

Benchmark comparison of load and dynamics of a floating 5MW semisub windturbine, using three different hydrodynamic approaches

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Title: Benchmark comparison of load and dynamics of a floating 5MW semisub windturbine, using three different hydrodynamic approaches

Summary (max 2000 characters):

In this report the results from project IEA Annex 30 Offshore Code Collaboration Continued (OC4) phase II are reported with main attention to the Danish results obtained within the EUDP funded project IEA Annex 30: Offshore Code Collaboration Continued (OC4) 64010-0071. The results from the international comparison is summarized here and mainly based together with a more comprehensive comparison of three hydrodynamic approaches using the aeroelastic code HAWC2 is presented. Here an engineering approach mainly based on Morisons approach is used for a HAWC2-standalone version, as well as two approaches where HAWC2 is coupled together with a potential flow solution WAMSIM and WAMIT respectively. The theory of these three approaches is also presented. With these approaches it is possible to explain in detail some of the differences seen in the international comparison.

In general a very fine agreement is seen for all the results with respect to eigen frequencies and free decay transients, which indicates that added mass effects can be well handled by rather simple engineering methods.

A fine agreement is also seen when simple wave load cases are applied to the rigid system. The main difference in response is the second order drift forces not present using the potential flow methods. A drift force is seen for the HAWC2-standalone due to the wheeler stretched wave profile. This can be seen to cause a different response in especially the anchor line, where the tension in the upstream line is higher for the HAWC2-standalone than for the coupled versions.

It seem as the pitch motion is slightly higher for the HAWC2-standalone version than for the version with WAMIT or WAMSIM when the structure is subjected to linear incoming waves. The consequence of this is a noticeable increase in especially tower bottom loads. When flexibility in the structure is also introduced, where full flexibility in the substructure is only possible with the HAWC2-standalone version, the tower loads increase even further. These results are in line with results seen from the international comparison. The case is that WAMIT and WAMSIM is more advanced hydrodynamic codes than an approach using Morisons equation on distributed beam elements. However these models are also linear, rather simple with respect to viscous drag force modeling, and so far not capable of handling flexible structures. From the study in can therefore not be concluded which approach is the best, but only that large differences in tower loads are seen.

A very comprehensive appendix is also enclosed, where the detailed sensor comparison can be found. It includes both time series, PSD spectra, value distributions, statistics and fatigue load levels.

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Preface

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Senior scientist

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Summary

In this report the results from the project IEA Annex 30 Offshore Code Collaboration Continued (OC4) phase II are reported. The results from the international comparison are summarized here based on reporting from especially the paper presented at the OMAE 2014 conference (Robertson et.al., 2014).

Furthermore a comprehensive comparison of three hydrodynamic approaches using the aeroelastic code HAWC2 is presented. Here an engineering approach mainly based on Morisons approach is used for a HAWC2-standalone version, as well as two approaches where HAWC2 is coupled together with a potential flow solution WAMSIM and WAMIT respectively. The theory of these three approaches are also presented. With these approaches it is possible to explain in detail some of the differences seen in the international comparison.

In general a very fine agreement is seen for all the results with respect to eigen frequencies and free decay transients, which indicates that added mass effects can be well handled by Morsions approach together with additional added mass effects from the heave plates according to (Newman, 1986) and proper consideration of buoyancy.

A fine agreement is also seen when simple wave load cases are applied to the rigid system. The main difference in response is the second order drift forces that are not present using the potential flow methods. A drift force is seen for the HAWC2-standalone due to the wheeler stretched wave profile. This causes a different response in especially the anchor line, where the tension in the upstream line is higher for the HAWC2-standalone than for the coupled versions.

The pitch motion is slightly higher for the HAWC2-standalone version than for the version with WAMIT or WAMSIM when the structure is subjected to linear incoming waves. The consequence of this is a noticeable increase in especially tower bottom loads. When flexibility in the structure is also introduced, where full flexibility in the substructure is only possible with the HAWC2-standalone version, the tower loads increase even further. These results are in line with results seen from the international comparison. It is generally recognized that WAMIT and WAMSIM are significantly more advanced hydrodynamic codes than an engineering approach using Morisons equation on distributed beam elements. However these models are eg rather simple with respect to viscous drag force modeling and so far not capable of handling flexible structures. From the study in can therefore not be concluded, which approach for this particular system is the best, but only that large differences in tower loads are seen.

Methods

In this chapter the three different approaches for modeling the floating wind turbine are presented. Special attention is on the hydrodynamic aspects as the wind turbine modeling is identical for all three approaches. A description and general validation of HAWC2 can be found in (Kim et.al, 2013) and (Larsen et.al., 2013)

The anchor line model is identical for all three approaches. It consists of a fully dynamic nonlinear chain-element model, originally described in (Kallesøe and Hansen, 2011). The model contains a structural description of a chain module with elements only capable of transferring axial forces and includes effects of large rotations as well as hydrodynamic added mass and drag. A set of vertical nonlinear springs is used from mudline and downward to ensure correct handling of bottom contact. Above mudline the springs stiffness is zero corresponding to floating conditions. The mooring line will for low motions of the cables correspond to a static non-linear mooring line solution, but in the simulation also dynamic effects of the line movement in the water is included. The inertial of the line itself is included as well as viscous drag. It is assumed that the added hydrodynamic mass effects are neglectable.

As part of this EUDP project, the mooring line module was extended for inclusion of wave forces from the incoming wave field using Morison's formula. Furthermore a general python script was created which enables an easy creating of the otherwise rather complex input data for the mooring line module.

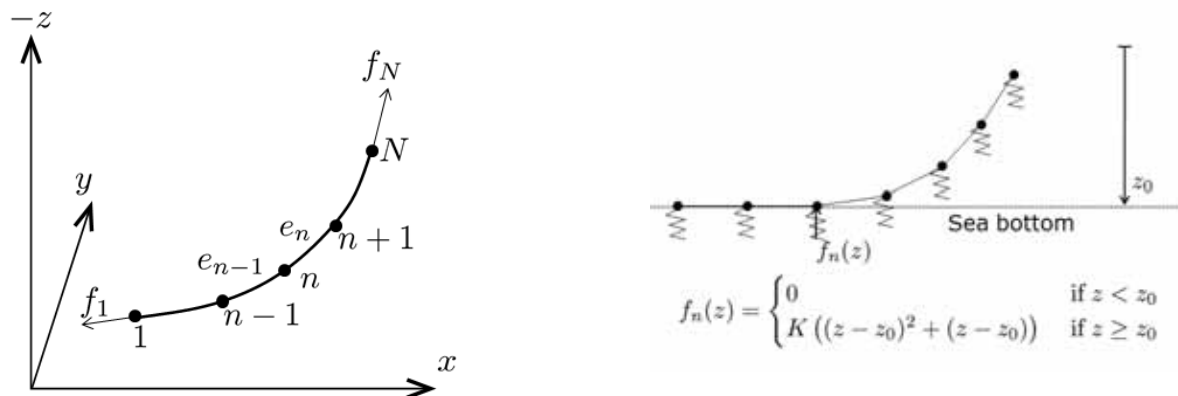


Figure 1. illustration of the non-linear mooring line model (left) and the handling of the sea bottom contact problem (right). From (Kallesøe and Hansen, 2011)

HAWC2-Standalone

In the basic version of the program HAWC2, hydrodynamic forces can be included quite similarly to how other distributed external force from aerodynamics and gravity are included. As default the wave kinematics are calculated from a separate module a bit similar to how turbulent wind is generated for the wind loading. The wave velocities and accelerations are converted to external forces on the structure using Morison's formula and there are also contribution for added mass and drag effects of heave plates, buoyancy forces and influence of flooded water.

In the calculation of hydrodynamic forces, it is assumed that the structure is assembled from slender members with a local diameter much less than the length of the incoming wave. A set of calculation points is distributed along the structure. In these calculation points, the hydrodynamic forces are calculated with an engineering approach with contribution from different load generating effects.

First of all the Morison formula (1) is used for calculating the wave forces dF .

$$dF = \rho A \dot{U} + \rho C_a A_R \dot{U}_{rel} + \frac{1}{2} \rho D C_d U_{rel} |U_{rel}| \quad (1)$$

The Froud-Krylov contribution is included in the term $\rho A \dot{U}$, the added mass effects in the term $\rho C_a A_R \dot{U}_{rel}$ and the viscous drag from the term $\frac{1}{2} \rho D C_d U_{rel} |U_{rel}|$. ρ is the density of water, A is the cross sectional area, \dot{U} is the water acceleration, C_a is the added mass coefficient related to the shape dependent cross sectional area A_R . \dot{U}_{rel} is the relative acceleration between wave and structure, D is the diameter of the cross section and U_{rel} is the relative velocity between wave and structure.

The added mass and drag from the heave plate is included as a separate concentrated end effect with an added mass based on a sphere (Newmann,1986), see Figure 2. From this figure it can be seen that the added mass coefficient for a circular disc is 0.65.

The heave plate also contributes with viscous drag forces (2), especially important for the heave motion. The drag coefficient used in the HAWC2 simulations is 2.4.

$$F_d = \frac{1}{2} \rho A C_d U_{rel} |U_{rel}| \quad (2)$$

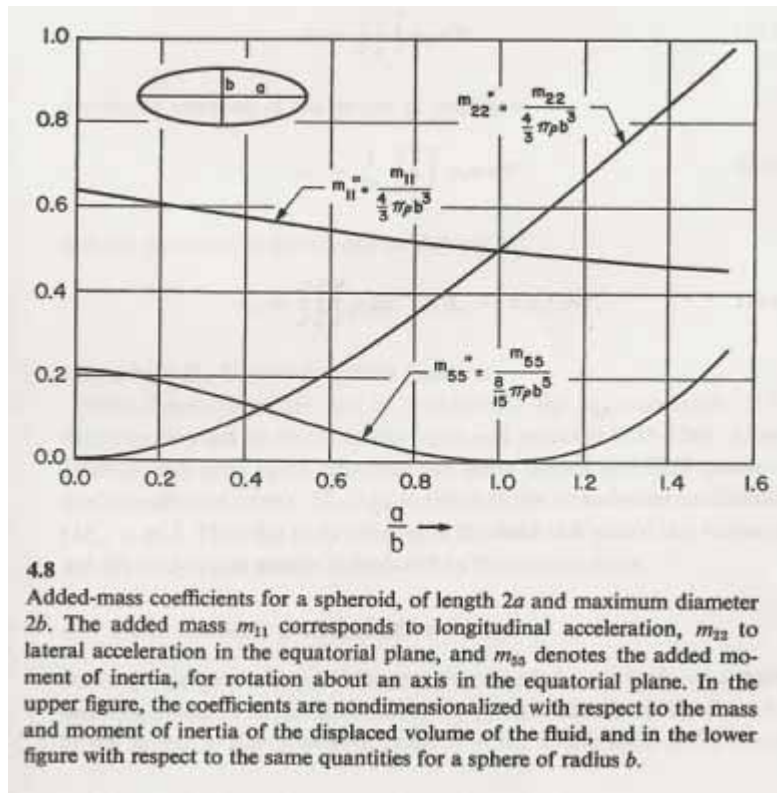


Figure 2. Added mass effects of a sphere, from (Newman, 1986). If 'a' equals zero then the expression can be used for a thin circular disc. Heave notation is m_{11} .

Buoyancy is found based on an approach equivalent to integration of external pressure forces. This is done in order to ensure a correct force distribution so that internal cross sectional forces in the structure can be found. The local buoyancy forcing per length of the structure is found as written in (4) and (5) for cross sectional forces and moments respectfully. An essential part is the orientation of the beam expressed as the orientation matrix A (z along the beam, x and y perpendicular and orthogonal to z). The offdiagonal terms $A_{3,1}$ and $A_{3,2}$ only contains values when the beam is not vertical. Conicity is expressed as the change in Area S per length z $\frac{\partial S}{\partial z}$. Gravity acceleration is denoted g .

In the end of the beams, or where changes in area occur, concentrated forces are inserted according to (3).

$$F_{b,end}(3) = \rho g S(z - z_0) + S p_{dyn} + \frac{1}{2} \rho C_{d,axial} S U_{rel} |U_{rel}| \quad (3)$$

$$\bar{F}_b = -g \rho \begin{pmatrix} A_{3,1} S \\ A_{3,2} S \\ -\frac{\partial S}{\partial z} (z - z_0) + \frac{\partial S}{\partial z} p_{dyn} \end{pmatrix} \quad (4)$$

$$\bar{M}_b = -g\rho \begin{Bmatrix} -A_{3,2} \frac{\partial r}{\partial z} \pi r^3 \\ A_{3,1} \frac{\partial r}{\partial z} \pi r^3 \\ 0 \end{Bmatrix} \quad (5)$$

HAWC2-WAMSIM

The vessel response model WAMSIM developed by DHI, Denmark is capable of simulating wave-induced motion of a moored or freely floating structure in the time domain. The wave exciting force is calculated assuming a superposition of long-crested (uniform along one horizontal dimension) waves. The results of each WAMSIM simulation are presented as time-series of motions for surge, sway, heave, roll, pitch and yaw and as forces in the mooring lines and vessel diffraction forces. The radiation/diffraction code WAMSIM for calculating floating body dynamics is based on the frequency-domain program WAMIT for the calculation of the hydrodynamic quantities (Bingham, 2000), (Christensen, 2008), (Hansen, 2009). The structure in WAMSIM is assumed to behave as a rigid body.

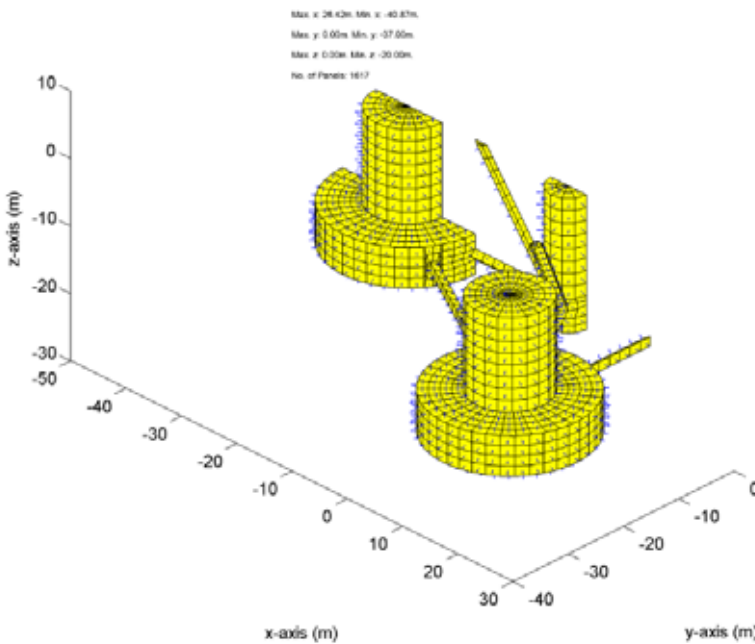


Figure 3. The WAMSIM model of the semi sub platform. Symmetry about the $y = 0$ plane is exploited

The following short general description of WAMSIM is taken from (Hansen et.al., 2009). The hydrodynamic interaction between the fluid and floating bodies is assumed to be well described by linear potential theory (i.e. an inviscid and irrotational flow, with the free surface and body boundary conditions satisfied to first order). That is to say, despite any nonlinear effects, which may have been important in producing the conditions at the bodies; all nonlinear terms are ignored in the free surface boundary conditions in the local vicinity of the bodies, as well as in the expressions for fluid pressure and force on the bodies. This is a good approximation as long as the parameter $kH/\tanh(kh) \ll 1$. Assuming the body motions remain small, the equations of motion for the body dynamics for the N degrees of freedom can be written in the following convolution form:

$$\sum_{k=1}^N \left[(M_{jk} + a_{jk}) \ddot{x}_k(t) + \int_0^t K_{jk}(t - \tau) \dot{x}_k(\tau) d\tau + C_{jk} x_k(t) \right] = F_{jD}(t) + F_{jni}(t), \quad j = 1, 2, \dots, N$$

All non-linear external forces, such as those due to viscous/frictional damping, are included via the term $F_{jni}(t)$. The rest of this equation describes the inertia, hydrostatic restoring forces, and hydrodynamic forces on the bodies to first order in the body motion and the wave steepness. The bodies' linear inertia and hydrostatic restoring matrices are M_{jk} and C_{jk} , respectively. The forces due to radiated waves generated by the bodies' motions are expressed as a convolution of the radiation impulse response functions, K_{jk} , with the body velocity (plus the impulsive contributions, a_{jk} , which come from the $t=0$ limit of the radiation problem, and are proportional to acceleration). A cross sectional view of the semisub can be seen in Figure 3. The transfer functions (RAO) can be seen in Figure 4 and Figure 5

Buoyancy is handled by integration on the submerged volume, where it is assumed that the initial position corresponds to a steady state equilibrium. The mass of the system is set to match this submerged volume mass in line with the assumption of steady state equilibrium. A simple and practical approach in many cases, but for the coupled approach to HAWC2 this caused some practical issues since the mass of the submerged volume is not necessarily the same when the turbine and anchor loads are assembled through the HAWC2 coupling. This had some importance for loadcase 1.2 where the steady state solution was to be found and fictitious forces had to be applied to ensure a correct heave position.

Coupling of HAWC2 with WAMSIM

The coupling of the models has been performed by letting a special version of WAMSIM interact with an interface for external models included in HAWC2, originally presented in (Larsen, 2011). The frame for connecting the external DOF's in the WAMSIM frame has been done using the multibody approach in similar way as the core of HAWC2 is build. First the external mass and stiffness matrix is set up in its own coordinates system. Secondly a set of six constraints are set to ensure fixed connection in translation and rotation at the coupling point. These constraints are updated at every time step and iteration and the derivative of the constraint with respect to the external system DOF are evaluated. The same solver (Newmark beta) used in the core of the code is also applied to the external system and therefore solved in an integrated way with the HAWC2 equations of motion. The special WAMSIM model has been compiled as a dynamically linked library (dll) that is activated and controlled by HAWC2. A number of modifications has been made to WAMSIM in order to return the right quantities to HAWC2 at the right times. The coupled model involves the following steps:

1. Mass matrices and stiffness matrices of the floating foundation are calculated by WAMSIM and delivered to HAWC2.
2. HAWC2 sets up mass and stiffness matrices for the entire system including wind turbines and floating foundation.
3. HAWC2 sets up mass and stiffness matrices for the entire system including wind turbines and floating foundation.
4. The simulation is initiated by HAWC2. A WAMSIM subroutine is called by HAWC2, with HAWC2's guess on the state of the system (ie. velocities and position in 6 DOF's) and the constraint force at the model interface (ie. forces from wind turbines on foundation). The subroutine uses parts of the WAMSIM routine for solving body equations of motion to returns the state differentiated with respect to time (ie.

accelerations and velocities). All hydrodynamics incl. added mass and forcing from incident waves are included in this step.

- The iterative solver of HAWC2 will repeat Step 3 with new guesses of the state vector until the calculated residuals are acceptable. When the acceptance criteria are met it will proceed to the next time step, and step 3 is repeated for this time step.

The convergence with this approach is in general very good and convergence is obtained within 1-2 iterations. The impact on simulation time with the coupled system to WAMSIM has not been noticeable.

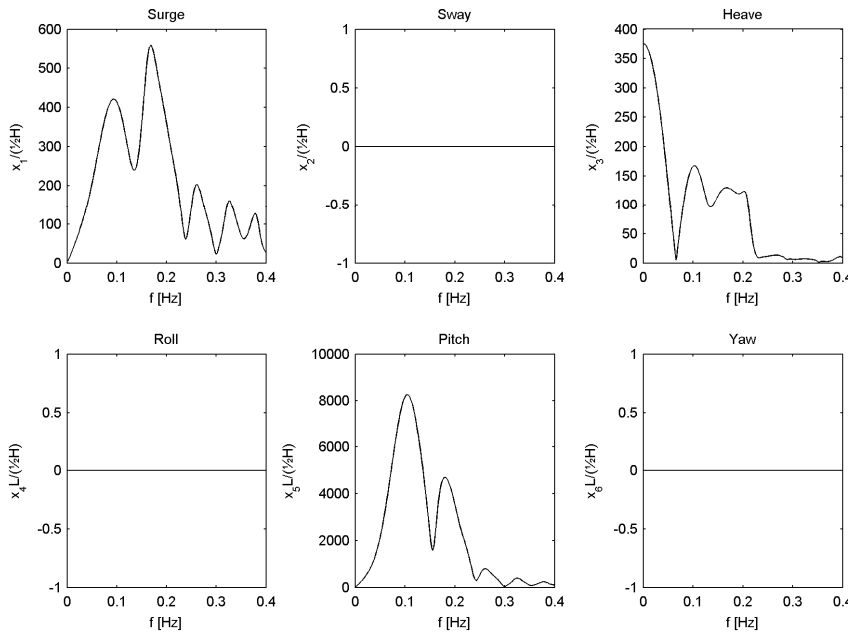


Figure 4. WAMSIM transfer function for 0deg wave heading

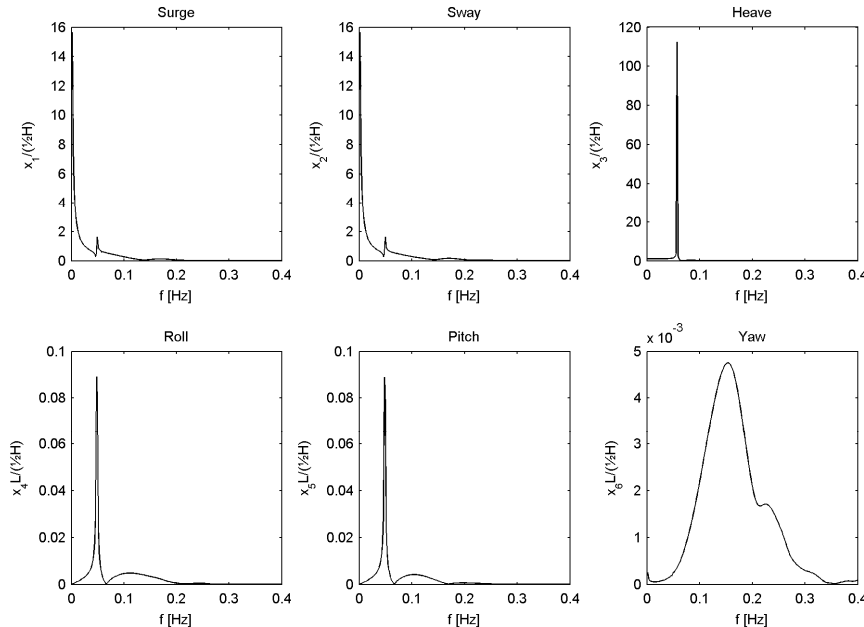


Figure 5. WAMSIM transfer function for 45deg wave heading

HAWC2-WAMIT

A newly developed stand-alone HAWC2 interface to WAMIT, similar to HAWC2-WAMSIM coupling, has also been used in the OC4 project. The interface reads WAMIT output files directly and uses these as input to a HAWC2-WAMIT module via the HAWC2 external system DLL interface (Called ESYSWamit on the following pages).

ESYSWamit can model rigid body floating structures limited to 6 degrees of freedom (DOF), 3 displacements and 3 rotations. The structural mass of the floating structure is included in ESYSWamit and allows arbitrary positioning of center of gravity and rotational inertia. The necessary constraints are implemented in ESYSWamit which allows coupling the floating structure to the wind turbine model to enable integrated simulation of the total floating wind turbine system.

The wave input to ESYSWamit is taken directly from the wave definition built into HAWC2 which allows other wave-dependent HAWC2 modules (e.g. the mooring lines) to share the same wave environment.

ESYSWamit implements the 6-DOF rigid body equations of motion for the floating structure and applies the following external forces to the structure:

- Gravity (in COG)
- Buoyancy (in COB, provided by WAMIT output)
- Linear and non-linear damping forces (user specified)
- Linear stiffness (user specified)
- Hydrostatic forces (provided from WAMIT output)
- Radiation forces (provided from WAMIT output)
- Diffraction forces (wave forces) (provided from WAMIT output)

The gravity and buoyancy forces and centers are independent which allows the floating structure to be in static equilibrium when external components interact with the structure (e.g. when a wind turbine is put on top of it). The user-specifies damping and stiffness forces are implemented for flexibility reasons to allow the user to interact with the system in a simple manner, e.g. to model simple mooring systems or to fit model behavior to measured response. The hydrostatic forces are read from file and added to the linear stiffness matrix for the system.

The radiation and diffraction forces are really the main concern in the ESYSWamit implementation. Both force components are implemented as convolution integrals based on the frequency response functions (FRFs) provided by WAMIT.

The radiation forces are output from WAMIT as the FRFs of hydrodynamic forces driven by the movement of the structure in all 6 DOFs. For each DOF, 6 FRFs are provided, one for each force component. This gives, in principle, 36 FRFs for the radiation force component, but due to symmetry conditions many of these are either equal or zero.

Similar to the radiation forces, the diffraction forces are also provided by WAMIT as FRFs, however, driven by the wave elevation instead of the movement of the structure. Since there

is only one driving parameter (the wave elevation), the diffraction forces are described by 6 FRFs, however, 6 FRFs for each wave direction. Presently, ESWAMIT can only handle one wave direction per simulation, but future plans include an interpolation scheme which can handle changes in wave direction during the simulation.

An example of one of the radiation FRFs provided by WAMIT output is shown in Figure 6- the upper plot shows the amplitude and the lower plot shows the phase of the surge radiation force driven by the surge acceleration. The force is in phase with the acceleration at zero and at infinite frequency, but in-between the force amplitude and phase is seen to be highly frequency dependent. The blue line is the WAMIT output directly read from file – the red dots will be mentioned later.

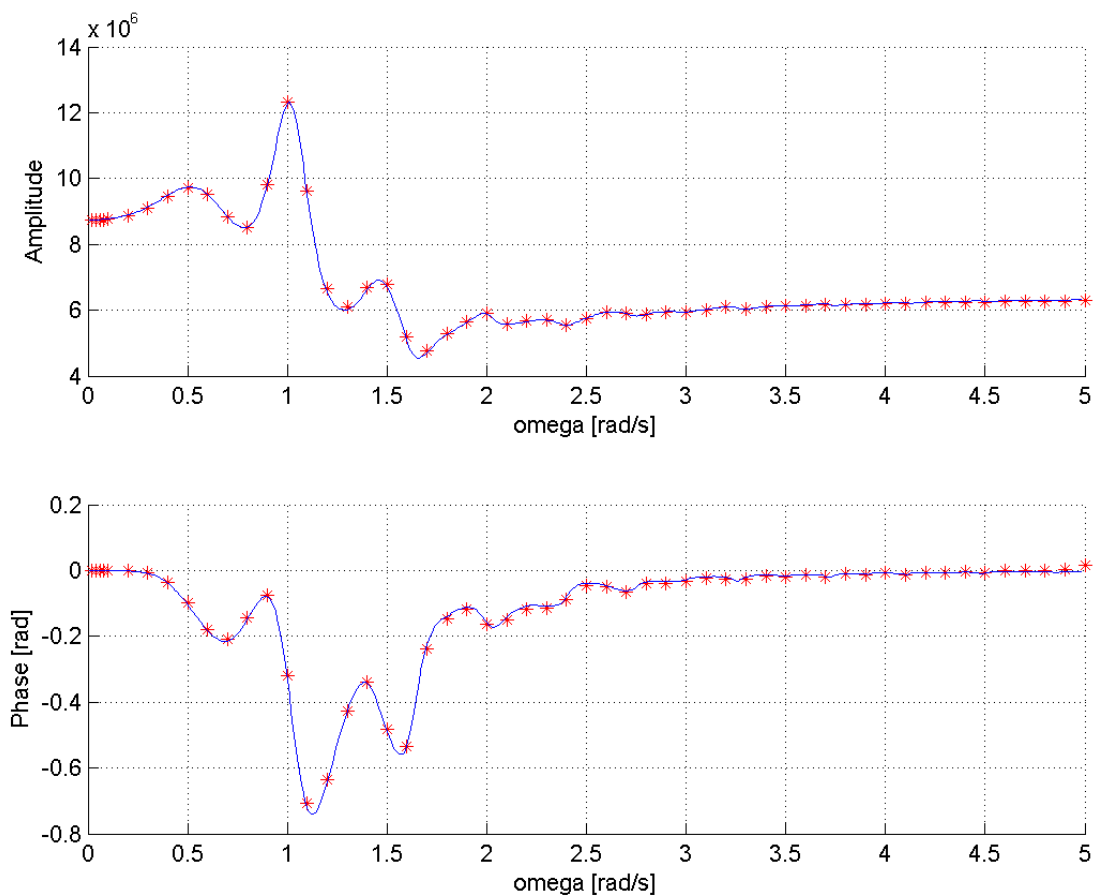


Figure 6: Surge/surge radiation FRF.

To go from the frequency domain forces defined by the FRFs to time domain is done by convolution. In general, the convolution integral is defined as:

$$F(t) = \int_0^{\infty} K(t - \tau)X(\tau)d\tau \quad (6)$$

where $K(t)$ is the impulse response function (IRF) which is found by the inverse Fourier transform of the corresponding FRF, and $X(t)$ is the driving parameter, i.e movement of the floating structure in case of radiation forces and wave elevation in case of diffraction forces. ESWAMIT calculates the IRFs related to both radiation and diffraction forces in the same way by an implementation of a method called Filon integration. An example of one of the radiation IRFs is shown in Figure 7 and one of the diffraction IRFs is shown in Figure 8.

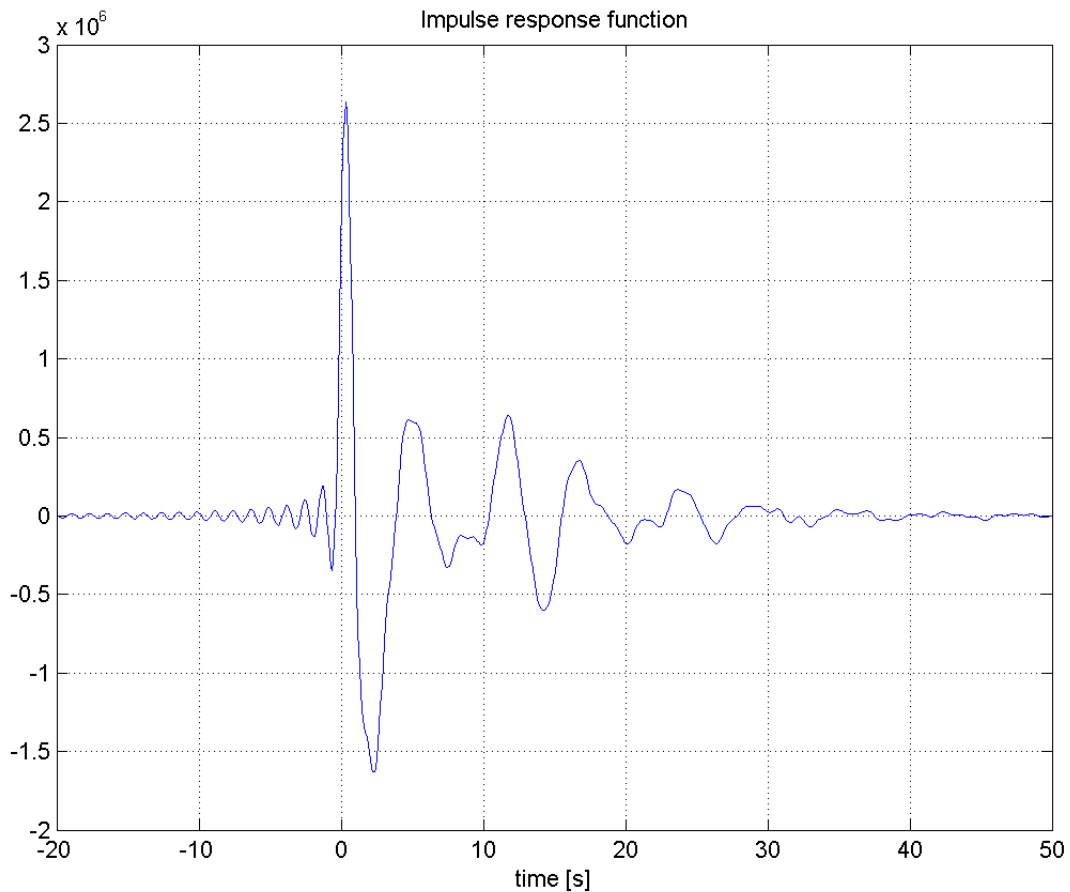


Figure 7: Surge/surge radiation IRF

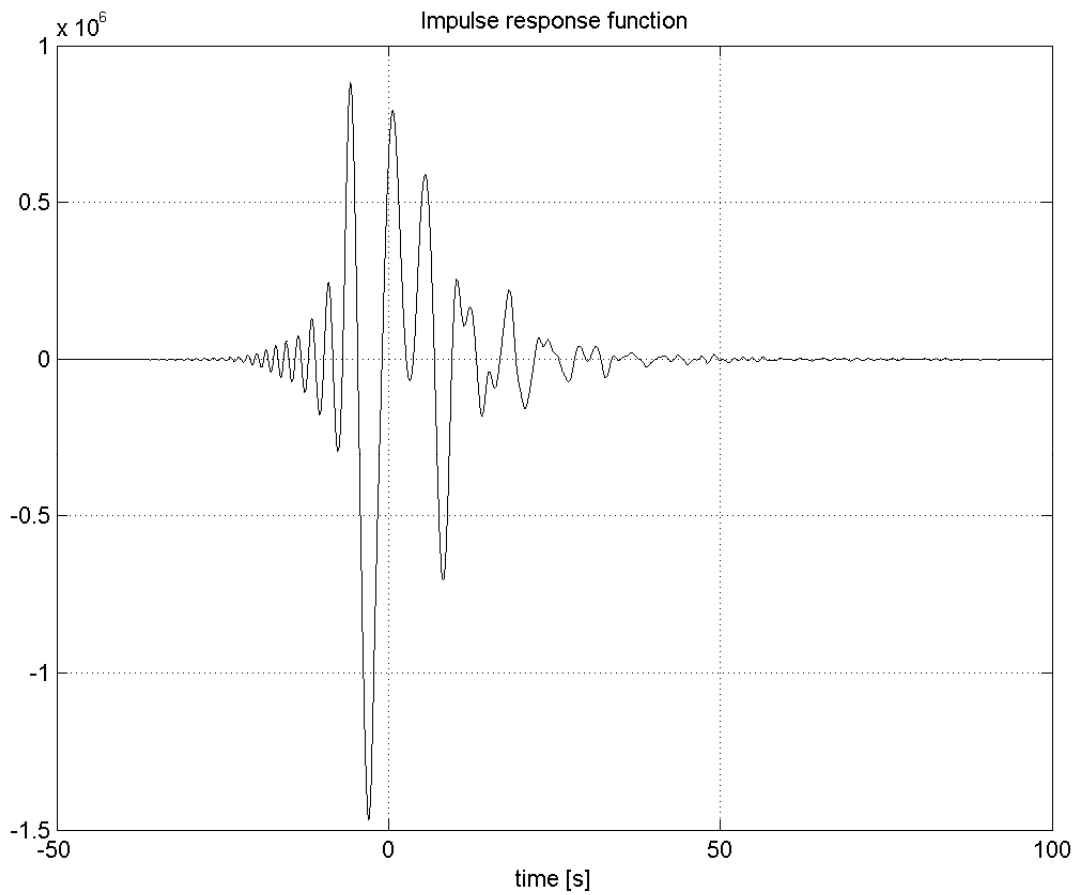


Figure 8: Surge diffraction IRF.

One general difference between the radiation and the diffraction IRFs is that the radiation IRFs must be equal to zero for $t < 0$ while the diffraction IRFs extend towards negative time. From the definition of the convolution integral in (6) it is seen that if the IRFs are non-zero for negative time, the force at present will be dependent on future values of the driving parameter. In case of the diffraction forces, the IRF shows that the force at present is dependent of the wave elevation in the future which is only natural because the structure can feel the waves approaching the structure. However, for the radiation forces which are dependent on the movement of the structure, the force cannot be dependent on how the structure will move before the movement has actually taken place. This is called causality and the radiation FRFs must obey causality otherwise they are un-physical. In Figure 7 it is seen that the radiation IRF does have non-zero values for $time < 0$, however small. This small contribution is caused by truncation of the frequency range when calculating the IRFs by inverse Fourier transformation using the Filon integration scheme and in the validation described next, the influence is shown to be negligible.

A validation of the implementation of the radiation and diffraction transformation into time domain has been made in the following way: Several simulations of the ESYSWamit model were made with HAWC2 where the structure was forced to move harmonically at varying frequencies. After the first transient period of the simulation has passed, the force response

also become harmonic, and the amplitude and phase of the harmonic response is plotted on top of the corresponding FRF provided by WAMIT input. The result of this validation procedure has produced the red dots in Figure 6: Surge/surge radiation FRF. (the blue line is the corresponding FRF from WAMIT). The correspondence between the input FRF and simulated FRF is good and shows that the radiation forces calculated by ESWAMIT can be trusted. The same procedure with varying wave frequency and fixed structure has been followed and the same correspondence between input FRF and simulated FRF was found for the diffraction forces (not shown herein). To conclude, both radiation forces and diffraction forces produced by ESWAMIT are indeed trustworthy.

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In the work package in the IEA Annex 30,subtask 2, semi-submersible foundation the following persons have been involved.

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Loadcases

The loadcases was set up where the complexity was gradually increased. The first cases covered stand still frequency analysis and steady state load distribution. Wave loads were later introduced and the complexity gradually increased until the final cases with fully turbulent atmospheric inflow, irregular wave loads and a fully flexible construction. The approach of gradually increasing the complexity made it possible to locate the reasons for discrepancies yet still also to include design driving load cases. The list of loadcase are shown in Table 1. Case 1.x are standstill situation with no external forces from waves of wind. Steady state loads and position if found together with eigenfrequencies and decay transients. Case 2.x are also standstill situations with a rigid turbine and a substructure with flexible mooring lines. Wave loads are applied. Case 3.x covers situation with a fully flexible construction submitted to both wind and wave loads. Further more, a load case where the transfer function from wave motion is found. This term is also denoted response amplitude operator (RAO).

Load Case	Description	Enabled DOFs	Wind Condition	Wave Condition
1.1	Eigenanalysis	All	No air	Still water
1.2	Static equilibrium	All	No air	Still water
1.3a	Free decay, surge	Platform and moorings	No air	Still water
1.3b	Free decay, heave	Platform and moorings	No air	Still water
1.3c	Free decay, pitch	Platform and moorings	No air	Still water
1.3d	Free decay, yaw	Platform and moorings	No air	Still water
2.1	Regular waves	Support structure	No air	Regular Airy: $H = 6$ m, $T = 10$ s
2.2	Irregular waves	Support structure	No air	Irregular Airy: $H_s = 6$ m, $T_p = 10$ s, $\gamma=2.87$, JONSWAP spectrum
2.3	Current only	Support structure	No air	Surface = 0.5 m/s, $1/7^{\text{th}}$ power law decrease with depth
2.4	Current and regular waves	Support structure	No air	Regular Airy: $H = 6$ m, $T = 10$ s; Current at surface = 0.5 m/s, $1/7^{\text{th}}$ power law
2.5	50-year extreme wave	Support structure	No air	Irregular Airy: $H_s = 15.0$ m, $T_p = 19.2$ s, $\gamma=1.05$, JONSWAP spectrum
2.6	RAO estimation, no wind	Support structure	No air	Banded white noise, $\text{PSD} = 1 \text{ m}^2/\text{Hz}$ for 0.05-0.25 Hz
3.1	Deterministic, below rated	All	Steady, uniform, no shear: $V_{hub} = 8$ m/s	Regular Airy: $H = 6$ m, $T = 10$ s
3.2	Stochastic, at rated	All	Turbulent (Mann model):	Irregular Airy: $H_s = 6$ m, $T_p = 10$ s, $\gamma=2.87$, JONSWAP spectrum

			$V_{hub} = V_r (11.4 \text{ m/s})$	
3.3	Stochastic, above rated	All	Turbulent (Mann model): $V_{hub} = V_r (18 \text{ m/s})$	Irregular Airy: $H_s = 6 \text{ m}$, $T_p = 10 \text{ s}$, $\gamma=2.87$, JONSWAP spectrum
3.4	Wind/wave/current	All	Steady, uniform, no shear: $V_{hub} = 8 \text{ m/s}$	Regular Airy: $H = 6 \text{ m}$, $T = 10 \text{ s}$; Current at surface = 0.5 m/s , $1/7^{\text{th}}$ power law
3.5	50-year extreme wind/wave	All	Turbulent (Mann model): $V_{hub} = V_r (47.5 \text{ m/s})$	Irregular Airy: $H_s = 15.0 \text{ m}$, $T_p = 19.2 \text{ s}$, $\gamma=1.05$, JONSWAP spectrum
3.6	Wind/wave misalignment	All	Steady, uniform, no shear: $V_{hub} = 8 \text{ m/s}$	Regular Airy: $H = 6 \text{ m}$, $T = 10 \text{ s}$, direction = 30^0
3.7	RAO estimation, with wind	All	Steady, uniform, no shear: $V_{hub} = 8 \text{ m/s}$	Banded white noise, PSD = $1 \text{ m}^2/\text{Hz}$ for $0.05\text{-}0.25 \text{ Hz}$
3.8	Mooring line loss	All	Steady, uniform, no shear: $V_{hub} = 18 \text{ m/s}$	Regular Airy: $H = 6 \text{ m}$, $T = 10 \text{ s}$
3.9a	Flooded column	All	No air	Still water
3.9b	Flooded column	All	Turbulent (Mann model): $V_{hub} = V_r (18 \text{ m/s})$	Irregular Airy: $H_s = 6 \text{ m}$, $T_p = 10 \text{ s}$, $\gamma=2.87$, JONSWAP spectrum
RAO = Response Amplitude Operator		DOF = Degree of Freedom	V_{hub} = hub-height wind speed V_r = rated wind speed PSD = power-spectral density	H = wave height H_s = significant wave height T = wave period T_p = peak-spectral wave period γ = peak enhancement factor

Table 1: Overview of loadcases for the semi sub simulations.

Sensors and coordinate systems

In this report, the coordinate system as used in the HAWC2 simulations has been used directly. Please pay attention that these orientation may differ compared to sensor used in joint papers within the international projects members as it was there decided to use a more common IEC set of coordinates.

The HAWC2 coordinate system is defined with the global z coordinate pointing downwards, the global y-direction in the direction of the default wind and wave direction and x horizontally to the side. Further on, each body on the structure has its own coordinate that is defined by the choice of the user. In this particular case, the structure is typically defined along the z-axis of the body coordinate system. The coordinate systems are shown in Figure 10 and Figure 11.

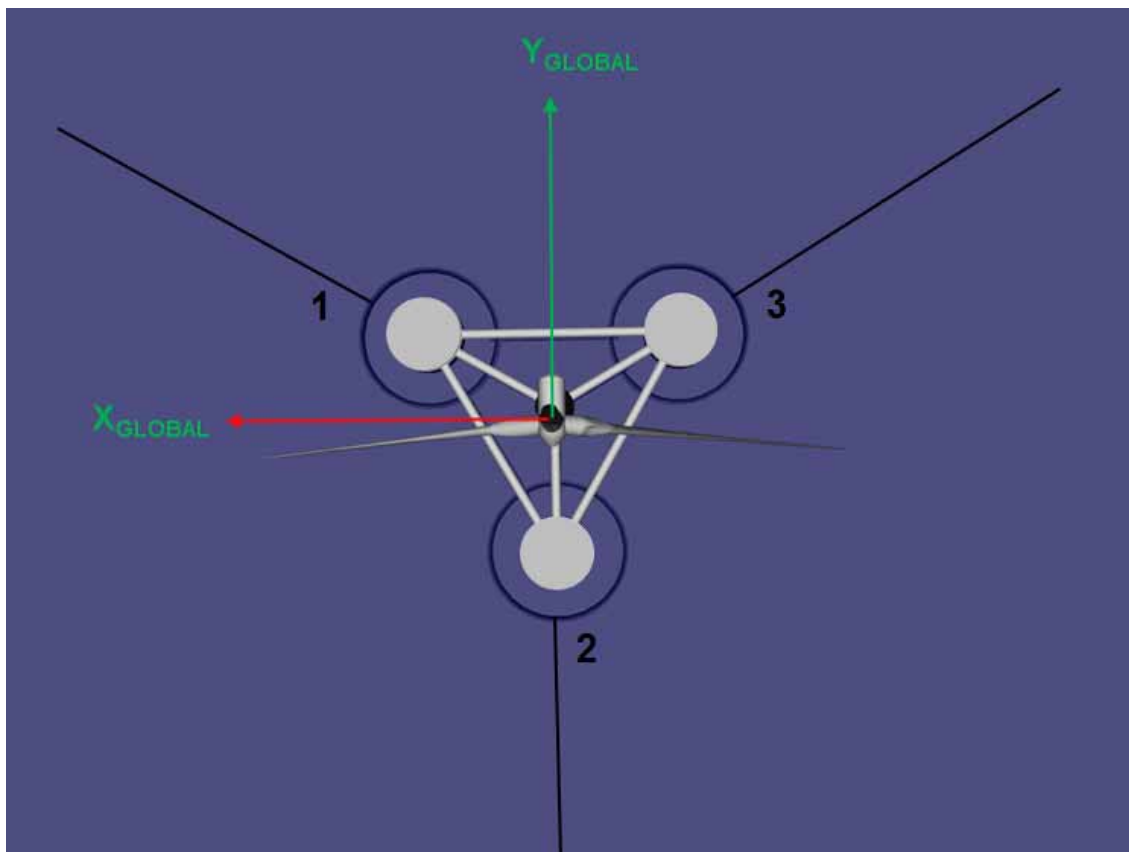


Figure 9 Global coordinate system and numbering order for columns and mooring lines

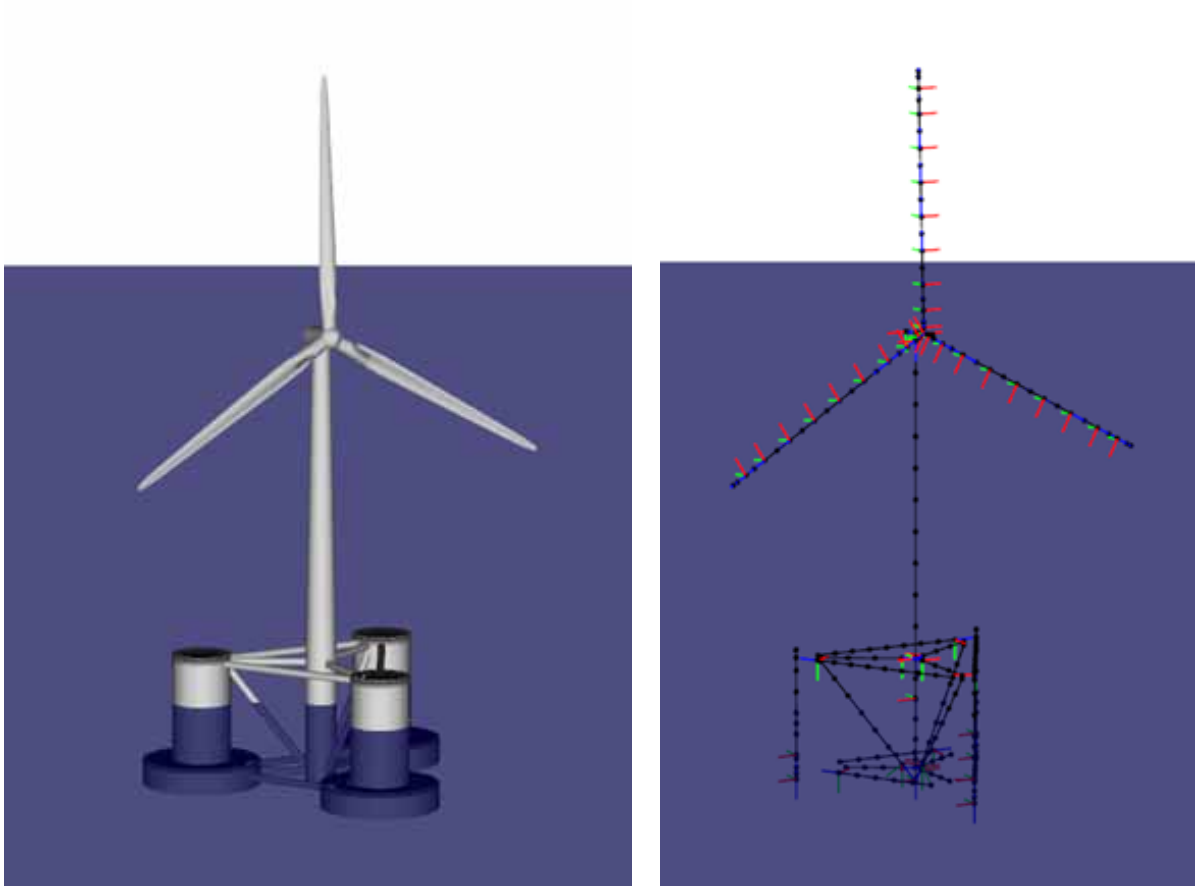


Figure 10: Body coordinates of the full system. X, Y and Z

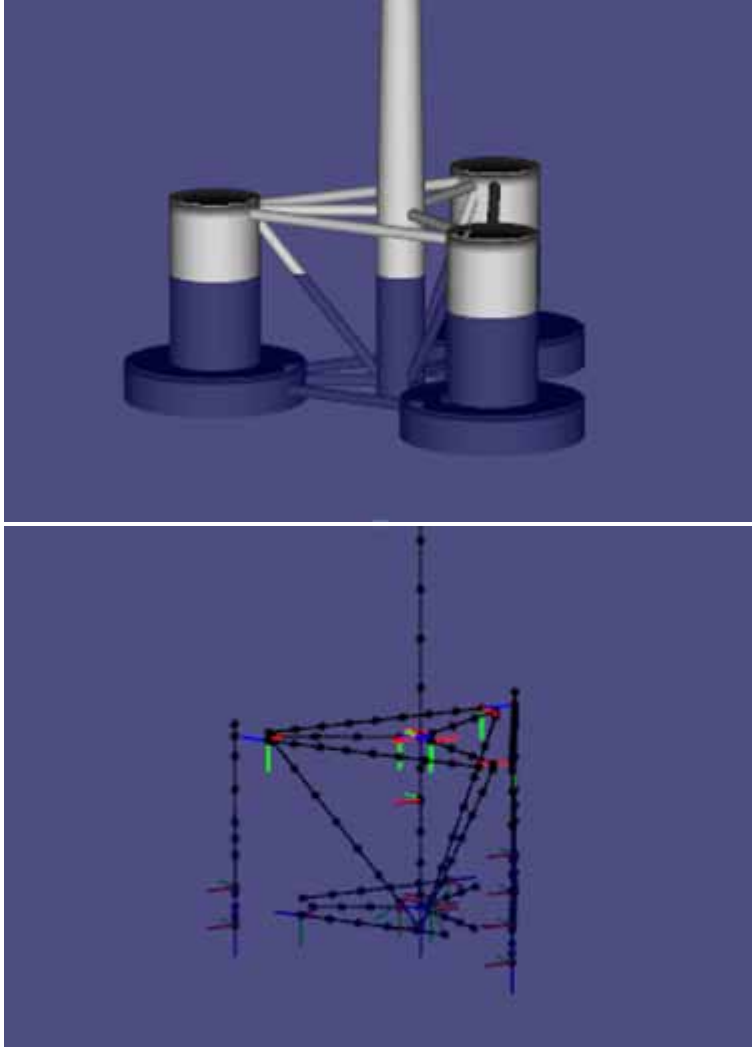


Figure 11: Body coordinates of the semi sub. X, Y and Z. The bodies are in all cases modeled along the direction of $-Z$ (opposite direction of Z).

Extended summary of results

Case 1.1: Steady state condition

The first and most basic case was the full system in a standstill situation, steady water and without wind loading. The dynamics of the system was investigated through eigenvalue analysis. In order to enable this, a new eigenvalue solution approach was implemented in HAWC2 which made it possible to perform the eigenvalue analysis at a time where a steady state equilibrium was obtained and also that it was possible to solve the full problem including contribution from structural flexibility, fully dynamic anchorline flexibility, buoyancy and gravity.

In general there is a fairly good agreement with respect to the natural frequencies and except of a few outliers a match within 5% was obtained.

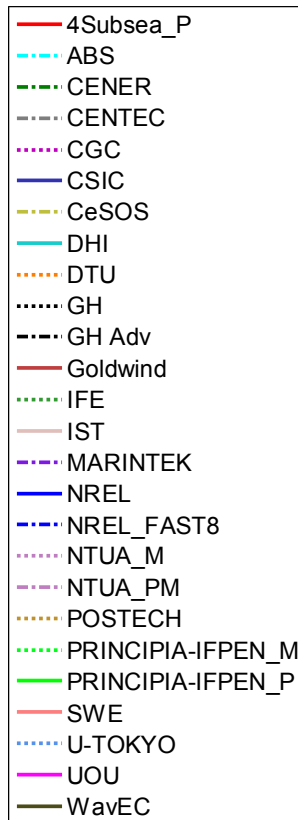


Figure 12: Participants line notations used in Figure 13. DTU is the HAWC2-standalone results.

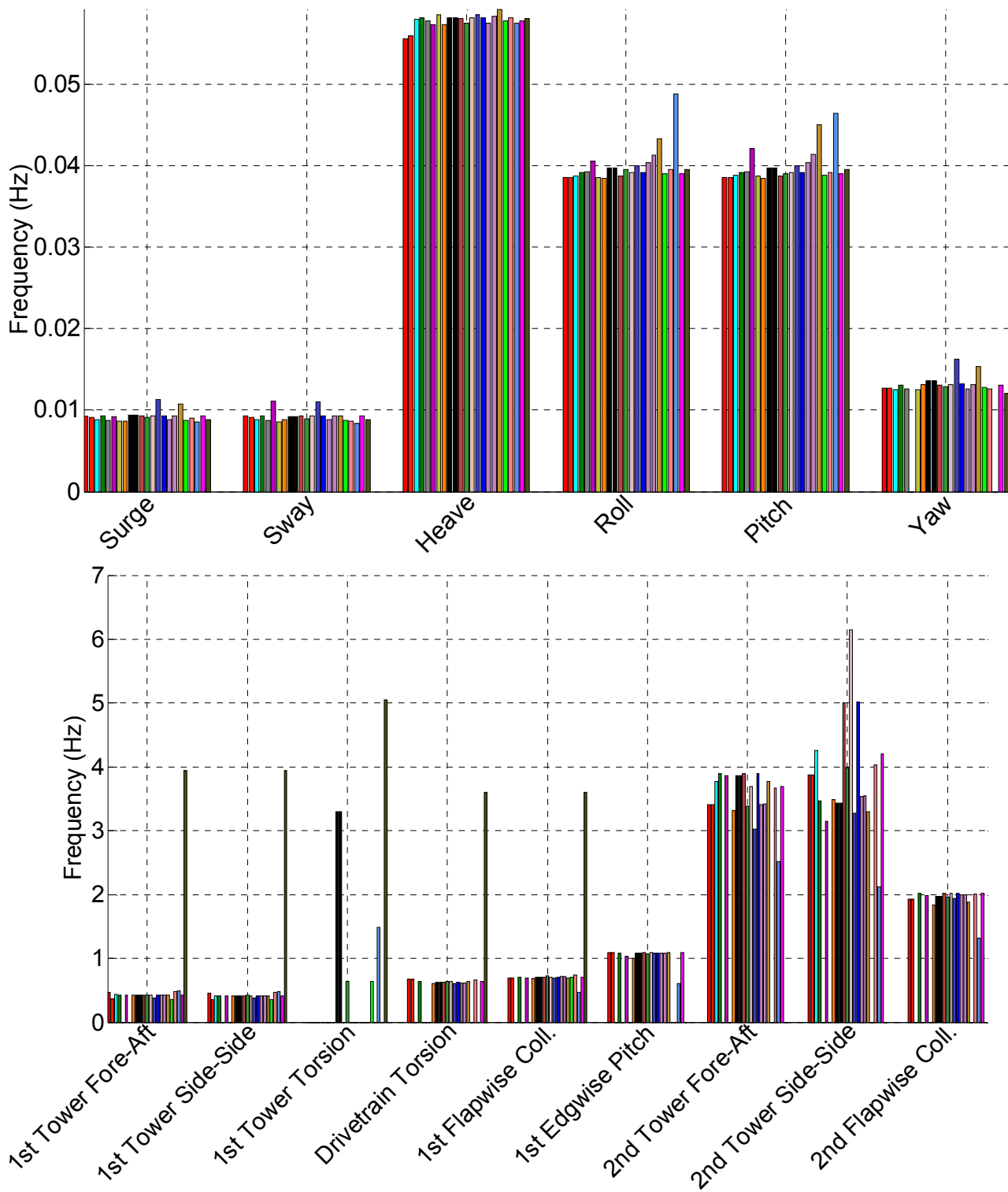


Figure 13: Full-system natural frequencies from LC 1.1. IEA international results.

Case 1.3: Free decay test

Case 1.3 is a decay test with an initial displacement of the structure of 22m in the surge direction. A very fine agreement is seen both for the international comparison as for the three versions of HAWC2.

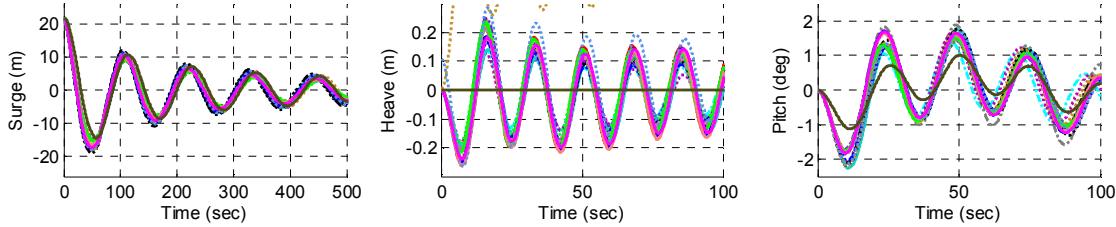


Figure 14: Surge free decay (LC 1.3a), platform motion response. IEA international results

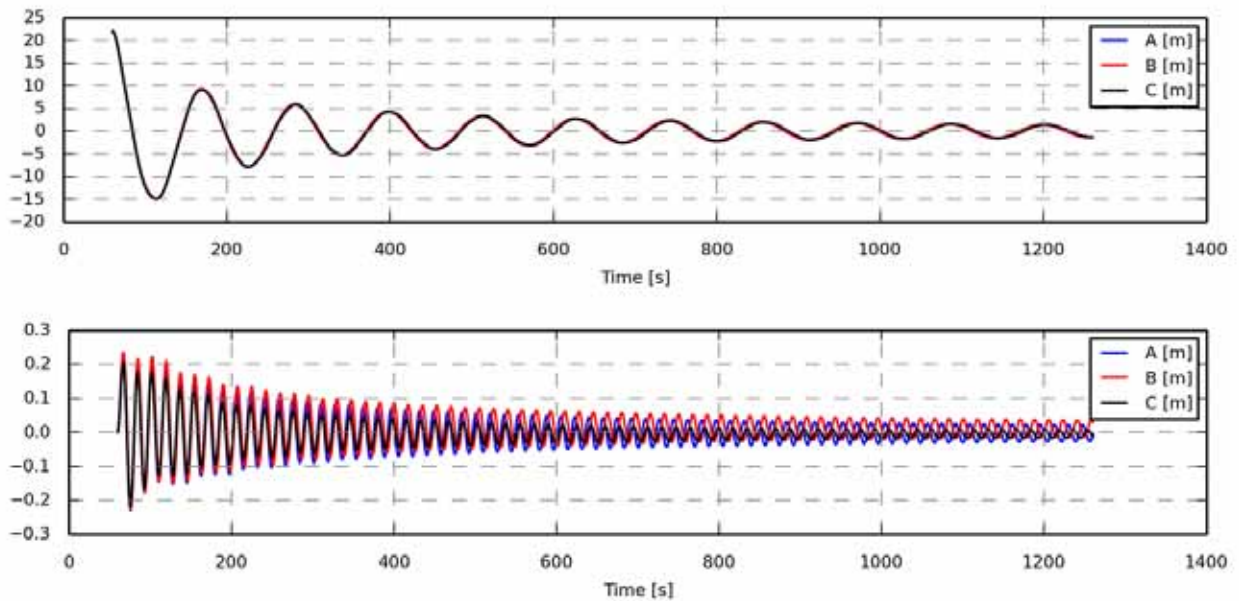


Figure 15: Case 1.3a. Surge and heave. A is HAWC2-WAMIT, B is HAWC2-WAMSIM and C is HAWC2-StdAlone

Case 1.3b is a decay test with an initial displacement of the structure of 6m in the heave direction. A very fine agreement for all methods are seen for the heave response, whereas in the corresponding pitch rotation, differences are seen. Two distinct levels of amplitude is seen. From the three version of HAWC2 it can be seen that the different response in pitch is a consequence of whether Morison or a potential solution is used. A higher level of drag in the Morison approach, not present in the potential flow solutions may very well be the reason for the differences.

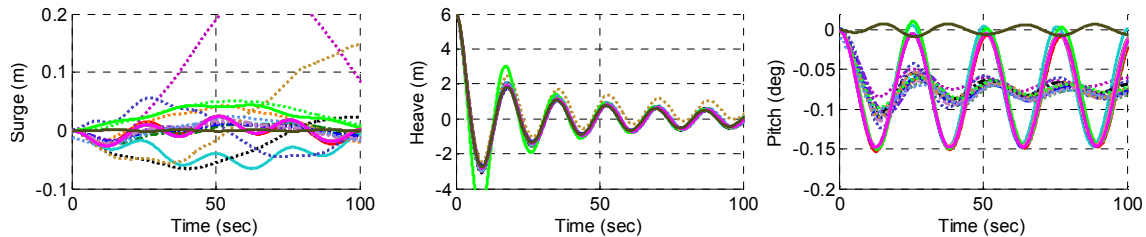


Figure 16: Heave free decay (LC 1.3b), platform motions response. IEA international results.

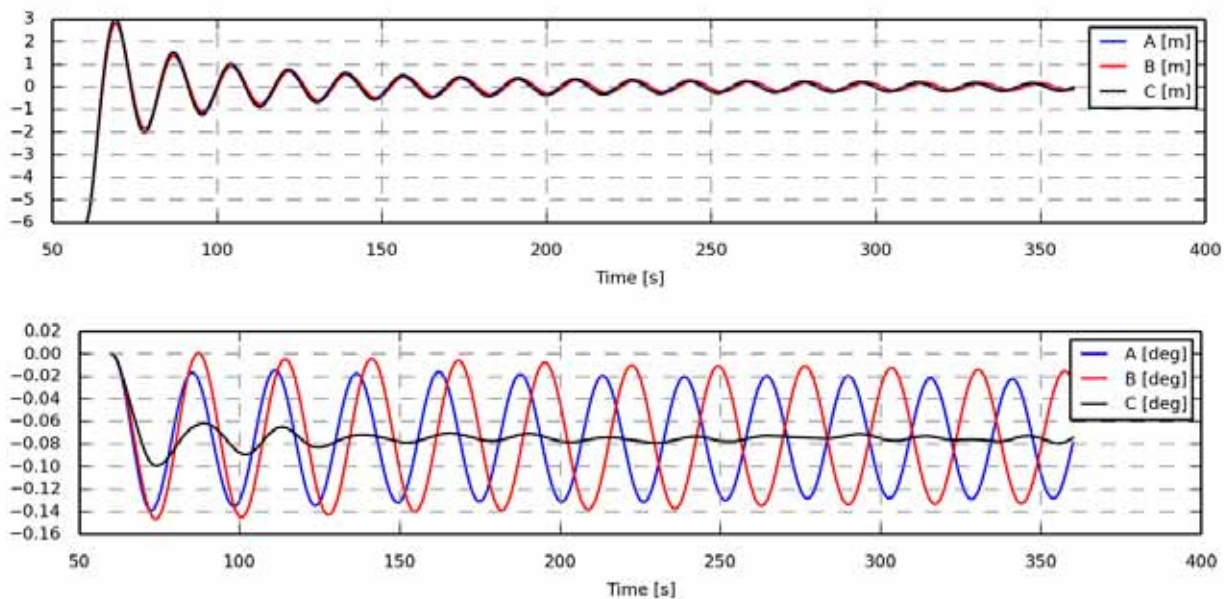


Figure 17: Case 1.3b. Heave and pitch. A is HAWC2-WAMIT, B is HAWC2-WAMSIM and C is HAWC2-StdAlone

Case 1.3c is a pitch decay test with an initial rotation of 8deg. A difference in pitch frequency is seen between the three HAWC2 versions. The HAWC2-WAMSIM approach results in a lower frequency. The reason for this is most likely caused by the approach of handling mass and buoyancy in WAMSIM as explained in the theory chapter HAWC2-WAMSIM. A too high mass is probably the outcome of the assumption of substructure mass being identical to the mass of the submerged volume of water by the substructure compensated by external fictive forces, since the actual mass of the substructure is significantly lower. When the mass is too high, the inertia is also too high and therefore the pitch frequency too low. This is however a small thing to update in WAMSIM, but is important to be aware about.

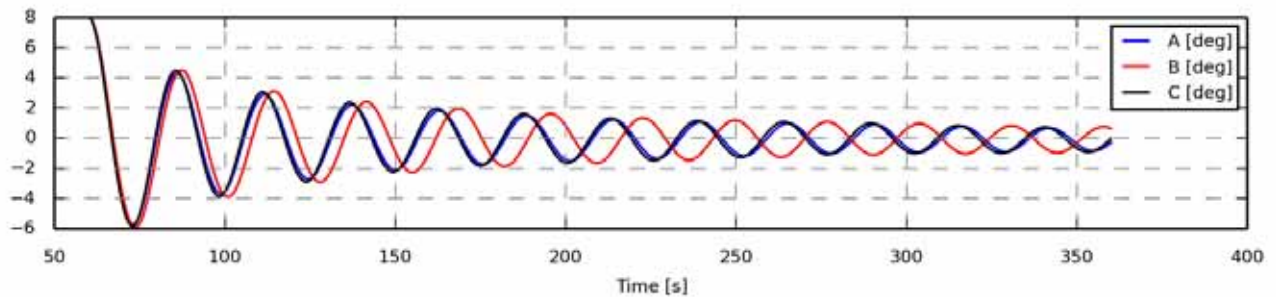


Figure 18: Case 1.3c. Pitch rotation. A is HAWC2-WAMIT, B is HAWC2-WAMSIM and C is HAWC2-StdAlone

Case 1.3d is a yaw decay test with a initial yaw rotation of 8deg. Three approaches in HAWC2 lead to same frequency, but slightly different damping levels. The method using Morisons approach also has the highest damping.

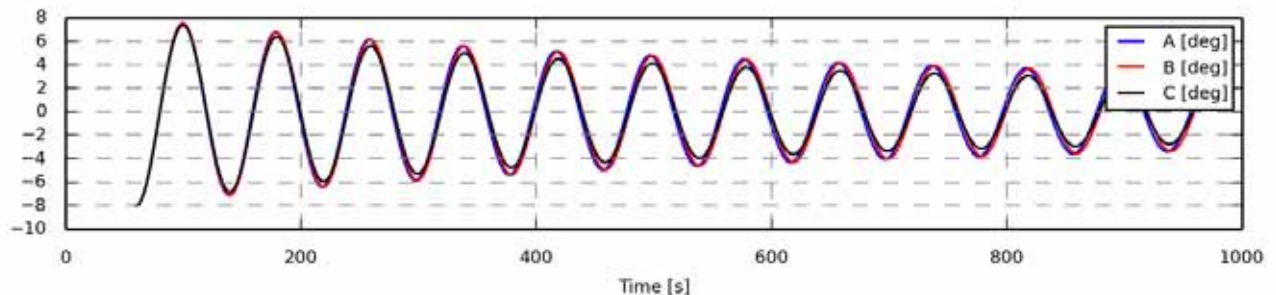


Figure 19: Case 1.3d. Yaw rotation. A is HAWC2-WAMIT, B is HAWC2-WAMSIM and C is HAWC2-StdAlone

Case 2.1: Linear waves on a rigid structure

In this case the structure is rigid, but the mooring lines flexible. Linear waves are applied with a wave height of 6m with a time period of 10s. In Figure 21 a drift force is seen for the Morison based simulations causing a different surge position as well as different anchor line tensions. This is explained by the Wheeler stretching of the wave. A small phase difference is also seen. It can also be seen that the pitch motion is higher for the Morison based approach.

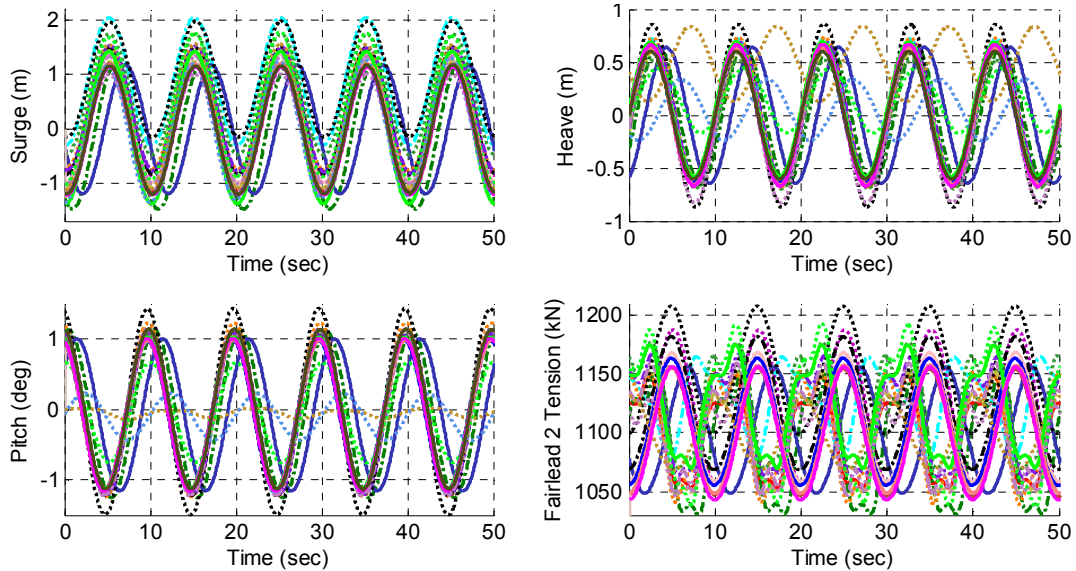


Figure 20: Regular wave simulation (LC 2.1), $H = 6$ m, $T = 10$ s. IEA international results.

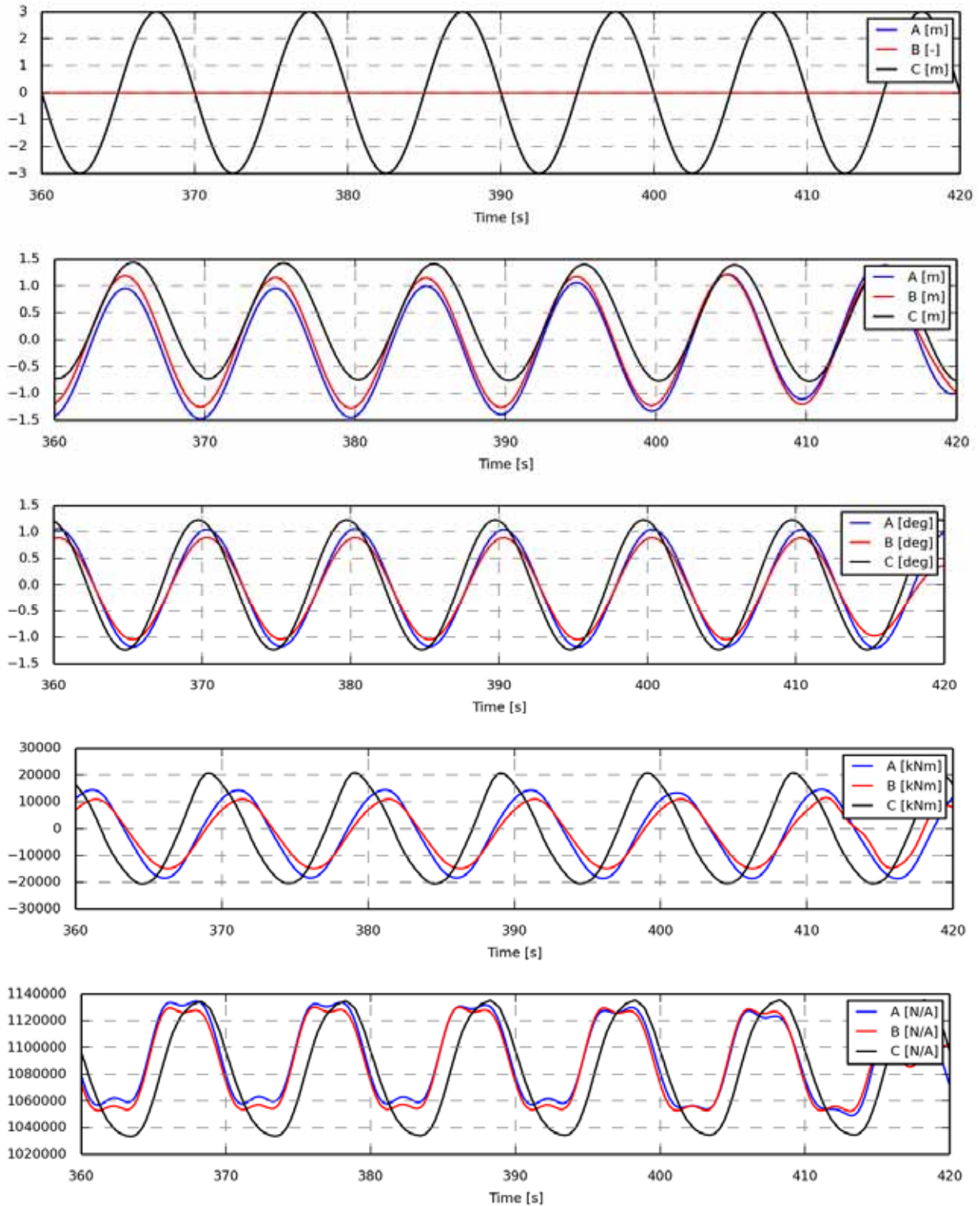


Figure 21: Case 2.1. Wave elevation, surge, pitch, tower Mx, axial force line 1 top. A is HAWC2-WAMIT, B is HAWC2-WAMSIM and C is HAWC2-StdAlone. Even though the wave height is not outputted for HAWC2-WAMSIM it is still present.

Case 2.2: Regular waves on a flexible substructure

Rigid turbine at standstill. Flexible substructure and moorings submitted to irregular Airy wave forces. $H_s = 6$ m, $T_p = 10$ s, $\gamma = 2.87$, JONSWAP spectrum.

In this case a significantly different response is observed for the pitch and surge motion of the structure when Morisons approach is used compared to the potential flow solutions. The increased pitch motion has a direct consequence in term of increased tower bending moments and increased anchor line tension. Since the surge motion is reduced it seem as the effective forcing point on the substructure is located at a lower position for the potential flow methods than for the Morsions approach. One explanation could be the slight wave non-linearity from wheeler stretching only applied with the Morison approach. Since the consequence is large, this is a point that need to be validated with experiments at later stage.

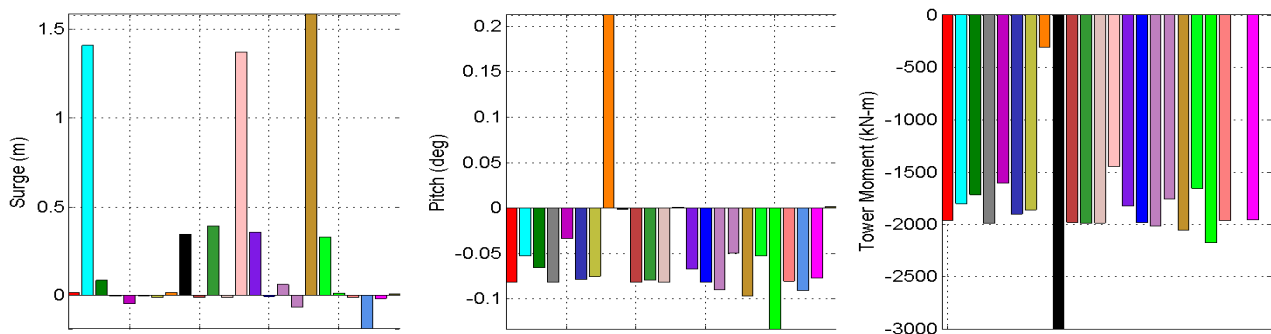


Figure 22. Irregular wave simulation (LC 2.2), $H_s = 6$ m and $T_p = 10$ s, mean value of response. IEA international results

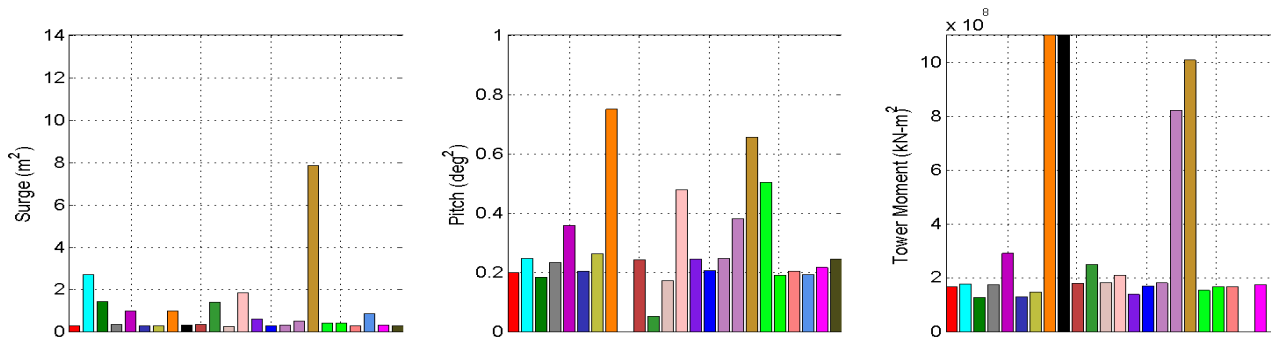


Figure 23. Irregular wave simulation (LC 2.2), $H_s = 6$ m and $T_p = 10$ s, variance of response. IEA international results

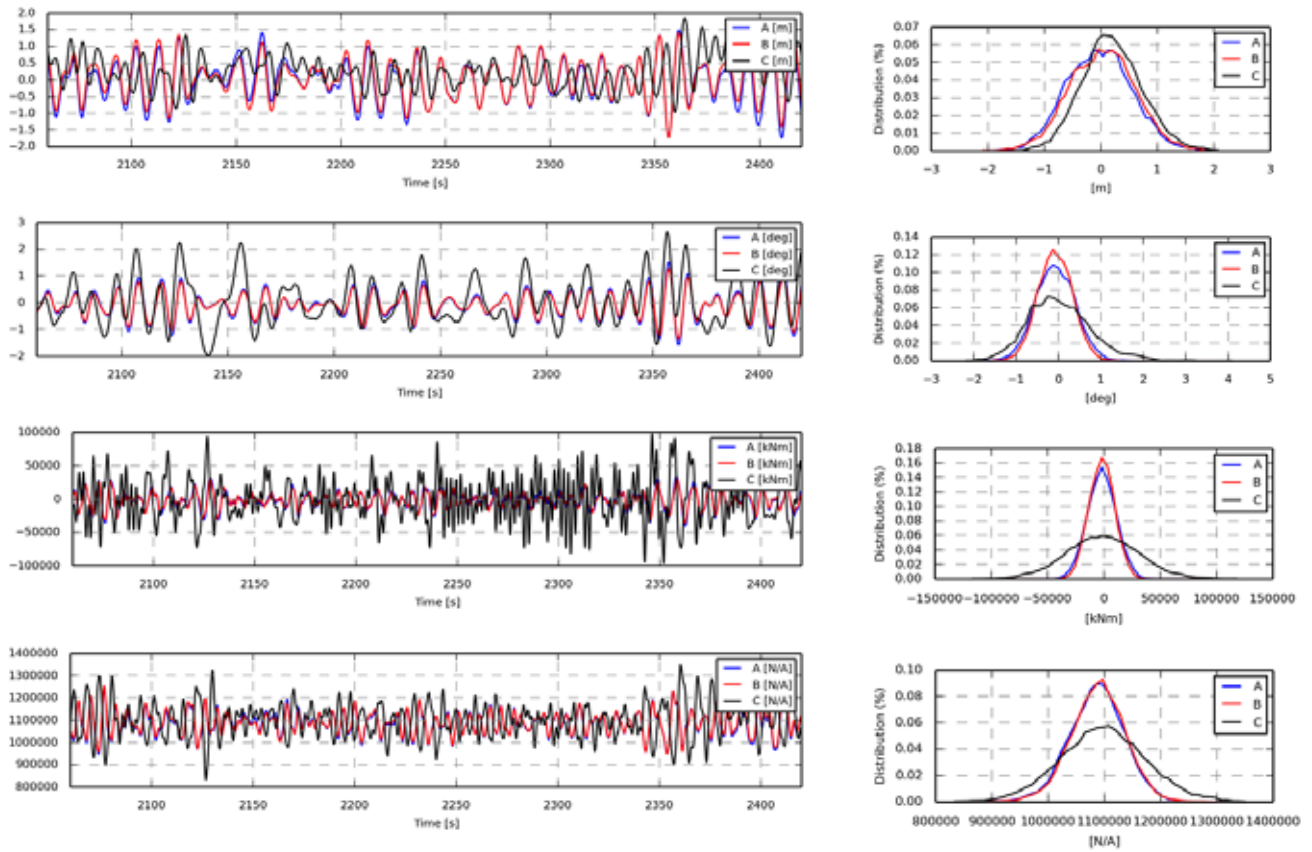


Figure 24: Case 2.2. Surge, pitch, Mx tower bottom, Line 2 axial force. A is HAWC2-WAMIT, B is HAWC2-WAMSIM and C is HAWC2-StdAlone. Left is a zoom of the time signal, right is the distribution function.

Case 2.5: Irregular waves on a flexible substructure

This loadcase is with a rigid turbine, but flexible mooring and substructure (Morison based versions). Irregular waves from a 50 year sea state is included. : $H_s = 15.0$ m, $T_p = 19.2$ s, $\gamma=1.05$, JONSWAP spectrum.

The Morison based results gives a higher response in pitch motion causing higher tower loads as also seen in load case 2.2.

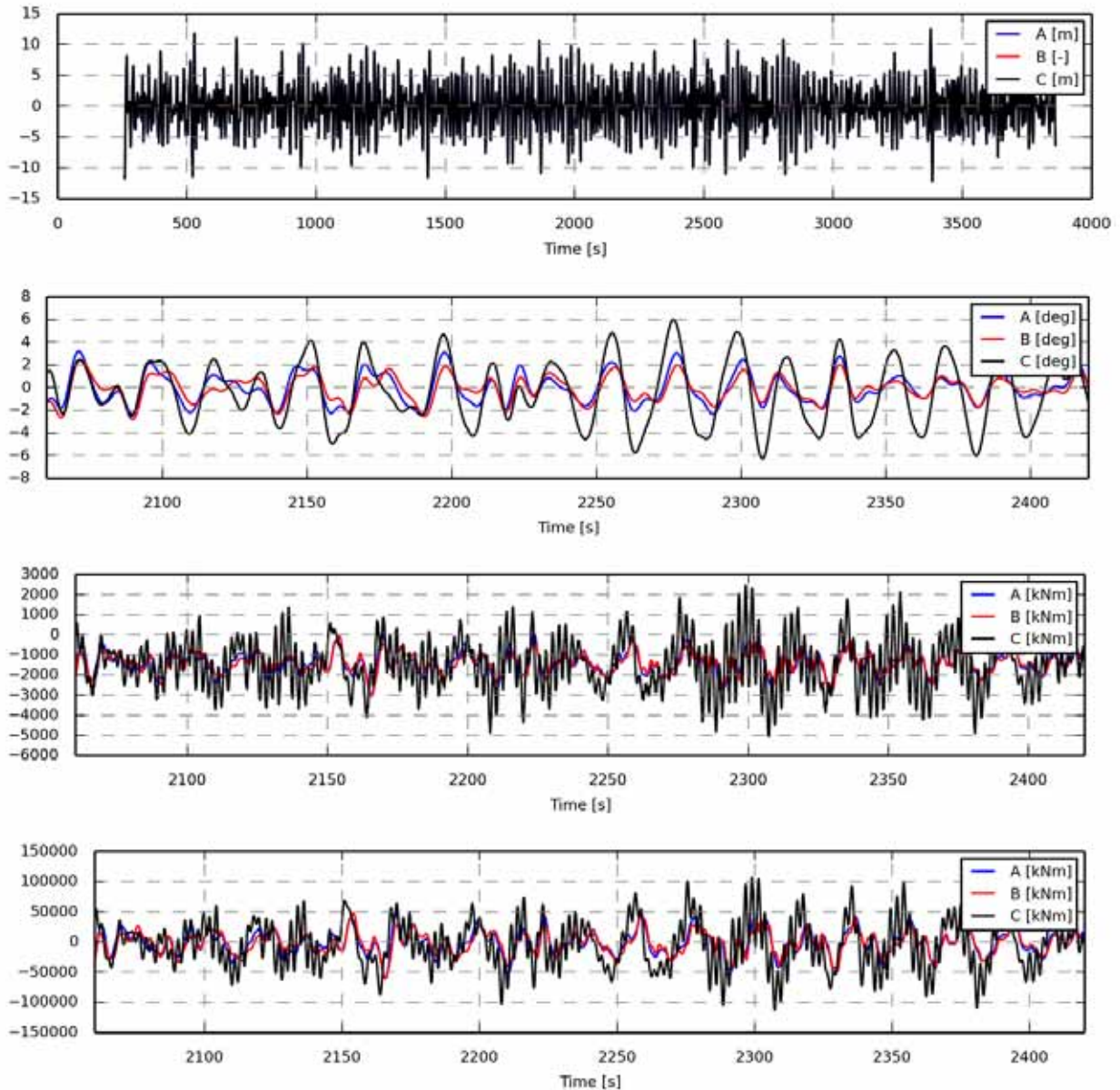


Figure 25: Case 2.5. Wave elevation, surge, pitch, tower bottom Mx. A is HAWC2-WAMIT, B is HAWC2-WAMSIM and C is HAWC2-StdAlone

Case 3.2: Irregular waves on a fully flexible structure at 11.4m/s

In this load case, the structure is fully flexible (potential flow methods with rigid substructure though). The turbine is operating at 11.4m/s in turbulent inflow and the waves are irregular with $H_s = 6$ m, $T_p = 10$ s, $\gamma=2.87$, jonswap spectrum.

It can be seen that the fully flexible HAWC2-stdalone solution results in higher pitch motions of the structure, which can be seen to cause larger variations in rotor speed, power production and blade pitch angle. The tower loads agree very well in the top of the tower and side-side, but the fore-aft tower bottom loads larger variations are seen in the HAWC2-stdalone edition with the flexible semisub and Morison approach.

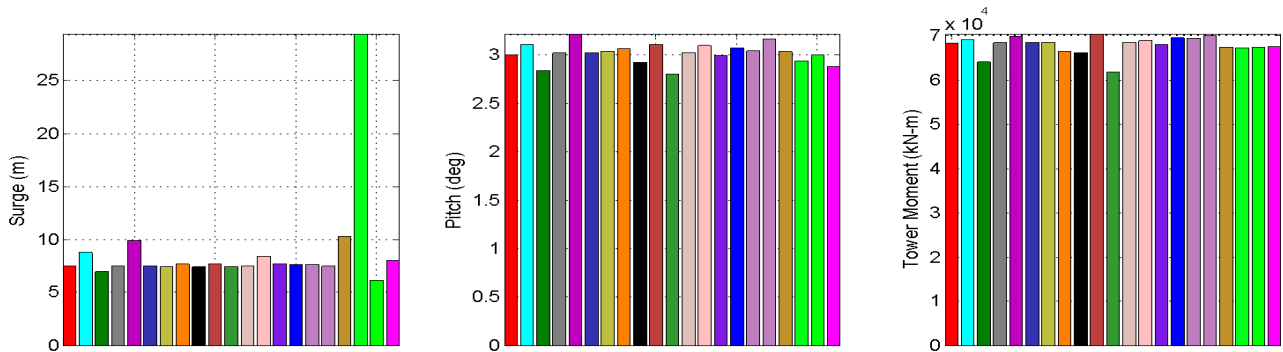


Figure 26. Irregular wave simulation with wind (LC 3.2), $H_s = 6$ m, $T_p = 10$ s, $V=11.4$ m/s, mean value of response. IEA international results

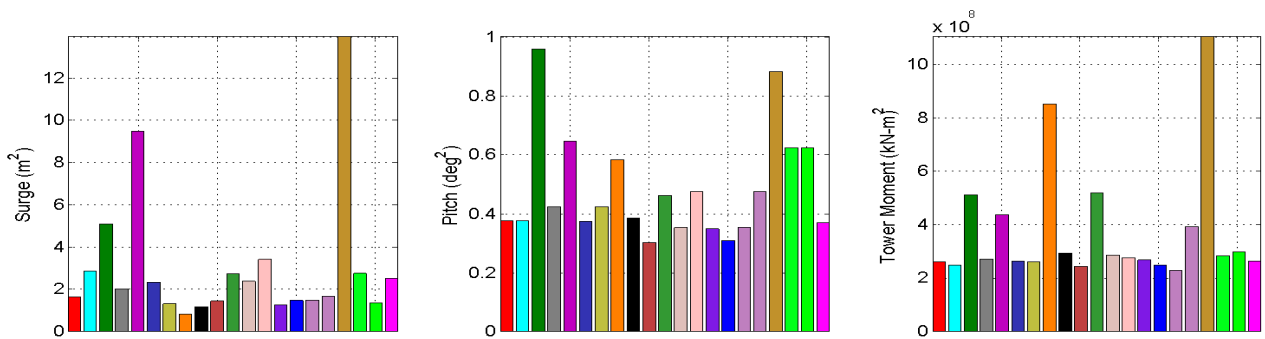


Figure 27. Irregular wave simulation with wind (LC 3.2), $H_s = 6$ m, $T_p = 10$ s, $V=11.4$ m/s, variance of response. IEA international results

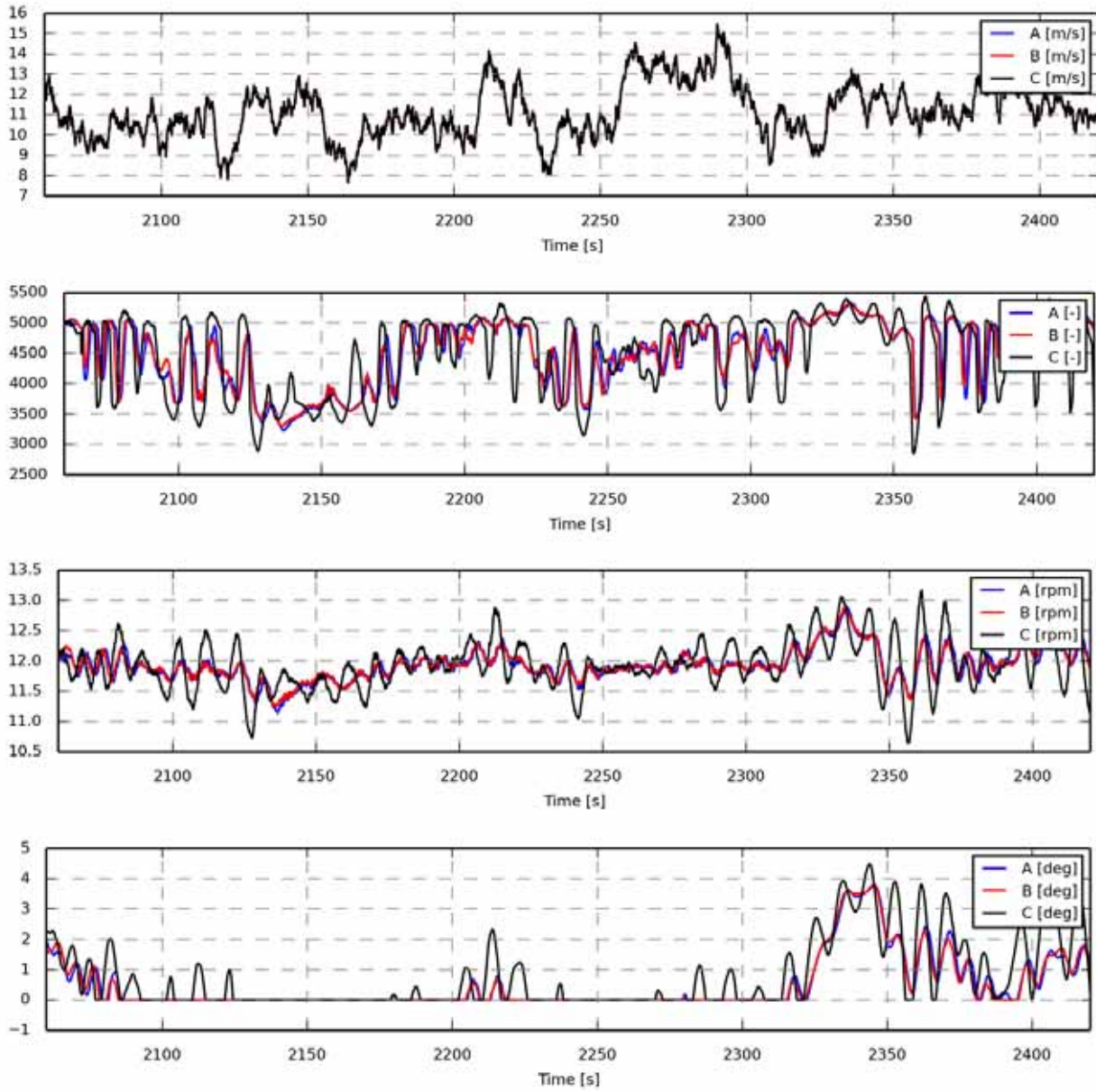
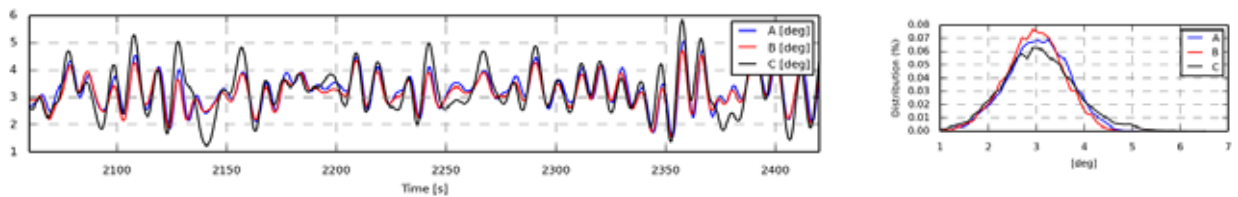


Figure 28: Case 3.2. Wind, Electrical power, rotor speed, blade pitch angle. A is HAWC2-WAMIT, B is HAWC2-WAMSIM and C is HAWC2-StdAlone.



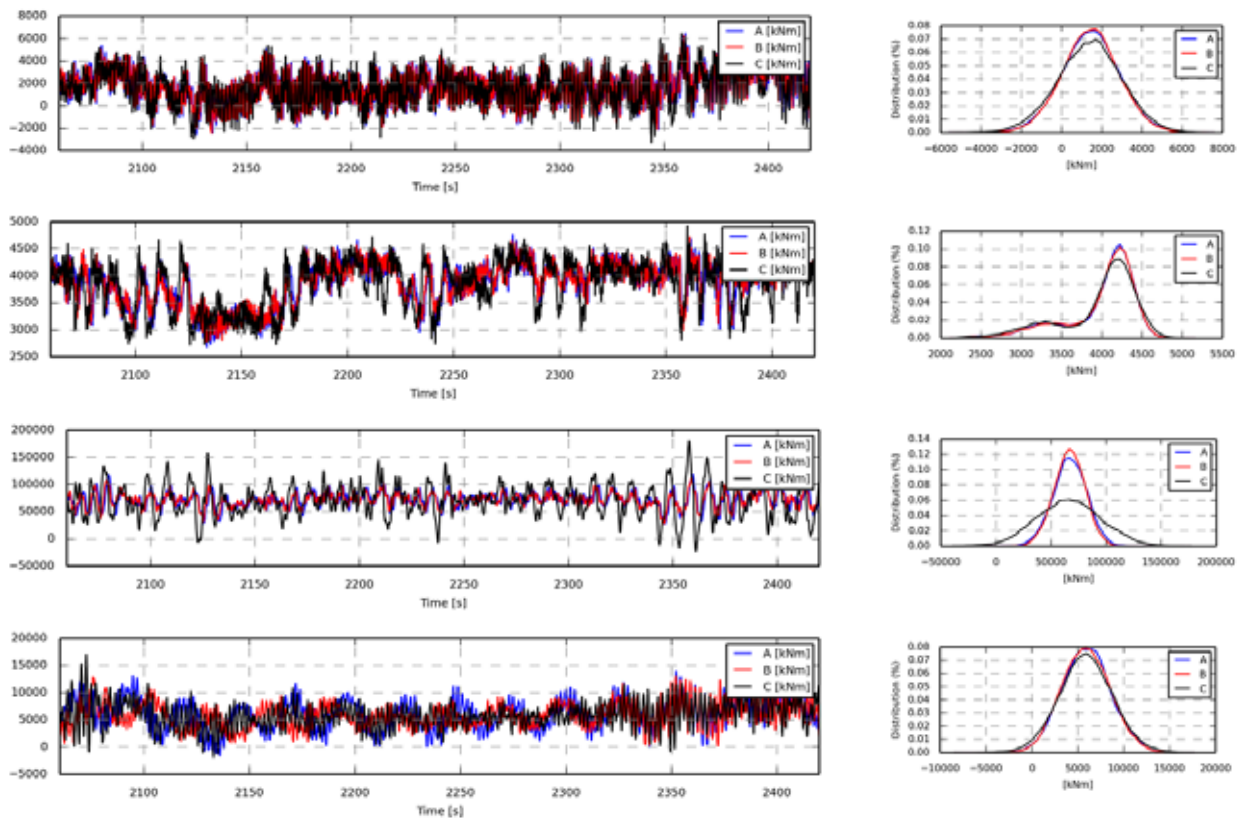


Figure 29: Case 3.2. Pitch, Mx tower top, My tower top, Mx tower bottom. A is HAWC2-WAMIT, B is HAWC2-WAMSIM and C is HAWC2-StdAlone. Left is a zoom of the time signal, right is the distribution function.

Case 3.3: Irregular waves on a fully flexible structure at 18m/s

In this load case, the structure is fully flexible (potential flow methods with rigid substructure though). The turbine is operating at 18m/s in turbulent inflow and the waves are irregular with $H_s = 6$ m, $T_p = 10$ s, $\gamma=2.87$, jonswap spectrum.

As for case 3.2 it can be seen that the fully flexible HAWC2-stdalone solution results in higher pitch motions of the structure, which can be seen to cause larger variations in rotor speed, power production and blade pitch angle. The tower loads agree very well in the top of the tower and side-side, but the fore-aft tower bottom loads larger variations are seen in the HAWC2-stdalone edition with the flexible semisub and Morison approach.

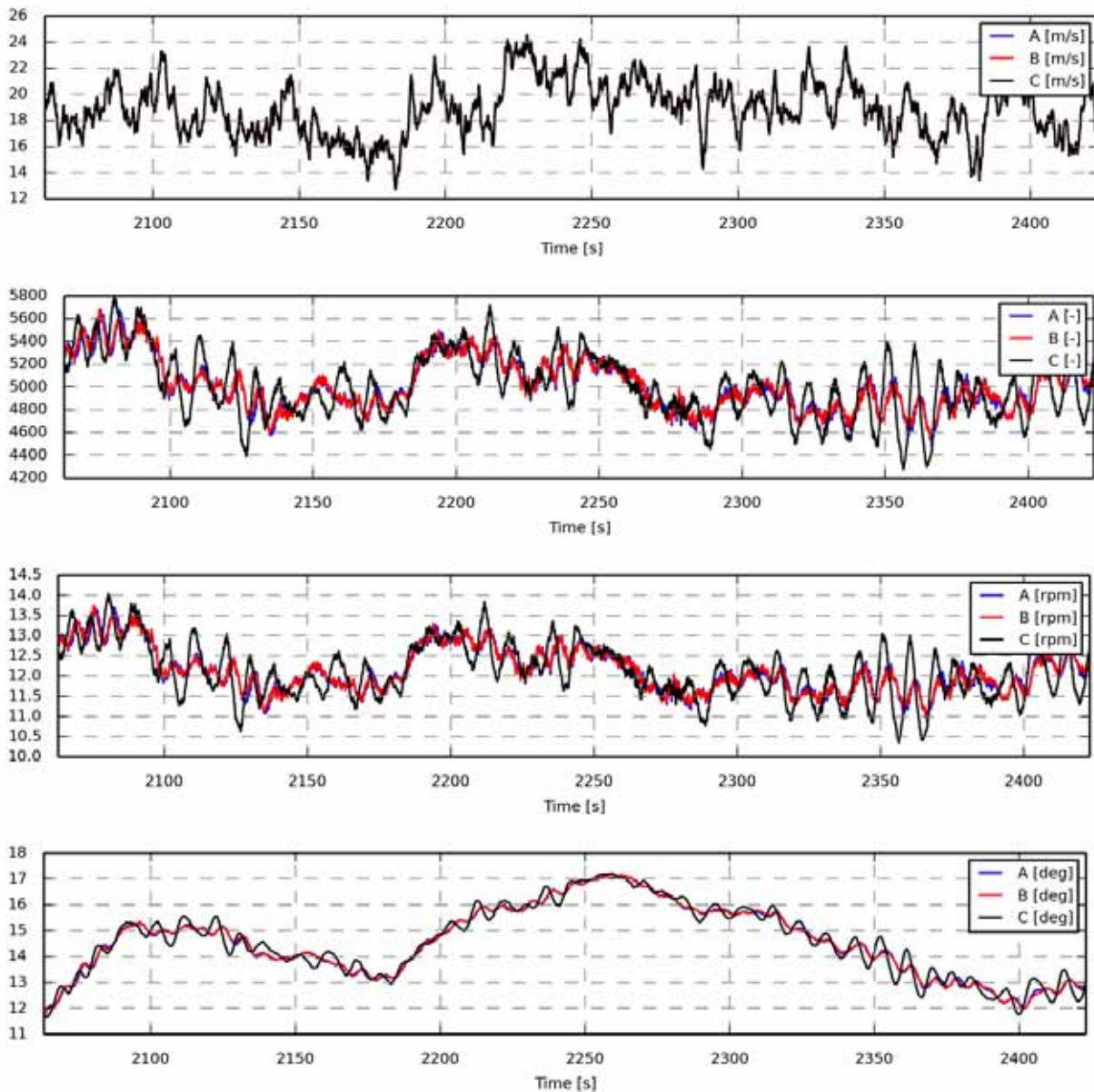


Figure 30: Case 3.3. Wind, Electrical power, rotor speed, blade pitch angle. A is HAWC2-WAMIT, B is HAWC2-WAMSIM and C is HAWC2-StdAlone.

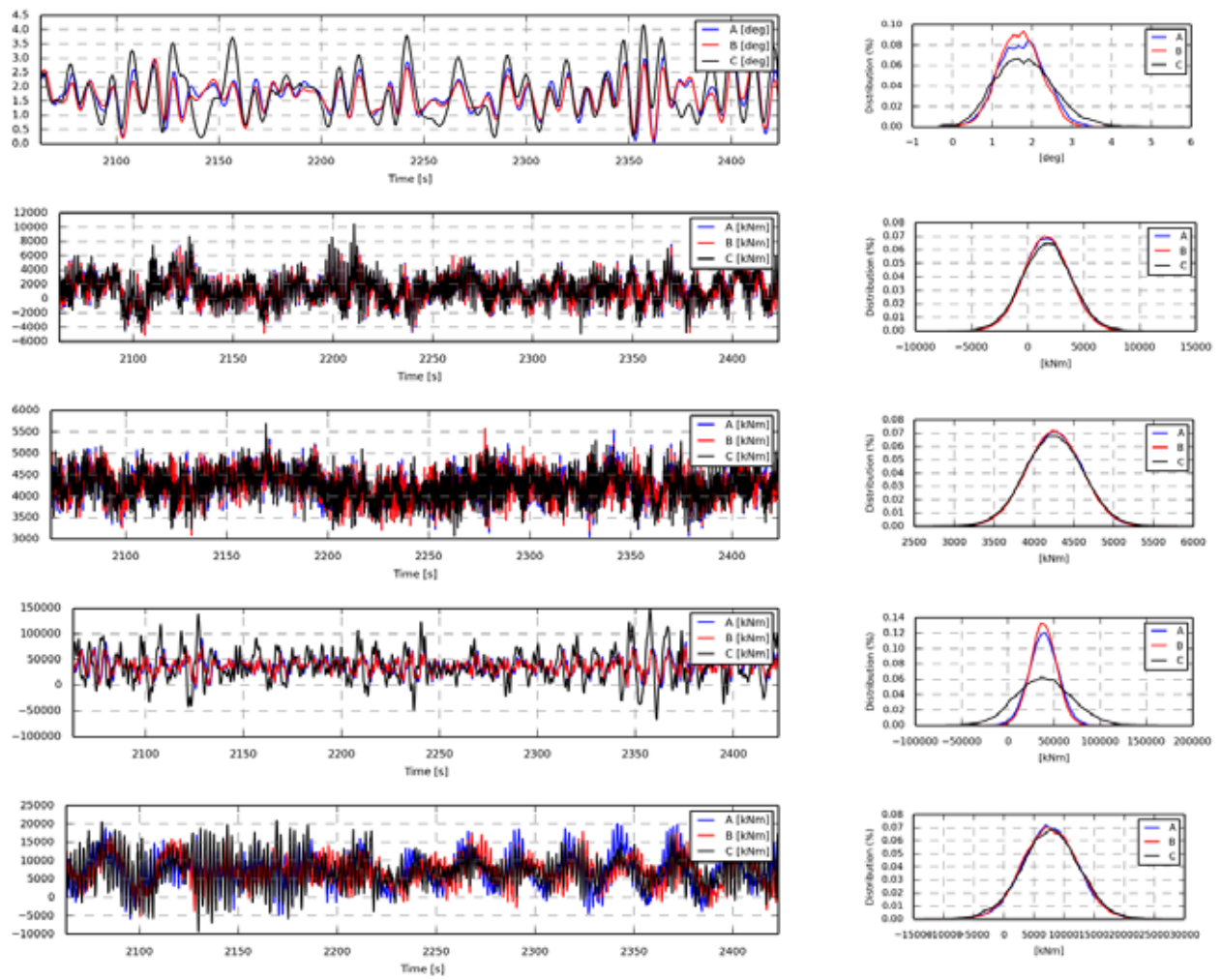


Figure 31: Case 3.3. Pitch, Mx tower top, My tower top, Mx tower bottom. A is HAWC2-WAMIT, B is HAWC2-WAMSIM and C is HAWC2-StdAlone. Left is a zoom of the time signal, right is the distribution function.

Case 3.5: Irregular waves on a fully flexible structure at 47.5m/s

In this load case, the structure is fully flexible (potential flow methods with rigid substructure though). The turbine at stand still with the blades pitched 90deg. The wind speed is 47.5m/s in turbulent inflow and the waves are irregular with $H_s = 15$ m, $T_p = 19.2$ s, $\gamma=1.05$, jonswap spectrum.

Again larger pitch motion is seen for the HAWC2-stdalone with Morison approach compared to the rigid semisub with potential flow theory. This results in higher tower loads, whereas the anchor line tension is more unaffected.

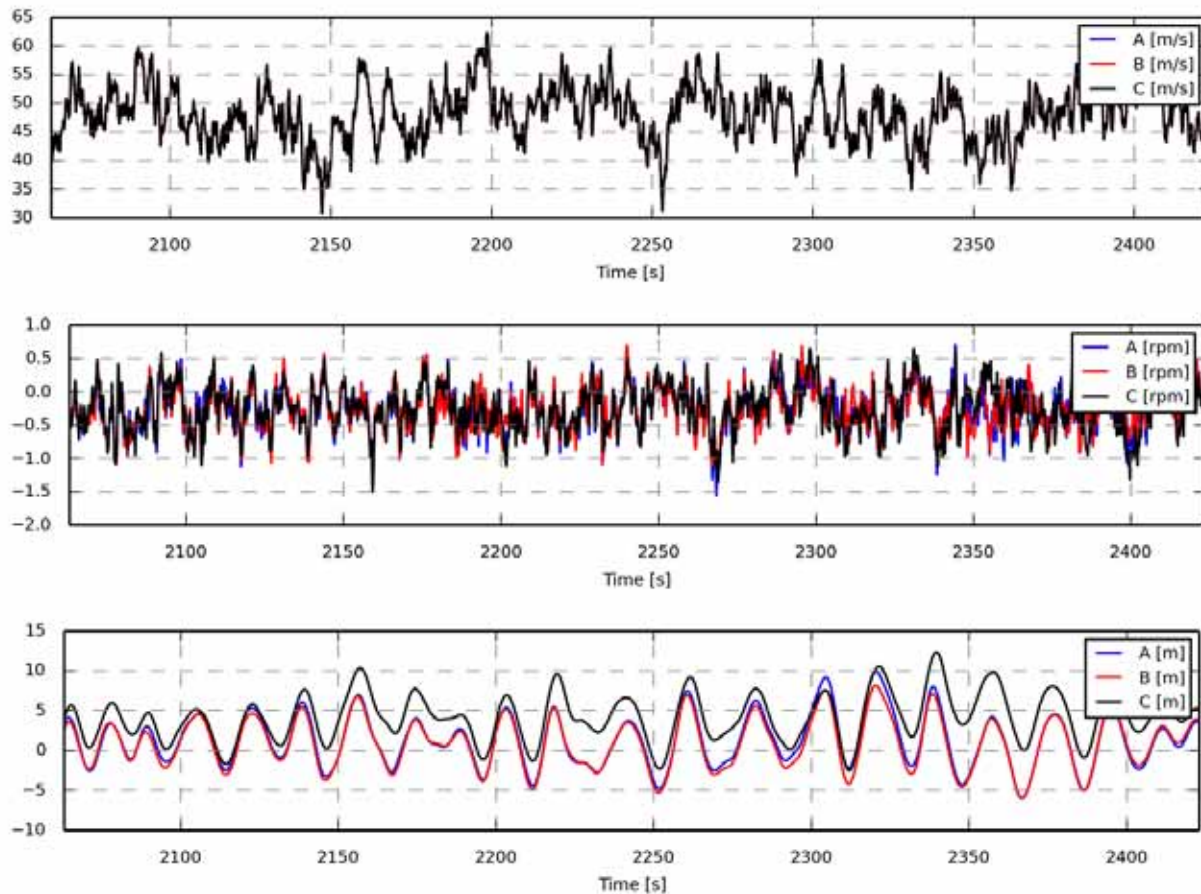


Figure 32: Case 3.5. Wind speed, rotor speed, surge. A is HAWC2-WAMIT, B is HAWC2-WAMSIM and C is HAWC2-StdAlone.

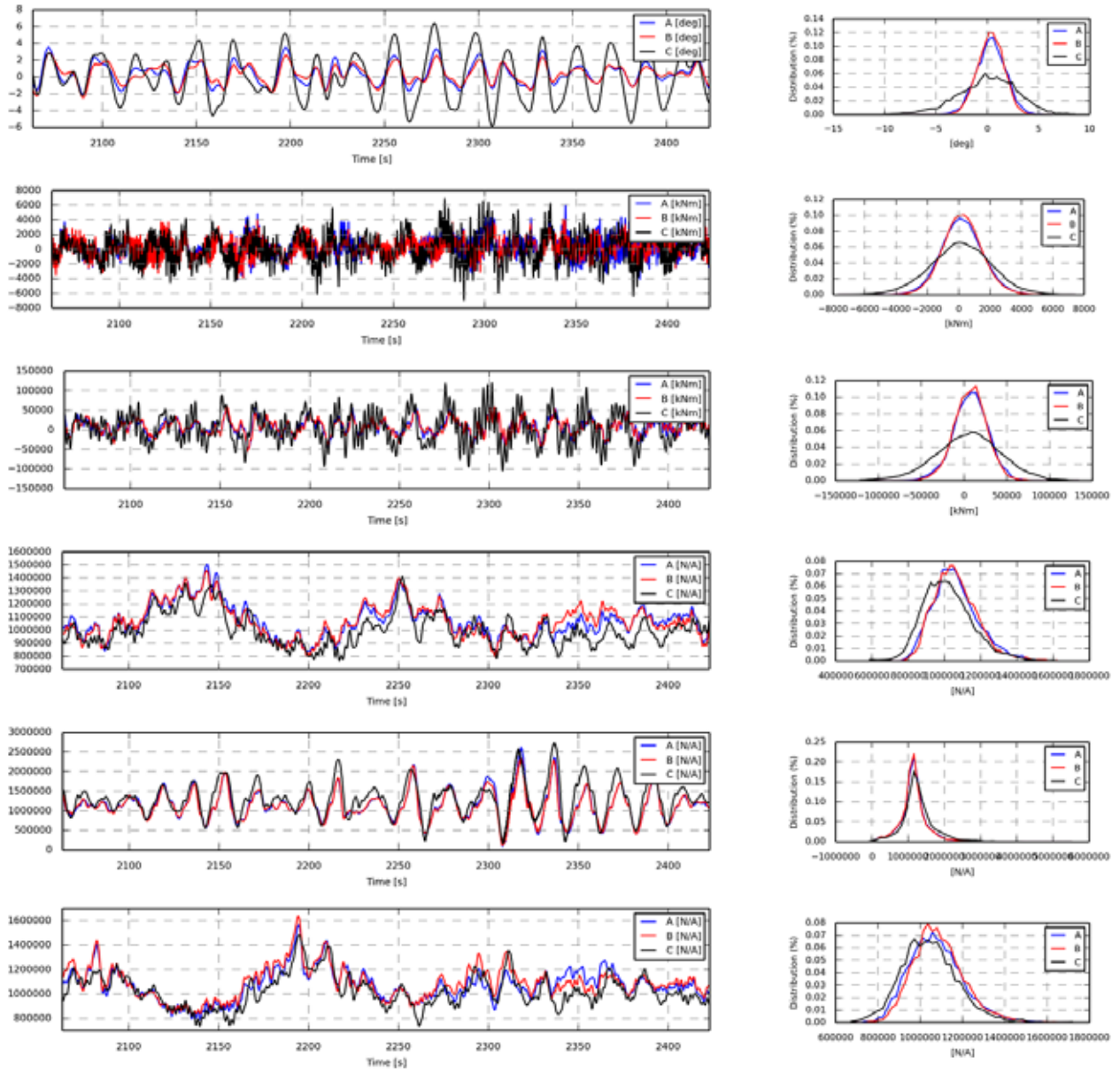


Figure 33: Case 3.5. Pitch, Mx tower top Mx tower bottom, line 1, line 2, line 3. A is HAWC2-WAMIT, B is HAWC2-WAMSIM and C is HAWC2-StdAlone. Left is a zoom of the time signal, right is the distribution function.

Case 3.9a: Flooded compartment, no waves

LC 3.9 examines the response of the semi during a damage scenario where water has flooded a compartment within one of the offset columns. Water is added to both Base Column 1 and Upper Column 1. For Base Column 1, the column is completely flooded, which results in the addition of 3.82×10^5 kg of water. Upper Column 1 is flooded up to 9.33 m above the base of that column, which means an addition of 1.704×10^5 kg of water.

It was not directly possible to adjust the water ballast in the hydrodynamic codes WAMSIM and WAMIT, and therefore these results do not result in a skew orientation of the semi sub. The impact can be seen from the HAWC2-standalone results where the offset is included. The semisub is seen to have a pitch angle of 7deg and a roll angle of 4deg due to the water offset, which directly causes extra loads on the tower bottom.

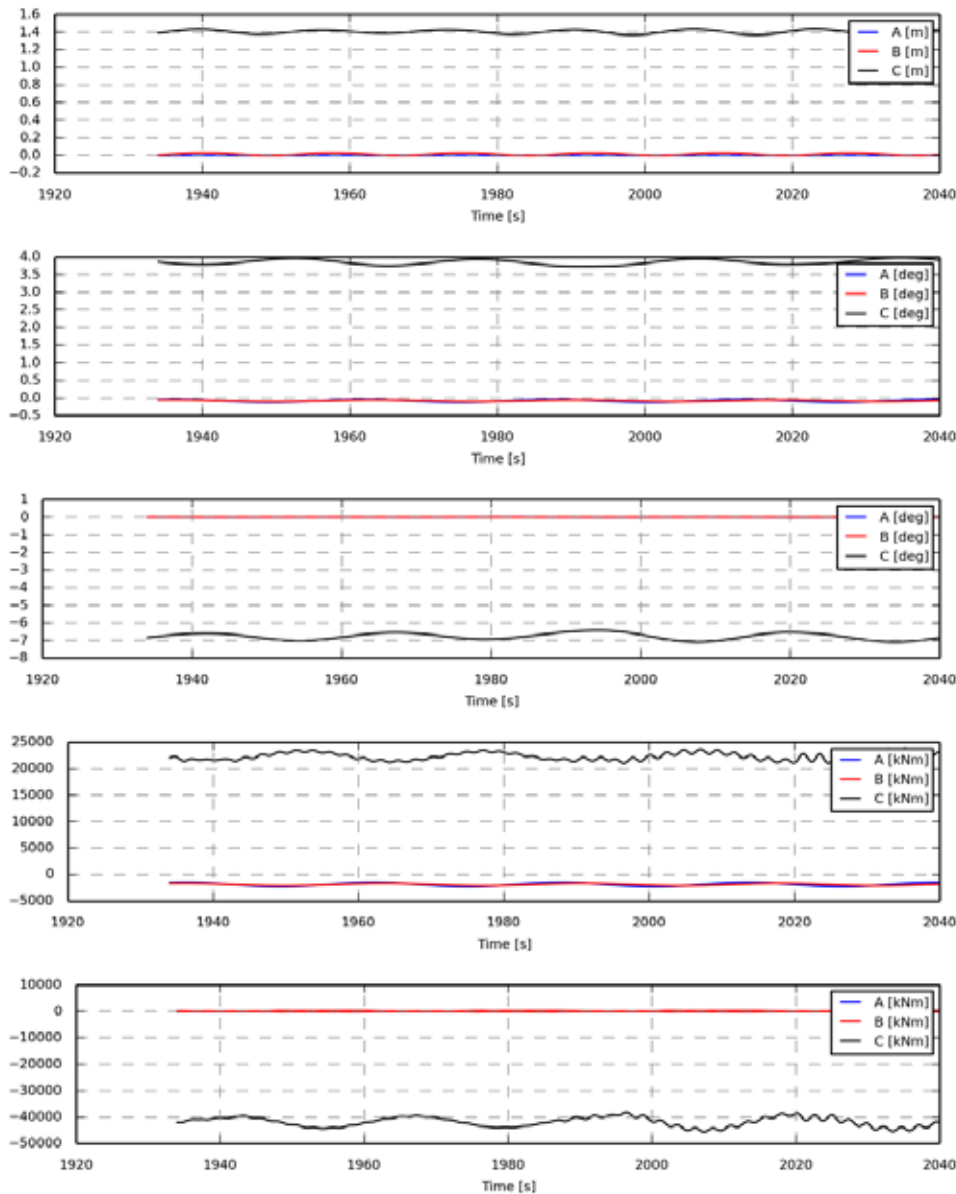


Figure 34: Case 3.9a. Heave, pitch, roll, Mx tower bottom, My tower bottom. A is HAWC2-WAMIT, B is HAWC2-WAMSIM and C is HAWC2-StdAlone

Case 3.9b: Flooded compartment, irregular waves

This loadcase is also with flooded compartments as for case 3.9a, but here the turbine is operating at 18m/s with turbulent inflow and irregular waves $H_s = 6$ m, $T_p = 10$ s, $\gamma=2.87$, jonswap spectrum.

It was not directly possible to adjust the water ballast in the hydrodynamic codes WAMSIM and WAMIT, and therefore these results does not result in a skew orientation of the semi sub which explain the main result differences.

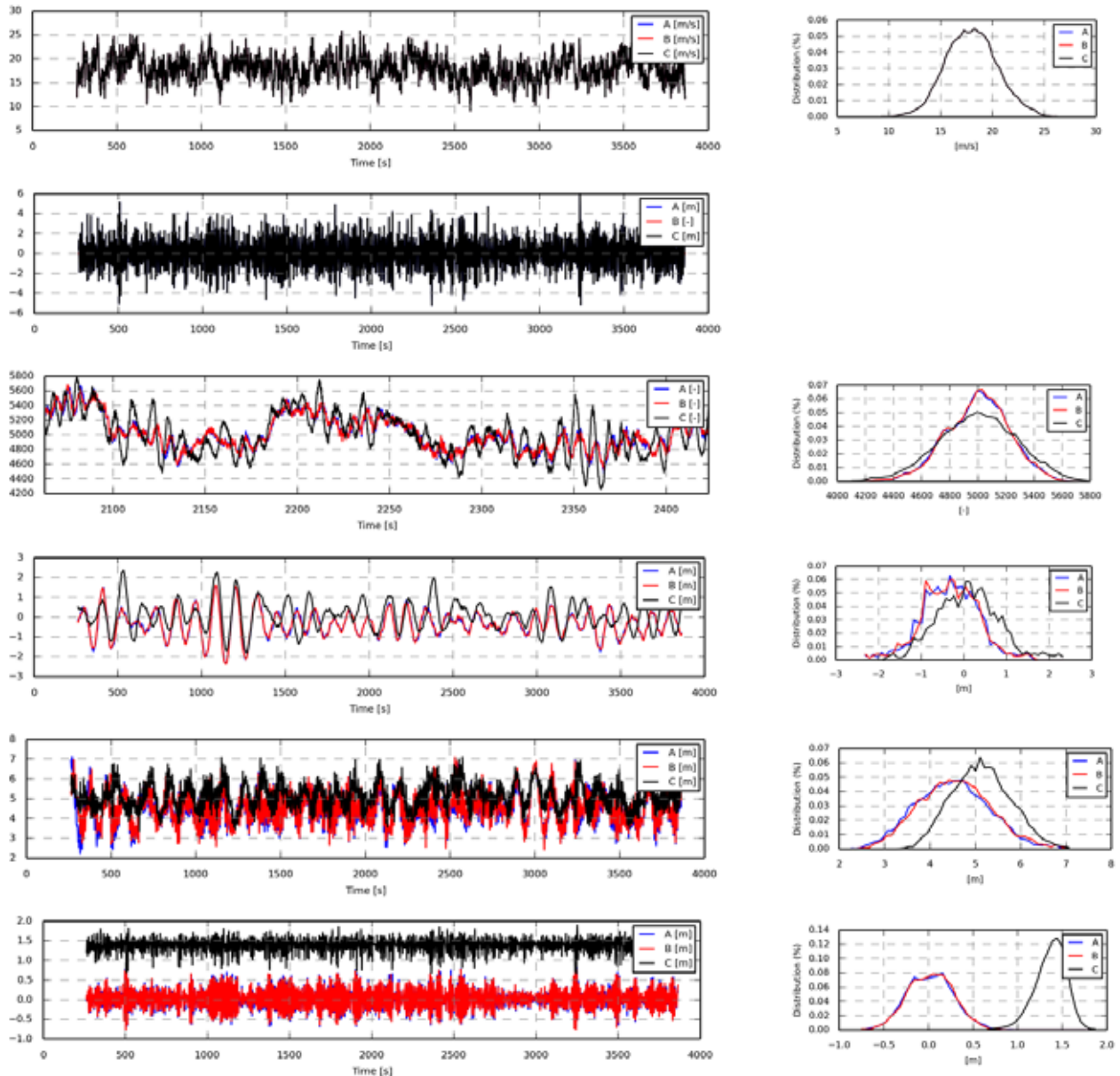


Figure 35: Case 3.9b. Wind speed, Wave height, Electrical power, sway, surge, heave. A is HAWC2-WAMIT, B is HAWC2-WAMSIM and C is HAWC2-StdAlone. Left the time signal, right is the distribution function

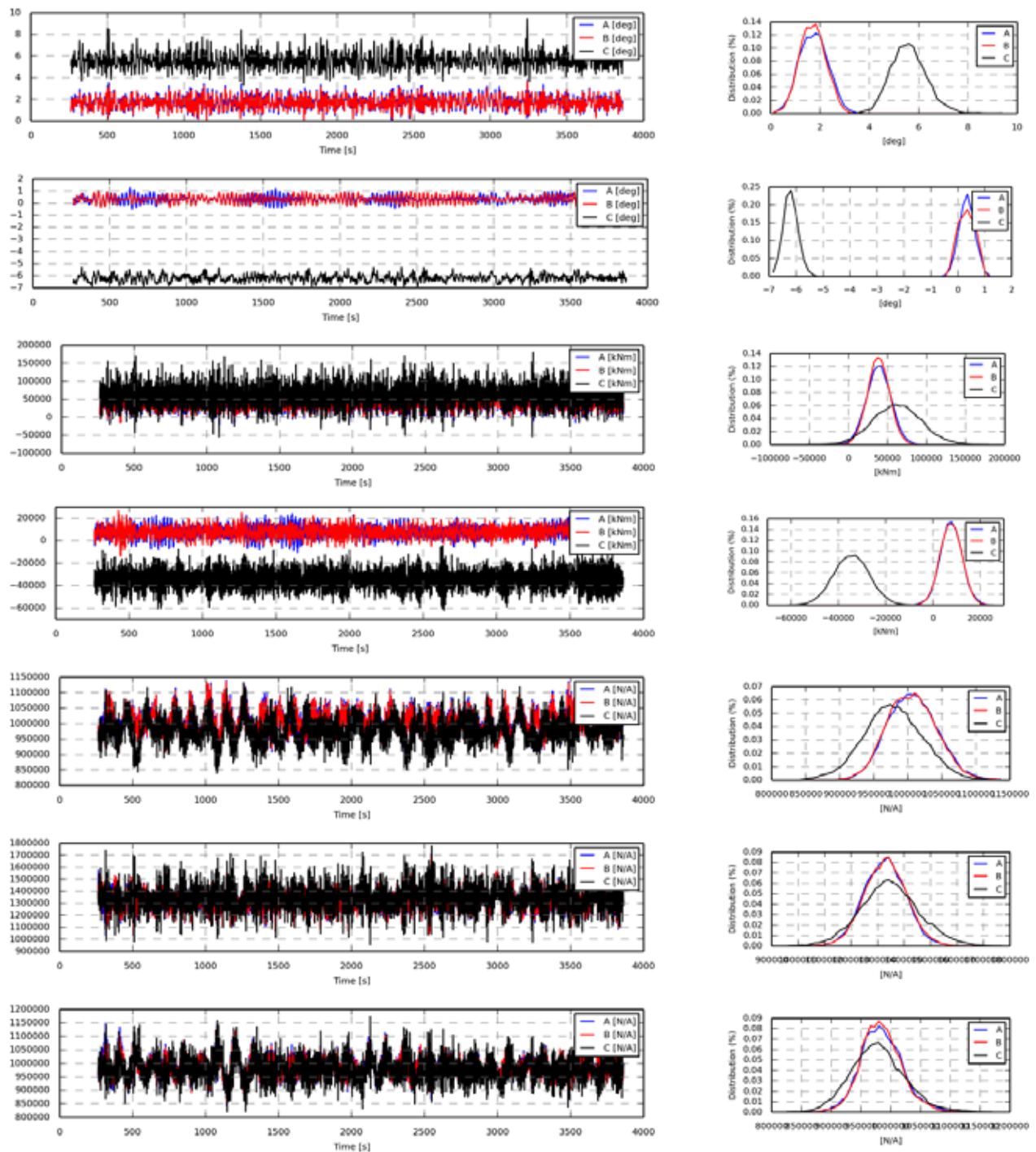


Figure 36: Case 3.9b. Pitch, roll, Mx tower bottom, My tower bottom, Fz line 1, Fz line 2, Fz line 3. A is HAWC2-WAMIT, B is HAWC2-WAMSIM and C is HAWC2-StdAlone. Left the time signal, right is the distribution function

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Sensor list

In the following appendix a set of sensors have been compared in a detailed way. The description of these sensors are written in Table 2.

No	Description	Unit
1	Wind speed towards the turbine	[m/s]
2	Water elevation (positive downwards)	[m]
3	Electrical power	[kW]
4	Rotor speed	[rpm]
5	Blade 1 pitch angle	[deg]
6	Substructure location, sway	[m]
7	Substructure location, surge	[m]
8	Substructure location, heave	[m]
9	Substructure rotation, pitch	[deg]
10	Substructure rotation, roll	[deg]
11	Substructure rotation, yaw	[deg]
12	Tower top bending moment, pitch	[kNm]
13	Tower top bending moment, roll	[kNm]
14	Tower top bending moment, yaw	[kNm]
15	Tower bottom bending moment, pitch	[kNm]
16	Tower bottom bending moment, roll	[kNm]
17	Tower bottom bending moment, yaw	[kNm]
18	Anchorline 1 tension top	[N]
19	Anchorline 1 tension bottom	[N]
20	Anchorline 2 tension top	[N]
21	Anchorline 2 tension bottom	[N]
22	Anchorline 3 tension top	[N]
23	Anchorline 3 tension bottom	[N]

Table 2: Sensor description

Article 1. oc4_p2_load_case_1-2

Generated 22-04-2014 10:00

Section 1.01 oc4_p2_load_case_1-2: WSP gl. coo.,Vy [m/s]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-2.sel (28-02-2014 16:17)	3	Free wind speed Vy, gl. coo, of gl. pos 0.00, 0.00, -90.00
B	WAMsim/oc4_p2_load_case_1-2.sel (01-04-2014 12:50)	3	Free wind speed Vy, gl. coo, of gl. pos 0.00, 0.00, -90.00
C	hawc2/oc4_p2_load_case_1-2.sel (04-12-2013 11:39)	3	Free wind speed Vy, gl. coo, of gl. pos 0.00, 0.00, -90.00

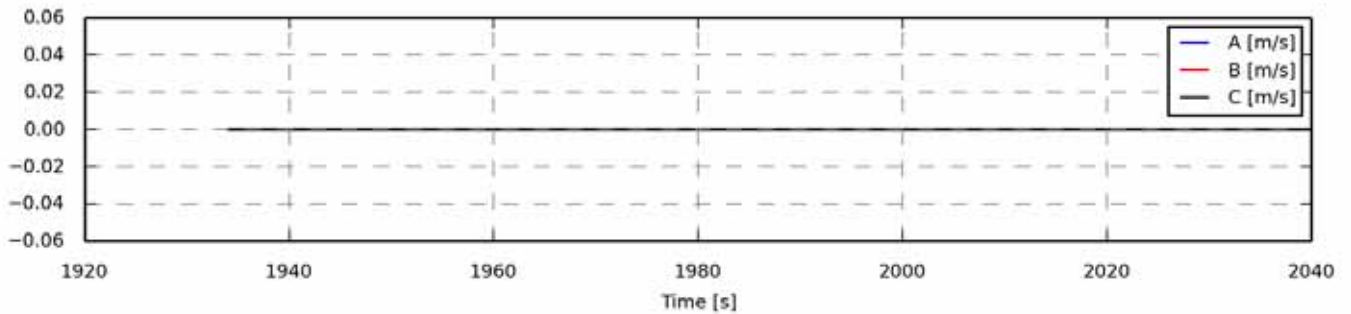


Figure 37 - Full length time series

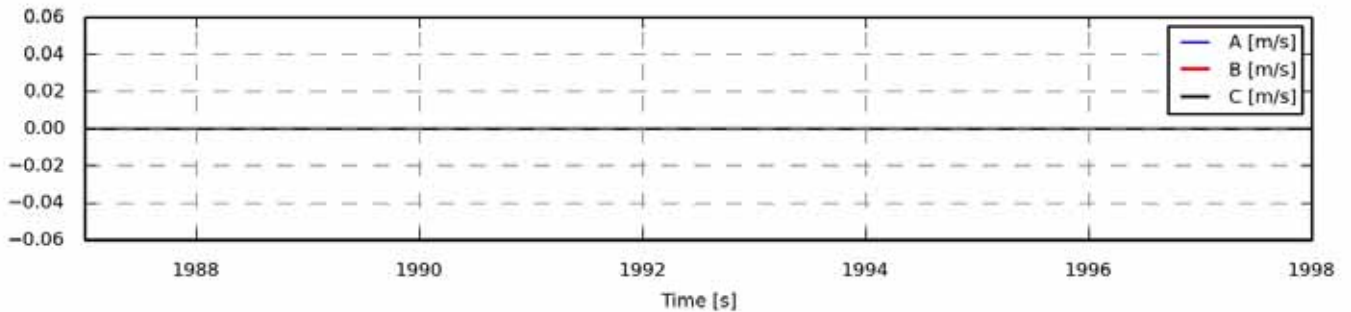


Figure 38 - Zoom of time series

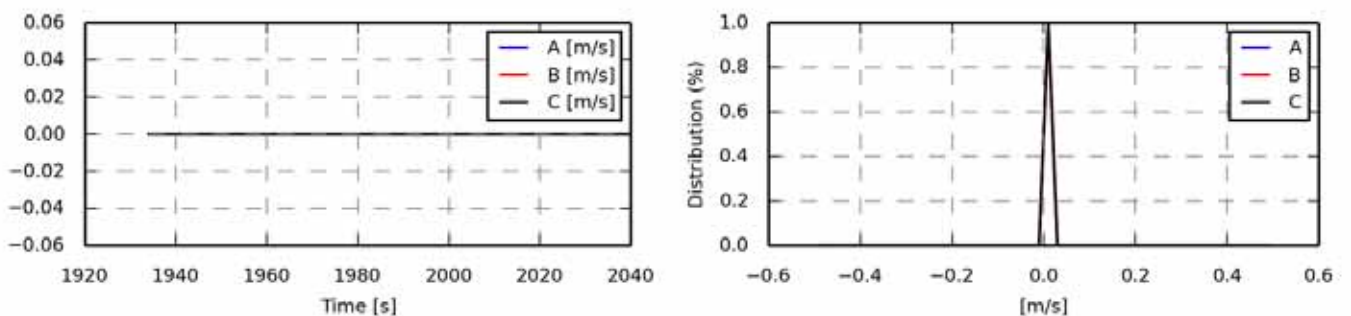


Figure 39 - Power spectrum density

Statistics	A	B	C
Min	0.0000	0.0000	0.0000
Max	0.0000	0.0000	0.0000
Mean	0.0000	0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

Figure 40 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 1.02 oc4_p2_load_case_1-2: Water surf. [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-2.sel (28-02-2014 16:17)	5	Water surface gl. coo, at gl. coo, x,y= 0.00, 0.00
B	WAMsim/oc4_p2_load_case_1-2.sel (01-04-2014 12:50)	5	Constant value
C	hawc2/oc4_p2_load_case_1-2.sel (04-12-2013 11:39)	5	Water surface gl. coo, at gl. coo, x,y= 0.00, 0.00

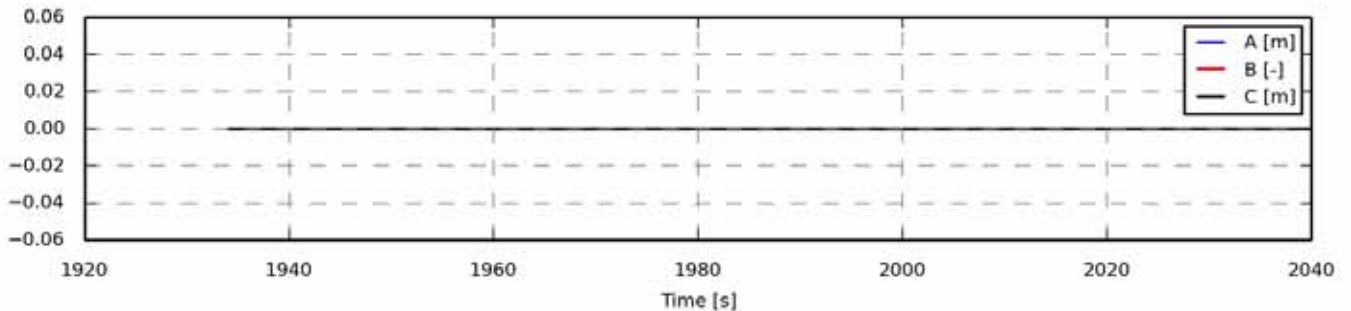


Figure 41 - Full length time series

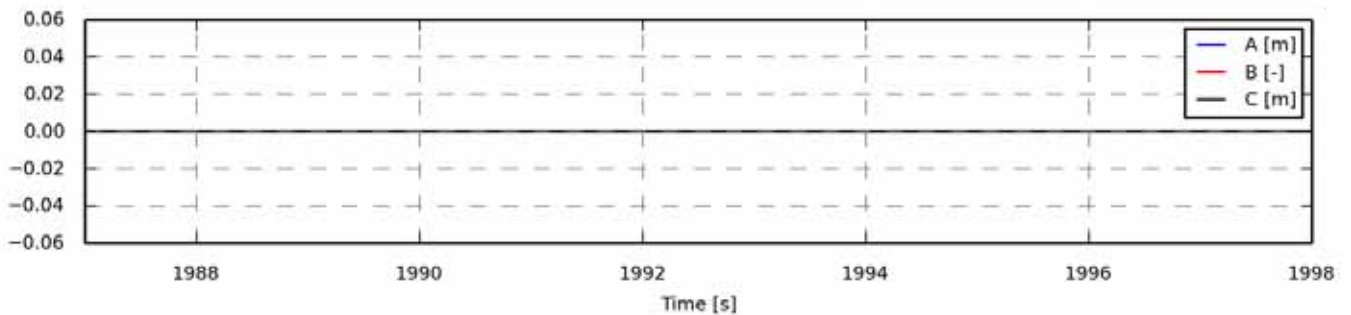


Figure 42 - Zoom of time series

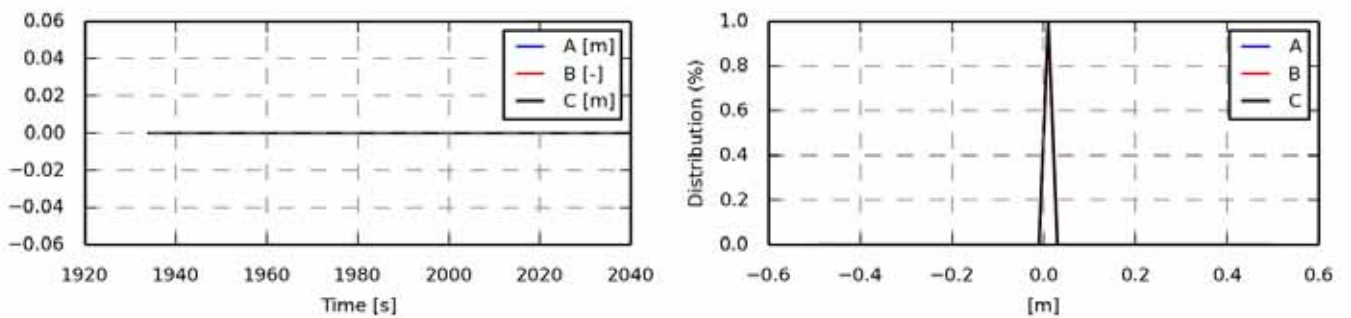


Figure 43 - Power spectrum density

Statistics	A	B	C
Min	0.0000	0.0000	0.0000
Max	0.0000	0.0000	0.0000
Mean	0.0000	0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

Figure 44 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 1.03 oc4_p2_load_case_1-2: Constant [-]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-2.sel (28-02-2014 16:17)	6	Constant value
B	WAMsim/oc4_p2_load_case_1-2.sel (01-04-2014 12:50)	6	Constant value
C	hawc2/oc4_p2_load_case_1-2.sel (04-12-2013 11:39)	6	Constant value

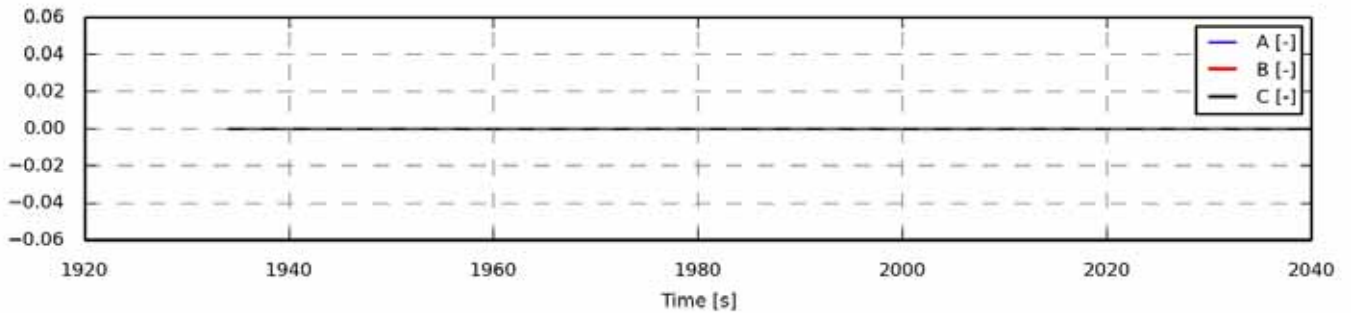


Figure 45 - Full length time series

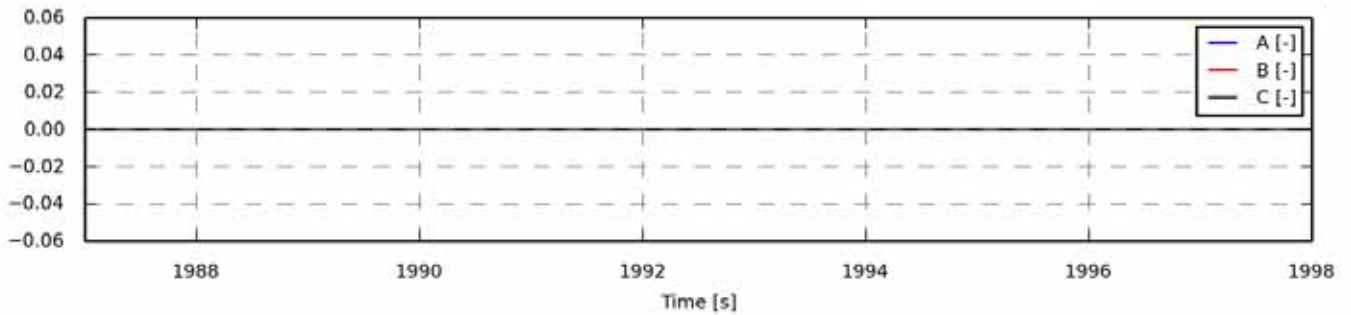


Figure 46 - Zoom of time series

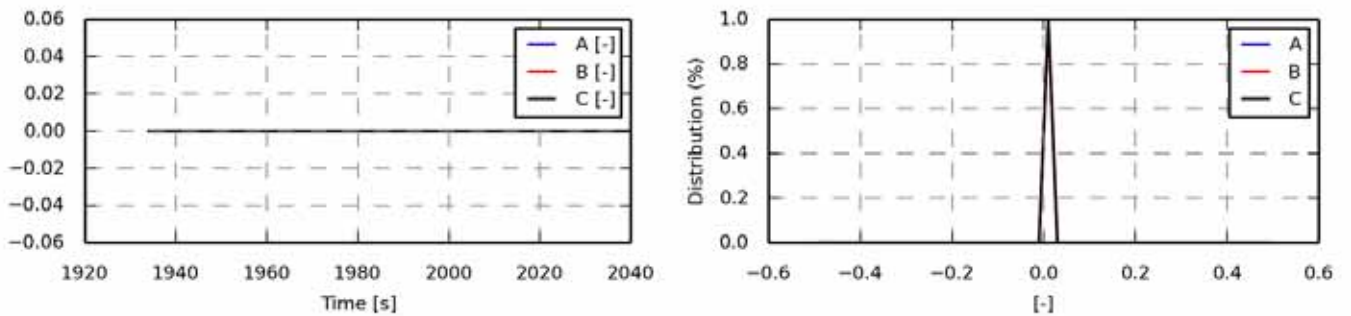


Figure 47 - Power spectrum density

Figure 48 - Value distribution

Statistics	A	B	C
Min	0.0000	0.0000	0.0000
Max	0.0000	0.0000	0.0000
Mean	0.0000	0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 1.04 oc4_p2_load_case_1-2: Constant [-]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-2.sel (28-02-2014 16:17)	9	Constant value
B	WAMsim/oc4_p2_load_case_1-2.sel (01-04-2014 12:50)	9	Constant value
C	hawc2/oc4_p2_load_case_1-2.sel (04-12-2013 11:39)	9	Constant value

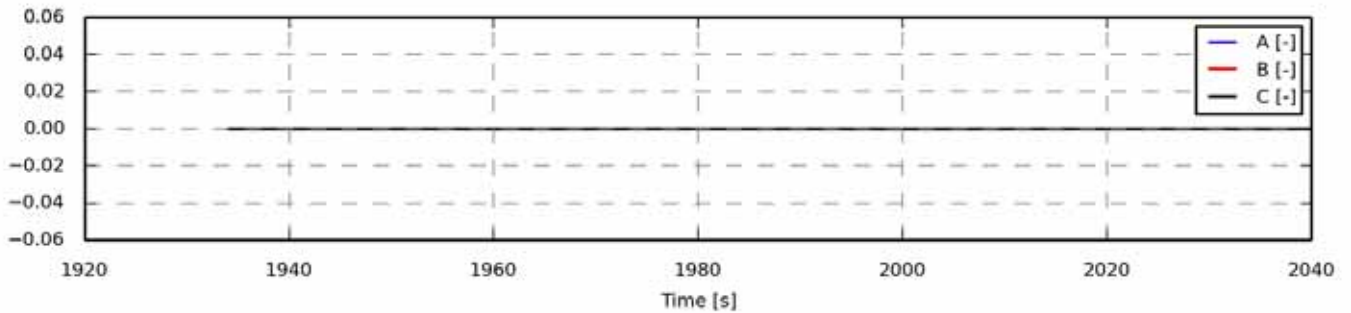


Figure 49 - Full length time series

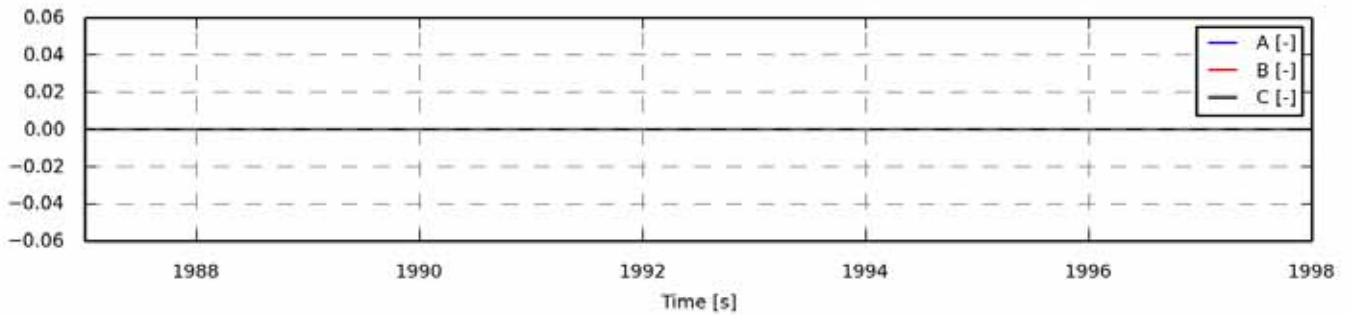


Figure 50 - Zoom of time series

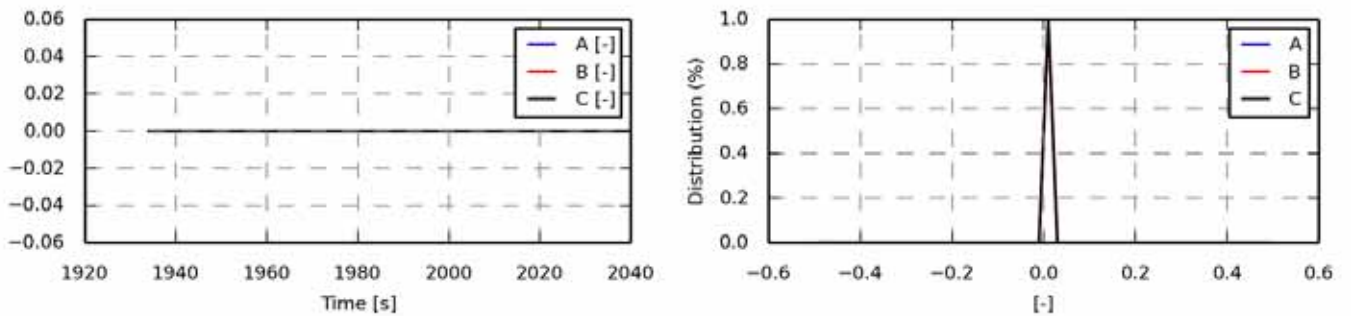


Figure 51 - Power spectrum density

Statistics	A	B	C
Min	0.0000	0.0000	0.0000
Max	0.0000	0.0000	0.0000
Mean	0.0000	0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

Figure 52 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 1.05 oc4_p2_load_case_1-2: bea1 angle [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-2.sel (28-02-2014 16:17)	14	pitch1 angle
B	WAMsim/oc4_p2_load_case_1-2.sel (01-04-2014 12:50)	14	pitch1 angle
C	hawc2/oc4_p2_load_case_1-2.sel (04-12-2013 11:39)	14	pitch1 angle

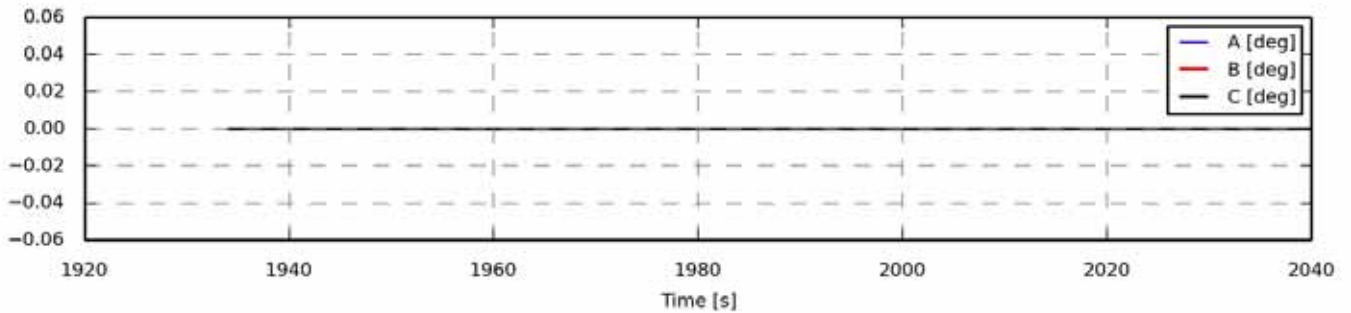


Figure 53 - Full length time series

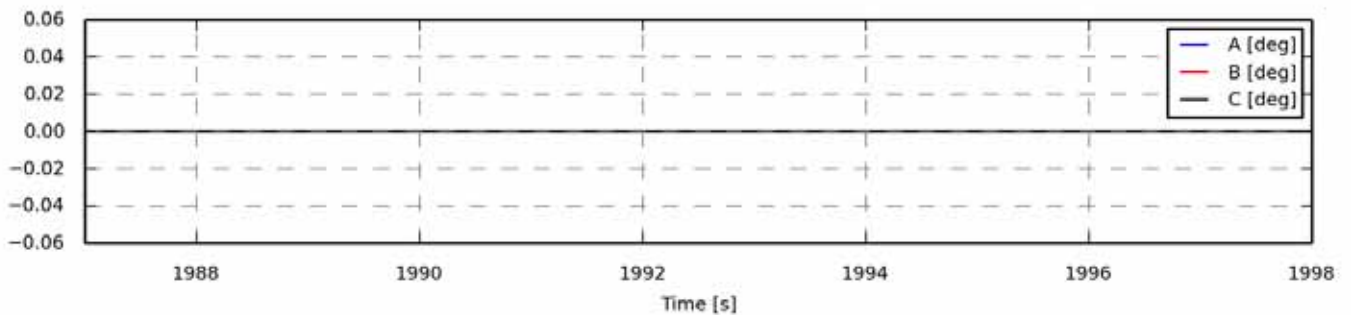


Figure 54 - Zoom of time series

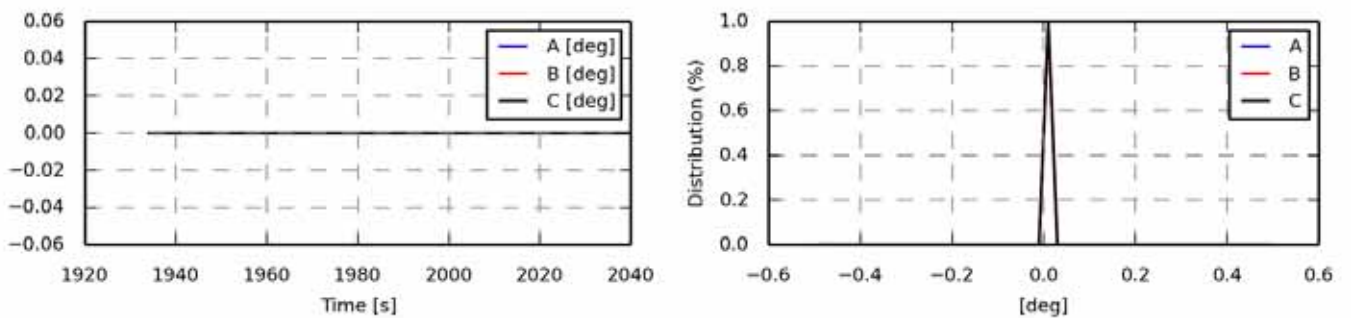


Figure 55 - Power spectrum density

Figure 56 - Value distribution

Statistics	A	B	C
Min	0.0000	0.0000	0.0000
Max	0.0000	0.0000	0.0000
Mean	0.0000	0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 1.06 oc4_p2_load_case_1-2: State pos x coo: global [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-2.sel (28-02-2014 16:17)	19	State pos x Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
B	WAMsim/oc4_p2_load_case_1-2.sel (01-04-2014 12:50)	19	State pos x Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
C	hawc2/oc4_p2_load_case_1-2.sel (04-12-2013 11:39)	19	State pos x Mbdy:mc E-nr: 8 Z-rel:0.00 coo: global platform translation in surge sway and heave

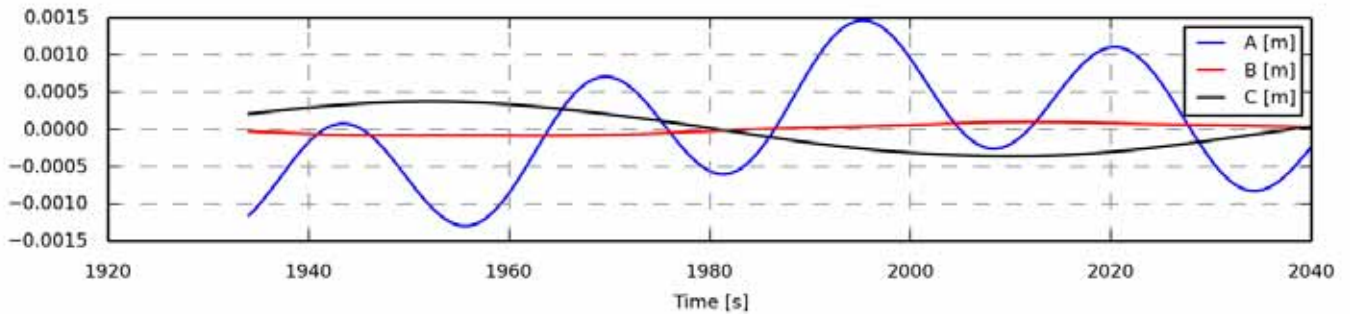


Figure 57 - Full length time series

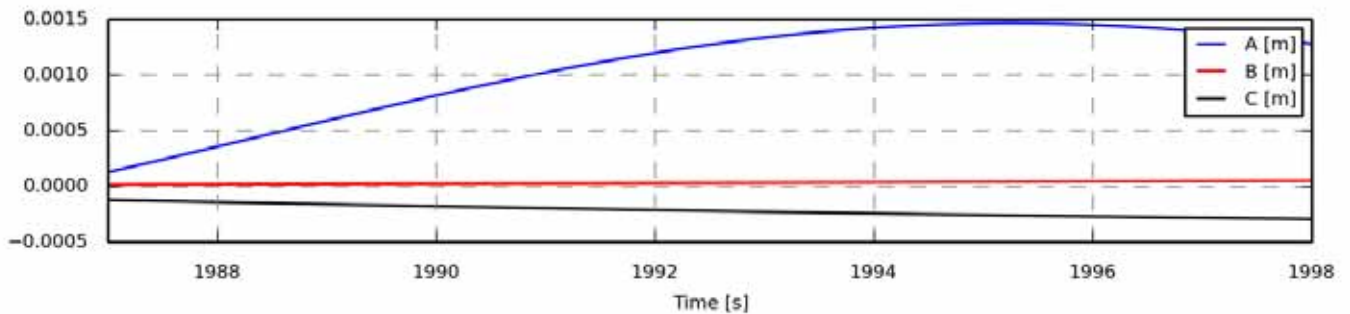


Figure 58 - Zoom of time series

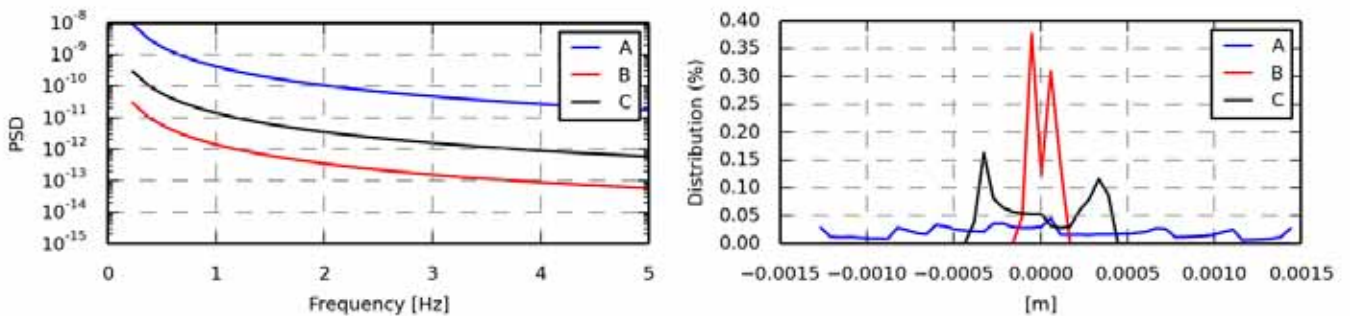


Figure 59 - Power spectrum density

Statistics	A	B	C
Min	-0.0013	-0.0001	-0.0004
Max	0.0015	0.0001	0.0004
Mean	0.0000	0.0000	-0.0000
Std	0.0007	0.0001	0.0003
Skewness	0.1808	0.0118	0.1077
Kurtosis	-0.8430	-1.5895	-1.5496

Figure 60 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.0006	0.0000	0.0001
Eq (m=4)	0.0008	0.0000	0.0002
Eq (m=6)	0.0012	0.0001	0.0003
Eq (m=8)	0.0015	0.0001	0.0004
Eq (m=10)	0.0016	0.0001	0.0004
Eq (m=12)	0.0018	0.0001	0.0005

Section 1.07 oc4_p2_load_case_1-2: State pos y coo: global [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-2.sel (28-02-2014 16:17)	20	State pos y Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
B	WAMsim/oc4_p2_load_case_1-2.sel (01-04-2014 12:50)	20	State pos y Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
C	hawc2/oc4_p2_load_case_1-2.sel (04-12-2013 11:39)	20	State pos y Mbdy:mc E-nr: 8 Z-rel:0.00 coo: global platform translation in surge sway and heave

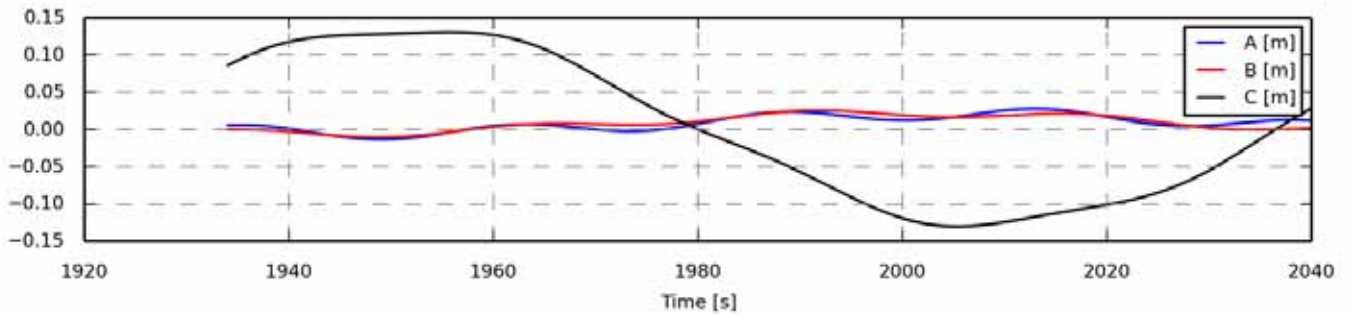


Figure 61 - Full length time series

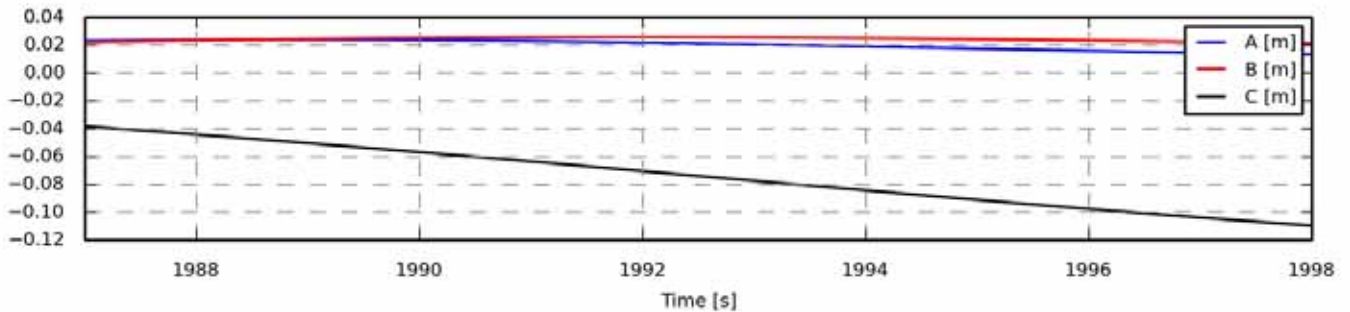


Figure 62 - Zoom of time series

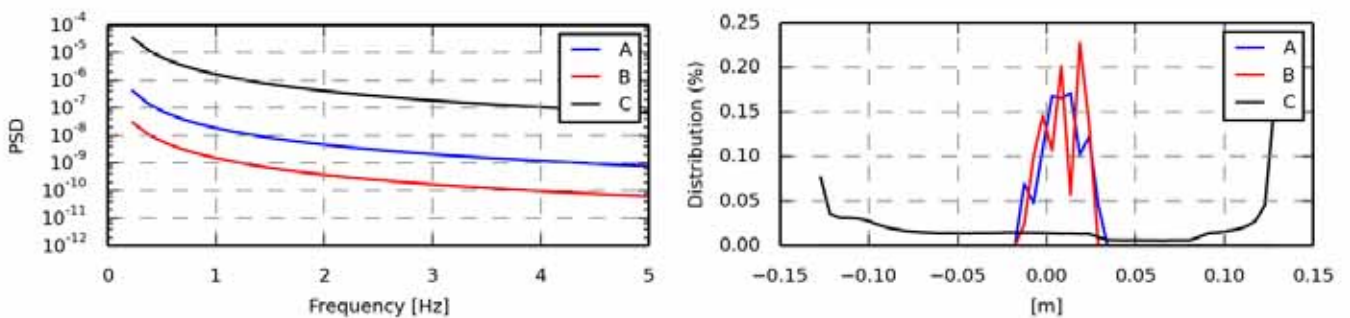


Figure 63 - Power spectrum density

Statistics	A	B	C
Min	-0.0134	-0.0102	-0.1299
Max	0.0279	0.0256	0.1308
Mean	0.0087	0.0089	0.0004
Std	0.0108	0.0105	0.0961
Skewness	-0.1378	-0.1179	0.1134
Kurtosis	-0.7107	-1.1651	-1.5557

Figure 64 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.0077	0.0067	0.0467
Eq (m=4)	0.0113	0.0100	0.0704
Eq (m=6)	0.0170	0.0150	0.1076
Eq (m=8)	0.0212	0.0185	0.1337
Eq (m=10)	0.0242	0.0211	0.1526
Eq (m=12)	0.0264	0.0230	0.1668

Section 1.08 oc4_p2_load_case_1-2: State pos z coo: global [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-2.sel (28-02-2014 16:17)	21	State pos z Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
B	WAMsim/oc4_p2_load_case_1-2.sel (01-04-2014 12:50)	21	State pos z Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
C	hawc2/oc4_p2_load_case_1-2.sel (04-12-2013 11:39)	21	State pos z Mbdy:mc E-nr: 8 Z-rel:0.00 coo: global platform translation in surge sway and heave

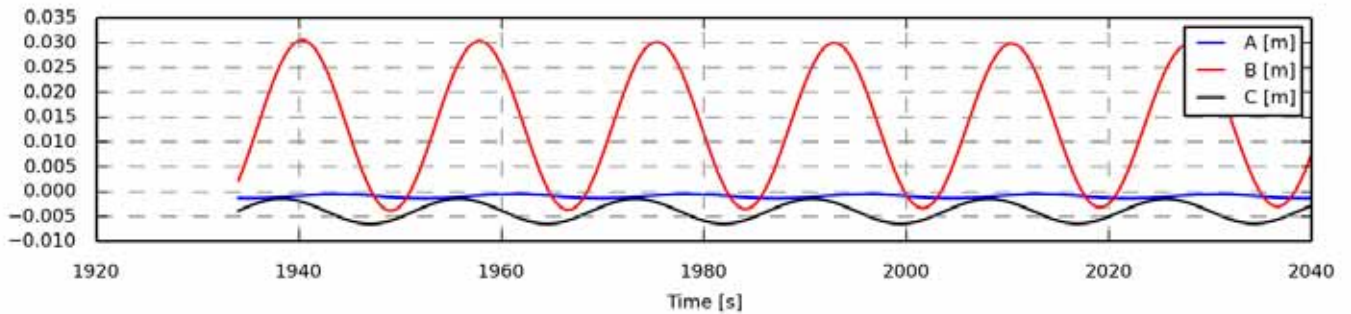


Figure 65 - Full length time series

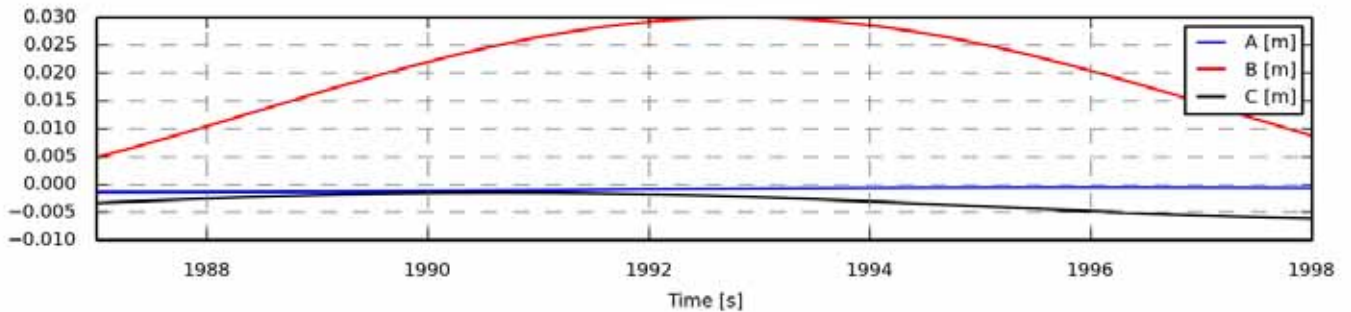


Figure 66 - Zoom of time series

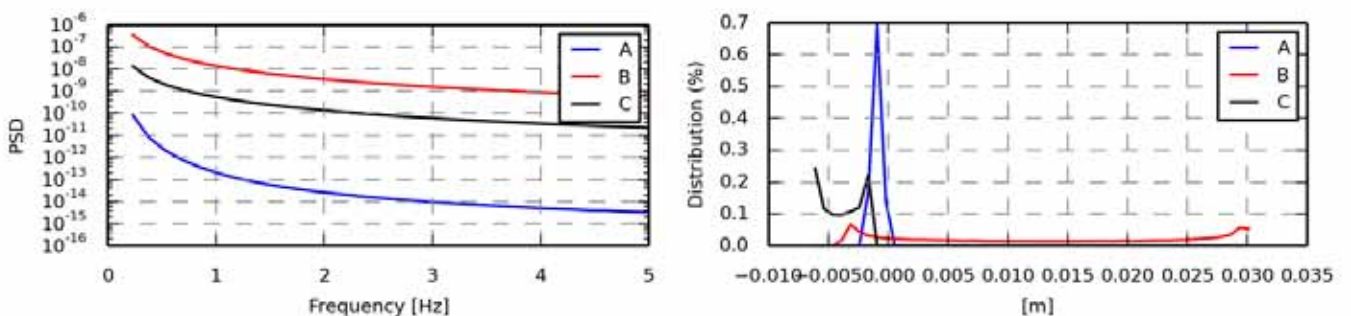


Figure 67 - Power spectrum density

Statistics	A	B	C
Min	-0.0014	-0.0039	-0.0065
Max	-0.0005	0.0305	-0.0014
Mean	-0.0009	0.0132	-0.0039
Std	0.0003	0.0118	0.0018
Skewness	0.0305	0.0182	-0.0103
Kurtosis	-1.5037	-1.4964	-1.4866

Figure 68 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.0003	0.0127	0.0019
Eq (m=4)	0.0004	0.0162	0.0024
Eq (m=6)	0.0005	0.0206	0.0031
Eq (m=8)	0.0006	0.0232	0.0035
Eq (m=10)	0.0006	0.0250	0.0037
Eq (m=12)	0.0007	0.0263	0.0039

Section 1.09 oc4_p2_load_case_1-2: proj_ang tx coo: global [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-2.sel (28-02-2014 16:17)	22	State_rot proj_ang tx Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
B	WAMsim/oc4_p2_load_case_1-2.sel (01-04-2014 12:50)	22	State_rot proj_ang tx Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
C	hawc2/oc4_p2_load_case_1-2.sel (04-12-2013 11:39)	22	State_rot proj_ang tx Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw

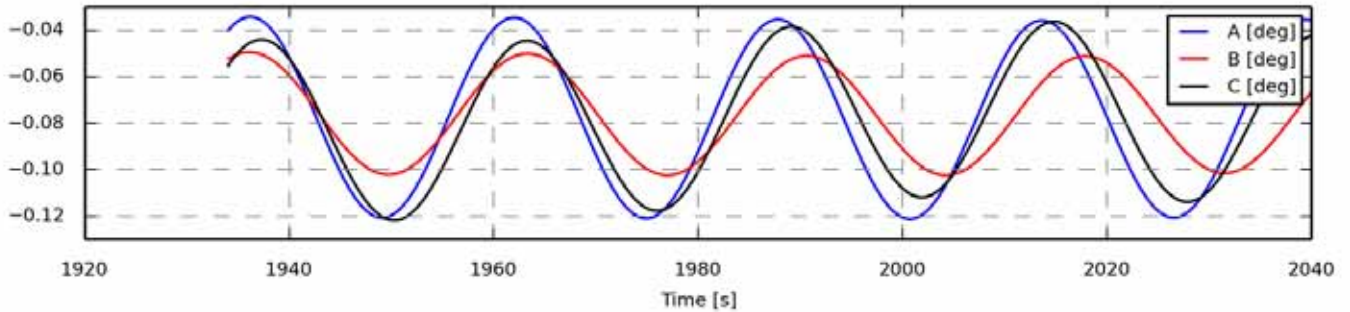


Figure 69 - Full length time series

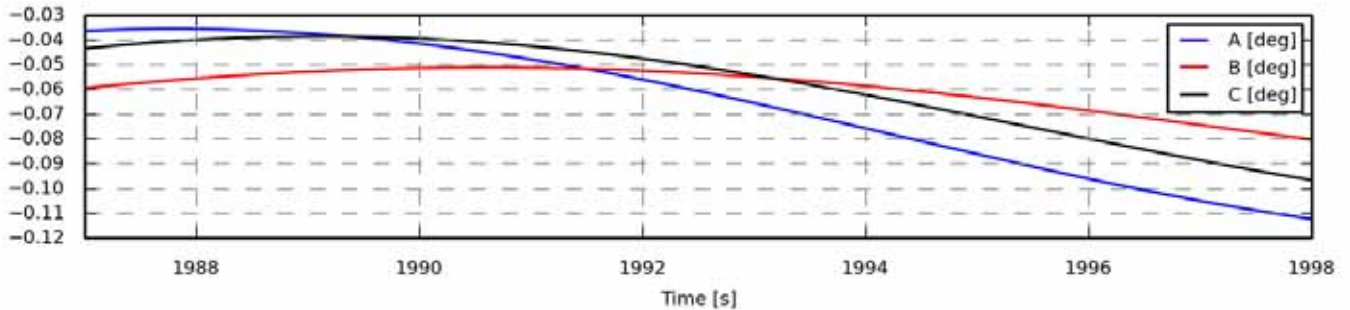


Figure 70 - Zoom of time series

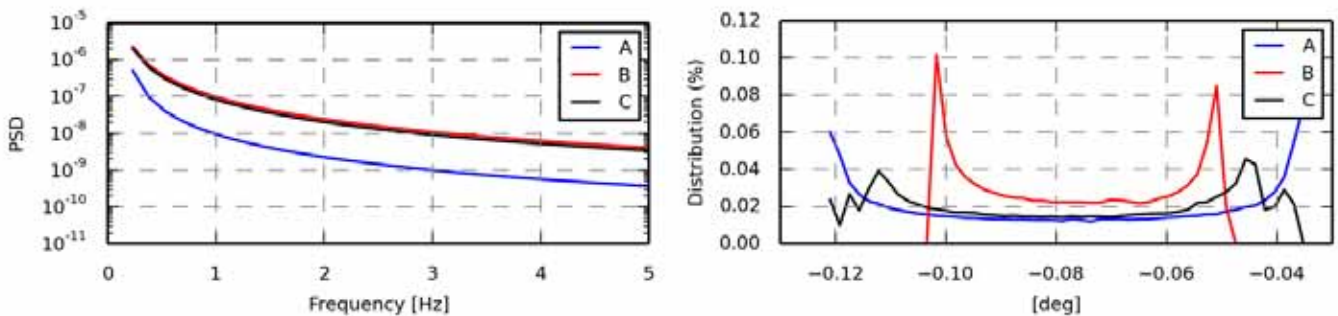


Figure 71 - Power spectrum density

Statistics	A	B	C
Min	-0.1212	-0.1024	-0.1219
Max	-0.0343	-0.0494	-0.0364
Mean	-0.0770	-0.0768	-0.0778
Std	0.0306	0.0183	0.0271
Skewness	-0.0393	0.0591	-0.0545
Kurtosis	-1.5122	-1.4827	-1.4604

Figure 72 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.0288	0.0167	0.0254
Eq (m=4)	0.0378	0.0221	0.0335
Eq (m=6)	0.0497	0.0292	0.0442
Eq (m=8)	0.0570	0.0336	0.0508
Eq (m=10)	0.0618	0.0366	0.0554
Eq (m=12)	0.0653	0.0387	0.0587

Section 1.10 oc4_p2_load_case_1-2: proj_ang ty coo: global [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-2.sel (28-02-2014 16:17)	23	State_rot proj_ang ty Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
B	WAMsim/oc4_p2_load_case_1-2.sel (01-04-2014 12:50)	23	State_rot proj_ang ty Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
C	hawc2/oc4_p2_load_case_1-2.sel (04-12-2013 11:39)	23	State_rot proj_ang ty Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw

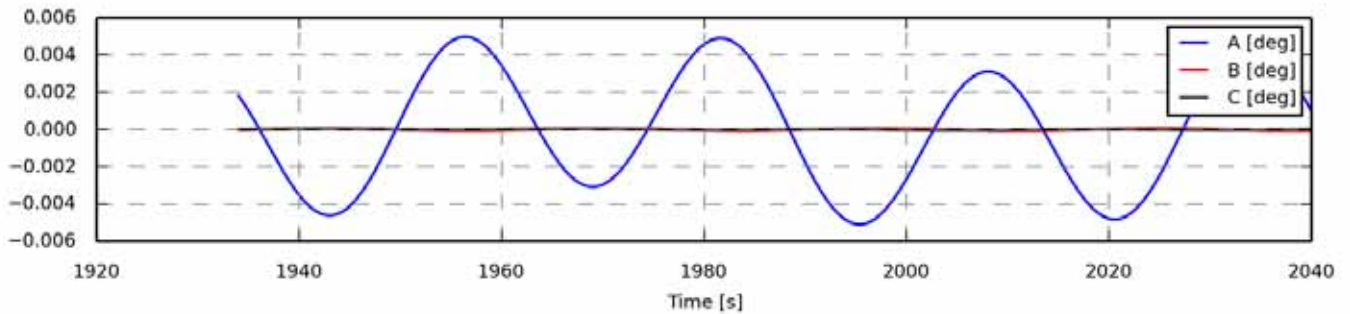


Figure 73 - Full length time series

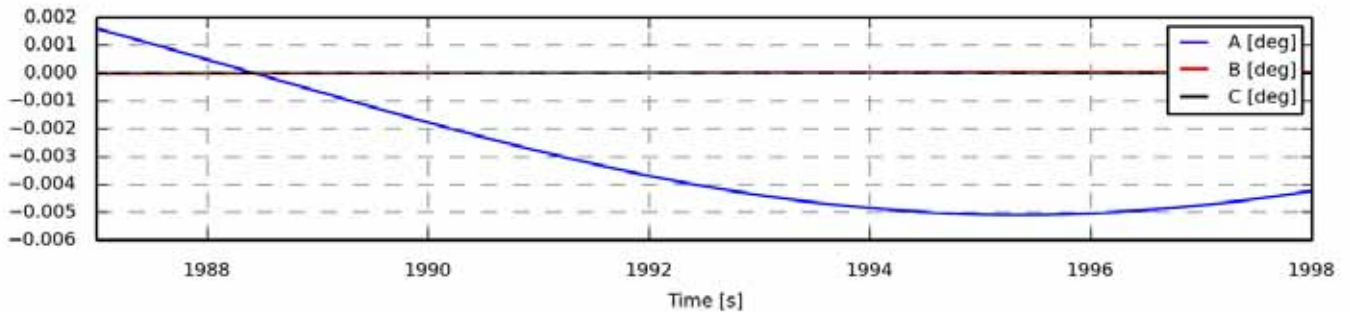


Figure 74 - Zoom of time series

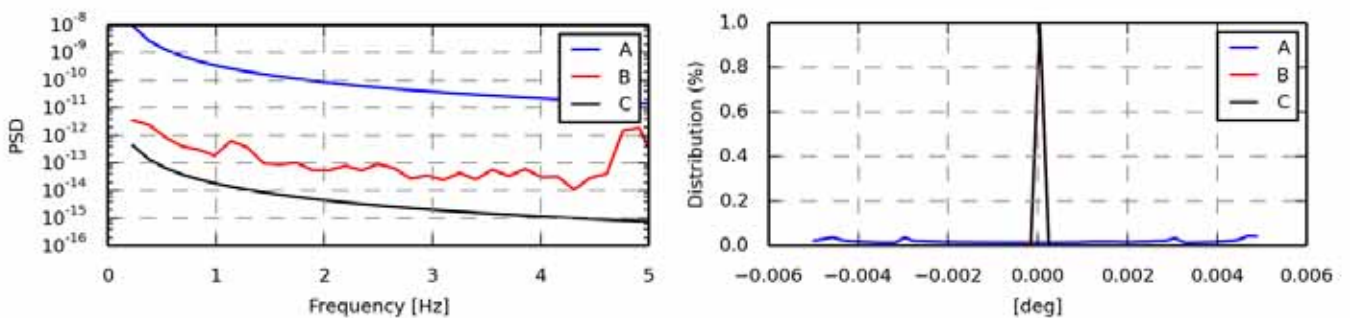


Figure 75 - Power spectrum density

Statistics	A	B	C
Min	-0.0051	-0.0001	-0.0000
Max	0.0050	0.0001	0.0000
Mean	0.0000	0.0000	-0.0000
Std	0.0032	0.0000	0.0000
Skewness	-0.0159	-0.0459	0.0101
Kurtosis	-1.3617	-1.3947	-0.8770

Figure 76 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.0029	0.0000	0.0000
Eq (m=4)	0.0038	0.0000	0.0000
Eq (m=6)	0.0051	0.0001	0.0000
Eq (m=8)	0.0060	0.0001	0.0000
Eq (m=10)	0.0065	0.0001	0.0000
Eq (m=12)	0.0070	0.0001	0.0000

Section 1.11 oc4_p2_load_case_1-2: proj_ang tz coo: global [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-2.sel (28-02-2014 16:17)	24	State_rot proj_ang tz Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
B	WAMsim/oc4_p2_load_case_1-2.sel (01-04-2014 12:50)	24	State_rot proj_ang tz Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
C	hawc2/oc4_p2_load_case_1-2.sel (04-12-2013 11:39)	24	State_rot proj_ang tz Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw

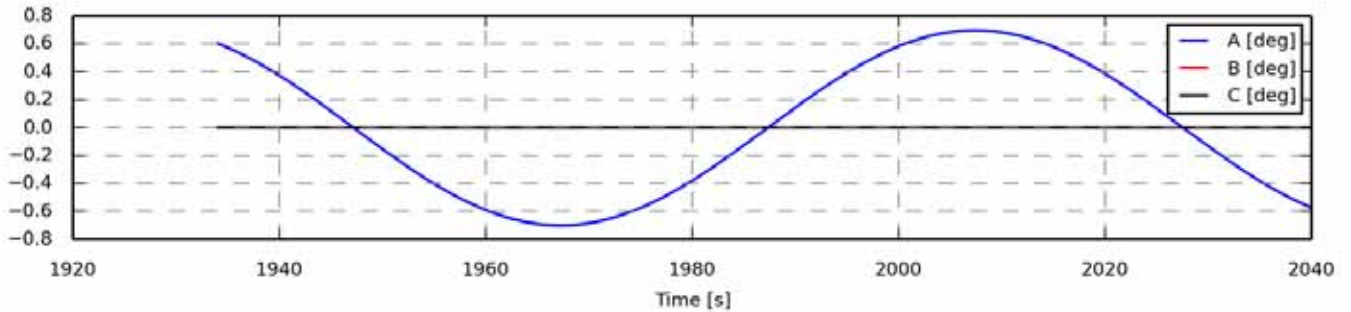


Figure 77 - Full length time series

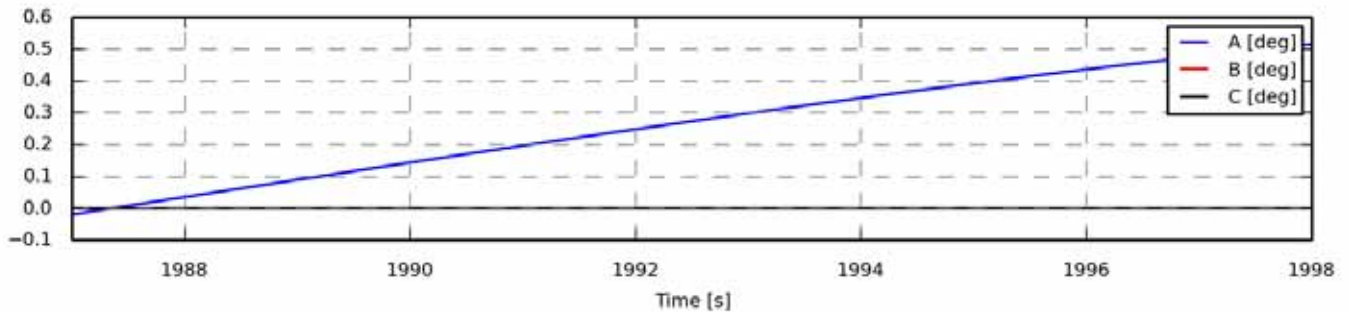


Figure 78 - Zoom of time series

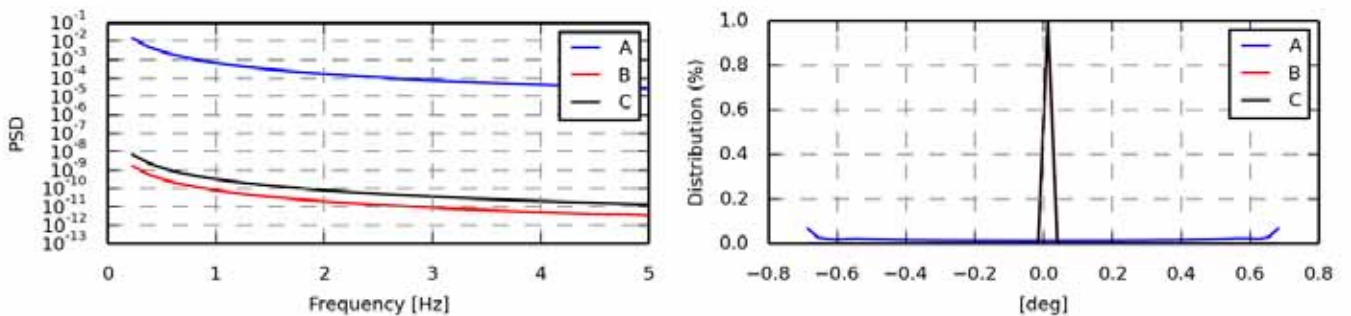


Figure 79 - Power spectrum density

Statistics	A	B	C
Min	-0.6993	-0.0003	-0.0006
Max	0.6957	0.0003	0.0006
Mean	0.0033	0.0000	-0.0001
Std	0.4655	0.0002	0.0004
Skewness	-0.0141	-0.2188	0.2658
Kurtosis	-1.4132	-1.3808	-1.3516

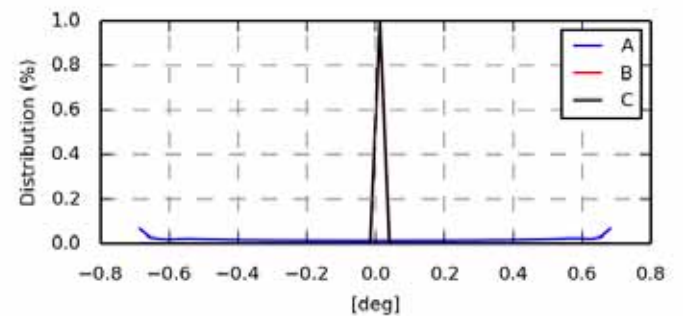


Figure 80 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.3200	0.0001	0.0003
Eq (m=4)	0.4568	0.0002	0.0004
Eq (m=6)	0.6526	0.0003	0.0006
Eq (m=8)	0.7808	0.0003	0.0007
Eq (m=10)	0.8701	0.0004	0.0008
Eq (m=12)	0.9358	0.0004	0.0008

Section 1.12 oc4_p2_load_case_1-2: Mx coo: towertop [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-2.sel (28-02-2014 16:17)	37	MomentMx Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
B	WAMsim/oc4_p2_load_case_1-2.sel (01-04-2014 12:50)	37	MomentMx Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
C	hawc2/oc4_p2_load_case_1-2.sel (04-12-2013 11:39)	37	MomentMx Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment

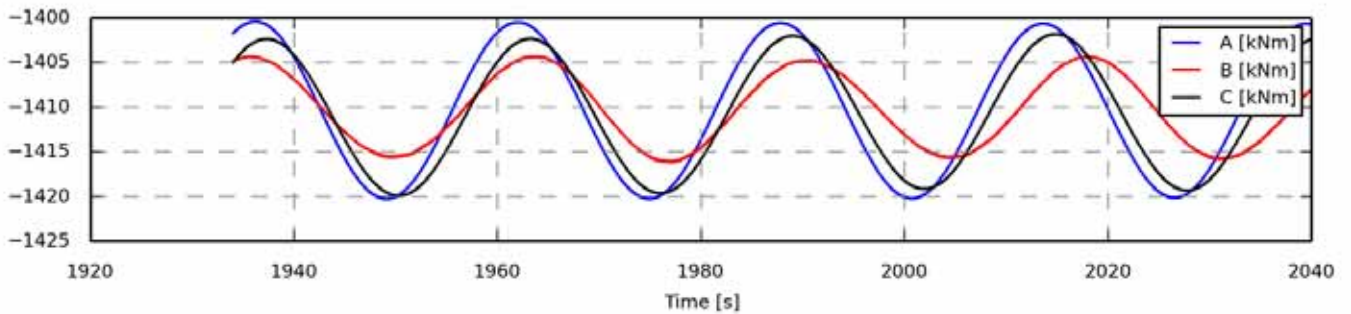


Figure 81 - Full length time series

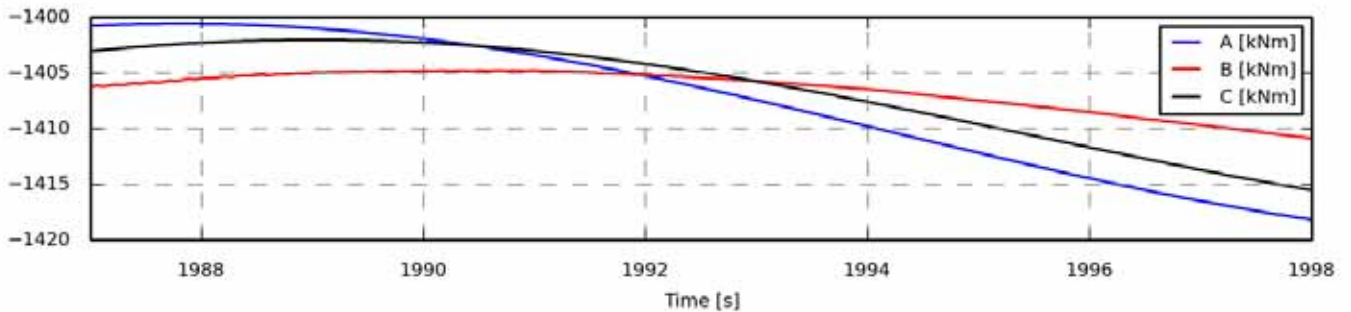


Figure 82 - Zoom of time series

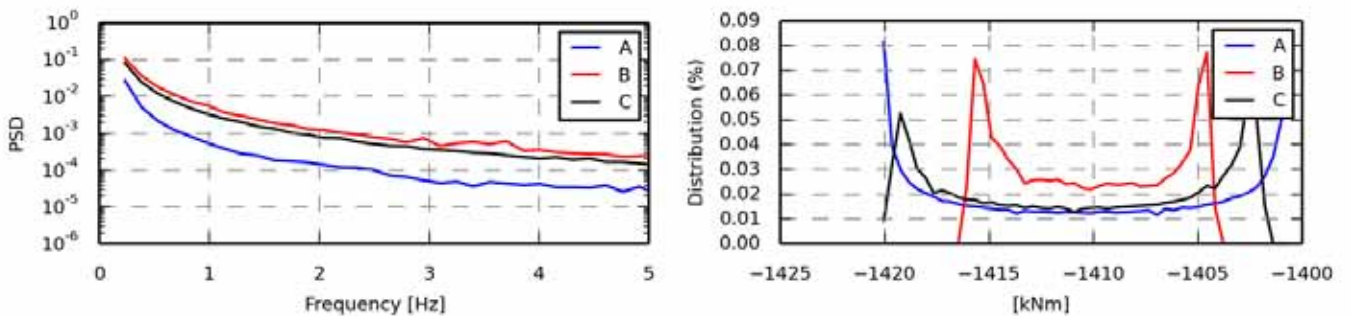


Figure 83 - Power spectrum density

Statistics	A	B	C
Min	-1.4202e+03	-1.4162e+03	-1.4199e+03
Max	-1.4004e+03	-1.4043e+03	-1.4019e+03
Mean	-1.4101e+03	-1.4103e+03	-1.4106e+03
Std	7.0247	3.9873	6.1729
Skewness	-0.0399	0.0716	-0.0479
Kurtosis	-1.5127	-1.4710	-1.5086

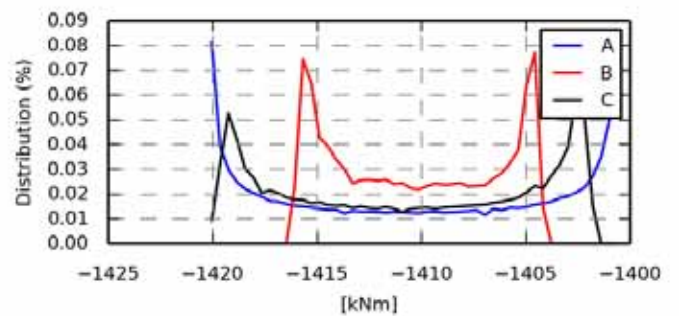


Figure 84 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	6.5879	3.7086	5.8030
Eq (m=4)	8.6566	4.8946	7.6258
Eq (m=6)	11.3750	6.4755	10.0243
Eq (m=8)	13.0392	7.4596	11.4956
Eq (m=10)	14.1525	8.1266	12.4823
Eq (m=12)	14.9470	8.6079	13.1887

Section 1.13 oc4_p2_load_case_1-2: My coo: towertop [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-2.sel (28-02-2014 16:17)	38	MomentMy Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
B	WAMsim/oc4_p2_load_case_1-2.sel (01-04-2014 12:50)	38	MomentMy Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
C	hawc2/oc4_p2_load_case_1-2.sel (04-12-2013 11:39)	38	MomentMy Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment

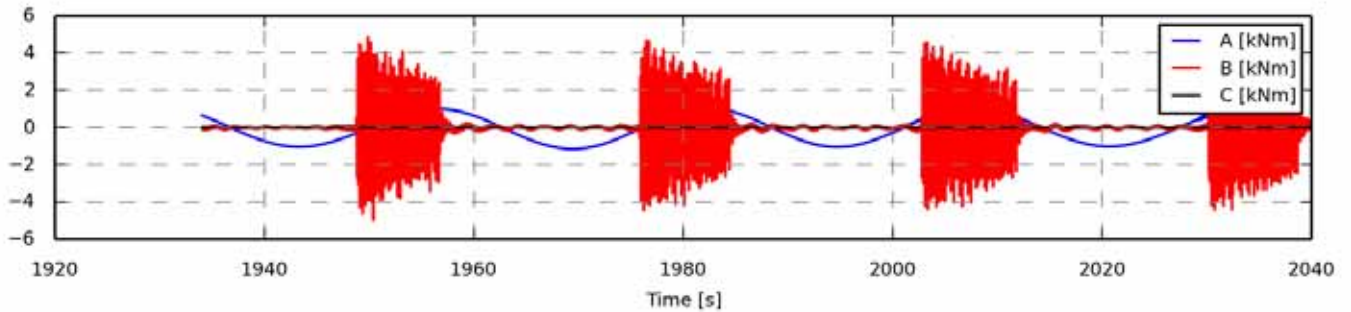


Figure 85 - Full length time series

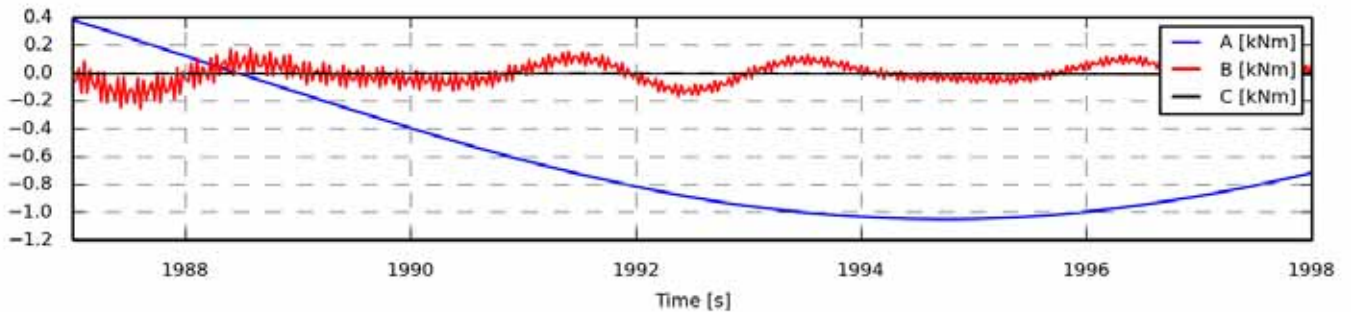


Figure 86 - Zoom of time series

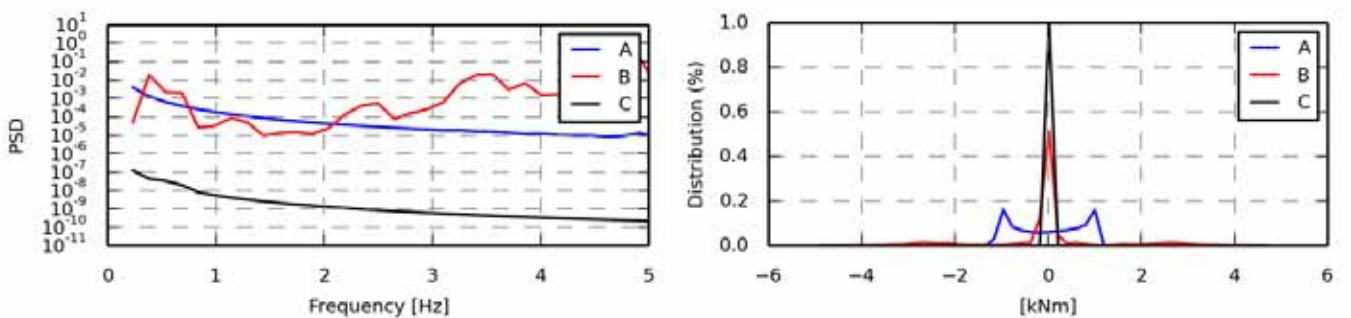


Figure 87 - Power spectrum density

Statistics	A	B	C
Min	-1.1519	-4.9863	-0.0176
Max	1.1094	4.8272	-0.0007
Mean	-0.0014	-0.0094	-0.0091
Std	0.7410	1.3209	0.0055
Skewness	-0.0314	0.0194	-0.0334
Kurtosis	-1.4703	2.3527	-1.4528

Figure 88 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.6996	8.6399	0.0051
Eq (m=4)	0.9186	8.0553	0.0067
Eq (m=6)	1.2107	7.6798	0.0089
Eq (m=8)	1.3928	7.6338	0.0102
Eq (m=10)	1.5166	7.6876	0.0111
Eq (m=12)	1.6064	7.7740	0.0117

Section 1.14 oc4_p2_load_case_1-2: Mz coo: towertop [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-2.sel (28-02-2014 16:17)	39	MomentMz Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
B	WAMsim/oc4_p2_load_case_1-2.sel (01-04-2014 12:50)	39	MomentMz Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
C	hawc2/oc4_p2_load_case_1-2.sel (04-12-2013 11:39)	39	MomentMz Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment

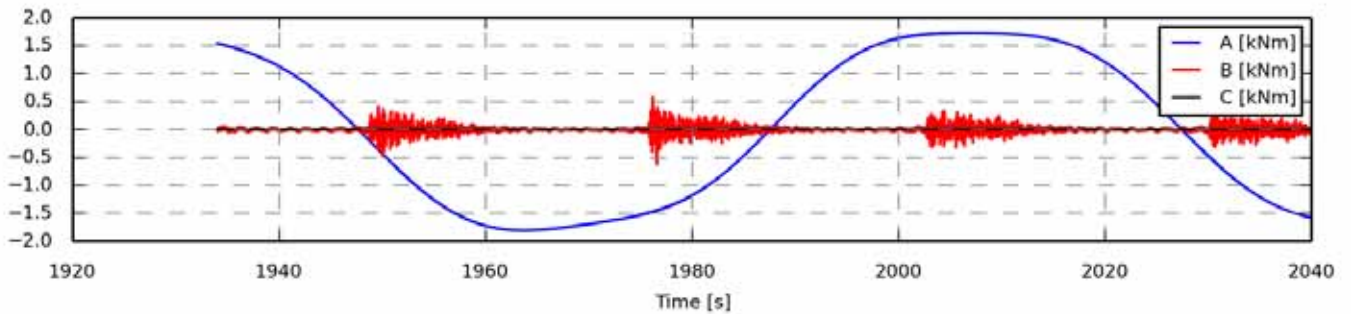


Figure 89 - Full length time series

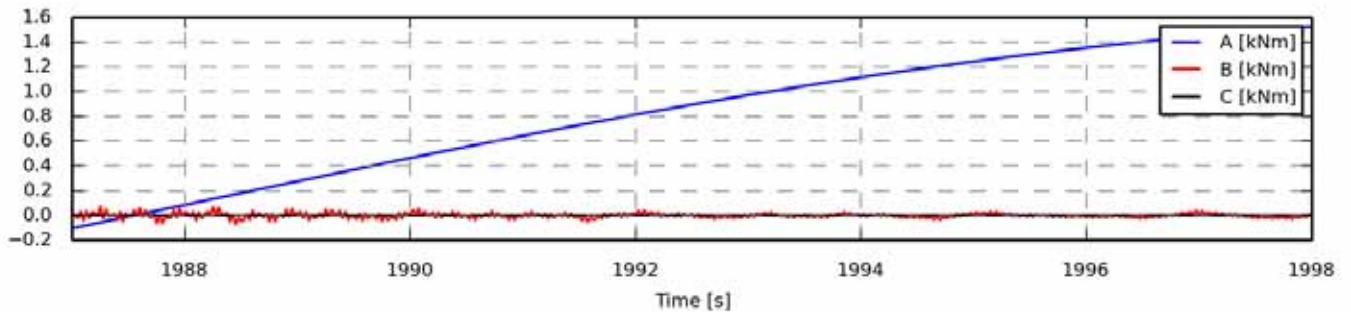


Figure 90 - Zoom of time series

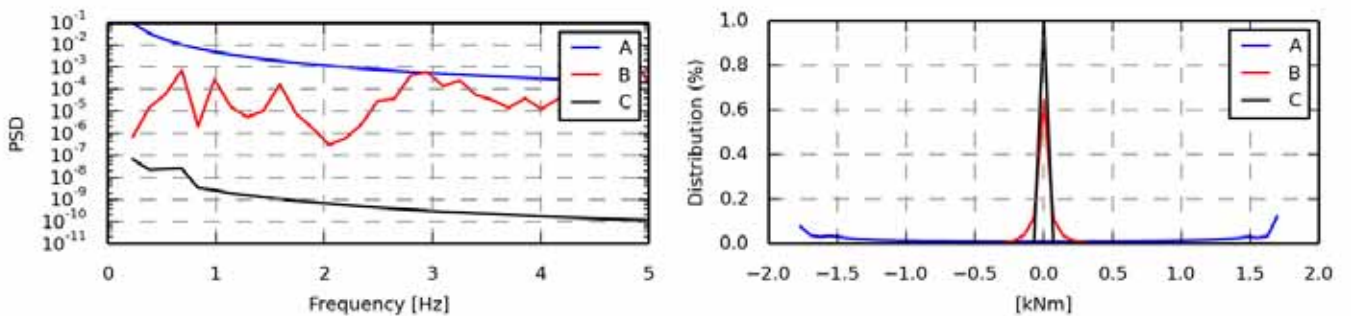


Figure 91 - Power spectrum density

Statistics	A	B	C
Min	-1.8020	-0.6241	-0.0019
Max	1.7317	0.5887	0.0021
Mean	0.0064	0.0001	-0.0002
Std	1.2893	0.0764	0.0013
Skewness	-0.0249	-0.0055	0.3728
Kurtosis	-1.5785	7.5466	-1.3425

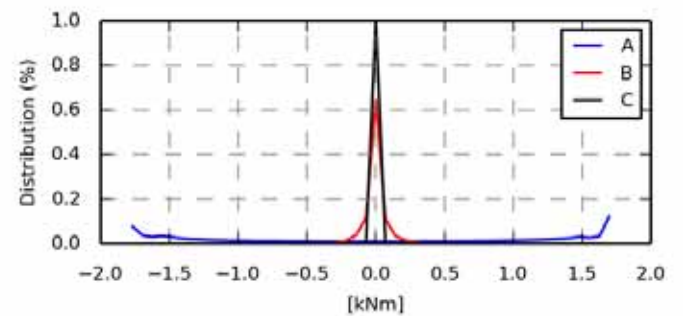


Figure 92 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.8212	0.5579	0.0009
Eq (m=4)	1.1716	0.5619	0.0013
Eq (m=6)	1.6721	0.6206	0.0018
Eq (m=8)	1.9985	0.6905	0.0022
Eq (m=10)	2.2250	0.7526	0.0025
Eq (m=12)	2.3909	0.8041	0.0027

Section 1.15 oc4_p2_load_case_1-2: Mx coo: tower [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-2.sel (28-02-2014 16:17)	43	MomentMx Mbdy:tower nodenr: 1 coo: tower tower base bending moment
B	WAMsim/oc4_p2_load_case_1-2.sel (01-04-2014 12:50)	43	MomentMx Mbdy:tower nodenr: 1 coo: tower tower base bending moment
C	hawc2/oc4_p2_load_case_1-2.sel (04-12-2013 11:39)	43	MomentMx Mbdy:tower nodenr: 1 coo: tower tower base bending moment

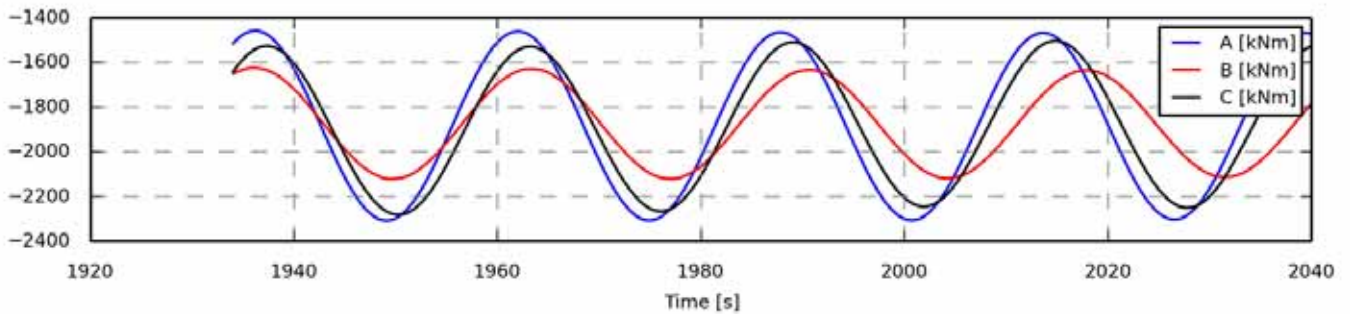


Figure 93 - Full length time series

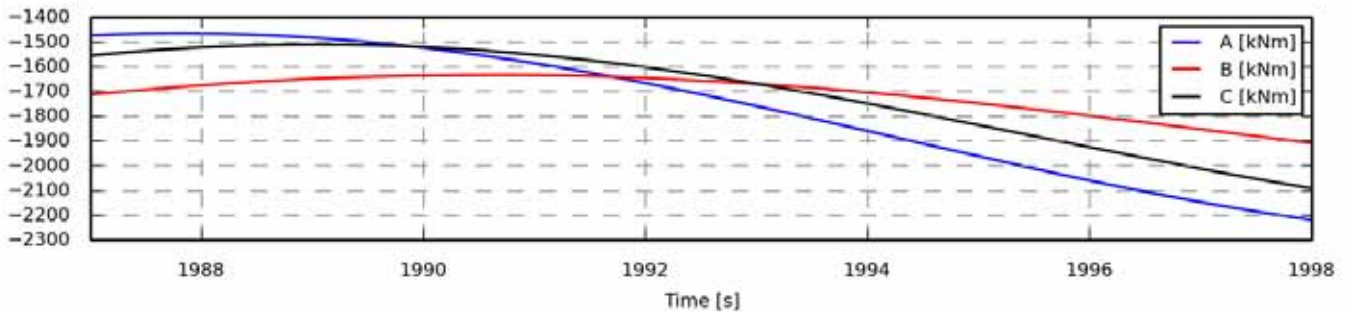


Figure 94 - Zoom of time series

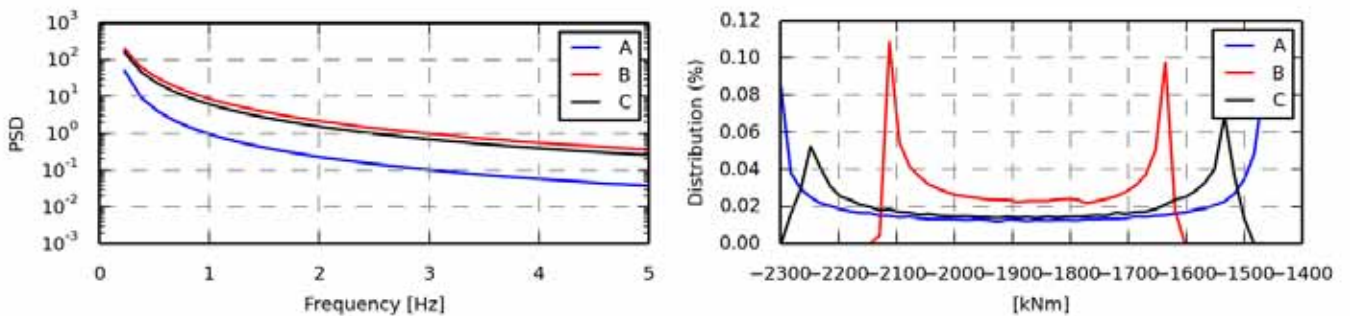


Figure 95 - Power spectrum density

Statistics	A	B	C
Min	-2.3076e+03	-2.1212e+03	-2.2815e+03
Max	-1.4578e+03	-1.6227e+03	-1.5032e+03
Mean	-1.8743e+03	-1.8789e+03	-1.8808e+03
Std	300.8713	172.6976	264.5790
Skewness	-0.0399	0.0582	-0.0478
Kurtosis	-1.5128	-1.4844	-1.5069

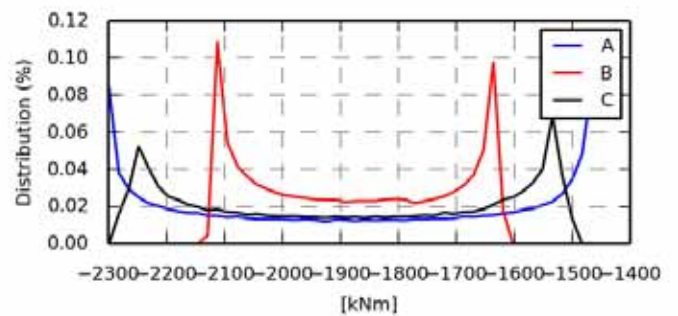


Figure 96 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	282.8901	158.5447	248.1935
Eq (m=4)	371.7215	209.1967	326.1872
Eq (m=6)	488.4514	276.5909	428.8627
Eq (m=8)	559.9165	318.3960	491.9053
Eq (m=10)	607.7212	346.6068	534.2342
Eq (m=12)	641.8376	366.8584	564.5845

Section 1.16 oc4_p2_load_case_1-2: My coo: tower [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-2.sel (28-02-2014 16:17)	44	MomentMy Mbdy:tower nodenr: 1 coo: tower tower base bending moment
B	WAMsim/oc4_p2_load_case_1-2.sel (01-04-2014 12:50)	44	MomentMy Mbdy:tower nodenr: 1 coo: tower tower base bending moment
C	hawc2/oc4_p2_load_case_1-2.sel (04-12-2013 11:39)	44	MomentMy Mbdy:tower nodenr: 1 coo: tower tower base bending moment

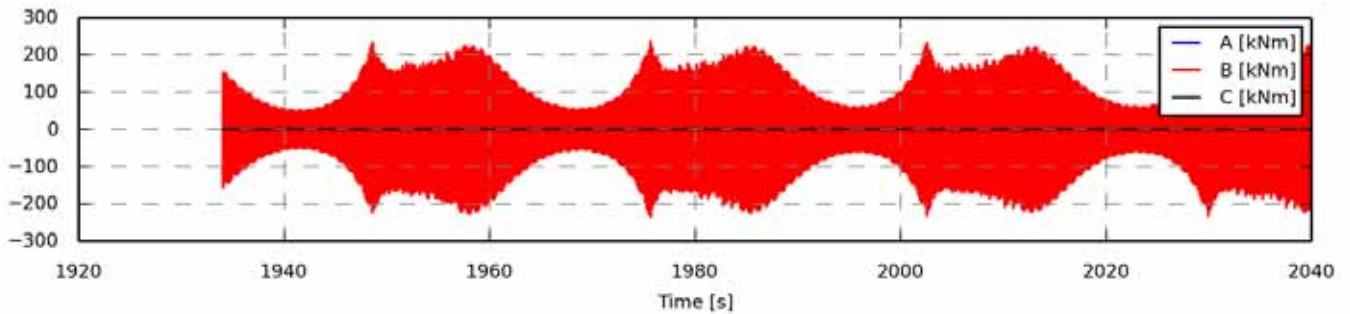


Figure 97 - Full length time series

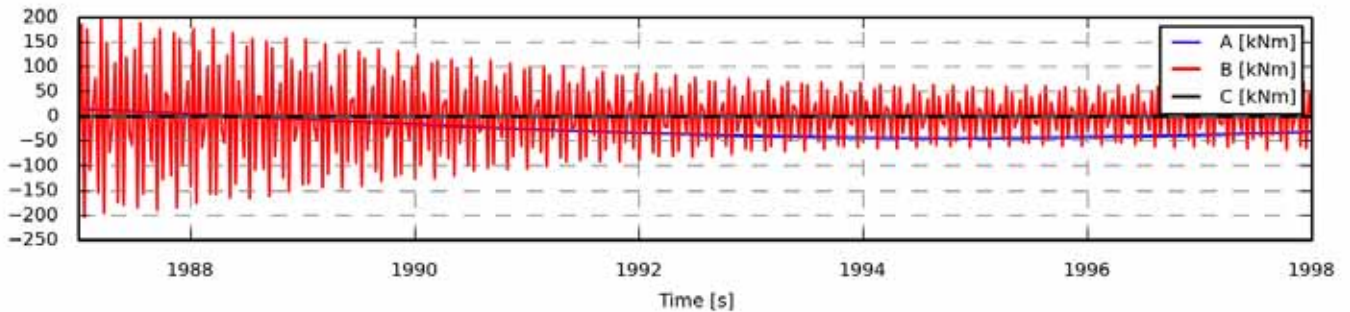


Figure 98 - Zoom of time series

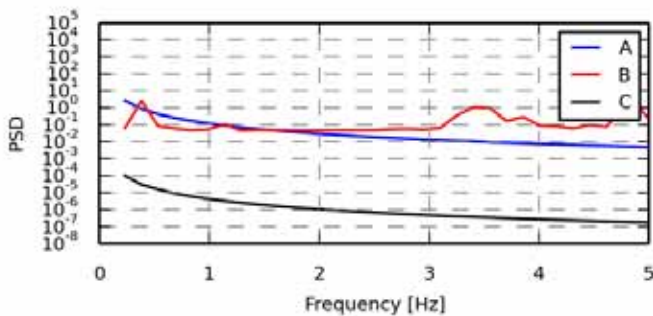


Figure 99 - Power spectrum density

Statistics	A	B	C
Min	-44.1861	-2.3320e+02	-0.2618
Max	46.3926	237.0250	0.2215
Mean	0.2898	0.0158	-0.0166
Std	29.9018	108.4584	0.1445
Skewness	-0.0138	-0.0040	-0.0193
Kurtosis	-1.4724	-0.8574	-1.3170

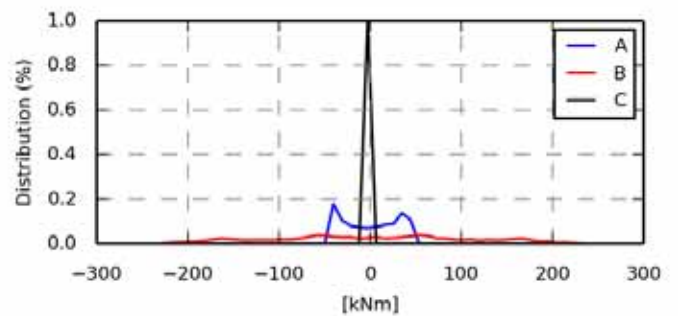


Figure 100 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	28.5286	653.1624	0.1307
Eq (m=4)	37.3780	550.1328	0.1723
Eq (m=6)	49.2933	474.7959	0.2293
Eq (m=8)	56.7224	447.5854	0.2670
Eq (m=10)	61.7637	435.3841	0.2946
Eq (m=12)	65.4061	429.5255	0.3162

Section 1.17 oc4_p2_load_case_1-2: Mz coo: tower [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-2.sel (28-02-2014 16:17)	45	MomentMz Mbdy:tower nodenr: 1 coo: tower tower base bending moment
B	WAMsim/oc4_p2_load_case_1-2.sel (01-04-2014 12:50)	45	MomentMz Mbdy:tower nodenr: 1 coo: tower tower base bending moment
C	hawc2/oc4_p2_load_case_1-2.sel (04-12-2013 11:39)	45	MomentMz Mbdy:tower nodenr: 1 coo: tower tower base bending moment

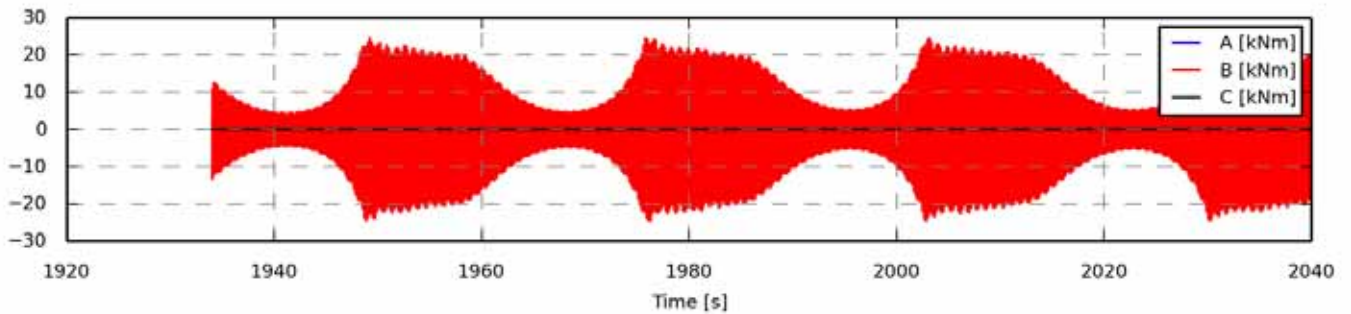


Figure 101 - Full length time series

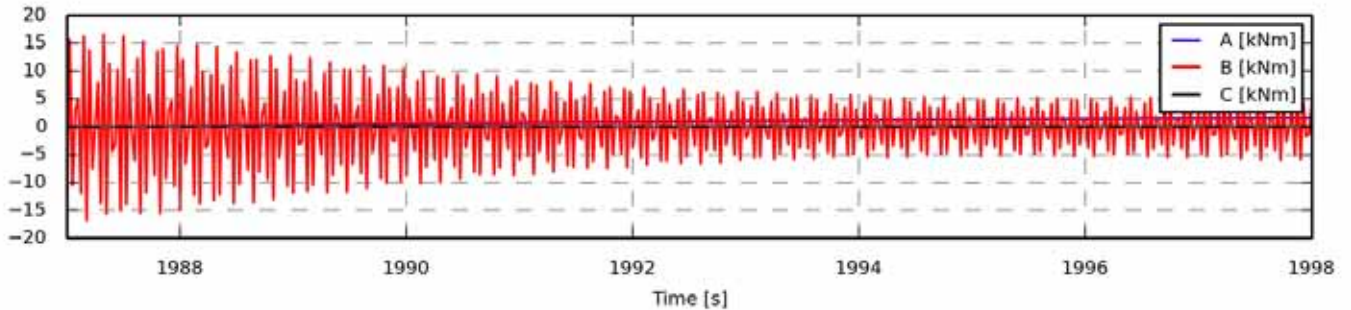


Figure 102 - Zoom of time series

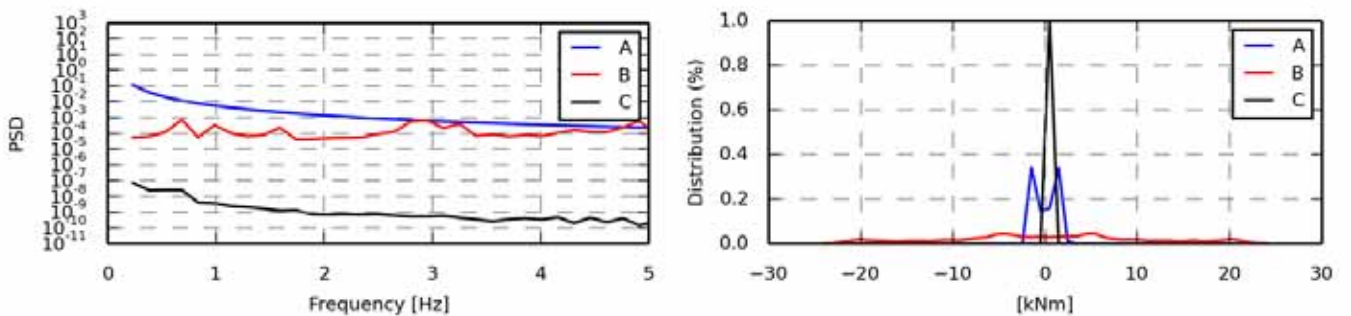


Figure 103 - Power spectrum density

Statistics	A	B	C
Min	-1.9480	-24.5602	-0.0026
Max	1.9814	24.5303	0.0028
Mean	0.0070	0.0005	-0.0002
Std	1.3806	11.1152	0.0013
Skewness	-0.0282	-0.0001	0.3672
Kurtosis	-1.5628	-0.5817	-1.3752

Figure 104 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.9999	68.2299	0.0012
Eq (m=4)	1.3099	58.0767	0.0016
Eq (m=6)	1.8488	50.5618	0.0024
Eq (m=8)	2.2100	47.7489	0.0029
Eq (m=10)	2.4615	46.4121	0.0033
Eq (m=12)	2.6460	45.7113	0.0035

Section 1.18 oc4_p2_load_case_1-2: ESYS line1_1 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-2.sel (28-02-2014 16:17)	55	ESYS line1_1 SENSOR 4
B	WAMsim/oc4_p2_load_case_1-2.sel (01-04-2014 12:50)	55	ESYS line1_1 SENSOR 4
C	hawc2/oc4_p2_load_case_1-2.sel (04-12-2013 11:39)	55	ESYS line1_1 SENSOR 4

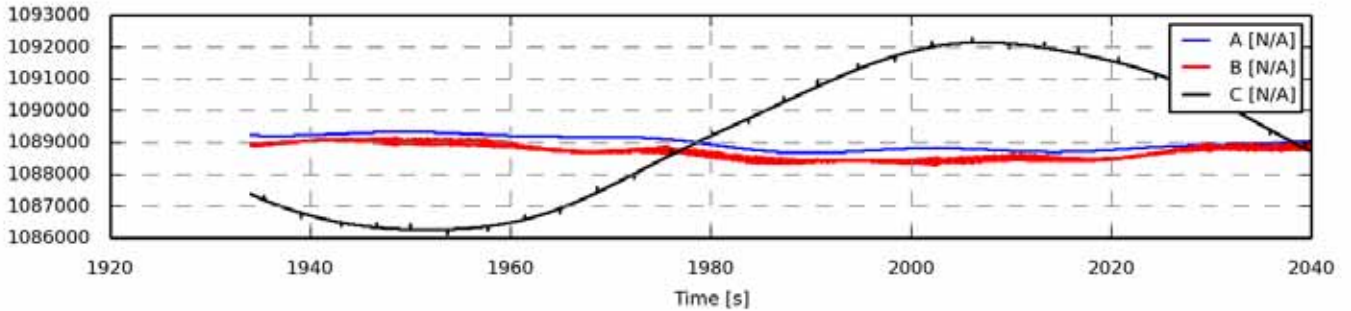


Figure 105 - Full length time series

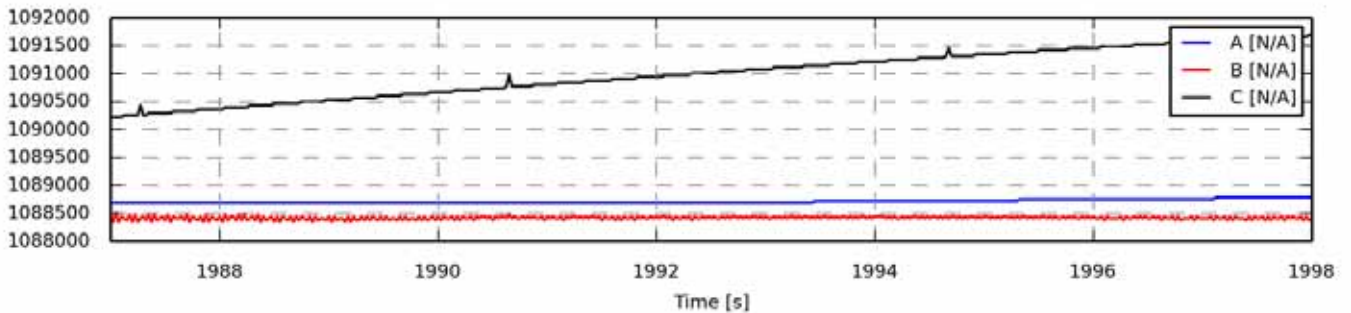


Figure 106 - Zoom of time series

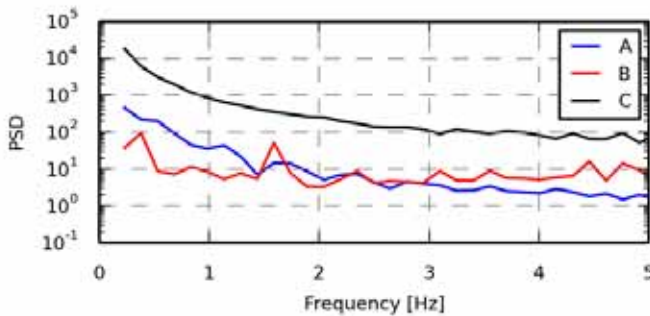


Figure 107 - Power spectrum density

Statistics	A	B	C
Min	1.0887e+06	1.0883e+06	1.0861e+06
Max	1.0893e+06	1.0892e+06	1.0923e+06
Mean	1.0890e+06	1.0887e+06	1.0893e+06
Std	220.1514	233.6341	2.1577e+03
Skewness	0.1516	0.1381	-0.1150
Kurtosis	-1.5019	-1.3067	-1.5496

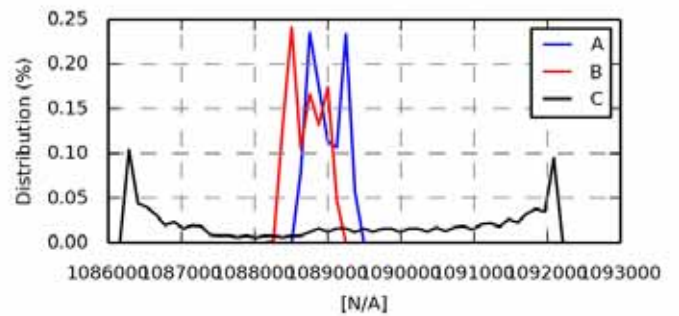


Figure 108 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	116.3535	309.0154	1.1030e+03
Eq (m=4)	174.3996	298.7077	1.6640e+03
Eq (m=6)	266.5449	376.3439	2.5460e+03
Eq (m=8)	331.6382	459.2053	3.1678e+03
Eq (m=10)	378.7198	521.1893	3.6175e+03
Eq (m=12)	413.9577	568.0340	3.9541e+03

Section 1.19 oc4_p2_load_case_1-2: ESYS line1_3 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-2.sel (28-02-2014 16:17)	259	ESYS line1_3 SENSOR 104
B	WAMsim/oc4_p2_load_case_1-2.sel (01-04-2014 12:50)	259	ESYS line1_3 SENSOR 104
C	hawc2/oc4_p2_load_case_1-2.sel (04-12-2013 11:39)	259	ESYS line1_3 SENSOR 104

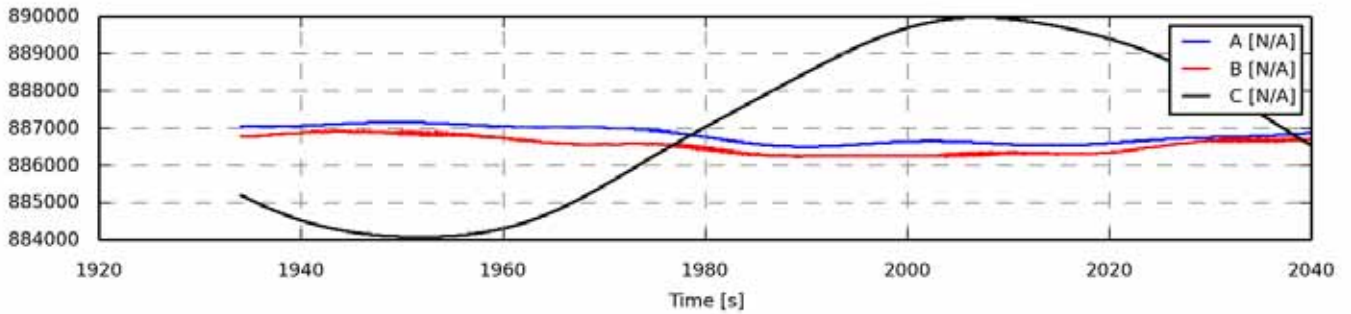


Figure 109 - Full length time series

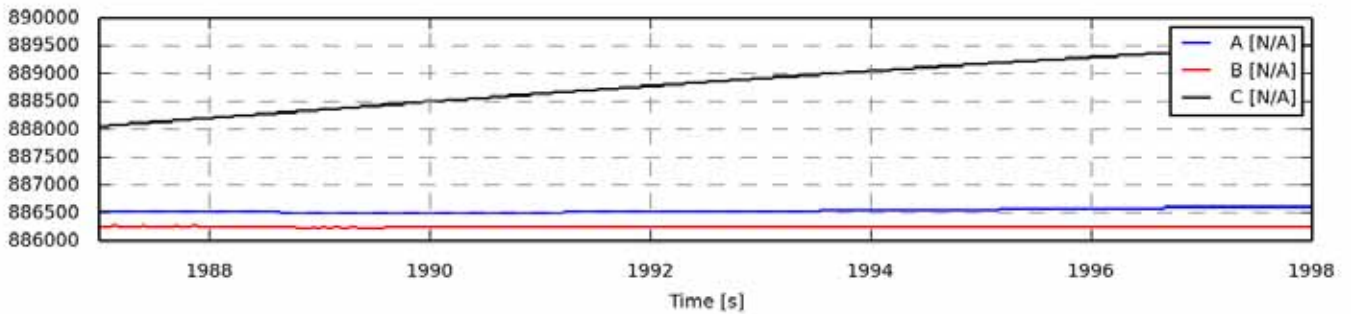


Figure 110 - Zoom of time series

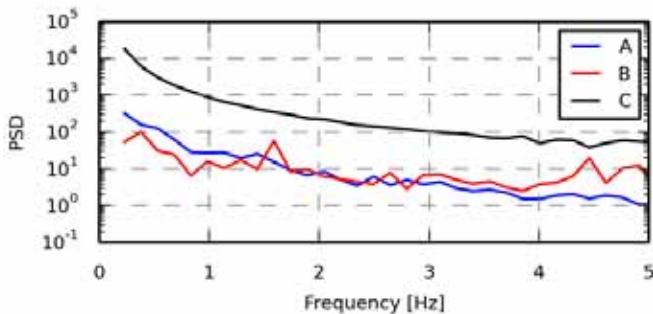


Figure 111 - Power spectrum density

Statistics	A	B	C
Min	8.8650e+05	8.8623e+05	8.8408e+05
Max	8.8716e+05	8.8692e+05	8.8998e+05
Mean	8.8682e+05	8.8654e+05	8.8709e+05
Std	221.5596	228.3719	2.1621e+03
Skewness	0.1448	0.1459	-0.1148
Kurtosis	-1.5348	-1.3929	-1.5493

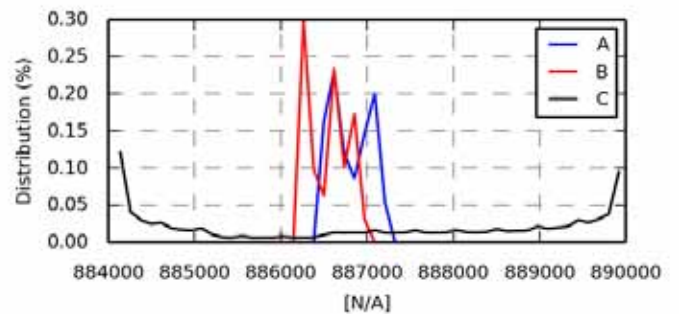


Figure 112 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	118.8361	140.4001	1.0511e+03
Eq (m=4)	179.1897	194.2060	1.5875e+03
Eq (m=6)	274.1885	290.0186	2.4297e+03
Eq (m=8)	341.1638	357.8238	3.0232e+03
Eq (m=10)	389.5983	407.0408	3.4524e+03
Eq (m=12)	425.8485	444.1295	3.7736e+03

Section 1.20 oc4_p2_load_case_1-2: ESYS line2_1 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-2.sel (28-02-2014 16:17)	263	ESYS line2_1 SENSOR 4
B	WAMsim/oc4_p2_load_case_1-2.sel (01-04-2014 12:50)	263	ESYS line2_1 SENSOR 4
C	hawc2/oc4_p2_load_case_1-2.sel (04-12-2013 11:39)	263	ESYS line2_1 SENSOR 4

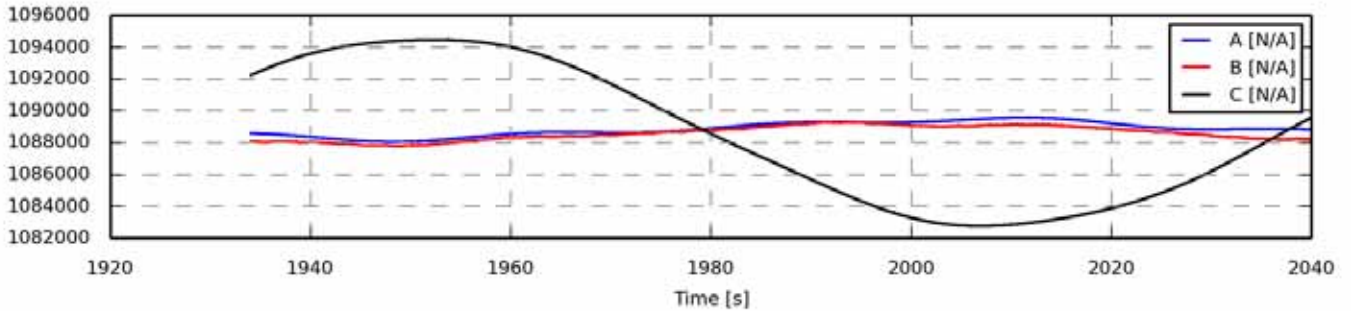


Figure 113 - Full length time series

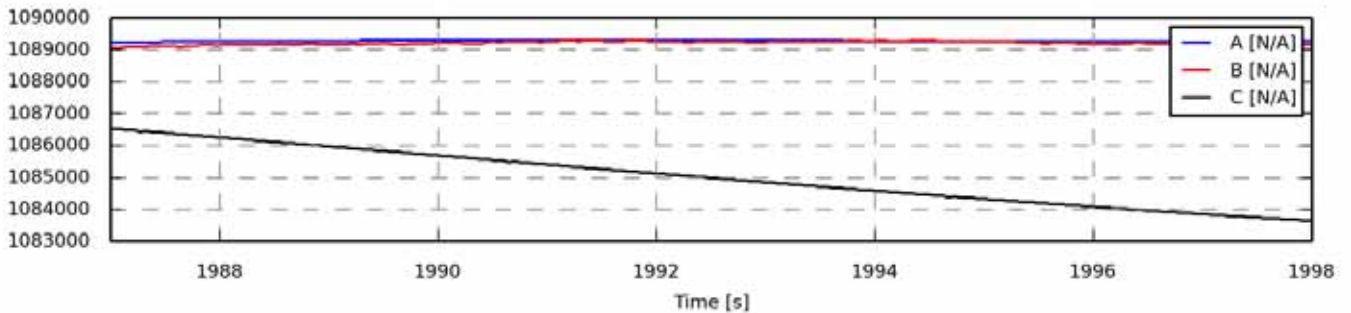


Figure 114 - Zoom of time series

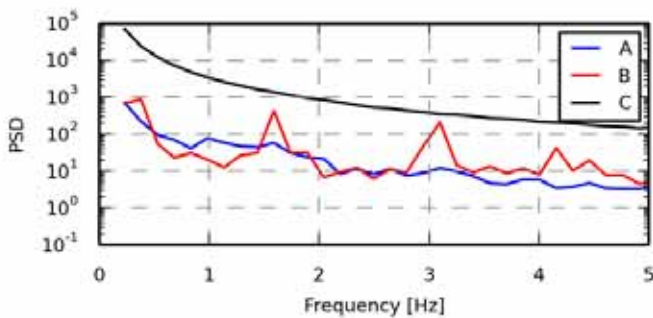


Figure 115 - Power spectrum density

Statistics	A	B	C
Min	1.0880e+06	1.0878e+06	1.0827e+06
Max	1.0896e+06	1.0893e+06	1.0945e+06
Mean	1.0889e+06	1.0886e+06	1.0885e+06
Std	437.5145	450.9634	4.2967e+03
Skewness	-0.1641	-0.1450	0.1192
Kurtosis	-1.0016	-1.2861	-1.5492

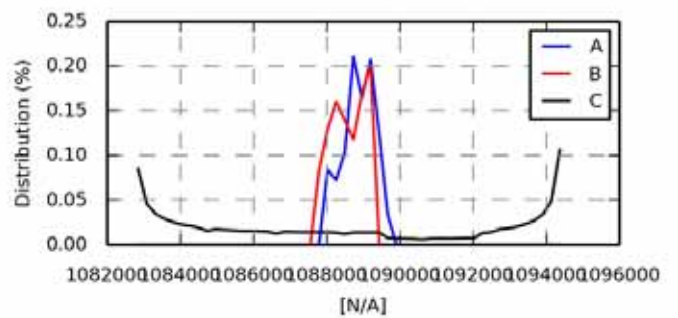


Figure 116 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	270.9012	288.8458	2.0987e+03
Eq (m=4)	409.2778	428.8069	3.1684e+03
Eq (m=6)	629.3199	643.4168	4.8485e+03
Eq (m=8)	784.7870	792.6626	6.0328e+03
Eq (m=10)	896.8654	900.8652	6.8893e+03
Eq (m=12)	980.5383	982.4433	7.5303e+03

Section 1.21 oc4_p2_load_case_1-2: ESYS line2_3 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-2.sel (28-02-2014 16:17)	467	ESYS line2_3 SENSOR 104
B	WAMsim/oc4_p2_load_case_1-2.sel (01-04-2014 12:50)	467	ESYS line2_3 SENSOR 104
C	hawc2/oc4_p2_load_case_1-2.sel (04-12-2013 11:39)	467	ESYS line2_3 SENSOR 104

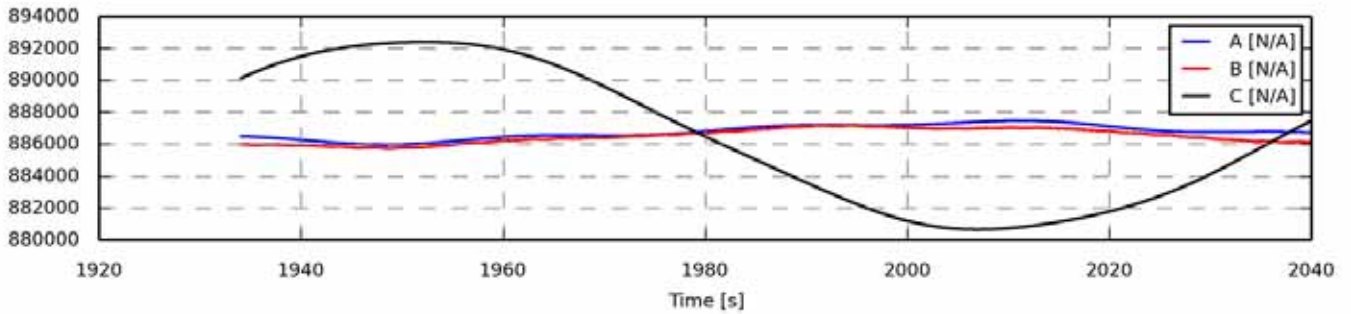


Figure 117 - Full length time series

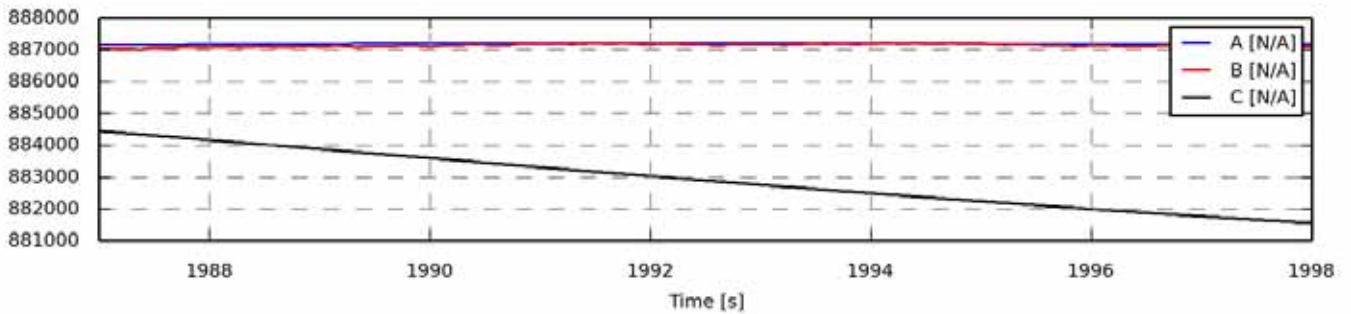


Figure 118 - Zoom of time series

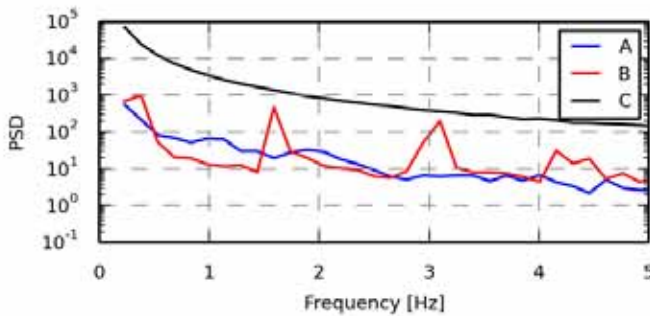


Figure 119 - Power spectrum density

Statistics	A	B	C
Min	8.8596e+05	8.8572e+05	8.8066e+05
Max	8.8748e+05	8.8722e+05	8.9240e+05
Mean	8.8678e+05	8.8652e+05	8.8639e+05
Std	436.7849	450.5358	4.3049e+03
Skewness	-0.1668	-0.1459	0.1194
Kurtosis	-1.0196	-1.3252	-1.5490

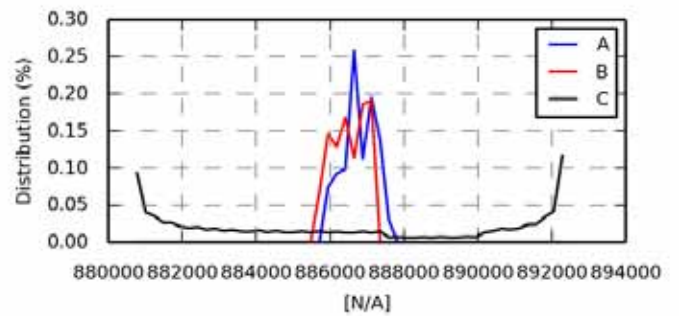


Figure 120 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	269.1265	282.2817	2.0942e+03
Eq (m=4)	407.1262	419.0773	3.1616e+03
Eq (m=6)	626.4454	628.8655	4.8381e+03
Eq (m=8)	781.2732	774.7392	6.0199e+03
Eq (m=10)	892.8599	880.4953	6.8746e+03
Eq (m=12)	976.1605	960.2289	7.5142e+03

Section 1.22 oc4_p2_load_case_1-2: ESYS line3_1 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-2.sel (28-02-2014 16:17)	471	ESYS line3_1 SENSOR 4
B	WAMsim/oc4_p2_load_case_1-2.sel (01-04-2014 12:50)	471	ESYS line3_1 SENSOR 4
C	hawc2/oc4_p2_load_case_1-2.sel (04-12-2013 11:39)	471	ESYS line3_1 SENSOR 4

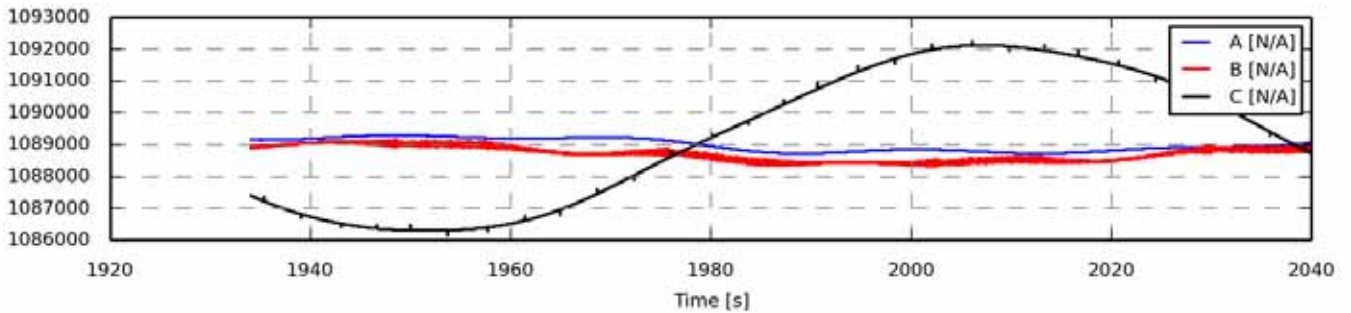


Figure 121 - Full length time series

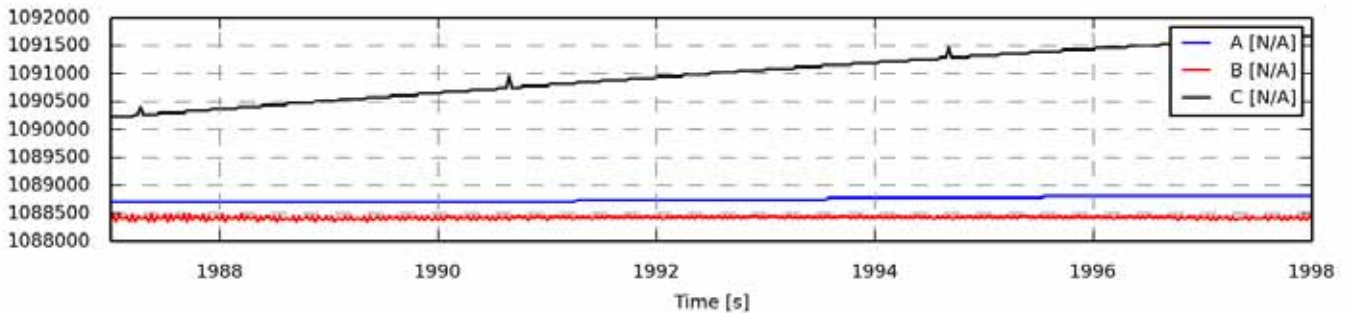


Figure 122 - Zoom of time series

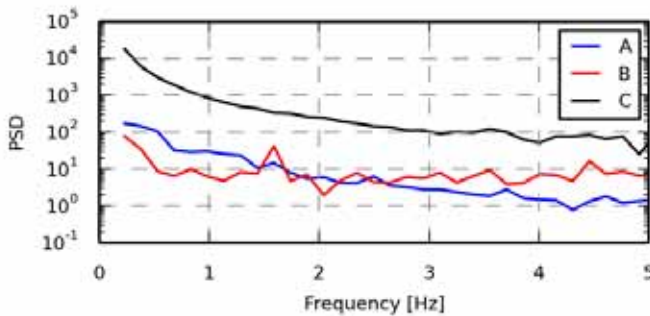


Figure 123 - Power spectrum density

Statistics	A	B	C
Min	1.0887e+06	1.0883e+06	1.0861e+06
Max	1.0893e+06	1.0892e+06	1.0922e+06
Mean	1.0890e+06	1.0887e+06	1.0893e+06
Std	201.3395	229.8418	2.1365e+03
Skewness	0.1033	0.1350	-0.1146
Kurtosis	-1.5734	-1.3061	-1.5500

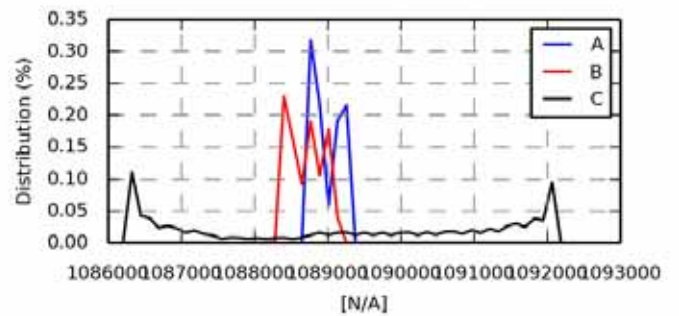


Figure 124 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	104.7240	299.5982	1.0900e+03
Eq (m=4)	156.3021	289.1592	1.6453e+03
Eq (m=6)	238.5072	362.2151	2.5177e+03
Eq (m=8)	296.7193	441.5779	3.1327e+03
Eq (m=10)	338.8408	501.1469	3.5775e+03
Eq (m=12)	370.3680	546.1868	3.9104e+03

Section 1.23 oc4_p2_load_case_1-2: ESYS line3_3 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-2.sel (28-02-2014 16:17)	675	ESYS line3_3 SENSOR 104
B	WAMsim/oc4_p2_load_case_1-2.sel (01-04-2014 12:50)	675	ESYS line3_3 SENSOR 104
C	hawc2/oc4_p2_load_case_1-2.sel (04-12-2013 11:39)	675	ESYS line3_3 SENSOR 104

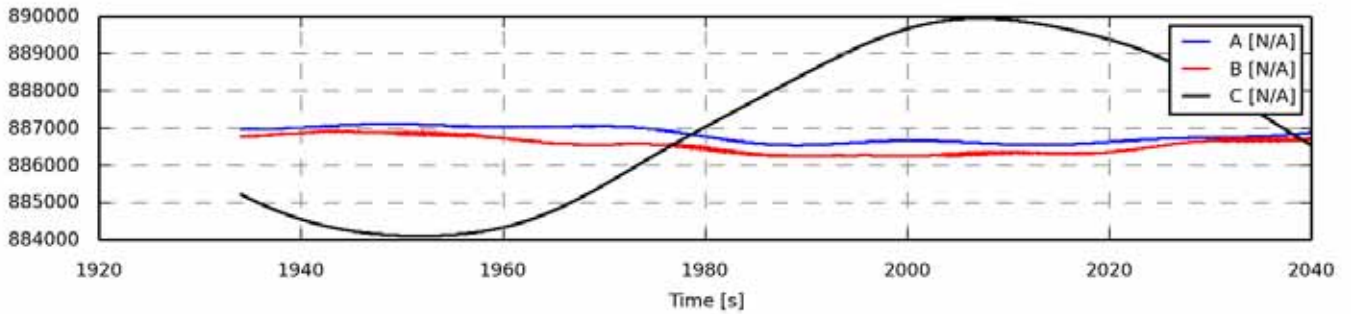


Figure 125 - Full length time series

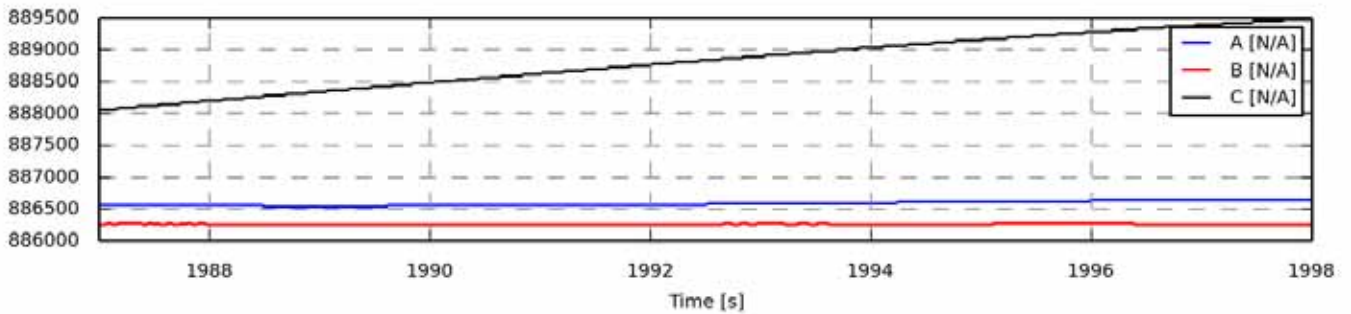


Figure 126 - Zoom of time series

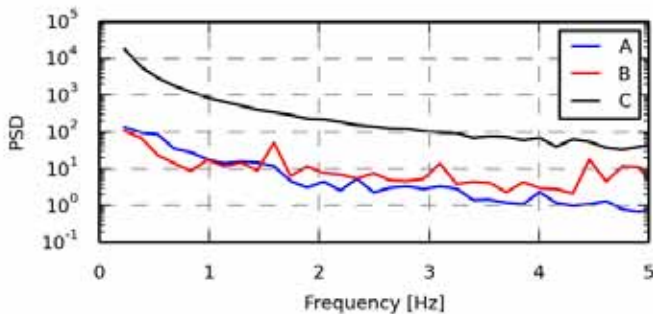


Figure 127 - Power spectrum density

Statistics	A	B	C
Min	8.8653e+05	8.8625e+05	8.8411e+05
Max	8.8712e+05	8.8692e+05	8.8995e+05
Mean	8.8682e+05	8.8655e+05	8.8709e+05
Std	200.2626	225.1114	2.1414e+03
Skewness	0.1180	0.1430	-0.1149
Kurtosis	-1.6052	-1.3845	-1.5493

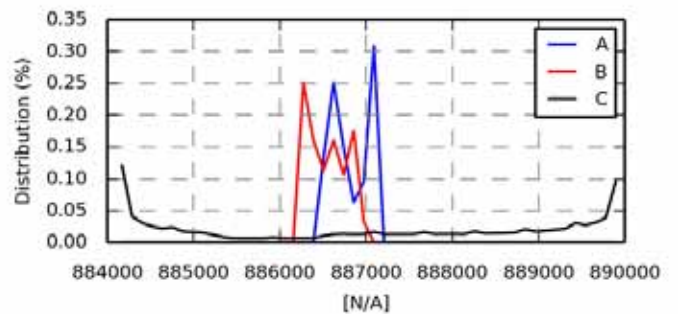


Figure 128 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	105.6877	133.5651	1.0417e+03
Eq (m=4)	158.1412	185.3110	1.5727e+03
Eq (m=6)	240.6291	277.5259	2.4067e+03
Eq (m=8)	298.8351	342.9225	2.9946e+03
Eq (m=10)	341.0198	390.4102	3.4197e+03
Eq (m=12)	372.6536	426.1683	3.7379e+03

Article II. oc4_p2_load_case_1-3a

Generated 22-04-2014 10:01

Section 2.01 oc4_p2_load_case_1-3a: WSP gl. coo.,Vy [m/s]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3a.sel (28-02-2014 16:40)	3	Free wind speed Vy, gl. coo, of gl. pos 0.00, 0.00, -90.00
B	WAMsim/oc4_p2_load_case_1-3a.sel (01-04-2014 12:50)	3	Free wind speed Vy, gl. coo, of gl. pos 0.00, 0.00, -90.00
C	hawc2/oc4_p2_load_case_1-3a.sel (04-12-2013 11:39)	3	Free wind speed Vy, gl. coo, of gl. pos 0.00, 0.00, -90.00

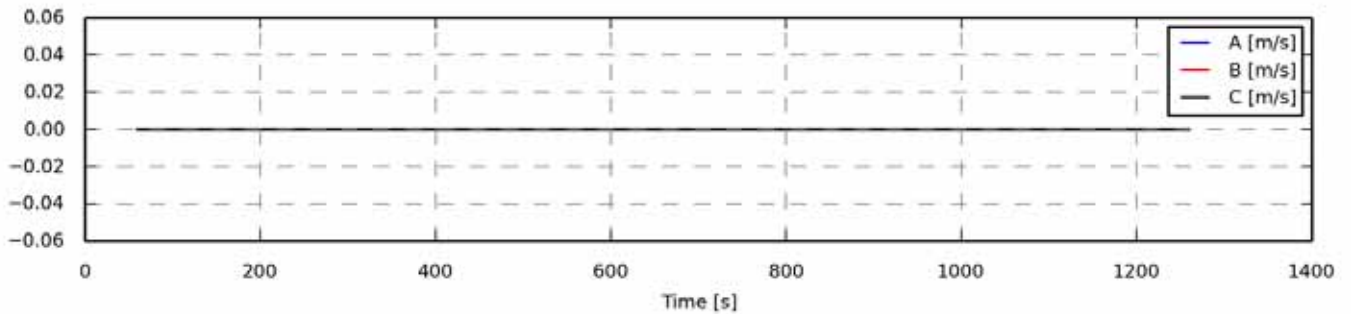


Figure 129 - Full length time series

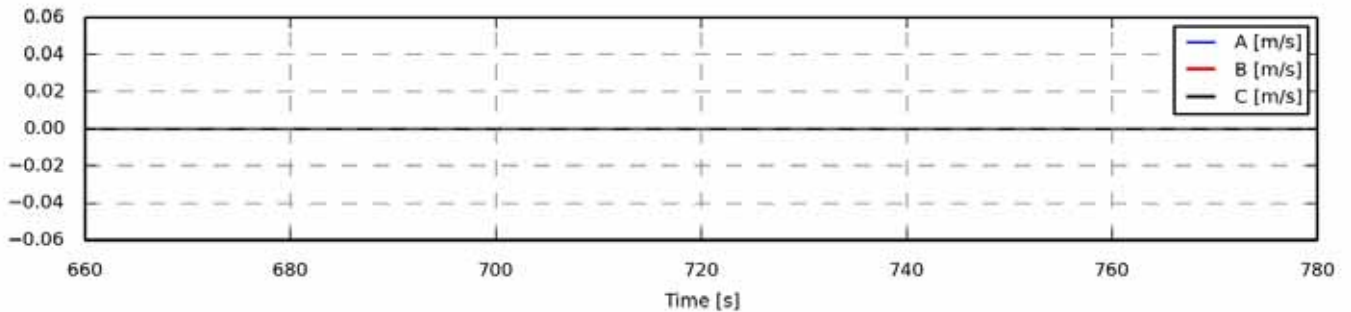


Figure 130 - Zoom of time series

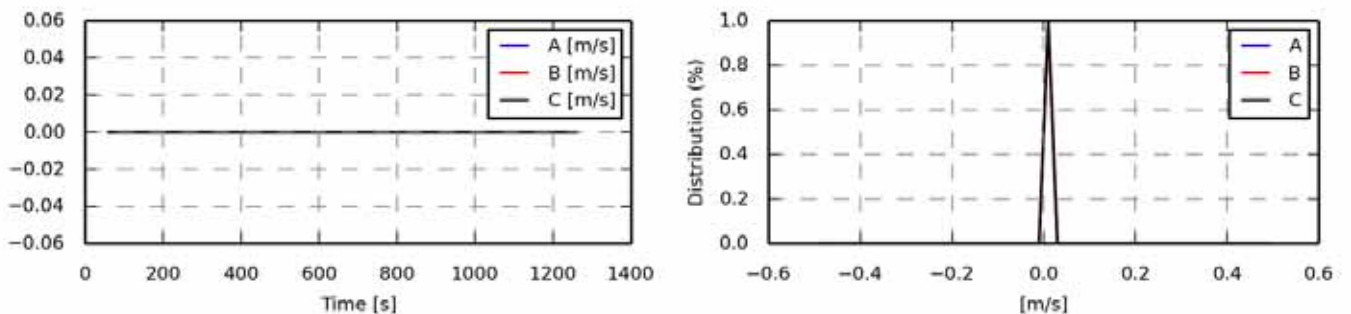


Figure 131 - Power spectrum density

Statistics	A	B	C
Min	0.0000	0.0000	0.0000
Max	0.0000	0.0000	0.0000
Mean	0.0000	0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

Figure 132 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 2.02 oc4_p2_load_case_1-3a: Water surf. [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3a.sel (28-02-2014 16:40)	5	Water surface gl. coo, at gl. coo, x,y= 0.00, 0.00
B	WAMsim/oc4_p2_load_case_1-3a.sel (01-04-2014 12:50)	5	Constant value
C	hawc2/oc4_p2_load_case_1-3a.sel (04-12-2013 11:39)	5	Water surface gl. coo, at gl. coo, x,y= 0.00, 0.00

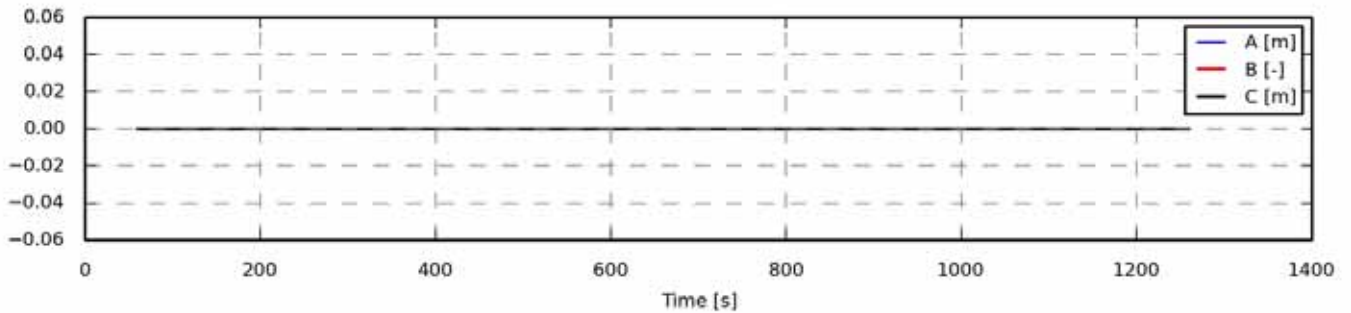


Figure 133 - Full length time series

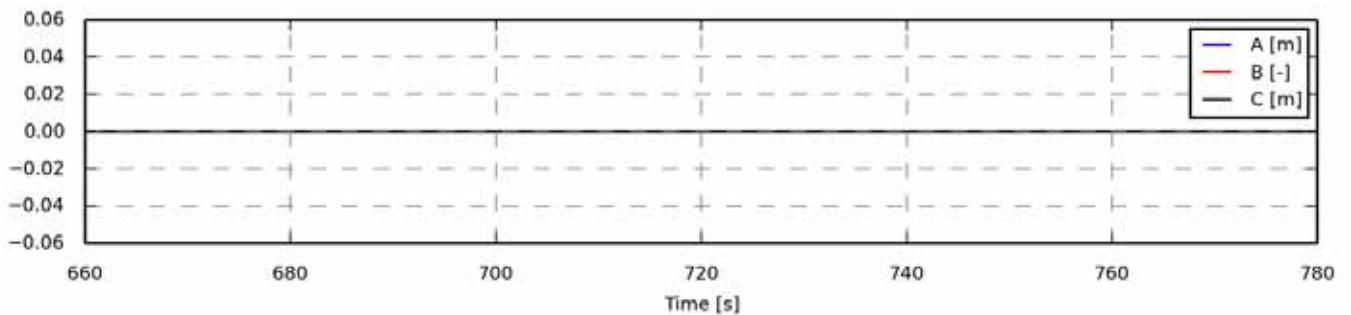


Figure 134 - Zoom of time series

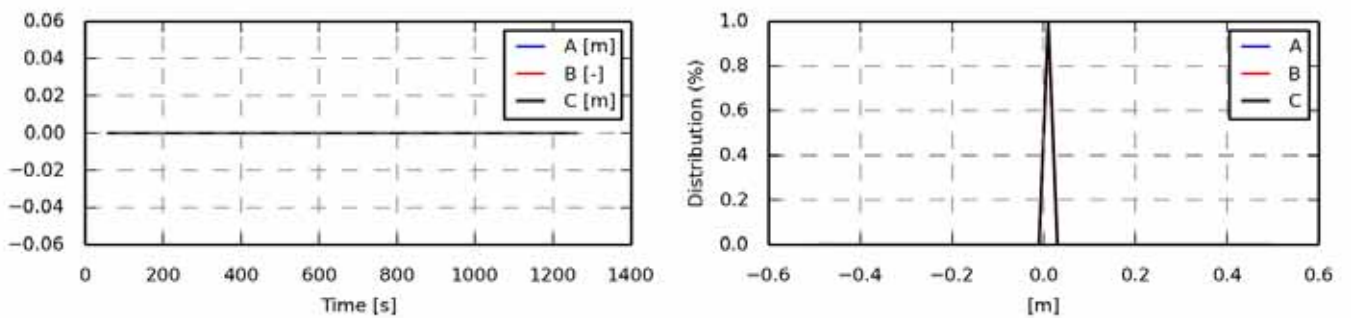


Figure 135 - Power spectrum density

Statistics	A	B	C
Min	0.0000	0.0000	0.0000
Max	0.0000	0.0000	0.0000
Mean	0.0000	0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

Figure 136 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 2.03 oc4_p2_load_case_1-3a: Constant [-]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3a.sel (28-02-2014 16:40)	6	Constant value
B	WAMsim/oc4_p2_load_case_1-3a.sel (01-04-2014 12:50)	6	Constant value
C	hawc2/oc4_p2_load_case_1-3a.sel (04-12-2013 11:39)	6	Constant value

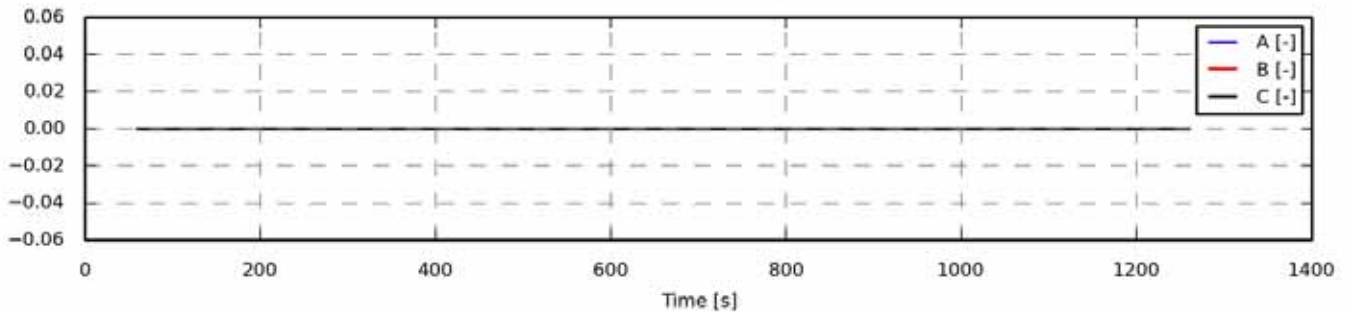


Figure 137 - Full length time series

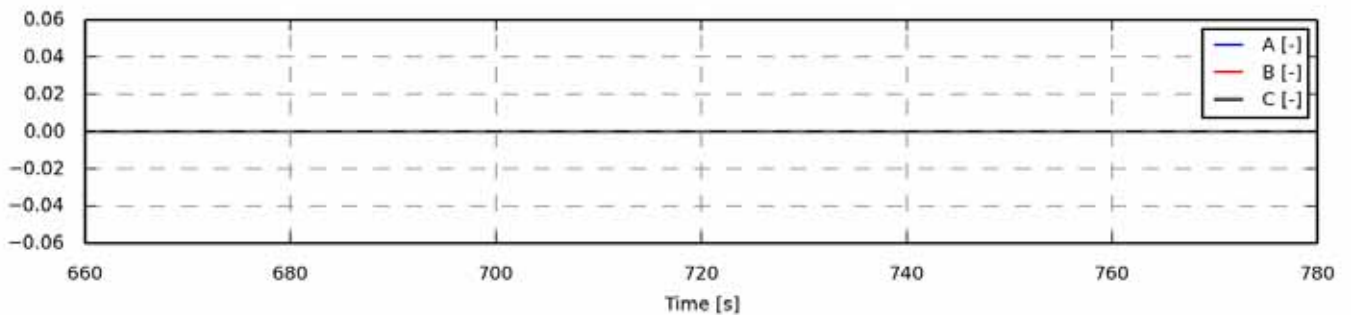


Figure 138 - Zoom of time series

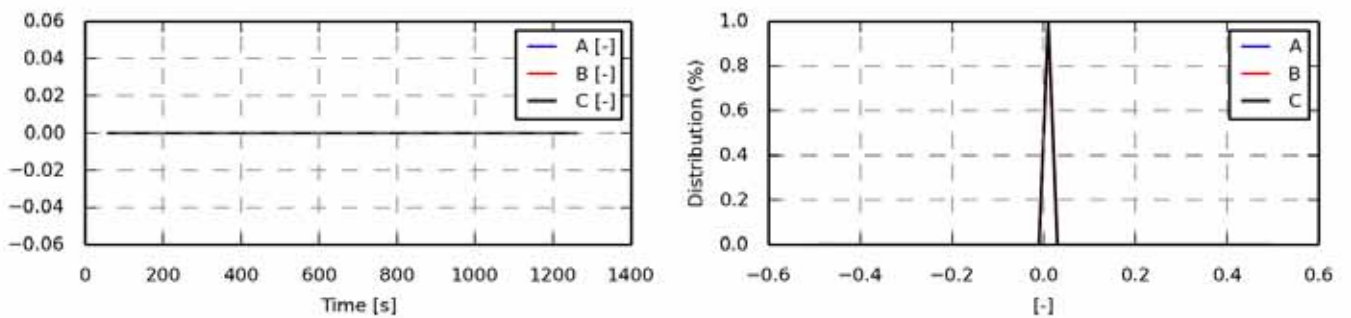


Figure 139 - Power spectrum density

Statistics	A	B	C
Min	0.0000	0.0000	0.0000
Max	0.0000	0.0000	0.0000
Mean	0.0000	0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

Figure 140 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 2.04 oc4_p2_load_case_1-3a: Constant [-]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3a.sel (28-02-2014 16:40)	9	Constant value
B	WAMsim/oc4_p2_load_case_1-3a.sel (01-04-2014 12:50)	9	Constant value
C	hawc2/oc4_p2_load_case_1-3a.sel (04-12-2013 11:39)	9	Constant value

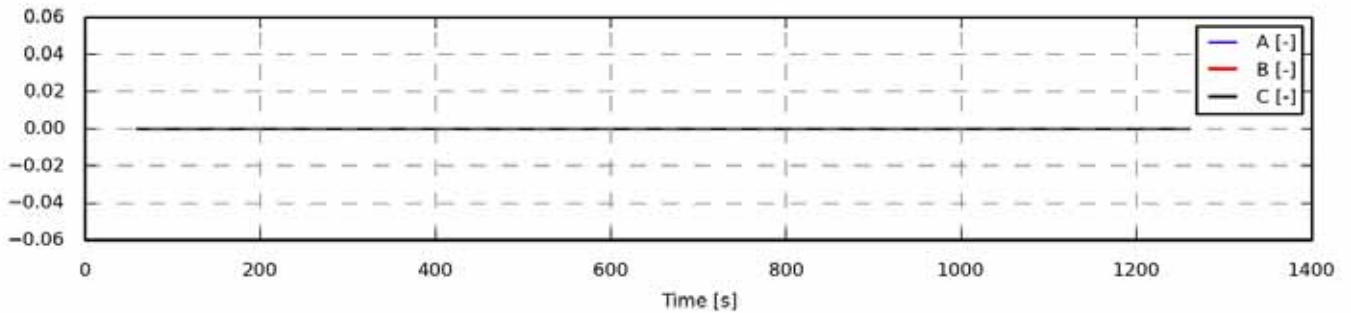


Figure 141 - Full length time series

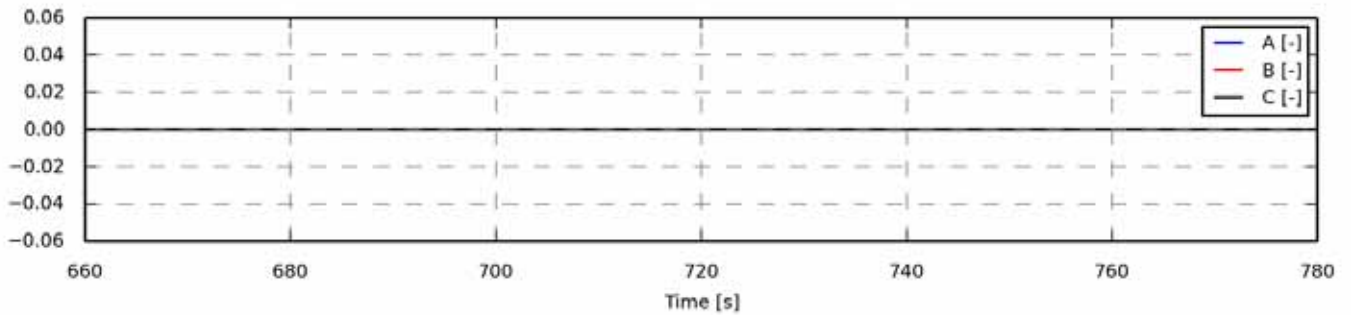


Figure 142 - Zoom of time series

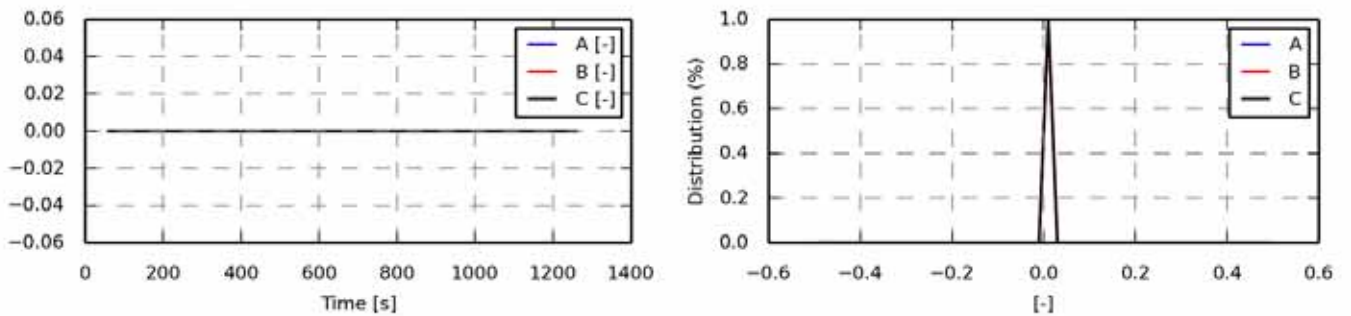


Figure 143 - Power spectrum density

Statistics	A	B	C
Min	0.0000	0.0000	0.0000
Max	0.0000	0.0000	0.0000
Mean	0.0000	0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

Figure 144 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 2.05 oc4_p2_load_case_1-3a: bea1 angle [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3a.sel (28-02-2014 16:40)	14	pitch1 angle
B	WAMsim/oc4_p2_load_case_1-3a.sel (01-04-2014 12:50)	14	pitch1 angle
C	hawc2/oc4_p2_load_case_1-3a.sel (04-12-2013 11:39)	14	pitch1 angle

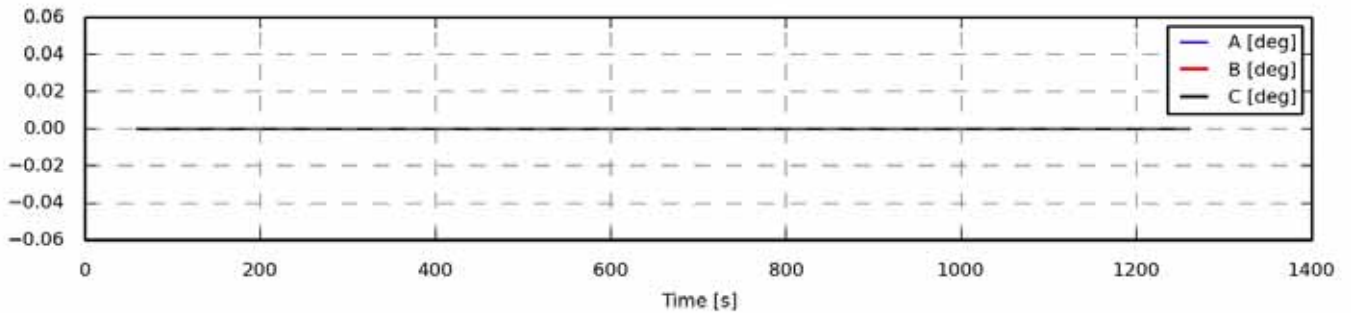


Figure 145 - Full length time series

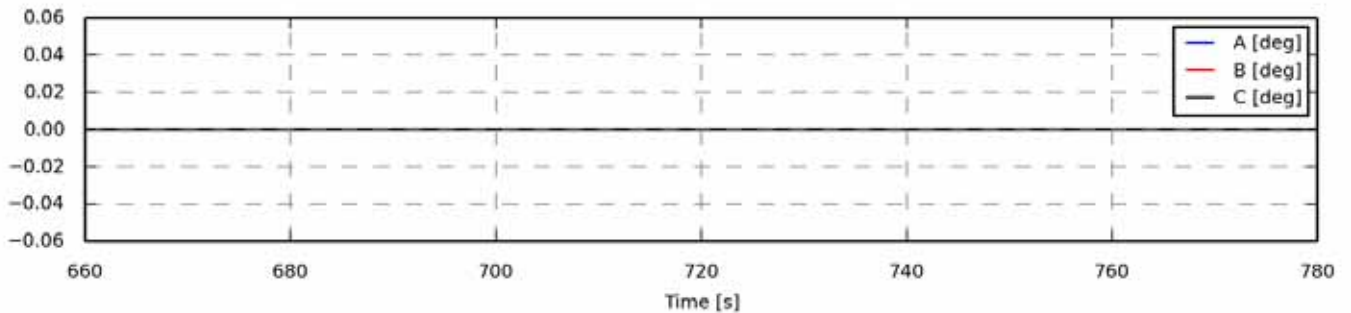


Figure 146 - Zoom of time series

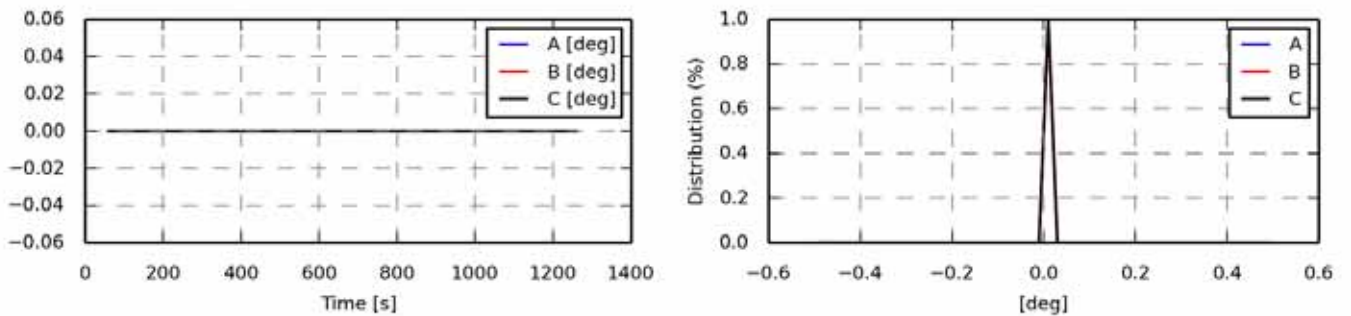


Figure 147 - Power spectrum density

Statistics	A	B	C
Min	0.0000	0.0000	0.0000
Max	0.0000	0.0000	0.0000
Mean	0.0000	0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

Figure 148 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 2.06 oc4_p2_load_case_1-3a: State pos x coo: global [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3a.sel (28-02-2014 16:40)	19	State pos x Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
B	WAMsim/oc4_p2_load_case_1-3a.sel (01-04-2014 12:50)	19	State pos x Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
C	hawc2/oc4_p2_load_case_1-3a.sel (04-12-2013 11:39)	19	State pos x Mbdy:mc E-nr: 8 Z-rel:0.00 coo: global platform translation in surge sway and heave

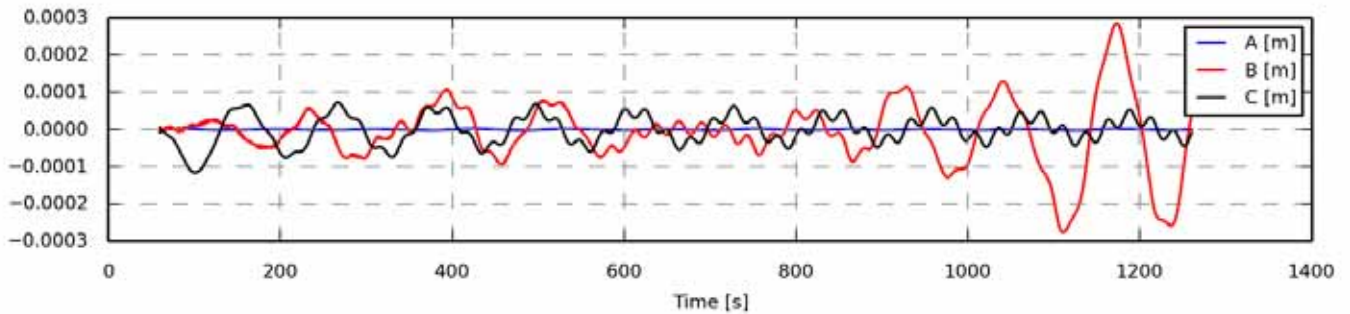


Figure 149 - Full length time series

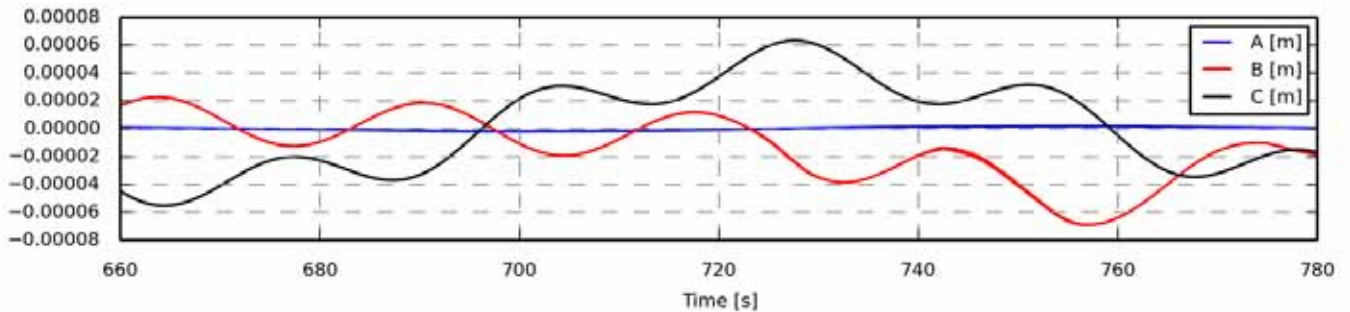


Figure 150 - Zoom of time series

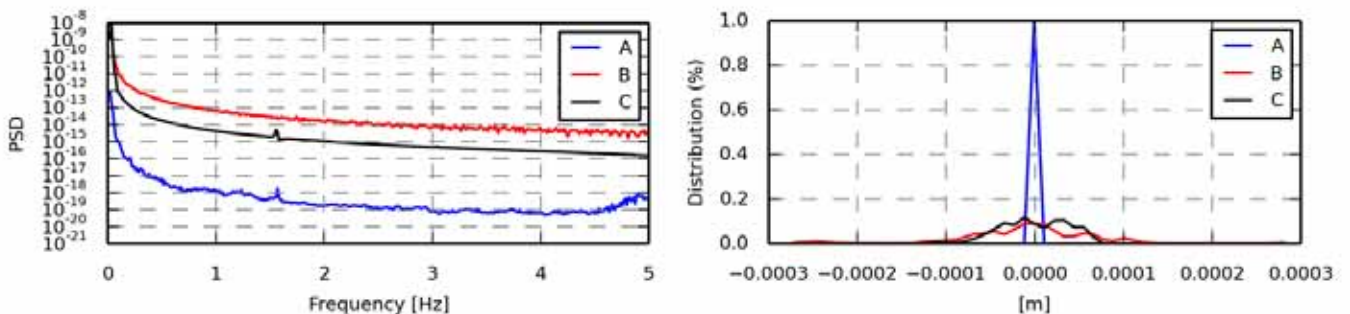


Figure 151 - Power spectrum density

Statistics	A	B	C
Min	-0.0000	-0.0003	-0.0001
Max	0.0000	0.0003	0.0001
Mean	0.0000	-0.0000	-0.0000
Std	0.0000	0.0001	0.0000
Skewness	0.0561	-0.2785	-0.3377
Kurtosis	-0.9953	2.1093	-0.3664

Figure 152 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.0000	0.0001	0.0000
Eq (m=4)	0.0000	0.0001	0.0000
Eq (m=6)	0.0000	0.0002	0.0001
Eq (m=8)	0.0000	0.0002	0.0001
Eq (m=10)	0.0000	0.0003	0.0001
Eq (m=12)	0.0000	0.0003	0.0001

Section 2.07 oc4_p2_load_case_1-3a: State pos y coo: global [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3a.sel (28-02-2014 16:40)	20	State pos y Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
B	WAMsim/oc4_p2_load_case_1-3a.sel (01-04-2014 12:50)	20	State pos y Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
C	hawc2/oc4_p2_load_case_1-3a.sel (04-12-2013 11:39)	20	State pos y Mbdy:mc E-nr: 8 Z-rel:0.00 coo: global platform translation in surge sway and heave

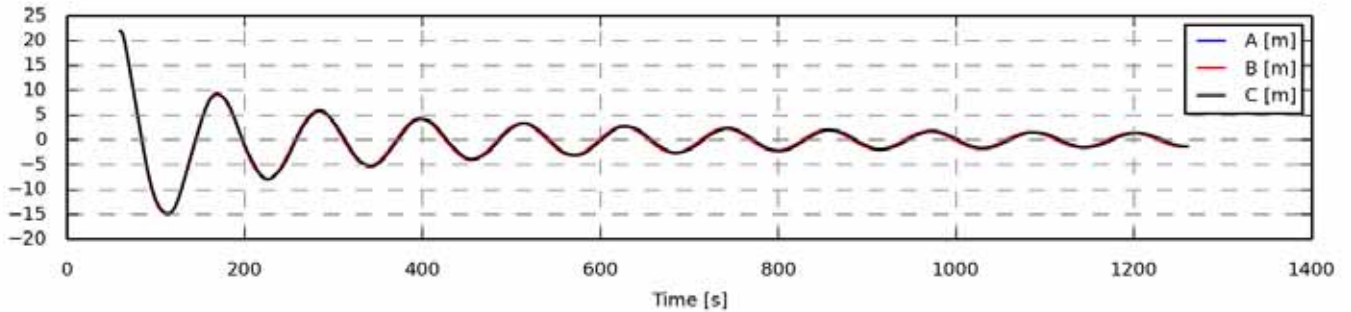


Figure 153 - Full length time series

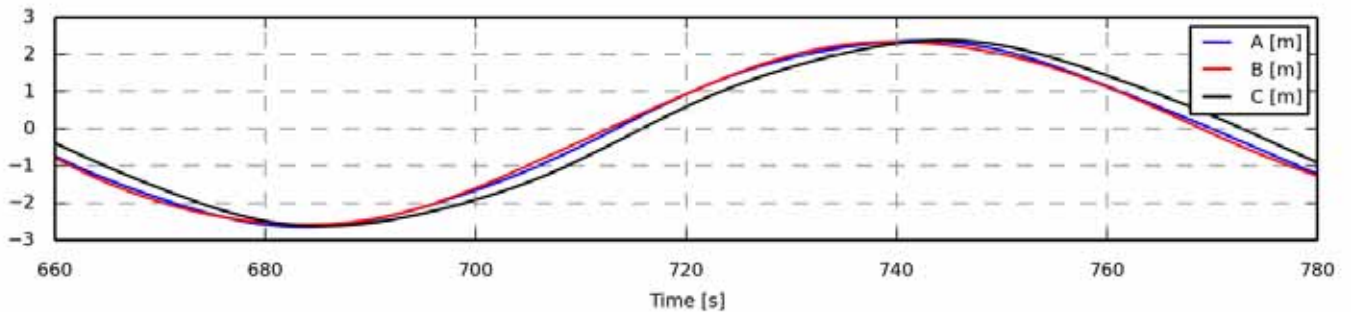


Figure 154 - Zoom of time series

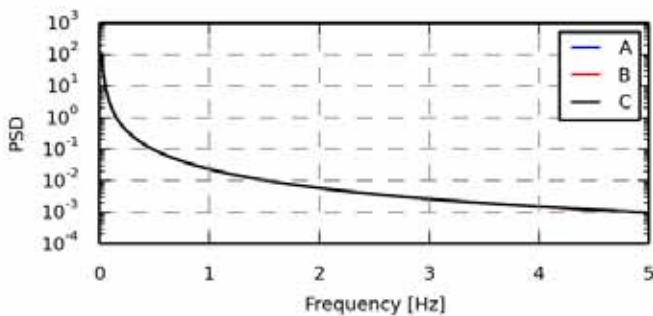


Figure 155 - Power spectrum density

Statistics	A	B	C
Min	-15.0376	-14.8946	-14.8402
Max	21.9998	21.9998	21.9997
Mean	-0.1816	-0.1807	-0.1704
Std	4.1365	4.1234	4.1131
Skewness	0.1943	0.2054	0.2283
Kurtosis	5.9072	5.9690	5.9256

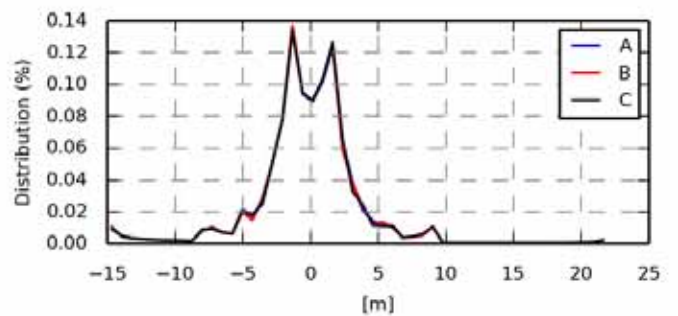


Figure 156 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	3.1858	3.1678	3.1688
Eq (m=4)	5.6234	5.5972	5.5934
Eq (m=6)	10.2786	10.2376	10.2238
Eq (m=8)	14.0659	14.0113	13.9909
Eq (m=10)	17.0340	16.9682	16.9431
Eq (m=12)	19.3734	19.2986	19.2701

Section 2.08 oc4_p2_load_case_1-3a: State pos z coo: global [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3a.sel (28-02-2014 16:40)	21	State pos z Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
B	WAMsim/oc4_p2_load_case_1-3a.sel (01-04-2014 12:50)	21	State pos z Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
C	hawc2/oc4_p2_load_case_1-3a.sel (04-12-2013 11:39)	21	State pos z Mbdy:mc E-nr: 8 Z-rel:0.00 coo: global platform translation in surge sway and heave

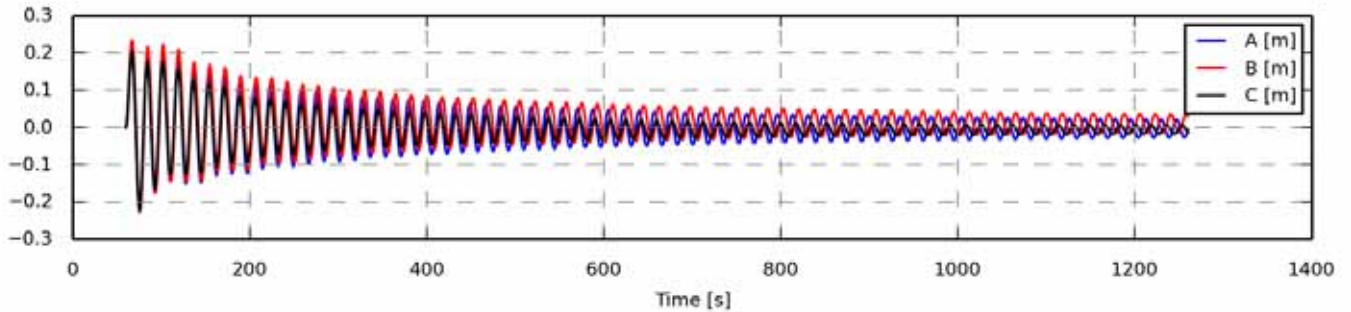


Figure 157 - Full length time series

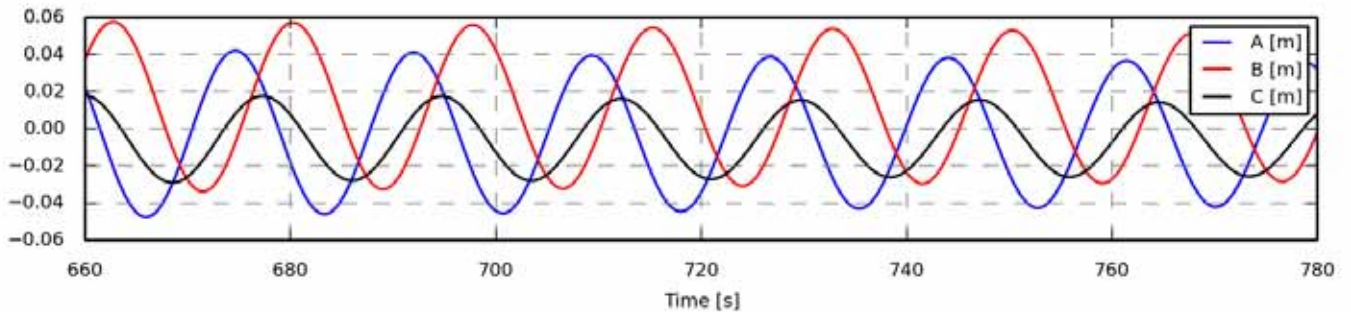


Figure 158 - Zoom of time series

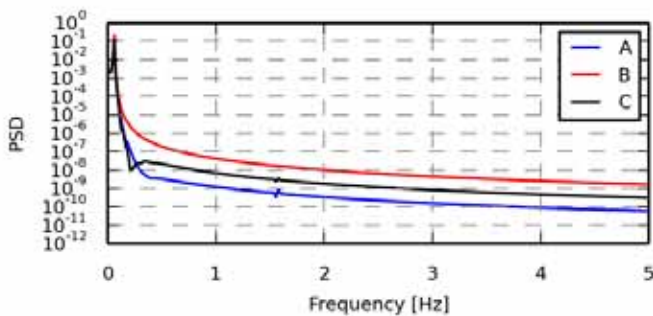


Figure 159 - Power spectrum density

Statistics	A	B	C
Min	-0.2280	-0.2244	-0.2180
Max	0.2103	0.2348	0.2040
Mean	-0.0009	0.0135	-0.0035
Std	0.0535	0.0562	0.0410
Skewness	0.2102	0.2236	0.4952
Kurtosis	2.1344	2.3374	6.2022

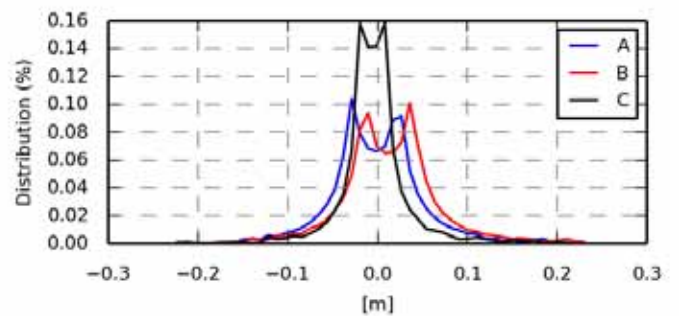


Figure 160 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.0681	0.0717	0.0565
Eq (m=4)	0.0983	0.1039	0.0858
Eq (m=6)	0.1491	0.1579	0.1363
Eq (m=8)	0.1880	0.1992	0.1755
Eq (m=10)	0.2183	0.2311	0.2060
Eq (m=12)	0.2424	0.2564	0.2300

Section 2.09 oc4_p2_load_case_1-3a: proj_ang tx coo: global [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3a.sel (28-02-2014 16:40)	22	State_rot proj_ang tx Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
B	WAMsim/oc4_p2_load_case_1-3a.sel (01-04-2014 12:50)	22	State_rot proj_ang tx Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
C	hawc2/oc4_p2_load_case_1-3a.sel (04-12-2013 11:39)	22	State_rot proj_ang tx Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw

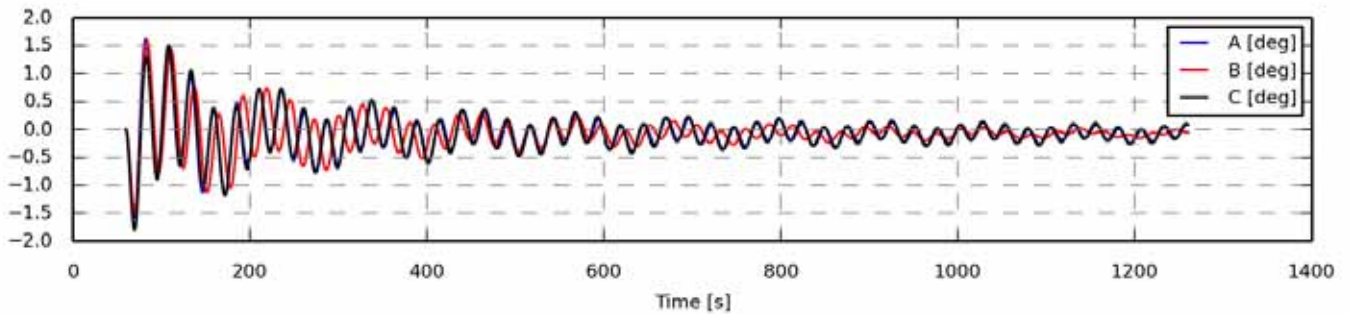


Figure 161 - Full length time series

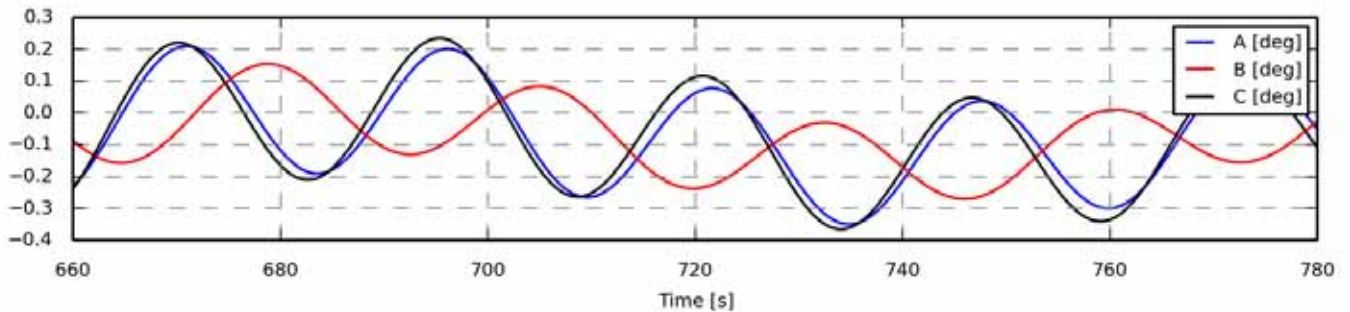


Figure 162 - Zoom of time series

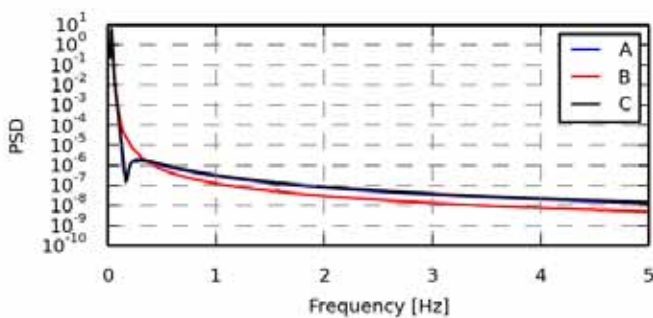


Figure 163 - Power spectrum density

Statistics	A	B	C
Min	-1.5611	-1.4637	-1.7957
Max	1.6187	1.5859	1.5053
Mean	-0.0655	-0.0639	-0.0712
Std	0.3339	0.3118	0.3424
Skewness	0.6027	0.7584	0.1118
Kurtosis	5.9245	7.3864	5.2242

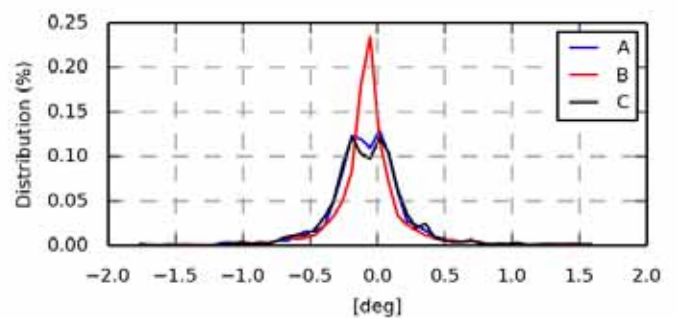


Figure 164 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.3728	0.3502	0.3790
Eq (m=4)	0.5841	0.5551	0.5907
Eq (m=6)	0.9647	0.9219	0.9768
Eq (m=8)	1.2682	1.2139	1.2910
Eq (m=10)	1.5059	1.4426	1.5409
Eq (m=12)	1.6943	1.6239	1.7406

Section 2.10 oc4_p2_load_case_1-3a: proj_ang ty coo: global [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3a.sel (28-02-2014 16:40)	23	State_rot proj_ang ty Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
B	WAMsim/oc4_p2_load_case_1-3a.sel (01-04-2014 12:50)	23	State_rot proj_ang ty Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
C	hawc2/oc4_p2_load_case_1-3a.sel (04-12-2013 11:39)	23	State_rot proj_ang ty Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw

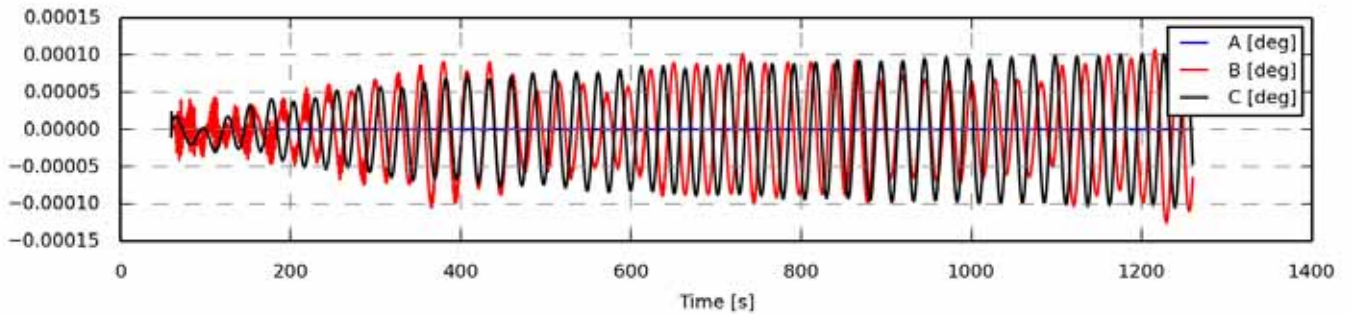


Figure 165 - Full length time series

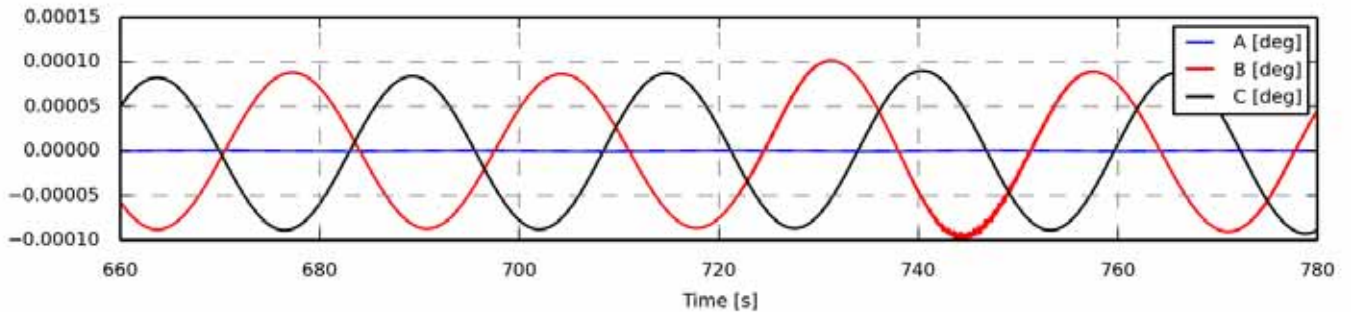


Figure 166 - Zoom of time series

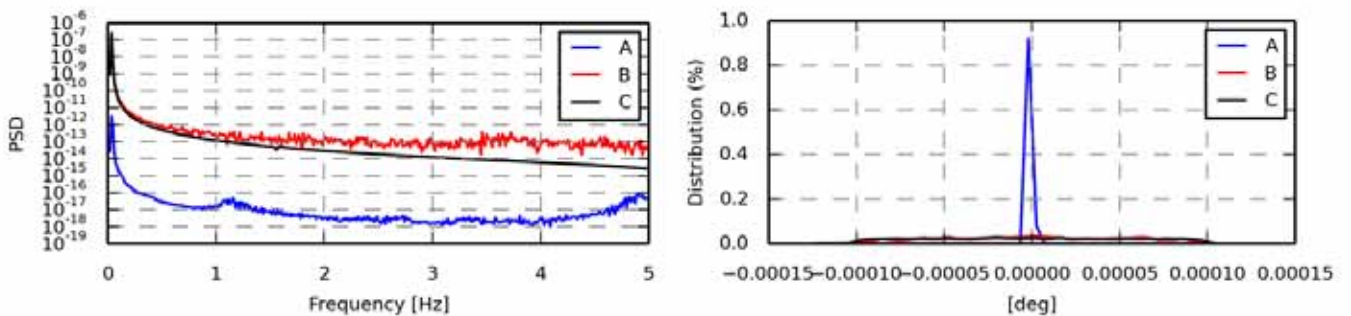


Figure 167 - Power spectrum density

Statistics	A	B	C
Min	-0.0000	-0.0001	-0.0001
Max	0.0000	0.0001	0.0001
Mean	0.0000	-0.0000	-0.0000
Std	0.0000	0.0001	0.0001
Skewness	-0.0624	-0.0279	0.0114
Kurtosis	-0.9535	-0.9623	-1.1580

Figure 168 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.0000	0.0001	0.0001
Eq (m=4)	0.0000	0.0001	0.0001
Eq (m=6)	0.0000	0.0001	0.0001
Eq (m=8)	0.0000	0.0001	0.0001
Eq (m=10)	0.0000	0.0001	0.0001
Eq (m=12)	0.0000	0.0001	0.0001

Section 2.11 oc4_p2_load_case_1-3a: proj_ang tz coo: global [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3a.sel (28-02-2014 16:40)	24	State_rot proj_ang tz Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
B	WAMsim/oc4_p2_load_case_1-3a.sel (01-04-2014 12:50)	24	State_rot proj_ang tz Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
C	hawc2/oc4_p2_load_case_1-3a.sel (04-12-2013 11:39)	24	State_rot proj_ang tz Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw

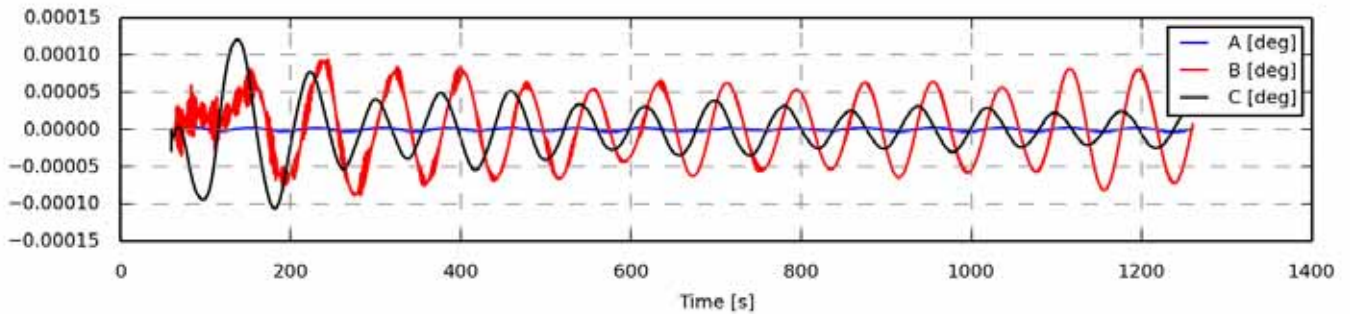


Figure 169 - Full length time series

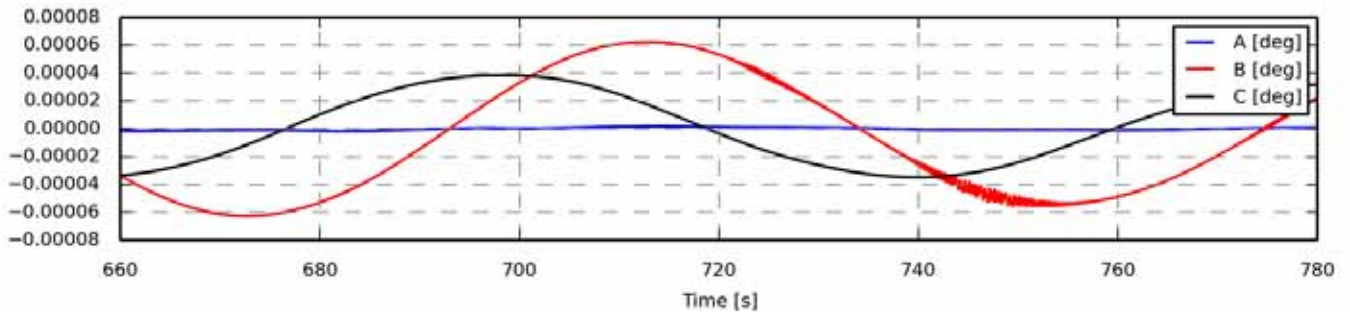


Figure 170 - Zoom of time series

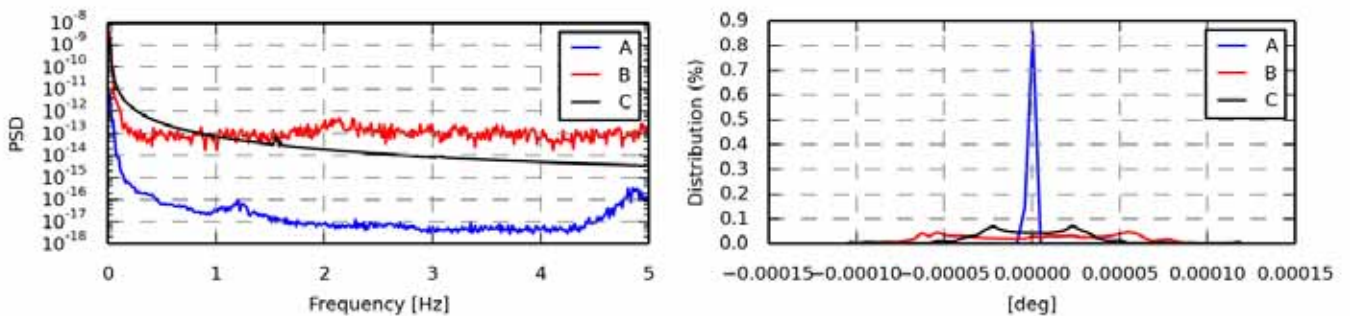


Figure 171 - Power spectrum density

Statistics	A	B	C
Min	-0.0000	-0.0001	-0.0001
Max	0.0000	0.0001	0.0001
Mean	0.0000	0.0000	-0.0000
Std	0.0000	0.0000	0.0000
Skewness	-0.0604	-0.0358	0.1052
Kurtosis	-1.2019	-1.2418	1.4354

Figure 172 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.0000	0.0000	0.0000
Eq (m=4)	0.0000	0.0000	0.0000
Eq (m=6)	0.0000	0.0001	0.0001
Eq (m=8)	0.0000	0.0001	0.0001
Eq (m=10)	0.0000	0.0001	0.0001
Eq (m=12)	0.0000	0.0001	0.0001

Section 2.12 oc4_p2_load_case_1-3a: Mx coo: towertop [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3a.sel (28-02-2014 16:40)	37	MomentMx Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
B	WAMsim/oc4_p2_load_case_1-3a.sel (01-04-2014 12:50)	37	MomentMx Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
C	hawc2/oc4_p2_load_case_1-3a.sel (04-12-2013 11:39)	37	MomentMx Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment

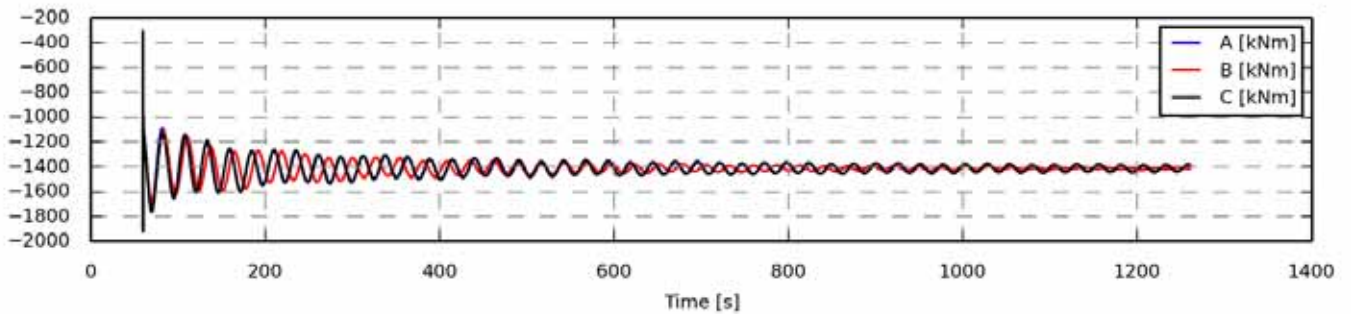


Figure 173 - Full length time series

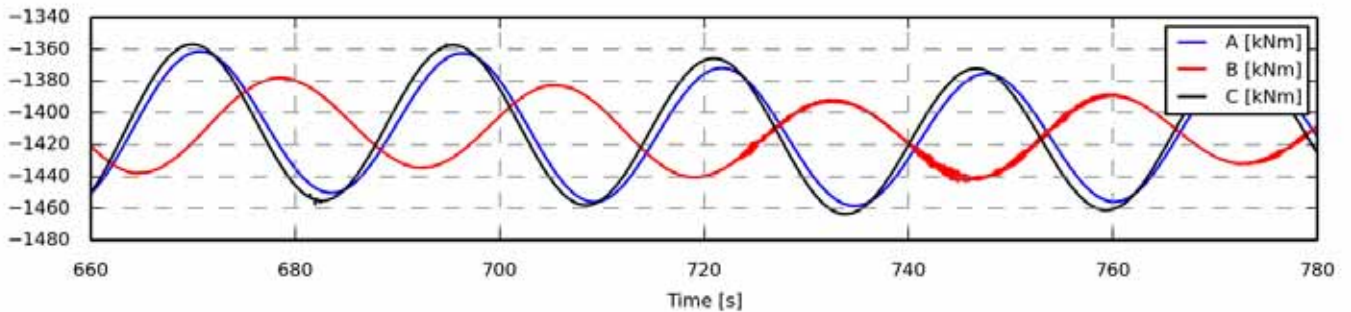


Figure 174 - Zoom of time series

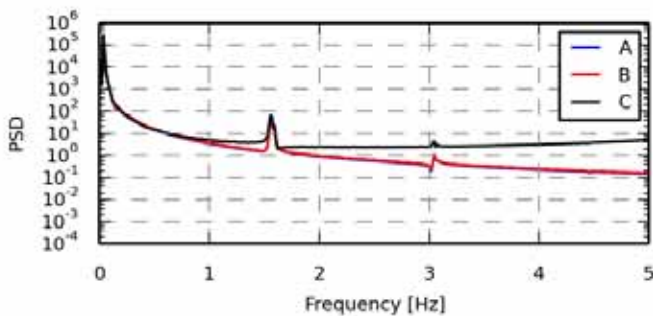


Figure 175 - Power spectrum density

Statistics	A	B	C
Min	-1.7341e+03	-1.6998e+03	-1.9213e+03
Max	-1.0838e+03	-1.0397e+03	-3.1028e+02
Mean	-1.4108e+03	-1.4106e+03	-1.4114e+03
Std	66.5726	58.6315	69.4848
Skewness	0.2795	0.3920	0.2723
Kurtosis	4.6382	6.1989	7.8983

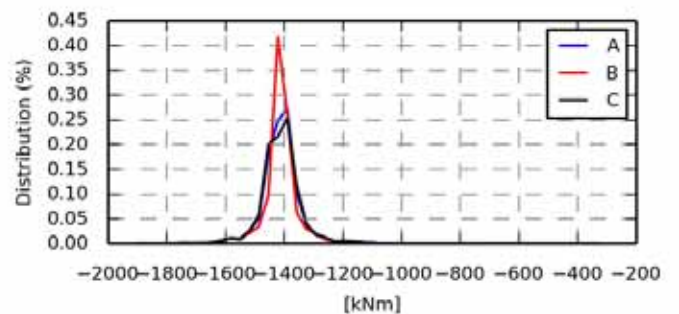


Figure 176 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	83.8479	79.4010	173.4820
Eq (m=4)	130.8206	123.3037	287.1939
Eq (m=6)	213.0434	202.7359	492.5785
Eq (m=8)	276.5789	265.7216	652.0922
Eq (m=10)	325.3881	314.8209	774.0941
Eq (m=12)	363.5703	353.6299	869.2072

Section 2.13 oc4_p2_load_case_1-3a: My coo: towertop [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3a.sel (28-02-2014 16:40)	38	MomentMy Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
B	WAMsim/oc4_p2_load_case_1-3a.sel (01-04-2014 12:50)	38	MomentMy Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
C	hawc2/oc4_p2_load_case_1-3a.sel (04-12-2013 11:39)	38	MomentMy Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment

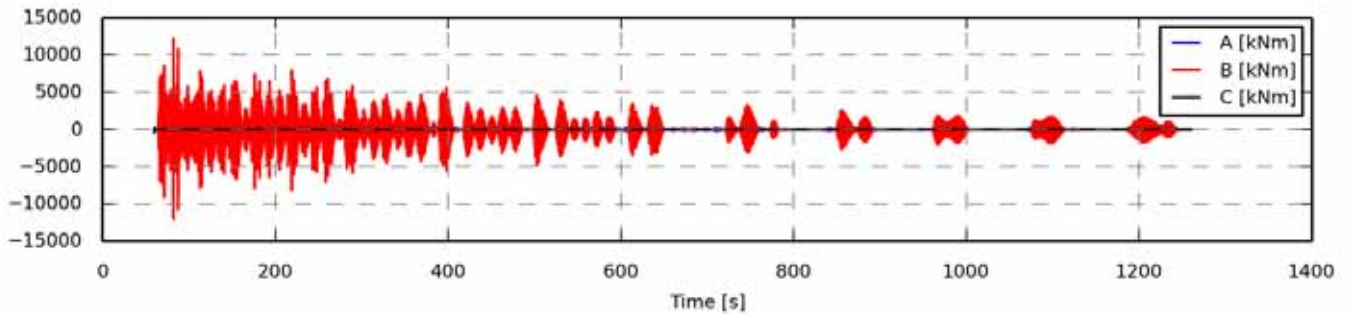


Figure 177 - Full length time series

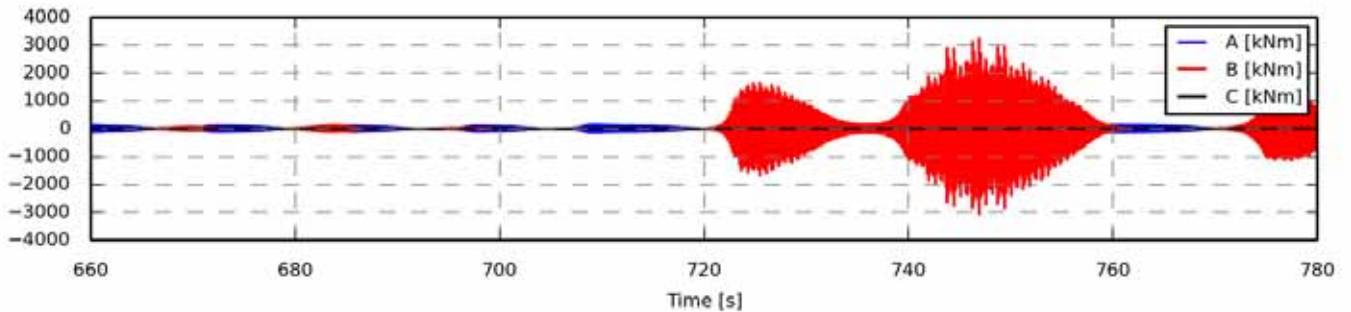


Figure 178 - Zoom of time series

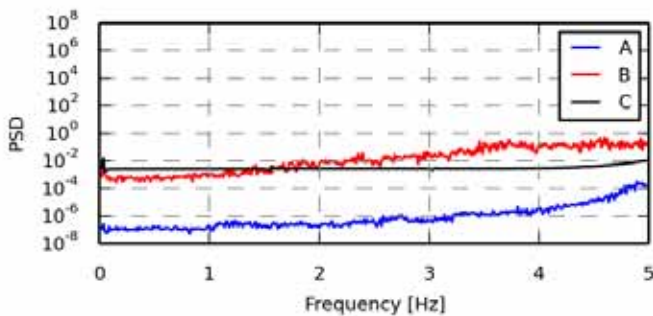


Figure 179 - Power spectrum density

Statistics	A	B	C
Min	-1.8870e+02	-1.1981e+04	-2.9460e+02
Max	191.5622	1.2163e+04	268.4735
Mean	0.0000	0.0010	0.0009
Std	37.1214	1.2182e+03	4.4715
Skewness	-0.0000	0.0001	-4.3349
Kurtosis	4.4306	5.6774	2.4600e+03

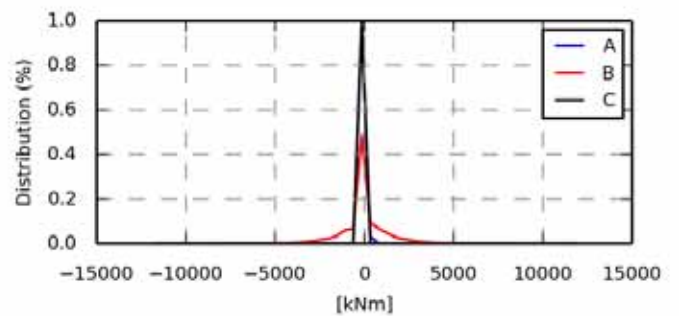


Figure 180 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	274.1905	8.9469e+03	79.2079
Eq (m=4)	256.9398	8.7800e+03	124.9671
Eq (m=6)	248.7319	9.7932e+03	199.5005
Eq (m=8)	250.2305	1.1259e+04	253.5234
Eq (m=10)	254.5304	1.2625e+04	293.4602
Eq (m=12)	259.8606	1.3779e+04	323.9855

Section 2.14 oc4_p2_load_case_1-3a: Mz coo: towertop [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3a.sel (28-02-2014 16:40)	39	MomentMz Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
B	WAMsim/oc4_p2_load_case_1-3a.sel (01-04-2014 12:50)	39	MomentMz Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
C	hawc2/oc4_p2_load_case_1-3a.sel (04-12-2013 11:39)	39	MomentMz Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment

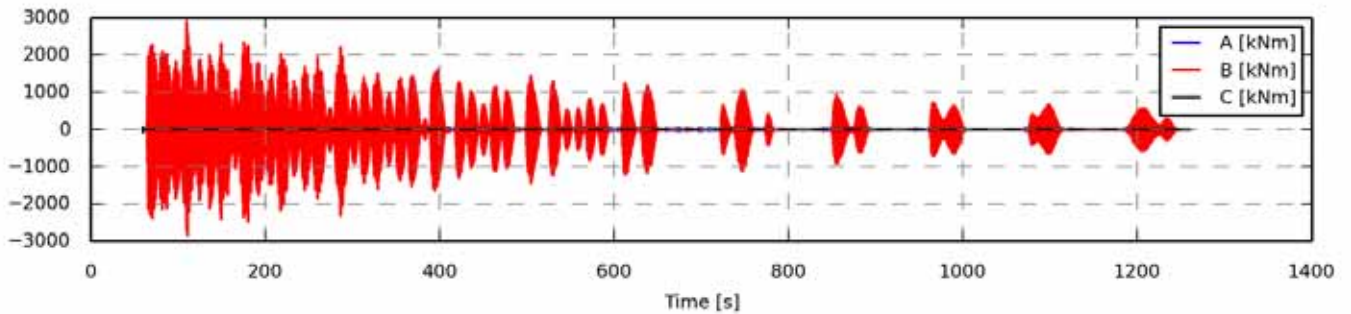


Figure 181 - Full length time series

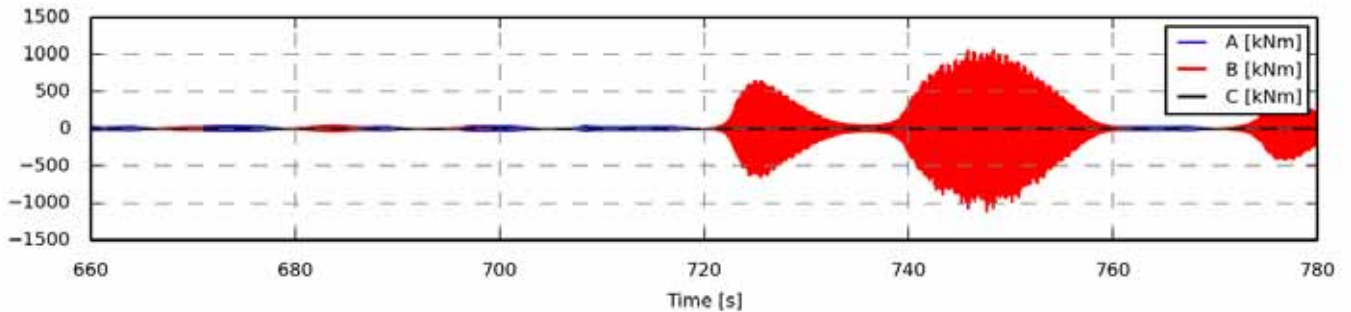


Figure 182 - Zoom of time series

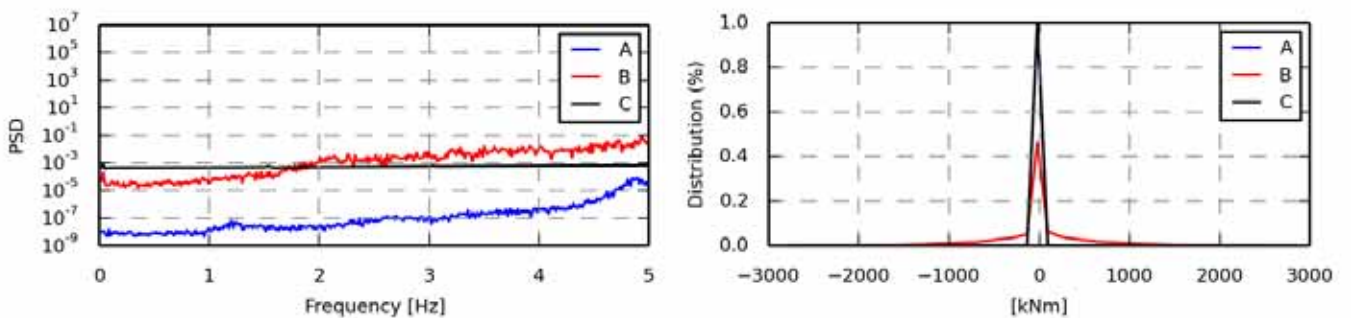


Figure 183 - Power spectrum density

Statistics	A	B	C
Min	-46.4851	-2.8339e+03	-60.1320
Max	45.5961	2.9076e+03	63.4806
Mean	0.0000	0.0002	-0.0004
Std	7.4894	490.0713	0.6308
Skewness	0.0000	-0.0002	-5.1946
Kurtosis	5.0849	3.2317	5.3595e+03

Figure 184 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	55.5050	3.4774e+03	13.0040
Eq (m=4)	52.9110	3.2454e+03	21.6047
Eq (m=6)	53.6939	3.2056e+03	37.1397
Eq (m=8)	56.4468	3.3170e+03	49.4255
Eq (m=10)	59.3292	3.4659e+03	58.9281
Eq (m=12)	61.9251	3.6208e+03	66.3625

Section 2.15 oc4_p2_load_case_1-3a: Mx coo: tower [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3a.sel (28-02-2014 16:40)	43	MomentMx Mbdy:tower nodenr: 1 coo: tower tower base bending moment
B	WAMsim/oc4_p2_load_case_1-3a.sel (01-04-2014 12:50)	43	MomentMx Mbdy:tower nodenr: 1 coo: tower tower base bending moment
C	hawc2/oc4_p2_load_case_1-3a.sel (04-12-2013 11:39)	43	MomentMx Mbdy:tower nodenr: 1 coo: tower tower base bending moment

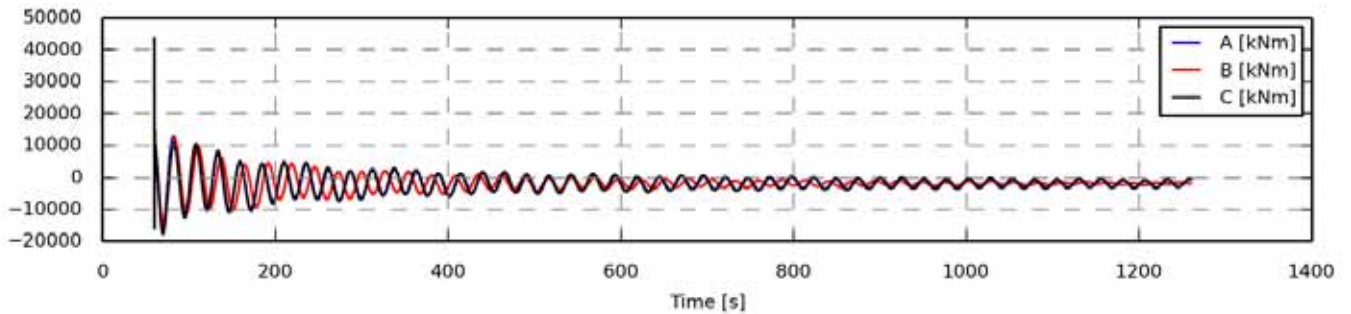


Figure 185 - Full length time series

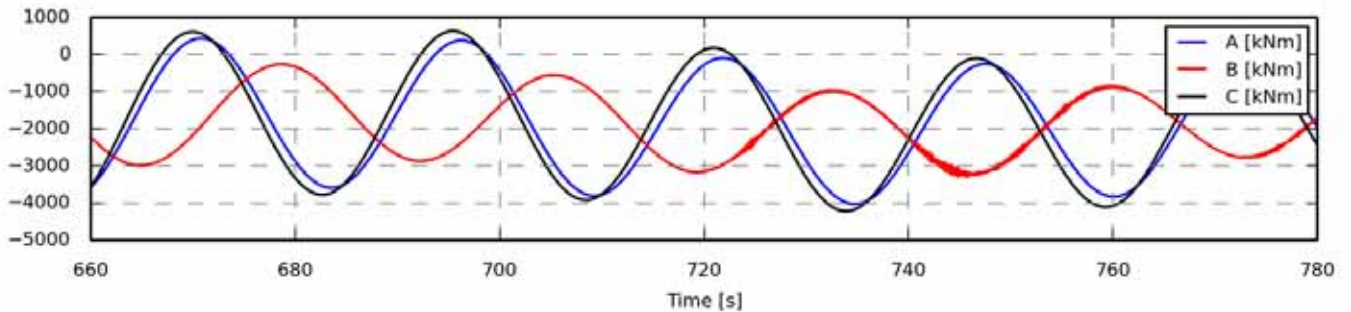


Figure 186 - Zoom of time series

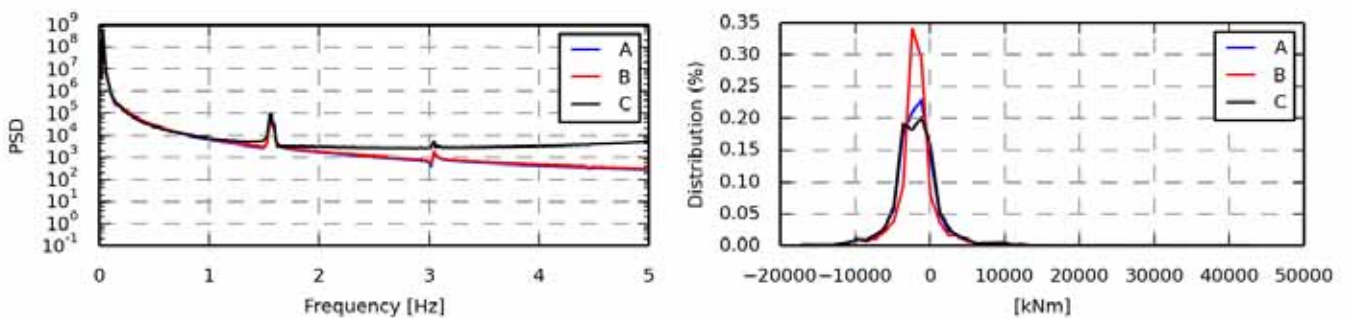


Figure 187 - Power spectrum density

Statistics	A	B	C
Min	-1.5962e+04	-1.4589e+04	-1.7637e+04
Max	1.2933e+04	1.4559e+04	4.3447e+04
Mean	-1.8087e+03	-1.7996e+03	-1.8425e+03
Std	2.9956e+03	2.6648e+03	3.1129e+03
Skewness	0.3341	0.4489	0.1375
Kurtosis	4.6450	6.1373	5.6576

Figure 188 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	3.7248e+03	3.4932e+03	6.3506e+03
Eq (m=4)	5.8002e+03	5.5067e+03	1.0381e+04
Eq (m=6)	9.4195e+03	9.0746e+03	1.7842e+04
Eq (m=8)	1.2208e+04	1.1865e+04	2.3815e+04
Eq (m=10)	1.4347e+04	1.4026e+04	2.8487e+04
Eq (m=12)	1.6019e+04	1.5728e+04	3.2192e+04

Section 2.16 oc4_p2_load_case_1-3a: My coo: tower [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3a.sel (28-02-2014 16:40)	44	MomentMy Mbdy:tower nodenr: 1 coo: tower tower base bending moment
B	WAMsim/oc4_p2_load_case_1-3a.sel (01-04-2014 12:50)	44	MomentMy Mbdy:tower nodenr: 1 coo: tower tower base bending moment
C	hawc2/oc4_p2_load_case_1-3a.sel (04-12-2013 11:39)	44	MomentMy Mbdy:tower nodenr: 1 coo: tower tower base bending moment

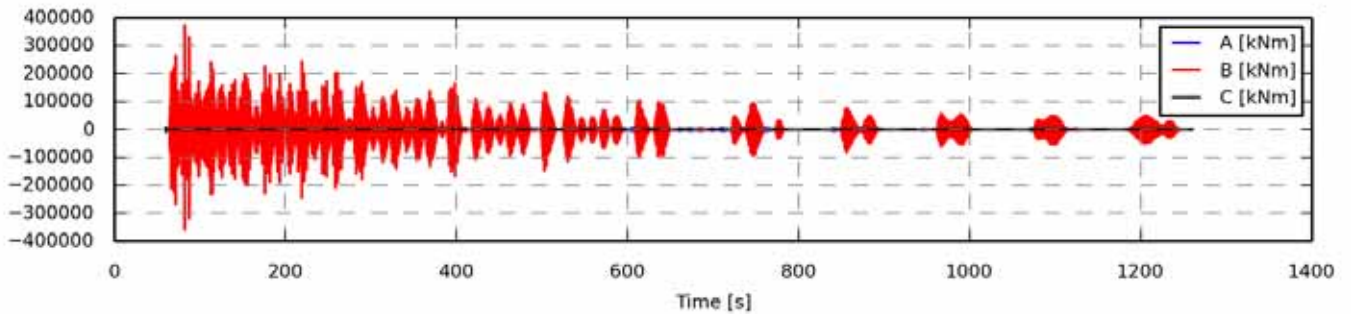


Figure 189 - Full length time series

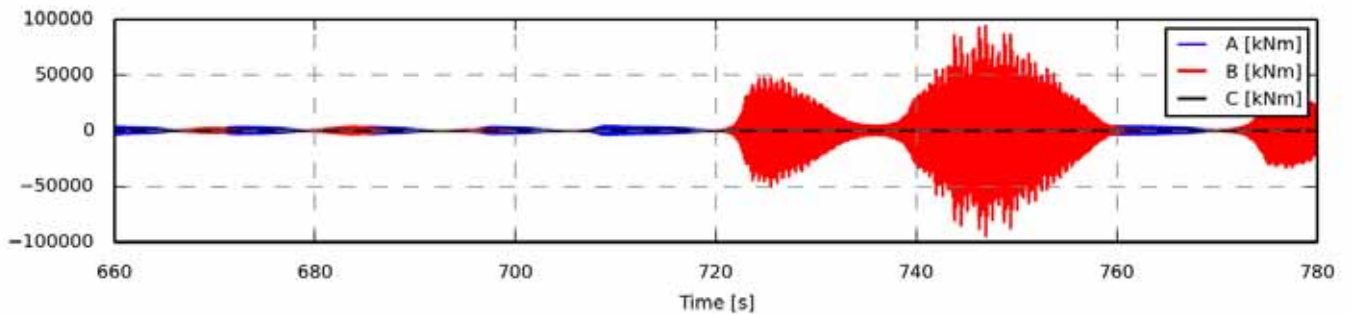


Figure 190 - Zoom of time series

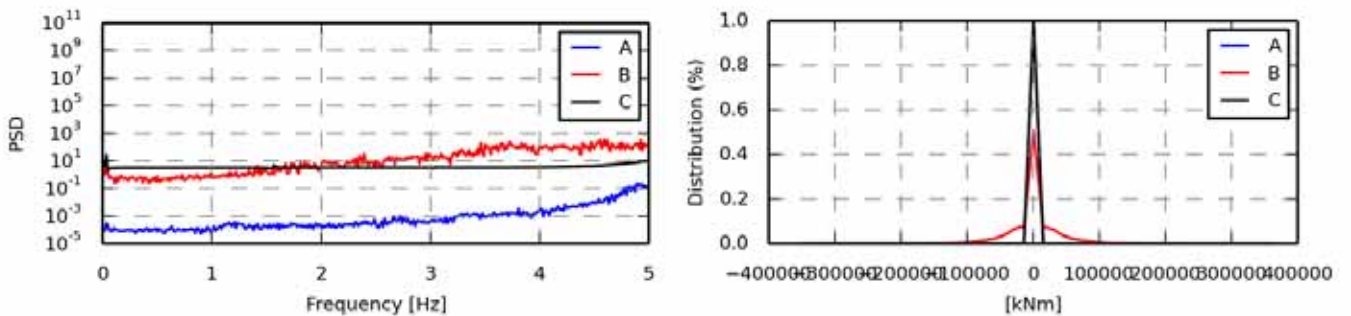


Figure 191 - Power spectrum density

Statistics	A	B	C
Min	-5.2062e+03	-3.5753e+05	-7.2902e+03
Max	5.3529e+03	3.7331e+05	7.1483e+03
Mean	0.0002	-0.0027	0.0315
Std	1.0318e+03	3.5633e+04	117.2310
Skewness	-0.0000	0.0001	-1.5204
Kurtosis	4.4123	6.2630	2.3847e+03

Figure 192 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	7.6150e+03	2.6406e+05	2.0619e+03
Eq (m=4)	7.1347e+03	2.6114e+05	3.2545e+03
Eq (m=6)	6.9050e+03	2.9454e+05	5.1977e+03
Eq (m=8)	6.9450e+03	3.4060e+05	6.6075e+03
Eq (m=10)	7.0624e+03	3.8302e+05	7.6507e+03
Eq (m=12)	7.2075e+03	4.1862e+05	8.4483e+03

Section 2.17 oc4_p2_load_case_1-3a: Mz coo: tower [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3a.sel (28-02-2014 16:40)	45	MomentMz Mbdy:tower nodenr: 1 coo: tower tower base bending moment
B	WAMsim/oc4_p2_load_case_1-3a.sel (01-04-2014 12:50)	45	MomentMz Mbdy:tower nodenr: 1 coo: tower tower base bending moment
C	hawc2/oc4_p2_load_case_1-3a.sel (04-12-2013 11:39)	45	MomentMz Mbdy:tower nodenr: 1 coo: tower tower base bending moment

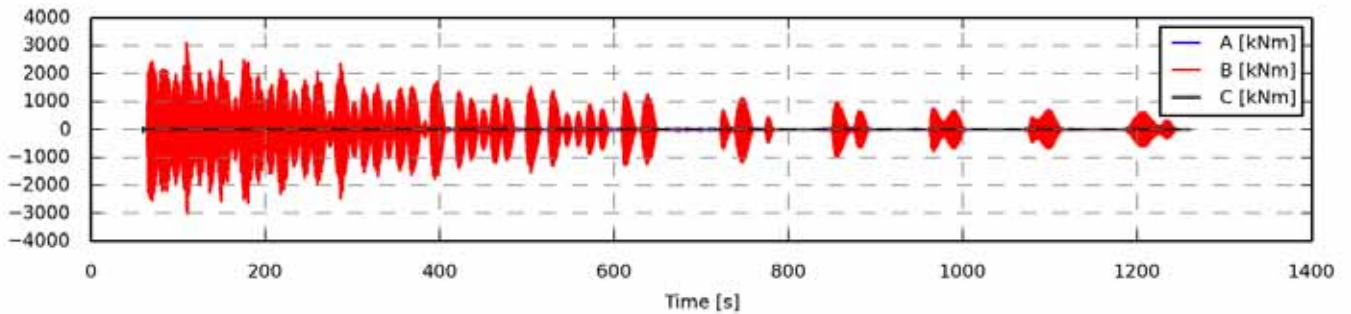


Figure 193 - Full length time series

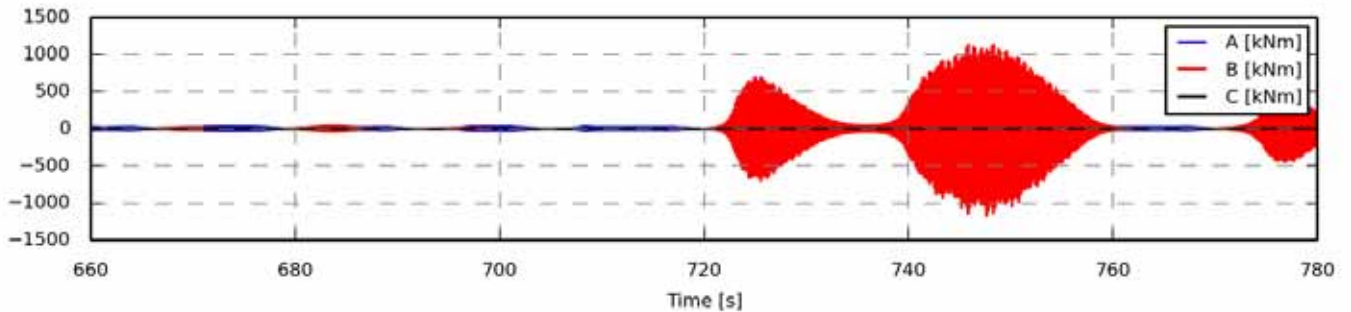


Figure 194 - Zoom of time series

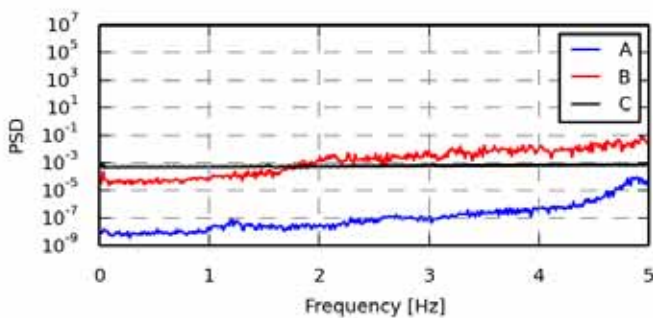


Figure 195 - Power spectrum density

Statistics	A	B	C
Min	-48.7936	-3.0219e+03	-63.1525
Max	47.9290	3.0974e+03	66.3584
Mean	-0.0000	-0.0001	-0.0004
Std	7.9753	522.5658	0.6524
Skewness	0.0000	-0.0002	-5.2582
Kurtosis	4.8829	3.2232	5.5855e+03

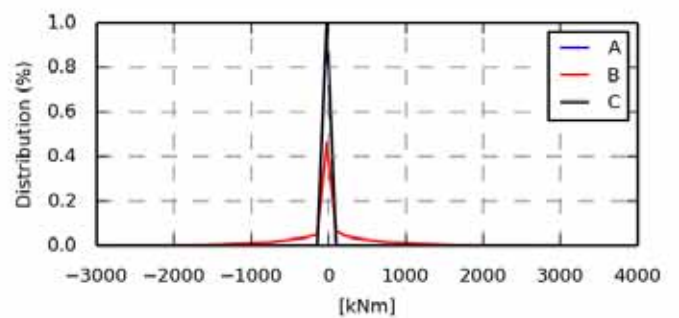


Figure 196 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	58.9314	3.7071e+03	13.4810
Eq (m=4)	55.9916	3.4592e+03	22.4195
Eq (m=6)	56.5291	3.4155e+03	38.5978
Eq (m=8)	59.2754	3.5329e+03	51.4206
Eq (m=10)	62.2434	3.6902e+03	61.3614
Eq (m=12)	64.9513	3.8540e+03	69.1579

Section 2.18 oc4_p2_load_case_1-3a: ESYS line1_1 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3a.sel (28-02-2014 16:40)	55	ESYS line1_1 SENSOR 4
B	WAMsim/oc4_p2_load_case_1-3a.sel (01-04-2014 12:50)	55	ESYS line1_1 SENSOR 4
C	hawc2/oc4_p2_load_case_1-3a.sel (04-12-2013 11:39)	55	ESYS line1_1 SENSOR 4

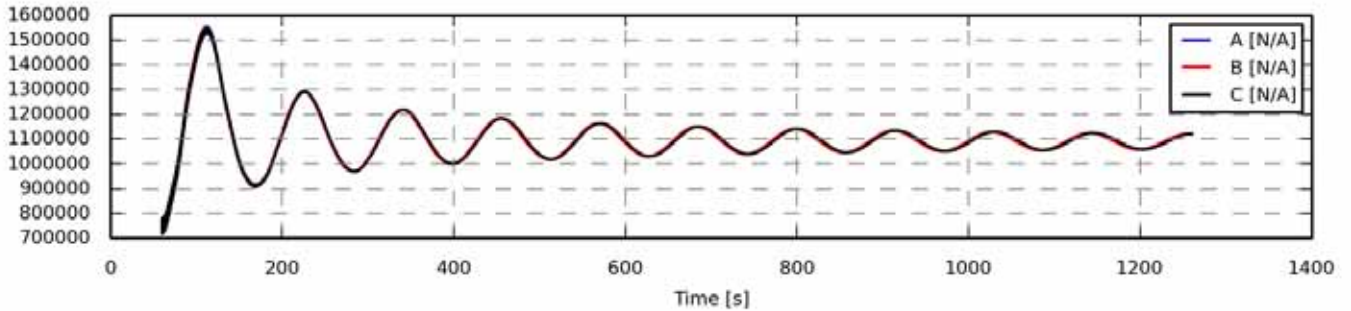


Figure 197 - Full length time series

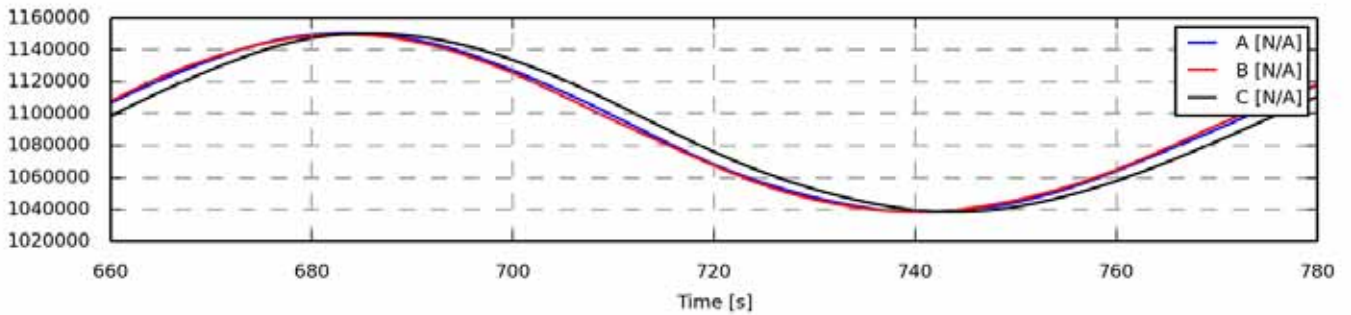


Figure 198 - Zoom of time series

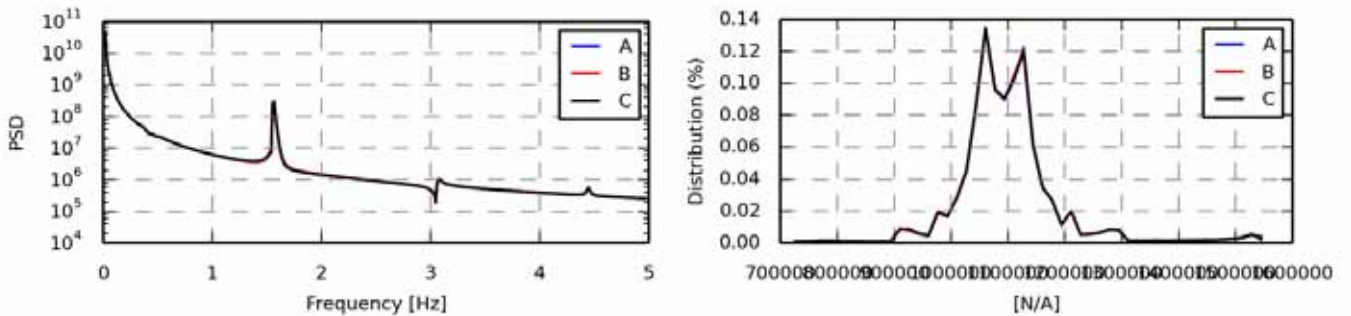


Figure 199 - Power spectrum density

Statistics	A	B	C
Min	7.1851e+05	7.1901e+05	7.1772e+05
Max	1.5536e+06	1.5496e+06	1.5459e+06
Mean	1.1008e+06	1.1005e+06	1.1006e+06
Std	9.7054e+04	9.6649e+04	9.6144e+04
Skewness	1.4185	1.4152	1.3741
Kurtosis	6.2443	6.2537	6.0874

Figure 200 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	7.5006e+04	7.4433e+04	7.3860e+04
Eq (m=4)	1.3119e+05	1.3036e+05	1.2927e+05
Eq (m=6)	2.3657e+05	2.3525e+05	2.3356e+05
Eq (m=8)	3.2087e+05	3.1912e+05	3.1728e+05
Eq (m=10)	3.8657e+05	3.8447e+05	3.8266e+05
Eq (m=12)	4.3839e+05	4.3601e+05	4.3426e+05

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3a.sel (28-02-2014 16:40)	259	ESYS line1_3 SENSOR 104
B	WAMsim/oc4_p2_load_case_1-3a.sel (01-04-2014 12:50)	259	ESYS line1_3 SENSOR 104
C	hawc2/oc4_p2_load_case_1-3a.sel (04-12-2013 11:39)	259	ESYS line1_3 SENSOR 104

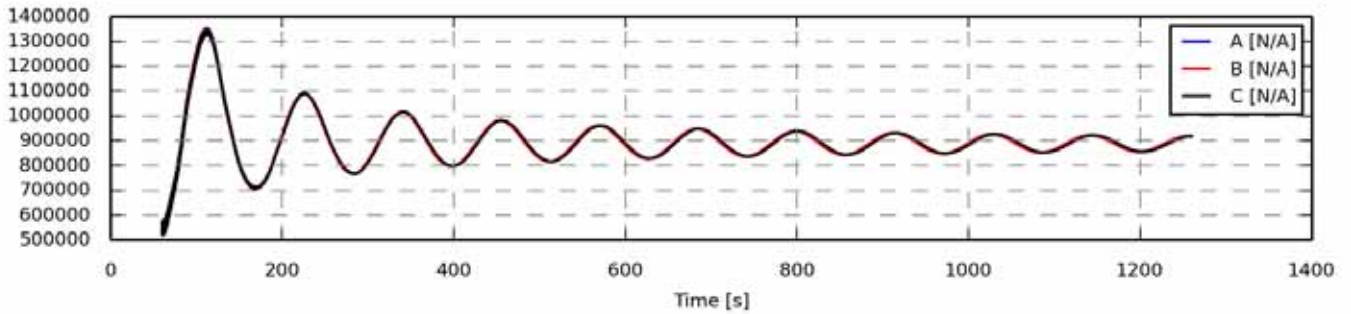


Figure 201 - Full length time series

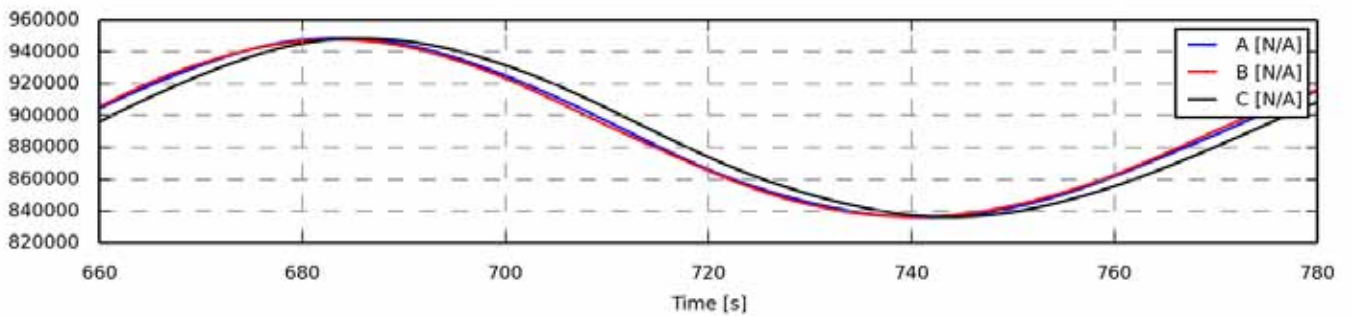


Figure 202 - Zoom of time series

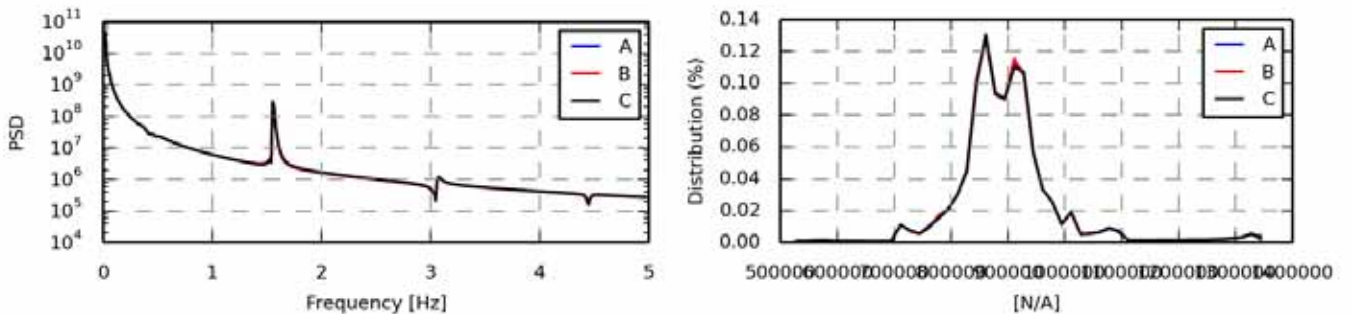


Figure 203 - Power spectrum density

Statistics	A	B	C
Min	5.1936e+05	5.1977e+05	5.1993e+05
Max	1.3526e+06	1.3485e+06	1.3447e+06
Mean	8.9867e+05	8.9840e+05	8.9849e+05
Std	9.7233e+04	9.6828e+04	9.6327e+04
Skewness	1.4188	1.4156	1.3740
Kurtosis	6.2401	6.2503	6.0834

Figure 204 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	7.4675e+04	7.4375e+04	7.4038e+04
Eq (m=4)	1.3078e+05	1.3018e+05	1.2955e+05
Eq (m=6)	2.3600e+05	2.3476e+05	2.3363e+05
Eq (m=8)	3.2014e+05	3.1842e+05	3.1688e+05
Eq (m=10)	3.8570e+05	3.8362e+05	3.8177e+05
Eq (m=12)	4.3740e+05	4.3505e+05	4.3294e+05

Section 2.20 oc4_p2_load_case_1-3a: ESYS line2_1 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3a.sel (28-02-2014 16:40)	263	ESYS line2_1 SENSOR 4
B	WAMsim/oc4_p2_load_case_1-3a.sel (01-04-2014 12:50)	263	ESYS line2_1 SENSOR 4
C	hawc2/oc4_p2_load_case_1-3a.sel (04-12-2013 11:39)	263	ESYS line2_1 SENSOR 4

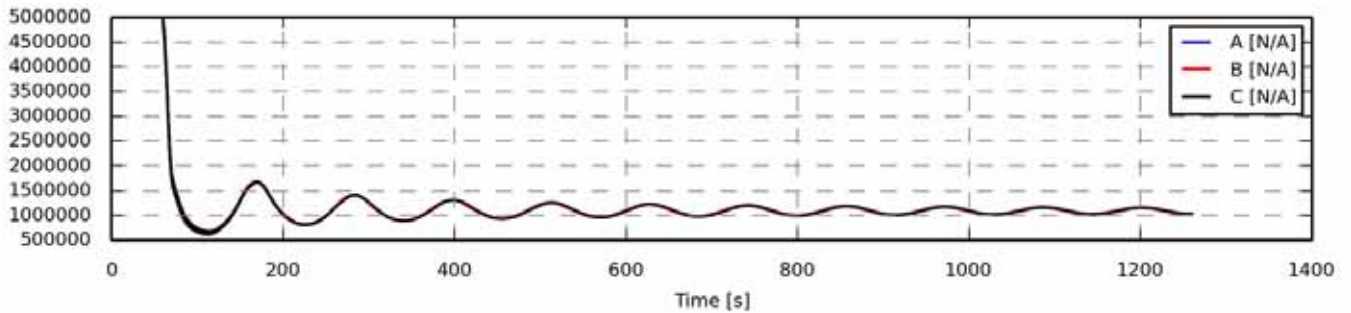


Figure 205 - Full length time series

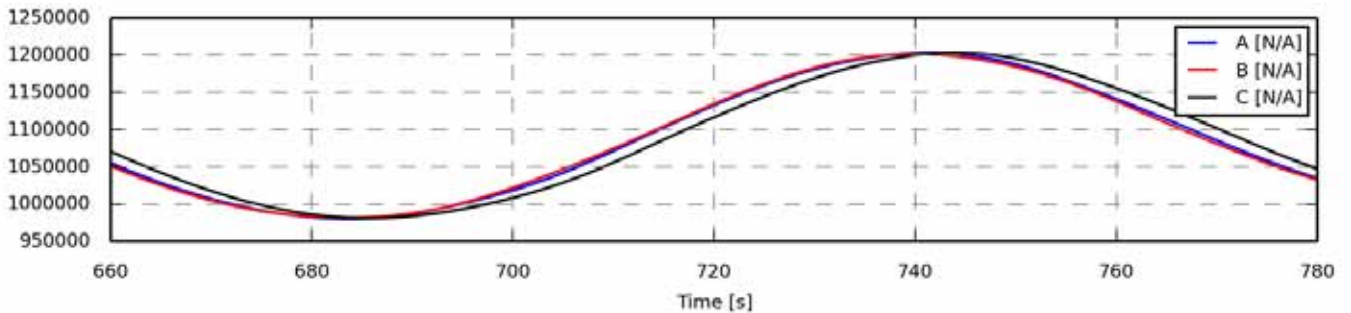


Figure 206 - Zoom of time series

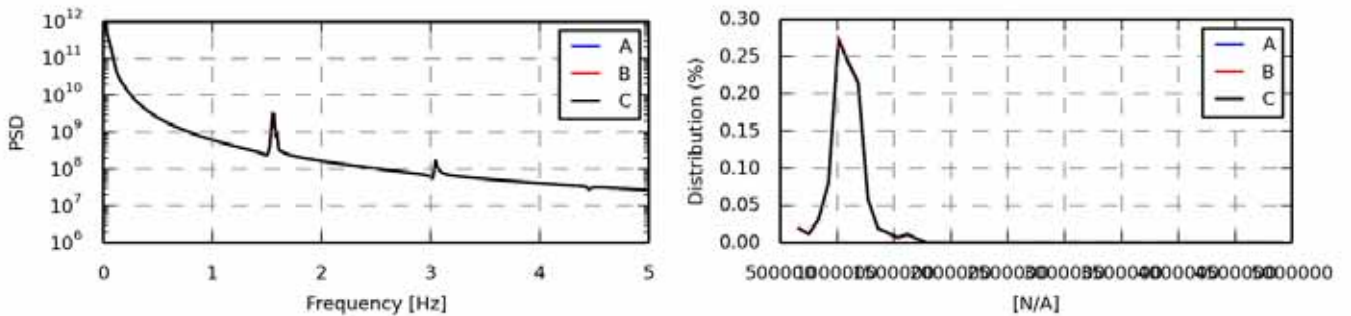


Figure 207 - Power spectrum density

Statistics	A	B	C
Min	6.2015e+05	6.2248e+05	6.2456e+05
Max	4.9599e+06	4.9600e+06	4.9605e+06
Mean	1.1089e+06	1.1086e+06	1.1093e+06
Std	2.7582e+05	2.7543e+05	2.7564e+05
Skewness	7.3969	7.4337	7.4591
Kurtosis	82.8113	83.4139	83.8801

Figure 208 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	3.2755e+05	3.2727e+05	3.2718e+05
Eq (m=4)	6.2095e+05	6.2061e+05	6.2038e+05
Eq (m=6)	1.1861e+06	1.1855e+06	1.1850e+06
Eq (m=8)	1.6404e+06	1.6395e+06	1.6389e+06
Eq (m=10)	1.9927e+06	1.9917e+06	1.9910e+06
Eq (m=12)	2.2687e+06	2.2676e+06	2.2667e+06

Section 2.21 oc4_p2_load_case_1-3a: ESYS line2_3 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3a.sel (28-02-2014 16:40)	467	ESYS line2_3 SENSOR 104
B	WAMsim/oc4_p2_load_case_1-3a.sel (01-04-2014 12:50)	467	ESYS line2_3 SENSOR 104
C	hawc2/oc4_p2_load_case_1-3a.sel (04-12-2013 11:39)	467	ESYS line2_3 SENSOR 104

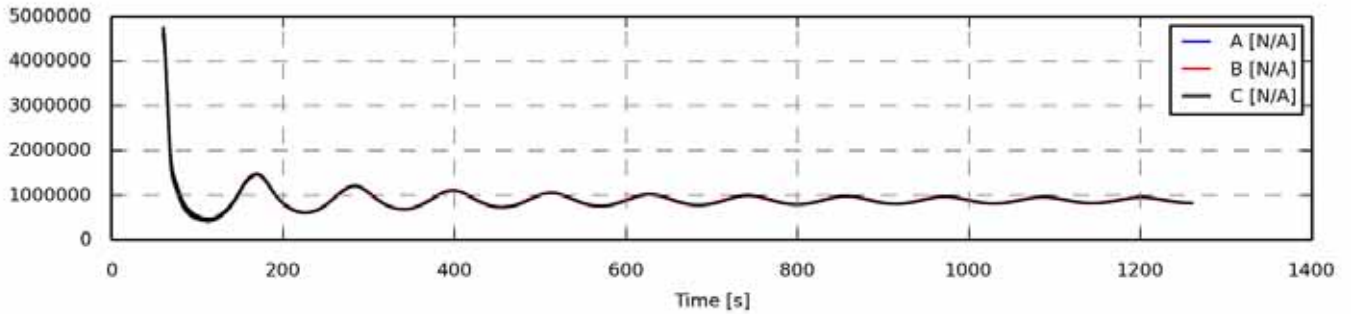


Figure 209 - Full length time series

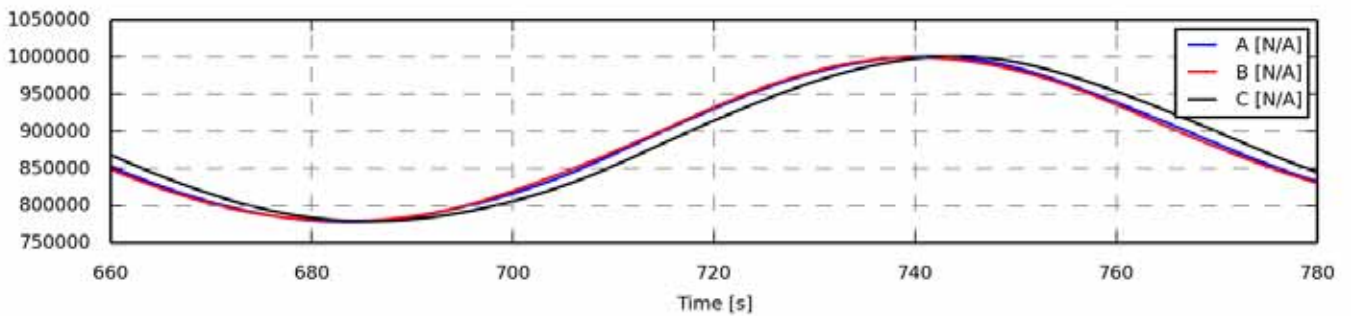


Figure 210 - Zoom of time series

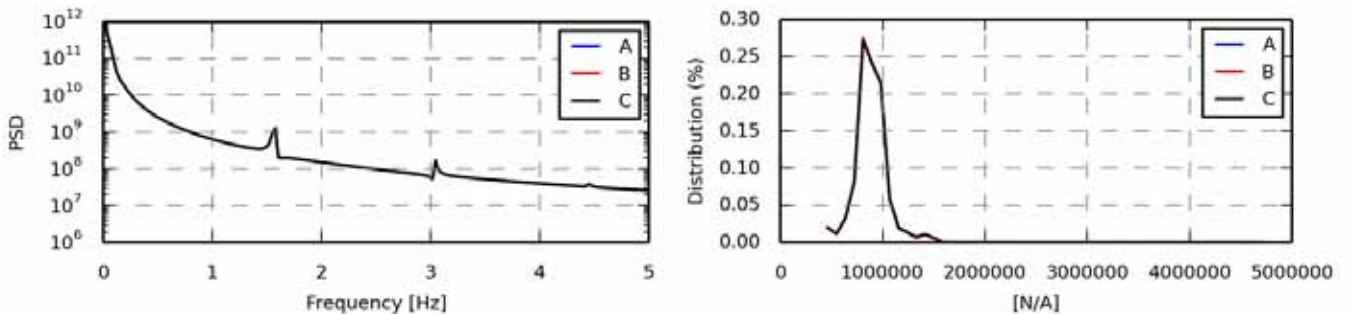


Figure 211 - Power spectrum density

Statistics	A	B	C
Min	4.1995e+05	4.2249e+05	4.2451e+05
Max	4.7435e+06	4.7437e+06	4.7448e+06
Mean	9.0685e+05	9.0652e+05	9.0723e+05
Std	2.7629e+05	2.7589e+05	2.7612e+05
Skewness	7.3909	7.4276	7.4527
Kurtosis	82.6472	83.2486	83.7053

Figure 212 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	3.2635e+05	3.2608e+05	3.2601e+05
Eq (m=4)	6.1863e+05	6.1828e+05	6.1814e+05
Eq (m=6)	1.1817e+06	1.1810e+06	1.1808e+06
Eq (m=8)	1.6342e+06	1.6334e+06	1.6330e+06
Eq (m=10)	1.9853e+06	1.9842e+06	1.9838e+06
Eq (m=12)	2.2603e+06	2.2590e+06	2.2585e+06

Section 2.22 oc4_p2_load_case_1-3a: ESYS line3_1 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3a.sel (28-02-2014 16:40)	471	ESYS line3_1 SENSOR 4
B	WAMsim/oc4_p2_load_case_1-3a.sel (01-04-2014 12:50)	471	ESYS line3_1 SENSOR 4
C	hawc2/oc4_p2_load_case_1-3a.sel (04-12-2013 11:39)	471	ESYS line3_1 SENSOR 4

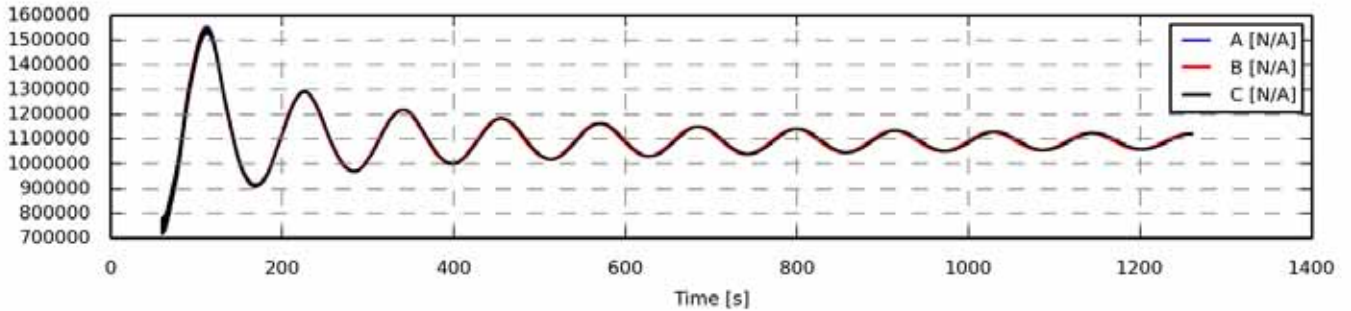


Figure 213 - Full length time series

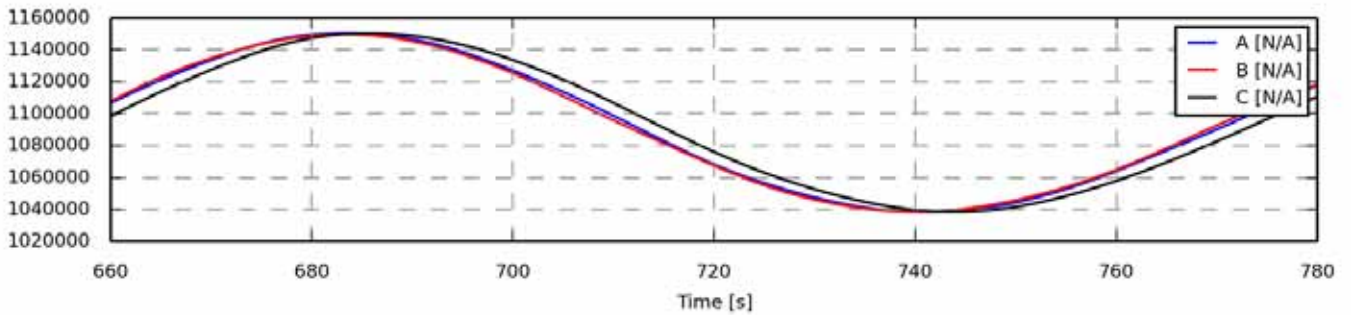


Figure 214 - Zoom of time series

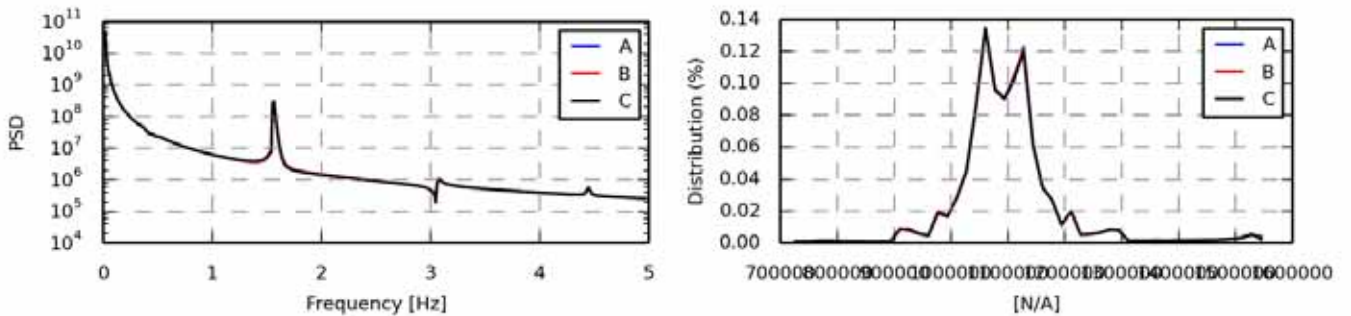


Figure 215 - Power spectrum density

Statistics	A	B	C
Min	7.1851e+05	7.1898e+05	7.1766e+05
Max	1.5536e+06	1.5496e+06	1.5459e+06
Mean	1.1008e+06	1.1005e+06	1.1007e+06
Std	9.7054e+04	9.6649e+04	9.6142e+04
Skewness	1.4185	1.4153	1.3741
Kurtosis	6.2443	6.2538	6.0873

Figure 216 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	7.5006e+04	7.4435e+04	7.3732e+04
Eq (m=4)	1.3119e+05	1.3037e+05	1.2917e+05
Eq (m=6)	2.3657e+05	2.3527e+05	2.3353e+05
Eq (m=8)	3.2087e+05	3.1914e+05	3.1729e+05
Eq (m=10)	3.8657e+05	3.8450e+05	3.8268e+05
Eq (m=12)	4.3839e+05	4.3604e+05	4.3428e+05

Section 2.23 oc4_p2_load_case_1-3a: ESYS line3_3 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3a.sel (28-02-2014 16:40)	675	ESYS line3_3 SENSOR 104
B	WAMsim/oc4_p2_load_case_1-3a.sel (01-04-2014 12:50)	675	ESYS line3_3 SENSOR 104
C	hawc2/oc4_p2_load_case_1-3a.sel (04-12-2013 11:39)	675	ESYS line3_3 SENSOR 104

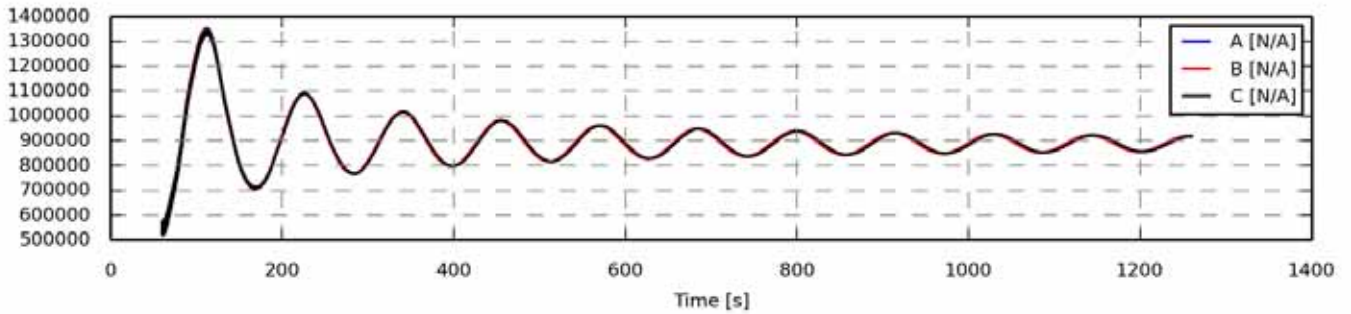


Figure 217 - Full length time series

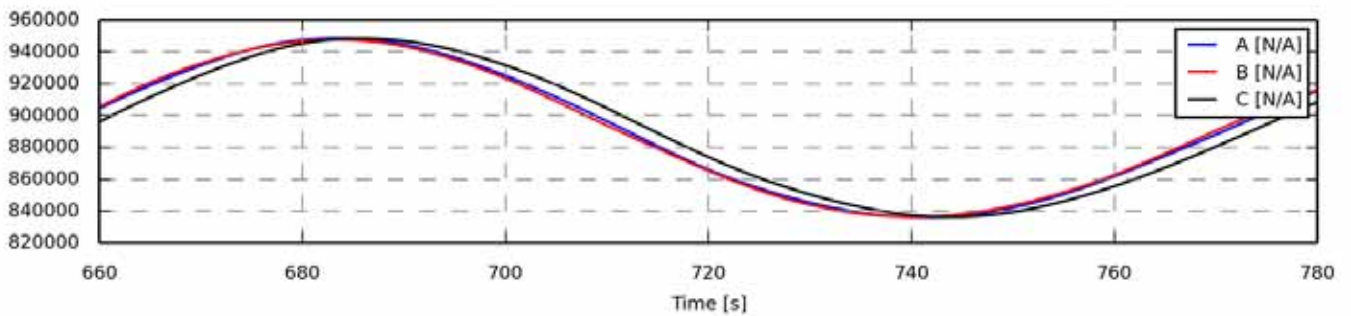


Figure 218 - Zoom of time series

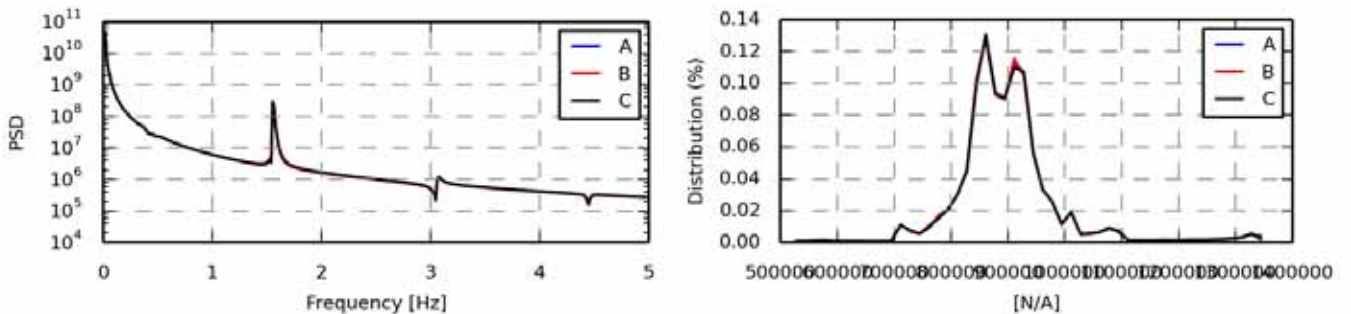


Figure 219 - Power spectrum density

Statistics	A	B	C
Min	5.1935e+05	5.1974e+05	5.1996e+05
Max	1.3526e+06	1.3486e+06	1.3447e+06
Mean	8.9867e+05	8.9839e+05	8.9849e+05
Std	9.7233e+04	9.6828e+04	9.6325e+04
Skewness	1.4188	1.4156	1.3740
Kurtosis	6.2401	6.2503	6.0833

Figure 220 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	7.4675e+04	7.4378e+04	7.4033e+04
Eq (m=4)	1.3078e+05	1.3019e+05	1.2954e+05
Eq (m=6)	2.3600e+05	2.3478e+05	2.3361e+05
Eq (m=8)	3.2014e+05	3.1844e+05	3.1686e+05
Eq (m=10)	3.8570e+05	3.8365e+05	3.8174e+05
Eq (m=12)	4.3740e+05	4.3508e+05	4.3292e+05

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Generated 22-04-2014 10:02

Section 3.01 oc4_p2_load_case_1-3b: WSP gl. coo.,Vy [m/s]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3b.sel (28-02-2014 16:48)	3	Free wind speed Vy, gl. coo, of gl. pos 0.00, 0.00, -90.00
B	WAMsim/oc4_p2_load_case_1-3b.sel (01-04-2014 12:51)	3	Free wind speed Vy, gl. coo, of gl. pos 0.00, 0.00, -90.00
C	hawc2/oc4_p2_load_case_1-3b.sel (04-12-2013 11:39)	3	Free wind speed Vy, gl. coo, of gl. pos 0.00, 0.00, -90.00

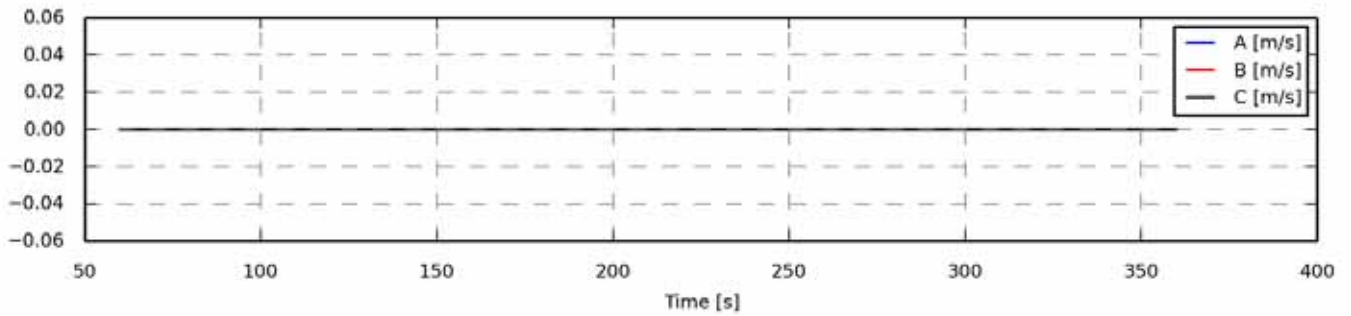


Figure 221 - Full length time series

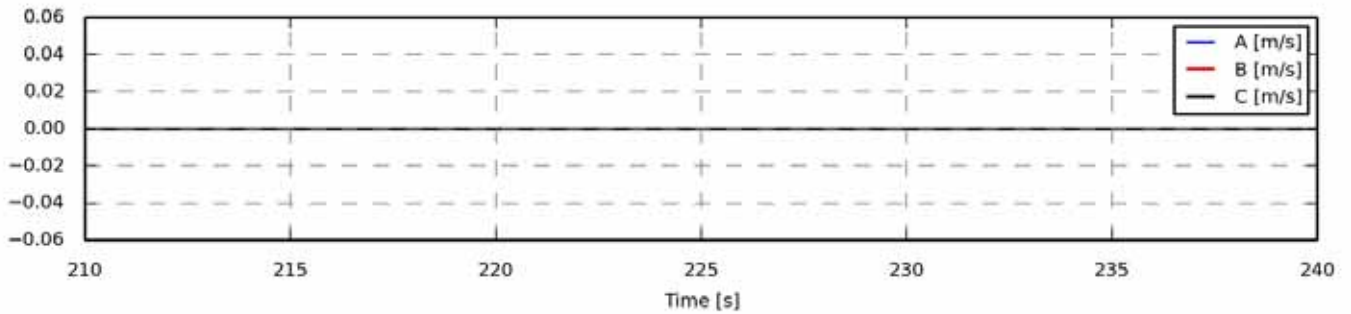


Figure 222 - Zoom of time series

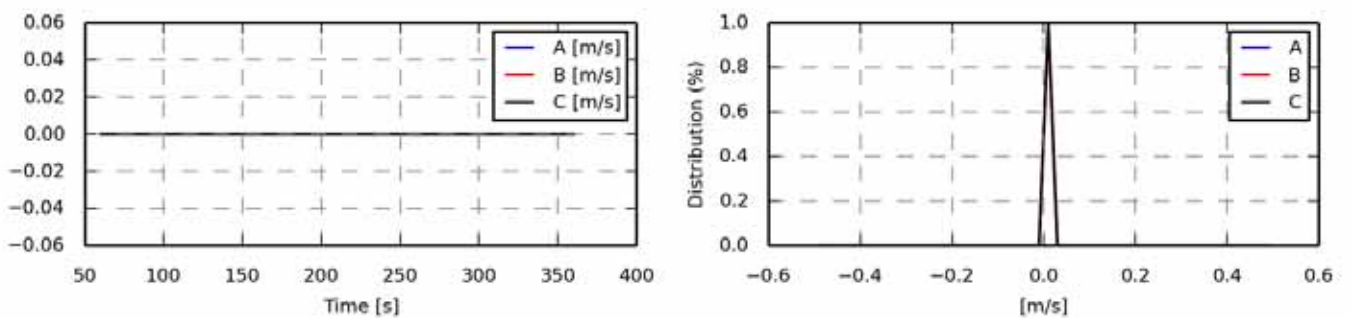


Figure 223 - Power spectrum density

Statistics	A	B	C
Min	0.0000	0.0000	0.0000
Max	0.0000	0.0000	0.0000
Mean	0.0000	0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

Figure 224 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 3.02 oc4_p2_load_case_1-3b: Water surf. [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3b.sel (28-02-2014 16:48)	5	Water surface gl. coo, at gl. coo, x,y= 0.00, 0.00
B	WAMsim/oc4_p2_load_case_1-3b.sel (01-04-2014 12:51)	5	Constant value
C	hawc2/oc4_p2_load_case_1-3b.sel (04-12-2013 11:39)	5	Water surface gl. coo, at gl. coo, x,y= 0.00, 0.00

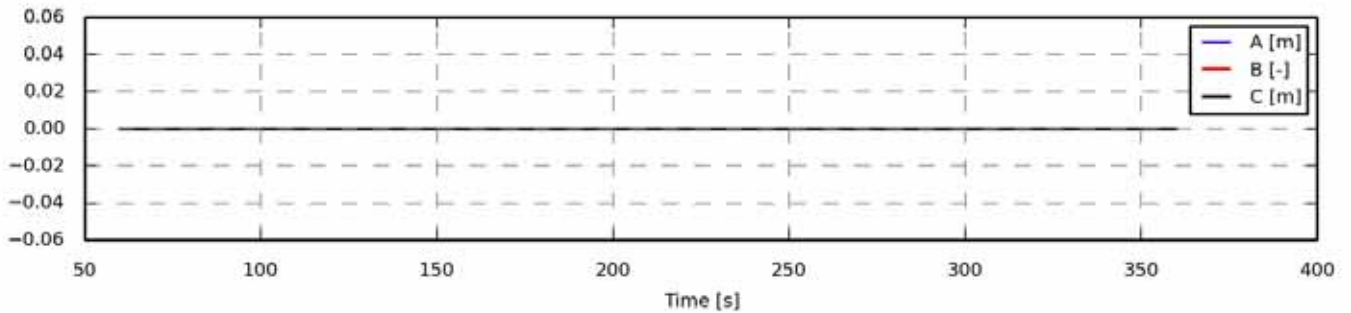


Figure 225 - Full length time series

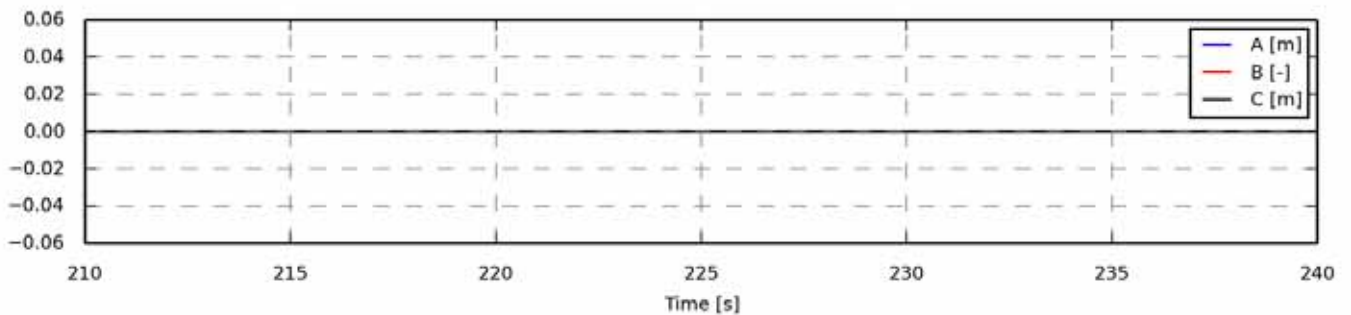


Figure 226 - Zoom of time series

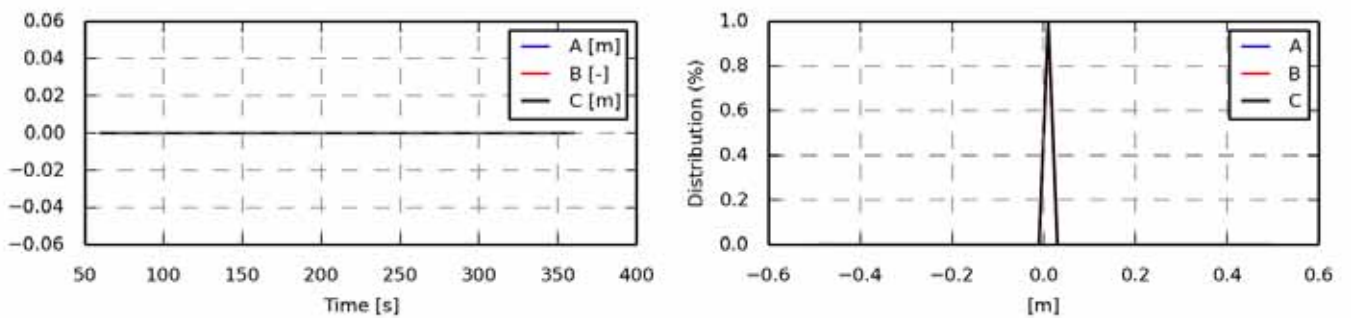


Figure 227 - Power spectrum density

Statistics	A	B	C
Min	0.0000	0.0000	0.0000
Max	0.0000	0.0000	0.0000
Mean	0.0000	0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

Figure 228 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 3.03 oc4_p2_load_case_1-3b: Constant [-]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3b.sel (28-02-2014 16:48)	6	Constant value
B	WAMsim/oc4_p2_load_case_1-3b.sel (01-04-2014 12:51)	6	Constant value
C	hawc2/oc4_p2_load_case_1-3b.sel (04-12-2013 11:39)	6	Constant value

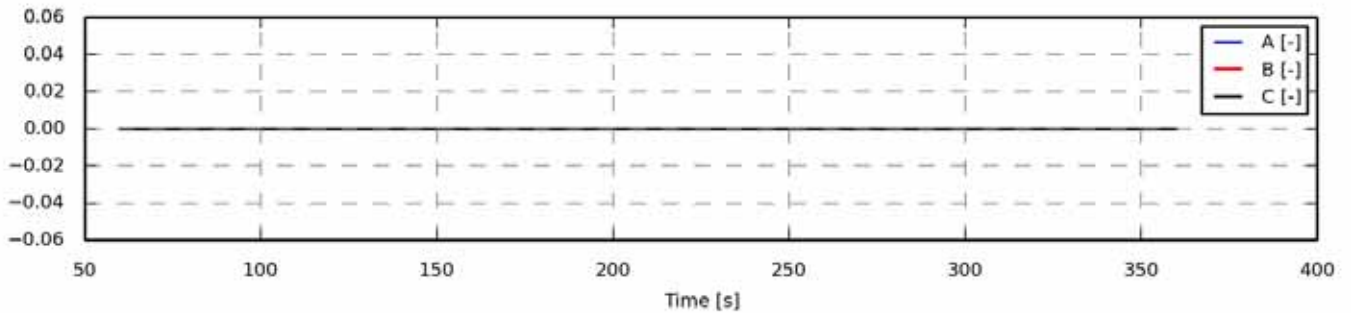


Figure 229 - Full length time series

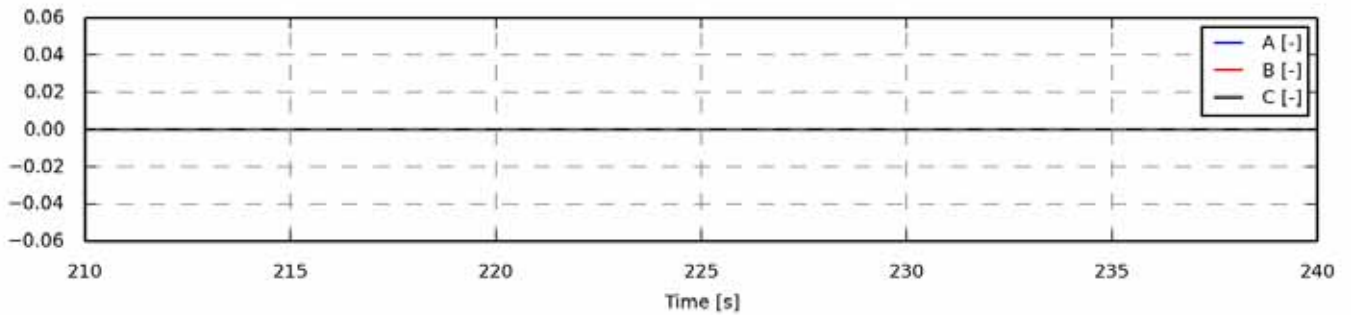


Figure 230 - Zoom of time series

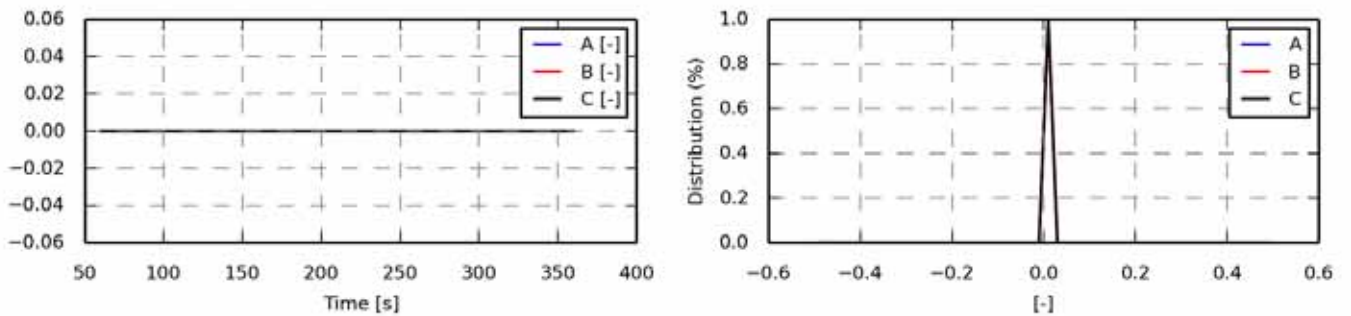


Figure 231 - Power spectrum density

Figure 232 - Value distribution

Statistics	A	B	C
Min	0.0000	0.0000	0.0000
Max	0.0000	0.0000	0.0000
Mean	0.0000	0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 3.04 oc4_p2_load_case_1-3b: Constant [-]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3b.sel (28-02-2014 16:48)	9	Constant value
B	WAMsim/oc4_p2_load_case_1-3b.sel (01-04-2014 12:51)	9	Constant value
C	hawc2/oc4_p2_load_case_1-3b.sel (04-12-2013 11:39)	9	Constant value

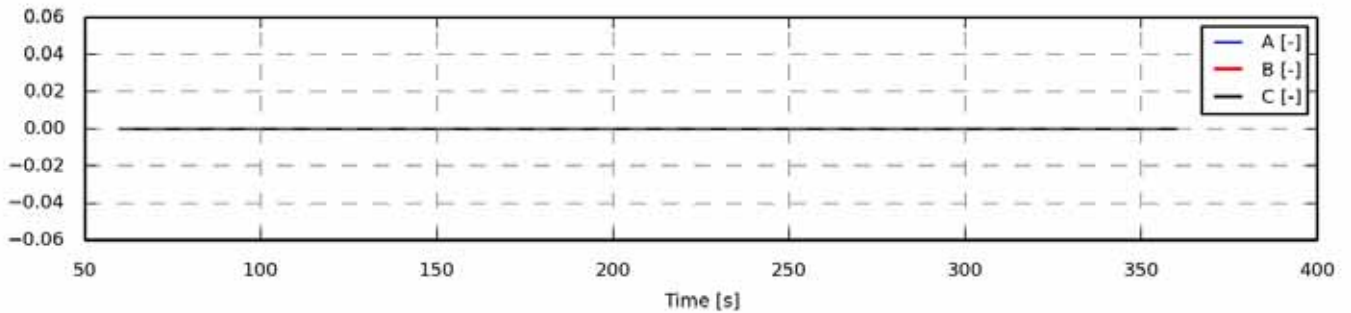


Figure 233 - Full length time series

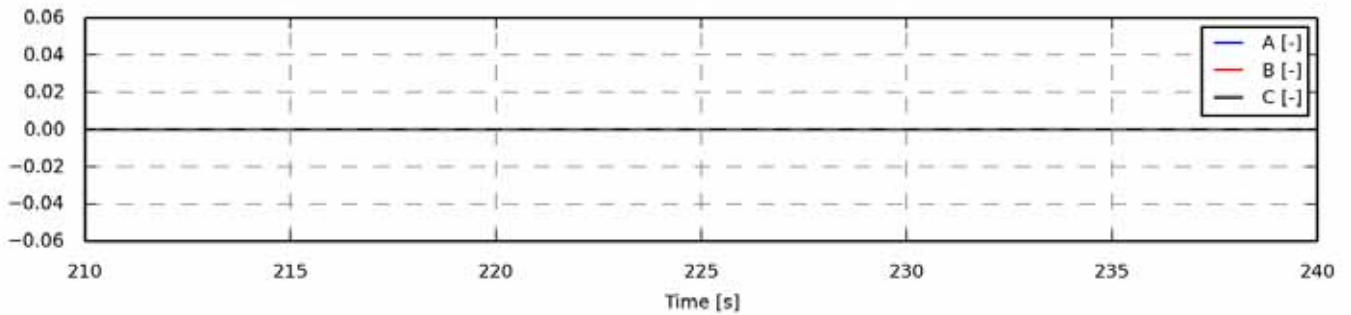


Figure 234 - Zoom of time series

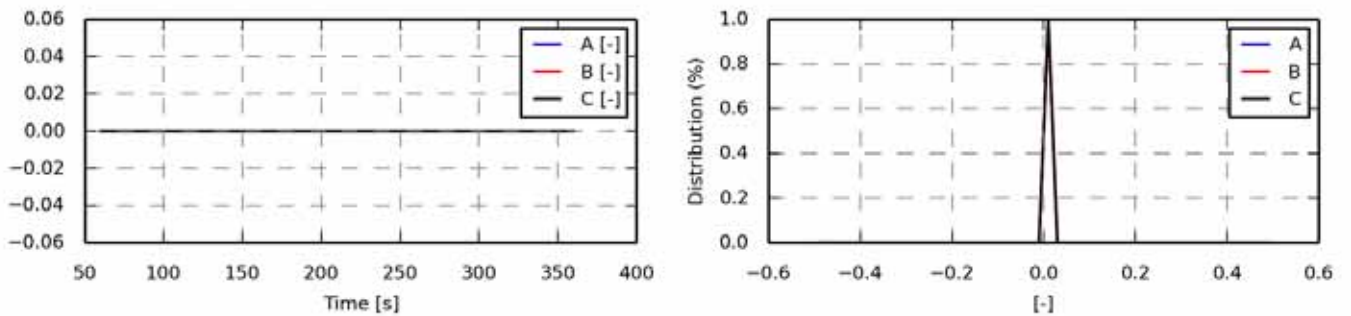


Figure 235 - Power spectrum density

Figure 236 - Value distribution

Statistics	A	B	C
Min	0.0000	0.0000	0.0000
Max	0.0000	0.0000	0.0000
Mean	0.0000	0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 3.05 oc4_p2_load_case_1-3b: bea1 angle [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3b.sel (28-02-2014 16:48)	14	pitch1 angle
B	WAMsim/oc4_p2_load_case_1-3b.sel (01-04-2014 12:51)	14	pitch1 angle
C	hawc2/oc4_p2_load_case_1-3b.sel (04-12-2013 11:39)	14	pitch1 angle

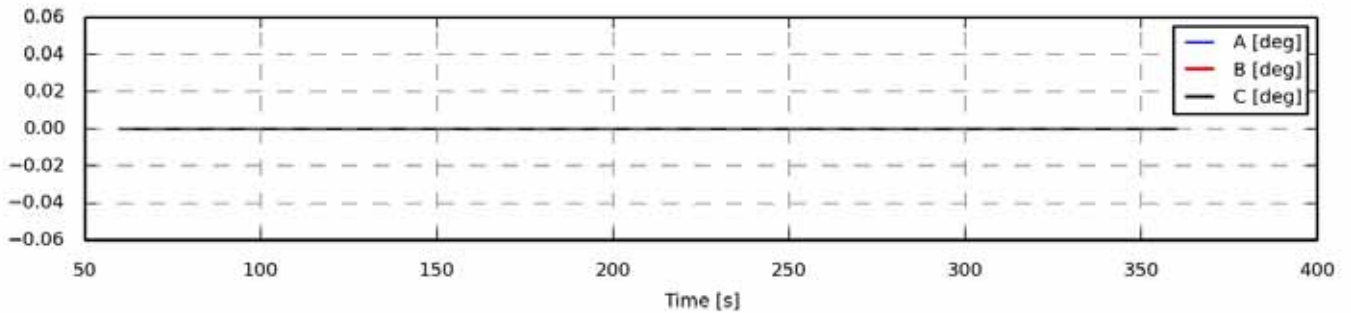


Figure 237 - Full length time series

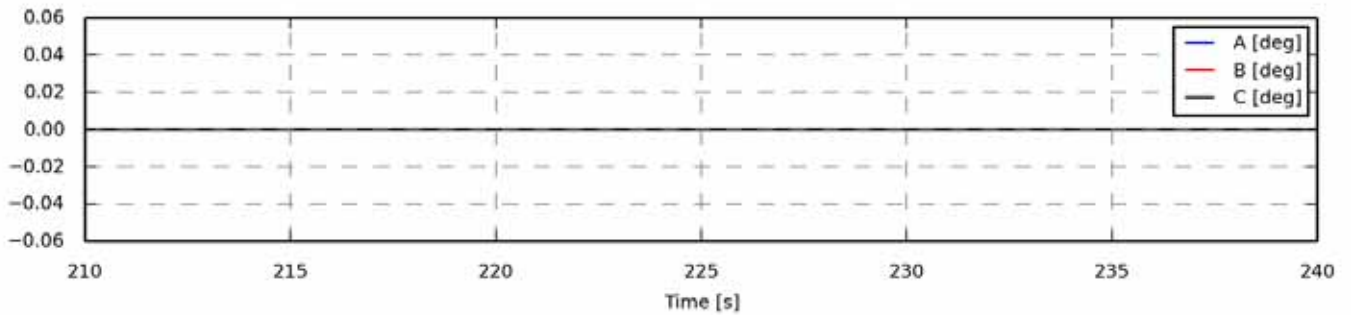


Figure 238 - Zoom of time series

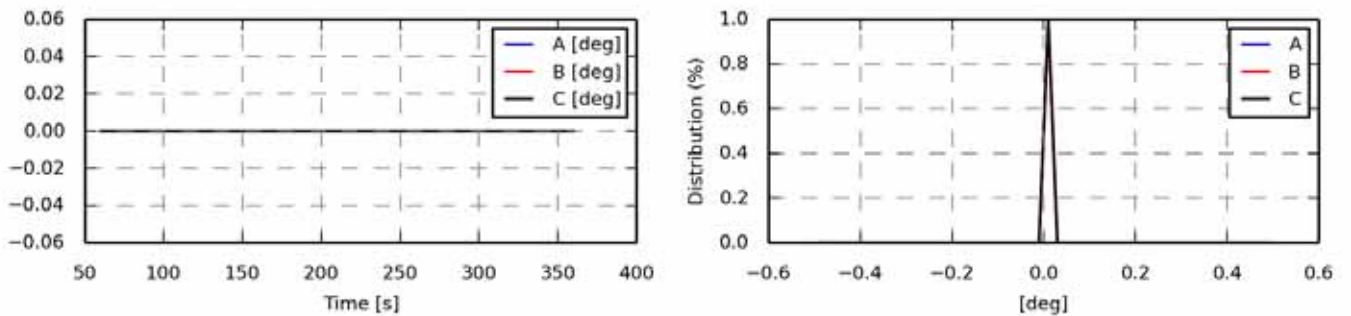


Figure 239 - Power spectrum density

Statistics	A	B	C
Min	0.0000	0.0000	0.0000
Max	0.0000	0.0000	0.0000
Mean	0.0000	0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

Figure 240 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 3.06 oc4_p2_load_case_1-3b: State pos x coo: global [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3b.sel (28-02-2014 16:48)	19	State pos x Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
B	WAMsim/oc4_p2_load_case_1-3b.sel (01-04-2014 12:51)	19	State pos x Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
C	hawc2/oc4_p2_load_case_1-3b.sel (04-12-2013 11:39)	19	State pos x Mbdy:mc E-nr: 8 Z-rel:0.00 coo: global platform translation in surge sway and heave

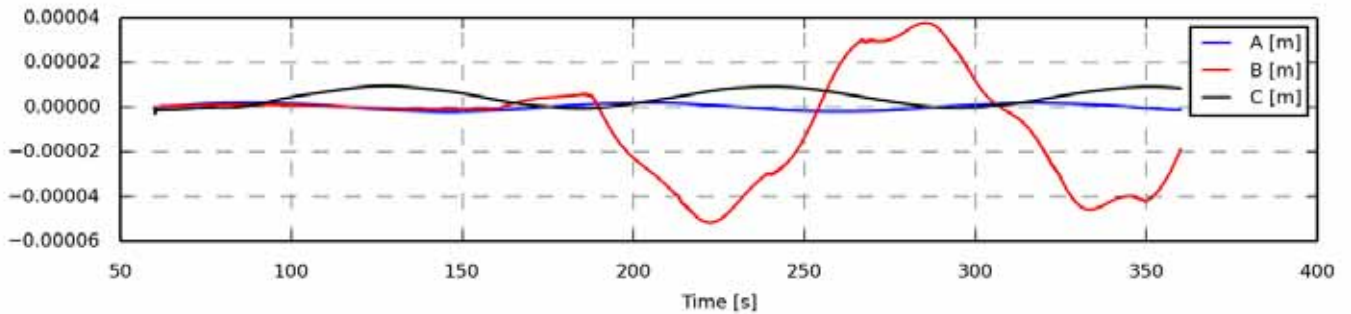


Figure 241 - Full length time series

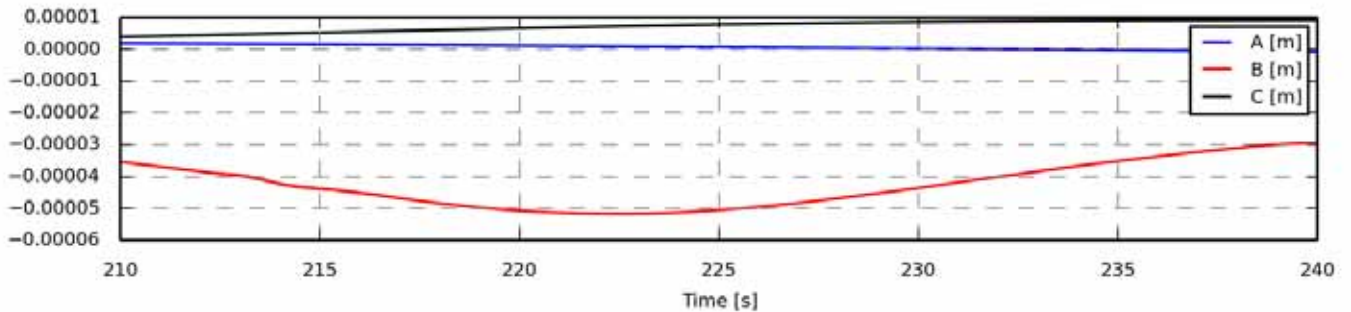


Figure 242 - Zoom of time series

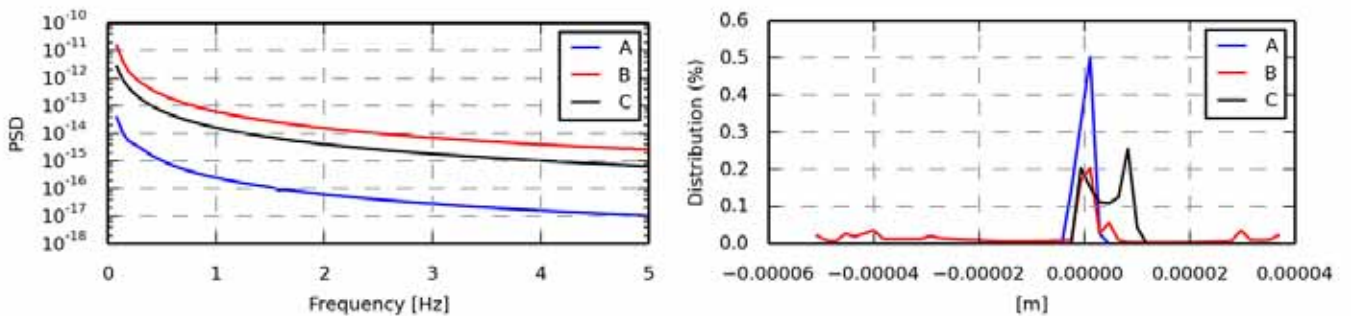


Figure 243 - Power spectrum density

Statistics	A	B	C
Min	-0.0000	-0.0001	-0.0000
Max	0.0000	0.0000	0.0000
Mean	0.0000	-0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	-0.2109	-0.1963	-0.0017
Kurtosis	-1.3936	-0.5963	-1.5274

Figure 244 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.0000	0.0000	0.0000
Eq (m=4)	0.0000	0.0000	0.0000
Eq (m=6)	0.0000	0.0000	0.0000
Eq (m=8)	0.0000	0.0000	0.0000
Eq (m=10)	0.0000	0.0000	0.0000
Eq (m=12)	0.0000	0.0001	0.0000

Section 3.07 oc4_p2_load_case_1-3b: State pos y coo: global [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3b.sel (28-02-2014 16:48)	20	State pos y Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
B	WAMsim/oc4_p2_load_case_1-3b.sel (01-04-2014 12:51)	20	State pos y Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
C	hawc2/oc4_p2_load_case_1-3b.sel (04-12-2013 11:39)	20	State pos y Mbdy:mc E-nr: 8 Z-rel:0.00 coo: global platform translation in surge sway and heave

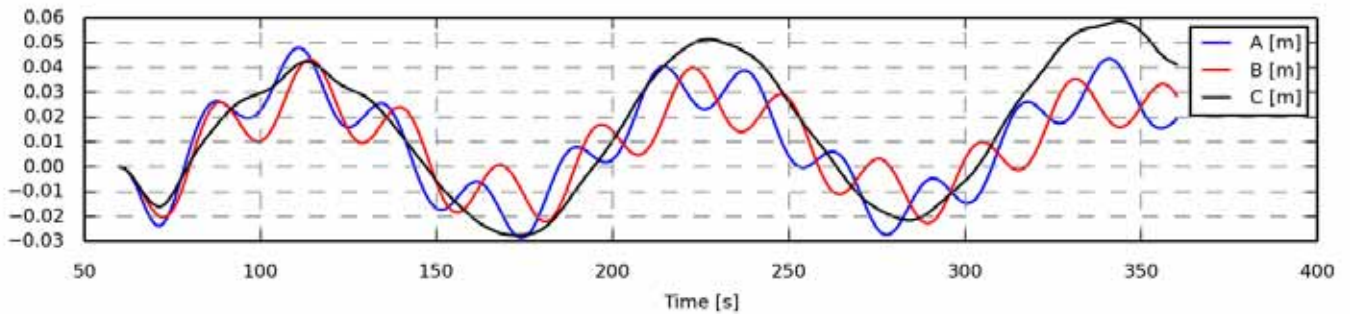


Figure 245 - Full length time series

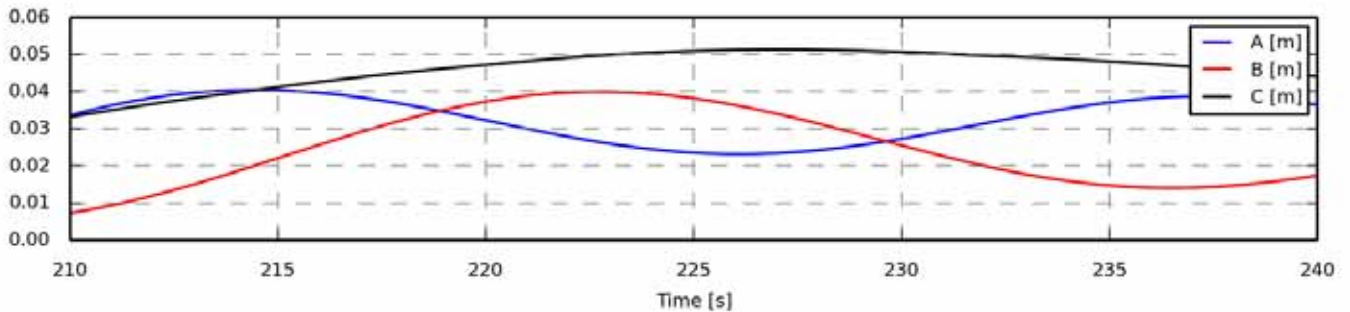


Figure 246 - Zoom of time series

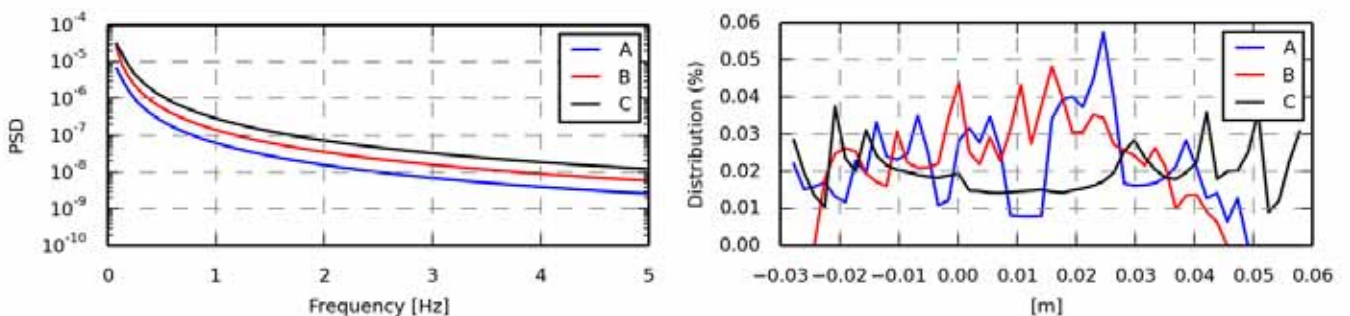


Figure 247 - Power spectrum density

Statistics	A	B	C
Min	-0.0286	-0.0227	-0.0275
Max	0.0479	0.0433	0.0587
Mean	0.0101	0.0095	0.0155
Std	0.0202	0.0172	0.0264
Skewness	-0.1278	-0.0956	-0.0458
Kurtosis	-1.0727	-0.9434	-1.3435

Figure 248 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.0146	0.0129	0.0148
Eq (m=4)	0.0216	0.0190	0.0222
Eq (m=6)	0.0322	0.0282	0.0336
Eq (m=8)	0.0393	0.0345	0.0415
Eq (m=10)	0.0445	0.0389	0.0474
Eq (m=12)	0.0483	0.0422	0.0518

Section 3.08 oc4_p2_load_case_1-3b: State pos z coo: global [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3b.sel (28-02-2014 16:48)	21	State pos z Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
B	WAMsim/oc4_p2_load_case_1-3b.sel (01-04-2014 12:51)	21	State pos z Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
C	hawc2/oc4_p2_load_case_1-3b.sel (04-12-2013 11:39)	21	State pos z Mbdy:mc E-nr: 8 Z-rel:0.00 coo: global platform translation in surge sway and heave

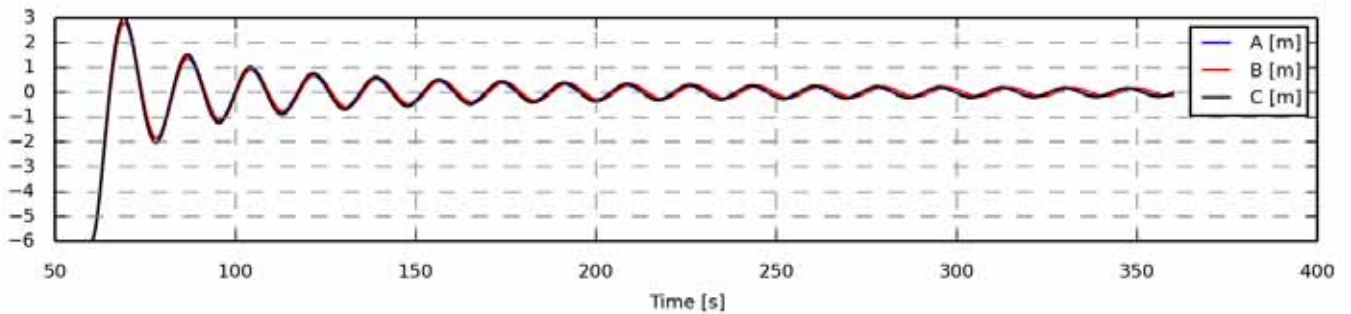


Figure 249 - Full length time series

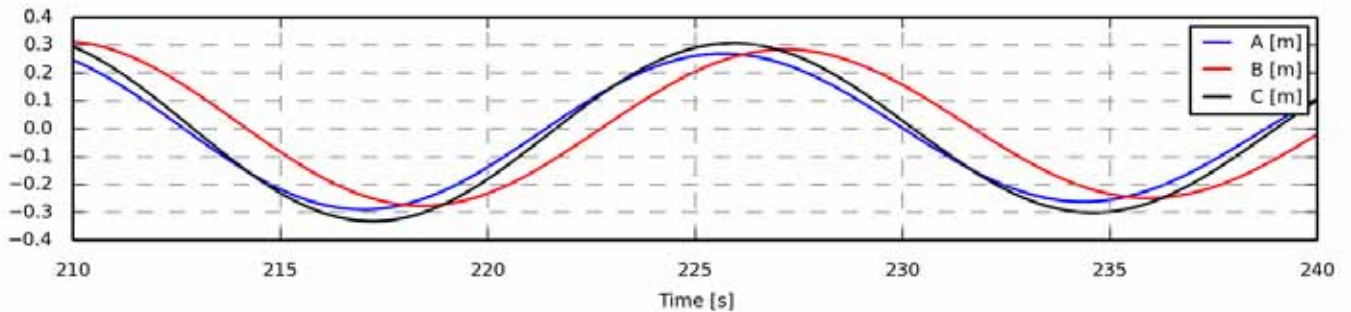


Figure 250 - Zoom of time series

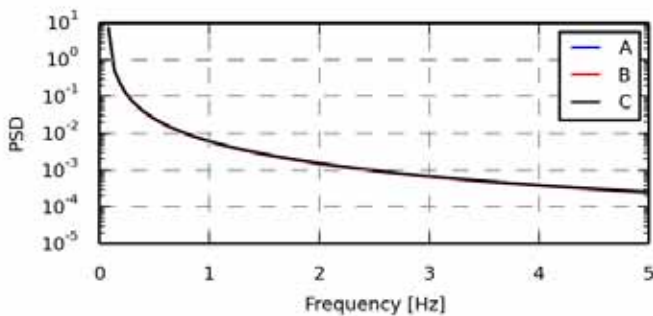


Figure 251 - Power spectrum density

Statistics	A	B	C
Min	-5.9994	-5.9994	-5.9991
Max	2.7818	2.8079	2.9967
Mean	-0.0328	-0.0181	-0.0314
Std	0.7391	0.7450	0.7765
Skewness	-2.7487	-2.7272	-2.2557
Kurtosis	23.4189	23.1113	19.6045

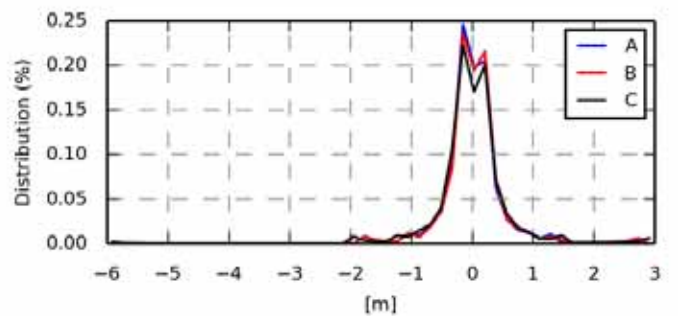


Figure 252 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	1.1214	1.1247	1.1703
Eq (m=4)	1.8184	1.8237	1.8791
Eq (m=6)	3.0350	3.0440	3.1159
Eq (m=8)	3.9500	3.9617	4.0489
Eq (m=10)	4.6324	4.6461	4.7464
Eq (m=12)	5.1529	5.1682	5.2791

Section 3.09 oc4_p2_load_case_1-3b: proj_ang tx coo: global [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3b.sel (28-02-2014 16:48)	22	State_rot proj_ang tx Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
B	WAMsim/oc4_p2_load_case_1-3b.sel (01-04-2014 12:51)	22	State_rot proj_ang tx Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
C	hawc2/oc4_p2_load_case_1-3b.sel (04-12-2013 11:39)	22	State_rot proj_ang tx Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw

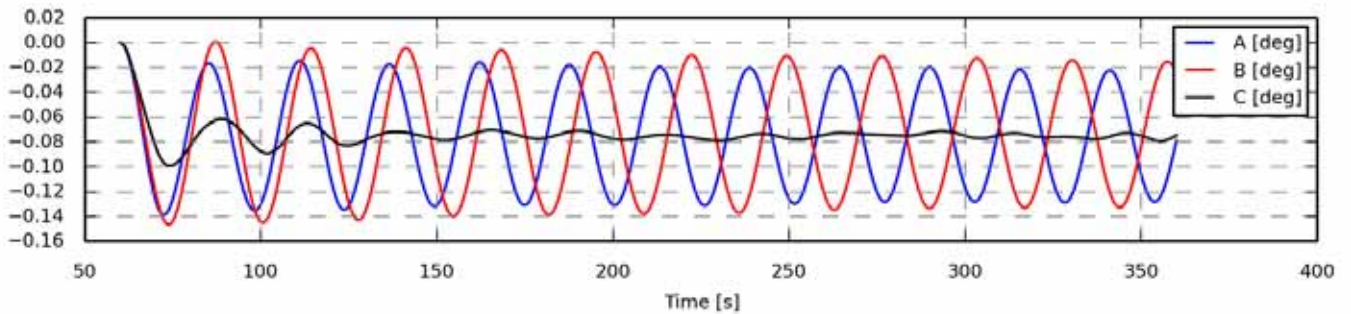


Figure 253 - Full length time series

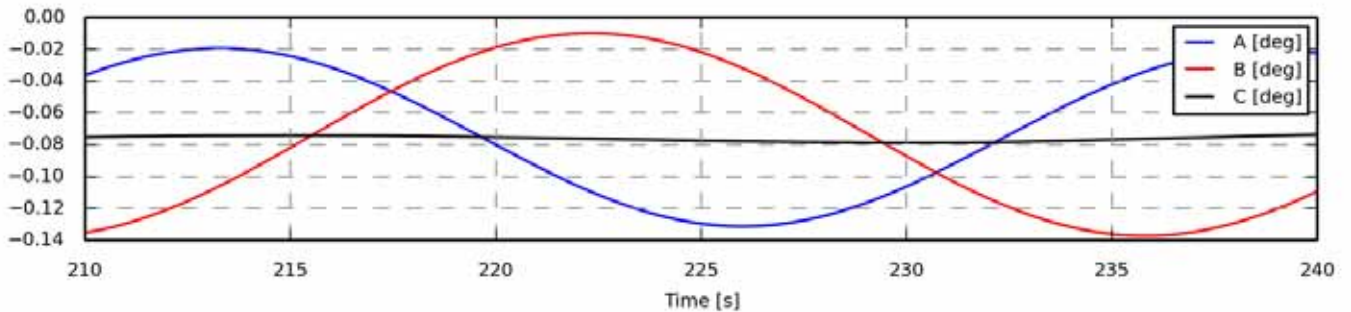


Figure 254 - Zoom of time series

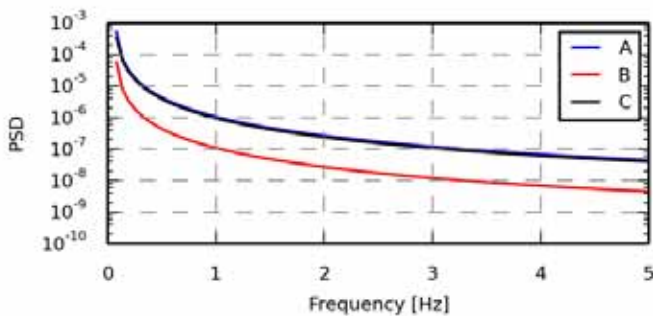


Figure 255 - Power spectrum density

Statistics	A	B	C
Min	-0.1388	-0.1465	-0.0993
Max	-0.0000	0.0007	0.0000
Mean	-0.0754	-0.0727	-0.0743
Std	0.0402	0.0463	0.0099
Skewness	0.0395	-0.0164	4.0472
Kurtosis	-1.4677	-1.4758	26.0502

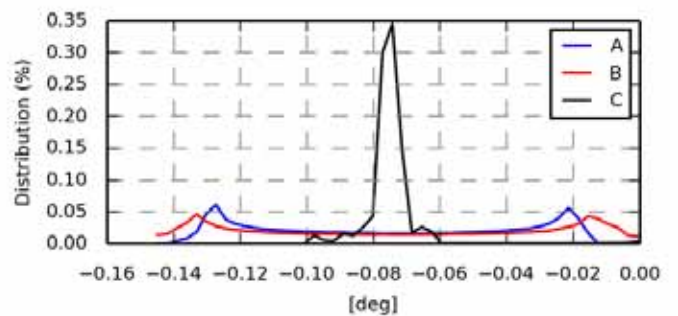


Figure 256 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.0385	0.0435	0.0122
Eq (m=4)	0.0506	0.0575	0.0202
Eq (m=6)	0.0667	0.0761	0.0342
Eq (m=8)	0.0769	0.0877	0.0446
Eq (m=10)	0.0840	0.0958	0.0524
Eq (m=12)	0.0893	0.1017	0.0583

Section 3.10 oc4_p2_load_case_1-3b: proj_ang ty coo: global [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3b.sel (28-02-2014 16:48)	23	State_rot proj_ang ty Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
B	WAMsim/oc4_p2_load_case_1-3b.sel (01-04-2014 12:51)	23	State_rot proj_ang ty Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
C	hawc2/oc4_p2_load_case_1-3b.sel (04-12-2013 11:39)	23	State_rot proj_ang ty Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw

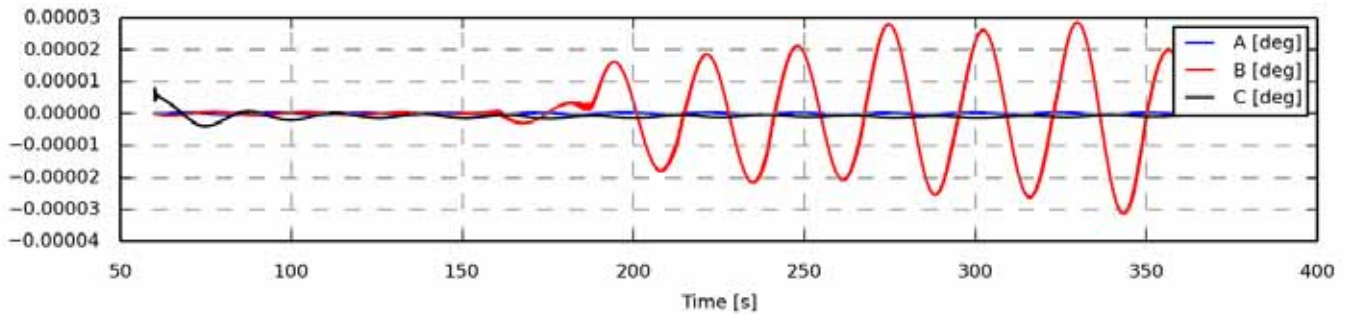


Figure 257 - Full length time series

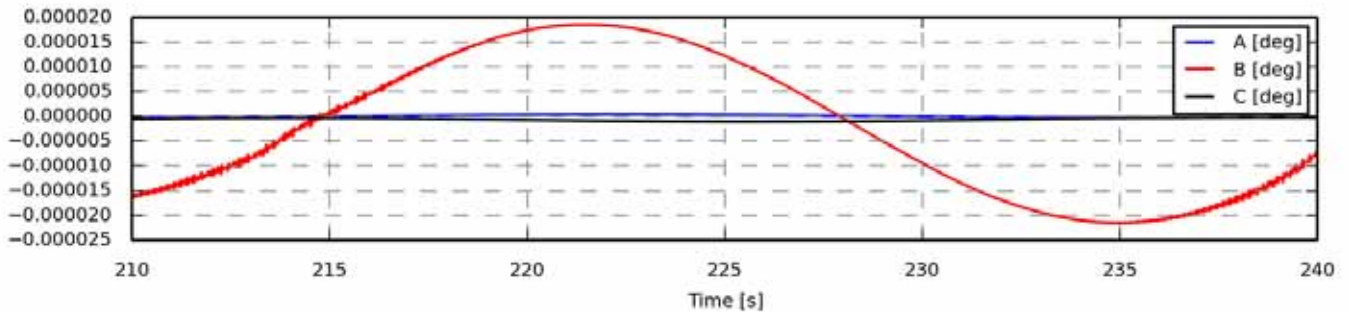


Figure 258 - Zoom of time series

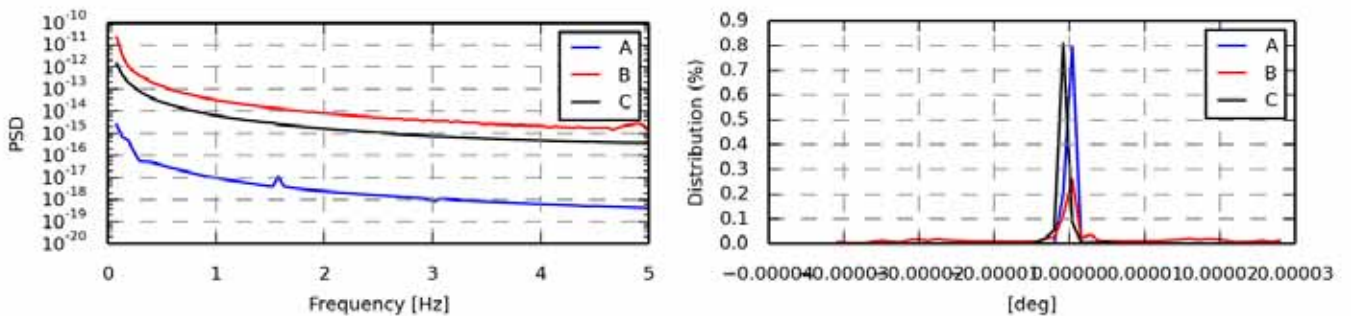


Figure 259 - Power spectrum density

Statistics	A	B	C
Min	-0.0000	-0.0000	-0.0000
Max	0.0000	0.0000	0.0000
Mean	0.0000	0.0000	-0.0000
Std	0.0000	0.0000	0.0000
Skewness	-0.0383	-0.0815	2.3811
Kurtosis	-1.3270	-0.0467	16.2236

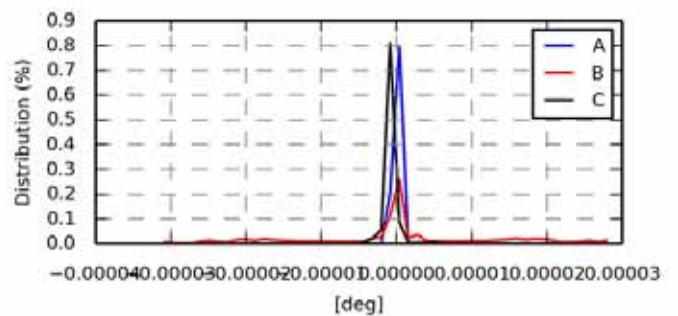


Figure 260 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.0000	0.0000	0.0000
Eq (m=4)	0.0000	0.0000	0.0000
Eq (m=6)	0.0000	0.0000	0.0000
Eq (m=8)	0.0000	0.0000	0.0000
Eq (m=10)	0.0000	0.0000	0.0000
Eq (m=12)	0.0000	0.0000	0.0000

Section 3.11 oc4_p2_load_case_1-3b: proj_ang tz coo: global [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3b.sel (28-02-2014 16:48)	24	State_rot proj_ang tz Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
B	WAMsim/oc4_p2_load_case_1-3b.sel (01-04-2014 12:51)	24	State_rot proj_ang tz Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
C	hawc2/oc4_p2_load_case_1-3b.sel (04-12-2013 11:39)	24	State_rot proj_ang tz Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw

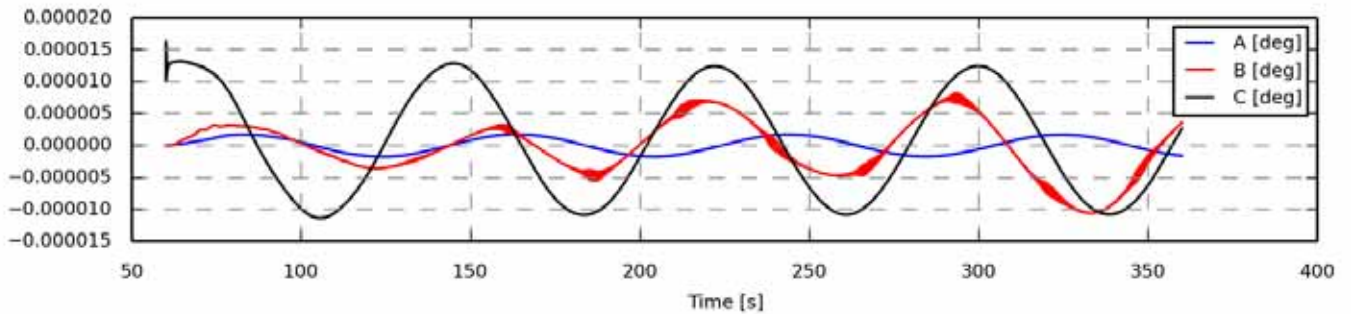


Figure 261 - Full length time series

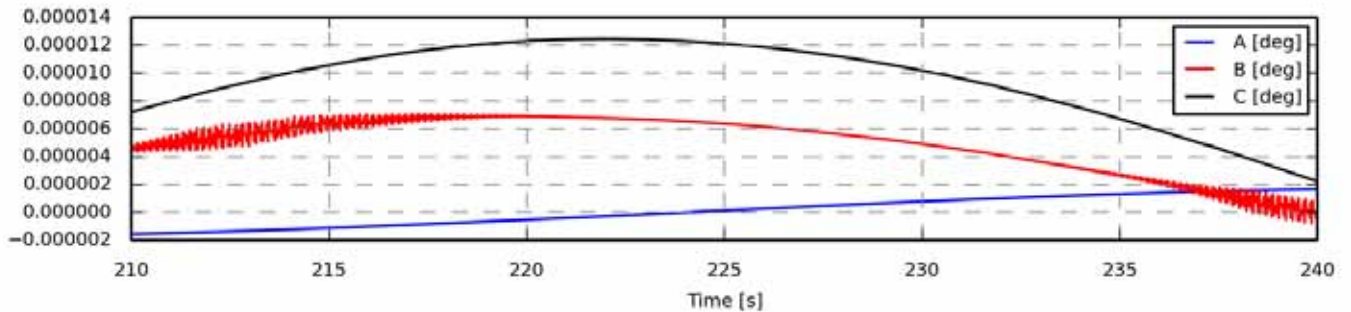


Figure 262 - Zoom of time series

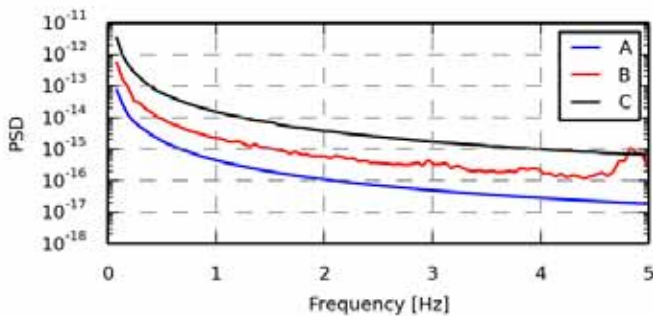


Figure 263 - Power spectrum density

Statistics	A	B	C
Min	-0.0000	-0.0000	-0.0000
Max	0.0000	0.0000	0.0000
Mean	0.0000	-0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	-0.1300	-0.3014	0.0667
Kurtosis	-1.4458	-0.3084	-1.4955

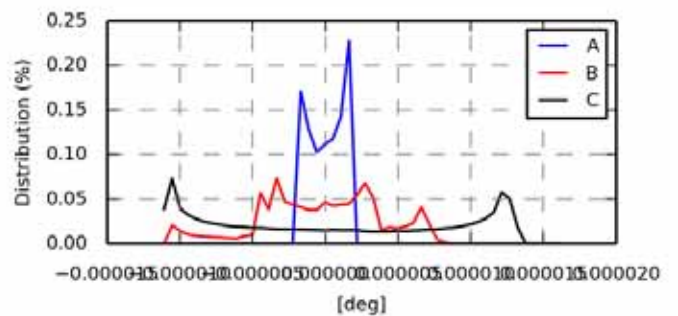


Figure 264 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.0000	0.0000	0.0000
Eq (m=4)	0.0000	0.0000	0.0000
Eq (m=6)	0.0000	0.0000	0.0000
Eq (m=8)	0.0000	0.0000	0.0000
Eq (m=10)	0.0000	0.0000	0.0000
Eq (m=12)	0.0000	0.0000	0.0000

Section 3.12 oc4_p2_load_case_1-3b: Mx coo: towertop [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3b.sel (28-02-2014 16:48)	37	MomentMx Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
B	WAMsim/oc4_p2_load_case_1-3b.sel (01-04-2014 12:51)	37	MomentMx Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
C	hawc2/oc4_p2_load_case_1-3b.sel (04-12-2013 11:39)	37	MomentMx Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment

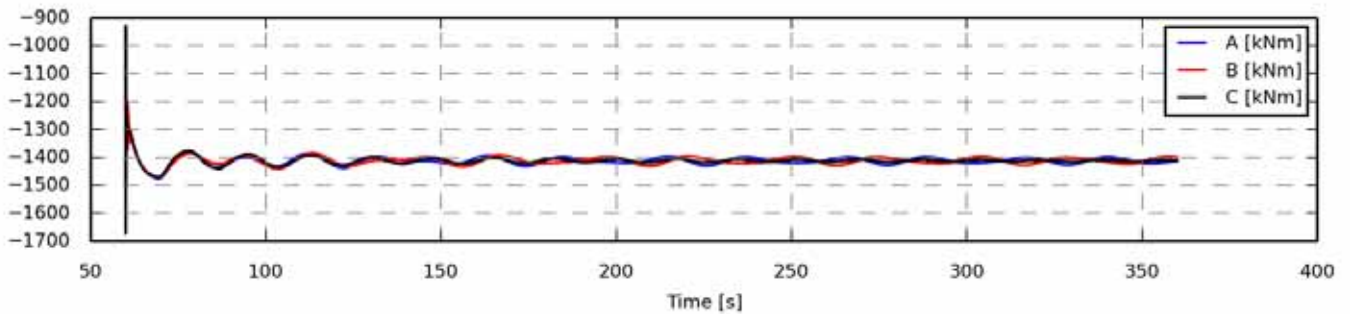


Figure 265 - Full length time series

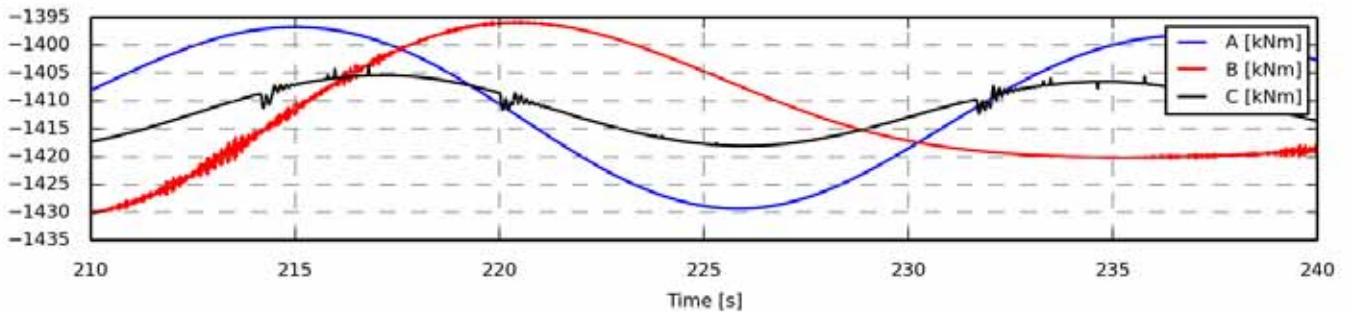


Figure 266 - Zoom of time series

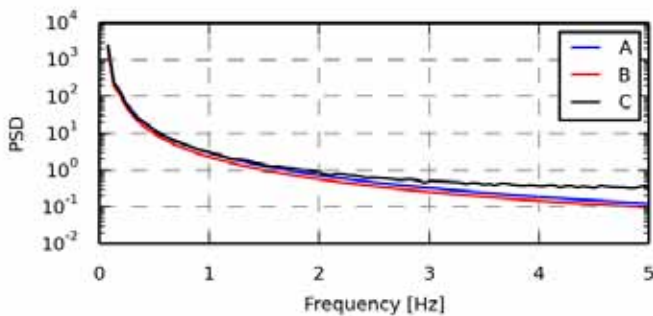


Figure 267 - Power spectrum density

Statistics	A	B	C
Min	-1.4751e+03	-1.4711e+03	-1.6695e+03
Max	-1.2815e+03	-1.2008e+03	-9.2921e+02
Mean	-1.4121e+03	-1.4116e+03	-1.4119e+03
Std	16.3093	16.6530	15.3856
Skewness	1.3969	2.2669	4.2207
Kurtosis	14.4833	27.5432	110.6675

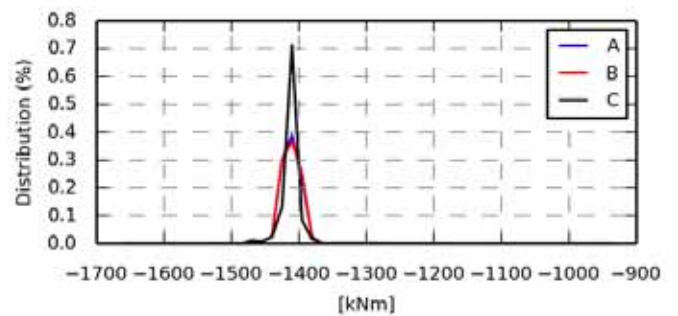


Figure 268 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	24.7520	56.5015	103.6320
Eq (m=4)	39.9772	74.6094	163.6169
Eq (m=6)	66.8563	103.0187	263.9920
Eq (m=8)	87.0713	125.5597	338.1803
Eq (m=10)	102.1300	144.0844	393.5946
Eq (m=12)	113.6114	159.1590	436.1710

Section 3.13 oc4_p2_load_case_1-3b: My coo: towertop [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3b.sel (28-02-2014 16:48)	38	MomentMy Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
B	WAMsim/oc4_p2_load_case_1-3b.sel (01-04-2014 12:51)	38	MomentMy Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
C	hawc2/oc4_p2_load_case_1-3b.sel (04-12-2013 11:39)	38	MomentMy Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment

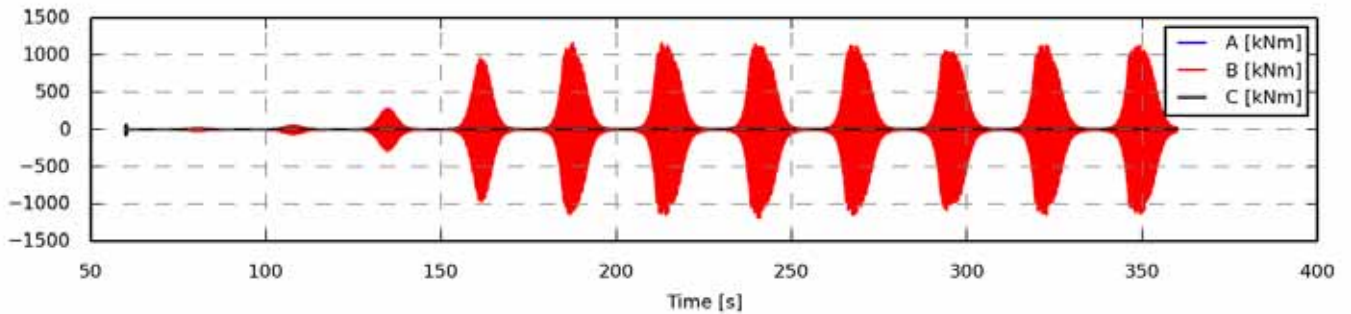


Figure 269 - Full length time series

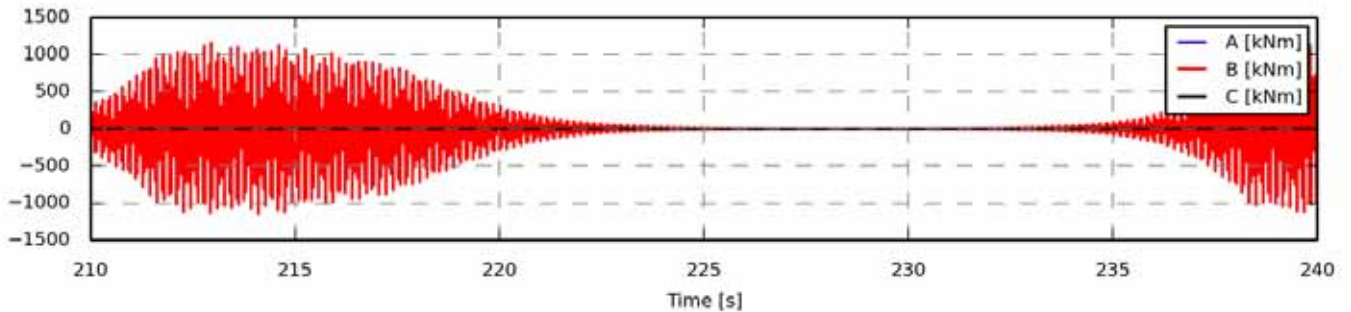


Figure 270 - Zoom of time series

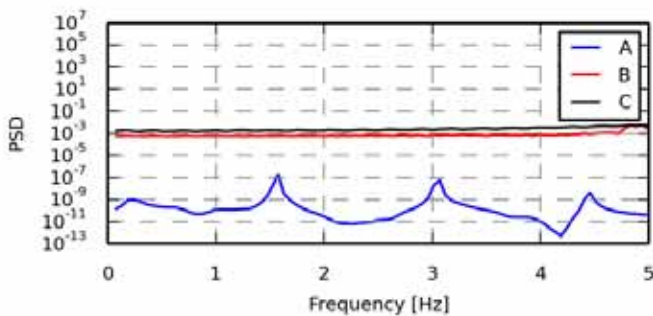


Figure 271 - Power spectrum density

Statistics	A	B	C
Min	-0.0038	-1.1856e+03	-72.9728
Max	0.0038	1.1619e+03	71.9580
Mean	0.0000	0.0009	0.0019
Std	0.0005	313.9720	1.5322
Skewness	-0.0708	-0.0000	-0.6872
Kurtosis	16.0888	3.8853	1.7332e+03

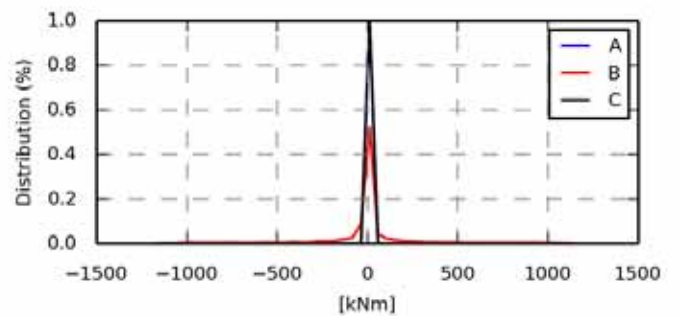


Figure 272 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.0037	2.2956e+03	27.7124
Eq (m=4)	0.0039	2.1325e+03	40.5865
Eq (m=6)	0.0044	2.0268e+03	60.1943
Eq (m=8)	0.0048	2.0013e+03	73.7046
Eq (m=10)	0.0051	1.9988e+03	83.3973
Eq (m=12)	0.0053	2.0046e+03	90.6609

Section 3.14 oc4_p2_load_case_1-3b: Mz coo: towertop [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3b.sel (28-02-2014 16:48)	39	MomentMz Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
B	WAMsim/oc4_p2_load_case_1-3b.sel (01-04-2014 12:51)	39	MomentMz Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
C	hawc2/oc4_p2_load_case_1-3b.sel (04-12-2013 11:39)	39	MomentMz Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment

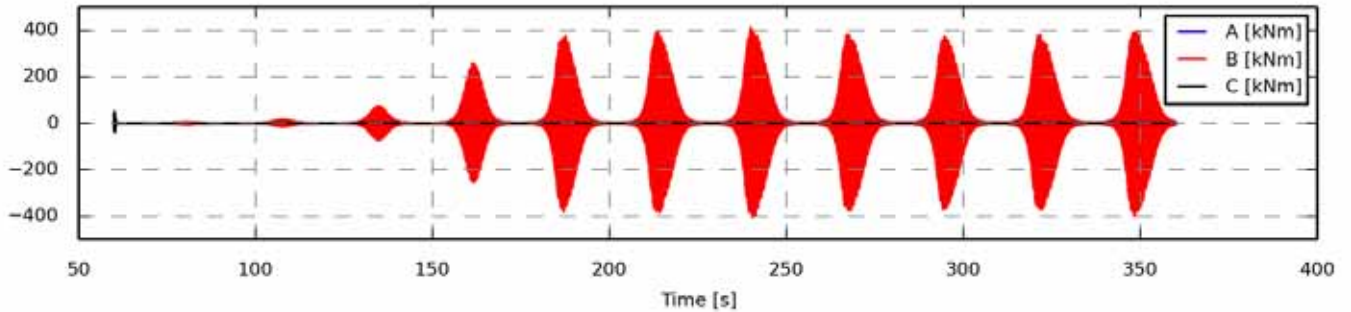


Figure 273 - Full length time series

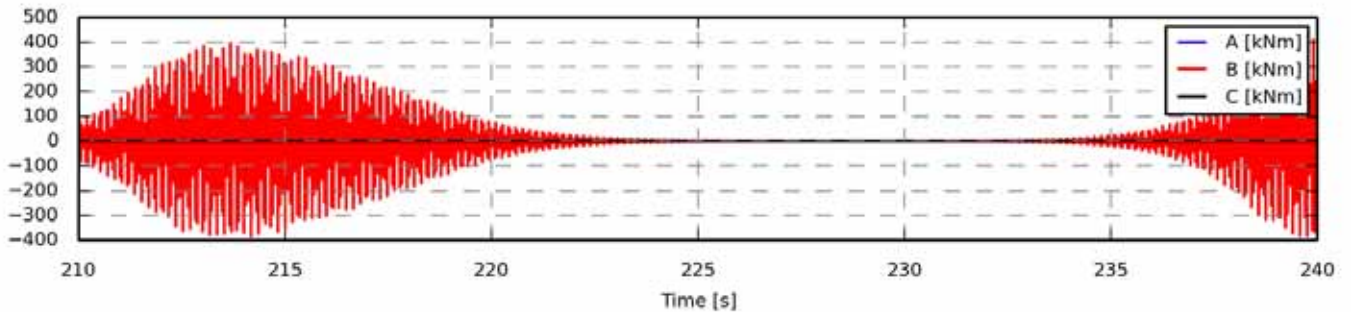


Figure 274 - Zoom of time series

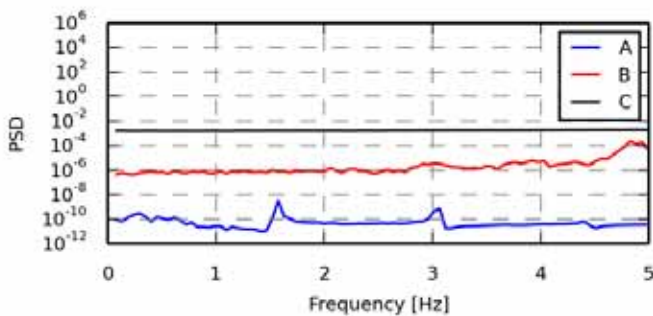


Figure 275 - Power spectrum density

Statistics	A	B	C
Min	-0.0047	-4.0500e+02	-38.5082
Max	0.0048	408.2368	49.1274
Mean	0.0000	-0.0000	0.0016
Std	0.0002	96.7668	1.0057
Skewness	0.5918	-0.0000	9.9361
Kurtosis	81.3142	5.1426	1.2896e+03

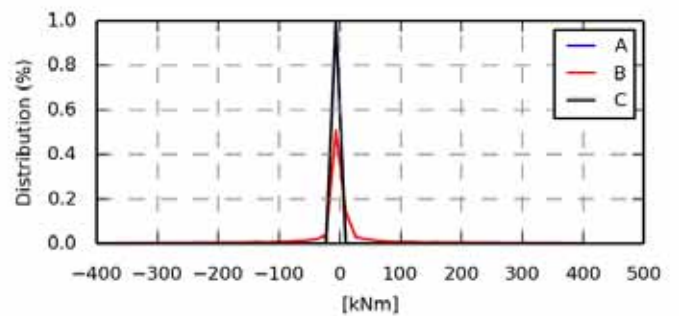


Figure 276 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.0020	725.2831	16.6733
Eq (m=4)	0.0025	685.0073	24.0075
Eq (m=6)	0.0036	664.8878	35.2652
Eq (m=8)	0.0045	664.8846	43.2185
Eq (m=10)	0.0052	669.5485	49.0901
Eq (m=12)	0.0057	675.3623	53.6033

Section 3.15 oc4_p2_load_case_1-3b: Mx coo: tower [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3b.sel (28-02-2014 16:48)	43	MomentMx Mbdy:tower nodenr: 1 coo: tower tower base bending moment
B	WAMsim/oc4_p2_load_case_1-3b.sel (01-04-2014 12:51)	43	MomentMx Mbdy:tower nodenr: 1 coo: tower tower base bending moment
C	hawc2/oc4_p2_load_case_1-3b.sel (04-12-2013 11:39)	43	MomentMx Mbdy:tower nodenr: 1 coo: tower tower base bending moment

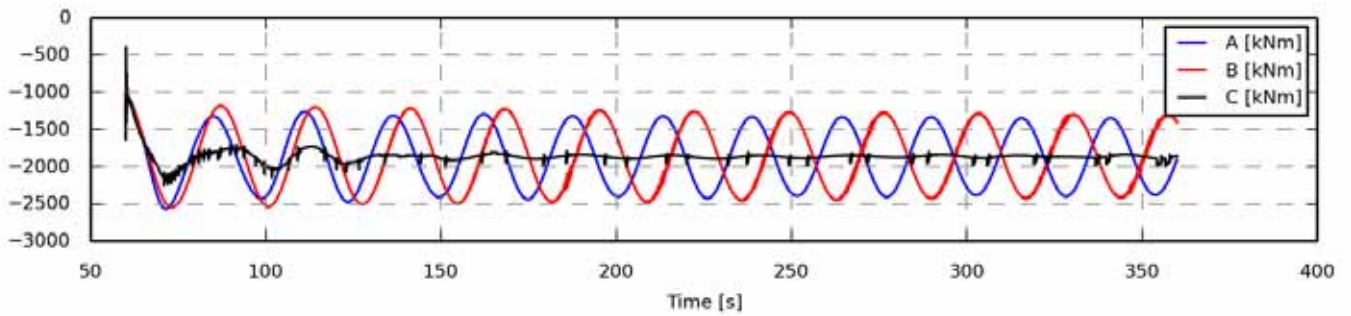


Figure 277 - Full length time series

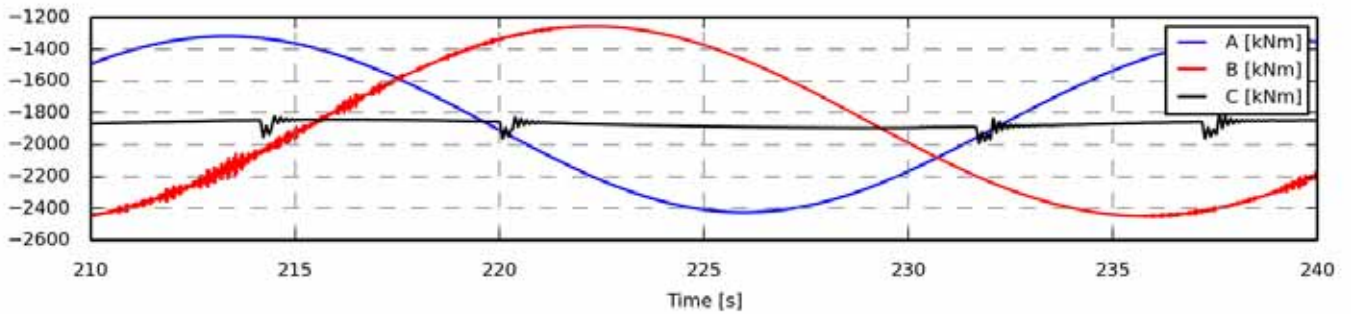


Figure 278 - Zoom of time series

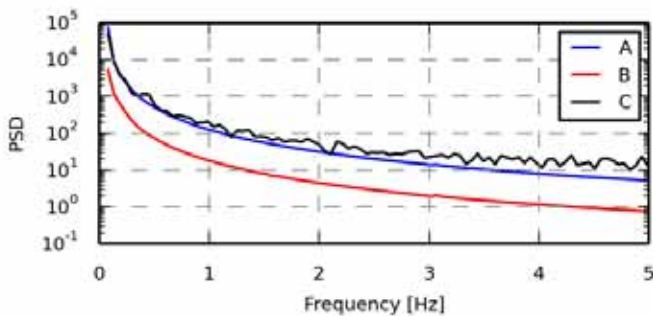


Figure 279 - Power spectrum density

Statistics	A	B	C
Min	-2.5636e+03	-2.5411e+03	-2.2547e+03
Max	-1.0369e+03	-9.8347e+02	-3.9965e+02
Mean	-1.8724e+03	-1.8514e+03	-1.8634e+03
Std	395.4831	435.9963	94.5697
Skewness	0.0395	-0.0107	3.9356
Kurtosis	-1.4305	-1.4693	34.1041

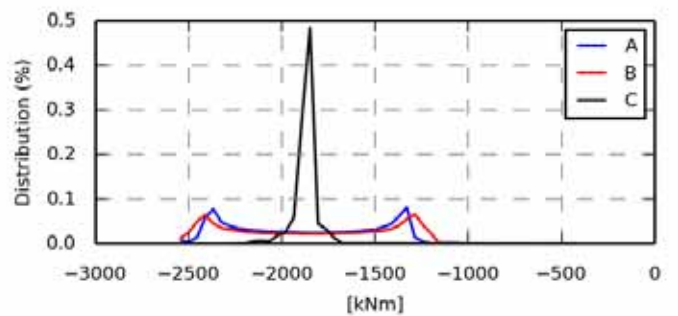


Figure 280 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	381.4479	415.6103	253.9841
Eq (m=4)	503.2339	547.9696	397.8025
Eq (m=6)	669.7314	727.4530	649.4067
Eq (m=8)	780.6384	842.2979	838.5873
Eq (m=10)	863.8110	923.7019	980.5135
Eq (m=12)	931.1342	986.0420	1.0894e+03

Section 3.16 oc4_p2_load_case_1-3b: My coo: tower [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3b.sel (28-02-2014 16:48)	44	MomentMy Mbdy:tower nodenr: 1 coo: tower tower base bending moment
B	WAMsim/oc4_p2_load_case_1-3b.sel (01-04-2014 12:51)	44	MomentMy Mbdy:tower nodenr: 1 coo: tower tower base bending moment
C	hawc2/oc4_p2_load_case_1-3b.sel (04-12-2013 11:39)	44	MomentMy Mbdy:tower nodenr: 1 coo: tower tower base bending moment

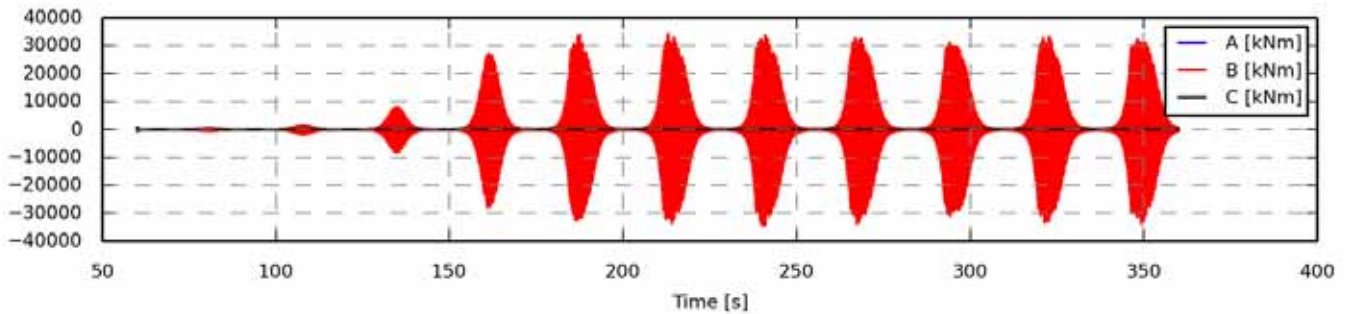


Figure 281 - Full length time series

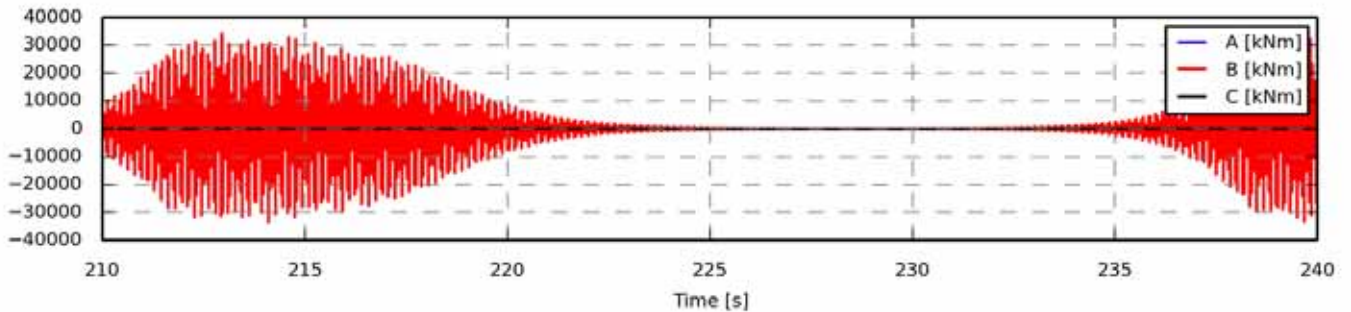


Figure 282 - Zoom of time series

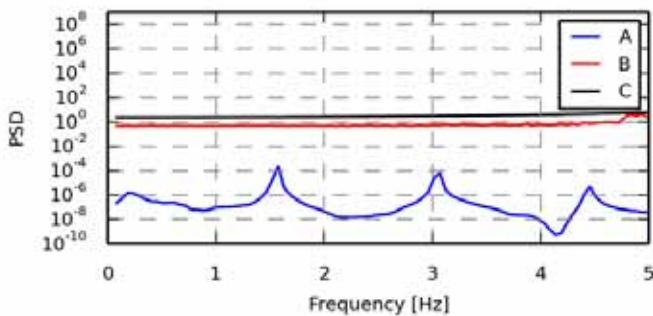


Figure 283 - Power spectrum density

Statistics	A	B	C
Min	-0.1064	-3.4351e+04	-5.3725e+02
Max	0.1185	3.4291e+04	816.9152
Mean	0.0001	0.0273	0.0566
Std	0.0130	9.0392e+03	15.4162
Skewness	-0.0794	-0.0000	16.6551
Kurtosis	15.4661	3.9147	1.5559e+03

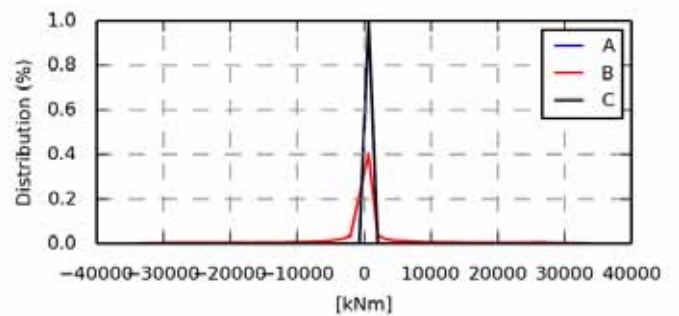


Figure 284 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.1055	6.6134e+04	238.6866
Eq (m=4)	0.1114	6.1465e+04	353.9625
Eq (m=6)	0.1250	5.8470e+04	533.2669
Eq (m=8)	0.1363	5.7779e+04	659.3746
Eq (m=10)	0.1453	5.7745e+04	751.6214
Eq (m=12)	0.1526	5.7952e+04	821.9985

Section 3.17 oc4_p2_load_case_1-3b: Mz coo: tower [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3b.sel (28-02-2014 16:48)	45	MomentMz Mbdy:tower nodenr: 1 coo: tower tower base bending moment
B	WAMsim/oc4_p2_load_case_1-3b.sel (01-04-2014 12:51)	45	MomentMz Mbdy:tower nodenr: 1 coo: tower tower base bending moment
C	hawc2/oc4_p2_load_case_1-3b.sel (04-12-2013 11:39)	45	MomentMz Mbdy:tower nodenr: 1 coo: tower tower base bending moment

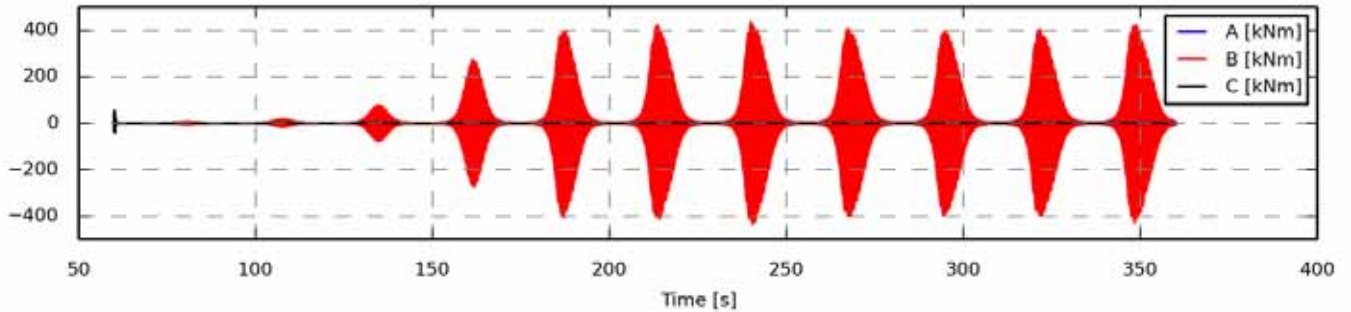


Figure 285 - Full length time series

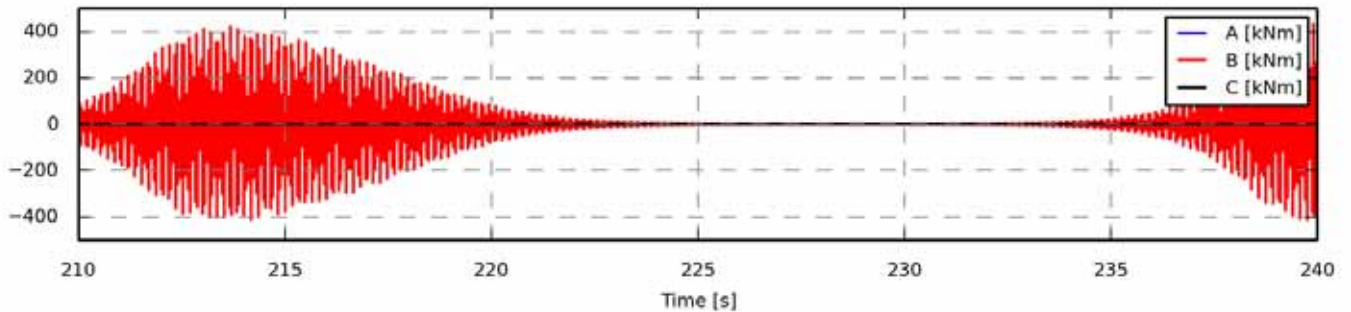


Figure 286 - Zoom of time series

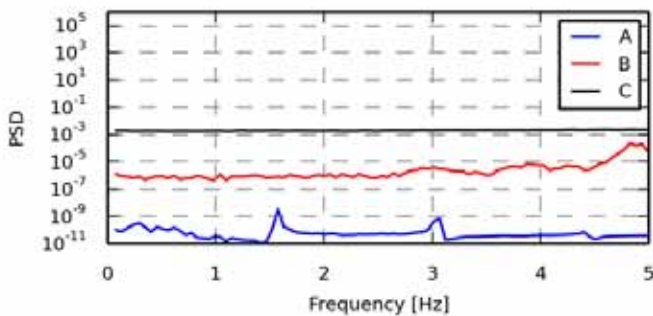


Figure 287 - Power spectrum density

Statistics	A	B	C
Min	-0.0049	-4.3189e+02	-41.2536
Max	0.0051	434.3104	52.8003
Mean	0.0000	-0.0000	0.0017
Std	0.0002	103.0743	1.0796
Skewness	0.5852	-0.0000	10.0133
Kurtosis	78.5424	5.1469	1.2910e+03

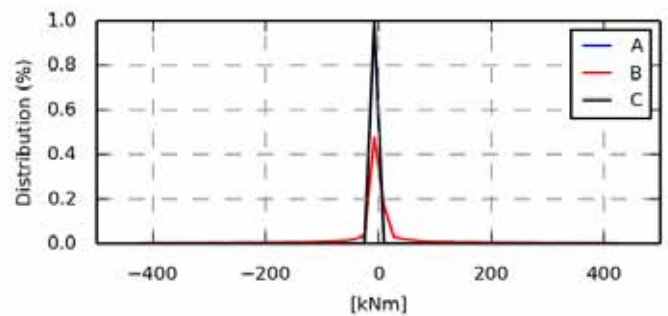


Figure 288 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.0022	772.4940	17.9395
Eq (m=4)	0.0027	729.6093	25.8061
Eq (m=6)	0.0038	708.1845	37.8685
Eq (m=8)	0.0047	708.1514	46.3917
Eq (m=10)	0.0054	713.0674	52.6881
Eq (m=12)	0.0060	719.1978	57.5300

Section 3.18 oc4_p2_load_case_1-3b: ESYS line1_1 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3b.sel (28-02-2014 16:48)	55	ESYS line1_1 SENSOR 4
B	WAMsim/oc4_p2_load_case_1-3b.sel (01-04-2014 12:51)	55	ESYS line1_1 SENSOR 4
C	hawc2/oc4_p2_load_case_1-3b.sel (04-12-2013 11:39)	55	ESYS line1_1 SENSOR 4

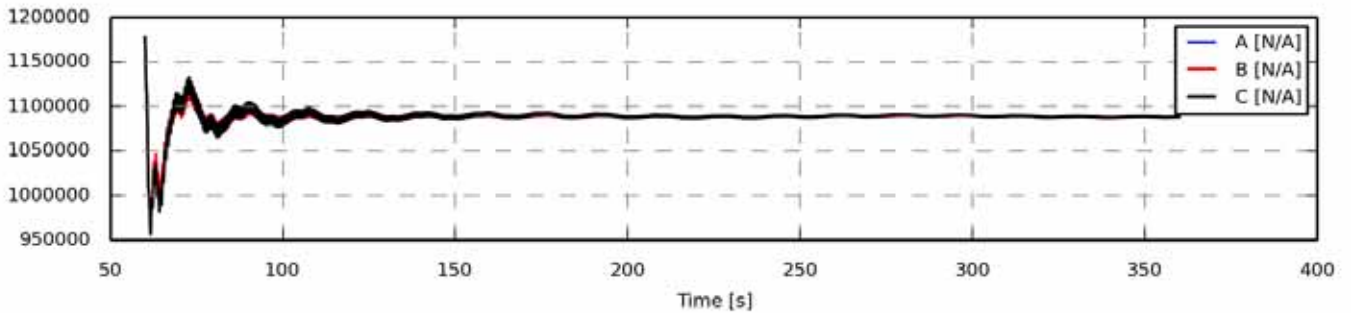


Figure 289 - Full length time series

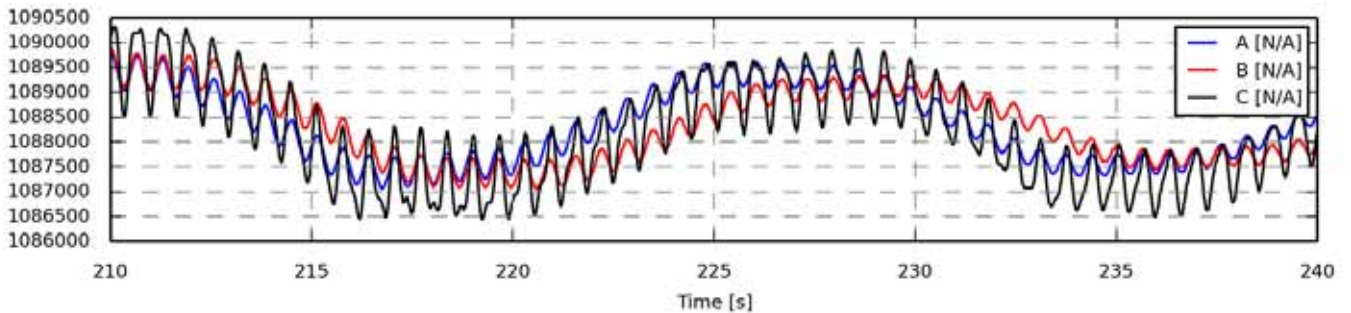


Figure 290 - Zoom of time series

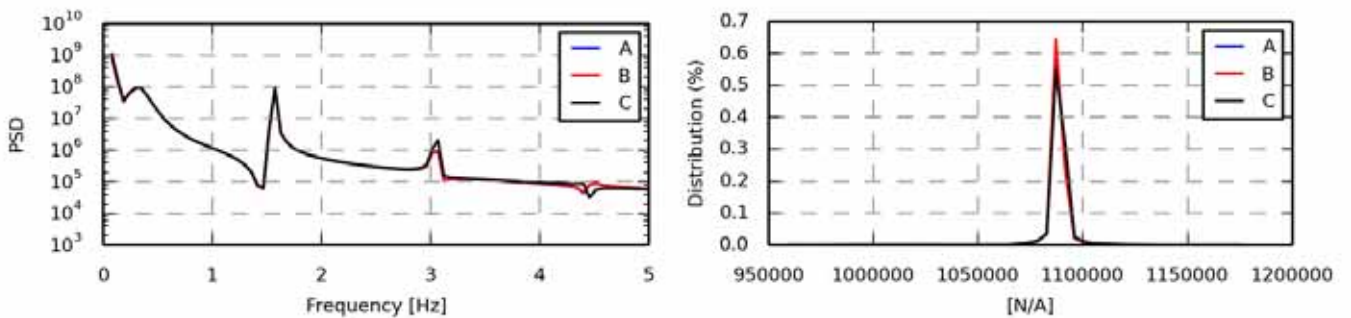


Figure 291 - Power spectrum density

Statistics	A	B	C
Min	9.5873e+05	9.6159e+05	9.5673e+05
Max	1.1775e+06	1.1777e+06	1.1772e+06
Mean	1.0878e+06	1.0877e+06	1.0878e+06
Std	1.1258e+04	1.1074e+04	1.2361e+04
Skewness	-5.6917	-5.6162	-5.3166
Kurtosis	49.0136	48.3393	42.4965

Figure 292 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	2.9831e+04	2.9480e+04	3.0634e+04
Eq (m=4)	4.7623e+04	4.7056e+04	4.8705e+04
Eq (m=6)	7.7576e+04	7.6654e+04	7.8945e+04
Eq (m=8)	9.9636e+04	9.8451e+04	1.0106e+05
Eq (m=10)	1.1610e+05	1.1472e+05	1.1750e+05
Eq (m=12)	1.2875e+05	1.2722e+05	1.3011e+05

Section 3.19 oc4_p2_load_case_1-3b: ESYS line1_3 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3b.sel (28-02-2014 16:48)	259	ESYS line1_3 SENSOR 104
B	WAMsim/oc4_p2_load_case_1-3b.sel (01-04-2014 12:51)	259	ESYS line1_3 SENSOR 104
C	hawc2/oc4_p2_load_case_1-3b.sel (04-12-2013 11:39)	259	ESYS line1_3 SENSOR 104

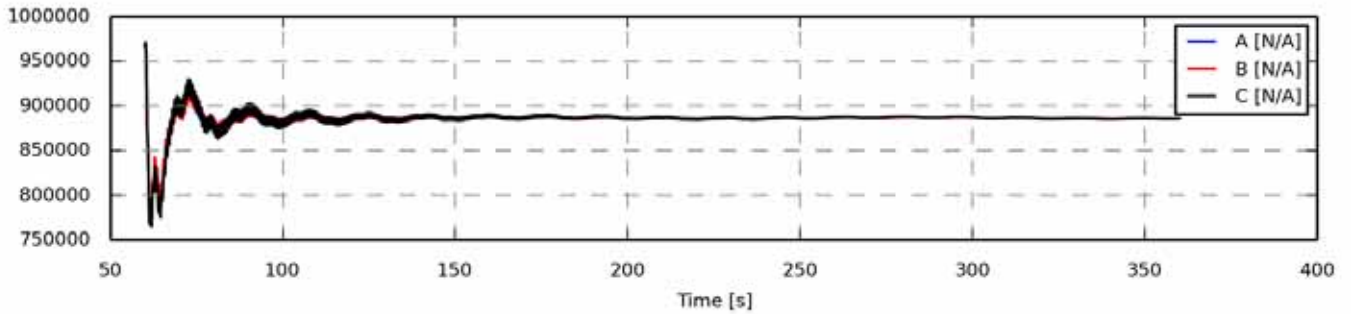


Figure 293 - Full length time series

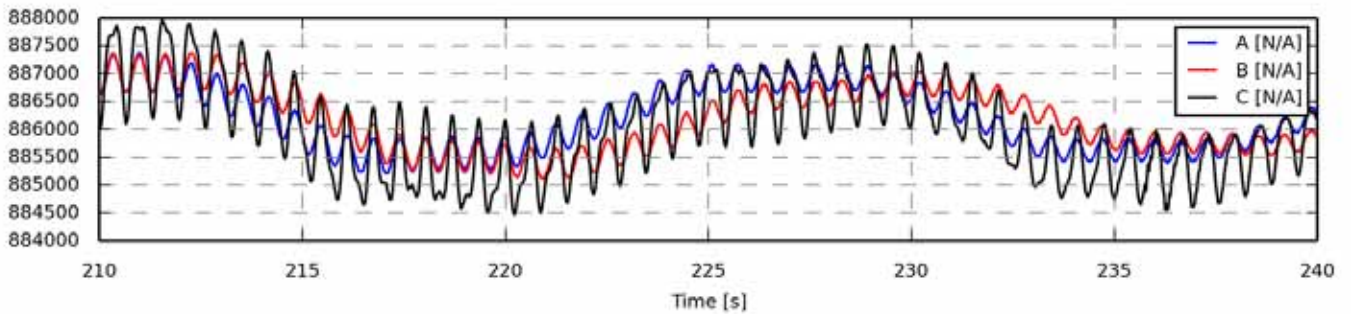


Figure 294 - Zoom of time series

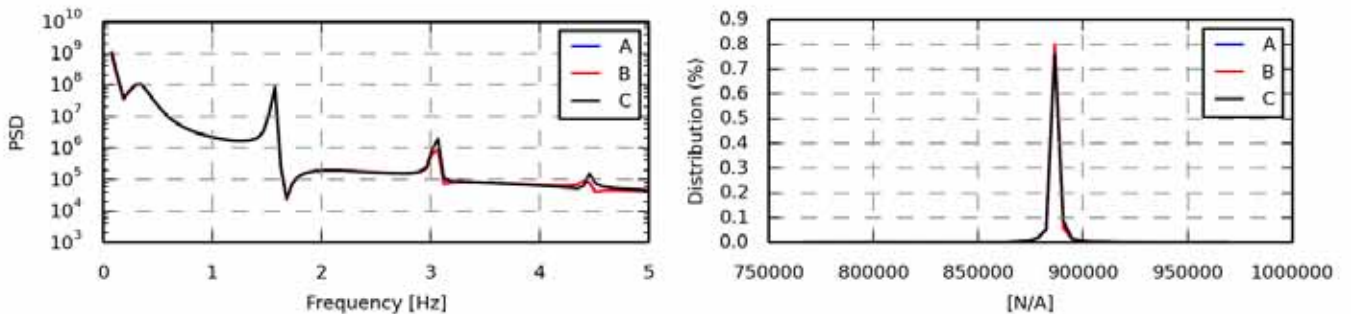


Figure 295 - Power spectrum density

Statistics	A	B	C
Min	7.6742e+05	7.7015e+05	7.6541e+05
Max	9.7073e+05	9.7076e+05	9.7068e+05
Mean	8.8564e+05	8.8546e+05	8.8558e+05
Std	1.1622e+04	1.1450e+04	1.2683e+04
Skewness	-5.3614	-5.2772	-5.0914
Kurtosis	47.1266	46.5029	41.5971

Figure 296 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	2.7843e+04	2.7545e+04	2.8687e+04
Eq (m=4)	4.4301e+04	4.3741e+04	4.5410e+04
Eq (m=6)	7.2103e+04	7.1151e+04	7.3497e+04
Eq (m=8)	9.2602e+04	9.1375e+04	9.4076e+04
Eq (m=10)	1.0791e+05	1.0648e+05	1.0938e+05
Eq (m=12)	1.1966e+05	1.1808e+05	1.2112e+05

Section 3.20 oc4_p2_load_case_1-3b: ESYS line2_1 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3b.sel (28-02-2014 16:48)	263	ESYS line2_1 SENSOR 4
B	WAMsim/oc4_p2_load_case_1-3b.sel (01-04-2014 12:51)	263	ESYS line2_1 SENSOR 4
C	hawc2/oc4_p2_load_case_1-3b.sel (04-12-2013 11:39)	263	ESYS line2_1 SENSOR 4

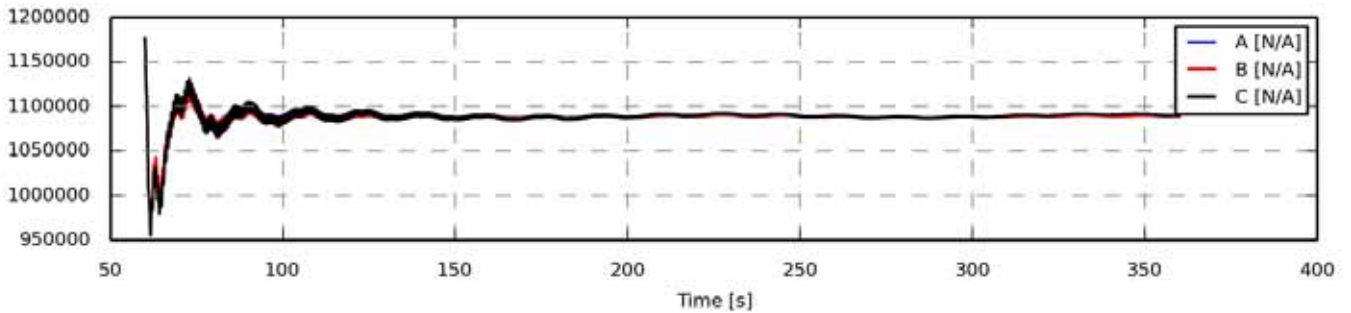


Figure 297 - Full length time series

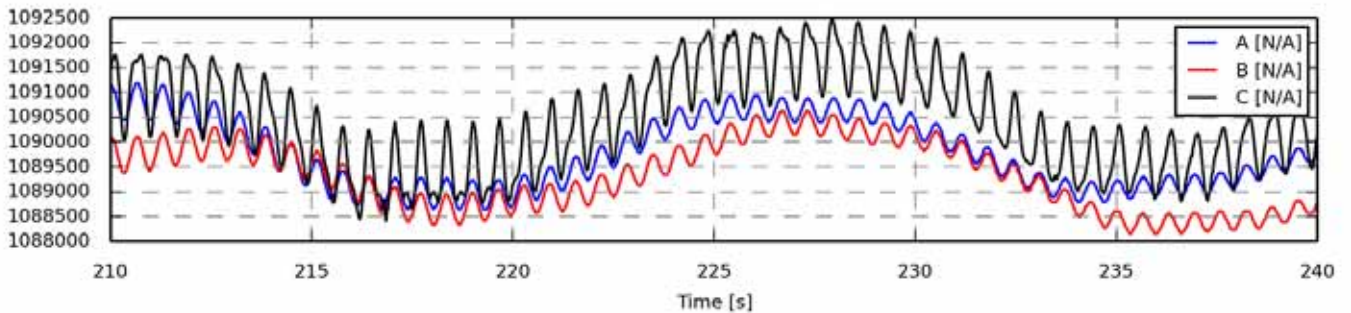


Figure 298 - Zoom of time series

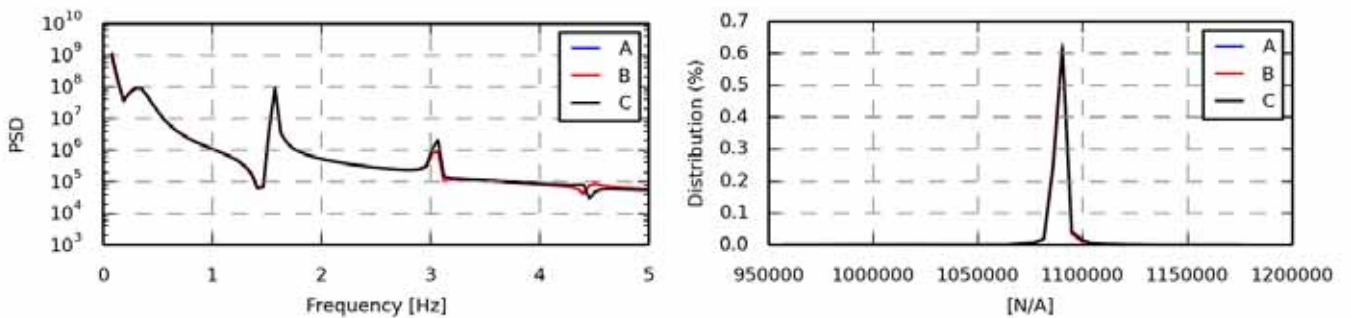


Figure 299 - Power spectrum density

Statistics	A	B	C
Min	9.5716e+05	9.6018e+05	9.5517e+05
Max	1.1763e+06	1.1766e+06	1.1759e+06
Mean	1.0878e+06	1.0876e+06	1.0880e+06
Std	1.1550e+04	1.1304e+04	1.2644e+04
Skewness	-5.8022	-5.7590	-5.4542
Kurtosis	48.4592	48.2021	42.4469

Figure 300 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	2.9879e+04	2.9513e+04	3.0659e+04
Eq (m=4)	4.7702e+04	4.7106e+04	4.8745e+04
Eq (m=6)	7.7706e+04	7.6733e+04	7.9011e+04
Eq (m=8)	9.9803e+04	9.8553e+04	1.0115e+05
Eq (m=10)	1.1630e+05	1.1484e+05	1.1760e+05
Eq (m=12)	1.2897e+05	1.2735e+05	1.3022e+05

Section 3.21 oc4_p2_load_case_1-3b: ESYS line2_3 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3b.sel (28-02-2014 16:48)	467	ESYS line2_3 SENSOR 104
B	WAMsim/oc4_p2_load_case_1-3b.sel (01-04-2014 12:51)	467	ESYS line2_3 SENSOR 104
C	hawc2/oc4_p2_load_case_1-3b.sel (04-12-2013 11:39)	467	ESYS line2_3 SENSOR 104

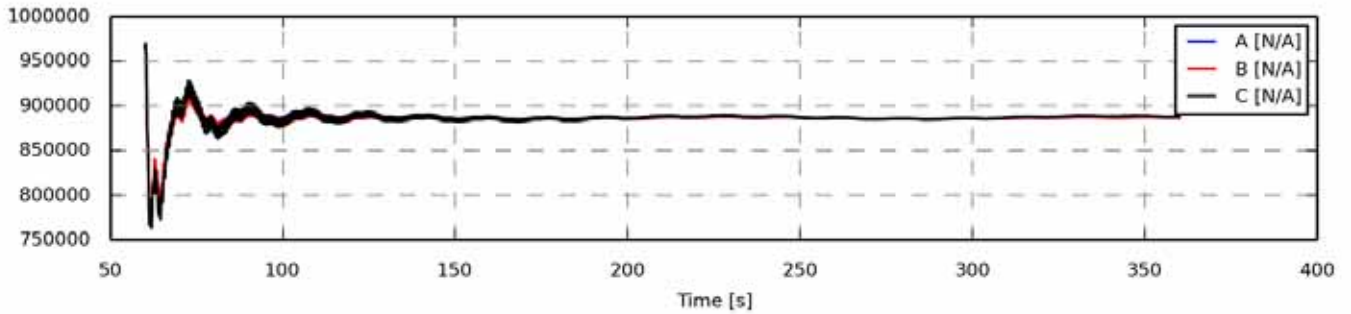


Figure 301 - Full length time series

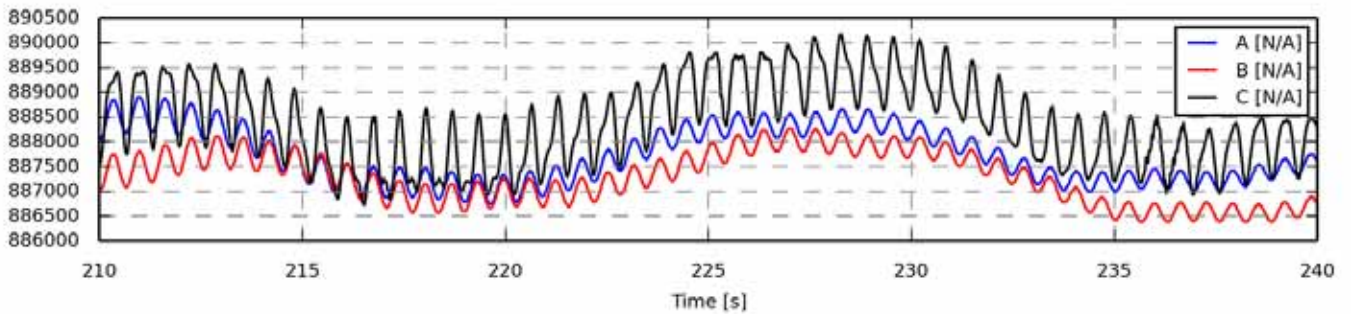


Figure 302 - Zoom of time series

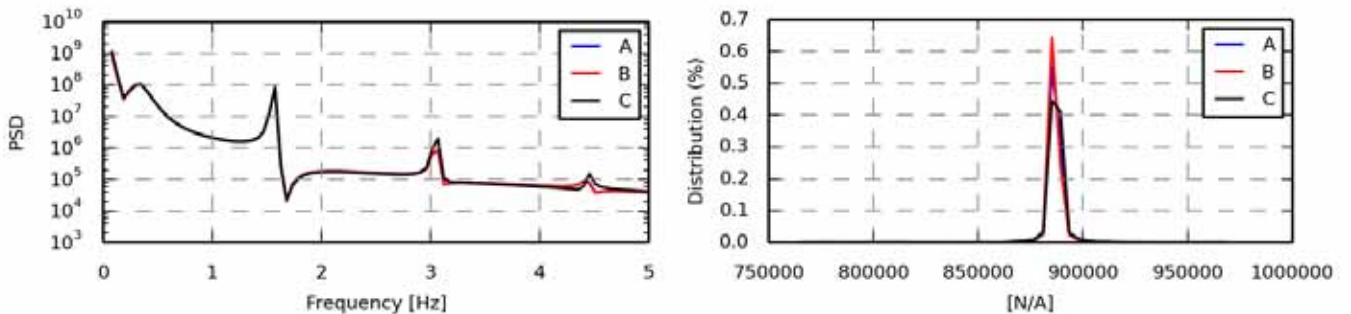


Figure 303 - Power spectrum density

Statistics	A	B	C
Min	7.6583e+05	7.6870e+05	7.6376e+05
Max	9.6959e+05	9.6962e+05	9.6936e+05
Mean	8.8568e+05	8.8546e+05	8.8585e+05
Std	1.1925e+04	1.1691e+04	1.2973e+04
Skewness	-5.4964	-5.4389	-5.2469
Kurtosis	46.6295	46.3784	41.5485

Figure 304 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	2.7968e+04	2.7549e+04	2.8734e+04
Eq (m=4)	4.4427e+04	4.3795e+04	4.5483e+04
Eq (m=6)	7.2269e+04	7.1259e+04	7.3614e+04
Eq (m=8)	9.2811e+04	9.1516e+04	9.4226e+04
Eq (m=10)	1.0815e+05	1.0664e+05	1.0955e+05
Eq (m=12)	1.1993e+05	1.1826e+05	1.2131e+05

Section 3.22 oc4_p2_load_case_1-3b: ESYS line3_1 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3b.sel (28-02-2014 16:48)	471	ESYS line3_1 SENSOR 4
B	WAMsim/oc4_p2_load_case_1-3b.sel (01-04-2014 12:51)	471	ESYS line3_1 SENSOR 4
C	hawc2/oc4_p2_load_case_1-3b.sel (04-12-2013 11:39)	471	ESYS line3_1 SENSOR 4

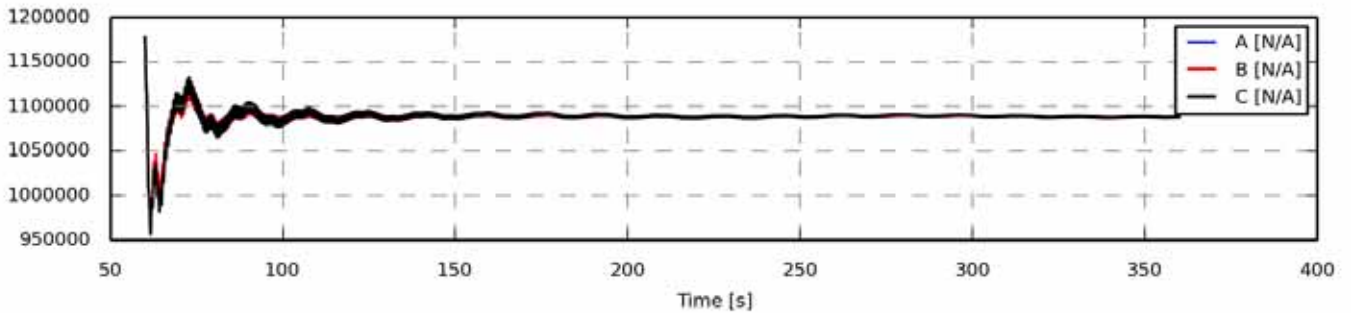


Figure 305 - Full length time series

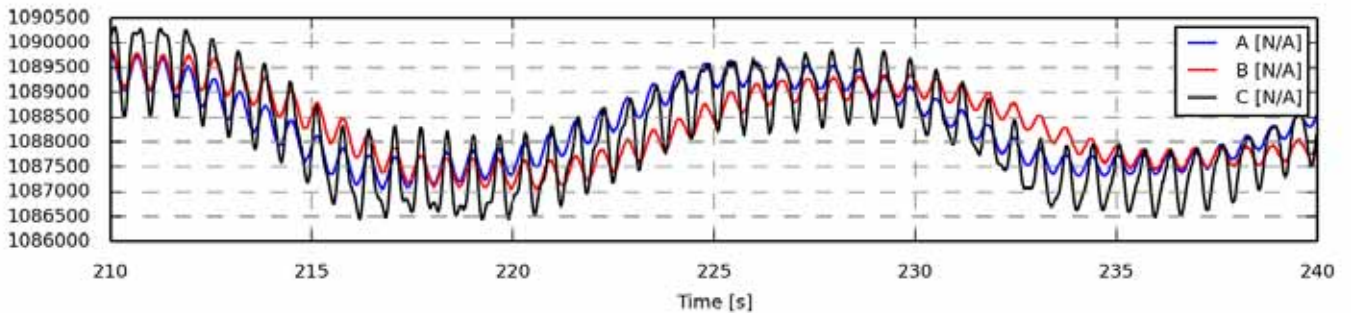


Figure 306 - Zoom of time series

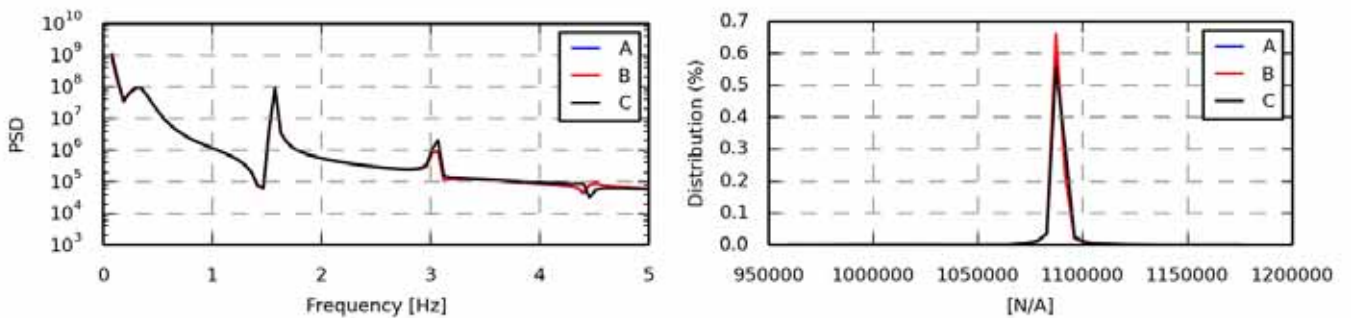


Figure 307 - Power spectrum density

Statistics	A	B	C
Min	9.5872e+05	9.6156e+05	9.5676e+05
Max	1.1775e+06	1.1778e+06	1.1773e+06
Mean	1.0878e+06	1.0877e+06	1.0878e+06
Std	1.1258e+04	1.1074e+04	1.2361e+04
Skewness	-5.6917	-5.6161	-5.3166
Kurtosis	49.0156	48.3386	42.4954

Figure 308 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	2.9831e+04	2.9485e+04	3.0634e+04
Eq (m=4)	4.7623e+04	4.7065e+04	4.8706e+04
Eq (m=6)	7.7576e+04	7.6667e+04	7.8948e+04
Eq (m=8)	9.9636e+04	9.8469e+04	1.0107e+05
Eq (m=10)	1.1610e+05	1.1474e+05	1.1751e+05
Eq (m=12)	1.2875e+05	1.2725e+05	1.3012e+05

Section 3.23 oc4_p2_load_case_1-3b: ESYS line3_3 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3b.sel (28-02-2014 16:48)	675	ESYS line3_3 SENSOR 104
B	WAMsim/oc4_p2_load_case_1-3b.sel (01-04-2014 12:51)	675	ESYS line3_3 SENSOR 104
C	hawc2/oc4_p2_load_case_1-3b.sel (04-12-2013 11:39)	675	ESYS line3_3 SENSOR 104

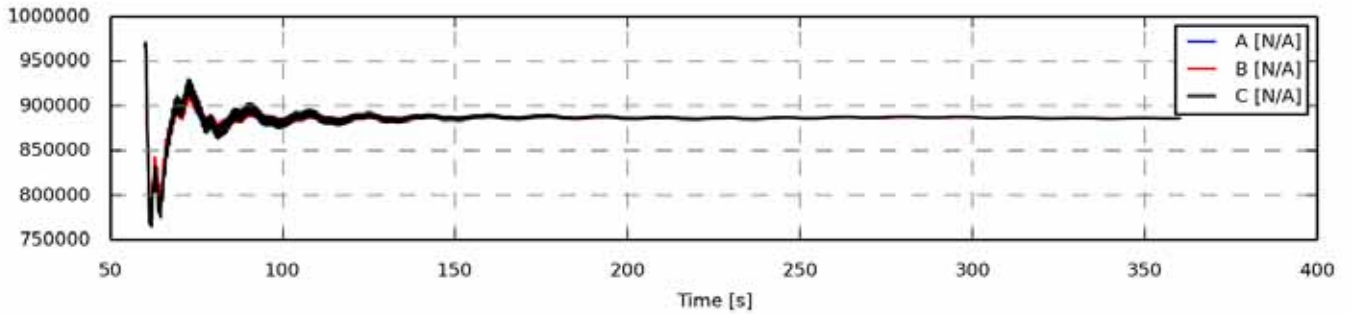


Figure 309 - Full length time series

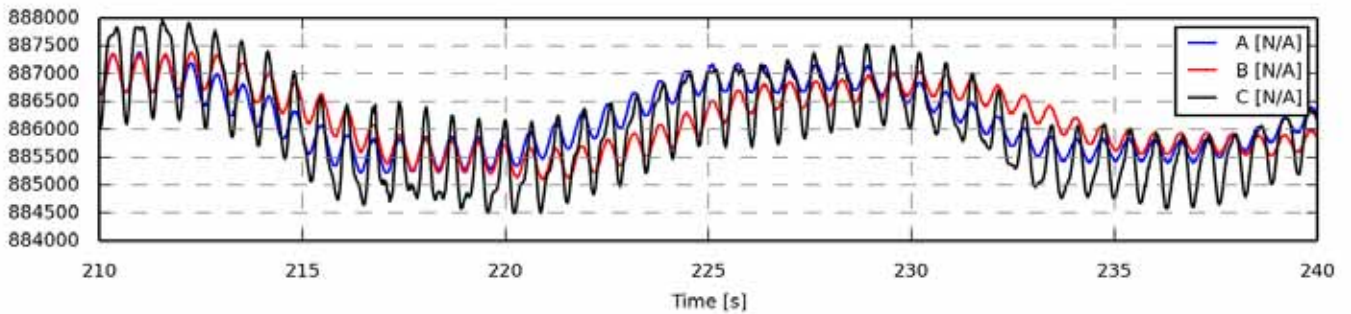


Figure 310 - Zoom of time series

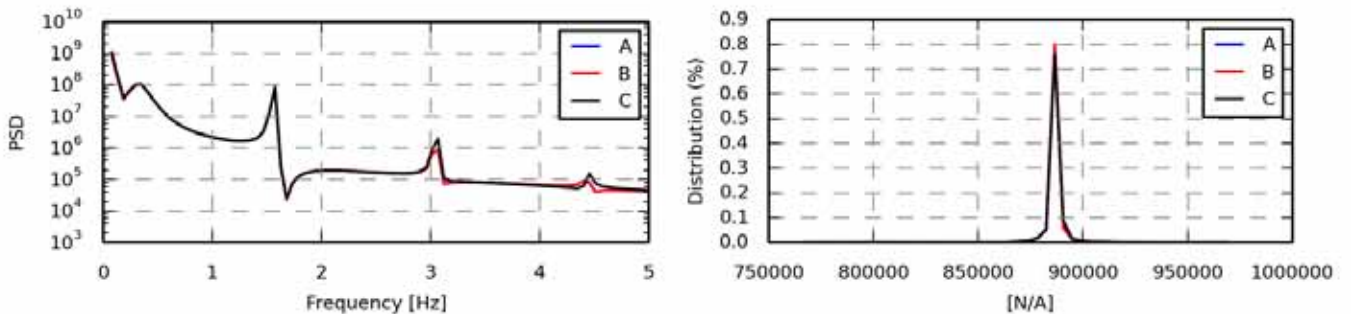


Figure 311 - Power spectrum density

Statistics	A	B	C
Min	7.6743e+05	7.7014e+05	7.6541e+05
Max	9.7074e+05	9.7075e+05	9.7067e+05
Mean	8.8564e+05	8.8546e+05	8.8558e+05
Std	1.1622e+04	1.1450e+04	1.2683e+04
Skewness	-5.3615	-5.2772	-5.0915
Kurtosis	47.1290	46.5009	41.5969

Figure 312 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	2.7848e+04	2.7545e+04	2.8688e+04
Eq (m=4)	4.4302e+04	4.3741e+04	4.5410e+04
Eq (m=6)	7.2104e+04	7.1150e+04	7.3497e+04
Eq (m=8)	9.2602e+04	9.1374e+04	9.4076e+04
Eq (m=10)	1.0791e+05	1.0648e+05	1.0938e+05
Eq (m=12)	1.1966e+05	1.1808e+05	1.2112e+05

Article IV. oc4_p2_load_case_1-3c

Generated 22-04-2014 10:03

Section 4.01 oc4_p2_load_case_1-3c: WSP gl. coo.,Vy [m/s]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3c.sel (28-02-2014 16:58)	3	Free wind speed Vy, gl. coo, of gl. pos 0.00, 0.00, -90.00
B	WAMsim/oc4_p2_load_case_1-3c.sel (01-04-2014 14:25)	3	Free wind speed Vy, gl. coo, of gl. pos 0.00, 0.00, -90.00
C	hawc2/oc4_p2_load_case_1-3c.sel (04-12-2013 11:39)	3	Free wind speed Vy, gl. coo, of gl. pos 0.00, 0.00, -90.00

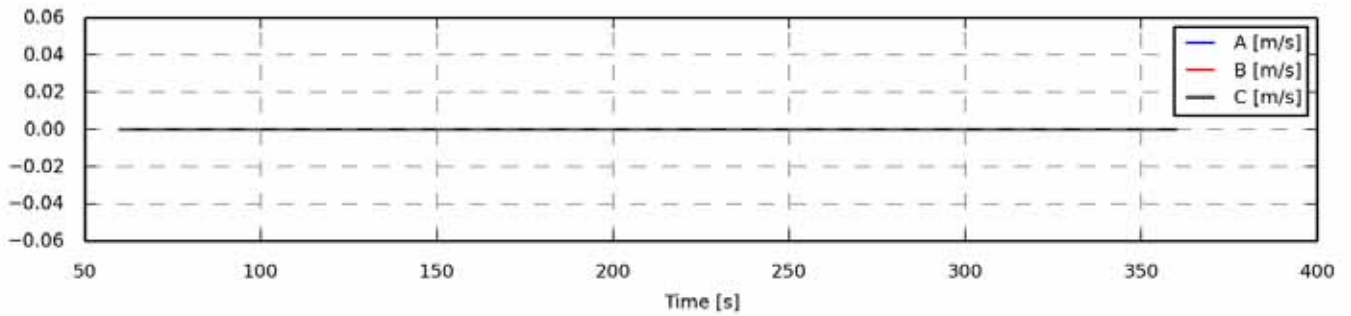


Figure 313 - Full length time series

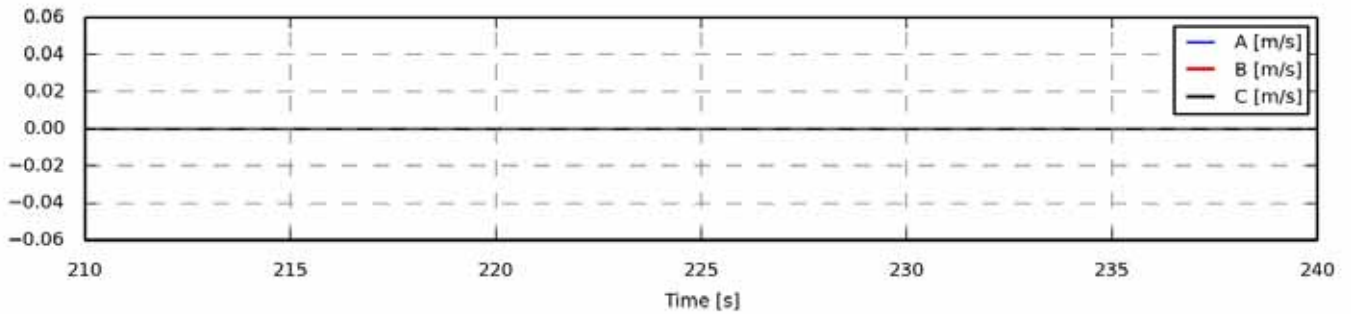


Figure 314 - Zoom of time series

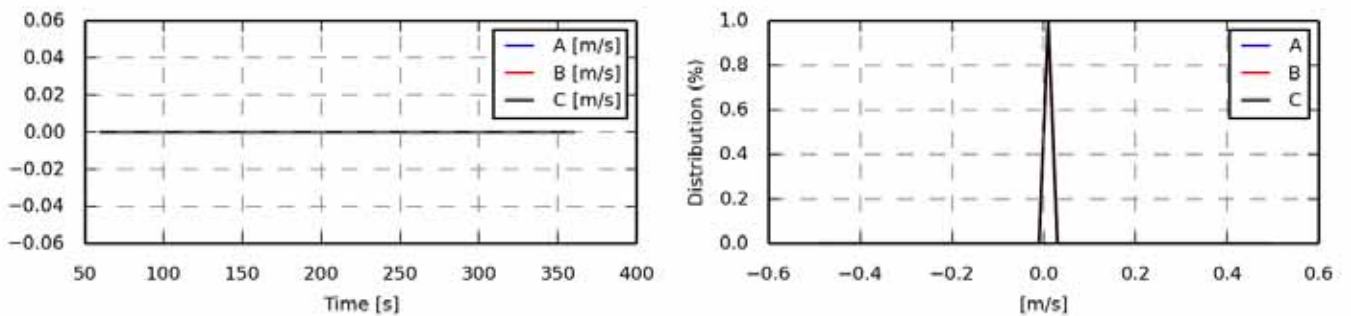


Figure 315 - Power spectrum density

Statistics	A	B	C
Min	0.0000	0.0000	0.0000
Max	0.0000	0.0000	0.0000
Mean	0.0000	0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

Figure 316 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 4.02 oc4_p2_load_case_1-3c: Water surf. [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3c.sel (28-02-2014 16:58)	5	Water surface gl. coo, at gl. coo, x,y= 0.00, 0.00
B	WAMsim/oc4_p2_load_case_1-3c.sel (01-04-2014 14:25)	5	Constant value
C	hawc2/oc4_p2_load_case_1-3c.sel (04-12-2013 11:39)	5	Water surface gl. coo, at gl. coo, x,y= 0.00, 0.00

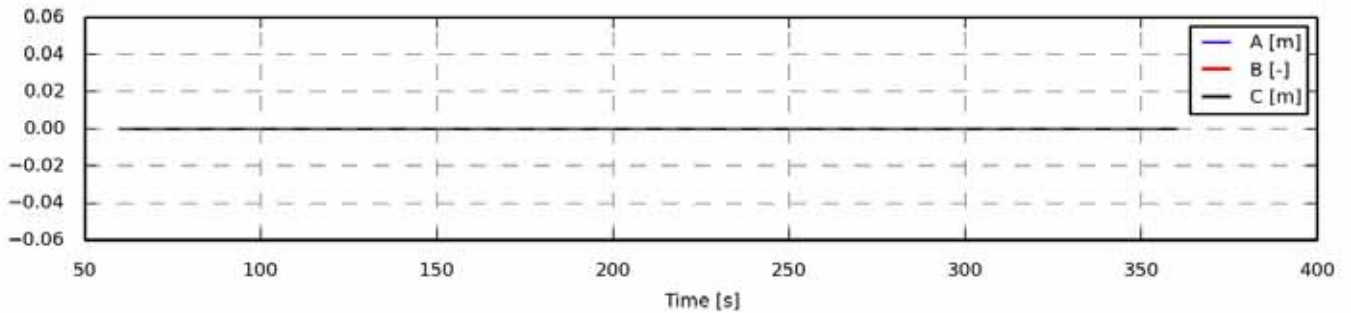


Figure 317 - Full length time series

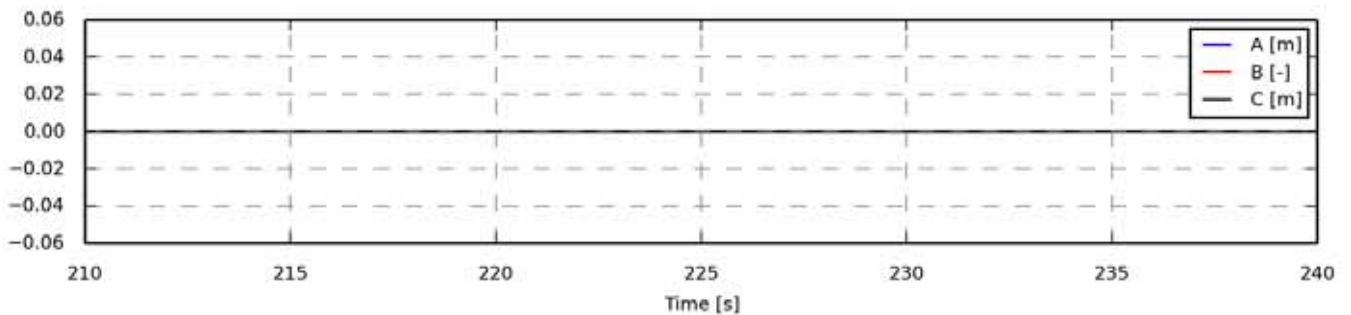


Figure 318 - Zoom of time series

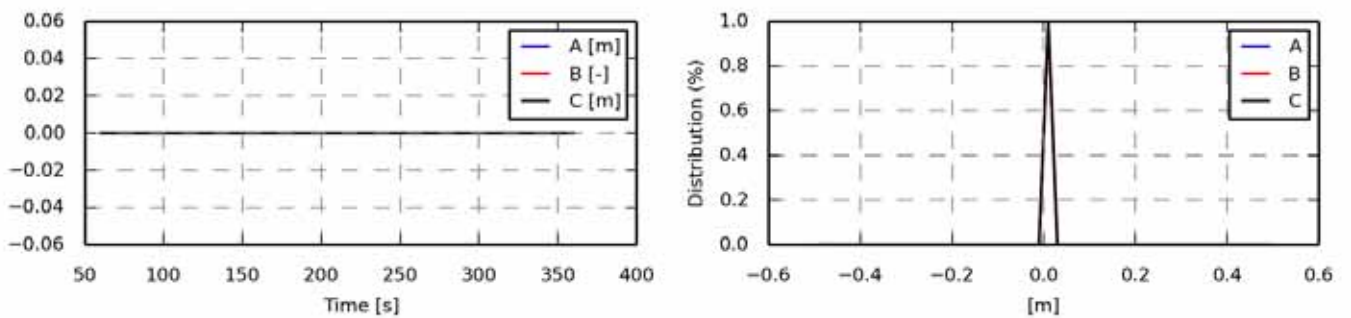


Figure 319 - Power spectrum density

Statistics	A	B	C
Min	0.0000	0.0000	0.0000
Max	0.0000	0.0000	0.0000
Mean	0.0000	0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

Figure 320 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 4.03 oc4_p2_load_case_1-3c: Constant [-]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3c.sel (28-02-2014 16:58)	6	Constant value
B	WAMsim/oc4_p2_load_case_1-3c.sel (01-04-2014 14:25)	6	Constant value
C	hawc2/oc4_p2_load_case_1-3c.sel (04-12-2013 11:39)	6	Constant value

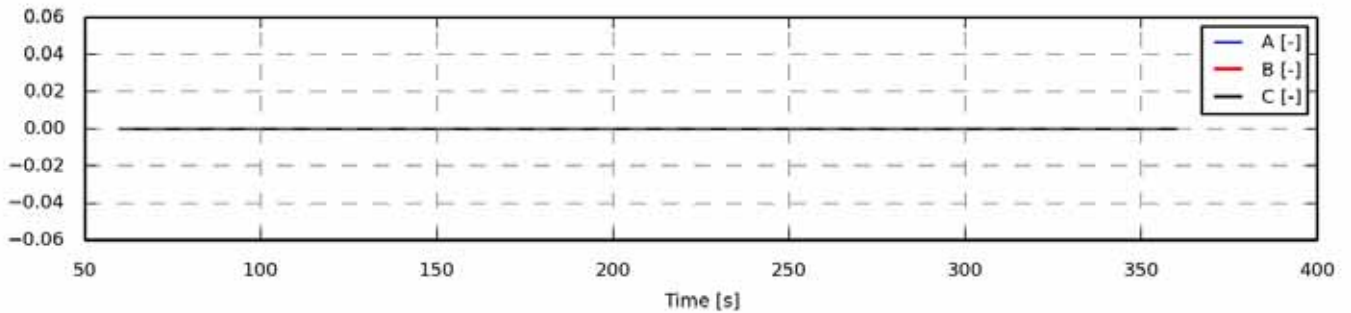


Figure 321 - Full length time series

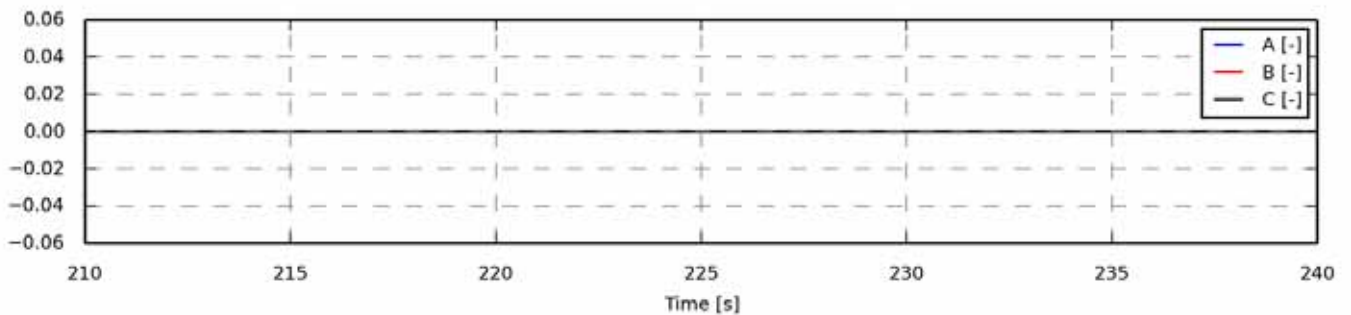


Figure 322 - Zoom of time series

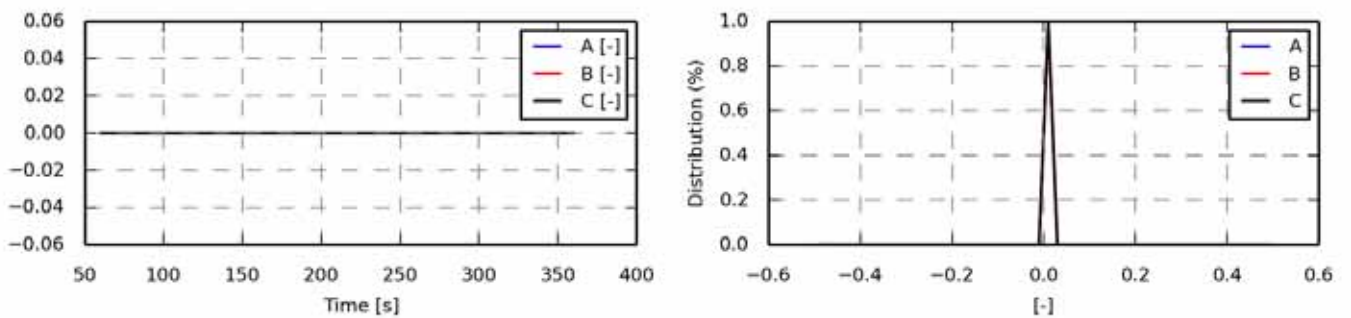


Figure 323 - Power spectrum density

Statistics	A	B	C
Min	0.0000	0.0000	0.0000
Max	0.0000	0.0000	0.0000
Mean	0.0000	0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

Figure 324 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 4.04 oc4_p2_load_case_1-3c: Constant [-]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3c.sel (28-02-2014 16:58)	9	Constant value
B	WAMsim/oc4_p2_load_case_1-3c.sel (01-04-2014 14:25)	9	Constant value
C	hawc2/oc4_p2_load_case_1-3c.sel (04-12-2013 11:39)	9	Constant value

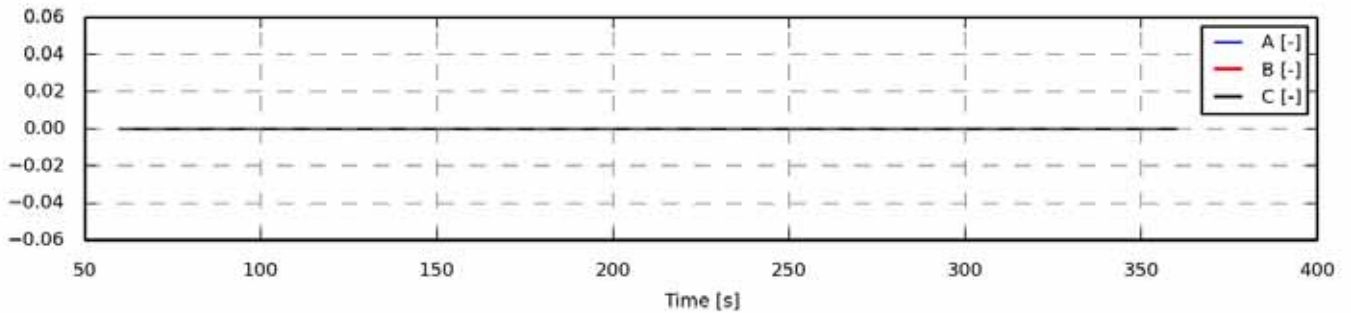


Figure 325 - Full length time series

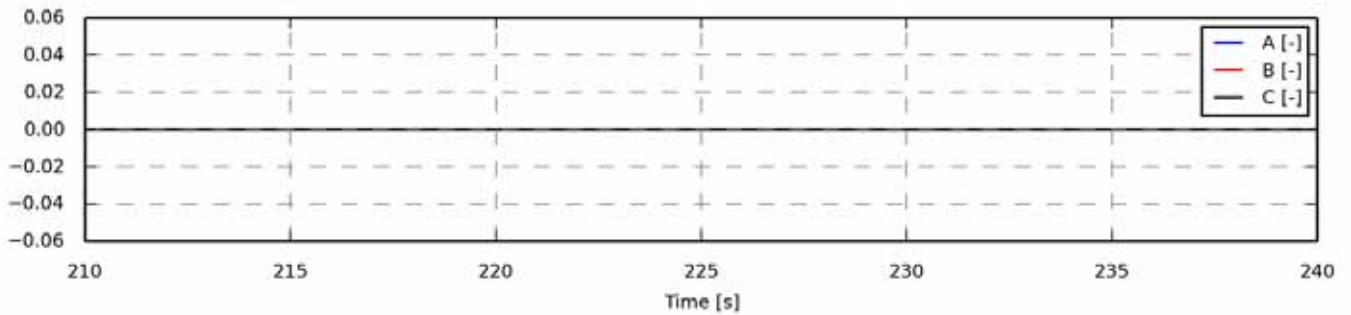


Figure 326 - Zoom of time series

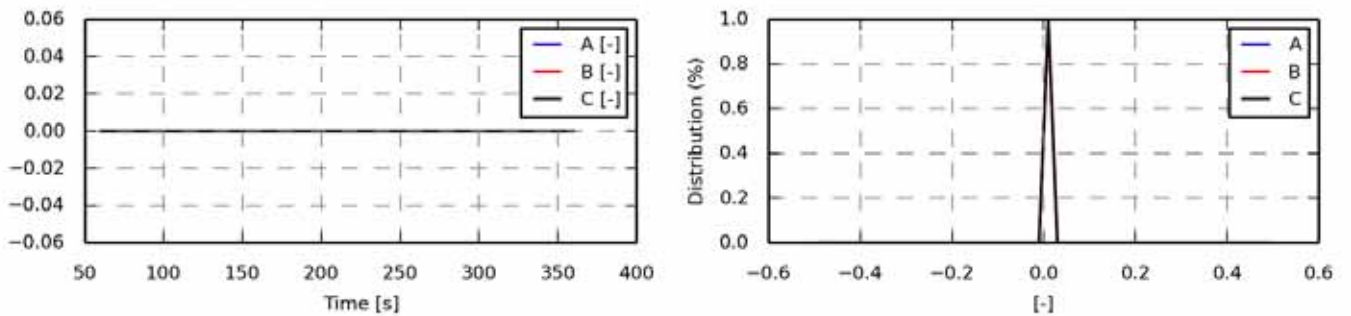


Figure 327 - Power spectrum density

Statistics	A	B	C
Min	0.0000	0.0000	0.0000
Max	0.0000	0.0000	0.0000
Mean	0.0000	0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

Figure 328 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 4.05 oc4_p2_load_case_1-3c: bea1 angle [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3c.sel (28-02-2014 16:58)	14	pitch1 angle
B	WAMsim/oc4_p2_load_case_1-3c.sel (01-04-2014 14:25)	14	pitch1 angle
C	hawc2/oc4_p2_load_case_1-3c.sel (04-12-2013 11:39)	14	pitch1 angle

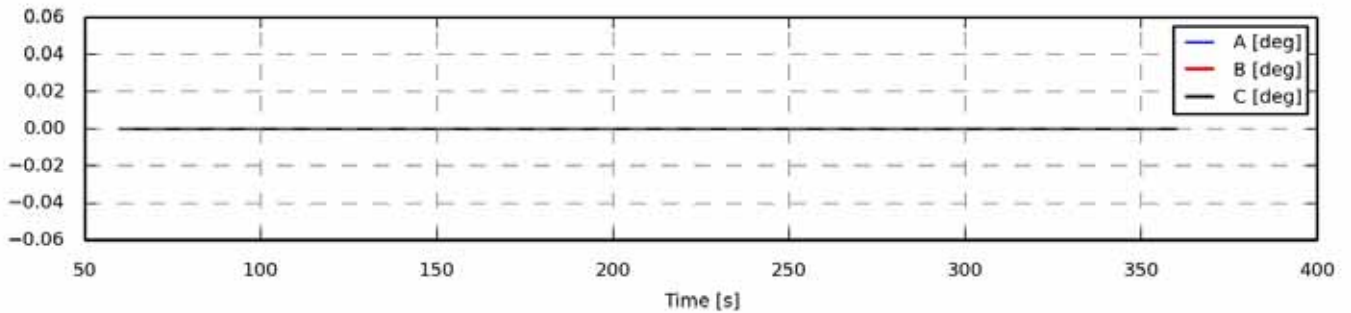


Figure 329 - Full length time series

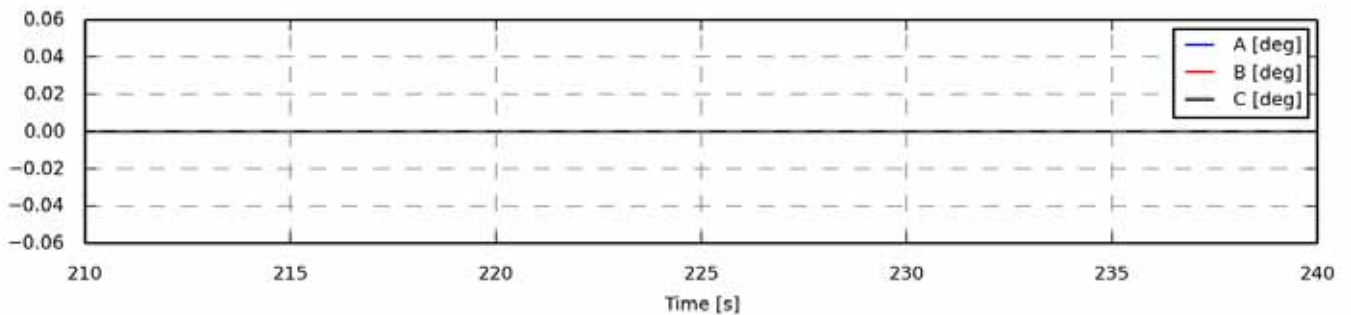


Figure 330 - Zoom of time series

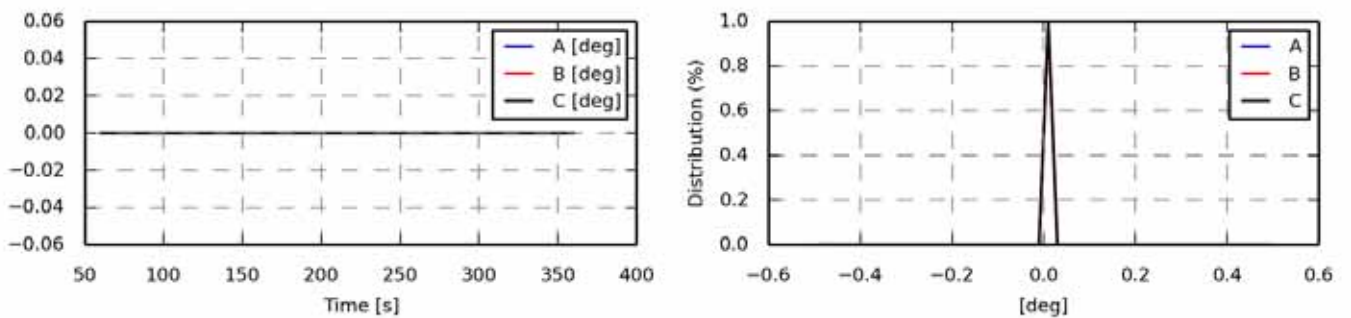


Figure 331 - Power spectrum density

Statistics	A	B	C
Min	0.0000	0.0000	0.0000
Max	0.0000	0.0000	0.0000
Mean	0.0000	0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

Figure 332 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 4.06 oc4_p2_load_case_1-3c: State pos x coo: global [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3c.sel (28-02-2014 16:58)	19	State pos x Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
B	WAMsim/oc4_p2_load_case_1-3c.sel (01-04-2014 14:25)	19	State pos x Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
C	hawc2/oc4_p2_load_case_1-3c.sel (04-12-2013 11:39)	19	State pos x Mbdy:mc E-nr: 8 Z-rel:0.00 coo: global platform translation in surge sway and heave

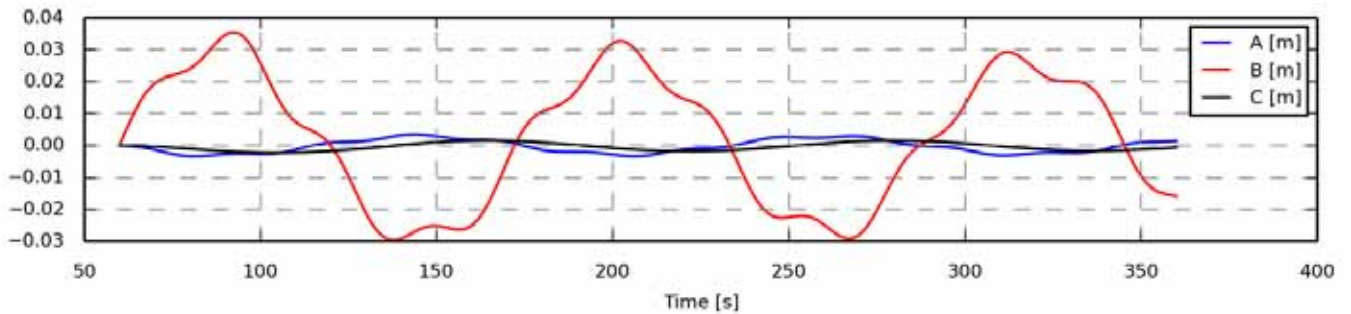


Figure 333 - Full length time series

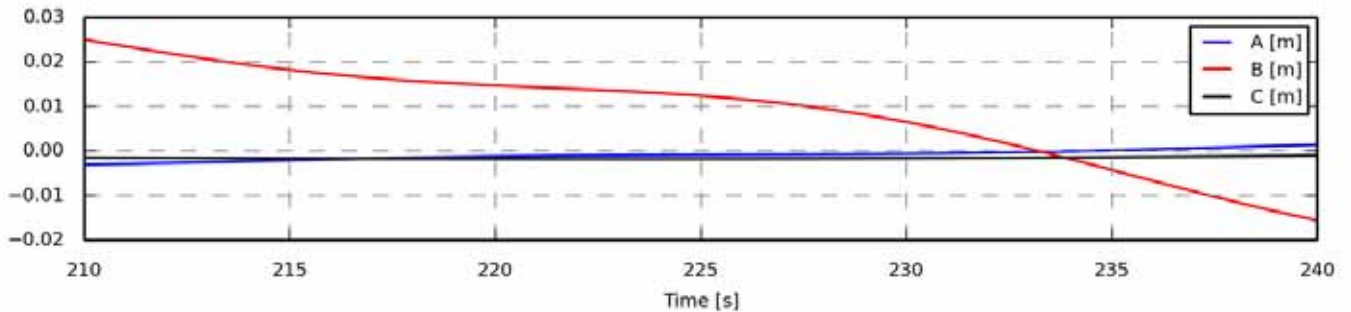


Figure 334 - Zoom of time series

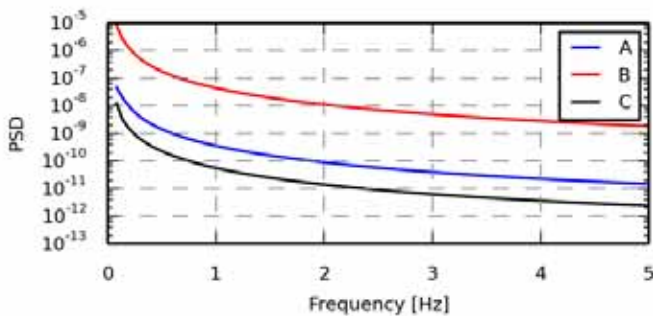


Figure 335 - Power spectrum density

Statistics	A	B	C
Min	-0.0034	-0.0296	-0.0023
Max	0.0035	0.0355	0.0016
Mean	-0.0003	0.0032	-0.0004
Std	0.0021	0.0200	0.0012
Skewness	0.1896	-0.2083	0.2511
Kurtosis	-1.3222	-1.3174	-1.2861

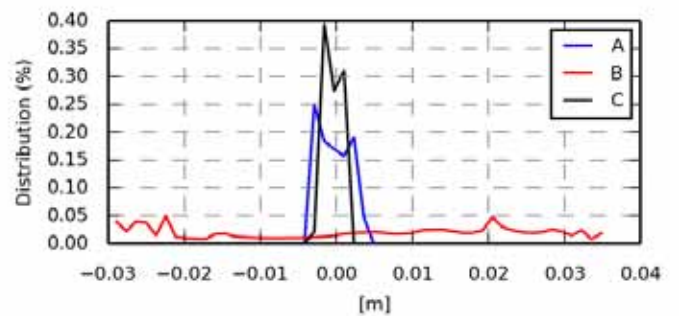


Figure 336 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.0013	0.0122	0.0007
Eq (m=4)	0.0019	0.0181	0.0010
Eq (m=6)	0.0029	0.0271	0.0015
Eq (m=8)	0.0036	0.0333	0.0019
Eq (m=10)	0.0040	0.0377	0.0021
Eq (m=12)	0.0044	0.0410	0.0023

Section 4.07 oc4_p2_load_case_1-3c: State pos y coo: global [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3c.sel (28-02-2014 16:58)	20	State pos y Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
B	WAMsim/oc4_p2_load_case_1-3c.sel (01-04-2014 14:25)	20	State pos y Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
C	hawc2/oc4_p2_load_case_1-3c.sel (04-12-2013 11:39)	20	State pos y Mbdy:mc E-nr: 8 Z-rel:0.00 coo: global platform translation in surge sway and heave

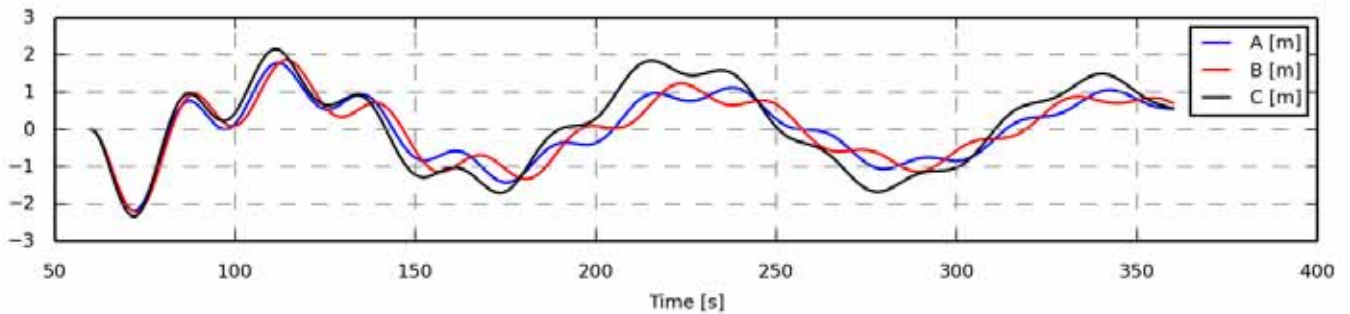


Figure 337 - Full length time series

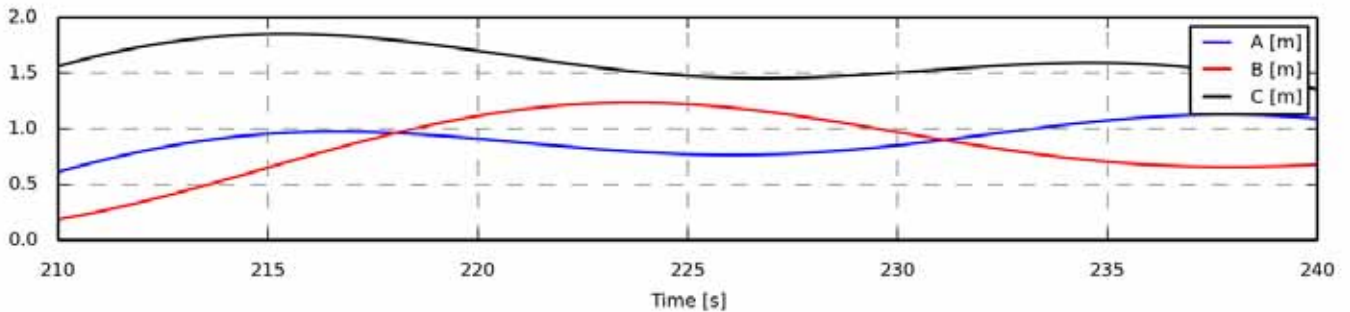


Figure 338 - Zoom of time series

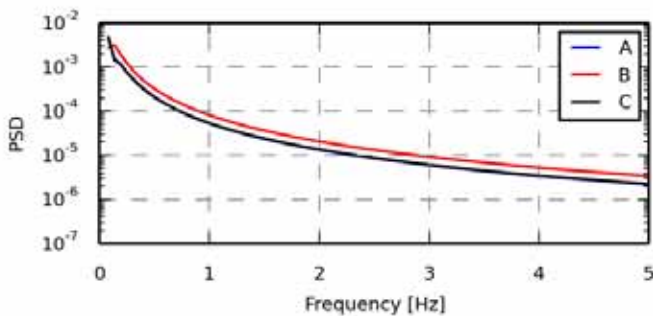


Figure 339 - Power spectrum density

Statistics	A	B	C
Min	-2.1788	-2.2081	-2.3374
Max	1.7881	1.8682	2.1552
Mean	0.0328	0.0341	0.1169
Std	0.8458	0.8548	1.1417
Skewness	-0.2802	-0.2883	-0.1923
Kurtosis	-0.6303	-0.5368	-1.1474

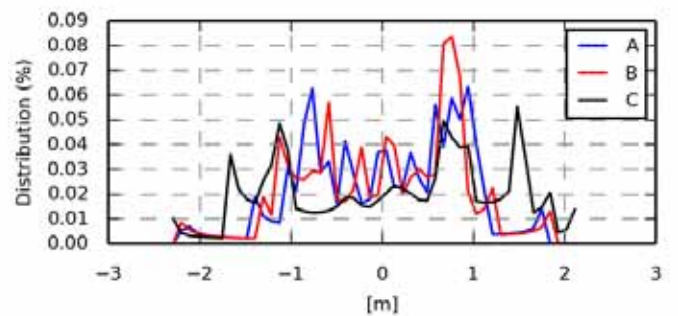


Figure 340 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.6175	0.6296	0.7786
Eq (m=4)	0.9329	0.9516	1.1574
Eq (m=6)	1.4457	1.4775	1.7406
Eq (m=8)	1.8276	1.8712	2.1527
Eq (m=10)	2.1172	2.1705	2.4580
Eq (m=12)	2.3419	2.4029	2.6941

Section 4.08 oc4_p2_load_case_1-3c: State pos z coo: global [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3c.sel (28-02-2014 16:58)	21	State pos z Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
B	WAMsim/oc4_p2_load_case_1-3c.sel (01-04-2014 14:25)	21	State pos z Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
C	hawc2/oc4_p2_load_case_1-3c.sel (04-12-2013 11:39)	21	State pos z Mbdy:mc E-nr: 8 Z-rel:0.00 coo: global platform translation in surge sway and heave

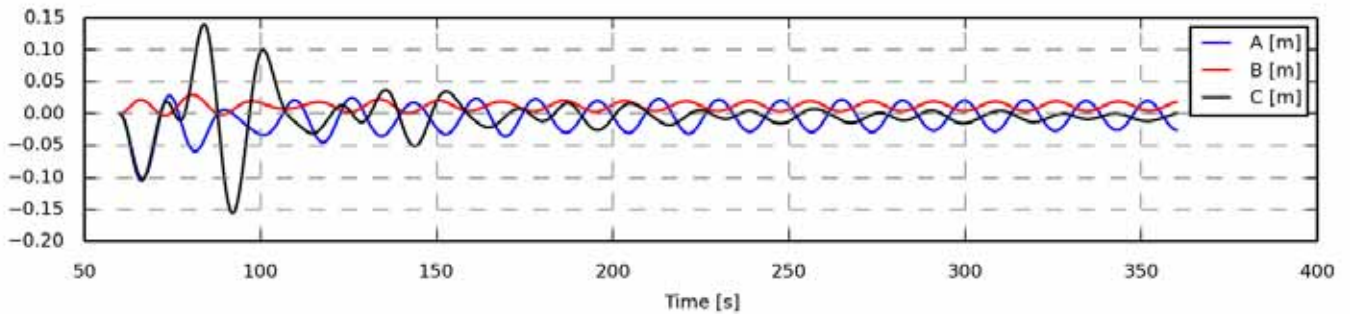


Figure 341 - Full length time series

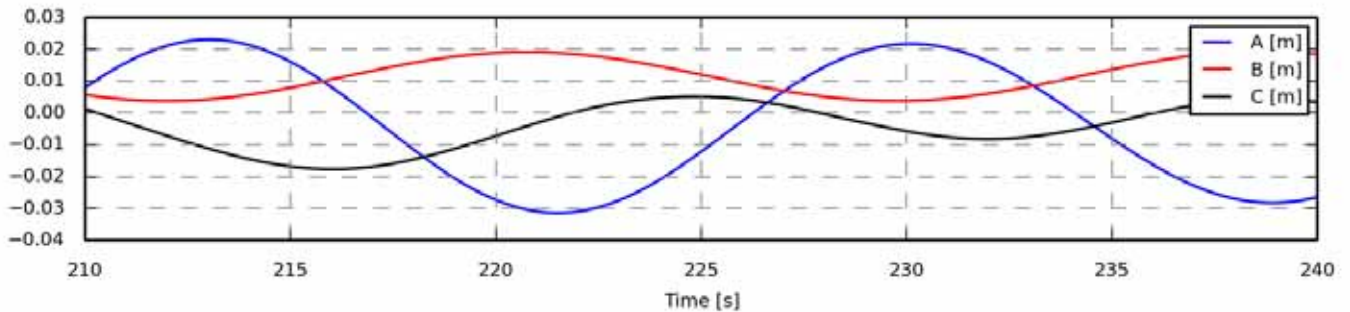


Figure 342 - Zoom of time series

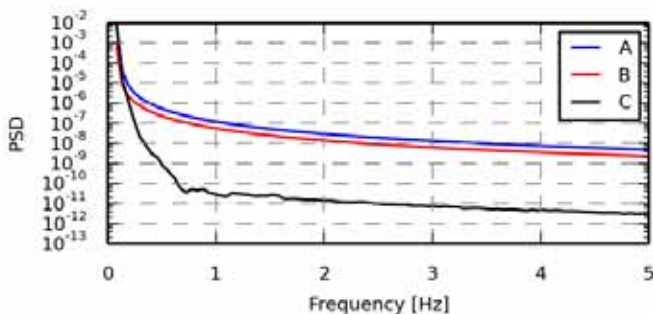


Figure 343 - Power spectrum density

Statistics	A	B	C
Min	-0.1020	-0.0028	-0.1561
Max	0.0278	0.0295	0.1397
Mean	-0.0079	0.0114	-0.0040
Std	0.0224	0.0062	0.0333
Skewness	-0.8815	0.0857	-0.1655
Kurtosis	1.6209	-0.7828	7.5750

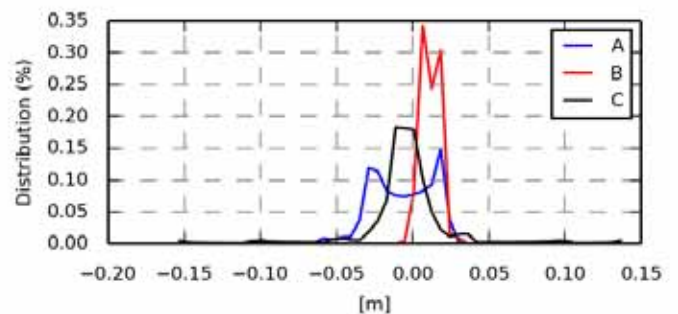


Figure 344 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.0244	0.0071	0.0472
Eq (m=4)	0.0331	0.0095	0.0719
Eq (m=6)	0.0480	0.0131	0.1116
Eq (m=8)	0.0599	0.0159	0.1400
Eq (m=10)	0.0693	0.0181	0.1609
Eq (m=12)	0.0766	0.0198	0.1769

Section 4.09 oc4_p2_load_case_1-3c: proj_ang tx coo: global [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3c.sel (28-02-2014 16:58)	22	State_rot proj_ang tx Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
B	WAMsim/oc4_p2_load_case_1-3c.sel (01-04-2014 14:25)	22	State_rot proj_ang tx Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
C	hawc2/oc4_p2_load_case_1-3c.sel (04-12-2013 11:39)	22	State_rot proj_ang tx Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw

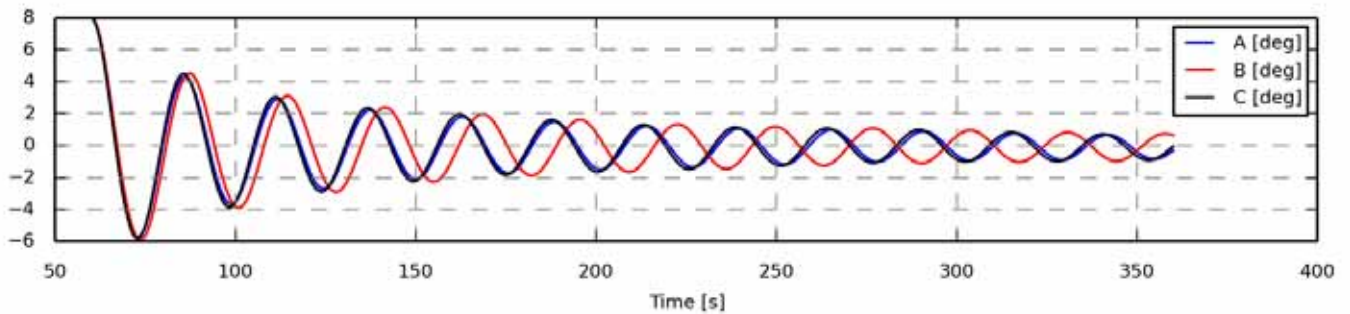


Figure 345 - Full length time series

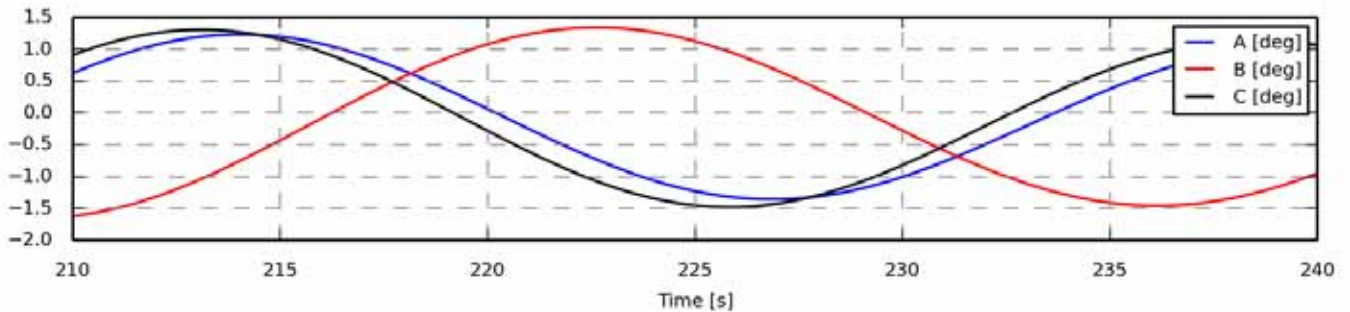


Figure 346 - Zoom of time series

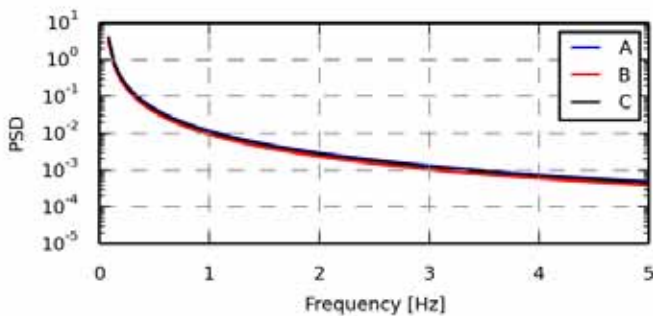


Figure 347 - Power spectrum density

Statistics	A	B	C
Min	-5.6992	-5.9075	-5.8299
Max	7.9996	7.9996	7.9981
Mean	-0.0616	-0.0467	-0.0664
Std	1.7602	1.8899	1.8207
Skewness	0.4466	0.3198	0.3836
Kurtosis	3.4866	2.6193	2.9746

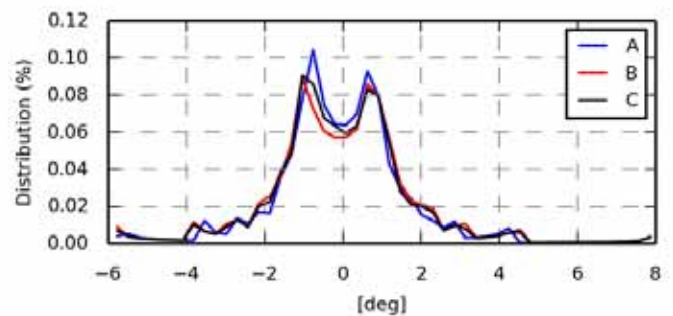


Figure 348 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	2.0219	2.0967	2.0857
Eq (m=4)	3.0688	3.1577	3.1397
Eq (m=6)	4.8613	4.9636	4.9353
Eq (m=8)	6.2236	6.3353	6.2993
Eq (m=10)	7.2557	7.3759	7.3339
Eq (m=12)	8.0524	8.1804	8.1338

Section 4.10 oc4_p2_load_case_1-3c: proj_ang ty coo: global [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3c.sel (28-02-2014 16:58)	23	State_rot proj_ang ty Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
B	WAMsim/oc4_p2_load_case_1-3c.sel (01-04-2014 14:25)	23	State_rot proj_ang ty Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
C	hawc2/oc4_p2_load_case_1-3c.sel (04-12-2013 11:39)	23	State_rot proj_ang ty Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw

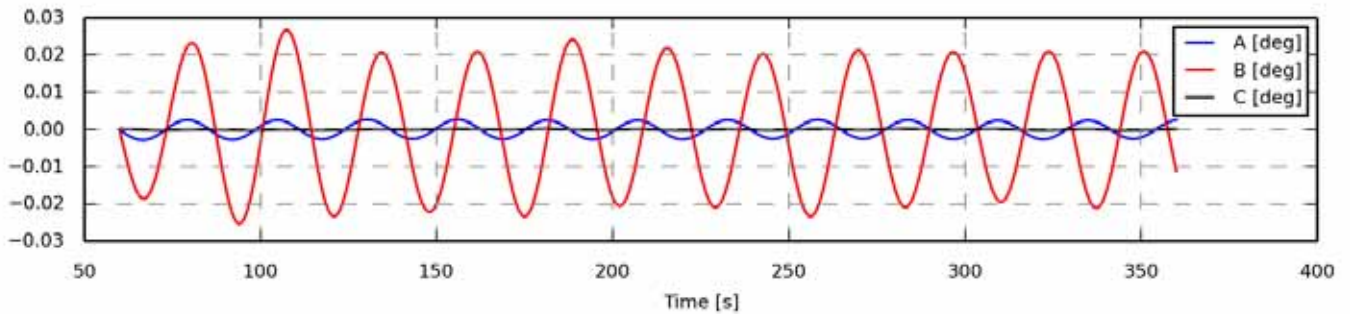


Figure 349 - Full length time series

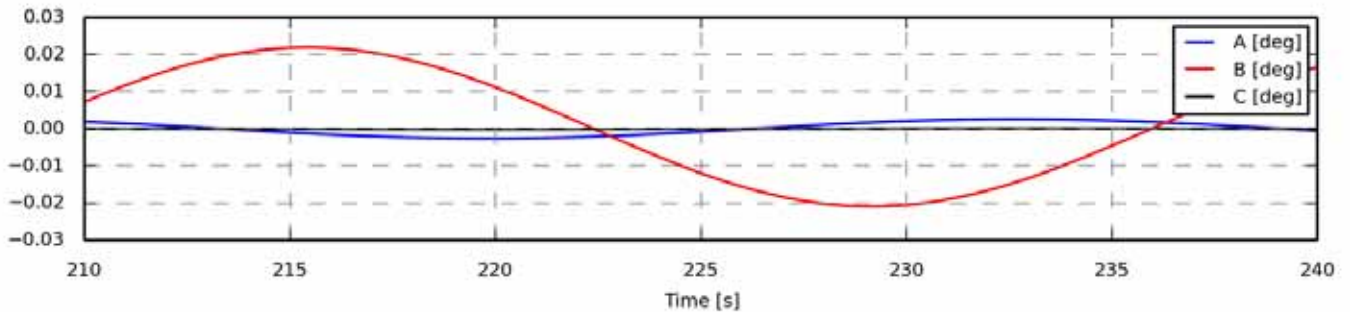


Figure 350 - Zoom of time series

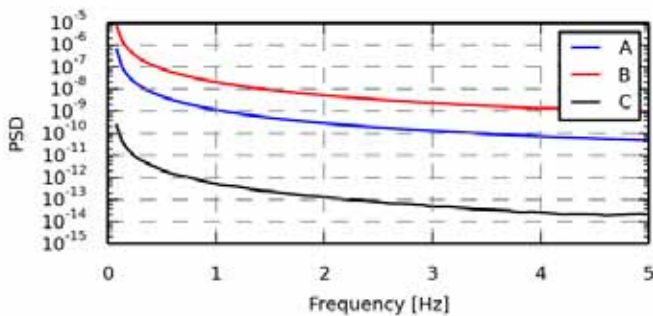


Figure 351 - Power spectrum density

Statistics	A	B	C
Min	-0.0028	-0.0252	-0.0002
Max	0.0027	0.0267	0.0002
Mean	-0.0001	0.0001	-0.0000
Std	0.0018	0.0155	0.0001
Skewness	0.0317	0.0117	0.1733
Kurtosis	-1.4890	-1.4448	-0.8463

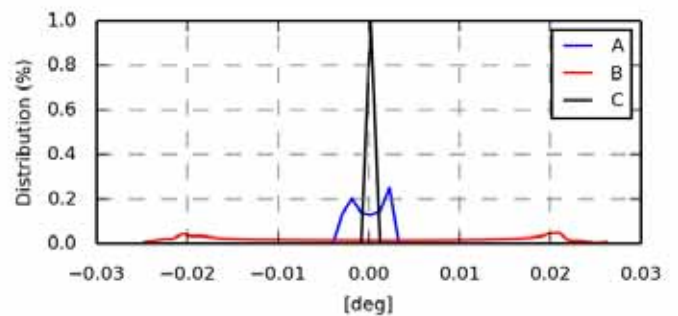


Figure 352 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.0017	0.0146	0.0001
Eq (m=4)	0.0023	0.0193	0.0001
Eq (m=6)	0.0030	0.0256	0.0002
Eq (m=8)	0.0034	0.0296	0.0002
Eq (m=10)	0.0037	0.0323	0.0002
Eq (m=12)	0.0040	0.0344	0.0002

Section 4.11 oc4_p2_load_case_1-3c: proj_ang tz coo: global [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3c.sel (28-02-2014 16:58)	24	State_rot proj_ang tz Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
B	WAMsim/oc4_p2_load_case_1-3c.sel (01-04-2014 14:25)	24	State_rot proj_ang tz Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
C	hawc2/oc4_p2_load_case_1-3c.sel (04-12-2013 11:39)	24	State_rot proj_ang tz Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw

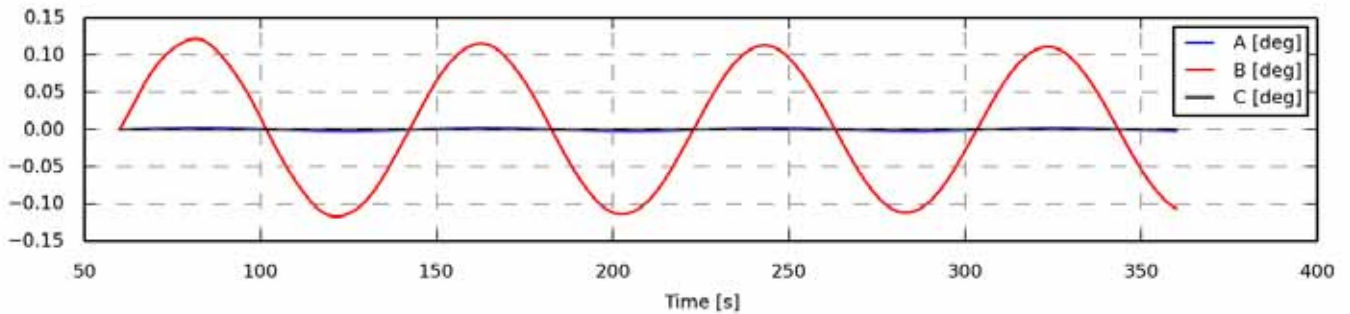


Figure 353 - Full length time series

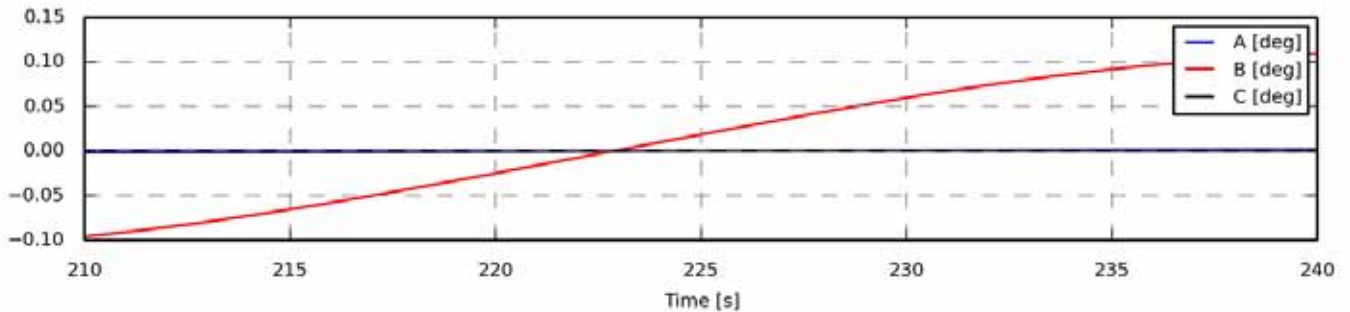


Figure 354 - Zoom of time series

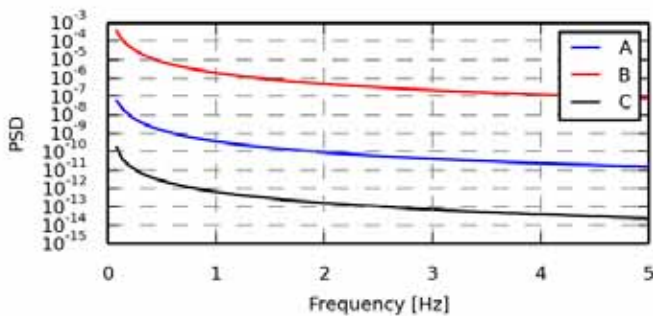


Figure 355 - Power spectrum density

Statistics	A	B	C
Min	-0.0017	-0.1169	-0.0002
Max	0.0020	0.1219	0.0002
Mean	0.0001	0.0069	-0.0000
Std	0.0012	0.0802	0.0001
Skewness	-0.1221	-0.1179	0.1227
Kurtosis	-1.4526	-1.4672	-1.0773

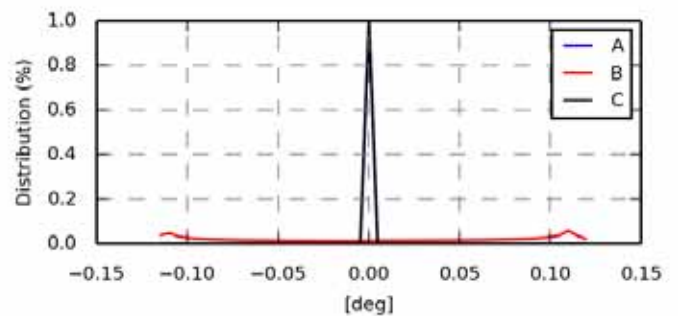


Figure 356 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.0008	0.0518	0.0001
Eq (m=4)	0.0011	0.0748	0.0001
Eq (m=6)	0.0016	0.1082	0.0002
Eq (m=8)	0.0019	0.1304	0.0002
Eq (m=10)	0.0022	0.1459	0.0002
Eq (m=12)	0.0023	0.1573	0.0003

Section 4.12 oc4_p2_load_case_1-3c: Mx coo: towertop [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3c.sel (28-02-2014 16:58)	37	MomentMx Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
B	WAMsim/oc4_p2_load_case_1-3c.sel (01-04-2014 14:25)	37	MomentMx Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
C	hawc2/oc4_p2_load_case_1-3c.sel (04-12-2013 11:39)	37	MomentMx Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment

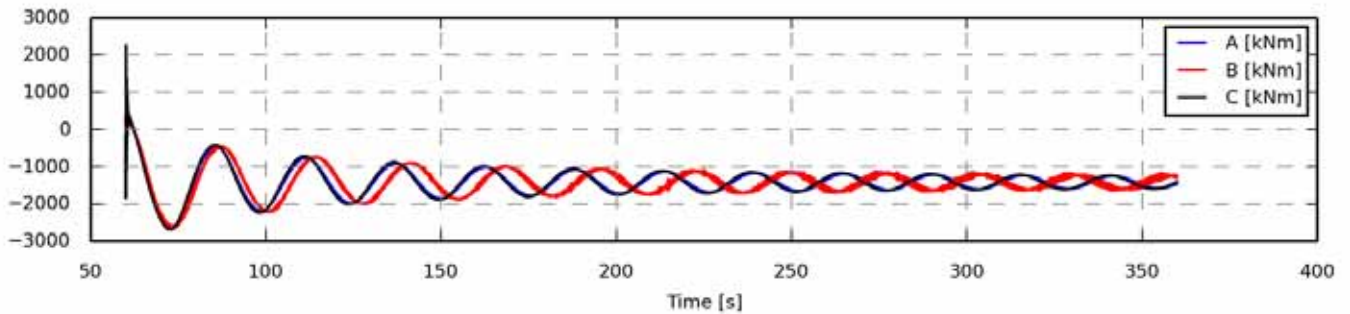


Figure 357 - Full length time series

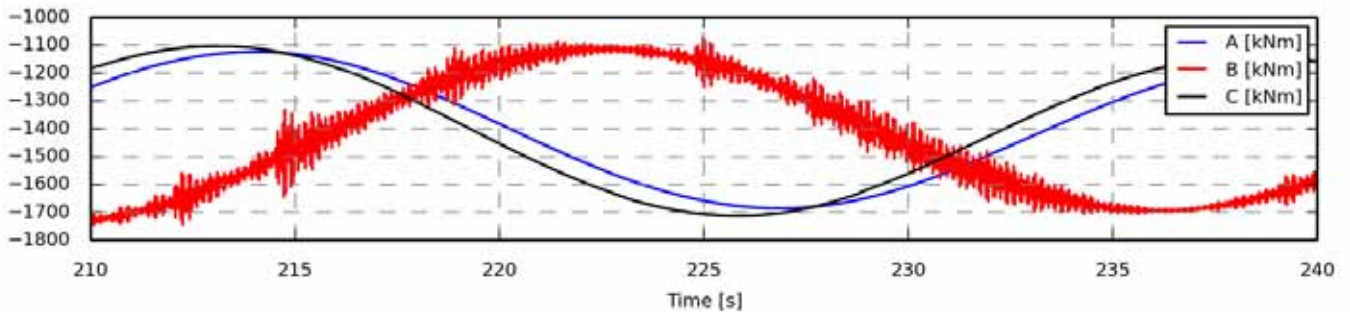


Figure 358 - Zoom of time series

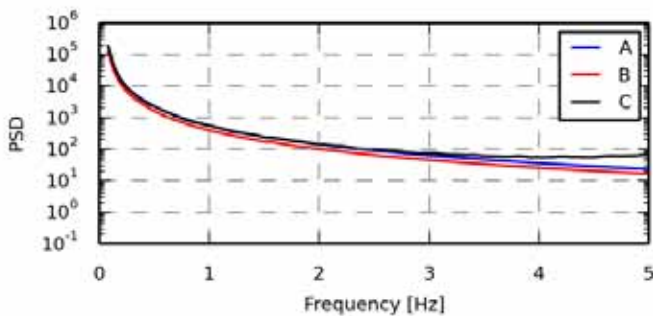


Figure 359 - Power spectrum density

Statistics	A	B	C
Min	-2.6264e+03	-2.6407e+03	-2.6798e+03
Max	365.4813	449.5001	2.2547e+03
Mean	-1.4099e+03	-1.4065e+03	-1.4106e+03
Std	377.9213	389.6396	396.5423
Skewness	0.3832	0.2850	0.4314
Kurtosis	3.3211	2.4608	3.9133

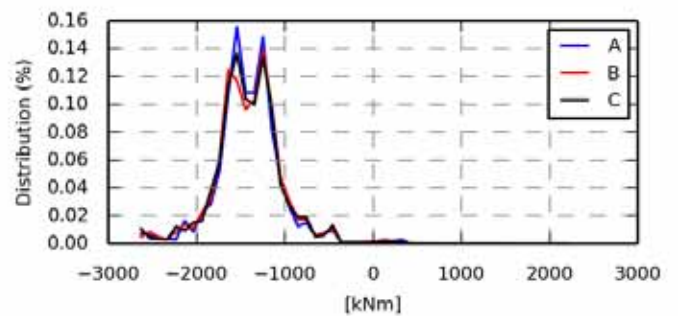


Figure 360 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	441.5988	476.4535	760.9931
Eq (m=4)	670.2487	694.2661	1.1455e+03
Eq (m=6)	1.0617e+03	1.0967e+03	1.7970e+03
Eq (m=8)	1.3593e+03	1.4039e+03	2.2827e+03
Eq (m=10)	1.5847e+03	1.6368e+03	2.6456e+03
Eq (m=12)	1.7587e+03	1.8165e+03	2.9239e+03

Section 4.13 oc4_p2_load_case_1-3c: My coo: towertop [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3c.sel (28-02-2014 16:58)	38	MomentMy Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
B	WAMsim/oc4_p2_load_case_1-3c.sel (01-04-2014 14:25)	38	MomentMy Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
C	hawc2/oc4_p2_load_case_1-3c.sel (04-12-2013 11:39)	38	MomentMy Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment

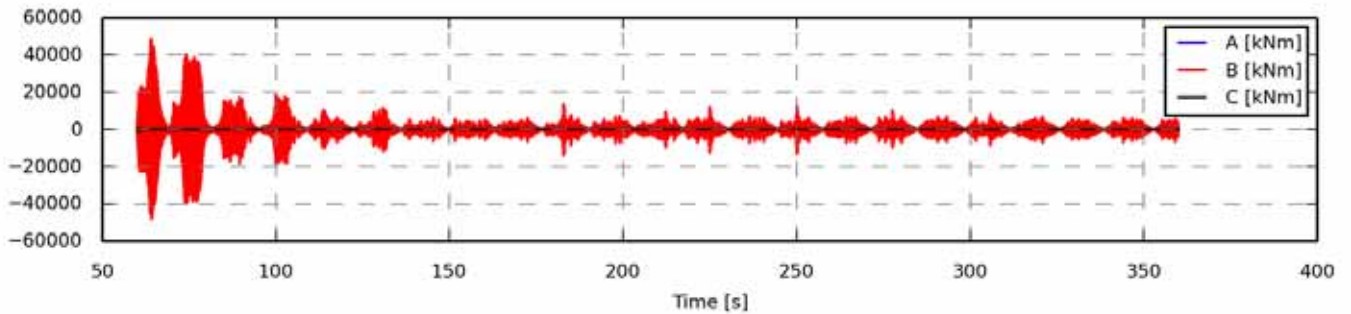


Figure 361 - Full length time series

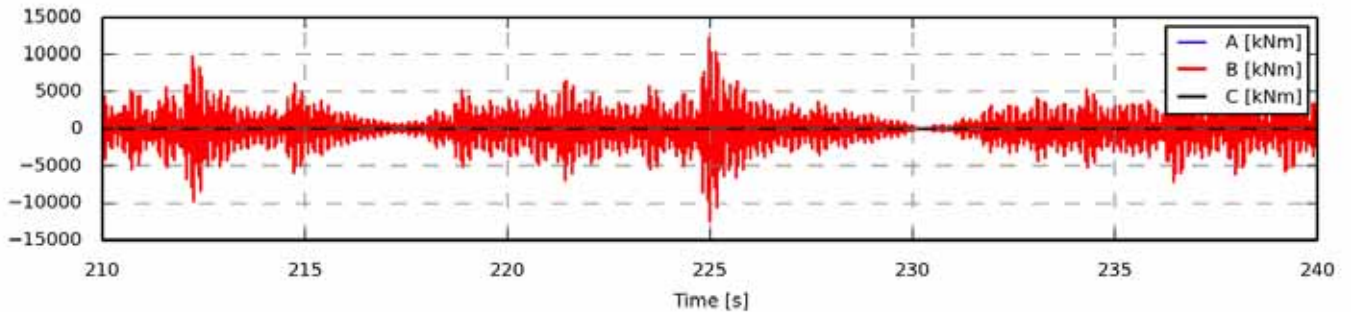


Figure 362 - Zoom of time series

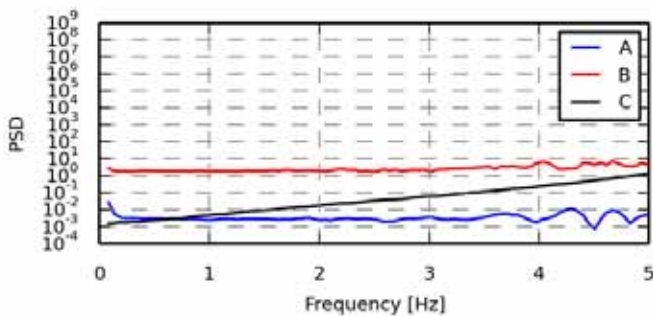


Figure 363 - Power spectrum density

Statistics	A	B	C
Min	-2.2639e+03	-4.8056e+04	-6.7305e+02
Max	2.2835e+03	4.8538e+04	674.1920
Mean	-0.0128	0.0789	-0.0006
Std	141.4876	5.7125e+03	20.6912
Skewness	-0.0094	0.0002	0.4840
Kurtosis	127.7310	19.9212	601.2836

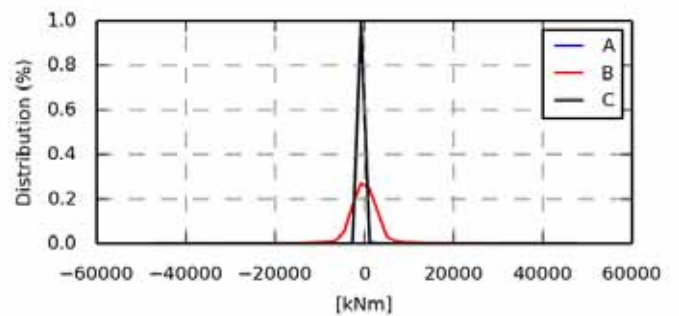


Figure 364 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	1.6788e+03	4.9378e+04	285.1517
Eq (m=4)	1.9989e+03	5.2272e+04	403.9243
Eq (m=6)	2.4481e+03	5.7912e+04	581.3982
Eq (m=8)	2.7493e+03	6.2210e+04	703.5699
Eq (m=10)	2.9668e+03	6.5577e+04	791.8408
Eq (m=12)	3.1325e+03	6.8330e+04	858.4118

Section 4.14 oc4_p2_load_case_1-3c: Mz coo: towertop [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3c.sel (28-02-2014 16:58)	39	MomentMz Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
B	WAMsim/oc4_p2_load_case_1-3c.sel (01-04-2014 14:25)	39	MomentMz Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
C	hawc2/oc4_p2_load_case_1-3c.sel (04-12-2013 11:39)	39	MomentMz Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment

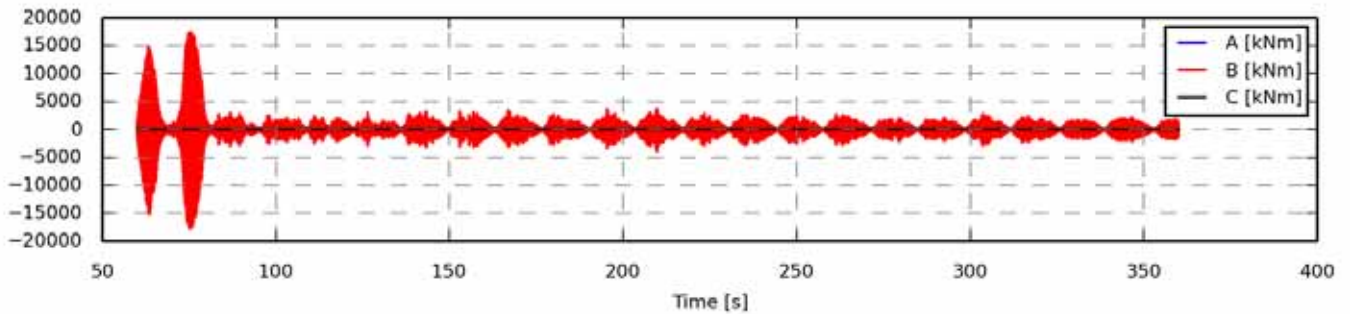


Figure 365 - Full length time series

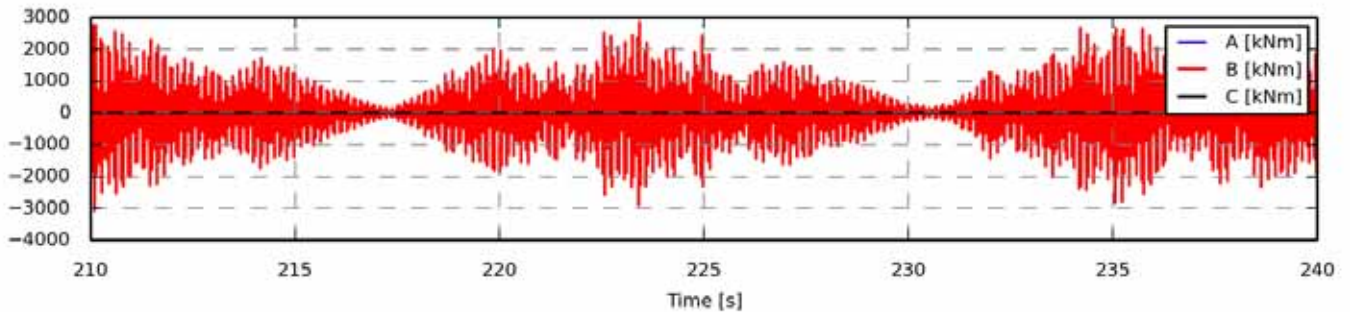


Figure 366 - Zoom of time series

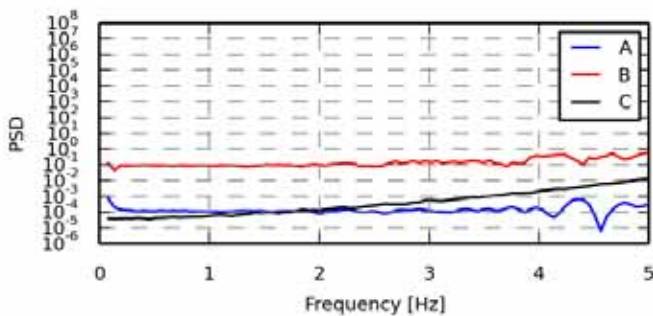


Figure 367 - Power spectrum density

Statistics	A	B	C
Min	-3.8891e+02	-1.7754e+04	-68.0445
Max	391.1936	1.7476e+04	68.7101
Mean	0.0026	0.0059	0.0007
Std	31.2166	2.0527e+03	2.1735
Skewness	0.0080	-0.0003	0.7708
Kurtosis	93.0782	25.4828	585.5558

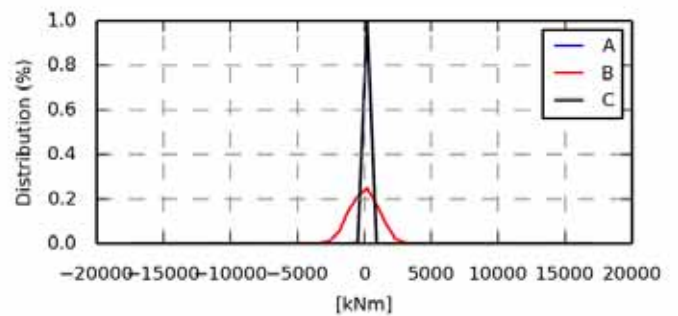


Figure 368 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	353.8334	1.8383e+04	30.0581
Eq (m=4)	408.7344	1.9878e+04	42.4133
Eq (m=6)	480.7003	2.2329e+04	60.6767
Eq (m=8)	525.9636	2.4051e+04	73.1068
Eq (m=10)	557.3495	2.5333e+04	82.0177
Eq (m=12)	580.6254	2.6333e+04	88.7034

Section 4.15 oc4_p2_load_case_1-3c: Mx coo: tower [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3c.sel (28-02-2014 16:58)	43	MomentMx Mbdy:tower nodenr: 1 coo: tower tower base bending moment
B	WAMsim/oc4_p2_load_case_1-3c.sel (01-04-2014 14:25)	43	MomentMx Mbdy:tower nodenr: 1 coo: tower tower base bending moment
C	hawc2/oc4_p2_load_case_1-3c.sel (04-12-2013 11:39)	43	MomentMx Mbdy:tower nodenr: 1 coo: tower tower base bending moment

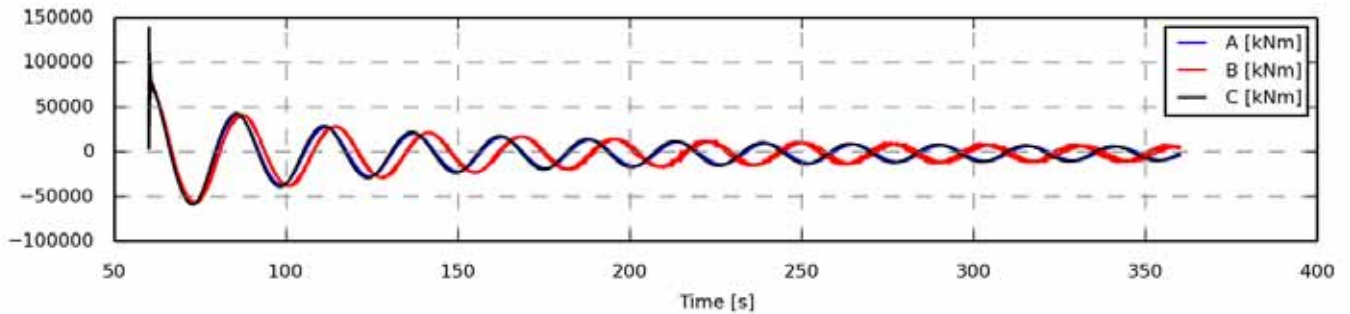


Figure 369 - Full length time series

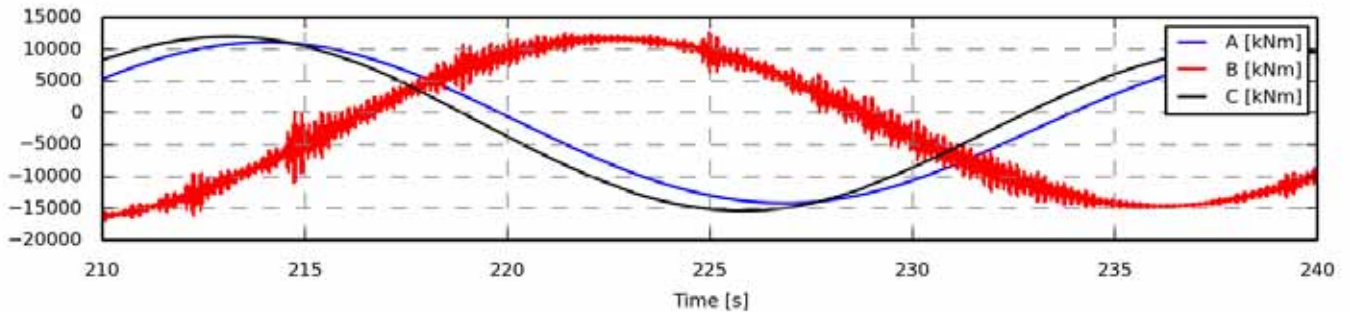


Figure 370 - Zoom of time series

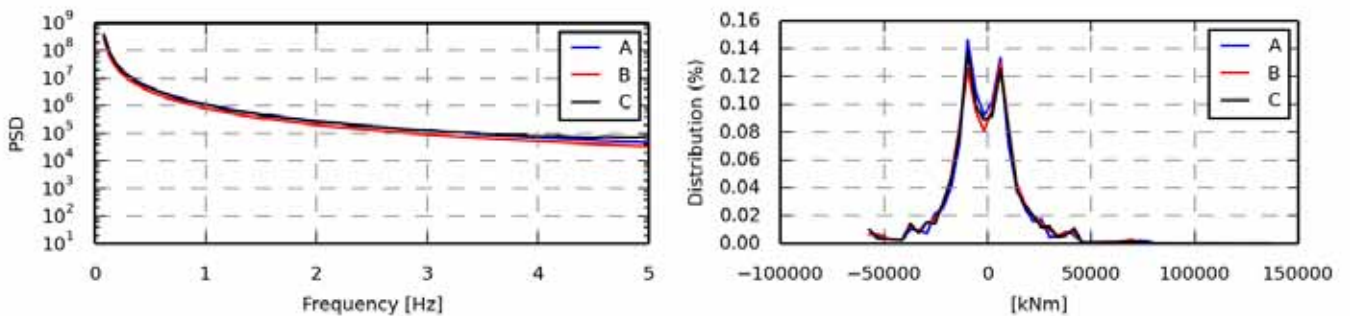


Figure 371 - Power spectrum density

Statistics	A	B	C
Min	-5.6760e+04	-5.7756e+04	-5.9043e+04
Max	7.7032e+04	8.0528e+04	1.3854e+05
Mean	-1.8177e+03	-1.6719e+03	-1.8547e+03
Std	1.7004e+04	1.7670e+04	1.7783e+04
Skewness	0.3661	0.2633	0.3643
Kurtosis	3.3003	2.4631	3.3782

Figure 372 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	1.9748e+04	2.0933e+04	2.8835e+04
Eq (m=4)	2.9972e+04	3.1061e+04	4.3603e+04
Eq (m=6)	4.7478e+04	4.9085e+04	6.9501e+04
Eq (m=8)	6.0784e+04	6.2827e+04	8.9396e+04
Eq (m=10)	7.0864e+04	7.3244e+04	1.0445e+05
Eq (m=12)	7.8645e+04	8.1286e+04	1.1604e+05

Section 4.16 oc4_p2_load_case_1-3c: My coo: tower [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3c.sel (28-02-2014 16:58)	44	MomentMy Mbdy:tower nodenr: 1 coo: tower tower base bending moment
B	WAMsim/oc4_p2_load_case_1-3c.sel (01-04-2014 14:25)	44	MomentMy Mbdy:tower nodenr: 1 coo: tower tower base bending moment
C	hawc2/oc4_p2_load_case_1-3c.sel (04-12-2013 11:39)	44	MomentMy Mbdy:tower nodenr: 1 coo: tower tower base bending moment

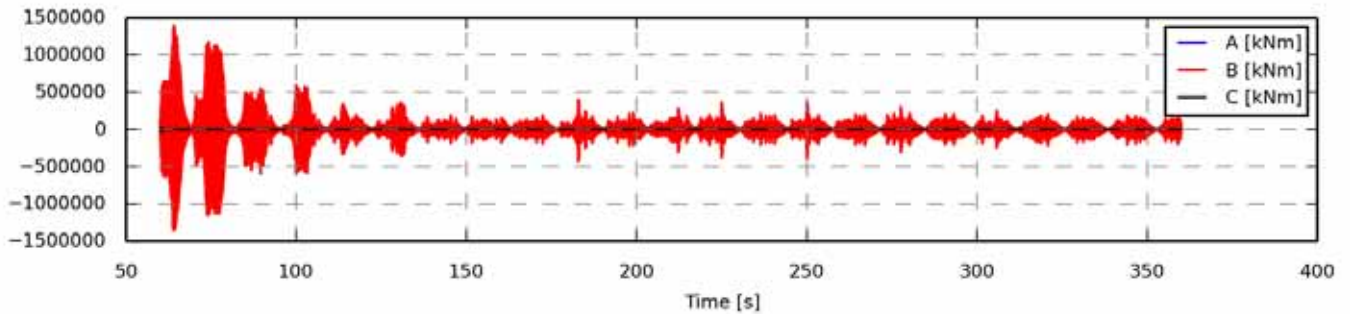


Figure 373 - Full length time series

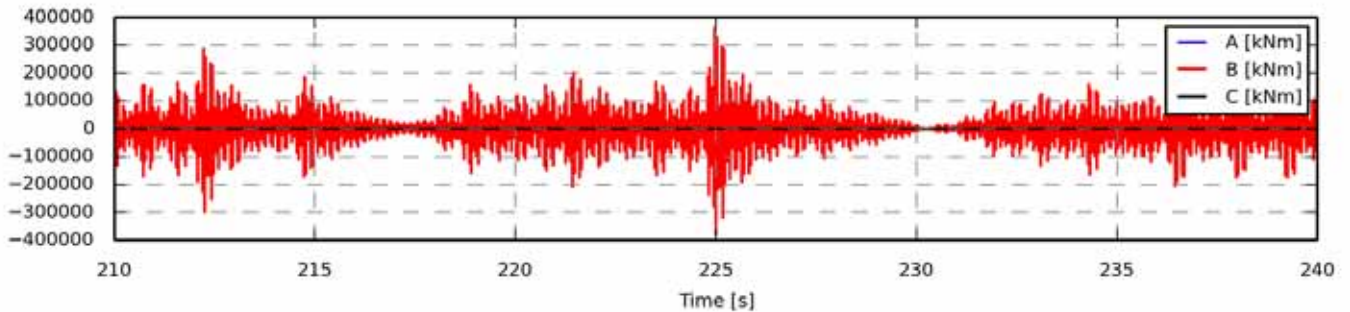


Figure 374 - Zoom of time series

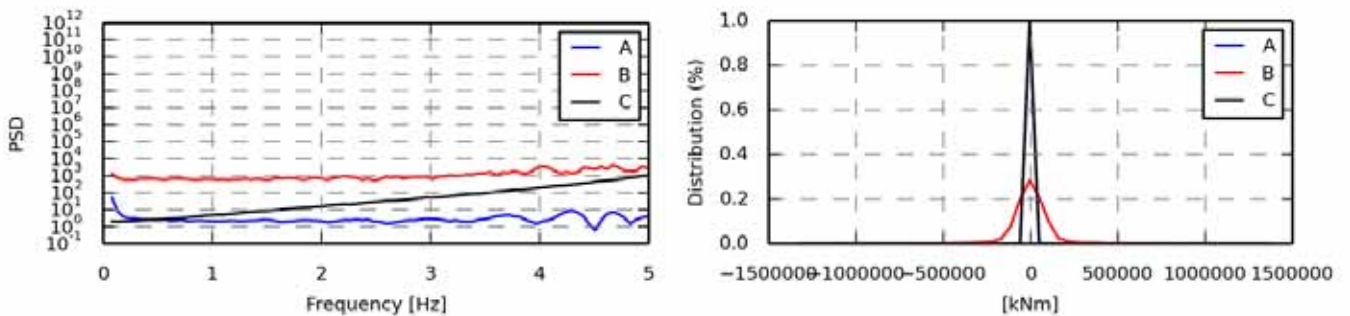


Figure 375 - Power spectrum density

Statistics	A	B	C
Min	-6.2740e+04	-1.3500e+06	-1.8016e+04
Max	6.1532e+04	1.3950e+06	1.8073e+04
Mean	-0.5181	2.0853	-0.0595
Std	3.8986e+03	1.6909e+05	552.1733
Skewness	-0.0139	0.0003	0.2383
Kurtosis	126.5202	18.4992	600.1392

Figure 376 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	4.6204e+04	1.4521e+06	7.6057e+03
Eq (m=4)	5.5038e+04	1.5291e+06	1.0780e+04
Eq (m=6)	6.7468e+04	1.6861e+06	1.5526e+04
Eq (m=8)	7.5811e+04	1.8062e+06	1.8795e+04
Eq (m=10)	8.1827e+04	1.8997e+06	2.1160e+04
Eq (m=12)	8.6401e+04	1.9756e+06	2.2946e+04

Section 4.17 oc4_p2_load_case_1-3c: Mz coo: tower [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3c.sel (28-02-2014 16:58)	45	MomentMz Mbdy:tower nodenr: 1 coo: tower tower base bending moment
B	WAMsim/oc4_p2_load_case_1-3c.sel (01-04-2014 14:25)	45	MomentMz Mbdy:tower nodenr: 1 coo: tower tower base bending moment
C	hawc2/oc4_p2_load_case_1-3c.sel (04-12-2013 11:39)	45	MomentMz Mbdy:tower nodenr: 1 coo: tower tower base bending moment

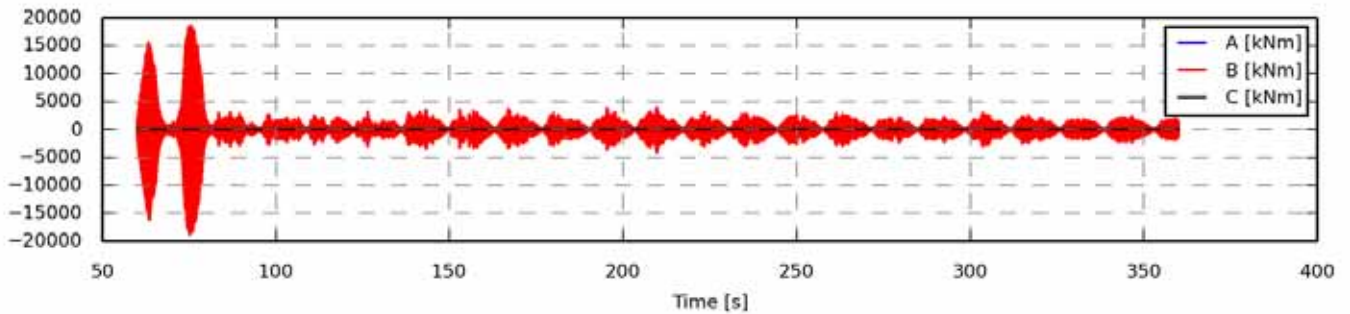


Figure 377 - Full length time series

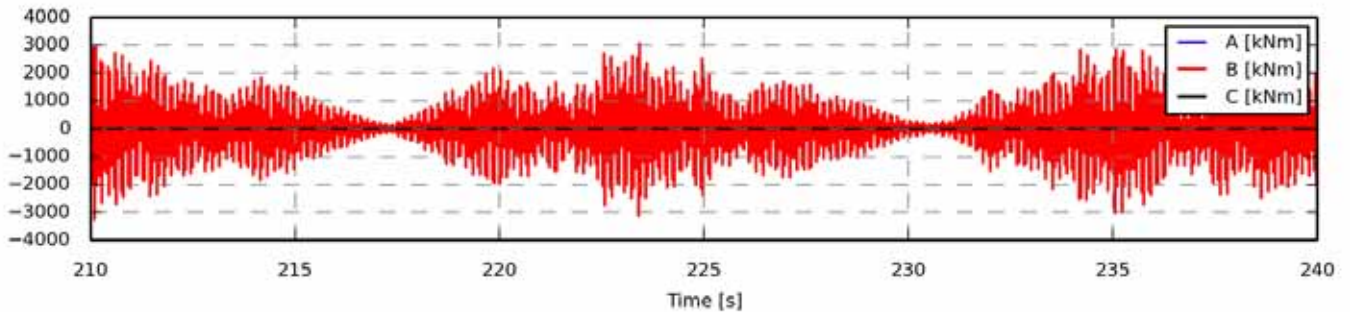


Figure 378 - Zoom of time series

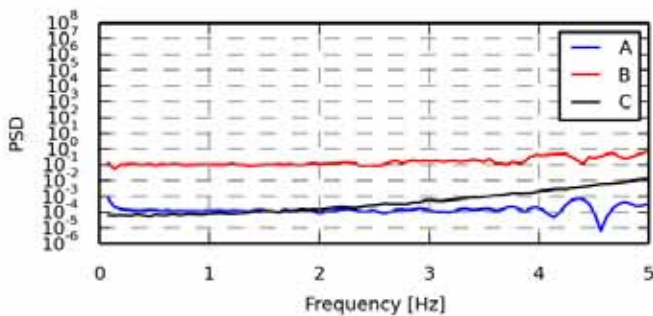


Figure 379 - Power spectrum density

Statistics	A	B	C
Min	-4.2274e+02	-1.8810e+04	-68.2354
Max	427.8368	1.8527e+04	68.9530
Mean	0.0027	0.0004	0.0007
Std	33.7491	2.1800e+03	2.1879
Skewness	0.0075	-0.0002	0.8215
Kurtosis	93.6144	25.3159	586.2858

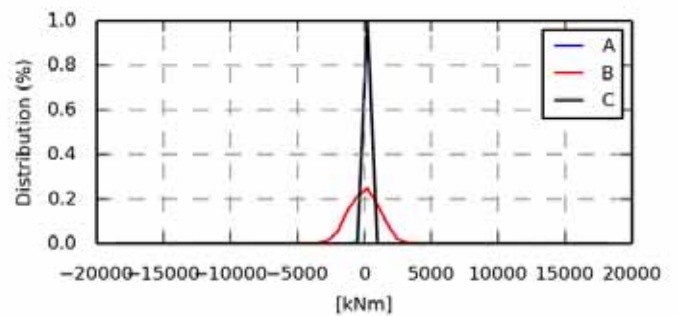


Figure 380 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	382.6419	1.9501e+04	30.2387
Eq (m=4)	442.3042	2.1075e+04	42.6787
Eq (m=6)	520.6410	2.3662e+04	61.0733
Eq (m=8)	570.0309	2.5481e+04	73.5918
Eq (m=10)	604.3522	2.6838e+04	82.5610
Eq (m=12)	629.8478	2.7898e+04	89.2841

Section 4.18 oc4_p2_load_case_1-3c: ESYS line1_1 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3c.sel (28-02-2014 16:58)	55	ESYS line1_1 SENSOR 4
B	WAMsim/oc4_p2_load_case_1-3c.sel (01-04-2014 14:25)	55	ESYS line1_1 SENSOR 4
C	hawc2/oc4_p2_load_case_1-3c.sel (04-12-2013 11:39)	55	ESYS line1_1 SENSOR 4

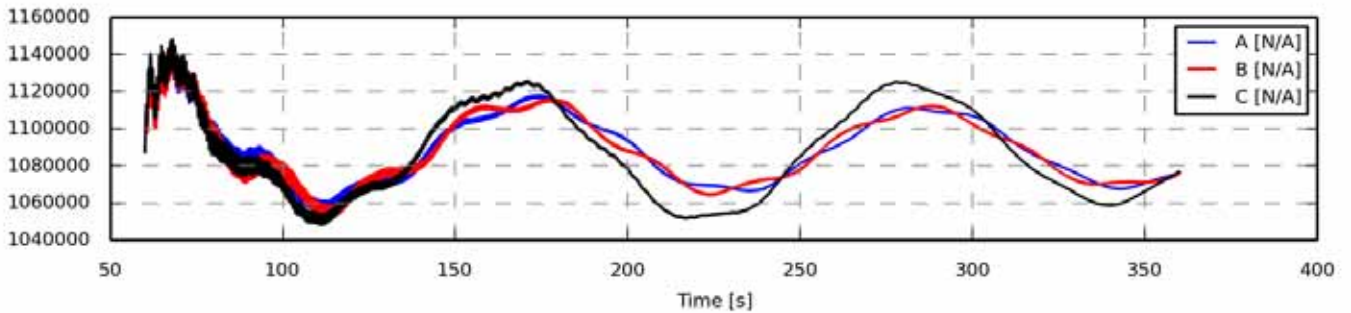


Figure 381 - Full length time series

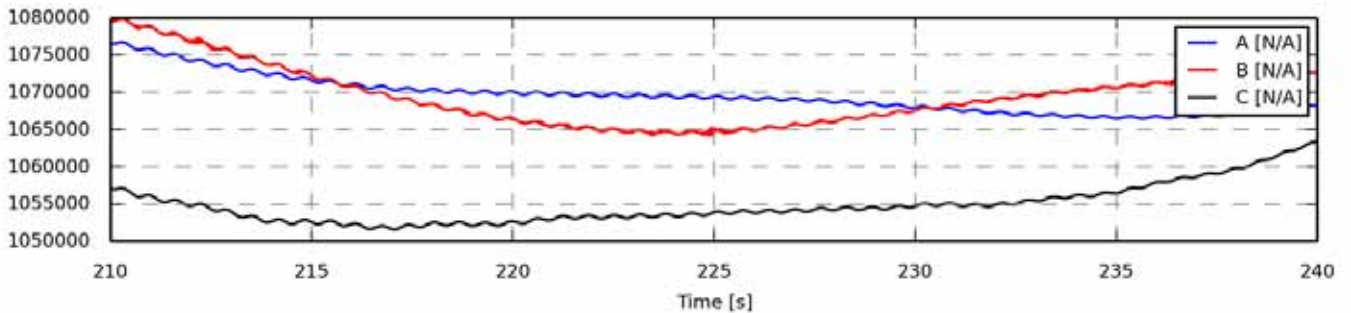


Figure 382 - Zoom of time series

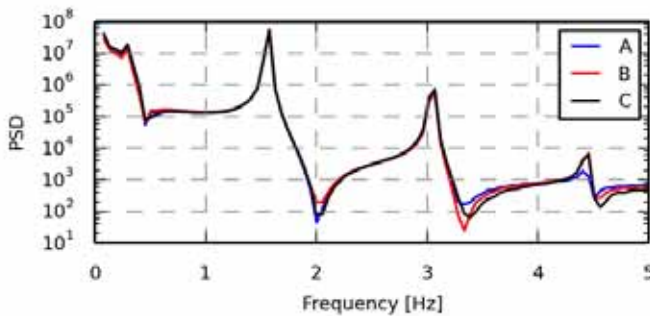


Figure 383 - Power spectrum density

Statistics	A	B	C
Min	1.0555e+06	1.0524e+06	1.0484e+06
Max	1.1448e+06	1.1453e+06	1.1480e+06
Mean	1.0891e+06	1.0887e+06	1.0875e+06
Std	1.8361e+04	1.8381e+04	2.4940e+04
Skewness	0.3302	0.3392	0.2242
Kurtosis	-0.8660	-0.8232	-1.2849

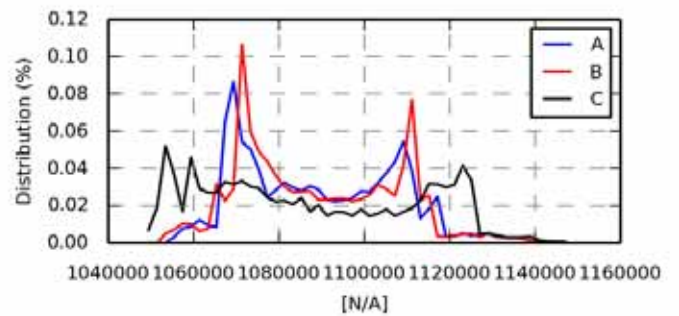


Figure 384 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	1.4335e+04	1.4663e+04	1.7240e+04
Eq (m=4)	2.0682e+04	2.1266e+04	2.4931e+04
Eq (m=6)	3.1940e+04	3.3057e+04	3.7431e+04
Eq (m=8)	4.0630e+04	4.2176e+04	4.6580e+04
Eq (m=10)	4.7290e+04	4.9155e+04	5.3531e+04
Eq (m=12)	5.2463e+04	5.4565e+04	5.8986e+04

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3c.sel (28-02-2014 16:58)	259	ESYS line1_3 SENSOR 104
B	WAMsim/oc4_p2_load_case_1-3c.sel (01-04-2014 14:25)	259	ESYS line1_3 SENSOR 104
C	hawc2/oc4_p2_load_case_1-3c.sel (04-12-2013 11:39)	259	ESYS line1_3 SENSOR 104

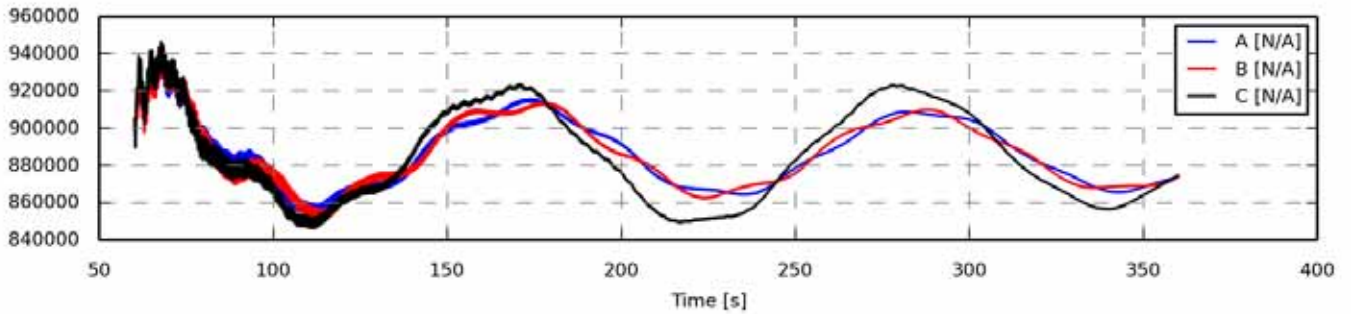


Figure 385 - Full length time series

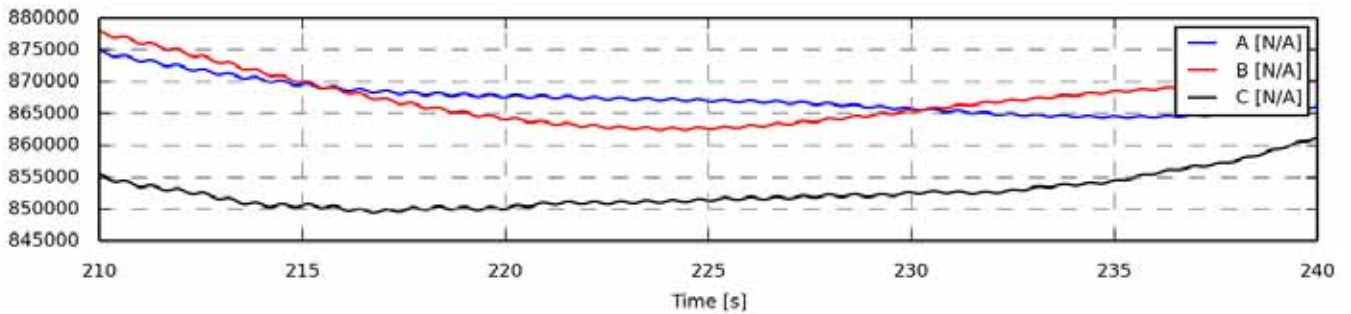


Figure 386 - Zoom of time series

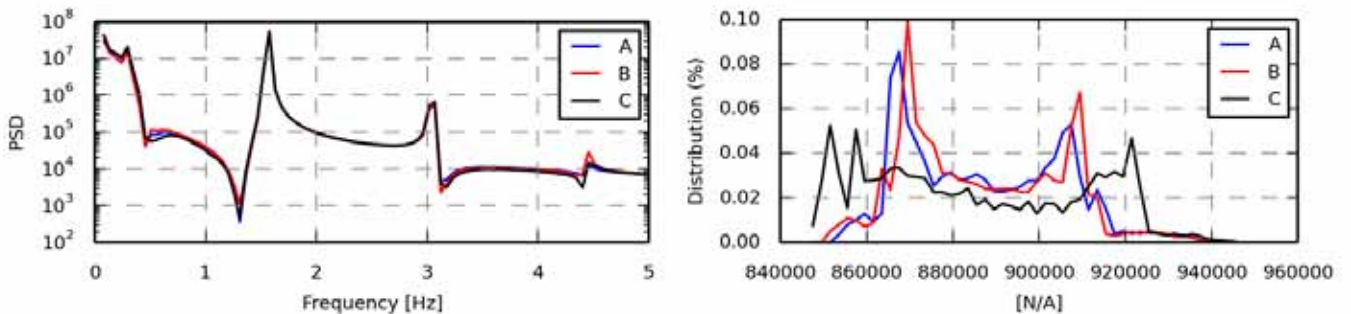


Figure 387 - Power spectrum density

Statistics	A	B	C
Min	8.5362e+05	8.5090e+05	8.4651e+05
Max	9.4348e+05	9.4345e+05	9.4642e+05
Mean	8.8692e+05	8.8655e+05	8.8533e+05
Std	1.8401e+04	1.8401e+04	2.4996e+04
Skewness	0.3354	0.3428	0.2264
Kurtosis	-0.8555	-0.8252	-1.2837

Figure 388 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	1.4293e+04	1.4435e+04	1.7209e+04
Eq (m=4)	2.0675e+04	2.1055e+04	2.4917e+04
Eq (m=6)	3.2036e+04	3.2854e+04	3.7478e+04
Eq (m=8)	4.0839e+04	4.1982e+04	4.6681e+04
Eq (m=10)	4.7581e+04	4.8960e+04	5.3668e+04
Eq (m=12)	5.2808e+04	5.4363e+04	5.9147e+04

Section 4.20 oc4_p2_load_case_1-3c: ESYS line2_1 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3c.sel (28-02-2014 16:58)	263	ESYS line2_1 SENSOR 4
B	WAMsim/oc4_p2_load_case_1-3c.sel (01-04-2014 14:25)	263	ESYS line2_1 SENSOR 4
C	hawc2/oc4_p2_load_case_1-3c.sel (04-12-2013 11:39)	263	ESYS line2_1 SENSOR 4

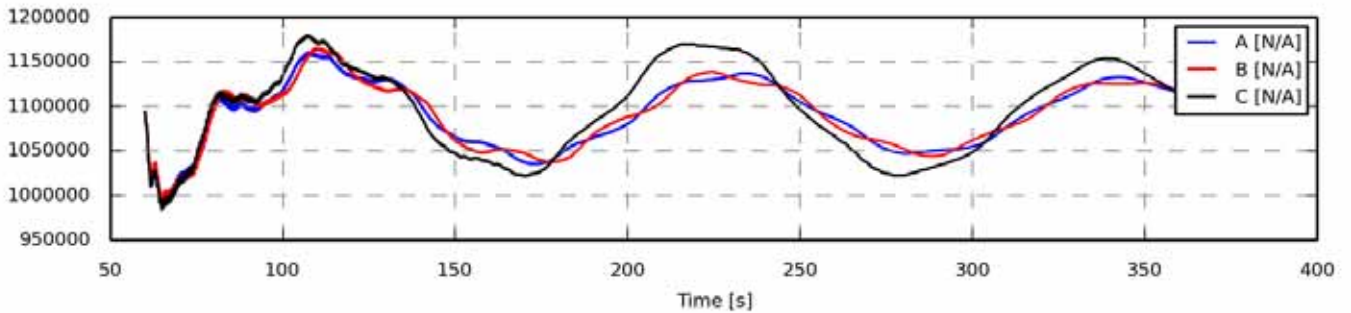


Figure 389 - Full length time series

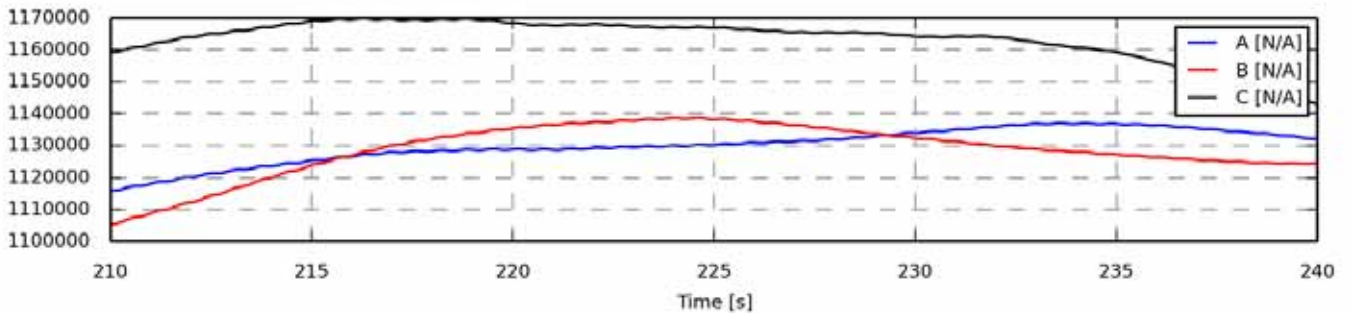


Figure 390 - Zoom of time series

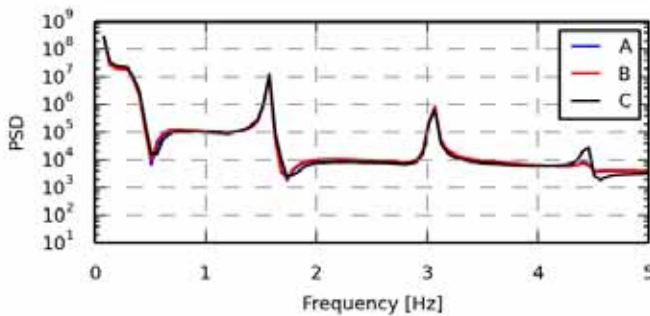


Figure 391 - Power spectrum density

Statistics	A	B	C
Min	9.9130e+05	9.9362e+05	9.8403e+05
Max	1.1609e+06	1.1658e+06	1.1798e+06
Mean	1.0914e+06	1.0913e+06	1.0962e+06
Std	3.6726e+04	3.6881e+04	5.0531e+04
Skewness	-0.2541	-0.2504	-0.1513
Kurtosis	-0.9084	-0.8444	-1.2827

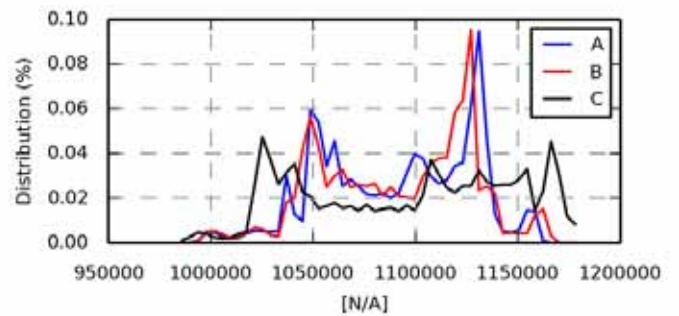


Figure 392 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	2.5799e+04	2.6014e+04	3.3082e+04
Eq (m=4)	3.9101e+04	3.9506e+04	4.9199e+04
Eq (m=6)	6.0951e+04	6.1738e+04	7.4209e+04
Eq (m=8)	7.7432e+04	7.8525e+04	9.2171e+04
Eq (m=10)	9.0010e+04	9.1327e+04	1.0570e+05
Eq (m=12)	9.9782e+04	1.0126e+05	1.1628e+05

Section 4.21 oc4_p2_load_case_1-3c: ESYS line2_3 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3c.sel (28-02-2014 16:58)	467	ESYS line2_3 SENSOR 104
B	WAMsim/oc4_p2_load_case_1-3c.sel (01-04-2014 14:25)	467	ESYS line2_3 SENSOR 104
C	hawc2/oc4_p2_load_case_1-3c.sel (04-12-2013 11:39)	467	ESYS line2_3 SENSOR 104

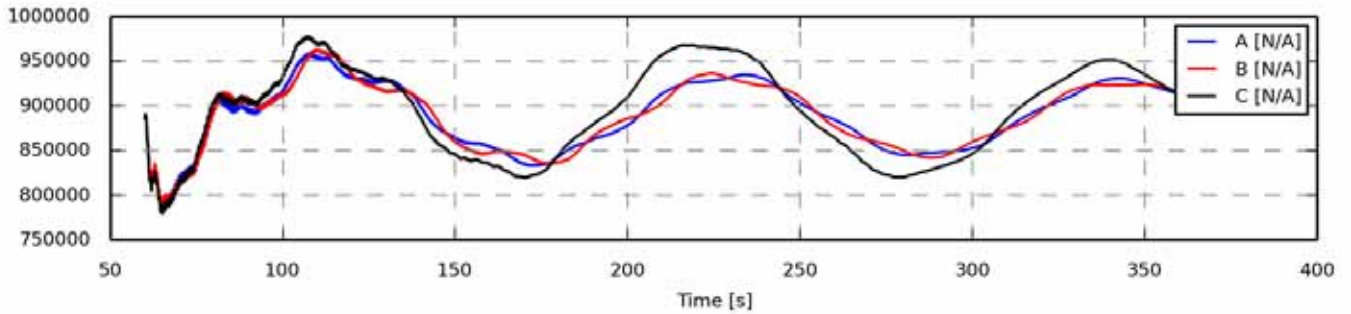


Figure 393 - Full length time series

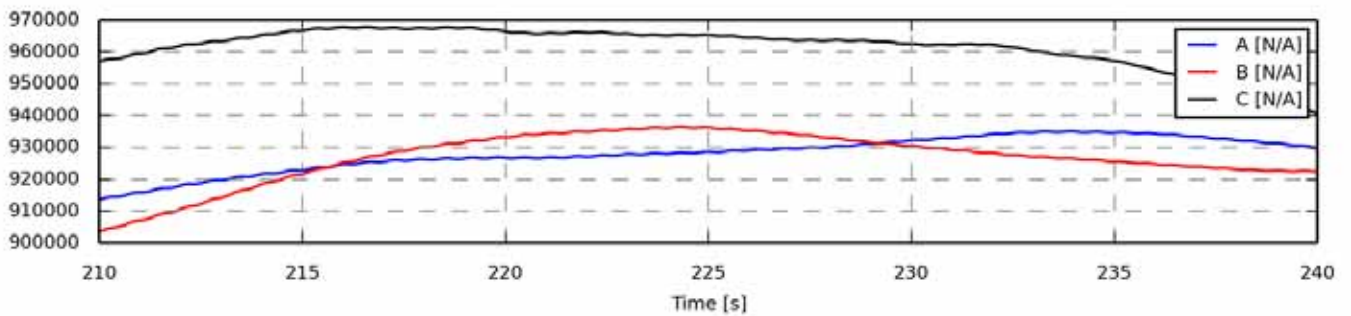


Figure 394 - Zoom of time series

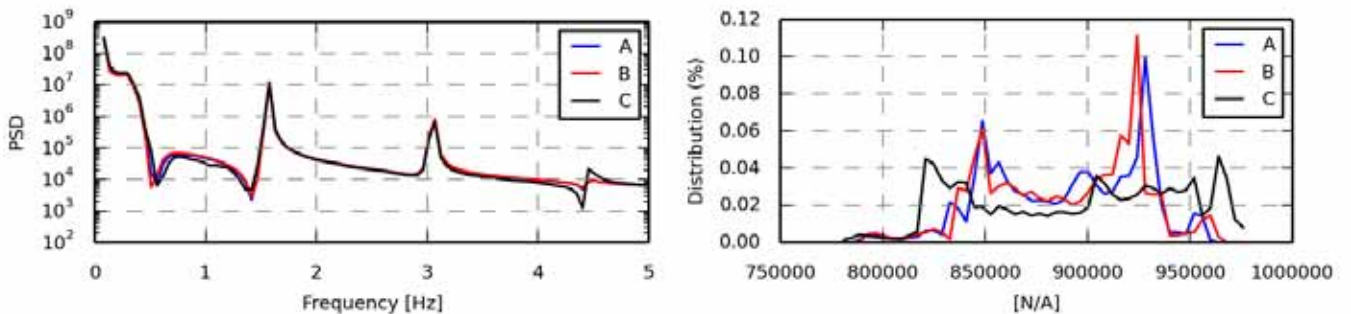


Figure 395 - Power spectrum density

Statistics	A	B	C
Min	7.8705e+05	7.8880e+05	7.7904e+05
Max	9.5876e+05	9.6345e+05	9.7784e+05
Mean	8.8933e+05	8.8919e+05	8.9407e+05
Std	3.6866e+04	3.6979e+04	5.0684e+04
Skewness	-0.2698	-0.2649	-0.1580
Kurtosis	-0.8650	-0.8084	-1.2686

Figure 396 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	2.5987e+04	2.6398e+04	3.3216e+04
Eq (m=4)	3.9405e+04	4.0087e+04	4.9465e+04
Eq (m=6)	6.1510e+04	6.2644e+04	7.4815e+04
Eq (m=8)	7.8240e+04	7.9678e+04	9.3147e+04
Eq (m=10)	9.1028e+04	9.2667e+04	1.0701e+05
Eq (m=12)	1.0096e+05	1.0275e+05	1.1786e+05

Section 4.22 oc4_p2_load_case_1-3c: ESYS line3_1 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3c.sel (28-02-2014 16:58)	471	ESYS line3_1 SENSOR 4
B	WAMsim/oc4_p2_load_case_1-3c.sel (01-04-2014 14:25)	471	ESYS line3_1 SENSOR 4
C	hawc2/oc4_p2_load_case_1-3c.sel (04-12-2013 11:39)	471	ESYS line3_1 SENSOR 4

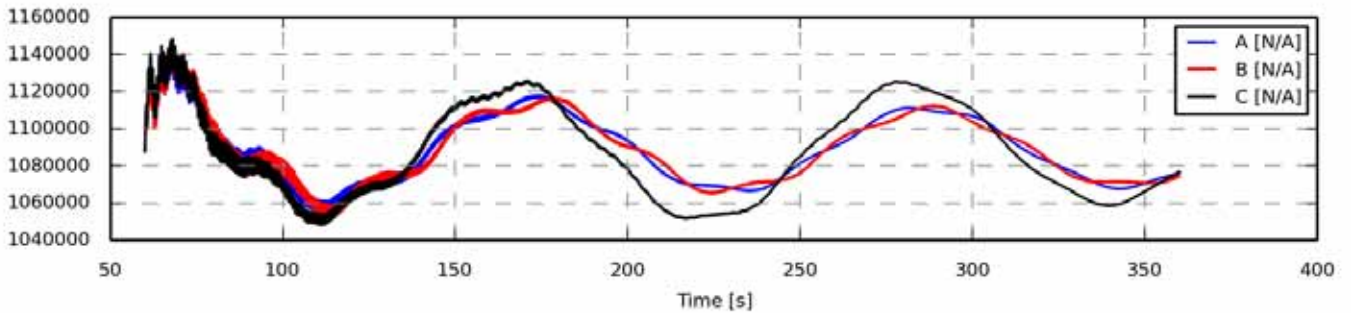


Figure 397 - Full length time series

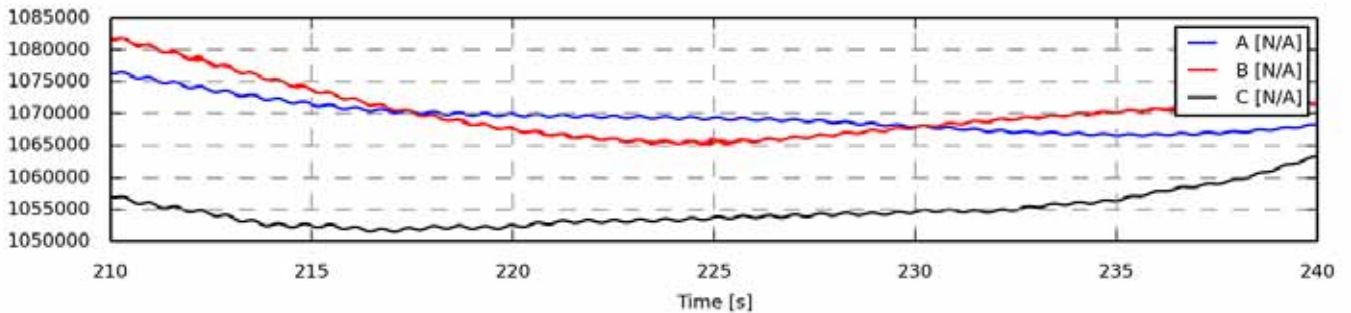


Figure 398 - Zoom of time series

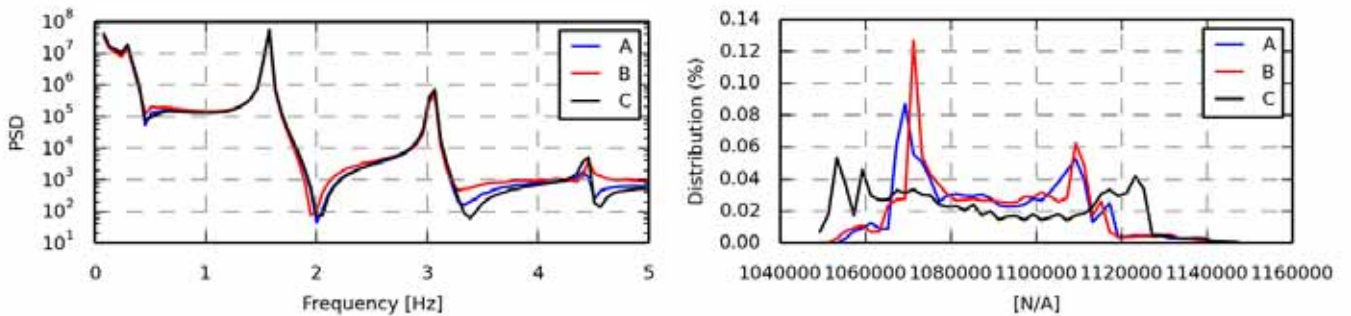


Figure 399 - Power spectrum density

Statistics	A	B	C
Min	1.0555e+06	1.0528e+06	1.0482e+06
Max	1.1446e+06	1.1458e+06	1.1482e+06
Mean	1.0891e+06	1.0889e+06	1.0875e+06
Std	1.8361e+04	1.8343e+04	2.5022e+04
Skewness	0.3293	0.3499	0.2235
Kurtosis	-0.8725	-0.7511	-1.2879

Figure 400 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	1.4316e+04	1.4523e+04	1.7269e+04
Eq (m=4)	2.0662e+04	2.1221e+04	2.4997e+04
Eq (m=6)	3.1911e+04	3.3094e+04	3.7553e+04
Eq (m=8)	4.0593e+04	4.2251e+04	4.6736e+04
Eq (m=10)	4.7246e+04	4.9251e+04	5.3711e+04
Eq (m=12)	5.2415e+04	5.4674e+04	5.9186e+04

Section 4.23 oc4_p2_load_case_1-3c: ESYS line3_3 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3c.sel (28-02-2014 16:58)	675	ESYS line3_3 SENSOR 104
B	WAMsim/oc4_p2_load_case_1-3c.sel (01-04-2014 14:25)	675	ESYS line3_3 SENSOR 104
C	hawc2/oc4_p2_load_case_1-3c.sel (04-12-2013 11:39)	675	ESYS line3_3 SENSOR 104

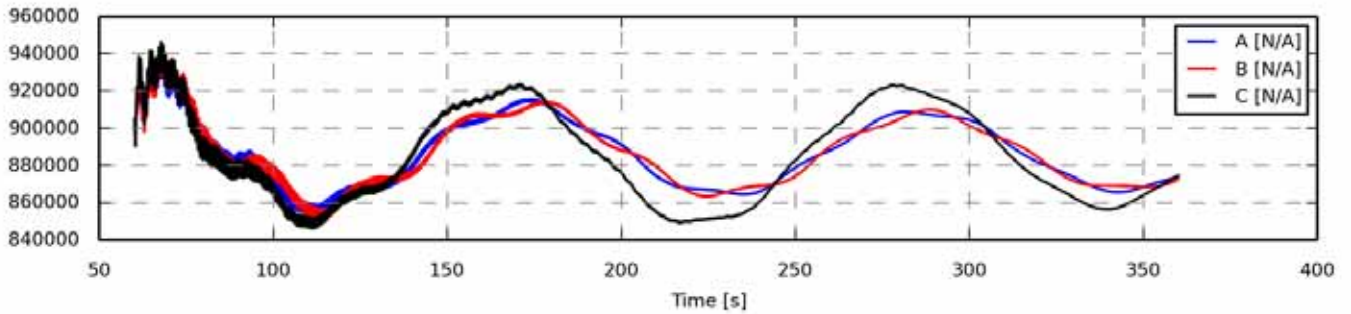


Figure 401 - Full length time series

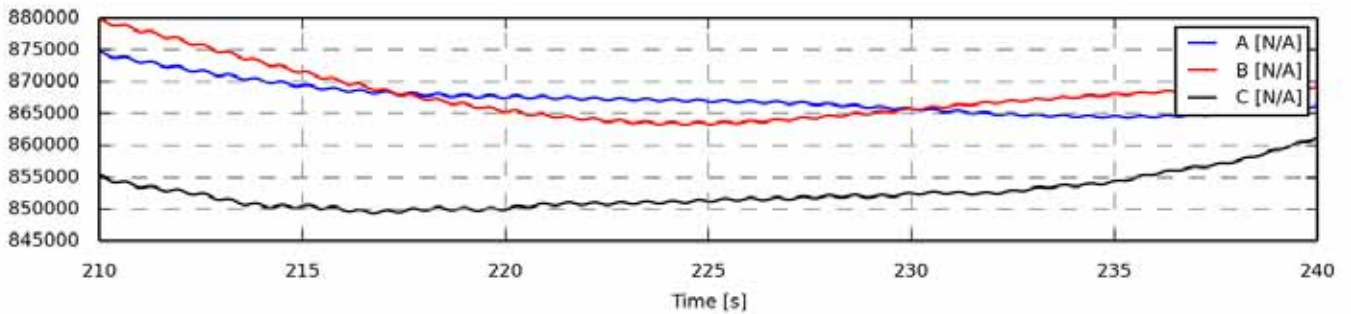


Figure 402 - Zoom of time series

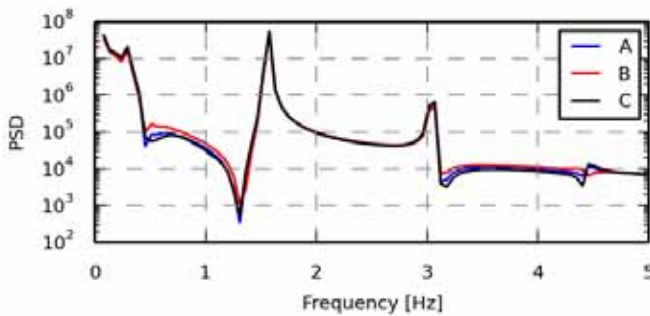


Figure 403 - Power spectrum density

Statistics	A	B	C
Min	8.5356e+05	8.5143e+05	8.4634e+05
Max	9.4336e+05	9.4430e+05	9.4633e+05
Mean	8.8689e+05	8.8679e+05	8.8530e+05
Std	1.8401e+04	1.8363e+04	2.5078e+04
Skewness	0.3345	0.3534	0.2257
Kurtosis	-0.8617	-0.7533	-1.2868

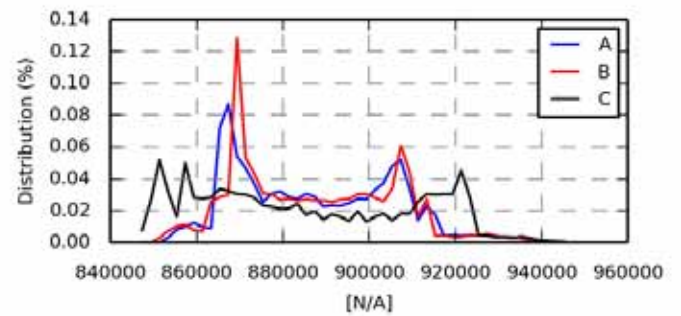


Figure 404 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	1.4247e+04	1.4379e+04	1.7224e+04
Eq (m=4)	2.0614e+04	2.1070e+04	2.4937e+04
Eq (m=6)	3.1979e+04	3.2943e+04	3.7508e+04
Eq (m=8)	4.0792e+04	4.2118e+04	4.6718e+04
Eq (m=10)	4.7538e+04	4.9127e+04	5.3711e+04
Eq (m=12)	5.2764e+04	5.4550e+04	5.9194e+04

Section 5.01 oc4_p2_load_case_1-3d: WSP gl. coo.,Vy [m/s]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3d.sel (28-02-2014 17:17)	3	Free wind speed Vy, gl. coo, of gl. pos 0.00, 0.00, -90.00
B	WAMsim/oc4_p2_load_case_1-3d.sel (01-04-2014 14:25)	3	Free wind speed Vy, gl. coo, of gl. pos 0.00, 0.00, -90.00
C	hawc2/oc4_p2_load_case_1-3d.sel (06-12-2013 21:42)	3	Free wind speed Vy, gl. coo, of gl. pos 0.00, 0.00, -90.00

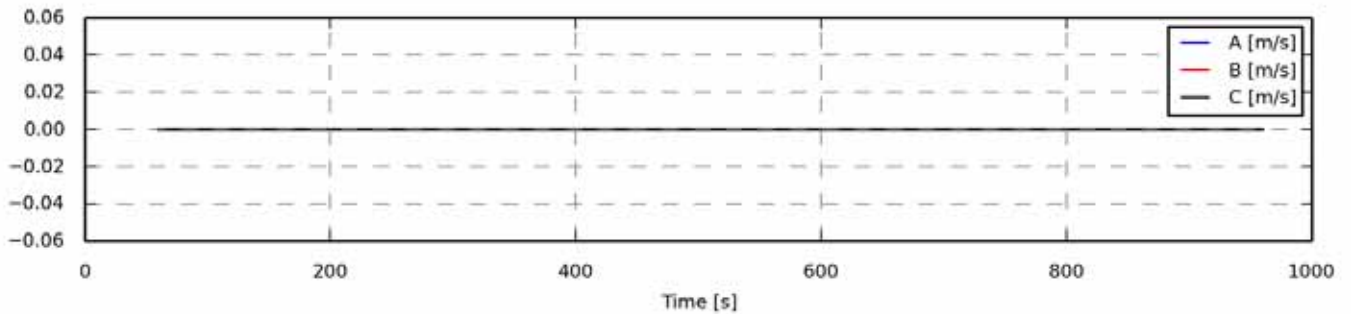


Figure 405 - Full length time series

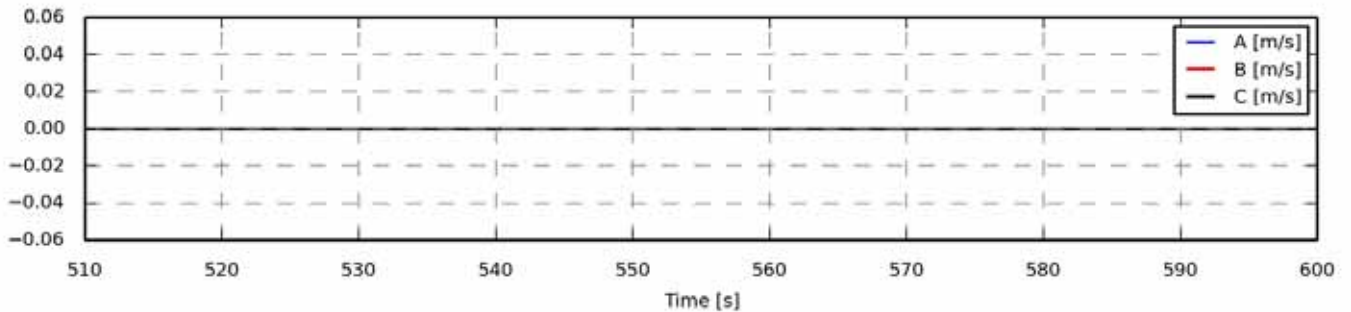


Figure 406 - Zoom of time series

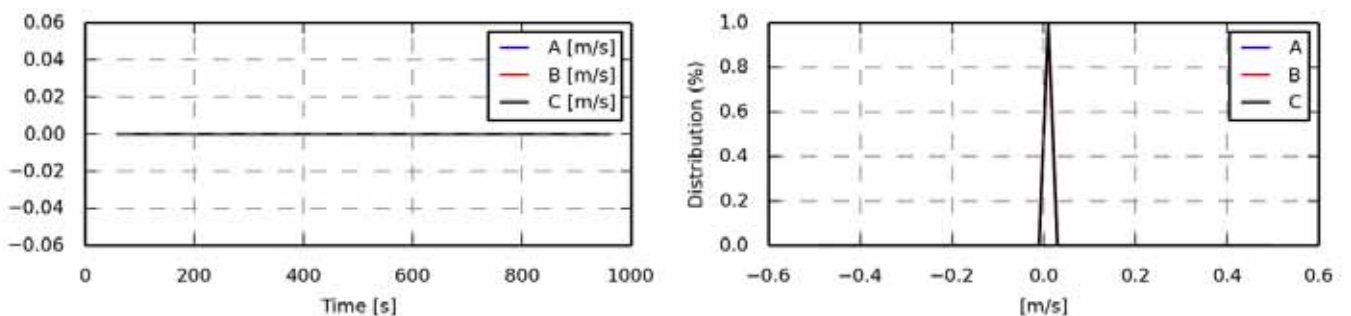


Figure 407 - Power spectrum density

Statistics	A	B	C
Min	0.0000	0.0000	0.0000
Max	0.0000	0.0000	0.0000
Mean	0.0000	0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

Figure 408 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 5.02 oc4_p2_load_case_1-3d: Water surf. [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3d.sel (28-02-2014 17:17)	5	Water surface gl. coo, at gl. coo, x,y= 0.00, 0.00
B	WAMsim/oc4_p2_load_case_1-3d.sel (01-04-2014 14:25)	5	Constant value
C	hawc2/oc4_p2_load_case_1-3d.sel (06-12-2013 21:42)	5	Water surface gl. coo, at gl. coo, x,y= 0.00, 0.00

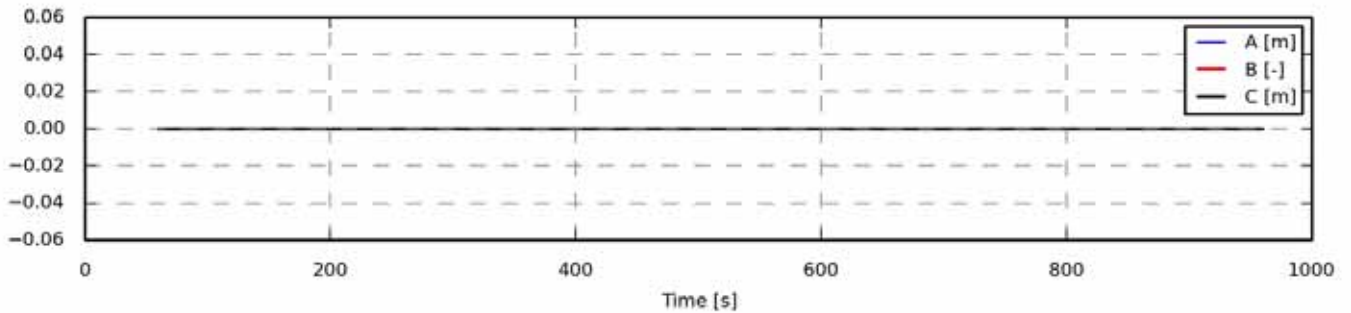


Figure 409 - Full length time series

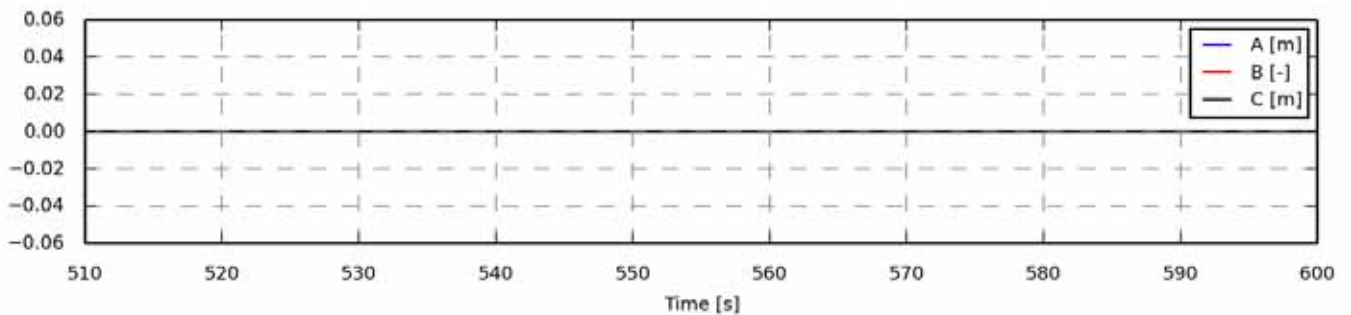


Figure 410 - Zoom of time series

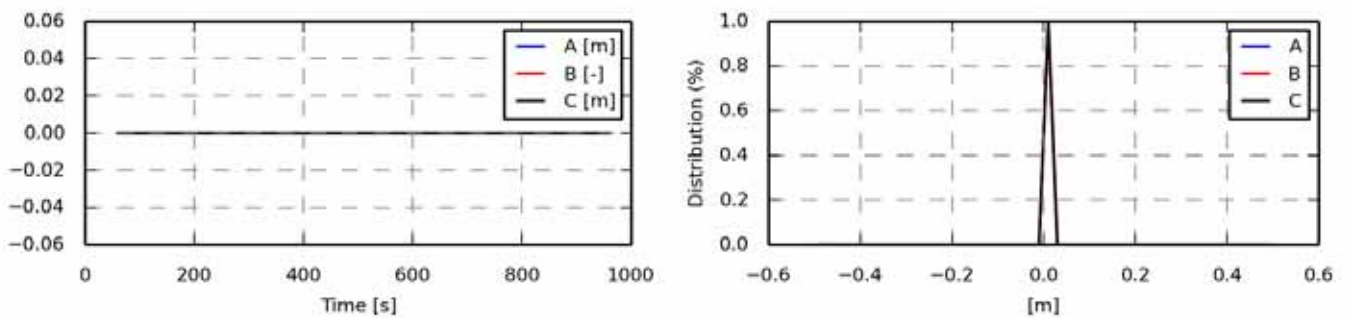


Figure 411 - Power spectrum density

Statistics	A	B	C
Min	0.0000	0.0000	0.0000
Max	0.0000	0.0000	0.0000
Mean	0.0000	0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

Figure 412 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 5.03 oc4_p2_load_case_1-3d: Constant [-]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3d.sel (28-02-2014 17:17)	6	Constant value
B	WAMsim/oc4_p2_load_case_1-3d.sel (01-04-2014 14:25)	6	Constant value
C	hawc2/oc4_p2_load_case_1-3d.sel (06-12-2013 21:42)	6	Constant value

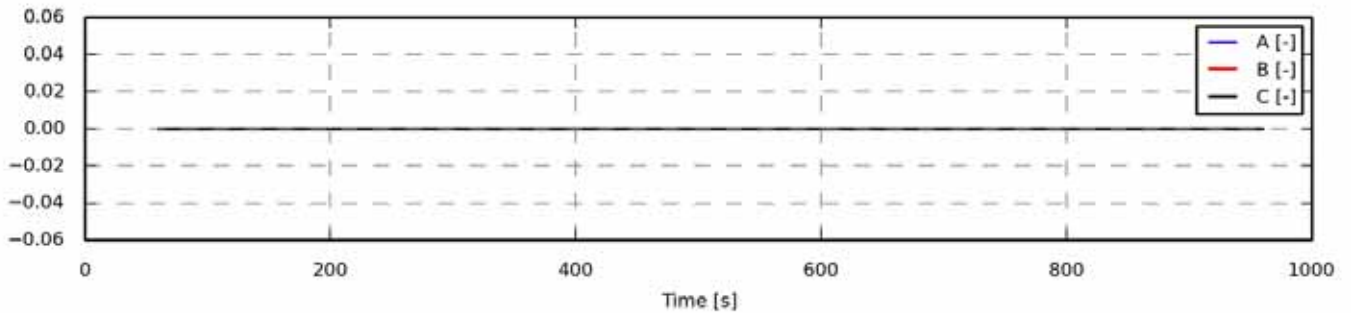


Figure 413 - Full length time series

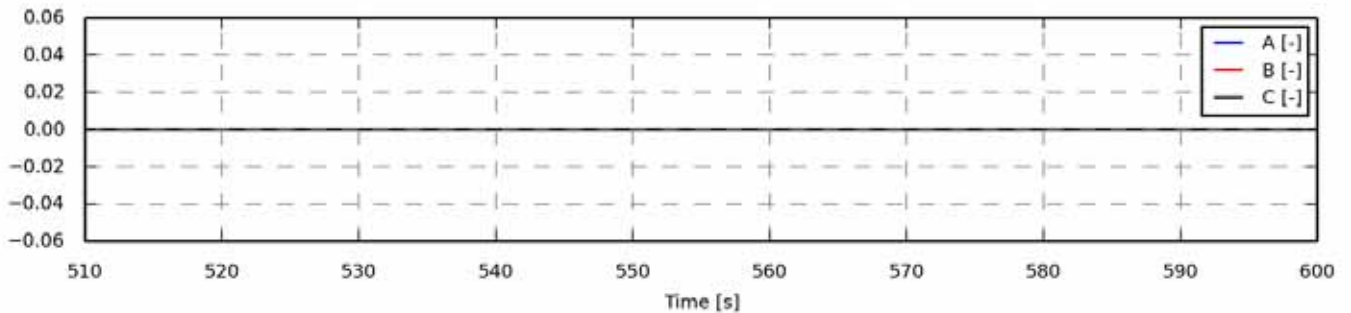


Figure 414 - Zoom of time series

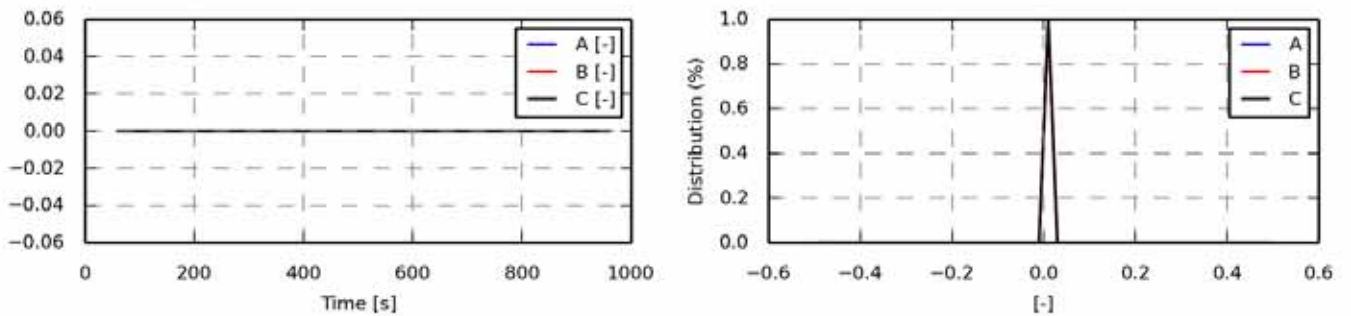


Figure 415 - Power spectrum density

Statistics	A	B	C
Min	0.0000	0.0000	0.0000
Max	0.0000	0.0000	0.0000
Mean	0.0000	0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

Figure 416 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 5.04 oc4_p2_load_case_1-3d: Constant [-]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3d.sel (28-02-2014 17:17)	9	Constant value
B	WAMsim/oc4_p2_load_case_1-3d.sel (01-04-2014 14:25)	9	Constant value
C	hawc2/oc4_p2_load_case_1-3d.sel (06-12-2013 21:42)	9	Constant value

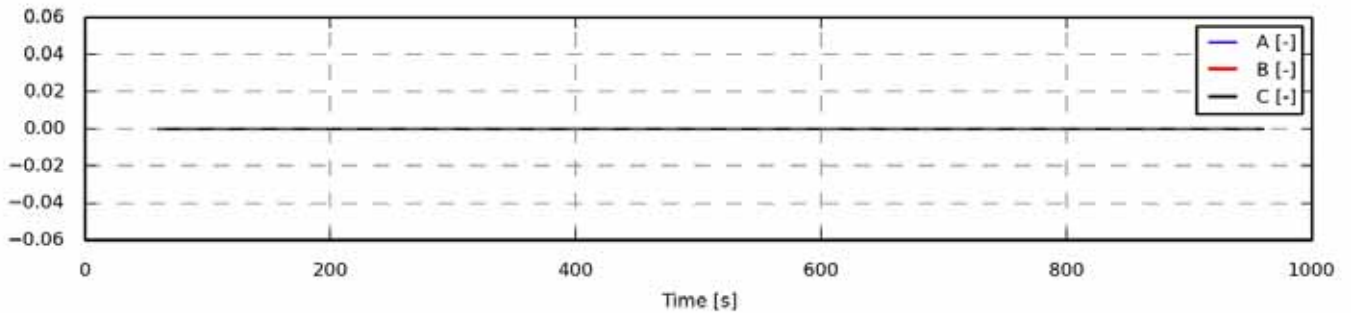


Figure 417 - Full length time series

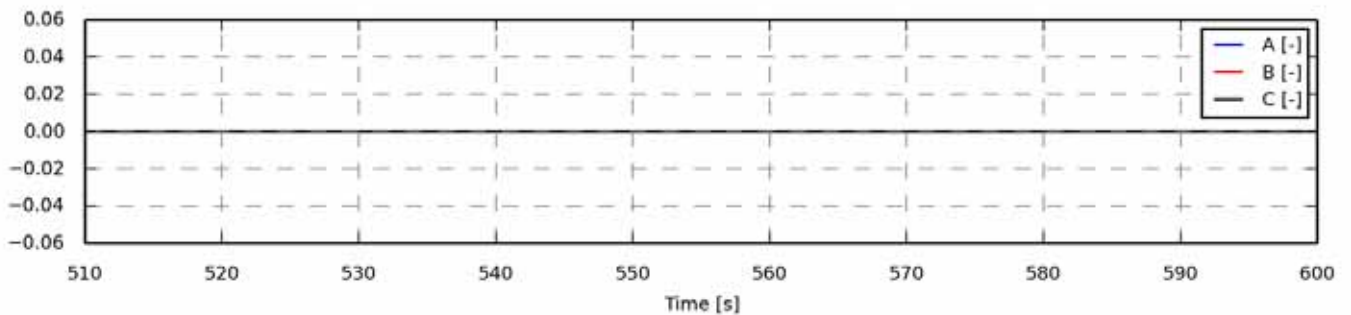


Figure 418 - Zoom of time series

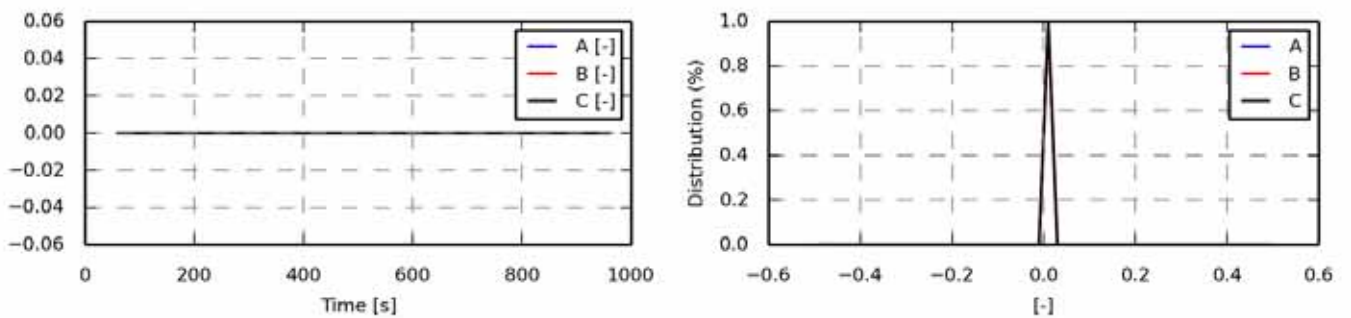


Figure 419 - Power spectrum density

Statistics	A	B	C
Min	0.0000	0.0000	0.0000
Max	0.0000	0.0000	0.0000
Mean	0.0000	0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

Figure 420 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 5.05 oc4_p2_load_case_1-3d: bea1 angle [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3d.sel (28-02-2014 17:17)	14	pitch1 angle
B	WAMsim/oc4_p2_load_case_1-3d.sel (01-04-2014 14:25)	14	pitch1 angle
C	hawc2/oc4_p2_load_case_1-3d.sel (06-12-2013 21:42)	14	pitch1 angle

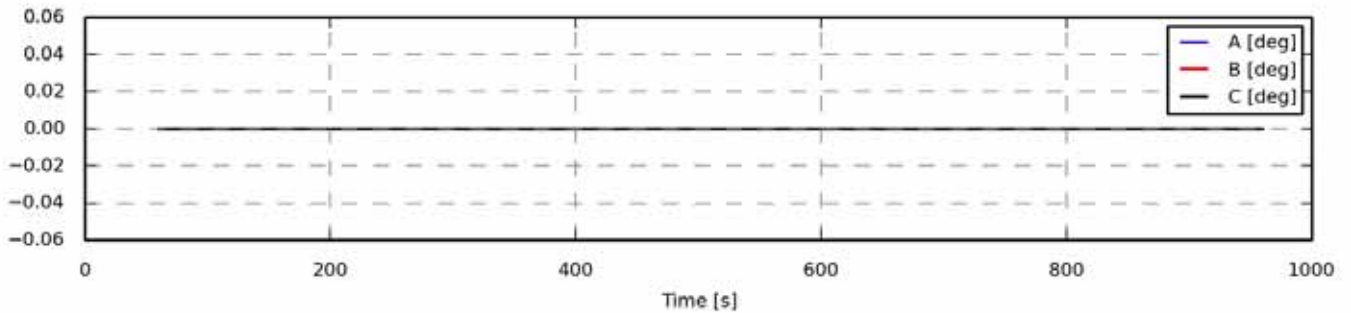


Figure 421 - Full length time series

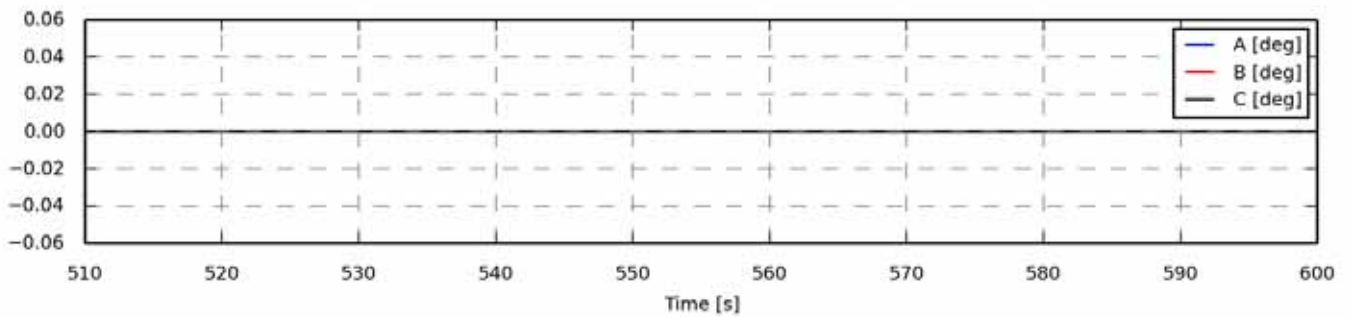


Figure 422 - Zoom of time series

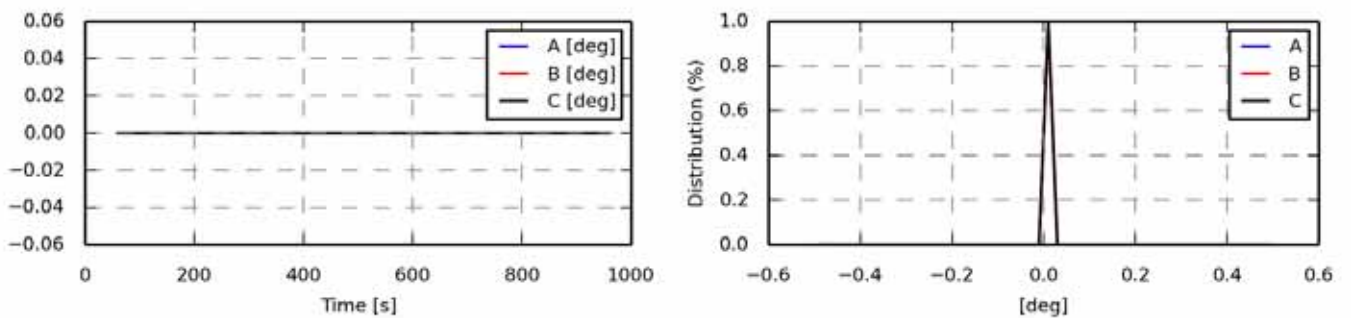


Figure 423 - Power spectrum density

Statistics	A	B	C
Min	0.0000	0.0000	0.0000
Max	0.0000	0.0000	0.0000
Mean	0.0000	0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

Figure 424 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 5.06 oc4_p2_load_case_1-3d: State pos x coo: global [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3d.sel (28-02-2014 17:17)	19	State pos x Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
B	WAMsim/oc4_p2_load_case_1-3d.sel (01-04-2014 14:25)	19	State pos x Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
C	hawc2/oc4_p2_load_case_1-3d.sel (06-12-2013 21:42)	19	State pos x Mbdy:mc E-nr: 8 Z-rel:0.00 coo: global platform translation in surge sway and heave

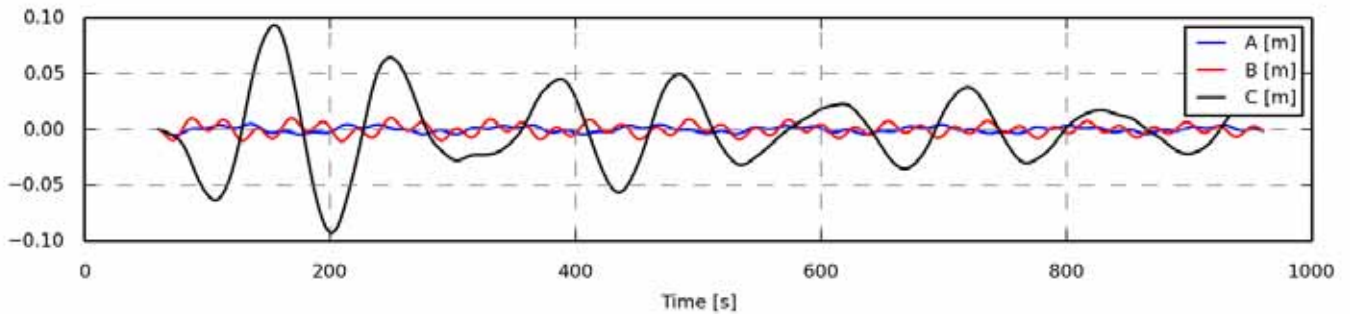


Figure 425 - Full length time series

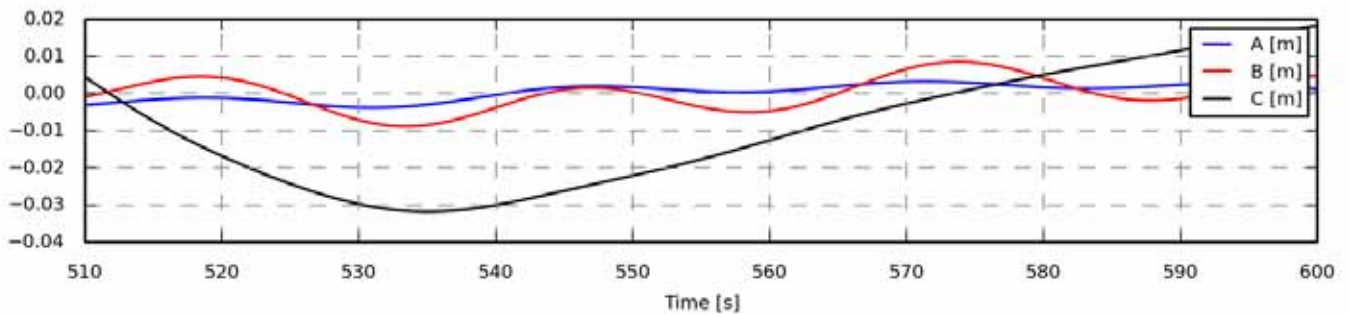


Figure 426 - Zoom of time series

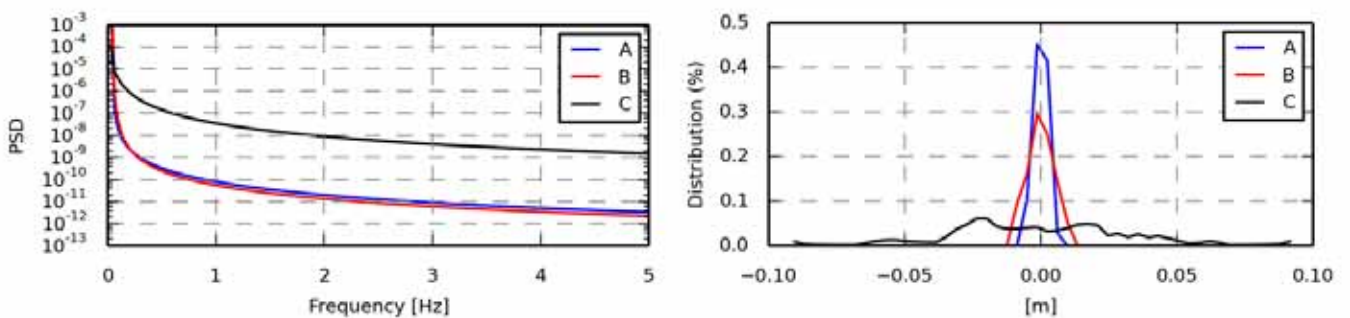


Figure 427 - Power spectrum density

Statistics	A	B	C
Min	-0.0050	-0.0104	-0.0923
Max	0.0052	0.0104	0.0934
Mean	0.0000	-0.0000	-0.0006
Std	0.0024	0.0047	0.0337
Skewness	0.0135	0.0344	0.1010
Kurtosis	-0.9772	-0.6320	0.2724

Figure 428 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.0017	0.0043	0.0223
Eq (m=4)	0.0026	0.0060	0.0356
Eq (m=6)	0.0038	0.0087	0.0589
Eq (m=8)	0.0047	0.0105	0.0768
Eq (m=10)	0.0054	0.0119	0.0905
Eq (m=12)	0.0059	0.0129	0.1013

Section 5.07 oc4_p2_load_case_1-3d: State pos y coo: global [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3d.sel (28-02-2014 17:17)	20	State pos y Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
B	WAMsim/oc4_p2_load_case_1-3d.sel (01-04-2014 14:25)	20	State pos y Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
C	hawc2/oc4_p2_load_case_1-3d.sel (06-12-2013 21:42)	20	State pos y Mbdy:mc E-nr: 8 Z-rel:0.00 coo: global platform translation in surge sway and heave

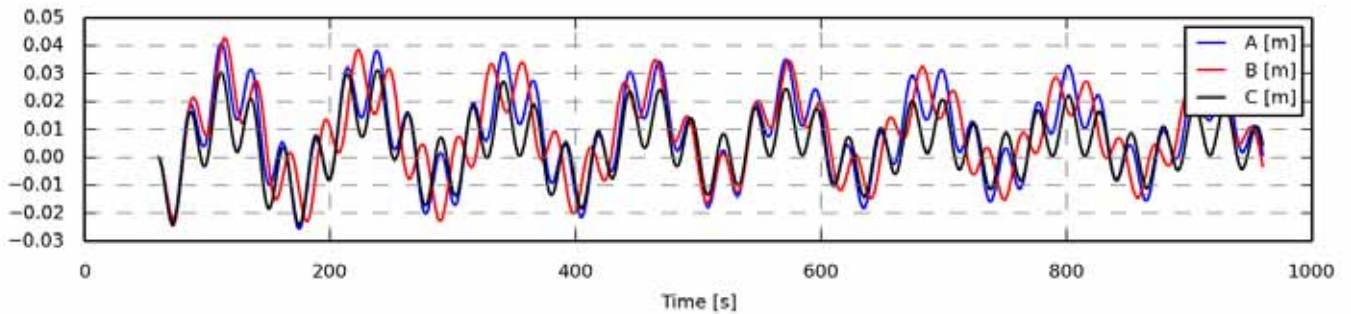


Figure 429 - Full length time series

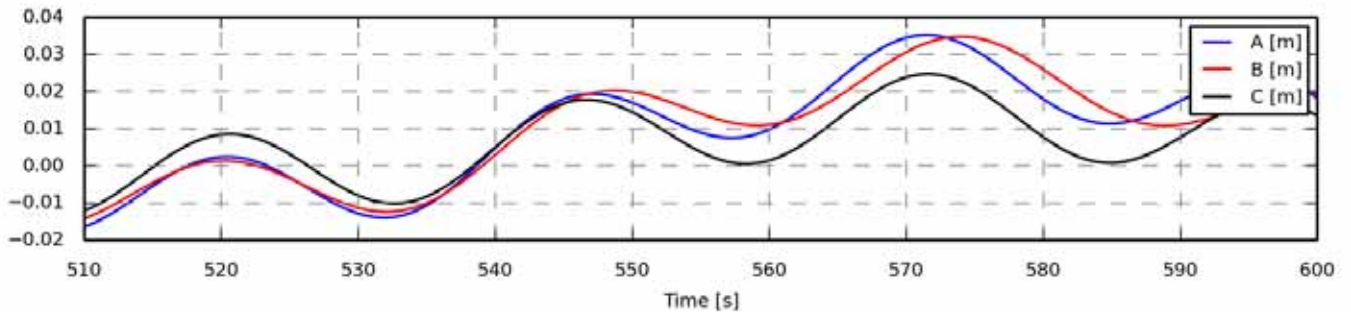


Figure 430 - Zoom of time series

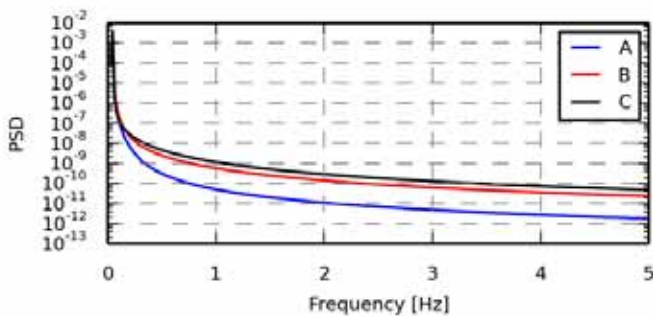


Figure 431 - Power spectrum density

Statistics	A	B	C
Min	-0.0255	-0.0229	-0.0241
Max	0.0409	0.0427	0.0313
Mean	0.0083	0.0086	0.0048
Std	0.0145	0.0144	0.0111
Skewness	-0.0368	-0.0288	-0.0817
Kurtosis	-0.7156	-0.7365	-0.3224

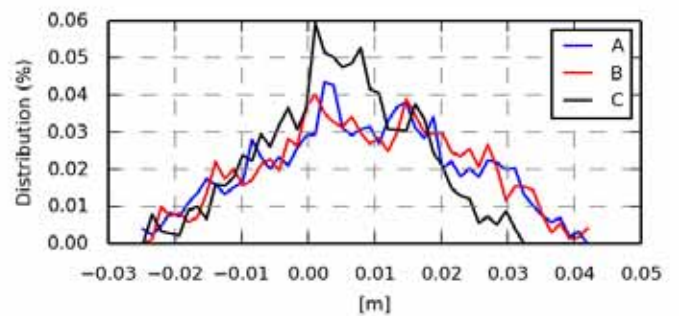


Figure 432 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.0116	0.0112	0.0095
Eq (m=4)	0.0170	0.0166	0.0137
Eq (m=6)	0.0256	0.0250	0.0206
Eq (m=8)	0.0316	0.0310	0.0257
Eq (m=10)	0.0360	0.0354	0.0296
Eq (m=12)	0.0393	0.0388	0.0326

Section 5.08 oc4_p2_load_case_1-3d: State pos z coo: global [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3d.sel (28-02-2014 17:17)	21	State pos z Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
B	WAMsim/oc4_p2_load_case_1-3d.sel (01-04-2014 14:25)	21	State pos z Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
C	hawc2/oc4_p2_load_case_1-3d.sel (06-12-2013 21:42)	21	State pos z Mbdy:mc E-nr: 8 Z-rel:0.00 coo: global platform translation in surge sway and heave

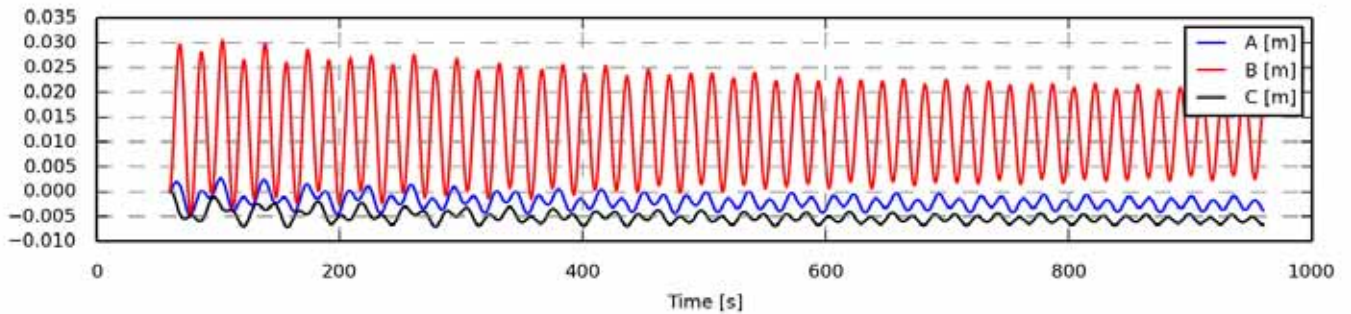


Figure 433 - Full length time series

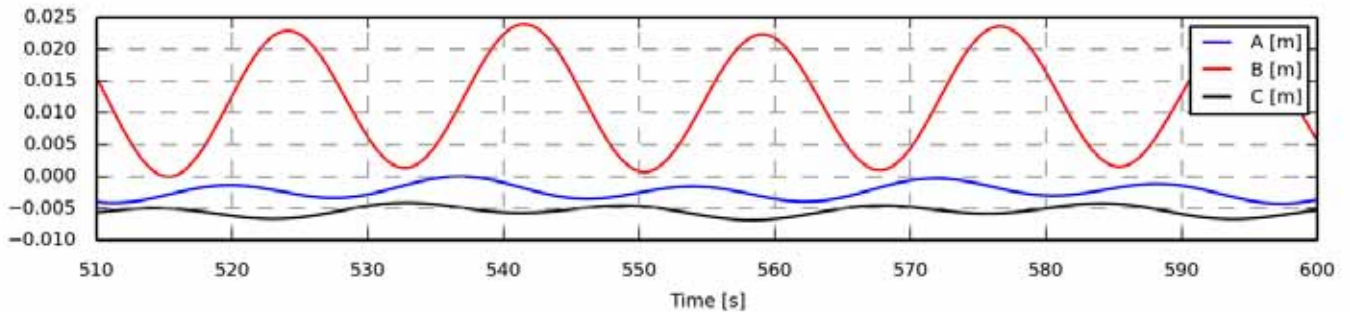


Figure 434 - Zoom of time series

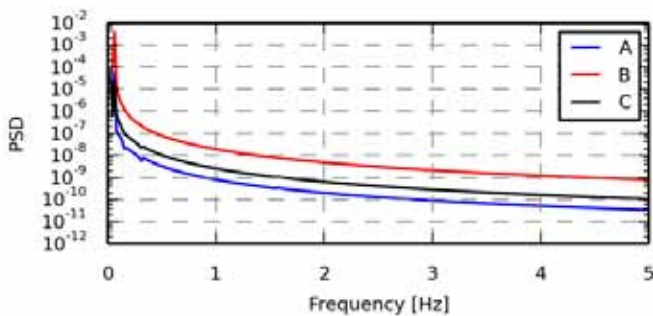


Figure 435 - Power spectrum density

Statistics	A	B	C
Min	-0.0047	-0.0044	-0.0071
Max	0.0026	0.0304	-0.0000
Mean	-0.0020	0.0122	-0.0051
Std	0.0014	0.0084	0.0011
Skewness	0.5357	0.0673	1.1075
Kurtosis	0.1520	-1.2598	2.0256

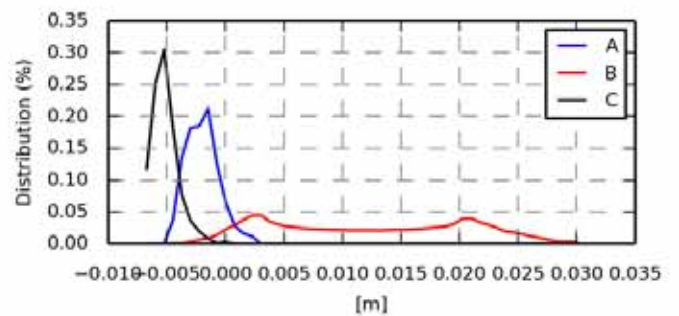


Figure 436 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.0014	0.0093	0.0010
Eq (m=4)	0.0019	0.0120	0.0015
Eq (m=6)	0.0028	0.0157	0.0023
Eq (m=8)	0.0034	0.0183	0.0029
Eq (m=10)	0.0039	0.0201	0.0034
Eq (m=12)	0.0043	0.0216	0.0038

Section 5.09 oc4_p2_load_case_1-3d: proj_ang tx coo: global [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3d.sel (28-02-2014 17:17)	22	State_rot proj_ang tx Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
B	WAMsim/oc4_p2_load_case_1-3d.sel (01-04-2014 14:25)	22	State_rot proj_ang tx Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
C	hawc2/oc4_p2_load_case_1-3d.sel (06-12-2013 21:42)	22	State_rot proj_ang tx Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw

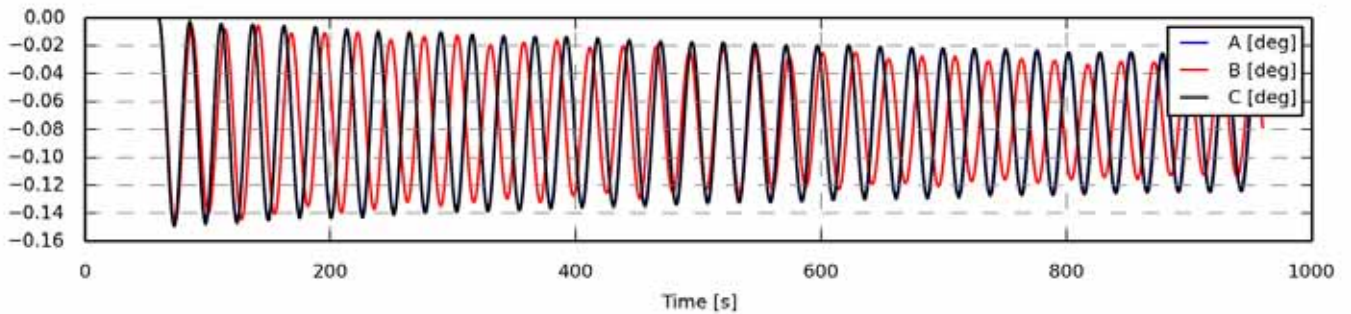


Figure 437 - Full length time series

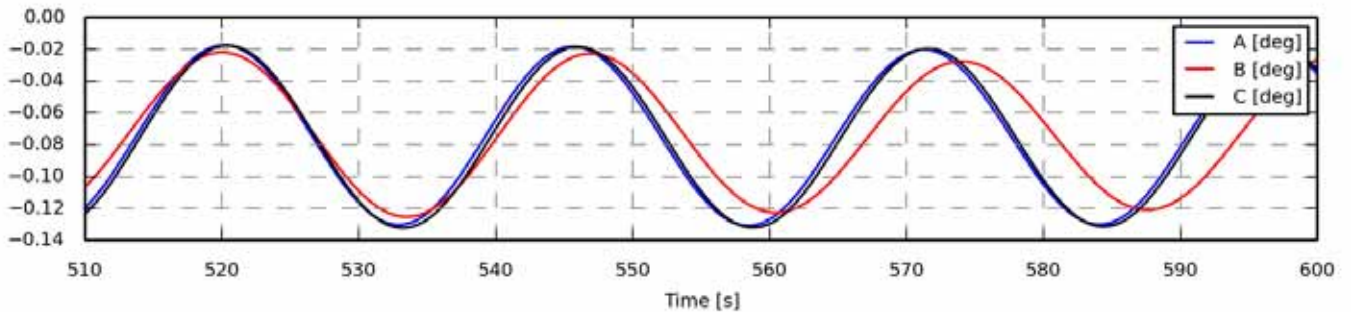


Figure 438 - Zoom of time series

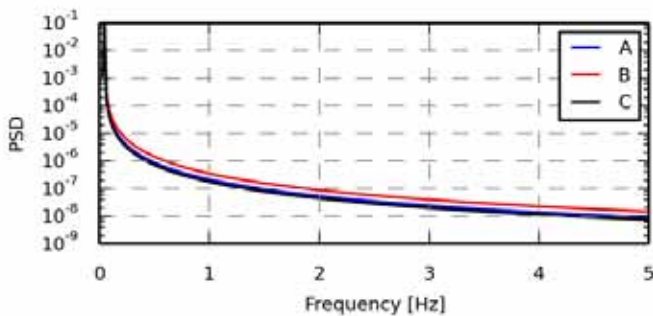


Figure 439 - Power spectrum density

Statistics	A	B	C
Min	-0.1464	-0.1463	-0.1489
Max	-0.0000	-0.0000	-0.0000
Mean	-0.0745	-0.0737	-0.0752
Std	0.0412	0.0374	0.0420
Skewness	-0.0096	-0.0216	-0.0093
Kurtosis	-1.4122	-1.3035	-1.4084

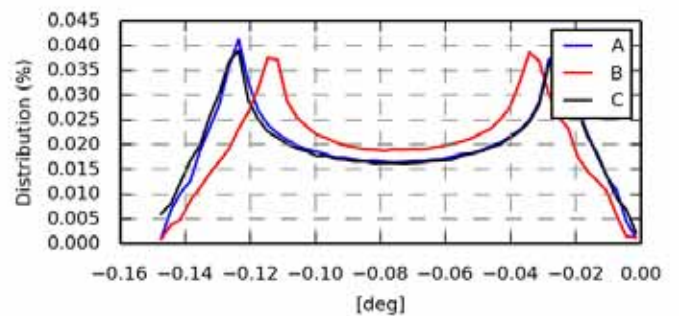


Figure 440 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.0398	0.0357	0.0406
Eq (m=4)	0.0525	0.0477	0.0536
Eq (m=6)	0.0698	0.0646	0.0712
Eq (m=8)	0.0809	0.0760	0.0827
Eq (m=10)	0.0888	0.0842	0.0908
Eq (m=12)	0.0948	0.0906	0.0970

Section 5.10 oc4_p2_load_case_1-3d: proj_ang ty coo: global [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3d.sel (28-02-2014 17:17)	23	State_rot proj_ang ty Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
B	WAMsim/oc4_p2_load_case_1-3d.sel (01-04-2014 14:25)	23	State_rot proj_ang ty Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
C	hawc2/oc4_p2_load_case_1-3d.sel (06-12-2013 21:42)	23	State_rot proj_ang ty Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw

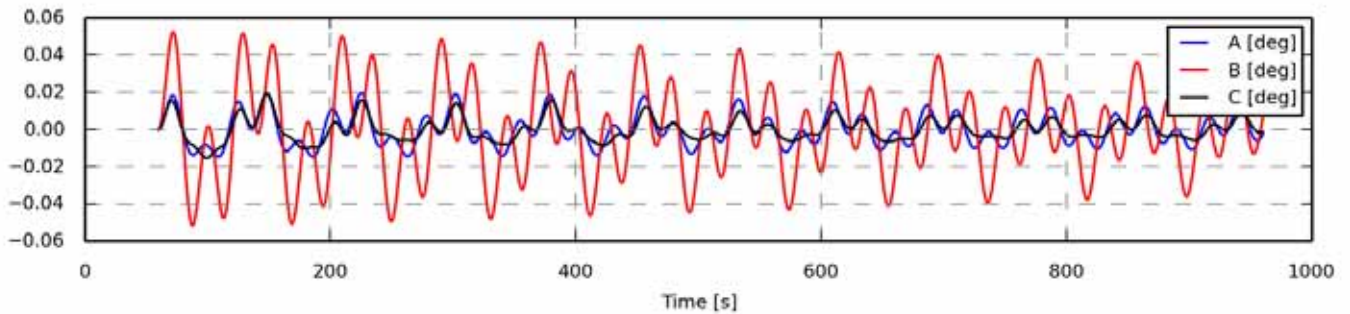


Figure 441 - Full length time series

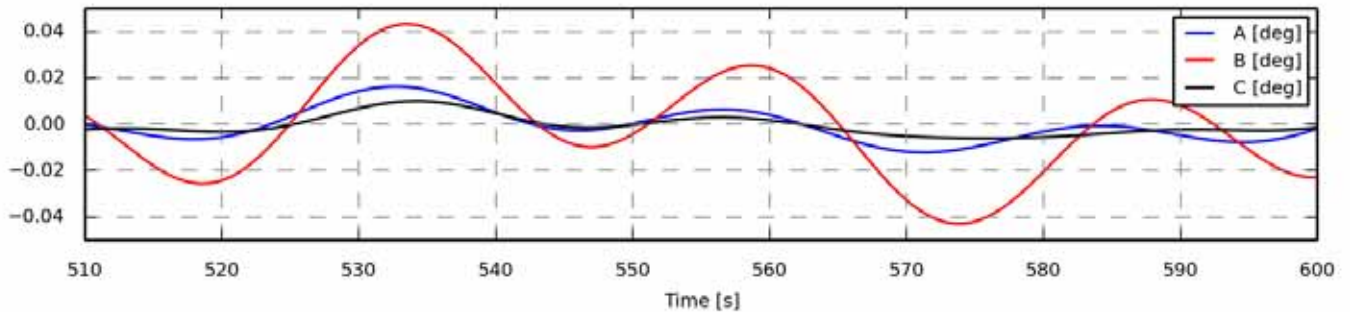


Figure 442 - Zoom of time series

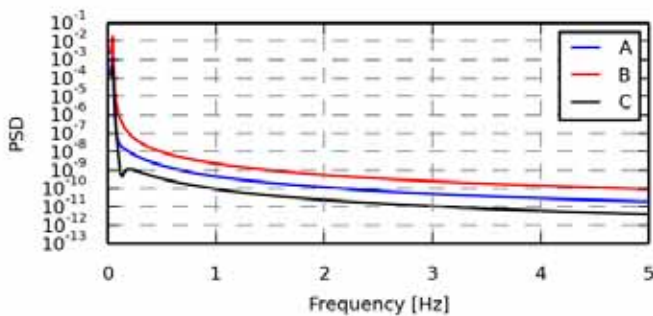


Figure 443 - Power spectrum density

Statistics	A	B	C
Min	-0.0147	-0.0513	-0.0154
Max	0.0196	0.0524	0.0194
Mean	0.0000	0.0001	0.0000
Std	0.0082	0.0245	0.0060
Skewness	0.3734	-0.0025	0.5453
Kurtosis	-0.6081	-0.6931	0.2791

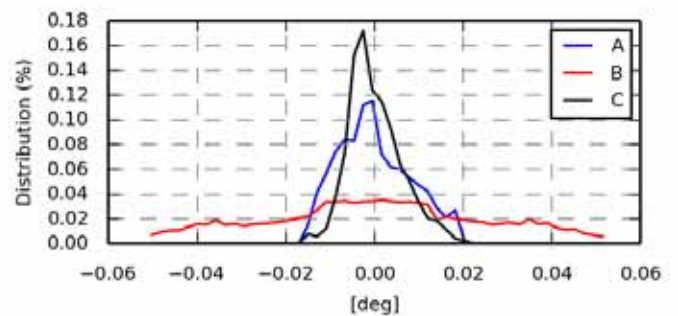


Figure 444 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.0070	0.0216	0.0050
Eq (m=4)	0.0100	0.0304	0.0075
Eq (m=6)	0.0146	0.0438	0.0117
Eq (m=8)	0.0178	0.0531	0.0148
Eq (m=10)	0.0201	0.0598	0.0173
Eq (m=12)	0.0218	0.0649	0.0192

Section 5.11 oc4_p2_load_case_1-3d: proj_ang tz coo: global [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3d.sel (28-02-2014 17:17)	24	State_rot proj_ang tz Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
B	WAMsim/oc4_p2_load_case_1-3d.sel (01-04-2014 14:25)	24	State_rot proj_ang tz Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
C	hawc2/oc4_p2_load_case_1-3d.sel (06-12-2013 21:42)	24	State_rot proj_ang tz Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw

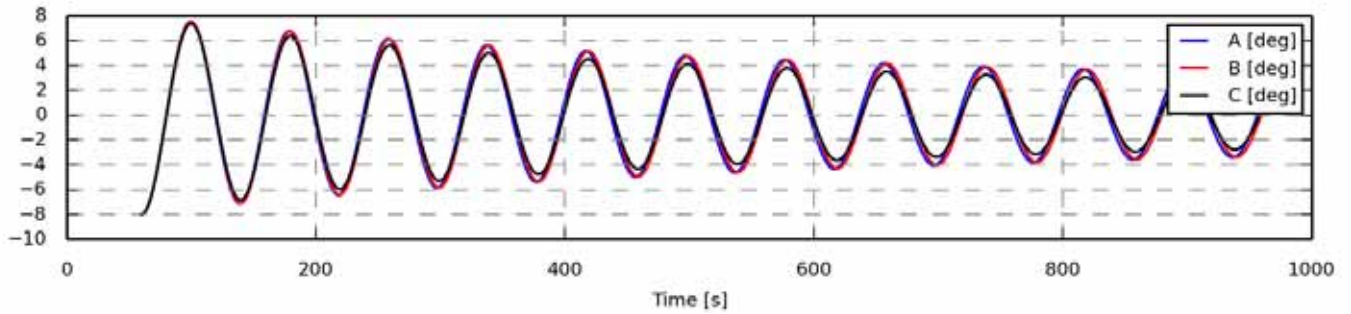


Figure 445 - Full length time series

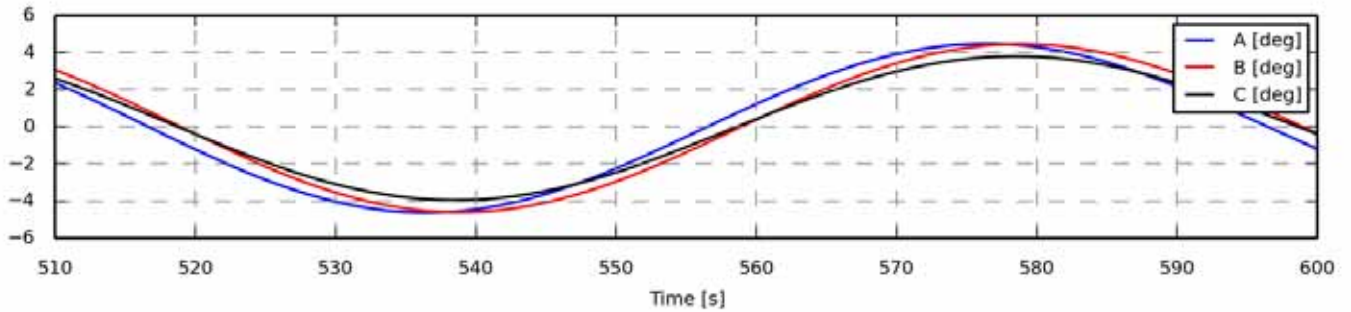


Figure 446 - Zoom of time series

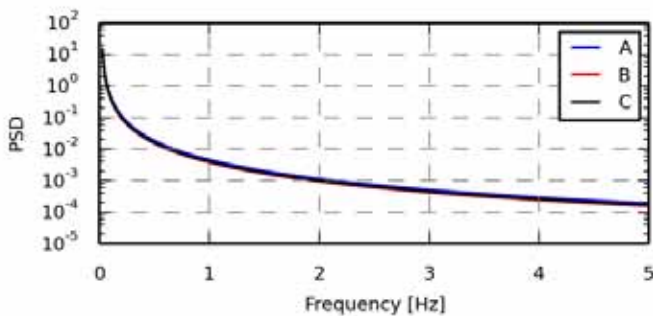


Figure 447 - Power spectrum density

Statistics	A	B	C
Min	-8.0000	-8.0000	-7.9990
Max	7.5330	7.5305	7.3661
Mean	-0.0492	-0.0512	-0.0434
Std	3.6595	3.6634	3.3071
Skewness	0.0246	0.0258	0.0175
Kurtosis	-1.0915	-1.0937	-0.8564

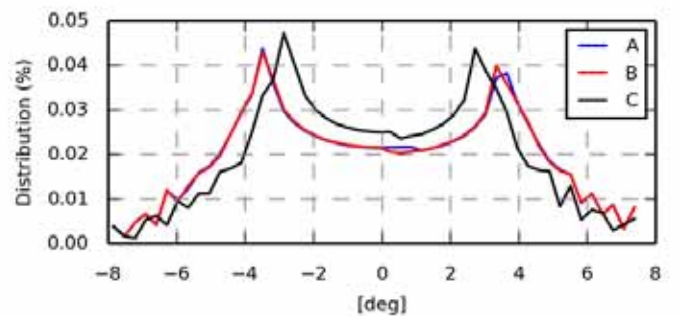


Figure 448 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	2.4774	2.4757	2.2694
Eq (m=4)	3.6741	3.6730	3.4128
Eq (m=6)	5.5675	5.5666	5.2758
Eq (m=8)	6.9567	6.9556	6.6735
Eq (m=10)	8.0111	8.0099	7.7446
Eq (m=12)	8.8366	8.8352	8.5870

Section 5.12 oc4_p2_load_case_1-3d: Mx coo: towertop [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3d.sel (28-02-2014 17:17)	37	MomentMx Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
B	WAMsim/oc4_p2_load_case_1-3d.sel (01-04-2014 14:25)	37	MomentMx Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
C	hawc2/oc4_p2_load_case_1-3d.sel (06-12-2013 21:42)	37	MomentMx Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment

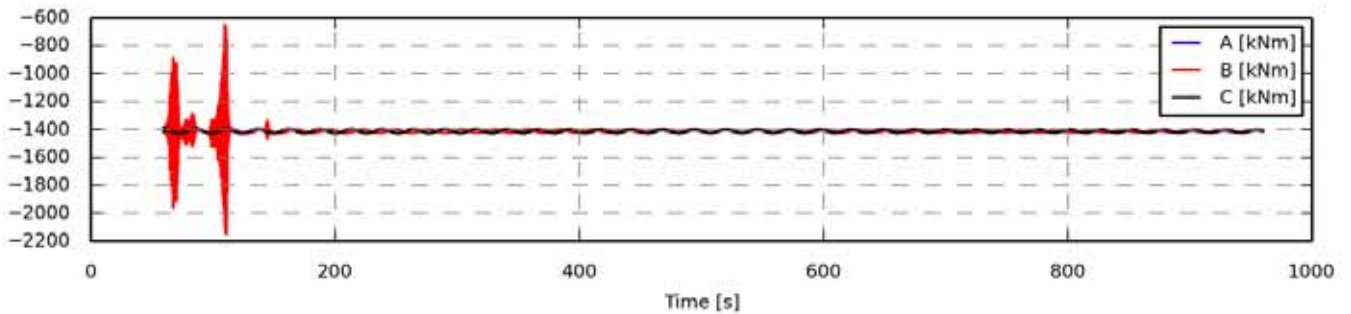


Figure 449 - Full length time series

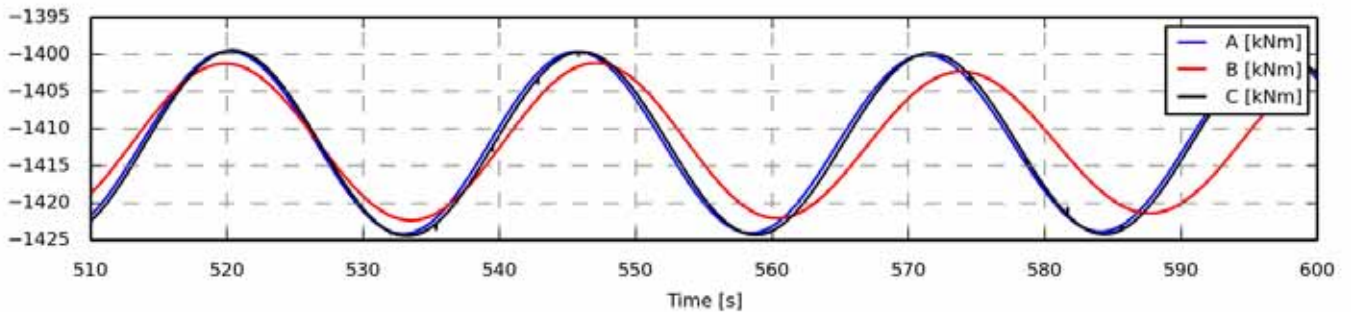


Figure 450 - Zoom of time series

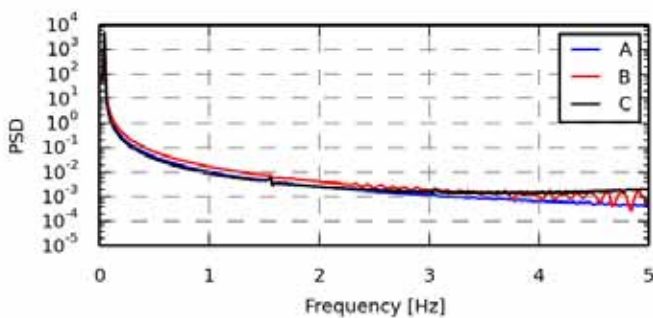


Figure 451 - Power spectrum density

Statistics	A	B	C
Min	-1.4275e+03	-2.1472e+03	-1.4280e+03
Max	-1.3955e+03	-6.4911e+02	-1.3781e+03
Mean	-1.4119e+03	-1.4118e+03	-1.4119e+03
Std	8.9632	42.1971	9.1240
Skewness	-0.0091	0.1118	-0.0059
Kurtosis	-1.4122	113.9231	-1.3993

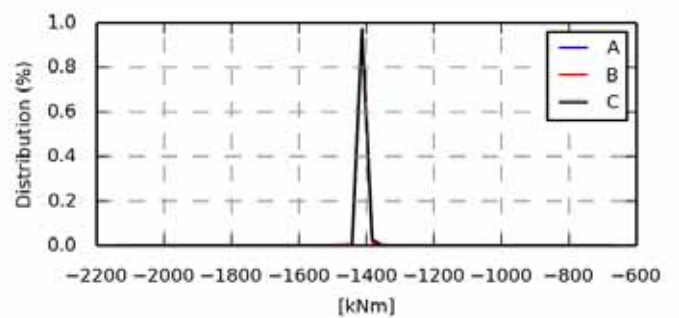


Figure 452 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	8.6532	487.8791	9.2953
Eq (m=4)	11.4199	583.2311	12.3724
Eq (m=6)	15.1728	727.6043	17.0618
Eq (m=8)	17.5960	832.9366	20.8699
Eq (m=10)	19.3128	913.0625	24.1794
Eq (m=12)	20.6096	975.6609	26.9965

Section 5.13 oc4_p2_load_case_1-3d: My coo: towertop [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3d.sel (28-02-2014 17:17)	38	MomentMy Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
B	WAMsim/oc4_p2_load_case_1-3d.sel (01-04-2014 14:25)	38	MomentMy Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
C	hawc2/oc4_p2_load_case_1-3d.sel (06-12-2013 21:42)	38	MomentMy Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment

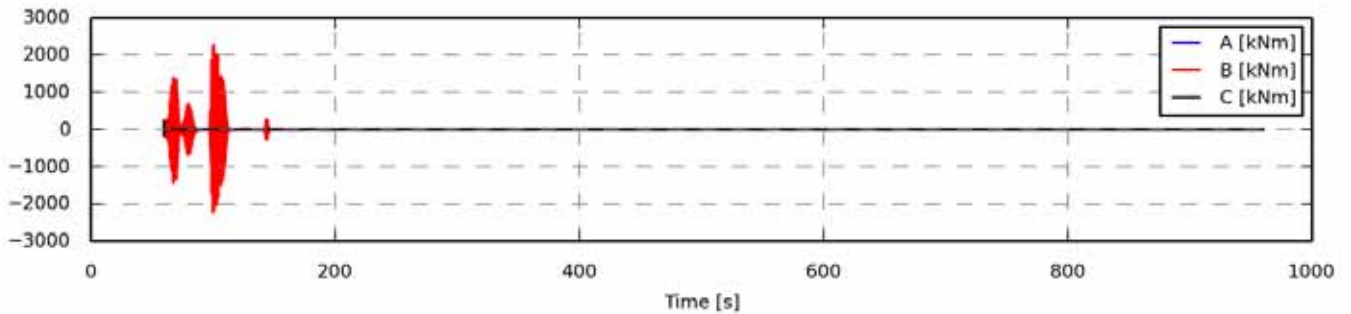


Figure 453 - Full length time series

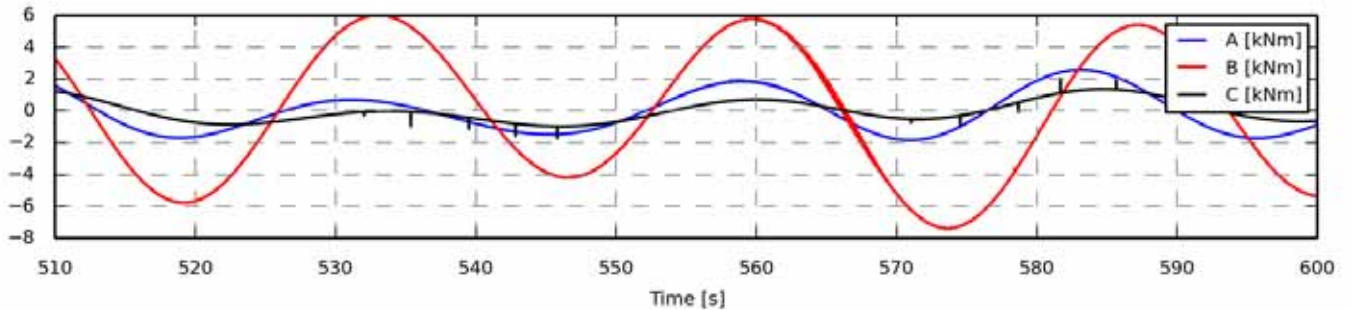


Figure 454 - Zoom of time series

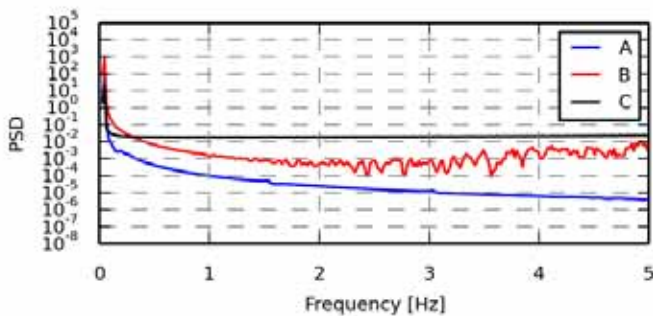


Figure 455 - Power spectrum density

Statistics	A	B	C
Min	-2.6180	-2.2254e+03	-1.6874e+02
Max	4.0960	2.2770e+03	236.1360
Mean	-0.0118	-0.0078	-0.0076
Std	1.3443	147.8922	1.9488
Skewness	0.4674	0.0670	30.7060
Kurtosis	-0.5616	76.3027	8.0630e+03

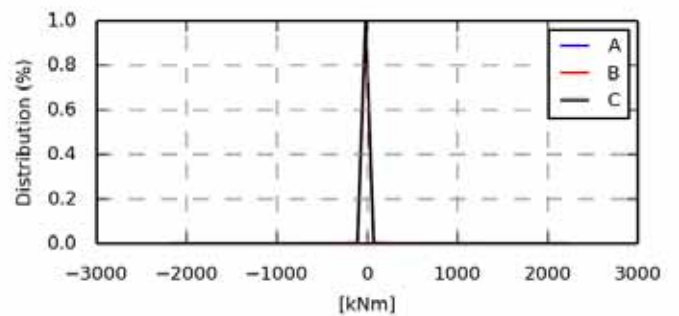


Figure 456 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	1.3828	1.6184e+03	38.3920
Eq (m=4)	1.8410	1.8571e+03	66.2894
Eq (m=6)	2.5790	2.2212e+03	118.0089
Eq (m=8)	3.1374	2.4946e+03	159.4331
Eq (m=10)	3.5722	2.7101e+03	191.6543
Eq (m=12)	3.9178	2.8841e+03	216.9235

Section 5.14 oc4_p2_load_case_1-3d: Mz coo: towertop [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3d.sel (28-02-2014 17:17)	39	MomentMz Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
B	WAMsim/oc4_p2_load_case_1-3d.sel (01-04-2014 14:25)	39	MomentMz Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
C	hawc2/oc4_p2_load_case_1-3d.sel (06-12-2013 21:42)	39	MomentMz Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment

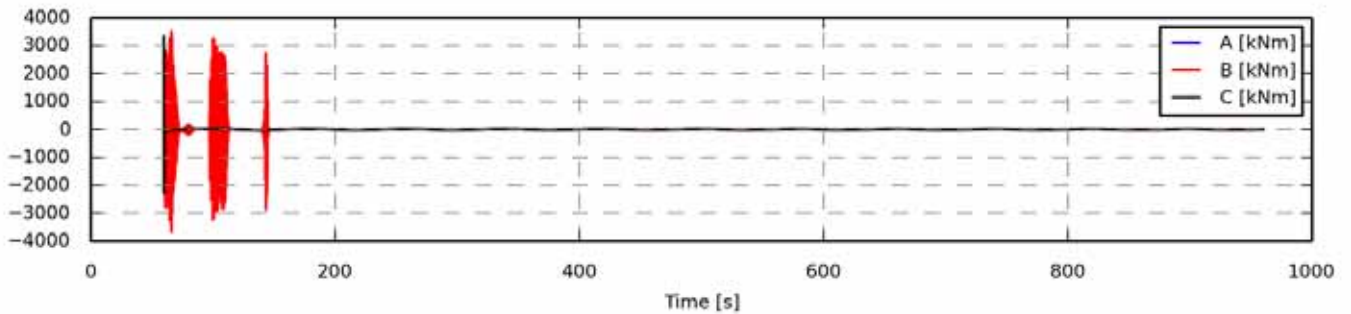


Figure 457 - Full length time series

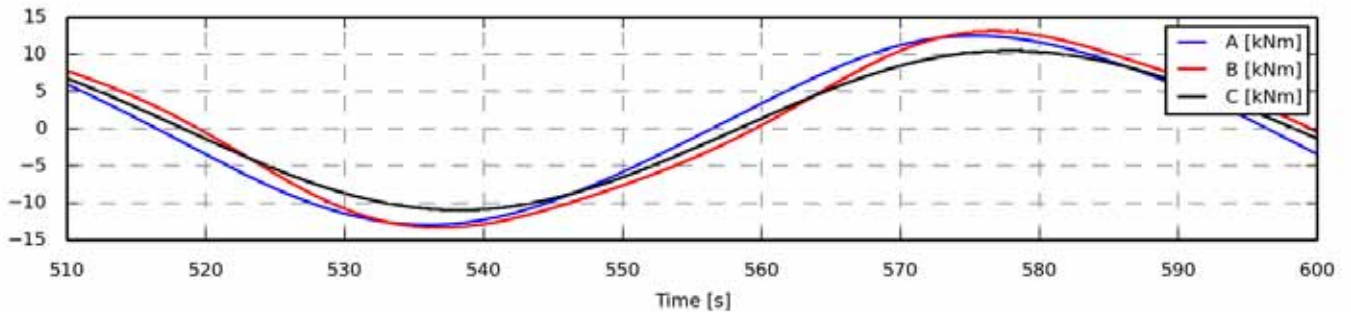


Figure 458 - Zoom of time series

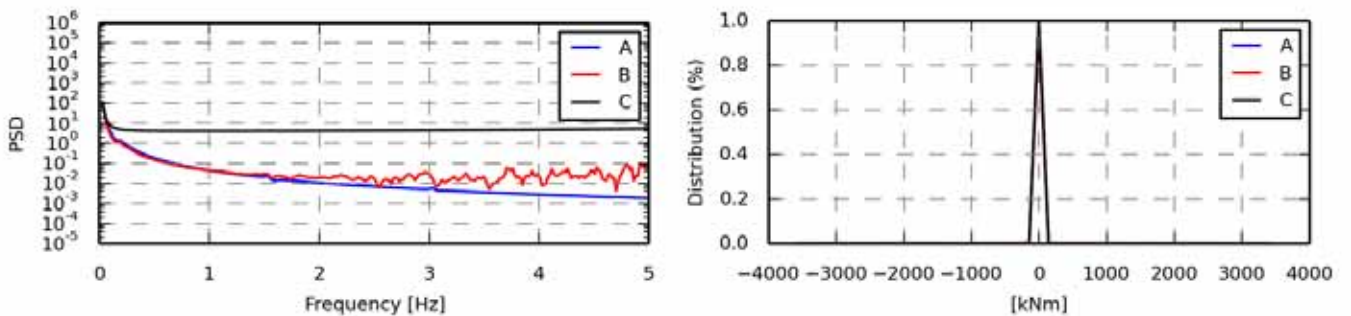


Figure 459 - Power spectrum density

Statistics	A	B	C
Min	-40.3274	-3.6682e+03	-2.2675e+03
Max	21.1278	3.5153e+03	3.3322e+03
Mean	-0.1235	-0.1330	-0.0563
Std	10.2432	287.7744	26.4019
Skewness	0.0054	0.0227	35.7878
Kurtosis	-0.9914	58.5510	9.0275e+03

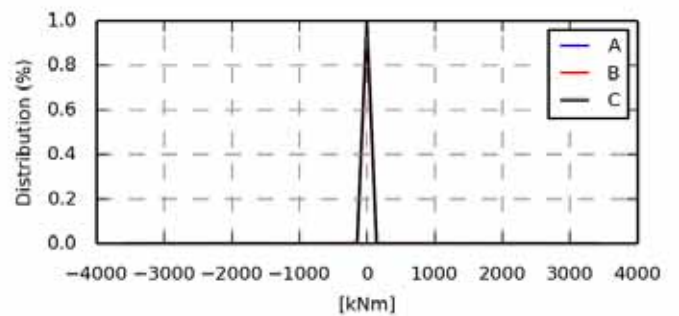


Figure 460 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	9.3092	3.0395e+03	524.0050
Eq (m=4)	12.8701	3.3840e+03	908.2253
Eq (m=6)	19.3295	3.8667e+03	1.6251e+03
Eq (m=8)	24.8603	4.2098e+03	2.2011e+03
Eq (m=10)	29.4061	4.4793e+03	2.6487e+03
Eq (m=12)	33.0824	4.7029e+03	2.9993e+03

Section 5.15 oc4_p2_load_case_1-3d: Mx coo: tower [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3d.sel (28-02-2014 17:17)	43	MomentMx Mbdy:tower nodenr: 1 coo: tower tower base bending moment
B	WAMsim/oc4_p2_load_case_1-3d.sel (01-04-2014 14:25)	43	MomentMx Mbdy:tower nodenr: 1 coo: tower tower base bending moment
C	hawc2/oc4_p2_load_case_1-3d.sel (06-12-2013 21:42)	43	MomentMx Mbdy:tower nodenr: 1 coo: tower tower base bending moment

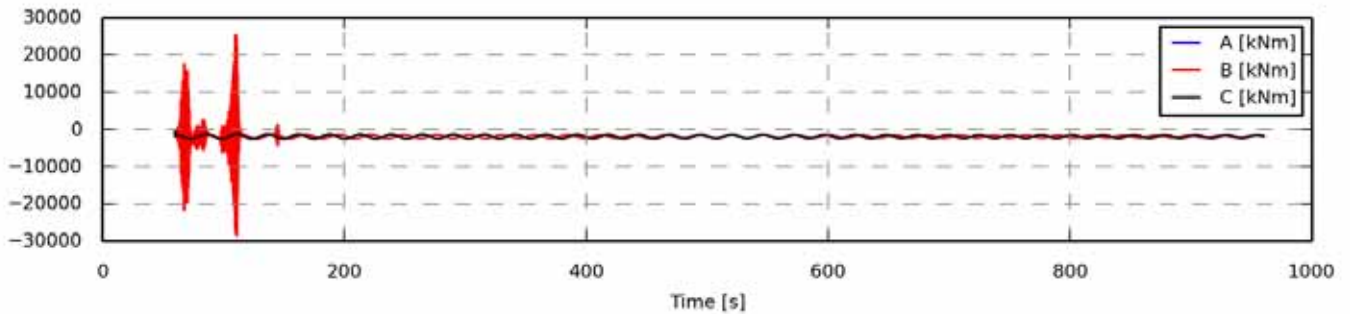


Figure 461 - Full length time series

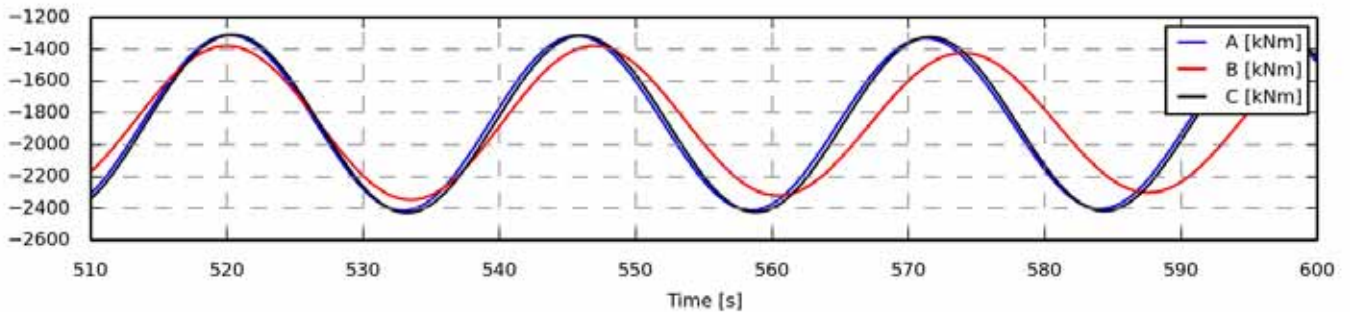


Figure 462 - Zoom of time series

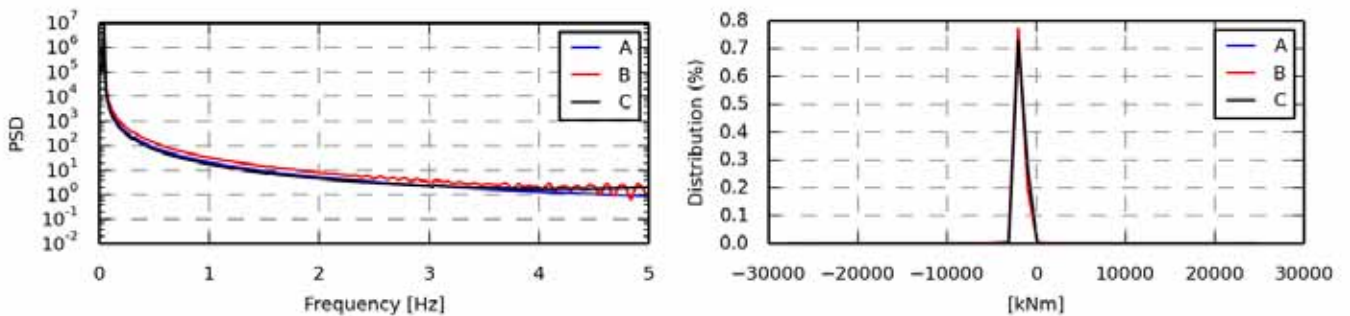


Figure 463 - Power spectrum density

Statistics	A	B	C
Min	-2.5719e+03	-2.8331e+04	-2.5922e+03
Max	-1.1301e+03	2.5349e+04	-5.4737e+02
Mean	-1.8641e+03	-1.8595e+03	-1.8685e+03
Std	402.9178	1.5268e+03	410.1338
Skewness	-0.0106	0.1238	-0.0087
Kurtosis	-1.4122	108.9785	-1.4040

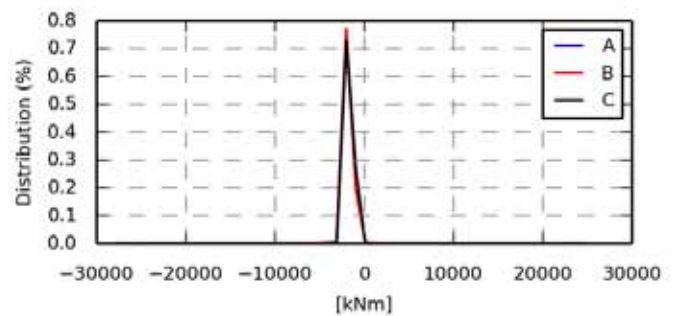


Figure 464 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	389.3750	1.7435e+04	405.8390
Eq (m=4)	513.9572	2.0842e+04	537.8903
Eq (m=6)	683.0658	2.6006e+04	729.5932
Eq (m=8)	792.3759	2.9786e+04	874.7640
Eq (m=10)	869.9104	3.2671e+04	999.3880
Eq (m=12)	928.5356	3.4930e+04	1.1088e+03

Section 5.16 oc4_p2_load_case_1-3d: My coo: tower [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3d.sel (28-02-2014 17:17)	44	MomentMy Mbdy:tower nodenr: 1 coo: tower tower base bending moment
B	WAMsim/oc4_p2_load_case_1-3d.sel (01-04-2014 14:25)	44	MomentMy Mbdy:tower nodenr: 1 coo: tower tower base bending moment
C	hawc2/oc4_p2_load_case_1-3d.sel (06-12-2013 21:42)	44	MomentMy Mbdy:tower nodenr: 1 coo: tower tower base bending moment

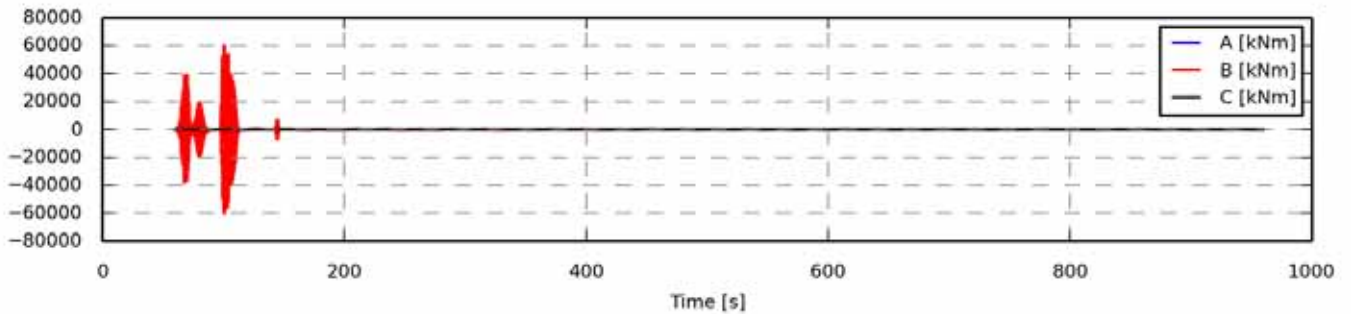


Figure 465 - Full length time series

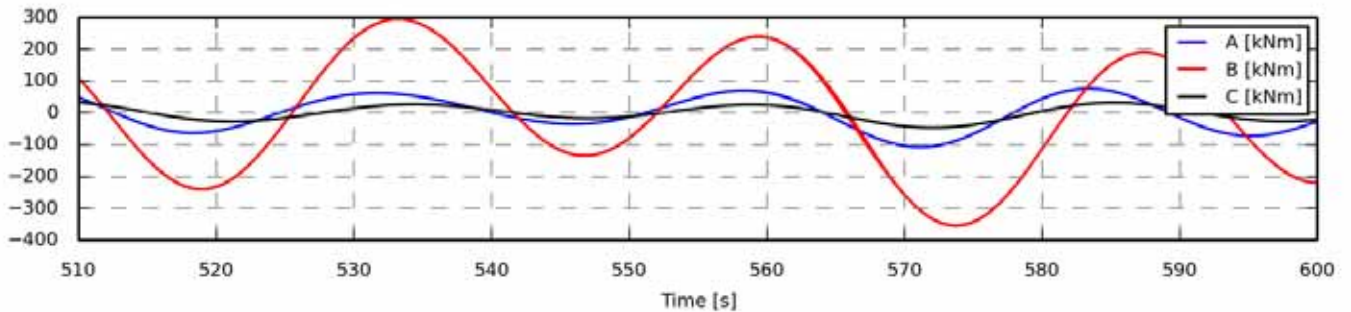


Figure 466 - Zoom of time series

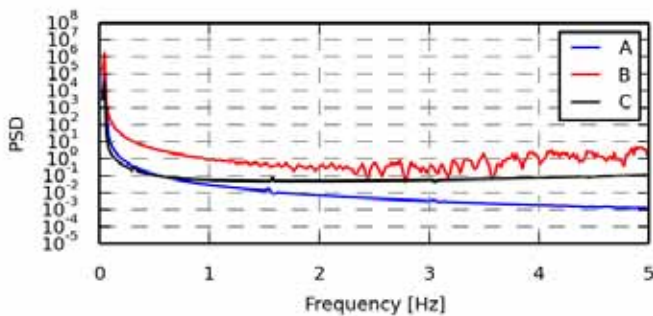


Figure 467 - Power spectrum density

Statistics	A	B	C
Min	-1.3623e+02	-6.0189e+04	-2.5860e+02
Max	107.2409	6.0408e+04	175.4516
Mean	-0.1362	0.2011	-0.2025
Std	55.4351	3.9249e+03	26.9194
Skewness	-0.4189	0.0878	-0.5202
Kurtosis	-0.7594	77.2808	0.0496

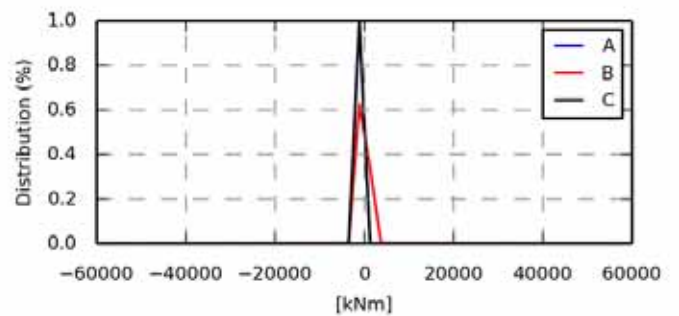


Figure 468 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	54.4040	4.2950e+04	56.3880
Eq (m=4)	73.8700	4.9372e+04	86.9186
Eq (m=6)	102.6915	5.9280e+04	140.1349
Eq (m=8)	122.8464	6.6783e+04	181.2884
Eq (m=10)	137.7644	7.2702e+04	213.1139
Eq (m=12)	149.2709	7.7469e+04	238.1892

Section 5.17 oc4_p2_load_case_1-3d: Mz coo: tower [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3d.sel (28-02-2014 17:17)	45	MomentMz Mbdy:tower nodenr: 1 coo: tower tower base bending moment
B	WAMsim/oc4_p2_load_case_1-3d.sel (01-04-2014 14:25)	45	MomentMz Mbdy:tower nodenr: 1 coo: tower tower base bending moment
C	hawc2/oc4_p2_load_case_1-3d.sel (06-12-2013 21:42)	45	MomentMz Mbdy:tower nodenr: 1 coo: tower tower base bending moment

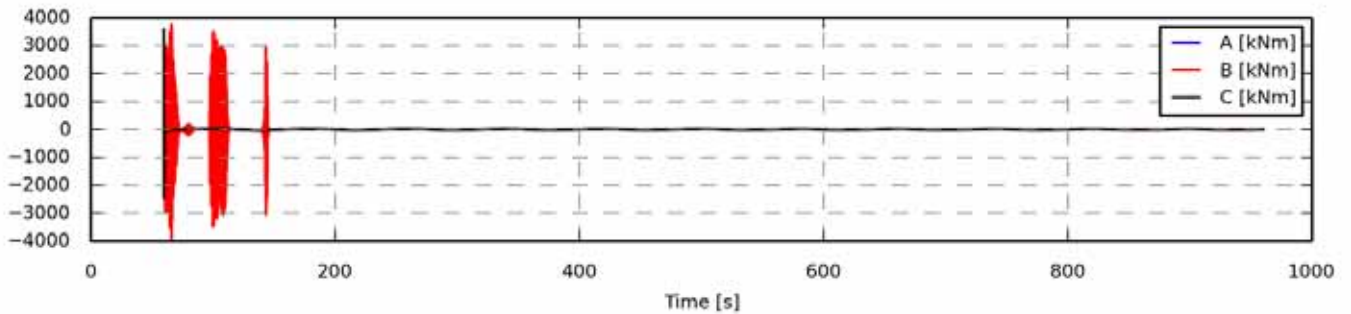


Figure 469 - Full length time series

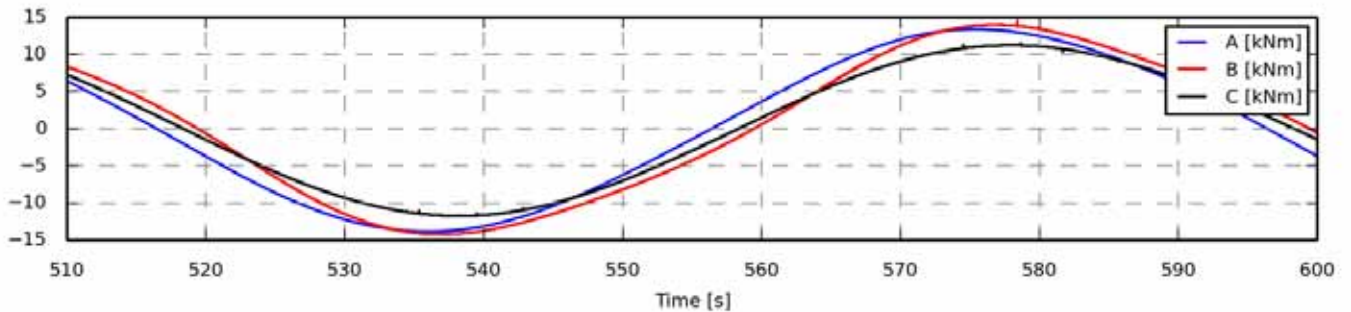


Figure 470 - Zoom of time series

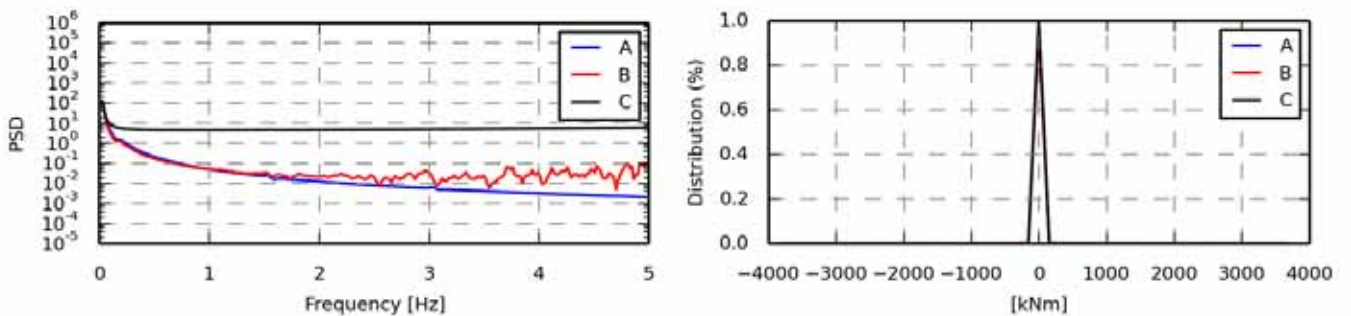


Figure 471 - Power spectrum density

Statistics	A	B	C
Min	-43.1949	-3.9370e+03	-2.4289e+03
Max	22.6571	3.7726e+03	3.5691e+03
Mean	-0.1323	-0.1421	-0.0605
Std	10.9667	309.1363	28.2766
Skewness	0.0055	0.0233	35.7919
Kurtosis	-0.9905	58.5506	9.0301e+03

Figure 472 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	9.9723	3.2658e+03	561.2737
Eq (m=4)	13.7886	3.6360e+03	972.8208
Eq (m=6)	20.7118	4.1547e+03	1.7407e+03
Eq (m=8)	26.6388	4.5231e+03	2.3576e+03
Eq (m=10)	31.5100	4.8121e+03	2.8371e+03
Eq (m=12)	35.4493	5.0515e+03	3.2126e+03

Section 5.18 oc4_p2_load_case_1-3d: ESYS line1_1 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3d.sel (28-02-2014 17:17)	55	ESYS line1_1 SENSOR 4
B	WAMsim/oc4_p2_load_case_1-3d.sel (01-04-2014 14:25)	55	ESYS line1_1 SENSOR 4
C	hawc2/oc4_p2_load_case_1-3d.sel (06-12-2013 21:42)	55	ESYS line1_1 SENSOR 4

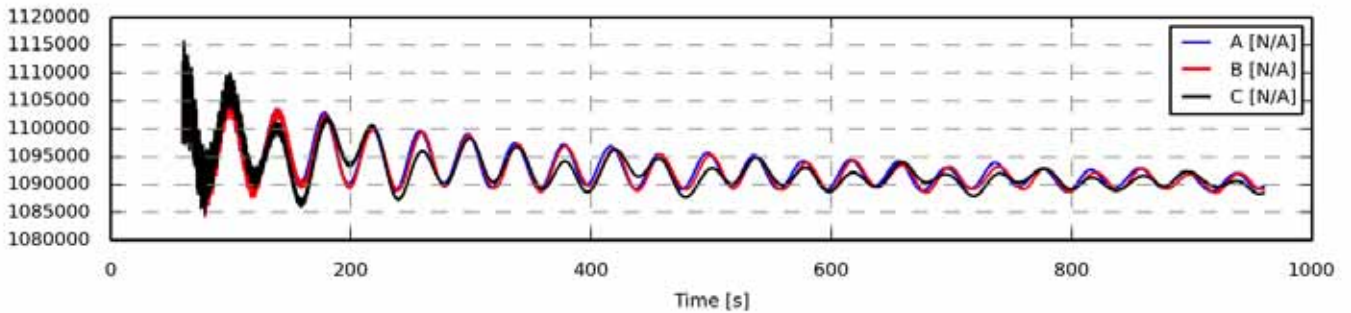


Figure 473 - Full length time series

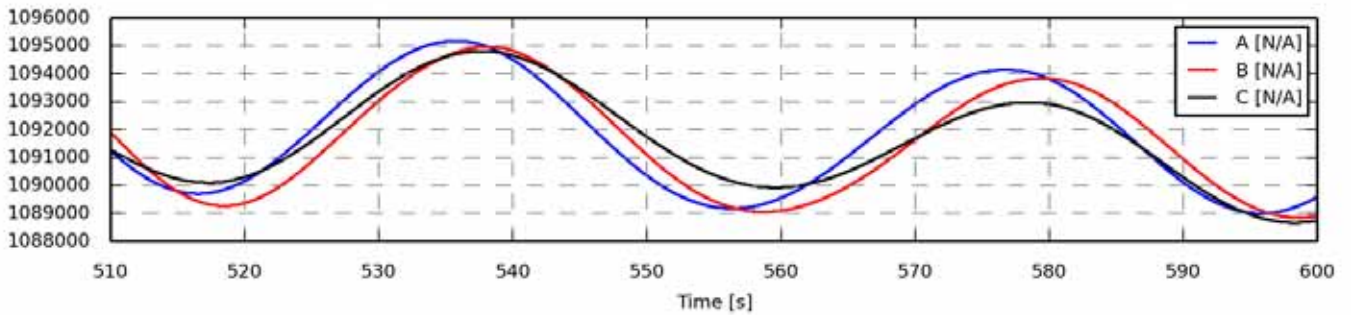


Figure 474 - Zoom of time series

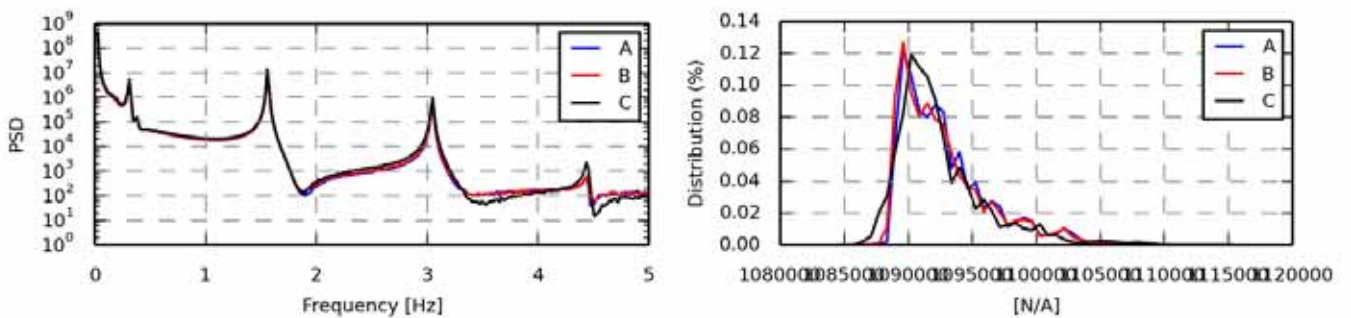


Figure 475 - Power spectrum density

Statistics	A	B	C
Min	1.0848e+06	1.0842e+06	1.0849e+06
Max	1.1150e+06	1.1153e+06	1.1157e+06
Mean	1.0929e+06	1.0927e+06	1.0925e+06
Std	3.5843e+03	3.5950e+03	3.6379e+03
Skewness	1.4710	1.4891	1.7612
Kurtosis	2.5880	2.6623	4.2854

Figure 476 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	4.0823e+03	4.1182e+03	4.3307e+03
Eq (m=4)	5.7942e+03	5.8745e+03	6.1618e+03
Eq (m=6)	9.1913e+03	9.3685e+03	9.6750e+03
Eq (m=8)	1.2094e+04	1.2361e+04	1.2582e+04
Eq (m=10)	1.4412e+04	1.4754e+04	1.4874e+04
Eq (m=12)	1.6255e+04	1.6654e+04	1.6693e+04

Section 5.19 oc4_p2_load_case_1-3d: ESYS line1_3 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3d.sel (28-02-2014 17:17)	259	ESYS line1_3 SENSOR 104
B	WAMsim/oc4_p2_load_case_1-3d.sel (01-04-2014 14:25)	259	ESYS line1_3 SENSOR 104
C	hawc2/oc4_p2_load_case_1-3d.sel (06-12-2013 21:42)	259	ESYS line1_3 SENSOR 104

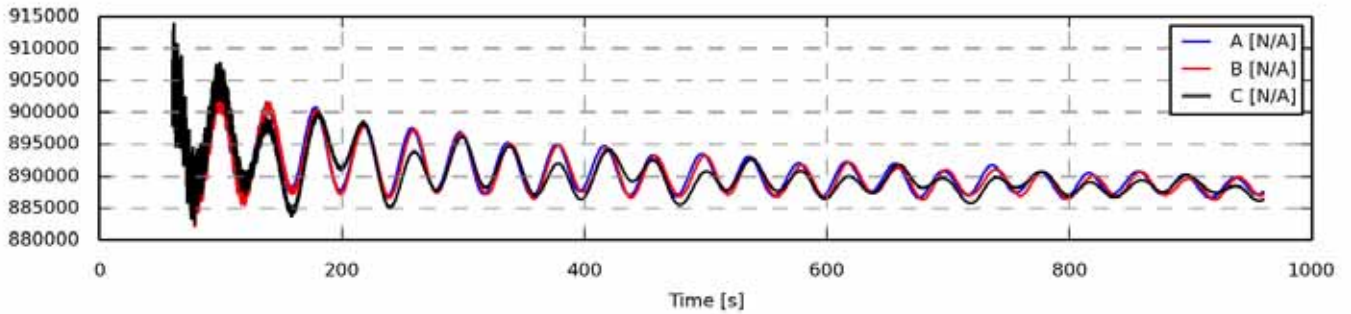


Figure 477 - Full length time series

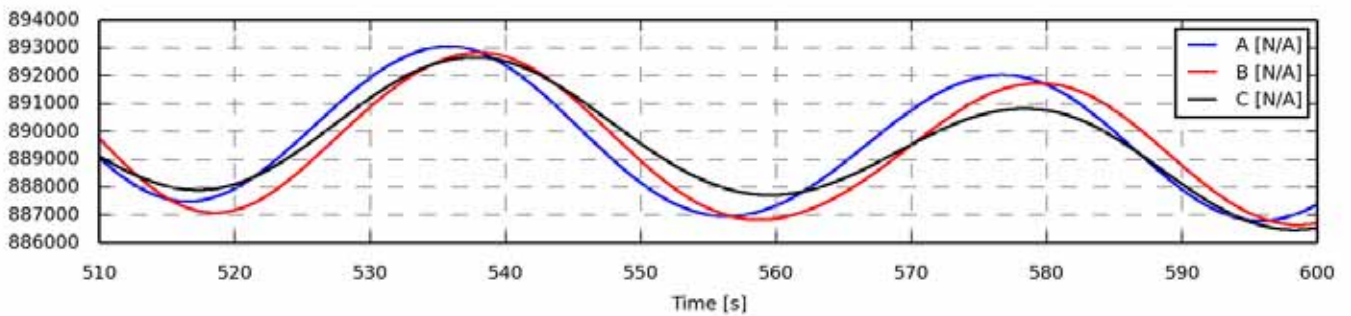


Figure 478 - Zoom of time series

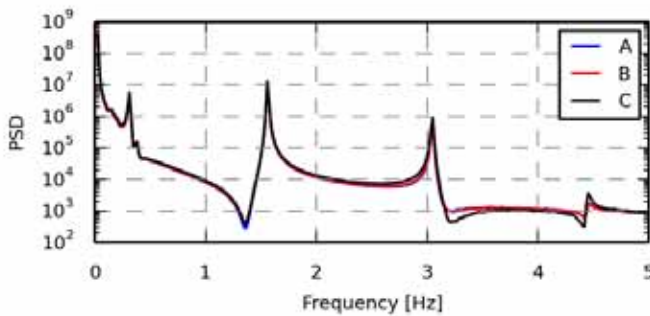


Figure 479 - Power spectrum density

Statistics	A	B	C
Min	8.8264e+05	8.8213e+05	8.8275e+05
Max	9.1312e+05	9.1330e+05	9.1391e+05
Mean	8.9077e+05	8.9058e+05	8.9033e+05
Std	3.6278e+03	3.6374e+03	3.6725e+03
Skewness	1.4711	1.4891	1.7652
Kurtosis	2.6180	2.6953	4.3395

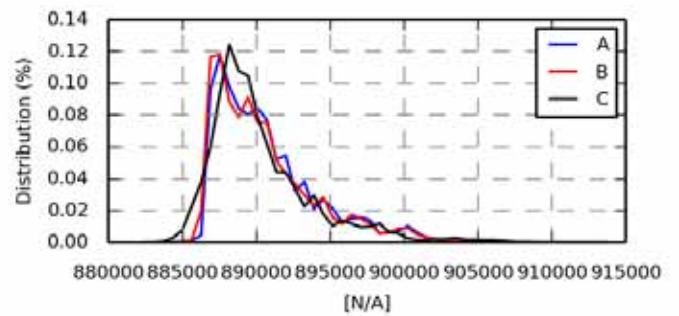


Figure 480 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	4.0537e+03	4.0815e+03	4.2948e+03
Eq (m=4)	5.7716e+03	5.8524e+03	6.1250e+03
Eq (m=6)	9.2067e+03	9.3901e+03	9.6725e+03
Eq (m=8)	1.2150e+04	1.2413e+04	1.2630e+04
Eq (m=10)	1.4499e+04	1.4822e+04	1.4970e+04
Eq (m=12)	1.6365e+04	1.6733e+04	1.6827e+04

Section 5.20 oc4_p2_load_case_1-3d: ESYS line2_1 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3d.sel (28-02-2014 17:17)	263	ESYS line2_1 SENSOR 4
B	WAMsim/oc4_p2_load_case_1-3d.sel (01-04-2014 14:25)	263	ESYS line2_1 SENSOR 4
C	hawc2/oc4_p2_load_case_1-3d.sel (06-12-2013 21:42)	263	ESYS line2_1 SENSOR 4

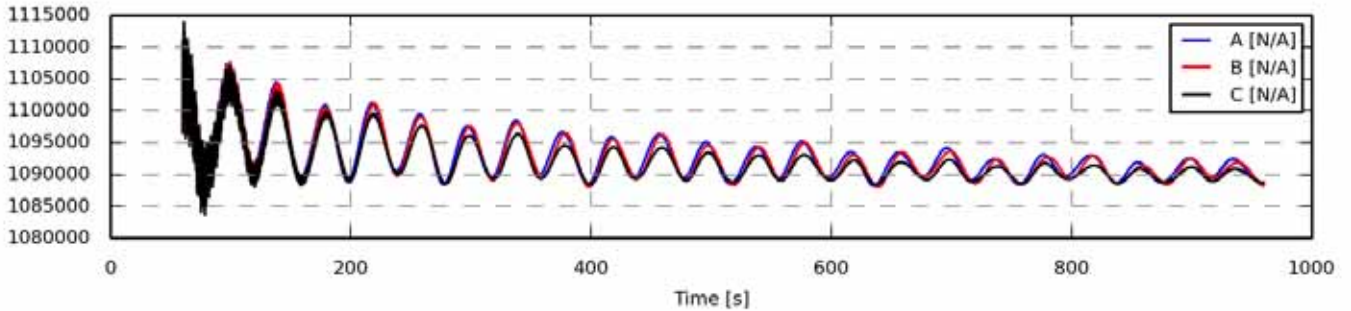


Figure 481 - Full length time series

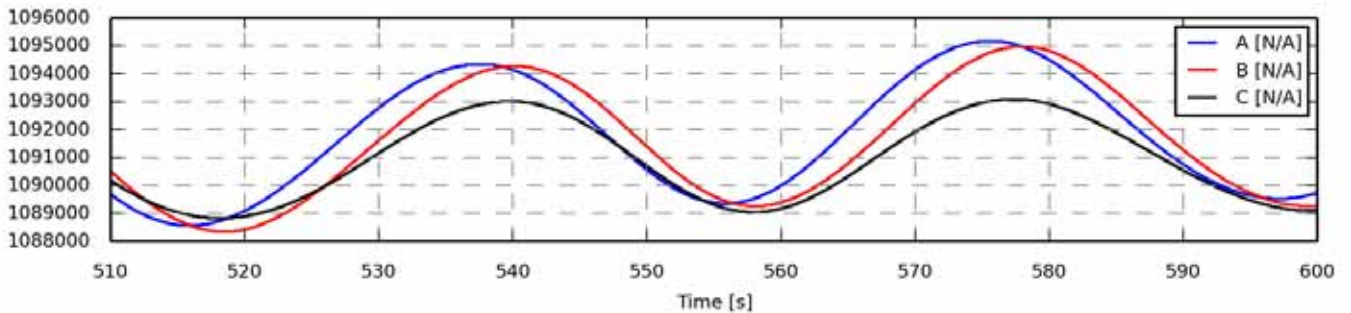


Figure 482 - Zoom of time series

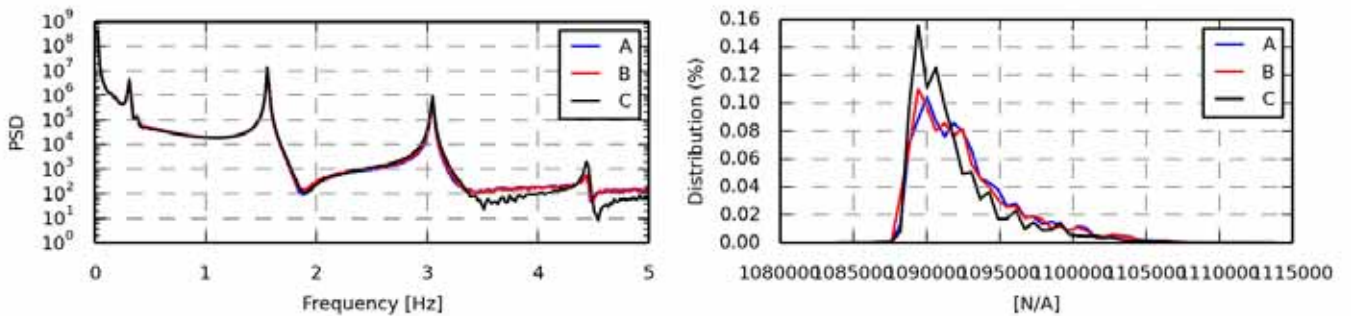


Figure 483 - Power spectrum density

Statistics	A	B	C
Min	1.0842e+06	1.0837e+06	1.0836e+06
Max	1.1135e+06	1.1137e+06	1.1140e+06
Mean	1.0928e+06	1.0926e+06	1.0919e+06
Std	3.5837e+03	3.5962e+03	3.2988e+03
Skewness	1.4026	1.4159	1.8600
Kurtosis	2.2202	2.2616	4.3008

Figure 484 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	4.0132e+03	4.0635e+03	4.1779e+03
Eq (m=4)	5.6830e+03	5.7843e+03	5.8926e+03
Eq (m=6)	8.9782e+03	9.1784e+03	9.2728e+03
Eq (m=8)	1.1775e+04	1.2052e+04	1.2168e+04
Eq (m=10)	1.4001e+04	1.4335e+04	1.4486e+04
Eq (m=12)	1.5768e+04	1.6145e+04	1.6330e+04

Section 5.21 oc4_p2_load_case_1-3d: ESYS line2_3 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3d.sel (28-02-2014 17:17)	467	ESYS line2_3 SENSOR 104
B	WAMsim/oc4_p2_load_case_1-3d.sel (01-04-2014 14:25)	467	ESYS line2_3 SENSOR 104
C	hawc2/oc4_p2_load_case_1-3d.sel (06-12-2013 21:42)	467	ESYS line2_3 SENSOR 104

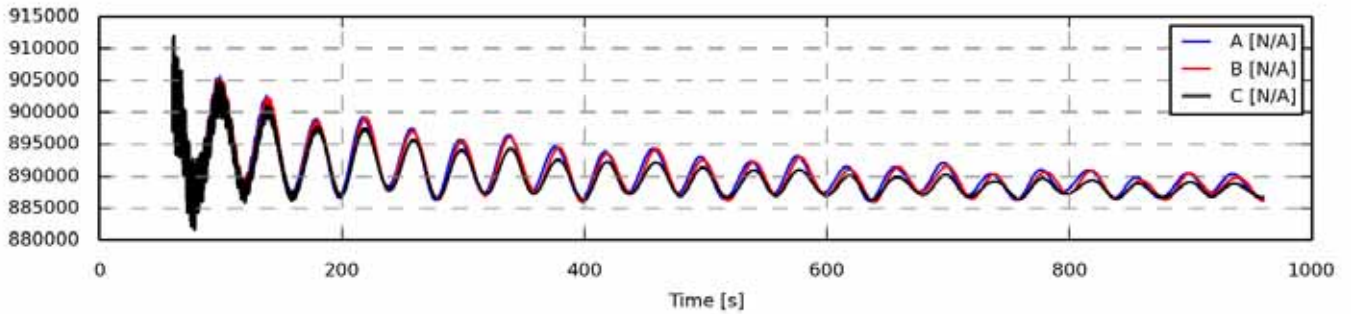


Figure 485 - Full length time series

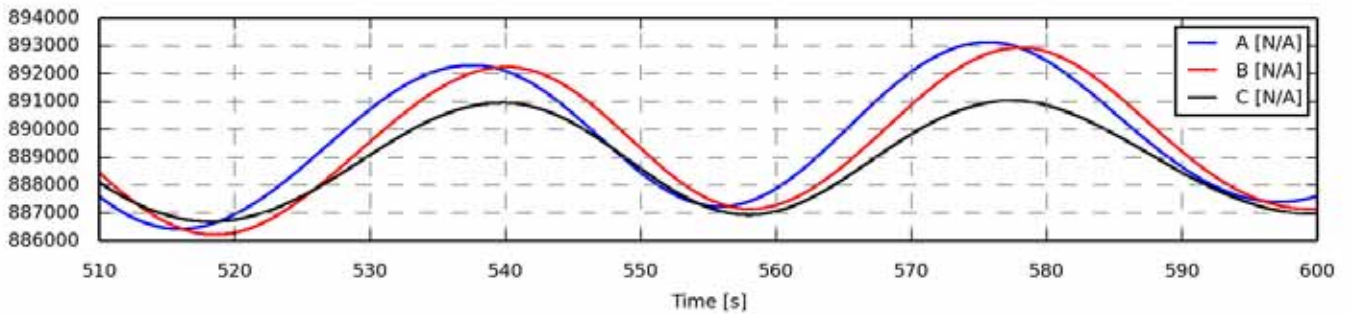


Figure 486 - Zoom of time series

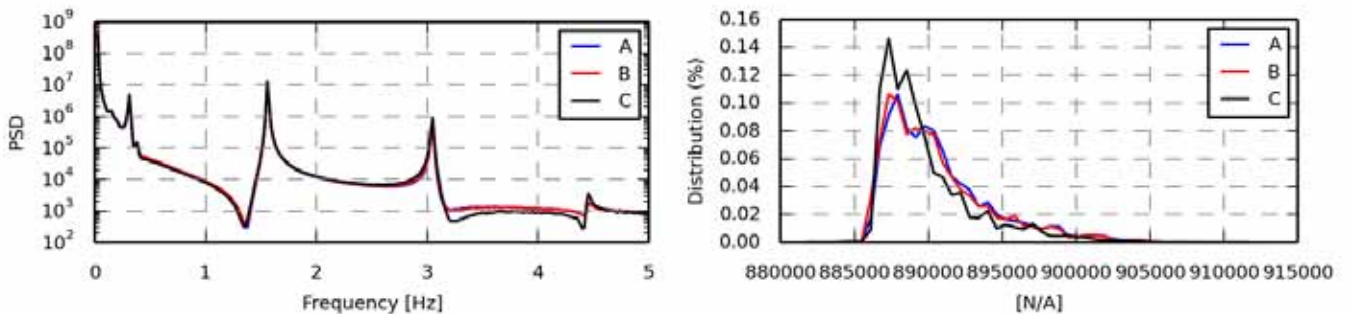


Figure 487 - Power spectrum density

Statistics	A	B	C
Min	8.8207e+05	8.8162e+05	8.8153e+05
Max	9.1138e+05	9.1150e+05	9.1197e+05
Mean	8.9070e+05	8.9051e+05	8.8985e+05
Std	3.6266e+03	3.6388e+03	3.3344e+03
Skewness	1.4025	1.4160	1.8638
Kurtosis	2.2434	2.2878	4.3599

Figure 488 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	3.9976e+03	4.0304e+03	4.1339e+03
Eq (m=4)	5.6666e+03	5.7485e+03	5.8373e+03
Eq (m=6)	8.9756e+03	9.1417e+03	9.2278e+03
Eq (m=8)	1.1786e+04	1.2014e+04	1.2152e+04
Eq (m=10)	1.4019e+04	1.4292e+04	1.4494e+04
Eq (m=12)	1.5790e+04	1.6099e+04	1.6354e+04

Section 5.22 oc4_p2_load_case_1-3d: ESYS line3_1 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3d.sel (28-02-2014 17:17)	471	ESYS line3_1 SENSOR 4
B	WAMsim/oc4_p2_load_case_1-3d.sel (01-04-2014 14:25)	471	ESYS line3_1 SENSOR 4
C	hawc2/oc4_p2_load_case_1-3d.sel (06-12-2013 21:42)	471	ESYS line3_1 SENSOR 4

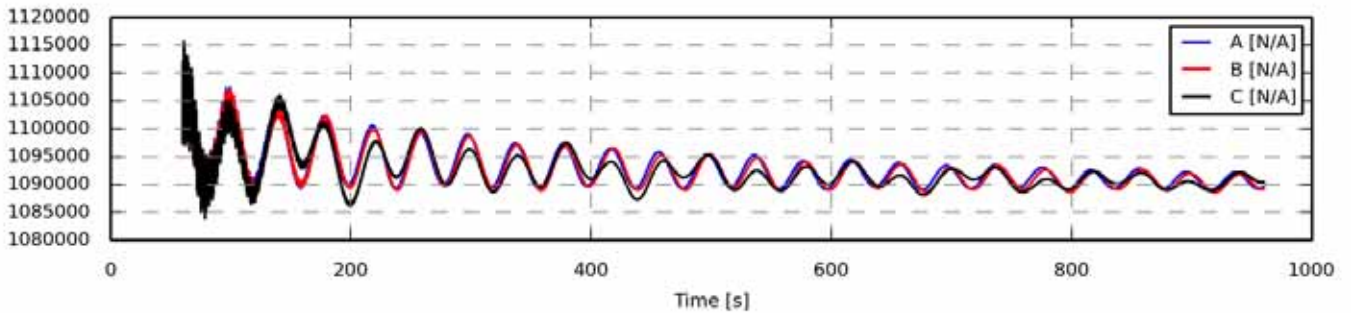


Figure 489 - Full length time series

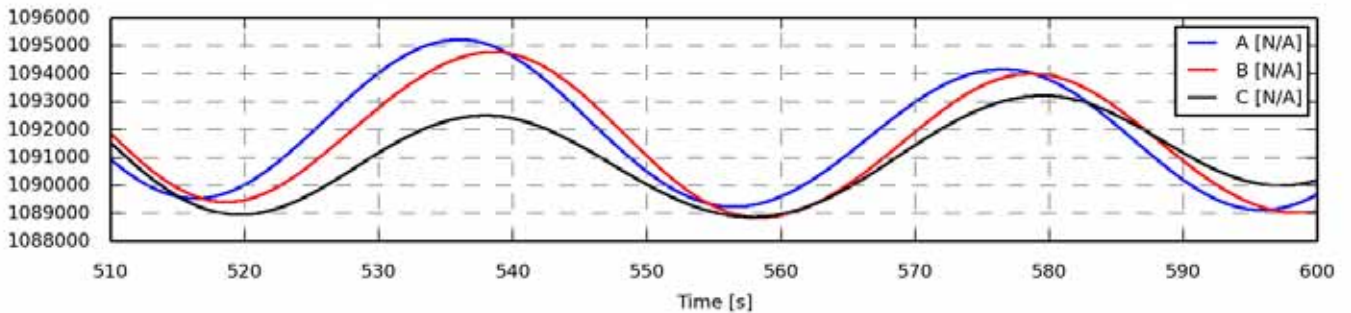


Figure 490 - Zoom of time series

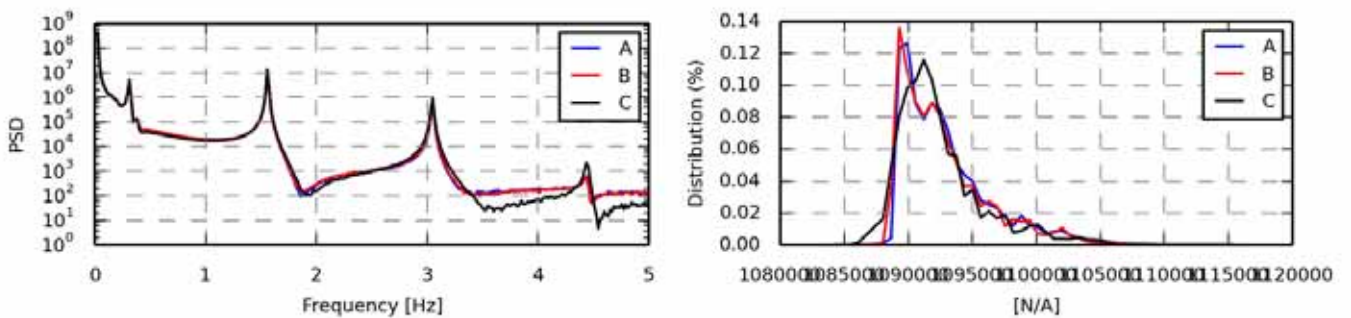


Figure 491 - Power spectrum density

Statistics	A	B	C
Min	1.0847e+06	1.0845e+06	1.0839e+06
Max	1.1151e+06	1.1151e+06	1.1157e+06
Mean	1.0929e+06	1.0927e+06	1.0925e+06
Std	3.5691e+03	3.5709e+03	3.5278e+03
Skewness	1.4837	1.4727	1.6338
Kurtosis	2.6301	2.5952	3.7595

Figure 492 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	4.0729e+03	4.0946e+03	4.3196e+03
Eq (m=4)	5.7849e+03	5.8254e+03	6.1182e+03
Eq (m=6)	9.2034e+03	9.2620e+03	9.6395e+03
Eq (m=8)	1.2139e+04	1.2210e+04	1.2672e+04
Eq (m=10)	1.4487e+04	1.4570e+04	1.5121e+04
Eq (m=12)	1.6353e+04	1.6446e+04	1.7076e+04

Section 5.23 oc4_p2_load_case_1-3d: ESYS line3_3 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_1-3d.sel (28-02-2014 17:17)	675	ESYS line3_3 SENSOR 104
B	WAMsim/oc4_p2_load_case_1-3d.sel (01-04-2014 14:25)	675	ESYS line3_3 SENSOR 104
C	hawc2/oc4_p2_load_case_1-3d.sel (06-12-2013 21:42)	675	ESYS line3_3 SENSOR 104

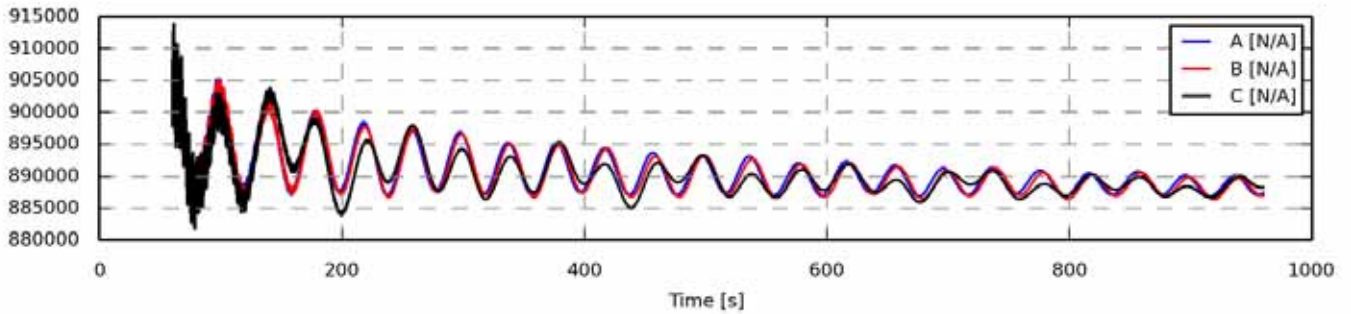


Figure 493 - Full length time series

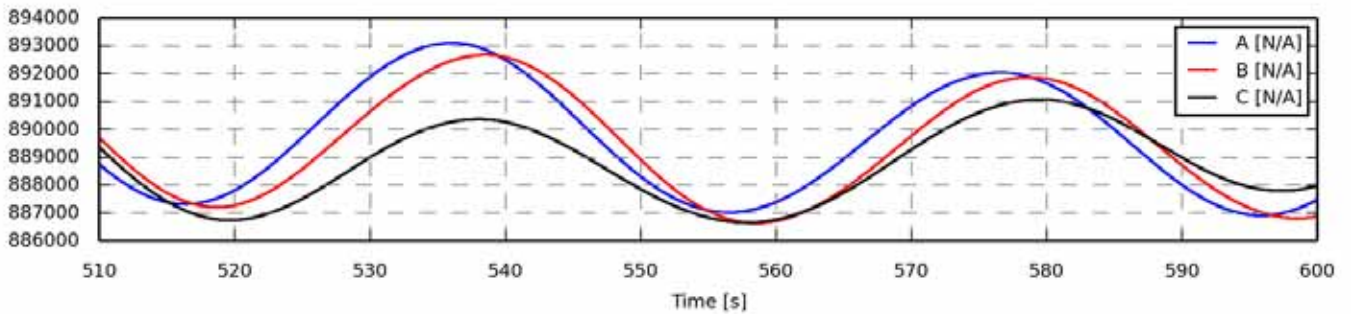


Figure 494 - Zoom of time series

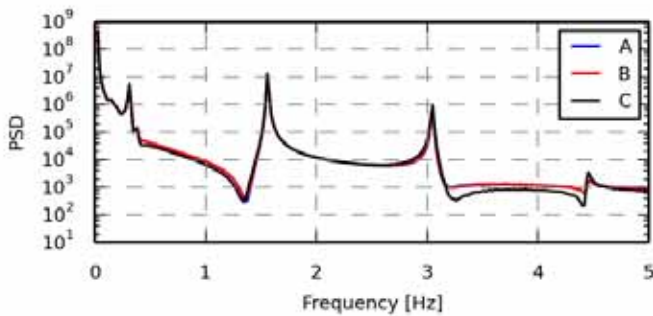


Figure 495 - Power spectrum density

Statistics	A	B	C
Min	8.8251e+05	8.8239e+05	8.8175e+05
Max	9.1322e+05	9.1309e+05	9.1388e+05
Mean	8.9078e+05	8.9058e+05	8.9028e+05
Std	3.6130e+03	3.6142e+03	3.5631e+03
Skewness	1.4834	1.4737	1.6385
Kurtosis	2.6599	2.6340	3.8286

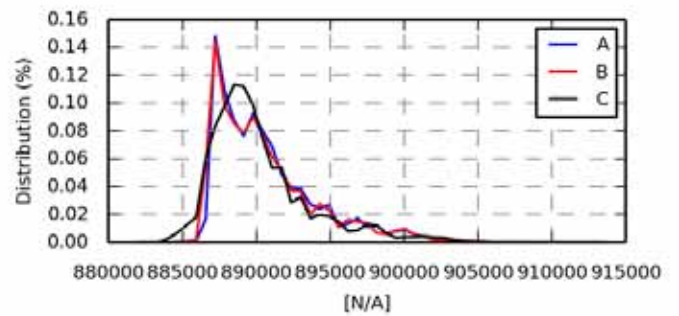


Figure 496 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	4.0548e+03	4.0438e+03	4.2924e+03
Eq (m=4)	5.7879e+03	5.7824e+03	6.1074e+03
Eq (m=6)	9.2584e+03	9.2562e+03	9.6906e+03
Eq (m=8)	1.2231e+04	1.2230e+04	1.2775e+04
Eq (m=10)	1.4604e+04	1.4602e+04	1.5257e+04
Eq (m=12)	1.6487e+04	1.6484e+04	1.7233e+04

Article VI. oc4_p2_load_case_2-1
Generated 22-04-2014 10:00

Section 6.01 oc4_p2_load_case_2-1: WSP gl. coo.,Vy [m/s]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-1.sel (28-02-2014 17:26)	3	Free wind speed Vy, gl. coo, of gl. pos 0.00, 0.00, -90.00
B	WAMsim/oc4_p2_load_case_2-1.sel (01-04-2014 12:51)	3	Free wind speed Vy, gl. coo, of gl. pos 0.00, 0.00, -90.00
C	hawc2/oc4_p2_load_case_2-1.sel (06-12-2013 21:42)	3	Free wind speed Vy, gl. coo, of gl. pos 0.00, 0.00, -90.00

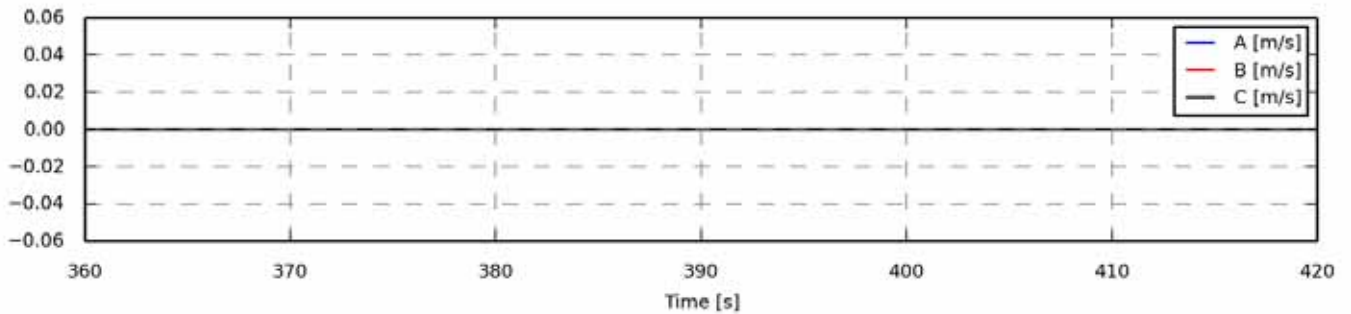


Figure 497 - Full length time series

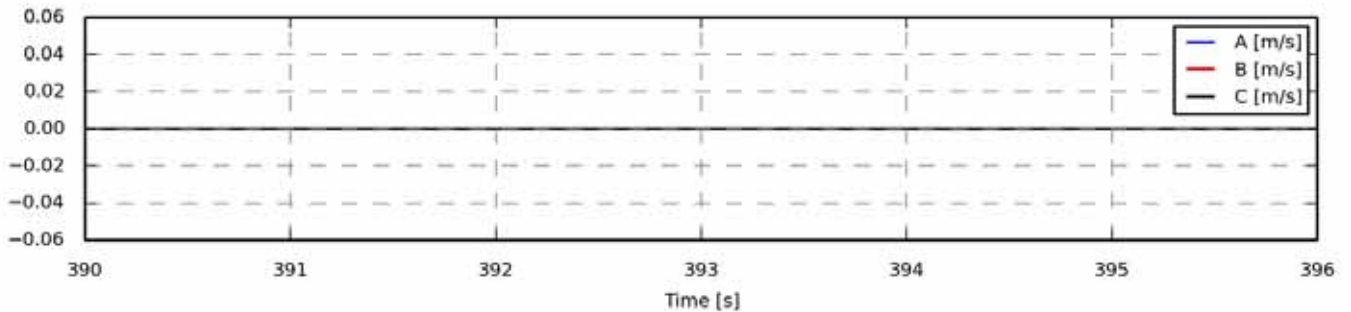


Figure 498 - Zoom of time series

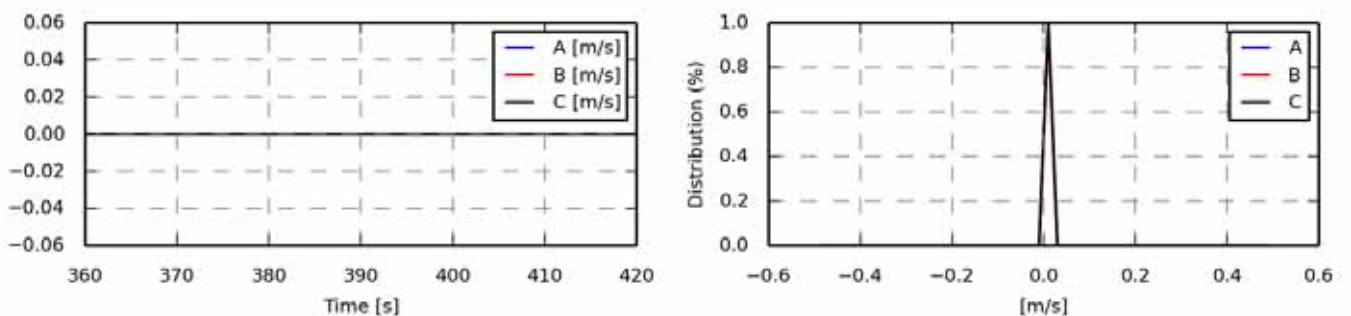


Figure 499 - Power spectrum density

Statistics	A	B	C
Min	0.0000	0.0000	0.0000
Max	0.0000	0.0000	0.0000
Mean	0.0000	0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

Figure 500 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 6.02 oc4_p2_load_case_2-1: Water surf. [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-1.sel (28-02-2014 17:26)	5	Water surface gl. coo, at gl. coo, x,y= 0.00, 0.00
B	WAMsim/oc4_p2_load_case_2-1.sel (01-04-2014 12:51)	5	Constant value
C	hawc2/oc4_p2_load_case_2-1.sel (06-12-2013 21:42)	5	Water surface gl. coo, at gl. coo, x,y= 0.00, 0.00

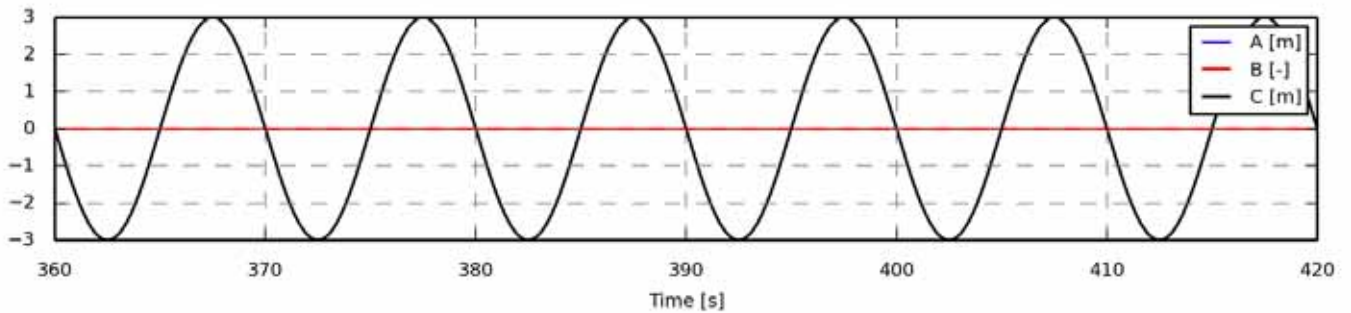


Figure 501 - Full length time series

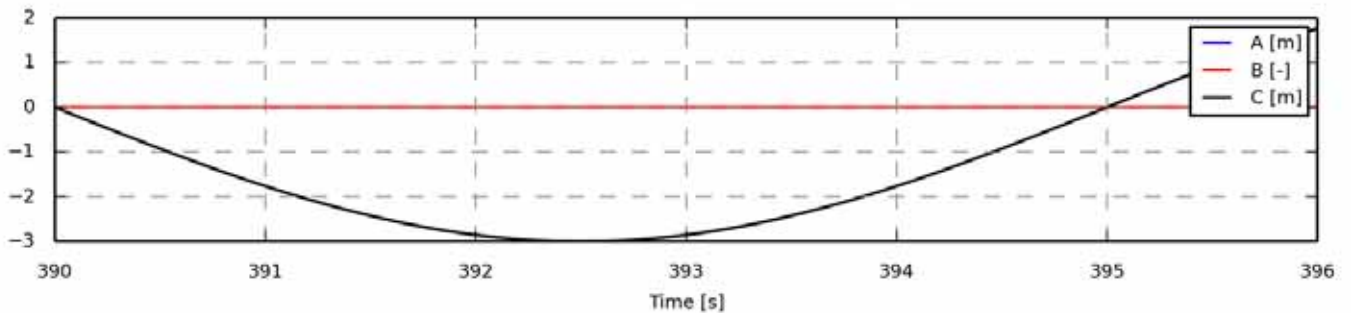


Figure 502 - Zoom of time series

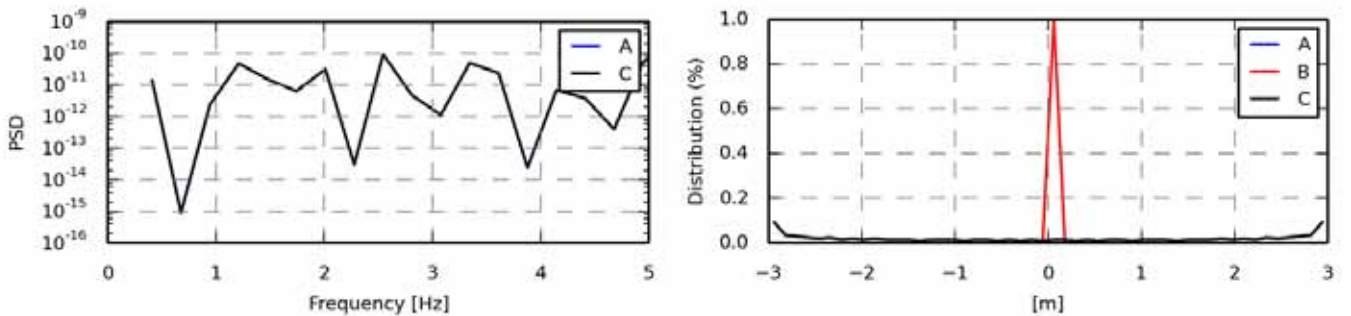


Figure 503 - Power spectrum density

Statistics	A	B	C
Min	-3.0000	0.0000	-3.0000
Max	3.0000	0.0000	3.0000
Mean	-0.0000	0.0000	-0.0000
Std	2.1213	0.0000	2.1213
Skewness	0.0000	0.0000	0.0000
Kurtosis	-1.5000	-3.0000	-1.5000

Figure 504 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	2.7257	-	2.7257
Eq (m=4)	3.3108	-	3.3108
Eq (m=6)	4.0308	-	4.0308
Eq (m=8)	4.4511	-	4.4511
Eq (m=10)	4.7248	-	4.7248
Eq (m=12)	4.9167	-	4.9167

Section 6.03 oc4_p2_load_case_2-1: Constant [-]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-1.sel (28-02-2014 17:26)	6	Constant value
B	WAMsim/oc4_p2_load_case_2-1.sel (01-04-2014 12:51)	6	Constant value
C	hawc2/oc4_p2_load_case_2-1.sel (06-12-2013 21:42)	6	Constant value

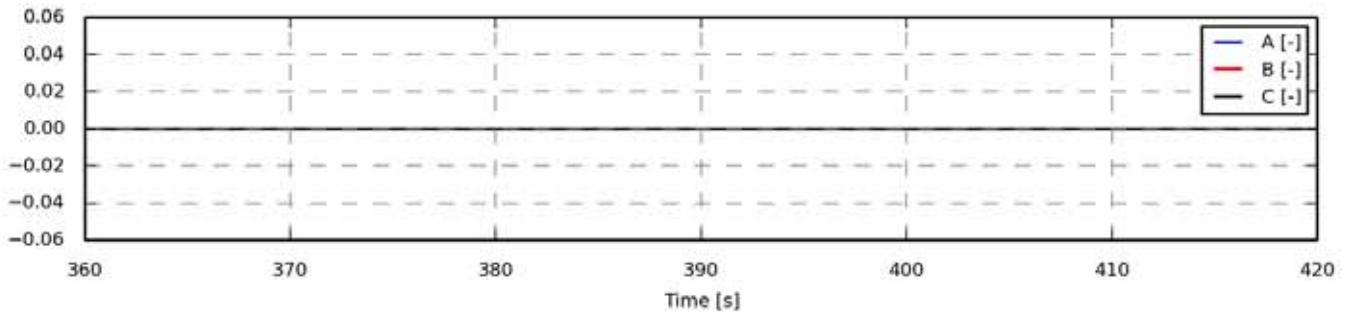


Figure 505 - Full length time series

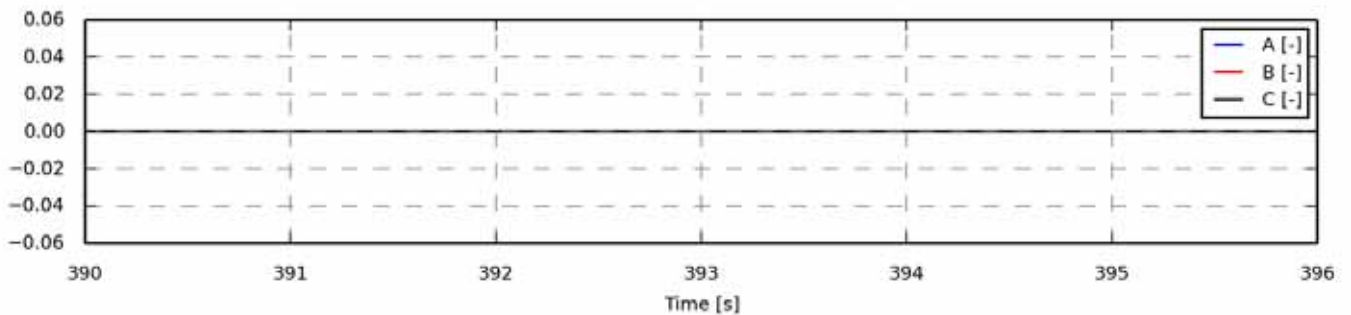


Figure 506 - Zoom of time series

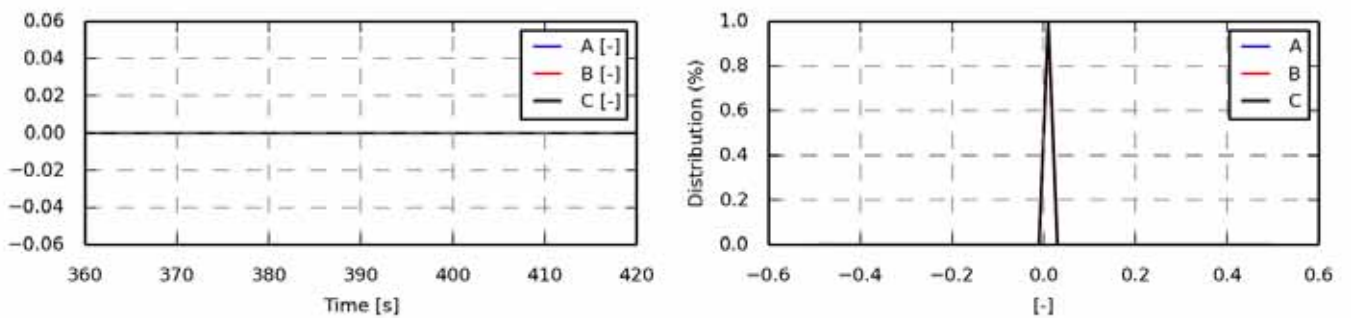


Figure 507 - Power spectrum density

Statistics	A	B	C
Min	0.0000	0.0000	0.0000
Max	0.0000	0.0000	0.0000
Mean	0.0000	0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

Figure 508 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 6.04 oc4_p2_load_case_2-1: Constant [-]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-1.sel (28-02-2014 17:26)	9	Constant value
B	WAMsim/oc4_p2_load_case_2-1.sel (01-04-2014 12:51)	9	Constant value
C	hawc2/oc4_p2_load_case_2-1.sel (06-12-2013 21:42)	9	Constant value

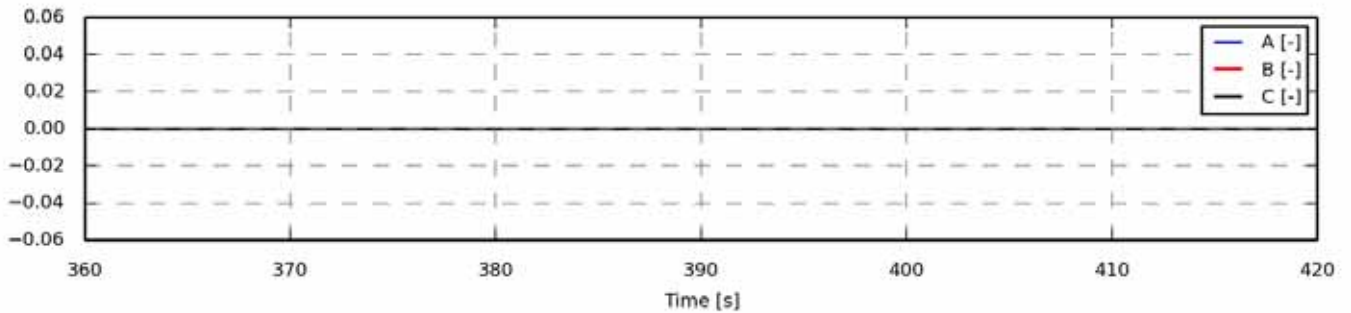


Figure 509 - Full length time series

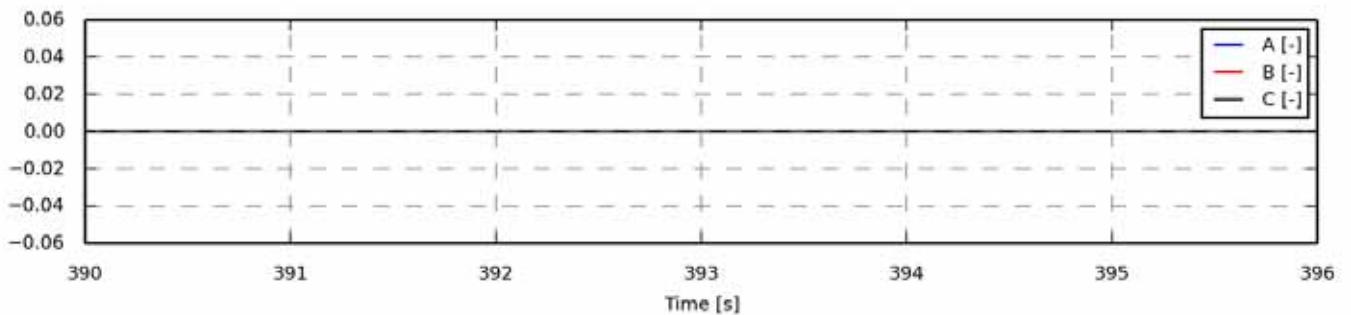


Figure 510 - Zoom of time series

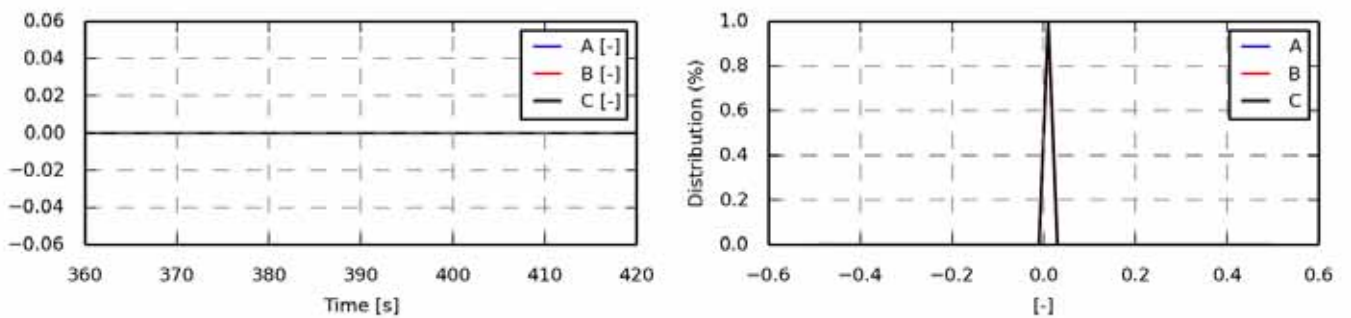


Figure 511 - Power spectrum density

Statistics	A	B	C
Min	0.0000	0.0000	0.0000
Max	0.0000	0.0000	0.0000
Mean	0.0000	0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

Figure 512 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 6.05 oc4_p2_load_case_2-1: bea1 angle [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-1.sel (28-02-2014 17:26)	14	pitch1 angle
B	WAMsim/oc4_p2_load_case_2-1.sel (01-04-2014 12:51)	14	pitch1 angle
C	hawc2/oc4_p2_load_case_2-1.sel (06-12-2013 21:42)	14	pitch1 angle

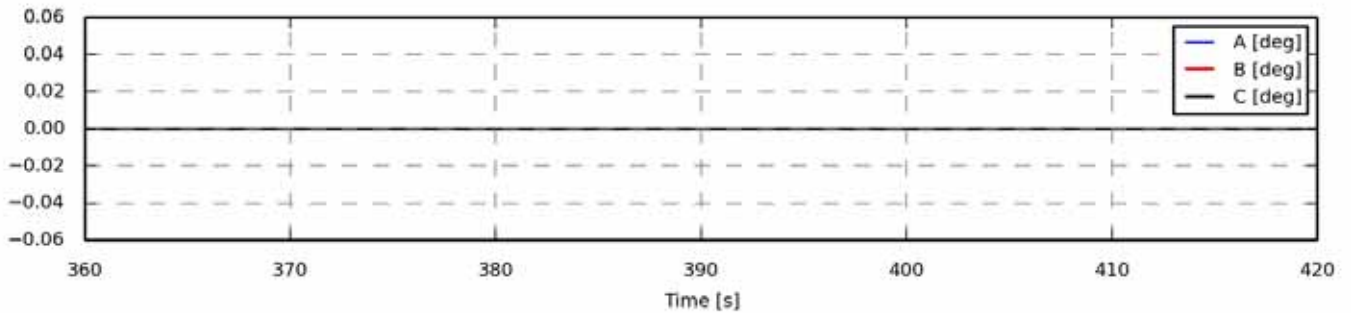


Figure 513 - Full length time series

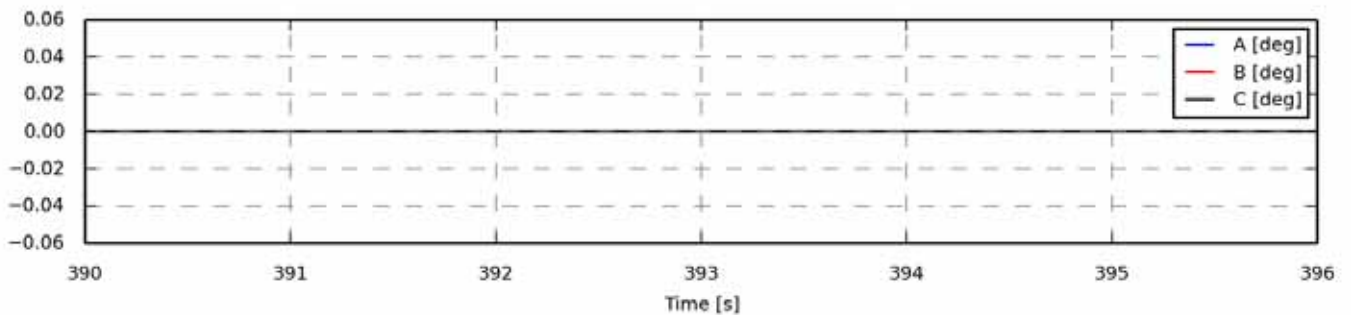


Figure 514 - Zoom of time series

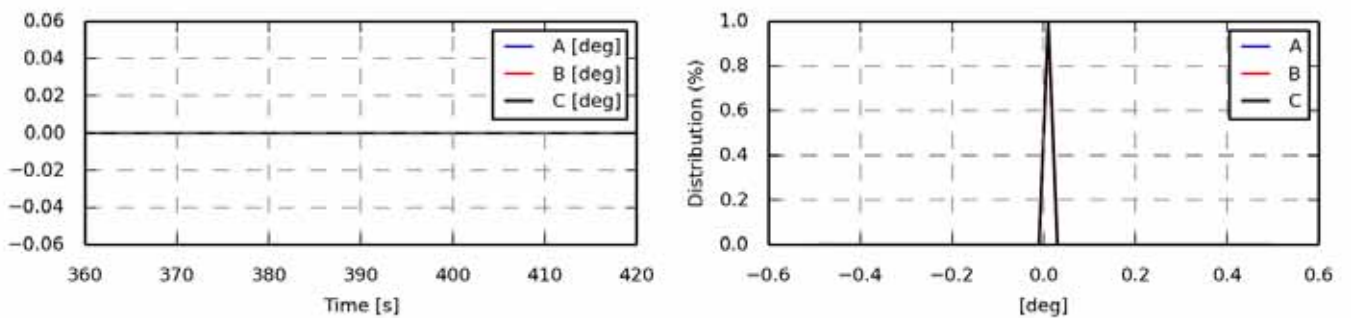


Figure 515 - Power spectrum density

Statistics	A	B	C
Min	0.0000	0.0000	0.0000
Max	0.0000	0.0000	0.0000
Mean	0.0000	0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

Figure 516 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 6.06 oc4_p2_load_case_2-1: State pos x coo: global [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-1.sel (28-02-2014 17:26)	19	State pos x Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
B	WAMsim/oc4_p2_load_case_2-1.sel (01-04-2014 12:51)	19	State pos x Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
C	hawc2/oc4_p2_load_case_2-1.sel (06-12-2013 21:42)	19	State pos x Mbdy:mc E-nr: 8 Z-rel:0.00 coo: global platform translation in surge sway and heave

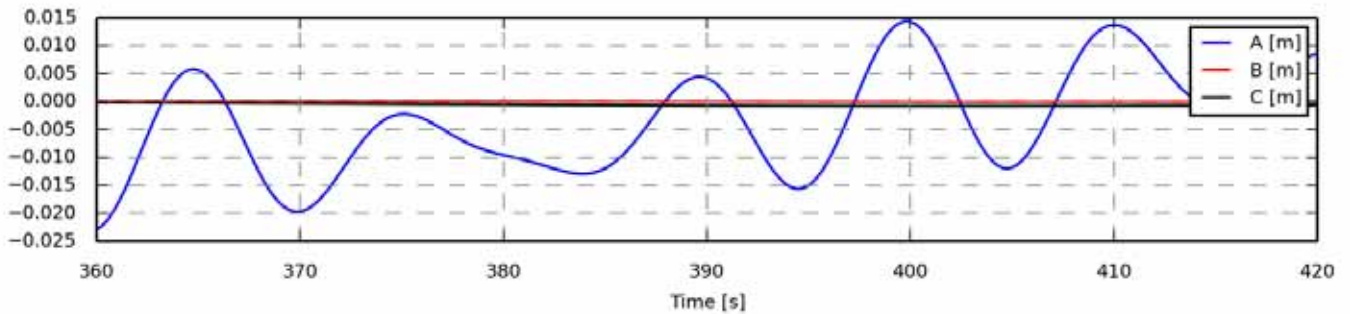


Figure 517 - Full length time series

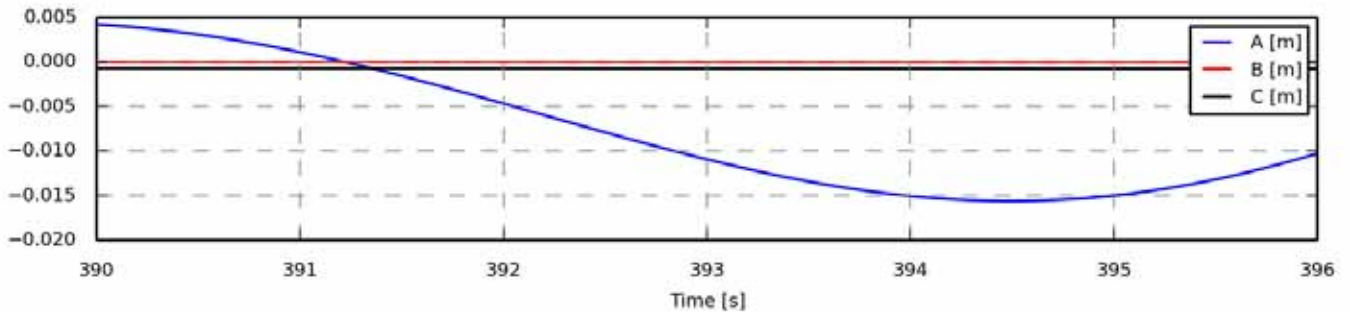


Figure 518 - Zoom of time series

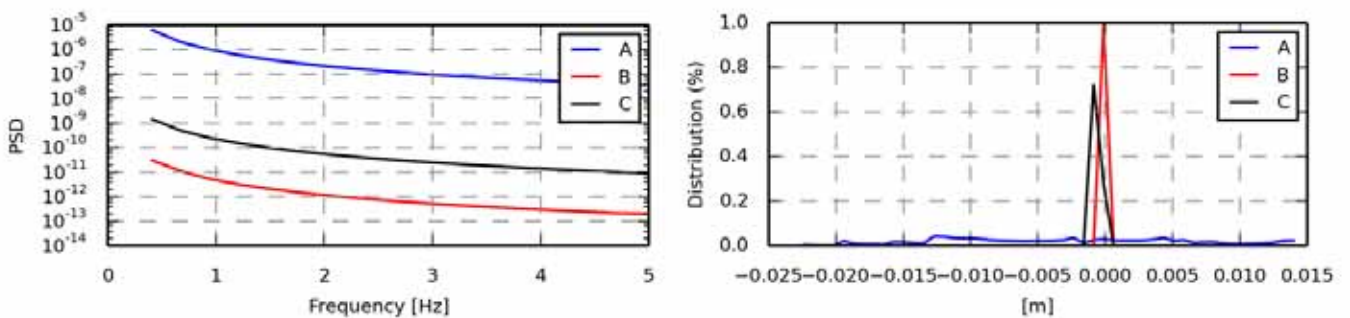


Figure 519 - Power spectrum density

Statistics	A	B	C
Min	-0.0228	-0.0000	-0.0008
Max	0.0144	0.0000	-0.0001
Mean	-0.0033	0.0000	-0.0006
Std	0.0091	0.0000	0.0002
Skewness	0.1023	-0.0566	0.8522
Kurtosis	-0.8849	-1.7549	-0.6511

Figure 520 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.0105	0.0000	0.0001
Eq (m=4)	0.0135	0.0000	0.0002
Eq (m=6)	0.0179	0.0000	0.0003
Eq (m=8)	0.0209	0.0001	0.0004
Eq (m=10)	0.0232	0.0001	0.0004
Eq (m=12)	0.0250	0.0001	0.0004

Section 6.07 oc4_p2_load_case_2-1: State pos y coo: global [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-1.sel (28-02-2014 17:26)	20	State pos y Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
B	WAMsim/oc4_p2_load_case_2-1.sel (01-04-2014 12:51)	20	State pos y Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
C	hawc2/oc4_p2_load_case_2-1.sel (06-12-2013 21:42)	20	State pos y Mbdy:mc E-nr: 8 Z-rel:0.00 coo: global platform translation in surge sway and heave

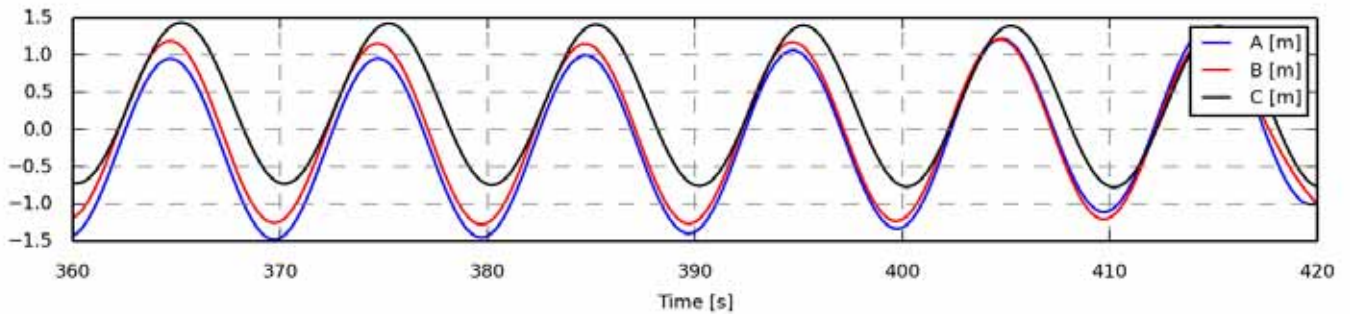


Figure 521 - Full length time series

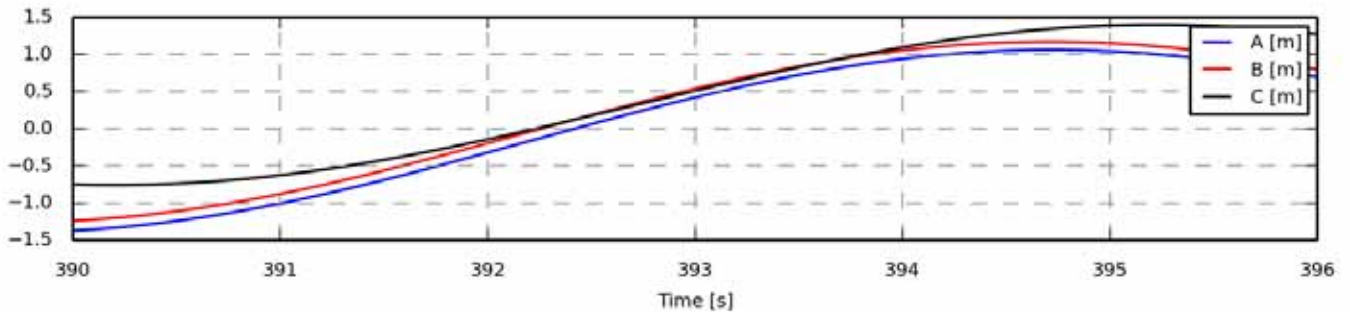


Figure 522 - Zoom of time series

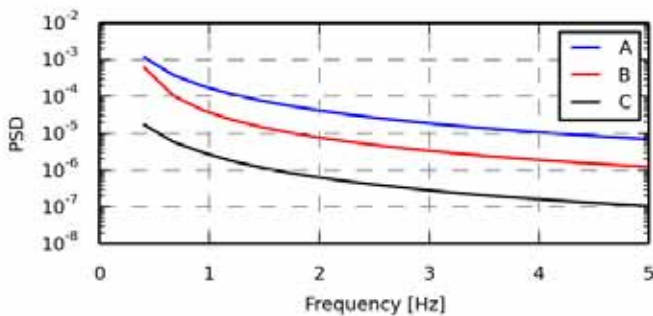


Figure 523 - Power spectrum density

Statistics	A	B	C
Min	-1.4750	-1.2707	-0.7728
Max	1.3600	1.2258	1.4382
Mean	-0.1203	-0.0057	0.3272
Std	0.8660	0.8454	0.7642
Skewness	0.0112	-0.0242	0.0032
Kurtosis	-1.4121	-1.4748	-1.4986

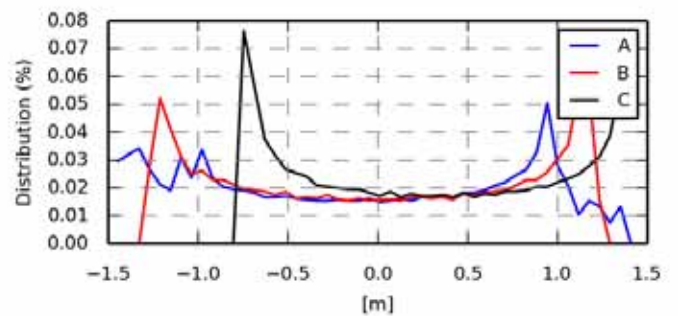


Figure 524 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	1.1284	1.1111	1.0075
Eq (m=4)	1.3694	1.3464	1.2206
Eq (m=6)	1.6653	1.6320	1.4788
Eq (m=8)	1.8409	1.7972	1.6277
Eq (m=10)	1.9596	1.9046	1.7241
Eq (m=12)	2.0474	1.9800	1.7916

Section 6.08 oc4_p2_load_case_2-1: State pos z coo: global [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-1.sel (28-02-2014 17:26)	21	State pos z Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
B	WAMsim/oc4_p2_load_case_2-1.sel (01-04-2014 12:51)	21	State pos z Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
C	hawc2/oc4_p2_load_case_2-1.sel (06-12-2013 21:42)	21	State pos z Mbdy:mc E-nr: 8 Z-rel:0.00 coo: global platform translation in surge sway and heave

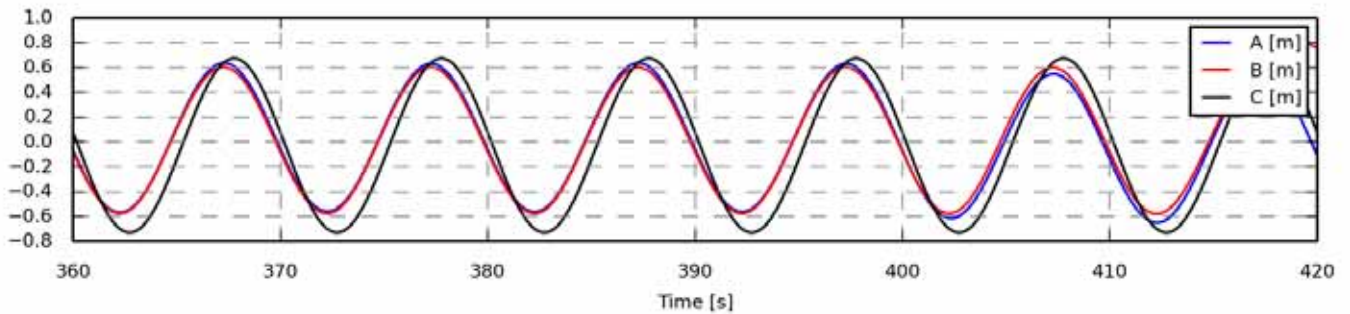


Figure 525 - Full length time series

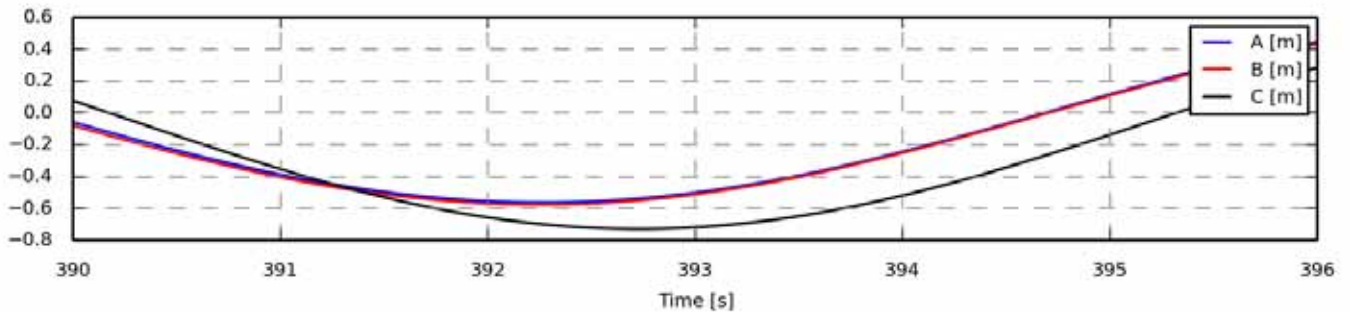


Figure 526 - Zoom of time series

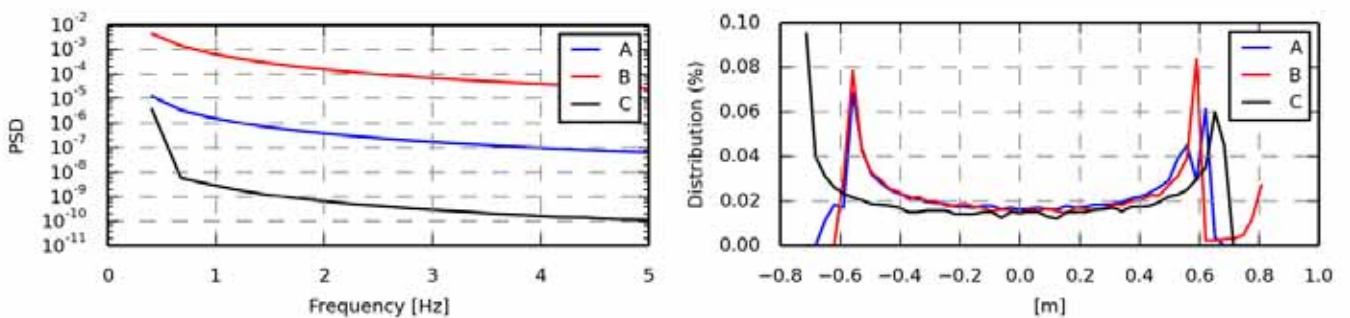


Figure 527 - Power spectrum density

Statistics	A	B	C
Min	-0.6499	-0.5800	-0.7294
Max	0.6373	0.8226	0.6749
Mean	0.0087	0.0330	-0.0301
Std	0.4237	0.4415	0.4954
Skewness	0.0099	0.0813	0.0084
Kurtosis	-1.4768	-1.4170	-1.4960

Figure 528 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.5447	0.5431	0.6379
Eq (m=4)	0.6620	0.6630	0.7749
Eq (m=6)	0.8067	0.8119	0.9435
Eq (m=8)	0.8916	0.9010	1.0418
Eq (m=10)	0.9473	0.9615	1.1058
Eq (m=12)	0.9867	1.0064	1.1507

Section 6.09 oc4_p2_load_case_2-1: proj_ang tx coo: global [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-1.sel (28-02-2014 17:26)	22	State_rot proj_ang tx Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
B	WAMsim/oc4_p2_load_case_2-1.sel (01-04-2014 12:51)	22	State_rot proj_ang tx Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
C	hawc2/oc4_p2_load_case_2-1.sel (06-12-2013 21:42)	22	State_rot proj_ang tx Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw

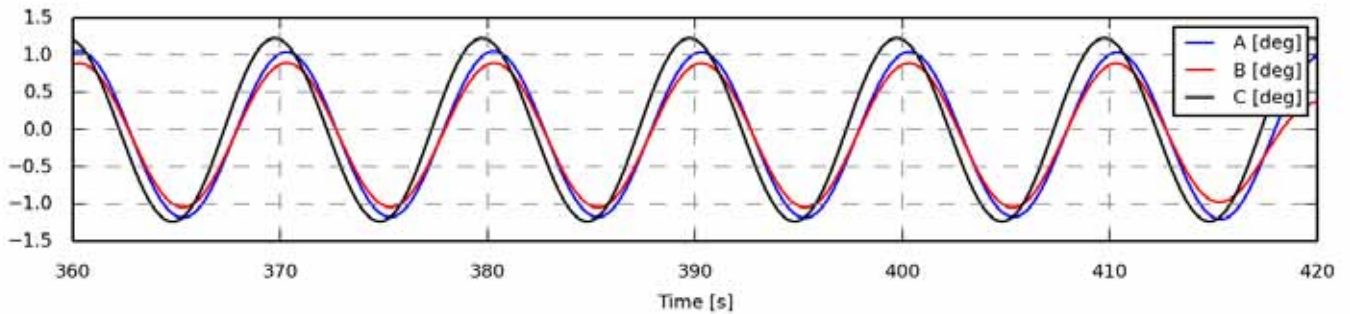


Figure 529 - Full length time series

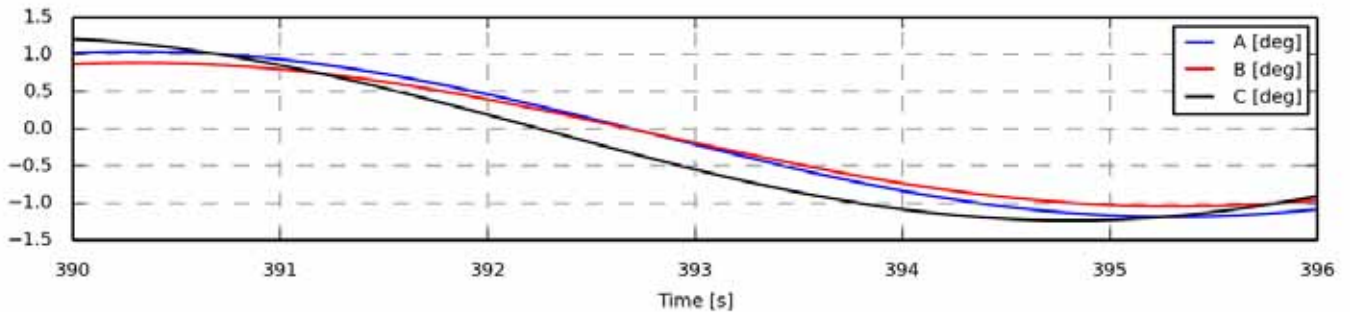


Figure 530 - Zoom of time series

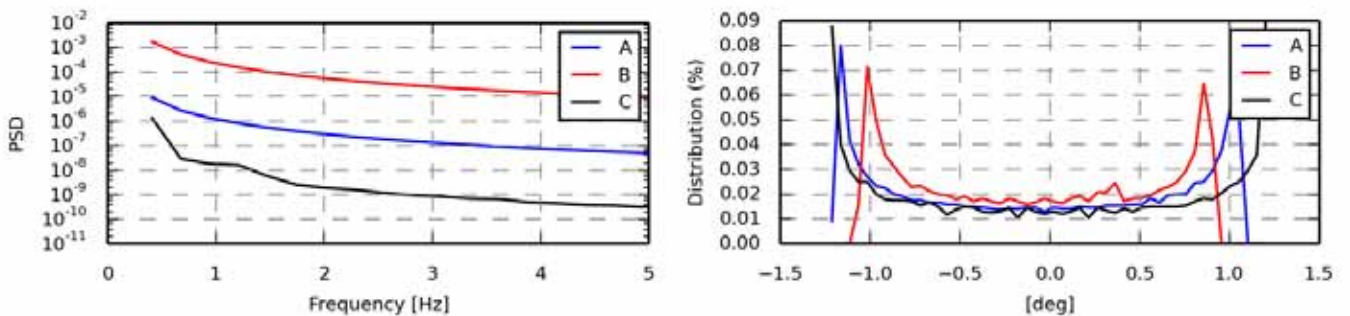


Figure 531 - Power spectrum density

Statistics	A	B	C
Min	-1.2057	-1.0461	-1.2386
Max	1.0537	0.8936	1.2262
Mean	-0.0709	-0.0862	-0.0113
Std	0.7872	0.6717	0.8701
Skewness	0.0001	0.0275	0.0101
Kurtosis	-1.4991	-1.4665	-1.4999

Figure 532 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	1.0330	0.8806	1.1421
Eq (m=4)	1.2515	1.0695	1.3837
Eq (m=6)	1.5162	1.3005	1.6764
Eq (m=8)	1.6689	1.4352	1.8453
Eq (m=10)	1.7678	1.5231	1.9546
Eq (m=12)	1.8369	1.5849	2.0311

Section 6.10 oc4_p2_load_case_2-1: proj_ang ty coo: global [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-1.sel (28-02-2014 17:26)	23	State_rot proj_ang ty Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
B	WAMsim/oc4_p2_load_case_2-1.sel (01-04-2014 12:51)	23	State_rot proj_ang ty Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
C	hawc2/oc4_p2_load_case_2-1.sel (06-12-2013 21:42)	23	State_rot proj_ang ty Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw

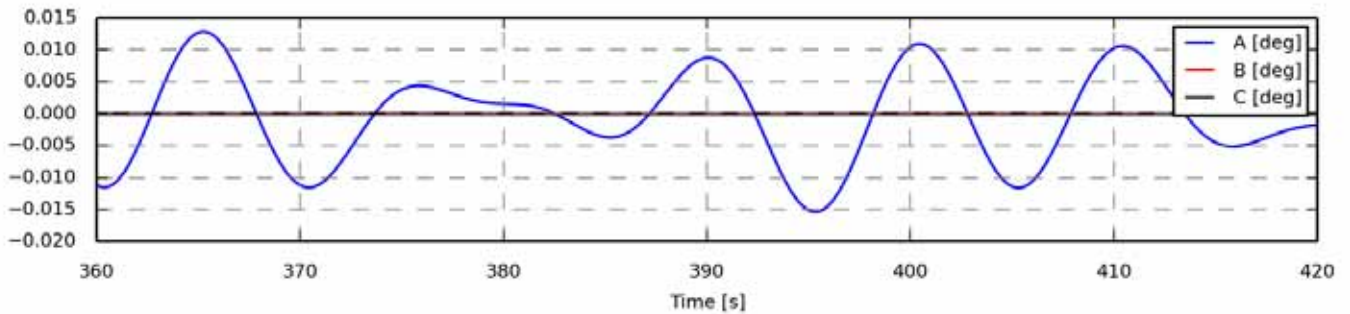


Figure 533 - Full length time series

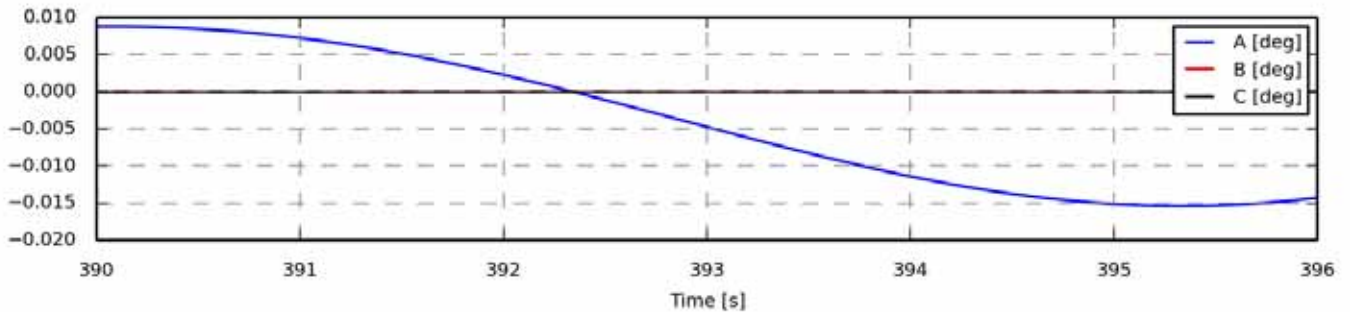


Figure 534 - Zoom of time series

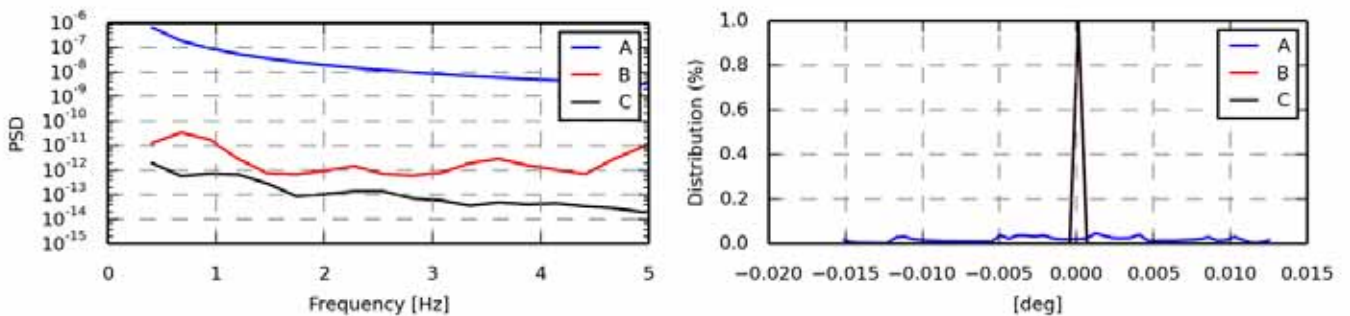


Figure 535 - Power spectrum density

Statistics	A	B	C
Min	-0.0154	-0.0001	-0.0001
Max	0.0128	0.0001	-0.0000
Mean	-0.0005	-0.0000	-0.0000
Std	0.0070	0.0000	0.0000
Skewness	-0.1172	0.2249	0.3400
Kurtosis	-0.8035	-0.1363	-0.6265

Figure 536 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.0094	0.0001	0.0000
Eq (m=4)	0.0119	0.0001	0.0000
Eq (m=6)	0.0152	0.0001	0.0000
Eq (m=8)	0.0173	0.0001	0.0000
Eq (m=10)	0.0188	0.0001	0.0000
Eq (m=12)	0.0199	0.0001	0.0000

Section 6.11 oc4_p2_load_case_2-1: proj_ang tz coo: global [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-1.sel (28-02-2014 17:26)	24	State_rot proj_ang tz Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
B	WAMsim/oc4_p2_load_case_2-1.sel (01-04-2014 12:51)	24	State_rot proj_ang tz Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
C	hawc2/oc4_p2_load_case_2-1.sel (06-12-2013 21:42)	24	State_rot proj_ang tz Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw

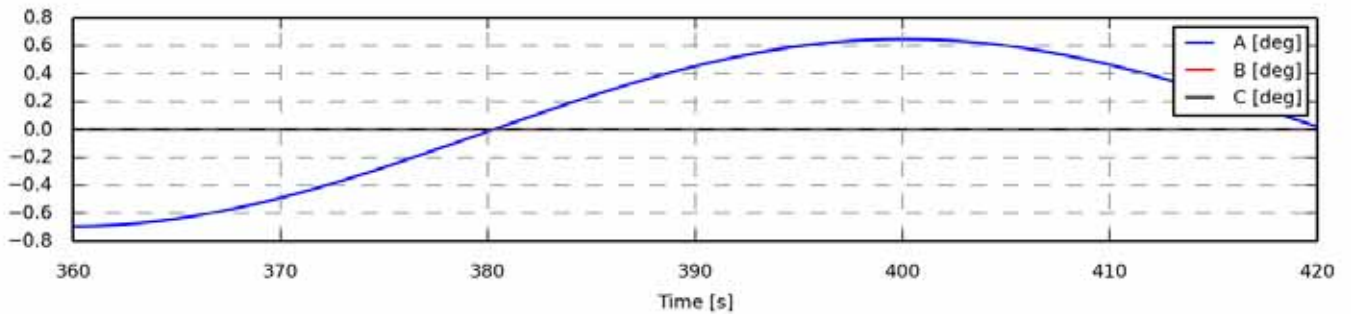


Figure 537 - Full length time series

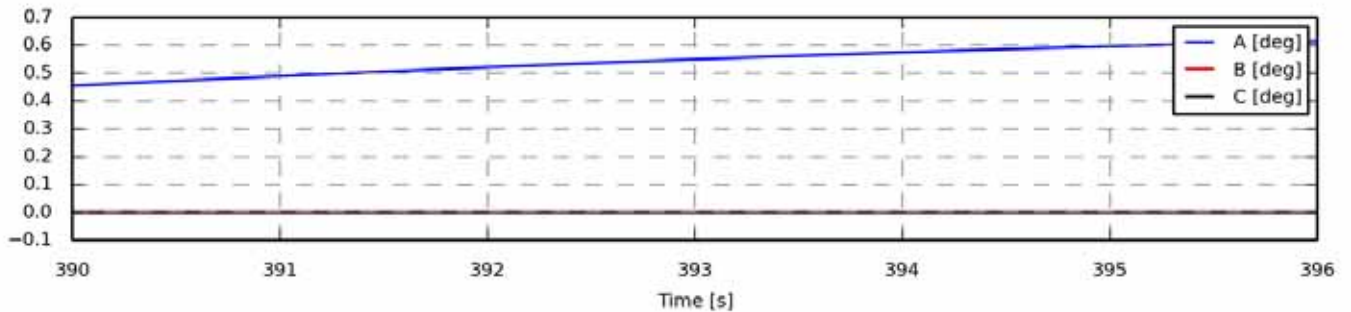


Figure 538 - Zoom of time series

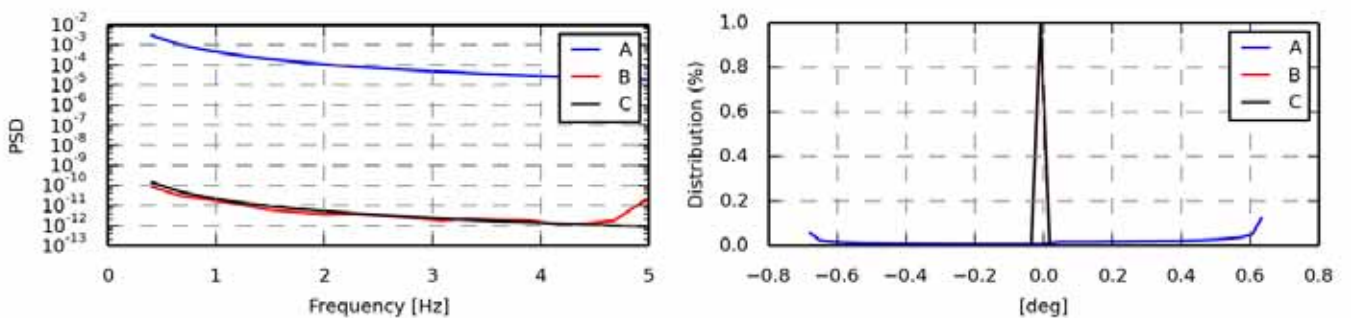


Figure 539 - Power spectrum density

Statistics	A	B	C
Min	-0.6923	-0.0001	-0.0001
Max	0.6471	0.0002	0.0001
Mean	0.1281	0.0001	0.0000
Std	0.4511	0.0001	0.0001
Skewness	-0.5463	0.2957	0.2743
Kurtosis	-1.1199	-1.5644	-1.5190

Figure 540 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.2801	0.0001	0.0000
Eq (m=4)	0.4091	0.0001	0.0001
Eq (m=6)	0.6040	0.0001	0.0001
Eq (m=8)	0.7364	0.0002	0.0001
Eq (m=10)	0.8298	0.0002	0.0001
Eq (m=12)	0.8987	0.0002	0.0002

Section 6.12 oc4_p2_load_case_2-1: Mx coo: towertop [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-1.sel (28-02-2014 17:26)	37	MomentMx Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
B	WAMsim/oc4_p2_load_case_2-1.sel (01-04-2014 12:51)	37	MomentMx Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
C	hawc2/oc4_p2_load_case_2-1.sel (06-12-2013 21:42)	37	MomentMx Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment

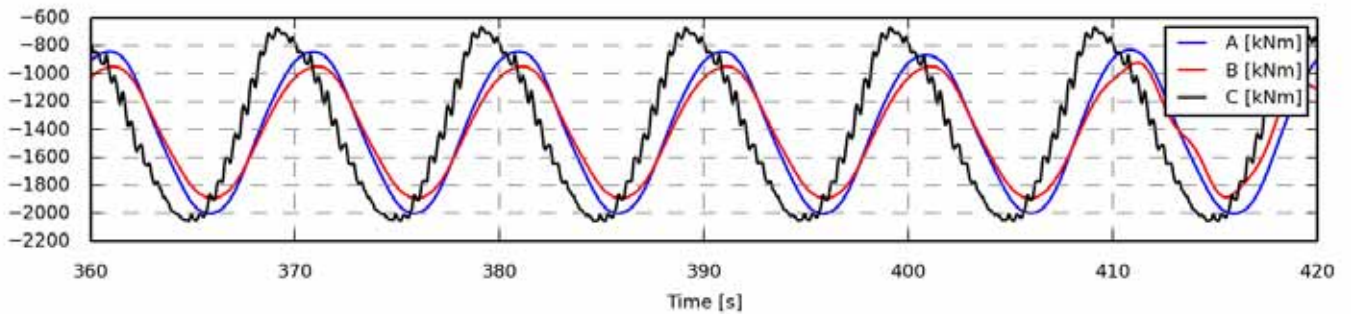


Figure 541 - Full length time series

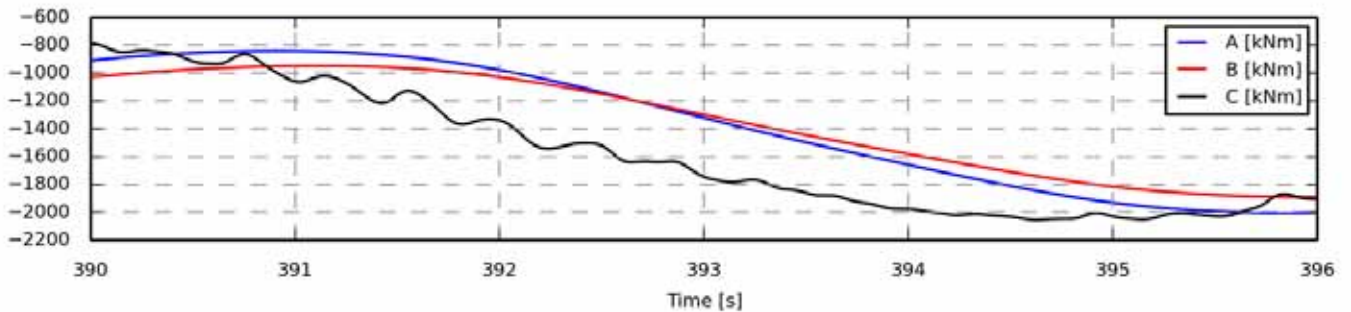


Figure 542 - Zoom of time series

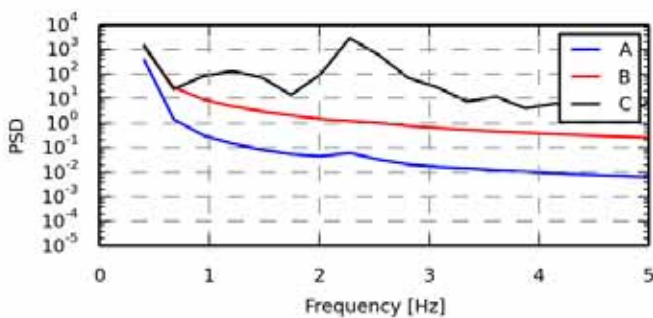


Figure 543 - Power spectrum density

Statistics	A	B	C
Min	-2.0034e+03	-1.8921e+03	-2.0575e+03
Max	-8.3008e+02	-9.2181e+02	-6.6702e+02
Mean	-1.4157e+03	-1.4083e+03	-1.4062e+03
Std	414.0421	334.8450	472.1396
Skewness	-0.0202	-0.0453	0.1042
Kurtosis	-1.5047	-1.5011	-1.4691

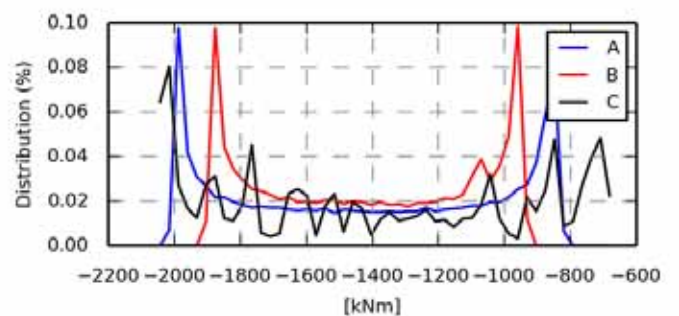


Figure 544 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	536.6174	438.8901	640.7112
Eq (m=4)	650.2380	531.9980	776.2752
Eq (m=6)	788.0521	645.1391	941.0615
Eq (m=8)	867.6913	710.6781	1.0364e+03
Eq (m=10)	919.3974	753.3151	1.0984e+03
Eq (m=12)	955.6581	783.2587	1.1418e+03

Section 6.13 oc4_p2_load_case_2-1: My coo: towertop [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-1.sel (28-02-2014 17:26)	38	MomentMy Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
B	WAMsim/oc4_p2_load_case_2-1.sel (01-04-2014 12:51)	38	MomentMy Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
C	hawc2/oc4_p2_load_case_2-1.sel (06-12-2013 21:42)	38	MomentMy Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment

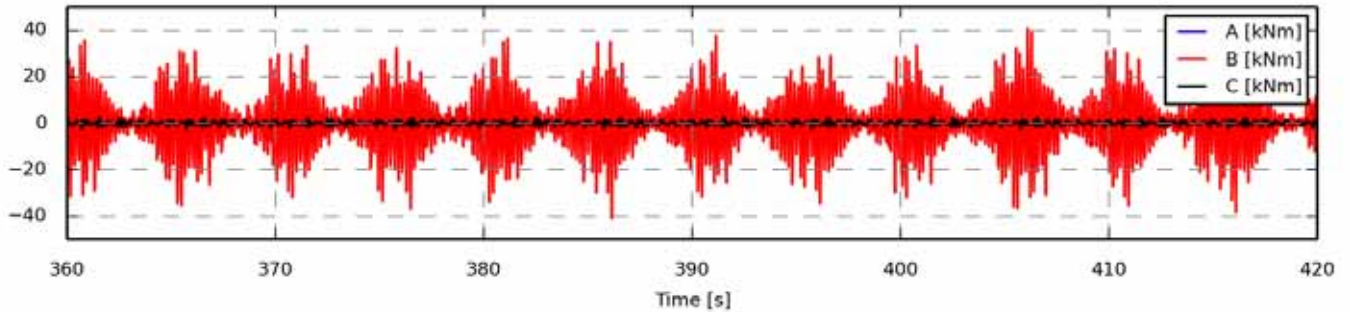


Figure 545 - Full length time series

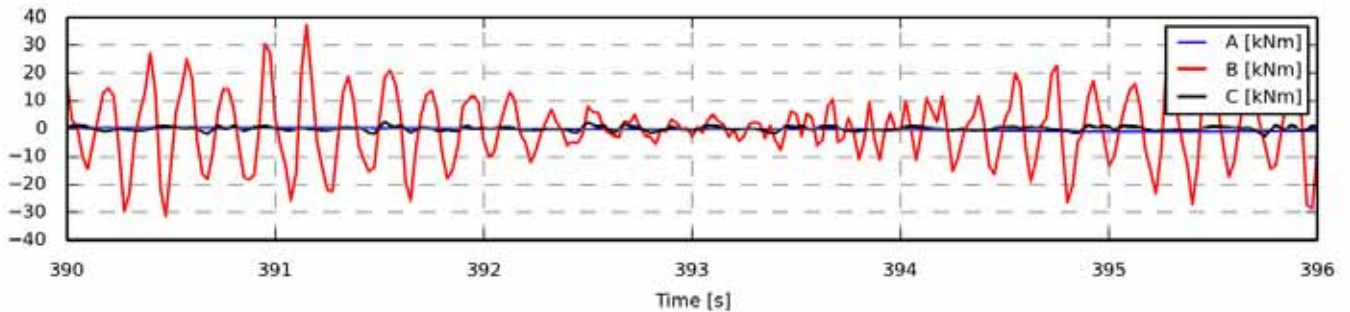


Figure 546 - Zoom of time series

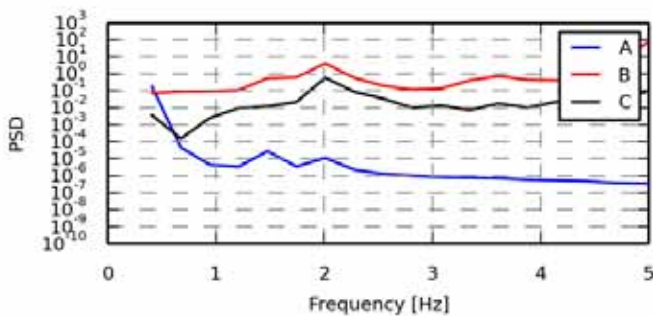


Figure 547 - Power spectrum density

Statistics	A	B	C
Min	-1.1151	-40.9680	-2.5867
Max	1.0140	40.5391	2.5520
Mean	-0.0061	0.0178	-0.0037
Std	0.4845	11.7992	0.7387
Skewness	-0.3657	0.0104	-0.2585
Kurtosis	-0.4703	0.5287	0.5290

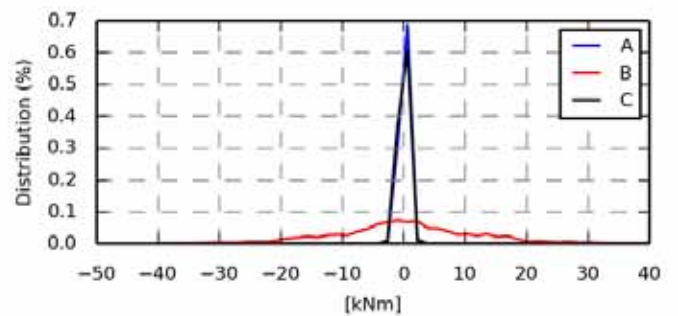


Figure 548 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.6911	66.5018	3.9849
Eq (m=4)	0.8706	62.8668	3.8386
Eq (m=6)	1.1272	61.5095	3.8772
Eq (m=8)	1.2948	62.1182	4.0100
Eq (m=10)	1.4117	63.1268	4.1421
Eq (m=12)	1.4983	64.1827	4.2548

Section 6.14 oc4_p2_load_case_2-1: Mz coo: towertop [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-1.sel (28-02-2014 17:26)	39	MomentMz Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
B	WAMsim/oc4_p2_load_case_2-1.sel (01-04-2014 12:51)	39	MomentMz Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
C	hawc2/oc4_p2_load_case_2-1.sel (06-12-2013 21:42)	39	MomentMz Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment

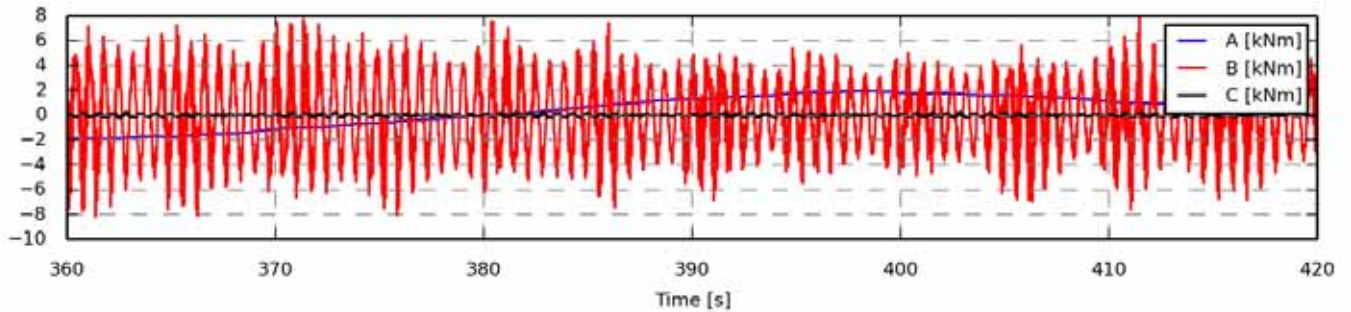


Figure 549 - Full length time series

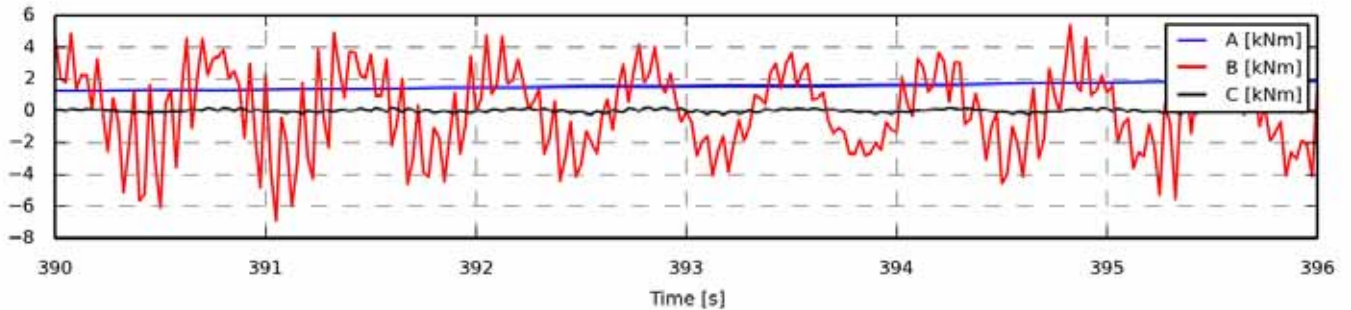


Figure 550 - Zoom of time series

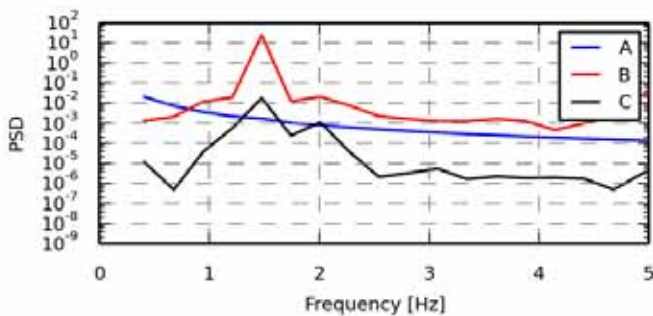


Figure 551 - Power spectrum density

Statistics	A	B	C
Min	-1.9101	-8.2012	-0.3041
Max	1.9432	7.8195	0.2790
Mean	0.3715	-0.0028	0.0008
Std	1.2034	3.0285	0.0905
Skewness	-0.5102	-0.0737	-0.0124
Kurtosis	-1.0441	-0.6386	-0.0264

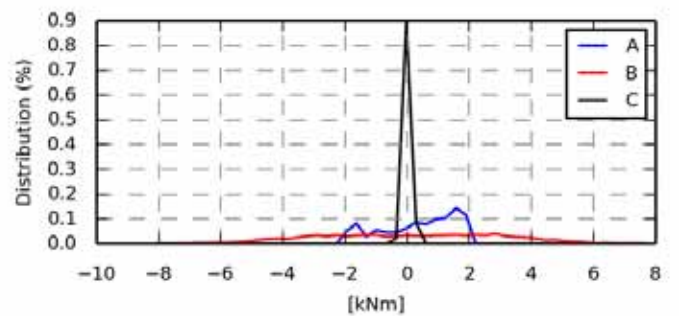


Figure 552 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.8125	13.4702	0.4366
Eq (m=4)	1.1820	12.7028	0.4129
Eq (m=6)	1.7395	12.4913	0.4108
Eq (m=8)	2.1191	12.6535	0.4194
Eq (m=10)	2.3876	12.8711	0.4292
Eq (m=12)	2.5857	13.0840	0.4388

Section 6.15 oc4_p2_load_case_2-1: Mx coo: tower [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-1.sel (28-02-2014 17:26)	43	MomentMx Mbdy:tower nodenr: 1 coo: tower tower base bending moment
B	WAMsim/oc4_p2_load_case_2-1.sel (01-04-2014 12:51)	43	MomentMx Mbdy:tower nodenr: 1 coo: tower tower base bending moment
C	hawc2/oc4_p2_load_case_2-1.sel (06-12-2013 21:42)	43	MomentMx Mbdy:tower nodenr: 1 coo: tower tower base bending moment

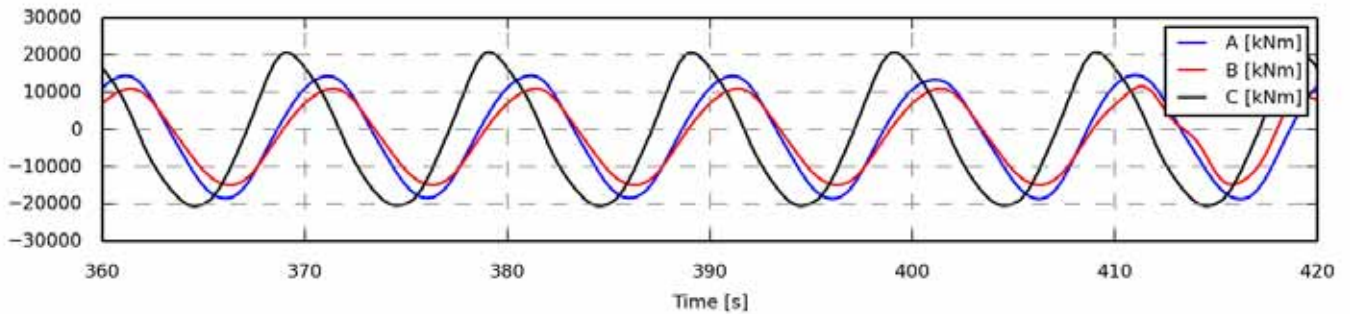


Figure 553 - Full length time series

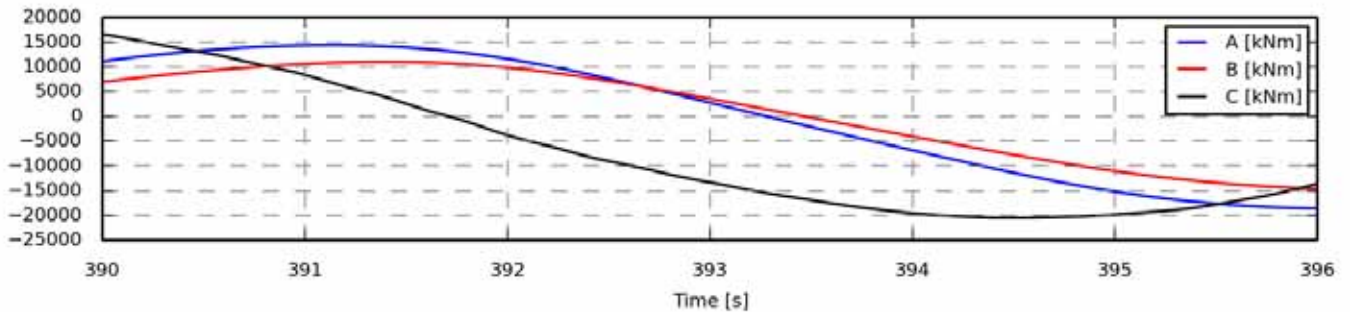


Figure 554 - Zoom of time series

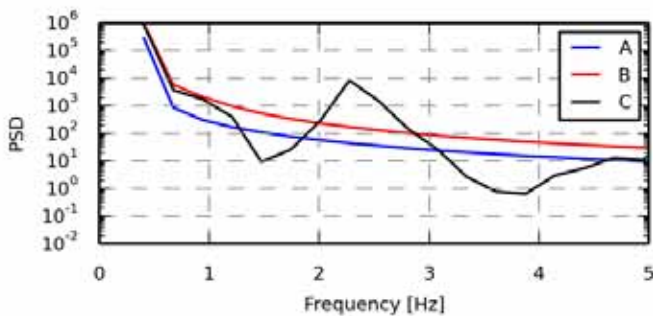


Figure 555 - Power spectrum density

Statistics	A	B	C
Min	-1.8680e+04	-1.4869e+04	-2.0563e+04
Max	1.4613e+04	1.1578e+04	2.0774e+04
Mean	-1.8898e+03	-1.6093e+03	-1.4451e+03
Std	1.1601e+04	9.0934e+03	1.4313e+04
Skewness	-0.0308	-0.0662	0.1429
Kurtosis	-1.4890	-1.4855	-1.4565

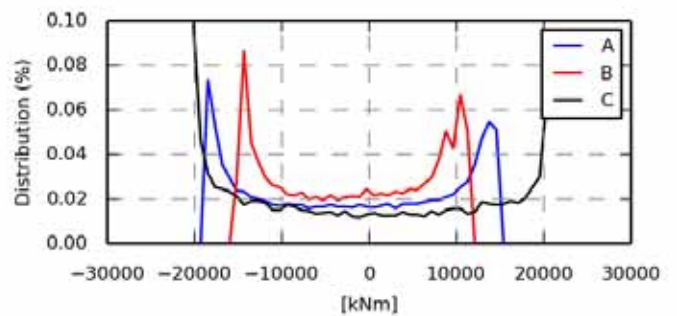


Figure 556 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	1.5077e+04	1.1997e+04	1.9042e+04
Eq (m=4)	1.8270e+04	1.4537e+04	2.3077e+04
Eq (m=6)	2.2147e+04	1.7620e+04	2.7976e+04
Eq (m=8)	2.4390e+04	1.9403e+04	3.0810e+04
Eq (m=10)	2.5847e+04	2.0560e+04	3.2652e+04
Eq (m=12)	2.6870e+04	2.1372e+04	3.3944e+04

Section 6.16 oc4_p2_load_case_2-1: My coo: tower [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-1.sel (28-02-2014 17:26)	44	MomentMy Mbdy:tower nodenr: 1 coo: tower tower base bending moment
B	WAMsim/oc4_p2_load_case_2-1.sel (01-04-2014 12:51)	44	MomentMy Mbdy:tower nodenr: 1 coo: tower tower base bending moment
C	hawc2/oc4_p2_load_case_2-1.sel (06-12-2013 21:42)	44	MomentMy Mbdy:tower nodenr: 1 coo: tower tower base bending moment

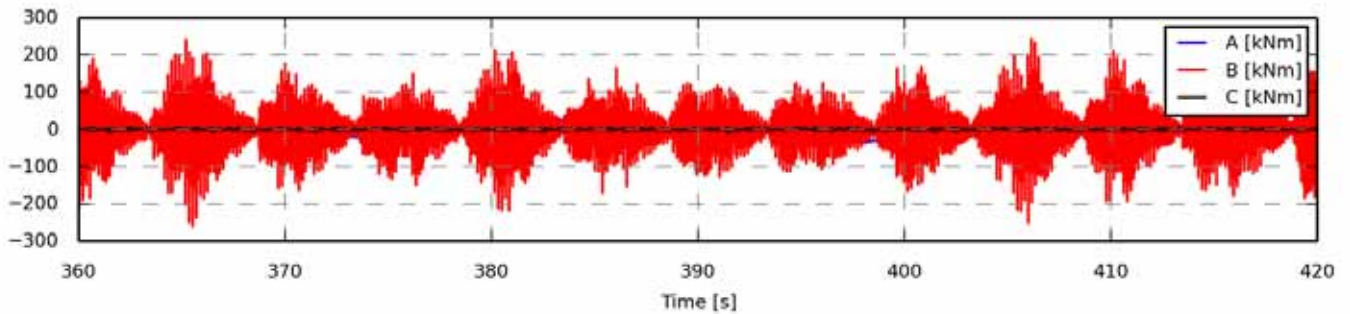


Figure 557 - Full length time series

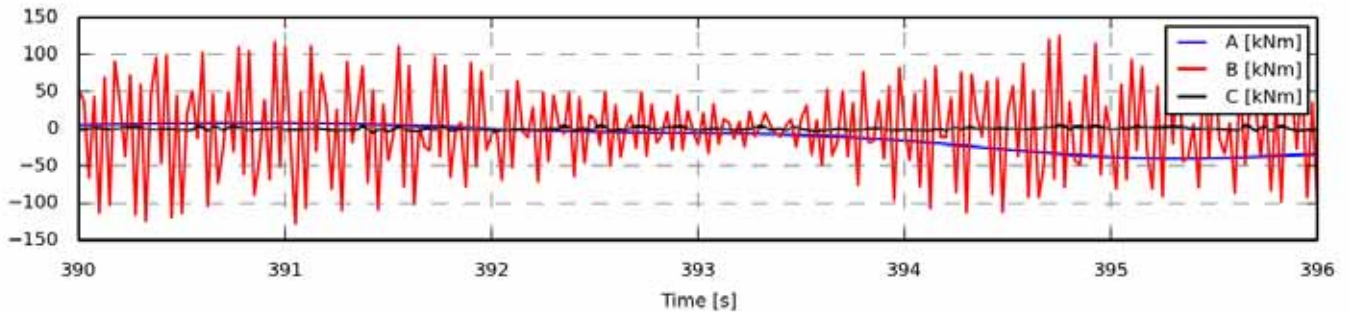


Figure 558 - Zoom of time series

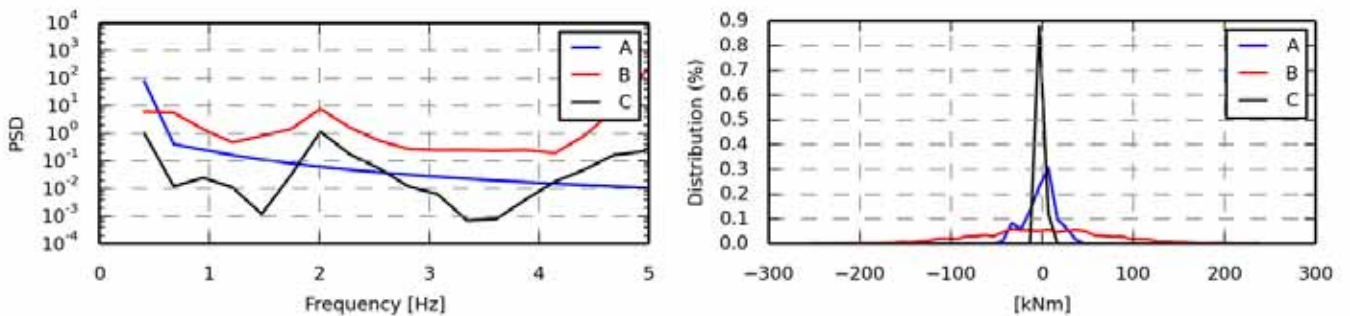


Figure 559 - Power spectrum density

Statistics	A	B	C
Min	-40.1216	-2.5891e+02	-6.0044
Max	32.7455	242.2499	5.1138
Mean	-1.0725	-0.1185	-0.1857
Std	16.4319	73.4693	1.5582
Skewness	-0.3278	-0.0196	0.4094
Kurtosis	-0.2111	0.1718	0.6196

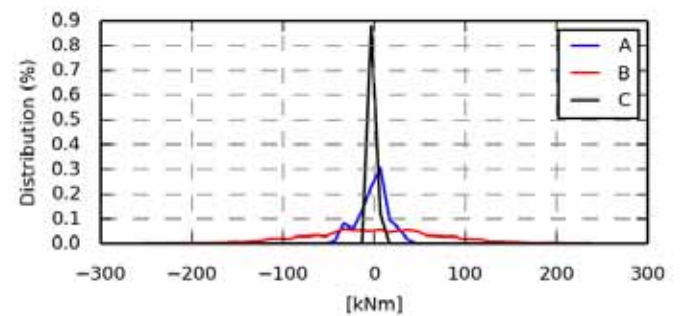


Figure 560 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	22.5326	458.9153	8.5306
Eq (m=4)	29.5056	405.3735	8.0439
Eq (m=6)	39.1544	378.7435	7.9783
Eq (m=8)	45.3498	379.2218	8.1987
Eq (m=10)	49.6353	385.7498	8.4547
Eq (m=12)	52.7670	393.4168	8.6909

Section 6.17 oc4_p2_load_case_2-1: Mz coo: tower [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-1.sel (28-02-2014 17:26)	45	MomentMz Mbdy:tower nodenr: 1 coo: tower tower base bending moment
B	WAMsim/oc4_p2_load_case_2-1.sel (01-04-2014 12:51)	45	MomentMz Mbdy:tower nodenr: 1 coo: tower tower base bending moment
C	hawc2/oc4_p2_load_case_2-1.sel (06-12-2013 21:42)	45	MomentMz Mbdy:tower nodenr: 1 coo: tower tower base bending moment

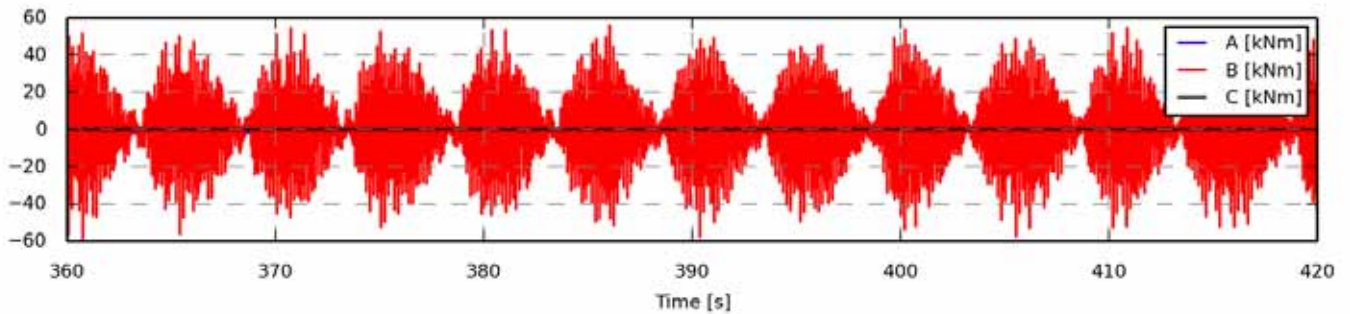


Figure 561 - Full length time series

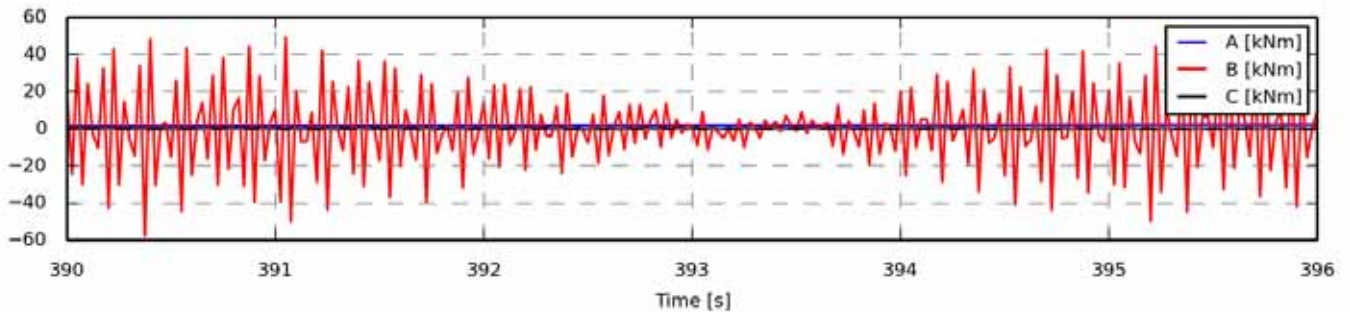


Figure 562 - Zoom of time series

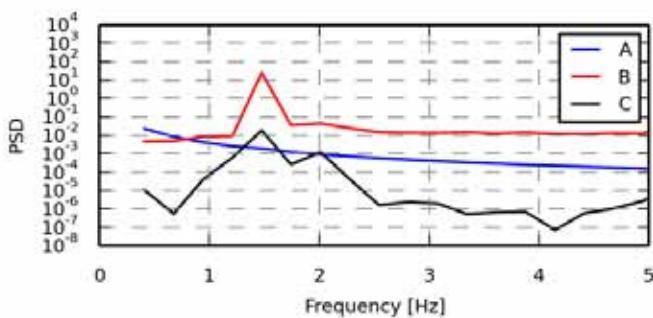


Figure 563 - Power spectrum density

Statistics	A	B	C
Min	-2.0414	-59.2934	-0.5041
Max	2.0675	55.9193	0.4891
Mean	0.3975	0.0066	0.0007
Std	1.2895	20.9747	0.1563
Skewness	-0.5150	-0.0059	-0.0828
Kurtosis	-1.0488	-0.2198	-0.2767

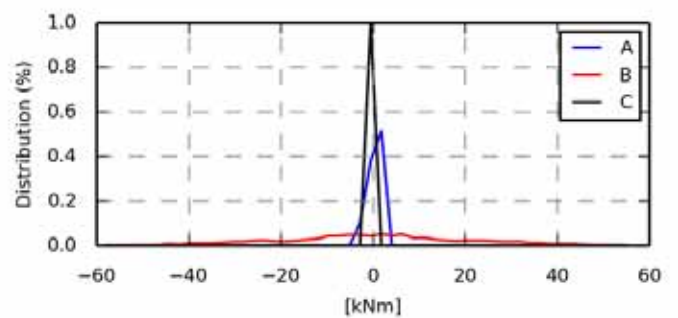


Figure 564 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.8664	130.6910	0.8740
Eq (m=4)	1.2604	113.0633	0.7682
Eq (m=6)	1.8549	101.3227	0.7123
Eq (m=8)	2.2597	98.0787	0.7134
Eq (m=10)	2.5460	97.2920	0.7287
Eq (m=12)	2.7573	97.4174	0.7469

Section 6.18 oc4_p2_load_case_2-1: ESYS line1_1 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-1.sel (28-02-2014 17:26)	55	ESYS line1_1 SENSOR 4
B	WAMsim/oc4_p2_load_case_2-1.sel (01-04-2014 12:51)	55	ESYS line1_1 SENSOR 4
C	hawc2/oc4_p2_load_case_2-1.sel (06-12-2013 21:42)	55	ESYS line1_1 SENSOR 4

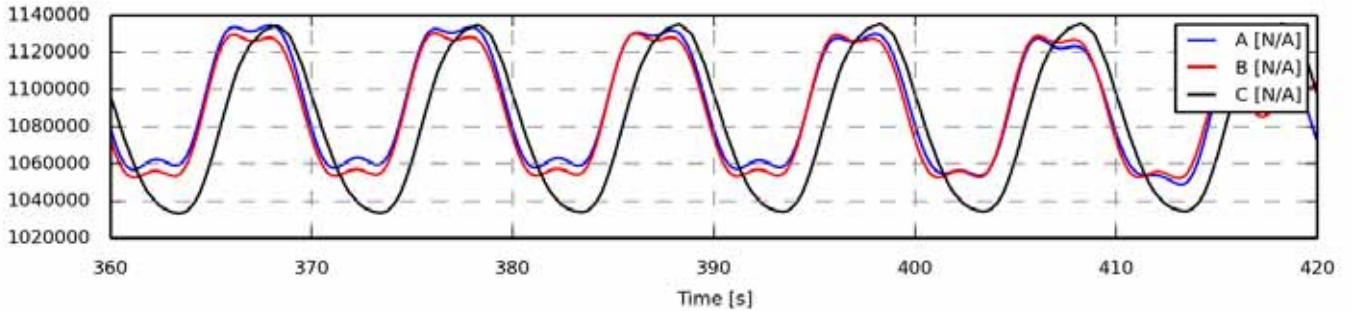


Figure 565 - Full length time series

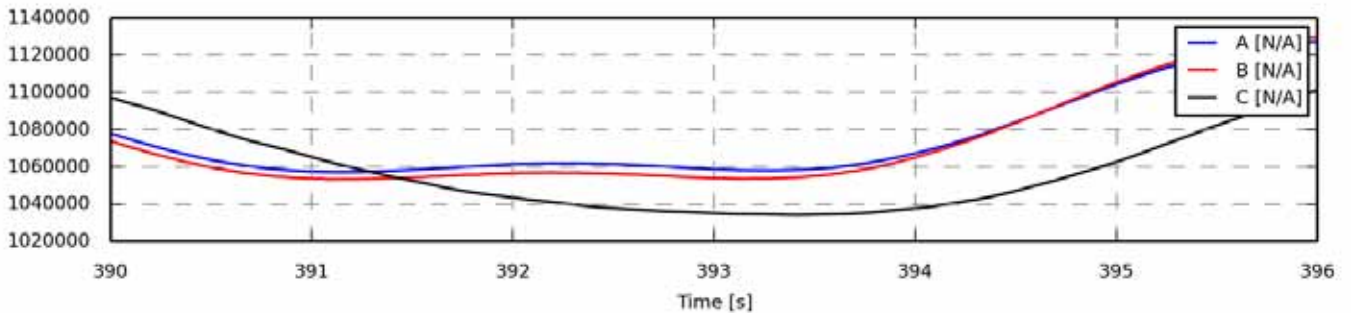


Figure 566 - Zoom of time series

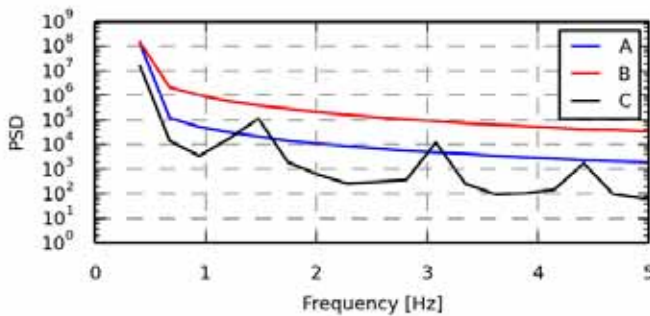


Figure 567 - Power spectrum density

Statistics	A	B	C
Min	1.0489e+06	1.0523e+06	1.0333e+06
Max	1.1347e+06	1.1304e+06	1.1356e+06
Mean	1.0922e+06	1.0885e+06	1.0828e+06
Std	3.0103e+04	2.9752e+04	3.6930e+04
Skewness	0.0606	0.1237	0.0590
Kurtosis	-1.6915	-1.6379	-1.5687

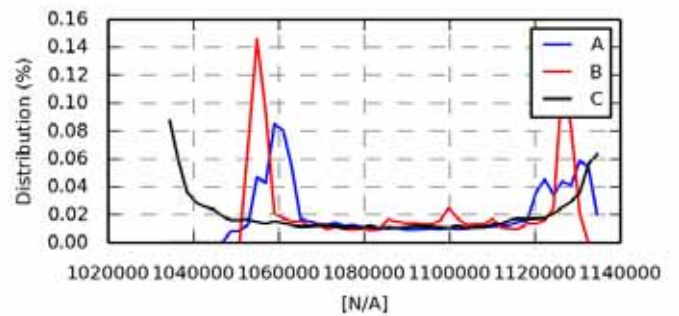


Figure 568 - Value distribution

Fatigue eq.	1Hz	A	B	C
Eq (m=3)		3.4437e+04	3.4144e+04	4.5648e+04
Eq (m=4)		4.1852e+04	4.1677e+04	5.5434e+04
Eq (m=6)		5.1022e+04	5.0994e+04	6.7458e+04
Eq (m=8)		5.6475e+04	5.6458e+04	7.4475e+04
Eq (m=10)		6.0134e+04	6.0035e+04	7.9047e+04
Eq (m=12)		6.2803e+04	6.2554e+04	8.2255e+04

Section 6.19 oc4_p2_load_case_2-1: ESYS line1_3 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-1.sel (28-02-2014 17:26)	259	ESYS line1_3 SENSOR 104
B	WAMsim/oc4_p2_load_case_2-1.sel (01-04-2014 12:51)	259	ESYS line1_3 SENSOR 104
C	hawc2/oc4_p2_load_case_2-1.sel (06-12-2013 21:42)	259	ESYS line1_3 SENSOR 104

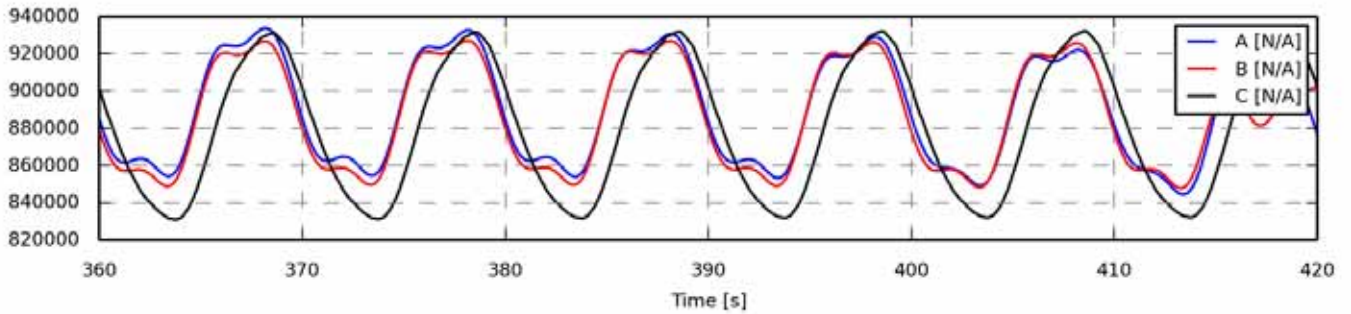


Figure 569 - Full length time series

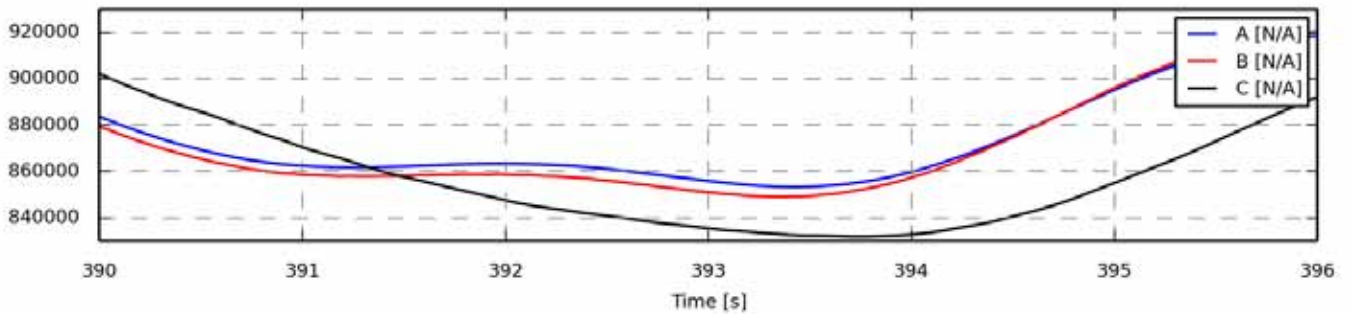


Figure 570 - Zoom of time series

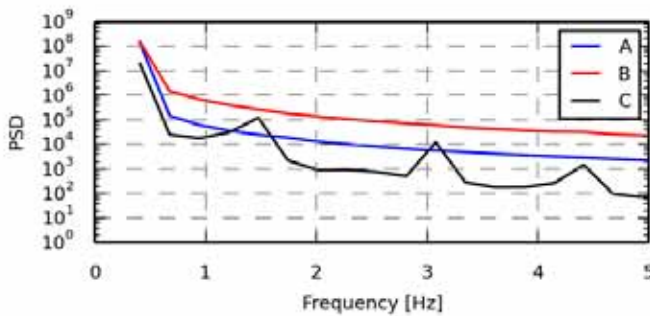


Figure 571 - Power spectrum density

Statistics	A	B	C
Min	8.4438e+05	8.4782e+05	8.3095e+05
Max	9.3372e+05	9.2711e+05	9.3234e+05
Mean	8.9003e+05	8.8633e+05	8.8069e+05
Std	2.8269e+04	2.7859e+04	3.5557e+04
Skewness	0.0337	0.1059	0.0341
Kurtosis	-1.6321	-1.6114	-1.5327

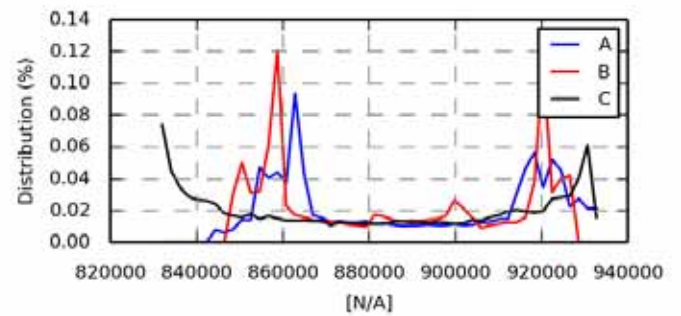


Figure 572 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	3.5291e+04	3.4524e+04	4.5371e+04
Eq (m=4)	4.2959e+04	4.2138e+04	5.5071e+04
Eq (m=6)	5.2509e+04	5.1579e+04	6.6957e+04
Eq (m=8)	5.8225e+04	5.7126e+04	7.3888e+04
Eq (m=10)	6.2082e+04	6.0757e+04	7.8407e+04
Eq (m=12)	6.4914e+04	6.3314e+04	8.1582e+04

Section 6.20 oc4_p2_load_case_2-1: ESYS line2_1 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-1.sel (28-02-2014 17:26)	263	ESYS line2_1 SENSOR 4
B	WAMsim/oc4_p2_load_case_2-1.sel (01-04-2014 12:51)	263	ESYS line2_1 SENSOR 4
C	hawc2/oc4_p2_load_case_2-1.sel (06-12-2013 21:42)	263	ESYS line2_1 SENSOR 4

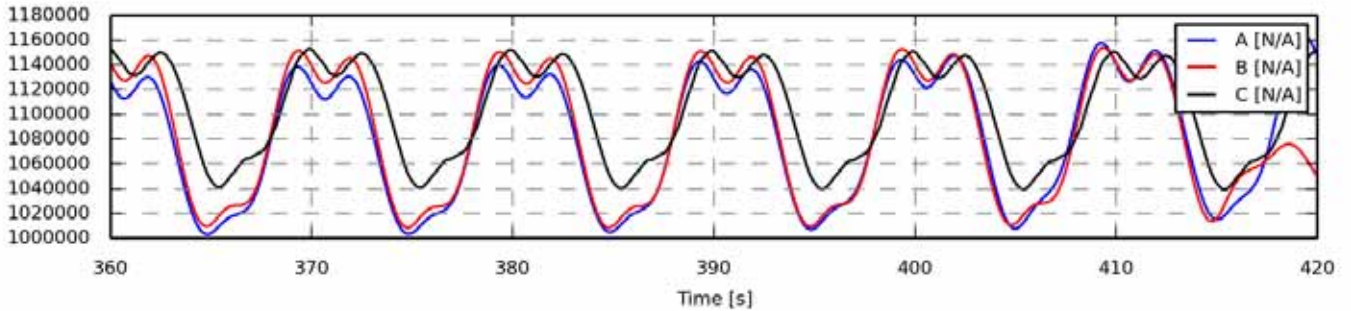


Figure 573 - Full length time series

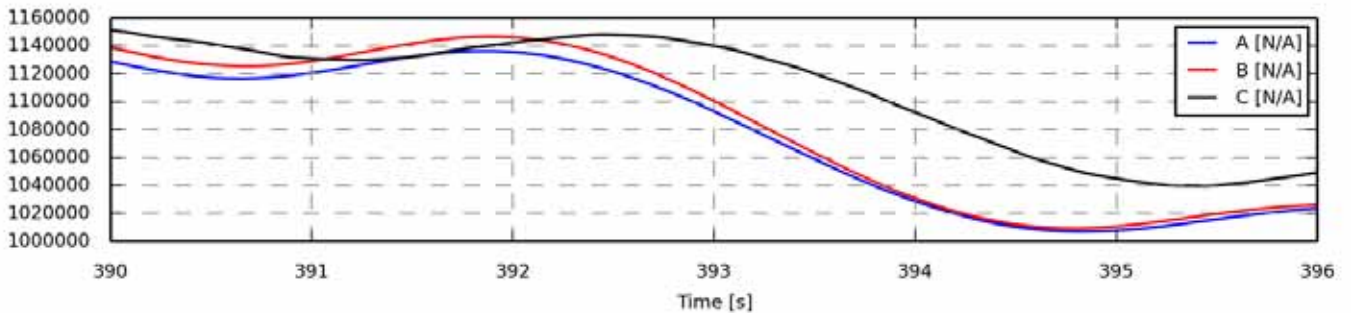


Figure 574 - Zoom of time series

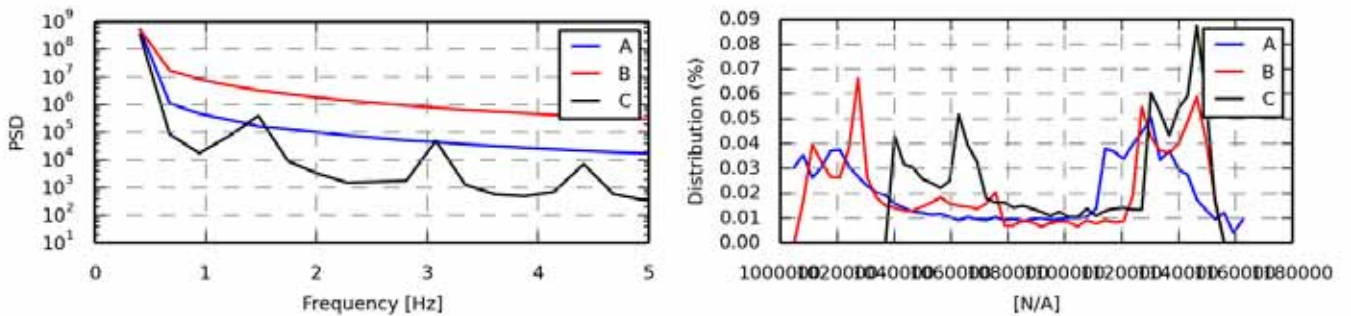


Figure 575 - Power spectrum density

Statistics	A	B	C
Min	1.0031e+06	1.0085e+06	1.0394e+06
Max	1.1641e+06	1.1537e+06	1.1529e+06
Mean	1.0818e+06	1.0838e+06	1.1027e+06
Std	5.0594e+04	5.0822e+04	3.8806e+04
Skewness	-0.1621	-0.0724	-0.2414
Kurtosis	-1.5562	-1.6313	-1.5545

Figure 576 - Value distribution

Fatigue eq.	1Hz	A	B	C
Eq (m=3)		6.4660e+04	6.4174e+04	5.1820e+04
Eq (m=4)		7.8402e+04	7.8112e+04	6.2702e+04
Eq (m=6)		9.5349e+04	9.5262e+04	7.5952e+04
Eq (m=8)		1.0540e+05	1.0524e+05	8.3600e+04
Eq (m=10)		1.1217e+05	1.1174e+05	8.8554e+04
Eq (m=12)		1.1714e+05	1.1630e+05	9.2018e+04

Section 6.21 oc4_p2_load_case_2-1: ESYS line2_3 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-1.sel (28-02-2014 17:26)	467	ESYS line2_3 SENSOR 104
B	WAMsim/oc4_p2_load_case_2-1.sel (01-04-2014 12:51)	467	ESYS line2_3 SENSOR 104
C	hawc2/oc4_p2_load_case_2-1.sel (06-12-2013 21:42)	467	ESYS line2_3 SENSOR 104

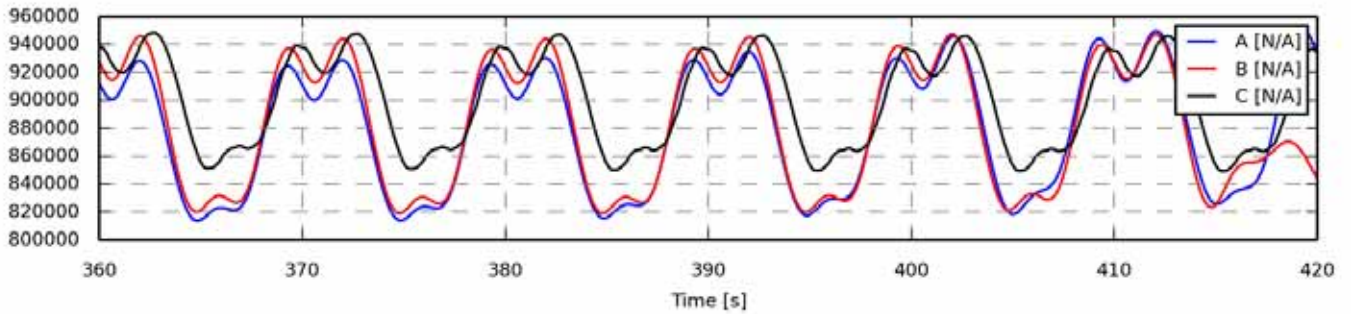


Figure 577 - Full length time series

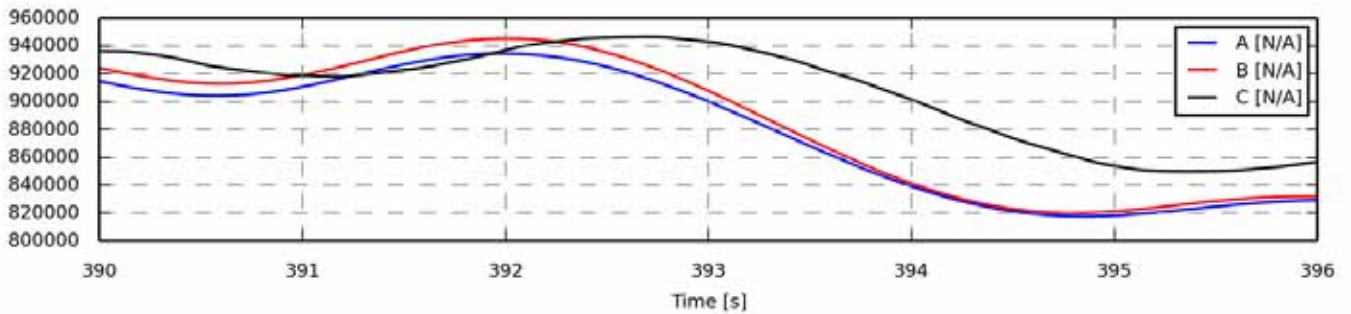


Figure 578 - Zoom of time series

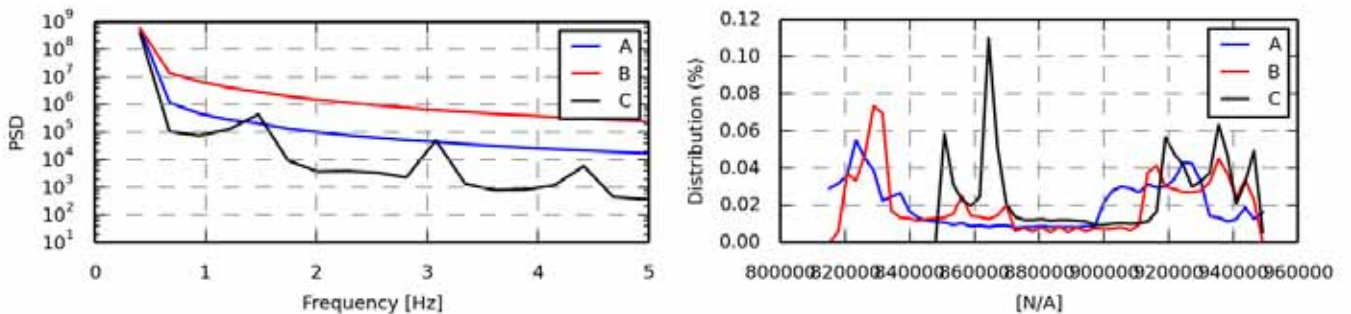


Figure 579 - Power spectrum density

Statistics	A	B	C
Min	8.1376e+05	8.1898e+05	8.4951e+05
Max	9.5051e+05	9.4742e+05	9.4844e+05
Mean	8.7981e+05	8.8208e+05	9.0056e+05
Std	4.4228e+04	4.4954e+04	3.3270e+04
Skewness	-0.1153	-0.0202	-0.1454
Kurtosis	-1.5687	-1.6471	-1.5895

Figure 580 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	5.6194e+04	5.6798e+04	4.4581e+04
Eq (m=4)	6.8016e+04	6.9070e+04	5.3878e+04
Eq (m=6)	8.2636e+04	8.4229e+04	6.5284e+04
Eq (m=8)	9.1274e+04	9.3052e+04	7.1903e+04
Eq (m=10)	9.7039e+04	9.8790e+04	7.6209e+04
Eq (m=12)	1.0122e+05	1.0281e+05	7.9234e+04

Section 6.22 oc4_p2_load_case_2-1: ESYS line3_1 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-1.sel (28-02-2014 17:26)	471	ESYS line3_1 SENSOR 4
B	WAMsim/oc4_p2_load_case_2-1.sel (01-04-2014 12:51)	471	ESYS line3_1 SENSOR 4
C	hawc2/oc4_p2_load_case_2-1.sel (06-12-2013 21:42)	471	ESYS line3_1 SENSOR 4

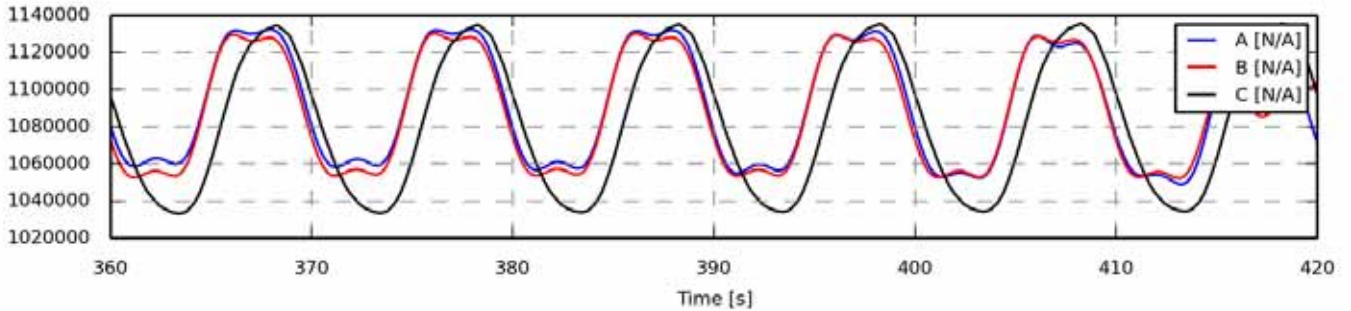


Figure 581 - Full length time series

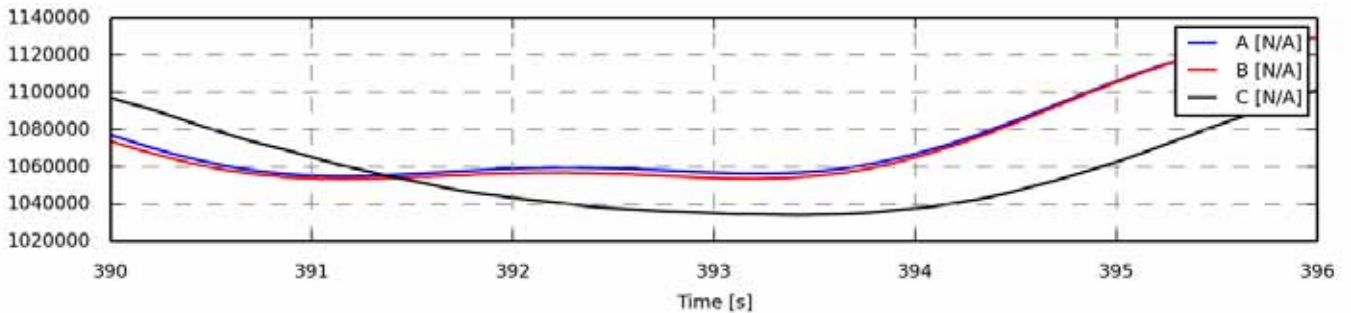


Figure 582 - Zoom of time series

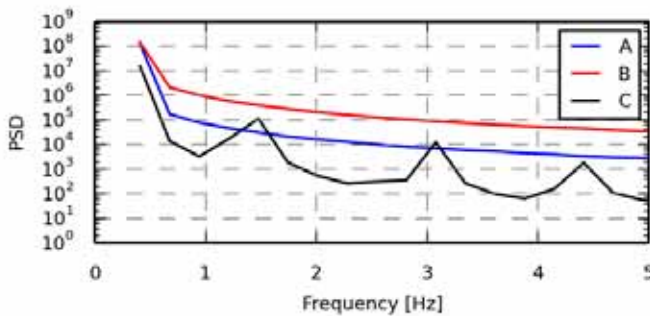


Figure 583 - Power spectrum density

Statistics	A	B	C
Min	1.0490e+06	1.0522e+06	1.0333e+06
Max	1.1324e+06	1.1305e+06	1.1355e+06
Mean	1.0920e+06	1.0885e+06	1.0828e+06
Std	3.0436e+04	2.9752e+04	3.6927e+04
Skewness	0.0469	0.1237	0.0590
Kurtosis	-1.7051	-1.6379	-1.5686

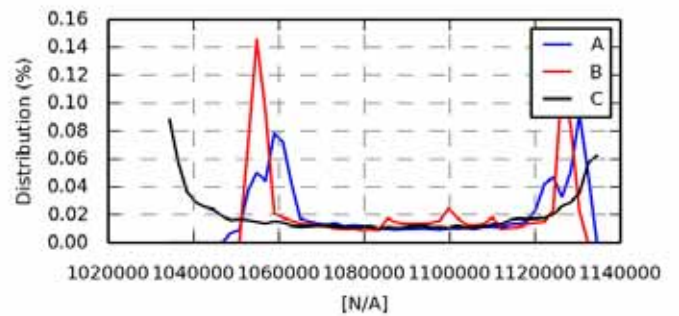


Figure 584 - Value distribution

Fatigue eq.	1Hz	A	B	C
Eq (m=3)		3.4774e+04	3.4188e+04	4.5646e+04
Eq (m=4)		4.2239e+04	4.1734e+04	5.5431e+04
Eq (m=6)		5.1426e+04	5.1065e+04	6.7455e+04
Eq (m=8)		5.6830e+04	5.6537e+04	7.4472e+04
Eq (m=10)		6.0400e+04	6.0118e+04	7.9044e+04
Eq (m=12)		6.2950e+04	6.2641e+04	8.2251e+04

Section 6.23 oc4_p2_load_case_2-1: ESYS line3_3 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-1.sel (28-02-2014 17:26)	675	ESYS line3_3 SENSOR 104
B	WAMsim/oc4_p2_load_case_2-1.sel (01-04-2014 12:51)	675	ESYS line3_3 SENSOR 104
C	hawc2/oc4_p2_load_case_2-1.sel (06-12-2013 21:42)	675	ESYS line3_3 SENSOR 104

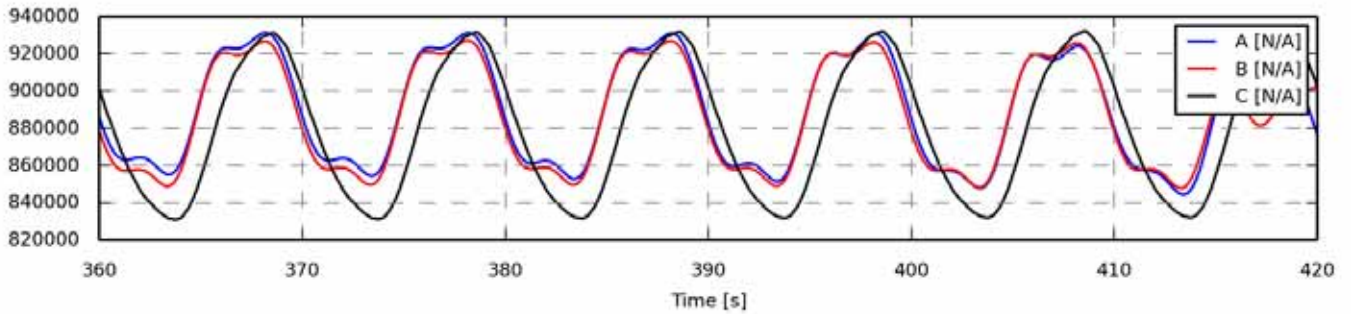


Figure 585 - Full length time series

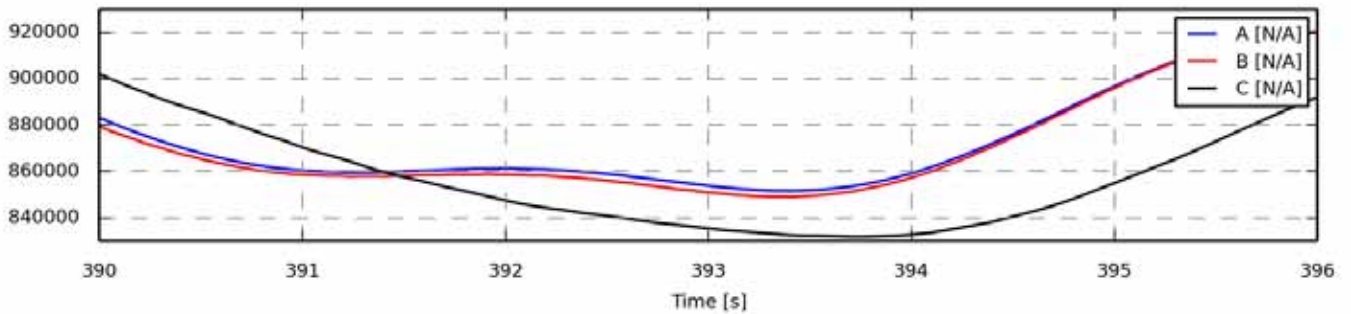


Figure 586 - Zoom of time series

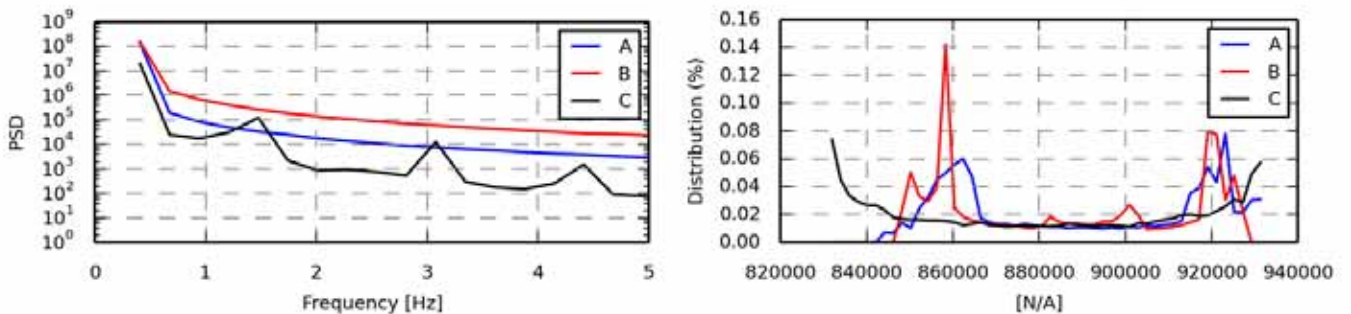


Figure 587 - Power spectrum density

Statistics	A	B	C
Min	8.4431e+05	8.4782e+05	8.3093e+05
Max	9.3127e+05	9.2718e+05	9.3229e+05
Mean	8.8986e+05	8.8633e+05	8.8065e+05
Std	2.8590e+04	2.7859e+04	3.5554e+04
Skewness	0.0195	0.1059	0.0341
Kurtosis	-1.6503	-1.6114	-1.5326

Figure 588 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	3.5529e+04	3.4552e+04	4.5355e+04
Eq (m=4)	4.3199e+04	4.2172e+04	5.5052e+04
Eq (m=6)	5.2682e+04	5.1620e+04	6.6934e+04
Eq (m=8)	5.8280e+04	5.7172e+04	7.3862e+04
Eq (m=10)	6.1989e+04	6.0806e+04	7.8380e+04
Eq (m=12)	6.4653e+04	6.3365e+04	8.1554e+04

Article VII. oc4_p2_load_case_2-2

Generated 22-04-2014 10:01

Section 7.01 oc4_p2_load_case_2-2: WSP gl. coo.,Vy [m/s]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-2.sel (28-02-2014 18:52)	3	Free wind speed Vy, gl. coo, of gl. pos 0.00, 0.00, -90.00
B	WAMsim/oc4_p2_load_case_2-2.sel (01-04-2014 12:51)	3	Free wind speed Vy, gl. coo, of gl. pos 0.00, 0.00, -90.00
C	hawc2/oc4_p2_load_case_2-2.sel (31-03-2014 15:51)	3	Free wind speed Vy, gl. coo, of gl. pos 0.00, 0.00, -90.00

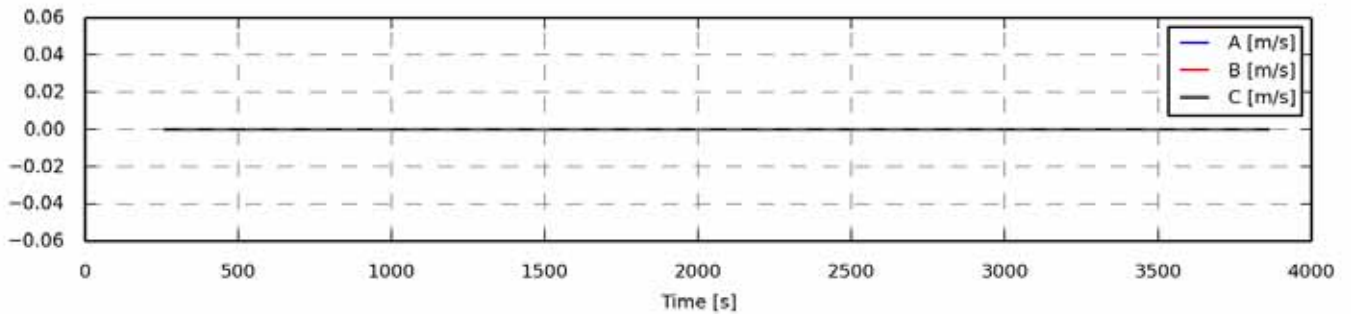


Figure 589 - Full length time series

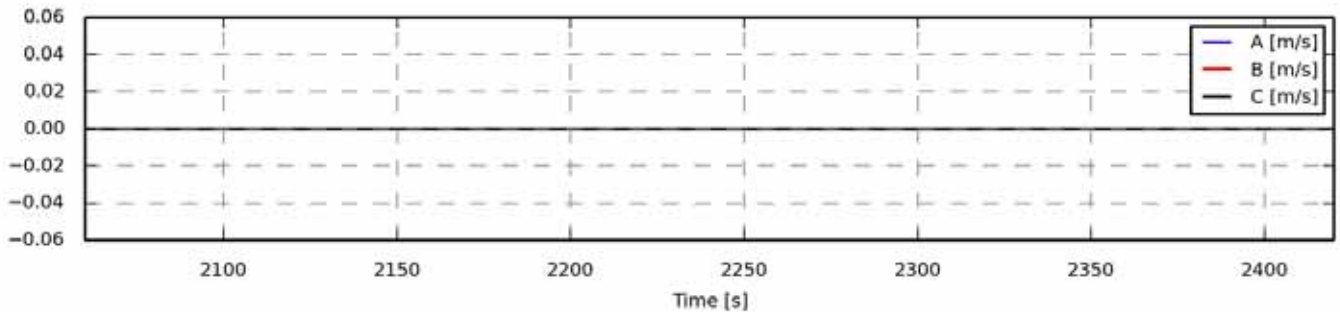


Figure 590 - Zoom of time series

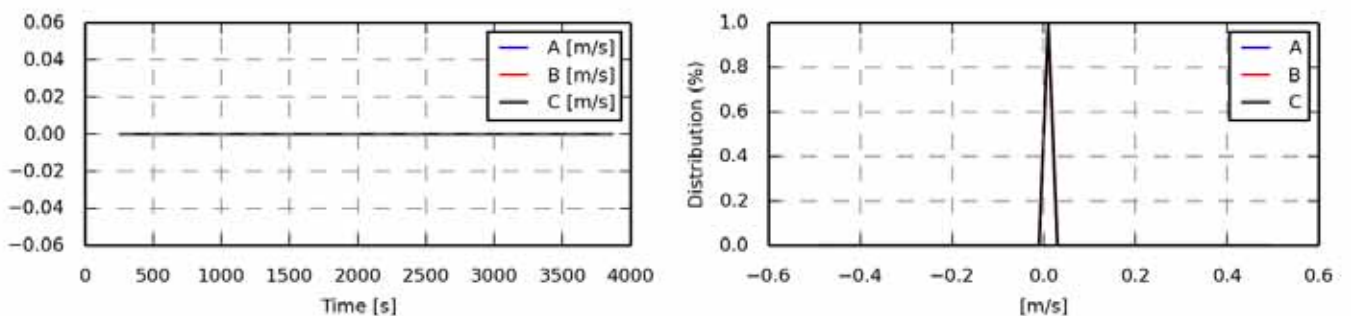


Figure 591 - Power spectrum density

Statistics	A	B	C
Min	0.0000	0.0000	0.0000
Max	0.0000	0.0000	0.0000
Mean	0.0000	0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

Figure 592 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 7.02 oc4_p2_load_case_2-2: Water surf. [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-2.sel (28-02-2014 18:52)	5	Water surface gl. coo, at gl. coo, x,y= 0.00, 0.00
B	WAMsim/oc4_p2_load_case_2-2.sel (01-04-2014 12:51)	5	Constant value
C	hawc2/oc4_p2_load_case_2-2.sel (31-03-2014 15:51)	5	Water surface gl. coo, at gl. coo, x,y= 0.00, 0.00

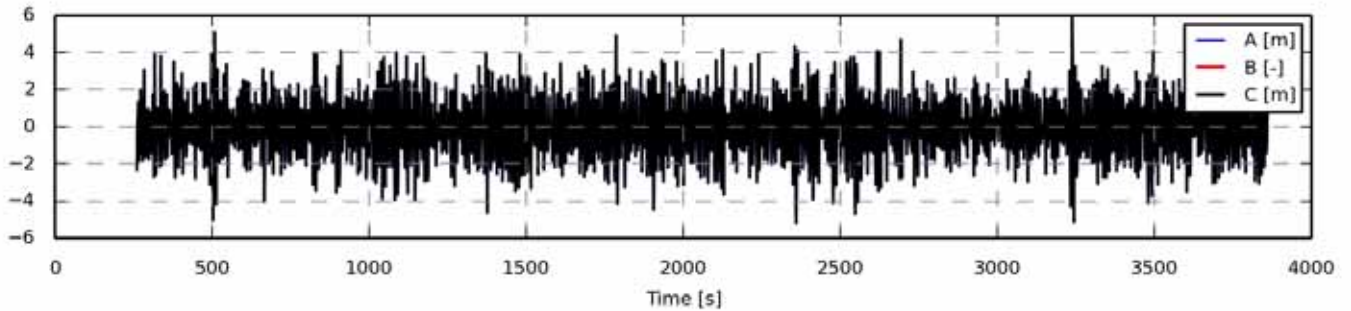


Figure 593 - Full length time series

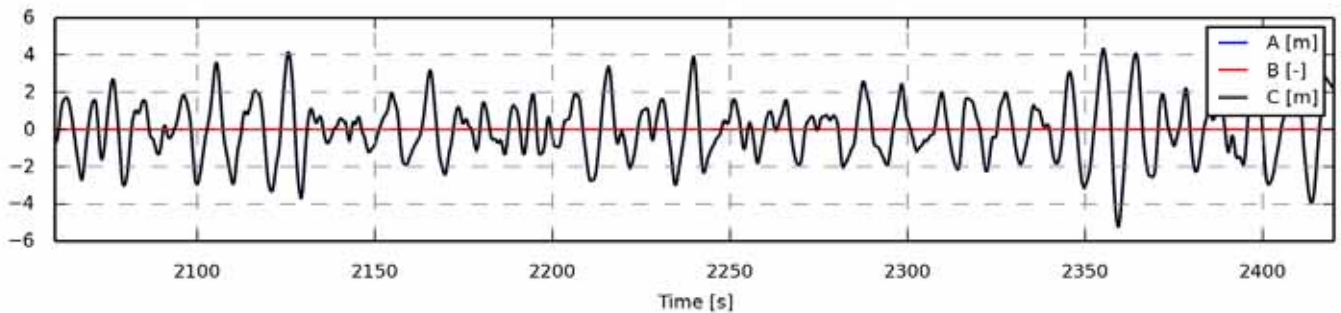


Figure 594 - Zoom of time series

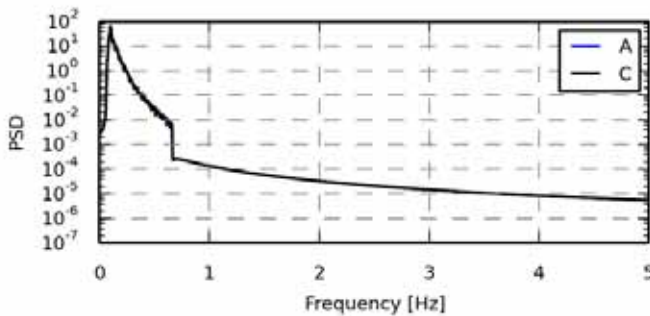


Figure 595 - Power spectrum density

Statistics	A	B	C
Min	-5.1962	0.0000	-5.1924
Max	5.8603	0.0000	5.8593
Mean	-0.0006	0.0000	-0.0006
Std	1.4856	0.0000	1.4844
Skewness	0.0212	0.0000	0.0212
Kurtosis	-0.0312	-3.0000	-0.0310

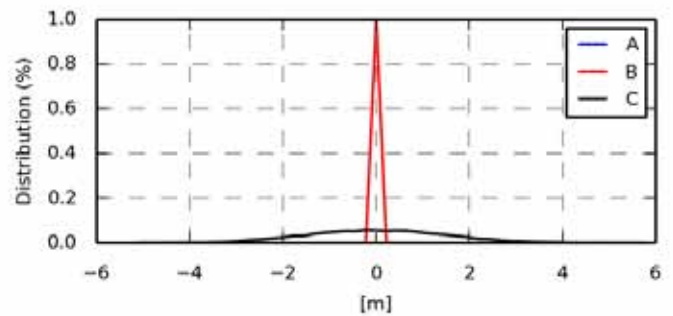


Figure 596 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	2.2966	-	2.2942
Eq (m=4)	2.9419	-	2.9391
Eq (m=6)	3.9521	-	3.9494
Eq (m=8)	4.7500	-	4.7474
Eq (m=10)	5.4105	-	5.4080
Eq (m=12)	5.9645	-	5.9618

Section 7.03 oc4_p2_load_case_2-2: Constant [-]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-2.sel (28-02-2014 18:52)	6	Constant value
B	WAMsim/oc4_p2_load_case_2-2.sel (01-04-2014 12:51)	6	Constant value
C	hawc2/oc4_p2_load_case_2-2.sel (31-03-2014 15:51)	6	Constant value

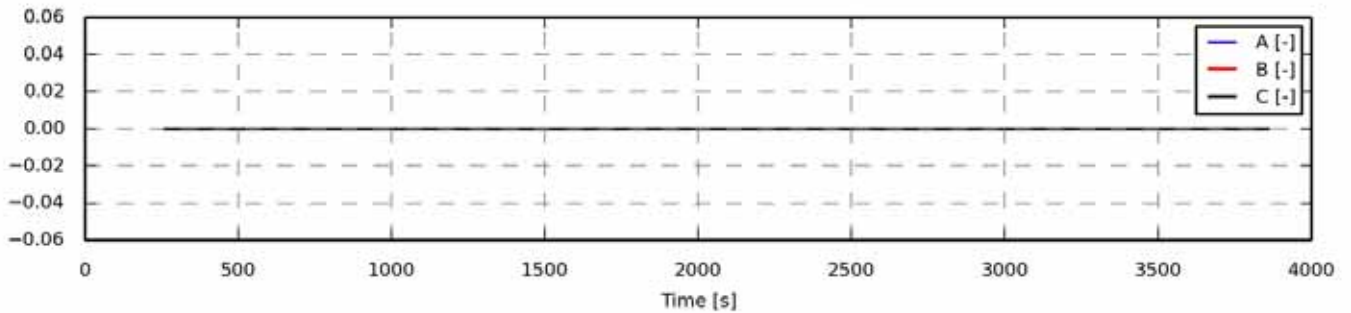


Figure 597 - Full length time series

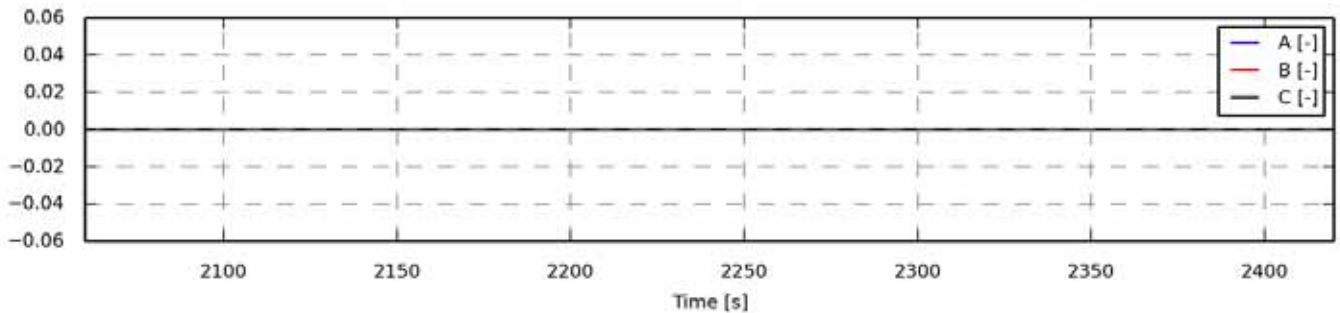


Figure 598 - Zoom of time series

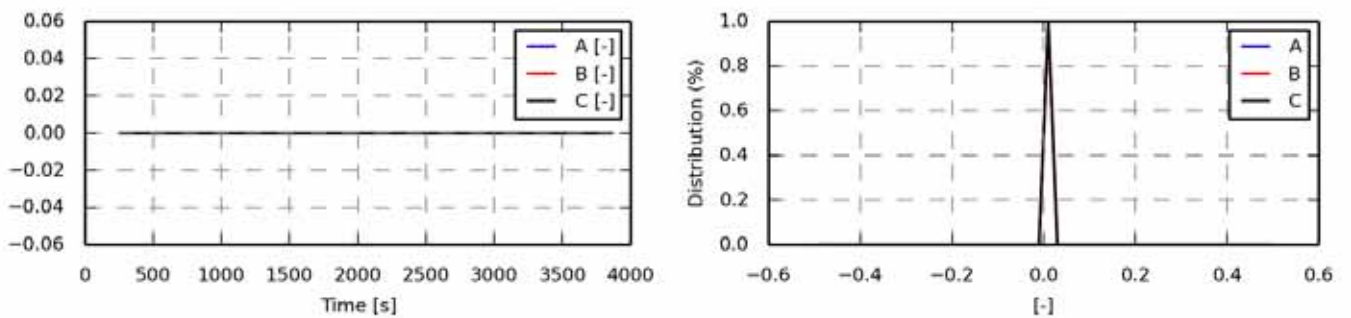


Figure 599 - Power spectrum density

Statistics	A	B	C
Min	0.0000	0.0000	0.0000
Max	0.0000	0.0000	0.0000
Mean	0.0000	0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

Figure 600 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 7.04 oc4_p2_load_case_2-2: Constant [-]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-2.sel (28-02-2014 18:52)	9	Constant value
B	WAMsim/oc4_p2_load_case_2-2.sel (01-04-2014 12:51)	9	Constant value
C	hawc2/oc4_p2_load_case_2-2.sel (31-03-2014 15:51)	9	Constant value

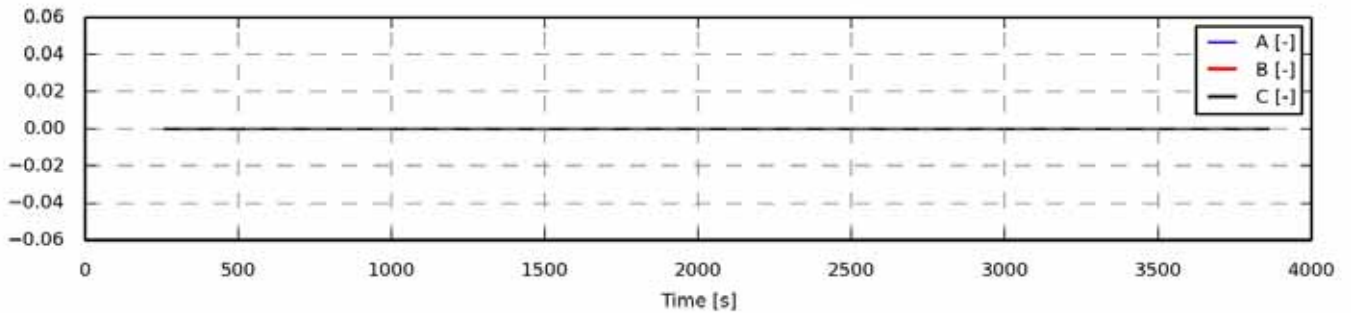


Figure 601 - Full length time series

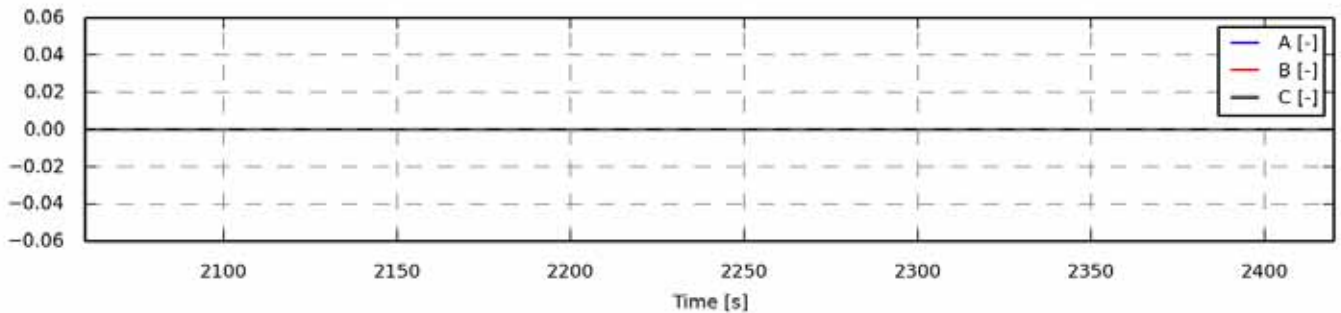


Figure 602 - Zoom of time series

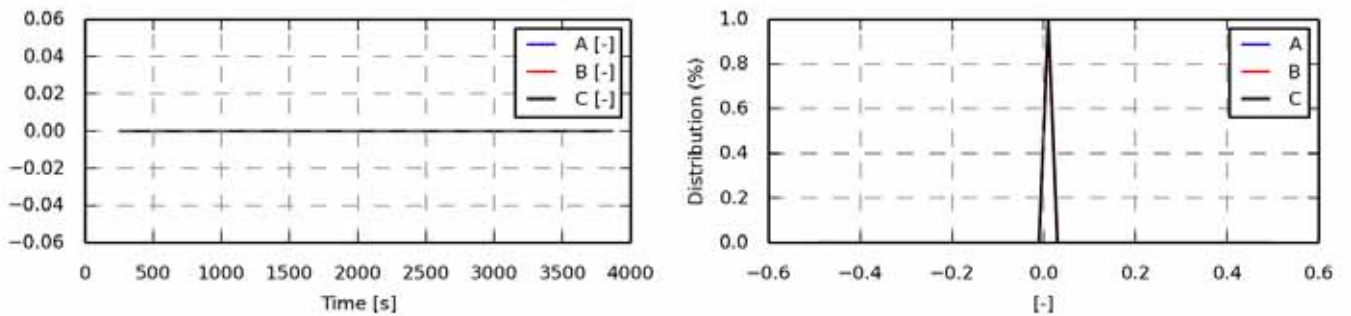


Figure 603 - Power spectrum density

Statistics	A	B	C
Min	0.0000	0.0000	0.0000
Max	0.0000	0.0000	0.0000
Mean	0.0000	0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

Figure 604 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 7.05 oc4_p2_load_case_2-2: bea1 angle [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-2.sel (28-02-2014 18:52)	14	pitch1 angle
B	WAMsim/oc4_p2_load_case_2-2.sel (01-04-2014 12:51)	14	pitch1 angle
C	hawc2/oc4_p2_load_case_2-2.sel (31-03-2014 15:51)	14	pitch1 angle

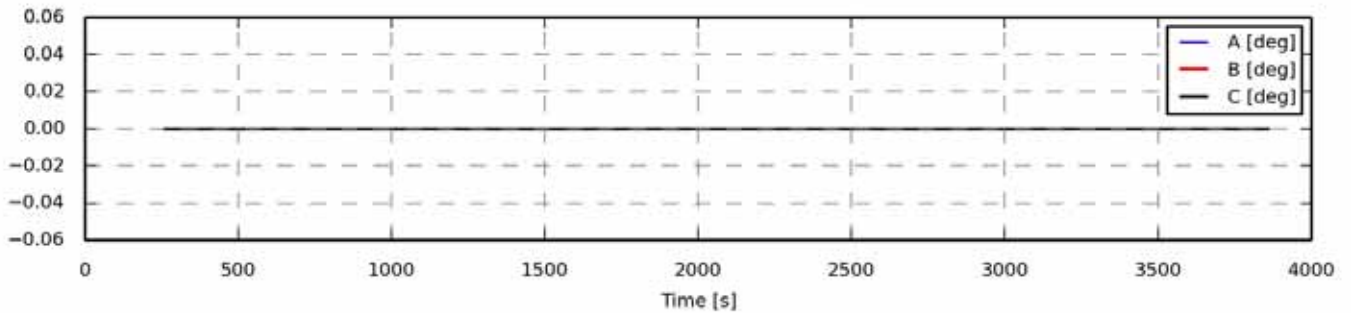


Figure 605 - Full length time series

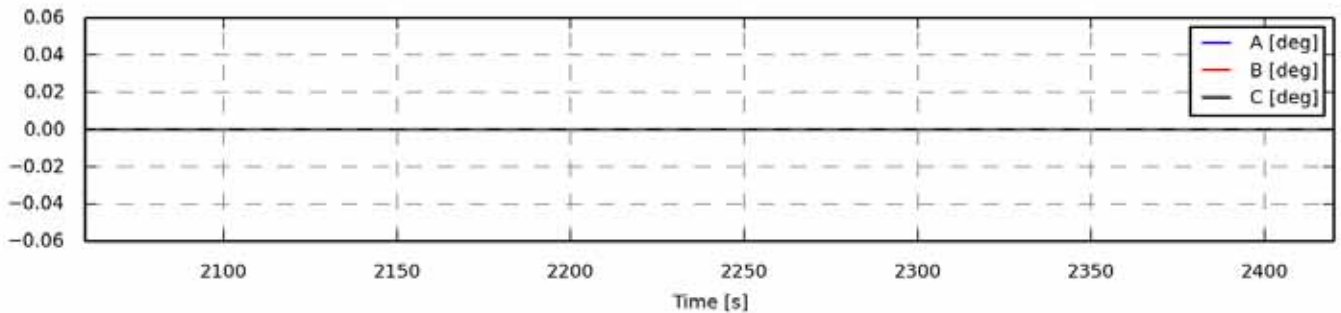


Figure 606 - Zoom of time series

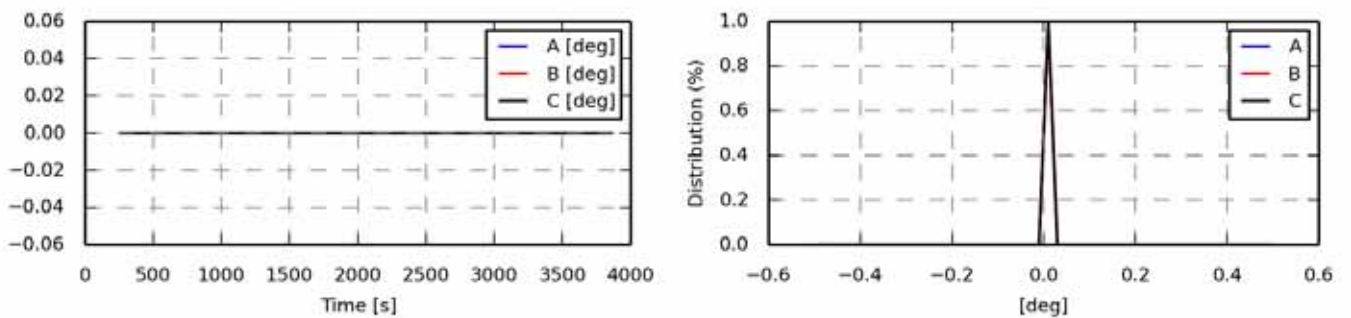


Figure 607 - Power spectrum density

Statistics	A	B	C
Min	0.0000	0.0000	0.0000
Max	0.0000	0.0000	0.0000
Mean	0.0000	0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

Figure 608 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 7.06 oc4_p2_load_case_2-2: State pos x coo: global [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-2.sel (28-02-2014 18:52)	19	State pos x Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
B	WAMsim/oc4_p2_load_case_2-2.sel (01-04-2014 12:51)	19	State pos x Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
C	hawc2/oc4_p2_load_case_2-2.sel (31-03-2014 15:51)	19	State pos x Mbdy:mc E-nr: 8 Z-rel:0.00 coo: global platform translation in surge sway and heave

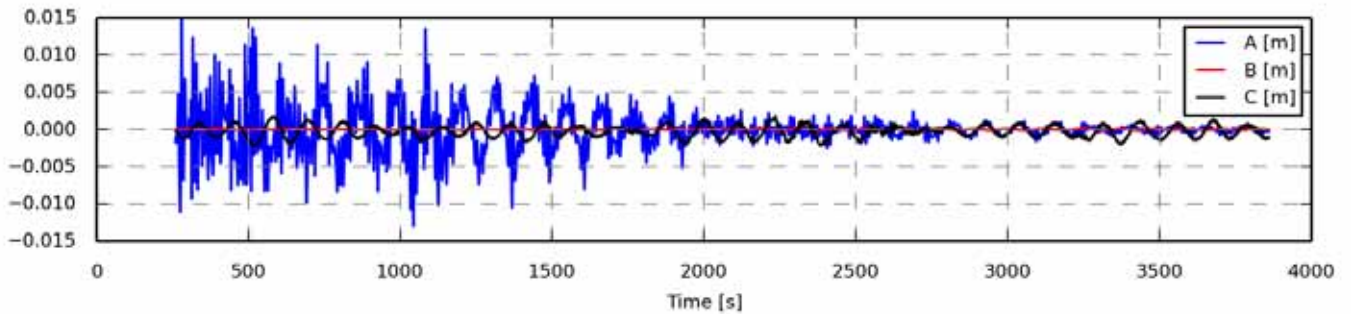


Figure 609 - Full length time series

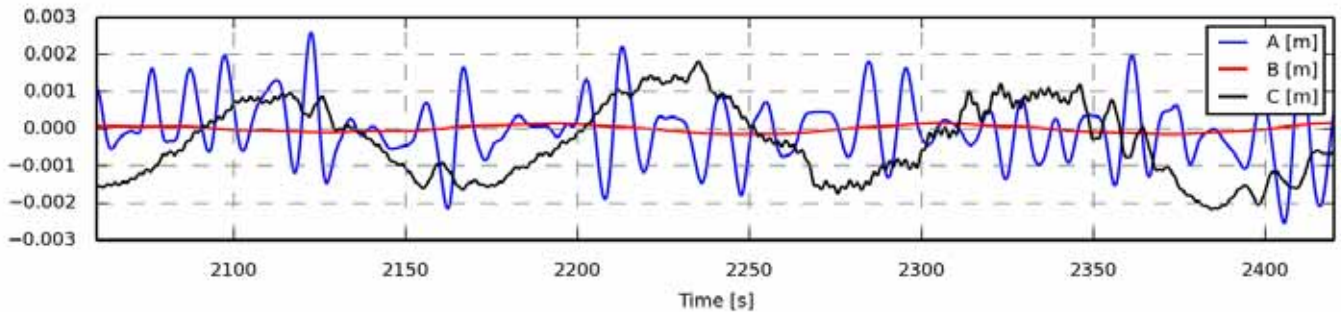


Figure 610 - Zoom of time series

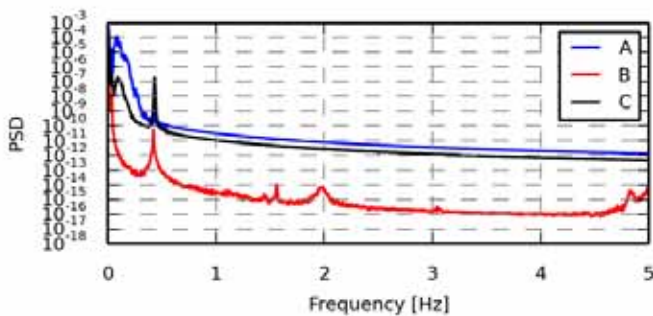


Figure 611 - Power spectrum density

Statistics	A	B	C
Min	-0.0129	-0.0002	-0.0022
Max	0.0148	0.0002	0.0018
Mean	-0.0000	-0.0000	-0.0002
Std	0.0027	0.0001	0.0008
Skewness	0.2016	-0.0424	-0.0474
Kurtosis	3.9062	-0.5572	-0.7227

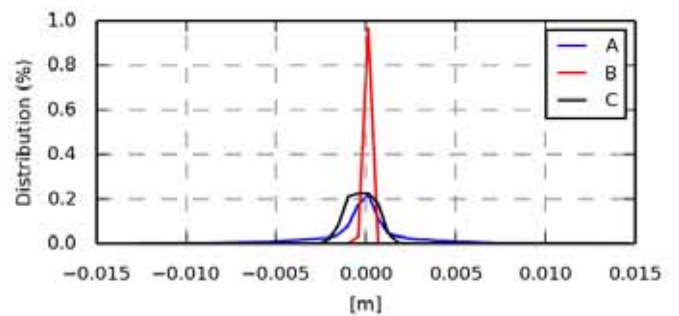


Figure 612 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.0036	0.0000	0.0005
Eq (m=4)	0.0054	0.0001	0.0008
Eq (m=6)	0.0084	0.0001	0.0013
Eq (m=8)	0.0108	0.0002	0.0016
Eq (m=10)	0.0127	0.0002	0.0019
Eq (m=12)	0.0143	0.0002	0.0021

Section 7.07 oc4_p2_load_case_2-2: State pos y coo: global [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-2.sel (28-02-2014 18:52)	20	State pos y Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
B	WAMsim/oc4_p2_load_case_2-2.sel (01-04-2014 12:51)	20	State pos y Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
C	hawc2/oc4_p2_load_case_2-2.sel (31-03-2014 15:51)	20	State pos y Mbdy:mc E-nr: 8 Z-rel:0.00 coo: global platform translation in surge sway and heave

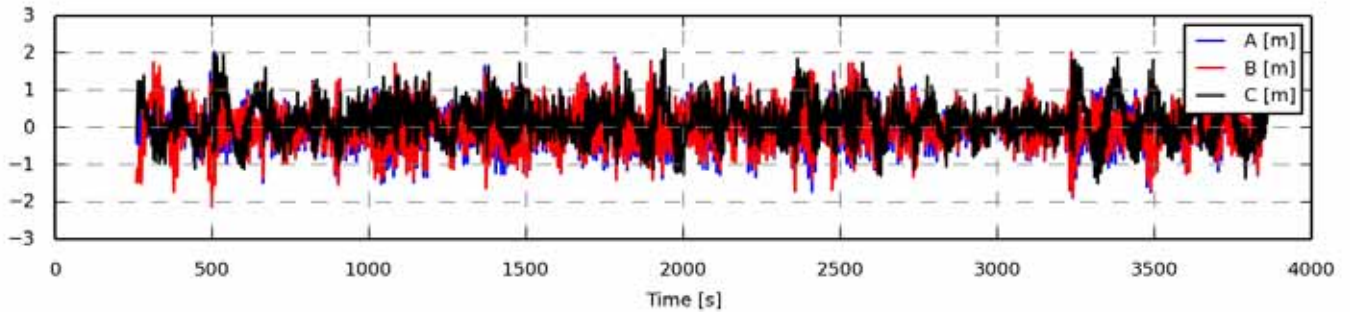


Figure 613 - Full length time series

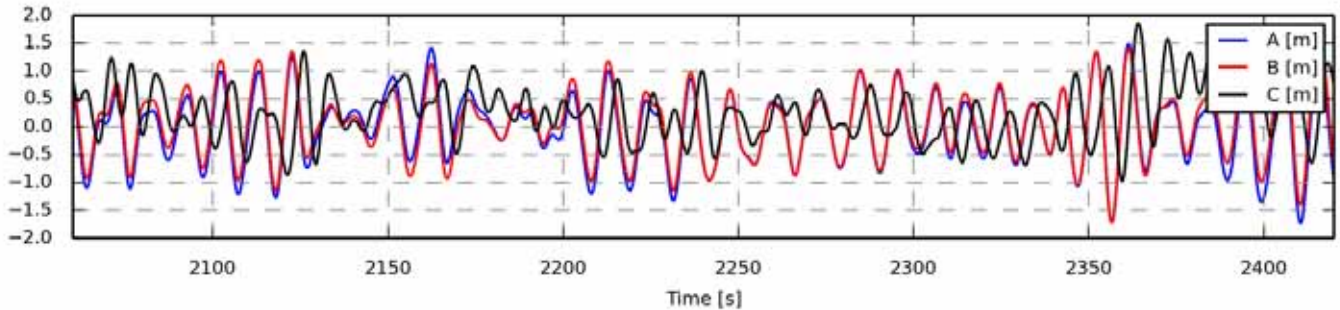


Figure 614 - Zoom of time series

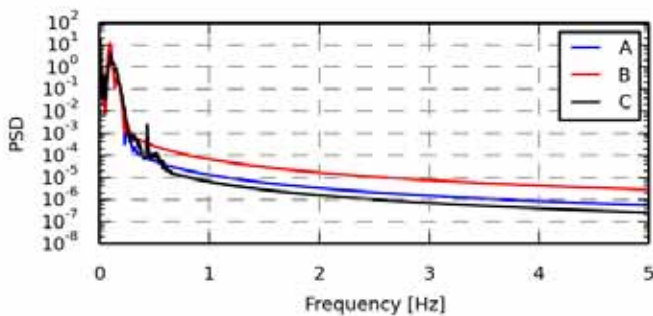


Figure 615 - Power spectrum density

Statistics	A	B	C
Min	-1.8801	-2.1233	-1.5036
Max	2.0380	2.0113	2.1137
Mean	-0.0288	0.0240	0.1963
Std	0.5736	0.5779	0.5329
Skewness	0.0875	-0.0182	0.1788
Kurtosis	-0.0868	-0.0497	0.0726

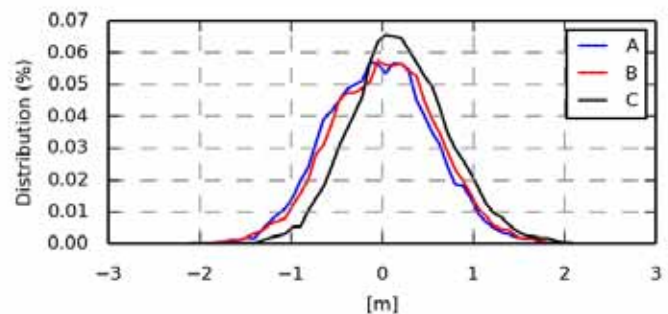


Figure 616 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.7902	0.7909	0.6390
Eq (m=4)	1.0350	1.0389	0.8555
Eq (m=6)	1.4169	1.4300	1.2202
Eq (m=8)	1.7087	1.7337	1.5089
Eq (m=10)	1.9418	1.9800	1.7374
Eq (m=12)	2.1327	2.1839	1.9211

Section 7.08 oc4_p2_load_case_2-2: State pos z coo: global [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-2.sel (28-02-2014 18:52)	21	State pos z Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
B	WAMsim/oc4_p2_load_case_2-2.sel (01-04-2014 12:51)	21	State pos z Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
C	hawc2/oc4_p2_load_case_2-2.sel (31-03-2014 15:51)	21	State pos z Mbdy:mc E-nr: 8 Z-rel:0.00 coo: global platform translation in surge sway and heave

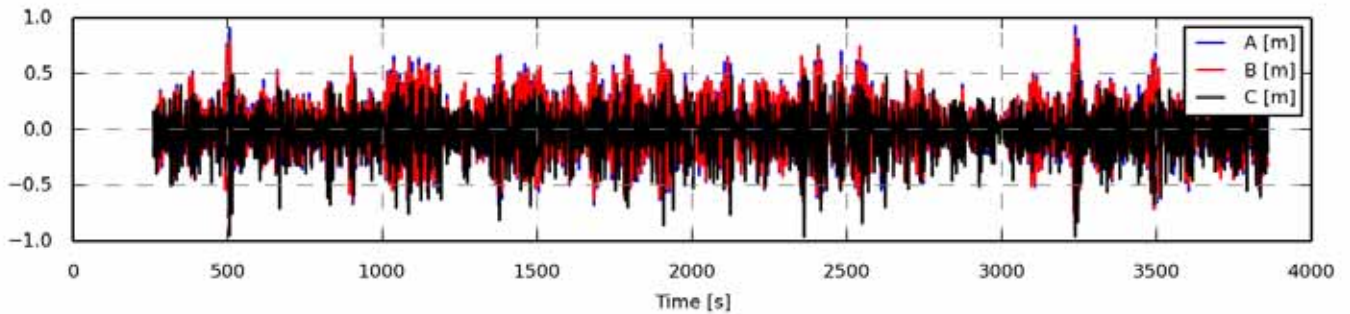


Figure 617 - Full length time series

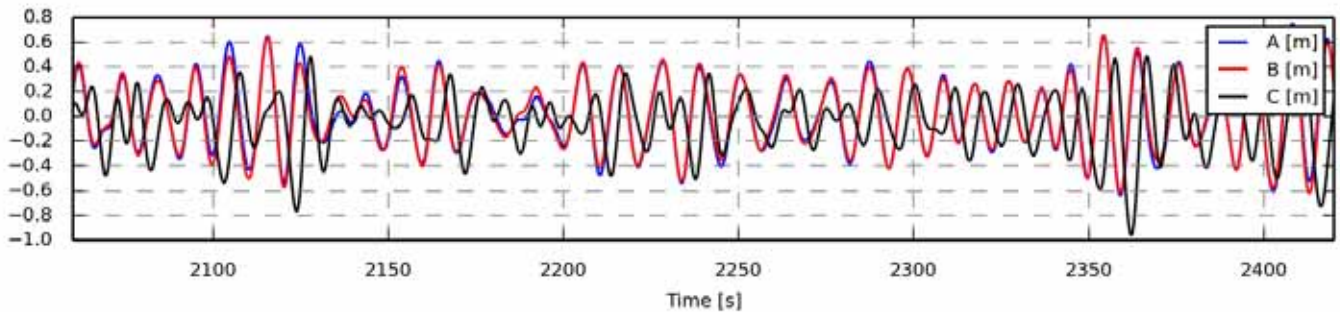


Figure 618 - Zoom of time series

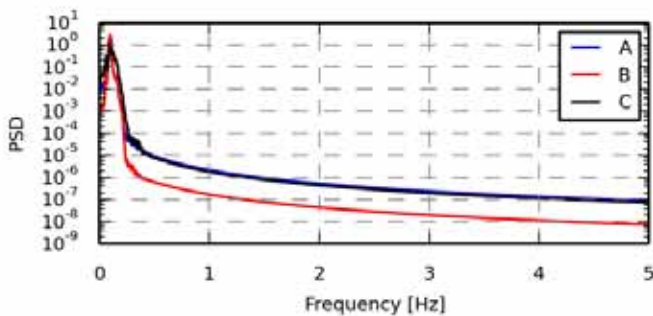


Figure 619 - Power spectrum density

Statistics	A	B	C
Min	-0.7395	-0.7879	-0.9577
Max	0.9256	0.8485	0.5259
Mean	0.0082	0.0128	-0.0436
Std	0.2536	0.2487	0.2148
Skewness	0.1008	0.0114	-0.5138
Kurtosis	-0.2205	-0.2735	0.4398

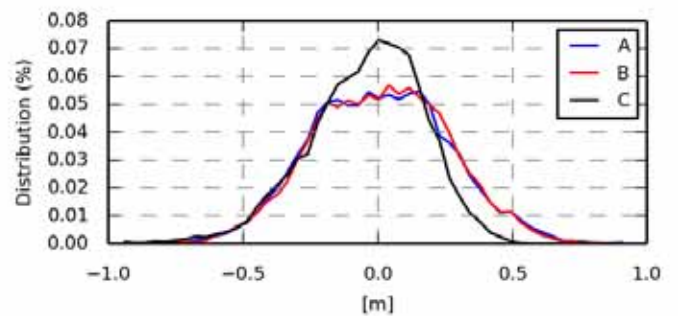


Figure 620 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.3554	0.3491	0.3135
Eq (m=4)	0.4625	0.4540	0.4080
Eq (m=6)	0.6261	0.6140	0.5573
Eq (m=8)	0.7485	0.7337	0.6721
Eq (m=10)	0.8454	0.8285	0.7631
Eq (m=12)	0.9245	0.9062	0.8364

Section 7.09 oc4_p2_load_case_2-2: proj_ang tx coo: global [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-2.sel (28-02-2014 18:52)	22	State_rot proj_ang tx Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
B	WAMsim/oc4_p2_load_case_2-2.sel (01-04-2014 12:51)	22	State_rot proj_ang tx Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
C	hawc2/oc4_p2_load_case_2-2.sel (31-03-2014 15:51)	22	State_rot proj_ang tx Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw

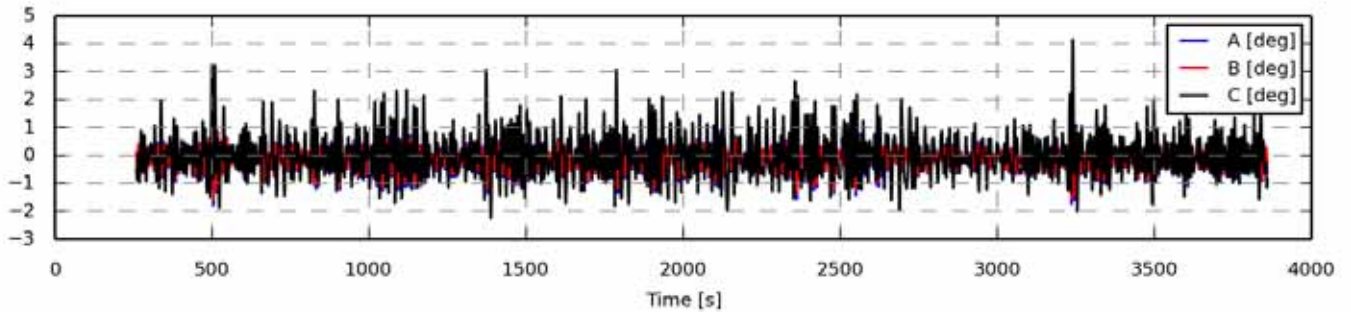


Figure 621 - Full length time series

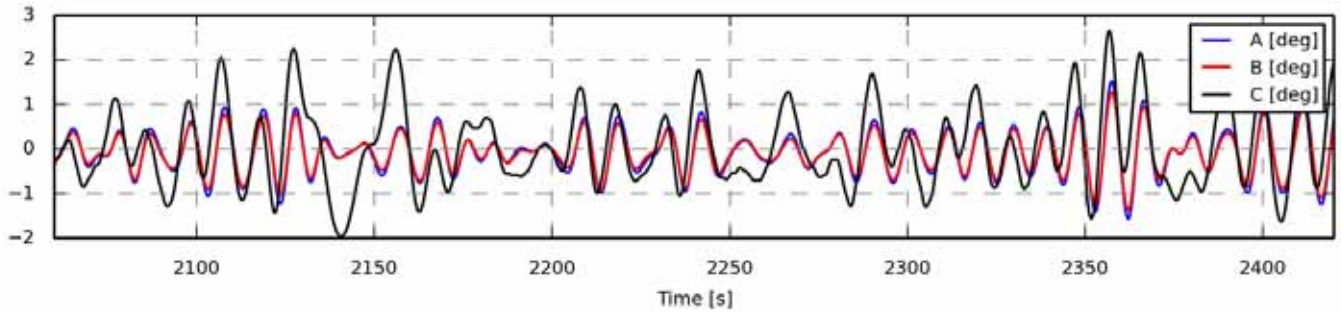


Figure 622 - Zoom of time series

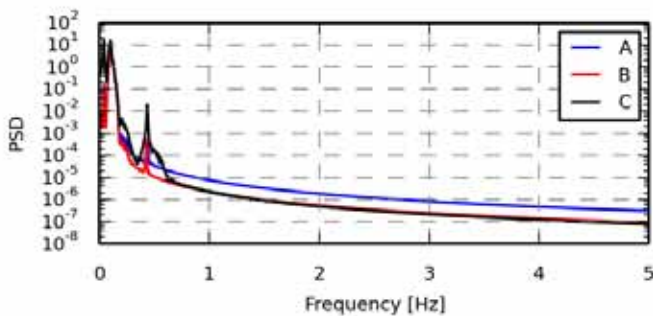


Figure 623 - Power spectrum density

Statistics	A	B	C
Min	-1.7648	-1.5775	-2.2397
Max	1.7268	1.4533	4.1518
Mean	-0.0753	-0.0774	0.0280
Std	0.4631	0.4019	0.7554
Skewness	0.0188	-0.0073	0.5455
Kurtosis	0.0291	0.0255	0.9105

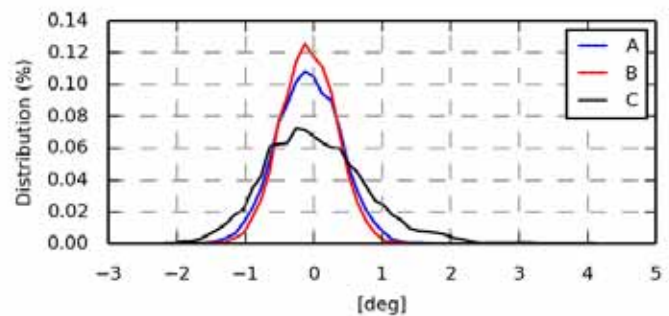


Figure 624 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.6730	0.5846	1.0106
Eq (m=4)	0.8811	0.7648	1.3672
Eq (m=6)	1.2135	1.0516	1.9686
Eq (m=8)	1.4766	1.2776	2.4699
Eq (m=10)	1.6921	1.4621	2.8930
Eq (m=12)	1.8706	1.6148	3.2481

Section 7.10 oc4_p2_load_case_2-2: proj_ang ty coo: global [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-2.sel (28-02-2014 18:52)	23	State_rot proj_ang ty Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
B	WAMsim/oc4_p2_load_case_2-2.sel (01-04-2014 12:51)	23	State_rot proj_ang ty Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
C	hawc2/oc4_p2_load_case_2-2.sel (31-03-2014 15:51)	23	State_rot proj_ang ty Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw

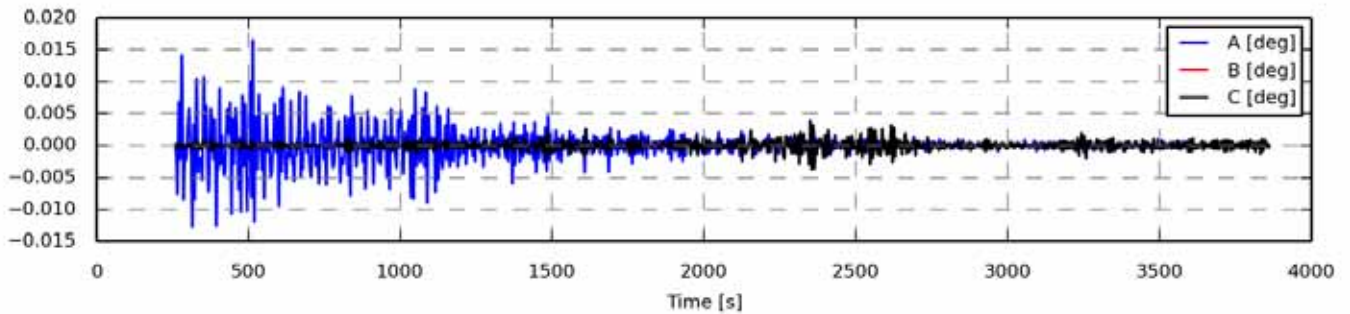


Figure 625 - Full length time series

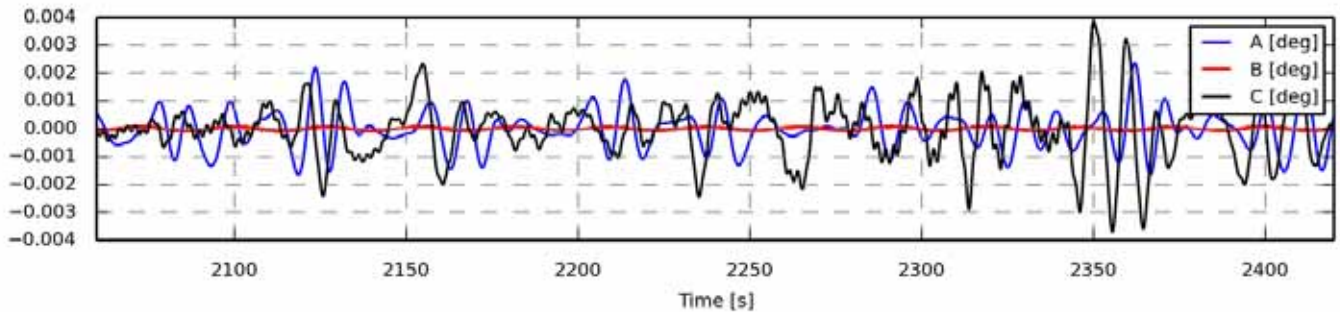


Figure 626 - Zoom of time series

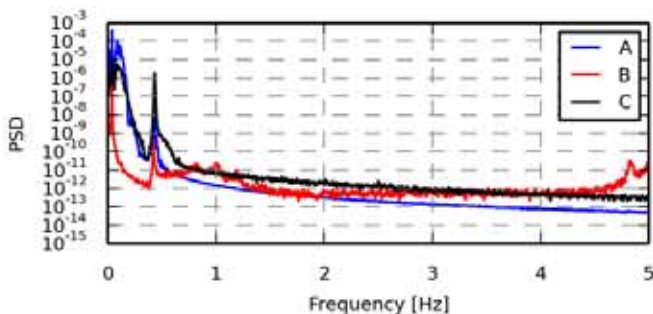


Figure 627 - Power spectrum density

Statistics	A	B	C
Min	-0.0127	-0.0002	-0.0037
Max	0.0164	0.0002	0.0039
Mean	0.0000	-0.0000	-0.0000
Std	0.0022	0.0000	0.0006
Skewness	0.1494	0.0170	0.1250
Kurtosis	7.7348	-0.0316	5.7815

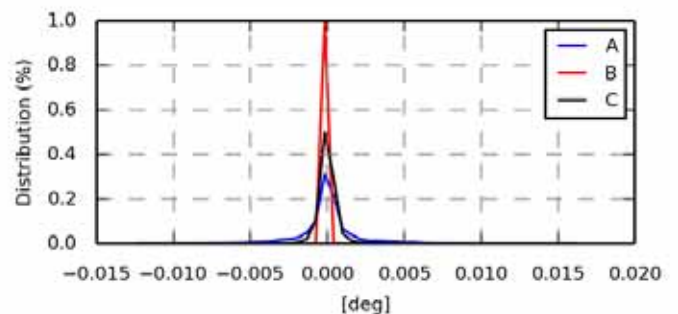


Figure 628 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.0035	0.0001	0.0010
Eq (m=4)	0.0053	0.0001	0.0014
Eq (m=6)	0.0085	0.0001	0.0023
Eq (m=8)	0.0111	0.0001	0.0029
Eq (m=10)	0.0132	0.0002	0.0035
Eq (m=12)	0.0149	0.0002	0.0039

Section 7.11 oc4_p2_load_case_2-2: proj_ang tz coo: global [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-2.sel (28-02-2014 18:52)	24	State_rot proj_ang tz Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
B	WAMsim/oc4_p2_load_case_2-2.sel (01-04-2014 12:51)	24	State_rot proj_ang tz Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
C	hawc2/oc4_p2_load_case_2-2.sel (31-03-2014 15:51)	24	State_rot proj_ang tz Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw

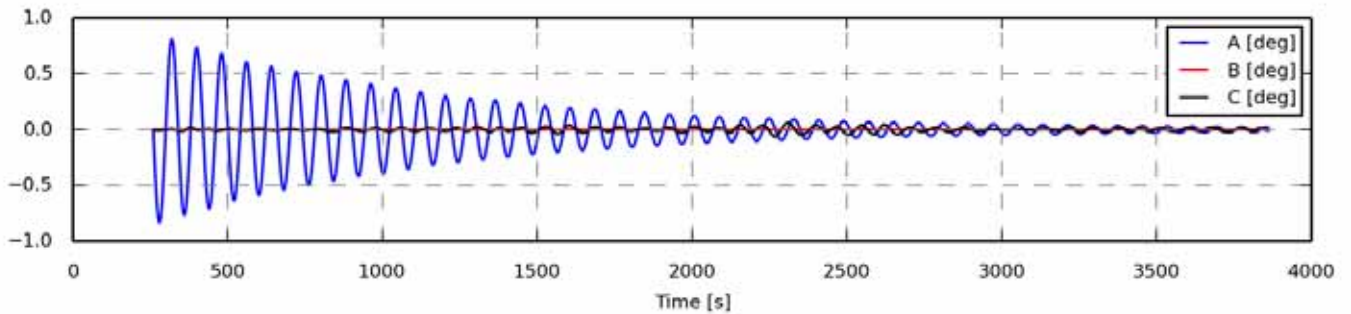


Figure 629 - Full length time series

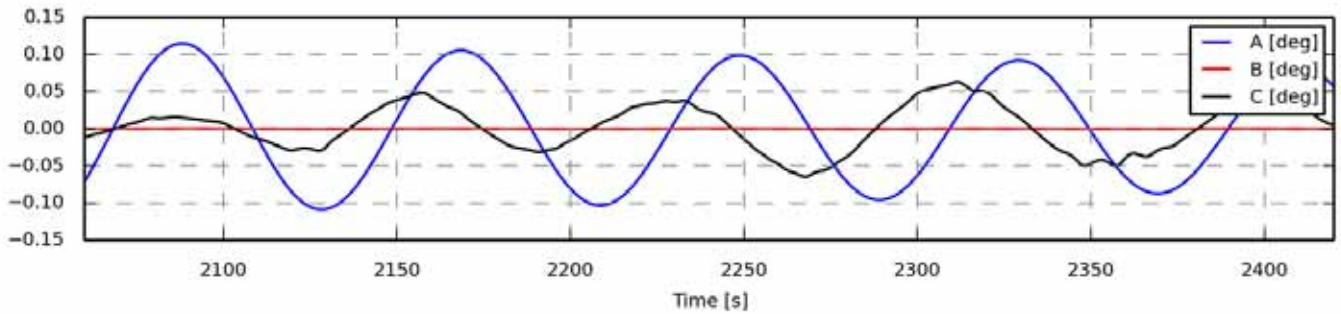


Figure 630 - Zoom of time series

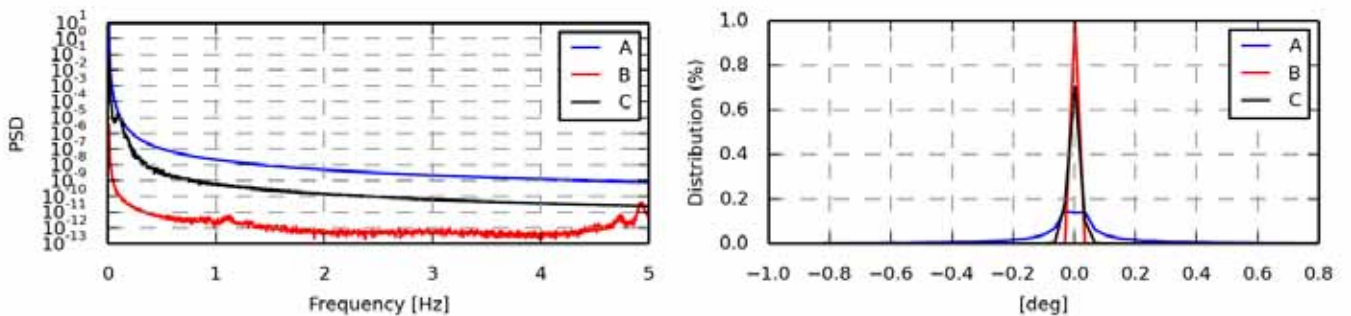


Figure 631 - Power spectrum density

Statistics	A	B	C
Min	-0.8342	-0.0004	-0.0646
Max	0.8062	0.0004	0.0631
Mean	-0.0030	0.0000	-0.0003
Std	0.2166	0.0001	0.0171
Skewness	-0.0975	-0.0599	-0.0557
Kurtosis	2.8405	-0.3521	0.8510

Figure 632 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.1718	0.0001	0.0130
Eq (m=4)	0.2822	0.0002	0.0208
Eq (m=6)	0.4771	0.0003	0.0350
Eq (m=8)	0.6300	0.0003	0.0465
Eq (m=10)	0.7493	0.0004	0.0557
Eq (m=12)	0.8441	0.0004	0.0632

Section 7.12 oc4_p2_load_case_2-2: Mx coo: towertop [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-2.sel (28-02-2014 18:52)	37	MomentMx Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
B	WAMsim/oc4_p2_load_case_2-2.sel (01-04-2014 12:51)	37	MomentMx Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
C	hawc2/oc4_p2_load_case_2-2.sel (31-03-2014 15:51)	37	MomentMx Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment

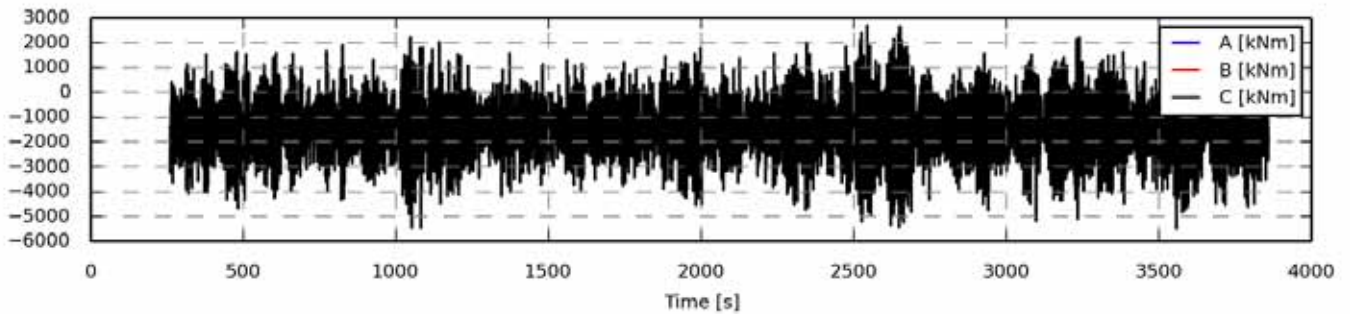


Figure 633 - Full length time series

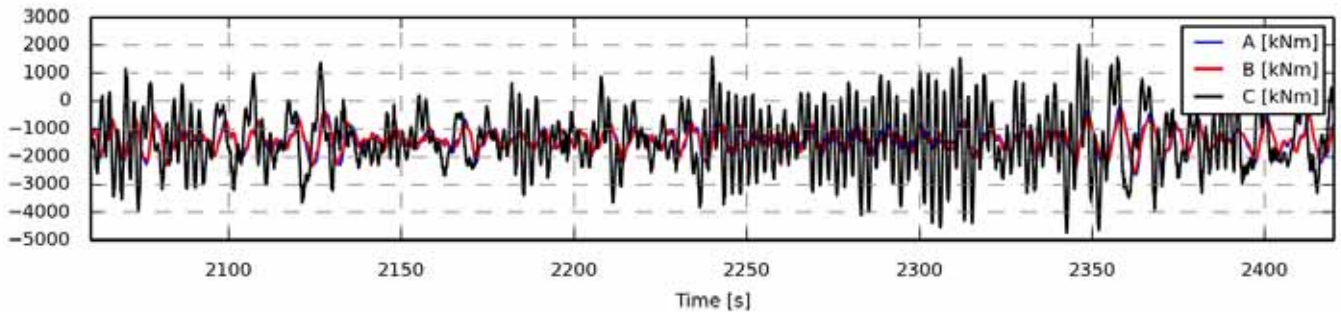


Figure 634 - Zoom of time series

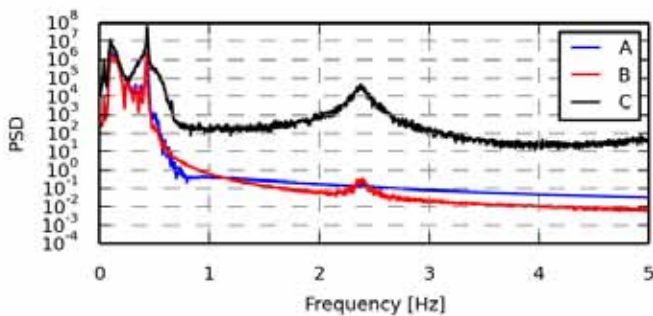


Figure 635 - Power spectrum density

Statistics	A	B	C
Min	-2.8430e+03	-2.6452e+03	-5.4805e+03
Max	-36.2479	-30.9154	2.6776e+03
Mean	-1.4158e+03	-1.4162e+03	-1.4015e+03
Std	391.8908	351.2589	1.1294e+03
Skewness	0.0017	-0.0042	-0.0168
Kurtosis	-0.1233	-0.0950	0.0520

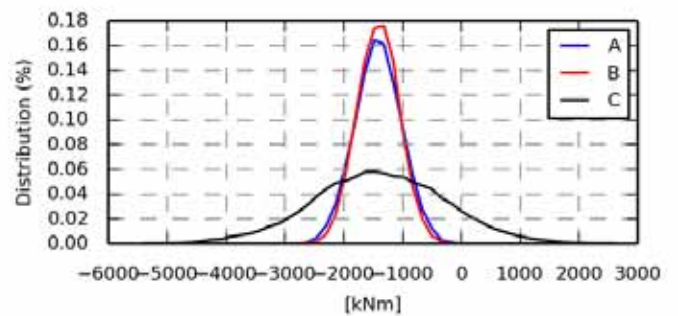


Figure 636 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	675.5946	630.2092	2.4464e+03
Eq (m=4)	839.0494	780.6925	2.8933e+03
Eq (m=6)	1.0807e+03	1.0089e+03	3.5890e+03
Eq (m=8)	1.2592e+03	1.1823e+03	4.1217e+03
Eq (m=10)	1.4022e+03	1.3239e+03	4.5462e+03
Eq (m=12)	1.5219e+03	1.4432e+03	4.8924e+03

Section 7.13 oc4_p2_load_case_2-2: My coo: towertop [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-2.sel (28-02-2014 18:52)	38	MomentMy Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
B	WAMsim/oc4_p2_load_case_2-2.sel (01-04-2014 12:51)	38	MomentMy Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
C	hawc2/oc4_p2_load_case_2-2.sel (31-03-2014 15:51)	38	MomentMy Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment

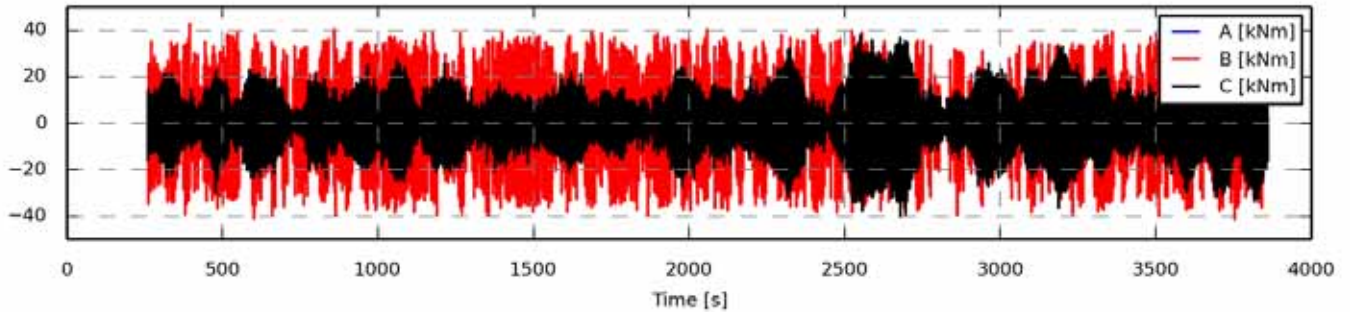


Figure 637 - Full length time series

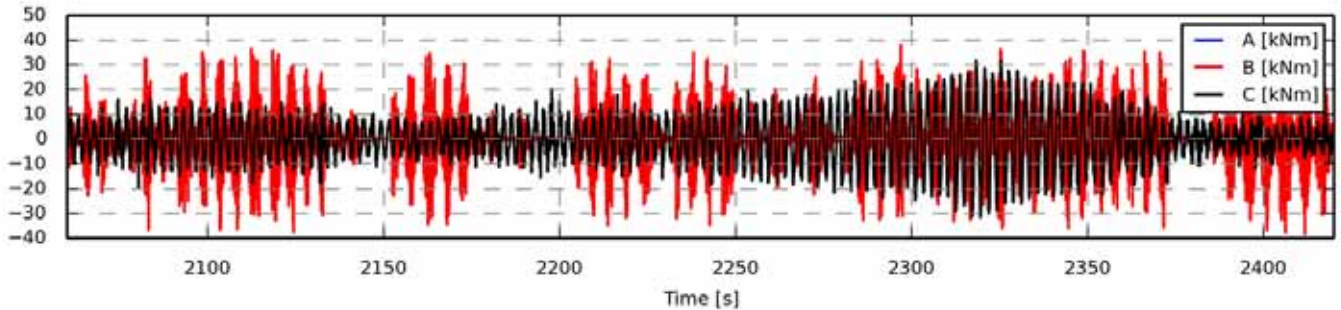


Figure 638 - Zoom of time series

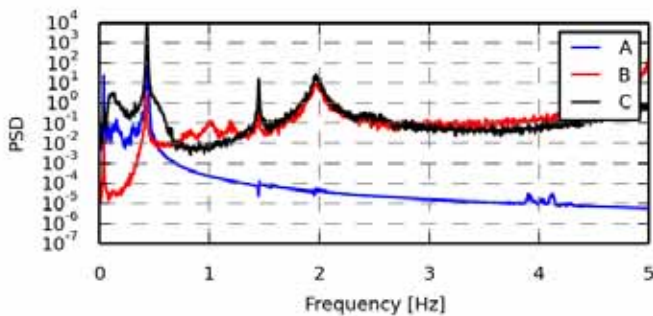


Figure 639 - Power spectrum density

Statistics	A	B	C
Min	-6.8864	-41.6331	-40.2618
Max	7.9684	42.6064	37.6636
Mean	-0.0009	-0.0000	-0.0020
Std	1.0014	8.7304	10.2989
Skewness	-0.0329	0.0110	-0.0041
Kurtosis	10.5736	2.2716	0.0316

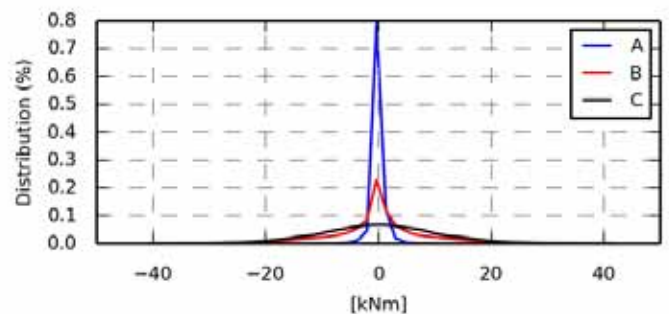


Figure 640 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	2.8227	52.5041	26.8951
Eq (m=4)	3.7741	51.3004	30.6580
Eq (m=6)	5.3155	52.1835	36.4568
Eq (m=8)	6.4896	53.9691	40.7991
Eq (m=10)	7.4085	55.7865	44.2262
Eq (m=12)	8.1443	57.4674	47.0282

Section 7.14 oc4_p2_load_case_2-2: Mz coo: towertop [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-2.sel (28-02-2014 18:52)	39	MomentMz Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
B	WAMsim/oc4_p2_load_case_2-2.sel (01-04-2014 12:51)	39	MomentMz Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
C	hawc2/oc4_p2_load_case_2-2.sel (31-03-2014 15:51)	39	MomentMz Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment

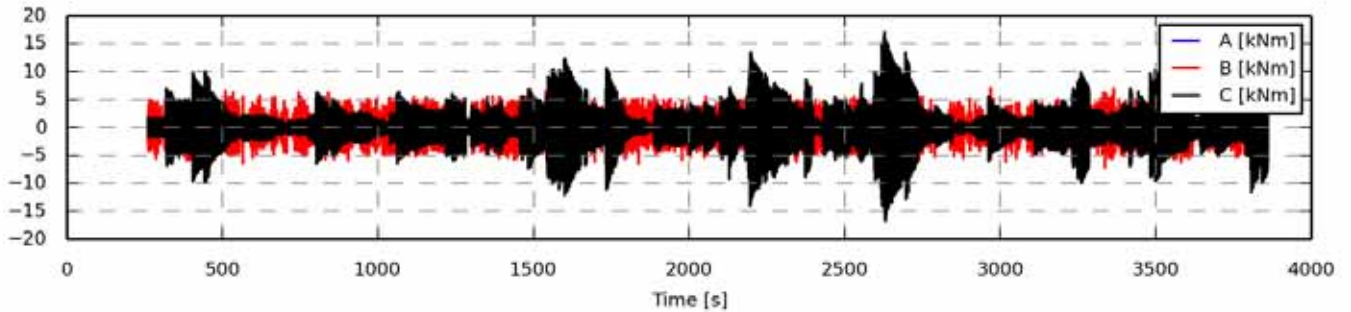


Figure 641 - Full length time series

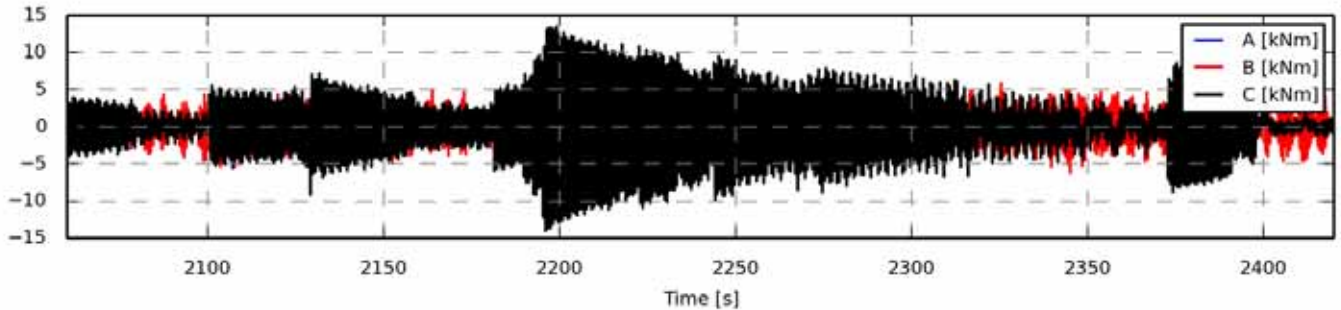


Figure 642 - Zoom of time series

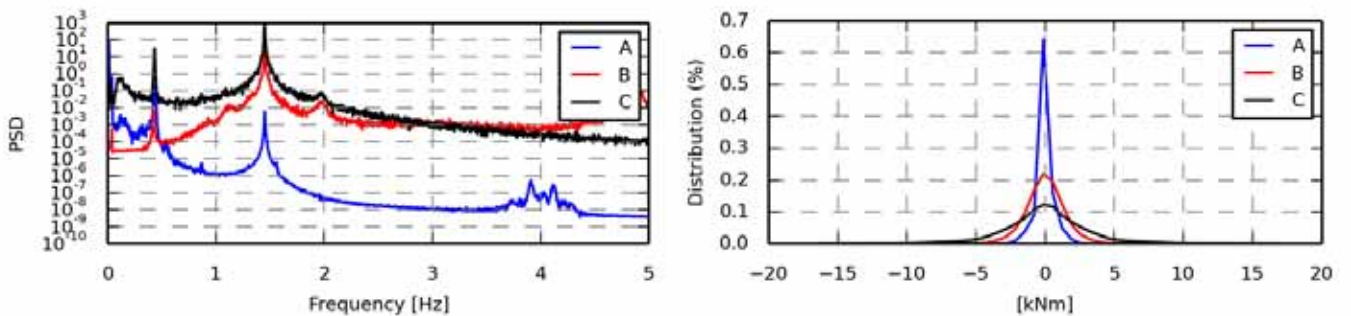


Figure 643 - Power spectrum density

Statistics	A	B	C
Min	-2.6536	-7.1387	-16.7111
Max	2.7260	7.4301	17.1302
Mean	-0.0081	-0.0001	-0.0025
Std	0.5978	1.3904	3.1424
Skewness	-0.1058	0.0235	0.0046
Kurtosis	3.1786	0.9490	2.0244

Figure 644 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.5351	8.0748	11.8607
Eq (m=4)	0.8830	7.5851	13.1164
Eq (m=6)	1.5175	7.5571	15.3437
Eq (m=8)	2.0302	7.8533	17.1924
Eq (m=10)	2.4377	8.2249	18.7414
Eq (m=12)	2.7640	8.6118	20.0455

Section 7.15 oc4_p2_load_case_2-2: Mx coo: tower [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-2.sel (28-02-2014 18:52)	43	MomentMx Mbdy:tower nodenr: 1 coo: tower tower base bending moment
B	WAMsim/oc4_p2_load_case_2-2.sel (01-04-2014 12:51)	43	MomentMx Mbdy:tower nodenr: 1 coo: tower tower base bending moment
C	hawc2/oc4_p2_load_case_2-2.sel (31-03-2014 15:51)	43	MomentMx Mbdy:tower nodenr: 1 coo: tower tower base bending moment

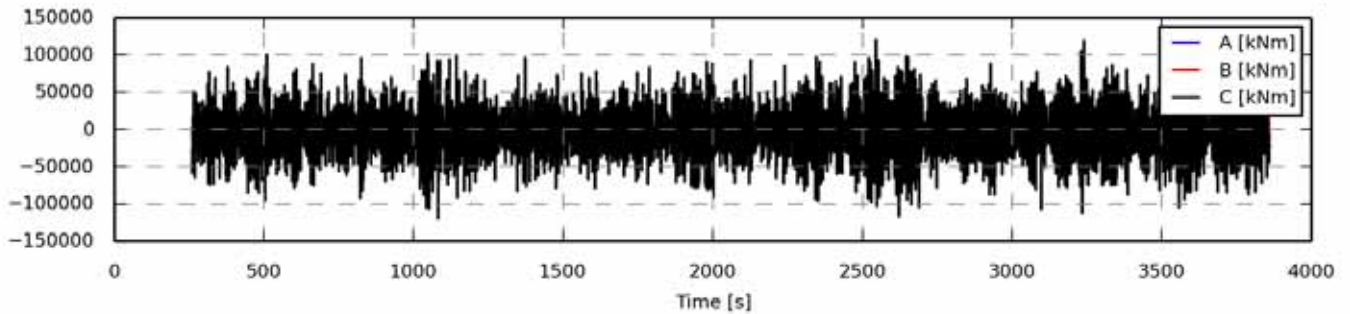


Figure 645 - Full length time series

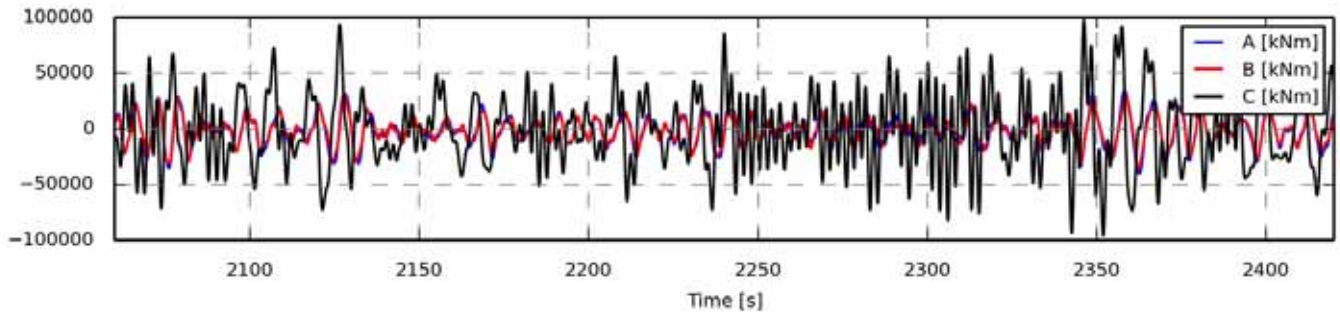


Figure 646 - Zoom of time series

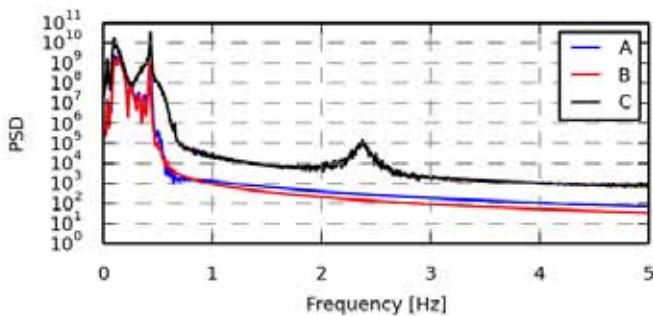


Figure 647 - Power spectrum density

Statistics	A	B	C
Min	-4.2631e+04	-3.9934e+04	-1.1902e+05
Max	4.3794e+04	4.1500e+04	1.2000e+05
Mean	-1.8869e+03	-1.9013e+03	-1.2294e+03
Std	1.2568e+04	1.1180e+04	3.2271e+04
Skewness	0.0077	0.0043	0.0280
Kurtosis	-0.1250	-0.1281	0.0157

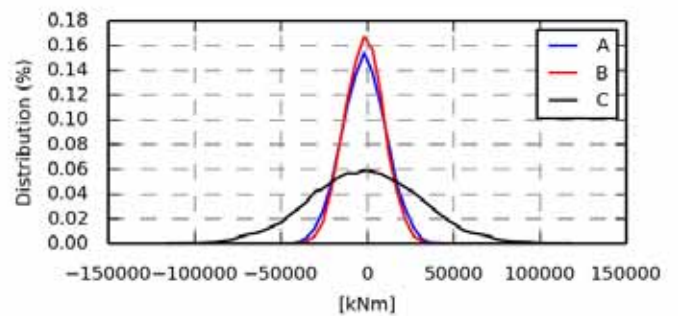


Figure 648 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	2.1190e+04	1.9347e+04	6.2582e+04
Eq (m=4)	2.6460e+04	2.4084e+04	7.6019e+04
Eq (m=6)	3.4279e+04	3.1175e+04	9.6843e+04
Eq (m=8)	4.0068e+04	3.6486e+04	1.1265e+05
Eq (m=10)	4.4679e+04	4.0755e+04	1.2528e+05
Eq (m=12)	4.8497e+04	4.4316e+04	1.3570e+05

Section 7.16 oc4_p2_load_case_2-2: My coo: tower [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-2.sel (28-02-2014 18:52)	44	MomentMy Mbdy:tower nodenr: 1 coo: tower tower base bending moment
B	WAMsim/oc4_p2_load_case_2-2.sel (01-04-2014 12:51)	44	MomentMy Mbdy:tower nodenr: 1 coo: tower tower base bending moment
C	hawc2/oc4_p2_load_case_2-2.sel (31-03-2014 15:51)	44	MomentMy Mbdy:tower nodenr: 1 coo: tower tower base bending moment

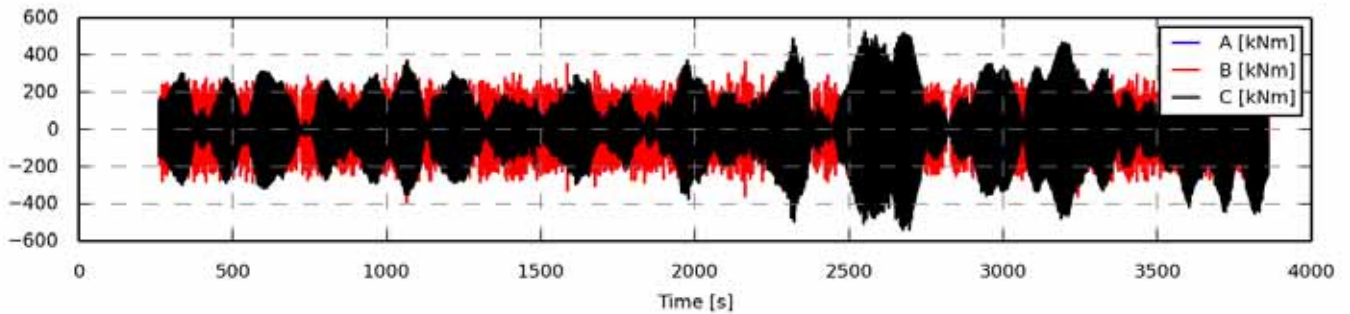


Figure 649 - Full length time series

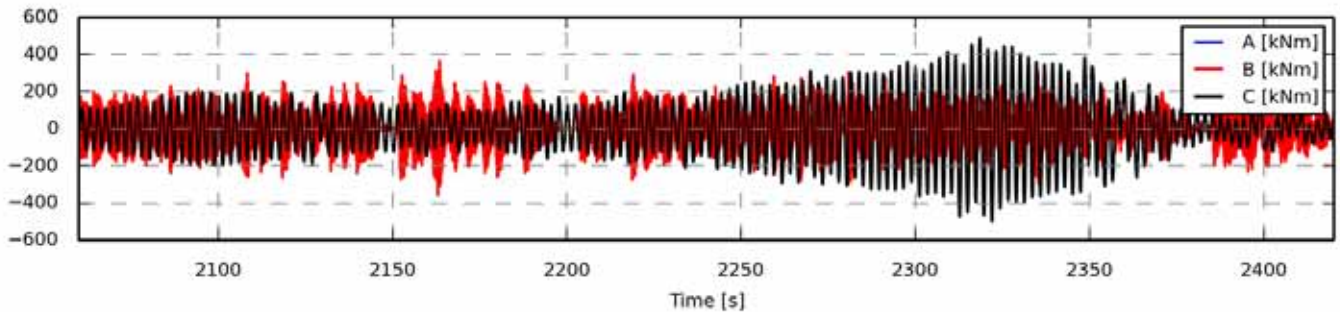


Figure 650 - Zoom of time series

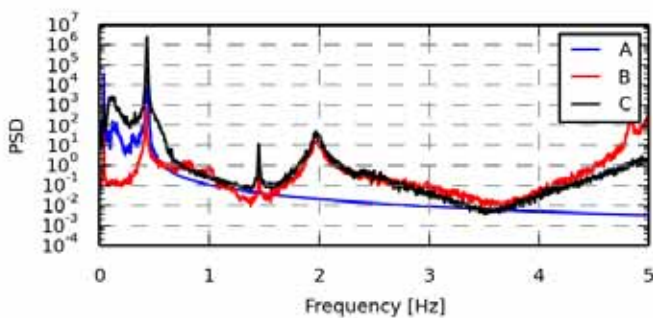


Figure 651 - Power spectrum density

Statistics	A	B	C
Min	-1.4903e+02	-3.8998e+02	-5.3884e+02
Max	164.4570	374.0525	525.3138
Mean	-0.0229	0.0012	-0.0764
Std	20.4720	93.1484	163.6676
Skewness	0.0042	0.0014	-0.0007
Kurtosis	9.9744	-0.3568	0.0353

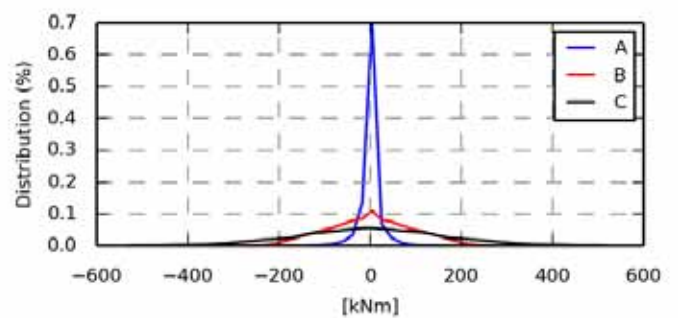


Figure 652 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	48.5137	575.8573	387.8090
Eq (m=4)	66.3993	497.1338	449.0482
Eq (m=6)	97.9866	448.6204	539.0188
Eq (m=8)	124.3372	441.5030	603.5659
Eq (m=10)	145.9020	448.4255	652.4590
Eq (m=12)	163.4254	461.8095	690.8442

Section 7.17 oc4_p2_load_case_2-2: Mz coo: tower [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-2.sel (28-02-2014 18:52)	45	MomentMz Mbdy:tower nodenr: 1 coo: tower tower base bending moment
B	WAMsim/oc4_p2_load_case_2-2.sel (01-04-2014 12:51)	45	MomentMz Mbdy:tower nodenr: 1 coo: tower tower base bending moment
C	hawc2/oc4_p2_load_case_2-2.sel (31-03-2014 15:51)	45	MomentMz Mbdy:tower nodenr: 1 coo: tower tower base bending moment

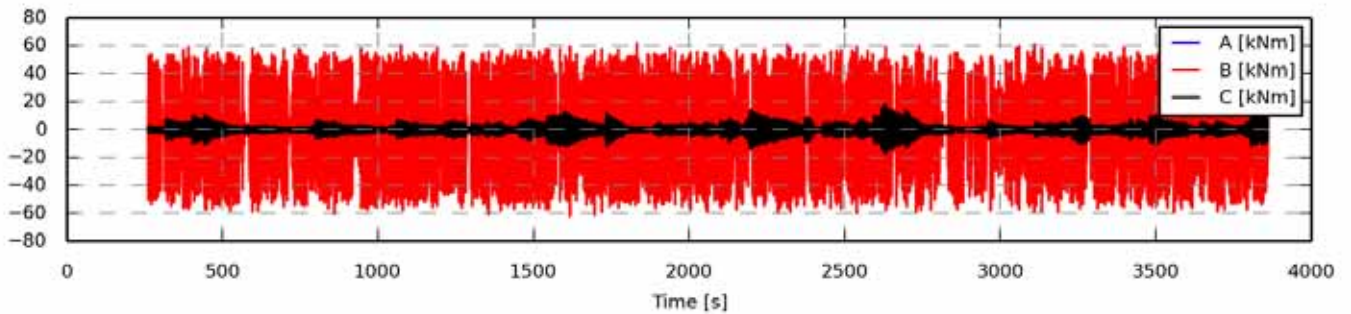


Figure 653 - Full length time series

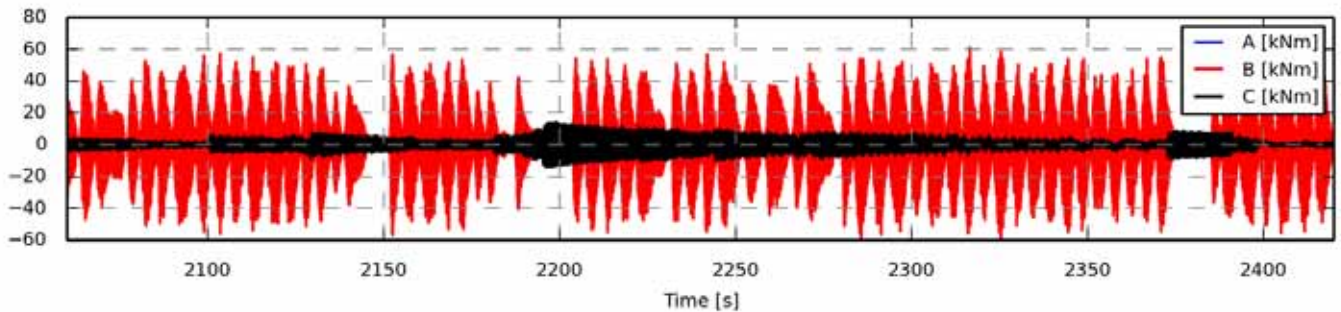


Figure 654 - Zoom of time series

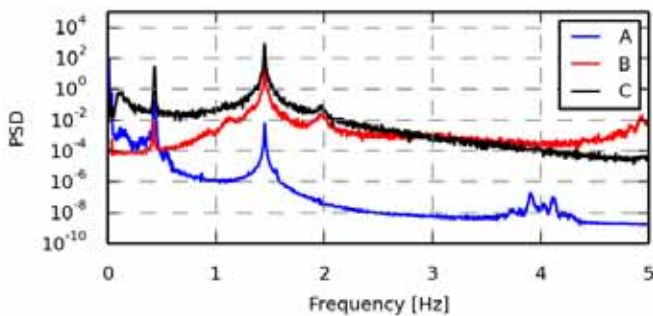


Figure 655 - Power spectrum density

Statistics	A	B	C
Min	-2.7999	-61.8387	-17.0489
Max	2.8590	61.6339	17.8850
Mean	-0.0086	-0.0001	0.0008
Std	0.6390	19.5350	3.1960
Skewness	-0.1035	-0.0004	0.0060
Kurtosis	3.1215	0.0595	2.0129

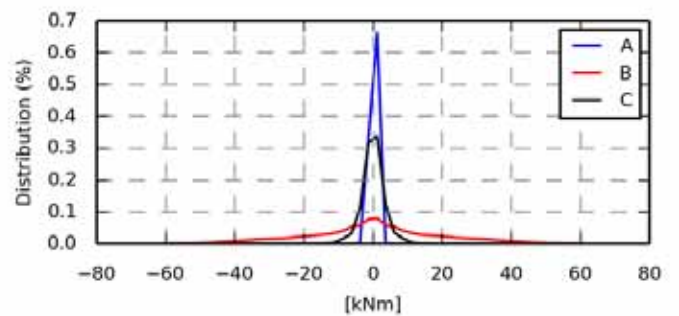


Figure 656 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.5664	124.0768	12.2577
Eq (m=4)	0.9346	108.2774	13.5098
Eq (m=6)	1.6025	97.9791	15.7635
Eq (m=8)	2.1404	95.3276	17.6480
Eq (m=10)	2.5676	94.8742	19.2335
Eq (m=12)	2.9096	95.2350	20.5728

Section 7.18 oc4_p2_load_case_2-2: ESYS line1_1 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-2.sel (28-02-2014 18:52)	55	ESYS line1_1 SENSOR 4
B	WAMsim/oc4_p2_load_case_2-2.sel (01-04-2014 12:51)	55	ESYS line1_1 SENSOR 4
C	hawc2/oc4_p2_load_case_2-2.sel (31-03-2014 15:51)	55	ESYS line1_1 SENSOR 4

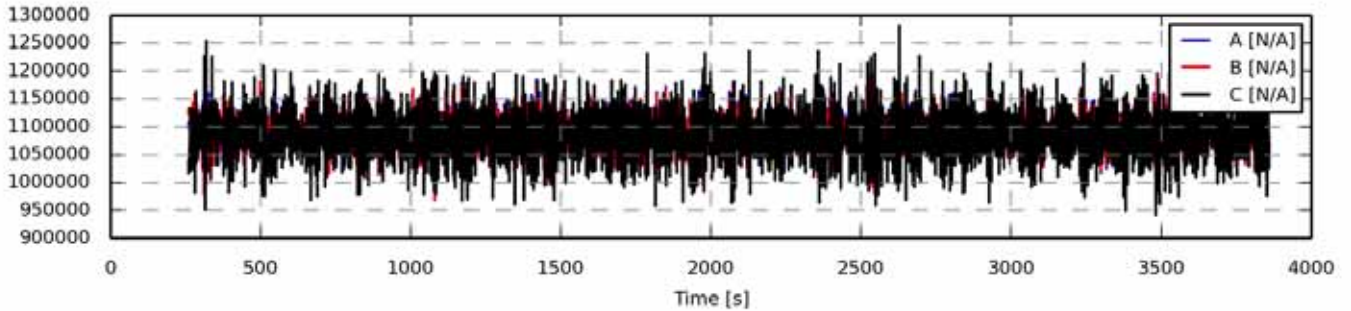


Figure 657 - Full length time series

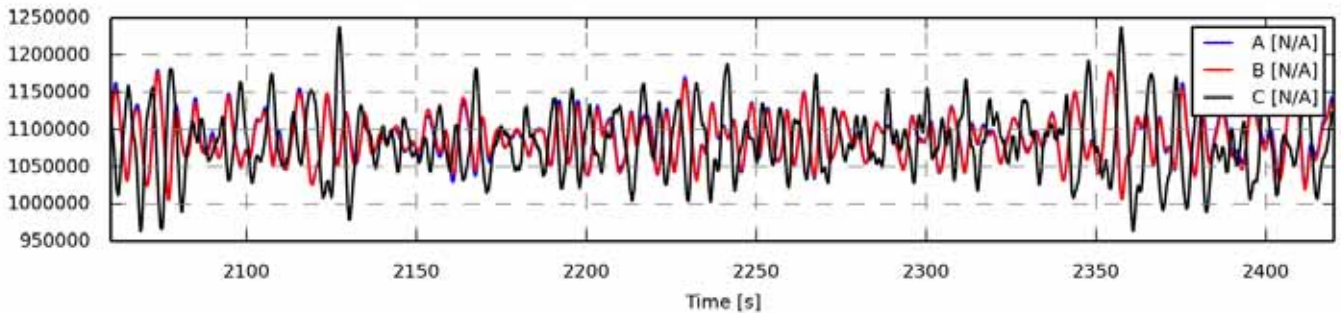


Figure 658 - Zoom of time series

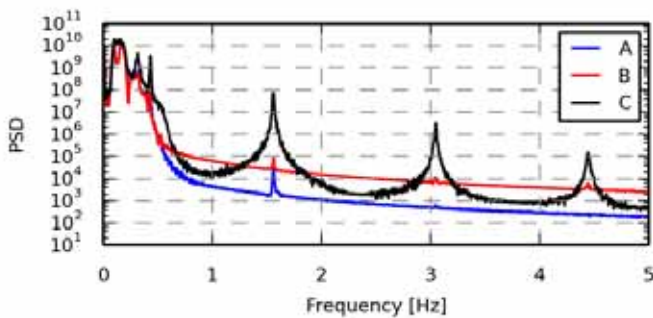


Figure 659 - Power spectrum density

Statistics	A	B	C
Min	9.6908e+05	9.6828e+05	9.4070e+05
Max	1.1956e+06	1.1943e+06	1.2811e+06
Mean	1.0898e+06	1.0885e+06	1.0855e+06
Std	2.9593e+04	2.9095e+04	4.3170e+04
Skewness	0.0168	0.0030	0.1073
Kurtosis	0.1271	0.1381	0.0992

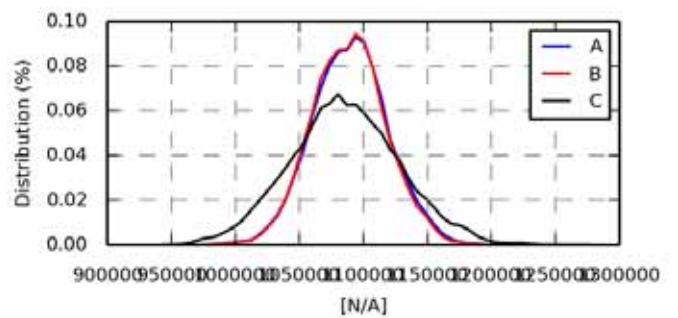


Figure 660 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	4.9990e+04	4.8782e+04	7.4542e+04
Eq (m=4)	6.3095e+04	6.1774e+04	9.3281e+04
Eq (m=6)	8.3792e+04	8.2442e+04	1.2222e+05
Eq (m=8)	1.0013e+05	9.8791e+04	1.4482e+05
Eq (m=10)	1.1349e+05	1.1209e+05	1.6358e+05
Eq (m=12)	1.2450e+05	1.2300e+05	1.7955e+05

Section 7.19 oc4_p2_load_case_2-2: ESYS line1_3 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-2.sel (28-02-2014 18:52)	259	ESYS line1_3 SENSOR 104
B	WAMsim/oc4_p2_load_case_2-2.sel (01-04-2014 12:51)	259	ESYS line1_3 SENSOR 104
C	hawc2/oc4_p2_load_case_2-2.sel (31-03-2014 15:51)	259	ESYS line1_3 SENSOR 104

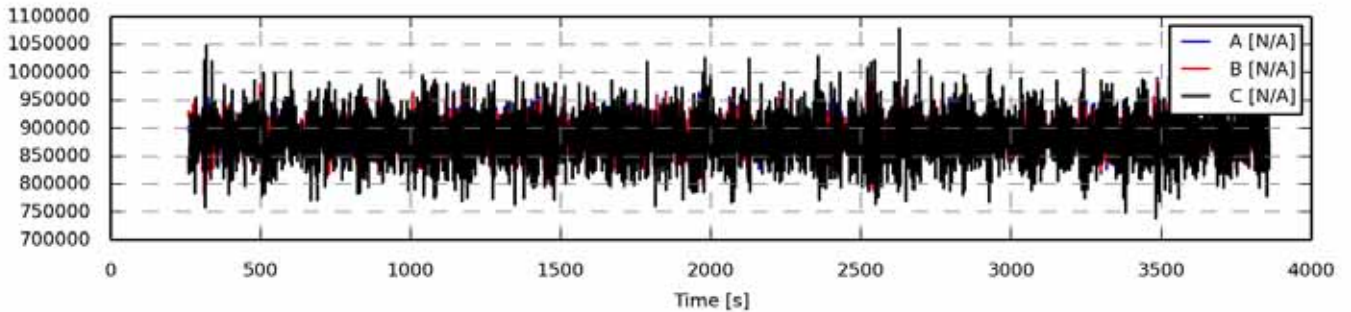


Figure 661 - Full length time series

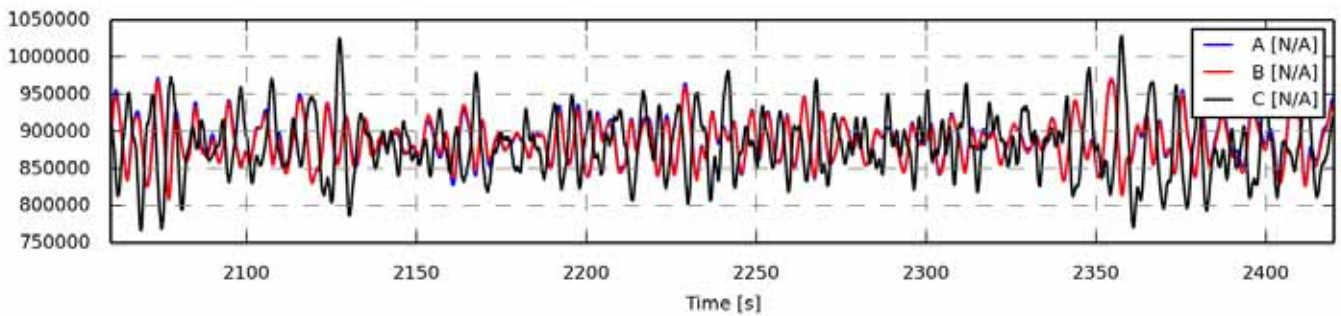


Figure 662 - Zoom of time series

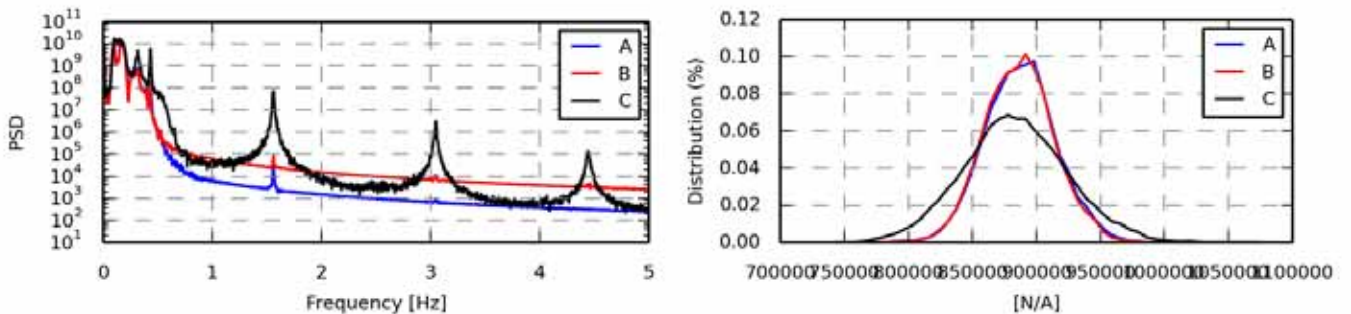


Figure 663 - Power spectrum density

Statistics	A	B	C
Min	7.7507e+05	7.7415e+05	7.3890e+05
Max	9.9027e+05	9.8590e+05	1.0777e+06
Mean	8.8769e+05	8.8640e+05	8.8333e+05
Std	2.7816e+04	2.7290e+04	4.1002e+04
Skewness	0.0433	0.0226	0.1254
Kurtosis	0.1313	0.1504	0.1395

Figure 664 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	4.7027e+04	4.5753e+04	7.1764e+04
Eq (m=4)	5.9289e+04	5.7848e+04	8.9604e+04
Eq (m=6)	7.8695e+04	7.7103e+04	1.1740e+05
Eq (m=8)	9.4069e+04	9.2408e+04	1.3951e+05
Eq (m=10)	1.0666e+05	1.0494e+05	1.5826e+05
Eq (m=12)	1.1707e+05	1.1529e+05	1.7453e+05

Section 7.20 oc4_p2_load_case_2-2: ESYS line2_1 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-2.sel (28-02-2014 18:52)	263	ESYS line2_1 SENSOR 4
B	WAMsim/oc4_p2_load_case_2-2.sel (01-04-2014 12:51)	263	ESYS line2_1 SENSOR 4
C	hawc2/oc4_p2_load_case_2-2.sel (31-03-2014 15:51)	263	ESYS line2_1 SENSOR 4

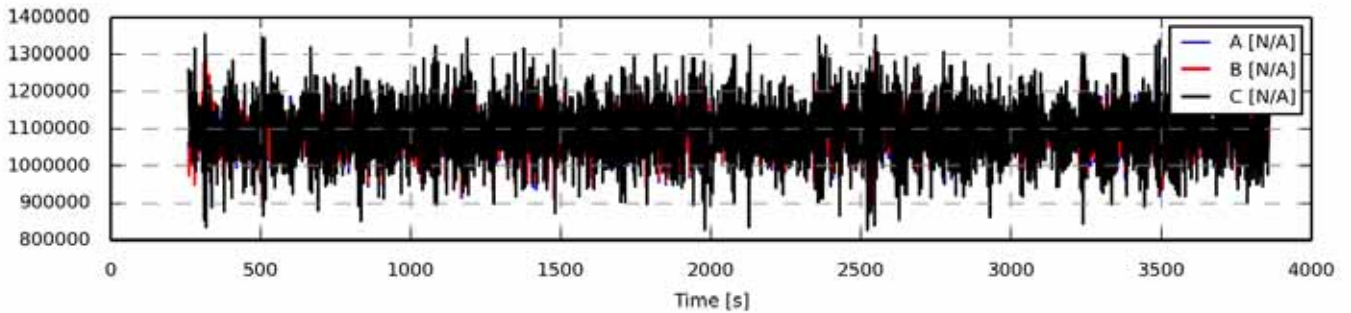


Figure 665 - Full length time series

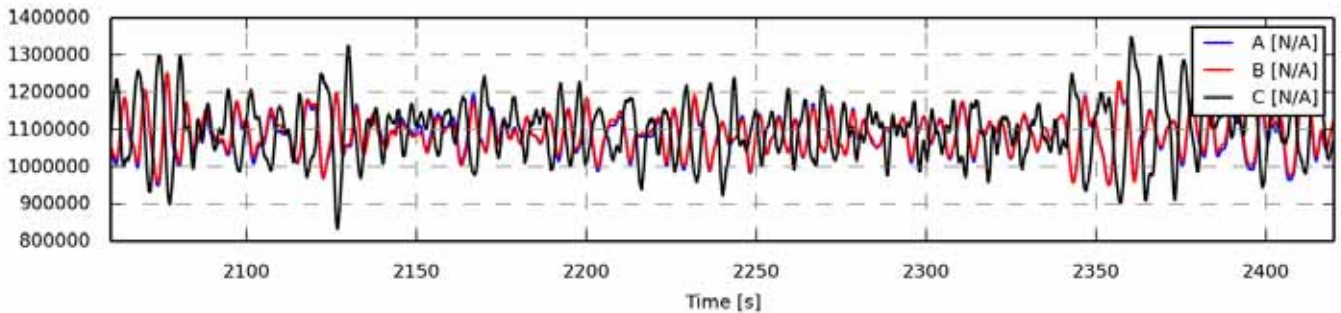


Figure 666 - Zoom of time series

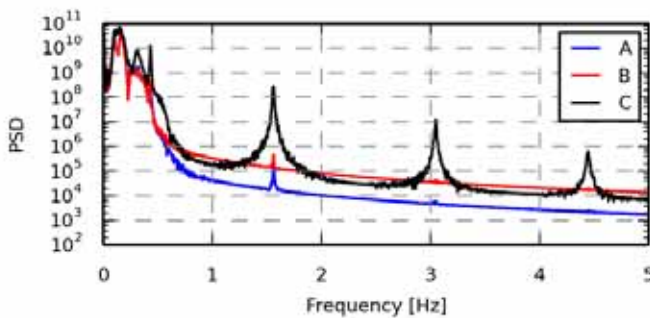


Figure 667 - Power spectrum density

Statistics	A	B	C
Min	8.7232e+05	8.7721e+05	8.2823e+05
Max	1.3123e+06	1.3104e+06	1.3555e+06
Mean	1.0862e+06	1.0886e+06	1.0976e+06
Std	4.9228e+04	4.8653e+04	7.6745e+04
Skewness	-0.1294	-0.0927	0.0146
Kurtosis	0.3490	0.4721	0.0736

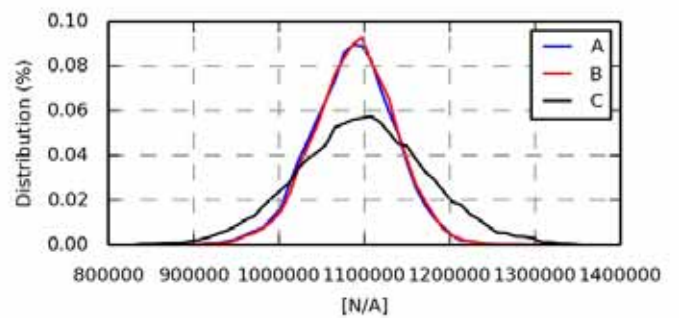


Figure 668 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	8.3393e+04	8.1944e+04	1.3223e+05
Eq (m=4)	1.0606e+05	1.0475e+05	1.6534e+05
Eq (m=6)	1.4338e+05	1.4297e+05	2.1593e+05
Eq (m=8)	1.7449e+05	1.7506e+05	2.5406e+05
Eq (m=10)	2.0102e+05	2.0216e+05	2.8417e+05
Eq (m=12)	2.2365e+05	2.2488e+05	3.0852e+05

Section 7.21 oc4_p2_load_case_2-2: ESYS line2_3 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-2.sel (28-02-2014 18:52)	467	ESYS line2_3 SENSOR 104
B	WAMsim/oc4_p2_load_case_2-2.sel (01-04-2014 12:51)	467	ESYS line2_3 SENSOR 104
C	hawc2/oc4_p2_load_case_2-2.sel (31-03-2014 15:51)	467	ESYS line2_3 SENSOR 104

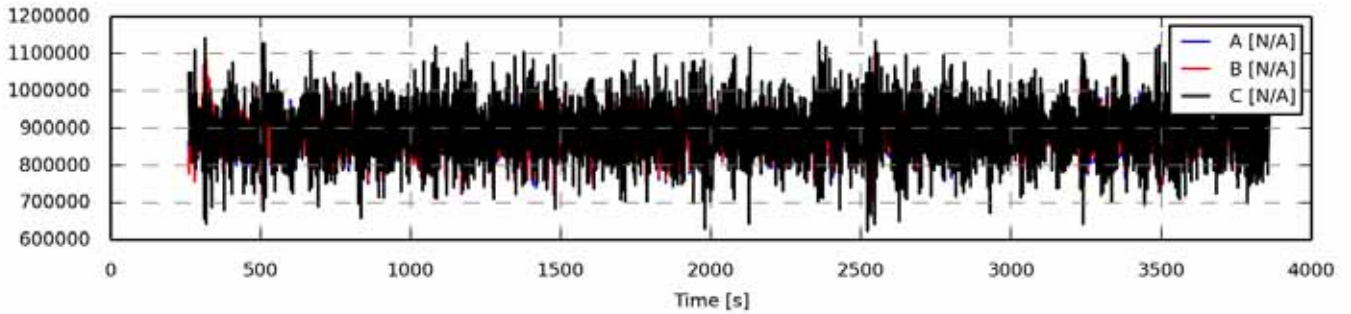


Figure 669 - Full length time series

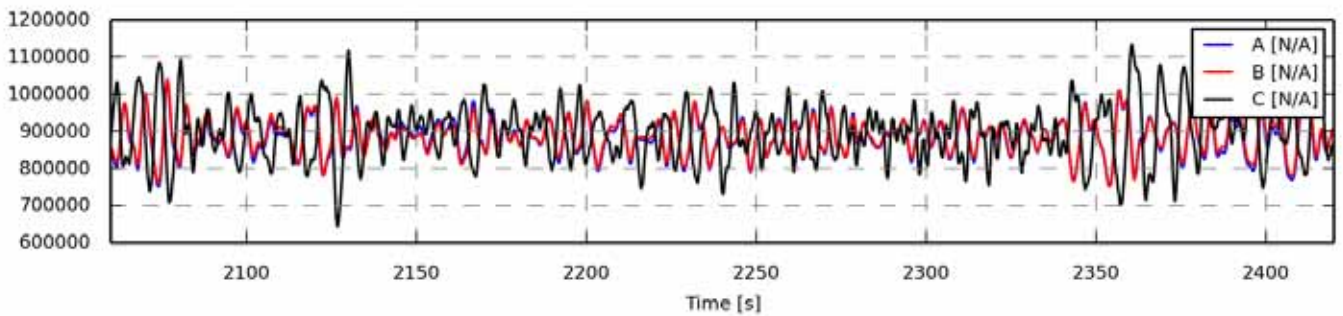


Figure 670 - Zoom of time series

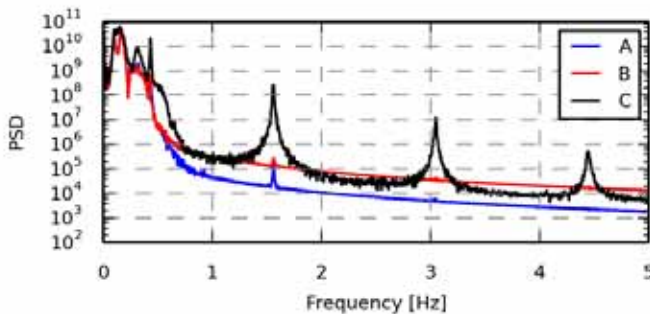


Figure 671 - Power spectrum density

Statistics	A	B	C
Min	6.8410e+05	6.8799e+05	6.2341e+05
Max	1.0948e+06	1.0938e+06	1.1409e+06
Mean	8.8413e+05	8.8652e+05	8.9541e+05
Std	4.5749e+04	4.5191e+04	7.3930e+04
Skewness	-0.1114	-0.0686	0.0088
Kurtosis	0.4029	0.5548	0.0793

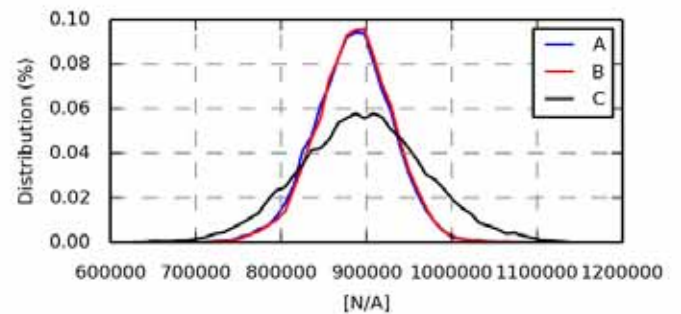


Figure 672 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	7.8159e+04	7.6805e+04	1.2876e+05
Eq (m=4)	9.9321e+04	9.8211e+04	1.6044e+05
Eq (m=6)	1.3428e+05	1.3431e+05	2.0914e+05
Eq (m=8)	1.6337e+05	1.6463e+05	2.4612e+05
Eq (m=10)	1.8808e+05	1.9012e+05	2.7548e+05
Eq (m=12)	2.0909e+05	2.1145e+05	2.9930e+05

Section 7.22 oc4_p2_load_case_2-2: ESYS line3_1 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-2.sel (28-02-2014 18:52)	471	ESYS line3_1 SENSOR 4
B	WAMsim/oc4_p2_load_case_2-2.sel (01-04-2014 12:51)	471	ESYS line3_1 SENSOR 4
C	hawc2/oc4_p2_load_case_2-2.sel (31-03-2014 15:51)	471	ESYS line3_1 SENSOR 4

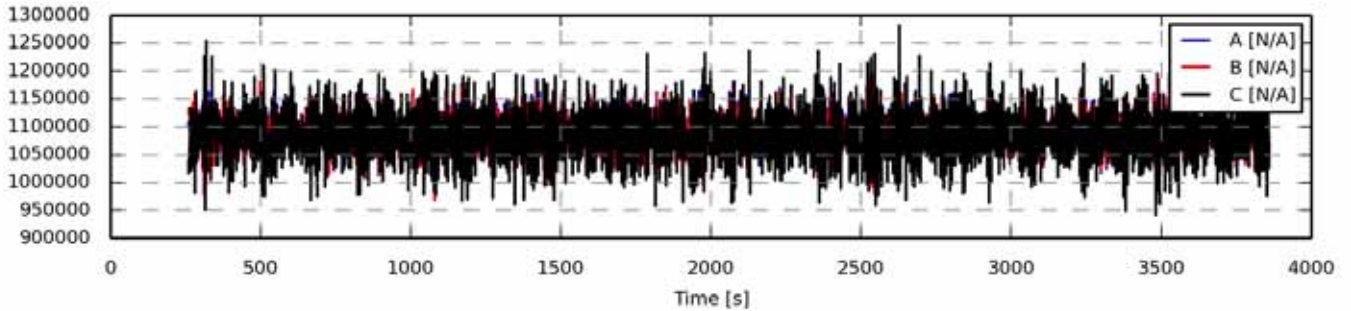


Figure 673 - Full length time series

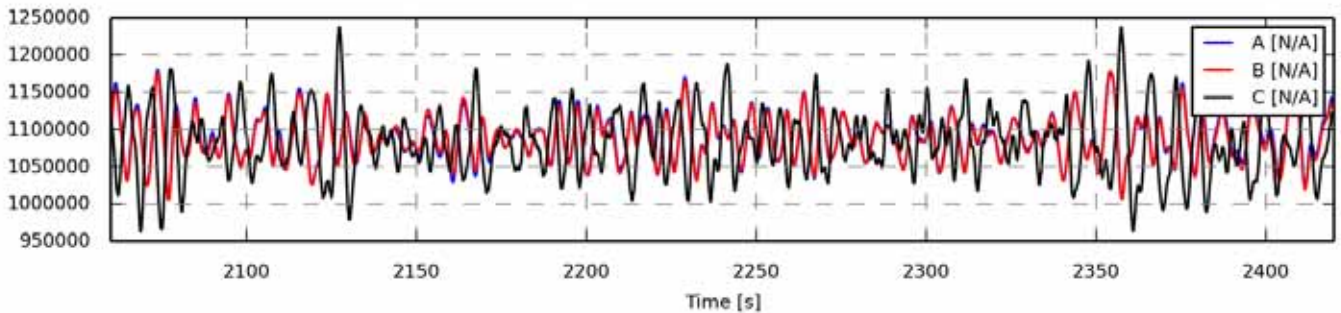


Figure 674 - Zoom of time series

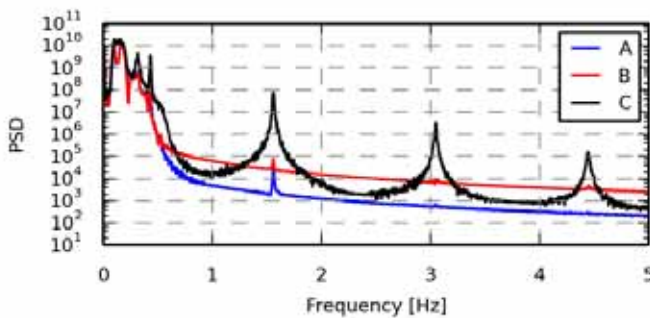


Figure 675 - Power spectrum density

Statistics	A	B	C
Min	9.7203e+05	9.6824e+05	9.4057e+05
Max	1.1954e+06	1.1942e+06	1.2816e+06
Mean	1.0898e+06	1.0885e+06	1.0855e+06
Std	2.9592e+04	2.9095e+04	4.3193e+04
Skewness	0.0198	0.0030	0.1080
Kurtosis	0.1253	0.1381	0.1000

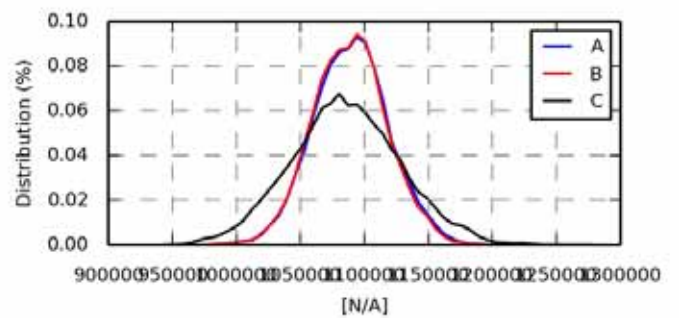


Figure 676 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	4.9952e+04	4.8739e+04	7.4613e+04
Eq (m=4)	6.3065e+04	6.1721e+04	9.3362e+04
Eq (m=6)	8.3818e+04	8.2381e+04	1.2232e+05
Eq (m=8)	1.0024e+05	9.8727e+04	1.4496e+05
Eq (m=10)	1.1367e+05	1.1203e+05	1.6378e+05
Eq (m=12)	1.2474e+05	1.2294e+05	1.7981e+05

Section 7.23 oc4_p2_load_case_2-2: ESYS line3_3 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-2.sel (28-02-2014 18:52)	675	ESYS line3_3 SENSOR 104
B	WAMsim/oc4_p2_load_case_2-2.sel (01-04-2014 12:51)	675	ESYS line3_3 SENSOR 104
C	hawc2/oc4_p2_load_case_2-2.sel (31-03-2014 15:51)	675	ESYS line3_3 SENSOR 104

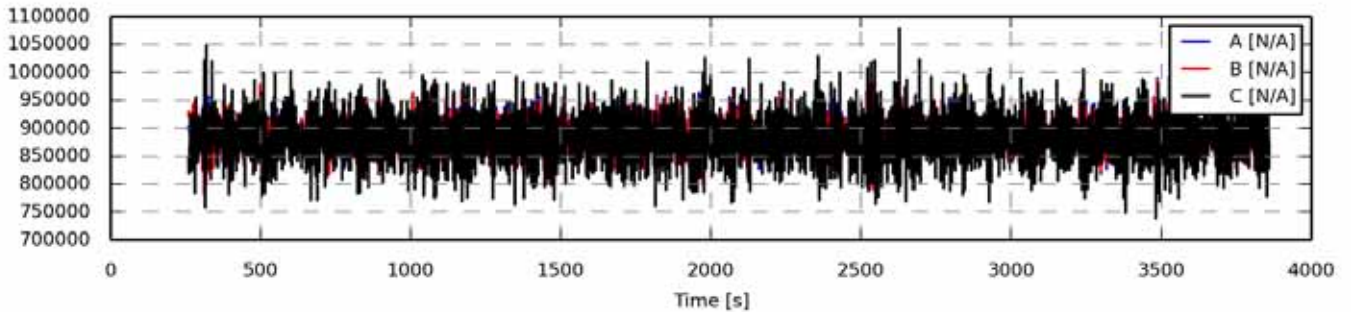


Figure 677 - Full length time series

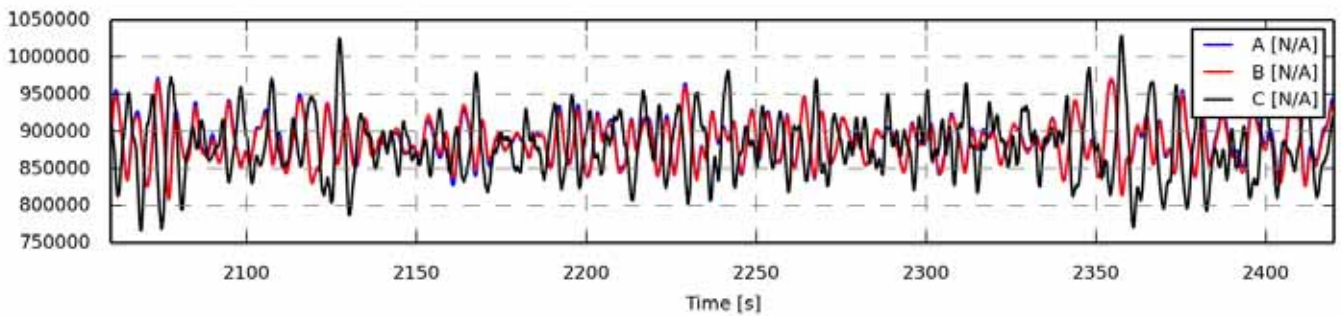


Figure 678 - Zoom of time series

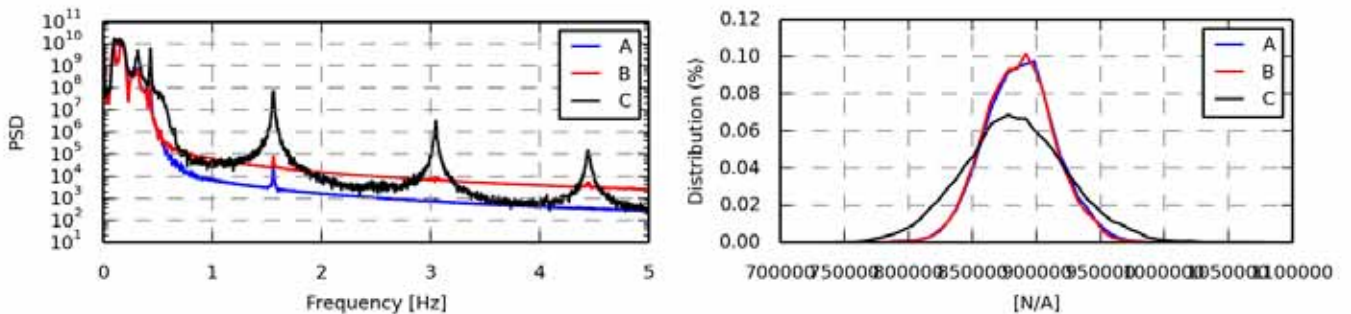


Figure 679 - Power spectrum density

Statistics	A	B	C
Min	7.7789e+05	7.7423e+05	7.3874e+05
Max	9.9007e+05	9.8593e+05	1.0783e+06
Mean	8.8769e+05	8.8640e+05	8.8331e+05
Std	2.7815e+04	2.7290e+04	4.1035e+04
Skewness	0.0462	0.0227	0.1263
Kurtosis	0.1290	0.1504	0.1405

Figure 680 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	4.7016e+04	4.5728e+04	7.1915e+04
Eq (m=4)	5.9249e+04	5.7818e+04	8.9792e+04
Eq (m=6)	7.8558e+04	7.7067e+04	1.1766e+05
Eq (m=8)	9.3821e+04	9.2370e+04	1.3983e+05
Eq (m=10)	1.0632e+05	1.0490e+05	1.5864e+05
Eq (m=12)	1.1666e+05	1.1525e+05	1.7495e+05

Article VIII. oc4_p2_load_case_2-3

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Section 8.01 oc4_p2_load_case_2-3: WSP gl. coo.,Vy [m/s]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-3.sel (28-02-2014 19:12)	3	Free wind speed Vy, gl. coo, of gl. pos 0.00, 0.00, -90.00
B	WAMsim/oc4_p2_load_case_2-3.sel (01-04-2014 12:51)	3	Free wind speed Vy, gl. coo, of gl. pos 0.00, 0.00, -90.00
C	hawc2/oc4_p2_load_case_2-3.sel (06-12-2013 21:42)	3	Free wind speed Vy, gl. coo, of gl. pos 0.00, 0.00, -90.00

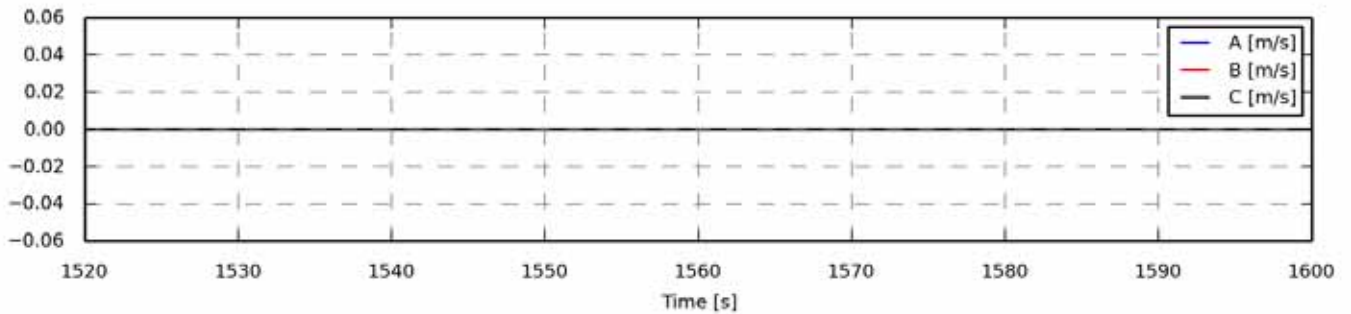


Figure 681 - Full length time series

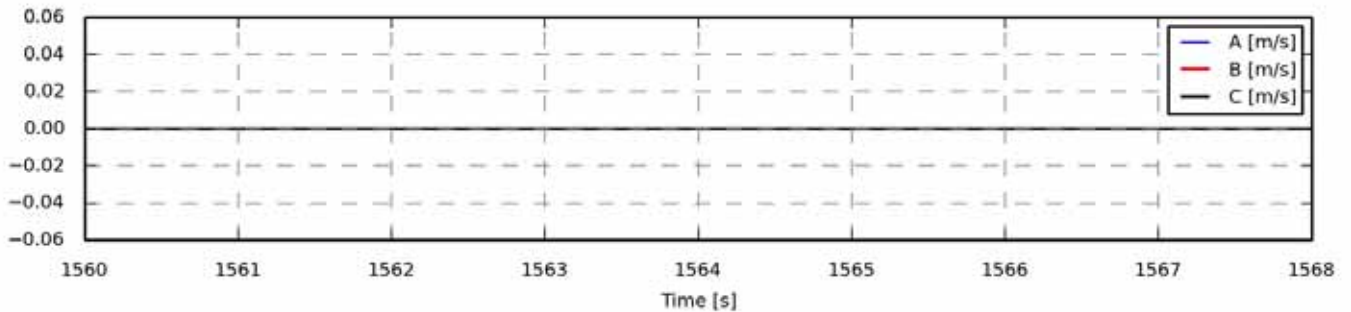


Figure 682 - Zoom of time series

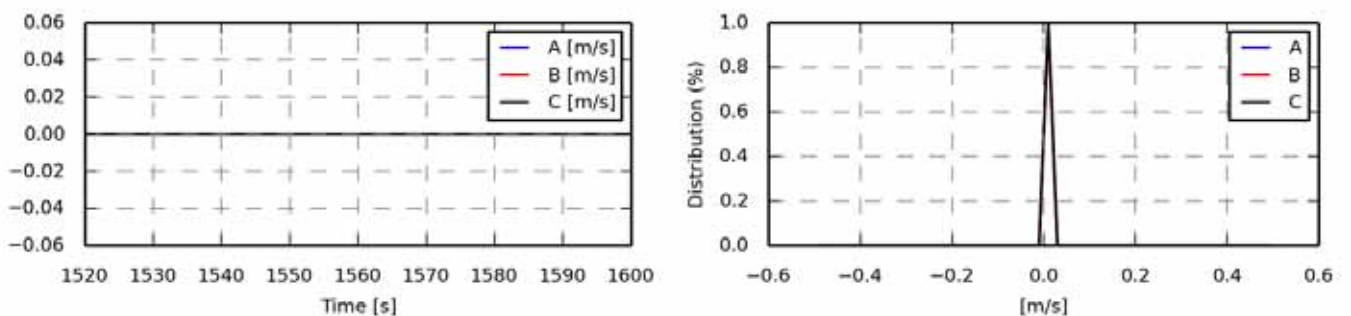


Figure 683 - Power spectrum density

Statistics	A	B	C
Min	0.0000	0.0000	0.0000
Max	0.0000	0.0000	0.0000
Mean	0.0000	0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

Figure 684 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 8.02 oc4_p2_load_case_2-3: Water surf. [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-3.sel (28-02-2014 19:12)	5	Water surface gl. coo, at gl. coo, x,y= 0.00, 0.00
B	WAMsim/oc4_p2_load_case_2-3.sel (01-04-2014 12:51)	5	Constant value
C	hawc2/oc4_p2_load_case_2-3.sel (06-12-2013 21:42)	5	Water surface gl. coo, at gl. coo, x,y= 0.00, 0.00

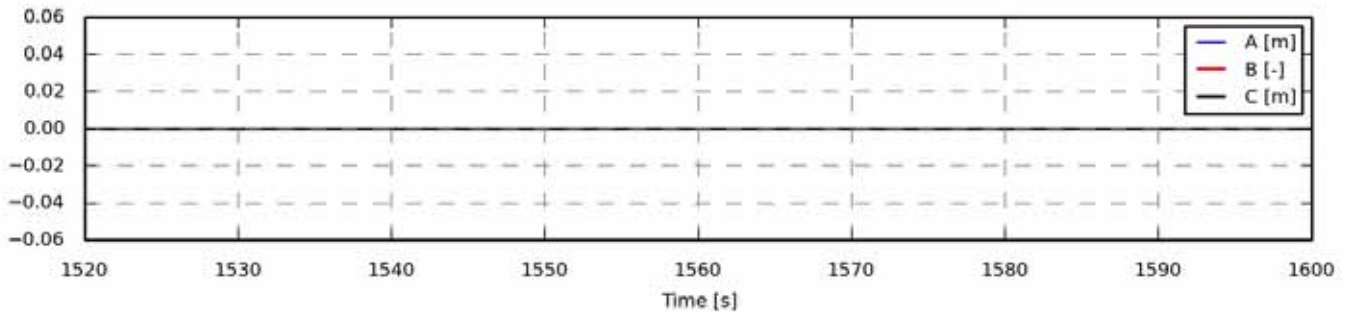


Figure 685 - Full length time series

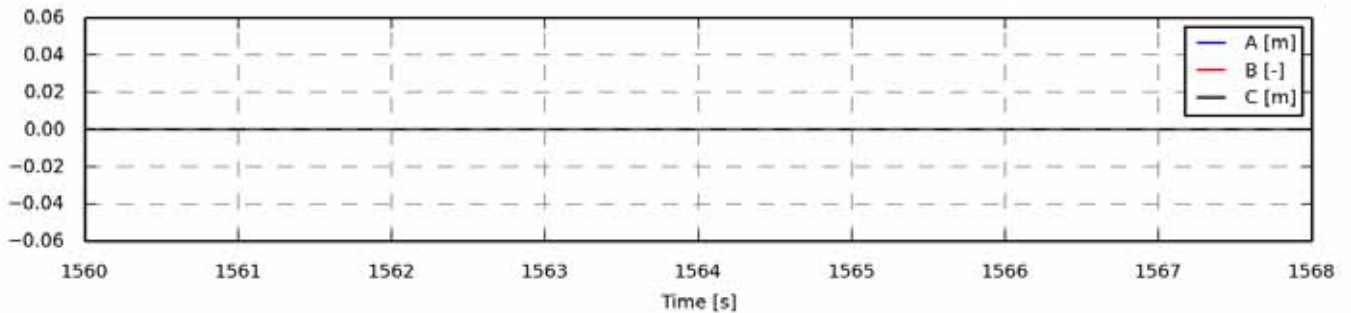


Figure 686 - Zoom of time series

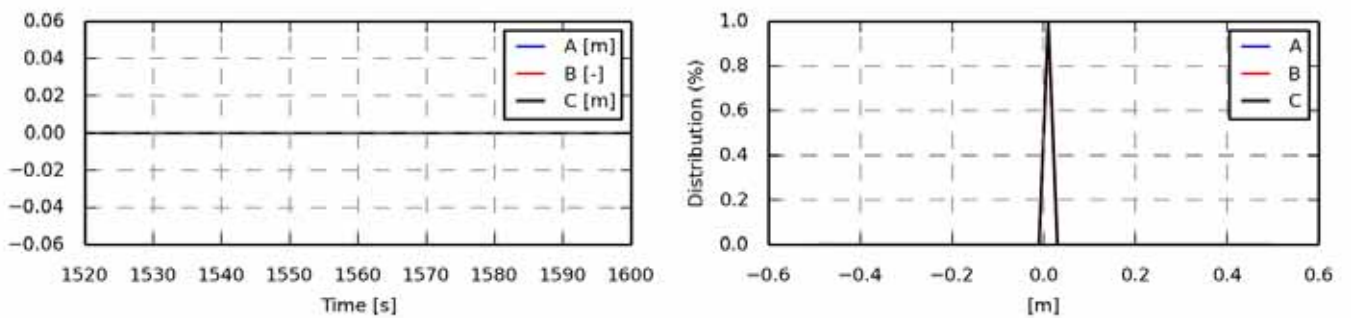


Figure 687 - Power spectrum density

Statistics	A	B	C
Min	0.0000	0.0000	0.0000
Max	0.0000	0.0000	0.0000
Mean	0.0000	0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

Figure 688 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 8.03 oc4_p2_load_case_2-3: Constant [-]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-3.sel (28-02-2014 19:12)	6	Constant value
B	WAMsim/oc4_p2_load_case_2-3.sel (01-04-2014 12:51)	6	Constant value
C	hawc2/oc4_p2_load_case_2-3.sel (06-12-2013 21:42)	6	Constant value

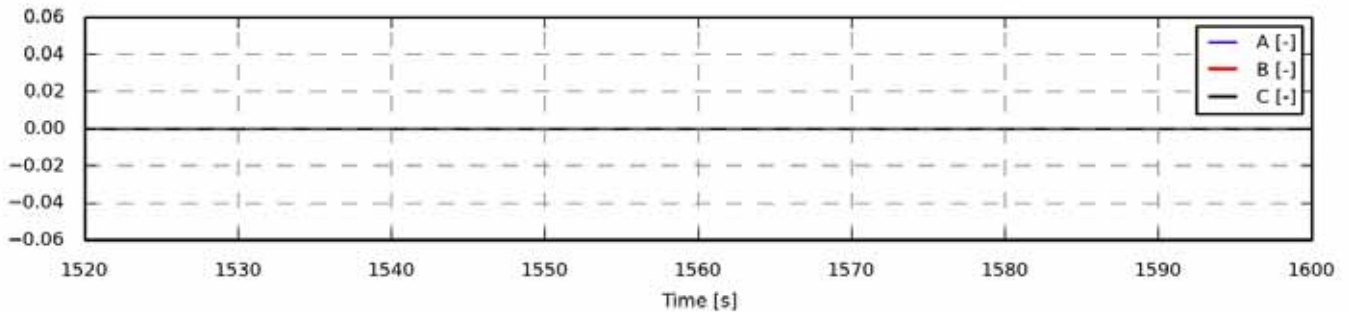


Figure 689 - Full length time series

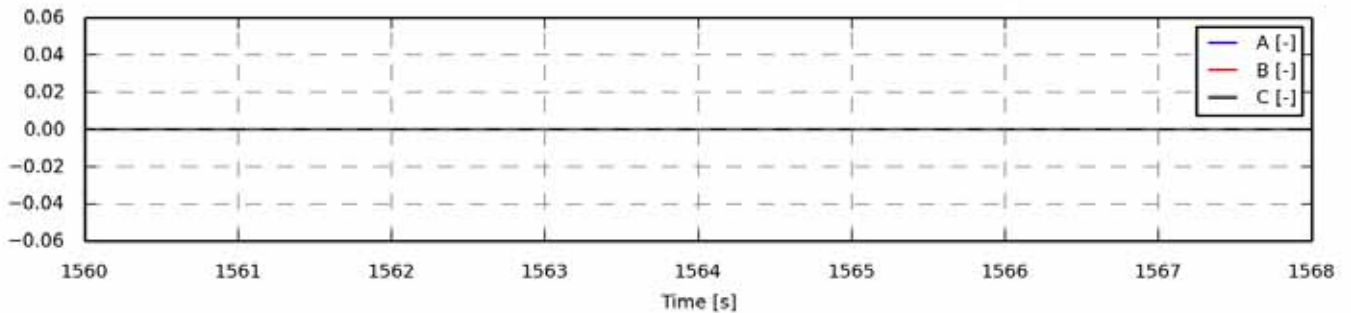


Figure 690 - Zoom of time series

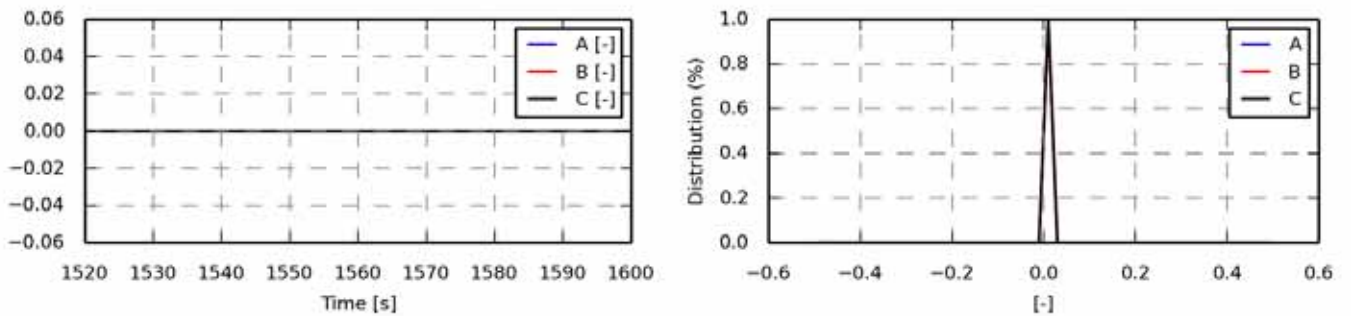


Figure 691 - Power spectrum density

Statistics	A	B	C
Min	0.0000	0.0000	0.0000
Max	0.0000	0.0000	0.0000
Mean	0.0000	0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

Figure 692 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 8.04 oc4_p2_load_case_2-3: Constant [-]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-3.sel (28-02-2014 19:12)	9	Constant value
B	WAMsim/oc4_p2_load_case_2-3.sel (01-04-2014 12:51)	9	Constant value
C	hawc2/oc4_p2_load_case_2-3.sel (06-12-2013 21:42)	9	Constant value

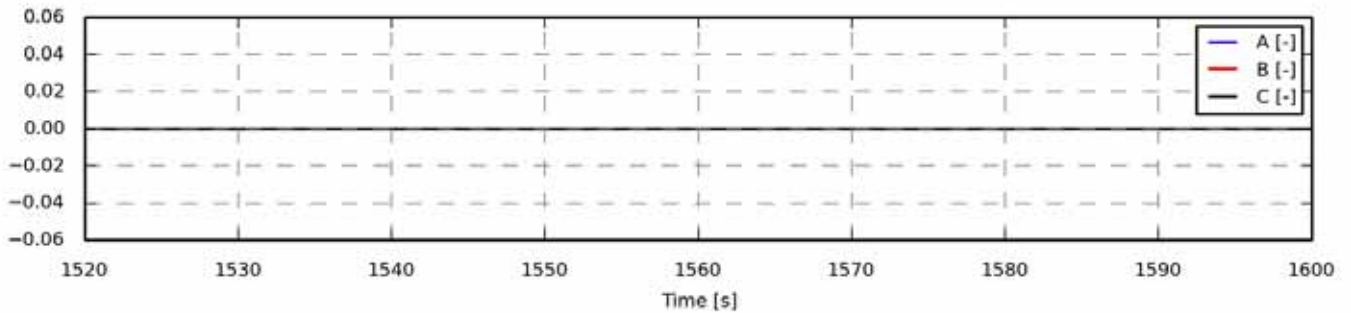


Figure 693 - Full length time series

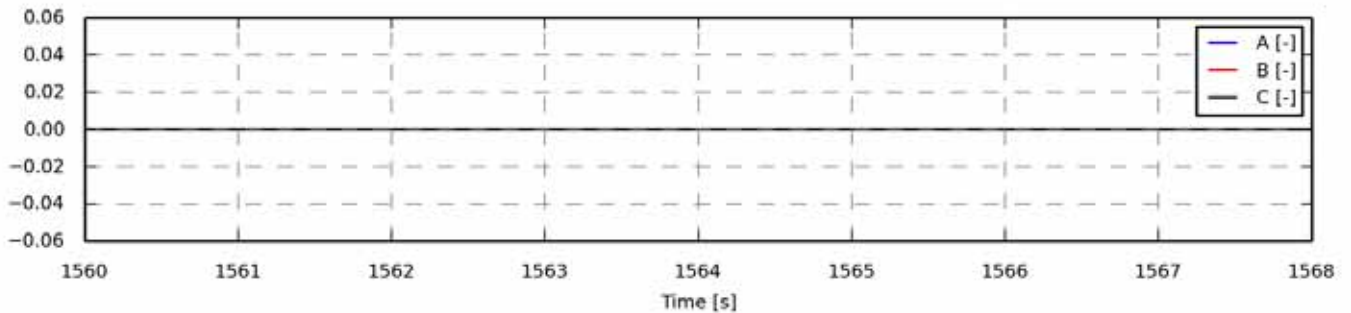


Figure 694 - Zoom of time series

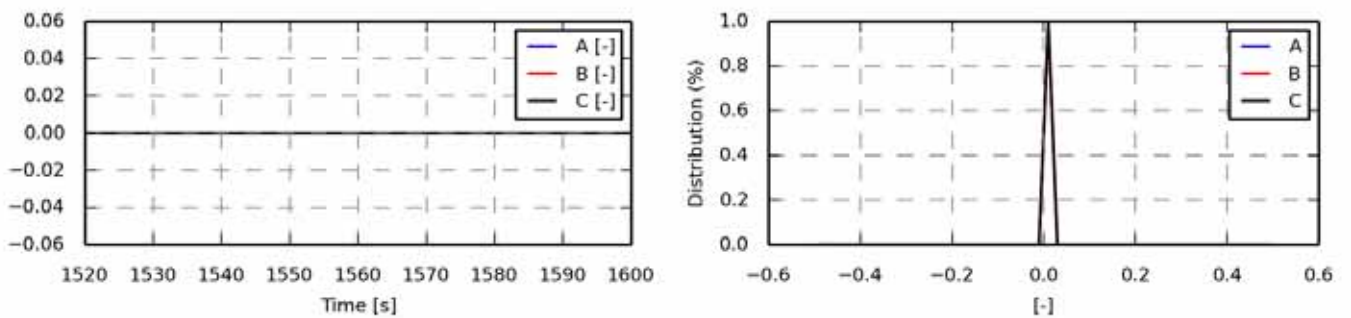


Figure 695 - Power spectrum density

Statistics	A	B	C
Min	0.0000	0.0000	0.0000
Max	0.0000	0.0000	0.0000
Mean	0.0000	0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

Figure 696 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 8.05 oc4_p2_load_case_2-3: bea1 angle [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-3.sel (28-02-2014 19:12)	14	pitch1 angle
B	WAMsim/oc4_p2_load_case_2-3.sel (01-04-2014 12:51)	14	pitch1 angle
C	hawc2/oc4_p2_load_case_2-3.sel (06-12-2013 21:42)	14	pitch1 angle

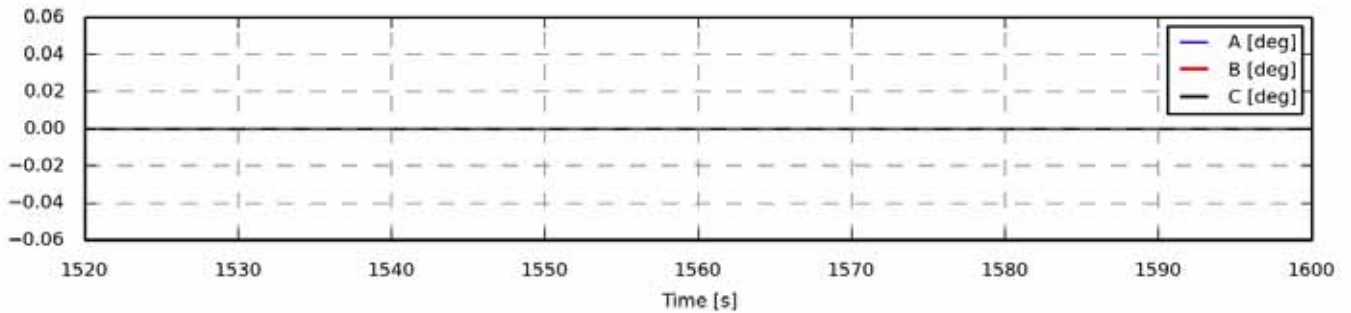


Figure 697 - Full length time series

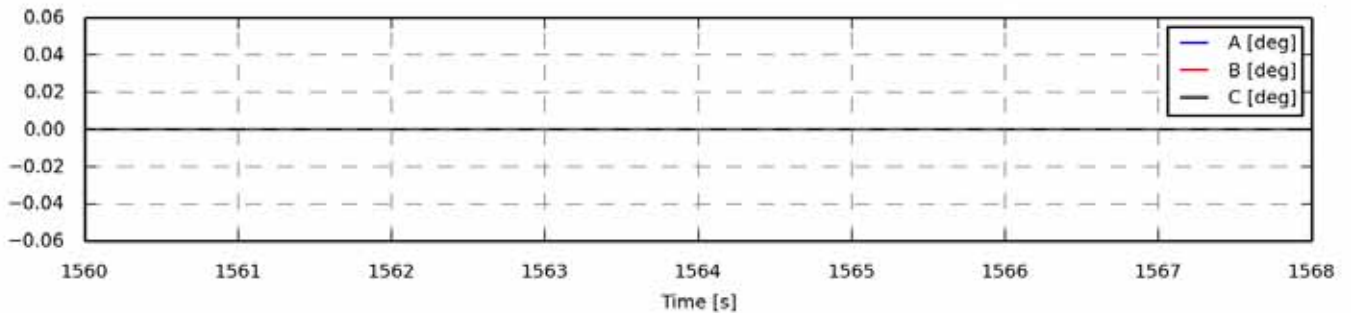


Figure 698 - Zoom of time series

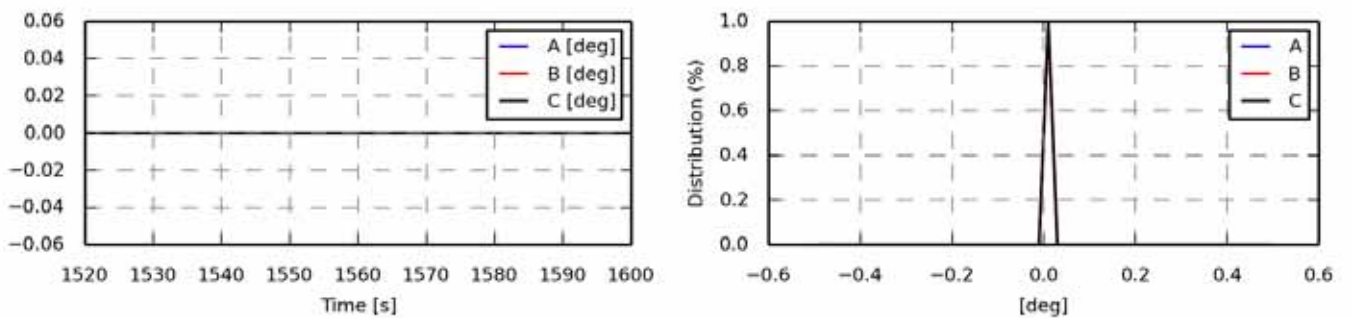


Figure 699 - Power spectrum density

Statistics	A	B	C
Min	0.0000	0.0000	0.0000
Max	0.0000	0.0000	0.0000
Mean	0.0000	0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

Figure 700 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 8.06 oc4_p2_load_case_2-3: State pos x coo: global [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-3.sel (28-02-2014 19:12)	19	State pos x Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
B	WAMsim/oc4_p2_load_case_2-3.sel (01-04-2014 12:51)	19	State pos x Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
C	hawc2/oc4_p2_load_case_2-3.sel (06-12-2013 21:42)	19	State pos x Mbdy:mc E-nr: 8 Z-rel:0.00 coo: global platform translation in surge sway and heave

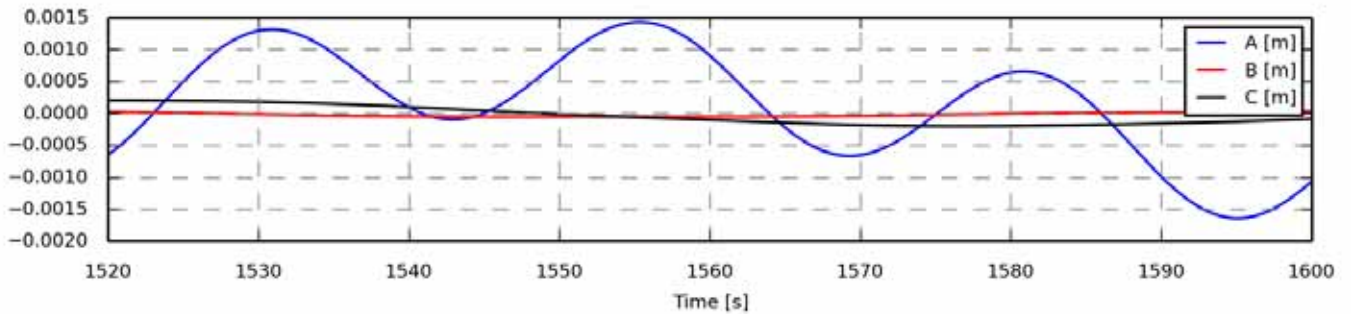


Figure 701 - Full length time series

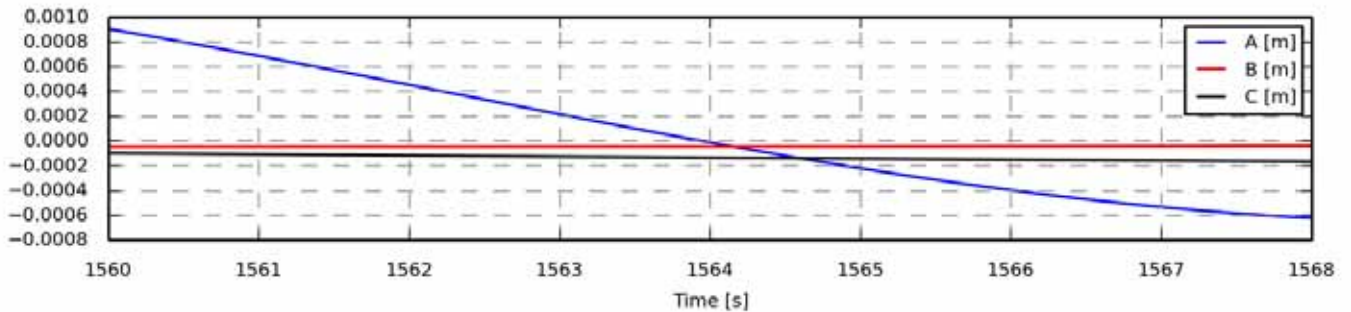


Figure 702 - Zoom of time series

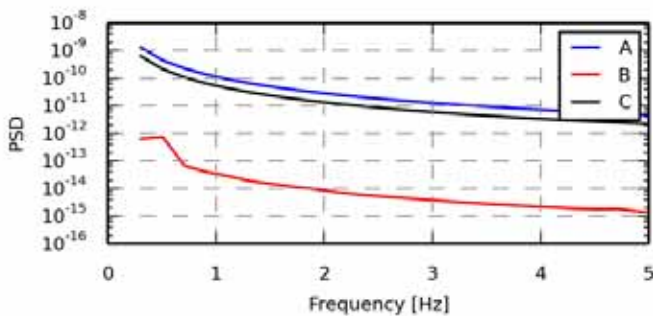


Figure 703 - Power spectrum density

Statistics	A	B	C
Min	-0.0016	-0.0000	-0.0002
Max	0.0014	0.0000	0.0002
Mean	0.0002	-0.0000	-0.0000
Std	0.0008	0.0000	0.0001
Skewness	-0.4489	0.3412	0.5118
Kurtosis	-0.6077	-1.4571	-1.2806

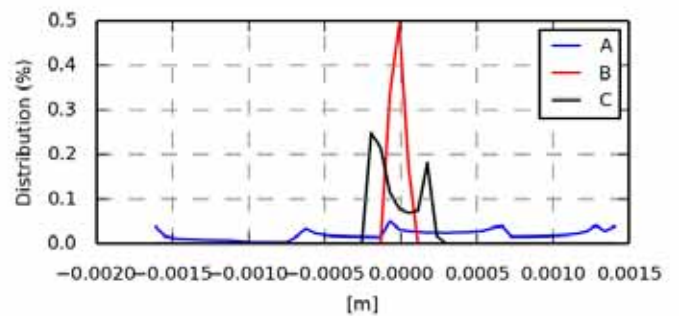


Figure 704 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.0007	0.0000	0.0001
Eq (m=4)	0.0009	0.0000	0.0001
Eq (m=6)	0.0013	0.0000	0.0002
Eq (m=8)	0.0016	0.0000	0.0002
Eq (m=10)	0.0019	0.0001	0.0002
Eq (m=12)	0.0020	0.0001	0.0003

Section 8.07 oc4_p2_load_case_2-3: State pos y coo: global [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-3.sel (28-02-2014 19:12)	20	State pos y Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
B	WAMsim/oc4_p2_load_case_2-3.sel (01-04-2014 12:51)	20	State pos y Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
C	hawc2/oc4_p2_load_case_2-3.sel (06-12-2013 21:42)	20	State pos y Mbdy:mc E-nr: 8 Z-rel:0.00 coo: global platform translation in surge sway and heave

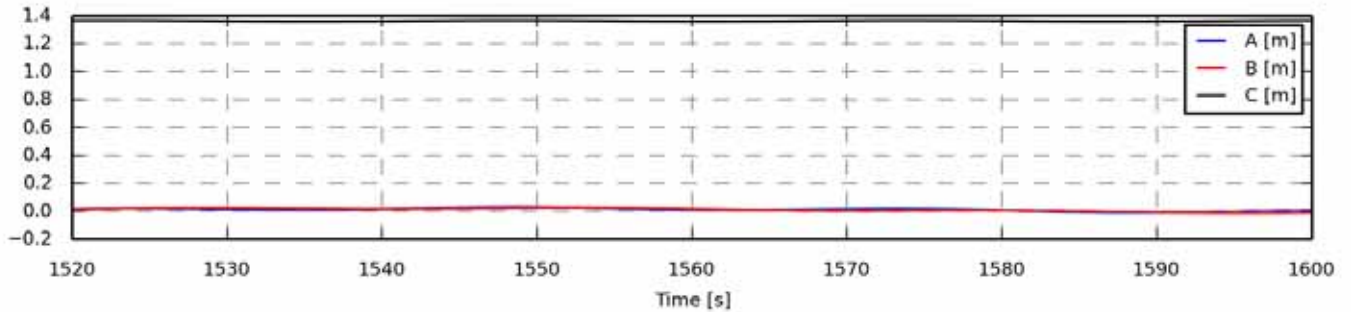


Figure 705 - Full length time series

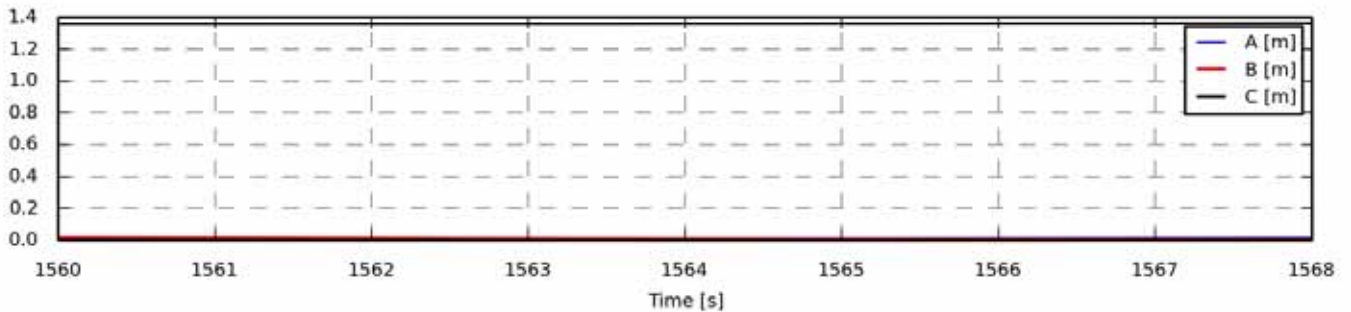


Figure 706 - Zoom of time series

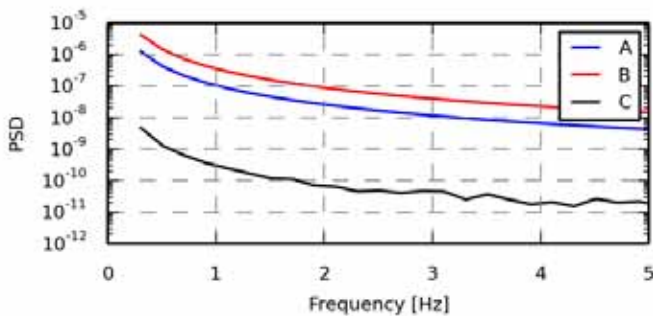


Figure 707 - Power spectrum density

Statistics	A	B	C
Min	-0.0098	-0.0129	1.3591
Max	0.0312	0.0270	1.3684
Mean	0.0123	0.0114	1.3639
Std	0.0109	0.0124	0.0033
Skewness	-0.3882	-0.5411	-0.0499
Kurtosis	-0.5303	-0.9200	-1.5146

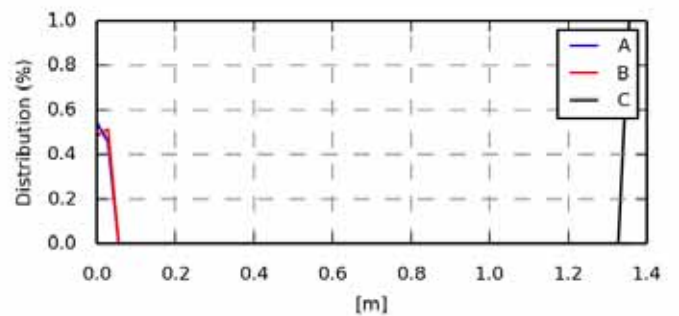


Figure 708 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.0081	0.0075	0.0031
Eq (m=4)	0.0118	0.0113	0.0040
Eq (m=6)	0.0177	0.0171	0.0053
Eq (m=8)	0.0218	0.0212	0.0061
Eq (m=10)	0.0247	0.0240	0.0066
Eq (m=12)	0.0269	0.0262	0.0070

Section 8.08 oc4_p2_load_case_2-3: State pos z coo: global [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-3.sel (28-02-2014 19:12)	21	State pos z Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
B	WAMsim/oc4_p2_load_case_2-3.sel (01-04-2014 12:51)	21	State pos z Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
C	hawc2/oc4_p2_load_case_2-3.sel (06-12-2013 21:42)	21	State pos z Mbdy:mc E-nr: 8 Z-rel:0.00 coo: global platform translation in surge sway and heave

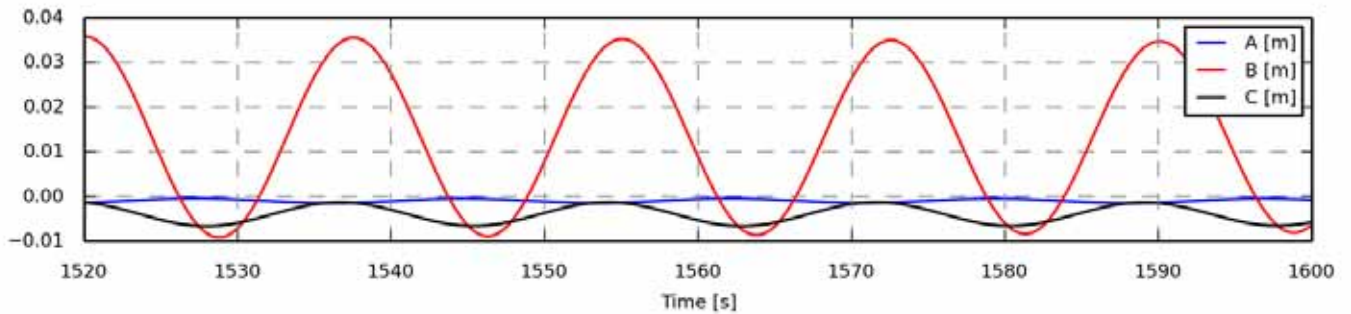


Figure 709 - Full length time series

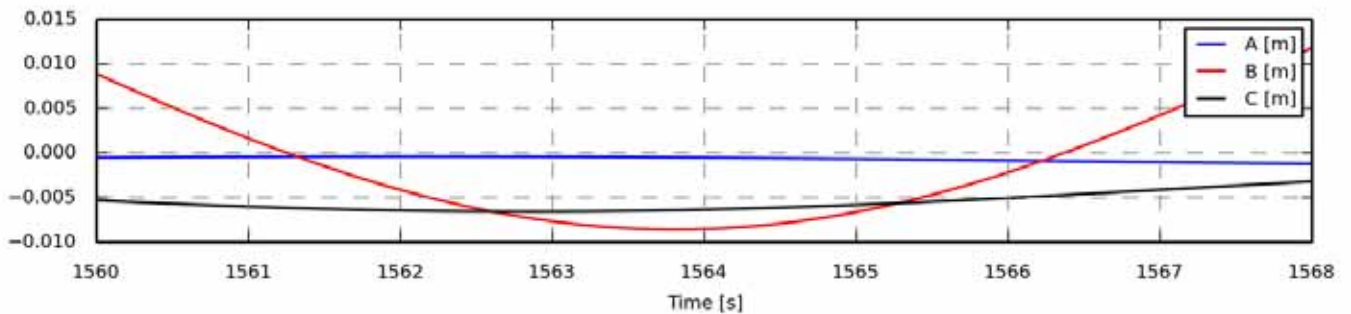


Figure 710 - Zoom of time series

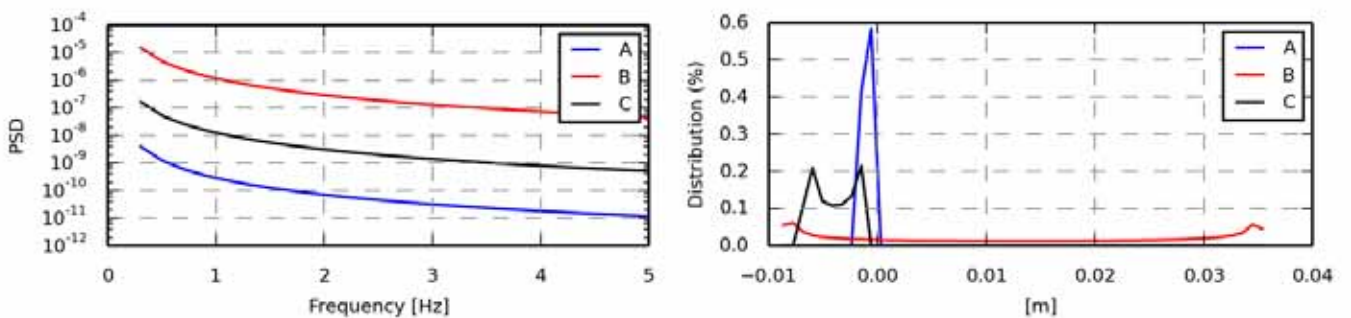


Figure 711 - Power spectrum density

Statistics	A	B	C
Min	-0.0015	-0.0091	-0.0066
Max	-0.0004	0.0358	-0.0013
Mean	-0.0009	0.0130	-0.0040
Std	0.0004	0.0156	0.0019
Skewness	-0.0992	0.0240	0.0636
Kurtosis	-1.4876	-1.5076	-1.5077

Figure 712 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.0004	0.0168	0.0020
Eq (m=4)	0.0005	0.0213	0.0026
Eq (m=6)	0.0006	0.0271	0.0032
Eq (m=8)	0.0007	0.0306	0.0037
Eq (m=10)	0.0008	0.0329	0.0039
Eq (m=12)	0.0008	0.0345	0.0041

Section 8.09 oc4_p2_load_case_2-3: proj_ang tx coo: global [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-3.sel (28-02-2014 19:12)	22	State_rot proj_ang tx Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
B	WAMsim/oc4_p2_load_case_2-3.sel (01-04-2014 12:51)	22	State_rot proj_ang tx Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
C	hawc2/oc4_p2_load_case_2-3.sel (06-12-2013 21:42)	22	State_rot proj_ang tx Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw

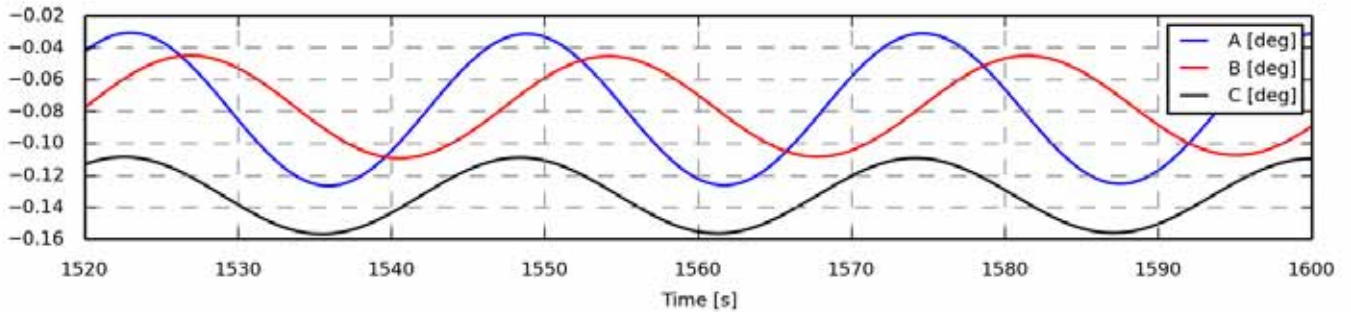


Figure 713 - Full length time series

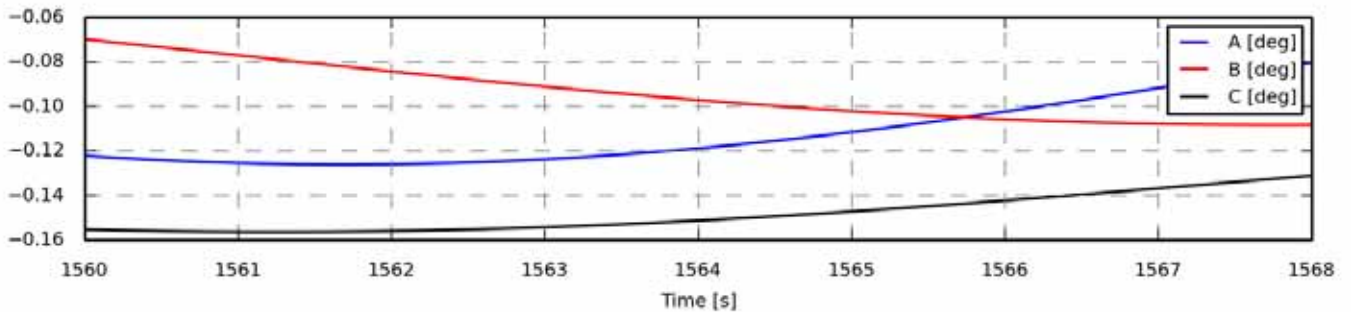


Figure 714 - Zoom of time series

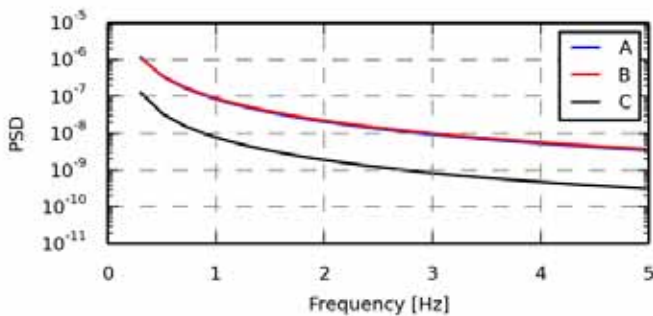


Figure 715 - Power spectrum density

Statistics	A	B	C
Min	-0.1265	-0.1092	-0.1566
Max	-0.0306	-0.0448	-0.1085
Mean	-0.0771	-0.0765	-0.1319
Std	0.0339	0.0226	0.0169
Skewness	-0.0547	-0.0162	-0.0515
Kurtosis	-1.5162	-1.5229	-1.5149

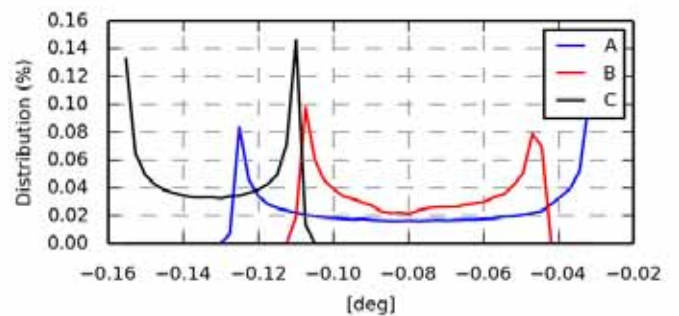


Figure 716 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.0317	0.0202	0.0158
Eq (m=4)	0.0416	0.0268	0.0208
Eq (m=6)	0.0547	0.0356	0.0273
Eq (m=8)	0.0628	0.0411	0.0313
Eq (m=10)	0.0681	0.0449	0.0340
Eq (m=12)	0.0720	0.0475	0.0359

Section 8.10 oc4_p2_load_case_2-3: proj_ang ty coo: global [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-3.sel (28-02-2014 19:12)	23	State_rot proj_ang ty Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
B	WAMsim/oc4_p2_load_case_2-3.sel (01-04-2014 12:51)	23	State_rot proj_ang ty Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
C	hawc2/oc4_p2_load_case_2-3.sel (06-12-2013 21:42)	23	State_rot proj_ang ty Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw

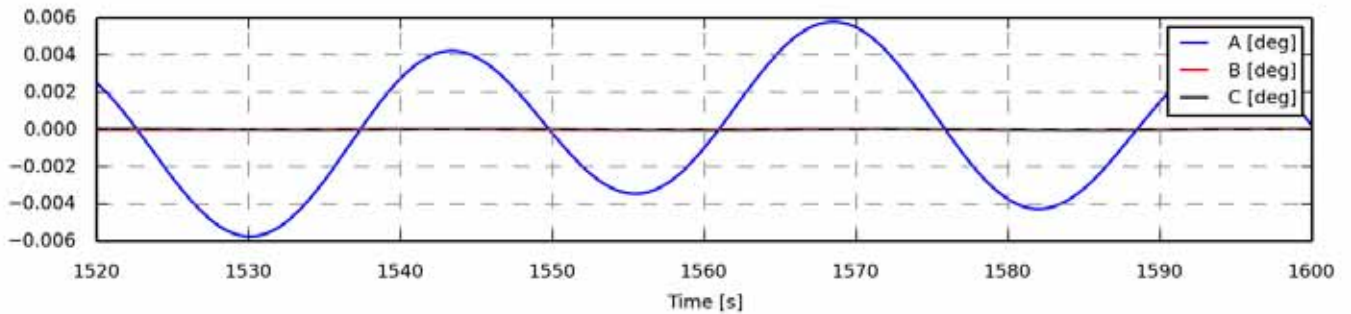


Figure 717 - Full length time series

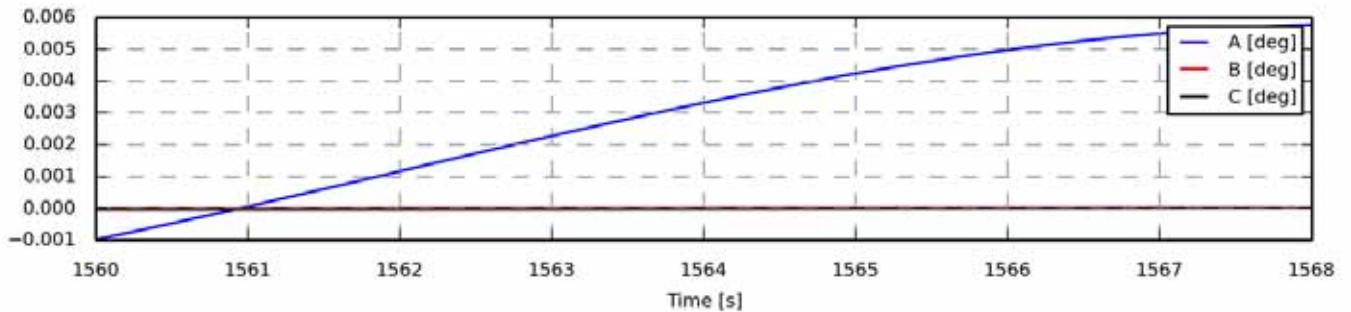


Figure 718 - Zoom of time series

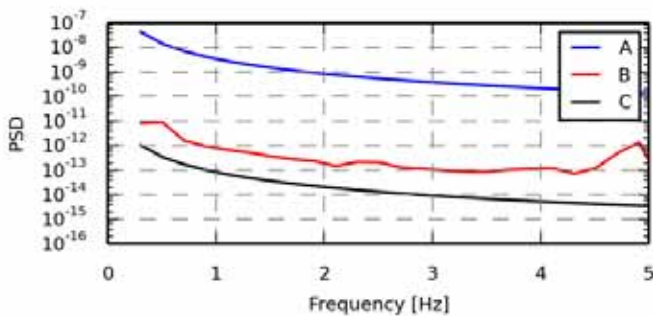


Figure 719 - Power spectrum density

Statistics	A	B	C
Min	-0.0057	-0.0000	-0.0000
Max	0.0058	0.0000	0.0000
Mean	0.0001	-0.0000	-0.0000
Std	0.0033	0.0000	0.0000
Skewness	-0.0453	-0.0000	-0.0217
Kurtosis	-1.2303	-1.3731	-1.3214

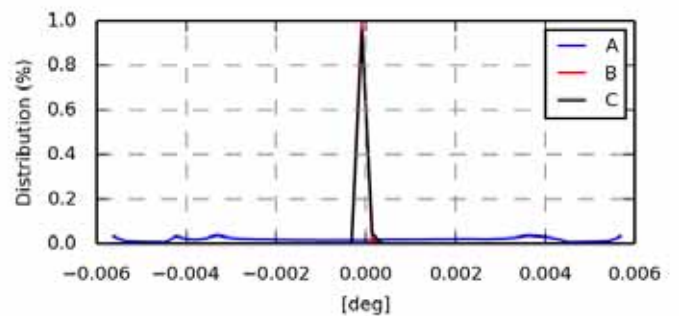


Figure 720 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.0031	0.0000	0.0000
Eq (m=4)	0.0041	0.0000	0.0000
Eq (m=6)	0.0055	0.0000	0.0000
Eq (m=8)	0.0065	0.0000	0.0000
Eq (m=10)	0.0072	0.0000	0.0000
Eq (m=12)	0.0077	0.0000	0.0000

Section 8.11 oc4_p2_load_case_2-3: proj_ang tz coo: global [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-3.sel (28-02-2014 19:12)	24	State_rot proj_ang tz Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
B	WAMsim/oc4_p2_load_case_2-3.sel (01-04-2014 12:51)	24	State_rot proj_ang tz Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
C	hawc2/oc4_p2_load_case_2-3.sel (06-12-2013 21:42)	24	State_rot proj_ang tz Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw

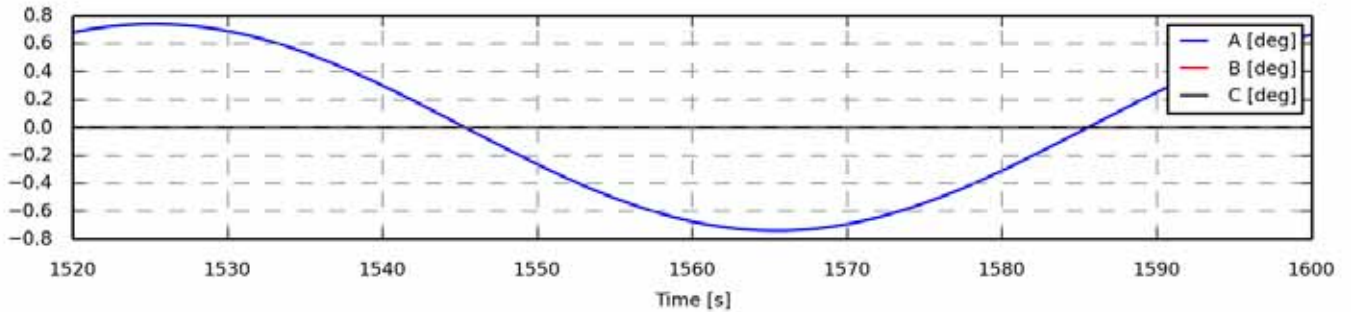


Figure 721 - Full length time series

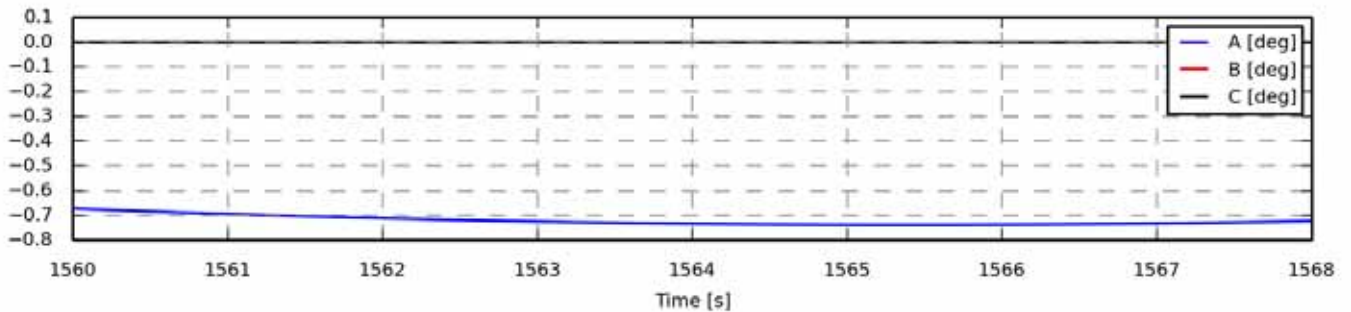


Figure 722 - Zoom of time series

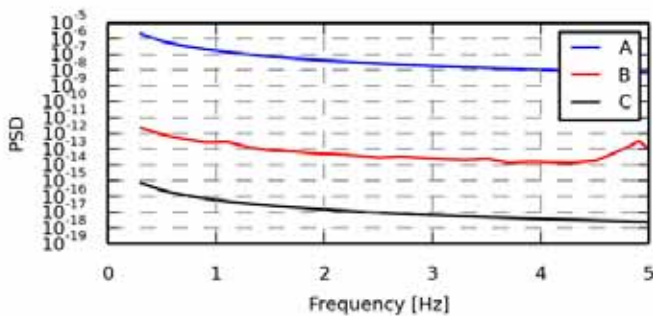


Figure 723 - Power spectrum density

Statistics	A	B	C
Min	-0.7376	-0.0001	-0.0000
Max	0.7417	0.0001	-0.0000
Mean	-0.0025	0.0000	-0.0000
Std	0.5215	0.0001	0.0000
Skewness	0.0106	-0.0571	0.0933
Kurtosis	-1.4943	-1.4261	-1.4653

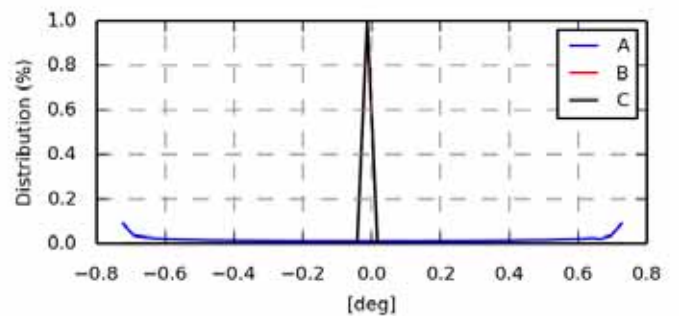


Figure 724 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.3333	0.0000	0.0000
Eq (m=4)	0.4805	0.0001	0.0000
Eq (m=6)	0.6929	0.0001	0.0000
Eq (m=8)	0.8325	0.0001	0.0000
Eq (m=10)	0.9297	0.0001	0.0000
Eq (m=12)	1.0010	0.0001	0.0000

Section 8.12 oc4_p2_load_case_2-3: Mx coo: towertop [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-3.sel (28-02-2014 19:12)	37	MomentMx Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
B	WAMsim/oc4_p2_load_case_2-3.sel (01-04-2014 12:51)	37	MomentMx Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
C	hawc2/oc4_p2_load_case_2-3.sel (06-12-2013 21:42)	37	MomentMx Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment

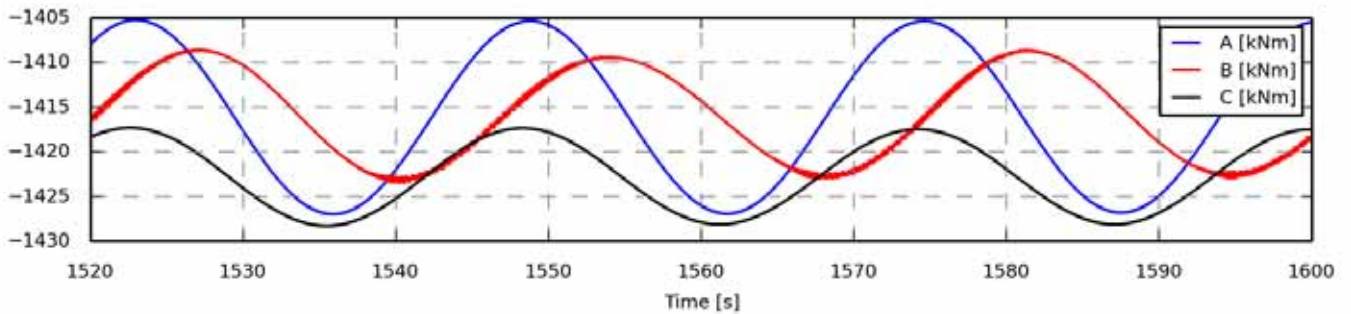


Figure 725 - Full length time series

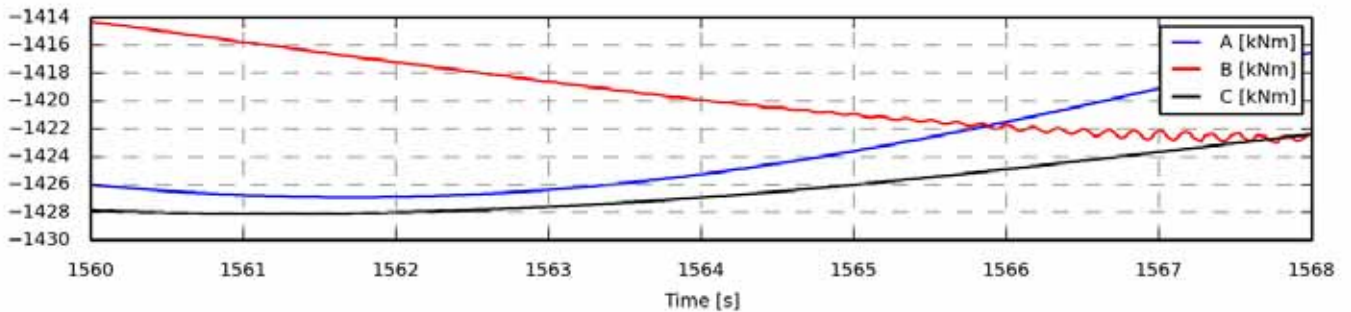


Figure 726 - Zoom of time series

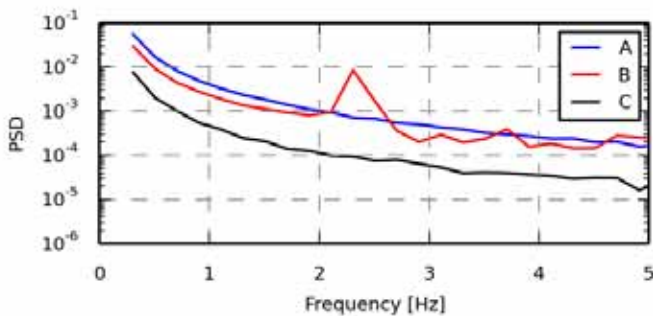


Figure 727 - Power spectrum density

Statistics	A	B	C
Min	-1.4270e+03	-1.4235e+03	-1.4283e+03
Max	-1.4053e+03	-1.4086e+03	-1.4173e+03
Mean	-1.4158e+03	-1.4159e+03	-1.4226e+03
Std	7.6954	4.9392	3.8504
Skewness	-0.0542	-0.0028	-0.0550
Kurtosis	-1.5164	-1.5062	-1.5152

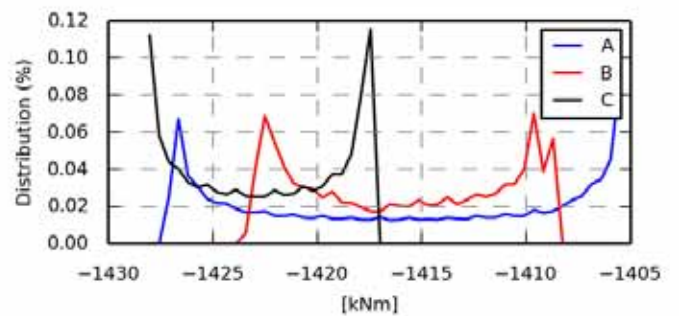


Figure 728 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	7.2212	4.5952	3.5906
Eq (m=4)	9.4930	6.0792	4.7211
Eq (m=6)	12.4804	8.0896	6.2086
Eq (m=8)	14.3102	9.3511	7.1209
Eq (m=10)	15.5344	10.2091	7.7323
Eq (m=12)	16.4082	10.8296	8.1696

Section 8.13 oc4_p2_load_case_2-3: My coo: towertop [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-3.sel (28-02-2014 19:12)	38	MomentMy Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
B	WAMsim/oc4_p2_load_case_2-3.sel (01-04-2014 12:51)	38	MomentMy Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
C	hawc2/oc4_p2_load_case_2-3.sel (06-12-2013 21:42)	38	MomentMy Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment

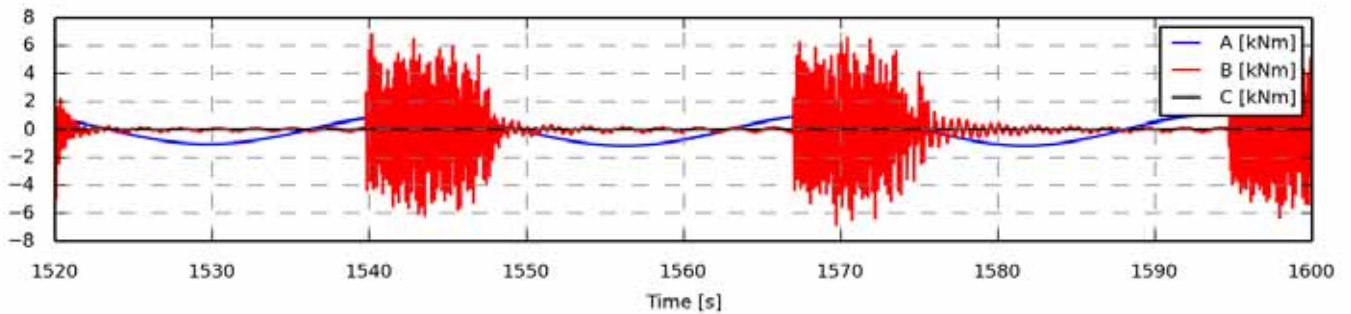


Figure 729 - Full length time series

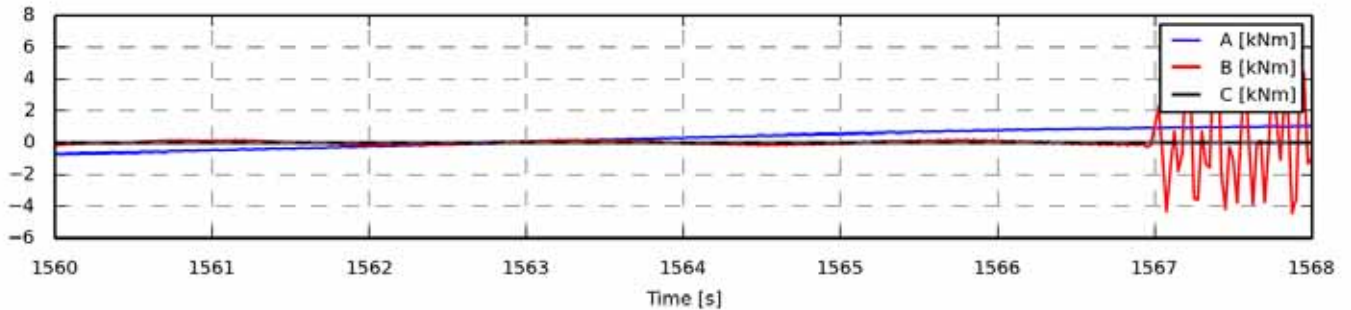


Figure 730 - Zoom of time series

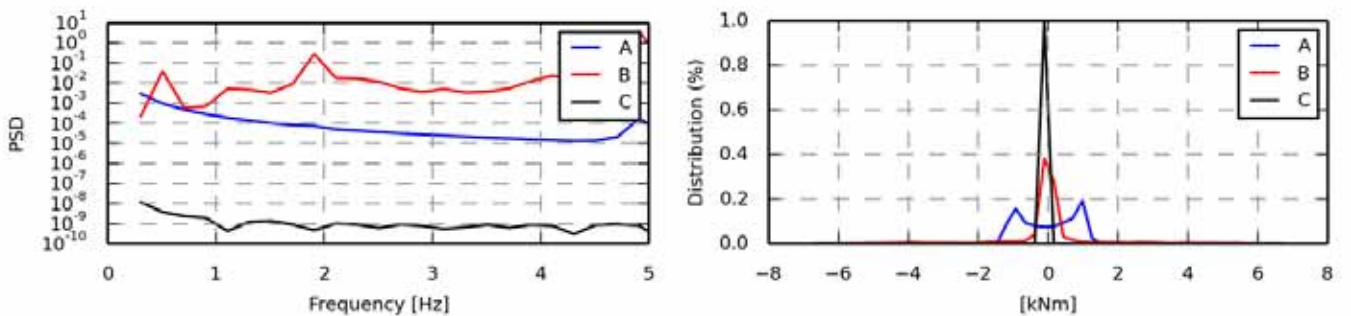


Figure 731 - Power spectrum density

Statistics	A	B	C
Min	-1.1628	-6.7862	-0.0082
Max	1.1906	6.8413	0.0089
Mean	0.0158	-0.0011	0.0001
Std	0.7886	1.5850	0.0048
Skewness	-0.0554	0.0708	-0.0434
Kurtosis	-1.4803	4.6398	-1.4925

Figure 732 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.7418	10.3275	0.0050
Eq (m=4)	0.9743	10.1258	0.0065
Eq (m=6)	1.2840	10.1436	0.0086
Eq (m=8)	1.4767	10.3018	0.0100
Eq (m=10)	1.6075	10.4914	0.0110
Eq (m=12)	1.7020	10.6835	0.0117

Section 8.14 oc4_p2_load_case_2-3: Mz coo: towertop [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-3.sel (28-02-2014 19:12)	39	MomentMz Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
B	WAMsim/oc4_p2_load_case_2-3.sel (01-04-2014 12:51)	39	MomentMz Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
C	hawc2/oc4_p2_load_case_2-3.sel (06-12-2013 21:42)	39	MomentMz Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment

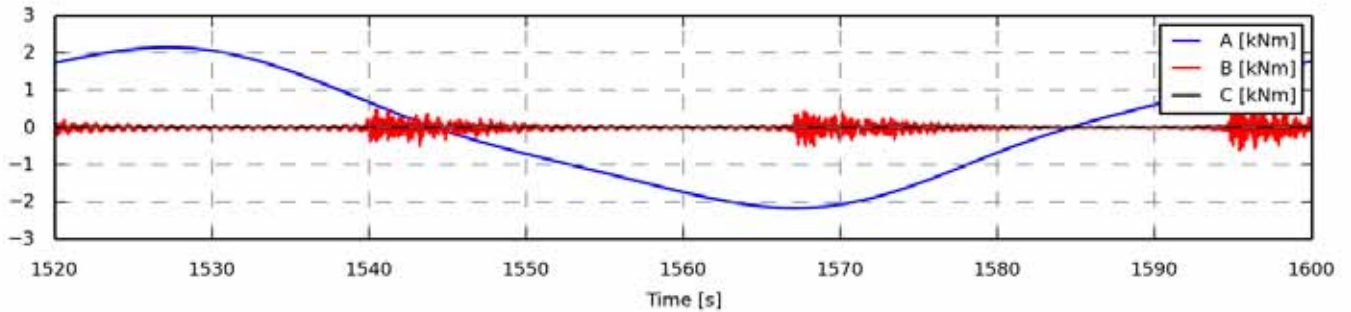


Figure 733 - Full length time series

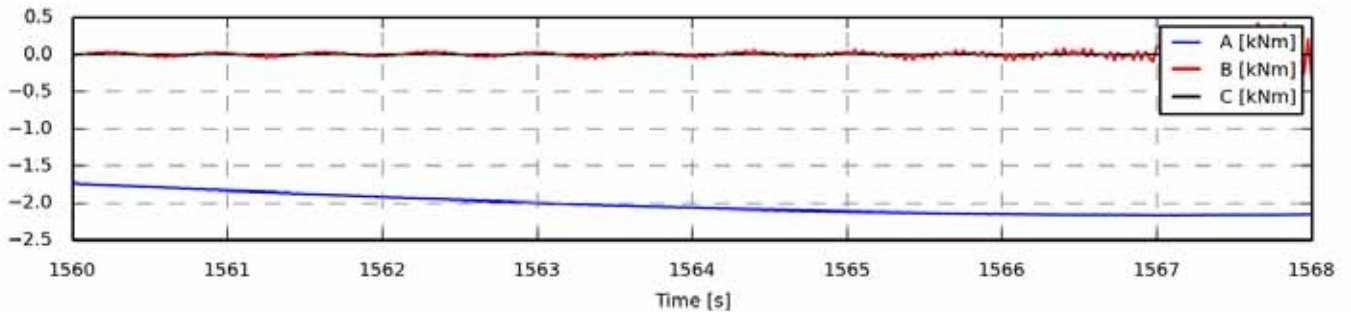


Figure 734 - Zoom of time series

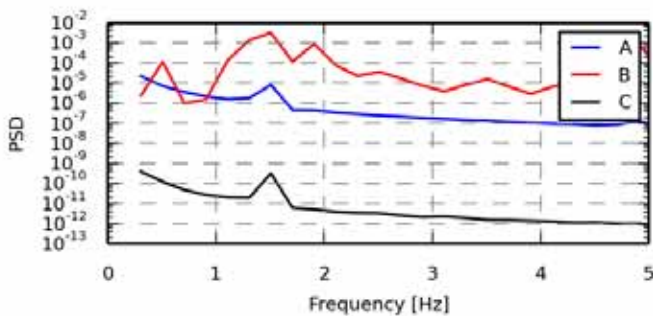


Figure 735 - Power spectrum density

Statistics	A	B	C
Min	-2.1639	-0.6048	-0.0012
Max	2.1510	0.7255	0.0012
Mean	-0.0095	-0.0001	-0.0000
Std	1.4301	0.0973	0.0008
Skewness	0.0167	0.0045	0.0445
Kurtosis	-1.3621	7.7058	-1.4816

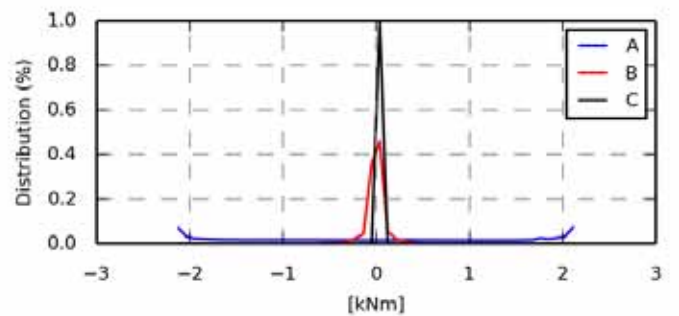


Figure 736 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.9632	0.7094	0.0007
Eq (m=4)	1.3887	0.7117	0.0010
Eq (m=6)	2.0041	0.7608	0.0013
Eq (m=8)	2.4096	0.8179	0.0015
Eq (m=10)	2.6929	0.8706	0.0016
Eq (m=12)	2.9015	0.9169	0.0017

Section 8.15 oc4_p2_load_case_2-3: Mx coo: tower [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-3.sel (28-02-2014 19:12)	43	MomentMx Mbdy:tower nodenr: 1 coo: tower tower base bending moment
B	WAMsim/oc4_p2_load_case_2-3.sel (01-04-2014 12:51)	43	MomentMx Mbdy:tower nodenr: 1 coo: tower tower base bending moment
C	hawc2/oc4_p2_load_case_2-3.sel (06-12-2013 21:42)	43	MomentMx Mbdy:tower nodenr: 1 coo: tower tower base bending moment

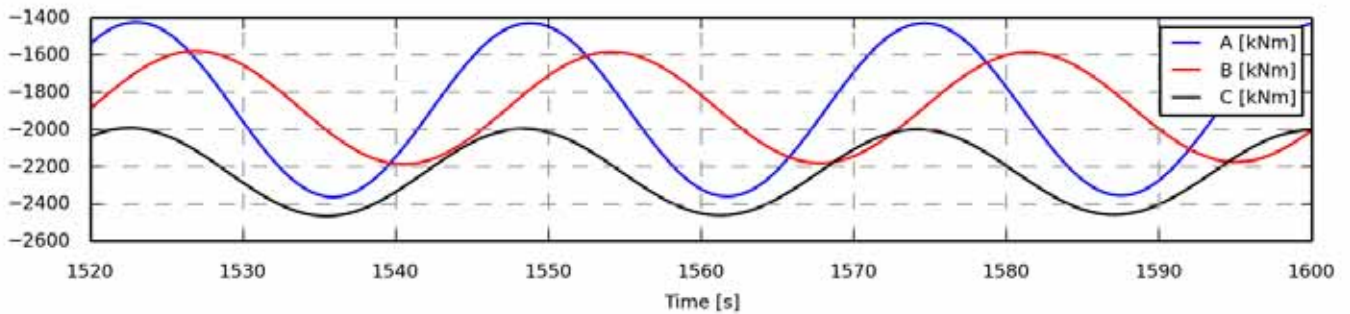


Figure 737 - Full length time series

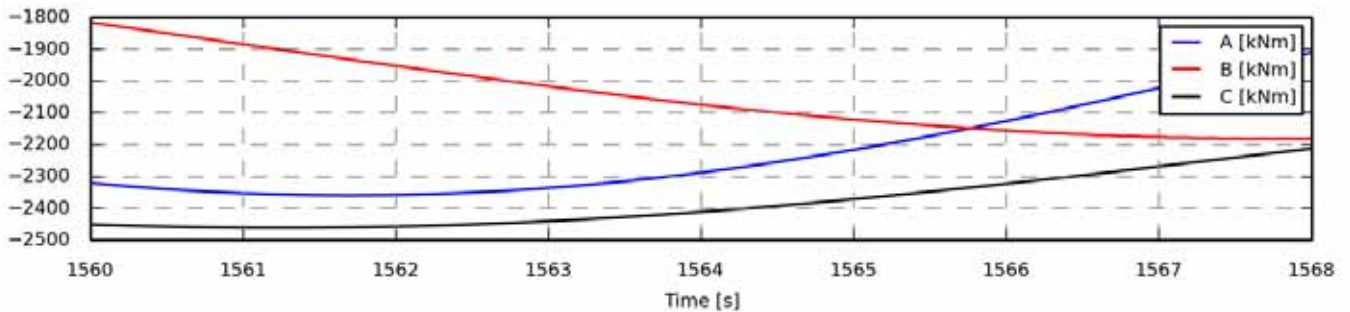


Figure 738 - Zoom of time series

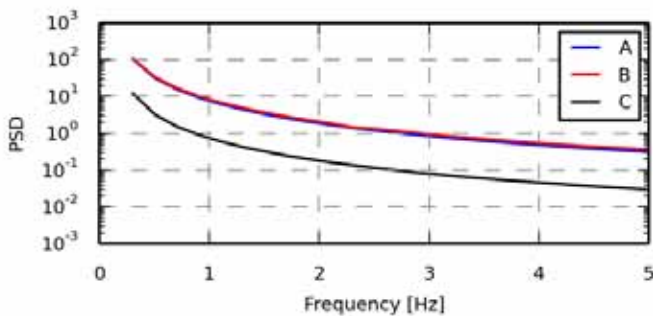


Figure 739 - Power spectrum density

Statistics	A	B	C
Min	-2.3624e+03	-2.1877e+03	-2.4646e+03
Max	-1.4226e+03	-1.5784e+03	-1.9918e+03
Mean	-1.8792e+03	-1.8802e+03	-2.2219e+03
Std	332.7033	213.8726	166.2305
Skewness	-0.0545	-0.0161	-0.0517
Kurtosis	-1.5164	-1.5240	-1.5148

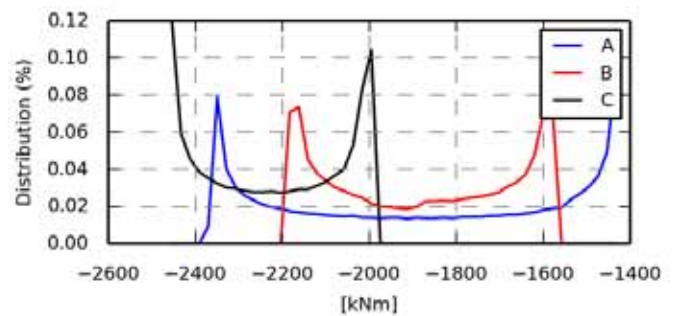


Figure 740 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	312.4936	191.5375	155.1366
Eq (m=4)	410.8027	254.0333	203.9699
Eq (m=6)	540.0826	338.0779	268.2149
Eq (m=8)	619.2635	390.4166	307.5990
Eq (m=10)	672.2405	425.7155	333.9792
Eq (m=12)	710.0531	451.0220	352.8331

Section 8.16 oc4_p2_load_case_2-3: My coo: tower [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-3.sel (28-02-2014 19:12)	44	MomentMy Mbdy:tower nodenr: 1 coo: tower tower base bending moment
B	WAMsim/oc4_p2_load_case_2-3.sel (01-04-2014 12:51)	44	MomentMy Mbdy:tower nodenr: 1 coo: tower tower base bending moment
C	hawc2/oc4_p2_load_case_2-3.sel (06-12-2013 21:42)	44	MomentMy Mbdy:tower nodenr: 1 coo: tower tower base bending moment

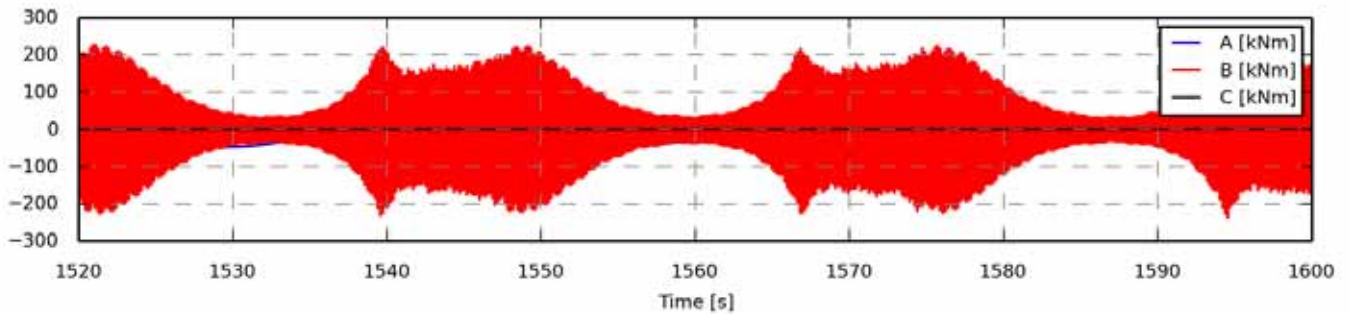


Figure 741 - Full length time series

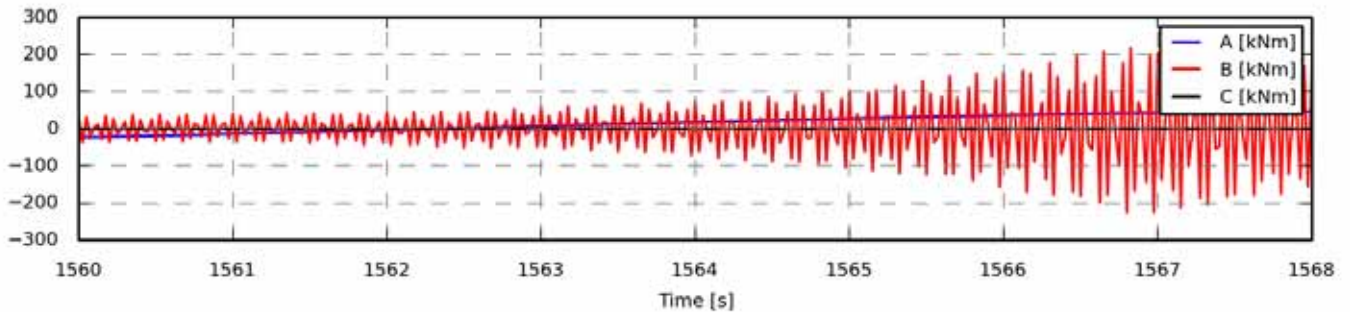


Figure 742 - Zoom of time series

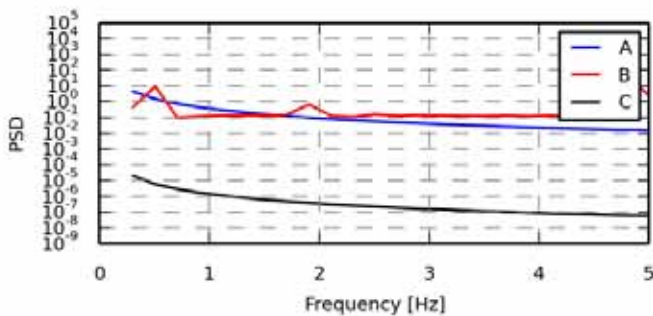


Figure 743 - Power spectrum density

Statistics	A	B	C
Min	-46.8728	-2.3697e+02	-0.2911
Max	49.2346	238.9389	0.2911
Mean	0.6519	0.0317	0.0018
Std	31.2966	101.0090	0.1925
Skewness	-0.0385	-0.0018	-0.0422
Kurtosis	-1.4604	-0.5116	-1.4847

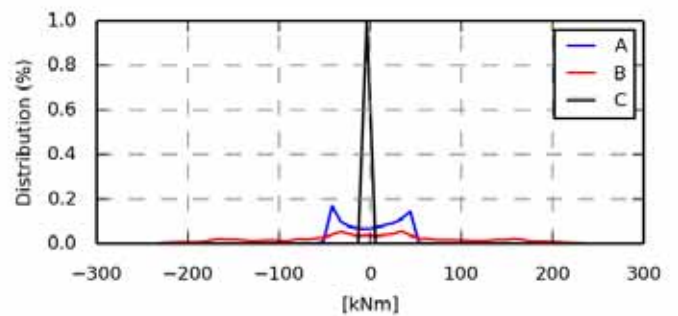


Figure 744 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	30.0445	623.2204	0.1790
Eq (m=4)	39.3737	531.7619	0.2356
Eq (m=6)	51.9004	464.8982	0.3105
Eq (m=8)	59.7138	441.1733	0.3569
Eq (m=10)	65.0313	430.9257	0.3884
Eq (m=12)	68.8913	426.3019	0.4113

Section 8.17 oc4_p2_load_case_2-3: Mz coo: tower [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-3.sel (28-02-2014 19:12)	45	MomentMz Mbdy:tower nodenr: 1 coo: tower tower base bending moment
B	WAMsim/oc4_p2_load_case_2-3.sel (01-04-2014 12:51)	45	MomentMz Mbdy:tower nodenr: 1 coo: tower tower base bending moment
C	hawc2/oc4_p2_load_case_2-3.sel (06-12-2013 21:42)	45	MomentMz Mbdy:tower nodenr: 1 coo: tower tower base bending moment

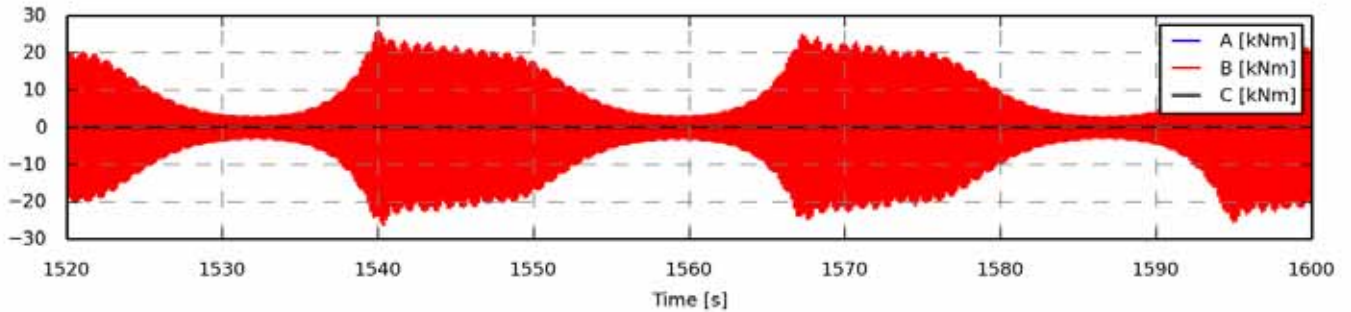


Figure 745 - Full length time series

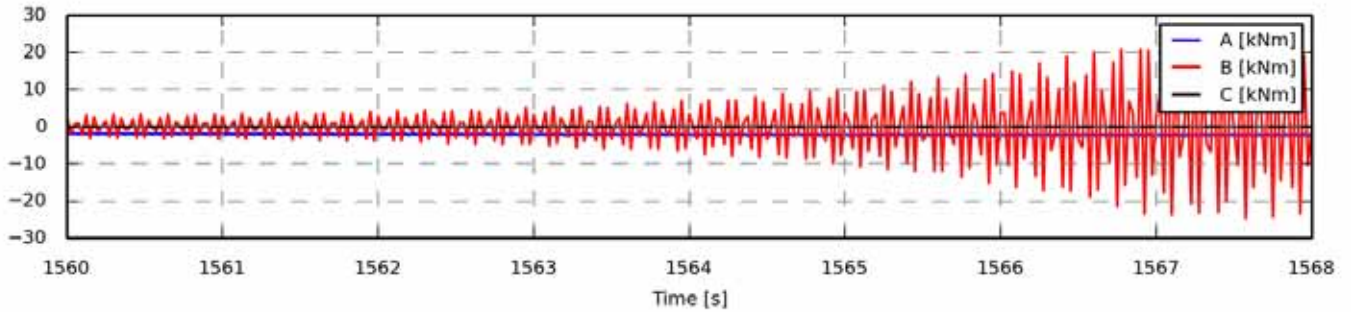


Figure 746 - Zoom of time series

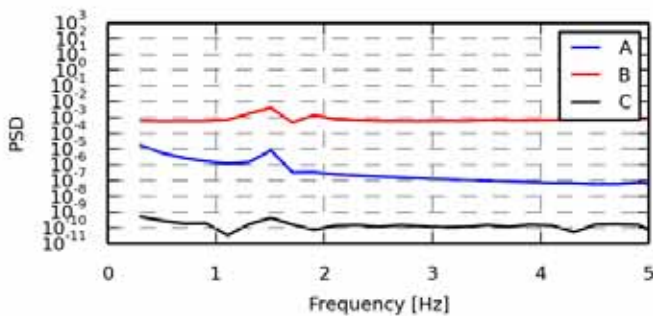


Figure 747 - Power spectrum density

Statistics	A	B	C
Min	-2.3948	-26.0926	-0.0019
Max	2.2910	26.0641	0.0016
Mean	-0.0099	-0.0019	-0.0000
Std	1.5323	10.4984	0.0007
Skewness	0.0174	0.0002	0.0438
Kurtosis	-1.3786	-0.1774	-1.4576

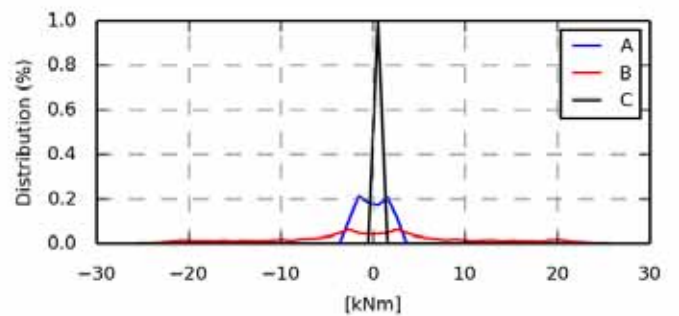


Figure 748 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	1.0985	66.0833	0.0011
Eq (m=4)	1.5134	57.0007	0.0014
Eq (m=6)	2.1764	50.3182	0.0018
Eq (m=8)	2.6167	47.8989	0.0021
Eq (m=10)	2.9244	46.8226	0.0023
Eq (m=12)	3.1509	46.3215	0.0024

Section 8.18 oc4_p2_load_case_2-3: ESYS line1_1 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-3.sel (28-02-2014 19:12)	55	ESYS line1_1 SENSOR 4
B	WAMsim/oc4_p2_load_case_2-3.sel (01-04-2014 12:51)	55	ESYS line1_1 SENSOR 4
C	hawc2/oc4_p2_load_case_2-3.sel (06-12-2013 21:42)	55	ESYS line1_1 SENSOR 4

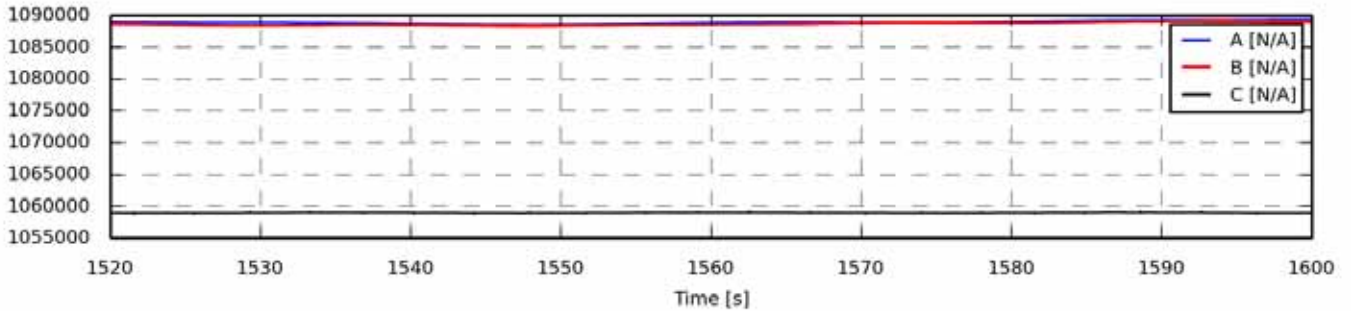


Figure 749 - Full length time series

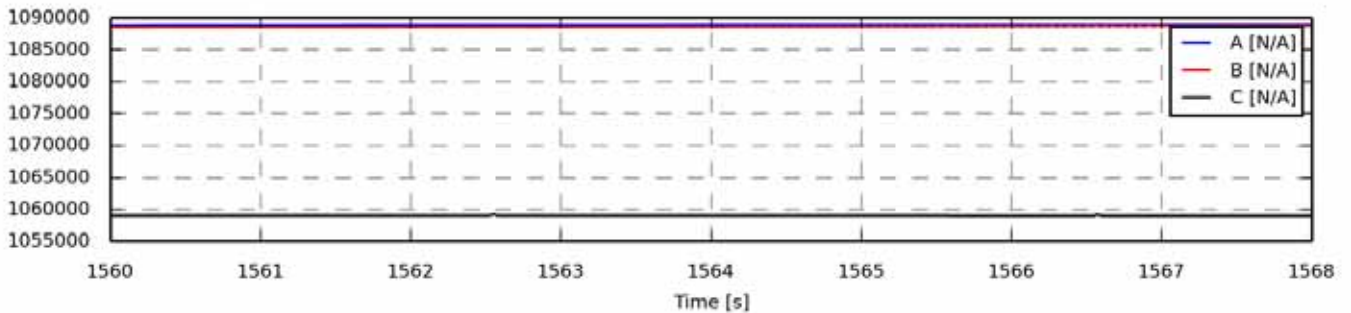


Figure 750 - Zoom of time series

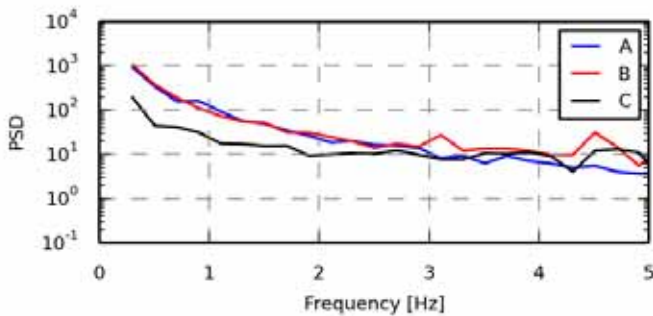


Figure 751 - Power spectrum density

Statistics	A	B	C
Min	1.0885e+06	1.0882e+06	1.0588e+06
Max	1.0893e+06	1.0893e+06	1.0592e+06
Mean	1.0889e+06	1.0886e+06	1.0590e+06
Std	227.3281	264.2612	33.0376
Skewness	0.1659	0.4974	0.0744
Kurtosis	-0.6758	-1.0120	3.4413

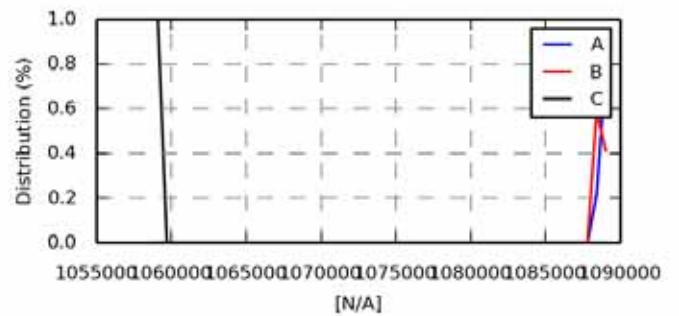


Figure 752 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	159.7896	304.6511	149.6313
Eq (m=4)	235.9594	329.0211	185.0894
Eq (m=6)	352.8344	455.5234	236.6101
Eq (m=8)	433.9061	559.9659	271.5026
Eq (m=10)	492.0334	635.3310	296.6078
Eq (m=12)	535.2981	691.3294	315.6802

Section 8.19 oc4_p2_load_case_2-3: ESYS line1_3 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-3.sel (28-02-2014 19:12)	259	ESYS line1_3 SENSOR 104
B	WAMsim/oc4_p2_load_case_2-3.sel (01-04-2014 12:51)	259	ESYS line1_3 SENSOR 104
C	hawc2/oc4_p2_load_case_2-3.sel (06-12-2013 21:42)	259	ESYS line1_3 SENSOR 104

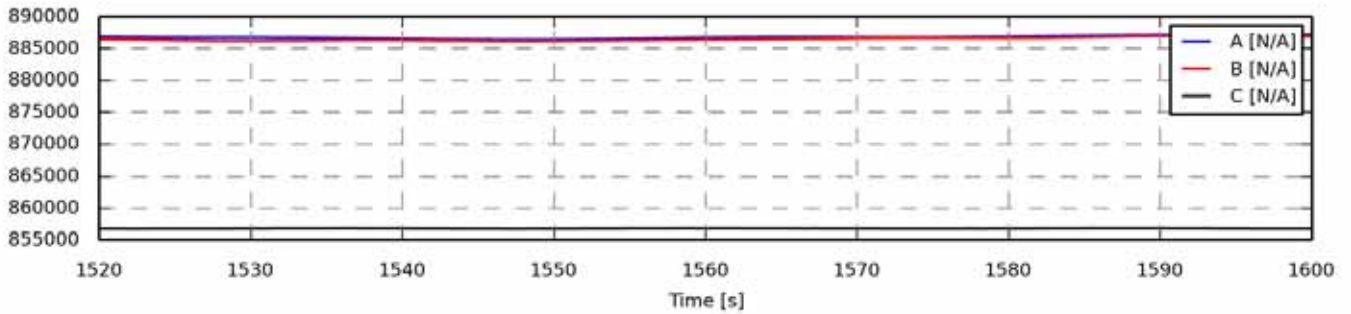


Figure 753 - Full length time series

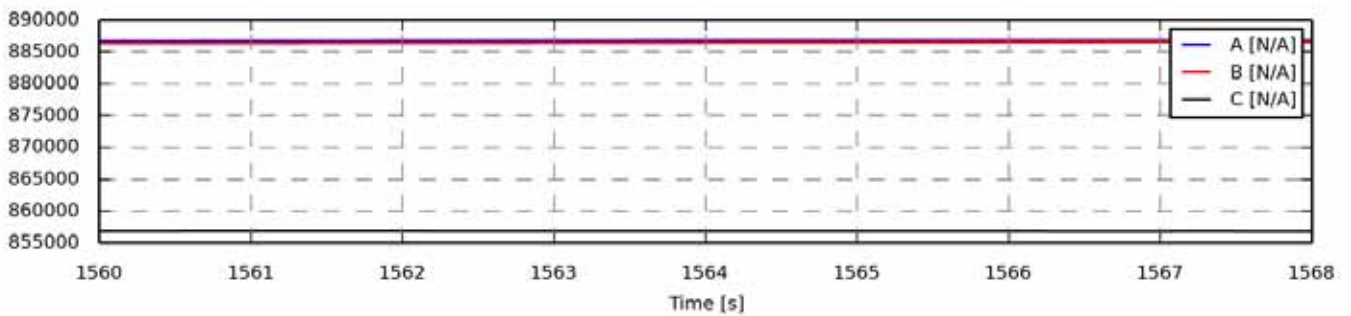


Figure 754 - Zoom of time series

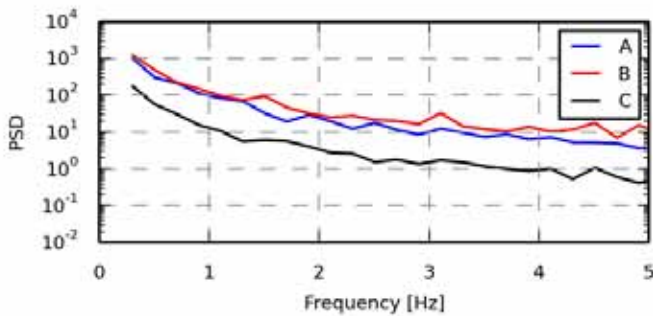


Figure 755 - Power spectrum density

Statistics	A	B	C
Min	8.8636e+05	8.8615e+05	8.5678e+05
Max	8.8716e+05	8.8698e+05	8.5689e+05
Mean	8.8675e+05	8.8649e+05	8.5684e+05
Std	227.7016	258.0165	29.0505
Skewness	0.1709	0.5163	0.1081
Kurtosis	-0.6753	-1.1073	-1.0027

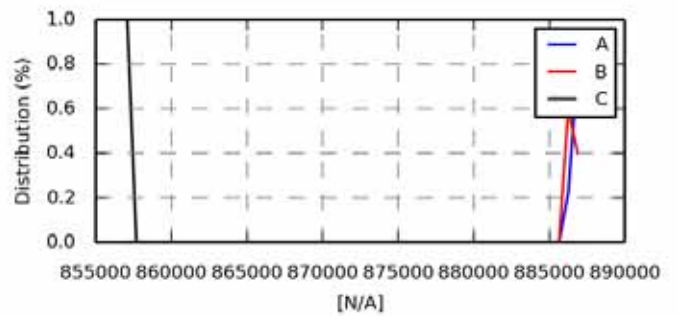


Figure 756 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	157.1680	165.2246	32.2467
Eq (m=4)	232.2003	236.2703	42.4251
Eq (m=6)	347.2189	357.1433	56.6316
Eq (m=8)	427.0002	440.9679	65.8623
Eq (m=10)	484.2025	500.5862	72.3140
Eq (m=12)	526.7785	544.7663	77.0693

Section 8.20 oc4_p2_load_case_2-3: ESYS line2_1 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-3.sel (28-02-2014 19:12)	263	ESYS line2_1 SENSOR 4
B	WAMsim/oc4_p2_load_case_2-3.sel (01-04-2014 12:51)	263	ESYS line2_1 SENSOR 4
C	hawc2/oc4_p2_load_case_2-3.sel (06-12-2013 21:42)	263	ESYS line2_1 SENSOR 4

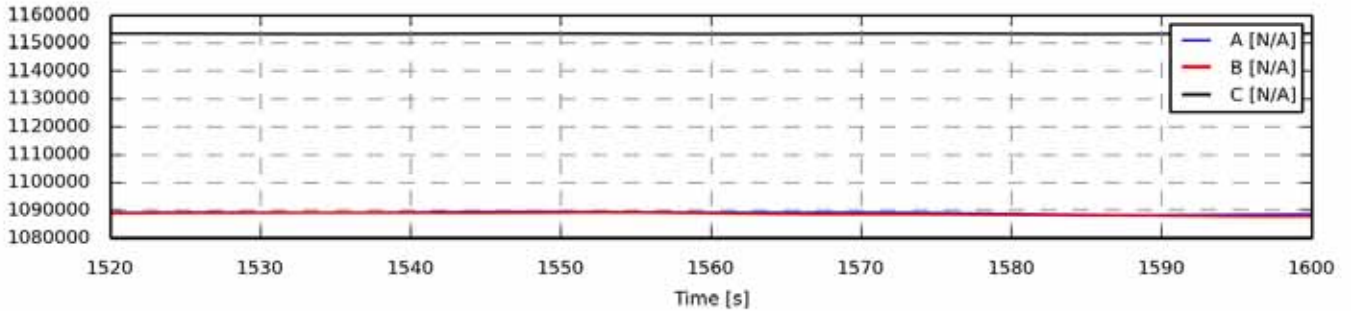


Figure 757 - Full length time series

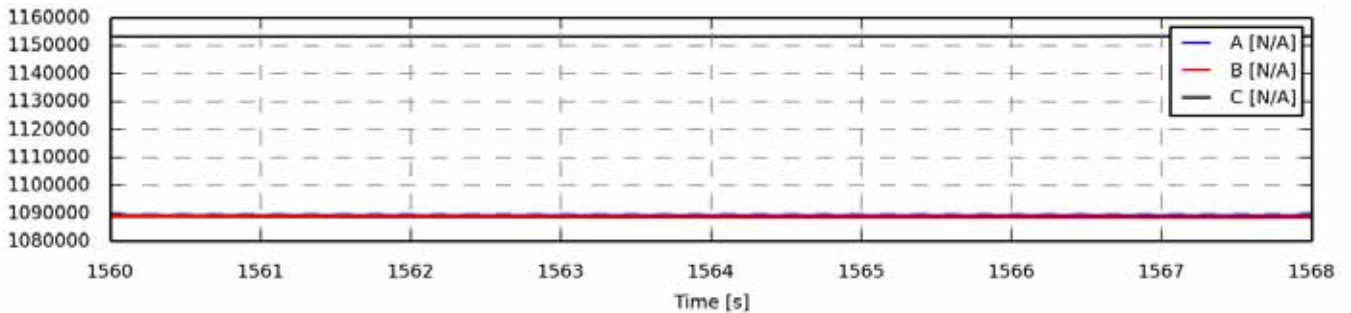


Figure 758 - Zoom of time series

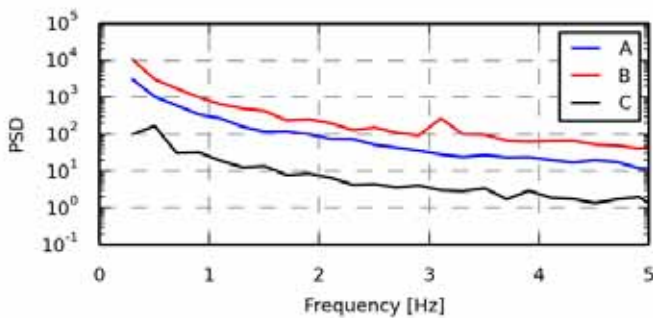


Figure 759 - Power spectrum density

Statistics	A	B	C
Min	1.0882e+06	1.0877e+06	1.1532e+06
Max	1.0896e+06	1.0893e+06	1.1535e+06
Mean	1.0890e+06	1.0887e+06	1.1533e+06
Std	422.7022	515.0343	61.1169
Skewness	-0.7712	-0.5372	0.0101
Kurtosis	-0.8067	-1.1514	-1.3494

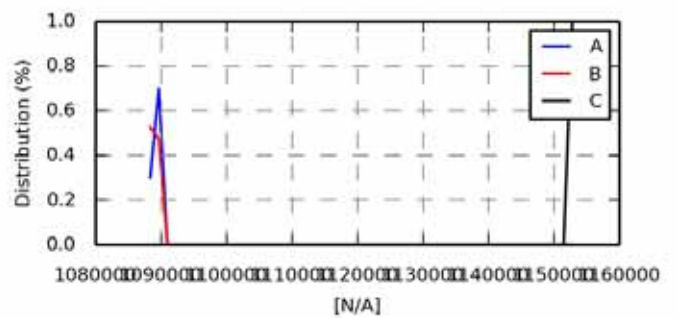


Figure 760 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	254.6789	303.4796	75.6171
Eq (m=4)	384.3257	460.1374	98.7838
Eq (m=6)	584.6929	701.3323	130.2254
Eq (m=8)	722.2069	866.4217	150.0016
Eq (m=10)	819.8904	983.6269	163.6424
Eq (m=12)	892.2577	1.0704e+03	173.7461

Section 8.21 oc4_p2_load_case_2-3: ESYS line2_3 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-3.sel (28-02-2014 19:12)	467	ESYS line2_3 SENSOR 104
B	WAMsim/oc4_p2_load_case_2-3.sel (01-04-2014 12:51)	467	ESYS line2_3 SENSOR 104
C	hawc2/oc4_p2_load_case_2-3.sel (06-12-2013 21:42)	467	ESYS line2_3 SENSOR 104

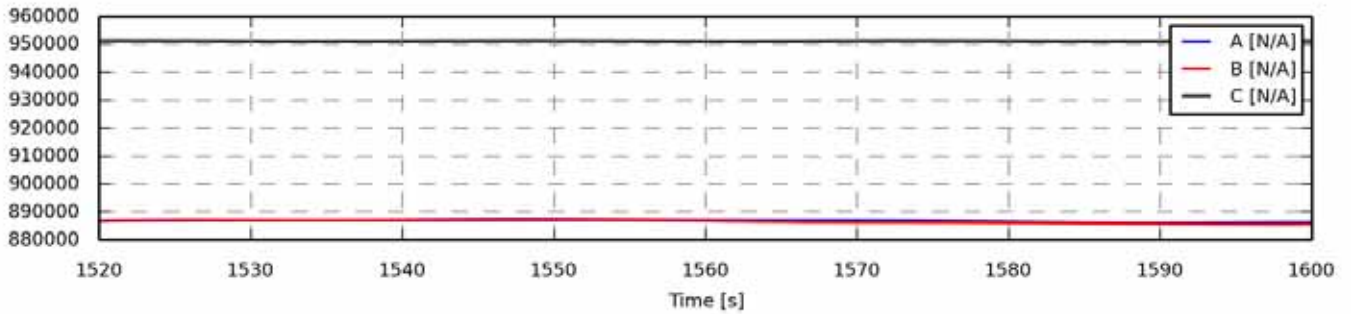


Figure 761 - Full length time series

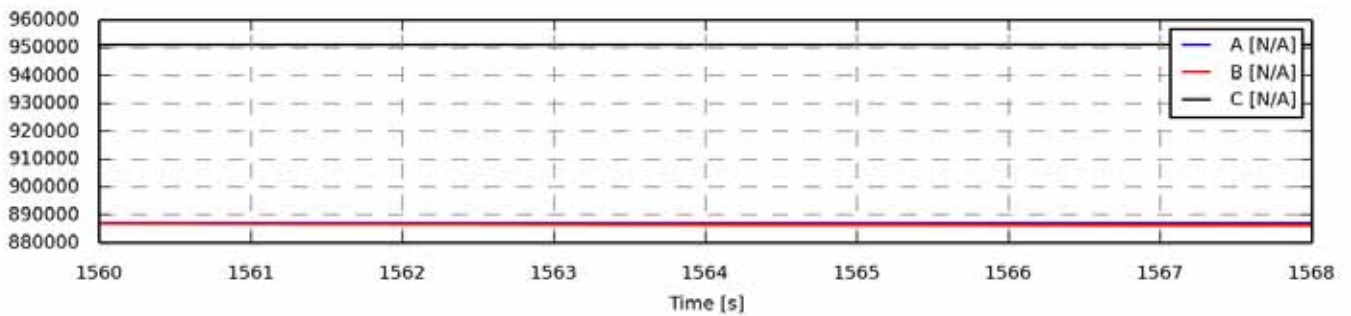


Figure 762 - Zoom of time series

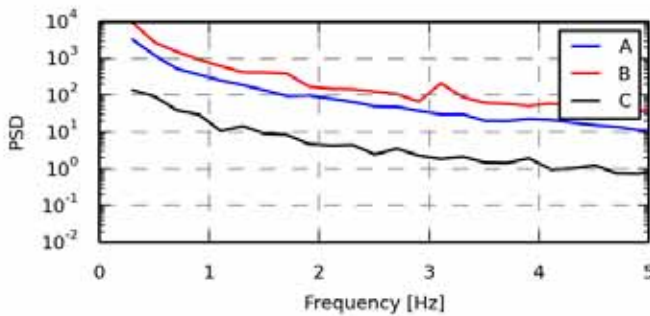


Figure 763 - Power spectrum density

Statistics	A	B	C
Min	8.8616e+05	8.8565e+05	9.5116e+05
Max	8.8749e+05	8.8723e+05	9.5134e+05
Mean	8.8695e+05	8.8663e+05	9.5126e+05
Std	422.2960	513.3727	57.3273
Skewness	-0.7775	-0.5395	-0.0162
Kurtosis	-0.8283	-1.1688	-1.3608

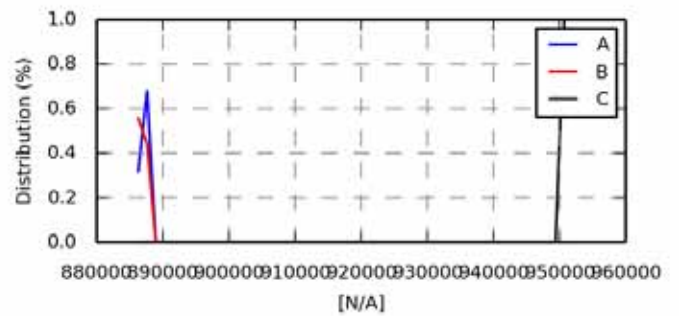


Figure 764 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	249.8708	293.4878	59.7055
Eq (m=4)	376.2773	445.0472	78.4956
Eq (m=6)	571.6347	678.3316	103.1991
Eq (m=8)	705.9312	838.0068	118.3290
Eq (m=10)	801.3910	951.3682	128.4519
Eq (m=12)	872.1223	1.0353e+03	135.6771

Section 8.22 oc4_p2_load_case_2-3: ESYS line3_1 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-3.sel (28-02-2014 19:12)	471	ESYS line3_1 SENSOR 4
B	WAMsim/oc4_p2_load_case_2-3.sel (01-04-2014 12:51)	471	ESYS line3_1 SENSOR 4
C	hawc2/oc4_p2_load_case_2-3.sel (06-12-2013 21:42)	471	ESYS line3_1 SENSOR 4

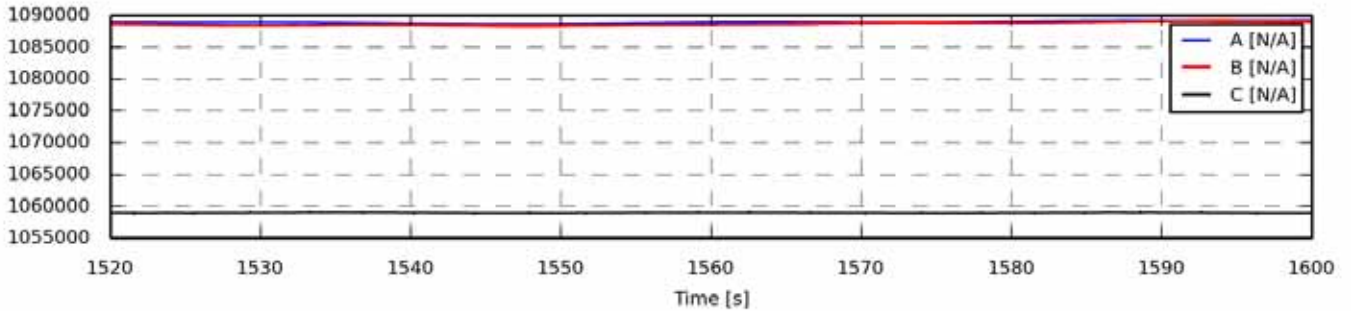


Figure 765 - Full length time series

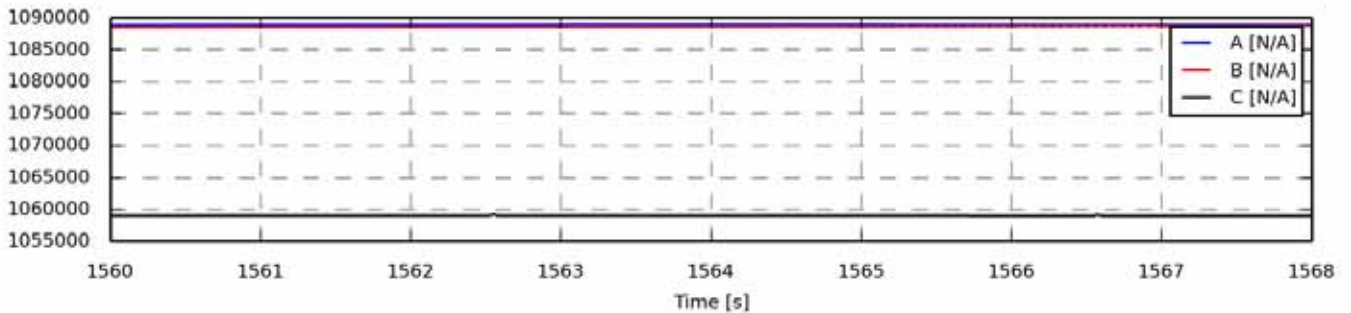


Figure 766 - Zoom of time series

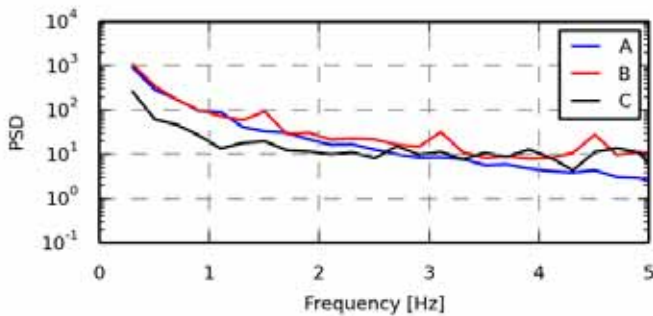


Figure 767 - Power spectrum density

Statistics	A	B	C
Min	1.0886e+06	1.0882e+06	1.0588e+06
Max	1.0892e+06	1.0893e+06	1.0592e+06
Mean	1.0889e+06	1.0886e+06	1.0590e+06
Std	185.8083	266.1400	34.7809
Skewness	-0.1205	0.5006	0.1506
Kurtosis	-0.7203	-1.0141	2.3468

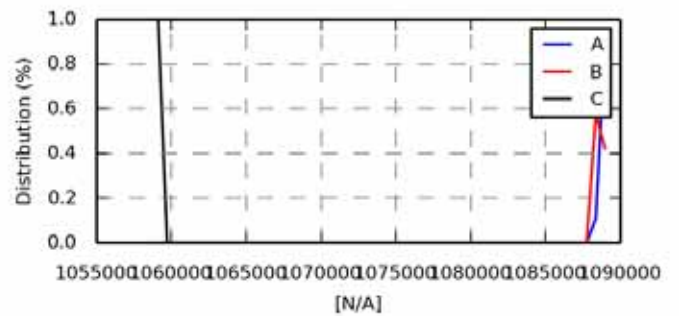


Figure 768 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	126.6449	304.7197	149.5650
Eq (m=4)	186.8024	329.3162	183.6776
Eq (m=6)	279.3052	455.8569	232.0153
Eq (m=8)	343.4817	560.0952	263.9313
Eq (m=10)	389.4956	635.3730	286.3903
Eq (m=12)	423.7440	691.3423	303.0781

Section 8.23 oc4_p2_load_case_2-3: ESYS line3_3 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-3.sel (28-02-2014 19:12)	675	ESYS line3_3 SENSOR 104
B	WAMsim/oc4_p2_load_case_2-3.sel (01-04-2014 12:51)	675	ESYS line3_3 SENSOR 104
C	hawc2/oc4_p2_load_case_2-3.sel (06-12-2013 21:42)	675	ESYS line3_3 SENSOR 104

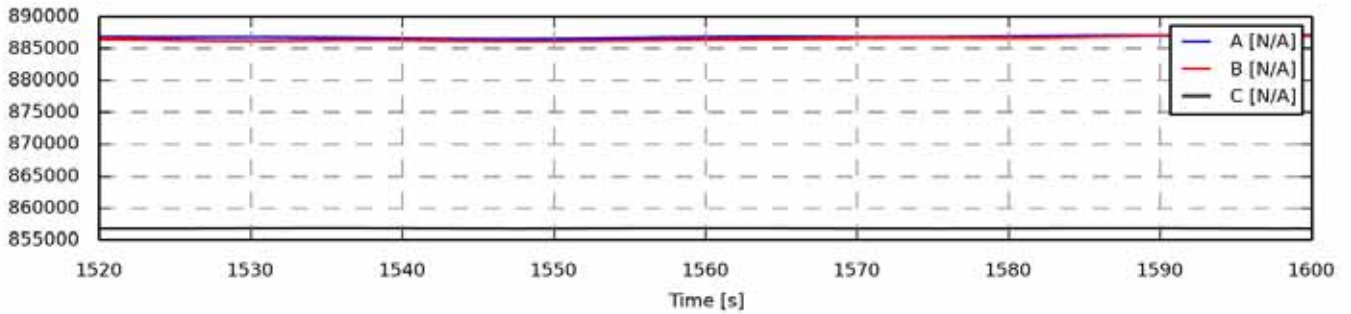


Figure 769 - Full length time series

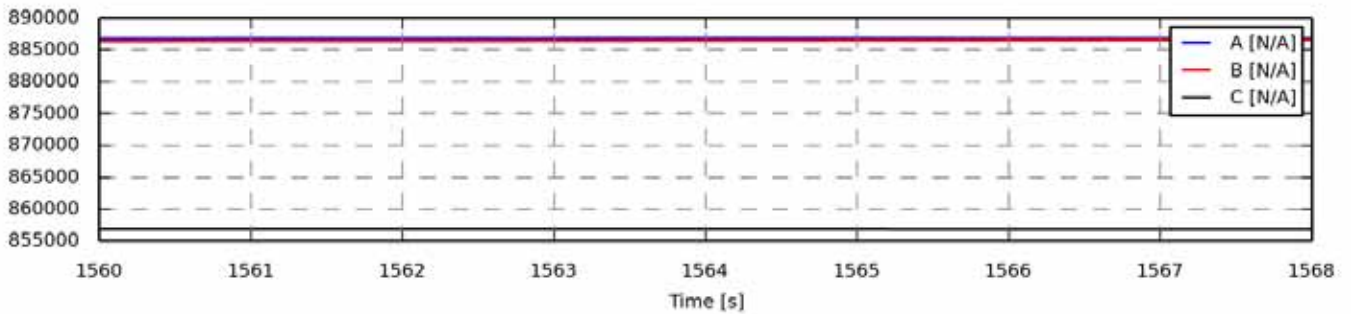


Figure 770 - Zoom of time series

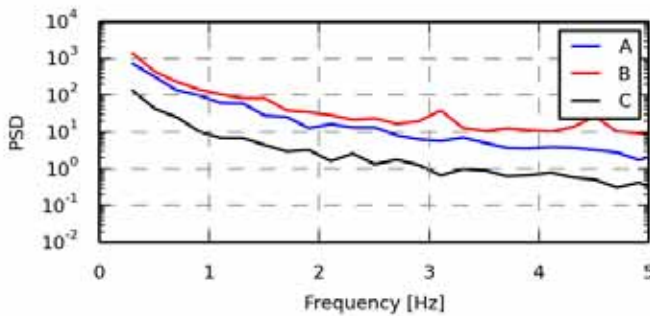


Figure 771 - Power spectrum density

Statistics	A	B	C
Min	8.8641e+05	8.8614e+05	8.5679e+05
Max	8.8708e+05	8.8700e+05	8.5689e+05
Mean	8.8676e+05	8.8649e+05	8.5684e+05
Std	186.9421	260.0868	28.3398
Skewness	-0.1475	0.5265	0.0884
Kurtosis	-0.6891	-1.0951	-1.0018

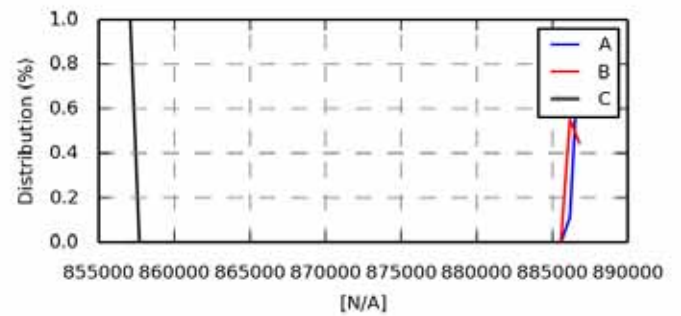


Figure 772 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	130.1126	170.8754	28.6482
Eq (m=4)	192.1507	244.4258	37.9017
Eq (m=6)	287.3246	369.1392	50.8035
Eq (m=8)	353.3438	455.6929	59.4948
Eq (m=10)	400.6788	517.2851	65.9149
Eq (m=12)	435.9106	562.9359	70.9148

Article IX. oc4_p2_load_case_2-4

Generated 22-04-2014 10:03

Section 9.01 oc4_p2_load_case_2-4: WSP gl. coo.,Vy [m/s]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-4.sel (28-02-2014 19:21)	3	Free wind speed Vy, gl. coo, of gl. pos 0.00, 0.00, -90.00
B	WAMsim/oc4_p2_load_case_2-4.sel (01-04-2014 12:45)	3	Free wind speed Vy, gl. coo, of gl. pos 0.00, 0.00, -90.00
C	hawc2/oc4_p2_load_case_2-4.sel (06-12-2013 12:05)	3	Free wind speed Vy, gl. coo, of gl. pos 0.00, 0.00, -90.00

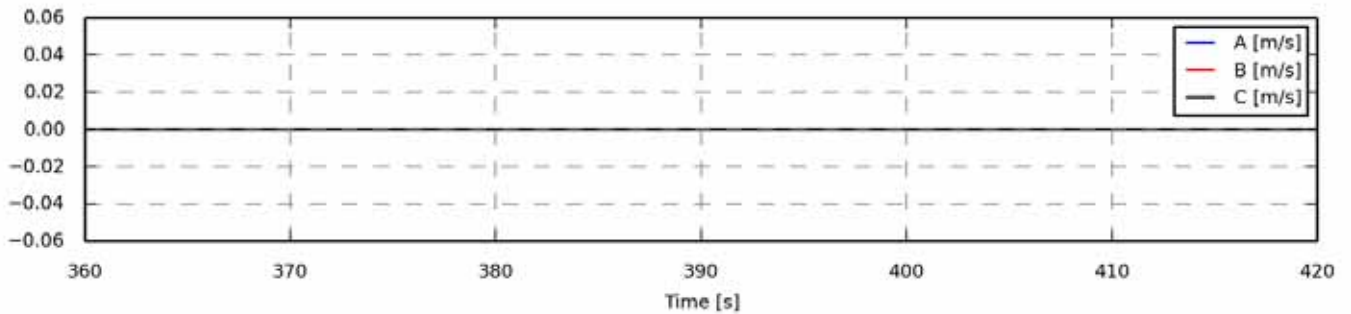


Figure 773 - Full length time series

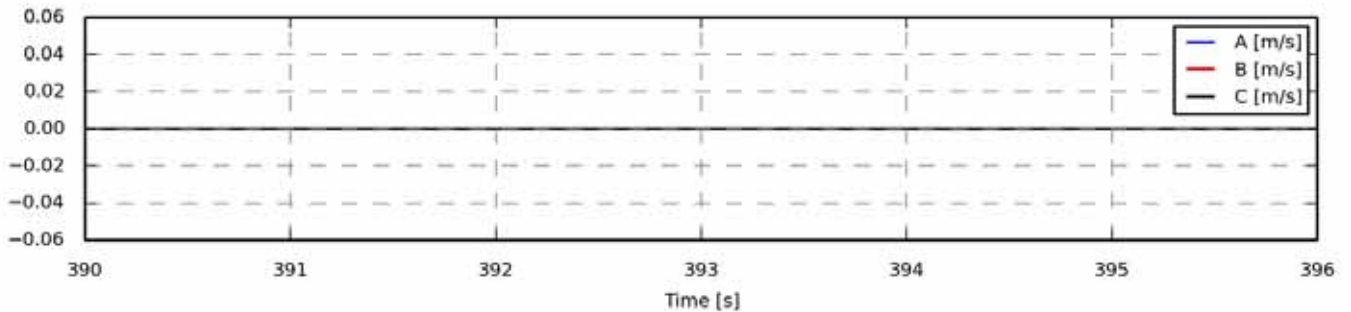


Figure 774 - Zoom of time series

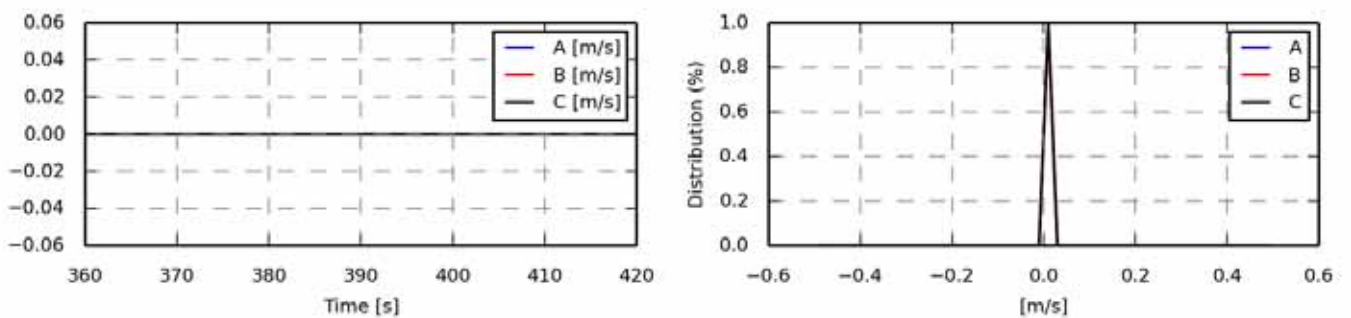


Figure 775 - Power spectrum density

Statistics	A	B	C
Min	0.0000	0.0000	0.0000
Max	0.0000	0.0000	0.0000
Mean	0.0000	0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

Figure 776 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 9.02 oc4_p2_load_case_2-4: Water surf. [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-4.sel (28-02-2014 19:21)	5	Water surface gl. coo, at gl. coo, x,y= 0.00, 0.00
B	WAMsim/oc4_p2_load_case_2-4.sel (01-04-2014 12:45)	5	Constant value
C	hawc2/oc4_p2_load_case_2-4.sel (06-12-2013 12:05)	5	Water surface gl. coo, at gl. coo, x,y= 0.00, 0.00

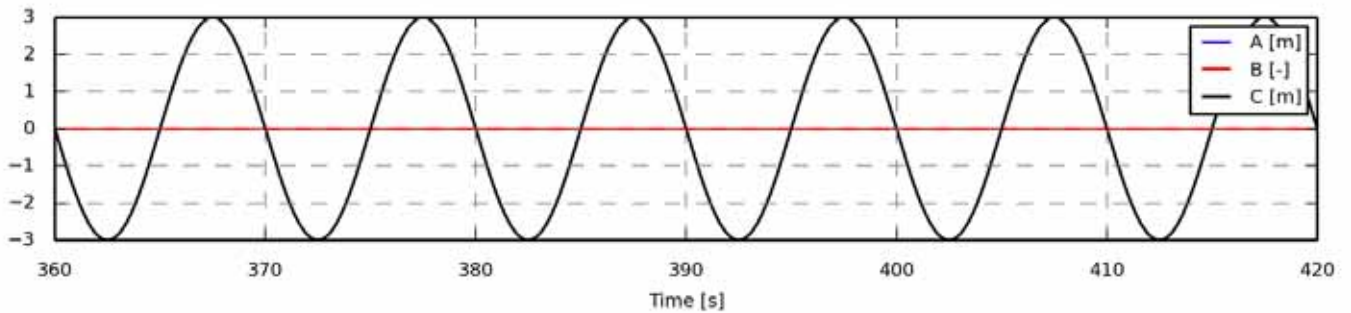


Figure 777 - Full length time series

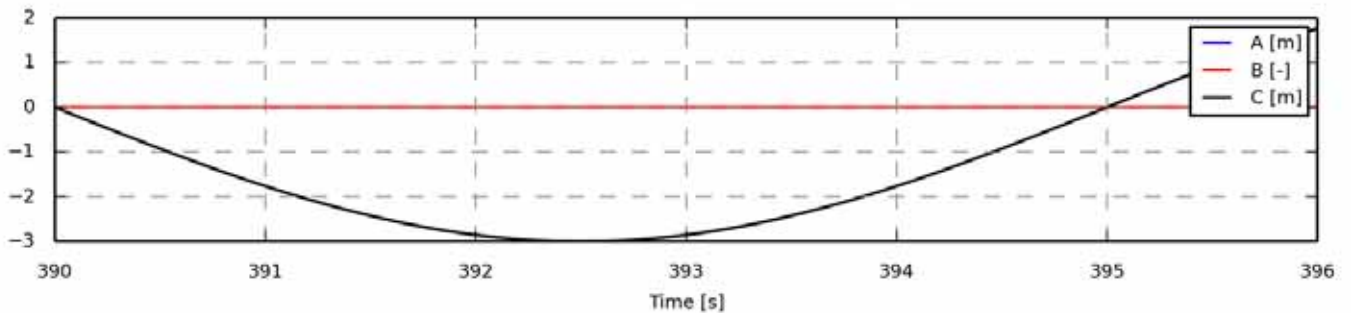


Figure 778 - Zoom of time series

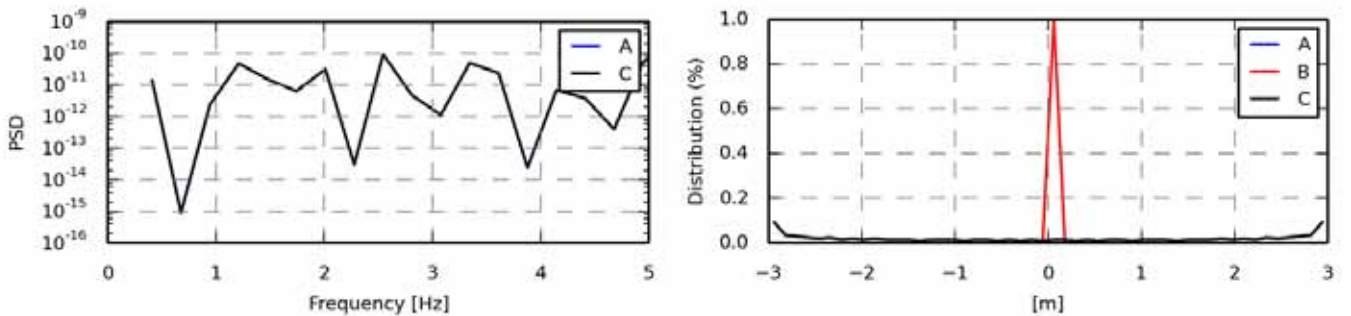


Figure 779 - Power spectrum density

Statistics	A	B	C
Min	-3.0000	0.0000	-3.0000
Max	3.0000	0.0000	3.0000
Mean	-0.0000	0.0000	-0.0000
Std	2.1213	0.0000	2.1213
Skewness	0.0000	0.0000	0.0000
Kurtosis	-1.5000	-3.0000	-1.5000

Figure 780 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	2.7257	-	2.7257
Eq (m=4)	3.3108	-	3.3108
Eq (m=6)	4.0308	-	4.0308
Eq (m=8)	4.4511	-	4.4511
Eq (m=10)	4.7248	-	4.7248
Eq (m=12)	4.9167	-	4.9167

Section 9.03 oc4_p2_load_case_2-4: Constant [-]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-4.sel (28-02-2014 19:21)	6	Constant value
B	WAMsim/oc4_p2_load_case_2-4.sel (01-04-2014 12:45)	6	Constant value
C	hawc2/oc4_p2_load_case_2-4.sel (06-12-2013 12:05)	6	Constant value

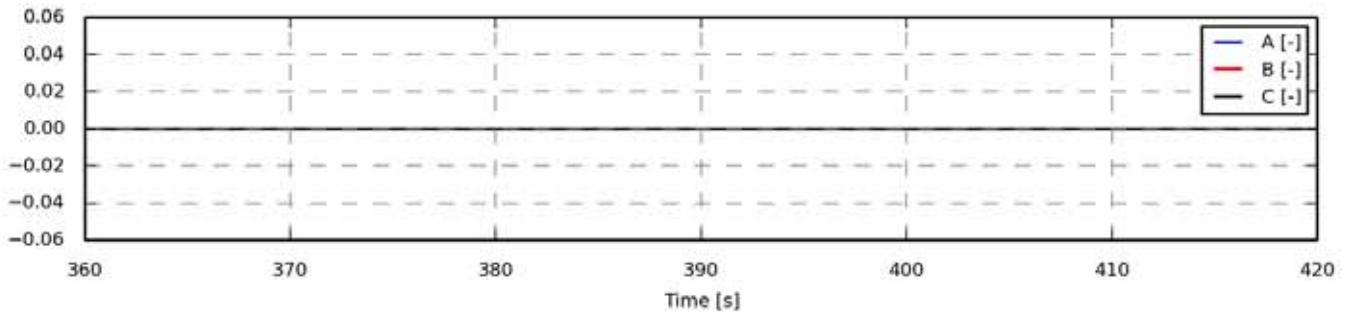


Figure 781 - Full length time series

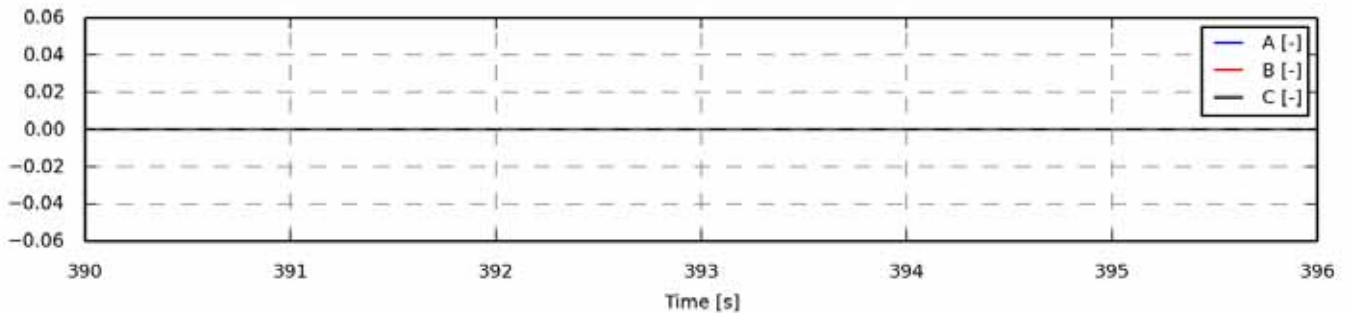


Figure 782 - Zoom of time series

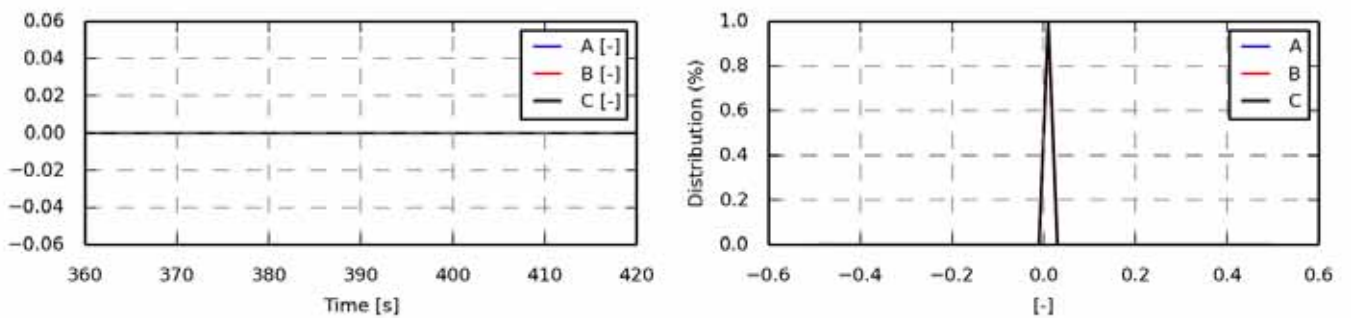


Figure 783 - Power spectrum density

Statistics	A	B	C
Min	0.0000	0.0000	0.0000
Max	0.0000	0.0000	0.0000
Mean	0.0000	0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

Figure 784 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 9.04 oc4_p2_load_case_2-4: Constant [-]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-4.sel (28-02-2014 19:21)	9	Constant value
B	WAMsim/oc4_p2_load_case_2-4.sel (01-04-2014 12:45)	9	Constant value
C	hawc2/oc4_p2_load_case_2-4.sel (06-12-2013 12:05)	9	Constant value

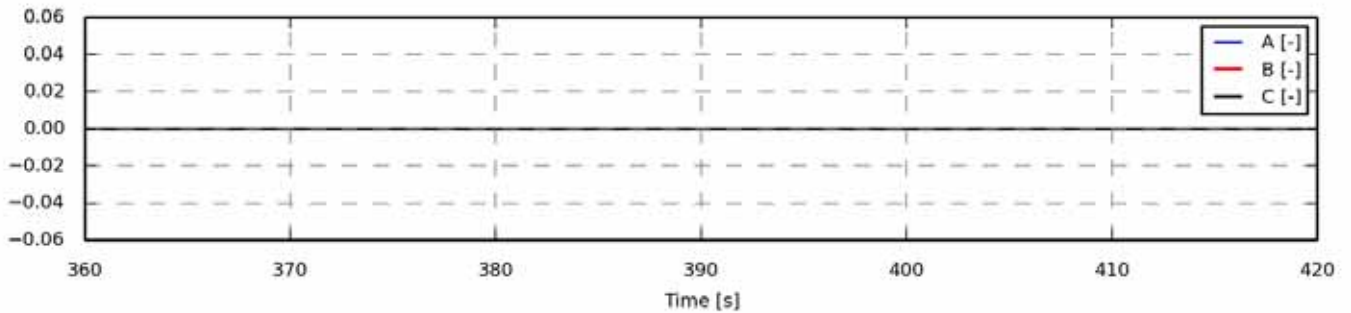


Figure 785 - Full length time series

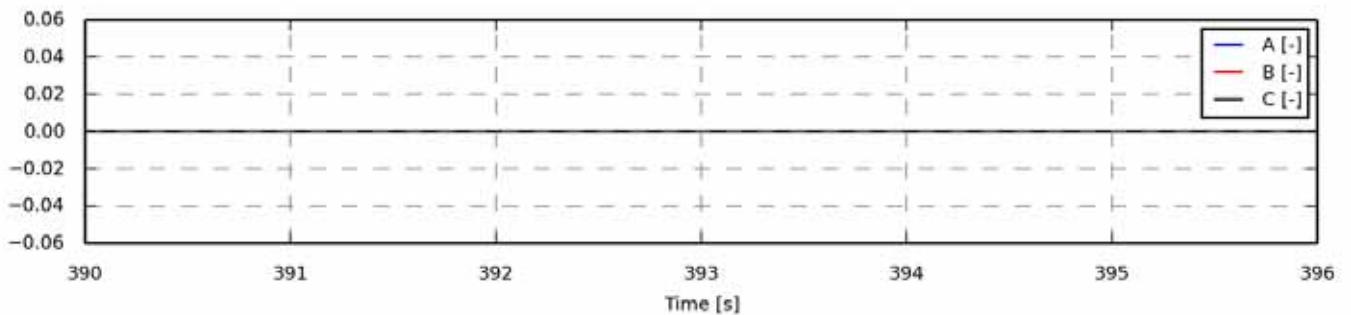


Figure 786 - Zoom of time series

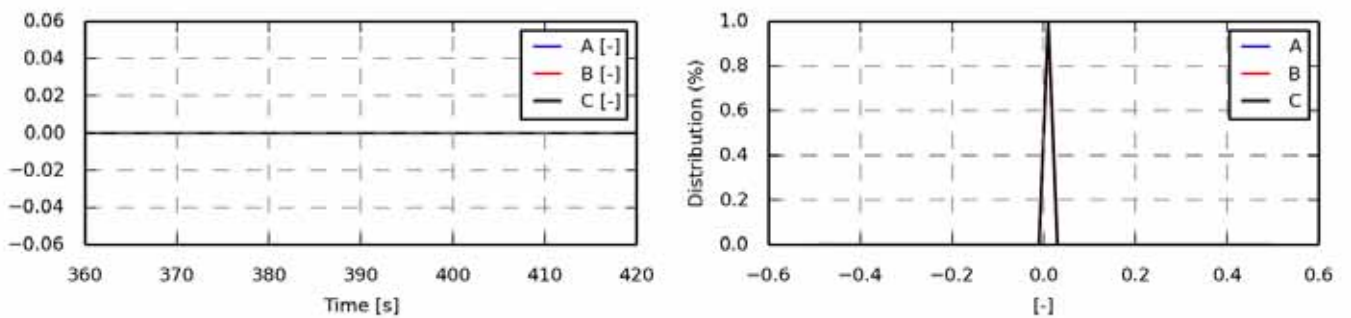


Figure 787 - Power spectrum density

Statistics	A	B	C
Min	0.0000	0.0000	0.0000
Max	0.0000	0.0000	0.0000
Mean	0.0000	0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

Figure 788 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 9.05 oc4_p2_load_case_2-4: bea1 angle [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-4.sel (28-02-2014 19:21)	14	pitch1 angle
B	WAMsim/oc4_p2_load_case_2-4.sel (01-04-2014 12:45)	14	pitch1 angle
C	hawc2/oc4_p2_load_case_2-4.sel (06-12-2013 12:05)	14	pitch1 angle

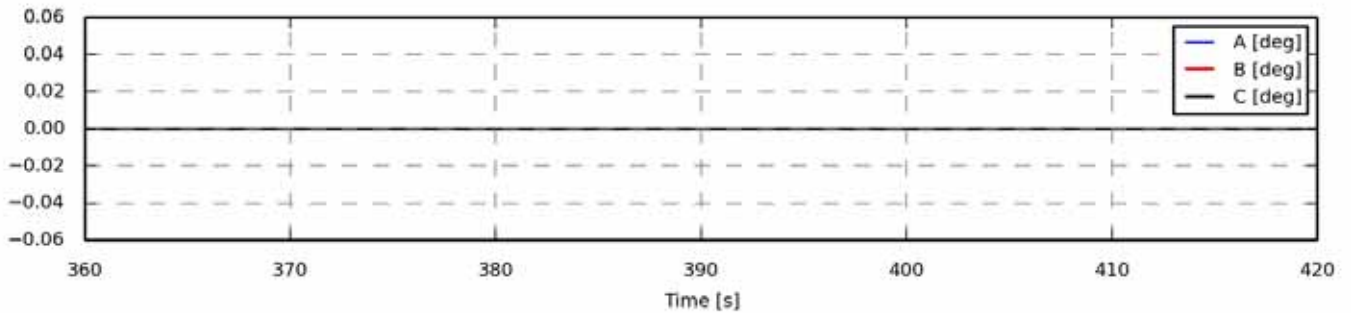


Figure 789 - Full length time series

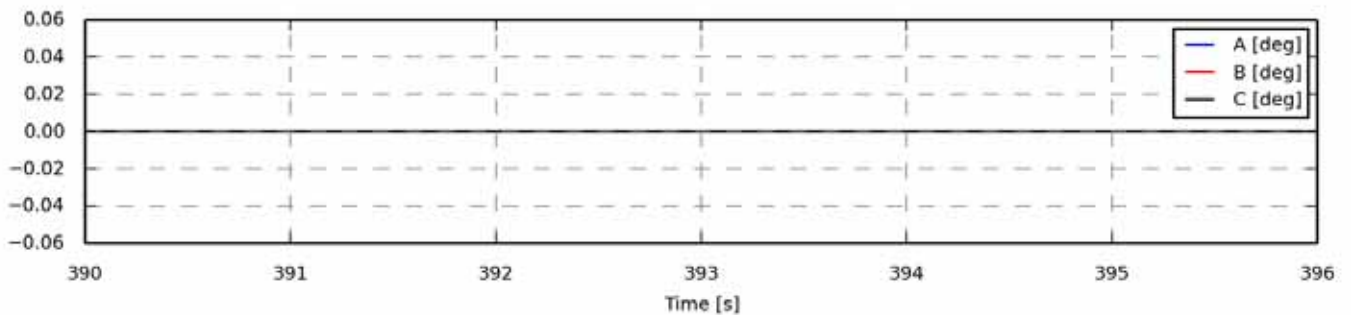


Figure 790 - Zoom of time series

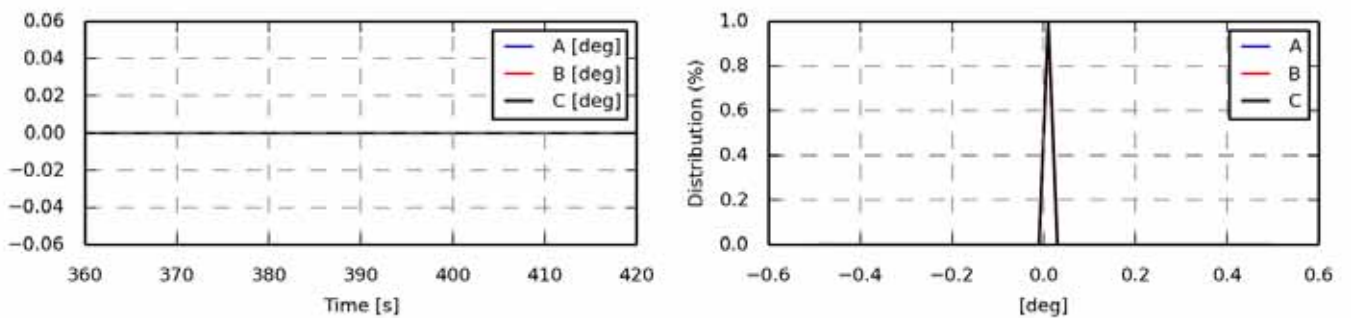


Figure 791 - Power spectrum density

Statistics	A	B	C
Min	0.0000	0.0000	0.0000
Max	0.0000	0.0000	0.0000
Mean	0.0000	0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

Figure 792 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 9.06 oc4_p2_load_case_2-4: State pos x coo: global [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-4.sel (28-02-2014 19:21)	19	State pos x Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
B	WAMsim/oc4_p2_load_case_2-4.sel (01-04-2014 12:45)	19	State pos x Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
C	hawc2/oc4_p2_load_case_2-4.sel (06-12-2013 12:05)	19	State pos x Mbdy:mc E-nr: 8 Z-rel:0.00 coo: global platform translation in surge sway and heave

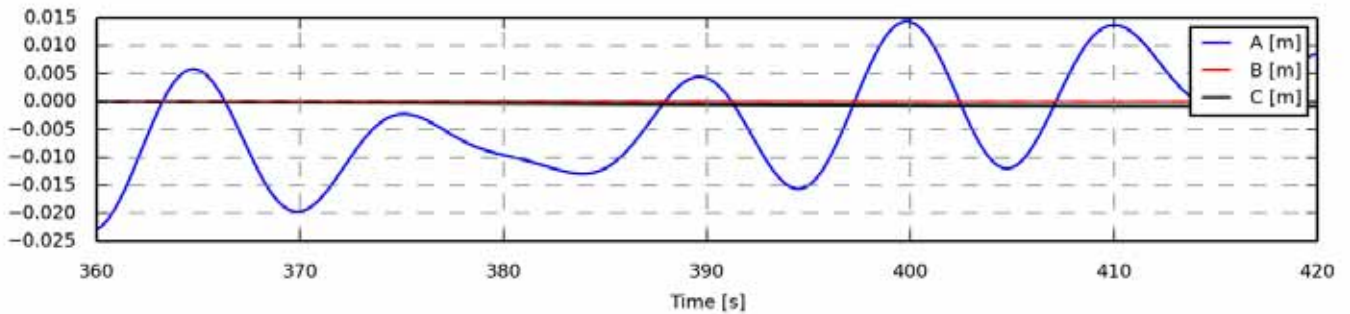


Figure 793 - Full length time series

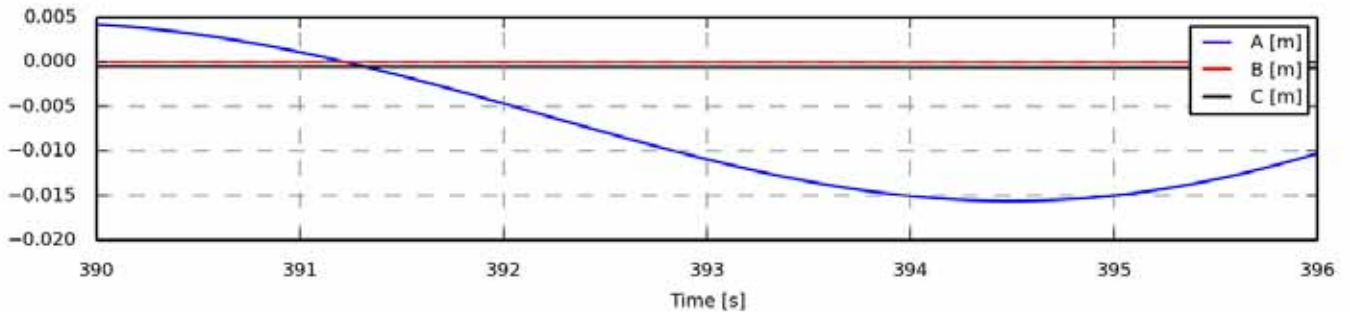


Figure 794 - Zoom of time series

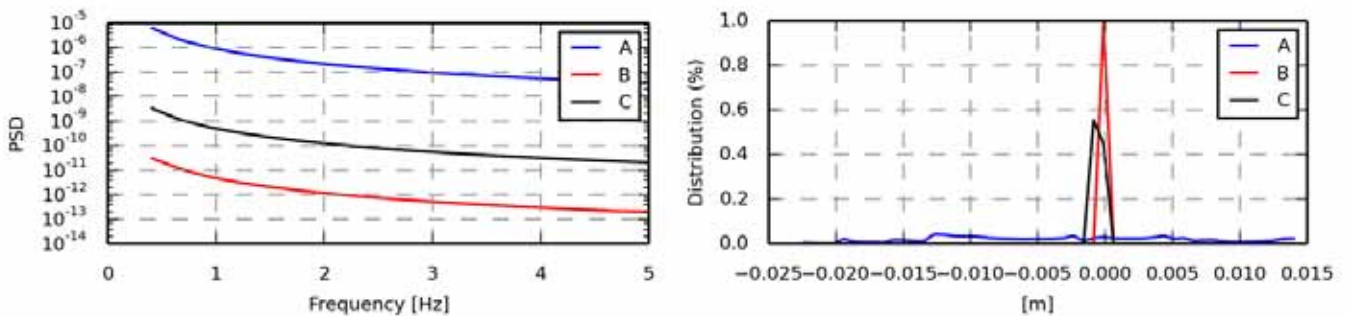


Figure 795 - Power spectrum density

Statistics	A	B	C
Min	-0.0228	-0.0000	-0.0008
Max	0.0144	0.0000	-0.0001
Mean	-0.0033	0.0000	-0.0005
Std	0.0091	0.0000	0.0003
Skewness	0.1023	-0.0566	0.2205
Kurtosis	-0.8849	-1.7549	-1.4473

Figure 796 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.0105	0.0000	0.0002
Eq (m=4)	0.0135	0.0000	0.0002
Eq (m=6)	0.0179	0.0000	0.0003
Eq (m=8)	0.0209	0.0001	0.0004
Eq (m=10)	0.0232	0.0001	0.0005
Eq (m=12)	0.0250	0.0001	0.0005

Section 9.07 oc4_p2_load_case_2-4: State pos y coo: global [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-4.sel (28-02-2014 19:21)	20	State pos y Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
B	WAMsim/oc4_p2_load_case_2-4.sel (01-04-2014 12:45)	20	State pos y Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
C	hawc2/oc4_p2_load_case_2-4.sel (06-12-2013 12:05)	20	State pos y Mbdy:mc E-nr: 8 Z-rel:0.00 coo: global platform translation in surge sway and heave

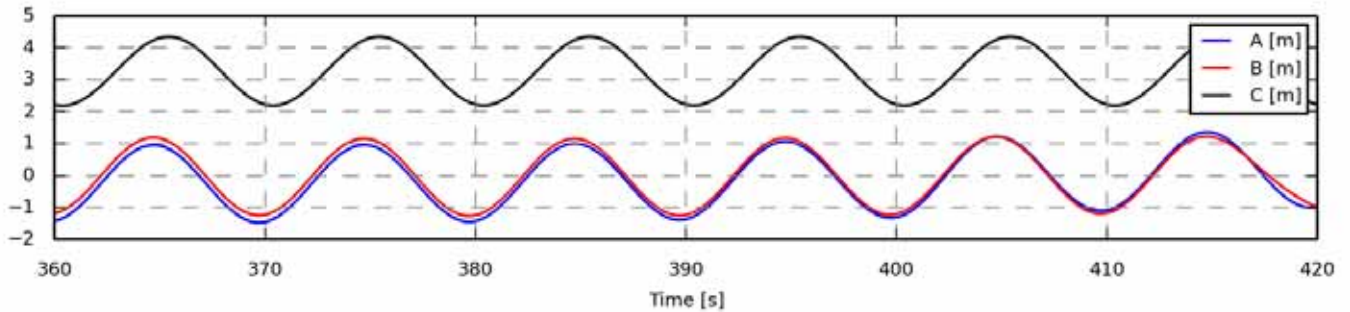


Figure 797 - Full length time series

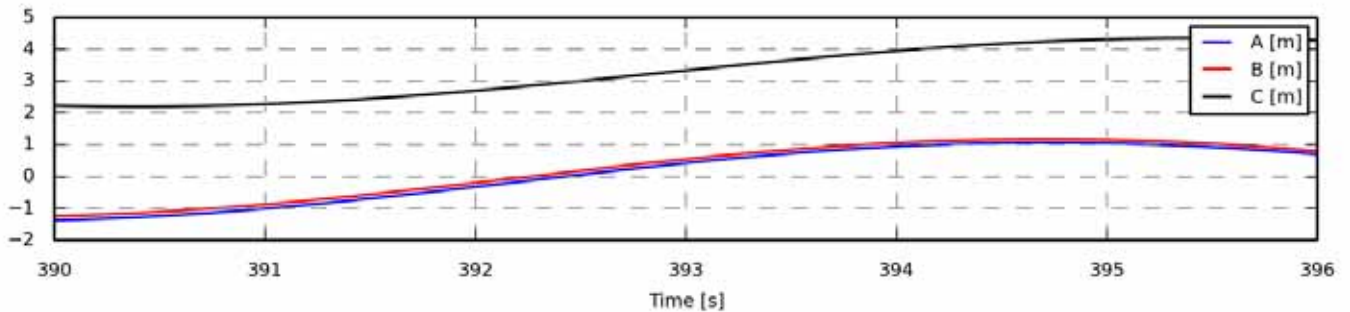


Figure 798 - Zoom of time series

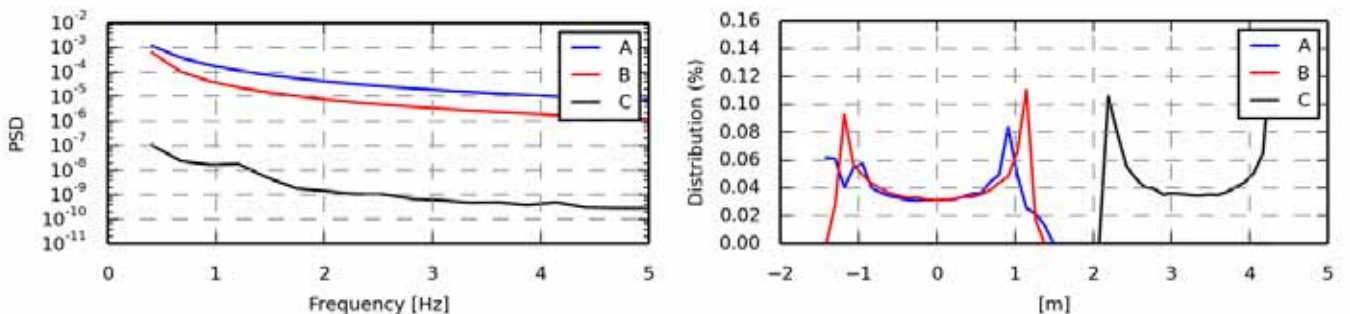


Figure 799 - Power spectrum density

Statistics	A	B	C
Min	-1.4750	-1.2707	2.1864
Max	1.3600	1.2258	4.3451
Mean	-0.1203	-0.0057	3.2671
Std	0.8660	0.8454	0.7611
Skewness	0.0112	-0.0242	-0.0000
Kurtosis	-1.4121	-1.4748	-1.4999

Figure 800 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	1.1284	1.1111	1.0003
Eq (m=4)	1.3694	1.3464	1.2119
Eq (m=6)	1.6653	1.6320	1.4683
Eq (m=8)	1.8409	1.7972	1.6161
Eq (m=10)	1.9596	1.9046	1.7119
Eq (m=12)	2.0474	1.9800	1.7788

Section 9.08 oc4_p2_load_case_2-4: State pos z coo: global [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-4.sel (28-02-2014 19:21)	21	State pos z Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
B	WAMsim/oc4_p2_load_case_2-4.sel (01-04-2014 12:45)	21	State pos z Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
C	hawc2/oc4_p2_load_case_2-4.sel (06-12-2013 12:05)	21	State pos z Mbdy:mc E-nr: 8 Z-rel:0.00 coo: global platform translation in surge sway and heave

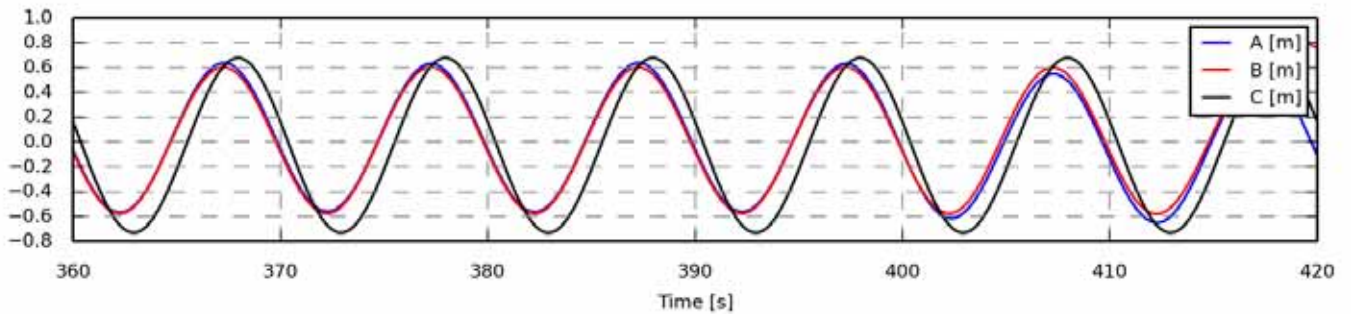


Figure 801 - Full length time series

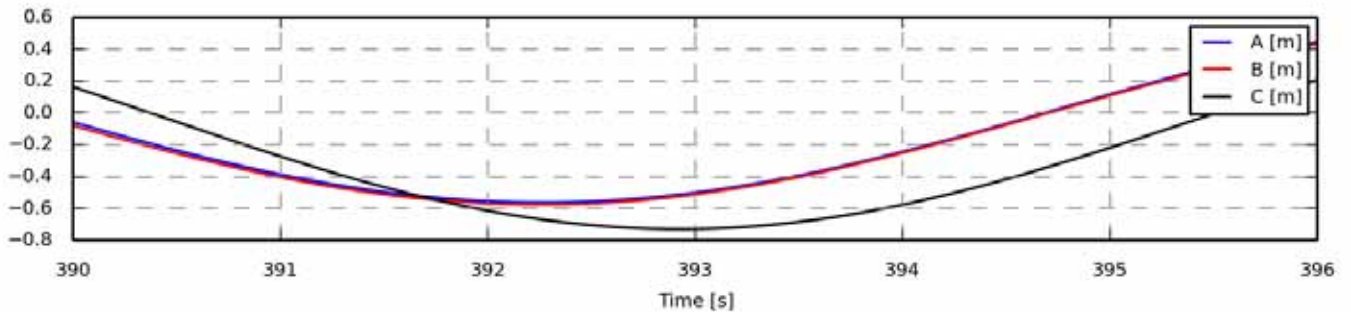


Figure 802 - Zoom of time series

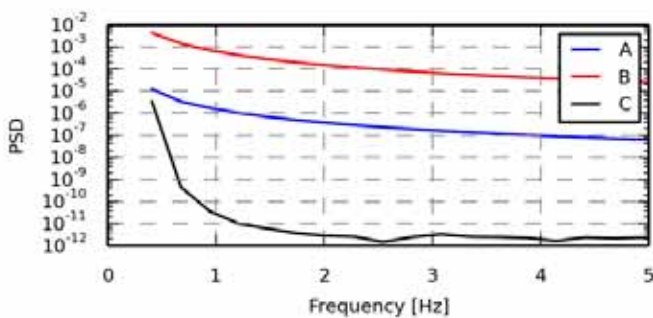


Figure 803 - Power spectrum density

Statistics	A	B	C
Min	-0.6499	-0.5800	-0.7304
Max	0.6373	0.8226	0.6782
Mean	0.0087	0.0330	-0.0290
Std	0.4237	0.4415	0.4970
Skewness	0.0099	0.0813	0.0082
Kurtosis	-1.4768	-1.4170	-1.4961

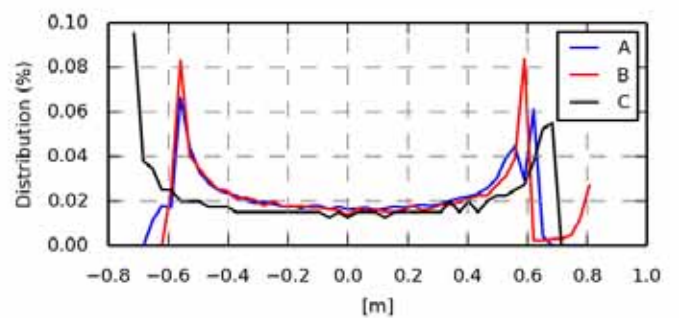


Figure 804 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.5447	0.5431	0.6406
Eq (m=4)	0.6620	0.6630	0.7780
Eq (m=6)	0.8067	0.8119	0.9467
Eq (m=8)	0.8916	0.9010	1.0452
Eq (m=10)	0.9473	0.9615	1.1093
Eq (m=12)	0.9867	1.0064	1.1543

Section 9.09 oc4_p2_load_case_2-4: proj_ang tx coo: global [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-4.sel (28-02-2014 19:21)	22	State_rot proj_ang tx Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
B	WAMsim/oc4_p2_load_case_2-4.sel (01-04-2014 12:45)	22	State_rot proj_ang tx Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
C	hawc2/oc4_p2_load_case_2-4.sel (06-12-2013 12:05)	22	State_rot proj_ang tx Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw

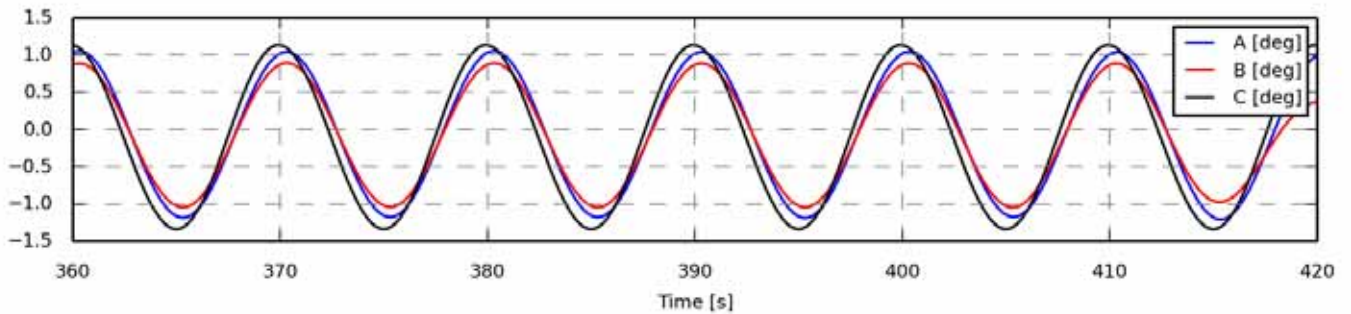


Figure 805 - Full length time series

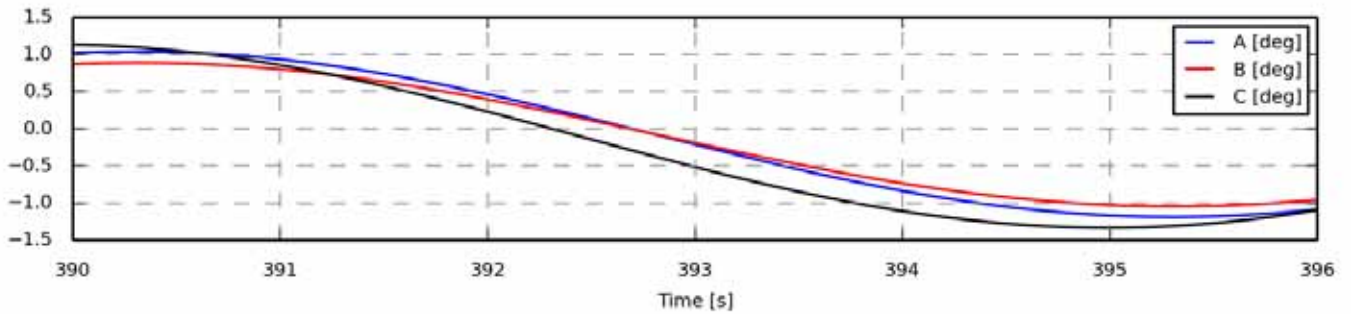


Figure 806 - Zoom of time series

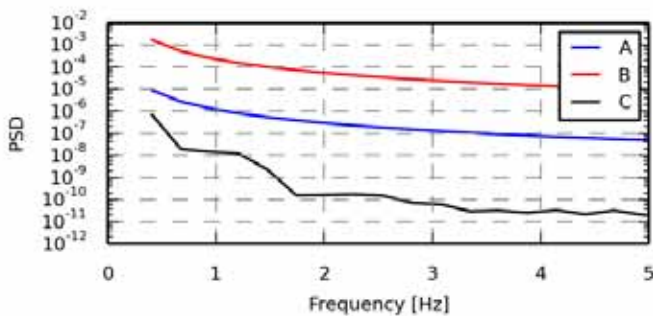


Figure 807 - Power spectrum density

Statistics	A	B	C
Min	-1.2057	-1.0461	-1.3342
Max	1.0537	0.8936	1.1331
Mean	-0.0709	-0.0862	-0.1065
Std	0.7872	0.6717	0.8718
Skewness	0.0001	0.0275	0.0103
Kurtosis	-1.4991	-1.4665	-1.4997

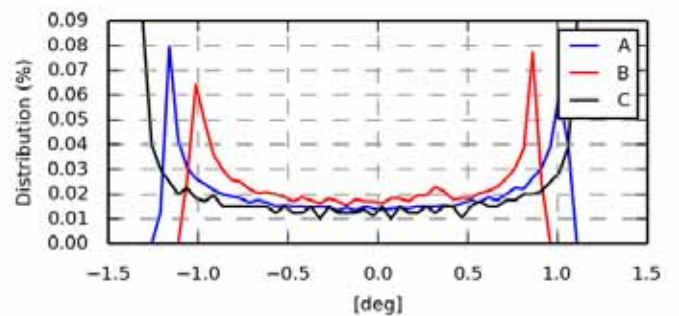


Figure 808 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	1.0330	0.8806	1.1452
Eq (m=4)	1.2515	1.0695	1.3875
Eq (m=6)	1.5162	1.3005	1.6810
Eq (m=8)	1.6689	1.4352	1.8502
Eq (m=10)	1.7678	1.5231	1.9599
Eq (m=12)	1.8369	1.5849	2.0366

Section 9.10 oc4_p2_load_case_2-4: proj_ang ty coo: global [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-4.sel (28-02-2014 19:21)	23	State_rot proj_ang ty Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
B	WAMsim/oc4_p2_load_case_2-4.sel (01-04-2014 12:45)	23	State_rot proj_ang ty Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
C	hawc2/oc4_p2_load_case_2-4.sel (06-12-2013 12:05)	23	State_rot proj_ang ty Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw

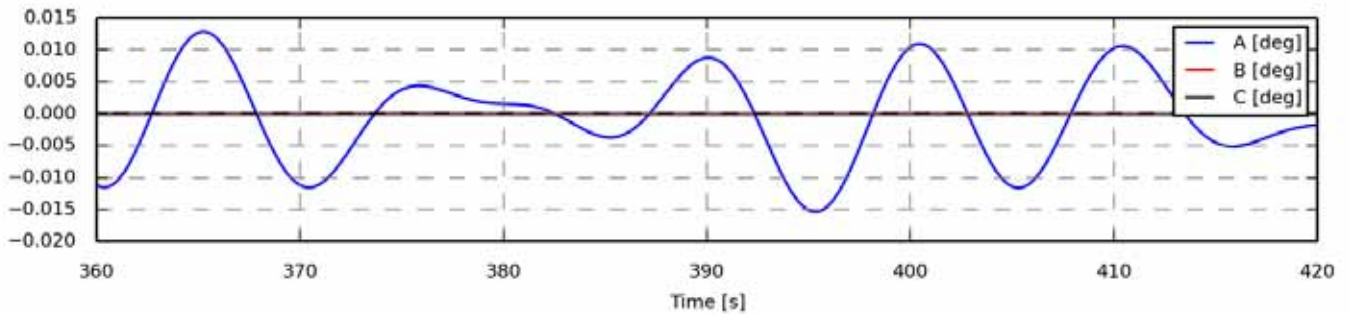


Figure 809 - Full length time series

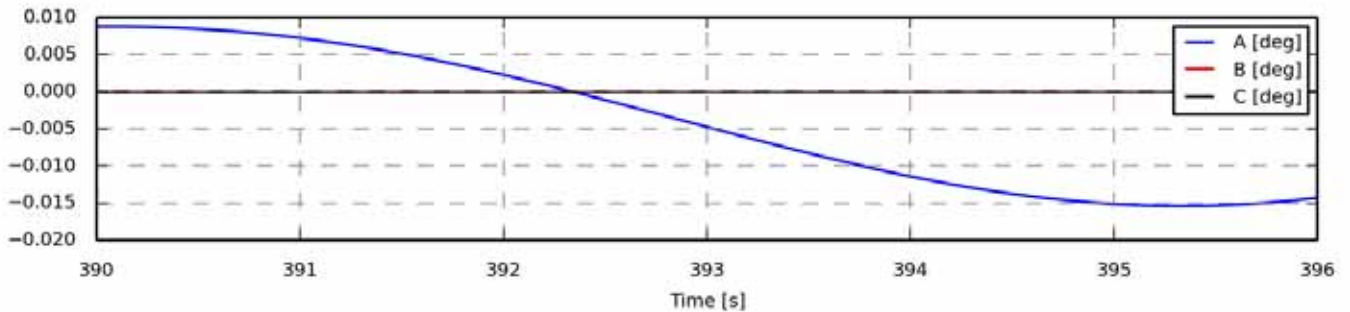


Figure 810 - Zoom of time series

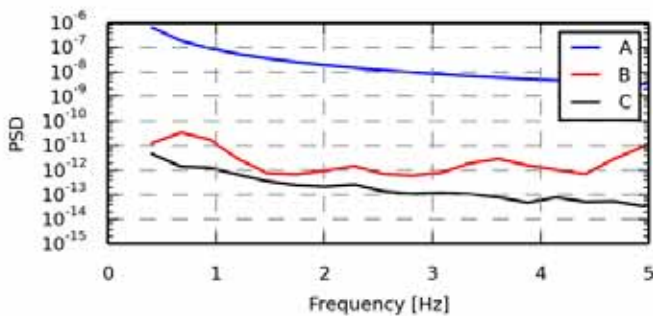


Figure 811 - Power spectrum density

Statistics	A	B	C
Min	-0.0154	-0.0001	-0.0000
Max	0.0128	0.0001	-0.0000
Mean	-0.0005	-0.0000	-0.0000
Std	0.0070	0.0000	0.0000
Skewness	-0.1172	0.2249	0.1942
Kurtosis	-0.8035	-0.1363	-0.8327

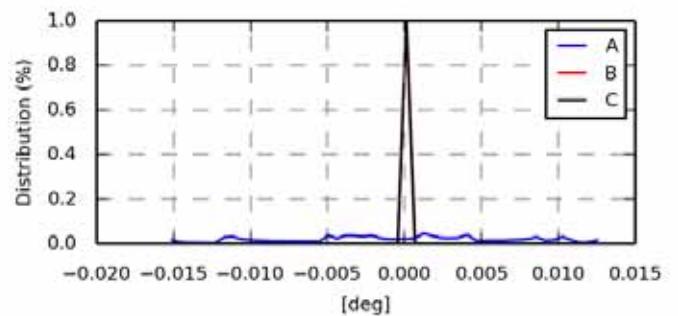


Figure 812 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.0094	0.0001	0.0000
Eq (m=4)	0.0119	0.0001	0.0000
Eq (m=6)	0.0152	0.0001	0.0000
Eq (m=8)	0.0173	0.0001	0.0000
Eq (m=10)	0.0188	0.0001	0.0000
Eq (m=12)	0.0199	0.0001	0.0000

Section 9.11 oc4_p2_load_case_2-4: proj_ang tz coo: global [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-4.sel (28-02-2014 19:21)	24	State_rot proj_ang tz Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
B	WAMsim/oc4_p2_load_case_2-4.sel (01-04-2014 12:45)	24	State_rot proj_ang tz Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
C	hawc2/oc4_p2_load_case_2-4.sel (06-12-2013 12:05)	24	State_rot proj_ang tz Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw

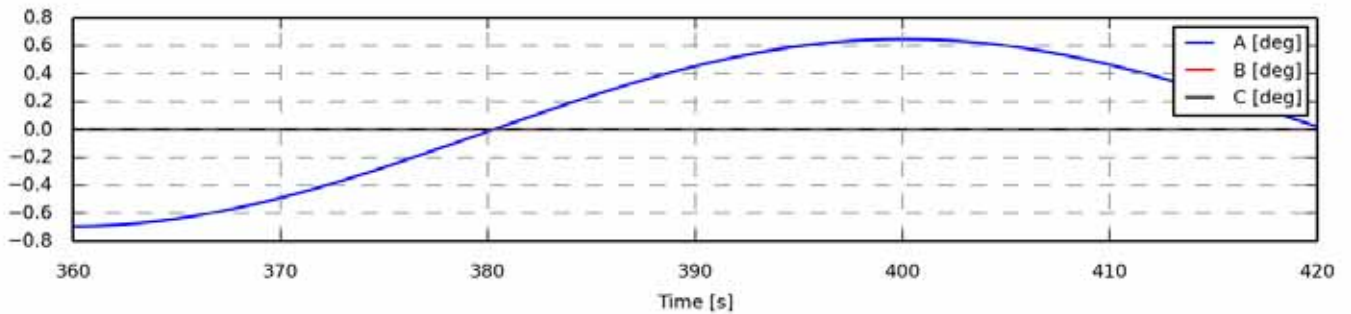


Figure 813 - Full length time series

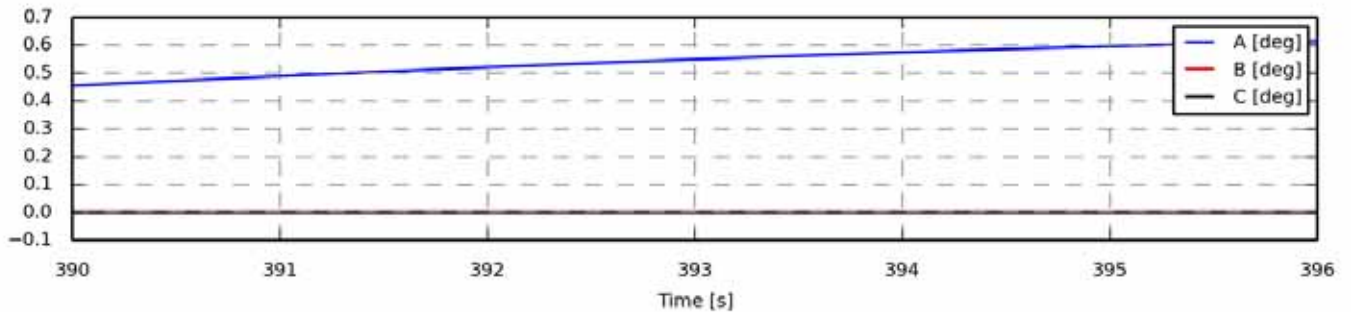


Figure 814 - Zoom of time series

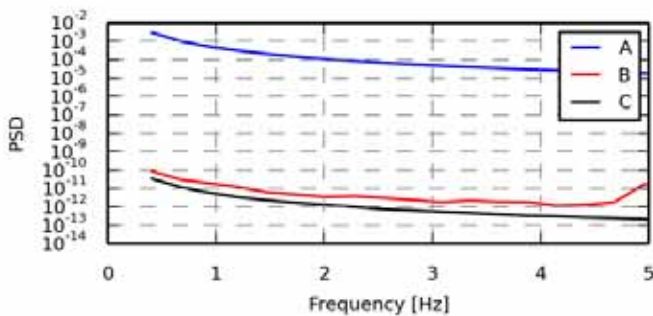


Figure 815 - Power spectrum density

Statistics	A	B	C
Min	-0.6923	-0.0001	-0.0001
Max	0.6471	0.0002	0.0001
Mean	0.1281	0.0001	-0.0000
Std	0.4511	0.0001	0.0000
Skewness	-0.5463	0.2957	0.4367
Kurtosis	-1.1199	-1.5644	-1.1991

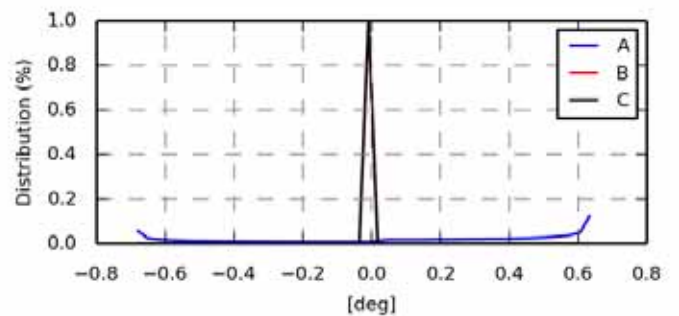


Figure 816 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.2801	0.0001	0.0000
Eq (m=4)	0.4091	0.0001	0.0000
Eq (m=6)	0.6040	0.0001	0.0001
Eq (m=8)	0.7364	0.0002	0.0001
Eq (m=10)	0.8298	0.0002	0.0001
Eq (m=12)	0.8987	0.0002	0.0001

Section 9.12 oc4_p2_load_case_2-4: Mx coo: towertop [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-4.sel (28-02-2014 19:21)	37	MomentMx Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
B	WAMsim/oc4_p2_load_case_2-4.sel (01-04-2014 12:45)	37	MomentMx Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
C	hawc2/oc4_p2_load_case_2-4.sel (06-12-2013 12:05)	37	MomentMx Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment

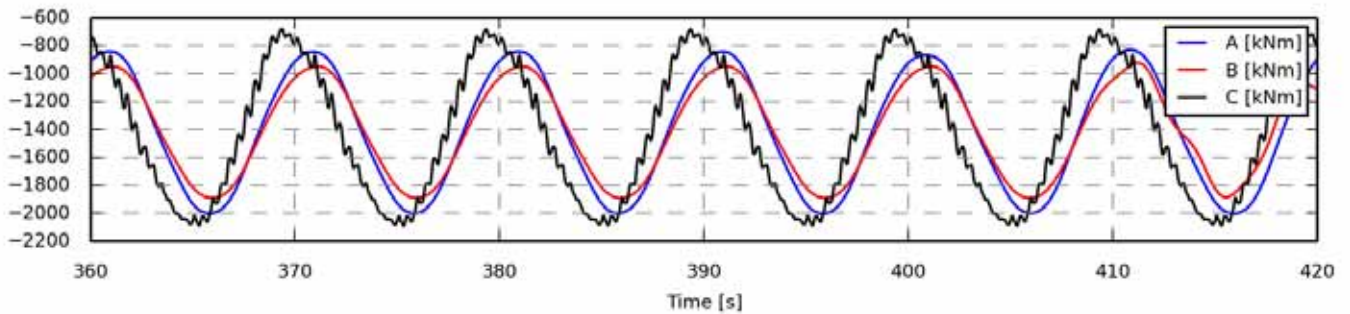


Figure 817 - Full length time series

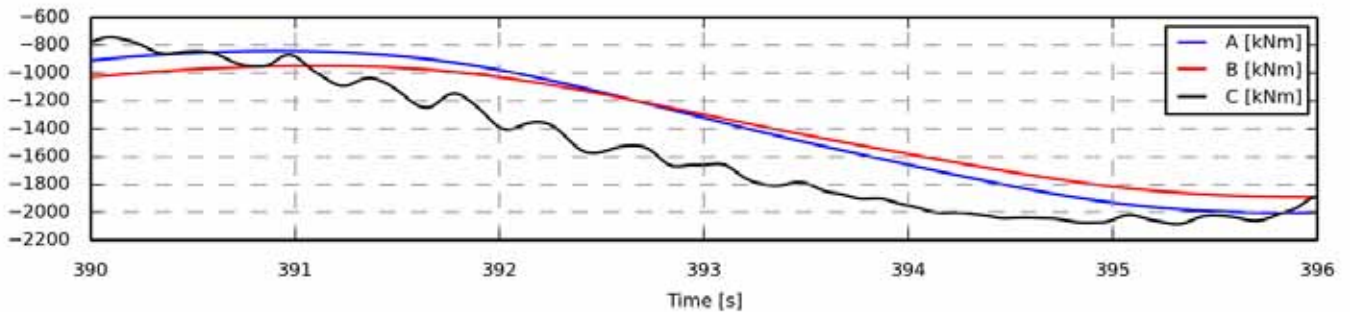


Figure 818 - Zoom of time series

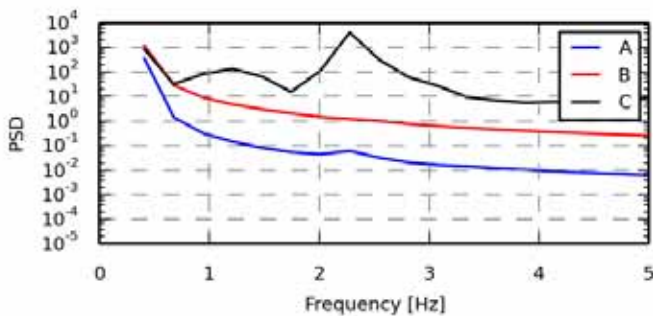


Figure 819 - Power spectrum density

Statistics	A	B	C
Min	-2.0034e+03	-1.8921e+03	-2.0858e+03
Max	-8.3008e+02	-9.2181e+02	-6.8328e+02
Mean	-1.4157e+03	-1.4083e+03	-1.4179e+03
Std	414.0421	334.8450	474.3680
Skewness	-0.0202	-0.0453	0.0880
Kurtosis	-1.5047	-1.5011	-1.4709

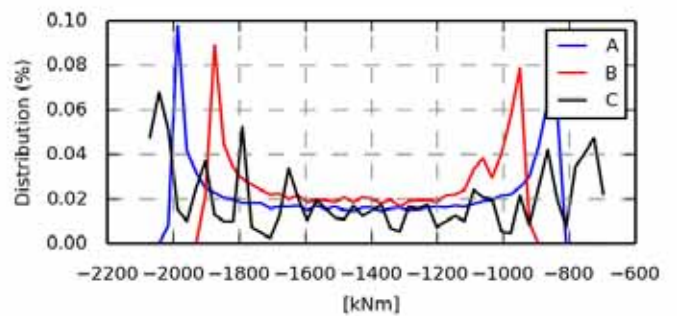


Figure 820 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	536.6174	438.8901	649.2533
Eq (m=4)	650.2380	531.9980	786.2047
Eq (m=6)	788.0521	645.1391	952.5923
Eq (m=8)	867.6913	710.6781	1.0486e+03
Eq (m=10)	919.3974	753.3151	1.1109e+03
Eq (m=12)	955.6581	783.2587	1.1545e+03

Section 9.13 oc4_p2_load_case_2-4: My coo: towertop [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-4.sel (28-02-2014 19:21)	38	MomentMy Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
B	WAMsim/oc4_p2_load_case_2-4.sel (01-04-2014 12:45)	38	MomentMy Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
C	hawc2/oc4_p2_load_case_2-4.sel (06-12-2013 12:05)	38	MomentMy Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment

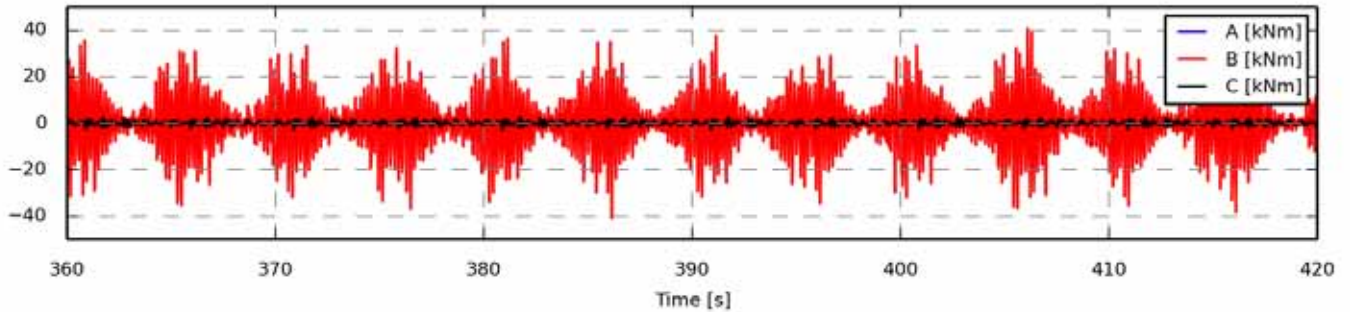


Figure 821 - Full length time series

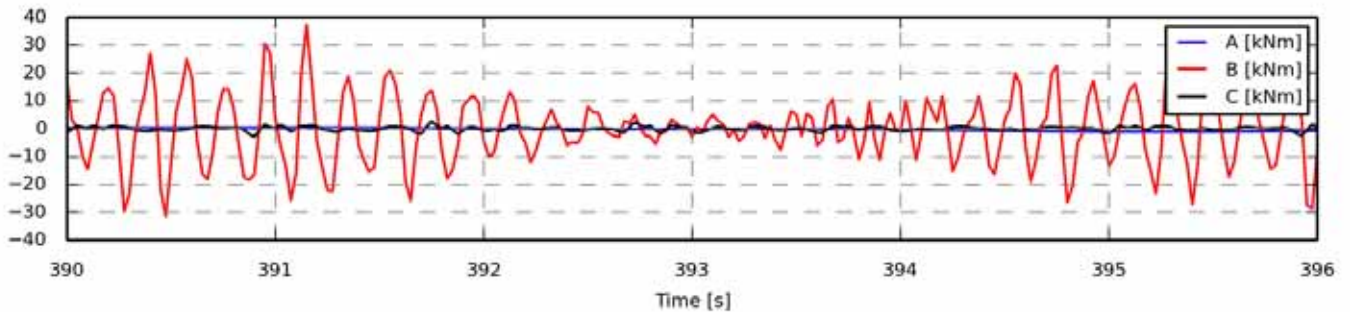


Figure 822 - Zoom of time series

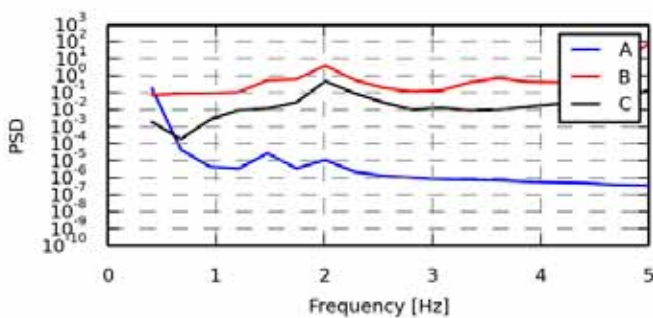


Figure 823 - Power spectrum density

Statistics	A	B	C
Min	-1.1151	-40.9680	-2.7846
Max	1.0140	40.5391	2.5806
Mean	-0.0061	0.0178	-0.0035
Std	0.4845	11.7992	0.7425
Skewness	-0.3657	0.0104	-0.2834
Kurtosis	-0.4703	0.5287	0.7754

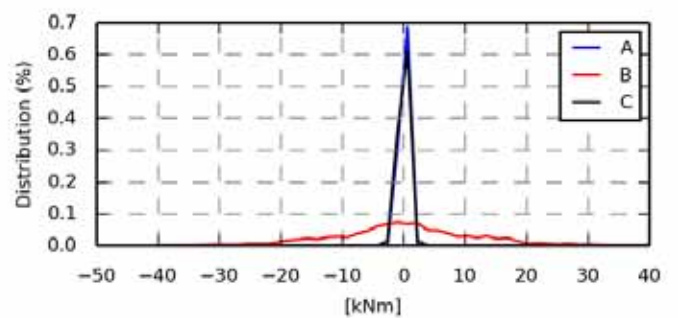


Figure 824 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.6911	66.5018	4.1367
Eq (m=4)	0.8706	62.8668	4.0110
Eq (m=6)	1.1272	61.5095	4.0849
Eq (m=8)	1.2948	62.1182	4.2345
Eq (m=10)	1.4117	63.1268	4.3728
Eq (m=12)	1.4983	64.1827	4.4882

Section 9.14 oc4_p2_load_case_2-4: Mz coo: towertop [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-4.sel (28-02-2014 19:21)	39	MomentMz Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
B	WAMsim/oc4_p2_load_case_2-4.sel (01-04-2014 12:45)	39	MomentMz Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
C	hawc2/oc4_p2_load_case_2-4.sel (06-12-2013 12:05)	39	MomentMz Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment

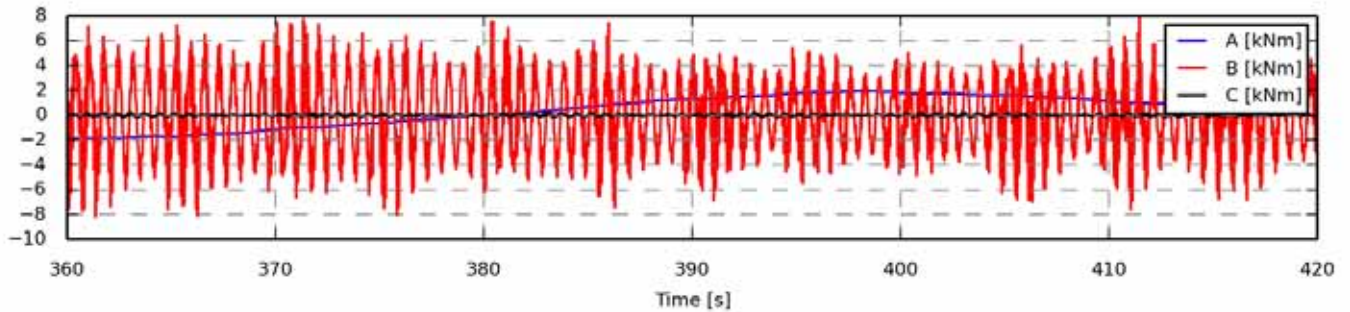


Figure 825 - Full length time series

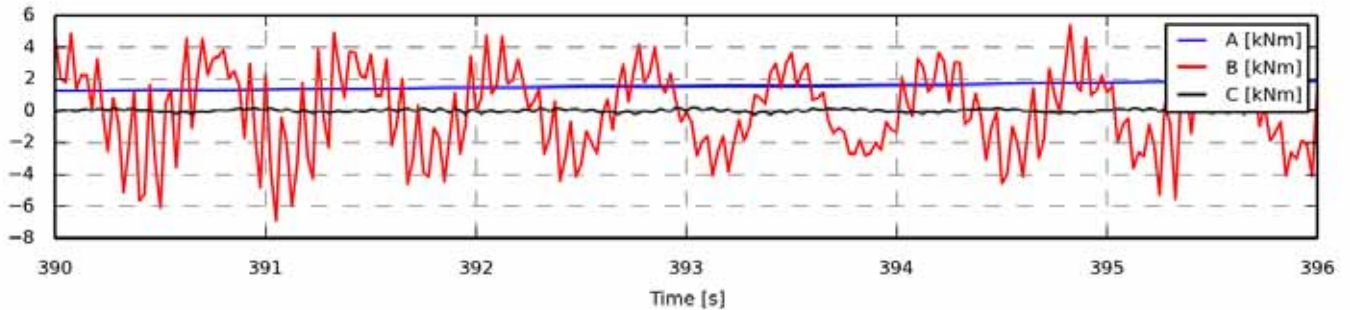


Figure 826 - Zoom of time series

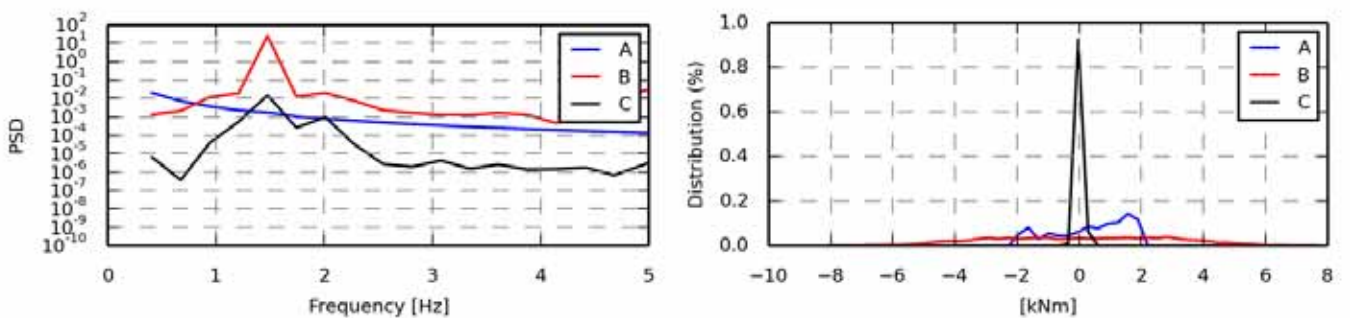


Figure 827 - Power spectrum density

Statistics	A	B	C
Min	-1.9101	-8.2012	-0.2348
Max	1.9432	7.8195	0.2381
Mean	0.3715	-0.0028	0.0007
Std	1.2034	3.0285	0.0832
Skewness	-0.5102	-0.0737	-0.0230
Kurtosis	-1.0441	-0.6386	-0.0616

Figure 828 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.8125	13.4702	0.3963
Eq (m=4)	1.1820	12.7028	0.3734
Eq (m=6)	1.7395	12.4913	0.3694
Eq (m=8)	2.1191	12.6535	0.3754
Eq (m=10)	2.3876	12.8711	0.3824
Eq (m=12)	2.5857	13.0840	0.3891

Section 9.15 oc4_p2_load_case_2-4: Mx coo: tower [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-4.sel (28-02-2014 19:21)	43	MomentMx Mbdy:tower nodenr: 1 coo: tower tower base bending moment
B	WAMsim/oc4_p2_load_case_2-4.sel (01-04-2014 12:45)	43	MomentMx Mbdy:tower nodenr: 1 coo: tower tower base bending moment
C	hawc2/oc4_p2_load_case_2-4.sel (06-12-2013 12:05)	43	MomentMx Mbdy:tower nodenr: 1 coo: tower tower base bending moment

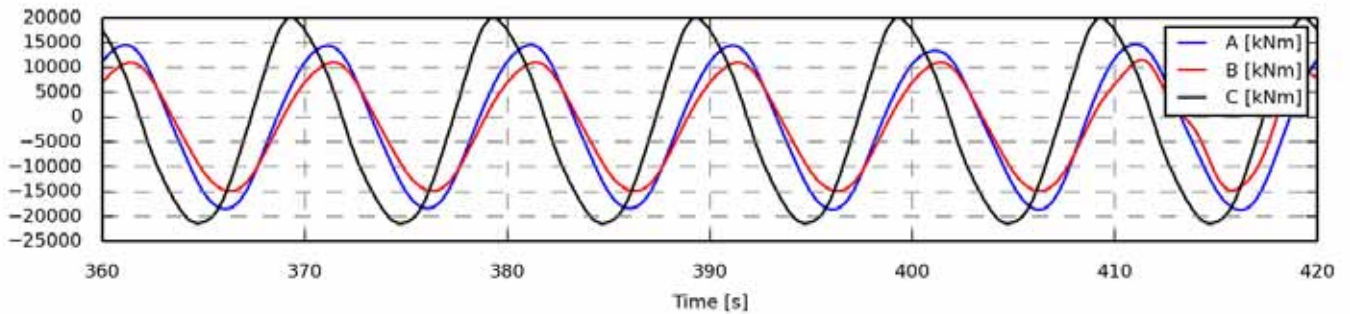


Figure 829 - Full length time series

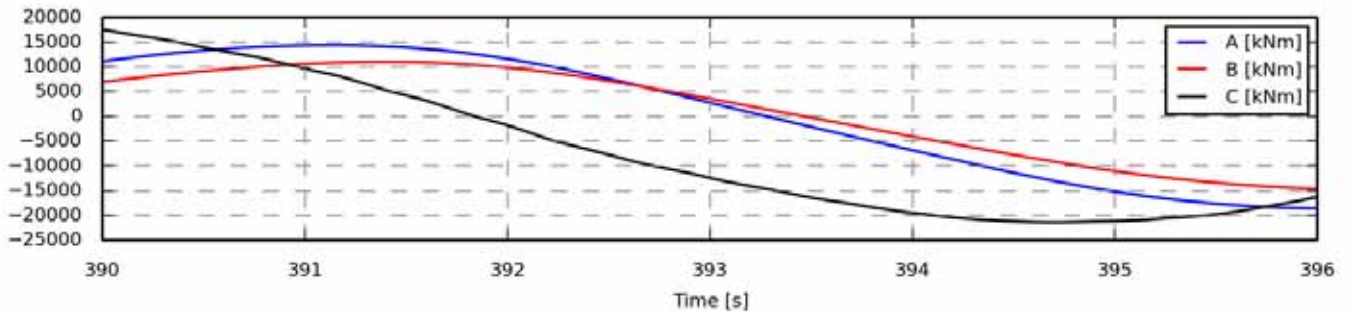


Figure 830 - Zoom of time series

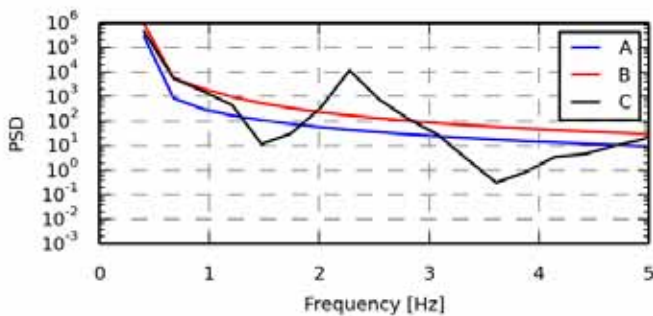


Figure 831 - Power spectrum density

Statistics	A	B	C
Min	-1.8680e+04	-1.4869e+04	-2.1399e+04
Max	1.4613e+04	1.1578e+04	1.9912e+04
Mean	-1.8898e+03	-1.6093e+03	-2.0359e+03
Std	1.1601e+04	9.0934e+03	1.4409e+04
Skewness	-0.0308	-0.0662	0.1211
Kurtosis	-1.4890	-1.4855	-1.4673

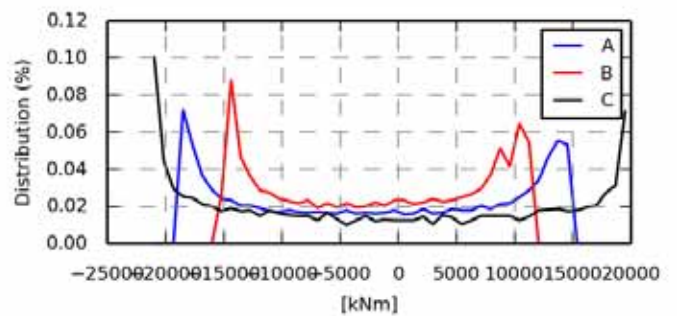


Figure 832 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	1.5077e+04	1.1997e+04	1.9084e+04
Eq (m=4)	1.8270e+04	1.4537e+04	2.3124e+04
Eq (m=6)	2.2147e+04	1.7620e+04	2.8022e+04
Eq (m=8)	2.4390e+04	1.9403e+04	3.0851e+04
Eq (m=10)	2.5847e+04	2.0560e+04	3.2686e+04
Eq (m=12)	2.6870e+04	2.1372e+04	3.3972e+04

Section 9.16 oc4_p2_load_case_2-4: My coo: tower [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-4.sel (28-02-2014 19:21)	44	MomentMy Mbdy:tower nodenr: 1 coo: tower tower base bending moment
B	WAMsim/oc4_p2_load_case_2-4.sel (01-04-2014 12:45)	44	MomentMy Mbdy:tower nodenr: 1 coo: tower tower base bending moment
C	hawc2/oc4_p2_load_case_2-4.sel (06-12-2013 12:05)	44	MomentMy Mbdy:tower nodenr: 1 coo: tower tower base bending moment

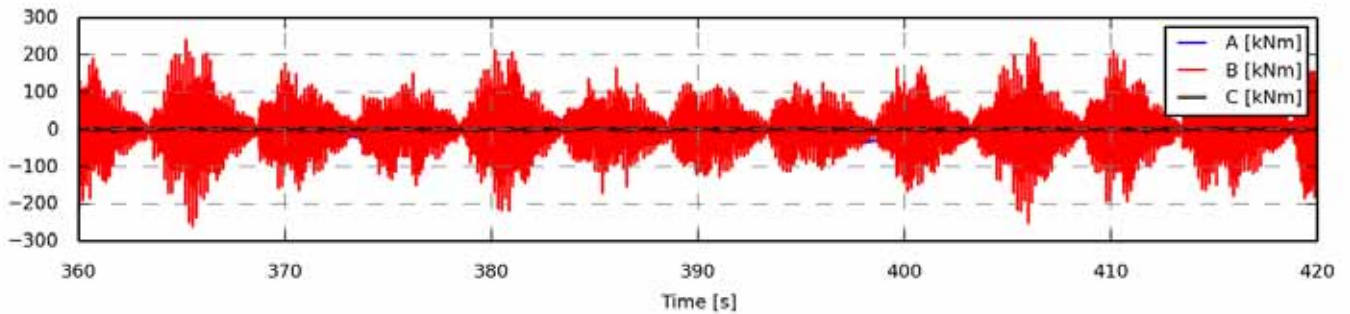


Figure 833 - Full length time series

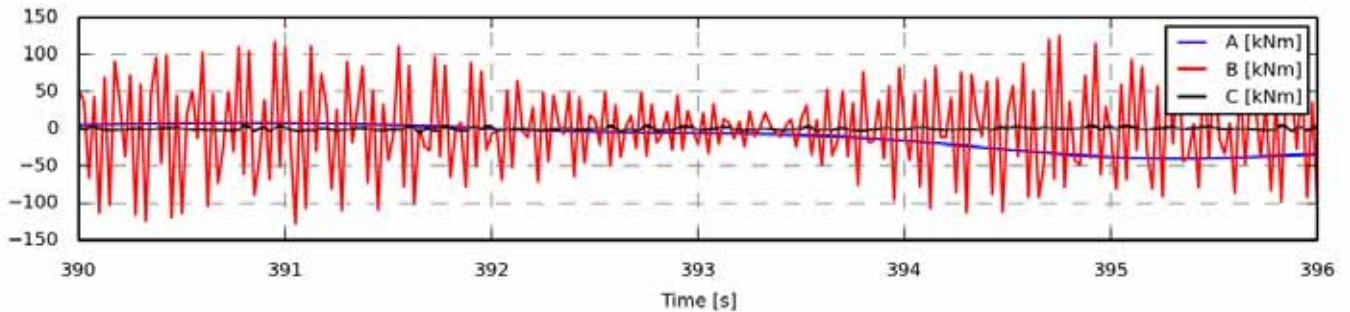


Figure 834 - Zoom of time series

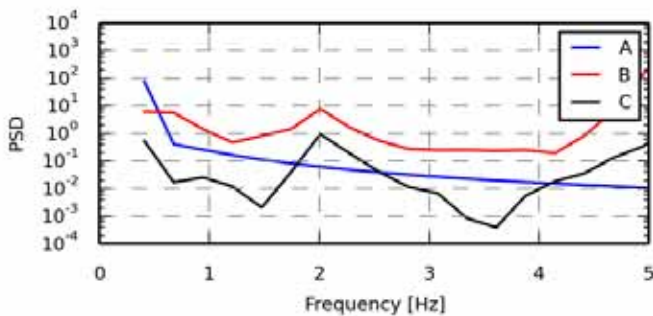


Figure 835 - Power spectrum density

Statistics	A	B	C
Min	-40.1216	-2.5891e+02	-6.0889
Max	32.7455	242.2499	5.2515
Mean	-1.0725	-0.1185	-0.1757
Std	16.4319	73.4693	1.5434
Skewness	-0.3278	-0.0196	0.3765
Kurtosis	-0.2111	0.1718	0.8907

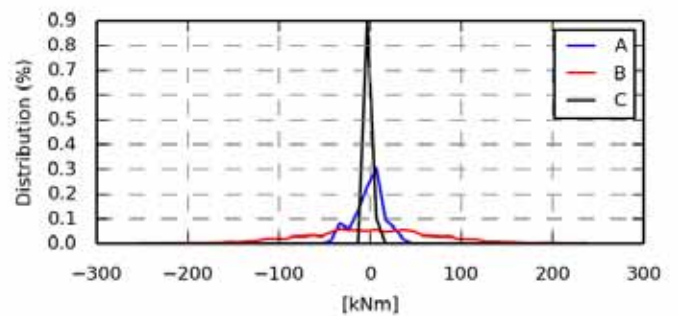


Figure 836 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	22.5326	458.9153	8.7816
Eq (m=4)	29.5056	405.3735	8.3107
Eq (m=6)	39.1544	378.7435	8.2696
Eq (m=8)	45.3498	379.2218	8.5116
Eq (m=10)	49.6353	385.7498	8.7866
Eq (m=12)	52.7670	393.4168	9.0364

Section 9.17 oc4_p2_load_case_2-4: Mz coo: tower [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-4.sel (28-02-2014 19:21)	45	MomentMz Mbdy:tower nodenr: 1 coo: tower tower base bending moment
B	WAMsim/oc4_p2_load_case_2-4.sel (01-04-2014 12:45)	45	MomentMz Mbdy:tower nodenr: 1 coo: tower tower base bending moment
C	hawc2/oc4_p2_load_case_2-4.sel (06-12-2013 12:05)	45	MomentMz Mbdy:tower nodenr: 1 coo: tower tower base bending moment

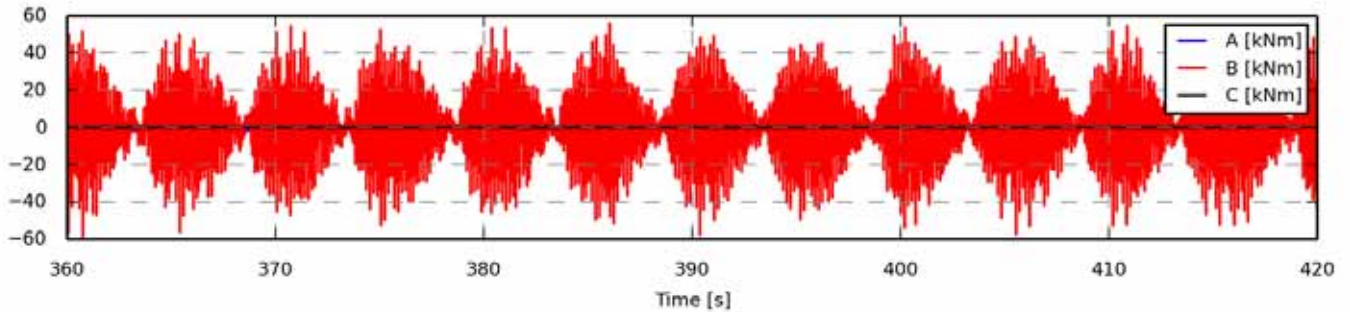


Figure 837 - Full length time series

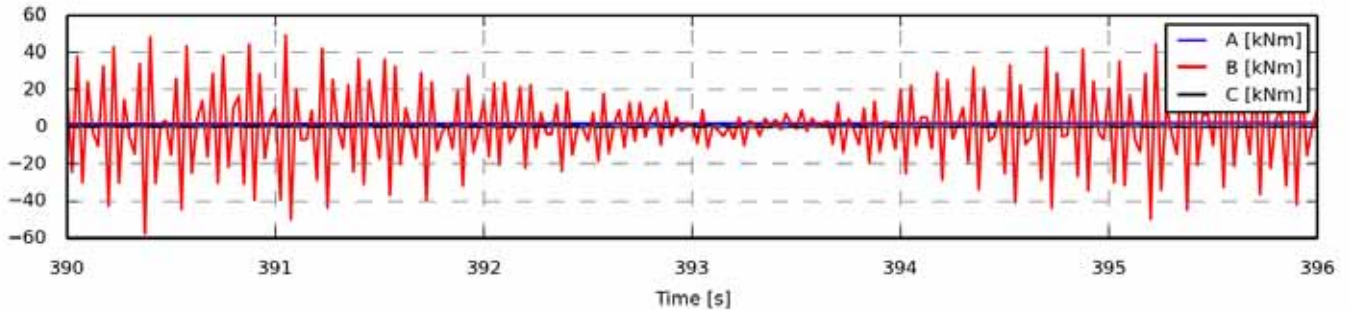


Figure 838 - Zoom of time series

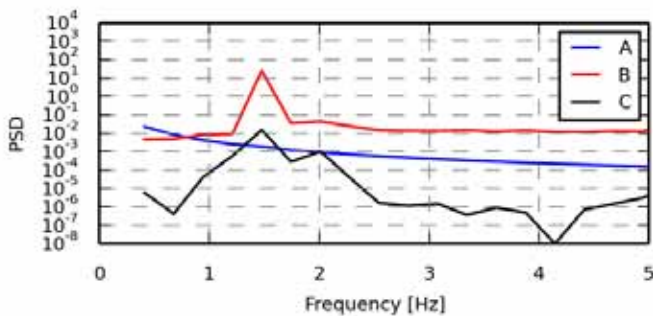


Figure 839 - Power spectrum density

Statistics	A	B	C
Min	-2.0414	-59.2934	-0.4159
Max	2.0675	55.9193	0.4744
Mean	0.3975	0.0066	0.0007
Std	1.2895	20.9747	0.1432
Skewness	-0.5150	-0.0059	-0.0705
Kurtosis	-1.0488	-0.2198	-0.0269

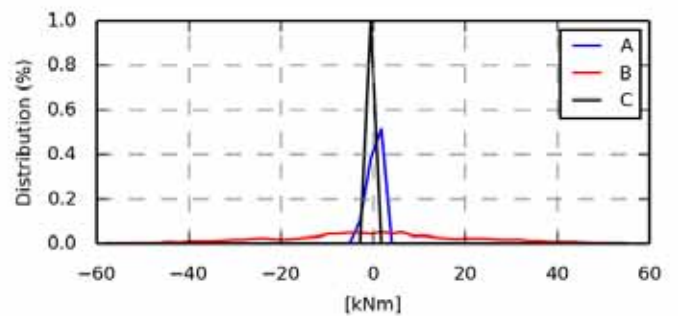


Figure 840 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.8664	130.6910	0.8103
Eq (m=4)	1.2604	113.0633	0.7228
Eq (m=6)	1.8549	101.3227	0.6838
Eq (m=8)	2.2597	98.0787	0.6918
Eq (m=10)	2.5460	97.2920	0.7090
Eq (m=12)	2.7573	97.4174	0.7264

Section 9.18 oc4_p2_load_case_2-4: ESYS line1_1 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-4.sel (28-02-2014 19:21)	55	ESYS line1_1 SENSOR 4
B	WAMsim/oc4_p2_load_case_2-4.sel (01-04-2014 12:45)	55	ESYS line1_1 SENSOR 4
C	hawc2/oc4_p2_load_case_2-4.sel (06-12-2013 12:05)	55	ESYS line1_1 SENSOR 4

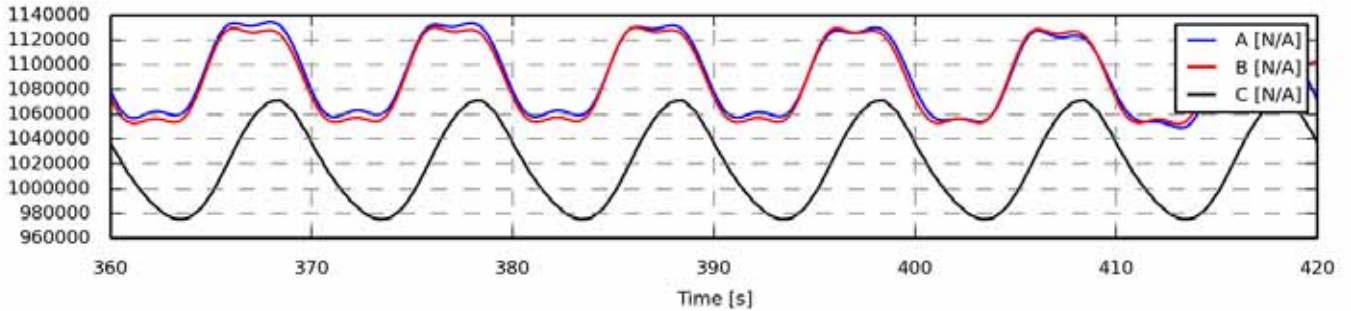


Figure 841 - Full length time series

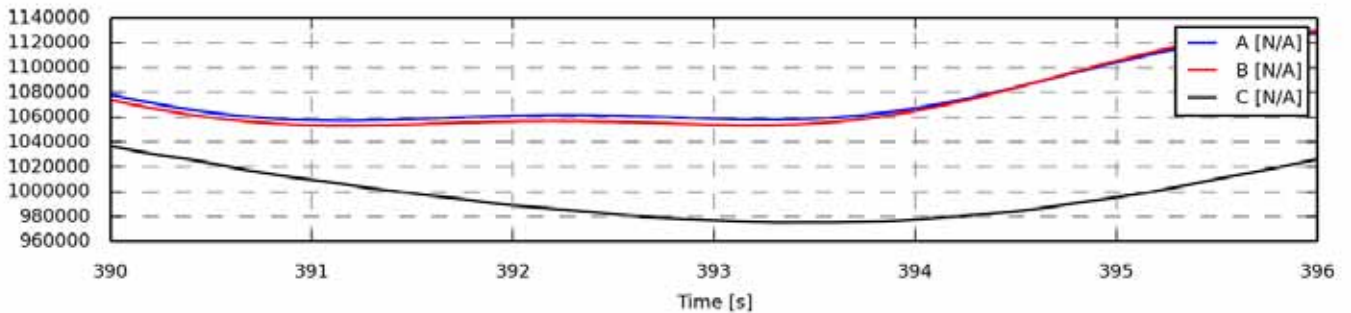


Figure 842 - Zoom of time series

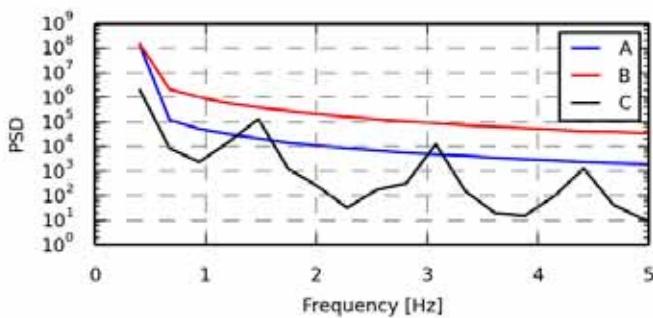


Figure 843 - Power spectrum density

Statistics	A	B	C
Min	1.0489e+06	1.0523e+06	9.7522e+05
Max	1.1347e+06	1.1304e+06	1.0713e+06
Mean	1.0922e+06	1.0885e+06	1.0202e+06
Std	3.0103e+04	2.9752e+04	3.3646e+04
Skewness	0.0606	0.1237	0.1414
Kurtosis	-1.6915	-1.6379	-1.4682

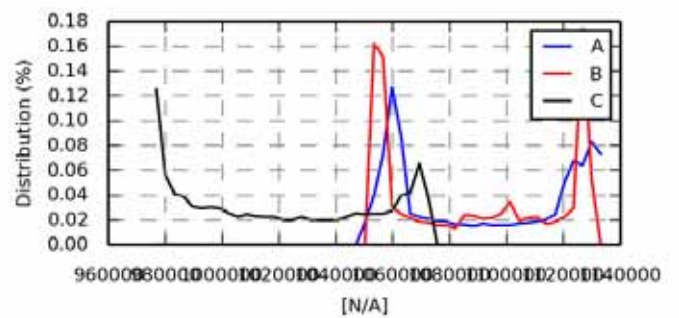


Figure 844 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	3.4437e+04	3.4144e+04	4.3741e+04
Eq (m=4)	4.1852e+04	4.1677e+04	5.3109e+04
Eq (m=6)	5.1022e+04	5.0994e+04	6.4611e+04
Eq (m=8)	5.6475e+04	5.6458e+04	7.1322e+04
Eq (m=10)	6.0134e+04	6.0035e+04	7.5697e+04
Eq (m=12)	6.2803e+04	6.2554e+04	7.8767e+04

Section 9.19 oc4_p2_load_case_2-4: ESYS line1_3 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-4.sel (28-02-2014 19:21)	259	ESYS line1_3 SENSOR 104
B	WAMsim/oc4_p2_load_case_2-4.sel (01-04-2014 12:45)	259	ESYS line1_3 SENSOR 104
C	hawc2/oc4_p2_load_case_2-4.sel (06-12-2013 12:05)	259	ESYS line1_3 SENSOR 104

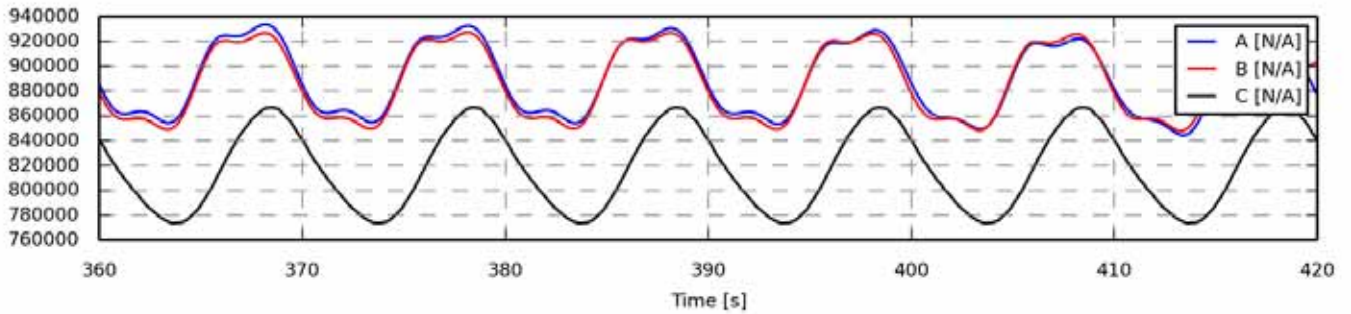


Figure 845 - Full length time series

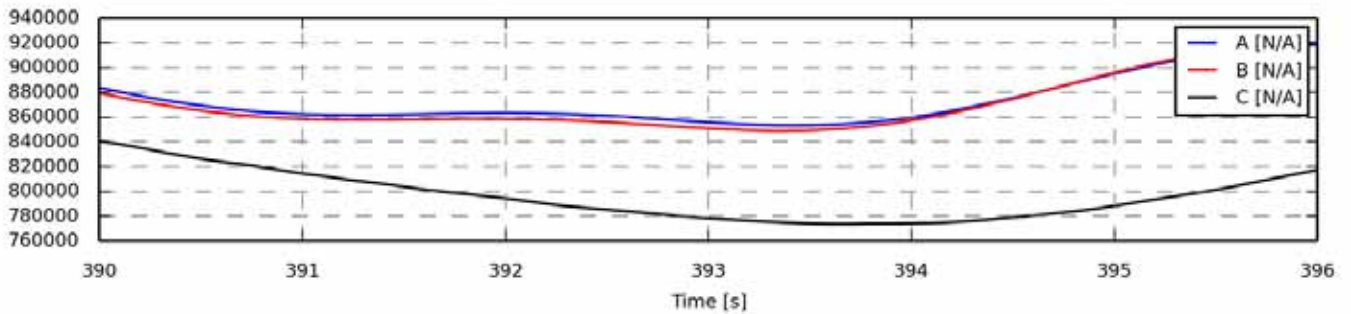


Figure 846 - Zoom of time series

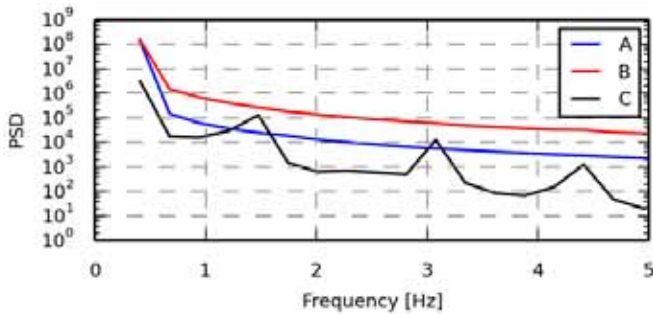


Figure 847 - Power spectrum density

Statistics	A	B	C
Min	8.4438e+05	8.4782e+05	7.7363e+05
Max	9.3372e+05	9.2711e+05	8.6678e+05
Mean	8.9003e+05	8.8633e+05	8.1801e+05
Std	2.8269e+04	2.7859e+04	3.2269e+04
Skewness	0.0337	0.1059	0.1055
Kurtosis	-1.6321	-1.6114	-1.4493

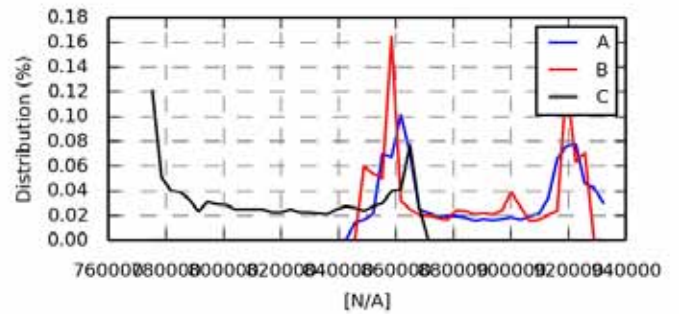


Figure 848 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	3.5291e+04	3.4524e+04	4.2498e+04
Eq (m=4)	4.2959e+04	4.2138e+04	5.1573e+04
Eq (m=6)	5.2509e+04	5.1579e+04	6.2682e+04
Eq (m=8)	5.8225e+04	5.7126e+04	6.9155e+04
Eq (m=10)	6.2082e+04	6.0757e+04	7.3377e+04
Eq (m=12)	6.4914e+04	6.3314e+04	7.6344e+04

Section 9.20 oc4_p2_load_case_2-4: ESYS line2_1 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-4.sel (28-02-2014 19:21)	263	ESYS line2_1 SENSOR 4
B	WAMsim/oc4_p2_load_case_2-4.sel (01-04-2014 12:45)	263	ESYS line2_1 SENSOR 4
C	hawc2/oc4_p2_load_case_2-4.sel (06-12-2013 12:05)	263	ESYS line2_1 SENSOR 4

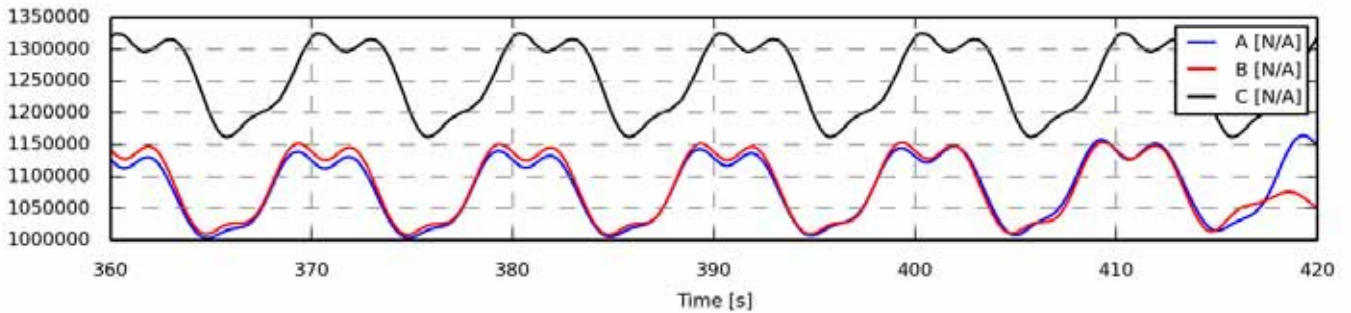


Figure 849 - Full length time series

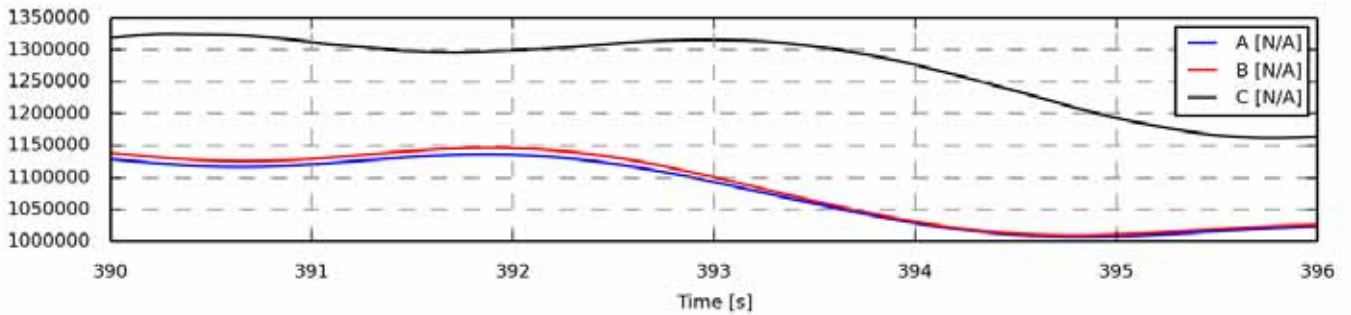


Figure 850 - Zoom of time series

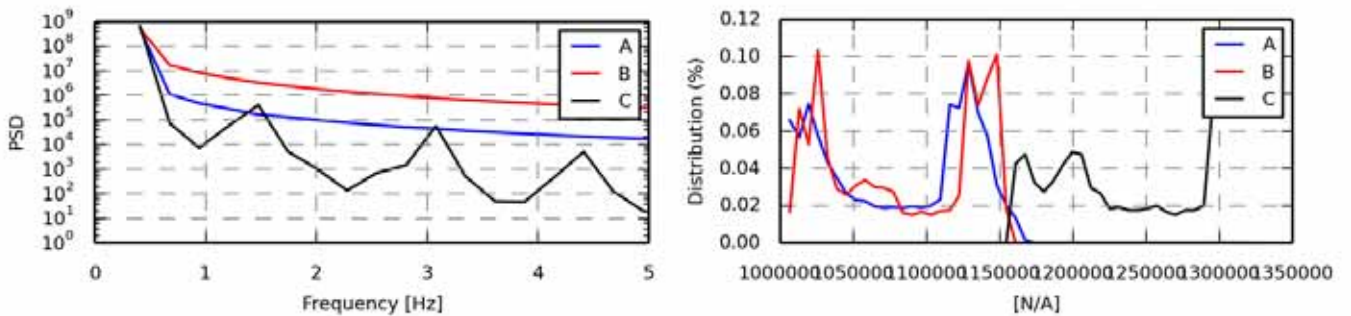


Figure 851 - Power spectrum density

Statistics	A	B	C
Min	1.0031e+06	1.0085e+06	1.1617e+06
Max	1.1641e+06	1.1537e+06	1.3248e+06
Mean	1.0818e+06	1.0838e+06	1.2534e+06
Std	5.0594e+04	5.0822e+04	5.6074e+04
Skewness	-0.1621	-0.0724	-0.2554
Kurtosis	-1.5562	-1.6313	-1.5242

Figure 852 - Value distribution

Fatigue eq.	1Hz	A	B	C
Eq (m=3)		6.4660e+04	6.4174e+04	7.5514e+04
Eq (m=4)		7.8402e+04	7.8112e+04	9.1444e+04
Eq (m=6)		9.5349e+04	9.5262e+04	1.1079e+05
Eq (m=8)		1.0540e+05	1.0524e+05	1.2196e+05
Eq (m=10)		1.1217e+05	1.1174e+05	1.2920e+05
Eq (m=12)		1.1714e+05	1.1630e+05	1.3427e+05

Section 9.21 oc4_p2_load_case_2-4: ESYS line2_3 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-4.sel (28-02-2014 19:21)	467	ESYS line2_3 SENSOR 104
B	WAMsim/oc4_p2_load_case_2-4.sel (01-04-2014 12:45)	467	ESYS line2_3 SENSOR 104
C	hawc2/oc4_p2_load_case_2-4.sel (06-12-2013 12:05)	467	ESYS line2_3 SENSOR 104

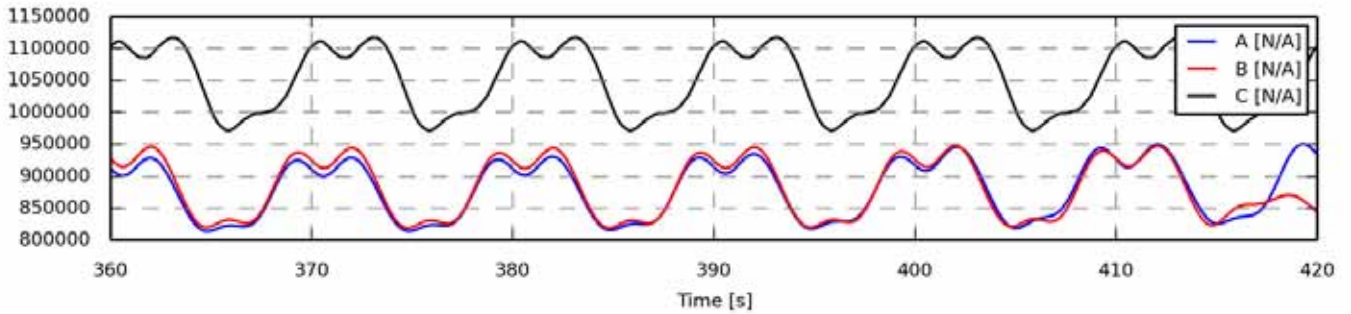


Figure 853 - Full length time series

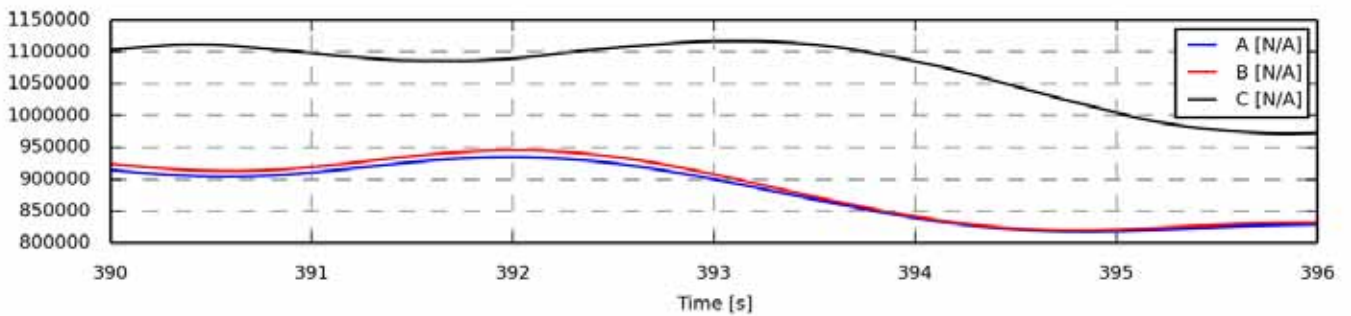


Figure 854 - Zoom of time series

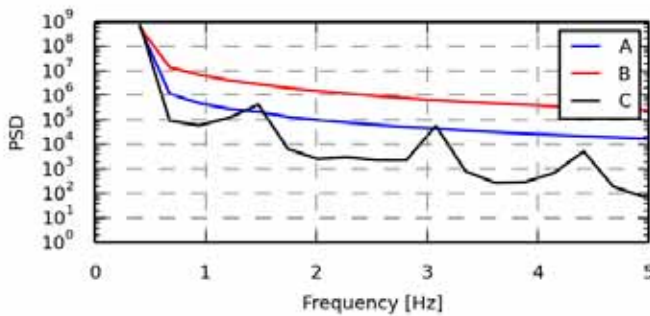


Figure 855 - Power spectrum density

Statistics	A	B	C
Min	8.1376e+05	8.1898e+05	9.7141e+05
Max	9.5051e+05	9.4742e+05	1.1169e+06
Mean	8.7981e+05	8.8208e+05	1.0513e+06
Std	4.4228e+04	4.4954e+04	5.0790e+04
Skewness	-0.1153	-0.0202	-0.1902
Kurtosis	-1.5687	-1.6471	-1.5997

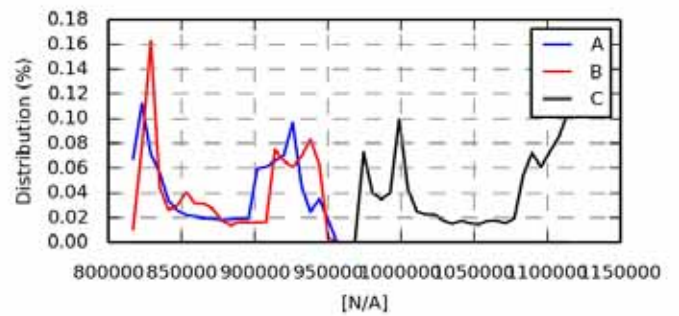


Figure 856 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	5.6194e+04	5.6798e+04	6.7172e+04
Eq (m=4)	6.8016e+04	6.9070e+04	8.1260e+04
Eq (m=6)	8.2636e+04	8.4229e+04	9.8482e+04
Eq (m=8)	9.1274e+04	9.3052e+04	1.0846e+05
Eq (m=10)	9.7039e+04	9.8790e+04	1.1494e+05
Eq (m=12)	1.0122e+05	1.0281e+05	1.1949e+05

Section 9.22 oc4_p2_load_case_2-4: ESYS line3_1 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-4.sel (28-02-2014 19:21)	471	ESYS line3_1 SENSOR 4
B	WAMsim/oc4_p2_load_case_2-4.sel (01-04-2014 12:45)	471	ESYS line3_1 SENSOR 4
C	hawc2/oc4_p2_load_case_2-4.sel (06-12-2013 12:05)	471	ESYS line3_1 SENSOR 4

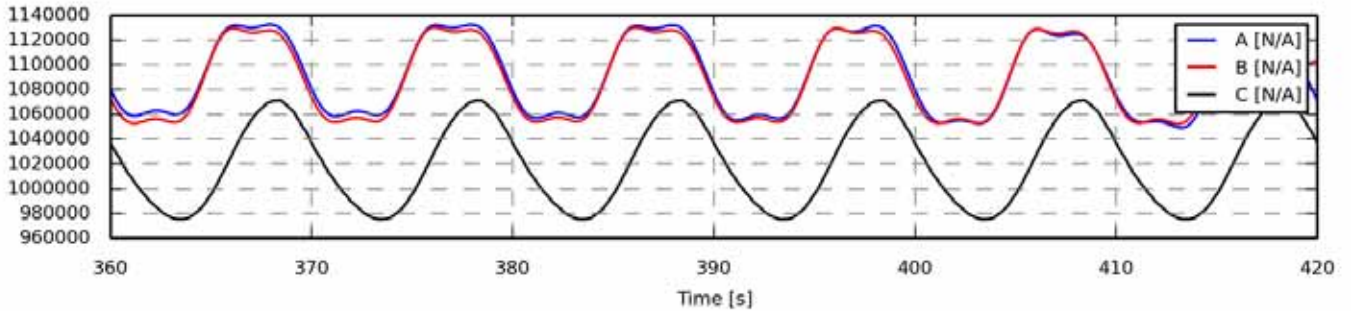


Figure 857 - Full length time series

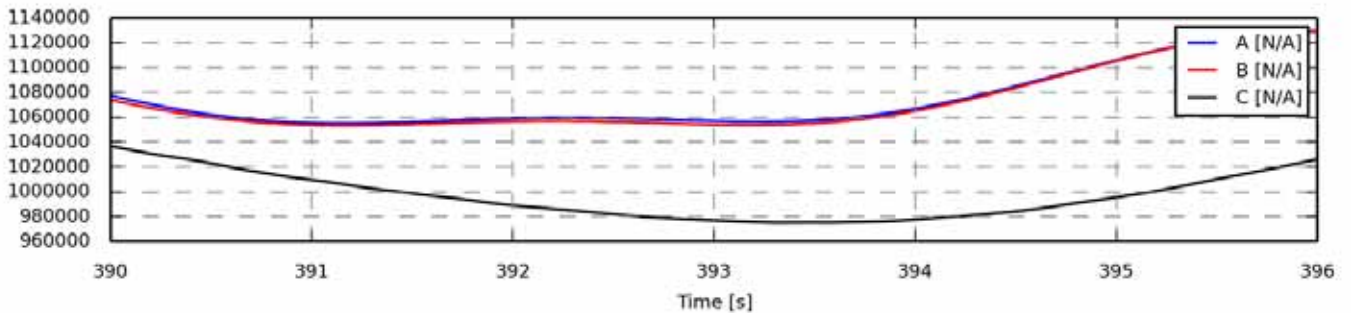


Figure 858 - Zoom of time series

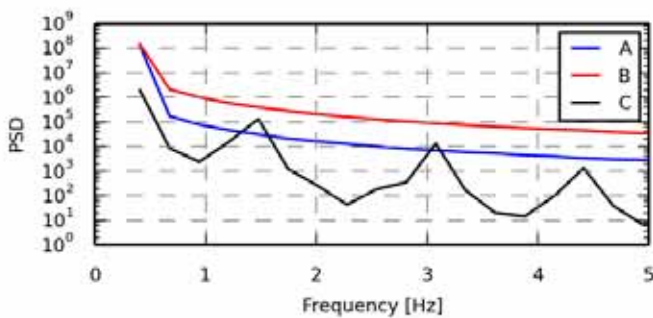


Figure 859 - Power spectrum density

Statistics	A	B	C
Min	1.0490e+06	1.0522e+06	9.7517e+05
Max	1.1324e+06	1.1305e+06	1.0713e+06
Mean	1.0920e+06	1.0885e+06	1.0201e+06
Std	3.0436e+04	2.9752e+04	3.3643e+04
Skewness	0.0469	0.1237	0.1414
Kurtosis	-1.7051	-1.6379	-1.4682

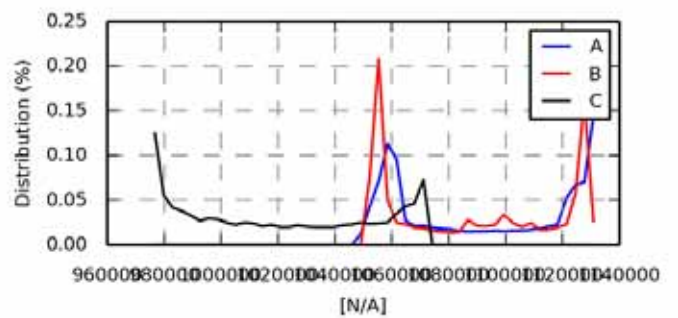


Figure 860 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	3.4774e+04	3.4188e+04	4.3739e+04
Eq (m=4)	4.2239e+04	4.1734e+04	5.3106e+04
Eq (m=6)	5.1426e+04	5.1065e+04	6.4608e+04
Eq (m=8)	5.6830e+04	5.6537e+04	7.1319e+04
Eq (m=10)	6.0400e+04	6.0118e+04	7.5693e+04
Eq (m=12)	6.2950e+04	6.2641e+04	7.8762e+04

Section 9.23 oc4_p2_load_case_2-4: ESYS line3_3 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-4.sel (28-02-2014 19:21)	675	ESYS line3_3 SENSOR 104
B	WAMsim/oc4_p2_load_case_2-4.sel (01-04-2014 12:45)	675	ESYS line3_3 SENSOR 104
C	hawc2/oc4_p2_load_case_2-4.sel (06-12-2013 12:05)	675	ESYS line3_3 SENSOR 104

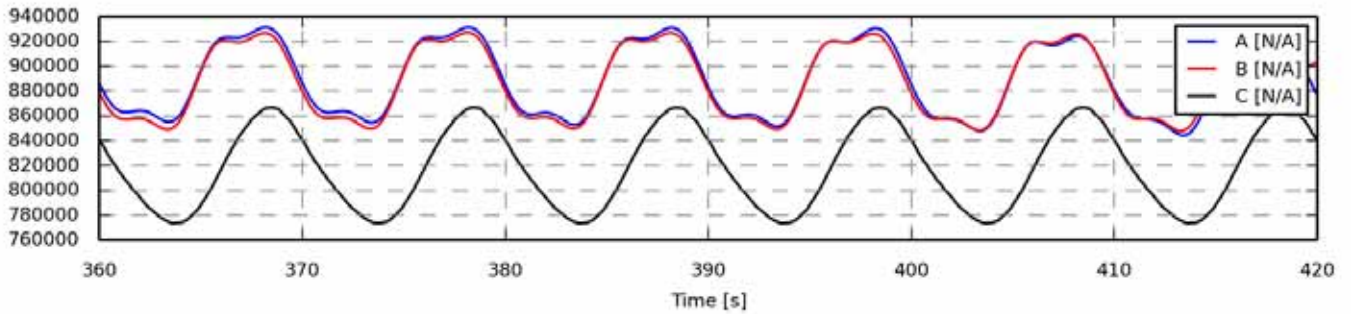


Figure 861 - Full length time series

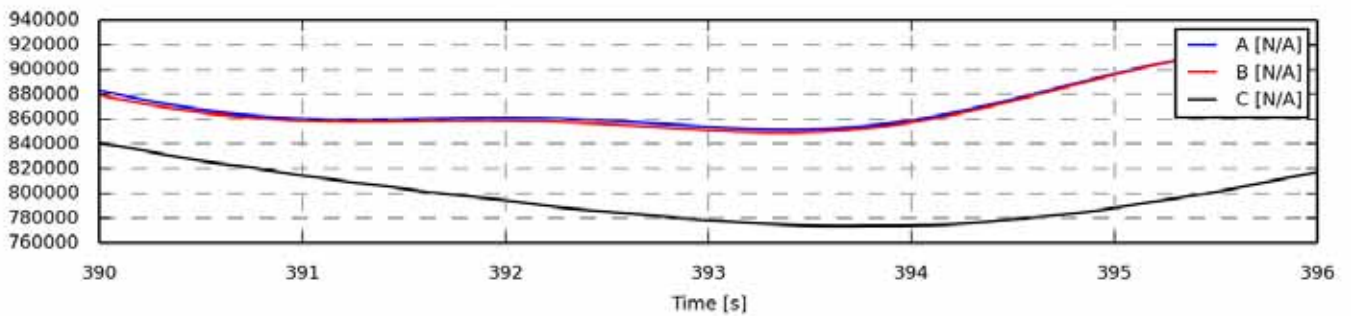


Figure 862 - Zoom of time series

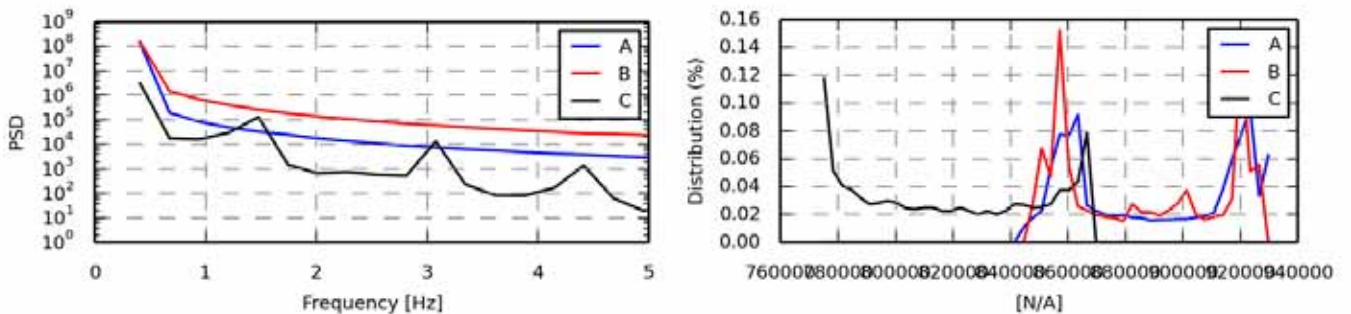


Figure 863 - Power spectrum density

Statistics	A	B	C
Min	8.4431e+05	8.4782e+05	7.7358e+05
Max	9.3127e+05	9.2718e+05	8.6673e+05
Mean	8.8986e+05	8.8633e+05	8.1798e+05
Std	2.8590e+04	2.7859e+04	3.2266e+04
Skewness	0.0195	0.1059	0.1055
Kurtosis	-1.6503	-1.6114	-1.4493

Figure 864 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	3.5529e+04	3.4552e+04	4.2496e+04
Eq (m=4)	4.3199e+04	4.2172e+04	5.1570e+04
Eq (m=6)	5.2682e+04	5.1620e+04	6.2678e+04
Eq (m=8)	5.8280e+04	5.7172e+04	6.9151e+04
Eq (m=10)	6.1989e+04	6.0806e+04	7.3372e+04
Eq (m=12)	6.4653e+04	6.3365e+04	7.6339e+04

Article X. oc4_p2_load_case_2-5

Generated 22-04-2014 10:04

Section 10.01 oc4_p2_load_case_2-5: WSP gl. coo.,Vy [m/s]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-5.sel (28-02-2014 20:58)	3	Free wind speed Vy, gl. coo, of gl. pos 0.00, 0.00, -90.00
B	WAMsim/oc4_p2_load_case_2-5.sel (01-04-2014 12:45)	3	Free wind speed Vy, gl. coo, of gl. pos 0.00, 0.00, -90.00
C	hawc2/oc4_p2_load_case_2-5.sel (31-03-2014 15:33)	3	Free wind speed Vy, gl. coo, of gl. pos 0.00, 0.00, -90.00

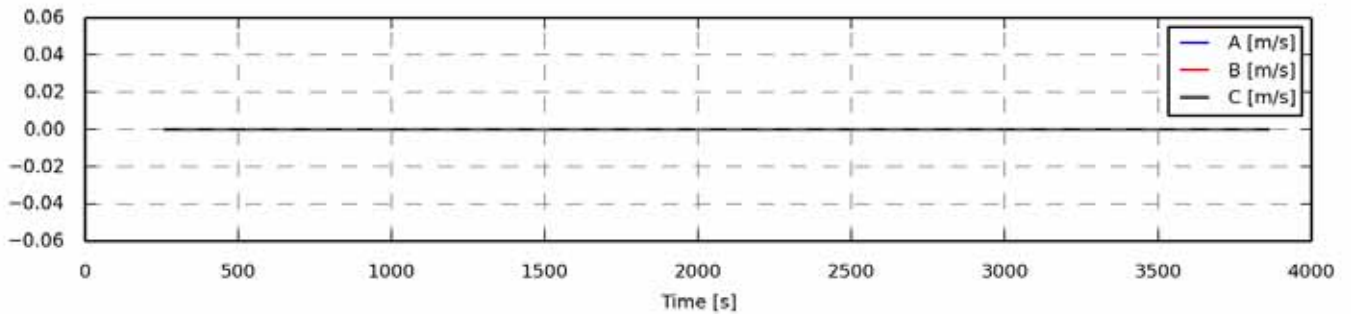


Figure 865 - Full length time series

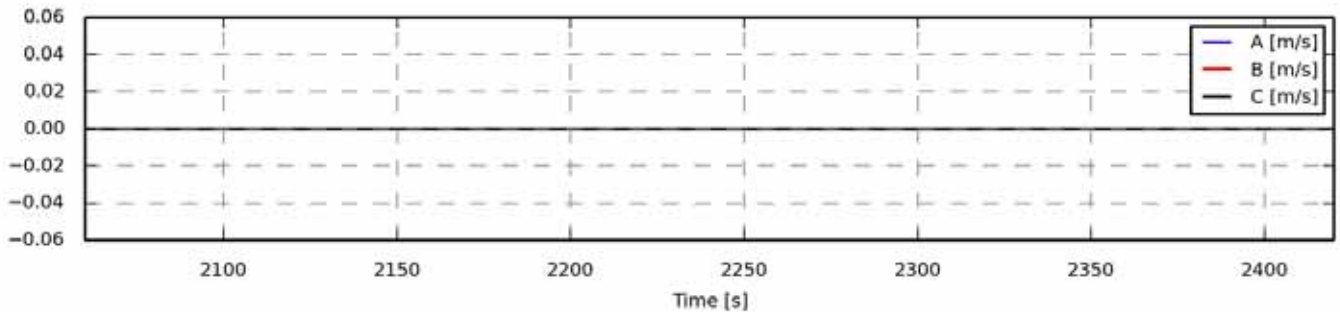


Figure 866 - Zoom of time series

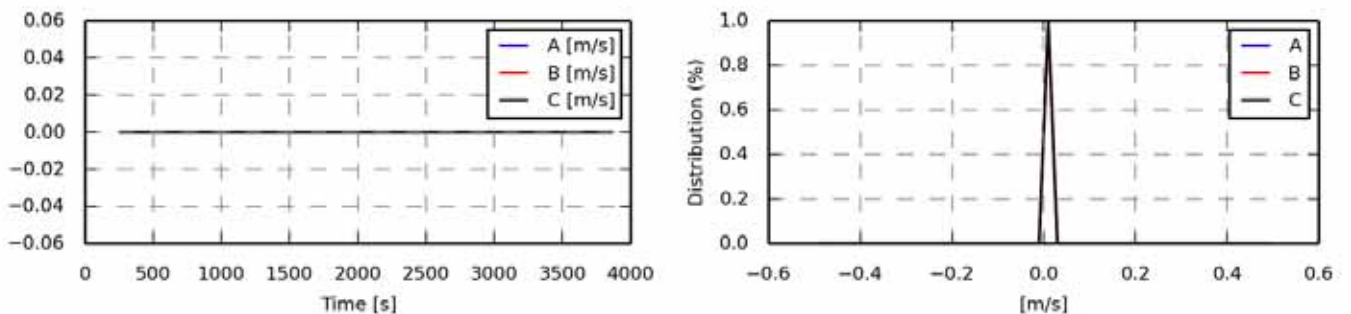


Figure 867 - Power spectrum density

Statistics	A	B	C
Min	0.0000	0.0000	0.0000
Max	0.0000	0.0000	0.0000
Mean	0.0000	0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

Figure 868 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 10.02 oc4_p2_load_case_2-5: Water surf. [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-5.sel (28-02-2014 20:58)	5	Water surface gl. coo, at gl. coo, x,y= 0.00, 0.00
B	WAMsim/oc4_p2_load_case_2-5.sel (01-04-2014 12:45)	5	Constant value
C	hawc2/oc4_p2_load_case_2-5.sel (31-03-2014 15:33)	5	Water surface gl. coo, at gl. coo, x,y= 0.00, 0.00

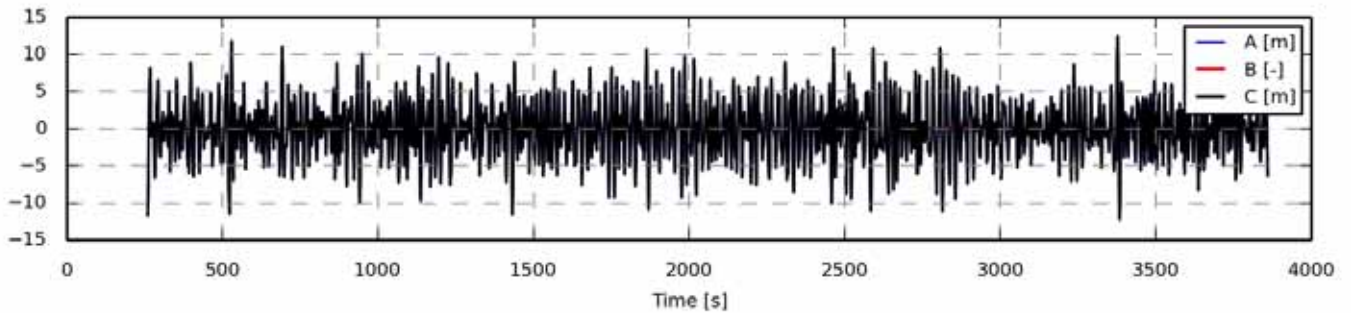


Figure 869 - Full length time series

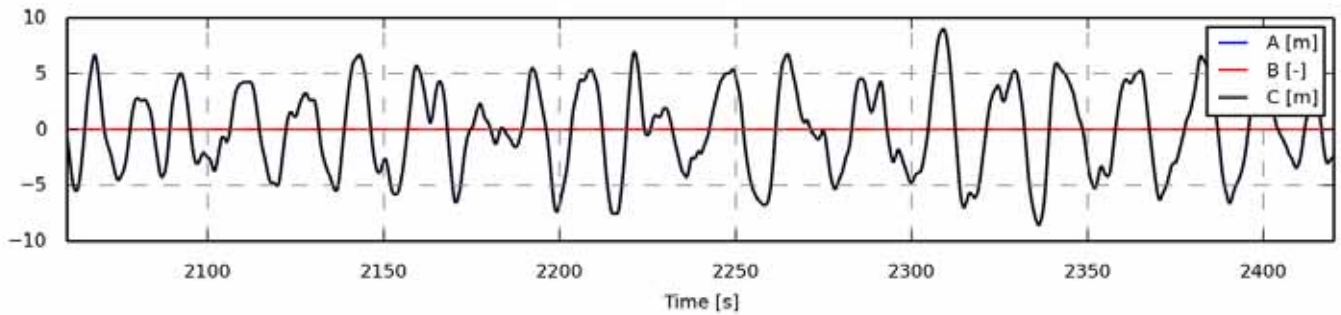


Figure 870 - Zoom of time series

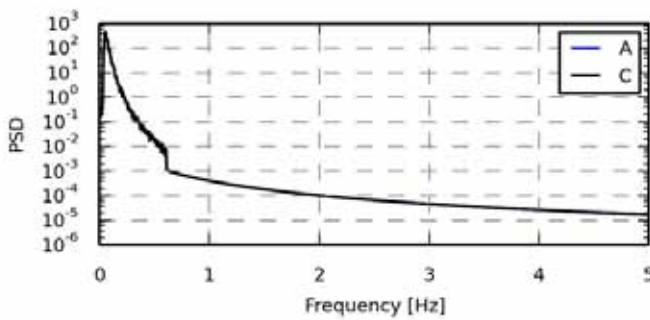


Figure 871 - Power spectrum density

Statistics	A	B	C
Min	-12.1995	0.0000	-12.1951
Max	12.4283	0.0000	12.4273
Mean	0.0045	0.0000	0.0045
Std	3.7271	0.0000	3.7260
Skewness	0.0293	0.0000	0.0293
Kurtosis	-0.0739	-3.0000	-0.0739

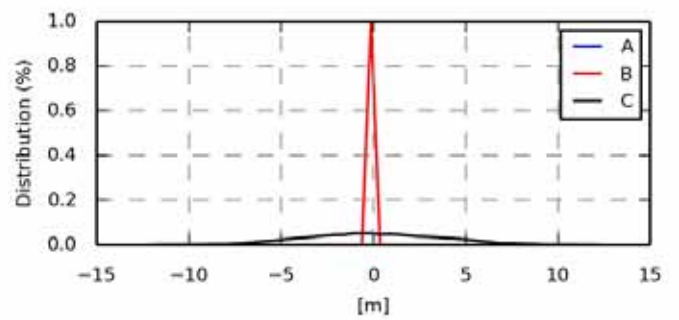


Figure 872 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	4.7198	-	4.7182
Eq (m=4)	6.3367	-	6.3347
Eq (m=6)	8.8726	-	8.8700
Eq (m=8)	10.8002	-	10.7973
Eq (m=10)	12.3181	-	12.3151
Eq (m=12)	13.5390	-	13.5359

Section 10.03 oc4_p2_load_case_2-5: Constant [-]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-5.sel (28-02-2014 20:58)	6	Constant value
B	WAMsim/oc4_p2_load_case_2-5.sel (01-04-2014 12:45)	6	Constant value
C	hawc2/oc4_p2_load_case_2-5.sel (31-03-2014 15:33)	6	Constant value

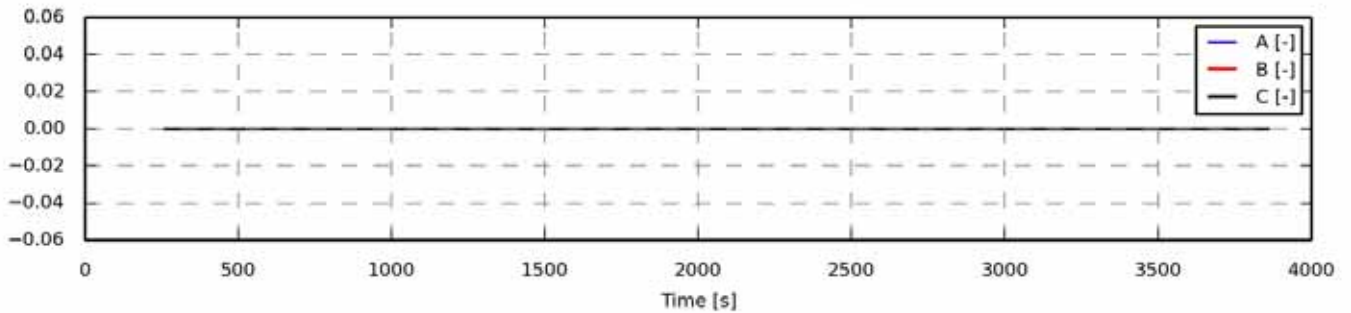


Figure 873 - Full length time series

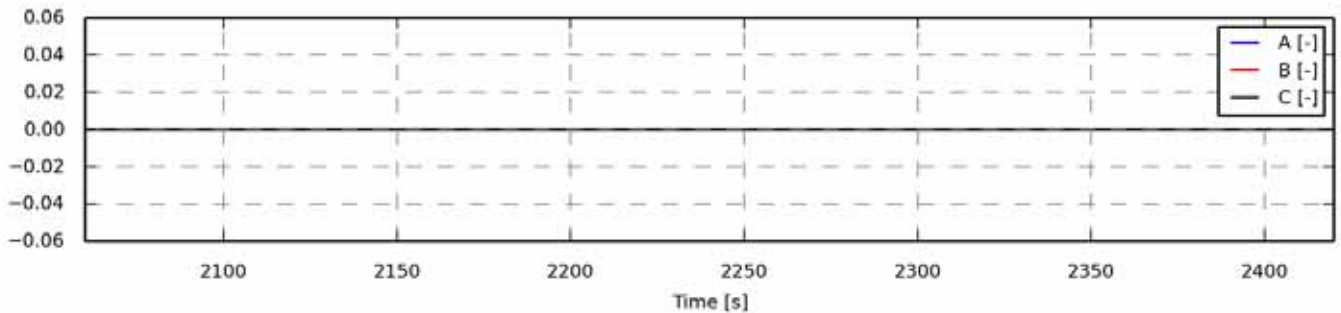


Figure 874 - Zoom of time series

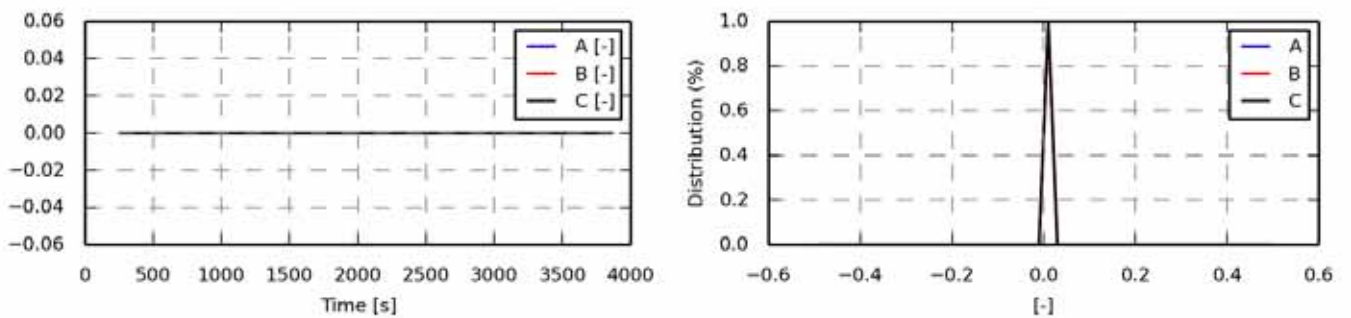


Figure 875 - Power spectrum density

Statistics	A	B	C
Min	0.0000	0.0000	0.0000
Max	0.0000	0.0000	0.0000
Mean	0.0000	0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

Figure 876 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 10.04 oc4_p2_load_case_2-5: Constant [-]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-5.sel (28-02-2014 20:58)	9	Constant value
B	WAMsim/oc4_p2_load_case_2-5.sel (01-04-2014 12:45)	9	Constant value
C	hawc2/oc4_p2_load_case_2-5.sel (31-03-2014 15:33)	9	Constant value

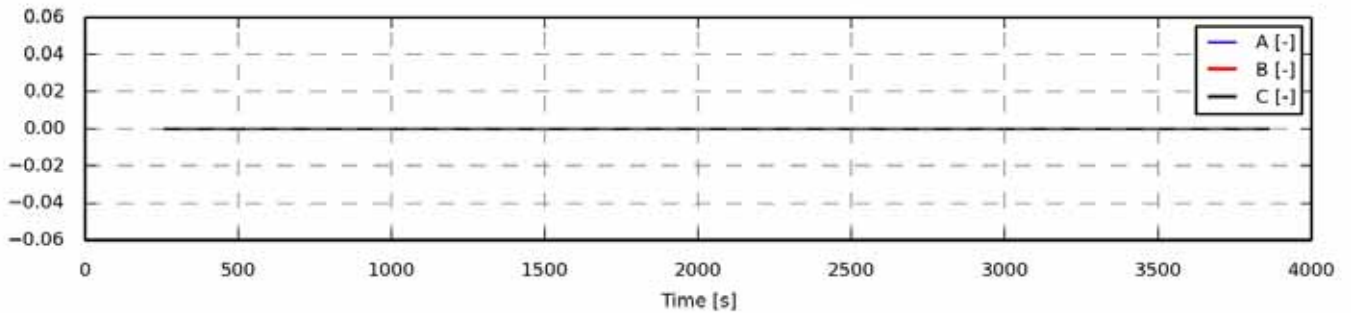


Figure 877 - Full length time series

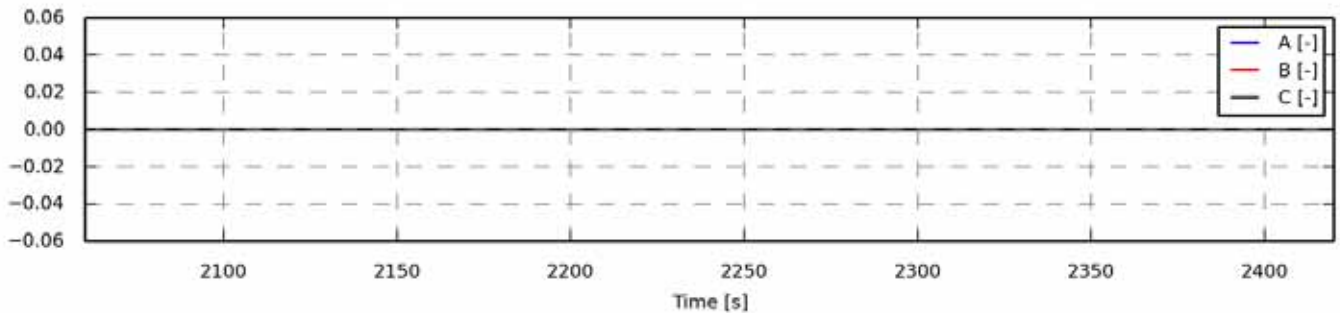


Figure 878 - Zoom of time series

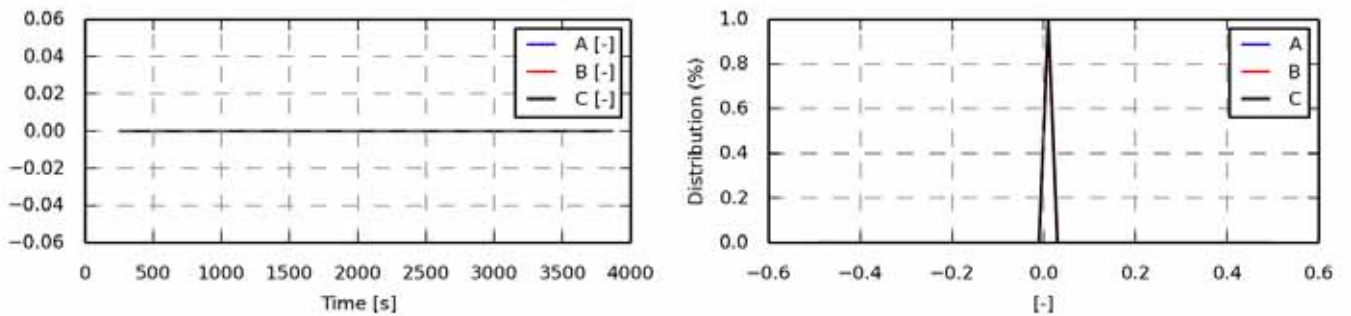


Figure 879 - Power spectrum density

Statistics	A	B	C
Min	0.0000	0.0000	0.0000
Max	0.0000	0.0000	0.0000
Mean	0.0000	0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

Figure 880 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 10.05 oc4_p2_load_case_2-5: bea1 angle [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-5.sel (28-02-2014 20:58)	14	pitch1 angle
B	WAMsim/oc4_p2_load_case_2-5.sel (01-04-2014 12:45)	14	pitch1 angle
C	hawc2/oc4_p2_load_case_2-5.sel (31-03-2014 15:33)	14	pitch1 angle

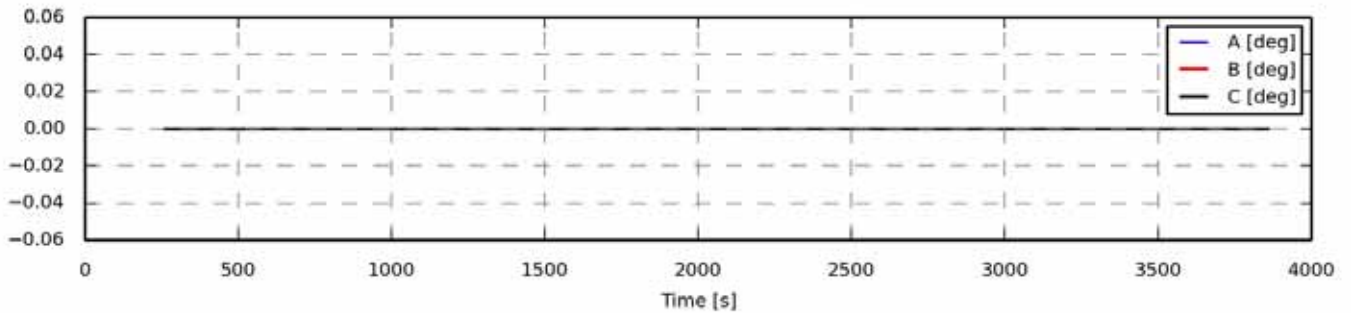


Figure 881 - Full length time series

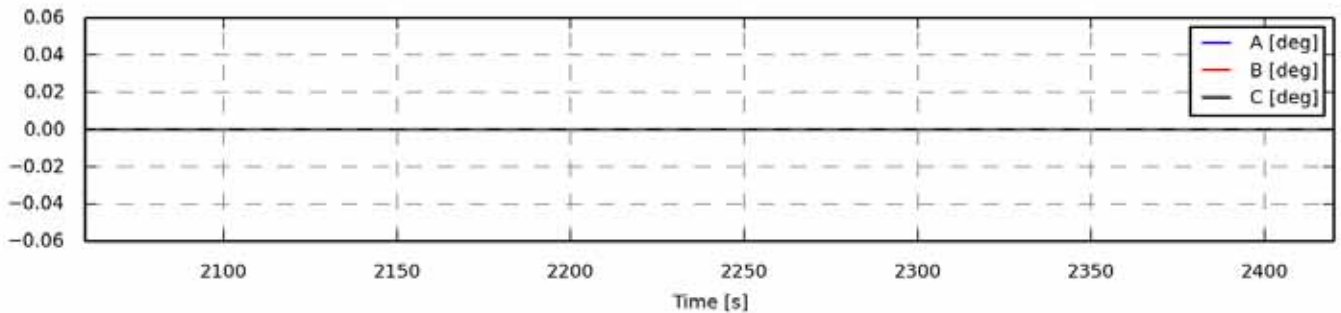


Figure 882 - Zoom of time series

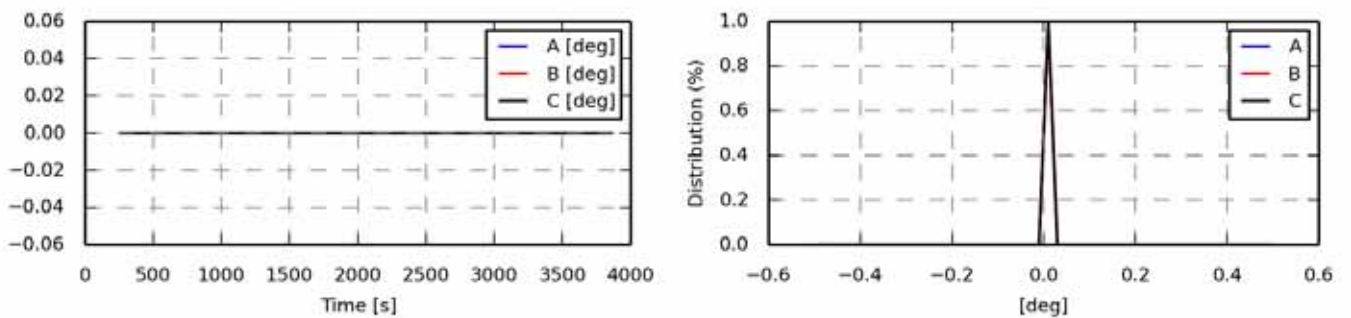


Figure 883 - Power spectrum density

Statistics	A	B	C
Min	0.0000	0.0000	0.0000
Max	0.0000	0.0000	0.0000
Mean	0.0000	0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

Figure 884 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 10.06 oc4_p2_load_case_2-5: State pos x coo: global [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-5.sel (28-02-2014 20:58)	19	State pos x Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
B	WAMsim/oc4_p2_load_case_2-5.sel (01-04-2014 12:45)	19	State pos x Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
C	hawc2/oc4_p2_load_case_2-5.sel (31-03-2014 15:33)	19	State pos x Mbdy:mc E-nr: 8 Z-rel:0.00 coo: global platform translation in surge sway and heave

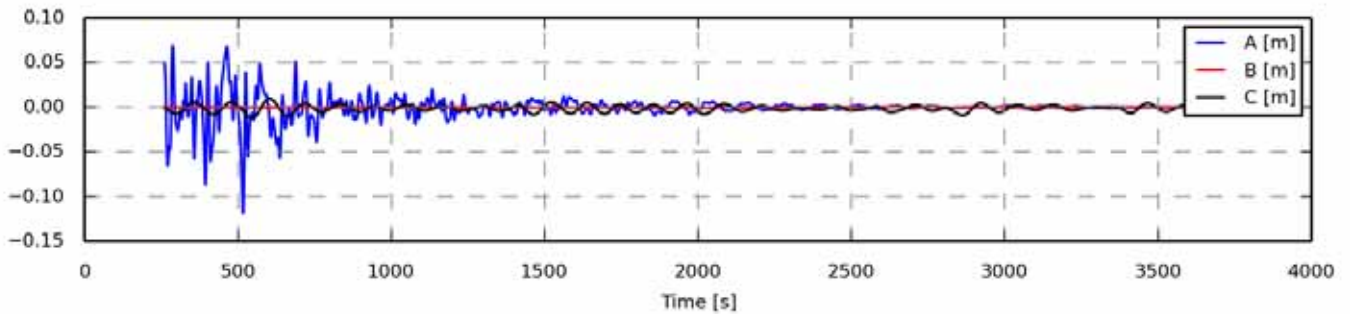


Figure 885 - Full length time series

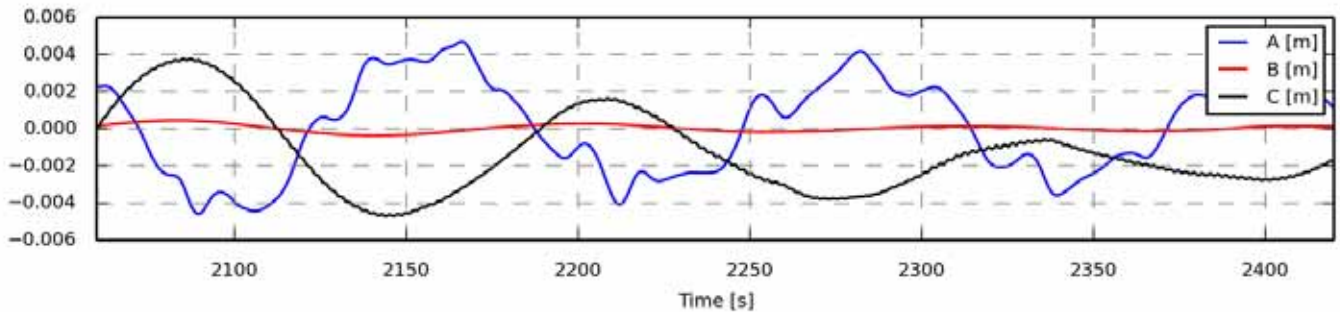


Figure 886 - Zoom of time series

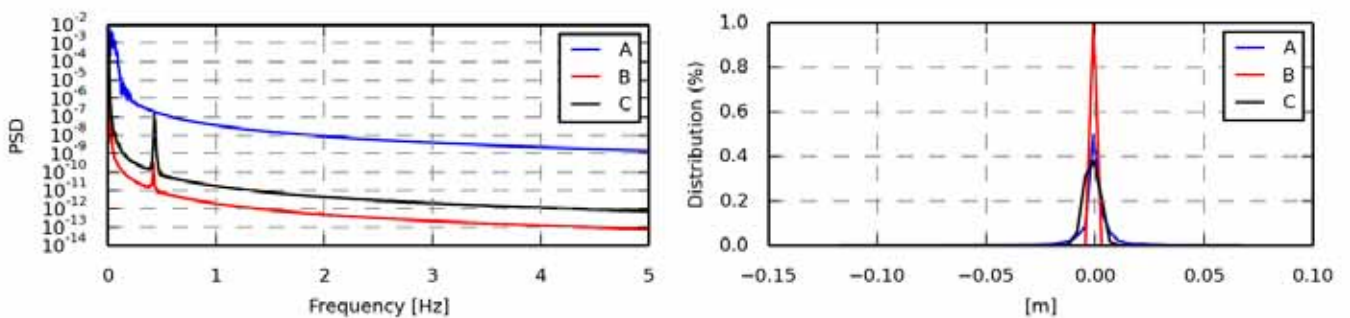


Figure 887 - Power spectrum density

Statistics	A	B	C
Min	-0.1187	-0.0006	-0.0121
Max	0.0686	0.0007	0.0096
Mean	-0.0005	0.0000	-0.0014
Std	0.0128	0.0002	0.0034
Skewness	-1.5726	0.1783	-0.0229
Kurtosis	18.6272	0.7220	0.0076

Figure 888 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.0167	0.0001	0.0021
Eq (m=4)	0.0283	0.0002	0.0034
Eq (m=6)	0.0498	0.0003	0.0058
Eq (m=8)	0.0673	0.0005	0.0078
Eq (m=10)	0.0812	0.0005	0.0094
Eq (m=12)	0.0924	0.0006	0.0107

Section 10.07 oc4_p2_load_case_2-5: State pos y coo: global [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-5.sel (28-02-2014 20:58)	20	State pos y Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
B	WAMsim/oc4_p2_load_case_2-5.sel (01-04-2014 12:45)	20	State pos y Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
C	hawc2/oc4_p2_load_case_2-5.sel (31-03-2014 15:33)	20	State pos y Mbdy:mc E-nr: 8 Z-rel:0.00 coo: global platform translation in surge sway and heave

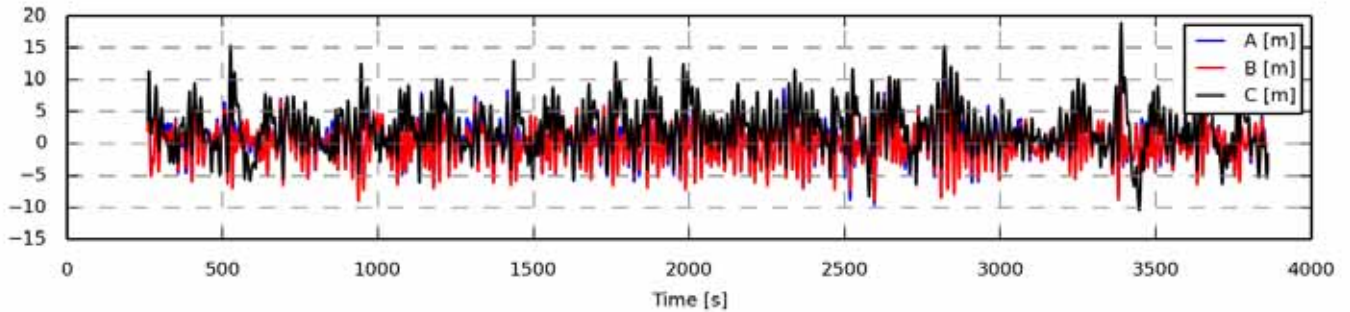


Figure 889 - Full length time series

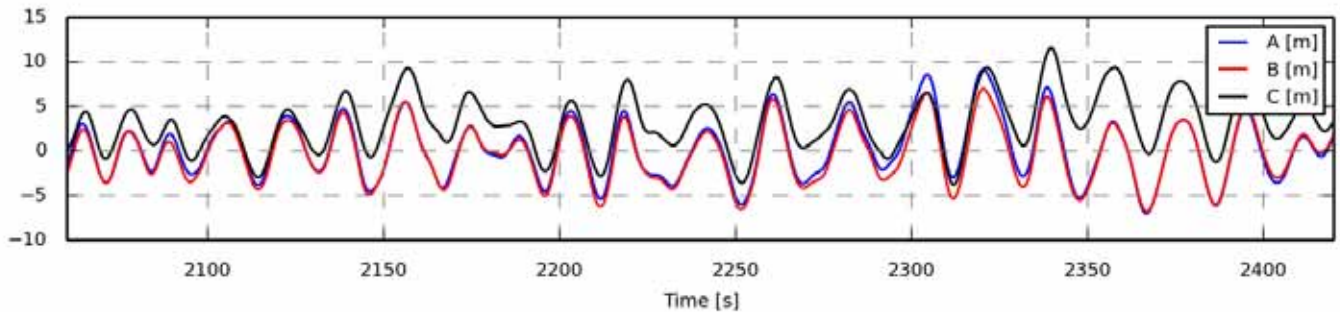


Figure 890 - Zoom of time series

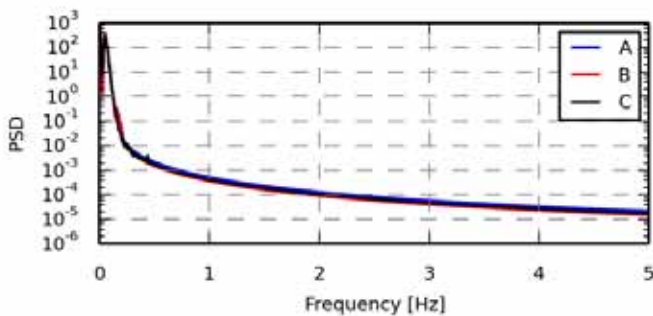


Figure 891 - Power spectrum density

Statistics	A	B	C
Min	-9.5528	-9.0239	-10.4770
Max	11.2950	9.8040	18.8891
Mean	0.4811	0.0925	2.3545
Std	3.1096	3.0283	3.7158
Skewness	0.1764	0.0266	0.3412
Kurtosis	-0.0289	-0.1690	0.4441

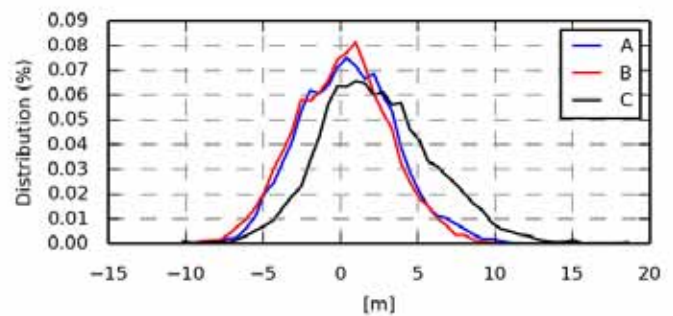


Figure 892 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	3.5155	3.4822	3.6607
Eq (m=4)	4.8264	4.7506	5.2918
Eq (m=6)	6.9287	6.7358	8.2255
Eq (m=8)	8.5533	8.2297	10.7171
Eq (m=10)	9.8542	9.4035	12.7979
Eq (m=12)	10.9208	10.3518	14.5222

Section 10.08 oc4_p2_load_case_2-5: State pos z coo: global [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-5.sel (28-02-2014 20:58)	21	State pos z Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
B	WAMsim/oc4_p2_load_case_2-5.sel (01-04-2014 12:45)	21	State pos z Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
C	hawc2/oc4_p2_load_case_2-5.sel (31-03-2014 15:33)	21	State pos z Mbdy:mc E-nr: 8 Z-rel:0.00 coo: global platform translation in surge sway and heave

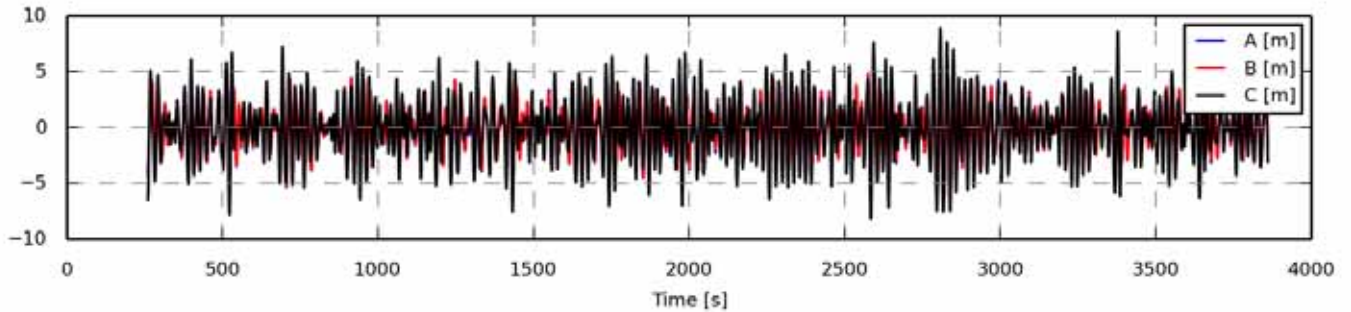


Figure 893 - Full length time series

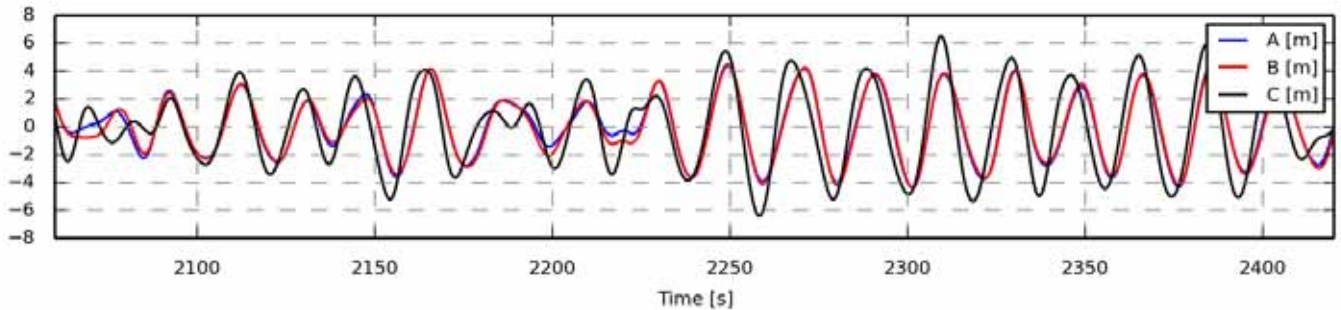


Figure 894 - Zoom of time series

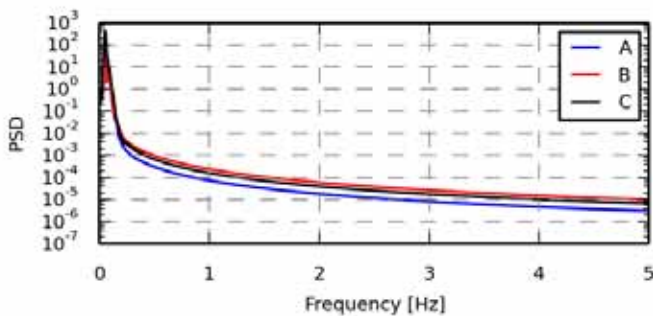


Figure 895 - Power spectrum density

Statistics	A	B	C
Min	-6.1228	-6.0970	-8.1790
Max	6.7880	6.0772	8.8512
Mean	0.0488	0.0181	-0.0427
Std	2.1665	2.1430	2.7119
Skewness	0.0442	0.0087	0.0290
Kurtosis	-0.6698	-0.7152	-0.1746

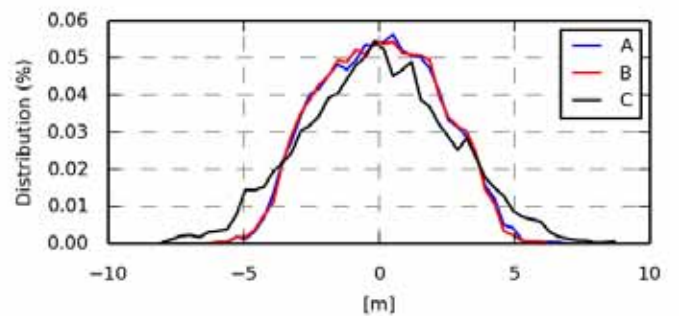


Figure 896 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	2.3953	2.3657	3.1220
Eq (m=4)	3.2228	3.1771	4.2710
Eq (m=6)	4.4739	4.3911	6.0578
Eq (m=8)	5.4139	5.2860	7.3948
Eq (m=10)	6.1768	5.9986	8.4401
Eq (m=12)	6.8174	6.5888	9.2800

Section 10.09 oc4_p2_load_case_2-5: proj_ang tx coo: global [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-5.sel (28-02-2014 20:58)	22	State_rot proj_ang tx Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
B	WAMsim/oc4_p2_load_case_2-5.sel (01-04-2014 12:45)	22	State_rot proj_ang tx Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
C	hawc2/oc4_p2_load_case_2-5.sel (31-03-2014 15:33)	22	State_rot proj_ang tx Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw

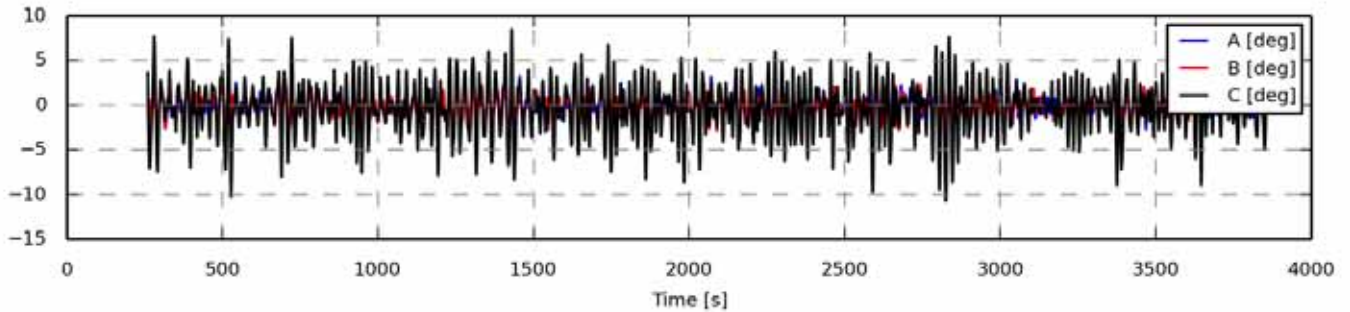


Figure 897 - Full length time series

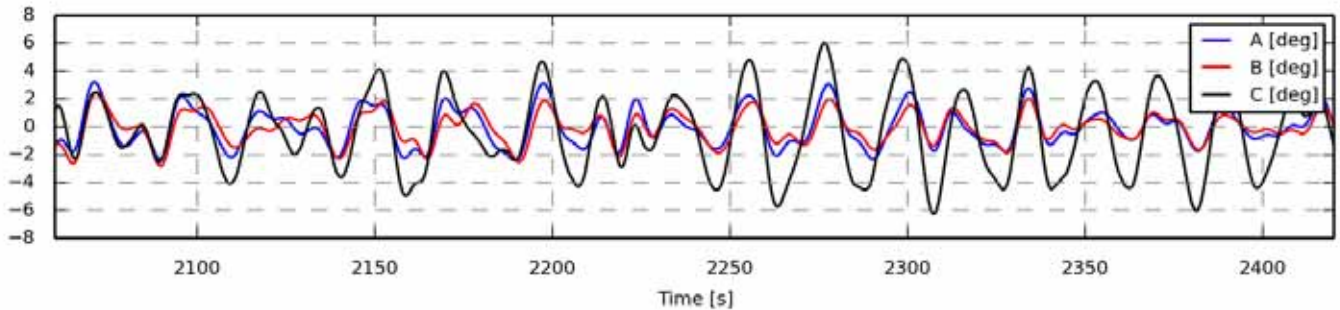


Figure 898 - Zoom of time series

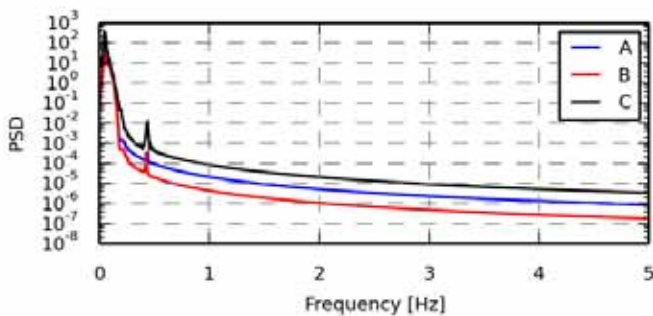


Figure 899 - Power spectrum density

Statistics	A	B	C
Min	-4.8731	-4.1388	-10.7113
Max	5.1245	3.7078	8.4820
Mean	-0.0622	-0.0865	-0.3781
Std	1.4447	1.2332	2.8508
Skewness	-0.0400	-0.0888	-0.2946
Kurtosis	-0.1077	-0.2517	0.1246

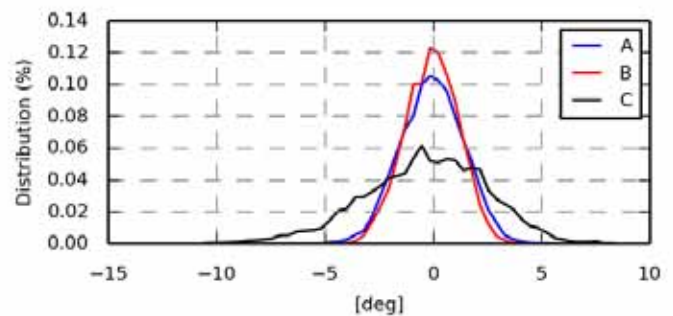


Figure 900 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	1.7046	1.4414	3.2931
Eq (m=4)	2.3335	1.9609	4.5476
Eq (m=6)	3.3296	2.7580	6.5520
Eq (m=8)	4.0994	3.3490	8.0876
Eq (m=10)	4.7197	3.8115	9.3054
Eq (m=12)	5.2300	4.1862	10.2949

Section 10.10 oc4_p2_load_case_2-5: proj_ang ty coo: global [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-5.sel (28-02-2014 20:58)	23	State_rot proj_ang ty Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
B	WAMsim/oc4_p2_load_case_2-5.sel (01-04-2014 12:45)	23	State_rot proj_ang ty Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
C	hawc2/oc4_p2_load_case_2-5.sel (31-03-2014 15:33)	23	State_rot proj_ang ty Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw

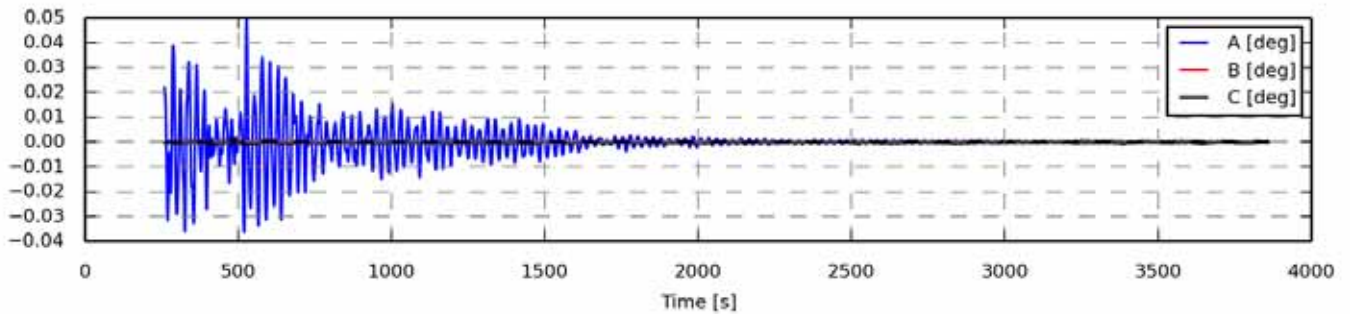


Figure 901 - Full length time series

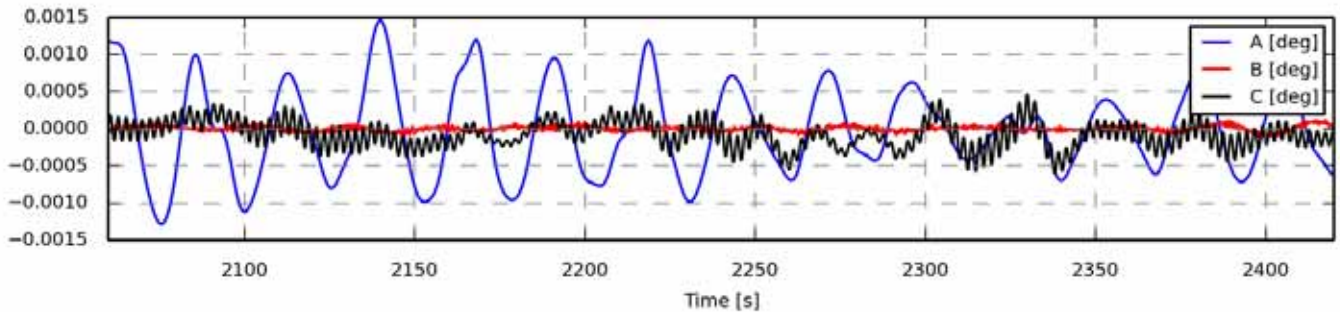


Figure 902 - Zoom of time series

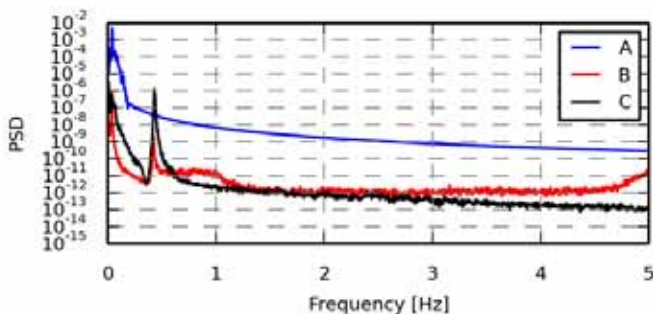


Figure 903 - Power spectrum density

Statistics	A	B	C
Min	-0.0363	-0.0002	-0.0009
Max	0.0500	0.0002	0.0007
Mean	-0.0000	-0.0000	-0.0001
Std	0.0069	0.0001	0.0002
Skewness	0.2134	0.0181	-0.0943
Kurtosis	9.8402	-0.4021	0.4288

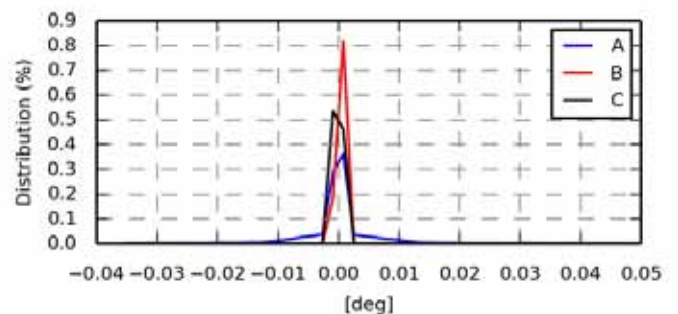


Figure 904 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.0097	0.0001	0.0003
Eq (m=4)	0.0154	0.0001	0.0004
Eq (m=6)	0.0253	0.0002	0.0005
Eq (m=8)	0.0331	0.0002	0.0007
Eq (m=10)	0.0392	0.0002	0.0008
Eq (m=12)	0.0440	0.0003	0.0009

Section 10.11 oc4_p2_load_case_2-5: proj_ang tz coo: global [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-5.sel (28-02-2014 20:58)	24	State_rot proj_ang tz Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
B	WAMsim/oc4_p2_load_case_2-5.sel (01-04-2014 12:45)	24	State_rot proj_ang tz Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
C	hawc2/oc4_p2_load_case_2-5.sel (31-03-2014 15:33)	24	State_rot proj_ang tz Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw

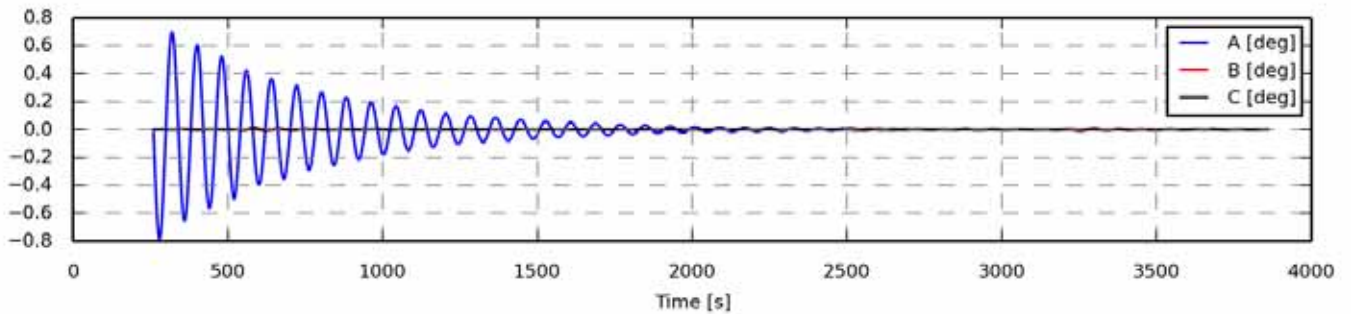


Figure 905 - Full length time series

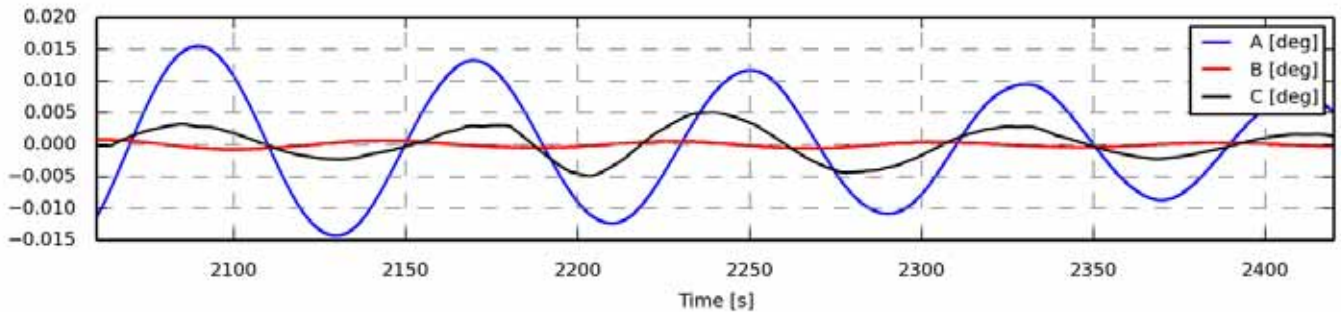


Figure 906 - Zoom of time series

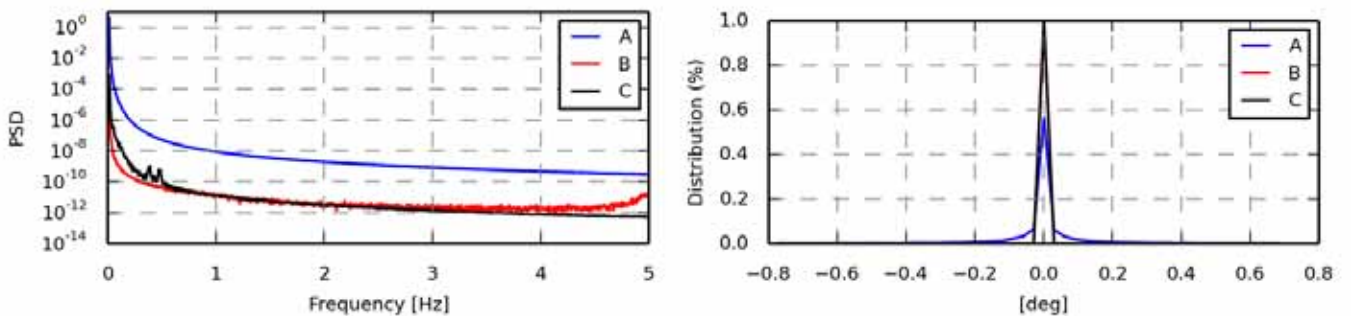


Figure 907 - Power spectrum density

Statistics	A	B	C
Min	-0.7850	-0.0014	-0.0084
Max	0.6975	0.0017	0.0106
Mean	-0.0029	-0.0000	0.0001
Std	0.1485	0.0004	0.0023
Skewness	-0.3594	0.1376	0.2739
Kurtosis	7.9459	0.9188	2.7317

Figure 908 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.1289	0.0003	0.0017
Eq (m=4)	0.2221	0.0005	0.0029
Eq (m=6)	0.3938	0.0009	0.0049
Eq (m=8)	0.5326	0.0012	0.0067
Eq (m=10)	0.6429	0.0014	0.0081
Eq (m=12)	0.7315	0.0015	0.0092

Section 10.12 oc4_p2_load_case_2-5: Mx coo: towertop [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-5.sel (28-02-2014 20:58)	37	MomentMx Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
B	WAMsim/oc4_p2_load_case_2-5.sel (01-04-2014 12:45)	37	MomentMx Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
C	hawc2/oc4_p2_load_case_2-5.sel (31-03-2014 15:33)	37	MomentMx Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment

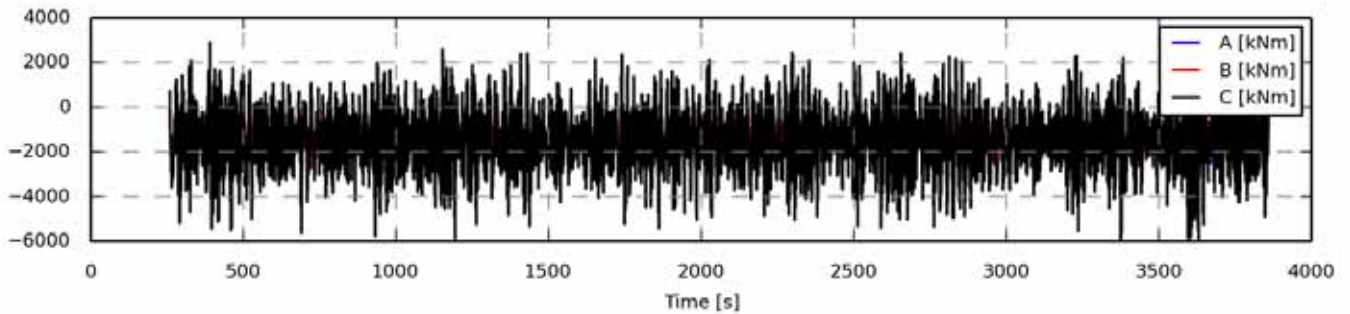


Figure 909 - Full length time series

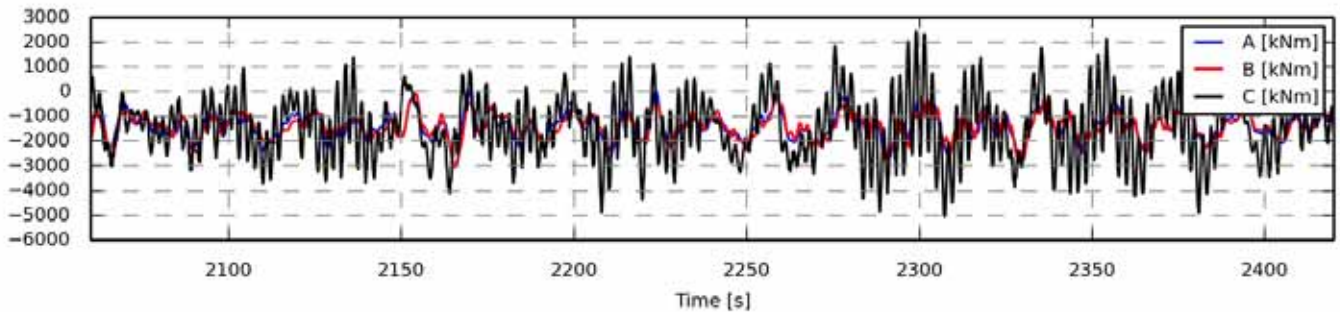


Figure 910 - Zoom of time series

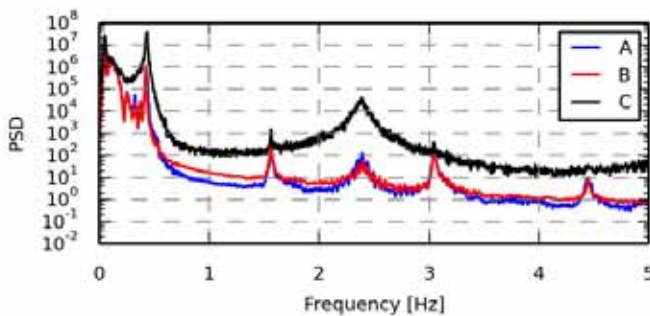


Figure 911 - Power spectrum density

Statistics	A	B	C
Min	-3.4239e+03	-3.2913e+03	-5.9689e+03
Max	526.5273	449.7805	3.3239e+03
Mean	-1.4148e+03	-1.4177e+03	-1.4535e+03
Std	543.7348	485.3402	1.2503e+03
Skewness	-0.1536	-0.0569	-0.0441
Kurtosis	0.1329	0.1755	0.1124

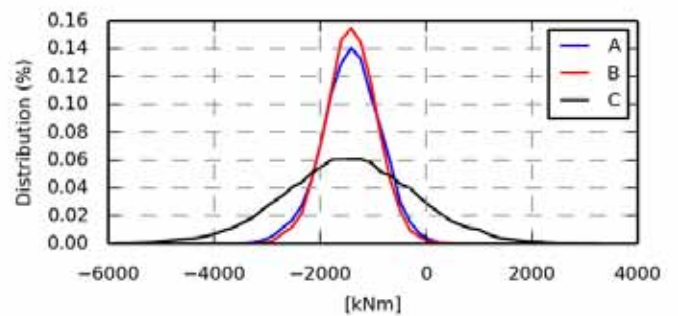


Figure 912 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	817.3215	734.4023	2.4376e+03
Eq (m=4)	1.0635e+03	962.4438	2.9395e+03
Eq (m=6)	1.4418e+03	1.3237e+03	3.7541e+03
Eq (m=8)	1.7237e+03	1.6004e+03	4.3835e+03
Eq (m=10)	1.9453e+03	1.8213e+03	4.8813e+03
Eq (m=12)	2.1257e+03	2.0022e+03	5.2859e+03

Section 10.13 oc4_p2_load_case_2-5: My coo: towertop [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-5.sel (28-02-2014 20:58)	38	MomentMy Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
B	WAMsim/oc4_p2_load_case_2-5.sel (01-04-2014 12:45)	38	MomentMy Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
C	hawc2/oc4_p2_load_case_2-5.sel (31-03-2014 15:33)	38	MomentMy Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment

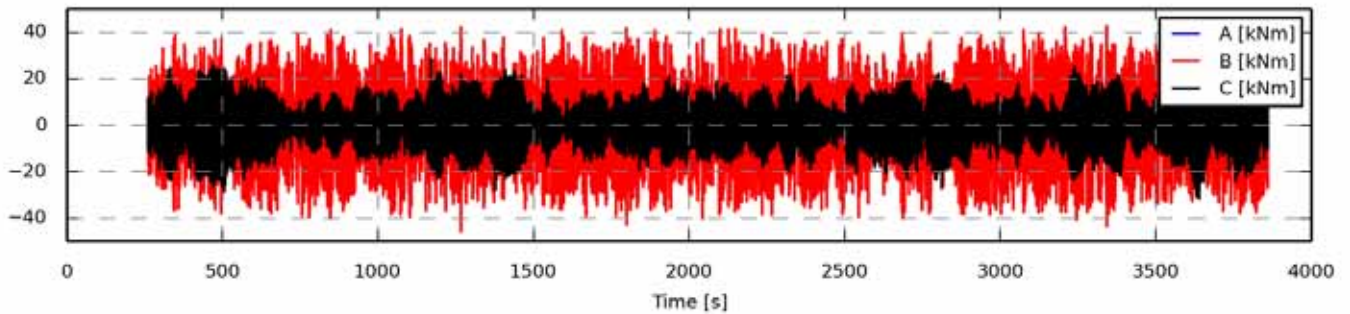


Figure 913 - Full length time series

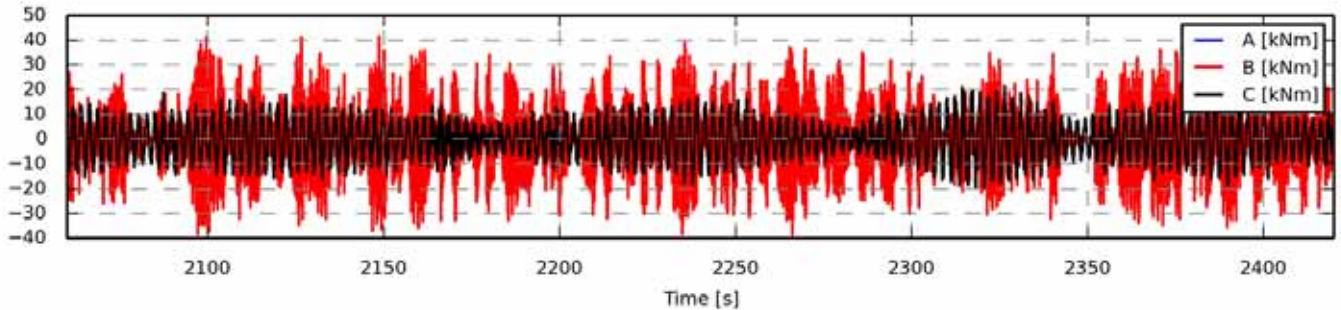


Figure 914 - Zoom of time series

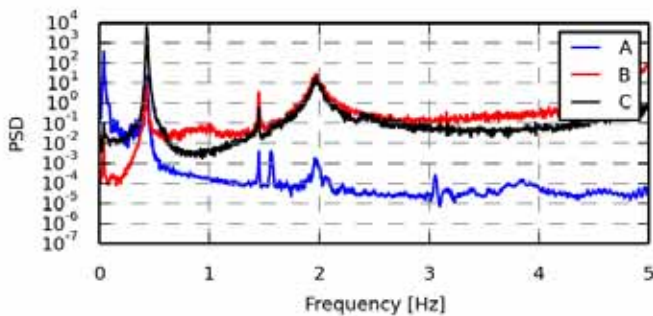


Figure 915 - Power spectrum density

Statistics	A	B	C
Min	-12.1723	-45.9587	-31.5467
Max	10.5408	42.6439	33.8042
Mean	-0.0026	-0.0001	-0.0104
Std	1.8012	9.7536	8.2846
Skewness	-0.0699	0.0062	-0.0020
Kurtosis	8.7220	1.2648	-0.3398

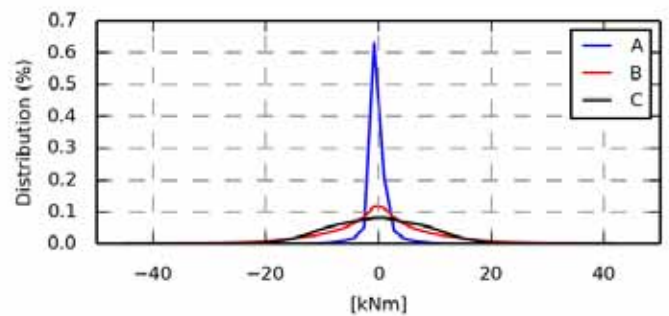


Figure 916 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	2.8716	56.7967	21.6571
Eq (m=4)	4.3634	54.4185	24.2772
Eq (m=6)	6.9704	54.3385	28.4138
Eq (m=8)	8.9993	55.7866	31.7218
Eq (m=10)	10.5845	57.4966	34.5593
Eq (m=12)	11.8511	59.1776	37.0556

Section 10.14 oc4_p2_load_case_2-5: Mz coo: towertop [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-5.sel (28-02-2014 20:58)	39	MomentMz Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
B	WAMsim/oc4_p2_load_case_2-5.sel (01-04-2014 12:45)	39	MomentMz Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
C	hawc2/oc4_p2_load_case_2-5.sel (31-03-2014 15:33)	39	MomentMz Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment

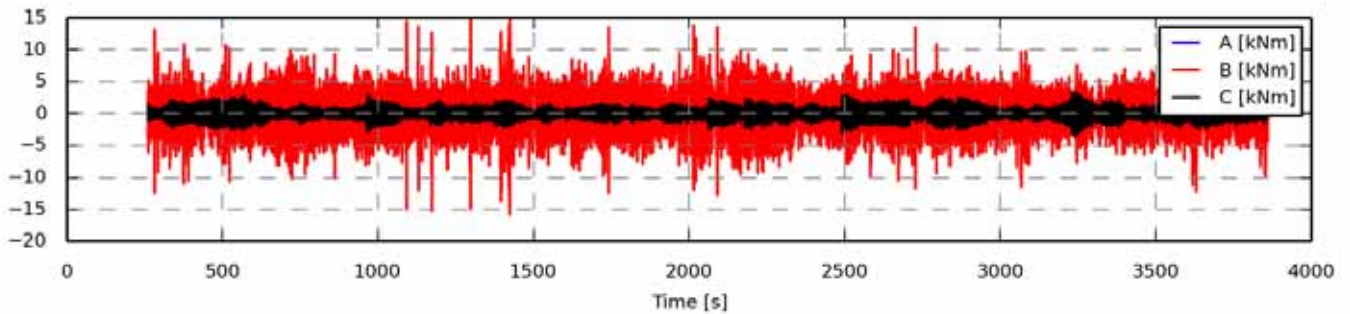


Figure 917 - Full length time series

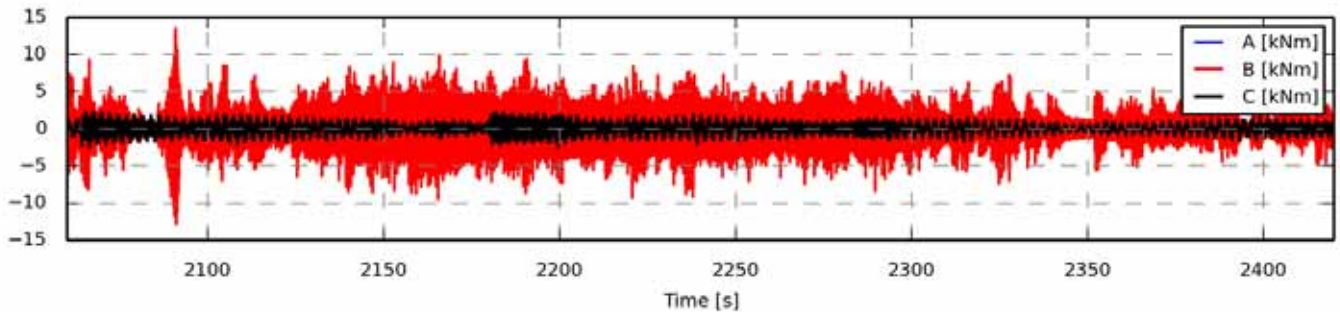


Figure 918 - Zoom of time series

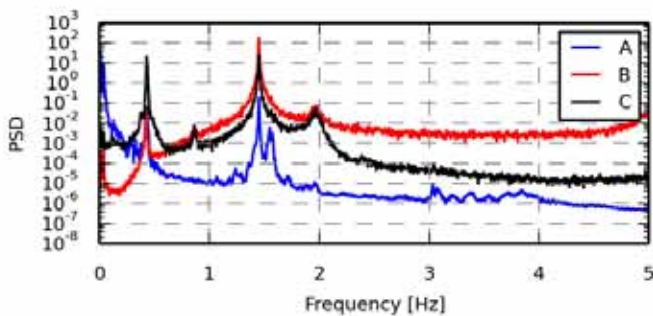


Figure 919 - Power spectrum density

Statistics	A	B	C
Min	-3.4579	-15.8842	-3.5684
Max	3.4308	14.6770	3.3038
Mean	-0.0071	0.0000	0.0005
Std	0.5030	2.2961	0.7244
Skewness	-0.3908	0.0008	-0.0094
Kurtosis	12.0558	1.9386	0.4767

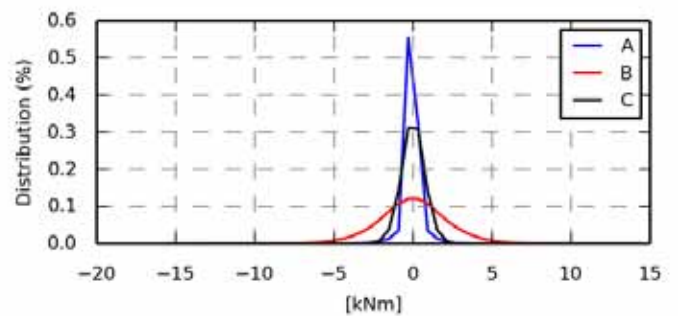


Figure 920 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.6235	13.6119	2.4725
Eq (m=4)	1.0422	13.3348	2.6768
Eq (m=6)	1.8279	14.4598	3.0751
Eq (m=8)	2.4711	15.9334	3.4295
Eq (m=10)	2.9863	17.2763	3.7395
Eq (m=12)	3.4018	18.4354	4.0084

Section 10.15 oc4_p2_load_case_2-5: Mx coo: tower [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-5.sel (28-02-2014 20:58)	43	MomentMx Mbdy:tower nodenr: 1 coo: tower tower base bending moment
B	WAMsim/oc4_p2_load_case_2-5.sel (01-04-2014 12:45)	43	MomentMx Mbdy:tower nodenr: 1 coo: tower tower base bending moment
C	hawc2/oc4_p2_load_case_2-5.sel (31-03-2014 15:33)	43	MomentMx Mbdy:tower nodenr: 1 coo: tower tower base bending moment

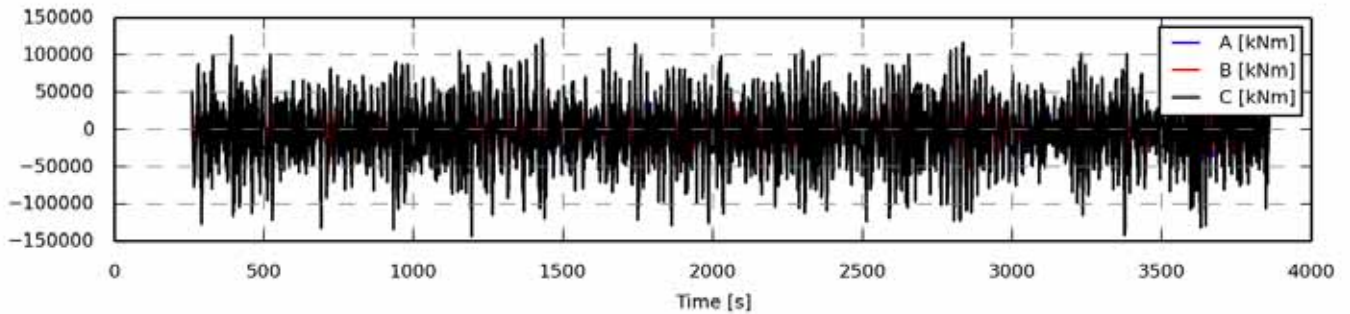


Figure 921 - Full length time series

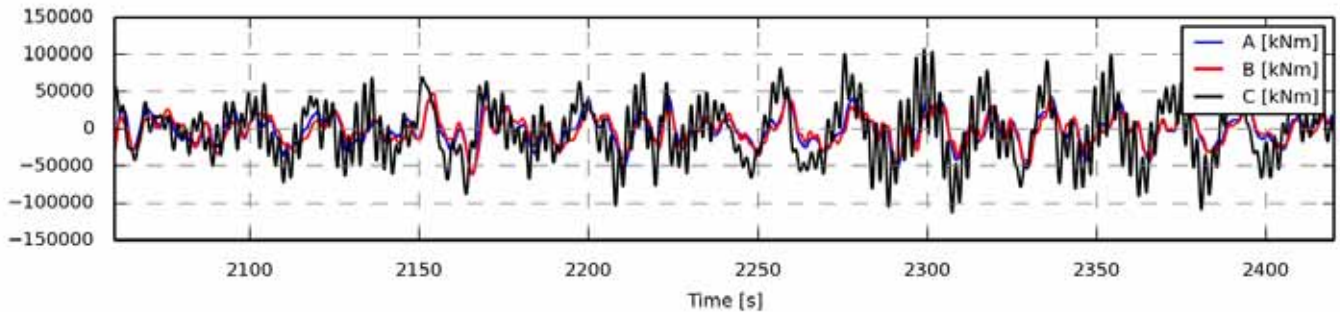


Figure 922 - Zoom of time series

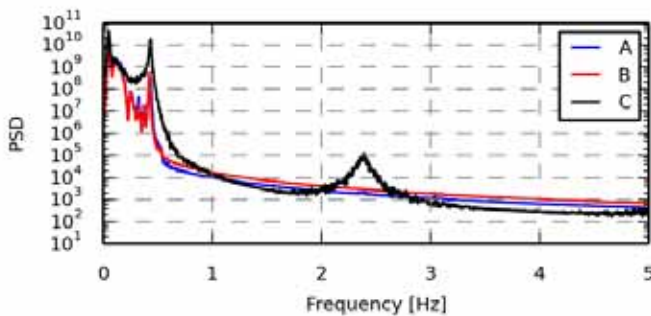


Figure 923 - Power spectrum density

Statistics	A	B	C
Min	-7.3229e+04	-6.7513e+04	-1.4290e+05
Max	6.4089e+04	6.3283e+04	1.2573e+05
Mean	-1.8615e+03	-1.9968e+03	-4.0126e+03
Std	1.9938e+04	1.8237e+04	3.8383e+04
Skewness	-0.1466	-0.0552	-0.1033
Kurtosis	0.1130	0.1080	0.0917

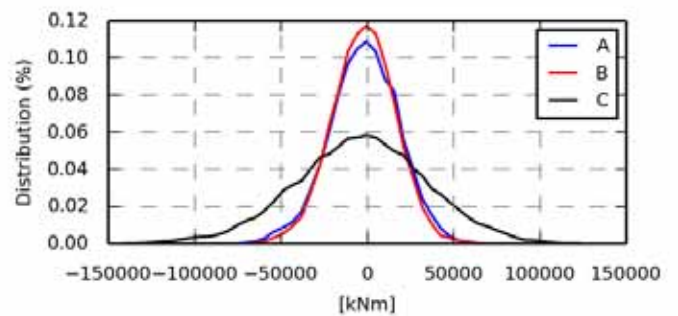


Figure 924 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	2.8105e+04	2.5669e+04	6.3717e+04
Eq (m=4)	3.7079e+04	3.4093e+04	8.0166e+04
Eq (m=6)	5.0968e+04	4.7392e+04	1.0665e+05
Eq (m=8)	6.1317e+04	5.7484e+04	1.2652e+05
Eq (m=10)	6.9397e+04	6.5437e+04	1.4188e+05
Eq (m=12)	7.5903e+04	7.1859e+04	1.5411e+05

Section 10.16 oc4_p2_load_case_2-5: My coo: tower [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-5.sel (28-02-2014 20:58)	44	MomentMy Mbdy:tower nodenr: 1 coo: tower tower base bending moment
B	WAMsim/oc4_p2_load_case_2-5.sel (01-04-2014 12:45)	44	MomentMy Mbdy:tower nodenr: 1 coo: tower tower base bending moment
C	hawc2/oc4_p2_load_case_2-5.sel (31-03-2014 15:33)	44	MomentMy Mbdy:tower nodenr: 1 coo: tower tower base bending moment

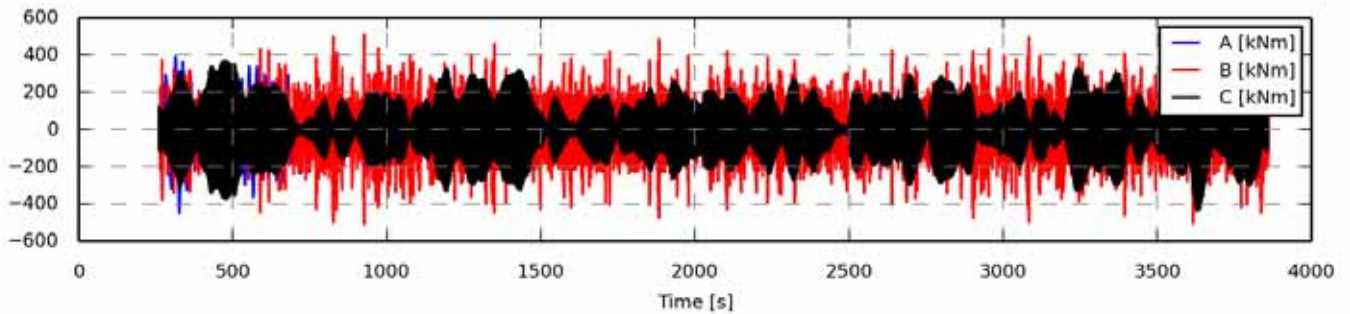


Figure 925 - Full length time series

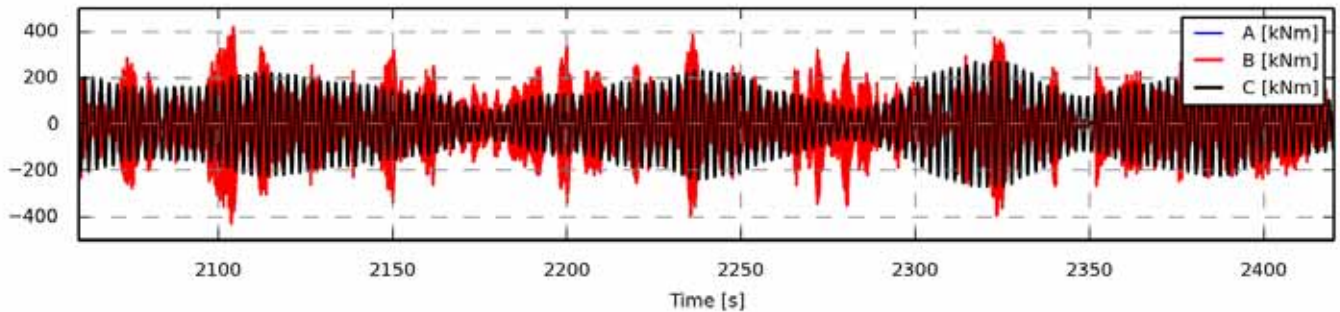


Figure 926 - Zoom of time series

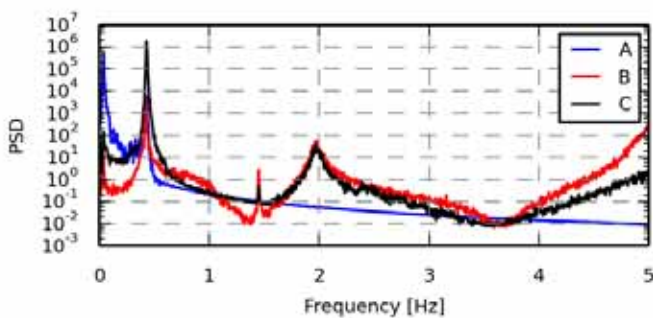


Figure 927 - Power spectrum density

Statistics	A	B	C
Min	-4.4979e+02	-5.0690e+02	-4.3782e+02
Max	390.0962	512.4416	446.6176
Mean	-0.0657	-0.0020	-0.5076
Std	68.8867	97.8275	131.1255
Skewness	-0.0819	-0.0027	-0.0005
Kurtosis	8.6687	1.4418	-0.3658

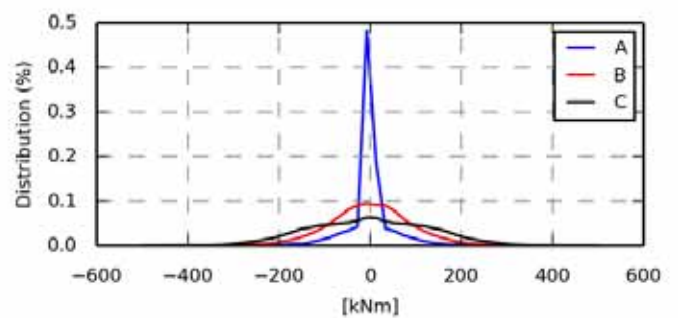


Figure 928 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	97.3941	646.8989	305.0203
Eq (m=4)	153.5974	594.8097	348.2191
Eq (m=6)	250.8113	591.3641	412.8250
Eq (m=8)	326.0803	616.9364	462.4930
Eq (m=10)	384.9055	645.7005	503.4598
Eq (m=12)	432.0011	672.8673	538.2290

Section 10.17 oc4_p2_load_case_2-5: Mz coo: tower [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-5.sel (28-02-2014 20:58)	45	MomentMz Mbdy:tower nodenr: 1 coo: tower tower base bending moment
B	WAMsim/oc4_p2_load_case_2-5.sel (01-04-2014 12:45)	45	MomentMz Mbdy:tower nodenr: 1 coo: tower tower base bending moment
C	hawc2/oc4_p2_load_case_2-5.sel (31-03-2014 15:33)	45	MomentMz Mbdy:tower nodenr: 1 coo: tower tower base bending moment

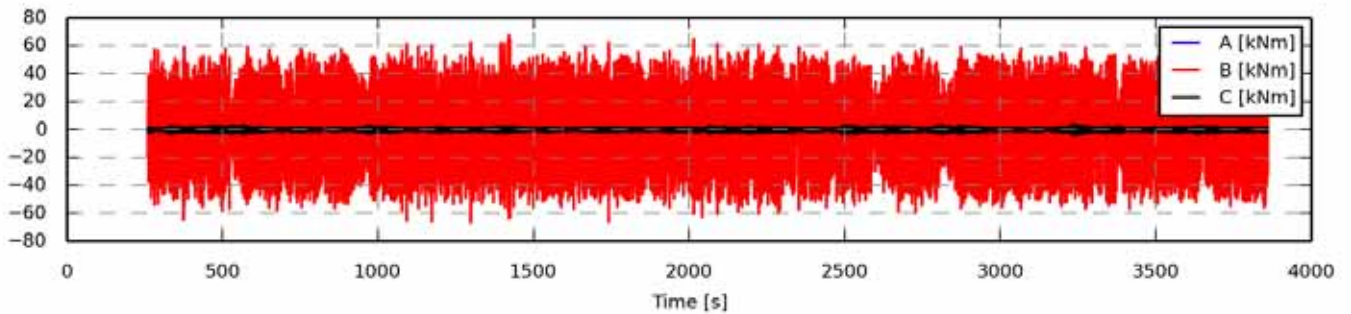


Figure 929 - Full length time series

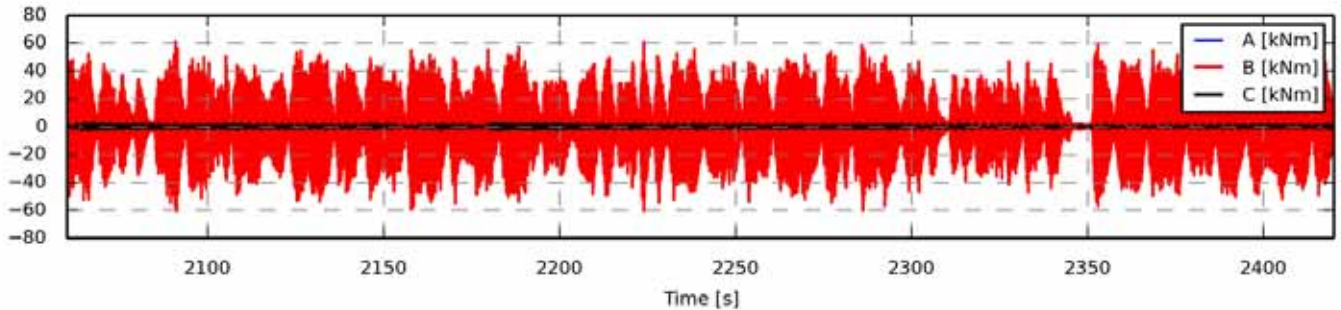


Figure 930 - Zoom of time series

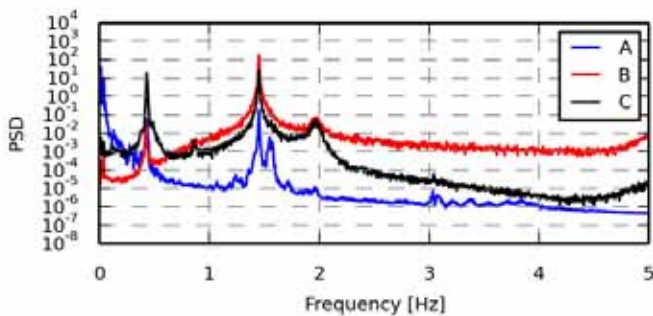


Figure 931 - Power spectrum density

Statistics	A	B	C
Min	-3.5748	-66.6955	-3.8464
Max	3.4682	67.9354	3.8363
Mean	-0.0077	-0.0000	0.0022
Std	0.5216	19.7437	0.7556
Skewness	-0.4322	0.0006	-0.0091
Kurtosis	11.8957	-0.2657	0.4971

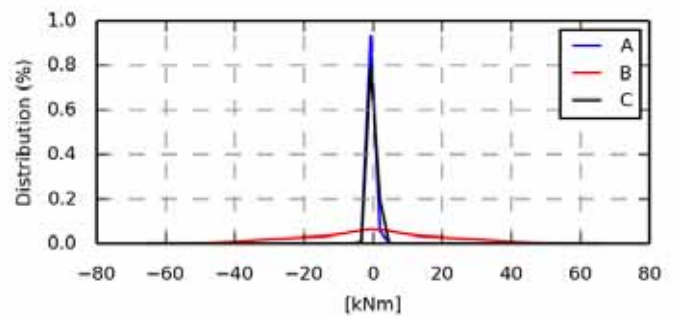


Figure 932 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.6349	122.9367	2.9170
Eq (m=4)	1.0650	106.1820	3.0431
Eq (m=6)	1.8703	95.1787	3.4281
Eq (m=8)	2.5280	92.4364	3.8174
Eq (m=10)	3.0542	92.2186	4.1753
Eq (m=12)	3.4786	93.0422	4.4934

Section 10.18 oc4_p2_load_case_2-5: ESYS line1_1 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-5.sel (28-02-2014 20:58)	55	ESYS line1_1 SENSOR 4
B	WAMsim/oc4_p2_load_case_2-5.sel (01-04-2014 12:45)	55	ESYS line1_1 SENSOR 4
C	hawc2/oc4_p2_load_case_2-5.sel (31-03-2014 15:33)	55	ESYS line1_1 SENSOR 4

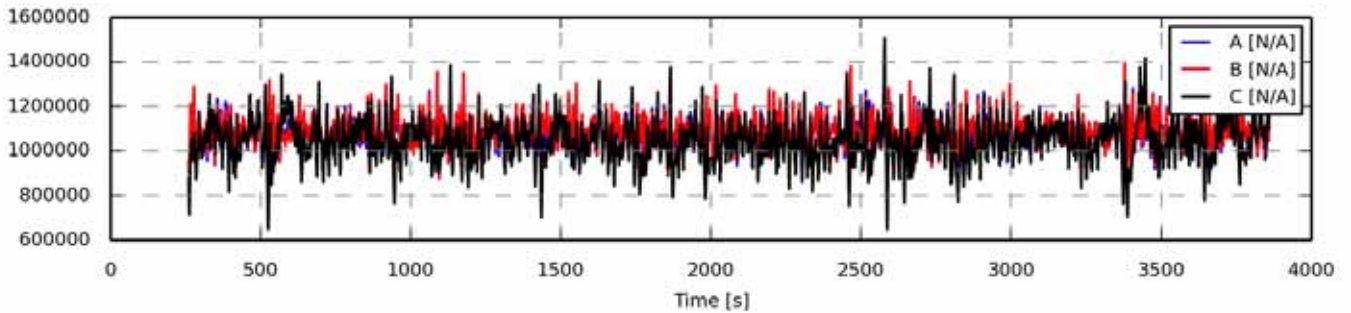


Figure 933 - Full length time series

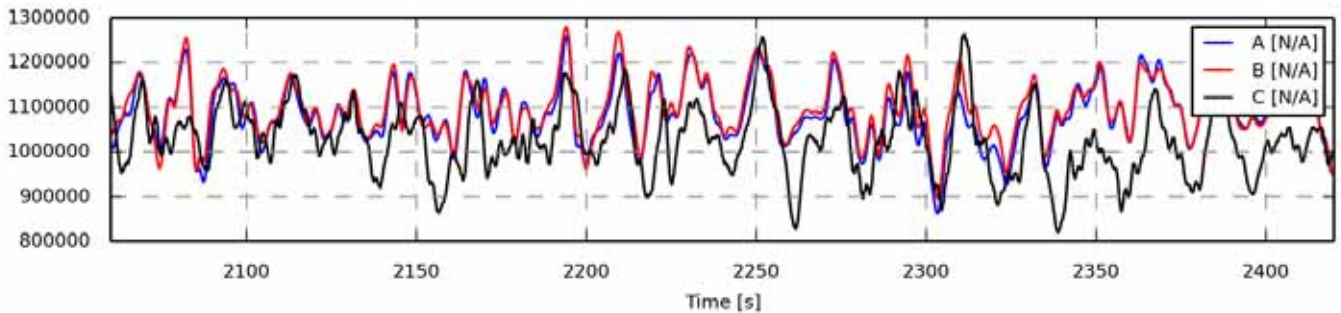


Figure 934 - Zoom of time series

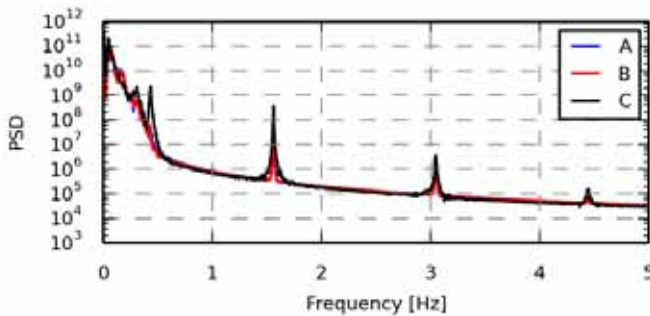


Figure 935 - Power spectrum density

Statistics	A	B	C
Min	8.2728e+05	8.3145e+05	6.4826e+05
Max	1.4139e+06	1.3987e+06	1.5057e+06
Mean	1.0810e+06	1.0901e+06	1.0434e+06
Std	6.8638e+04	6.8822e+04	9.3410e+04
Skewness	0.2653	0.3928	0.0310
Kurtosis	0.7080	1.0301	1.3035

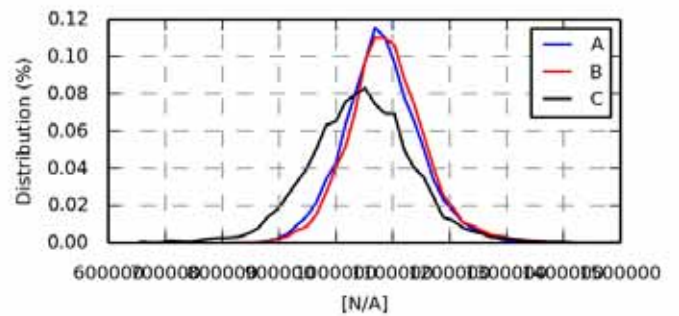


Figure 936 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	9.2606e+04	9.5632e+04	1.1878e+05
Eq (m=4)	1.2664e+05	1.3102e+05	1.7027e+05
Eq (m=6)	1.8359e+05	1.8944e+05	2.6112e+05
Eq (m=8)	2.2946e+05	2.3504e+05	3.3515e+05
Eq (m=10)	2.6703e+05	2.7109e+05	3.9522e+05
Eq (m=12)	2.9815e+05	3.0007e+05	4.4435e+05

Section 10.19 oc4_p2_load_case_2-5: ESYS line1_3 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-5.sel (28-02-2014 20:58)	259	ESYS line1_3 SENSOR 104
B	WAMsim/oc4_p2_load_case_2-5.sel (01-04-2014 12:45)	259	ESYS line1_3 SENSOR 104
C	hawc2/oc4_p2_load_case_2-5.sel (31-03-2014 15:33)	259	ESYS line1_3 SENSOR 104

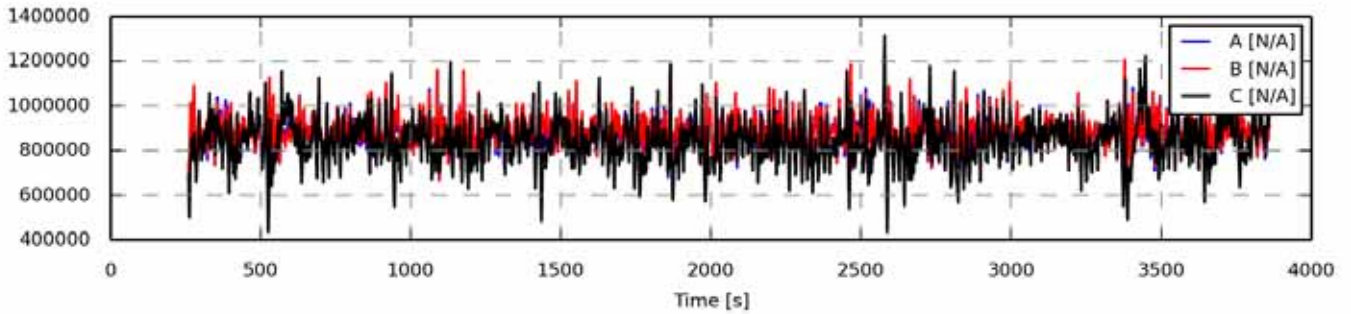


Figure 937 - Full length time series

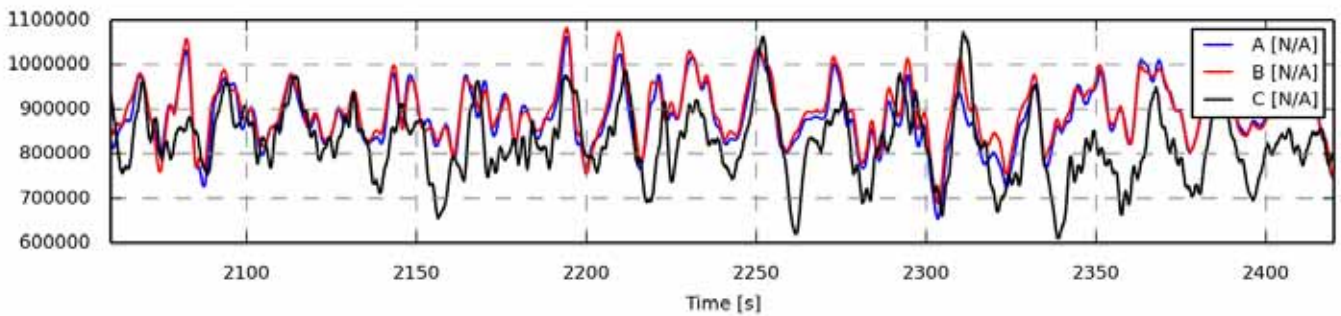


Figure 938 - Zoom of time series

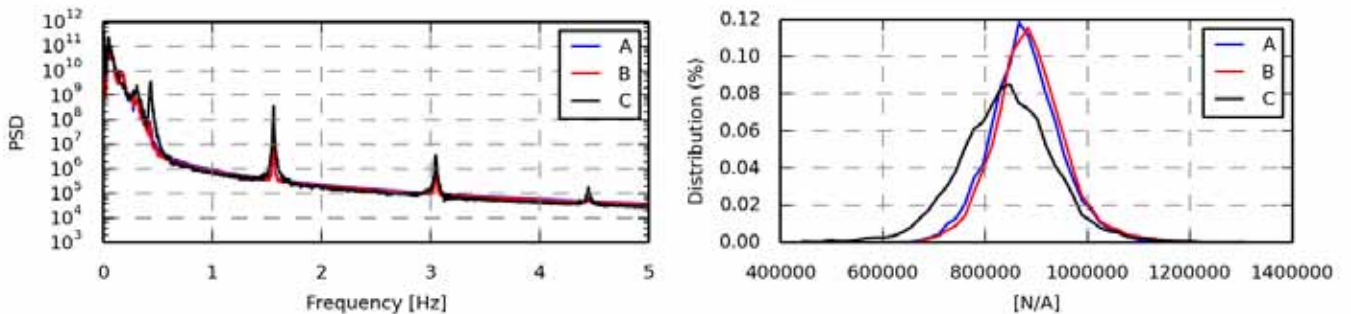


Figure 939 - Power spectrum density

Statistics	A	B	C
Min	6.1667e+05	6.2076e+05	4.3499e+05
Max	1.2209e+06	1.2081e+06	1.3143e+06
Mean	8.7902e+05	8.8800e+05	8.4118e+05
Std	7.0175e+04	7.0402e+04	9.5668e+04
Skewness	0.2954	0.4272	0.0069
Kurtosis	0.7913	1.1424	1.3354

Figure 940 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	9.5171e+04	9.8312e+04	1.2306e+05
Eq (m=4)	1.3069e+05	1.3522e+05	1.7622e+05
Eq (m=6)	1.9001e+05	1.9602e+05	2.6959e+05
Eq (m=8)	2.3757e+05	2.4329e+05	3.4535e+05
Eq (m=10)	2.7640e+05	2.8056e+05	4.0664e+05
Eq (m=12)	3.0850e+05	3.1050e+05	4.5669e+05

Section 10.20 oc4_p2_load_case_2-5: ESYS line2_1 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-5.sel (28-02-2014 20:58)	263	ESYS line2_1 SENSOR 4
B	WAMsim/oc4_p2_load_case_2-5.sel (01-04-2014 12:45)	263	ESYS line2_1 SENSOR 4
C	hawc2/oc4_p2_load_case_2-5.sel (31-03-2014 15:33)	263	ESYS line2_1 SENSOR 4

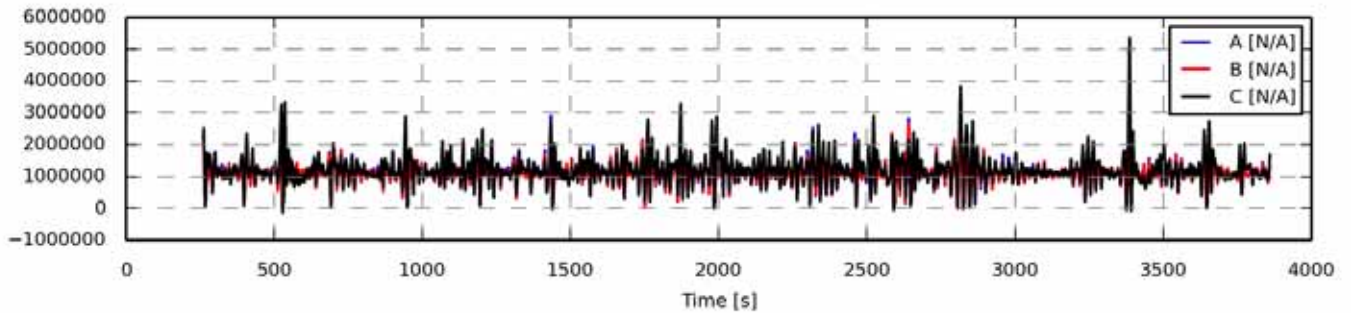


Figure 941 - Full length time series

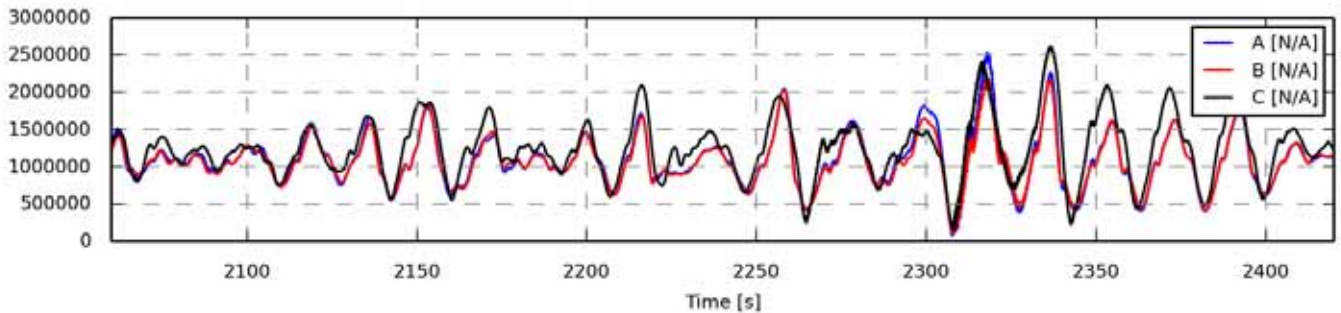


Figure 942 - Zoom of time series

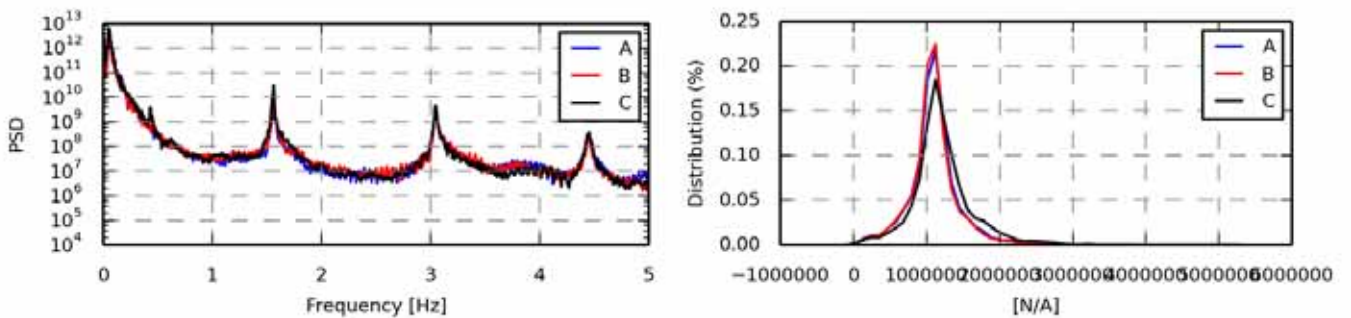


Figure 943 - Power spectrum density

Statistics	A	B	C
Min	-3.3461e+04	-2.7739e+04	-1.4006e+05
Max	3.0769e+06	2.8179e+06	5.3484e+06
Mean	1.1094e+06	1.0916e+06	1.2231e+06
Std	3.5255e+05	3.3190e+05	4.4680e+05
Skewness	0.6497	0.4932	1.6348
Kurtosis	3.2247	2.7541	8.7751

Figure 944 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	4.9639e+05	4.6752e+05	6.1152e+05
Eq (m=4)	7.1171e+05	6.6591e+05	9.1072e+05
Eq (m=6)	1.0680e+06	9.9333e+05	1.4855e+06
Eq (m=8)	1.3371e+06	1.2416e+06	1.9912e+06
Eq (m=10)	1.5427e+06	1.4328e+06	2.4111e+06
Eq (m=12)	1.7037e+06	1.5834e+06	2.7523e+06

Section 10.21 oc4_p2_load_case_2-5: ESYS line2_3 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-5.sel (28-02-2014 20:58)	467	ESYS line2_3 SENSOR 104
B	WAMsim/oc4_p2_load_case_2-5.sel (01-04-2014 12:45)	467	ESYS line2_3 SENSOR 104
C	hawc2/oc4_p2_load_case_2-5.sel (31-03-2014 15:33)	467	ESYS line2_3 SENSOR 104

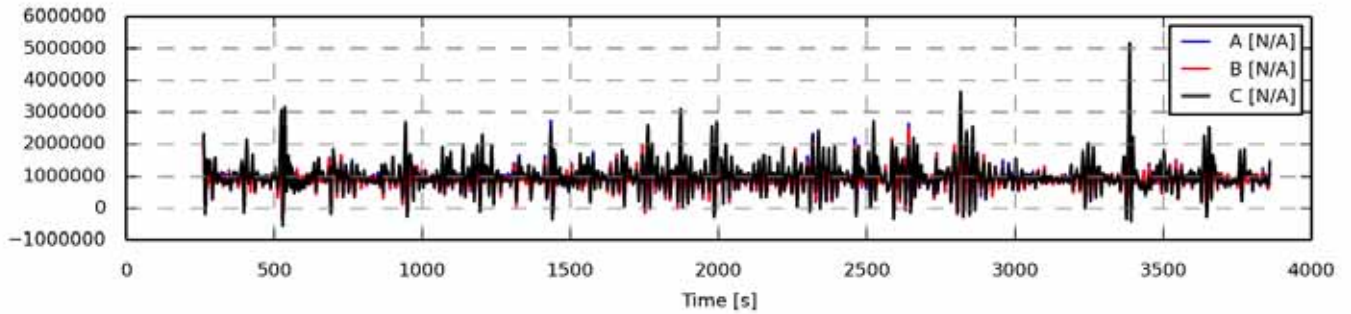


Figure 945 - Full length time series

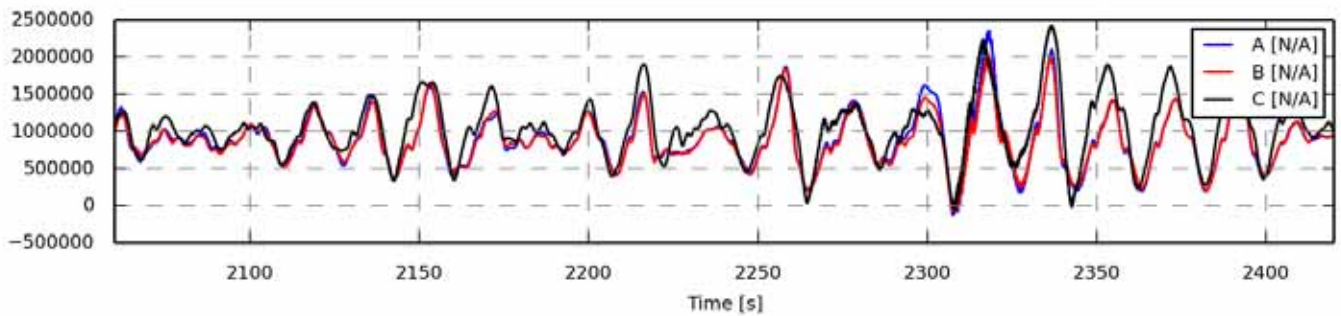


Figure 946 - Zoom of time series

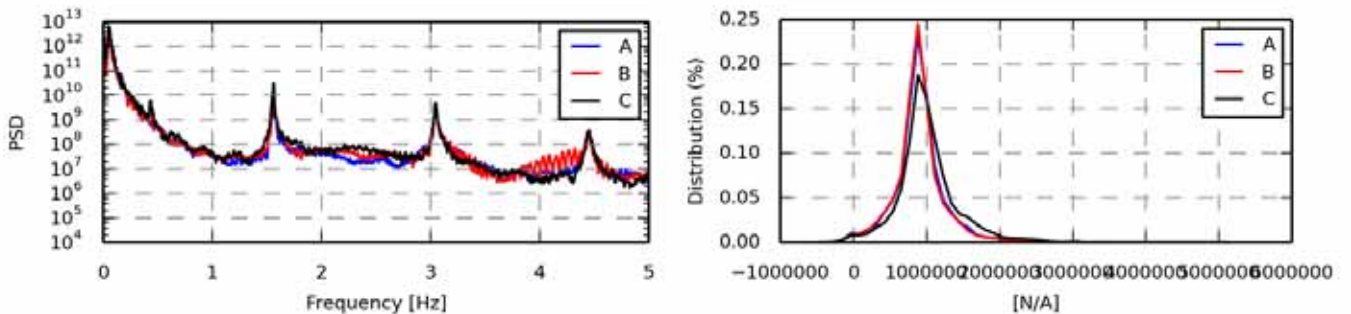


Figure 947 - Power spectrum density

Statistics	A	B	C
Min	-3.6705e+05	-2.8786e+05	-5.4694e+05
Max	2.9066e+06	2.6724e+06	5.1735e+06
Mean	9.0752e+05	8.8970e+05	1.0213e+06
Std	3.5668e+05	3.3591e+05	4.4935e+05
Skewness	0.6606	0.5052	1.6473
Kurtosis	3.2919	2.8217	8.9625

Figure 948 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	5.0491e+05	4.7577e+05	6.2870e+05
Eq (m=4)	7.2509e+05	6.7863e+05	9.4129e+05
Eq (m=6)	1.0924e+06	1.0155e+06	1.5450e+06
Eq (m=8)	1.3720e+06	1.2725e+06	2.0748e+06
Eq (m=10)	1.5873e+06	1.4714e+06	2.5130e+06
Eq (m=12)	1.7568e+06	1.6286e+06	2.8688e+06

Section 10.22 oc4_p2_load_case_2-5: ESYS line3_1 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-5.sel (28-02-2014 20:58)	471	ESYS line3_1 SENSOR 4
B	WAMsim/oc4_p2_load_case_2-5.sel (01-04-2014 12:45)	471	ESYS line3_1 SENSOR 4
C	hawc2/oc4_p2_load_case_2-5.sel (31-03-2014 15:33)	471	ESYS line3_1 SENSOR 4

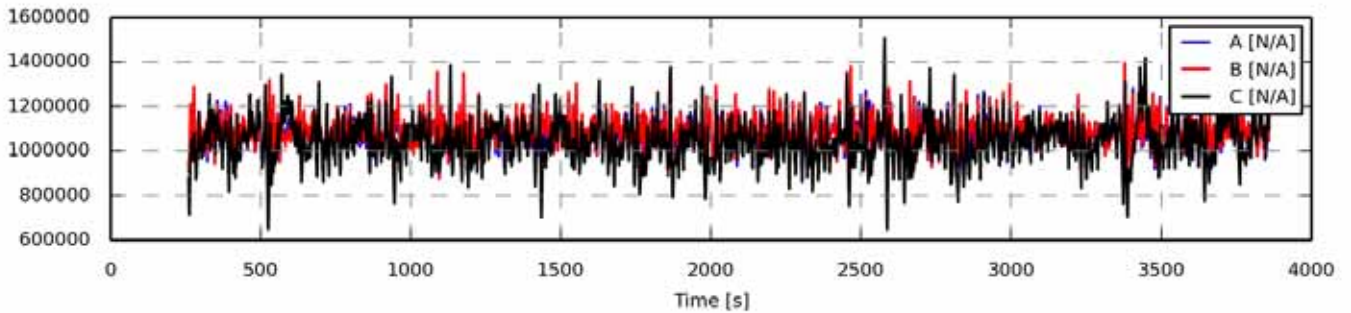


Figure 949 - Full length time series

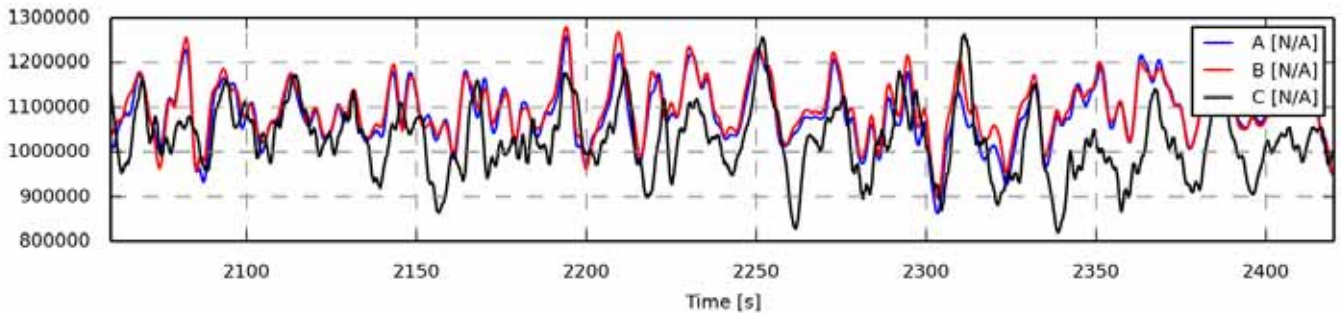


Figure 950 - Zoom of time series

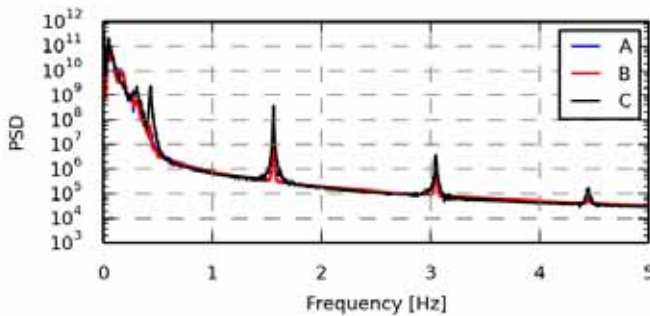


Figure 951 - Power spectrum density

Statistics	A	B	C
Min	8.2733e+05	8.3151e+05	6.4818e+05
Max	1.4137e+06	1.3987e+06	1.5060e+06
Mean	1.0810e+06	1.0901e+06	1.0433e+06
Std	6.8538e+04	6.8821e+04	9.3476e+04
Skewness	0.2603	0.3928	0.0318
Kurtosis	0.6909	1.0301	1.2996

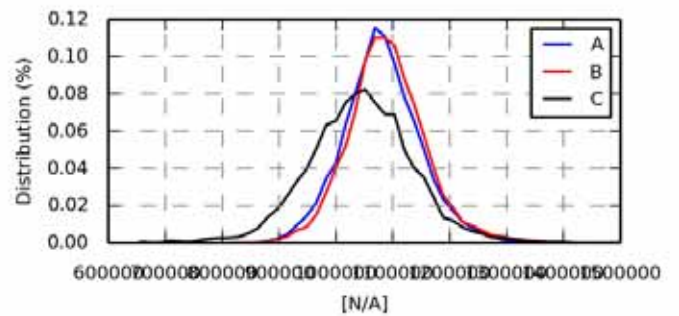


Figure 952 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	9.2464e+04	9.5698e+04	1.1886e+05
Eq (m=4)	1.2639e+05	1.3113e+05	1.7039e+05
Eq (m=6)	1.8311e+05	1.8966e+05	2.6129e+05
Eq (m=8)	2.2885e+05	2.3531e+05	3.3534e+05
Eq (m=10)	2.6641e+05	2.7136e+05	3.9541e+05
Eq (m=12)	2.9759e+05	3.0031e+05	4.4454e+05

Section 10.23 oc4_p2_load_case_2-5: ESYS line3_3 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-5.sel (28-02-2014 20:58)	675	ESYS line3_3 SENSOR 104
B	WAMsim/oc4_p2_load_case_2-5.sel (01-04-2014 12:45)	675	ESYS line3_3 SENSOR 104
C	hawc2/oc4_p2_load_case_2-5.sel (31-03-2014 15:33)	675	ESYS line3_3 SENSOR 104

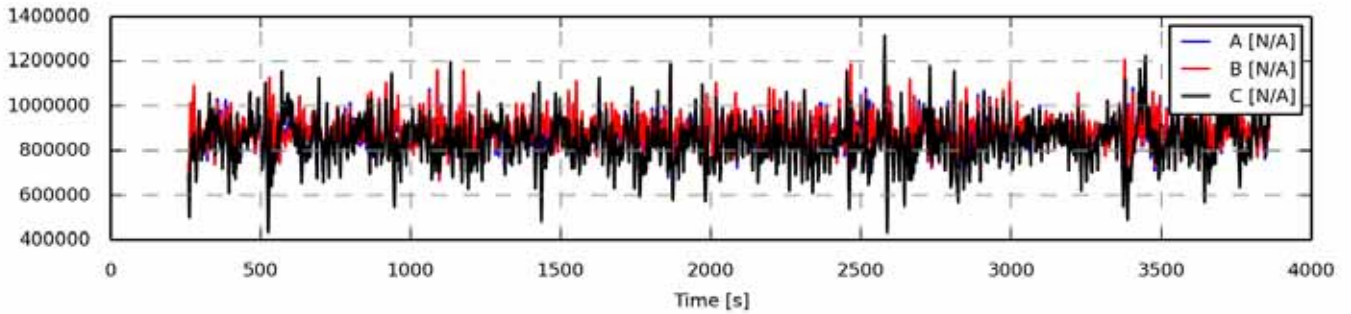


Figure 953 - Full length time series

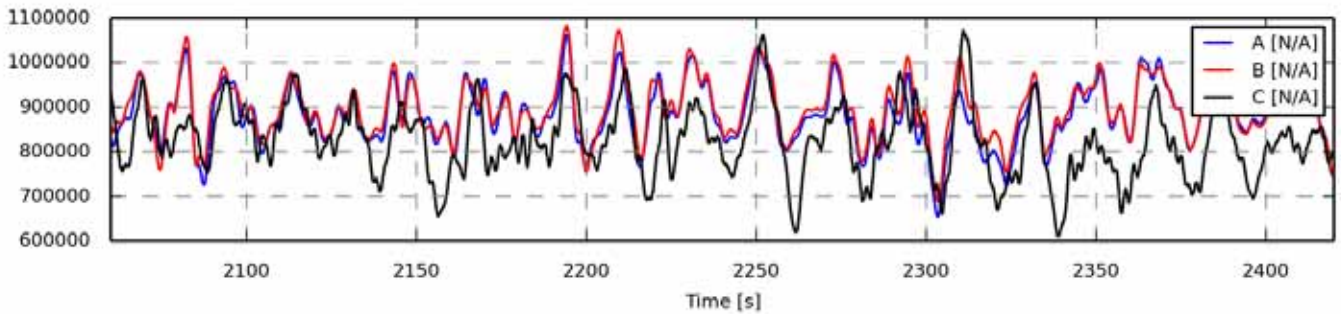


Figure 954 - Zoom of time series

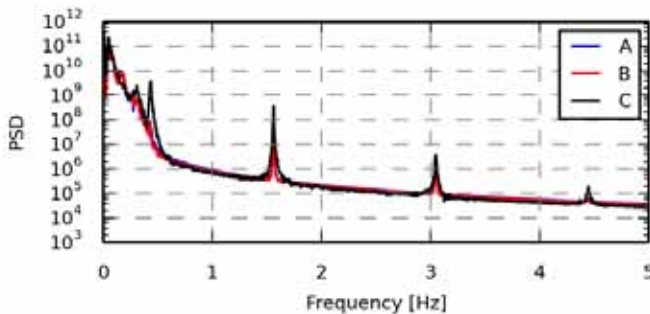


Figure 955 - Power spectrum density

Statistics	A	B	C
Min	6.1675e+05	6.2075e+05	4.3480e+05
Max	1.2208e+06	1.2081e+06	1.3146e+06
Mean	8.7897e+05	8.8800e+05	8.4108e+05
Std	7.0069e+04	7.0401e+04	9.5734e+04
Skewness	0.2906	0.4272	0.0076
Kurtosis	0.7741	1.1424	1.3315

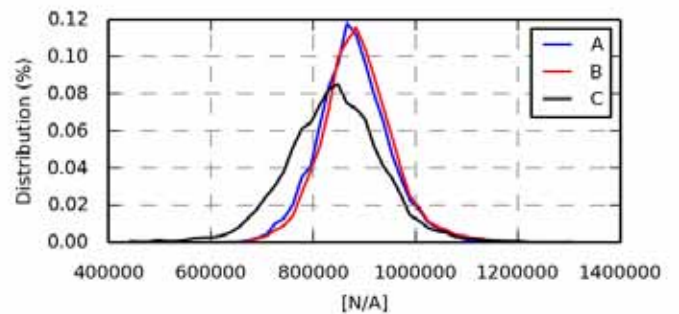


Figure 956 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	9.4936e+04	9.8294e+04	1.2306e+05
Eq (m=4)	1.3032e+05	1.3519e+05	1.7621e+05
Eq (m=6)	1.8945e+05	1.9599e+05	2.6963e+05
Eq (m=8)	2.3699e+05	2.4327e+05	3.4547e+05
Eq (m=10)	2.7587e+05	2.8055e+05	4.0683e+05
Eq (m=12)	3.0804e+05	3.1049e+05	4.5693e+05

Article XI. oc4_p2_load_case_2-6

Generated 22-04-2014 10:00

Section 11.01 oc4_p2_load_case_2-6: WSP gl. coo.,Vy [m/s]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-6.sel (28-02-2014 22:24)	3	Free wind speed Vy, gl. coo, of gl. pos 0.00, 0.00, -90.00
B	WAMsim/oc4_p2_load_case_2-6.sel (01-04-2014 12:46)	3	Free wind speed Vy, gl. coo, of gl. pos 0.00, 0.00, -90.00
C	hawc2/oc4_p2_load_case_2-6.sel (31-03-2014 15:33)	3	Free wind speed Vy, gl. coo, of gl. pos 0.00, 0.00, -90.00

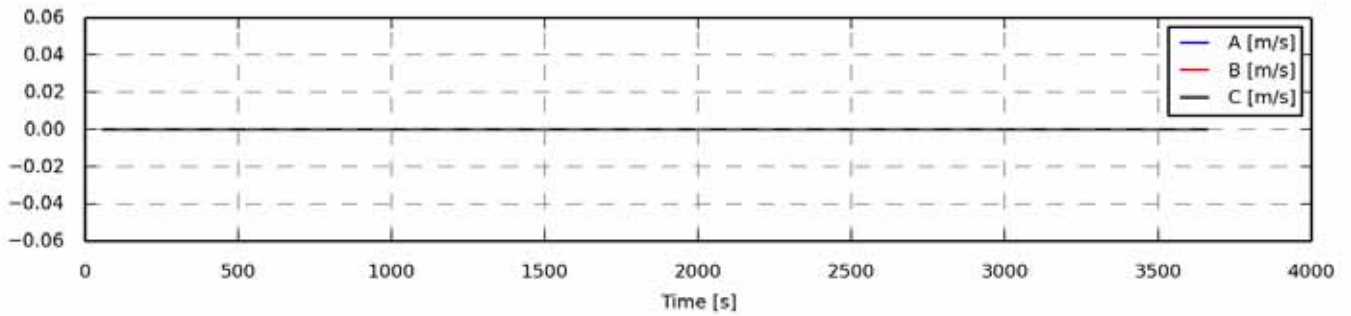


Figure 957 - Full length time series

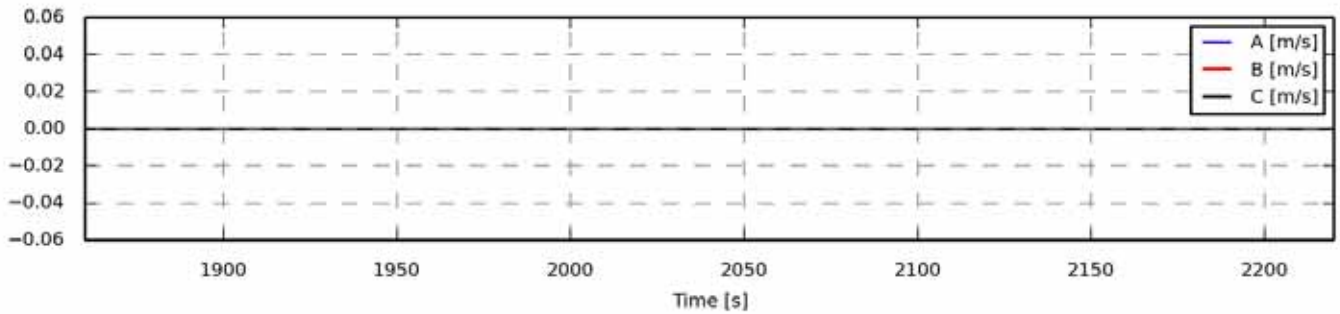


Figure 958 - Zoom of time series

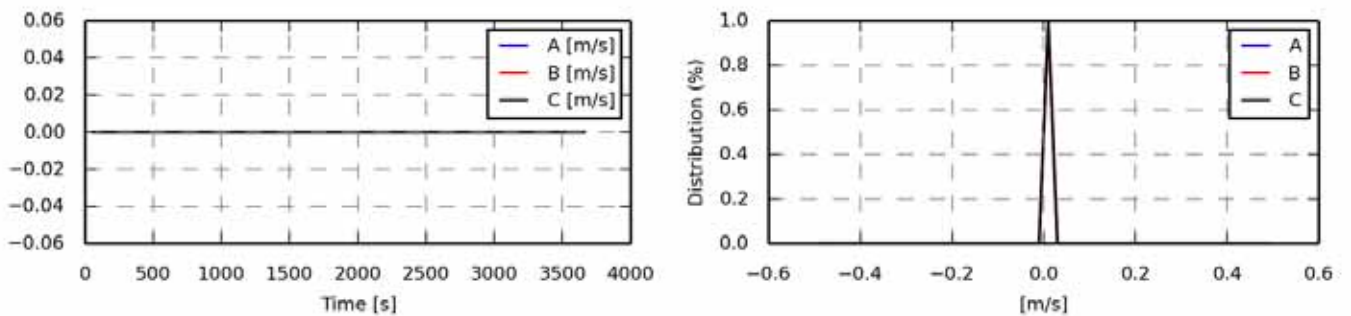


Figure 959 - Power spectrum density

Statistics	A	B	C
Min	0.0000	0.0000	0.0000
Max	0.0000	0.0000	0.0000
Mean	0.0000	0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

Figure 960 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 11.02 oc4_p2_load_case_2-6: Water surf. [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-6.sel (28-02-2014 22:24)	5	Water surface gl. coo, at gl. coo, x,y= 0.00, 0.00
B	WAMsim/oc4_p2_load_case_2-6.sel (01-04-2014 12:46)	5	Constant value
C	hawc2/oc4_p2_load_case_2-6.sel (31-03-2014 15:33)	5	Water surface gl. coo, at gl. coo, x,y= 0.00, 0.00

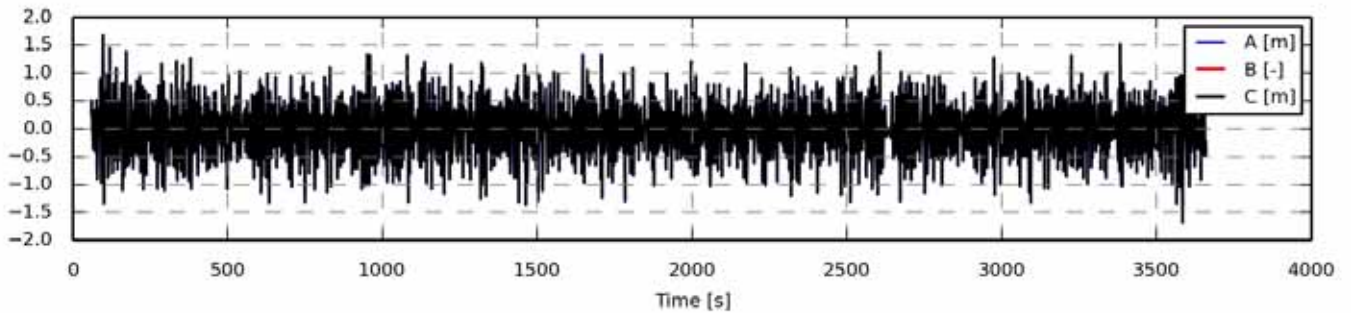


Figure 961 - Full length time series

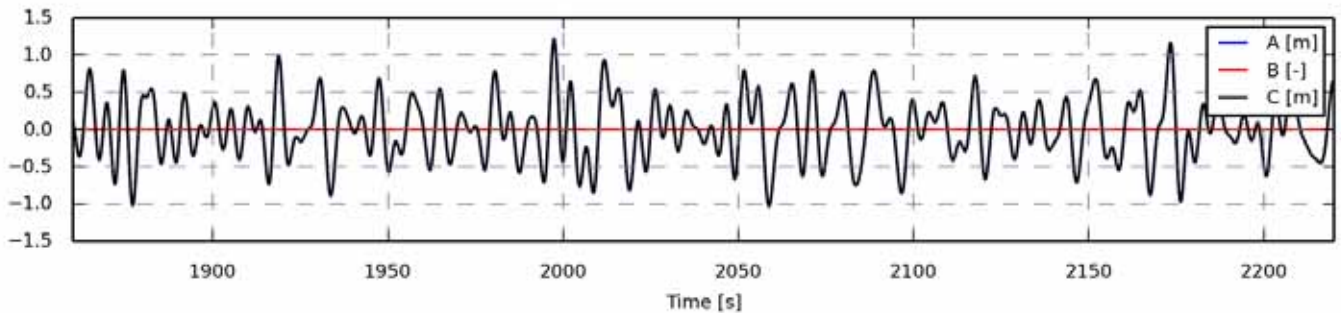


Figure 962 - Zoom of time series

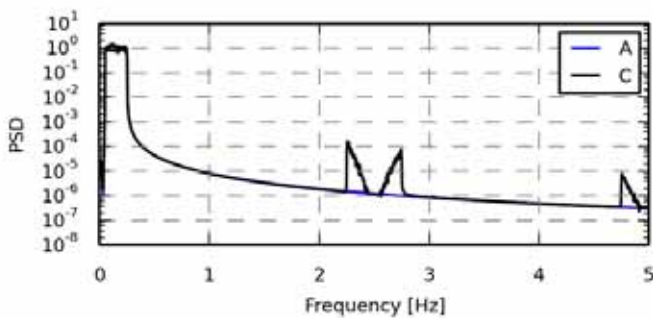


Figure 963 - Power spectrum density

Statistics	A	B	C
Min	-1.6871	0.0000	-1.6796
Max	1.6855	0.0000	1.6782
Mean	0.0001	0.0000	0.0001
Std	0.4475	0.0000	0.4415
Skewness	-0.0567	0.0000	-0.0572
Kurtosis	-0.0509	-3.0000	-0.0523

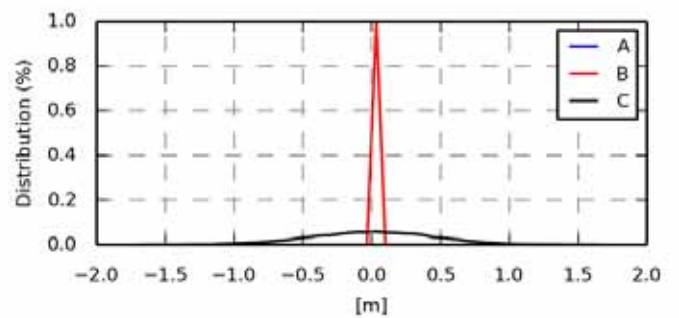


Figure 964 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.7382	-	0.7317
Eq (m=4)	0.9278	-	0.9202
Eq (m=6)	1.2142	-	1.2055
Eq (m=8)	1.4299	-	1.4208
Eq (m=10)	1.6048	-	1.5953
Eq (m=12)	1.7530	-	1.7433

Section 11.03 oc4_p2_load_case_2-6: Constant [-]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-6.sel (28-02-2014 22:24)	6	Constant value
B	WAMsim/oc4_p2_load_case_2-6.sel (01-04-2014 12:46)	6	Constant value
C	hawc2/oc4_p2_load_case_2-6.sel (31-03-2014 15:33)	6	Constant value

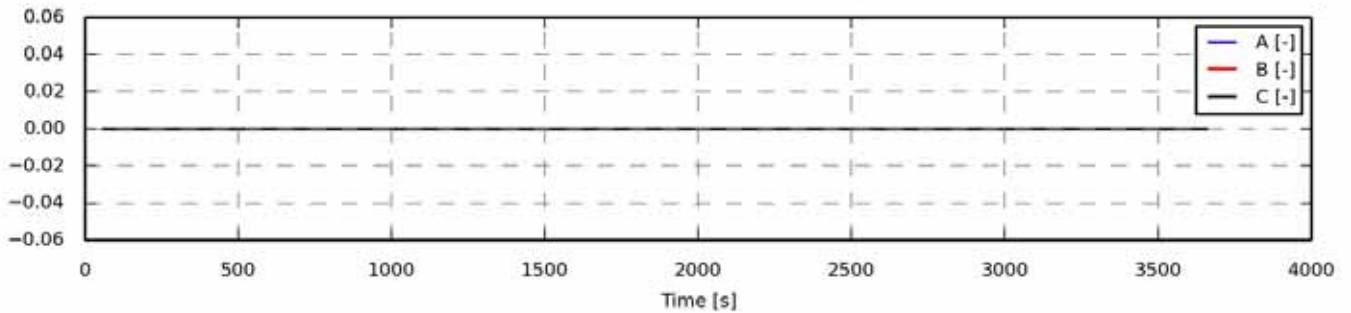


Figure 965 - Full length time series

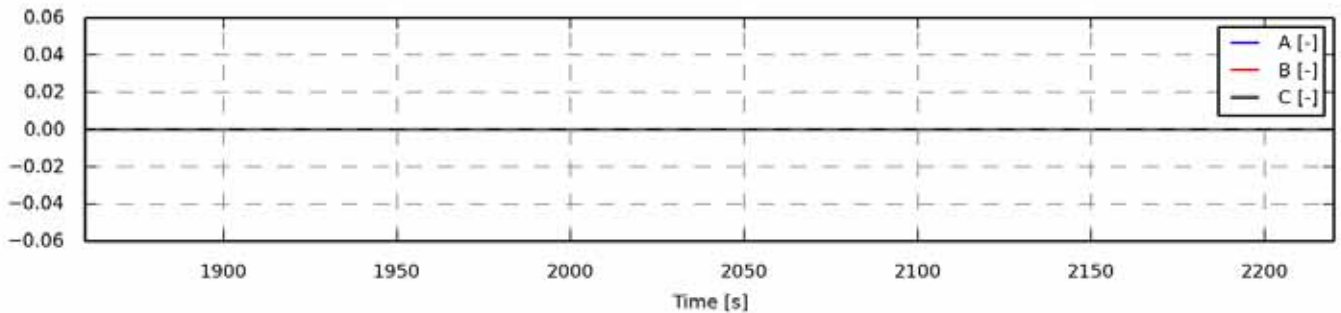


Figure 966 - Zoom of time series

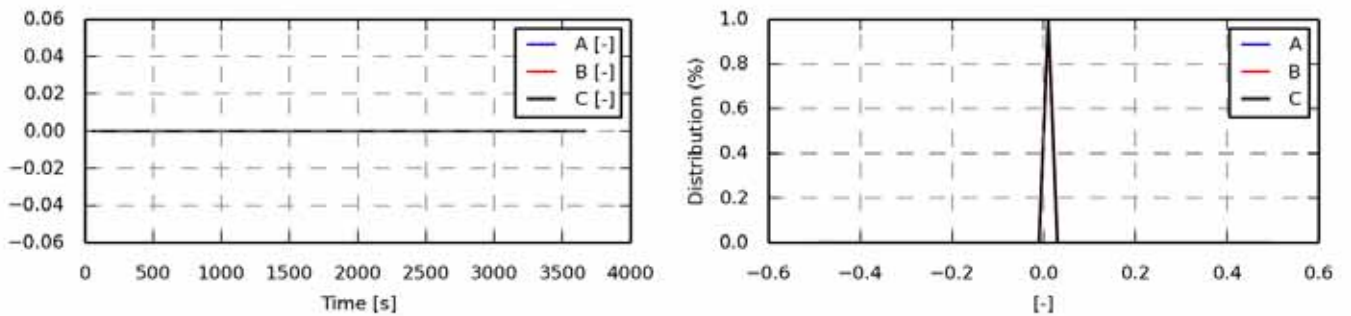


Figure 967 - Power spectrum density

Statistics	A	B	C
Min	0.0000	0.0000	0.0000
Max	0.0000	0.0000	0.0000
Mean	0.0000	0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

Figure 968 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 11.04 oc4_p2_load_case_2-6: Constant [-]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-6.sel (28-02-2014 22:24)	9	Constant value
B	WAMsim/oc4_p2_load_case_2-6.sel (01-04-2014 12:46)	9	Constant value
C	hawc2/oc4_p2_load_case_2-6.sel (31-03-2014 15:33)	9	Constant value

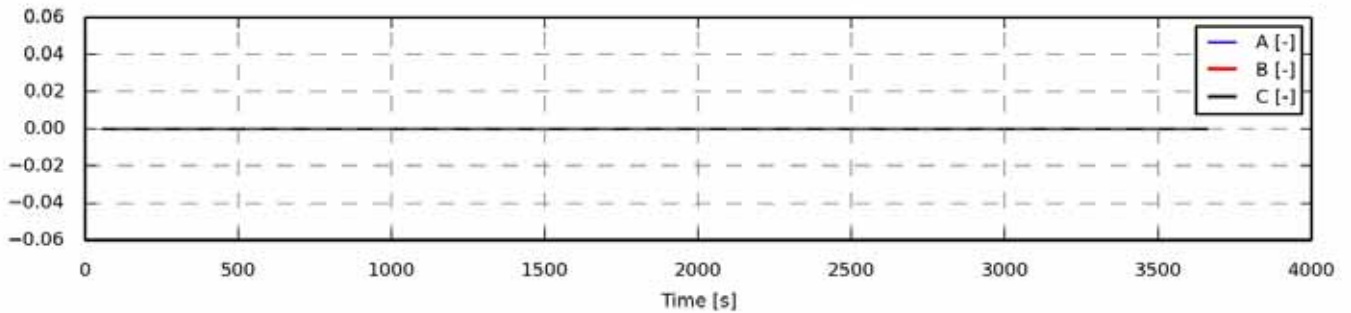


Figure 969 - Full length time series

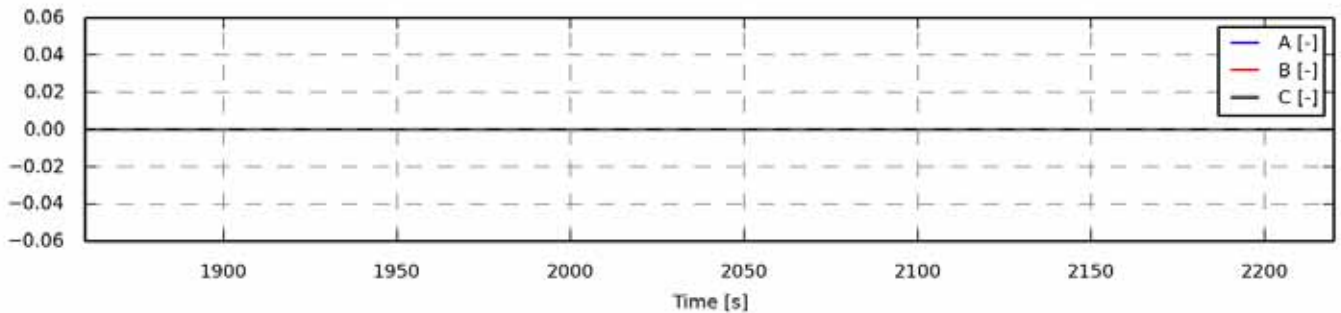


Figure 970 - Zoom of time series

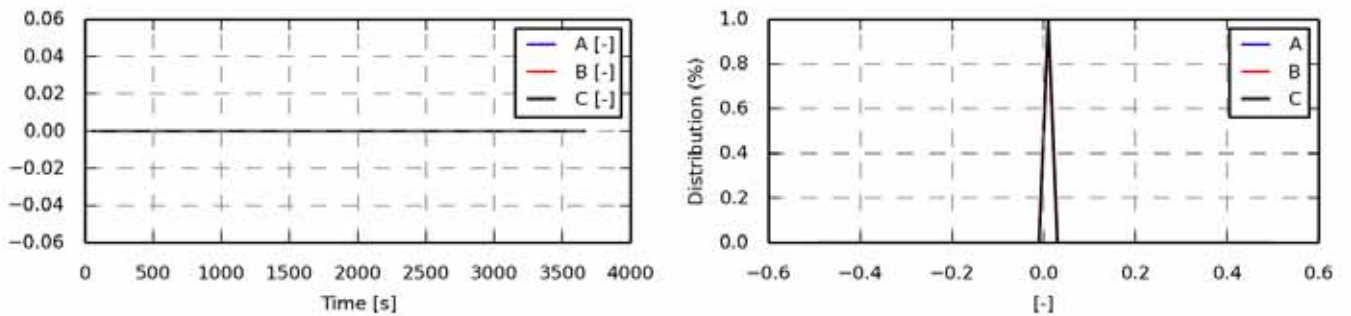


Figure 971 - Power spectrum density

Statistics	A	B	C
Min	0.0000	0.0000	0.0000
Max	0.0000	0.0000	0.0000
Mean	0.0000	0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

Figure 972 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 11.05 oc4_p2_load_case_2-6: bea1 angle [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-6.sel (28-02-2014 22:24)	14	pitch1 angle
B	WAMsim/oc4_p2_load_case_2-6.sel (01-04-2014 12:46)	14	pitch1 angle
C	hawc2/oc4_p2_load_case_2-6.sel (31-03-2014 15:33)	14	pitch1 angle

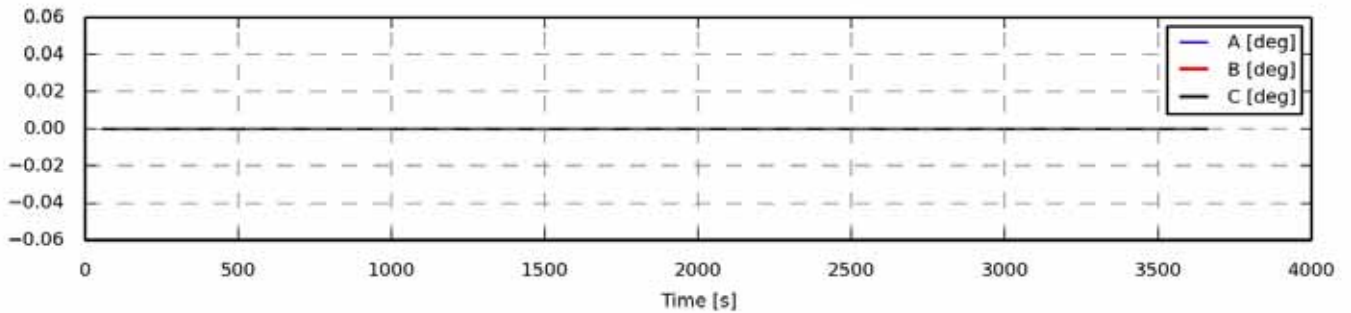


Figure 973 - Full length time series

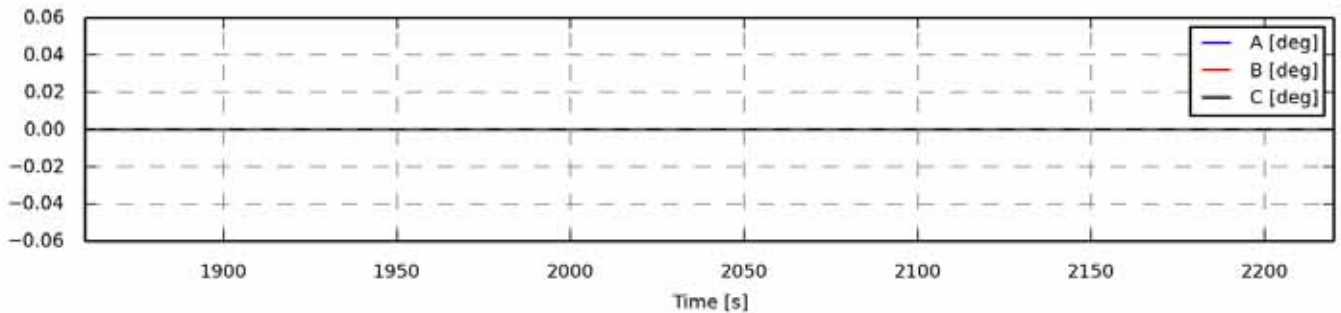


Figure 974 - Zoom of time series

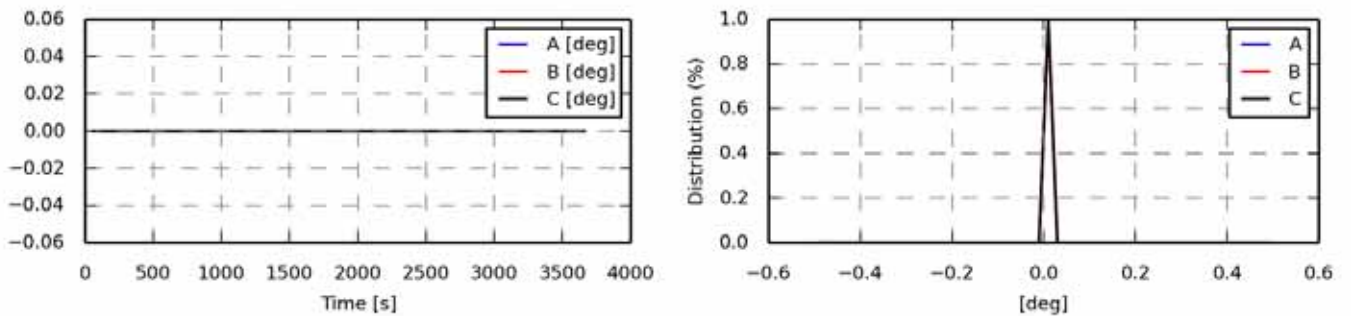


Figure 975 - Power spectrum density

Statistics	A	B	C
Min	0.0000	0.0000	0.0000
Max	0.0000	0.0000	0.0000
Mean	0.0000	0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

Figure 976 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 11.06 oc4_p2_load_case_2-6: State pos x coo: global [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-6.sel (28-02-2014 22:24)	19	State pos x Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
B	WAMsim/oc4_p2_load_case_2-6.sel (01-04-2014 12:46)	19	State pos x Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
C	hawc2/oc4_p2_load_case_2-6.sel (31-03-2014 15:33)	19	State pos x Mbdy:mc E-nr: 8 Z-rel:0.00 coo: global platform translation in surge sway and heave

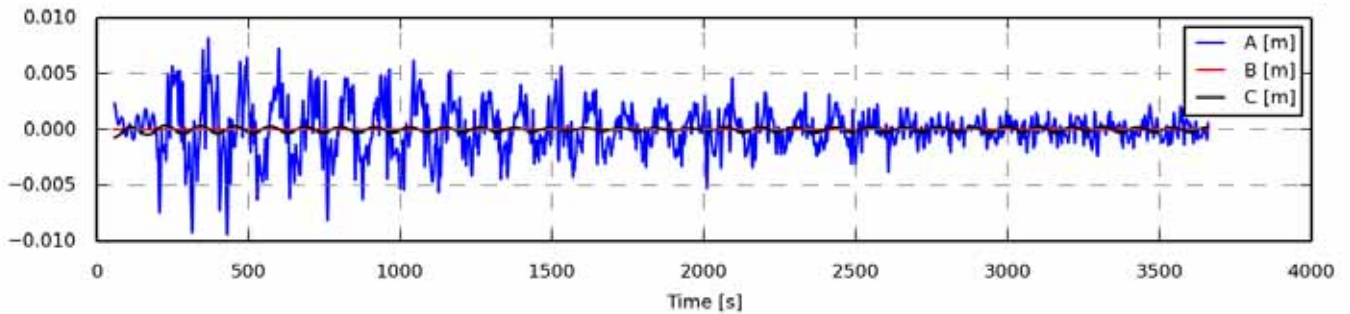


Figure 977 - Full length time series

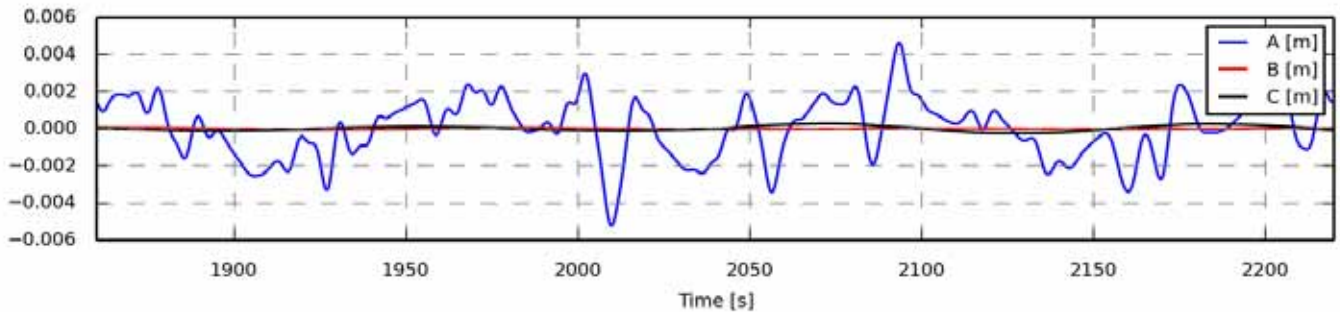


Figure 978 - Zoom of time series

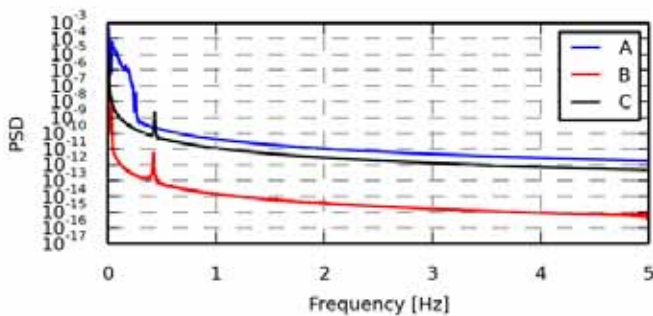


Figure 979 - Power spectrum density

Statistics	A	B	C
Min	-0.0093	-0.0001	-0.0007
Max	0.0081	0.0001	0.0004
Mean	0.0000	0.0000	-0.0000
Std	0.0020	0.0000	0.0002
Skewness	-0.1145	0.0774	-0.1874
Kurtosis	1.8115	-0.2645	-0.4579

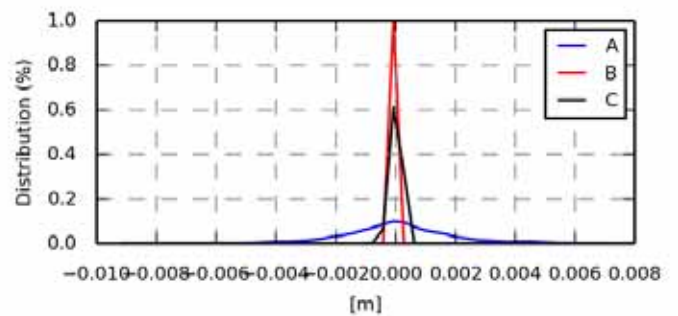


Figure 980 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.0021	0.0000	0.0001
Eq (m=4)	0.0032	0.0000	0.0002
Eq (m=6)	0.0052	0.0000	0.0003
Eq (m=8)	0.0069	0.0001	0.0004
Eq (m=10)	0.0081	0.0001	0.0005
Eq (m=12)	0.0091	0.0001	0.0005

Section 11.07 oc4_p2_load_case_2-6: State pos y coo: global [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-6.sel (28-02-2014 22:24)	20	State pos y Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
B	WAMsim/oc4_p2_load_case_2-6.sel (01-04-2014 12:46)	20	State pos y Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
C	hawc2/oc4_p2_load_case_2-6.sel (31-03-2014 15:33)	20	State pos y Mbdy:mc E-nr: 8 Z-rel:0.00 coo: global platform translation in surge sway and heave

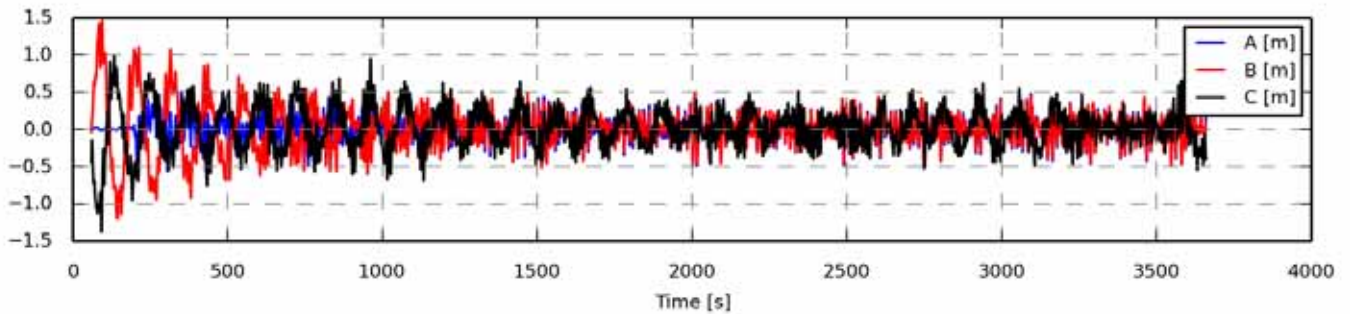


Figure 981 - Full length time series

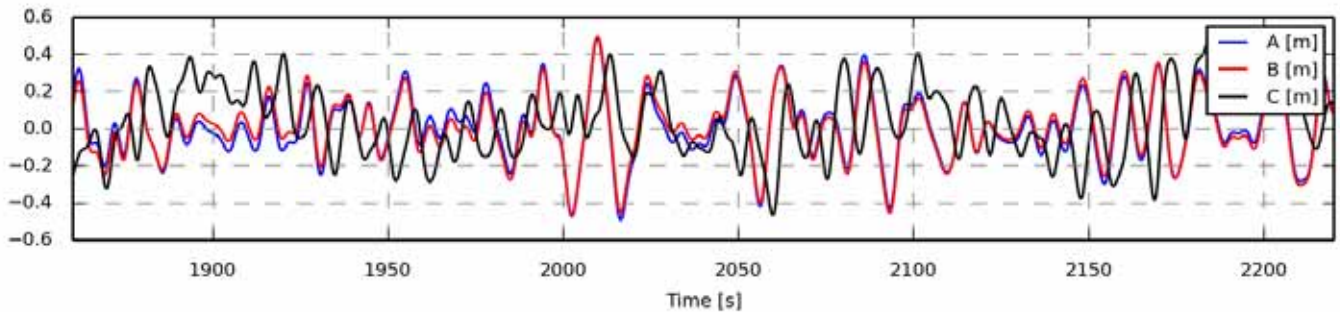


Figure 982 - Zoom of time series

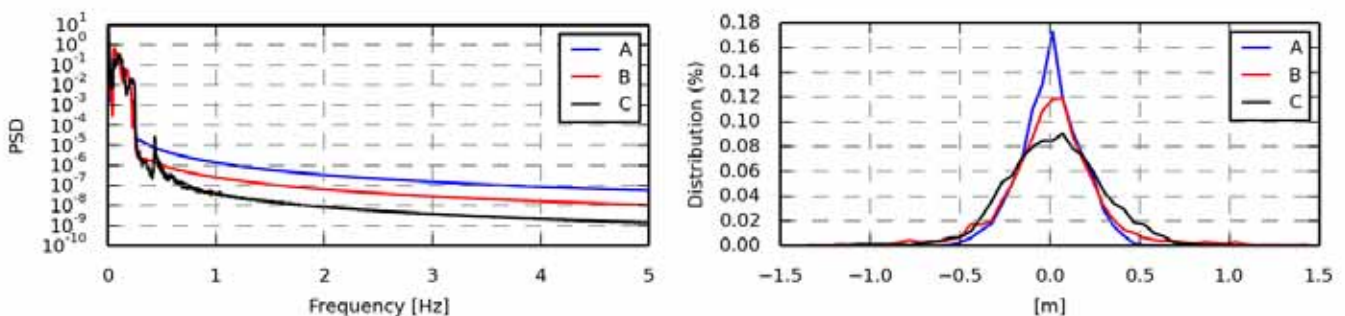


Figure 983 - Power spectrum density

Statistics	A	B	C
Min	-0.5688	-1.1962	-1.3727
Max	0.6005	1.4587	0.9846
Mean	0.0068	0.0149	0.0222
Std	0.1667	0.2776	0.2726
Skewness	-0.1348	0.3158	-0.2531
Kurtosis	0.1762	3.7072	1.1960

Figure 984 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.2237	0.2746	0.2601
Eq (m=4)	0.2976	0.4120	0.3809
Eq (m=6)	0.4126	0.6922	0.6163
Eq (m=8)	0.4997	0.9348	0.8237
Eq (m=10)	0.5689	1.1321	0.9975
Eq (m=12)	0.6256	1.2926	1.1411

Section 11.08 oc4_p2_load_case_2-6: State pos z coo: global [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-6.sel (28-02-2014 22:24)	21	State pos z Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
B	WAMsim/oc4_p2_load_case_2-6.sel (01-04-2014 12:46)	21	State pos z Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
C	hawc2/oc4_p2_load_case_2-6.sel (31-03-2014 15:33)	21	State pos z Mbdy:mc E-nr: 8 Z-rel:0.00 coo: global platform translation in surge sway and heave

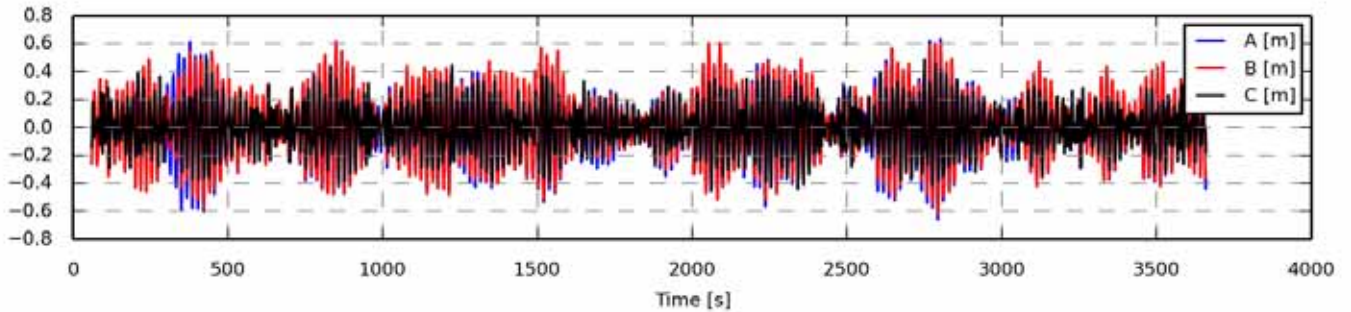


Figure 985 - Full length time series

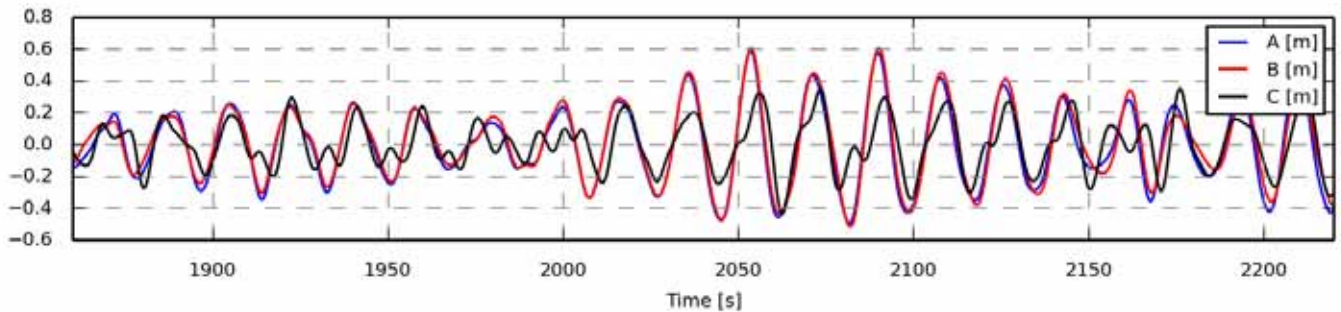


Figure 986 - Zoom of time series

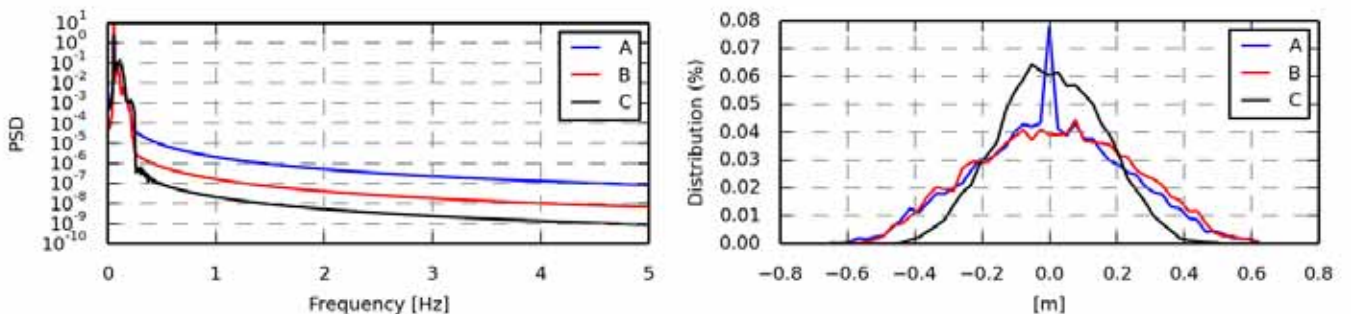


Figure 987 - Power spectrum density

Statistics	A	B	C
Min	-0.6606	-0.6172	-0.4398
Max	0.6326	0.6169	0.4893
Mean	-0.0005	0.0132	0.0040
Std	0.2219	0.2292	0.1551
Skewness	0.0176	0.0136	0.0087
Kurtosis	-0.3001	-0.6158	-0.3390

Figure 988 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.2637	0.2668	0.1967
Eq (m=4)	0.3560	0.3561	0.2604
Eq (m=6)	0.4944	0.4872	0.3560
Eq (m=8)	0.5941	0.5801	0.4259
Eq (m=10)	0.6704	0.6506	0.4804
Eq (m=12)	0.7310	0.7065	0.5245

Section 11.09 oc4_p2_load_case_2-6: proj_ang tx coo: global [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-6.sel (28-02-2014 22:24)	22	State_rot proj_ang tx Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
B	WAMsim/oc4_p2_load_case_2-6.sel (01-04-2014 12:46)	22	State_rot proj_ang tx Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
C	hawc2/oc4_p2_load_case_2-6.sel (31-03-2014 15:33)	22	State_rot proj_ang tx Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw

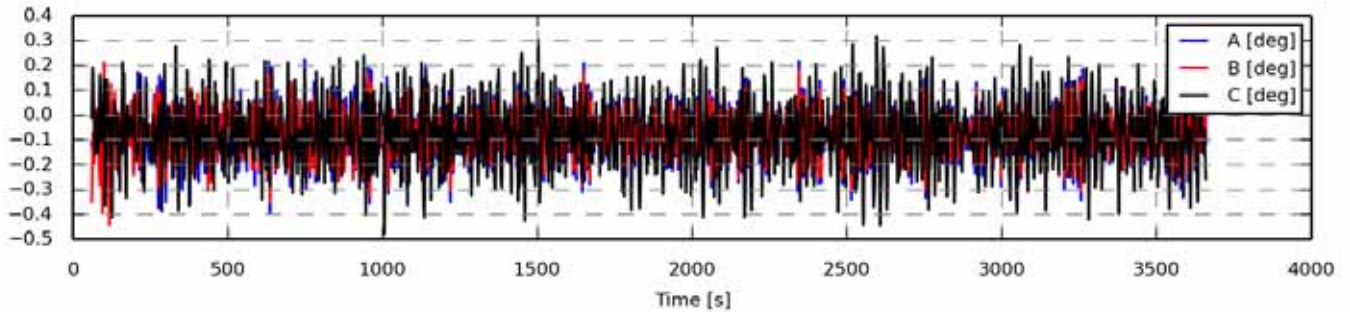


Figure 989 - Full length time series

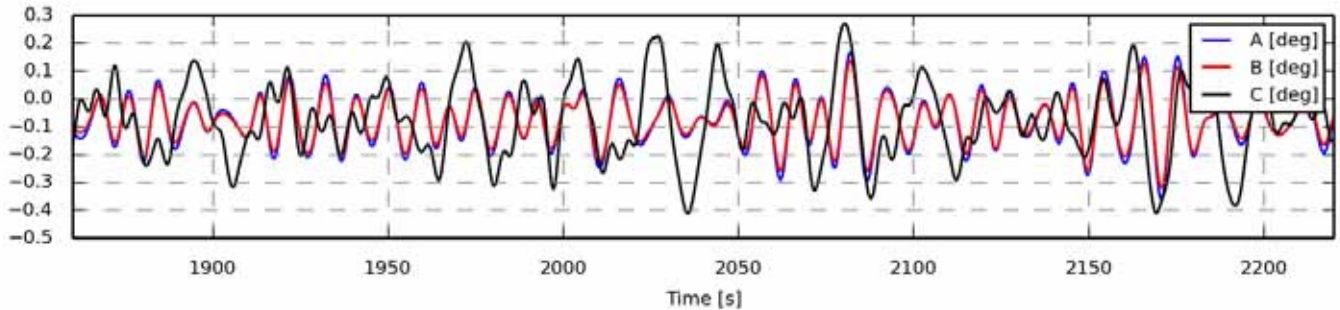


Figure 990 - Zoom of time series

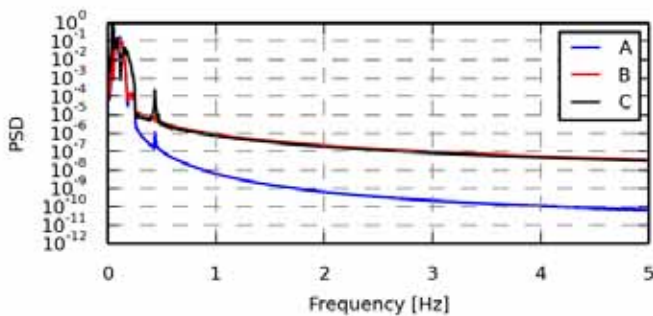


Figure 991 - Power spectrum density

Statistics	A	B	C
Min	-0.3959	-0.4427	-0.4793
Max	0.2247	0.2118	0.3155
Mean	-0.0781	-0.0769	-0.0743
Std	0.0912	0.0817	0.1297
Skewness	0.0142	-0.0693	0.0567
Kurtosis	0.0911	0.2164	-0.2620

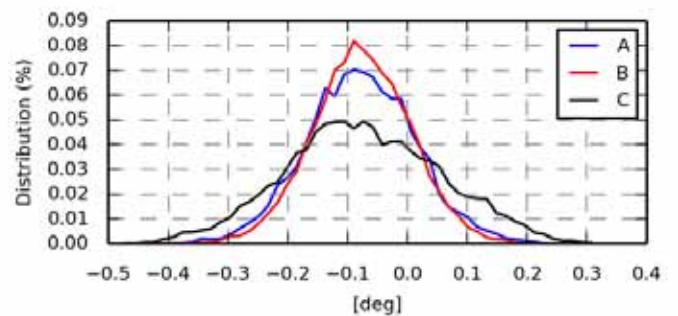


Figure 992 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.1331	0.1182	0.1654
Eq (m=4)	0.1739	0.1551	0.2204
Eq (m=6)	0.2372	0.2148	0.3029
Eq (m=8)	0.2847	0.2629	0.3628
Eq (m=10)	0.3216	0.3034	0.4089
Eq (m=12)	0.3511	0.3378	0.4459

Section 11.10 oc4_p2_load_case_2-6: proj_ang ty coo: global [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-6.sel (28-02-2014 22:24)	23	State_rot proj_ang ty Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
B	WAMsim/oc4_p2_load_case_2-6.sel (01-04-2014 12:46)	23	State_rot proj_ang ty Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
C	hawc2/oc4_p2_load_case_2-6.sel (31-03-2014 15:33)	23	State_rot proj_ang ty Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw

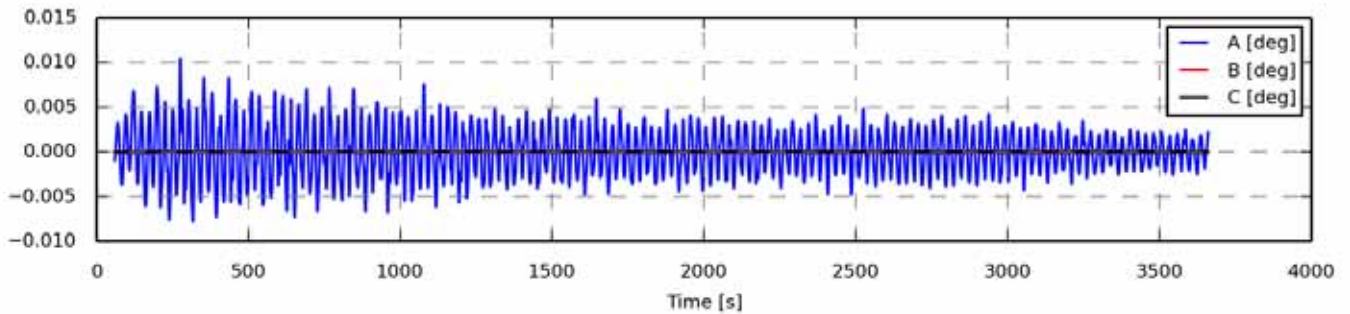


Figure 993 - Full length time series

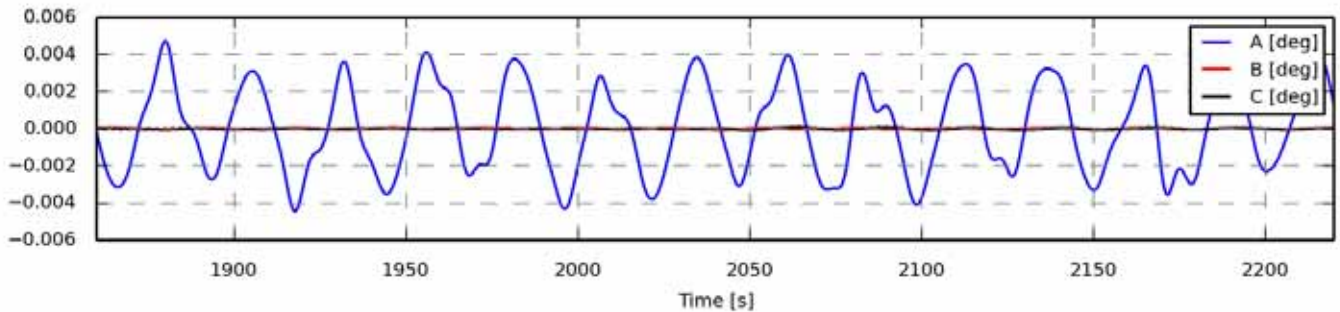


Figure 994 - Zoom of time series

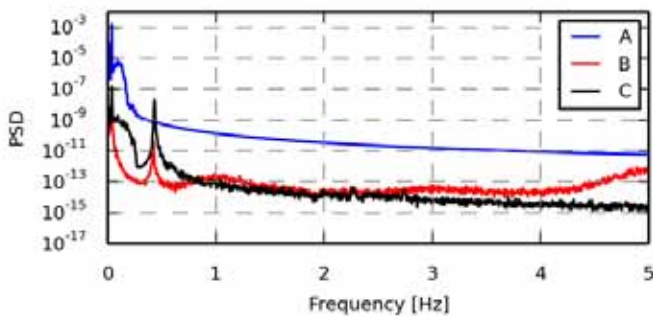


Figure 995 - Power spectrum density

Statistics	A	B	C
Min	-0.0078	-0.0001	-0.0002
Max	0.0105	0.0001	0.0001
Mean	0.0000	0.0000	-0.0000
Std	0.0028	0.0000	0.0000
Skewness	0.0856	0.0198	0.0228
Kurtosis	-0.4724	-0.0039	1.8306

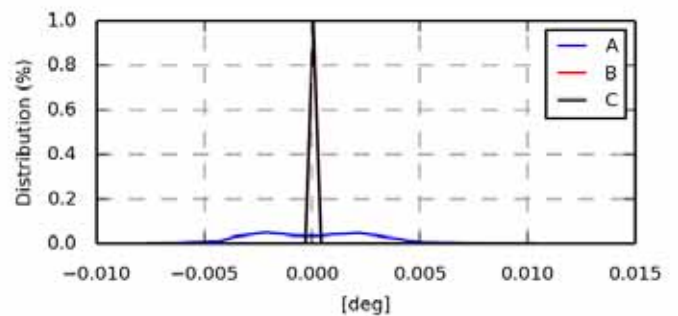


Figure 996 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.0029	0.0000	0.0000
Eq (m=4)	0.0041	0.0000	0.0001
Eq (m=6)	0.0059	0.0001	0.0001
Eq (m=8)	0.0074	0.0001	0.0001
Eq (m=10)	0.0086	0.0001	0.0001
Eq (m=12)	0.0095	0.0001	0.0002

Section 11.11 oc4_p2_load_case_2-6: proj_ang tz coo: global [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-6.sel (28-02-2014 22:24)	24	State_rot proj_ang tz Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
B	WAMsim/oc4_p2_load_case_2-6.sel (01-04-2014 12:46)	24	State_rot proj_ang tz Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
C	hawc2/oc4_p2_load_case_2-6.sel (31-03-2014 15:33)	24	State_rot proj_ang tz Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw

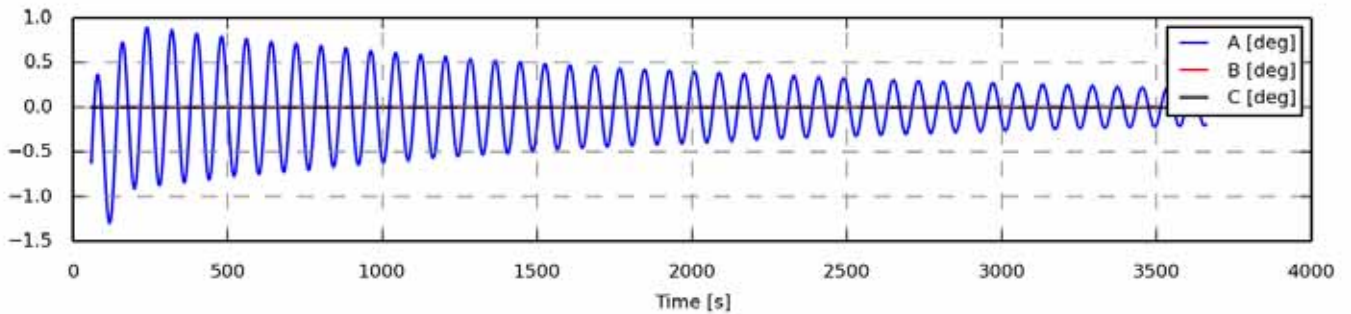


Figure 997 - Full length time series

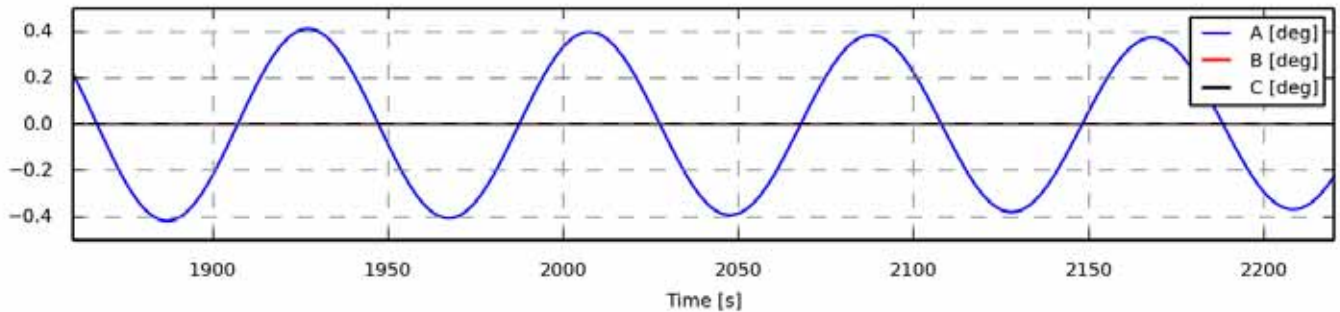


Figure 998 - Zoom of time series

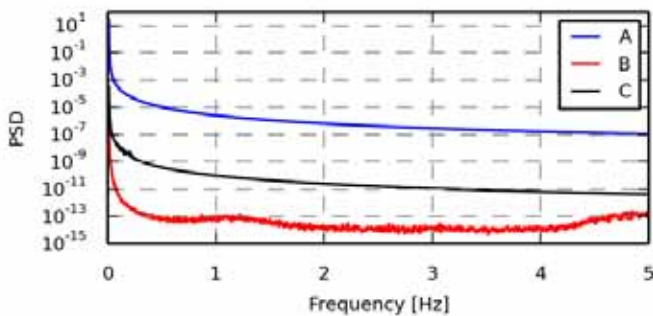


Figure 999 - Power spectrum density

Statistics	A	B	C
Min	-1.2962	-0.0003	-0.0044
Max	0.8905	0.0003	0.0041
Mean	-0.0096	0.0000	-0.0000
Std	0.3690	0.0001	0.0013
Skewness	-0.1763	0.0014	-0.0804
Kurtosis	-0.0848	-0.7011	1.6825

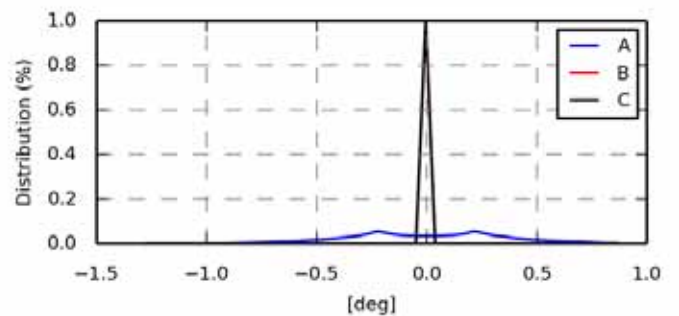


Figure 1000 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.2585	0.0001	0.0010
Eq (m=4)	0.3967	0.0002	0.0016
Eq (m=6)	0.6290	0.0002	0.0026
Eq (m=8)	0.8100	0.0003	0.0034
Eq (m=10)	0.9555	0.0003	0.0040
Eq (m=12)	1.0763	0.0004	0.0045

Section 11.12 oc4_p2_load_case_2-6: Mx coo: towertop [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-6.sel (28-02-2014 22:24)	37	MomentMx Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
B	WAMsim/oc4_p2_load_case_2-6.sel (01-04-2014 12:46)	37	MomentMx Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
C	hawc2/oc4_p2_load_case_2-6.sel (31-03-2014 15:33)	37	MomentMx Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment

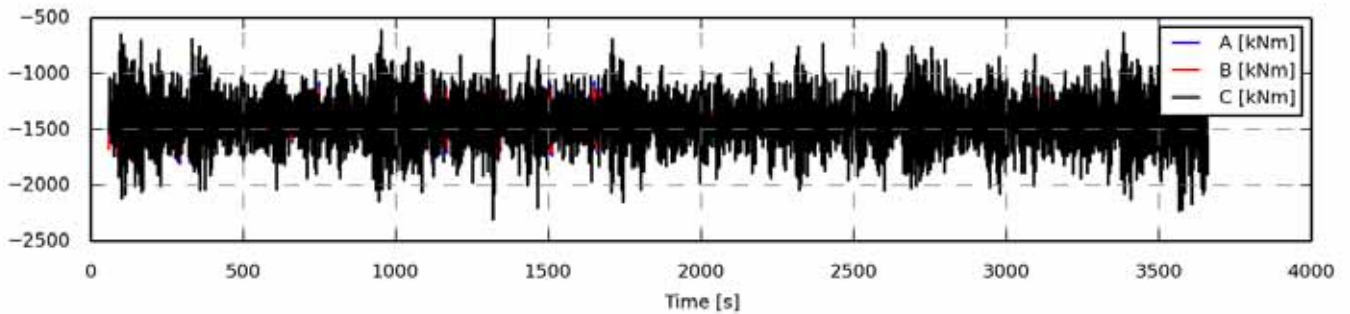


Figure 1001 - Full length time series

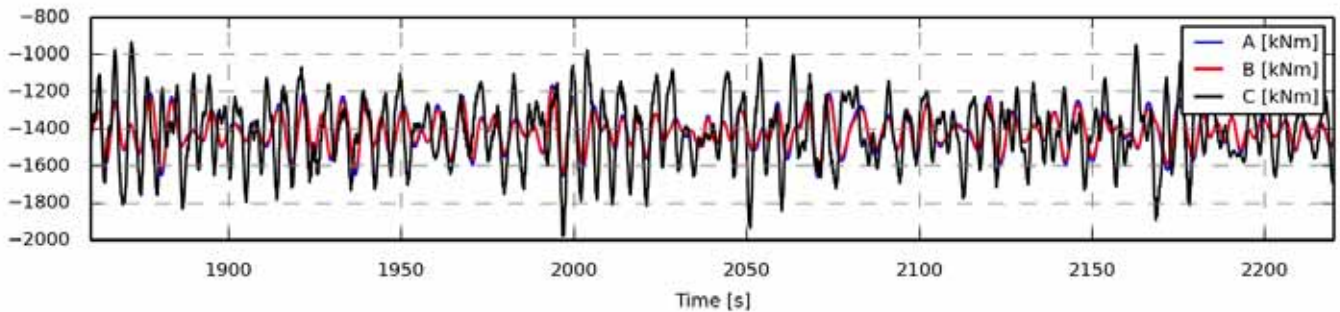


Figure 1002 - Zoom of time series

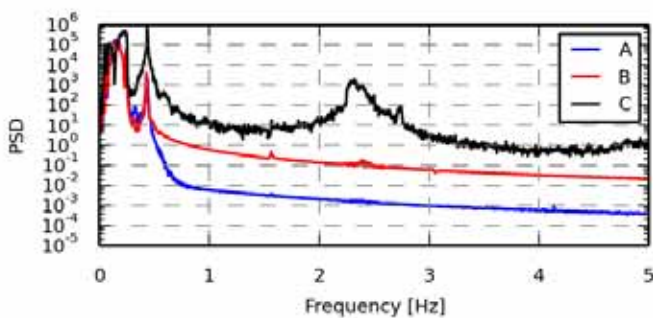


Figure 1003 - Power spectrum density

Statistics	A	B	C
Min	-1.8057e+03	-1.7485e+03	-2.3048e+03
Max	-1.0275e+03	-1.0608e+03	-5.0540e+02
Mean	-1.4161e+03	-1.4159e+03	-1.4156e+03
Std	109.7116	99.9318	208.7074
Skewness	0.0045	0.0030	-0.0171
Kurtosis	0.1118	0.0129	0.2496

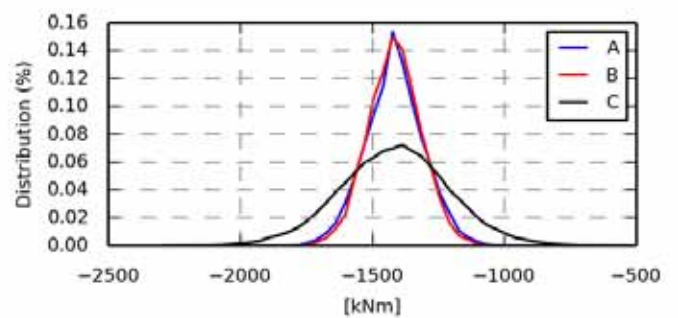


Figure 1004 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	185.4423	169.1619	426.7112
Eq (m=4)	234.0692	212.6600	522.2823
Eq (m=6)	307.7569	278.5042	672.3325
Eq (m=8)	362.4923	327.3583	790.4296
Eq (m=10)	405.3021	365.4855	888.1091
Eq (m=12)	439.8566	396.1848	970.6058

Section 11.13 oc4_p2_load_case_2-6: My coo: towertop [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-6.sel (28-02-2014 22:24)	38	MomentMy Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
B	WAMsim/oc4_p2_load_case_2-6.sel (01-04-2014 12:46)	38	MomentMy Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
C	hawc2/oc4_p2_load_case_2-6.sel (31-03-2014 15:33)	38	MomentMy Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment

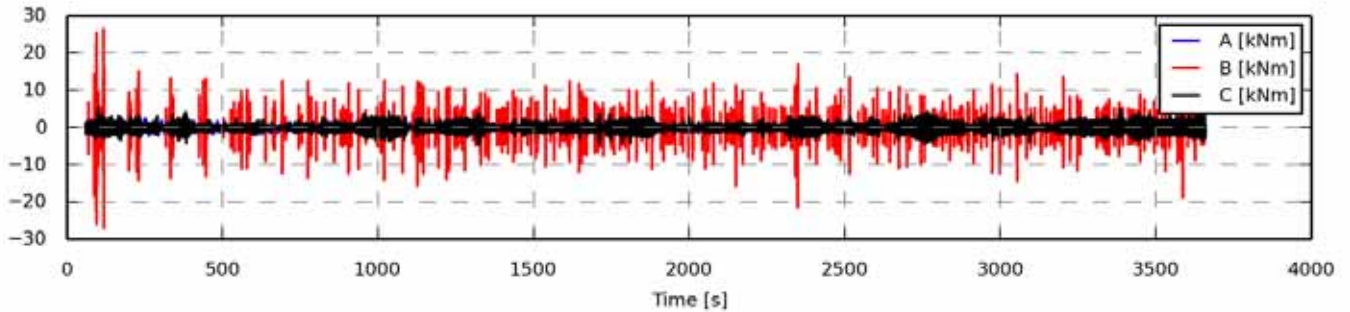


Figure 1005 - Full length time series

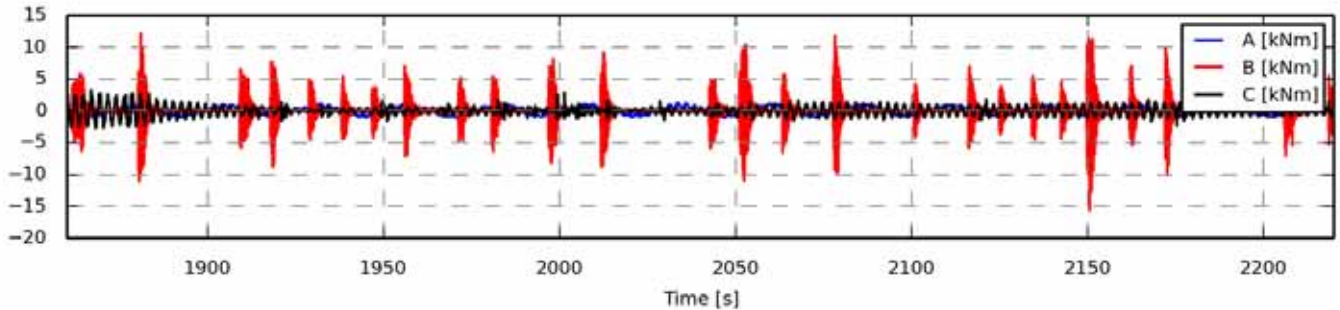


Figure 1006 - Zoom of time series

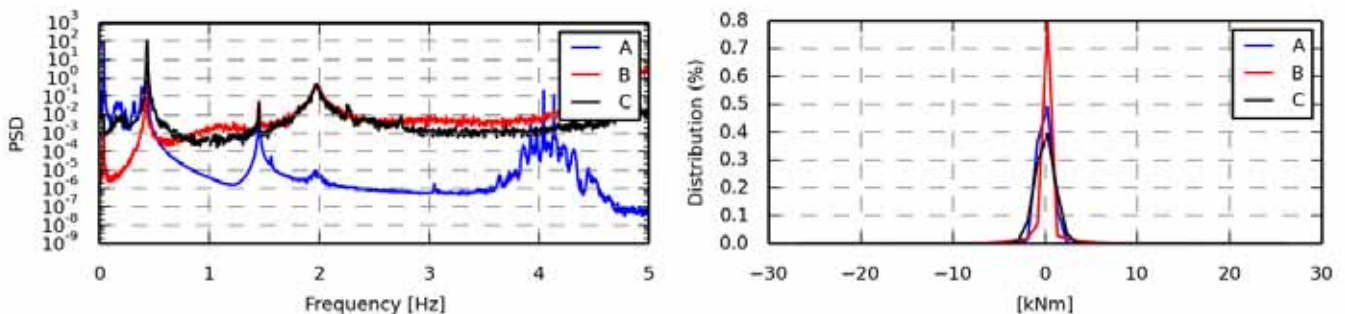


Figure 1007 - Power spectrum density

Statistics	A	B	C
Min	-2.3357	-26.9974	-4.7424
Max	2.5748	26.4271	5.6784
Mean	0.0017	0.0000	-0.0006
Std	0.6853	1.5088	1.0319
Skewness	0.0211	-0.0860	0.0113
Kurtosis	-0.5524	30.5141	0.1569

Figure 1008 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.9123	12.2445	2.9445
Eq (m=4)	1.2172	14.1827	3.3425
Eq (m=6)	1.7048	18.5779	4.0154
Eq (m=8)	2.0804	22.7057	4.5758
Eq (m=10)	2.3829	26.1315	5.0628
Eq (m=12)	2.6317	28.9047	5.4945

Section 11.14 oc4_p2_load_case_2-6: Mz coo: towertop [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-6.sel (28-02-2014 22:24)	39	MomentMz Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
B	WAMsim/oc4_p2_load_case_2-6.sel (01-04-2014 12:46)	39	MomentMz Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
C	hawc2/oc4_p2_load_case_2-6.sel (31-03-2014 15:33)	39	MomentMz Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment

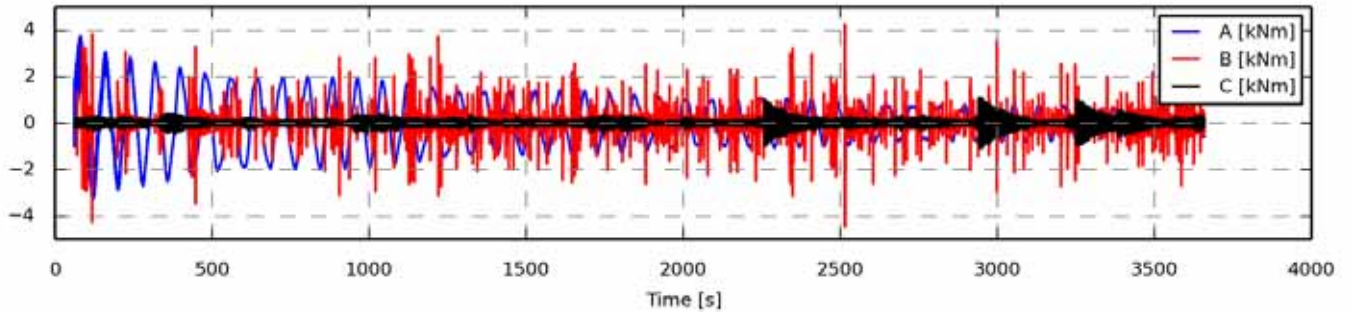


Figure 1009 - Full length time series

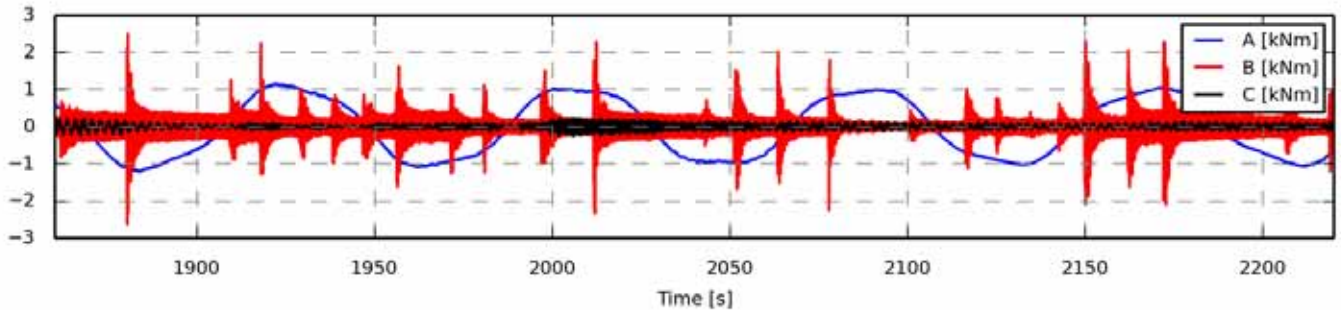


Figure 1010 - Zoom of time series

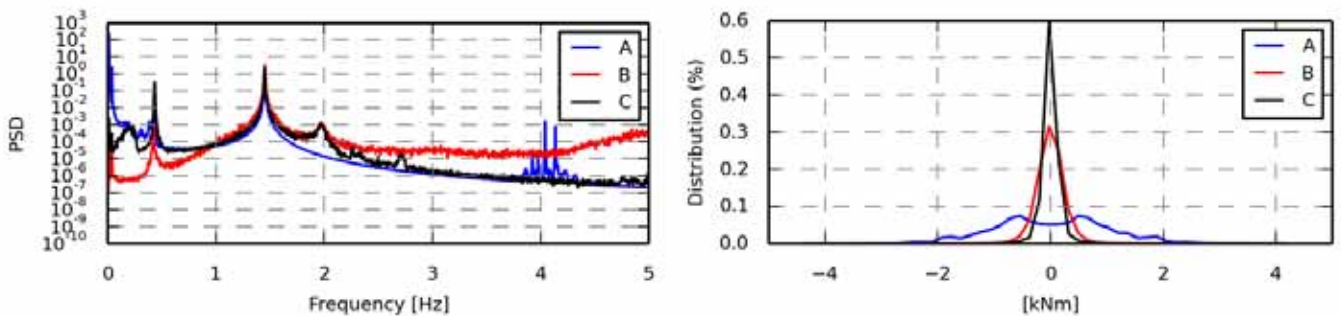


Figure 1011 - Power spectrum density

Statistics	A	B	C
Min	-3.2712	-4.4556	-1.0890
Max	3.7345	4.2343	1.0942
Mean	0.0086	-0.0000	0.0000
Std	1.0166	0.2994	0.1565
Skewness	0.0340	0.0153	0.0013
Kurtosis	-0.1705	14.8685	8.0105

Figure 1012 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.8695	2.2145	0.6657
Eq (m=4)	1.2667	2.5002	0.7999
Eq (m=6)	1.9957	3.1258	1.0129
Eq (m=8)	2.6009	3.7057	1.1644
Eq (m=10)	3.0909	4.2089	1.2770
Eq (m=12)	3.4902	4.6362	1.3646

Section 11.15 oc4_p2_load_case_2-6: Mx coo: tower [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-6.sel (28-02-2014 22:24)	43	MomentMx Mbdy:tower nodenr: 1 coo: tower tower base bending moment
B	WAMsim/oc4_p2_load_case_2-6.sel (01-04-2014 12:46)	43	MomentMx Mbdy:tower nodenr: 1 coo: tower tower base bending moment
C	hawc2/oc4_p2_load_case_2-6.sel (31-03-2014 15:33)	43	MomentMx Mbdy:tower nodenr: 1 coo: tower tower base bending moment

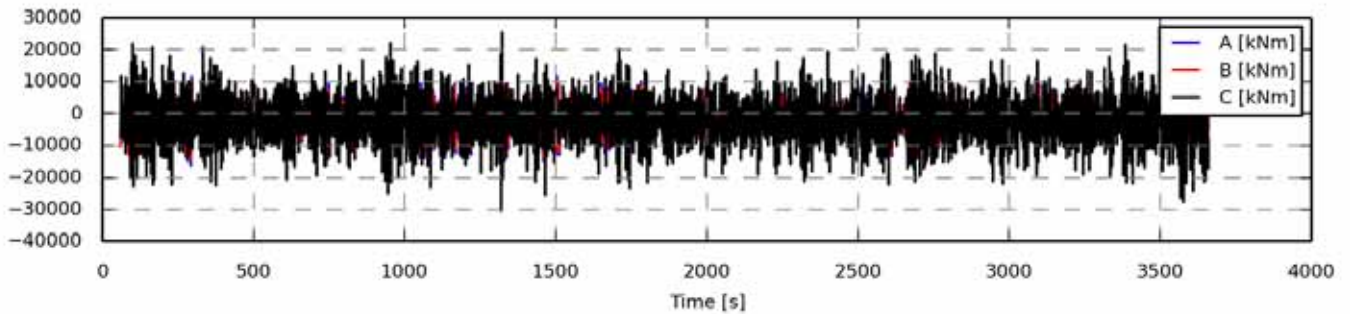


Figure 1013 - Full length time series

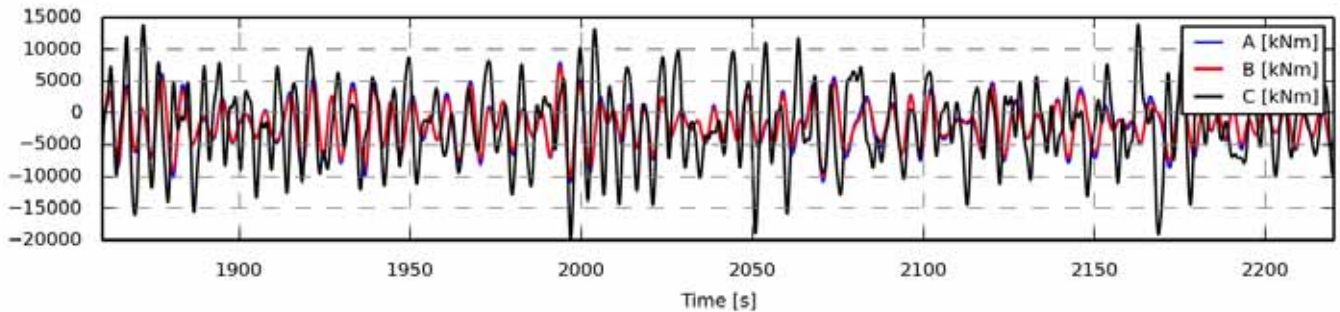


Figure 1014 - Zoom of time series

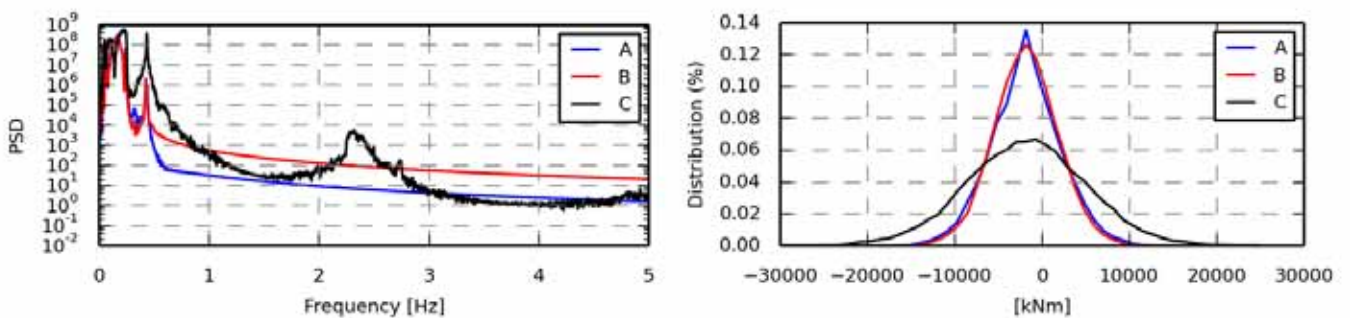


Figure 1015 - Power spectrum density

Statistics	A	B	C
Min	-1.6341e+04	-1.4486e+04	-3.0432e+04
Max	1.2227e+04	1.0723e+04	2.5563e+04
Mean	-1.8912e+03	-1.8833e+03	-1.8670e+03
Std	3.9726e+03	3.6663e+03	6.9102e+03
Skewness	0.0090	0.0121	-0.0173
Kurtosis	0.1809	0.0730	0.1361

Figure 1016 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	6.7998e+03	6.2632e+03	1.2918e+04
Eq (m=4)	8.5873e+03	7.8766e+03	1.5951e+04
Eq (m=6)	1.1304e+04	1.0326e+04	2.0676e+04
Eq (m=8)	1.3320e+04	1.2142e+04	2.4369e+04
Eq (m=10)	1.4892e+04	1.3554e+04	2.7415e+04
Eq (m=12)	1.6155e+04	1.4686e+04	2.9992e+04

Section 11.16 oc4_p2_load_case_2-6: My coo: tower [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-6.sel (28-02-2014 22:24)	44	MomentMy Mbdy:tower nodenr: 1 coo: tower tower base bending moment
B	WAMsim/oc4_p2_load_case_2-6.sel (01-04-2014 12:46)	44	MomentMy Mbdy:tower nodenr: 1 coo: tower tower base bending moment
C	hawc2/oc4_p2_load_case_2-6.sel (31-03-2014 15:33)	44	MomentMy Mbdy:tower nodenr: 1 coo: tower tower base bending moment

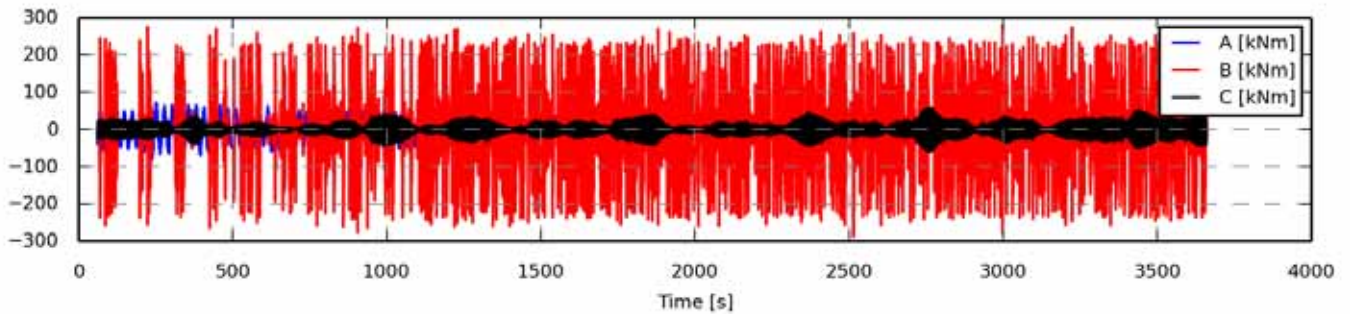


Figure 1017 - Full length time series

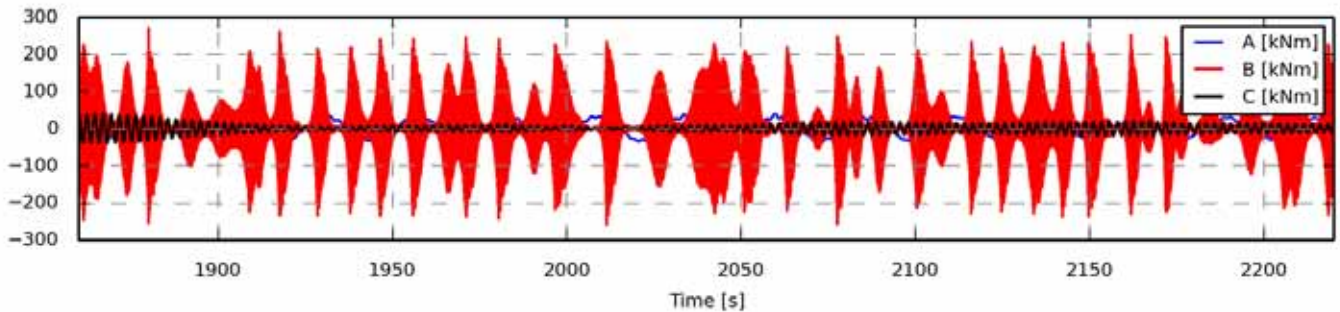


Figure 1018 - Zoom of time series

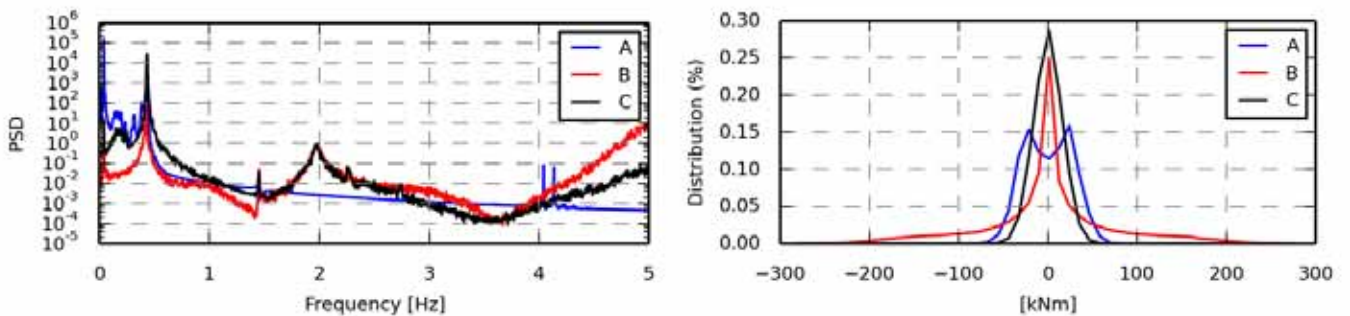


Figure 1019 - Power spectrum density

Statistics	A	B	C
Min	-80.2566	-2.8817e+02	-59.6561
Max	70.8566	279.0845	60.2397
Mean	0.0552	0.0006	-0.0170
Std	26.2138	72.1145	16.0430
Skewness	-0.0035	-0.0006	0.0000
Kurtosis	-0.8875	1.4112	0.0783

Figure 1020 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	28.7279	486.7603	38.1778
Eq (m=4)	39.1007	438.1426	44.3304
Eq (m=6)	54.9780	408.2364	53.9480
Eq (m=8)	66.6511	402.4761	61.5162
Eq (m=10)	75.6837	403.6168	67.6960
Eq (m=12)	82.9257	407.3244	72.7956

Section 11.17 oc4_p2_load_case_2-6: Mz coo: tower [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-6.sel (28-02-2014 22:24)	45	MomentMz Mbdy:tower nodenr: 1 coo: tower tower base bending moment
B	WAMsim/oc4_p2_load_case_2-6.sel (01-04-2014 12:46)	45	MomentMz Mbdy:tower nodenr: 1 coo: tower tower base bending moment
C	hawc2/oc4_p2_load_case_2-6.sel (31-03-2014 15:33)	45	MomentMz Mbdy:tower nodenr: 1 coo: tower tower base bending moment

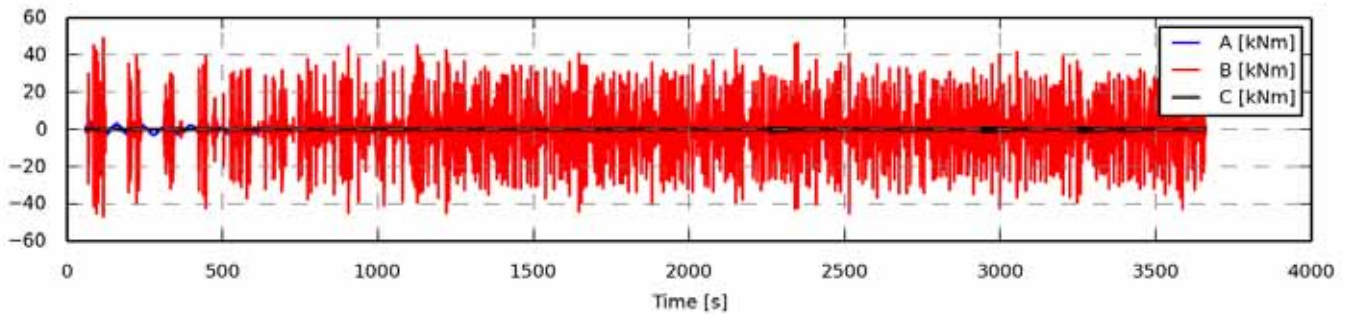


Figure 1021 - Full length time series

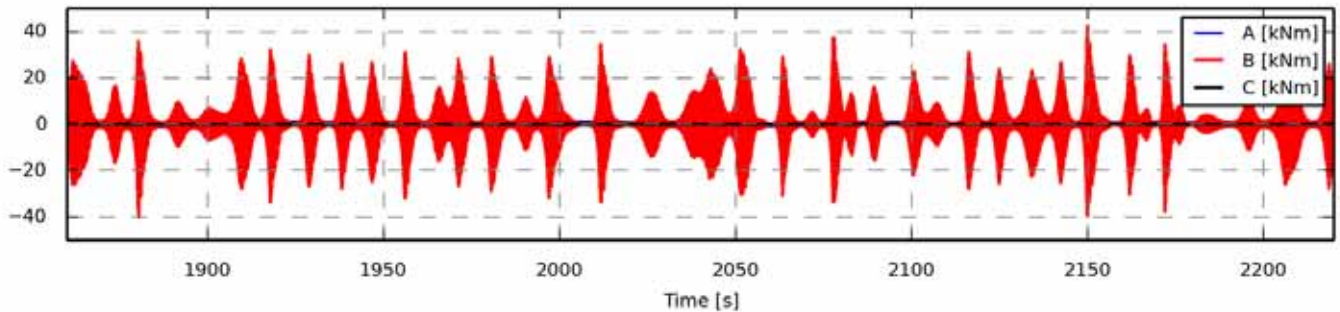


Figure 1022 - Zoom of time series

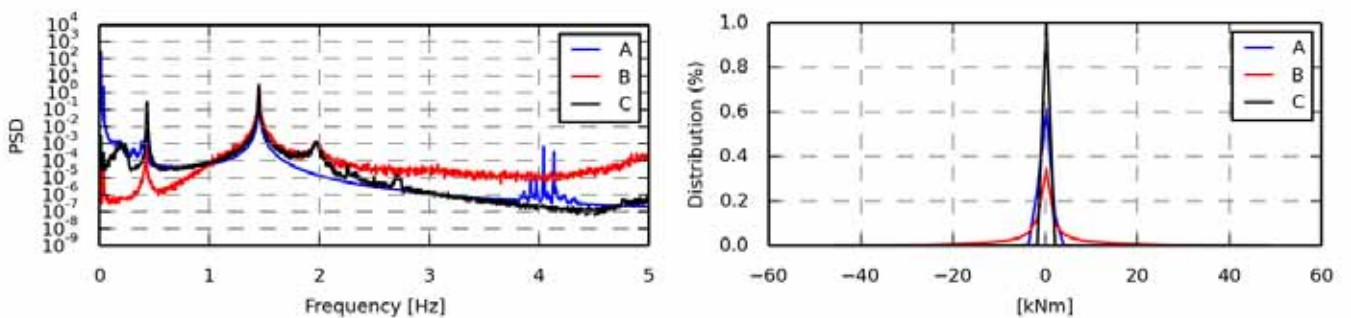


Figure 1023 - Power spectrum density

Statistics	A	B	C
Min	-3.4487	-46.6333	-1.1628
Max	3.9234	48.9990	1.2138
Mean	0.0092	0.0000	0.0001
Std	1.0868	8.2815	0.1621
Skewness	0.0319	0.0007	-0.0037
Kurtosis	-0.1953	3.3980	7.5318

Figure 1024 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.9105	58.9582	0.7185
Eq (m=4)	1.3329	55.2276	0.8446
Eq (m=6)	2.1059	54.7091	1.0629
Eq (m=8)	2.7445	56.5975	1.2234
Eq (m=10)	3.2602	59.0136	1.3446
Eq (m=12)	3.6800	61.4347	1.4402

Section 11.18 oc4_p2_load_case_2-6: ESYS line1_1 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-6.sel (28-02-2014 22:24)	55	ESYS line1_1 SENSOR 4
B	WAMsim/oc4_p2_load_case_2-6.sel (01-04-2014 12:46)	55	ESYS line1_1 SENSOR 4
C	hawc2/oc4_p2_load_case_2-6.sel (31-03-2014 15:33)	55	ESYS line1_1 SENSOR 4

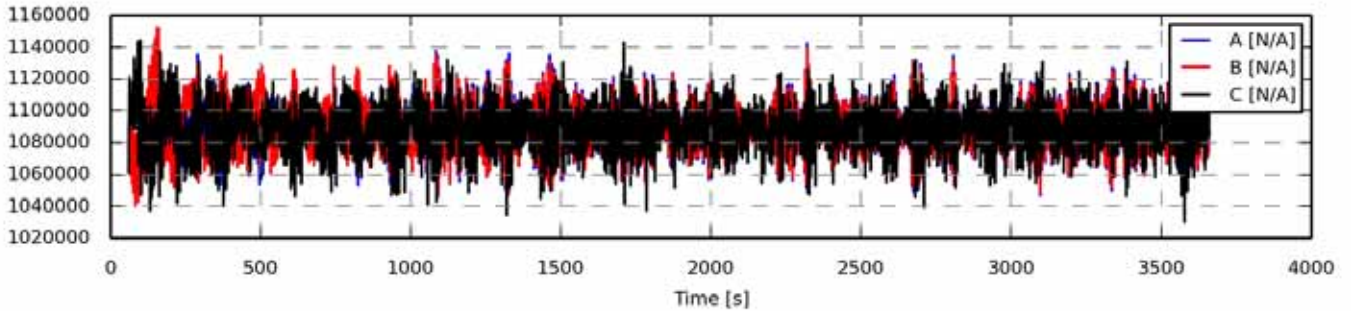


Figure 1025 - Full length time series

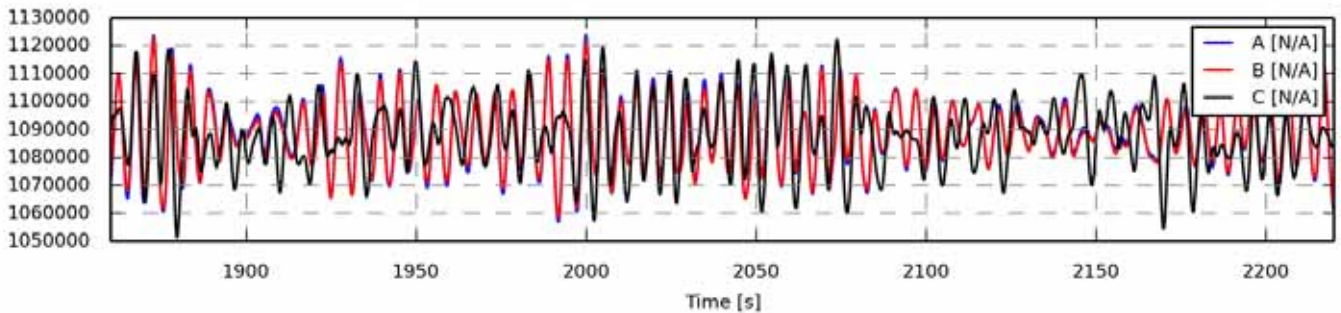


Figure 1026 - Zoom of time series

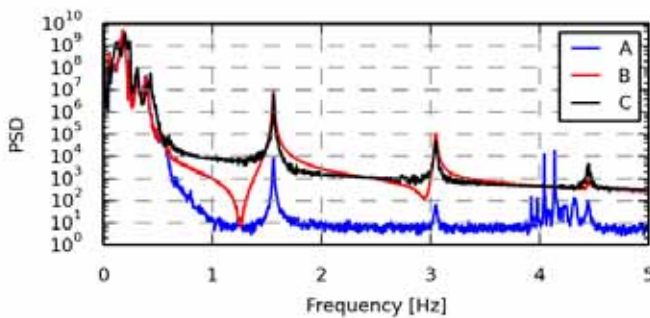


Figure 1027 - Power spectrum density

Statistics	A	B	C
Min	1.0465e+06	1.0403e+06	1.0303e+06
Max	1.1423e+06	1.1519e+06	1.1443e+06
Mean	1.0890e+06	1.0886e+06	1.0886e+06
Std	1.3256e+04	1.3846e+04	1.4474e+04
Skewness	0.1036	0.2375	-0.1106
Kurtosis	0.2055	0.3385	0.2193

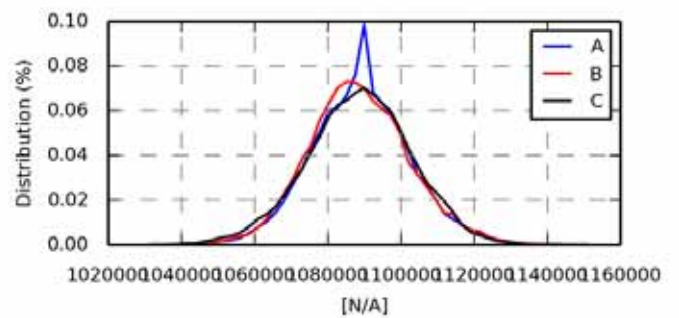


Figure 1028 - Value distribution

Fatigue eq.	1Hz	A	B	C
Eq (m=3)		2.3537e+04	2.3046e+04	2.4580e+04
Eq (m=4)		2.9433e+04	2.8873e+04	3.0795e+04
Eq (m=6)		3.8389e+04	3.8010e+04	4.0736e+04
Eq (m=8)		4.5066e+04	4.5292e+04	4.8751e+04
Eq (m=10)		5.0311e+04	5.1517e+04	5.5433e+04
Eq (m=12)		5.4563e+04	5.6981e+04	6.1041e+04

Section 11.19 oc4_p2_load_case_2-6: ESYS line1_3 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-6.sel (28-02-2014 22:24)	259	ESYS line1_3 SENSOR 104
B	WAMsim/oc4_p2_load_case_2-6.sel (01-04-2014 12:46)	259	ESYS line1_3 SENSOR 104
C	hawc2/oc4_p2_load_case_2-6.sel (31-03-2014 15:33)	259	ESYS line1_3 SENSOR 104

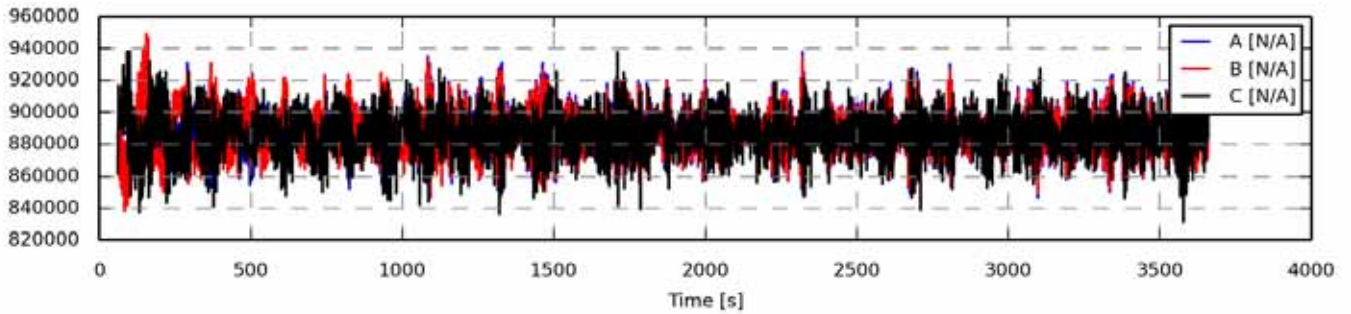


Figure 1029 - Full length time series

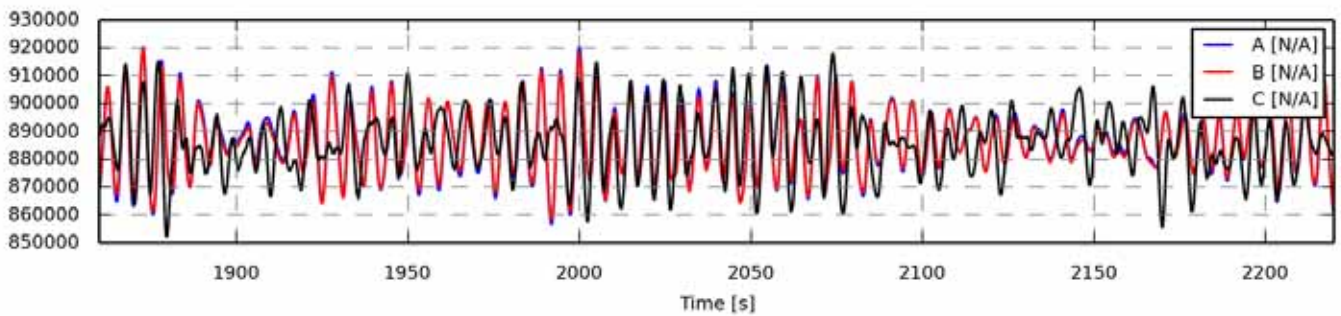


Figure 1030 - Zoom of time series

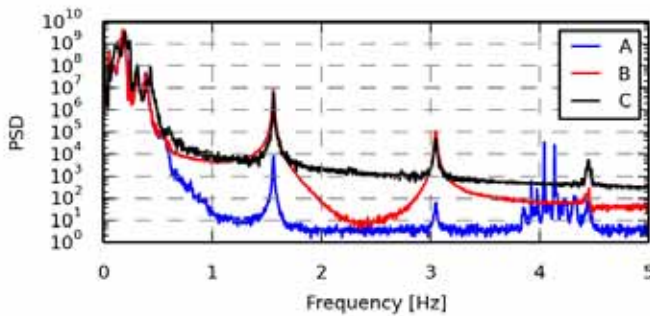


Figure 1031 - Power spectrum density

Statistics	A	B	C
Min	8.4663e+05	8.3809e+05	8.3125e+05
Max	9.3787e+05	9.4938e+05	9.3824e+05
Mean	8.8683e+05	8.8643e+05	8.8640e+05
Std	1.2602e+04	1.3248e+04	1.3601e+04
Skewness	0.1292	0.2588	-0.1012
Kurtosis	0.2053	0.3882	0.2499

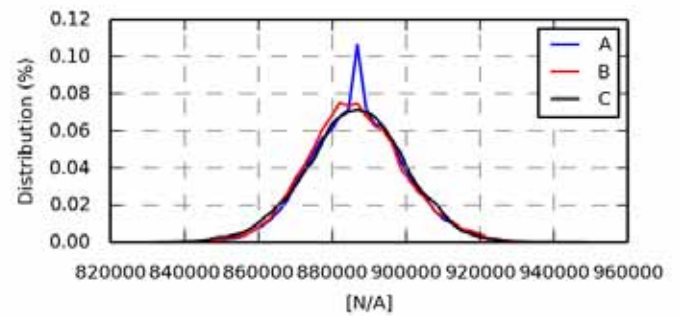


Figure 1032 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	2.2418e+04	2.1969e+04	2.3067e+04
Eq (m=4)	2.7998e+04	2.7537e+04	2.8905e+04
Eq (m=6)	3.6449e+04	3.6387e+04	3.8277e+04
Eq (m=8)	4.2744e+04	4.3667e+04	4.5830e+04
Eq (m=10)	4.7703e+04	5.0090e+04	5.2084e+04
Eq (m=12)	5.1742e+04	5.5807e+04	5.7288e+04

Section 11.20 oc4_p2_load_case_2-6: ESYS line2_1 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-6.sel (28-02-2014 22:24)	263	ESYS line2_1 SENSOR 4
B	WAMsim/oc4_p2_load_case_2-6.sel (01-04-2014 12:46)	263	ESYS line2_1 SENSOR 4
C	hawc2/oc4_p2_load_case_2-6.sel (31-03-2014 15:33)	263	ESYS line2_1 SENSOR 4

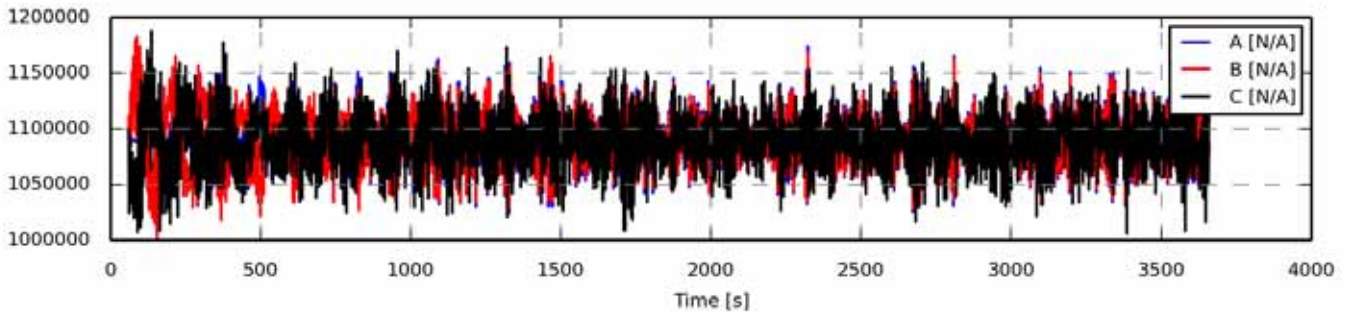


Figure 1033 - Full length time series

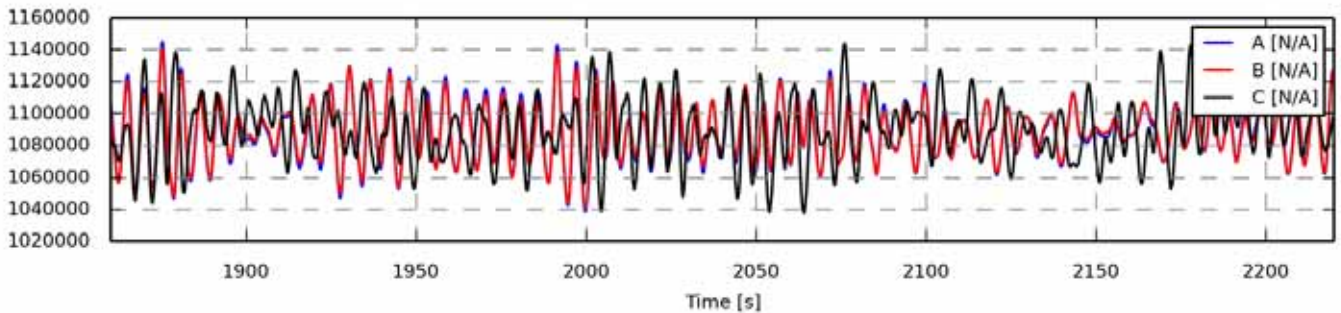


Figure 1034 - Zoom of time series

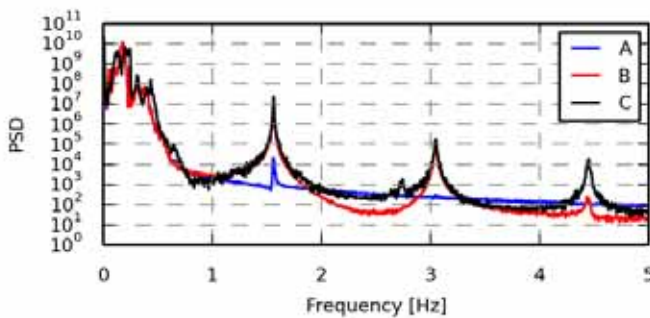


Figure 1035 - Power spectrum density

Statistics	A	B	C
Min	1.0245e+06	1.0006e+06	1.0059e+06
Max	1.1739e+06	1.1827e+06	1.1877e+06
Mean	1.0887e+06	1.0889e+06	1.0895e+06
Std	2.0462e+04	2.2169e+04	2.4156e+04
Skewness	0.1952	0.0803	0.0260
Kurtosis	0.1874	0.3513	0.1534

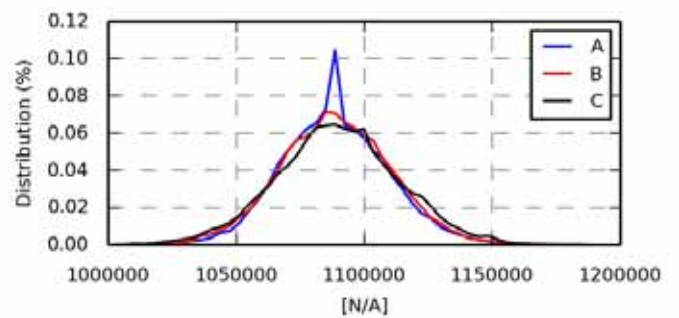


Figure 1036 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	3.6014e+04	3.5180e+04	3.9932e+04
Eq (m=4)	4.5071e+04	4.4258e+04	4.9976e+04
Eq (m=6)	5.8907e+04	5.8963e+04	6.5944e+04
Eq (m=8)	6.9300e+04	7.1241e+04	7.8642e+04
Eq (m=10)	7.7512e+04	8.2012e+04	8.9154e+04
Eq (m=12)	8.4204e+04	9.1473e+04	9.8003e+04

Section 11.21 oc4_p2_load_case_2-6: ESYS line2_3 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-6.sel (28-02-2014 22:24)	467	ESYS line2_3 SENSOR 104
B	WAMsim/oc4_p2_load_case_2-6.sel (01-04-2014 12:46)	467	ESYS line2_3 SENSOR 104
C	hawc2/oc4_p2_load_case_2-6.sel (31-03-2014 15:33)	467	ESYS line2_3 SENSOR 104

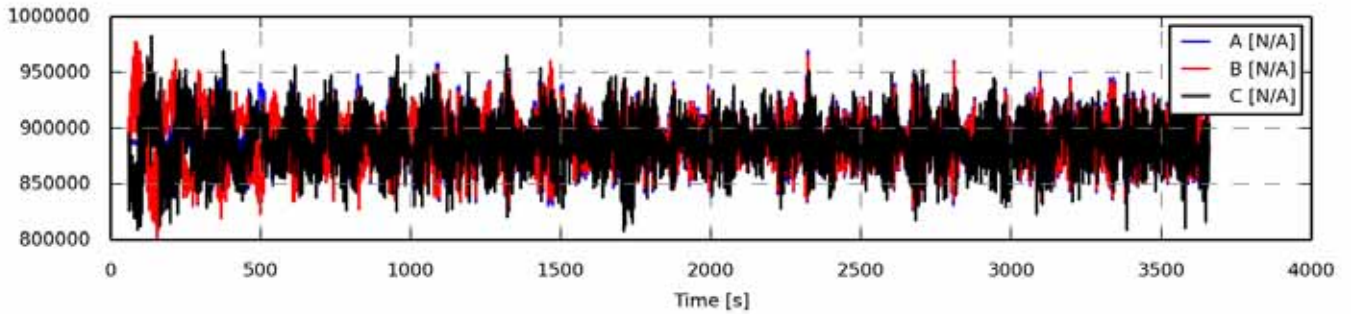


Figure 1037 - Full length time series

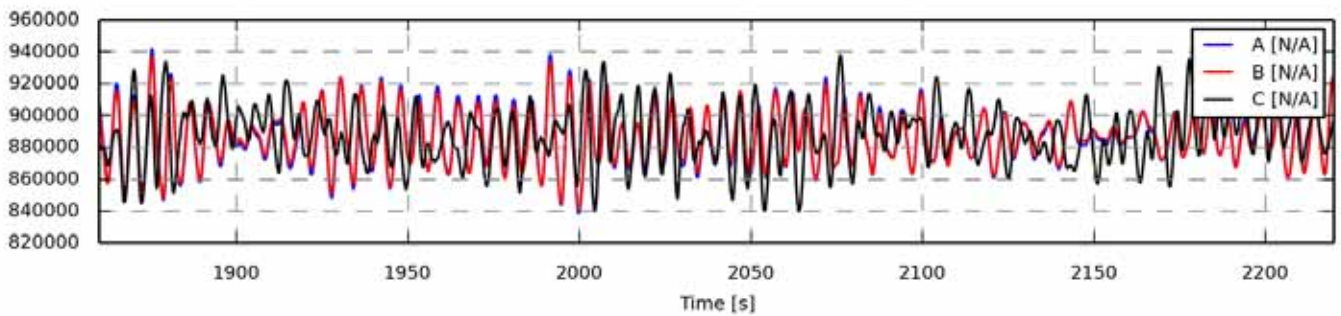


Figure 1038 - Zoom of time series

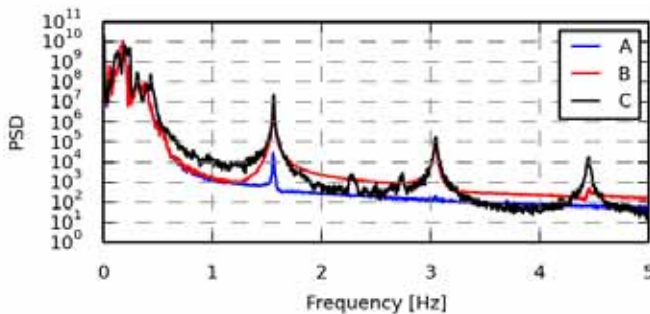


Figure 1039 - Power spectrum density

Statistics	A	B	C
Min	8.2629e+05	8.0146e+05	8.0776e+05
Max	9.6968e+05	9.7768e+05	9.8235e+05
Mean	8.8661e+05	8.8680e+05	8.8738e+05
Std	1.9427e+04	2.1281e+04	2.2743e+04
Skewness	0.2276	0.1074	0.0273
Kurtosis	0.2084	0.4315	0.1982

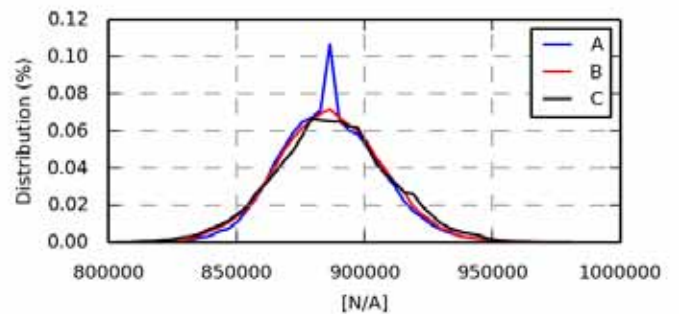


Figure 1040 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	3.4270e+04	3.3488e+04	3.7517e+04
Eq (m=4)	4.2883e+04	4.2160e+04	4.7010e+04
Eq (m=6)	5.6063e+04	5.6347e+04	6.2248e+04
Eq (m=8)	6.5998e+04	6.8356e+04	7.4484e+04
Eq (m=10)	7.3886e+04	7.8963e+04	8.4671e+04
Eq (m=12)	8.0348e+04	8.8273e+04	9.3278e+04

Section 11.22 oc4_p2_load_case_2-6: ESYS line3_1 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-6.sel (28-02-2014 22:24)	471	ESYS line3_1 SENSOR 4
B	WAMsim/oc4_p2_load_case_2-6.sel (01-04-2014 12:46)	471	ESYS line3_1 SENSOR 4
C	hawc2/oc4_p2_load_case_2-6.sel (31-03-2014 15:33)	471	ESYS line3_1 SENSOR 4

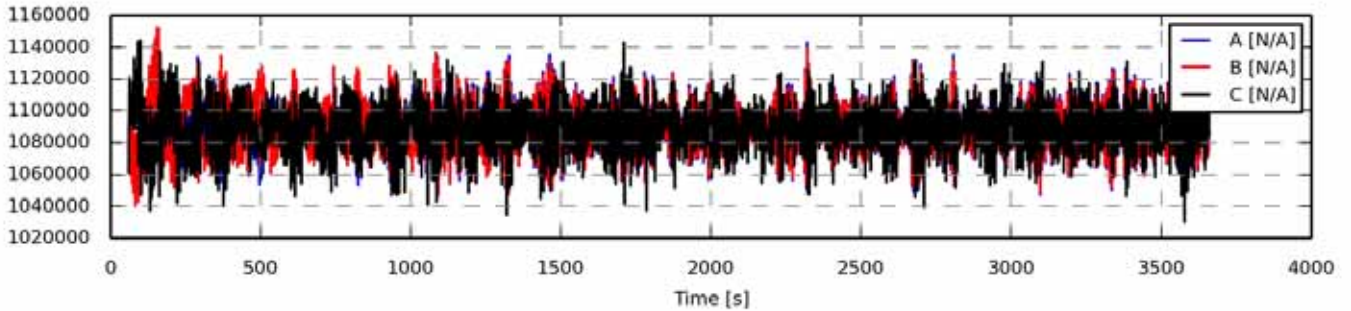


Figure 1041 - Full length time series

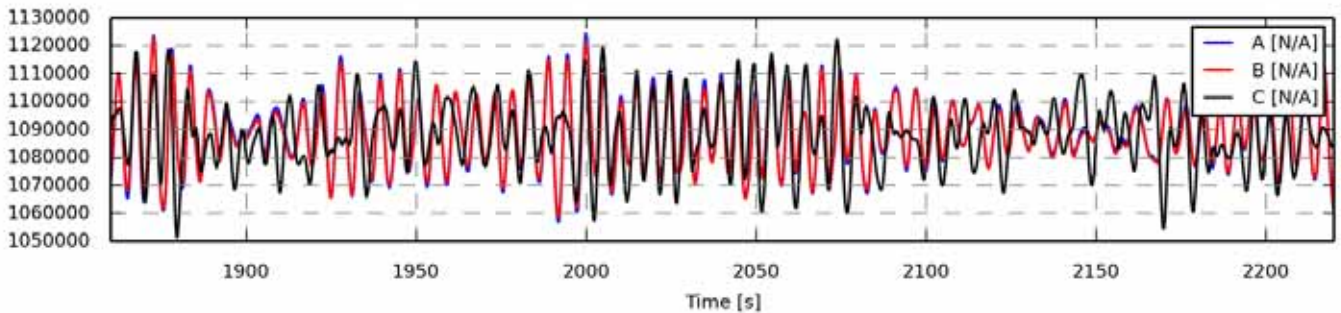


Figure 1042 - Zoom of time series

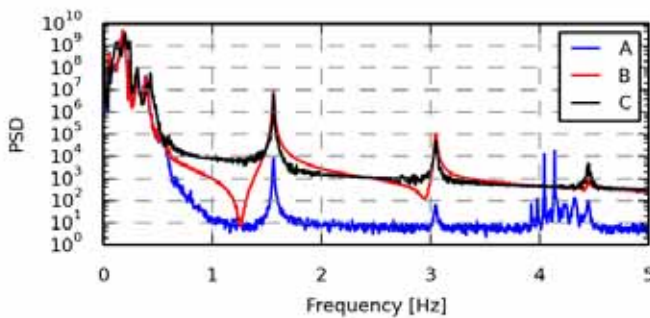


Figure 1043 - Power spectrum density

Statistics	A	B	C
Min	1.0472e+06	1.0403e+06	1.0303e+06
Max	1.1429e+06	1.1519e+06	1.1443e+06
Mean	1.0890e+06	1.0886e+06	1.0886e+06
Std	1.3218e+04	1.3846e+04	1.4476e+04
Skewness	0.1029	0.2375	-0.1106
Kurtosis	0.1840	0.3385	0.2193

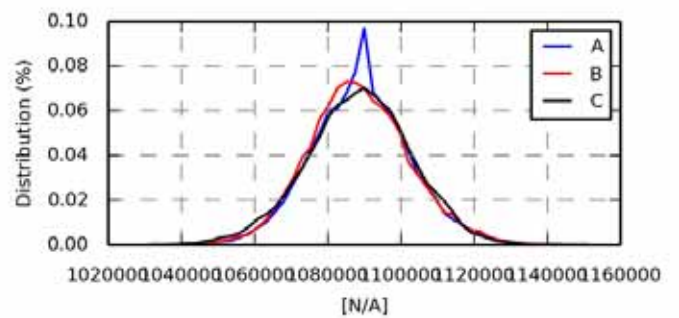


Figure 1044 - Value distribution

Fatigue eq.	1Hz	A	B	C
Eq (m=3)		2.3431e+04	2.3044e+04	2.4596e+04
Eq (m=4)		2.9277e+04	2.8871e+04	3.0815e+04
Eq (m=6)		3.8137e+04	3.8010e+04	4.0755e+04
Eq (m=8)		4.4736e+04	4.5292e+04	4.8764e+04
Eq (m=10)		4.9928e+04	5.1518e+04	5.5441e+04
Eq (m=12)		5.4150e+04	5.6982e+04	6.1045e+04

Section 11.23 oc4_p2_load_case_2-6: ESYS line3_3 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_2-6.sel (28-02-2014 22:24)	675	ESYS line3_3 SENSOR 104
B	WAMsim/oc4_p2_load_case_2-6.sel (01-04-2014 12:46)	675	ESYS line3_3 SENSOR 104
C	hawc2/oc4_p2_load_case_2-6.sel (31-03-2014 15:33)	675	ESYS line3_3 SENSOR 104

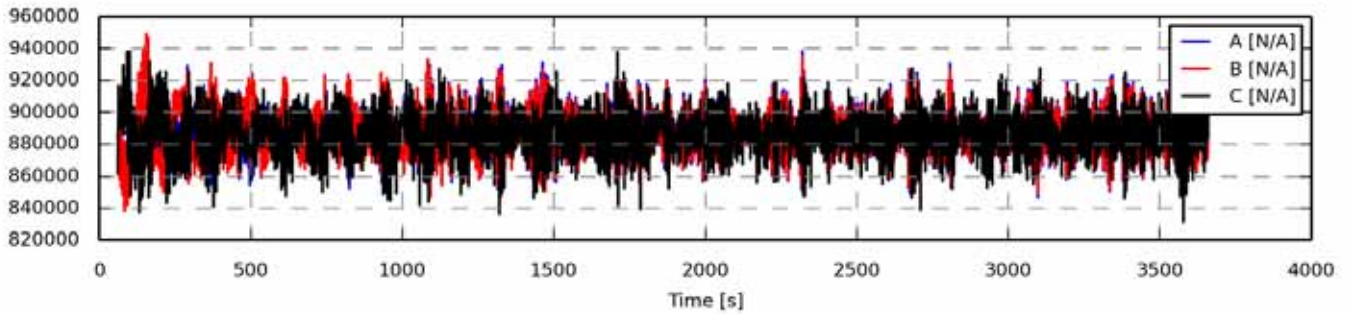


Figure 1045 - Full length time series

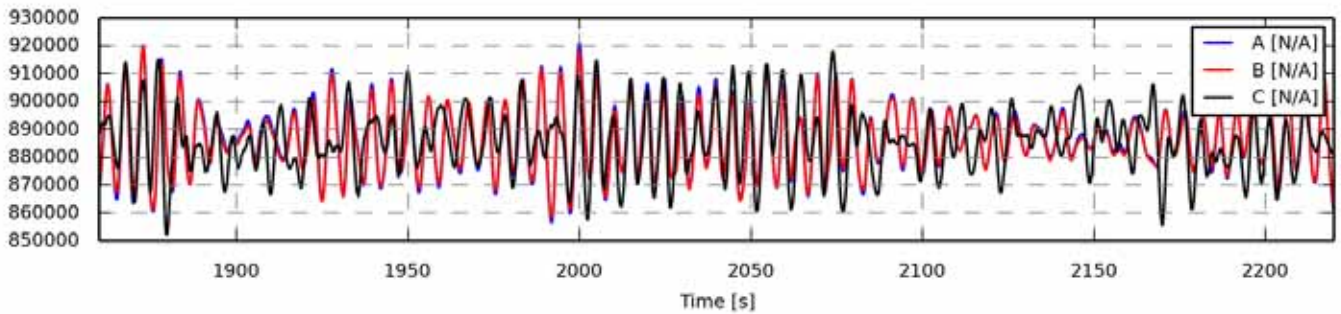


Figure 1046 - Zoom of time series

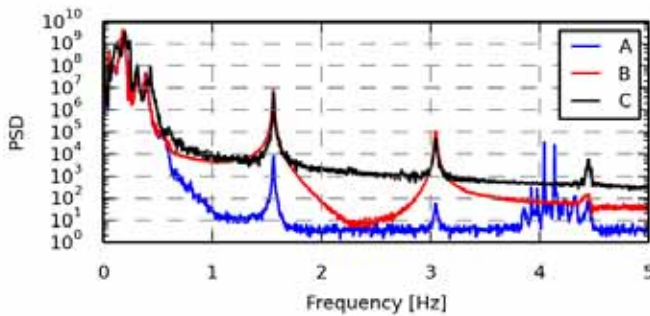


Figure 1047 - Power spectrum density

Statistics	A	B	C
Min	8.4697e+05	8.3810e+05	8.3128e+05
Max	9.3840e+05	9.4938e+05	9.3824e+05
Mean	8.8683e+05	8.8643e+05	8.8640e+05
Std	1.2565e+04	1.3248e+04	1.3604e+04
Skewness	0.1283	0.2588	-0.1012
Kurtosis	0.1839	0.3882	0.2499

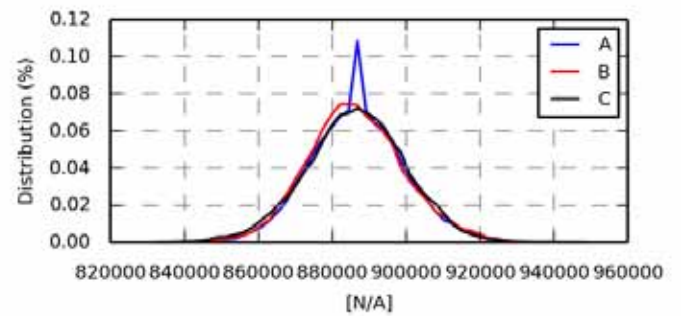


Figure 1048 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	2.2341e+04	2.1954e+04	2.3061e+04
Eq (m=4)	2.7875e+04	2.7518e+04	2.8898e+04
Eq (m=6)	3.6239e+04	3.6358e+04	3.8270e+04
Eq (m=8)	4.2471e+04	4.3635e+04	4.5821e+04
Eq (m=10)	4.7393e+04	5.0061e+04	5.2072e+04
Eq (m=12)	5.1421e+04	5.5786e+04	5.7274e+04

Article XII. oc4_p2_load_case_3-1

Generated 22-04-2014 10:02

Section 12.01 oc4_p2_load_case_3-1: WSP gl. coo.,Vy [m/s]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-1.sel (28-02-2014 22:36)	3	Free wind speed Vy, gl. coo, of gl. pos 0.00, 0.00, -90.00
B	WAMsim/oc4_p2_load_case_3-1.sel (01-04-2014 12:46)	3	Free wind speed Vy, gl. coo, of gl. pos 0.00, 0.00, -90.00
C	hawc2/oc4_p2_load_case_3-1.sel (31-03-2014 15:33)	3	Free wind speed Vy, gl. coo, of gl. pos 0.00, 0.00, -90.00

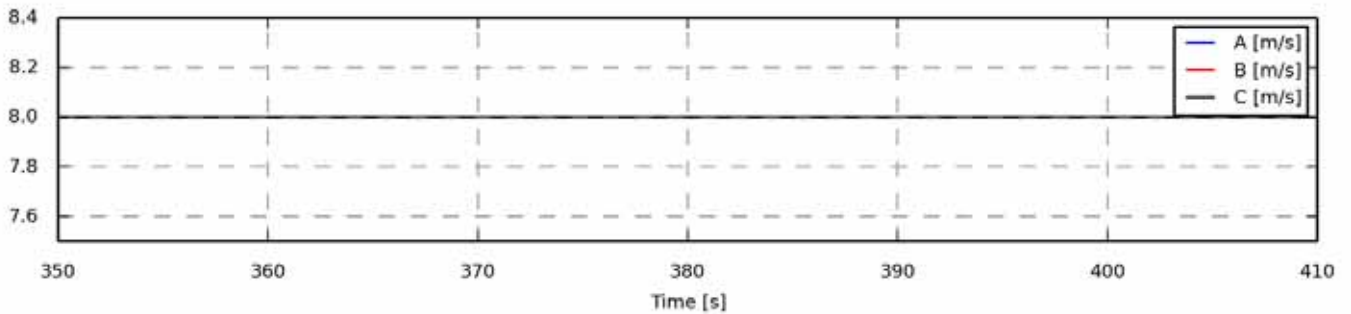


Figure 1049 - Full length time series

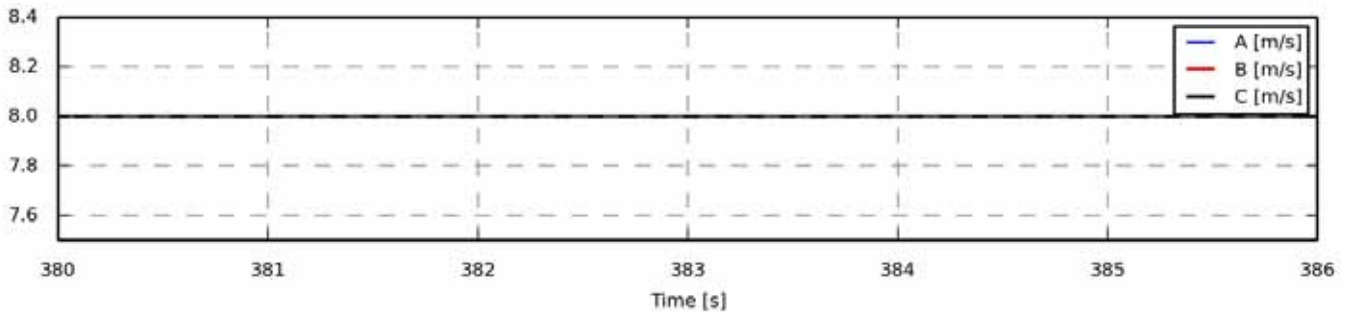


Figure 1050 - Zoom of time series

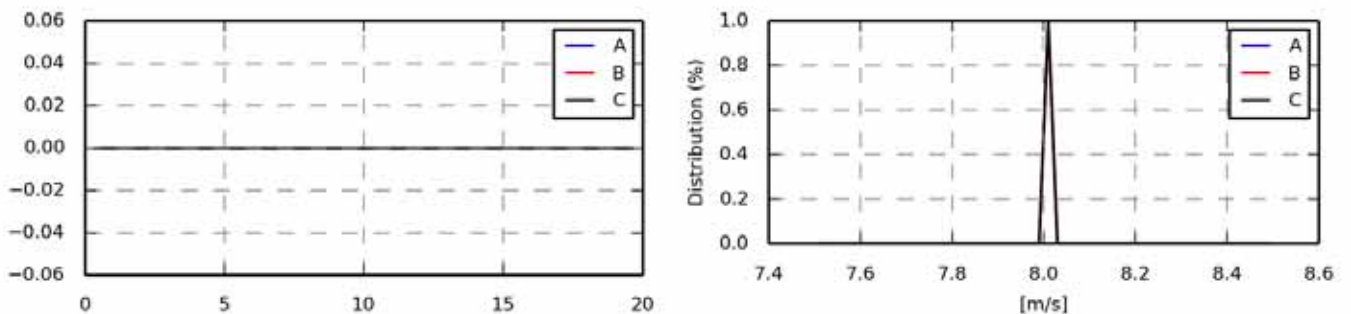


Figure 1051 - Power spectrum density

Statistics	A	B	C
Min	8.0000	8.0000	8.0000
Max	8.0000	8.0000	8.0000
Mean	8.0000	8.0000	8.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

Figure 1052 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 12.02 oc4_p2_load_case_3-1: Water surf. [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-1.sel (28-02-2014 22:36)	5	Water surface gl. coo, at gl. coo, x,y= 0.00, 0.00
B	WAMsim/oc4_p2_load_case_3-1.sel (01-04-2014 12:46)	5	Constant value
C	hawc2/oc4_p2_load_case_3-1.sel (31-03-2014 15:33)	5	Water surface gl. coo, at gl. coo, x,y= 0.00, 0.00

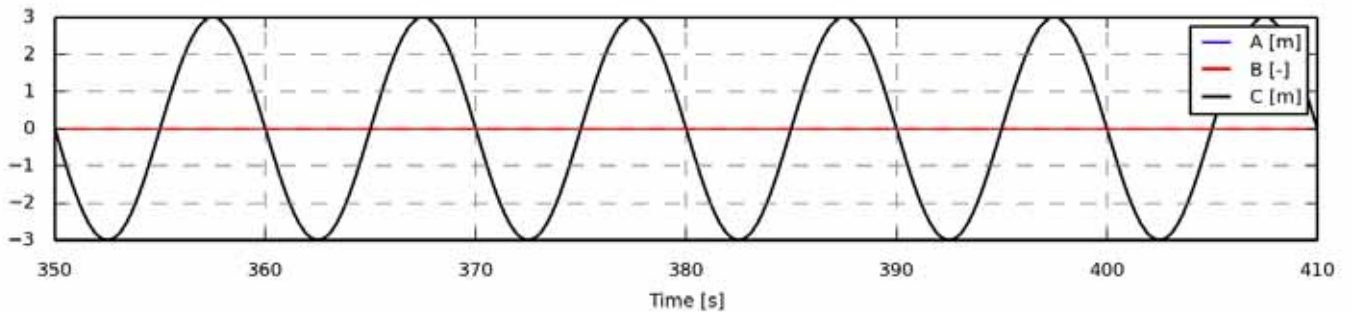


Figure 1053 - Full length time series

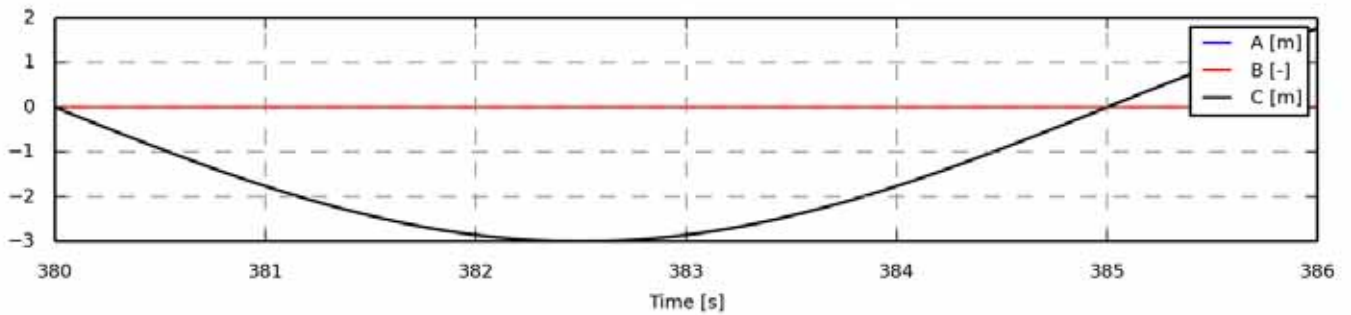


Figure 1054 - Zoom of time series

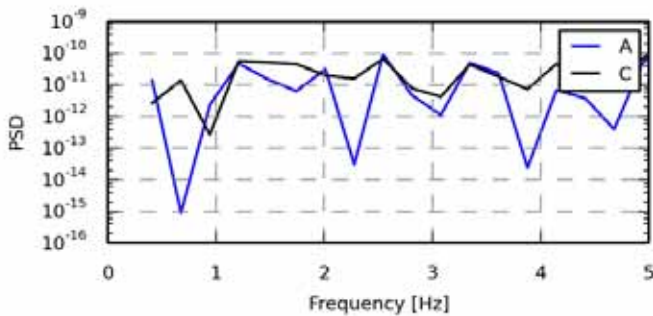


Figure 1055 - Power spectrum density

Statistics	A	B	C
Min	-3.0000	0.0000	-3.0000
Max	3.0000	0.0000	3.0000
Mean	-0.0000	0.0000	-0.0000
Std	2.1213	0.0000	2.1213
Skewness	0.0000	0.0000	0.0000
Kurtosis	-1.5000	-3.0000	-1.5000

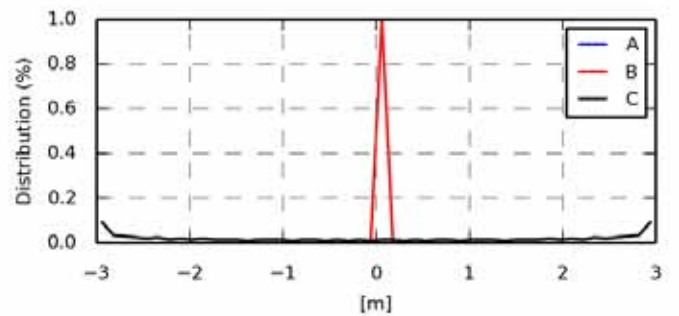


Figure 1056 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	2.7257	-	2.7257
Eq (m=4)	3.3108	-	3.3108
Eq (m=6)	4.0308	-	4.0308
Eq (m=8)	4.4511	-	4.4511
Eq (m=10)	4.7248	-	4.7248
Eq (m=12)	4.9167	-	4.9167

Section 12.03 oc4_p2_load_case_3-1: DLL inp 1: 9 [-]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-1.sel (28-02-2014 22:36)	6	DLL : 1 inpvec : 9 electrical power generator [kw]
B	WAMsim/oc4_p2_load_case_3-1.sel (01-04-2014 12:46)	6	DLL : 1 inpvec : 9 electrical power generator [kw]
C	hawc2/oc4_p2_load_case_3-1.sel (31-03-2014 15:33)	6	DLL : 1 inpvec : 9 electrical power generator [kw]

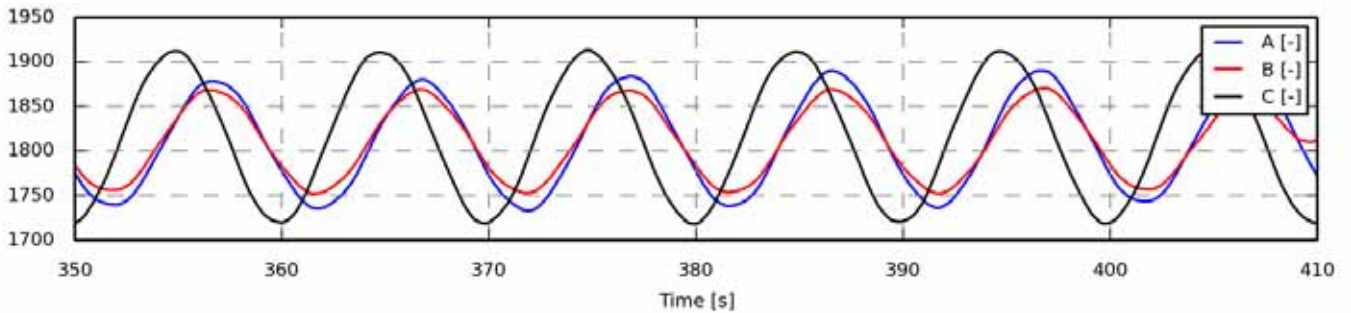


Figure 1057 - Full length time series

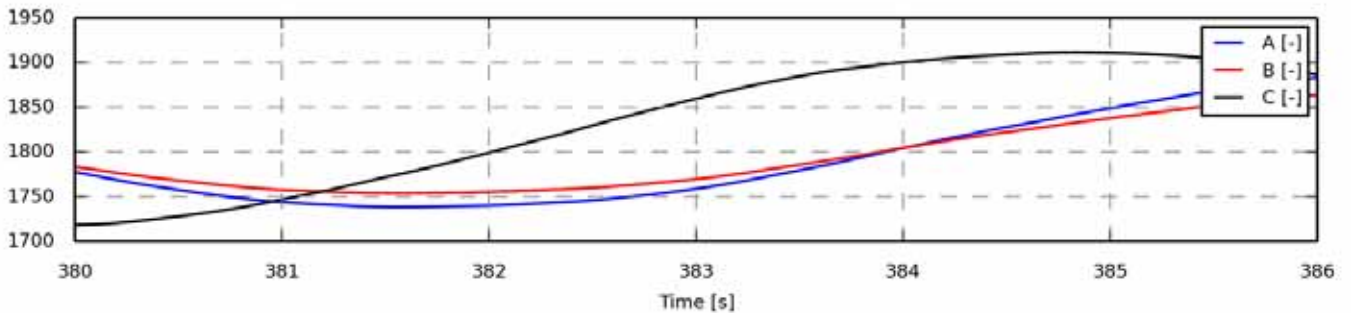


Figure 1058 - Zoom of time series

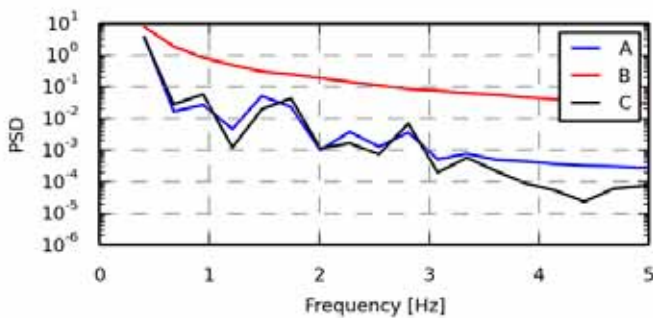


Figure 1059 - Power spectrum density

Statistics	A	B	C
Min	1.7331e+03	1.7523e+03	1.7184e+03
Max	1.8903e+03	1.8704e+03	1.9132e+03
Mean	1.8104e+03	1.8105e+03	1.8171e+03
Std	52.2216	39.8815	67.9080
Skewness	0.0354	0.0019	-0.0345
Kurtosis	-1.4831	-1.4745	-1.4946

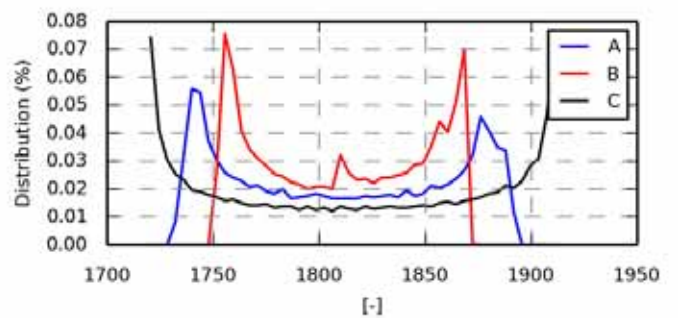


Figure 1060 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	67.4559	51.6434	89.6585
Eq (m=4)	81.8638	62.9418	108.6238
Eq (m=6)	99.5286	76.8483	131.6007
Eq (m=8)	109.8892	84.9819	144.8522
Eq (m=10)	116.7174	90.3043	153.4352
Eq (m=12)	121.5790	94.0598	159.4379

Section 12.04 oc4_p2_load_case_3-1: bea1 angle_speed [rpm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-1.sel (28-02-2014 22:36)	9	shaft_rot angle speed
B	WAMsim/oc4_p2_load_case_3-1.sel (01-04-2014 12:46)	9	shaft_rot angle speed
C	hawc2/oc4_p2_load_case_3-1.sel (31-03-2014 15:33)	9	shaft_rot angle speed

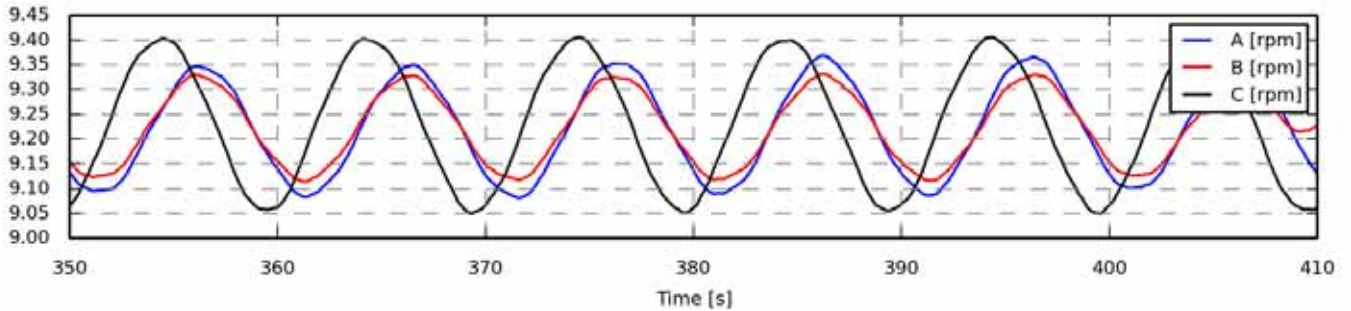


Figure 1061 - Full length time series

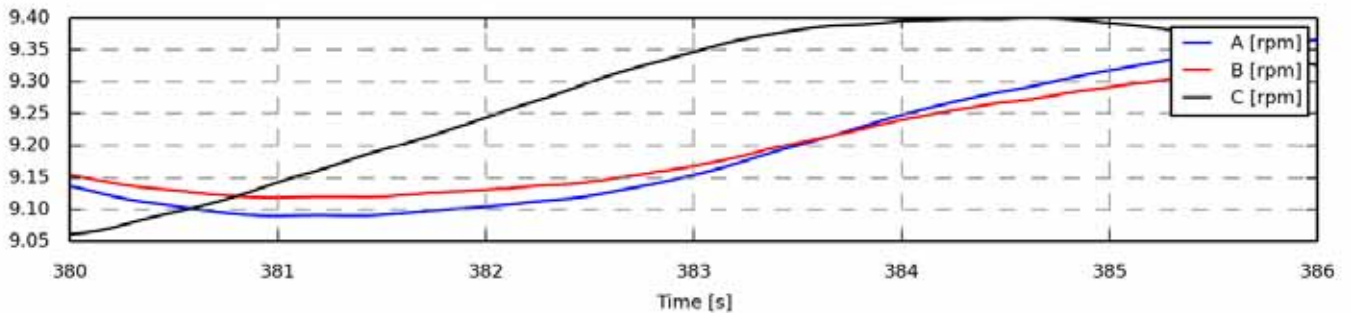


Figure 1062 - Zoom of time series

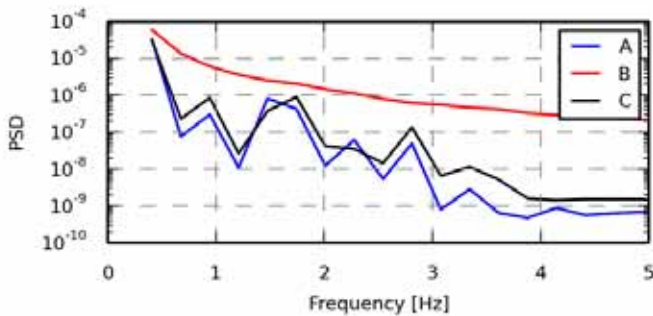


Figure 1063 - Power spectrum density

Statistics	A	B	C
Min	9.0812	9.1142	9.0496
Max	9.3687	9.3311	9.4056
Mean	9.2221	9.2230	9.2330
Std	0.0946	0.0722	0.1228
Skewness	0.0233	-0.0145	-0.0598
Kurtosis	-1.4857	-1.4630	-1.4904

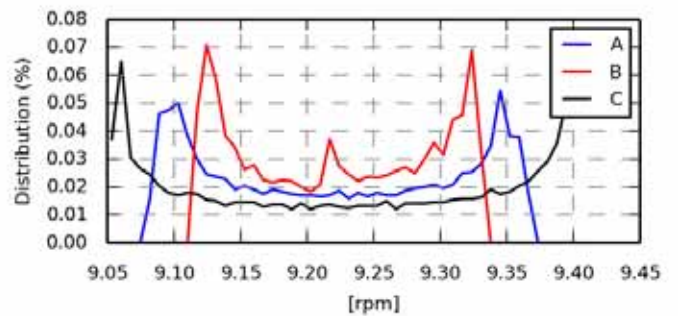


Figure 1064 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.1231	0.0947	0.1625
Eq (m=4)	0.1494	0.1154	0.1969
Eq (m=6)	0.1814	0.1409	0.2387
Eq (m=8)	0.2001	0.1558	0.2628
Eq (m=10)	0.2125	0.1656	0.2784
Eq (m=12)	0.2213	0.1725	0.2894

Section 12.05 oc4_p2_load_case_3-1: bea1 angle [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-1.sel (28-02-2014 22:36)	14	pitch1 angle
B	WAMsim/oc4_p2_load_case_3-1.sel (01-04-2014 12:46)	14	pitch1 angle
C	hawc2/oc4_p2_load_case_3-1.sel (31-03-2014 15:33)	14	pitch1 angle

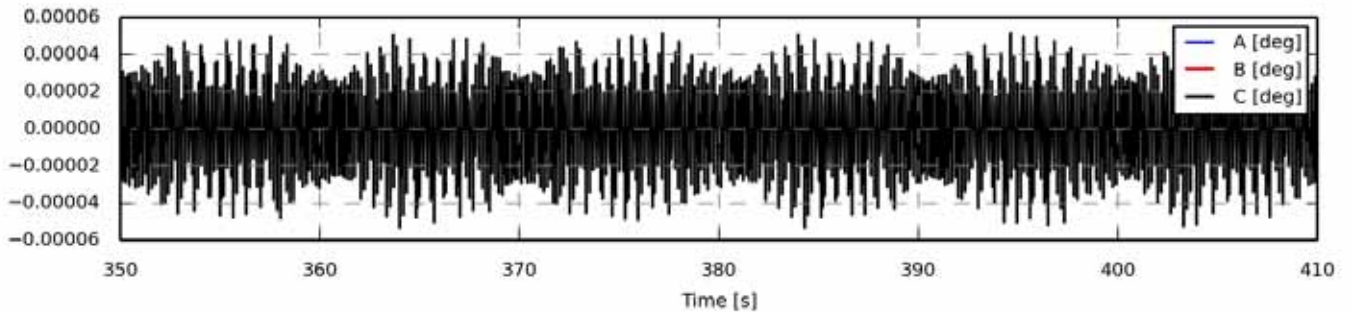


Figure 1065 - Full length time series

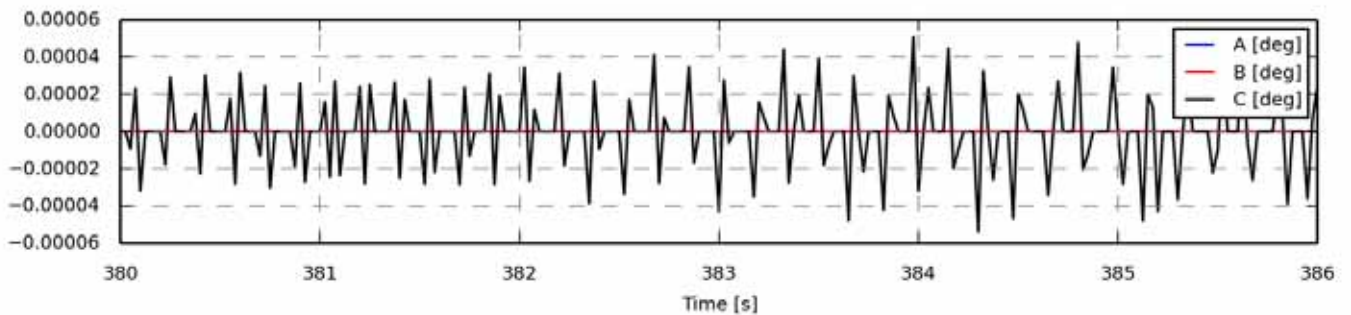


Figure 1066 - Zoom of time series

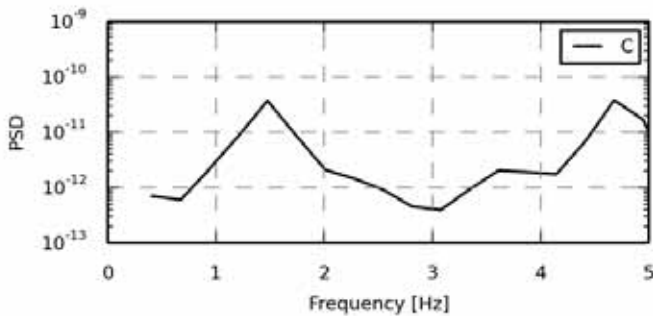


Figure 1067 - Power spectrum density

Statistics	A	B	C
Min	0.0000	0.0000	-0.0001
Max	0.0000	0.0000	0.0001
Mean	0.0000	0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0021
Kurtosis	-3.0000	-3.0000	0.6399

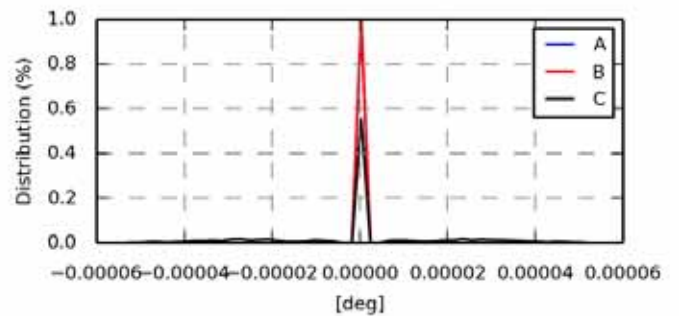


Figure 1068 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	0.0001
Eq (m=4)	-	-	0.0001
Eq (m=6)	-	-	0.0001
Eq (m=8)	-	-	0.0001
Eq (m=10)	-	-	0.0001
Eq (m=12)	-	-	0.0001

Section 12.06 oc4_p2_load_case_3-1: State pos x coo: global [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-1.sel (28-02-2014 22:36)	19	State pos x Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
B	WAMsim/oc4_p2_load_case_3-1.sel (01-04-2014 12:46)	19	State pos x Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
C	hawc2/oc4_p2_load_case_3-1.sel (31-03-2014 15:33)	19	State pos x Mbdy:mc E-nr: 8 Z-rel:0.00 coo: global platform translation in surge sway and heave

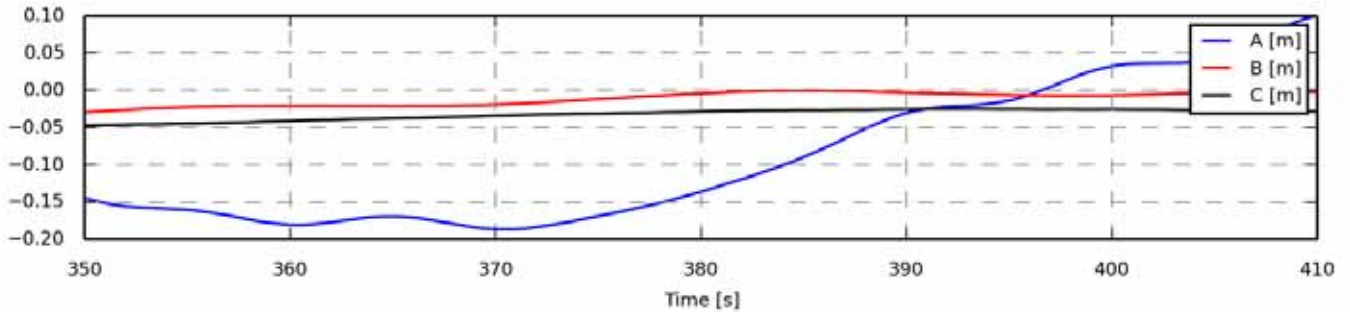


Figure 1069 - Full length time series

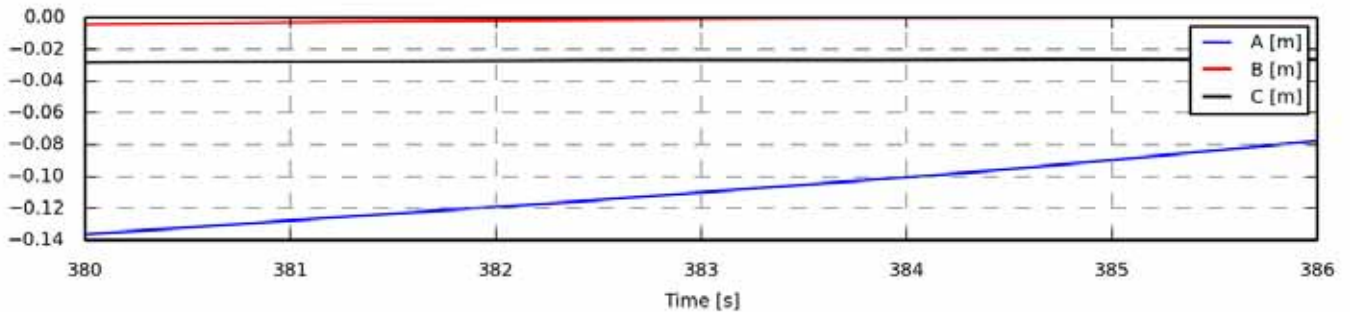


Figure 1070 - Zoom of time series

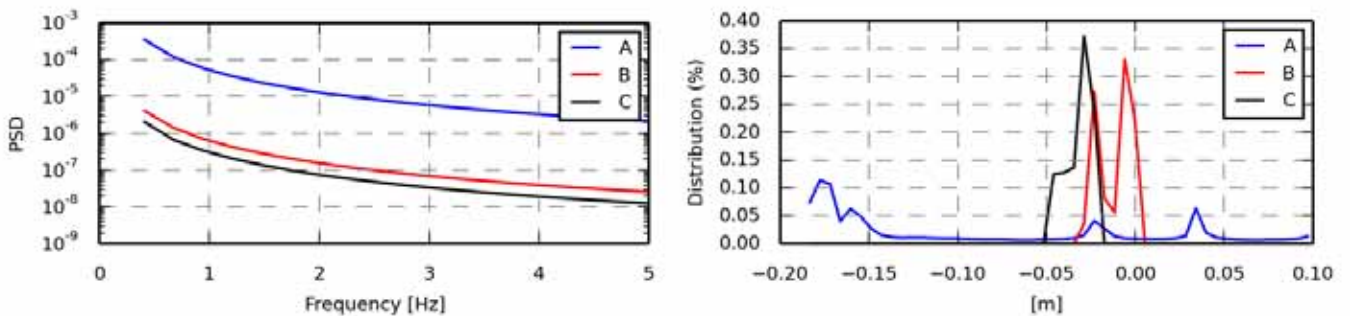


Figure 1071 - Power spectrum density

Statistics	A	B	C
Min	-0.1862	-0.0293	-0.0470
Max	0.0999	-0.0004	-0.0248
Mean	-0.0905	-0.0112	-0.0319
Std	0.0904	0.0086	0.0070
Skewness	0.5624	-0.3699	-0.7941
Kurtosis	-1.2178	-1.4385	-0.8159

Figure 1072 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.0581	0.0059	0.0045
Eq (m=4)	0.0865	0.0087	0.0067
Eq (m=6)	0.1289	0.0130	0.0100
Eq (m=8)	0.1573	0.0159	0.0122
Eq (m=10)	0.1773	0.0179	0.0138
Eq (m=12)	0.1920	0.0194	0.0149

Section 12.07 oc4_p2_load_case_3-1: State pos y coo: global [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-1.sel (28-02-2014 22:36)	20	State pos y Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
B	WAMsim/oc4_p2_load_case_3-1.sel (01-04-2014 12:46)	20	State pos y Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
C	hawc2/oc4_p2_load_case_3-1.sel (31-03-2014 15:33)	20	State pos y Mbdy:mc E-nr: 8 Z-rel:0.00 coo: global platform translation in surge sway and heave

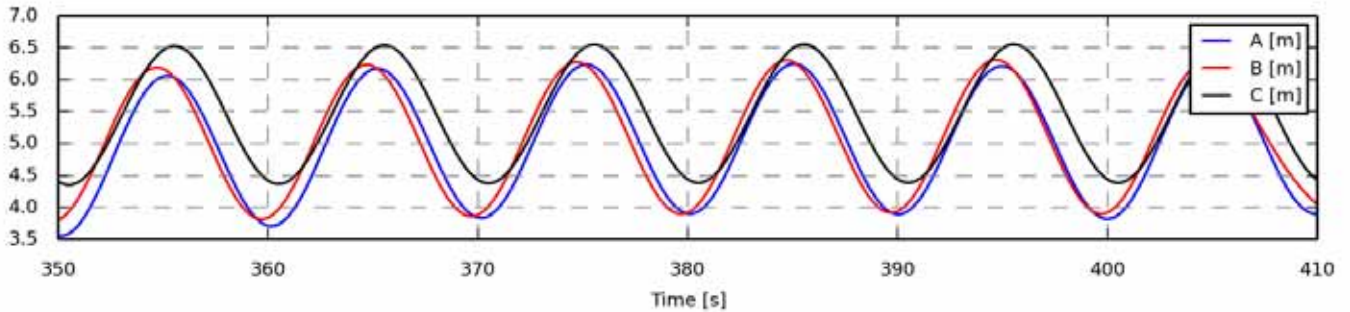


Figure 1073 - Full length time series

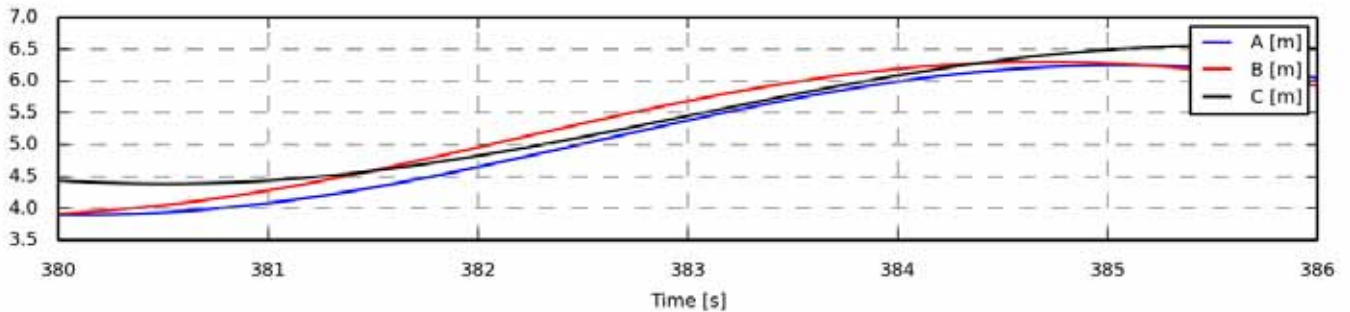


Figure 1074 - Zoom of time series

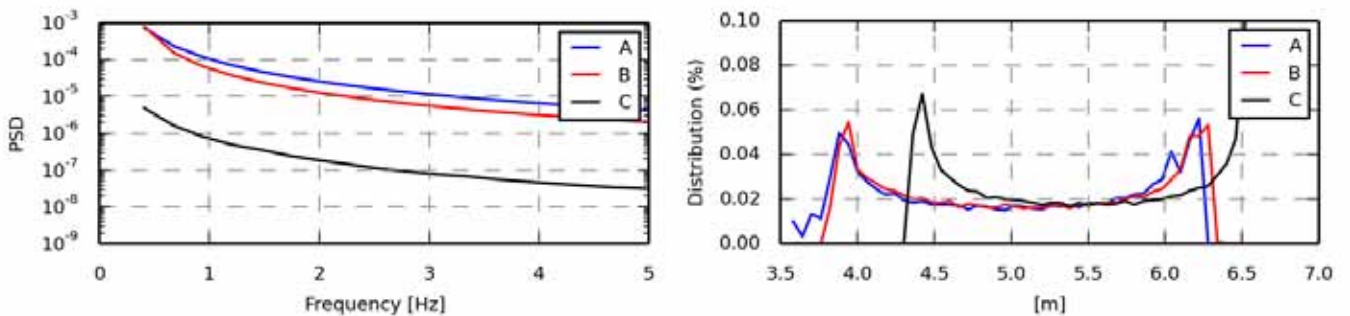


Figure 1075 - Power spectrum density

Statistics	A	B	C
Min	3.5519	3.8057	4.3531
Max	6.2483	6.3103	6.5500
Mean	4.9992	5.0869	5.4591
Std	0.8480	0.8367	0.7653
Skewness	-0.0065	-0.0184	0.0011
Kurtosis	-1.4664	-1.4768	-1.4988

Figure 1076 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	1.1056	1.1031	0.9994
Eq (m=4)	1.3409	1.3368	1.2108
Eq (m=6)	1.6284	1.6205	1.4669
Eq (m=8)	1.7972	1.7846	1.6147
Eq (m=10)	1.9093	1.8914	1.7105
Eq (m=12)	1.9904	1.9666	1.7774

Section 12.08 oc4_p2_load_case_3-1: State pos z coo: global [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-1.sel (28-02-2014 22:36)	21	State pos z Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
B	WAMsim/oc4_p2_load_case_3-1.sel (01-04-2014 12:46)	21	State pos z Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
C	hawc2/oc4_p2_load_case_3-1.sel (31-03-2014 15:33)	21	State pos z Mbdy:mc E-nr: 8 Z-rel:0.00 coo: global platform translation in surge sway and heave

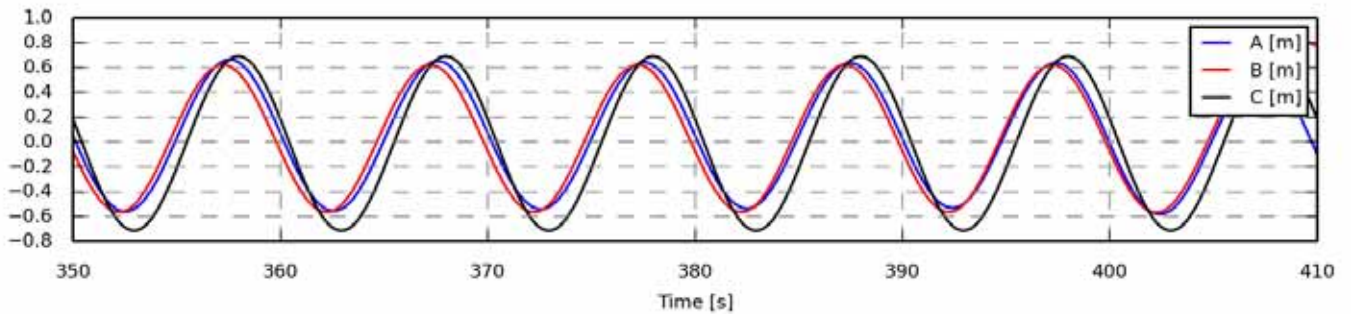


Figure 1077 - Full length time series

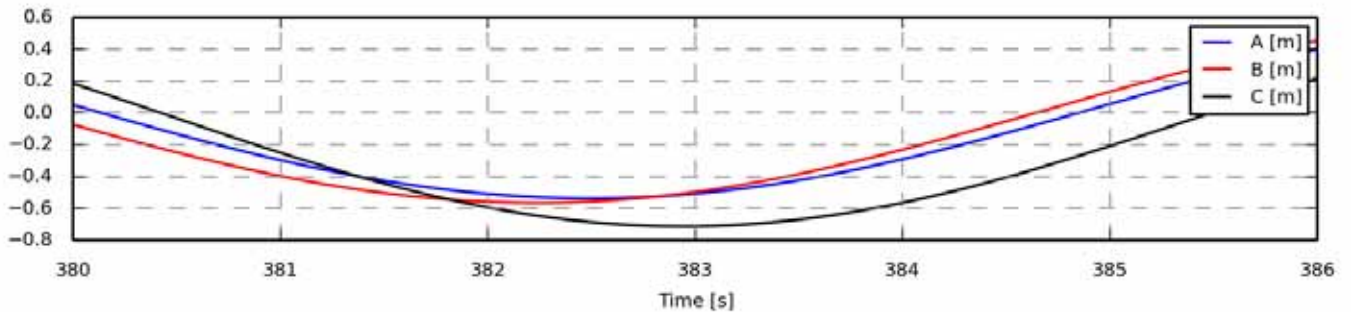


Figure 1078 - Zoom of time series

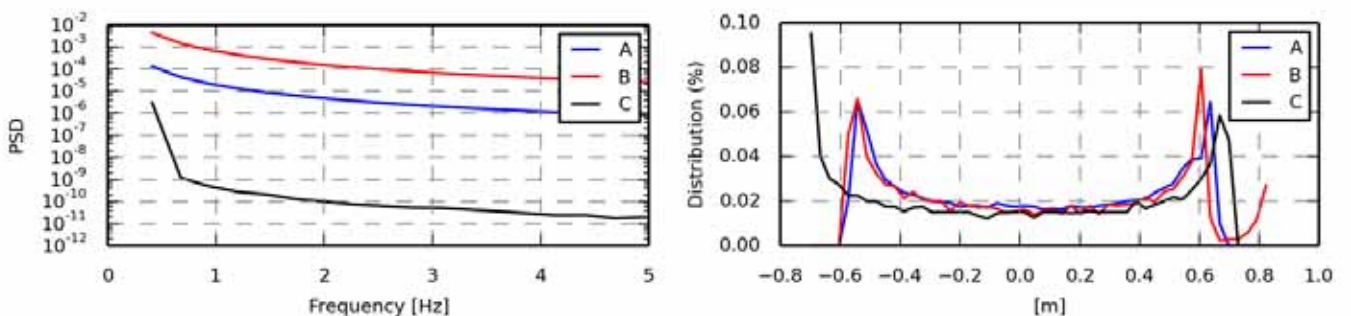


Figure 1079 - Power spectrum density

Statistics	A	B	C
Min	-0.5827	-0.5684	-0.7133
Max	0.6634	0.8382	0.6911
Mean	0.0381	0.0485	-0.0132
Std	0.4183	0.4442	0.4956
Skewness	0.0145	0.0777	0.0061
Kurtosis	-1.4819	-1.4225	-1.4965

Figure 1080 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.5416	0.5447	0.6391
Eq (m=4)	0.6575	0.6650	0.7760
Eq (m=6)	0.8005	0.8143	0.9440
Eq (m=8)	0.8843	0.9036	1.0421
Eq (m=10)	0.9393	0.9643	1.1060
Eq (m=12)	0.9780	1.0093	1.1508

Section 12.09 oc4_p2_load_case_3-1: proj_ang tx coo: global [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-1.sel (28-02-2014 22:36)	22	State_rot proj_ang tx Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
B	WAMsim/oc4_p2_load_case_3-1.sel (01-04-2014 12:46)	22	State_rot proj_ang tx Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
C	hawc2/oc4_p2_load_case_3-1.sel (31-03-2014 15:33)	22	State_rot proj_ang tx Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw

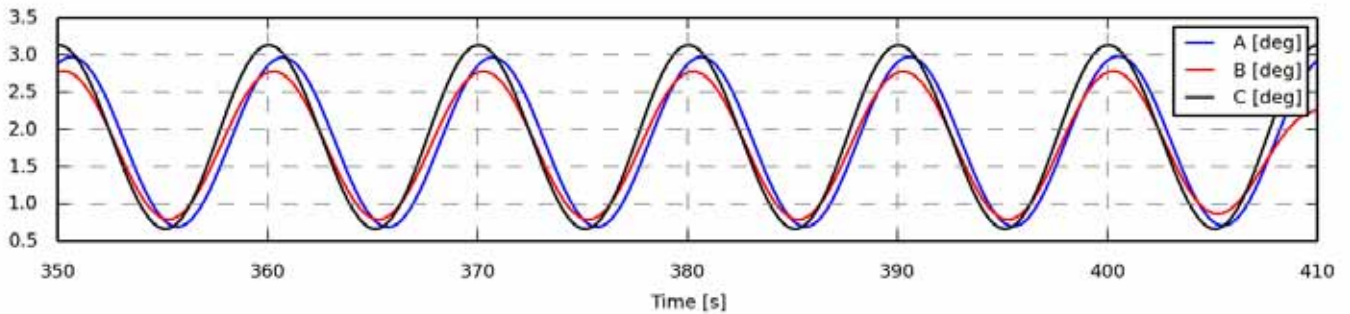


Figure 1081 - Full length time series

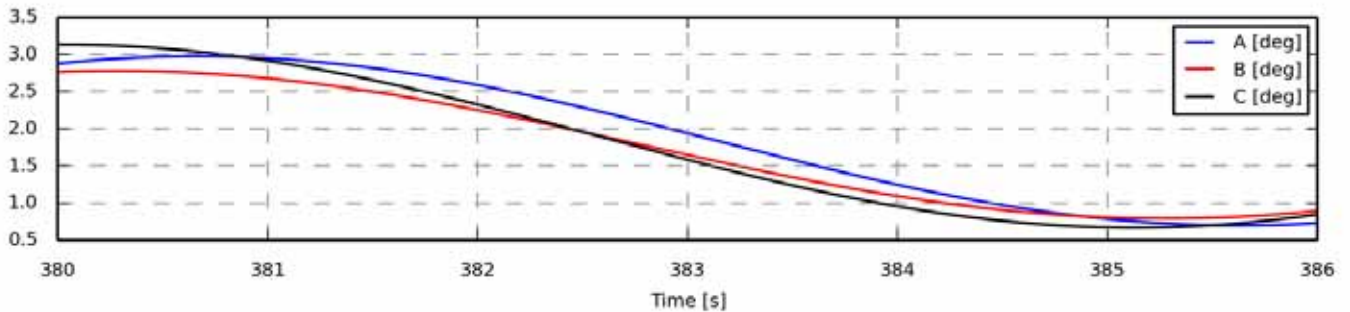


Figure 1082 - Zoom of time series

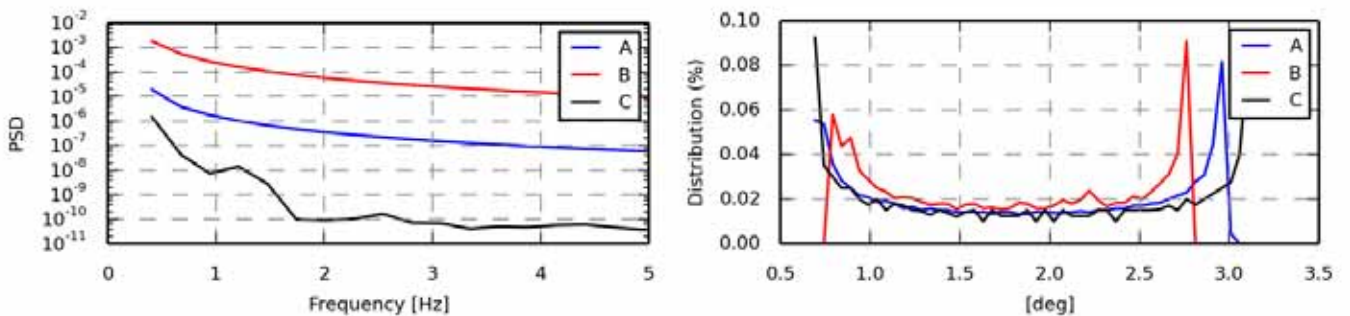


Figure 1083 - Power spectrum density

Statistics	A	B	C
Min	0.6921	0.7913	0.6679
Max	2.9878	2.7850	3.1317
Mean	1.8416	1.7779	1.8931
Std	0.8058	0.6905	0.8704
Skewness	-0.0066	0.0253	0.0108
Kurtosis	-1.5018	-1.4660	-1.4995

Figure 1084 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	1.0622	0.9051	1.1436
Eq (m=4)	1.2869	1.0992	1.3855
Eq (m=6)	1.5593	1.3367	1.6785
Eq (m=8)	1.7165	1.4751	1.8476
Eq (m=10)	1.8184	1.5655	1.9570
Eq (m=12)	1.8898	1.6290	2.0336

Section 12.10 oc4_p2_load_case_3-1: proj_ang ty coo: global [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-1.sel (28-02-2014 22:36)	23	State_rot proj_ang ty Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
B	WAMsim/oc4_p2_load_case_3-1.sel (01-04-2014 12:46)	23	State_rot proj_ang ty Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
C	hawc2/oc4_p2_load_case_3-1.sel (31-03-2014 15:33)	23	State_rot proj_ang ty Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw

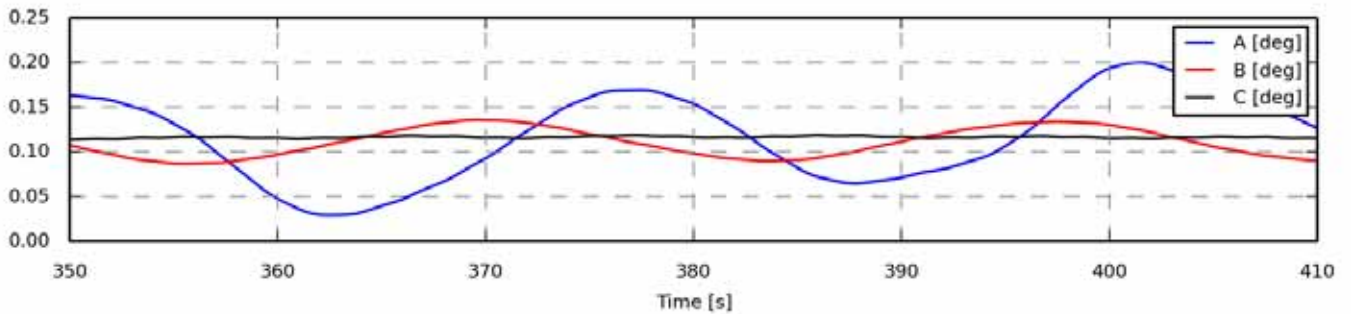


Figure 1085 - Full length time series

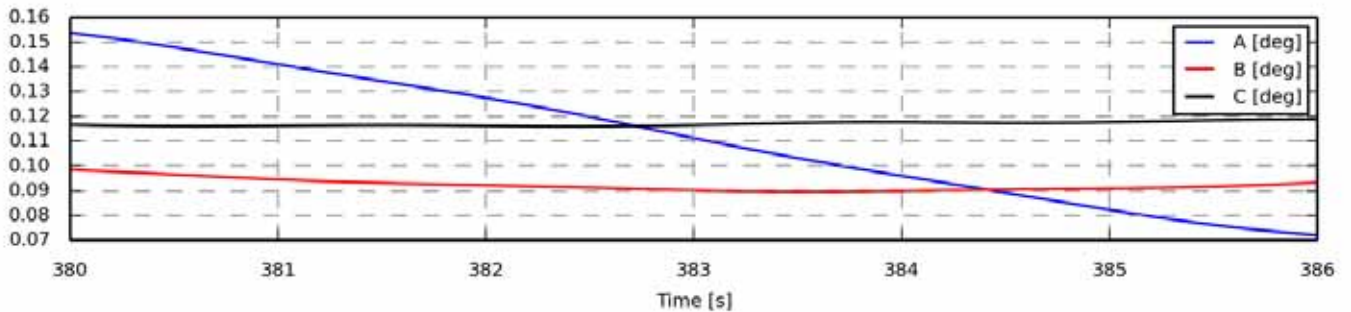


Figure 1086 - Zoom of time series

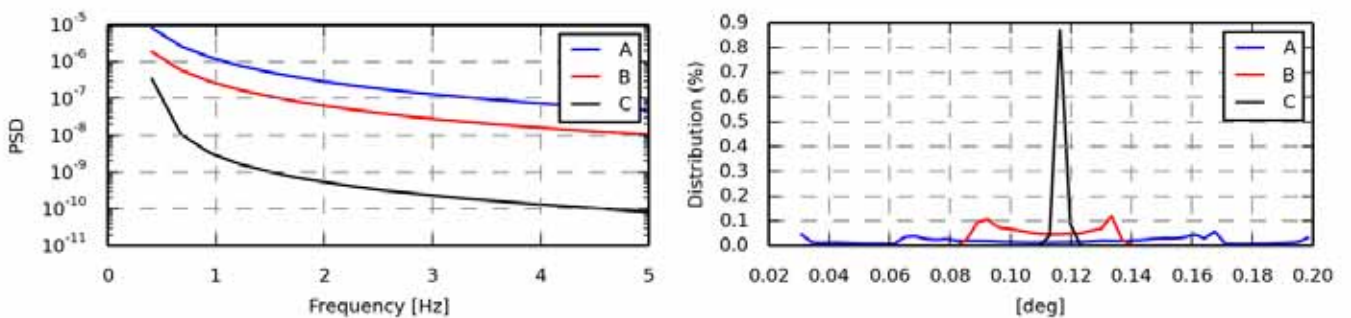


Figure 1087 - Power spectrum density

Statistics	A	B	C
Min	0.0292	0.0867	0.1138
Max	0.2001	0.1357	0.1188
Mean	0.1167	0.1104	0.1166
Std	0.0484	0.0160	0.0010
Skewness	-0.1464	0.1267	-0.0685
Kurtosis	-1.1447	-1.4377	-0.4038

Figure 1088 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.0439	0.0149	0.0015
Eq (m=4)	0.0590	0.0197	0.0018
Eq (m=6)	0.0809	0.0262	0.0024
Eq (m=8)	0.0959	0.0302	0.0028
Eq (m=10)	0.1069	0.0329	0.0031
Eq (m=12)	0.1152	0.0349	0.0034

Section 12.11 oc4_p2_load_case_3-1: proj_ang tz coo: global [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-1.sel (28-02-2014 22:36)	24	State_rot proj_ang tz Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
B	WAMsim/oc4_p2_load_case_3-1.sel (01-04-2014 12:46)	24	State_rot proj_ang tz Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
C	hawc2/oc4_p2_load_case_3-1.sel (31-03-2014 15:33)	24	State_rot proj_ang tz Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw

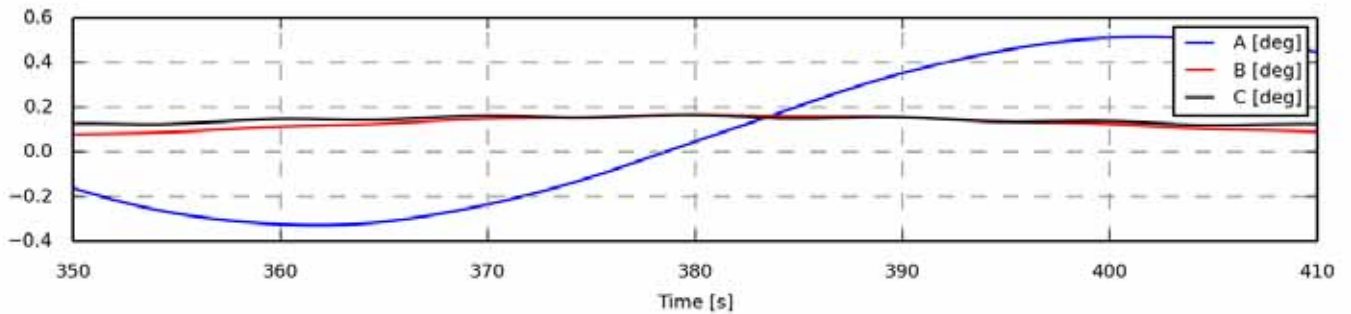


Figure 1089 - Full length time series

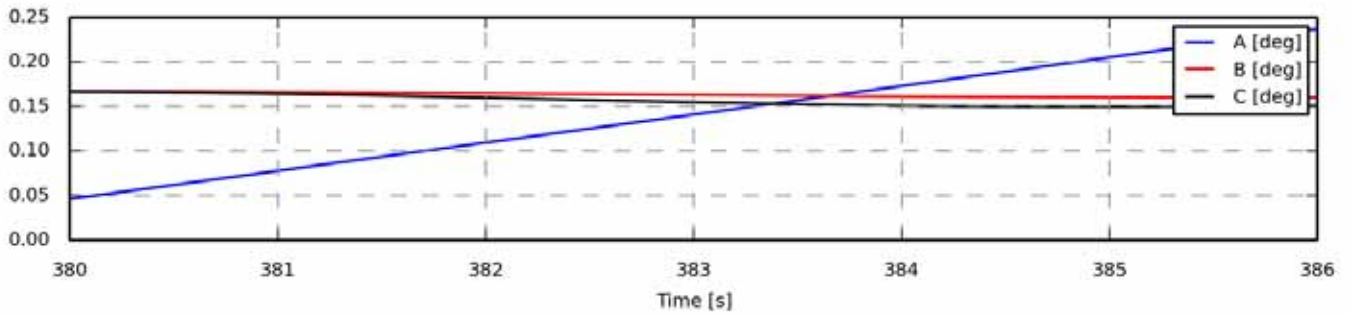


Figure 1090 - Zoom of time series

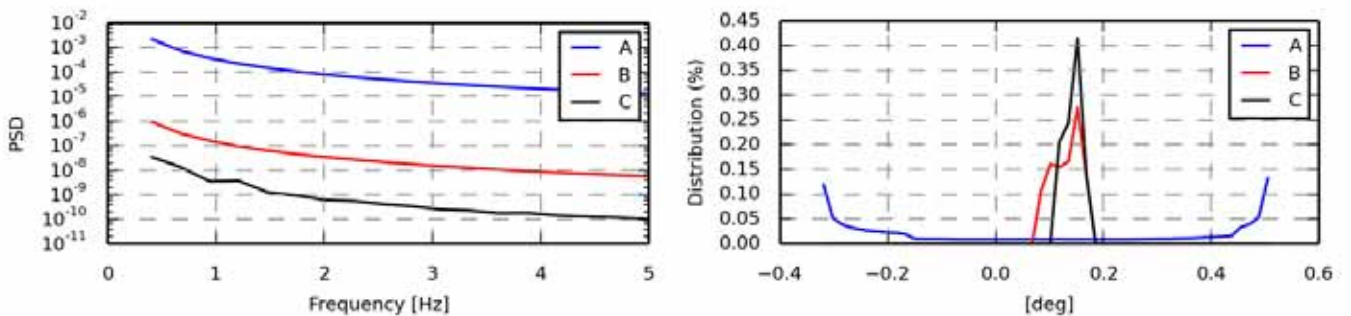


Figure 1091 - Power spectrum density

Statistics	A	B	C
Min	-0.3278	0.0785	0.1198
Max	0.5140	0.1671	0.1669
Mean	0.0796	0.1308	0.1441
Std	0.3272	0.0268	0.0139
Skewness	0.0999	-0.3326	-0.1972
Kurtosis	-1.6706	-1.1949	-1.1831

Figure 1092 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.1711	0.0212	0.0116
Eq (m=4)	0.2544	0.0299	0.0163
Eq (m=6)	0.3790	0.0422	0.0229
Eq (m=8)	0.4627	0.0503	0.0273
Eq (m=10)	0.5215	0.0560	0.0302
Eq (m=12)	0.5648	0.0602	0.0324

Section 12.12 oc4_p2_load_case_3-1: Mx coo: towertop [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-1.sel (28-02-2014 22:36)	37	MomentMx Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
B	WAMsim/oc4_p2_load_case_3-1.sel (01-04-2014 12:46)	37	MomentMx Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
C	hawc2/oc4_p2_load_case_3-1.sel (31-03-2014 15:33)	37	MomentMx Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment

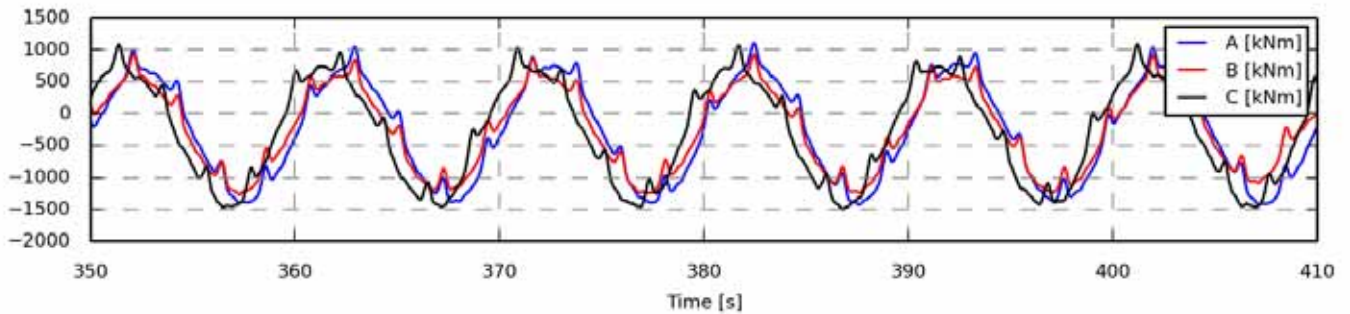


Figure 1093 - Full length time series

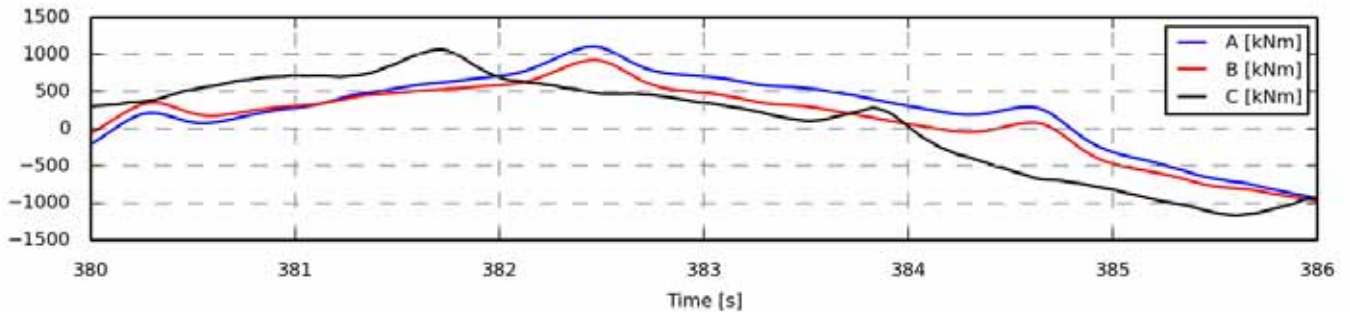


Figure 1094 - Zoom of time series

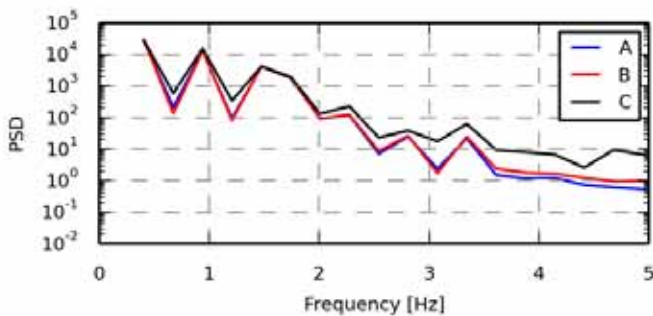


Figure 1095 - Power spectrum density

Statistics	A	B	C
Min	-1.4293e+03	-1.2669e+03	-1.5041e+03
Max	1.1041e+03	935.0833	1.0866e+03
Mean	-2.6289e+02	-2.4869e+02	-2.7238e+02
Std	754.0001	634.7091	779.8585
Skewness	-0.0076	-0.0149	-0.0703
Kurtosis	-1.4158	-1.3634	-1.4395

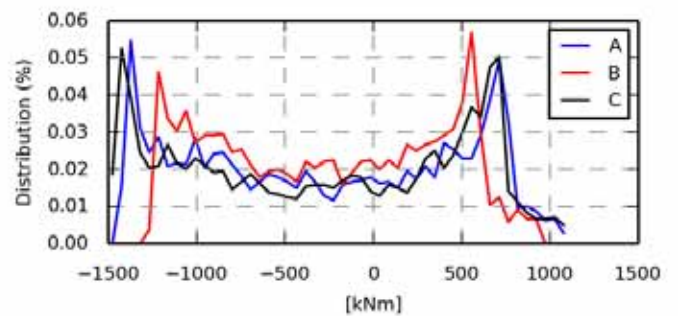


Figure 1096 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	1.0907e+03	949.7491	1.1404e+03
Eq (m=4)	1.3249e+03	1.1536e+03	1.3821e+03
Eq (m=6)	1.6152e+03	1.4068e+03	1.6788e+03
Eq (m=8)	1.7861e+03	1.5559e+03	1.8525e+03
Eq (m=10)	1.8985e+03	1.6540e+03	1.9665e+03
Eq (m=12)	1.9783e+03	1.7237e+03	2.0473e+03

Section 12.13 oc4_p2_load_case_3-1: My coo: towertop [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-1.sel (28-02-2014 22:36)	38	MomentMy Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
B	WAMsim/oc4_p2_load_case_3-1.sel (01-04-2014 12:46)	38	MomentMy Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
C	hawc2/oc4_p2_load_case_3-1.sel (31-03-2014 15:33)	38	MomentMy Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment

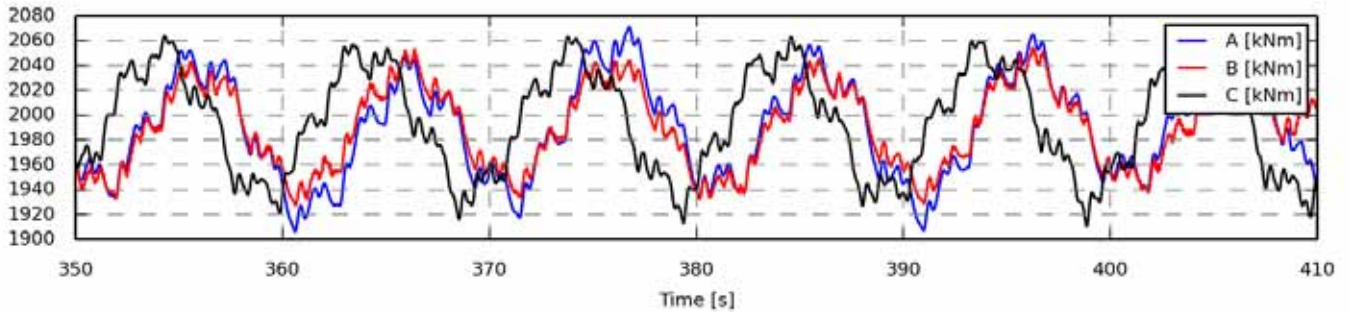


Figure 1097 - Full length time series

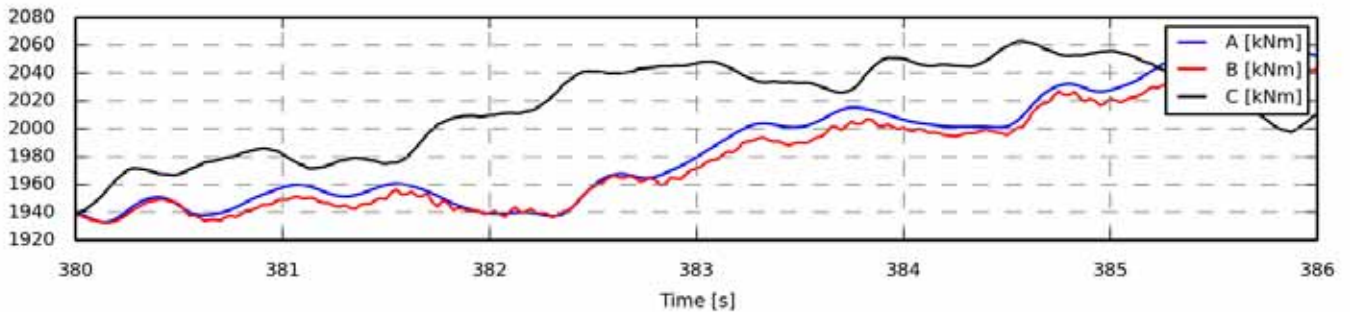


Figure 1098 - Zoom of time series

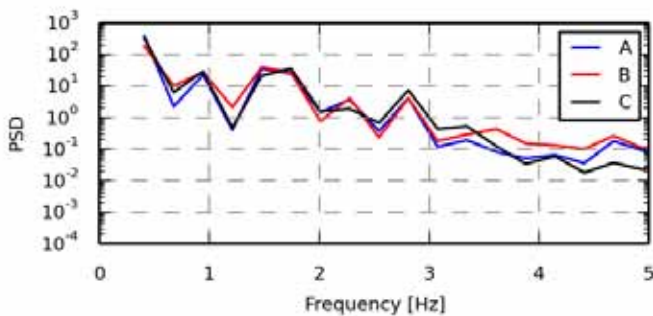


Figure 1099 - Power spectrum density

Statistics	A	B	C
Min	1.9064e+03	1.9275e+03	1.9108e+03
Max	2.0707e+03	2.0541e+03	2.0652e+03
Mean	1.9919e+03	1.9906e+03	1.9947e+03
Std	40.6592	32.9930	41.2950
Skewness	-0.0004	-0.0511	-0.0984
Kurtosis	-1.1372	-1.2589	-1.2891

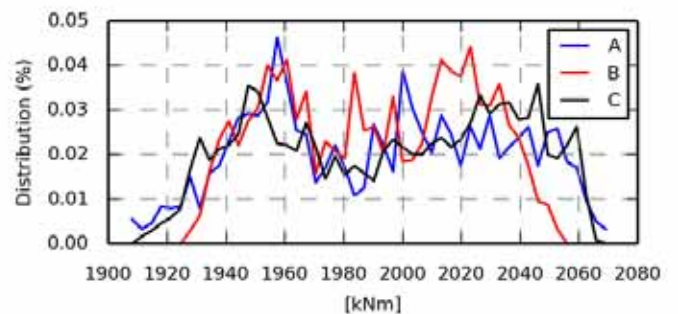


Figure 1100 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	64.2080	52.6922	65.8297
Eq (m=4)	78.1266	63.8119	79.7883
Eq (m=6)	96.0833	77.9755	97.1790
Eq (m=8)	107.3418	86.4217	107.4594
Eq (m=10)	115.2739	92.0533	114.2718
Eq (m=12)	121.2596	96.1104	119.1425

Section 12.14 oc4_p2_load_case_3-1: Mz coo: towertop [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-1.sel (28-02-2014 22:36)	39	MomentMz Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
B	WAMsim/oc4_p2_load_case_3-1.sel (01-04-2014 12:46)	39	MomentMz Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
C	hawc2/oc4_p2_load_case_3-1.sel (31-03-2014 15:33)	39	MomentMz Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment

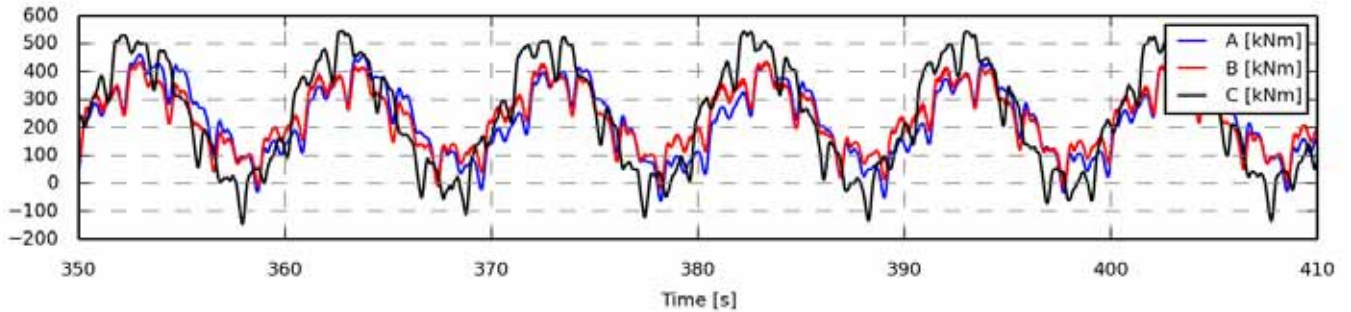


Figure 1101 - Full length time series

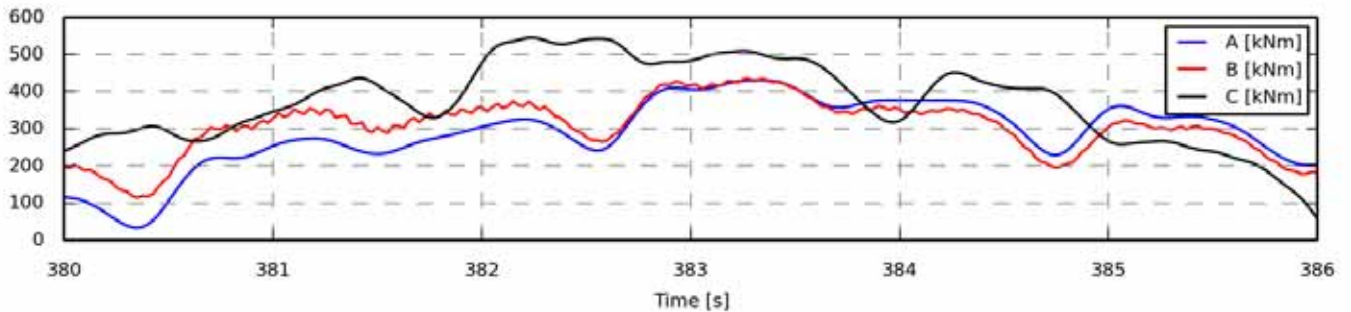


Figure 1102 - Zoom of time series

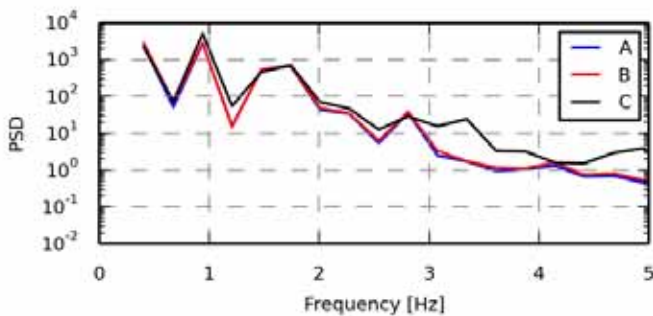


Figure 1103 - Power spectrum density

Statistics	A	B	C
Min	-63.0756	-19.5265	-1.4381e+02
Max	459.4624	438.7968	547.5232
Mean	229.1241	234.4775	241.8450
Std	126.5742	109.6529	187.6254
Skewness	-0.0506	-0.0607	-0.0331
Kurtosis	-1.1406	-1.0550	-1.3096

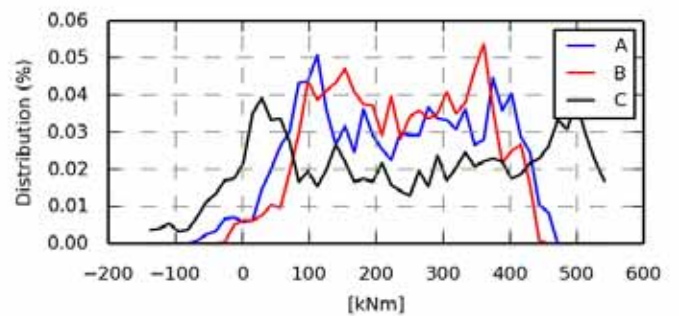


Figure 1104 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	222.0466	205.6666	299.8007
Eq (m=4)	265.6431	243.5268	362.1532
Eq (m=6)	322.0045	293.9214	441.5344
Eq (m=8)	355.6944	324.2911	488.5683
Eq (m=10)	378.1066	344.3604	519.5599
Eq (m=12)	394.2311	358.6260	541.5664

Section 12.15 oc4_p2_load_case_3-1: Mx coo: tower [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-1.sel (28-02-2014 22:36)	43	MomentMx Mbdy:tower nodenr: 1 coo: tower tower base bending moment
B	WAMsim/oc4_p2_load_case_3-1.sel (01-04-2014 12:46)	43	MomentMx Mbdy:tower nodenr: 1 coo: tower tower base bending moment
C	hawc2/oc4_p2_load_case_3-1.sel (31-03-2014 15:33)	43	MomentMx Mbdy:tower nodenr: 1 coo: tower tower base bending moment

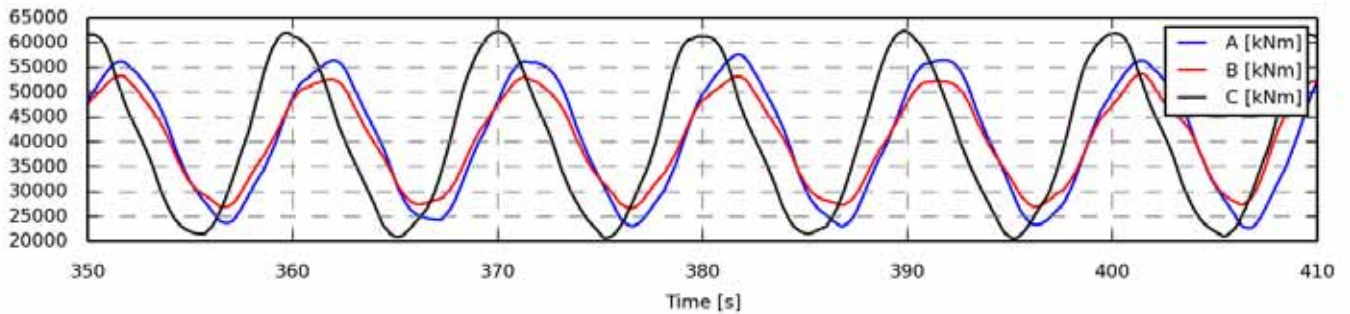


Figure 1105 - Full length time series

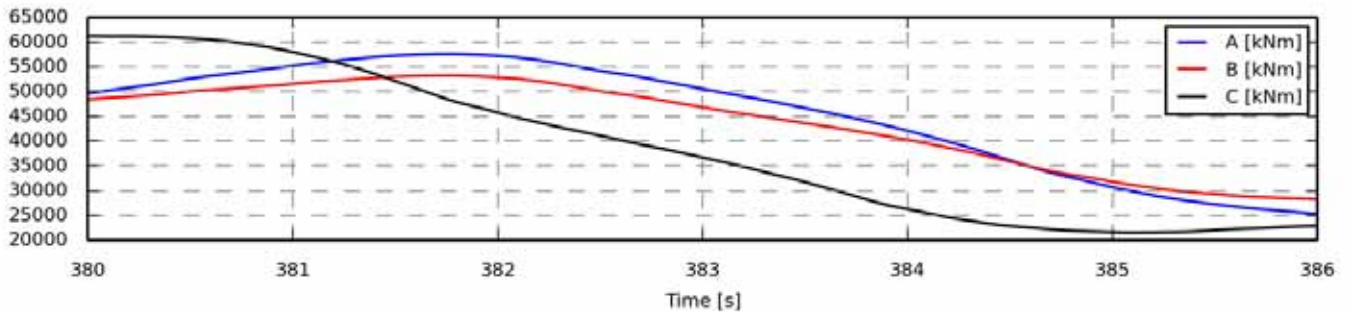


Figure 1106 - Zoom of time series

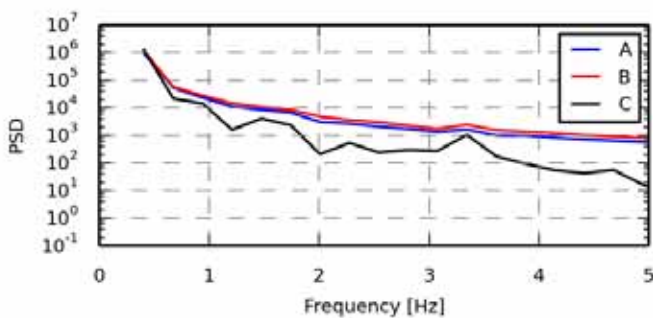


Figure 1107 - Power spectrum density

Statistics	A	B	C
Min	2.2660e+04	2.6642e+04	2.0577e+04
Max	5.7608e+04	5.3754e+04	6.2348e+04
Mean	4.0400e+04	4.0445e+04	4.0803e+04
Std	1.1571e+04	9.0358e+03	1.4383e+04
Skewness	-0.0494	-0.0777	0.1059
Kurtosis	-1.4872	-1.4922	-1.4717

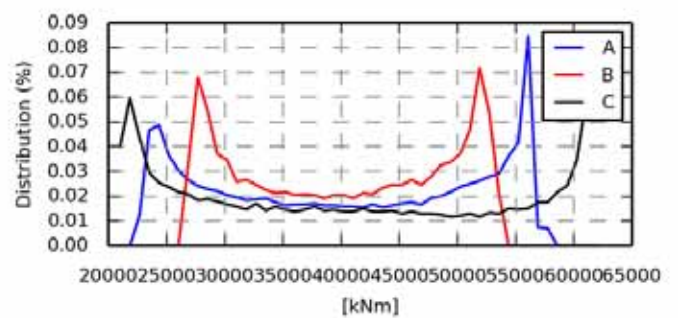


Figure 1108 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	1.5278e+04	1.1968e+04	1.8911e+04
Eq (m=4)	1.8519e+04	1.4502e+04	2.2915e+04
Eq (m=6)	2.2467e+04	1.7584e+04	2.7771e+04
Eq (m=8)	2.4763e+04	1.9370e+04	3.0578e+04
Eq (m=10)	2.6265e+04	2.0535e+04	3.2401e+04
Eq (m=12)	2.7326e+04	2.1355e+04	3.3679e+04

Section 12.16 oc4_p2_load_case_3-1: My coo: tower [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-1.sel (28-02-2014 22:36)	44	MomentMy Mbdy:tower nodenr: 1 coo: tower tower base bending moment
B	WAMsim/oc4_p2_load_case_3-1.sel (01-04-2014 12:46)	44	MomentMy Mbdy:tower nodenr: 1 coo: tower tower base bending moment
C	hawc2/oc4_p2_load_case_3-1.sel (31-03-2014 15:33)	44	MomentMy Mbdy:tower nodenr: 1 coo: tower tower base bending moment

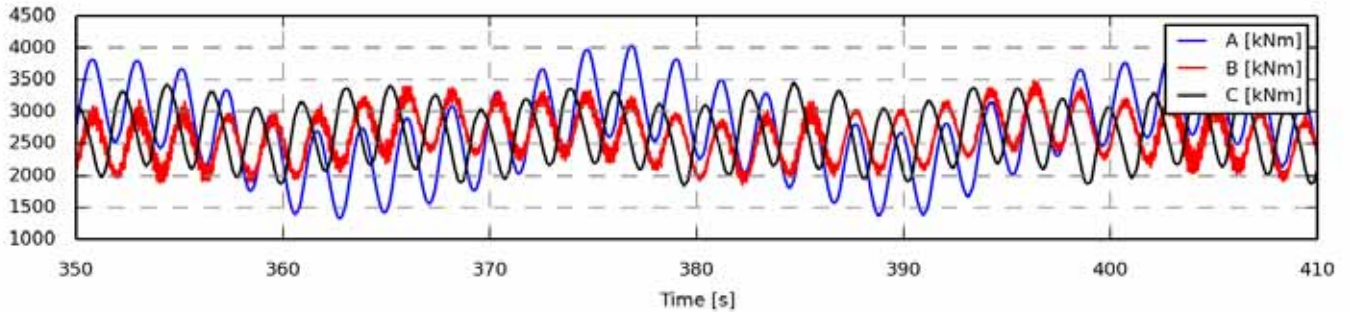


Figure 1109 - Full length time series

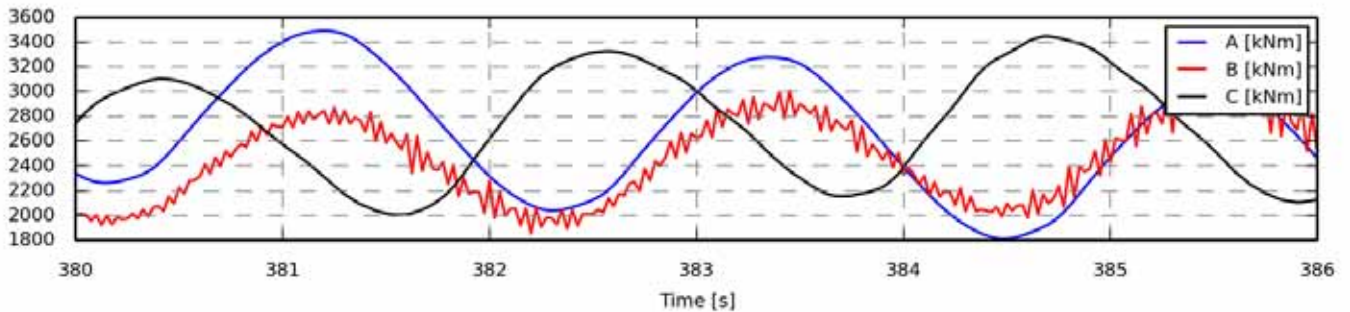


Figure 1110 - Zoom of time series

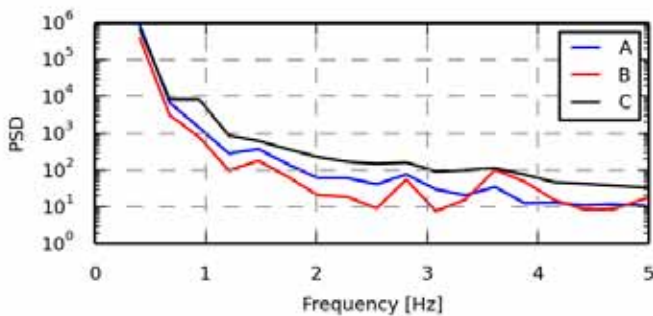


Figure 1111 - Power spectrum density

Statistics	A	B	C
Min	1.3264e+03	1.8534e+03	1.8494e+03
Max	4.0242e+03	3.4872e+03	3.4463e+03
Mean	2.7122e+03	2.6333e+03	2.6725e+03
Std	640.9030	360.6892	438.8591
Skewness	-0.1076	-0.0097	-0.0959
Kurtosis	-0.7137	-0.9210	-1.2634

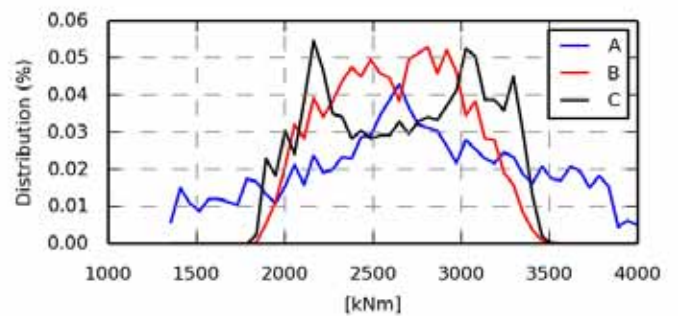


Figure 1112 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	1.1222e+03	902.0810	947.4696
Eq (m=4)	1.2635e+03	939.1254	1.0226e+03
Eq (m=6)	1.5074e+03	1.0254e+03	1.1170e+03
Eq (m=8)	1.7017e+03	1.0951e+03	1.1802e+03
Eq (m=10)	1.8469e+03	1.1531e+03	1.2283e+03
Eq (m=12)	1.9551e+03	1.2019e+03	1.2666e+03

Section 12.17 oc4_p2_load_case_3-1: Mz coo: tower [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-1.sel (28-02-2014 22:36)	45	MomentMz Mbdy:tower nodenr: 1 coo: tower tower base bending moment
B	WAMsim/oc4_p2_load_case_3-1.sel (01-04-2014 12:46)	45	MomentMz Mbdy:tower nodenr: 1 coo: tower tower base bending moment
C	hawc2/oc4_p2_load_case_3-1.sel (31-03-2014 15:33)	45	MomentMz Mbdy:tower nodenr: 1 coo: tower tower base bending moment

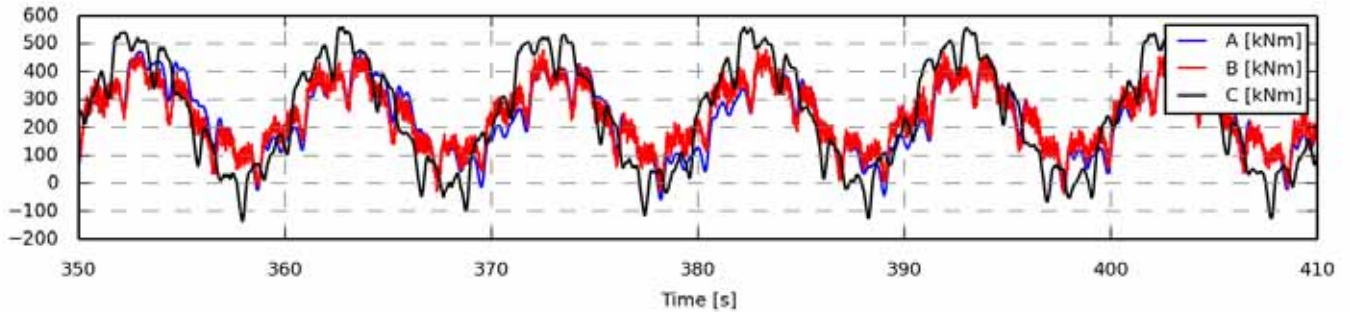


Figure 1113 - Full length time series

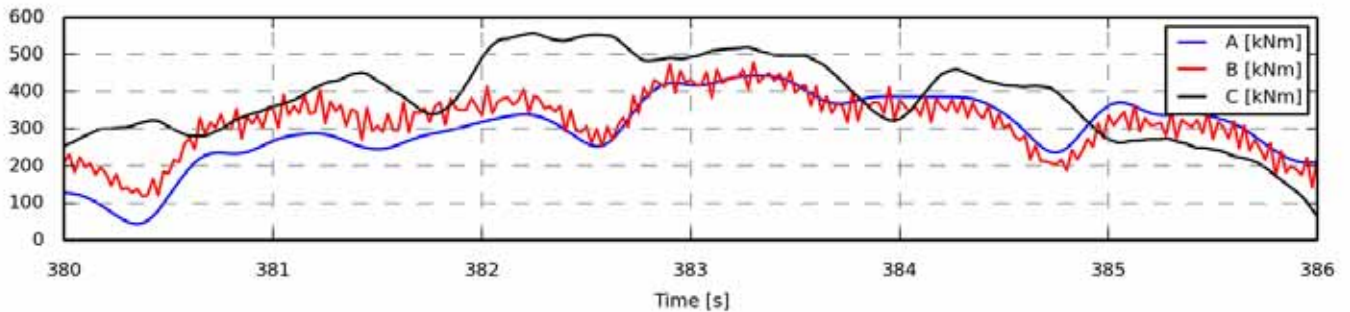


Figure 1114 - Zoom of time series

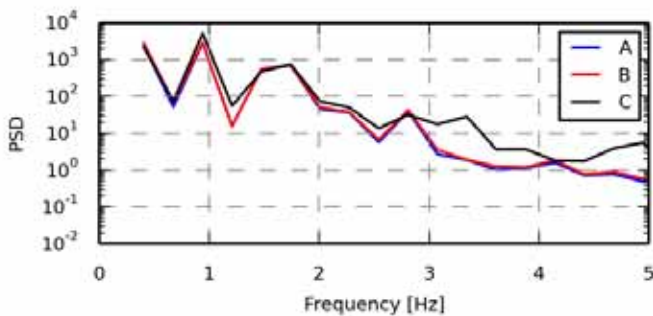


Figure 1115 - Power spectrum density

Statistics	A	B	C
Min	-56.4475	-36.2816	-1.3488e+02
Max	471.5008	478.7680	557.4272
Mean	239.0175	244.3996	251.8456
Std	127.3512	112.6629	187.2941
Skewness	-0.0517	-0.0600	-0.0328
Kurtosis	-1.1389	-0.9992	-1.3044

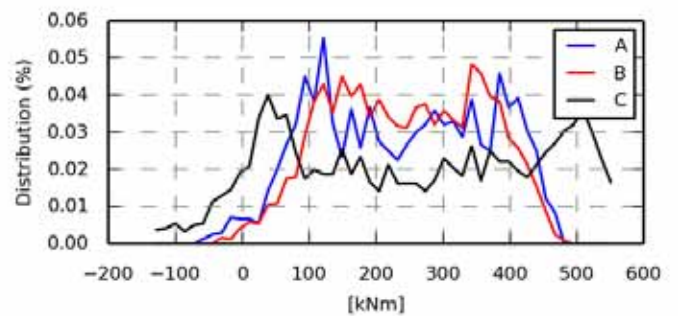


Figure 1116 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	224.6606	246.6833	300.3525
Eq (m=4)	268.6449	276.6810	362.5595
Eq (m=6)	325.6701	329.6101	441.8852
Eq (m=8)	359.8203	363.3630	488.8896
Eq (m=10)	382.5477	385.8969	519.8598
Eq (m=12)	398.8902	401.9871	541.8580

Section 12.18 oc4_p2_load_case_3-1: ESYS line1_1 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-1.sel (28-02-2014 22:36)	55	ESYS line1_1 SENSOR 4
B	WAMsim/oc4_p2_load_case_3-1.sel (01-04-2014 12:46)	55	ESYS line1_1 SENSOR 4
C	hawc2/oc4_p2_load_case_3-1.sel (31-03-2014 15:33)	55	ESYS line1_1 SENSOR 4

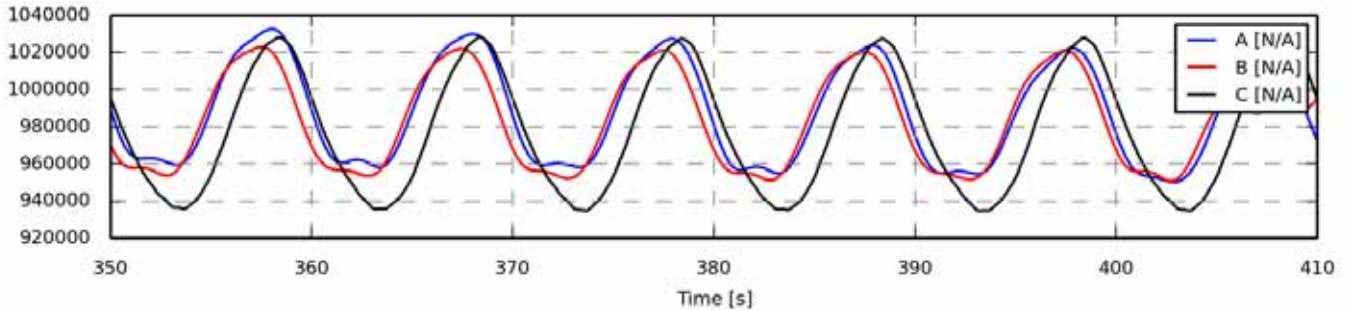


Figure 1117 - Full length time series

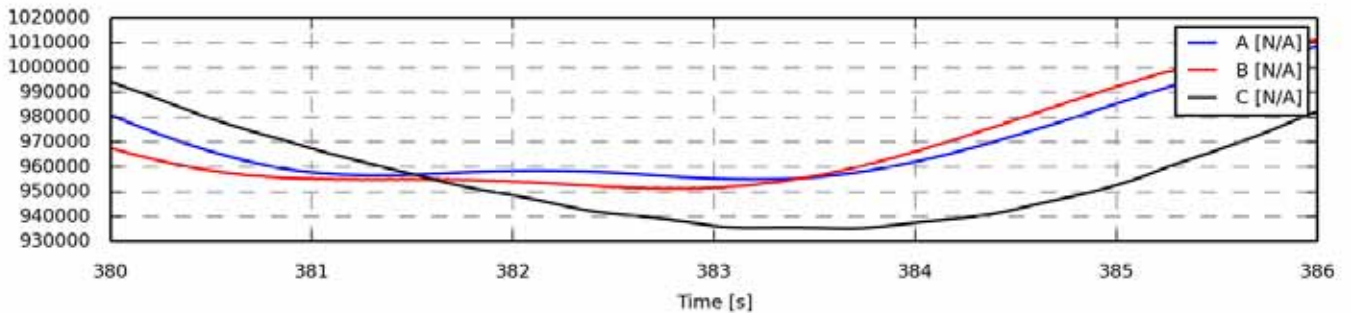


Figure 1118 - Zoom of time series

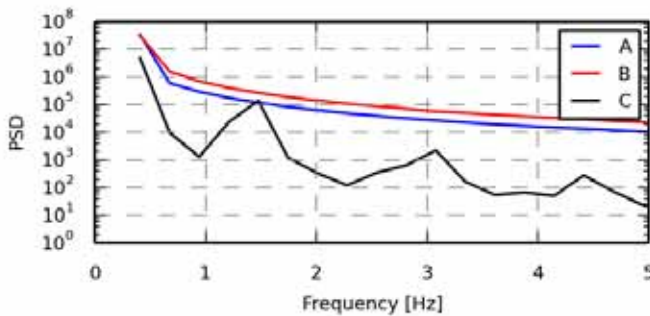


Figure 1119 - Power spectrum density

Statistics	A	B	C
Min	9.5020e+05	9.5068e+05	9.3478e+05
Max	1.0326e+06	1.0231e+06	1.0283e+06
Mean	9.8741e+05	9.8267e+05	9.7785e+05
Std	2.6443e+04	2.4669e+04	3.2266e+04
Skewness	0.1811	0.2224	0.1696
Kurtosis	-1.5276	-1.4645	-1.4647

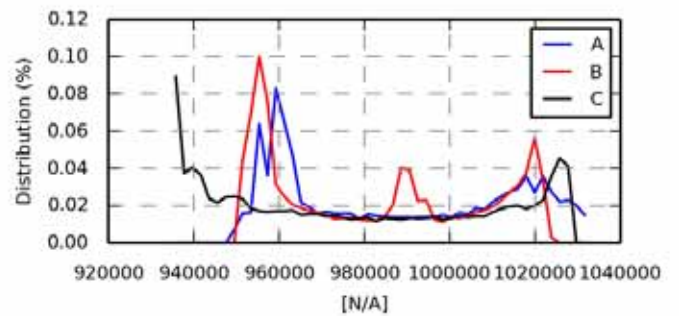


Figure 1120 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	3.2401e+04	3.0536e+04	4.2243e+04
Eq (m=4)	3.9391e+04	3.7381e+04	5.1294e+04
Eq (m=6)	4.8102e+04	4.5849e+04	6.2403e+04
Eq (m=8)	5.3339e+04	5.0826e+04	6.8883e+04
Eq (m=10)	5.6896e+04	5.4090e+04	7.3107e+04
Eq (m=12)	5.9527e+04	5.6394e+04	7.6072e+04

Section 12.19 oc4_p2_load_case_3-1: ESYS line1_3 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-1.sel (28-02-2014 22:36)	259	ESYS line1_3 SENSOR 104
B	WAMsim/oc4_p2_load_case_3-1.sel (01-04-2014 12:46)	259	ESYS line1_3 SENSOR 104
C	hawc2/oc4_p2_load_case_3-1.sel (31-03-2014 15:33)	259	ESYS line1_3 SENSOR 104

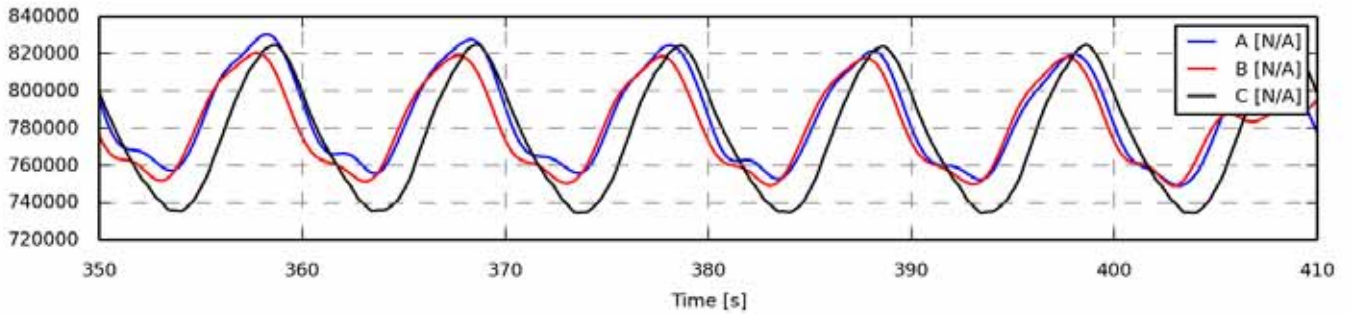


Figure 1121 - Full length time series

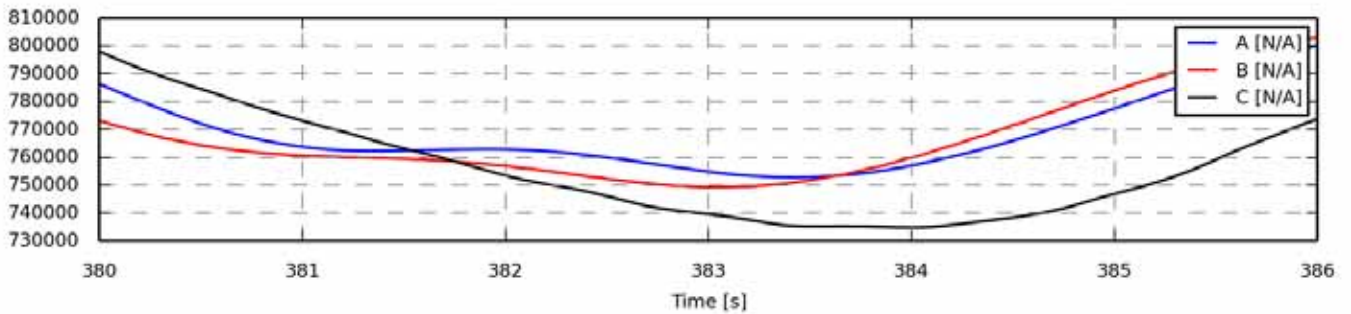


Figure 1122 - Zoom of time series

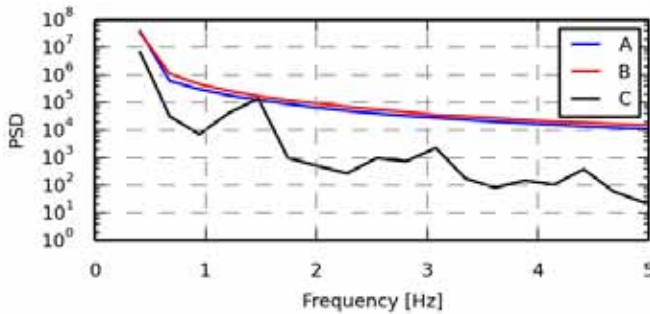


Figure 1123 - Power spectrum density

Statistics	A	B	C
Min	7.4913e+05	7.4909e+05	7.3453e+05
Max	8.3041e+05	8.2058e+05	8.2505e+05
Mean	7.8607e+05	7.8127e+05	7.7647e+05
Std	2.4414e+04	2.2797e+04	3.0738e+04
Skewness	0.2028	0.2417	0.1452
Kurtosis	-1.4273	-1.3612	-1.4317

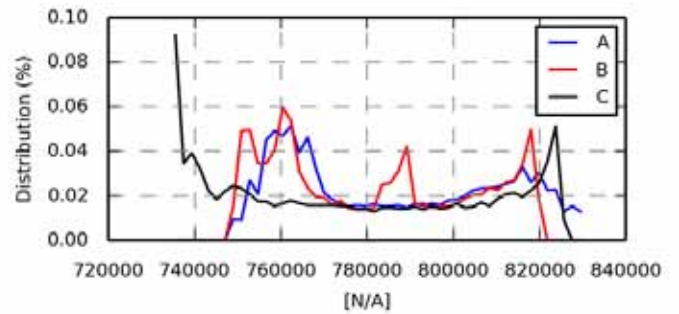


Figure 1124 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	3.2121e+04	3.0224e+04	4.0900e+04
Eq (m=4)	3.9047e+04	3.6958e+04	4.9641e+04
Eq (m=6)	4.7684e+04	4.5291e+04	6.0346e+04
Eq (m=8)	5.2868e+04	5.0191e+04	6.6585e+04
Eq (m=10)	5.6376e+04	5.3407e+04	7.0654e+04
Eq (m=12)	5.8957e+04	5.5678e+04	7.3513e+04

Section 12.20 oc4_p2_load_case_3-1: ESYS line2_1 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-1.sel (28-02-2014 22:36)	263	ESYS line2_1 SENSOR 4
B	WAMsim/oc4_p2_load_case_3-1.sel (01-04-2014 12:46)	263	ESYS line2_1 SENSOR 4
C	hawc2/oc4_p2_load_case_3-1.sel (31-03-2014 15:33)	263	ESYS line2_1 SENSOR 4

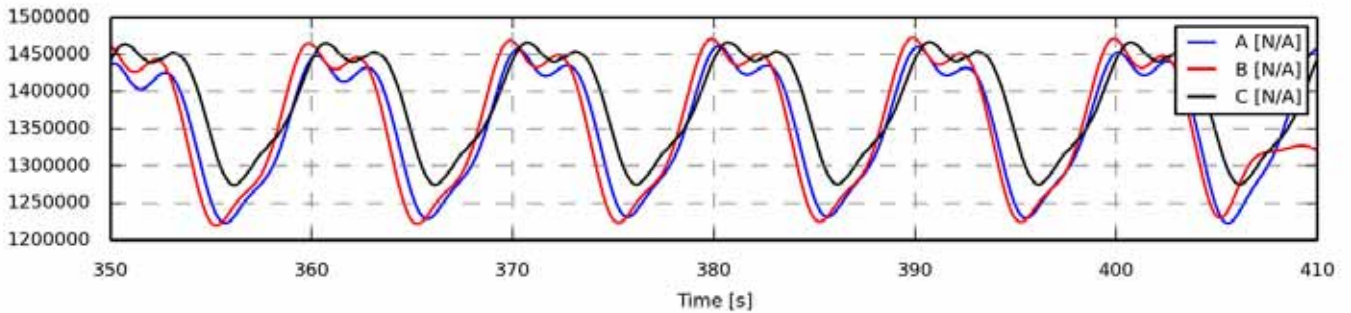


Figure 1125 - Full length time series

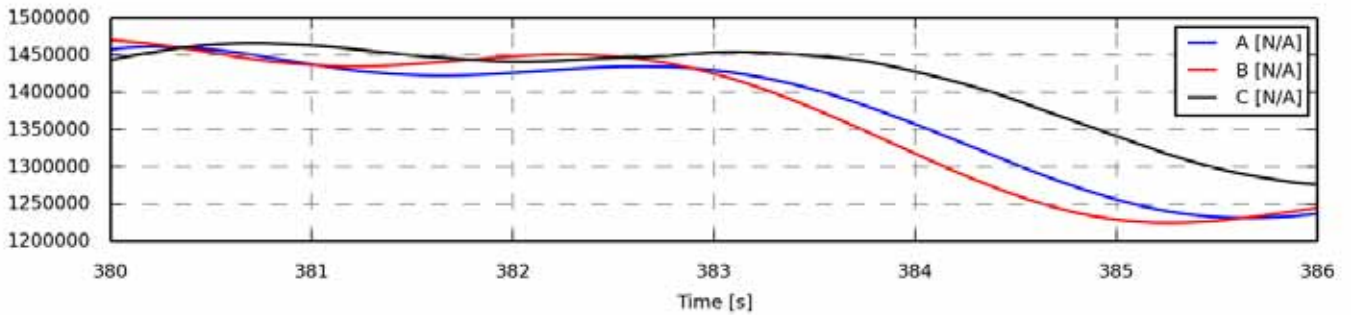


Figure 1126 - Zoom of time series

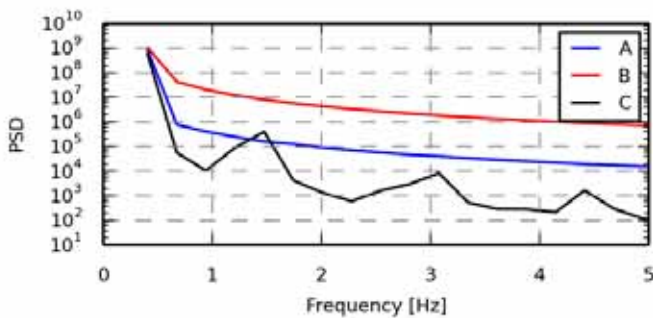


Figure 1127 - Power spectrum density

Statistics	A	B	C
Min	1.2228e+06	1.2196e+06	1.2741e+06
Max	1.4613e+06	1.4724e+06	1.4667e+06
Mean	1.3547e+06	1.3560e+06	1.3849e+06
Std	7.7884e+04	8.4163e+04	6.5511e+04
Skewness	-0.2899	-0.1617	-0.3257
Kurtosis	-1.4790	-1.5377	-1.4533

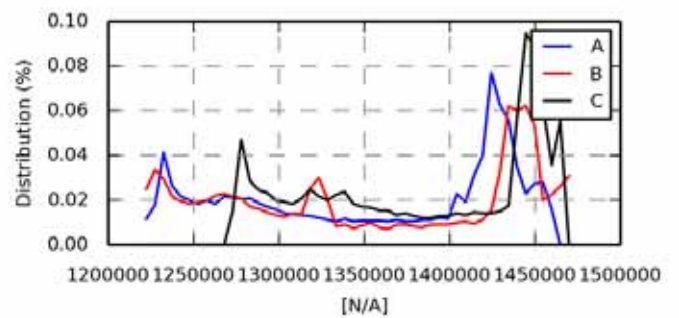


Figure 1128 - Value distribution

Fatigue eq.	1Hz	A	B	C
Eq (m=3)		1.0529e+05	1.1087e+05	8.8136e+04
Eq (m=4)		1.2760e+05	1.3513e+05	1.0681e+05
Eq (m=6)		1.5475e+05	1.6485e+05	1.2951e+05
Eq (m=8)		1.7049e+05	1.8212e+05	1.4265e+05
Eq (m=10)		1.8077e+05	1.9336e+05	1.5119e+05
Eq (m=12)		1.8803e+05	2.0125e+05	1.5719e+05

Section 12.21 oc4_p2_load_case_3-1: ESYS line2_3 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-1.sel (28-02-2014 22:36)	467	ESYS line2_3 SENSOR 104
B	WAMsim/oc4_p2_load_case_3-1.sel (01-04-2014 12:46)	467	ESYS line2_3 SENSOR 104
C	hawc2/oc4_p2_load_case_3-1.sel (31-03-2014 15:33)	467	ESYS line2_3 SENSOR 104

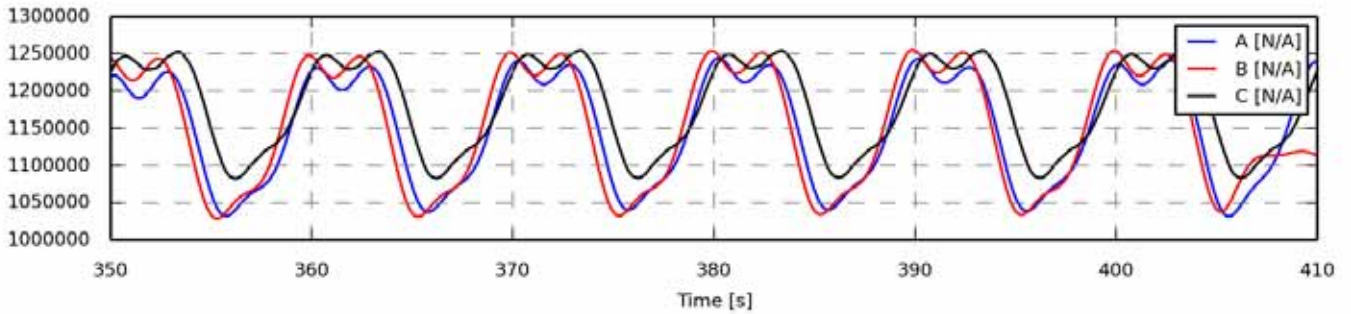


Figure 1129 - Full length time series

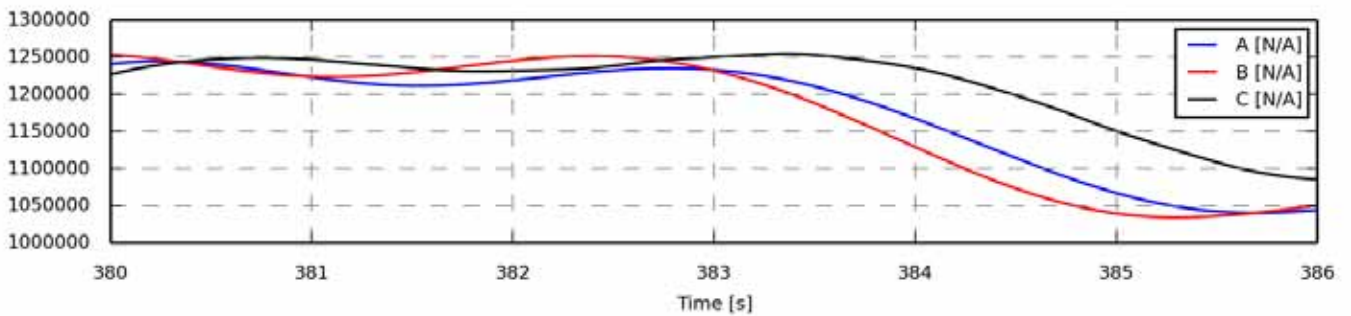


Figure 1130 - Zoom of time series

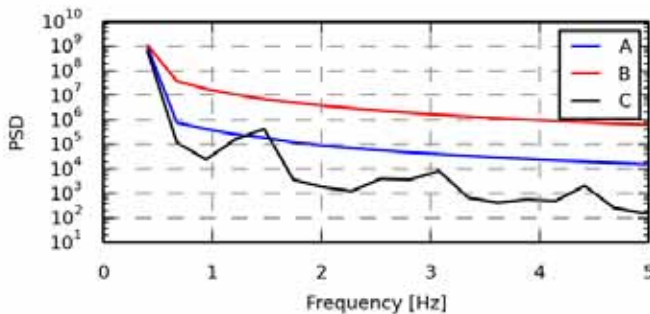


Figure 1131 - Power spectrum density

Statistics	A	B	C
Min	1.0317e+06	1.0289e+06	1.0827e+06
Max	1.2445e+06	1.2554e+06	1.2549e+06
Mean	1.1511e+06	1.1527e+06	1.1812e+06
Std	7.1912e+04	7.8761e+04	6.0254e+04
Skewness	-0.2655	-0.1352	-0.2811
Kurtosis	-1.5456	-1.6069	-1.5305

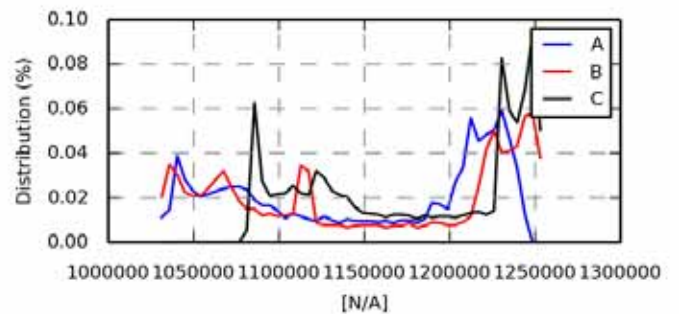


Figure 1132 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	9.4043e+04	9.8814e+04	7.8917e+04
Eq (m=4)	1.1391e+05	1.2039e+05	9.5639e+04
Eq (m=6)	1.3813e+05	1.4688e+05	1.1603e+05
Eq (m=8)	1.5219e+05	1.6229e+05	1.2786e+05
Eq (m=10)	1.6136e+05	1.7231e+05	1.3556e+05
Eq (m=12)	1.6784e+05	1.7935e+05	1.4098e+05

Section 12.22 oc4_p2_load_case_3-1: ESYS line3_1 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-1.sel (28-02-2014 22:36)	471	ESYS line3_1 SENSOR 4
B	WAMsim/oc4_p2_load_case_3-1.sel (01-04-2014 12:46)	471	ESYS line3_1 SENSOR 4
C	hawc2/oc4_p2_load_case_3-1.sel (31-03-2014 15:33)	471	ESYS line3_1 SENSOR 4

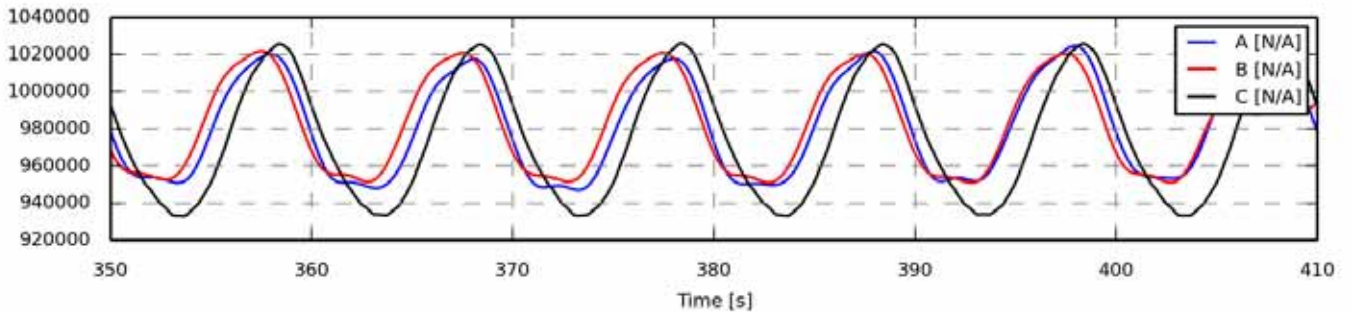


Figure 1133 - Full length time series

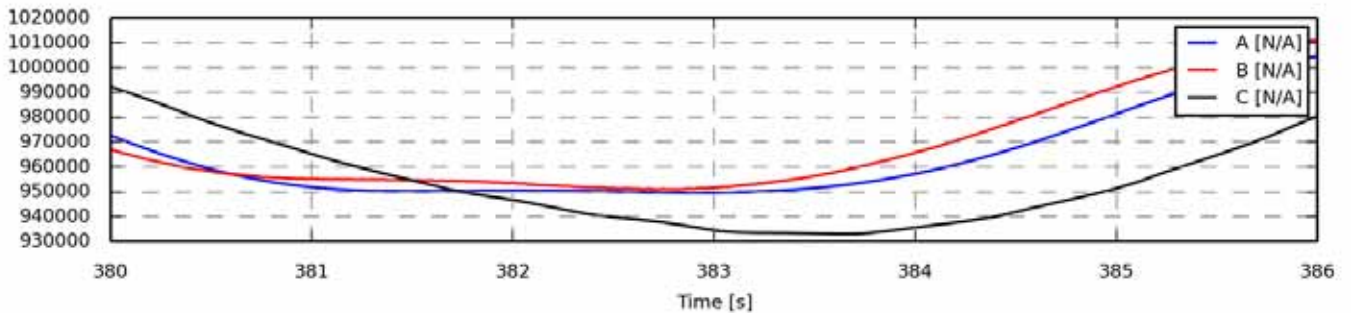


Figure 1134 - Zoom of time series

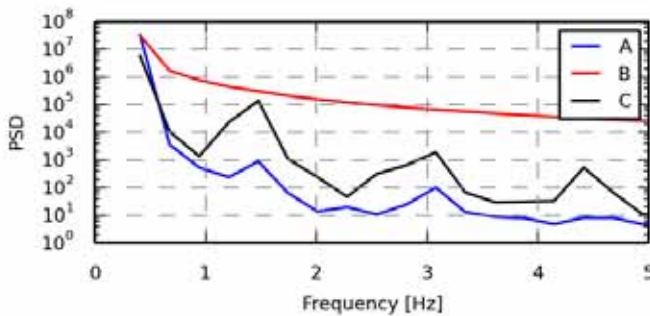


Figure 1135 - Power spectrum density

Statistics	A	B	C
Min	9.4699e+05	9.5080e+05	9.3298e+05
Max	1.0254e+06	1.0219e+06	1.0261e+06
Mean	9.8191e+05	9.8197e+05	9.7579e+05
Std	2.6935e+04	2.4772e+04	3.2318e+04
Skewness	0.1639	0.2169	0.1733
Kurtosis	-1.5816	-1.4753	-1.4660

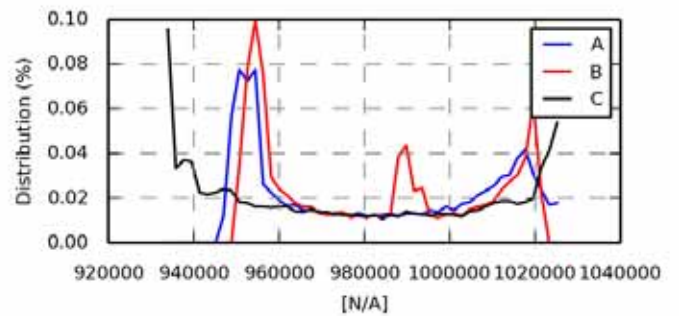


Figure 1136 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	3.2313e+04	3.0787e+04	4.2076e+04
Eq (m=4)	3.9249e+04	3.7692e+04	5.1083e+04
Eq (m=6)	4.7814e+04	4.6227e+04	6.2142e+04
Eq (m=8)	5.2872e+04	5.1232e+04	6.8595e+04
Eq (m=10)	5.6226e+04	5.4504e+04	7.2801e+04
Eq (m=12)	5.8632e+04	5.6805e+04	7.5753e+04

Section 12.23 oc4_p2_load_case_3-1: ESYS line3_3 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-1.sel (28-02-2014 22:36)	675	ESYS line3_3 SENSOR 104
B	WAMsim/oc4_p2_load_case_3-1.sel (01-04-2014 12:46)	675	ESYS line3_3 SENSOR 104
C	hawc2/oc4_p2_load_case_3-1.sel (31-03-2014 15:33)	675	ESYS line3_3 SENSOR 104

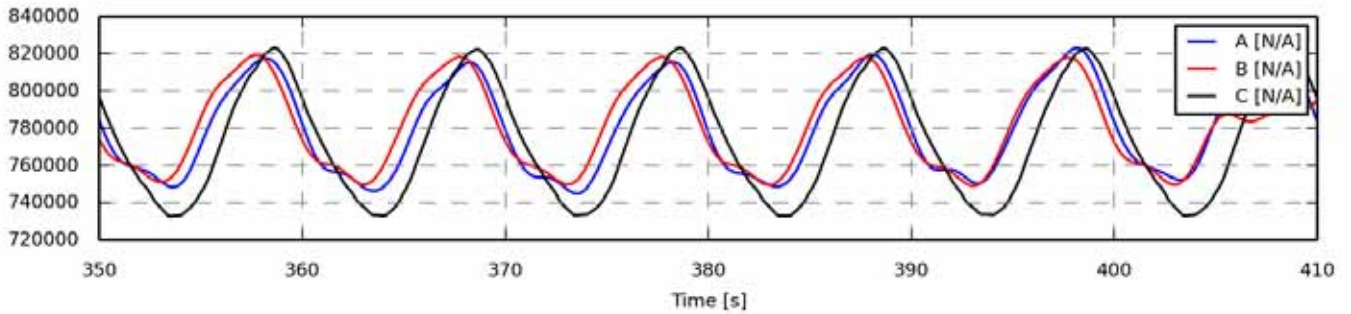


Figure 1137 - Full length time series

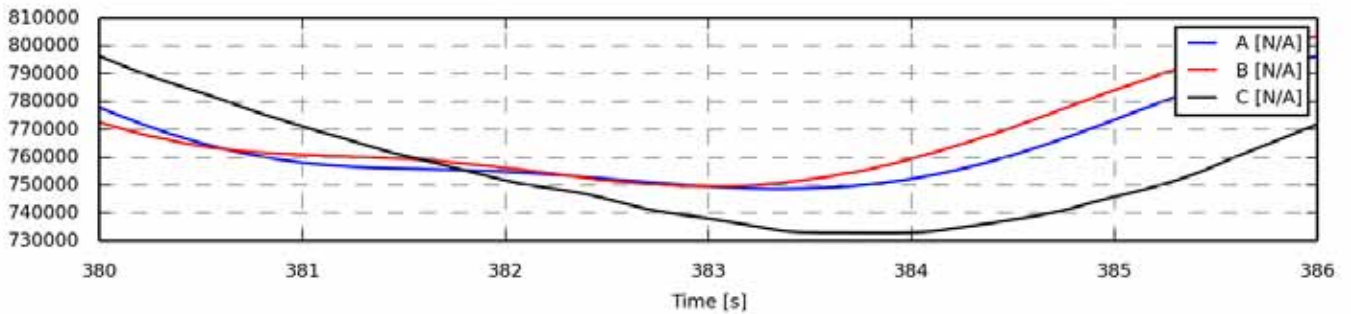


Figure 1138 - Zoom of time series

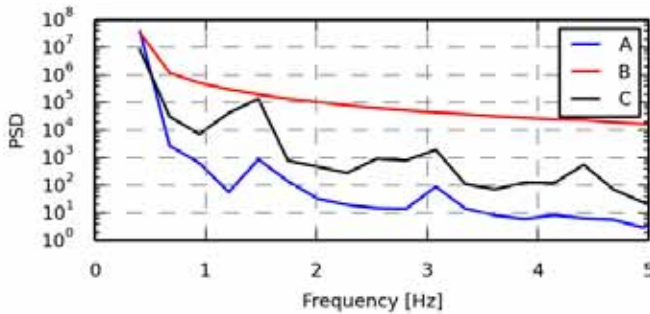


Figure 1139 - Power spectrum density

Statistics	A	B	C
Min	7.4501e+05	7.4906e+05	7.3277e+05
Max	8.2316e+05	8.1951e+05	8.2340e+05
Mean	7.8072e+05	7.8072e+05	7.7456e+05
Std	2.4912e+04	2.2889e+04	3.0774e+04
Skewness	0.1981	0.2377	0.1507
Kurtosis	-1.4880	-1.3727	-1.4292

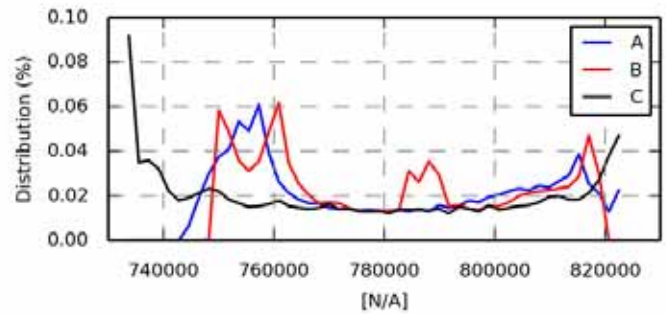


Figure 1140 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	3.1977e+04	3.0530e+04	4.1024e+04
Eq (m=4)	3.8856e+04	3.7349e+04	4.9788e+04
Eq (m=6)	4.7377e+04	4.5783e+04	6.0523e+04
Eq (m=8)	5.2420e+04	5.0733e+04	6.6781e+04
Eq (m=10)	5.5766e+04	5.3970e+04	7.0863e+04
Eq (m=12)	5.8171e+04	5.6247e+04	7.3730e+04

Article XIII. oc4_p2_load_case_3-2

Generated 22-04-2014 10:02

Section 13.01 oc4_p2_load_case_3-2: WSP gl. coo.,Vy [m/s]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-2.sel (01-03-2014 00:57)	3	Free wind speed Vy, gl. coo, of gl. pos 0.00, 0.00, -90.00
B	WAMsim/oc4_p2_load_case_3-2.sel (01-04-2014 12:46)	3	Free wind speed Vy, gl. coo, of gl. pos 0.00, 0.00, -90.00
C	hawc2/oc4_p2_load_case_3-2.sel (31-03-2014 15:34)	3	Free wind speed Vy, gl. coo, of gl. pos 0.00, 0.00, -90.00

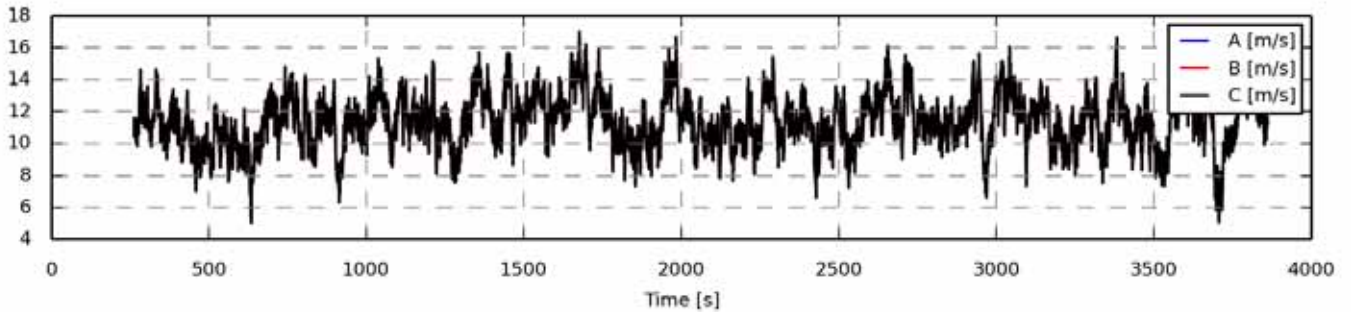


Figure 1141 - Full length time series

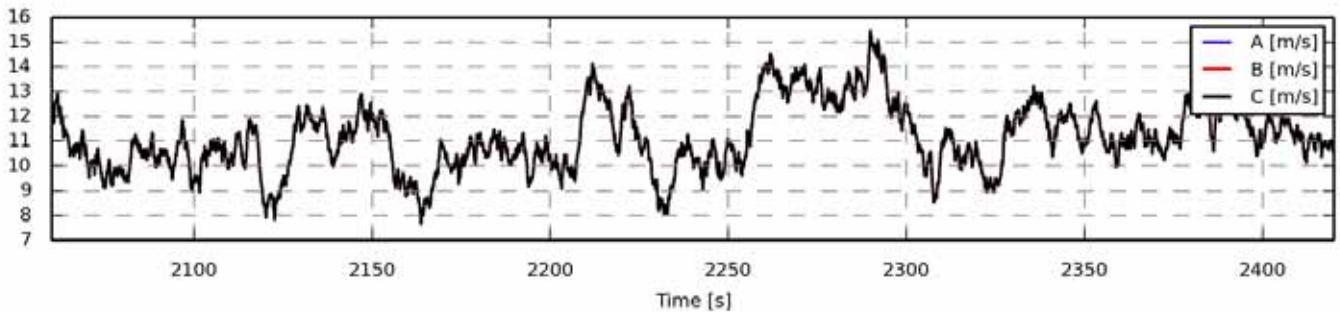


Figure 1142 - Zoom of time series

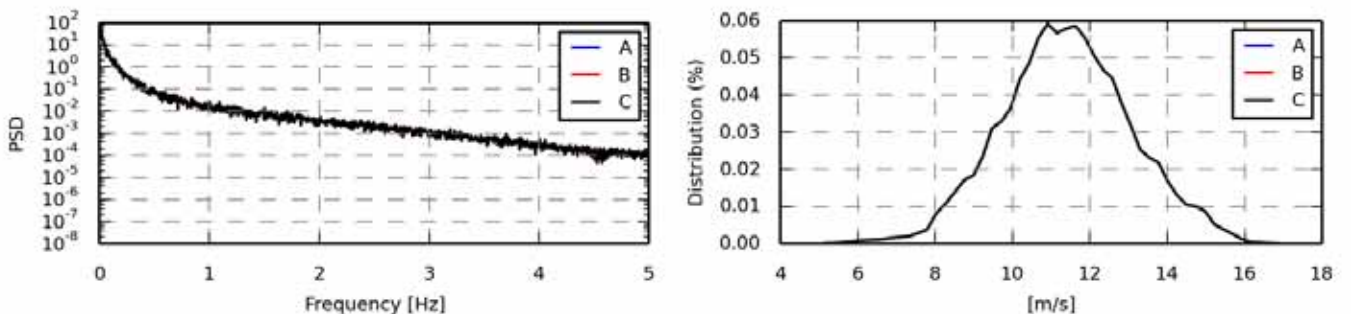


Figure 1143 - Power spectrum density

Statistics	A	B	C
Min	5.0391	5.0391	5.0391
Max	17.0114	17.0114	17.0114
Mean	11.3915	11.3915	11.3915
Std	1.6826	1.6826	1.6826
Skewness	-0.0154	-0.0154	-0.0154
Kurtosis	0.0598	0.0598	0.0598

Figure 1144 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	1.7055	1.7055	1.7055
Eq (m=4)	2.4099	2.4099	2.4099
Eq (m=6)	3.6903	3.6903	3.6903
Eq (m=8)	4.7254	4.7254	4.7254
Eq (m=10)	5.5536	5.5536	5.5536
Eq (m=12)	6.2262	6.2262	6.2262

Section 13.02 oc4_p2_load_case_3-2: Water surf. [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-2.sel (01-03-2014 00:57)	5	Water surface gl. coo, at gl. coo, x,y= 0.00, 0.00
B	WAMsim/oc4_p2_load_case_3-2.sel (01-04-2014 12:46)	5	Constant value
C	hawc2/oc4_p2_load_case_3-2.sel (31-03-2014 15:34)	5	Water surface gl. coo, at gl. coo, x,y= 0.00, 0.00

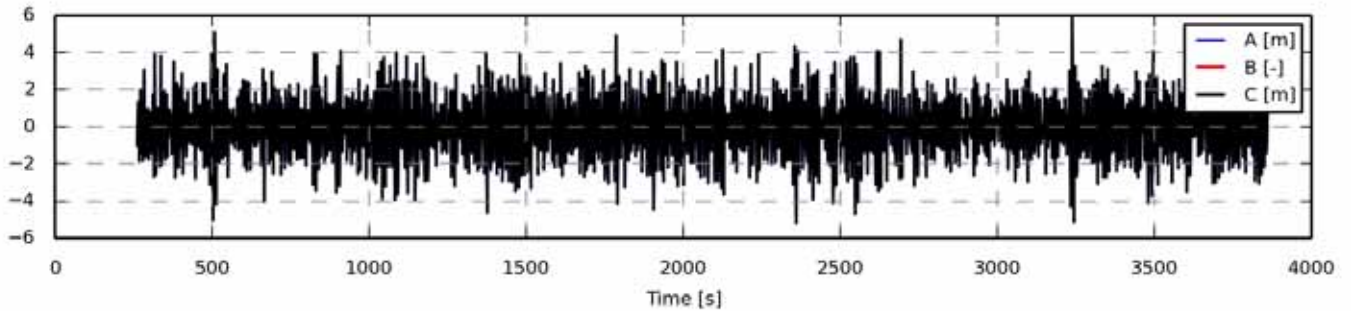


Figure 1145 - Full length time series

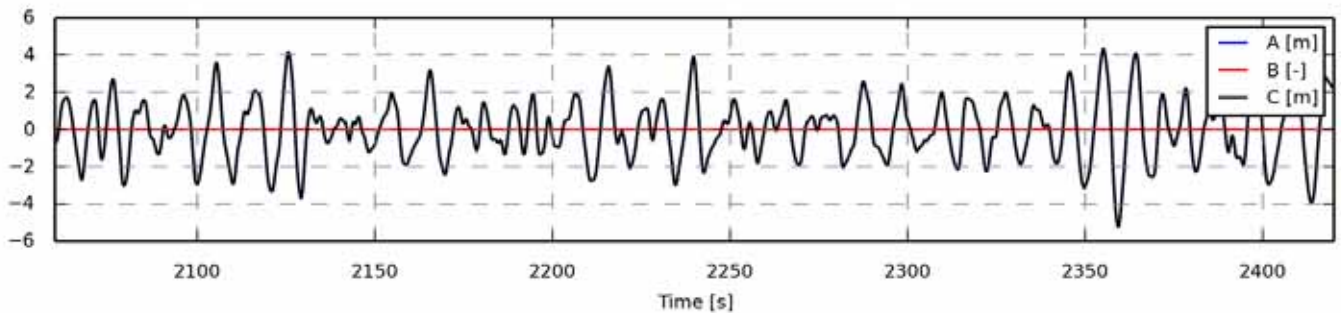


Figure 1146 - Zoom of time series

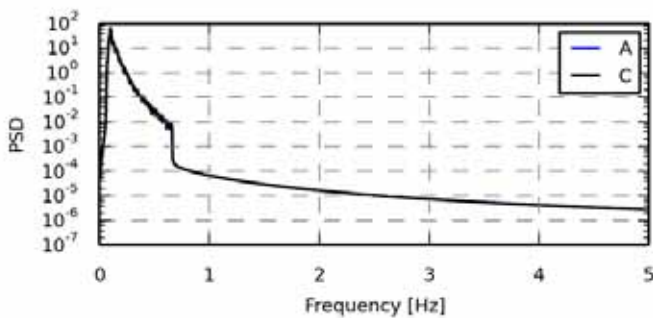


Figure 1147 - Power spectrum density

Statistics	A	B	C
Min	-5.1966	0.0000	-5.1927
Max	5.8607	0.0000	5.8596
Mean	0.0000	0.0000	0.0000
Std	1.4855	0.0000	1.4843
Skewness	0.0204	0.0000	0.0203
Kurtosis	-0.0303	-3.0000	-0.0301

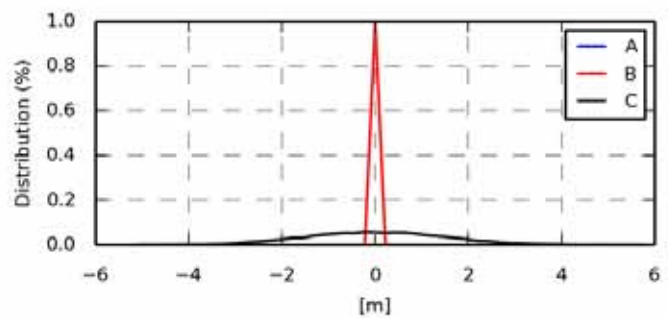


Figure 1148 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	2.2965	-	2.2940
Eq (m=4)	2.9418	-	2.9390
Eq (m=6)	3.9522	-	3.9495
Eq (m=8)	4.7503	-	4.7477
Eq (m=10)	5.4109	-	5.4083
Eq (m=12)	5.9649	-	5.9622

Section 13.03 oc4_p2_load_case_3-2: DLL inp 1: 9 [-]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-2.sel (01-03-2014 00:57)	6	DLL : 1 inpvec : 9 electrical power generator [kw]
B	WAMsim/oc4_p2_load_case_3-2.sel (01-04-2014 12:46)	6	DLL : 1 inpvec : 9 electrical power generator [kw]
C	hawc2/oc4_p2_load_case_3-2.sel (31-03-2014 15:34)	6	DLL : 1 inpvec : 9 electrical power generator [kw]

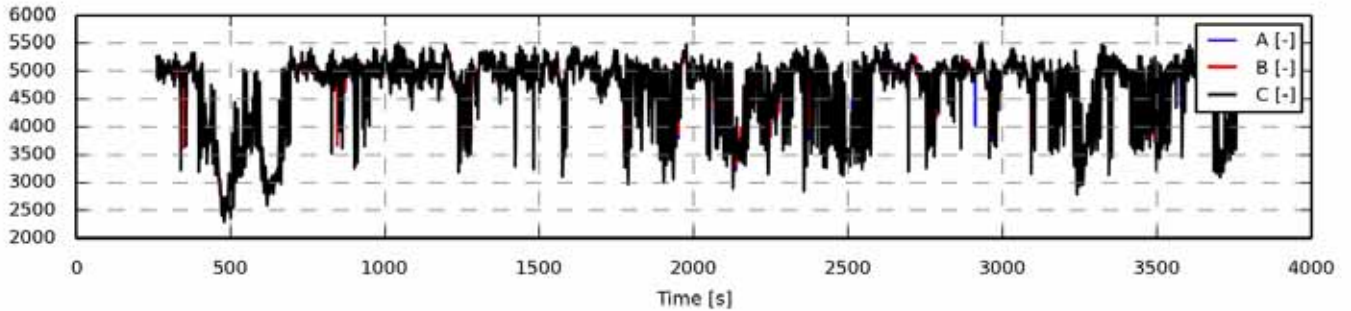


Figure 1149 - Full length time series

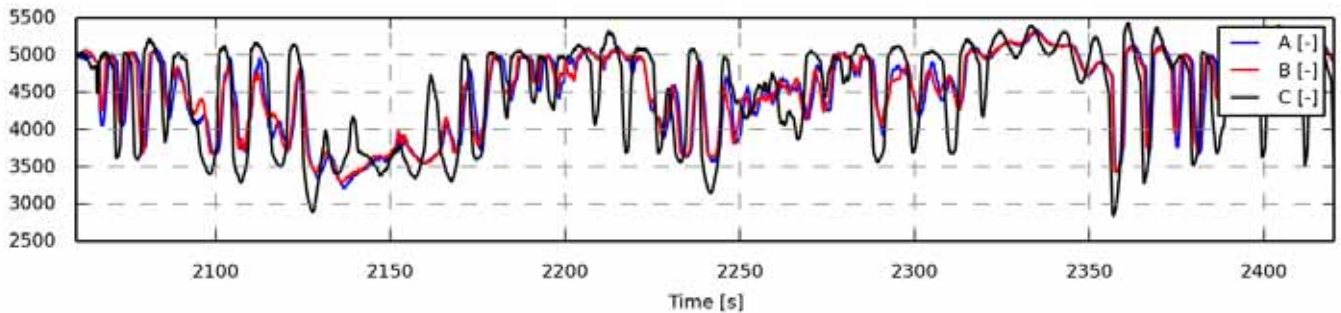


Figure 1150 - Zoom of time series

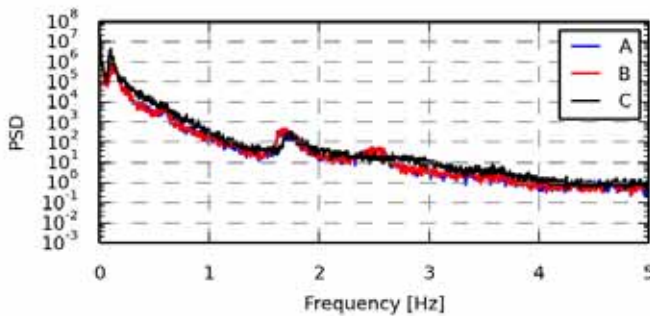


Figure 1151 - Power spectrum density

Statistics	A	B	C
Min	2.3569e+03	2.3931e+03	2.2882e+03
Max	5.4381e+03	5.3951e+03	5.5758e+03
Mean	4.6728e+03	4.6751e+03	4.6589e+03
Std	589.0346	583.3389	655.9775
Skewness	-1.4556	-1.4704	-1.3208
Kurtosis	1.2566	1.3409	0.6566

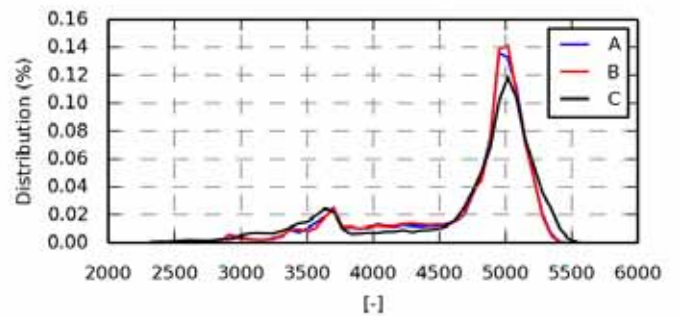


Figure 1152 - Value distribution

Fatigue eq.	1Hz	A	B	C
Eq (m=3)		430.8993	418.1573	604.3354
Eq (m=4)		603.1895	588.2422	803.8843
Eq (m=6)		896.4248	876.9016	1.1081e+03
Eq (m=8)		1.1438e+03	1.1178e+03	1.3384e+03
Eq (m=10)		1.3551e+03	1.3225e+03	1.5268e+03
Eq (m=12)		1.5333e+03	1.4951e+03	1.6868e+03

Section 13.04 oc4_p2_load_case_3-2: bea1 angle_speed [rpm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-2.sel (01-03-2014 00:57)	9	shaft_rot angle speed
B	WAMsim/oc4_p2_load_case_3-2.sel (01-04-2014 12:46)	9	shaft_rot angle speed
C	hawc2/oc4_p2_load_case_3-2.sel (31-03-2014 15:34)	9	shaft_rot angle speed

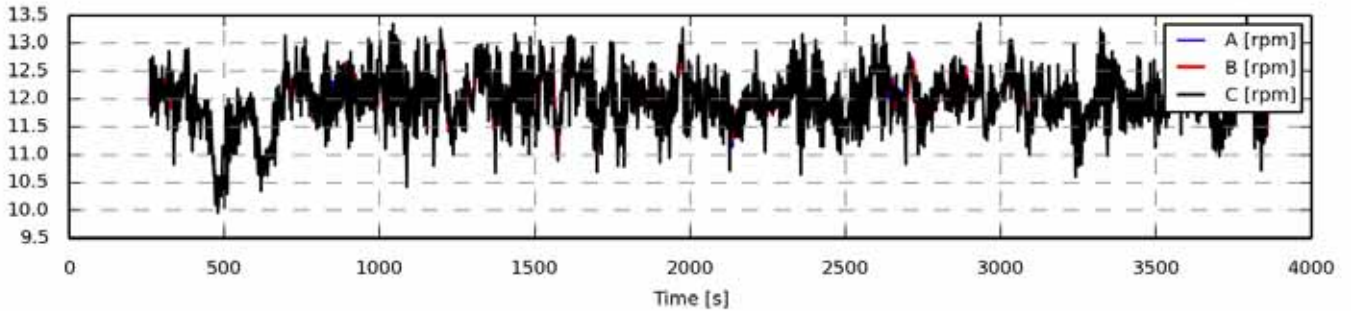


Figure 1153 - Full length time series

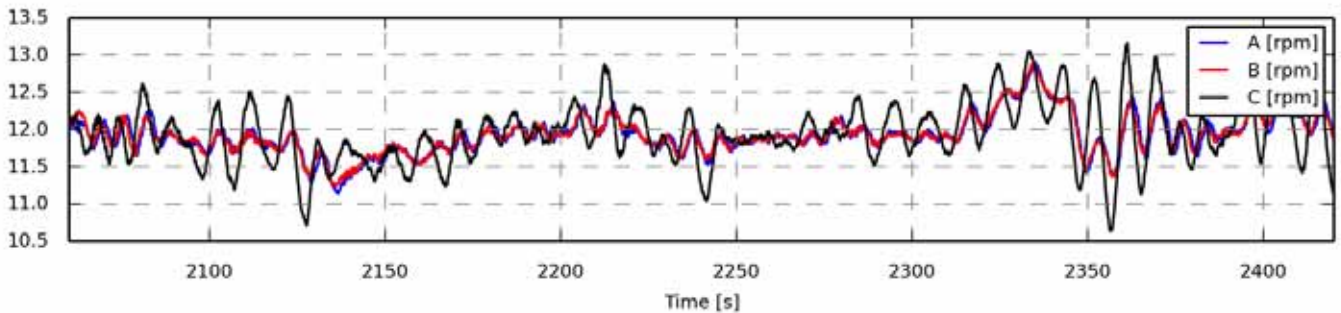


Figure 1154 - Zoom of time series

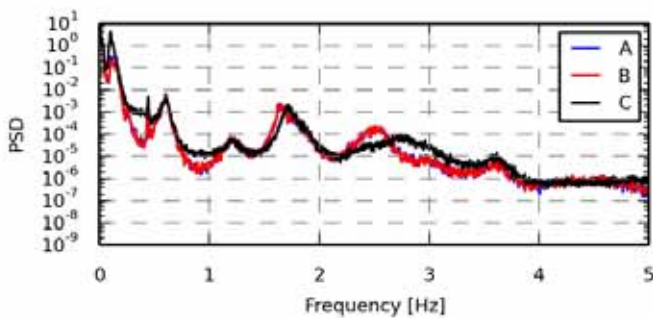


Figure 1155 - Power spectrum density

Statistics	A	B	C
Min	10.0550	10.1041	9.9541
Max	13.1599	13.0554	13.4925
Mean	11.9787	11.9791	11.9808
Std	0.3940	0.3892	0.4990
Skewness	-0.6347	-0.6596	-0.3250
Kurtosis	1.9504	2.0572	0.6058

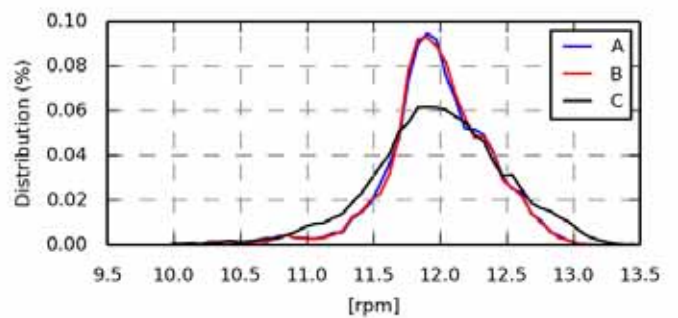


Figure 1156 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.3427	0.3262	0.5691
Eq (m=4)	0.5067	0.4856	0.7657
Eq (m=6)	0.8160	0.7845	1.0959
Eq (m=8)	1.0851	1.0420	1.3631
Eq (m=10)	1.3126	1.2581	1.5841
Eq (m=12)	1.5019	1.4370	1.7700

Section 13.05 oc4_p2_load_case_3-2: bea1 angle [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-2.sel (01-03-2014 00:57)	14	pitch1 angle
B	WAMsim/oc4_p2_load_case_3-2.sel (01-04-2014 12:46)	14	pitch1 angle
C	hawc2/oc4_p2_load_case_3-2.sel (31-03-2014 15:34)	14	pitch1 angle

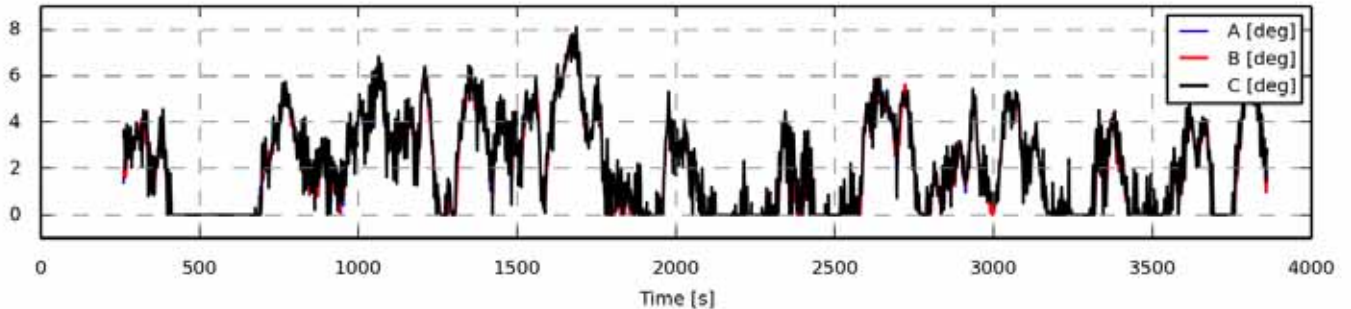


Figure 1157 - Full length time series

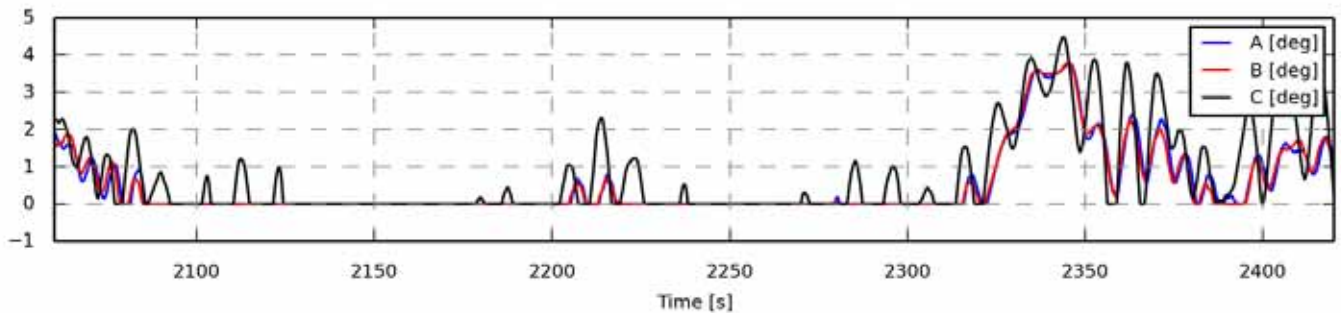


Figure 1158 - Zoom of time series

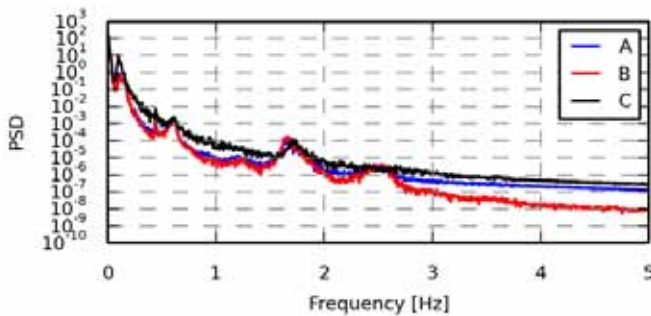


Figure 1159 - Power spectrum density

Statistics	A	B	C
Min	0.0000	0.0000	-0.0003
Max	7.6899	7.7553	8.0988
Mean	2.0019	1.9969	2.1649
Std	1.9375	1.9421	1.9533
Skewness	0.5689	0.5697	0.4849
Kurtosis	-0.7742	-0.7758	-0.8236

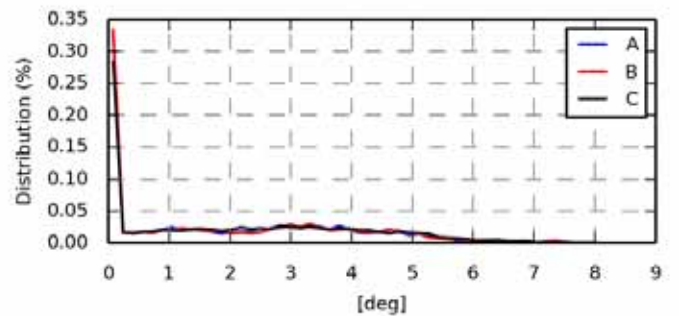


Figure 1160 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.8981	0.8957	1.0988
Eq (m=4)	1.4087	1.4113	1.5980
Eq (m=6)	2.2928	2.3010	2.4764
Eq (m=8)	2.9855	2.9983	3.1790
Eq (m=10)	3.5346	3.5525	3.7424
Eq (m=12)	3.9787	4.0019	4.2015

Section 13.06 oc4_p2_load_case_3-2: State pos x coo: global [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-2.sel (01-03-2014 00:57)	19	State pos x Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
B	WAMsim/oc4_p2_load_case_3-2.sel (01-04-2014 12:46)	19	State pos x Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
C	hawc2/oc4_p2_load_case_3-2.sel (31-03-2014 15:34)	19	State pos x Mbdy:mc E-nr: 8 Z-rel:0.00 coo: global platform translation in surge sway and heave

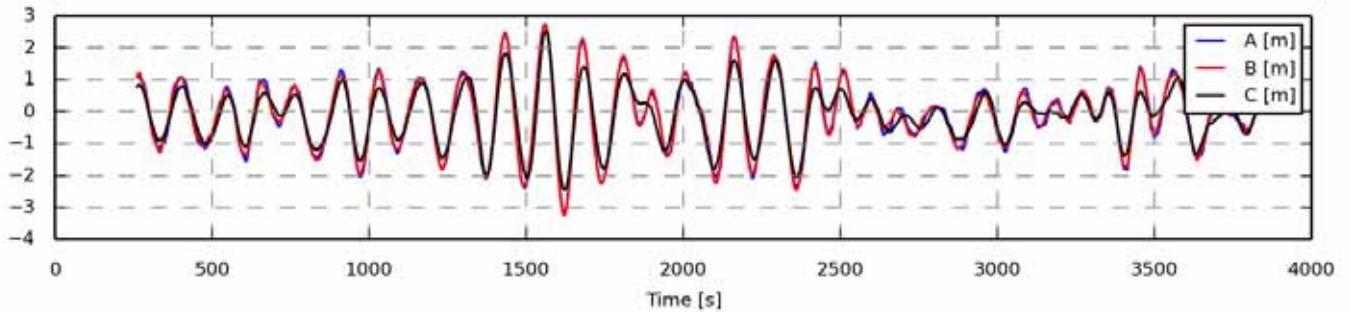


Figure 1161 - Full length time series

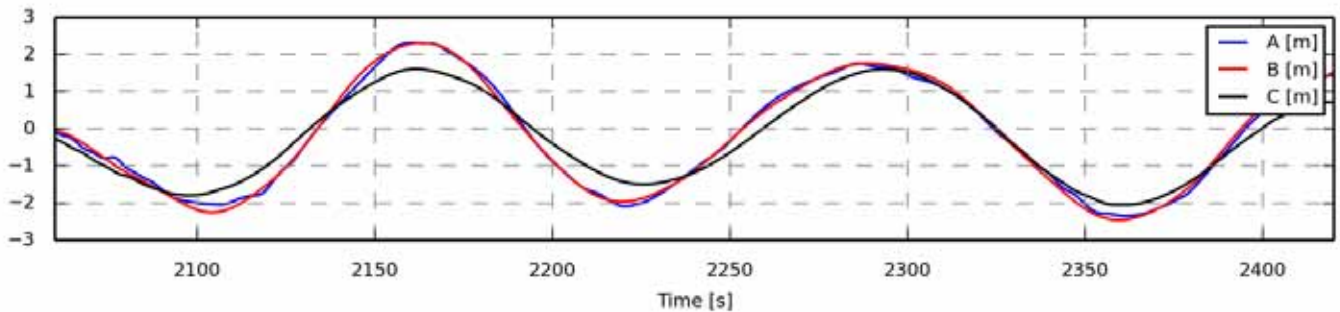


Figure 1162 - Zoom of time series

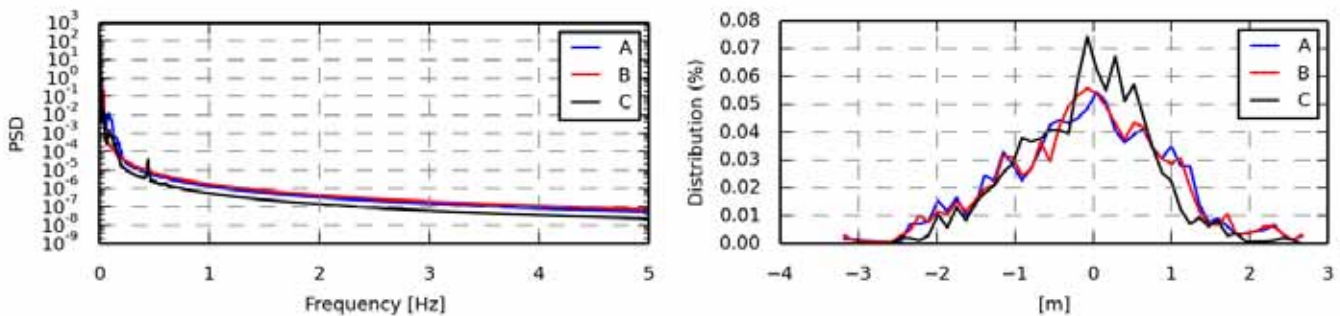


Figure 1163 - Power spectrum density

Statistics	A	B	C
Min	-3.2018	-3.2405	-2.4491
Max	2.7296	2.7229	2.5106
Mean	-0.0931	-0.0932	-0.1124
Std	1.0231	1.0146	0.8180
Skewness	-0.1031	-0.1106	-0.1222
Kurtosis	-0.0940	0.0505	0.1099

Figure 1164 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.6292	0.6271	0.4985
Eq (m=4)	1.0113	1.0118	0.8111
Eq (m=6)	1.6814	1.6866	1.3676
Eq (m=8)	2.2126	2.2204	1.8156
Eq (m=10)	2.6339	2.6432	2.1743
Eq (m=12)	2.9736	2.9844	2.4649

Section 13.07 oc4_p2_load_case_3-2: State pos y coo: global [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-2.sel (01-03-2014 00:57)	20	State pos y Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
B	WAMsim/oc4_p2_load_case_3-2.sel (01-04-2014 12:46)	20	State pos y Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
C	hawc2/oc4_p2_load_case_3-2.sel (31-03-2014 15:34)	20	State pos y Mbdy:mc E-nr: 8 Z-rel:0.00 coo: global platform translation in surge sway and heave

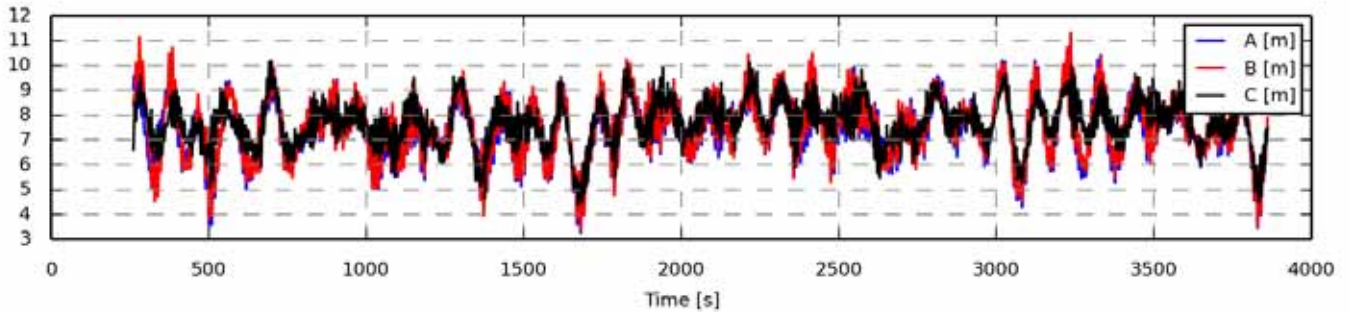


Figure 1165 - Full length time series

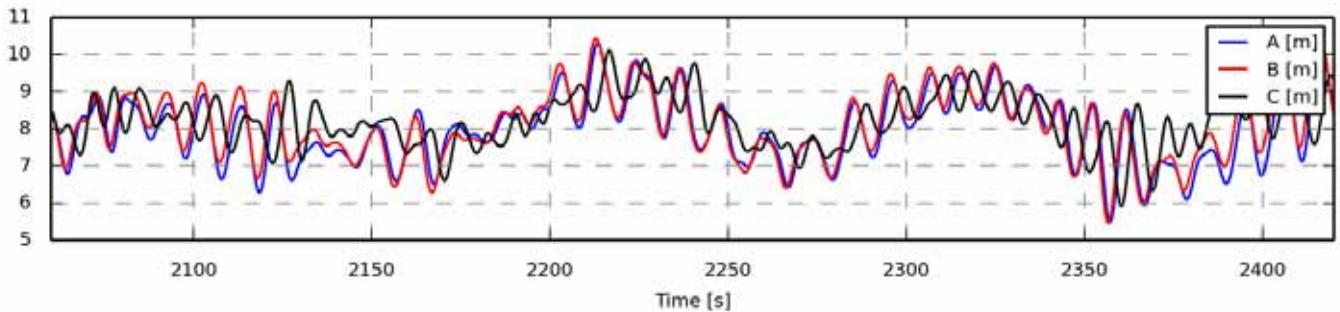


Figure 1166 - Zoom of time series

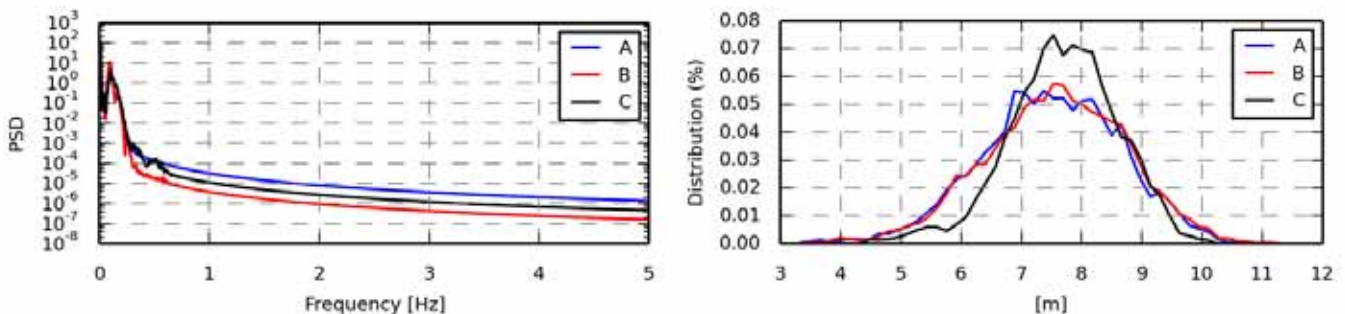


Figure 1167 - Power spectrum density

Statistics	A	B	C
Min	3.2647	3.3871	4.3940
Max	11.3184	11.2938	10.1824
Mean	7.4875	7.5591	7.6922
Std	1.1628	1.1792	0.9077
Skewness	-0.2322	-0.2162	-0.3695
Kurtosis	0.0915	0.0544	0.3744

Figure 1168 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	1.0250	1.0353	0.7919
Eq (m=4)	1.4877	1.5121	1.1457
Eq (m=6)	2.3325	2.3803	1.7893
Eq (m=8)	3.0375	3.0921	2.3090
Eq (m=10)	3.6150	3.6638	2.7207
Eq (m=12)	4.0877	4.1250	3.0504

Section 13.08 oc4_p2_load_case_3-2: State pos z coo: global [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-2.sel (01-03-2014 00:57)	21	State pos z Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
B	WAMsim/oc4_p2_load_case_3-2.sel (01-04-2014 12:46)	21	State pos z Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
C	hawc2/oc4_p2_load_case_3-2.sel (31-03-2014 15:34)	21	State pos z Mbdy:mc E-nr: 8 Z-rel:0.00 coo: global platform translation in surge sway and heave

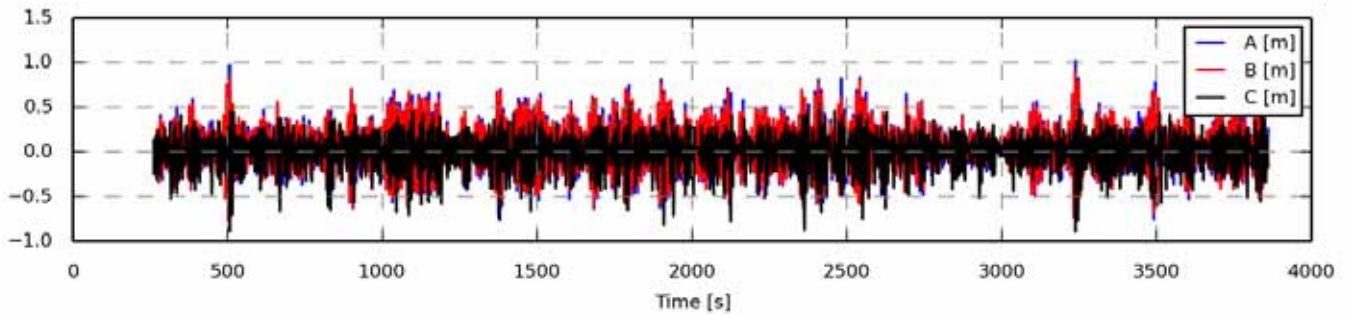


Figure 1169 - Full length time series

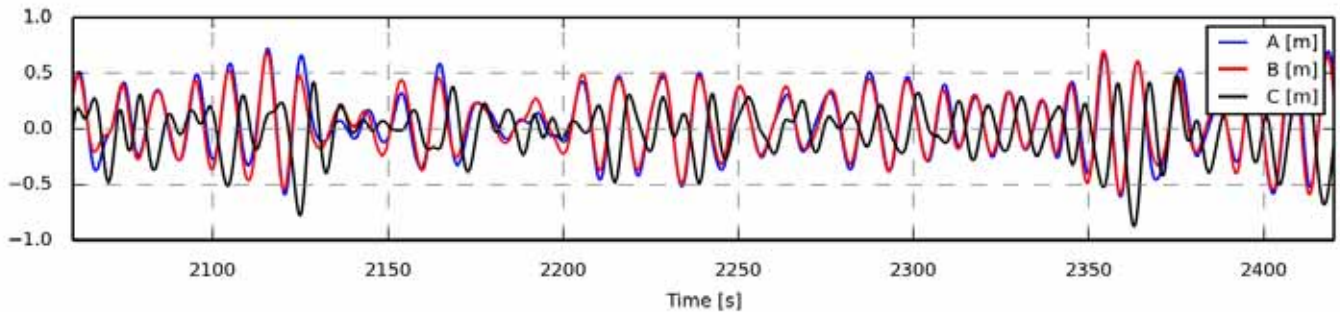


Figure 1170 - Zoom of time series

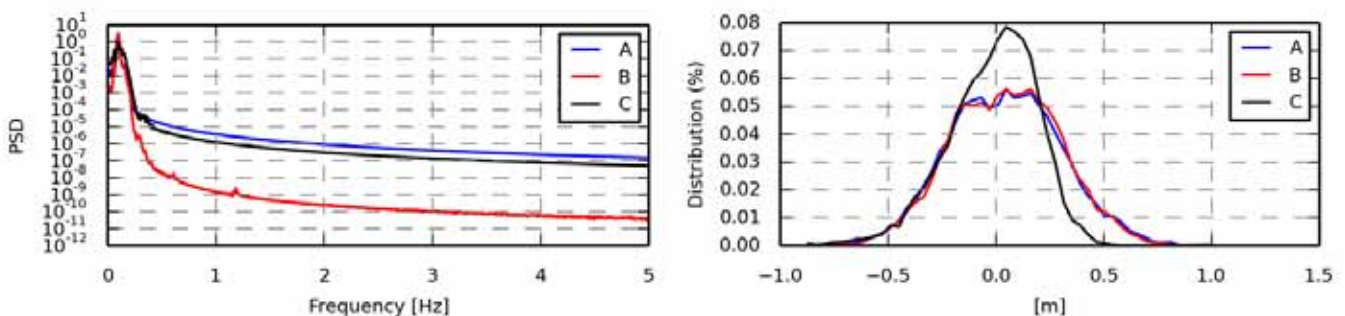


Figure 1171 - Power spectrum density

Statistics	A	B	C
Min	-0.7532	-0.7696	-0.8910
Max	1.0221	0.9099	0.5495
Mean	0.0418	0.0464	-0.0172
Std	0.2604	0.2518	0.2063
Skewness	0.0997	0.0101	-0.5828
Kurtosis	-0.1375	-0.2585	0.5115

Figure 1172 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.3658	0.3538	0.2989
Eq (m=4)	0.4779	0.4604	0.3895
Eq (m=6)	0.6510	0.6231	0.5330
Eq (m=8)	0.7822	0.7451	0.6440
Eq (m=10)	0.8868	0.8422	0.7325
Eq (m=12)	0.9726	0.9221	0.8044

Section 13.09 oc4_p2_load_case_3-2: proj_ang tx coo: global [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-2.sel (01-03-2014 00:57)	22	State_rot proj_ang tx Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
B	WAMsim/oc4_p2_load_case_3-2.sel (01-04-2014 12:46)	22	State_rot proj_ang tx Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
C	hawc2/oc4_p2_load_case_3-2.sel (31-03-2014 15:34)	22	State_rot proj_ang tx Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw

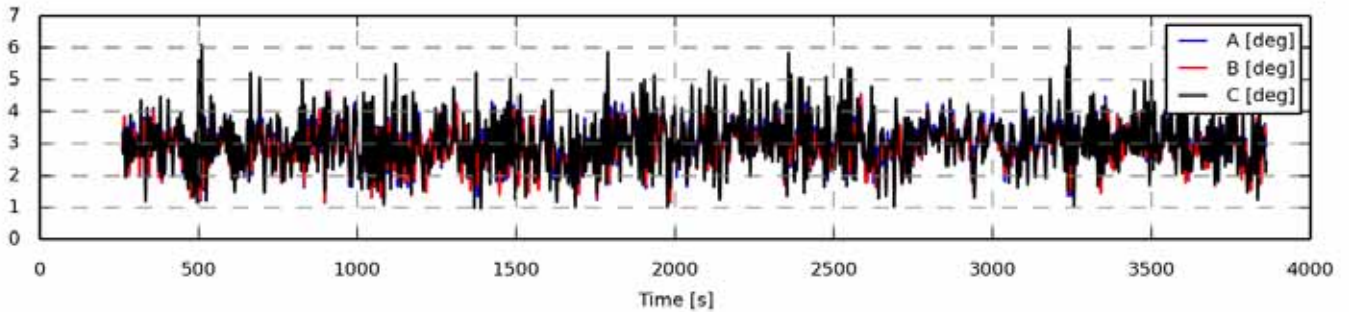


Figure 1173 - Full length time series

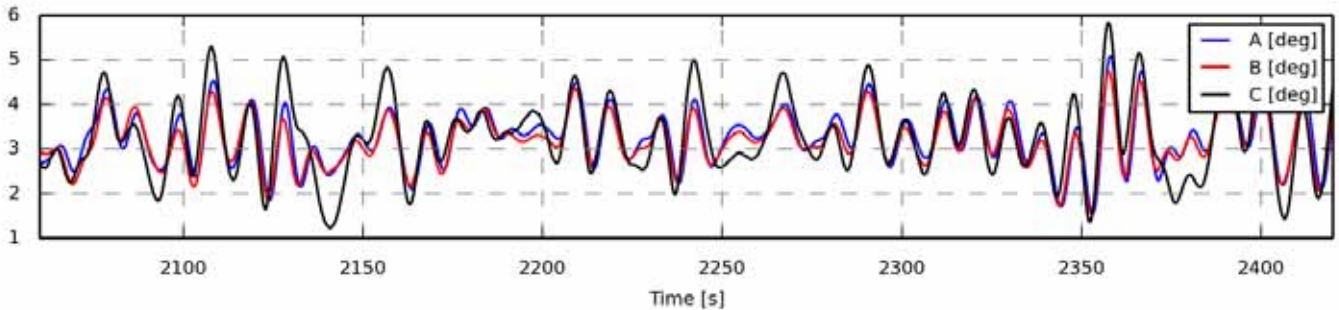


Figure 1174 - Zoom of time series

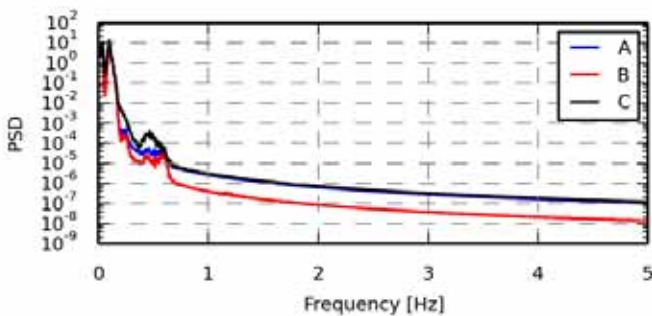


Figure 1175 - Power spectrum density

Statistics	A	B	C
Min	1.2040	1.1259	0.9594
Max	5.0709	4.7277	6.5828
Mean	3.0446	2.9614	3.0577
Std	0.6287	0.5902	0.7629
Skewness	-0.0979	-0.1185	0.2983
Kurtosis	-0.2540	-0.1796	0.3794

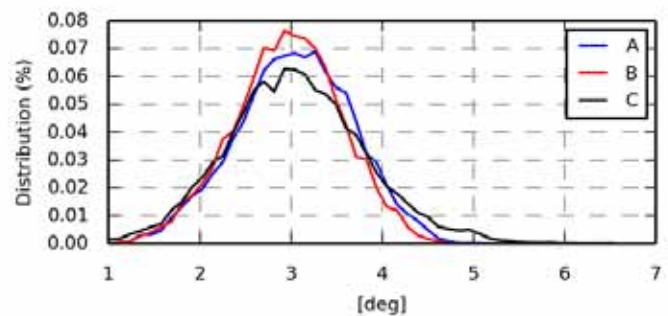


Figure 1176 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.7635	0.7005	0.9722
Eq (m=4)	1.0126	0.9374	1.3164
Eq (m=6)	1.4001	1.3089	1.8789
Eq (m=8)	1.6908	1.5879	2.3220
Eq (m=10)	1.9192	1.8059	2.6793
Eq (m=12)	2.1040	1.9809	2.9720

Section 13.10 oc4_p2_load_case_3-2: proj_ang ty coo: global [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-2.sel (01-03-2014 00:57)	23	State_rot proj_ang ty Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
B	WAMsim/oc4_p2_load_case_3-2.sel (01-04-2014 12:46)	23	State_rot proj_ang ty Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
C	hawc2/oc4_p2_load_case_3-2.sel (31-03-2014 15:34)	23	State_rot proj_ang ty Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw

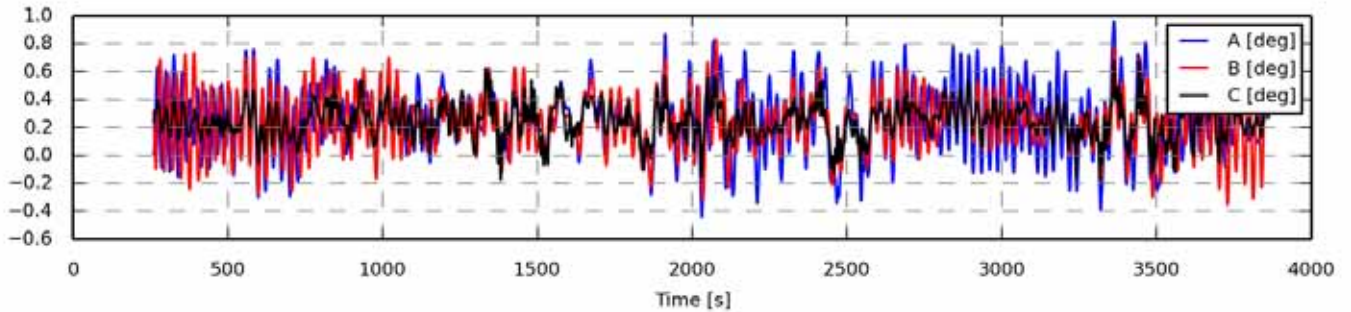


Figure 1177 - Full length time series

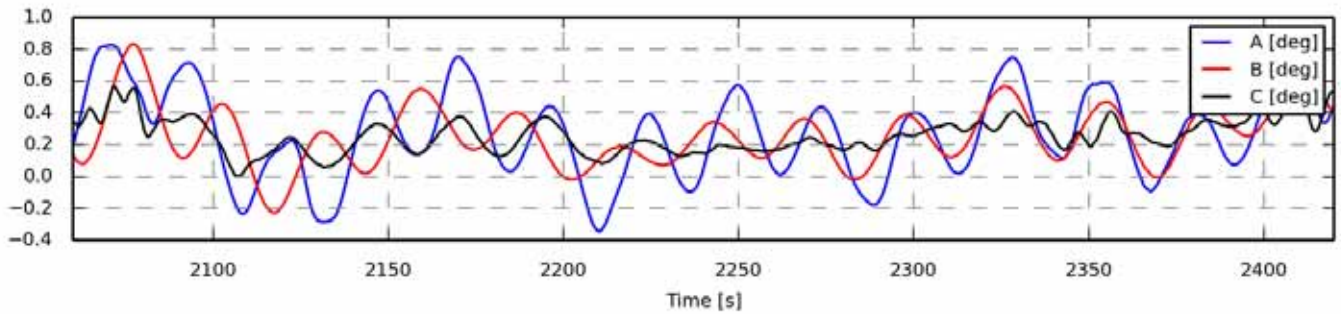


Figure 1178 - Zoom of time series

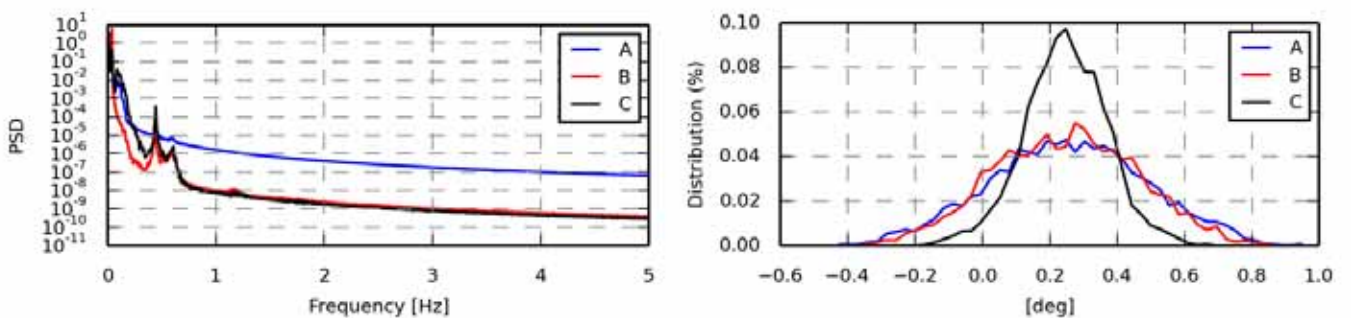


Figure 1179 - Power spectrum density

Statistics	A	B	C
Min	-0.4387	-0.3509	-0.1726
Max	0.9612	0.8527	0.6776
Mean	0.2533	0.2460	0.2466
Std	0.2332	0.2125	0.1239
Skewness	-0.0202	-0.0023	-0.0822
Kurtosis	-0.3006	-0.3690	0.3169

Figure 1180 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.2108	0.1982	0.1161
Eq (m=4)	0.3016	0.2816	0.1725
Eq (m=6)	0.4494	0.4152	0.2695
Eq (m=8)	0.5629	0.5160	0.3439
Eq (m=10)	0.6527	0.5941	0.4014
Eq (m=12)	0.7255	0.6564	0.4468

Section 13.11 oc4_p2_load_case_3-2: proj_ang tz coo: global [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-2.sel (01-03-2014 00:57)	24	State_rot proj_ang tz Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
B	WAMsim/oc4_p2_load_case_3-2.sel (01-04-2014 12:46)	24	State_rot proj_ang tz Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
C	hawc2/oc4_p2_load_case_3-2.sel (31-03-2014 15:34)	24	State_rot proj_ang tz Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw

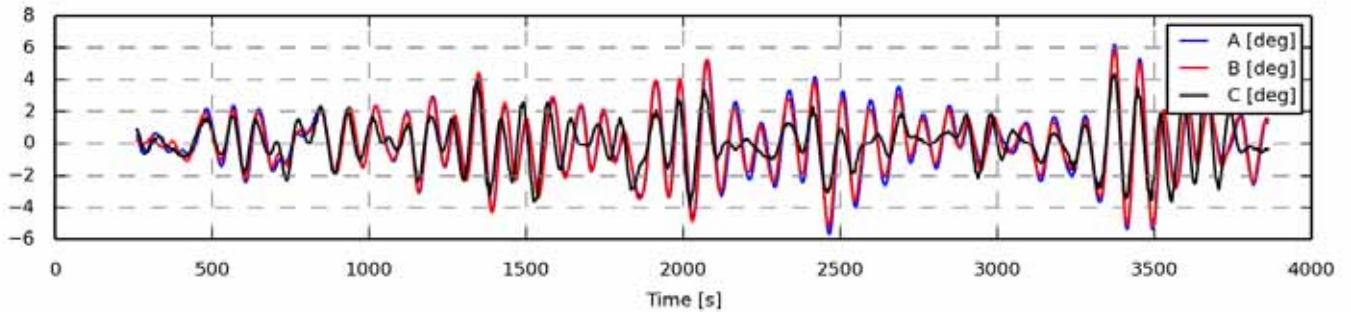


Figure 1181 - Full length time series

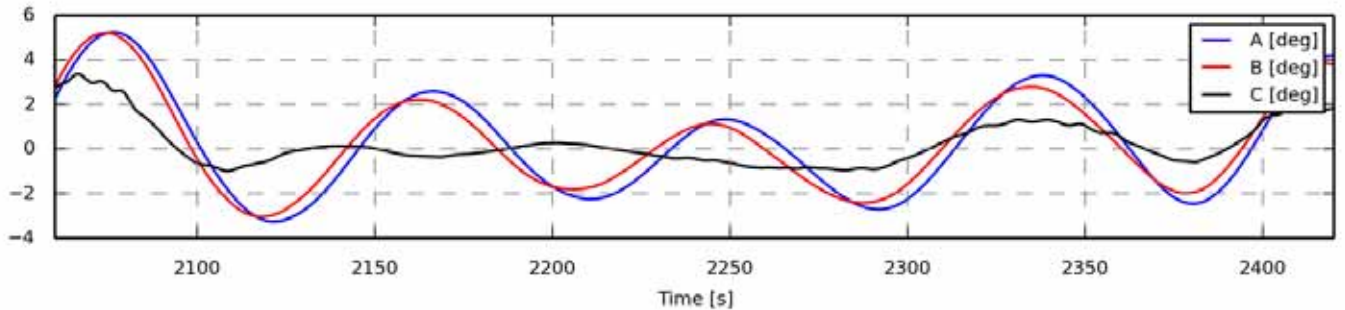


Figure 1182 - Zoom of time series

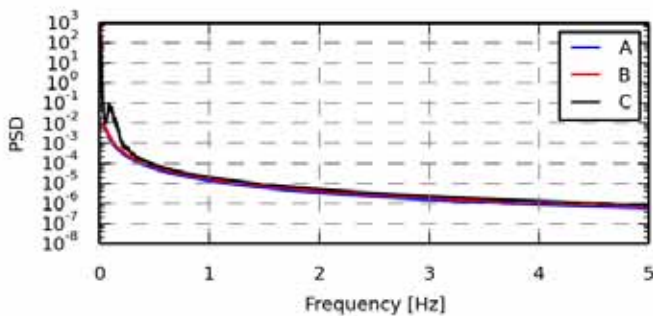


Figure 1183 - Power spectrum density

Statistics	A	B	C
Min	-5.6443	-5.1463	-3.8404
Max	6.1768	5.8389	4.5004
Mean	0.0387	0.0405	0.0369
Std	1.9521	1.8806	1.3916
Skewness	-0.0386	-0.0458	-0.0237
Kurtosis	0.1743	0.1650	0.4453

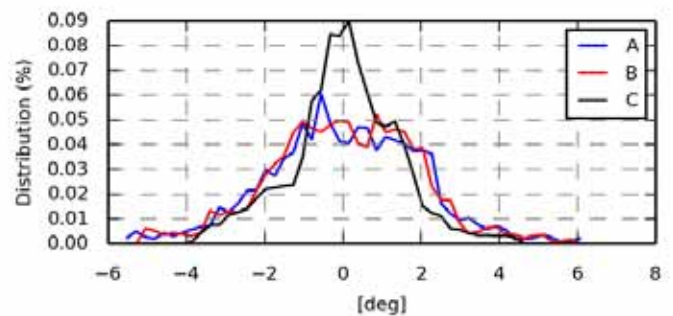


Figure 1184 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	1.3583	1.3113	1.0222
Eq (m=4)	2.1450	2.0667	1.6058
Eq (m=6)	3.5297	3.3876	2.5976
Eq (m=8)	4.6261	4.4229	3.3587
Eq (m=10)	5.4856	5.2275	3.9480
Eq (m=12)	6.1678	5.8618	4.4143

Section 13.12 oc4_p2_load_case_3-2: Mx coo: towertop [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-2.sel (01-03-2014 00:57)	37	MomentMx Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
B	WAMsim/oc4_p2_load_case_3-2.sel (01-04-2014 12:46)	37	MomentMx Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
C	hawc2/oc4_p2_load_case_3-2.sel (31-03-2014 15:34)	37	MomentMx Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment

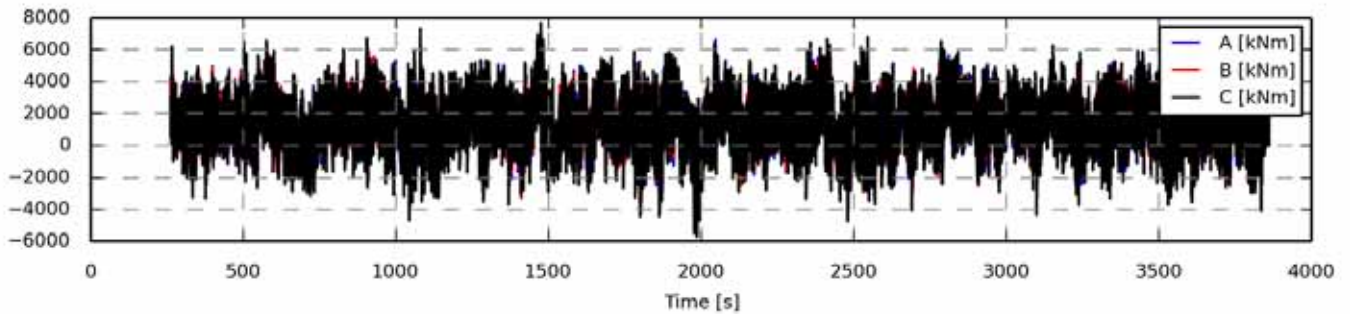


Figure 1185 - Full length time series

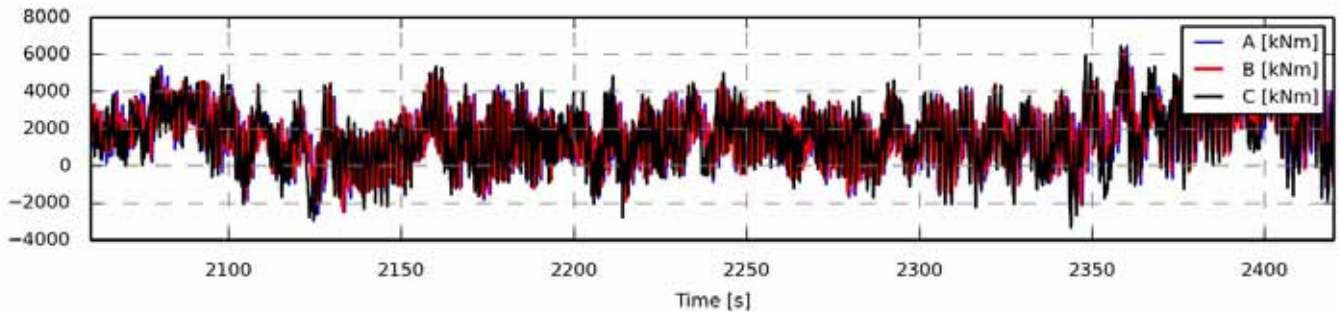


Figure 1186 - Zoom of time series

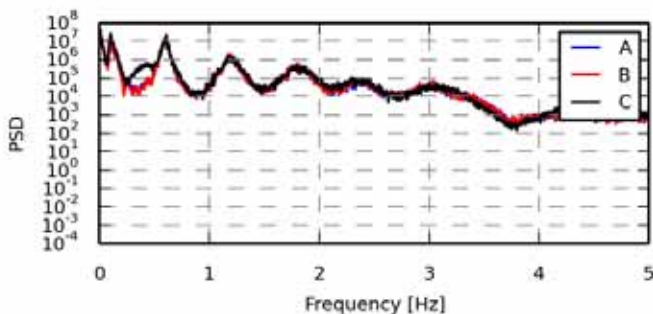


Figure 1187 - Power spectrum density

Statistics	A	B	C
Min	-5.7348e+03	-5.3435e+03	-5.6301e+03
Max	7.3241e+03	7.1626e+03	7.7089e+03
Mean	1.4375e+03	1.4344e+03	1.3859e+03
Std	1.4381e+03	1.4118e+03	1.5973e+03
Skewness	-0.0340	-0.0245	-0.0977
Kurtosis	0.1349	0.1454	0.1173

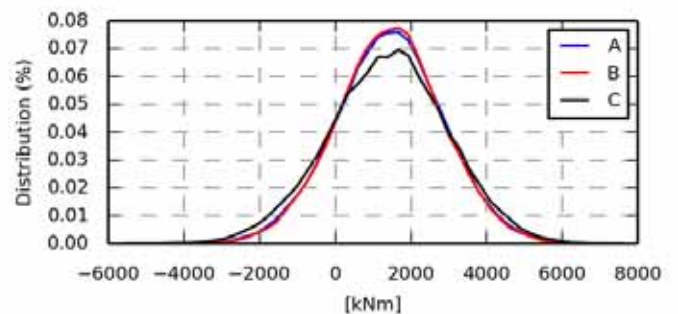


Figure 1188 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	3.2858e+03	3.2525e+03	3.5476e+03
Eq (m=4)	3.6917e+03	3.6372e+03	4.0451e+03
Eq (m=6)	4.4848e+03	4.3901e+03	4.9673e+03
Eq (m=8)	5.2689e+03	5.1387e+03	5.7906e+03
Eq (m=10)	6.0185e+03	5.8546e+03	6.5118e+03
Eq (m=12)	6.6971e+03	6.5017e+03	7.1334e+03

Section 13.13 oc4_p2_load_case_3-2: My coo: towertop [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-2.sel (01-03-2014 00:57)	38	MomentMy Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
B	WAMsim/oc4_p2_load_case_3-2.sel (01-04-2014 12:46)	38	MomentMy Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
C	hawc2/oc4_p2_load_case_3-2.sel (31-03-2014 15:34)	38	MomentMy Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment

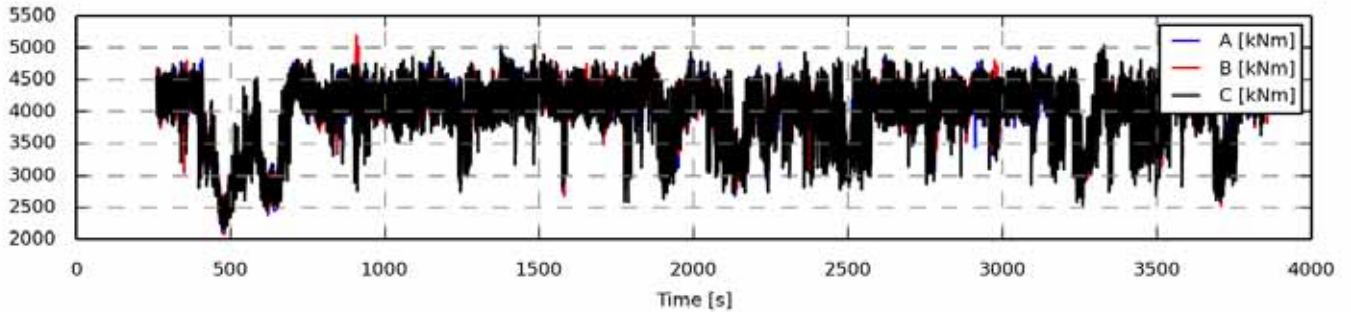


Figure 1189 - Full length time series

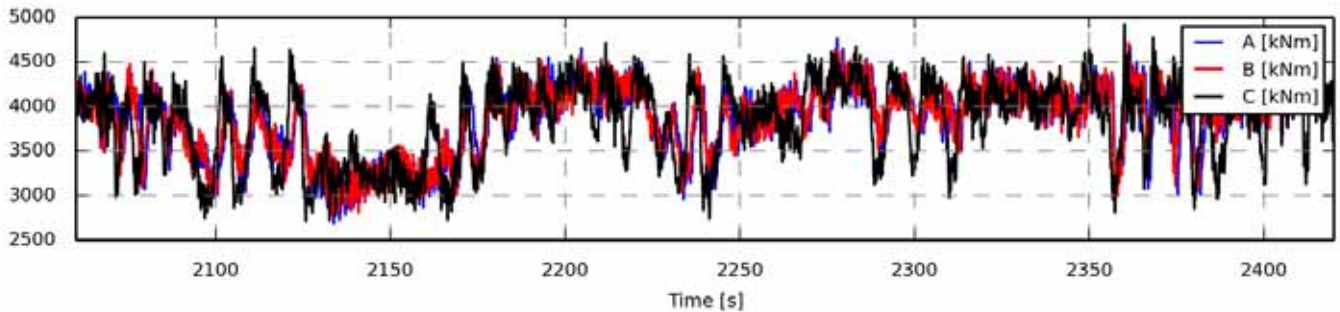


Figure 1190 - Zoom of time series

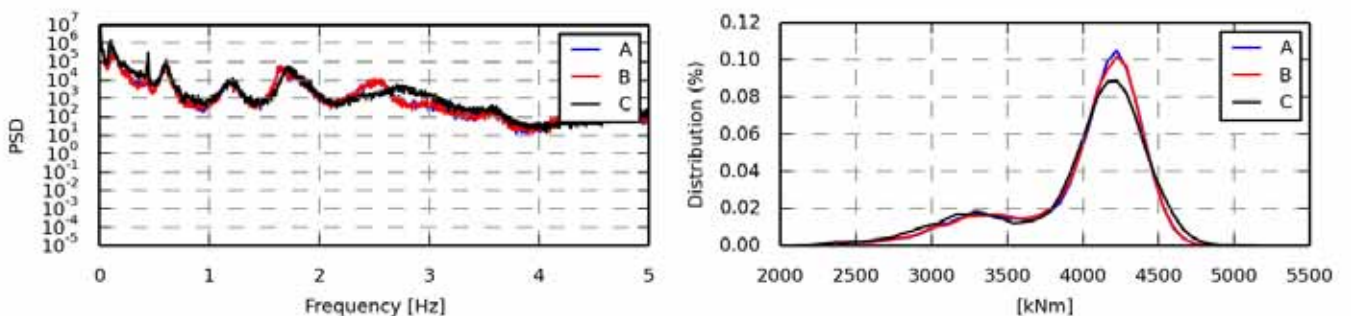


Figure 1191 - Power spectrum density

Statistics	A	B	C
Min	2.1129e+03	2.0796e+03	2.1551e+03
Max	4.8619e+03	5.1856e+03	5.0987e+03
Mean	3.9946e+03	3.9957e+03	3.9774e+03
Std	443.0497	440.9731	475.4370
Skewness	-1.3252	-1.3200	-1.1539
Kurtosis	1.3162	1.3564	0.7899

Figure 1192 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	538.2913	552.4659	640.0590
Eq (m=4)	646.5081	668.1871	780.0283
Eq (m=6)	881.1531	927.8981	1.0305e+03
Eq (m=8)	1.0882e+03	1.1667e+03	1.2291e+03
Eq (m=10)	1.2625e+03	1.3716e+03	1.3914e+03
Eq (m=12)	1.4099e+03	1.5444e+03	1.5285e+03

Section 13.14 oc4_p2_load_case_3-2: Mz coo: towertop [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-2.sel (01-03-2014 00:57)	39	MomentMz Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
B	WAMsim/oc4_p2_load_case_3-2.sel (01-04-2014 12:46)	39	MomentMz Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
C	hawc2/oc4_p2_load_case_3-2.sel (31-03-2014 15:34)	39	MomentMz Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment

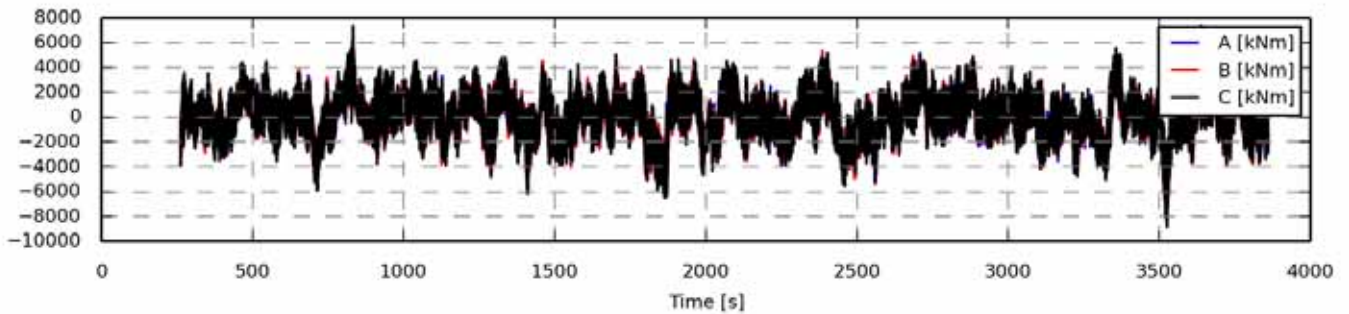


Figure 1193 - Full length time series

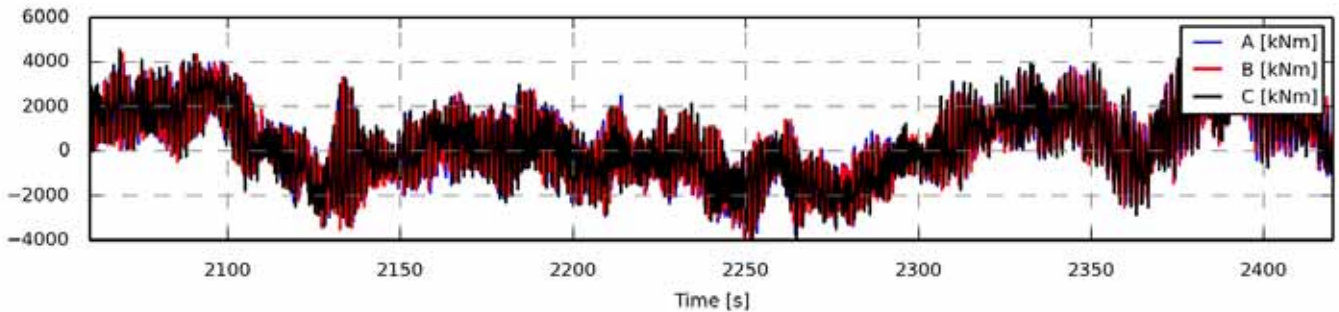


Figure 1194 - Zoom of time series

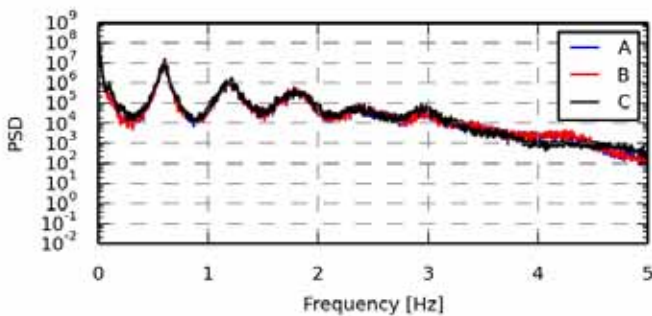


Figure 1195 - Power spectrum density

Statistics	A	B	C
Min	-8.2689e+03	-8.3672e+03	-8.8265e+03
Max	7.2213e+03	7.0473e+03	7.3754e+03
Mean	86.2999	85.3576	99.8737
Std	1.6623e+03	1.6632e+03	1.6902e+03
Skewness	-0.2050	-0.2052	-0.1930
Kurtosis	0.4685	0.4634	0.4212

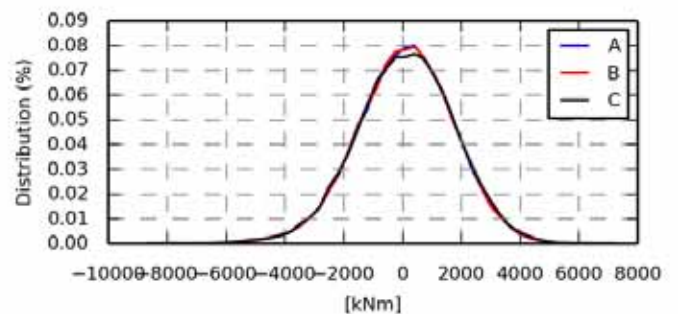


Figure 1196 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	3.0524e+03	3.0532e+03	3.1423e+03
Eq (m=4)	3.4740e+03	3.4738e+03	3.5957e+03
Eq (m=6)	4.5419e+03	4.5373e+03	4.7799e+03
Eq (m=8)	5.7366e+03	5.7236e+03	6.1053e+03
Eq (m=10)	6.8114e+03	6.7894e+03	7.2830e+03
Eq (m=12)	7.7137e+03	7.6839e+03	8.2608e+03

Section 13.15 oc4_p2_load_case_3-2: Mx coo: tower [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-2.sel (01-03-2014 00:57)	43	MomentMx Mbdy:tower nodenr: 1 coo: tower tower base bending moment
B	WAMsim/oc4_p2_load_case_3-2.sel (01-04-2014 12:46)	43	MomentMx Mbdy:tower nodenr: 1 coo: tower tower base bending moment
C	hawc2/oc4_p2_load_case_3-2.sel (31-03-2014 15:34)	43	MomentMx Mbdy:tower nodenr: 1 coo: tower tower base bending moment

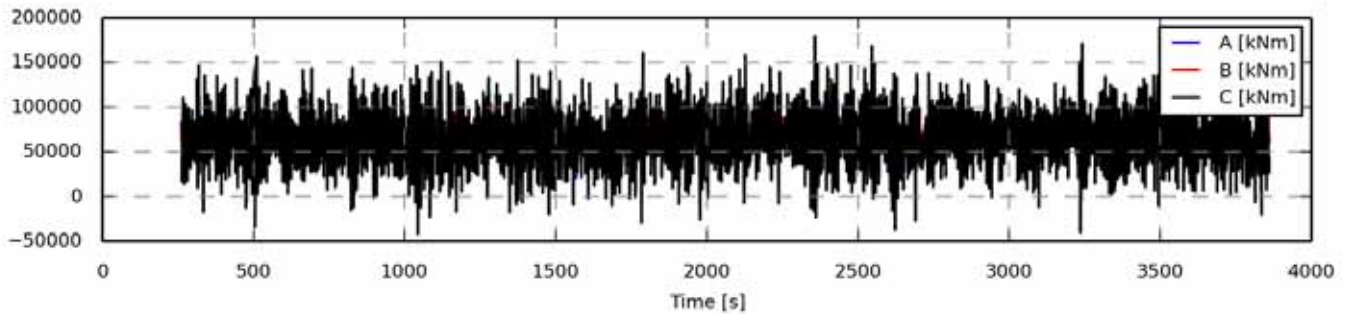


Figure 1197 - Full length time series

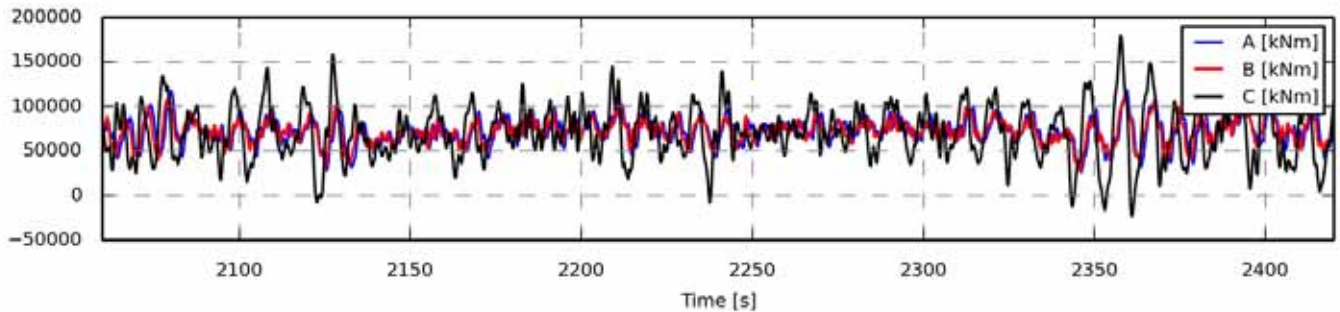


Figure 1198 - Zoom of time series

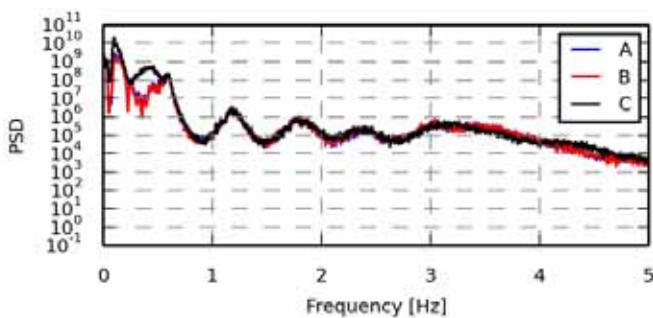


Figure 1199 - Power spectrum density

Statistics	A	B	C
Min	2.9217e+03	9.2253e+03	-4.1560e+04
Max	1.1820e+05	1.1478e+05	1.7923e+05
Mean	6.7150e+04	6.6692e+04	6.6265e+04
Std	1.5162e+04	1.3822e+04	2.9184e+04
Skewness	-0.0990	-0.0954	0.0103
Kurtosis	-0.0453	-0.1005	-0.0316

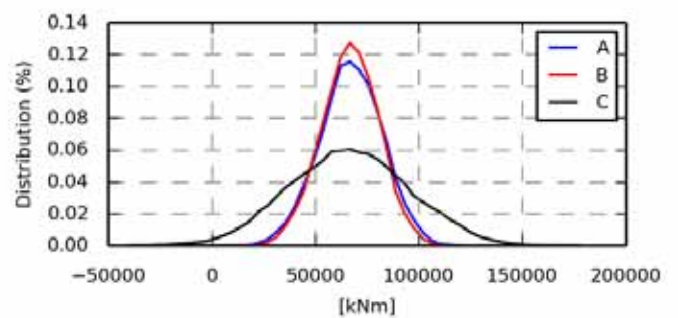


Figure 1200 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	2.5266e+04	2.2858e+04	4.8960e+04
Eq (m=4)	3.1649e+04	2.8557e+04	6.1826e+04
Eq (m=6)	4.1702e+04	3.7493e+04	8.1890e+04
Eq (m=8)	4.9593e+04	4.4451e+04	9.7526e+04
Eq (m=10)	5.6112e+04	5.0206e+04	1.1033e+05
Eq (m=12)	6.1604e+04	5.5111e+04	1.2100e+05

Section 13.16 oc4_p2_load_case_3-2: My coo: tower [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-2.sel (01-03-2014 00:57)	44	MomentMy Mbdy:tower nodenr: 1 coo: tower tower base bending moment
B	WAMsim/oc4_p2_load_case_3-2.sel (01-04-2014 12:46)	44	MomentMy Mbdy:tower nodenr: 1 coo: tower tower base bending moment
C	hawc2/oc4_p2_load_case_3-2.sel (31-03-2014 15:34)	44	MomentMy Mbdy:tower nodenr: 1 coo: tower tower base bending moment

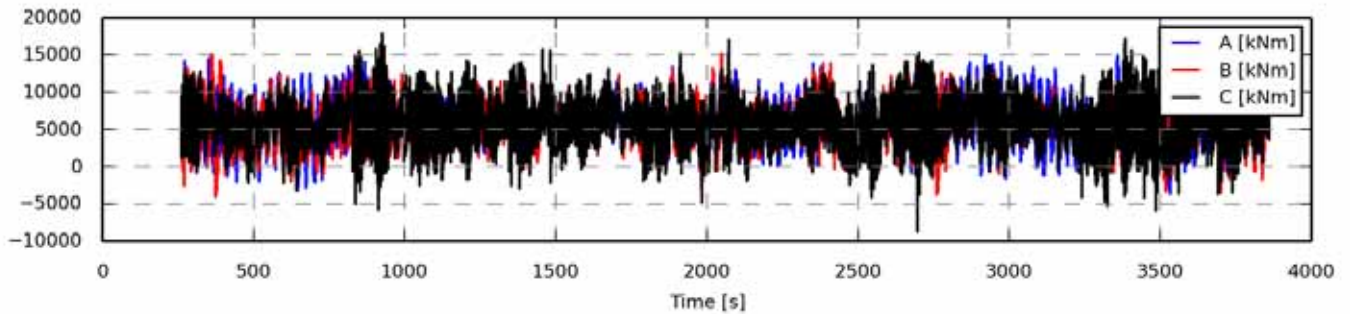


Figure 1201 - Full length time series

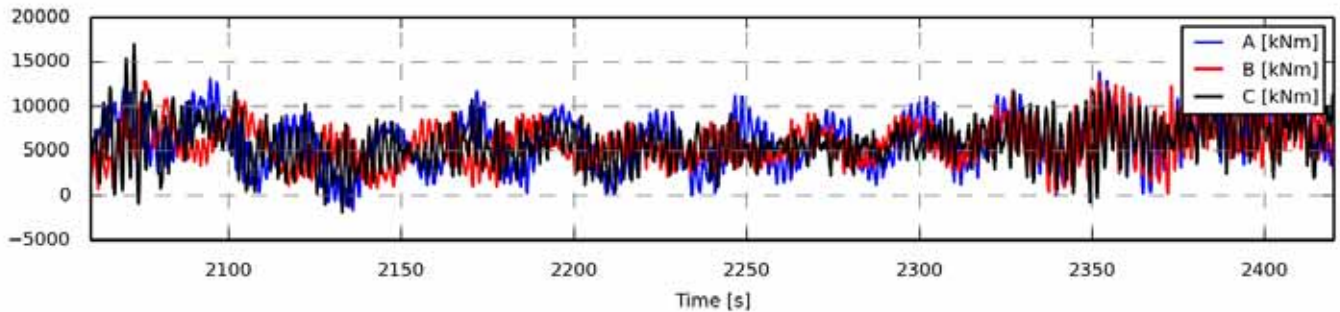


Figure 1202 - Zoom of time series

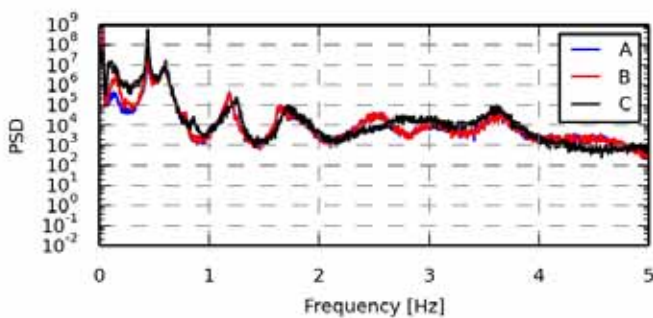


Figure 1203 - Power spectrum density

Statistics	A	B	C
Min	-3.6344e+03	-4.0291e+03	-8.7153e+03
Max	1.4985e+04	1.5334e+04	1.7946e+04
Mean	5.9289e+03	5.8853e+03	5.8776e+03
Std	2.6323e+03	2.6336e+03	2.9382e+03
Skewness	0.0390	0.0514	-0.0088
Kurtosis	-0.1190	-0.0613	0.2121

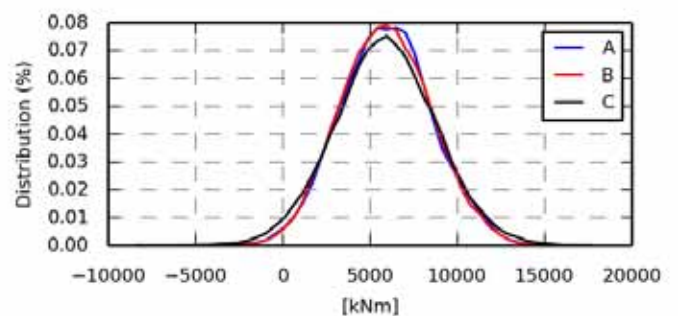


Figure 1204 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	4.5004e+03	4.4665e+03	6.4130e+03
Eq (m=4)	5.4359e+03	5.4260e+03	7.5576e+03
Eq (m=6)	7.0723e+03	7.1462e+03	9.5121e+03
Eq (m=8)	8.4063e+03	8.6029e+03	1.1199e+04
Eq (m=10)	9.4882e+03	9.8108e+03	1.2676e+04
Eq (m=12)	1.0377e+04	1.0806e+04	1.3961e+04

Section 13.17 oc4_p2_load_case_3-2: Mz coo: tower [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-2.sel (01-03-2014 00:57)	45	MomentMz Mbdy:tower nodenr: 1 coo: tower tower base bending moment
B	WAMsim/oc4_p2_load_case_3-2.sel (01-04-2014 12:46)	45	MomentMz Mbdy:tower nodenr: 1 coo: tower tower base bending moment
C	hawc2/oc4_p2_load_case_3-2.sel (31-03-2014 15:34)	45	MomentMz Mbdy:tower nodenr: 1 coo: tower tower base bending moment

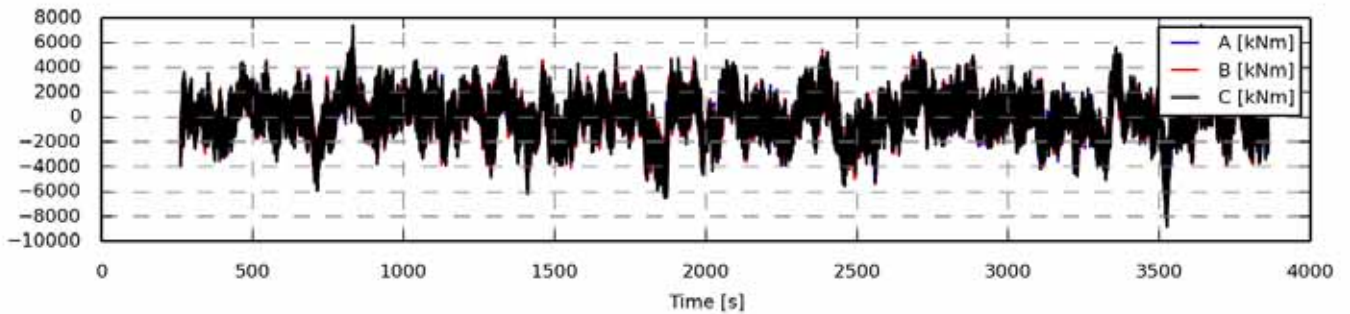


Figure 1205 - Full length time series

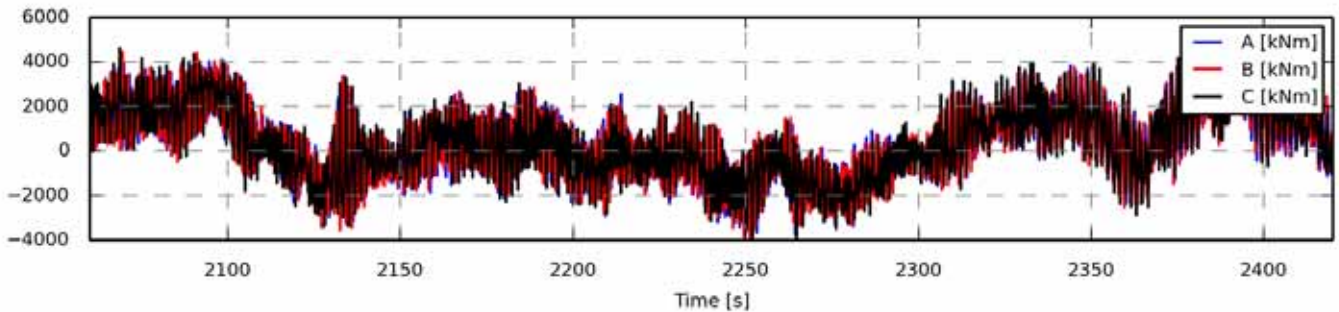


Figure 1206 - Zoom of time series

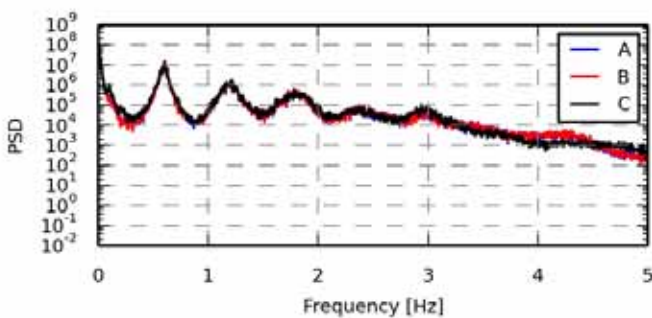


Figure 1207 - Power spectrum density

Statistics	A	B	C
Min	-8.2637e+03	-8.3708e+03	-8.8024e+03
Max	7.2793e+03	7.1028e+03	7.4303e+03
Mean	117.7264	116.6187	130.6104
Std	1.6657e+03	1.6666e+03	1.6935e+03
Skewness	-0.2031	-0.2032	-0.1922
Kurtosis	0.4653	0.4604	0.4189

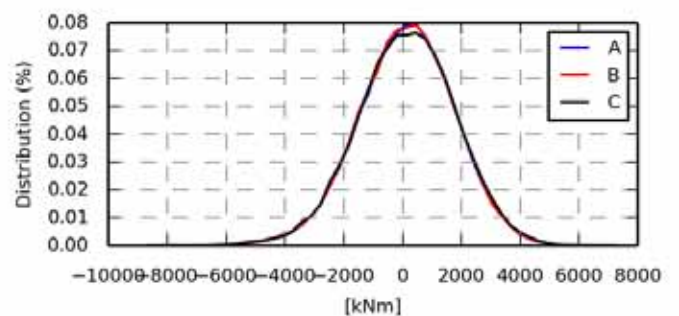


Figure 1208 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	3.0899e+03	3.0948e+03	3.1819e+03
Eq (m=4)	3.5073e+03	3.5119e+03	3.6308e+03
Eq (m=6)	4.5668e+03	4.5671e+03	4.8038e+03
Eq (m=8)	5.7588e+03	5.7490e+03	6.1231e+03
Eq (m=10)	6.8352e+03	6.8151e+03	7.2996e+03
Eq (m=12)	7.7401e+03	7.7118e+03	8.2778e+03

Section 13.18 oc4_p2_load_case_3-2: ESYS line1_1 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-2.sel (01-03-2014 00:57)	55	ESYS line1_1 SENSOR 4
B	WAMsim/oc4_p2_load_case_3-2.sel (01-04-2014 12:46)	55	ESYS line1_1 SENSOR 4
C	hawc2/oc4_p2_load_case_3-2.sel (31-03-2014 15:34)	55	ESYS line1_1 SENSOR 4

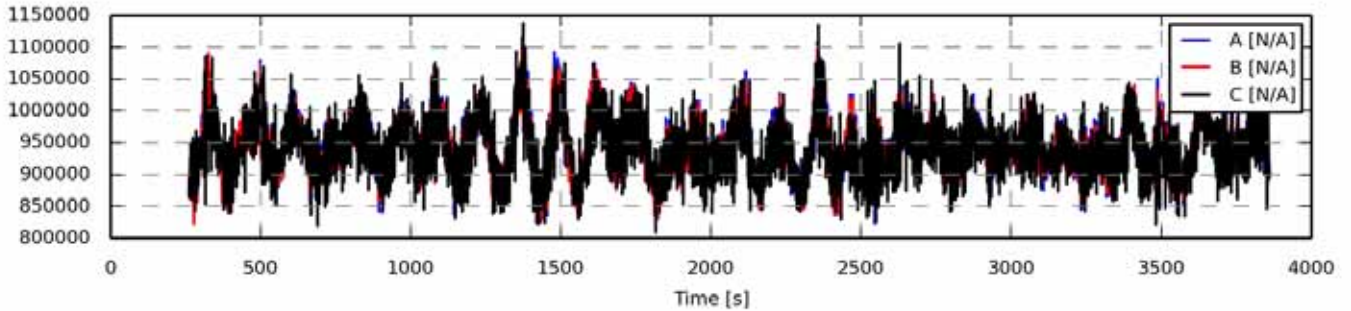


Figure 1209 - Full length time series

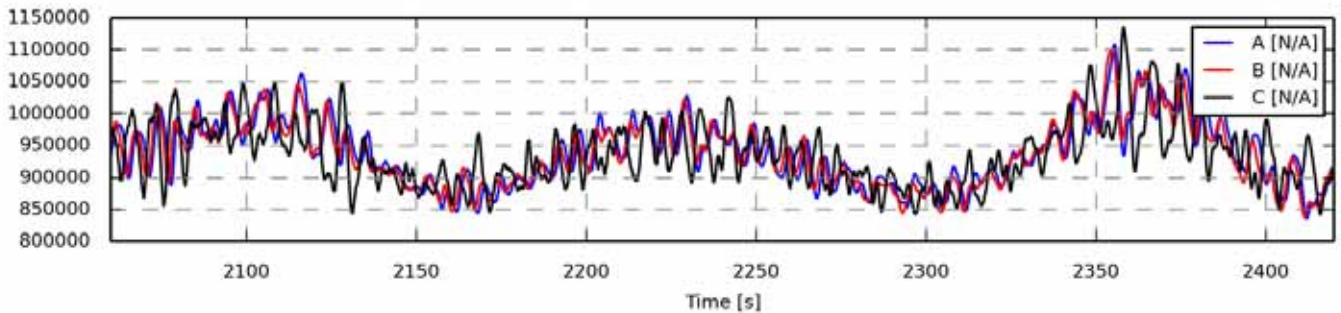


Figure 1210 - Zoom of time series

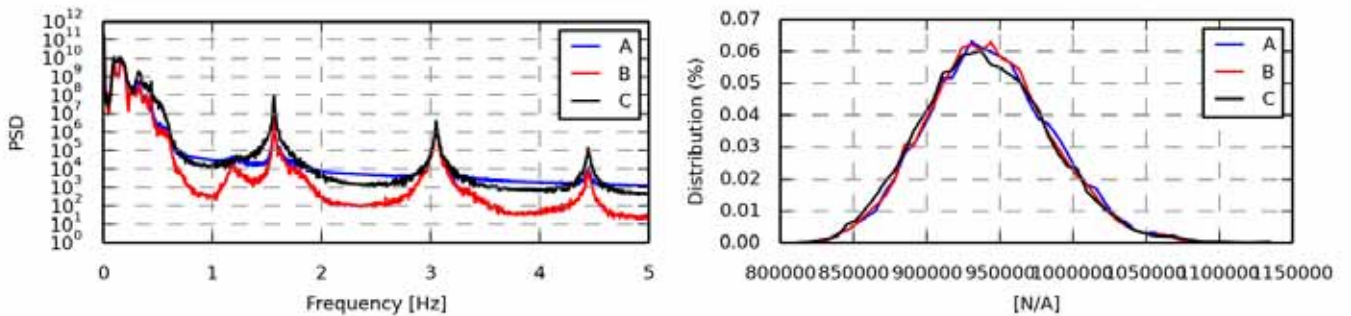


Figure 1211 - Power spectrum density

Statistics	A	B	C
Min	8.2248e+05	8.2169e+05	8.0925e+05
Max	1.1155e+06	1.1074e+06	1.1374e+06
Mean	9.4351e+05	9.4219e+05	9.4040e+05
Std	4.3199e+04	4.2442e+04	4.4069e+04
Skewness	0.2580	0.2539	0.3026
Kurtosis	0.0221	0.0588	0.1926

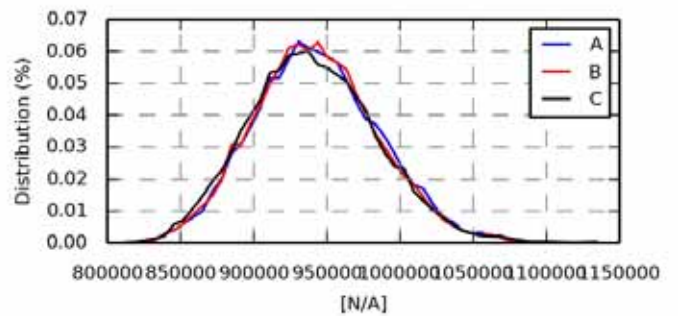


Figure 1212 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	4.6999e+04	4.3730e+04	6.0728e+04
Eq (m=4)	6.4694e+04	6.0597e+04	7.8461e+04
Eq (m=6)	9.6521e+04	9.1349e+04	1.0960e+05
Eq (m=8)	1.2193e+05	1.1612e+05	1.3620e+05
Eq (m=10)	1.4183e+05	1.3562e+05	1.5834e+05
Eq (m=12)	1.5766e+05	1.5119e+05	1.7653e+05

Section 13.19 oc4_p2_load_case_3-2: ESYS line1_3 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-2.sel (01-03-2014 00:57)	259	ESYS line1_3 SENSOR 104
B	WAMsim/oc4_p2_load_case_3-2.sel (01-04-2014 12:46)	259	ESYS line1_3 SENSOR 104
C	hawc2/oc4_p2_load_case_3-2.sel (31-03-2014 15:34)	259	ESYS line1_3 SENSOR 104

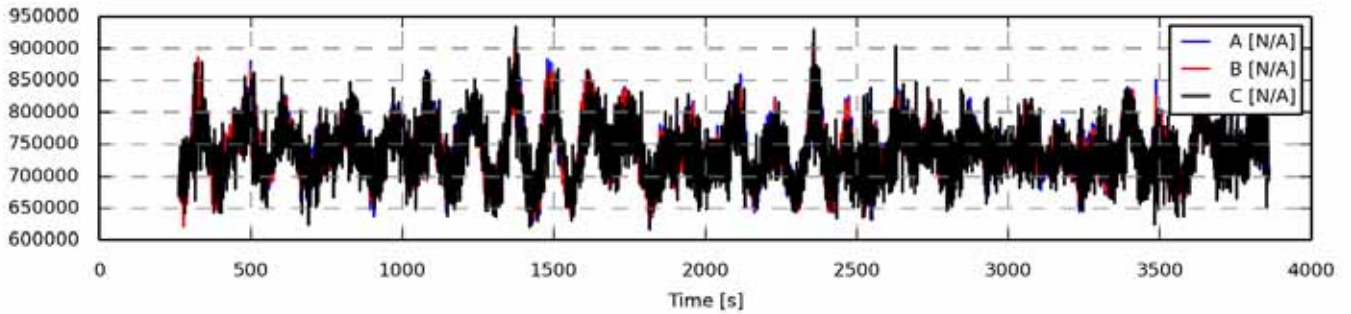


Figure 1213 - Full length time series

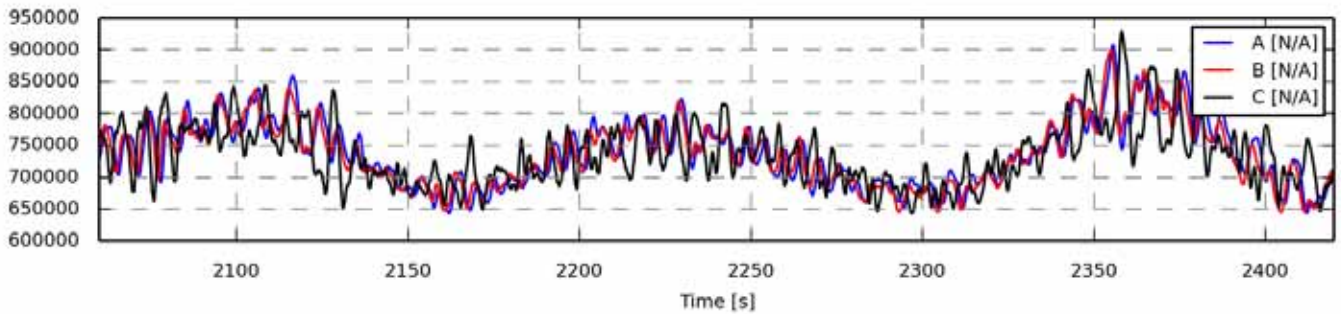


Figure 1214 - Zoom of time series

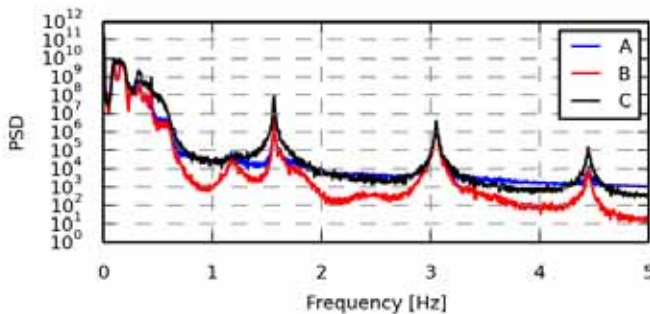


Figure 1215 - Power spectrum density

Statistics	A	B	C
Min	6.2907e+05	6.2156e+05	6.1640e+05
Max	9.1613e+05	9.0772e+05	9.3350e+05
Mean	7.4255e+05	7.4121e+05	7.3938e+05
Std	4.2233e+04	4.1619e+04	4.2425e+04
Skewness	0.2664	0.2553	0.3130
Kurtosis	0.0171	0.0522	0.2210

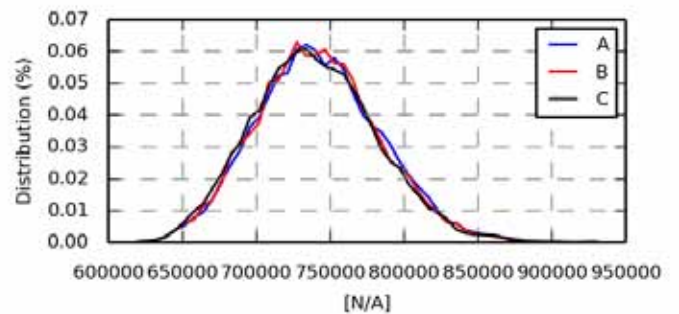


Figure 1216 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	4.4569e+04	4.1638e+04	5.7800e+04
Eq (m=4)	6.1928e+04	5.8429e+04	7.4748e+04
Eq (m=6)	9.3303e+04	8.9311e+04	1.0491e+05
Eq (m=8)	1.1826e+05	1.1422e+05	1.3072e+05
Eq (m=10)	1.3781e+05	1.3387e+05	1.5211e+05
Eq (m=12)	1.5339e+05	1.4960e+05	1.6962e+05

Section 13.20 oc4_p2_load_case_3-2: ESYS line2_1 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-2.sel (01-03-2014 00:57)	263	ESYS line2_1 SENSOR 4
B	WAMsim/oc4_p2_load_case_3-2.sel (01-04-2014 12:46)	263	ESYS line2_1 SENSOR 4
C	hawc2/oc4_p2_load_case_3-2.sel (31-03-2014 15:34)	263	ESYS line2_1 SENSOR 4

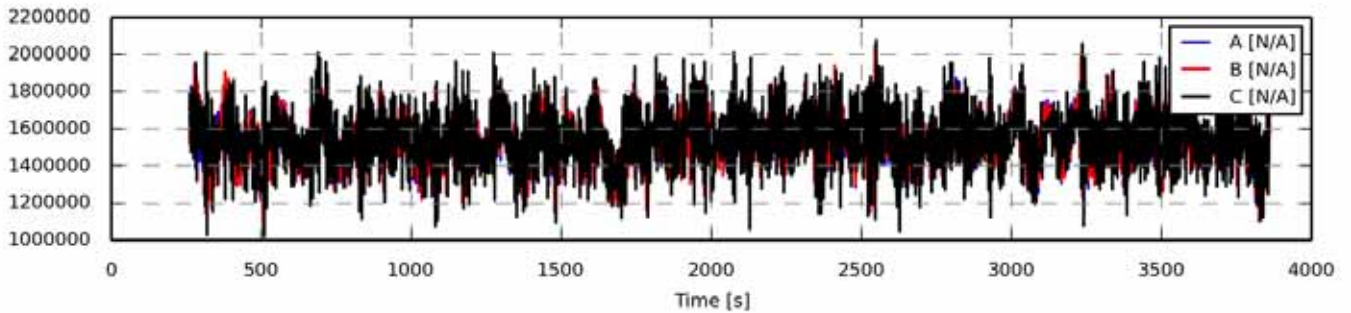


Figure 1217 - Full length time series

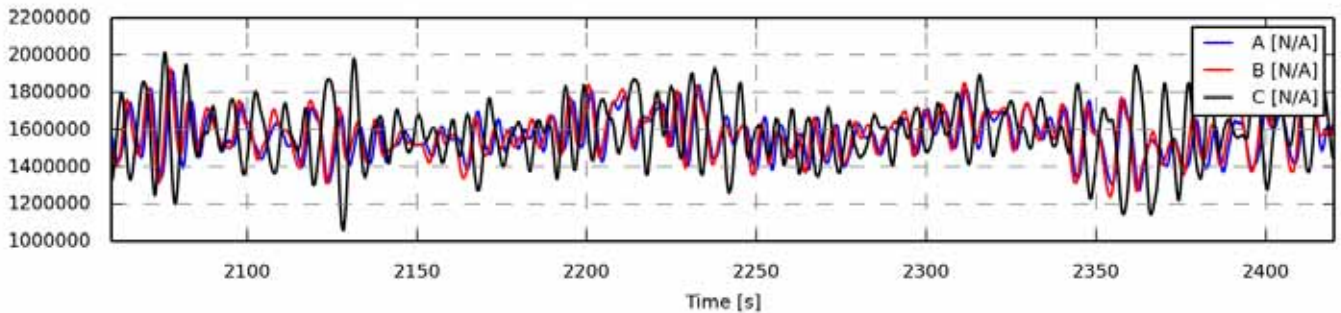


Figure 1218 - Zoom of time series

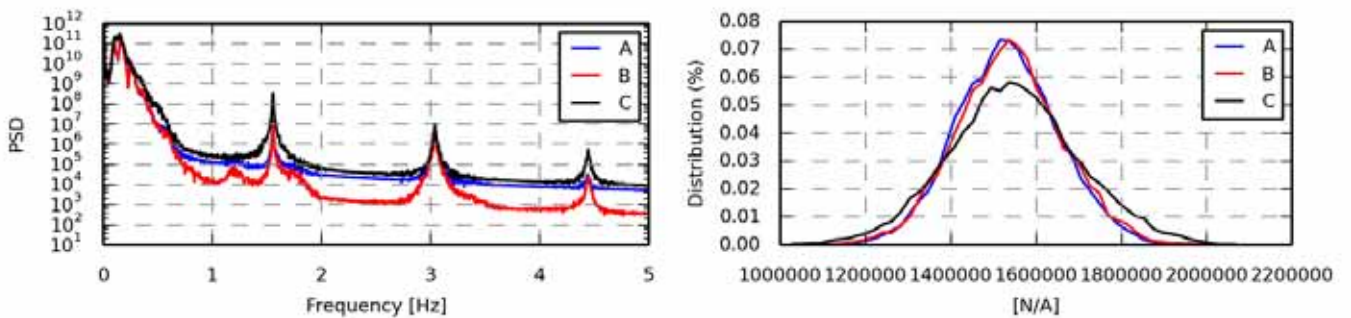


Figure 1219 - Power spectrum density

Statistics	A	B	C
Min	1.0905e+06	1.0856e+06	1.0175e+06
Max	2.0493e+06	2.0220e+06	2.0758e+06
Mean	1.5320e+06	1.5370e+06	1.5469e+06
Std	1.2020e+05	1.2463e+05	1.5421e+05
Skewness	0.0776	0.0679	0.0474
Kurtosis	0.1273	0.1503	0.0644

Figure 1220 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	1.6271e+05	1.6794e+05	2.3800e+05
Eq (m=4)	2.1279e+05	2.2015e+05	3.0261e+05
Eq (m=6)	3.0055e+05	3.0976e+05	4.0343e+05
Eq (m=8)	3.7508e+05	3.8286e+05	4.8055e+05
Eq (m=10)	4.3792e+05	4.4230e+05	5.4184e+05
Eq (m=12)	4.9073e+05	4.9104e+05	5.9162e+05

Section 13.21 oc4_p2_load_case_3-2: ESYS line2_3 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-2.sel (01-03-2014 00:57)	467	ESYS line2_3 SENSOR 104
B	WAMsim/oc4_p2_load_case_3-2.sel (01-04-2014 12:46)	467	ESYS line2_3 SENSOR 104
C	hawc2/oc4_p2_load_case_3-2.sel (31-03-2014 15:34)	467	ESYS line2_3 SENSOR 104

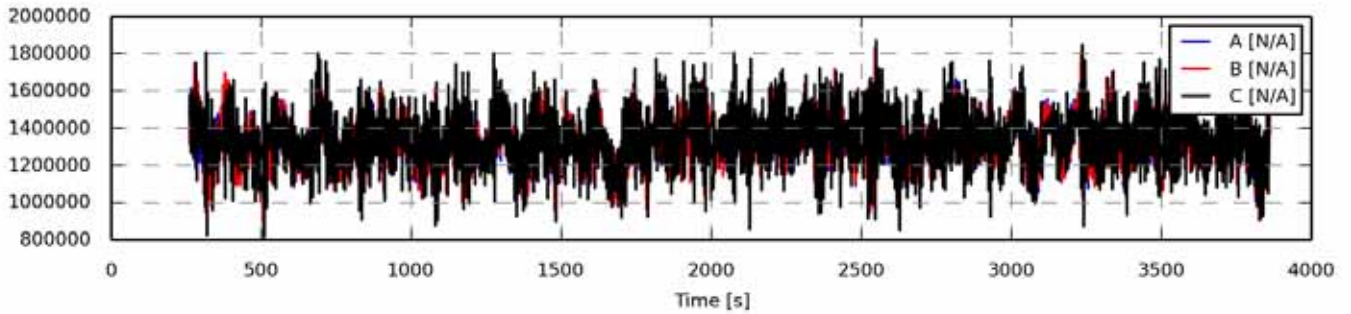


Figure 1221 - Full length time series

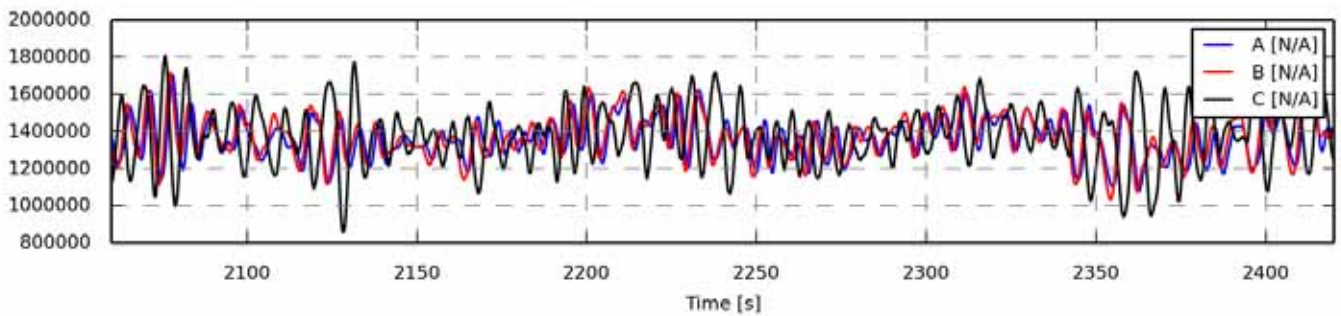


Figure 1222 - Zoom of time series

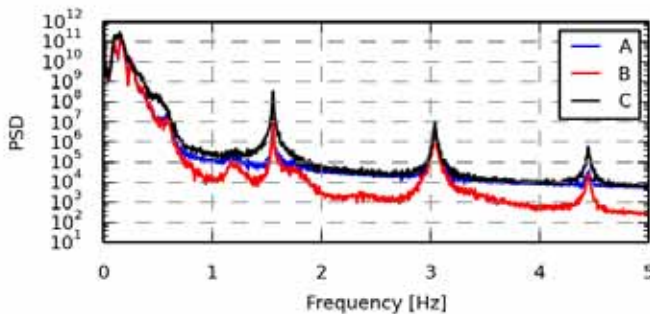


Figure 1223 - Power spectrum density

Statistics	A	B	C
Min	8.9781e+05	8.9533e+05	8.1433e+05
Max	1.8323e+06	1.8102e+06	1.8727e+06
Mean	1.3273e+06	1.3325e+06	1.3421e+06
Std	1.1813e+05	1.2251e+05	1.5187e+05
Skewness	0.0875	0.0777	0.0443
Kurtosis	0.1361	0.1643	0.0907

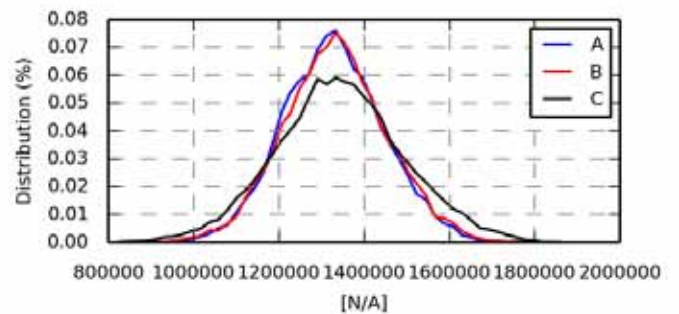


Figure 1224 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	1.5880e+05	1.6425e+05	2.3469e+05
Eq (m=4)	2.0810e+05	2.1573e+05	2.9861e+05
Eq (m=6)	2.9479e+05	3.0430e+05	3.9867e+05
Eq (m=8)	3.6842e+05	3.7646e+05	4.7541e+05
Eq (m=10)	4.3047e+05	4.3497e+05	5.3647e+05
Eq (m=12)	4.8261e+05	4.8278e+05	5.8613e+05

Section 13.22 oc4_p2_load_case_3-2: ESYS line3_1 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-2.sel (01-03-2014 00:57)	471	ESYS line3_1 SENSOR 4
B	WAMsim/oc4_p2_load_case_3-2.sel (01-04-2014 12:46)	471	ESYS line3_1 SENSOR 4
C	hawc2/oc4_p2_load_case_3-2.sel (31-03-2014 15:34)	471	ESYS line3_1 SENSOR 4

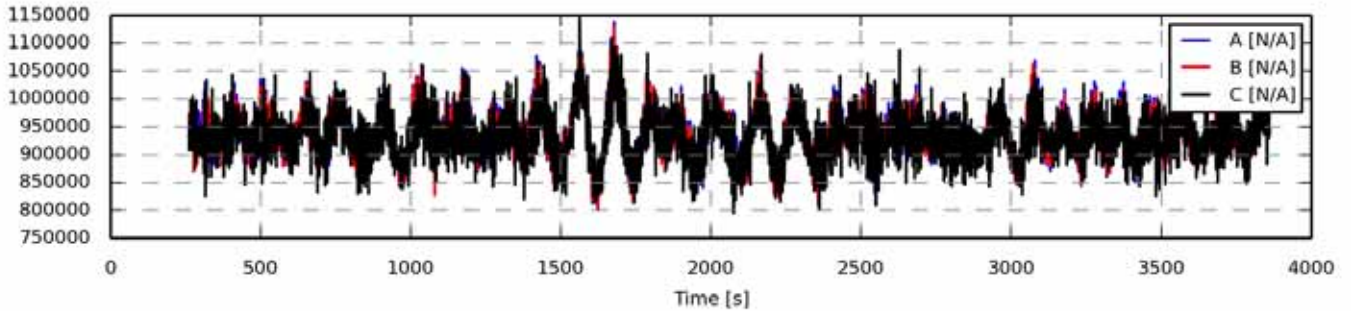


Figure 1225 - Full length time series

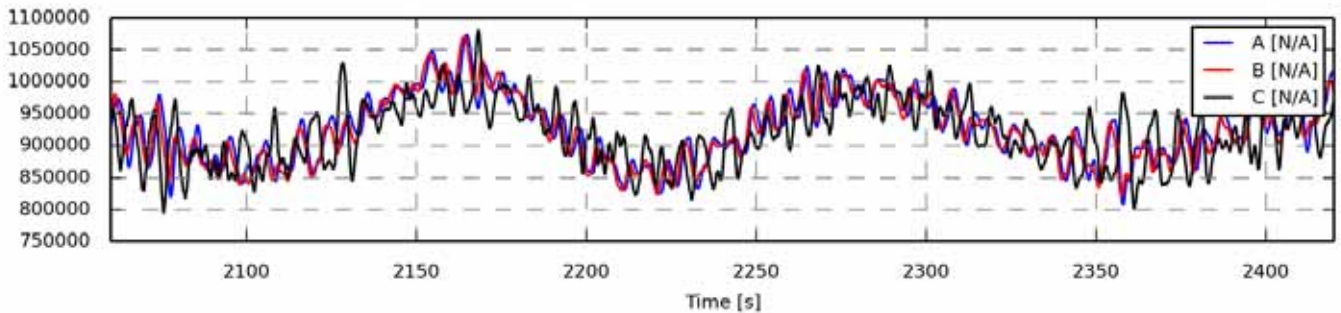


Figure 1226 - Zoom of time series

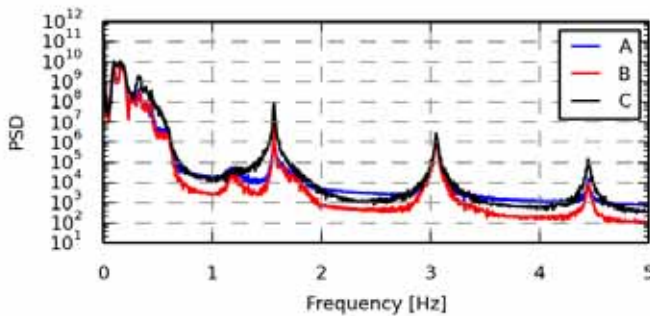


Figure 1227 - Power spectrum density

Statistics	A	B	C
Min	8.0108e+05	8.0492e+05	7.9456e+05
Max	1.1383e+06	1.1305e+06	1.1445e+06
Mean	9.3785e+05	9.3641e+05	9.3340e+05
Std	4.4081e+04	4.2505e+04	4.3064e+04
Skewness	0.3505	0.3487	0.2560
Kurtosis	0.4244	0.5411	0.3131

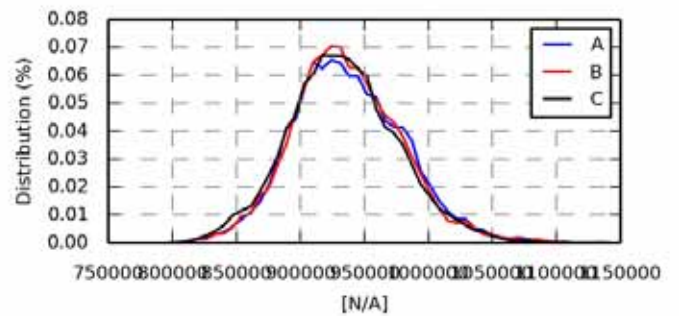


Figure 1228 - Value distribution

Fatigue eq.	1Hz	A	B	C
Eq (m=3)		4.7498e+04	4.3949e+04	6.0517e+04
Eq (m=4)		6.5858e+04	6.1654e+04	7.8352e+04
Eq (m=6)		1.0054e+05	9.5595e+04	1.0974e+05
Eq (m=8)		1.2984e+05	1.2438e+05	1.3659e+05
Eq (m=10)		1.5367e+05	1.4769e+05	1.5906e+05
Eq (m=12)		1.7306e+05	1.6654e+05	1.7775e+05

Section 13.23 oc4_p2_load_case_3-2: ESYS line3_3 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-2.sel (01-03-2014 00:57)	675	ESYS line3_3 SENSOR 104
B	WAMsim/oc4_p2_load_case_3-2.sel (01-04-2014 12:46)	675	ESYS line3_3 SENSOR 104
C	hawc2/oc4_p2_load_case_3-2.sel (31-03-2014 15:34)	675	ESYS line3_3 SENSOR 104

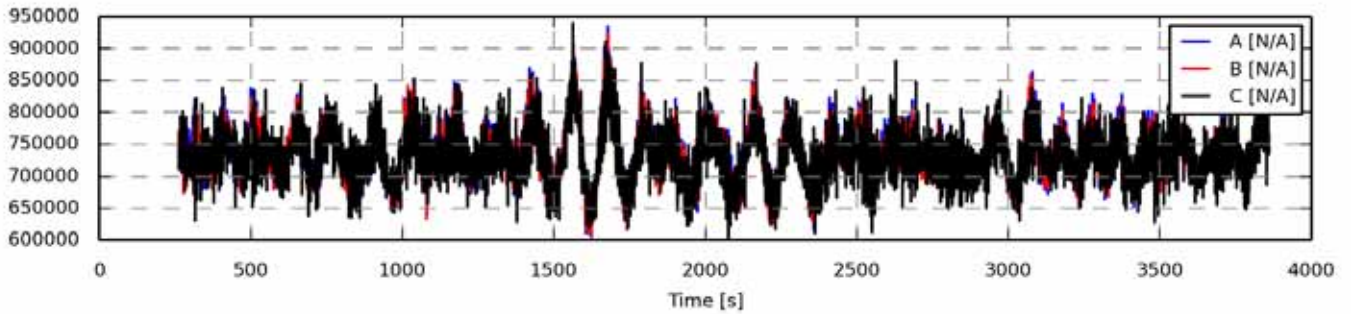


Figure 1229 - Full length time series

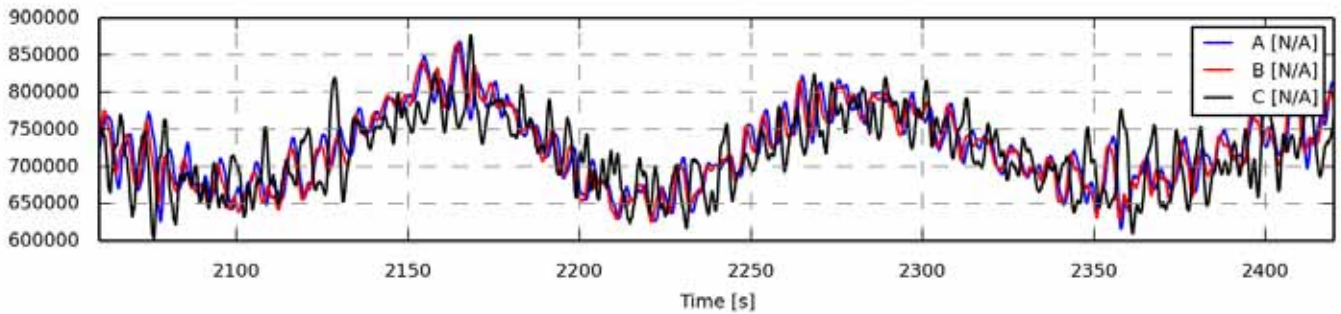


Figure 1230 - Zoom of time series

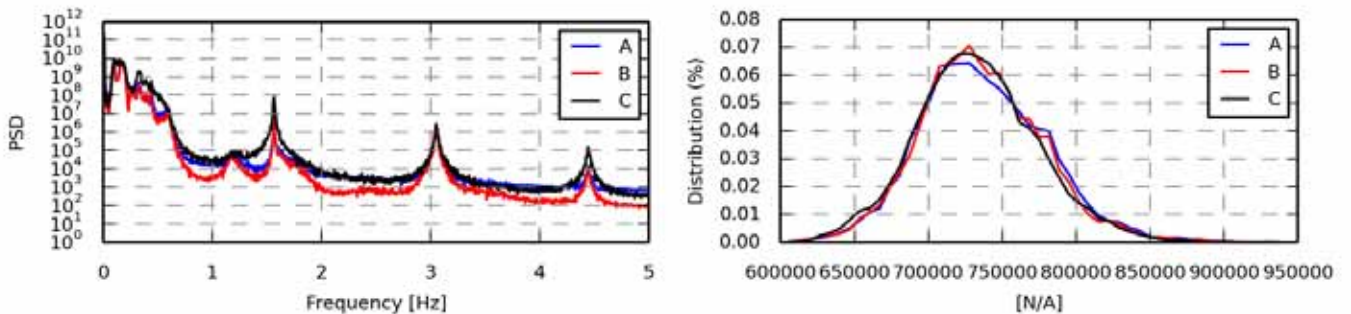


Figure 1231 - Power spectrum density

Statistics	A	B	C
Min	6.0479e+05	6.0843e+05	6.0304e+05
Max	9.3400e+05	9.2484e+05	9.4000e+05
Mean	7.3723e+05	7.3576e+05	7.3272e+05
Std	4.3196e+04	4.1728e+04	4.1469e+04
Skewness	0.3622	0.3586	0.2786
Kurtosis	0.4595	0.5850	0.3754

Figure 1232 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	4.5051e+04	4.1786e+04	5.7832e+04
Eq (m=4)	6.2890e+04	5.9154e+04	7.4849e+04
Eq (m=6)	9.6793e+04	9.2549e+04	1.0517e+05
Eq (m=8)	1.2550e+05	1.2073e+05	1.3122e+05
Eq (m=10)	1.4889e+05	1.4348e+05	1.5302e+05
Eq (m=12)	1.6791e+05	1.6184e+05	1.7112e+05

Article XIV. oc4_p2_load_case_3-3

Generated 22-04-2014 10:04

Section 14.01 oc4_p2_load_case_3-3: WSP gl. coo.,Vy [m/s]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-3.sel (01-03-2014 03:12)	3	Free wind speed Vy, gl. coo, of gl. pos 0.00, 0.00, -90.00
B	WAMsim/oc4_p2_load_case_3-3.sel (01-04-2014 12:47)	3	Free wind speed Vy, gl. coo, of gl. pos 0.00, 0.00, -90.00
C	hawc2/oc4_p2_load_case_3-3.sel (31-03-2014 15:35)	3	Free wind speed Vy, gl. coo, of gl. pos 0.00, 0.00, -90.00

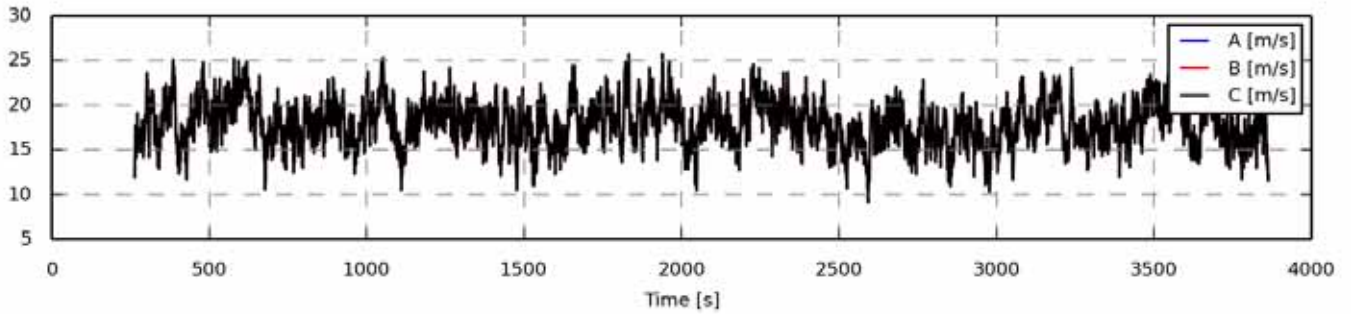


Figure 1233 - Full length time series

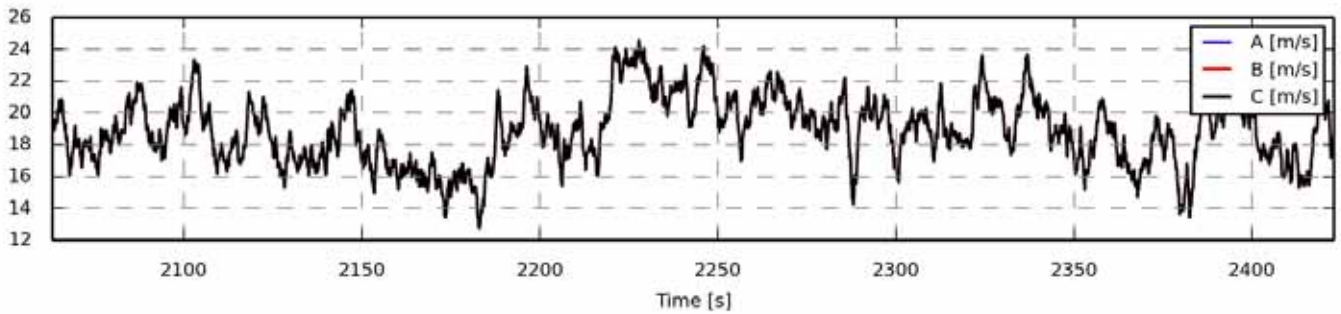


Figure 1234 - Zoom of time series

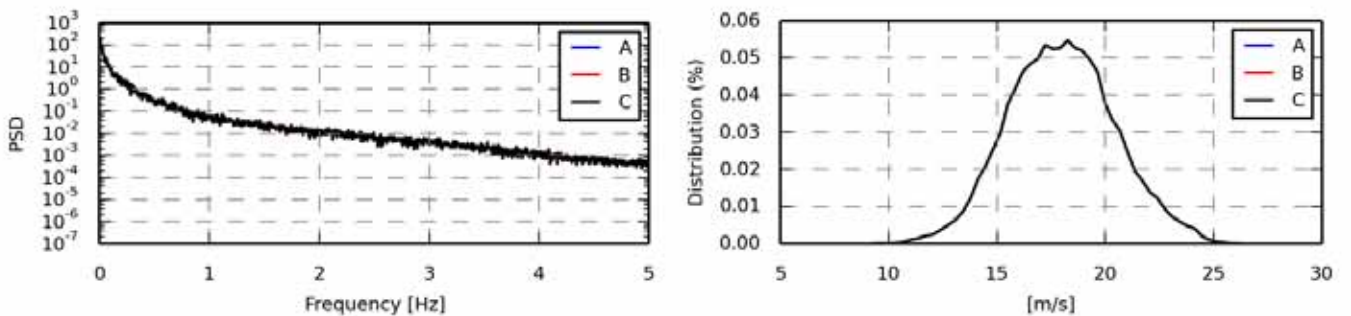


Figure 1235 - Power spectrum density

Statistics	A	B	C
Min	9.1150	9.1150	9.1150
Max	26.3700	26.3700	26.3700
Mean	17.9861	17.9861	17.9861
Std	2.4545	2.4545	2.4545
Skewness	0.0743	0.0743	0.0743
Kurtosis	-0.1223	-0.1223	-0.1223

Figure 1236 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	2.8772	2.8772	2.8772
Eq (m=4)	3.8808	3.8808	3.8808
Eq (m=6)	5.6355	5.6355	5.6355
Eq (m=8)	7.0328	7.0328	7.0328
Eq (m=10)	8.1448	8.1448	8.1448
Eq (m=12)	9.0443	9.0443	9.0443

Section 14.02 oc4_p2_load_case_3-3: Water surf. [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-3.sel (01-03-2014 03:12)	5	Water surface gl. coo, at gl. coo, x,y= 0.00, 0.00
B	WAMsim/oc4_p2_load_case_3-3.sel (01-04-2014 12:47)	5	Constant value
C	hawc2/oc4_p2_load_case_3-3.sel (31-03-2014 15:35)	5	Water surface gl. coo, at gl. coo, x,y= 0.00, 0.00

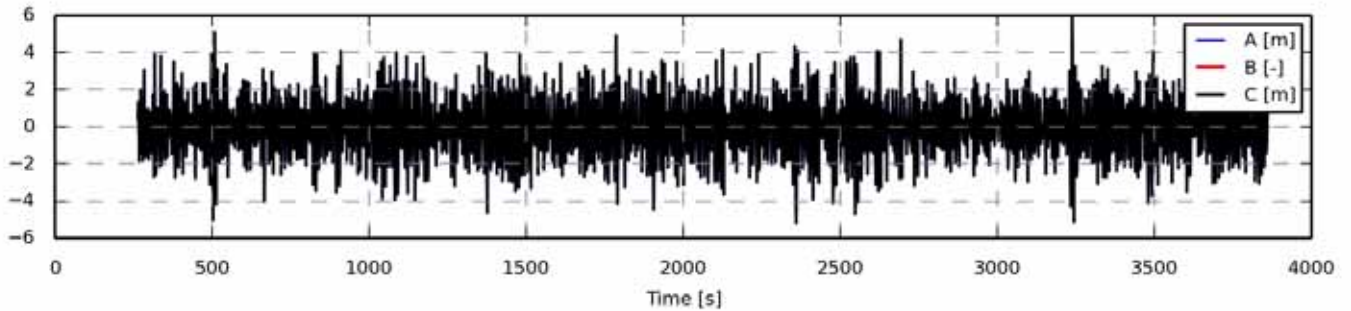


Figure 1237 - Full length time series

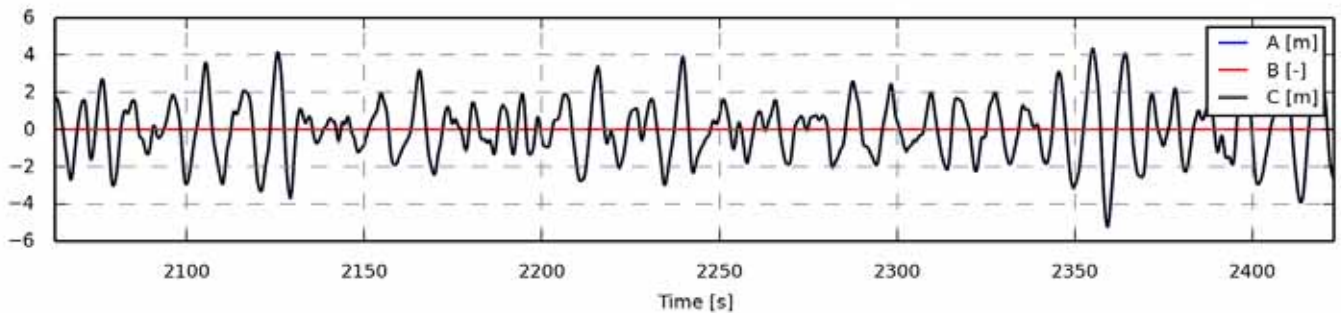


Figure 1238 - Zoom of time series

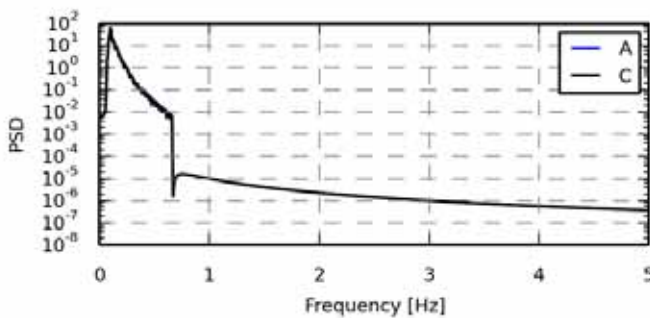


Figure 1239 - Power spectrum density

Statistics	A	B	C
Min	-5.1966	0.0000	-5.1928
Max	5.8607	0.0000	5.8597
Mean	0.0009	0.0000	0.0009
Std	1.4859	0.0000	1.4847
Skewness	0.0193	0.0000	0.0192
Kurtosis	-0.0329	-3.0000	-0.0328

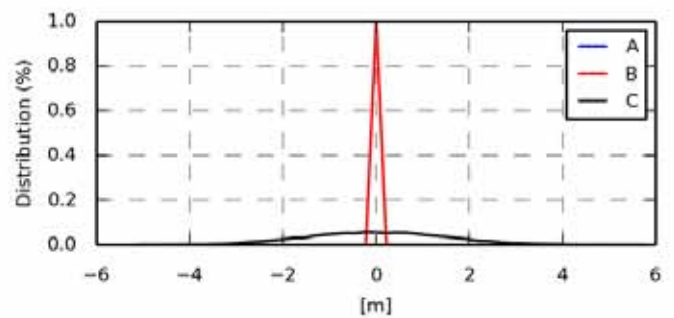


Figure 1240 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	2.2965	-	2.2941
Eq (m=4)	2.9419	-	2.9391
Eq (m=6)	3.9523	-	3.9495
Eq (m=8)	4.7503	-	4.7477
Eq (m=10)	5.4109	-	5.4083
Eq (m=12)	5.9650	-	5.9623

Section 14.03 oc4_p2_load_case_3-3: DLL inp 1: 9 [-]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-3.sel (01-03-2014 03:12)	6	DLL : 1 inpvec : 9 electrical power generator [kw]
B	WAMsim/oc4_p2_load_case_3-3.sel (01-04-2014 12:47)	6	DLL : 1 inpvec : 9 electrical power generator [kw]
C	hawc2/oc4_p2_load_case_3-3.sel (31-03-2014 15:35)	6	DLL : 1 inpvec : 9 electrical power generator [kw]

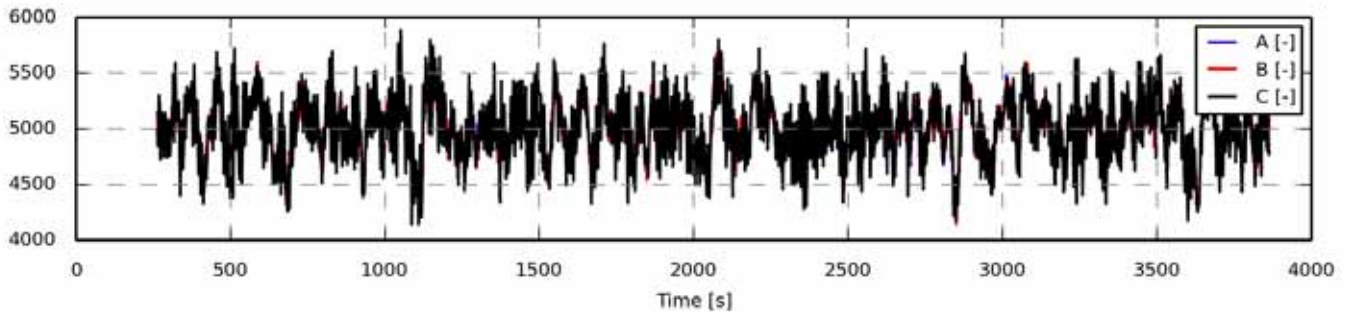


Figure 1241 - Full length time series

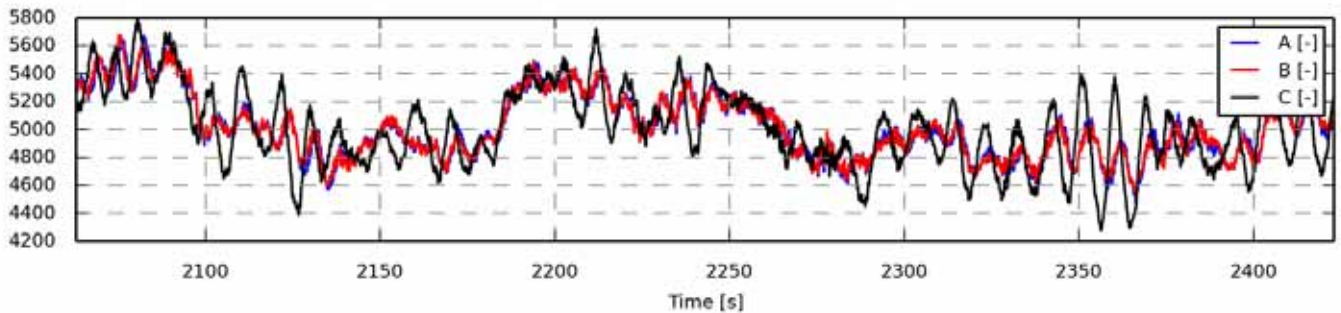


Figure 1242 - Zoom of time series

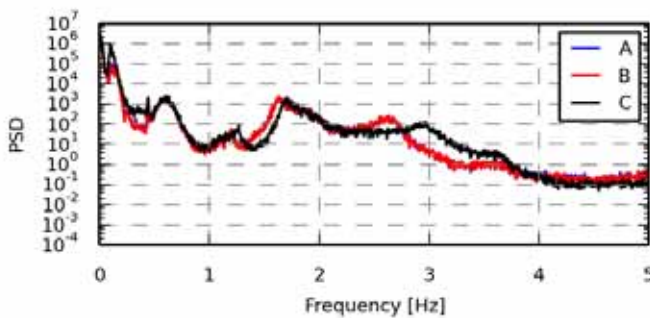


Figure 1243 - Power spectrum density

Statistics	A	B	C
Min	4.1778e+03	4.1408e+03	4.1399e+03
Max	5.6708e+03	5.6798e+03	5.8821e+03
Mean	5.0001e+03	5.0000e+03	4.9999e+03
Std	223.1337	220.8712	272.2668
Skewness	-0.1814	-0.2078	-0.1061
Kurtosis	-0.1009	-0.0195	-0.2167

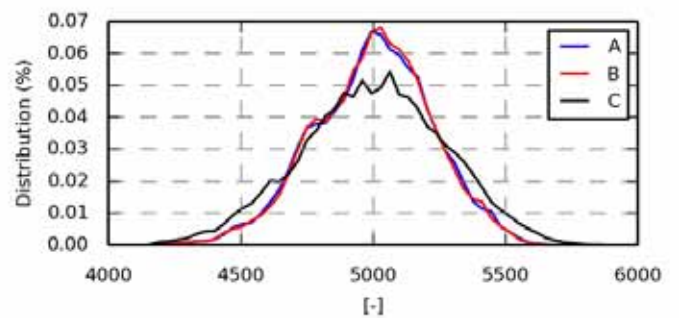


Figure 1244 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	223.0909	217.4902	323.2145
Eq (m=4)	314.2866	310.0414	432.3857
Eq (m=6)	472.9277	473.2044	610.1904
Eq (m=8)	596.2945	601.8663	746.2031
Eq (m=10)	693.4651	704.3893	852.9081
Eq (m=12)	771.9233	787.7931	938.9059

Section 14.04 oc4_p2_load_case_3-3: bea1 angle_speed [rpm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-3.sel (01-03-2014 03:12)	9	shaft_rot angle speed
B	WAMsim/oc4_p2_load_case_3-3.sel (01-04-2014 12:47)	9	shaft_rot angle speed
C	hawc2/oc4_p2_load_case_3-3.sel (31-03-2014 15:35)	9	shaft_rot angle speed

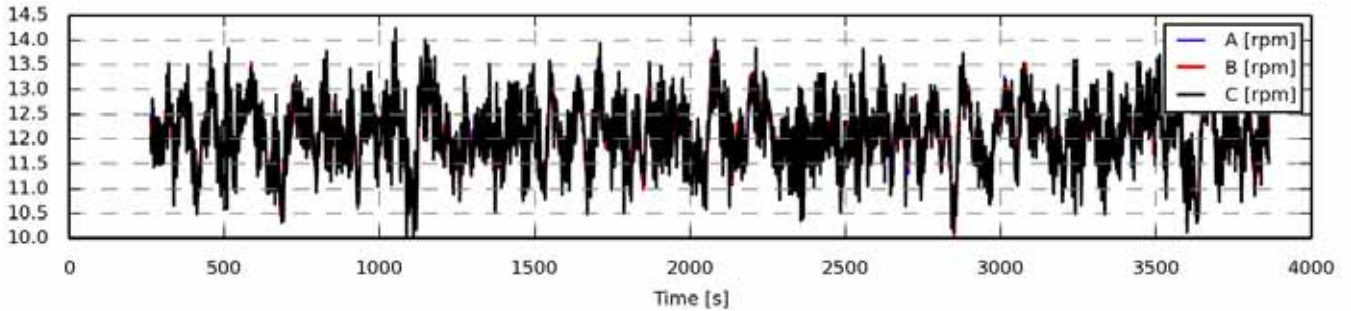


Figure 1245 - Full length time series

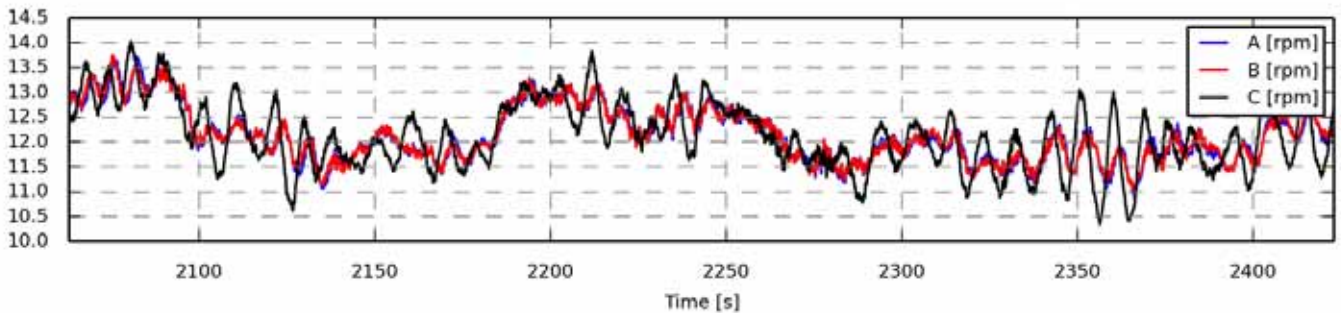


Figure 1246 - Zoom of time series

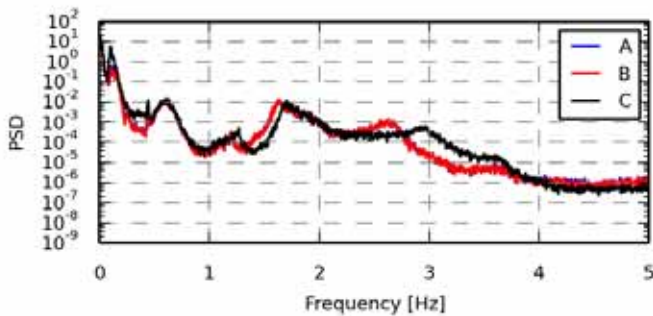


Figure 1247 - Power spectrum density

Statistics	A	B	C
Min	10.1122	10.0223	10.0211
Max	13.7219	13.7439	14.2313
Mean	12.1003	12.1001	12.0998
Std	0.5399	0.5344	0.6588
Skewness	-0.1815	-0.2079	-0.1062
Kurtosis	-0.1010	-0.0196	-0.2168

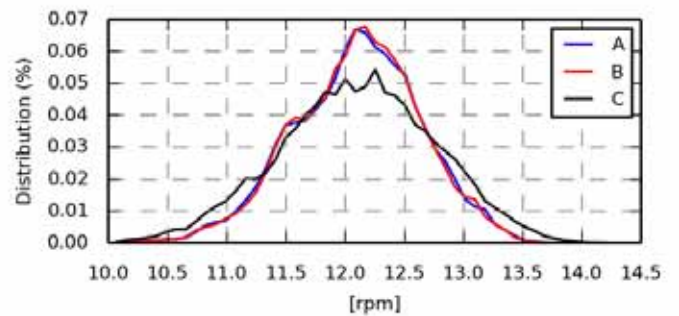


Figure 1248 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.5385	0.5247	0.7807
Eq (m=4)	0.7595	0.7487	1.0447
Eq (m=6)	1.1434	1.1432	1.4745
Eq (m=8)	1.4417	1.4545	1.8033
Eq (m=10)	1.6766	1.7026	2.0611
Eq (m=12)	1.8663	1.9046	2.2690

Section 14.05 oc4_p2_load_case_3-3: bea1 angle [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-3.sel (01-03-2014 03:12)	14	pitch1 angle
B	WAMsim/oc4_p2_load_case_3-3.sel (01-04-2014 12:47)	14	pitch1 angle
C	hawc2/oc4_p2_load_case_3-3.sel (31-03-2014 15:35)	14	pitch1 angle

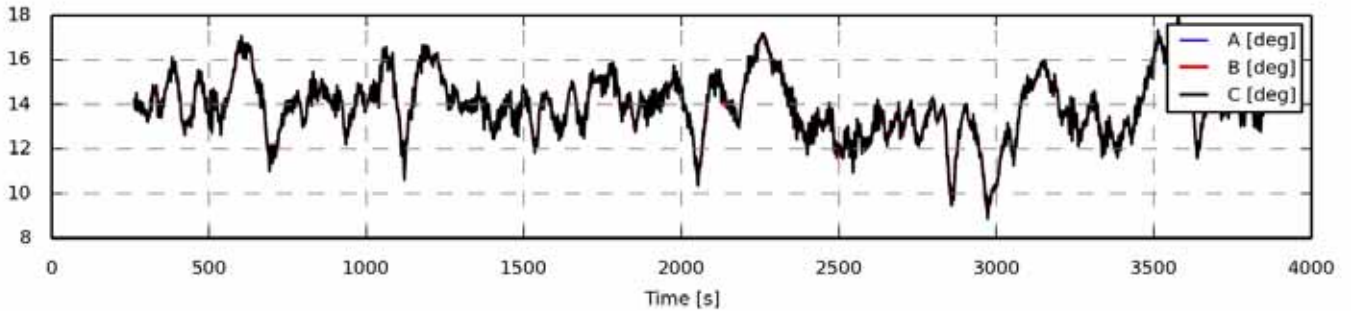


Figure 1249 - Full length time series

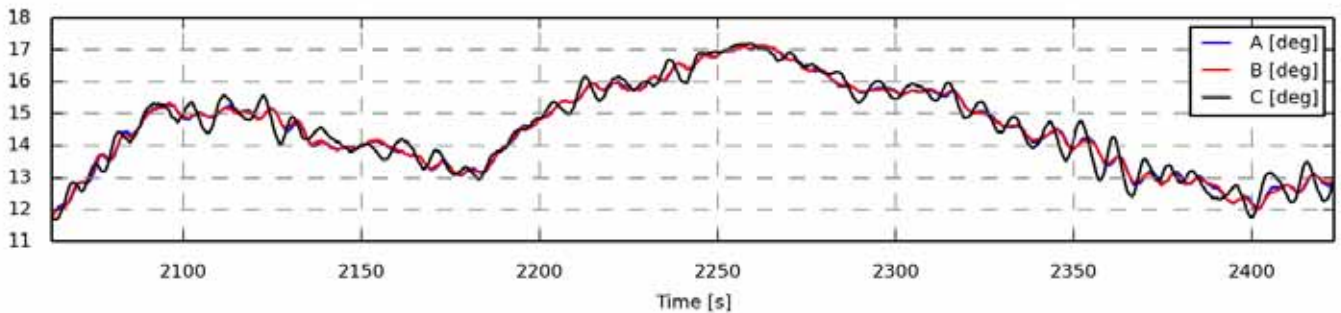


Figure 1250 - Zoom of time series

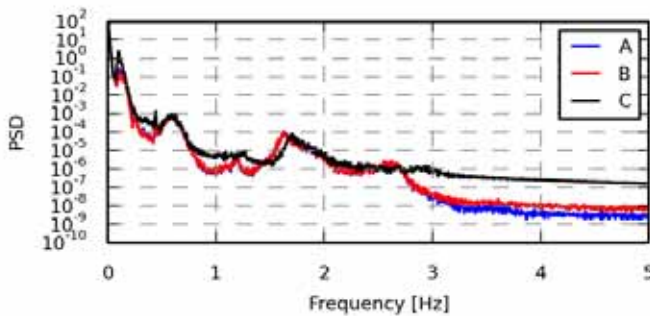


Figure 1251 - Power spectrum density

Statistics	A	B	C
Min	9.1460	9.2572	8.8905
Max	17.8797	17.8269	17.9980
Mean	13.9167	13.9171	13.9274
Std	1.3380	1.3386	1.3591
Skewness	-0.0718	-0.0762	-0.0749
Kurtosis	0.6531	0.6522	0.5526

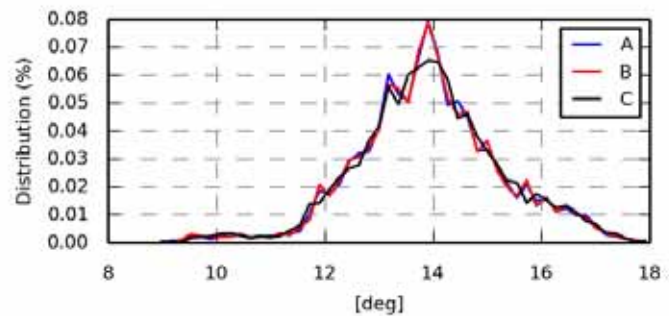


Figure 1252 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.7751	0.7630	0.8586
Eq (m=4)	1.2942	1.2743	1.3921
Eq (m=6)	2.2750	2.2377	2.4075
Eq (m=8)	3.0934	3.0396	3.2516
Eq (m=10)	3.7553	3.6879	3.9330
Eq (m=12)	4.2909	4.2123	4.4849

Section 14.06 oc4_p2_load_case_3-3: State pos x coo: global [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-3.sel (01-03-2014 03:12)	19	State pos x Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
B	WAMsim/oc4_p2_load_case_3-3.sel (01-04-2014 12:47)	19	State pos x Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
C	hawc2/oc4_p2_load_case_3-3.sel (31-03-2014 15:35)	19	State pos x Mbdy:mc E-nr: 8 Z-rel:0.00 coo: global platform translation in surge sway and heave

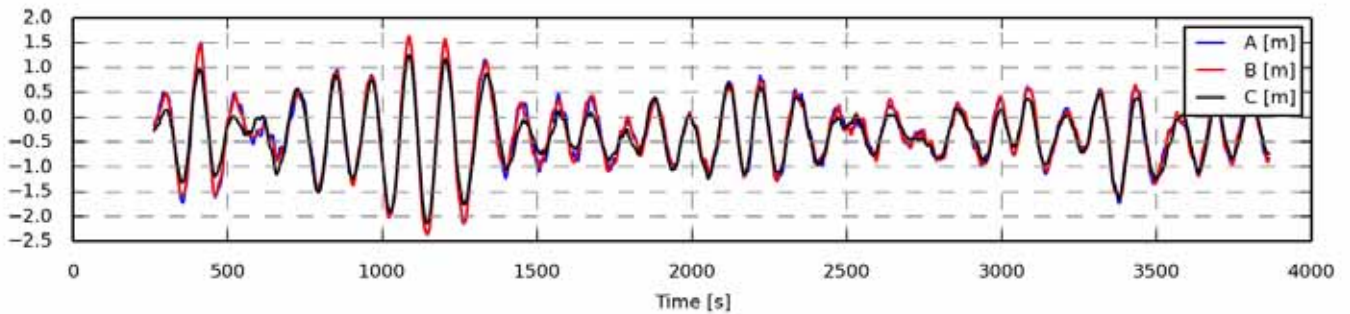


Figure 1253 - Full length time series

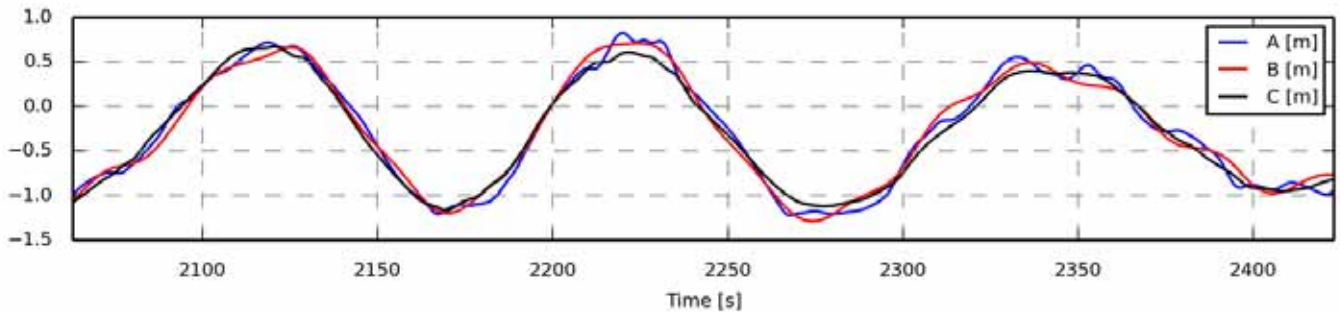


Figure 1254 - Zoom of time series

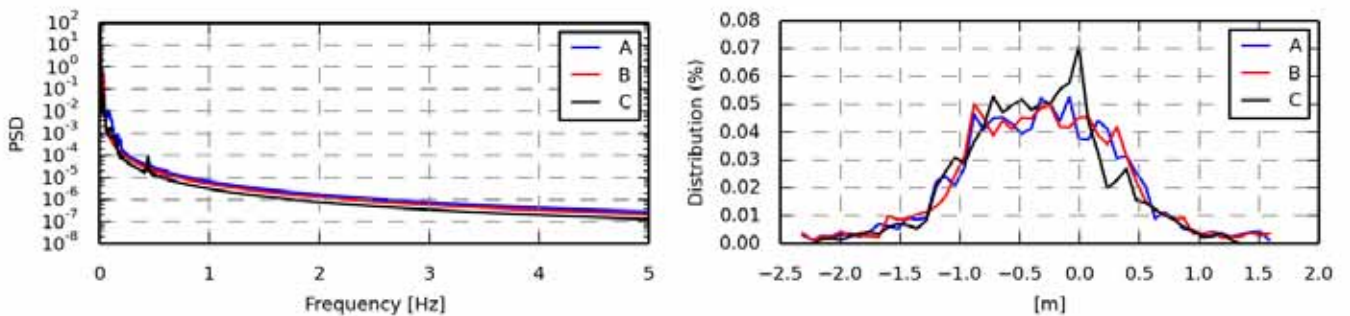


Figure 1255 - Power spectrum density

Statistics	A	B	C
Min	-2.3293	-2.3549	-2.1348
Max	1.5721	1.6263	1.2450
Mean	-0.3230	-0.3222	-0.3579
Std	0.6601	0.6604	0.5770
Skewness	-0.0523	-0.0570	-0.0757
Kurtosis	0.2737	0.3301	0.1241

Figure 1256 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.4256	0.4269	0.3639
Eq (m=4)	0.6882	0.6915	0.5889
Eq (m=6)	1.1562	1.1672	0.9892
Eq (m=8)	1.5259	1.5458	1.3071
Eq (m=10)	1.8135	1.8412	1.5564
Eq (m=12)	2.0401	2.0742	1.7542

Section 14.07 oc4_p2_load_case_3-3: State pos y coo: global [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-3.sel (01-03-2014 03:12)	20	State pos y Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
B	WAMsim/oc4_p2_load_case_3-3.sel (01-04-2014 12:47)	20	State pos y Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
C	hawc2/oc4_p2_load_case_3-3.sel (31-03-2014 15:35)	20	State pos y Mbdy:mc E-nr: 8 Z-rel:0.00 coo: global platform translation in surge sway and heave

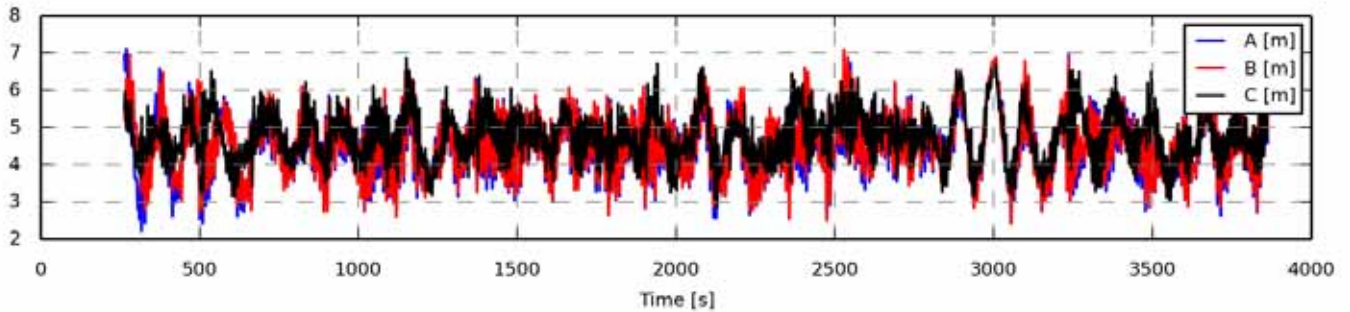


Figure 1257 - Full length time series

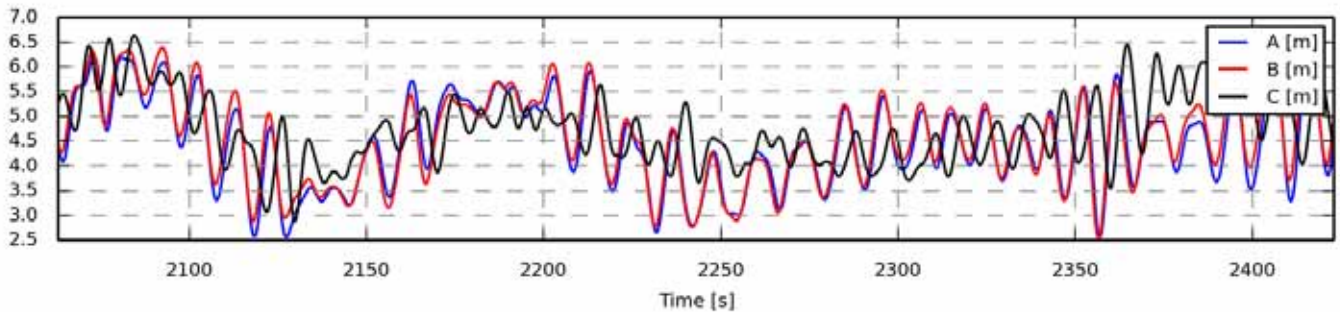


Figure 1258 - Zoom of time series

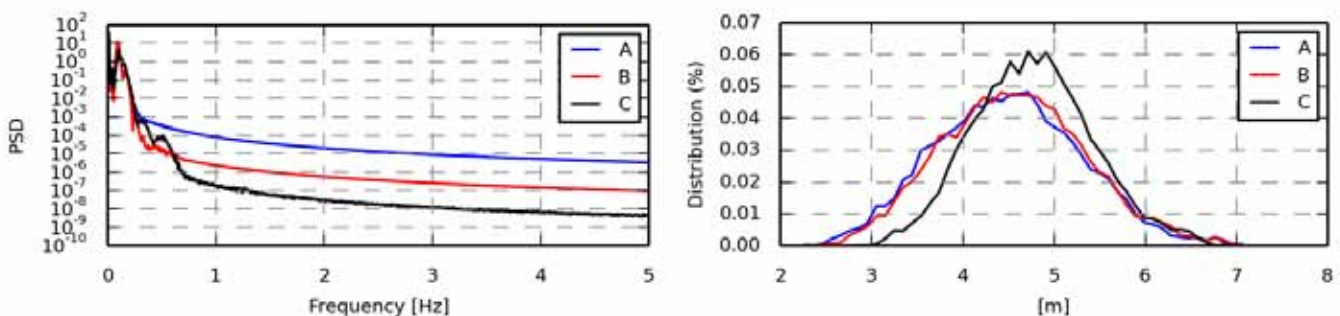


Figure 1259 - Power spectrum density

Statistics	A	B	C
Min	2.2203	2.4260	2.8832
Max	7.1129	7.0923	6.8853
Mean	4.4955	4.5580	4.7695
Std	0.8022	0.7855	0.6512
Skewness	0.1544	0.1752	0.1757
Kurtosis	-0.2168	-0.2106	-0.1403

Figure 1260 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.8565	0.8524	0.6772
Eq (m=4)	1.1553	1.1508	0.9289
Eq (m=6)	1.6460	1.6408	1.3583
Eq (m=8)	2.0308	2.0211	1.6912
Eq (m=10)	2.3391	2.3201	1.9486
Eq (m=12)	2.5912	2.5594	2.1519

Section 14.08 oc4_p2_load_case_3-3: State pos z coo: global [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-3.sel (01-03-2014 03:12)	21	State pos z Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
B	WAMsim/oc4_p2_load_case_3-3.sel (01-04-2014 12:47)	21	State pos z Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
C	hawc2/oc4_p2_load_case_3-3.sel (31-03-2014 15:35)	21	State pos z Mbdy:mc E-nr: 8 Z-rel:0.00 coo: global platform translation in surge sway and heave

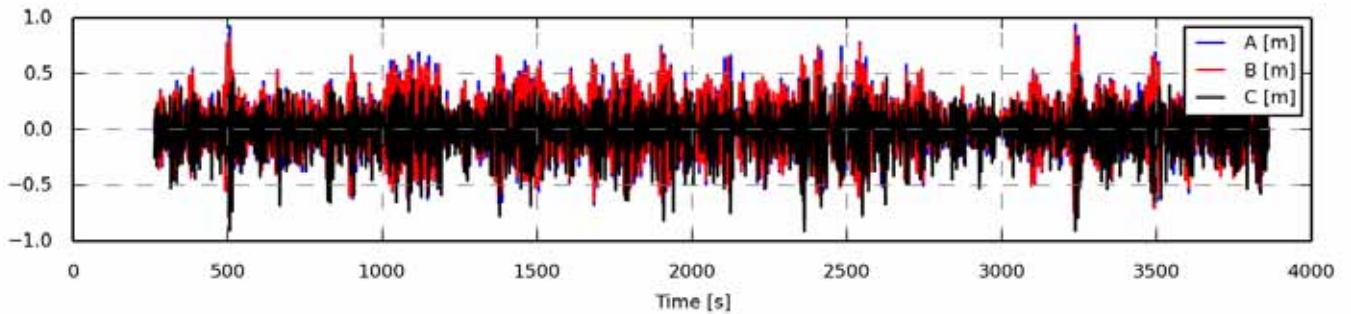


Figure 1261 - Full length time series

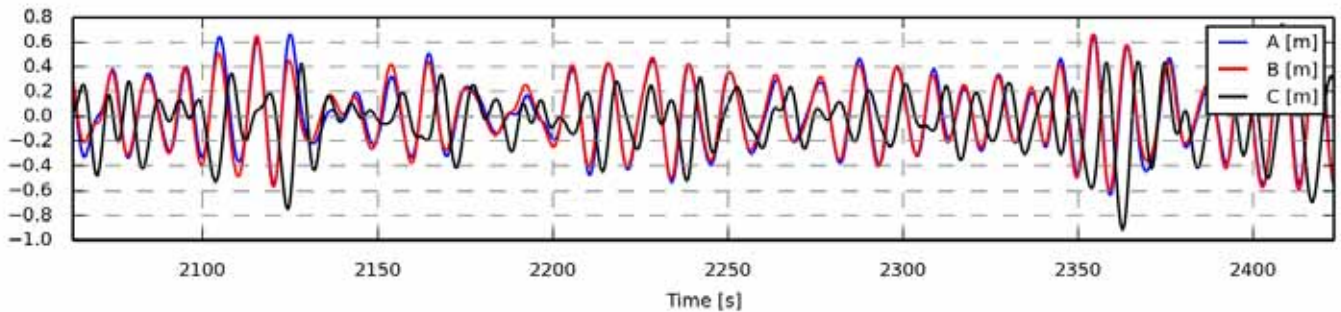


Figure 1262 - Zoom of time series

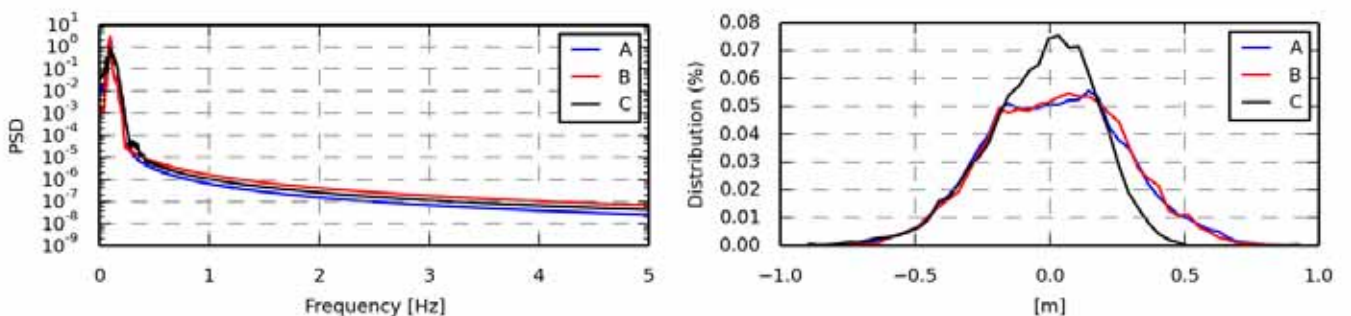


Figure 1263 - Power spectrum density

Statistics	A	B	C
Min	-0.7215	-0.7755	-0.9126
Max	0.9414	0.8810	0.4960
Mean	0.0218	0.0267	-0.0330
Std	0.2564	0.2508	0.2085
Skewness	0.0965	0.0032	-0.5601
Kurtosis	-0.2059	-0.2710	0.4504

Figure 1264 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.3590	0.3524	0.3028
Eq (m=4)	0.4679	0.4584	0.3934
Eq (m=6)	0.6343	0.6201	0.5351
Eq (m=8)	0.7588	0.7412	0.6434
Eq (m=10)	0.8570	0.8375	0.7290
Eq (m=12)	0.9372	0.9165	0.7980

Section 14.09 oc4_p2_load_case_3-3: proj_ang tx coo: global [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-3.sel (01-03-2014 03:12)	22	State_rot proj_ang tx Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
B	WAMsim/oc4_p2_load_case_3-3.sel (01-04-2014 12:47)	22	State_rot proj_ang tx Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
C	hawc2/oc4_p2_load_case_3-3.sel (31-03-2014 15:35)	22	State_rot proj_ang tx Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw

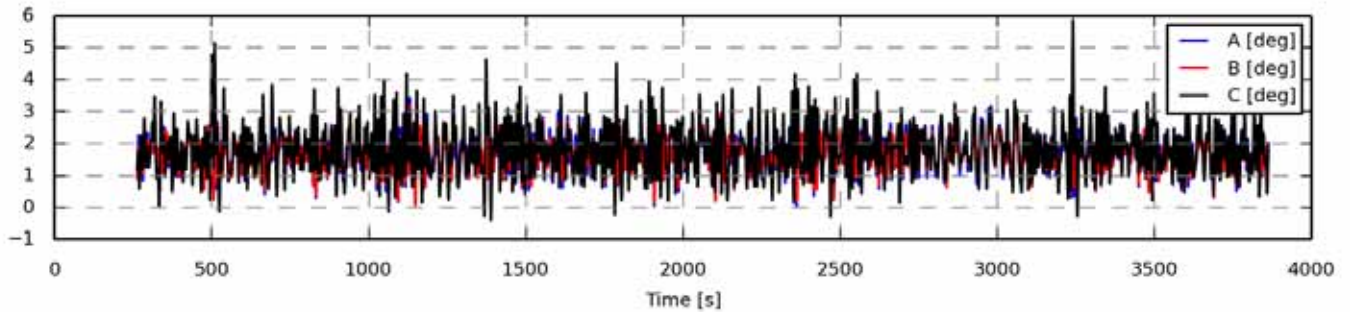


Figure 1265 - Full length time series

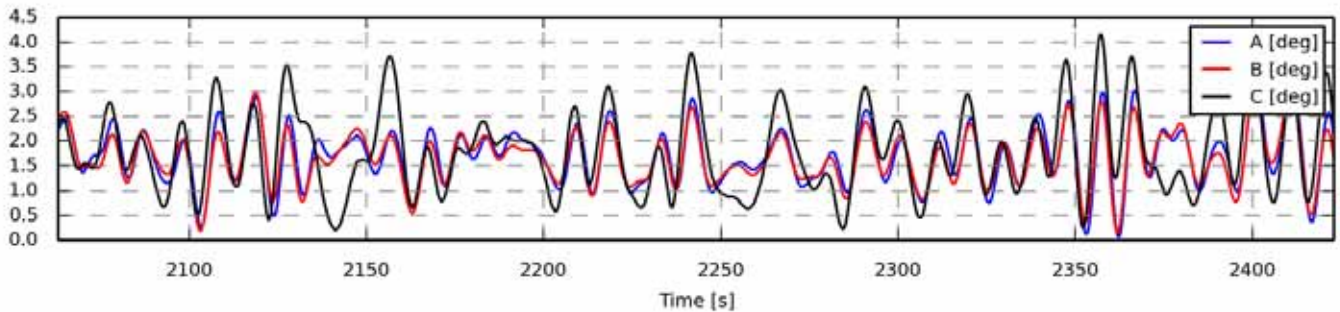


Figure 1266 - Zoom of time series

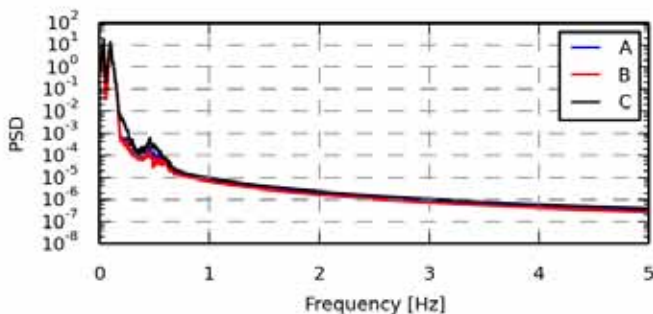


Figure 1267 - Power spectrum density

Statistics	A	B	C
Min	0.0405	0.0679	-0.4119
Max	3.8343	3.7167	5.8811
Mean	1.7501	1.7053	1.8247
Std	0.5687	0.5200	0.7500
Skewness	0.0610	0.0314	0.4132
Kurtosis	-0.2606	-0.1851	0.6393

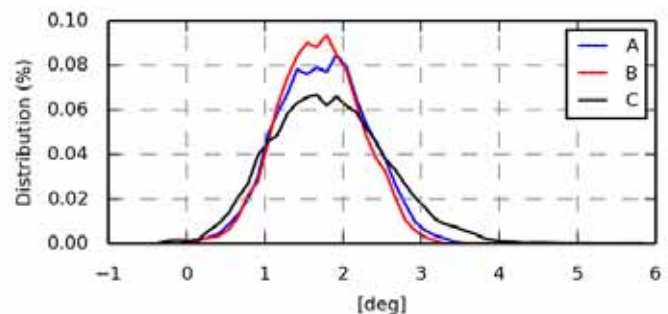


Figure 1268 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.7490	0.6743	0.9705
Eq (m=4)	0.9877	0.8953	1.3228
Eq (m=6)	1.3582	1.2428	1.9270
Eq (m=8)	1.6385	1.5101	2.4374
Eq (m=10)	1.8599	1.7253	2.8666
Eq (m=12)	2.0395	1.9033	3.2233

Section 14.10 oc4_p2_load_case_3-3: proj_ang ty coo: global [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-3.sel (01-03-2014 03:12)	23	State_rot proj_ang ty Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
B	WAMsim/oc4_p2_load_case_3-3.sel (01-04-2014 12:47)	23	State_rot proj_ang ty Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
C	hawc2/oc4_p2_load_case_3-3.sel (31-03-2014 15:35)	23	State_rot proj_ang ty Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw

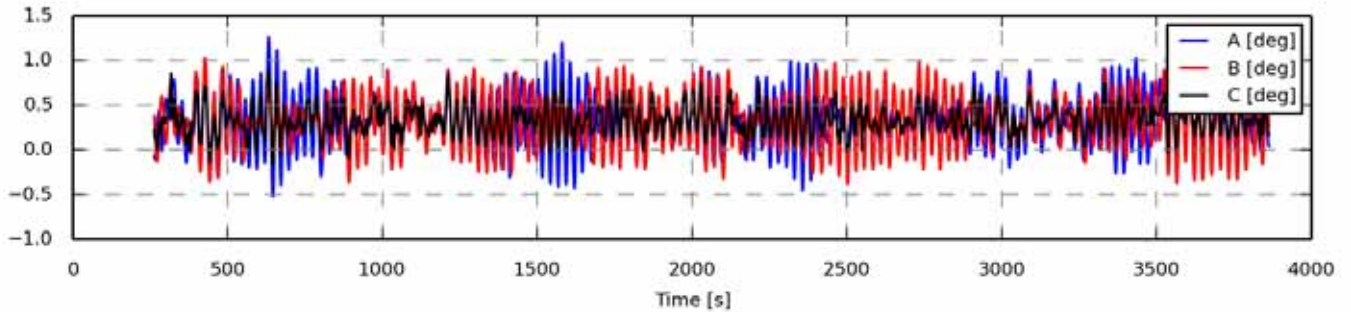


Figure 1269 - Full length time series

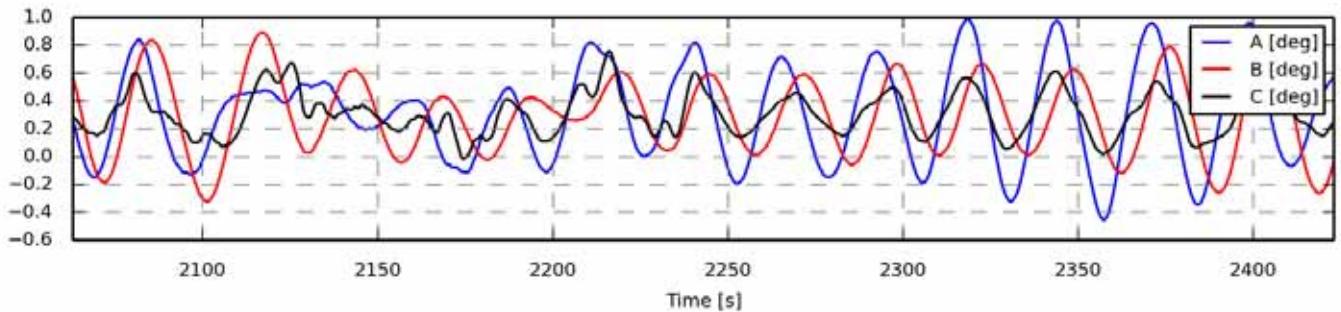


Figure 1270 - Zoom of time series

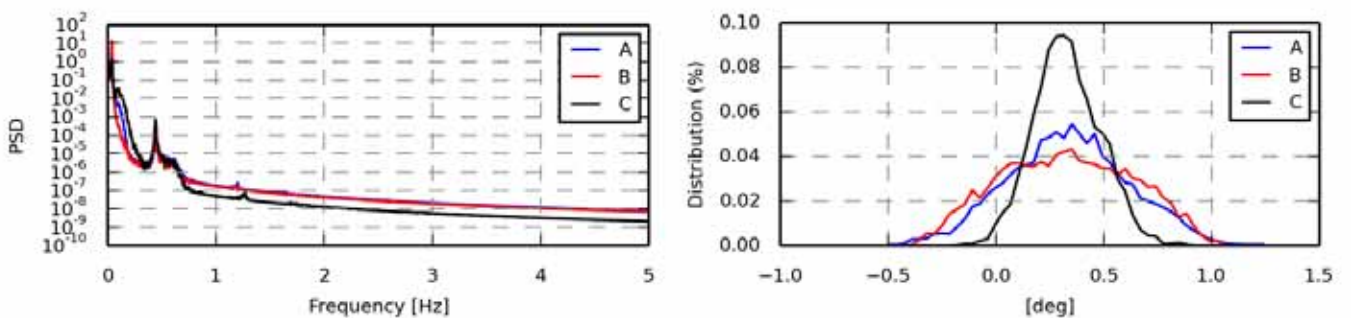


Figure 1271 - Power spectrum density

Statistics	A	B	C
Min	-0.5180	-0.3863	-0.1680
Max	1.2553	1.0514	0.8753
Mean	0.3352	0.3257	0.3297
Std	0.2830	0.3048	0.1553
Skewness	0.0356	0.0109	0.1755
Kurtosis	-0.1662	-0.8006	0.0227

Figure 1272 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.2868	0.2950	0.1612
Eq (m=4)	0.4053	0.4054	0.2290
Eq (m=6)	0.5943	0.5687	0.3402
Eq (m=8)	0.7379	0.6832	0.4269
Eq (m=10)	0.8509	0.7688	0.4961
Eq (m=12)	0.9422	0.8359	0.5524

Section 14.11 oc4_p2_load_case_3-3: proj_ang tz coo: global [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-3.sel (01-03-2014 03:12)	24	State_rot proj_ang tz Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
B	WAMsim/oc4_p2_load_case_3-3.sel (01-04-2014 12:47)	24	State_rot proj_ang tz Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
C	hawc2/oc4_p2_load_case_3-3.sel (31-03-2014 15:35)	24	State_rot proj_ang tz Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw

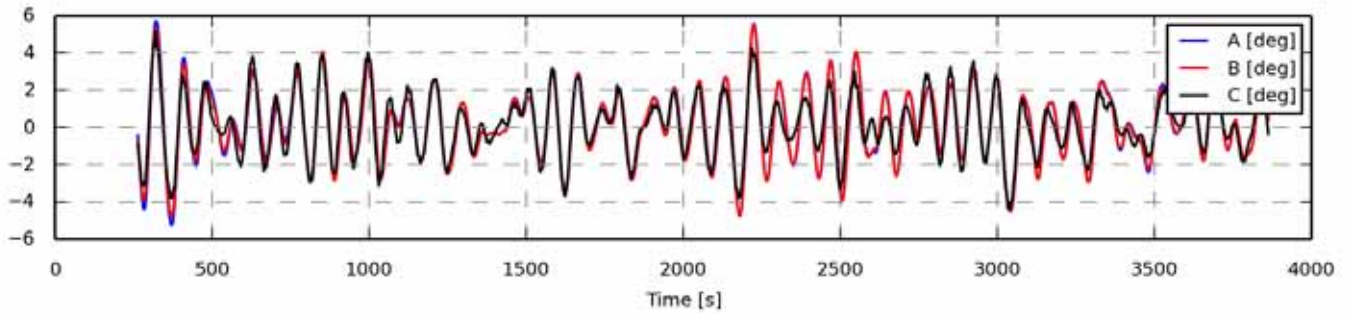


Figure 1273 - Full length time series

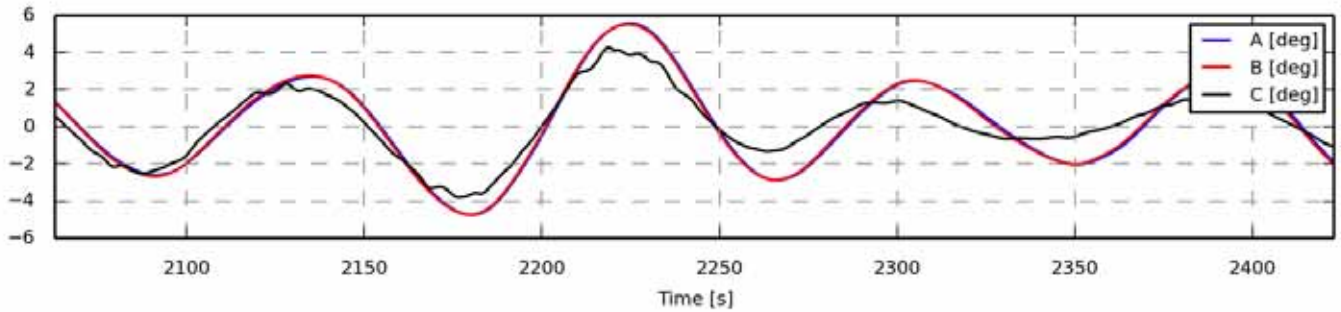


Figure 1274 - Zoom of time series

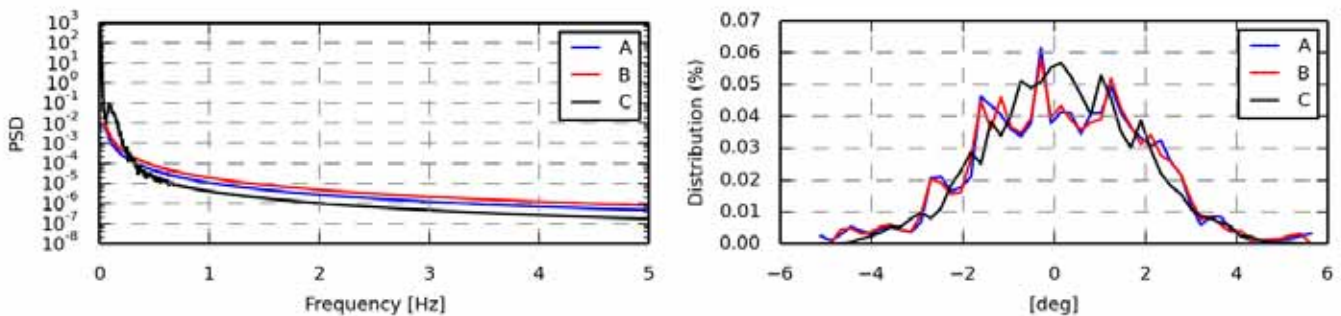


Figure 1275 - Power spectrum density

Statistics	A	B	C
Min	-5.2241	-4.7663	-4.4165
Max	5.7443	5.5108	5.1852
Mean	0.1679	0.1672	0.1789
Std	1.8444	1.8231	1.6158
Skewness	-0.0533	-0.0445	-0.0132
Kurtosis	-0.0440	-0.1818	-0.2152

Figure 1276 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	1.2640	1.2462	1.1446
Eq (m=4)	1.9755	1.9353	1.7627
Eq (m=6)	3.2340	3.1331	2.8094
Eq (m=8)	4.2466	4.0824	3.6277
Eq (m=10)	5.0491	4.8294	4.2780
Eq (m=12)	5.6893	5.4234	4.8067

Section 14.12 oc4_p2_load_case_3-3: Mx coo: towertop [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-3.sel (01-03-2014 03:12)	37	MomentMx Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
B	WAMsim/oc4_p2_load_case_3-3.sel (01-04-2014 12:47)	37	MomentMx Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
C	hawc2/oc4_p2_load_case_3-3.sel (31-03-2014 15:35)	37	MomentMx Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment

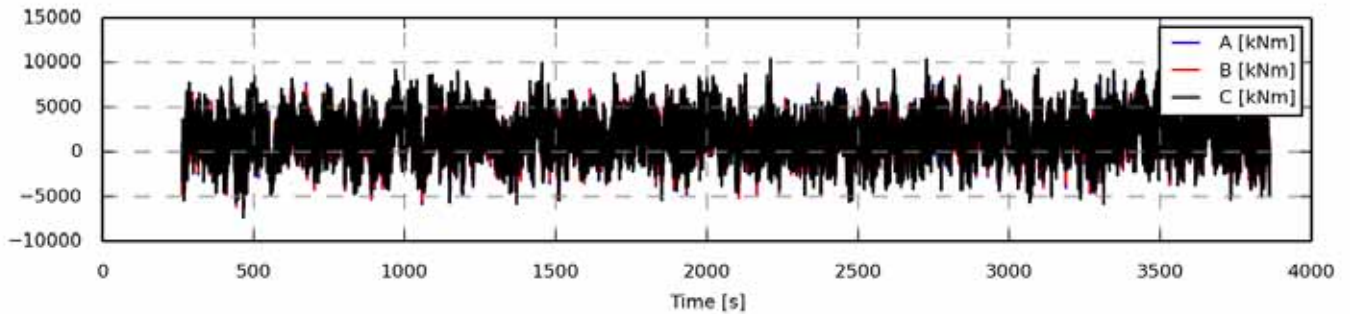


Figure 1277 - Full length time series

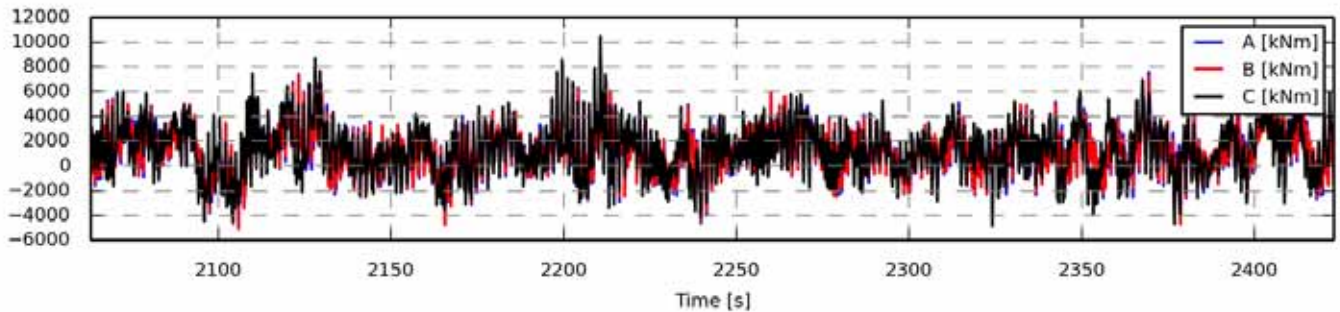


Figure 1278 - Zoom of time series

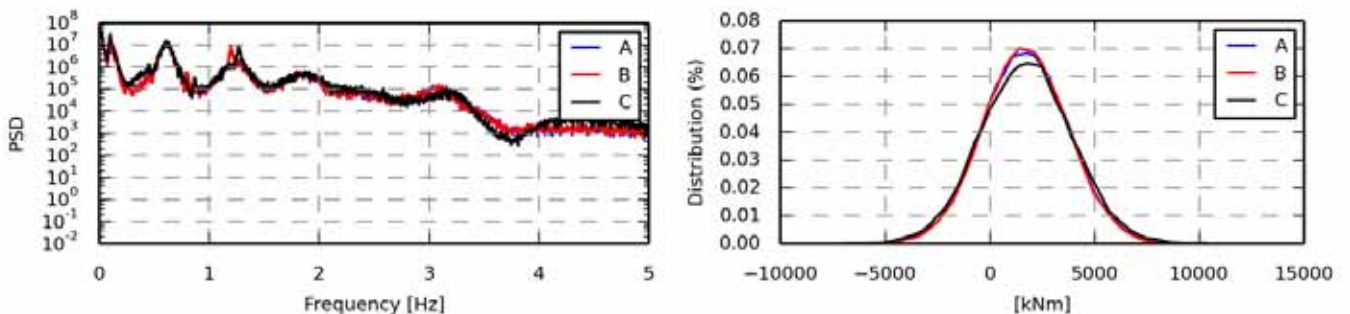


Figure 1279 - Power spectrum density

Statistics	A	B	C
Min	-6.0695e+03	-5.9934e+03	-7.3030e+03
Max	8.9101e+03	8.8824e+03	1.0467e+04
Mean	1.6985e+03	1.6905e+03	1.7258e+03
Std	2.0289e+03	2.0043e+03	2.1825e+03
Skewness	0.0058	0.0040	0.0295
Kurtosis	-0.0844	-0.0768	0.0049

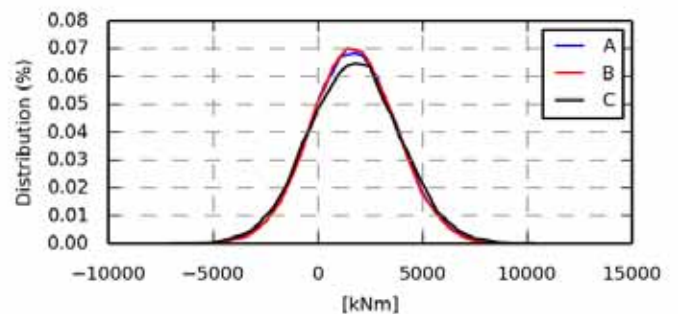


Figure 1280 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	4.6634e+03	4.6430e+03	4.9914e+03
Eq (m=4)	5.2024e+03	5.1629e+03	5.6391e+03
Eq (m=6)	6.2457e+03	6.1725e+03	6.8768e+03
Eq (m=8)	7.1840e+03	7.0877e+03	7.9744e+03
Eq (m=10)	7.9797e+03	7.8673e+03	8.9074e+03
Eq (m=12)	8.6392e+03	8.5136e+03	9.6912e+03

Section 14.13 oc4_p2_load_case_3-3: My coo: towertop [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-3.sel (01-03-2014 03:12)	38	MomentMy Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
B	WAMsim/oc4_p2_load_case_3-3.sel (01-04-2014 12:47)	38	MomentMy Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
C	hawc2/oc4_p2_load_case_3-3.sel (31-03-2014 15:35)	38	MomentMy Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment

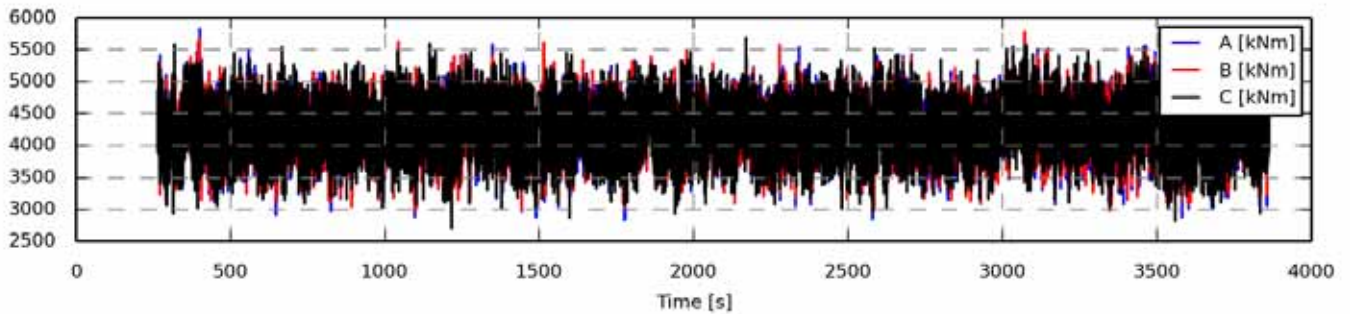


Figure 1281 - Full length time series

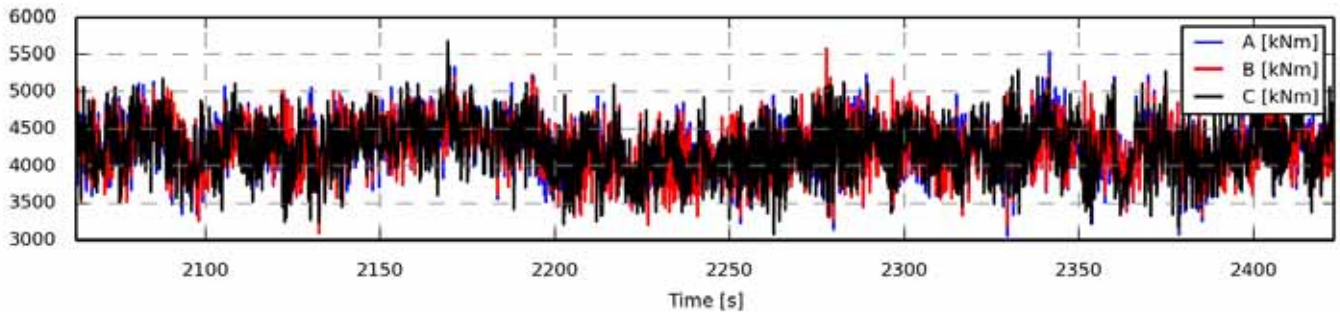


Figure 1282 - Zoom of time series

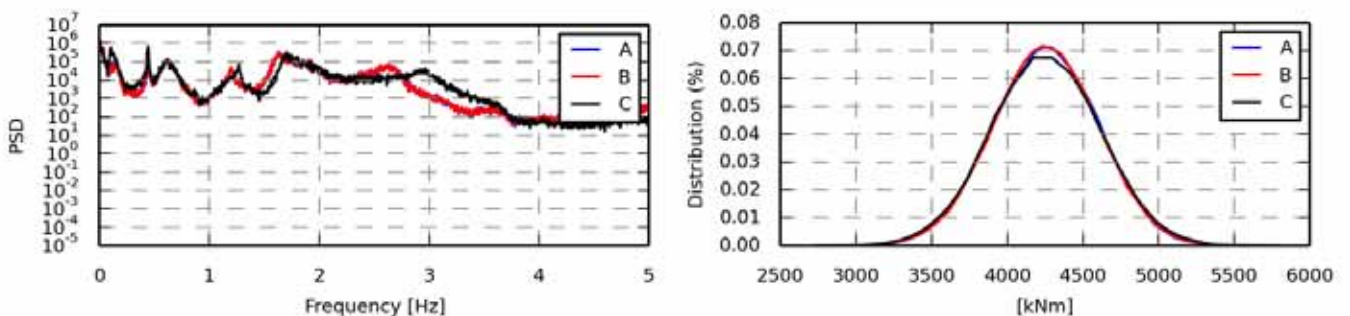


Figure 1283 - Power spectrum density

Statistics	A	B	C
Min	2.8372e+03	2.9320e+03	2.7058e+03
Max	5.8213e+03	5.7860e+03	5.6792e+03
Mean	4.2534e+03	4.2526e+03	4.2524e+03
Std	347.0321	346.1907	360.8092
Skewness	-0.0316	-0.0155	-0.0014
Kurtosis	-0.0103	0.0059	-0.0429

Figure 1284 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	1.1197e+03	1.1189e+03	1.1083e+03
Eq (m=4)	1.1699e+03	1.1680e+03	1.1694e+03
Eq (m=6)	1.3007e+03	1.2947e+03	1.3166e+03
Eq (m=8)	1.4362e+03	1.4248e+03	1.4610e+03
Eq (m=10)	1.5626e+03	1.5457e+03	1.5912e+03
Eq (m=12)	1.6757e+03	1.6536e+03	1.7056e+03

Section 14.14 oc4_p2_load_case_3-3: Mz coo: towertop [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-3.sel (01-03-2014 03:12)	39	MomentMz Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
B	WAMsim/oc4_p2_load_case_3-3.sel (01-04-2014 12:47)	39	MomentMz Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
C	hawc2/oc4_p2_load_case_3-3.sel (31-03-2014 15:35)	39	MomentMz Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment

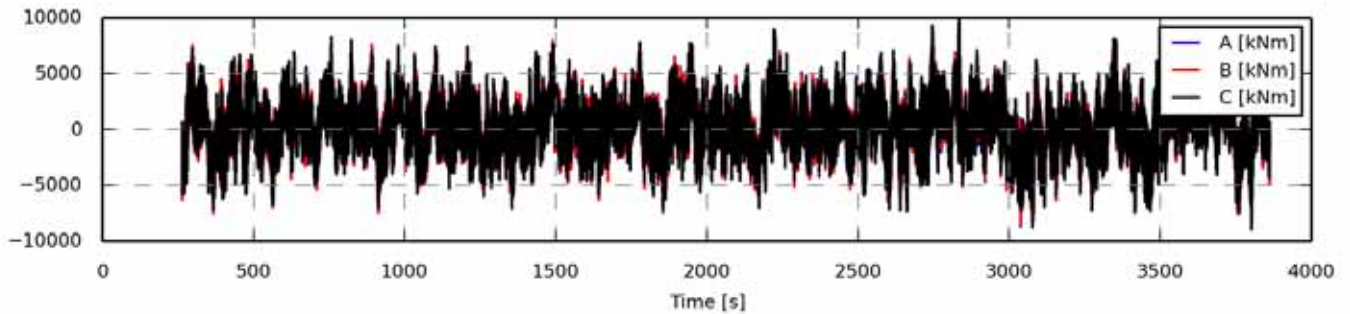


Figure 1285 - Full length time series

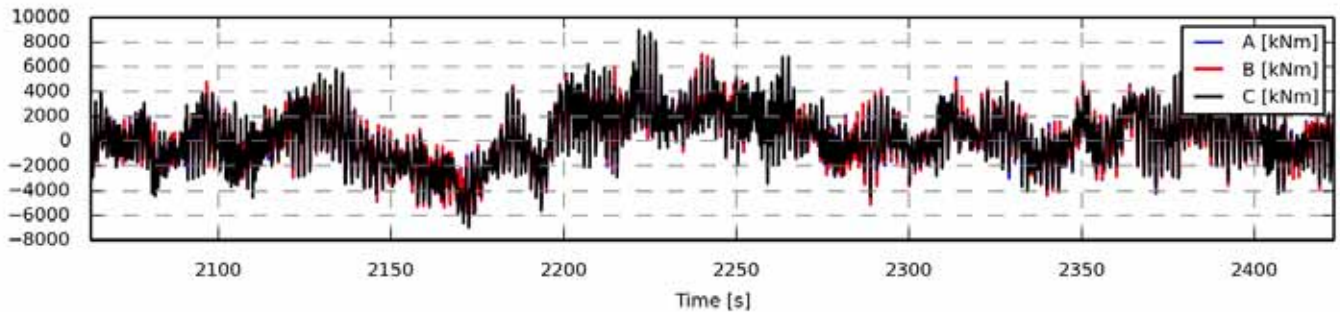


Figure 1286 - Zoom of time series

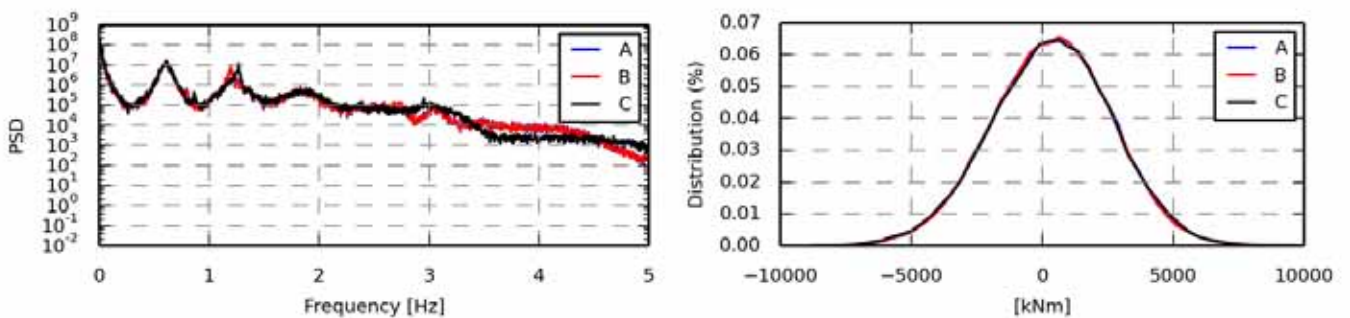


Figure 1287 - Power spectrum density

Statistics	A	B	C
Min	-8.6652e+03	-8.4773e+03	-8.9427e+03
Max	9.0534e+03	9.1221e+03	9.8383e+03
Mean	343.8992	339.2133	350.0930
Std	2.2856e+03	2.2830e+03	2.3245e+03
Skewness	-0.0697	-0.0705	-0.0760
Kurtosis	-0.0334	-0.0301	-0.0001

Figure 1288 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	4.6741e+03	4.6750e+03	4.8638e+03
Eq (m=4)	5.2563e+03	5.2574e+03	5.4681e+03
Eq (m=6)	6.5048e+03	6.4982e+03	6.7603e+03
Eq (m=8)	7.7043e+03	7.6805e+03	8.0002e+03
Eq (m=10)	8.7313e+03	8.6896e+03	9.0681e+03
Eq (m=12)	9.5808e+03	9.5248e+03	9.9605e+03

Section 14.15 oc4_p2_load_case_3-3: Mx coo: tower [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-3.sel (01-03-2014 03:12)	43	MomentMx Mbdy:tower nodenr: 1 coo: tower tower base bending moment
B	WAMsim/oc4_p2_load_case_3-3.sel (01-04-2014 12:47)	43	MomentMx Mbdy:tower nodenr: 1 coo: tower tower base bending moment
C	hawc2/oc4_p2_load_case_3-3.sel (31-03-2014 15:35)	43	MomentMx Mbdy:tower nodenr: 1 coo: tower tower base bending moment

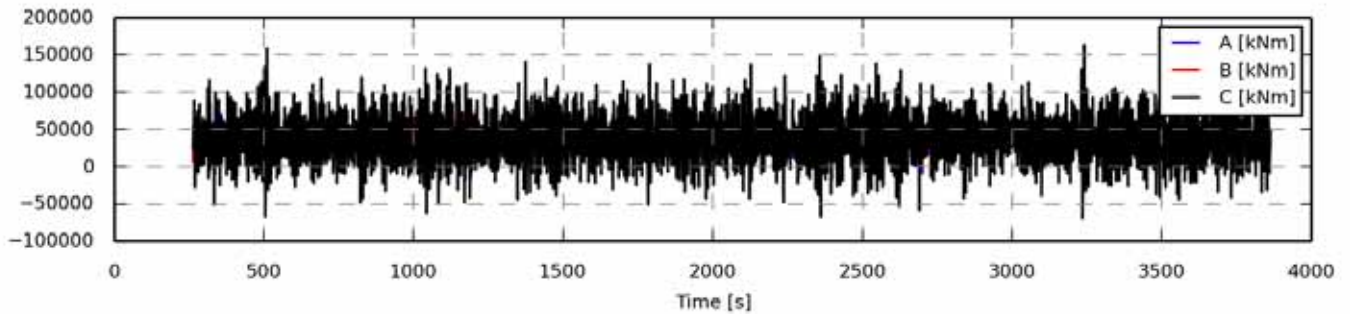


Figure 1289 - Full length time series

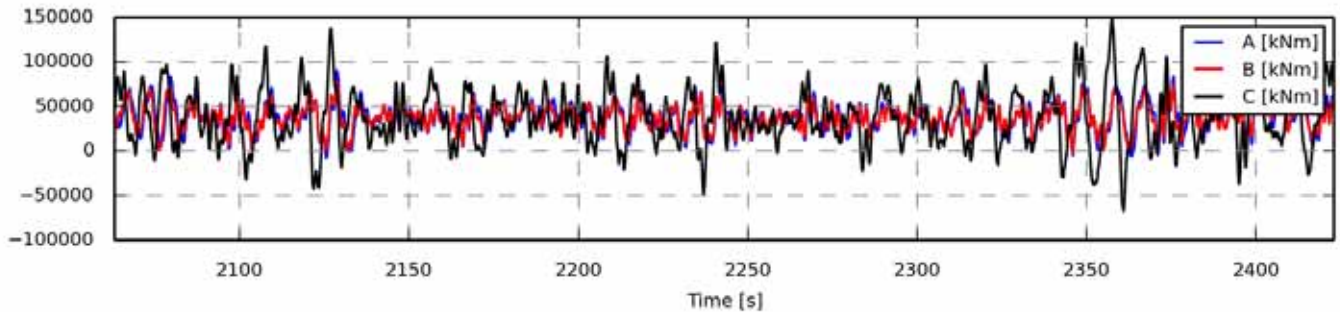


Figure 1290 - Zoom of time series

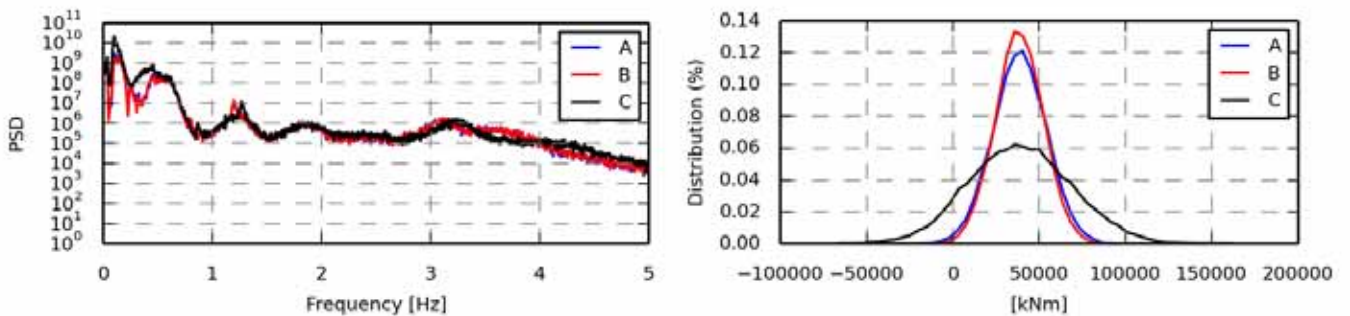


Figure 1291 - Power spectrum density

Statistics	A	B	C
Min	-2.0625e+04	-1.4671e+04	-6.8927e+04
Max	9.1449e+04	8.8984e+04	1.6352e+05
Mean	3.8712e+04	3.8454e+04	3.9026e+04
Std	1.5429e+04	1.3832e+04	2.9937e+04
Skewness	-0.0262	-0.0118	0.0852
Kurtosis	-0.0432	-0.0557	0.0433

Figure 1292 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	2.9373e+04	2.6699e+04	5.2116e+04
Eq (m=4)	3.5942e+04	3.2511e+04	6.5538e+04
Eq (m=6)	4.5895e+04	4.1356e+04	8.6528e+04
Eq (m=8)	5.3223e+04	4.7935e+04	1.0293e+05
Eq (m=10)	5.8963e+04	5.3167e+04	1.1634e+05
Eq (m=12)	6.3638e+04	5.7501e+04	1.2746e+05

Section 14.16 oc4_p2_load_case_3-3: My coo: tower [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-3.sel (01-03-2014 03:12)	44	MomentMy Mbdy:tower nodenr: 1 coo: tower tower base bending moment
B	WAMsim/oc4_p2_load_case_3-3.sel (01-04-2014 12:47)	44	MomentMy Mbdy:tower nodenr: 1 coo: tower tower base bending moment
C	hawc2/oc4_p2_load_case_3-3.sel (31-03-2014 15:35)	44	MomentMy Mbdy:tower nodenr: 1 coo: tower tower base bending moment

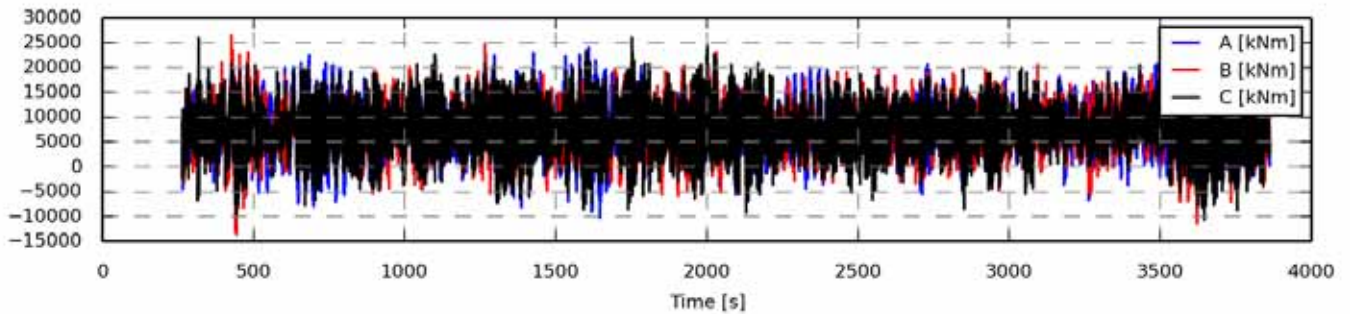


Figure 1293 - Full length time series

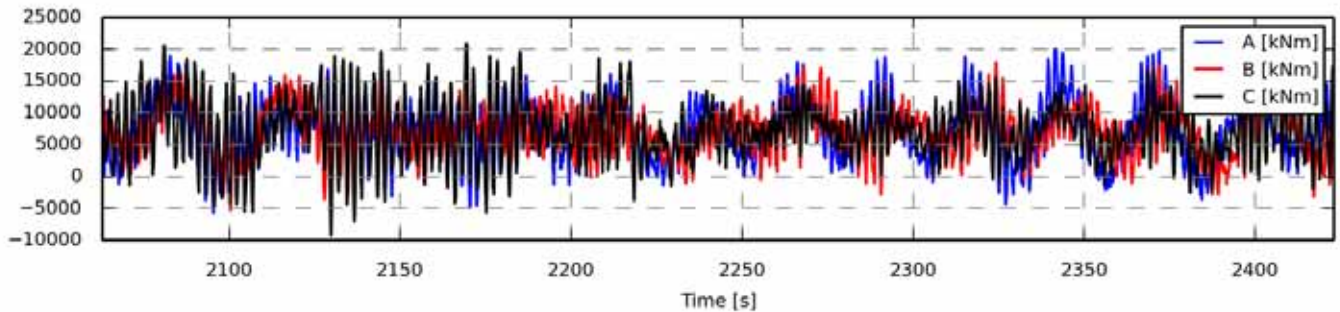


Figure 1294 - Zoom of time series

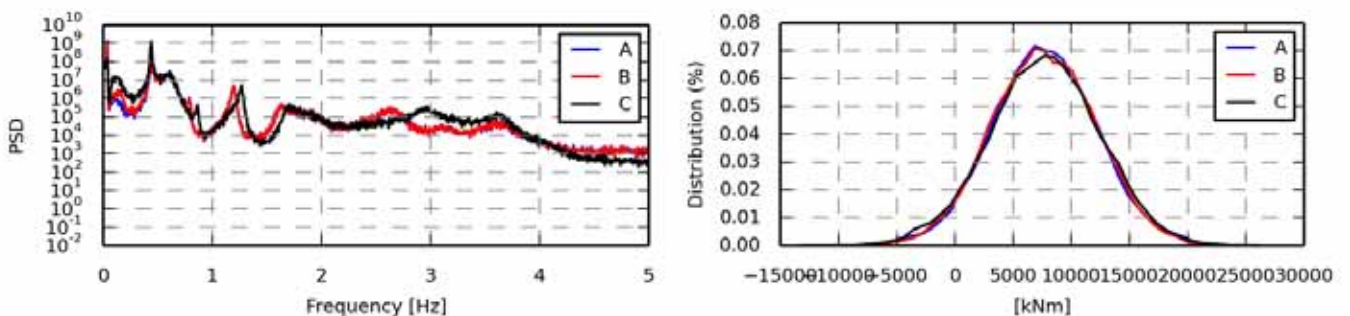


Figure 1295 - Power spectrum density

Statistics	A	B	C
Min	-1.0292e+04	-1.3594e+04	-1.0714e+04
Max	2.4332e+04	2.6527e+04	2.5927e+04
Mean	7.7122e+03	7.6526e+03	7.6856e+03
Std	4.5604e+03	4.5119e+03	4.7672e+03
Skewness	0.0072	-0.0073	-0.0587
Kurtosis	0.1280	0.0796	0.0412

Figure 1296 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	9.3340e+03	8.9685e+03	1.0990e+04
Eq (m=4)	1.0929e+04	1.0657e+04	1.2680e+04
Eq (m=6)	1.3654e+04	1.3708e+04	1.5361e+04
Eq (m=8)	1.5933e+04	1.6429e+04	1.7504e+04
Eq (m=10)	1.7825e+04	1.8818e+04	1.9297e+04
Eq (m=12)	1.9390e+04	2.0874e+04	2.0820e+04

Section 14.17 oc4_p2_load_case_3-3: Mz coo: tower [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-3.sel (01-03-2014 03:12)	45	MomentMz Mbdy:tower nodenr: 1 coo: tower tower base bending moment
B	WAMsim/oc4_p2_load_case_3-3.sel (01-04-2014 12:47)	45	MomentMz Mbdy:tower nodenr: 1 coo: tower tower base bending moment
C	hawc2/oc4_p2_load_case_3-3.sel (31-03-2014 15:35)	45	MomentMz Mbdy:tower nodenr: 1 coo: tower tower base bending moment

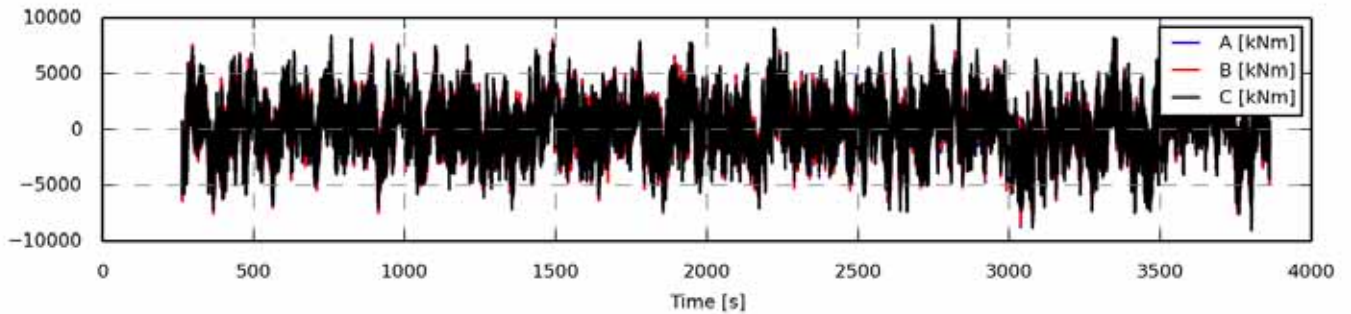


Figure 1297 - Full length time series

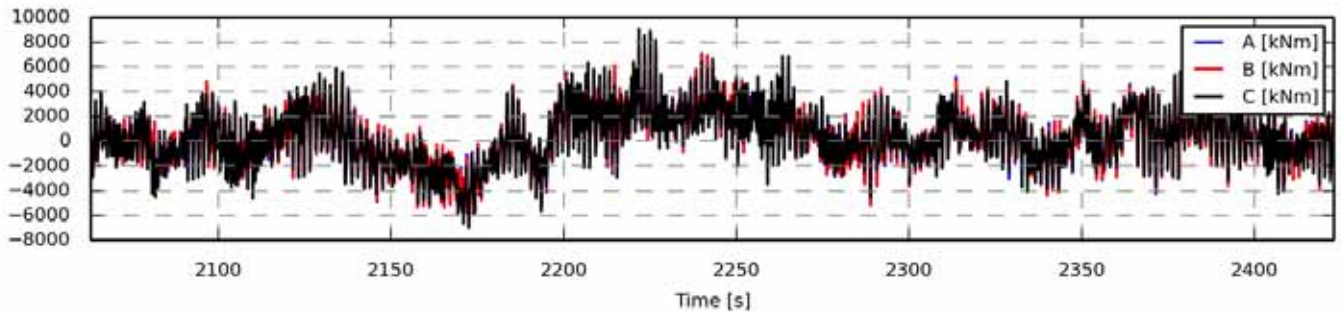


Figure 1298 - Zoom of time series

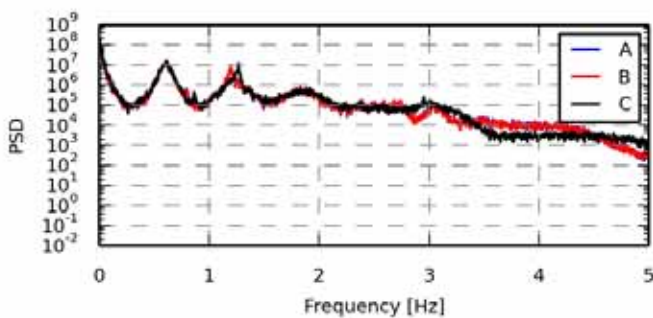


Figure 1299 - Power spectrum density

Statistics	A	B	C
Min	-8.6957e+03	-8.5002e+03	-9.0131e+03
Max	9.1404e+03	9.2312e+03	9.9417e+03
Mean	362.3278	357.5311	368.8671
Std	2.2930e+03	2.2903e+03	2.3333e+03
Skewness	-0.0692	-0.0700	-0.0760
Kurtosis	-0.0320	-0.0288	0.0019

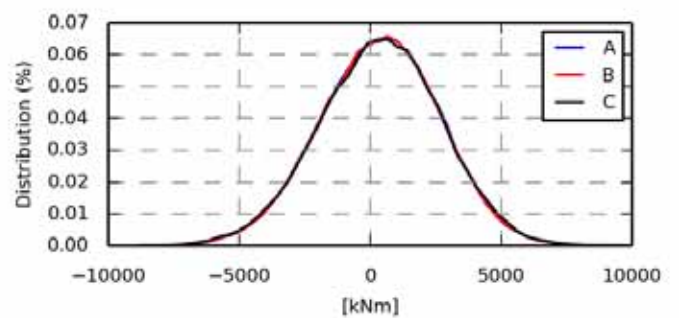


Figure 1300 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	4.7357e+03	4.7336e+03	4.9309e+03
Eq (m=4)	5.3144e+03	5.3131e+03	5.5333e+03
Eq (m=6)	6.5581e+03	6.5527e+03	6.8252e+03
Eq (m=8)	7.7571e+03	7.7390e+03	8.0691e+03
Eq (m=10)	8.7867e+03	8.7544e+03	9.1439e+03
Eq (m=12)	9.6397e+03	9.5958e+03	1.0044e+04

Section 14.18 oc4_p2_load_case_3-3: ESYS line1_1 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-3.sel (01-03-2014 03:12)	55	ESYS line1_1 SENSOR 4
B	WAMsim/oc4_p2_load_case_3-3.sel (01-04-2014 12:47)	55	ESYS line1_1 SENSOR 4
C	hawc2/oc4_p2_load_case_3-3.sel (31-03-2014 15:35)	55	ESYS line1_1 SENSOR 4

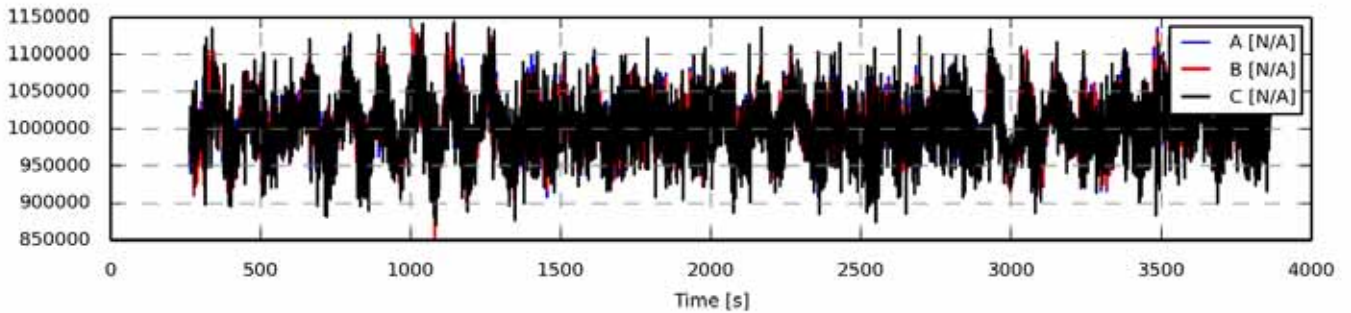


Figure 1301 - Full length time series

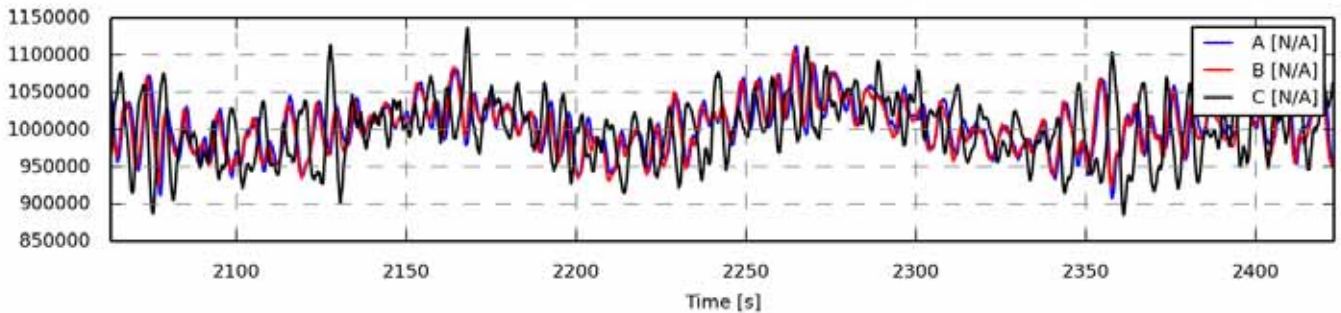


Figure 1302 - Zoom of time series

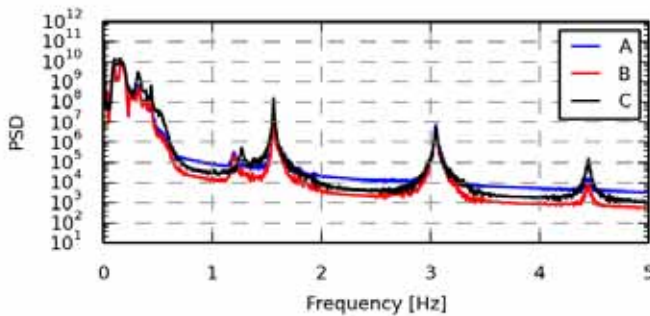


Figure 1303 - Power spectrum density

Statistics	A	B	C
Min	8.5633e+05	8.5115e+05	8.7017e+05
Max	1.1387e+06	1.1345e+06	1.1445e+06
Mean	1.0070e+06	1.0057e+06	1.0031e+06
Std	3.6157e+04	3.5751e+04	4.1432e+04
Skewness	0.1425	0.1340	0.0959
Kurtosis	-0.0267	-0.0286	-0.0618

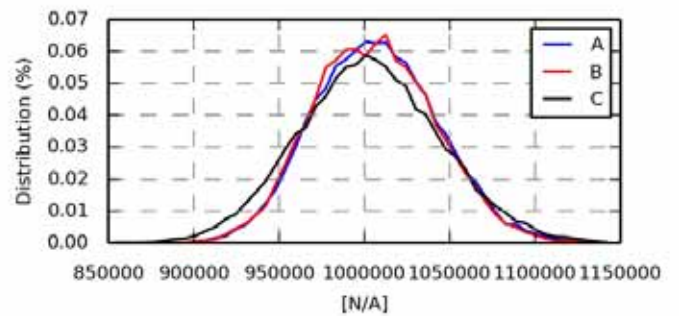


Figure 1304 - Value distribution

Fatigue eq.	1Hz	A	B	C
Eq (m=3)		4.7968e+04	4.5663e+04	6.4821e+04
Eq (m=4)		6.2801e+04	6.0472e+04	8.1845e+04
Eq (m=6)		8.8752e+04	8.7232e+04	1.0857e+05
Eq (m=8)		1.1061e+05	1.1035e+05	1.2908e+05
Eq (m=10)		1.2889e+05	1.2980e+05	1.4529e+05
Eq (m=12)		1.4418e+05	1.4601e+05	1.5831e+05

Section 14.19 oc4_p2_load_case_3-3: ESYS line1_3 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-3.sel (01-03-2014 03:12)	259	ESYS line1_3 SENSOR 104
B	WAMsim/oc4_p2_load_case_3-3.sel (01-04-2014 12:47)	259	ESYS line1_3 SENSOR 104
C	hawc2/oc4_p2_load_case_3-3.sel (31-03-2014 15:35)	259	ESYS line1_3 SENSOR 104

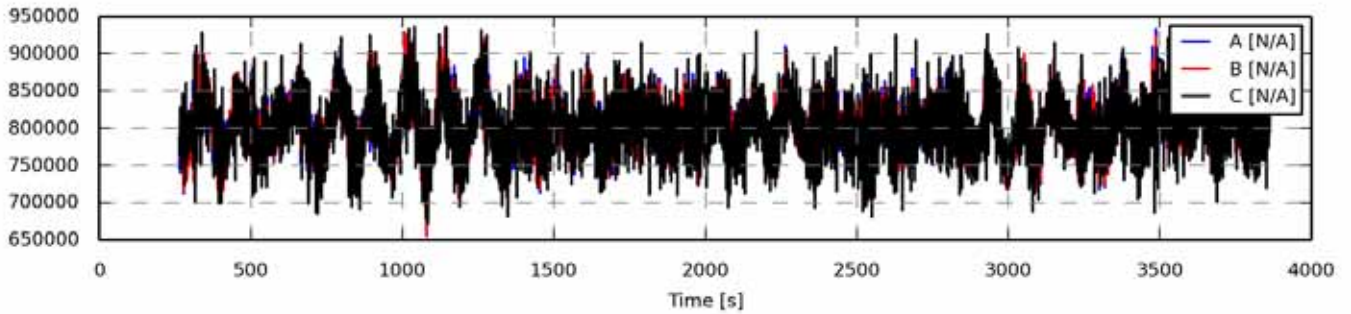


Figure 1305 - Full length time series

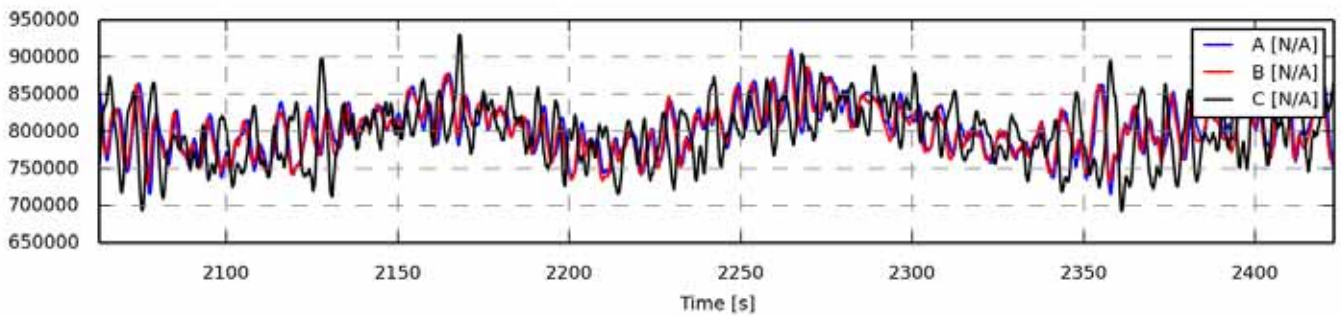


Figure 1306 - Zoom of time series

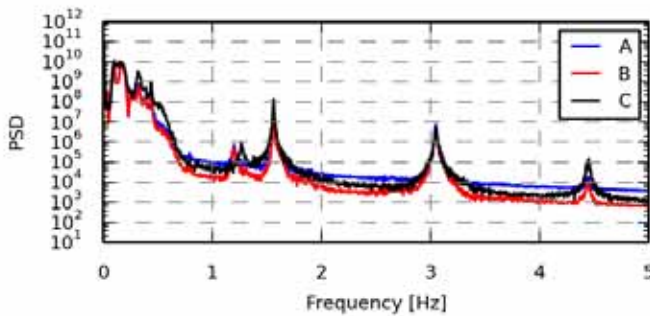


Figure 1307 - Power spectrum density

Statistics	A	B	C
Min	6.6407e+05	6.5506e+05	6.7283e+05
Max	9.3568e+05	9.3214e+05	9.3596e+05
Mean	8.0538e+05	8.0407e+05	8.0145e+05
Std	3.4971e+04	3.4653e+04	3.9563e+04
Skewness	0.1586	0.1471	0.1098
Kurtosis	-0.0317	-0.0261	-0.0343

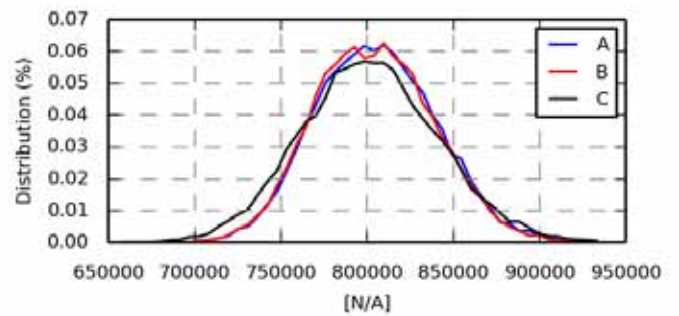


Figure 1308 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	4.5388e+04	4.3365e+04	6.1996e+04
Eq (m=4)	5.9593e+04	5.7676e+04	7.8179e+04
Eq (m=6)	8.4711e+04	8.3978e+04	1.0381e+05
Eq (m=8)	1.0586e+05	1.0692e+05	1.2360e+05
Eq (m=10)	1.2347e+05	1.2625e+05	1.3924e+05
Eq (m=12)	1.3814e+05	1.4233e+05	1.5177e+05

Section 14.20 oc4_p2_load_case_3-3: ESYS line2_1 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-3.sel (01-03-2014 03:12)	263	ESYS line2_1 SENSOR 4
B	WAMsim/oc4_p2_load_case_3-3.sel (01-04-2014 12:47)	263	ESYS line2_1 SENSOR 4
C	hawc2/oc4_p2_load_case_3-3.sel (31-03-2014 15:35)	263	ESYS line2_1 SENSOR 4

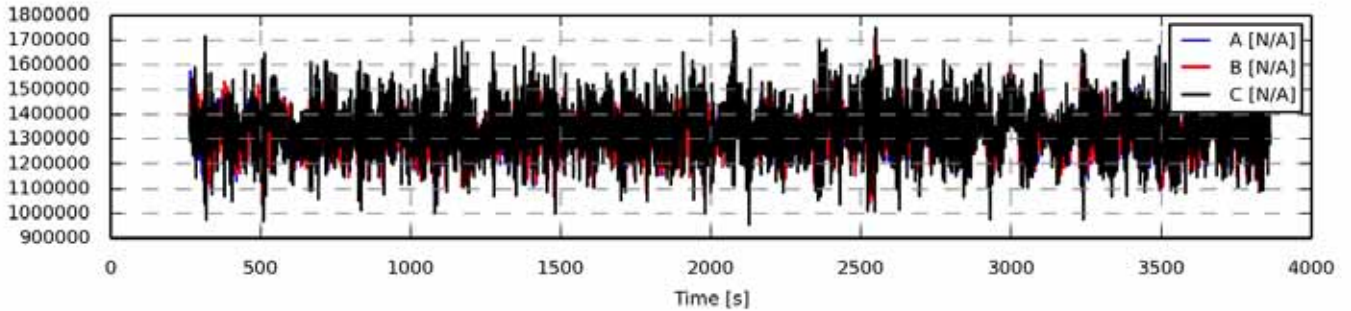


Figure 1309 - Full length time series

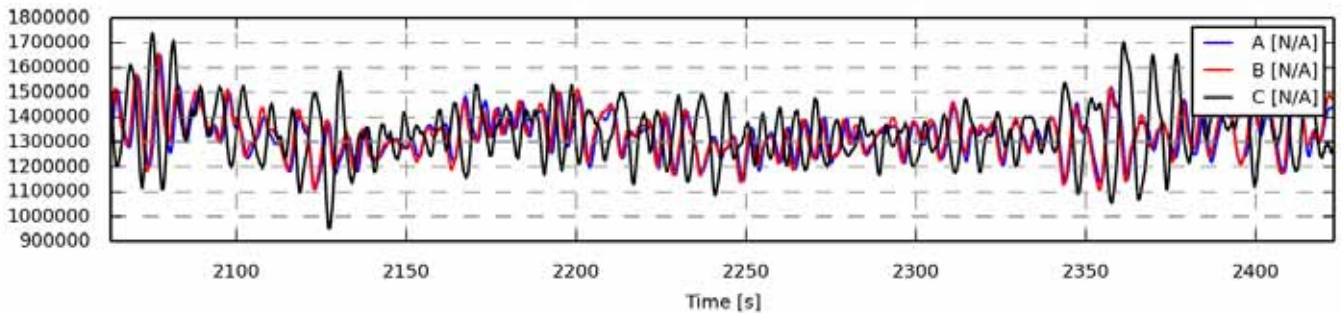


Figure 1310 - Zoom of time series

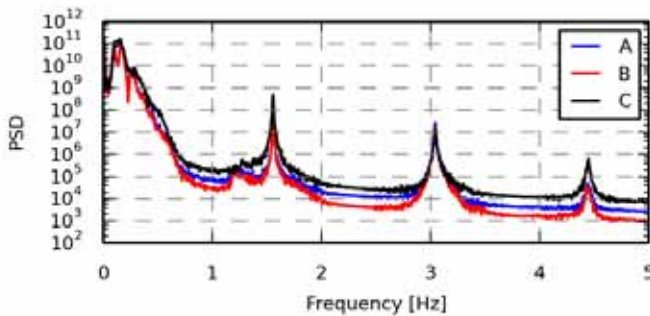


Figure 1311 - Power spectrum density

Statistics	A	B	C
Min	1.0345e+06	1.0410e+06	9.5243e+05
Max	1.7086e+06	1.6997e+06	1.7488e+06
Mean	1.3262e+06	1.3298e+06	1.3438e+06
Std	7.8979e+04	7.9865e+04	1.1182e+05
Skewness	0.0157	0.0177	0.0517
Kurtosis	0.1978	0.1941	0.1043

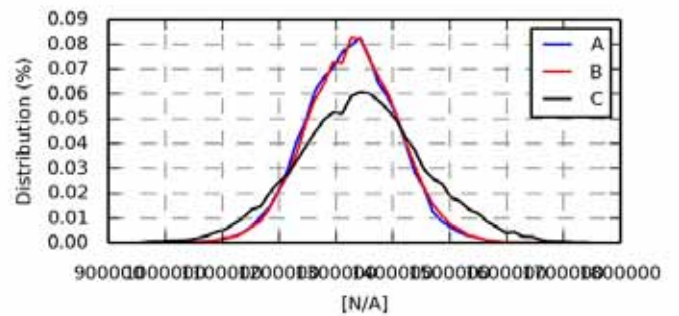


Figure 1312 - Value distribution

Fatigue eq.	1Hz	A	B	C
Eq (m=3)		1.2154e+05	1.2292e+05	1.8292e+05
Eq (m=4)		1.5584e+05	1.5812e+05	2.3116e+05
Eq (m=6)		2.1438e+05	2.1733e+05	3.0572e+05
Eq (m=8)		2.6441e+05	2.6665e+05	3.6266e+05
Eq (m=10)		3.0706e+05	3.0798e+05	4.0817e+05
Eq (m=12)		3.4301e+05	3.4254e+05	4.4544e+05

Section 14.21 oc4_p2_load_case_3-3: ESYS line2_3 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-3.sel (01-03-2014 03:12)	467	ESYS line2_3 SENSOR 104
B	WAMsim/oc4_p2_load_case_3-3.sel (01-04-2014 12:47)	467	ESYS line2_3 SENSOR 104
C	hawc2/oc4_p2_load_case_3-3.sel (31-03-2014 15:35)	467	ESYS line2_3 SENSOR 104

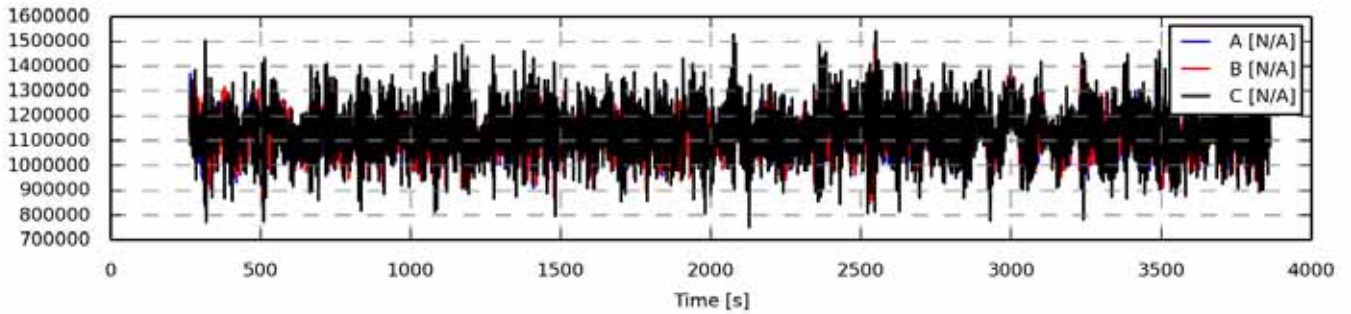


Figure 1313 - Full length time series

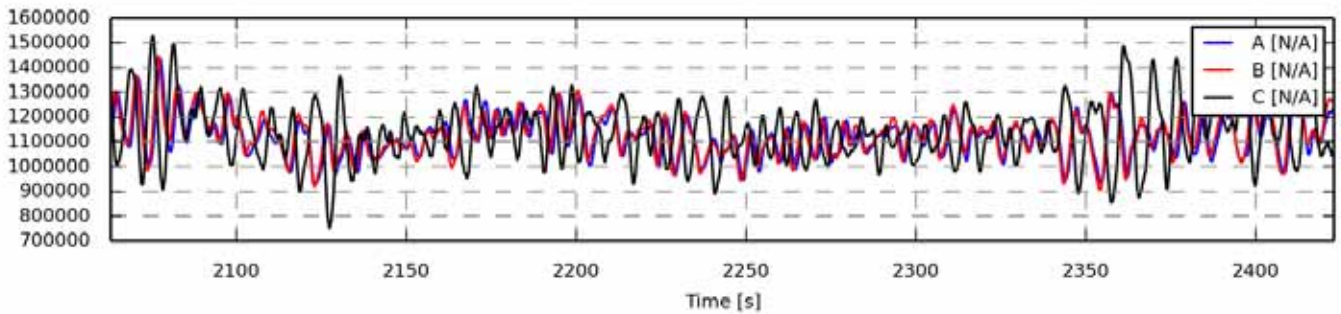


Figure 1314 - Zoom of time series

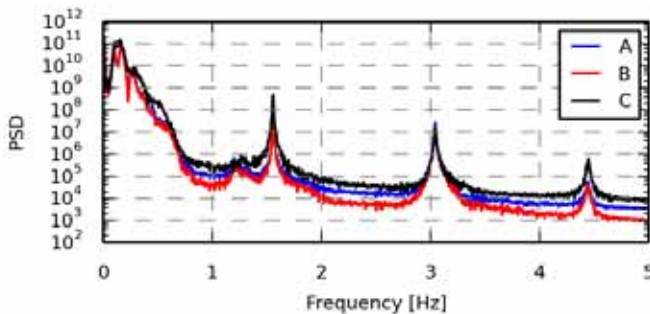


Figure 1315 - Power spectrum density

Statistics	A	B	C
Min	8.3665e+05	8.4653e+05	7.5218e+05
Max	1.4904e+06	1.4851e+06	1.5421e+06
Mean	1.1226e+06	1.1262e+06	1.1401e+06
Std	7.6220e+04	7.7023e+04	1.0884e+05
Skewness	0.0366	0.0381	0.0481
Kurtosis	0.2328	0.2335	0.1357

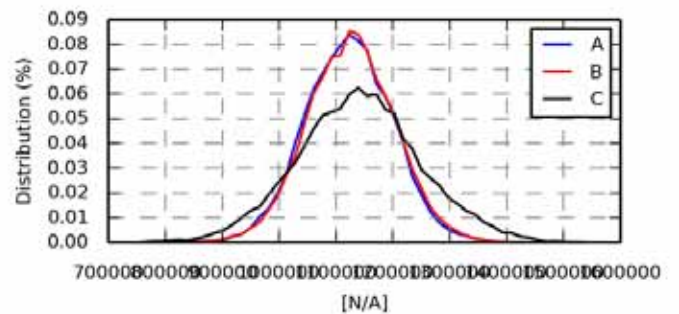


Figure 1316 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	1.1719e+05	1.1824e+05	1.7842e+05
Eq (m=4)	1.5048e+05	1.5223e+05	2.2558e+05
Eq (m=6)	2.0783e+05	2.0971e+05	2.9893e+05
Eq (m=8)	2.5708e+05	2.5763e+05	3.5534e+05
Eq (m=10)	2.9901e+05	2.9771e+05	4.0072e+05
Eq (m=12)	3.3420e+05	3.3116e+05	4.3807e+05

Section 14.22 oc4_p2_load_case_3-3: ESYS line3_1 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-3.sel (01-03-2014 03:12)	471	ESYS line3_1 SENSOR 4
B	WAMsim/oc4_p2_load_case_3-3.sel (01-04-2014 12:47)	471	ESYS line3_1 SENSOR 4
C	hawc2/oc4_p2_load_case_3-3.sel (31-03-2014 15:35)	471	ESYS line3_1 SENSOR 4

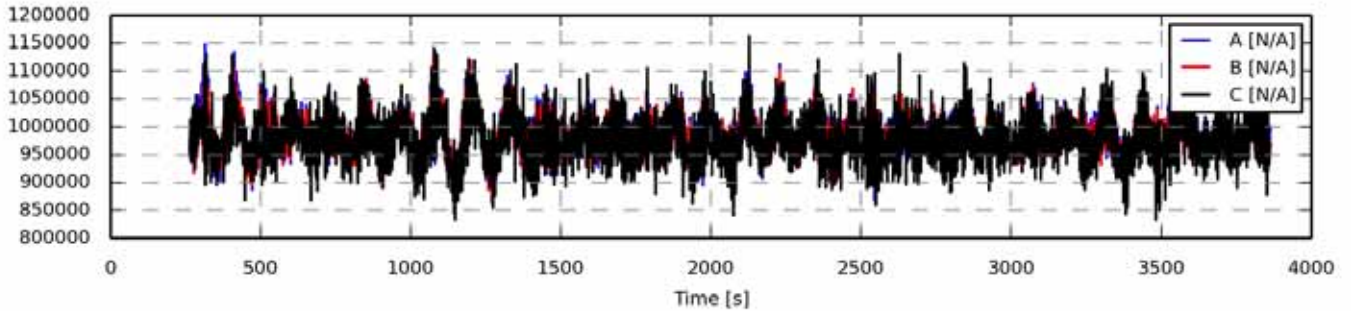


Figure 1317 - Full length time series

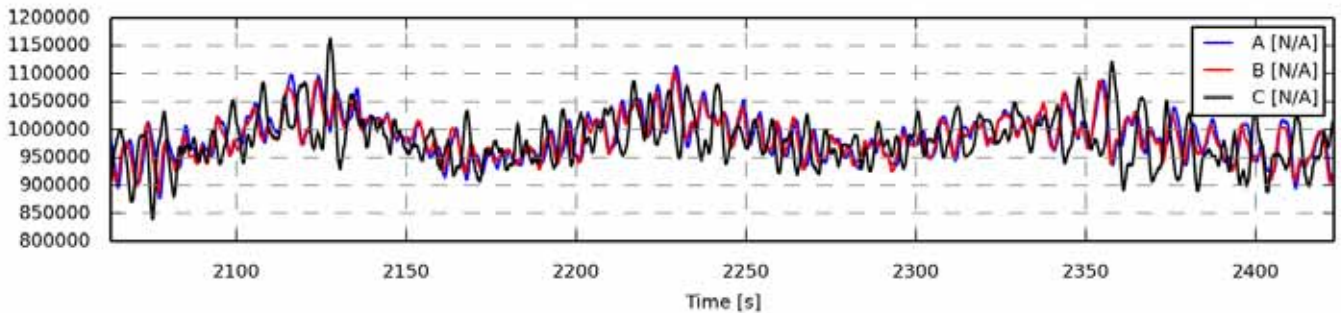


Figure 1318 - Zoom of time series

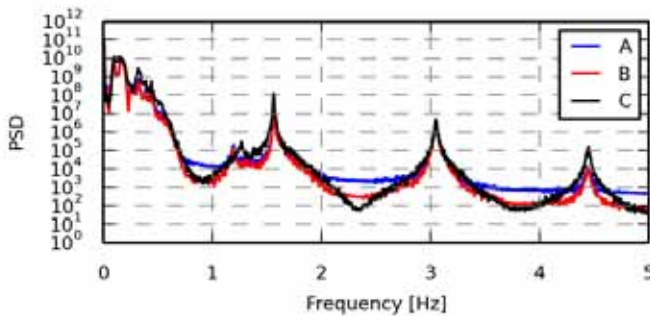


Figure 1319 - Power spectrum density

Statistics	A	B	C
Min	8.4459e+05	8.5558e+05	8.3310e+05
Max	1.1478e+06	1.1317e+06	1.1626e+06
Mean	9.8491e+05	9.8359e+05	9.7894e+05
Std	3.5672e+04	3.3570e+04	4.1294e+04
Skewness	0.3115	0.2392	0.2577
Kurtosis	0.5672	0.4359	0.3631

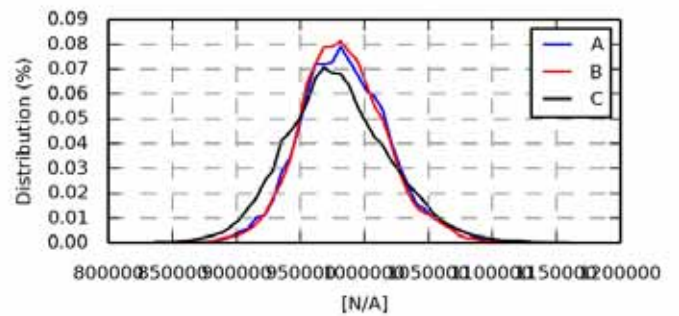


Figure 1320 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	4.7975e+04	4.4098e+04	6.3681e+04
Eq (m=4)	6.3825e+04	5.8634e+04	8.1452e+04
Eq (m=6)	9.2651e+04	8.5271e+04	1.1162e+05
Eq (m=8)	1.1700e+05	1.0803e+05	1.3672e+05
Eq (m=10)	1.3695e+05	1.2679e+05	1.5754e+05
Eq (m=12)	1.5333e+05	1.4215e+05	1.7481e+05

Section 14.23 oc4_p2_load_case_3-3: ESYS line3_3 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-3.sel (01-03-2014 03:12)	675	ESYS line3_3 SENSOR 104
B	WAMsim/oc4_p2_load_case_3-3.sel (01-04-2014 12:47)	675	ESYS line3_3 SENSOR 104
C	hawc2/oc4_p2_load_case_3-3.sel (31-03-2014 15:35)	675	ESYS line3_3 SENSOR 104

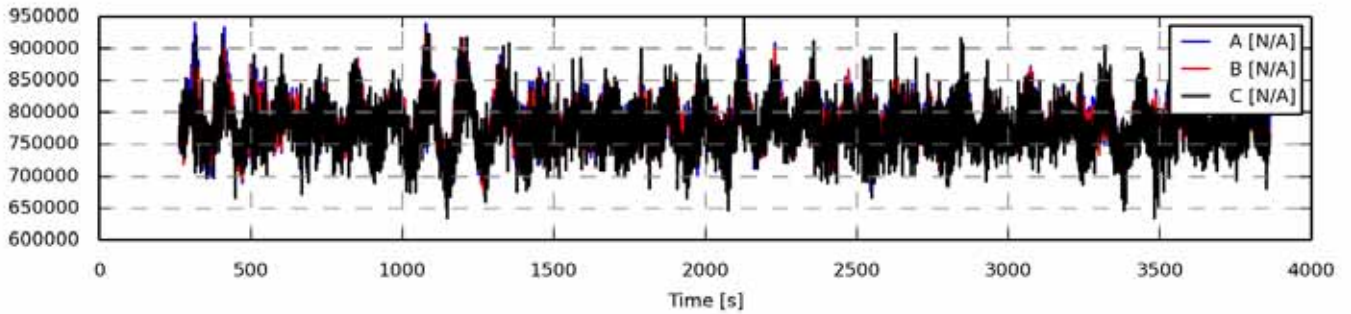


Figure 1321 - Full length time series

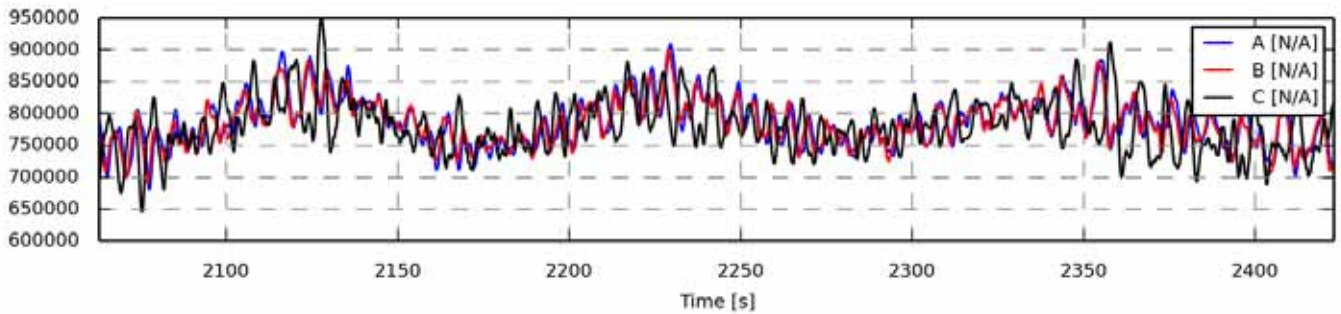


Figure 1322 - Zoom of time series

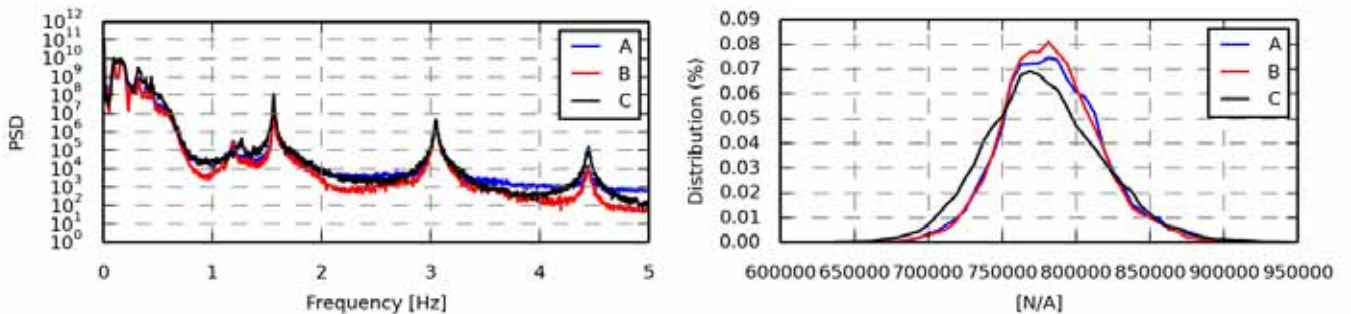


Figure 1323 - Power spectrum density

Statistics	A	B	C
Min	6.5107e+05	6.6223e+05	6.3410e+05
Max	9.4081e+05	9.2624e+05	9.4713e+05
Mean	7.8379e+05	7.8245e+05	7.7778e+05
Std	3.4540e+04	3.2472e+04	3.9536e+04
Skewness	0.3285	0.2515	0.2647
Kurtosis	0.5944	0.4709	0.3722

Figure 1324 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	4.5958e+04	4.1901e+04	6.1119e+04
Eq (m=4)	6.1295e+04	5.5864e+04	7.8070e+04
Eq (m=6)	8.9374e+04	8.1629e+04	1.0701e+05
Eq (m=8)	1.1292e+05	1.0355e+05	1.3097e+05
Eq (m=10)	1.3202e+05	1.2150e+05	1.5065e+05
Eq (m=12)	1.4757e+05	1.3616e+05	1.6687e+05

Article XV. oc4_p2_load_case_3-4

Generated 22-04-2014 10:06

Section 15.01 oc4_p2_load_case_3-4: WSP gl. coo.,Vy [m/s]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-4.sel (01-03-2014 03:26)	3	Free wind speed Vy, gl. coo, of gl. pos 0.00, 0.00, -90.00
B	WAMsim/oc4_p2_load_case_3-4.sel (01-04-2014 12:47)	3	Free wind speed Vy, gl. coo, of gl. pos 0.00, 0.00, -90.00
C	hawc2/oc4_p2_load_case_3-4.sel (31-03-2014 15:35)	3	Free wind speed Vy, gl. coo, of gl. pos 0.00, 0.00, -90.00

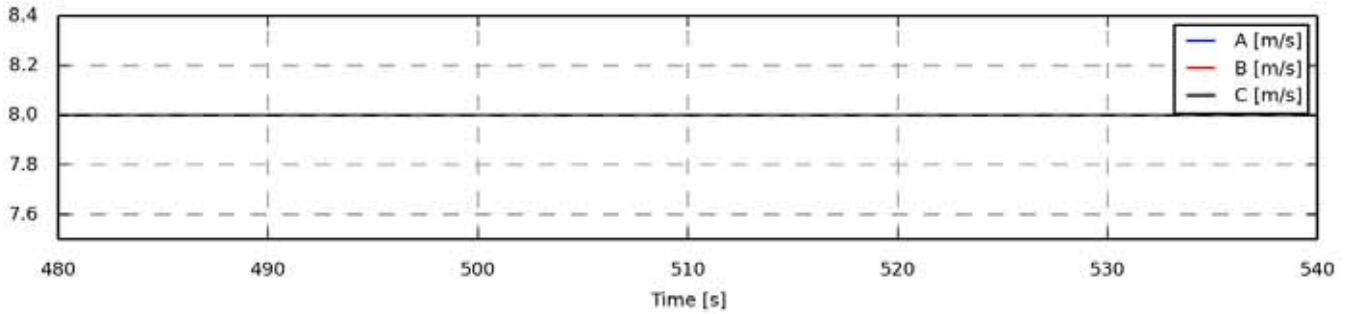


Figure 1325 - Full length time series

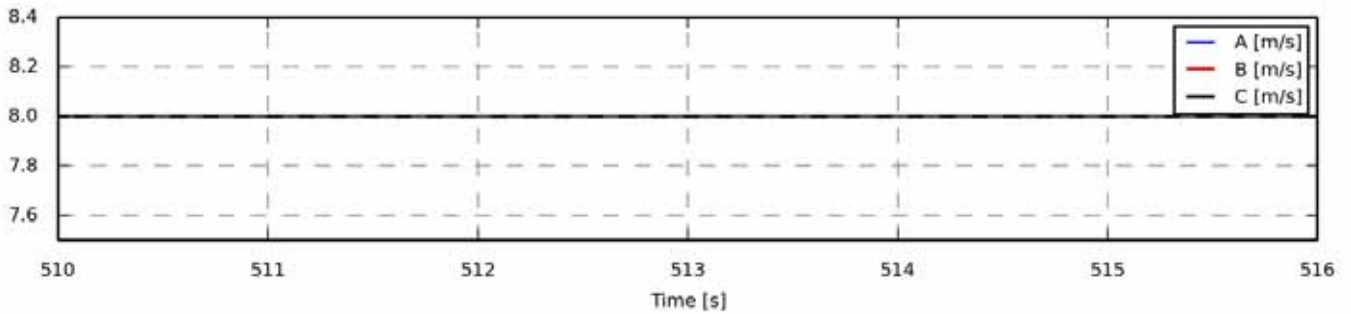


Figure 1326 - Zoom of time series

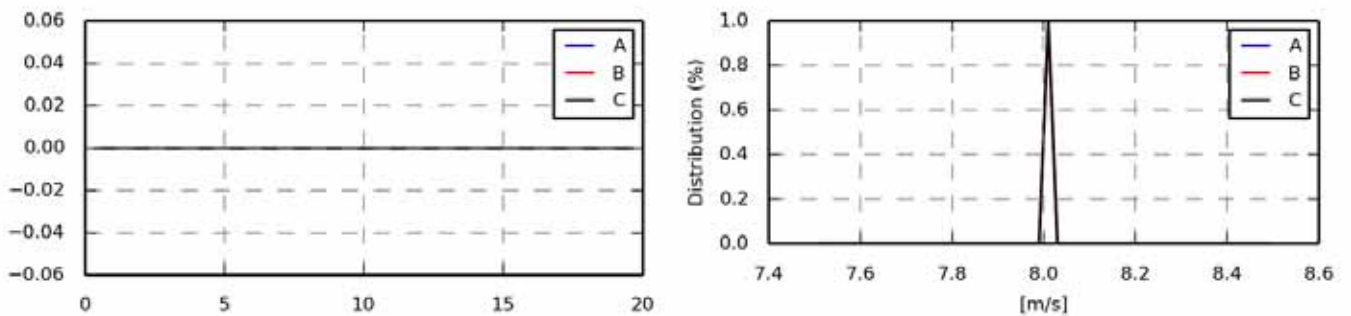


Figure 1327 - Power spectrum density

Statistics	A	B	C
Min	8.0000	8.0000	8.0000
Max	8.0000	8.0000	8.0000
Mean	8.0000	8.0000	8.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

Figure 1328 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 15.02 oc4_p2_load_case_3-4: Water surf. [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-4.sel (01-03-2014 03:26)	5	Water surface gl. coo, at gl. coo, x,y= 0.00, 0.00
B	WAMsim/oc4_p2_load_case_3-4.sel (01-04-2014 12:47)	5	Constant value
C	hawc2/oc4_p2_load_case_3-4.sel (31-03-2014 15:35)	5	Water surface gl. coo, at gl. coo, x,y= 0.00, 0.00

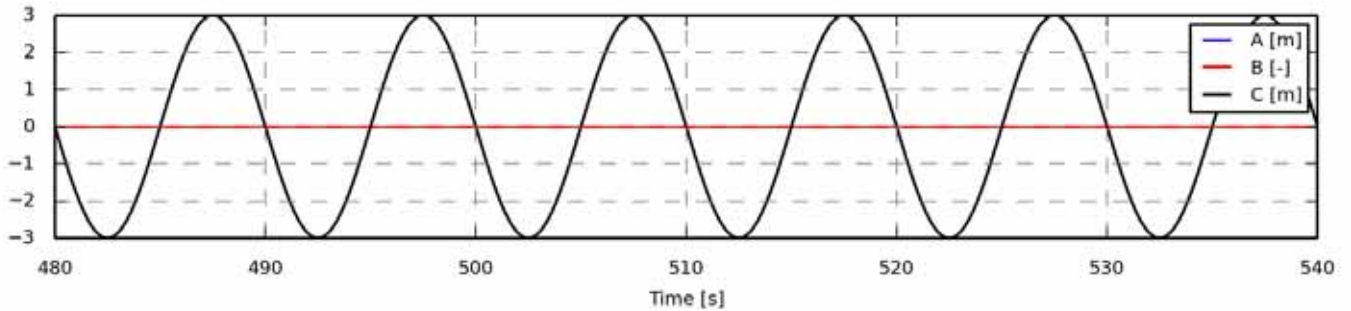


Figure 1329 - Full length time series

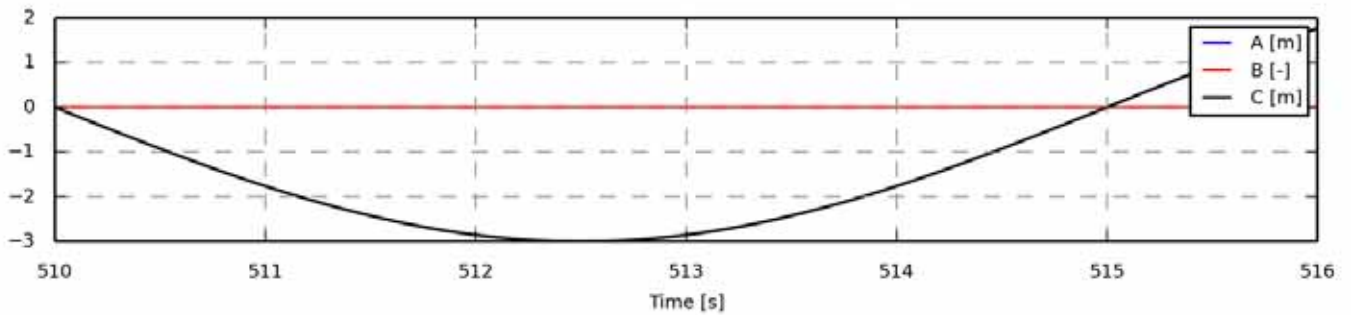


Figure 1330 - Zoom of time series

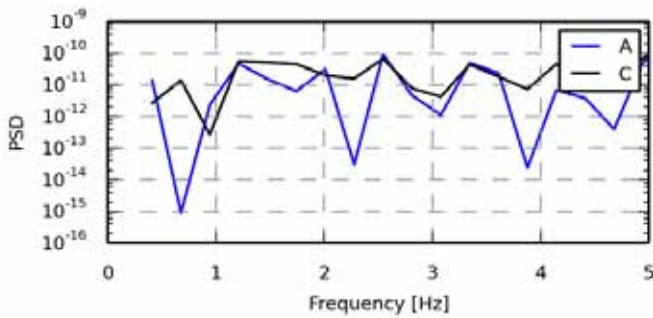


Figure 1331 - Power spectrum density

Statistics	A	B	C
Min	-3.0000	0.0000	-3.0000
Max	3.0000	0.0000	3.0000
Mean	-0.0000	0.0000	-0.0000
Std	2.1213	0.0000	2.1213
Skewness	0.0000	0.0000	0.0000
Kurtosis	-1.5000	-3.0000	-1.5000

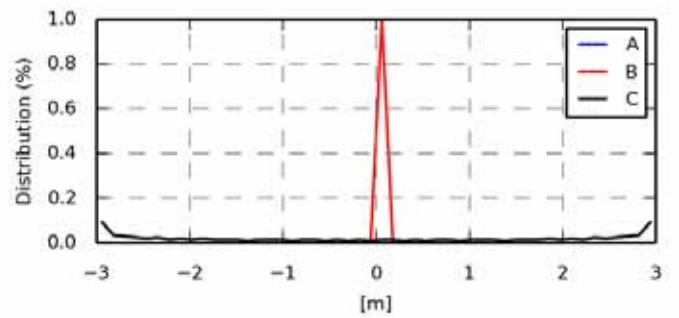


Figure 1332 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	2.7257	-	2.7257
Eq (m=4)	3.3108	-	3.3108
Eq (m=6)	4.0308	-	4.0308
Eq (m=8)	4.4511	-	4.4511
Eq (m=10)	4.7248	-	4.7248
Eq (m=12)	4.9167	-	4.9167

Section 15.03 oc4_p2_load_case_3-4: DLL inp 1: 9 [-]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-4.sel (01-03-2014 03:26)	6	DLL : 1 inpvec : 9 electrical power generator [kw]
B	WAMsim/oc4_p2_load_case_3-4.sel (01-04-2014 12:47)	6	DLL : 1 inpvec : 9 electrical power generator [kw]
C	hawc2/oc4_p2_load_case_3-4.sel (31-03-2014 15:35)	6	DLL : 1 inpvec : 9 electrical power generator [kw]

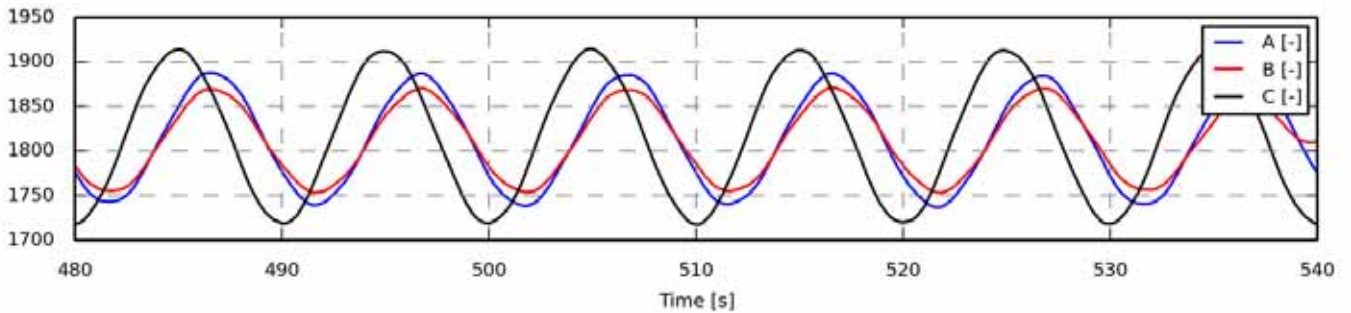


Figure 1333 - Full length time series

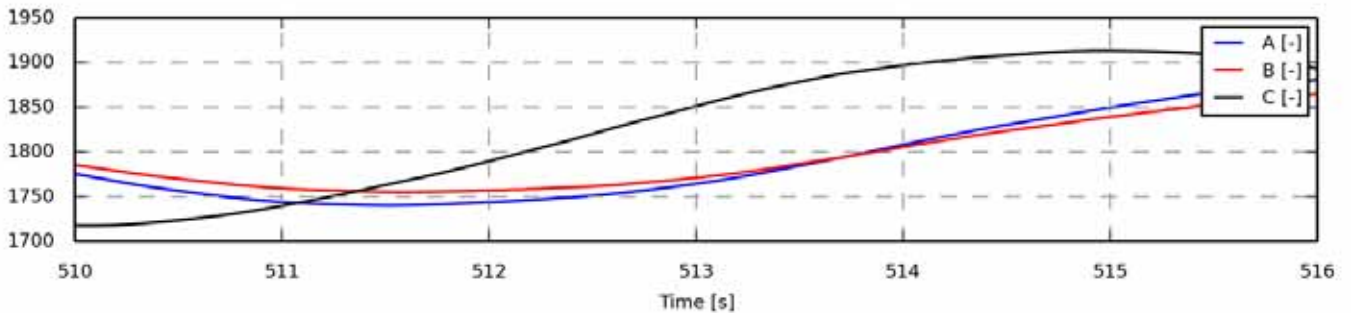


Figure 1334 - Zoom of time series

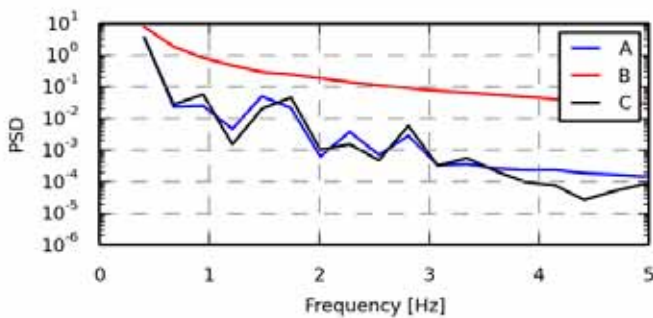


Figure 1335 - Power spectrum density

Statistics	A	B	C
Min	1.7368e+03	1.7531e+03	1.7177e+03
Max	1.8877e+03	1.8709e+03	1.9147e+03
Mean	1.8124e+03	1.8110e+03	1.8173e+03
Std	51.7293	39.9305	68.5852
Skewness	0.0159	0.0055	-0.0286
Kurtosis	-1.4972	-1.4727	-1.4957

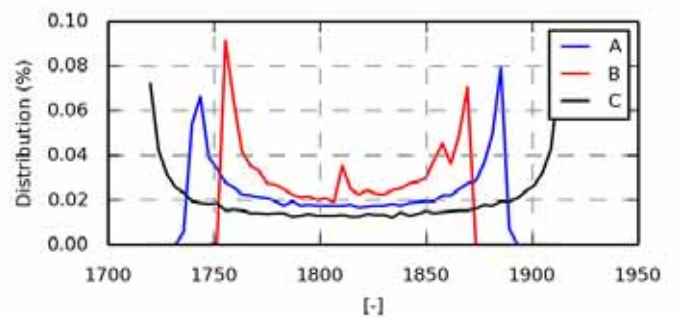


Figure 1336 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	67.0867	51.6032	90.5143
Eq (m=4)	81.3961	62.8860	109.6605
Eq (m=6)	98.8851	76.7726	132.8568
Eq (m=8)	109.0736	84.8914	146.2347
Eq (m=10)	115.7259	90.2007	154.8996
Eq (m=12)	120.4081	93.9443	160.9596

Section 15.04 oc4_p2_load_case_3-4: bea1 angle_speed [rpm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-4.sel (01-03-2014 03:26)	9	shaft_rot angle speed
B	WAMsim/oc4_p2_load_case_3-4.sel (01-04-2014 12:47)	9	shaft_rot angle speed
C	hawc2/oc4_p2_load_case_3-4.sel (31-03-2014 15:35)	9	shaft_rot angle speed

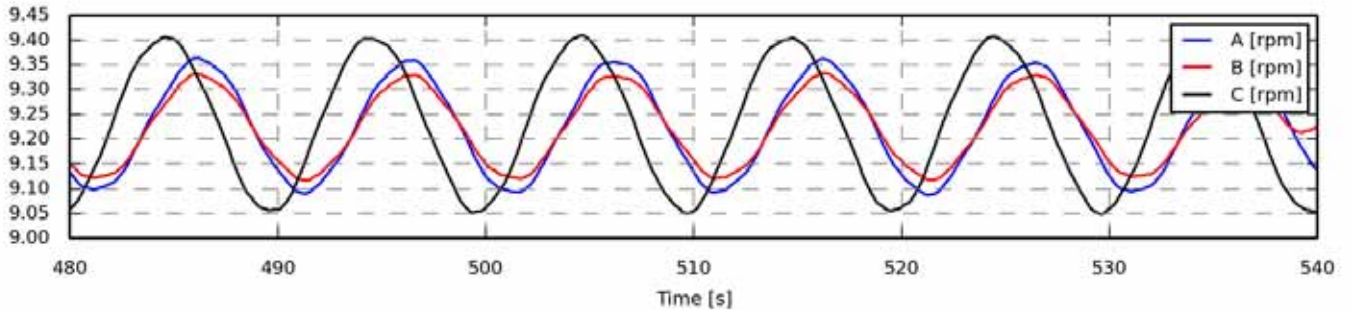


Figure 1337 - Full length time series

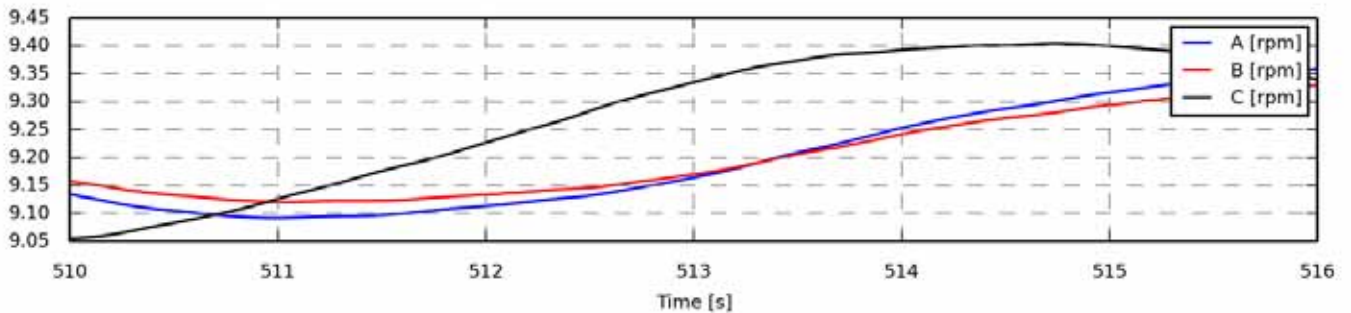


Figure 1338 - Zoom of time series

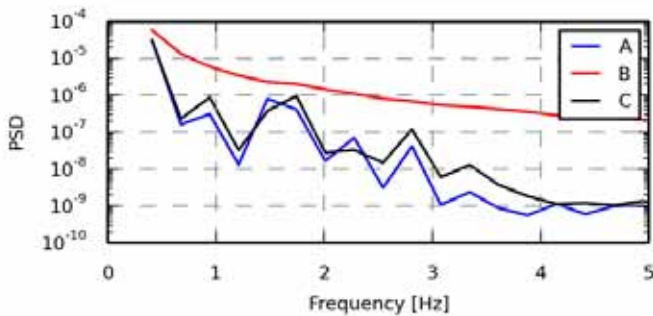


Figure 1339 - Power spectrum density

Statistics	A	B	C
Min	9.0872	9.1164	9.0484
Max	9.3637	9.3340	9.4092
Mean	9.2255	9.2239	9.2334
Std	0.0937	0.0722	0.1240
Skewness	0.0005	-0.0109	-0.0530
Kurtosis	-1.4975	-1.4613	-1.4924

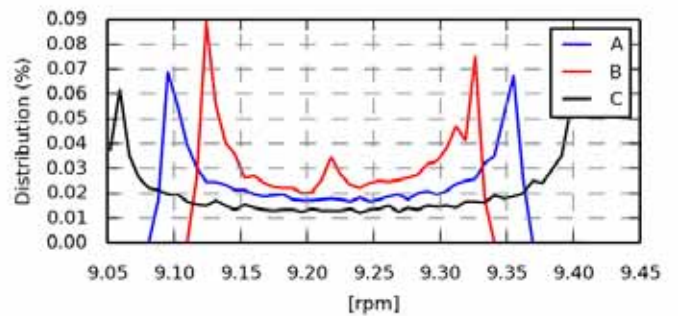


Figure 1340 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.1225	0.0943	0.1642
Eq (m=4)	0.1485	0.1149	0.1989
Eq (m=6)	0.1803	0.1402	0.2411
Eq (m=8)	0.1987	0.1551	0.2654
Eq (m=10)	0.2108	0.1648	0.2812
Eq (m=12)	0.2193	0.1717	0.2923

Section 15.05 oc4_p2_load_case_3-4: bea1 angle [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-4.sel (01-03-2014 03:26)	14	pitch1 angle
B	WAMsim/oc4_p2_load_case_3-4.sel (01-04-2014 12:47)	14	pitch1 angle
C	hawc2/oc4_p2_load_case_3-4.sel (31-03-2014 15:35)	14	pitch1 angle

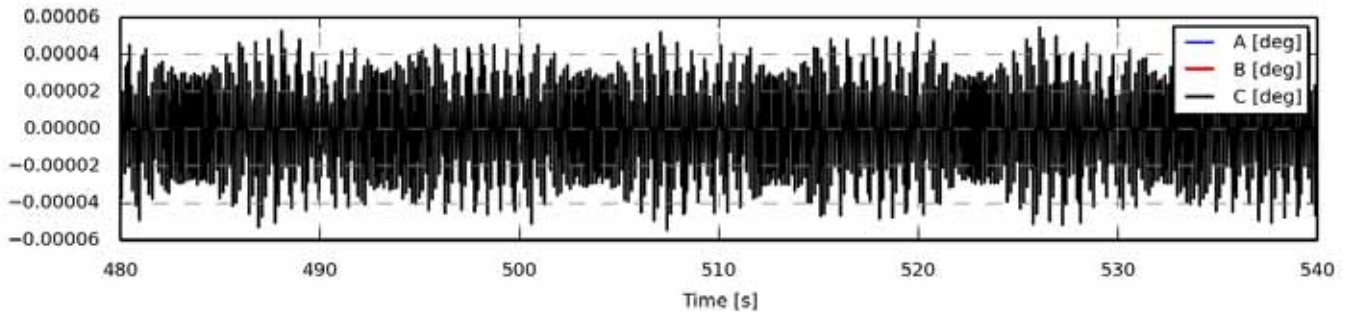


Figure 1341 - Full length time series

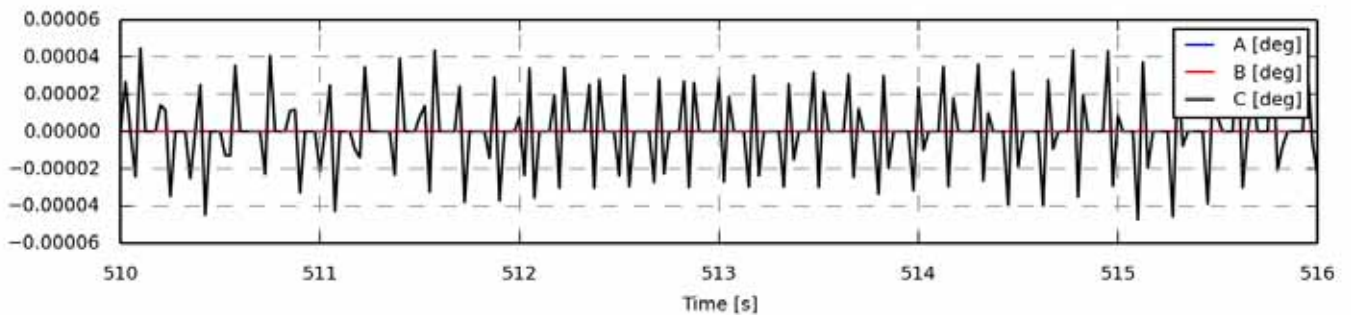


Figure 1342 - Zoom of time series

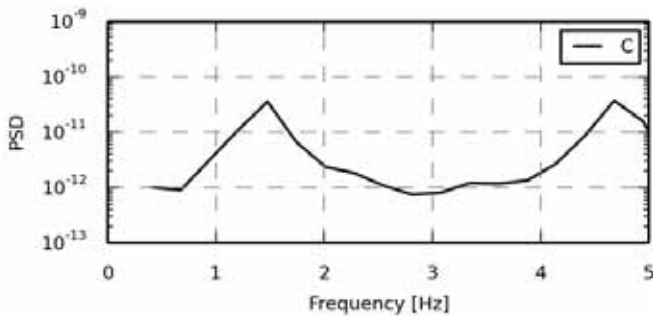


Figure 1343 - Power spectrum density

Statistics	A	B	C
Min	0.0000	0.0000	-0.0001
Max	0.0000	0.0000	0.0001
Mean	0.0000	0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	-0.0093
Kurtosis	-3.0000	-3.0000	0.5125

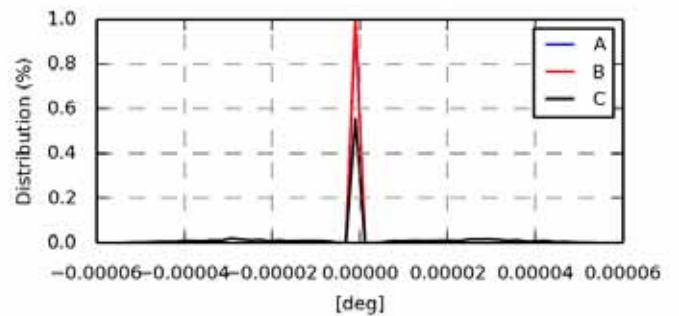


Figure 1344 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	0.0001
Eq (m=4)	-	-	0.0001
Eq (m=6)	-	-	0.0001
Eq (m=8)	-	-	0.0001
Eq (m=10)	-	-	0.0001
Eq (m=12)	-	-	0.0001

Section 15.06 oc4_p2_load_case_3-4: State pos x coo: global [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-4.sel (01-03-2014 03:26)	19	State pos x Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
B	WAMsim/oc4_p2_load_case_3-4.sel (01-04-2014 12:47)	19	State pos x Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
C	hawc2/oc4_p2_load_case_3-4.sel (31-03-2014 15:35)	19	State pos x Mbdy:mc E-nr: 8 Z-rel:0.00 coo: global platform translation in surge sway and heave

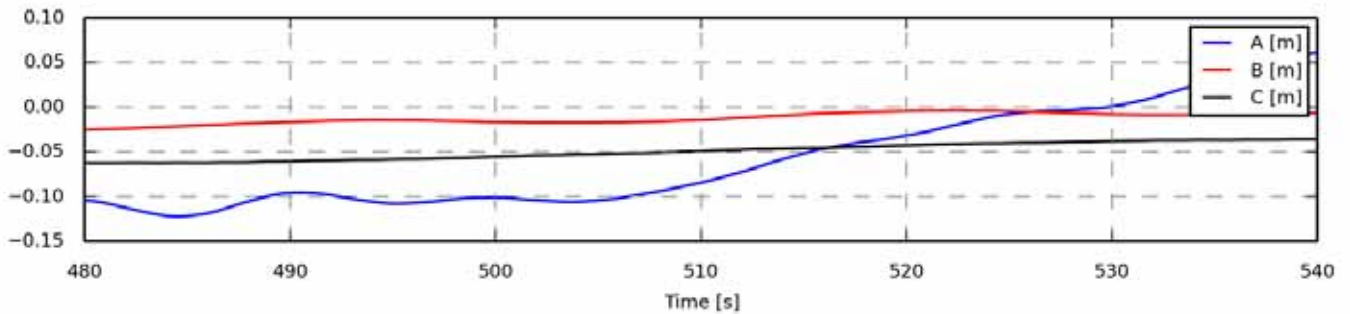


Figure 1345 - Full length time series

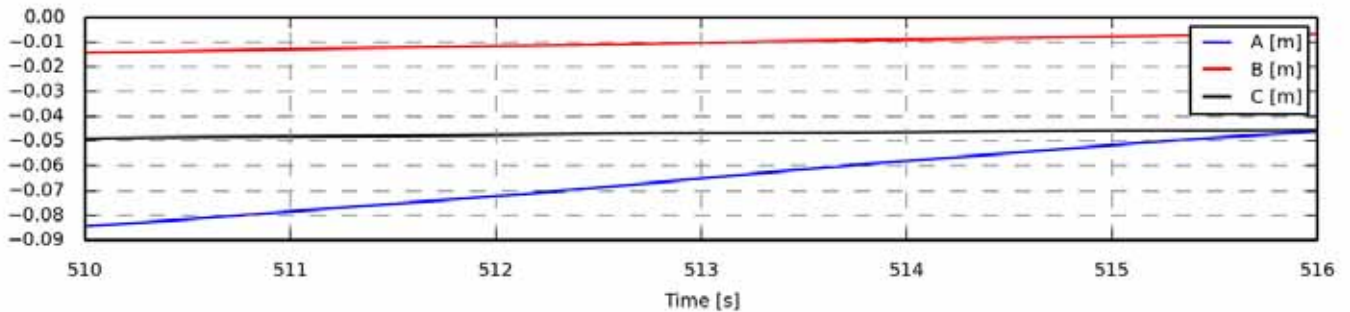


Figure 1346 - Zoom of time series

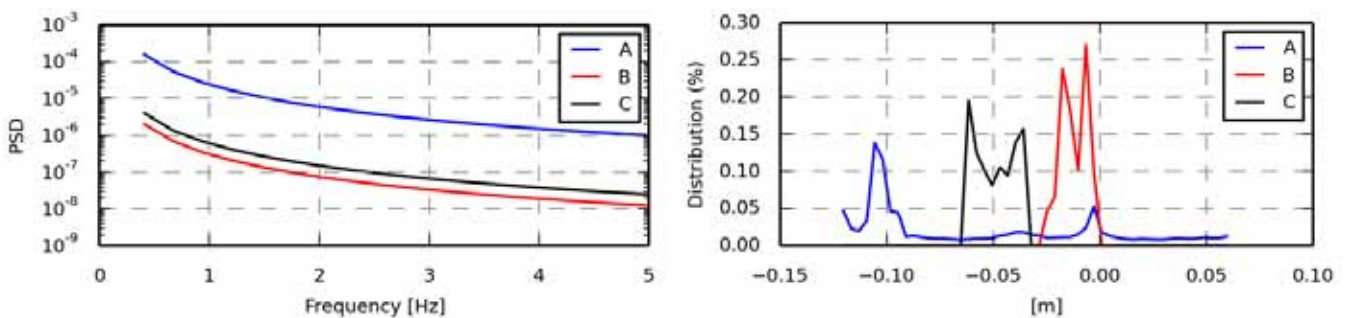


Figure 1347 - Power spectrum density

Statistics	A	B	C
Min	-0.1222	-0.0250	-0.0624
Max	0.0616	-0.0037	-0.0360
Mean	-0.0581	-0.0123	-0.0492
Std	0.0541	0.0058	0.0092
Skewness	0.6208	-0.2072	-0.0208
Kurtosis	-0.9962	-1.0467	-1.4828

Figure 1348 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.0373	0.0044	0.0054
Eq (m=4)	0.0555	0.0065	0.0080
Eq (m=6)	0.0827	0.0096	0.0119
Eq (m=8)	0.1010	0.0117	0.0145
Eq (m=10)	0.1138	0.0132	0.0164
Eq (m=12)	0.1233	0.0143	0.0177

Section 15.07 oc4_p2_load_case_3-4: State pos y coo: global [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-4.sel (01-03-2014 03:26)	20	State pos y Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
B	WAMsim/oc4_p2_load_case_3-4.sel (01-04-2014 12:47)	20	State pos y Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
C	hawc2/oc4_p2_load_case_3-4.sel (31-03-2014 15:35)	20	State pos y Mbdy:mc E-nr: 8 Z-rel:0.00 coo: global platform translation in surge sway and heave

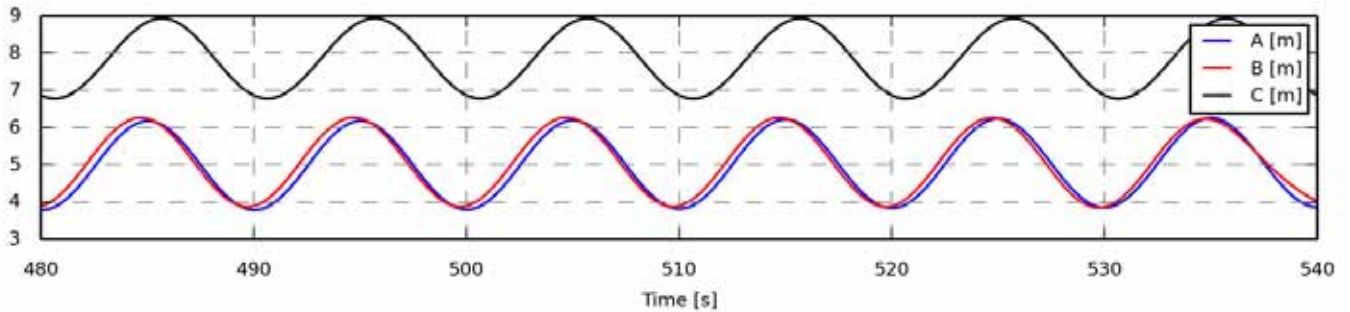


Figure 1349 - Full length time series

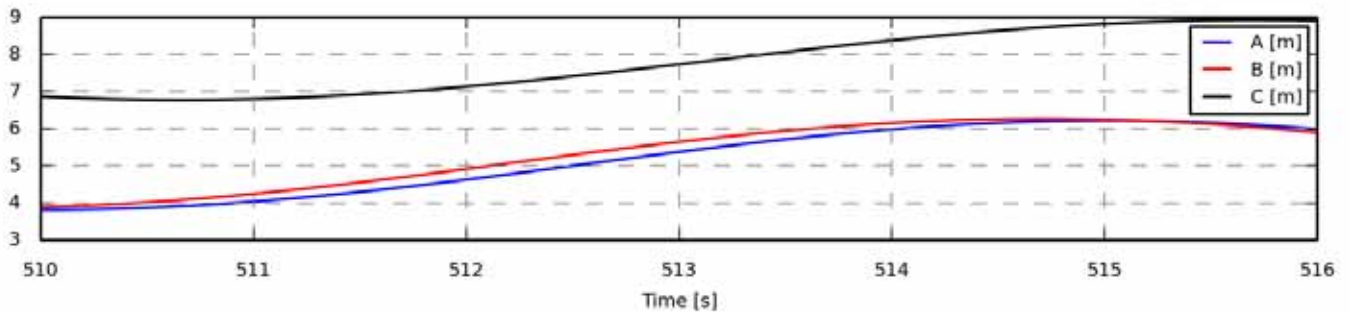


Figure 1350 - Zoom of time series

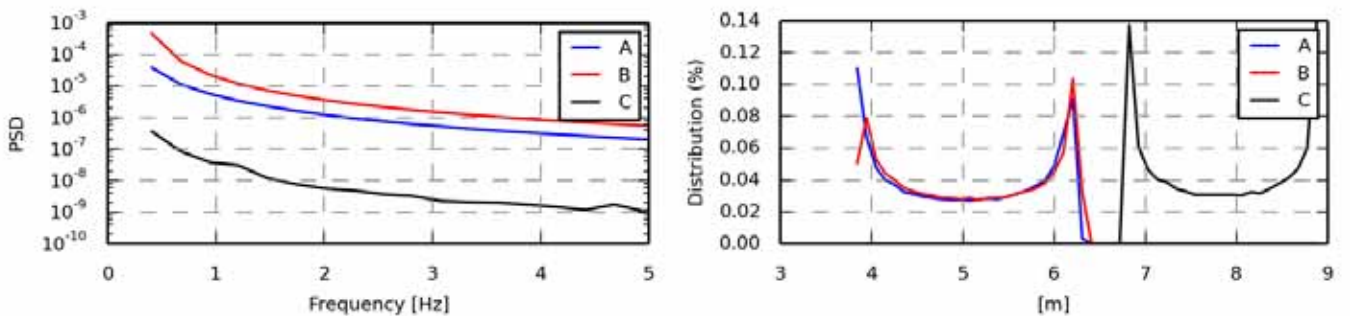


Figure 1351 - Power spectrum density

Statistics	A	B	C
Min	3.7900	3.8524	6.7727
Max	6.2602	6.2705	8.9312
Mean	5.0077	5.0839	7.8522
Std	0.8462	0.8358	0.7612
Skewness	0.0167	-0.0177	0.0001
Kurtosis	-1.4972	-1.4835	-1.5003

Figure 1352 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	1.1047	1.1022	0.9987
Eq (m=4)	1.3385	1.3355	1.2100
Eq (m=6)	1.6218	1.6185	1.4661
Eq (m=8)	1.7854	1.7820	1.6140
Eq (m=10)	1.8915	1.8881	1.7098
Eq (m=12)	1.9658	1.9625	1.7768

Section 15.08 oc4_p2_load_case_3-4: State pos z coo: global [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-4.sel (01-03-2014 03:26)	21	State pos z Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
B	WAMsim/oc4_p2_load_case_3-4.sel (01-04-2014 12:47)	21	State pos z Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
C	hawc2/oc4_p2_load_case_3-4.sel (31-03-2014 15:35)	21	State pos z Mbdy:mc E-nr: 8 Z-rel:0.00 coo: global platform translation in surge sway and heave

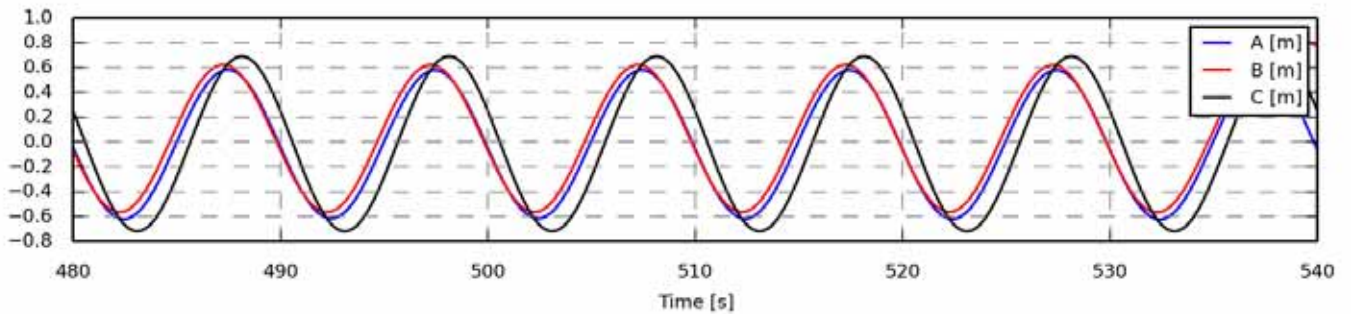


Figure 1353 - Full length time series

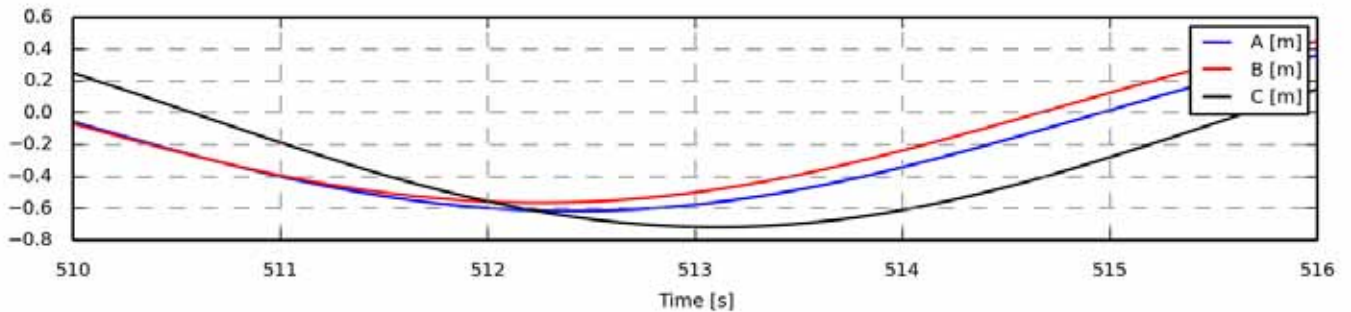


Figure 1354 - Zoom of time series

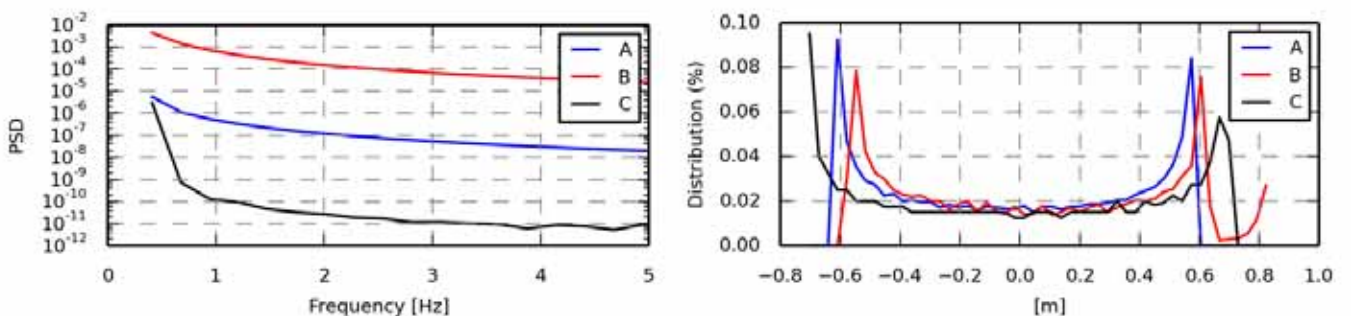


Figure 1355 - Power spectrum density

Statistics	A	B	C
Min	-0.6237	-0.5685	-0.7186
Max	0.5811	0.8382	0.6907
Mean	-0.0209	0.0483	-0.0163
Std	0.4233	0.4440	0.4973
Skewness	0.0035	0.0781	0.0065
Kurtosis	-1.4987	-1.4220	-1.4965

Figure 1356 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.5457	0.5447	0.6420
Eq (m=4)	0.6626	0.6650	0.7794
Eq (m=6)	0.8065	0.8143	0.9477
Eq (m=8)	0.8905	0.9036	1.0459
Eq (m=10)	0.9453	0.9643	1.1099
Eq (m=12)	0.9837	1.0093	1.1549

Section 15.09 oc4_p2_load_case_3-4: proj_ang tx coo: global [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-4.sel (01-03-2014 03:26)	22	State_rot proj_ang tx Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
B	WAMsim/oc4_p2_load_case_3-4.sel (01-04-2014 12:47)	22	State_rot proj_ang tx Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
C	hawc2/oc4_p2_load_case_3-4.sel (31-03-2014 15:35)	22	State_rot proj_ang tx Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw

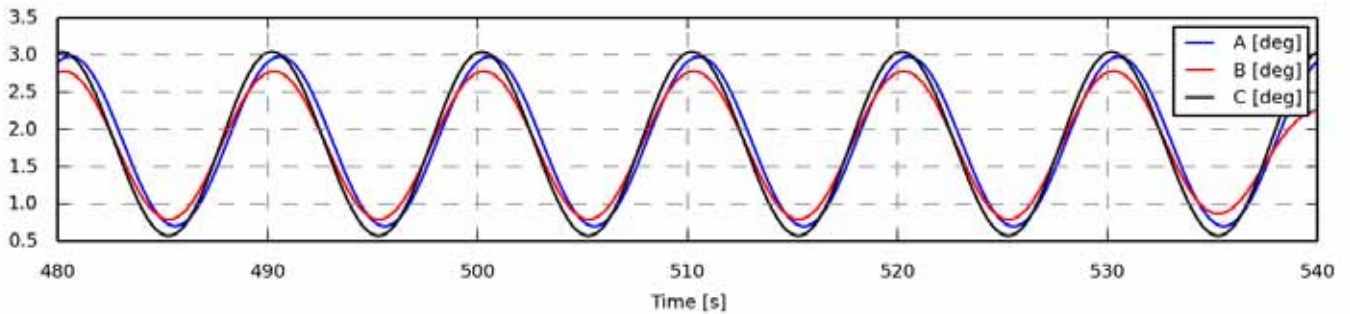


Figure 1357 - Full length time series

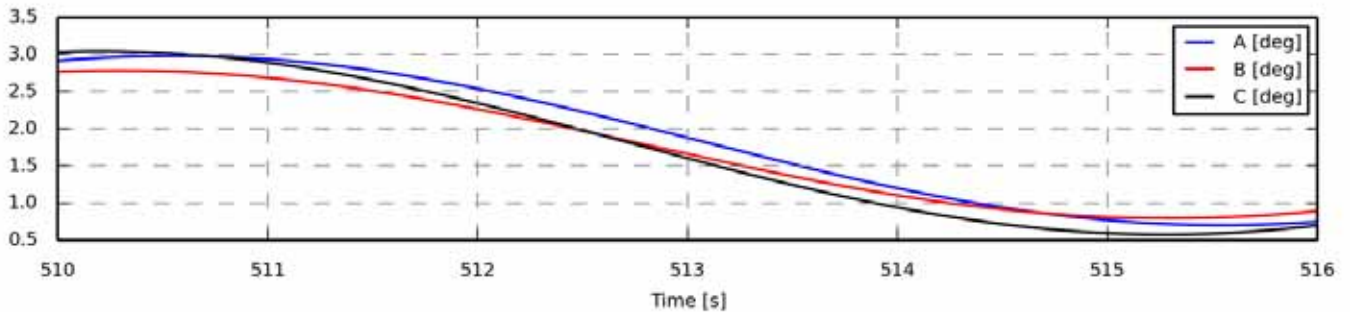


Figure 1358 - Zoom of time series

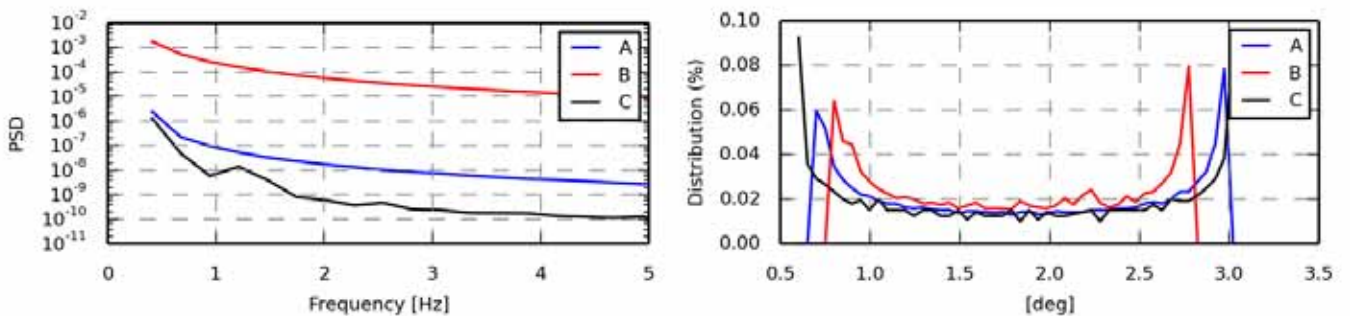


Figure 1359 - Power spectrum density

Statistics	A	B	C
Min	0.7025	0.7931	0.5761
Max	2.9855	2.7851	3.0462
Mean	1.8449	1.7795	1.8037
Std	0.8053	0.6906	0.8725
Skewness	-0.0037	0.0254	0.0118
Kurtosis	-1.5006	-1.4663	-1.4995

Figure 1360 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	1.0563	0.9043	1.1465
Eq (m=4)	1.2798	1.0983	1.3891
Eq (m=6)	1.5506	1.3355	1.6829
Eq (m=8)	1.7070	1.4738	1.8523
Eq (m=10)	1.8083	1.5641	1.9621
Eq (m=12)	1.8792	1.6276	2.0388

Section 15.10 oc4_p2_load_case_3-4: proj_ang ty coo: global [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-4.sel (01-03-2014 03:26)	23	State_rot proj_ang ty Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
B	WAMsim/oc4_p2_load_case_3-4.sel (01-04-2014 12:47)	23	State_rot proj_ang ty Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
C	hawc2/oc4_p2_load_case_3-4.sel (31-03-2014 15:35)	23	State_rot proj_ang ty Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw

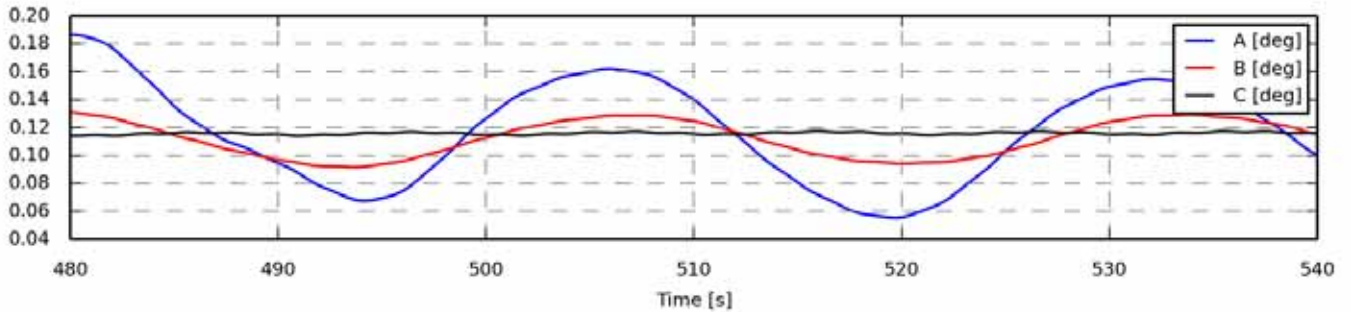


Figure 1361 - Full length time series

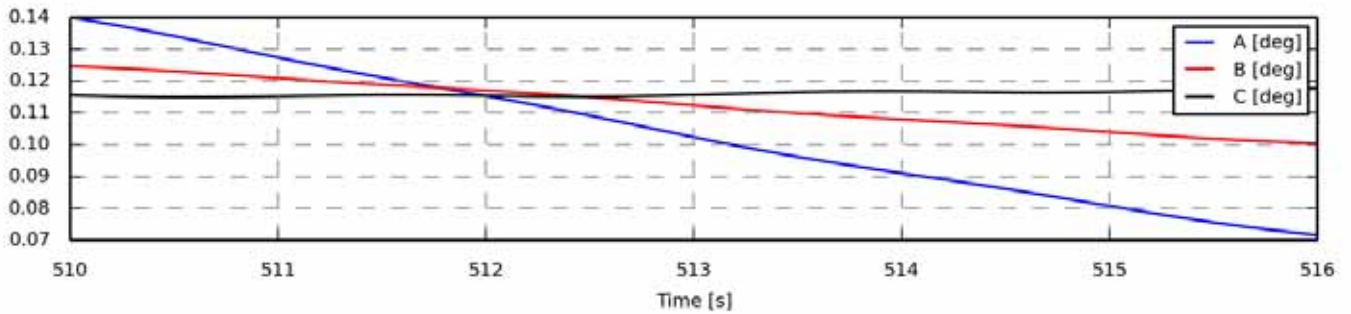


Figure 1362 - Zoom of time series

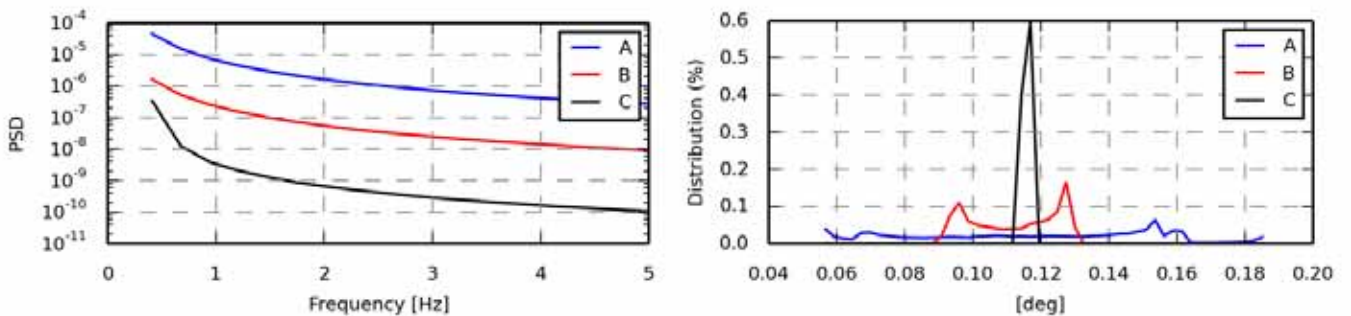


Figure 1363 - Power spectrum density

Statistics	A	B	C
Min	0.0554	0.0917	0.1141
Max	0.1864	0.1312	0.1176
Mean	0.1174	0.1123	0.1159
Std	0.0355	0.0129	0.0009
Skewness	-0.1298	-0.1496	-0.1896
Kurtosis	-1.1481	-1.4988	-0.8395

Figure 1364 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.0348	0.0119	0.0013
Eq (m=4)	0.0465	0.0158	0.0016
Eq (m=6)	0.0629	0.0210	0.0019
Eq (m=8)	0.0741	0.0243	0.0021
Eq (m=10)	0.0822	0.0265	0.0023
Eq (m=12)	0.0884	0.0282	0.0024

Section 15.11 oc4_p2_load_case_3-4: proj_ang tz coo: global [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-4.sel (01-03-2014 03:26)	24	State_rot proj_ang tz Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
B	WAMsim/oc4_p2_load_case_3-4.sel (01-04-2014 12:47)	24	State_rot proj_ang tz Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
C	hawc2/oc4_p2_load_case_3-4.sel (31-03-2014 15:35)	24	State_rot proj_ang tz Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw

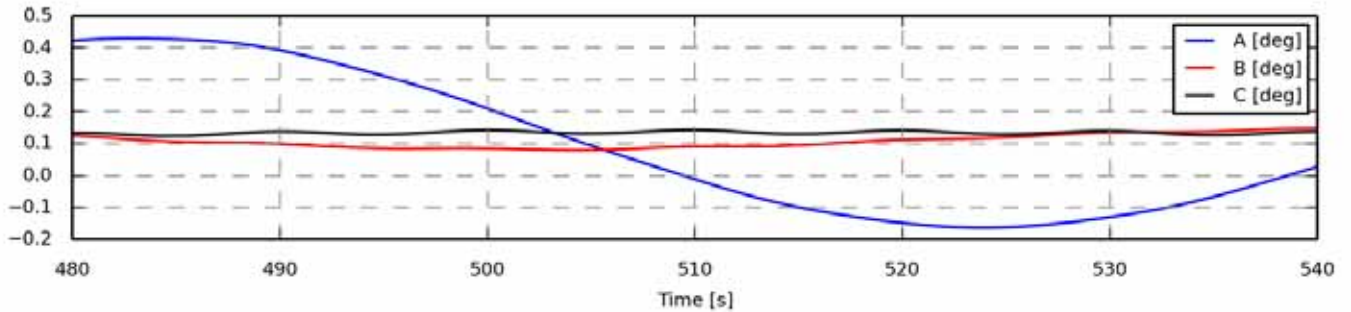


Figure 1365 - Full length time series

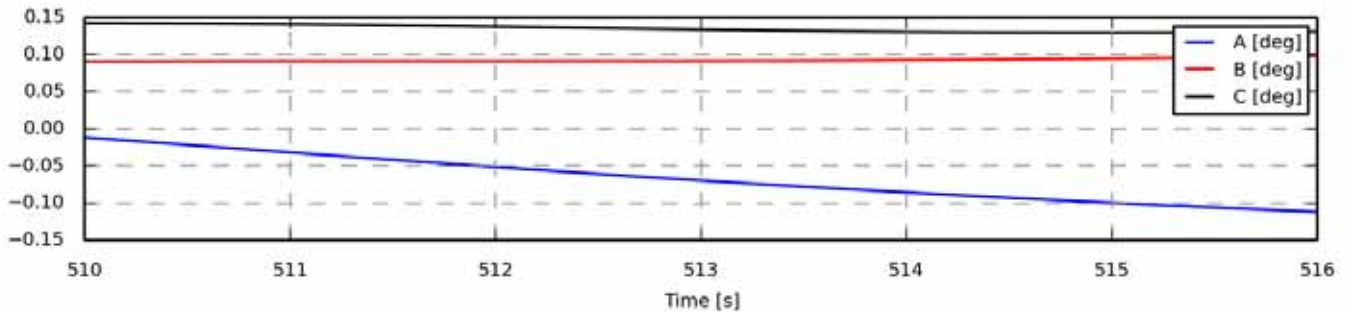


Figure 1366 - Zoom of time series

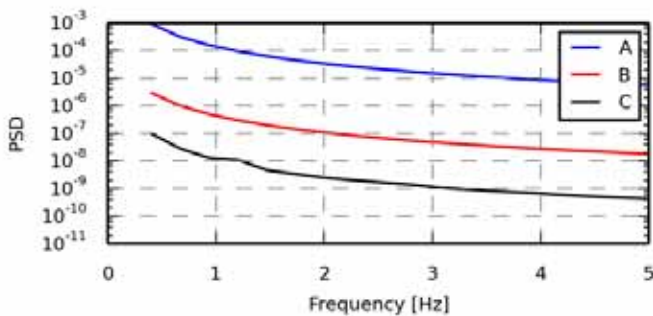


Figure 1367 - Power spectrum density

Statistics	A	B	C
Min	-0.1633	0.0787	0.1237
Max	0.4289	0.1477	0.1426
Mean	0.0860	0.1065	0.1338
Std	0.2174	0.0206	0.0048
Skewness	0.4207	0.4509	-0.0501
Kurtosis	-1.4104	-1.0695	-0.8937

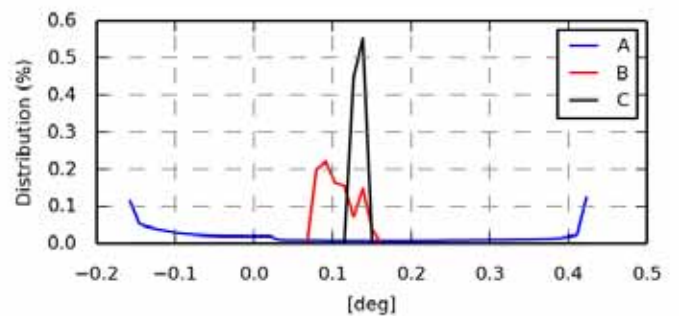


Figure 1368 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.1214	0.0153	0.0057
Eq (m=4)	0.1794	0.0219	0.0072
Eq (m=6)	0.2667	0.0315	0.0093
Eq (m=8)	0.3255	0.0381	0.0108
Eq (m=10)	0.3669	0.0428	0.0120
Eq (m=12)	0.3974	0.0463	0.0128

Section 15.12 oc4_p2_load_case_3-4: Mx coo: towertop [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-4.sel (01-03-2014 03:26)	37	MomentMx Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
B	WAMsim/oc4_p2_load_case_3-4.sel (01-04-2014 12:47)	37	MomentMx Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
C	hawc2/oc4_p2_load_case_3-4.sel (31-03-2014 15:35)	37	MomentMx Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment

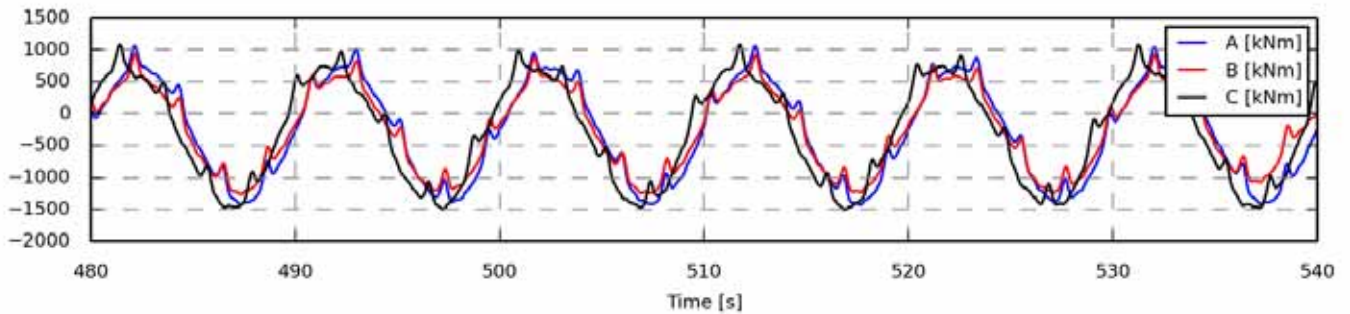


Figure 1369 - Full length time series

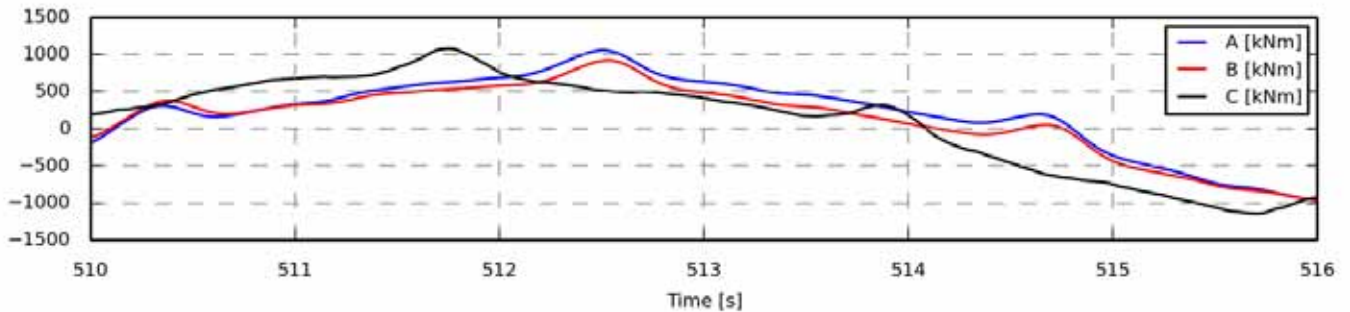


Figure 1370 - Zoom of time series

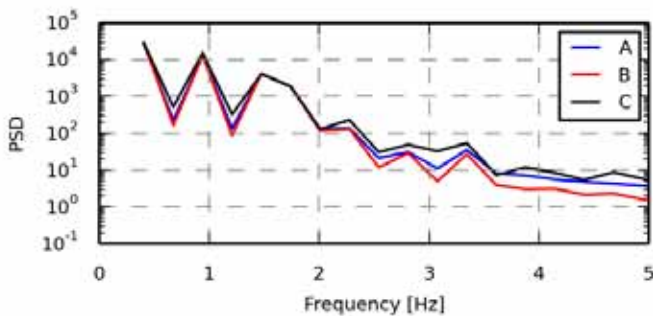


Figure 1371 - Power spectrum density

Statistics	A	B	C
Min	-1.4314e+03	-1.2662e+03	-1.5082e+03
Max	1.0585e+03	933.9099	1.0806e+03
Mean	-2.6690e+02	-2.4852e+02	-2.8277e+02
Std	752.6436	634.8698	783.4087
Skewness	-0.0218	-0.0179	-0.0613
Kurtosis	-1.4200	-1.3657	-1.4382

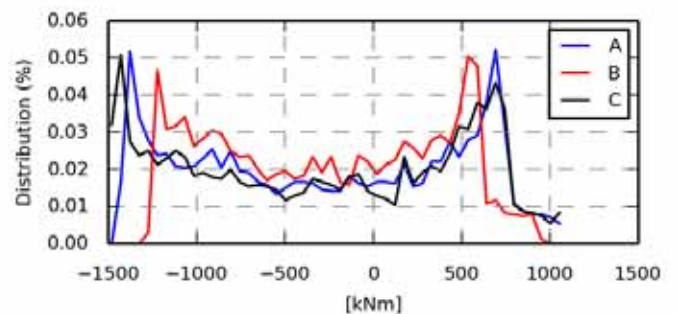


Figure 1372 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	1.0895e+03	948.4545	1.1431e+03
Eq (m=4)	1.3240e+03	1.1523e+03	1.3855e+03
Eq (m=6)	1.6143e+03	1.4055e+03	1.6837e+03
Eq (m=8)	1.7850e+03	1.5546e+03	1.8587e+03
Eq (m=10)	1.8971e+03	1.6526e+03	1.9739e+03
Eq (m=12)	1.9764e+03	1.7223e+03	2.0557e+03

Section 15.13 oc4_p2_load_case_3-4: My coo: towertop [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-4.sel (01-03-2014 03:26)	38	MomentMy Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
B	WAMsim/oc4_p2_load_case_3-4.sel (01-04-2014 12:47)	38	MomentMy Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
C	hawc2/oc4_p2_load_case_3-4.sel (31-03-2014 15:35)	38	MomentMy Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment

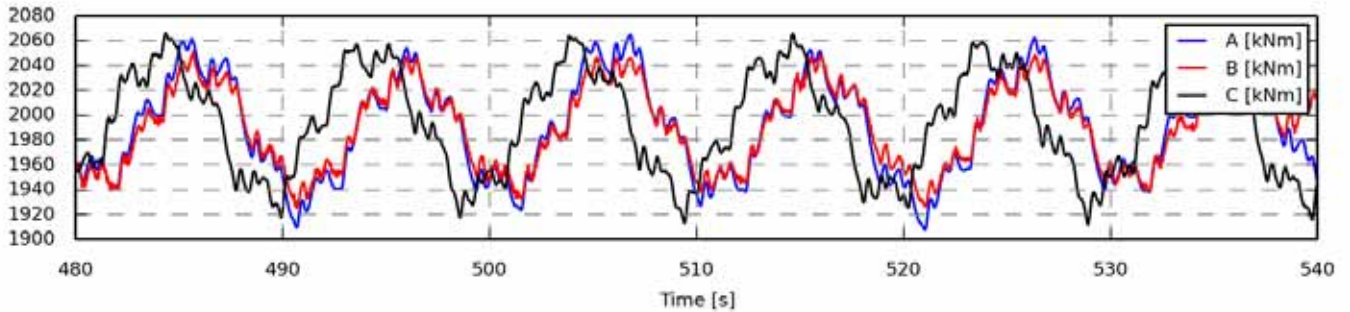


Figure 1373 - Full length time series

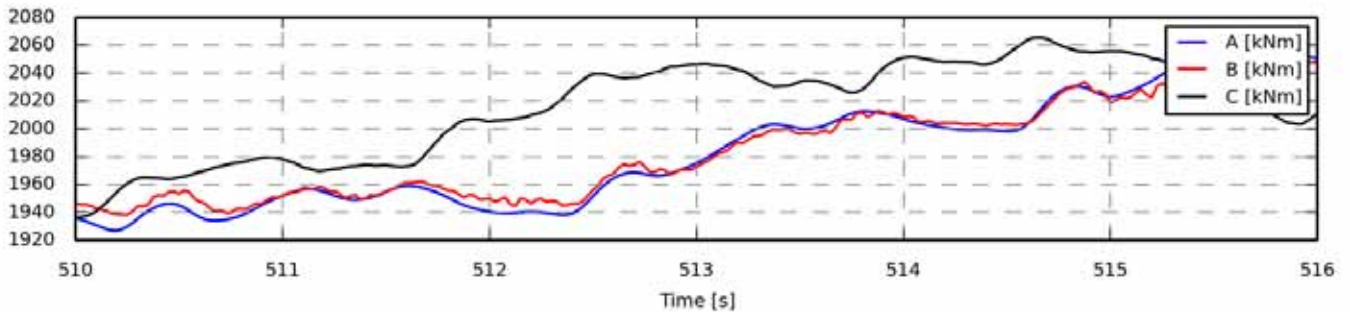


Figure 1374 - Zoom of time series

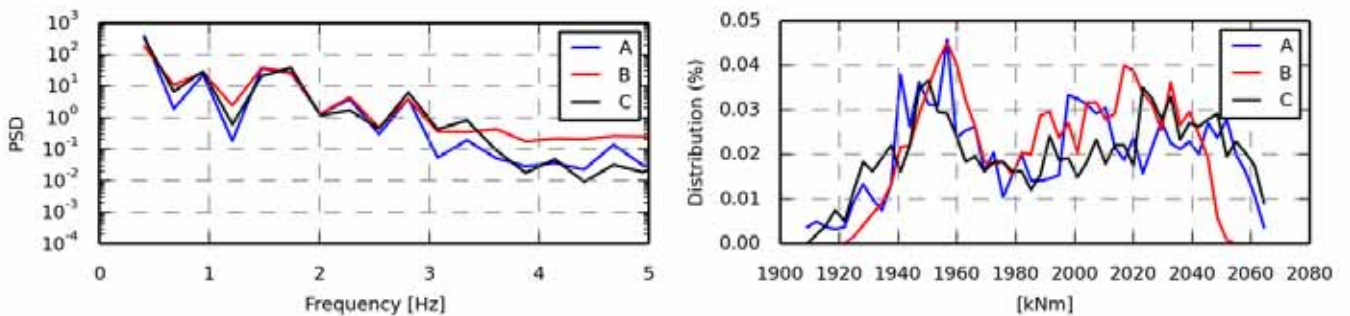


Figure 1375 - Power spectrum density

Statistics	A	B	C
Min	1.9075e+03	1.9252e+03	1.9123e+03
Max	2.0646e+03	2.0510e+03	2.0660e+03
Mean	1.9922e+03	1.9915e+03	1.9947e+03
Std	39.9045	33.0065	41.7517
Skewness	-0.0006	-0.0684	-0.0918
Kurtosis	-1.1862	-1.2857	-1.2972

Figure 1376 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	63.4487	52.4929	66.1173
Eq (m=4)	77.0869	63.5545	80.1007
Eq (m=6)	94.4832	77.6222	97.4891
Eq (m=8)	105.1863	86.0009	107.7505
Eq (m=10)	112.5894	91.5830	114.5428
Eq (m=12)	118.0929	95.6017	119.3945

Section 15.14 oc4_p2_load_case_3-4: Mz coo: towertop [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-4.sel (01-03-2014 03:26)	39	MomentMz Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
B	WAMsim/oc4_p2_load_case_3-4.sel (01-04-2014 12:47)	39	MomentMz Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
C	hawc2/oc4_p2_load_case_3-4.sel (31-03-2014 15:35)	39	MomentMz Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment

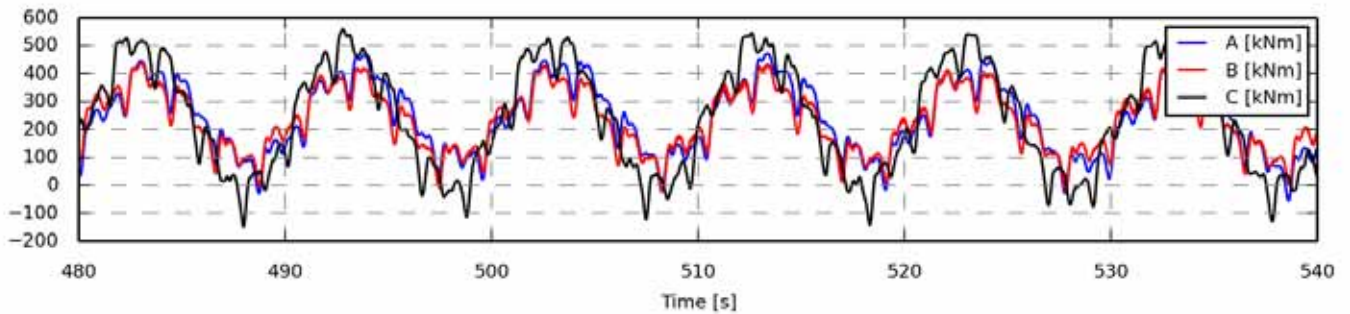


Figure 1377 - Full length time series

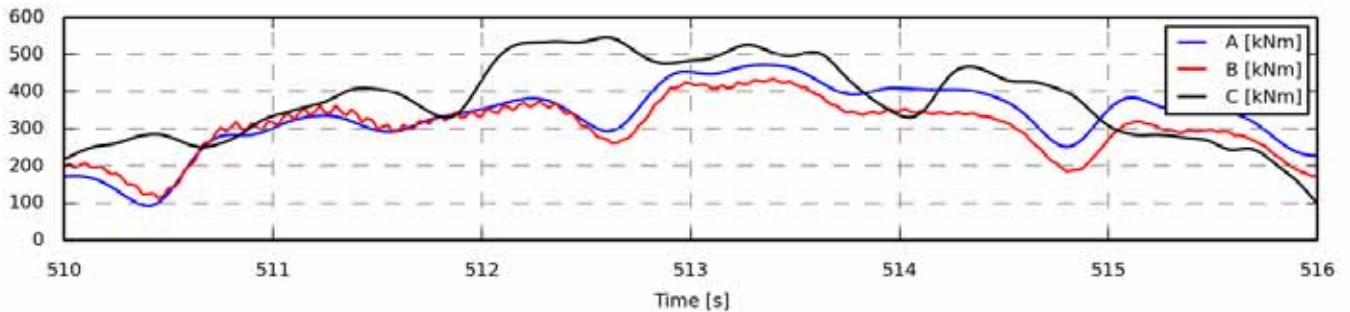


Figure 1378 - Zoom of time series

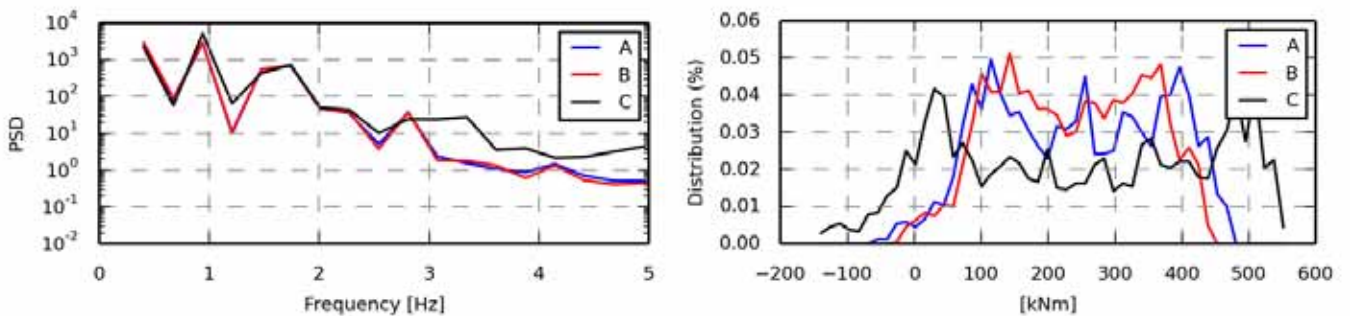


Figure 1379 - Power spectrum density

Statistics	A	B	C
Min	-53.7965	-20.0635	-1.4632e+02
Max	471.7696	437.9488	558.5440
Mean	242.3544	234.2499	243.6931
Std	126.2583	109.9893	188.6139
Skewness	-0.0504	-0.0641	-0.0341
Kurtosis	-1.1443	-1.0621	-1.3132

Figure 1380 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	221.4448	204.4948	300.0777
Eq (m=4)	264.7770	242.1000	362.9614
Eq (m=6)	320.9669	292.1789	442.9383
Eq (m=8)	354.6871	322.4053	490.4006
Eq (m=10)	377.2281	342.4151	521.7705
Eq (m=12)	393.5430	356.6693	544.1298

Section 15.15 oc4_p2_load_case_3-4: Mx coo: tower [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-4.sel (01-03-2014 03:26)	43	MomentMx Mbdy:tower nodenr: 1 coo: tower tower base bending moment
B	WAMsim/oc4_p2_load_case_3-4.sel (01-04-2014 12:47)	43	MomentMx Mbdy:tower nodenr: 1 coo: tower tower base bending moment
C	hawc2/oc4_p2_load_case_3-4.sel (31-03-2014 15:35)	43	MomentMx Mbdy:tower nodenr: 1 coo: tower tower base bending moment

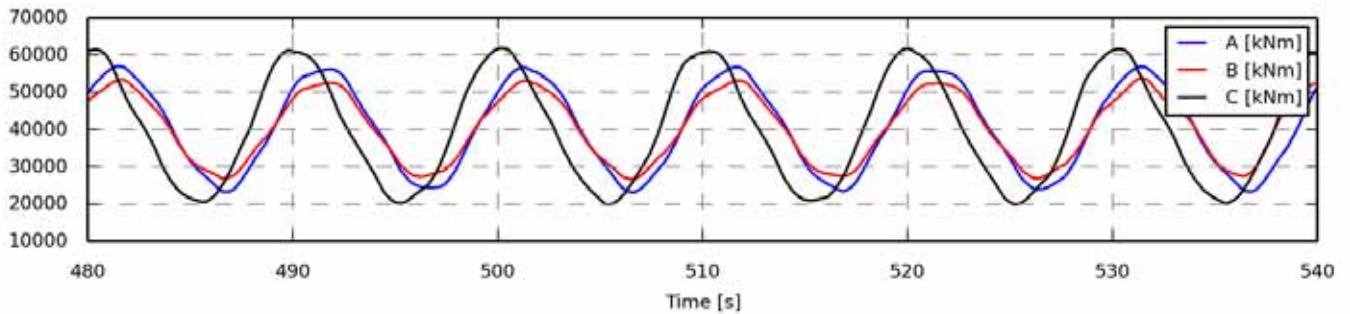


Figure 1381 - Full length time series

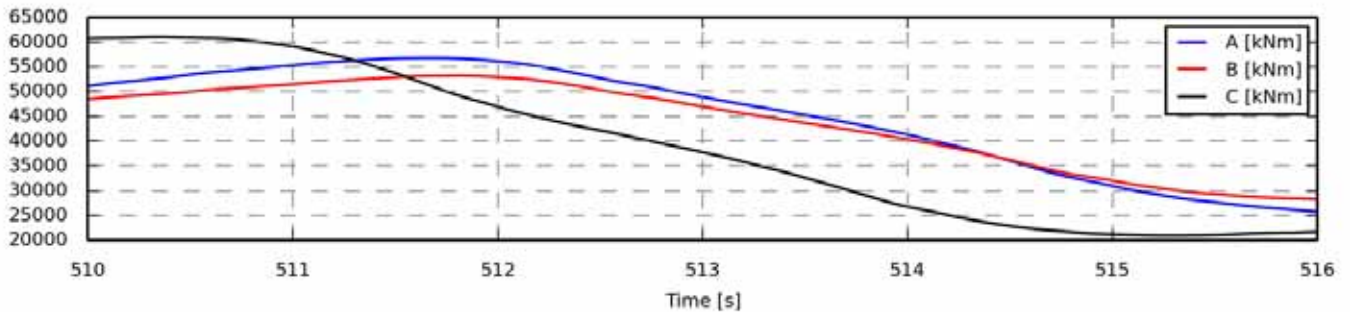


Figure 1382 - Zoom of time series

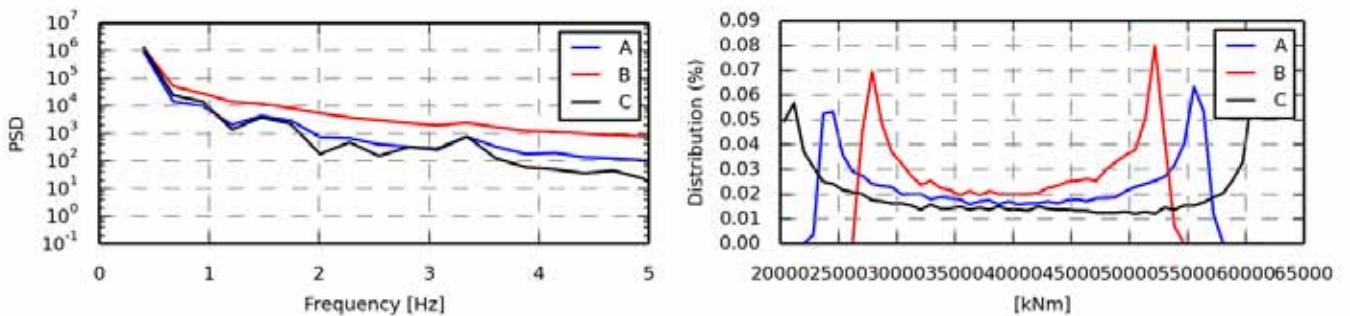


Figure 1383 - Power spectrum density

Statistics	A	B	C
Min	2.3162e+04	2.6678e+04	1.9900e+04
Max	5.7053e+04	5.3752e+04	6.1838e+04
Mean	4.0434e+04	4.0456e+04	4.0251e+04
Std	1.1495e+04	9.0330e+03	1.4487e+04
Skewness	-0.0368	-0.0781	0.0954
Kurtosis	-1.4861	-1.4928	-1.4765

Figure 1384 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	1.5134e+04	1.1973e+04	1.9115e+04
Eq (m=4)	1.8348e+04	1.4509e+04	2.3163e+04
Eq (m=6)	2.2264e+04	1.7593e+04	2.8072e+04
Eq (m=8)	2.4541e+04	1.9381e+04	3.0909e+04
Eq (m=10)	2.6029e+04	2.0547e+04	3.2752e+04
Eq (m=12)	2.7079e+04	2.1369e+04	3.4044e+04

Section 15.16 oc4_p2_load_case_3-4: My coo: tower [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-4.sel (01-03-2014 03:26)	44	MomentMy Mbdy:tower nodenr: 1 coo: tower tower base bending moment
B	WAMsim/oc4_p2_load_case_3-4.sel (01-04-2014 12:47)	44	MomentMy Mbdy:tower nodenr: 1 coo: tower tower base bending moment
C	hawc2/oc4_p2_load_case_3-4.sel (31-03-2014 15:35)	44	MomentMy Mbdy:tower nodenr: 1 coo: tower tower base bending moment

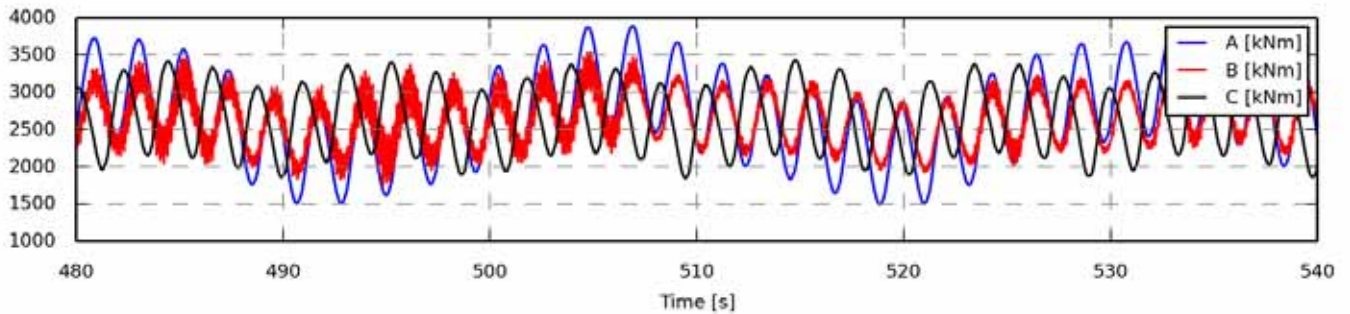


Figure 1385 - Full length time series

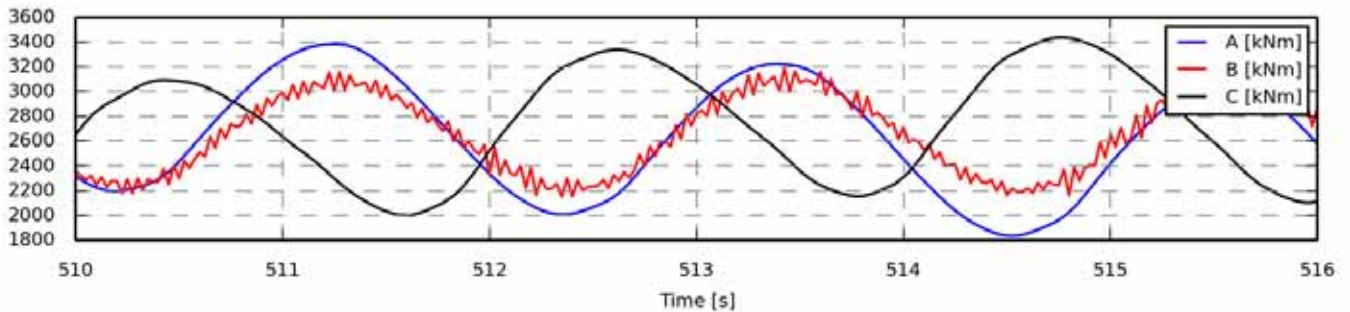


Figure 1386 - Zoom of time series

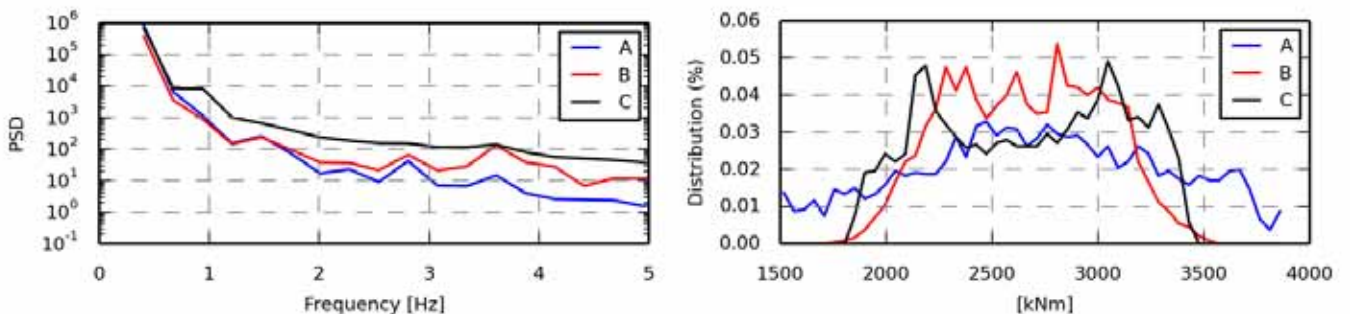


Figure 1387 - Power spectrum density

Statistics	A	B	C
Min	1.4916e+03	1.7546e+03	1.8515e+03
Max	3.8840e+03	3.5382e+03	3.4359e+03
Mean	2.7107e+03	2.6566e+03	2.6737e+03
Std	580.2517	358.6927	440.1730
Skewness	-0.0633	-0.0094	-0.0993
Kurtosis	-0.7855	-0.9108	-1.2614

Figure 1388 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	1.0773e+03	1.0284e+03	952.0711
Eq (m=4)	1.1916e+03	1.0304e+03	1.0280e+03
Eq (m=6)	1.3801e+03	1.1069e+03	1.1235e+03
Eq (m=8)	1.5364e+03	1.1804e+03	1.1876e+03
Eq (m=10)	1.6594e+03	1.2424e+03	1.2361e+03
Eq (m=12)	1.7538e+03	1.2951e+03	1.2747e+03

Section 15.17 oc4_p2_load_case_3-4: Mz coo: tower [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-4.sel (01-03-2014 03:26)	45	MomentMz Mbdy:tower nodenr: 1 coo: tower tower base bending moment
B	WAMsim/oc4_p2_load_case_3-4.sel (01-04-2014 12:47)	45	MomentMz Mbdy:tower nodenr: 1 coo: tower tower base bending moment
C	hawc2/oc4_p2_load_case_3-4.sel (31-03-2014 15:35)	45	MomentMz Mbdy:tower nodenr: 1 coo: tower tower base bending moment

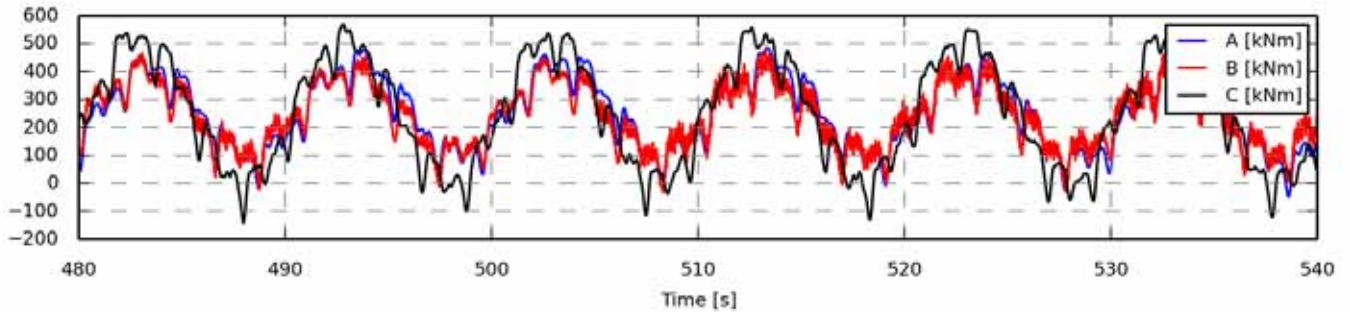


Figure 1389 - Full length time series

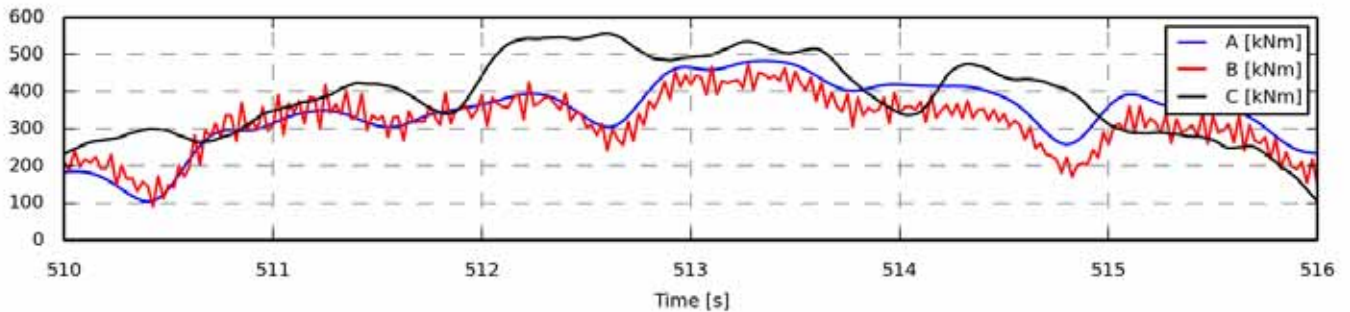


Figure 1390 - Zoom of time series

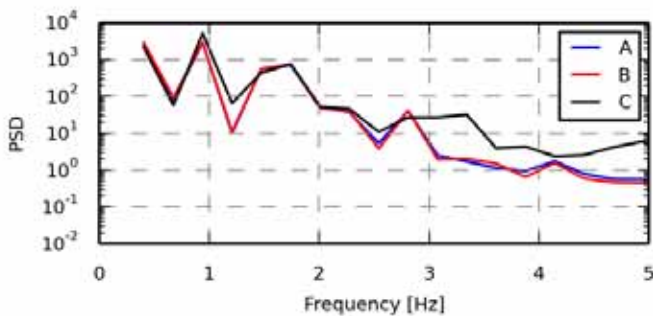


Figure 1391 - Power spectrum density

Statistics	A	B	C
Min	-46.0716	-31.8015	-1.3954e+02
Max	482.8992	473.5456	568.0864
Mean	252.2538	244.1630	253.5758
Std	127.0417	112.4518	188.2858
Skewness	-0.0520	-0.0645	-0.0339
Kurtosis	-1.1427	-1.0179	-1.3080

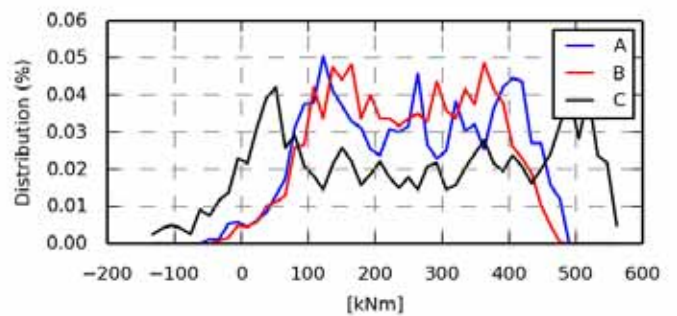


Figure 1392 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	224.5606	238.4142	300.9851
Eq (m=4)	268.3133	270.1302	363.7352
Eq (m=6)	325.0021	322.4984	443.7456
Eq (m=8)	358.9239	355.7046	491.2683
Eq (m=10)	381.5083	377.9076	522.6859
Eq (m=12)	397.7828	393.7845	545.0862

Section 15.18 oc4_p2_load_case_3-4: ESYS line1_1 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-4.sel (01-03-2014 03:26)	55	ESYS line1_1 SENSOR 4
B	WAMsim/oc4_p2_load_case_3-4.sel (01-04-2014 12:47)	55	ESYS line1_1 SENSOR 4
C	hawc2/oc4_p2_load_case_3-4.sel (31-03-2014 15:35)	55	ESYS line1_1 SENSOR 4

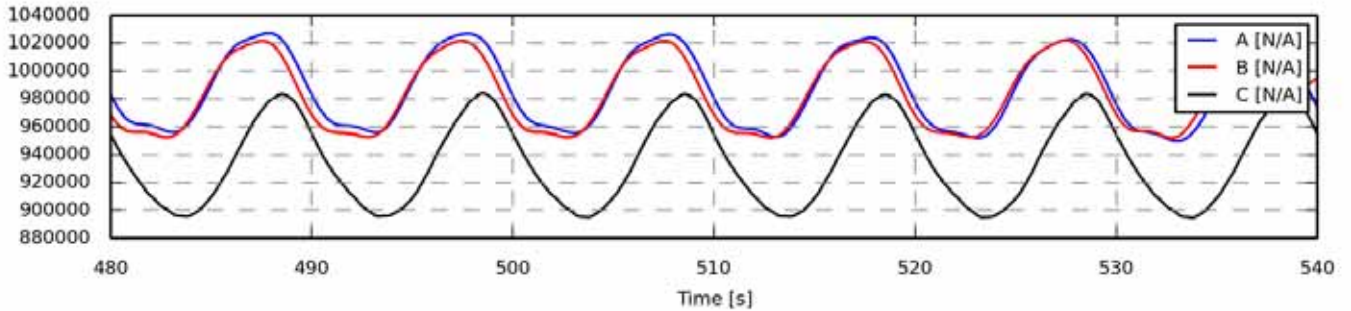


Figure 1393 - Full length time series

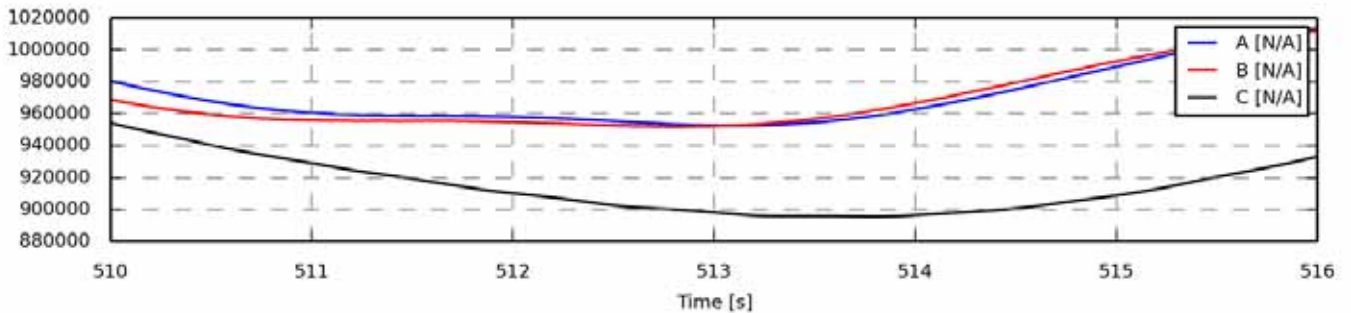


Figure 1394 - Zoom of time series

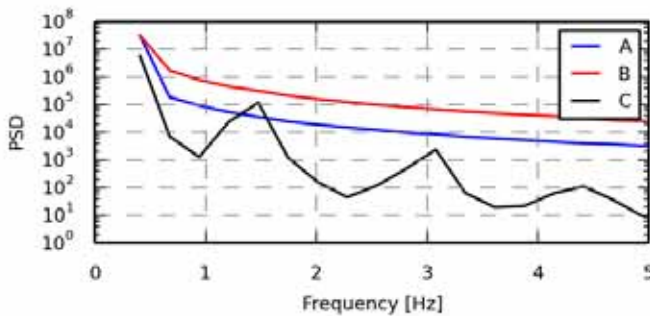


Figure 1395 - Power spectrum density

Statistics	A	B	C
Min	9.4951e+05	9.5171e+05	8.9474e+05
Max	1.0272e+06	1.0220e+06	9.8394e+05
Mean	9.8721e+05	9.8280e+05	9.3493e+05
Std	2.6518e+04	2.4719e+04	3.0241e+04
Skewness	0.1255	0.2131	0.2180
Kurtosis	-1.5963	-1.4776	-1.4107

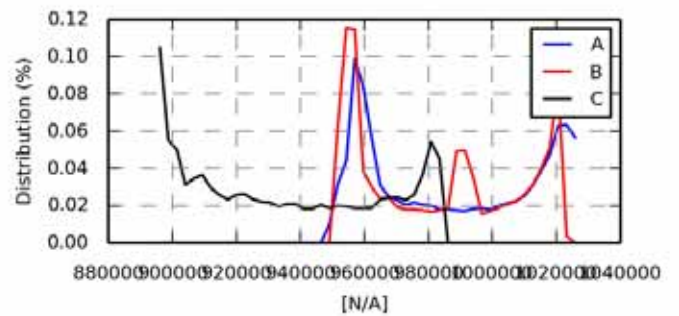


Figure 1396 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	3.2554e+04	3.0660e+04	4.0104e+04
Eq (m=4)	3.9536e+04	3.7537e+04	4.8687e+04
Eq (m=6)	4.8136e+04	4.6039e+04	5.9215e+04
Eq (m=8)	5.3189e+04	5.1025e+04	6.5354e+04
Eq (m=10)	5.6515e+04	5.4285e+04	6.9357e+04
Eq (m=12)	5.8879e+04	5.6577e+04	7.2168e+04

Section 15.19 oc4_p2_load_case_3-4: ESYS line1_3 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-4.sel (01-03-2014 03:26)	259	ESYS line1_3 SENSOR 104
B	WAMsim/oc4_p2_load_case_3-4.sel (01-04-2014 12:47)	259	ESYS line1_3 SENSOR 104
C	hawc2/oc4_p2_load_case_3-4.sel (31-03-2014 15:35)	259	ESYS line1_3 SENSOR 104

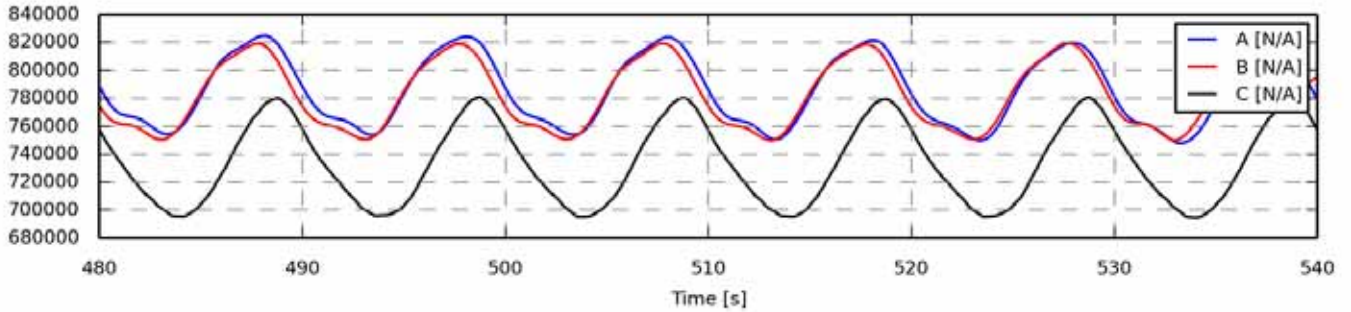


Figure 1397 - Full length time series

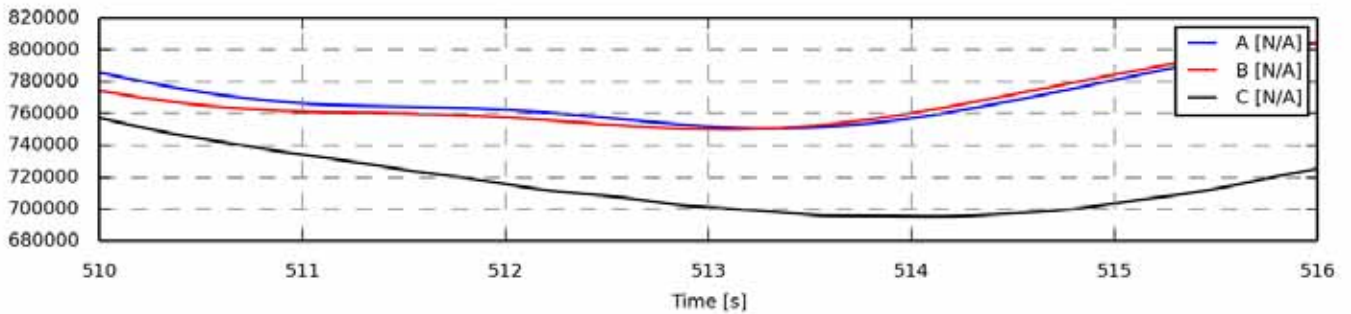


Figure 1398 - Zoom of time series

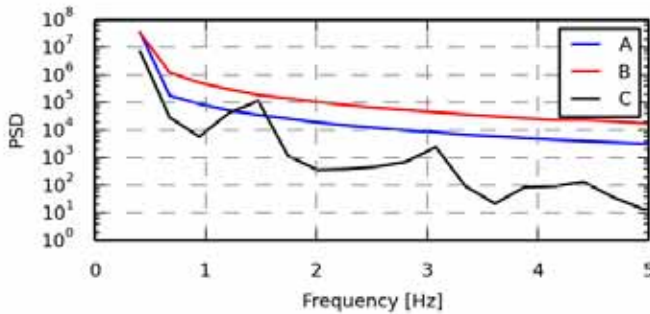


Figure 1399 - Power spectrum density

Statistics	A	B	C
Min	7.4794e+05	7.4994e+05	6.9464e+05
Max	8.2485e+05	8.1936e+05	7.8060e+05
Mean	7.8580e+05	7.8141e+05	7.3354e+05
Std	2.4519e+04	2.2842e+04	2.8711e+04
Skewness	0.1134	0.2343	0.2002
Kurtosis	-1.4979	-1.3754	-1.3791

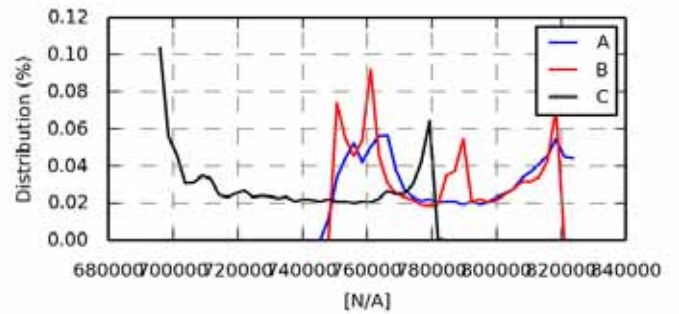


Figure 1400 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	3.2314e+04	3.0291e+04	3.8870e+04
Eq (m=4)	3.9258e+04	3.7043e+04	4.7170e+04
Eq (m=6)	4.7829e+04	4.5394e+04	5.7326e+04
Eq (m=8)	5.2862e+04	5.0295e+04	6.3242e+04
Eq (m=10)	5.6168e+04	5.3502e+04	6.7101e+04
Eq (m=12)	5.8512e+04	5.5758e+04	6.9813e+04

Section 15.20 oc4_p2_load_case_3-4: ESYS line2_1 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-4.sel (01-03-2014 03:26)	263	ESYS line2_1 SENSOR 4
B	WAMsim/oc4_p2_load_case_3-4.sel (01-04-2014 12:47)	263	ESYS line2_1 SENSOR 4
C	hawc2/oc4_p2_load_case_3-4.sel (31-03-2014 15:35)	263	ESYS line2_1 SENSOR 4

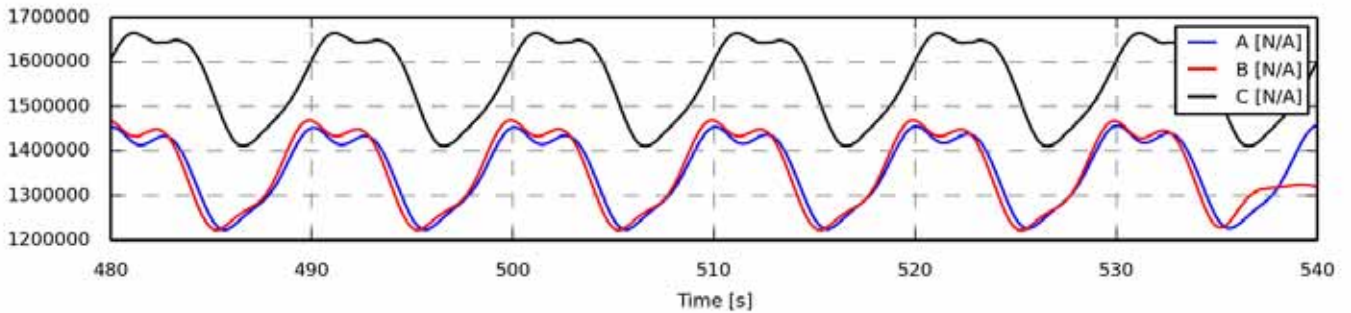


Figure 1401 - Full length time series

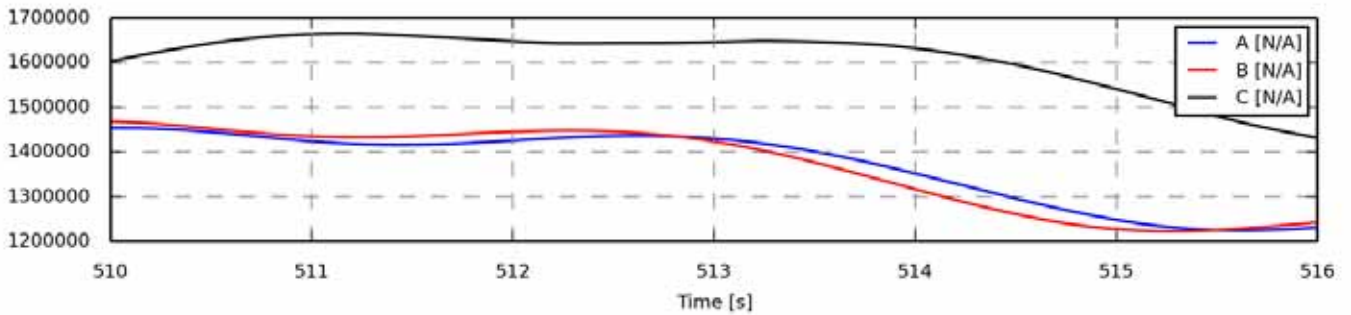


Figure 1402 - Zoom of time series

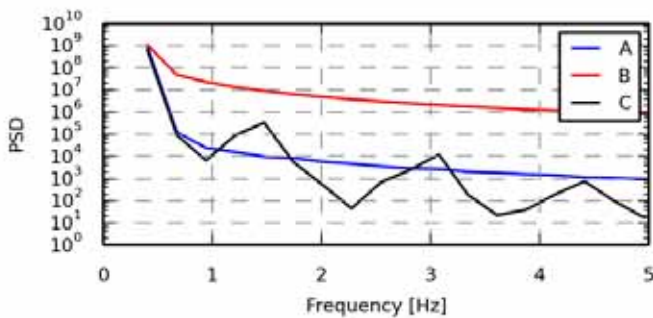


Figure 1403 - Power spectrum density

Statistics	A	B	C
Min	1.2232e+06	1.2221e+06	1.4106e+06
Max	1.4573e+06	1.4697e+06	1.6657e+06
Mean	1.3546e+06	1.3556e+06	1.5562e+06
Std	7.9028e+04	8.4288e+04	9.0056e+04
Skewness	-0.3264	-0.1571	-0.3029
Kurtosis	-1.4715	-1.5461	-1.4907

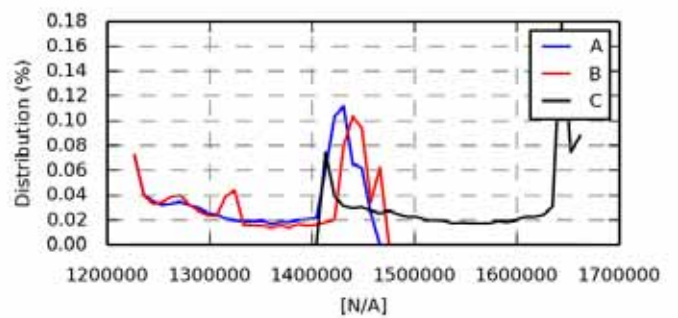


Figure 1404 - Value distribution

Fatigue eq.	1Hz	A	B	C
Eq (m=3)		1.0668e+05	1.1125e+05	1.1659e+05
Eq (m=4)		1.2922e+05	1.3558e+05	1.4144e+05
Eq (m=6)		1.5655e+05	1.6538e+05	1.7180e+05
Eq (m=8)		1.7231e+05	1.8270e+05	1.8948e+05
Eq (m=10)		1.8252e+05	1.9397e+05	2.0101e+05
Eq (m=12)		1.8966e+05	2.0187e+05	2.0911e+05

Section 15.21 oc4_p2_load_case_3-4: ESYS line2_3 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-4.sel (01-03-2014 03:26)	467	ESYS line2_3 SENSOR 104
B	WAMsim/oc4_p2_load_case_3-4.sel (01-04-2014 12:47)	467	ESYS line2_3 SENSOR 104
C	hawc2/oc4_p2_load_case_3-4.sel (31-03-2014 15:35)	467	ESYS line2_3 SENSOR 104

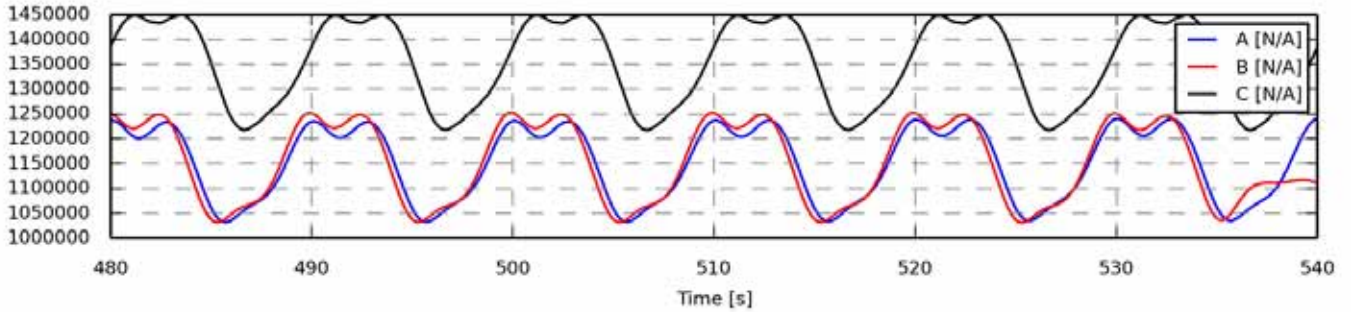


Figure 1405 - Full length time series

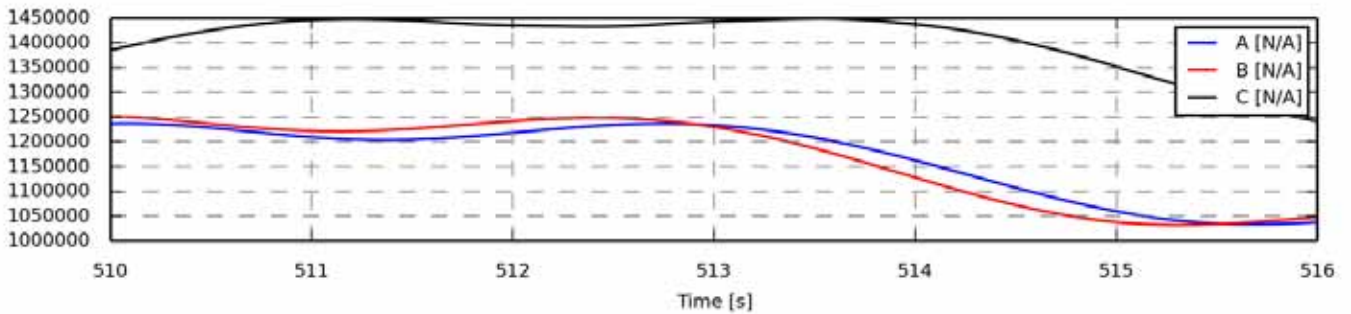


Figure 1406 - Zoom of time series

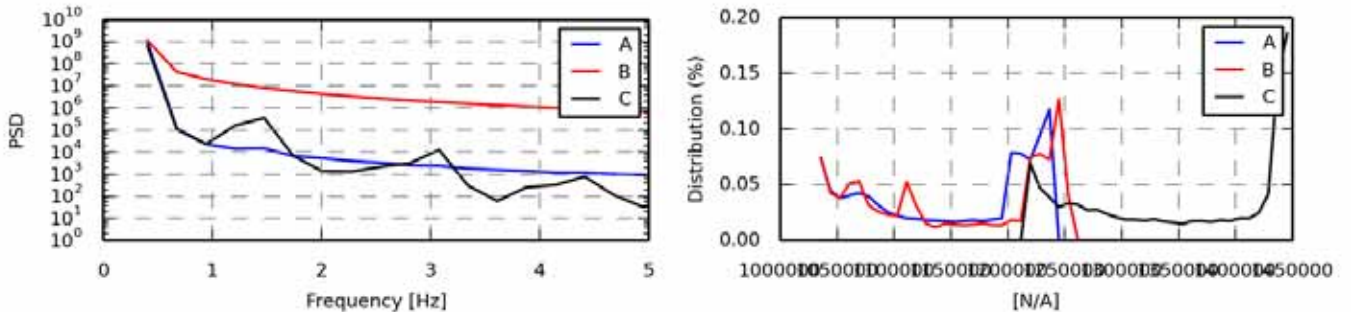


Figure 1407 - Power spectrum density

Statistics	A	B	C
Min	1.0322e+06	1.0316e+06	1.2173e+06
Max	1.2406e+06	1.2528e+06	1.4497e+06
Mean	1.1509e+06	1.1523e+06	1.3525e+06
Std	7.3173e+04	7.8888e+04	8.5196e+04
Skewness	-0.2990	-0.1315	-0.2819
Kurtosis	-1.5344	-1.6163	-1.5485

Figure 1408 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	9.4769e+04	9.9583e+04	1.0603e+05
Eq (m=4)	1.1467e+05	1.2132e+05	1.2867e+05
Eq (m=6)	1.3891e+05	1.4799e+05	1.5638e+05
Eq (m=8)	1.5291e+05	1.6348e+05	1.7253e+05
Eq (m=10)	1.6198e+05	1.7355e+05	1.8307e+05
Eq (m=12)	1.6833e+05	1.8060e+05	1.9047e+05

Section 15.22 oc4_p2_load_case_3-4: ESYS line3_1 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-4.sel (01-03-2014 03:26)	471	ESYS line3_1 SENSOR 4
B	WAMsim/oc4_p2_load_case_3-4.sel (01-04-2014 12:47)	471	ESYS line3_1 SENSOR 4
C	hawc2/oc4_p2_load_case_3-4.sel (31-03-2014 15:35)	471	ESYS line3_1 SENSOR 4

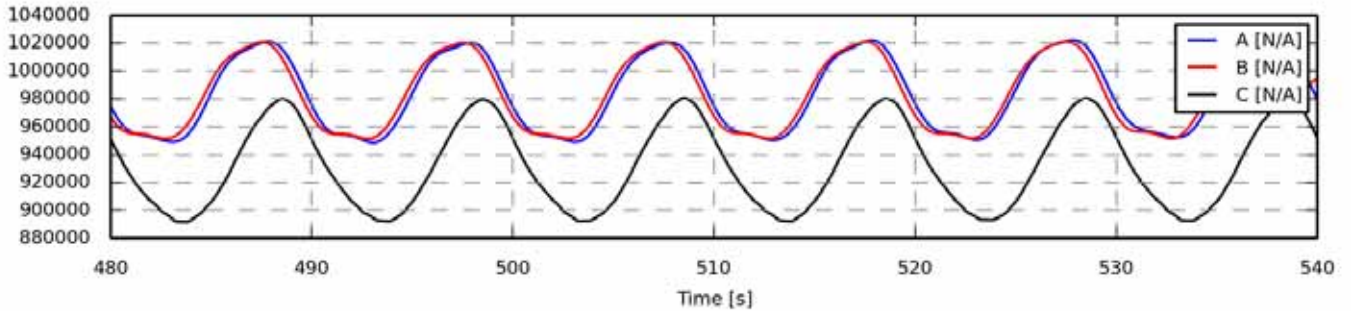


Figure 1409 - Full length time series

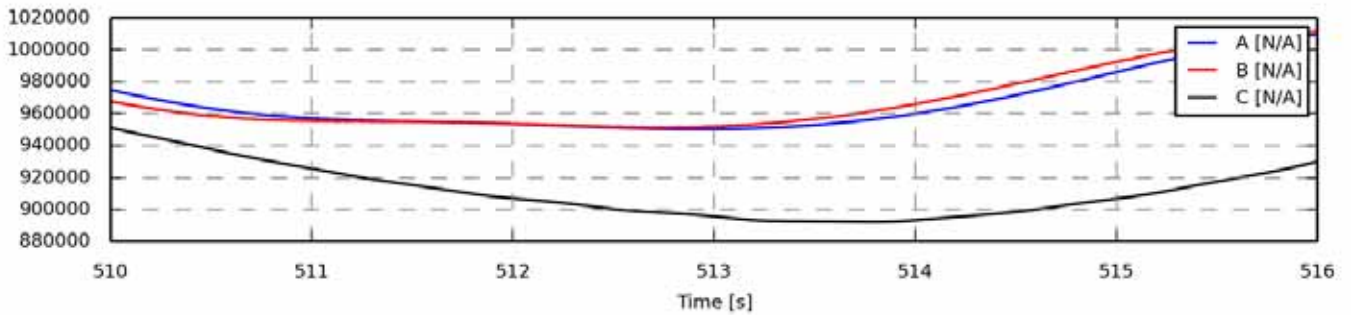


Figure 1410 - Zoom of time series

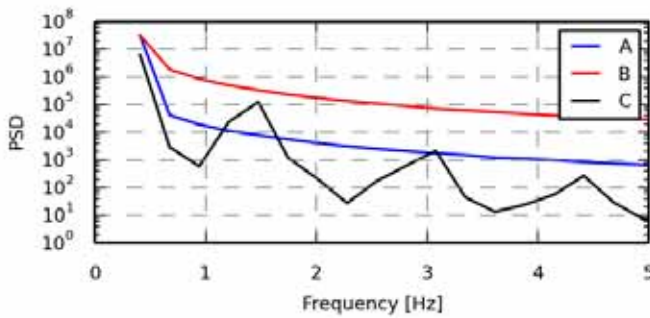


Figure 1411 - Power spectrum density

Statistics	A	B	C
Min	9.4853e+05	9.5107e+05	8.9161e+05
Max	1.0248e+06	1.0212e+06	9.8118e+05
Mean	9.8367e+05	9.8204e+05	9.3189e+05
Std	2.6857e+04	2.4813e+04	3.0249e+04
Skewness	0.1268	0.2089	0.2224
Kurtosis	-1.6179	-1.4827	-1.4095

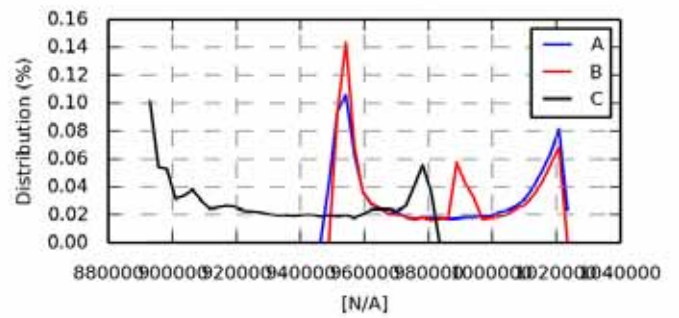


Figure 1412 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	3.2627e+04	3.0772e+04	4.0203e+04
Eq (m=4)	3.9633e+04	3.7679e+04	4.8800e+04
Eq (m=6)	4.8251e+04	4.6218e+04	5.9348e+04
Eq (m=8)	5.3299e+04	5.1224e+04	6.5500e+04
Eq (m=10)	5.6606e+04	5.4497e+04	6.9512e+04
Eq (m=12)	5.8944e+04	5.6798e+04	7.2329e+04

Section 15.23 oc4_p2_load_case_3-4: ESYS line3_3 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-4.sel (01-03-2014 03:26)	675	ESYS line3_3 SENSOR 104
B	WAMsim/oc4_p2_load_case_3-4.sel (01-04-2014 12:47)	675	ESYS line3_3 SENSOR 104
C	hawc2/oc4_p2_load_case_3-4.sel (31-03-2014 15:35)	675	ESYS line3_3 SENSOR 104

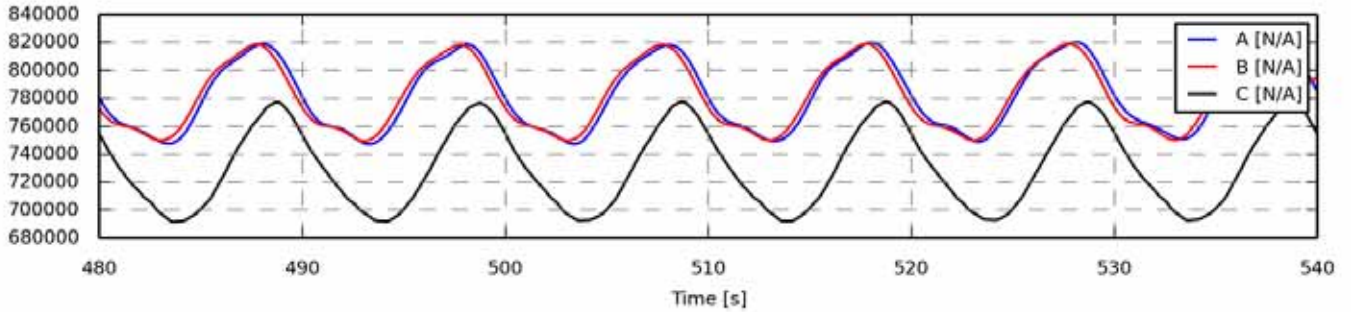


Figure 1413 - Full length time series

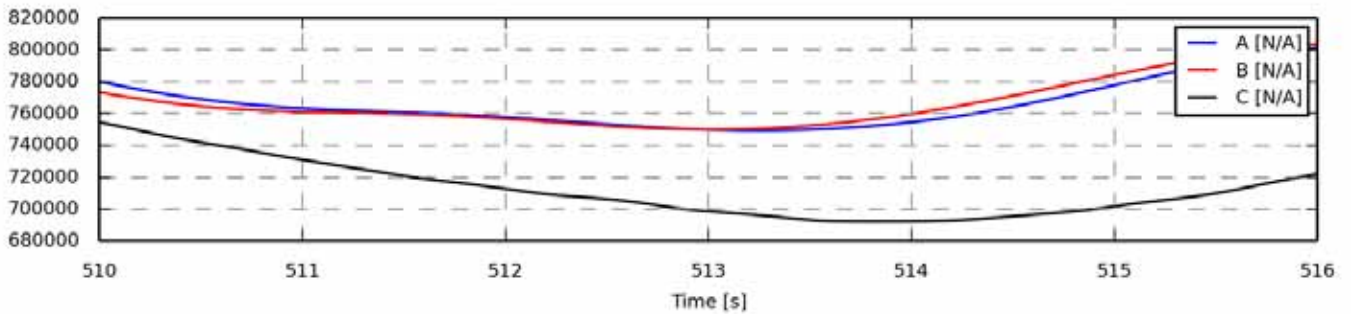


Figure 1414 - Zoom of time series

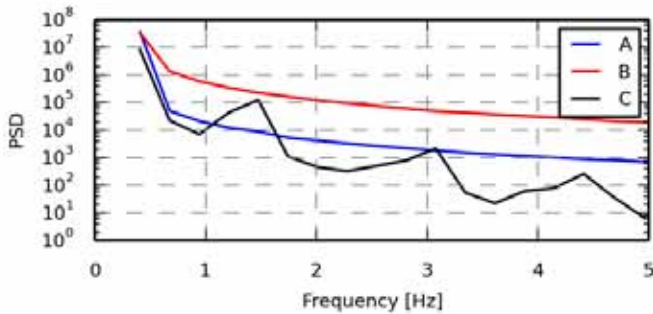


Figure 1415 - Power spectrum density

Statistics	A	B	C
Min	7.4716e+05	7.4935e+05	6.9168e+05
Max	8.2224e+05	8.1904e+05	7.7818e+05
Mean	7.8242e+05	7.8079e+05	7.3066e+05
Std	2.4847e+04	2.2930e+04	2.8702e+04
Skewness	0.1308	0.2310	0.2080
Kurtosis	-1.5261	-1.3808	-1.3727

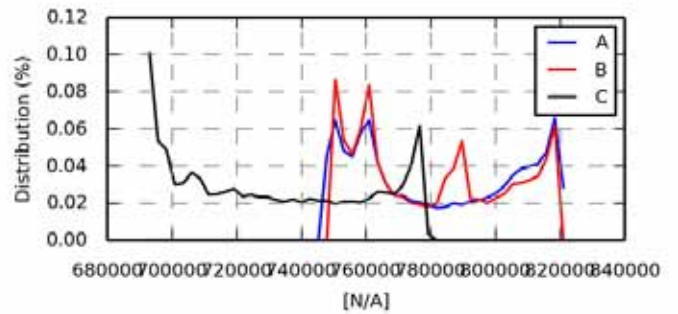


Figure 1416 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	3.2070e+04	3.0347e+04	3.8636e+04
Eq (m=4)	3.8973e+04	3.7116e+04	4.6877e+04
Eq (m=6)	4.7484e+04	4.5486e+04	5.6963e+04
Eq (m=8)	5.2470e+04	5.0397e+04	6.2842e+04
Eq (m=10)	5.5734e+04	5.3609e+04	6.6678e+04
Eq (m=12)	5.8039e+04	5.5870e+04	6.9376e+04

Article XVI. oc4_p2_load_case_3-5

Generated 22-04-2014 10:00

Section 16.01 oc4_p2_load_case_3-5: WSP gl. coo.,Vy [m/s]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-5.sel (01-03-2014 05:34)	3	Free wind speed Vy, gl. coo, of gl. pos 0.00, 0.00, -90.00
B	WAMsim/oc4_p2_load_case_3-5.sel (01-04-2014 12:47)	3	Free wind speed Vy, gl. coo, of gl. pos 0.00, 0.00, -90.00
C	hawc2/oc4_p2_load_case_3-5.sel (31-03-2014 15:36)	3	Free wind speed Vy, gl. coo, of gl. pos 0.00, 0.00, -90.00

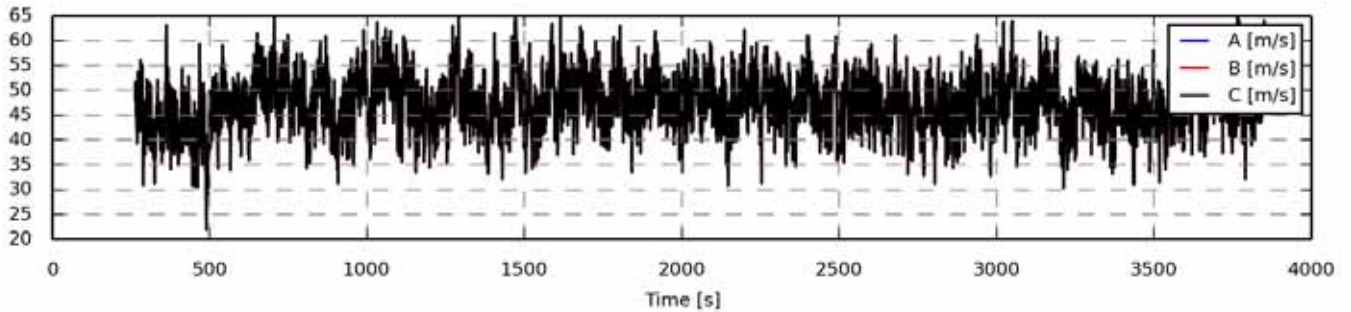


Figure 1417 - Full length time series

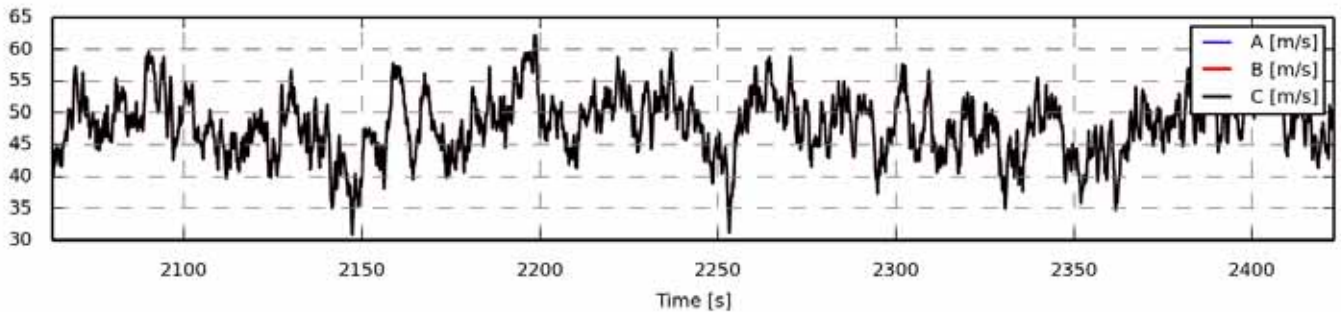


Figure 1418 - Zoom of time series

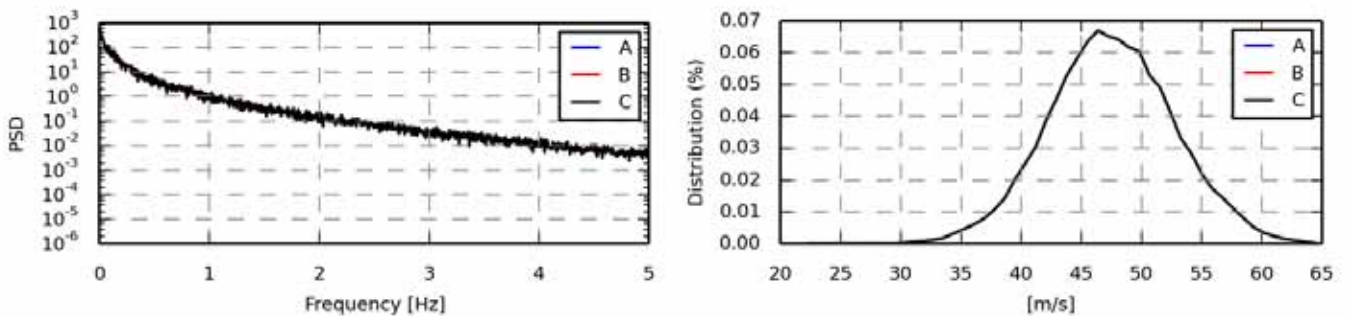


Figure 1419 - Power spectrum density

Statistics	A	B	C
Min	21.8907	21.8907	21.8907
Max	64.8614	64.8614	64.8614
Mean	47.4662	47.4662	47.4662
Std	5.2322	5.2322	5.2322
Skewness	-0.0212	-0.0212	-0.0212
Kurtosis	0.1126	0.1126	0.1126

Figure 1420 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	8.1476	8.1476	8.1476
Eq (m=4)	10.3237	10.3237	10.3237
Eq (m=6)	14.1270	14.1270	14.1270
Eq (m=8)	17.2480	17.2480	17.2480
Eq (m=10)	19.8492	19.8492	19.8492
Eq (m=12)	22.0533	22.0533	22.0533

Section 16.02 oc4_p2_load_case_3-5: Water surf. [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-5.sel (01-03-2014 05:34)	5	Water surface gl. coo, at gl. coo, x,y= 0.00, 0.00
B	WAMsim/oc4_p2_load_case_3-5.sel (01-04-2014 12:47)	5	Constant value
C	hawc2/oc4_p2_load_case_3-5.sel (31-03-2014 15:36)	5	Water surface gl. coo, at gl. coo, x,y= 0.00, 0.00

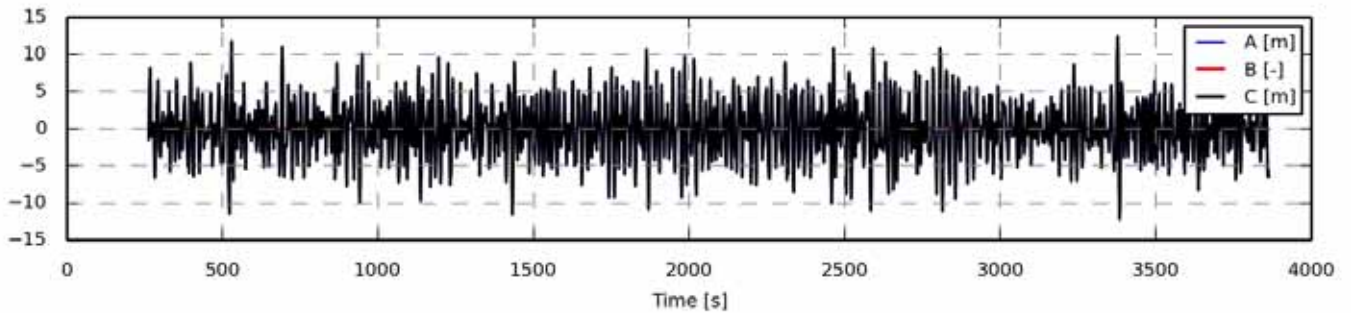


Figure 1421 - Full length time series

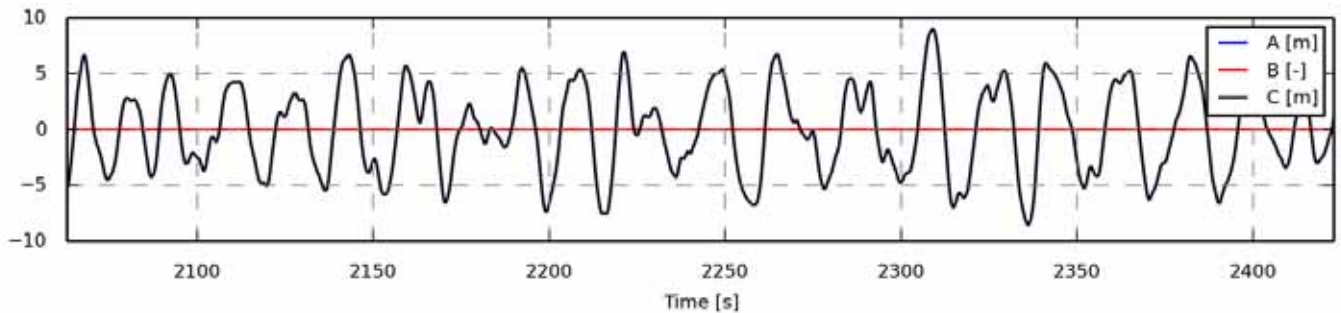


Figure 1422 - Zoom of time series

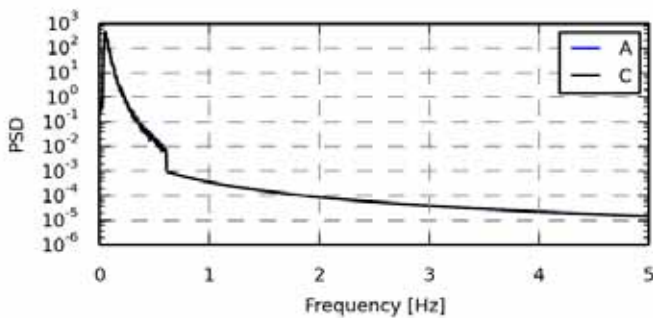


Figure 1423 - Power spectrum density

Statistics	A	B	C
Min	-12.1920	0.0000	-12.1875
Max	12.4206	0.0000	12.4196
Mean	0.0060	0.0000	0.0060
Std	3.7211	0.0000	3.7200
Skewness	0.0356	0.0000	0.0356
Kurtosis	-0.0862	-3.0000	-0.0861

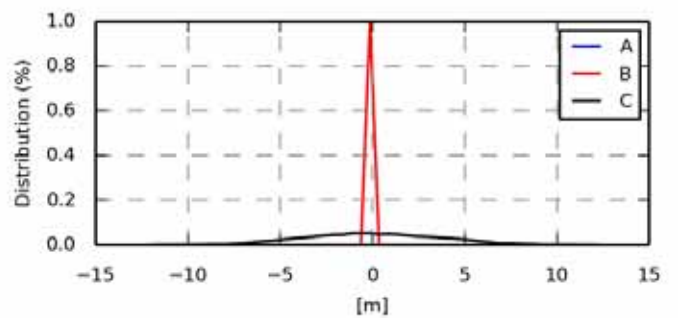


Figure 1424 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	4.7028	-	4.7013
Eq (m=4)	6.3130	-	6.3110
Eq (m=6)	8.8407	-	8.8381
Eq (m=8)	10.7668	-	10.7640
Eq (m=10)	12.2872	-	12.2843
Eq (m=12)	13.5120	-	13.5089

Section 16.03 oc4_p2_load_case_3-5: Constant [-]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-5.sel (01-03-2014 05:34)	6	Constant value
B	WAMsim/oc4_p2_load_case_3-5.sel (01-04-2014 12:47)	6	Constant value
C	hawc2/oc4_p2_load_case_3-5.sel (31-03-2014 15:36)	6	Constant value

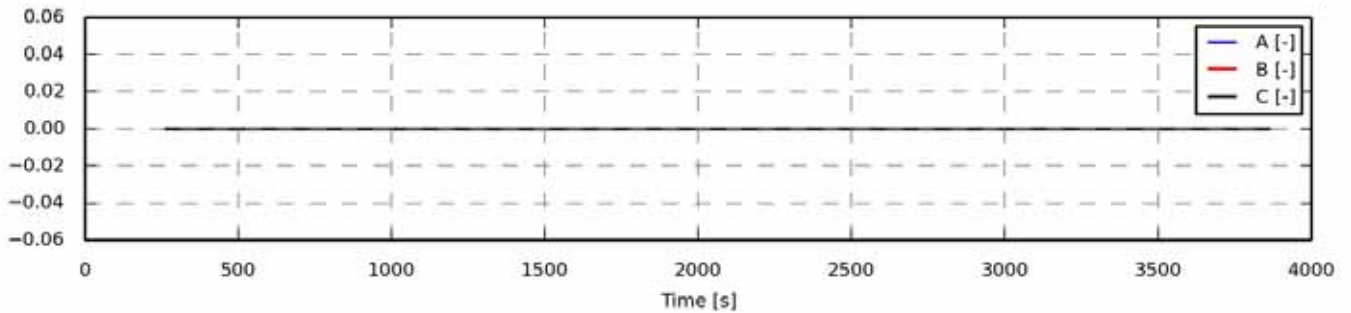


Figure 1425 - Full length time series

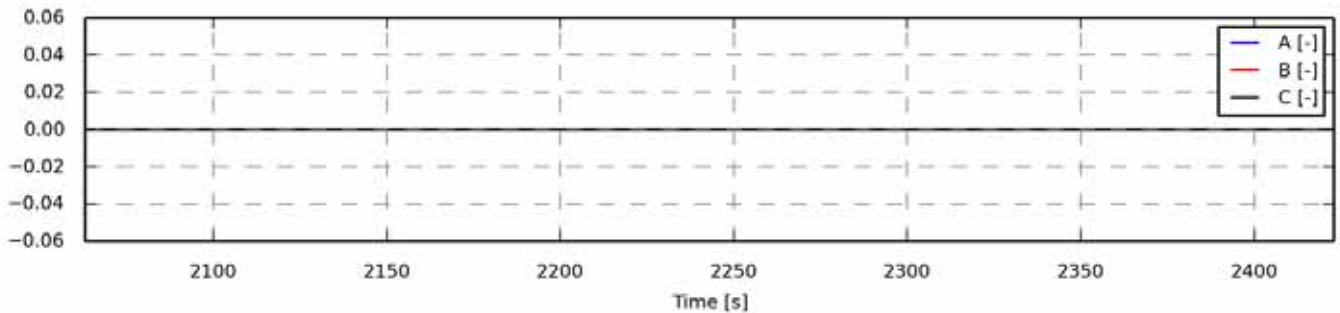


Figure 1426 - Zoom of time series

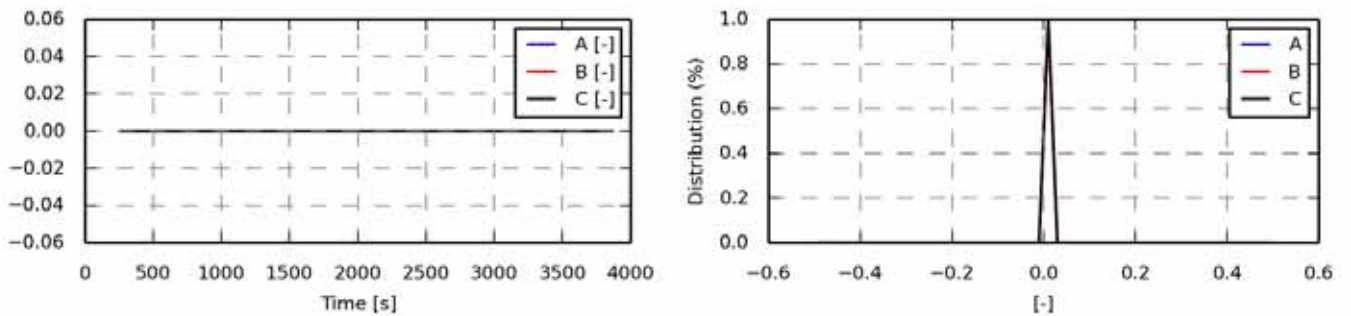


Figure 1427 - Power spectrum density

Statistics	A	B	C
Min	0.0000	0.0000	0.0000
Max	0.0000	0.0000	0.0000
Mean	0.0000	0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

Figure 1428 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 16.04 oc4_p2_load_case_3-5: bea1 angle_speed [rpm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-5.sel (01-03-2014 05:34)	9	shaft_rot angle speed
B	WAMsim/oc4_p2_load_case_3-5.sel (01-04-2014 12:47)	9	shaft_rot angle speed
C	hawc2/oc4_p2_load_case_3-5.sel (31-03-2014 15:36)	9	shaft_rot angle speed

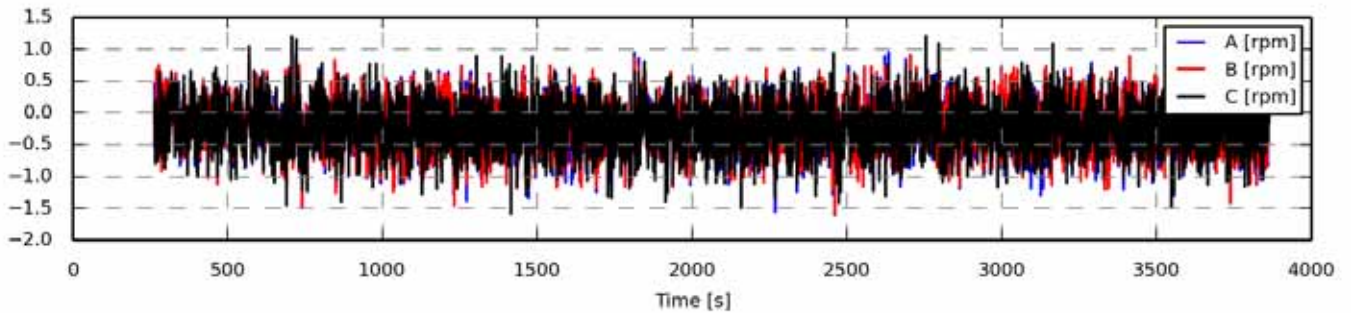


Figure 1429 - Full length time series

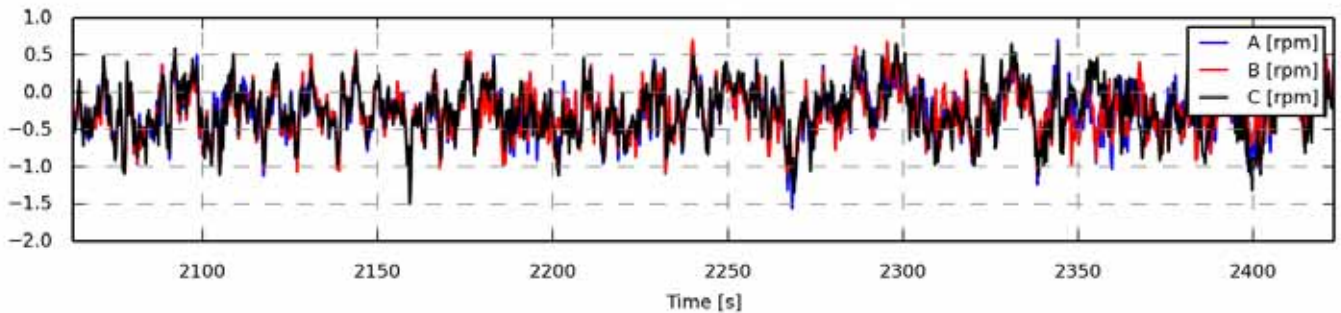


Figure 1430 - Zoom of time series

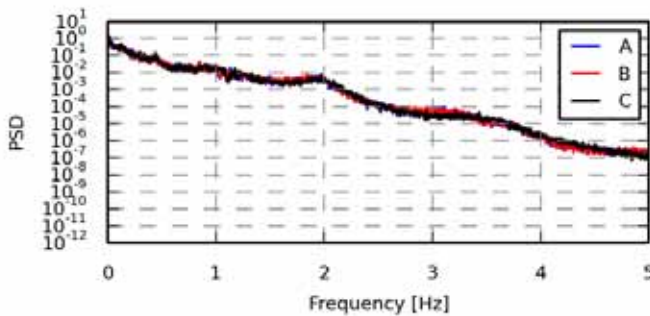


Figure 1431 - Power spectrum density

Statistics	A	B	C
Min	-1.6071	-1.5870	-1.5886
Max	1.1227	1.1551	1.2064
Mean	-0.2223	-0.2176	-0.2112
Std	0.3271	0.3281	0.3310
Skewness	-0.0014	0.0135	0.0453
Kurtosis	0.0428	-0.0787	0.1138

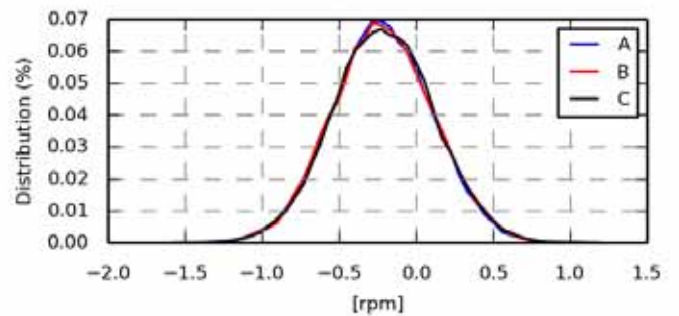


Figure 1432 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.6522	0.6496	0.6577
Eq (m=4)	0.7844	0.7768	0.7962
Eq (m=6)	1.0085	0.9887	1.0329
Eq (m=8)	1.1896	1.1598	1.2275
Eq (m=10)	1.3392	1.3041	1.3906
Eq (m=12)	1.4651	1.4287	1.5279

Section 16.05 oc4_p2_load_case_3-5: bea1 angle [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-5.sel (01-03-2014 05:34)	14	pitch1 angle
B	WAMsim/oc4_p2_load_case_3-5.sel (01-04-2014 12:47)	14	pitch1 angle
C	hawc2/oc4_p2_load_case_3-5.sel (31-03-2014 15:36)	14	pitch1 angle

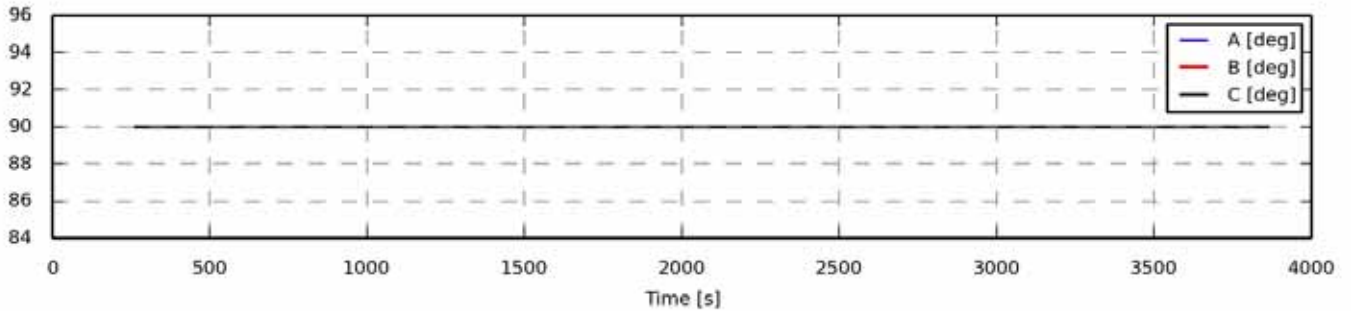


Figure 1433 - Full length time series

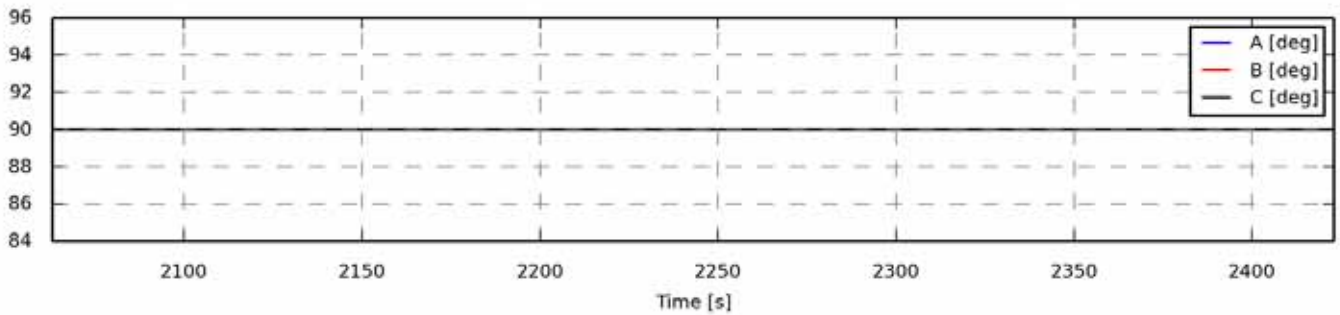


Figure 1434 - Zoom of time series

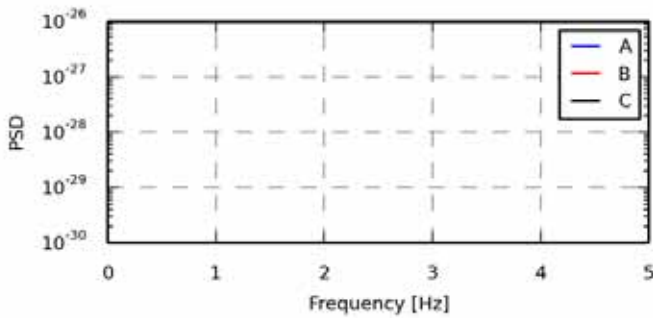


Figure 1435 - Power spectrum density

Statistics	A	B	C
Min	90.0000	90.0000	90.0000
Max	90.0000	90.0000	90.0000
Mean	90.0000	90.0000	90.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

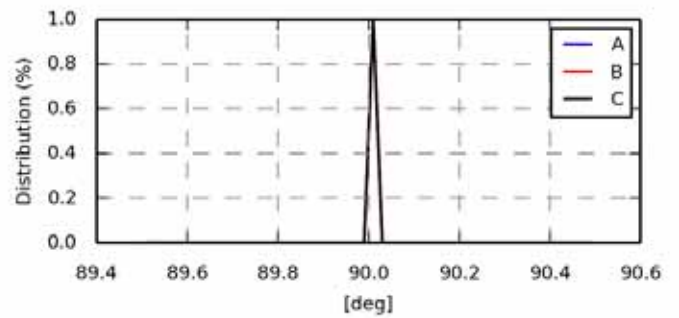


Figure 1436 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 16.06 oc4_p2_load_case_3-5: State pos x coo: global [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-5.sel (01-03-2014 05:34)	19	State pos x Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
B	WAMsim/oc4_p2_load_case_3-5.sel (01-04-2014 12:47)	19	State pos x Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
C	hawc2/oc4_p2_load_case_3-5.sel (31-03-2014 15:36)	19	State pos x Mbdy:mc E-nr: 8 Z-rel:0.00 coo: global platform translation in surge sway and heave

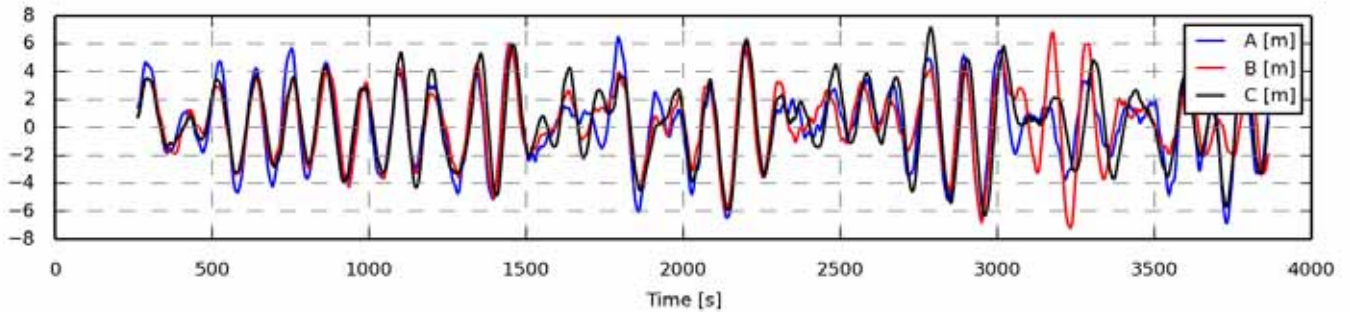


Figure 1437 - Full length time series

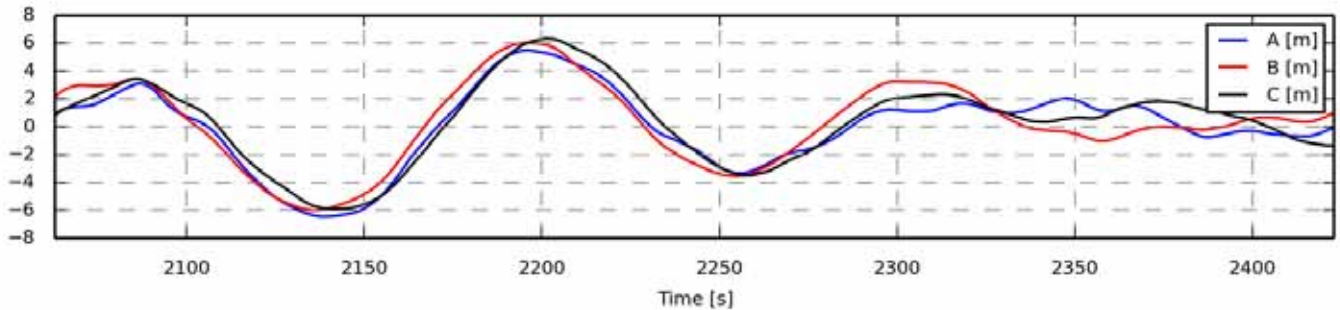


Figure 1438 - Zoom of time series

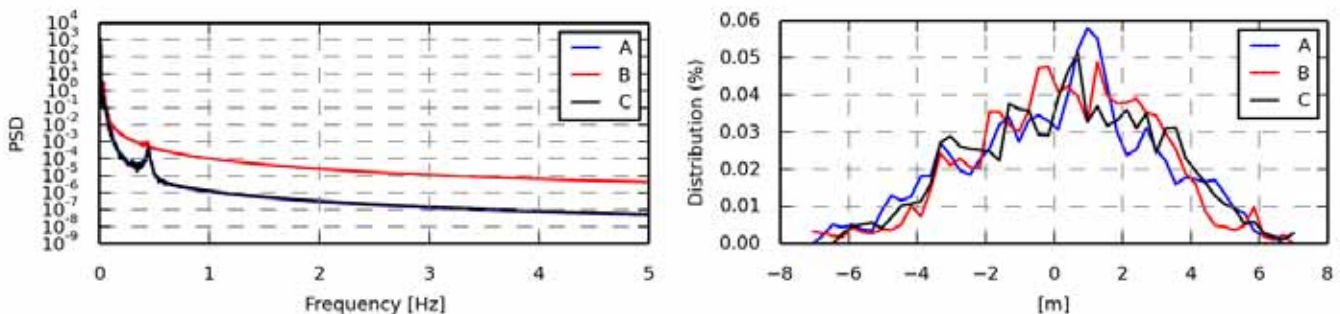


Figure 1439 - Power spectrum density

Statistics	A	B	C
Min	-6.8016	-7.1898	-6.3005
Max	6.4494	6.8472	7.1398
Mean	0.1835	0.3309	0.3744
Std	2.7272	2.5202	2.6877
Skewness	-0.1718	-0.2117	-0.0793
Kurtosis	-0.4864	-0.1636	-0.6079

Figure 1440 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	1.6635	1.5790	1.6428
Eq (m=4)	2.5970	2.5180	2.5704
Eq (m=6)	4.1436	4.1603	4.1271
Eq (m=8)	5.3114	5.4587	5.3187
Eq (m=10)	6.2124	6.4778	6.2453
Eq (m=12)	6.9264	7.2869	6.9836

Section 16.07 oc4_p2_load_case_3-5: State pos y coo: global [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-5.sel (01-03-2014 05:34)	20	State pos y Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
B	WAMsim/oc4_p2_load_case_3-5.sel (01-04-2014 12:47)	20	State pos y Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
C	hawc2/oc4_p2_load_case_3-5.sel (31-03-2014 15:36)	20	State pos y Mbdy:mc E-nr: 8 Z-rel:0.00 coo: global platform translation in surge sway and heave

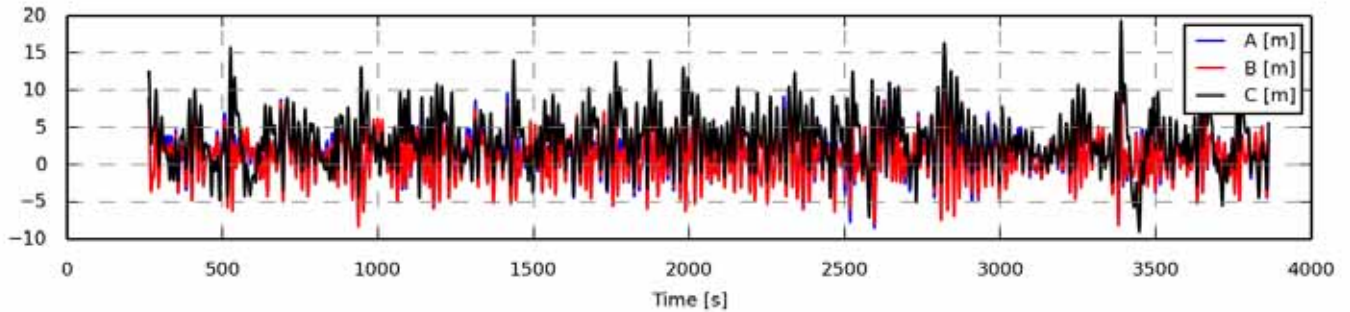


Figure 1441 - Full length time series

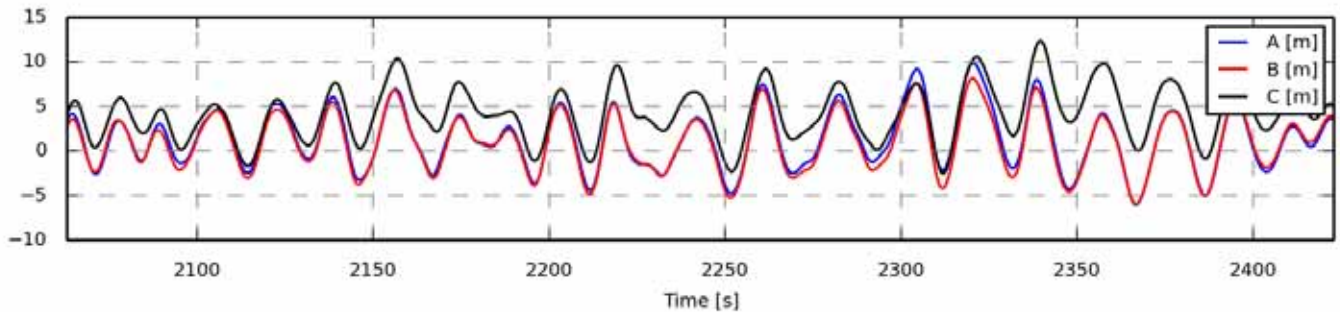


Figure 1442 - Zoom of time series

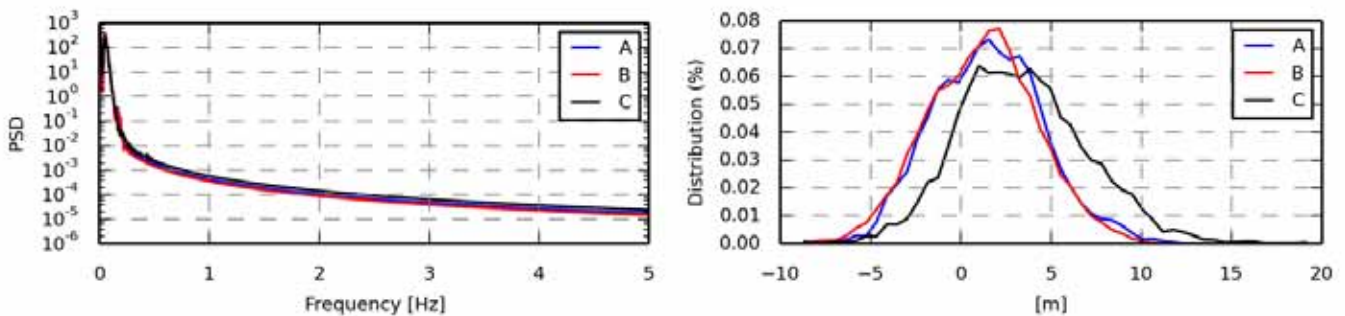


Figure 1443 - Power spectrum density

Statistics	A	B	C
Min	-8.4768	-8.2559	-8.9373
Max	11.8516	10.6011	19.4184
Mean	1.5079	1.1866	3.4026
Std	3.0703	3.0255	3.6142
Skewness	0.1499	-0.0001	0.3244
Kurtosis	-0.0379	-0.1736	0.4447

Figure 1444 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	3.5031	3.4891	3.6095
Eq (m=4)	4.8021	4.7612	5.2051
Eq (m=6)	6.8792	6.7527	8.0581
Eq (m=8)	8.4809	8.2552	10.4668
Eq (m=10)	9.7590	9.4396	12.4706
Eq (m=12)	10.8008	10.3990	14.1281

Section 16.08 oc4_p2_load_case_3-5: State pos z coo: global [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-5.sel (01-03-2014 05:34)	21	State pos z Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
B	WAMsim/oc4_p2_load_case_3-5.sel (01-04-2014 12:47)	21	State pos z Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
C	hawc2/oc4_p2_load_case_3-5.sel (31-03-2014 15:36)	21	State pos z Mbdy:mc E-nr: 8 Z-rel:0.00 coo: global platform translation in surge sway and heave

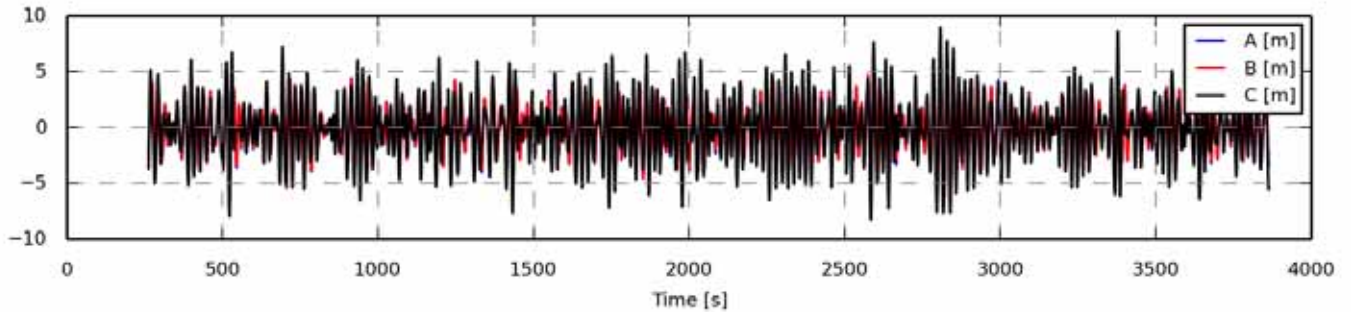


Figure 1445 - Full length time series

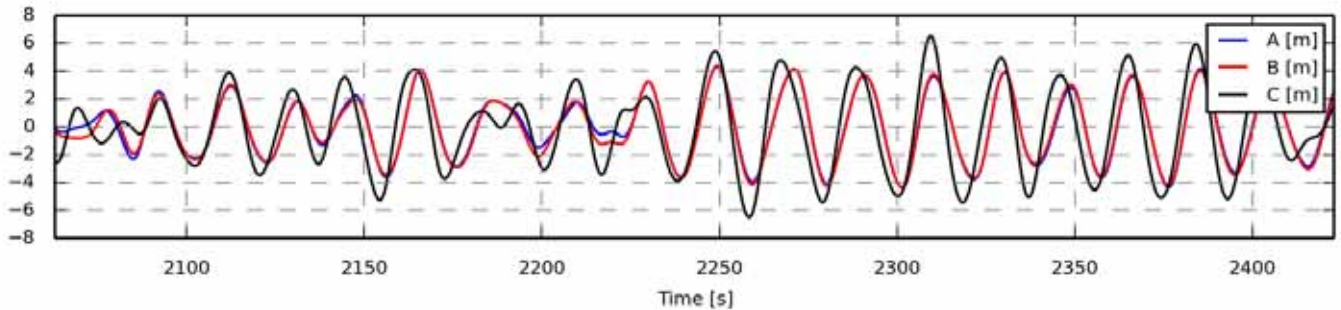


Figure 1446 - Zoom of time series

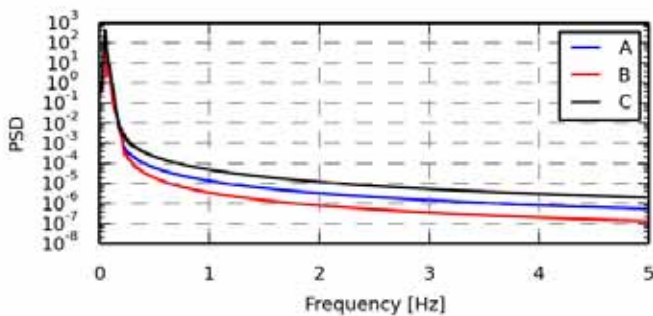


Figure 1447 - Power spectrum density

Statistics	A	B	C
Min	-6.1381	-6.1312	-8.2750
Max	6.6987	6.0457	8.9084
Mean	0.0013	-0.0305	-0.0850
Std	2.1544	2.1363	2.7382
Skewness	0.0433	0.0122	0.0339
Kurtosis	-0.6745	-0.7103	-0.1763

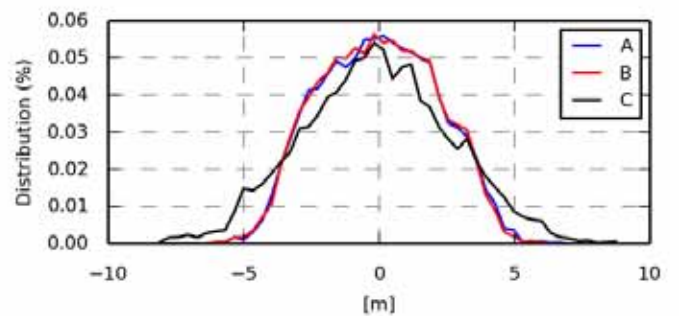


Figure 1448 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	2.3803	2.3530	3.1531
Eq (m=4)	3.2018	3.1608	4.3122
Eq (m=6)	4.4437	4.3711	6.1125
Eq (m=8)	5.3784	5.2666	7.4592
Eq (m=10)	6.1386	5.9825	8.5130
Eq (m=12)	6.7773	6.5768	9.3607

Section 16.09 oc4_p2_load_case_3-5: proj_ang tx coo: global [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-5.sel (01-03-2014 05:34)	22	State_rot proj_ang tx Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
B	WAMsim/oc4_p2_load_case_3-5.sel (01-04-2014 12:47)	22	State_rot proj_ang tx Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
C	hawc2/oc4_p2_load_case_3-5.sel (31-03-2014 15:36)	22	State_rot proj_ang tx Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw

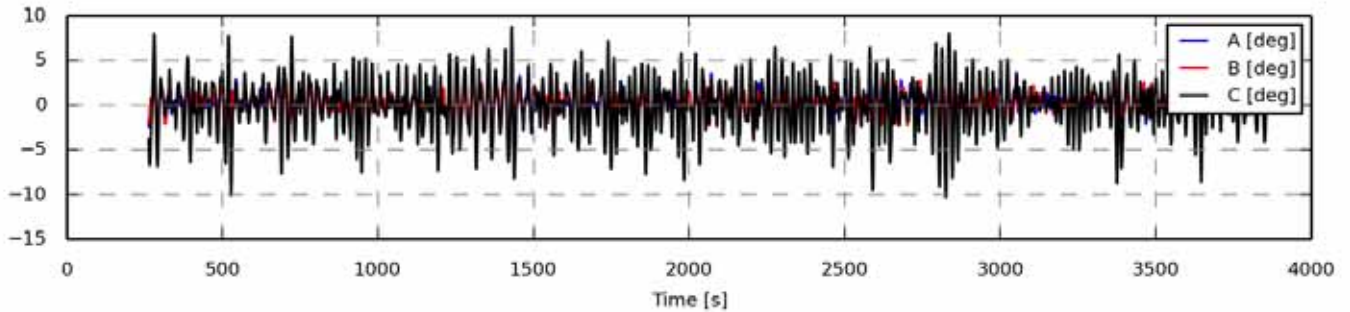


Figure 1449 - Full length time series

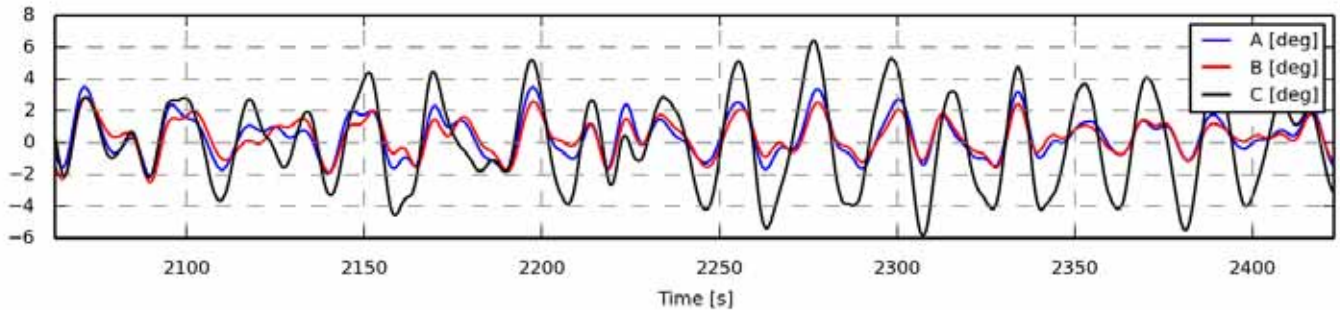


Figure 1450 - Zoom of time series

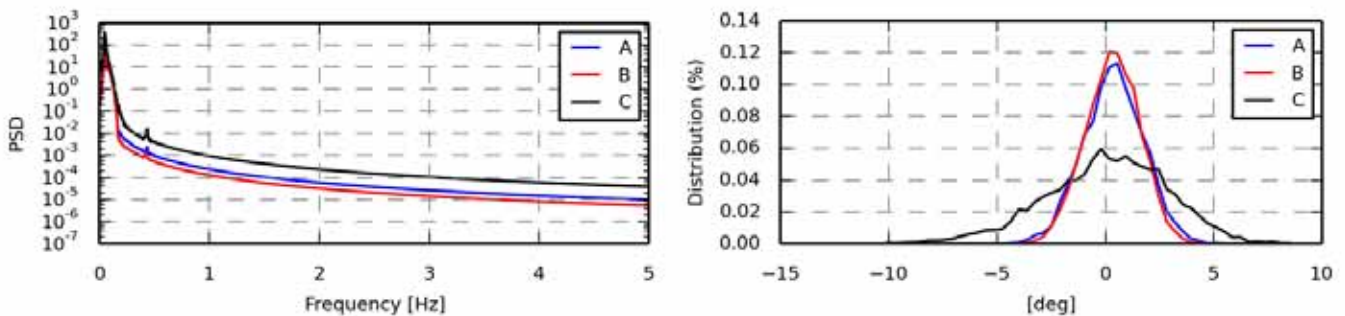


Figure 1451 - Power spectrum density

Statistics	A	B	C
Min	-4.3121	-3.8480	-10.2591
Max	5.2337	4.3554	8.7090
Mean	0.3609	0.3291	0.0327
Std	1.3929	1.2429	2.8462
Skewness	-0.0604	-0.0946	-0.3150
Kurtosis	-0.0471	-0.2090	0.1607

Figure 1452 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	1.6574	1.4527	3.2944
Eq (m=4)	2.2690	1.9822	4.5531
Eq (m=6)	3.2337	2.8048	6.5609
Eq (m=8)	3.9698	3.4230	8.0891
Eq (m=10)	4.5560	3.9115	9.2916
Eq (m=12)	5.0349	4.3101	10.2621

Section 16.10 oc4_p2_load_case_3-5: proj_ang ty coo: global [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-5.sel (01-03-2014 05:34)	23	State_rot proj_ang ty Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
B	WAMsim/oc4_p2_load_case_3-5.sel (01-04-2014 12:47)	23	State_rot proj_ang ty Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
C	hawc2/oc4_p2_load_case_3-5.sel (31-03-2014 15:36)	23	State_rot proj_ang ty Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw

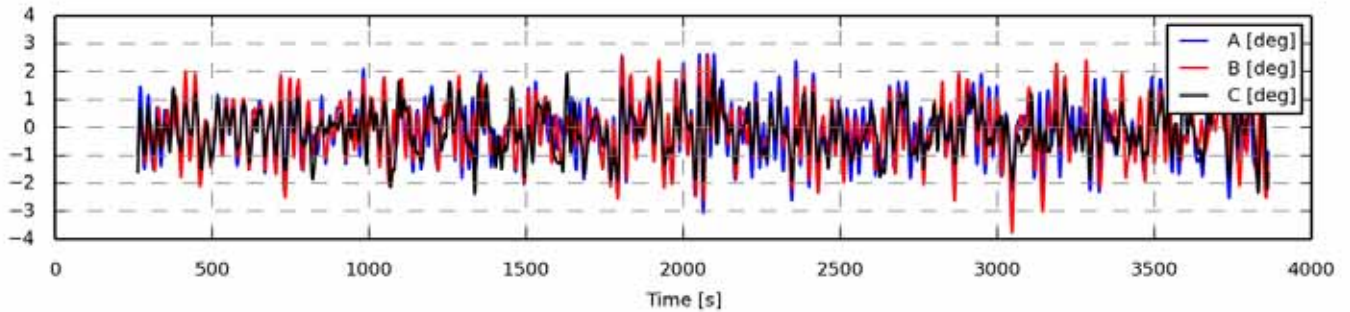


Figure 1453 - Full length time series

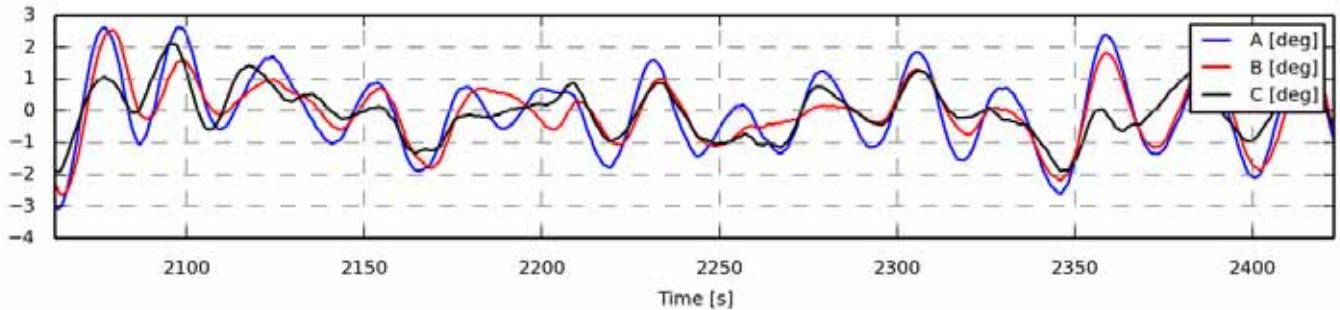


Figure 1454 - Zoom of time series

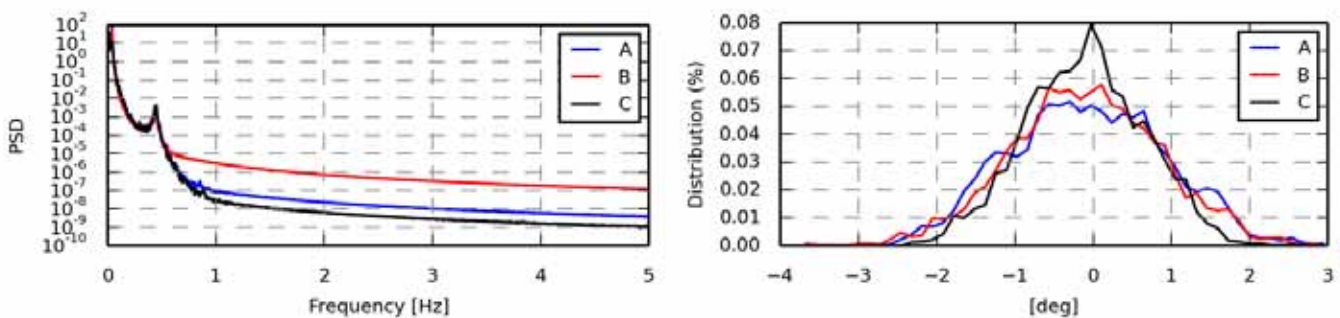


Figure 1455 - Power spectrum density

Statistics	A	B	C
Min	-3.0654	-3.7443	-2.3811
Max	3.0084	2.8544	2.6185
Mean	-0.0782	-0.1078	-0.1121
Std	0.9937	0.9613	0.7662
Skewness	0.0697	-0.0582	0.0178
Kurtosis	-0.3666	0.0675	-0.1751

Figure 1456 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.9349	0.9091	0.6780
Eq (m=4)	1.3237	1.3111	0.9930
Eq (m=6)	1.9540	1.9846	1.5212
Eq (m=8)	2.4425	2.5249	1.9422
Eq (m=10)	2.8325	2.9690	2.2864
Eq (m=12)	3.1505	3.3385	2.5720

Section 16.11 oc4_p2_load_case_3-5: proj_ang tz coo: global [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-5.sel (01-03-2014 05:34)	24	State_rot proj_ang tz Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
B	WAMsim/oc4_p2_load_case_3-5.sel (01-04-2014 12:47)	24	State_rot proj_ang tz Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
C	hawc2/oc4_p2_load_case_3-5.sel (31-03-2014 15:36)	24	State_rot proj_ang tz Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw

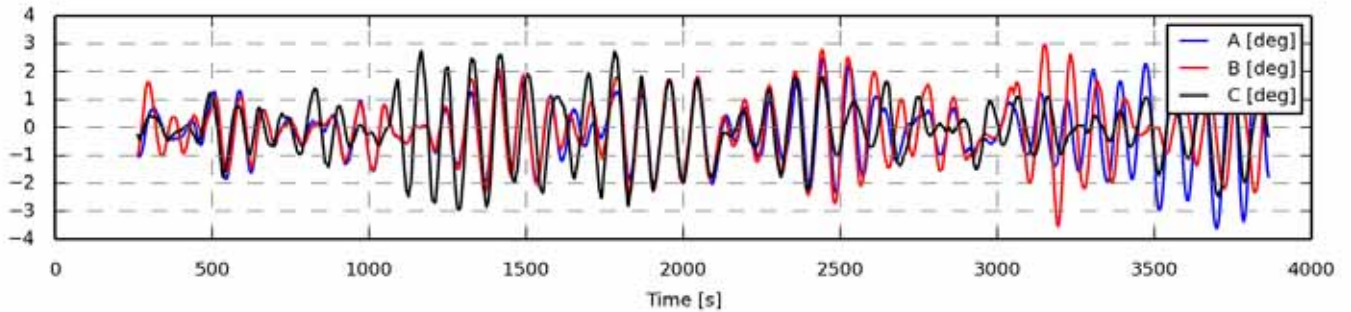


Figure 1457 - Full length time series

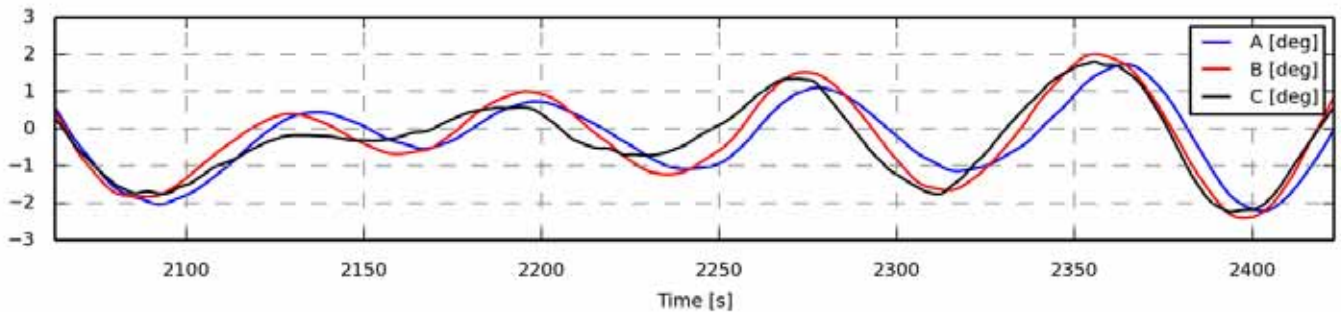


Figure 1458 - Zoom of time series

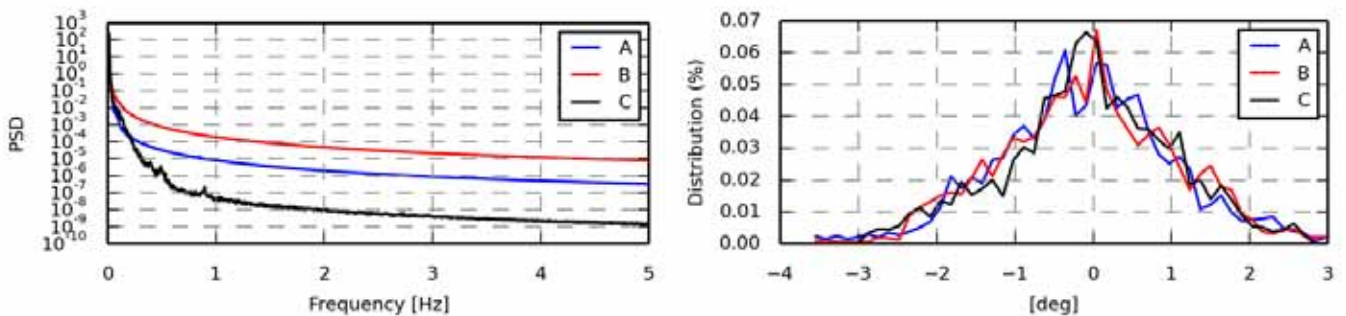


Figure 1459 - Power spectrum density

Statistics	A	B	C
Min	-3.6138	-3.5298	-2.9427
Max	3.0296	2.9684	2.7297
Mean	-0.1072	-0.0782	-0.0586
Std	1.1077	1.1126	1.0773
Skewness	-0.0486	0.0018	-0.1182
Kurtosis	0.1772	-0.2126	-0.0750

Figure 1460 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.7781	0.7695	0.7620
Eq (m=4)	1.2221	1.1918	1.1836
Eq (m=6)	1.9912	1.9095	1.8818
Eq (m=8)	2.5972	2.4743	2.4052
Eq (m=10)	3.0741	2.9256	2.8044
Eq (m=12)	3.4547	3.2921	3.1171

Section 16.12 oc4_p2_load_case_3-5: Mx coo: towertop [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-5.sel (01-03-2014 05:34)	37	MomentMx Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
B	WAMsim/oc4_p2_load_case_3-5.sel (01-04-2014 12:47)	37	MomentMx Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
C	hawc2/oc4_p2_load_case_3-5.sel (31-03-2014 15:36)	37	MomentMx Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment

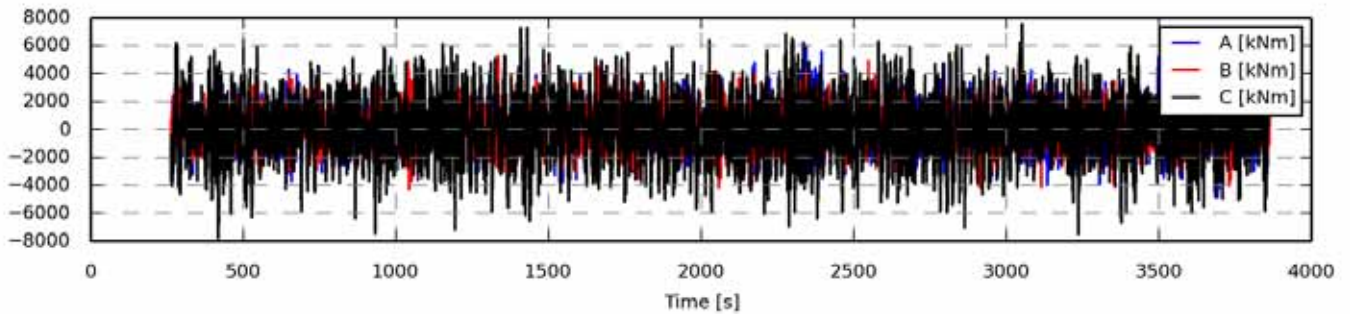


Figure 1461 - Full length time series

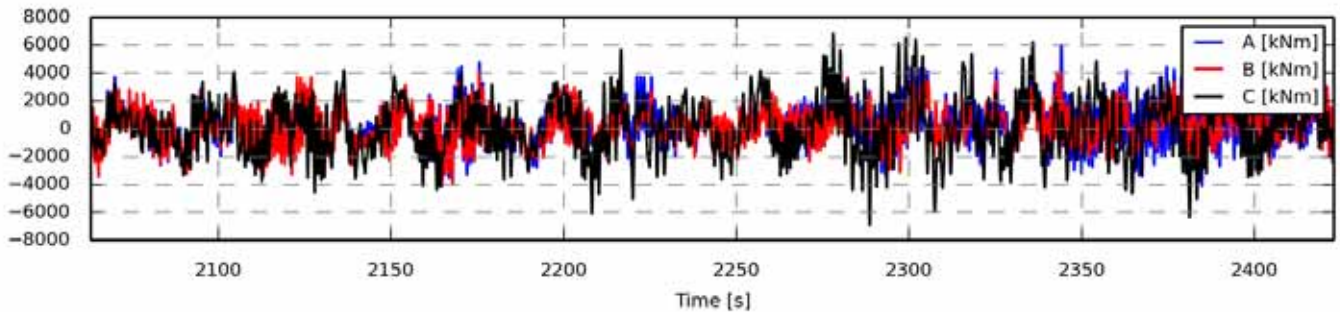


Figure 1462 - Zoom of time series

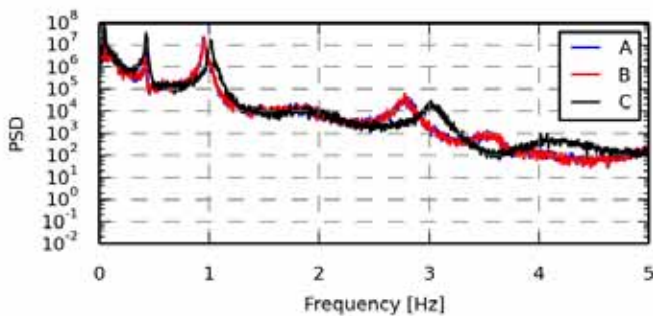


Figure 1463 - Power spectrum density

Statistics	A	B	C
Min	-4.8288e+03	-4.3771e+03	-7.8028e+03
Max	5.9996e+03	5.3720e+03	7.5690e+03
Mean	211.3808	239.5056	138.0428
Std	1.3026e+03	1.2418e+03	1.9368e+03
Skewness	0.0850	0.1176	-0.0614
Kurtosis	0.1241	0.2194	0.1298

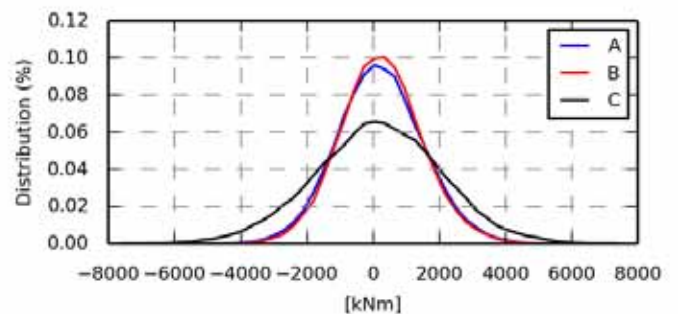


Figure 1464 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	3.1556e+03	3.0437e+03	4.0195e+03
Eq (m=4)	3.5744e+03	3.4462e+03	4.7773e+03
Eq (m=6)	4.3203e+03	4.1576e+03	6.1013e+03
Eq (m=8)	4.9600e+03	4.7564e+03	7.1625e+03
Eq (m=10)	5.5074e+03	5.2593e+03	8.0113e+03
Eq (m=12)	5.9751e+03	5.6824e+03	8.7009e+03

Section 16.13 oc4_p2_load_case_3-5: My coo: towertop [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-5.sel (01-03-2014 05:34)	38	MomentMy Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
B	WAMsim/oc4_p2_load_case_3-5.sel (01-04-2014 12:47)	38	MomentMy Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
C	hawc2/oc4_p2_load_case_3-5.sel (31-03-2014 15:36)	38	MomentMy Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment

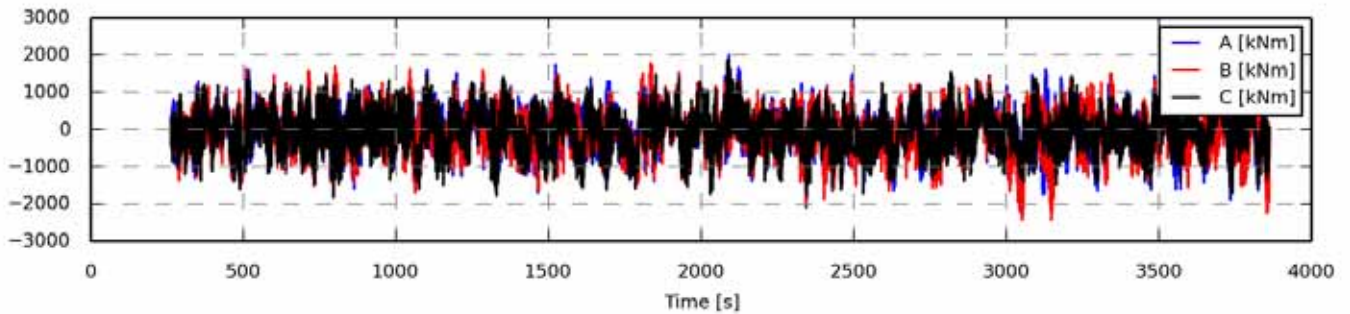


Figure 1465 - Full length time series

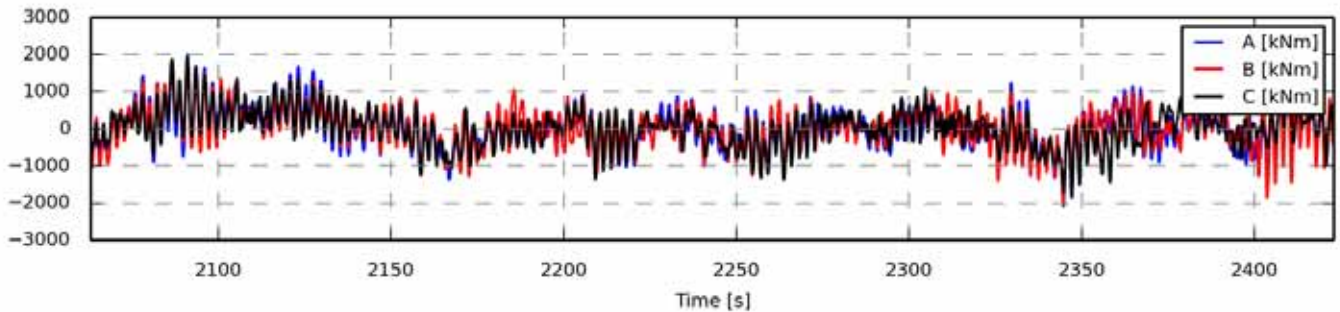


Figure 1466 - Zoom of time series

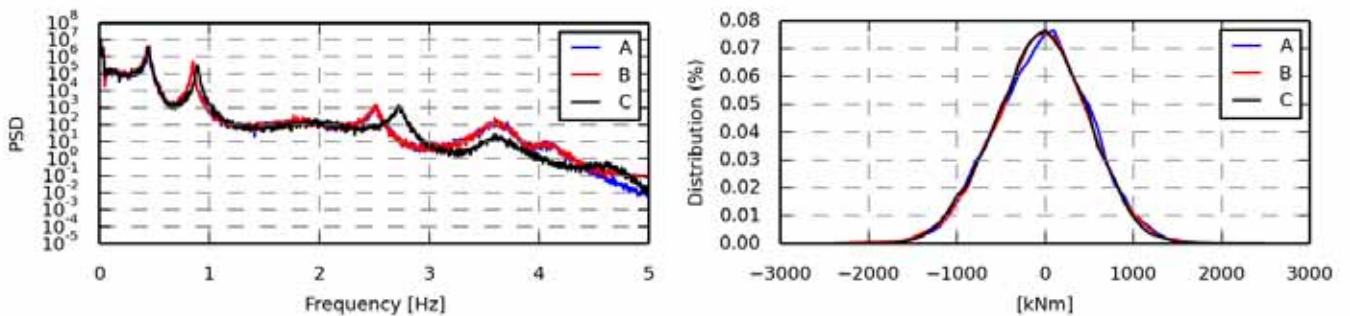


Figure 1467 - Power spectrum density

Statistics	A	B	C
Min	-2.0874e+03	-2.4208e+03	-1.8100e+03
Max	2.5220e+03	1.8340e+03	2.1419e+03
Mean	-23.0374	-42.8167	-47.0131
Std	537.0975	541.1627	524.2354
Skewness	-0.0201	-0.1767	-0.0423
Kurtosis	0.0061	0.3214	-0.0692

Figure 1468 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	977.0174	991.1181	935.3754
Eq (m=4)	1.1669e+03	1.1785e+03	1.1111e+03
Eq (m=6)	1.5089e+03	1.5094e+03	1.4217e+03
Eq (m=8)	1.8213e+03	1.7992e+03	1.6920e+03
Eq (m=10)	2.1030e+03	2.0484e+03	1.9220e+03
Eq (m=12)	2.3492e+03	2.2600e+03	2.1157e+03

Section 16.14 oc4_p2_load_case_3-5: Mz coo: towertop [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-5.sel (01-03-2014 05:34)	39	MomentMz Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
B	WAMsim/oc4_p2_load_case_3-5.sel (01-04-2014 12:47)	39	MomentMz Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
C	hawc2/oc4_p2_load_case_3-5.sel (31-03-2014 15:36)	39	MomentMz Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment

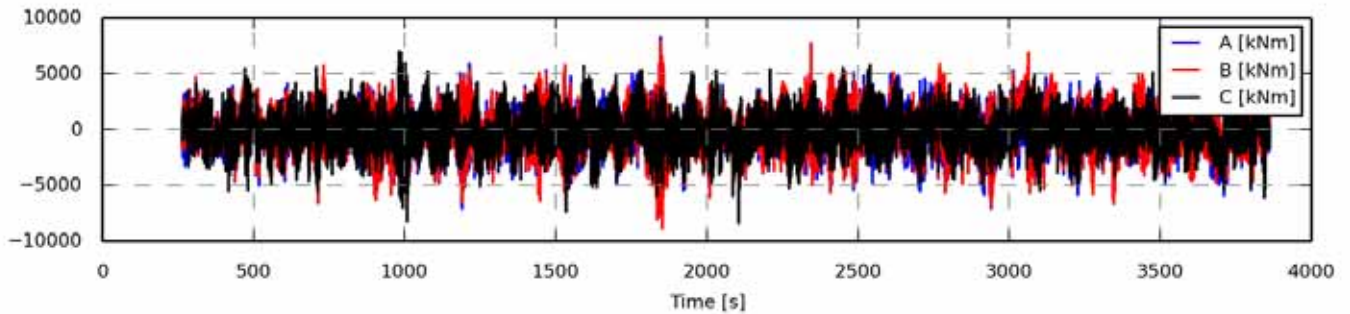


Figure 1469 - Full length time series

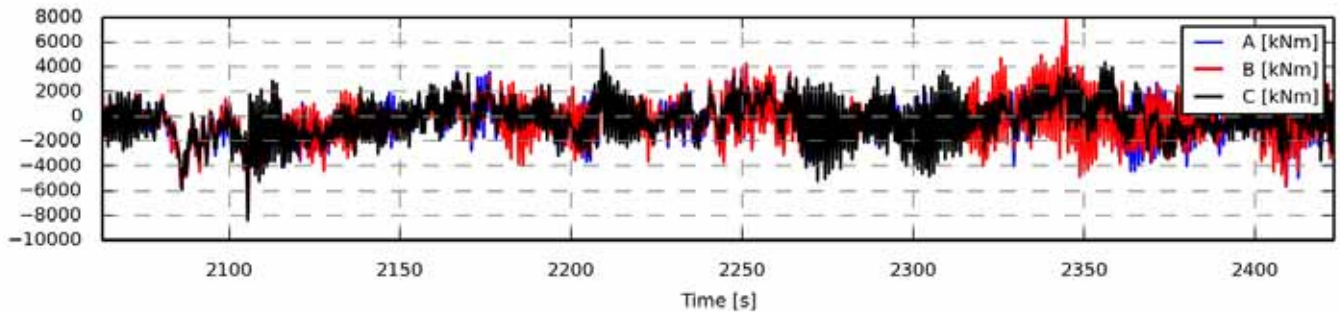


Figure 1470 - Zoom of time series

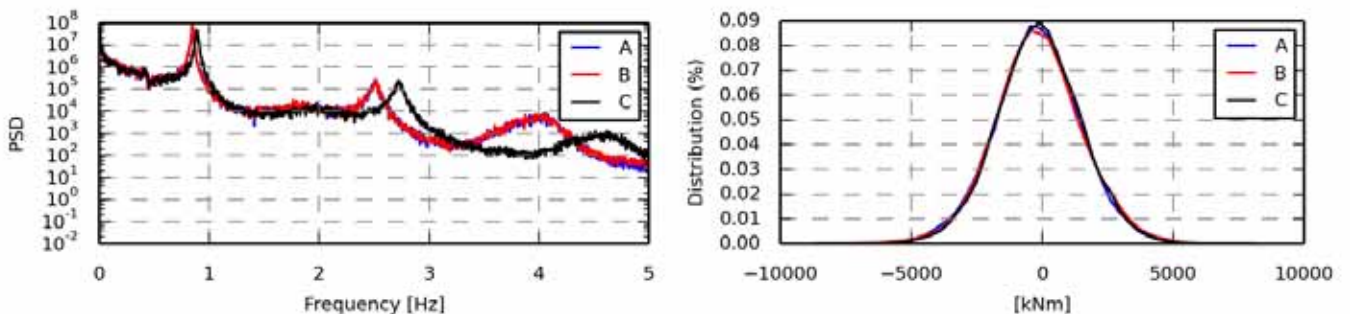


Figure 1471 - Power spectrum density

Statistics	A	B	C
Min	-7.8237e+03	-8.8517e+03	-8.3752e+03
Max	8.2717e+03	7.9601e+03	7.0030e+03
Mean	-2.0718e+02	-1.6319e+02	-1.2661e+02
Std	1.6508e+03	1.6986e+03	1.6130e+03
Skewness	-0.0799	-0.0195	-0.0171
Kurtosis	0.4453	0.5883	0.3318

Figure 1472 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	4.2665e+03	4.4239e+03	4.1145e+03
Eq (m=4)	4.8282e+03	5.0444e+03	4.6627e+03
Eq (m=6)	5.9040e+03	6.2399e+03	5.7233e+03
Eq (m=8)	6.9061e+03	7.3335e+03	6.6888e+03
Eq (m=10)	7.7932e+03	8.2820e+03	7.5197e+03
Eq (m=12)	8.5568e+03	9.0871e+03	8.2211e+03

Section 16.15 oc4_p2_load_case_3-5: Mx coo: tower [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-5.sel (01-03-2014 05:34)	43	MomentMx Mbdy:tower nodenr: 1 coo: tower tower base bending moment
B	WAMsim/oc4_p2_load_case_3-5.sel (01-04-2014 12:47)	43	MomentMx Mbdy:tower nodenr: 1 coo: tower tower base bending moment
C	hawc2/oc4_p2_load_case_3-5.sel (31-03-2014 15:36)	43	MomentMx Mbdy:tower nodenr: 1 coo: tower tower base bending moment

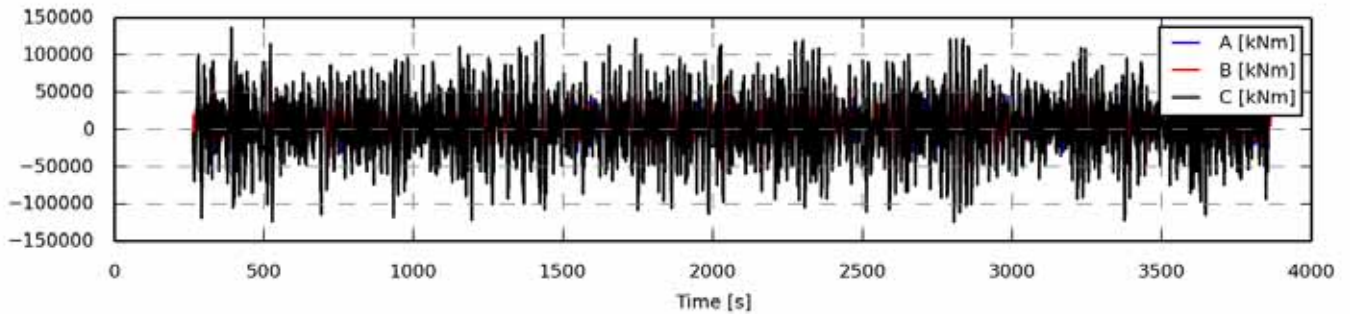


Figure 1473 - Full length time series

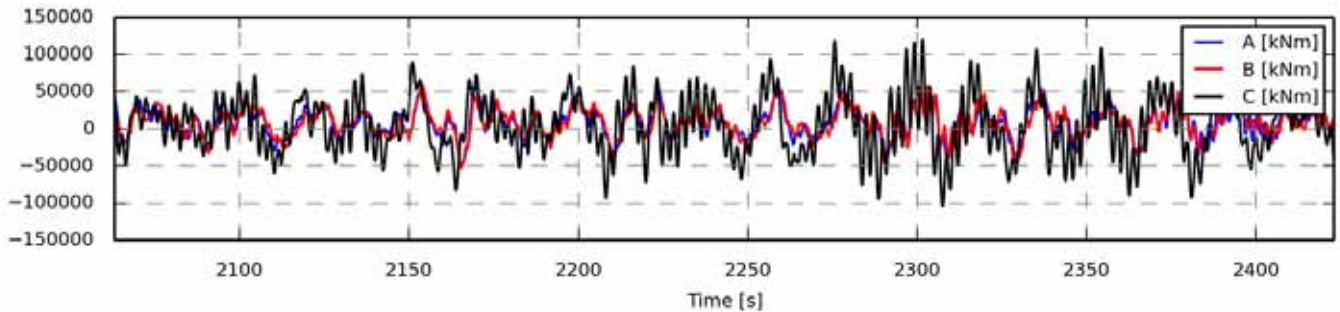


Figure 1474 - Zoom of time series

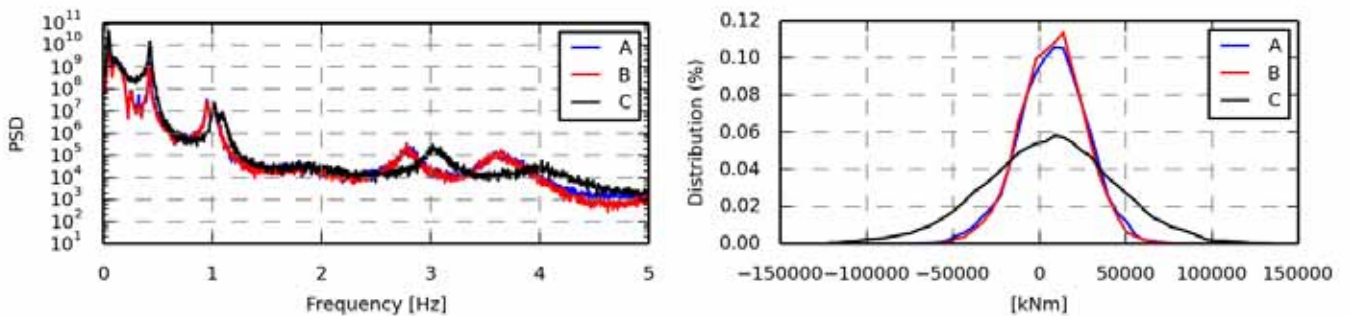


Figure 1475 - Power spectrum density

Statistics	A	B	C
Min	-7.1087e+04	-6.1232e+04	-1.2439e+05
Max	7.2046e+04	7.5305e+04	1.3643e+05
Mean	7.6415e+03	7.4778e+03	5.3372e+03
Std	1.9959e+04	1.8746e+04	3.8005e+04
Skewness	-0.1650	-0.0666	-0.1161
Kurtosis	0.1541	0.1158	0.1032

Figure 1476 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	3.0705e+04	2.8300e+04	6.1850e+04
Eq (m=4)	3.9891e+04	3.6949e+04	7.8342e+04
Eq (m=6)	5.4198e+04	5.0638e+04	1.0469e+05
Eq (m=8)	6.4883e+04	6.1039e+04	1.2429e+05
Eq (m=10)	7.3255e+04	6.9262e+04	1.3934e+05
Eq (m=12)	8.0030e+04	7.5935e+04	1.5126e+05

Section 16.16 oc4_p2_load_case_3-5: My coo: tower [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-5.sel (01-03-2014 05:34)	44	MomentMy Mbdy:tower nodenr: 1 coo: tower tower base bending moment
B	WAMsim/oc4_p2_load_case_3-5.sel (01-04-2014 12:47)	44	MomentMy Mbdy:tower nodenr: 1 coo: tower tower base bending moment
C	hawc2/oc4_p2_load_case_3-5.sel (31-03-2014 15:36)	44	MomentMy Mbdy:tower nodenr: 1 coo: tower tower base bending moment

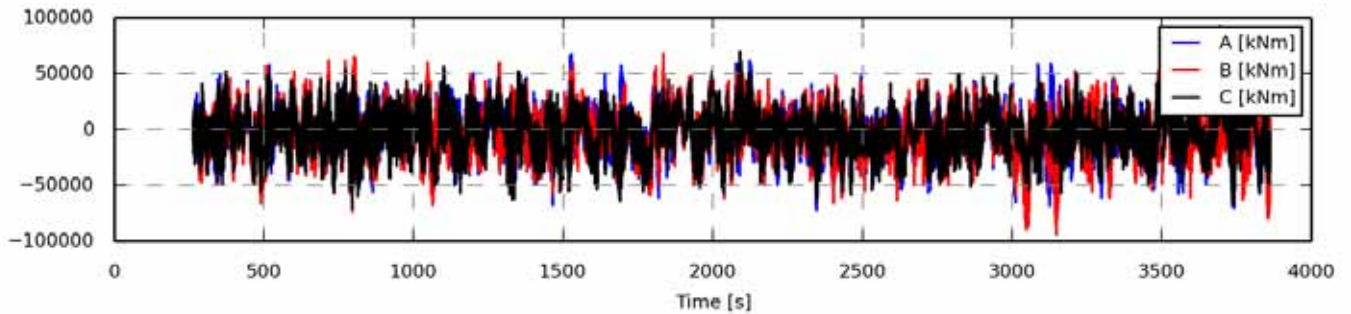


Figure 1477 - Full length time series

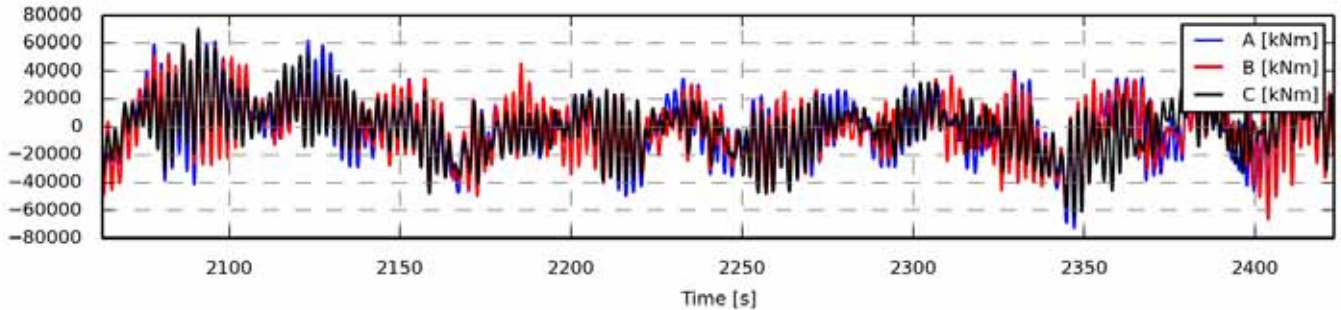


Figure 1478 - Zoom of time series

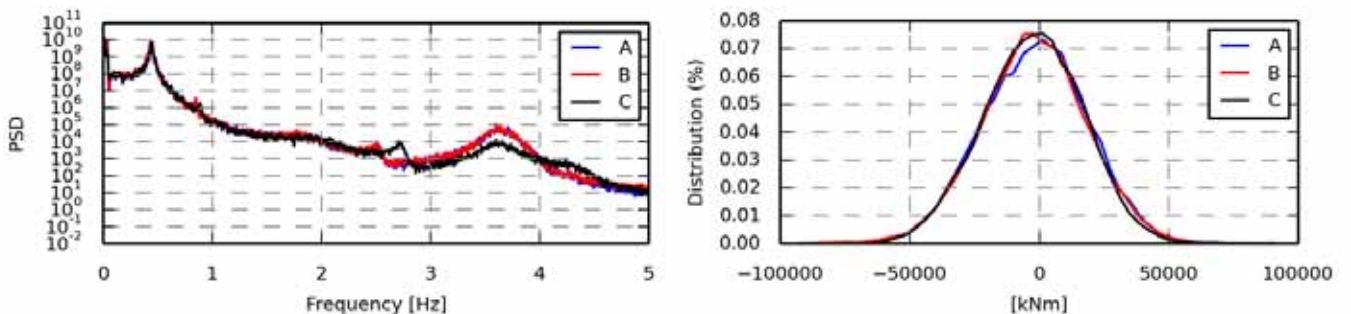


Figure 1479 - Power spectrum density

Statistics	A	B	C
Min	-7.2381e+04	-9.3956e+04	-7.0199e+04
Max	9.2700e+04	6.7936e+04	7.8679e+04
Mean	-1.7163e+03	-2.3904e+03	-2.4394e+03
Std	2.0415e+04	2.0485e+04	1.9371e+04
Skewness	-0.0137	-0.1499	-0.0458
Kurtosis	-0.0459	0.2868	-0.0896

Figure 1480 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	3.7275e+04	3.7870e+04	3.5301e+04
Eq (m=4)	4.4455e+04	4.5058e+04	4.1793e+04
Eq (m=6)	5.6838e+04	5.7433e+04	5.2896e+04
Eq (m=8)	6.7674e+04	6.8144e+04	6.2630e+04
Eq (m=10)	7.7253e+04	7.7411e+04	7.1194e+04
Eq (m=12)	8.5621e+04	8.5357e+04	7.8592e+04

Section 16.17 oc4_p2_load_case_3-5: Mz coo: tower [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-5.sel (01-03-2014 05:34)	45	MomentMz Mbdy:tower nodenr: 1 coo: tower tower base bending moment
B	WAMsim/oc4_p2_load_case_3-5.sel (01-04-2014 12:47)	45	MomentMz Mbdy:tower nodenr: 1 coo: tower tower base bending moment
C	hawc2/oc4_p2_load_case_3-5.sel (31-03-2014 15:36)	45	MomentMz Mbdy:tower nodenr: 1 coo: tower tower base bending moment

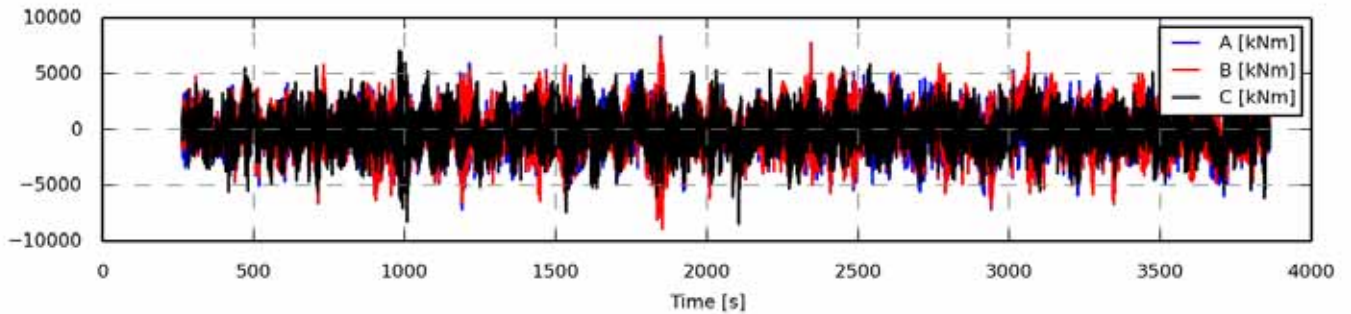


Figure 1481 - Full length time series

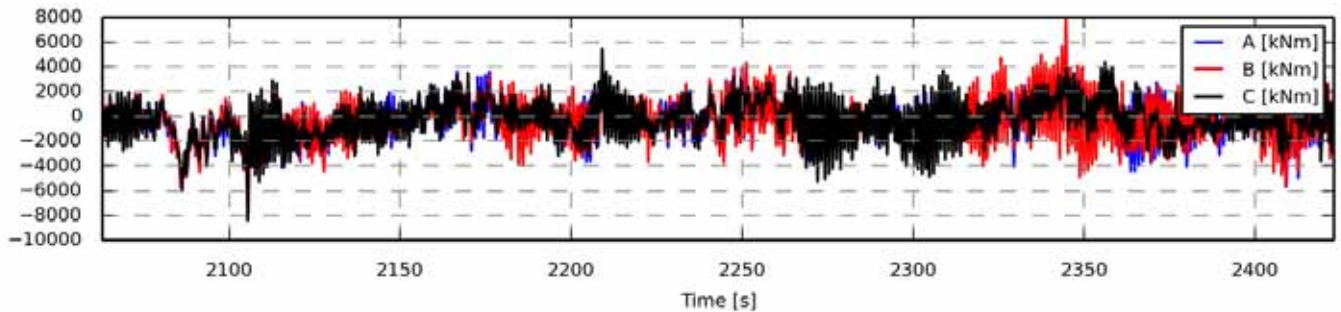


Figure 1482 - Zoom of time series

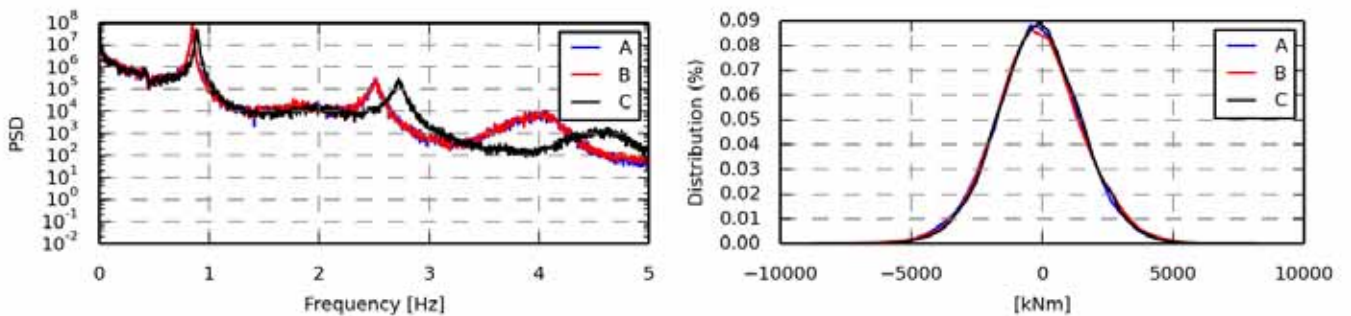


Figure 1483 - Power spectrum density

Statistics	A	B	C
Min	-7.8477e+03	-8.8927e+03	-8.4052e+03
Max	8.3165e+03	8.0004e+03	7.0538e+03
Mean	-2.0676e+02	-1.6275e+02	-1.2614e+02
Std	1.6572e+03	1.7053e+03	1.6195e+03
Skewness	-0.0792	-0.0191	-0.0167
Kurtosis	0.4448	0.5890	0.3343

Figure 1484 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	4.2962e+03	4.4566e+03	4.1459e+03
Eq (m=4)	4.8584e+03	5.0777e+03	4.6956e+03
Eq (m=6)	5.9359e+03	6.2740e+03	5.7613e+03
Eq (m=8)	6.9405e+03	7.3677e+03	6.7321e+03
Eq (m=10)	7.8303e+03	8.3166e+03	7.5670e+03
Eq (m=12)	8.5963e+03	9.1230e+03	8.2713e+03

Section 16.18 oc4_p2_load_case_3-5: ESYS line1_1 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-5.sel (01-03-2014 05:34)	55	ESYS line1_1 SENSOR 4
B	WAMsim/oc4_p2_load_case_3-5.sel (01-04-2014 12:47)	55	ESYS line1_1 SENSOR 4
C	hawc2/oc4_p2_load_case_3-5.sel (31-03-2014 15:36)	55	ESYS line1_1 SENSOR 4

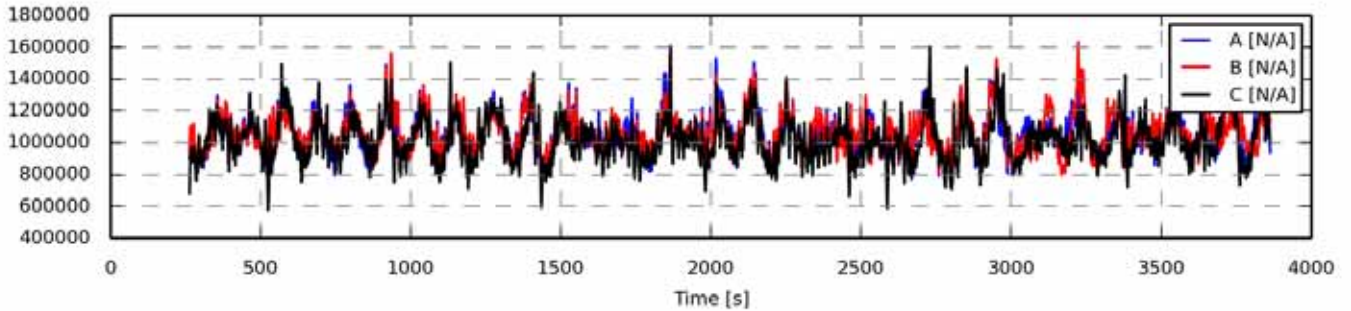


Figure 1485 - Full length time series

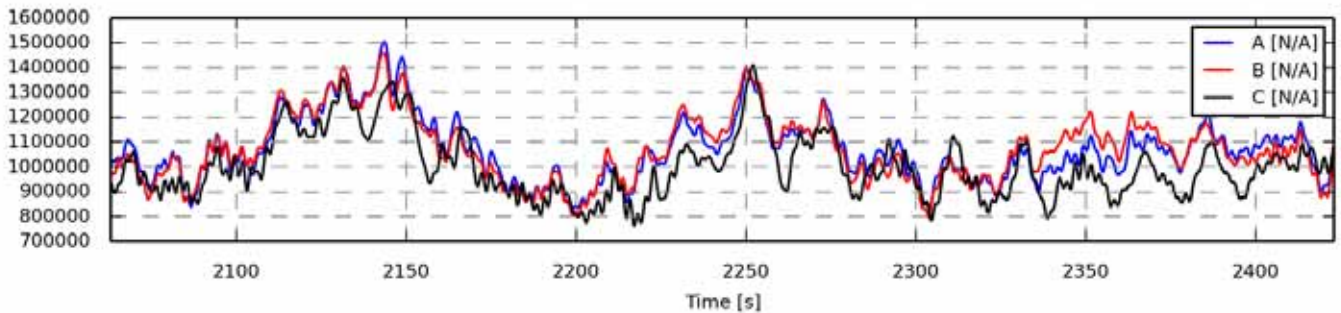


Figure 1486 - Zoom of time series

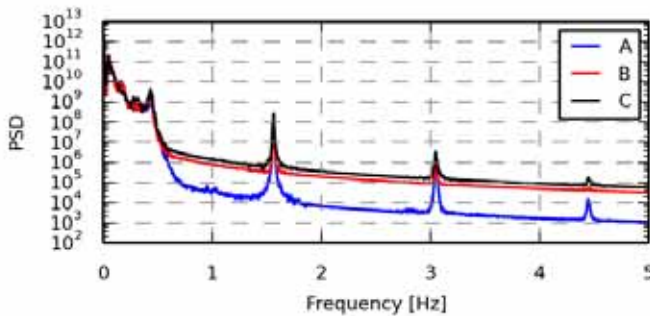


Figure 1487 - Power spectrum density

Statistics	A	B	C
Min	7.7112e+05	7.6901e+05	5.7622e+05
Max	1.5359e+06	1.6308e+06	1.6058e+06
Mean	1.0607e+06	1.0620e+06	1.0173e+06
Std	1.2466e+05	1.1988e+05	1.3559e+05
Skewness	0.5653	0.6719	0.5152
Kurtosis	0.2801	0.8277	0.5763

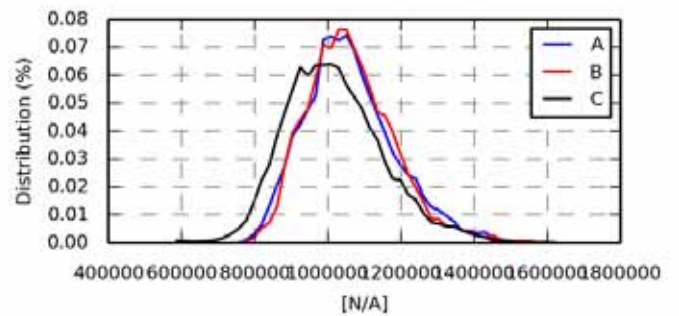


Figure 1488 - Value distribution

Fatigue eq.	1Hz	A	B	C
Eq (m=3)		1.1857e+05	1.1928e+05	1.4123e+05
Eq (m=4)		1.7048e+05	1.7436e+05	2.0826e+05
Eq (m=6)		2.5689e+05	2.7124e+05	3.2465e+05
Eq (m=8)		3.2174e+05	3.4756e+05	4.1584e+05
Eq (m=10)		3.7157e+05	4.0728e+05	4.8768e+05
Eq (m=12)		4.1120e+05	4.5471e+05	5.4531e+05

Section 16.19 oc4_p2_load_case_3-5: ESYS line1_3 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-5.sel (01-03-2014 05:34)	259	ESYS line1_3 SENSOR 104
B	WAMsim/oc4_p2_load_case_3-5.sel (01-04-2014 12:47)	259	ESYS line1_3 SENSOR 104
C	hawc2/oc4_p2_load_case_3-5.sel (31-03-2014 15:36)	259	ESYS line1_3 SENSOR 104

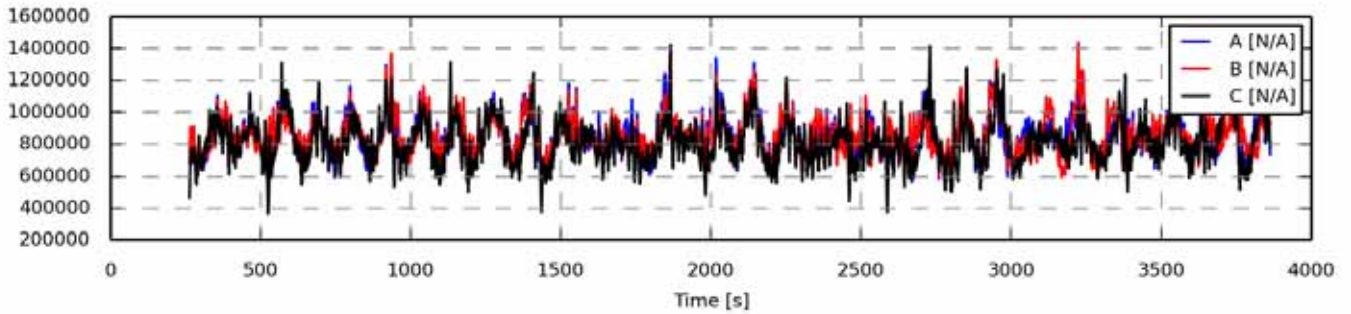


Figure 1489 - Full length time series

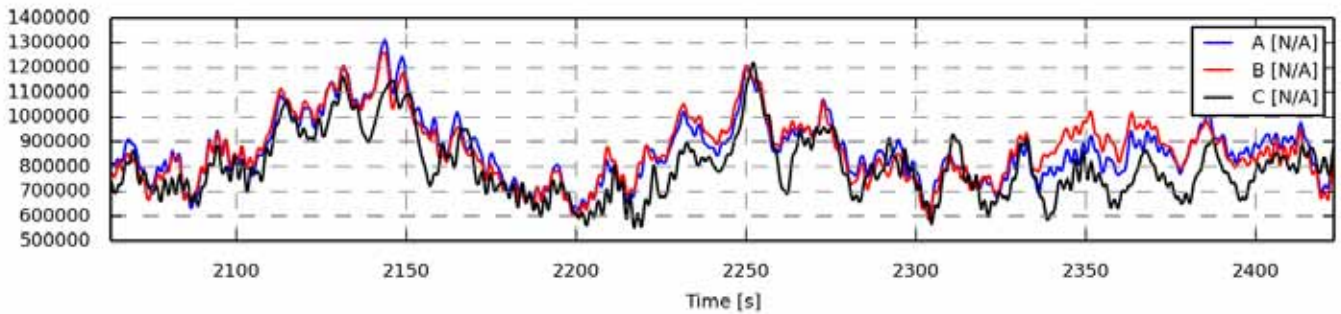


Figure 1490 - Zoom of time series

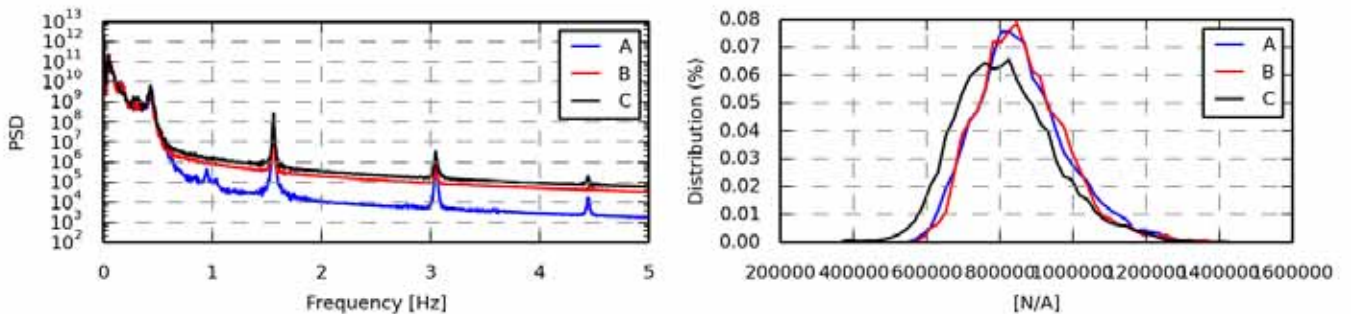


Figure 1491 - Power spectrum density

Statistics	A	B	C
Min	5.5917e+05	5.5990e+05	3.6222e+05
Max	1.3464e+06	1.4371e+06	1.4199e+06
Mean	8.5891e+05	8.6012e+05	8.1526e+05
Std	1.2581e+05	1.2108e+05	1.3744e+05
Skewness	0.5691	0.6777	0.4994
Kurtosis	0.3079	0.8687	0.6025

Figure 1492 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	1.2219e+05	1.2189e+05	1.4606e+05
Eq (m=4)	1.7546e+05	1.7764e+05	2.1482e+05
Eq (m=6)	2.6419e+05	2.7576e+05	3.3458e+05
Eq (m=8)	3.3100e+05	3.5338e+05	4.2855e+05
Eq (m=10)	3.8262e+05	4.1439e+05	5.0254e+05
Eq (m=12)	4.2390e+05	4.6302e+05	5.6182e+05

Section 16.20 oc4_p2_load_case_3-5: ESYS line2_1 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-5.sel (01-03-2014 05:34)	263	ESYS line2_1 SENSOR 4
B	WAMsim/oc4_p2_load_case_3-5.sel (01-04-2014 12:47)	263	ESYS line2_1 SENSOR 4
C	hawc2/oc4_p2_load_case_3-5.sel (31-03-2014 15:36)	263	ESYS line2_1 SENSOR 4

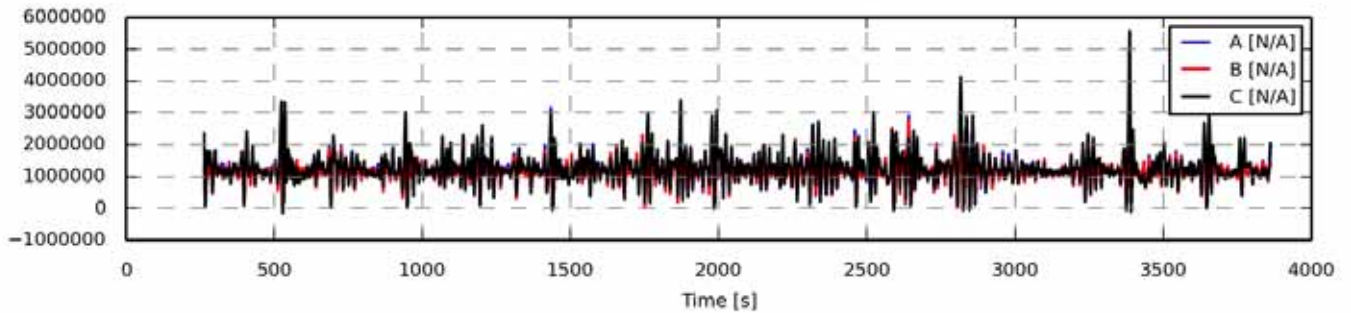


Figure 1493 - Full length time series

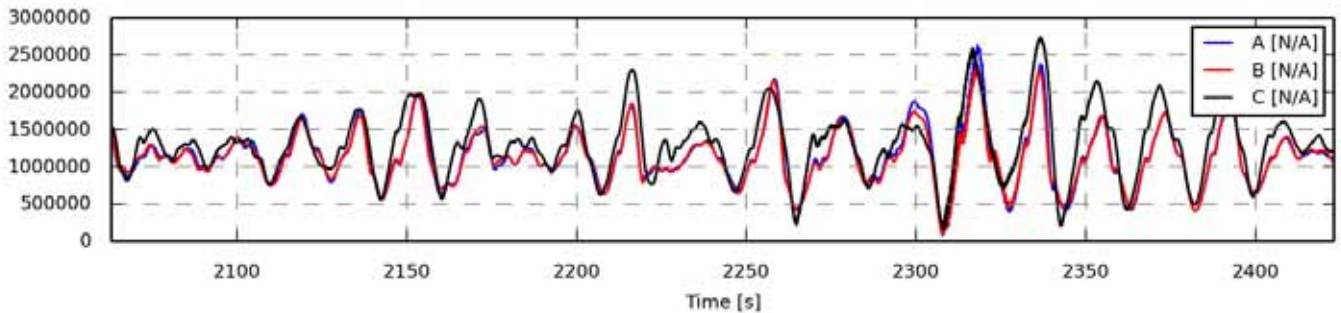


Figure 1494 - Zoom of time series

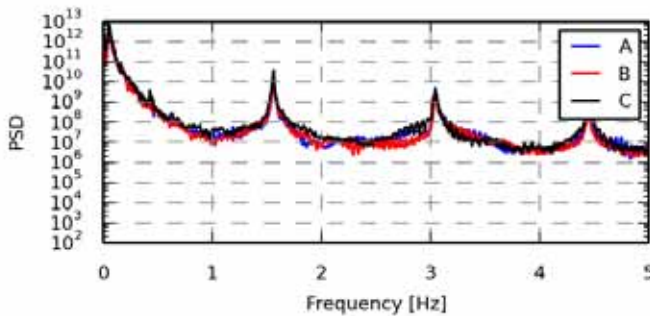


Figure 1495 - Power spectrum density

Statistics	A	B	C
Min	-5.1687e+04	-3.4576e+04	-1.5554e+05
Max	3.1505e+06	2.9584e+06	5.5673e+06
Mean	1.1603e+06	1.1447e+06	1.2825e+06
Std	3.7447e+05	3.5802e+05	4.7539e+05
Skewness	0.6072	0.4544	1.5604
Kurtosis	3.0132	2.4896	8.1885

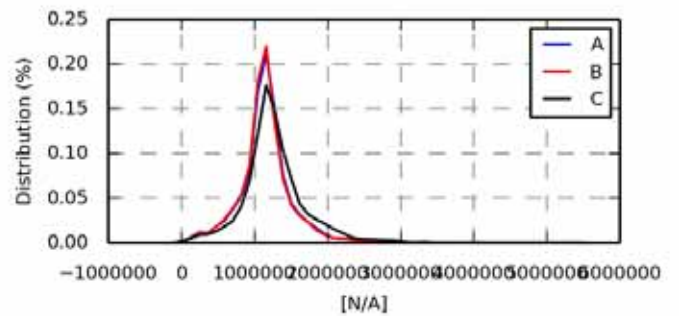


Figure 1496 - Value distribution

Fatigue eq.	1Hz	A	B	C
Eq (m=3)		5.2213e+05	4.9906e+05	6.4811e+05
Eq (m=4)		7.4654e+05	7.0945e+05	9.6282e+05
Eq (m=6)		1.1184e+06	1.0548e+06	1.5666e+06
Eq (m=8)		1.4002e+06	1.3156e+06	2.0984e+06
Eq (m=10)		1.6167e+06	1.5160e+06	2.5402e+06
Eq (m=12)		1.7869e+06	1.6733e+06	2.8993e+06

Section 16.21 oc4_p2_load_case_3-5: ESYS line2_3 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-5.sel (01-03-2014 05:34)	467	ESYS line2_3 SENSOR 104
B	WAMsim/oc4_p2_load_case_3-5.sel (01-04-2014 12:47)	467	ESYS line2_3 SENSOR 104
C	hawc2/oc4_p2_load_case_3-5.sel (31-03-2014 15:36)	467	ESYS line2_3 SENSOR 104

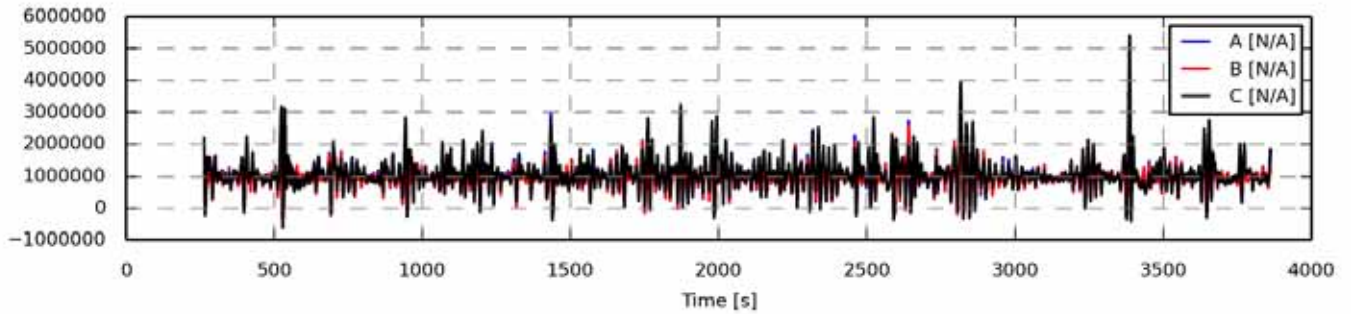


Figure 1497 - Full length time series

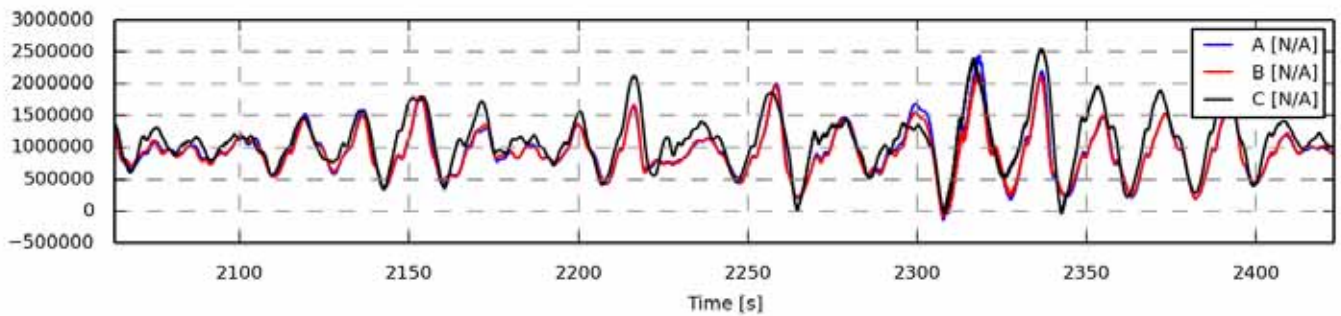


Figure 1498 - Zoom of time series

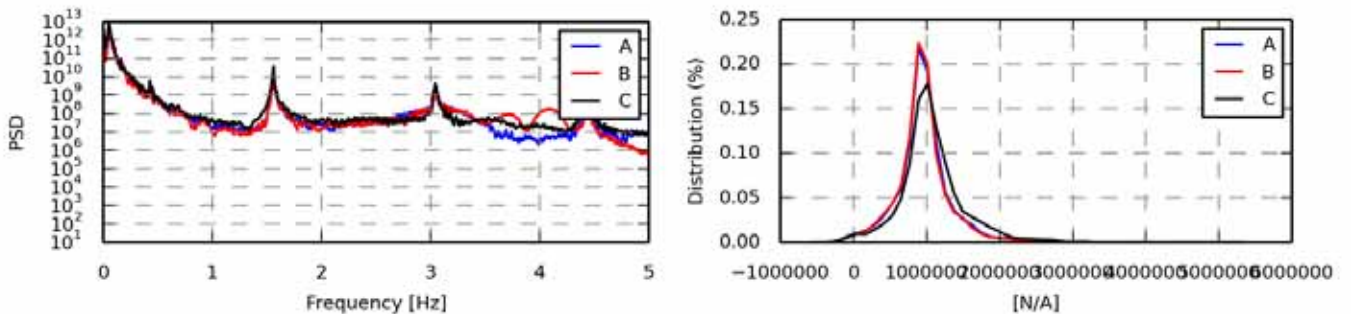


Figure 1499 - Power spectrum density

Statistics	A	B	C
Min	-3.6415e+05	-3.1032e+05	-6.1204e+05
Max	2.9811e+06	2.8059e+06	5.4028e+06
Mean	9.5794e+05	9.4232e+05	1.0803e+06
Std	3.7891e+05	3.6237e+05	4.7821e+05
Skewness	0.6128	0.4594	1.5703
Kurtosis	3.0936	2.5740	8.3565

Figure 1500 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	5.3609e+05	5.1010e+05	6.6602e+05
Eq (m=4)	7.6627e+05	7.2391e+05	9.9173e+05
Eq (m=6)	1.1502e+06	1.0783e+06	1.6177e+06
Eq (m=8)	1.4422e+06	1.3479e+06	2.1675e+06
Eq (m=10)	1.6670e+06	1.5560e+06	2.6236e+06
Eq (m=12)	1.8442e+06	1.7200e+06	2.9945e+06

Section 16.22 oc4_p2_load_case_3-5: ESYS line3_1 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-5.sel (01-03-2014 05:34)	471	ESYS line3_1 SENSOR 4
B	WAMsim/oc4_p2_load_case_3-5.sel (01-04-2014 12:47)	471	ESYS line3_1 SENSOR 4
C	hawc2/oc4_p2_load_case_3-5.sel (31-03-2014 15:36)	471	ESYS line3_1 SENSOR 4

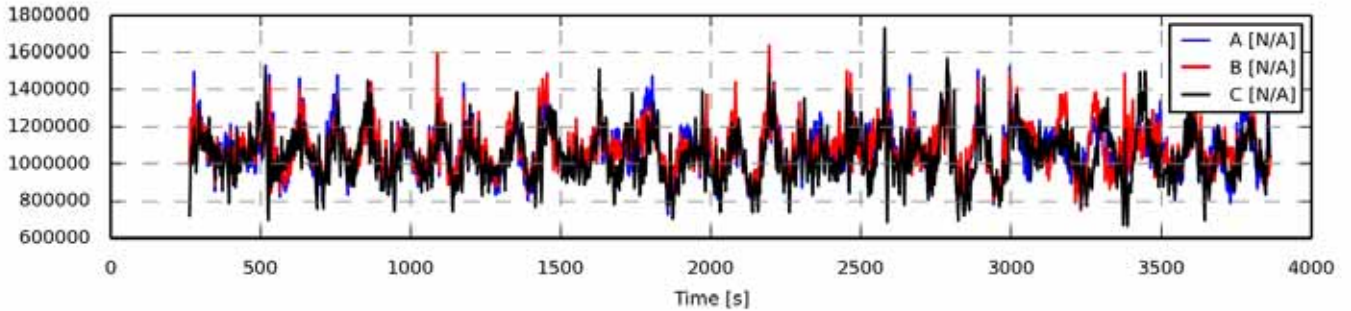


Figure 1501 - Full length time series

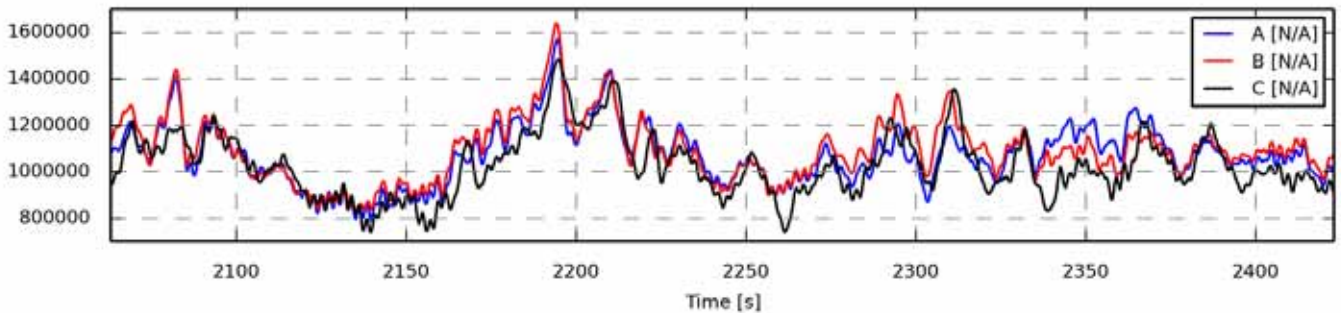


Figure 1502 - Zoom of time series

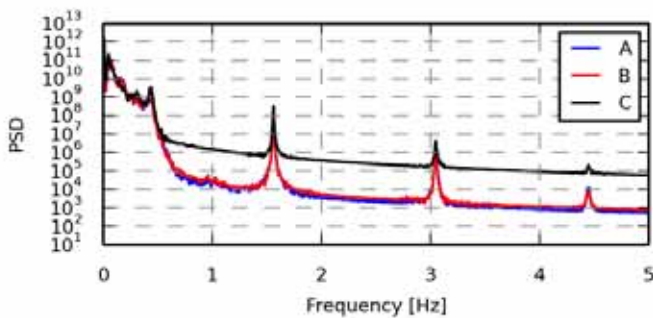


Figure 1503 - Power spectrum density

Statistics	A	B	C
Min	7.2724e+05	7.5034e+05	6.6313e+05
Max	1.5849e+06	1.6376e+06	1.7290e+06
Mean	1.0752e+06	1.0865e+06	1.0434e+06
Std	1.2643e+05	1.1938e+05	1.3258e+05
Skewness	0.5135	0.5357	0.4637
Kurtosis	0.3761	0.5691	0.7873

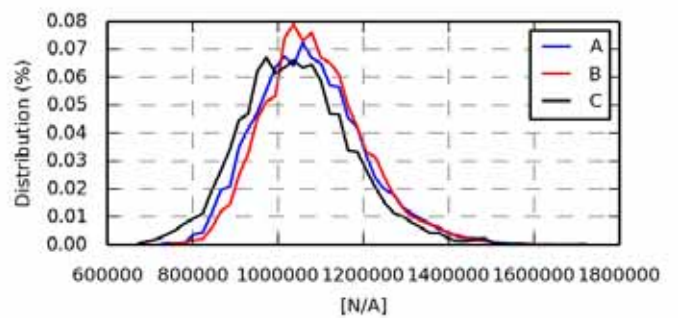


Figure 1504 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	1.2935e+05	1.2488e+05	1.3972e+05
Eq (m=4)	1.8739e+05	1.8063e+05	2.0470e+05
Eq (m=6)	2.8438e+05	2.7636e+05	3.1844e+05
Eq (m=8)	3.5768e+05	3.5200e+05	4.0944e+05
Eq (m=10)	4.1427e+05	4.1256e+05	4.8262e+05
Eq (m=12)	4.5934e+05	4.6189e+05	5.4235e+05

Section 16.23 oc4_p2_load_case_3-5: ESYS line3_3 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-5.sel (01-03-2014 05:34)	675	ESYS line3_3 SENSOR 104
B	WAMsim/oc4_p2_load_case_3-5.sel (01-04-2014 12:47)	675	ESYS line3_3 SENSOR 104
C	hawc2/oc4_p2_load_case_3-5.sel (31-03-2014 15:36)	675	ESYS line3_3 SENSOR 104

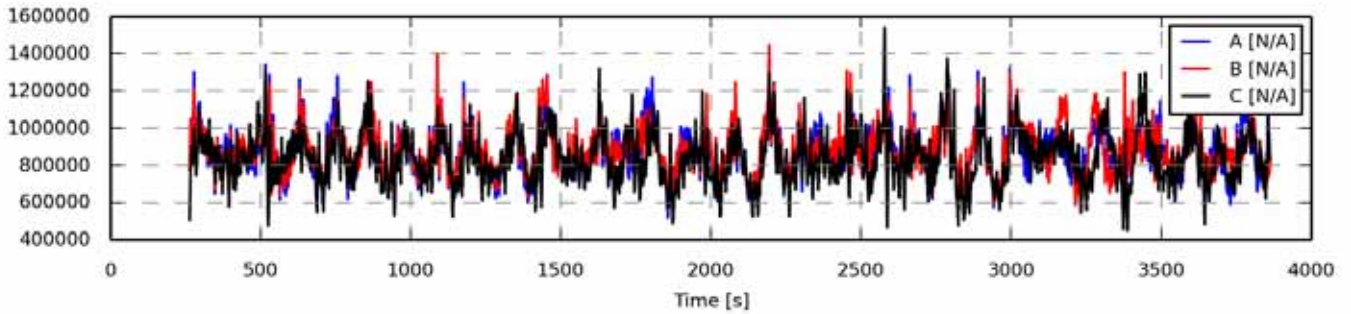


Figure 1505 - Full length time series

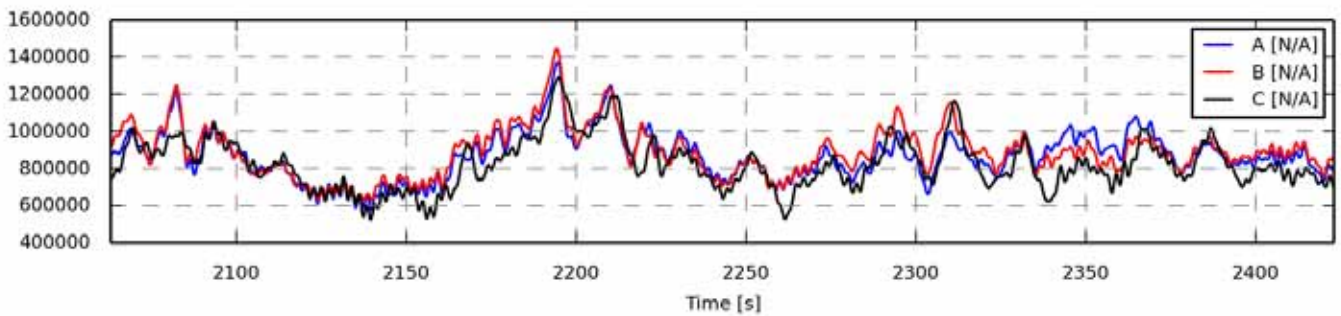


Figure 1506 - Zoom of time series

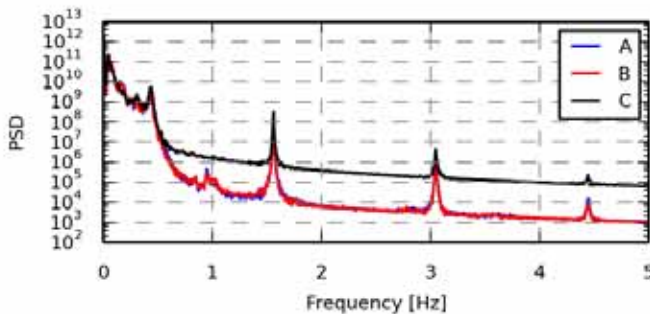


Figure 1507 - Power spectrum density

Statistics	A	B	C
Min	5.2030e+05	5.4195e+05	4.4845e+05
Max	1.3946e+06	1.4458e+06	1.5383e+06
Mean	8.7325e+05	8.8449e+05	8.4122e+05
Std	1.2764e+05	1.2058e+05	1.3450e+05
Skewness	0.5189	0.5421	0.4474
Kurtosis	0.4213	0.6117	0.8001

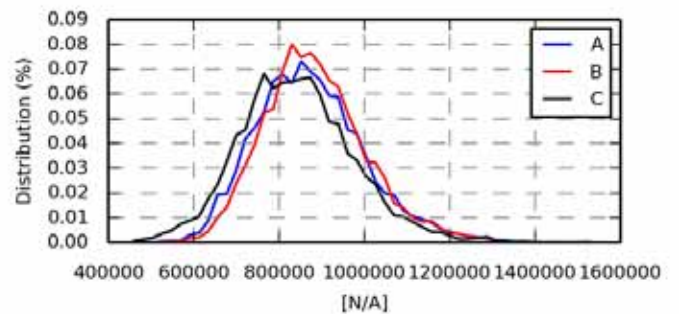


Figure 1508 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	1.3275e+05	1.2770e+05	1.4443e+05
Eq (m=4)	1.9202e+05	1.8445e+05	2.1074e+05
Eq (m=6)	2.9096e+05	2.8197e+05	3.2710e+05
Eq (m=8)	3.6561e+05	3.5904e+05	4.2067e+05
Eq (m=10)	4.2315e+05	4.2074e+05	4.9616e+05
Eq (m=12)	4.6891e+05	4.7094e+05	5.5784e+05

Article XVII. oc4_p2_load_case_3-7

Generated 22-04-2014 10:01

Section 17.01 oc4_p2_load_case_3-7: WSP gl. coo.,Vy [m/s]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-7.sel (01-03-2014 07:24)	3	Free wind speed Vy, gl. coo, of gl. pos 0.00, 0.00, -90.00
B	WAMsim/oc4_p2_load_case_3-7.sel (01-04-2014 12:48)	3	Free wind speed Vy, gl. coo, of gl. pos 0.00, 0.00, -90.00
C	hawc2/oc4_p2_load_case_3-7.sel (31-03-2014 15:36)	3	Free wind speed Vy, gl. coo, of gl. pos 0.00, 0.00, -90.00

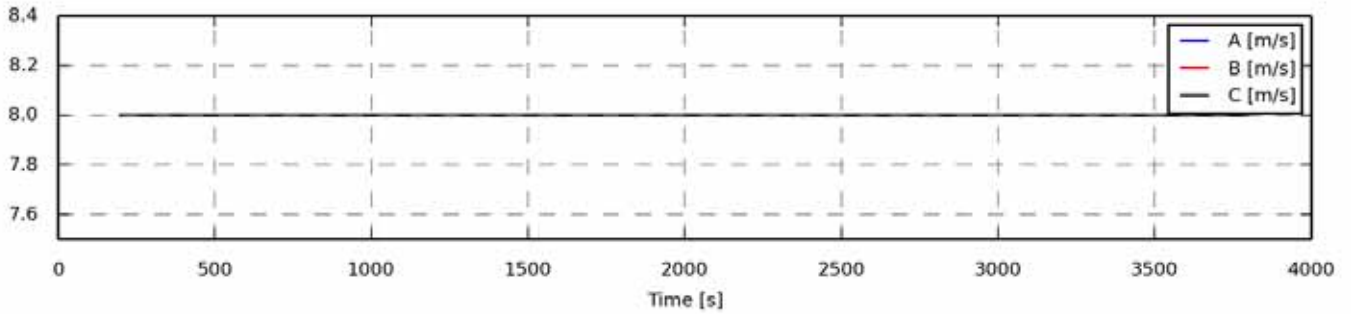


Figure 1509 - Full length time series

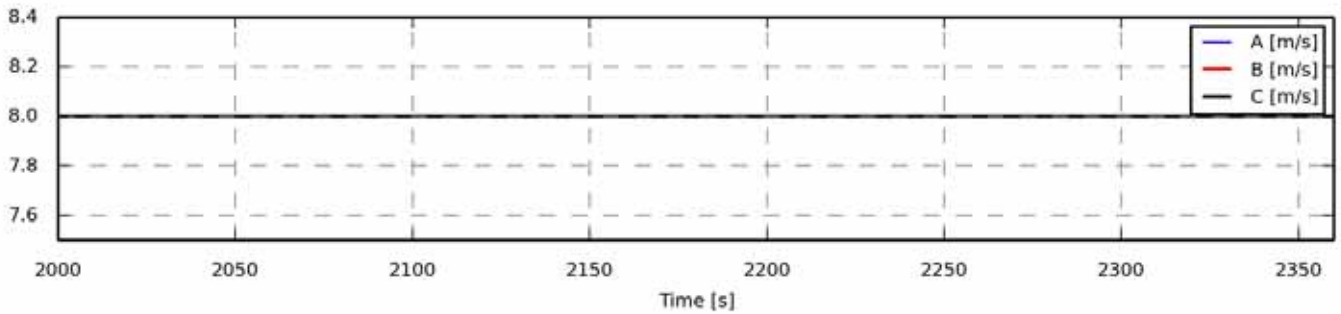


Figure 1510 - Zoom of time series

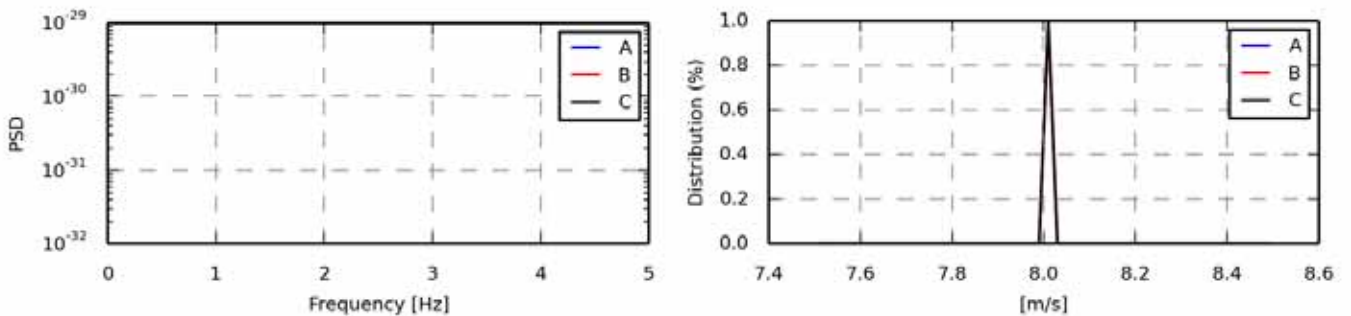


Figure 1511 - Power spectrum density

Statistics	A	B	C
Min	8.0000	8.0000	8.0000
Max	8.0000	8.0000	8.0000
Mean	8.0000	8.0000	8.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

Figure 1512 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 17.02 oc4_p2_load_case_3-7: Water surf. [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-7.sel (01-03-2014 07:24)	5	Water surface gl. coo, at gl. coo, x,y= 0.00, 0.00
B	WAMsim/oc4_p2_load_case_3-7.sel (01-04-2014 12:48)	5	Constant value
C	hawc2/oc4_p2_load_case_3-7.sel (31-03-2014 15:36)	5	Water surface gl. coo, at gl. coo, x,y= 0.00, 0.00

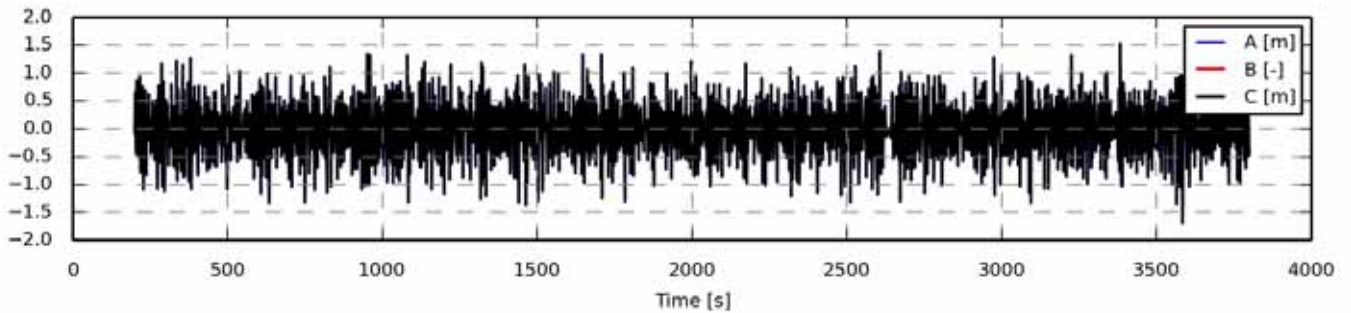


Figure 1513 - Full length time series

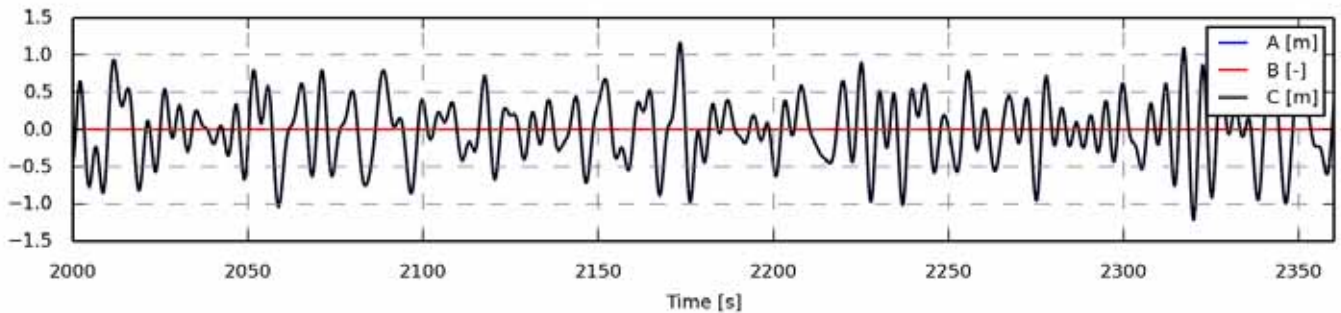


Figure 1514 - Zoom of time series

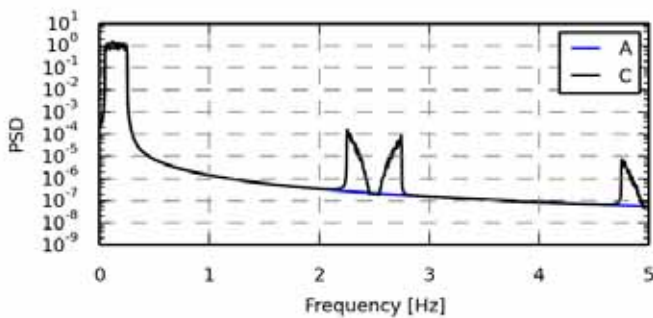


Figure 1515 - Power spectrum density

Statistics	A	B	C
Min	-1.6931	0.0000	-1.6856
Max	1.5301	0.0000	1.5256
Mean	0.0002	0.0000	0.0002
Std	0.4434	0.0000	0.4374
Skewness	-0.0763	0.0000	-0.0768
Kurtosis	-0.0578	-3.0000	-0.0582

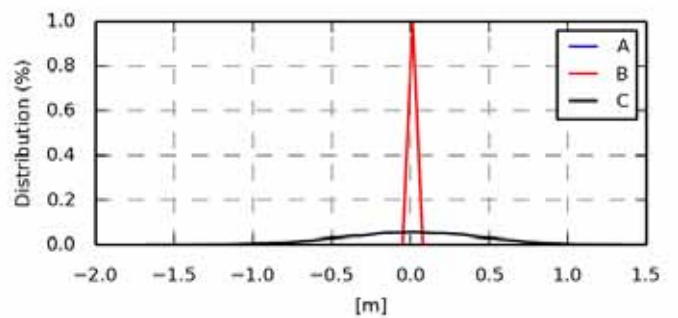


Figure 1516 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.7326	-	0.7257
Eq (m=4)	0.9200	-	0.9119
Eq (m=6)	1.2021	-	1.1928
Eq (m=8)	1.4134	-	1.4037
Eq (m=10)	1.5835	-	1.5738
Eq (m=12)	1.7263	-	1.7168

Section 17.03 oc4_p2_load_case_3-7: DLL inp 1: 9 [-]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-7.sel (01-03-2014 07:24)	6	DLL : 1 inpvec : 9 electrical power generator [kw]
B	WAMsim/oc4_p2_load_case_3-7.sel (01-04-2014 12:48)	6	DLL : 1 inpvec : 9 electrical power generator [kw]
C	hawc2/oc4_p2_load_case_3-7.sel (31-03-2014 15:36)	6	DLL : 1 inpvec : 9 electrical power generator [kw]

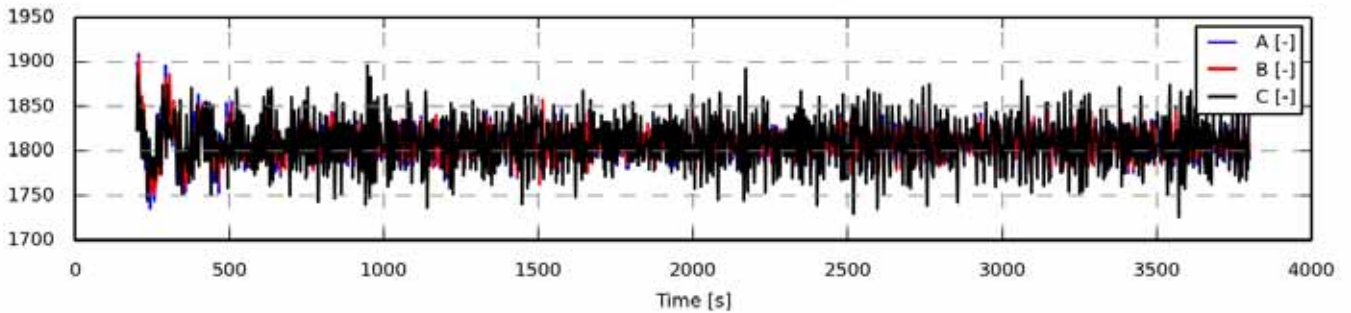


Figure 1517 - Full length time series

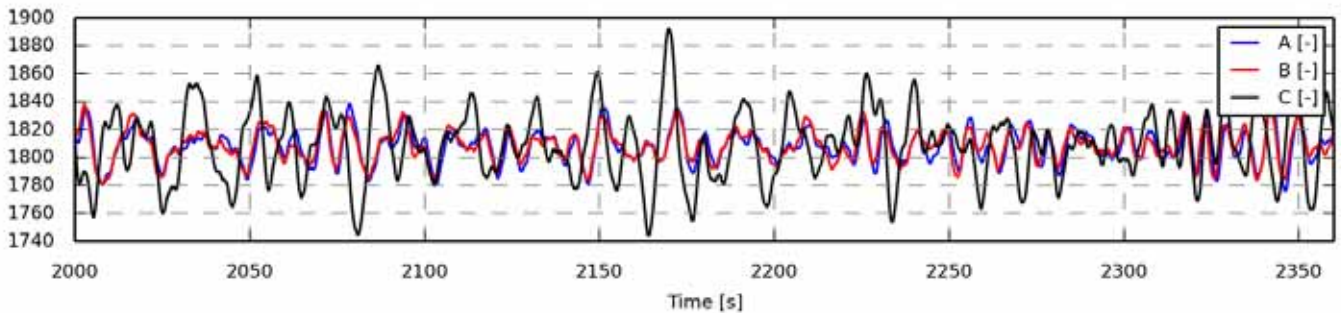


Figure 1518 - Zoom of time series

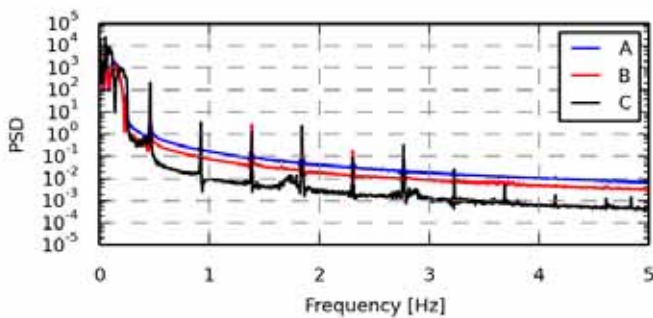


Figure 1519 - Power spectrum density

Statistics	A	B	C
Min	1.7351e+03	1.7509e+03	1.7255e+03
Max	1.9090e+03	1.9052e+03	1.8964e+03
Mean	1.8084e+03	1.8087e+03	1.8093e+03
Std	16.3689	14.8468	23.8383
Skewness	0.4073	0.5439	-0.0117
Kurtosis	3.2624	3.1896	-0.0056

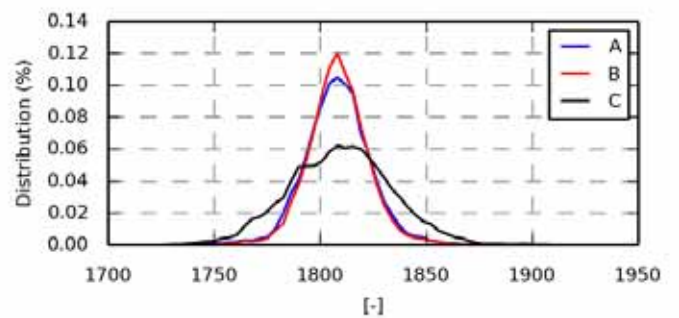


Figure 1520 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	21.4411	19.4429	33.2889
Eq (m=4)	29.4930	26.6192	43.7989
Eq (m=6)	46.3024	41.1105	60.2132
Eq (m=8)	62.0765	54.6869	72.7227
Eq (m=10)	75.1916	66.1252	82.6998
Eq (m=12)	85.7987	75.4742	90.8757

Section 17.04 oc4_p2_load_case_3-7: bea1 angle_speed [rpm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-7.sel (01-03-2014 07:24)	9	shaft_rot angle speed
B	WAMsim/oc4_p2_load_case_3-7.sel (01-04-2014 12:48)	9	shaft_rot angle speed
C	hawc2/oc4_p2_load_case_3-7.sel (31-03-2014 15:36)	9	shaft_rot angle speed

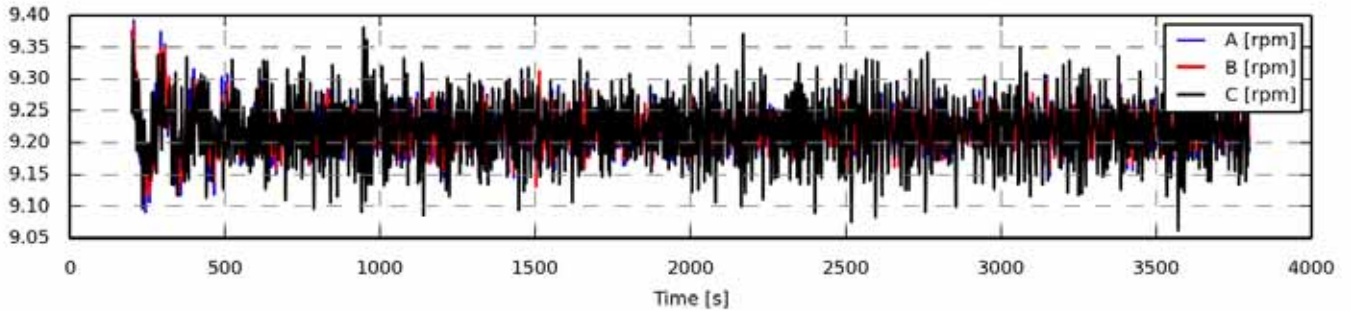


Figure 1521 - Full length time series

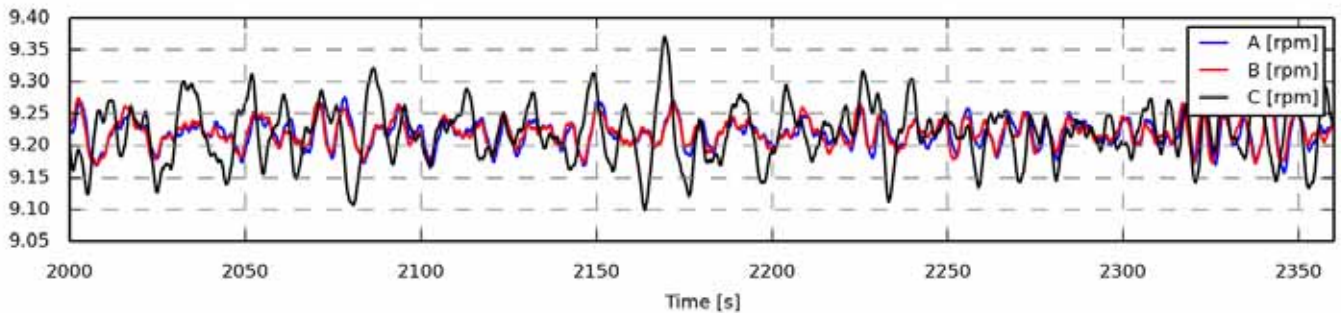


Figure 1522 - Zoom of time series

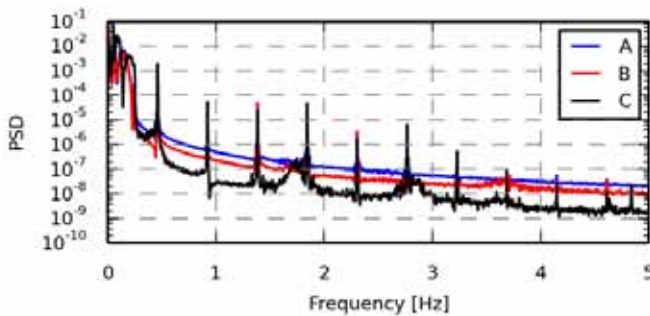


Figure 1523 - Power spectrum density

Statistics	A	B	C
Min	9.0909	9.1162	9.0623
Max	9.3923	9.3857	9.3804
Mean	9.2195	9.2201	9.2209
Std	0.0295	0.0268	0.0432
Skewness	0.3078	0.4310	-0.0380
Kurtosis	2.4386	2.4069	0.0061

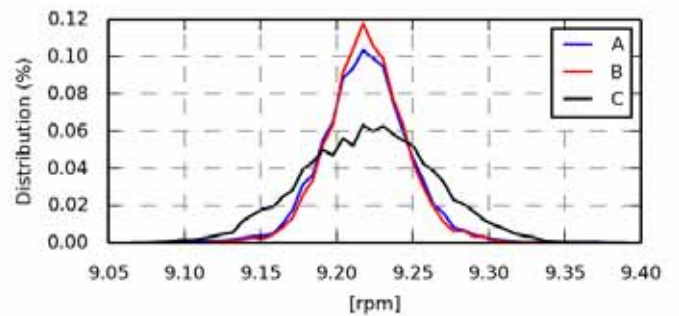


Figure 1524 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.0406	0.0370	0.0624
Eq (m=4)	0.0546	0.0496	0.0815
Eq (m=6)	0.0828	0.0740	0.1114
Eq (m=8)	0.1094	0.0969	0.1343
Eq (m=10)	0.1318	0.1164	0.1526
Eq (m=12)	0.1501	0.1325	0.1677

Section 17.05 oc4_p2_load_case_3-7: bea1 angle [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-7.sel (01-03-2014 07:24)	14	pitch1 angle
B	WAMsim/oc4_p2_load_case_3-7.sel (01-04-2014 12:48)	14	pitch1 angle
C	hawc2/oc4_p2_load_case_3-7.sel (31-03-2014 15:36)	14	pitch1 angle

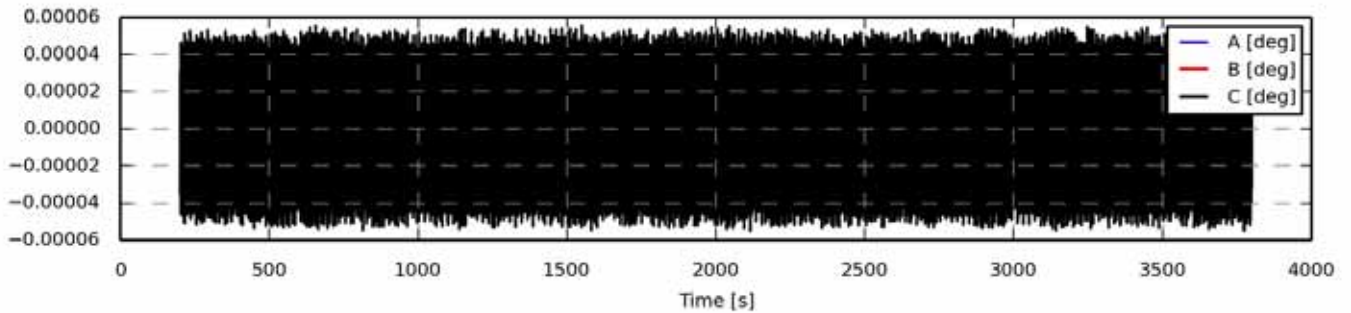


Figure 1525 - Full length time series

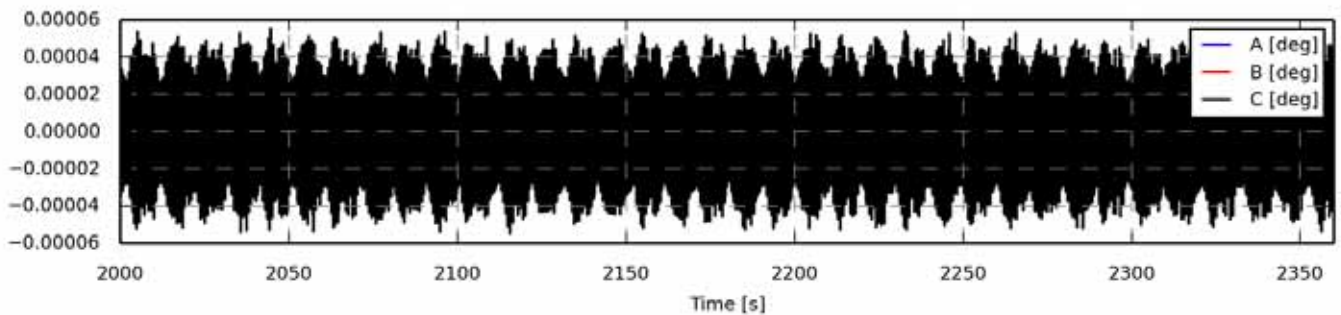


Figure 1526 - Zoom of time series

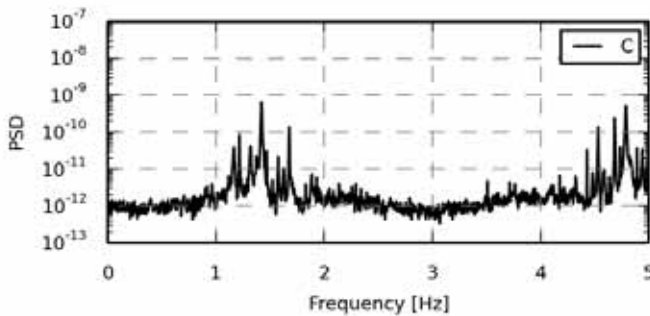


Figure 1527 - Power spectrum density

Statistics	A	B	C
Min	0.0000	0.0000	-0.0001
Max	0.0000	0.0000	0.0001
Mean	0.0000	0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0031
Kurtosis	-3.0000	-3.0000	0.5573

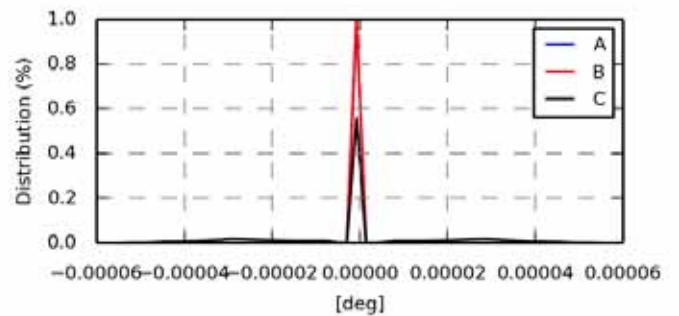


Figure 1528 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	0.0001
Eq (m=4)	-	-	0.0001
Eq (m=6)	-	-	0.0001
Eq (m=8)	-	-	0.0001
Eq (m=10)	-	-	0.0001
Eq (m=12)	-	-	0.0001

Section 17.06 oc4_p2_load_case_3-7: State pos x coo: global [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-7.sel (01-03-2014 07:24)	19	State pos x Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
B	WAMsim/oc4_p2_load_case_3-7.sel (01-04-2014 12:48)	19	State pos x Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
C	hawc2/oc4_p2_load_case_3-7.sel (31-03-2014 15:36)	19	State pos x Mbdy:mc E-nr: 8 Z-rel:0.00 coo: global platform translation in surge sway and heave

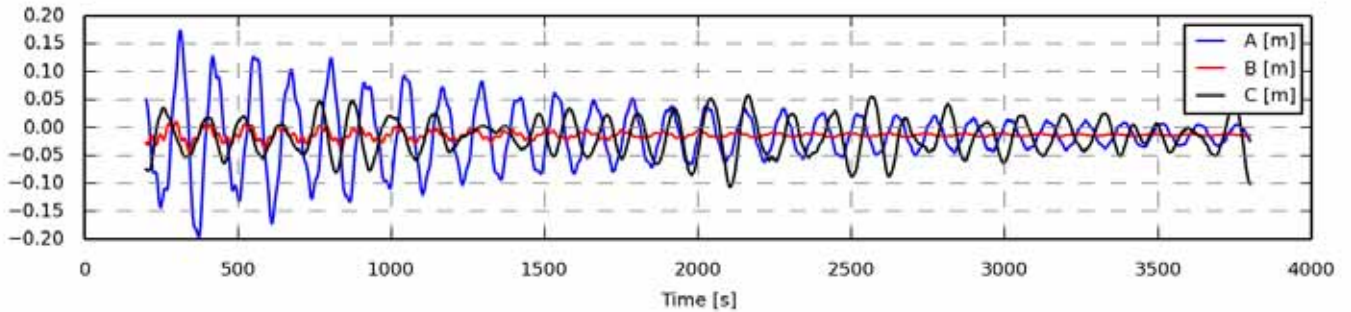


Figure 1529 - Full length time series

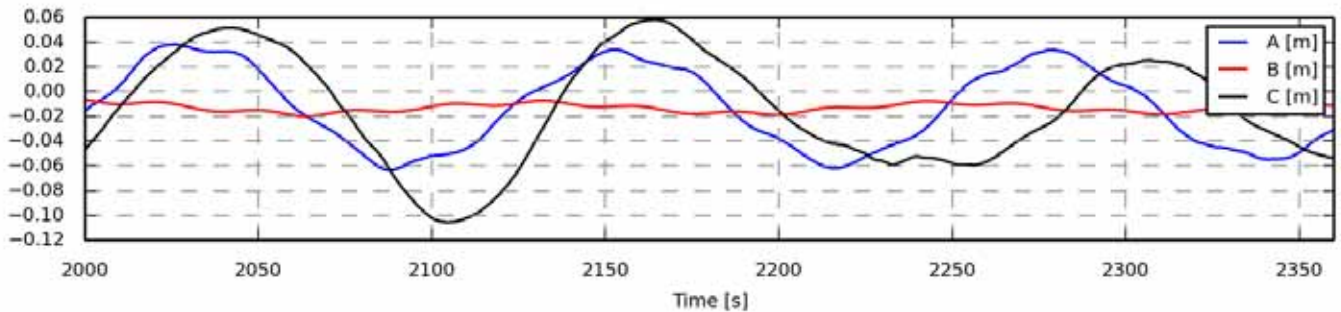


Figure 1530 - Zoom of time series

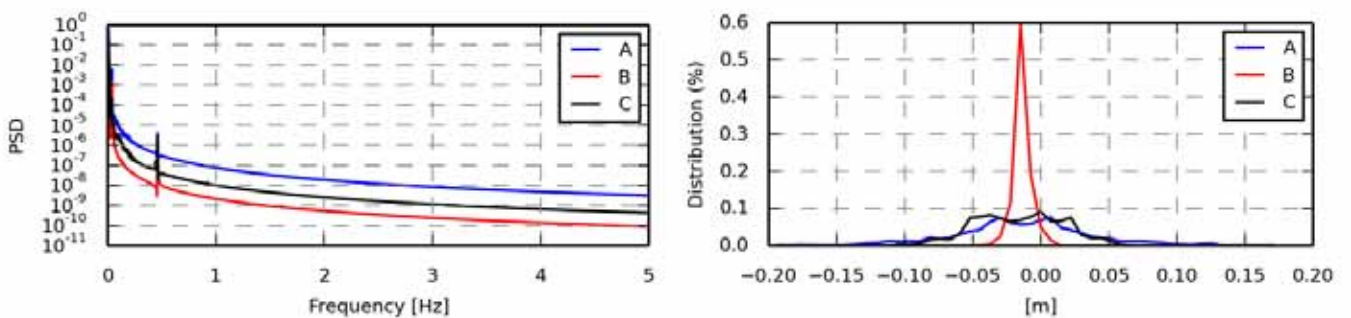


Figure 1531 - Power spectrum density

Statistics	A	B	C
Min	-0.1965	-0.0433	-0.1056
Max	0.1744	0.0109	0.0581
Mean	-0.0141	-0.0135	-0.0161
Std	0.0535	0.0063	0.0321
Skewness	-0.0246	-0.0125	-0.0866
Kurtosis	0.9519	2.6472	-0.5601

Figure 1532 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.0364	0.0052	0.0197
Eq (m=4)	0.0599	0.0086	0.0310
Eq (m=6)	0.1019	0.0148	0.0503
Eq (m=8)	0.1355	0.0198	0.0652
Eq (m=10)	0.1622	0.0238	0.0768
Eq (m=12)	0.1837	0.0270	0.0861

Section 17.07 oc4_p2_load_case_3-7: State pos y coo: global [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-7.sel (01-03-2014 07:24)	20	State pos y Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
B	WAMsim/oc4_p2_load_case_3-7.sel (01-04-2014 12:48)	20	State pos y Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
C	hawc2/oc4_p2_load_case_3-7.sel (31-03-2014 15:36)	20	State pos y Mbdy:mc E-nr: 8 Z-rel:0.00 coo: global platform translation in surge sway and heave

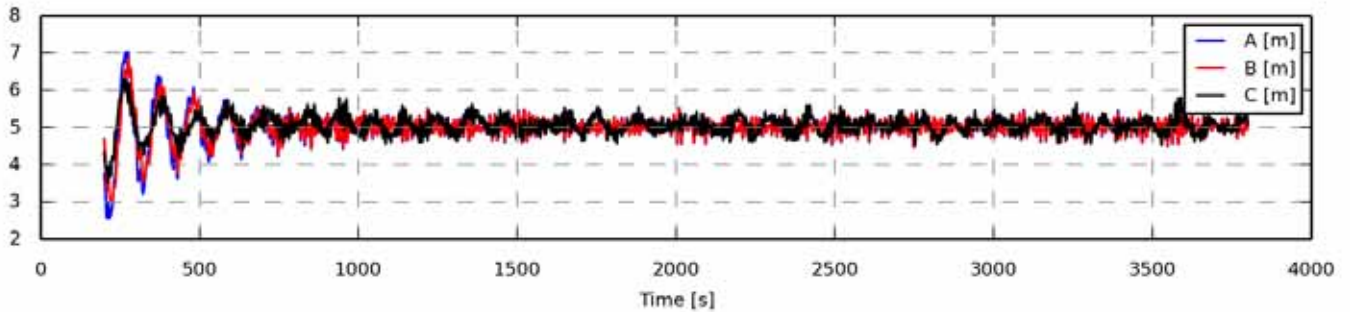


Figure 1533 - Full length time series

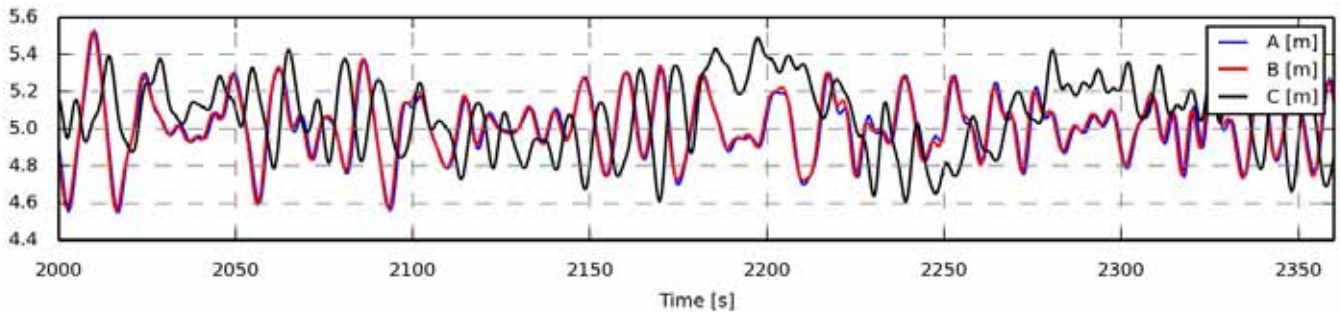


Figure 1534 - Zoom of time series

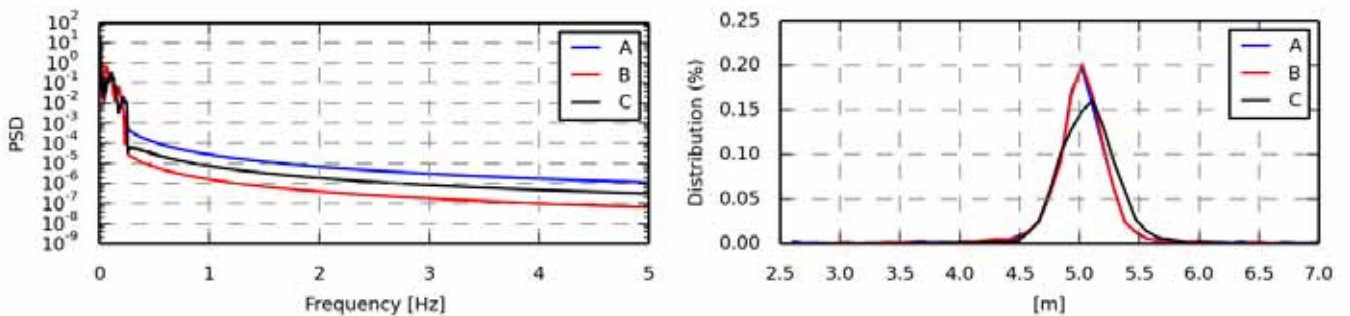


Figure 1535 - Power spectrum density

Statistics	A	B	C
Min	2.5650	2.9783	3.5112
Max	7.0299	6.8601	6.3049
Mean	5.0063	5.0123	5.0679
Std	0.3824	0.3278	0.2624
Skewness	-1.0615	-0.8894	-0.2155
Kurtosis	12.7229	10.4472	3.9449

Figure 1536 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.3489	0.3156	0.2546
Eq (m=4)	0.5932	0.5216	0.3847
Eq (m=6)	1.1014	0.9575	0.6701
Eq (m=8)	1.5327	1.3316	0.9352
Eq (m=10)	1.8799	1.6336	1.1562
Eq (m=12)	2.1597	1.8772	1.3360

Section 17.08 oc4_p2_load_case_3-7: State pos z coo: global [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-7.sel (01-03-2014 07:24)	21	State pos z Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
B	WAMsim/oc4_p2_load_case_3-7.sel (01-04-2014 12:48)	21	State pos z Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
C	hawc2/oc4_p2_load_case_3-7.sel (31-03-2014 15:36)	21	State pos z Mbdy:mc E-nr: 8 Z-rel:0.00 coo: global platform translation in surge sway and heave

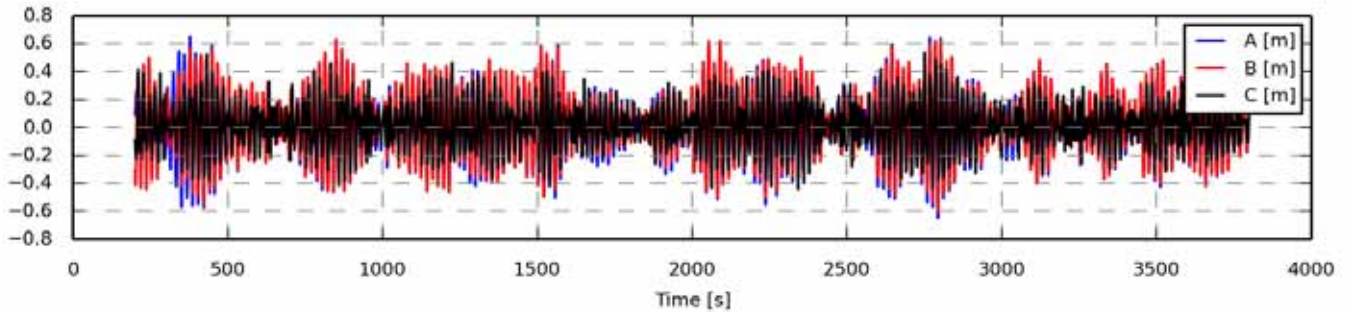


Figure 1537 - Full length time series

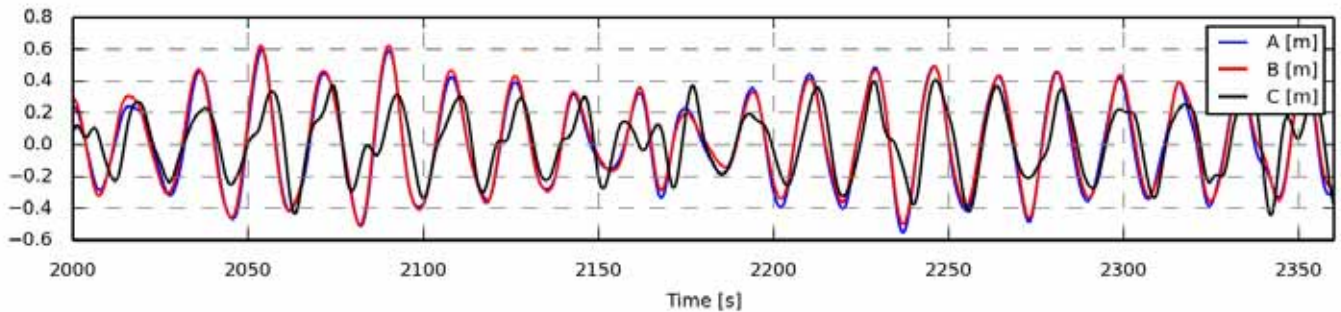


Figure 1538 - Zoom of time series

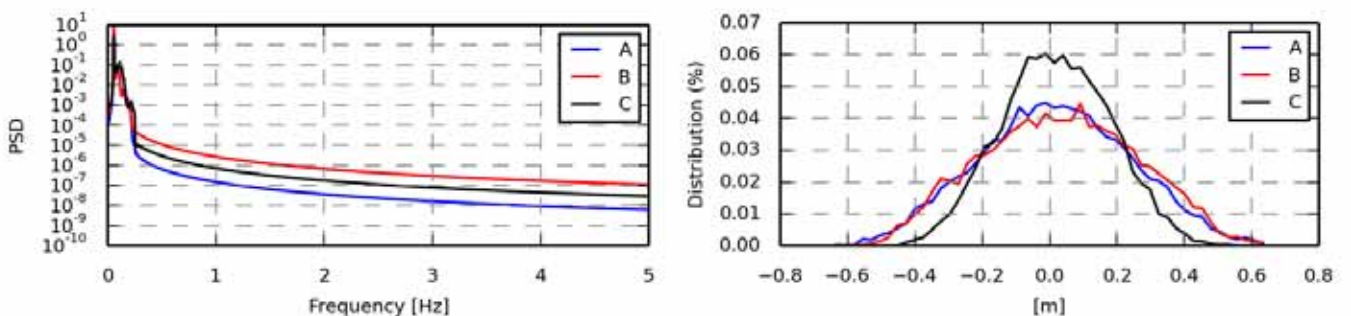


Figure 1539 - Power spectrum density

Statistics	A	B	C
Min	-0.6467	-0.6015	-0.4420
Max	0.6482	0.6317	0.5352
Mean	0.0149	0.0285	0.0188
Std	0.2251	0.2296	0.1618
Skewness	0.0162	0.0136	0.0168
Kurtosis	-0.3933	-0.6191	-0.3471

Figure 1540 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.2663	0.2671	0.2034
Eq (m=4)	0.3585	0.3564	0.2699
Eq (m=6)	0.4971	0.4873	0.3695
Eq (m=8)	0.5971	0.5799	0.4424
Eq (m=10)	0.6734	0.6501	0.4993
Eq (m=12)	0.7339	0.7060	0.5454

Section 17.09 oc4_p2_load_case_3-7: proj_ang tx coo: global [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-7.sel (01-03-2014 07:24)	22	State_rot proj_ang tx Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
B	WAMsim/oc4_p2_load_case_3-7.sel (01-04-2014 12:48)	22	State_rot proj_ang tx Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
C	hawc2/oc4_p2_load_case_3-7.sel (31-03-2014 15:36)	22	State_rot proj_ang tx Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw

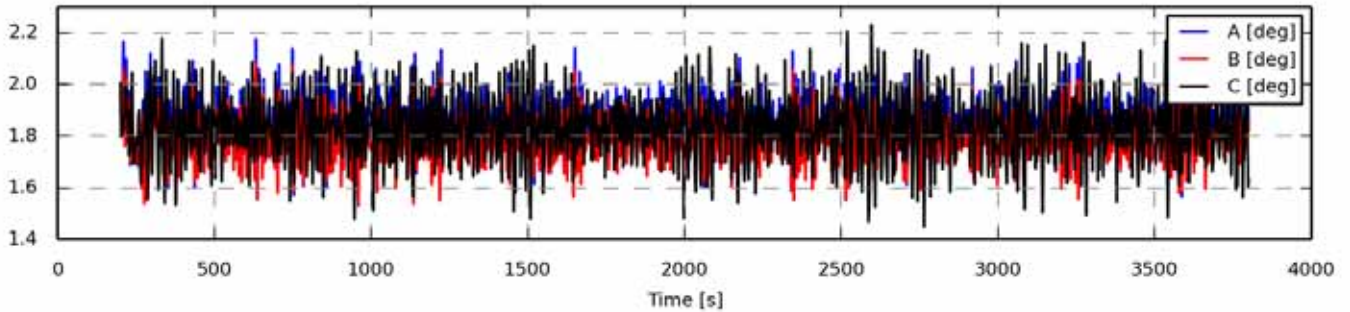


Figure 1541 - Full length time series

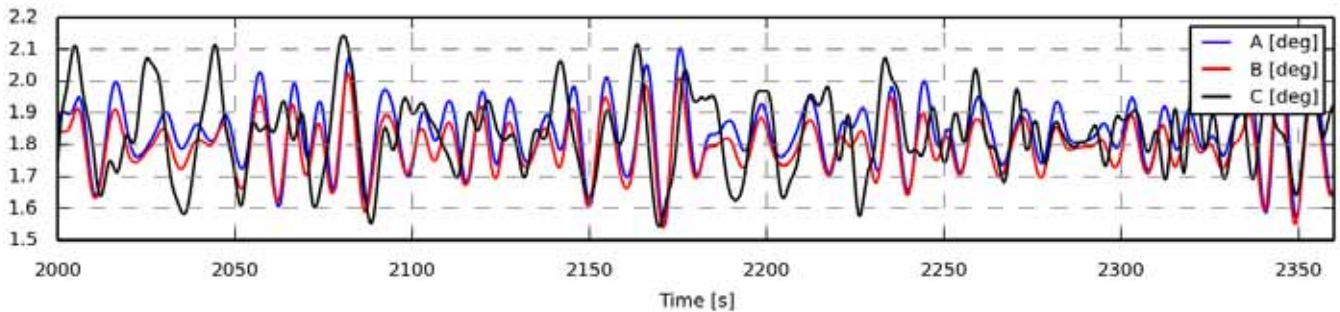


Figure 1542 - Zoom of time series

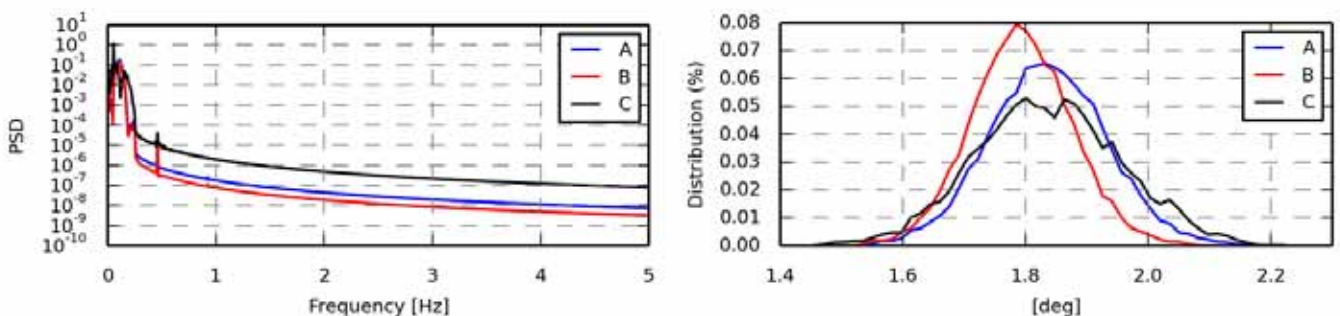


Figure 1543 - Power spectrum density

Statistics	A	B	C
Min	1.5311	1.5356	1.4488
Max	2.1750	2.0819	2.2298
Mean	1.8361	1.7931	1.8357
Std	0.0958	0.0823	0.1190
Skewness	0.0715	0.0648	0.0261
Kurtosis	0.0573	0.1140	-0.1070

Figure 1544 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.1384	0.1191	0.1577
Eq (m=4)	0.1806	0.1556	0.2097
Eq (m=6)	0.2460	0.2124	0.2895
Eq (m=8)	0.2949	0.2552	0.3489
Eq (m=10)	0.3329	0.2886	0.3953
Eq (m=12)	0.3631	0.3150	0.4326

Section 17.10 oc4_p2_load_case_3-7: proj_ang ty coo: global [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-7.sel (01-03-2014 07:24)	23	State_rot proj_ang ty Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
B	WAMsim/oc4_p2_load_case_3-7.sel (01-04-2014 12:48)	23	State_rot proj_ang ty Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
C	hawc2/oc4_p2_load_case_3-7.sel (31-03-2014 15:36)	23	State_rot proj_ang ty Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw

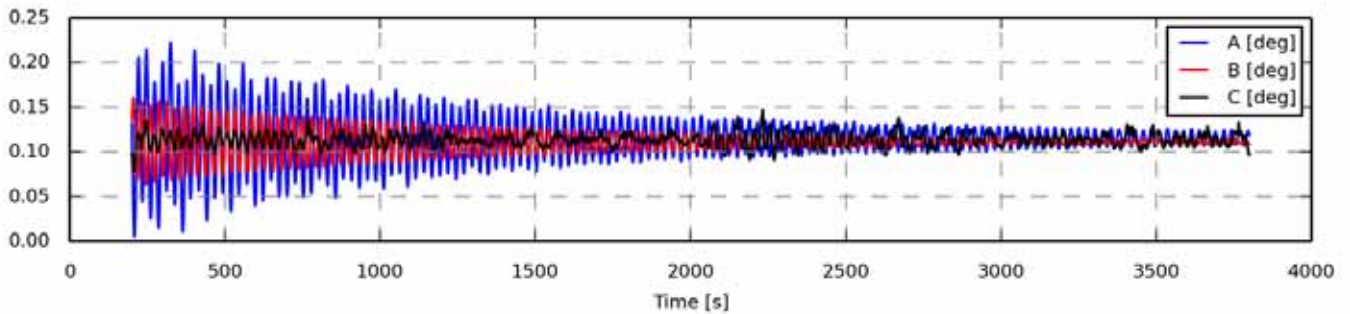


Figure 1545 - Full length time series

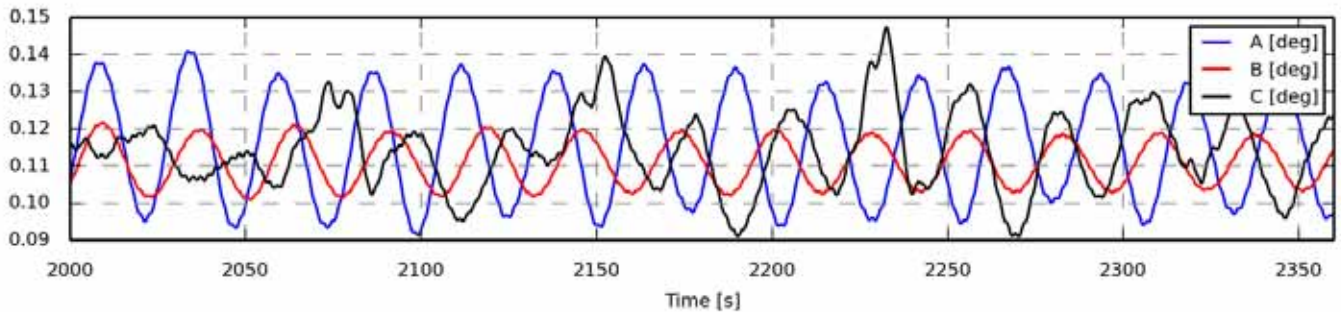


Figure 1546 - Zoom of time series

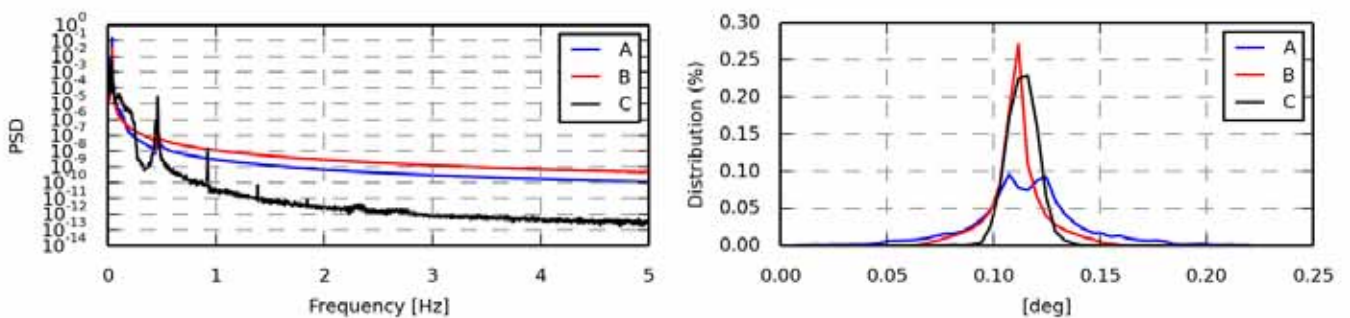


Figure 1547 - Power spectrum density

Statistics	A	B	C
Min	0.0056	0.0632	0.0785
Max	0.2223	0.1608	0.1473
Mean	0.1151	0.1110	0.1136
Std	0.0272	0.0131	0.0073
Skewness	-0.0344	0.0457	-0.0213
Kurtosis	1.7928	1.7805	0.9781

Figure 1548 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.0301	0.0145	0.0075
Eq (m=4)	0.0444	0.0214	0.0111
Eq (m=6)	0.0686	0.0326	0.0179
Eq (m=8)	0.0876	0.0408	0.0239
Eq (m=10)	0.1027	0.0472	0.0290
Eq (m=12)	0.1148	0.0522	0.0332

Section 17.11 oc4_p2_load_case_3-7: proj_ang tz coo: global [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-7.sel (01-03-2014 07:24)	24	State_rot proj_ang tz Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
B	WAMsim/oc4_p2_load_case_3-7.sel (01-04-2014 12:48)	24	State_rot proj_ang tz Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
C	hawc2/oc4_p2_load_case_3-7.sel (31-03-2014 15:36)	24	State_rot proj_ang tz Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw

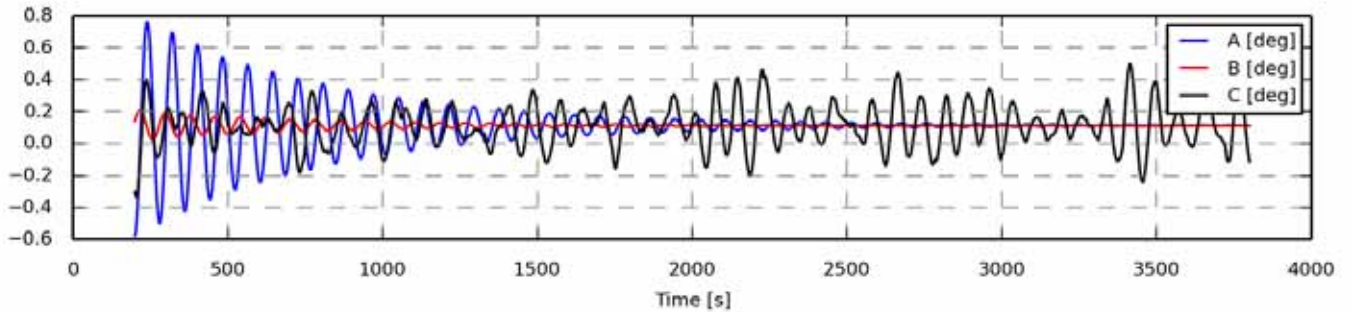


Figure 1549 - Full length time series

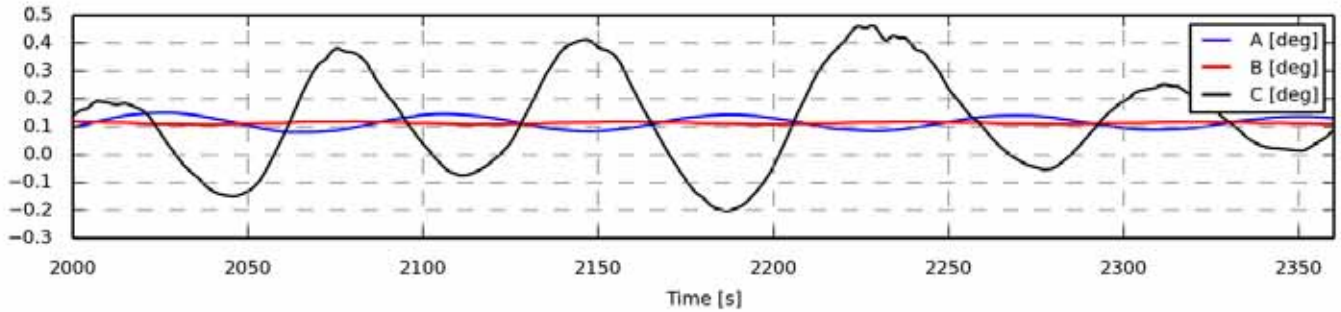


Figure 1550 - Zoom of time series

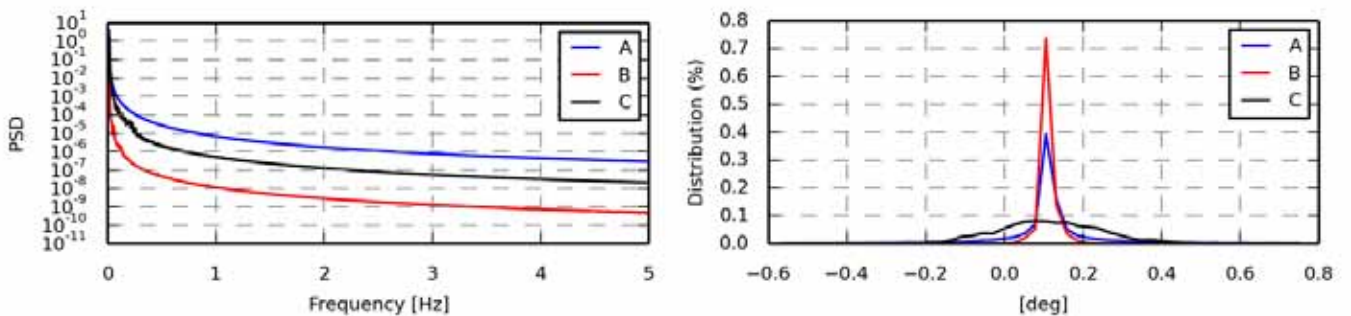


Figure 1551 - Power spectrum density

Statistics	A	B	C
Min	-0.5780	0.0251	-0.3357
Max	0.7627	0.2073	0.4984
Mean	0.1139	0.1134	0.1139
Std	0.1430	0.0192	0.1317
Skewness	0.0125	0.2554	0.0246
Kurtosis	5.8708	6.2091	0.0072

Figure 1552 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.1236	0.0162	0.0937
Eq (m=4)	0.2110	0.0277	0.1449
Eq (m=6)	0.3703	0.0489	0.2334
Eq (m=8)	0.4975	0.0662	0.3045
Eq (m=10)	0.5972	0.0799	0.3625
Eq (m=12)	0.6766	0.0909	0.4104

Section 17.12 oc4_p2_load_case_3-7: Mx coo: towertop [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-7.sel (01-03-2014 07:24)	37	MomentMx Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
B	WAMsim/oc4_p2_load_case_3-7.sel (01-04-2014 12:48)	37	MomentMx Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
C	hawc2/oc4_p2_load_case_3-7.sel (31-03-2014 15:36)	37	MomentMx Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment

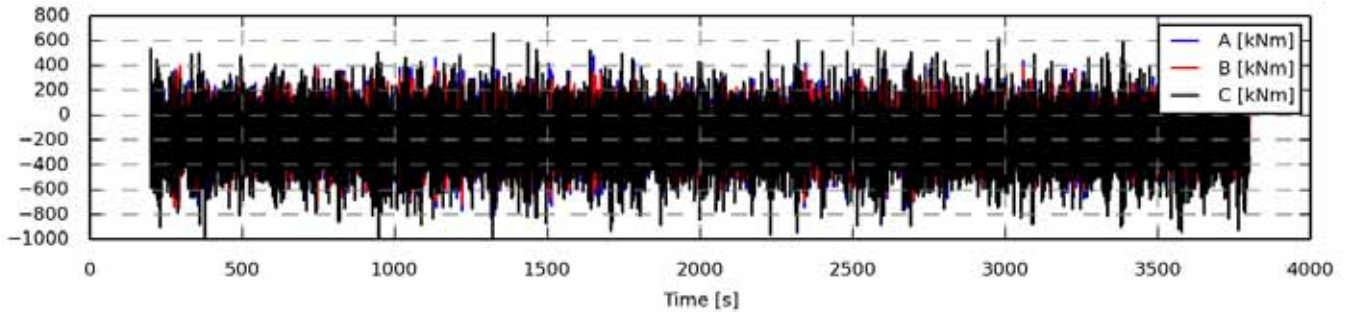


Figure 1553 - Full length time series

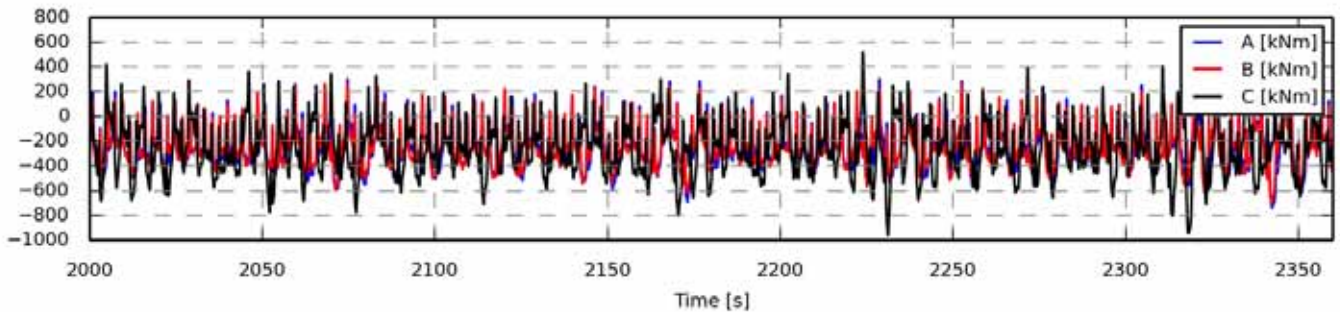


Figure 1554 - Zoom of time series

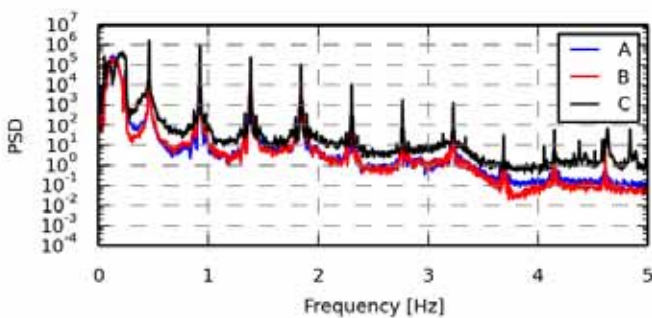


Figure 1555 - Power spectrum density

Statistics	A	B	C
Min	-7.7148e+02	-7.4780e+02	-9.9167e+02
Max	476.5345	398.8370	656.8267
Mean	-2.4944e+02	-2.5375e+02	-2.6361e+02
Std	174.1789	162.9305	221.7825
Skewness	0.3826	0.4959	0.2544
Kurtosis	0.1735	0.2460	0.1879

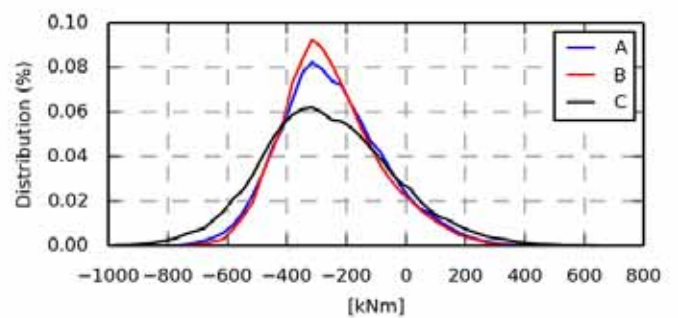


Figure 1556 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	395.6038	380.5039	501.5254
Eq (m=4)	461.3616	438.4653	589.9779
Eq (m=6)	563.9884	528.6999	725.5473
Eq (m=8)	640.5166	596.1302	827.0024
Eq (m=10)	700.5222	649.1924	907.1279
Eq (m=12)	749.3177	692.6968	972.3857

Section 17.13 oc4_p2_load_case_3-7: My coo: towertop [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-7.sel (01-03-2014 07:24)	38	MomentMy Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
B	WAMsim/oc4_p2_load_case_3-7.sel (01-04-2014 12:48)	38	MomentMy Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
C	hawc2/oc4_p2_load_case_3-7.sel (31-03-2014 15:36)	38	MomentMy Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment

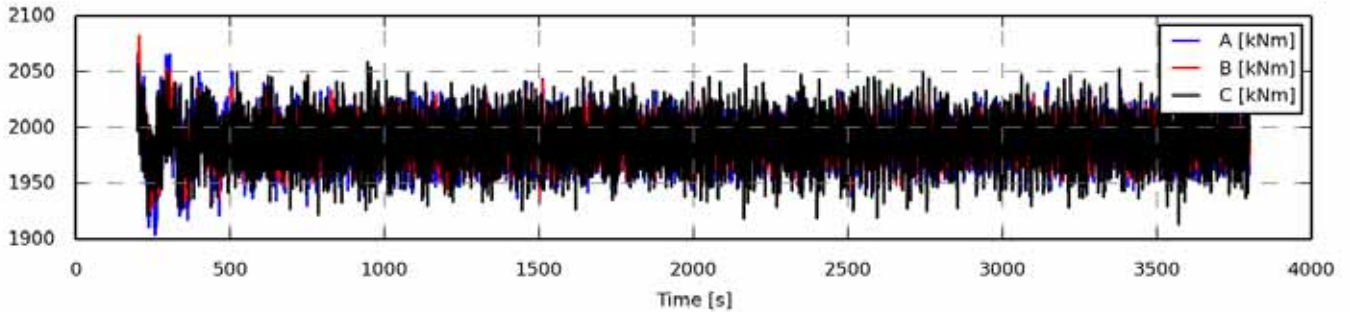


Figure 1557 - Full length time series

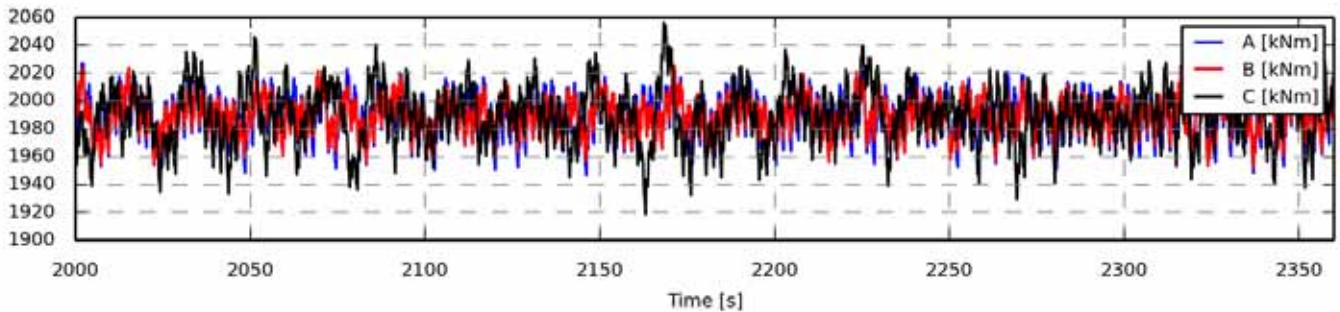


Figure 1558 - Zoom of time series

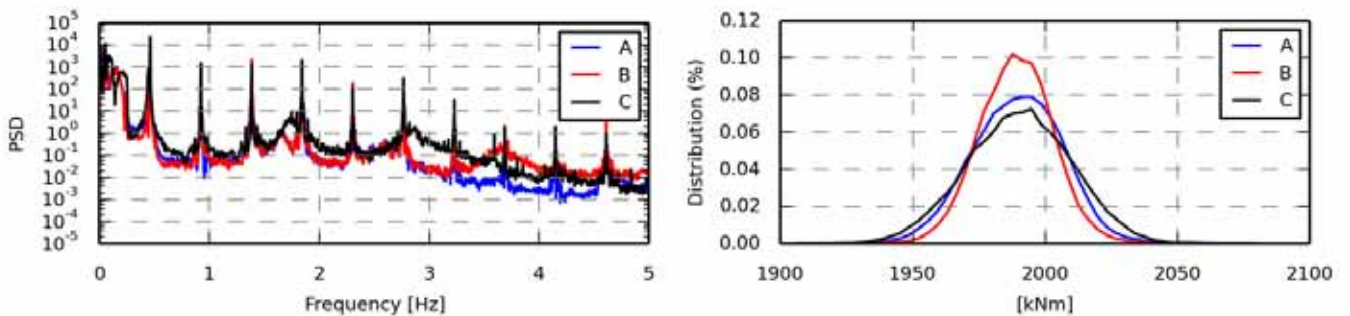


Figure 1559 - Power spectrum density

Statistics	A	B	C
Min	1.9041e+03	1.9259e+03	1.9138e+03
Max	2.0664e+03	2.0820e+03	2.0586e+03
Mean	1.9894e+03	1.9891e+03	1.9900e+03
Std	17.7074	14.3473	19.7896
Skewness	-0.0650	0.2253	-0.0673
Kurtosis	0.6881	1.3774	-0.1130

Figure 1560 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	35.6360	29.8974	40.0453
Eq (m=4)	41.3103	34.5920	47.7181
Eq (m=6)	52.6043	44.9651	60.3193
Eq (m=8)	64.0308	55.9863	69.8838
Eq (m=10)	74.7030	66.5266	77.3660
Eq (m=12)	83.9311	75.7283	83.4164

Section 17.14 oc4_p2_load_case_3-7: Mz coo: towertop [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-7.sel (01-03-2014 07:24)	39	MomentMz Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
B	WAMsim/oc4_p2_load_case_3-7.sel (01-04-2014 12:48)	39	MomentMz Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
C	hawc2/oc4_p2_load_case_3-7.sel (31-03-2014 15:36)	39	MomentMz Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment

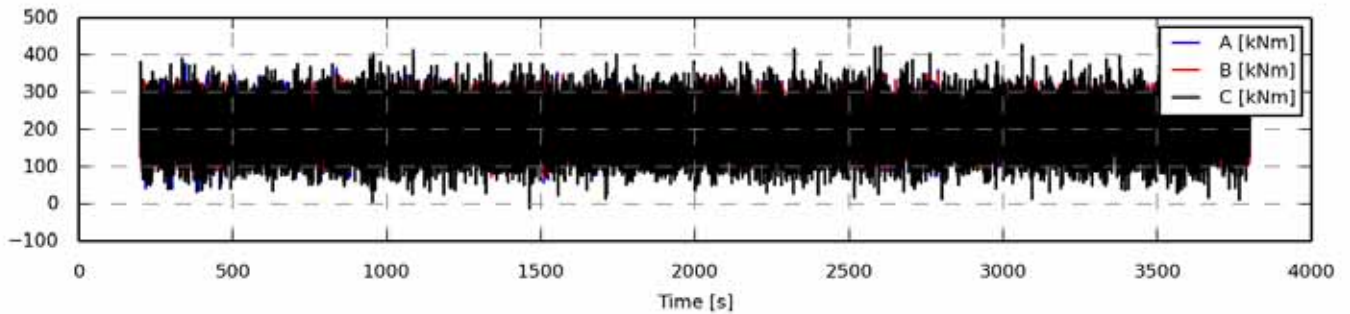


Figure 1561 - Full length time series

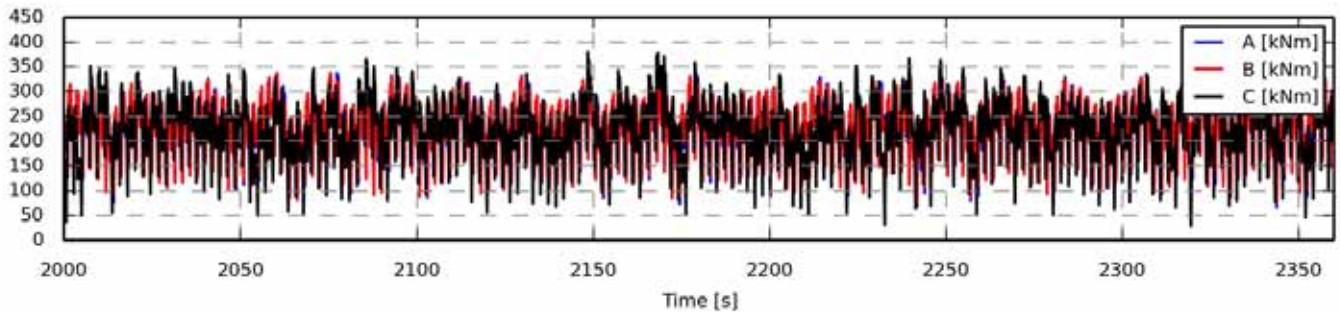


Figure 1562 - Zoom of time series

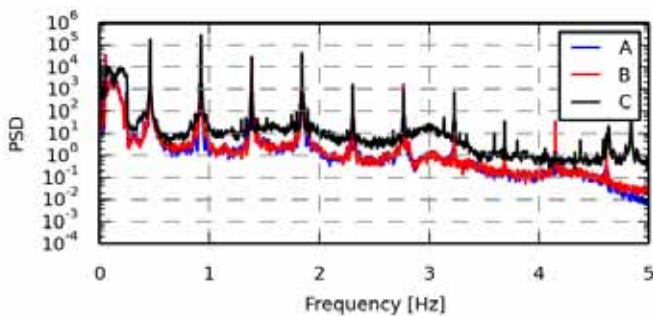


Figure 1563 - Power spectrum density

Statistics	A	B	C
Min	35.8613	60.6209	-10.9120
Max	376.2496	353.9904	427.9232
Mean	230.0227	230.8682	228.5701
Std	49.3175	48.2408	60.5268
Skewness	-0.4520	-0.5159	-0.3487
Kurtosis	-0.0450	-0.0639	-0.0226

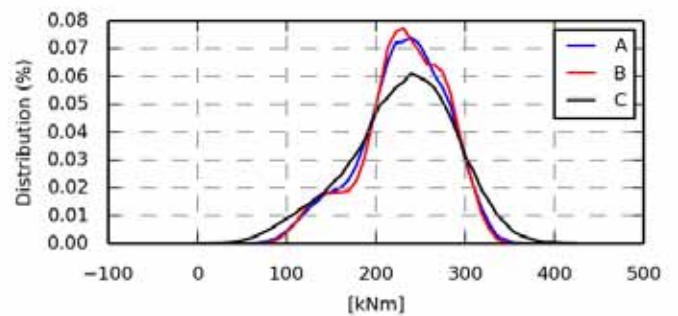


Figure 1564 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	130.1727	133.2494	158.5661
Eq (m=4)	141.8365	144.0877	175.5747
Eq (m=6)	159.5137	159.2655	202.5551
Eq (m=8)	174.0030	170.7457	224.2112
Eq (m=10)	186.7025	180.3531	242.4178
Eq (m=12)	197.9569	188.5609	258.0169

Section 17.15 oc4_p2_load_case_3-7: Mx coo: tower [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-7.sel (01-03-2014 07:24)	43	MomentMx Mbdy:tower nodenr: 1 coo: tower tower base bending moment
B	WAMsim/oc4_p2_load_case_3-7.sel (01-04-2014 12:48)	43	MomentMx Mbdy:tower nodenr: 1 coo: tower tower base bending moment
C	hawc2/oc4_p2_load_case_3-7.sel (31-03-2014 15:36)	43	MomentMx Mbdy:tower nodenr: 1 coo: tower tower base bending moment

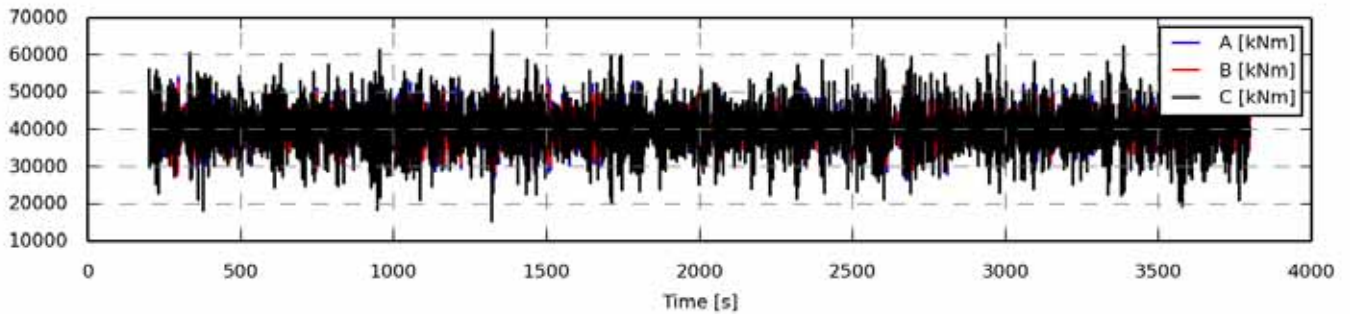


Figure 1565 - Full length time series

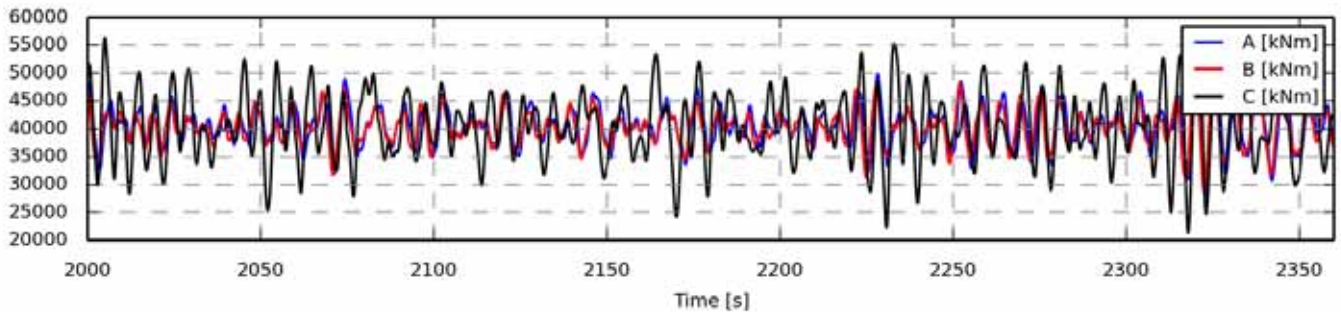


Figure 1566 - Zoom of time series

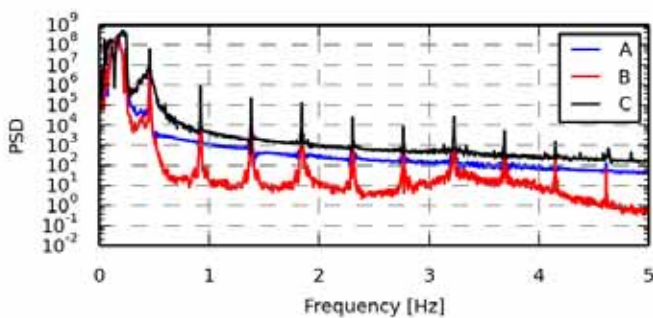


Figure 1567 - Power spectrum density

Statistics	A	B	C
Min	2.6511e+04	2.7570e+04	1.5354e+04
Max	5.4094e+04	5.3003e+04	6.6466e+04
Mean	4.0461e+04	4.0203e+04	4.0463e+04
Std	3.9275e+03	3.5262e+03	6.2643e+03
Skewness	0.0059	0.0132	-0.0027
Kurtosis	0.0744	0.1188	0.1348

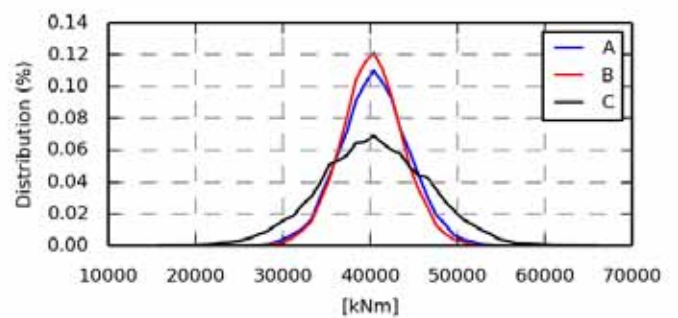


Figure 1568 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	6.8195e+03	6.1531e+03	1.1313e+04
Eq (m=4)	8.5445e+03	7.7135e+03	1.4070e+04
Eq (m=6)	1.1155e+04	1.0090e+04	1.8377e+04
Eq (m=8)	1.3086e+04	1.1869e+04	2.1753e+04
Eq (m=10)	1.4586e+04	1.3266e+04	2.4538e+04
Eq (m=12)	1.5790e+04	1.4394e+04	2.6891e+04

Section 17.16 oc4_p2_load_case_3-7: My coo: tower [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-7.sel (01-03-2014 07:24)	44	MomentMy Mbdy:tower nodenr: 1 coo: tower tower base bending moment
B	WAMsim/oc4_p2_load_case_3-7.sel (01-04-2014 12:48)	44	MomentMy Mbdy:tower nodenr: 1 coo: tower tower base bending moment
C	hawc2/oc4_p2_load_case_3-7.sel (31-03-2014 15:36)	44	MomentMy Mbdy:tower nodenr: 1 coo: tower tower base bending moment

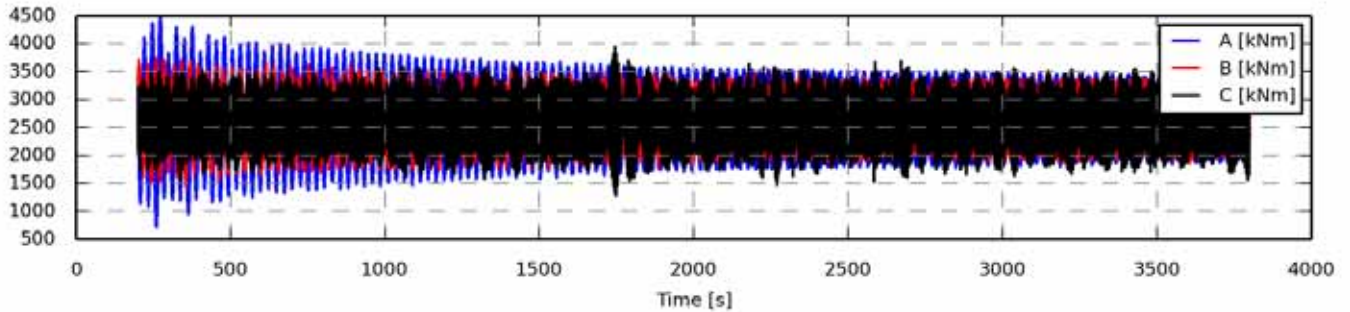


Figure 1569 - Full length time series

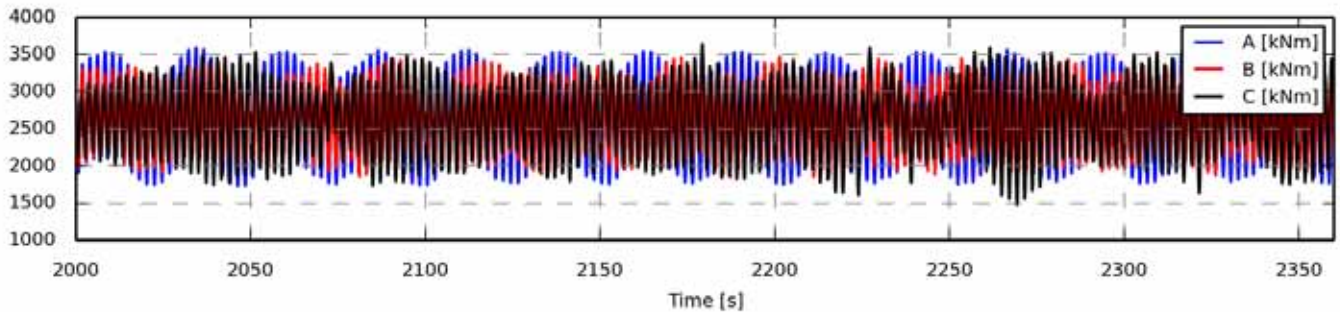


Figure 1570 - Zoom of time series

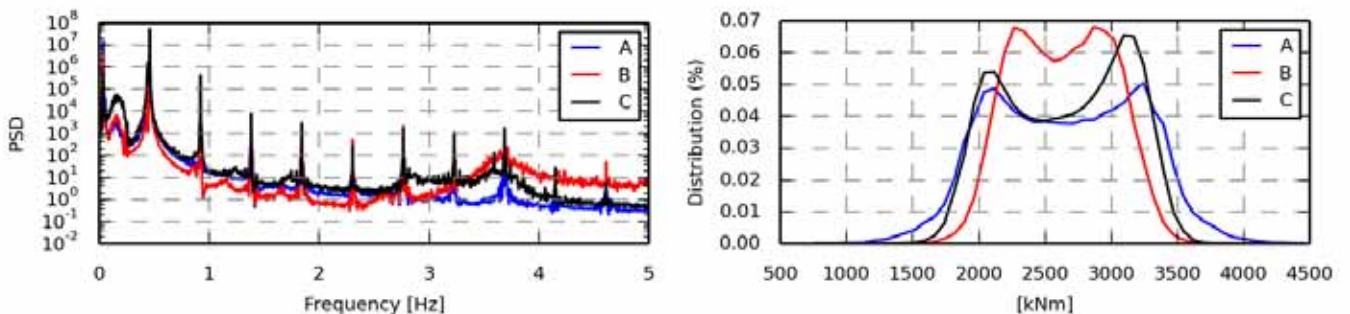


Figure 1571 - Power spectrum density

Statistics	A	B	C
Min	721.4151	1.4403e+03	1.2867e+03
Max	4.4878e+03	3.7588e+03	3.9356e+03
Mean	2.6589e+03	2.6346e+03	2.6510e+03
Std	559.9825	368.1451	474.4968
Skewness	-0.0171	0.0029	-0.1232
Kurtosis	-0.7978	-0.8847	-1.1958

Figure 1572 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	1.1173e+03	1.0659e+03	1.0488e+03
Eq (m=4)	1.2256e+03	1.0647e+03	1.1403e+03
Eq (m=6)	1.4196e+03	1.1415e+03	1.2633e+03
Eq (m=8)	1.6274e+03	1.2183e+03	1.3562e+03
Eq (m=10)	1.8301e+03	1.2926e+03	1.4396e+03
Eq (m=12)	2.0091e+03	1.3658e+03	1.5197e+03

Section 17.17 oc4_p2_load_case_3-7: Mz coo: tower [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-7.sel (01-03-2014 07:24)	45	MomentMz Mbdy:tower nodenr: 1 coo: tower tower base bending moment
B	WAMsim/oc4_p2_load_case_3-7.sel (01-04-2014 12:48)	45	MomentMz Mbdy:tower nodenr: 1 coo: tower tower base bending moment
C	hawc2/oc4_p2_load_case_3-7.sel (31-03-2014 15:36)	45	MomentMz Mbdy:tower nodenr: 1 coo: tower tower base bending moment

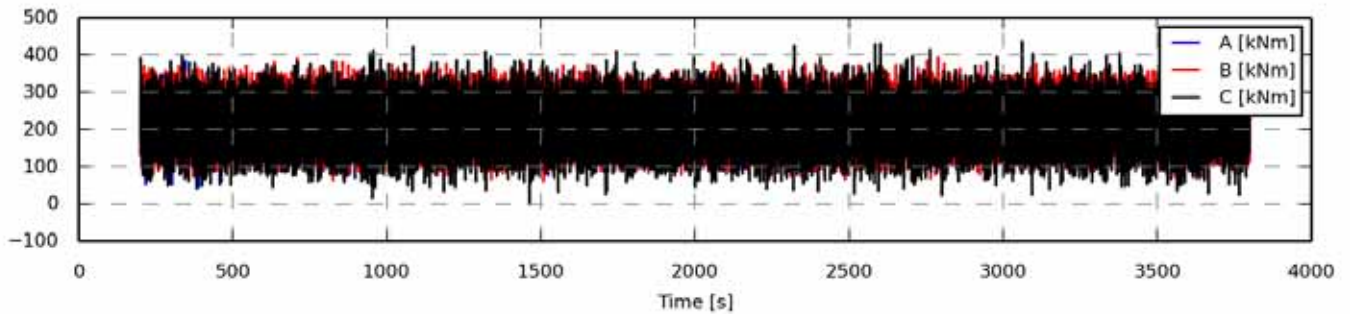


Figure 1573 - Full length time series

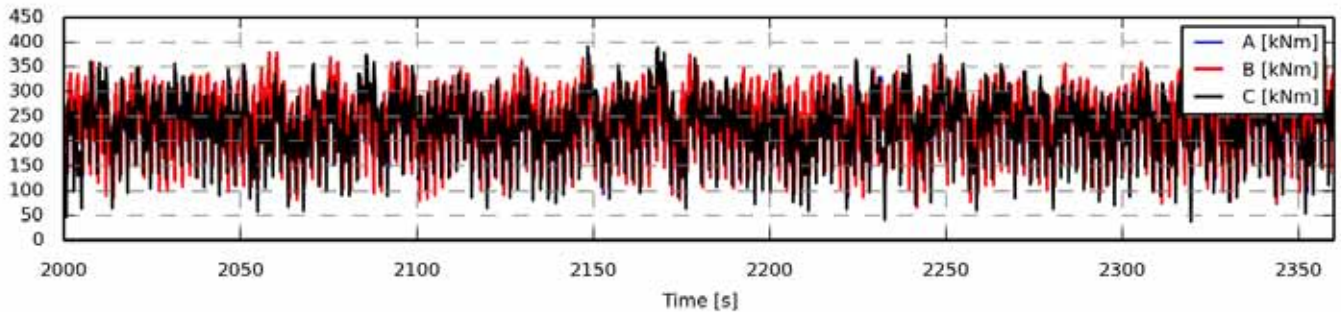


Figure 1574 - Zoom of time series

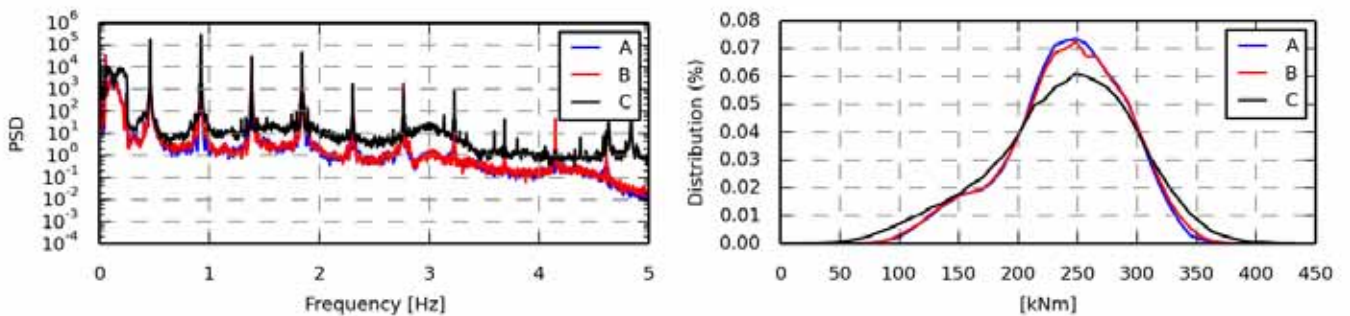


Figure 1575 - Power spectrum density

Statistics	A	B	C
Min	45.3921	60.6282	-1.4331
Max	384.7808	393.7696	436.7680
Mean	239.9658	240.7511	238.5166
Std	49.5718	51.0007	60.5298
Skewness	-0.4678	-0.4284	-0.3687
Kurtosis	-0.0261	-0.0793	-0.0144

Figure 1576 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	131.5405	171.9708	160.0617
Eq (m=4)	143.1908	176.9171	176.8279
Eq (m=6)	160.7807	191.5265	203.3526
Eq (m=8)	175.1808	203.4703	224.6059
Eq (m=10)	187.8134	213.3628	242.4612
Eq (m=12)	198.9955	221.8553	257.7542

Section 17.18 oc4_p2_load_case_3-7: ESYS line1_1 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-7.sel (01-03-2014 07:24)	55	ESYS line1_1 SENSOR 4
B	WAMsim/oc4_p2_load_case_3-7.sel (01-04-2014 12:48)	55	ESYS line1_1 SENSOR 4
C	hawc2/oc4_p2_load_case_3-7.sel (31-03-2014 15:36)	55	ESYS line1_1 SENSOR 4

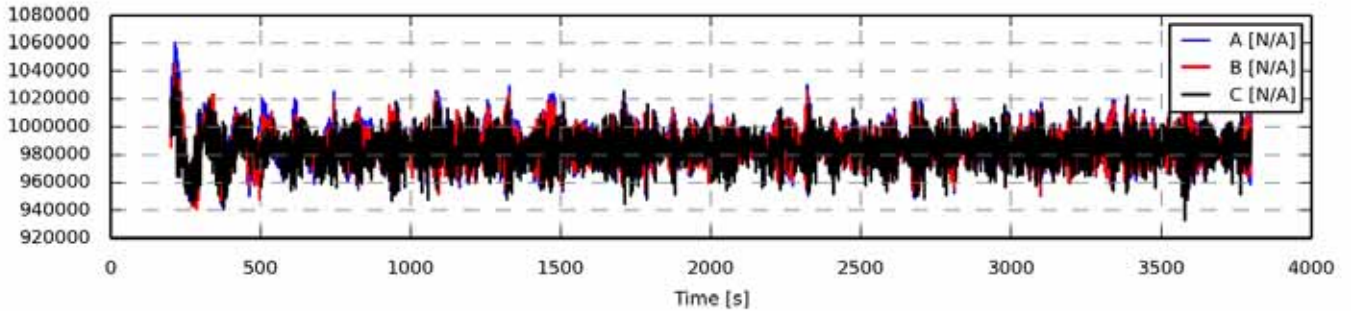


Figure 1577 - Full length time series

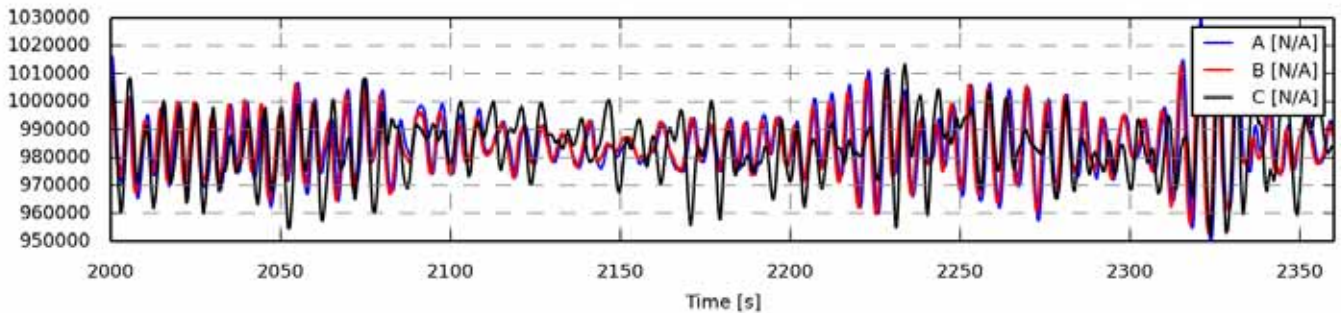


Figure 1578 - Zoom of time series

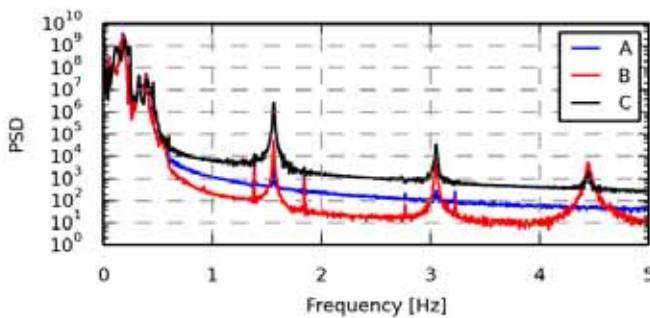


Figure 1579 - Power spectrum density

Statistics	A	B	C
Min	9.4245e+05	9.4122e+05	9.3293e+05
Max	1.0604e+06	1.0454e+06	1.0400e+06
Mean	9.8489e+05	9.8456e+05	9.8381e+05
Std	1.2774e+04	1.1565e+04	1.1607e+04
Skewness	0.4211	0.2404	-0.0523
Kurtosis	1.4513	0.9570	0.4280

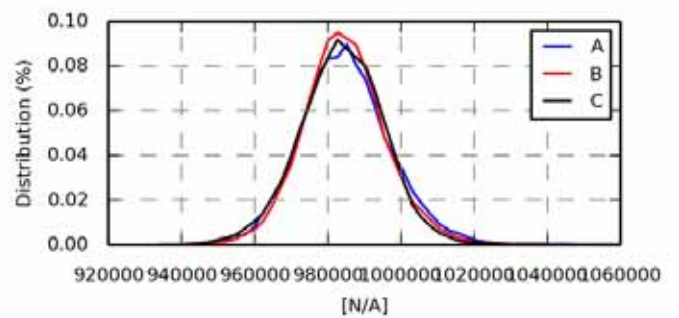


Figure 1580 - Value distribution

Fatigue eq.	1Hz	A	B	C
Eq (m=3)		2.0067e+04	1.8500e+04	1.9462e+04
Eq (m=4)		2.5353e+04	2.3349e+04	2.4483e+04
Eq (m=6)		3.4220e+04	3.1386e+04	3.2754e+04
Eq (m=8)		4.2274e+04	3.8431e+04	3.9910e+04
Eq (m=10)		4.9916e+04	4.4899e+04	4.6413e+04
Eq (m=12)		5.6818e+04	5.0701e+04	5.2251e+04

Section 17.19 oc4_p2_load_case_3-7: ESYS line1_3 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-7.sel (01-03-2014 07:24)	259	ESYS line1_3 SENSOR 104
B	WAMsim/oc4_p2_load_case_3-7.sel (01-04-2014 12:48)	259	ESYS line1_3 SENSOR 104
C	hawc2/oc4_p2_load_case_3-7.sel (31-03-2014 15:36)	259	ESYS line1_3 SENSOR 104

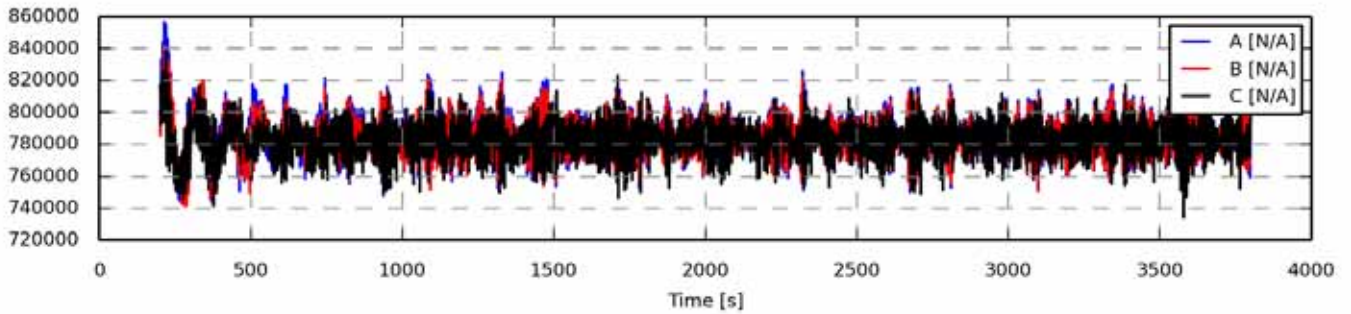


Figure 1581 - Full length time series

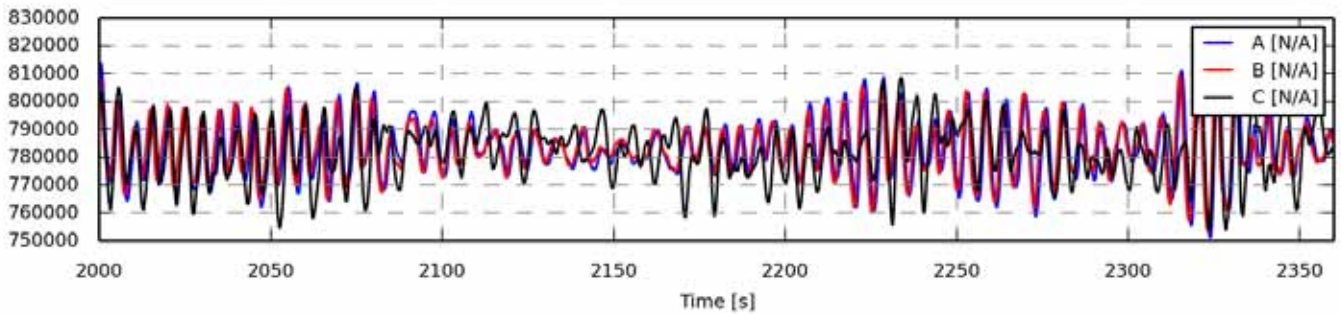


Figure 1582 - Zoom of time series

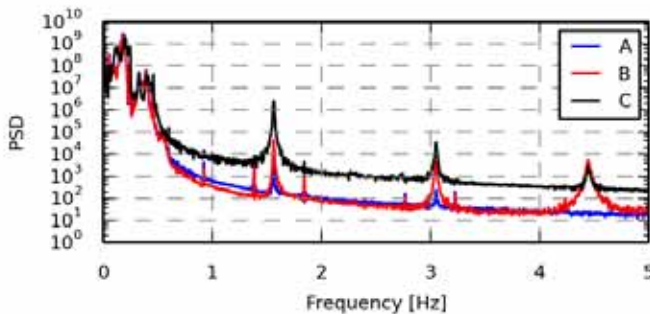


Figure 1583 - Power spectrum density

Statistics	A	B	C
Min	7.4273e+05	7.4149e+05	7.3427e+05
Max	8.5683e+05	8.4221e+05	8.3853e+05
Mean	7.8348e+05	7.8316e+05	7.8241e+05
Std	1.2210e+04	1.1040e+04	1.0763e+04
Skewness	0.4916	0.2957	-0.0297
Kurtosis	1.7651	1.1757	0.5592

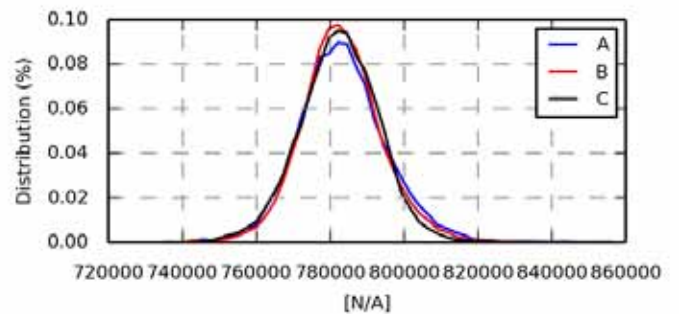


Figure 1584 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	1.8957e+04	1.7417e+04	1.8038e+04
Eq (m=4)	2.3968e+04	2.1999e+04	2.2756e+04
Eq (m=6)	3.2496e+04	2.9698e+04	3.0754e+04
Eq (m=8)	4.0438e+04	3.6622e+04	3.7963e+04
Eq (m=10)	4.8027e+04	4.3059e+04	4.4630e+04
Eq (m=12)	5.4832e+04	4.8816e+04	5.0573e+04

Section 17.20 oc4_p2_load_case_3-7: ESYS line2_1 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-7.sel (01-03-2014 07:24)	263	ESYS line2_1 SENSOR 4
B	WAMsim/oc4_p2_load_case_3-7.sel (01-04-2014 12:48)	263	ESYS line2_1 SENSOR 4
C	hawc2/oc4_p2_load_case_3-7.sel (31-03-2014 15:36)	263	ESYS line2_1 SENSOR 4

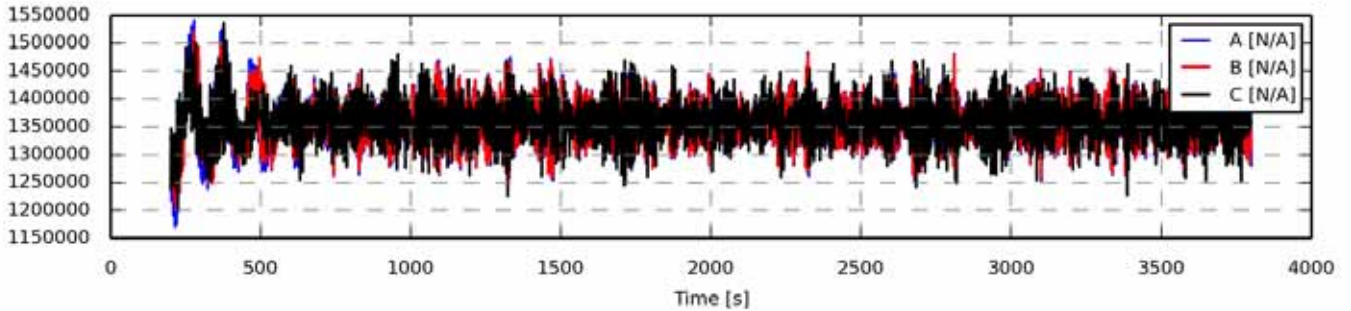


Figure 1585 - Full length time series

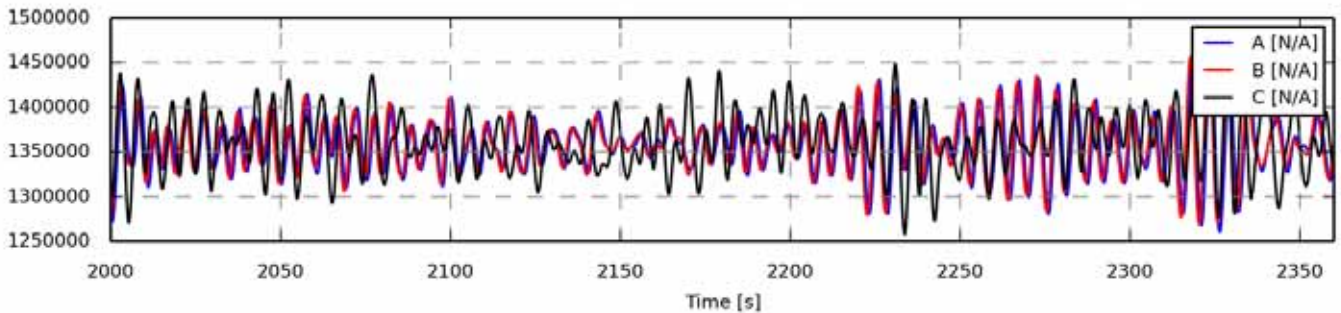


Figure 1586 - Zoom of time series

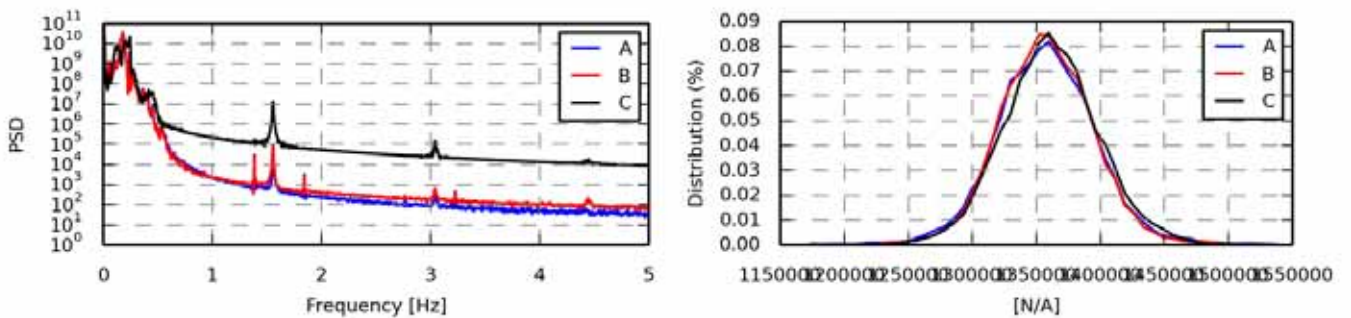


Figure 1587 - Power spectrum density

Statistics	A	B	C
Min	1.1703e+06	1.2046e+06	1.1976e+06
Max	1.5412e+06	1.5220e+06	1.5367e+06
Mean	1.3575e+06	1.3575e+06	1.3613e+06
Std	3.9586e+04	3.6801e+04	3.7510e+04
Skewness	0.0387	0.0932	0.0643
Kurtosis	1.2470	0.6914	0.3801

Figure 1588 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	5.9622e+04	5.7238e+04	6.3576e+04
Eq (m=4)	7.5574e+04	7.2125e+04	7.9438e+04
Eq (m=6)	1.0421e+05	9.7012e+04	1.0574e+05
Eq (m=8)	1.3183e+05	1.1885e+05	1.2880e+05
Eq (m=10)	1.5736e+05	1.3858e+05	1.4979e+05
Eq (m=12)	1.7947e+05	1.5599e+05	1.6837e+05

Section 17.21 oc4_p2_load_case_3-7: ESYS line2_3 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-7.sel (01-03-2014 07:24)	467	ESYS line2_3 SENSOR 104
B	WAMsim/oc4_p2_load_case_3-7.sel (01-04-2014 12:48)	467	ESYS line2_3 SENSOR 104
C	hawc2/oc4_p2_load_case_3-7.sel (31-03-2014 15:36)	467	ESYS line2_3 SENSOR 104

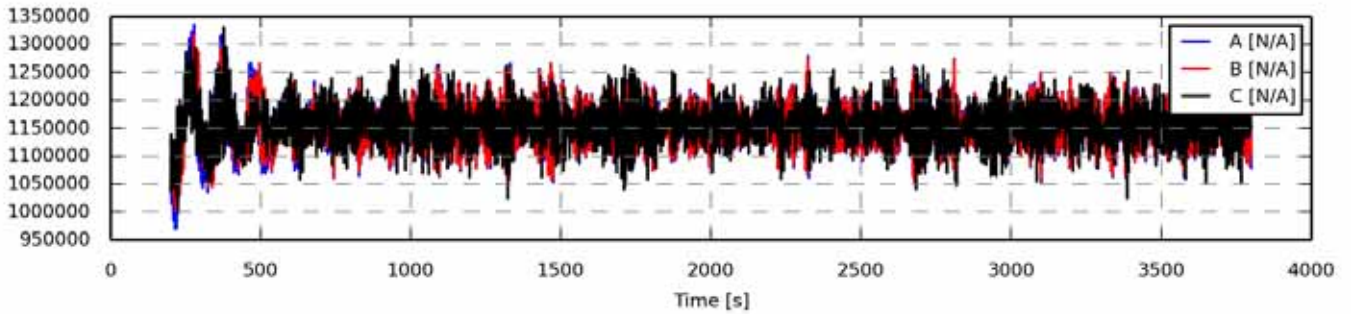


Figure 1589 - Full length time series

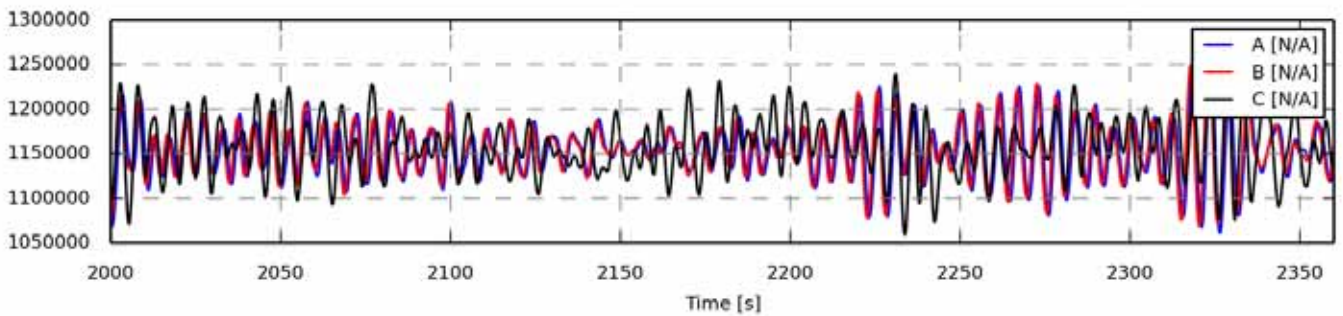


Figure 1590 - Zoom of time series

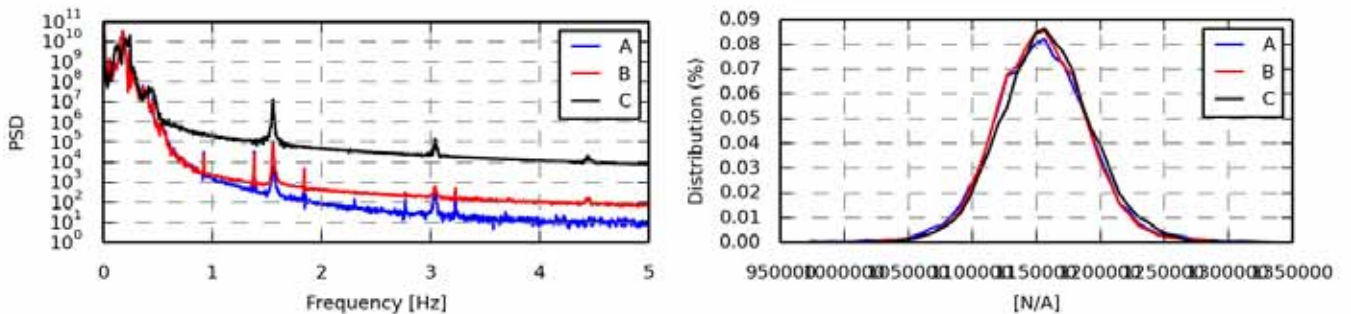


Figure 1591 - Power spectrum density

Statistics	A	B	C
Min	9.7010e+05	1.0010e+06	9.9729e+05
Max	1.3354e+06	1.3165e+06	1.3304e+06
Mean	1.1538e+06	1.1539e+06	1.1576e+06
Std	3.8748e+04	3.5914e+04	3.6147e+04
Skewness	0.0368	0.0935	0.0668
Kurtosis	1.3987	0.7989	0.4297

Figure 1592 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	5.7989e+04	5.5634e+04	6.1260e+04
Eq (m=4)	7.3632e+04	7.0211e+04	7.6662e+04
Eq (m=6)	1.0207e+05	9.4928e+04	1.0251e+05
Eq (m=8)	1.2967e+05	1.1699e+05	1.2552e+05
Eq (m=10)	1.5503e+05	1.3700e+05	1.4654e+05
Eq (m=12)	1.7686e+05	1.5460e+05	1.6509e+05

Section 17.22 oc4_p2_load_case_3-7: ESYS line3_1 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-7.sel (01-03-2014 07:24)	471	ESYS line3_1 SENSOR 4
B	WAMsim/oc4_p2_load_case_3-7.sel (01-04-2014 12:48)	471	ESYS line3_1 SENSOR 4
C	hawc2/oc4_p2_load_case_3-7.sel (31-03-2014 15:36)	471	ESYS line3_1 SENSOR 4

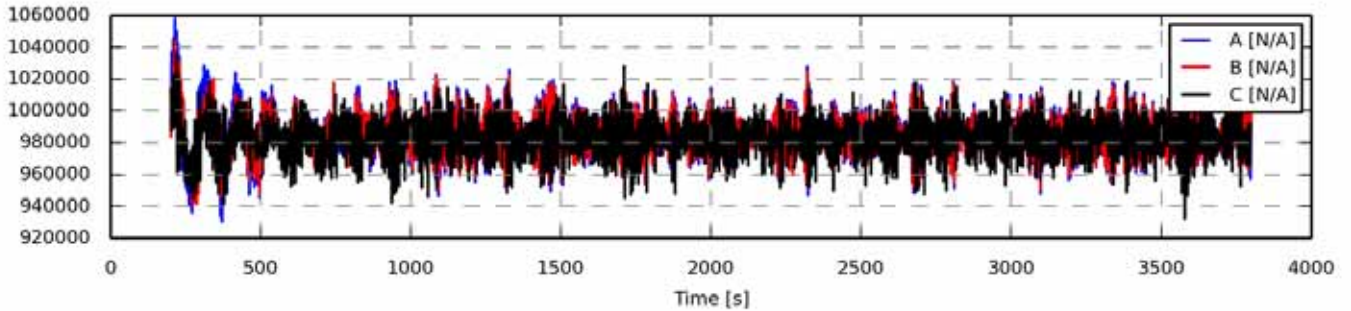


Figure 1593 - Full length time series

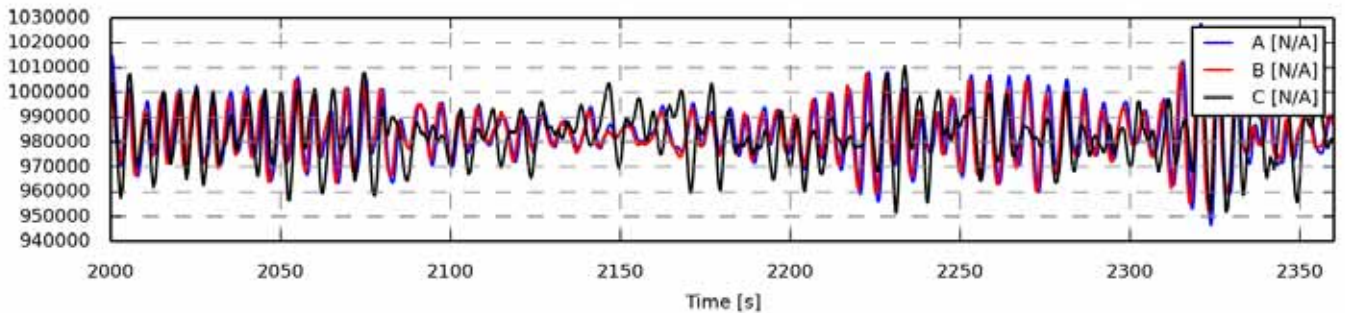


Figure 1594 - Zoom of time series

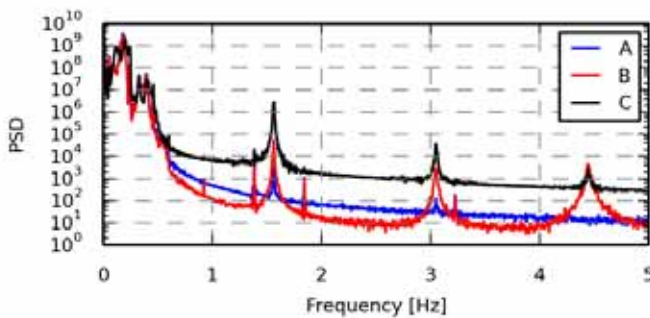


Figure 1595 - Power spectrum density

Statistics	A	B	C
Min	9.3044e+05	9.4128e+05	9.3231e+05
Max	1.0579e+06	1.0444e+06	1.0362e+06
Mean	9.8398e+05	9.8368e+05	9.8275e+05
Std	1.3262e+04	1.1519e+04	1.1587e+04
Skewness	0.2708	0.2239	-0.0595
Kurtosis	1.3664	0.8698	0.3305

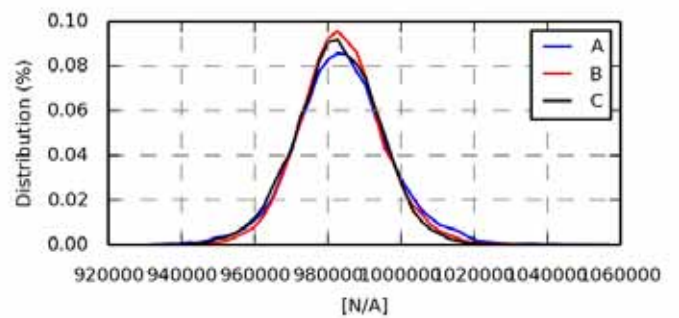


Figure 1596 - Value distribution

Fatigue eq.	1Hz	A	B	C
Eq (m=3)		2.0170e+04	1.8438e+04	1.9505e+04
Eq (m=4)		2.5656e+04	2.3253e+04	2.4536e+04
Eq (m=6)		3.5430e+04	3.1206e+04	3.2748e+04
Eq (m=8)		4.4848e+04	3.8144e+04	3.9697e+04
Eq (m=10)		5.3660e+04	4.4504e+04	4.5876e+04
Eq (m=12)		6.1351e+04	5.0218e+04	5.1358e+04

Section 17.23 oc4_p2_load_case_3-7: ESYS line3_3 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-7.sel (01-03-2014 07:24)	675	ESYS line3_3 SENSOR 104
B	WAMsim/oc4_p2_load_case_3-7.sel (01-04-2014 12:48)	675	ESYS line3_3 SENSOR 104
C	hawc2/oc4_p2_load_case_3-7.sel (31-03-2014 15:36)	675	ESYS line3_3 SENSOR 104

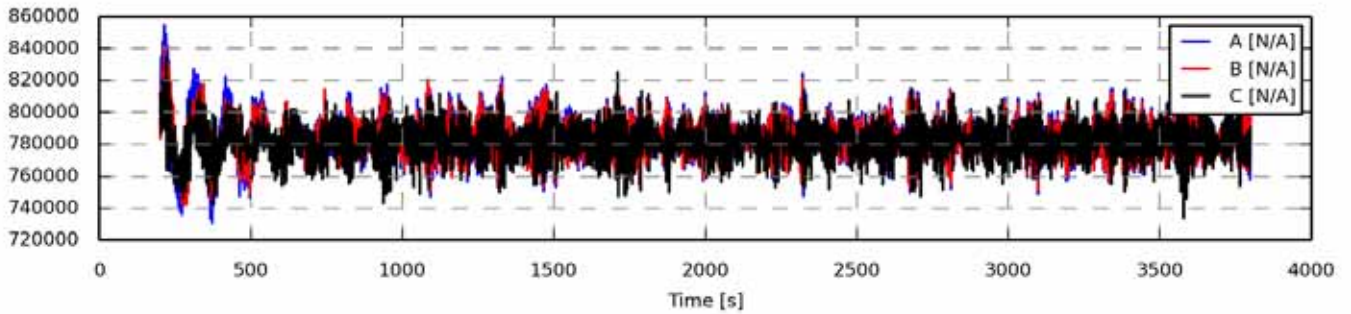


Figure 1597 - Full length time series

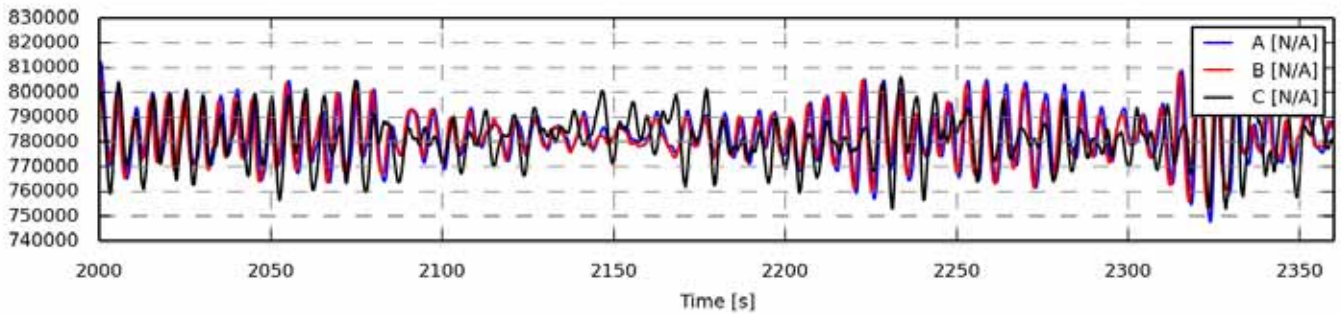


Figure 1598 - Zoom of time series

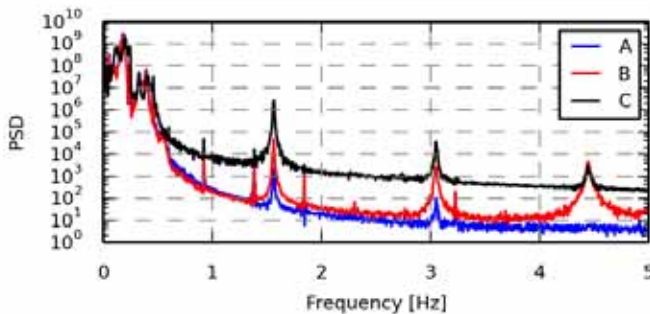


Figure 1599 - Power spectrum density

Statistics	A	B	C
Min	7.3096e+05	7.4212e+05	7.3379e+05
Max	8.5458e+05	8.4158e+05	8.3492e+05
Mean	7.8273e+05	7.8242e+05	7.8150e+05
Std	1.2719e+04	1.0991e+04	1.0738e+04
Skewness	0.3228	0.2784	-0.0419
Kurtosis	1.6614	1.0733	0.4260

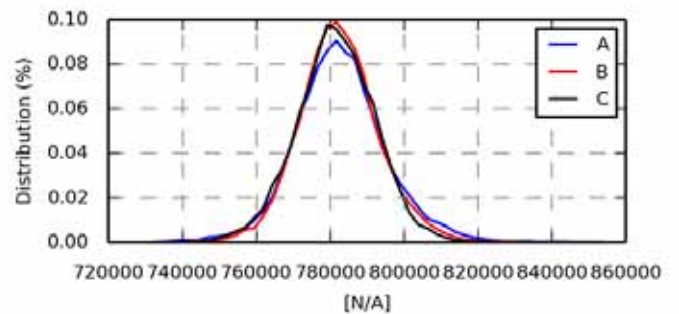


Figure 1600 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	1.9118e+04	1.7401e+04	1.8093e+04
Eq (m=4)	2.4379e+04	2.1967e+04	2.2798e+04
Eq (m=6)	3.3970e+04	2.9585e+04	3.0647e+04
Eq (m=8)	4.3348e+04	3.6358e+04	3.7544e+04
Eq (m=10)	5.2029e+04	4.2631e+04	4.3833e+04
Eq (m=12)	5.9522e+04	4.8259e+04	4.9433e+04

Article XVIII.oc4_p2_load_case_3-9a

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Section 18.01 oc4_p2_load_case_3-9a: WSP gl. coo.,Vy [m/s]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-9a.sel (01-03-2014 07:48)	3	Free wind speed Vy, gl. coo, of gl. pos 0.00, 0.00, -90.00
B	WAMsim/oc4_p2_load_case_3-9a.sel (01-04-2014 12:48)	3	Free wind speed Vy, gl. coo, of gl. pos 0.00, 0.00, -90.00
C	hawc2/oc4_p2_load_case_3-9a.sel (04-12-2013 20:49)	3	Free wind speed Vy, gl. coo, of gl. pos 0.00, 0.00, -90.00

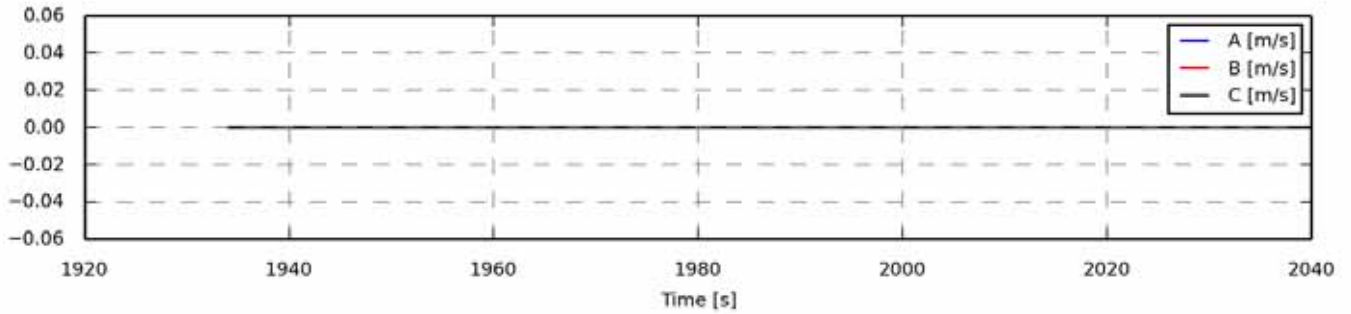


Figure 1601 - Full length time series

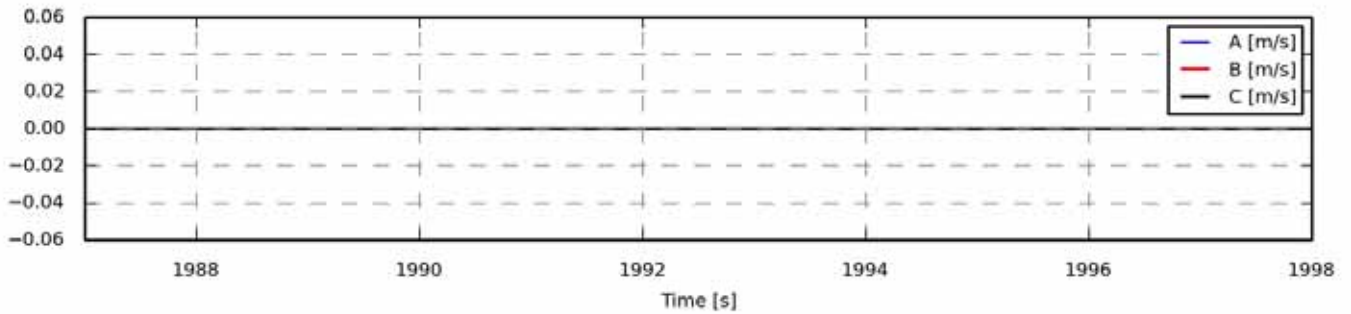


Figure 1602 - Zoom of time series

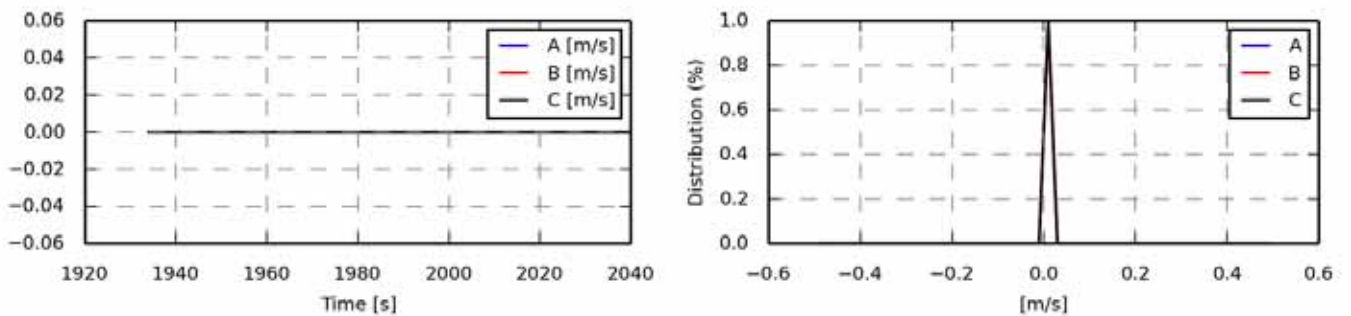


Figure 1603 - Power spectrum density

Statistics	A	B	C
Min	0.0000	0.0000	0.0000
Max	0.0000	0.0000	0.0000
Mean	0.0000	0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

Figure 1604 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 18.02 oc4_p2_load_case_3-9a: Water surf. [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-9a.sel (01-03-2014 07:48)	5	Water surface gl. coo, at gl. coo, x,y= 0.00, 0.00
B	WAMsim/oc4_p2_load_case_3-9a.sel (01-04-2014 12:48)	5	Constant value
C	hawc2/oc4_p2_load_case_3-9a.sel (04-12-2013 20:49)	5	Water surface gl. coo, at gl. coo, x,y= 0.00, 0.00

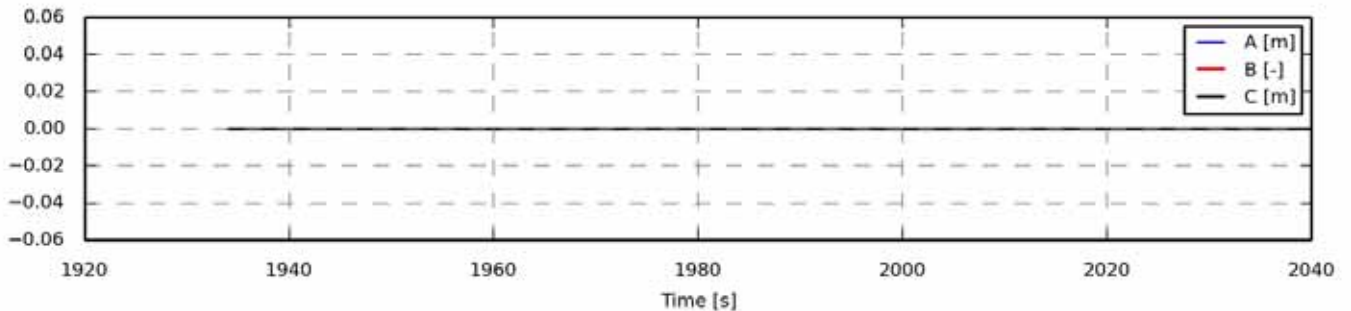


Figure 1605 - Full length time series

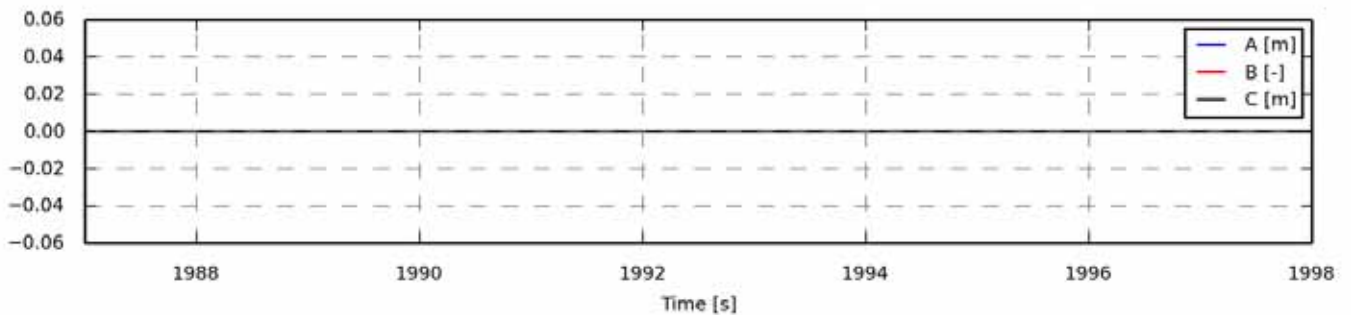


Figure 1606 - Zoom of time series

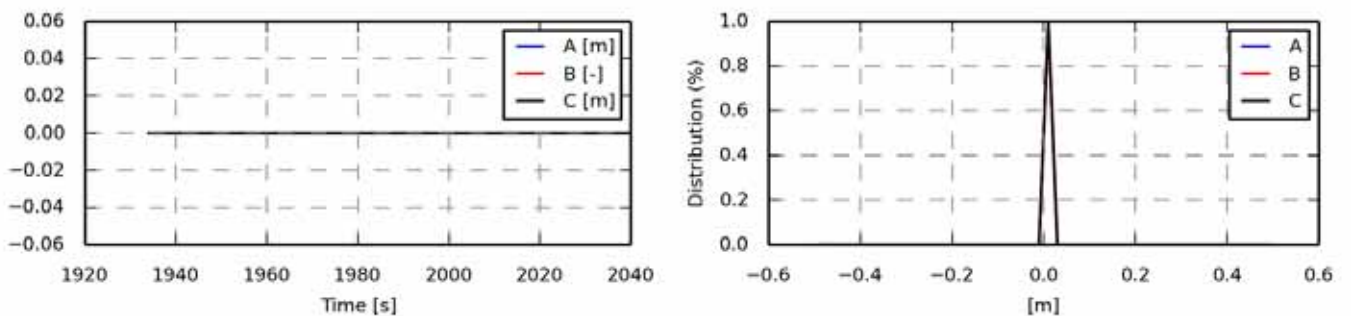


Figure 1607 - Power spectrum density

Statistics	A	B	C
Min	0.0000	0.0000	0.0000
Max	0.0000	0.0000	0.0000
Mean	0.0000	0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

Figure 1608 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 18.03 oc4_p2_load_case_3-9a: Constant [-]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-9a.sel (01-03-2014 07:48)	6	Constant value
B	WAMsim/oc4_p2_load_case_3-9a.sel (01-04-2014 12:48)	6	Constant value
C	hawc2/oc4_p2_load_case_3-9a.sel (04-12-2013 20:49)	6	Constant value

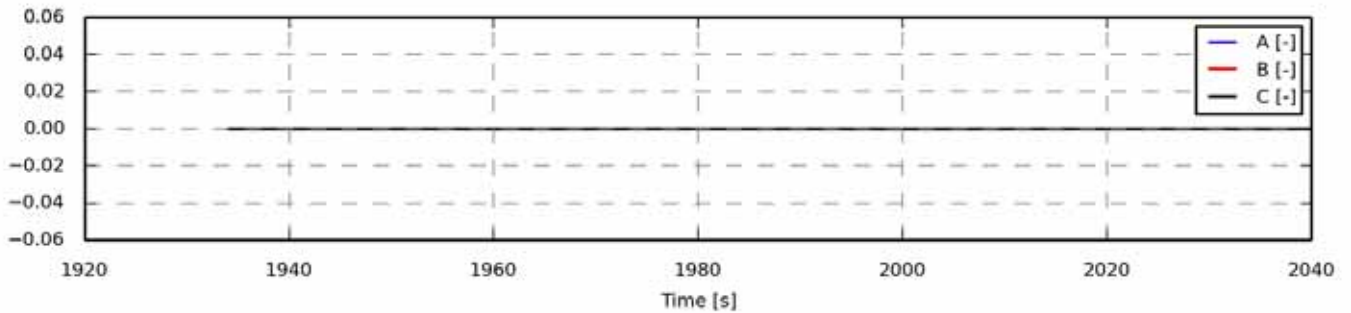


Figure 1609 - Full length time series

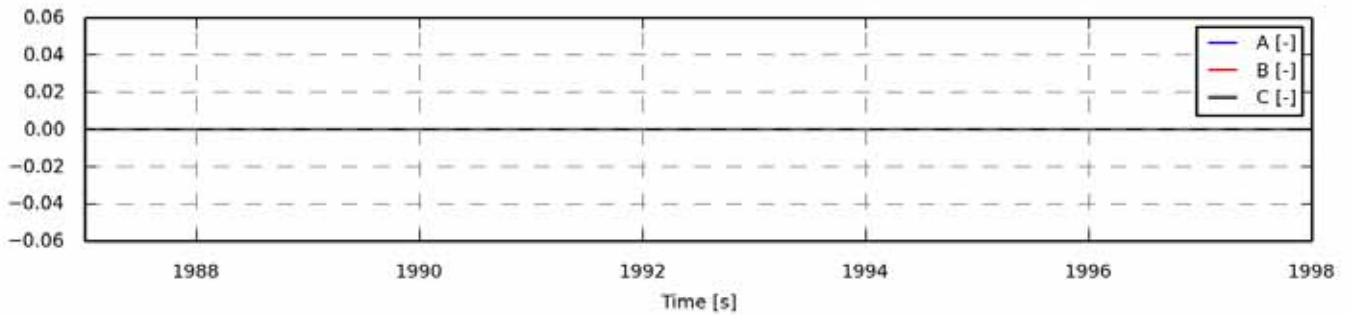


Figure 1610 - Zoom of time series

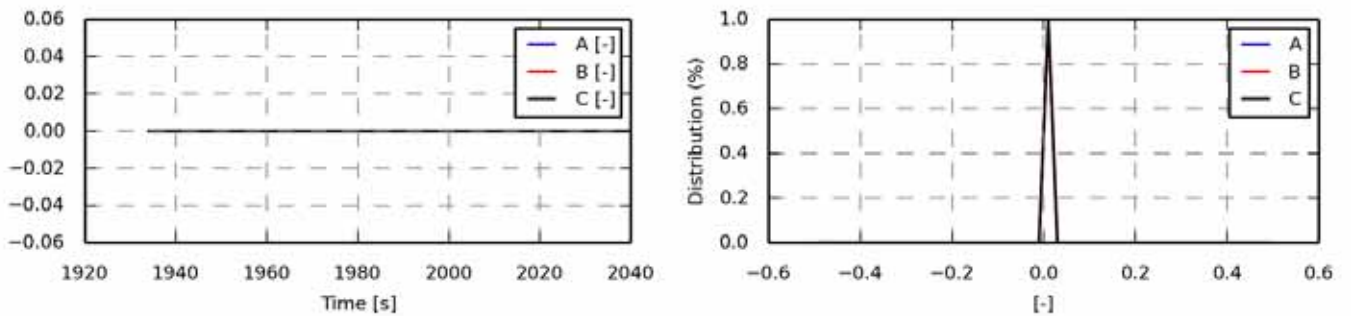


Figure 1611 - Power spectrum density

Statistics	A	B	C
Min	0.0000	0.0000	0.0000
Max	0.0000	0.0000	0.0000
Mean	0.0000	0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

Figure 1612 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 18.04 oc4_p2_load_case_3-9a: Constant [-]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-9a.sel (01-03-2014 07:48)	9	Constant value
B	WAMsim/oc4_p2_load_case_3-9a.sel (01-04-2014 12:48)	9	Constant value
C	hawc2/oc4_p2_load_case_3-9a.sel (04-12-2013 20:49)	9	Constant value

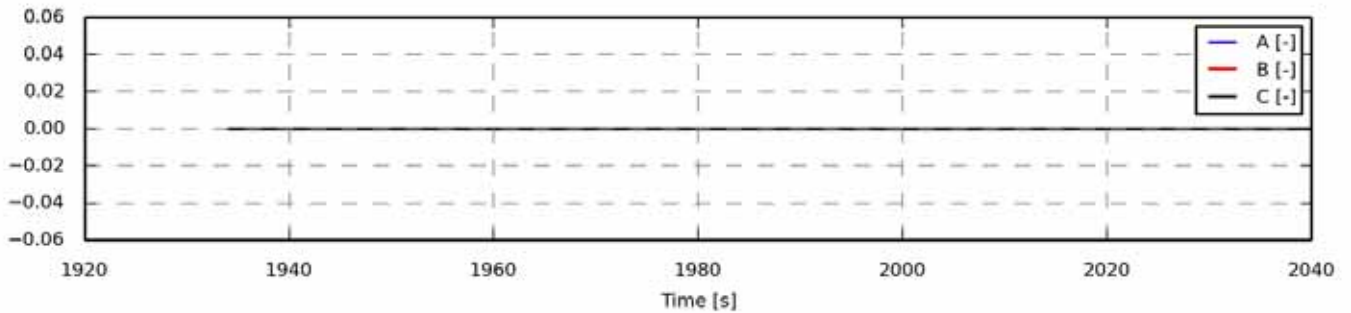


Figure 1613 - Full length time series

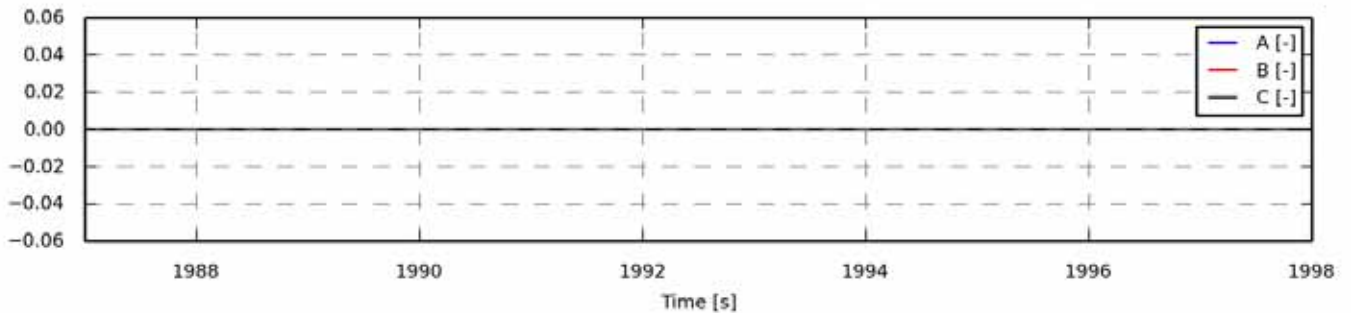


Figure 1614 - Zoom of time series

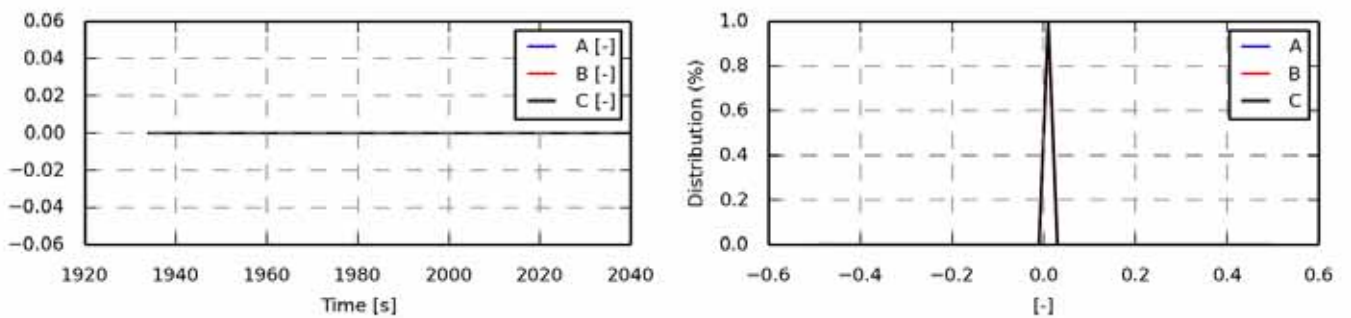


Figure 1615 - Power spectrum density

Statistics	A	B	C
Min	0.0000	0.0000	0.0000
Max	0.0000	0.0000	0.0000
Mean	0.0000	0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

Figure 1616 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 18.05 oc4_p2_load_case_3-9a: bea1 angle [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-9a.sel (01-03-2014 07:48)	14	pitch1 angle
B	WAMsim/oc4_p2_load_case_3-9a.sel (01-04-2014 12:48)	14	pitch1 angle
C	hawc2/oc4_p2_load_case_3-9a.sel (04-12-2013 20:49)	14	pitch1 angle

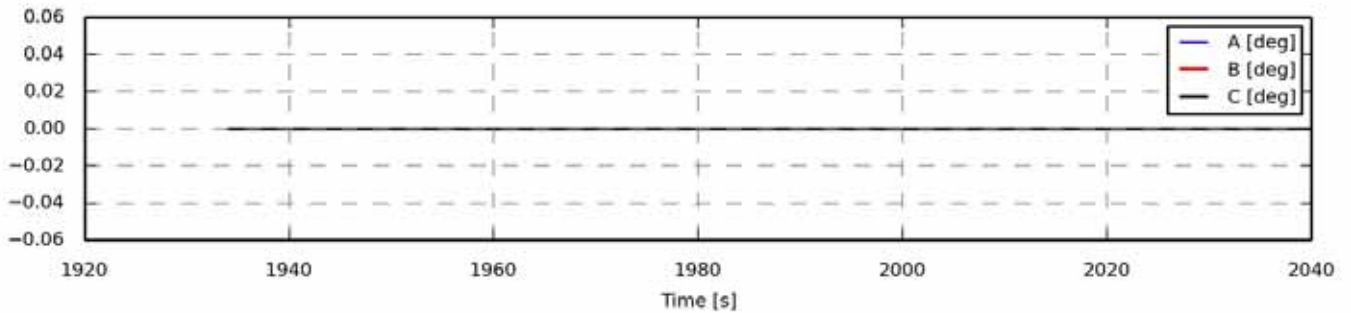


Figure 1617 - Full length time series

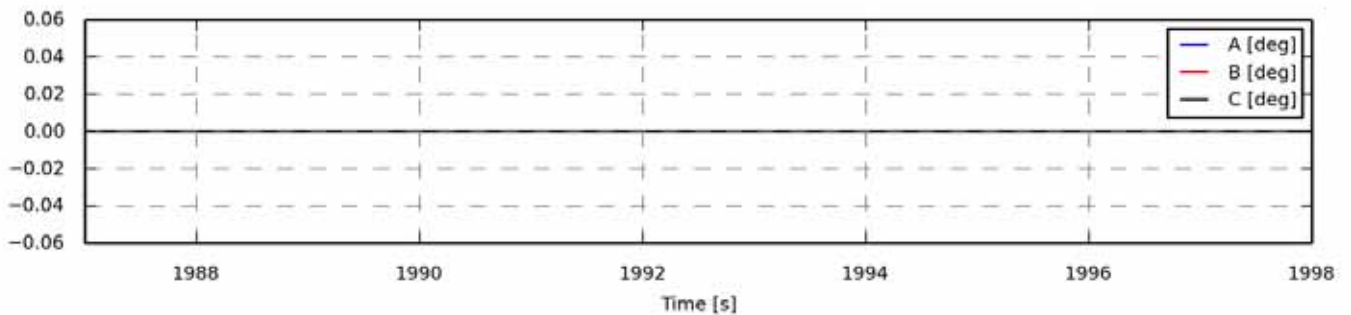


Figure 1618 - Zoom of time series

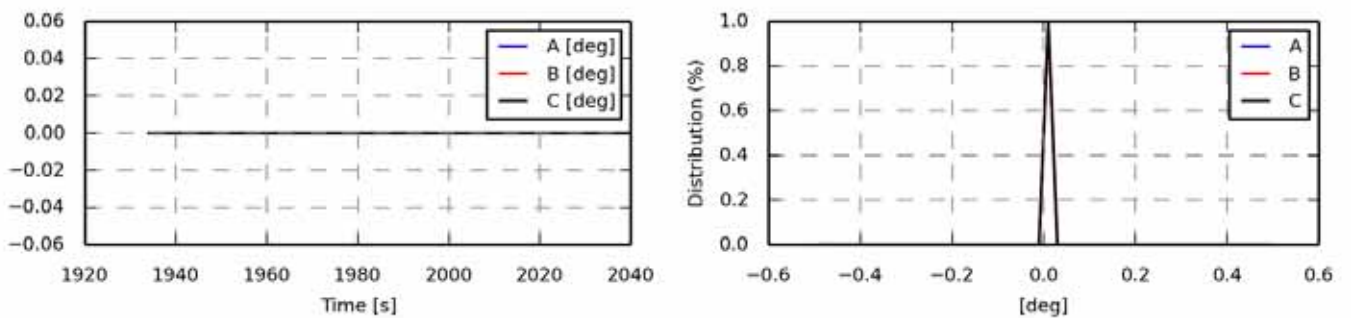


Figure 1619 - Power spectrum density

Statistics	A	B	C
Min	0.0000	0.0000	0.0000
Max	0.0000	0.0000	0.0000
Mean	0.0000	0.0000	0.0000
Std	0.0000	0.0000	0.0000
Skewness	0.0000	0.0000	0.0000
Kurtosis	-3.0000	-3.0000	-3.0000

Figure 1620 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	-	-	-
Eq (m=4)	-	-	-
Eq (m=6)	-	-	-
Eq (m=8)	-	-	-
Eq (m=10)	-	-	-
Eq (m=12)	-	-	-

Section 18.06 oc4_p2_load_case_3-9a: State pos x coo: global [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-9a.sel (01-03-2014 07:48)	19	State pos x Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
B	WAMsim/oc4_p2_load_case_3-9a.sel (01-04-2014 12:48)	19	State pos x Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
C	hawc2/oc4_p2_load_case_3-9a.sel (04-12-2013 20:49)	19	State pos x Mbdy:mc E-nr: 8 Z-rel:0.00 coo: global platform translation in surge sway and heave

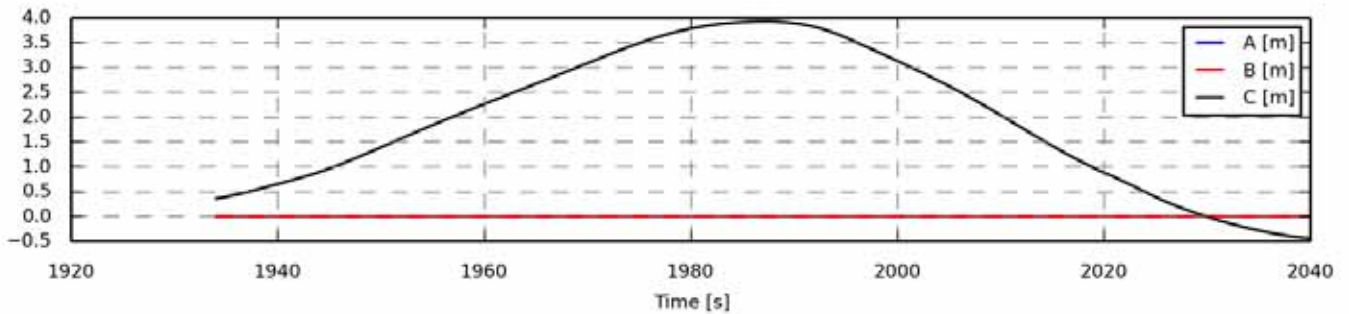


Figure 1621 - Full length time series

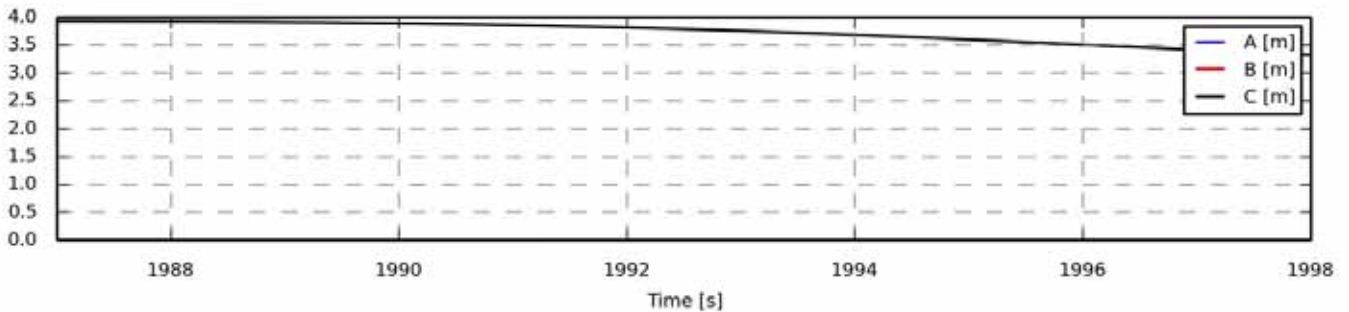


Figure 1622 - Zoom of time series

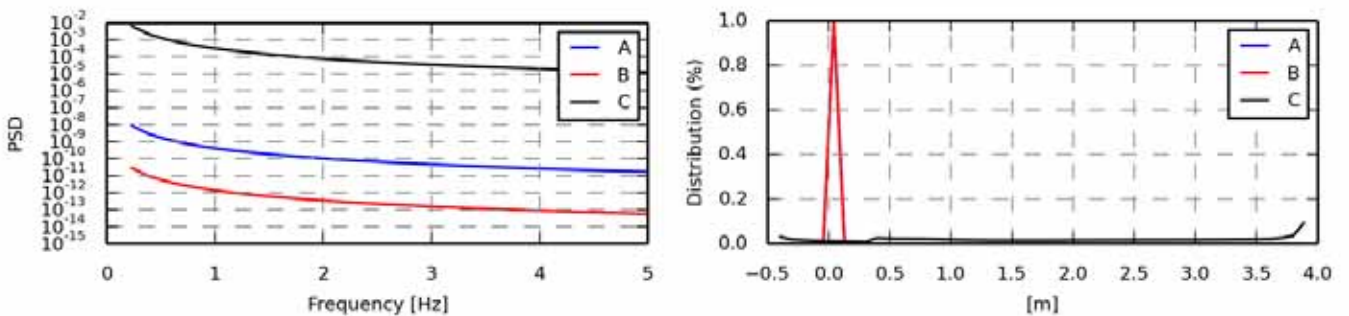


Figure 1623 - Power spectrum density

Statistics	A	B	C
Min	-0.0013	-0.0001	-0.4387
Max	0.0015	0.0001	3.9309
Mean	0.0000	0.0000	1.9745
Std	0.0007	0.0001	1.3731
Skewness	0.1808	0.0118	-0.1106
Kurtosis	-0.8430	-1.5895	-1.2927

Figure 1624 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.0006	0.0000	0.8483
Eq (m=4)	0.0008	0.0000	1.2571
Eq (m=6)	0.0012	0.0001	1.8704
Eq (m=8)	0.0015	0.0001	2.2895
Eq (m=10)	0.0016	0.0001	2.5906
Eq (m=12)	0.0018	0.0001	2.8169

Section 18.07 oc4_p2_load_case_3-9a: State pos y coo: global [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-9a.sel (01-03-2014 07:48)	20	State pos y Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
B	WAMsim/oc4_p2_load_case_3-9a.sel (01-04-2014 12:48)	20	State pos y Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
C	hawc2/oc4_p2_load_case_3-9a.sel (04-12-2013 20:49)	20	State pos y Mbdy:mc E-nr: 8 Z-rel:0.00 coo: global platform translation in surge sway and heave

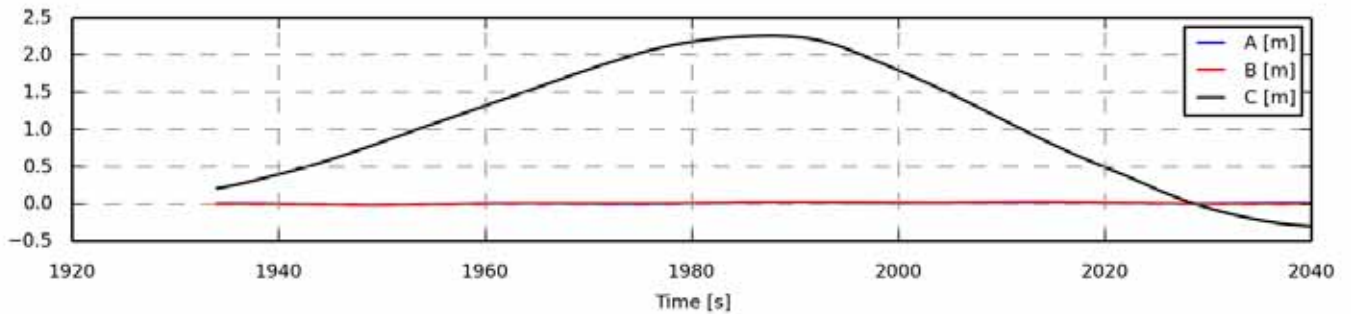


Figure 1625 - Full length time series

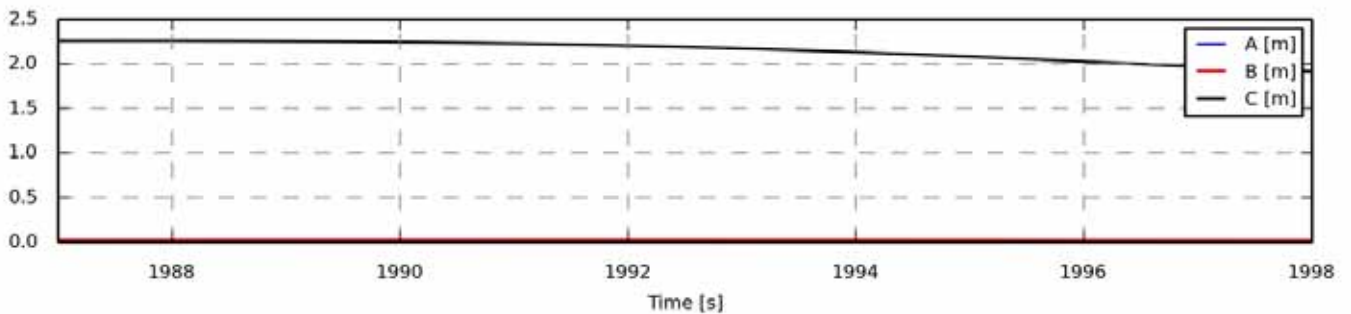


Figure 1626 - Zoom of time series

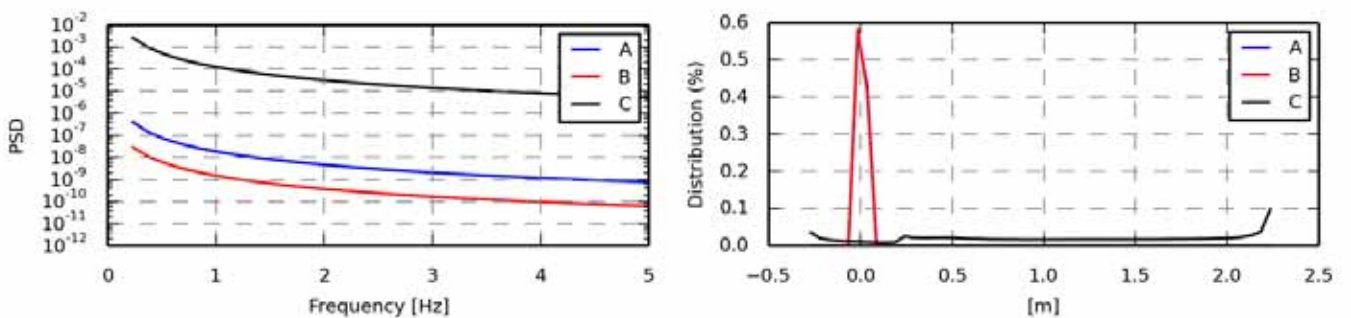


Figure 1627 - Power spectrum density

Statistics	A	B	C
Min	-0.0134	-0.0102	-0.2952
Max	0.0279	0.0256	2.2598
Mean	0.0087	0.0089	1.1346
Std	0.0108	0.0105	0.8013
Skewness	-0.1378	-0.1179	-0.1466
Kurtosis	-0.7107	-1.1651	-1.2514

Figure 1628 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.0077	0.0067	0.4918
Eq (m=4)	0.0113	0.0100	0.7296
Eq (m=6)	0.0170	0.0150	1.0877
Eq (m=8)	0.0212	0.0185	1.3336
Eq (m=10)	0.0242	0.0211	1.5107
Eq (m=12)	0.0264	0.0230	1.6441

Section 18.08 oc4_p2_load_case_3-9a: State pos z coo: global [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-9a.sel (01-03-2014 07:48)	21	State pos z Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
B	WAMsim/oc4_p2_load_case_3-9a.sel (01-04-2014 12:48)	21	State pos z Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
C	hawc2/oc4_p2_load_case_3-9a.sel (04-12-2013 20:49)	21	State pos z Mbdy:mc E-nr: 8 Z-rel:0.00 coo: global platform translation in surge sway and heave

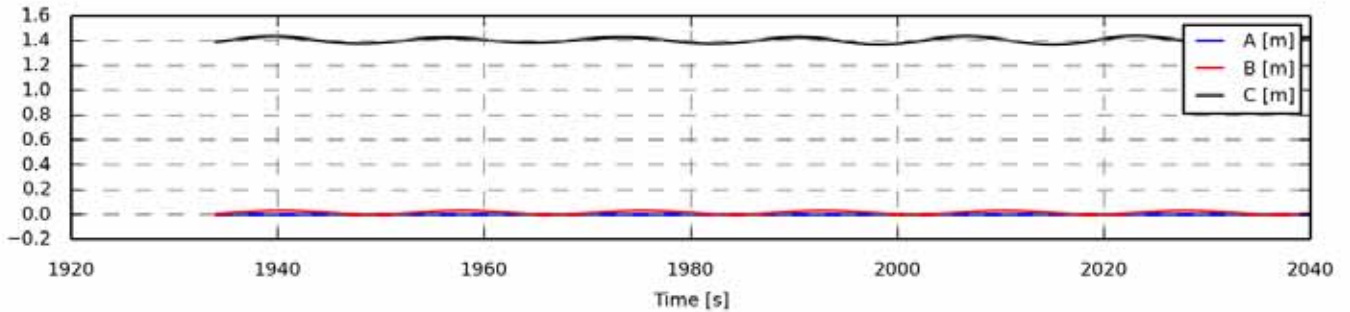


Figure 1629 - Full length time series

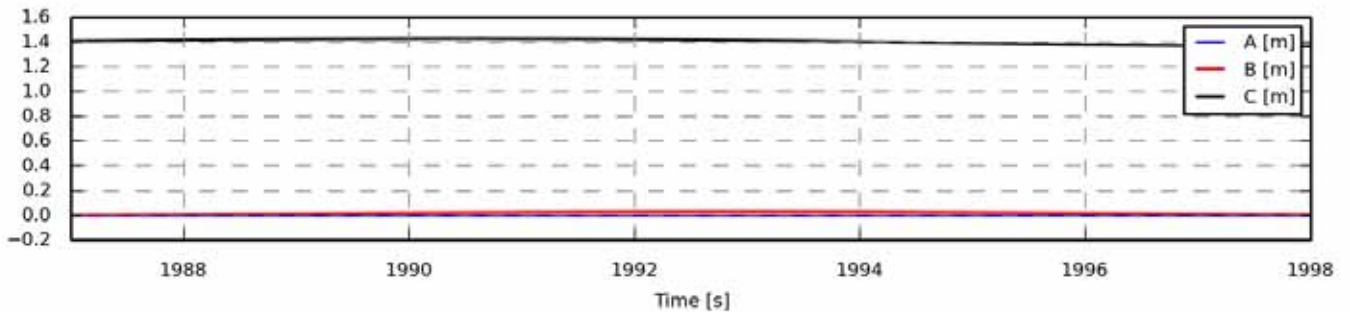


Figure 1630 - Zoom of time series

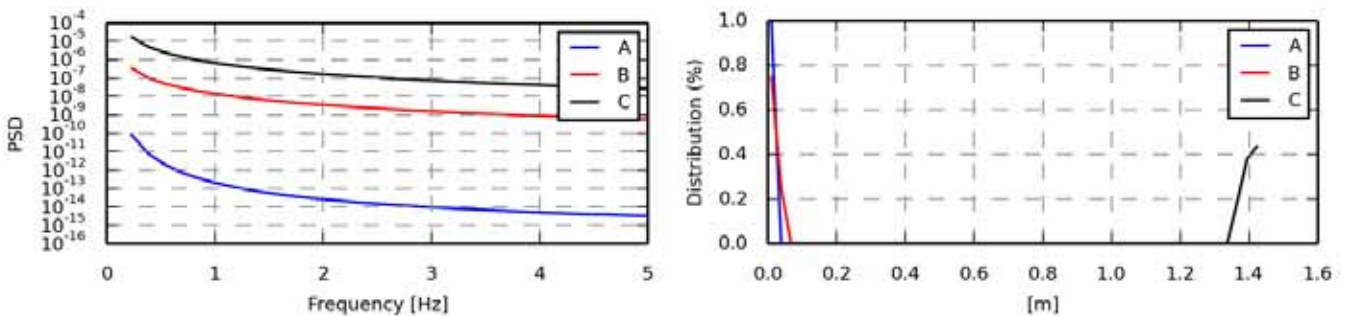


Figure 1631 - Power spectrum density

Statistics	A	B	C
Min	-0.0014	-0.0039	1.3665
Max	-0.0005	0.0305	1.4366
Mean	-0.0009	0.0132	1.4020
Std	0.0003	0.0118	0.0205
Skewness	0.0305	0.0182	-0.0487
Kurtosis	-1.5037	-1.4964	-1.3104

Figure 1632 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.0003	0.0127	0.0227
Eq (m=4)	0.0004	0.0162	0.0291
Eq (m=6)	0.0005	0.0206	0.0375
Eq (m=8)	0.0006	0.0232	0.0429
Eq (m=10)	0.0006	0.0250	0.0467
Eq (m=12)	0.0007	0.0263	0.0496

Section 18.09 oc4_p2_load_case_3-9a: proj_ang tx coo: global [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-9a.sel (01-03-2014 07:48)	22	State_rot proj_ang tx Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
B	WAMsim/oc4_p2_load_case_3-9a.sel (01-04-2014 12:48)	22	State_rot proj_ang tx Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
C	hawc2/oc4_p2_load_case_3-9a.sel (04-12-2013 20:49)	22	State_rot proj_ang tx Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw

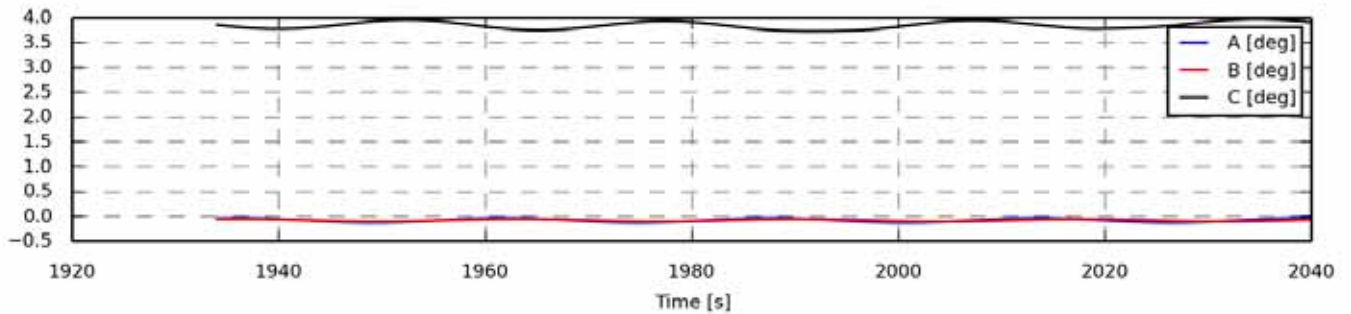


Figure 1633 - Full length time series

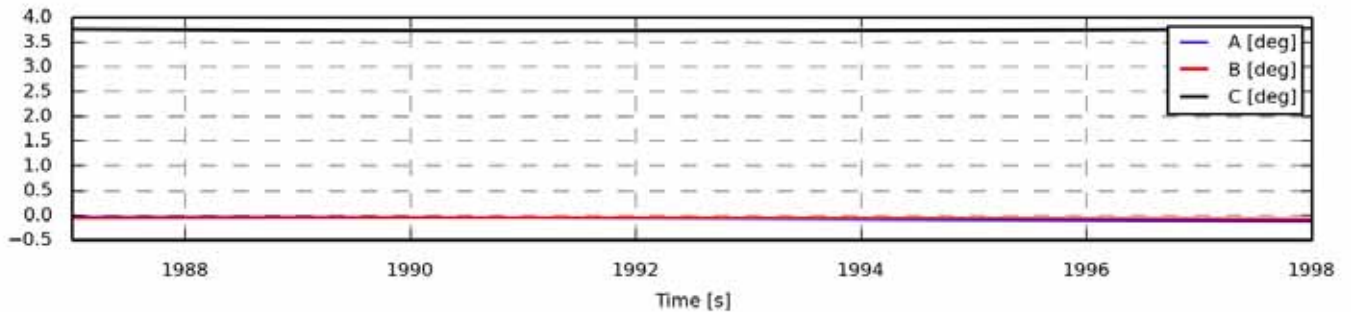


Figure 1634 - Zoom of time series

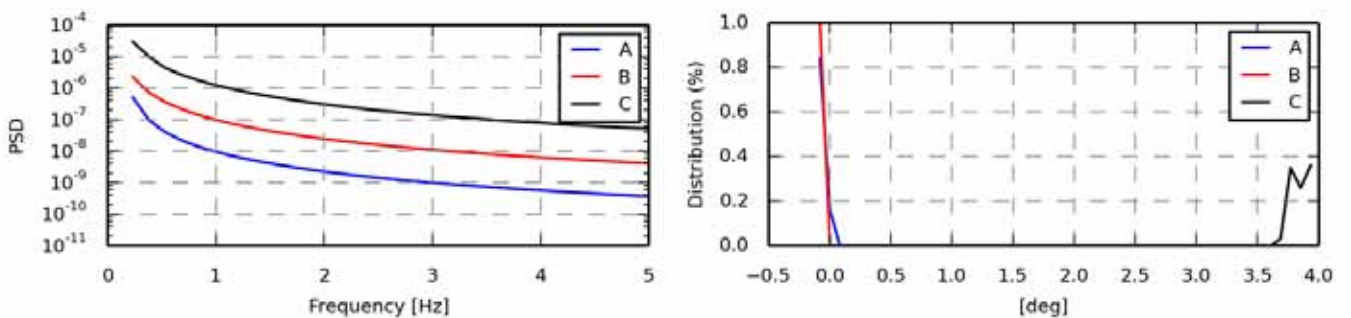


Figure 1635 - Power spectrum density

Statistics	A	B	C
Min	-0.1212	-0.1024	3.7280
Max	-0.0343	-0.0494	3.9763
Mean	-0.0770	-0.0768	3.8520
Std	0.0306	0.0183	0.0749
Skewness	-0.0393	0.0591	0.0343
Kurtosis	-1.5122	-1.4827	-1.3325

Figure 1636 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.0288	0.0167	0.0658
Eq (m=4)	0.0378	0.0221	0.0880
Eq (m=6)	0.0497	0.0292	0.1192
Eq (m=8)	0.0570	0.0336	0.1400
Eq (m=10)	0.0618	0.0366	0.1551
Eq (m=12)	0.0653	0.0387	0.1665

Section 18.10 oc4_p2_load_case_3-9a: proj_ang ty coo: global [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-9a.sel (01-03-2014 07:48)	23	State_rot proj_ang ty Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
B	WAMsim/oc4_p2_load_case_3-9a.sel (01-04-2014 12:48)	23	State_rot proj_ang ty Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
C	hawc2/oc4_p2_load_case_3-9a.sel (04-12-2013 20:49)	23	State_rot proj_ang ty Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw

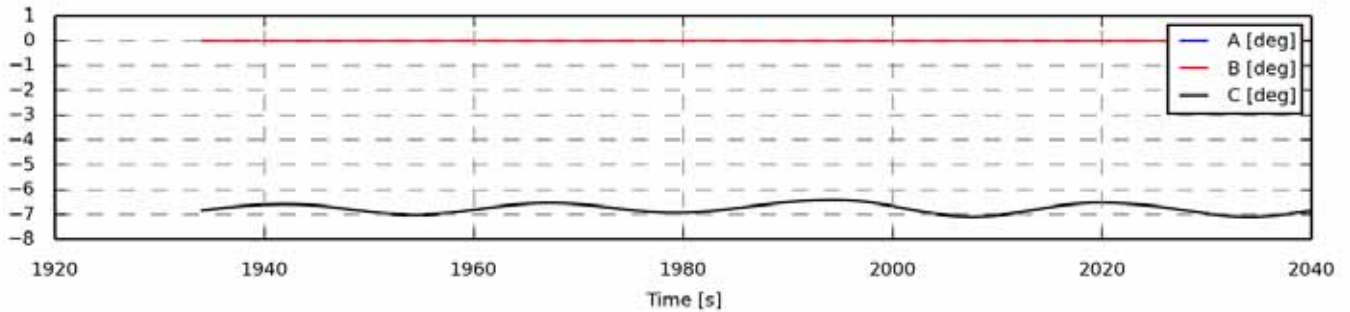


Figure 1637 - Full length time series

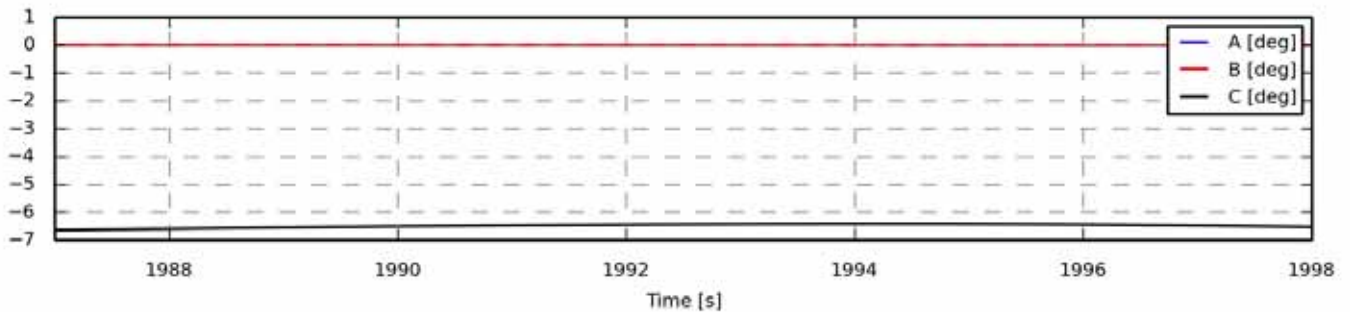


Figure 1638 - Zoom of time series

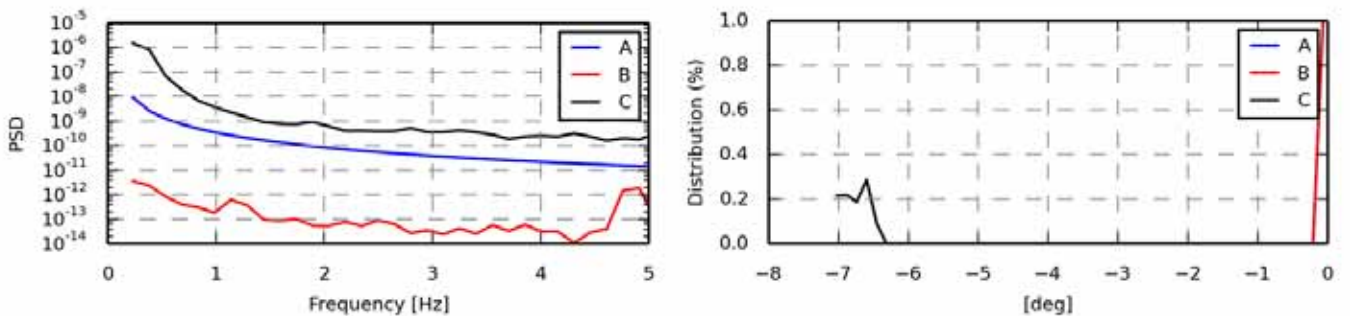


Figure 1639 - Power spectrum density

Statistics	A	B	C
Min	-0.0051	-0.0001	-7.0943
Max	0.0050	0.0001	-6.4102
Mean	0.0000	0.0000	-6.7657
Std	0.0032	0.0000	0.1945
Skewness	-0.0159	-0.0459	-0.0334
Kurtosis	-1.3617	-1.3947	-1.1865

Figure 1640 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.0029	0.0000	0.1776
Eq (m=4)	0.0038	0.0000	0.2382
Eq (m=6)	0.0051	0.0001	0.3242
Eq (m=8)	0.0060	0.0001	0.3817
Eq (m=10)	0.0065	0.0001	0.4228
Eq (m=12)	0.0070	0.0001	0.4538

Section 18.11 oc4_p2_load_case_3-9a: proj_ang tz coo: global [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-9a.sel (01-03-2014 07:48)	24	State_rot proj_ang tz Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
B	WAMsim/oc4_p2_load_case_3-9a.sel (01-04-2014 12:48)	24	State_rot proj_ang tz Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
C	hawc2/oc4_p2_load_case_3-9a.sel (04-12-2013 20:49)	24	State_rot proj_ang tz Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw

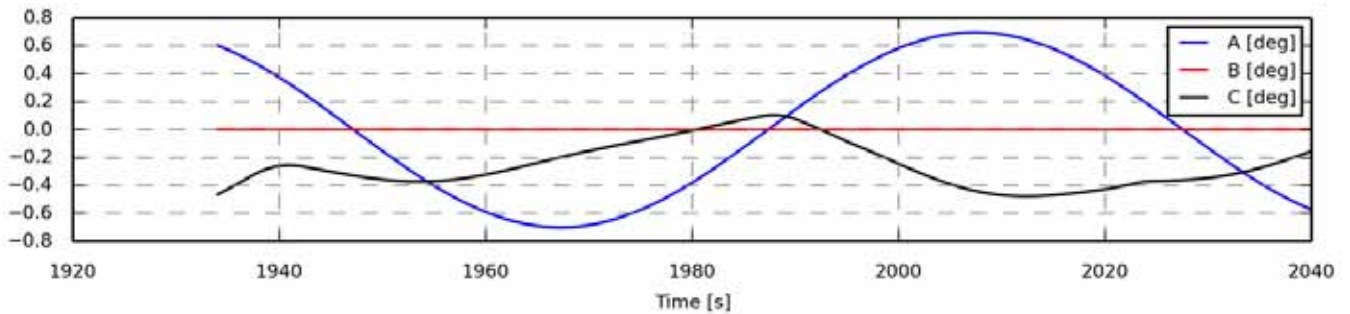


Figure 1641 - Full length time series

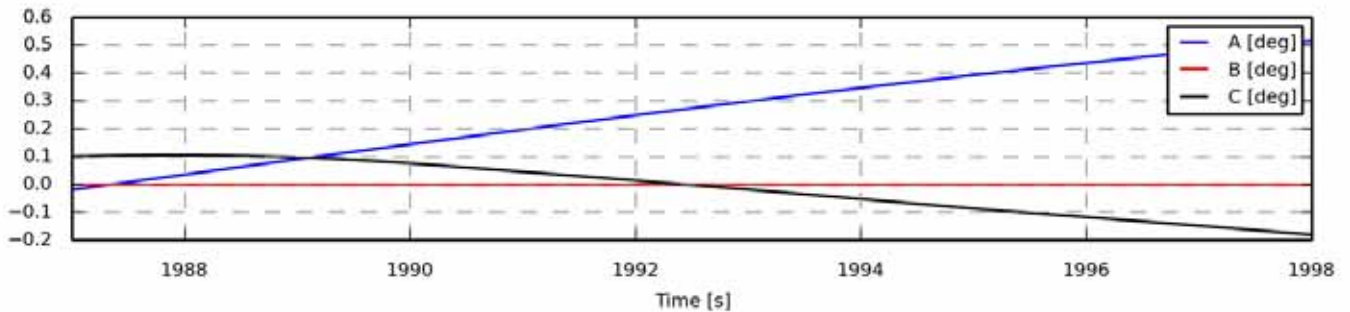


Figure 1642 - Zoom of time series

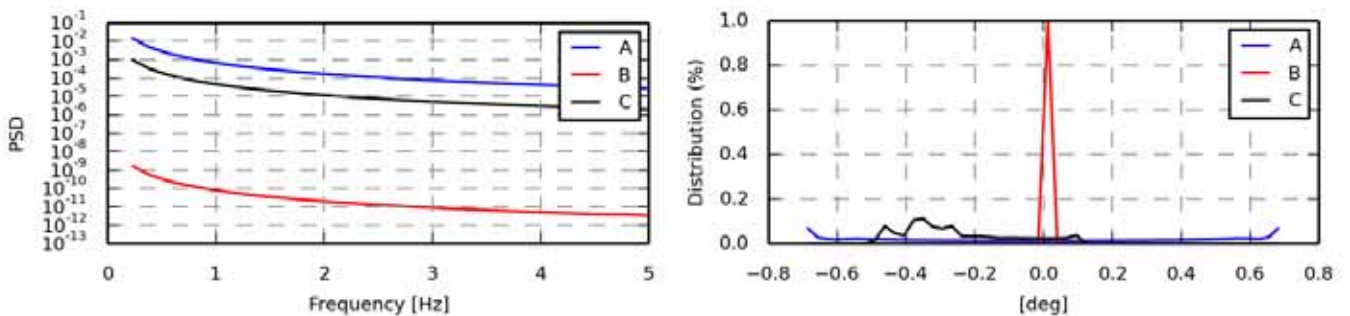


Figure 1643 - Power spectrum density

Statistics	A	B	C
Min	-0.6993	-0.0003	-0.4772
Max	0.6957	0.0003	0.1049
Mean	0.0033	0.0000	-0.2541
Std	0.4655	0.0002	0.1624
Skewness	-0.0141	-0.2188	0.6879
Kurtosis	-1.4132	-1.3808	-0.5815

Figure 1644 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.3200	0.0001	0.1256
Eq (m=4)	0.4568	0.0002	0.1819
Eq (m=6)	0.6526	0.0003	0.2656
Eq (m=8)	0.7808	0.0003	0.3219
Eq (m=10)	0.8701	0.0004	0.3615
Eq (m=12)	0.9358	0.0004	0.3907

Section 18.12 oc4_p2_load_case_3-9a: Mx coo: towertop [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-9a.sel (01-03-2014 07:48)	37	MomentMx Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
B	WAMsim/oc4_p2_load_case_3-9a.sel (01-04-2014 12:48)	37	MomentMx Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
C	hawc2/oc4_p2_load_case_3-9a.sel (04-12-2013 20:49)	37	MomentMx Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment

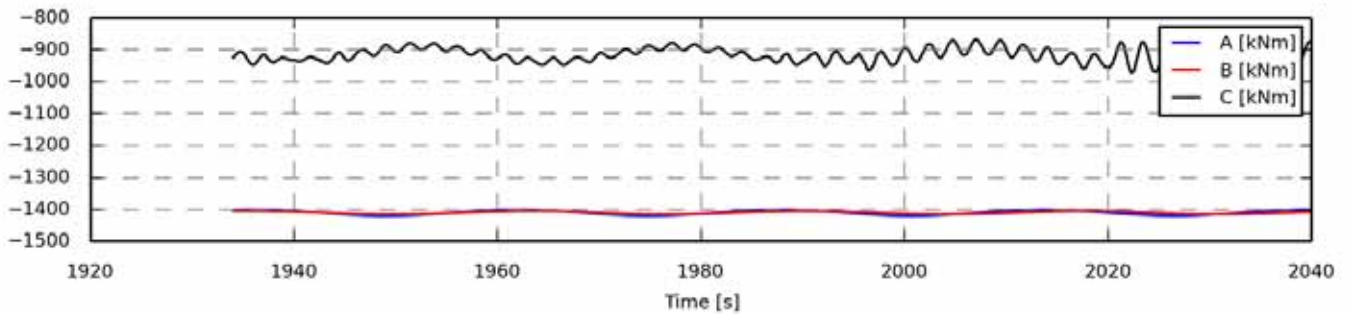


Figure 1645 - Full length time series

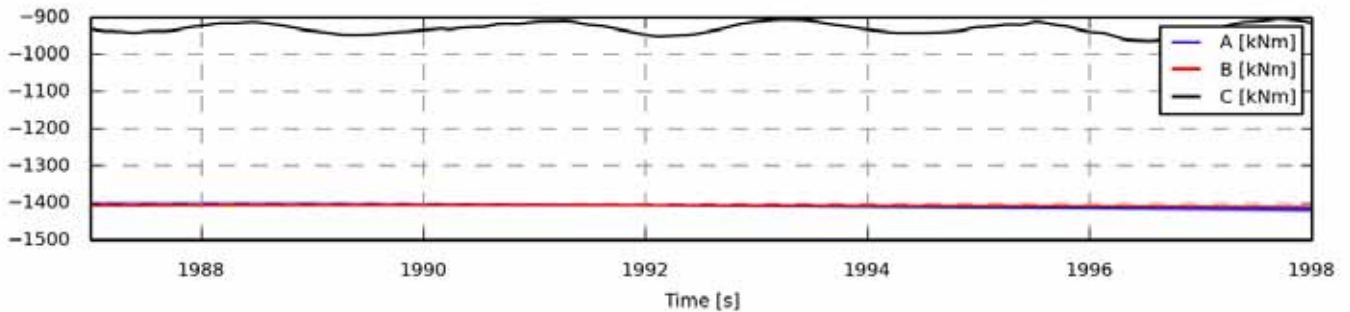


Figure 1646 - Zoom of time series

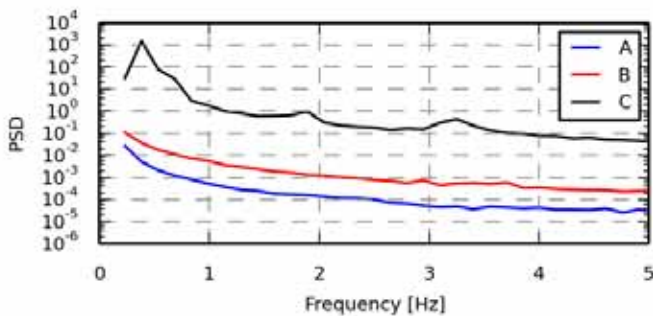


Figure 1647 - Power spectrum density

Statistics	A	B	C
Min	-1.4202e+03	-1.4162e+03	-9.7285e+02
Max	-1.4004e+03	-1.4043e+03	-8.5788e+02
Mean	-1.4101e+03	-1.4103e+03	-9.1445e+02
Std	7.0247	3.9873	21.9731
Skewness	-0.0399	0.0716	0.1124
Kurtosis	-1.5127	-1.4710	-0.5132

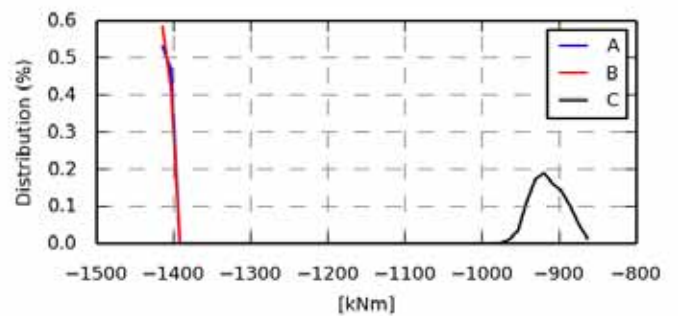


Figure 1648 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	6.5879	3.7086	40.0457
Eq (m=4)	8.6566	4.8946	47.4552
Eq (m=6)	11.3750	6.4755	58.4814
Eq (m=8)	13.0392	7.4596	66.4147
Eq (m=10)	14.1525	8.1266	72.4366
Eq (m=12)	14.9470	8.6079	77.1700

Section 18.13 oc4_p2_load_case_3-9a: My coo: towertop [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-9a.sel (01-03-2014 07:48)	38	MomentMy Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
B	WAMsim/oc4_p2_load_case_3-9a.sel (01-04-2014 12:48)	38	MomentMy Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
C	hawc2/oc4_p2_load_case_3-9a.sel (04-12-2013 20:49)	38	MomentMy Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment

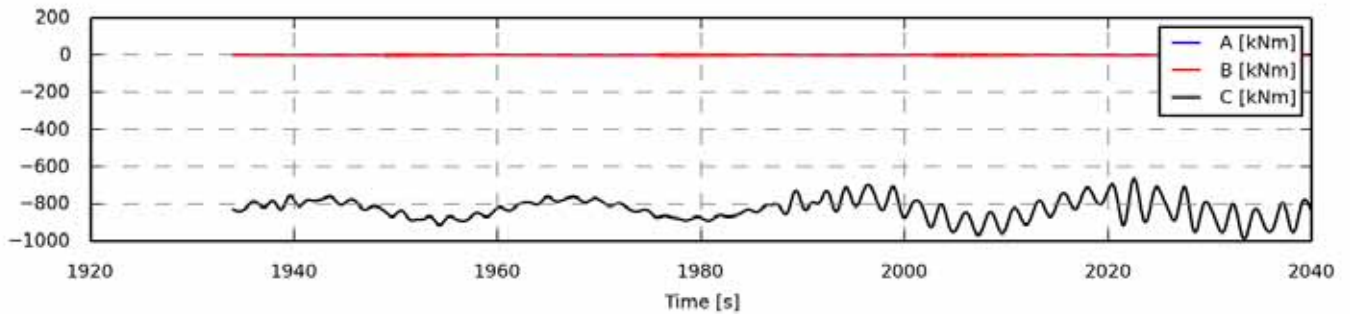


Figure 1649 - Full length time series

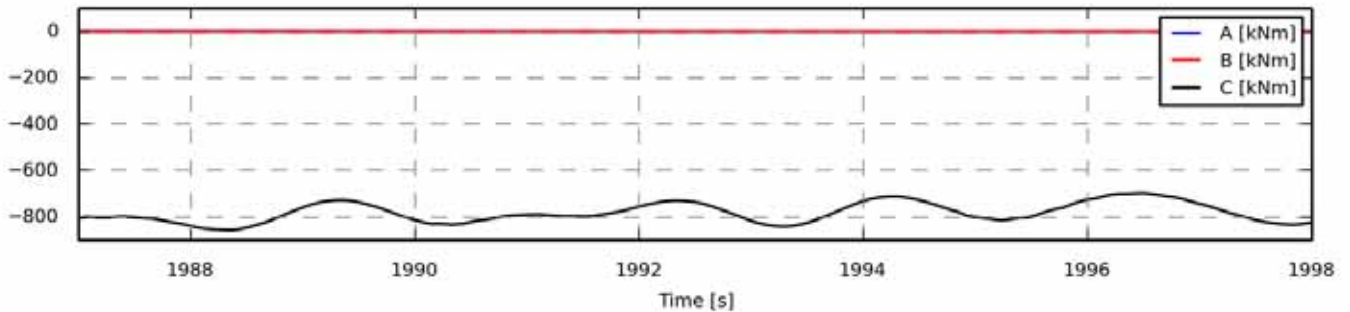


Figure 1650 - Zoom of time series

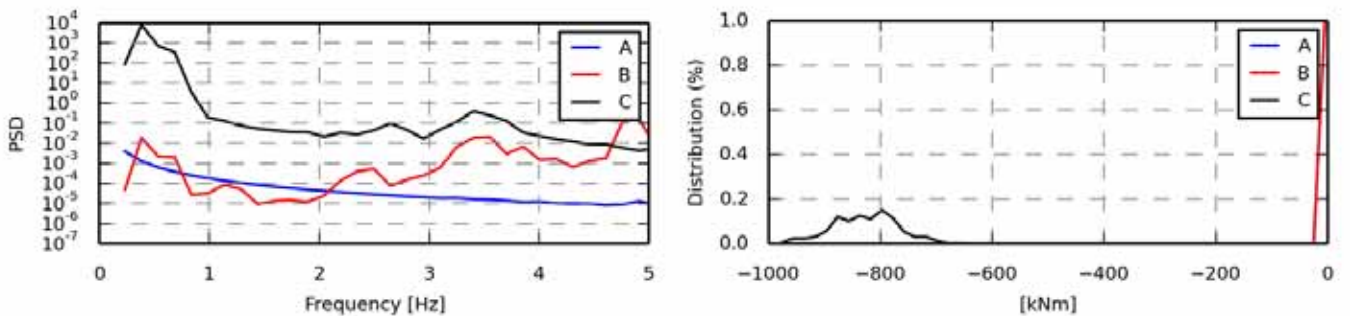


Figure 1651 - Power spectrum density

Statistics	A	B	C
Min	-1.1519	-4.9863	-9.8566e+02
Max	1.1094	4.8272	-6.6341e+02
Mean	-0.0014	-0.0094	-8.2715e+02
Std	0.7410	1.3209	57.5415
Skewness	-0.0314	0.0194	-0.0864
Kurtosis	-1.4703	2.3527	-0.1725

Figure 1652 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.6996	8.6399	100.7321
Eq (m=4)	0.9186	8.0553	122.3954
Eq (m=6)	1.2107	7.6798	156.2092
Eq (m=8)	1.3928	7.6338	181.3194
Eq (m=10)	1.5166	7.6876	200.3207
Eq (m=12)	1.6064	7.7740	214.9928

Section 18.14 oc4_p2_load_case_3-9a: Mz coo: towertop [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-9a.sel (01-03-2014 07:48)	39	MomentMz Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
B	WAMsim/oc4_p2_load_case_3-9a.sel (01-04-2014 12:48)	39	MomentMz Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
C	hawc2/oc4_p2_load_case_3-9a.sel (04-12-2013 20:49)	39	MomentMz Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment

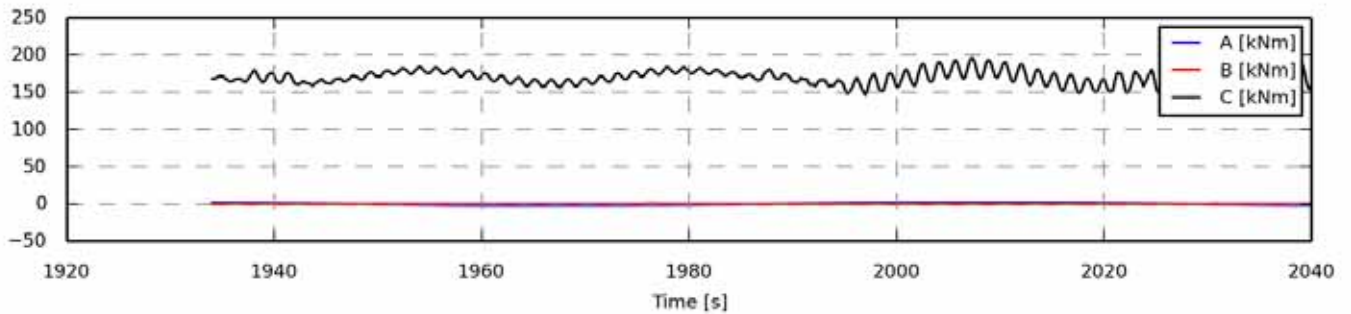


Figure 1653 - Full length time series

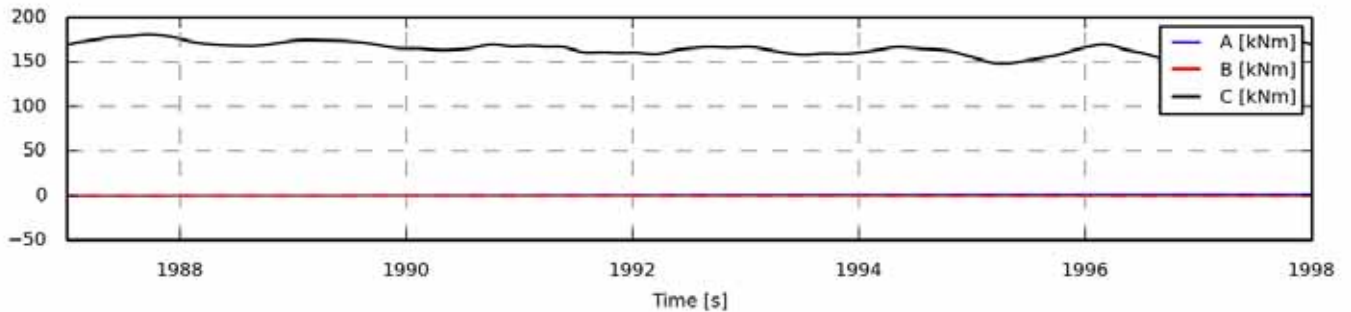


Figure 1654 - Zoom of time series

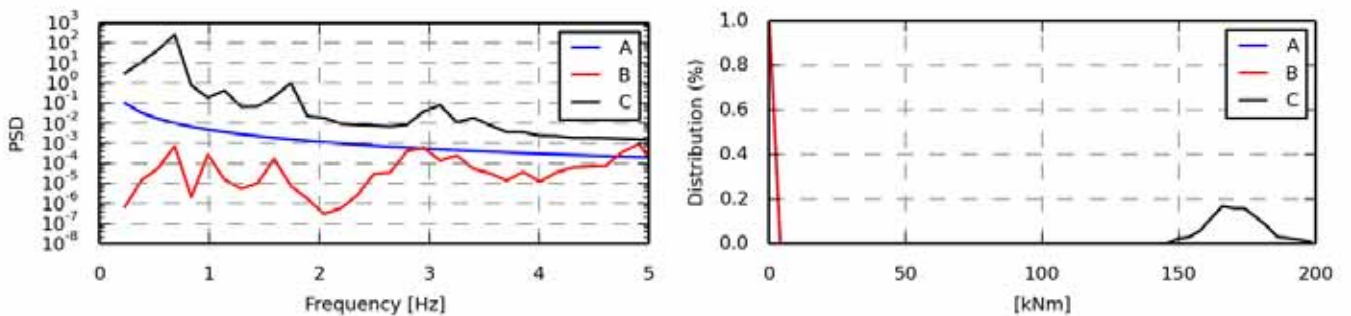


Figure 1655 - Power spectrum density

Statistics	A	B	C
Min	-1.8020	-0.6241	146.8270
Max	1.7317	0.5887	200.1219
Mean	0.0064	0.0001	170.8674
Std	1.2893	0.0764	9.7043
Skewness	-0.0249	-0.0055	0.2471
Kurtosis	-1.5785	7.5466	0.0612

Figure 1656 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.8212	0.5579	19.8062
Eq (m=4)	1.1716	0.5619	22.8247
Eq (m=6)	1.6721	0.6206	27.5136
Eq (m=8)	1.9985	0.6905	31.0971
Eq (m=10)	2.2250	0.7526	33.8998
Eq (m=12)	2.3909	0.8041	36.1114

Section 18.15 oc4_p2_load_case_3-9a: Mx coo: tower [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-9a.sel (01-03-2014 07:48)	43	MomentMx Mbdy:tower nodenr: 1 coo: tower tower base bending moment
B	WAMsim/oc4_p2_load_case_3-9a.sel (01-04-2014 12:48)	43	MomentMx Mbdy:tower nodenr: 1 coo: tower tower base bending moment
C	hawc2/oc4_p2_load_case_3-9a.sel (04-12-2013 20:49)	43	MomentMx Mbdy:tower nodenr: 1 coo: tower tower base bending moment

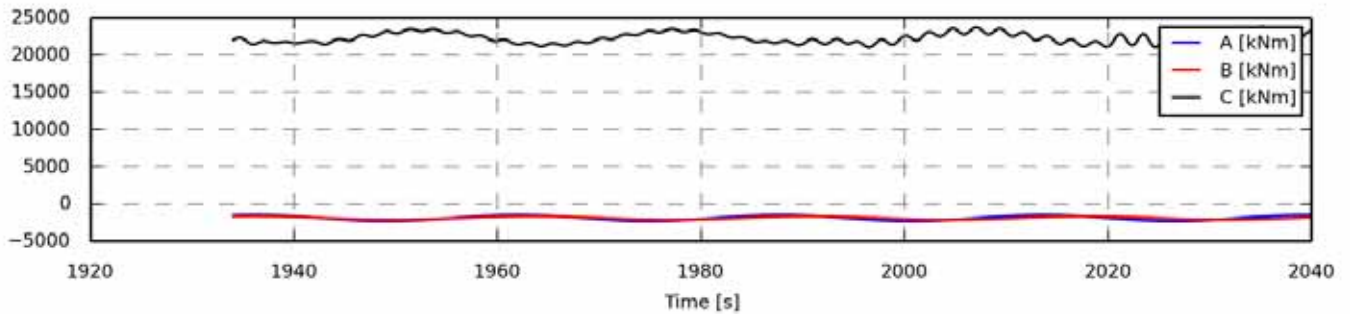


Figure 1657 - Full length time series

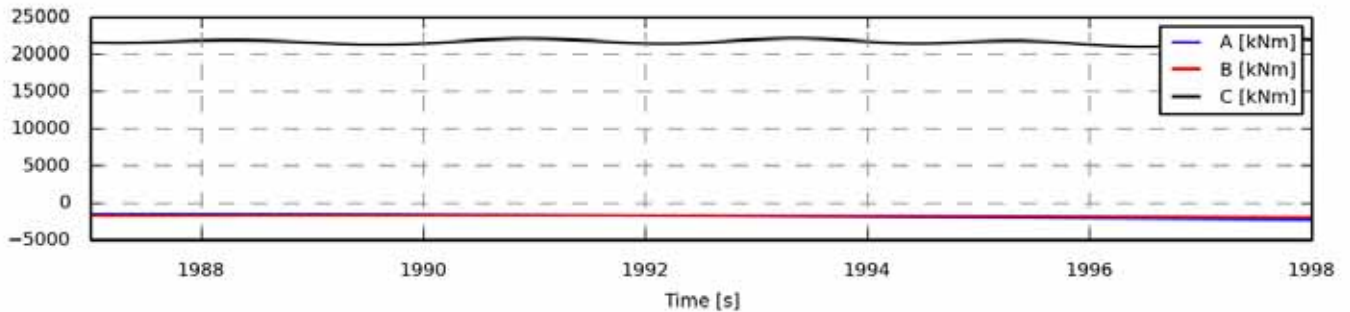


Figure 1658 - Zoom of time series

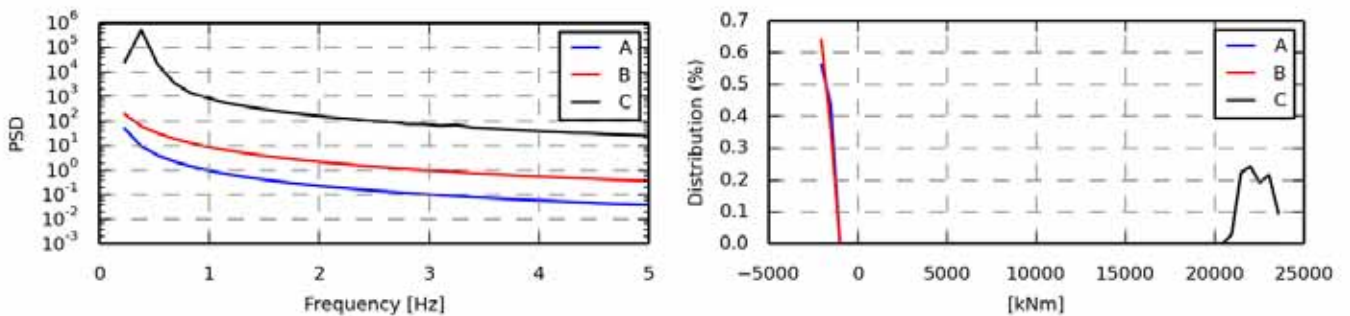


Figure 1659 - Power spectrum density

Statistics	A	B	C
Min	-2.3076e+03	-2.1212e+03	2.1001e+04
Max	-1.4578e+03	-1.6227e+03	2.3826e+04
Mean	-1.8743e+03	-1.8789e+03	2.2326e+04
Std	300.8713	172.6976	697.4497
Skewness	-0.0399	0.0582	0.1605
Kurtosis	-1.5128	-1.4844	-1.1187

Figure 1660 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	282.8901	158.5447	913.8992
Eq (m=4)	371.7215	209.1967	1.1398e+03
Eq (m=6)	488.4514	276.5909	1.4715e+03
Eq (m=8)	559.9165	318.3960	1.6945e+03
Eq (m=10)	607.7212	346.6068	1.8524e+03
Eq (m=12)	641.8376	366.8584	1.9699e+03

Section 18.16 oc4_p2_load_case_3-9a: My coo: tower [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-9a.sel (01-03-2014 07:48)	44	MomentMy Mbdy:tower nodenr: 1 coo: tower tower base bending moment
B	WAMsim/oc4_p2_load_case_3-9a.sel (01-04-2014 12:48)	44	MomentMy Mbdy:tower nodenr: 1 coo: tower tower base bending moment
C	hawc2/oc4_p2_load_case_3-9a.sel (04-12-2013 20:49)	44	MomentMy Mbdy:tower nodenr: 1 coo: tower tower base bending moment

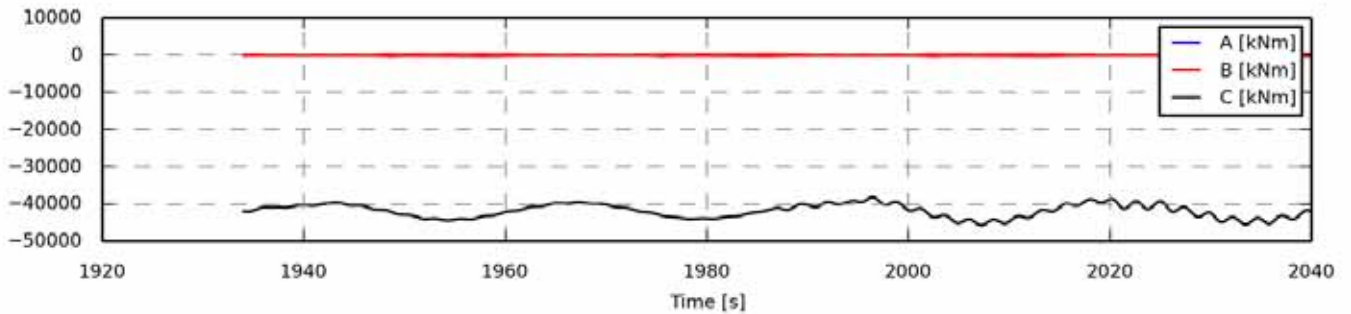


Figure 1661 - Full length time series

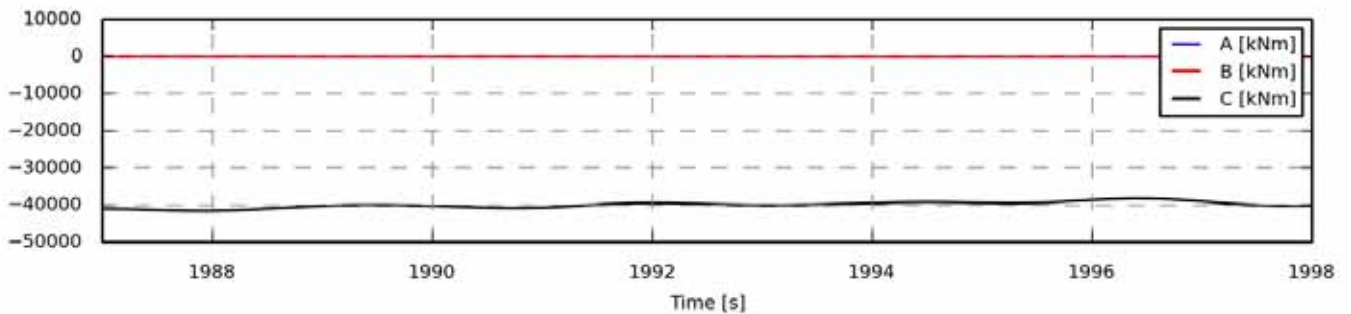


Figure 1662 - Zoom of time series

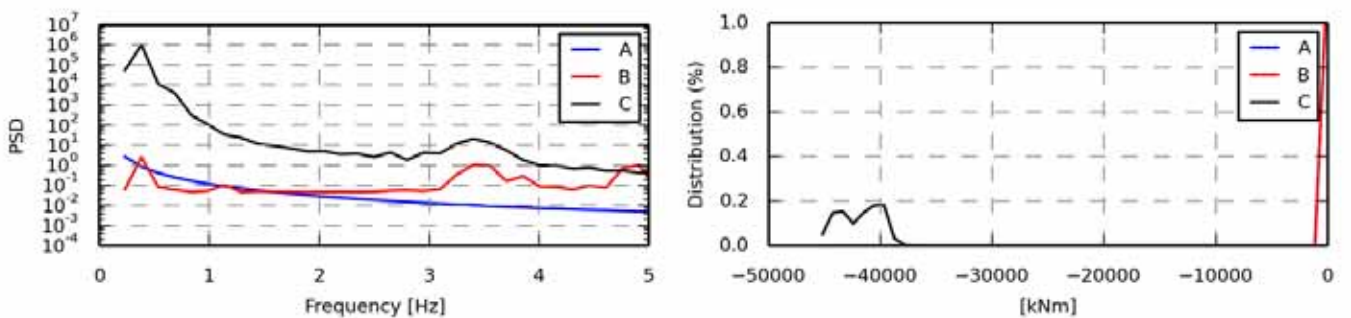


Figure 1663 - Power spectrum density

Statistics	A	B	C
Min	-44.1861	-2.3320e+02	-4.5647e+04
Max	46.3926	237.0250	-3.8150e+04
Mean	0.2898	0.0158	-4.1862e+04
Std	29.9018	108.4584	1.7975e+03
Skewness	-0.0138	-0.0040	-0.1335
Kurtosis	-1.4724	-0.8574	-1.1603

Figure 1664 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	28.5286	653.1624	2.0251e+03
Eq (m=4)	37.3780	550.1328	2.6823e+03
Eq (m=6)	49.2933	474.7959	3.6351e+03
Eq (m=8)	56.7224	447.5854	4.2717e+03
Eq (m=10)	61.7637	435.3841	4.7232e+03
Eq (m=12)	65.4061	429.5255	5.0596e+03

Section 18.17 oc4_p2_load_case_3-9a: Mz coo: tower [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-9a.sel (01-03-2014 07:48)	45	MomentMz Mbdy:tower nodenr: 1 coo: tower tower base bending moment
B	WAMsim/oc4_p2_load_case_3-9a.sel (01-04-2014 12:48)	45	MomentMz Mbdy:tower nodenr: 1 coo: tower tower base bending moment
C	hawc2/oc4_p2_load_case_3-9a.sel (04-12-2013 20:49)	45	MomentMz Mbdy:tower nodenr: 1 coo: tower tower base bending moment

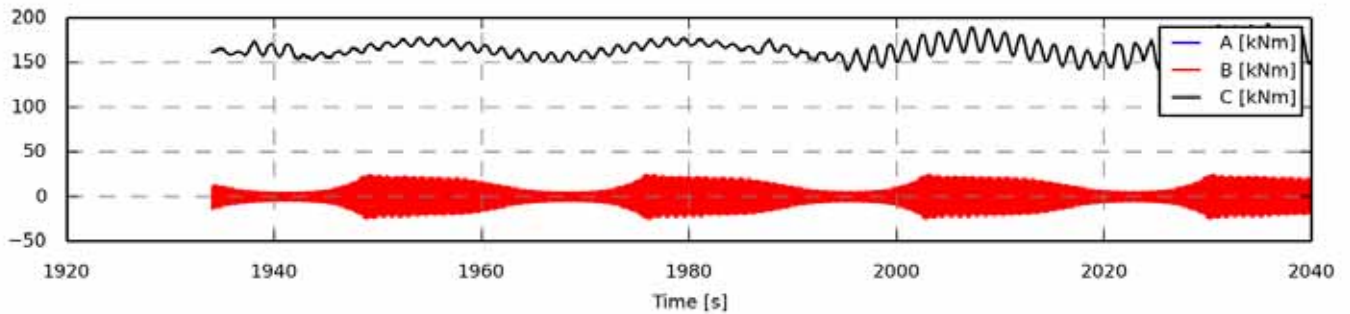


Figure 1665 - Full length time series

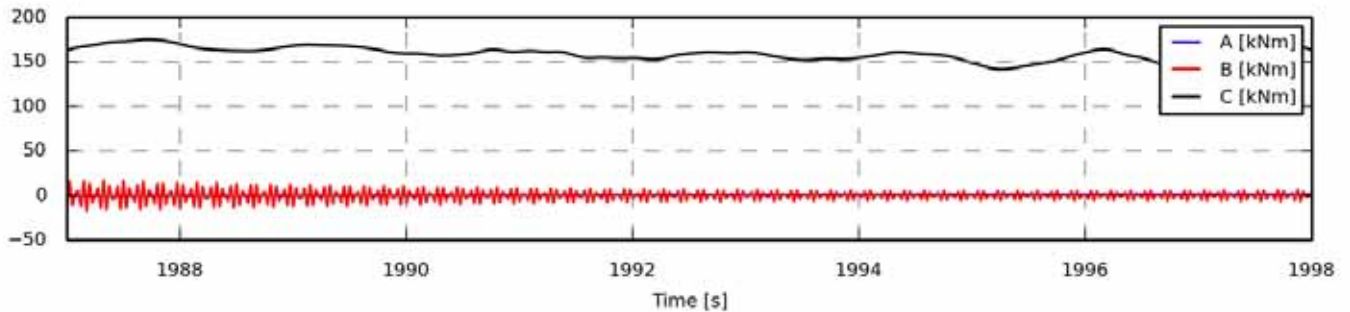


Figure 1666 - Zoom of time series

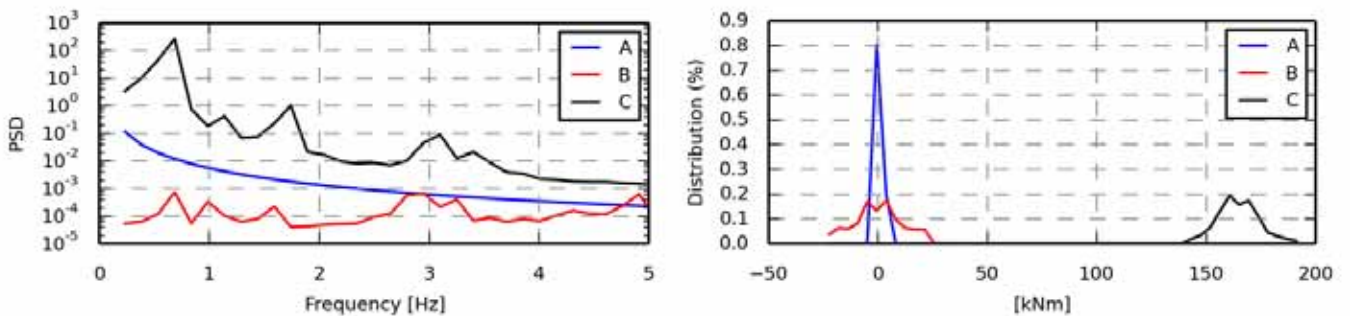


Figure 1667 - Power spectrum density

Statistics	A	B	C
Min	-1.9480	-24.5602	140.9910
Max	1.9814	24.5303	193.2707
Mean	0.0070	0.0005	164.6476
Std	1.3806	11.1152	9.5306
Skewness	-0.0282	-0.0001	0.2376
Kurtosis	-1.5628	-0.5817	0.0778

Figure 1668 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.9999	68.2299	19.8101
Eq (m=4)	1.3099	58.0767	22.7389
Eq (m=6)	1.8488	50.5618	27.2303
Eq (m=8)	2.2100	47.7489	30.6456
Eq (m=10)	2.4615	46.4121	33.3290
Eq (m=12)	2.6460	45.7113	35.4616

Section 18.18 oc4_p2_load_case_3-9a: ESYS line1_1 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-9a.sel (01-03-2014 07:48)	55	ESYS line1_1 SENSOR 4
B	WAMsim/oc4_p2_load_case_3-9a.sel (01-04-2014 12:48)	55	ESYS line1_1 SENSOR 4
C	hawc2/oc4_p2_load_case_3-9a.sel (04-12-2013 20:49)	55	ESYS line1_1 SENSOR 4

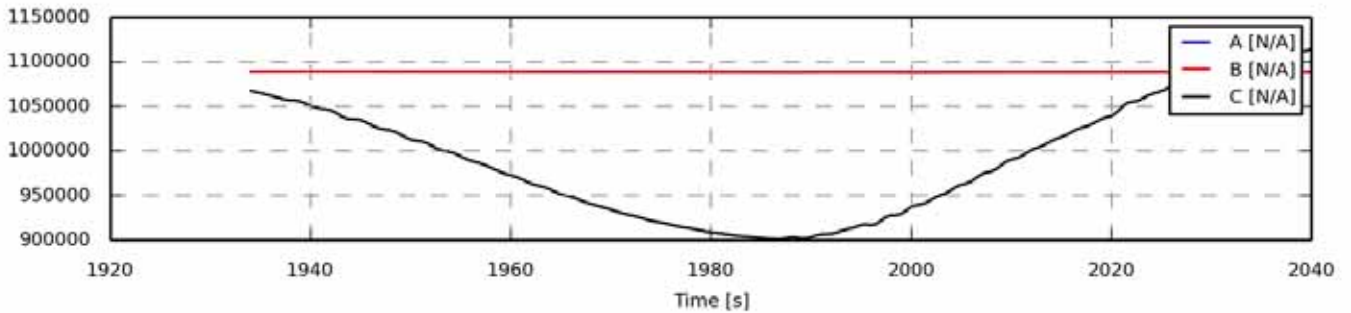


Figure 1669 - Full length time series

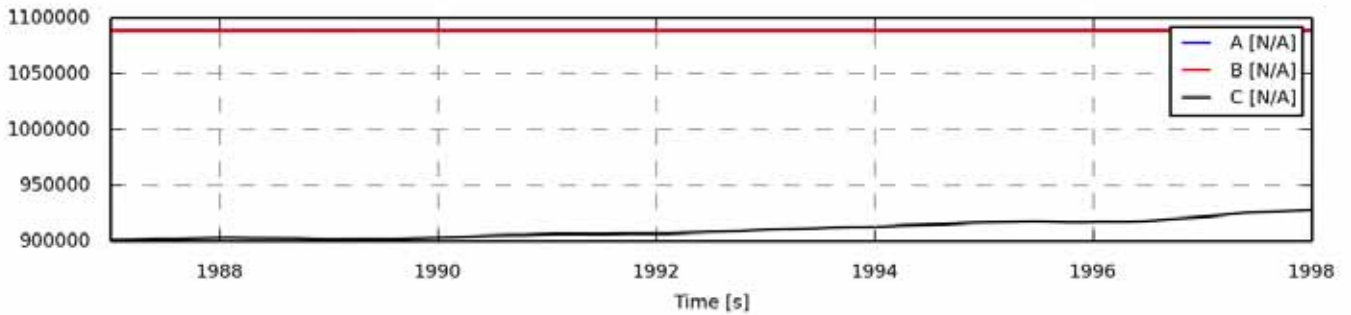


Figure 1670 - Zoom of time series

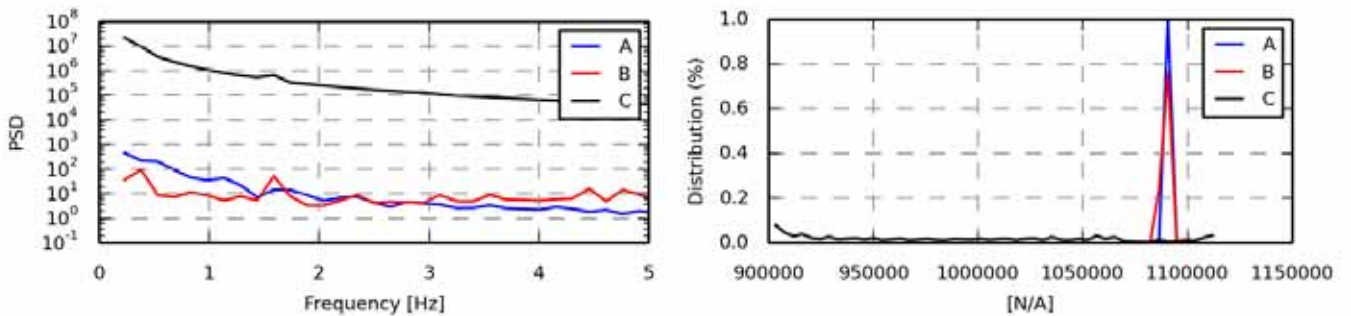


Figure 1671 - Power spectrum density

Statistics	A	B	C
Min	1.0887e+06	1.0883e+06	9.0119e+05
Max	1.0893e+06	1.0892e+06	1.1140e+06
Mean	1.0890e+06	1.0887e+06	9.9125e+05
Std	220.1514	233.6341	6.5828e+04
Skewness	0.1516	0.1381	0.2481
Kurtosis	-1.5019	-1.3067	-1.1859

Figure 1672 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	116.3535	309.0154	4.0622e+04
Eq (m=4)	174.3996	298.7077	6.0339e+04
Eq (m=6)	266.5449	376.3439	9.0150e+04
Eq (m=8)	331.6382	459.2053	1.1070e+05
Eq (m=10)	378.7198	521.1893	1.2555e+05
Eq (m=12)	413.9577	568.0340	1.3675e+05

Section 18.19 oc4_p2_load_case_3-9a: ESYS line1_3 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-9a.sel (01-03-2014 07:48)	259	ESYS line1_3 SENSOR 104
B	WAMsim/oc4_p2_load_case_3-9a.sel (01-04-2014 12:48)	259	ESYS line1_3 SENSOR 104
C	hawc2/oc4_p2_load_case_3-9a.sel (04-12-2013 20:49)	259	ESYS line1_3 SENSOR 104

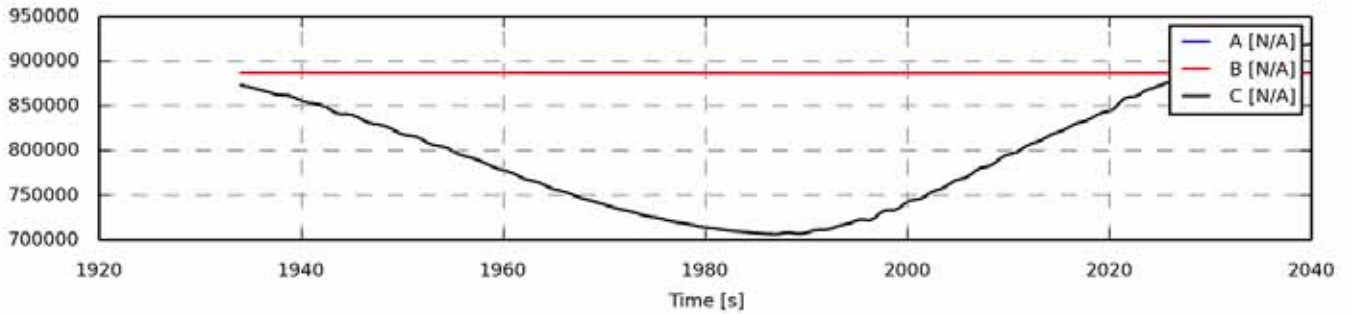


Figure 1673 - Full length time series

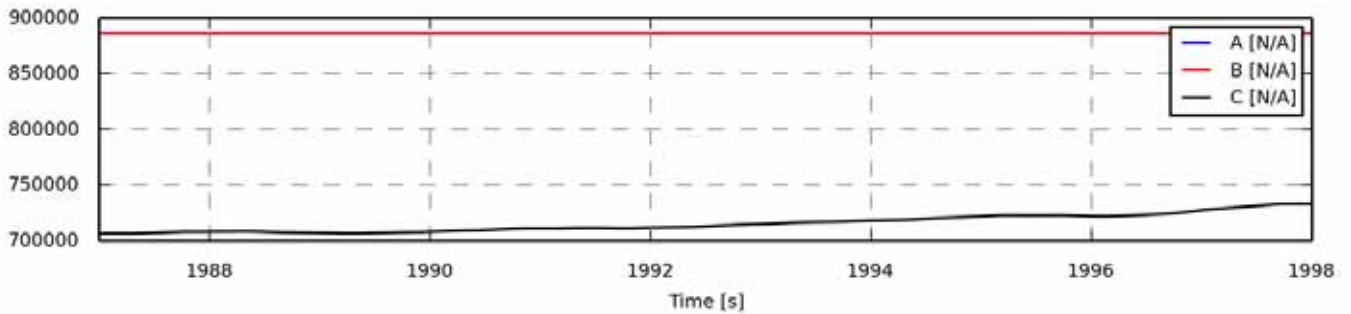


Figure 1674 - Zoom of time series

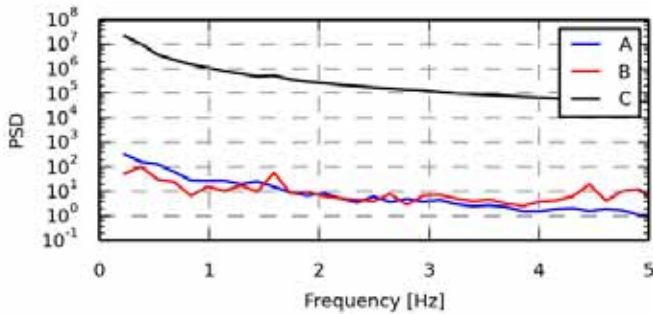


Figure 1675 - Power spectrum density

Statistics	A	B	C
Min	8.8650e+05	8.8623e+05	7.0642e+05
Max	8.8716e+05	8.8692e+05	9.1981e+05
Mean	8.8682e+05	8.8654e+05	7.9665e+05
Std	221.5596	228.3719	6.5942e+04
Skewness	0.1448	0.1459	0.2478
Kurtosis	-1.5348	-1.3929	-1.1828

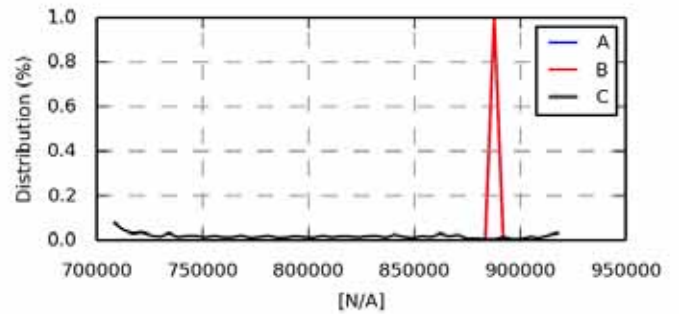


Figure 1676 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	118.8361	140.4001	4.0734e+04
Eq (m=4)	179.1897	194.2060	6.0505e+04
Eq (m=6)	274.1885	290.0186	9.0399e+04
Eq (m=8)	341.1638	357.8238	1.1101e+05
Eq (m=10)	389.5983	407.0408	1.2590e+05
Eq (m=12)	425.8485	444.1295	1.3712e+05

Section 18.20 oc4_p2_load_case_3-9a: ESYS line2_1 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-9a.sel (01-03-2014 07:48)	263	ESYS line2_1 SENSOR 4
B	WAMsim/oc4_p2_load_case_3-9a.sel (01-04-2014 12:48)	263	ESYS line2_1 SENSOR 4
C	hawc2/oc4_p2_load_case_3-9a.sel (04-12-2013 20:49)	263	ESYS line2_1 SENSOR 4

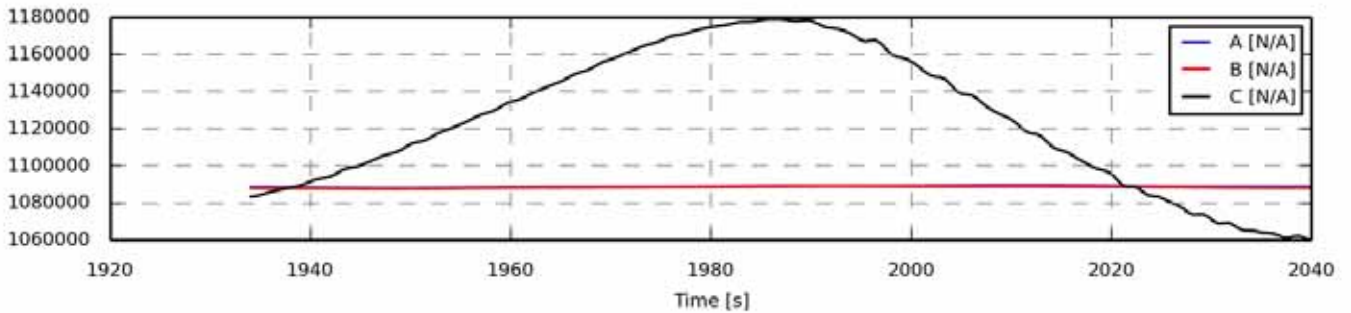


Figure 1677 - Full length time series

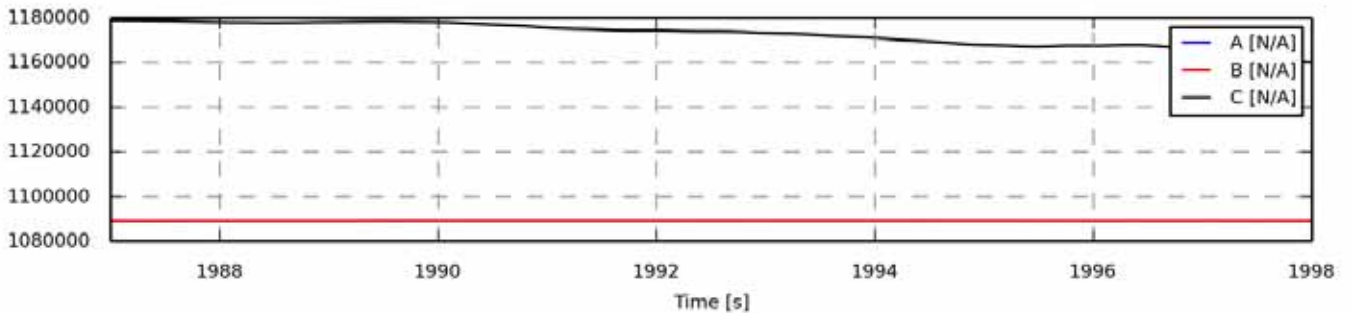


Figure 1678 - Zoom of time series

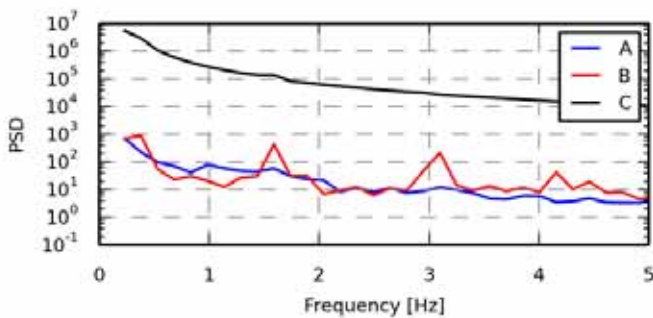


Figure 1679 - Power spectrum density

Statistics	A	B	C
Min	1.0880e+06	1.0878e+06	1.0602e+06
Max	1.0896e+06	1.0893e+06	1.1791e+06
Mean	1.0889e+06	1.0886e+06	1.1255e+06
Std	437.5145	450.9634	3.7147e+04
Skewness	-0.1641	-0.1450	-0.1011
Kurtosis	-1.0016	-1.2861	-1.2816

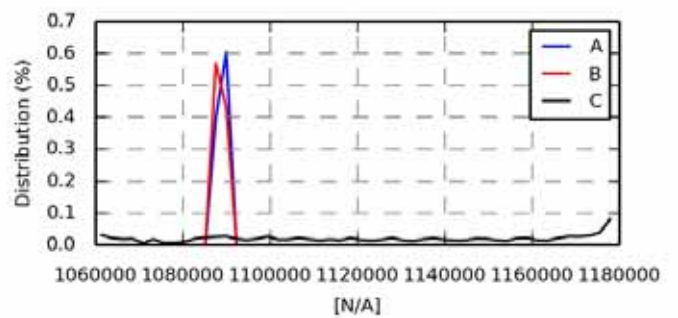


Figure 1680 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	270.9012	288.8458	2.2880e+04
Eq (m=4)	409.2778	428.8069	3.3942e+04
Eq (m=6)	629.3199	643.4168	5.0603e+04
Eq (m=8)	784.7870	792.6626	6.2041e+04
Eq (m=10)	896.8654	900.8652	7.0282e+04
Eq (m=12)	980.5383	982.4433	7.6488e+04

Section 18.21 oc4_p2_load_case_3-9a: ESYS line2_3 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-9a.sel (01-03-2014 07:48)	467	ESYS line2_3 SENSOR 104
B	WAMsim/oc4_p2_load_case_3-9a.sel (01-04-2014 12:48)	467	ESYS line2_3 SENSOR 104
C	hawc2/oc4_p2_load_case_3-9a.sel (04-12-2013 20:49)	467	ESYS line2_3 SENSOR 104

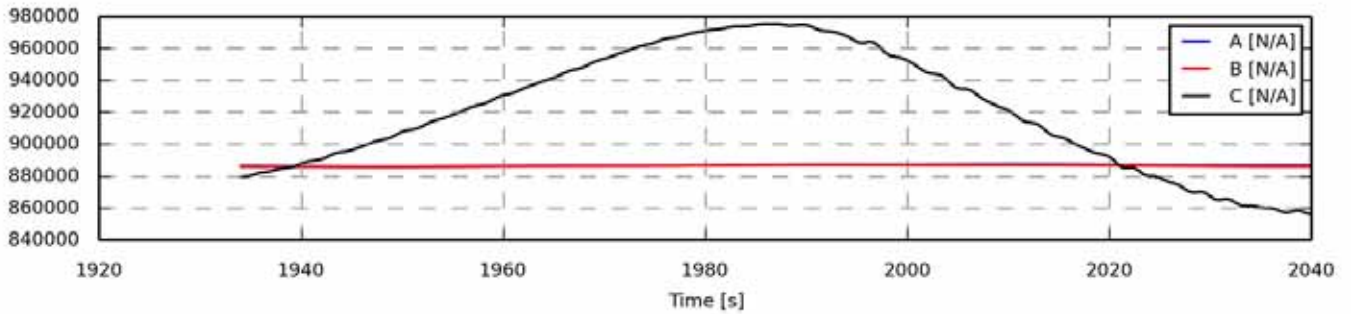


Figure 1681 - Full length time series

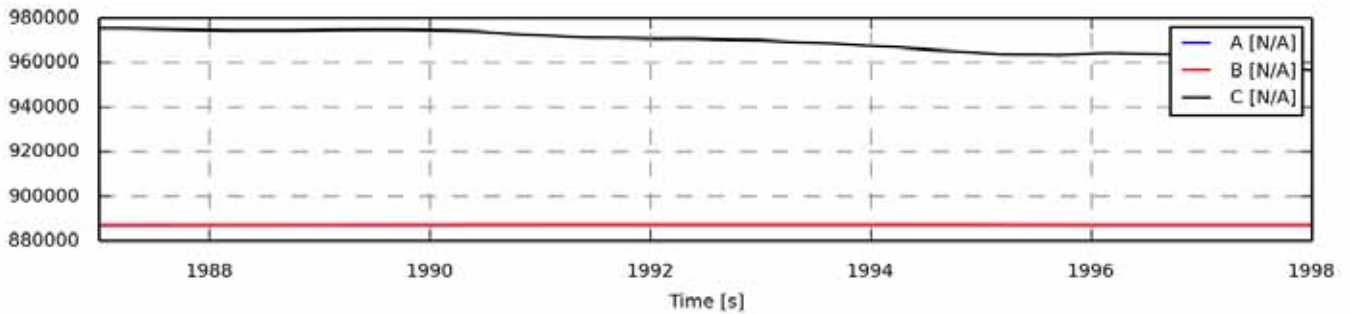


Figure 1682 - Zoom of time series

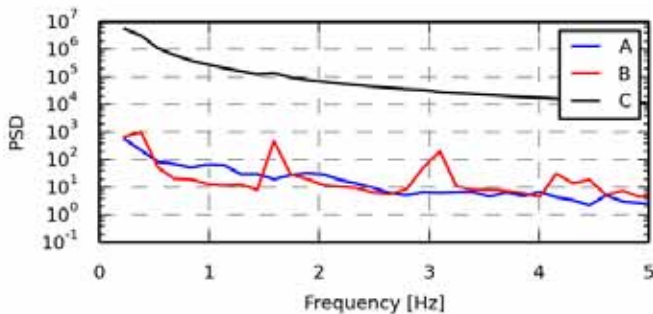


Figure 1683 - Power spectrum density

Statistics	A	B	C
Min	8.8596e+05	8.8572e+05	8.5613e+05
Max	8.8748e+05	8.8722e+05	9.7537e+05
Mean	8.8678e+05	8.8652e+05	9.2174e+05
Std	436.7849	450.5358	3.7218e+04
Skewness	-0.1668	-0.1459	-0.1001
Kurtosis	-1.0196	-1.3252	-1.2802

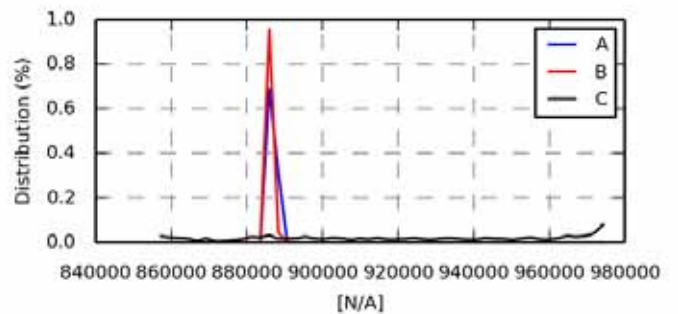


Figure 1684 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	269.1265	282.2817	2.2952e+04
Eq (m=4)	407.1262	419.0773	3.4049e+04
Eq (m=6)	626.4454	628.8655	5.0763e+04
Eq (m=8)	781.2732	774.7392	6.2237e+04
Eq (m=10)	892.8599	880.4953	7.0504e+04
Eq (m=12)	976.1605	960.2289	7.6730e+04

Section 18.22 oc4_p2_load_case_3-9a: ESYS line3_1 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-9a.sel (01-03-2014 07:48)	471	ESYS line3_1 SENSOR 4
B	WAMsim/oc4_p2_load_case_3-9a.sel (01-04-2014 12:48)	471	ESYS line3_1 SENSOR 4
C	hawc2/oc4_p2_load_case_3-9a.sel (04-12-2013 20:49)	471	ESYS line3_1 SENSOR 4

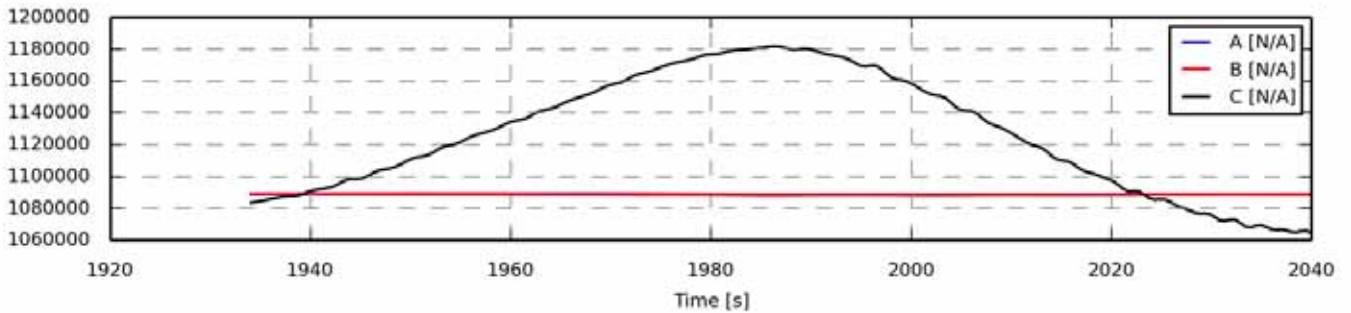


Figure 1685 - Full length time series

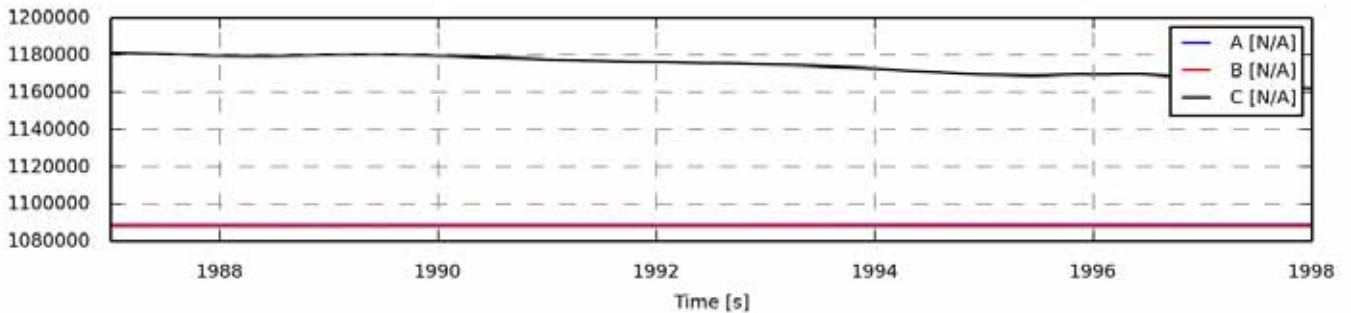


Figure 1686 - Zoom of time series

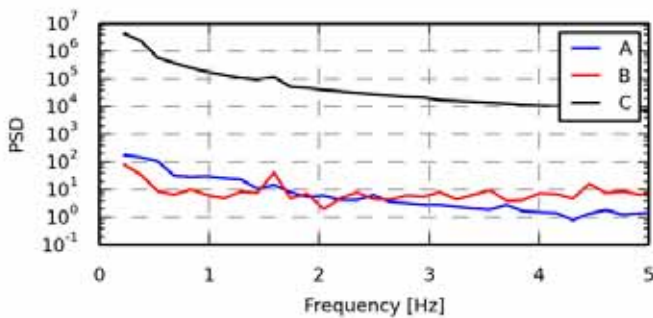


Figure 1687 - Power spectrum density

Statistics	A	B	C
Min	1.0887e+06	1.0883e+06	1.0649e+06
Max	1.0893e+06	1.0892e+06	1.1817e+06
Mean	1.0890e+06	1.0887e+06	1.1269e+06
Std	201.3395	229.8418	3.6924e+04
Skewness	0.1033	0.1350	-0.0379
Kurtosis	-1.5734	-1.3061	-1.3336

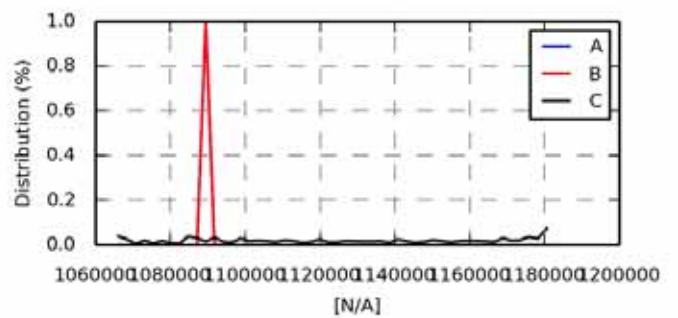


Figure 1688 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	104.7240	299.5982	2.2869e+04
Eq (m=4)	156.3021	289.1592	3.3853e+04
Eq (m=6)	238.5072	362.2151	5.0278e+04
Eq (m=8)	296.7193	441.5779	6.1452e+04
Eq (m=10)	338.8408	501.1469	6.9450e+04
Eq (m=12)	370.3680	546.1868	7.5450e+04

Section 18.23 oc4_p2_load_case_3-9a: ESYS line3_3 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-9a.sel (01-03-2014 07:48)	675	ESYS line3_3 SENSOR 104
B	WAMsim/oc4_p2_load_case_3-9a.sel (01-04-2014 12:48)	675	ESYS line3_3 SENSOR 104
C	hawc2/oc4_p2_load_case_3-9a.sel (04-12-2013 20:49)	675	ESYS line3_3 SENSOR 104

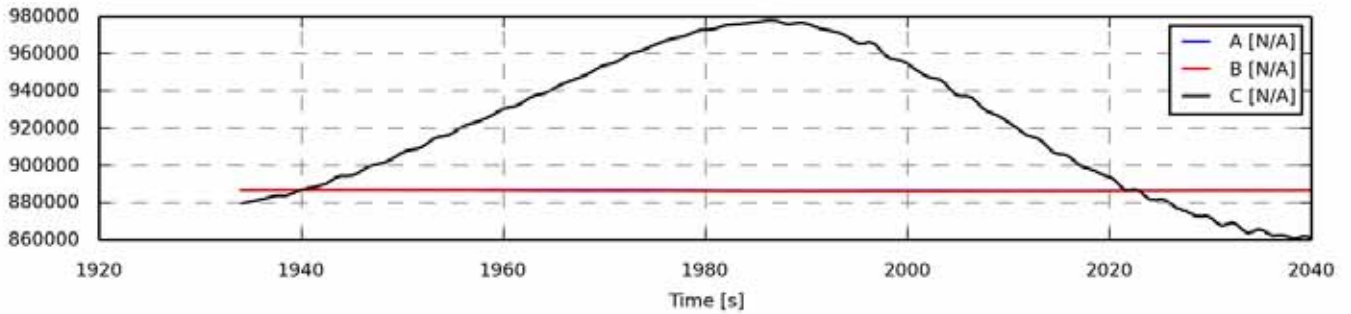


Figure 1689 - Full length time series

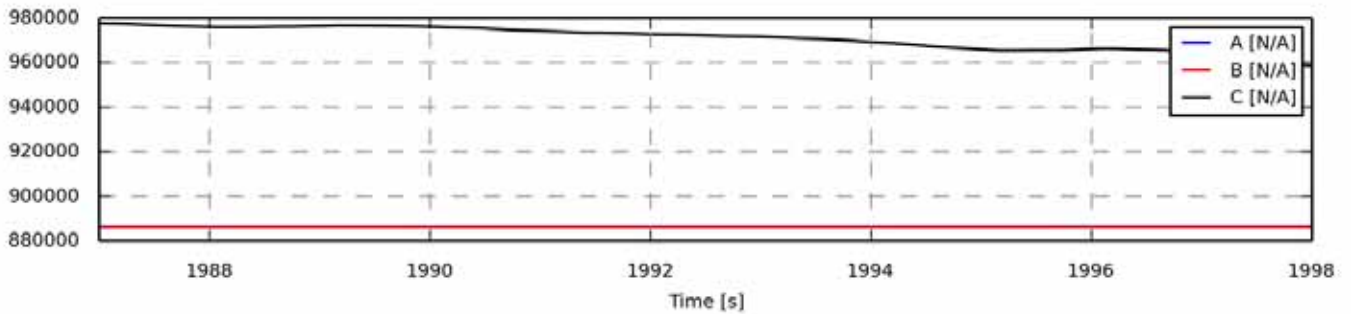


Figure 1690 - Zoom of time series

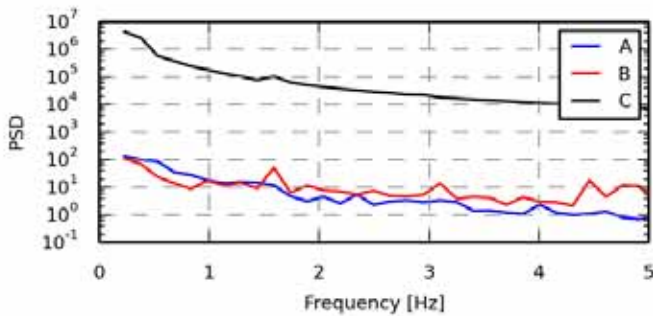


Figure 1691 - Power spectrum density

Statistics	A	B	C
Min	8.8653e+05	8.8625e+05	8.6073e+05
Max	8.8712e+05	8.8692e+05	9.7796e+05
Mean	8.8682e+05	8.8655e+05	9.2305e+05
Std	200.2626	225.1114	3.6996e+04
Skewness	0.1180	0.1430	-0.0366
Kurtosis	-1.6052	-1.3845	-1.3319

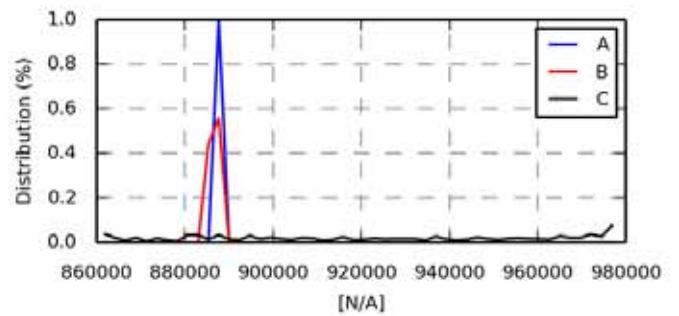


Figure 1692 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	105.6877	133.5651	2.2961e+04
Eq (m=4)	158.1412	185.3110	3.3989e+04
Eq (m=6)	240.6291	277.5259	5.0480e+04
Eq (m=8)	298.8351	342.9225	6.1699e+04
Eq (m=10)	341.0198	390.4102	6.9729e+04
Eq (m=12)	372.6536	426.1683	7.5753e+04

Article XIX. oc4_p2_load_case_3-9b

Generated 22-04-2014 10:04

Section 19.01 oc4_p2_load_case_3-9b: WSP gl. coo.,Vy [m/s]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-9b.sel (01-03-2014 10:03)	3	Free wind speed Vy, gl. coo, of gl. pos 0.00, 0.00, -90.00
B	WAMsim/oc4_p2_load_case_3-9b.sel (01-04-2014 12:49)	3	Free wind speed Vy, gl. coo, of gl. pos 0.00, 0.00, -90.00
C	hawc2/oc4_p2_load_case_3-9b.sel (31-03-2014 15:37)	3	Free wind speed Vy, gl. coo, of gl. pos 0.00, 0.00, -90.00

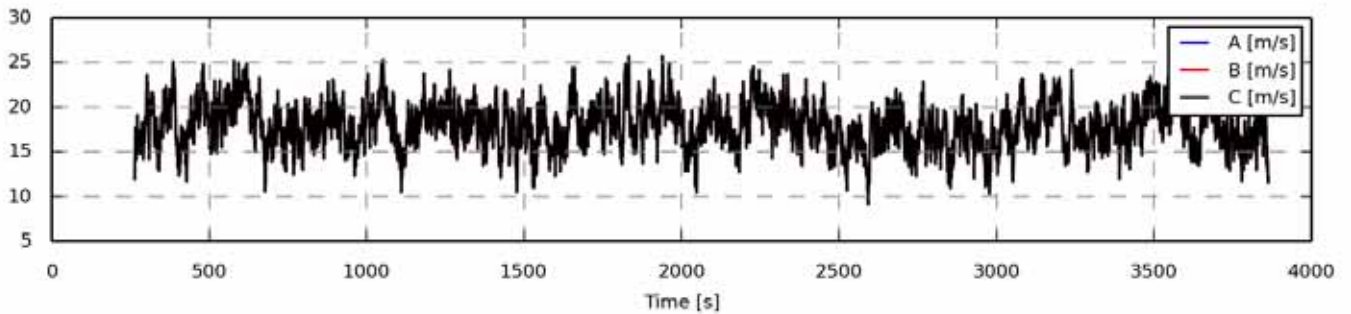


Figure 1693 - Full length time series

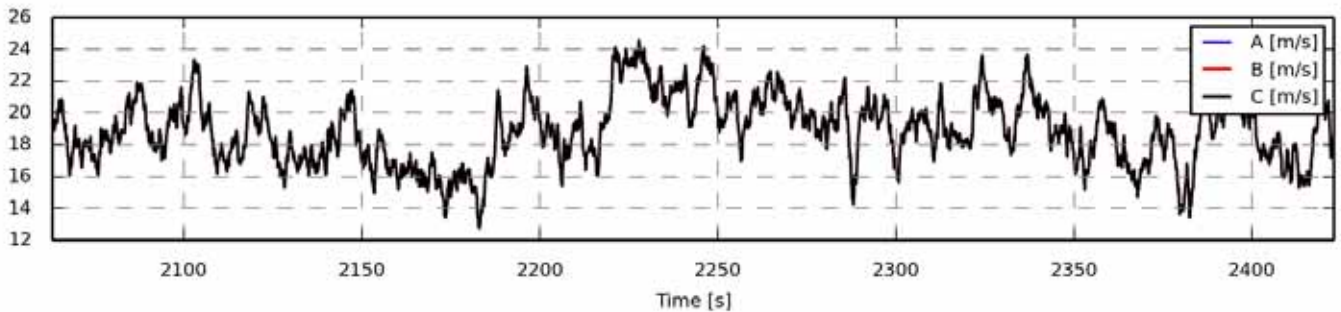


Figure 1694 - Zoom of time series

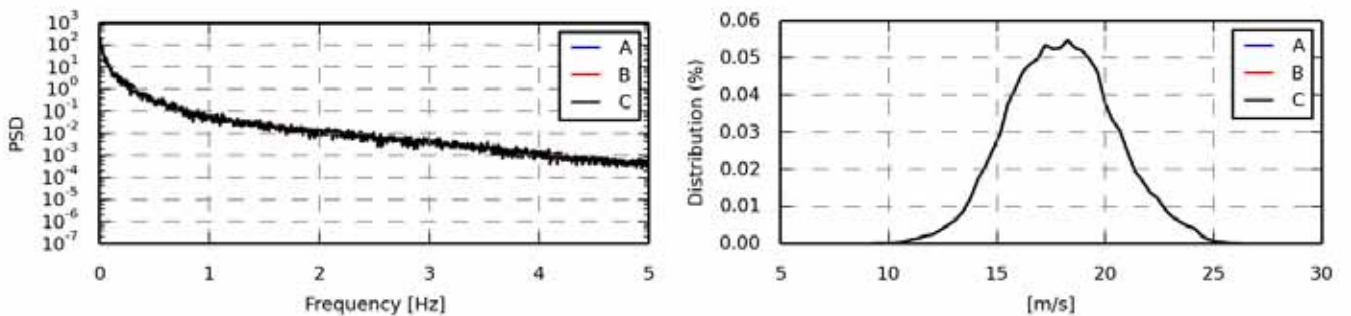


Figure 1695 - Power spectrum density

Statistics	A	B	C
Min	9.1150	9.1150	9.1150
Max	26.3700	26.3700	26.3700
Mean	17.9861	17.9861	17.9861
Std	2.4545	2.4545	2.4545
Skewness	0.0743	0.0743	0.0743
Kurtosis	-0.1223	-0.1223	-0.1223

Figure 1696 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	2.8772	2.8772	2.8772
Eq (m=4)	3.8808	3.8808	3.8808
Eq (m=6)	5.6355	5.6355	5.6355
Eq (m=8)	7.0328	7.0328	7.0328
Eq (m=10)	8.1448	8.1448	8.1448
Eq (m=12)	9.0443	9.0443	9.0443

Section 19.02 oc4_p2_load_case_3-9b: Water surf. [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-9b.sel (01-03-2014 10:03)	5	Water surface gl. coo, at gl. coo, x,y= 0.00, 0.00
B	WAMsim/oc4_p2_load_case_3-9b.sel (01-04-2014 12:49)	5	Constant value
C	hawc2/oc4_p2_load_case_3-9b.sel (31-03-2014 15:37)	5	Water surface gl. coo, at gl. coo, x,y= 0.00, 0.00

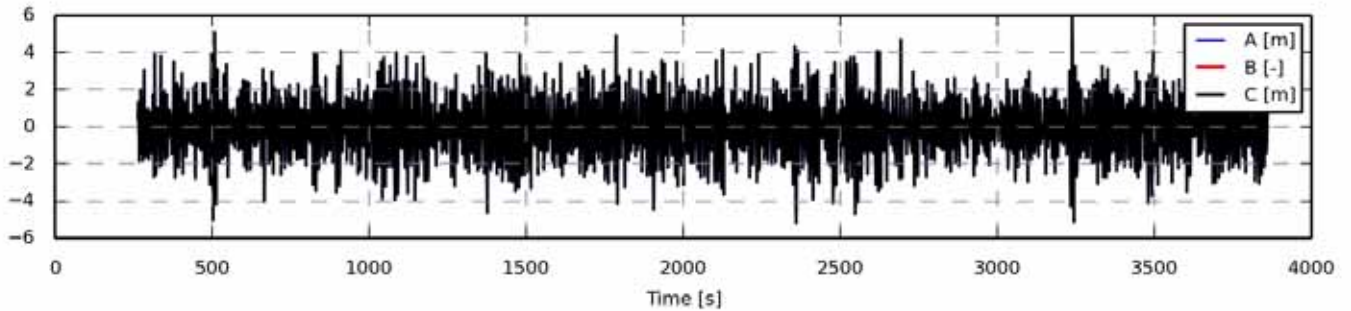


Figure 1697 - Full length time series

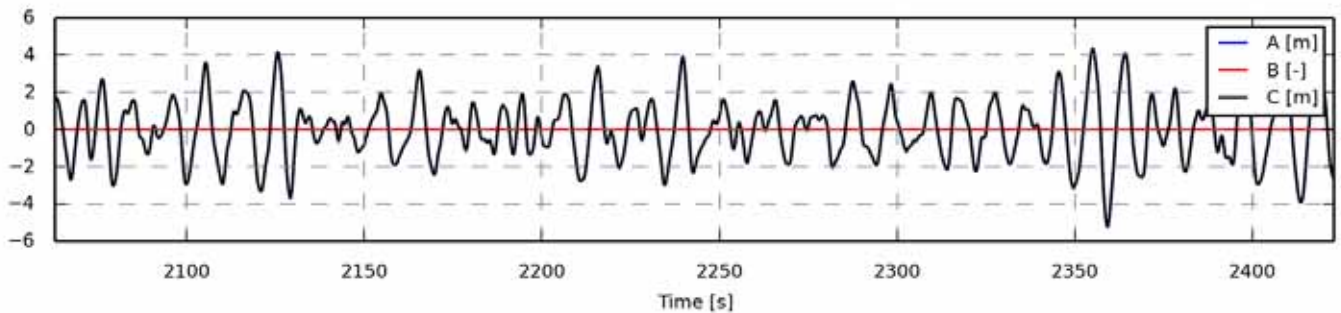


Figure 1698 - Zoom of time series

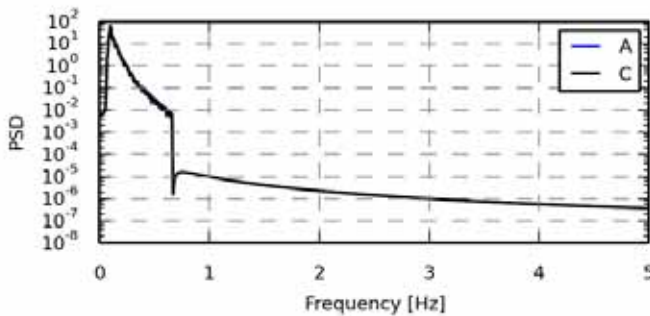


Figure 1699 - Power spectrum density

Statistics	A	B	C
Min	-5.1966	0.0000	-5.1928
Max	5.8607	0.0000	5.8597
Mean	0.0009	0.0000	0.0009
Std	1.4859	0.0000	1.4847
Skewness	0.0193	0.0000	0.0192
Kurtosis	-0.0329	-3.0000	-0.0328

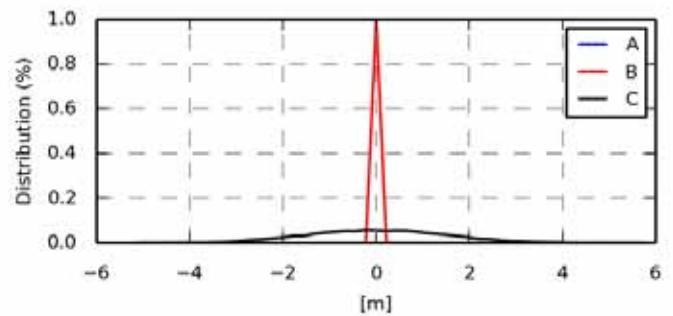


Figure 1700 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	2.2965	-	2.2941
Eq (m=4)	2.9419	-	2.9391
Eq (m=6)	3.9523	-	3.9495
Eq (m=8)	4.7503	-	4.7477
Eq (m=10)	5.4109	-	5.4083
Eq (m=12)	5.9650	-	5.9623

Section 19.03 oc4_p2_load_case_3-9b: DLL inp 1: 9 [-]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-9b.sel (01-03-2014 10:03)	6	DLL : 1 inpvec : 9 electrical power generator [kw]
B	WAMsim/oc4_p2_load_case_3-9b.sel (01-04-2014 12:49)	6	DLL : 1 inpvec : 9 electrical power generator [kw]
C	hawc2/oc4_p2_load_case_3-9b.sel (31-03-2014 15:37)	6	DLL : 1 inpvec : 9 electrical power generator [kw]

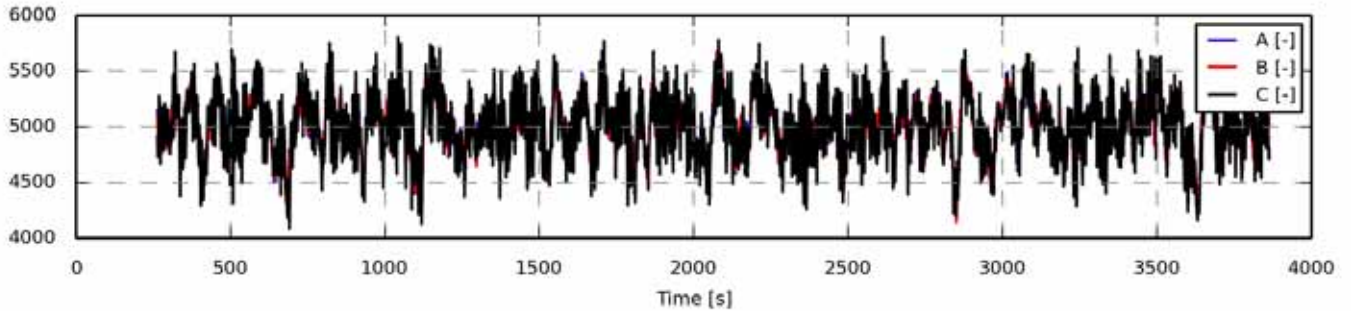


Figure 1701 - Full length time series

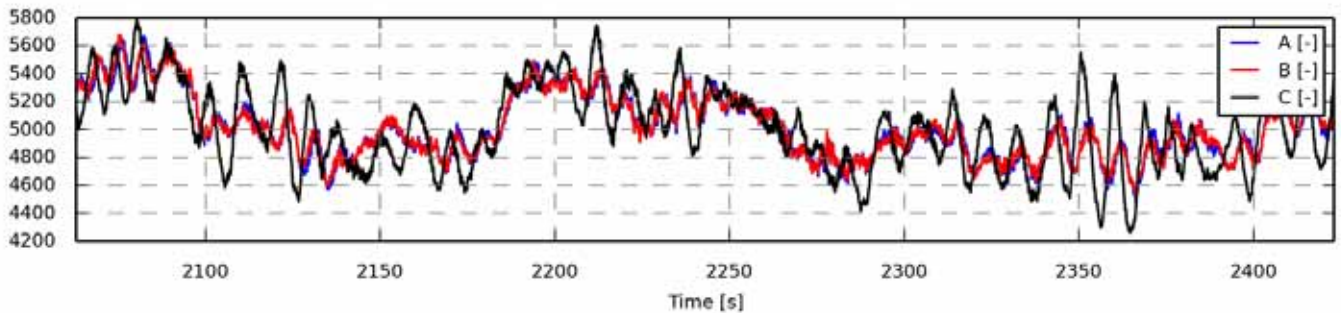


Figure 1702 - Zoom of time series

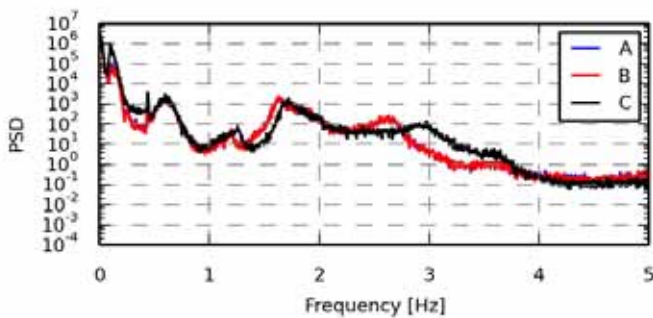


Figure 1703 - Power spectrum density

Statistics	A	B	C
Min	4.1778e+03	4.1408e+03	4.0870e+03
Max	5.6708e+03	5.6798e+03	5.8020e+03
Mean	5.0001e+03	5.0000e+03	4.9999e+03
Std	223.1337	220.8712	276.6413
Skewness	-0.1814	-0.2078	-0.1060
Kurtosis	-0.1009	-0.0195	-0.1976

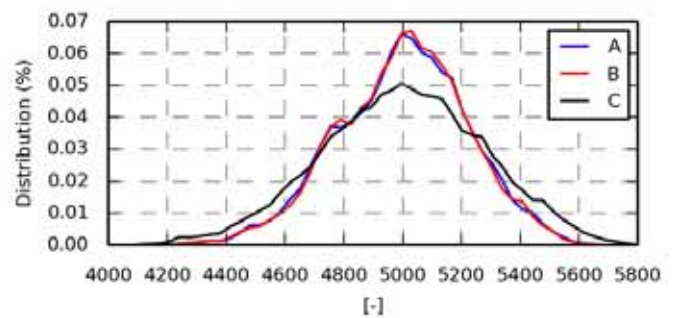


Figure 1704 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	223.0909	217.4902	333.6774
Eq (m=4)	314.2866	310.0414	445.5060
Eq (m=6)	472.9277	473.2044	626.6486
Eq (m=8)	596.2945	601.8663	764.2076
Eq (m=10)	693.4651	704.3893	871.2132
Eq (m=12)	771.9233	787.7931	956.5951

Section 19.04 oc4_p2_load_case_3-9b: bea1 angle_speed [rpm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-9b.sel (01-03-2014 10:03)	9	shaft_rot angle speed
B	WAMsim/oc4_p2_load_case_3-9b.sel (01-04-2014 12:49)	9	shaft_rot angle speed
C	hawc2/oc4_p2_load_case_3-9b.sel (31-03-2014 15:37)	9	shaft_rot angle speed

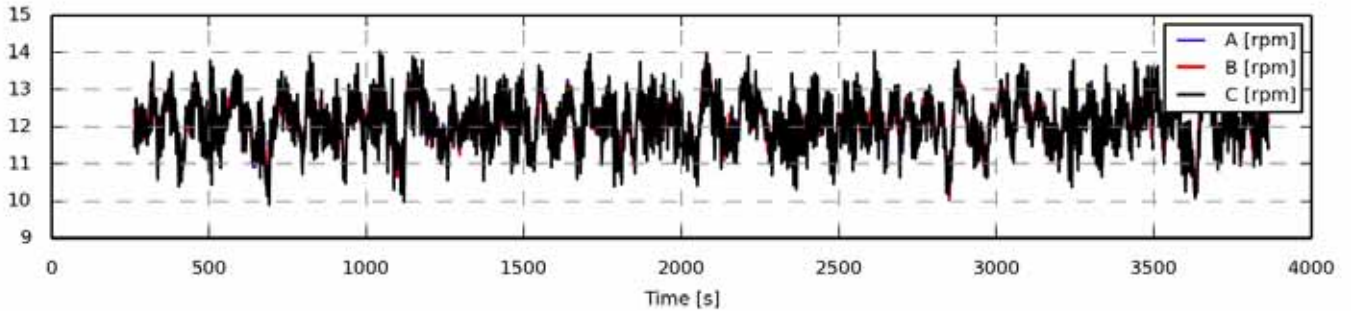


Figure 1705 - Full length time series

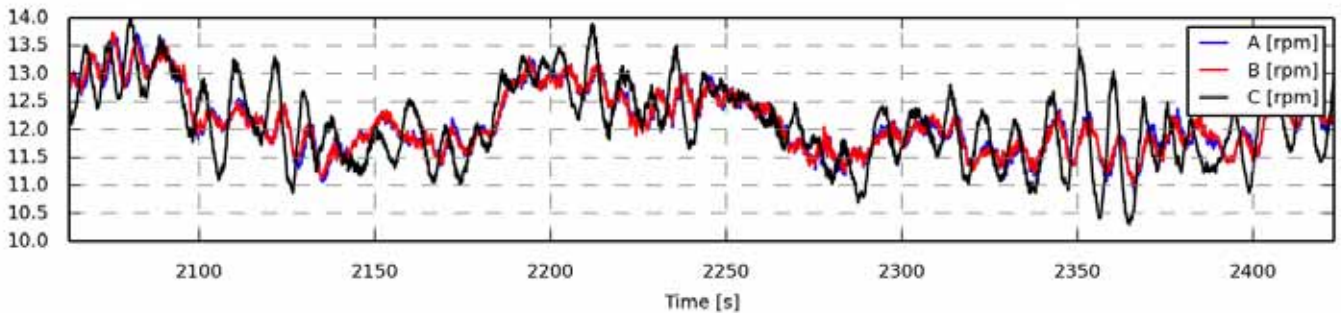


Figure 1706 - Zoom of time series

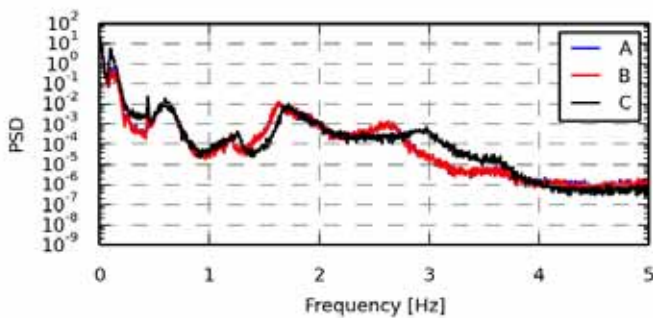


Figure 1707 - Power spectrum density

Statistics	A	B	C
Min	10.1122	10.0223	9.8914
Max	13.7219	13.7439	14.0384
Mean	12.1003	12.1001	12.0997
Std	0.5399	0.5344	0.6694
Skewness	-0.1815	-0.2079	-0.1061
Kurtosis	-0.1010	-0.0196	-0.1977

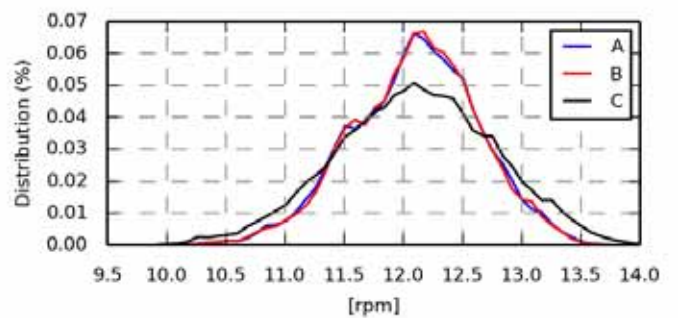


Figure 1708 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.5385	0.5247	0.8053
Eq (m=4)	0.7595	0.7487	1.0757
Eq (m=6)	1.1434	1.1432	1.5139
Eq (m=8)	1.4417	1.4545	1.8468
Eq (m=10)	1.6766	1.7026	2.1058
Eq (m=12)	1.8663	1.9046	2.3125

Section 19.05 oc4_p2_load_case_3-9b: bea1 angle [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-9b.sel (01-03-2014 10:03)	14	pitch1 angle
B	WAMsim/oc4_p2_load_case_3-9b.sel (01-04-2014 12:49)	14	pitch1 angle
C	hawc2/oc4_p2_load_case_3-9b.sel (31-03-2014 15:37)	14	pitch1 angle

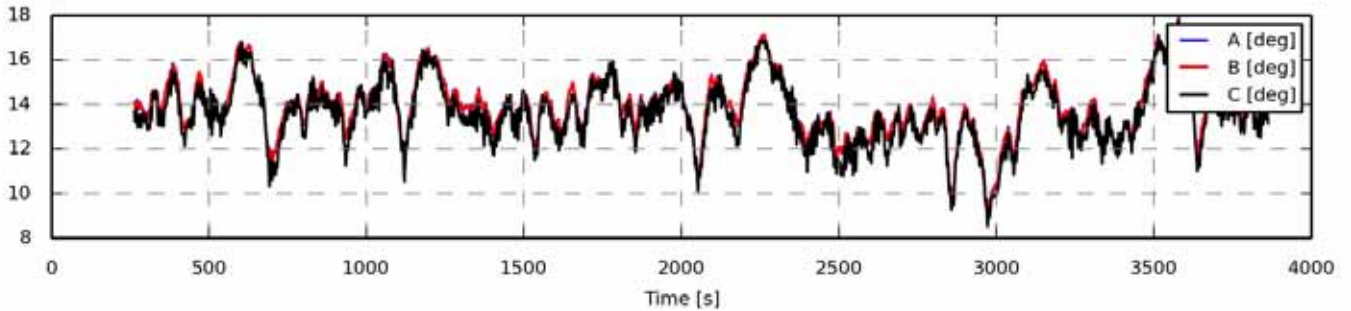


Figure 1709 - Full length time series

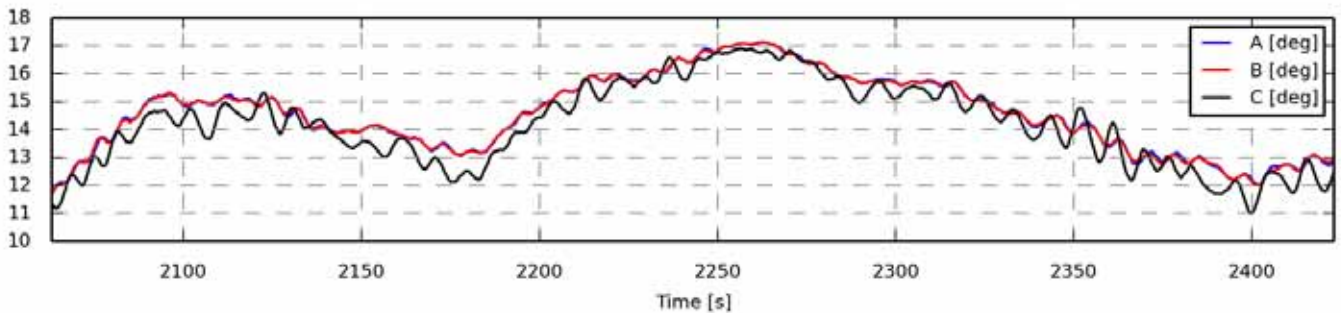


Figure 1710 - Zoom of time series

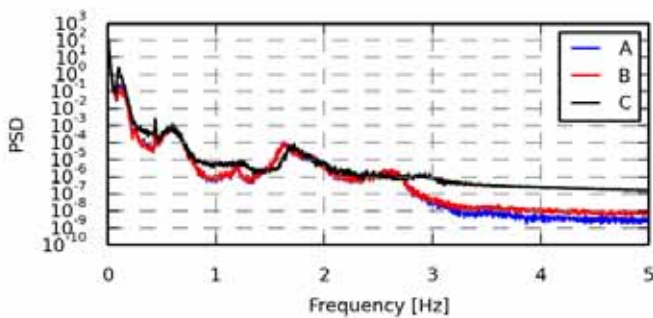


Figure 1711 - Power spectrum density

Statistics	A	B	C
Min	9.1460	9.2572	8.5104
Max	17.8797	17.8269	17.8041
Mean	13.9167	13.9171	13.5781
Std	1.3380	1.3386	1.4002
Skewness	-0.0718	-0.0762	0.0082
Kurtosis	0.6531	0.6522	0.4464

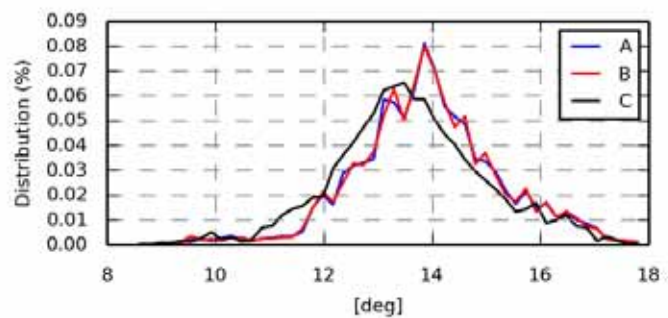


Figure 1712 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.7751	0.7630	0.8780
Eq (m=4)	1.2942	1.2743	1.4144
Eq (m=6)	2.2750	2.2377	2.4363
Eq (m=8)	3.0934	3.0396	3.2906
Eq (m=10)	3.7553	3.6879	3.9843
Eq (m=12)	4.2909	4.2123	4.5485

Section 19.06 oc4_p2_load_case_3-9b: State pos x coo: global [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-9b.sel (01-03-2014 10:03)	19	State pos x Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
B	WAMsim/oc4_p2_load_case_3-9b.sel (01-04-2014 12:49)	19	State pos x Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
C	hawc2/oc4_p2_load_case_3-9b.sel (31-03-2014 15:37)	19	State pos x Mbdy:mc E-nr: 8 Z-rel:0.00 coo: global platform translation in surge sway and heave

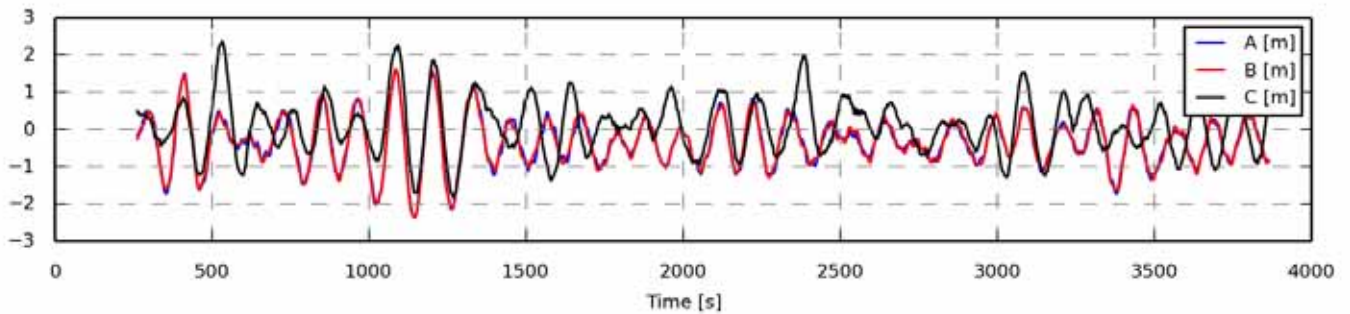


Figure 1713 - Full length time series

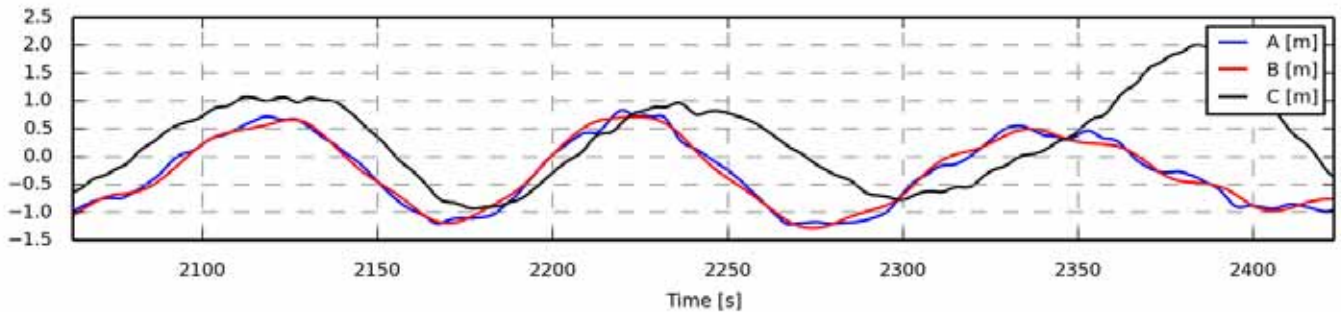


Figure 1714 - Zoom of time series

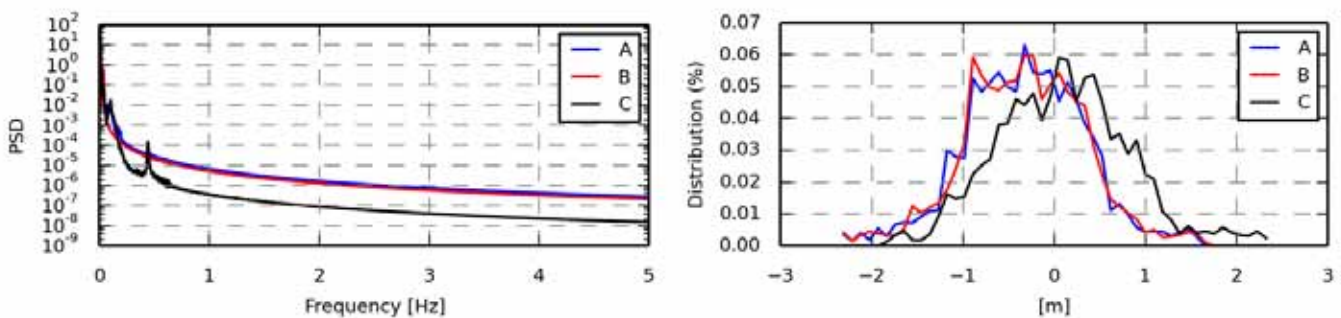


Figure 1715 - Power spectrum density

Statistics	A	B	C
Min	-2.3293	-2.3549	-1.8167
Max	1.5721	1.6263	2.3683
Mean	-0.3230	-0.3222	0.0963
Std	0.6601	0.6604	0.7261
Skewness	-0.0523	-0.0570	0.2522
Kurtosis	0.2737	0.3301	0.2106

Figure 1716 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.4256	0.4269	0.4484
Eq (m=4)	0.6882	0.6915	0.7251
Eq (m=6)	1.1562	1.1672	1.2130
Eq (m=8)	1.5259	1.5458	1.5960
Eq (m=10)	1.8135	1.8412	1.8942
Eq (m=12)	2.0401	2.0742	2.1306

Section 19.07 oc4_p2_load_case_3-9b: State pos y coo: global [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-9b.sel (01-03-2014 10:03)	20	State pos y Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
B	WAMsim/oc4_p2_load_case_3-9b.sel (01-04-2014 12:49)	20	State pos y Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
C	hawc2/oc4_p2_load_case_3-9b.sel (31-03-2014 15:37)	20	State pos y Mbdy:mc E-nr: 8 Z-rel:0.00 coo: global platform translation in surge sway and heave

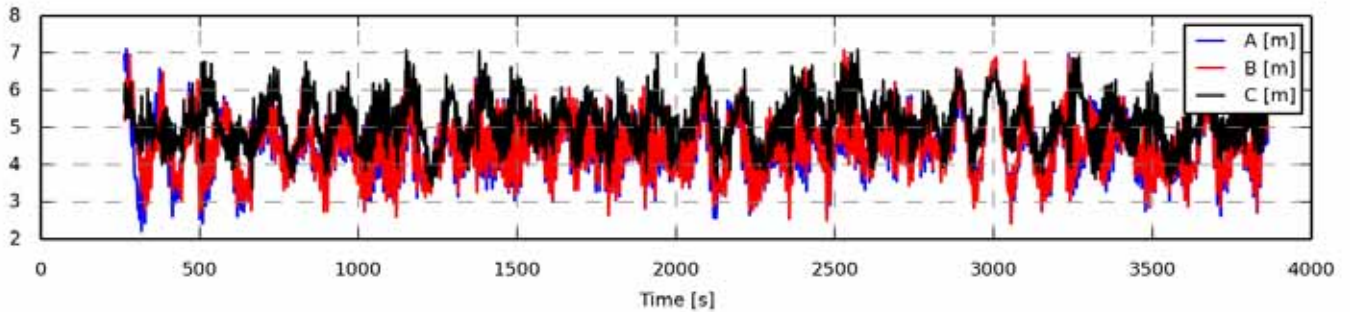


Figure 1717 - Full length time series

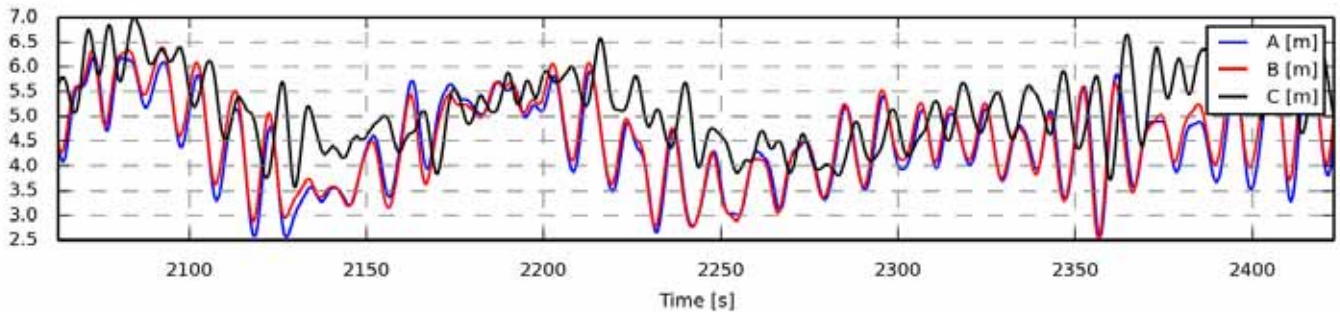


Figure 1718 - Zoom of time series

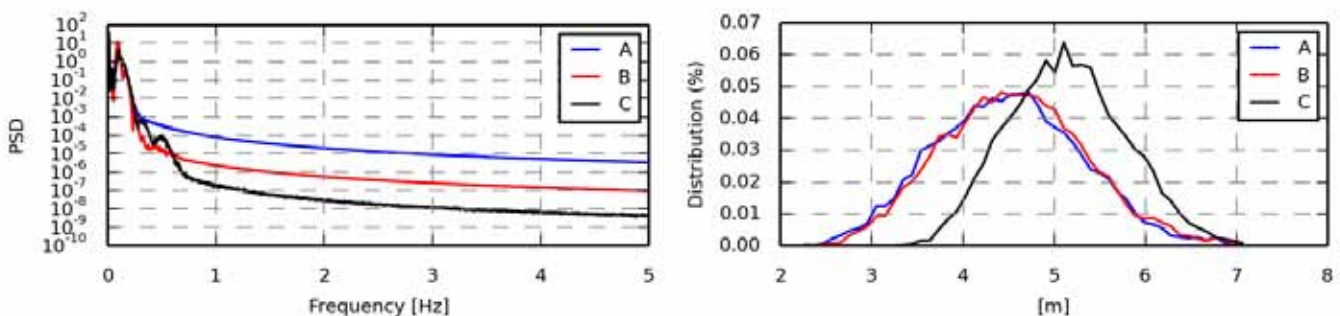


Figure 1719 - Power spectrum density

Statistics	A	B	C
Min	2.2203	2.4260	3.3593
Max	7.1129	7.0923	7.1055
Mean	4.4955	4.5580	5.1361
Std	0.8022	0.7855	0.6420
Skewness	0.1544	0.1752	0.1505
Kurtosis	-0.2168	-0.2106	-0.3327

Figure 1720 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.8565	0.8524	0.6679
Eq (m=4)	1.1553	1.1508	0.9114
Eq (m=6)	1.6460	1.6408	1.3227
Eq (m=8)	2.0308	2.0211	1.6415
Eq (m=10)	2.3391	2.3201	1.8890
Eq (m=12)	2.5912	2.5594	2.0850

Section 19.08 oc4_p2_load_case_3-9b: State pos z coo: global [m]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-9b.sel (01-03-2014 10:03)	21	State pos z Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
B	WAMsim/oc4_p2_load_case_3-9b.sel (01-04-2014 12:49)	21	State pos z Mbdy:mc_coupling E-nr: 1 Z-rel:0.00 coo: global platform translation in surge sway and heave
C	hawc2/oc4_p2_load_case_3-9b.sel (31-03-2014 15:37)	21	State pos z Mbdy:mc E-nr: 8 Z-rel:0.00 coo: global platform translation in surge sway and heave

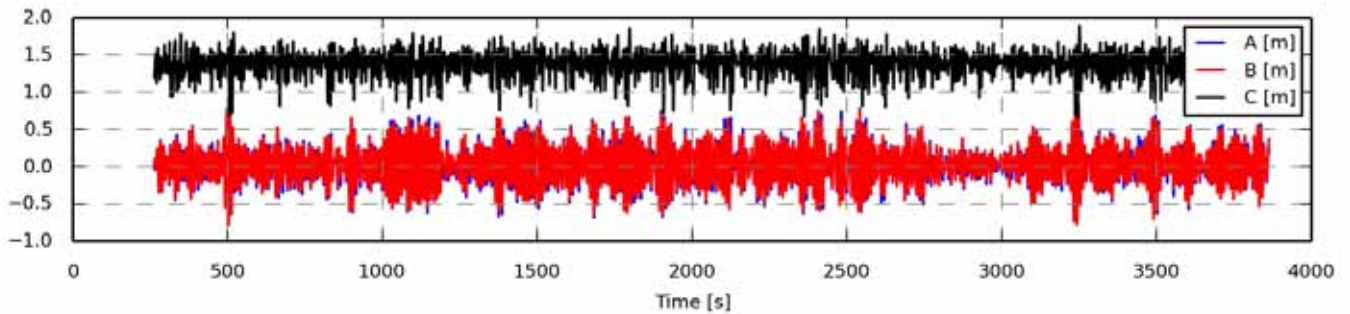


Figure 1721 - Full length time series

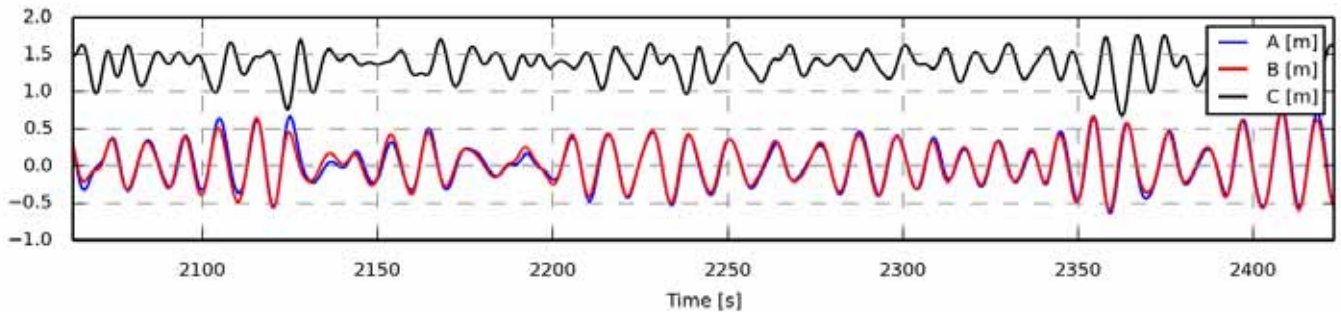


Figure 1722 - Zoom of time series

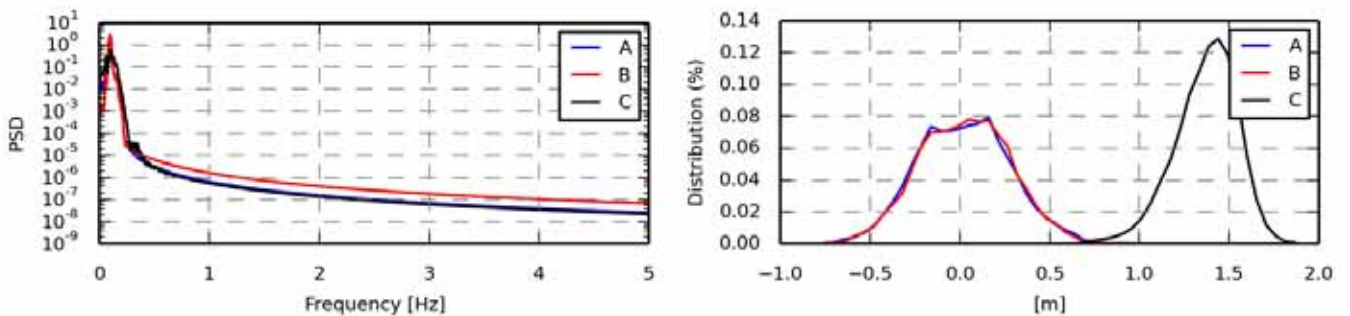


Figure 1723 - Power spectrum density

Statistics	A	B	C
Min	-0.7215	-0.7755	0.6640
Max	0.9414	0.8810	1.8934
Mean	0.0218	0.0267	1.3700
Std	0.2564	0.2508	0.1747
Skewness	0.0965	0.0032	-0.5518
Kurtosis	-0.2059	-0.2710	0.4861

Figure 1724 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.3590	0.3524	0.2522
Eq (m=4)	0.4679	0.4584	0.3294
Eq (m=6)	0.6343	0.6201	0.4513
Eq (m=8)	0.7588	0.7412	0.5446
Eq (m=10)	0.8570	0.8375	0.6187
Eq (m=12)	0.9372	0.9165	0.6786

Section 19.09 oc4_p2_load_case_3-9b: proj_ang tx coo: global [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-9b.sel (01-03-2014 10:03)	22	State_rot proj_ang tx Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
B	WAMsim/oc4_p2_load_case_3-9b.sel (01-04-2014 12:49)	22	State_rot proj_ang tx Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
C	hawc2/oc4_p2_load_case_3-9b.sel (31-03-2014 15:37)	22	State_rot proj_ang tx Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw

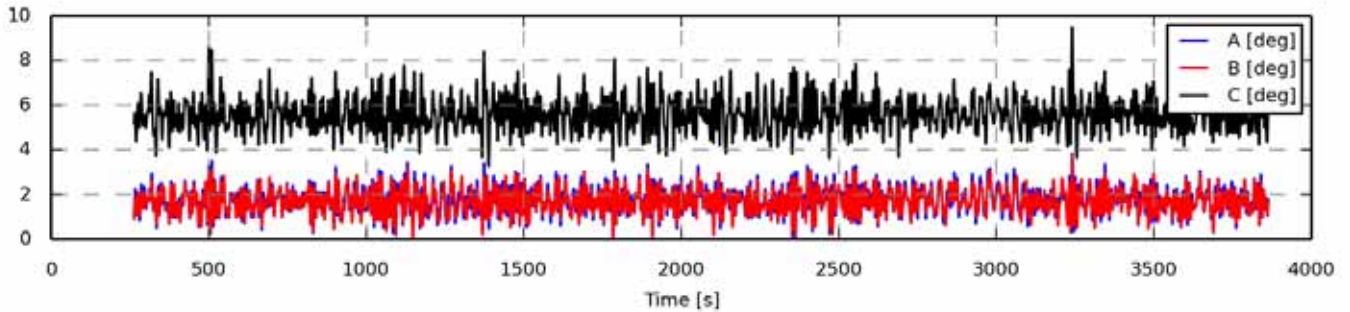


Figure 1725 - Full length time series

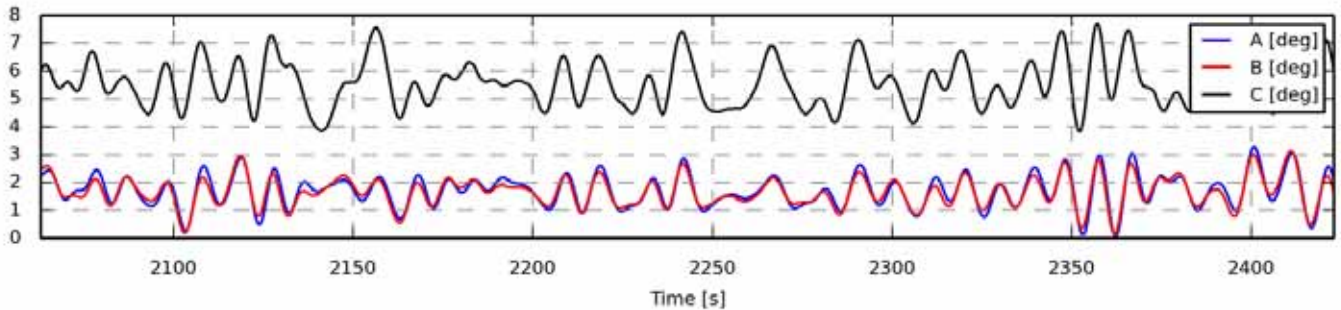


Figure 1726 - Zoom of time series

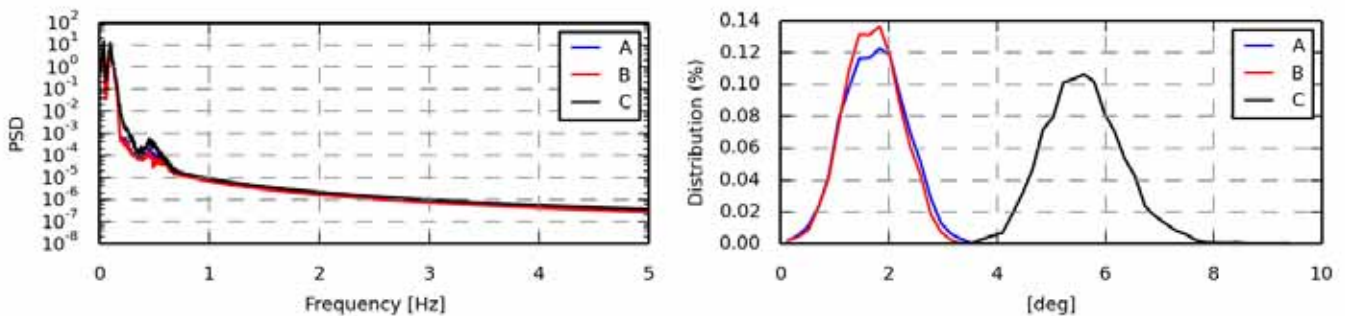


Figure 1727 - Power spectrum density

Statistics	A	B	C
Min	0.0405	0.0679	3.2879
Max	3.8343	3.7167	9.4659
Mean	1.7501	1.7053	5.5926
Std	0.5687	0.5200	0.7225
Skewness	0.0610	0.0314	0.3842
Kurtosis	-0.2606	-0.1851	0.6402

Figure 1728 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.7490	0.6743	0.9518
Eq (m=4)	0.9877	0.8953	1.2914
Eq (m=6)	1.3582	1.2428	1.8665
Eq (m=8)	1.6385	1.5101	2.3505
Eq (m=10)	1.8599	1.7253	2.7618
Eq (m=12)	2.0395	1.9033	3.1079

Section 19.10 oc4_p2_load_case_3-9b: proj_ang ty coo: global [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-9b.sel (01-03-2014 10:03)	23	State_rot proj_ang ty Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
B	WAMsim/oc4_p2_load_case_3-9b.sel (01-04-2014 12:49)	23	State_rot proj_ang ty Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
C	hawc2/oc4_p2_load_case_3-9b.sel (31-03-2014 15:37)	23	State_rot proj_ang ty Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw

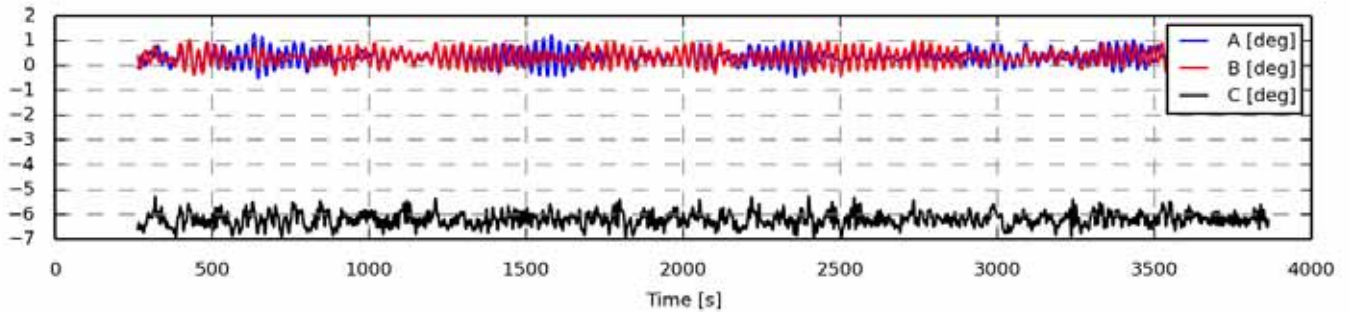


Figure 1729 - Full length time series

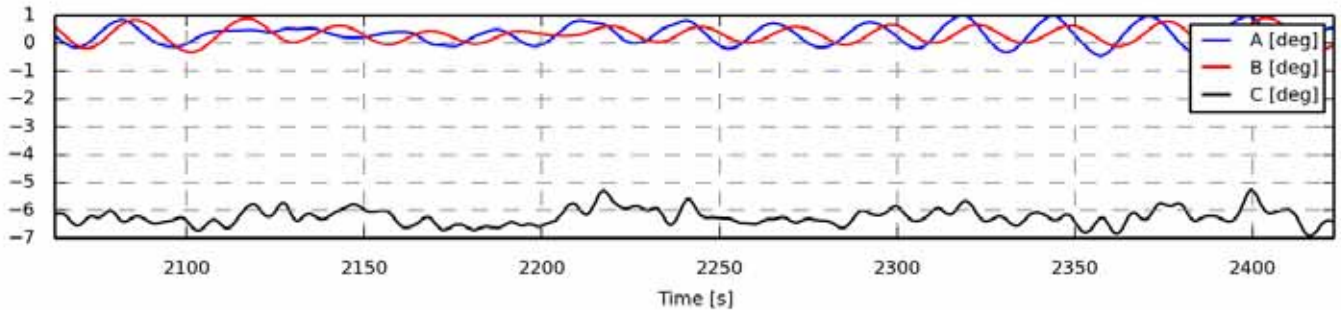


Figure 1730 - Zoom of time series

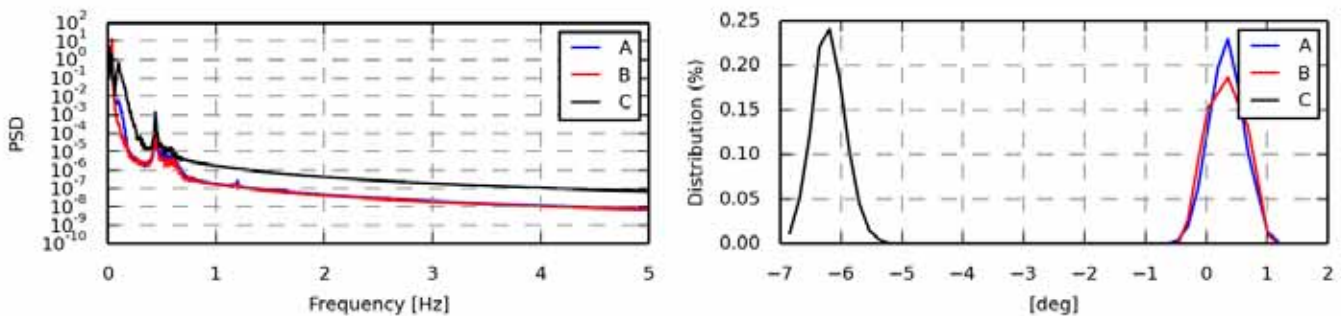


Figure 1731 - Power spectrum density

Statistics	A	B	C
Min	-0.5180	-0.3863	-6.9279
Max	1.2553	1.0514	-5.2732
Mean	0.3352	0.3257	-6.1997
Std	0.2830	0.3048	0.2656
Skewness	0.0356	0.0109	0.2210
Kurtosis	-0.1662	-0.8006	0.0344

Figure 1732 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	0.2868	0.2950	0.2938
Eq (m=4)	0.4053	0.4054	0.4105
Eq (m=6)	0.5943	0.5687	0.6004
Eq (m=8)	0.7379	0.6832	0.7430
Eq (m=10)	0.8509	0.7688	0.8521
Eq (m=12)	0.9422	0.8359	0.9377

Section 19.11 oc4_p2_load_case_3-9b: proj_ang tz coo: global [deg]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-9b.sel (01-03-2014 10:03)	24	State_rot proj_ang tz Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
B	WAMsim/oc4_p2_load_case_3-9b.sel (01-04-2014 12:49)	24	State_rot proj_ang tz Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw
C	hawc2/oc4_p2_load_case_3-9b.sel (31-03-2014 15:37)	24	State_rot proj_ang tz Mbdy:mc_dummy E-nr: 1 Z-rel:0.00 coo: global platform rotation in roll pitch and yaw

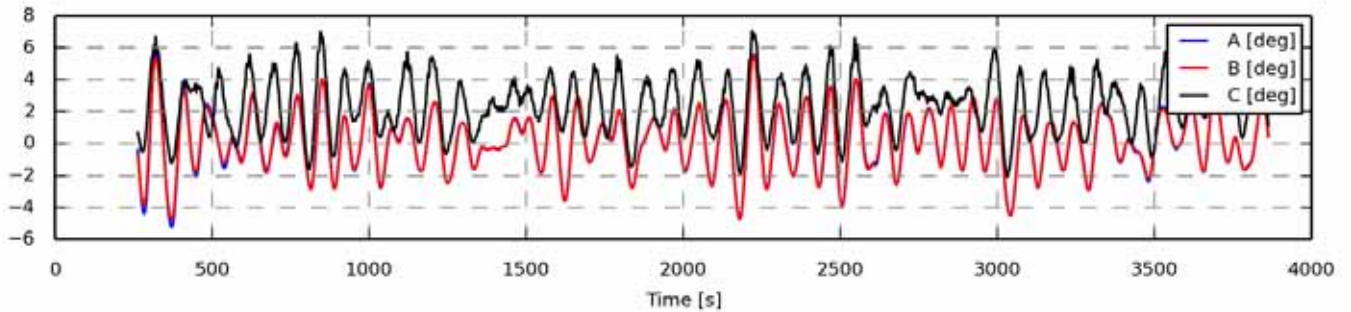


Figure 1733 - Full length time series

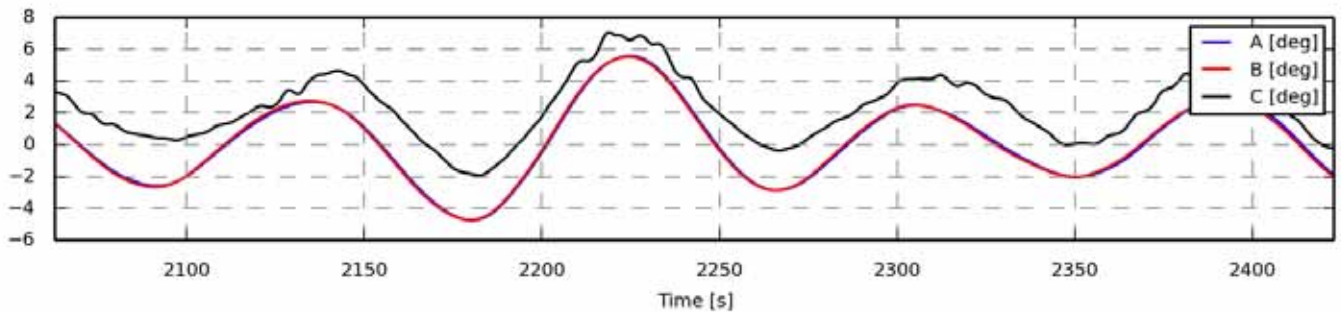


Figure 1734 - Zoom of time series

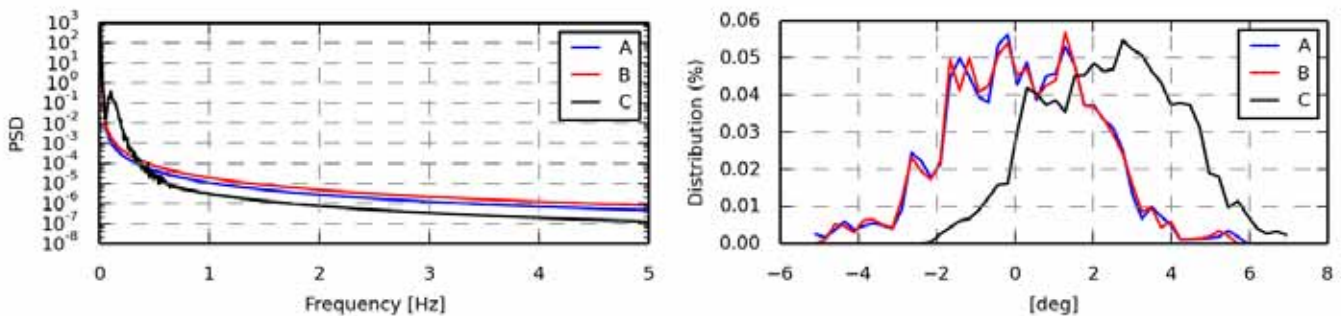


Figure 1735 - Power spectrum density

Statistics	A	B	C
Min	-5.2241	-4.7663	-2.0737
Max	5.7443	5.5108	7.0579
Mean	0.1679	0.1672	2.4241
Std	1.8444	1.8231	1.7472
Skewness	-0.0533	-0.0445	-0.0250
Kurtosis	-0.0440	-0.1818	-0.5526

Figure 1736 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	1.2640	1.2462	1.2400
Eq (m=4)	1.9755	1.9353	1.8870
Eq (m=6)	3.2340	3.1331	2.9578
Eq (m=8)	4.2466	4.0824	3.7747
Eq (m=10)	5.0491	4.8294	4.4091
Eq (m=12)	5.6893	5.4234	4.9126

Section 19.12 oc4_p2_load_case_3-9b: Mx coo: towertop [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-9b.sel (01-03-2014 10:03)	37	MomentMx Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
B	WAMsim/oc4_p2_load_case_3-9b.sel (01-04-2014 12:49)	37	MomentMx Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
C	hawc2/oc4_p2_load_case_3-9b.sel (31-03-2014 15:37)	37	MomentMx Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment

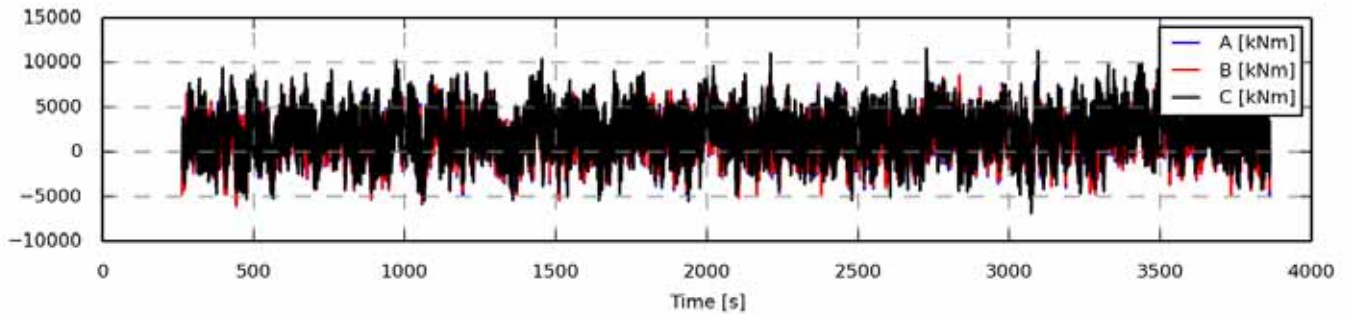


Figure 1737 - Full length time series

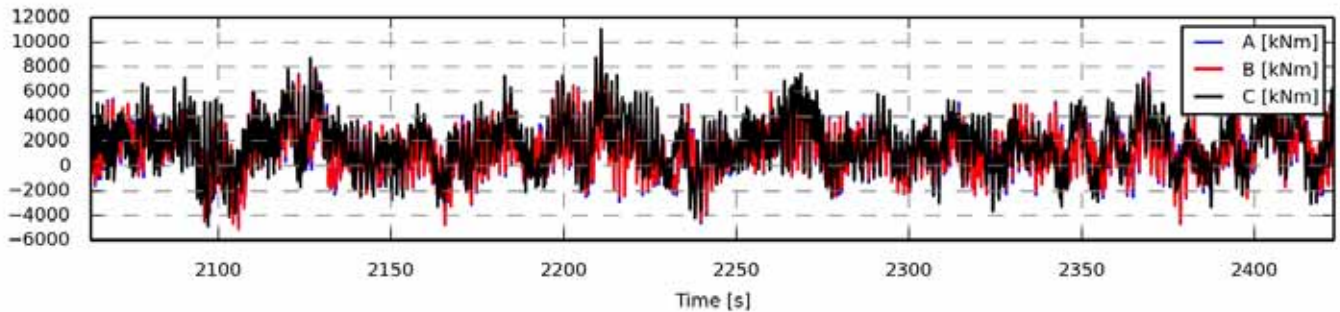


Figure 1738 - Zoom of time series

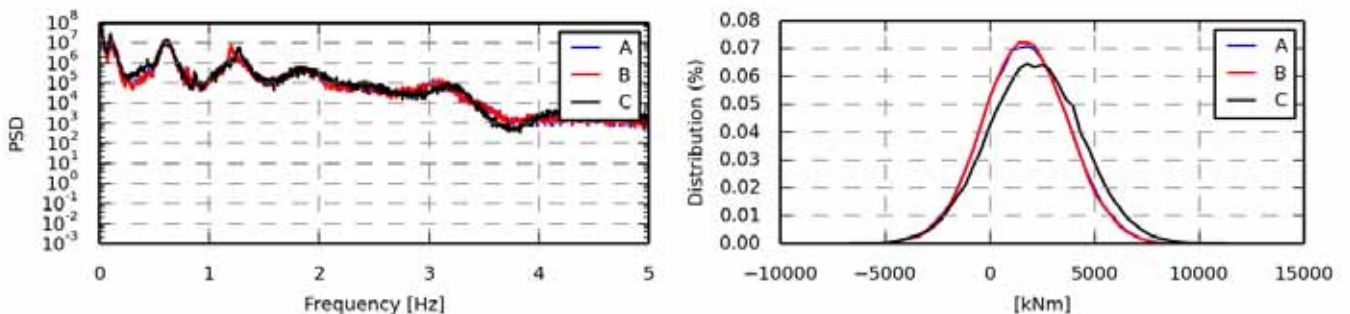


Figure 1739 - Power spectrum density

Statistics	A	B	C
Min	-6.0695e+03	-5.9934e+03	-6.8894e+03
Max	8.9101e+03	8.8824e+03	1.1509e+04
Mean	1.6985e+03	1.6905e+03	2.1357e+03
Std	2.0289e+03	2.0043e+03	2.2420e+03
Skewness	0.0058	0.0040	0.0210
Kurtosis	-0.0844	-0.0768	0.0112

Figure 1740 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	4.6634e+03	4.6430e+03	4.9172e+03
Eq (m=4)	5.2024e+03	5.1629e+03	5.5886e+03
Eq (m=6)	6.2457e+03	6.1725e+03	6.9128e+03
Eq (m=8)	7.1840e+03	7.0877e+03	8.1133e+03
Eq (m=10)	7.9797e+03	7.8673e+03	9.1393e+03
Eq (m=12)	8.6392e+03	8.5136e+03	1.0002e+04

Section 19.13 oc4_p2_load_case_3-9b: My coo: towertop [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-9b.sel (01-03-2014 10:03)	38	MomentMy Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
B	WAMsim/oc4_p2_load_case_3-9b.sel (01-04-2014 12:49)	38	MomentMy Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
C	hawc2/oc4_p2_load_case_3-9b.sel (31-03-2014 15:37)	38	MomentMy Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment

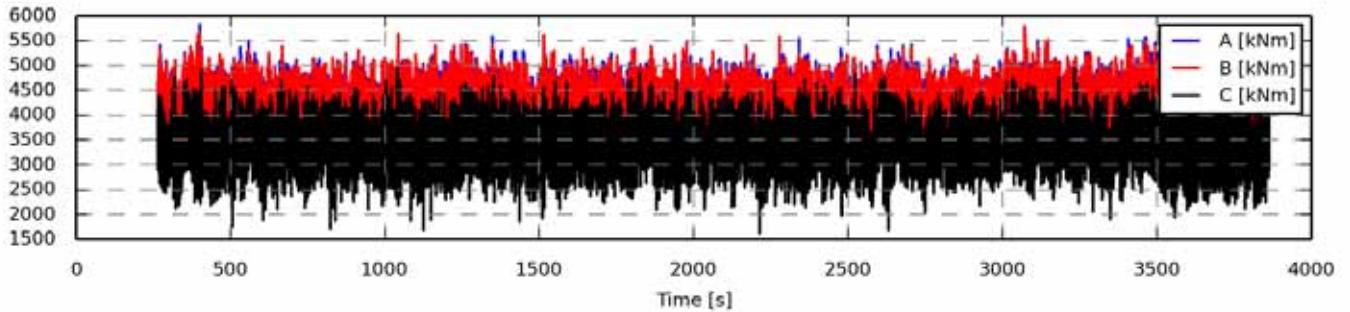


Figure 1741 - Full length time series

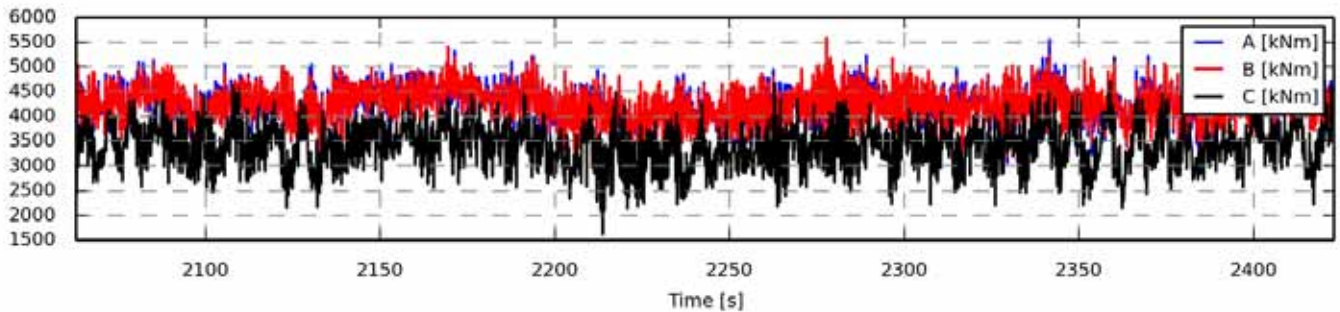


Figure 1742 - Zoom of time series

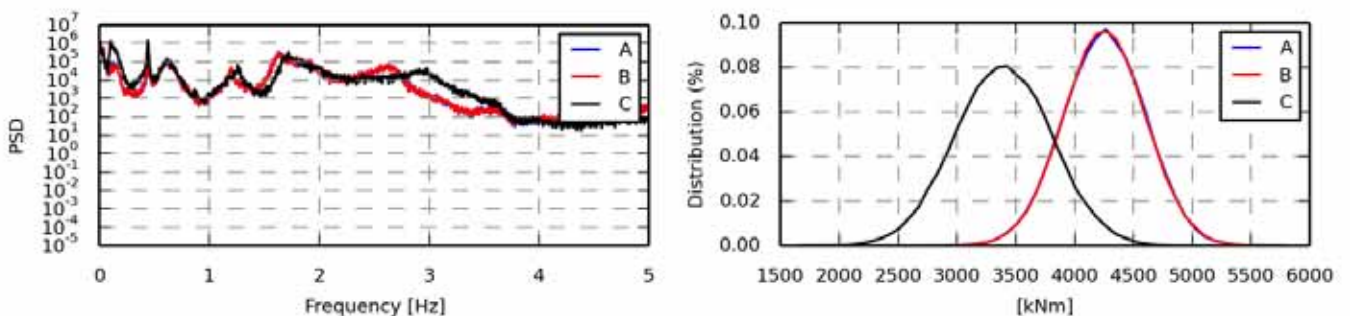


Figure 1743 - Power spectrum density

Statistics	A	B	C
Min	2.8372e+03	2.9320e+03	1.6201e+03
Max	5.8213e+03	5.7860e+03	4.9625e+03
Mean	4.2534e+03	4.2526e+03	3.3925e+03
Std	347.0321	346.1907	409.6195
Skewness	-0.0316	-0.0155	-0.0191
Kurtosis	-0.0103	0.0059	-0.0467

Figure 1744 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	1.1197e+03	1.1189e+03	1.1749e+03
Eq (m=4)	1.1699e+03	1.1680e+03	1.2637e+03
Eq (m=6)	1.3007e+03	1.2947e+03	1.4581e+03
Eq (m=8)	1.4362e+03	1.4248e+03	1.6383e+03
Eq (m=10)	1.5626e+03	1.5457e+03	1.7972e+03
Eq (m=12)	1.6757e+03	1.6536e+03	1.9361e+03

Section 19.14 oc4_p2_load_case_3-9b: Mz coo: towertop [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-9b.sel (01-03-2014 10:03)	39	MomentMz Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
B	WAMsim/oc4_p2_load_case_3-9b.sel (01-04-2014 12:49)	39	MomentMz Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment
C	hawc2/oc4_p2_load_case_3-9b.sel (31-03-2014 15:37)	39	MomentMz Mbdy:towertop nodenr: 1 coo: towertop tower top bending moment

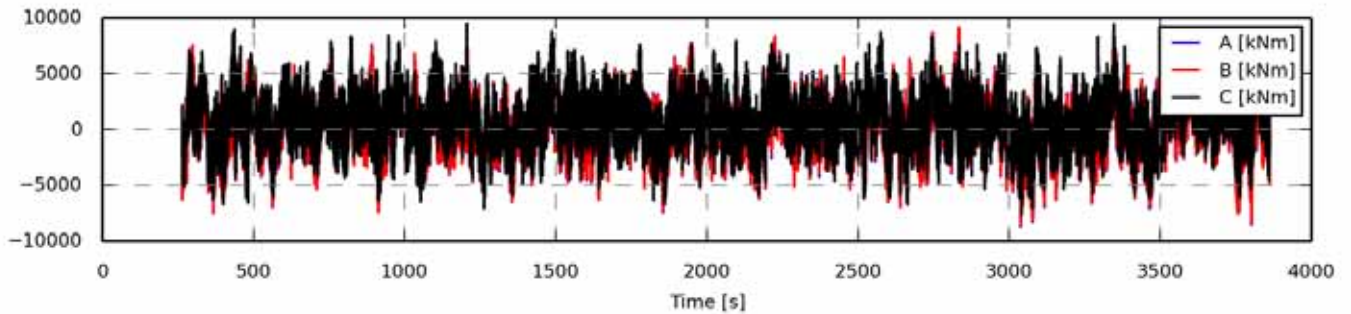


Figure 1745 - Full length time series

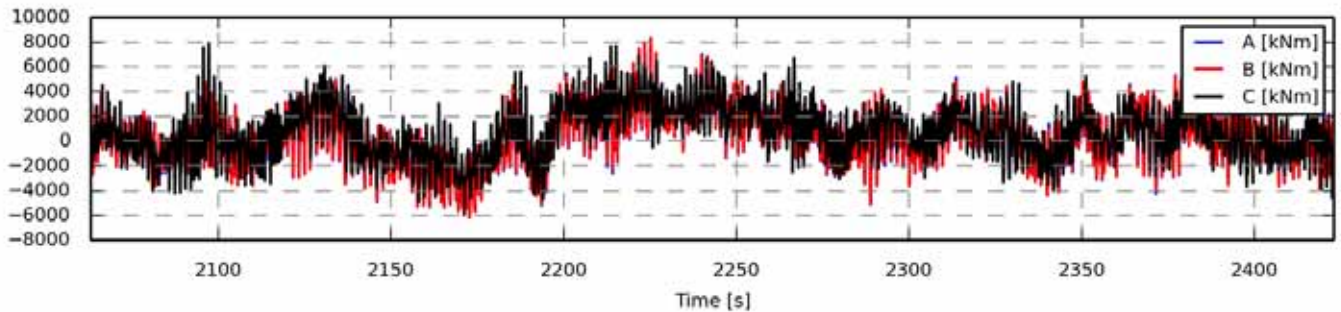


Figure 1746 - Zoom of time series

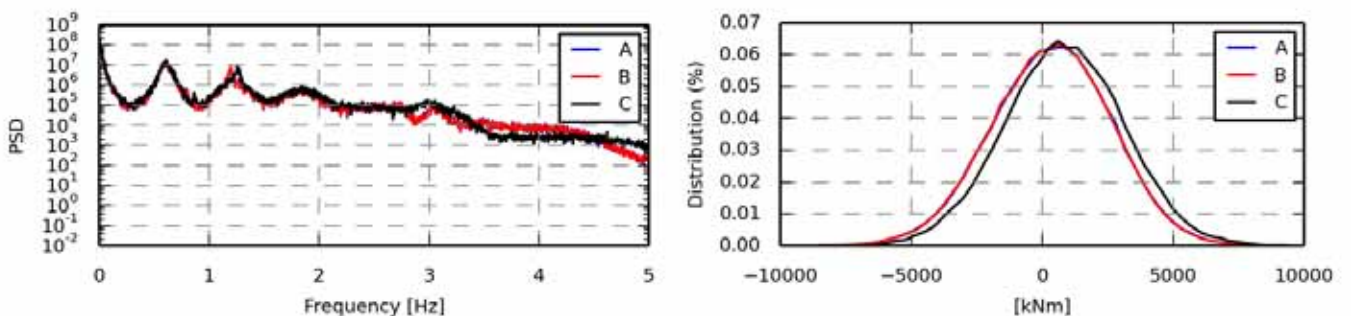


Figure 1747 - Power spectrum density

Statistics	A	B	C
Min	-8.6652e+03	-8.4773e+03	-7.6729e+03
Max	9.0534e+03	9.1221e+03	9.5010e+03
Mean	343.8992	339.2133	821.9811
Std	2.2856e+03	2.2830e+03	2.2780e+03
Skewness	-0.0697	-0.0705	-0.0001
Kurtosis	-0.0334	-0.0301	-0.0344

Figure 1748 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	4.6741e+03	4.6750e+03	5.0388e+03
Eq (m=4)	5.2563e+03	5.2574e+03	5.6040e+03
Eq (m=6)	6.5048e+03	6.4982e+03	6.7793e+03
Eq (m=8)	7.7043e+03	7.6805e+03	7.9047e+03
Eq (m=10)	8.7313e+03	8.6896e+03	8.8780e+03
Eq (m=12)	9.5808e+03	9.5248e+03	9.6861e+03

Section 19.15 oc4_p2_load_case_3-9b: Mx coo: tower [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-9b.sel (01-03-2014 10:03)	43	MomentMx Mbdy:tower nodenr: 1 coo: tower tower base bending moment
B	WAMsim/oc4_p2_load_case_3-9b.sel (01-04-2014 12:49)	43	MomentMx Mbdy:tower nodenr: 1 coo: tower tower base bending moment
C	hawc2/oc4_p2_load_case_3-9b.sel (31-03-2014 15:37)	43	MomentMx Mbdy:tower nodenr: 1 coo: tower tower base bending moment

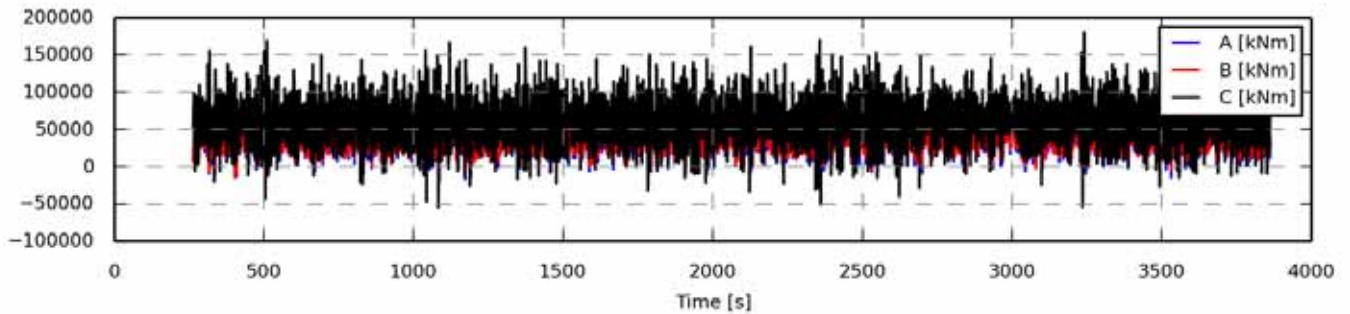


Figure 1749 - Full length time series

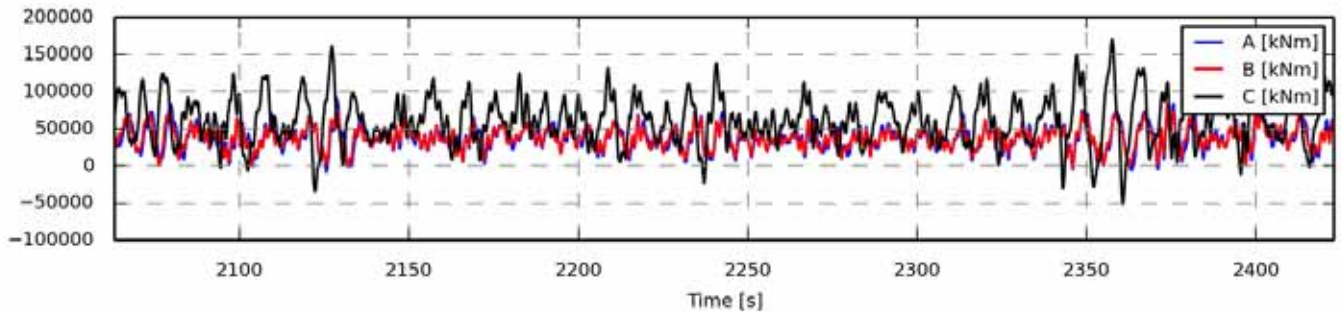


Figure 1750 - Zoom of time series

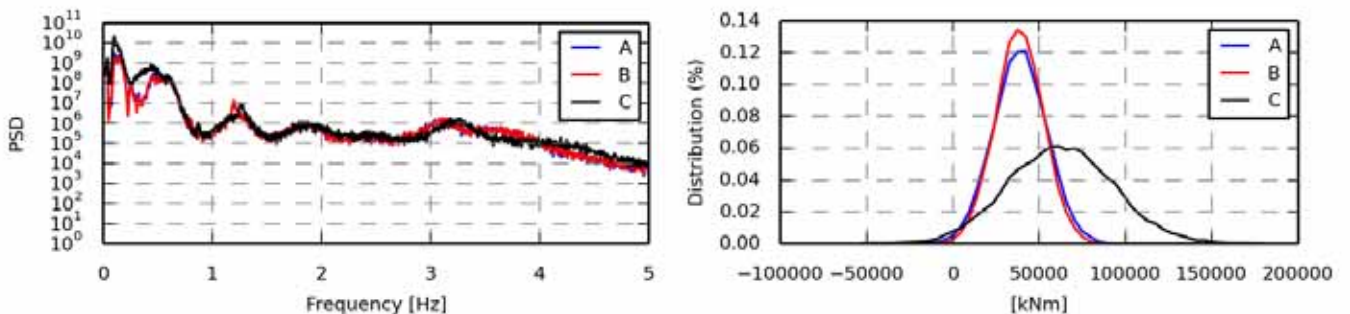


Figure 1751 - Power spectrum density

Statistics	A	B	C
Min	-2.0625e+04	-1.4671e+04	-5.4394e+04
Max	9.1449e+04	8.8984e+04	1.8092e+05
Mean	3.8712e+04	3.8454e+04	6.2414e+04
Std	1.5429e+04	1.3832e+04	3.0571e+04
Skewness	-0.0262	-0.0118	0.0364
Kurtosis	-0.0432	-0.0557	0.0560

Figure 1752 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	2.9373e+04	2.6699e+04	5.3564e+04
Eq (m=4)	3.5942e+04	3.2511e+04	6.7261e+04
Eq (m=6)	4.5895e+04	4.1356e+04	8.8583e+04
Eq (m=8)	5.3223e+04	4.7935e+04	1.0504e+05
Eq (m=10)	5.8963e+04	5.3167e+04	1.1832e+05
Eq (m=12)	6.3638e+04	5.7501e+04	1.2925e+05

Section 19.16 oc4_p2_load_case_3-9b: My coo: tower [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-9b.sel (01-03-2014 10:03)	44	MomentMy Mbdy:tower nodenr: 1 coo: tower tower base bending moment
B	WAMsim/oc4_p2_load_case_3-9b.sel (01-04-2014 12:49)	44	MomentMy Mbdy:tower nodenr: 1 coo: tower tower base bending moment
C	hawc2/oc4_p2_load_case_3-9b.sel (31-03-2014 15:37)	44	MomentMy Mbdy:tower nodenr: 1 coo: tower tower base bending moment

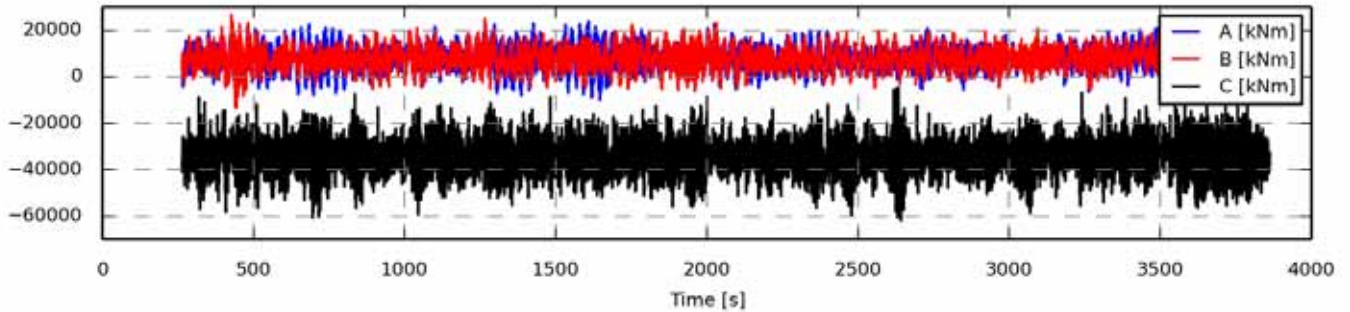


Figure 1753 - Full length time series

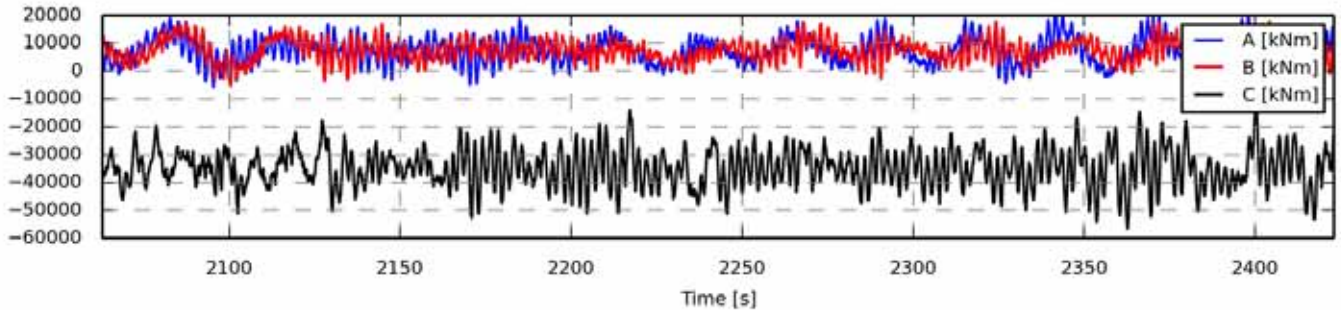


Figure 1754 - Zoom of time series

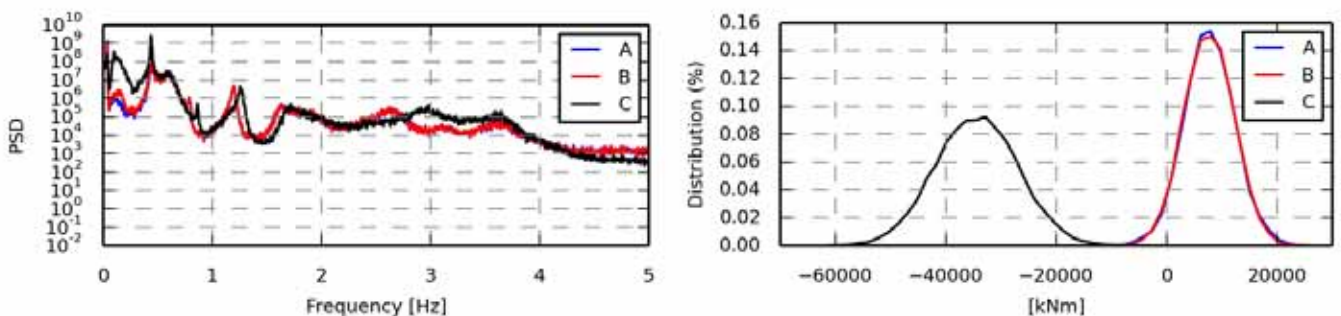


Figure 1755 - Power spectrum density

Statistics	A	B	C
Min	-1.0292e+04	-1.3594e+04	-6.2048e+04
Max	2.4332e+04	2.6527e+04	-4.5256e+03
Mean	7.7122e+03	7.6526e+03	-3.4466e+04
Std	4.5604e+03	4.5119e+03	7.4924e+03
Skewness	0.0072	-0.0073	0.0281
Kurtosis	0.1280	0.0796	0.0083

Figure 1756 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	9.3340e+03	8.9685e+03	1.6244e+04
Eq (m=4)	1.0929e+04	1.0657e+04	1.9065e+04
Eq (m=6)	1.3654e+04	1.3708e+04	2.3581e+04
Eq (m=8)	1.5933e+04	1.6429e+04	2.7210e+04
Eq (m=10)	1.7825e+04	1.8818e+04	3.0229e+04
Eq (m=12)	1.9390e+04	2.0874e+04	3.2770e+04

Section 19.17 oc4_p2_load_case_3-9b: Mz coo: tower [kNm]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-9b.sel (01-03-2014 10:03)	45	MomentMz Mbdy:tower nodenr: 1 coo: tower tower base bending moment
B	WAMsim/oc4_p2_load_case_3-9b.sel (01-04-2014 12:49)	45	MomentMz Mbdy:tower nodenr: 1 coo: tower tower base bending moment
C	hawc2/oc4_p2_load_case_3-9b.sel (31-03-2014 15:37)	45	MomentMz Mbdy:tower nodenr: 1 coo: tower tower base bending moment

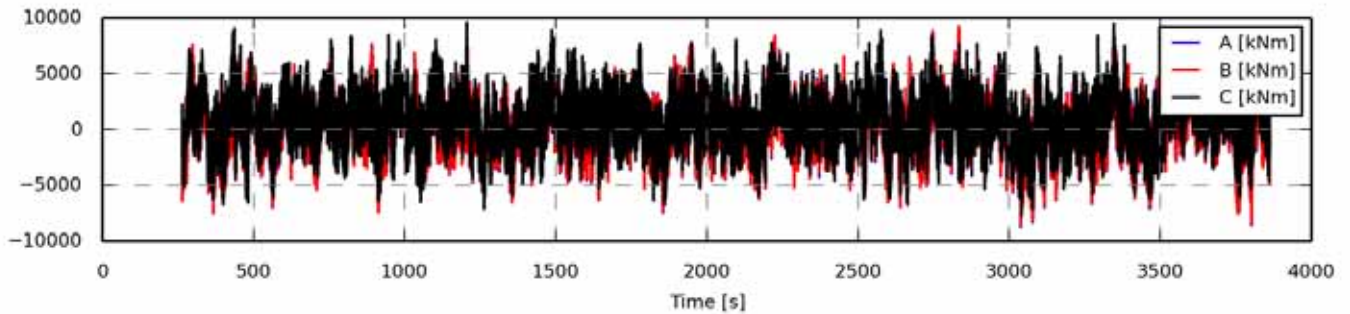


Figure 1757 - Full length time series

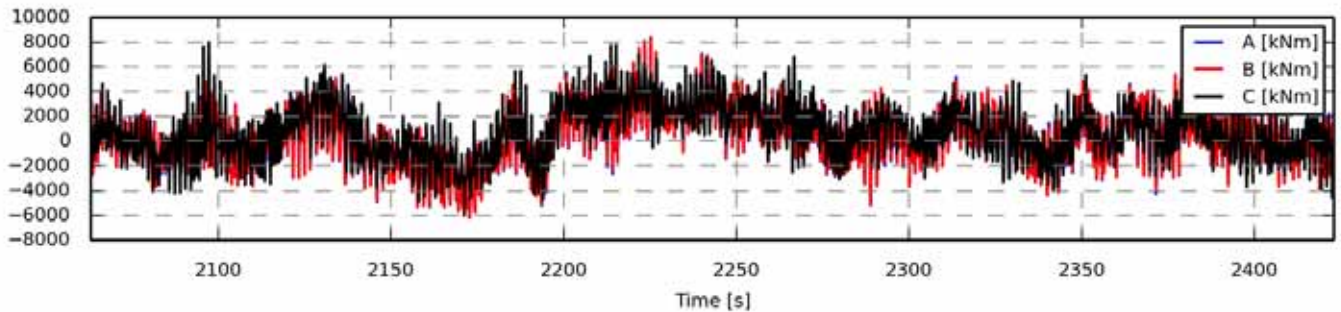


Figure 1758 - Zoom of time series

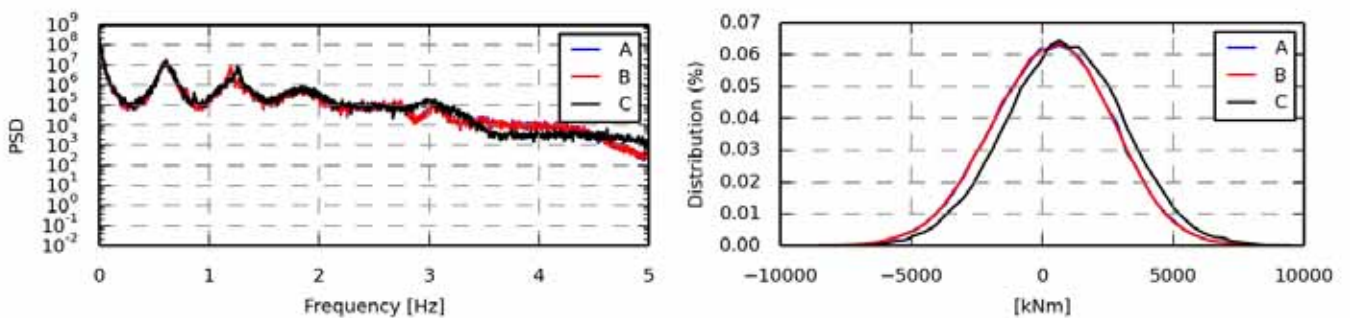


Figure 1759 - Power spectrum density

Statistics	A	B	C
Min	-8.6957e+03	-8.5002e+03	-7.7246e+03
Max	9.1404e+03	9.2312e+03	9.6242e+03
Mean	362.3278	357.5311	854.9072
Std	2.2930e+03	2.2903e+03	2.2881e+03
Skewness	-0.0692	-0.0700	-0.0005
Kurtosis	-0.0320	-0.0288	-0.0322

Figure 1760 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	4.7357e+03	4.7336e+03	5.1070e+03
Eq (m=4)	5.3144e+03	5.3131e+03	5.6713e+03
Eq (m=6)	6.5581e+03	6.5527e+03	6.8520e+03
Eq (m=8)	7.7571e+03	7.7390e+03	7.9873e+03
Eq (m=10)	8.7867e+03	8.7544e+03	8.9704e+03
Eq (m=12)	9.6397e+03	9.5958e+03	9.7865e+03

Section 19.18 oc4_p2_load_case_3-9b: ESYS line1_1 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-9b.sel (01-03-2014 10:03)	55	ESYS line1_1 SENSOR 4
B	WAMsim/oc4_p2_load_case_3-9b.sel (01-04-2014 12:49)	55	ESYS line1_1 SENSOR 4
C	hawc2/oc4_p2_load_case_3-9b.sel (31-03-2014 15:37)	55	ESYS line1_1 SENSOR 4

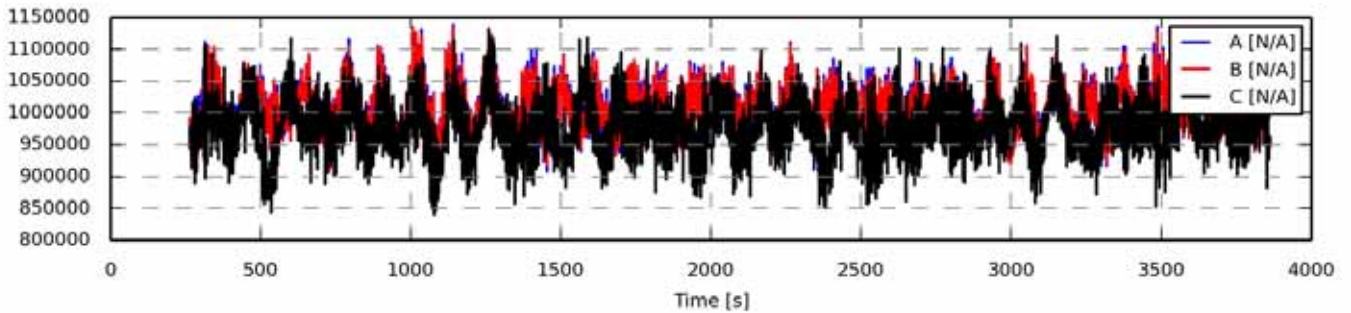


Figure 1761 - Full length time series

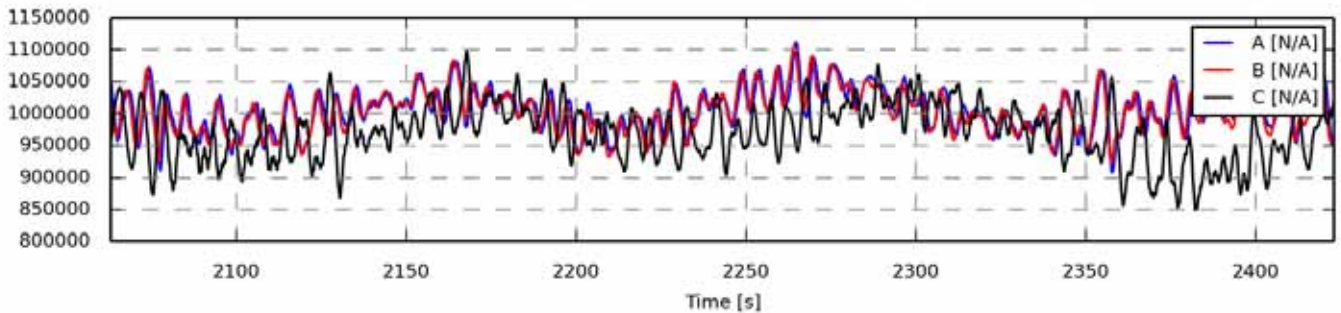


Figure 1762 - Zoom of time series

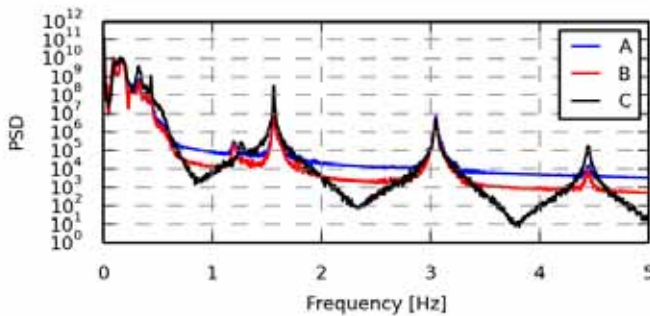


Figure 1763 - Power spectrum density

Statistics	A	B	C
Min	8.5633e+05	8.5115e+05	8.3938e+05
Max	1.1387e+06	1.1345e+06	1.1314e+06
Mean	1.0070e+06	1.0057e+06	9.7833e+05
Std	3.6157e+04	3.5751e+04	4.3073e+04
Skewness	0.1425	0.1340	0.0473
Kurtosis	-0.0267	-0.0286	-0.0286

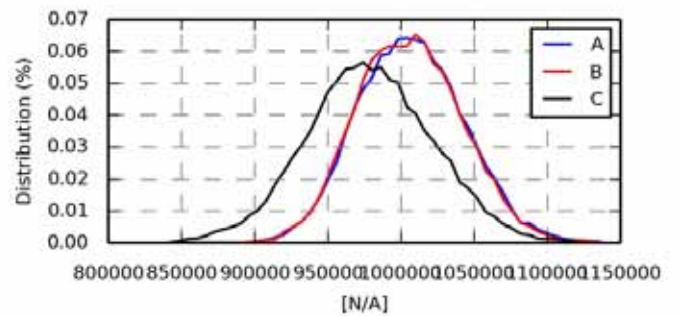


Figure 1764 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	4.7968e+04	4.5663e+04	6.1082e+04
Eq (m=4)	6.2801e+04	6.0472e+04	7.7786e+04
Eq (m=6)	8.8752e+04	8.7232e+04	1.0589e+05
Eq (m=8)	1.1061e+05	1.1035e+05	1.2855e+05
Eq (m=10)	1.2889e+05	1.2980e+05	1.4667e+05
Eq (m=12)	1.4418e+05	1.4601e+05	1.6122e+05

Section 19.19 oc4_p2_load_case_3-9b: ESYS line1_3 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-9b.sel (01-03-2014 10:03)	259	ESYS line1_3 SENSOR 104
B	WAMsim/oc4_p2_load_case_3-9b.sel (01-04-2014 12:49)	259	ESYS line1_3 SENSOR 104
C	hawc2/oc4_p2_load_case_3-9b.sel (31-03-2014 15:37)	259	ESYS line1_3 SENSOR 104

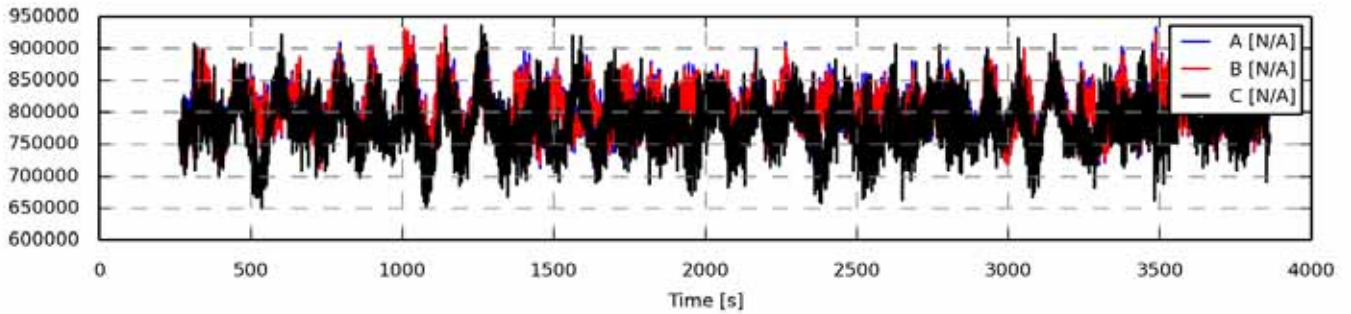


Figure 1765 - Full length time series

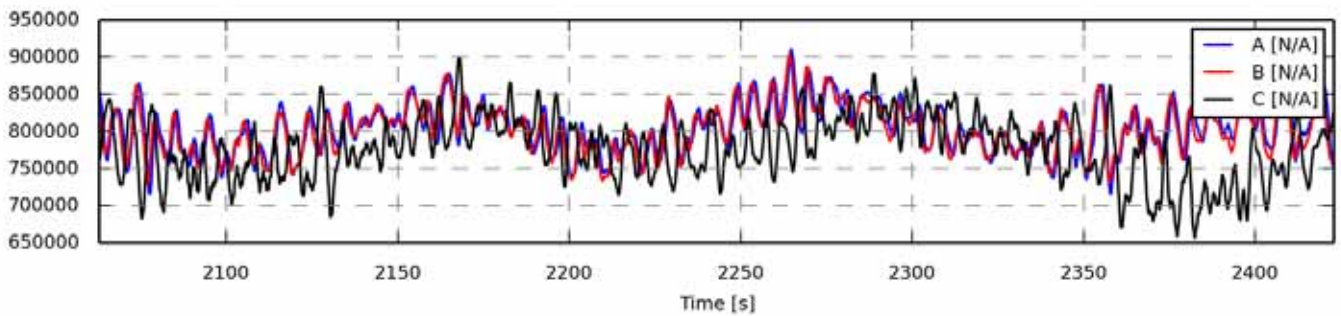


Figure 1766 - Zoom of time series

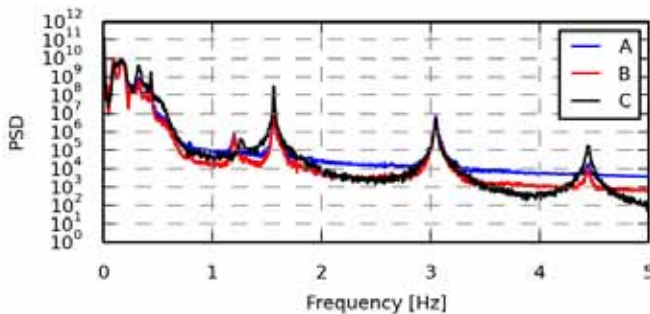


Figure 1767 - Power spectrum density

Statistics	A	B	C
Min	6.6407e+05	6.5506e+05	6.4951e+05
Max	9.3568e+05	9.3214e+05	9.3560e+05
Mean	8.0538e+05	8.0407e+05	7.8418e+05
Std	3.4971e+04	3.4653e+04	4.1879e+04
Skewness	0.1586	0.1471	0.0530
Kurtosis	-0.0317	-0.0261	-0.0229

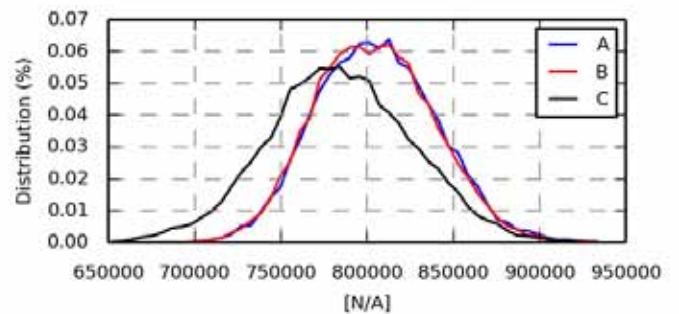


Figure 1768 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	4.5388e+04	4.3365e+04	5.9052e+04
Eq (m=4)	5.9593e+04	5.7676e+04	7.5180e+04
Eq (m=6)	8.4711e+04	8.3978e+04	1.0283e+05
Eq (m=8)	1.0586e+05	1.0692e+05	1.2537e+05
Eq (m=10)	1.2347e+05	1.2625e+05	1.4339e+05
Eq (m=12)	1.3814e+05	1.4233e+05	1.5784e+05

Section 19.20 oc4_p2_load_case_3-9b: ESYS line2_1 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-9b.sel (01-03-2014 10:03)	263	ESYS line2_1 SENSOR 4
B	WAMsim/oc4_p2_load_case_3-9b.sel (01-04-2014 12:49)	263	ESYS line2_1 SENSOR 4
C	hawc2/oc4_p2_load_case_3-9b.sel (31-03-2014 15:37)	263	ESYS line2_1 SENSOR 4

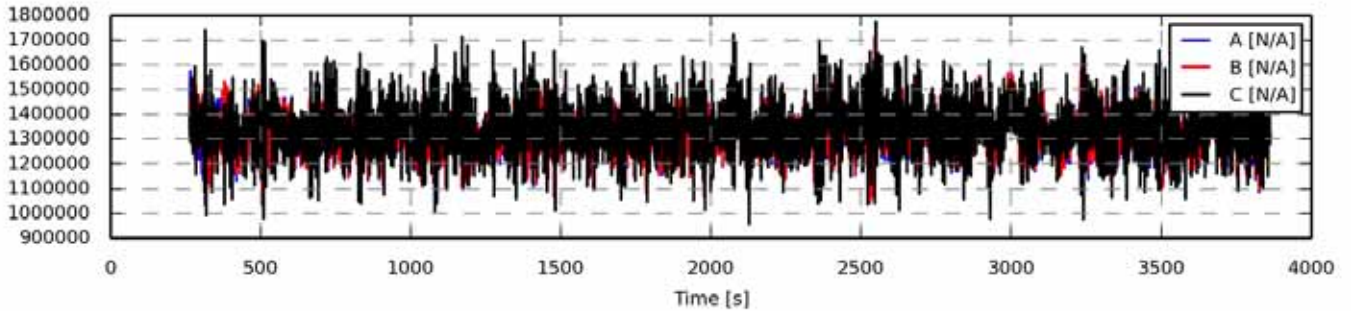


Figure 1769 - Full length time series

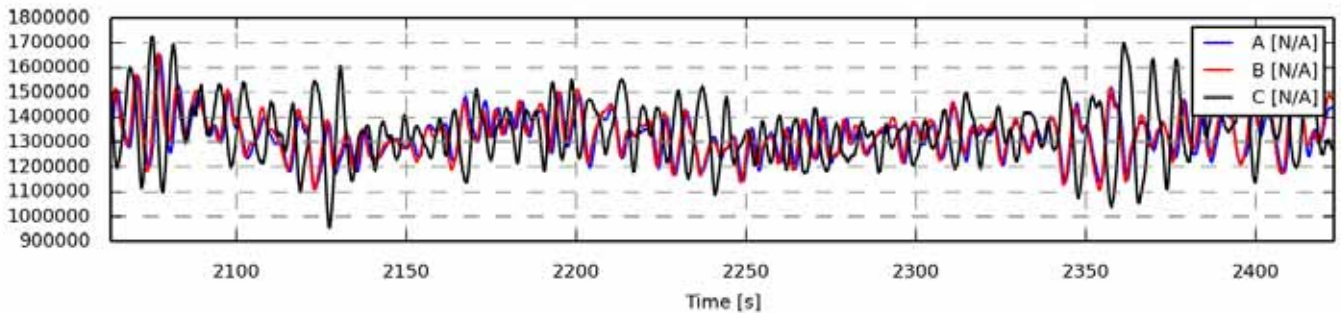


Figure 1770 - Zoom of time series

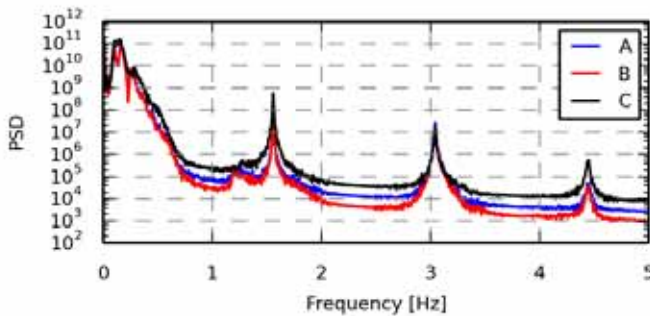


Figure 1771 - Power spectrum density

Statistics	A	B	C
Min	1.0345e+06	1.0410e+06	9.5537e+05
Max	1.7086e+06	1.6997e+06	1.7759e+06
Mean	1.3262e+06	1.3298e+06	1.3462e+06
Std	7.8979e+04	7.9865e+04	1.1175e+05
Skewness	0.0157	0.0177	0.0918
Kurtosis	0.1978	0.1941	0.1338

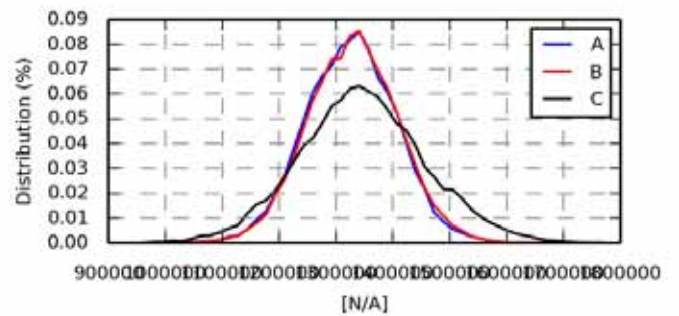


Figure 1772 - Value distribution

Fatigue eq.	1Hz	A	B	C
Eq (m=3)		1.2154e+05	1.2292e+05	1.8290e+05
Eq (m=4)		1.5584e+05	1.5812e+05	2.3179e+05
Eq (m=6)		2.1438e+05	2.1733e+05	3.0778e+05
Eq (m=8)		2.6441e+05	2.6665e+05	3.6605e+05
Eq (m=10)		3.0706e+05	3.0798e+05	4.1281e+05
Eq (m=12)		3.4301e+05	3.4254e+05	4.5124e+05

Section 19.21 oc4_p2_load_case_3-9b: ESYS line2_3 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-9b.sel (01-03-2014 10:03)	467	ESYS line2_3 SENSOR 104
B	WAMsim/oc4_p2_load_case_3-9b.sel (01-04-2014 12:49)	467	ESYS line2_3 SENSOR 104
C	hawc2/oc4_p2_load_case_3-9b.sel (31-03-2014 15:37)	467	ESYS line2_3 SENSOR 104

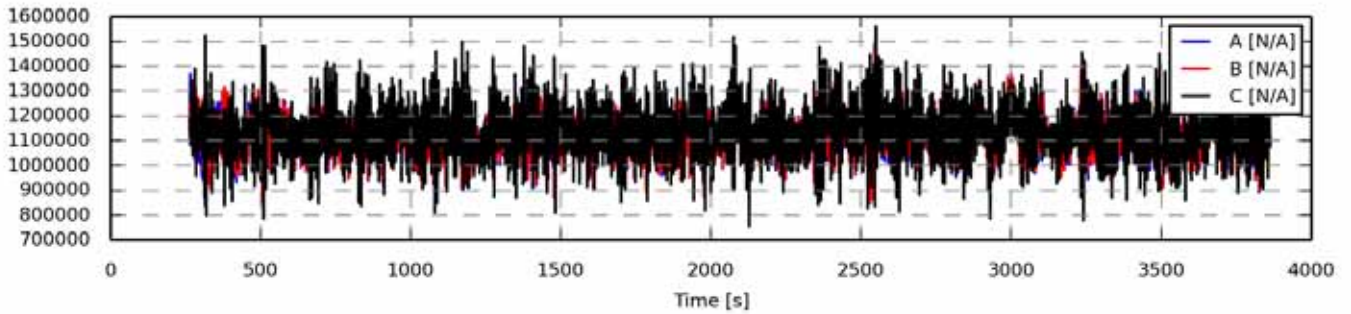


Figure 1773 - Full length time series

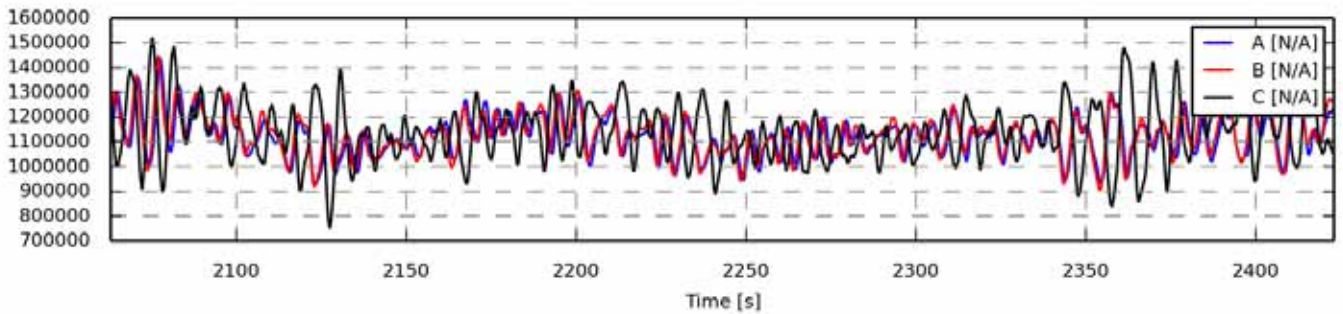


Figure 1774 - Zoom of time series

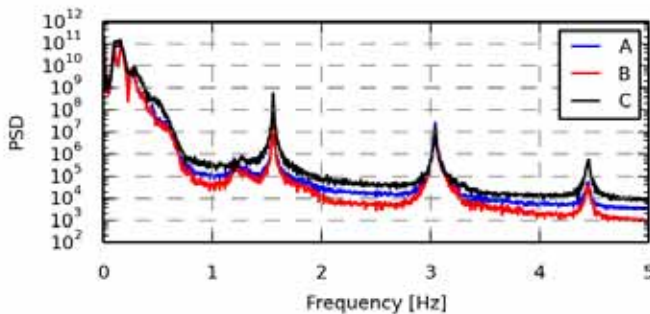


Figure 1775 - Power spectrum density

Statistics	A	B	C
Min	8.3665e+05	8.4653e+05	7.5534e+05
Max	1.4904e+06	1.4851e+06	1.5601e+06
Mean	1.1226e+06	1.1262e+06	1.1410e+06
Std	7.6220e+04	7.7023e+04	1.0869e+05
Skewness	0.0366	0.0381	0.0887
Kurtosis	0.2328	0.2335	0.1656

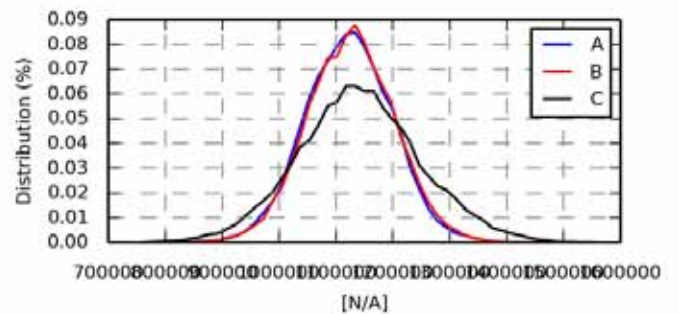


Figure 1776 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	1.1719e+05	1.1824e+05	1.7807e+05
Eq (m=4)	1.5048e+05	1.5223e+05	2.2571e+05
Eq (m=6)	2.0783e+05	2.0971e+05	3.0008e+05
Eq (m=8)	2.5708e+05	2.5763e+05	3.5730e+05
Eq (m=10)	2.9901e+05	2.9771e+05	4.0329e+05
Eq (m=12)	3.3420e+05	3.3116e+05	4.4117e+05

Section 19.22 oc4_p2_load_case_3-9b: ESYS line3_1 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-9b.sel (01-03-2014 10:03)	471	ESYS line3_1 SENSOR 4
B	WAMsim/oc4_p2_load_case_3-9b.sel (01-04-2014 12:49)	471	ESYS line3_1 SENSOR 4
C	hawc2/oc4_p2_load_case_3-9b.sel (31-03-2014 15:37)	471	ESYS line3_1 SENSOR 4

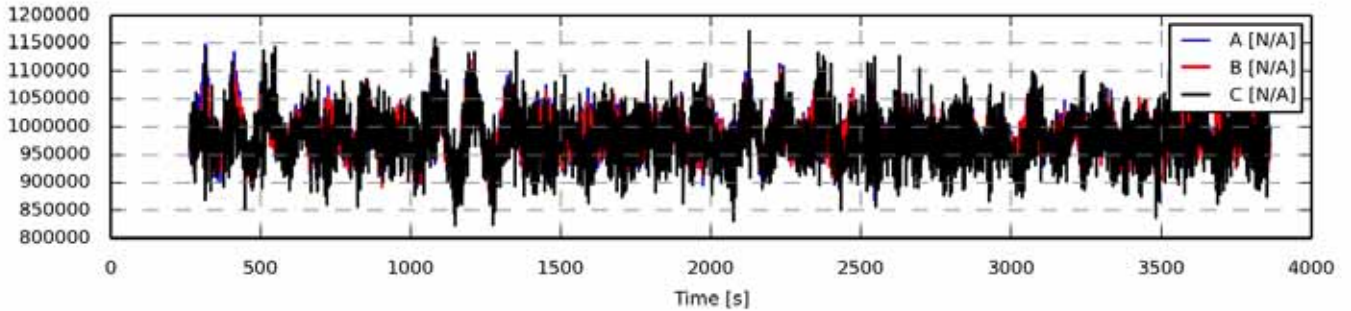


Figure 1777 - Full length time series

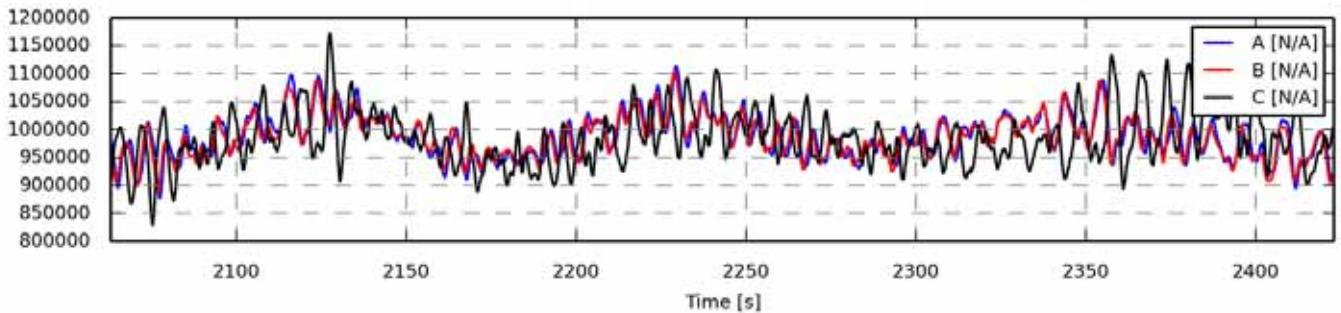


Figure 1778 - Zoom of time series

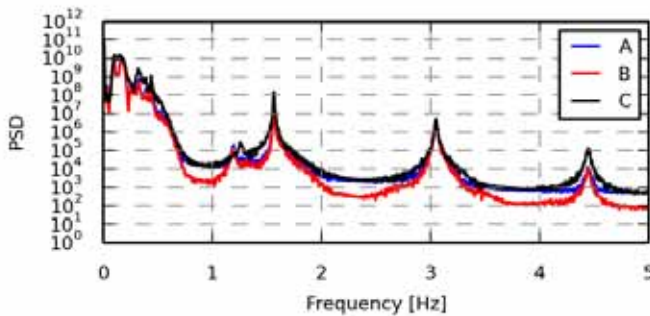


Figure 1779 - Power spectrum density

Statistics	A	B	C
Min	8.4459e+05	8.5558e+05	8.2215e+05
Max	1.1478e+06	1.1317e+06	1.1726e+06
Mean	9.8491e+05	9.8359e+05	9.7839e+05
Std	3.5672e+04	3.3570e+04	4.5365e+04
Skewness	0.3115	0.2392	0.2897
Kurtosis	0.5672	0.4359	0.3476

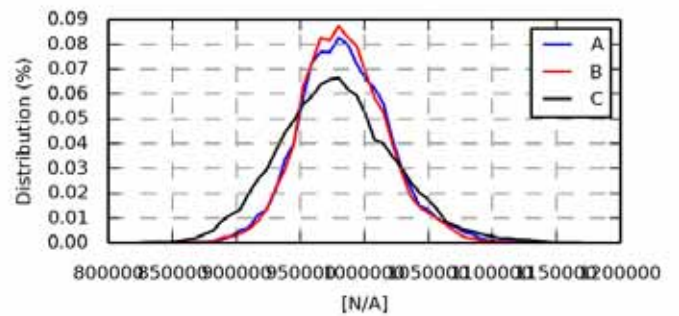


Figure 1780 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	4.7975e+04	4.4098e+04	7.0819e+04
Eq (m=4)	6.3825e+04	5.8634e+04	9.0173e+04
Eq (m=6)	9.2651e+04	8.5271e+04	1.2242e+05
Eq (m=8)	1.1700e+05	1.0803e+05	1.4888e+05
Eq (m=10)	1.3695e+05	1.2679e+05	1.7061e+05
Eq (m=12)	1.5333e+05	1.4215e+05	1.8842e+05

Section 19.23 oc4_p2_load_case_3-9b: ESYS line3_3 SENSOR [N/A]

.	File	Ch	Description
A	WAMIT/oc4_p2_load_case_3-9b.sel (01-03-2014 10:03)	675	ESYS line3_3 SENSOR 104
B	WAMsim/oc4_p2_load_case_3-9b.sel (01-04-2014 12:49)	675	ESYS line3_3 SENSOR 104
C	hawc2/oc4_p2_load_case_3-9b.sel (31-03-2014 15:37)	675	ESYS line3_3 SENSOR 104

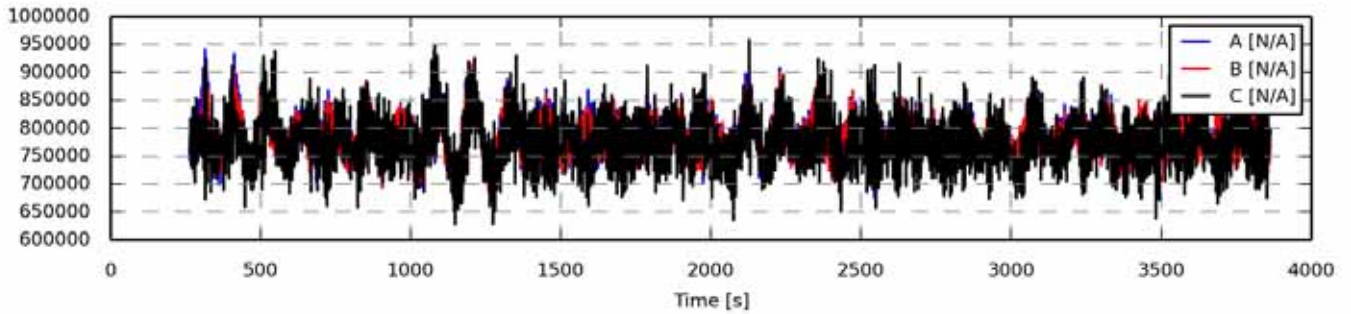


Figure 1781 - Full length time series

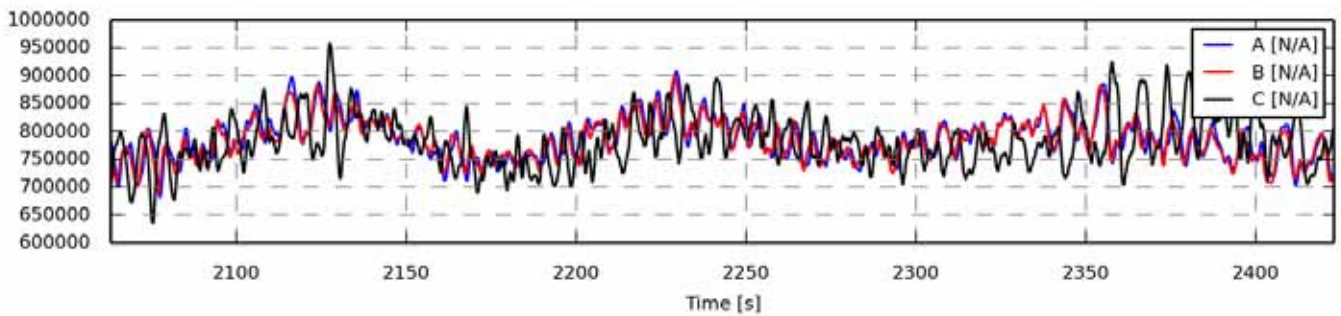


Figure 1782 - Zoom of time series

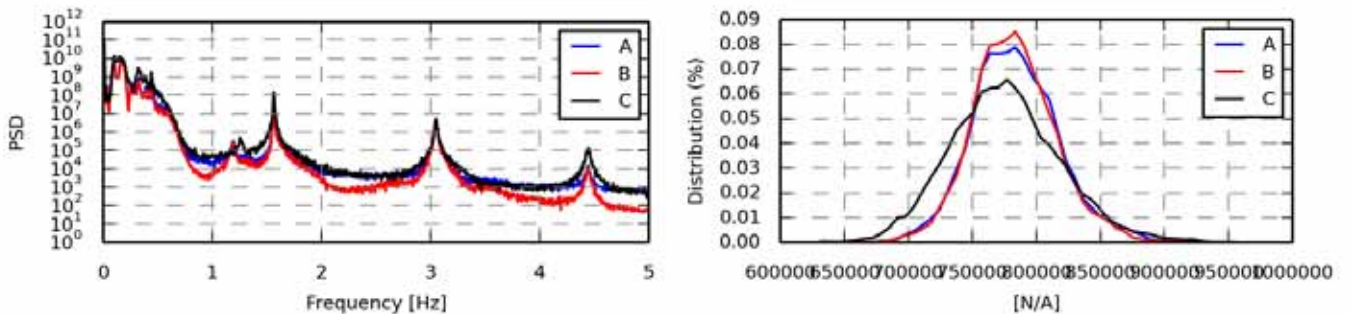


Figure 1783 - Power spectrum density

Statistics	A	B	C
Min	6.5107e+05	6.6223e+05	6.2866e+05
Max	9.4081e+05	9.2624e+05	9.5818e+05
Mean	7.8379e+05	7.8245e+05	7.7546e+05
Std	3.4540e+04	3.2472e+04	4.3421e+04
Skewness	0.3285	0.2515	0.3052
Kurtosis	0.5944	0.4709	0.3542

Figure 1784 - Value distribution

Fatigue 1Hz eq.	A	B	C
Eq (m=3)	4.5958e+04	4.1901e+04	6.7674e+04
Eq (m=4)	6.1295e+04	5.5864e+04	8.5924e+04
Eq (m=6)	8.9374e+04	8.1629e+04	1.1645e+05
Eq (m=8)	1.1292e+05	1.0355e+05	1.4144e+05
Eq (m=10)	1.3202e+05	1.2150e+05	1.6187e+05
Eq (m=12)	1.4757e+05	1.3616e+05	1.7856e+05

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DTU Wind Energy is a department of the Technical University of Denmark with a unique integration of research, education, innovation and public/private sector consulting in the field of wind energy. Our activities develop new opportunities and technology for the global and Danish exploitation of wind energy. Research focuses on key technical-scientific fields, which are central for the development, innovation and use of wind energy and provides the basis for advanced education at the education.

We have more than 240 staff members of which approximately 60 are PhD students. Research is conducted within nine research programmes organized into three main topics: Wind energy systems, Wind turbine technology and Basics for wind energy.

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