Publications 2014

Journal papers:

Barstad, I. (2014) Downscaling Era-Interim to a 3-km grid – evaluation with a focusing on the static stability. Wind Energy.

Kjelland, M.B. and Hansen, M.R. (2014). Offshore Wind Payload Transfer Using Flexible Mobile Crane. Modeling, Identification and Control

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Posters and presentations:

Heggelund Y., Khalil M., Jarvis C. Interactive design of wind farm layouts using CFD and model reduction. EWEA 2014 conference, Barcelona, 10-13 March 2014.

Heggelund, Y., Khalil, M., Jarvis, C., Stephansen, A. 2014. Model reduction for wind farm power prediction. Presentation at NORCOWE work package meetings, Grimstad, May 6-7 2014.

Reuder, J., and K. G. Frøysa, Highlights from NORCOWE, talk, DeepWind 2014 - 11th Deep Sea Offshore Wind R&D Conference, 22 - 24 January 2014, Trondheim.

Christakos, K, G. Varlas, J. Reuder, P. Katsafados, and A. Papadopoulos, Analysis of a Low-level Coastal Jet off the Norwegian Coast, talk, DeepWind 2014 - 11th Deep Sea Offshore Wind R&D Conference, 22 - 24 January 2014, Trondheim.

Bakhoday Paskyabi, M., S. Zieger, A.D. Jenkins, A. Babanin, M. Ghantous, D. Chalikhov, and I.Fer, Air-sea interaction influenced by swell waves, talk, DeepWind 2014 - 11th Deep Sea Offshore Wind R&D Conference, 22 - 24 January 2014, Trondheim.

Kumer, V., B. Svardal, J.-W. Wagenaar, and J. Reuder, Wind Turbine Wake Experiment - Wieringermeer (WINTWEX-W), talk, DeepWind 2014 - 11th Deep Sea Offshore Wind R&D Conference, 22 - 24 January 2014, Trondheim.

Båserud, L., M. Flügge, A. Bhandari, and J. Reuder, Characterization of the SUMO turbulence measurement system for wind turbine wake assessment, poster, DeepWind 2014 - 11th Deep Sea Offshore Wind R&D Conference, 22 - 24 January 2013, Trondheim.

Båserud, L., M. Flügge, A. Bhandari, and J. Reuder, Characterization of the SUMO turbulence measurement system for wind turbine wake assessment, talk, 2nd ISARRA Conference, 26 – 28 May 2014, Odense, Denmark.

Bakhoday Paskyabi, M., M. Flügge, V. Kumer, J. Reuder, and I. Fer, Field Measurements of Wave Breaking Statistics Using Video Camera for Offshore Wind Application, poster, DeepWind 2014 - 11th Deep Sea Offshore Wind R&D Conference, 22 - 24 January 2013, Trondheim.

Bakhoday Paskyabi, M., and A. Valinejad, Stochastic Particle Trajectories in the Wake of Large Wind Farm, poster, DeepWind 2014 - 11th Deep Sea Offshore Wind R&D Conference, 22 - 24 January 2013, Trondheim.

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Kumer, V., J. Reuder, B. Svardal, and P. Eecen, Wind Turbine Wake Experiment - Wieringermeer (WINTWEX-W), talk, European Geosciences Union General Assembly 2014, 27 April – 2 May 2014, Vienna, Austria.

Kumer, V., J. Reuder, B. Svardal, and P. Eecen, Wind Turbine Wake Experiment - Wieringermeer (WINTWEX-W), poster, American Geosciences Union Fall Meeting 2014, 15 – 19 December 2014, San Francisco, USA.

Kettle, A.J., Met-ocean data analysis; review of progress 2014 and proposed projects in 2015, oral presentation at NORCOWE Day, Rica Hotel, Bergen, Sept. 10, 2014.

Kettle, A.J., Storm Britta: Oct. 31–Nov. 1, 2006, poster presentation at NORCOWE Day, Rica Hotel, Bergen, Sept. 10, 2014.

Kettle, A.J., A diagnostic diagram to understand the marine atmospheric boundary layer at high wind speeds, poster presentation at the European Geophysical Union General Assembly, Vienna, Apr. 28–May 2, 2014.

Mostafa Bakhoday Paskyabi, Brain Ward, and Ilker Fer, Observational and numerical study of wave-turbulence interaction near the sea surface, Ocean Science Meeting, 24-29 February 2014 (Poster).

Mostafa Bakhoday Paskyabi, Ilker Fer, A. D. Jenkins, Measurement and Modelling the atmospheric and oceanic turbulence near the sea surface, 4 March 2014, Applied Physic Laboratory, Washington, Seattle, USA (Talk).

Mostafa Bakhoday Paskyabi, Ilker Fer, A. D. Jenkins, Wave-current-turbulence interaction near the sea surface, 27 June 2014, Dalhousie University, Canada (Talk).

Heggelund Y., Khalil M., Jarvis C. Model reduction based on CFD for fast and accurate computation of wind farm flow fields. EWEA 2014 conference, Barcelona, 10-13 March 2014.

Jarvis C., Heggelund Y., Khalil M. and Sælen L. Interactive design of wind farm layout using CFD and model reduction, EERA DeepWind 2014 conference, Trondheim, 22-24 January 2014.

Sapronova, A. Analytic and data mining applications for the renewable and green-energy sector. Invited seminar at Nelson Mandela Metropolitan University, Port Elizabeth, February 2014.

Johan Lindal Haug, Morten Ottestad and Geir Hovland, Development of Vision System for Vessel-to-Vessel Motion Compensation, WP-Meetings, Grimstad, May 2014.

Magnus Berthelsen Kjelland and Michael Rygaard Hansen, Offshore Access for Wind Turbines during Operation, Installation and Maintenance, WP-Meetings, Grimstad, May 2014.

Lene Eliassen. A poster on the unsteady aerodynamics of attached flow for a floating wind turbine was presented at the EERA Deep Wind 2014 conference in January.

Siri Kalvig. On offshore wind turbine fatigue caused by wave influenced wind, 2nd Symposium on OpenFOAM in Wind Energy, Conference May 2014, Boulder, Colorado, USA.

Jasna B. Jakobsen and Etienne Cheynet, presentation on the wind and bridge response measurements at WP meeting in Grimstad, May 2014.

John Dalsgaard Sørensen, Keynote presentation Reliability analysis of wind turbines exposed to dynamic loads, Eurodyn conference, Rotterdam, July 1, 2014.

John Dalsgaard Sørensen, presentation at Reliability of wind turbines and wave energy devices, 2nd International Summer School on Stochastic Dynamics of Wind Turbines and Wave Energy Absorbers, August 7, 2014.

John Dalsgaard Sørensen, presentation, Probabilistic design of wind turbines structural components, IRPWIND/EERAJoint Programme Wind R&D Conference, Amsterdam, September 25, 2014.

John Dalsgaard Sørensen, Keynote presentation on Reliability of offshore wind turbines at RENEW conference, Lisbon, November 25, 2014.

Asgarpour M., Florian M., Sørensen J.D. Risk and Reliability based O&M Planning of Offshore Wind Farms Poster presentation at NORCOWE day; Bergen, September 2014.

Mihai Florian, John Dalsgaard Sørensen, ASRANet presentation, September 2014, Glasgow, UK.

Mihai Florian. Risk-based O&M planning of offshore wind farms. Presentation at NORCOWE O&M meeting at Aalborg University in Denmark, October 2014.

Asgarpour M. O&M Planning of OWF w.r.t. System Effects; presentation at NORCOWE O&M meeting at Aalborg University in Denmark, October 2014.

Barstad, I. Downscaling Era-Interim to a 3-km grid – evaluation with a focusing on the static stability. Poster presentation at NORCOWE meeting, Grimstad, 7-8 May 2014.

Heggelund Y. and Jarvis C. Model reduction in wind farm analysis. Presentation at NORCOWE workshop on relevant scales in space and time, Bergen, February 14th, 2014.

Heggelund, Y., Khalil, M., Jarvis, C. and Stephansen, A. Model reduction for wind farm power predictions: work toward a demonstration case. Presentation at NORCOWE meeting, Grimstad, 7 May 2014.

Heiberg-Andersen, H. Site climatologies and predictions of fatigue damage of support structures of floating wind turbines. Presentation at NORCOWE meeting, Grimstad, 7 May 2014.

Jarvis, C., Heggelund, Y., Khalil, M. and Sælen, L. Interactive design of wind farm layout using CFD and model reduction. Poster presentation at NORCOWE meeting, Grimstad, 7-8 May 2014.

Jenkins, A. D. Mesoscale atmospheric and wave modelling: Physical and numerical aspects of the WRF-WAM coupled system. Poster presentation at NORCOWE meeting, Grimstad, 7-8 May 2014.

Khalil M. How to connect the large scale to the small scale – which methods are available. Presentation at NORCOWE workshop on relevant scales in space and time, Bergen, February 14th, 2014.

Lorenz, T. Weather models and wind, wave and current climatologies at potential offshore wind farm sites. Presentation at NORCOWE meeting, Grimstad, 7 May 2014.

Sapronova, A. and Graham, A. Model to model calibration: NWP downscaling with machine learning. Poster presentation at NORCOWE meeting, Grimstad, 7-8 May 2014.

Heiberg-Andersen, H. 2014. Simulation of turbine wake in unsteady wind. Report to NORCOWE, 6pp.

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Heiberg-Andersen, H. 2014. Extension of the wind farm drag model to Large Eddy Simulations. Report to NORCOWE, 3pp.

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Internal NORCOWE reports:

Lorenz, T. 2014. Large eddy simulations in the North Sea. Report to NORCOWE, 12pp.

Sapronova, A. and Graham, A. 2014. Short-term forecasting. Report to NORCOWE, 11pp.

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Barstad, I. and Jenkins, A. D. 2014. NORCOWE reference wind farm - Climatology database overview. Report to NORCOWE, 28 pp.

Torben Knudsen. Wind turbine state estimation. Technical report, Automation and Control, Department of Electronic Systems, Aalborg University, 2014.

Florian Mihai, John Dalsgaard Sørensen. Operation and maintenance for offshore wind turbines State-of-the-art literature study. NORCOWE report, NORCOWE-RR-C-14-WP3-002. Aalborg Unversity, 2014.