

Papers

1. Barthelmie, R.J., Frandsen, S.T., Nielsen, N.M., Pryor, S.C., Rethore, P.E. and H.E. Jørgensen, 2007: Modelling and measurements of power losses and turbulence intensity in wind turbine wakes at Middelgrunden offshore wind farm, *Wind Energy* doi: 10.1002/we.238. **10**, 217-228.
2. Frandsen, S.T., Jørgensen, H.E., Barthelmie, R.J., Rathmann, O., Badger, J., Hansen, K., Ott, S., Rethore, P.-E., Larsen, S.E., Jensen, L.E. 2009: The making of a second-generation wind farm efficiency model-complex, *Wind Energy*, **12(5)**, 445-458. DOI: 10.1002/we.351.
3. Barthelmie, R.J., Hansen, K., Frandsen, S.T., Rathmann, O., Schepers, J.G., Schlez, W., Philips, J., Rados, K., Zervos, A., Politis, E.S. and Chaviaropoulos, P.K. 2009: Modelling and measuring flow and wind turbine wakes in large wind farms offshore, *Wind Energy*, **12(5)**, 431-444. DOI: 10.1002/we.348.
4. Barthelmie, R.J., Pryor, S.C., Frandsen, S.T., Hansen, K.S., Schepers, J.G., Rados, K., Schlez, W., Neubert, A., Jensen, L.E. and Neckelmann S. 2009: Quantifying the impact of wind turbine wakes on power output at offshore wind farms. *Journal of Atmospheric and Oceanic Technology*, **27(8)**, 1302-1317. doi: 10.1175/2010JTECHA1398.1.
5. Barthelmie, R.J. and Jensen, L.E. 2010: Evaluation of power losses due to wind turbine wakes at the Nysted offshore wind farm, *Wind Energy*, **13**, 573-586, DOI: 10.1002/we.408.
6. Politis, E., Prospathopoulos, J. and Chaviaropoulos, P.K., Cabezon, D., Hansen, K. and Barthelmie, R.J. 2010: Modelling wake effects in large complex terrain wind farms: the problem, the methods and the issues, *Wind Energy* (submitted WE-10-0103 2-July-2010).
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8. J.G. Schepers, J.G. and Obdam, T.G. 2010: Analysis of wake measurements from the ECN Wind Turbine Test Site Wieringermeer, EWTW, *Wind Energy* (Submitted October 2010).

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1. Rathmann, O., Frandsen, S.T. and Barthelmie, R.J. 2007: Wake modelling for intermediate and large wind farms. *European Wind Energy Conference and Exhibition*, Milan, May 2007 (poster). 8pp.
2. Barthelmie, R.J., Schepers, J.G., van der Pijl, S., Rathmann, O., Frandsen, S.T., Cabezon, D., Politis, E., Prospathopoulos, J., Rados, K., Hansen, K., Schlez, W., Phillips, J. and Neubert, A. 2007: Flow and wakes in complex terrain and offshore: model development and verification in UPWIND. *European Wind Energy Conference and Exhibition*, Milan, May 2007 (poster). 10pp.
3. Barthelmie, R.J., Rathmann, O., Frandsen, S.T., Hansen, K., Politis, E., Prospathopoulos, J., Rados, K., Cabezon, D., Schlez, W., Phillips, J., Neubert, A., Schepers, J.G. and van der Piljl, S., Rados 2007: Modelling and measurements of wakes in large offshore wind farms, *Conference on the science of making torque from wind*, Danish Technical University, August 2007. 8 pp. Journal of Physics Conference Series, Vol. 75, 012049.

4. Barthelmie, R.J., E.S. Politis, Prospathopoulos, J., Hansen, K.S., Rados, K., Frandsen, S.T., Rathmann, Schlez, W., Phillips, J., Schepers, G. and van der Pijl, S. and Cabezón, D. 2007: Wakes in large offshore wind farms; model evaluation in Upwind. *European Offshore Wind conference*, Berlin, December 2007.
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6. J. M. Prospathopoulos, E. S Politis and P. K. Chaviaropoulos : Modelling Wind Turbine Wakes in Complex Terrain. *European Wind Energy Association Conference*, Brussels, March 2008. (Scientific track).
7. Barthelmie, R.J., Frandsen, S.T., Rathmann, O., Politis, E., Propspatopoulos, J., Rados, K., Hansen, K., Cabezon, D., Schlez, W., Phillips, J., Neubert, A., van der Pijl, S. and Schepers, G. 2008: Flow and wakes in large wind farms in complex terrain and offshore. *American Wind Energy Association Conference*, Houston, Texas, June 2008.
8. Barthelmie, R.J. Politis, E., Prospathopoulos, J., Frandsen, S.T., Rathmann, O., Hansen, K., van der Pijl, S., Schepers, G., Rados, K., Cabezon, D., Schlez, W., Phillips, J., Neubert, A. 2008: Power losses due to wakes in large wind farms, *World Renewable Energy Congress X*, Glasgow, July 2008.
9. Rados, K.G., Prospathopoulos, J.M., Stefanatos, N.Ch., Politis, E.S., Chaviaropoulos, P.K. and Zervos, A. 2009: CFD Modeling Issues of Wind Turbine Wakes under Stable Atmospheric Conditions, *European Wind Energy Conference, Marseilles*, March 2009 (Poster).
10. Barthelmie, R.J., Hansen, K., Frandsen, S.T., Rathmann, O., Jensen, L.E., Neckelmann, S., Schlez, W., Rados, K. and Schepers, J.G. 2009: Modelling the impact of wakes on power output at Nysted and Horns Rev. *European Wind Energy Conference and Exhibition 2009*, Marseilles, March 2009.
11. Schlez, W., Neubert, A. and Prakesh, C. 2009: New developments in large wind farm modelling. *European Wind Energy Conference and Exhibition 2009*, Marseilles, March 2009 (Poster).
12. Cabezón D., Sanz J., Martí I., Crespo A. 2009: CFD modelling of the interaction between the Surface Boundary Layer and rotor wake. Comparison of results obtained with different turbulence models and mesh strategies. *European Wind Energy Conference and Exhibition 2009*, Marseille, March 2009.
13. Ott, S. 2009. Applying flow models of different complexity for estimation of wind turbine wakes. *European Wind Energy Conference and Exhibition 2009*, Marseille, March 2009 (Poster).
14. Rathmann, O. 2009: A fast parameterized wake-model for large wind farms. *European Wind Energy Conference and Exhibition 2009*, Marseille, March 2009 (Poster).
15. Barthelmie, R.J., Frandsen, S.T., Hansen, K., Schepers, J.G., Rados, K., Schlez, W., Neubert, A., Jensen, L.E. and Neckelmann, S. 2009: Modelling the impact of wakes on power output in large offshore wind farms. *Offshore Wind Energy in Mediterranean and Other European Seas 2009*, Brindisi, May 2009, 12 pp.
16. Prospathopoulos, J., Politis, E.P., Chaviaropoulos, P.K., Rados, K.G. Rados, Schepers, G.S. Cabezon-Martinez, D., Hansen, K.S. and Barthelmie, R.J. 2010: CFD modelling of wind farms in complex terrain. *European Wind Energy Conference*, Warsaw, April 2010, 9 pp.

17. Cabezón, D., Hansen, K. and Barthelmie, R.J 2010: Analysis and validation of CFD wind farm models in complex terrain. Effects induced by topography and wind turbines. *European Wind Energy Conference*, Warsaw, April 2010, 7pp.
18. Rathmann, O., Frandsen, S. and Nielsen, M. 2010: Wake decay constant for the infinite turbine array. *European Wind Energy Conference*, Warsaw, April 2010, 9pp.
19. Cabezón, D., Hansen, K. and Barthelmie, R.J 2010: Linearity analysis of wake effects induced by complex terrain and wind turbines through CFD wind farm models. *Fifth European Conference on Computational Fluid Dynamics, ECCOMAS CFD 2010*, Lisbon, June 2010. (Submitted).
20. Prospathopoulos, J., Cabezón, D., Politis, E.P., Chaviaropoulos, P.K., Rados, K.G., Schepers, G.S., Hansen, K.S. and Barthelmie, R.J. 2010: Simulation of wind farms in flat and complex terrain using CFD, The Science of Making Torque from Wind, Crete, June 2010. 12 pp.
21. Hansen, K.S., Barthelmie, R.J., Jensen, L.E. and Sommer, A. 2010: Simulation of wind farms in flat and complex terrain using CFD, The Science of Making Torque from Wind, Crete, June 2010. 6 pp.

Presentations or posters (without proceedings).

1. Jørgensen, H.E., Rathmann, O., Frandsen, S.T., Barthelmie, R.J., Badger, J., Ott, S., Rethore, P.E., Larsen, S.E. and Jensen, L.E. 2008: The making of a second generation wind farm efficiency model-complex. *European Wind Energy Association Conference*, Brussels, March 2008. (Scientific track)
2. Barthelmie, R.J., Frandsen, S.T., Rathmann, O., Hansen, K., Sørensen, J.N., Schepers, J.G., van der Pijl, S., Rados, K., Politis, E., Philips, J. and I. Marti and D. Cabezon 2007: Power losses from wakes in large offshore wind farms. ERE1-1FR2P-0281. European Geosciences Union Annual Meeting, Vienna, 15-20 April 2007 (poster).
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4. Barthelmie, R.J. Optimising wind farm layouts. WIndiana, Indianapolis, June 17-18 2008. (Poster).
5. Barthelmie, R.J., Pryor, S.C., Frandsen, S.T., Hansen, K., Schepers, J.G., Rados, K., Schlez, W., Neubert, A., Jensen, L.E. and Neckelmann, S. 2009: Improved modelling of power output in large offshore wind farms based on data from Nysted and Horns Rev. *European Offshore Conference 2009*, Stockholm, 14-16 September 2009.
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10. Barthelmie, R.J., Hansen, K., Frandsen, S.T., Rathmann, O., Politis, E., Prospathopoulos, J., Schepers, J.G., Rados, K., Cabezón, D. and Schlez, W. 2009: The impact of wakes on power output at large offshore wind farms. *American Geophysical Union, San Francisco, December 2010*.

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