The exhalant jet of mussels Mytilus edulis

The exhalant jet flow of mussels in conjunction with currents and/or other mussels may strongly influence the mussels' grazing impact. Literature values of mussel exhalant jet velocity vary considerably and the detailed fluid mechanics of the near-mussel flow generated by the exhalant jet has hitherto been uncertain. Computational modelling of this phenomenon depends on knowledge of the velocity distribution near the exhalant siphon aperture of mussels to provide appropriate boundary conditions for numerical flow models. To be useful such information should be available for a range of mussel shell lengths. Here, we present results of a detailed study of fully open mussels Mytilus edulis in terms of filtration rate, exhalant siphon aperture area, jet velocity, gill area and body dry weight, all as a function of shell length (mean +/- SD) over the range 16.0 +/- 0.4 to 82.6 +/- 2.9 mm, with the corresponding scaling laws also presented. The exhalant jet velocity was determined by 3 methods: (1) measured clearance rate divided by exhalant aperture area, (2) manual particle tracking velocimetry (PTV) using video-microscope recordings, and (3) particle image velocimetry (PIV). The latter provides detailed 2-component velocity distributions near the exhalant siphon in 5 planes parallel to the axis of the jet and the major axis of the oval aperture, and hence estimates of momentum and kinetic energy flows in addition to mean velocity. Data obtained on particles inside the exhalant jet of filtered water was verified by the use of titanium dioxide seeding particles which were de-agglomerated by ultrasound to a size range of 0.7 to 2 μm prior to addition, to avoid retention by the gill filter of the mussels. We found that exhalant jet velocity was essentially constant at similar to 8 cm s(-1), and independent of shell length. Based on geometric similarity and scaling of mussel pump-system characteristics we found that these characteristics coincide approximately for all sizes when expressed as pressure head versus volume flow divided by shell length squared.
Control of vortex breakdown in a closed cylinder with a rotating lid

The flow within a closed cylinder with a rotating lid is considered as a prototype for fundamental studies of vortex breakdown. Numerical simulations for various parameter values have been carried out to reproduce the known effect of a thin rotating rod positioned along the center axis as well as analyze the influence of local vorticity sources. As expected, the results show that the breakdown bubbles in the steady axisymmetric flow can be affected dramatically, i.e., fully suppressed or significantly enhanced, by rotating the rod. The main contribution of this article is to show that the observed behavior can be explained by the vorticity generated by the rod locally near the rotating lid and near the fixed lid, as analogous behavior is caused by the introduction of local vorticity sources in the flow without a rod. Moreover, we describe
the influence on the breakdown bubbles of the vorticity sources by an analytical model. In addition to improving our understanding, this finding should also open the door to other types of flow control devices capable of generating localized vorticity.

General information
State: Published
Organisations: Fluid Mechanics, Department of Mechanical Engineering, Carnegie Mellon University
Authors: Jørgensen, B. H. (Intern), Sørensen, J. N. (Intern), Aubry, N. (Ekstern)
Pages: 483-496
Publication date: 2010
Main Research Area: Technical/natural sciences

Publication information
Journal: Theoretical and Computational Fluid Dynamics
Volume: 24
Issue number: 5
ISSN (Print): 0935-4964
Ratings:
BFI (2018): BFI-level 1
BFI (2017): BFI-level 1
Web of Science (2017): Indexed Yes
BFI (2016): BFI-level 1
Scopus rating (2016): SJR 0.574 SNIP 0.836 CiteScore 1.42
Web of Science (2016): Indexed yes
BFI (2015): BFI-level 1
Scopus rating (2015): SJR 0.795 SNIP 1.543 CiteScore 1.63
BFI (2014): BFI-level 1
Scopus rating (2014): SJR 0.972 SNIP 1.637 CiteScore 2.06
BFI (2013): BFI-level 1
Scopus rating (2013): SJR 0.923 SNIP 1.023 CiteScore 1.29
ISI indexed (2013): ISI indexed yes
BFI (2012): BFI-level 1
Scopus rating (2012): SJR 0.665 SNIP 0.874 CiteScore 0.96
ISI indexed (2012): ISI indexed yes
BFI (2011): BFI-level 1
Scopus rating (2011): SJR 0.747 SNIP 1.028 CiteScore 1.04
ISI indexed (2011): ISI indexed yes
BFI (2010): BFI-level 1
Scopus rating (2010): SJR 0.982 SNIP 1.321
Web of Science (2010): Indexed yes
BFI (2009): BFI-level 1
Scopus rating (2009): SJR 1.406 SNIP 2.864
BFI (2008): BFI-level 1
Scopus rating (2008): SJR 1.38 SNIP 1.52
Scopus rating (2007): SJR 0.622 SNIP 0.806
Scopus rating (2006): SJR 0.707 SNIP 0.858
Scopus rating (2005): SJR 0.91 SNIP 0.978
Scopus rating (2004): SJR 0.994 SNIP 1.705
Scopus rating (2003): SJR 1.504 SNIP 0.913
Web of Science (2003): Indexed yes
Scopus rating (2002): SJR 0.651 SNIP 0.771
Scopus rating (2001): SJR 1.209 SNIP 1.348
Scopus rating (2000): SJR 0.8 SNIP 0.842
Scopus rating (1999): SJR 1.222 SNIP 0.974
Original language: English
Vortex breakdown suppression, Flow control, Rotating flow, Laminar flows in cavities
DOIs:
Computational methods in wind power meteorology

General information
State: Published
Organisations: Risø National Laboratory for Sustainable Energy, Meteorology, Wind Energy Division, Aeroelastic Design
Authors: Jørgensen, B. H. (Intern), Ott, S. (Intern), Serensen, N. N. (Intern), Mann, J. (Intern), Badger, J. (Intern)
Number of pages: 28
Publication date: 2007

Publication information
Publisher: Risø National Laboratory
Original language: English
Series: Denmark. Forskningscenter Risoe. Risoe-R
Number: 1560(EN)
ISSN: 0106-2840
Main Research Area: Technical/natural sciences
Risø-R-1560, Risø-R-1560(EN)
Electronic versions:
ris_r_1560.pdf

Bibliographical note
Risø-R-1560(EN)
Source: orbit
Source-ID: 216426
Publication: Research › Report – Annual report year: 2007

Wind atlas for Egypt: Measurements, micro- and mesoscale modelling
The results of a comprehensive, 8-year wind resource assessment programme in Egypt are presented. The objective has been to provide reliable and accurate wind atlas data sets for evaluating the potential wind power output from large electricity-producing wind turbine installations. The regional wind climates of Egypt have been determined by two independent methods: a traditional wind atlas based on observations from more than 30 stations all over Egypt, and a numerical wind atlas based on long-term reanalysis data and a mesoscale model (KAMM). The mean absolute error comparing the two methods is about 10% for two large-scale KAMM domains covering all of Egypt, and typically about 5% for several smaller-scale regional domains. The numerical wind atlas covers all of Egypt, whereas the meteorological stations are concentrated in six regions. The numerical wind atlas database, in combination with SRTM 3 elevation data and satellite imagery, provide the means for immediate WAsP wind resource assessments anywhere in Egypt. In addition to the very high wind resource in the Gulfs of Suez and Aqaba, the wind atlas has discovered a large region in the Western Desert with a fairly high resource – close to consumers and the electrical grid. The KAMM simulations seem to capture the main features of the wind climate of Egypt, but in regions where the horizontal wind gradients are large, the uncertainties are large as well and additional measurements are required. The results are now published in a Wind Atlas for Egypt.

General information
State: Published
Organisations: Rise National Laboratory for Sustainable Energy
Number of pages: 10
Publication date: 2006

Host publication information
Title of host publication: Proceedings (online)
Place of publication: Brussels
Publisher: European Wind Energy Association (EWEA)
Main Research Area: Technical/natural sciences
Electronic versions:
Comparison of corrections to site wind speeds in the offshore environment: Value for short-term forecasting

General information
State: Published
Organisations: Risø National Laboratory for Sustainable Energy
Authors: Barthelmie, R. (Intern), Giebel, G. (Intern), Jørgensen, B. (Intern), Badger, J. (Intern), Pryor, S. (Ekstern), Hasager, C. (Intern)
Publication date: 2005

Host publication information
Title of host publication: Proceedings CD-ROM
Place of publication: Brussels
Publisher: European Wind Energy Association (EWEA)
Main Research Area: Technical/natural sciences
Source: orbit
Source-ID: 307863
Publication: Research › Article in proceedings – Annual report year: 2005

Computational wind power meteorology in complex terrain compared to measurements (poster)

General information
State: Published
Organisations: Risø National Laboratory for Sustainable Energy, Wind Energy Division
Authors: Jørgensen, B. (Intern), Hansen, A. (Intern), Myllerup, L. (Intern), Sørensen, N. N. (Intern), Mann, J. (Intern), Ott, S. (Intern), Badger, J. (Intern)
Publication date: 2005

Host publication information
Title of host publication: Proceedings CD-ROM
Place of publication: Brussels
Publisher: European Wind Energy Association (EWEA)
Main Research Area: Technical/natural sciences
Source: orbit
Source-ID: 307866
Publication: Research › Article in proceedings – Annual report year: 2005

Offshore wind resource estimation from satellite SAR wind field maps

General information
State: Published
Organisations: Risø National Laboratory for Sustainable Energy
Pages: 403-419
Publication date: 2005
Main Research Area: Technical/natural sciences

Publication information
Journal: Wind Energy
Volume: 8
ISSN (Print): 1095-4244
Ratings:
BFI (2018): BFI-level 2
BFI (2017): BFI-level 2
Web of Science (2017): Indexed yes
BFI (2016): BFI-level 2
Computational wind power meteorology in complex terrain compared to measurements (poster)

General information
State: Published
Organisations: Risø National Laboratory for Sustainable Energy, Wind Energy Division
Authors: Jørgensen, B. (Intern), Hansen, A. (Intern), Myllerup, L. (Intern), Sørensen, N. N. (Intern), Mann, J. (Intern), Ott, S. (Intern), Badger, J. (Intern)

Scopus rating (2016): CiteScore 3.37 SJR 1.104 SNIP 2.306
Web of Science (2016): Indexed yes
BFI (2015): BFI-level 2
Scopus rating (2015): SJR 1.196 SNIP 2.086 CiteScore 3.06
Web of Science (2015): Indexed yes
BFI (2014): BFI-level 2
Scopus rating (2014): SJR 1.272 SNIP 3.75 CiteScore 3.42
Web of Science (2014): Indexed yes
BFI (2013): BFI-level 2
Scopus rating (2013): SJR 1.275 SNIP 2.464 CiteScore 2.75
ISI indexed (2013): ISI indexed yes
Web of Science (2013): Indexed yes
BFI (2012): BFI-level 2
Scopus rating (2012): SJR 1.126 SNIP 2.39 CiteScore 2.36
ISI indexed (2012): ISI indexed yes
Web of Science (2012): Indexed yes
BFI (2011): BFI-level 2
Scopus rating (2011): SJR 1.024 SNIP 2.718 CiteScore 2.49
ISI indexed (2011): ISI indexed yes
Web of Science (2011): Indexed yes
BFI (2010): BFI-level 2
Scopus rating (2010): SJR 1.487 SNIP 2.013
Web of Science (2010): Indexed yes
BFI (2009): BFI-level 2
Scopus rating (2009): SJR 1.124 SNIP 1.448
Web of Science (2009): Indexed yes
BFI (2008): BFI-level 2
Scopus rating (2008): SJR 0.826 SNIP 1.559
Web of Science (2008): Indexed yes
Scopus rating (2007): SJR 1.053 SNIP 1.453
Web of Science (2007): Indexed yes
Scopus rating (2006): SJR 0.637 SNIP 1.689
Web of Science (2006): Indexed yes
Scopus rating (2005): SJR 0.287 SNIP 0.9
Web of Science (2005): Indexed yes
Scopus rating (2004): SJR 0.528 SNIP 0.846
Web of Science (2004): Indexed yes
Web of Science (2003): Indexed yes
Web of Science (2002): Indexed yes
Web of Science (2001): Indexed yes
Web of Science (2000): Indexed yes
Original language: English
DOI: 10.1002/we.150
Source: orbit
Source-ID: 308472
Publication: Research - peer-review › Journal article – Annual report year: 2005
Improving flow models for complex terrain (poster)

General information
State: Published
Organisations: Risø National Laboratory for Sustainable Energy
Authors: Myllerup, L. (Intern), Jørgensen, B. (Intern), Badger, J. (Intern), Astrup, P. (Intern), Landberg, L. (Intern)
Publication date: 2004

Host publication information
Title of host publication: Conference proceedings (CD-ROM)
Place of publication: Washington, DC
Publisher: American Wind Energy Association (AWEA)
Main Research Area: Technical/natural sciences
Conference: 2004 Global Windpower Conference and Exhibition, Chicago, IL, United States, 28/03/2004 - 28/03/2004
Source: orbit
Source-ID: 306936
Publication: Research › Conference abstract in proceedings – Annual report year: 2004

The SWERA project KAMM-WAsP numerical wind atlases: New challenges and results

General information
State: Published
Organisations: Risø National Laboratory for Sustainable Energy
Authors: Badger, J. (Intern), Jørgensen, B. (Intern), Landberg, L. (Intern)
Publication date: 2004

Host publication information
Title of host publication: Conference proceedings (CD-ROM)
Place of publication: Washington, DC
Publisher: American Wind Energy Association (AWEA)
Main Research Area: Technical/natural sciences
Conference: 2004 Global Windpower Conference and Exhibition, Chicago, IL, United States, 28/03/2004 - 28/03/2004
Source: orbit
Source-ID: 306935
Publication: Research › Article in proceedings – Annual report year: 2004

Using satellite SAR in offshore wind resource assessment

General information
State: Published
Organisations: Risø National Laboratory for Sustainable Energy
Authors: Furevik, B. (Ekstern), Hasager, C. (Intern), Nielsen, M. (Intern), Hamre, T. (Ekstern), Jørgensen, B. (Intern), Rathmann, O. (Intern), Johannessen, O. (Ekstern)
Pages: 33-38
Publication date: 2004

Host publication information
Title of host publication: Proceedings (CD-ROM)
Place of publication: Noordwijk
Publisher: ESA Publications Division
Editor: Lacoste, H.
ISBN (Print): 92-9092-876-X
Main Research Area: Technical/natural sciences
Conference: 2. Workshop on coastal and marine applications of SAR, Svalbard (NO), 8-12 Sep, 01/01/2003
Source: orbit
Source-ID: 307044
Publication: Research - peer-review › Article in proceedings – Annual report year: 2004
Computational methods in wind power meteorology (poster)

**General information**
State: Published
Organisations: Wind Energy Division, Risø National Laboratory for Sustainable Energy
Authors: Sørensen, N. N. (Intern), Mann, J. (Intern), Jørgensen, B. (Intern)
Publication date: 2003
Event: Poster session presented at DCSC seminar, Copenhagen, Denmark.
Main Research Area: Technical/natural sciences
Source: orbit
Source-ID: 306399
Publication: Research › Poster – Annual report year: 2003

Developments in numerical wind atlas methodologies: Capturing diurnal and seasonal cycles

**General information**
State: Published
Organisations: Risø National Laboratory for Sustainable Energy
Authors: Badger, J. (Intern), Jørgensen, B. (Intern), Landberg, L. (Intern)
Publication date: 2003
Main Research Area: Technical/natural sciences

**Publication information**
Journal: Geophysical Research Abstracts
Volume: 5
ISSN (Print): 1607-7962
Ratings:
Web of Science (2014): Indexed yes
ISI indexed (2013): ISI indexed no
Web of Science (2013): Indexed yes
ISI indexed (2012): ISI indexed no
Web of Science (2012): Indexed yes
ISI indexed (2011): ISI indexed no
Web of Science (2011): Indexed yes
BFI (2009): BFI-level 1
Original language: English
Source: orbit
Source-ID: 305455
Publication: Research › Journal article – Annual report year: 2003

Developments in numerical wind atlas methodologies: Capturing seasonal and diurnal variations

**General information**
State: Published
Organisations: Risø National Laboratory for Sustainable Energy
Authors: Badger, J. (Intern), Jørgensen, B. (Intern), Landberg, L. (Intern)
Publication date: 2003

**Host publication information**
Title of host publication: Proceedings CD-ROM. CD 2
Place of publication: Brussels
Publisher: European Wind Energy Association (EWEA)
Main Research Area: Technical/natural sciences
Workshop: 2003 European Wind Energy Conference and Exhibition, Madrid, Spain, 16/06/2003 - 16/06/2003
Source: orbit
Source-ID: 305920
Publication: Research › Article in proceedings – Annual report year: 2003

Low-dimensional modeling of a driven cavity flow with two free parameters
By applying Proper Orthogonal Decomposition (POD) one is able to extract a limited amount of data which characterizes a flow of interest. The modes resulting from the decomposition form a basis in the phase space on which a Galerkin
projection of the equations of motion can be performed. By carrying out such a procedure one obtains a low-dimensional model consisting of a reduced set of Ordinary Differential Equations (ODEs) which models the original equations. A technique called Sequential Proper Orthogonal Decomposition (SPOD) is developed to perform decompositions suitable for low-dimensional models. SPOD is capable of transforming data organized in different sets separately while still producing orthogonal modes. A low-dimensional model is constructed and used for analyzing bifurcations occurring in the flow in the lid-driven cavity with a rotating rod. The model allows one of the free parameters to appear in the inhomogeneous boundary conditions without the addition of any constraints. This is necessary because both the driving lid and the rotating rod are controlled simultaneously. Apparently, the results reported for this model are the first to be obtained for a low-dimensional model based on projections on POD modes for more than one free parameter.

General information
State: Published
Organisations: Department of Mechanical Engineering, Department of Mathematics
Authors: Jørgensen, B. H. (Intern), Sørensen, J. N. (Intern), Brøns, M. (Intern)
Pages: 299-317
Publication date: 2003
Main Research Area: Technical/natural sciences

Publication information
Journal: Theoretical and Computational Fluid Dynamics
Volume: 16
Issue number: 4
ISSN (Print): 0935-4964
Ratings:
BFI (2018): BFI-level 1
BFI (2017): BFI-level 1
Web of Science (2017): Indexed Yes
BFI (2016): BFI-level 1
Scopus rating (2016): SJR 0.574 SNIP 0.836 CiteScore 1.42
Web of Science (2016): Indexed yes
BFI (2015): BFI-level 1
Scopus rating (2015): SJR 0.795 SNIP 1.543 CiteScore 1.63
BFI (2014): BFI-level 1
Scopus rating (2014): SJR 0.972 SNIP 1.637 CiteScore 2.06
BFI (2013): BFI-level 1
Scopus rating (2013): SJR 0.923 SNIP 1.023 CiteScore 1.29
ISI indexed (2013): ISI indexed yes
BFI (2012): BFI-level 1
Scopus rating (2012): SJR 0.665 SNIP 0.874 CiteScore 0.96
ISI indexed (2012): ISI indexed yes
BFI (2011): BFI-level 1
Scopus rating (2011): SJR 0.747 SNIP 1.028 CiteScore 1.04
ISI indexed (2011): ISI indexed yes
BFI (2010): BFI-level 1
Scopus rating (2010): SJR 0.982 SNIP 1.321
Web of Science (2010): Indexed yes
BFI (2009): BFI-level 1
Scopus rating (2009): SJR 1.406 SNIP 2.864
BFI (2008): BFI-level 1
Scopus rating (2008): SJR 1.38 SNIP 1.52
Scopus rating (2007): SJR 0.622 SNIP 0.806
Scopus rating (2006): SJR 0.707 SNIP 0.858
Scopus rating (2005): SJR 0.91 SNIP 0.978
Scopus rating (2004): SJR 0.994 SNIP 1.705
Scopus rating (2003): SJR 1.504 SNIP 0.913
Web of Science (2003): Indexed yes
Scopus rating (2002): SJR 0.651 SNIP 0.771
Scopus rating (2001): SJR 1.209 SNIP 1.348
Satellite-based wind maps - are they useful for siting of offshore wind farms

General information
State: Published
Organisations: Risø National Laboratory for Sustainable Energy
Authors: Furevik, B. (Ekstern), Hasager, C. (Intern), Barthelmie, R. (Intern), Espedal, H. (Ekstern), Jørgensen, B. (Intern), Rathmann, O. (Intern), Sandven, S. (Ekstern), Gaudiosi, G. (Ekstern), Christensen, L. (Ekstern), Pryor, S. (Ekstern), Johannessen, O. (Ekstern)
Pages: 177-186
Publication date: 2003

Host publication information
Title of host publication: Offshore wind energy in Mediterranean and other European seas. Resources, technology, applications
Place of publication: Naples
Publisher: Univ. of Naples
Main Research Area: Technical/natural sciences
Seminar: European Seminar Offshore Wind Energy in Mediterranean and Other European Seas, Naples, Italy, 10/04/2003 - 10/04/2003
Source: orbit
Source-ID: 305558
Publication: Research › Article in proceedings – Annual report year: 2003

Satellite-based wind maps as guidance for siting offshore wind farms

General information
State: Published
Organisations: Risø National Laboratory for Sustainable Energy
Authors: Furevik, B. (Ekstern), Espedal, H. (Ekstern), Hamre, T. (Ekstern), Hasager, C. (Intern), Johannessen, O. (Ekstern), Jørgensen, B. (Intern), Rathmann, O. (Intern)
Pages: 327-338
Publication date: 2003

Main Research Area: Technical/natural sciences

Publication information
Journal: Wind Engineering
Volume: 27
ISSN (Print): 0309-524X
Ratings:
BFI (2018): BFI-level 1
BFI (2017): BFI-level 1
BFI (2016): BFI-level 1
Scopus rating (2016): SJR 0.267 SNIP 0.515 CiteScore 0.58
Web of Science (2016): Indexed yes
BFI (2015): BFI-level 1
Scopus rating (2015): SJR 0.369 SNIP 0.632 CiteScore 0.63
Web of Science (2015): Indexed yes
BFI (2014): BFI-level 1
Scopus rating (2014): SJR 0.412 SNIP 1 CiteScore 0.78
BFI (2013): BFI-level 1
Scopus rating (2013): SJR 0.382 SNIP 1.105 CiteScore 0.62
ISI indexed (2013): ISI indexed no
Tensor formulation of the model equations on strong conservation form for an incompressible flow in general coordinates

General information
State: Published
Organisations: Risø National Laboratory for Sustainable Energy
Authors: Jørgensen, B. H. (Intern)
Number of pages: 20
Publication date: 2003

Publication information
ISBN (Print): 87-550-3293-1(Internet)
Original language: English
Series: Denmark. Forskningscenter Risoe. Risoe-R
Number: 1445(EN)
ISSN: 0106-2840
Main Research Area: Technical/natural sciences
Risø-R-1445, Risø-R-1445(EN)
Electronic versions:
ris_r_1445.pdf
Source: orbit
Source-ID: 306272
Publication: Research - peer-review › Report – Annual report year: 2003

The horizontally homogeneous model equations of incompressible atmospheric flow in general orthogonal coordinates

General information
Wind resource estimation - an overview

General information
State: Published
Organisations: Risø National Laboratory for Sustainable Energy
Authors: Landberg, L. (Intern), Myllerup, L. (Intern), Rathmann, O. (Intern), Petersen, E. (Ekstern), Jørgensen, B. (Intern), Badger, J. (Intern), Mortensen, N. (Intern)
Pages: 261-271
Publication date: 2003
Main Research Area: Technical/natural sciences

Publication information
Journal: Wind Energy
Volume: 6
ISSN (Print): 1095-4244
Ratings:
BFI (2018): BFI-level 2
BFI (2017): BFI-level 2
Web of Science (2017): Indexed yes
BFI (2016): BFI-level 2
Scopus rating (2016): CiteScore 3.37 SJR 1.104 SNIP 2.306
Web of Science (2016): Indexed yes
BFI (2015): BFI-level 2
Scopus rating (2015): SJR 1.196 SNIP 2.086 CiteScore 3.06
Web of Science (2015): Indexed yes
BFI (2014): BFI-level 2
Scopus rating (2014): SJR 1.272 SNIP 3.75 CiteScore 3.42
Web of Science (2014): Indexed yes
BFI (2013): BFI-level 2
Scopus rating (2013): SJR 1.275 SNIP 2.464 CiteScore 2.75
ISI indexed (2013): ISI indexed yes
Web of Science (2013): Indexed yes
BFI (2012): BFI-level 2
Scopus rating (2012): SJR 1.126 SNIP 2.39 CiteScore 2.36
ISI indexed (2012): ISI indexed yes
Web of Science (2012): Indexed yes
BFI (2011): BFI-level 2
Scopus rating (2011): SJR 1.024 SNIP 2.718 CiteScore 2.49
ISI indexed (2011): ISI indexed yes
Wind resource estimation - on timescales from 12 hours to 30 years

General information
State: Published
Organisations: Risø National Laboratory for Sustainable Energy
Authors: Landberg, L. (Intern), Mortensen, N. (Intern), Rathmann, O. (Intern), Myllerup, L. (Intern), Badger, J. (Intern), Jørgensen, B. (Intern), Giebel, G. (Intern), Petersen, E. (Ekstern), Højstrup, J. (Ekstern)
Publication date: 2003

Host publication information
Title of host publication: Conference proceedings (CD-ROM)
Place of publication: Calgary
Publisher: Canadian Wind Energy Association
Main Research Area: Technical/natural sciences
Source: orbit
Source-ID: 306329
Publication: Research - peer-review › Journal article – Annual report year: 2003

Developments in mesoscale modelling and SAR imaging of offshore wind maps

General information
State: Published
Organisations: Risø National Laboratory for Sustainable Energy
Authors: Jørgensen, B. (Intern), Furevik, B. (Ekstern), Hasager, C. (Intern), Astrup, P. (Intern), Rathmann, O. (Intern), Barthemie, R. (Intern), Pryor, S. (Intern)
Publication date: 2002

Host publication information
Title of host publication: Proceedings CD-ROM
Place of publication: Brussels
Off-shore wind fields obtained from mesoscale modeling and satellite SAR images

General information
State: Published
Organisations: Risø National Laboratory for Sustainable Energy
Authors: Jørgensen, B. (Intern), Furevik, B. (Ekstern), Hasager, C. (Intern), Astrup, P. (Intern), Rathmann, O. (Intern), Barthelmie, R. (Intern), Pryor, S. (Intern)
Publication date: 2002

Host publication information
Title of host publication: Offshore wind energy (CD-ROM)
Place of publication: Brussels
Publisher: European Wind Energy Association (EWEA)
Main Research Area: Technical/natural sciences
Conference: EWEA Offshore Wind Energy Special Topic Conference, Brussels, Belgium, 10/12/2001 - 10/12/2001
Source: orbit
Source-ID: 304029
Publication: Research › Article in proceedings – Annual report year: 2002

State-of-the-art: Wind resource, prediction and forecasting

General information
State: Published
Organisations: Risø National Laboratory for Sustainable Energy
Authors: Badger, J. (Intern), Jørgensen, B. (Intern), Landberg, L. (Intern)
Publication date: 2002

Host publication information
Title of host publication: Proceedings CD-ROM
Place of publication: Brussels
Publisher: European Wind Energy Association (EWEA)
Main Research Area: Technical/natural sciences
Conference: Understanding winds in numerical wind atlases, Paris (FR), 2-5 Apr, 01/01/2002
Source: orbit
Source-ID: 304235
Publication: Research › Article in proceedings – Annual report year: 2002

Wind estimates at the Norwegian west coast from modelling, in situ and satellite observations

General information
State: Published
Organisations: Risø National Laboratory for Sustainable Energy
Authors: Furevik, B. (Ekstern), Espedal, H. (Ekstern), Hasager, C. (Intern), Johannessen, O. (Ekstern), Jørgensen, B. (Intern), Rathmann, O. (Intern), Sandven, S. (Ekstern)
Publication date: 2002
Main Research Area: Technical/natural sciences

Publication information
Journal: Geophysical Research Abstracts
Volume: 4
ISSN (Print): 1607-7962
Ratings:
Web of Science (2014): Indexed yes
ISI indexed (2013): ISI indexed no
Web of Science (2013): Indexed yes
ISI indexed (2012): ISI indexed no
Wind resource estimation - from local to global

General information
State: Published
Organisations: Risø National Laboratory for Sustainable Energy
Authors: Landberg, L. (Intern), Frank, H. (Ekstern), Myllerup, L. (Intern), Mortensen, N. (Intern), Rathmann, O. (Intern), Petersen, E. (Ekstern), Badger, J. (Intern), Jørgensen, B. (Intern)
Publication date: 2002

Host publication information
Title of host publication: Proceedings CD-ROM
Place of publication: Brussels
Publisher: European Wind Energy Association (EWEA)
Main Research Area: Technical/natural sciences
Source: orbit
Source-ID: 304237
Publication: Research › Article in proceedings – Annual report year: 2002

Meso-skala modellering

General information
State: Published
Organisations: Risø National Laboratory for Sustainable Energy
Authors: Jørgensen, B. (Intern)
Publication date: 2001

Main Research Area: Technical/natural sciences
Source: orbit
Source-ID: 303120
Publication: Research › Conference abstract for conference – Annual report year: 2001

Satellite images used in offshore wind resource assessment

General information
State: Published
Organisations: Risø National Laboratory for Sustainable Energy
Authors: Hasager, C. (Intern), Furevik, B. (Ekstern), Dellwik, E. (Ekstern), Sandven, S. (Ekstern), Jensen, N. (Ekstern), Astrup, P. (Intern), Jørgensen, B. (Intern), Rathmann, O. (Intern), Barthelmie, R. (Intern), Johannessen, O. (Ekstern), Gaudiosi, G. (Ekstern), Christensen, L. (Ekstern)
Pages: 673-677
Publication date: 2001

Host publication information
Title of host publication: Wind energy for the new millennium. Proceedings
Place of publication: München
Publisher: WIP Renewable Energies
Editors: Helm, P., Zervos, A.
Main Research Area: Technical/natural sciences
Conference: 2001 European Wind Energy Conference and Exhibition (EWEC '01), Copenhagen, Denmark, 02/07/2001 - 02/07/2001
Satellite images used in offshore wind resource assessment

General information
State: Published
Organisations: Risø National Laboratory for Sustainable Energy
Authors: Jørgensen, B. (Intern), Furevik, B. (Ekstern), Hasager, C. (Intern), Astrup, P. (Intern), Rathmann, O. (Intern), Barthelmie, R. (Intern), Pryor, S. (Ekstern)
Publication date: 2001
Main Research Area: Technical/natural sciences
Source: orbit
Source-ID: 303313
Publication: Research › Article in proceedings – Annual report year: 2001

Low-dimensional modeling and dynamics of the flow in a lid driven cavity with a rotating rod

General information
State: Published
Organisations: Fluid Mechanics, Department of Mechanical Engineering, Department of Informatics and Mathematical Modeling, Image Analysis and Computer Graphics, Dynamical systems, Department of Mathematics
Authors: Jørgensen, B. H. (Intern), Larsen, R. (Intern), Sørensen, J. N. (Intern), Brøns, M. (Intern)
Publication date: Nov 2000

Publication information
Place of publication: Kgs. Lyngby, Denmark
Publisher: Technical University of Denmark (DTU)
Original language: English
Series: ET-PHD
Number: 2000-02
Main Research Area: Technical/natural sciences
Electronic versions:
Hoffman.PDF
Source: orbit
Source-ID: 275407
Publication: Research › Ph.D. thesis – Annual report year: 2000

Application of POD to PIV images of flow over a wall mounted fence

General information
State: Published
Organisations: Department of Energy Engineering
Authors: Jørgensen, B. H. (Intern)
Publication date: 1997

Host publication information
Title of host publication: Proceedings of the IUTAM SYmposium on Simulation and Identification of Organized Structures in Flows
Main Research Area: Technical/natural sciences
Conference: IUTAM Symposium on Simulation and Identification of Organized Structures in Flows, Lyngby, Denmark, 25/05/1997 - 25/05/1997
Source: orbit
Source-ID: 175500
Publication: Research › Article in proceedings – Annual report year: 1997

Projects:
Simulering og identifikation af strukturer i komplesse fluidstrømnings

Department of Mechanical Engineering
Period: 01/09/1996 → 26/03/2000
Number of participants: 7
Phd Student:
Jørgensen, Bo Hoffmann (Intern)
Supervisor:
Brøns, Morten (Intern)
Larsen, Rasmus (Intern)
Main Supervisor:
Sørensen, Jens Nørkær (Intern)
Examiner:
Meyer, Knud Erik (Intern)
Mann, Jakob (Ekstern)
Veldman, A.E.P. (Ekstern)

Financing sources
Source: Internal funding (public)
Name of research programme: DTU-Su Stipendium, Eksperiment
Project: PhD