

IEA Wind Task 36

Gregor Giebel, DTU Wind Energy

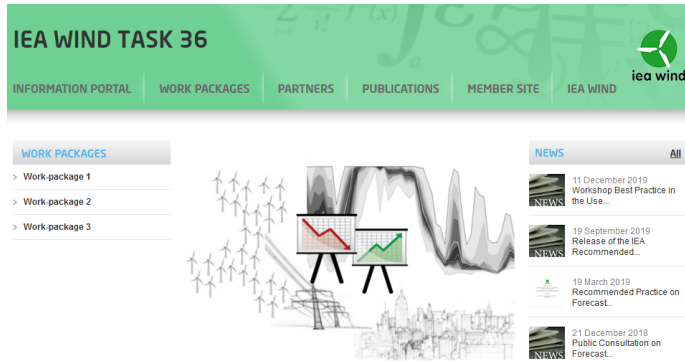
W. Shaw, H. Frank, C. Möhrlein, C. Draxl, J. Zack, P. Pinson, G. Kariniotakis, R. Bessa

ESIG Meteorology & Market Design for Grid Services Workshop Online 2020

Task 36 Web Presence

Website

www.ieawindforecasting.dk



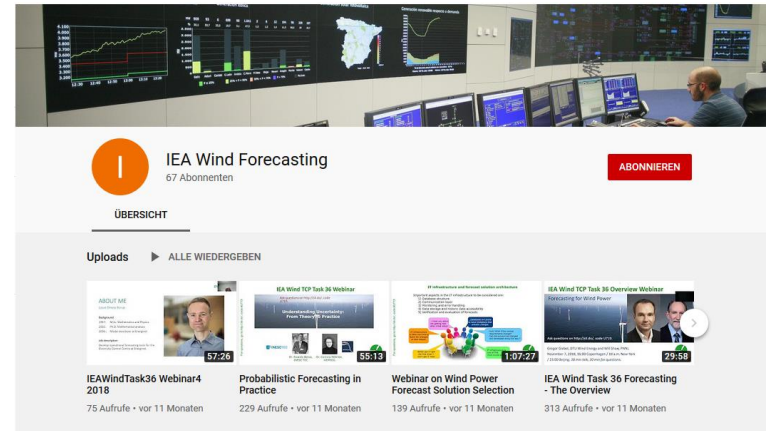
Source: Corinna Möhrten, WEPROG

Wind power forecasts have been used operatively for over 20 years. Despite this fact, there are still several possibilities to improve the forecasts, both from the weather prediction side and from the usage of the forecasts. The new International Energy Agency (IEA) Task on Forecasting for Wind Energy tries to organise international collaboration, among national weather centres with an interest and/or large projects on wind forecast improvements (NOAA, DWD, ...), operational forecaster and forecast users.

The Task is divided in three work packages: Firstly, a collaboration on the improvement of the scientific basis for the wind predictions themselves. This includes numerical weather prediction model physics, but also widely distributed information on accessible datasets. Secondly, we will be aiming at an international pre-standard (an IEA Recommended Practice) on benchmarking and comparing wind power forecasts, including probabilistic forecasts. This WP will also organise benchmarks, in cooperation with the IEA Task WakeBench. Thirdly, we will be engaging end users aiming at dissemination of the best practice in the usage of wind power predictions.

 YouTube Channel

<http://www.youtube.com/c/IEAWindForecasting>





International Energy Agency History

The IEA was founded in 1974 to help countries co-ordinate a collective response to major disruptions in the supply of oil.



Image source: dpa



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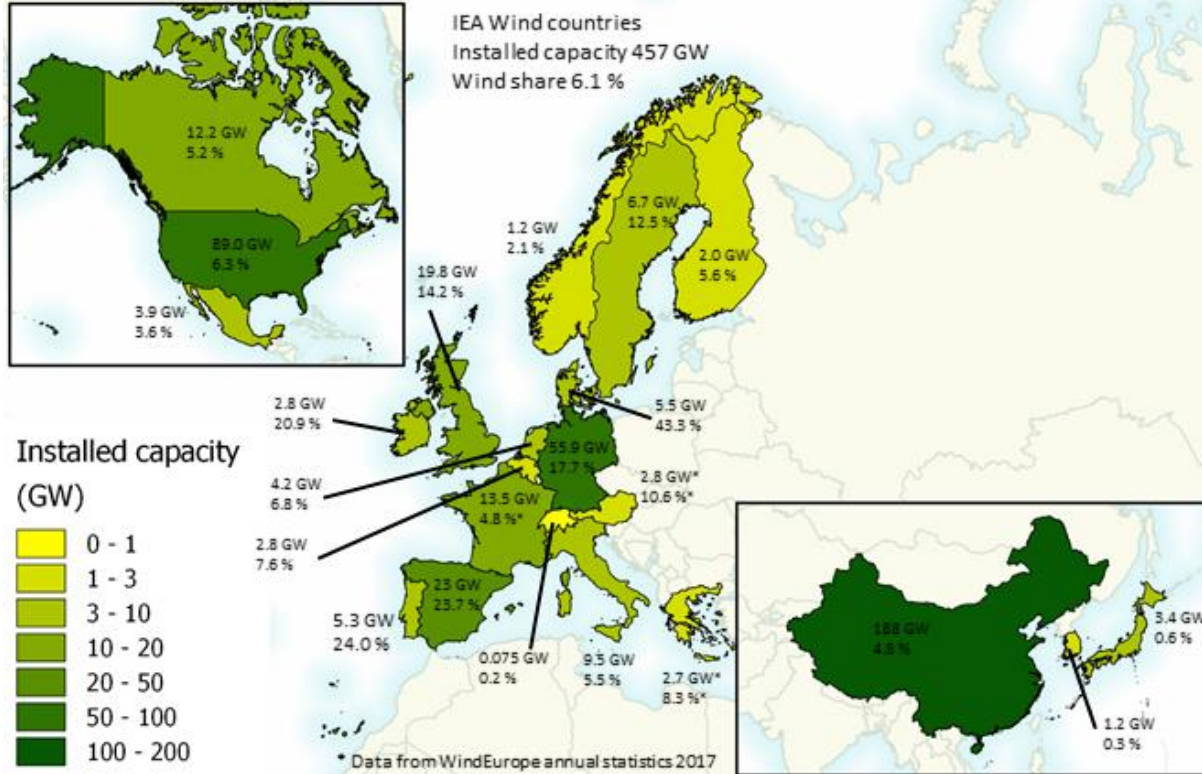
Specific Technology Collaboration

Programs:

- Bioenergy TCP
- Concentrated Solar Power (SolarPACES TCP)
- Geothermal TCP
- Hydrogen TCP
- Hydropower TCP
- Ocean Energy Systems (OES TCP)
- Photovoltaic Power Systems (PVPS TCP)
- Solar Heating and Cooling (SHC TCP)
- Wind Energy Systems (Wind TCP)



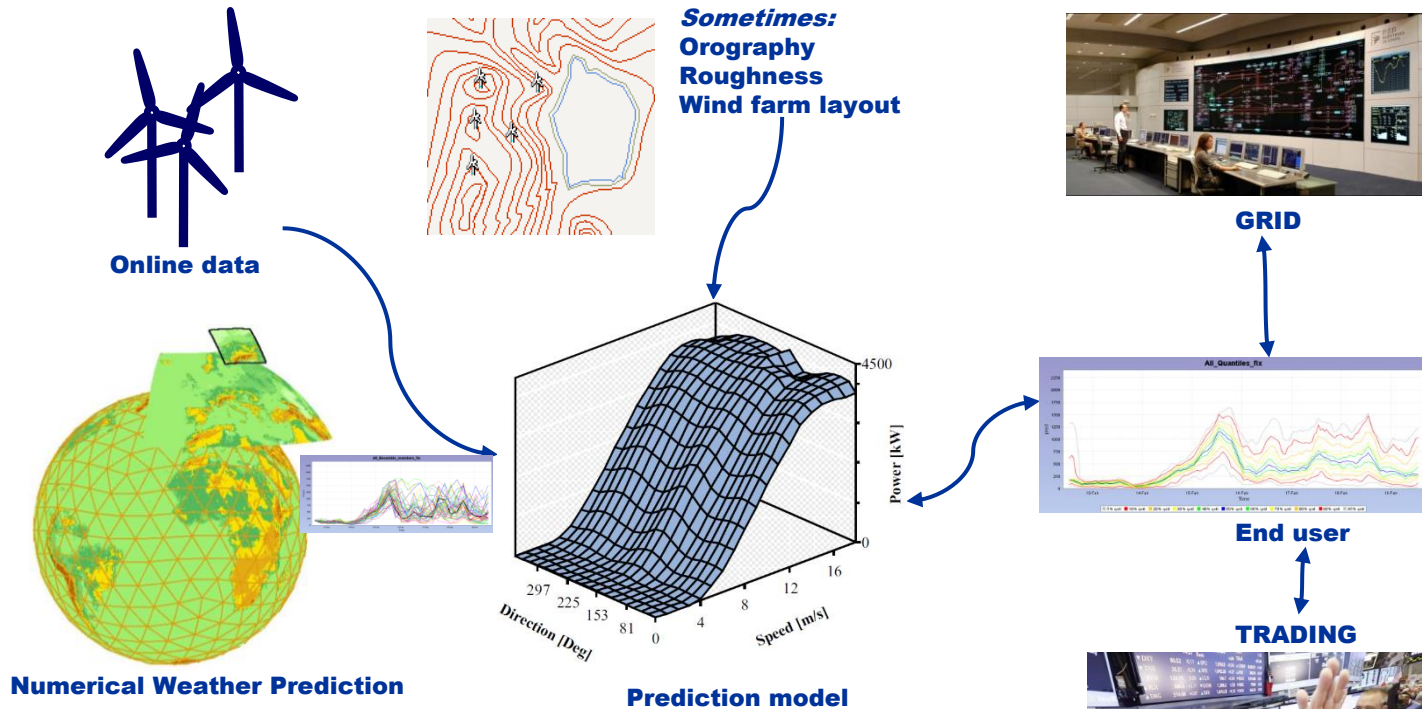
iea wind

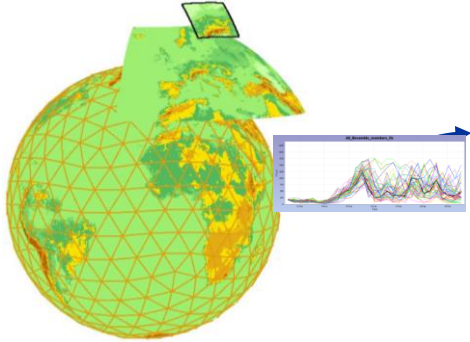


Task 36 members:
AT, CN, DE, DK, ES, FI,
FR, IE, PT, SE, UK, US

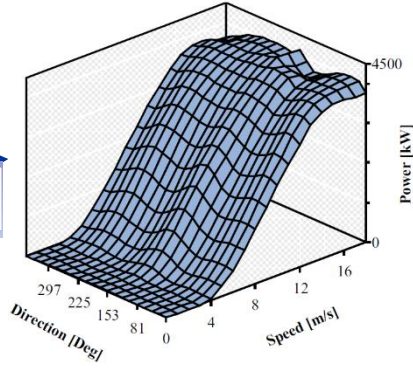


Short-term prediction of wind power, quickly explained





Numerical Weather Prediction

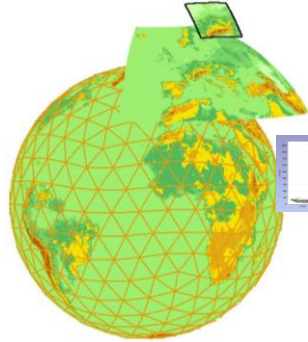


Prediction model

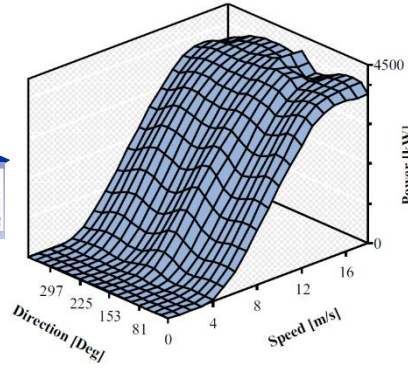


End user





Numerical Weather Prediction

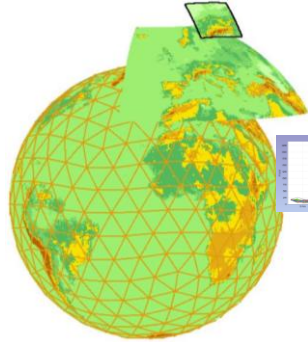


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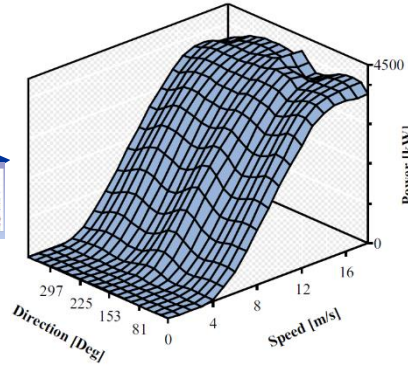
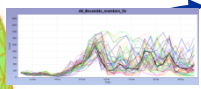


End user

**WP1: Coordination
Datasets
Benchmarks**



Numerical Weather Prediction



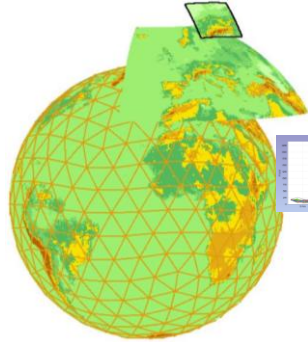
Prediction model



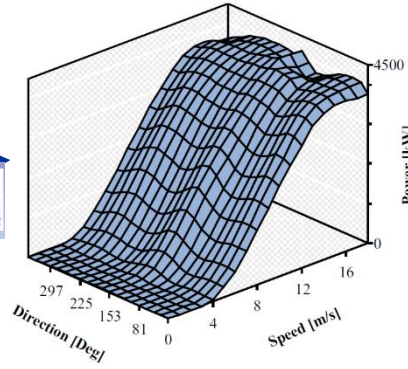
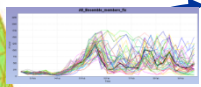
End user

WP2:

Vendor selection
Evaluation protocol
Benchmarks



Numerical Weather Prediction



Prediction model



End user

WP3:

**Decision support
Best Practice in Use
Communication**

www.IEAWindForecasting.dk



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