

## **BOREAS VI: Wind Energy Production in Cold Climates**

First announcement and call for papers

B. Tammelin, Finnish Meteorological Institute

From April 9 to 11, 2003, the Finnish Meteorological Institute FMI will host the BOREAS conference for the sixth time in the Hotel Pyhänturi at Pyhä in Finnish Lapland.

Interest in icing problems for wind power production has strongly grown since the first BOREAS meeting in 1992. The ideas and results that emerged from previous meetings and from several European research projects have already been adopted among e.g. users and manufacturers of wind gauges, manufacturers of wind turbines and their components, and wind turbine utilities and operators. Several wind power plants have been established within the last two years in Finland and Sweden, where the technological requirements for operation in cold climates have been fully adopted, and large new farms will be constructed this year at mountainous and hilly sites elsewhere in Europe (e.g. in Austria, Germany and Spain). There are also numerous sites in Europe and other parts of the world where cold climate problems could have been better accounted in order to improve the production of wind power and operational safety of wind turbines.

There is now a much greater recognition among national and other meteorological services of the problems posed by severe weather, especially icing effects, for operational meteorological measurements conducted under cold climate conditions. The aim of the BOREAS VI conference is to offer manufacturers, utilities, consultants, scientists and engineers working with wind power and meteorological measurements related to wind energy the opportunity to discuss their evolving ideas and experiences and to present their research and development results. Also active participation at the meeting of representatives from the relevant authorities and certification bodies concerned with wind energy production encouraged.

### **CALL FOR PAPERS**

Interested persons working in research, development and application fields of wind energy, are invited to make proposals for contributions to the subjects mentioned below and are asked to send their paper abstracts to the organisers by 31st October 2002 at the latest. The abstracts should not be longer than 1 page (DIN A4) and must be written in English.

Information can be found at [http://www.fmi.fi/research\\_meteorology/meteorology\\_19.html](http://www.fmi.fi/research_meteorology/meteorology_19.html)

Ms. Kirsi Virolainen  
BOREAS VI  
Finnish Meteorological Institute  
P.O.Box 503, 00101 Helsinki, FINLAND  
Tel. +358 9 1929 2224, Fax +358 9 1929 4129  
Email: [kirsi.virolainen@fmi.fi](mailto:kirsi.virolainen@fmi.fi)

### **Subjects of the BOREAS VI**

Papers are invited on the following topics:

1. Icing effects on wind turbine operation (operational experiences, safety, special wind turbines, economy)
2. Aerodynamics and loads (loads due to icing, observations, measurements and models)
3. Technical development (heated blades, coating of blades, certification)
4. Instrumentation (wind gauges, ice detectors)
5. Ice modelling and simulation (icing on blades and structures, in-cloud icing)
6. Measuring methods and results (wind velocity, power performance, icing data)