

Precision weather service tells you exactly when it will rain

May 26 2006

When planning a summer wedding, it does not really help to hear that "the probability of showers is increasing". A precision weather forecast will predict when the sun comes out or when the rain stops - or foretells if there is fog on the road or shipping lane.

Helsinki Testbed is a project designed to develop precision weather services. It consists of two parallel projects: a wide-ranging research project launched by the Finnish Meteorological Institute in 2005 that focuses on providing new weather services, and another project concentrating on the new observational systems developed by Vaisala Measurements Systems.

Precision weather data requires forecasting on a so-called mesoscale that in meteorological terms means a distance of 1 to 30 kilometres and time span of 0 to 3 hours. For this type of immediate forecasting the conventional observation networks and prediction models are too dispersed.

Testbed is part of Finnish "Business Opportunities from Space Technology" Programme launched by Tekes, the Finnish Funding Agency for Technology and Innovation. The project will produce a development platform that combines a range of observational instruments, analysis and forecast models and environment-related weather services.

For the Testbed project, Vaisala built a dense weather and environmental

measurements network that makes use of wireless data transmission technology. The system also includes a database and a web user interface.

"Testbed is open. New parties are free to join the system and use it for their own purposes while at the same time diversifying the system through their own input. Accessibility and scalability promote innovation and encourage networking among the players in the environmental measurement sector", says project manager Heikki Turtiainen of Vaisala.

"Several international research teams have indicated their willingness to join Testbed by offering their equipment for use in the project," Turtiainen says.

Source: Tekes

Citation: Precision weather service tells you exactly when it will rain (2006, May 26) retrieved 12 May 2024 from <https://phys.org/news/2006-05-precision-weather.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.