## Vaisala at ATC Maastricht 2006

The 16th annual ATC Maastricht Exhibition and Conference was held on February 14-16, 2006 in Maastricht, the Netherlands. ATC Maastricht is the host of the biggest and most comprehensive event for the global ATC & ATM industry, providing the best showcase for introducing new and innovative systems and solutions in these industries. The exhibition featured more than 190 exhibitors from all over the world, and the organizer estimated that the total number of visitors was around 4,300. Vaisala Aviation Weather participated in the exhibition displaying systems and solutions that enhance the safety and efficiency of air traffic.

#### Third Vaisala Aviation Weather Seminar

A Vaisala Aviation Weather Seminar was arranged for the third time in connection with the ATC exhibition and conference. The seminar provided a unique opportunity to hear presentations from a few well-selected key speakers. Dr. Olli Turpeinen from the International Civil Aviation Organization (ICAO) gave a presentation on the Future Trends in Aeronautical

Meteorology and Expected Changes to Relevant ICAO Regulations in 2007. Dr. Roy Rasmussen from the National Center for Atmospheric Research (NCAR) talked about Weather Support to De-icing Decision Making, and Captain



Jussi Ekman from Finnair gave a presentation on Ground Icing - From a Pilot's Perspective.

The seminar was well received: "The positive feedback from the participants was very encouraging and helps us to further develop the seminar. It also challenges us to find interesting topics and speakers for next year", says Markku Bollmann, Director of Sales and Marketing, Vaisala Aviation Weather.

ATC Maastricht 2007 will be held on February 13-15, 2007.

# Helsinki Testbed data available for researchers

The fourth campaign of the four-season mesoscale Testbed in the Greater Helsinki area was completed in May. The campaign focused on sea breeze and its dynamics. In the spring, the sea is still very cold and the land heats up rapidly during the daytime, creating a cycling air stream in the coastal area. This is called sea breeze.

Data from all but the last of the Helsinki Testbed campaigns is now available for researchers on the Internet. Users must register but the data is free for non-commercial purposes. The database can be accessed at http://testbed.fmi.fi, click on "Researchers' Interface". The application enables users to make Testbed database queries without any specific database or programming language know-how. The Researchers' Interface is administered and maintained by the Finnish Meteorological Institute.

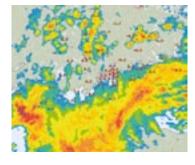
The Helsinki Testbed is primarily a research project and thus occasional breaks in service may occur. For the time being, data acquisitions are limited to cover a few weeks at a time.

Using the Researchers' Interface, you can choose data as files, or browse ready-made datasets such as radar images, analyzed daily weather maps, or outputs from a wind profiler, ceilometers or the Canadian Precipitation Occurrence Sensor System POSS. Campaign months are August 2005, November 2005, January-February 2006, May 2006 and August 2006.

### Sea breeze

Temperature difference between land and sea can create an air flow circulation even on a rather small scale on the coasts of Finland. At the height of 500-1000 m the flow is offshore, and at

the ground level onshore across the coastline. A slow ascending motion of air (typically a few cm/s) occurs above the land and a descending motion occurs above the sea. This circulation of air creates thermal low pressures and high pres-



sures in order of a couple of hectopascals. Sea breeze circulation can be observed during summertime in fair weather. Sea breezes form with similar mechanisms on other coasts of the world, but the values presented here are typical for Finland.

Sea breeze blows when the sea surface is relatively cold compared to the land surface. The temperature difference must be from 5 to 15 degrees Celsius, and the basic airflow (i.e. wind caused by other factors) must be weak: 0-5 m/s from the sea or 0-8 m/s from inland. The temperature difference is created by insolation, so there should not be too many clouds to prevent sunshine.

In an average summer, sea breeze is observed in downtown Helsinki during approximately 50 days. How far inland the sea breeze intrudes depends mainly on the strength of the basic airflow.

### Sea breeze and society

Many enjoyable summer activities are connected to sun and sea, temperature and wind. Almost anyone relaxing in a garden or at the beach gets annoyed when the wind brings in cooler sea air and the temperature drops several degrees.

There are others to whom the start/non-start of sea breeze can be very important. If an accident such as fire or chemical leak takes place, evacuation planning requires accurate wind information on a small scale. Also, light aviation - from hot

air ballooners to gliders - requires wind information for both pleasure and safety.

(Elena Saltikoff, contributor to "Ilmakehä ja sää" by Karttunen et al, Ursa 2003)

## Rauno Sirola in Memoriam



Vaisala's former Marketing and Sales Director and more recently Vaisala KK's (Tokyo operations) Managing Director Rauno Sirola was killed in a car accident on March 19th in Vilamoura, Portugal.

Rauno Sirola worked at Vaisala for 36 years (1965-2001). He became good friends with many of us and was very active in keeping in touch even after

his retirement. Those who worked with Rauno remember him as a supervisor and colleague who granted freedom and responsibility, while also focusing on results.

Rauno Sirola's career in Vaisala started in 1965 as a sales, training and installation engineer. At the time, Vaisala's founder Professor Vilho Väisälä was still acting as the company's Managing Director and the product offering consisted of sounding equipment for the upper atmosphere.

Rauno Sirola's career included many expatriation placements. At the turn of the 1960s, "Rane" Sirola worked in Brazil for five years in a project run by the WMO, introducing and installing Vaisala's sounding equipment, and training locals how to use it.

In 1974, Rauno was appointed Marketing and Sales Manager. In this role, he traveled around the world promoting the sales of Vaisala's sounding equipment, weather stations and humidity meters. He played an active role in the launch and marketing of the Vaisala Radiosonde RS80 in the 1980s. His efforts paid off and resulted in a significant growth in Vaisala's market share in the radiosonde market.

In 1986, Rauno Sirola and his family moved to Australia, where his task was to establish Vaisala Pty in Melbourne. From Australia the mission continued to Tokyo, where he was responsible for Vaisala KK's operations. The Sirola family stayed in Japan for nearly 15 years, and became well acquainted with the local language and culture. Rauno Sirola also played an important role as the President of the Japanese-Finnish Business Council and the Japanese-Finnish Chamber of Commerce.

Rauno Sirola retired in 2001. He will be greatly missed.

