



Innovation • Reliability • Solutions

# The Vaisala promise.



We provide instruments, solutions and services that allow our customers to precisely measure, analyze, and predict the world around us. These are the words we live by. Through our incomparable measurement technologies, Vaisala seeks not only to quantify and facilitate everyday industrial tasks but also to improve the understanding of meteorological phenomena. Vaisala aims to establish the basis for a better quality of life.

Productivity, quality, safety — these are the essential qualities behind our success and that of our customers.

# Extending your senses.



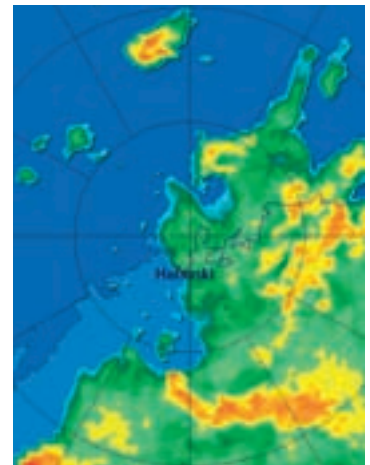
Photo © Mark Cosslett

For the past 70 years Vaisala has developed and marketed leading-class electronic measurement instruments, systems and solutions. Innovation. Reliability. Solutions. Through these, we add focus, remove uncertainty, and aid our customers in correctly assessing situations so they can make the right decisions.

Vaisala offers a wide range of products, solutions and services relating to environmental measurement. Whether the requirement is for a single instrument or highly advanced turnkey solutions, Vaisala is the chosen partner. Our service organization ensures that our customers have full support

throughout the product lifecycle. From forecasting weather, protecting the environment and improving the safety of road and air traffic, to a large variety of industrial uses such as automotive and pharmaceutical, our focus is on facilitating our customers' everyday operations. We work to bring them more accurately in tune with the environment, from the upper atmosphere to the earth's surface and man-made structures.

As a world leader in many environmental and industrial measurement fields, Vaisala is the number one partner in mission-critical measurement processes and among demanding professionals.



# No place unreachable, no situation unserviceable.

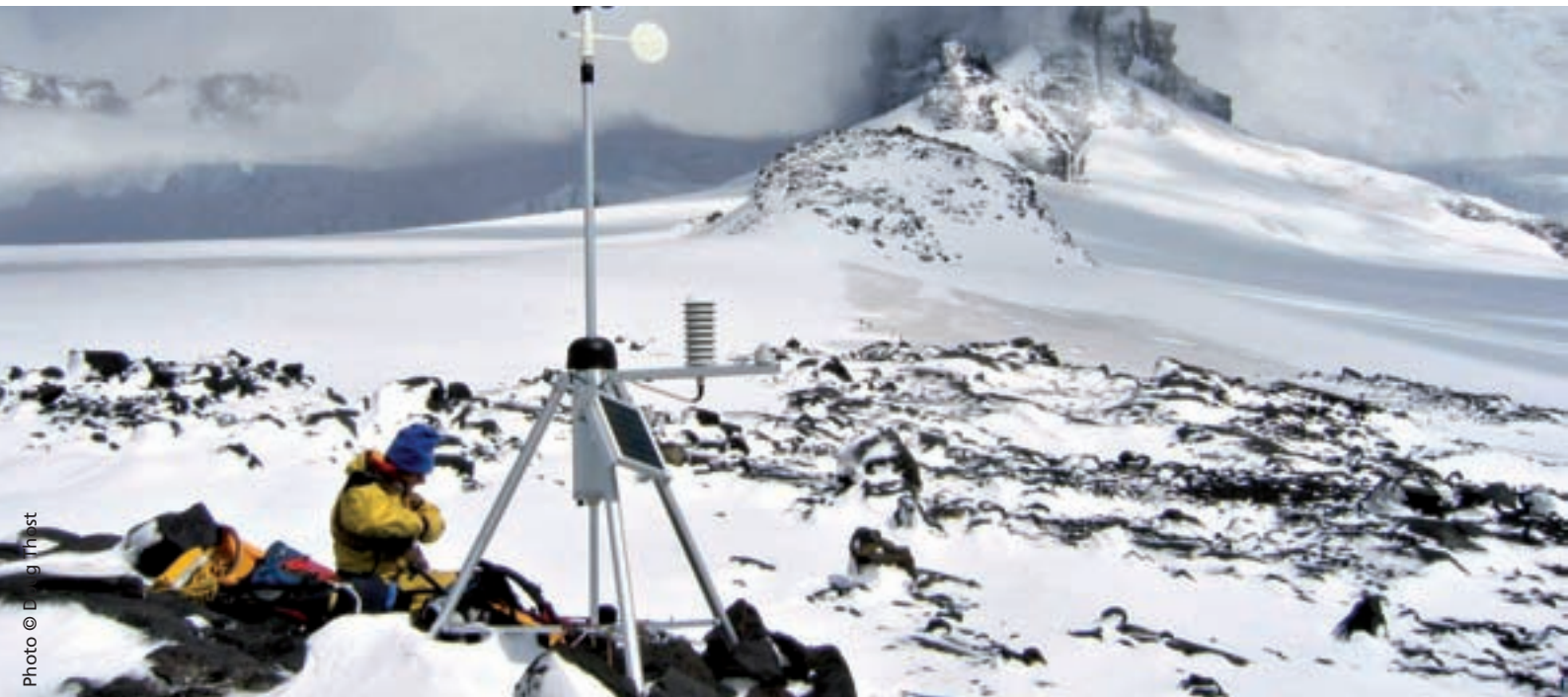


Photo © David Frost



Headquartered in Vantaa, Finland, the Vaisala Group provides its solutions to over 100 countries. The Group has over 20 offices around the world, and over 1000 dedicated experts. In 2006 Vaisala achieved net sales of EUR 220.8 million.

No matter the extent of our customer's need, it is met by selecting, testing, installing, using and maintaining the appropriate solution. Maintenance, training and calibration services are provided all over the world.

The commitment Vaisala makes to comprehensive customer care and high quality is as strong as that made to measurement technologies. Through thorough knowledge of local circumstances and close customer relationships we can provide solutions for every situation you may be faced with. One of Vaisala's core values is to focus on each customer's unique and specific requirements, case by case.

## Two hemispheres of Vaisala.



If ever there was a company whose focus is on better understanding our environment and facilitating industrial tasks, it is Vaisala.

Catering to all weather-related requirements is one of the backbones of Vaisala's business. Vaisala's automatic weather observation systems are used across the world by meteorological and hydrological institutes. Accurate weather observing tools help aviation and traffic authorities prevent hazards and problems. Like other professionals in weather-sensitive operations, they know that no solution is as dependable as a Vaisala solution. Upper-air sounding equipment and remote sensing technologies such as

lightning detection and wind profilers, help us see further and beyond.

Along with weather measurement systems, solutions and instruments, Vaisala develops, manufactures and markets instruments for use in a vast array of industrial areas. Applications range from automotive, food and beverage, pulp and paper to power and energy, just to name a few. Through these instruments, day-to-day operations can be carried out more efficiently. All Vaisala instruments are developed to provide optimal measurements so that our customers' decision-making tools are exactly what they need to be — flawless and accurate.



# The heart of Vaisala.



## **Innovation**

To keep our thinking advanced, Vaisala invests in the future. We have 19% of our people working in research and development alone, providing our customers with cutting-edge products and technologies. Working closely with our customers, universities and research institutes, we ensure that Vaisala products are at the forefront of environmental and industrial measurement technology. A history of excellence in measurement technologies coupled with unsurpassed research and development is the foundation upon which Vaisala has built its operations and products. Vaisala also maintains a continuous drive to innovate and pioneer new ways of measurement and servicing our customers.

## **Reliability**

Our customers have become accustomed to Vaisala quality and reliability. All of our products undergo rigorous testing procedures by industry-leading experts to ensure faultless operations even in the most demanding conditions. Vaisala instruments provide exacting measures, and ease of use. Our customers have placed their faith in Vaisala because of our highly reliable and accurate measurement, and our dependability as a company. In short, we keep our promises.

## **Solutions**

With many of our customers looking for tailored solutions, systems and services, we offer turnkey deliveries and comprehensive services. Our aviation and road weather systems are an excellent example of Vaisala's leadership as a solution provider. At Vaisala, we maintain a strong customer focus to allow our customers to concentrate on their core business.

# Cases.

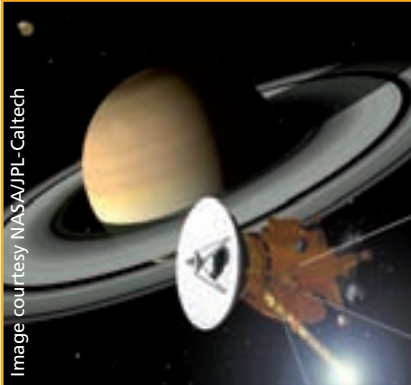


Image courtesy NASA/JPL-Caltech

## Vaisala goes to Titan

To shed light on Saturn and one of its moons, Titan, a spacecraft was constructed by NASA, the Italian Space Agency, the European Space Agency, and scientists worldwide. The Cassini-Huygens spacecraft was launched in October 1997 from Florida.

Cassini entered the Saturn system in July 2004. This marked the start of its 4-year mission. Cassini will carry out many orbits around Saturn and make close flybys of Titan.

Titan exhibits many similarities to conditions that may have once prevailed on Earth. In December 2004, the Huygens probe separated from the spacecraft for its journey to Titan. It successfully descended on its surface.

Huygens carried instruments to sample Titan's atmosphere and surface properties. The Pressure Profile Instrument contained eight Vaisala BAROCAP® barometric pressure sensors. BAROCAP® is known for its excellent hysteresis and repeatability characteristics, and outstanding temperature and long-term stability.



## Vaisala at Suvarnabhumi Airport

The Second Bangkok International Airport (SBIA), or Suvarnabhumi Airport, opened for commercial flights in September 2006 in Thailand. It boasts the world's tallest control tower and the world's second largest single building and airport terminal. It has two parallel runways and two parallel taxiways to accommodate simultaneous departures and arrivals, as well as a total of 120 parking bays.

The SBIA Automated Weather Observing System (AWOS) is provided by Vaisala. It was designed to provide as much automated data as possible. Basic variables like pressure, temperature, humidity and rain are measured at five different locations to ensure the quality of data all around the airport area. The runways are equipped with an extensive set of Vaisala wind and visibility sensors.

In addition to surface, visibility and wind shear measurements, a Vaisala lightning detection network helps to minimize the threat posed by thunderstorms on SBIA airport operations.



## Vaisala lightning detection

Vaisala owns and operates the U.S. National Lightning Detection Network (NLDN), consisting of ground-based lightning sensors that continuously detect lightning discharges to ground for the continental United States. Each lightning stroke is recorded in real-time at Vaisala's Tucson Operations.

NLDN information is used for both monitoring current conditions and studying past events. Weather forecasters use real-time lightning maps and individual lightning strike characteristics from the NLDN to closely monitor thunderstorm development, strength, and paths. Electric power utilities, airports, telecommunications networks, explosives handling operations and others rely on NLDN lightning data to tell which facilities are at risk.

Lightning-sensitive operations around the world rely on Vaisala's lightning warning, tracking, mapping and analysis systems and services to save lives, protect property and reduce economic losses caused by lightning.



**VAISALA**

Reliable.

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