Long Tradition of Meteorological Service

Poland’s Center of Aerology, operating under the Institute of Meteorology and Water Management, is responsible for upper-air weather observations and ozone research work. Since April 1999, it has used Vaisala’s RS90 Radiosonde in its routine soundings. "During this short period, our experiences with the RS90 have been positive," explains Dr. Zenobia Litynska, Head of the Center of Aerology.

Various observations

The Center of Aerology operates as a department in the IMWM organization, and is located in Legionowo, about 30 km from Warsaw.

One of its main responsibilities is to operate weather observations at the Legionowo upper-air station (12374, location: 52.40° N, 20.97° E), which was equipped with Vaisala’s DigiCORa MW11A ground equipment in 1992. The Center also supervises two other upper-air stations – in Leba (12120, location: 54.75° N, 17.53° E) and Wroclaw (12425, location: 51.12° N, 16.88° E) – using the same sounding equipment.

In addition, it operates a meteorological radar and collects data on clouds and precipitation (including snowfall) for the IMWM’s weather forecasting service, the Warsaw Airport and general forecasting. It also carries out research on radar meteorology, ozone and UV-B.

Dr. Zenobia Litynska, Head of the Center of Aerology, is a specialist in atmospheric physics. "Apart from supervising all the Center’s activities, I also participate personally in the research. We collect and utilize data on the upper air (pressure, temper-
Sodankylä Observatory celebrates 50th anniversary
Monitoring Atmospheric Ozone Levels

The Sodankylä Observatory in Finnish Lapland celebrated its 50th anniversary on October 1st, 1999. "Though we were established in 1949, the very first meteorological observations in Sodankylä were made almost 150 years ago," notes Dr. Esko Kyrö, Head of the Observatory. Nowadays, the Observatory is well known for its ozone research, and uses Vaisala’s ozonesondes for its measurements.

The Centre of Aerology makes upper-air soundings to measure pressure, temperature, humidity, wind speed and direction. At present, this is done twice a day at Legionowo and once a day at Leba and Wroclaw. Ozone soundings have been performed at the Legionowo site since 1979. They are done regularly, once a week, and even more frequently during the winter and spring.

The Center of Aerology has used Vaisala’s RS90 Radiosondes in its regular soundings since April 1999. According to Dr. Litynska: "Though we have used them for only a short time, our experiences have been positive." She notes that her organization chose the RS90 Radiosondes to improve data availability and quality.

The IMWM uses Vaisala’s barometers in all its upper-air and meteorological stations. Two of its meteorological stations are equipped with the MILOS 500 automatic weather station. Vaisala’s meteorological instrumentation has been installed at the Warsaw and Krakow airports. "Looking ahead, we must maintain the accuracy of our measurement data and are therefore planning to buy more automatic weather stations," says Dr. Litynska.

Based on her experiences since 1992, she concludes that the relationship with Vaisala has been both fruitful and friendly.