VAISALA / SUCCESS STORY

WEATHER RADAR

MeteoGalicia Ready to Brave the Atlantic Gales with Vaisala

Determined to further strengthen Galicia's regional defenses against the storm-swept Atlantic Ocean, Spain's MeteoGalicia chose Vaisala as its partner in providing a comprehensive Early Warning System.

Boosting MeteoGalicia's Early Warning Capability

MeteoGalicia, the 10-year-old regional meteorological service attached to the Environmental Department of Xunta de Galicia was tasked with ensuring rapid and reliable meteorological forecasts and weather warnings for the region of Galicia. To achieve this goal, the organization needed to augment its current measurement capabilities with a highly accurate weather radar system. After carefully considering several competitive offers, MeteoGalicia was confident that Vaisala offered the best solution, citing the professionalism, care and expertise of Vaisala's customer service as well as the versatility of the Vaisala solution portfolio.

Challenge

- Mitigate the worst effects of Atlantic storms with accurate early warnings
- Improve the reliability of regional forecasting for local populations and industry
- Gather long-term data to further advance climatological research

Solution

- Vaisala Dual Polarization Weather Radar WRM200
- Lightning detection network comprising four sensors
- Upper air sounding system
- Five-year service contract

Benefits

- Greatly improved warning accuracy, helping safeguard lives and property
- Better regional forecasting for televised weather reports
- A wealth of data for long-term climatological research
- Easily accessible, localized information for weather-sensitive industries

"Research on the effects of climate change has been carried out in Galicia. It found evidence that there are more extreme events of rain in the area than in the past.

There may be fewer rainy days, but when it rains it is more intensive. There are clear risks relating to this, for example villages and small towns close to rivers or the sea may suffer damaging floods.

The new Vaisala radar will benefit us in many ways. It will improve our capacity for civil protection as we will be able to issue more accurate warnings. The data gained will compliment measurement data from other instruments, and we will be able to assimilate the information into our numerical models. The radar will also be used for more long-term climatological research. Our university researchers are already enthusiastically waiting for the radar data."

Vicente Pérez-Muñuzuri,
Director,
MeteoGalicia

Making an Impact on Everyday Life

Weather plays a critical role in the lives of people residing in the Galicia region. Stretching along Spain's picturesque northwest coastline, the region has always been vulnerable to the extreme weather events generated by the Atlantic Ocean.

Many key players in the economy – such as energy companies, recreational companies, fishermen, and clam pickers – are directly affected by changing weather. With the devastation inflicted by cyclone Klaus in 1999 still fresh in local memories, MeteoGalicia was determined to secure a more comprehensive meteorological system to offer the people of the region improved forecasts and more timely early warnings. It was a goal welcomed and shared by Vaisala.

Building a Robust, Comprehensive System

As MeteoGalicia was already equipped with many of the basic components required for a full-scale early warning system – weather stations, rain gauges, and the decision support software (DSS) module – Vaisala rounded out the system with the Vaisala Dual Polarization Weather Radar WRM200. MeteoGalicia also opted for the Vaisala Lightning Detection system, consisting of a network of four sensors and an upper-air sounding system. The entire solution was backed up with a five-year service contract to ensure the system continues to operate at maximum efficiency well into the future.

Prepared for the Future

After inking the agreement and completing factory acceptance testing, construction and implementation of the weather radar and the lightning detection system began in earnest in 2008. The system was fully operational in October 2010. Early cooperation with Vaisala has already paid dividends by with ensuring the development of MeteoGalicia's mesometeorological research capability. Similarly, MeteoGalicia will be better able to monitor the ongoing effects of climate change in the region, having already discovered patterns of more extreme events of rain than in the past.

The significant improvements in MeteoGalicia's forecasting will help alleviate the worst of these effects in the years to come.

VAISALA

For more information, visit www.vaisala.com or contact us at sales@vaisala.com