Fields of application



Beware of similar products

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Support for water treatment



Public Utilities Board (Singapore National Water Agency)

PUB installed six weather radars across various parts of Singapore as part of a rainfall monitoring and nowcasting system.

X-band Weather Radar sites in Singapore



System Outline



Holding Energia Risorse Ambiente (Italy)

HERA, an Italian multi-utility company, installed a weather radar system in the Rimini area. The radar improves weather data accuracy, replacing a previous radar with limited range. It provides precise weather data for monitoring and forecasting.

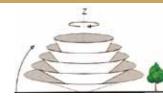




System Outline Data flow from weather radar observation to application



S-band C-band



ODIM H5

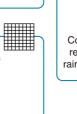
Data adjustment/quality control 3D - Physical data correction

correction correction

2D - Projection and coordinate transformation



Cartesian coordinates Gridding/resampling



Adjustment of distributed precipitation estimates



VeVaDaM H5

Data interface

Data processing



Data products example Radar/NWP* assimilation

Other data sources

Various Data interfaces

Simulation and modeling



Real-time modeling Retrospective analyses Planning analyses



Decision support

Planning

Illust by VeVa (http://www.veva.dk/)

Monitoring and

NWP*: Numerical Weather Prediction

Research and education

Western Illinois University (USA)

Western Illinois University has installed a Furuno Weather Radar on campus to provide more accurate regional weather information for the community. It is also an important tool for student curriculum, research and educational opportunities.





IRUNO INC.

National Taiwan University

National Taiwan University utilizes the weather radar for their urban intense precipitation research and education for students.

Milešovka observatory, Czech Academy of Science (Czech Republic)

A Furuno WR2120 installed at observatory. Milešovka is the oldest mountain observatory in the Czech Republic.



Safety in airport

Wakkanai Airport (Japan)

The Furuno radar supports the improvement of operational efficiency in aircraft by accurately observing rainfall and snowfall around airports. And utilizing this data to make informed decisions regarding aircraft takeoff and landing.





Safety in offshore platform



Drill ship

Furuno weather radars provide detailed weather condition observations that are critical for crew, shipboard and helicopter operations safety. The continuous, real-time weather information includes storm location, precipitation, visibility and Doppler velocity detail, maximizing operational drilling efficiency.



Broadcasting

WLX radio (USA)

Providing critical, gap filling data that the regional S-band radars cannot see, which has allowed them to send immediate tornado alerts to local NWS (National Weather Service) on multiple occasions.





Volcano observation

Popocatepetl volcano (Mexico)

Operated by Geophysics Institute of the National Autonomous University of Mexico. Developed to measure weather



Wildfire observation with a transportable platform

University of Queensland

The University of Queensland in Australia has developed a wildfire prediction model using the WR-2100 radar. Its small size is perfect for both transportation and safe relocation.





Small size allows the FURUNO WR-2100 weather radar to easily be mounted on a transportable platform creating a mobile observation unit that can be deployed in desired area.

System Configuration * Designed by the University of Queensland and supported by Furuno

Digital compass (acquires North offse

Signal Processing Unit WR-2100-SPU

Towing vehicle

Power generator



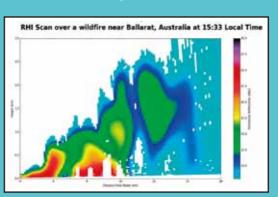
Antenna unit WR-2100-ATU

(raised for observations)

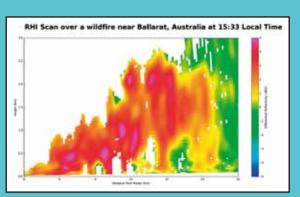
nclination is fixed at +/- 0.5 degrees

Observation Result

The WR-2100 provides unique, detailed information of the fire plumes and wind speed/direction within the fire activity to the researchers.



RHI scan showing horizontal reflectivity



RHI scan showing differential reflectivity (ZDR)