



RAINWATCH



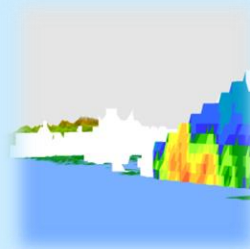
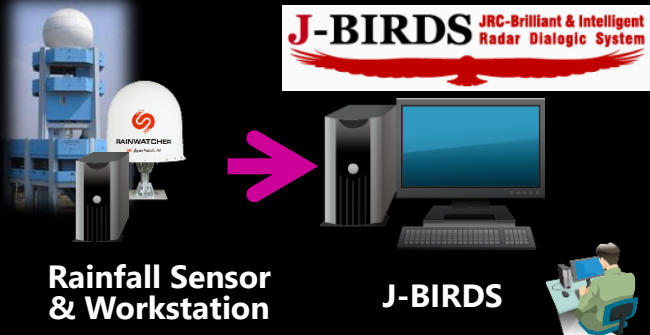
Japan Radio Co., Ltd.

**ICT Solutions
for Promoting Disasters Resilience**

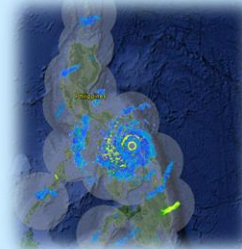


Japan Radio Co., Ltd.

Radar Rainfall Sensor

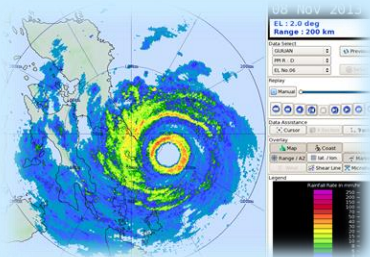


3D

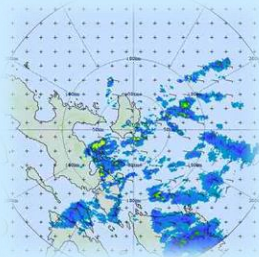


Composite

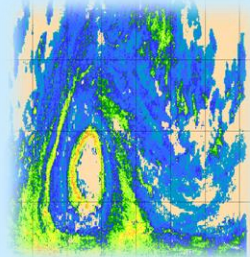
J-BIRDS software provides various products



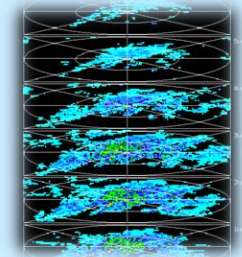
PPI



Intensity + Wind

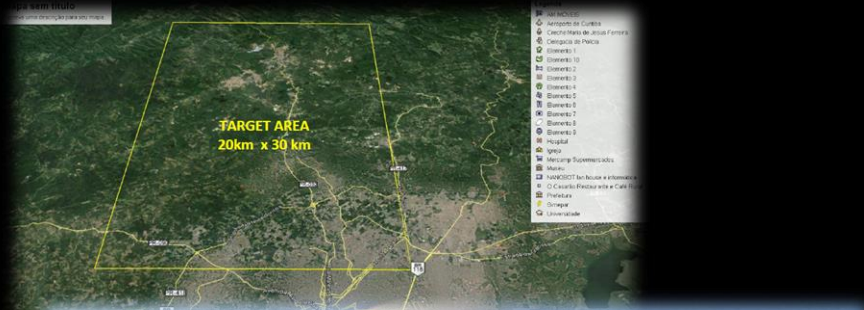


RTI



CAPPI

JRC's Supply Record in Parana State, Brazil



Purpose of the Project

Period Jan. 2019 (System operation started)

Target Area Near Curitiba City (Landslide risk: **High**)

Main Purpose Transferring technologies on **Disaster Risk Prevention System with X-band Radar** to **Civil Defense in Parana.**

Data Acquisition



Polarimetric

Real-time Rainfall Data

Risk Analysis



Radar Data
Analysis Server

Landslide Risk Evaluation

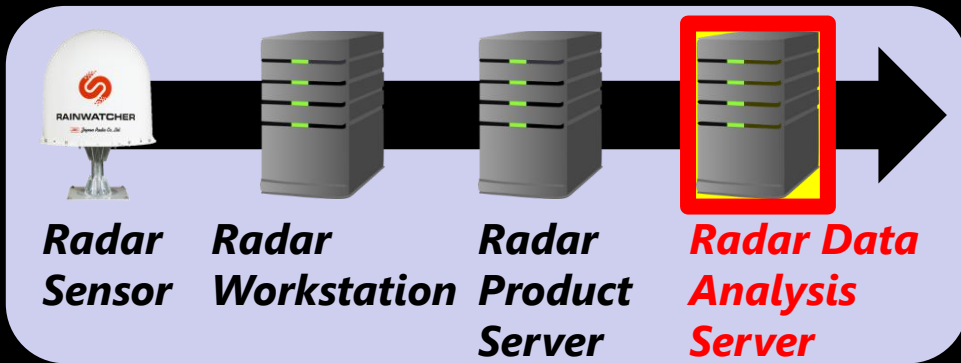
Warning



Civil Defense

Evacuation

Radar Data Analysis Function

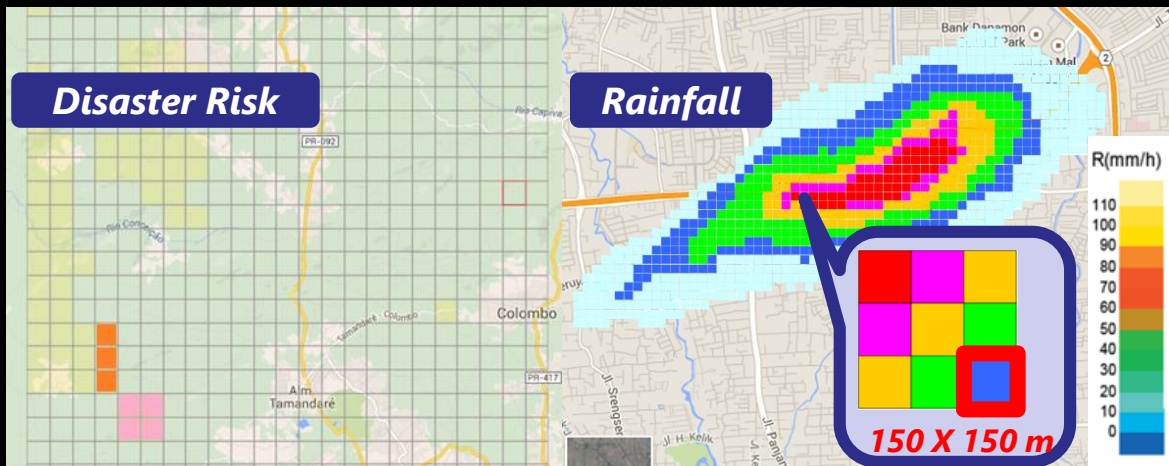


Output Data **For Flood Forecasting**

- 1/10/60-min rainfall
- 24/48-hr rainfall
- Continuous rainfall

For Landslide Forecasting

- 1.5-hr half-life working rainfall
- 72-hr half-life working rainfall

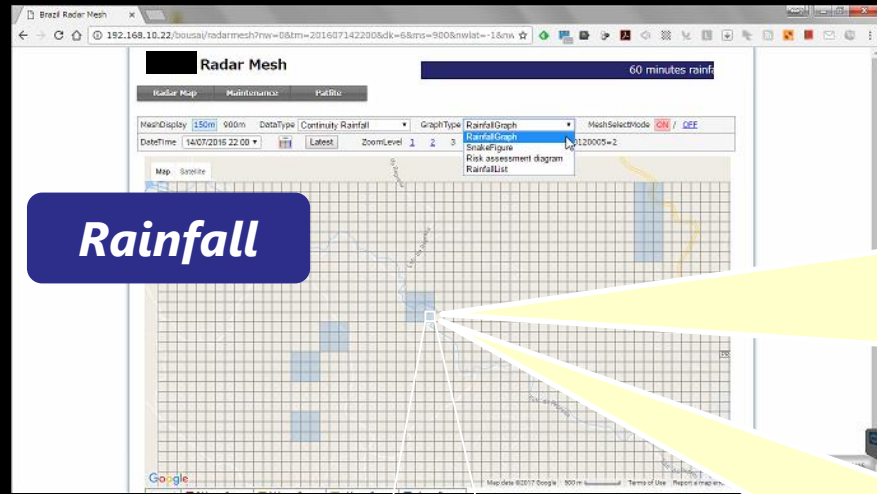


Installation of JMA-912 at Brazil

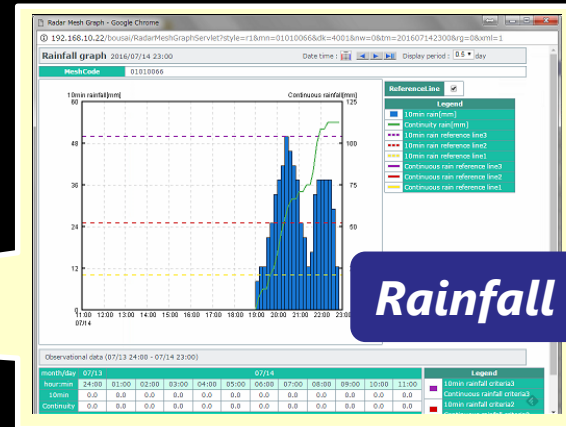
JRC



Calculation in Each Radar Mesh



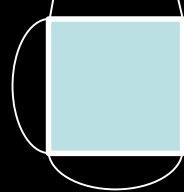
Rainfall



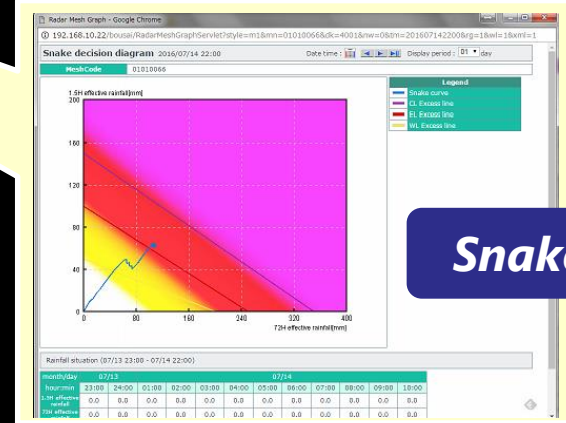
Rainfall Graph

➤ Calculation in each mesh in the target area...

150m



150m



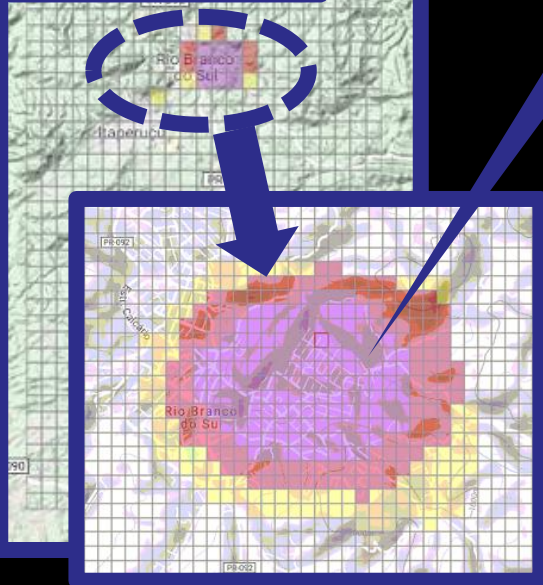
Snake Line

Landslide Warning – 30 Jan. 2019

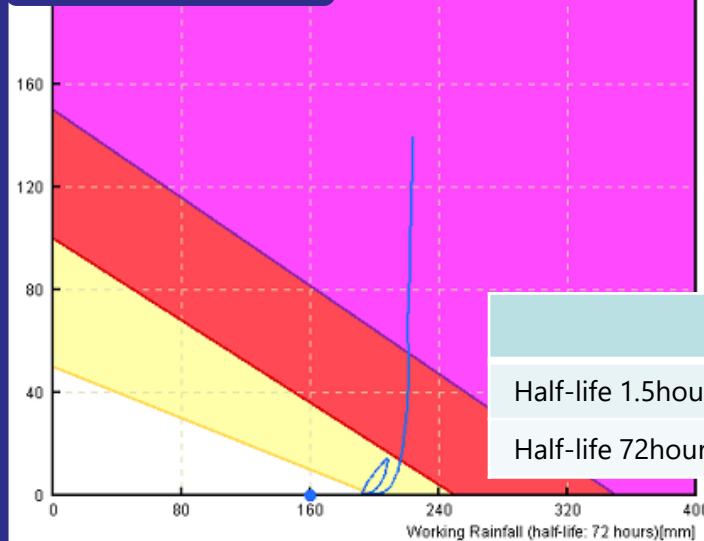
[30 Jan. 2019]
20:08

Landslide Warning was generated with heavy rain.

Degree of Risk



Snake Line

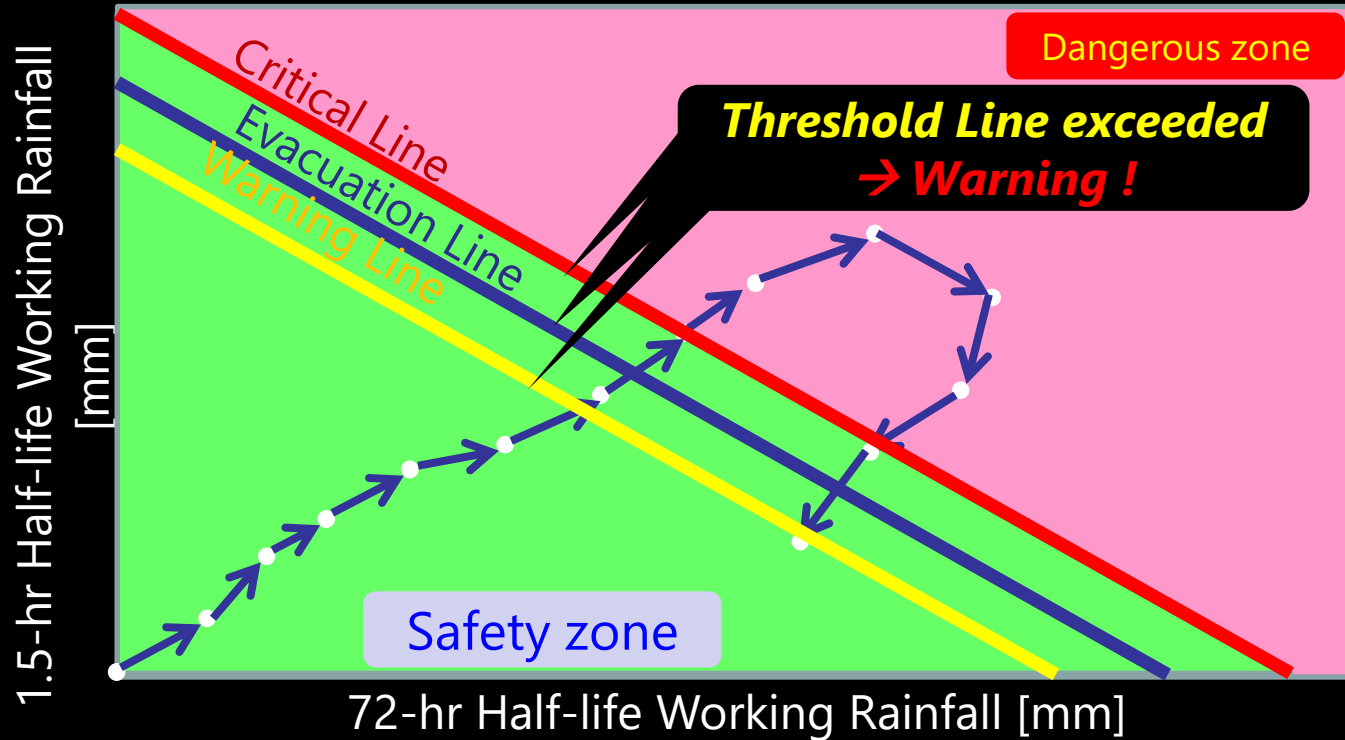


Threshold exceeded

	20:20	21:20
Half-life 1.5hours (mm)	85.3	139.3
Half-life 72hours (mm)	109.2	224.2

What is the Snake Curve ?

Contributed to judgment of landslide risk index!!



**JRC proposes and delivers
the comprehensive disaster risk reduction
system most suitable for your country.**

- **Experience of delivering more than 57 disaster risk reduction systems to overseas markets over 50 years**
- **Great technologies and know-how accumulated over the years**
- **Flexible system configurations are available with a wide range of products**