



Republic of the Philippines
Department of Science and Technology
Philippine Atmospheric, Geophysical and Astronomical Services Administration



COUNTRY REPORT

WMO/ASEAN Training Workshop on Weather Radar Quality Control and Radar Data Exchange
Bangkok, Thailand (Jan 29 – Feb 2, 2024)

JOHN MARK I. DOLENDO

Weather Specialist II
Research and Development and Training Division (RDTD)
jmdolendo@pagasa.dost.gov.ph

MARK GEOFFRAY GALES

Weather Specialist I
Visayas PAGASA Regional Services Division (VPRSD)
mseag05@gmail.com

OUTLINE

- PAGASA and its RADAR system
- RADAR applications
- Ongoing activities



PAGASA AND ITS CURRENT RADAR SYSTEM



THE PAGASA

- **Philippine Atmospheric Geophysical and Astronomical Services Administration**

Mission

Protecting lives and properties through timely, accurate and reliable weather-related information and services.

Vision

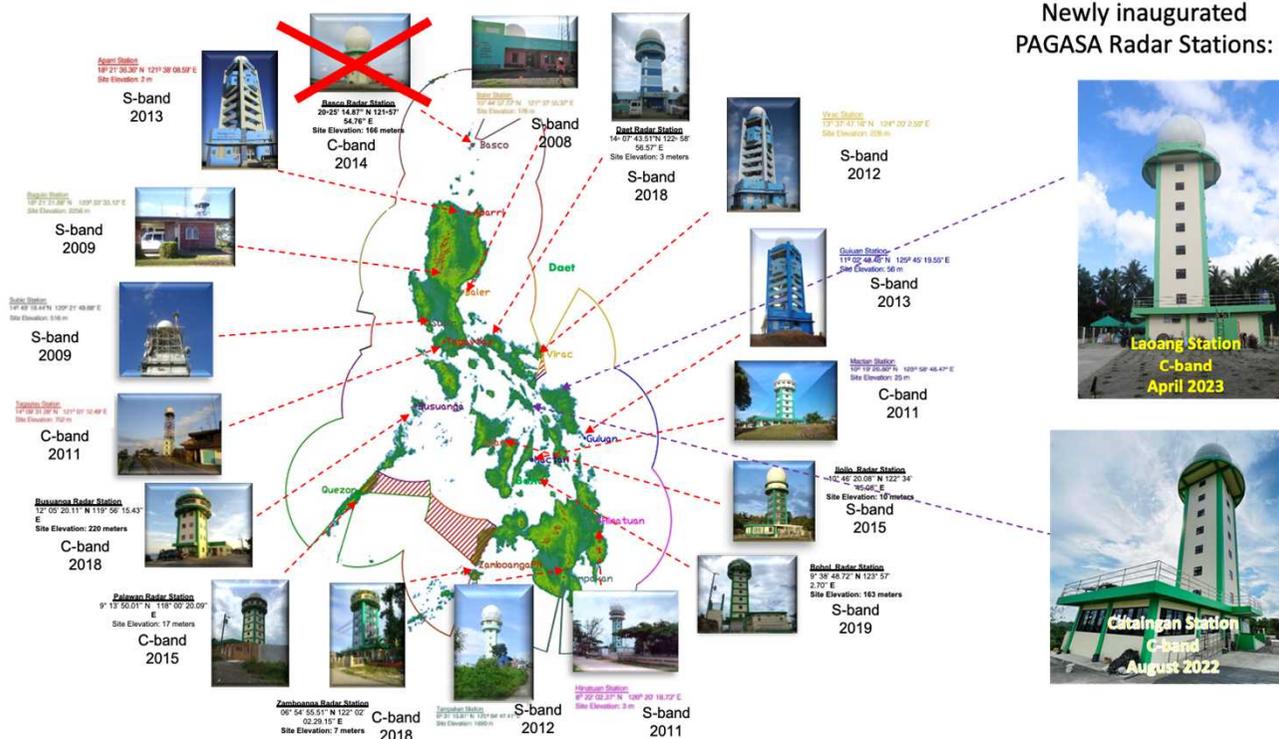
Center of excellence for weather related information and services

Core Values

Integrity, Commitment and Patriotism



RADAR SYSTEM



- **Total of 20 weather radars**

- 11 operational
- 7 non-operational
- 1 ongoing

- **Brands**

- EEC
- Vaisala
- JRC
- Selex

- **Polarization**

- Single
- Dual

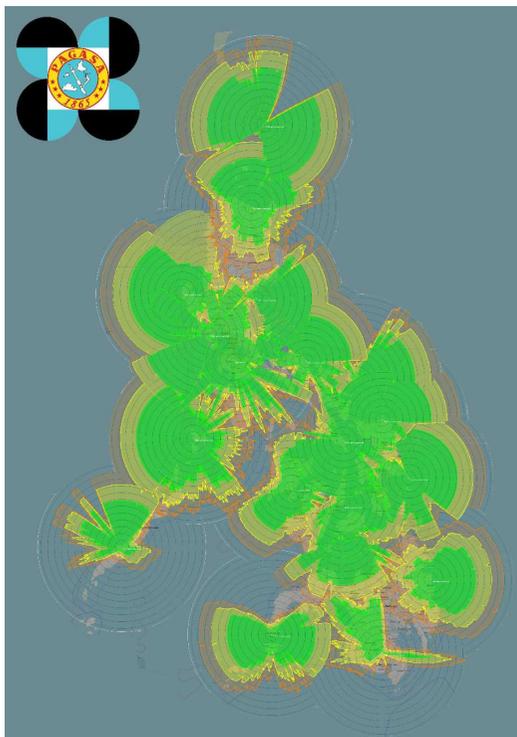
- **Bands**

- S band
- C band

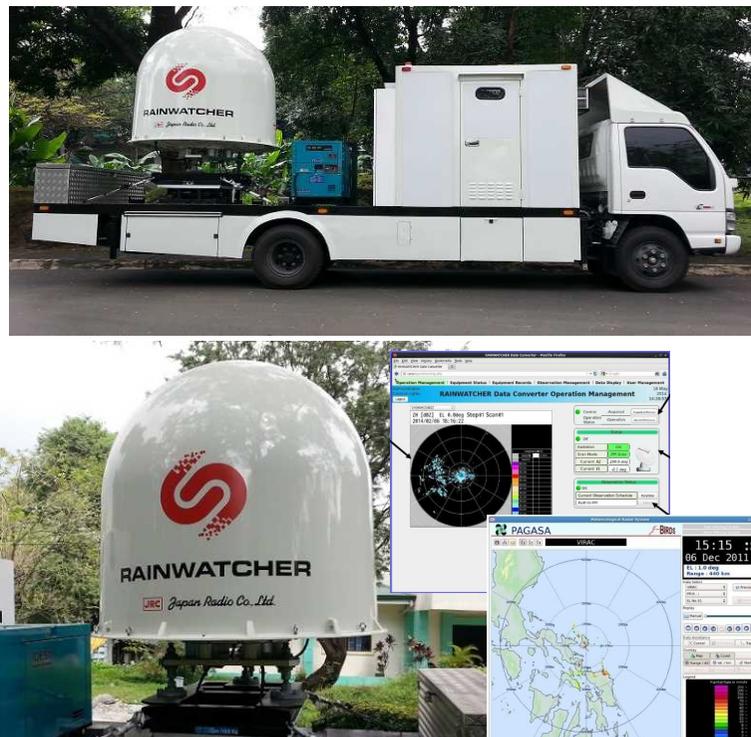


RADAR SYSTEM

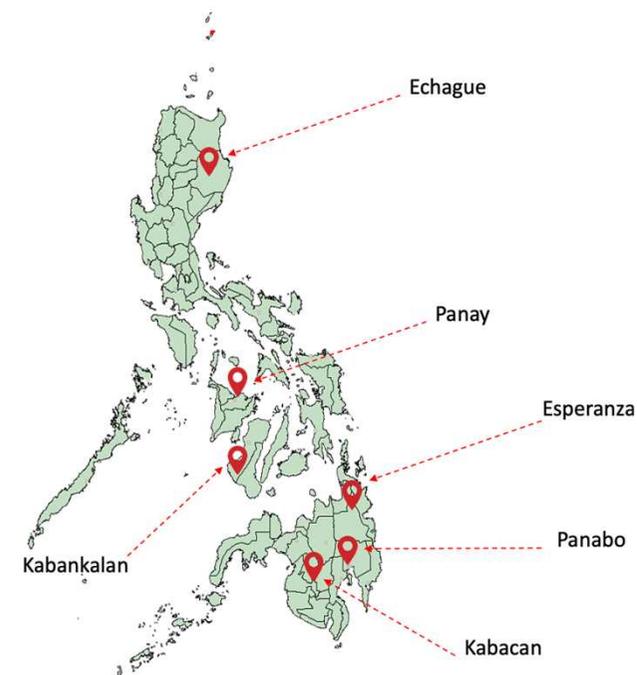
Radar coverage and beam blockages



Radar coverage and beam blockages



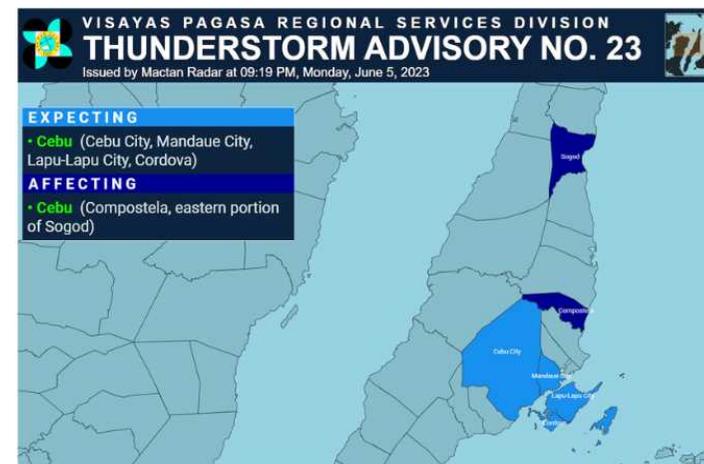
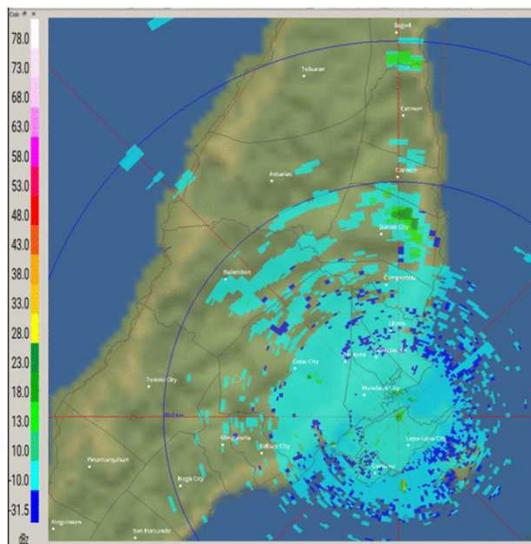
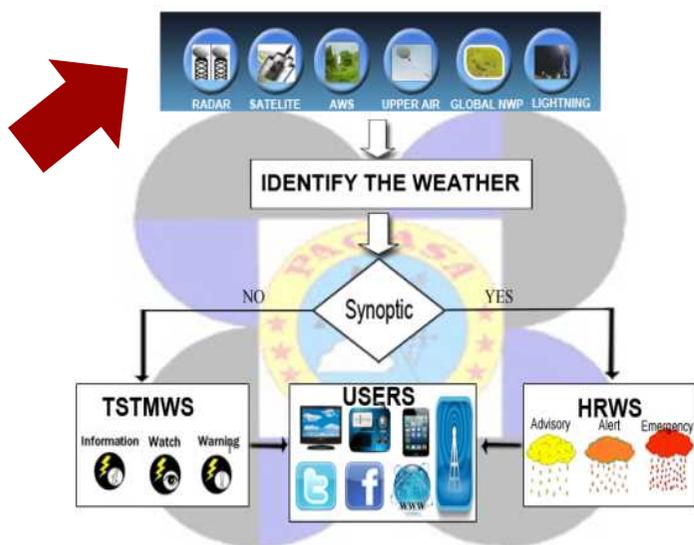
Additional 7 fixed X-band radars in the future



RADAR APPLICATIONS

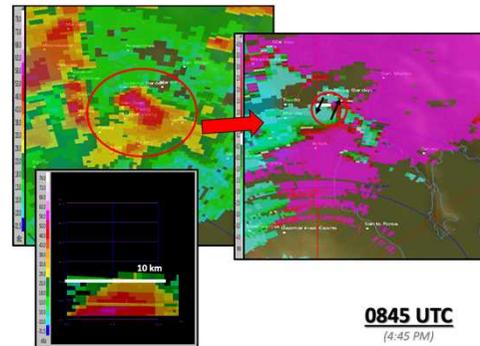
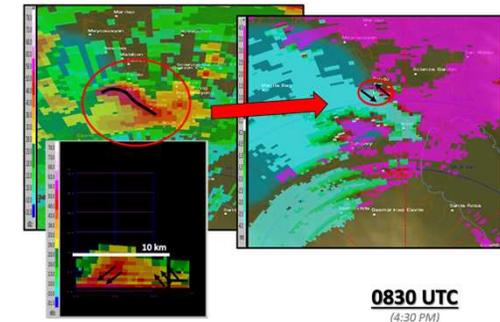
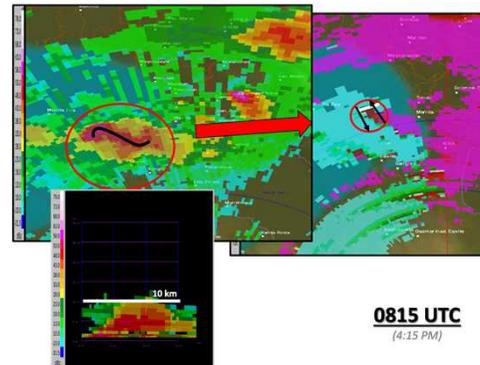
I. Rainfall Warning System

- Thunderstorm warning system
- Heavy rainfall warning system



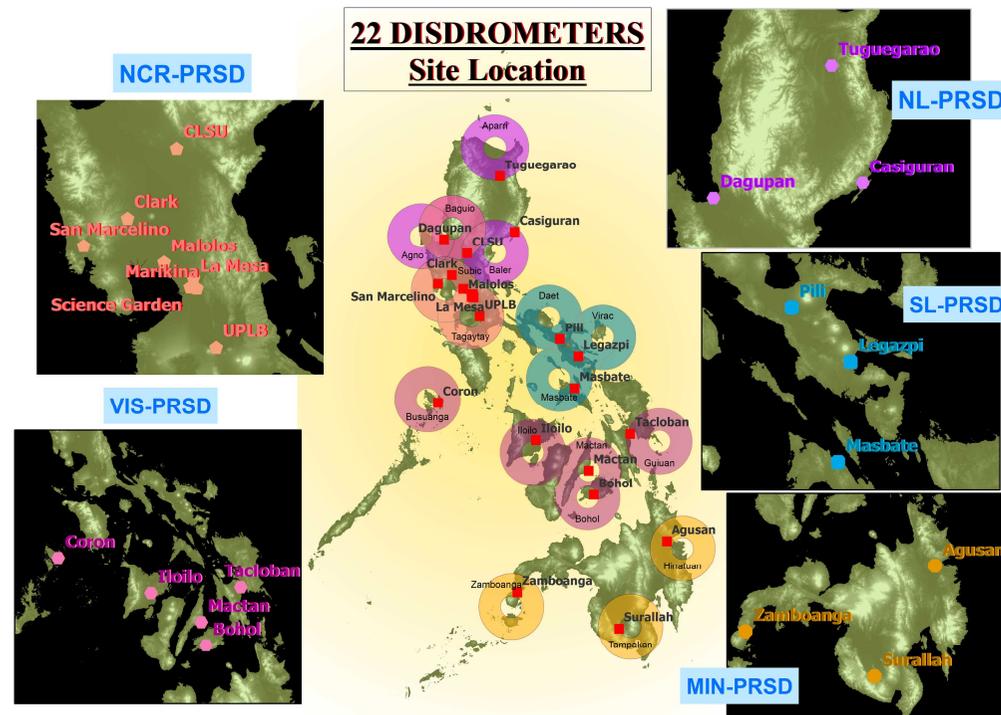
RADAR APPLICATIONS

III. Analyze tornado cases



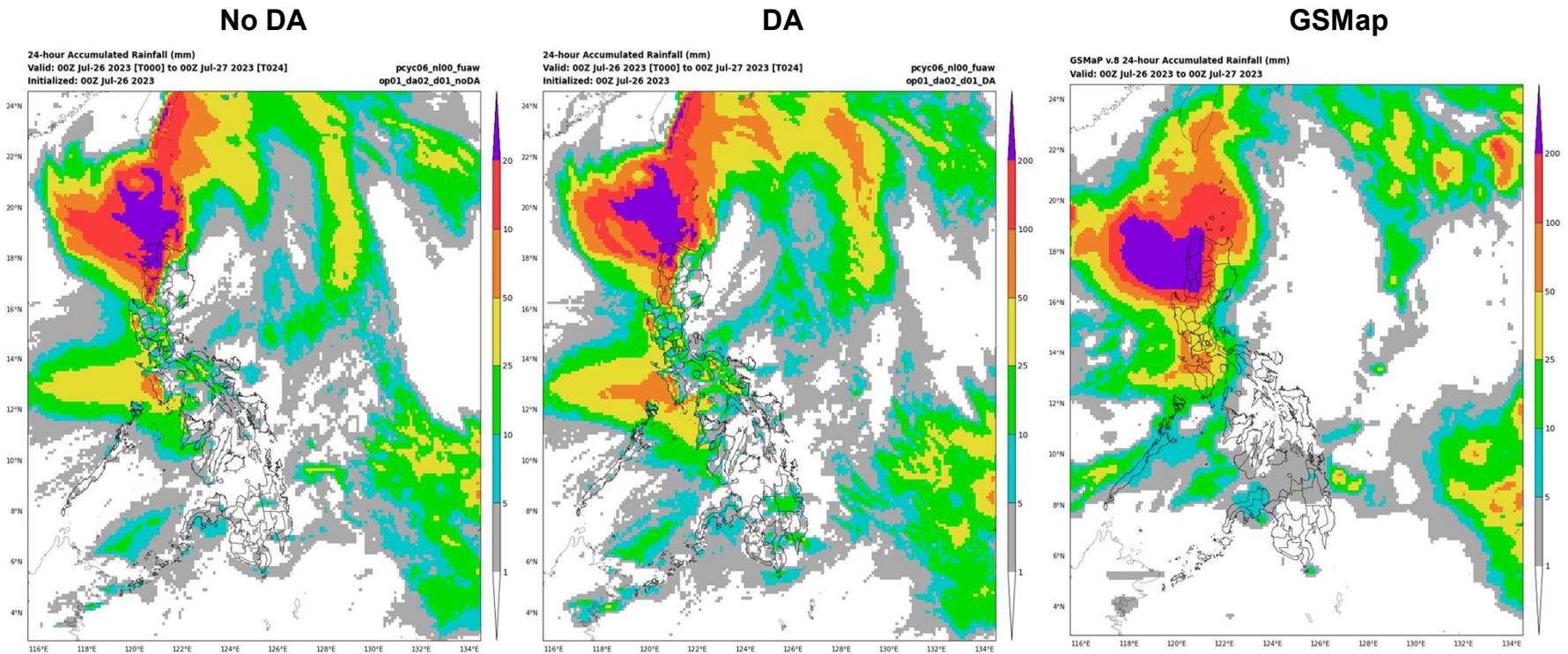
ONGOING ACTIVITIES

- Development of Z-R Relationship using the disdrometer instrument



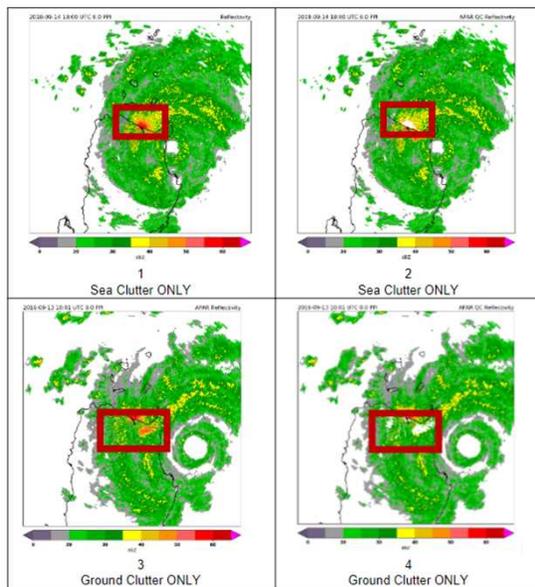
ONGOING ACTIVITIES

- Radar Data Assimilation

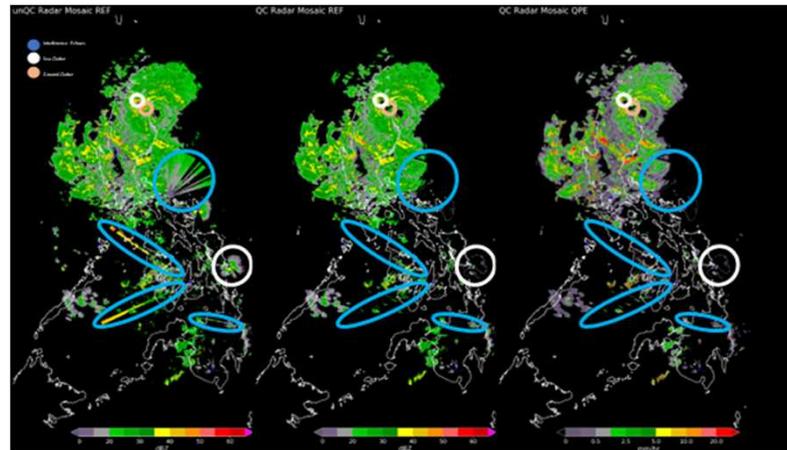


ONGOING ACTIVITIES

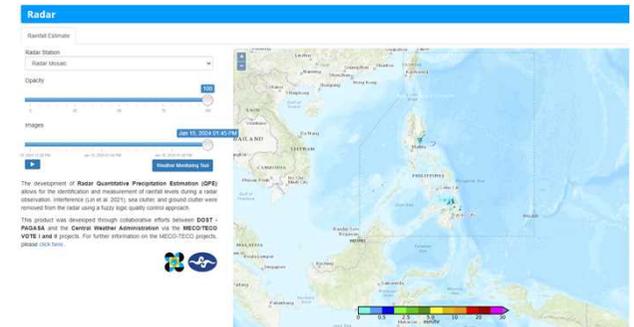
- Quality control and mosaic



BEFORE (left) AFTER (right)



No QC (leftmost), QC (center), QPE (rightmost)



PAGASA Official Website



Thank you for listening!

