

Common Alerting Protocol in the Philippines

2018 Common Alerting Protocol (CAP) Implementation Workshop

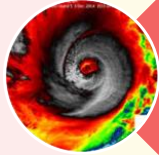
Arnel R. Manoos
WFSIII, METTSS-ETSD-ICT
Project Team

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WFSI, ETSD-ICT
Development and Programming

Hong Kong Observatory
31 October – 01 November 2018



OUTLINE



Introduction



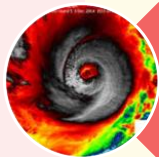
CAP in PAGASA



Experiences



Updates



Concerns

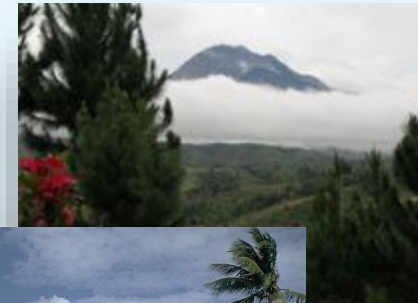


Republika ng Pilipinas

Republic of the Philippines



Capital : Manila
Area : 300,000 sq.km
Water : 61 %
No. of Islands : 7,107
Population : 105,000,000 est.
Density : 336 /sq. km
Currency : Peso
Per Capita : \$ 3,541.00





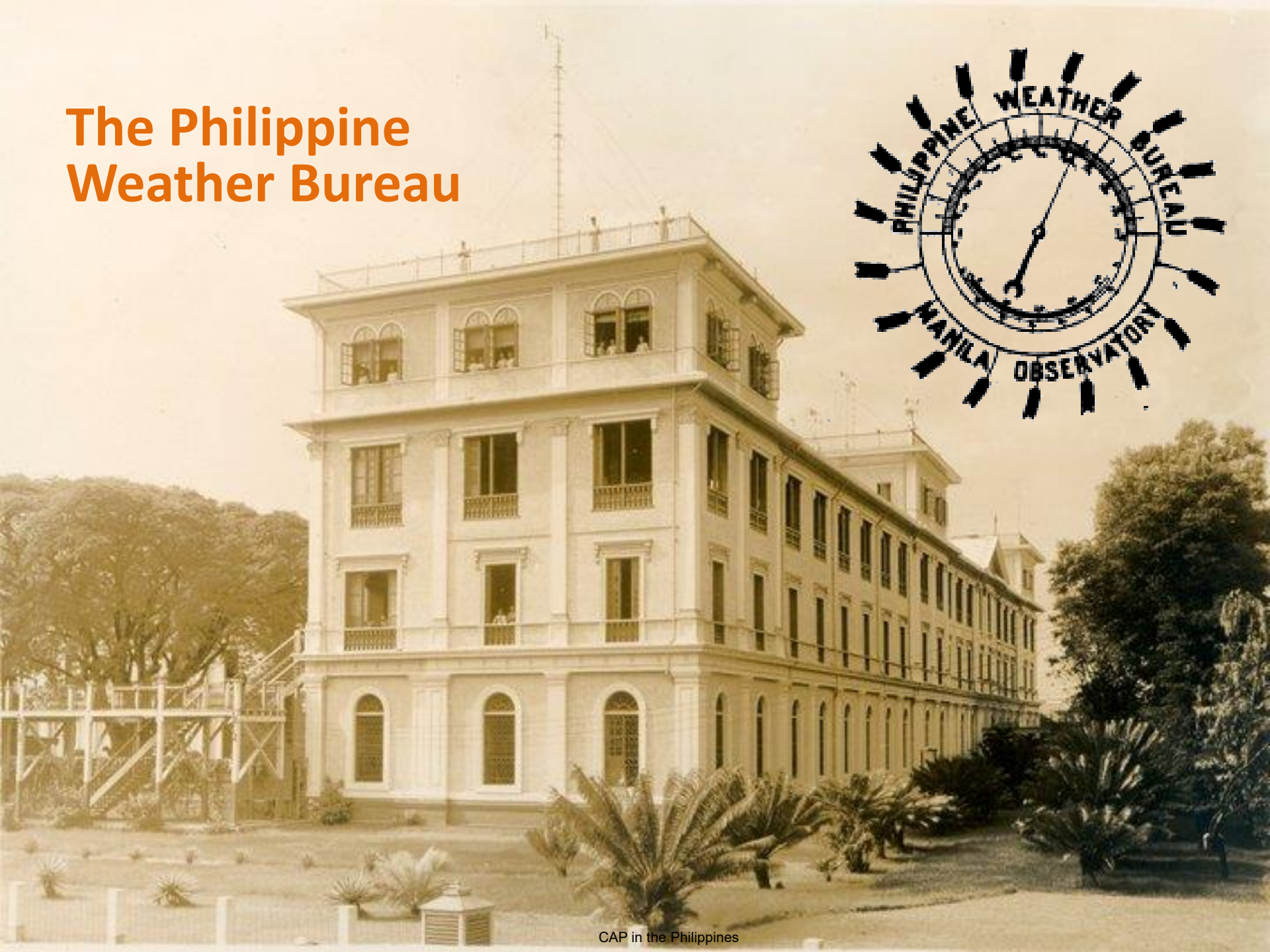
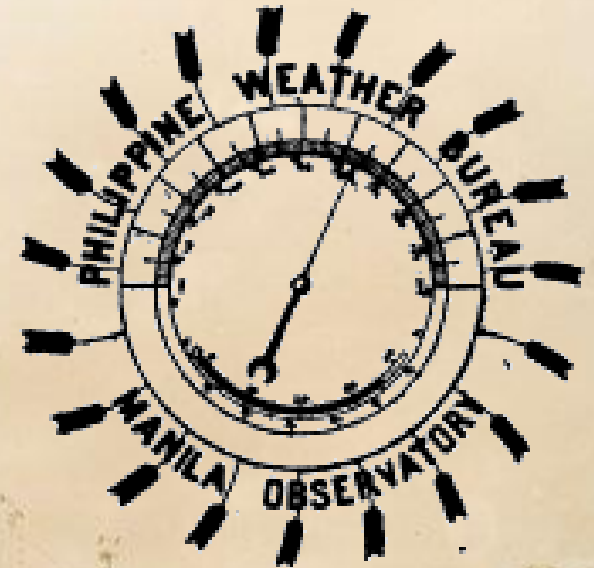
January 1, 1865
The Jesuits
founded the
Ateneo - Manila
Observatory



Payong
PAGASA



The Philippine Weather Bureau



Philippine Atmospheric, Geophysical & Astronomical Services Administration

Legal Mandate

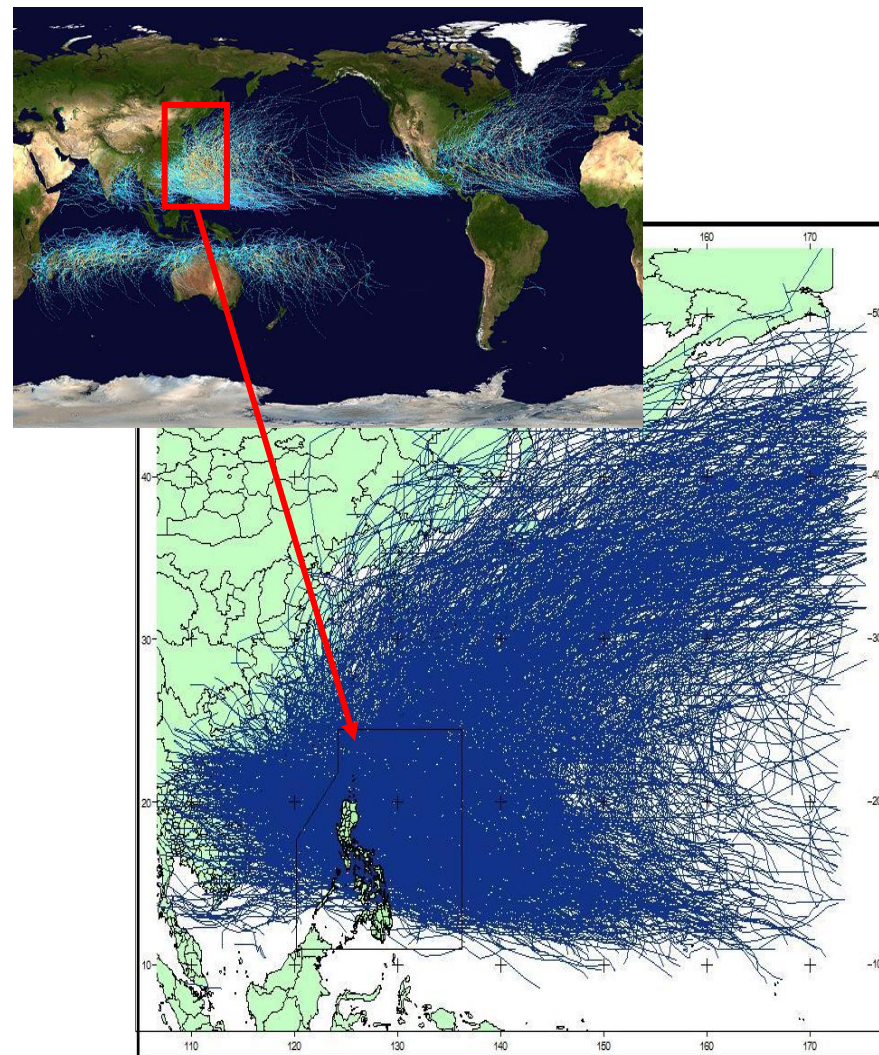
To provide protection against natural calamities and utilize scientific knowledge as an effective instrument to insure the safety, well being and economic security of all the people, and for the promotion of national progress.



The Philippines, through the PAGASA, is a Member of the World Meteorological Organization (WMO), a specialized body of the United Nations.



- **Philippines** is 4th in the world as the country's most exposed and at risk to natural hazards (*World Risk Report 2017*).
- **20 Tropical Cyclones** in a year with the following associated hazards
 - Strong Winds
 - Excessive Rainfall & Thunderstorms
 - Floods
 - Landslides/Mudflows
 - Storm Surges
 - Tornado
- **Affected by ITCZ and monsoons** that result to floods and landslides



Tracks of tropical cyclones that formed in the Western North Pacific (WNW) during the period 1948-2010 (data used : JMA Data set) (Source : Cinco, et. al., 2011)

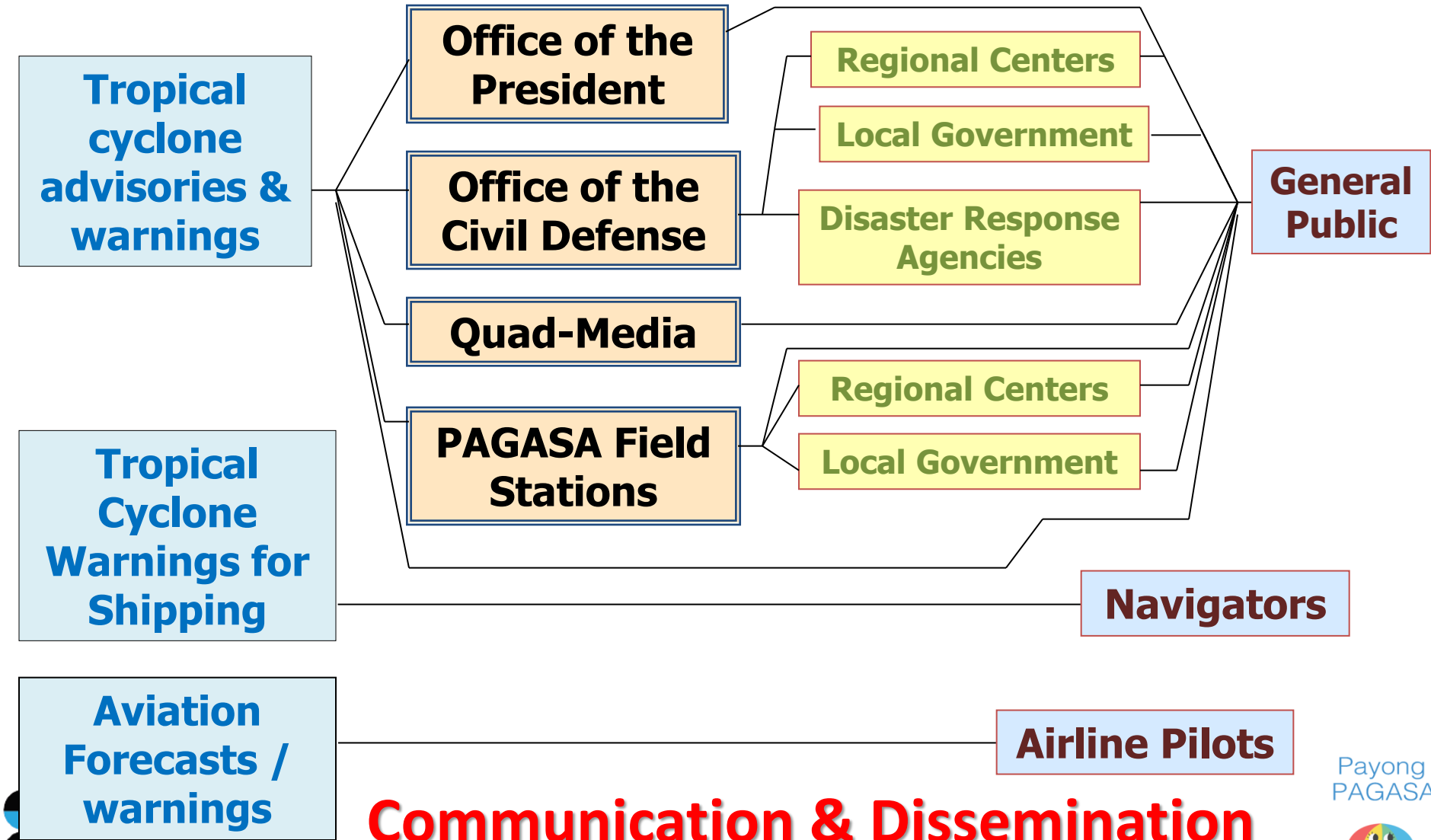
Disaster Prone



Information Packages

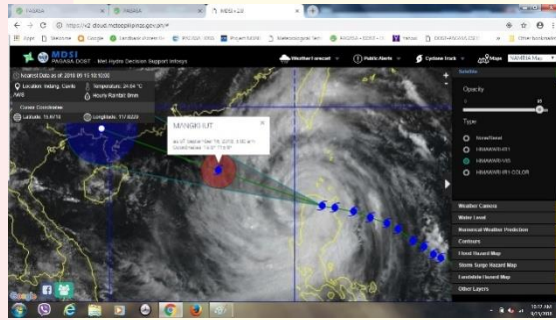
Dissemination Channel

End Users/Beneficiaries



Communication & Dissemination

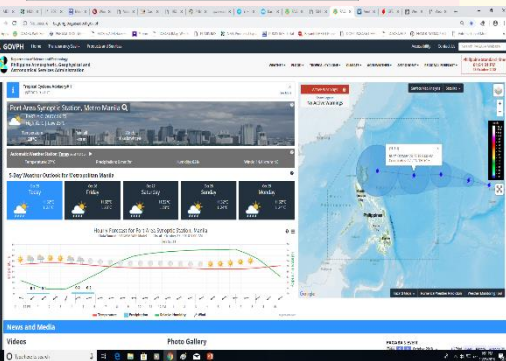
MEDIUM OF COMMUNICATION & DISSEMINATION



Met-hydro Decision Support Info System
<https://v2-cloud.meteopilipinas.gov.ph>



Facebook



@dost_pagasa
 Twitter

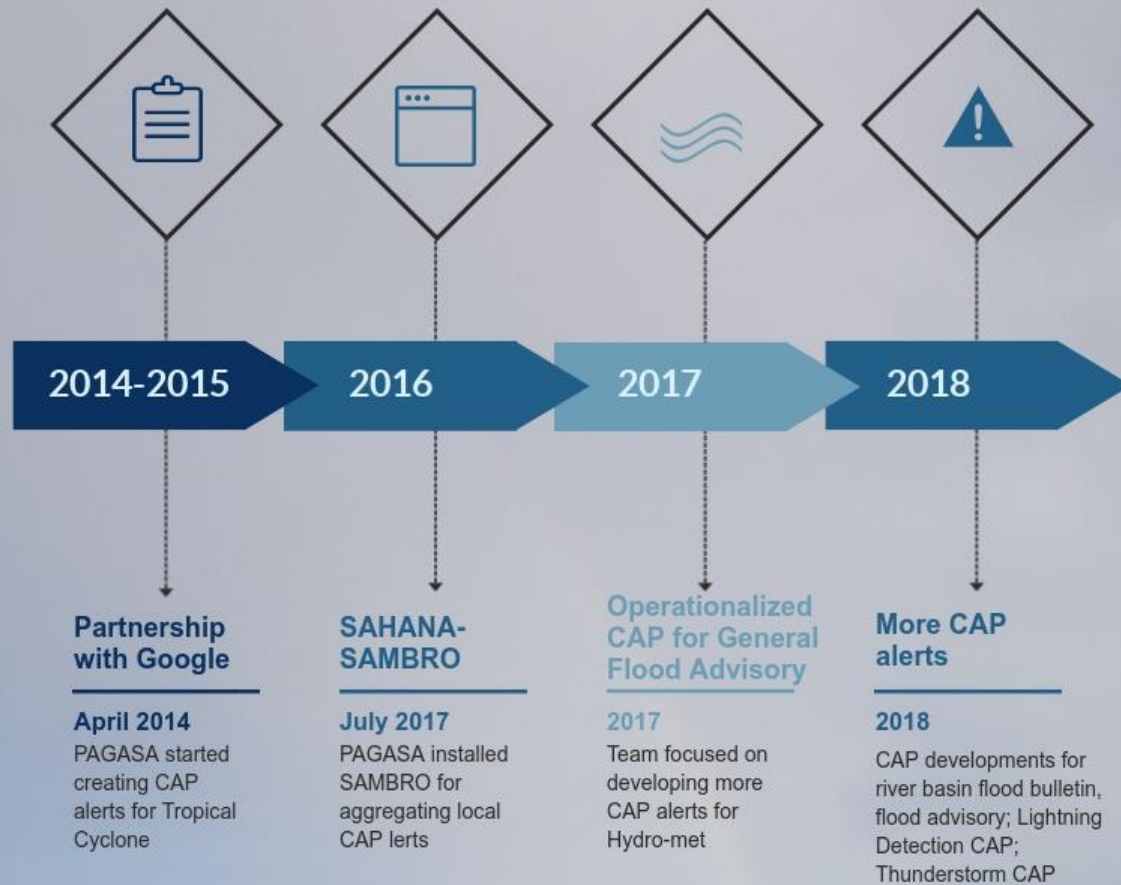


Livestreaming

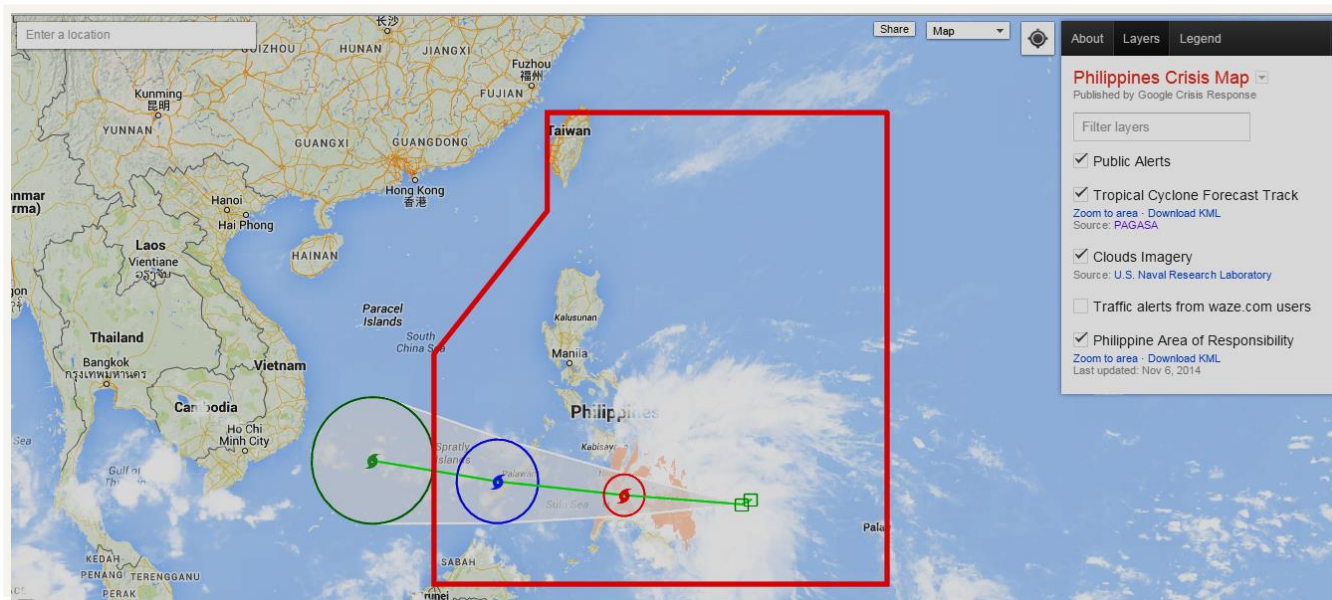


<http://www.pagasa.dost.gov.ph>

CAP PH | PAGASA



Google Public Alerts



<http://google.org/crisismap/philippines>

Next:

- Addition of information regarding River Flood Advisory

Public Storm Warning Signal 1
Active for next 6 hours

Locations: Southern Leyte, Bohol, Cebu, Negros Oriental, Negros Occidental, Siquijor, Surigao del Norte, Surigao del Sur, Davao del Norte, Davao Oriental, Compostela Valley, Dinagat Islands, Camiguin, Misamis Occidental, Misamis Oriental, Bukidnon, Zamboanga del Norte

Posted 49 minutes ago - PAGASA

How likely: ■ ■ ■ ■ ■ How soon: ■ ■ ■ ■ ■ How severe: ■ ■ ■ ■ ■

Location of eye/center: At 10:00 AM today, the center of Tropical Depression "QUEENIE" was estimated based on available data at 210 km East of Hinatuan, Surigao del Sur (8°1N, 125°2"E).
Strength: Maximum winds of 45 kph near the center.
Movement: Forecast to move West at 24 kph.
Forecast Positions:

Tropical Depression "QUEENIE" is expected to make landfall over Surigao del Sur this afternoon and traverse the Northern Mindanao area tonight. By tomorrow morning, it is expected to be at 35 km North of Dipolog City, and at 105 km West of Puerto Princesa by Friday morning. It is expected to be outside the Philippine Area of Responsibility (PAR) by Friday evening and at 710 km West of Puerto Princesa or over the West Philippine Sea by Saturday morning.

Recommended actions

- Estimated rainfall amount is from 7 – 15 mm per hour (moderate - heavy) within the 300 km diameter of the Tropical Depression.
- Residents in low lying and mountainous areas of the provinces with PSWSR1 as well as the rest of Mindanao are alerted against possible flashfloods and landslides.
- Fisherfolks and those with small seacrafts are advised not to venture out over the eastern seaboard of Visayas and Mindanao.
- The public and the disaster risk reduction and management council concerned are advised to take appropriate actions and watch for the next bulletin to be issued at 6 PM today.

What to do: Excerpted from pagasa.dost.gov.ph

- Inspect your house to see if repairs are needed
- Clean up drainage systems
- Harvest crops that can be yielded

Precautionary measures:

- Monitor the latest Severe Weather Bulletin issued by PAGASA every six hours and hourly updates
- In the meantime, business may be carried out as usual except when floods occur



Other alerts in this area

Public Storm Warning Signal 1 for Visayas, Mindanao
PAGASA - updated 57 mins ago



SAMBRO - Sahana

Multi Agency Situational Awareness Application



[Home](#) | [Alerts](#) | [Organizations](#) | [Persons](#) | [Recipients](#) | [Map](#)

MESSAGE ID :: 2bda04f9-7f20-4a5d-8ed1-a86d2711e5b8

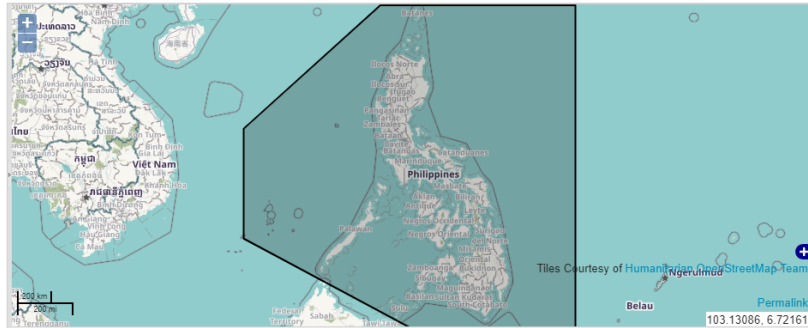
HEADLINE :: Tropical Cyclone Alert : Typhoon Rosita (YUTU)
DESCRIPTION :: TYPHOON WITH INTERNATIONAL NAME "YUTU" HAS ENTERED THE PHILIPPINE AREA OF RESPONSIBILITY (PAR) AND WAS NAMED "ROSITA". Location of eye/center : At 10:00 AM today, the eye of Typhoon "ROSITA" was located based on all available data at 1,345 km East of Aparri, Cagayan (17.6, 134.3). Strength : Maximum winds of 200 kph near the center and gustiness of up to 245 kph. Forecast movement : Forecast to move West at 20 kph Forecast position : • 24 Hour (Tomorrow morning): 905 km East of Aparri, Cagayan (17.9°N, 130.2°E) • 48 Hour (Monday morning): 545 km East of Aparri, Cagayan (17.5°N, 126.7°E) • 72 Hour (Tuesday morning): 175 km East Southeast of Tuguegarao City, Cagayan (17.2°N, 123.3°E) • 96 Hour (Wednesday morning): 65 km Northwest of Sinait, Ilocos Sur (17.9°N, 119.9°E) • 120 Hour (Thursday morning): 225 km West of Laoag City, Ilocos Norte (18.5°N, 118.5°E) Possible hoisting of Tropical Cyclone Warning Signals over the Eastern section of Northern and Central Luzon on Sunday evening (28 Oct). Moderate to heavy rains directly associated with the Typhoon is expected over Northern and Central Luzon starting Monday evening (29 Oct) Strong to very strong winds are expected to affect the Eastern section of Northern and Central Luzon starting Tuesday morning (30 Oct) Sea travel is risky over the Northern and Eastern seaboard of Luzon and seaboard of Samar provinces. Expected to make landfall over Cagayan – Isabela area by Tuesday (30 Oct). Possible raising TCWS #1 over Metro Manila by Monday evening (29 Oct).
RESPONSE TYPE :: Prepare

INFORMATION EVENT :: Tropical Cyclone Alert
Category :: Met - Meteorological (inc. flood)
Urgency :: Expected - Response action should be taken soon (within next hour)
Severity :: Minor - Minimal to no known threat to life or property
Certainty :: Possible but not likely (p <= ~50%)
Effective Date :: 2018-10-27 20:18:27
Onset Date :: 2018-10-27 20:18:27
Expiry Date :: 2018-10-27 23:57:54
Information URL :: <http://sambro.meteopilipinas.gov.ph/eden/cap/public/7184>
Sender :: PAGASA-DOST
Contact Info :: PAGASA DOST
Parameters :: layer:Google:Region:0.1: Philippine Area of Responsibility

Administration | admin@example.com | Language

SOURCE :: sambro.meteopilipinas.gov.ph | <http://sambro.meteopilipinas.gov.ph>

AREA :: Philippine Area of Responsibility



Tiles Courtesy of [Humanitarian OpenStreetMap Team](#)

Permalink: 103.13086, 6.72161

ALERT QUALIFIERS
Sender ID :: PAGASA-DOST
Sent Date/Time :: 2018-10-27 10:58:03
Message Status :: Actual - actionable by all targeted recipients
Message Type :: Alert
Scope :: Public

Powered by Sahana

SAMBRO Workshop June 10, 2015

CAP on a Map Project

<http://sambro.meteopilipinas.gov.ph/>

CAP in the Philippines

New PAGASA Website

Contact Us



Email address:
piias@pagasa.dost.gov.ph

Address:
PAGASA Science Garden Complex,
BIR Road, Barangay Central, Quezon
City, Metro Manila 1100

Phone:
(632) 4342696



PAGASA CITIZEN CHARTER



FREEDOM OF INFORMATION



REPUBLIC OF THE PHILIPPINES

All content is in the public domain unless otherwise stated.

ABOUT GOVPH

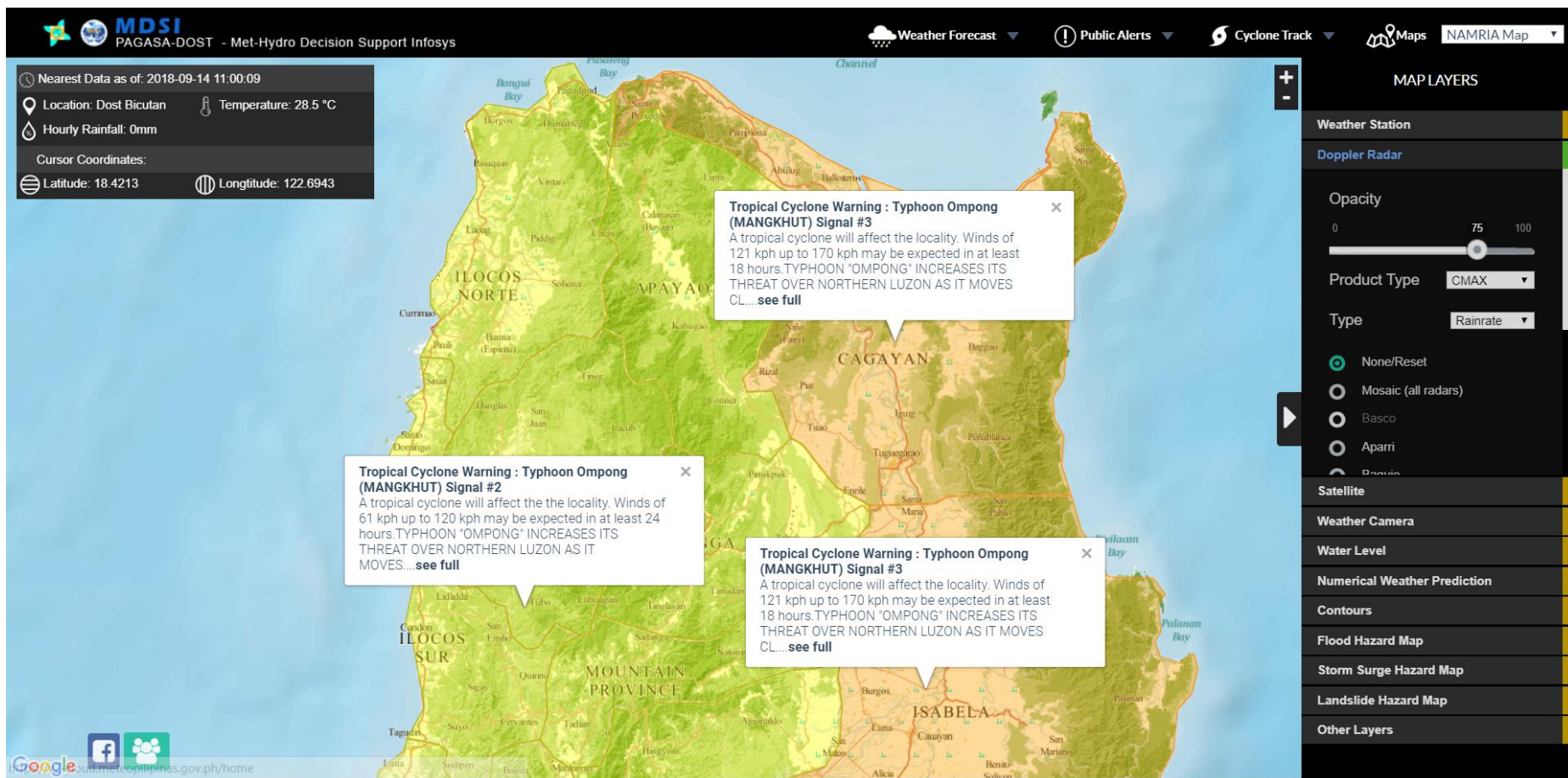
Learn more about the Philippine government, its structure, how government works and the people behind it.

GOV.PH
Open Data Portal
Official Gazette

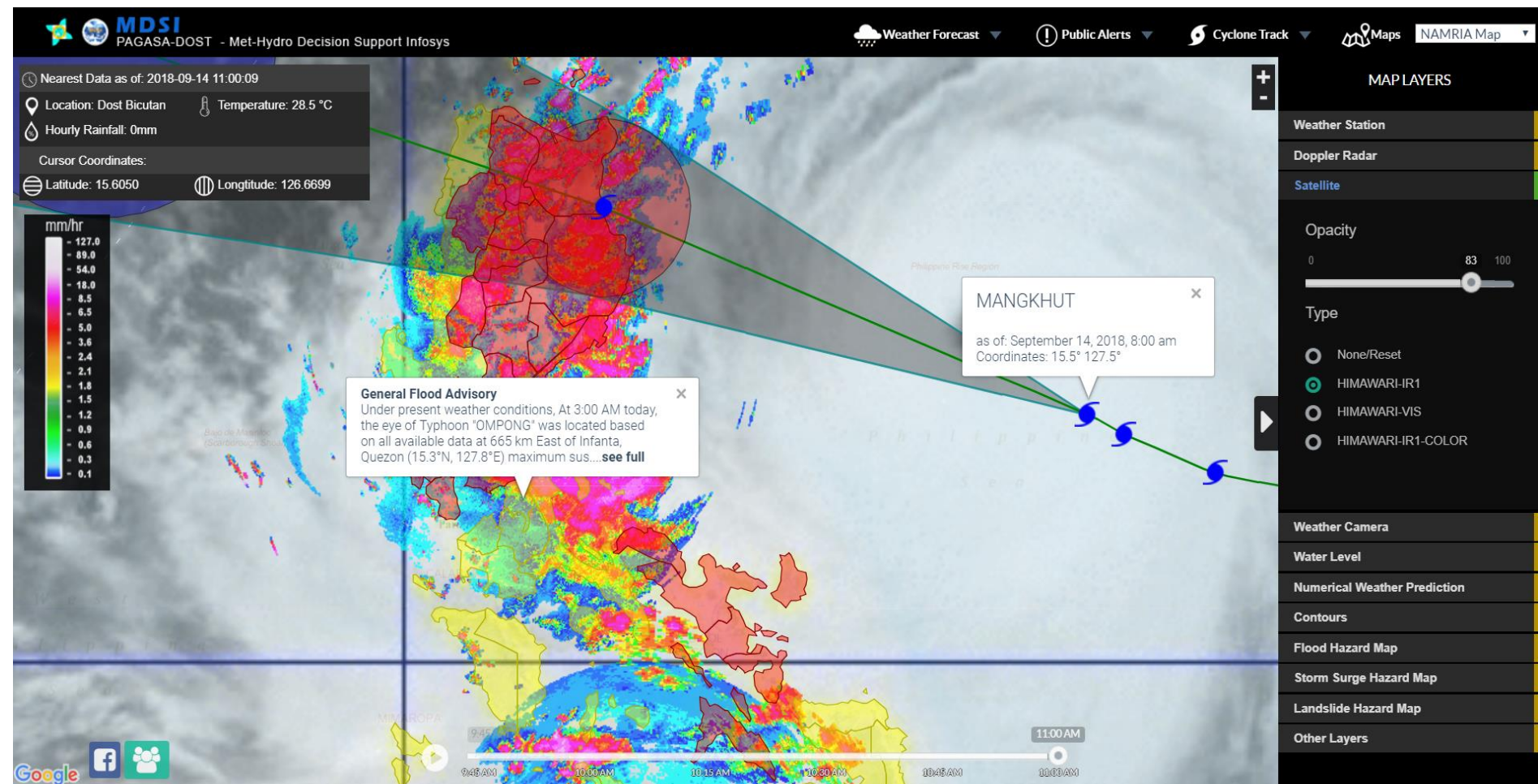
GOVERNMENT LINKS

Office of the President
Office of the Vice President
Senate of the Philippines
House of Representatives
Supreme Court
Court of Appeals
Sandiganbayan

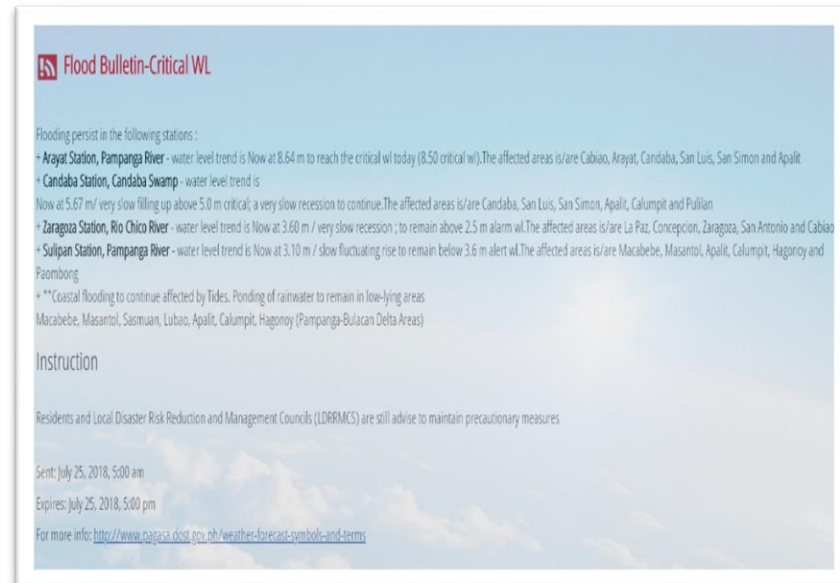
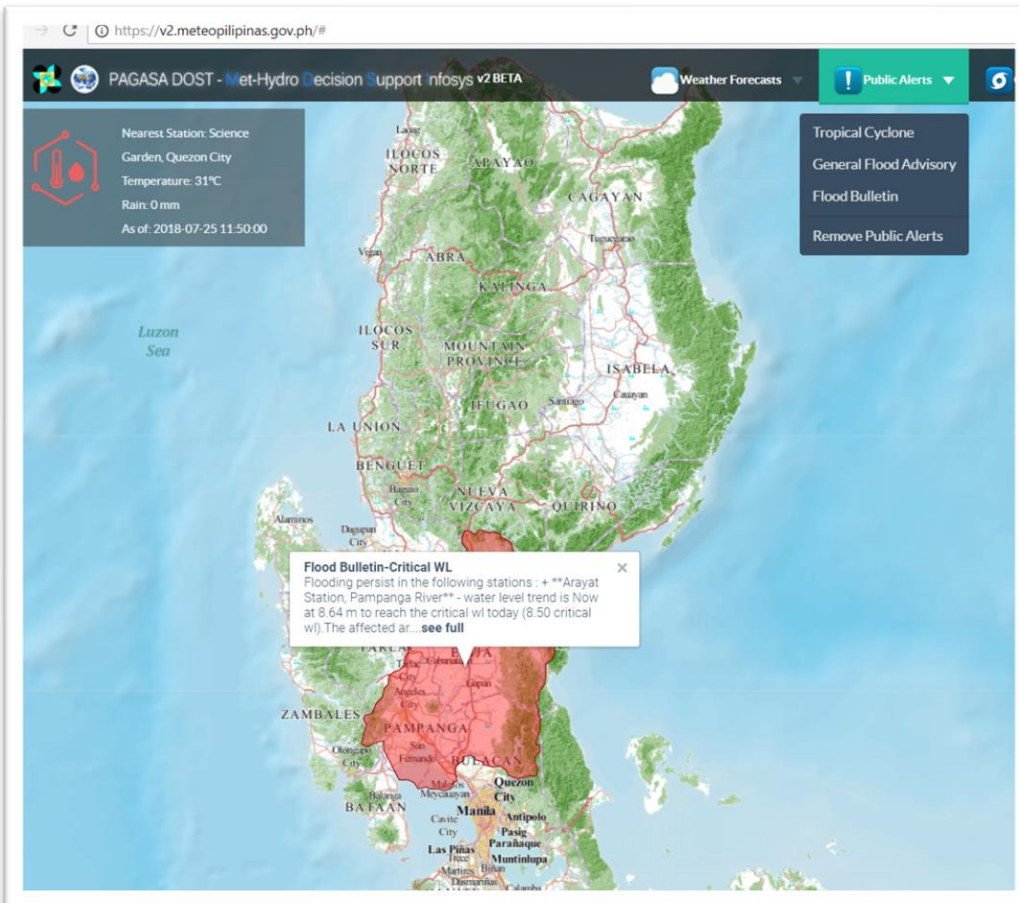
Tropical Cyclone Warning: MANGKHUT (OMPONG)



General Flood Advisory: MANGKHUT (OMPONG)

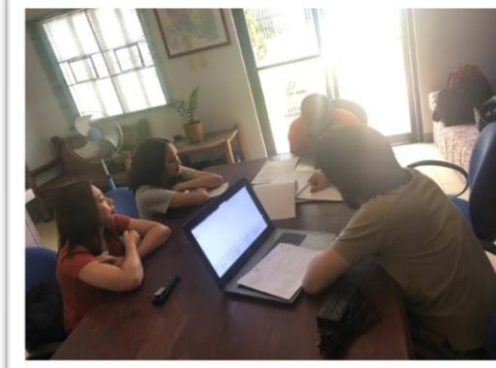
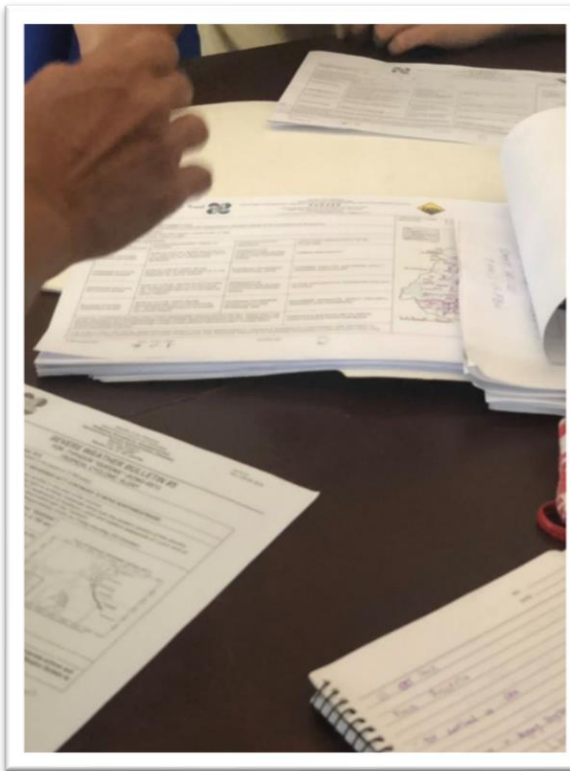


Flood Bulletin: First CAP issued from Pampanga River Basin

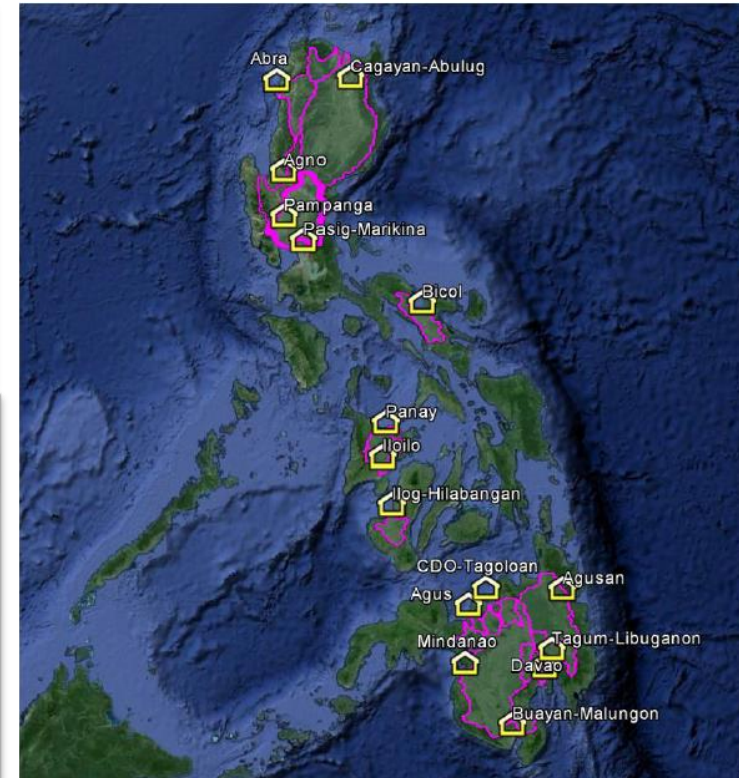


First issuance on August 13, 2018, 5 AM due to enhanced southwest monsoon (HABAGAT)

Flood Advisory for River Basin (New CAP)



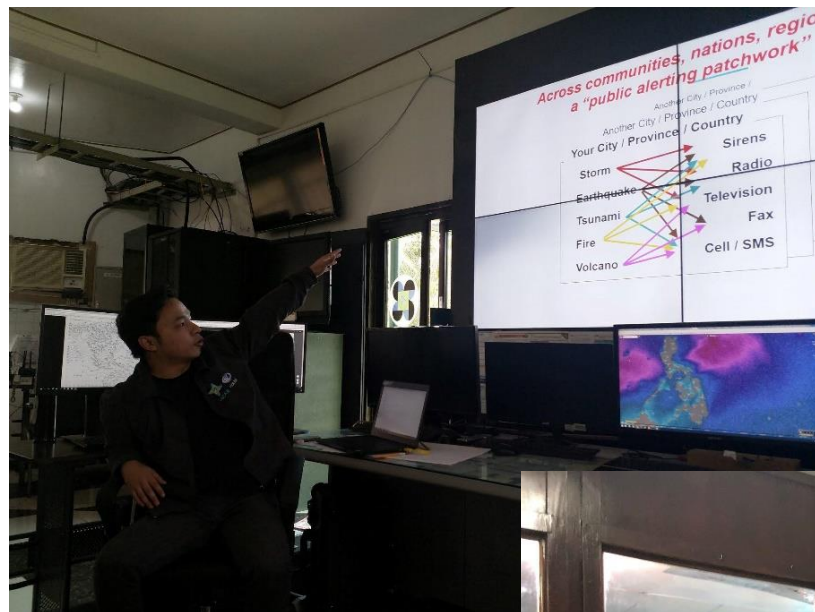
Meeting conducted on October 3, 2018 for additional Flood Advisory CAP in Pampanga river basin.



PAGASA - Proposed and Existing River Centers for Major River Basins of the Philippines
(As of March 2014)

Flood Forecasting & Warning Centers
For 18 Major River Basins

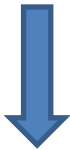
Flood Bulletin for Bicol River Basin



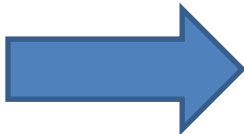
Meeting conducted
last July 2018



Local CAP System



INTERNET



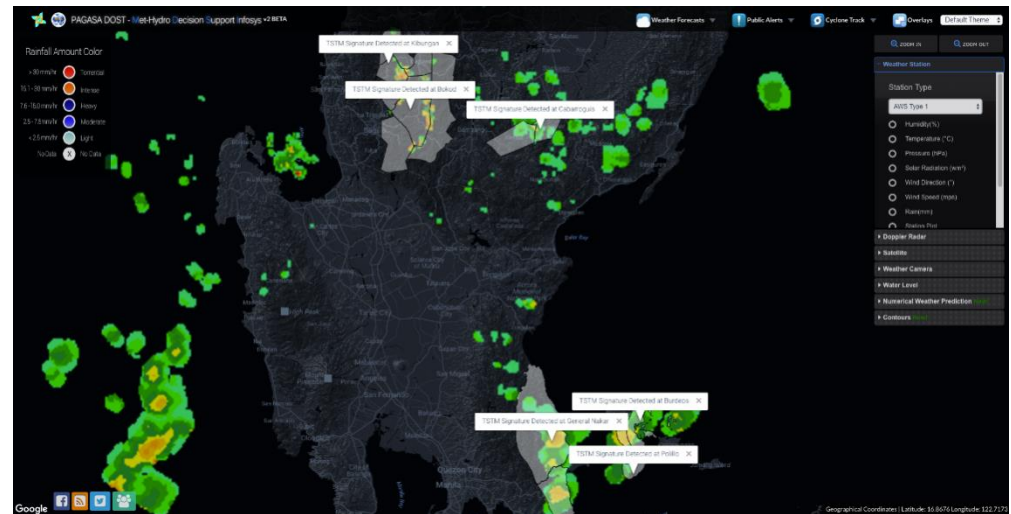
CLOUD CAP GENERATOR

Updates



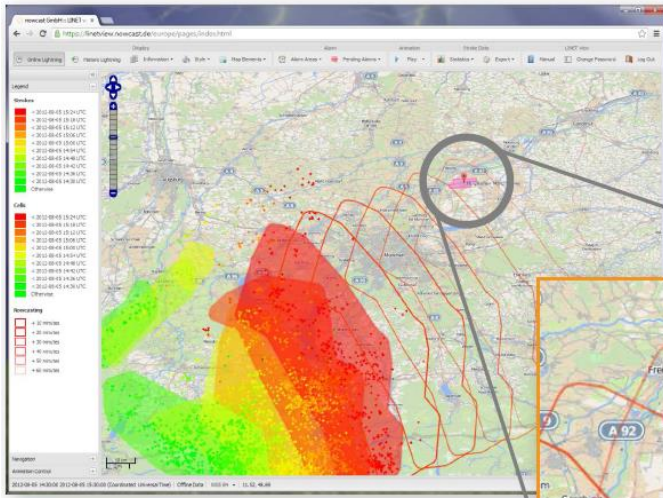
PAGASA – Philippine Red Cross
Collaboration on information sharing

Automatic CAP Generation
From Radar Observations



Updates

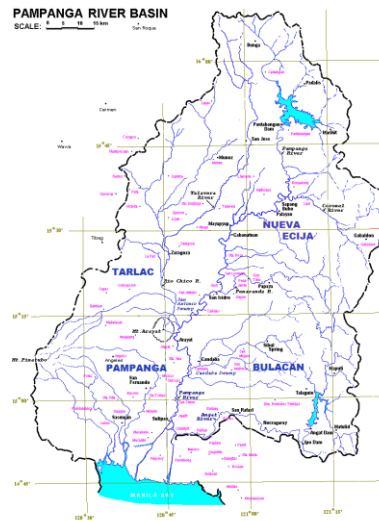
Nowcasting



- **Nowcasting** of thunderstorm development for the next 60 minutes
- **Automatic warning** for individual alarm areas

Automatic CAP for Severe Weather particularly thunderstorm warnings

CAP Flood Bulletin Issuance for other major River Basins. Bicol River Basin is in progress.



Updates



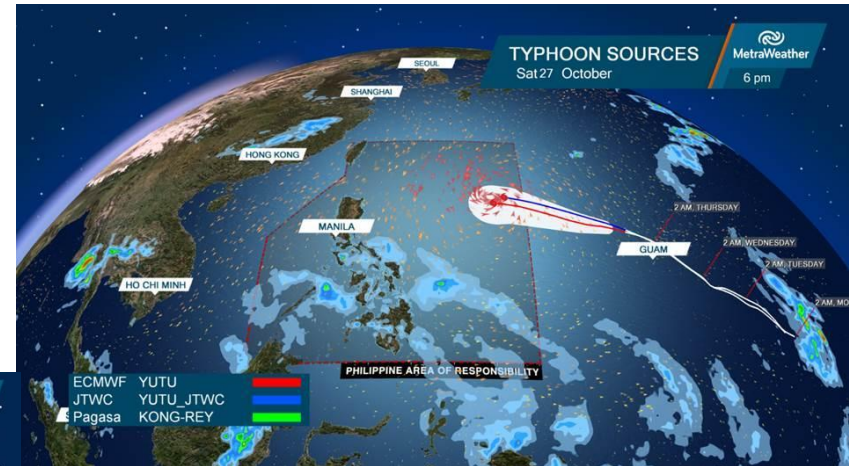
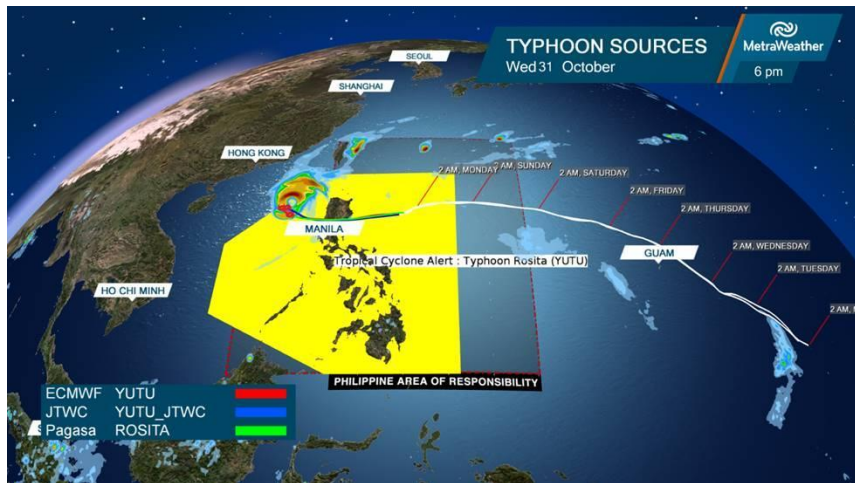
Requested for information
sharing through Twitter
or RSS



Weather warnings /
advisories to be
scrolled on screen
on digital broadcast television



Updates



- Typhoon tracks
- Forecasts
- Observations



CAP Integration on “Weather Scape XT”

Concerns

- Endorsement of national CAP early warning system to the Office of Civil Defense
- Adoption of CAP as a platform for information sharing
- Additional ICT personnel needed to respond to the growing demand
- Establish ICT organizational structure in PAGASA

THANK YOU!

Website:

www.pagasa.dost.gov.ph

Facebook: 

www.facebook.com/pagasa.dost.gov.ph

Twitter: 

@dost_pagasa

Typhoon

+632-9271541

+632-9271335

Climate

+632-4351675

+632-4340955

Flood

+632-9266970

+632-9204052

IEC

+632-4342696

+632-9279308

