



# GEOSS Related Activities in the Philippines

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# OUTLINE

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- Introduction
- Recent Developments in Observational Network
- Data and Information Application/Utilization
- Limitations/Shortcomings
- Summary/Recommendations

# Background Information

## ○ Geographical Information



# Earth Observation Systems in the Philippines

- Atmosphere







The Philippine Atmospheric, Geophysical and Astronomical Services Administration (*PAGASA*) under the Department of Science and Technology (*DOST*) is the National Meteorological Service.



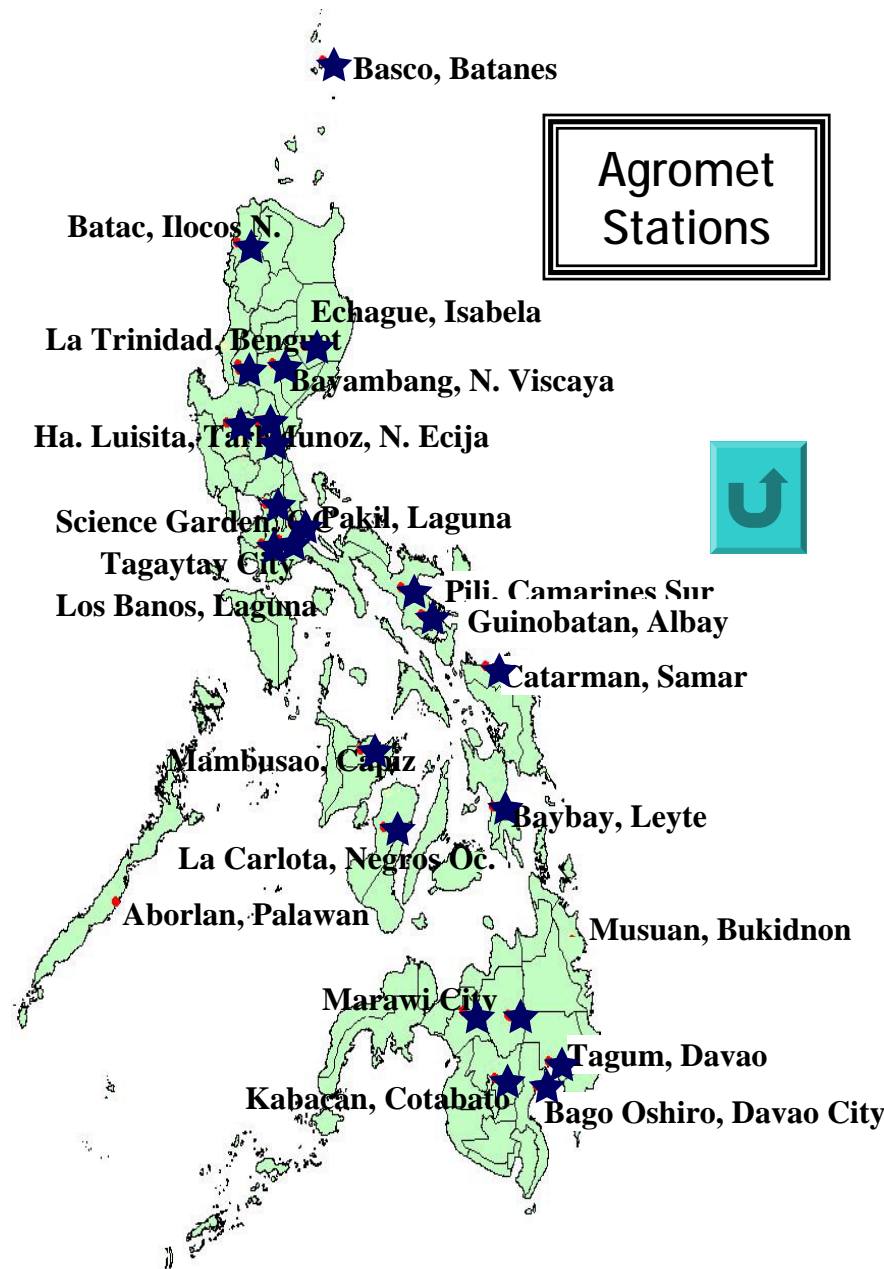
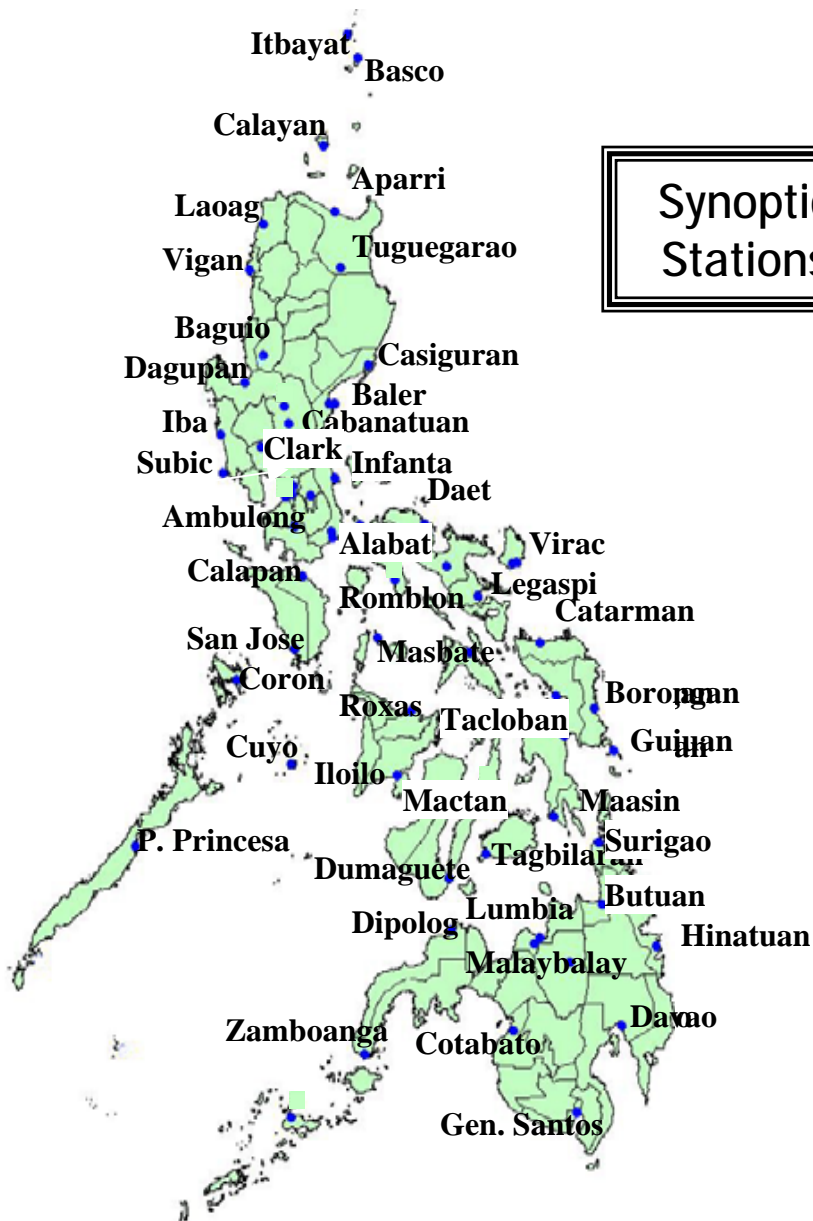
Satellite Antenna at Weather and Flood Forecasting Center

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

# Meteorological Observation Systems in the Philippines

- The PAGASA-DOST Maintains network of information consisting of:
  - 58 surface weather stations 
  - 21 agrometeorological observation stations
  - 4 upper-air stations 
  - 5 weather surveillance radars 
  - 17 aeronautical meteorological stations
  - 2 satellite ground receiving system 
  - 2 WEFAX satellite receiving system 
  - 140 rain/climat stations
  - 2 DCPs 

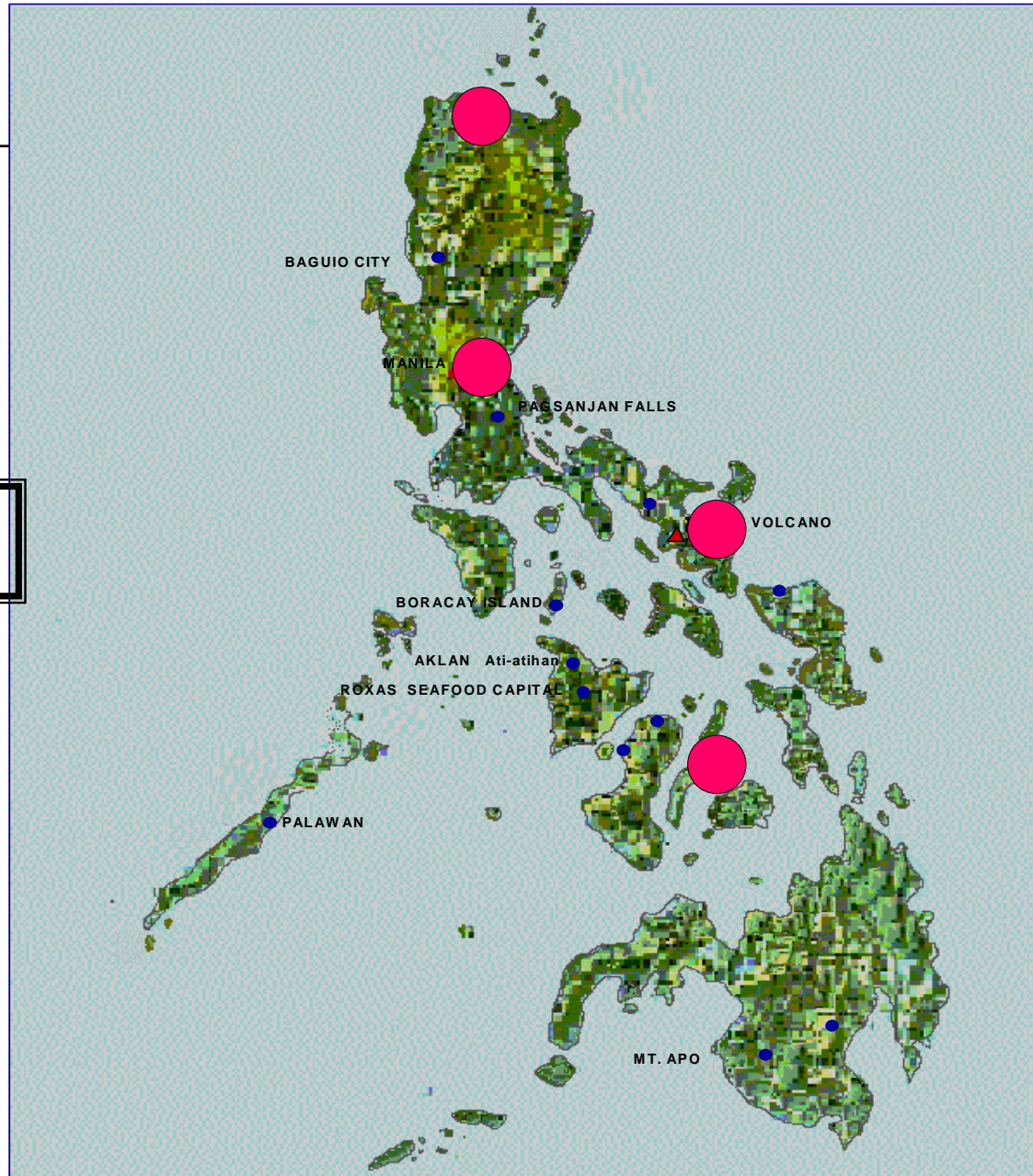
# PAGASA's Observational Network





# PAGASA's Observational Network

## Upper Air Stations



# PAGASA's Observational Network

## Philippine Weather Radar Network



- 5 RADARS Weather Surveillance Radars





# PAGASA's Observational Network



## • DOPPLER RADARS



### LEGEND:



EXISTING



FOR  
INSTALLATION



APPROVED  
FUNDING

# Satellite receiving facilities

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Satellite Antenna at Weather and Flood Forecasting Center



# PAGASA's Observational Network

## Weather Satellite Stations



Existing



For Installation





# PAGASA's Observational Network: Recent Developments

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- Upgraded the Polar Orbiting Meteorological Satellite Station
- Upgraded the Geostationary Meteorological Receiving Station for MTSAT 1R for Manila and Cebu in Central Philippines
- Acquired local funding for the installation of MODIS Receiving Station
- Rehabilitated/Upgraded 5 Weather Surveillance Radars
- Acquired local funding for the installation of 5 Doppler Radars
- Upgraded 3 Upper-air stations, a number of synoptic and agromet stations and instrumentation



# Data and Information Application and Utilization

- Research
- Disaster prevention, mitigation and management
- Socio-economic benefits





## Limitations/Shortcomings

- The Philippines has yet to establish efficient and faster communication links, high speed computing capacity and acquire advanced instrumentation system needed to meet the required comprehensive observations.
- Limited/insufficient training on Doppler radars and other technologies



# Summary/Recommendations

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- Supports the vision and objectives of the GEOSS towards a comprehensive, integrated and sustained monitoring of the environment through programmed observation.
- There are limitations however, as to what it may contribute to this global effort considering the country's economic and political stature as a developing country.
- It is expected that the country would be able to avail of capacity building opportunities for strengthening scientific capabilities that in turn will contribute to the general advancement of the knowledge of the earth system and its application to national development.

# Thank You

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