

# Years of the Maritime Continent (YMC)

*Chidong Zhang*

*NOAA Pacific Marine Environmental Laboratory  
Seattle WA*

Indian Ocean Science Workshop

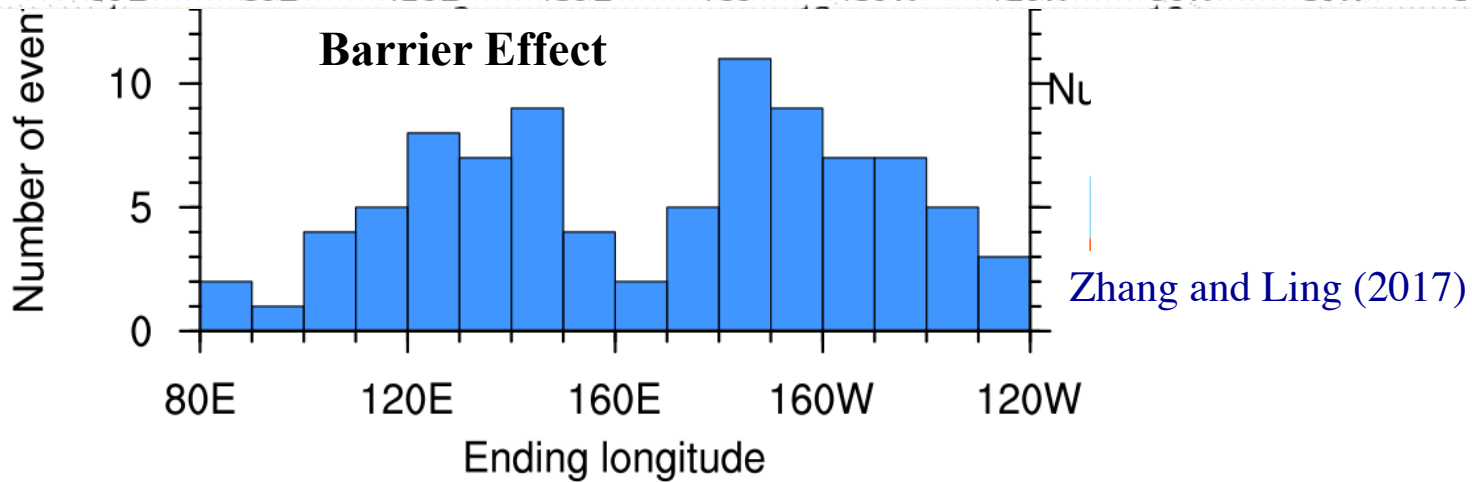
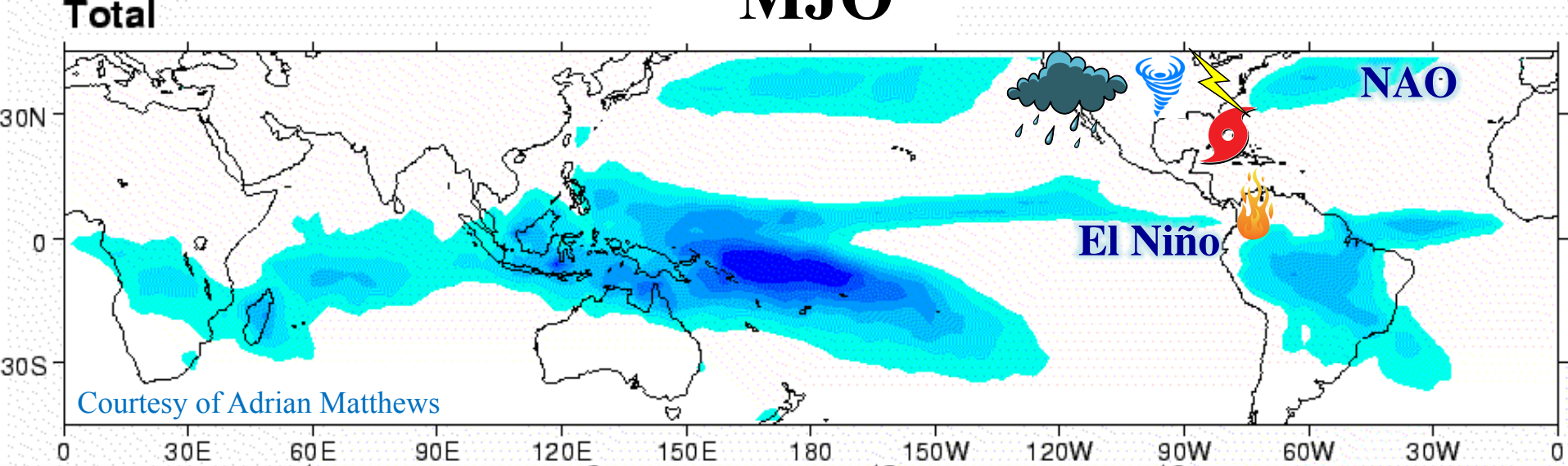
September 11-13, 2017

Scripps Institution of Oceanography, La Jolla, CA

# Indo-Pacific Maritime Continent (MC)

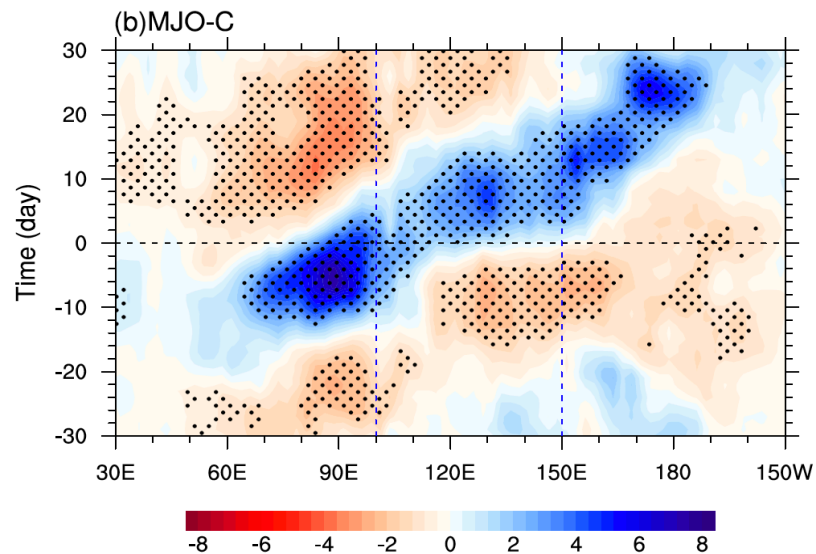
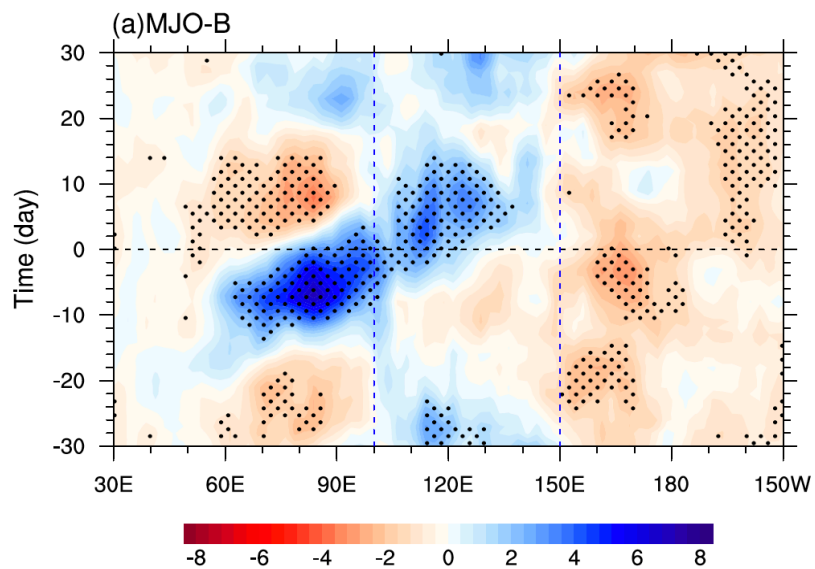
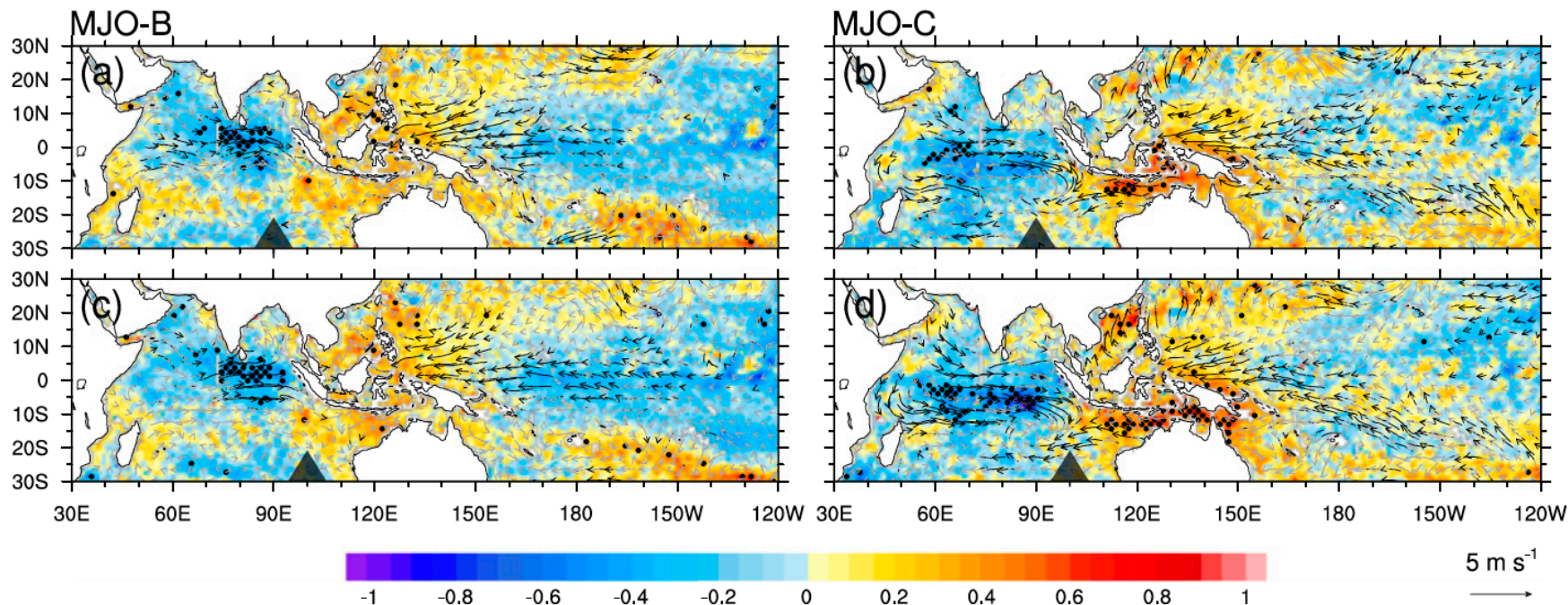




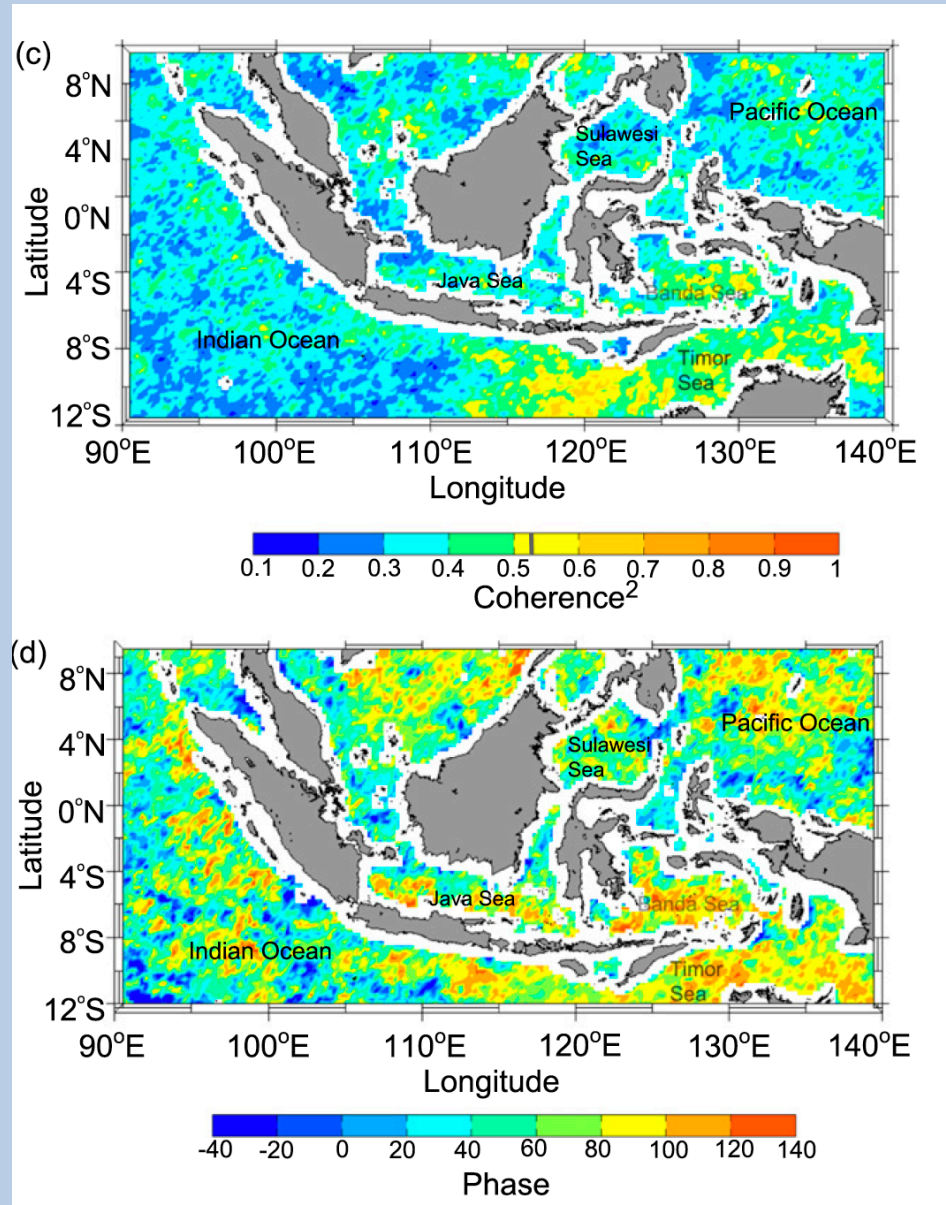


Possible Mechanisms for the Barrier Effects:

- Block of surface evaporation by islands
- Topographic interference with the low-level flows
- Zonal variation in the mean state
- The diurnal cycle
- Air-sea interaction



# Coherence and Phase between Intraseasonal of Variability in SST and Precipitation Across the Indonesian Seas



# Years of the Maritime Continent (YMC)

**Goal:** Observing the weather-climate system of the Earth's largest archipelago to improve understanding and prediction of its local variability and global impact

**Science Themes:** Atmospheric Convection, Stratosphere-Troposphere Interaction, Upper-Ocean Processes and Air-Sea Interaction, Aerosol, Prediction Improvement

**Main Activities:** Two-Year Data Sharing, Field Campaigns, Modeling, Prediction and Application, Outreach and Capacity Building

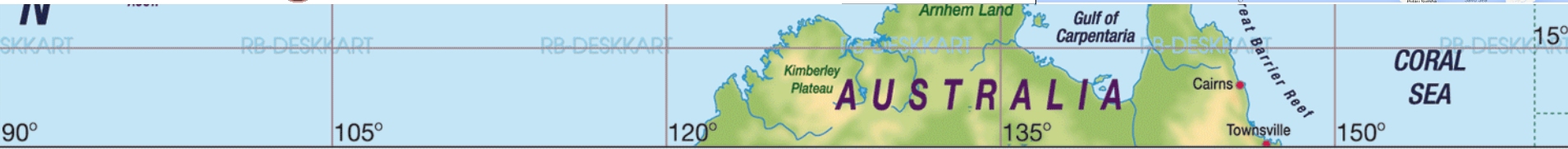
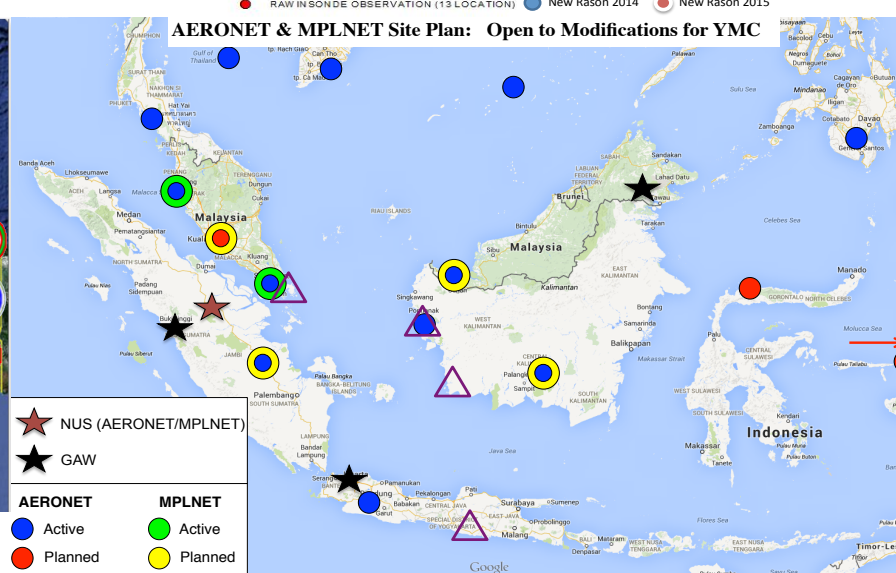
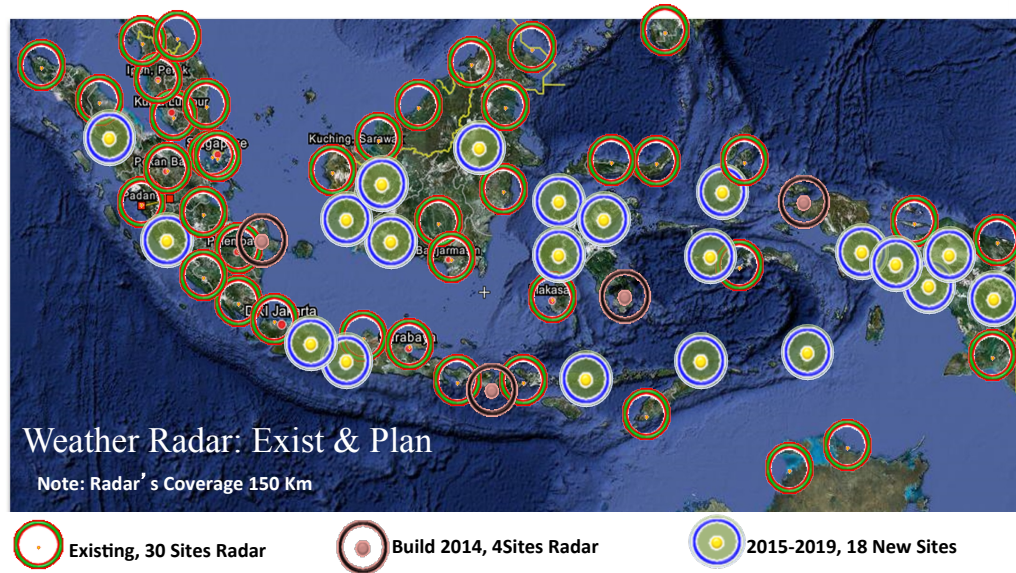
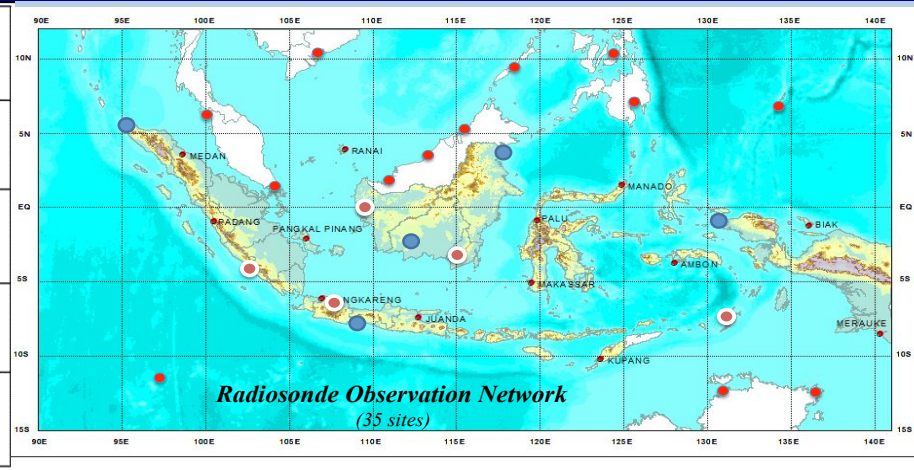
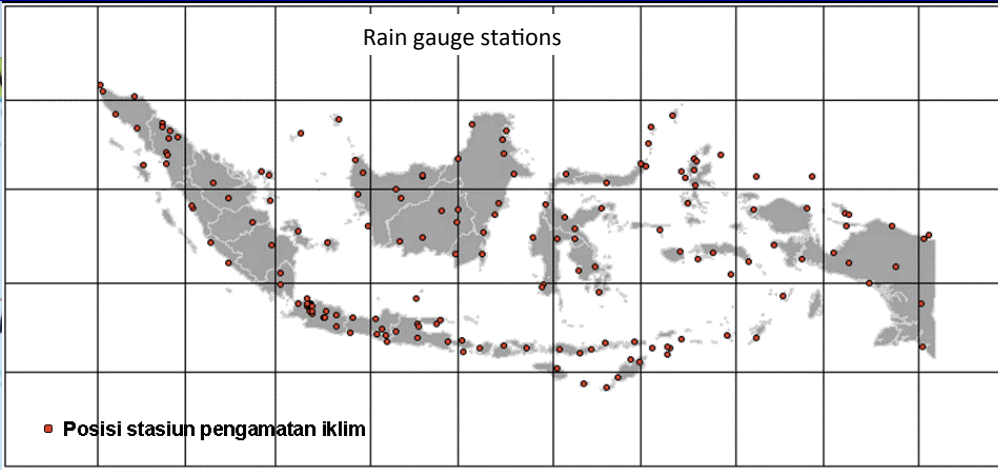
**International Participation:** Australia, China, France, Germany, Indonesia, Japan, Korea, Malaysia, Philippines, Singapore, Taiwan, UK, US

## **WMO Endorsement:**

- WWRP/Working Group on Tropical Meteorological Research
- WWRP/Working Group on Numerical Experimentation/MJO Task Force
- WWRP/THORPEX/-WCRP Subseasonal to Seasonal Prediction (S2S) Project
- Commission for Atmospheric Sciences
- CLIVAR Scientific Steering Group

**Websites:** <http://www.bmkg.go.id/ymc/>; <http://www.jamstec.go.jp/ymc/>

# YMC Observing Networks





# Mooring Deployment during YMC

# YMC Intensive Observations



▲ Upper-ocean, air-sea

● Surface met

◆ Ocean

■ TAO/TRITON moorings

# YMC Cruise R/V Ronald H. Brown

## May 2018

NOAA Ship Ronald H. Brown - Indian Ocean - FY 2018

