

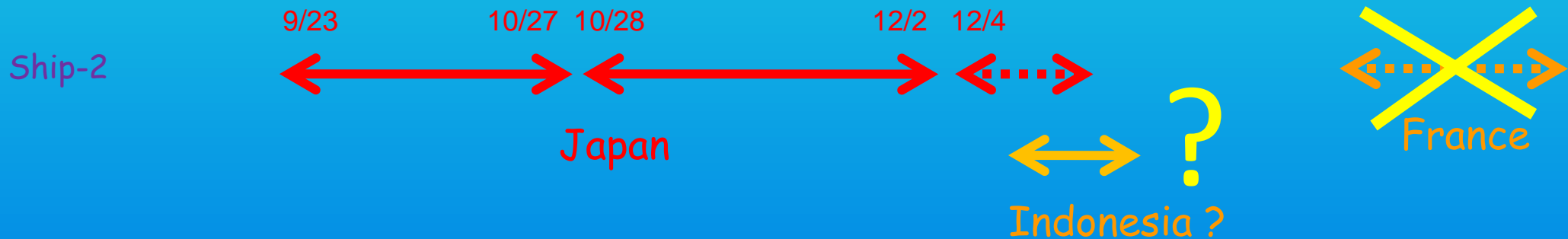
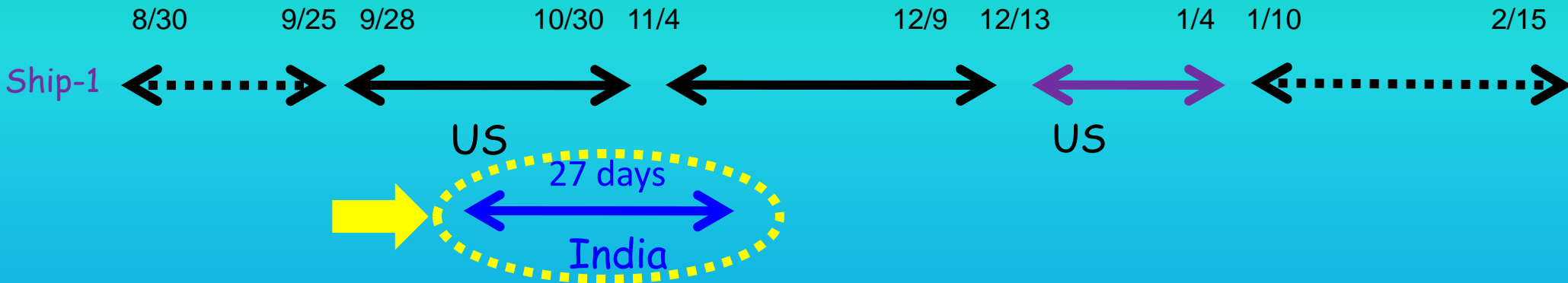
# Update on CINDY2011

Kunio Yoneyama (JAMSTEC)

## Good News & Bad News for Observation Network

1. Ship-time
2. Land-based Sounding Sites
3. Others

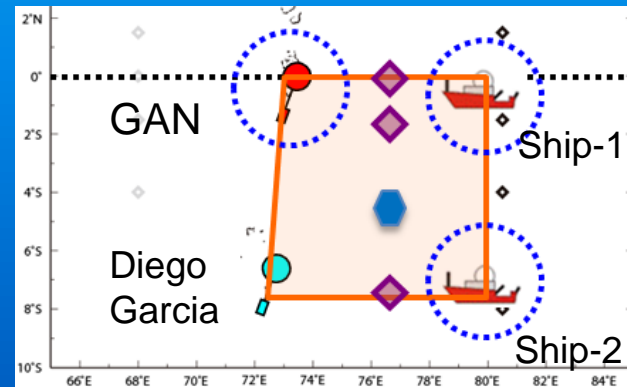
# Ship Rotation Plan



Stationary observation cruise



Non-stationary, but within Array area



# India

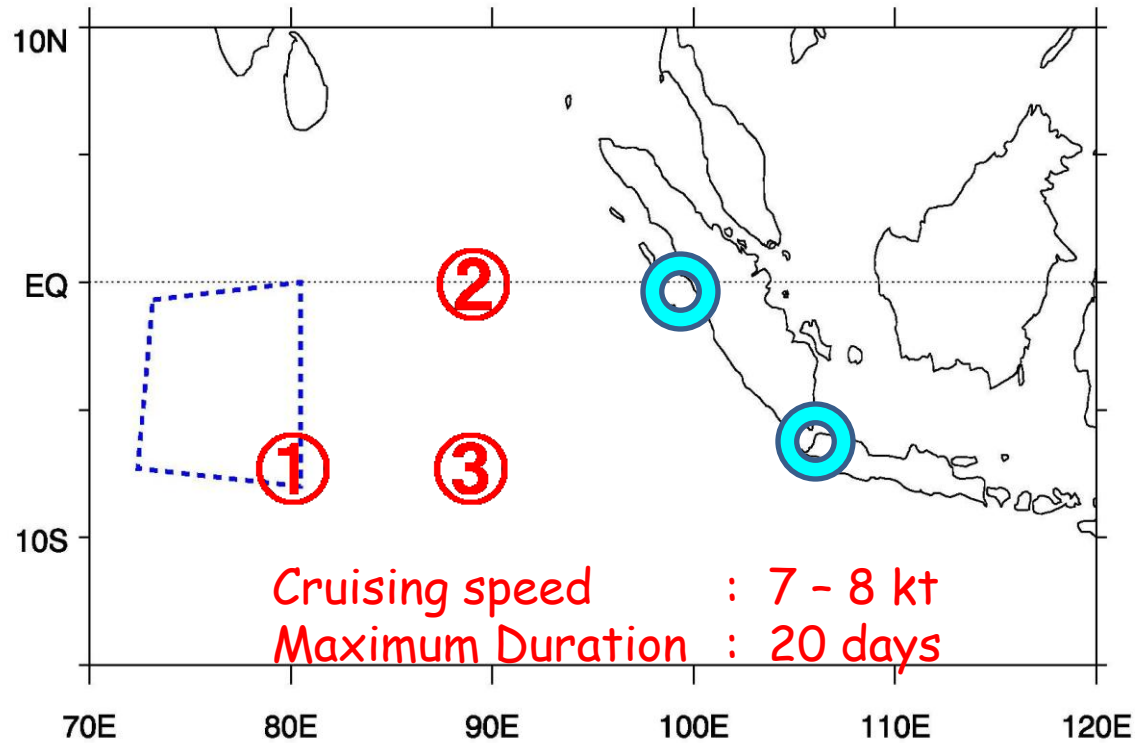
PIs : Dr. S. Prasanna Kumar & P. M. Muraleedharan ( NIO )

"27-days" ship-time for ORV Sagar Kanya has been allotted. However, since the approved time slot was Sep 24 - Oct 24, re-scheduling to the period of Oct 15 - Nov 15 is being negotiated/coordinated. SK will occupy (0, 80.5E) while Roger Revelle must leave for calling at port. During other periods, Sagar Kanya is expected to occupy (0, 77E) site.

Observations    Radiosonde (4/day)  
                    Surface Meteorology  
                    CTD with water sample for biogeochemical analyses  
                    ( T, S, dissolved oxygen, Fluorescence, chlorophyll-a,  
                    Nutrients (nitrate, phosphate, silicate), pH )  
                    ADCP



# Possibility of Indonesian Ship "Baruna Jaya - III"



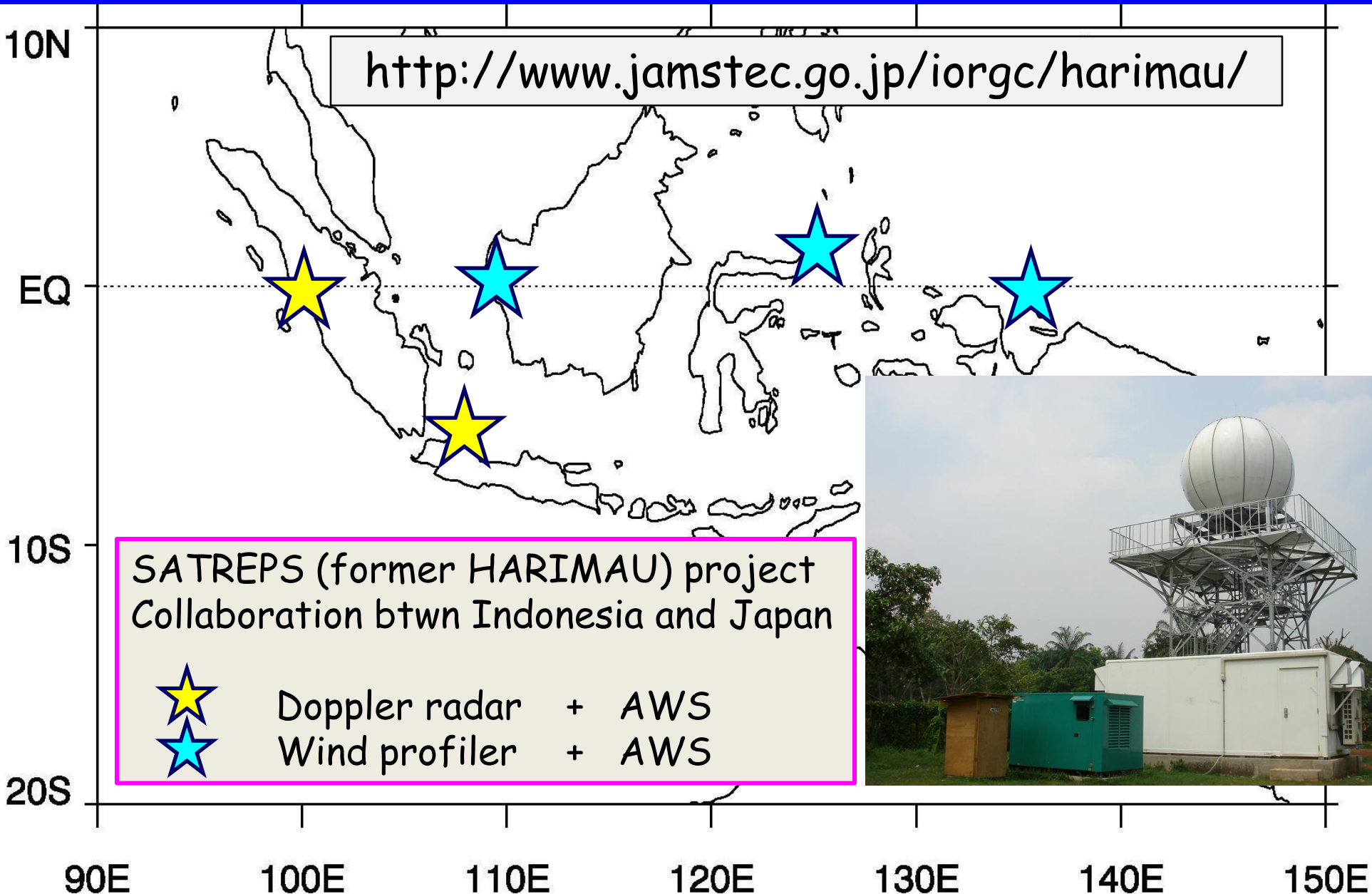
- Plan - 1 : (80E, 8S) 1 week on station
- Plan - 2 : (90E, EQ) 2 weeks on station
- Plan - 3 : (90E, 8S) 2 weeks on station

## Remarks.

Additional observations are needed.

# Indonesia

<http://www.jamstec.go.jp/iorgc/harimau/>



SATREPS (former HARIMAU) project  
Collaboration btwn Indonesia and Japan



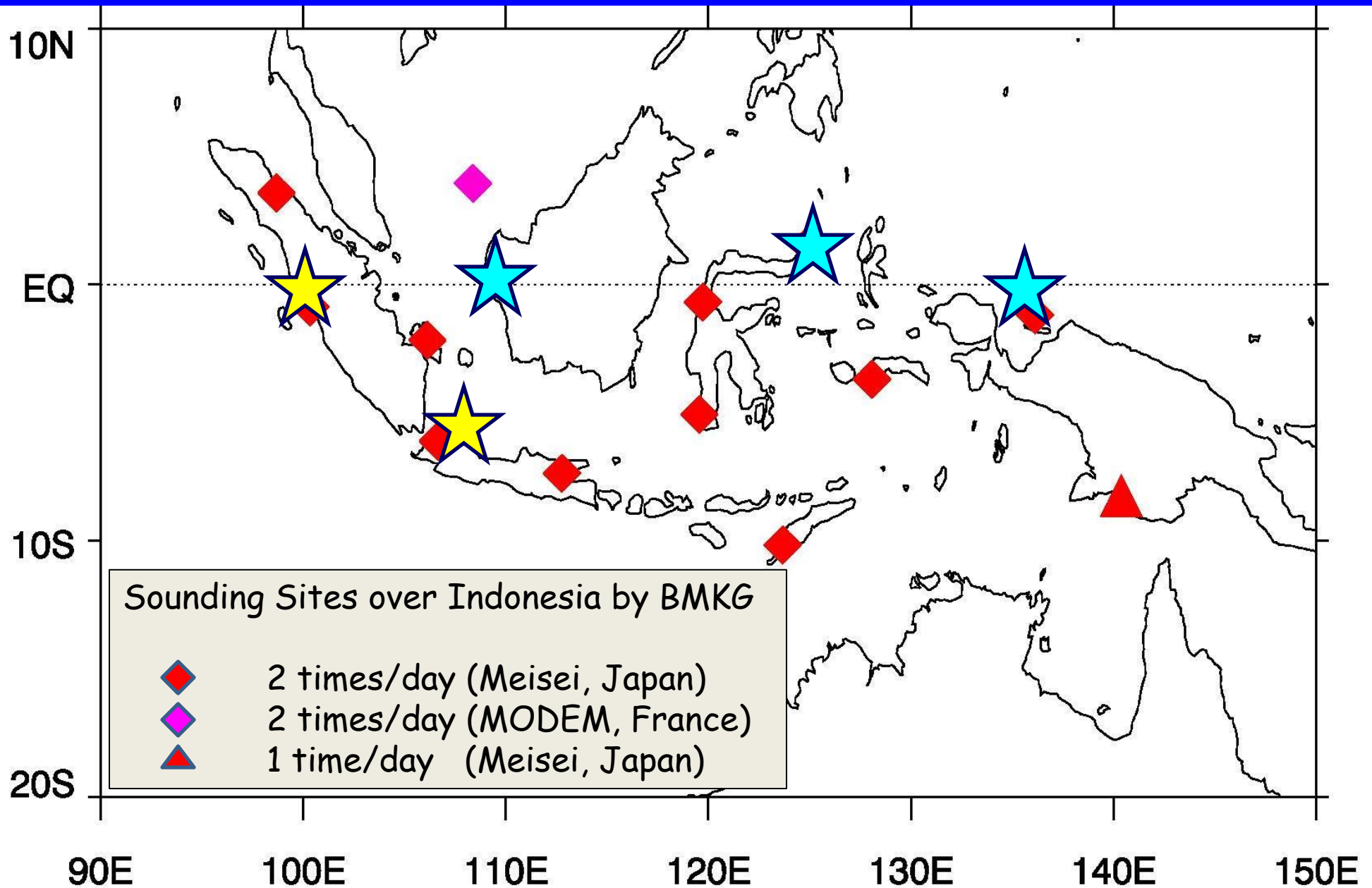
Doppler radar + AWS



Wind profiler + AWS



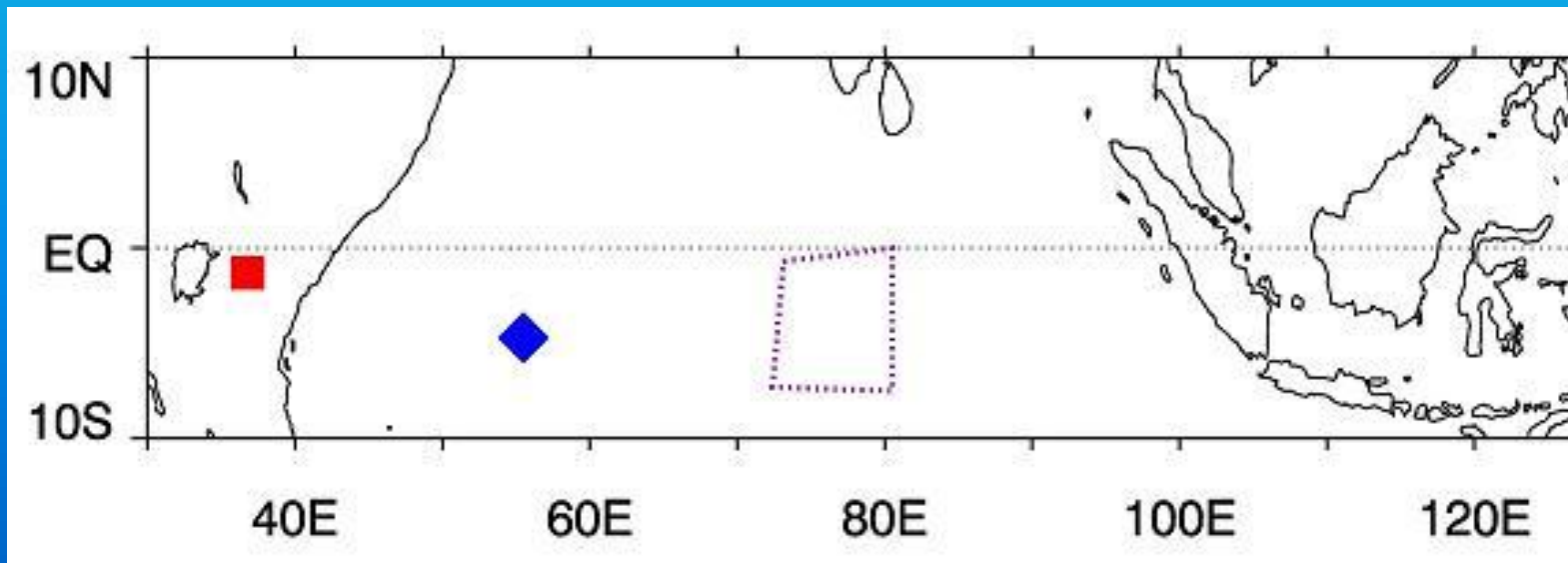
# Indonesia



# Seychelles & Kenya

Enhanced Radiosonde sounding will be performed by Seychelles National Weather Services and Kenya Meteorological Department as upwind sites.

Kenya 2 times/day (Oct - Jan)  
Seychelles 4 times/day (Nov; 5 weeks)  
2 times/day (Oct, Dec-Jan)



# Observation Network of CINDY2011 / DYNAMO + Collaborative Projects

Ship-1 & 2 sites will be occupied by 3 ships (and more, if possible)



Gan ; Super site



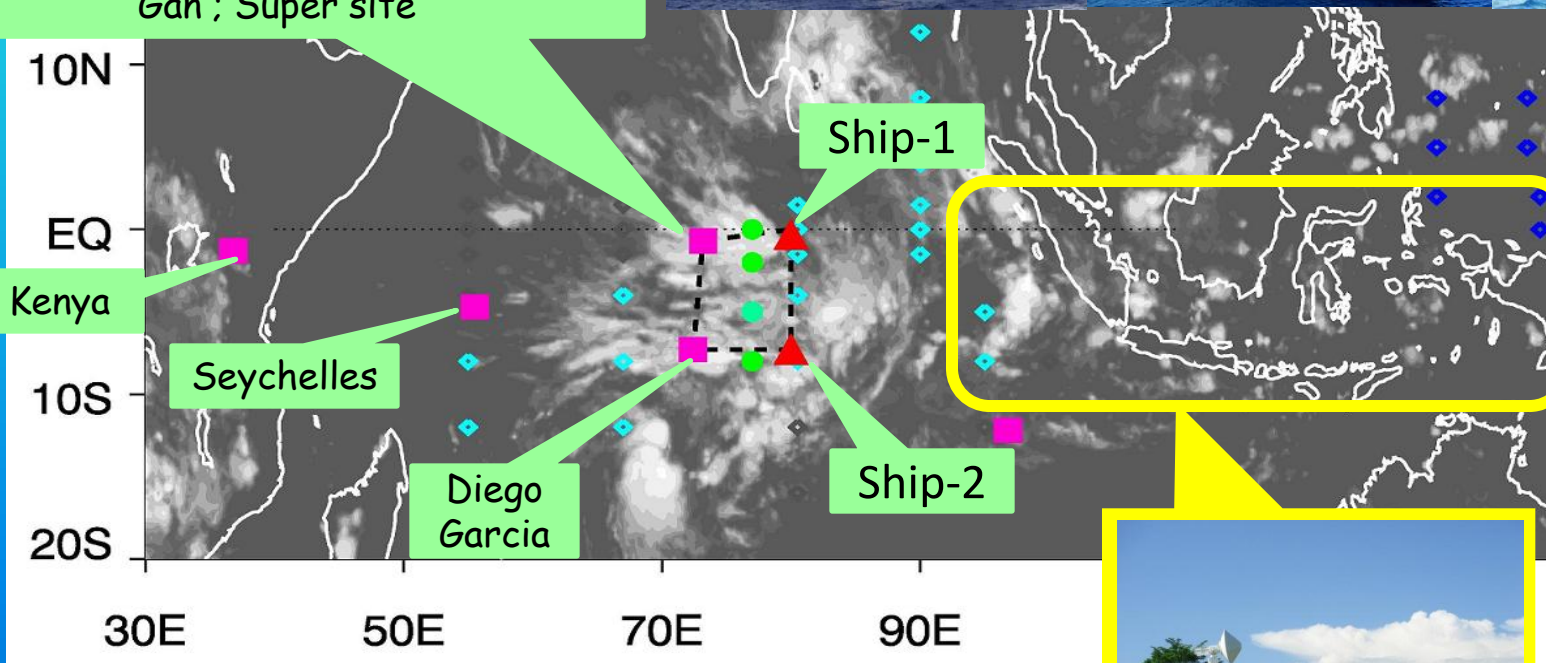
Japan / Mirai



US / Roger Revelle



India / Sagar Kanya



Indonesia / BJ-III



SATREPS  
Indonesia/Japan



ARM MJO Investigation  
Exp. by US DOE

Observation network will be formed over the central equatorial Indian Ocean with Islands, ships, and moorings. By combining relevant projects, it is possible to monitor the entire life cycle of MJO convection from IO to Pacific.

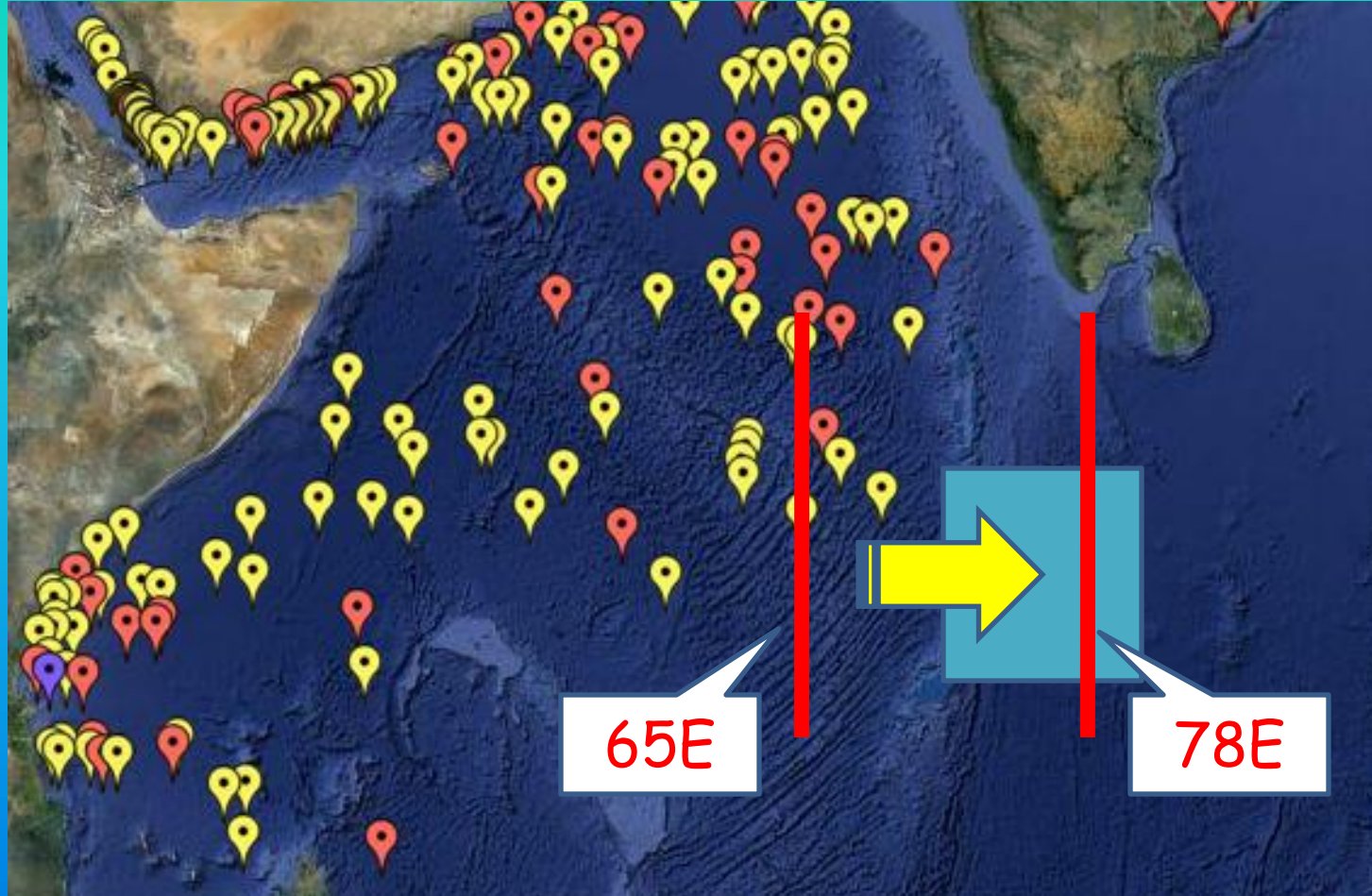


# Other good news and bad news

- 1) French project related to Megha-Tropiques  
Aircraft (Falcon 20) observation based at Gan  
Numerical model studies  
x But ship observation was not funded.
- 2) Tropical DISGO project by UK (Univ. East Anglia) was not funded.  
But they are still looking at the possibility to deploy "one" glider.
- 3) Soundings at Male, Maldives  
Possibility of CSU Sounding system deployment
- 4) Soundings at Colombo, Sri Lanka  
Currently, 3 times/week sounding is conducted.  
M. Katsumata (JAMSTEC) will visit Sri Lanka for coordination in March
- 5) Chinese participation ?  
There is a SLIGHT possibility of Chinese ship participation in C/D  
by sending their ship in January 2012.  
BUT their final decision will be made in NOVEMBER 2011.



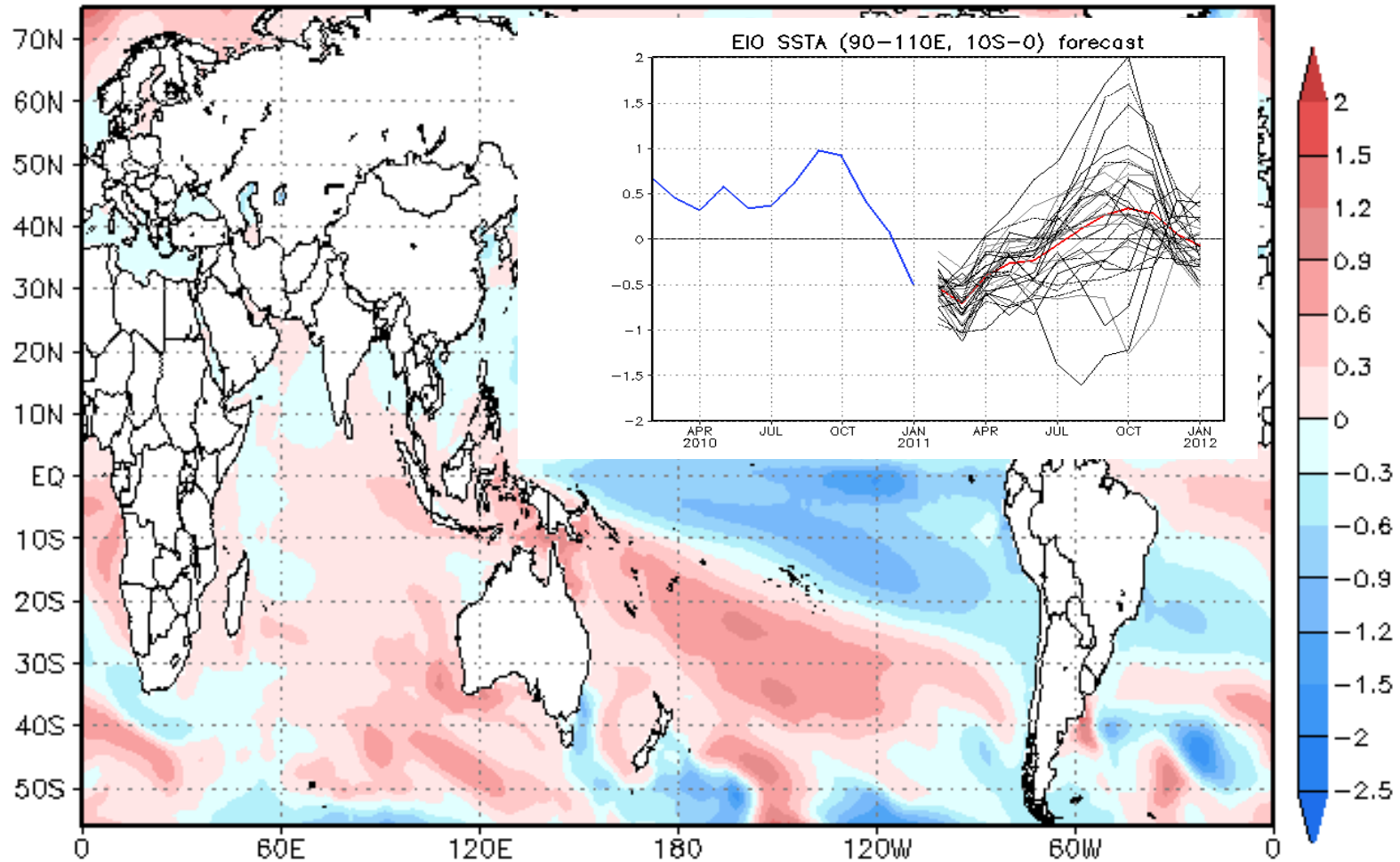
# Piracy Problem ???



War Risks Zone to be expanded from 65E to 78E as attack area grows.  
If decided, JAMSTEC ship may need to pay much for insurance ...  
It may affect the deployment of ADCP sub-surface mooring at 5S, 77E.

# Seasonal Forecast (SON 2011) by SINTEX-F

Predicted SON2011 SST anom. from 1feb2011 (27-member)



<http://www.jamstec.go.jp/frsgc/research/d1/iod/>

Weak negative IOD is predicted by a Global Ocean-Atmosphere Coupled Model "SINTEX-F".