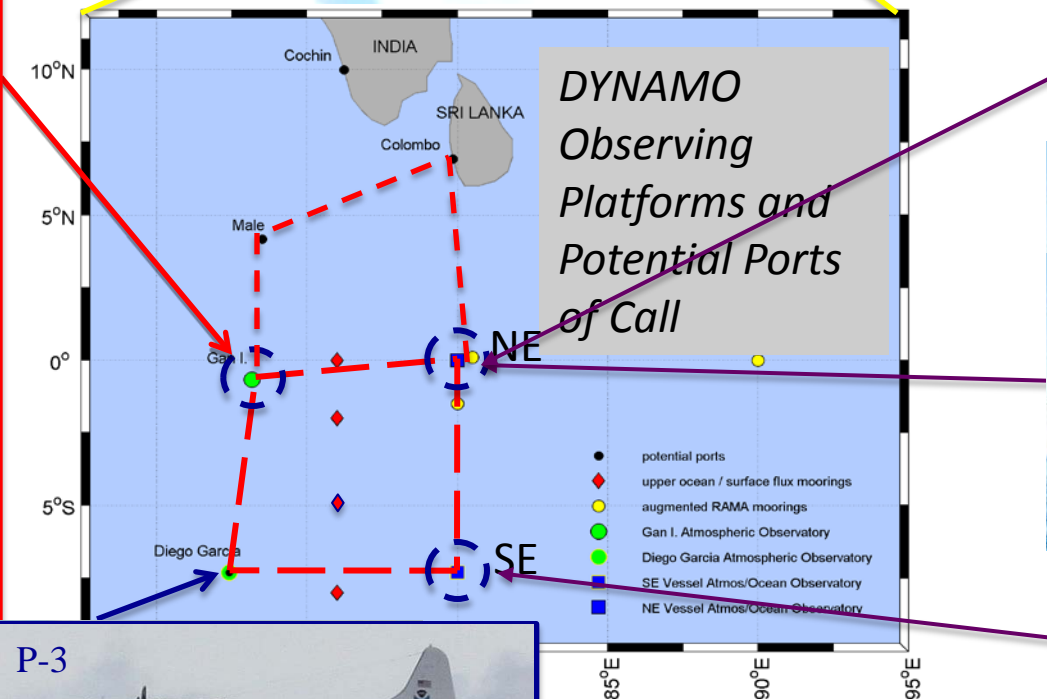
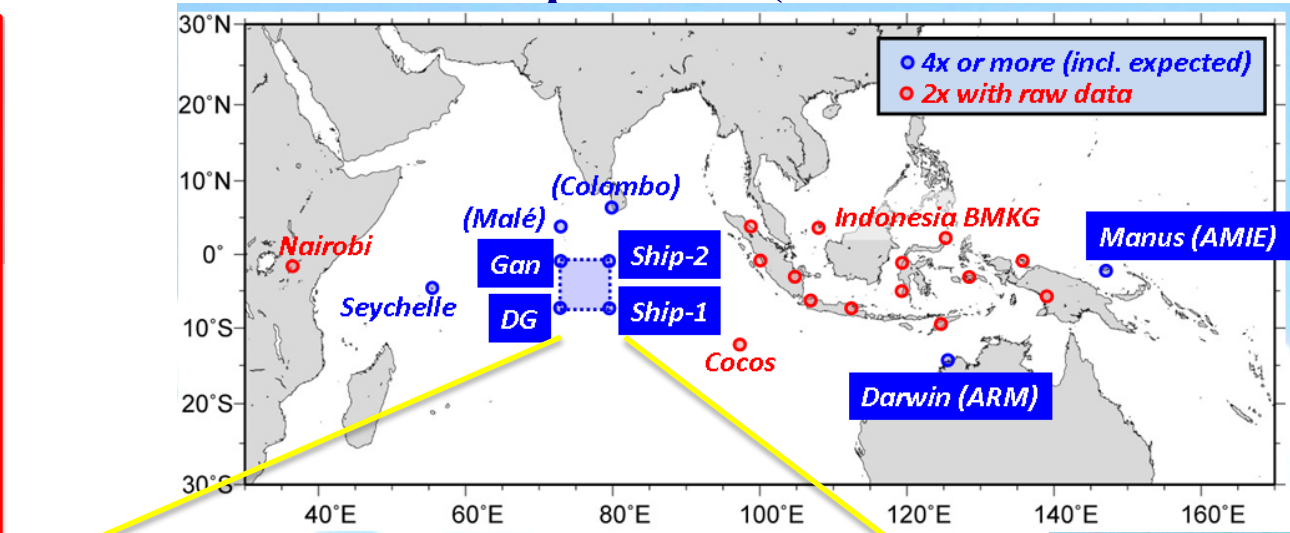


MJO Interest Group Report

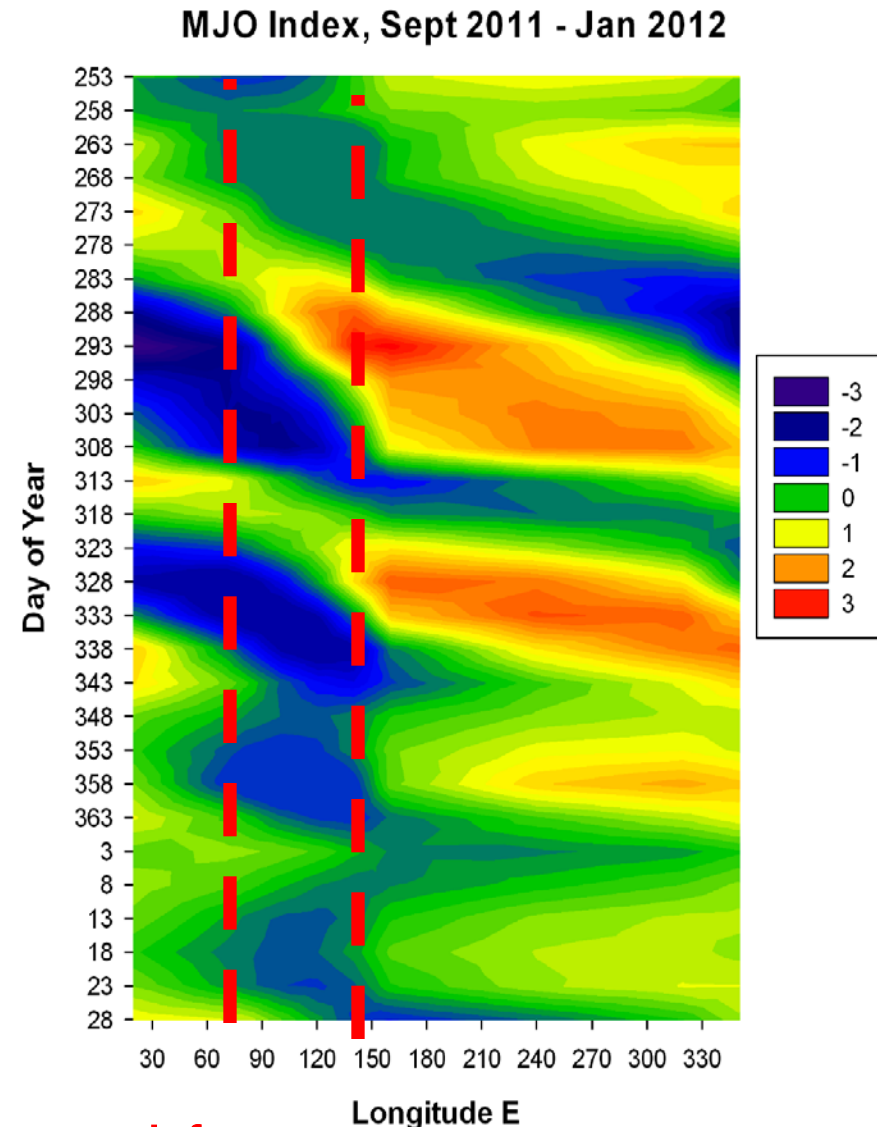
Samson Hagos, Chuck Long, Sally
McFarlane

AMIE/DYNAMO/CINDY2011 Field Experiment (October 2011 – March 2012)



AMIE Observations, Gan & Manus

- Captured 3 MJO events at each site to date.
- 1000+ sondes (8/day) at each site, >90% success rate.
- With precip radar, will allow production of model forcing data sets.
- Some instrument issues, but major success as well.
- In partnership with DYNAMO, landmark set of observations of tropical convection and environment in the context of the MJO.



See presentations from AMIE/MJO Breakout for more info

Ideas for collaborative research aimed toward formation of a focus group.

- ▶ Straw men of format general goals and tasks for an MJO focus group
 - Better theories.
 - Better cloud microphysics schemes.
 - Better cumulus schemes etc.

Tasks by modeling needs.

Task 2: Cumulus Parameterization

(Single column and global model, multiple parameterizations, observations and the large-domain high resolution simulations)

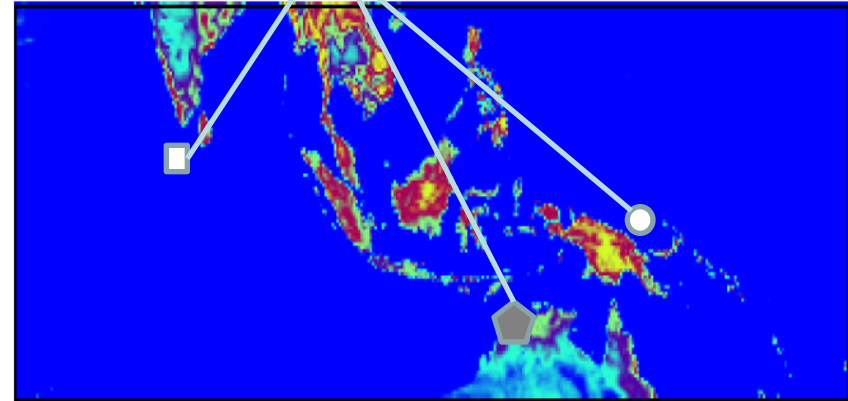
Task leads:

Investigators:

Task 1: Cloud microphysics (Radar and CRM)

Task Leads:

Investigators:



Tasks by scientific issues and hypotheses

Example of tasking by hypotheses

- Challenges to the “recharge-discharge” hypothesis.
- The roles of wind shear, cold pool dynamics in the organization and development of convection in MJO
- The role of variations of cloud population and associated diabatic heating profiles etc.

Other ideas for organizing collaborative research, modeling needs, hypotheses to be tested etc are welcome and appreciated.