+++ ITCZ persists through center of the array +++ MJO onset possible within a week +++

• **Current Conditions/Previous Day Recap**

Yesterday: Image 1. Today: Image 2. The main ITCZ band of convection remains roughly halfway through the DYNAMO array (~5N). The northern “double ITCZ” has less convection than yesterday and in mainly influencing the weather at Gan. Diego Garcia and the RV Mirai site remain in the trade winds. A large MCS developed just northwest of Gan, along that northern ITCZ. At the RV Revelle, numerous showers/storms occurred, but they were not as deep or organized as at Gan. (Img. 3).

Soundings: Img. 4, 5, 6, 7, 8. Male sounding remains dry. Gan and the RV Revelle were drier than yesterday, as the northern ITCZ band moved a bit north. The Gan sounding may be influenced by mesoscale subsidence surrounding the MCS just to the northwest. Trade winds remain in place at Diego Garcia and the RV Mirai as the southern ITCZ band is north of these locations. The inversion developed at ~800 mb at Diego Garcia and ~700 mb at RV Mirai.

The Northern Hemisphere monsoon trough remains in place over southern India and the Bay of Bengal. In the Southern Hemisphere, there is a dry area near ~85-95E, which is moving westward (Img 9).
• **Day 1 (next 24 hours) Forecast**

Image 10, Image 11. Northern ITCZ band continues to diminish, with the major band cutting roughly through the center of the array and the northern one over or just north of Gan/RV Revelle. Decreasing coverage of showers and storms in range of the SPOL and RV Revelle radars, still with some organized convection.

• **Day 2-3 (24-72 hours) Outlook**

Image 12. Convection mostly concentrated west of the array. The dry slot in Img. 9 is expected to affect the south part of the array, mainly in day 2. Meanwhile, the ITCZ shifts north towards Gan/RV Revelle, so convection is still likely there.

Elsewhere, the monsoon persists over southern India and Sri Lanka, but the models are no longer predicting the formation of the Monsoon low in the Arabian Sea. Overall, convective coverage and moisture gradually increase.

• **Extended Outlook**

Image 13, Image 14. Dramatically Increasing convection throughout the DYNAMO array. The dry slot moves west of the array, and meanwhile the MJO is expected to be in Phase 1—Indian Ocean onset. Through the next week or so, models are consistent at developing the next MJO Phase 1.
Gan

Time series for 43599 from 10/04 to 10/12

Yesterday

CSU Skew-T

43599, YRWW
0.75 75.2E

122.1 5 Oct. 2011

Today

CSU Skew-T

43555, YRWW
4.2N 75.3E

122.4 5 Oct. 2011
Diego Garcia

Yesterday

CSU Skew-T

Today

CSU Skew-T
Short Term: Valid 0Z 15 Oct.
Day 3.

GFS forecast OLR for day 3 for: 20111017 from 12z

Day 3.

S forecast PWAT vs. Wind 1000 hPa for day 3 for: 20111017 from 1