+++ Broad, active ITCZ 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 dissappeared while convection increased along the main ITCZ. Diego Garcia and the RV Mirai site remain in the trade winds. At the RV Revelle, numerous showers/storms occurred, while the ITCZ convection could be seen in the south of the SOPL radar. (Img. 3).

Soundings: Img. 4, 5, 6, 7, 8. Male sounding remains dry. At Gan and the RV Revelle, the soundings may be affected by subsidence surrounding the nearby convective systems. Trade winds remain in place at Diego Garcia and the RV Mirai as the southern ITCZ band is north of these locations.

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 ~80-90E, which is moving westward (Img 9).
• **Day 1 (next 24 hours) Forecast**

Image 10, Image 11. The dry slot moves over the southern part of the array, and the ITCZ axis shifts northward towards Gan/RV Revelle. Gan and the RV Revelle are likely to experience organized convective systems, especially at night, as the ITCZ moves close or over them. Diego Garcia may experience some showers during the day as the moist axis moves over there, but besides that, very dry conditions continue at DG and RV Mirai.

• **Day 2-3 (24-72 hours) Outlook**

Image 12. During Day 2 the array is still affected by the dry slot with the ITCZ axis close to Gan/RV Revelle. During day 3, that feature moves west of the array, and the ITCZ shifts south. However, most of the convection should be concentrated in the west Indian Ocean.

The models are again longer predicting the formation of the Monsoon low in the Arabian Sea and in the Bay of Bengal. Overall, convective coverage and moisture gradually increase.

• **Extended Outlook**

Image 13. Dramatically Increasing convection throughout the DYNAMO array. 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. Elsewhere, a front moves across northern India—the first one of the season. At the same time, there is a significant trough affecting Madagascar.
Male

Yesterday

CSU Skew-T

43466,
6.9N 79.9E
122 14 Oct. 2011

Note = Quick-look data
wind barbs (knots)

Today

CSU Skew-T

43555, VRMM
4.2N 73.5E
122 15 Oct. 2011

Note = Quick-look data
wind barbs (knots)
Gan

Time series for 43599 from 10/08 to 10/16

Yesterday

CSU Skew-T

43555, VRMM

4.2N 73.5E

122.14 Oct. 2011

Notes: Quick-look data
wind barbs (knots)

Today

CSU Skew-T

43599, VRMG

0.75 73.2E

122.15 Oct. 2011

Notes: Quick-look data
wind barbs (knots)
Time series for 61967 from 10/08 to 10/16

Yesterday
CSU Skew-T
97980, WANK
8.55 140.4E
122 14 Oct. 2011
Note: Quick-look data
wind barbs (knots)

Today
CSU Skew-T
61967, DORG
7.35 72.4E
122 15 Oct. 2011
Note: Quick-look data
wind barbs (knots)
RV Mirai

Time series for 99990 from 10/08 to 10/16

CSU Skew-T

61967, DDRG
7.35 72.4F
122 14 Oct. 2011
Short Term: Valid 0Z 16 Oct.
GFS forecast OLR for day 3 for: 20111018 from 12z

Day 3.