

Subseasonal Update, Sept 16, 2021 (experimental)

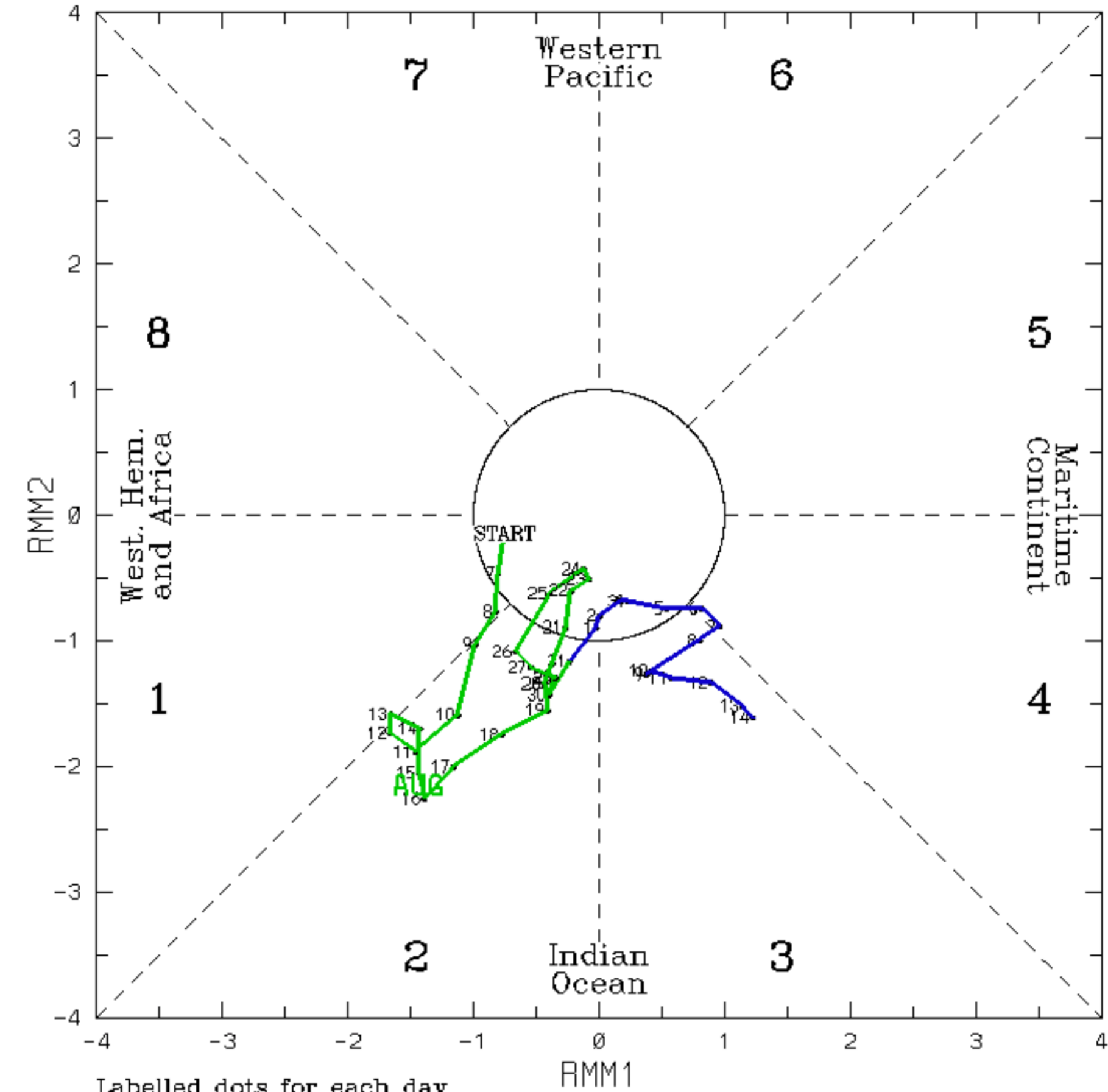
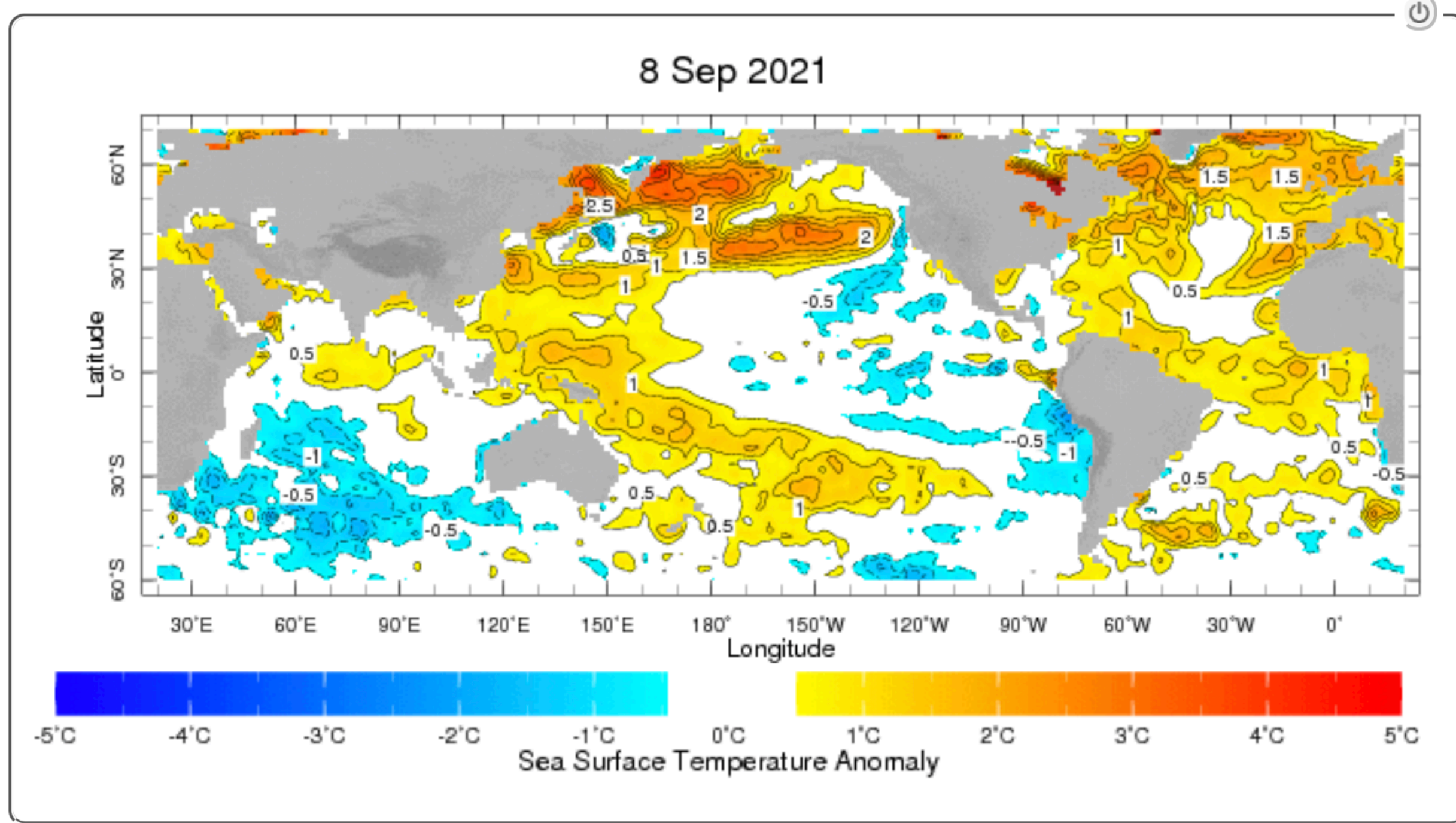
Andrew W Robertson

Subseasonal drivers

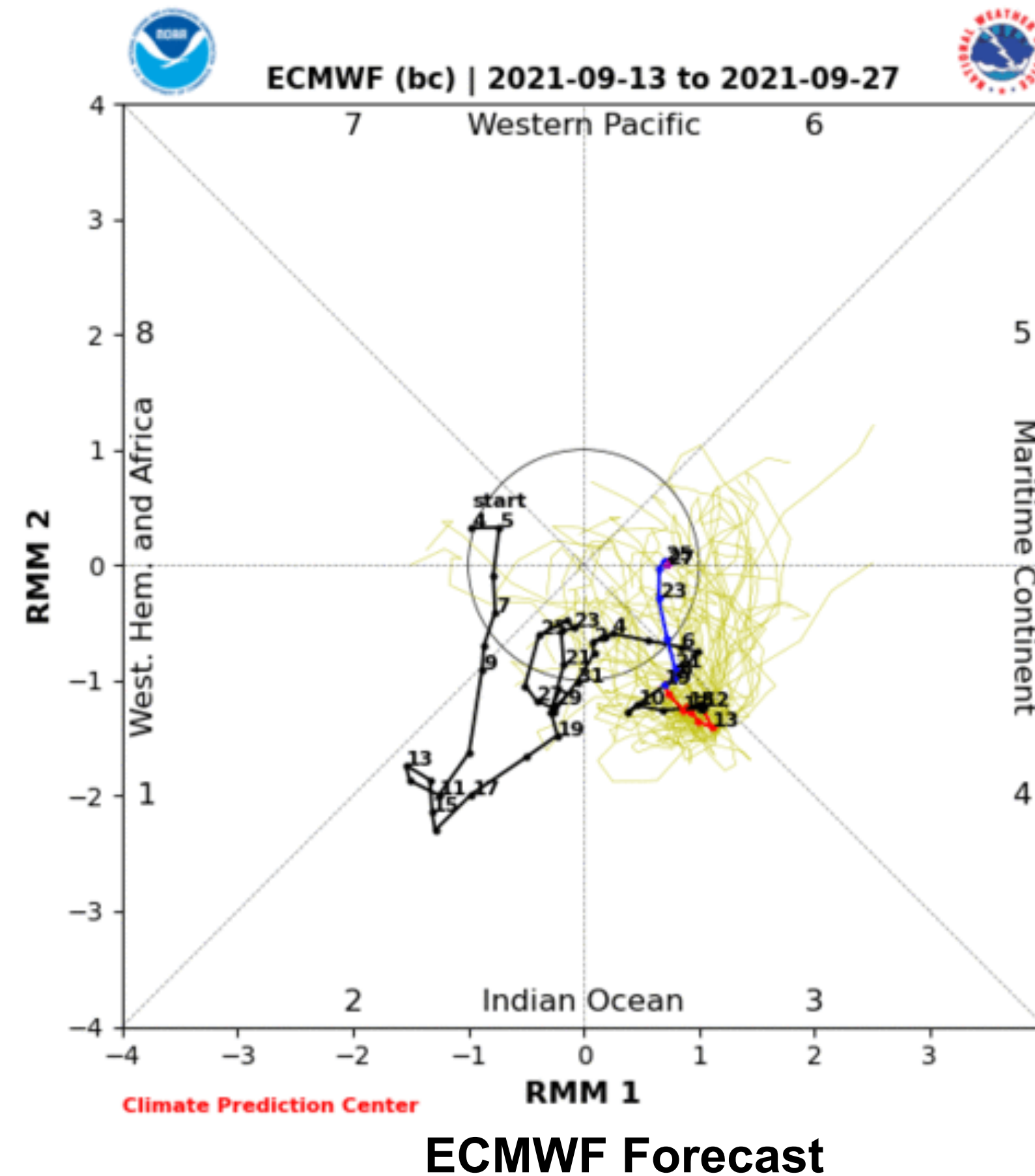
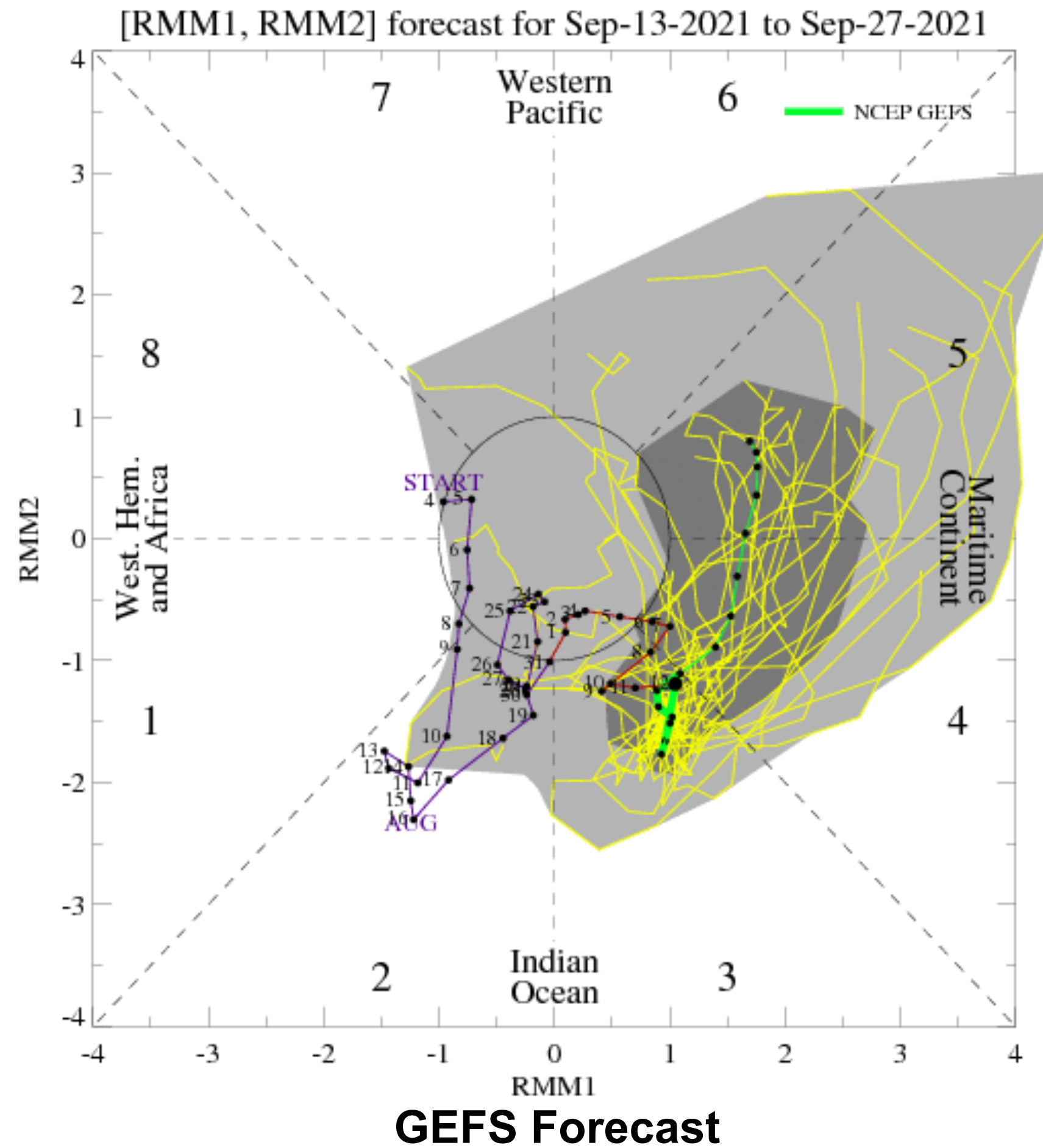
MJO monitoring

(RMM1,RMM2) phase space for 6-Aug-2021 to 14-Sep-2021

Weekly Obs SST Anomaly Sep 5-11, 2021



Blue line is for Sep, green line is for Aug, red line is for Jul.
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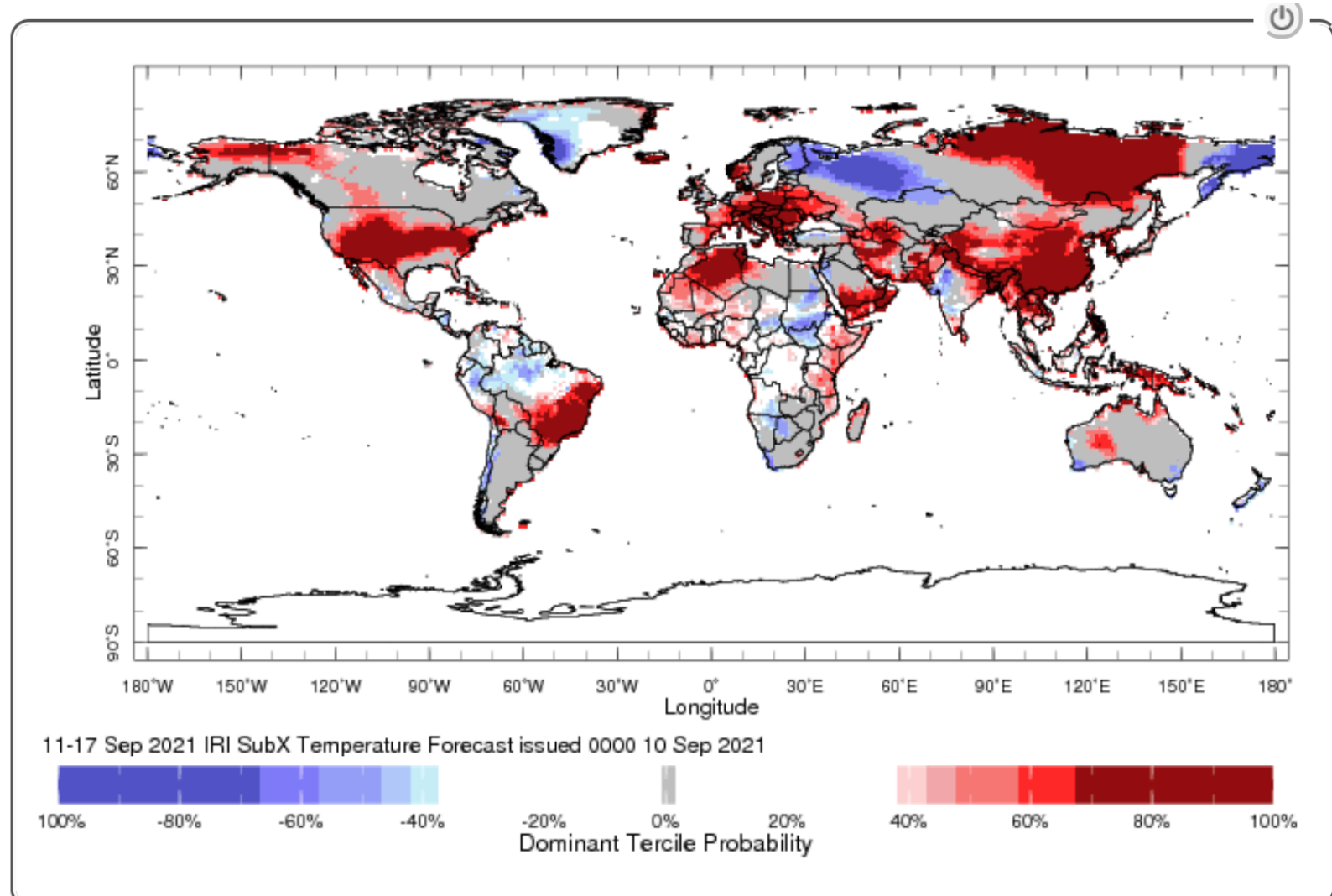


MJO eastward propagation is forecasted but with low confidence in amplitude (large spread).

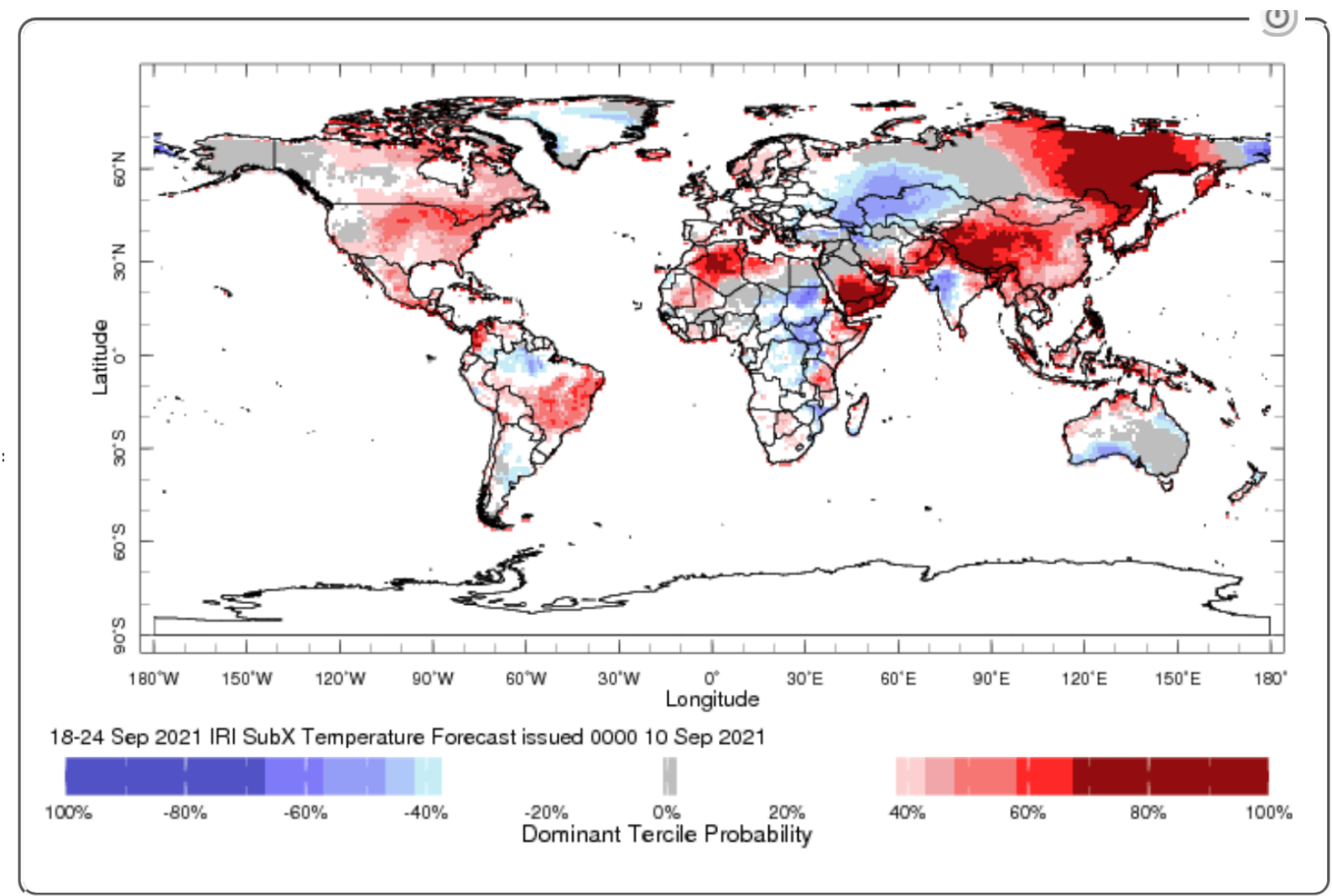
- The GEFS remains bullish forecasting a robust Maritime Continent MJO, similar to last week. Some GFS ensemble members depict a very strong event.
- The ECMWF also shows renewed eastward propagation, but slower and with a weaker amplitude overall.
- Some ensemble members from each model system depict very different solutions (e.g., a return to Phase-1), highlighting increased uncertainty.

Temperature Forecasts: SubX MME Initialized Sep 8, 2021

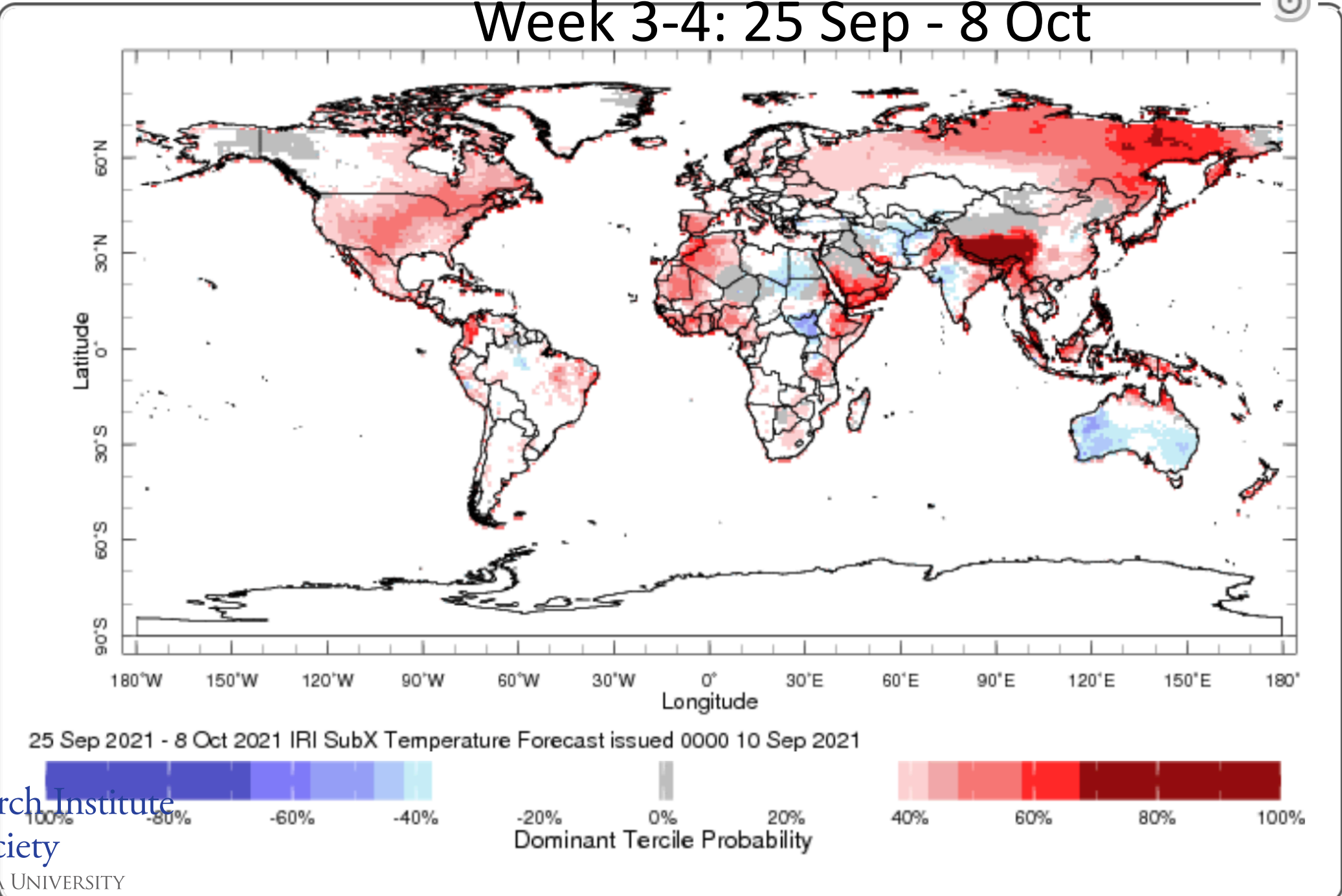
Week 1: 11-17 Sep



Week 2: 18-24 Sep



Week 3-4: 25 Sep - 8 Oct



CFSv2, GEFSv12, ESRL FIM models

CPC Products

Global Tropics Hazards and Benefits Outlook - Climate Prediction Center

Week 1 - Valid: Sep 15, 2021 - Sep 21, 2021

Week 2 - Valid: Sep 22, 2021 - Sep 28, 2021

Produced: 09/14/2021
Forecaster: Allgood

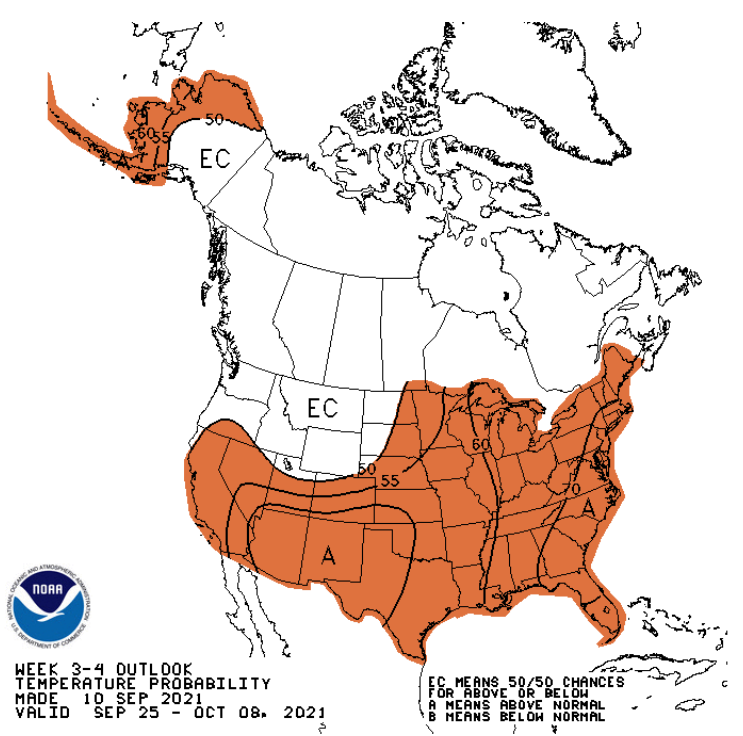
Confidence	
High	Moderate
Tropical Cyclone Formation	Development of a tropical cyclone (tropical depression - TD, or greater strength).
Above-average rainfall	Weekly total rainfall in the upper third of the historical range.
Below-average rainfall	Weekly total rainfall in the lower third of the historical range.
Above-normal temperatures	7-day mean temperatures in the upper third of the historical range.
Below-normal temperatures	7-day mean temperatures in the lower third of the historical range.

Product is updated once per week, except from 6/1 - 11/30 for the region from 120E to 0, 0 to 40N. The product targets broad scale conditions integrated over a 7-day period for US interests only. Consult your local responsible forecast agency.

<https://www.cpc.ncep.noaa.gov/products/precip/CWlink/ghazards/index.php>

CPC Week 3-4 Outlooks

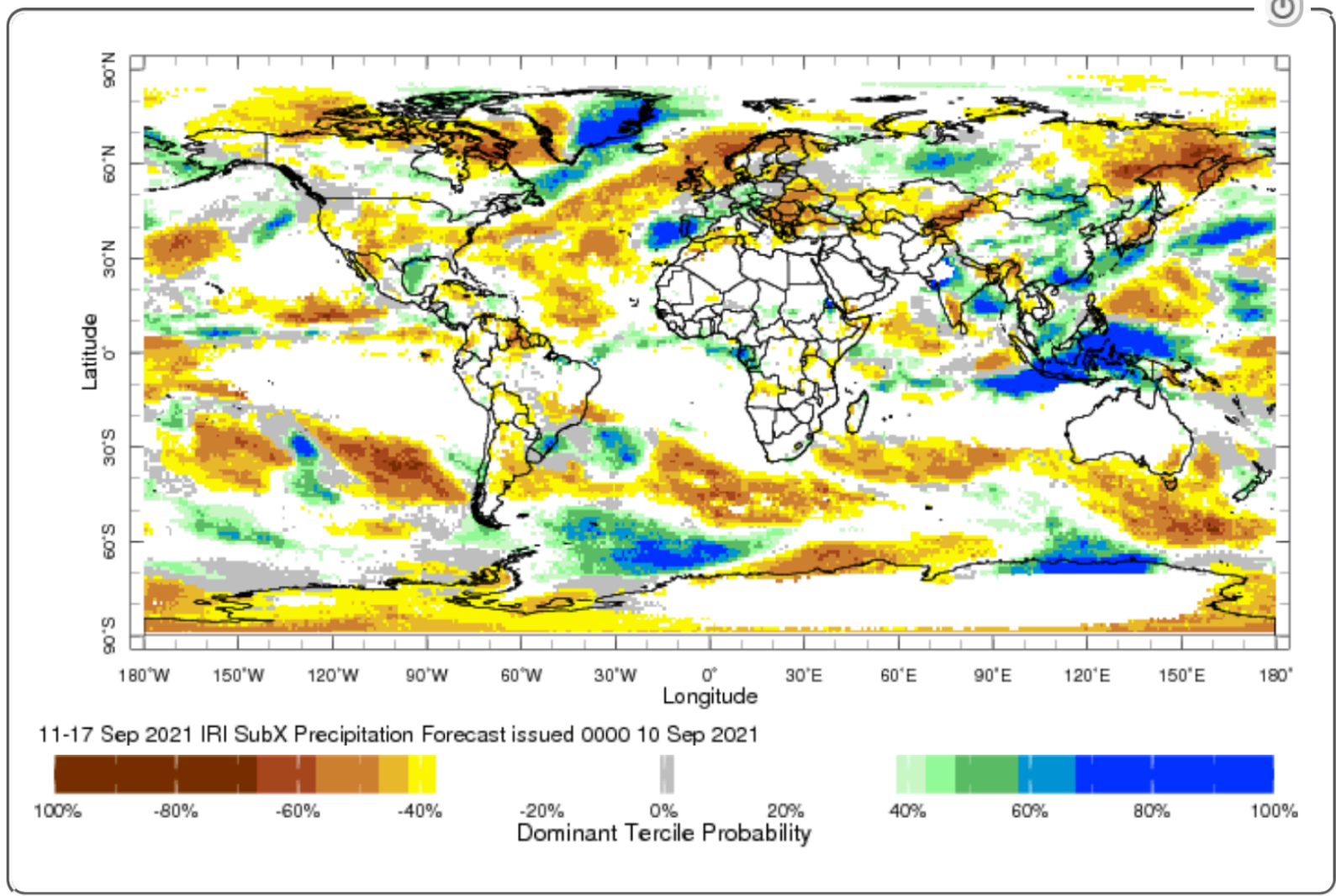
Valid: 25 Sep 2021 to 08 Oct 2021
Updated: 10 Sep 2021



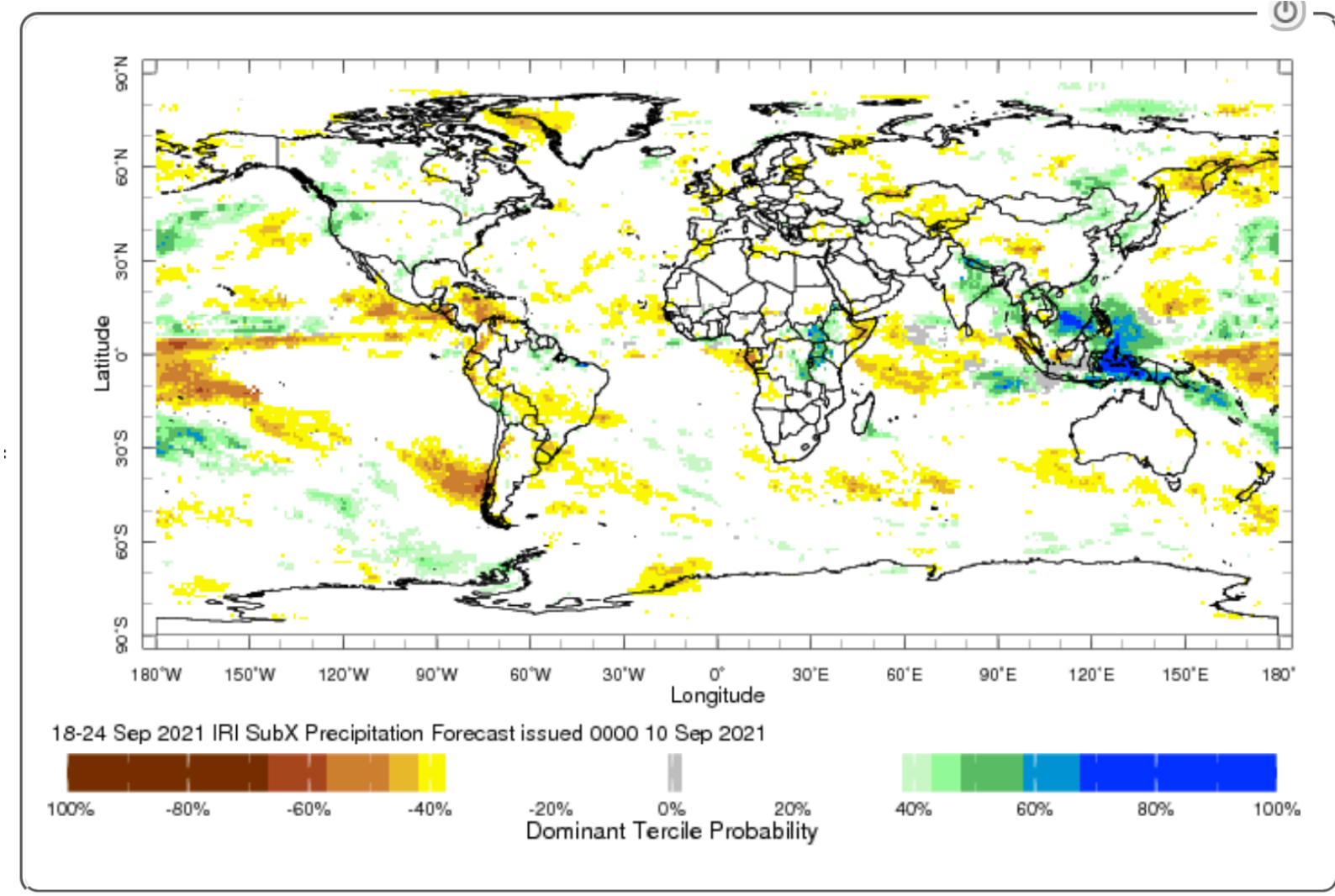
Above median probabilities.

Precipitation Forecasts: SubX MME Initialized Sep 8, 2021

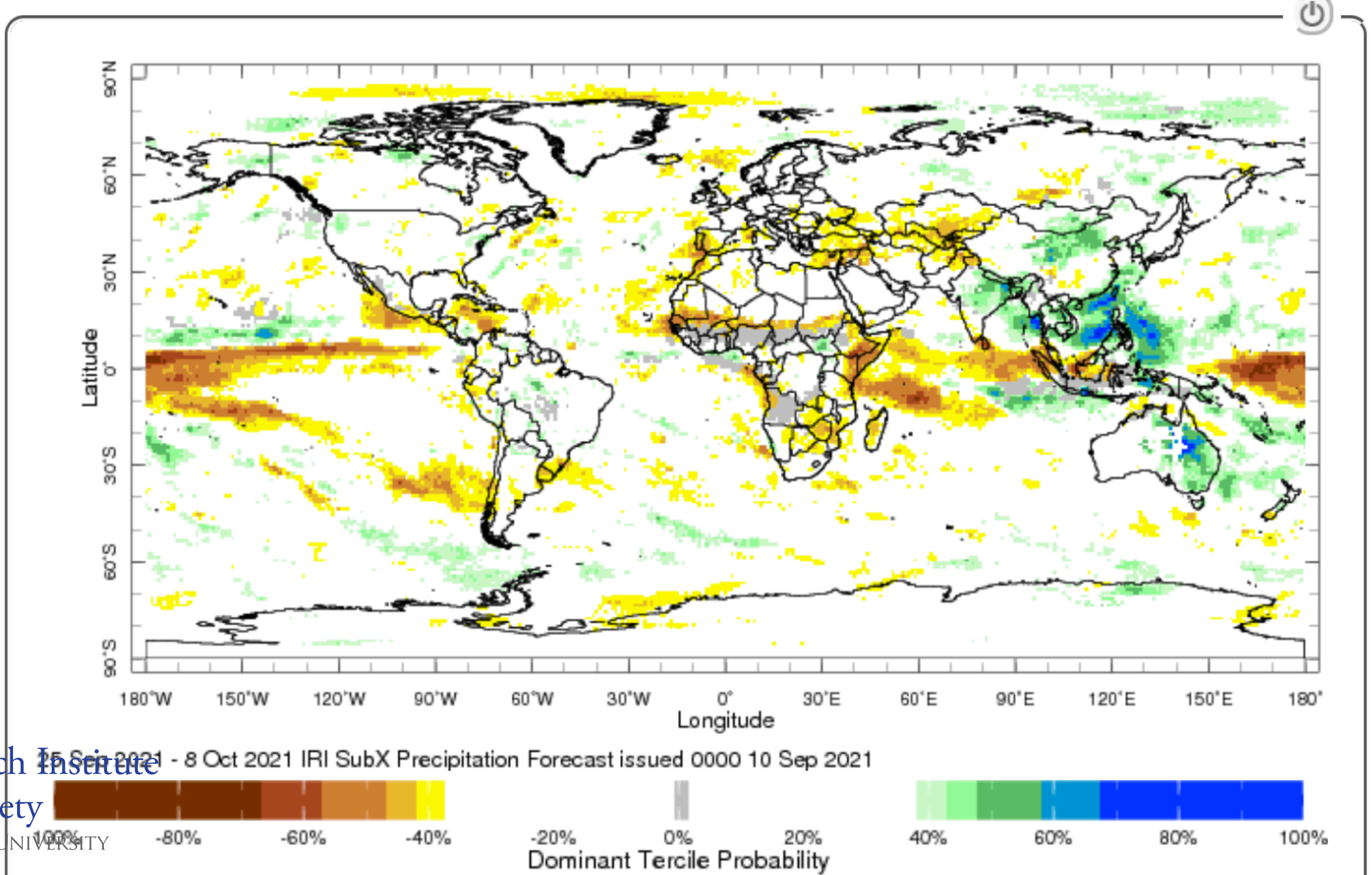
Week 1: 11-17 Sep



Week 2: 18-24 Sep



Week 3-4: 25 Sep - 8 Oct



CPC Products

Global Tropics Hazards and Benefits Outlook - Climate Prediction Center

Week 1 - Valid: Sep 15, 2021 - Sep 21, 2021

Week 2 - Valid: Sep 22, 2021 - Sep 28, 2021

Produced: 09/14/2021
Forecaster: Allgood

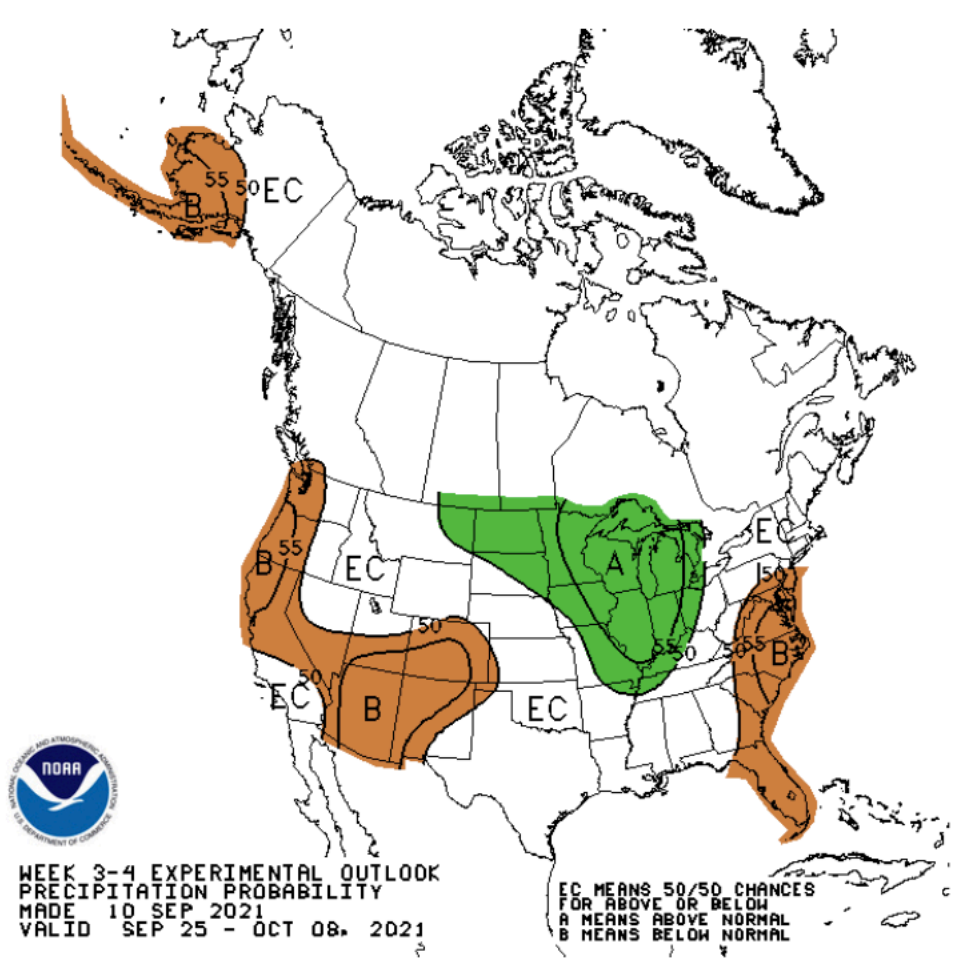
Confidence		
High	Moderate	
		Development of a tropical cyclone (tropical depression - TD, or greater strength).
		Above-average rainfall: Weekly total rainfall in the upper third of the historical range.
		Below-average rainfall: Weekly total rainfall in the lower third of the historical range.
		Above-normal temperatures: 7-day mean temperatures in the upper third of the historical range.
		Below-normal temperatures: 7-day mean temperatures in the lower third of the historical range.

Product is updated once per week, except from 6/1 - 11/30 for the region from 120E to 0, 0 to 40N. The product targets broad scale conditions integrated over a 7-day period for US interests only. Consult your local responsible forecast agency.

Logos: 中央氣象局, UNIVERSITY AT ALBANY, Australian Government Bureau of Meteorology, NPS

<https://www.cpc.ncep.noaa.gov/products/precip/CWlink/ghazards/index.php>

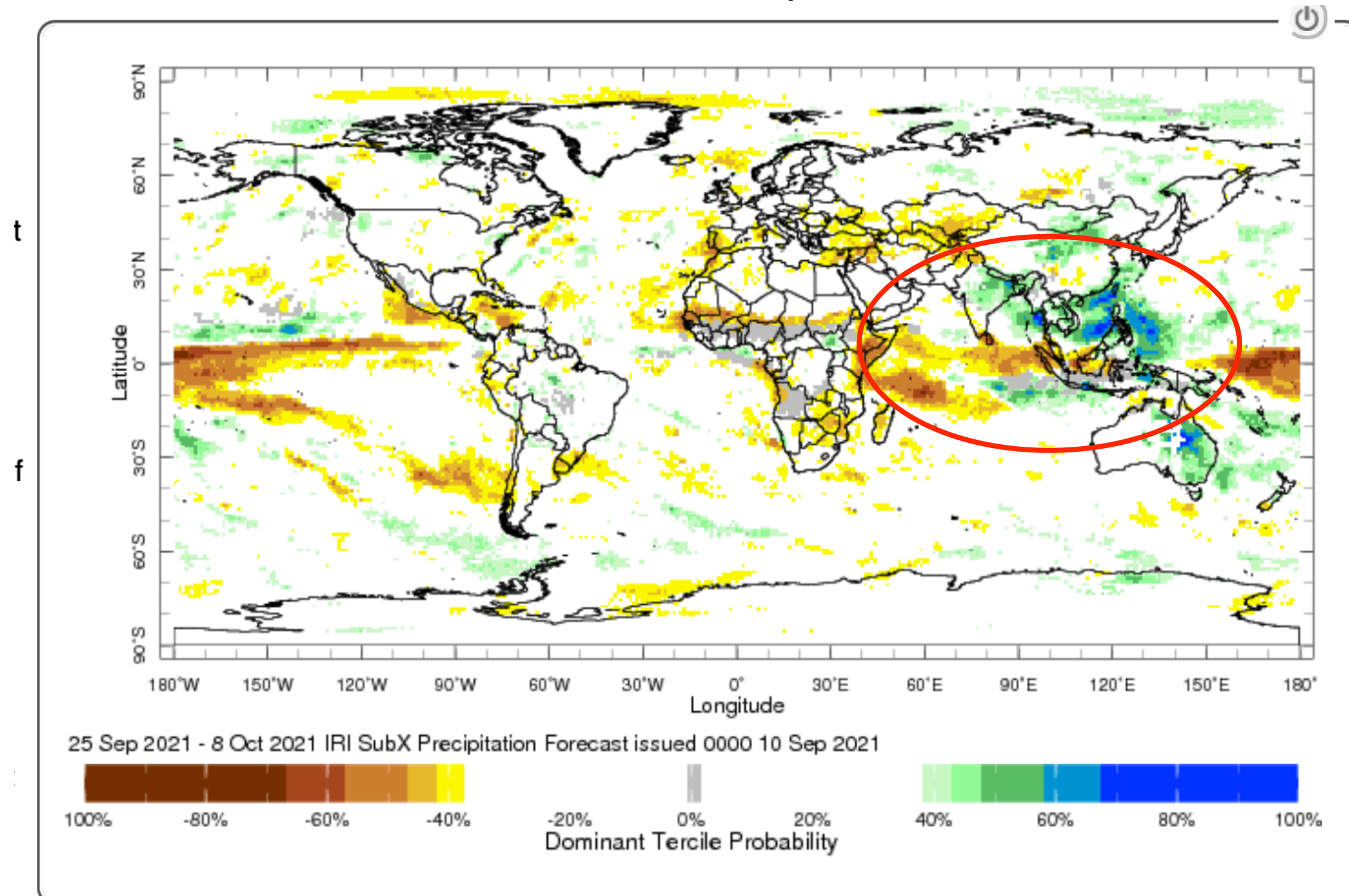
Precipitation Probability (Experimental)



Attribution to Subseasonal drivers

MJO centered over the eastern Indian Ocean in first half of September, forecasted to propagate over the Maritime Continent by end of Sept.

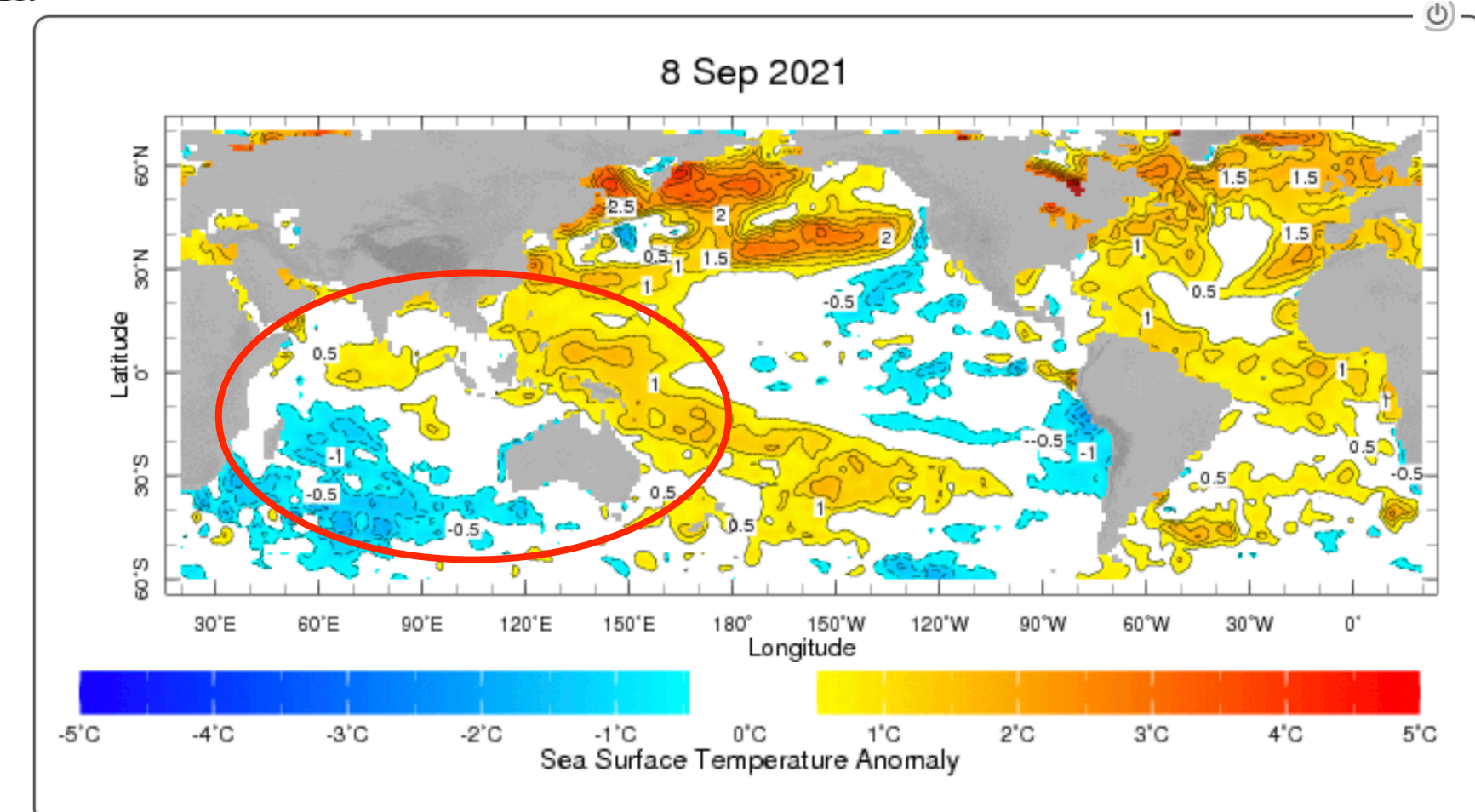
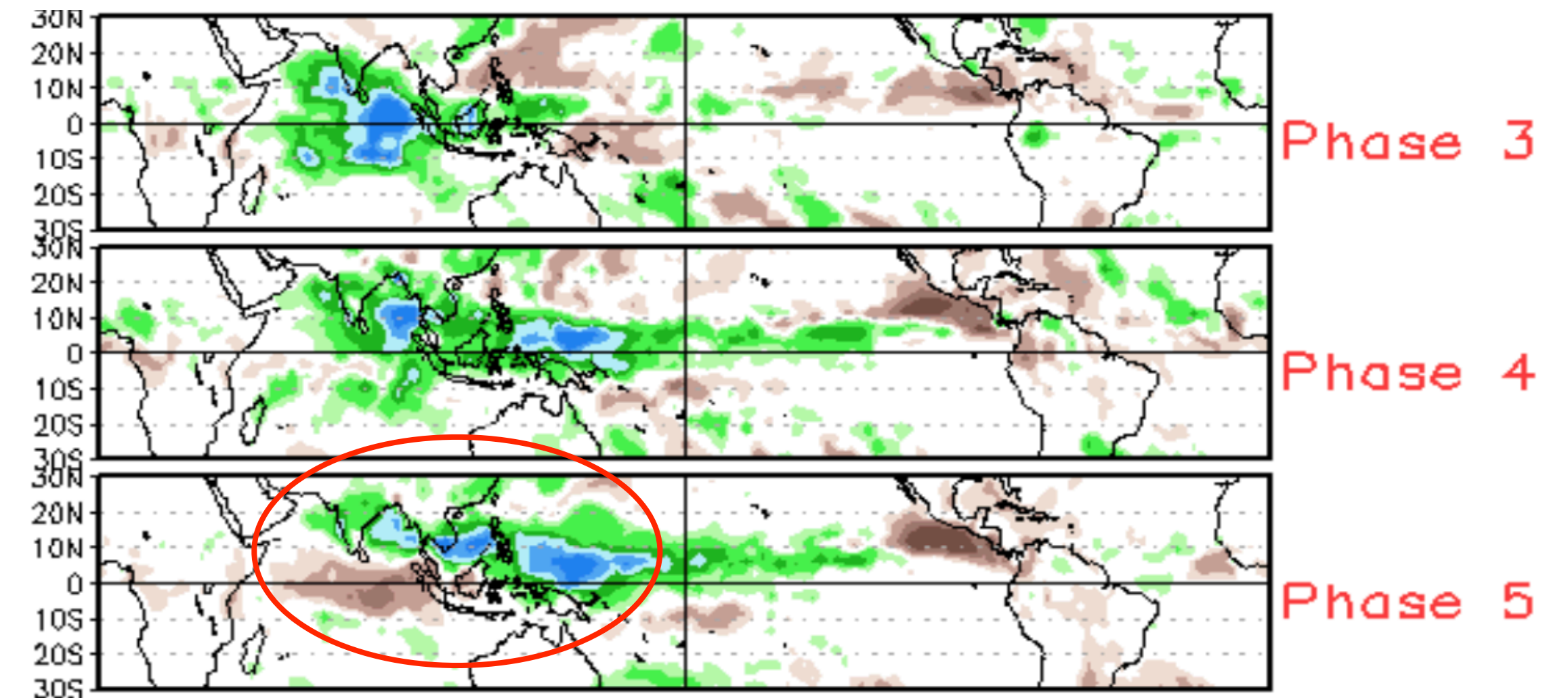
Week 3-4: 25 Sep - 8 Oct



Over the Indian Ocean/SE Asia sector, the Week 3-4 forecast shows consistency with MJO Phase 5 conditions.

If weekly SST anomalies persist, they may amplify this pattern.

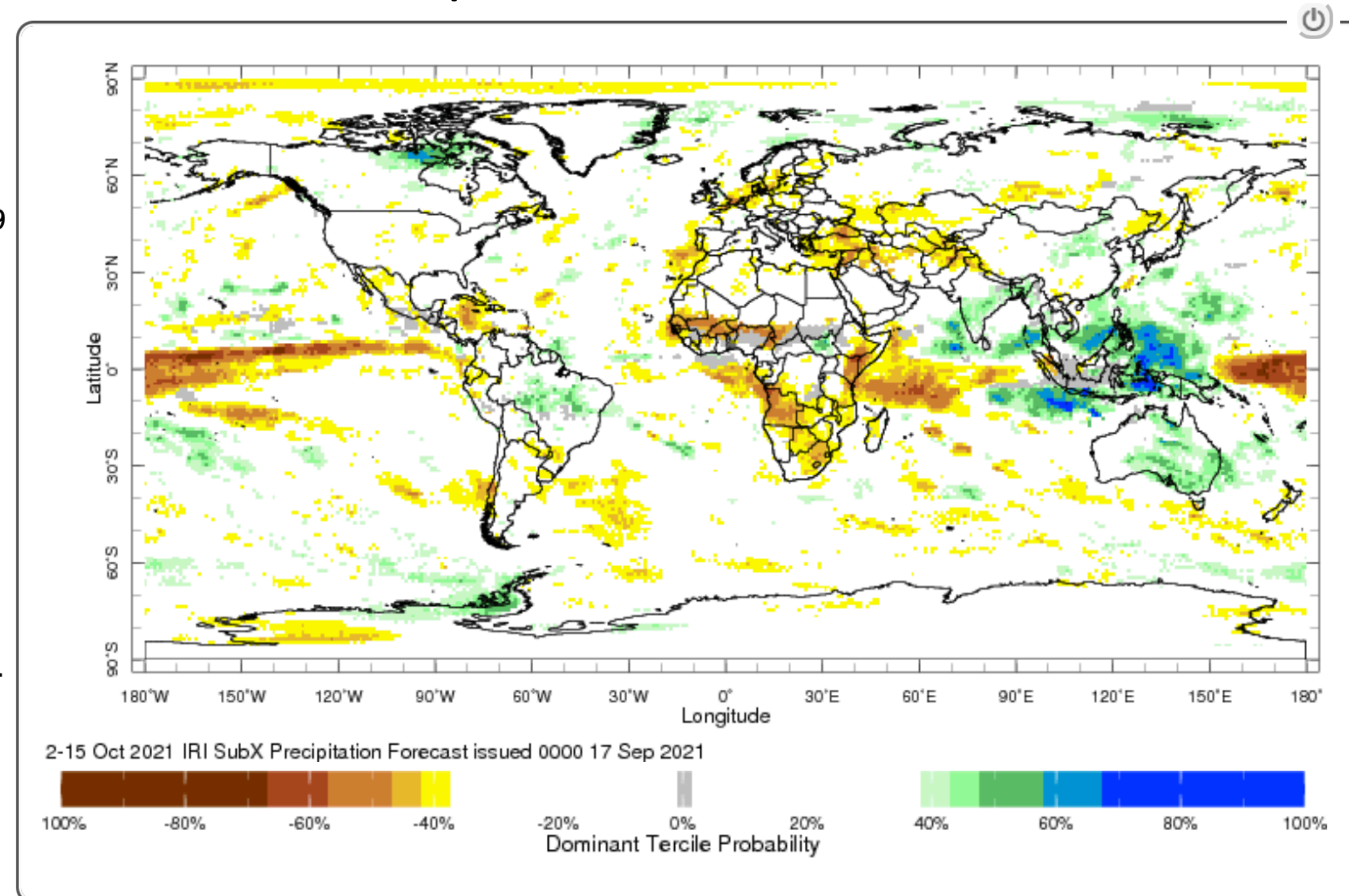
MJO-related Precipitation Anomalies



Weekly Obs
SST Anomaly
Sep 5-11, 2021

New Forecasts from today!

Precipitation Week 3-4: 2-15 Oct



Temperature: Week 3-4: 2-15 Oct

