

The latest observations indicate that the MJO remains weak with any enhanced phase persisting over the western Pacific. Although a large amount of enhanced convection continues across the western Pacific, there has been little evidence of this convection shifting eastward coherently on the MJO time scale as indicated by a few different measures. The majority of dynamical model MJO index forecasts indicate little clear eastward propagating coherent MJO signal during most of the next two weeks. Model spread and uncertainty remain high, similar to the last few weeks. Some models forecast a stronger MJO signal later in Week-2 but model forecasts of the MJO index have been relatively poor after Week-1 in recent weeks. Based on the latest observations and model forecasts, the MJO is forecast to remain generally weak through most of the outlook period and at this time not expected to contribute substantially to anomalous tropical convection during the next 1-2 weeks. A combination of factors, including an atmospheric Kelvin wave and perhaps somewhat better coupling between the ocean and the atmosphere with respect to ENSO have resulted in a westerly wind burst across the western Pacific.

Two tropical cyclones developed during the past week across the western Pacific. Tropical cyclone Maliksi developed far east of the Philippines while Tropical cyclone Gaemi developed in the South China

Sea. At the current time (10/2 18 UTC), Gaemi is forecast to move westward to Indochina while Maliksi will move north-northeast but expected to stay away from Japan. During the past week, Super-typhoon Jelawat impacted Japan with heavy rainfall and strong winds as well.

In the short-term, a tropical wave across the eastern Atlantic is likely to develop within the next few days. If the system is not able to organize in the next few days, conditions are forecast to become less favorable for development. During Week-1, above median rainfall is favored to persist from parts of Southeast Asia across the Philippines into the western Pacific, in part associated with current and forecast tropical cyclone activity. This is supported by model forecast guidance and to a marginal degree MJO composites. Drier-than-average conditions are most likely to persist for the eastern Indian Ocean and parts of the Maritime continent and are associated with model guidance, cooler than normal SST's in some areas and to a lesser degree MJO composites. Tropical cyclogenesis remains favored for areas east of the Philippines centered at 145E, 15N. Model forecast guidance still supports below-median rainfall for portions of the western Atlantic as well as a dipole of enhanced (suppressed) rainfall for poerions of central South America.

During Week-2, the anomalous rainfall areas across the eastern Hemisphere are forecast to generally persist with the uncertainty in any evolution of the MJO during the Week-2 period and are supported by model guidance and to a lesser extent MJO index model forecasts. Tropical cyclogenesis remains favored in the western Pacific. There are moderate chances for tropical cyclogenesis for the northern Bay of Bengal and the South China Sea as well, associated with longer range predictions from both the ensemble GFS and CFSv2.

Atmospheric Kelvin wave activity slightly elevates chances for tropical cyclogenesis for portions of the eastern Pacific at times during both Week-1 and Week-2, although the threat is somewhat low and not all times during the outlook period will be favorable.