

The CPC MJO assessment remains largely unchanged from last week. The RMM index has increased in amplitude over the Western Hemisphere during the past week, largely due to low-level westerly wind anomalies associated with multiple modes of variability acting across time scales. There appears to be an eastward-moving subseasonal signal in the velocity potential field that could be due to both a weak canonical MJO event as well as the impact of the extratropics on the tropical circulation. The various dynamical ensemble systems are favoring a low frequency signal over the Pacific and Western Hemisphere during the next two weeks that projects at least somewhat onto the RMM index. At the same time, the Pacific remains to exhibit signs of oceanic-atmospheric coupling that are consistent with the low-frequency evolution toward a warm ENSO event, even if only of modest amplitude. The various dynamical models are used to construct the precipitation forecasts, along with the official forecast tracks of the many ongoing tropical cyclones (TCs). Given the number and potential impacts of the various ongoing and potential TCs, the remainder of the discussion will focus specifically on aspects of the outlook related to TCs.

Hurricane Florence is the headliner among three active named storms in the Atlantic basin. Florence is forecast to make landfall over the Carolinas on September 14 as a major hurricane. Tropical Storm Isaac

is forecast to impact the Lesser Antilles as a strong tropical storm or weak hurricane later this week, before continuing into the Caribbean. Farther east, Hurricane Helene is forecast to turn northward between 35W and 40W late this week before accelerating into the Northeast Atlantic this weekend. Two areas are being monitored for tropical cyclogenesis during Week-1: the western Gulf of Mexico and the central Atlantic near 35N. The former is more likely to develop and could result in a landfalling system with heavy rain over South Texas, while the latter would be a subtropical system, at least initially, tracking westward under a blocking high pressure system to the north. Tropical cyclogenesis is not currently expected during Week-2 over the Atlantic Basin.

Over the central and eastern Pacific basin the big player is Tropical Storm Olivia that is forecast to track across Hawaii from northeast to southwest on September 12. Farther east Tropical Depression Paul is dissipating with little fanfare. TC formation over the far eastern Pacific is possible late in Week-1 or during Week-2 based on the latest guidance and the low-frequency state.

The West Pacific is also active, with Super Typhoon Mangkhut forecast to track near the northern Philippines toward Hong Kong by September 16. It is forecast to weaken somewhat as it tracks across the South China Sea toward southeastern China. Tropical Storm Barijat is forecast to track toward the Hainan Peninsula and then toward northern Vietnam during the next few days. Heavy rain is likely to be the main hazard with this system. Tropical cyclogenesis is forecast with moderate confidence over the West Pacific east of the Philippines during both Week-1 and Week-2. The ECMWF ensemble mean forecast suggests that conditions are broadly favorable for TC formation over this area.

Forecasts over Africa are made in consultation with the CPC international desk, and can represent local-scale conditions in addition to global-scale variability.