

The MJO index amplitude increased during the past week with an eastward propagation into the eastern Indian Ocean. During the past week, enhanced rainfall was observed across a broad area including India, Southeast Asia, the Philippines, and the northwest Pacific. Enhanced rainfall was also observed along Hurricane Irene's track from the Bahamas northward to the U.S. East Coast.

Irene strengthened to a Category 3 hurricane as it passed through the Bahamas. Although it weakened to a Category 1 hurricane before making multiple landfalls along the East Coast, Irene caused widespread damaging winds, storm surge, and major flooding to the mid-Atlantic, Northeast, and New England. Tropical Storm Jose was short-lived as it tracked near Bermuda and on August 30, Tropical Storm Katia developed in the eastern Atlantic. Meanwhile, after two weeks with no tropical cyclones in the northwest Pacific Ocean, a pair of tropical cyclones developed in the northwest Pacific. No tropical cyclones developed this past week in the east Pacific.

Most dynamical model MJO index forecasts indicate a weakening of the MJO signal at the beginning of the Week-1 period. Therefore, the MJO is not expected to contribute substantially to anomalous convection across the global tropics during the period at this time.

During Week-1, two monsoon lows are expected to bring very heavy rainfall to central India and southeast Pakistan, while anomalous onshore flow enhances rainfall along the west coast of India. The remnant low of a former tropical cyclone is expected to elevate rainfall across southeast China while according to the Joint Typhoon Warning Center, Tropical Storm Talas in the northwest Pacific is forecast to become a typhoon with heavy rainfall expected along its path into central Japan. Cyclonic flow is forecast to maintain enhanced rainfall in the northern Philippines.

A moderate chance of tropical cyclone development exists in the northwest Pacific (20-30N/135-165E) while an area of low pressure, near the Mexico coastline, has a moderate chance of becoming a tropical cyclone in the east Pacific early in the period. Model guidance has an increasing threat for tropical cyclone development in the very warm waters of the Gulf of Mexico. Regardless of tropical cyclone development, enhanced rainfall is likely across much of the Gulf of Mexico with a threat for very heavy rainfall along the western/central Gulf coastal region. Tropical Storm Katia is forecast to become a hurricane and track into the central Atlantic. Late in week-1, a moderate chance of tropical cyclone development exists in the eastern Atlantic.

During week-2, signals are rather weak for anomalous convection across the global tropics. Model guidance indicates the continuation of enhanced rainfall across the northern Gulf of Mexico. By week-2, Hurricane Katia is expected to enter the west-central Atlantic and interests are encouraged to pay close attention to the latest forecasts from the National Hurricane Center at www.nhc.noaa.gov. Moderate chances for tropical cyclone development are expected to continue in the eastern Atlantic as robust easterly wav