2000 UTC 31 August 2018 Forecast Discussion

**Summary**

Typhoon Jebi is gradually moving northwestward and is not expected to threaten the area of operation. However, Jebi's trailing rainband will move into the area of operation within 24-48 hours, with increased chances of precipitation likely through 12 UTC 20180903. Winds will be coming from the southwest at 15-20 knots with swells from the northeast first increasing to 9-12 feet in the next 12 hours.

**Day One (24 hr) Outlook:** Scattered precipitation is forecasted and chances of convection increases through 24 hours due to Jebi. Significant wave heights will increase to 9-12 feet from the northeast, with winds coming from the southwest at 15-20 knots.

**Day Two (48 hr) Outlook:** Increased chances of convection will remain due to the trailing rainband of Jebi. COAMPS output shows significant wave heights decreasing to 6-8 feet near the end of the 48-hour period, but FNMOC models show 9-12 ft through 48 hours. Winds remain at 15-20 knots from the southwest.

**Extended Outlook:** Chances of convection will remain high through 12 UTC 20180903. Swells are expected to be high 6-8 ft according to COAMPS and 9-12 ft according to the global FNMOC model, then decrease to 7-9 ft after 12 UTC 20180903.

**Discussion**

**TCs:** As of 12 UTC 20180831, JTWC has the center of Jebi located at 18.5N 141.5E moving 285 degree direction at 12 knots with 150 knot intensity - a Cat. 5. Jebi is gradually moving northwestward and is not expected to threaten the area of operation. However, swells from Jebi will affect the area of operation, along with increased chances of precipitation associated with the trailing rainband from Jebi. By 12 UTC on 20180903, GFS seems to indicate the formation of a surface low around 16N 150E, with ECMWF showing a weaker representation of the same system at the same forecast hour. However, both models do not seem to intensify this surface low at this moment, and have it track northwestward and away from the area of operation. Close attention will be paid to this surface low in future forecast discussions.

**Convection:** Invest 96W is diminishing with convection associated with it located over Luzon. Convection associated with the trailing rainband southeast of Jebi is now connected to a larger area of convection south of 10N latitude. However, the convection associated with this trailing rainband has diminished since yesterday's forecast discussion, particularly in the latitude between Typhoon Jebi and the larger area of convection south of the 10N latitude. The reason behind this diminished convection is likely due to the intrusion of drier air to the east and west of the trailing rainband. As of 18 UTC 20180831, IR image shows possible reinvigoration of convection associated with this trailing rainband. However, whether this cycle of diminishing and

re-invigorating convection will continue as the trailing rainband moves westward into the area of operation remains unclear. GFS is still indicating that this trailing rainband will move over the area of operation within the next 24 to 48 hours, with high chances of precipitation through at least 12 UTC 20180903.

**MJO/BSISO:** No updates for BSISO indices forecast - very weak amplitude for the next two weeks. MJO forecasts issued today by NCEP and ECMWF (BOM's is not updated since 0826) shows a phase change into phase 1 & 8. The amplitude is forecast to increase upto marginally significant signal by next week.

**SSTs**: Sea surface temperatures should remain between 28-30 C.

**Currents and Wave Heights:** Significant wave heights of 9-12 ft are expected from 0901 00z through 0903 12z, and it seems to decrease to 7-9 ft after that according to FNMOC WW3 model. COAMPS forecasts shows the wave heights decrease to 7-9 ft at an earlier time by 0902 00z. Two different FNMOC models based on NAVGEM only and TC Warning only show consistent wave forecasts, but TC Warning only run shows smaller wave heights and confined distribution around STY Jebi.

FORECASTERS: RAZIN and NAM

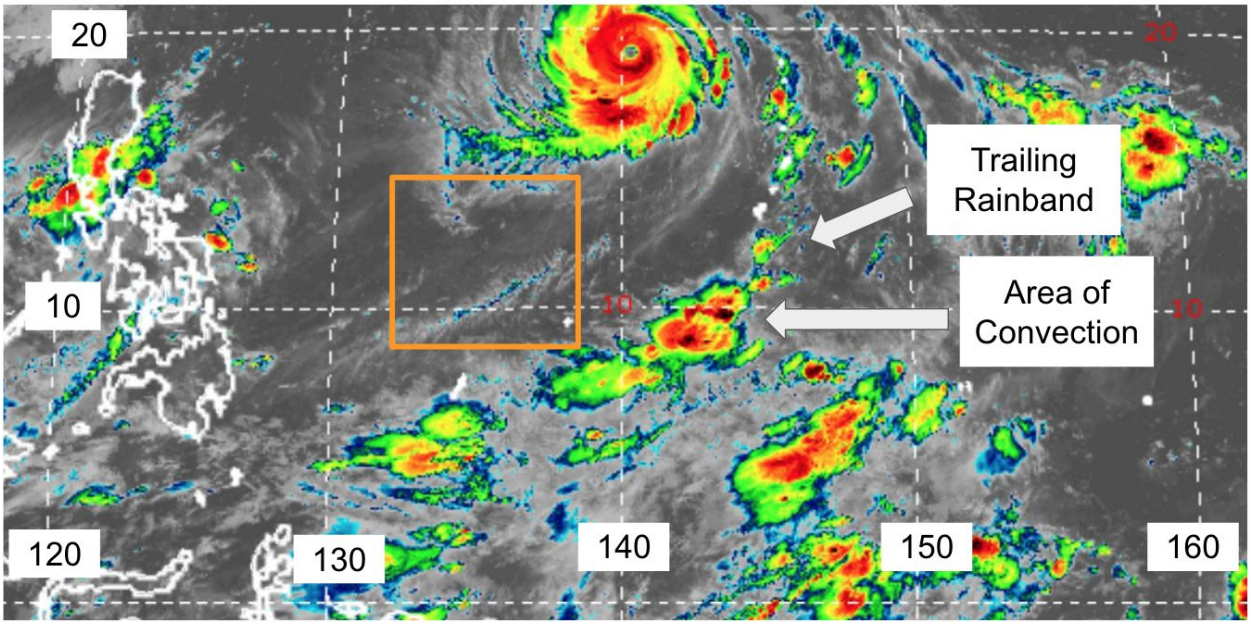


Fig. 1. Himawari IR image at 1730 UTC on 20180831 [1]

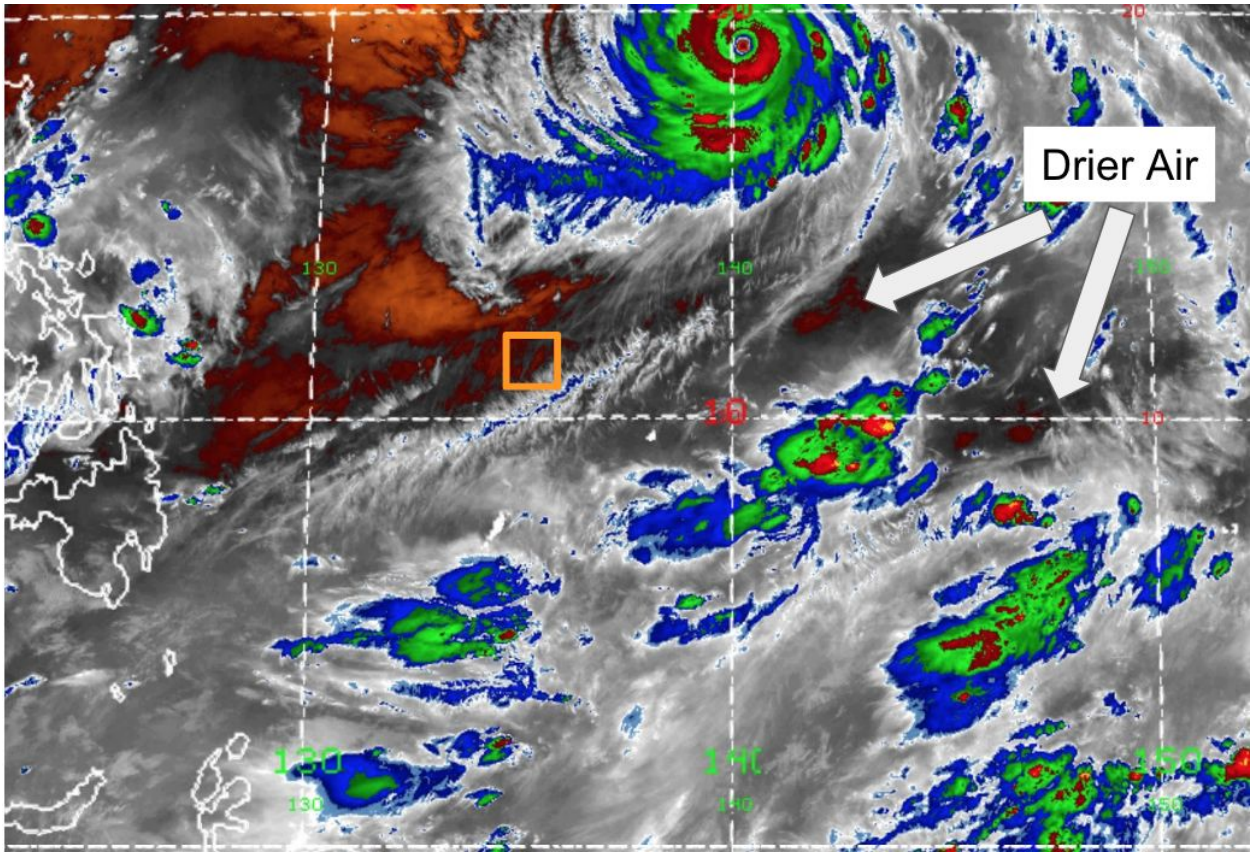


Fig. 2. Himawari water vapor image (6.9 microns) at 1740 UTC [2]

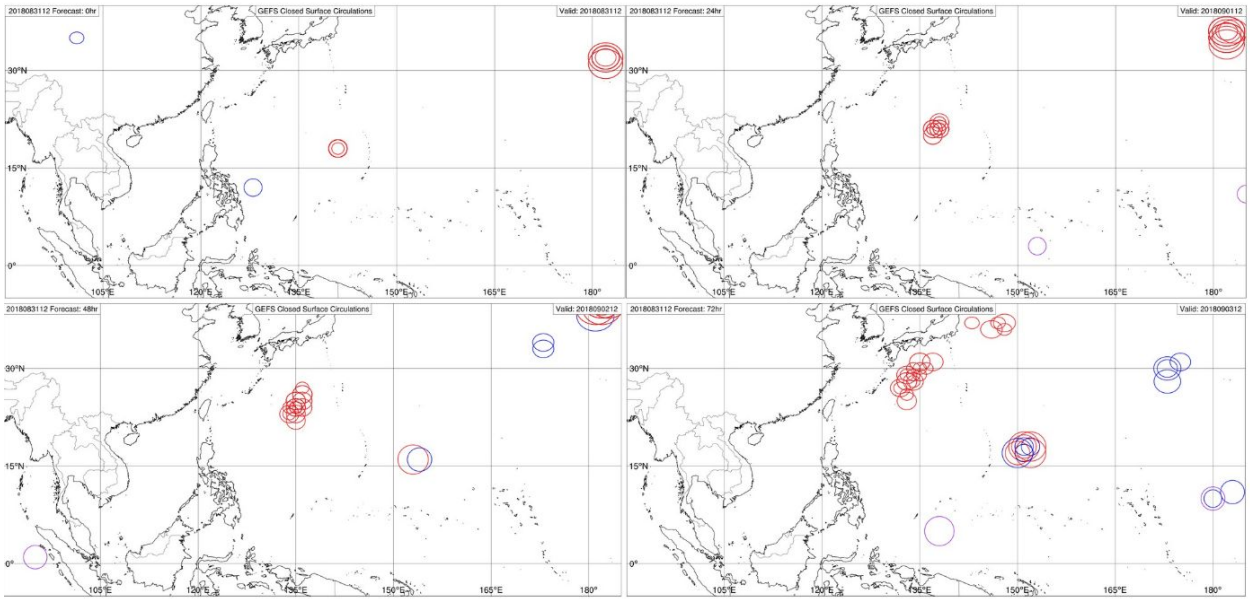

Fig 3. GEFS ensemble products for 10m circulation 0hr, 24hr, 48hr, and 72hr from 0831 12z [3]