

## 2000 UTC 30 August 2018 Forecast Discussion

### Summary

Widespread convective activity is expected to remain suppressed over the area of operation (12 N 134.5 E) for the next 36 hours or so. Beyond 36 hours, trailing rainband associated with Typhoon Jebi is expected to enter the area of operation. Significant wave heights are expected to increase to 9-12 feet coming from the northeast within 48 hours. Typhoon Jebi is not expected to threaten the area of operation.

**Day One (24 hr) Outlook:** Widespread convective activity is expected to remain suppressed. Significant wave heights of 3-5 ft from the northeast can be expected. 5-7 knots winds from the southeast will increase to 15-20 knots from the west-southwest.

**Day Two (48 hr) Outlook:** Increased chances of widespread convective activity can be expected, especially near the end of the 48 hour period. Significant wave heights is expected to increase to 9-12 feet from the northeast by the end of the 48 hour period. Wind speed of 15-20 knots from the west-southwest is expected.

**Extended Outlook:** Widespread convective activity can be expected, associated with trailing rainband far southeast of Typhoon Jebi. Significant wave heights are expected to remain around 9-12 feet through 0904 06z according to NAVGEM + WW3 model. Surface wind speed is expected to be around 15-20 knots from the west for the next 72 hours.

### Discussion

**TCs:** As of 12 UTC on August 30th, JTWC has the center of Jebi located at 17.7N 146.8E, heading 270 at 12 knots. Its intensity as classified by JTWC is 110 knots - a strong Category 3 on the Saffir-Simpson Scale. Further intensification is expected as shear, SSTs, and RH is expected to remain favorable around the storm. However, there is less spread in the model track forecast, with Jebi is expected to track westward along the southern edge of the subtropical ridge over the next 24 hours, and turn northwestward around 12 UTC on the 31st as an upper-level trough comes off of the Asian continent and weakens the subtropical ridge. Jebi is not expected to threaten the area of operation, as the JTWC ship avoidance area is expected to remain northward of 15 N latitude. However, trailing rainband associated with Jebi is expected to impact the area of operation beyond 48 hours. Some fantastic science observations are expected to be obtained from this rainband - no pressure. In addition, significant wave heights are expected to increase associated with Typhoon Jebi within the next 48 hours. See discussion on Currents and Wave Heights below.

**Convection:** Convective activity is currently suppressed due to the presence of a drier air pocket over the operation area. Convection associated with Invest 96W is no longer impacting the operation area. Invest 96W is dissipating now located at 11N 128E. Low convective activity

is expected for the next 36 hours before the extended rainband of Jebi starts to impact the area of operation. The trailing rainband may approach our operation after 0901 12z according to global models.

**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 28-29 C.

**Currents and Wave Heights:** Significant Wave Heights are expected to increase to 3-5 ft by 0831 00z and become 9-12 ft by 0901 00z. The wave heights are expected to remain around 9-12 ft through 0904 06z according NAVGEM WW3 model. Expect wave period and direction increasing from 7-8 seconds to the SSW to 14-17 seconds by 0901 00z.

FORECASTERS: RAZIN and NAM

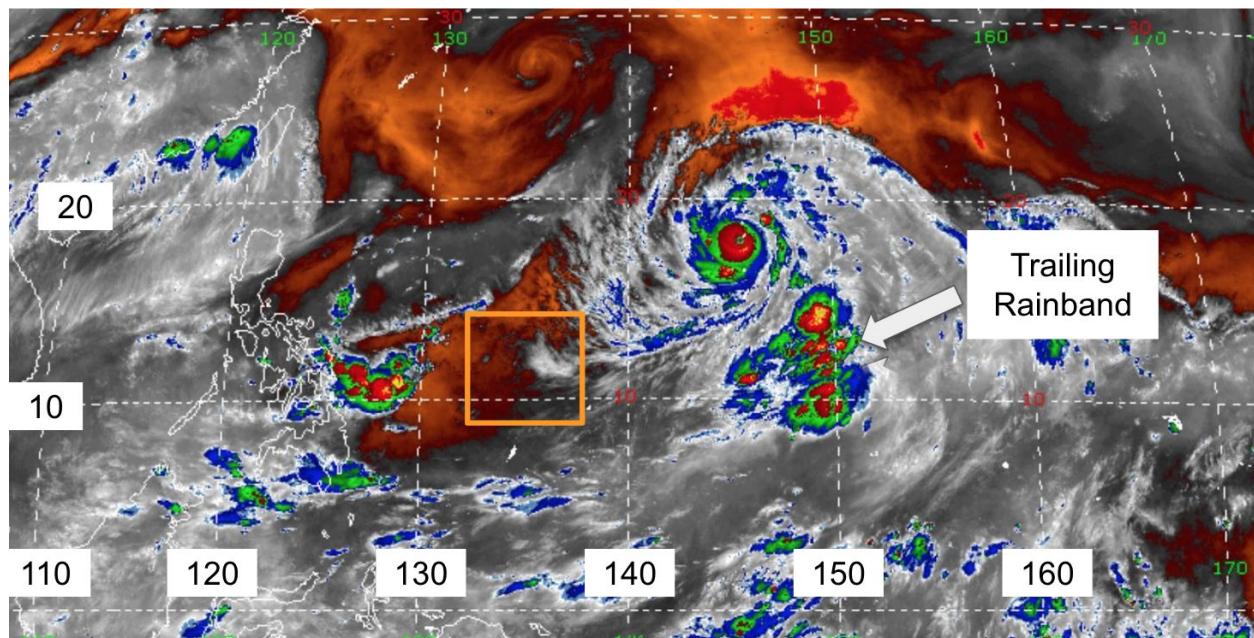


Fig. 1. Himawari WV channel (6.9 microns) at 1710 UTC on 20180830. [1]

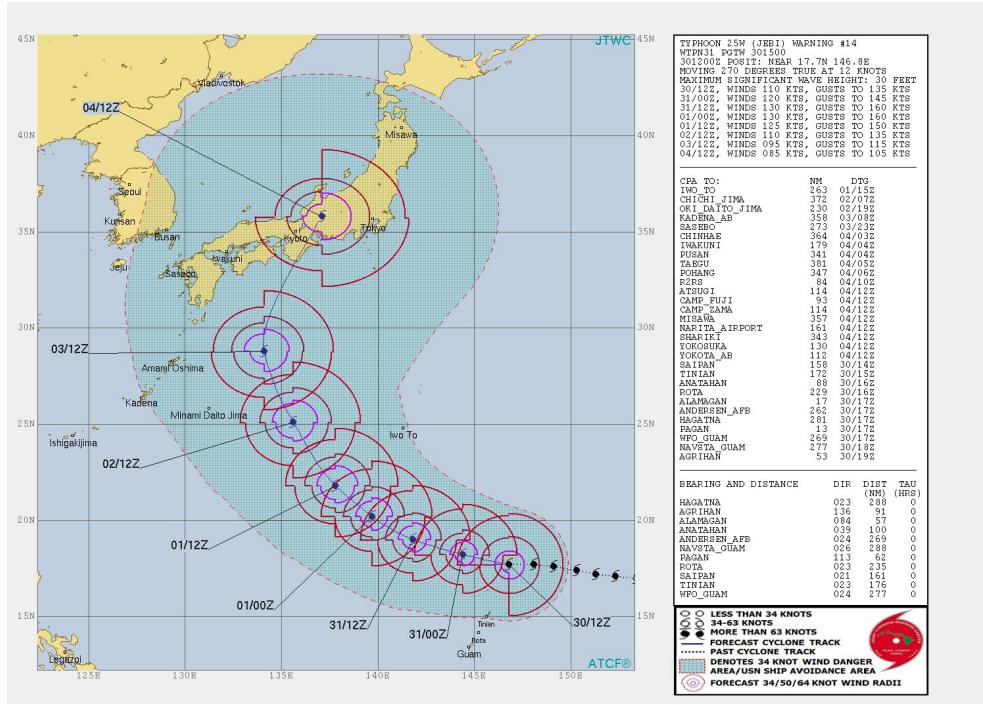


Fig. 2. JTWC forecast graphic for Typhoon Jebi [2]

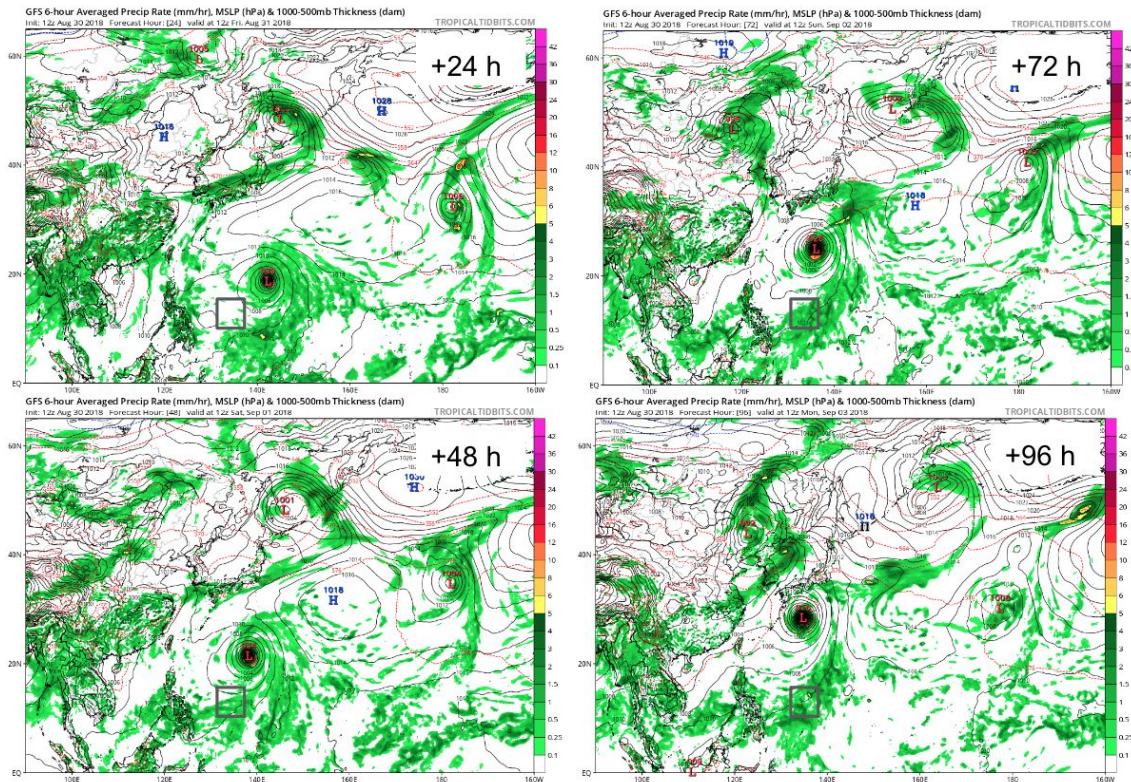


Fig 3. GFS 6-hour averaged precipitation rate initiated 0830 12z. The grey boxes indicate the operation area [3]

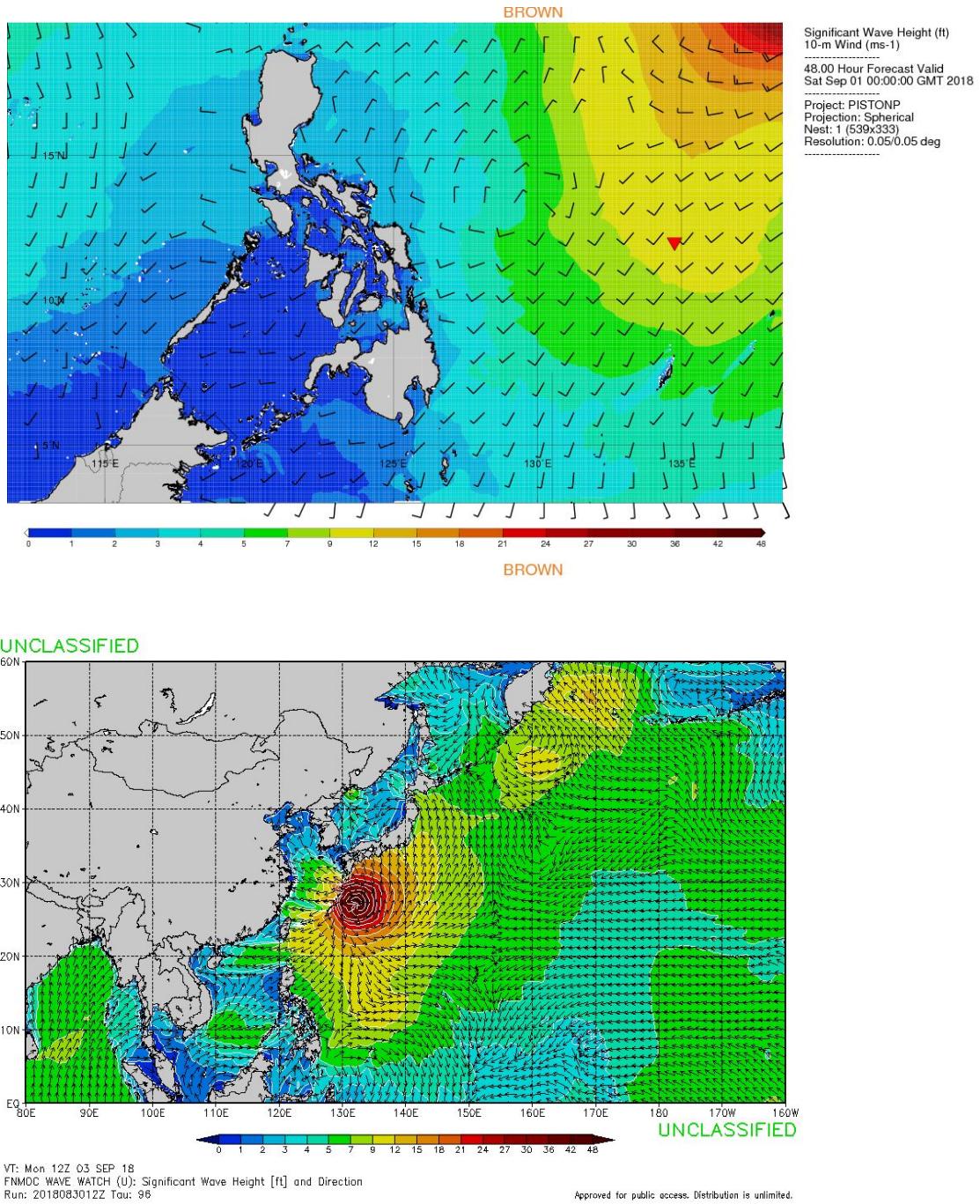


Fig. 4. (Top) Significant wave heights with 10-meter winds from COAMPS valid at 0901 00z and (bottom) Significant wave heights and direction from NAVGEM + Wave Watch 3 valid at 0903 12z.