

## 2200 UTC 18 August 2017 Forecast Discussion

### Summary

At this time a strong subtropical ridge has built southeast of Japan with high pressure providing a westward steering flow for convection west of the Mariana Islands. This upper level system is causing low to moderate shear in the region between 130-140E and 10-20N (Fig. 1, label 1). Favorable upper level divergence has produced a large cluster of convective features that is expected to move west and conglomerate into an area of low pressure. An area of 850mb vorticity is present along with some spin seen in the precipitable water at the leading edge of the subtropical high (Fig. 2).

**Day One (24 hr) Outlook:** Some organization of convective storms east of the Philippines is expected in the next 24 hours; however, no tropical cyclogenesis is expected.

**Day Two (48 hr) Outlook:** A large area of low pressure will develop east-northeast of the Luzon tracking west-northwest. This low pressure system will likely intensify in the favorable environment and cause an increase in precipitation due to the strong southwest flow. Models disagree on intensity of this low, and hurricane model guidance is unavailable since this area has not yet been labeled an invest by JTWC.

**Extended Outlook:** Both the 12Z GFS and ECMWF are consistently showing a potential TC near the northern edge of Luzon on 06Z Aug 23. This new system is expected to develop from the current convection east of the Mariana Islands on the curtails of the previously discussed system (Fig 1., label2). Environmental conditions are still favorable for development should it occur, as there is still low vertical wind shear, generally high TPW, and warm SSTs.

### Discussion

**TCs:** Currently, there are no active TCs but development is expected in the next 36-72 hours. However, the 12Z GFS has reduced the intensity of the potential TC discussed yesterday. Low level vorticity has increased and there is widespread convection east of the Philippines. A favorable environment means this system is likely to undergo genesis and a possible rapid intensification cannot be ruled out at this point. Improved guidance will be available once the system has become more organized.

**Convection:** Since yesterday convection has persisted east of Manilla, and is still moving westward. Spurious storms are forming around Lamon Bay moving west over Manilla and we expect precipitation to continue from 06Z Aug 19 – 00Z Aug 20 with the heaviest rainfall between 09Z-18Z Aug 19.

**MJO/BSISO:** The BSISO and MJO signatures are currently weak. BSISO index is likely Phase 3 (Fig.3). Both the BOM and the ECMWF show that the BSISO 1 might change to Phase 3 within the 0-4 day time frame, but the CWB actually shows retrograding to Phase 1 instead.

**SSTs:** SSTs are between 28.5-30.5 along immediate coast. They are forecast to continue being warm in the absence of strong convection-induced upwelling.

**Surface Currents:** Surface currents are still weak (<1 cm/s) along entire west (Fig. 4).

FORECASTERS: Trabing, CHA, AND DELAP

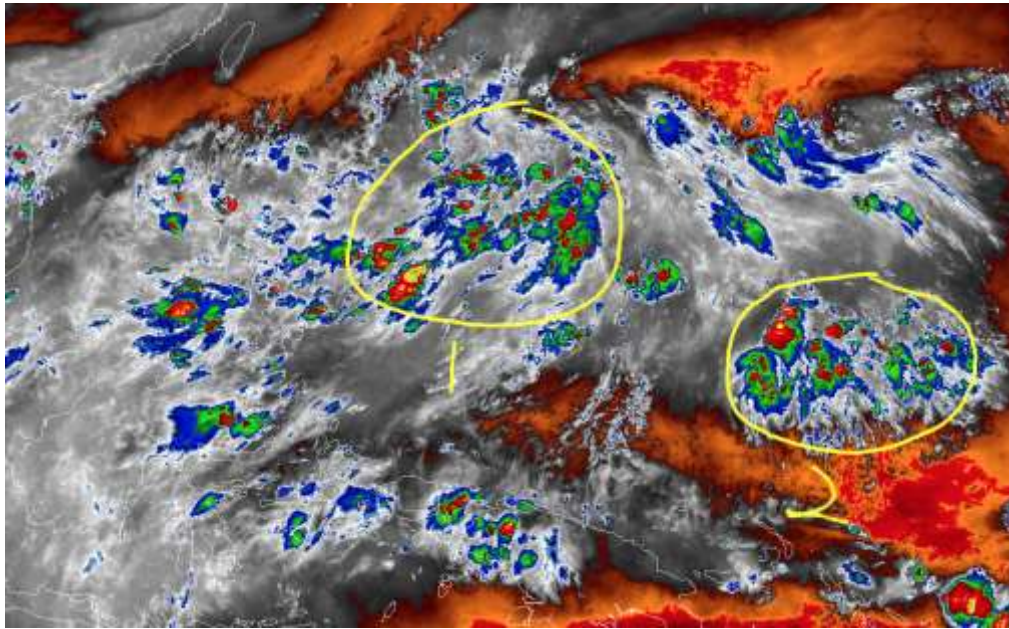


Figure 1: Himawari-8 water vapor imagery showing areas of convection that is expected to organize into tropical disturbances. [1]

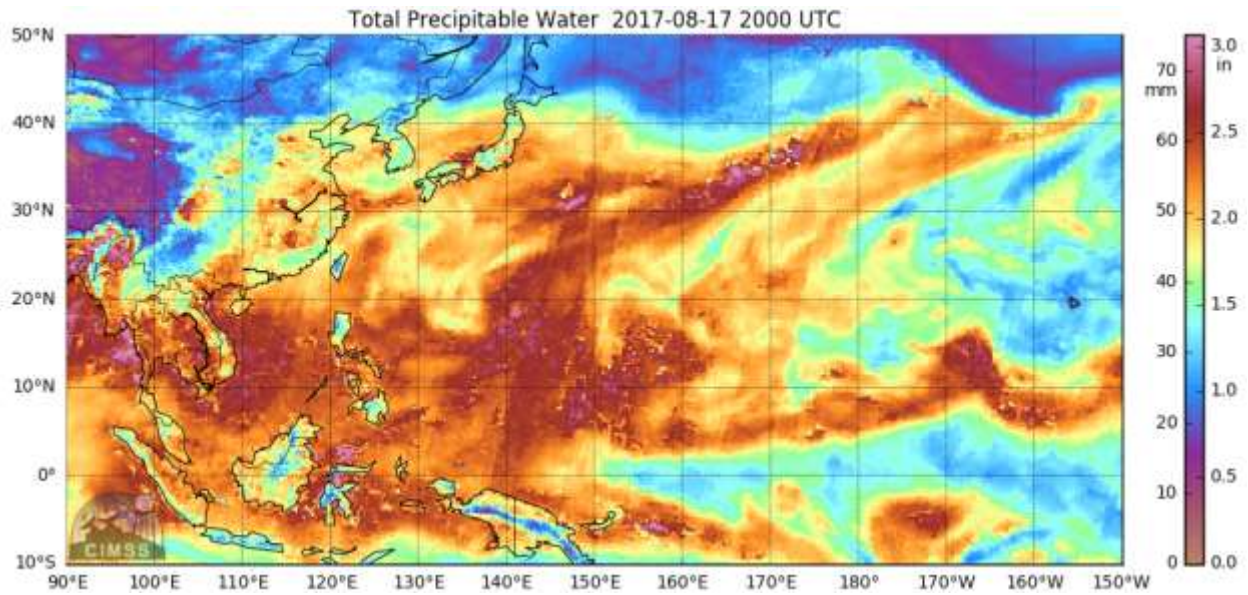


Figure 2: Precipitable water showing high values and some spin associated with moisture east of the Philippines. [2]

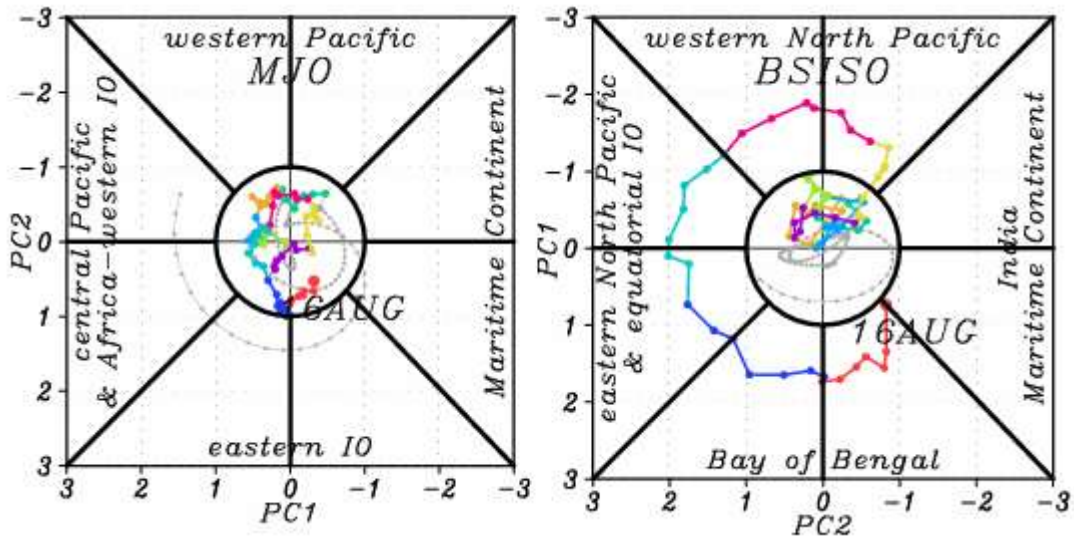
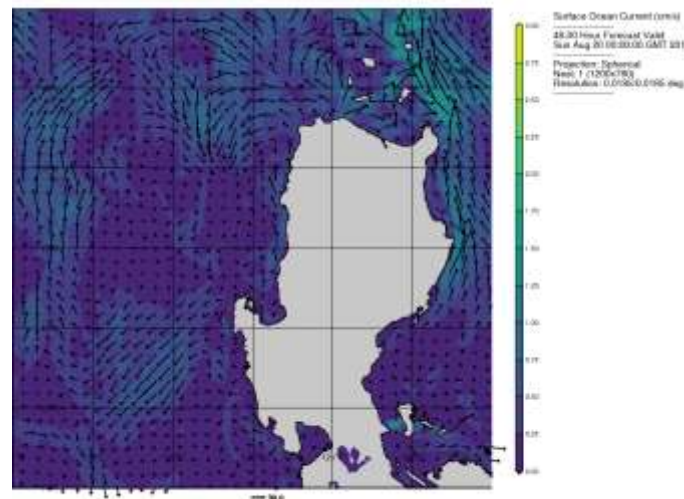
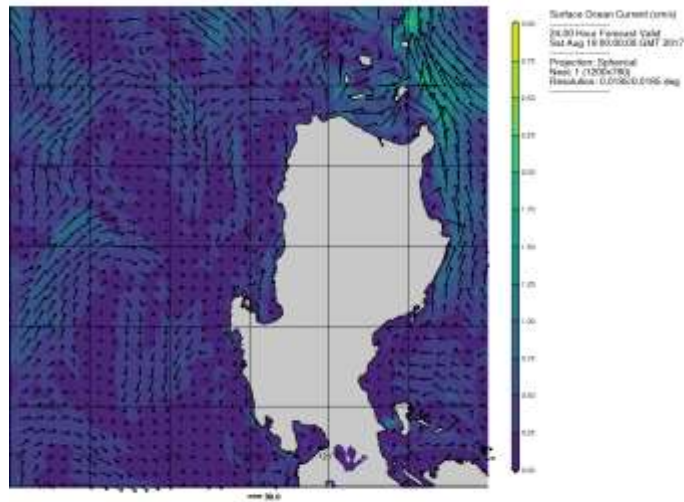


Figure 3: BSISO index valid for 16 Aug. [3]



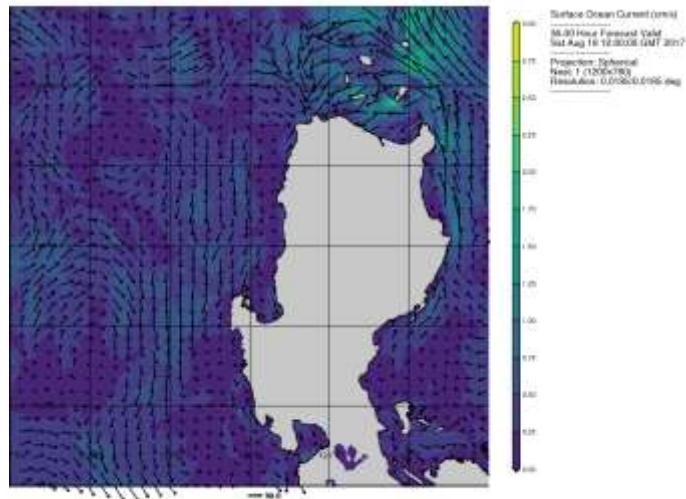


Figure 4: 00Z COAMPS surface currents for 24 hr (top), 36 hr (middle), and 48 hr (bottom).