

## Summary

High chances of precipitation is expected, since the convective system influencing the area of operation (10N 133E) is expected to stall. Winds from the SW of 15-20 kts with possible 20-25 kts are expected for the next 48 hours. No threat from TC is expected for the next 48 hours. Possible tropical cyclogenesis is discussed but the chance of development in 48 hours still remains low as of now. Wave heights will be 6-8 for the next 12 hours, and decrease to 4-6 from then.

Please note that we have decided to clarify the Invest classification in the discussion. In our previous forecast discussions, we have referred to Invests as both systems that have been officially declared by JTWC **and** systems that were not declared by JTWC, but followed and called as "Invest" by NOAA's experimental TC track product and CIRA's TC Real-Time webpage. "Invest" 96W and 97W are the latter cases. We realized this may bring confusion to the readers. So from now on, the term "Invest" will only refer to that officially declared by JTWC. For systems of interest that have been tracked by other institutions but have not been officially declared as an Invest by JTWC, we will refer to them as how we would describe them, such as disturbances, closed circulations, convective systems, etc.

**Day One (24 hr) Outlook:** High chances of precipitation over the area of operation due to widespread convection over the operation area. Winds from the SW of 15-20 kts through the end of the forecast period with possible 20-25 kts. Wave heights of 6-8 ft are expected.

**Day Two (48 hr) Outlook:** Continued precipitation from the widespread convection is expected. Wave heights will decrease to 4-6 ft.

**Extended Outlook:** A possible tropical cyclogenesis from a closed circulation around 15N 137E may influence the operation area by swells and convection. This system is not expected to be a threat as it is forecast to move northwestward. Winds and precipitation beyond 48 hours will be also highly dependent on this system's activity.

## Discussion

**TCs:** Convective activity associated with the area of widespread convection (declared as Invest 97W in yesterday's forecast discussion) has diminished greatly since yesterday's forecast discussion. Similar to yesterday, both GFS and ECMWF do not intensify this system, showing the area of relatively higher 850 mb vorticity - associated with the region of convection seen yesterday - diminishing. As convective activity continues to decline, further development of this system is not expected. Based on AMSU retrieved 700 mb winds, a closed circulation can be seen centered around 15N and 137E. This closed circulation (defined as WP98 in CIRA's

AMSU 700 mb retrieved wind product, Fig. 2) was forecast to form in yesterday's discussion, associated with the convection over the area of operation. Only relatively weaker convection can be seen associated with this closed circulation, as seen from satellite IR imagery. However, GEFS ensemble output and ECMWF shows this closed circulation intensifying as it moves northwestward and away from the area of operation. But GFS has a weaker representation of this system although agreeing with the track forecast. This closed circulation is not expected to affect the area of operation at this moment. Closed attention will be paid to both systems in future forecast discussions.

**Convection:** Scattered precipitation can be expected over at least the next 48 hours, associated with the region of widespread convection that has stalled in the area of operation. Convective activity appears weaker compared to the satellite representation from yesterday's forecast discussion. Nonetheless, beyond 48 hours, GFS precip forecast indicate high chances of precipitation to remain over the area of operation for a while.

**MJO/BSISO:** MJO forecasts by ECMWF and NCEP issued on 0903 are consistent with yesterday's - phase change into 1 & 8 in a week and weak amplitudes. No updated forecast available for BSISO indices - the most recent one was issued on 0830 and showed weak amplitudes with ensemble runs spread over all over the phase diagram.

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

**Currents and Wave Heights:** Wave heights of 6-8 ft through 0904 06z then decreasing to 4-6 ft. Further decrease is expected until another possible TC system affects the area of operation.

FORECASTERS: RAZIN and NAM

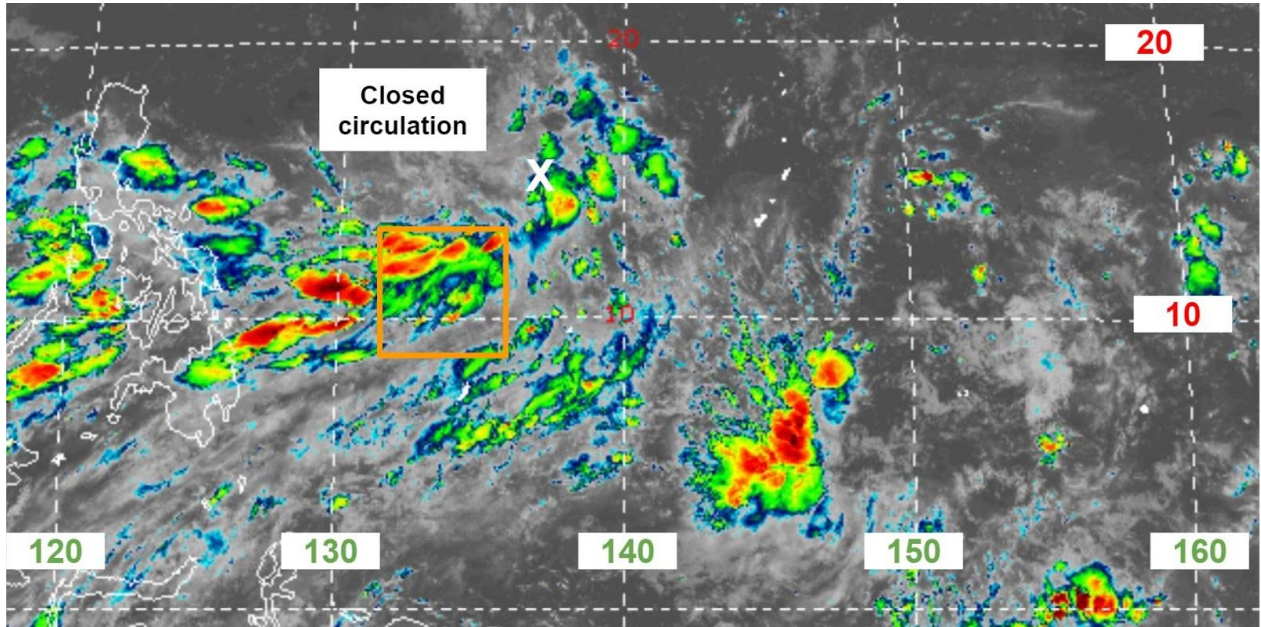


Fig. 1. Himawari 10.4 microns imagery at 20180903 1720 UTC. [1]

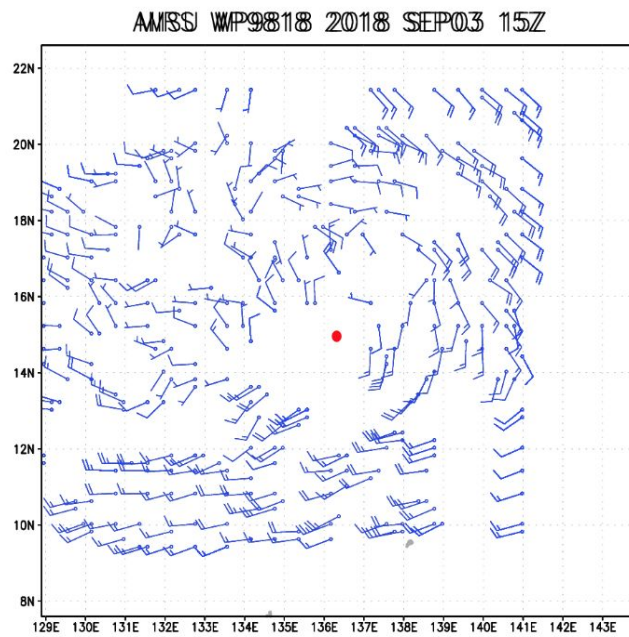


Fig. 2. 700 hPa wind of the area of closed circulation (defined as WP98 in this product), created from Advanced Microwave Sounding Unit (AMSU) by CIRA [2]

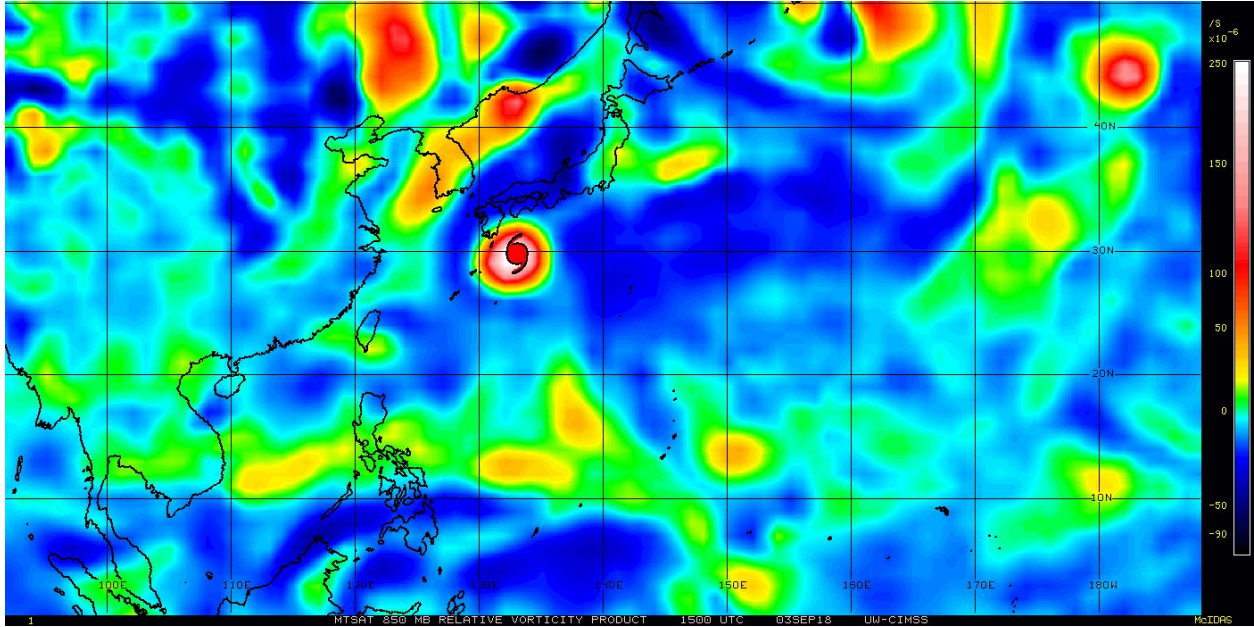


Fig 3. CIMSS 850 hPa vorticity valid at 0903 1500 UTC [3]

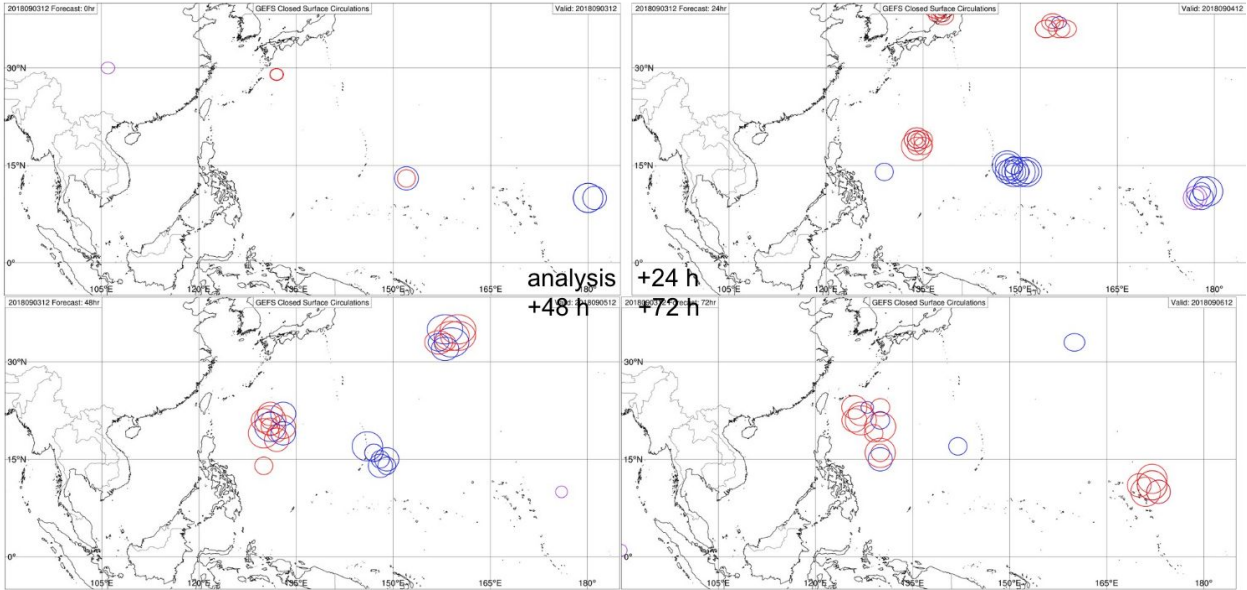


Fig. 4. GEFS ensemble 10m circulation forecast initiated at 1200 UTC 0903 [4]