

Summary

Himawari shows suppressed convection over the area of operation. Generally quiet conditions over the next 48 h, with increasing chances of isolated precipitation towards the end of the 48 h forecast period. The circulation 1 that was identified yesterday is less coherent today and is not bringing enhanced precipitation today. Circulation 2 is now forecast to stall east of Guam as it merges with additional 850 mb vorticity to its south, and increased chances of widespread convection will now occur closer to 21 September.

Day One (24 hr) Outlook: Generally quiet conditions with suppressed convection over the next 24 h. Winds from the E-NE between 5-15 knots will persist throughout the forecast period, and both COAMPS and FNMOC WW3 show significant wave heights anywhere between 5-7 ft near the beginning of the forecast period, gradually decreasing to 4-5 ft by the end.

Day Two (48 hr) Outlook: Chances of scattered convection increasing by 48 h as circulation 2 approaches and expands, primarily at the end of the forecast period. Winds will remain from the E-NE between 5-15 knots throughout the 24-48 h forecast period. FNMOC WW3 shows significant wave heights between 4-5 ft near the beginning of the forecast period, gradually decreasing to 3-5 ft by the end.

Extended Outlook: Yesterday's region of low-level (850-hPa) cyclonic vorticity, labeled circulation 2, is now forecast to stall east of Guam as it merges with additional 850 mb vorticity to its south, and increased chances of widespread convection will now occur closer to 21 September. Winds from the E between 5-15 knots will persist throughout the 48-72 h forecast period. FNMOC WW3 shows significant wave heights between 3-5 ft throughout the 48-72 h forecast period.

Discussion

TCs: No TC genesis events in the next 48 h. The next potential for a marginal genesis would be around forecast hour 240 after the broad low-level circulation approaches the area of operation around 12Z 21 September, and confidence at this time is extremely low at this time given the long lead time.

Convection: There is suppressed convection in the area of operation, and generally quiet conditions are expected over the next 48 h. Chances of scattered convection may increase closer to the end of the forecast period as circulation 2 gets closer to the area of operation and merges with vorticity to its south.

MJO/BSISO: The MJO forecast provided by the ECMWF shows the two week period beginning on 16 September and the BOM has been updated to show the two week period beginning on 13 September. The two models show a low-amplitude MJO signal persisting throughout their

respective two week forecast periods, with the ECMWF showing a potential phase 8 signal emerging near the end of its forecast period. The BSISO forecasts have not been updated, with both the BOM and ECMWF showing the 13 September through 02 October forecast period. Both models show a low-amplitude BSISO1 signal and a phase 8 BSISO2 signal (enhanced convective activity over the Western Pacific) in the 0-4 day forecast period.

SSTs: Sea surface temperatures are expected to be between 28-29 C throughout the 24-h forecast period.

Currents and Wave Heights: Significant wave heights near the area of operation are expected to be around 5-7 ft over the next 24 h, then decreasing to 3-5 ft throughout the 72-h forecast period.

FORECASTERS: CASAS (DELAP)

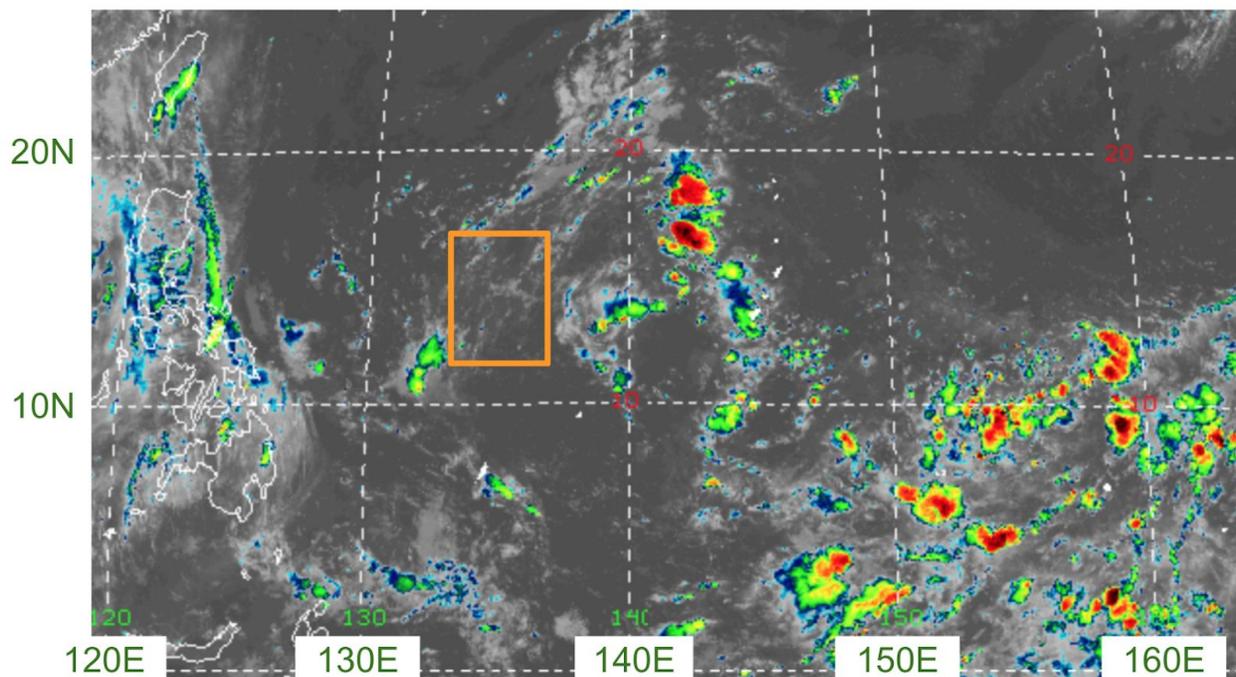


Fig. 1. Himawari IR imagery (10.4 microns) valid at 1830 UTC 16 September 2018. [1]

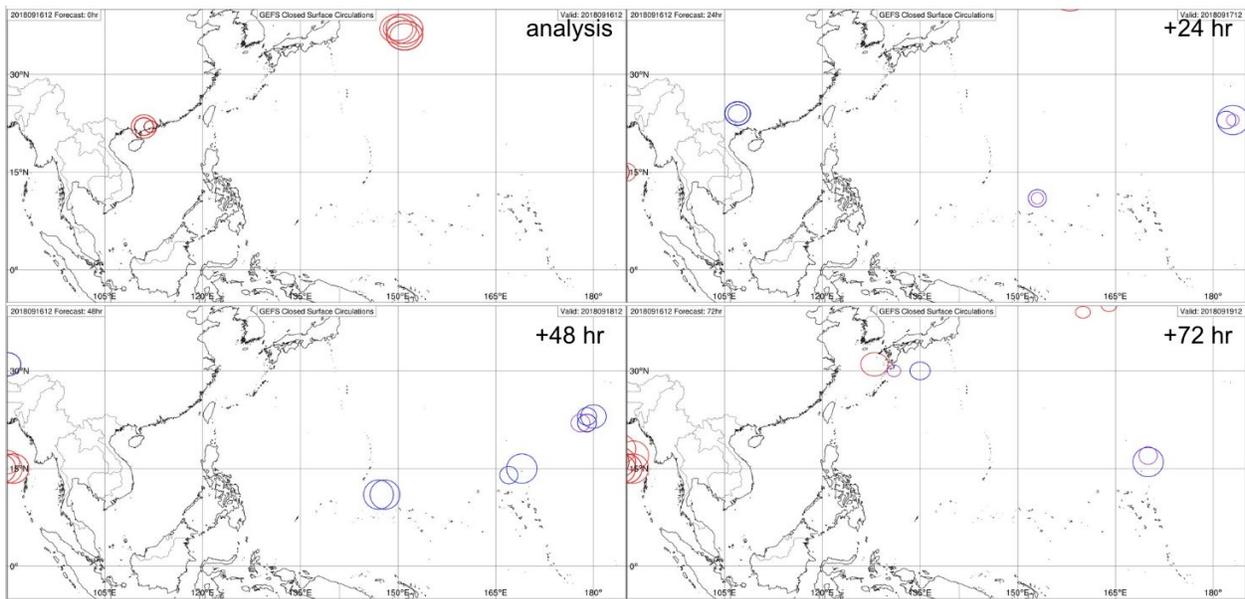


Fig. 2. GEFS ensemble 10-m circulation forecast initiated at 1200 UTC 15 September 2018 and valid through 1200 UTC 21 September. [2]

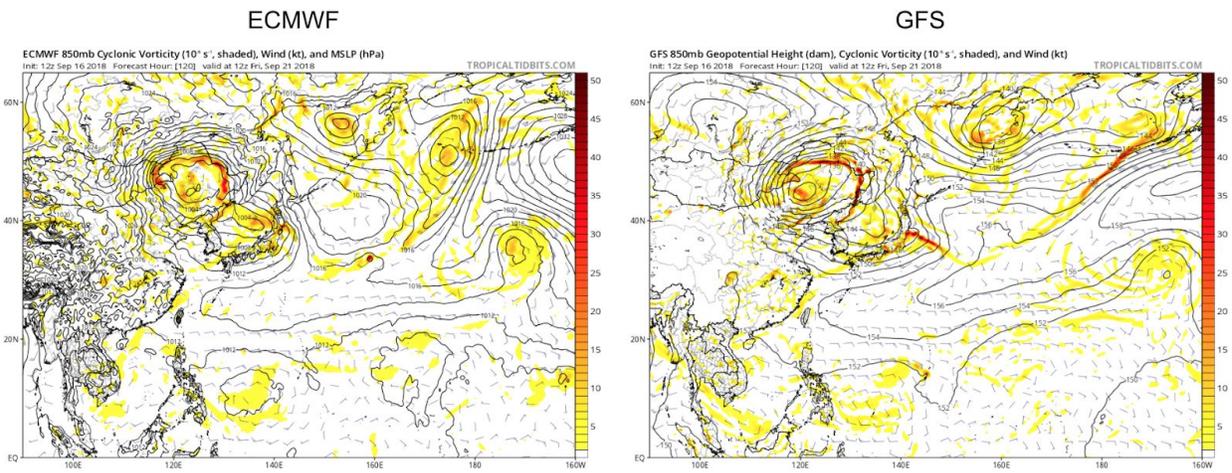


Fig 3. (left) ECMWF and (right) GFS 850-hPa vorticity (shaded) and wind barbs, and MSLP (contoured) initiated at 1200 UTC 15 September 2018 and valid at 1200 UTC 18 September 2018. [3]

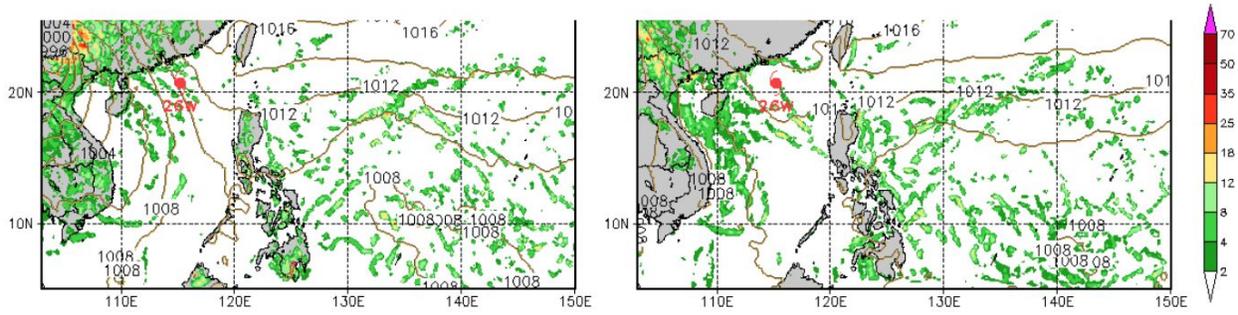


Fig 4. COAMPS 3-hourly precipitation (shading, mm) and MSLP (contours) initiated at 0000 UTC 16 September 2018 and valid at (left) 1200 UTC 17 September and (right) 0000 UTC 18 September.

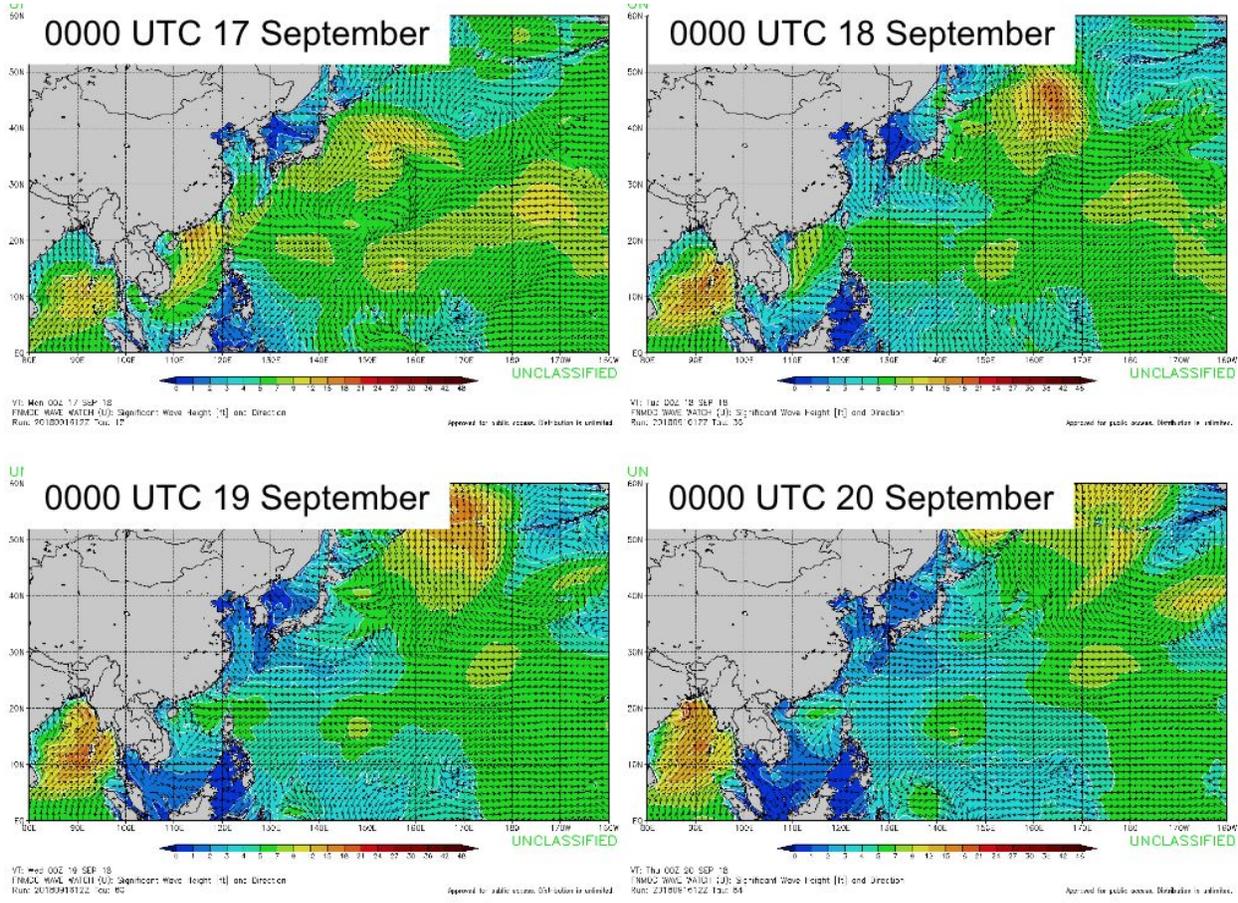


Fig. 5. FNMOC WW3 significant wave height forecast initiated at 1200 UTC 16 September and valid at (top left) 0000 UTC 17 September, (top right) 0000 UTC 18 September, (bottom left) 0000 UTC 19 September, and (bottom right) 0000 UTC 20 September. [5]