

Summary

STY Mangkhut is currently at an intensity of 145 kt, and will be crossing Luzon in the next 24-48 h. There are no upcoming TCs in the extended forecast after STY Mangkhut. Conditions forecasted over Palau at the expected departure time (0000 UTC 14 September): A chance for light, scattered precipitation with winds from the S-SW at 10-20 knots and significant wave heights between 7-12 ft. Winds are forecasted to transition from the S to the NE between 5-15 knots by the end of the 48 h forecasted period as a broad low-level circulation tracks toward the region. Isolated convection is forecasted throughout the 48-h forecast period, transitioning to scattered precipitation for the 48-96 h forecast period.

Day One (24 hr) Outlook: Both the GFS and COAMPS show clear conditions near Palau throughout the 24-h forecast period with a chance for isolated convection. Winds will be decreasing throughout the 24-h forecast period, becoming southerly between 10-15 knots. Both COAMPS and FNMOC WW3 forecast significant wave heights to decrease throughout the 24-h forecast period, reaching 5-7 ft near the end.

Day Two (48 hr) Outlook: GFS shows a chance for scattered convection near Palau while COAMPS remains more modest, favoring isolated convective activity throughout the 24-48 h forecast period. GFS shows winds near Palau shifting from the S to the NE between 5-15 knots towards the end of the 24-48 h forecast period as the western flank of a broad low-level (cyclonic) circulation tracks towards the region. Both COAMPS and FNMOC WW3 forecast decreasing significant wave heights, becoming 3-7 ft near the end of the forecast period.

Extended Outlook: Winds near Palau will remain from the N-NE between 5-15 knots and scattered precipitation is expected throughout the 48-72 h forecast period. FNMOC WW3 shows significant wave heights near Palau remaining between 3-5 ft throughout the 48-72 h forecast period, and further decreasing to 3-4 ft throughout the 72-96 h forecast period.

Discussion

TCs: STY Mangkhut is about to cross over Luzon in the next 24-48 h, and it is currently located at approximately 15N, 129E with a current intensity of 145 kt. Since STY Mangkhut is moving well out of the area of operation, it will no longer be discussed after today.

The potential TD that yesterday's GFS was spinning up is no longer developing in today's 12Z GFS run. Instead, the 850 mb vorticity is now kept broad and disorganized. There are no upcoming TCs in the extended forecast.

Convection: The Himawari-8 IR satellite imagery currently shows no convective activity near Palau as STY Mangkhut has tracked west of the region and begins to approach the Philippines. Isolated convective activity is forecasted throughout the 48-h forecast period.

MJO/BSISO: The MJO forecast provided by the ECMWF shows the two week period beginning on 13 September, and the BOM shows the two week period beginning on 09 September. The two models show a low-amplitude MJO signal persisting throughout their respective two week forecast periods. The BSISO forecast from ECMWF shows the 10-29 September forecast period while the BOM shows the 09-28 September forecast period. Both models hint at a weak-amplitude BSISO1 signal in phase 3 and BSISO2 signal in phase 8 for the 0-4 day forecast period and then diverge in their representation thereafter. ECMWF favors a weak-amplitude BSISO1 signal in phase 4 and BOM favors a weak-amplitude BSISO1 signal in phase 2 for the 5-9 day forecast.

SSTs: Sea surface temperatures are expected to be between 29-31 C.

Currents and Wave Heights: Significant wave heights at Palau are forecasted by both COAMPS and FNMOC WW3 to be around 7-12 ft at the time of departure, around 0000 UTC 14 September. Significant wave heights are forecasted to decrease thereafter, to about 5-7 ft by around 0000 UTC 15 September, and then further decreasing to about 3-5 ft within 48 h.

FORECASTERS: MARTINEZ, CASAS (DELAP)

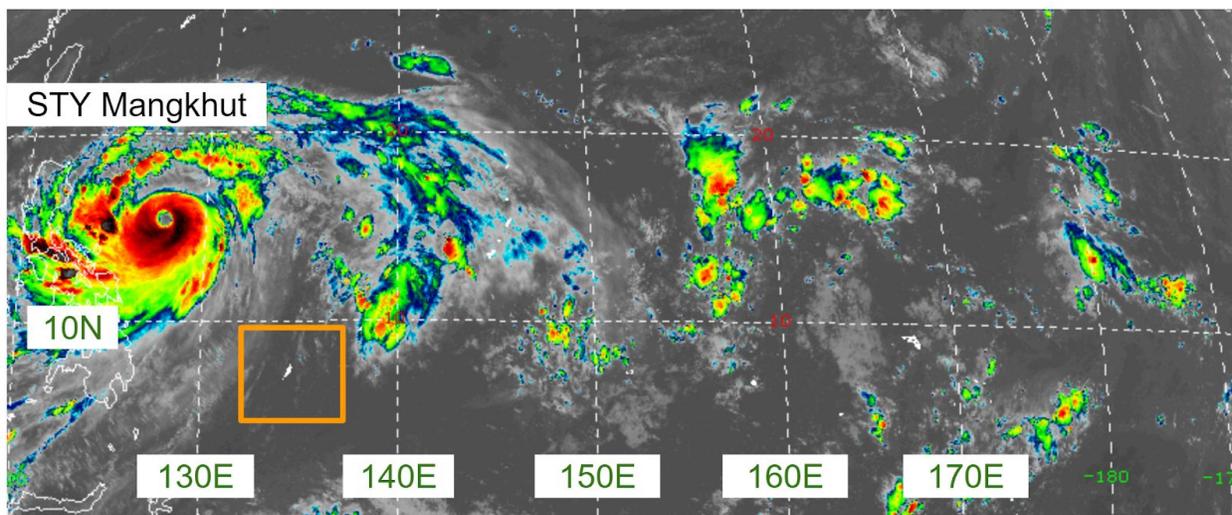


Fig. 1. Himawari IR imagery (10.4 microns) valid at 1800 UTC 13 September 2018. [1]

September, (top right) 0000 UTC 14 September, (bottom left) 1200 UTC 14 September, and (bottom right) 0000 UTC 15 September.

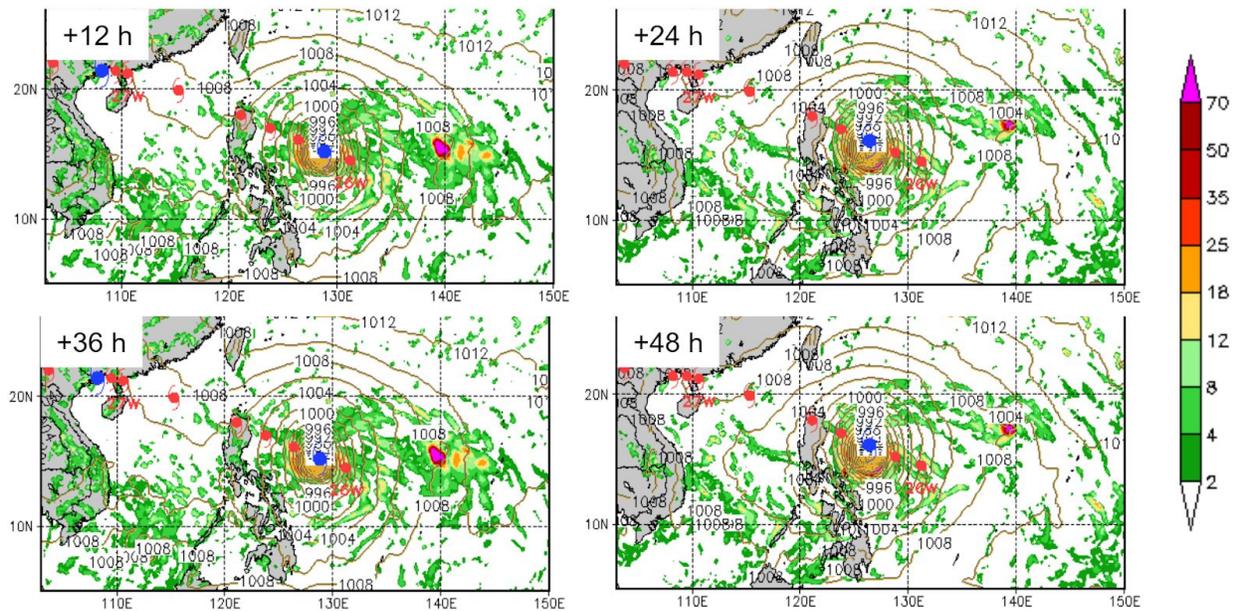


Fig 4. COAMPS 3-hourly precipitation (shading, mm) and MSLP (contours) initiated at 0000 UTC 13 September 2018 and valid at (top left) 1200 UTC 13 September, (top right) 0000 UTC 14 September, (bottom left) 1200 UTC 14 September, and (bottom right) 0000 UTC 15 September.

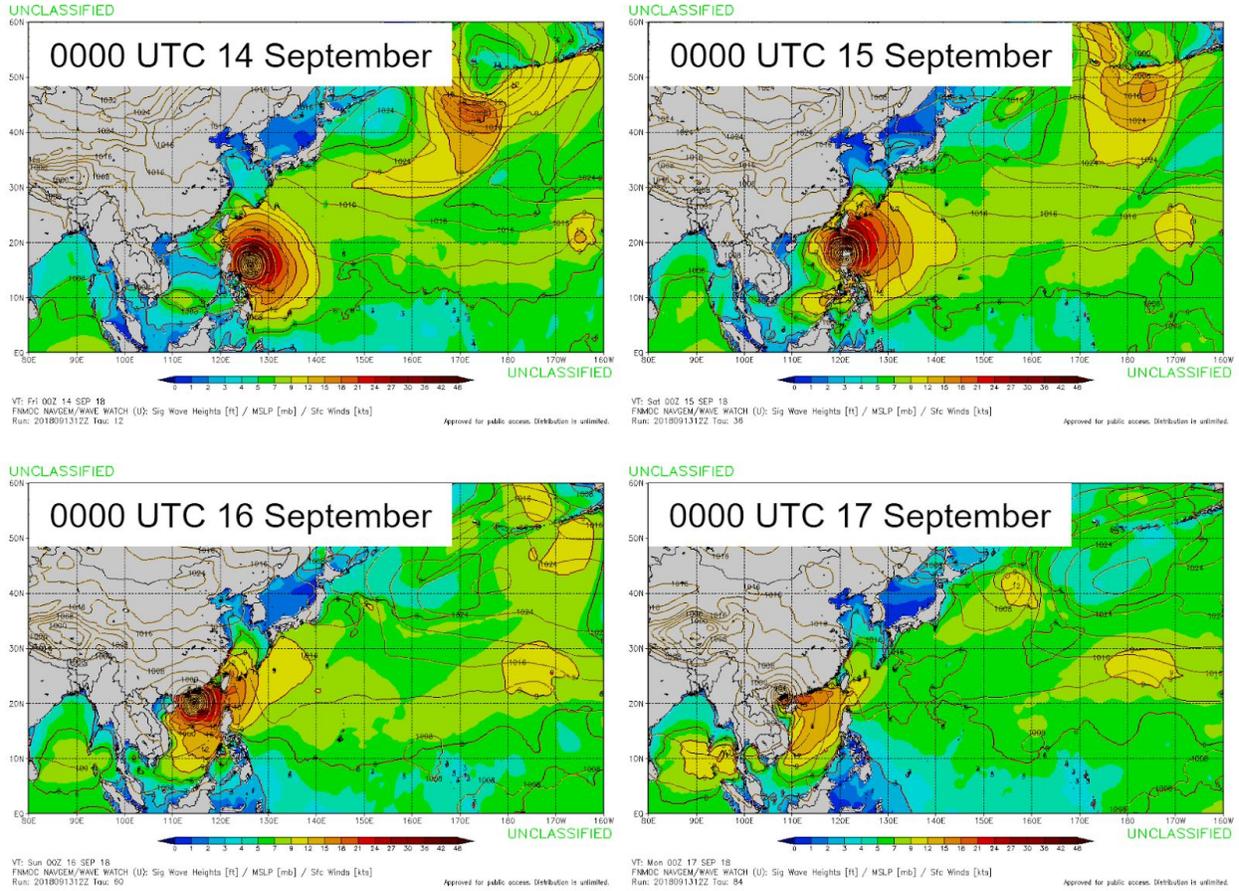


Fig. 5. FMOC WW3 significant wave height forecast initiated at 1200 UTC 13 September and valid at (top left) 0000 UTC 14 September, (top right) 0000 UTC 15 September, (bottom left) 0000 UTC 16 September, and (bottom right) 0000 UTC 17 September. [5]