

2000 UTC 16 September 2019 Forecast Discussion
Current Ship Location: Near 18.16°N, 126.12°E

Summary: Invest 95W has been slowly moving SW towards the area of operation, bringing along mesoscale convective activity. JTWC has a low-likelihood of tropical cyclone development for 95W in the next 24 h. 95W will begin a slow westward track during the next 24 h, bringing intermittent periods of widespread convection to the area of operation. Both the GFS and ECMWF show 95W gradually developing during the 24-72 h forecast and a potential tropical cyclone formation. The timing and location of potential genesis are uncertain, but is most likely to occur east of Luzon and west of the area of operation towards the end of the 48-72 h forecast period. The ECMWF ensemble continues to show the BSISO slowly moving into phase 8 with a weak amplitude during the 0-4 day forecast.

Day One (24 hr) Outlook: Widespread convective activity is expected throughout the 24-h forecast in association with Invest 95W tracking SW towards the area of operation. There is a chance for mesoscale convective systems to develop in continuation with convection that has been occurring over the area of operation. Winds shifting from the WNW to WSW between 15-25 knots. Significant wave heights will slowly increase in the 7-9 ft range and potentially exceed 9 ft near the end of the 24-h forecast. JTWC has an unlikely probability of genesis for 95W in the next 24 h.

Day Two (48 hr) Outlook: Intermittent periods of widespread convection are expected during the 24-48 h forecast in association the continued development of 95W and a slow westward track. Winds primarily from the SW between 15-25 knots and potentially exceeding 25 knots towards the end of the 24-48 h forecast period. Significant wave heights will likely remain between 9-11 ft.

Extended Outlook: Widespread convection is expected throughout the 48-72 h forecast in association with 95W continuing to develop NE of Luzon. Winds will remain from the SW between 15-25 knots. There is a chance that winds will exceed 30-35 knots (tropical storm force winds) towards the end of the 48-72 h forecast period if 95W continues to intensify. Significant wave heights will continue to increase and may reach 13-15 ft towards the end of the 48-72 h forecast period. Both the GFS and ECMWF show 95W beginning a northward turn during the 72-96 h forecast. The GFS shows a potential tropical storm in between Luzon and the area of operation developing during the 72-96 h forecast, which would bring tropical storm force winds to the area of operation in addition to significant wave heights exceeding 15 ft.

Discussion

TCs: Tropical Storm Peipah (former 97W) has been downgraded to Tropical Depression Peipah. It will continue to move NNW and not affect the area of operation. It will likely get sheared apart in the next 24 h. Invest 95W is tracking SW towards the area of operation and will begin a slow westward track over the next 24 h. 95W has developed closed isobars and strong

low-level vorticity, despite large deep-layer (850-200 hPa) vertical wind shear. The GFS and ECMWF deterministic runs begin to diverge in their representation of 95W beyond the 24-h forecast, but both models show a gradual development and potential tropical cyclone formation. The timing and location of potential genesis are uncertain, but is most likely to occur east of Luzon and west of the area of operation. The GFS spins up 95W in this location to a tropical storm during towards the end of the 48-72 h forecast. We will continue to monitor this system as it develops over the next few days.

Convection: Widespread convection is expected throughout the 96-h forecast as 95W continues to develop near the area of operation.

MJO/BSISO: There is no update on the BSISO forecast. BSISO index is slowly moving into phase 8, but the signal is also weakening into low significance during the 0-4 day forecast. MJO index will remain in phase 8 during the 0-3 day forecast and slowly move into phase 1.

SSTs: SSTs are still expected to remain warm around 29°C.

Currents and Wave Heights: The significant wave heights may increase from 5-7 ft to 9-11 ft in the next 24 h as 95W tracks near the area of operation. The wave heights will increase substantially, up to 13-15 ft in the next 72-96 h as 95W continues to develop. Surface Currents are variable 1-3 kts.

CAMP-EX: P-3 coordinated a flight with Sally Ride, but quickly-developed deep convection associated with 95W in the area interfered with the flight plan. The coordinated flight is postponed.

FORECASTER: MARTINEZ, PANASAWATWONG, PASILLAS



JOINT TYPHOON WARNING CENTER

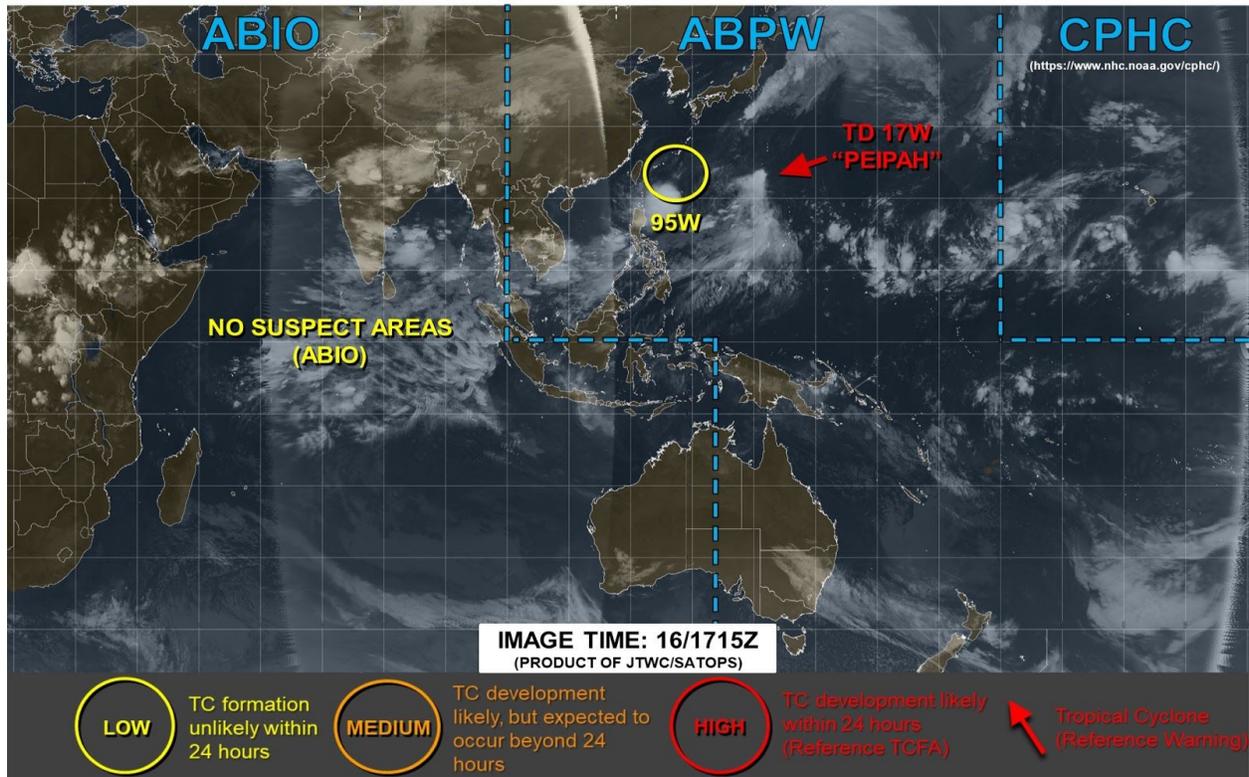


Fig. 1. JTWC TC outlook valid at 1715Z Sep 16.

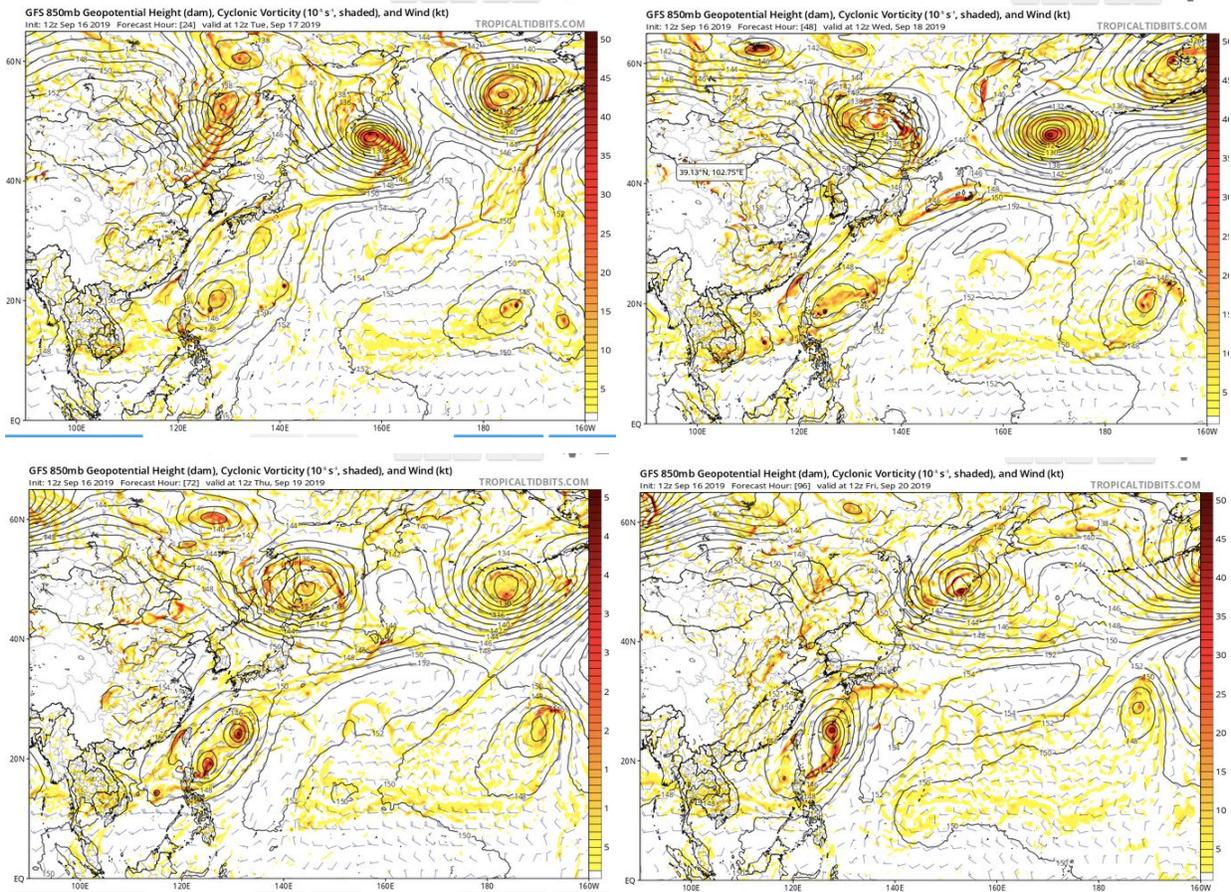


Fig. 2. GFS 850 mb vorticity and wind field and mean sea-level pressure initialized at 12Z on Sep 16. From top to bottom, left to right, the figures valid for 12Z Sep 17, 18, 19, and 20.

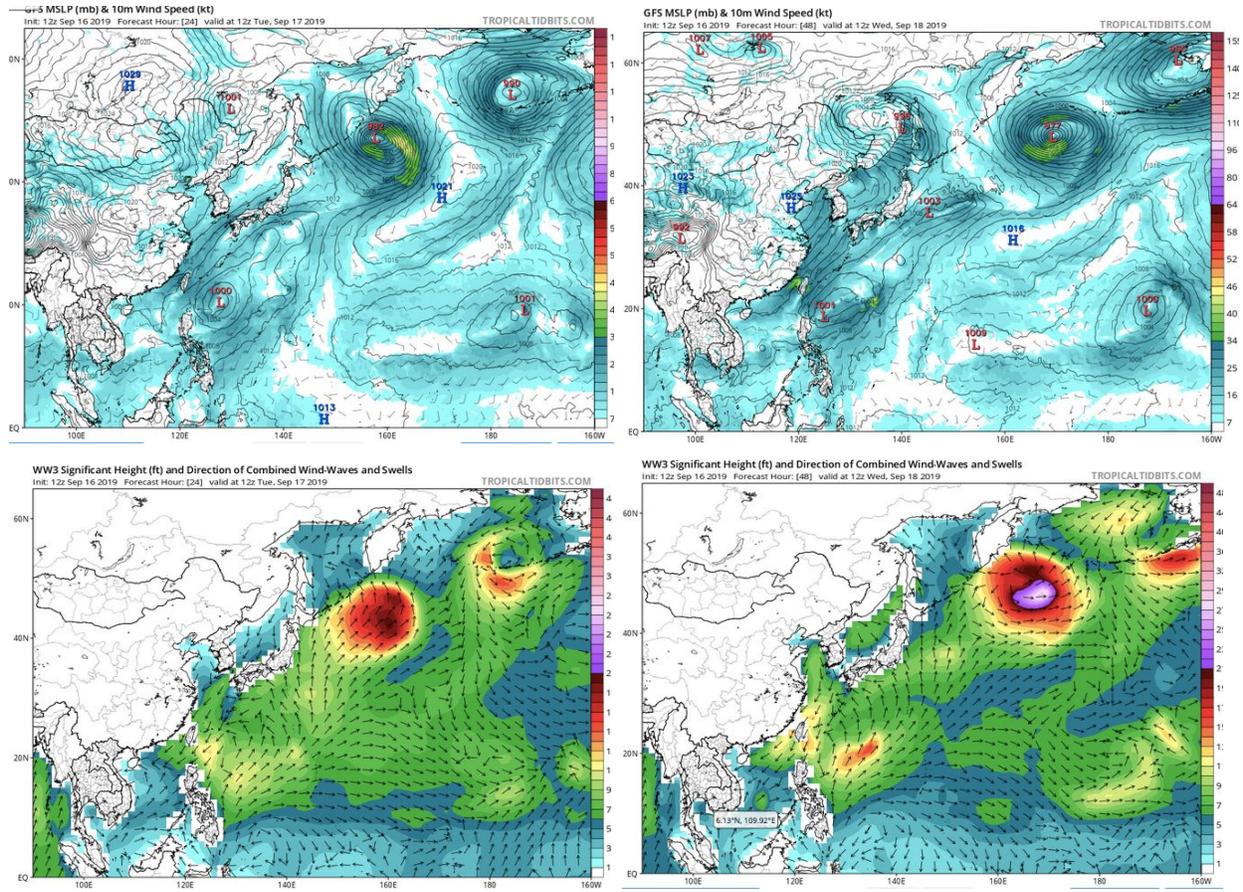


Fig. 3. GFS mean sea level pressure and 10-m winds (top row), and WW3 significant wave heights (bottom row) initialized on 12Z Sep 16, valid for 12Z Sep 17 (left column) and 12Z Sep 18 (right column).