

2000 UTC 17 September 2019 Forecast Discussion

Current Ship Location: Near 17.17°N, 126.73°E

Summary: Invest 95W has remained relatively stationary, north of the area of operation. Invest 99W has been designated by JTWC, currently to the west of Luzon. JTWC places a low-likelihood of tropical cyclone development for 99W and a medium-likelihood of tropical cyclone development for 95W during the 24-h forecast period. Widespread convection is expected to persist throughout the 72-h forecast period in association with Invest 99W tracking east towards the area of operation during the 24-h forecast period, turning NE during the 24-48 h forecast period, and moving north away from the area of operation during the 48-72 h forecast period. The 1200 UTC GFS deterministic run spins up 99W into a tropical storm during the 48-72 h forecast period, centered near 19.5N, 126.2E: there is a chance for tropical storm force winds over the area of operation on the SE quadrant of this system if this forecast verifies. Significant wave heights will increase throughout the 60-h forecast period, potentially exceeding 15 ft near the area of operation during the 48-60 h forecast period. We will continue to closely monitor the development of both Invest 95W and Invest 99W. The ECMWF ensemble shows the BSISO in phase 8 with a weakening amplitude during the next 48 h.

Day One (24 hr) Outlook: Intermittent periods of widespread convection are expected throughout the 24-h forecast as Invest 95W remains NNW of the area of operation and interacts with the eastward moving Invest 99W. Winds will remain from the SW between 20-25 knots, with a chance of winds exceeding 25 knots towards the end of the 24-h forecast period. Significant wave heights will remain between 9-11 ft. JTWC has a medium-likelihood of genesis for 95W in the next 24 h and a low-likelihood of genesis for 99W in the next 24 h.

Day Two (48 hr) Outlook: Widespread convection is expected throughout the 24-48 h forecast as Invest 99W moves east over Luzon and then begins a NE track. Winds will remain from the SW, increasing from 20-25 knots to 25-30 knots throughout the 24-48 h forecast period. There is a chance that winds will exceed 35 knots (tropical storm force) towards the end of the 24-48 h forecast period as Invest 99W tracks ENE near the area of operation. Significant wave heights will continue increasing to 11-13 ft, potentially exceeding 13 ft towards the end of the 24-48 h forecast.

Extended Outlook: Widespread convection is expected throughout the 48-72 h forecast period, with a chance of rainband activity over the area of operation associated with Invest 99W. Winds will remain from the SW between 25-35 knots with potential for a sustained period of tropical storm force winds over the area of operation. Significant wave heights will rapidly increase to 13-15 ft during the 48-60 h forecast period, potentially exceeding 15 ft, and then begin decreasing to 11-13 ft towards the end of the 60-72 h forecast. Both the GFS and ECMWF 1200 UTC deterministic runs show Invest 99W moving east over Luzon during the 24 h forecast, turning NE during the 24-48 h forecast, and then tracking northward away from the area of operation during the 48-72 h forecast. The 1200 UTC GFS deterministic run spins up 99W into a

tropical storm as it moves ENE during the 48-72 h forecast. Winds, significant wave heights, and convection are all expected to decrease throughout the 72-120 h forecast.

Discussion

TCs: Tropical Depression Peipah has dissipated and its remnants continue to move NNW. The JTWC forecast shows a weak intensification for Invest 95W over the next 24-48 h, with a medium-likelihood of genesis. The system remains relatively stationary and begins to track north away from the area of operation during the 24-48 h forecast period. The second area of interest is Invest 99W, currently to the west of Luzon, with JTWC forecasting a low-likelihood of genesis in the next 24 h. Both the GFS and ECMWF 1200 UTC deterministic runs show a complicated interaction occurring between 95W and 99W throughout the 24-72 h forecast. The 1200 UTC GFS deterministic run tracks 99W east over Luzon towards the area of operation during the 24-h forecast period before turning NE during the 24-48 h forecast period. The 1200UTC GFS deterministic run also spins up 99W, showing potential tropical storm force winds over the area of operation throughout the 48-72 h forecast period. As Invest 99W moves eastward over Luzon, it will begin to interact with 95W. The 1200 UTC GFS deterministic run depicts two potential tropical cyclones (one forming from 95W, the other from 99W) that interact with each other prior to merging north of the area of operation. The 1200 UTC ECMWF deterministic run keeps 99W weaker than the GFS and favors a quicker merger of 99W into 95W by the end of the 48-h forecast period. We will continue to monitor the co-development of these two systems in the coming days.

Convection: Widespread convection is expected over the area of operation as Invest 99W tracks eastward during the next 24 h and begins to move NE during the 24-48 h forecast period. Widespread convection is expected to persist throughout the 72-h forecast period, and will begin to decrease as both 99W and 95W move north, away from the area of operation.

MJO/BSISO: There is no update on the BSISO forecast. BSISO index is in phase 8, albeit with low significance during the 0-2 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: Surface currents are expected to remain E between 1-3 knots throughout the 36-h forecast. Significant wave heights will continue to increase during the 60-h forecast period: 9-11 ft throughout the 24-h forecast period, 11-13 ft throughout the 24-48 h forecast period, and potentially exceeding 15 ft during the 48-60 h forecast.

CAMP2Ex: There is no update from CAMP2Ex today.

FORECASTERS: MARTINEZ, PANASAWATWONG, PASILLAS

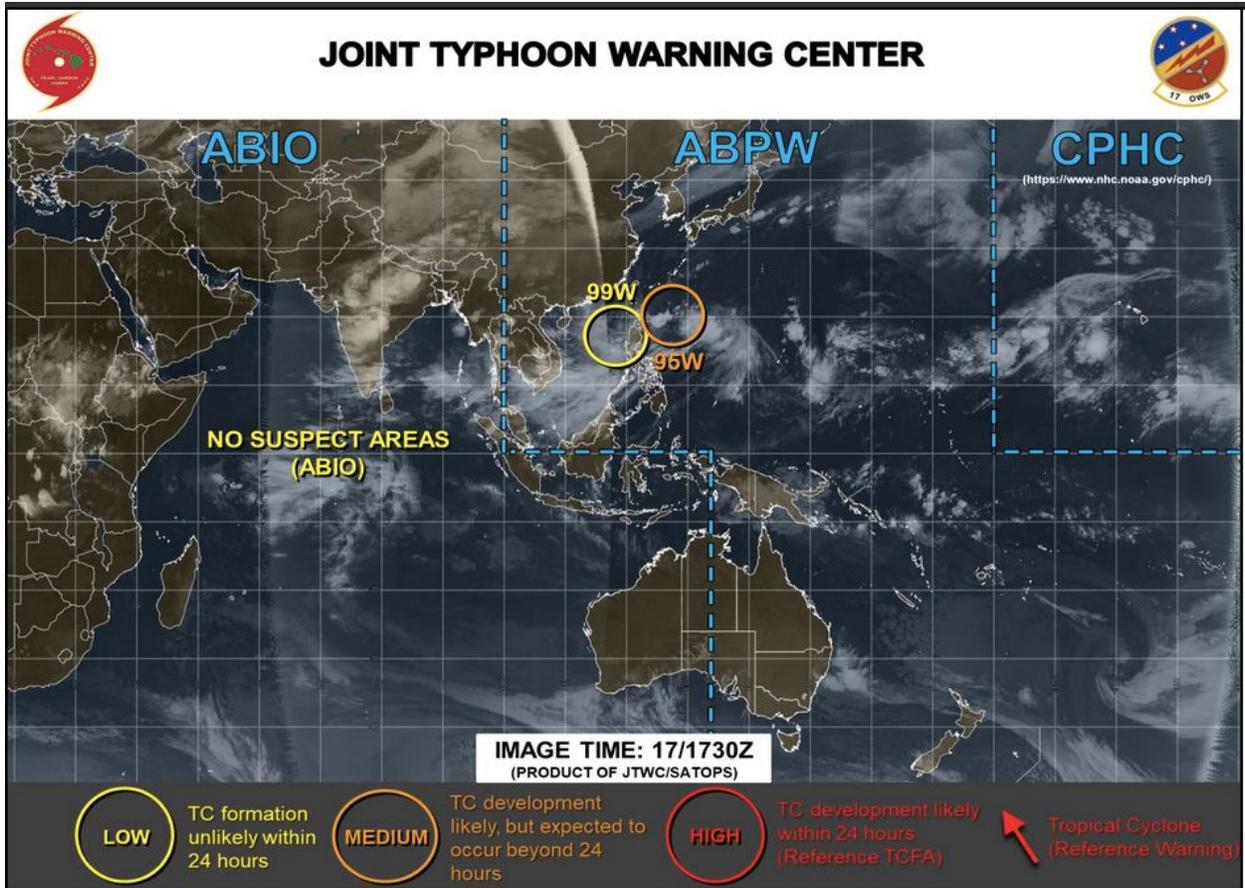


Fig. 1. JTWC TC outlook valid at 1715Z Sep 17.

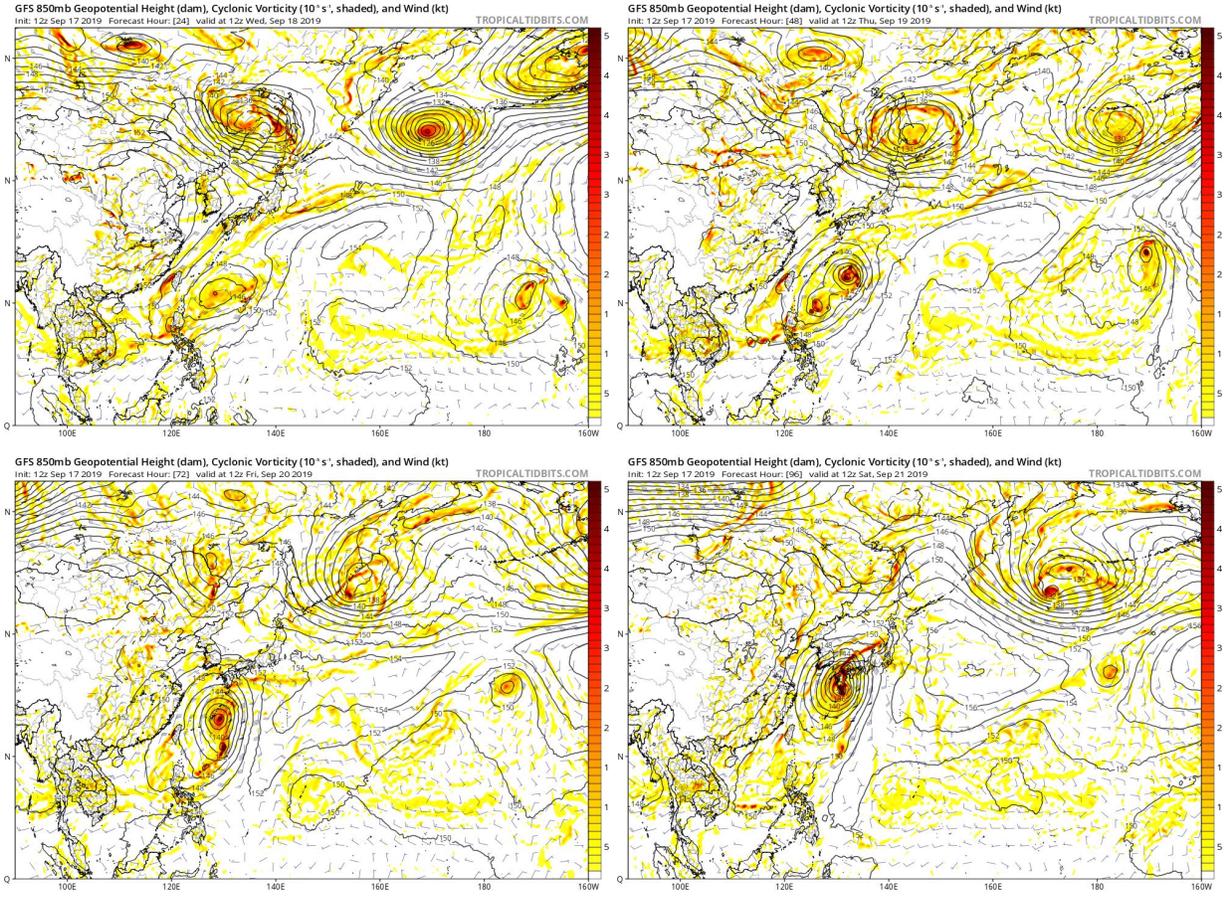


Fig. 2. GFS 850 mb vorticity and wind field and mean sea-level pressure initialized at 12Z on Sep 17. From top to bottom, left to right, the figures valid for 12Z Sep 18, 19, 20, and 21.

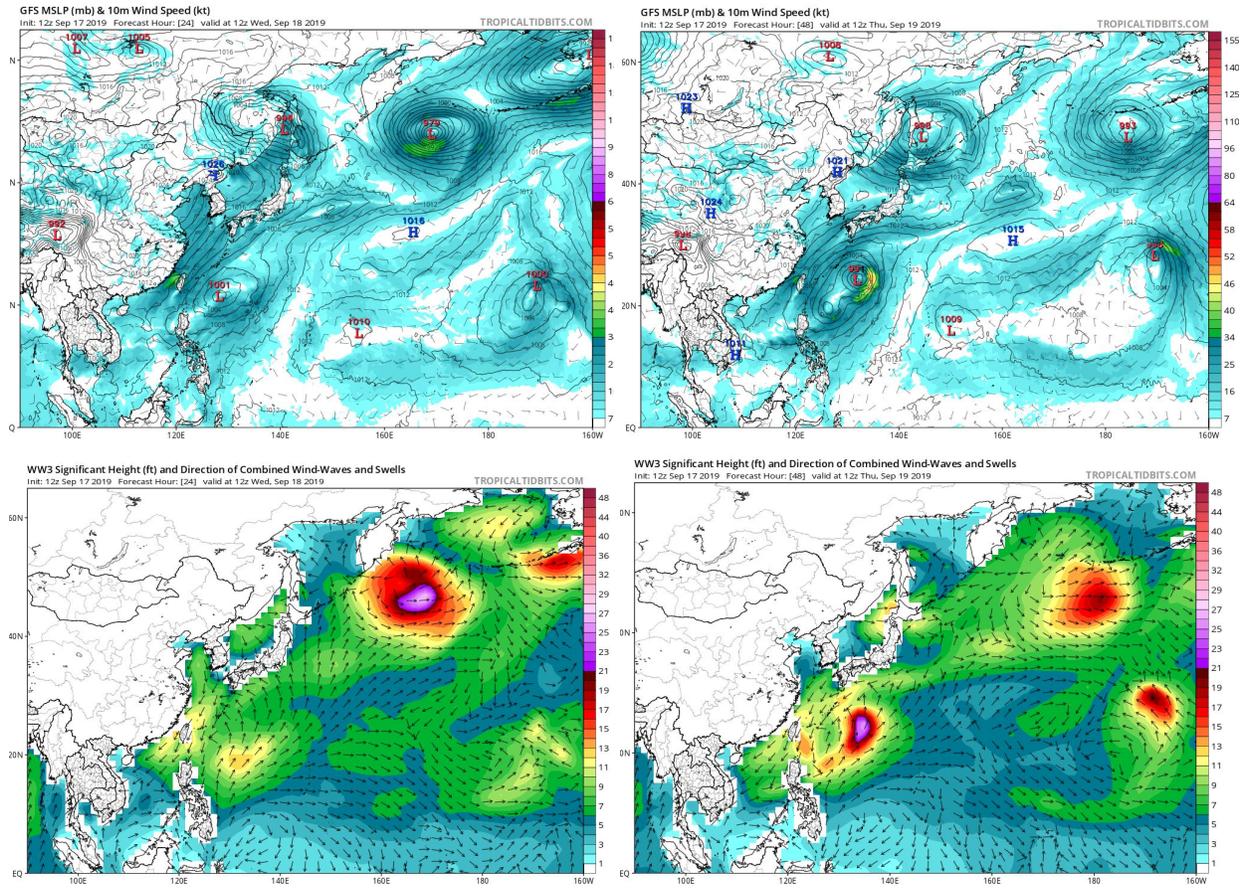


Fig. 3. GFS mean sea level pressure and 10-m winds (top row), and WW3 significant wave heights (bottom row) initialized on 12Z Sep 17, valid for 12Z Sep 18 (left column) and 12Z Sep 19 (right column).