

2000 UTC 18 September 2019 Forecast Discussion  
Current Ship Location: Near 15.00°N, 127.92°E

### **Summary:**

Invest 95W has remained mainly stationary and GFS, ECMWF, and JTWC show 95W developing into a TC within 24-48hrs. The system continues to impact the area of operations with rain showers, winds of 20-25kts, and wave height of 9-11ft in the S and 11+ft in the N of area of operation in the next 24h. The system will move northward and wave heights in vicinity of current ship operating location will decrease to 5-7 ft in the next 48hrs, while wave height in the north will remain high 11+ ft.

99W has been removed from JTWC watch.

**Day One (24 hr) Outlook:** Scattered convection with intermittent periods of widespread convection are expected over the area of operation throughout the 24-h forecast. Winds will remain from the SW between 20-25 knots, and potentially exceed 25 knots towards the end of the 24-h forecast period. Significant wave heights will increase throughout the 24-h forecast period, reaching between 9-11 ft near the southern boundary of the area of operation (15N) and 13-15 ft near the northern boundary of the area of operation (18N). JTWC has a high-likelihood of tropical cyclone development for Invest 95W in the next 24 h.

**Day Two (48 hr) Outlook:** Widespread convection is expected over the area of operation during the beginning of the 24-48 h forecast and will become scattered as 95W begins to track northward. Winds from the SW between 20-25 knots will decrease towards the end of the 24-48 h forecast. Significant wave heights between 9-11 ft near the southern boundary of the area of operation (15N) will begin to decrease to 7-9 ft near the end of the 24-48 h forecast period. Significant wave heights between 13-15 ft near the northern boundary of the area of operation (18N) will begin to decrease to 11-13 ft near the end of the 24-48 h forecast period.

**Extended Outlook:** Scattered convection is expected over the area of operation throughout the 48-72 h forecast period. Both the 1200 UTC GFS and ECMWF deterministic runs place 95W well north of the area of operation (near 25N) in the 48-h forecast. An elongated SW-NE oriented band of vorticity, associated with 95W and the monsoon trough, will keep winds from the SSW between 15-25 knots throughout the 48-72 h forecast period. Significant wave heights will continue to decrease, reaching 5-7 ft near the southern boundary of the area of operation (15N) and 9-11 ft near the northern boundary of the area of operation (18N). Convection, winds, and significant wave heights are expected to decrease near the area of operation throughout the 72-120 h forecast period.

### **Discussion**

**TCs:** Invest 95W is still impacting the operating area with thunderstorms, increased seas and winds estimated 20-30kts. The JTWC forecast shows a high probability of genesis within the next 24hrs and a TCFA has been issued. The system is slowly moving NNW at 2kts. Invest 99W has been removed from the JTWC outlook though convective activity and vorticity still remains west of the Philippines, organization is not likely. Unlike yesterday, both the ECMWF and GFS show a single tropical cyclone forming in the area with 95W. As 95W moves poleward impacts to the op area will continue to decrease. The GFS and ECMWF have become similar in track, timing, and location of 95W, though ECMWF shows greater intensification.

**Convection:** Widespread convection associated with 95W and the monsoon trough is expected to persist over the region throughout the 48-h forecast period, and will begin to decrease as 95W moves north, away from the area of operation.

**MJO/BSISO:**

BSISO index is in phase 8 but with low significance for the next 0-2 day forecast. MJO index will remain in phase 8 during the 0-2 day before moving into phase 1.

**SSTs:**

There is a mass of cold water (28°C) to the north and south of the area of operation. In the area of operation, SSTs are still expected to remain warm around 29°C.

**Currents and Wave Heights:**

Currents are E 1-3 kts through 36 hours. Significant wave heights will continue to increase in the next 24h to 9-11 ft near the southern boundary of the area of operation (15N) and 13-15 ft near the northern boundary of the area of operation (18N) due to 95W development. Then, the wave height will decrease in the next 24-48h to 7-9 ft as 95W moves northward.

**CAMP2Ex:**

CAMP2Ex had coordinated flight observations and communicated with Sally Ride.

FORECASTERS: MARTINEZ, PANASAWATWONG, PASILLAS



# JOINT TYPHOON WARNING CENTER

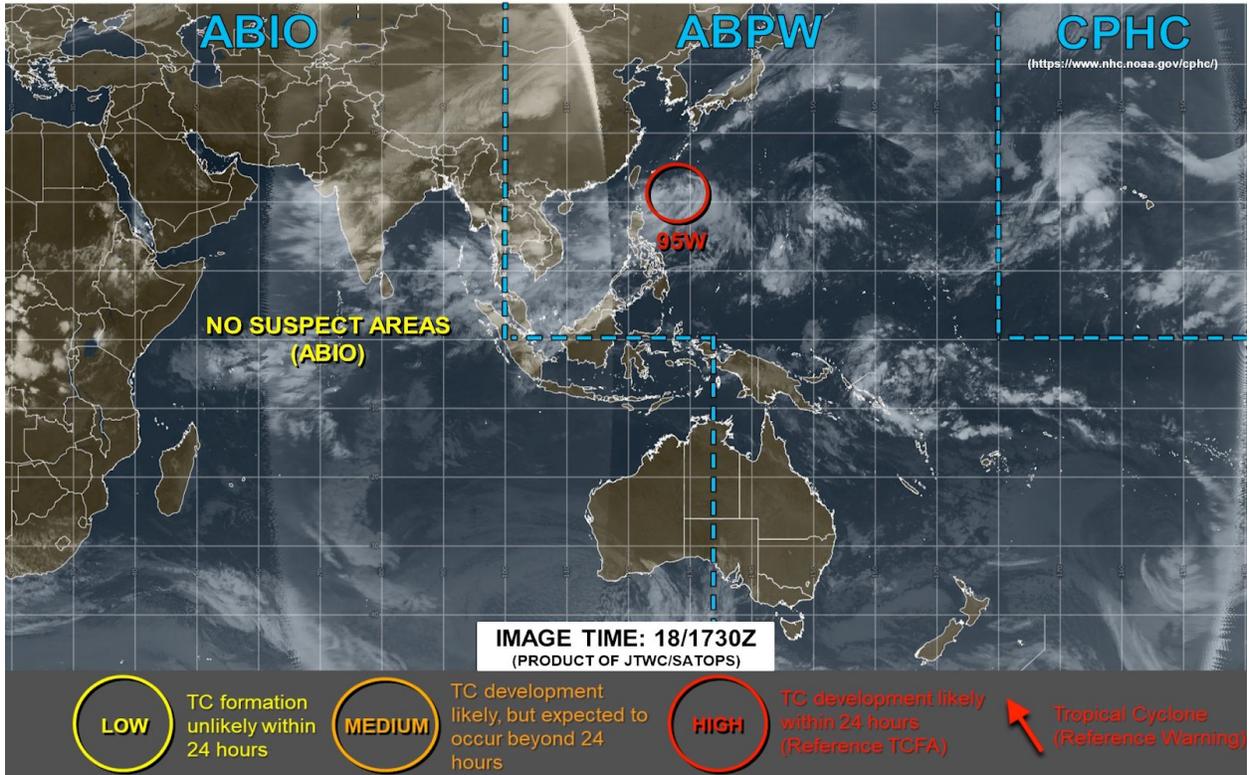
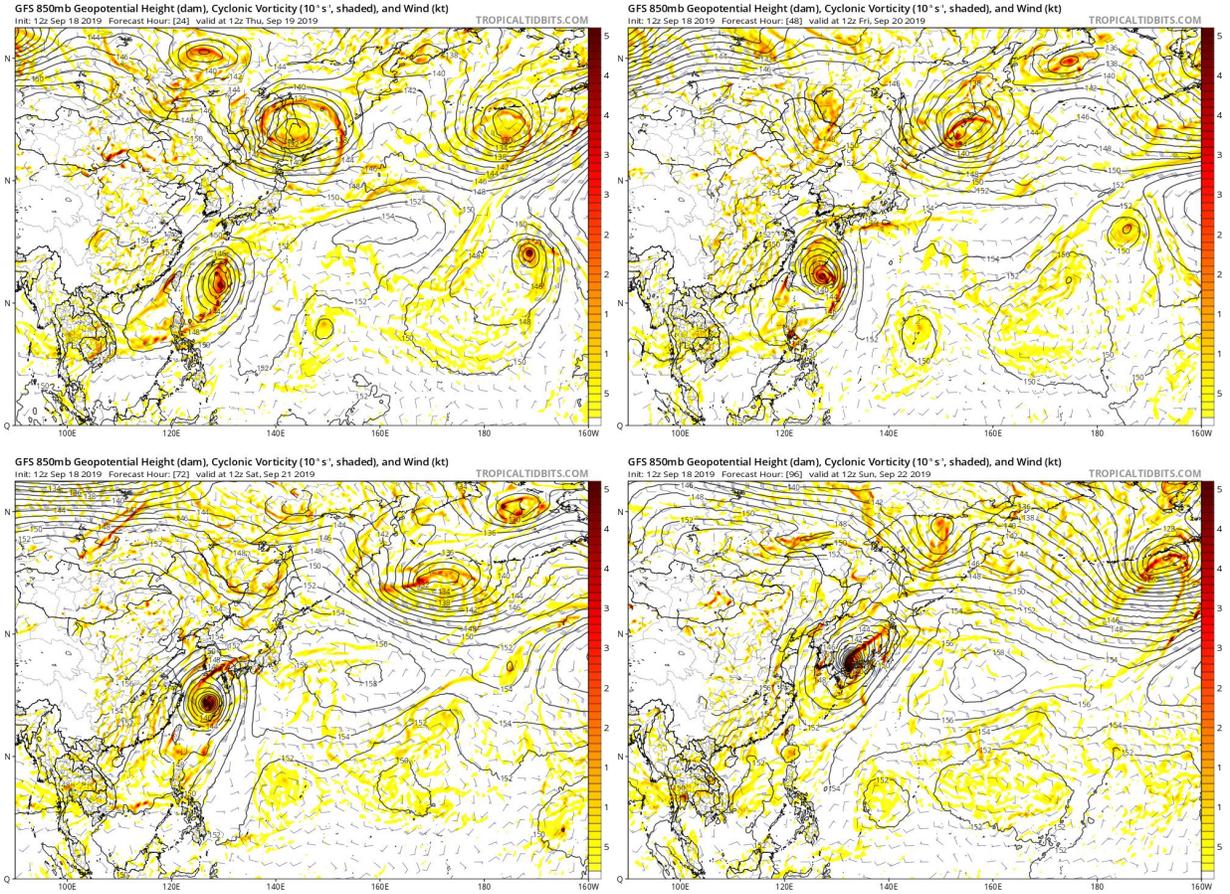
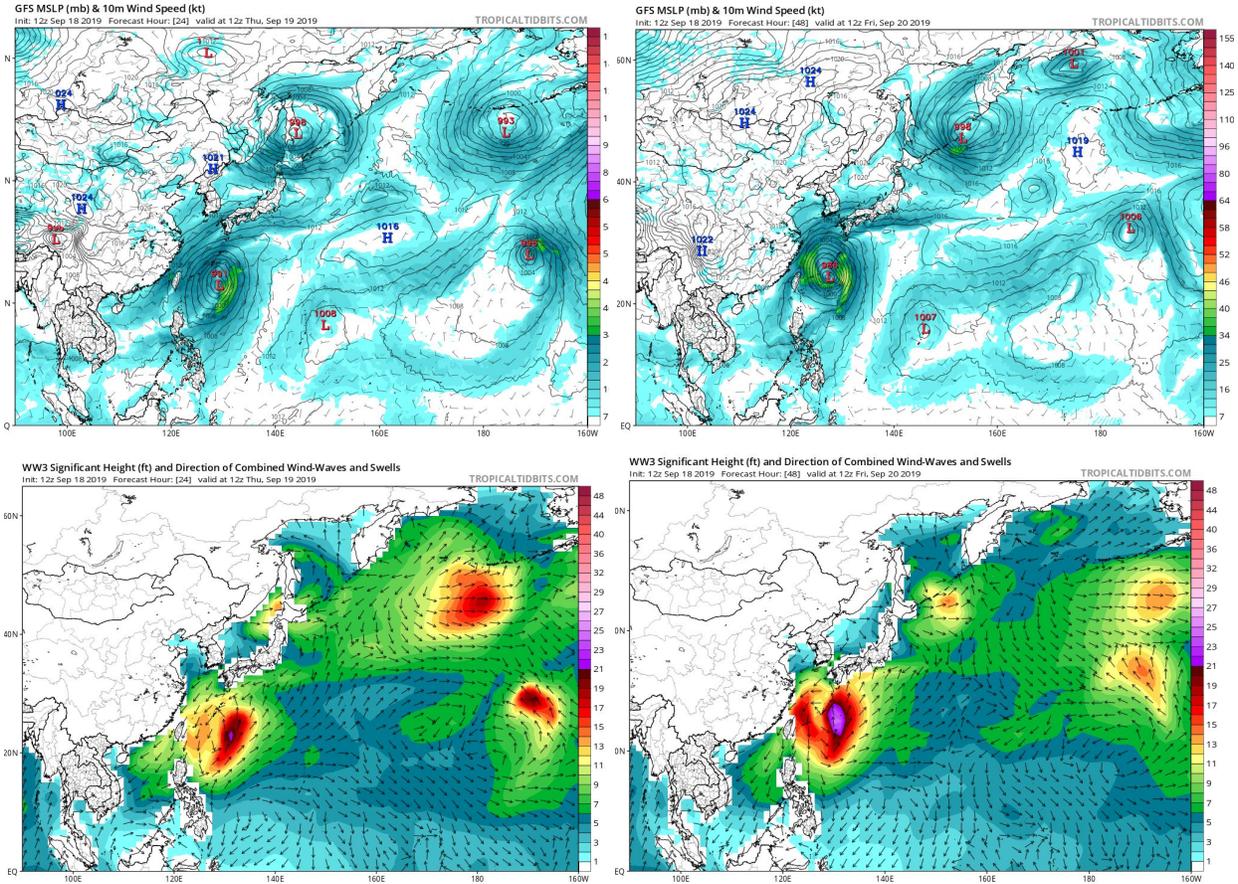


Fig. 1. JTWC TC outlook valid at 1730Z Sep 18.



**Fig. 2.** GFS 850 mb vorticity and wind field and mean sea-level pressure initialized on 18Sep12Z. From top to bottom, left to right, the figures valid for 12Z Sep 19, 20, 21, and 22.



**Fig. 3.** GFS mean sea level pressure and 10-m winds (top row), and WW3 significant wave heights (bottom row) initialized on 18Sep12Z, valid for 19Sep12Z (left column) and 20Sep12Z (right column).