

2000 UTC 12 September 2019 Forecast Discussion

Current Ship Location: Near 18.1°N, 126.1°E

**Summary:** 95W is currently centered around 18.1°N and 133.6°E. The monsoon depression is not expected to intensify into a tropical cyclone. Observations and models have it tracking northward away from the operation area. Thus, chances for convection are precipitation is expected to decrease. Slight decrease in northerly wind speed before the winds shift westerly. Wave heights expected to slowly decrease, remaining below 10 ft. BSISO is currently in phase 5 and is expected to propagate back to a phase 6 and onward in the 0-4 day timeframe.

**Day One (24 hr) Outlook:** Tropical cyclogenesis of 95W not likely to occur. Increasing chances for widespread rain showers and thunderstorms. Northerly winds of 15-20 kts to decrease to 10-15 kts. Significant wave heights will likely increase slowly to 7-10 ft.

**Day Two (48 hr) Outlook:** Tropical cyclogenesis of 95W not likely. Rain showers and thunderstorms becoming scattered. Winds expected to increase back to 15-20 kts in the operation area, shifting from northerly to westerly. Wave heights should remain similar to Day 1, but may slightly decrease to 6-9 ft through Day 2.

**Extended Outlook:** Impacts to the area of operation should continue to lessen as 95W tracks more northward. Elevated winds and wave heights may persist over the area of operation over the next few days until 95W has moved far enough north. There is uncertainty in the longer term if a circulation spawned from 95W will re-enter the area in the long term which may end up near the area of operation. This would not occur until about +144hrs, so it is not an immediate threat, but should keep 95W in the forecast consideration.

## Discussion

**TCs:** 95W, currently centered around 18.1°N and 133.6°E, remains tagged with a medium chance for genesis by JTWC with genesis not expected within 24 hours. The system has finally started to move northward today. This lends more credence to the ECMWF solution which favored this yesterday. Now the GFS and ECMWF have come to a closer agreement which continues to move 95W out of the vicinity of the operation area which should lessen wind and wave impacts. This invest should continue to be tracked. Past +144hrs in the ECMWF and GFS, a circulation is forecasted to enter the area of operations again. This circulation spawns from the south end of 95W after it elongates and splits around +72-96hrs.

**Convection:** With the current northward track of 95W, precipitation forecast is starkly different from yesterday's. Both GFS and ECMWF seem to favor this slow northward track for 95W to continue over the next few days. Therefore, as the circulation center of 95W moves further away from the operation area, precipitation maxima associated with the system are also expected to move away from the operation area. However, rain showers and thunderstorms would become

widespread in the first 24 hours, as a rainband on the southern edge of 95W moves over the operation area. Beyond 24 hours, rain showers and thunderstorms would become scattered.

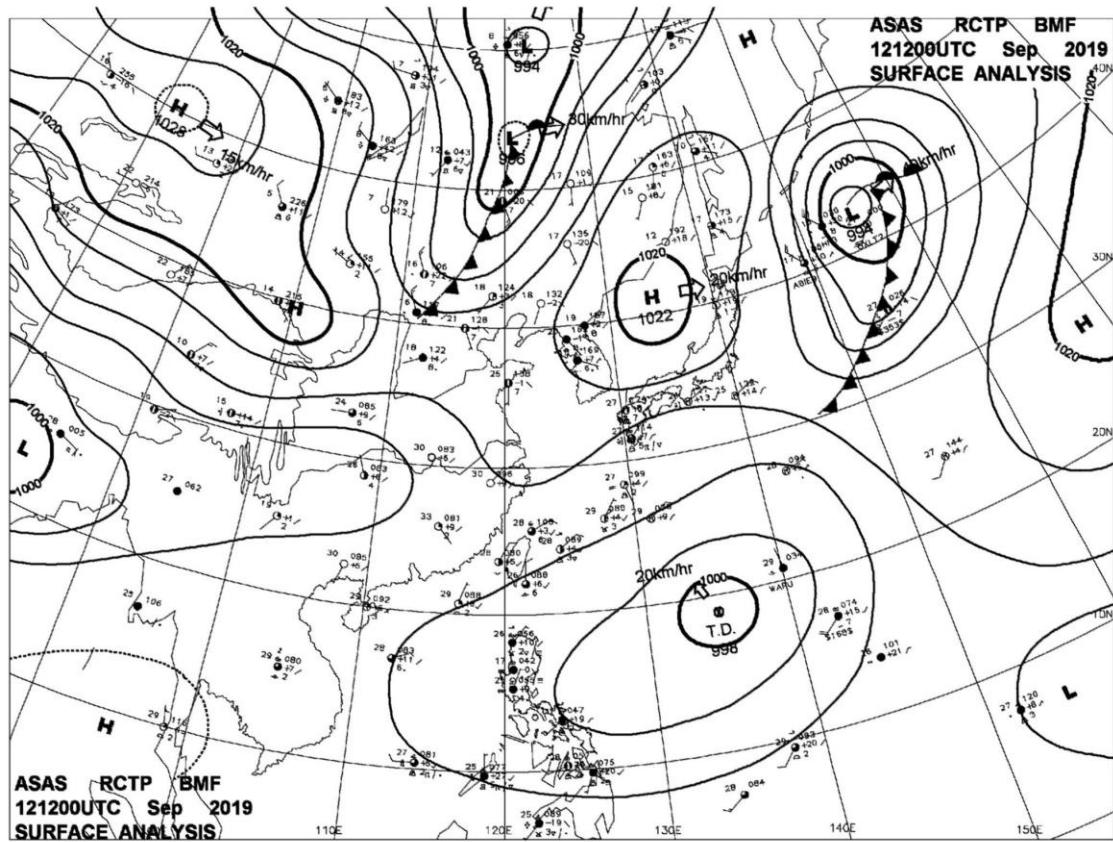
**MJO/BSISO:** The current BSISO index is in phase 5, and the previous discussion of a retrograde has verified. Both GFS and ECMWF are still in agreement that it will propagate back to a phase 6 and onward in the 0-4 day timeframe. There is also agreement that the amplitude will stay consistent until at least phase 7.

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

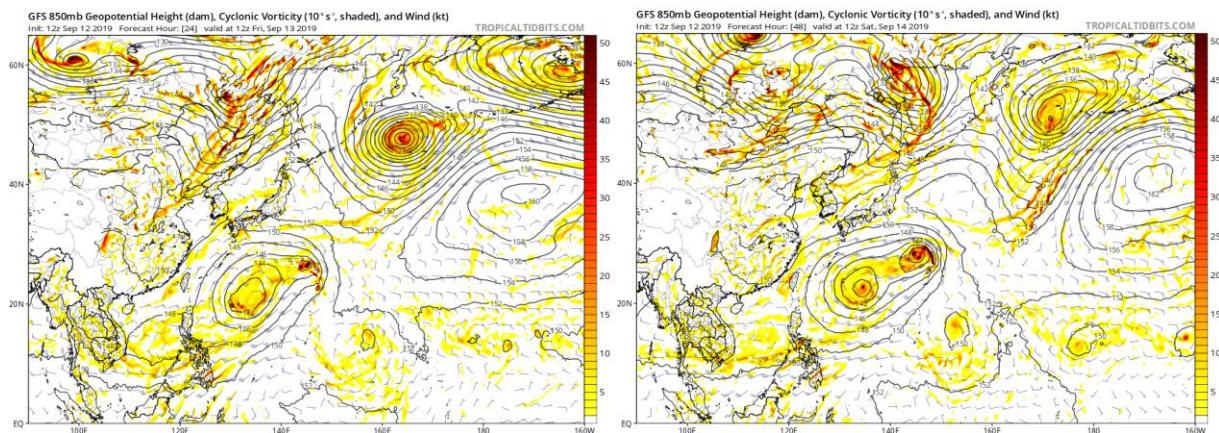
**Currents and Wave Heights:** 95W has begun to move northward and as a result wave heights should decrease in the coming days. Large-scale models suggest wave heights will remain around 7-9 feet through 12Z on 13 Sep, with a slight decrease possible on day 2. Currents should remain E at 1-3kts through the next 36hrs.

**CAMP2EX:** The P3 could fly tomorrow, but plans have not been discussed or finalized for coordination since 95W has become less of a factor for the ship.

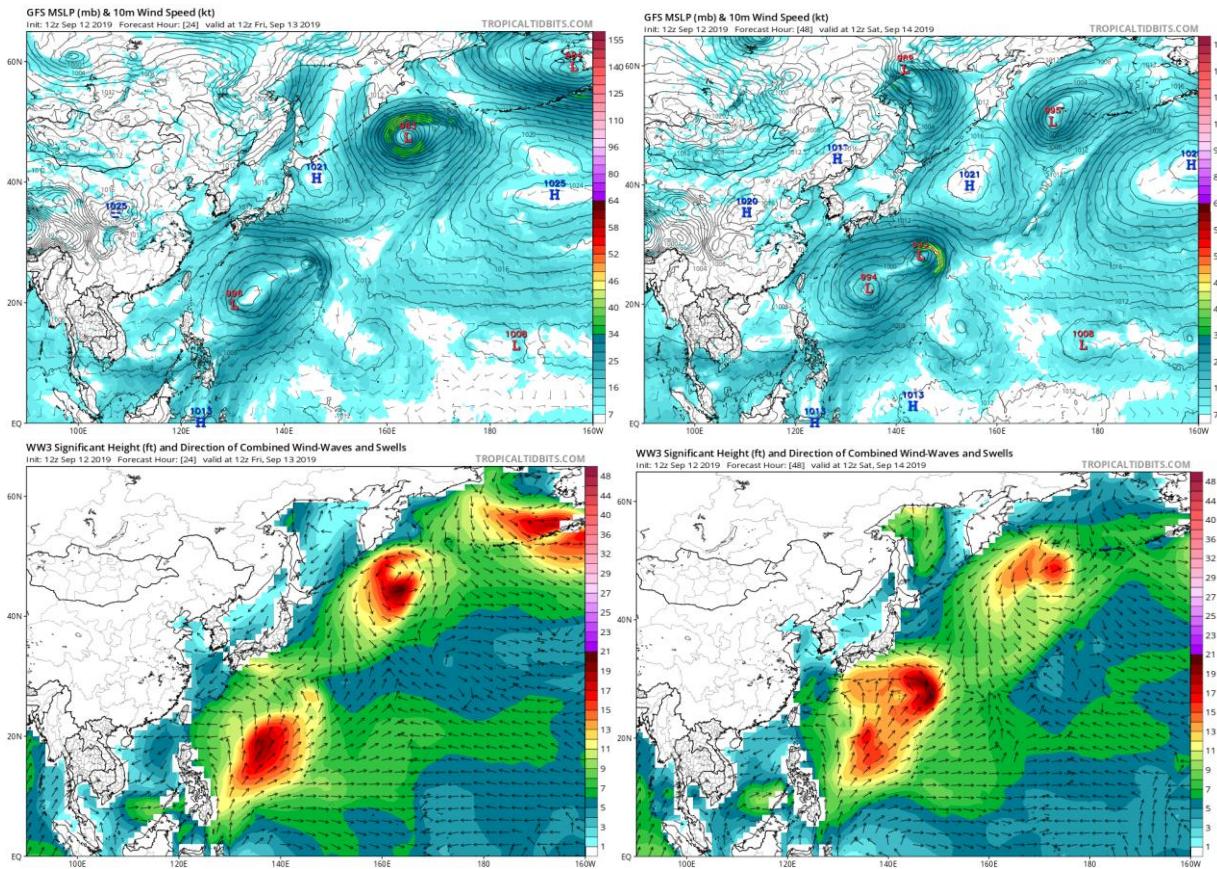
FORECASTER: CASAS, DEHART, DESROSIERS, PASILLAS, PANASAWATWONG, RAZIN



**Fig. 1.** CWB surface analysis at 12Z on Sept. 12th.



**Fig. 2.** GFS 850 mb vorticity and wind field and mean sea-level pressure initialized at 12Z on Sept. 12th, valid for 12Z Sept. 13th (left) and 12Z Sept. 14th (right).



**Fig. 3.** GFS mean sea level pressure and 10-m winds (top row), and WW3 significant wave heights (bottom row) initialized on Sept. 12th, valid for 12Z Sept. 13th (left column) and 12Z Sept. 14th (right column).