

2000 UTC 23 September 2019 Forecast Discussion
Current Ship Location: Near 18.13°N, 126.08°E

Summary:

Clear calm weather is expected over the next 24 hours. Some shallow scattered convection associated with a low pressure system will move into the area beyond 24h forecast period. Winds in the area of operation will remain primarily out of the N, shifting to be out of the NE as the low pressure system moves into the area in the 24-48h forecast period. Winds will have mesoscale variability due to this system, causing speeds to range between 5 and 20 knots. Significant wave heights will remain 4-6ft in the 24-h forecast period and 3-5ft in the 24-48h forecast period. The BSISO signal is strengthening in amplitude over the 0-4 day forecast, remaining in Phase 2.

Day One (24 hr) Outlook:

Clear and calm weather conditions are expected. Significant wave heights will vary between 4-6 ft over the next 24 hrs.

Day Two (48 hr) Outlook:

Scattered convection associated with low-pressure system to the east possible in the next 24 hrs due to saturation at lower levels. Forecasts show no organization or deep convective systems within the 24-48 hrs. The surface low will be south of the op area by the end of 48-hr forecast period. Significant wave heights forecast to decrease into 3-4 ft in the operation area.

Extended Outlook:

Scattered or isolated convection is expected to last for this week due to the surface low system and widespread convection east to that low. Significant wave heights will be 2-4 ft over the op area for 72-120 hr forecast period. A possible genesis around 16-19N 135-137E around 120hr forecast period, but it will not affect the ship for it will be weak and far from the ship.

Discussion

TCs:

Tropical Storm Tapah is now an extratropical cyclone system over the sea between Korea and Japan. JTWC ended their forecast for Tapah. Hence, we will no longer discuss Tapah from now on. Both ECMWF and GFS show a possible cyclogenesis by 28 Sep 12z (120 hr forecast) (plus handful ensemble members of GEFS). ECMWF locating the depression near 19 N, 135 E, and GFS shows weaker, more widespread low pressure system around 16N 137E. This possible genesis is not expected to affect the ship as it will be near Keelung at that point.

Convection:

Continuous clear calm weather is expected for the next 24hr. Scattered shallow convection associated with the approaching surface low is forecast over the op area beyond 24 hr window.

GFS soundings show continuous saturated column over the op area from 18z Sep 24 (30h forecast) to Sep 28 (120h forecast).

MJO/BSISO:

BSISO indices do not have significant magnitudes but it is forecast to intensify over this week, which means more active convection over the maritime continent. MJO is in Phase 1, convection over Africa.

* COAMPS model run had a problem so 12z is not available, so this info is based on Sept 23 00z run.

SSTs:

Neutral in the op area with cooler temperatures N and warmer temperatures S. Cold water will push into the op area over the 48-h forecast period.

Currents and Wave Heights:

Surface currents are forecast to remain weak below 1 kt through 36 hours over the op area. There is a mesoscale eddy at the northwest corner of the op area, so it is possible for Sally Ride to meet this eddy on the way going back to Keelung.

Significant wave heights forecast to remain below 5 ft over the op area for the next 24 h according to NASA product (WW3). COAMPS shows that significant wave heights will be out of the N/NW at 5-7 ft over the 12-h forecast period. They will transition to be out of the N/NE at 5-7 ft over the 24-h forecast period, weakening to 4-6 ft over the 48-h forecast period.

CAMP2Ex:

One last coordinated campaign with CAMP2Ex P3 for SST measurements.

FORECASTERS: COLE, JONES and NAM



JOINT TYPHOON WARNING CENTER

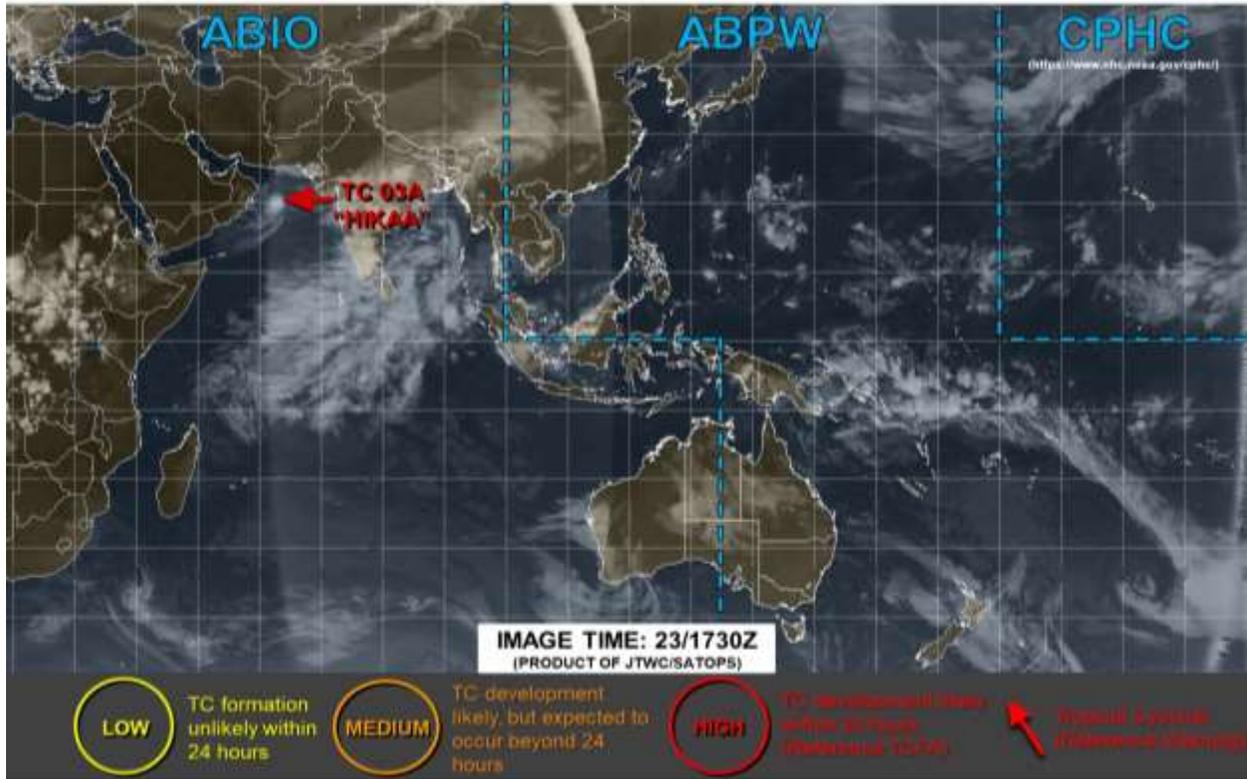


Fig. 1. JTWC TC outlook valid at 1730Z Sep 23.

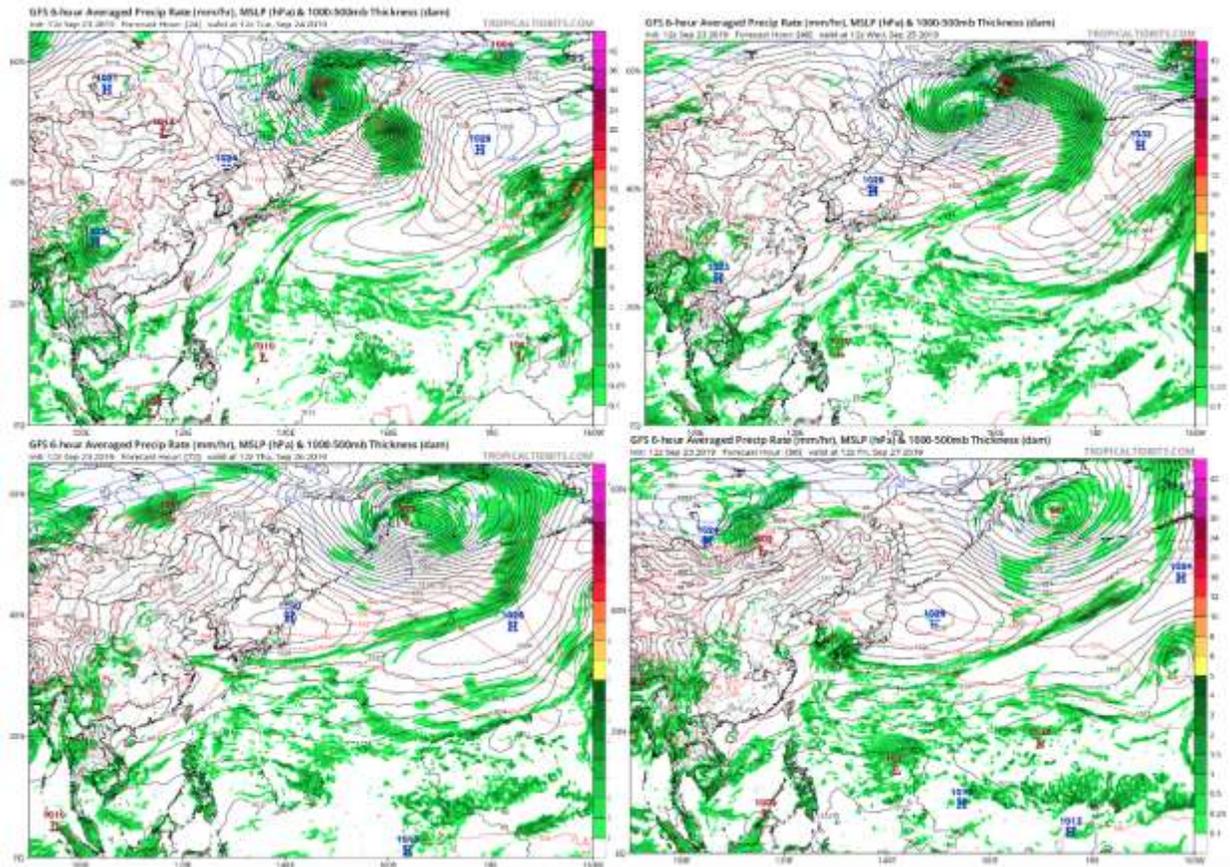


Fig. 2. GFS 6-hr averaged precip initialized on 23Sep12Z. From top to bottom, left to right, the figures valid for 12Z Sep 24, 25, 26, and 27.

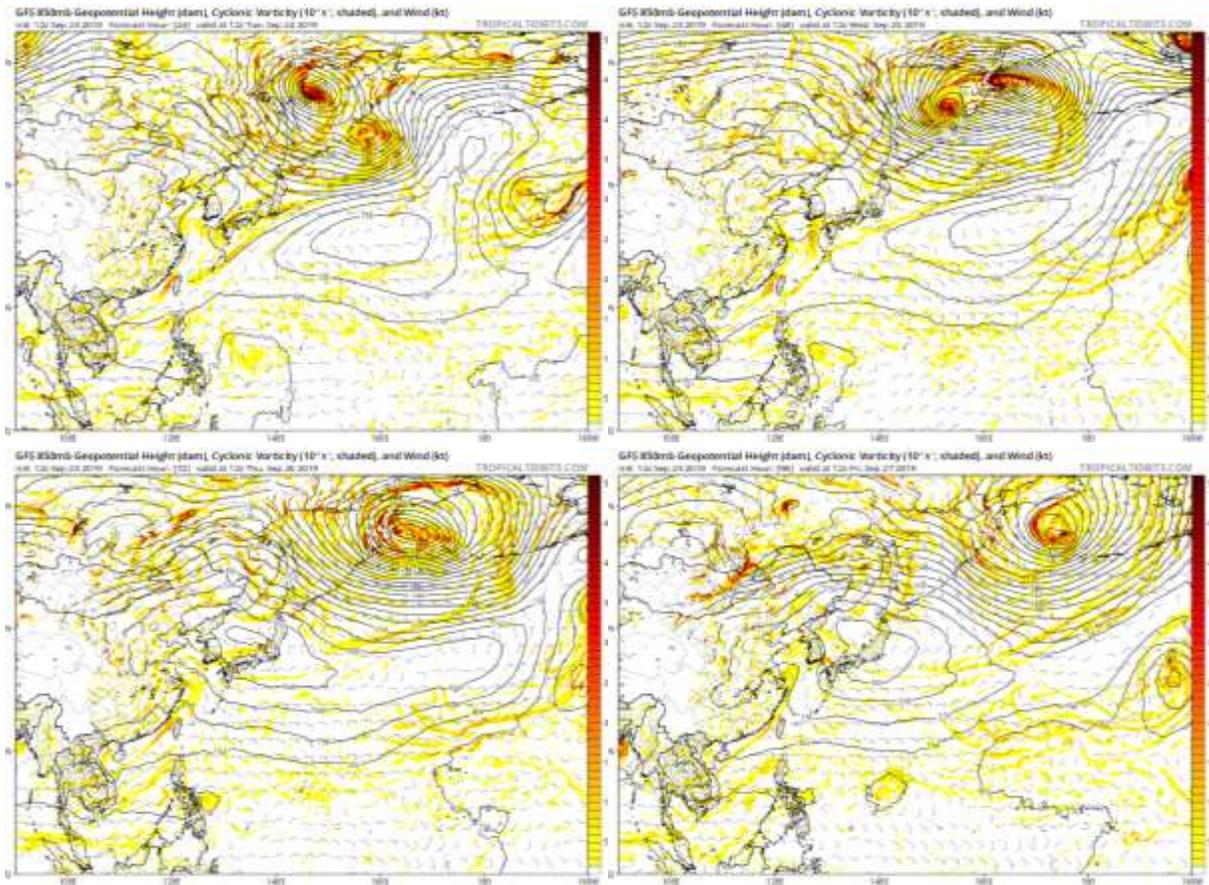


Fig. 3. GFS 850 mb vorticity and wind field and mean sea-level pressure initialized on 23Sep12Z. From top to bottom, left to right, the figures valid for 12Z Sep 24, 25, 26, and 27.

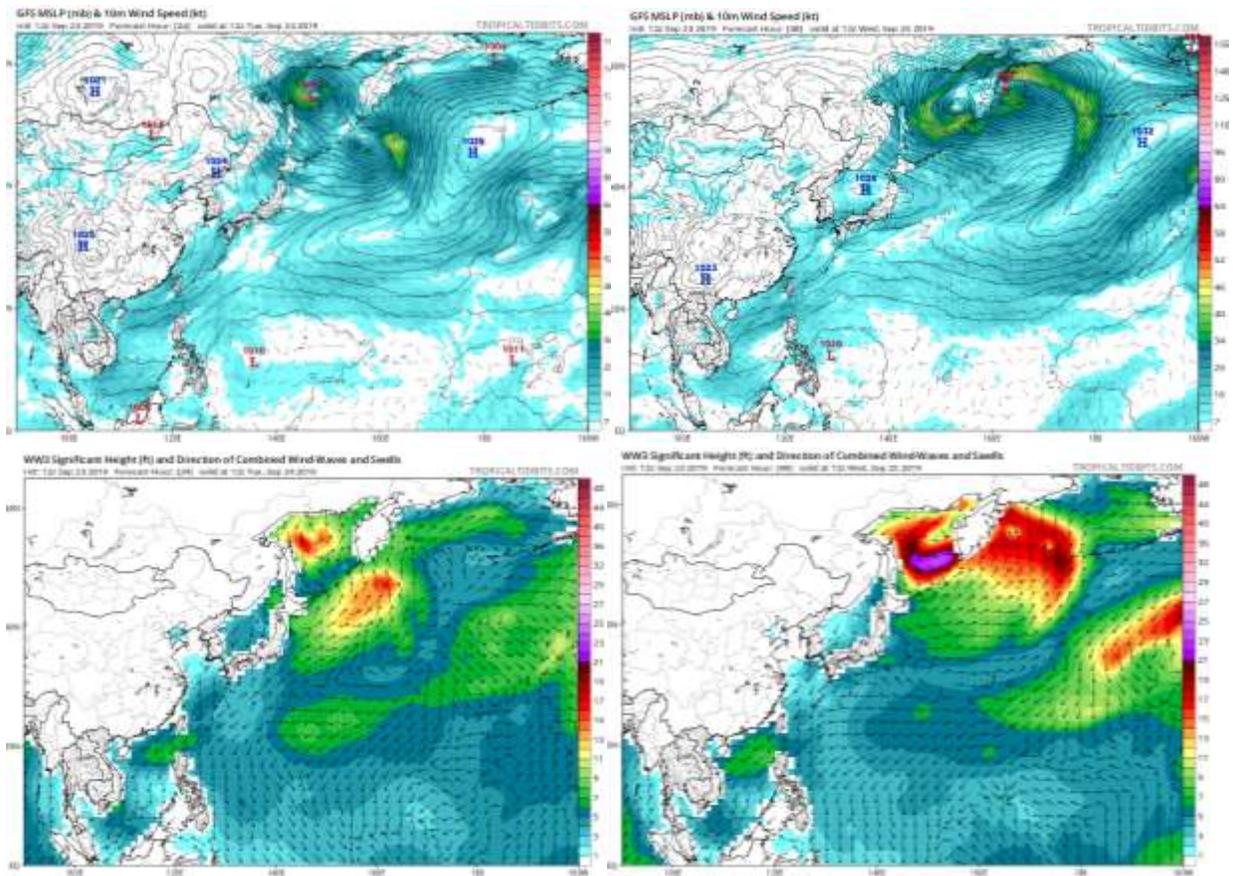


Fig. 4. GFS mean sea level pressure and 10-m winds (top row), and WW3 significant wave heights (bottom row) initialized on 23Sep12Z, valid for 24Sep12Z (left column) and 25Sep12Z (right column).