

2000 UTC 11 October 2018 Forecast Discussion

Summary:

Scattered convection and rainy conditions over the next 1-3 days due to low to the south of Japan (affecting Taiwan as well) and also convection to the south-southeast of ship location. High shear conditions over the Luzon Strait and Taiwan. Rainy conditions will likely subside as the low continues to travel northeast away from ship. Winds remain in range 10-15 kts within the next 12-48 hrs, but remain under 20 kts. Wave heights might increase to 5-7 ft in the next 24-hr, due to high pressure system over the Korean Peninsula. As the ship gets closer to Taiwan, the wind direction will shift from E to NE.

The BSISO I is active in phase 2 over the Indian Ocean. The MJO signal remains suppressed in the area of operation.

Day One (24 hr) Outlook:

The weather is relatively clear. Winds remains 10-15 knots Easterly. Wave products forecast significant wave heights will decrease from 4-5 ft E to 2-3 ft E and then increase back up to 5-7 ft NE as the ship gets closer to Taiwan.

Day Two (48 hr) Outlook:

Winds over the area of operation remains at 10-15 knots. The wind direction changes from E to NE as the ship gets closer to Taiwan. Significant wave height will mostly remains at 5-7 ft NE.

Extended Outlook:

The wind should remains at 10-15 kts Easterly. Significant wave heights will decrease to 4-5 ft, and possibly as low as 3-4 ft near Taiwan by 96 hrs.

Discussion

Convection: Scattered convection located to NE (associated with low over Japan) and to SE (associated with easterly wave) of ship location. Easterly wave convection unlikely to impact ship as ship moves towards Taiwan. Ship is expected to move into area of convective activity, and rainy conditions are likely to persist until the end of the cruise.

MJO/BSISO: Updates to the BOM and ECM forecast products show no change in forecasts. The BSISO I remains active in phase 2 (in the Indian Ocean). The updated MJO signal is active in phase 1 (West hemisphere and Africa), but remains suppressed in the area of operation.

SSTs: Sea surface temperatures within the region are expected to remain within the range of 28-29 C throughout the 24-hr forecast period, with some cooling within the next two-three days due to convective activity within the region.

Currents and Wave Heights: Wave heights are decreasing 2-3 ft E then increasing to 5-7 ft NE in the next 48 hrs. The wave direction remains E. The surface wind is expected to remain at 10-15 kts and change the direction to NE as the ship gets closer to Taiwan.

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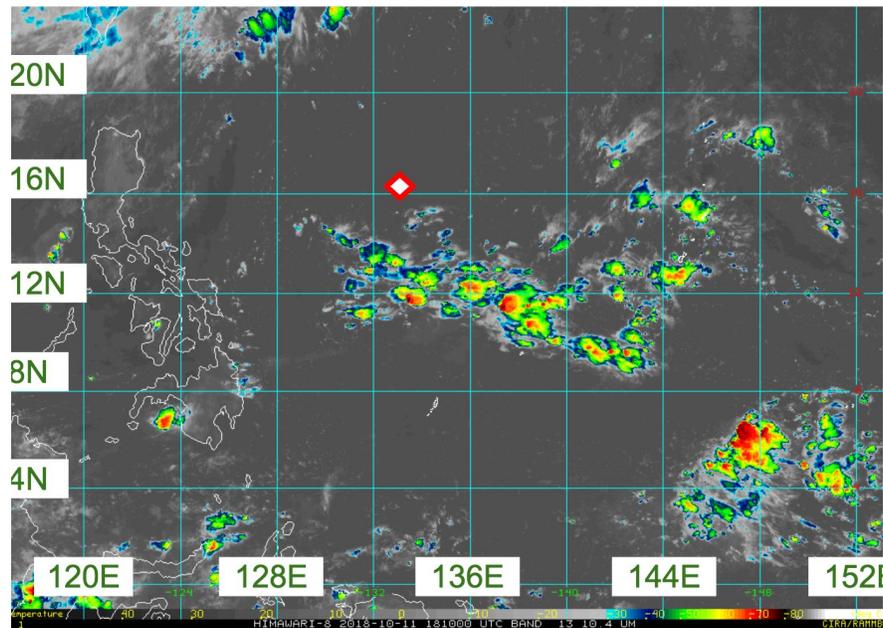


Fig. 1a. Himawari IR imagery (10.4 microns) valid at 1810 UTC 11 October 2018. Ship location is marked with a diamond. [1]

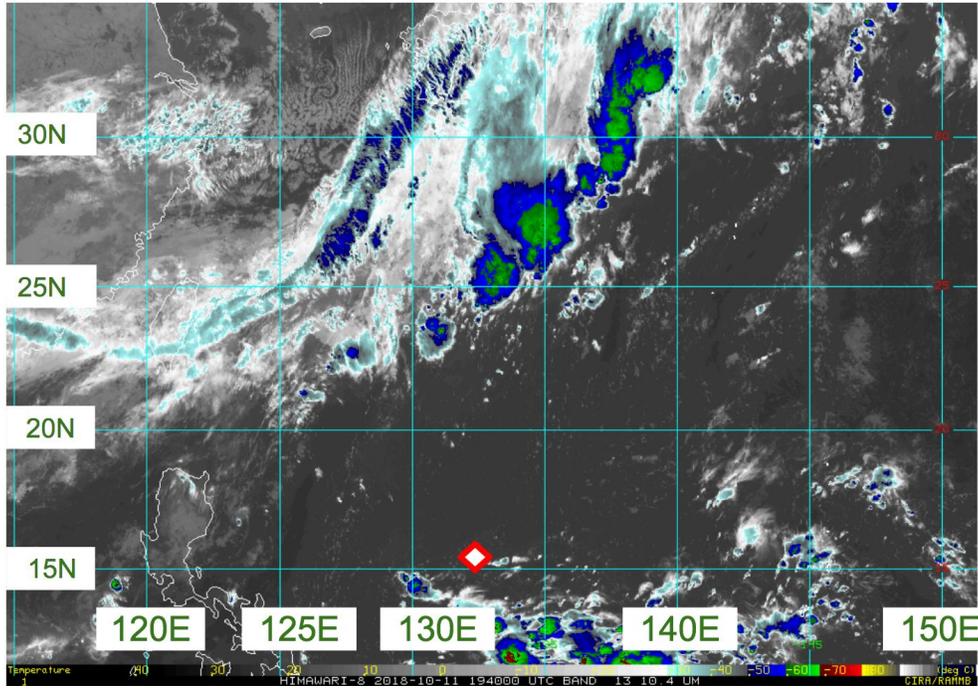


Fig. 1b. Himawari IR imagery (10.4 microns) valid at 1940 UTC 11 October 2018 showing convective system to north of ship location. Ship location is marked with a diamond. [1]

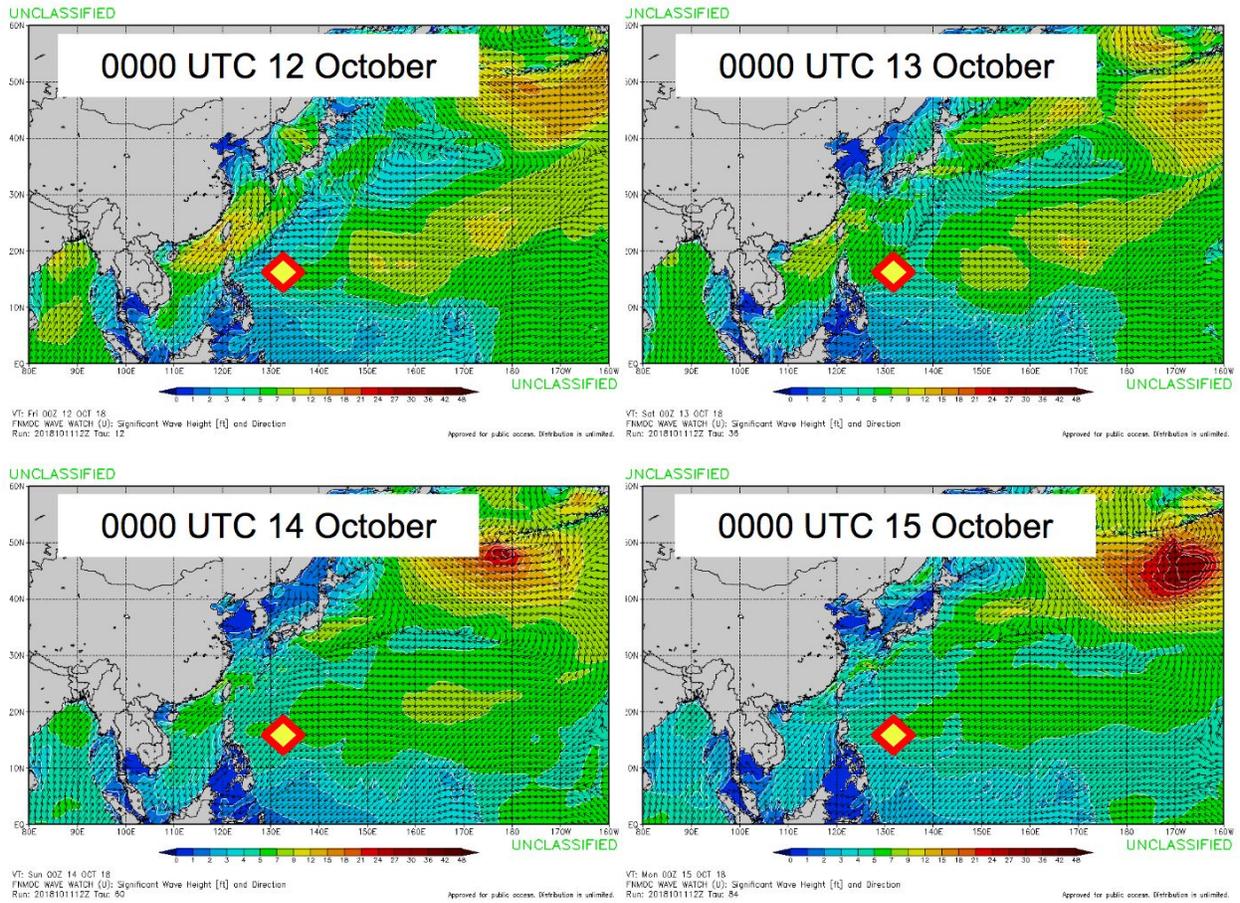


Fig. 2. FNMOC WW3 significant wave height forecast initiated at 1200 UTC 11 October and valid at (top left) 00 UTC 12 October (top right), 00 UTC 13 October (bottom left), 00 UTC 14 October, and (bottom right) 00 UTC 15 October. [2]

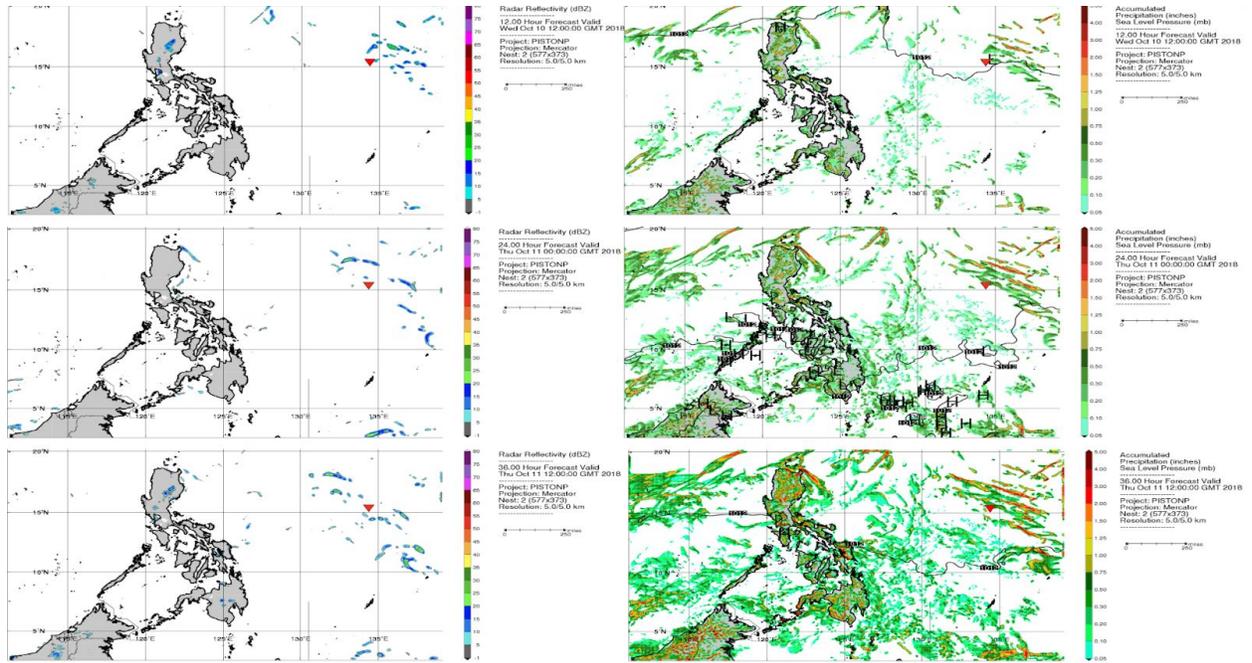


Fig 3. COAMPS reflectivity (left panels) and accumulated rainfall (right panels) forecast at 24, 36, 48 hrs initiated at 0000 UTC 10 October.