Summary

TY Trami is now located near 17.5N 133.2E with an intensity of 115 knots, and is forecasted to intensify 25 knots for the next 24-h forecast period. Trami is tracking to the W-NW with a moving speed of 11 kt, and the track speeds are forecasted to decrease to 2 kt throughout the next 48-h forecast period. Chances for scattered precipitation and organized convection in association with Trami’s trailing rainbands will remain throughout the 48-h forecast period. Significant waves heights are forecasted to reach 9-12 ft during the next 48-h, then remain 9-12 throughout the 48-72 h forecast period, and may potentially reach 12-15 ft during the 72-96 forecast period.

Day One (24 hr) Outlook: Scattered precipitation is expected and chances for organized convection in associated with TY Trami’s trailing rainbands increase through 24-h forecast period. Winds will come from the W-SW between 15-25 knots. FNMOC WW3 shows significant wave heights near the area of operation increasing from 5-7 ft to potential 9-12 ft throughout the 24-h forecast period.

Day Two (48 hr) Outlook: Scattered convection is expected and chances for convection associated with Trami’s trailing rainbands remain high over the area of operation. Winds over the area of operation will remain from the SW between 15-25 knots. FNMOC WW3 shows significant wave heights between 9-12 ft persisting throughout the 24-48 h forecast period, while COAMPS show significant wave heights between 7-9 ft.

Extended Outlook:

Chances for organized convection decrease as Trami continue tracks to the W-NW away from the area of operation throughout the 48-96 h forecast period, while a chance for scattered precipitation is expected over the ship. Winds over the area of operation will come from the SW between the 48-60 h forecast period, and shift slightly from the S-SW between the 60-96 forecast period with an intensity between 20-25 knots. FNMOC WW3 shows significant wave heights near the area of operation persisting 9-12 ft towards the end of the 48-72 h forecast period and potentially reaching 12-15 ft during the 72-96 h forecast period due to Trami’s slow-moving track.

Discussion

TCs: TY Trami is now with a clear eye and located near 17.5N 133.2E with an intensity of 115 knots, and is forecasted to intensify 25 knots within the next 24-h forecast period, reaching the intensity of 140 knots. The environment is still favorable for Trami to continue intensifying, with low-shear, high SST and a TUTT cell located to the NW of Trami. Trami is now tracking to the W-NW with a moving speed of 11 kt, and the track speeds are forecasted to decrease to 2 kt throughout the next 48-h forecast period due to a deepening midlatitude shortwave trough over
the east China sea. Both the GFS and ECMWF show a similar NW trajectory of Trami during the 120-h forecast period, while forecasts of Trami’s track are still uncertain beyond the 120-h forecast period. Although Trami gradually moves northwestward and has passed the closest position to the area of operation, swells from Trami will affect the area of operation, along with chances for precipitation in association with the trailing rainbands.

There are now two area of interests (AOI), AOI 1 and AOI 2, labeled by NRL TC page. AOI 1 is now located near 20N, 166E, and AOI 2 is located near 10N, 156E. Both AOIs are now associated with a fair amount of vorticity on 850 mb. AOI 1 is forecasted to intensify and possibly reach tropical storm intensify for the next 48-h forecast period by both the GFS and ECMWF. AOI 1 may have no impact to the area of operation due to the NW forecast trajectory. AOI 2 is forecasted to have a closed circulation for the next 48-h forecast period by both the GFS and ECMWF, and potentially become a tropical storm for the next 120-h forecast period by the GFS. There is still a large amount of uncertainty regarding to the development and the track. We will continue to closely monitor the potential developments over the next few days.

**Convection:** The Himawari-8 IR satellite imagery currently shows no convective activity over the area of operation. Scattered convection and a chance for organized convection in association with Trami’s trailing rainbands persist throughout the 48-h forecast period as Trami continues to track to the WNW.

**MJO/BSISO:** The MJO forecast provided by the ECMWF has been updated to show the two week period beginning on 23 September, which shows a similar pattern as yesterday’s forecast with a phase 8 MJO signal currently and then rotating to phase 1 in the beginning of October. There is no updates for the BOM, showing a phase 7 MJO signal currently and then rotating to phase 8 near the end of September. The BSISO forecast from both the BOM and ECMWF have no updates, showing a BSISO1 weak-amplitude phase 2 signal which propagates to phase 1 for the next 3 days, and then propagates from phase 1 to phase 2 for the 5-9 day forecast.

**SSTs:** Sea surface temperatures are expected to be between 28-29 C throughout the 24-h forecast period.

**Currents and Wave Heights:** FNMOC WW3 shows significant wave heights near the area of operation near the area of operation increasing from 5-7 ft to potential 9-12 ft throughout the 24-h forecast period, remaining between 9-12 ft throughout the 48-h forecast period, then persisting 9-12 ft towards the end of the 48-72 h forecast period and potentially reaching 12-15 ft during the 72-96 h forecast period. Currents will shift from the NW to W near the end of the 24-h forecast period, and remain from the W throughout the 24-96 h forecast period.

FORECASTERS: CHA
Fig. 1. Himawari IR imagery (10.4 microns) valid at 1810 UTC 23 September 2018. [1]

Fig. 2. JTWC forecasted track and intensity of TS Trami, issued at 1200 UTC 23 September 2018 and valid through 1200 UTC 28 September 2018. [2]
Fig. 3. COAMPS-TC 96-h forecast for TS Trami initialized at 0000 UTC 23 September and valid at 0600 UTC 27 September. The mesoscale domain shows (left) 10-m wind speed (knots; shaded) and streamlines, (middle) radar reflectivity (dBZ), and (right) sea level pressure (hPa; shaded and contoured). The red dot represents the current ship location.

Fig. 4. GEFS ensemble 10-m circulation forecast initiated at 1200 UTC 23 September 2018 and valid from the analysis time through 1200 UTC 26 September. Circulation centers are colored with respect to maximum wind speed. Purple: ≤ 20 knots, Blue: 20-34 knots, Red: > 34 knots. [3]
Fig. 5. FNMOC WW3 significant wave height forecast initiated at 1200 UTC 23 September and valid at (top left) 0000 UTC 24 September, (top right) 0000 UTC 25 September, (bottom left) 0000 UTC 26 September, and (bottom right) 0000 UTC 27 September. [6]