

## Summary

Trami has weakened to a typhoon near 21.3N 129.2E with an intensity of 90 knots, and is moving slow to north. Swells from Trami will continue affect the area of operation, with significant waves heights in the 7-12 ft range expected to persist during the next 48-h. Convection over the area of operation is largely suppressed and is expected to remain light and scattered throughout the 48-h forecast period. The Invest 94W shows continued potential for development with a track to the north of the area of operations placing it near Guam in 72-h.

**Day One (24 hr) Outlook:** Scattered and isolated precipitation is expected throughout 24-h forecast period, and chances for organized convection remain low. Winds will come from the SW between 10-20 knots. FNMOC WW3 shows significant wave heights between 7-9 ft persisting for the next 24-h forecast period, while COAMPS shows significant wave heights decreasing from 7-9 ft to 5-7 ft for the next 24-h forecast period.

**Day Two (48 hr) Outlook:** Scattered and isolated precipitation is expected throughout 24-h forecast period, and chances for organized convection remain low. Winds will mainly come from the S-SW between 10-20 knots. FNMOC WW3 shows significant wave heights between 7-9 ft persisting throughout the 24-48 h forecast period.

**Extended Outlook:** Convective activity is still expected to be suppressed over the next 48-96 hours. Winds over the area of operation will transition to the NW between 5-15 knots throughout the 48-72 h forecast period, and rotate counterclockwise from the NW to W throughout the 72-96 h forecast with an intensity of 10-20 knots as Invest 94 W tracks to the NW and passes over Guam. FNMOC WW3 shows significant wave heights mostly remaining 7-9 ft between the 48-72 h forecast period near the area of operation, and decreasing to 5-7 ft between the 72-96 h forecast period.

## Discussion

**TCs:** TY Trami was located near 21.3N 129.2E at 12 UTC 26 September with an intensity of 90 knots, and is forecasted to maintain its intensity in the next 24 hours. Trami is slowly moving northward now at 3 kts, and is expected to continue its slow northerly motion in the 24 - 48 hour time frame, followed by a rapid acceleration to the northeast as it is picked up by a midlatitude trough. Swells from Trami will continue to affect the area of operation in the next 24-48 hours.

Tropical depression 29W has formed at 30N and is forecast to move northward away from the area of operation.

JTWC has upgraded Invest 94W to a 'medium' chance for development, suggesting formation will occur after 24 hours. A tropical cyclone formation alert has been issued for its companion

91P in the southern hemisphere, and global models continue to indicate twin cyclone development around 157E. Both the ECWMF and GFS have stayed consistent in bringing a cyclonic circulation to the northwest near Guam at 72 hours on 29 September. At the current time there are no deterministic or ensemble tracks bringing a TC near the ship, and all solutions are consistently to the north of the area of operations. We will continue to closely monitor the potential development of 94W over the next few days.

**Convection:** The Himawari-8 IR satellite imagery currently shows no convective activity over the area of operation. Scattered convection is possible throughout the 48-h forecast period, and the convective activity is expected to be suppressed over the next 48-96 h forecast period.

**MJO/BSISO:** Both the MJO forecast provided by the ECMWF and the BOM show a phase 8 MJO signal currently and then rotating to phase 1 in the beginning of October. The BOM with an extended outlook to November 4 shows a stationary phase 1 signal with decreasing amplitude throughout October. The BSISO forecast from both the BOM and ECMWF show a BSISO1 phase 1 signal currently and then moving into phase 2 near the end of September. The BOM show a phase 2 signal propagating to phase 6, while the ECMWF show a relatively stationary phase 2 signal in the beginning of October.

**SSTs:** Sea surface temperatures are expected to be between 28-30 C throughout the 24-h forecast period.

**Currents and Wave Heights:** FNMOC WW3 shows significant wave heights near the area of operation persisting 7-9 ft throughout the 72-h forecast period, decreasing to 5-7 ft throughout 72-96 h forecast period. Currents will remain from the W throughout the 24-h forecast period, and gradually shift from the W to NW between the 24-96 h forecast period.

FORECASTERS: BELL and CHA

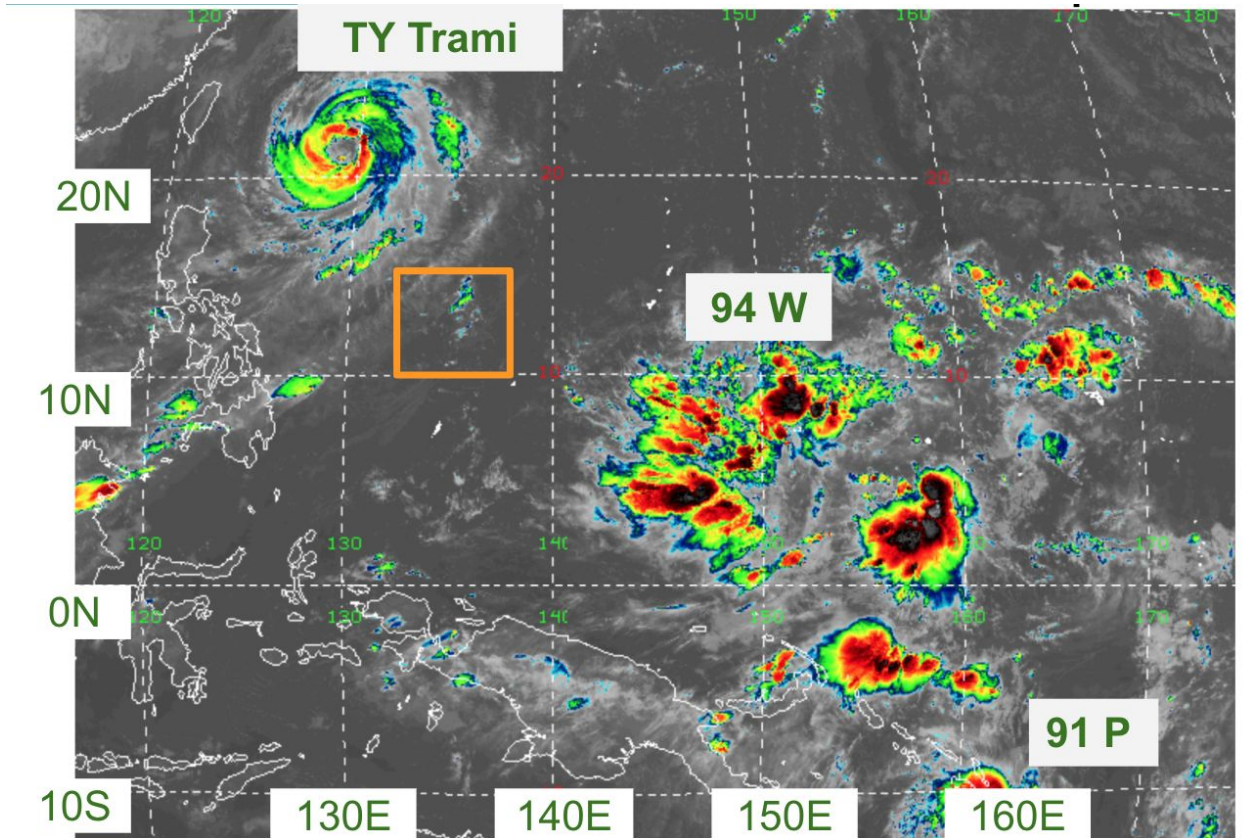


Fig. 1. Himawari IR imagery (10.4 microns) valid at 1540 UTC 25 September 2018. [1]

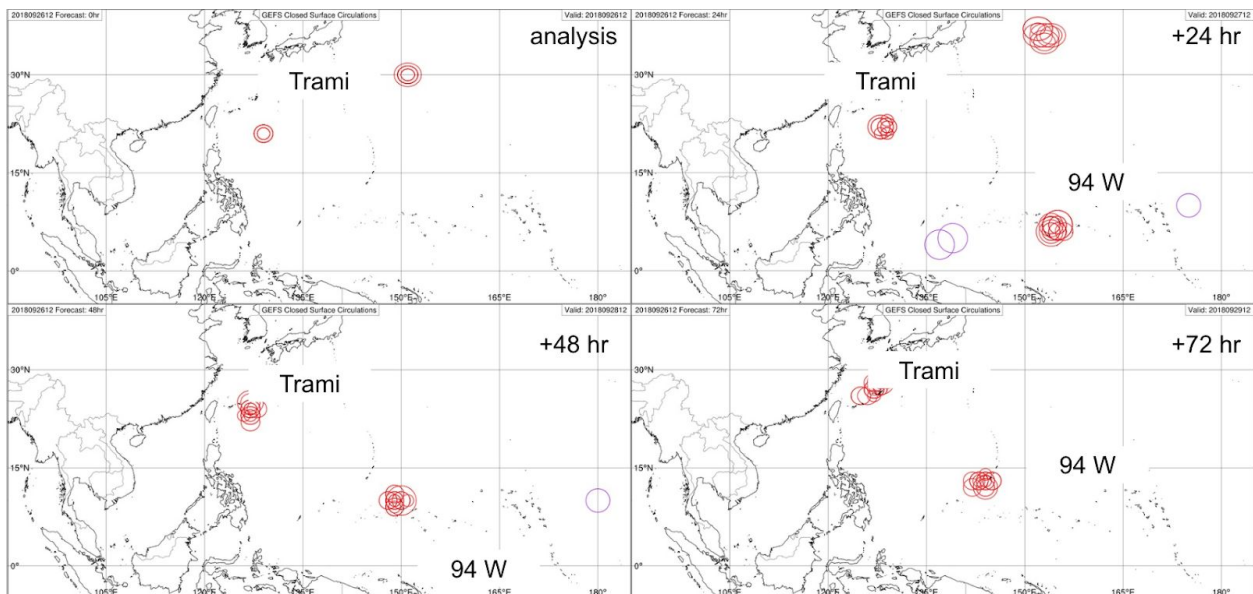


Fig. 2. GEFS ensemble 10-m circulation forecast initiated at 1200 UTC 26 September 2018 and valid from the analysis time through 1200 UTC 29 September. Circulation centers are colored with respect to maximum wind speed. Purple:  $\leq 20$  knots, Blue: 20-34 knots, Red:  $> 34$  knots.

[2]

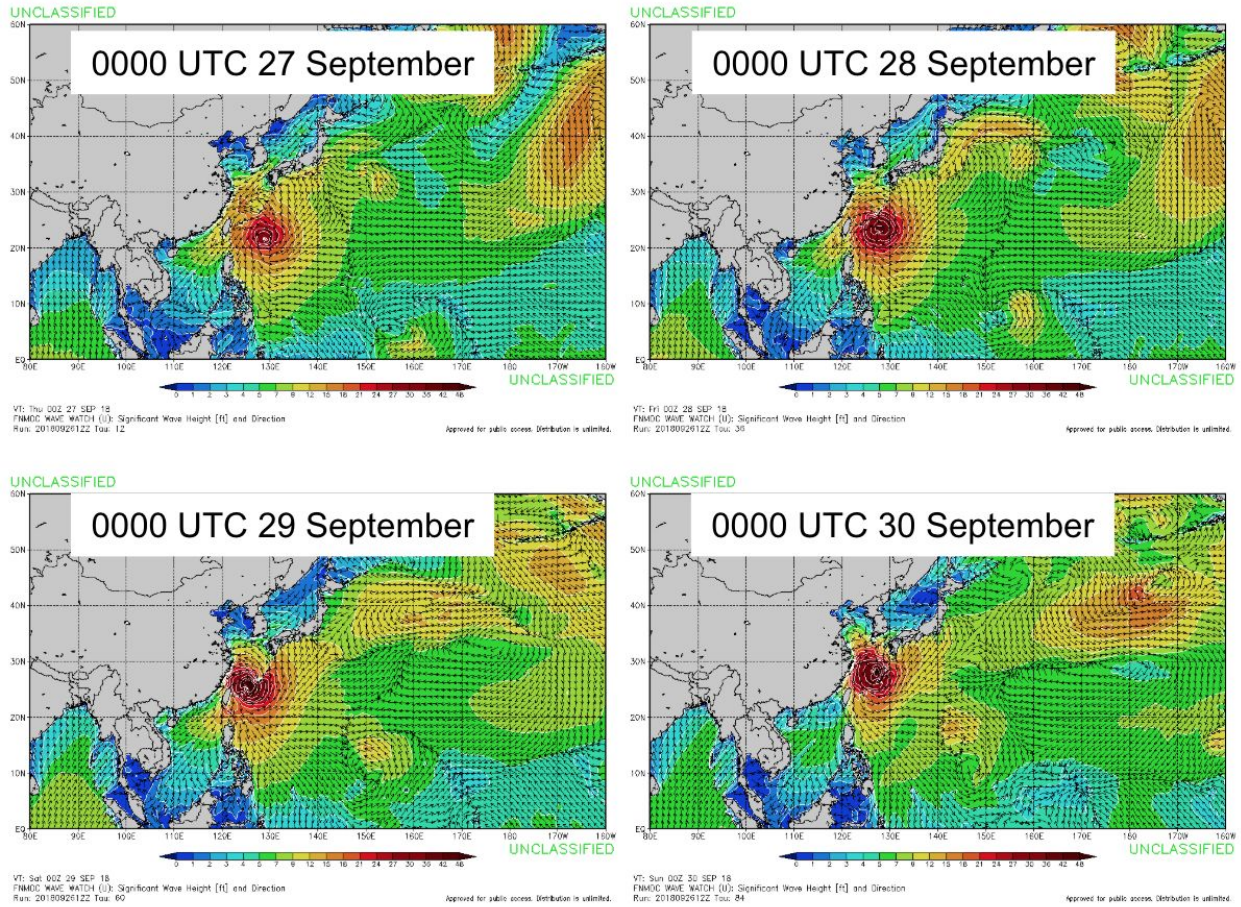


Fig. 3. FNMOC WW3 significant wave height forecast initiated at 1200 UTC 26 September and valid at (top left) 0000 UTC 27 September, (top right) 0000 UTC 28 September, (bottom left) 0000 UTC 29 September, and (bottom right) 0000 UTC 30 September. [3]