

## Summary

Continued southwesterly monsoon flow and strong northeasterly upper-level winds are expected to continue near the area of operation (12N 134.5E) over the next week. Invest 96W and TS 18W (Yagi) are not expected to have any impacts on Taiwan or the transit from Taiwan to Palau. Monsoon driven convection East of Luzon over the next few days is expected to persist with both the GFS and ECMWF now suggesting possible cyclogenesis of a TC but with differences in timing and location. Both scenarios suggest that 30-35 kt winds are possible along the transit region on 12Z August 13 due to the monsoon trough which could persist through 12Z August 15.

**Day One (24 hr) Outlook:** No expected TC genesis with impacts on the area of operation or Taiwan expected.

**Day Two (48 hr) Outlook:** No expected TC genesis with impacts on the area of operation or Taiwan expected. Increased precipitation is expected East of Luzon in the expected transit region over the next 48 hours.

**Extended Outlook:** The GFS deterministic is continuing to suggest a rollup of vorticity around 20N, 130E developing into a potential TC by 12Z August 13. Southwesterly monsoon flow will contribute to enhanced precipitation east of Luzon which is moving towards the northwest contributing to the vorticity expected to spin up the TC. The ECMWF maintains a broader area of low-level vorticity compared to the GFS but does eventually suggest a possible TC formation near Taiwan. The timing and strength of a building subtropical ridge to the east will strongly influence the location of possible genesis which is likely still 5 days away. Similar to yesterday's forecast, the potential system could have impacts on the transit from Taiwan to Palau.

## Discussion

**TCs:** Yagi remains under the influence of high northeasterly shear. Slow northward motion and a relatively constant intensity are expected to continue. No threat to operations expected. 96W in the South China Sea continues to be impacted by the high shear as well, with the associated convection west of the low-level center. It is still expected to move towards China and not pose a threat to operations leaving Taiwan. Both the GFS and EC show indicate region of low pressure developing east of Luzon and tracking westward over Taiwan sometime on August 15. The EC develops a weaker circulation, but tracks fairly well with the GFS otherwise. GEFS supports development of circulation as well.

**Convection:** Continued convection and precipitation expected on the southern periphery of Yagi's circulation associated with convergence in the low-level monsoonal flow. GFS expects

continued broad low-level convergence associated with the monsoonal flow, so this pattern is expected to continue over the next week. Eventually, northeastward extent of strong monsoonal flow is forecasted to weaken, suggesting reduced precipitation east of Luzon in the longer term (Fig. 4).

**MJO/BSISO:** The BSISO magnitude remains small and is forecast to remain weak over the next week according to BOM and ECM ensembles. The ensemble mean shows movement towards low amplitude Phase 6 (South China Sea) near August 20 but the ensemble spread shows lower confidence. The influence of the monsoon may dominate the signal over the next week. BSISO indices don't agree, but some (BOM, EC, CFS) suggest there could be a reduction in clouds in the study area in the longer term (~15-25 August).

**SSTs:** Remain warm between 29-30°C.

**Currents and Wave Heights:** Currents continue heading to the SW at 0.25-0.5 cm/s. Wave heights between 5-7 feet over the next two days.

FORECASTERS: TRABING and DEHART

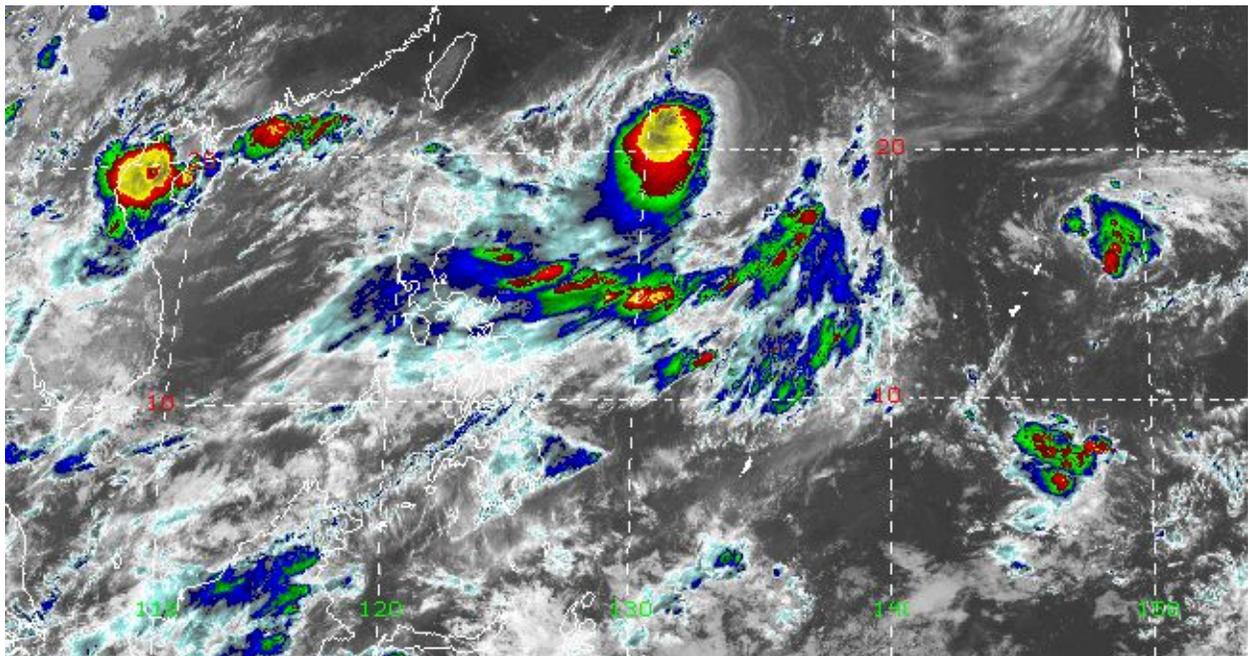


Fig. 1.1750 UTC August 9 11.2 micron Himawari 8 imagery. [1]

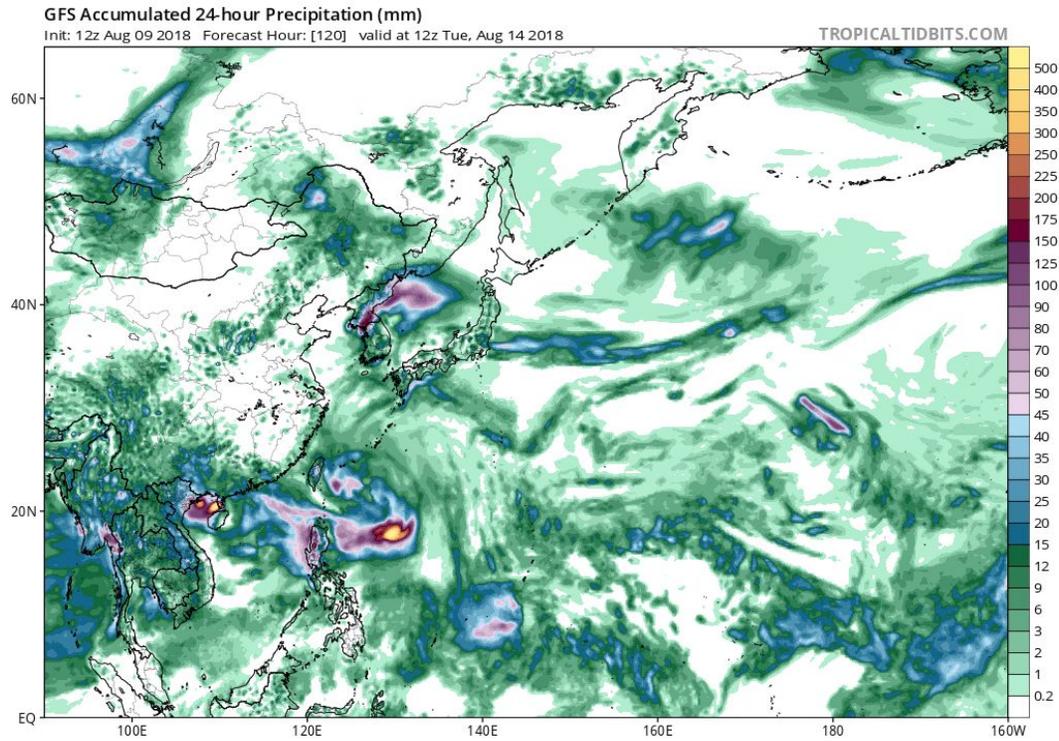


Fig. 2. 24-h GFS precipitation between 12Z August 13 to 12Z August 14. [2]

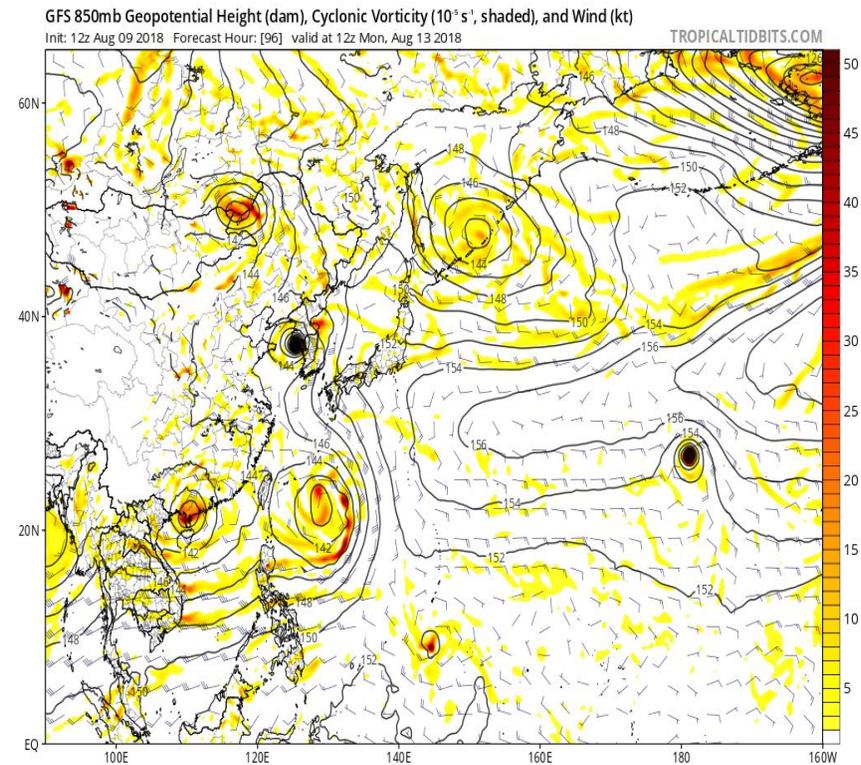


Fig 3. 96-h GFS 850-hPa Geopotential height, relative vorticity, and wind. [3]

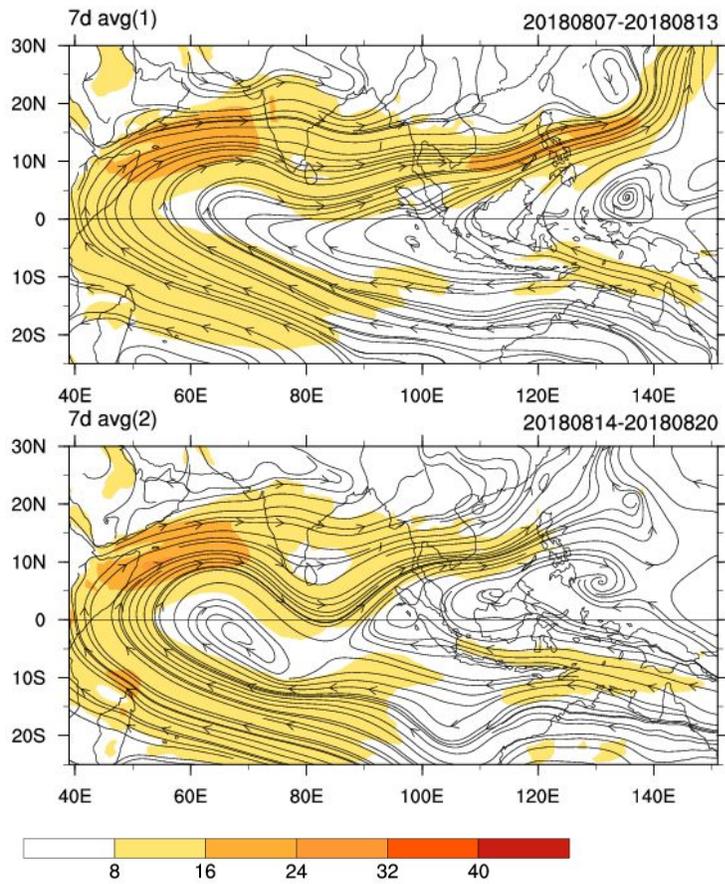


Fig. 4. 7 day averaged forecasts of 850-hPa winds and streamlines from the GFS on August 7th. [4]