

2000 UTC 21 August 2017 Forecast Discussion

Summary

TS Hato (Isang) is located just north of Luzon and is moving to the WNW with maximum sustained winds of 35 kts. Northerly shear is displacing the convection to the south towards Luzon. As Hato continues to track the WNW the winds will shift from westerly to southerly along with an increase in precipitation and significant wave heights.

Day One (24 hr) Outlook: TS Hato will continue to move WNW through the Luzon Strait towards Taiwan. It is forecast to strengthen to 50 kts, but is moving away from Luzon. Local winds will increase to 20 kts from the west, with heavy precipitation over northern Luzon.

Day Two (48 hr) Outlook: Winds will shift to slightly stronger southerlies and significant wave heights will increase. Wide spread heavy rainfall is expected.

Extended Outlook: Global models are in broad agreement that another cyclonic system will pass through the area later in the week, but intensity varies widely. GFS is indicating another tropical cyclogenesis later this week near Luzon, so we will continue to monitor that area.

Discussion

TCs: TS Hato (Isang) is located in the Luzon Strait as a tropical storm (Fig. 1). Hato is being affected by northerly wind shear up to 20 knots, which is displacing the convection towards the south over the west coast of Luzon. Model diagnostics have it going WNW, with forecast intensification into a strong tropical storm within the next 48 hours (Fig. 2).

Convection: Heavy convection is expected to the north of the cruise area associated with Hato, with increasing widespread rainfall in the 24 - 48 hour timeframe as the winds shift to westerly and then southwesterly (Fig. 3).

MJO/BSISO: BSISO index shows a trend towards propagation of the active phase into the South China Sea within the next week. MJO signal remains weak.

SSTs: SSTs over the larger area of interest generally remain warm above 30 degrees Celsius, but are forecast to slightly cool near Northern Luzon due to Hato.

Currents and Wave Heights: Surface currents remain weak, but significant wave heights are forecast to increase up to between 6 and 9 ft. in the area of interest after 00 UTC on the 22nd (Fig. 4)

FORECASTERS: BELL, NAM

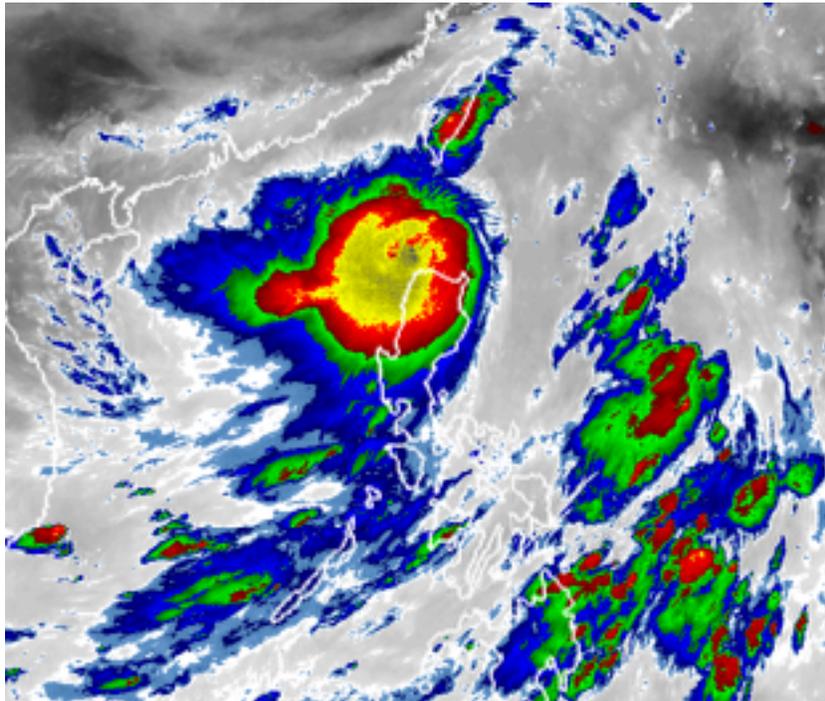


Fig. 1. IR imagery at 1850 UTC from Himawari-8 showing TS Hato north of Luzon

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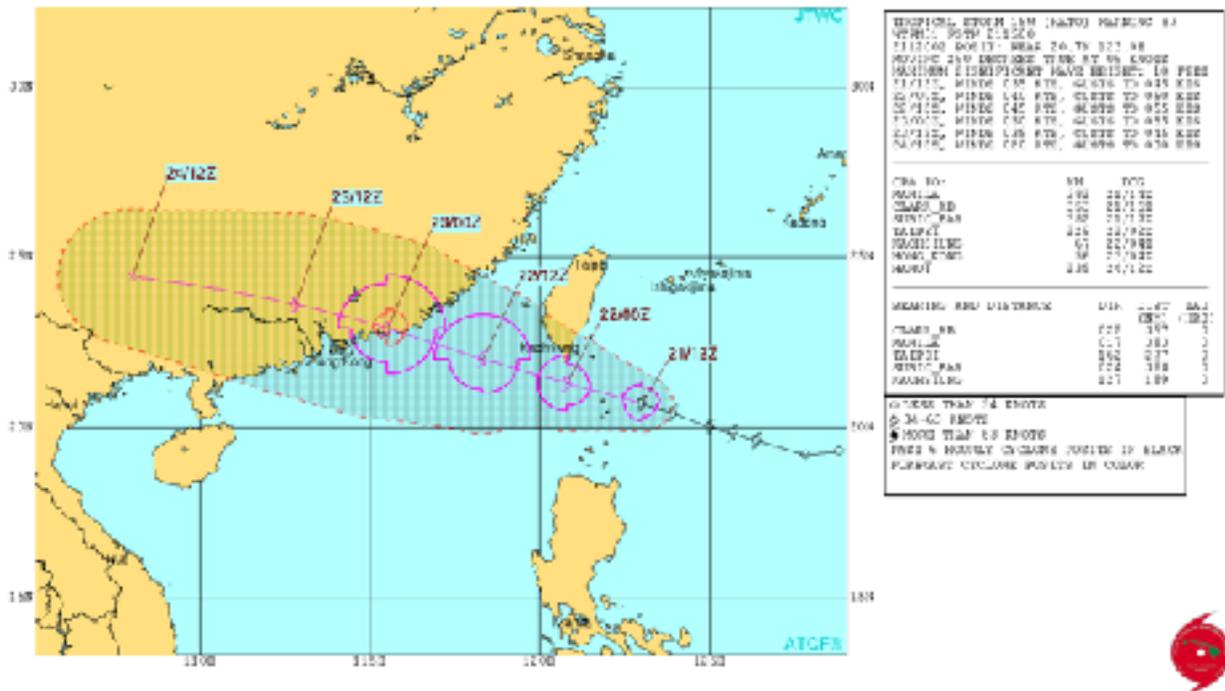


Fig. 2. TC warning graphics from JTWC

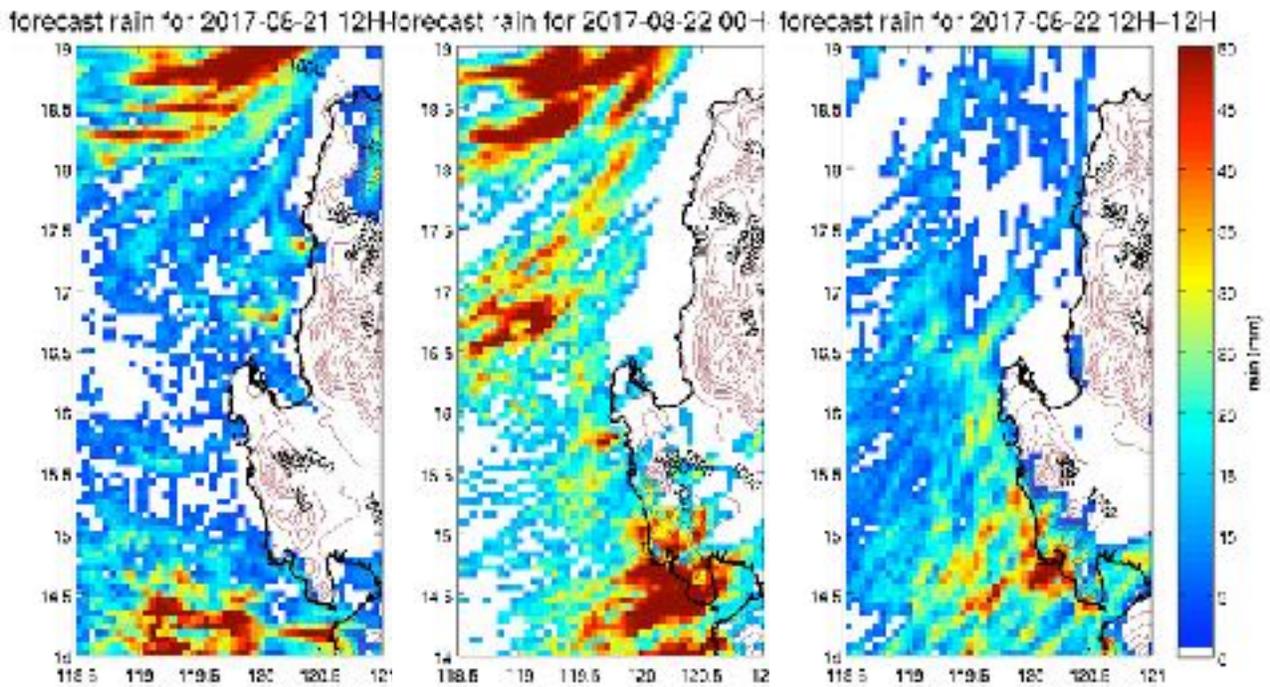
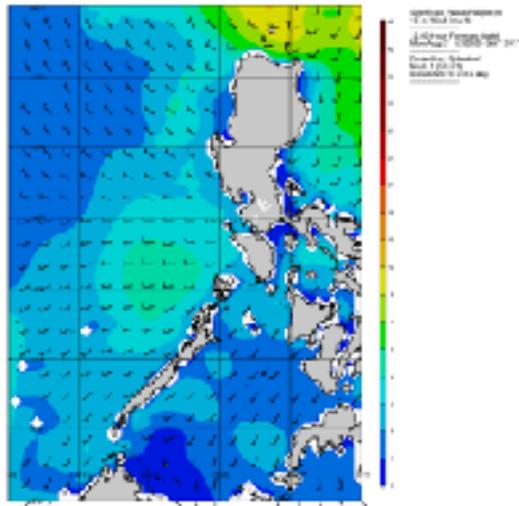
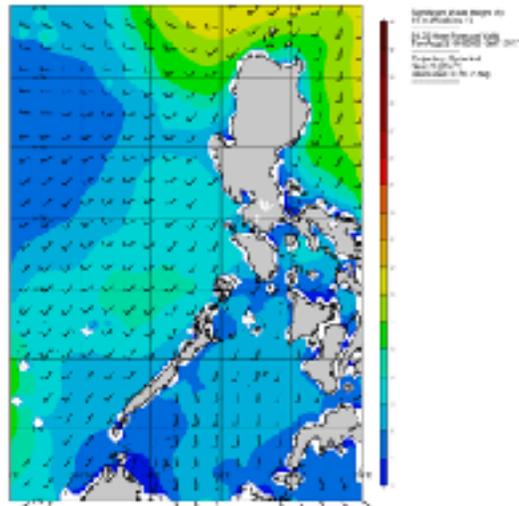


Fig. 3. 36-hr WRF rain forecast, courtesy of Gerry Batas

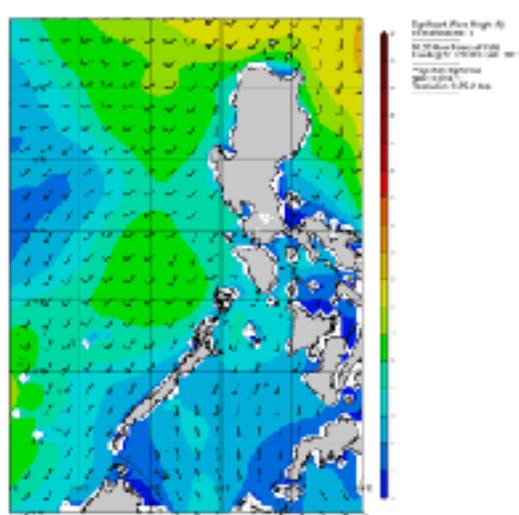
12-h FCST (Aug. 21 12Z)



24-h FCST (Aug. 22 00Z)



36-h FCST (Aug. 22 12Z)



48-h FCST (Aug. 23 00Z)

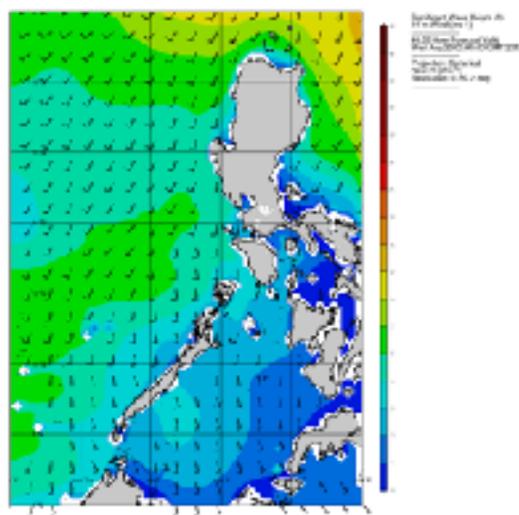


Fig. 4 Significant Wave Height from COAMPS model forecast initialized at 00 UTC 21 August 2017