

A Discussion on TS. Wipha (1907)

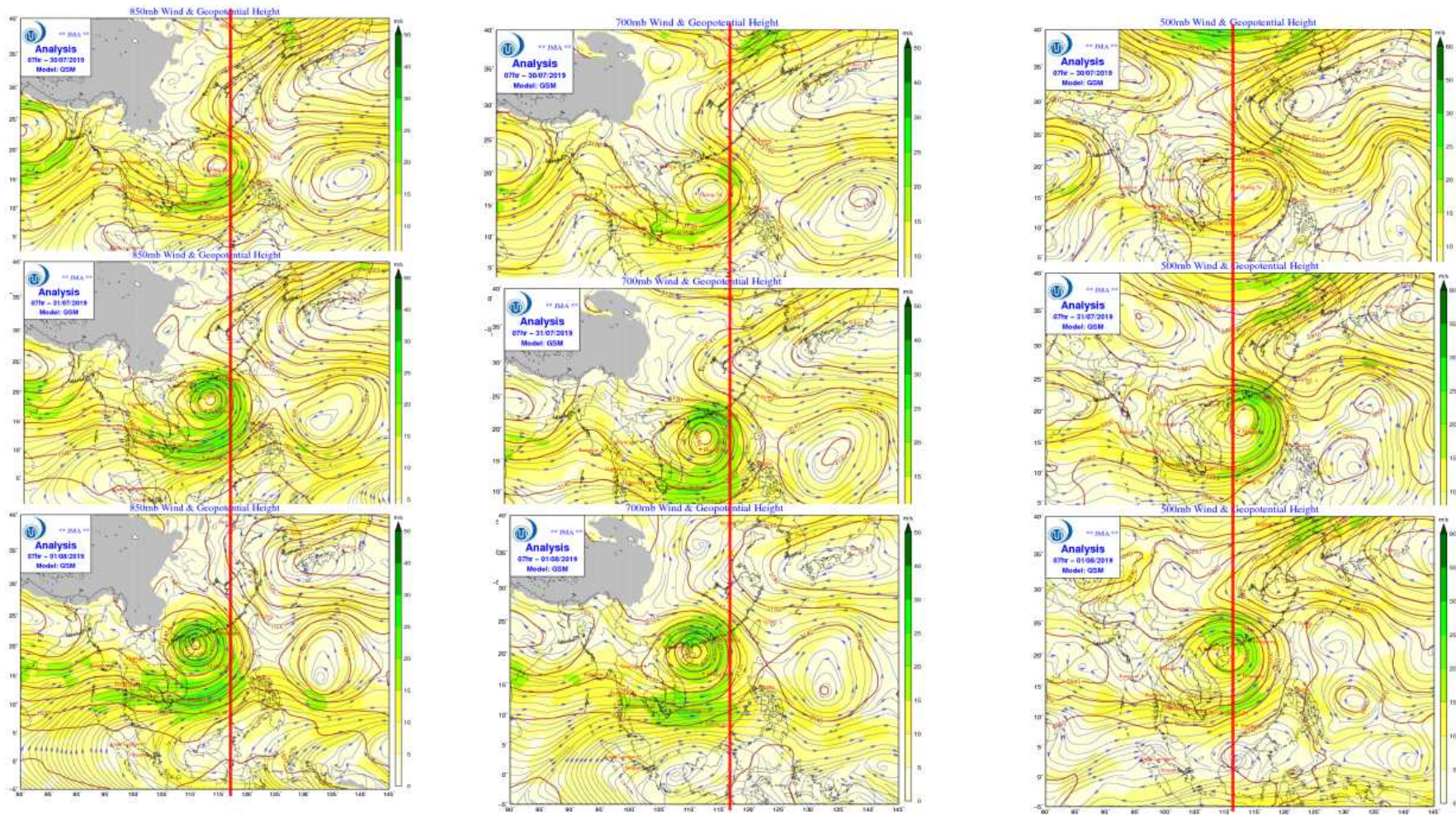
Vietnam NCHMF

TS. Wipha track

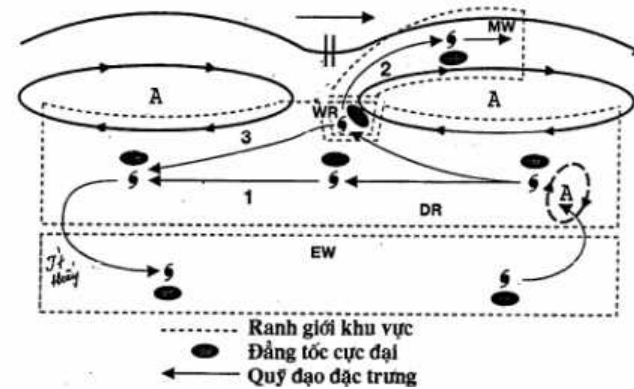
- Wipha formed about 400km from Hainan island
- Significant moved northward when approaching Hainan island
- Cause heavy rain in Vietnam
- Global model did not forecast this north-ward movement well but the regional ensemble system did.



Large scale circulation and situation

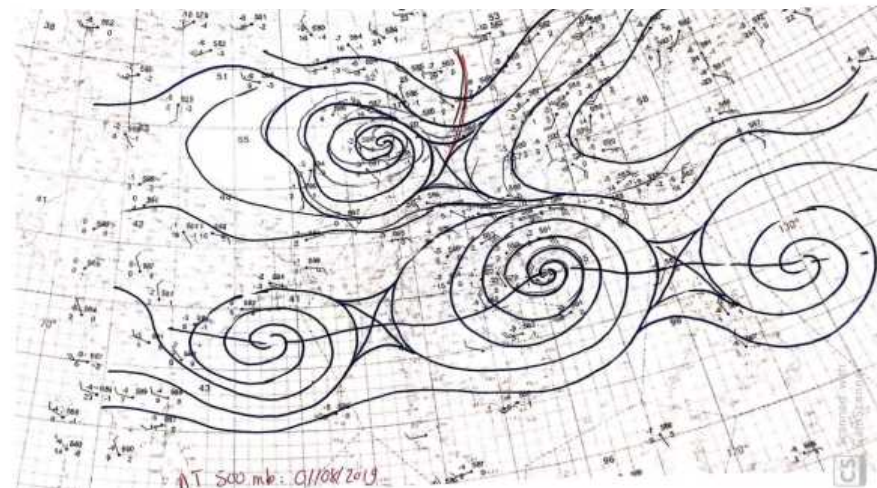


Large scale circulation and situation



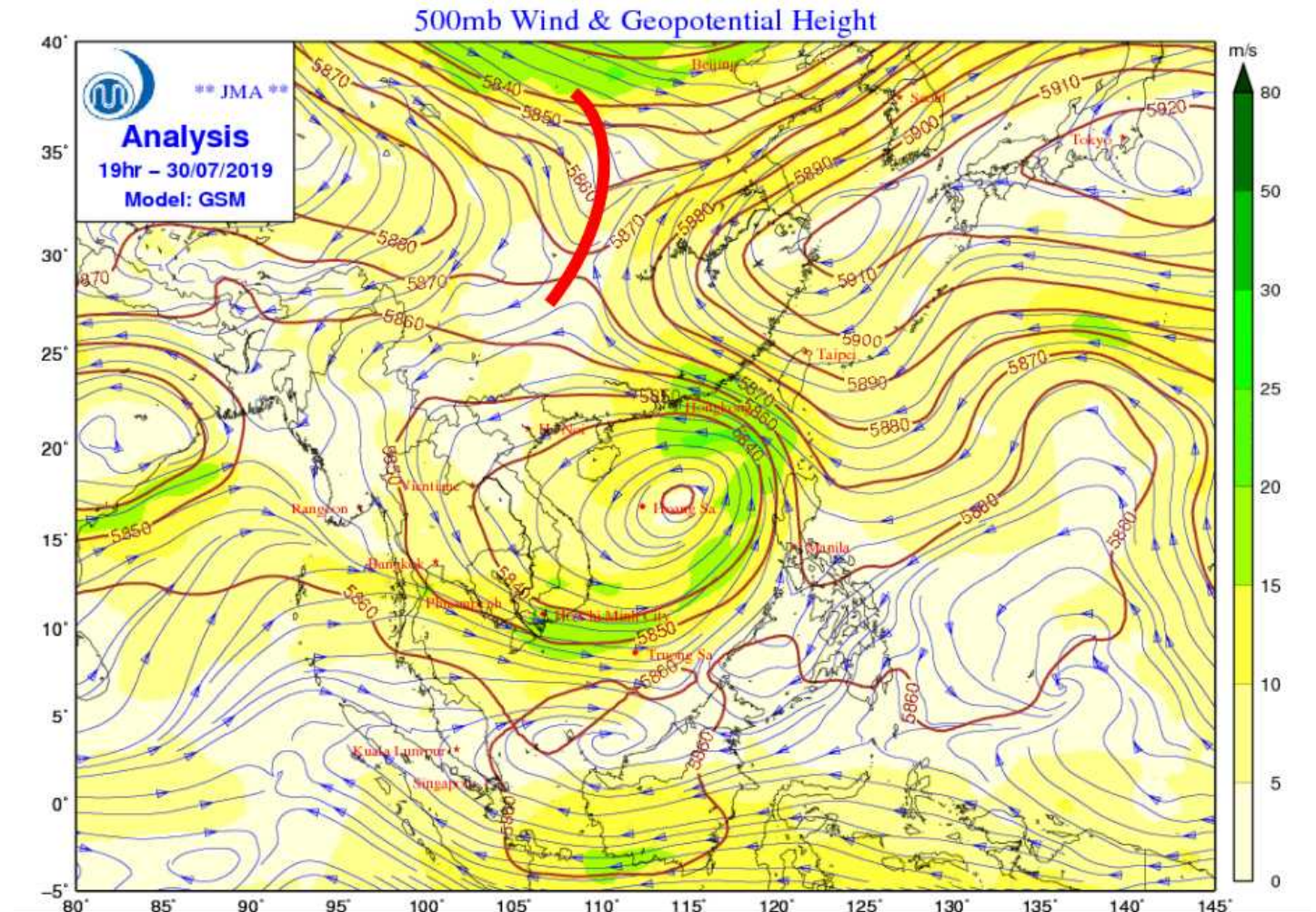
Emperical model for TC track

- Subtropical ridge moving eastward when subtropical High weakened

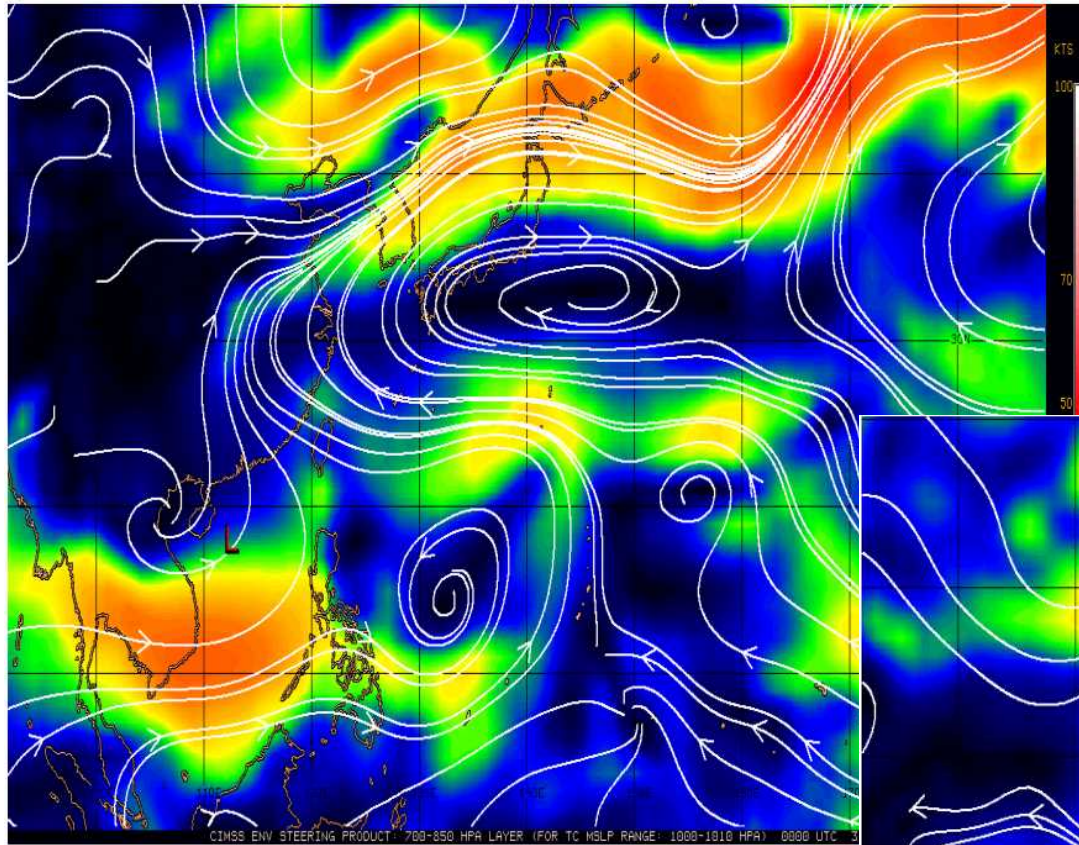


Large scale circulation and situation

- Subtropical High retreat to the east on 31th July and intensify to the west again on 01 August.
- Sub-tropical trough close to the cyclone, about 1000km

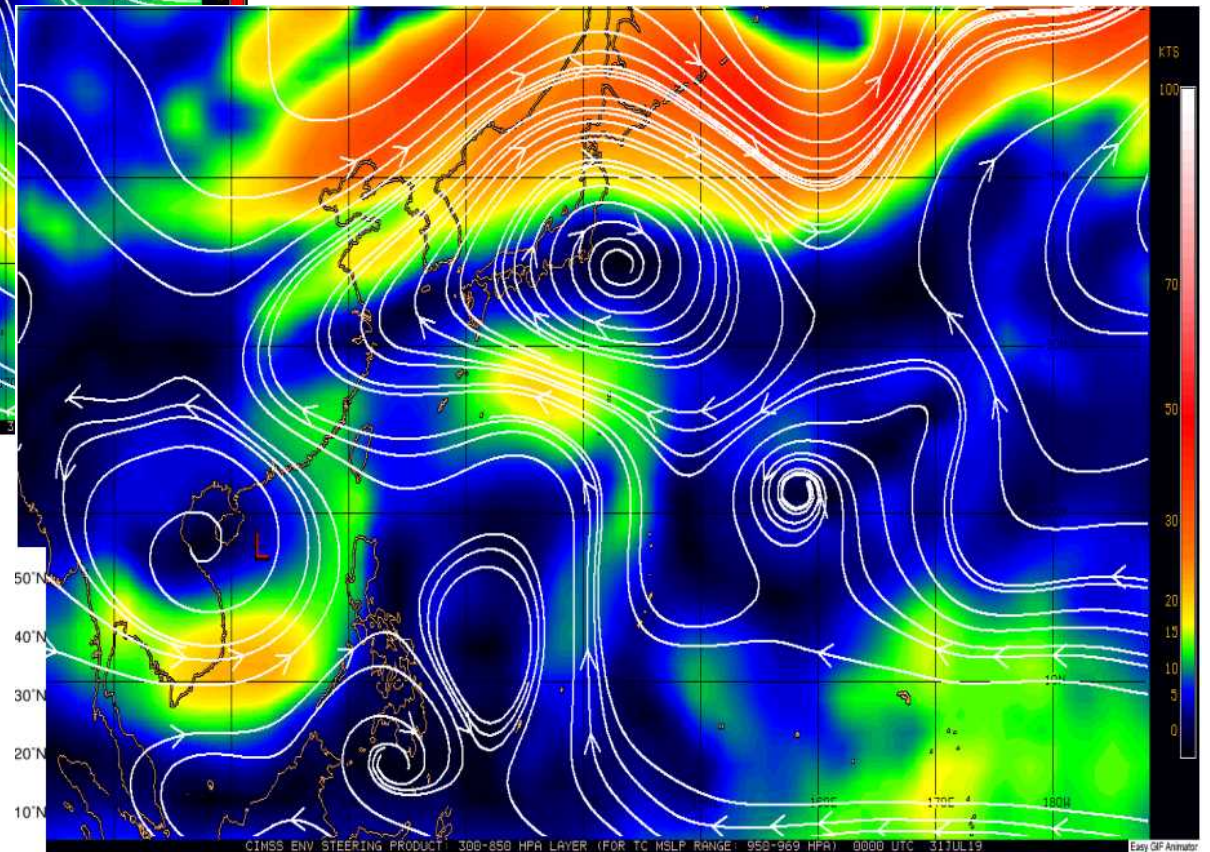


Steering flow when Wipha moved North

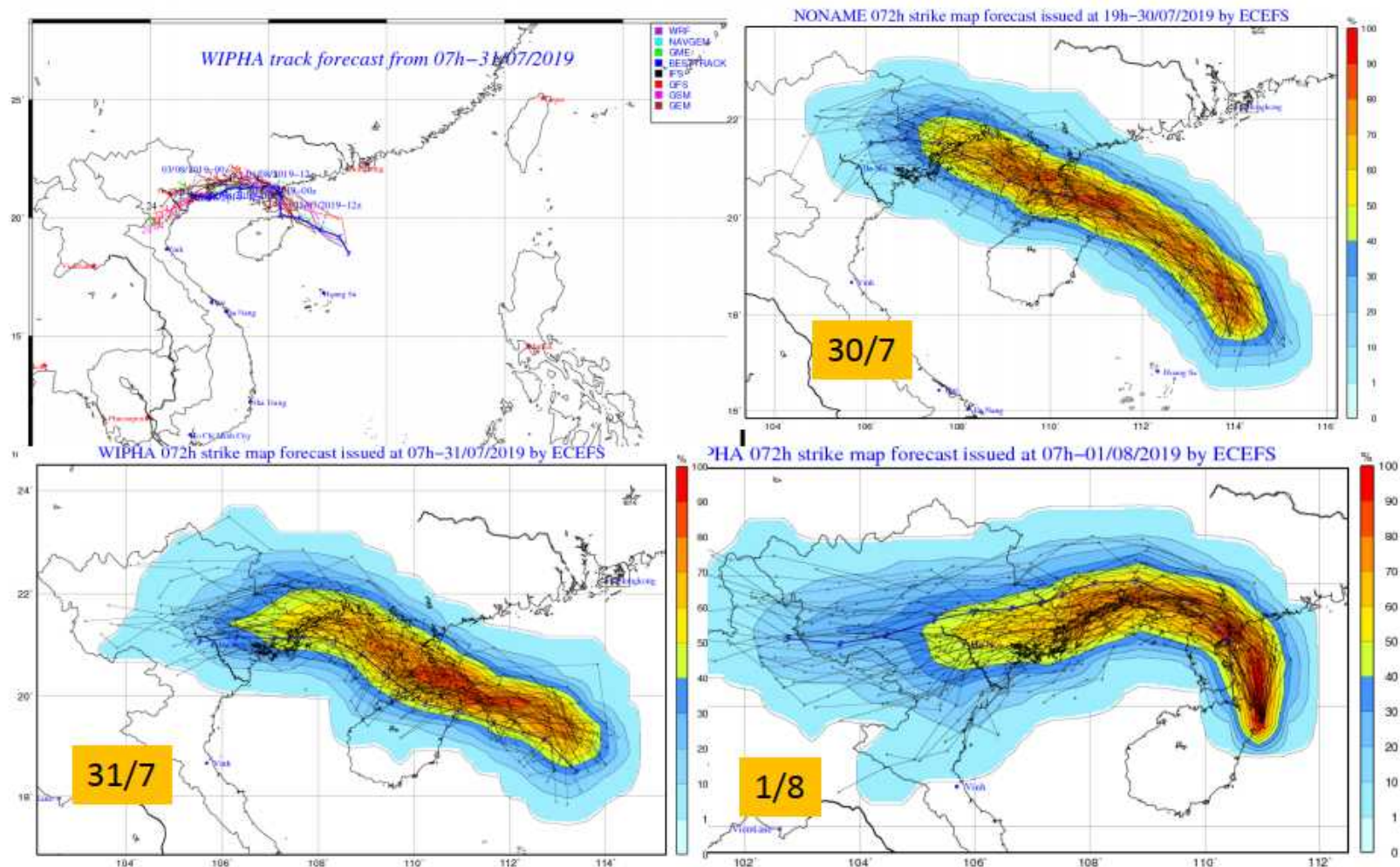


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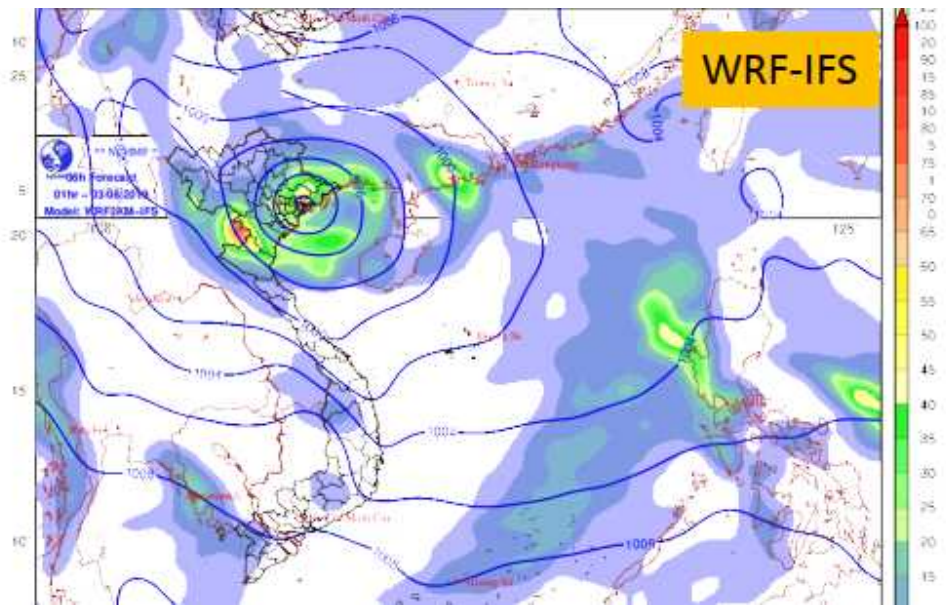
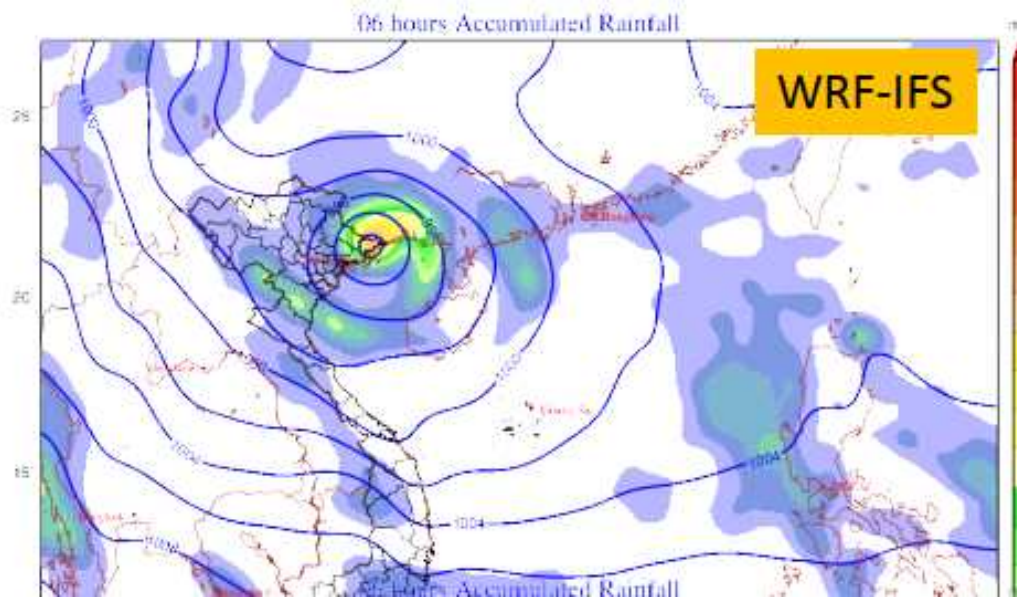
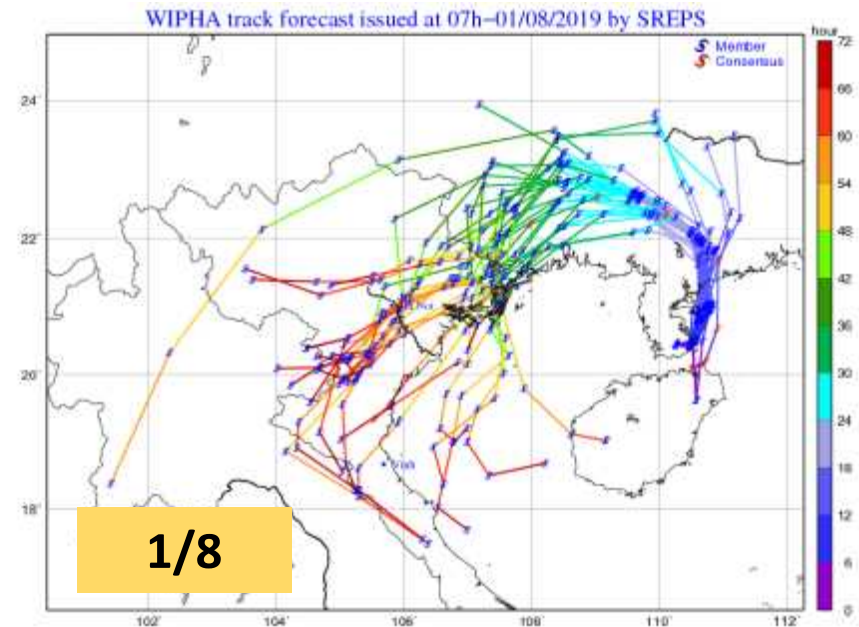
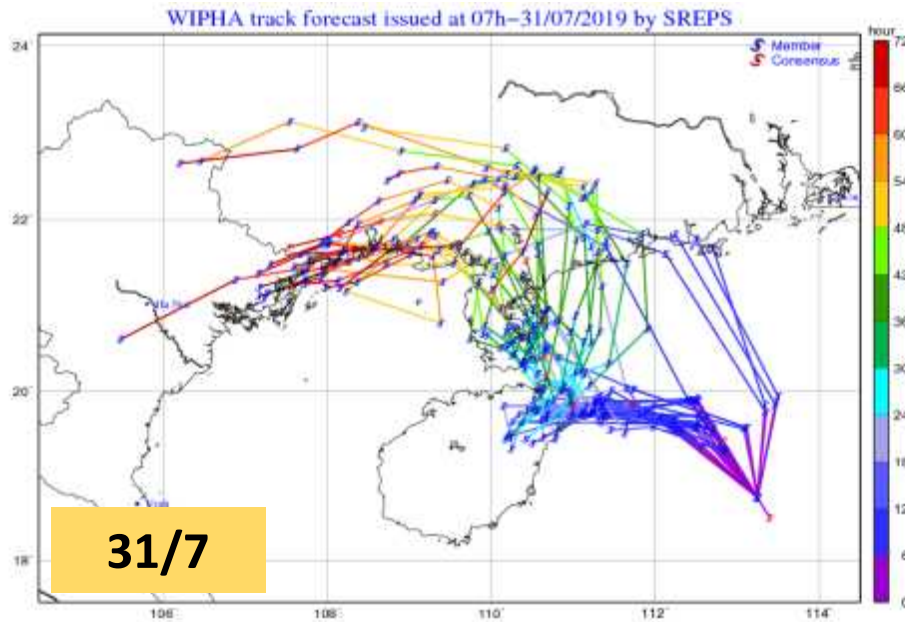
300-850mb



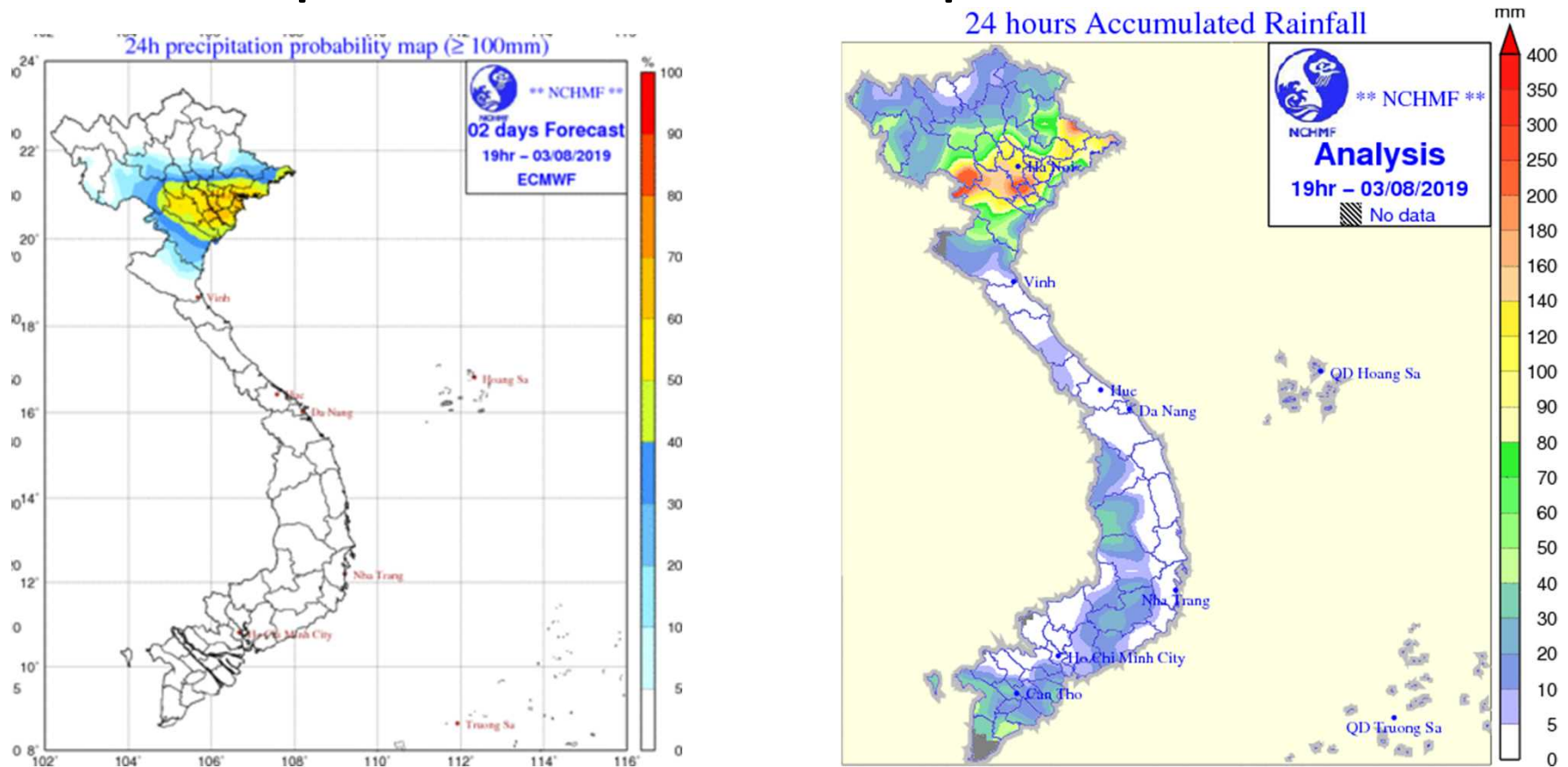
Ensemble track forecast by ECMWF



Ensemble track forecast by Vietnam (SREP – Short-Range Ensemble Prediction)



TS. Wipha rainfall impacts



The ensemble track forecasts are scattered, however the rainfall probability forecast is quite good at 2 days lead-time
Lesson learned: Focus more on the impact, even the rainfall when the ensemble forecast give high probability.