

201910 - Tropical Cyclone - Lorenzo

Status: Finalised Material from: Linus

1. Impact

On 1 October the tropical Lorenzo hit the island Flores in the Azores. The cyclone caused a severe damage to the harbour on the island.

2. Description of the event

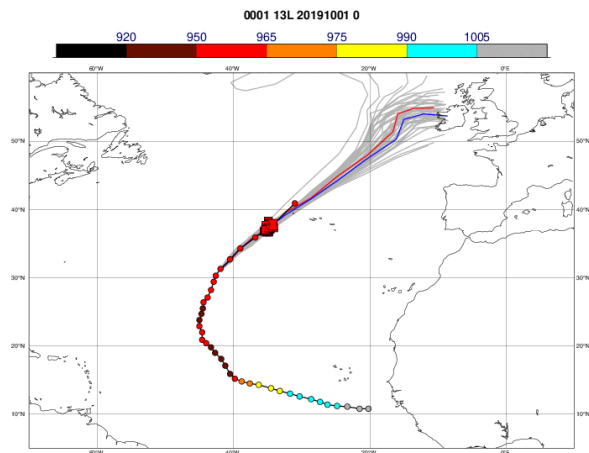
3. Predictability

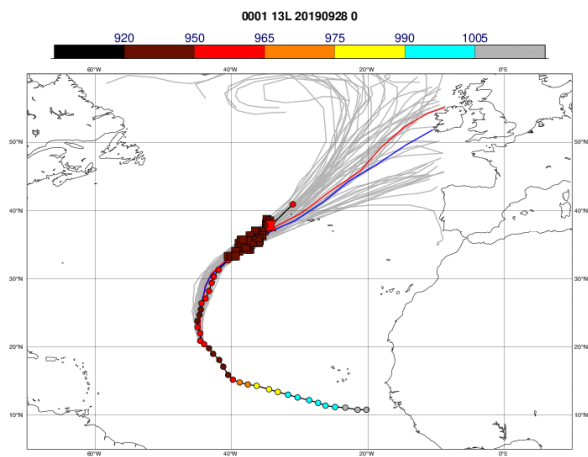
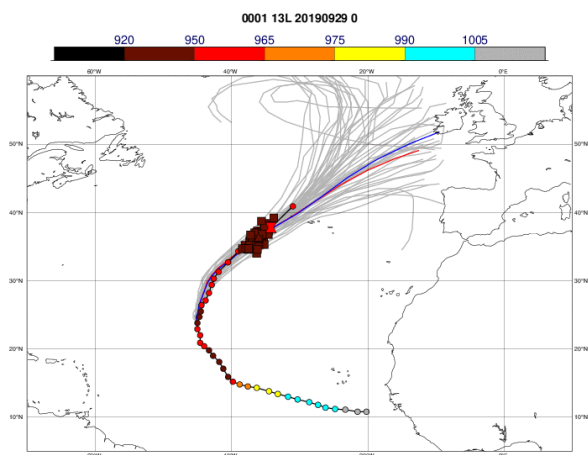
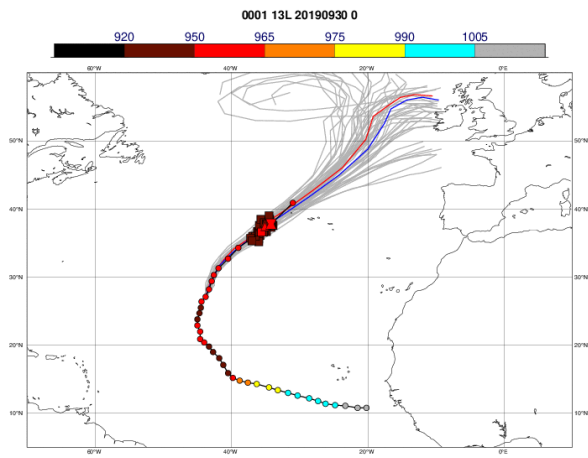
3.1 Data assimilation

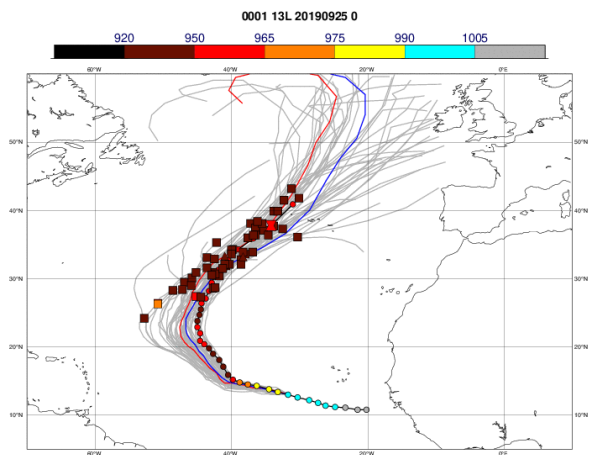
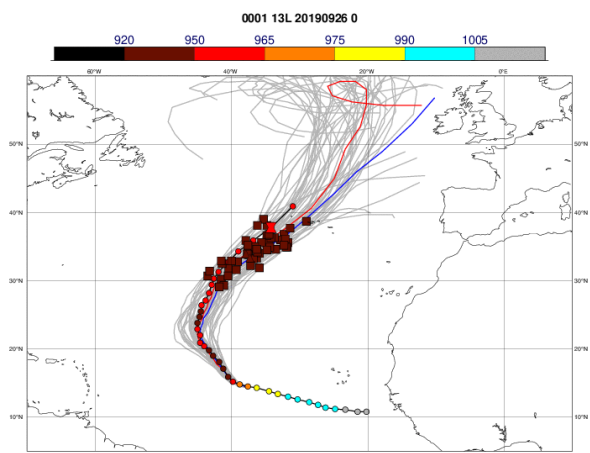
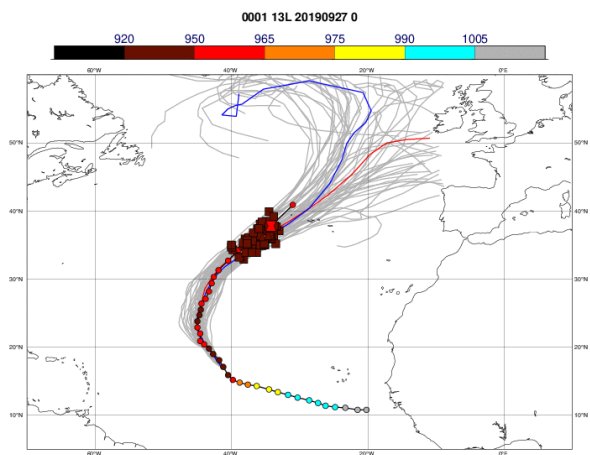
3.2 HRES

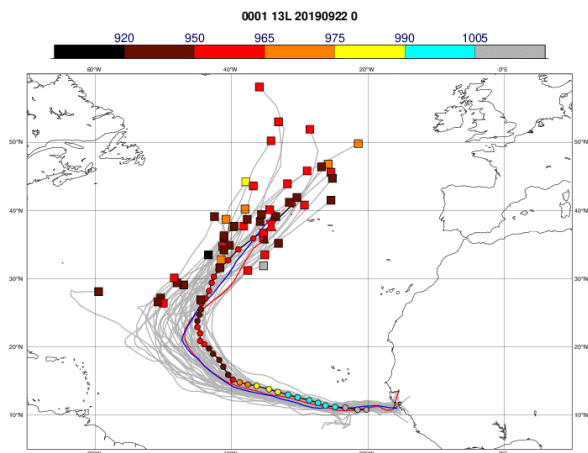
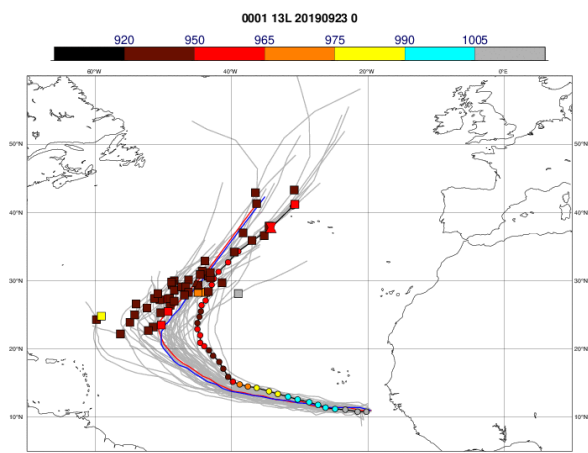
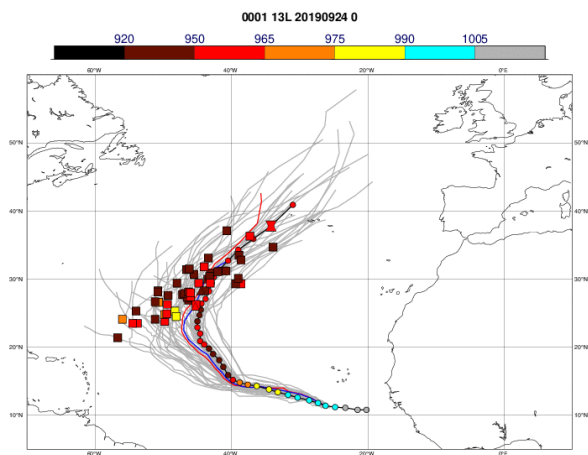
3.3 ENS

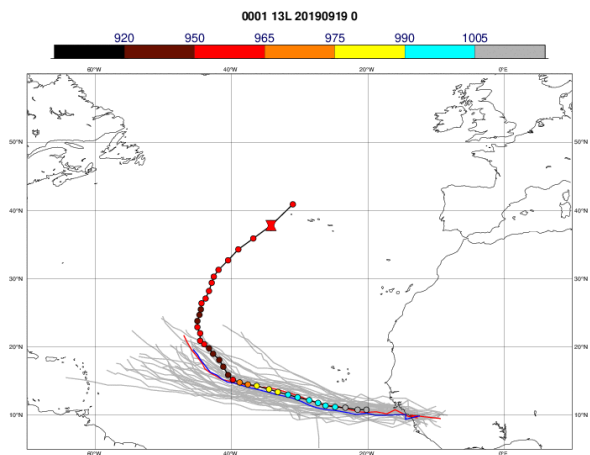
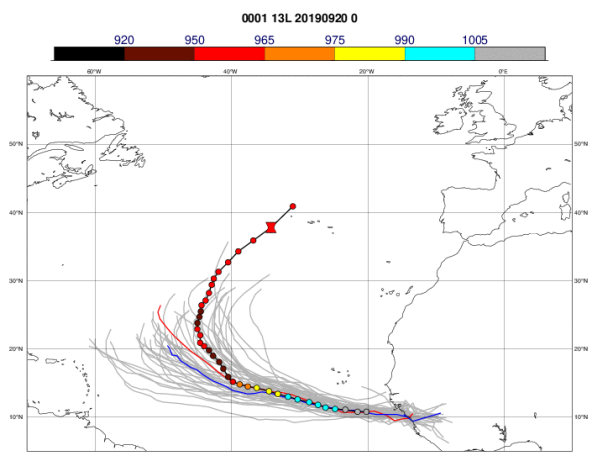
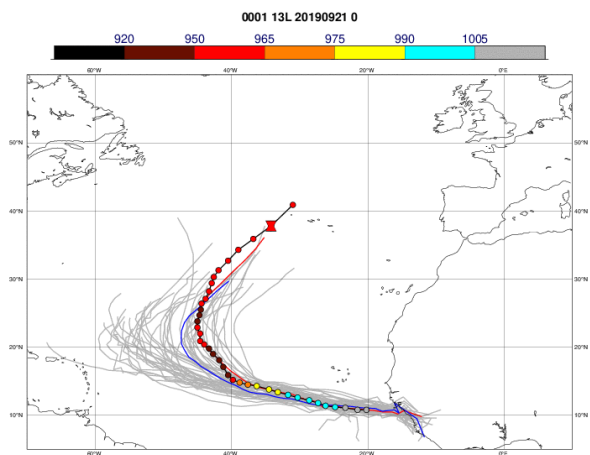
he plots below show the tracks (ensemble -grey, HRES - red, ENS control - blue, best track - black), position and intensity on 1 October 00UTC (ensemble - squares, best track - hourglass) in forecasts from 1 October (first plot) to 15 September (last plot). The cyclone was recognised as a tropical storm on 24 September.

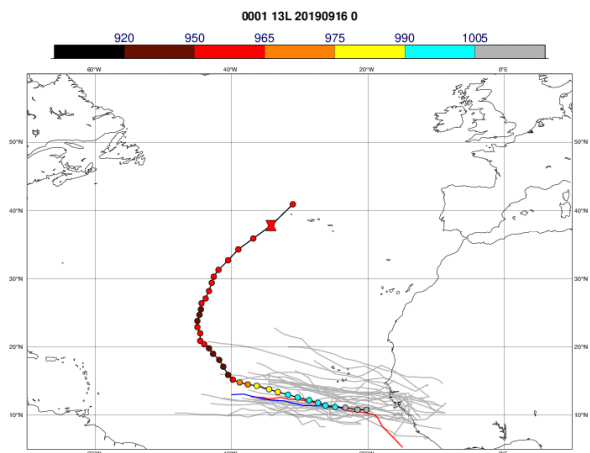
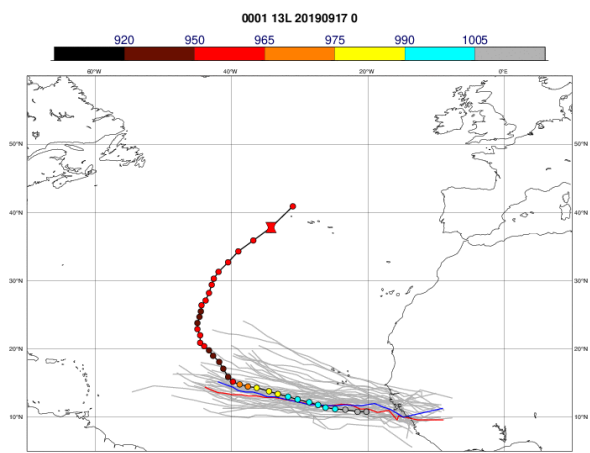
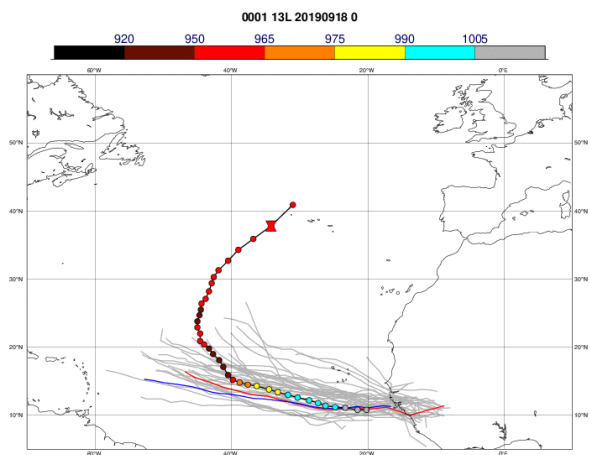


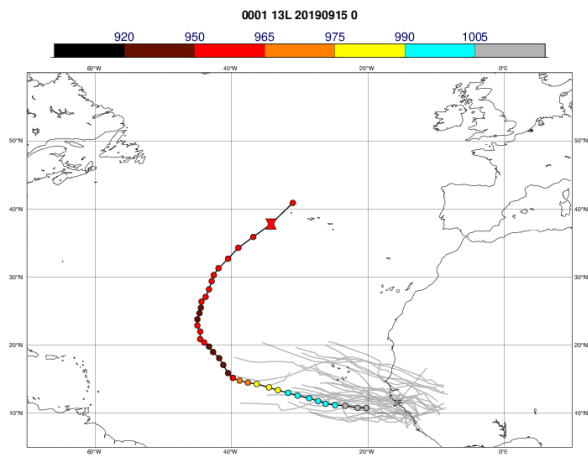




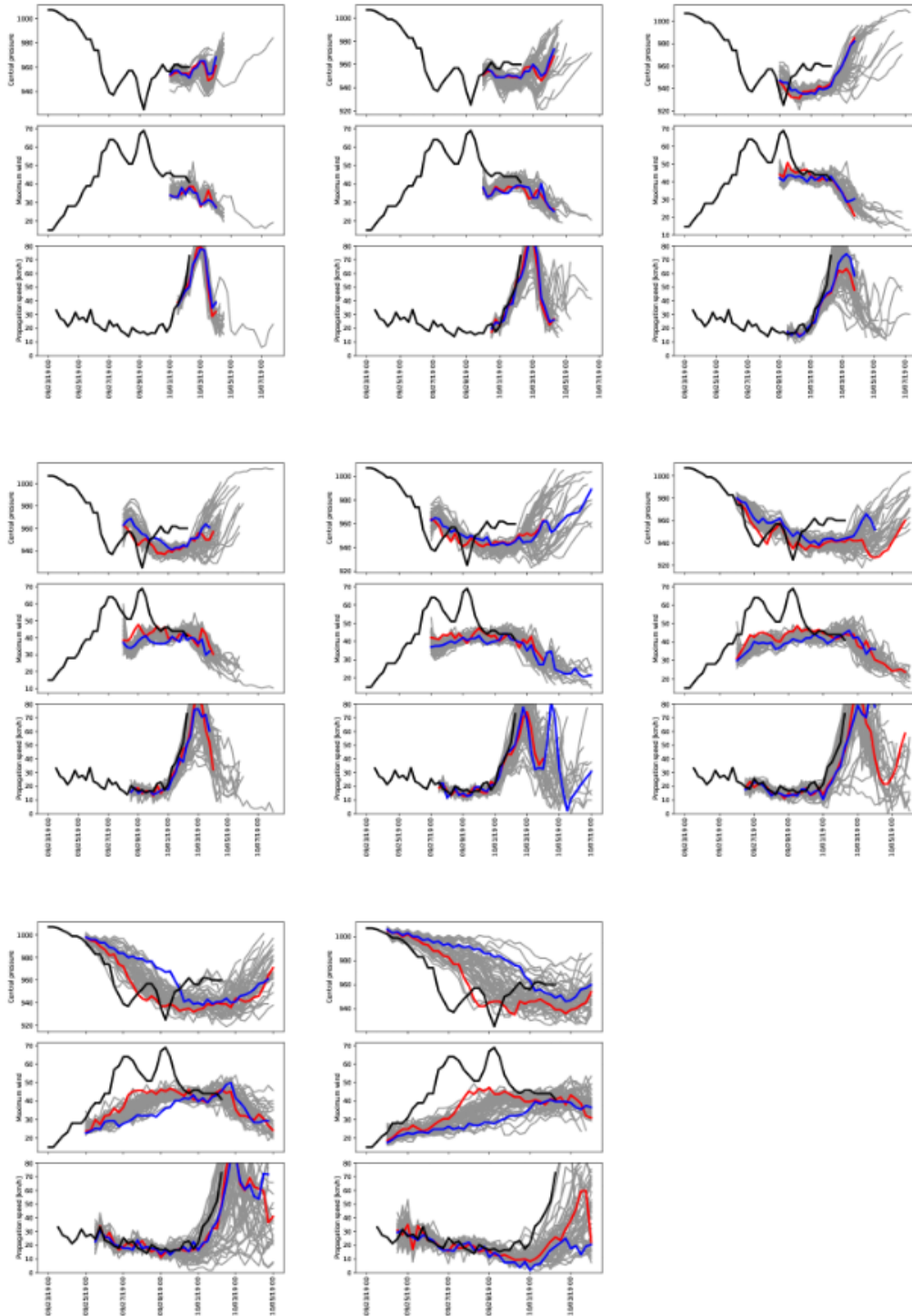








The plots below show the cyclone intensity in terms of central pressure (top), maximum wind speed (middle) and the propagation speed (bottom) for the forecasts from 1 October (first plot) to 24 September (last plot).



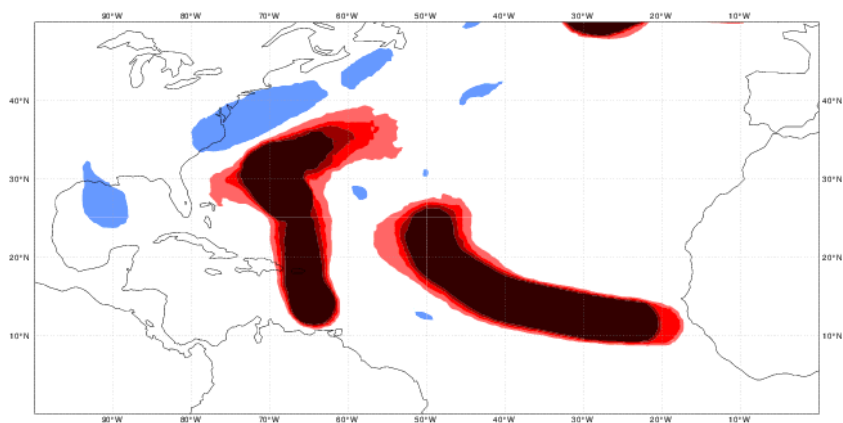
3.4 Monthly forecasts

The plots below show anomalies of tropical storm strike probability 23-30 September in extended-range forecasts, starting from the latest forecast (23 September).

Weekly mean Anomaly of Tropical Storm Strike Probability. Date:20190923 0 UTC t+(- 0-168)

Probability of a TS passing within 300km radius

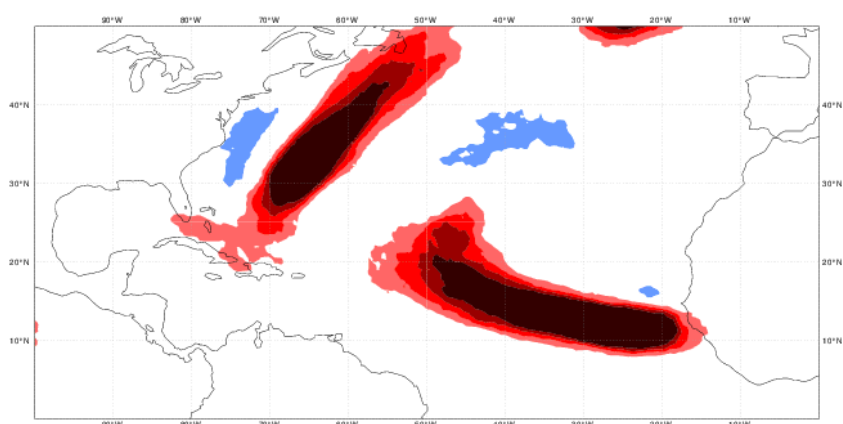
-100-40 -40-30 -30-20 -20-10 -10-10 10-20 20-30 30-40 40-100



Weekly mean Anomaly of Tropical Storm Strike Probability. Date:20190919 0 UTC t+(96-264)

Probability of a TS passing within 300km radius

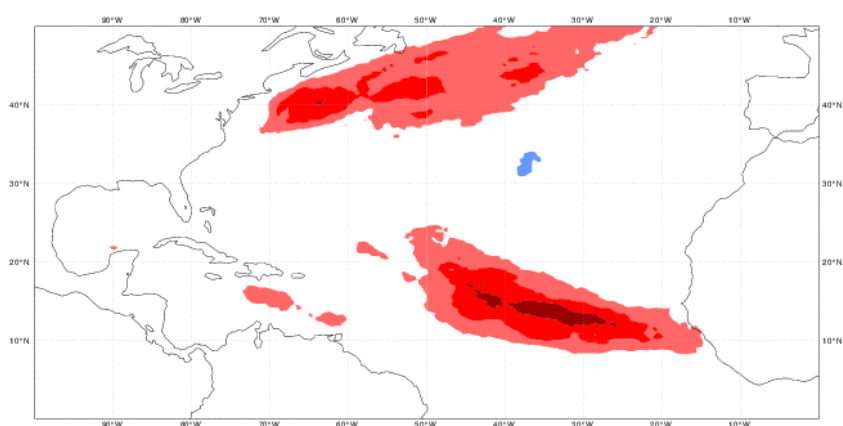
-100-40 -40-30 -30-20 -20-10 -10-10 10-20 20-30 30-40 40-100

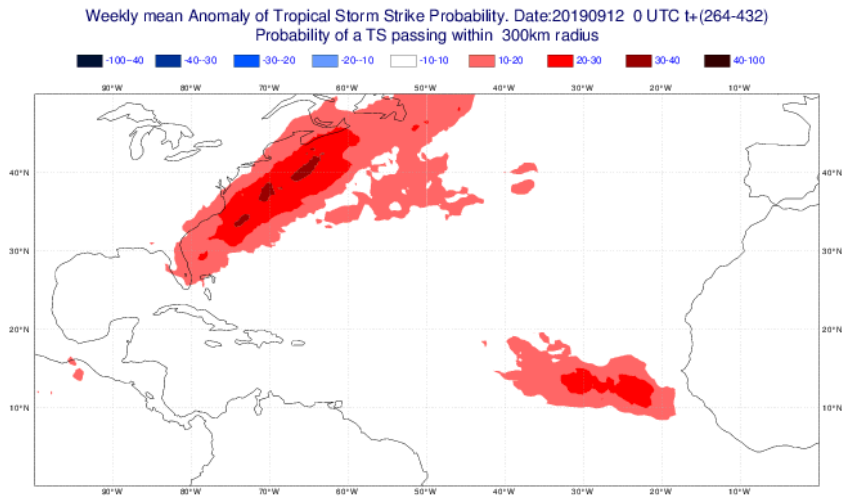


Weekly mean Anomaly of Tropical Storm Strike Probability. Date:20190916 0 UTC t+(168-336)

Probability of a TS passing within 300km radius

-100-40 -40-30 -30-20 -20-10 -10-10 10-20 20-30 30-40 40-100





3.5 Comparison with other centres

4. Experience from general performance/other cases

- Very good early signal for cyclogenesis

5. Good and bad aspects of the forecasts for the event

6. Additional material