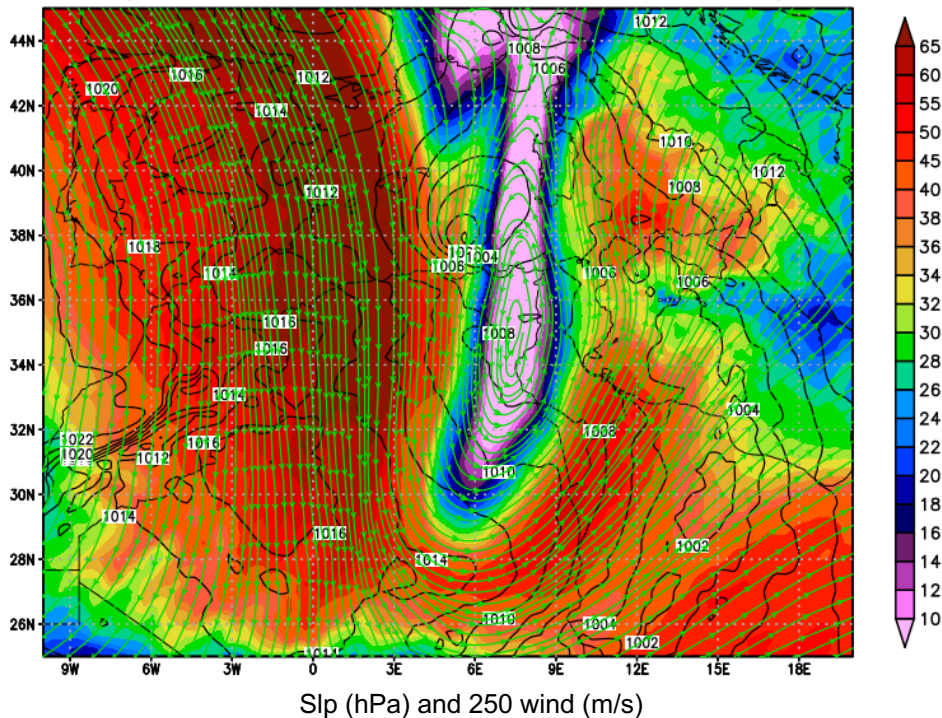


GEOS Captures Tropical Cyclone-Like System “Trudy” Over the Mediterranean Sea

Trudy 12z11Nov2019; 250 hPa wind GEOS Analysis



“Medicanes” are a type of short-lived but intense cyclone that form over the Mediterranean Sea. This case study of Medicanes Trudy, which made landfall in northeastern Algeria on 11 November 2019, demonstrates that the GEOS Forward Processing (FP) system is able to analyze and forecast such cyclones.

The figure shows the GEOS analysis of upper tropospheric wind and sea level pressure at 1200 UTC on 11 November 2019. The streamlines show a sharp southerly meander of the jet stream, with strong horizontal shear on its western side. The wind speeds in this region change from 65 ms⁻¹ to less than 10 ms⁻¹ over a distance of only 250 km. Over water, a surface low forms in correspondence to the satellite imagery.