

A new diagnostic for identifying cyclonic and anticyclonic regions and its application for combining ensembles

Thursday, 6 June 2024 13:30 (20 minutes)

This presentation introduces a new simple diagnostic, called CURV (Curvature Using Radial Variation), that identifies cyclonic and anticyclonic regions using surface pressure or geopotential height, over a range of scales (typically 500-4000km). CURV has been developed as part of work to assess the benefit of combining forecasts from the medium-range and extended-range ensembles.

The method for computing the CURV diagnostic will be shown in a pictorial way along with the rationale behind it, which will then be followed by real examples of what it looks like and reveals. Brief initial results using CURV to combine and verify ensemble forecasts will be provided before considering a variety of practical uses in operational weather forecasting.

Presenter: ROBERTS, Nigel (ECMWF)

Session Classification: Speakers Corner –Updates on ECMWF forecast products