WMO Lead Centre for Deterministic NWP Verification (LC-DNV)



Please note the change of the ftp server for LCDNV data exchange to aux.ecmwf.int. More information here.

The 16th Congress (2011) of the World Meteorological Organisation (WMO) approved the recommendation from its Commission for Basic Systems (CBS-Ext.(2010)) to establish a Lead Centre for Deterministic NWP Verification (LC-DNV) and to designate ECMWF as this Lead Centre.

It is important to provide consistent verification information on the Numerical Weather Prediction (NWP) products produced by different centres for the benefit of operational forecasters and to help the centres compare and improve their forecasts. CBS has therefore defined detailed procedures for the production and exchange of a standard set of verification scores for deterministic NWP forecasts produced by WMO GDPFS centres.

Scores will be exchanged between the participating producing centres via the LC-DNV. The role of the LC-DNV is to facilitate this standardised verification, to ensure the routine exchange of the required verification results between centres and to provide consistent comparisons of these results.

CBS standard verification procedures for deterministic NWP products

The CBS standardised procedures for verification of deterministic NWP products are defined in Manual on the Global Data-processing and Forecasting System: Annex IV to the WMO Technical Regulations (available from WMO library at https://library.wmo.int/records/item/35703-manual-on-the-global-data-processing-and-forecasting-system), appendix 2.2.34.

The 16th WMO Congress (2011) approved a number of significant changes to these standard procedures, as recommended by CBS-Ext.(2010). LC-DNV will coordinate and facilitate the transition to the updated procedures. All GDPFS centres are encouraged to read the information and guidance provided and to implement these changes as soon as possible.

- Standard verification procedures
- · Exchange of surface verification scores

Lead Centre guidelines for data exchange

- Score definitions
- Procedure for posting verification reports to FTP server
- Data format of verification reports
- Access to FTP site
- · Auxiliary data (climatology, station lists)
- Comments and hints

Verification results (plots)

- Time series plots
- Monthly mean plots

Joint Working Group for Forecast Verification Research

- JWGFVR home
- · Verification methods

Documents and reports

- Scores for polar regions
- Detailed description of the SEEPS score for precipitation: Rodwell et al, 2010: A new equitable score suitable for verifying precipitation in NWP.
- Haiden et al, 2012: Intercomparison of global model precipitation forecast skill in 2010/11 using the SEEPS score.
- Surface verification studies CMC
- Surface verification studies CMVF
- Surface verification studies JMA
- Surface verification studies TMA
- Surface verification studies UKMO

Contacts

For further information please contact WMO LC DNV group at ECMWF (wmolcdnv@lists.ecmwf.int)