



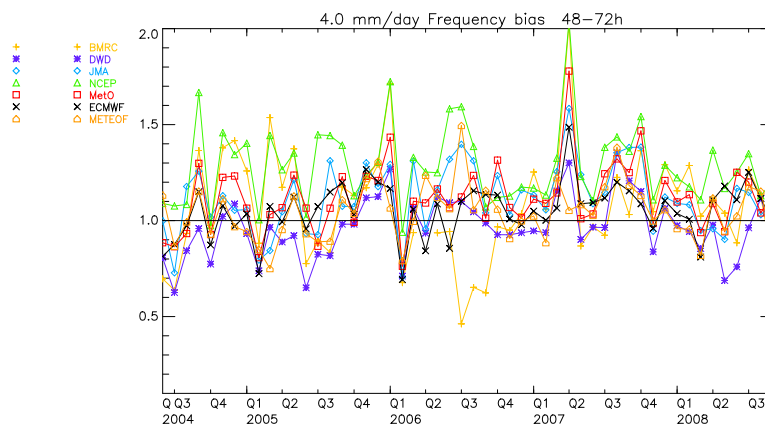
Verification and comparison of precipitation forecasts at the Met Office

Andy Brown

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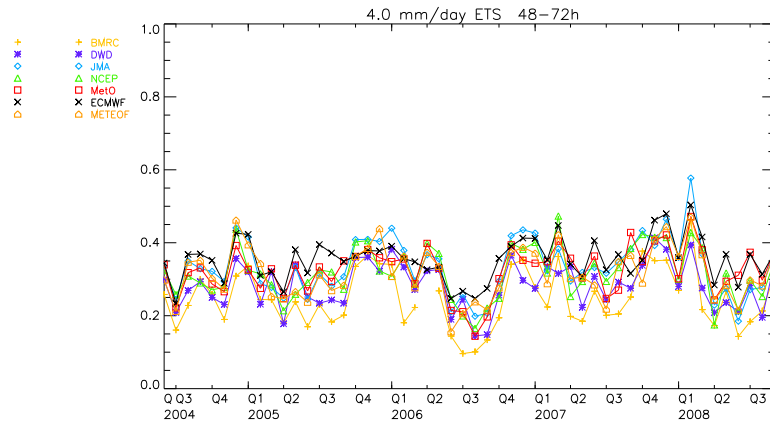
Global model comparison daily ppn against Radar over UK



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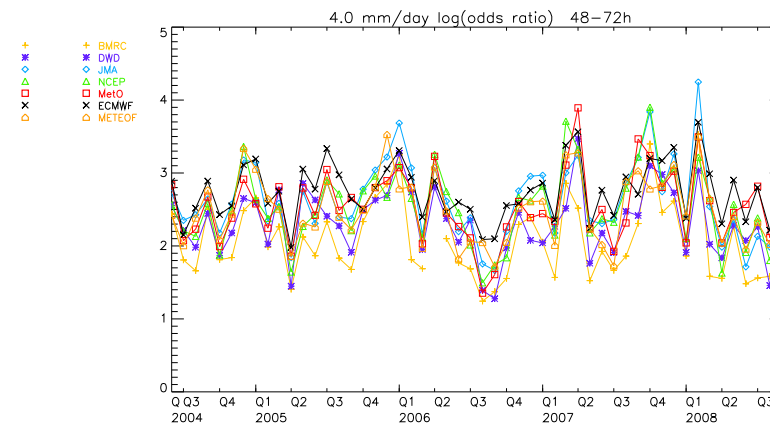
Global model comparison daily ppn against Radar over UK



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Global model comparison daily ppn against Radar over UK

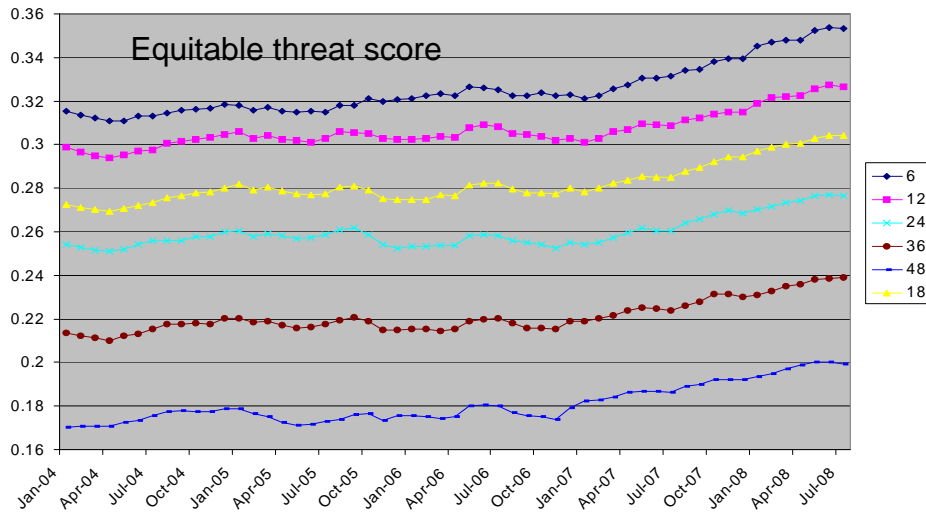


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Improving accuracy: regional model heavy rain forecasts for the UK

Forecasts of >4mm in 6 hrs are now as accurate 24hrs ahead as they were 18hrs ahead 2 years ago

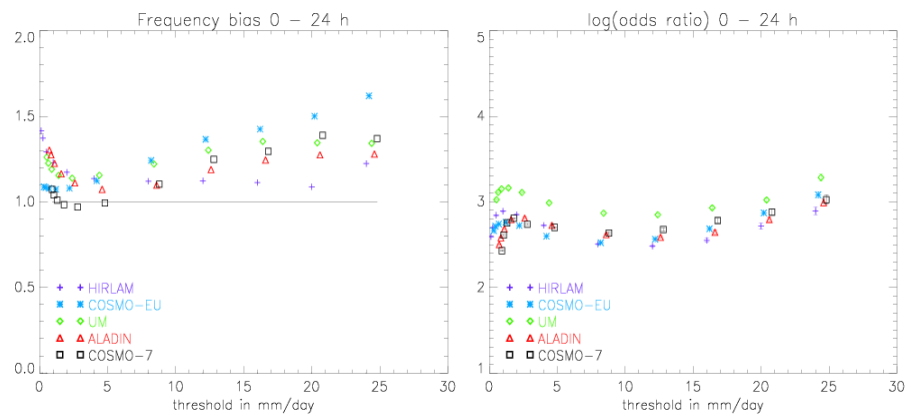


Current European Precipitation comparison - External Met Office website

- <http://www.metoffice.gov.uk/research/nwp/numerical/precipitation/emip.html>
- Password protected
- Models:
 - Hirlam reference (FMI)
 - COSMO-EU (DWD)
 - Aladin (MeteoFrance)
 - UM – North Atlantic European (Met Office)
 - COSMO-7 (MeteoSwiss)
- Verified against British Isles Nimrod radar composite



European Limited area Models - Some example results



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EUMETNET/SRNWP Programme- Verification and Model Intercomparison for European models

- **D1: Operational verification comparison of one version of each of the 4 regional models of Europe (available for all the participating members).**
- **D2: Additional intercomparison of other versions of the consortia models including high resolution models**
- **D3: Inventory and recommendations of “new” scale-selective verification methods.**
- **D4: Catalogue of sources of non-GTS data.**

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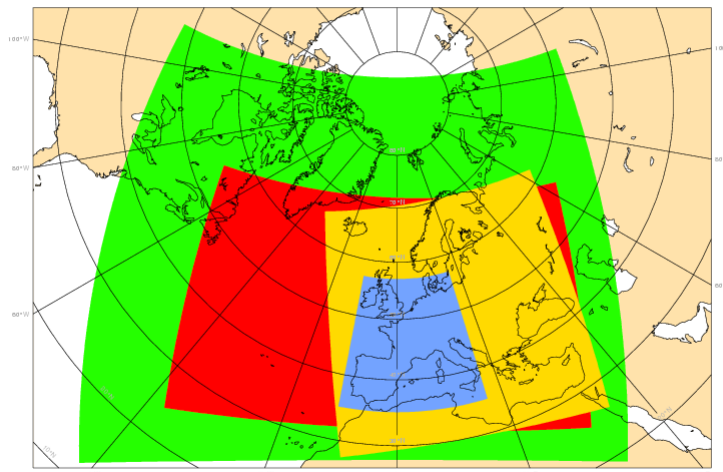
D1. Operational model intercomparison

- Exchange of forecasts* from models at 3-4 centres
 - Met Office NAE - 12km
 - Hirlam reference - 15km
 - Aladin France - 10km
 - COSMO-EU - 7km
- Use existing packages
 - Accept different station selection, QC (difficult to mandate/change at op. centres)
- Verify common scores for same parameters over common areas
- Compare, contrast & pool results to reach “consensus”
- Extension of existing precipitation verification done by Met Office

* Format – GRIB1 then interoperability to define

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Domains of 4 consortia reference models



Hirlam UM COSMO ALADIN

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