OpenIFS workshop 2017

Practical experiment

Seasonal forecast

- OpenIFS – based on IFS cycle 40r1
  Operational from Nov-2013 to May-2015

- No ocean model (NEMO)

- Running seasonal mode with CMIP5 forcing
  - Mass conservation active

Basic experiment design

- Study El Nino 2015/16

- Start dates: 1/11/2015 – 15/11/2016
  Each group can choose any date(s)

- Model runs until end April 2016

Pre-run ensembles

- 10 member ensembles for each start dates
- Two cases:
  - "ob00" : ERA-Interim analysis of observed
    sea-surface & sea-ice
  - "clim" : replace SST & CI with 20yr
    ERA-Interim climatology
- The data for these cases are provided
  - They do not need to be re-run at ECMWF.

In teams, you will…

- Design experiment(s) to alter the SST for the model.

   e.g. remove/increase SST anomaly over the Pacific

- Modify the SST fields for model, using 'ob00'.

- Run 10-member ensemble.

- Process output to compute monthly-means.

- Transfer monthly means output to ICTP

- Plot results with prepared "Metview" scripts

Daily discussion / brainstorm

- Scientific discussion with other teams

- End of day highlights & brainstorms

- Each team to give a short presentation on Friday

Tutorials online

https://software.ecmwf.int/oifs/OpenIFS+user+meeting+2017

Workshop tutorials

- OpenIFS 2017: Adding new experiment for Metview
- OpenIFS 2017: Creating a new OpenIFS experiment
- OpenIFS 2017: Modifying the sea-surface temperature (SST)
- OpenIFS 2017: Setting up ectrans to ICTP