

Transfer of model results to evaluation activities

GRG session

8. Feb. 2006

10am

CTM output issues

- Technicalities
 - Data formats
 - Storage capacities
 - Data access
 - User services
 - RAQ interface
 - Run & archiving scripts (sms)
- What should be in output the files ?

Data Formats

- Operational GEMS archiving & dissemination shall be based on MARS
 - MARS requires GRIB code
 - Accuracy problem for GRG data with GRIB
 - Definition of GRIB tables (not everything defined)
 - For operational scenario, CTMs should output GRIB fields to Fields Data Base (FDB), as is done in IFS, for subsequent archiving in MARS. This means amending model code to write output directly in GRIB.
- As first step ... Store CTM output in netCDF at ECFS
 - Which netCDF convention (RETRO)

CTM netCDF-output in ECFS

- Total needed capacity
 - 3-6 GB per model and simulation day (1-2 Tbyte per model year)
 - Are member state allocations sufficient ?
- Which files types
 - gridded fields (concentrations, fluxes, etc.)
 - station timeseries (one level or vertical profiles)
 - aircraft flight tracks
- File structure (how many days & species) - one common file structure for all three CTMs
- Directory structure for “archiving”
 - ec:/gems/grg/<model>/<run_ID>/<file type (gridded|point|track|restart)>/<year>

CTM runs at HPCD

- Using HPCF
 - Are member state CPU time allocations sufficient ?
 - Maximum file output size at HPCD is 6GB
- Run time scripts (SMS)
 - “PRO 4” will help
 - Structure in monthly, daily chunks
 - Afterburner needed or direct netCDF output?
 - Transfer to ECFS
 - Post-processing for time series etc.
 - GRIB conversion and storage in MARS

Access for GRG and RAQ partners

- ECMWF access (available for partners?)
- ftp from ECgate (would need member state access –secure card)
- “Archive” catalogue
- Data description and versioning
- Download speed
- User requirements

RAQ and GRG_4 requirements

- What should be in the files
- Model output diagnostics ..