EUROPEAN COMMISSION
DIRECTORATE-GENERAL
Joint Research Centre

Institute for Environment and Sustainability

CCU

Joint Research Centre

Update on meteo format

From HDF to NetCDF ?

TM5 meteo files

from previous meeting

- current format:
  - hdf
  - internal compression
    - saves 25% of disk space
    - useful when we only used workstations with small disks
  - multiple 3D records in a file
  - 8-10 years old ?

- testing a new format:
  - NetCDF4
    - = based on HDF5
    - ! bug in HDF5 for IBM AIX machines (ecmwf ...); therefore tests with 'classic' NetCDF
  - 4D records
  - uncompressed
  - allows parallel i/o

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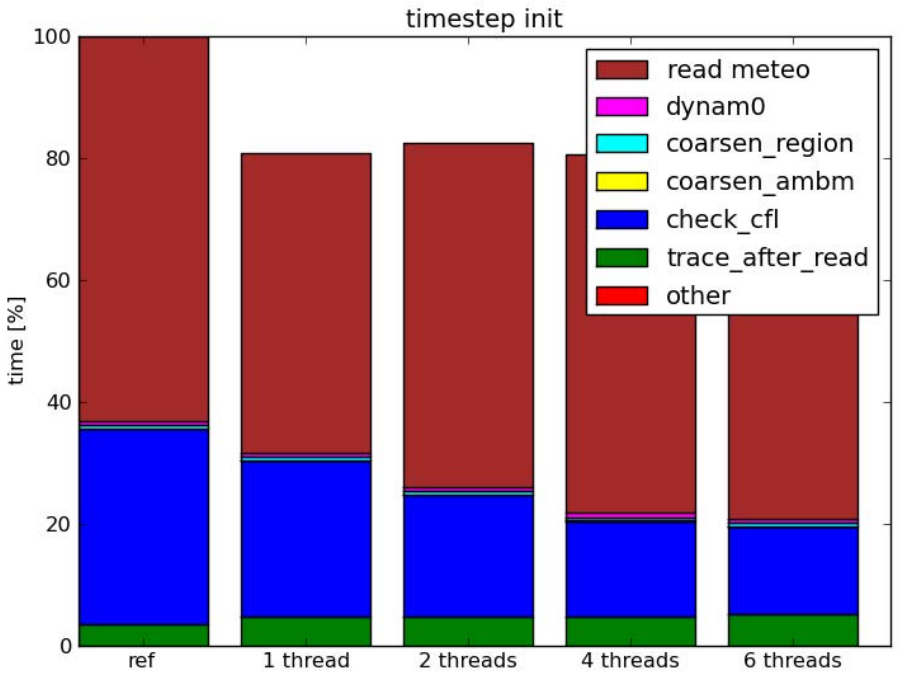
solved !

TM5 meteo files

- Compared runs with old and new meteo:
  - tiny difference in land/sea mask (% is not a CF unit); round to integer values 0-100 ...
  - run output exactly the same

- run time for reading meteo: -20%
- ... but slightly increasing when using more threads (memory?)
- similar for input from glb3x2 and glb1x1

! overall time strongly depended on file system !



TM5 meteo files

- **Proposal: commit branch into trunk:**
  - **backwards compatible**
  - **cleaner**
  - **ready for use in future (far, far away ...)**
- **Proposal: start converting archives:**
  - **era-interim**
- **... at the same time : clean up ALL archives !**