

CCMVal Dynamics data request

27 October 2006

This data request is for files that are needed for the analysis of dynamical changes in the REF1/REF2/SCN2 simulations that have been performed in support of the UNEP/WMO Ozone Assessment. Many of the fields requested here have already been requested in previous data requests, but for a more detailed inter-comparison of stratospheric climate and circulation changes in these simulations, a few additional fields would be useful.

For each of the files the ICD bullet number (see <http://www.pa.op.dlr.de/CCMVal/InterfaceControlDocument.html>) is given where the format is specified. While extracting your data, please stick to this format.

The data will be collected at BADC (British Atmospheric Data Centre). Instructions how to get access to this site are given at http://www.pa.op.dlr.de/CCMVal/BADC_FTPinstructions.pdf.

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For REF2/SCN2 and REF1 simulations please submit

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- 1. 2D monthly-mean zonal means (latitude-pressure; standard 31 pressure levels defined in ICD). Temperature, u (zonal wind), O₃, H₂O, age-of-air tracer.**
File names and data format defined under bullet **ICD 10a**
- 2. 2D monthly-mean zonal means (latitude-pressure; standard 31 pressure levels defined in ICD) transformed Eulerian-mean (TEM) diagnostics. Residual velocities (v^* , w^*) - Andrews et al. (1987; equation 3.5.1).**
File names and data format defined under bullet **ICD 8**
EP flux (F_y , F_z) – Andrews et al. (1987; equation 3.5.3) and the westerly acceleration (D) in ms^{-1} per day, resulting from the EP-flux divergence - Andrews et al. (1987; equation 3.5.2a [rhs]).
File names and data format defined under bullet **ICD 18 and ICD 19**
- 3. 2D monthly-mean zonal means (latitude-pressure; standard 31 pressure levels defined in ICD) the westerly acceleration in ms^{-1} per day, resulting from the parameterized Gravity Wave Drag (orographic + non orographic).**
File names and data format defined under bullet **ICD 20a, b, c**
- 4. 1D Zonally averaged heat flux at 100 hPa as monthly means derived from daily fields (NH and SH).**
File names and data format defined under bullet **ICD 7a**
- 5. Daily time series of vertical profiles on the 17 middle atmosphere pressure levels defined in ICD of Temperature at the pole and zonal mean zonal wind at 60°.**
File names and data format defined under bullet **ICD 4b**
- 6. Daily time series for the winter months (NH: November to April, SH : July to December): Area where the temperatures are below the threshold temperatures for NAT (195K) and Ice (188K) formation and the model “PSC areas” poleward of 60° at 50 hPa .**
File names and data format defined under bullet **ICD 21a, b**

Questions regarding this data request can be directed to Neal Butchart (neal.butchart@metoffice.gov.uk) and Veronika Eyring (Veronika.Eyring@dlr.de).