Project no. GOCE-CT-2003-505539

Project acronym: ENSEMBLES

Project title: ENSEMBLE-based Predictions of Climate Changes and their Impacts

Instrument: Integrated Project

Thematic Priority: Global Change and Ecosystems

D2A.4.6
20th century runs of Stream 2: all data archived centrally in CERA database, under condition that they are fully provided to MPI-MET before month 51 (November 2008).

Due date of deliverable: February 2009 (month 54)
Actual Submission date: March 2009 (month 55)

Start date of project: 1 September 2004 Duration: 60 Months

Lead Contractor: MPIMET-MD **Version: interim**

Project co-funded by the European Commission within the Sixth Framework Programme (2002-2006)		
Dissemination Level		
PU	Public	x
PP	Restricted to other programme participants (including the Commission Services)	
RE	Restricted to a group specified by the consortium (including the Commission Services)	
CO	Confidential, only for members of the Consortium (including the Commission Services)	

The archiving of the ENSEMBLES Stream 2 20th century data in the CERA data base should have been finished at the end of February 2009, provided that all of the 20th century data from all centers were submitted to MPI-MD by the end of November 2008 at the latest.

That was not the case, so that not all of the ENSEMBLES Stream 2 20th century data are archived to date (April 2009). Nevertheless a big amount of data is archived already, because not only 20th century data were stored, but also data of 10 SRA1B scenario runs and data of 5 E1 scenario runs.

In the next section is an overview of the data which are provided by the centers and the already available in the CERA database.

Availability of stream 2 data

For ENSEMBLES a list of requested variables was compiled, which contains the information on the variables, their names and units and the temporal resolution for which they should be stored centrally. It can be seen at: http://ensembles.wdc-climate.de/output-variables .

On the basis of this list the involved centers provided stream 2 data for the following scenarios (the numbers are the numbers of the realisations):

Center	20C3M	SRA1B	E1
CNRM	1,2	1,2	-
MPI	1,2,3	1,2,3	1,3
DMI	1,2,3	1,2,3	-
BCCR	-	-	-
FUB	1,2,3	3	
INGV	1	1	1
IPSL	1,2,4,7	-	-
METO-HC	1	1	1

and the following temporal resolution:

Center	Temporal resolution
CNRM	monthly, daily, 12-hourly, 6-hourly
MPI	monthly, daily, 12-hourly, 6-hourly
DMI	monthly, daily, 6-hourly
BCCR	
FUB	daily
INGV	monthly
IPSL	monthly, daily, 6-hourly
METO-HC	monthly, daily, 12-hourly, 6-hourly

The majority of these data were provided to MPI-MD only in 2009.
The additional monthly mean data of carbon cycle variables and aerosol variables are not provided by the centers at this time.

Already archived at the CERA database are:

Center	20C3M	SRA1B	E1
CNRM	1,2	1,2	-
MPI	1,2,3	1,2,3	1,3
DMI	1,2,3	1,2,3	-
BCCR	-	-	-
FUB	1,2,3	3	
INGV	1	1	1
IPSL	-	-	-
METO-HC	1	1	-

All of these data are available now.

Availability of information

Special information on the stored datasets is given on the website: http://ensembles.wdc-climate.de , which was established as deliverable D2A.4.4 in March 2007 and kept up to date since then.

Structure of the website

On http://ensembles.wdc-climate.de/output-variables
(as mentioned above)
one can find the complete “ENSEMBLES output list for Global Circulation Model scenario runs” which contains all variable names (netCDF-CF) as well as the output intervalls to be stored centrally and locally.

On http://ensembles.wdc-climate.de/technical-details
one can find necessary information for model data providers but also a list of used acronyms for centers, models and scenarios.

On http://ensembles.wdc-climate.de/experiment-list-for-stream-1
one can find for every center which provided data a list of their experiments, for every experiment a list of variables (the complete ENSEMBLES list) and for every available variable of this special model/experiment a link to the database where it is stored (CERA or PCMDI)

On http://ensembles.wdc-climate.de/experiment-list-for-stream-2
This part of the website is currently under development. It will show the same information as the site above, only for stream 2 data.

CERA

Information about the data which are stored at the CERA database is also available from the CERA directly (metadata). How to get there is described in the next paragraph. The metadata include information about the project

ENSEMBLES, about the experiments: design, temporal and spatial coverage, temporal and spatial resolution, contact persons, references and additionally about the datasets: topic, unit, aggregation, temporal and spatial structure.

Registration and data access

The web address of the CERA database is http://cera.www.dkrz.de .
Within the “CERA user interface” and the link “browse experiments”, “select project”=ENSEMBLES one can see all for ENSEMBLES filled experiments. (By using the “CERA”-link on the website described above (http://ensembles.wdc-climate.de) you will get this view as the CERA-startpoint) Via the buttons “experiment information” and “show related entries” one gets all the metadata information about the experiment and variables.
All this can be done without registration. Registration is only needed for downloading data.
To register you just have to send an email with your request to ensembles@dkrz.de

The web address of the PCMDI is http://www-pcmdi.llnl.gov/ .
Choose “data portal” at first, then “Browse dataset catalogue, IPCC”. (By using the “PCMDI”-link on the website described above (http://ensembles.wdc-climate.de) you will get this view as the PCMDI-startpoint). Within the shown list, choose the model/experiment you are interested in.
For downloading data, a registration is required, the registration form can be found here: https://esg.llnl.gov:8443/security/accountRequestData.do .

Download data from the CERA
There are two different ways to download data (whole datasets or parts of them):
1. interactive via graphical user interface. Get there as described above, then you are leaded by the download manager.
2. via a command-line based programm called jblob. It can be used in a batch job.
Information about jblob installation and usage is given on the jblob-homepage: http://cera.www.dkrz.de/CERA/jblob . (Take care for the installation instructions mentioned.)

Further information
You can get further information about the CERA database on the CERA-homepage: http://www.pik-potsdam.de/cera
If you need more information about the data of a special center, you find contact persons and addresses within the experiment metadata of that experiment at the CERA database.
If you need additional information about the data storage or the download procedure, or if you want to report an error in one of the datasets, please send an email to ensembles@dkrz.de.