



Project No. 037005

CECILIA



Central and Eastern Europe Climate Change Impact and Vulnerability Assessment

Specific targeted research project

1.1.6.3.I.3.2: Climate change impacts in central-eastern Europe

D2.5: Production of the database

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Start date of project: 1st June 2006

Duration: 36 months

Lead contractor for this deliverable: Danish Meteorological Institute (DMI)

Revision: Final

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)	

Introduction

Note that the present formal deliverable has been delayed beyond the end of the CECILIA project by mistake. The actual database was, however, established in due time.

The database of model data produced in the CECILIA project is located at the site <http://cecilia.dmi.dk/> which is physically the same server as the database sites for the results of the PRUDENCE (<http://prudence.dmi.dk/>) and the ENSEMBLES RT3 (<http://ensemblesrt3.dmi.dk/>).

The database contains two kinds of data. The first kind is a collection of daily grid-based fields for the two driving simulations and for the high-resolution CECILIA simulations. In the same way as the PRUDENCE and ENSEMBLES RT3 archives, data can be accessed in two ways: Direct download of decadal files with daily data; or access to sub-windows and/or sub-periods through the open-source interface OpenDaP.

The fields are the same as in the PRUDENCE database with two supplemental upper-air fields. They are:

clt	Cloud cover
evspsbl	Evaporation
hurs	Relative humidity at 2 m
mrro	Total runoff
mrso	Soil moisture
pr	Precipitation
ps	Surface pressure
psl	Mean sea level pressure
rlds	Downward long wave radiation at surface
rls	Net long wave radiation at surface
rsds	Downward short wave radiation at surface
rss	Net short wave radiation at surface
snw	Surface snow cover
ts	Temperature at 2 m
tasmax	Daily maximum of tas
tasmin	Daily minimum of tas
wss	Wind speed at 10 m
wssmax	Daily maximum of wss
ta850	Temperature at 850 hPa
zg500	Geopotential height at 500 hPa
zg700*	Geopotential height at 700 hPa
uas*	Zonal wind at 10 m
vas*	Meridional wind at 10 m
prc*	Convective precipitation
prls*	Large scale precipitation

The fields marked with an asterisk are voluntary and only contributed from some of the groups. Apart from the maxima and minima, the stored data are daily averages.

The second kind of data being provided is extremes indices as defined in WP4.2. These indices are available not just for the driving models and the high resolution RCM simulations from CECILIA, but also for the observed station data provided by most of the Central and Eastern European institutions involved in the project as indicated in the table below. Furthermore, indices have been calculated for the E-OBS and ECA&D observational data sets from the ENSEMBLES project and the KNMI, respectively; also all model data from the PRUDENCE and ENSEMBLES archive have been treated and archived in

the CECILIA database thus forming a very comprehensive documentation of present and expected future temperature and precipitation extremes.

Institution	Area	Comment
Eötvös Lorand University, Budapest (ELU)	Hungary	Station data
National Meteorological Administration, Bucharest (NMA)	Romania	
Hungarian Meteorological Institute, Budapest (OMSz)	Hungary	Gridded station-based
Czech Hydro-Meteorological Institute, Prague (CHMI)	Czech Republic	
National Institute of Meteorology and Hydrology, Sofia (NIMH)	Bulgaria	
University of Natural Resources and Applied Life Sciences (BOKU)	Austria	

Data are provided from the driving model ALADIN in the 50km simulation from the CNRM. The second driving model, RegCM from the ICTP in 25km resolution, forms part of the existing ENSEMBLES archive, of which the CECILIA fields form a sub-set. Hence, the ICTP data are supplied through links to this archive.

High resolution simulations from the CECILIA project are archived as seen in this table.

Institution	Driving model	Regional model	Area	Data in archive	Archived extremes indices
Charles University, Prague (CUNI)	ECHAM5+RegCM	RegCM	Central Europe	X	X
Eötvös Lorand University, Budapest (ELU)	ECHAM5+RegCM	RegCM	Hungary	X	X
National Meteorological Administration, Bucharest (NMA)	ECHAM5+RegCM	RegCM	Romania	X	X
Hungarian Meteorological Institute, Budapest (OMSz)	ARPEGE	Aladin	Hungary	X	X
Czech Hydro-Meteorological Institute, Prague (CHMI)	ARPEGE	Aladin	Central Europe	X	X
National Institute of Meteorology and Hydrology, Sofia (NIMH)	ARPEGE	Aladin	Bulgaria	Being postprocessed	