CMIP5 Models and Grid Resolution

The following table lists the models for which CMIP5 simulation data can be downloaded. Also tabulated are the grid resolutions, i.e. the distance between adjacent grid points in degrees. In case of the athmospheric grid and its latitude, the tabulated resolution is only valid for the equator region. For higher latitudes deviations may occur.

Ocean models have their own, finer grid. If two values are given for the latitude resolution of the ocean grid, resolution is not constant. The first value is that for the equator, the second for the poles (maximum for the two poles if different). In case of rotated poles the resolutions for the rotated coordinates rlon and rlat are tabulated. *lat(i,j)* and *lon(i,j)* denote latitudes and longitudes defined with two indices *i* and *j*. In this case the resolution cannot simply be read out.

Model	Atmospheric Grid		Ocean Grid	
	Latitude	Longitude	Latitude	Longitude
ACCESS1.0	1.25	1.875	*lat(i,j)*	*lon(i,j)*
ACCESS1.3	1.25	1.875	*lat(i,j)*	*lon(i,j)*
BCC-CSM1.1	2.7906	2.8125	0.3333, 1	1
BCC-CSM1.1(m)	2.7906	2.8125	0.3333, 1	1
BNU-ESM	2.7906	2.8125	0.3344, 1	1
CCSM4	0.9424	1.25	*lat(i,j)*	*lon(i,j)*
CESM1(BGC)	0.9424	1.25	*lat(i,j)*	*lon(i,j)*
CESM1(CAM5)	0.9424	1.25	*lat(i,j)*	*lon(i,j)*
CESM1(FASTCHEM)	0.9424	1.25	only time-independent ocean data	
CESM1(WACCM)	1.8848	2.5	*lat(i,j)*	*lon(i,j)*
CFSv2-2011	1	1	0.5	0.5
CMCC-CESM	3.4431	3.75	*lat(i,j)*	*lon(i,j)*
CMCC-CM	0.7484	0.75	*lat(i,j)*	*lon(i,j)*
CMCC-CMS	3.7111	3.75	*lat(i,j)*	*lon(i,j)*
CNRM-CM5	1.4008	1.40625	*lat(i,j)*	*lon(i,j)*
CNRM-CM5-2	1.4008	1.40625	*lat(i,j)*	*lon(i,j)*
CSIRO-Mk3.6.0	1.8653	1.875	0.9327, 0.9457	1.875
CSIRO-Mk3L-1-2	3.1857	5.625	only time-independent ocean data	
CanAM4	2.7906	2.8125	no ocean data	
CanCM4	2.7906	2.8125	0.9303, 1.1407	1.40625
CanESM2	2.7906	2.8125	0.9303, 1.1407	1.40625
EC-EARTH	1.1215	1.125	*lat(i,j)*	*lon(i,j)*
FGOALS-g2	2.7906	2.8125	0.5, 1	1
FGOALS-gl	4.1026	5	1	1
FGOALS-s2	1.6590	2.8125	0.5, 1	1
GEOS-5	2	2.5	1	1
GFDL-CM2.1	2.0225	2.5	0.3344, 1	1
GFDL-CM3	2	2.5	0.3344, 1	1
GFDL-ESM2G	2.0225	2	0.375, 0.5	1
GFDL-ESM2M	2.0225	2.5	0.3344, 1	1
GISS-E2-H	2	2.5	1	1
GISS-E2-H-CC	2	2.5	1	1

GISS-E2-R	2	2.5	1	1.25
GISS-E2-R-CC	2	2.5	1	1.25
HadCM3	2.5	3.75	1.25	1.25
HadGEM2-A	1.25	1.875	no ocean data	
HadGEM2-AO	1.25	1.875	0.3396, 1	1
HadGEM2-CC	1.25	1.875	0.3396, 1	1
HadGEM2-ES	1.25	1.875	0.3396, 1	1
INM-CM4	1.5	2	0.5	1
IPSL-CM5A-LR	1.8947	3.75	*lat(i,j)*	*lon(i,j)*
IPSL-CM5A-MR	1.2676	2.5	*lat(i,j)*	*lon(i,j)*
IPSL-CM5B-LR	1.8947	3.75	*lat(i,j)*	*lon(i,j)*
MIROC-ESM	2.7906	2.8125	0.5582, 1.7111	1.40625
MIROC-ESM-CHEM	2.7906	2.8125	0.5582, 1.7111	1.40625
MIROC4h	0.5616	0.5625	0.1875	0.28125
MIROC5	1.4008	1.40625	0.5, 0.5	1.40625
MPI-ESM-LR	1.8653	1.875		
MPI-ESM-MR	1.8653	1.875	orthogonal curvilinear coordinates *lat(i,j)* and *lon(i,j)*	
MPI-ESM-P	1.8653	1.875		
MRI-AGCM3-2H	0.562	0.5625	no ocean data	
MRI-AGCM3-2S	0.188	0.1875		
MRI-CGCM3	1.12148	1.125	0.5, 0.5	1
MRI-ESM1	1.12148	1.125	0.5, 1.125	1
NorESM1-M	1.8947	2.5	*lat(i,j)*	*lon(i,j)*
NorESM1-ME	1.8947	2.5	*lat(i,j)*	*lon(i,j)*

Details concerning the European models

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Support services

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