A Big Earth Data Platform for Three Poles

**Simulated dataset of 3km/1hour in Heihe River basin (2009)**

1、Description

In east Asia, institute of atmospheric physics, Chinese Academy of Sciences key laboratory of regional climate and environment development of regional integration environment with independent copyright system model RIEMS 2.0, on the basis of the regional climate model RIEMS 2.0 in the United States center for atmospheric research and the development of the university of binzhou mesoscale model (MM5) is a static dynamic framework, coupled with some physical processes needed for the study climate solutions.These processes include the biosphere - atmosphere transmission solutions, using FC80 closed Grell cumulus parameterization scheme, MRF planetary boundary condition and modify the CCM3 radiation, such as the heihe river basin observation and remote sensing data of important parameters in the model for second rate, and USES the heihe river basin vegetation data list data of land use in 2000 and the heihe river basin in 30 SEC DEM data, building up suitable for the study of heihe river basin ecological - hydrological processes of the regional climate model.The era-interim reanalysis data were used as the driving field to establish the regional climate model suitable for the study of the eco-hydrological process of the heihe river basin.
Spatial scope: the grid center of the simulation area is located at (40.30n, 99.50e), the horizontal resolution is 3 km, and the number of simulated grid points in the model is 161 (meridional) X 201 (zonal).
Projection: LAMBERT conformal projection, two standard latitudes of 30N and 60N.
Time range: January 1, 2009 - December 31, 2009, time interval of 1 hour
File content description: a total of 12 files, according to the variable independent name.After each file is unzipped, it is a text file with 7 lines of packet line header, and 365\*24\*201 lines, each with 161 columns.

2、Keywords

Theme：Precipitation,Radiation,Temperature
Discipline：Atmosphere
Places：Heihe River Basin
Time：2009

3、Data details

1.Scale：100000

2.Projection：4326

3.Filesize：23571.45MB

4.Data format：文本

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：43.3 | - |
| west：96.1 | - | east：104.2 |
| - | south：37.7 | - |

5、Time frame:2009-01-11 00:00:00+00:00--2010-01-10 23:00:00+00:00

6、Reference method

References to data:

Simulated dataset of 3km/1hour in Heihe River basin (2009). A Big Earth Data Platform for Three Poles, doi:10.3972/heihe.002.2013.db2015

References to articles:

Xiong, Z, Yan, X.D. (2013). Building a high-resolution regional climate model for the Heihe River Basin and simulating precipitation over this region. Chinese Science Bulletin, 58(036), 4670-4678. doi:10.116/s11434-013-5971-3.

7、Supporting project information

8、Data resource provider