A Big Earth Data Platform for Three Poles

**2015-2100 global climate dataset considering different SSPs scenarios of China's carbon neutral targets**

1、Description

The data set is a numerical simulation data set based on CESM2.1.3 mode. The data set is global multi scenario monthly climate data. The spatial resolution is f19\_ G17 atmosphere/land is 1.9x2.5 degrees, from January 2015 to December 2010, and the data is in NETCDF format.
The data set includes historical data from 1850-2014 (referred to as Hist for short) and SSP scenarios (SSP126, SSP245, SSP370, SSP585). Each scenario includes three sets of climate data (default emission data CMIP6 (referred to as CMIP6 for short), China's carbon neutral CNCN (referred to as CNCN for short) CO2 emissions, and China's CH4 and N2O changes with CNCN, which are further used to drive the CESM (referred to as CNCNext for short)), The data set contains a geospatial range of - 90 ° N – 90 ° N and - 180 ° E – 180 ° E.

2、Keywords

Theme：Global warming,Greenhouse Gases,CO2,Other,carbon neutrality
Discipline：Atmosphere
Places：global, China
Time：2015-2100, 1850-2014

3、Data details

1.Scale：None

2.Projection：

3.Filesize：3600000.0MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：90.0 | - |
| west：90.0 | - | east：180.0 |
| - | south：90.0 | - |

5、Time frame:2017-11-30 16:00:00+00:00--2022-09-09 03:59:59+00:00

6、Reference method

References to data:

LI Longhui . 2015-2100 global climate dataset considering different SSPs scenarios of China's carbon neutral targets. A Big Earth Data Platform for Three Poles, doi:https://doi.org/10.1038/s41467-022-33047-92022

References to articles:

Li, L., Zhang, Y., Zhou, T., Wang, K., Wang, C., Wang, T., Yuan, L., An, K., Zhou, C., & Lü, G. (2022). Mitigation of China’s carbon neutrality to global warming. Nature Communications, 13(1), 1-7.

7、Supporting project information

8、Data resource provider

name: LI Longhui
unit: Nanjing Normal University
email: Longhui.Li@njnu.edu.cn