Upper Yangtze River Scientific Data Center

**Meteorological forcing data with nine-kilometer spatial resolution simulated by WRF model for southwest China (2020)**

1、Description

This data set is simulated by ERA5 reanalysis data driven WRF model, and is simulated by three-layer nesting. The variables of this data set include near-surface pressure (hPa), 10m wind speed (m/s), 2m temperature (℃), 2m relative humidity (%), downward short-wave radiation (W/m-2), downward long-wave radiation (W/m-2), and precipitation (mm/h). The data is in NETCDF format, with a time resolution of 1 hour and a horizontal spatial resolution of 9 km. The projection method is Lambert projection. This data set can provide atmospheric driving data with high spatial and temporal resolution for the simulation of land surface processes in Chongqing, a complex mountainous area.

2、Keywords

Theme：2m temperature,Radiation,Temperature,Winds,Radiation,wind speed  
Discipline：Atmosphere  
Places：Southwest University, China  
Time：2020

3、Data details

1.Scale：None

2.Projection：Lambert\_Conformal\_Conic

3.Filesize：23040.0MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：36.2 | - |
| west：100.5 | - | east：115.0 |
| - | south：23.8 | - |

5、Time frame:2019-12-31 16:00:00+00:00--2020-12-30 16:00:00+00:00

6、Reference method

References to data:

LANG Qin . Meteorological forcing data with nine-kilometer spatial resolution simulated by WRF model for southwest China (2020). Upper Yangtze River Scientific Data Center, 2023

References to articles:

7、Supporting project information

8、Data resource provider

name: LANG Qin   
unit: School of Geographical Sciences, Southwest University  
email: langqin@email.swu.edu.cn