Upper Yangtze River Scientific Data Center

**MERRA-2 Surface Diagnostic Dataset of 0.5 ° \* 0.625 ° in Southwest China (1980-2022)**

1、Description

MERRA-2 is the latest version of the data set for global atmospheric reanalysis in the satellite era produced by NASA's Global Modeling and Assimilation Office (GMAO) using Goddard Earth Observation System Model (GEOS) version 5.12.4. With the enhancement of meteorological assimilation, MERRA-2 has taken an important step towards the goal of GMAO Earth system reanalysis. MERRA-2 is the first long-term global reanalysis to assimilate space-based aerosol observations and represent their interactions with other physical processes in the climate system. This data set is a two-dimensional data collection with an average time of every hour in MERRA-2, covering the period from 1980 to 2022, with a spatial resolution of 0.5 ° \* 0.625 °. This collection contains the surface diagnostic data of Southwest China, such as base flow flux, surface temperature, runoff, surface soil moisture, root zone soil moisture, surface water, root zone layer water and six layer soil temperature. The data field is time marked using the one hour central time starting from 00:30 UTC, for example: 00:30, 01:30,..., 23:30 UTC.

2、Keywords

Theme：Land Surface Parameter,Terrestrial Surface Remote Sensing  
Discipline：Terrestrial Surface  
Places：Southwest China  
Time：1980-2022

3、Data details

1.Scale：None

2.Projection：WGS84

3.Filesize：31744.0MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：34.5 | - |
| west：97.0 | - | east：112.5 |
| - | south：20.5 | - |

5、Time frame:1979-12-31 16:00:00+00:00--2022-07-30 16:00:00+00:00

6、Reference method

References to data:

NASA NASA . MERRA-2 Surface Diagnostic Dataset of 0.5 ° \* 0.625 ° in Southwest China (1980-2022). Upper Yangtze River Scientific Data Center, doi:10.5067/RKPHT8KC1Y1T2022

References to articles:

7、Supporting project information

8、Data resource provider

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