Upper Yangtze River Scientific Data Center

**Radiation product data set based on FY-4A AGRI of Fengyun satellite (August 12, 2018 to present)**

1、Description

The data set includes: outgoing long wave radiation (OLR), surface downward long wave radiation (DLR), surface incident solar radiation (SSI), and surface upward long wave radiation (ULR). All data are from Fengyun Satellite Remote Sensing Data Service Network. Among them, satellite OLR products are widely used in the evaluation of climate model output parameters, i.e. model performance. In the Chinese meteorological community, OLR data are used to monitor the summer monsoon over the South China Sea and determine the location of the Western Pacific subtropical high. International OLR data are used for monitoring and analysis of ITCZ and ENSO. Satellite DLR products are applied to climate models, land surface models and ocean atmospheric general circulation models as input parameters or model performance evaluation. SSI is the solar radiation flux density incident to the earth's surface (unit: W/m2), specifically referring to the earth's surface  
The total solar radiation energy received per unit time and area on the horizontal plane, including direct solar radiation and diffuse radiation. Provide input and verification for weather, climate and land surface models, and provide surface solar radiation distribution information for solar energy industry, forest and grassland fire monitoring and early warning. Satellite ULR products are used in climate models, land surface models, ocean atmospheric general circulation models, as input parameters or model performance evaluation, and also for earthquake diagnosis.

2、Keywords

Theme：Solar radiation,Remote Sensing Technology  
Discipline：Remote Sensing Technology  
Places：Southwest China  
Time：2022.6.1-至今

3、Data details

1.Scale：None

2.Projection：WGS84

3.Filesize：10467143.68MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：50.0 | - |
| west：83.0 | - | east：180.0 |
| - | south：-50.0 | - |

5、Time frame:2018-03-11 16:00:00+00:00--2022-09-26 16:00:00+00:00

6、Reference method

References to data:

WU Xiao . Radiation product data set based on FY-4A AGRI of Fengyun satellite (August 12, 2018 to present). Upper Yangtze River Scientific Data Center, 2022

References to articles:

7、Supporting project information

8、Data resource provider

name: WU Xiao   
unit: National Climate Centre, National Meteorological Centre, Provincial and Local Meteorological Bureaux  
email: wuxiao@cma.gov.cn