A Big Earth Data Platform for Three Poles

**Land Surface Temperature Dataset of Typical Stations in Middle Reaches of Heihe River Basin Based on UAV Remote Sensing(2019-07-09,V1)**

1、Description

Land surface temperature is a critical parameter in land surface energy balance. This dataset provides the monthly land surface temperature of UAV remote sensing for typical ground stations in the middle reaches of Heihe River basin from July to September in 2019. The land surface temperature retrieval algorithm is an improved single-channel algorithm, which was applied to the land surface brightness temperature data obtained by the UAV thermal infrared remote sensing sensor, and finally the land surface temperature data with a spatial resolution of 0.4m was obtained.

2、Keywords

Theme：Vegetation,Thermal infrared,Atmosphere Remote Sensing,land surface temperature,Thermal infrared image  
Discipline：Atmosphere,Terrestrial Surface  
Places：Huazhaizi, Middle Reaches of Heihe River Basin, Heihe River Basin, Zhangye National Wetland Park,   
Time：2019

3、Data details

1.Scale：None

2.Projection：WGS84

3.Filesize：1229.0MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：38.98 | - |
| west：100.309 | - | east：100.451 |
| - | south：38.757 | - |

5、Time frame:2019-06-08 08:00:00+00:00--2019-10-07 08:00:00+00:00

6、Reference method

References to data:

WANG Ziwei, ZHOU Ji, LIU Shaomin. Land Surface Temperature Dataset of Typical Stations in Middle Reaches of Heihe River Basin Based on UAV Remote Sensing(2019-07-09,V1). A Big Earth Data Platform for Three Poles, doi:10.11888/Ecolo.tpdc.2707402020

References to articles:

Li, M., Zhou, J., Peng, Z., Liu, S., Göttsche, F., Zhang, X., Song, L. (2019). Component radiative temperatures over sparsely vegetated surfaces and their potential for upscaling land surface temperature. Agricultural and Forest Meteorology, 276–277. https://doi.org/10.1016/j.agrformet.2019.05.031

7、Supporting project information

Pan-Third Pole Environment Study for a Green Silk Road-A CAS Strategic Priority A Program

8、Data resource provider

name: LIU Shaomin  
unit: Beijing Normal University  
email: smliu@bnu.edu.cn  
  
name: ZHOU Ji  
unit: University of Electronic Science and Technology of China  
email: jzhou233@uestc.edu.cn  
  
name: WANG Ziwei  
unit:   
email: oneziway@163.com