A Big Earth Data Platform for Three Poles

**HiWATER: Thermal-Infrared yyperspectral radiometer（Jul. 4, 2012）**

1、Description

On 4 July 2012 (UTC+8), a TASI sensor boarded on the Y-12 aircraft was used to obtain the thermal-infrared hyperspectral image, which is located in the observation experimental area, Linze region and Heihe riverway. The relative flight altitude is 1000 meters. The wavelength of TASI is 8-11.5 μm with a spatial resolution of 3 meters.   
Through the ground sample points and atmospheric data, the data are recorded in surface radiance processed by geometric correction and atmospheric correction. Land surface temperature (LST) data was retrieved by temperature/emissivity separation algorithm.

2、Keywords

Theme：TASI,Terrestrial Surface Remote Sensing  
Discipline：Terrestrial Surface  
Places：Heihe River Basin, the artificial oasis experimental area in the middle reaches  
Time：2012, 2012-07-04

3、Data details

1.Scale：None

2.Projection：WGS84 UTM

3.Filesize：2283.52MB

4.Data format：影像

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：39.0 | - |
| west：100.3 | - | east：100.46 |
| - | south：38.7 | - |

5、Time frame:2018-11-20 18:48:33+00:00--2018-11-20 18:48:33+00:00

6、Reference method

References to data:

Wen Jianguang. HiWATER: Thermal-Infrared yyperspectral radiometer（Jul. 4, 2012）. A Big Earth Data Platform for Three Poles, doi:10.3972/hiwater.006.2013.db2017

References to articles:

Li, X., Liu, S.M., Xiao, Q., Ma, M.G., Jin, R., Che, T., Wang, W.Z., Hu, X.L., Xu, Z.W., Wen, J.G., Wang, L.X. (2017). A multiscale dataset for understanding complex eco-hydrological processes in a heterogeneous oasis system. Scientific Data, 4, 170083. doi:10.1038/sdata.2017.83.

7、Supporting project information

Heihe Watershed Allied Telemetry Experimental Research (HiWATER)

8、Data resource provider

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