A Big Earth Data Platform for Three Poles

**WATER: Dataset of LST (land surface temperature) observed by the thermal camera in the Yingke oasis, Huazhaizi desert steppe and Linze grassland foci experimental areas (2008)**

1、Description

The dataset of LST (land surface temperature) observed by the thermal camera (ThermaCAM SC2000 and ThermaCAM S60) at 24°×18° was obtained in the Yingke oasis, Huazhaizi desert steppe and Linze grassland foci experimental areas on May 20, 24,28 and 30, Jun. 1, 4, 16 and 29, Jul. 7, 8 and 11, 2008. Meanwhile, the optical photos were acquired in Yingke oasis maize field, Huazhaizi desert No. 1 and 2 plots, Huazhaizi desert maize field and Linze grassland. The dataset of ground truth measurement was synchronizing with WiDAS (Wide-angle Infrared Dual-mode line/area Array Scanner), OMIS-II, Landsat TM and ASTER.

2、Keywords

Theme：Radiation,Radiation temperature,Terrestrial Surface Remote Sensing,Ground verification information  
Discipline：Atmosphere,Terrestrial Surface  
Places：Heihe River Basin, Arid Region Hydrology in the Middle Reaches,   
Time：2008-07-08, 2008,

3、Data details

1.Scale：None

2.Projection：4326

3.Filesize：955.7MB

4.Data format：

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：39.268 | - |
| west：100.037 | - | east：100.46 |
| - | south：38.734 | - |

5、Time frame:2008-06-04 08:00:00+00:00--2008-07-26 08:00:00+00:00

6、Reference method

References to data:

HE Tao, WANG Tianxing, KANG Guoting, Liu Qiang, YAN Guangkuo, ZHOU Mengwei, YANG Tianfu, LI Hua, CHEN Shaohui, ZHOU Chunyan, XIA Chuanfu, REN Huazhong, WANG Haoxing. WATER: Dataset of LST (land surface temperature) observed by the thermal camera in the Yingke oasis, Huazhaizi desert steppe and Linze grassland foci experimental areas (2008). A Big Earth Data Platform for Three Poles, doi:10.3972/water973.0145.db2013

References to articles:

康国婷, 阎广建, 任华忠, 王颢星, 钱永刚. 田块尺度作物辐射温度获取方法对比研究. 地球科学进展, 2009, 24(7): 784-792.

7、Supporting project information

The CAS (Chinese Academy of Sciences) Action Plan for West Development Project  
National Program on Key Basic Research Project (973 Program

8、Data resource provider

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