A Big Earth Data Platform for Three Poles

**Remote sensing dataset of landsurface in Badain Jaran Desert, 1.0（1990-2010）**

1、Description

This dataset contains three basic remote sensing data of digital topography (DEM), TM remote sensing image and NDVI vegetation index of badan jilin desert.
1. DEM, digital terrain data, from the SRTM1 data set released by NASA in the United States, was cropped in the desert area.The resolution is 30 m.The data is stored in the DEM folder, and the dm.ovr file can be opened by ArcGIS.
2. TM image data.The composite data of Landsat TM/ETM + 543 band released by NASA were cropped in the desert lake group distribution area.The resolution is 30 m.From 1990 to 2010, one scene was selected in summer and one scene in autumn every five years to analyze the long-term changes of the lake.In 2002, there was a scene for each quarter to analyze the changes of the lake during the year.The data is stored in TM folder, TIFF format, can be opened by ArcGIS or ENVI software.The file naming rule is yyyymm.tif, where yyyy refers to the year and mm to the month. For example, 199009 refers to the time corresponding to the impact data of September 1990.
3. NDVI, vegetation index.The modis-ndvi product MOD13Q1, released by NASA, was cropped in desert areas.The NDVI data of every ten days of the growing season (June, July, August and September) from 2000 to 2012 are included. The spatial resolution is 250 m and the temporal resolution is 16 days.Stored in NDVI folder, TIFF format, can be opened by ArcGIS or ENVI software.Mosaic\_tmp\_yyyyddd.hdfout.250m\_16\_days\_ndvi\_roi.tif,
Where yyyy represents the year and DDD represents the day of DDD of the year.

2、Keywords

Theme：Digital elevation model,Topography,NDVI,Remote Sensing Technology,Visible remote sensing,Terrestrial Surface Remote Sensing
Discipline：Terrestrial Surface,Remote Sensing Technology
Places：Heihe River Basin, Badain Jaran Desert
Time：1990-2012

3、Data details

1.Scale：None

2.Projection：4326

3.Filesize：1309.0MB

4.Data format：PDF

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：42.0 | - |
| west：101.0 | - | east：104.0 |
| - | south：39.0 | - |

5、Time frame:1990-07-18 21:00:00+00:00--2013-07-07 22:00:00+00:00

6、Reference method

References to data:

HU Xiaonong. Remote sensing dataset of landsurface in Badain Jaran Desert, 1.0（1990-2010）. A Big Earth Data Platform for Three Poles, doi:10.3972/heihe.077.2014.db2014

References to articles:

金晓媚、高萌萌、巩朋、张竞. 巴丹吉林沙漠陆面遥感数据集 1.0. 北京：中国地质大学(北京), 2014. [Jin XM, Gao MM, Gong P, Zhang J. Remote sensing datasets of landsurface in Badain Jaran Desert, 1.0. Beijing: China University of Geosciences, Beijing, 2014. ]doi:10.3972/heihe.077.2014.db

7、Supporting project information

8、Data resource provider

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