A Big Earth Data Platform for Three Poles

**Surface information of Qinghai-Tibet engineering corridor (2014-2020)**

1、Description

The dataset is the remote sensing image data ofGF-1 satellite in the Qinghai-Tibet engineering corridor obtained by China High Resolution Earth Observation Center. After the fusion processing of multispectral and panchromatic bands, the image data with a spatial resolution of 2 m is obtained. In the process of obtaining ground vegetation information, the classification technology of combining object-oriented computer automatic interpretation and manual interpretation is adopted, The object-oriented classification technology is to collect adjacent pixels as objects to identify the spectral elements of interest, make full use of high-resolution panchromatic and multispectral data space, texture and spectral information to segment and classify, and output high-precision classification results or vectors. In actual operation, the image is automatically extracted by eCognition software. The main processes are image segmentation, information extraction and accuracy evaluation. After verification with the field survey, the overall extraction accuracy is more than 90%.

2、Keywords

Theme：Frozen Ground,Terrestrial Surface Remote Sensing
Discipline：Terrestrial Surface,Cryosphere
Places：Qinghai-Tibet Engineering Corridor, China
Time：2014-2020

3、Data details

1.Scale：None

2.Projection：

3.Filesize：2024.0MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：37.0 | - |
| west：90.0 | - | east：95.0 |
| - | south：31.0 | - |

5、Time frame:2013-12-31 16:00:00+00:00--2020-12-30 16:00:00+00:00

6、Reference method

References to data:

NIU Fujun. Surface information of Qinghai-Tibet engineering corridor (2014-2020). A Big Earth Data Platform for Three Poles, doi:10.11888/Terre.tpdc.2727962022

References to articles:

7、Supporting project information

CASEarth:Big Earth Data for Three Poles（grant No. XDA19070000）

8、Data resource provider

name: NIU Fujun
unit: Northeast Institute of Ecology and Environmental Resources,Chinese Academy of Sciences
email: niufujun@lzb.ac.cn