A Big Earth Data Platform for Three Poles

**WATER: EO-1 Hyperion dataset**

1、Description

Eo-1 (Earth Observing Mission) is a new Earth Observing satellite developed by NASA to replace Landsat7 in the 21st century. It was launched on November 21, 2000.The orbit of eo-1 satellite is basically the same as that of Landsat7, which is a solar synchronous orbit with an orbital altitude of 705km and an inclination Angle of 98.7°, which is 1min less than that of Landsat7 and crosses the equator.On board of EO 1 3 kinds of sensors, namely, the Advanced Land Imager (ALI (the Advanced Land Imager), atmospheric correction instrument AC (Atmosp heric Corrector) and compose a specular as spectrometer (Hyperion), Hyperion sensor is first spaceborne hyperspectral mapping measurement instrument, the hyperspectral data a total of 242 bands, spectral range is 400 ~ 2500 nm, spectral resolution up to 10 nm, ground resolution of 30 m.  
Currently, there are 6 scenes of eo-1 Hyperion data in heihe river basin.The coverage and acquisition time were: 4 scenes in the encrypted observation area of zhangye urban area + yingke oasis encrypted observation area (2007-09-10, 2008-05-12, 2008-05-20, 2008-07-15).Two scenes of the iceditch watershed observation area were encrypted, the time was 2008-03-17, 2008-03-22, respectively.  
Product grade is L1 without geometric correction.  
The eo-1 Hyperion remote sensing data set of heihe integrated remote sensing joint experiment was acquired by researcher wang jian and Beijing normal university through purchase.  
(note: "+" represents simultaneous coverage)

2、Keywords

Theme：Remote Sensing Technology,Visible remote sensing  
Discipline：Remote Sensing Technology  
Places：Heihe River Basin, Arid Region Hydrology in the Middle Reaches, Zhangye City Foci Experimental Area, the cold region hydrology experimental area in the upper reaches, ice-channel watershed encryption observation area  
Time：2007, 2008-05-12, 2008,

3、Data details

1.Scale：None

2.Projection：4326

3.Filesize：1821.1MB

4.Data format：

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：39.393 | - |
| west：100.293 | - | east：100.389 |
| - | south：37.495 | - |

5、Time frame:2008-03-22 08:00:00+00:00--2009-01-26 07:00:00+00:00

6、Reference method

References to data:

Institute of Remote Sensing and Digital earth, Chinese Academy of Sciences. WATER: EO-1 Hyperion dataset. A Big Earth Data Platform for Three Poles, 2014

References to articles:

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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