A Big Earth Data Platform for Three Poles

**Landscape structure changes dataset of the terminal lakes and wetlands of the China's Heihe River Basin in the recent 50 years**

1、Description

Taking Landsat series data as the main data source, including KH in 1965 (only including Gurinai and Guaizi Lake), MSS in 1975, TM in 1990, 1995, 2006 and 2010, and ETM in 2000. Before information extraction, remote sensing images are preprocessed by image synthesis, mosaic, fusion, geometric correction and image enhancement. In the process of correction, ETM + image in 2000 is corrected by 1:100000 topographic map and used as reference image. The 4, 3 and 2 band standard pseudocolor synthesis scheme is selected for image synthesis; during correction, 7 × 8 control points are evenly selected on each image, and the average positioning error is less than 1 pixel, that is, the ground distance is less than 30m. In other years, the datum image of 2000 is used as the reference image for image registration, so that the pixels with the same name on different images have the same geographical coordinates. After correction and registration, the whole image maintains the 30 m spatial resolution of TM. Through field correction, the accuracy of qualitative analysis can be ensured to be over 95%.

2、Keywords

Theme：Biological Resources,Landscape structure,Tourism Resources,Wetlands resource  
Discipline：Human-nature Relationship  
Places：Heihe River Basin,   
Time：2010, 2006, 1990,

3、Data details

1.Scale：None

2.Projection：None

3.Filesize：0.032MB

4.Data format：EXCEL

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：42.0 | - |
| west：96.0 | - | east：102.0 |
| - | south：37.0 | - |

5、Time frame:2018-11-25 10:48:23+00:00--2018-11-25 10:48:23+00:00

6、Reference method

References to data:

XIAO Shengchun. Landscape structure changes dataset of the terminal lakes and wetlands of the China's Heihe River Basin in the recent 50 years. A Big Earth Data Platform for Three Poles, doi:10.3972/heihe.066.2014.db2014

References to articles:

7、Supporting project information

8、Data resource provider

name: XIAO Shengchun  
unit:   
email: xiaosc@lzb.ac.cn