A Big Earth Data Platform for Three Poles

**WATER: PROBA CHRIS dataset (2008-2009)**

1、Description

Proba (project for on board autonomy) is the smallest earth observation satellite launched by ESA in 2001. Chris (compact high resolution imaging Spectrometer) is the most important imaging spectrophotometer on the platform of proba. It has five imaging modes. With its excellent spectral spatial resolution and multi angle advantages, it can image land, ocean and inland water respectively for different research purposes. It is the only on-board sensor in the world that can obtain hyperspectral and multi angle data at the same time. It has high spatial resolution, wide spectral range, and can collect rich information in biophysics, biochemistry, etc. At present, there are 23 scenes of proba Chris data in Heihe River Basin.   
The coverage and acquisition time are as follows: 4 scenes in Arjun dense observation area, 2008-11-18, 2008-12-05, 2009-03-29, 2009-05-22; 1 scene in pingdukou dense observation area, 2009-07-13; 7 scenes in Binggou basin dense observation area, 2008-11-19, 2008-11-26, 2008-12-06, 2009-01-10, 2009-03-04, 2009-03-30, 2009-03-31; dayokou basin dense observation area, 2009-07-13 There are two views in the observation area, 2008-10-23, 2009-06-08; one in Linze area, 2008-06-23; one in Minle area, 2008-10-22; seven in Yingke oasis dense observation area, 2008-04-30, 2008-05-09, 2008-06-04, 2008-07-01, 2008-07-19, 2009-05-31, 2009-08-10.   
The product level is L1 without geometric correction. Except that there are only four angles for the images of 2009-03-29 and 2009-05-24 in the Arjun encrypted observation area, each image has five different angles.   
The remote sensing data set of the comprehensive remote sensing joint experiment of Heihe River, proba Chris, was obtained through the "dragon plan" project (Project No.: 5322) (see the data use statement for details).

2、Keywords

Theme：Remote Sensing Technology,Visible remote sensing  
Discipline：Remote Sensing Technology  
Places：Heihe River Basin, Dayekou watershed foci experimental areas, Forest and Hydrology Experimental Areas, Linze encryption test area, Arid Region Hydrology in the Middle Reaches, the cold region hydrology experimental area in the upper reaches, A'rou flight zone, closed observation area of Biandoukou, ice-channel watershed encryption observation area,   
Time：

3、Data details

1.Scale：None

2.Projection：4326

3.Filesize：9087.9MB

4.Data format：数字影像

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：42.685 | - |
| west：100.04 | - | east：102.125 |
| - | south：37.683 | - |

5、Time frame:2008-05-12 16:15:00+00:00--2009-06-20 15:00:00+00:00

6、Reference method

References to data:

LI Xin. WATER: PROBA CHRIS dataset (2008-2009). A Big Earth Data Platform for Three Poles, 2011

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

name: LI Xin  
unit:   
email: xinli@itpcas.ac.cn