A Big Earth Data Platform for Three Poles

**2017 water products based on sentinel-2 in Sanjiangyuan, Puhe and Yukon River Basins**

1、Description

The data of this study is mainly based on Google Earth Engine big data cloud processing platform. Sentinel-2 of The Three River Headwater region, Pul and Yukon River Basins in 2017 is selected as the basic data, STRM-DEM and Global Surface Water are used as auxiliary data. AWEIn，AWEIs，WI2015，MNDWI，NDWI and other index threshold extraction are selected to obtain seasonal water body and permanent water body according to annual water frequency(spatial resolution 10m). This water data product provides effective basic data for high spatial-temporal resolution water body change and permafrost hydrological analysis.

2、Keywords

Theme：Area,Surface Water,Lakes
Discipline：Terrestrial Surface
Places：The Three River Headwater region, Yukon River Basins, Pul River Basins
Time：2017

3、Data details

1.Scale：None

2.Projection：WGS84

3.Filesize：4780.0MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：37.0 | - |
| west：89.0 | - | east：104.0 |
| - | south：31.0 | - |

5、Time frame:2017-01-12 08:00:00+00:00--2018-01-11 19:59:59+00:00

6、Reference method

References to data:

RAN Youhua. 2017 water products based on sentinel-2 in Sanjiangyuan, Puhe and Yukon River Basins. A Big Earth Data Platform for Three Poles, doi:10.11888/Hydro.tpdc.2709542019

References to articles:

7、Supporting project information

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

8、Data resource provider

name: RAN Youhua
unit:
email: ranyh@lzb.ac.cn