时空三极环境大数据平台

**High resolution inland surface water dataset for the tundra and boreal in North America**

英文标题：High resolution inland surface water dataset for the tundra and boreal in North America

1、摘要

The Water body dataset for the North American high latitudes(WBD-NAHL) data is important for hydrology research, matter and energy cycle research. The inland water inventory included water bodies of tundra and boreal forest in North America. The water extent was extracted from Sentinel-2 A/B multi-spectral with assistant of JRC yearly permanent water. Both water index and random forest methods were used to detect water. The water index extracted the loose water extent. Random forest extracted the more accurate water extent. And area, perimeter and shape index (SI) were provided in this dataset. The overall accuracy is 98%. It was established that about 6.5 million water bodies presented in tundra and boreal forest in North America, among witch 6 million small water bodies less than 0.1 km2 (90% of total water bodies) were included. And the inventory covered 801,445 km2 inland water, the average size, perimeter and SI of which were 0.12 km2, 1.01 km and 1.43.

2、关键词

主题关键词：海洋遥感,内陆水域  
学科关键词：海洋  
地点关键词：tundra and boreal forest, North America  
时间关键词：Yearly, permanent water

3、数据细节

1.比例尺：None

2.投影：

3.文件大小：1475.0MB

4.数据格式：None

4、空间范围

|  |  |  |
| --- | --- | --- |
| - | 北：71.991885 | - |
| 西：-176.630704 | - | 东：-52.664451 |
| - | 南：44.997592 | - |

5、时间范围2019-05-31 16:00:00+00:00--2019-09-29 16:00:00+00:00

6、引用方式

数据的引用:

冯敏, Yijie Sui. High resolution inland surface water dataset for the tundra and boreal in North America. 时空三极环境大数据平台, DOI:10.11888/Hydro.tpdc.271021, CSTR:18406.11.Hydro.tpdc.271021, 2020.[SUI Yijie, FENG Min. . A Big Earth Data Platform for Three Poles, DOI:10.11888/Hydro.tpdc.271021, CSTR:18406.11.Hydro.tpdc.271021, 2020]

文章的引用:

7、资助项目信息

8、数据资源提供者

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