时空三极环境大数据平台

**A new MODIS snow cover extent product over China（2000-2020）**

英文标题：A new MODIS snow cover extent product over China（2000-2020）

1、摘要

For the snow distribution area in China, we prepared a MODIS day-by-day cloud-free snow area dataset with a spatial resolution of 500m from 2000 to 2020 based on the MODIS reflectivity product MOD/MYD09GA, using a decision tree snow discriminant algorithm for different surface types and a vacancy filling algorithm such as a spatiotemporal interpolation algorithm for the hidden Markov random field model. The dataset is stored in HDF5 file format, and each HDF5 file contains 18 data elements, which include data values, data start date, latitude, and longitude. Meanwhile, for a quick preview of snow distribution, the day-by-day file contains snow area thumbnails stored in jpg format. This dataset will be continuously supplemented and improved based on real-time satellite remote sensing data and algorithm updates (currently through December 2020), and will be shared in a fully open sharing format.

2、关键词

主题关键词：积雪,积雪
学科关键词：冰冻圈
地点关键词：China
时间关键词：2000-2020

3、数据细节

1.比例尺：None

2.投影：

3.文件大小：72704.0MB

4.数据格式：None

4、空间范围

|  |  |  |
| --- | --- | --- |
| - | 北：56.0 | - |
| 西：72.0 | - | 东：142.0 |
| - | 南：16.0 | - |

5、时间范围2000-02-27 16:00:00+00:00--2020-12-30 16:00:00+00:00

6、引用方式

数据的引用:

HAO Xiaohua. A new MODIS snow cover extent product over China（2000-2020）. 时空三极环境大数据平台, DOI:10.11888/Snow.tpdc.271387, CSTR:18406.11.Snow.tpdc.271387, 2021.[HAO Xiaohua. A new MODIS snow cover extent product over China（2000-2020）. A Big Earth Data Platform for Three Poles, DOI:10.11888/Snow.tpdc.271387, CSTR:18406.11.Snow.tpdc.271387, 2021]

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7、资助项目信息

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8、数据资源提供者

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