A Big Earth Data Platform for Three Poles

**Basic datasets of Urumqi river basin in Chinese Cryospheric Information System**

1、Description

Chinese Cryospheric Information System is a comprehensive information system for the management and analysis of Chinese cryospheric data. The establishment of Chinese Cryospheric Information System is to meet the needs of earth system science, and provide parameters and verification data for the development of response and feedback models of permafrost, glacier and snow cover to global changes under GIS framework. On the other hand, the system collates and rescues valuable cryospheric data to provide a scientific, efficient and safe management and analysis tool.
Chinese Cryospheric Information System contains three basic databases of different research regions. The basic database of Urumqi river basin is one of three basic databases, which covers the Urumqi river basin in tianshan mountain, east longitude 86-89 °, and north latitude 42-45 °, mainly containing the following data:
1. Cryospheric data.Include:
Distribution of glacier no. 1 and glacier no. 2;
2. Natural environment and resources.Include:
Terrain digital elevation: elevation, slope, slope direction;
Hydrology: current situation of water resource utilization;Surface water;
Surface characteristics: vegetation type;Soil type;Land resource evaluation map;Land use status map;
3. Social and economic resources: a change map of human action;
Please refer to the documents (in Chinese): "Chinese Cryospheric Information System design. Doc" and "Chinese Cryospheric Information System data dictionary. Doc".

2、Keywords

Theme：Soil,Glacier topography,Land Use/Land Cover,Visibility,Land use change,Glacier(Ice Sheet),Soil classification
Discipline：Atmosphere,Terrestrial Surface,Cryosphere
Places：Urumqi River Basin
Time：1983, 1962, 1973, 1986, 1964

3、Data details

1.Scale：None

2.Projection：None

3.Filesize：537.0MB

4.Data format：矢量、栅格、文本

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：44.0 | - |
| west：86.0 | - | east：89.0 |
| - | south：43.0 | - |

5、Time frame:None--None

6、Reference method

References to data:

LI Xin. Basic datasets of Urumqi river basin in Chinese Cryospheric Information System. A Big Earth Data Platform for Three Poles, doi:10.11888/Glacio.tpdc.2702892010

References to articles:

Li, X., Cheng, G.D., Wu, Q.B., & Ding, Y.J. (2003). Modeling Chinese cryospheric change by using GIS technology. Cold Regions Science and Technology, 36(1-3), 1-9.

7、Supporting project information

8、Data resource provider

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