A Big Earth Data Platform for Three Poles

**Light-absorbing impurities from snow and ice in Tibetan Plateau and its surroudings (2020)**

1、Description

The data set of light absorbing impurities in snow and ice in and around the Qinghai Tibet Plateau include black carbon and dust concentration data and their mass absorption cross sections from 9 glaciers (Urumqi glacier No.1, Laohugou glacier No.12, xiaodongkemadi glacier, renlongba glacier, Baishui River glacier No.1, and golubin glacier, Abramov glacier, syekzapadniyi glacier and No. 354 glacier in Pamir region) . The black carbon data is obtained by DRI 2015 model thermo-optical carbon analyzer, and the dust data is obtained by weighing method. The sampling and experimental processes are carried out in strict accordance with the requirements. The data can be used for the study of snow ice albedo and climate effect.

2、Keywords

Theme：Glacier(Ice Sheet)  
Discipline：Cryosphere  
Places：Tibetan Plateau  
Time：2020

3、Data details

1.Scale：None

2.Projection：

3.Filesize：0.057MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：50.0 | - |
| west：70.0 | - | east：120.0 |
| - | south：20.0 | - |

5、Time frame:2019-12-31 16:00:00+00:00--2021-10-30 16:00:00+00:00

6、Reference method

References to data:

KANG Shichang. Light-absorbing impurities from snow and ice in Tibetan Plateau and its surroudings (2020). A Big Earth Data Platform for Three Poles, doi:10.11888/Cryos.tpdc.2718912021

References to articles:

Li, Y., Kang, S.C., Zhang, X.L, Chen, J.Z., Schmale, J., Li, X.F., Zhang, Y.L., Niu, H.W., Li, Z.Q., Qin, X., He X.B., Yang, W., Zhang, G.S., Wang, S.J., Shao, L.L., & Tian, L.D. (2021). Black carbon and dust in the Third Pole glaciers: Revaluated concentrations, mass absorption cross-sections and contributions to glacier ablation. Sci Total Environ, 789, 147746.

7、Supporting project information

Pan-Third Pole Environment Study for a Green Silk Road-A CAS Strategic Priority A Program  
Second Tibetan Plateau Scientific Expedition Program

8、Data resource provider

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