A Big Earth Data Platform for Three Poles

**Photos of soil microbial samples collected from glaciers, runoff and glacier front in Qinghai Tibet Plateau (2019)**

1、Description

Record the original collection process of glacier, runoff, soil and air microbial samples. 1) Collection of ice and snow microbial samples: wear clean gloves during collection and collect ice and snow into clean self sealing bags. 2) Collection of ice dust microbial samples: insert the hose into the bottom of the ice and snow cave, suck the sediment and melt water into the sampling bottle with a syringe, store them at low temperature and bring them back to the laboratory. Both the sediment and melt water on the top of the ice dust cave are used to extract environmental DNA. 3) Runoff includes ice runoff and glacier front runoff, and the runoff melt water is directly collected into the sampling bottle or water collection bag. 4) Collection of soil in front of Glacier: collect soil samples with shovel, put the soil into clean whirl Pak sampling bag after passing 2mm soil sieve, and then store it at low temperature for subsequent soil DNA extraction. 5) Air membrane sample collection: place the designed sampling device at the sampling point. The lower part of the device is a battery (continuous operation for 48h), and the upper part contains two filter membranes to collect air microorganisms for DNA extraction. 6) for real-time monitoring of physical and chemical properties in Glacier runoff and melt water, use YSI multi parameter water quality instrument to directly put it into the sample to be measured to obtain temperature, do, chlorophyll concentration, etc.

2、Keywords

Theme：Snow,Wetland  
Discipline：Terrestrial Surface,Cryosphere  
Places：Qiangyong Glacier, Tanggula Longxiazailongba Glacier  
Time：2018 ~ 2019

3、Data details

1.Scale：None

2.Projection：

3.Filesize：66.38MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：33.11 | - |
| west：86.851 | - | east：96.934 |
| - | south：28.0225 | - |

5、Time frame:2018-12-31 16:00:00+00:00--2019-08-30 16:00:00+00:00

6、Reference method

References to data:

LIU Yongqin. Photos of soil microbial samples collected from glaciers, runoff and glacier front in Qinghai Tibet Plateau (2019). A Big Earth Data Platform for Three Poles, doi:10.11888/Glacio.tpdc.2717502021

References to articles:

7、Supporting project information

Second Tibetan Plateau Scientific Expedition Program

8、Data resource provider

name: LIU Yongqin  
unit:   
email: yql@lzu.edu.cn