A Big Earth Data Platform for Three Poles

**Major cations and cations in 22 lakes in selinco area, Namco, Tibet (summer of 2019)**

1、Description

In the summer of 2019, 22 lake water samples were collected in selinco area of Nam Co, Tibet. They were put into plastic bottles. Some samples were titrated on site by alkalinity kit to obtain the concentrations of CO32 - and HCO3 - ions. The rest samples were stored in the refrigerator. After they were brought back to the laboratory, the concentrations of main cations K +, Na +, Ca2 +, Mg2 + were measured by ICP-OES, The concentrations of HNO3 -, SO42 -, F - and Cl - were measured by anion chromatography. The results showed that the highest concentration of Ca2 + in 22 lakes was 34.8ppm in yueqiaco, and the lowest was 1.8ppm in zhangnaicuo, with an average of 11.9ppm. The highest K + ion concentration was 745.6ppm, the lowest was 1.0ppm, the average was 270.9ppm. The highest concentration of Mg2 + was 1632.8ppm in Jiangcuo, and the lowest was 2.5ppm in mudadaryuco, with an average of 180.1ppm. The highest concentration of Na1 + is 5446.0ppm of daze Cuo, and the lowest is 13.8ppm of Mu Cuo, with an average of 1675.3ppm. The highest F-ion concentration was 0.3 mmol / L, the lowest was 0.1 mmol / L, and the average was 0.1 mmol / L. The highest concentration of Cl - was 73.0 mmol / L, the lowest was 0.4 mmol / L, and the average was 19.0 mmol / L. The highest concentration of NO3 - was 0.2 mmol / L, the lowest was 0.1 mmol / L, and the average was 0.2 mmol / L. The highest concentration of S042 - was 219.3 mmol / L, the lowest was 0.1 mmol / L, and the average was 33.3 mmol / L. The highest concentration of CO32 - was 54.0 mmol / L, the lowest was 0.0 mmol / L, and the average was 15.5 mmol / L. The highest concentration of HCO3 - was 50.7 mmol / L, the lowest was 2.0 mmol / L, and the average was 21.1 mmol / L.

2、Keywords

Theme：Cations and anions,Water trace elements,Surface Water,Water Quality/Water Chemistry,Surface water chemistry
Discipline：Terrestrial Surface
Places：Naqu, Selincuo, Nam Co, Tibet
Time：summer, 2019

3、Data details

1.Scale：10000

2.Projection：WGS84

3.Filesize：0.02MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：32.4 | - |
| west：87.0 | - | east：92.0 |
| - | south：30.5 | - |

5、Time frame:2019-08-17 16:00:00+00:00--2019-09-11 16:00:00+00:00

6、Reference method

References to data:

MENG Xianqiang . Major cations and cations in 22 lakes in selinco area, Namco, Tibet (summer of 2019). A Big Earth Data Platform for Three Poles, doi:10.11888/Hydro.tpdc.2713392021

References to articles:

7、Supporting project information

Second Tibetan Plateau Scientific Expedition Program

8、Data resource provider

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