A Big Earth Data Platform for Three Poles

**Hydrochemical characteristics of the upper Yarlung Zangbo River in summer（2020）**

1、Description

To explore inorganic hydrochemical characteristics of the upper Yarlung Zangbo River, water samples were collected from the main stream and different tributaries in this region in August 2020. The water was collected with 100mL polyethylene (PE) plastic bottle, and the basic physical and chemical parameters such as pH value (±0.2) and dissolved oxygen (±1%) of the sampling site were measured by multi -parameter water quality monitor (YSI-EX02,USA).,and HCO3- concentration was titrated with 0.025mol/L HCl.The concentrations of Na+, K+, Ca2+, Mg2+, SO42-, NO3- and Cl- ions were analyzed and determined by ion chromatograph (Shenhan CIC-D160, China) in the laboratory. Using Gibbs model, correlation analysis and principal component analysis method, analyzed the one main ion concentration changes, chemical composition characteristics, analytical, and the ion source was designed to reveal inorganic water chemical characteristics of The Tibet plateau glacier melt water runoff, and for plateau typical river water and changing trend forecast provides the basis.

2、Keywords

Theme：Cations and anions,water quality parameter,Water Environment,Water Quality/Water Chemistry  
Discipline：Terrestrial Surface,Others  
Places：The upper Yarlung Zangbo River, The Tibetan plateau  
Time：summer, 2020

3、Data details

1.Scale：None

2.Projection：

3.Filesize：0.024MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：31.0 | - |
| west：82.0 | - | east：84.5 |
| - | south：29.5 | - |

5、Time frame:2020-08-12 16:00:00+00:00--2020-09-11 16:00:00+00:00

6、Reference method

References to data:

NIU Fengxia. Hydrochemical characteristics of the upper Yarlung Zangbo River in summer（2020）. A Big Earth Data Platform for Three Poles, doi:10.11888/Terre.tpdc.2725402022

References to articles:

严宇鹏, 牛凤霞, 刘佳, 刘心庭, 李颖, 彭辉, 严登华, 肖尚斌. (2022). 雅鲁藏布江上游夏季水化学特征及来源解析. 中国环境科学, 42(02), 815-825. DOI:10.19674/j.cnki.issn1000-6923.2022.0037.

7、Supporting project information

Second Tibetan Plateau Scientific Expedition Program

8、Data resource provider

name: NIU Fengxia  
unit: College of Hydraulic and Environmental Engineering,China Three Gorges University.  
email: nfxctgu@yeah.net