A Big Earth Data Platform for Three Poles

**Bacterial post-treatment products and conventional water quality parameters of some lakes in the third pole in 2015**

1、Description

The data set of bacterial post-treatment products and conventional water quality parameters of some lakes in the third pole in 2015 collected the bacterial analysis results and conventional water quality parameters of some lakes in the Qinghai Tibet Plateau during 2015. Through sorting, summarizing and summarizing, the bacterial post-treatment products of some lakes in the third pole in 2015 are obtained. The data format is excel, which is convenient for users to view. The samples were collected by Mr. Ji mukan from July 1 to July 15, 2015, including 28 Lakes (bamuco, baimanamuco, bangoso (Salt Lake), Bangong Cuo, bengcuo, bieruozhao, cuo'e (Shenza), cuo'e (Naqu), dawaco, dangqiong Cuo, dangjayong Cuo, Dongcuo, eyaco, gongzhucuo, guogencuo, jiarehbu Cuo, mabongyong Cuo, Namuco, Nier CuO (Salt Lake), Norma Cuo, Peng yancuo (Salt Lake), Peng Cuo, gun Yong Cuo, Se lincuo, Wu rucuo, Wu Ma Cuo, Zha RI Nan Mu Cuo, Zha Xi CuO), a total of 138 samples. The extraction method of bacterial DNA in lake water is as follows: the lake water is filtered onto a 0.45 membrane, and then DNA is extracted by Mo bio powerOil DNA kit. The 16S rRNA gene fragment amplification primers were 515f (5'-gtgccagcmgcgcggtaa-3') and 909r (5'-ggactachvggtwtctaat-3'). The sequencing method was Illumina miseq PE250. The original data were analyzed by mothur software, including quality filtering and chimera removal. The sequence classification was based on the silva109 database. The archaeal, eukaryotic and unknown source sequences had been removed. OTU classifies with 97% similarity and then removes sequences that appear only once in the database. Conventional water quality detection parameters include dissolved oxygen, conductivity, total dissolved solids, salinity, redox potential, nonvolatile organic carbon, total nitrogen, etc. The dissolved oxygen is determined by electrode polarography; Conductivity meter is used for conductivity; Salinity is measured by a salinity meter; TDS tester is used for total dissolved solids; ORP online analyzer was used for redox potential; TOC analyzer is used for non-volatile organic carbon; The water quality parameters of total nitrogen were obtained by Spectrophotometry for reference.

2、Keywords

Theme：Biological Resources,alpine lake,Microbial resources,water quality parameter,Drainage Basin and River System,alpine lake,Hydrology,Water Environment
Discipline：Terrestrial Surface,Human-nature Relationship
Places：Tibetan Plateau
Time：2015

3、Data details

1.Scale：None

2.Projection：WGS84

3.Filesize：2.6MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：32.93 | - |
| west：88.69 | - | east：90.23 |
| - | south：28.89 | - |

5、Time frame:2015-06-30 16:00:00+00:00--2015-12-24 16:00:00+00:00

6、Reference method

References to data:

YE Aizhong. Bacterial post-treatment products and conventional water quality parameters of some lakes in the third pole in 2015. A Big Earth Data Platform for Three Poles, doi:10.11888/HumanNat.tpdc.2727332022

References to articles:

7、Supporting project information

CASEarth:Big Earth Data for Three Poles（grant No. XDA19070000）

8、Data resource provider

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