A Big Earth Data Platform for Three Poles

**Hydrogen and oxygen stable isotope data set of Kathmandu precipitation (2016-2018)**

1、Description

Precipitation stable isotopes (2H and 18O) are adequately understood on their climate controls in the Tibetan Plateau, especially the north of Himalayas via about 30 years’ studies. However, knowledge of controls on precipitation stable isotopes in Nepal (the south of Himalayas), is still far from sufficient.
 This study described the intra-seasonal and annual variations of precipitation stable isotopes at Kathmandu, Nepal from 10 May 2016 to 21 September 2018 and analysed the possible controls on precipitation stable isotopes. All samples are located in Kathmandu, the capital of Nepal (27 degrees north latitude, 85 degrees east longitude), with an average altitude of about 1400 m. Combined with the meteorological data from January 1, 2001 to September 21, 2018, the values of precipitation (P), temperature (T) and relative humidity (RH) are given.

2、Keywords

Theme：Monsoons,Temperature,Maximum/Minimum temperature,Precipitation,Precipitation,Temperature,Stable hydrogen and oxygen isotope,Atmospheric circulation,Meteorological Disaster,Humidity/Dryness,Hydrology,Precipitation,Air temperature,Water Quality/Water Chemistry
Discipline：Atmosphere,Terrestrial Surface
Places：Kathmandu, Nepal
Time：non-monsoon season, the monsoon season, 2016-2018

3、Data details

1.Scale：None

2.Projection：None

3.Filesize：0.036MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：27.7 | - |
| west：85.33 | - | east：85.33 |
| - | south：27.7 | - |

5、Time frame:2016-06-26 08:00:00+00:00--2018-11-07 08:00:00+00:00

6、Reference method

References to data:

GAO Jing. Hydrogen and oxygen stable isotope data set of Kathmandu precipitation (2016-2018). A Big Earth Data Platform for Three Poles, doi:10.11888/Meteoro.tpdc.2709362020

References to articles:

Niranjan Adhikari, Jing Gao, Tandong Yao, Yulong Yang & Di Dai .(2020). The main controls of the precipitation stable isotopes at Kathmandu, Nepal, Tellus B: Chemical and Physical Meteorology, 72:1, 1-17, DOI: 10.1080/16000889.2020.1721967

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
the National Natural Science Foundation of China

8、Data resource provider

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