A Big Earth Data Platform for Three Poles

**Indoor and outdoor physiological and ecological data of four lizards in the Qinghai Tibet Plateau and surrounding typical areas (2013-2019)**

1、Description

1) data content: including the morphological and reproductive life history data of four lizards, i.e. Phrynocephalus vlangalii, Phrynocephalus przewalskii, Eremias argus and Eremias multiocellata, and the physiological and ecological data of indoor and outdoor activity temperature, selection temperature, tolerant high temperature and tolerant low temperature, which is helpful to understand and analyze the physiological and ecological characteristics of typical lizards. 2) data source and processing method: Based on the indoor and outdoor experiments of typical lizards on the Qinghai Tibet Plateau and pan third pole from 2013 to 2019, the data of physiological and ecological indicators of lizards in the field and the data of reproductive life history of pregnant lizards were recorded. 3) data quality description: the lizard indoor and outdoor data collectors are all graduate students, who have been trained strictly to ensure the quality of the collected data. 4) data application achievements and prospects: Taking the typical lizards in the Qinghai Tibet Plateau and surrounding areas as the object, focusing on the impact of climate change on the thermal regulation behavior and reproductive life history of lizards, obtaining the physiological and ecological change characteristics of lizards under the climate change conditions is helpful to simulate and analyze the response trend of lizards distribution and population change under the climate warming environment.

2、Keywords

Theme：Biological Resources,Lizard,Reptiles,Vertebrate
Discipline：Human-nature Relationship
Places：Qinghai, gansu
Time：2013-2019

3、Data details

1.Scale：None

2.Projection：

3.Filesize：0.06MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：40.0 | - |
| west：78.0 | - | east：110.0 |
| - | south：26.0 | - |

5、Time frame:2013-05-16 00:00:00+00:00--2019-10-16 11:59:59+00:00

6、Reference method

References to data:

ZENG Zhigao. Indoor and outdoor physiological and ecological data of four lizards in the Qinghai Tibet Plateau and surrounding typical areas (2013-2019). A Big Earth Data Platform for Three Poles, doi:10.11888/Ecolo.tpdc.2703872019

References to articles:

Li, S. R., Wang, Y., Ma, L., Zeng, Z. G., Bi, J. H., & Du, W. G. (2017). Thermal ecology of three coexistent desert lizards: Implications for habitat divergence and thermal vulnerability. Journal of Comparative Physiology B, 187:1009–1018.

Zeng, Z. G., Zhao, J. M., & Sun, B. J. (2013). Life history variation among geographically close populations of the toad-headed lizard (Phrynocephalus przewalskii): Exploring environmental and physiological associations. Acta Oecologica, 51: 28–33.

Wang, Y., Zeng, Z. G., Li, S. R., Bi, J. H., & Du, W. G. (2016). Low precipitation aggravates the impact of extreme high temperatures on lizard reproduction. Oecologia, 182: 961–971.

7、Supporting project information

Pan-Third Pole Environment Study for a Green Silk Road-A CAS Strategic Priority A Program

8、Data resource provider

name: ZENG Zhigao
unit: Insititute of Zoology, CAS
email: zengzhg@ioz.ac.cn