A Big Earth Data Platform for Three Poles

**Genome re sequencing data of major domestic animals (2020)**

1、Description

In order to describe the distribution pattern of genetic diversity of main domesticated animals in the Qinghai Tibet Plateau and its surrounding areas (Pan third pole area), and clarify its related genetic background. In 2020, we extracted the total DNA from 201 global chicken blood, tissue and other DNA tissue samples, built a database and sequenced the whole genome. At the same time, we downloaded the published chicken genome data, and carried out population analysis of 863 chicken genomes, so as to provide basic data for exploring the historical events of domestication, migration and expansion of domestic chickens in the pan third pole region, and further explore the adaptation mechanism of domesticated animals to harsh environments such as drying. Articles related to this data set have been published. All data in this data set can be downloaded online from fastq, BAM, VCF and SNP files.

2、Keywords

Theme：Biological Resources,Domestic animal  
Discipline：Human-nature Relationship  
Places：Pan-third pole region  
Time：2020

3、Data details

1.Scale：None

2.Projection：

3.Filesize：1.0MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：43.3 | - |
| west：89.53 | - | east：104.22 |
| - | south：31.34 | - |

5、Time frame:2019-12-31 16:00:00+00:00--2020-12-31 03:59:59+00:00

6、Reference method

References to data:

PENG Minsheng. Genome re sequencing data of major domestic animals (2020). A Big Earth Data Platform for Three Poles, doi:10.1038/s41422-020-0349-y2020

References to articles:

Wang, M.S., Thakur, M., Peng, M.S., Jiang, Y., Frantz, L.A.F., Li, M., Zhang, J.J., Wang, S., Peters, J., Otecko, N.O., Suwannapoom, C., Guo, X., Zheng, Z.Q., Esmailizadeh, A., Hirimuthugoda, N.Y., Ashari, H., Suladari, S., Zein, M.S.A., Kusza, S., Sohrabi, S., Kharrati-Koopaee, H., Shen, Q.K., Zeng, L., Yang, M.M., Wu, Y.J., Yang, X.Y., Lu, X.M., Jia, X.Z., Nie, Q.H., Lamont, S.J., Lasagna, E., Ceccobelli, S., Gunwardana, H., Senasige, T.M., Feng, S.H., Si, J.F., Zhang, H., Jin, J.Q., Li, M.L., Liu, Y.H., Chen, H.M., Ma, C., Dai, S.S., Bhuiyan, A., Khan, M.S., Silva, G., Le, T.T., Mwai, O.A., Ibrahim, M.N.M., Supple, M., Shapiro, B., Hanotte, O., Zhang, G., Larson, G., Han, J.L., Wu, D.D., Zhang, Y.P. (2020). 863 genomes reveal the origin and domestication of chicken. Cell Res. doi: 10.1038/s41422-020-0349-y.

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

8、Data resource provider

name: PENG Minsheng  
unit: Kunming Institute of Zoology, Chinese Academy of Sciences  
email: pengminsheng@mail.kiz.ac.cn