A Big Earth Data Platform for Three Poles

**Whole rock major and trace geochemical data set of magmatic rocks in the Qinghai Tibet Plateau (Hoh Xil-South Qiangtang-Lhasa) (2020)**

1、Description

The data content mainly includes the main and micro data of the whole rock of some magmatic rocks in the Hoh Xil Lhasa plate of the Qinghai Tibet Plateau. The samples were mainly distributed in Hoh Xil lake, South Qiangtang guoganjianian, Dugur, and Gangdise Nasongduo and Saga counties. There are more than 300 major and trace elements in the samples, including olivine leucite, quartz monzonite, diorite and granite, which are of great significance to the study of the lithospheric evolution of the Qinghai Tibet Plateau. Data mainly come from published articles or being accepted. XRF spectroscopy was used to determine the major elements and ICP-MS was used to determine the trace elements. The data quality is highly reliable, and the testing units include the State Key Laboratory of Guangzhou Institute of geochemistry, Chinese Academy of Sciences, etc. The data are published in high-level journals, including geology, BSA bulletin and Journal of petroleum.

2、Keywords

Theme：Major elements,Trace elements,Geochemistry  
Discipline：Solid earth  
Places：South China, Tibet  
Time：Paleozoic, Cenozoic, Mesozoic

3、Data details

1.Scale：None

2.Projection：

3.Filesize：0.14MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：47.0 | - |
| west：84.0 | - | east：92.0 |
| - | south：29.0 | - |

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:

WANG Jun, ZHOU Jinsheng, DAN Wei, QI Yue, TANG Gongjian. Whole rock major and trace geochemical data set of magmatic rocks in the Qinghai Tibet Plateau (Hoh Xil-South Qiangtang-Lhasa) (2020). A Big Earth Data Platform for Three Poles, doi:10.11888/Geo.tpdc.2712422021

References to articles:

Dan, W., Wang, Q., White, W.M., Li, X.H., Zhang, X.Z., Tang, G.J., Ou, Q., Hao, L.L., Qi, Y. (2020). Passive-margin magmatism caused by enhanced slab-pull forces in central Tibet. Geology, in press, https://doi.org/10.1130/G47957.1  
  
Dan, W., Wang, Q., Zhang, X.Z., Tang, G.J. (2020). Early Paleozoic S-type granites as the basement of Southern Qiantang Terrane, Tibet. Lithos 356-357, 105395.  
  
Qi, Y., Hawkesworth, C.J., Wang, Q., Wyman, D.A., Li, Z.X., Dong, H., Ma, T., Chen, F., Hu, W.L., Zhang, X.Z. (2020). Syn-collisional magmatic record of Indian steep subduction by 50 Ma. GSA Bulletin. in press, https://doi.org/10.1130/B35498.1.  
  
Qi, Y., Wang, Q., Zhu, Y.T., Shi, L.C., Yang, Y.N. (2020). Miocene Olivine Leucitites in the Hoh Xil Basin, Northern Tibet: Implications for Intracontinental Lithosphere Melting and Surface Uplift of the Tibetan Plateau. Journal of Petrology 61(1), egaa026, https://doi.org/10.1093/petrology/egaa026.  
  
Tang, G.J., Wang, Q., Wyman, D.A., Dan, W., Ma, L., Zhang, H.X., Zhao, Z.H. (2020). Petrogenesis of the Ulungur Intrusive Complex, NW China, and Implications for Crustal Generation and Reworking in Accretionary Orogens. Journal of Petrology 61(2), egaa018, https://doi.org/10.1093/petrology/egaa018  
  
Wang, J., Dan, W., Wang, Q., Tang, G.J. (2020). High-Mg# adakitic rocks formed by lower-crustal magma differentiation: mineralogical and geochemical evidence from garnet-bearing diorite porphyries in central Tibet. Journal of Petrology. egaa099, https://doi.org/10.1093/petrology/egaa099  
  
Zhou, J.S., Yang, Z.S., Wang, Q., Zheng, Y.C., Hou, Z.Q., Wyman, D.A. (2020). Extraction of high-silica granites from an upper crustal magma reservoir: Insights from the Narusongduo magmatic system, Gangdese arc. American Mineralogist 105, 1572-1584.

7、Supporting project information

Second Tibetan Plateau Scientific Expedition Program

8、Data resource provider

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