A Big Earth Data Platform for Three Poles

**3-D Geophysical Model for Qulong deposits**

1、Description

The three-dimensional model obtained by three-dimensional inversion processing of MT data completed in Qulong mining area and the inversion of MT full impedance data show the shallow three-dimensional electrical structure characteristics of 5km with strong anisotropy. The isosurface of high resistivity body in Qulong mining area shows that the high resistivity anomaly with resistivity greater than 200 Ω• m mainly reflects the distribution of intermediate acid intrusive rocks, and the low resistivity anomaly less than 200 Ω • m mainly reflects the distribution characteristics of Quaternary sedimentary strata, rhyolite and tuff of Yeba formation. Based on the resistivity structure in Qulong ore concentration area, combined with some drilling data and physical property data collected, a three-dimensional geophysical model of Qulong ore concentration area is constructed by using GOCAD software. Compared with the three-dimensional model star of Jiama ore concentration area, due to the limitation of data, the three-dimensional geophysical model of Qulong ore concentration area is slightly worse. But it is also the only three-dimensional geophysical model provided so far. The model is helpful to the development and utilization of Qulong ore concentration area.

2、Keywords

Theme：3-D Geological Model,Qulong,Porphyry,Others  
Discipline：Solid earth  
Places：Qulong  
Time：2021

3、Data details

1.Scale：None

2.Projection：

3.Filesize：400.0MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：29.8 | - |
| west：91.0 | - | east：92.0 |
| - | south：29.0 | - |

5、Time frame:None--None

6、Reference method

References to data:

HE Rizheng . 3-D Geophysical Model for Qulong deposits. A Big Earth Data Platform for Three Poles, doi:10.11888/SolidEar.tpdc.2721062022

References to articles:

王素芬, 屈挺, 贺日政, 丁毅, 刘建利, 陈小龙, 李冰, 卢晓. (2021). 西藏甲玛矿区三维地质建模与层状矽卡岩靶区预测, 地质通报, 40(12), 2110-2122.

7、Supporting project information

Deep Probe of Geophysical Techniques for typical ore concentration area  
the Projector of China Geological Survey

8、Data resource provider

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