A Big Earth Data Platform for Three Poles

**Multi dimensional observation data set of single watershed in Maqu County, Qinghai Tibet Plateau (2018-2019)**

1、Description

The dataset includs borehole core lithology, altitude survey, soil thickness and slop measurement, hydrogeological survey, and hydrogeophysical survey in the Maqu catchment of the Yellow River source region in the Tibetan Plateau. The borehole lithology data is from the 2017 drilled borehole ITC\_ Maqu\_ 1; altitude survey was carried out using RTK in 2019; Soil thickness and slope data were collected by auger and inclinometer in 2018 and 2019; hydrogeological survey includes groundwater table depth measurements in 2018 and 2019, and aquifer test data obtained in 2019; hydrogeological survey includes Magnetic Resonance Sounding (MRS) , Electrical Resistivity Tomography (ERT) , Transient Electromagnetic (TEM) , and magnetic susceptibility measurements. MRS and ERT surveys were conducted in 2018. TEM and magnetic susceptibility measurements were carried out in 2019.

2、Keywords

Theme：Underground water level,Aquifers,Water table,Water level,Transient electromagnetic,Earth Resistivity,Magnetic Resonance Sounding,Electrical resistivity tomography,Tectonics,Ground Water,Groundwater depth,Hydrology,Hydrogeology
Discipline：Terrestrial Surface,Solid earth
Places：Maqu
Time：2018-2019

3、Data details

1.Scale：None

2.Projection：WGS84

3.Filesize：2.63MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：33.97 | - |
| west：101.85 | - | east：102.27 |
| - | south：33.72 | - |

5、Time frame:2018-05-31 16:00:00+00:00--2019-09-29 16:00:00+00:00

6、Reference method

References to data:

Maciek W. LUBCZYNSKI, BOB Su. Multi dimensional observation data set of single watershed in Maqu County, Qinghai Tibet Plateau (2018-2019). A Big Earth Data Platform for Three Poles, doi:10.11888/Hydro.tpdc.2712212021

References to articles:

Li, M., Zeng, Y., Lubczynski, M. W., Roy, J., Yu, L., Qian, H., Li, Z., Chen, J., Han, L., Zheng, H., Veldkamp, T., Schoorl, J. M., Hendricks Franssen, H.-J., Hou, K., Zhang, Q., Xu, P., Li, F., Lu, K., Li, Y., and Su, Z. (2021). A first investigation of hydrogeology and hydrogeophysics of the Maqu catchment in the Yellow River source region, Earth Syst. Sci. Data, 13, 4727–4757, https://doi.org/10.5194/essd-13-4727-2021.

7、Supporting project information

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