A Big Earth Data Platform for Three Poles

**The hypocentre parameters of shallow-focus earthquakes in the Himalaya-Tibetan Plateau area (1991-2014)**

1、Description

The data set describes the hypocentre parameters of shallow-focus earthquakes that occurred in the Himalayan-Tibetan Plateau area from 1990 to 2014. Accurate seismic focal depth and focal mechanism solutions can provide an elementary scientific basis for deep Earth deformation and seismogenic structure research. The seismic waveform data are from the IRIS website (http://ds.iris.edu/wilber3/find\_event). Teleseismic waveform fitting is used in processing data.

The focal depth error is ±3 km.
Earthquake number: earthquake number ID for different areas in chronological order
Origin Time: mm/dd/yyyy (month/day/year), hh:mm (hour/minute)
Earthquake location: longitude, latitude, depth
Earthquake magnitude: moment magnitude (Mw)
Focal mechanism solution: trend / inclination / inclination angle (strike / dip / slip)
Error: the least squares method is used to determine the variance between the theoretical waveform and the observed waveform (misfit)
Moho Depth: Moho

2、Keywords

Theme：Natural Disaster,Earthquakes
Discipline：Human-nature Relationship
Places：Tibetan Plateau , Himalaya
Time：1991-2014

3、Data details

1.Scale：None

2.Projection：

3.Filesize：0.07MB

4.Data format：EXCEL

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：38.0 | - |
| west：73.0 | - | east：104.0 |
| - | south：28.0 | - |

5、Time frame:1991-11-13 16:00:00+00:00--2014-11-25 16:00:00+00:00

6、Reference method

References to data:

BAI Ling. The hypocentre parameters of shallow-focus earthquakes in the Himalaya-Tibetan Plateau area (1991-2014). A Big Earth Data Platform for Three Poles, doi:10.11888/Geophysics.tpe.249424.db2018

References to articles:

Bai, L., Li, G.H., Khan, N.G., Zhao, J.M., & Ding, L. (2015). Focal depths and mechanisms of shallow earthquakes in the himalayan–tibetan region. Gondwana Research, 41, 390-399.

7、Supporting project information

8、Data resource provider

name: BAI Ling
unit: Institute of Tibetan Plateau Research,Chinese Academy of Sciences
email: bailing@itpcas.ac.cn