A Big Earth Data Platform for Three Poles

**Three dimensional S-wave velocity model beneath the Sichuan-Yunnan region**

1、Description

The data set is the three-dimensional S-wave velocity model in Sichuan-Yunnan region obtained by applying the ambient noise tomography. First, the seismic waveform data is applied from National Earthquake Data Center. Using the collected seismic waveform data, we intercept waveform of each day from each station. After removing the mean and trend and filtering, we invert the three-dimensional S-wave attenuation model in Sichuan-Yunnan region by applying the ambient noise tomography. The model can be used for further study on valuable scientific issues such as the mechanism of the large earthquakes preparation, tectonic evolution of the lithosphere in Sichuan-Yunnan region and the eastward extrusion of the Tibetan Plateau.

2、Keywords

Theme：Crust mantle structure,Tomography,Seismology
Discipline：Solid earth
Places：Sichuan-Yunnan region
Time：nothing

3、Data details

1.Scale：None

2.Projection：

3.Filesize：5.0MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：31.95 | - |
| west：97.66 | - | east：107.11 |
| - | south：21.19 | - |

5、Time frame:None--None

6、Reference method

References to data:

AI Yinshuang . Three dimensional S-wave velocity model beneath the Sichuan-Yunnan region. A Big Earth Data Platform for Three Poles, doi:10.11888/SolidEar.tpdc.2725802022

References to articles:

7、Supporting project information

The study on multi-scale and high-resolution structures, deformation patterns and background of large earthquakes preparation and occurrence beneath the Sichuan-Yunnan region

8、Data resource provider

name: AI Yinshuang
unit: Institute of Geology and Geophysics, CAS
email: ysai@mail.iggcas.ac.cn