A Big Earth Data Platform for Three Poles

**The three-dimensional S-wave velocity and azimuthal anisotropic model beneath the Sichuan-Yunnan region**

1、Description

The data set is the three-dimensional S-wave velocity and azimuthal anisotropic model in Sichuan-Yunnan region obtained by applying ambient noise tomography. First, the seismic waveform data is applied from National Earthquake Data Center and collected from deployed seismic stations. Using the collected seismic waveform data, we intercept waveform per each day and remove the mean and trend and filter the waveform. We invert the three-dimensional S-wave velocity and azimuthal anisotropic 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：Seismic anisotropy,Seismology  
Discipline：Solid earth  
Places：Sichuan-Yunnan region  
Time：nothing

3、Data details

1.Scale：None

2.Projection：None

3.Filesize：0.4MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：33.5 | - |
| west：96.5 | - | east：108.5 |
| - | south：20.5 | - |

5、Time frame:None--None

6、Reference method

References to data:

GAO Yuan . The three-dimensional S-wave velocity and azimuthal anisotropic model beneath the Sichuan-Yunnan region. A Big Earth Data Platform for Three Poles, doi:10.11888/SolidEar.tpdc.2725812022

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: GAO Yuan   
unit: Institute of Earthquake Forecasting,CEA  
email: gaoyuan@cea-ies.ac.cn