A Big Earth Data Platform for Three Poles

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

1、Description

The data set is the three-dimensional lithospheric S-wave Q-value model data in the surrounding areas of Sichuan and Yunnan obtained by using the full waveform based adjoint attenuation imaging method. First, apply to the data backup center of the national seismological network for obtaining the seismic waveform data. Using the collected seismic waveform data, intercept the S-wave seismic phase data with high signal-to-noise ratio according to the seismic events, and extract the S-wave amplitude information after de averaging, de trending, waveform pinching and filtering. Finally, the S-wave amplitude data are inverted by using the waveform accompanying attenuation imaging method to obtain the three-dimensional S-wave attenuation model in Sichuan and Yunnan. The model data set can be used to further study important scientific issues such as the tectonic evolution of the lithosphere in Sichuan Yunnan region and the extension of the Qinghai Tibet Plateau.

2、Keywords

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

3、Data details

1.Scale：None

2.Projection：

3.Filesize：11.7MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：34.0 | - |
| west：96.0 | - | east：106.0 |
| - | south：22.0 | - |

5、Time frame:None--None

6、Reference method

References to data:

YANG Dinghui . Three dimensional lithospheric S-wave attenuation model beneath the Sichuan-Yunnan region. A Big Earth Data Platform for Three Poles, doi:10.11888/SolidEar.tpdc.2725452022

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 Chuandian Block

8、Data resource provider

name: YANG Dinghui   
unit: Tsinghua University  
email: ydh@tsinghua.edu.cn