A Big Earth Data Platform for Three Poles

**Seismic velocity reduction and accelerated recovery due to earthquakes on the Longmenshan fault (2000-2014)**

1、Description

This data set is collected from the supplementary information part of the paper: Pei, S.P., Niu, F.L., Ben-Zion, Y., Sun, Q., Liu, Y.B., Xue, X.T., Su,J.R., & Shao, Z.G. (2019). Seismic velocity reduction and accelerated recovery due to earthquakes on the Longmenshan fault. Nature Geoscience. 12. 387-392. doi:10.1038/s41561-019-0347-1.   
This paper studies the structural evolution process of The Longmenshan fault zone located at a pronounced topographic boundary between the eastern margin of the Tibetan plateau and the western Sichuan basin. With the observations on coseismic velocity reductions and the healing phases, it is found that the healing phase of Wenchuan earthquake fracture zone accelerated significantly in response to the Lushan earthquake.  
This data set contains 3 tables, table names and content are as follows:  
Data list: The data name list of the rest tables;  
t1: Data of the four periods (befor Wenchuan earthquake, after Wenchuan earthquake, before Lushan earthquake, after Lushan earthquake);  
t2: The average velocities with error in Figure 2 in the paper for Wenchuan earthquake (WCEQ) and Lushan earthquake (LSEQ) area.  
See attachments for data details: Supplementary information.pdf, Seismic velocity reduction and accelerated recovery due to earthquakes on the Longmenshan fault.pdf.

2、Keywords

Theme：Recovery,Seismic velocity,Seismology  
Discipline：Solid earth  
Places：Wenchuan, Longmenshan, Lushan  
Time：2000-2014

3、Data details

1.Scale：None

2.Projection：

3.Filesize：0.01MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：33.0 | - |
| west：102.0 | - | east：107.0 |
| - | south：29.0 | - |

5、Time frame:None--None

6、Reference method

References to data:

PEI Shunping. Seismic velocity reduction and accelerated recovery due to earthquakes on the Longmenshan fault (2000-2014). A Big Earth Data Platform for Three Poles, doi:10.11888/Geo.tpdc.2701062019

References to articles:

Pei, S.P., Niu, F.L., Ben-Zion, Y., Sun, Q., Liu, Y.B., Xue, X.T., Su,J.R., & Shao, Z.G. (2019). Seismic velocity reduction and accelerated recovery due to earthquakes on the Longmenshan fault. Nature Geoscience. 12. 387-392. doi:10.1038/s41561-019-0347-1.

7、Supporting project information

8、Data resource provider

name: PEI Shunping  
unit: Institute of Tibetan Plateau Research, CAS  
email: peisp@itpcas.ac.cn