

Curriculum Vitae – Jiayuan Yao

Research Fellow

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Education

2018	Ph.D.	Geophysics	University of Science and Technology of China
2012	B.S.	Geophysics	University of Science and Technology of China

Academic Positions

08/01/2018 – present **Research Fellow** Nanyang Technological University, Singapore

Research Interests

- Structure of the Earth's interior
- Seismic monitoring
- Earthquake locations
- Repeating earthquakes

Professional Societies & Activities

2012 – present Member of the [American Geophysical Union](#) (AGU)
2018 – present Peer-reviewer of scientific journals:

- [Seismological Research Letters](#) (2)

2018 Invited Chinese translator for [Chinese version of Scientific American](#)
2018 Judge for the Outstanding Student Paper Award, AGU Fall Meeting

Awards & honors

2018 Outstanding Graduate Students with Good Conduct in Anhui Province (top %4)
2016 Championship of University Football League in Anhui Province
2015 Laolei Scholarship for Graduate Students
2014 National Scholarship for Graduate Students

Peer-reviewed Papers

* co-first author

7. **Yao, J.**, Tian, D., Sun, L., & Wen, L. (2019), Temporal change of seismic Earth's inner core phases: inner core differential rotation or temporal change of inner core surface? *J. Geophys. Res. Solid Earth*, 124, doi: [10.1029/2019JB017532](https://doi.org/10.1029/2019JB017532)
6. **Yao, J.**, Tian, D., Lu Z., Sun, L., & Wen L. (2018), Triggered seismicity after North Korea's 3 September 2017 nuclear test, *Seismol. Res. Lett.*, 89 (6), 2085–2093. doi:[10.1785/0220180135](https://doi.org/10.1785/0220180135)
5. **Yao, J.**, Tian, D., Sun, L., & Wen L. (2018), Source characteristics of North Korea's 3 September 2017 nuclear test, *Seismol. Res. Lett.*, 89 (6), 2078–2084, doi:[10.1785/0220180134](https://doi.org/10.1785/0220180134)
4. Tian, D., **Yao, J.***, & Wen L. (2018), Collapse and earthquake swarm after North Korea's 3 September 2017 nuclear test, *Geophys. Res. Lett.*, 45, 3976–3983, doi:[10.1029/2018GL077649](https://doi.org/10.1029/2018GL077649)

3. Wen, L., Tian, D., & **Yao, J.** (2018), Seismic structure and dynamic process of the earth's inner core and its boundary, *Chinese J. Geophys.* (in Chinese), 61(3), 803-818, doi:[10.6038/cjg2018L0500](https://doi.org/10.6038/cjg2018L0500)
2. **Yao, J.**, Sun, L., & Wen, L. (2015), Two decades of temporal change of Earth's inner core boundary, *J. Geophys. Res. Solid Earth*, 120(9), 6263-6283, doi:[10.1002/2015JB012339](https://doi.org/10.1002/2015JB012339)
1. **Yao, J.**, & Wen, L. (2014), Seismic structure and ultra-low velocity zones at the base of the Earth's mantle beneath Southeast Asia, *Phys. Earth Planet. In.*, 233, 103-111, doi:[10.1016/j.pepi.2014.05.009](https://doi.org/10.1016/j.pepi.2014.05.009)

Papers in Preparation

2. **Yao, J.**, Liu, S., Chen, M., Wei, S. & Tong, P., *Eikonal equation-based seismic traveltime tomography of Myanmar*
1. **Yao, J.**, Sun, L., & Wen, L., *Global temporal change of Earth's inner core boundary from repeating earthquakes*

Meeting Abstracts

9. **Yao, J.**, & Tong, P. (2018), *First finite-frequency tomography of Myanmar*, 2018 AGU Fall Meeting, Washington, D.C., USA ([S53C-0418](#)).
8. **Yao, J.**, Tian, D., Sun, L., & Wen, L. (2017), *Temporal change of seismic Earth's inner core phases: inner core differential rotation or temporal change of inner core surface?* 2017 AGU Fall Meeting, New Orleans, LA, USA ([DI33B-0405](#)).
7. **Yao, J.**, Tian, D., & Wen, L. (2017), *High-precision location, yield and tectonic release of North Korea's 3 September 2017 nuclear test*, 2017 AGU Fall Meeting, New Orleans, LA, USA ([S43H-2967](#)).
6. Tian, D., **Yao, J.**, & Wen, L. (2017), *Collapse and earthquake swarm after North Korea's 3 September 2017 nuclear test*, 2017 AGU Fall Meeting, New Orleans, LA, USA ([S43H-2968](#)).
5. **Yao, J.**, Tian, D., Sun, L., & Wen, L. (2017), *Temporal change of seismic Earth's inner core phases: inner core super-rotation or temporal change of inner core surface?* Gordon Research Conference: Interior of the Earth, South Hadley, MA, USA.
4. **Yao, J.**, & Wen, L. (2015), *Temporal change of the Earth's inner core boundary beneath North Pacific and Eurasia*, 2015 AGU Fall Meeting, San Francisco, CA, USA ([DI33A-2608](#)).
3. **Yao, J.**, & Wen, L. (2014), *New seismic evidence for localized temporal change of the Earth's inner core boundary*, 2014 AGU Fall Meeting, San Francisco, CA, USA ([DI31A-4261](#)).
2. **Yao, J.**, & Wen, L. (2013), *Seismic scattering and velocity structure near the Earth's core-mantle boundary beneath the South China Sea and north Indonesia*, 2013 AGU Fall Meeting, San Francisco, CA, USA ([DI23A-2289](#)).
1. **Yao, J.**, & Wen, L. (2012), *Strong seismic scatterers near the Earth's core-mantle Boundary in the location of the past Sunda subduction*, 2012 AGU Fall Meeting, San Francisco, CA, USA ([DI31B-2395](#)).

Talks

10. **Yao, J.**, Seismic monitoring of North Korea's 2017 nuclear test and its triggered seismicity, *Institute of Geodesy and Geophysics, Chinese Academy of Sciences*, Wuhan, China, May 30, 2019. **[Invited]**
9. **Yao, J.**, Seismic monitoring of North Korea's 2017 nuclear test and its triggered seismicity, *Center for Gravitational Experiments, Huazhong University of Science and Technology*, Wuhan, China, May 30, 2019.
8. **Yao, J.**, Location and source characteristics of North Korea's 2017 nuclear test and its triggered seismicity, *Earth Observatory of Singapore*, Singapore, Sep. 14, 2018. **[Invited]**
7. **Yao, J.**, Detection and location of small seismic events, *a workshop of seismic algorithm and program at University of Science and Technology of China*, Hefei, China, Jul. 3, 2018. **[Invited]**
6. **Yao, J.**, Seismic monitoring of North Korea's 3 September nuclear test, *Institute of Geology and Geophysics, Chinese Academy of Sciences*, Beijing, China, Jun. 15, 2018. **[Invited]**
5. **Yao, J.**, Temporal change of seismic Earth's inner core phases: inner core differential rotation or temporal change of inner core surface? *Institute of Geology and Geophysics, Chinese Academy of Sciences*, Beijing, China, Jun. 15, 2018. **[Invited]**
4. **Yao, J.**, Temporal change of the Earth's inner core surface and seismic monitoring of North Korea's 3 September nuclear test, *Institute of Earthquake Forecasting, China Earthquake Administration*, Beijing, China, Jun. 14, 2018.
3. **Yao, J.**, Seismic monitoring of North Korea's 3 September nuclear test, *China Earthquake Networks Center*, Beijing, China, Jun. 12, 2018.
2. **Yao, J.**, Temporal change of seismic Earth's inner core phases: inner core differential rotation or temporal change of inner core surface? *2017 Annual Meeting of Chinese Geoscience Union (CGU)*, Beijing, China, Oct. 17, 2017. **[Invited]**
1. **Yao, J.**, Temporal change of the Earth's inner core boundary, *China Earthquake Networks Center*, Beijing, China, Jun. 30, 2016. **[Invited]**

Teaching Experience

2019 Fall: Mathematics A

2019 Spring: Calculus II

Field Experience

Dense array in Singapore, 02/26/2019, install 20 short-period seismic stations.

Chinese Translation

E. Vance (2018), [Earthquakes in the sky](#), 11, *Chinese version of Scientific American*.

Expertise & Skills

Languages	Mandarin Chinese (native), English.
Programming	C, Fortran, Perl.
Seismological Tools	SAC, GMT, SOD, TauP.

Others GRT, GRT-FD hybrid method, Double difference location,
Match&Locate (Small event detection and location).