田冬冬

博士后

密西根州立大学，地球和环境科学系

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教育经历

2018　　地球物理博士学位，中国科学技术大学，中国安徽省合肥市

2012　　地球物理学士学位，中国科学技术大学，中国安徽省合肥市

工作经历

08/2018 – present　**博士后**，密西根州立大学，美国密西根州东兰辛

研究方向及兴趣

- 地球深部结构
- 小震机制（微震、核试验、塌陷等）
- 复杂介质中地震波传播的数值模拟

荣誉

2018　中国科学院院长奖

2018　中国科学技术大学优秀毕业生

2017　中国地球科学联合学术年会优秀学生论文奖

2017　博士生国家奖学金

2014　光华奖学金

2010　光华奖学金

2009　中国科学技术大学优秀志愿者

学术活动

2012 – present	美国地球物理联合会（AGU）会员
2013 – present	SeisMan 博客博主
2016 – 2018	中国地震学参考模型 研究助理及数据库管理员
2016 – present	GMT 中文社区 创办者
2017 – present	期刊审稿人: *Geophysical Research Letters* (1), *Seismological Research Letters* (2), *Review of Scientific Instruments* (1), *Journal of Open Source Software* (2)
2018 – present	Generic Mapping Tools (GMT) 和 PyGMT 核心开发者
2018 – 2019	AGU 秋季会议 Outstanding Student Paper Award 评审
2019	UNAVCO 短期课程 “The Generic Mapping Tools for Geodesy” 指导讲师
2019	AGU 秋季会议研讨会 SCIWS4: “Become a Generic Mapping Tools Contributor Even If You Can’t Code” 指导讲师

已发表论文

* 通讯作者，# 共同一作

10. Wessel, P., Luis, J., Uieda, L., Scharroo, R., Wobbe, F., Smith, W. H. F., & **Tian, D.** (2019). The Generic Mapping Tools Version 6. *Geochemistry, Geophysics, Geosystems*, *20*. doi:10.1029/2019GC008515

9. 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?. *Journal of Geophysical Research: Solid Earth*, *124*, 6720–6736. doi:10.1029/2019JB017532

8. Fan, W., Wei, S.S.,**Tian, D.**, McGuire J.J., & Wiens D.A. (2019). Complex and diverse rupture processes of the 2018 Mw 8.2 and Mw 7.9 Tonga-Fiji deep earthquakes. *Geophysical Research Letters*, *46*(5), 2434–2448. doi:10.1029/2018GL080997

7. Yao, J., **Tian, D.**#, Lu, Z., Sun, L., & Wen, L. (2018). Triggered seismicity after North Korea’s 3 September 2017 nuclear test. *Seismological Research Letters*, *89*(6), 2085–2093. doi:10.1785/0220180135

6. Yao, J., **Tian, D.**#, Sun, L., & Wen, L. (2018). Source characteristics of North Korea’s 3 September 2017 nuclear test. *Seismological Research Letters*, *89*(6), 2078–2084. doi:10.1785/0220180134

5. **Tian, D.**, Yao, J., & Wen, L. (2018). Collapse and earthquake swarm after North Korea’s 3 September 2017 nuclear test. *Geophysical Research Letters*, *45*(9), 3976–3983. doi:10.1029/2018GL077649

4. Wen, L., **Tian, D.**, & Yao, J. (2018). Seismic structure and dynamic process of the Earth's inner core and its boundary. *Chinese Journal of Geophysics*, *61*(3), 803–818. doi:10.6038/cjg2018L0500 [in Chinese]

3. **Tian, D.**, & Wen, L. (2017). Seismological evidence for a localized mushy zone at the Earth's inner core boundary. *Nature communications*, 8, 165. doi:10.1038/s41467-017-00229-9

2. Chen, X., **Tian, D.**, & Wen, L. (2015). Microseismic sources during hurricane sandy. *Journal of Geophysical Research: Solid Earth*, *120*(9), 6386–6403. doi:10.1002/2015JB012282

1. Zhang, M., **Tian, D.**, & Wen, L. (2014). A new method for earthquake depth determination: stacking multiple-station autocorrelograms. *Geophysical Journal International*, *197*(2), 1107–1116. doi:10.1093/gji/ggu044

尚未发表论文（审稿中）

1. **Tian, D.**, Lv, M., Wei, S. S., Dorfman, S. M. & Shearer, M. P. Global variations of Earth's 520- and 560-km discontinuities.

会议摘要

16. **Tian, D.**, Wang, W. & Wei, S. S. (2019) Source spectra and stress drop of deep earthquakes in the Tonga subduction zone. Abstract S13C-0458 presented at 2019 AGU Fall Meeting, San Francisco, CA, USA.

15. **Tian, D.**, Wei, S. S., & Shearer, M. P. (2019) Global variations of the 520-km discontinuity. Presented at Gordon Research Conference: Interior of the Earth, South Hadley, MA, USA.

14. **Tian, D.**, Wei, S. S., & Shearer, M. P. (2018) Global variations of the 520-km discontinuity. Abstract DI31C-0024 presented at 2018 AGU Fall Meeting, Washington, DC, USA.

13. **Tian, D.**, Yao, J., & Wen, L. (2017). Collapse and earthquake swarm after North Korea's 3 September 2017 nuclear test. Abstract S43H-2968 presented at 2017 AGU Fall Meeting, New Orleans, LA, USA.

12. **Tian, D.**, & Wen, L. (2017). Three types of Earth's inner core boundary. Abstract DI33B-0404 presented at 2017 AGU Fall Meeting, New Orleans, LA, USA.

11. Yao, J., **Tian, D.**, & Wen, L. (2017). High-precision location, yield and tectonic release of North Korea's 3 September 2017 nuclear test. Abstract S43H-2967 presented at 2017 AGU Fall Meeting, New Orleans, LA, USA.

10. 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? Abstract DI33B-0405 presented at 2017 AGU Fall Meeting, New Orleans, LA, USA.

9. **Tian, D.**, & Wen, L. (2017). Seismological evidence for a localized mushy zone at the Earth's inner core boundary. Presented at Gordon Research Conference: Interior of the Earth, South Hadley, MA, USA.

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? Presented at Gordon Research Conference: Interior of the Earth, South Hadley, MA, USA.

7. **Tian, D.**, & Wen, L. (2016). Seismic structures of the Earth's inner core boundary beneath the Bearing sea and Mexico. Abstract DI43A-2657 presented at 2016 AGU Fall Meeting, San Francisco, CA, USA.

6. **Tian, D.**, & Wen, L. (2015). Varying seismic property of the Earth's inner core boundary. Abstract DI33A-2606 presented at 2015 AGU Fall Meeting, San Francisco, CA, USA.

5. **Tian, D.**, & Wen, L. (2014). Seismic study on the properties of the Earth's inner core boundary. Abstract DI31B-4269 presented at 2014 AGU Fall Meeting, San Francisco, CA, USA.

4. Chen, X., **Tian, D.**, & Wen, L. (2013). Seismic tracking of hurricane sandy. Abstract S11A-2296 presented at 2013 AGU Fall Meeting, San Francisco, CA, USA.

3. **Tian, D.**, & Wen, L. (2013). Regional topography variation of Earth's inner core boundary. Abstract DI23A-2282 presented at 2013 AGU Fall Meeting, San Francisco, CA, USA.

2. Zhang, M., **Tian, D.**, & Wen, L. (2013). A new method for earthquake determination: stacking multiple-station autocorrelograms. Abstract S51A-2301 presented at 2013 AGU Fall Meeting, San Francisco, CA, USA.

1. **Tian, D.**, & Wen, L. (2012). Simulating wave propagation in a faulted medium using a 3D finite difference method. Abstract S43A-2458 presented at 2012 AGU Fall Meeting, San Francisco, CA, USA.

学术报告

7. **Tian, D.** Global variations of the 520-km discontinuity. *2nd Annual Earth and Environmental Sciences Student Research Symposium*, Department of Earth and Environmental Sciences, Michigan State University, East Lansing, MI, USA. Feb. 23, 2019.

6. **Tian, D.** Collapse and earthquake swarm after North Korea's 2017 nuclear test. *Institute of Geology and Geophysics, Chinese Academy of Sciences*, Beijing, China. Jun. 15, 2018.

5. **Tian, D.** Seismological evidence for a localized mushy zone at the Earth's inner core boundary. *Institute of Geology and Geophysics, Chinese Academy of Sciences*, Beijing, China. Jun. 15, 2018. **[邀请报告]**

4. **Tian, D.** Fine-scale structure of the Earth's inner core boundary and aftershocks of North Korea's 2017 nuclear test. *Institute of Earthquake Forcasting, China Earthquake Administration*, Beijing, China. Jun. 14, 2018.

3. **Tian, D.** Seismological evidence for a localized mushy zone at the Earth's inner core boundary. *2017 Annual Meeting of Chinese Geoscience Union (CGU)*, Beijing, China. Oct. 17, 2017. **[邀请报告]**

2. **Tian, D.** Getting started with GMT in 60 minutes. *Workshop on Analysis and Applications of Crustal Deformation Data*, Wuhan, China. Sep. 21, 2016. **[邀请报告]**

1. **Tian, D.** Seismic study on the properties of the Earth's inner core boundary. *China Earthquake Networks Center*, Beijing, China. Jun. 30, 2016. **[邀请报告]**

野外经历

- **LEEP** (**L**ake **E**rie **E**arthquake ex**P**eriment), 10/12/2018 – 10/16/2018，在 Erie 湖周边安装 8 个宽频带地震仪

开源软件

*年份表示项目开始时间。所有软件目前仍在维护中。

2014 **HinetPy** – 用于从 Hi-net 网站申请和处理地震波形数据的 Python 软件包
https://github.com/seisman/HinetPy/