

Tianhaozhe Sun

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Education

- Ph.D. candidate in Geophysics School of Earth and Ocean Sciences, University of
(2011.09 - present) Victoria, Canada; GPA: 9.00/9.00
- B.Sc. in Geophysics School of Ocean and Earth Sciences, Tongji
(2007.09 - 2011.06) University, China; GPA: 4.81/5.00 Rank: 1/19

Work, Teaching & Field Experiences

- 2014.08 Conducting pre-cruise tests on CORK instruments for R/V Atlantis Cruise AT26-17b
- 2014.07 Seismic station maintenance on Nootka Island and west Vancouver Island
- 2014, 2012 TA of EOS 110: Oceans and Atmosphere, Univ. of Victoria (two terms)
- 2013.09 Field trip at Marin Headlands ancient subduction zone and San Andreas
 creeping/locked transition zone
- 2013.09 Seminar at Tongji Univ., Shanghai and China Earthquake Administration, Beijing
- 2012.09 IODP workshop: Observatories in Scientific Ocean Drilling, Houston
- 2012.04-05 Science Party member of IODP Exp. 343: Japan Trench Fast Drilling Program
- 2010.07 Exploration geophysics (gravity, electromagnetics, and reflection seismology methods)
 field trip at Chongming Island, Shanghai
- 2009.07 Geology and Physical Geography field trip at Qinhuangdao, Hebei Province, China

Journal Publications

- Sun, T.** and K. Wang (2015), Viscoelastic relaxation following subduction earthquakes and its effects on afterslip determination, *J. Geophys. Res. Solid Earth*, published online, doi:10.1002/2014JB011707.
- Davis, E. E., H. Villinger, and **T. Sun** (2015), Slow and delayed deformation and uplift of the outermost subduction prism following ETS and seismogenic slip events beneath Nicoya Peninsula, Costa Rica, *Earth Planet. Sci. Lett.*, 410, 117-127, doi:10.1016/j.epsl.2014.11.015.
- Sun, T.** et al. (2014), Prevalence of viscoelastic relaxation after the 2011 Tohoku-oki earthquake, *Nature*, 514, 84-87, doi:10.1038/nature13778.
- Sun, T.** et al. (2013), Signatures of ocean storms on seismic records in South China Sea and East China Sea. *Mar Geophys Res*, 34(3-4), 431-448, doi:10.1007/s11001-013-9204-6.
- * As a member of author group "**Expedition 343 Scientists**" in following publications:
- Fulton, P. M. et al. (2013), Low coseismic friction on the Tohoku-oki fault determined from temperature measurements, *Science*, 342, 1214-1217, doi:10.1126/science.1243641.
- Chester, F. M. et al., Structure and composition of the plate-boundary slip zone for the 2011 Tohoku-oki earthquake, *Science*, 342, 1208-1211, doi:10.1126/science.1243719.
- Ujiie, K. et al. (2013), Low coseismic shear stress on the Tohoku-oki megathrust determined from laboratory experiments, *Science*, 342, 1211-1214, doi:10.1126/science.1243485.
- Lin, W. et al. (2013), Stress state in the largest displacement area of the 2011 Tohoku-oki earthquake, *Science*, 339, 687-690, doi:10.1126/science.1229379.
- Rowe, C. D. et al. (2013), The thickness of subduction plate boundary faults from the seafloor into the seismogenic zone, *Geology*, 41, 991-994, doi: 10.1130/G34556.1.
- Yang, T. et al. (2013), Strain decoupling across the décollement in the region of large slip during the 2011 Tohoku-Oki earthquake from anisotropy of magnetic susceptibility, *Earth Planet Sci. Lett.*, 381, 31-38, doi:10.1016/j.epsl.2013.08.045.

Conference Presentations (Presenter underlined)

- 2015.05, Sun, T. et al., Determining slip near trench in the M 9 Tohoku-oki earthquake using bathymetry differences before and after the rupture, **invited talk**, JpGU annual meeting.
- 2015.05, Wang, K. et al. (including **T. Sun**), How large is the fault slip at trench in the M=9 Tohoku-oki earthquake?, EGU General Assembly.
- 2014.12, Sun, T. et al., Dominance of viscoelastic relaxation after the 2011 Tohoku earthquake revealed by seafloor GPS observations, **invited talk**, AGU Fall meeting.
- 2014.12, Sun, T. et al., Studying near-trench characteristics of the 2011 Tohoku-Oki megathrust rupture using differential multi-Beam bathymetry before and after the earthquake, AGU Fall meeting.
- 2014.12, Brown, L. et al. (including **T. Sun**), Absolute strength of megathrust faults: constraints from stress drop of the 2011 great Tohoku earthquake, AGU Fall meeting.
- 2014.10, Wang, K. et al. (including **T. Sun**), Lessons learned from co- and post-seismic seafloor geodetic observations of the M 9 Tohoku-Oki earthquake, 2014 GSA meeting.
- 2014.07, Iinuma, T. et al. (including **T. Sun**), Modelling of the postseismic deformation associated with the 2011 off the Pacific coast of Tohoku earthquake based on terrestrial and seafloor geodetic observations, Asia Oceania Geosciences Society (AOGS) annual meeting.
- 2014.07, Wang, K. et al. (including **T. Sun**), Asymmetry of megathrust rupture and opposing motion of seafloor GPS stations following the Tohoku earthquake, AOGS annual meeting.
- 2013.12, Sun, T. et al., Viscoelastic landward motion of the trench area following a subduction earthquake, AGU Fall meeting.
- 2013.12, T. Iinuma et al., (including **T. Sun**), Postseismic deformation associated with the 2011 Tohoku Earthquake (M9.0) based on terrestrial and seafloor geodetic observation, AGU Fall meeting.
- 2013.09, Sun, T. et al., Viscoelastic landward motion of the trench area following the Tohoku earthquake, 2nd post-cruise meeting of IODP Exp.343: JFAST.
- 2013.05, Wang, K. et al. (including **T. Sun**), Investigating the relation between trench-breaching rupture and shallow afterslip, JpGU annual meeting.
- 2012.12, Kyo, N. et al. (including **T. Sun**), Development of observatories for the Japan Trench Fast Drilling Project, AGU Fall meeting.
- 2011.12, Sun, T. and M. Xue, Signatures of ocean storms on seismic records in South China Sea, AGU Fall meeting.
- 2011.05, Sun, T. and M. Xue, Characteristics of seismic records influenced by ocean storms in South China Sea, National Basic Research Program of China (2007CB411702), in Chinese.
- 2011.05, Yang, K., H. Li, **T. Sun**, A practical near-surface construction technique for overthrust data with Simulated Annealing algorithm, 73rd EAGE Conference & Exhibition, Vienna.

Selected Awards

- 2014-2015 Alexander and Helen Stafford MacCathy Muir Graduate Scholarship
- 2014-2015 Bob Wright Graduate Scholarships
- 2014.12 Outstanding Student Paper Award in AGU Fall meeting
- 2014.04 First prize of annual graduate student workshop of SEOS, Univ. of Victoria
- 2013-2014 Howard E. Petch Scholarship, Univ. of Victoria
- 2012-2013 Albert Hung Chao Hong Scholarships, Univ. of Victoria
- 2011-2014 Fellowship of Ph.D. program, Univ. of Victoria
- 2011 Outstanding Graduate Award, Tongji Univ.
- 2011 Outstanding Undergraduate Thesis of Tongji Univ. (1 in 19)
- 2009-2010 Guanghua Scholarship and Liuguangding Scholarship (For top 5% students)

2009, 2010 Special Scholarship for Academic Excellence, Tongji Univ., Tier 1
2008-2009 National Scholarship (Granted by Ministry of Education of China)
2007, 2008 Excellent Student Award, Tongji Univ.
2002.07 China National Youth Science and Technology Invention Contest, Second Prize

Other Experiences

2012.04 Champion of IODP Expedition 343 onboard Pingpong tournament
2010.08 Organization Committee member of national graduate summer course
“Evolution and Dynamics of Oceanic Lithosphere”, Shanghai, China
2009-2011 Elected Chair of university class (Geophysics, Tongji Univ.)
2008-2011 Member of department basketball team (Ocean and Earth Sciences, Tongji Univ.)
2007-2008 Member of Tongji University Chorus

References

Dr. Kelin Wang (Ph.D. supervisor) Kelin.Wang@NRCan-RNCan.gc.ca
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Sciences, Univ. of Victoria*
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