

# SURUI XIE

School of Geosciences, University of South Florida  
SCA 216, 4202 E. Fowler Ave, Tampa, FL 33620, USA

Tel: 813-335-9027 E-mail: [suruixie@mail.usf.edu](mailto:suruixie@mail.usf.edu) Web: <https://suruixie.github.io/>

## EDUCATION

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<b>University of South Florida</b> , Tampa, Florida, USA	<i>May 2020 (expected)</i>
Ph.D., Geology	
• Advisor: Timothy H. Dixon, Rocco Malservisi (co-advisor)	
<b>Wuhan University</b> , Wuhan, Hubei, China	<i>Jun 2014</i>
M.E., Geodesy and Survey Engineering	
• Advisor: Fei Li	
<b>Wuhan University</b> , Wuhan, Hubei, China	<i>Jun 2011</i>
B.E., Geodesy and Geomatics Engineering (Outstanding graduate)	

## HONORS AND AWARDS

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Tharp Endowed Scholarship, University of South Florida	<i>2015, 2016, 2017</i>
Outstanding Graduate, Wuhan University	<i>2011</i>
Chinese National Scholarship	<i>2009</i>

## RESEARCH EXPERIENCE

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<b>Geodesy Lab at the University of South Florida</b> , Tampa, Florida, USA	
<i>Research Assistant</i>	<i>Fall 2017–</i>
Space and terrestrial geodesy, tidewater glacier dynamics, fault slip rate.	
<b>Quaternary Geochronology Laboratories at the University of Cincinnati</b> , Cincinnati, Ohio, USA	
<i>Visiting Student</i>	<i>Jun-Jul 2015, Jul 2016</i>
Terrestrial cosmogenic nuclide exposure dating.	
<b>The 28<sup>th</sup> Chinese National Antarctic Research Expedition</b> , Zhongshan Station, Antarctica	
<i>Geodesist</i>	<i>Nov 2011 – Jan 2013</i>
Geodetic surveying and mapping, tide gauge calibration and maintenance.	

## FIELD WORK

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Geological field investigations in the Mojave Desert of the Eastern California Shear Zone	<i>2016, 2018</i>
Mountain glacier studies at Gangotri of the west Himalayas	<i>2016</i>
Marine-terminating glacier studies at Jakobshavn Isbræ of Greenland	<i>2015</i>
Volcano topography and deformation studies at Nevado del Ruiz in Colombia	<i>2015</i>
Geodetic surveys in Antarctica	<i>2011–2013</i>

## TEACHING EXPERIENCE

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TA for <i>History of Life</i>	<i>Spring 2016 – Spring 2017</i>
TA for <i>Dynamic Earth: Introduction to Physical Geology</i>	<i>Fall 2015</i>
TA for <i>Introduction to Earth Science</i>	<i>Spring 2015</i>
TA for <i>Geology For Engineers</i>	<i>Fall 2014</i>

## WORKSHOPS ATTENDED

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Crustal Deformation Modeling workshop, Golden, CO, USA (travel grant awarded)	2017
GipsyX class, Pasadena, CA, USA	2017
GAMIT/GLOBK/TRACK short course, Boulder, CO, USA (travel grant awarded)	2015

## COMPUTER SKILLS

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- Programming languages: Python, Fortran, Shell, C++, Matlab
- Software packages: GMT, GAMIT/GLOBK/TRACK, QGIS, GIMP, Gnuplot, L<sup>A</sup>T<sub>E</sub>X
- Operating systems: Linux, macOS, Microsoft Windows


## LANGUAGES

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Chinese (native), English (fluent)

## PEER REVIEWED PUBLICATIONS

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(*More information on  and *)

**Xie, S.**, Gallant, E., Wetmore, P.H., Figueiredo, P.M., Owen, L.A., Rasmussen, C., Malservisi, R., Dixon, T.H., (2018). A new geological slip rate estimate for the Calico Fault, eastern California: Implications for geodetic versus geologic rate estimates in the Eastern California Shear Zone. *International Geology Review*, doi:10.1080/00206814.2018.1531272.

Vaňková, I., Voytenko, D., Nicholls, K.W., **Xie, S.**, Parizek, B.R., Holland, D.M., 2018. Vertical structure of diurnal englacial hydrology cycle at Helheim Glacier, East Greenland. *Geophysical Research Letters*, 45, 8352–8362, doi:10.1029/2018GL077869.

Dixon, T.H., **Xie, S.**, 2018. A kinematic model for the evolution of the Eastern California Shear Zone and Garlock Fault, Mojave Desert, California. *Earth and Planetary Science Letters*, 494, 60–68, doi:10.1016/j.epsl.2018.04.050.

**Xie, S.**, Dixon, T.H., Voytenko, D., Deng, F., Holland, D.M., 2018. Grounding line migration through the calving season at Jakobshavn Isbræ, Greenland, observed with terrestrial radar interferometry. *The Cryosphere*, 12(4), 1387–1400, doi:10.5194/tc-12-1387-2018.

Lei, J., Li, F., Zhang, S., Xiao, C., **Xie, S.**, Ke, H., Zhang, Q., Li, W., 2018. Ocean Tides Observed from A GPS Receiver on Floating Sea Ice Near Chinese Zhongshan Station, Antarctica. *Marine Geodesy*, 41(4), 353–367, doi:10.1080/01490419.2018.1454370.

**Xie, S.**, Dixon, T.H., Voytenko, D., Holland, D.M., Holland, D., Zheng, T., 2016. Precursor motion to iceberg calving at Jakobshavn Isbræ, Greenland, observed with terrestrial radar interferometry. *Journal of Glaciology*, 62(236), 1134–1142, doi:10.1017/jog.2016.104. (**front cover article**)

**Xie, S.**, Li, F., Zhao, J., Zhang, S., 2014. Estimation of sea ice thickness at Zhongshan station in Antarctica based on a combination of GPS and tide observations. (in Chinese with English abstract) *Geomatics and Information Science of Wuhan University*, 39(10), 1153–1157, doi:10.13203/j.whugis20130048.

## SELECTED PRESENTATIONS

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**Xie, S.**, Dixon, T.H., Voytenko, D., Deng, F., Holland, D.M., Holland, D., 2017. Ice speed variation driven by tidal currents near the terminus of Jakobshavn Isbræ, Greenland, observed with terrestrial radar interferometry. Fall Meeting of the American Geophysical Union, New Orleans, LA, USA. (**Poster**)

Dixon, T.H., **Xie, S.**, Malservisi, R., Lembke, C., Iannaccone, G., Law, J., Rodgers, M., Russel, R., Voss, N., 2017. Measurement of shallow water sea floor motion with GPS on a rigid buoy: system design and preliminary analysis. Fall Meeting of the American Geophysical Union, New Orleans, LA, USA. (**Poster**)

Wetmore, P.H., **Xie, S.**, Gallant, E., Owen, L.A., Dixon, T.H., 2017. A new geological slip rate estimate for the Calico fault, Eastern California: Implications for geodetic versus geologic rate estimates in the Eastern California shear zone. Fall Meeting of the American Geophysical Union, New Orleans, LA, USA. (**Poster**)

**Xie, S.**, Gallant, E., Wetmore, P., Owen, L.A., Dixon, T.H., 2017. A new geological slip rate estimate for the Calico Fault, eastern California: Implications for geodetic versus geologic rate estimates in the Eastern California Shear Zone. GSA Annual Meeting, Seattle, WA, USA. doi:10.1130/abs/2017 AM-300595. (**Oral**)

**Xie, S.**, Wetmore, P.H., Owen, L.A., Gallant, E., Dixon, T.H., 2016. Evidence for a high slip rate of the Calico fault in the Eastern California Shear Zone. Fall Meeting of the American Geophysical Union, San Francisco, CA, USA. (**Oral**)

**Xie, S.**, Dixon, T.H., Voytenko, D., Holland, D.M., Holland, D., Zheng, T., 2016. Precursor motion to iceberg calving at Jakobshavn Isbræ, Greenland, observed with terrestrial radar interferometry. International Symposium on Interactions of Ice Sheets and Glaciers with the Ocean, La Jolla, CA, USA. (**Oral, travel grant awarded**)

**Xie, S.**, Voytenko, D., Holland, D.M., Dixon, T.H., 2015. Calving and velocity variations observed by Terrestrial Radar Interferometry at Jakobshavn Isbræ, Greenland, in 2015. Fall Meeting of the American Geophysical Union, San Francisco, CA, USA. (**Poster**)