

SURUI XIE

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EDUCATION

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

HONORS AND AWARDS

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

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

TEACHING EXPERIENCE

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>

FIELD WORK

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>

WORKSHOPS ATTENDED

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

- Programming languages: Python, Fortran, Shell, C++, Matlab
- Software packages: GMT, GAMIT/GLOBK/TRACK, QGIS, GIMP, Gnuplot, L^AT_EX
- Operating systems: Linux, macOS, Microsoft Windows

INSTRUMENT SKILLS

- Static and kinematic GPS
- Terrestrial radar interferometer
- Optical and digital level
- Theodolite and total station

LANGUAGES

Chinese (native), English (fluent)

PEER REVIEWED PUBLICATIONS

(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

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**)