

Timothy H. Dixon: Curriculum Vitae

Date: August 30, 2024

Lab web site: <http://labs.cas.usf.edu/geodesy/>

Book web site: <https://www.amazon.com/author/timothydixon>

Scholar Commons: <https://works.bepress.com/timothydixon/>

Cambridge Press Blogs:

https://www.cambridgeblog.org/?post_type=post&s=Dixon&submit=Submit

Google Scholar Profile: <https://scholar.google.com/citations?hl=en&user=aqQj96AAAAAJ>

PERSONAL

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Home Address: 5344 1st Ave S, St Petersburg, FL 33707

Academic Rank: Distinguished University Professor

Department: Geoscience

Citizenship: US

ORCID: 0000-0002-5127-0583

HIGHER EDUCATION

Institutional: Ph.D., Scripps Institution of Oceanography, University of California, 1979
B.Sc., University of Western Ontario, Honors in Geology, 1974

Certifications: Commercial Pilot, Instructor Rating
NAUI Advanced SCUBA Diver

EXPERIENCE

Academic:

2019-Present	Distinguished University Professor, USF
2011 – 2019	Professor, School of Geosciences, University of South Florida (USF)
6/95- 12/10	Professor, Marine Geology & Geophysics, RSMAS, University of Miami
9/92-5/95	Associate Professor, Marine Geology & Geophysics, RSMAS, University of Miami

Non-Academic:

9/79-9/80: Jet Propulsion Laboratory, Post-doctoral Fellow
10/80-10/81: Jet Propulsion Laboratory, Senior Scientist
10/81-5/92: Jet Propulsion Laboratory, Member, Technical Staff
1/85-5/92: Jet Propulsion Lab, Geodynamics Group, Technical Group Leader
5/92-9/92: NASA Headquarters, Geodynamics Program, Acting Program Manager
2000-2008: Co-Director, Center for Southeastern Tropical Advanced Remote Sensing
2013 – present: Director and Founder, Natural Hazards Network, University of South

Florida (USF); Director, USF Geodesy Lab

Field Work & Expedition Experience:

- Conducted geological field investigations in the Canadian Shield, Northern Mariana Archipelago, Northeast Africa, California, Dominican Republic, Costa Rica, Nicaragua.
- Participated in six sea-going expeditions, including responsibility for Arc Seamount investigations on MARIANA expedition in 1979.
- Organized GPS field programs in California, Mexico, the northern Caribbean, Central America, northern and central South America, and Iceland.
- Installed continuous GPS volcano monitoring equipment on Popocateptl (Mexico), Arenal (Costa Rica), Misti (Peru) and Cotopaxi (Ecuador) volcanoes.
- Conducted glacier studies in Iceland and Greenland using ground-based interferometric radar.
- Conducted volcano deformation and DEM studies with ground-based interferometric radar at Nevado del Ruiz (Colombia), Momotombo (Nicaragua) and Pacaya (Guatemala).
- Conducted drone-based LIDAR surveys of permafrost areas in Alaska.

PROFESSIONAL

Professional and Honorary Organizations:

Member and Fellow, American Geophysical Union

Member and Fellow, Geological Society of America

Member and Fellow, American Association for the Advancement of Science

Honors and Awards:

Admission Scholarship, University of Western Ontario, 1970

Dean's Honor List, University of Western Ontario, 1971-1974

Ontario Petroleum Institute Award, University of Western Ontario, 1974

National Research Council of Canada Fellowship, 1975-1978

Nimitz Scholarship, Scripps Institution of Oceanography, 1975

Sigma Xi Award, Scripps Institution of Oceanography, 1976

NASA Group Achievement Award, Shuttle Imaging Radar Science Team, 1989

NASA Group Achievement Award, GPS Geodesy Development Team, 1994

Fellow, American Geophysical Union, 2001

AAPG Distinguished Lecturer, 2006-2007

Best Paper Award, Geological Society of America (Structure/Tectonics) 2006

MARGINS Distinguished Lecturer, 2008-2010

Woollard Award, Geological Society of America, 2010

Fellow, Geological Society of America, 2011

Fellow, American Association for the Advancement of Science, 2015

Distinguished University Professor (USF) 2019

Editorial Responsibilities:

Editorial Board, *Geology*, 1984-1987

Associate Editor, Geophysical Research Letters Special Issue on Central and South American Geodesy, 1990
Associate Editor, Journal of Geophysical Research, 1998-2002; 2005-2008
Associate Editor, Journal of Volcanology and Geothermal Research, Special Issue on Volcano Monitoring, 2000.
Editor, The Seismogenic Zone of Subduction Thrusts, Columbia University Press (2007)
Manuscript Reviewer: Journal of Geophysical Research, Geophysical Research Letters, Tectonics, Science, Nature, Nature-Geoscience, Geology, Earth and Planetary Science Letters, Tectonophysics, Bulletin of the Seismological Society of America, Journal of Volcanology and Geothermal Research, and AGU Geodynamics Series Monographs.

Post-Doctoral Fellowships:

NASA Post-Doctoral Fellow, Jet Propulsion Laboratory, 1979-1980

Other Professional Activities:

Assistant Project Scientist, NASA Crustal Dynamics Project, 1983-1984
GPS Program Scientist, NASA GPS Program, 1984-1992
Member, Committee on Geodesy, National Research Council, 1987-1990
Co-Chairman, NASA Topographic Science Working Group, 1986-1988
Member, NASA Working Group on Water Vapor Radiometry, 1988-1990
Convenor, NASA Workshop on SAR Interferometry and Surface Change, 1994
Member, AGU Whitten Medal Committee, 1992-95
Co-Convenor, NASA/NOAA/NSF Workshop on Sea Level Change, 1995
Member, NSF UNAVCO Steering Committee, 1994-1996
Member, NSF Margins Science Committee, 1997-2000
Member, AGU Tectonics Editor Search Committee, 1999
Member, USArray Steering Committee, 1999-2002
Member, Unavco Committee on North America Reference Frame (2003-2004)
Member, PBO Site Selection Committee (Volcanoes)
Geodesy Program Chair, American Geophysical Union Spring Meeting, 2005
Chair, Unavco Facilities Committee, 2004-2008
Member, NSF/Continental Dynamics Panel, 2005-2007
Member, NSF/I&F Panel, 2009-2011; 2018
Member, Unavco Board of Directors Nominating Committee, 2009-2011
President-Elect, Geodesy Section, American Geophysical Union, 2011 – 2012
President, Geodesy Section, American Geophysical Union, 2013 – 2014
Member, NSERC (Canada) Review Panel, 2011-2014
Chair, Geology-Geography Section, AAAS (2012- 2013)
Member, NISAR Standing Review Board (2014-2022)
Member, NAS CORES committee (Decadal Survey for Earth Science (2018-2020)
Member, NASA Panel, NISAR Science Team Selection (2019)

Proposal Reviewer:

NSF, Earth Sciences Division: Tectonics, Geophysics, Instrumentation and Facilities,
Continental Dynamics Programs
NSF, Ocean Sciences Division: Marine Geology & Geophysics Program
NSF, Polar Programs Division
NASA
USGS/NEHRP
NOAA
Israeli National Research Council
UK Science Council
Canada NSERC

TEACHING

Teaching Specialization (courses taught):

Continental and Continental Margin Tectonics (graduate)
Geological and Environmental Remote Sensing (graduate)
Geodesy (graduate)
Structural Geology (undergraduate)
Remote Sensing (undergraduate)
Field Camp (undergraduate)
Quantitative Methods in Ecosystem Science (undergraduate)
Natural Hazards (undergraduate)
Debates: Structuring a Scientific Argument (Honors College)
Capstone (Honors College)

Dissertation Advising:

Taha Sadeghi Chorsi (PhD expected, 2025, USF)
Mahsa Afra (MSc, 2023, USF)
Mitchell Hastings (PhD, 2022, USF)
Nicolas Voss (PhD, 2021, USF)
Fanghui Deng (PhD, 2020, USF)
Surui Xie (PhD, 2020, USF)
Makan Karegar (PhD 2018, USF)
Qian Yang (PhD 2016, USF)
Denis Voytenko (PhD 2015, USF)
Yan Jiang (PhD 2012, University of Miami/RSMAS)
Batuhan Osmanoglu (PhD 2011, University of Miami/RSMAS)
Kim Outerbridge (PhD 2010, University of Miami/RSMAS)
Gina Schmalzle (PhD 2008) University of Miami/RSMAS)
Peter LaFemina (PhD 2006) University of Miami/RSMAS)
Edmundo Norabuena (PhD, 2004) University of Miami/RSMAS)
Ailin Mao (PhD, 1998) University of Miami/RSMAS)
Co-Advisor, Michael Finny, 1995-1998 (MSc 1998, University of Miami/RSMAS)
NASA/JPL Advisor, 1986-1991, K.M. Larson, "Precision, accuracy and tectonics from the
Global Positioning System, Ph.D. Thesis, UC San Diego
NASA/JPL Advisor, 1990-1992, J. Weber, "New Madrid Seismic Zone deformation from
GPS" Ph.D. thesis, Northwestern University.

Post-Doctoral Advisor:

D.M. Tralli (1985-87), Jet Propulsion Laboratory
M.I. Bursik (1990-92), Jet Propulsion Laboratory
J. Weber (1995), RSMAS/University of Miami
G. Sella (2001) RSMAS/University of Miami
R. Malservisi (2002-2004) RSMAS/University of Miami
B. Callieau (2003-2005) RSMAS/University of Miami
Sang Wan Kim (2004-2006, RSMAS/University of Miami
Juliet Biggs (2007-2009) RSMAS/University of Miami
Sang Hoon Hong (2007 – 2010) RSMAS/University of Miami
Christina Plattner (2009 – 2011) RSMAS/University of Miami

PATENTS: US Patent 11,892, 294 B1 (Shallow Underwater Buoy for Geodesy)

PUBLICATIONS

Citations: Google Scholar

Lifetime citations: >18,000 H-index: 75

Google Scholar profile: Timothy Dixon

https://scholar.google.com/citations?hl=en&user=aqQj96AAAAAJ&view_op=list_works&sortby=pubdate

Refereed articles:

Van Alphen, R., K. C. Rains, M. Rodgers, R. Malservisi, T. H. Dixon (2024) UAV-Based Wetland Monitoring: Multispectral and Lidar Fusion with Random Forest Classification. *Drones*, 8(3), 113; [DOI: 10.3390/drones8030113](https://doi.org/10.3390/drones8030113)

Sadeghi-Chorsi, T., F. Meyer, T. H. Dixon (2024) Toward long-term monitoring of regional permafrost thaw with satellite InSAR. *Cryosphere*, <https://doi.org/10.5194/egusphere-2023-2605>

Rodgers, M., F. Deng, T. H. Dixon, C. L. Glennie, M. R. James, R. Malservisi, R. Van Alphen, S. Xie (2022) Geodetic Applications to Geomorphology. In Shroder, J. J. F., ed., *Treatise on Geomorphology*, vol. 2, Elsevier Academic Press, p 34-55. ISBN 9780128182345.

Mejia, J. Z., J. D. Gulley, C. Trunz, M. D. Covington, T. C. Bartholomaus, C. Breithaupt, S. Xie, and T. H. Dixon (2022) Moulin density controls the timing of peak pressurization within the Greenland Ice Sheet's subglacial drainage system. *Geophysical Research Letters* 49, no. 22 : e2022GL100058.

Sadeghi-Chorsi, T., J. Braunmiller, F. Deng, T. H. Dixon (2022) Afterslip from the 2020 M 6.5 Monte Cristo Range, Nevada Earthquake. *Geophysical Research Letters*, 49.17 (2022): e2022GL099952

Zumberge, M.A., S. Xie, F. K. Wyatt, M. S. Steckler, G. Li, W. Hatfield, D. Elliott, T. H. Dixon, J. G. Bridgeman, E. L. Chamberlain, M. Allison (2022) Novel integration of geodetic and geologic methods for high-resolution monitoring of subsidence in the Mississippi Delta. *Journal of Geophysical Research: Earth Surface*, 127(9), p.e2022JF006718.

Mejia, J. Z., J. D. Gulley, C. Trunz, M. D. Covington, T. C. Bartholomaeus, S. Xie, T. H. Dixon (2021) Isolated cavities dominate Greenland Ice Sheet dynamic response to lake drainage. *Geophysical Research Letters* 48, no. 19 (2021): e2021GL094762.

Chorsi, T. S., J. Braunmiller, F. Deng, N. Mueller, S. Kerstetter, R. J. Stern, T. H. Dixon (2021) The May 15, 2020 M 6.5 Monte Cristo Range, Nevada, Earthquake: Eyes in the Sky, Boots on the Ground, and A Chance for Students to Learn. *International Geology Review*, DOI: 10.1080/00206814.2021.2000507

Xie, S., J. Chen, T. H. Dixon, R. H. Weisberg, M. A. Zumberge (2021) Offshore sea levels measured with an anchored spar-buoy system using GPS interferometric reflectometry. *Journal of Geophysical Research: Oceans*. DOI: 10.1029/2021JC017734; <https://doi.org/10.1029/2021JC017734>

Deng, F., T. H. Dixon, and S. Xie (2020) Surface deformation and induced seismicity due to fluid injection and oil and gas extraction in western Texas. *Journal of Geophysical Research: Solid Earth*, 125, <https://doi.org/10.1029/2019JB018962>.

Gallant, E., Deng, F., Connor, C. B., Dixon, T. H., Xie, S., Saballos, J. A., Guitierrez, C., Myhre, D., Connor, L. J., Zayac, J. M., LaFemina, P., Charbonnier, S., Richardson, J., Malservisi, R. and Thompson, G. (2020) Deep and rapid thermo-mechanical erosion by a small-volume lava flow. *Earth and Planetary Science Letters*, 537, 116163.

Xie, S., T. H. Dixon, R. Malservisi, Y. Jiang, M. Protti, C. Muller (2020) Slow slip and inter-transient locking on the Nicoya megathrust in the late and early stages of an earthquake cycle. *Journal of Geophysical Research: Solid Earth*, 125, doi.org/10.1029/2020JB020503

Karegar, M. A., K. M. Larson, J. Kusche, and T. H. Dixon (2020) Novel quantification of shallow sediment compaction by GPS interferometric reflectometry and implications for flood susceptibility." *Geophysical Research Letters* 47, no. 14: e2020GL087807.

Xie, S., J. Law, R. Russell, T. H. Dixon, C. Lembke, R. Malservisi, M. Rodgers, G. Iannaccone, S. Guardata, D. F. Naar, D. Calore, N. Fraticelli, J. Brizzolara, J. W. Gray, M. Hommeyer, J. Chen (2019) Seafloor geodesy in shallow water with GPS on an anchored spar buoy. *Journal of Geophysical Research, Solid Earth*, 124, <https://doi.org/10.1029/2019JB018242>.

- Xie, S., T. H. Dixon, D. M. Holland, D. Voytenko, I. Vaňková (2019) Rapid iceberg calving following removal of tightly packed pro-glacial mélange. *Nature Communications*, <https://doi.org/10.1038/s41467-019-10908-4>.
- Deng, F., M. Rodgers, Surui Xie, T. H. Dixon, S. Charbonnier, E. A. Gallant, C. M. López Velez, M. Ordoñez, R. Malservisi, N. K. Voss, J. A. Richardson (2019) High-resolution DEM generation from spaceborne and terrestrial remote sensing data for improved volcano hazard assessment - a case study at Nevado del Ruiz, Colombia. *Remote Sensing of Environment*, 233, <https://doi.org/10.1016/j.rse.2019.111348>.
- Voss, N., T. H. Dixon, Z. Liu, R. Malservisi, M. Protti (2018) Do Slow Slip Events Trigger Large and Great Megathrust Earthquakes? *Science Advances* 4. eaat8472.
- Xie, S., E. Gallant, P. H. Wetmore, P. M. Figueiredo, L. A. Owen, C. Rasmussen, R. Malservisi, T. H. Dixon (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*, <https://doi.org/10.1080/00206814.2018.1531272>
- Dixon, T. H. and S. Xie (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.
- Xie, S., T. H. Dixon, D. Voytenko, F. Deng, and D. M. Holland (2018) Grounding line migration through the calving season at Jakobshavn Isbræ, Greenland, observed with terrestrial radar interferometry. *Cryosphere*, 12(4): 1387 - 1400.
- Jiang, Y., Z. Liu, E. E. Davis, S. Y. Schwartz, T. H. Dixon, N. Voss, R. Malservisi, M. Protti (2017) Strain release at the trench during shallow slow slip: The example of Nicoya Peninsula, Costa Rica. *Geophysical Research Letters* 44, 4846–4854, doi 10.1002/2017GL072803.
- Karegar, M. A., T. H. Dixon, R. Malservisi, J. Kusche, and S. E. Engelhart (2017) Nuisance flooding and relative sea-level rise: The importance of present-day land motion. *Scientific Reports* 7, no. 1: 1-9.
- Voss, N. K., R., Malservisi, T. H. Dixon, and M. Protti (2017) Slow slip events in the early part of the earthquake cycle, *Journal of Geophysical Research, Solid Earth*, 122, doi:10.1002/2016JB013741
- Xie, S., T. H. Dixon, D. Voytenko, D. M. Holland, D. Holland, T. Zheng (2016) Precursor motion to iceberg calving at Jakobshavn Glacier, Greenland, observed with terrestrial radar interferometry. *Journal of Glaciology* (doi: 10.1017/jog.2016.104).
- Yang, Q. T. H. Dixon, P. G. Myers, J. Bonin, D. Chambers, M. R. van den Broeke, M. H. Ribergaard, J. Mortensen (2016) Recent increases in Arctic freshwater flux: impacts on Labrador Sea convection and Atlantic overturning circulation. *Nature Communications* 7: 10525 DOI: 10.1038/ncomms10525.

- Karegar, M.A., T. H. Dixon, and S. E. Engelhart (2016), Subsidence along the Atlantic Coast of North America: Insights from GPS and late Holocene relative sea level data, *Geophysical Research Letters*, 43, doi:10.1002/ 2016GL068015.
- Holland, D.M., D. Voytenko, K. Christianson, T.H. Dixon, M.J. Mei, B.R. Parizek, I. Vaňková, R.T. Walker, J.I. Walter, K. Nicholls, and D. Holland (2016) An intensive observation of calving at Helheim Glacier, East Greenland. *Oceanography*, 29, 46–61.
- Dixon, T. H. (2015) Ten years after Katrina: What have we learned? *Eos*, 96, doi:10.1029/2015EO034703
- Malservisi, R., S.Y. Schwartz, N. Voss, M. Protti, V. Gonzales, T.H. Dixon, Y. Jiang, A.V. Newman, J.A. Richardson, J.I. Walter, D. Voytenko (2015), Multiscale postseismic behavior on a megathrust: the 2012 Nicoya earthquake, Costa Rica, *Geochem. Geophys. Geosyst.*, 16, doi:10.1002/2015GC005794
- Plattner, C., R. Malservisi, F. Amelung, T.H. Dixon, M. Hackl, A. Verdecchia, P. Lonsdale, F. Suarez-Vidal, and J. Gonzalez-Garcia (2015), Space geodetic observation of the deformation cycle across the Ballenas Transform, Gulf of California, *J. Geophys. Res. Solid Earth*, 120, doi:10.1002/2015JB011959
- Voytenko, D., A. Stern, D. M. Holland, T. H. Dixon, K. Christianson, R. T. Walker (2015) Tidally-driven ice speed variation at Helheim Glacier, Greenland, observed with Terrestrial Radar Interferometry. *Journal of Glaciology*, 61, 301-308, doi: 10.3189/2015JoG14J173
- Voytenko, D., T. H. Dixon, I. M. Howat, N. Gourmelen, C. Lembke, C.L. Werner, S. de la Peña, B. Oddsson (2015) Multi-year observations of Breiðamerkurjökull, a marine-terminating glacier in southeastern Iceland, using terrestrial radar interferometry. *Journal of Glaciology*, 61, 42–54.
- Karegar, M. A., T. H. Dixon, R. Malservisi (2015) A three-dimensional surface velocity field for the Mississippi Delta: Implications for coastal restoration and flood potential. *Geology* 43 (6), 519–522. doi:10.1130/G36598.1
- Voytenko, D., T. H. Dixon, M. E. Luther, C. Lembke, I. M. Howat, S. de la Peña (2015) Observations of inertial currents in a lagoon in southeastern Iceland using terrestrial radar interferometry and automated iceberg tracking. *Computers & Geosciences*, 82, 23-30, doi:10.1016/j.cageo.2015.05.012
- Karegar, M. A., T. H. Dixon, Q. Yang, R. Malservisi, S. A. Hossaini, S. D. Hovorka (2015) GPS-based Monitoring of Surface Deformation Associated with CO₂ Injection at an Enhanced Oil Recovery Site, *International Journal of Greenhouse Gas Control* 41, 116-126, doi: [10.1016/j.ijggc.2015.07.006](https://doi.org/10.1016/j.ijggc.2015.07.006)

- Yang, Q., W. Zhao, T. H. Dixon, F. Amelung, W. S. Han, P. Li (2015) InSAR monitoring of ground deformation due to CO₂ injection at an Enhanced Oil Recovery Site, West Texas. *International Journal of Greenhouse Gas Control* 41, 116-126, doi:10.1016/j.ijggc.2015.06.016
- Dixon, T. H., Y. Jiang, R. Malservisi, R. McCaffrey, N. Voss, M. Protti, V. Gonzalez (2014) Earthquake and tsunami forecasts: Relation of slow slip events to subsequent earthquake rupture. *Proc. Nat. Acad. Sci.* 114, 17,039-17,044, doi: 10.1073/pnas.1412299111
- Osmanoglu, B., T. Dixon, and S. Wdowinski (2014) 3-D phase unwrapping for satellite radar interferometry, I: DEM generation, *IEEE Geosciences and Remote Sensing*, 52, p. 1059-1075, DOI :10.1109/TGRS.2013.2247043
- Protti M., V. González, A. V. Newman, T. H. Dixon³, S. Y. Schwartz, J. S. Marshall, L. Feng, J. I. Walter, R. Malservisi, S. E. Owen (2014) Nicoya earthquake rupture anticipated by GPS measurements of the locked plate interface, *Nature Geoscience* 7, 117-121, doi:10.1038/ngeo2038
- Zhao, W., F. Amelung, T. H. Dixon, S. Wdowinski, and R. Malservisi (2014) A method for estimating ice mass loss from relative InSAR observations: Application to the Vatnajökull ice cap, Iceland. *Geochem. Geophys. Geosys.*, v. 15, doi 10.1002/2013GC004936
- Yue, H., T. Lay, S. Y. Schwartz, L. Rivera, M. Protti, T. H. Dixon, S. Owen, A. Newman (2013) The 5 September 2012 Costa Rica M_w 7.6 earthquake rupture process from joint inversion of high-rate GPS, strong-motion, and teleseismic P wave data and its relationship to adjacent plate boundary interface properties. *Journal of Geophysical Research*, 118, 5453-5466.
- Dixon, T. H., S. Schwartz, M. Protti, V. Gonzalez, A. Newman, J. Marshall, J. Spotilla (2013) Detailed data available for recent Costa Rica earthquake. *EOS: Trans. Am. Geophys. Union*, 94, 17-18
- Yang, Q., S. Wdowinski, and T.H. Dixon (2013) Annual Variation of Coastal Uplift in Greenland as an Indicator of Variable and Accelerating Ice Mass Loss, *Geochem. Geophys. Geosys.*, v. 14, no.5, doi:10.1002/ggge.20089.
- Kim, S-W, S. Wdowinski, F. Amelung, T. H. Dixon, and J-S Won (2013) Interferometric coherence analysis of the Everglades wetlands, South Florida, *IEEE Geosciences and Remote Sensing*, v. 51, p. 5210-5224
- Lifton, Z.M., K.L. Frankel, A.V. Newman, C.W. Johnson, T.H. Dixon (2013) Insights into distributed plate rates across the Walker Lane from GPS geodesy: *Geophysical Research Letters* 40(17), 4620-4624, doi:10.1002/grl.50804
- Cigna, F., B. Osmanoglu, E. Cabral Cano, T. H. Dixon, J. A. Avila-Olivera, V. H. Garduno-Monroy, C. DeMets, S. Wdowinski (2012) Monitoring land subsidence and its geological hazard with Synthetic Aperture Radar: a case study in Morelia, Mexico. *Remote Sensing of*

- Jiang, Y., S. Wdowinski, T. H. Dixon, M. Hackl, M. Protti, V. Gonzalez (2012) Slow slip events in Costa Rica detected by continuous GPS observations, 2002-2011, *Geochem, Geophys., Geosys*, 13, Q04006 doi: 10.1029/2012GC004058
- Dixon, T. H., D. Voytenko, C. Lembke, S.de la Peña, I. Howat, N. Gourmelen, C. Werner, B. Oddsson (2012) Emerging technology monitors ice-sea interface at outlet glaciers, *EOS: Trans. Am. Geophys. Union*, 93, 497-499.
- Feng, L., A. V. Newman, M. Protti, V. González, Y. Jiang, and T. H. Dixon (2012) Active deformation near the Nicoya Peninsula, northwestern Costa Rica, between 1996 and 2010: Interseismic megathrust coupling. *J. Geophys. Research*, 117, doi:10.1029/2012JB009230
- Osmanoglu, B., T. H. Dixon, S. Wdowinski, E. Cabral-Cano (2011) On the importance of path for phase unwrapping in synthetic aperture radar interferometry, *Applied Optics*, v. 50, no.12
- Gourmelen, N., T. H. Dixon, F. Amelung, G. Schmalzle (2011) Acceleration and evolution of faults: An example from the Hunter Mountain-Panamint Valley Fault Zone, Eastern California, *Earth and Planetary Science Letters*, 301, 337-344.
- Osmanoglu, B, T. H. Dixon, S. Wdowinski, E. Cabral-Cano, Y. Jiang (2011) Mexico City subsidence observed with PS-InSAR, *Int. J. App. Earth Observation*, 13, 1-12.
- Weber, J. C., J. Saleh, .S. Balkaransingh, T. Dixon, W. Ambeh, T. Leong, A. Rodriguez, K. Miller (2011) Triangulation-to-GPS and GPS-to-GPS geodesy in Trinidad, West Indies: Neotectonics, seismic risk, and geologic implications, *Mar. Pet. Geol.*, 28, p. 200-211 DOI: 10.1016/j.marpetgeo.2009.07.010
- Jiang, Y., T. H. Dixon, S. Wdowinski (2010) Accelerating uplift in the North Atlantic region as an indicator of ice loss, *Nature – Geoscience* 3, 404-407, doi:10.1038/ngeo845
- Biggs, J., P. Mothes, M. Ruiz, F. Amelung, T. H. Dixon, S. Baker, and S-H. Hong (2010) Stratovolcano growth by co-eruptive intrusion: The 2008 eruption of Tungurahua Ecuador, *Geophys. Res. Lett.*, 37, L21302, doi:10.1029/2010GL044942
- Plattner, C., S. Wdowinski, T. H. Dixon, J. Biggs, J. (2010) Surface subsidence induced by the Crandall Canyon Mine (Utah) collapse: InSAR observations and elasto-plastic modeling, *Geophys. J. Int.* doi: 10.1111/j.1365-246X.2010.04803.x
- Kim, S. W., S. Wdowinski, T. H. Dixon, F. Amelung, J. W. Kim, and J.-S. Won (2010) Measurements and predictions of subsidence induced by soil consolidation using persistent scatterer InSAR and a hyperbolic model. *Geophys. Res. Letters*, 37, L05304, doi:10.1029/2009GL041644.
- Calais, E., A. Freed, G. Mattioli, S. Jonsson, F. Amelung, P. Jansma, S.-H. Hong, T. H. Dixon, C. Prepetit, and R. Momplaisir (2010), Transpressional rupture of an unmapped fault during the

2010 Haiti earthquake, *Nature Geosciences* doi 10.1038/NCEO992.

Dixon, T., F. Amelung, C. G. A. Harrison et al. (2010) Rebuilding Haiti smarter, *Science* 327, p. 1325-1326.

Outerbridge, K. C., T. H. Dixon, S. Y. Schwartz, J. I. Walter, M. Protti, V. Gonzalez, J. Biggs, M. Thorwart, and W. Rabbel (2010) A tremor and slip event on the Cocos-Caribbean subduction zone as measured by a global positioning system (GPS) and seismic network on the Nicoya Peninsula, Costa Rica. *J Geophys Res* 115: B10408.

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Combining GPS and InSAR to study Greenland... 1/1/2011-12/31/2014 \$609,048 (NASA)

Collaborative Research: A Plate Boundary Observatory on the Nicoya Peninsula, Costa Rica.
8/25/2011 – 9/30/2014. \$199,743 (NSF)

Collaborative Research: Acquisition of GPS and seismic equipment for Phase 2 of a Plate Boundary Observatory, Nicoya Peninsula, Costa Rica. 6/1/2011 – 4/30/2013. \$36,890 (NSF)

Integrating GRACE and surface deformation data to study hydrological...4/1/2014 – 3/31/2017
\$290K (NASA)

Geodetic observations at the early stage of subduction zone seismic cycle: towards complete seismic cycle coverage. 3/01/2014 – 2/28/2018 \$250,000 (NSF)

Collaborative Research: RAPID: Nevado del Ruiz Volcano, Colombia: Enhancing Geodetic Observations and Digital Elevation Models in Response to Recent Activity.7/1/2015-6/30/2016.
\$29,000 (NSF).

Measuring Sea Floor Motion: New Technology for Continental Margin Geodesy 12/1/2015 – 11/30/2019. \$822,000 (NSF).

SERVICE

University Service

UM: MGG Geophysics Search Committees, Research Advisory Council, Academic Committee, Facilities Committee, Strategic Planning Committee.

USF: University-wide QEP Committee (part of SACS accreditation); School and College Tenure and Promotion Committees; Volcanology faculty search committee (chair); GIS faculty search committee (member); Geosciences Faculty Evaluation Committee (chair, 2016-2018)

Professional Service

Chair, Unavco Facilities Committee, 2004-2008
President, Geodesy Section, American Geophysical Union, 2013 – 2014
Member, NSERC (Canada) Review Panel, 2011-2014
Chair, Geology-Geography Section, AAAS, 2012- 2013

Community Activities: United Way Contributor; K-5 Volunteer Teacher, K-12 Guest speaker, Trailblazer Speaker (CAS lecture series), Editorial contributor: Tampa Bay Times, Sept 29, 2016, Sewage and Sister Cities: <http://www.tampabay.com/opinion/columns/column-sewage-treatment-and-sister-cities-/2295886> ; Ottawa Citizen, April 16, 2018, A rational carbon plan...
<http://ottawacitizen.com/opinion/columnists/dixon-a-rational-carbon-culture-includes-the-trans-mountain-pipeline>