

## Timothy H. Dixon: Curriculum Vitae

**Date:** August 1, 2016

### PERSONAL

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**Email:** [thd@usf.edu](mailto:thd@usf.edu); thdixon51@gmail.com

**Home Address:** 2626 Keystone Ct. N, St Petersburg, FL 33710

**Academic Rank:** Professor

**Department:** Geoscience

**Citizenship:** US

### 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:** 01/11 – Present Professor, Dept Geology, University of South Florida  
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:**

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

#### *Field Work & Expedition Experience:*

Conducted geological field investigations in the Canadian Shield, Northern Mariana Archipelago, Northeast Africa, California, Dominican Republic. Participated in five 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 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) and Momotombo (Nicragua).

## **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

### **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-present  
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  
Member, Unavco Board of Directors Nominating Committee, 2009-2011  
President-Elect, Geodesy Section, American Geophysical Union, 2010 – 2012  
President, Geodesy Section, American Geophysical Union, 2013 – 2014  
Member, NSERC (Canada) Review Panel, 2011-2014  
Chair, Geology-Geography Section, AAAS (2012- 2013)

*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)  
Field Camp (undergraduate)  
Quantitative Methods in Ecosystem Science (undergraduate)  
Natural Hazards (undergraduate)

## **Dissertation Advising:**

Surui Xie (PhD expected 2018, USF)  
Nicolas Voss (PhD expected 2017, USF)  
Makan Karegar (PhD expected 2017, 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

Citations: Google Scholar

Lifetime citations: 9448, H-index: 55

Google Scholar profile: Timothy Dixon

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

## **PUBLICATIONS**

### **Refereed articles:**

**2016** 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* (In Press).

Yang, Q. T. H. Dixon, P. G. Myers, J. Bonin, D. Chambers, M. R. van den Broeke (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.

**2015** 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* 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 CO<sub>2</sub> 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 CO<sub>2</sub> 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

**2014** 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. Dixon<sup>3</sup>, 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

**2013** Yue, H., T. Lay, S. Y. Schwartz, L. Rivera, M. Protti, T. H. Dixon and S. Owen: 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, 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

**2012** 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 the Environment* DOI 10.1016/j.rse.2011.09.005

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

**2011** 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, 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

**2010** 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, 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/NGEO992.

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

Outerbridge KC, Outerbridge, 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.

Fulton, P. M., G. Schmalzle, R. Harris, T. Dixon (2010) Reconciling patterns of interseismic strain accumulation with thermal observations across the Carrizo section of the San Andreas Fault, *Earth Planet Sci. Letters* 300, p 402-406, doi 10.1016/j.epsl.2010.10.024

Weber, J., M. Vrabec, P. Pavlov-Preseren, T. Dixon, Y. Jiang, B. Stopar, GPS-derived motion of the Adriatic microplate from Istria Peninsula and Po Plain sites, and geodynamic implications, *Tectonophysics*, 483, 214-222, 2110.

**2009** Biggs J, F. Amelung, N. Gourmelen N, T. Dixon et al. InSAR observations of 2007 Tanzania rifting episode reveal mixed fault and dyke extension in an immature continental rift, *Geophys. J. Int*, 179, 549-558.

LaFemina P, T. H. Dixon, R. Govers et al, Fore-arc motion and Cocos Ridge collision in Central America, *Geochem, Geophys., Geosys*, 10, Article Number: Q05S14.

Biggs J, D. P. Robinson, T. H. Dixon, The 2007 Pisco, Peru, earthquake (M8.0): seismology and geodesy, *Geophys. J. Int*, 176, 657-669.

**2008** Wdowinski, S., S. W. Kim, F. Amelung, T. H. Dixon, F. Miralles-Wilhelm, R. Sonenshein, Space-based detection of wetlands' surface water level changes from L-band SAR interferometry, *Remote Sensing of Environment* 112, 681 – 696.

Kim, S. W., S. Wdowinski, T.H. Dixon, F. Amelung, Joong-Sun Won, and Jeong Woo Kim, InSAR -based mapping of surface subsidence in Mokpo City, Korea, using JERS-1 and ENVISAT SAR data, *Earth Planets Space*, v.60, p. 453-461, 2008.

Dixon, T. H. and R. K. Dokka, Earth scientists and public policy: have we failed New Orleans? *EOS: Trans. Am. Geophys. Union* v. 89, #10, p. 96, 2008.



Cabral-Cano, E., T. H. Dixon, O. Sánchez-Zamora, R. E. Carande, A. FitzGerrell, O. Díaz-Molina, Space geodetic Imaging of ground subsidence in Mexico City. *Geol. Soc. Am. Bull.*, v. 120, p. 1556-1566.

**2007** Turner H. L. III, P. LaFemina, A. Saballos, G. S. Mattioli, P. E. Jansma, T. Dixon, Kinematics of the Nicaraguan forearc from GPS geodesy, *Geophys. Res. Lett.*, 34, L02302, doi:10.1029/2006GL027586.

Sella, G., S. Stein, T. H. Dixon, M. Craymer, T. James, S. Mazzotti, R. K. Dokka, Observation of glacial isostatic adjustment in “stable” North America with GPS, *Geophysical Research Letters*, 34, L02306, doi:10.1029/2006GL027081.

Plattner, C., R. Malservisi, T. H. Dixon, P. LaFemina, G. F. Sella, J. Fletcher and F. Suarez-Vidal, (2007) New constraints on relative motion between the Pacific Plate and Baja California microplate (Mexico) from GPS measurements, *Geophys. J. Int.* doi: 10.1111/j.1365-246X.2007.03494.x

Pritchard M. E., E. Norabuena, C. Ji, R. Borosc hek, D. Comte. M. Simons. T. H. Dixon, P. A. Rosen (2007) Geodetic, teleseismic, and strong motion constraints on slip from recent southern Peru subduction zone earthquakes, *J. Geophys. Res.*, 112, B03307 doi 10.1029/2006JB004294

Sinigalliano, C. D., M. L. Gidley, T. Shibata, D. Whitman, T. H. Dixon, E. Laws, A. Hou, D. Bacheon, L. Brand, L. Amaral-Zettler, R. J. Gast, G. F. Steward, O. D. Nigro, R. Fujioka, W. Q. Betancourt, G. Vithanage, J. Mathews, L. E. Fleming, and H. M. Solo-Gabriele, Impacts of Hurricanes Katrina and Rita on the microbial landscape of the New Orleans area, *Proc. National Academy Sciences*, balt4/zpq-pnas/zpq-pnas/zpq-orig/zpq6250-07a.

Cailleau, B., P. C. LaFemina, T. H. Dixon, Stress accumulation between volcanoes: an explanation for intra-arc earthquakes in Nicaragua, *Geophys. J. Int.* doi: 10.1111/j.1365-246X.2007.03353.x

**2006** Dokka, R. K., G. Sella, T. H. Dixon, Tectonic control of New Orleans subsidence and coupled southward displacement of Southeast Louisiana, *Geophysical Research Letters*, v. 33, L23308, doi 10.1029/2006GL027250, 2006.

Iaffaldano, G., H. P. Bunge, T. H. Dixon, Feedback between mountain belt growth and plate convergence, *Geology*, v. 34, 893-896, 2006.

López A. M., S. Stein, T. Dixon, G. Sella, E. Calais, P. Jansma, J. Weber, P. LaFemina (2006), Is there a northern Lesser Antilles forearc block?, *Geophys. Res. Lett.*, 33, L07313, doi:10.1029/2005GL025293

- Dixon, T. H., F. Amelung, A. Ferretti, F. Novali, F. Rocca, R. Dokka, G. Sella, S.-W. Kim, S. Wdowinski, D. Whitman, New Orleans Subsidence: Rates and Spatial Variation Measured by Permanent Scatterer Interferometry, *Nature* 441, 587-588.
- Schmalzle, G., T. H. Dixon, R. Malservisi, R. Govers, Strain accumulation across the Carrizo Segment of the San Andreas Fault, California: Impact of laterally varying crustal properties, *J. Geophys. Res.*, 111, B05403, doi 10.1029/2005 JB003843.
- Newman, A. V., T. H. Dixon, N. Gourmelen, A four-dimensional viscoelastic deformation model for Long Valley Caldera, California, between 1995-2000, *J. Volc. Geotherm Res.*, 150, 244-269.
- DeShon, H. R., S. Schwartz, A. Newman, V. Gonzalez, M. Protti, L. Dormaan, T. H. Dixon, D. Sampson, E. Flueh, Seismogenic zone structure beneath the Nicoya Peninsula, Costa Rica, from three-dimensional local earthquake P- and S-wave tomography, *Geophys. J. Int.*, 164, 109-124.
- 2005** LaFemina, P. C., T.H. Dixon, R. Malservisi, T. Árnadóttir, E. Sturkell, F. Sigmundsson, P. Einarsson, Geodetic GPS measurements in South Iceland: strain accumulation and partitioning in a propagating ridge system, *J. Geophys. Res.*, 110, B11405, doi 1029/2005/JB003675.
- 2004** Dixon, J., T. Dixon, D. Bell, R. Malservisi, Lateral variation in upper mantle viscosity: role of water, *Earth and Planetary Science Letters*, 222, 451-467.
- Norabuena, E. T. H. Dixon, S. Schwartz, H. DeShon, A. Newman, M. Protti, V. Gonzalez, L. Dorman, E. Flueh, P. Lundgren, F. Pollitz, D. Sampson, Geodetic and seismic constraints on some seismogenic zone processes in Costa Rica, *J. Geophys. Res.*, 109, B11403, doi:10.1029/2003JB002931.
- Wdowinski, S., F. Amelung, F. Miralles-Wilhelm, T. H. Dixon, R. Carande, Space-based measurements of sheet flow characteristics in the Everglades, wetland, Florida, *Geophys. Res. Lett.*, 30, 1673, doi10.1029/2003GL017408.
- Wang, K., and T. H. Dixon, Coupling semantics and science in earthquake research, *EOS*, 85, no. 18, 180-181.
- 2003** Malservisi, R. T. Dixon, P. LaFemina, Holocene slip rate of the Wasatch fault zone, Utah, from geodetic data, *Geophys. Res. Lett.*, 30, 1673, doi10.1029/2003GL017408.
- Dixon, T. H., E. Norabuena, L. Hotaling, Paleoseismology and GPS: earthquake cycle effects and geodetic vs geologic fault slip rates in the eastern California shear zone, *Geology*, v. 31, 55-58.

- DeShon, H. R., S. Y. Schwartz, S. L. Bilek, L. M. Dorman, V. Gonzalez, J. M. Protti, E. R. Flueh, and T. H. Dixon (2003), Seismogenic zone structure of the southern Middle America Trench, Costa Rica, *J. Geophys. Res.*, *108*(B10), 2491.
- 2002** Dixon, T. H., J. Decaix, F. Farina, K. Furlong, R. Malservisi, R. Bennett, F. Suarez-Vidal, J. Fletcher, J. Lee, Seismic cycle and rheological effects on estimation of present-day slip rates for the Agua Blanca and San Miguel-Vallecitos faults, northern Baja California, Mexico, *J. Geophys. Res.*, *107*, B10, 10.1029/2000JB000099.
- Sella, G.F., T. H. Dixon, A. Mao, REVEL: A model for Recent plate velocities from space geodesy, *J. Geophys. Res.*, *107*, B4, 10.1029/2000JB000033.
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- 2016 T. H. Dixon, Curbing Catastrophe (monograph for general audience on natural hazards, to be published by Cambridge University Press)
- 1995 T.H. Dixon (editor), SAR Interferometry and surface change detection (Workshop Report), RSMAS Technical Report TR 95-003, 97 p.



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**FUNDED RESEARCH:** (Last Five Years)

Collaborative Research: A Plate Boundary Observatory on the Nicoya Peninsula, Costa Rica  
04/01/2009 03/31/2012, \$199,743 (NSF/MARGINS)

Collaborative Research: Acquisition of GPS and seismic equipment for Phase 2 of a Plate Boundary Observatory, Nicoya Peninsula, Costa Rica. 05/01/2009 - 04/30/2012, \$38,890 (NSF/I&F)

Subsidence and Land Loss in Southern Louisiana , 01/01/09 – 12/31/12 \$399, 321 (NASA)

Installation and test of a high precision GPS...1/1/2012 – 12/31/2012. \$43,086 (BP)

Monitoring sequestered CO2 with GPS, INSAR and Geochemical techniques. 09/09 – 08/14  
\$1,708,545 (DOE)

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 (NASA)

Geodetic observations at the early stage of subduction zone seismic cycle: towards complete seismic cycle coverage. 3/01/2014 – 2/28/2017 \$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 – 11/30/2018. \$822,000 (NSF).

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USF: University-wide QEP Committee (part of SACS accreditation); School and College Tenure and Promotion Committees; Volcanology Search Committee (chair).

**Community Activities:** United Way Contributor; K-5 Volunteer Teacher, K-12 Guest speaker