D. Sarah Stamps, PhD

Associate Professor Virginia Tech Department of Geosciences 926 W. Campus Drive Blacksburg, VA 24061	Fax: (+1) Email: dsta	os (Twitter) 540-231-3651 540-231-3386 mps@vt.edu odesy.geos.vt.edu
1.0 EDUCATION		
Purdue University, West Lafayette, IN PhD in Geodesy and Geophysics Dissertation: Kinematics and Dynamics of Nubia-Somalia Divergence the East African Rift	e Along	2013
The University of Memphis , Memphis, TN BS in Earth Sciences with honors		2007
 Additional Training Diversity Committee Toolkit Workshop Introduction to Machine Learning Active Bystander Training: How to Stand Up and Step In To End Har The Carpentries Instructor Training and Certification Captioning Fundamentals Principles of Effective Teaching Certificate Program Becoming a Good Mentor Include Is a Verb: How Allies Make Inclusion a Reality Creating Effective Group Activities and Assignments Fostering a Growth Mindset 	rassment	2023 2022 2021 2021 2020-2021 2020-2021 2020 2020
2.0 POSITIONS HELD		
Associate Professor, Virginia Tech Department of Geosciences		2021 – present
Assistant Professor, Virginia Tech Department of Geosciences		2015 - 2021
Assistant Adjunct Professor of Geology, UCLA		2014-2016
NSF Earth Sciences Postdoctoral Fellow, MIT/UCLA Main advisor: Brad Hager, MIT Proposal title: An Investigation of Continental Rift-Parallel Deformat	ion	2013-2015
NSF Graduate Research Fellow, GRA, and GTA, Purdue University Main advisor: Eric Calais Thesis: Kinematics and Dynamics of Nubia-Somalia Divergence Alo	ng the East Afri	2008-2013 can Rift
NSF Research Experiences for Undergraduates Participant, The Univers Advisors: Glenn Mattioli and Pamela Jansma Project: Caribbean Plate Block Kinematics and GPS Measurements	0	2005 (summer)
NSF Undergraduate Research Assistant, The University of Memphis Advisor: Robert Smalley Project 1: Kinematics of the Scotia Arc Project 2: Developing an analog earthquake locator		2004-2007

3.0 HONORS AND AWARDS

NSF CAREER Award	2020-present
NSF Computational Infrastructure for Geodynamics Distinguished Lecturer	2019-2020
NSF Computational Infrastructure for Geodynamics Distinguished Lecturer	2017-2018
NSF EarthCube Community Service and Leadership Award	2017
NSF Earth Sciences Postdoctoral Research Fellowship	2013
NSF Graduate Research Fellowship	2009
Outstanding Scientific Publication Award (co-author)	2008
University of Memphis Outstanding Senior Award in Earth Sciences	2007
First and Second Place Awards, University of Memphis Research Forum	2007
Excellence in Earth Sciences Phi Beta Delta Honors Award	2006
NSF Research Experiences for Undergraduates, University of Arkansas	2005
University of Memphis Regents Tuition Award	2004-2007
Leadership Award, Mainthia Technologies, NASA	2003

4.0 GRANTS, FELLOWSHIPS, AND PROPOSALS \$2,472,912 raised at Virginia Tech by 9/15/23

 PI, NSF Frontiers in Earth Sciences Program, "Dry Rifting in the Albertine- Rhino Graben" (\$3M total, \$491,754 Virginia Tech portion, 4 years +\$55,000 Supplement through NSF INTERN program) (Students: Asenath Kwagalakwe, Esha Islam, Crystal Lee, Justin Dean) 	2020 - present
 PI, NSF CAREER Program "Volcano-tectonic interactions during early phases of continental rifting" (\$625,000, 5 years) (Students: Joshua Robert Jones, Ntambila Daud, Kelsey Popolizio, Rami Gorle, Abdullah Rizwan) 	2020 - present
 Co-I, USGS, "Subsidence monitoring network to improve elevation datum quality for a comprehensive analysis of land motion effects on marsh migration in the Chesapeake Bay" (\$170,000, 4 years) (Students: Karen Williams, Gabrielle Troia, Madeline Kronebusch, Holly Hughes, Anabelle Fry) 	2021 - present
PI, Virginia Tech Coastal Hazards Seed Grant "Measuring vertical land motions in the Hampton Roads Area, Virginia: Towards investigating land subsidence processes in the Chesapeake Bay" (\$5000, 1 year)	2018-2019
PI, Virginia Tech ICTAS Program "Collecting Observations for Data Analysis and Encoding in the Geosciences (CODE-GEO)" (\$10,000, 1 year)	2017-2018
PI, NSF EarthCube Program "Brokered Alignment of Long-Tail Observations (BALTO)" (\$1.4M total, \$572,342 Virginia Tech portion, 3 years) (Students: Emmanuel Njinju, Ryan Roane, Gabbi Troia)	2017 - 2021
Co-I, NSF EarthCube Program "An Expanded Implementation of Cloud-Hosted Real-time Data Services for the Geosciences (CHORDS)" (\$1.3M total, \$87,815 + \$24,269 supplement Virginia Tech portion, 3 years) (Students: Joshua Robert Jones, ThaoVy Nguyen)	2016 - 2021
 PI, NSF GeoPRISMS Program "Quantifying plume-lithosphere interactions with GNSS geodesy, seismology, and geodynamic modeling" (\$393,047 + \$6000 REU) (Students: Tahiry Rajaonarison, Sean Malloy, Myles Mason, Rebecca Plosay) 	2016 - 2021

PI, National Geographic Society "Impending volcano eruption response in northern Tanzania" (\$18,500, 1 year)	2017 - 2018
Co-I, National Geographic Society "Geodetic and Geochemical Constraints on the Hypothesized Lwandle-Somalia Plate Boundary in Northern Madagascar" (\$14,185, 1 year, student Tahiry Rajaonarison lead PI)	2016-2017
PI, National Geographic Society "An investigation of plate boundary formation in Madagascar" (\$25,056, 1 year)	2014-2015
PI, NSF Earth Sciences Postdoctoral Fellowship "An investigation of continental rift-parallel deformation" (\$170,000, 2 years)	2013-2015
PI, National Geographic Society "Kinematic constraints on the Lwandle- Somalia plate boundary across Madagascar from GPS geodesy – Is Madagascar breaking apart?" (\$15,000, 2 years)	2011-2012
PI, NSF Graduate Research Fellowship Program "Testing rifting models in the	2009-2013

5.0 PEER-REVIEWED PUBLICATIONS AND BOOKS

East African Rift" (\$100,000, 3 years)

*GTL graduate student author, **GTL researcher/postdoc authored, ***GTL undergraduate student author ORCID 0000-0002-3531-1752 Statistics from Google Scholar (9/15/2023): Total citations: 1779, H-Index: 19, i10 index: 21 Total Peer-Reviewed Publications: 35 (7 first author, 14 second author, 12 GTL student first author)

- [35] Vadman, M.J., Garvue, M.M., Spotila, J.A., Bemis, S.P., Stamps, D.S., Owen, L.A., and Figueiredo, P.M., 2023, Evidence for a prehistoric multifault rupture along the southern Calico fault system, Eastern California Shear Zone, USA: Geosphere, v. 19, no. X, p. 1–27, <u>https://doi.org/10.1130/GES02653.1</u>.
- [34] *Njinju E.A., D.S. Stamps, T. Rooney, E.A. Atekwana, T.A. Rajaonarison (2023) Instantaneous 3D tomography-based convection beneath the Rungwe Volcanic Province, East Africa: implications for melt generation, Geophysical Journal International, <u>https://doi.org/10.1093/gji/ggad219</u>
- [33] *Rajaonarison, T. A., Stamps, D. S., Naliboff, J., Nyblade, A., & *Njinju, E. A. (2023). A Geodynamic Investigation of Plume-Lithosphere Interactions Beneath the East African Rift. *Journal of Geophysical Research: Solid Earth*, e2022JB025800.
- [32] *Daud, N., Stamps, D.S., Battaglia, M., Huang, M.H., Saria, E. and Ji, K.H. (2023) Elucidating the magma plumbing system of Ol Doinyo Lengai (Natron Rift, Tanzania) using Satellite Geodesy and numerical modeling. Journal of Volcanology and Geothermal Research, p.107821, https://doi.org/10.1016/j.jvolgeores.2023.107821
- [31] Brune, Sascha, Jean-Arthur Olive, **D. Sarah Stamps**, Folarin Kolawole, Susanne Buiter, Roger Buck, (2023), Geodynamics of Rift Initiation and Evolution, *Nature Reviews Earth & Environment:* 1-19/
- [30] ** Njinju E.A, Moorkamp M. and Stamps D.S. (2023), Density structure beneath the Rungwe volcanic province and surroundings, East Africa from shear-wave velocity perturbations constrained inversion of gravity data. Front. Earth Sci. 11:1118566. doi: 10.3389/feart.2023.1118566
- [29] ***Troia, G. D.S. Stamps, R.R. Lotspeich, J. Duda, K.J. McCoy, W. Moore, P. Hensel, R. Hippenstiel, T. McKenna, D. Andreasen, C. Geoghegan, T.P. Ulizio, ***M. Kronebusch, J. Carr, D. Walters, N. Winn (2022). GPS data from 2019 and 2020 campaigns in the Chesapeake Bay region towards vertical land motions, Scientific Data, https://doi.org/10.1038/s41597-022-01864-8

- [28] Fadel, I., Kolawole, F., Sobh, M., Stamps, D. S., Olugboji, T. M., Manzi, M., eds. (2022). Advances in African Earth Sciences e-book. Lausanne: Frontiers Media SA. doi: 10.3389/978-2-83250-505-2
- [27] Dye, M., Stamps, D.S., ***Mason, M., & Saria, E. (2022). Toward autonomous detection of anomalous GNSS data via applied unsupervised artificial intelligence. International Journal of Semantic Computing, 1-17, https://doi.org/10.1142/S1793351X22400025
- [26] *Njinju, E.A., D.S. Stamps, K. Neumuller, J. Gallagher, 2021, Lithospheric control of melt generation beneath the Rungwe Volcanic Province, East Africa, Journal of Geophysical Research, <u>https://doi.org/10.1029/2020JB020728</u>
- [25] *Rajaonarison, T.A., D.S. Stamps, J. Naliboff, 2021, Role of Lithospheric Buoyancy Forces in Driving Deformation in East African from 3D Geodynamic Modeling, Geophysical Research Letters, <u>https://doi.org/10.1029/2020GL090483</u>.
- [24] D.S. Stamps, C. Kreemer, R. Fernandes, *T. Rajaonarison, G. Rambolamanana, 2021, Redefining East African Rift System Kinematics, *Geology*, <u>https://doi.org/10.1130/G47985.1</u>.
- [23] Glerum, A., S. Brune, D.S. Stamps, M. Strecker, Why does Victoria rotate? Continental microplate dynamics in numerical models of the East African Rift, 2020, Nature Communications, doi:10.1038/s41467-020-16176-x.
- [22] *Rajaonarison, T.A., D.S. Stamps, S. Fishwick, S. Brune, A. Glerum, J. Hu, 2020, Numerical Modeling of Mantle Flow Beneath Madagascar to Constrain Upper Mantle Rheology Beneath Continental Regions, Journal of Geophysical Research, doi: 10.1029/2019JB018560.
- [21] *Njinju A. E., E. Atekwana, D.S. Stamps, M.G. Abdelsalam, E.A. Atekwana, K.L. Mickus, V.N. Nyalugwe, 2019, Lithospheric Structure of the Malawi Rift: Implications for Rifting Processes in Magma Poor Rift Systems, Tectonics, doi:10.1029/2019TC005549.
- [20] **Rui, X. and D.S. Stamps, 2019, Strain Accommodation in the Liangshan Mountain area, Southeastern Margin of the Tibetan Plateau, Journal of Geophysical Research, doi: 10.1029/2019JB017614.
- [19] *Njinju A. E., F. Kolawole, E.A. Atekwana, D.S. Stamps, E.A. Atekwana, M.G. Abdelsalam, K.L. Mickus, A.B. Katumwehe, and V.N. Nyalugwe, 2019, Terrestrial heat flow in the Malawi Rifted Zone, East Africa: Implications for tectono-thermal inheritance in continental rift basins, Journal of Volcanology and Geothermal Research, doi:10.1016/j.jvolgeores.2019.07.023.
- [18] *Jones, J.R., D.S. Stamps, C. Wauthier, J. Biggs, E. Saria, 2019, Evidence for slip on a border fault triggered by magmatic processes in an immature continental rift, G-Cubed. doi:10.1029/2018GC008165.
- [17] **Rui, X., D.S. Stamps, A Geodetic Strain Rate and Tectonic Velocity Model for mainland China Based on GNSS Data Spanning 1996-2017, 2019, G-Cubed, doi:10.1029/2018GC007806.
- [16] Rui, X., Stamps D.S., Huang Shengmu. GPS derived evolution of strain rate in Sichuan region [J]. Journal of Southwest Jiaotong University, 2018, 53(2): 344-350.
- [15] Stamps, D.S., E. Saria, C. Kreemer, 2018, Sub-Saharan Africa Geodetic Strain Rate Model 1.0, Scientific Reports, doi:10.1038/s41590-017-19097-w.
- [14] F. Kolawole, E. A. Atekwana, ***S. Malloy, D. S. Stamps, R. Grandin, M. G. Abdelsalam1, K. Leseane and E. M. Shemang, Aeromagnetic and gravity data, and Differential Interferometric Synthetic Aperture Radar (DInSAR) analysis reveal the causative fault of the April 3, 2017 Mw 6.5 Moijabana, Botswana Earthquake, 2017, Geophysical Research Letters. doi: 10.1002/2017GL074620.
- [13] Ji, K.H., <u>Stamps, D.S.</u>, Geirsson, H., Mashagiro, N., Syauswa, M., Kafudu, B., Subira, J. and d'Oreye, N., 2017, Deep magma accumulation at Nyamulagira volcano in 2011 detected by GNSS observations,

Special Pub. on Kivu Rift, Journal of African Earth Sciences. doi:10.1016/j.jafrearsci.2016.06.006 corresponding author.

- [12] Muirhead, J.D., S.A. Kattenhorn, H. Lee, S. Mana, B.D. Turrin, T.P. Fischer, G. Kianji, E. Dindi, and D.S. Stamps, 2016, Evolution of upper crustal faulting assisted by magmatic volatile release during early-stage continental rift development in the East African Rift: Geosphere, v. 12, doi:10.1130/GES01375.1.
- [11] **Rui, X. and D.S. Stamps, 2016, Present-day kinematics of the eastern Tibetan Plateau and Sichuan Basin: Implications for lower crustal rheology. Journal of Geophysical Research: Solid Earth, doi:10.1002/2016JB012839.
- [10] Saschau, T., D. Koehn, D.S. Stamps, M. Lindenfield, 2015, Fault kinematics and stress fields in the Rwenzori Mountains, Uganda, Int. Jrl. Earth Sci., doi: 10.1007/s00531-015-1162-6.
- [9] **Stamps, D.S.**, G. Iaffaldano, E. Calais 2015, Role of mantle flow in Nubia-Somalia divergence, Geophy. Res. Lett., doi: 10.1002/2014GL062515.
- [8] Stamps, D.S., L.M. Flesch, E. Calais, A. Ghosh, 2014, Current kinematics and dynamics of Africa and the East African Rift, Jrl. Geophy. Res., doi: 10.1002/2013JB010717.
- [7] Saria, E., E. Calais, D.S. Stamps, D. Delvaux, C.J.H. Hartnady, 2014, Present-day kinematics of the East African Rift, Jrl. Geophy. Res., doi: 10.1002/2013JB010901.
- [6] Fernandes, R., Miranda, J. M., Delvaux, D., **D.S., Stamps**, E. Saria, 2013, Re-evaluation of the kinematics of Victoria Plate using continuous GNSS data, Geophys J Int., doi: 10.1093/gji/ggs071.
- [5] Stamps, D.S., L.M. Flesch, E.Calais, 2010, Lithospheric buoyancy stresses in Africa from a thin sheet approach, Int. Jrl. Earth Sci., Special Publication on Continents in Extension, 99(7), doi: 10.1007/s00531-010-0533-2.
- [4] Calais, E., N. d'Oreye, J. Alberic, A. Deschamps, D. Delvaux, J. Deverchere, C. Ebinger, R.W. Ferdinand, F. Kervyn, A.S. Macheyeki, A. Oyen, J. Perror, E. Saria, B. Smets, D.S. Stamps, C. Wauthier, 2008, Aseismic strain accommodation by slow slip and dyking in a youthful continental rift, East Africa, Nature, doi:10.1038/nature07478.
- [3] Stamps, D.S., E. Calais, E. Saria, C. Hartnady, J.-M. Nocquet, C.J. Ebinger, and R. Fernandes, 2008, A kinematic model for the East African Rift, Geophy. Res. Lett., 35, L05304, doi:10.1029/2007GL032781.
- [2] Smalley, R. Jr., I.W. Dalziel, M.G. Bevis, E. Kendrick, D.S. Stamps, E.C. King, F.W. Taylor, E. Lauria, A. Zakrajsek, and H. Parra, 2007, Scotia arc kinematics from GPS geodesy, Geophys. Res. Lett., 34, L21308, doi:10.1029/2007GL031699.
- Stamps, D.S., R. Smalley, Jr., 2006, Strings and Things for Locating Earthquakes, Seismo. Res. Ltrs, Vol. 77, No. 6, pp.677-683, doi:10.1785/gssrl.77.6.677.

6.0 TEACHING EXPERIENCE

Virginia Tech (* indicates course was team taught)	
Volcanic Processes/Advanced Volcanic Processes	F23*
Volcanism in Europe (Study abroad course)	F23*
Tectonics/Advanced Tectonics (Undergraduate/Graduate, new course)	S16, Spring 2018-2023
Earth's Natural Hazards (Undergraduate, new section)	F17, F18, S/F19, S20, S/F21
Geodesy in the Earth Sciences (Undergraduate/Graduate, new course)	F18, F20, F22*
Active Tectonics Seminar (Undergraduate/Graduate, new seminar)	S17*
Tectonic Geodesy (Graduate, new course)	F16

Geodynamics and ASPECT (Graduate, new course) Undergraduate Research Web-based Tools for Teaching and Research: Jupyter Notebooks and GitHub (faculty only)	F15*, F17, F20 every semester F21*
Makerere University, Uganda DRIAR project training school 2022	2022*
Government of Uganda, Entebbe Workshop on Tectonic Geodesy Applications for the Seismology Department	2018
AfricaArray Annual Meetings, University of Witwatersrand, S. Africa International Scientific Collaboration and AfricaArray, Instructor Experiment Design and Implementation with GNSS, Instructor	June 2018 June 2017
University of California, Los Angeles Geologic Maps	Winter quarter 2015
University of Antananarivo, Madagascar Introduction to GPS Geodesy and High Precision Observations GPS Training Program	July 2015 June 2013
University of Bukavu, Democratic Republic of Congo GPS Geodesy and Applications in Geodynamics Short-Course	March 2013
Boston University Guest Lecturer, Introductory Geophysics	November 2013
Purdue University Teaching Assistant, Geosciences in the Cinema Laboratory Instructor, Physical Geology Guest Lecturer, A Dynamic Earth	Fall 2011 Summer 2010, Spring 2012 October 2010, 2012
Center for Earthquake Research and Information Student Teacher, Outreach Activities	Spring 2007, Fall 2007
The University of Memphis Instructor, Environmental Geology Laboratory	Spring 2005

7.0 CURRENT GEODESY AND TECTONOPHYSICS LABORATORY MEMBERS

<u>Undergraduate Students</u> Madeline Kronebusch (Geosciences, 2021 – present) Anabelle Fry (Geosciences, Virginia Tech, 2022 – present) Ruben Ramirez (Geosciences, Virginia Tech, 2022 – present) Justin Dean (CMDA, Virginia Tech, 2023 – present) Nicole Paredes (UCLA, USGS, 2023 – present) Jasmine Floyd (Geosciences, Virginia Tech, 2023 – present) <u>Graduate Students</u> Karen Williams (PhD Student, NSF DRRM Fellow, Virginia Tech, 2020 – present) Asenath Kwagalakwe (PhD Student, Virginia Tech, 2021 – present)

Ntambila "Daud" Masungulwa (PhD Student, Virginia Tech, 2021 – present) Elly Ngailo (PhD Student, University of Witwatersrand, 2023 – present, co-advisor) Software Engineer / Data Science Collaborators Mike Dye (2021 – present) John Wenskovitch (2020 – present)

8.0 FORMER GEODESY AND TECTONOPHYSICS LABORATORY MEMBERS

Postdoctoral Associates

Dr. Emmanuel Njinju (2020 – 2023)

Undergraduate Students

Holly Hughes (Geosciences, Virginia Tech, 2022 – 2023) Isabella Paolucci (Geosciences, Virginia Tech, 2022 – 2023) Esha Islam (Computational Modeling and Data Analytics, Virginia Tech, 2021 – 2023) Deja Celestine (USGS Student Contractor, 2021 – 2023) Crystal Lee (Computational Modeling and Data Analytics, Virginia Tech, 2021 – 2022) Gabrielle Troia (Geosciences, Virginia Tech, 2019 - 2022) Rufus Hinton (Engineering, Virginia Tech, 2019 - 2022) Kelsey Popolizio (Geosciences, Virginia Tech, 2021 – 2022) Abdullah Rizwan (Computational Modeling and Data Analytics, Virginia Tech, 2021 – 2022) Rami Gorle (Computational Modeling and Data Analytics, Virginia Tech, 2021 – 2022) Liam O'Hanlon (Sociology and Criminology, Virginia Tech, 2021 – 2022) Myles Mason (Computational Modeling and Data Analytics, Virginia Tech, Sept. 2019 – Aug. 2021) Rebecca Plosay (Geosciences, Virginia Tech, Oct 2019 – May 2020) Ryan Roane (Physics, Virginia Tech, January 2018 – July 2020) Roberto Gorjon-Andujar, (BS Geosciences, Virginia Tech, August 2018 - May 2020) Israel Mamo (Computational Modeling and Data Analytics, Virginia Tech, May 2019 – June 2019) ThaoVy Nguyen (Mathematics, Virginia Tech, April 2017 – June 2019) Sarah Morgan, (Mathematics, Virginia Tech, January 2018 – December 2018) Sean Malloy (Physics, Virginia Tech, January 2017 – May 2018, now Field Engineer at UNAVCO) Codi Wiersma, (Geosciences, Virginia Tech, August 2016 – May 2017) Jared Guzman (Physics, Virginia Tech, October 2017 – December 2017) Greg Jesmok (Geology, UCLA, 2016) Raul Carrillo (Geology, UCLA, 2016)

Graduate Students

Jane Wambui (Msc, 2022, University of Nairobi, co-advisor)

Joshua Robert Jones (PhD, 2021, MAOP Fellow, Virginia Tech, now a geodesist at the US National Geodetic Survey)

Emmanuel Njinju (PhD, 2020, Virginia Tech, now a postdoctoral associate at University of California, Davis)

Tahiry Rajaonarison (PhD, 2020, Virginia Tech, now a postdoctoral associate at New Mexico Tech) Jessica Schobelock (MSc, 2018, Virginia Tech, now a Software Engineer at Capitol One) Herimitsinjo Nia (MSc co-advisor, 2015, University of Antananarivo, Madagascar) Tahiry Rajaonarison (MSc, co-advisor, 2013, University of Antananarivo, Madagascar)

Research Associates

Rui Xu, Associate Researcher Visiting Scholar, 2017-2018, Sichuan Earthquake Bureau, China

9.0 OUTREACH

Public presentations	
Makerere University, Uganda	2022
Virginia Tech Department of Geosciences Public Lecture	2018
Ardhi University, Tanzania	2016

Presentation to Engaresero Village, Tanzania on Volcanic Hazards and the new TZVOLCANO GNSS Network	2016
K-12 presentations and activities	
Virginia Tech College of Science Data Science Camp	2023
Virginia Tech Hokie for a Day	2022
Virginia Tech College of Science Summer Camps	2022
Virginia Tech Black College Institute Geosciences representative	2020, 2021
Virginia Tech Summer Uncamp "Ask an Expert"	2020
Editor, contributor, and featured explorer for National Geographic Kids Book	2018 - 2019
"Absolute Expert: Rocks and Minerals" by Ruth Strother	
National Geographic "Earth and Space Science" by Mark Hendrix High	2019
School Textbook featurette	
Contributor to National Geographic Kids "Solve This!" Children's Book	2016
Sishi High School, China (200+ students)	2015
Chengdu No. 7 High School, China (300+ students)	2015
Sumbawanga Secondary School, Tanzania (200+ students)	2014
2 High Schools in Madagascar (100+ students)	2014
Soroto Secondary School, Tanzania (200+ students)	2010
Olito Secondary School, Uganda (200+ students)	2010
Trinity High School, Haiti (60+ students)	2010
S&H Secondary School, Haiti (50+ students)	2010
Ikizu Secondary School, Tanzania (150+ students)	2008
Madia	
Media	2022
Mushroom-shaped superplume of scorching hot rock may be splitting Africa	2023
$\frac{\ln 2}{2}$	2022
Study explains unusual deformation in Earth's largest continental rift	2023
YouTube Video on <u>Africa—Tectonic Setting and Historic Earthquakes</u>	2022
IRIS, Scientific consultant	2022
<u>DRIAR Project Field Training School – 11th-22nd July 2022</u>	2022
Makerere University, Uganda blog post	2021
Measuring volcanic interactions using real-time data on Jetstream	2021
NSF XSEDE Jetstream Science Focus Article	2020
Seismological Society of America At-Work: D. Sarah Stamps	2020
D. Sarah Stamps receives \$625,000 NSF CAREER grant to study role	2020
of volcanism in continental rifting, Virginia Tech College of Science News	
New study: East African Rift System is slowly breaking away, with	2020
Madagascar splitting into pieces, Virginia Tech College of Science News	2010
Geosciences' D. Sarah Stamps rocks science in National Geographic Kids	2019
book, Virginia Tech College of Science News	2010
UNAVCO Highlight: CHORDS Provides Next Generation Infrastructure for	2019
Real-time Geoscience Data Services,	
Spring Virginia Tech Science Magazine for CODE-GEO	2018
Invited AGU Policy Twitter featured Tweet	2018
National Geographic Society media interview	2017
on "Mountain of God" Volcano Preparing to Erupt	
Geoscience's D. Sarah Stamps to spearhead \$1.4 million NSF grant to build	2017
key cyberinfrastructure project, Virginia Tech College of Science News	
Geosciences team to place GPS sensors around Tanzanian volcano in	2016
effort to predict eruptions, Virginia Tech College of Science News	
National Geographic Society, Interview for Women in Science project	2016

Interview for Discovery Magazine on the East African Rift System	2016
UNAVCO Highlight: Rifting in Eastern Africa: Geodetic data deciphers	2014
spreading forces	
Interview for Haitian television on 2010 earthquake, Haiti	2010
Interview for Haitian radio network on 2010 earthquake, Haiti	2010
UNAVCO Highlight: Plate tectonics in the East African Rift	2008

10.0 LEADERSHIP AND SERVICE

National/International

Carpentries Code of Conduct Committee, Chair	2023 - present	
NSF EarthCube Early Career Travel Grant Proposal Leader	2021 - 2022	
Guest Associate Editor in Solid Earth Geophysics, Frontiers	2021 - 2022	
Special Topics Editor, Advances in African Earth Sciences, Frontiers	2021 - 2022	
Carpentries Code of Conduct Committee Member	2021 - present	
NSF EarthCube Workshop Template Materials Proposal Leader	2020	
Co-Leader of the Early Career Investigator Community Workshop to	2020	
Develop a Vision for the Future NSF Geophysical Facility		
AGU Committee Chair, Africa Award for Research Excellence	2020 - 2022	
in Earth/Ocean Sciences		
AGU Committee member, Africa Award for Research Excellence	2018 - 2020	
Research Excellence in Earth and Ocean Sciences		
NSF EarthCube Science and Engagement Team Co-Chair (elected)	2020 - 2022	
NSF EarthCube Leadership Council (elected)	2017 - 2018	
NSF UNAVCO Virginia Tech Institutional member representative	2015 - present	
NSF EarthCube Science Committee (now Science and Engagement Team)	2014 - 2022	
NSF EarthCube P418-GUI Advisory Team	2018	
NSF EarthCube Registry Priority Action Team	2017	
NSF EarthCube 2017 All-Hands Meeting Organizing Committee	2017	
NSF EarthCube 2017 All-Hands Meeting Emcee	2017	
NSF EarthCube Architecture and Implementation Plan Tiger Team Member	2016	
NSF UNAVCO Education & Community Engagement Committee Member	2009 - 2012	
NSF UNAVCO Education & Community Engagement Committee Member	2015 - 2017	
AGU Geodesy Executive Committee Member	2008 - 2010	
AGU Fall Meeting Session, Co-Chair or Chair	2014, 2016-2023	
Review Panel Member for NASA's Earth & Surface Interiors	2016, 2021	
Review Panel Member for NSF EAR Postdoctoral Fellowship	2021, 2022	
External Grant Reviewer (Multiple years for the programs NSF Tectonics, GeoF	'RISMS,	
Geophysics, EarthCube, UK Early Career, NASA postdoctoral program)		
Reviewer for journals (Numerous reviews for journals such as Tectonics, Science Advances,		
Geophysical Journal International, Journal of Geophysical Research, Tectonophysics,		
Earth and Planetary Science Letters, Geophysical Research Letters, Physics of	of	
the Earth and Planetary Interiors, Reviews of Geophysics, etc.)		
Virginia Tech		
Virginia Tech IT Systems and Services Committee	2021 – present	
Virginia Tech IT Transformation Steering Committee	2022 - 2023	

Virginia Tech IT Systems and Services Committee	2021 - present
Virginia Tech IT Transformation Steering Committee	2022 - 2023
Virginia Tech Women in Data Science Blacksburg Event organizer	2022, 2023
Virginia Tech Department of Geosciences Alumni Event	2019
Virginia Tech Science Week/Virginia Tech GeoFair	2019
Virginia Tech Hokie Village education outreach	2019
Virginia Tech ICAT Day	2017, 2018

Spring Break Camp: Collecting Observations and	2018, 2021, 2022
Data Analysis for Encoding in the Geosciences	
Virginia Tech Science Week/Virginia Tech GeoFair	2016

11.0 DIVERSITY, EQUITY, AND INCLUSION ACTIVITIES

Virginia Tech College of Science Diversity & Inclusion Committee Chair Virginia Tech College of Science Diversity & Inclusion Committee Member Virginia Tech Geosciences URGE Pod Leader NSF EarthCube Diversity, Equity, and Inclusion Working Group Member Virginia Tech HHMI Inclusive Excellence Faculty Scholar International Association for Geoscience Diversity Member Virginia Tech Geosciences Inclusion, Diversity, Equity, Inclusion, and Accessibility (IDEA) Committee Member	2022 - present 2021 - 2022 2020 - 2023 2020 - 2021 2019 - 2022 2019 - present 2018 - present
Virginia Tech Black College Institute Department Representative	2019, 2020, 2021
Supported Fall GNSS measurements with HBCU Hampton University	2020, 2021
Spring Break GNSS measurements with HBCU Hampton University	2019
Virginia Tech Black Students in STEM booth organization	2019
Black Students in STEM hike organizer and participant	2019
Virginia Tech Advancing Diversity Workshop	2018, 2019, 2020
Virginia Tech HBCU/HSI Institute Outreach	2018, 2019, 2020
Developed CODE-GEO program for underrepresented students in STEM	2018, 2021, 2022
(funded by NSF CAREER grant for 2021-2025)	
12.0 INVITED PANEL PARTICIPANT	
Women in Data Science Blacksburg Event Career Panelist	2022, 2023
EarthCube Program Panelist	2020
International Data Week Panelist	2016
13.0 ORAL PRESENTATIONS	
	Dec 2023*
American Geophysical Union, invited talk	Dec 2023* July 2023
American Geophysical Union, invited talk Southern East African Rift Workshop, speaker	Dec 2023* July 2023 Mar 2023
American Geophysical Union, invited talk Southern East African Rift Workshop, speaker GAGE/SAGE Community Science Workshop, invited plenary	July 2023
American Geophysical Union, invited talk Southern East African Rift Workshop, speaker GAGE/SAGE Community Science Workshop, invited plenary University of Colorado, Boulder	July 2023 Mar 2023
American Geophysical Union, invited talk Southern East African Rift Workshop, speaker GAGE/SAGE Community Science Workshop, invited plenary	July 2023 Mar 2023 Mar 2023
American Geophysical Union, invited talk Southern East African Rift Workshop, speaker GAGE/SAGE Community Science Workshop, invited plenary University of Colorado, Boulder American Geophysical Union, invited talk	July 2023 Mar 2023 Mar 2023 Dec 2022
American Geophysical Union, invited talk Southern East African Rift Workshop, speaker GAGE/SAGE Community Science Workshop, invited plenary University of Colorado, Boulder American Geophysical Union, invited talk European Geosciences Union	July 2023 Mar 2023 Mar 2023 Dec 2022 May 2022
American Geophysical Union, invited talk Southern East African Rift Workshop, speaker GAGE/SAGE Community Science Workshop, invited plenary University of Colorado, Boulder American Geophysical Union, invited talk European Geosciences Union CSDMS Keynote	July 2023 Mar 2023 Mar 2023 Dec 2022 May 2022 May 2022
American Geophysical Union, invited talk Southern East African Rift Workshop, speaker GAGE/SAGE Community Science Workshop, invited plenary University of Colorado, Boulder American Geophysical Union, invited talk European Geosciences Union CSDMS Keynote American Geophysical Union, oral presentation	July 2023 Mar 2023 Mar 2023 Dec 2022 May 2022 May 2022 Dec 2021
American Geophysical Union, invited talk Southern East African Rift Workshop, speaker GAGE/SAGE Community Science Workshop, invited plenary University of Colorado, Boulder American Geophysical Union, invited talk European Geosciences Union CSDMS Keynote American Geophysical Union, oral presentation AfricaArray keynote presentation, virtual	July 2023 Mar 2023 Mar 2023 Dec 2022 May 2022 May 2022 Dec 2021 Dec 2021
American Geophysical Union, invited talk Southern East African Rift Workshop, speaker GAGE/SAGE Community Science Workshop, invited plenary University of Colorado, Boulder American Geophysical Union, invited talk European Geosciences Union CSDMS Keynote American Geophysical Union, oral presentation AfricaArray keynote presentation, virtual AIKE keynote presentation, virtual	July 2023 Mar 2023 Mar 2023 Dec 2022 May 2022 May 2022 Dec 2021 Dec 2021 Dec 2021
American Geophysical Union, invited talk Southern East African Rift Workshop, speaker GAGE/SAGE Community Science Workshop, invited plenary University of Colorado, Boulder American Geophysical Union, invited talk European Geosciences Union CSDMS Keynote American Geophysical Union, oral presentation AfricaArray keynote presentation, virtual AIKE keynote presentation, virtual Stony Brook University, virtual, <u>YouTube</u>	July 2023 Mar 2023 Mar 2023 Dec 2022 May 2022 May 2022 Dec 2021 Dec 2021 Dec 2021 Oct 2021
American Geophysical Union, invited talk Southern East African Rift Workshop, speaker GAGE/SAGE Community Science Workshop, invited plenary University of Colorado, Boulder American Geophysical Union, invited talk European Geosciences Union CSDMS Keynote American Geophysical Union, oral presentation AfricaArray keynote presentation, virtual AIKE keynote presentation, virtual Stony Brook University, virtual, <u>YouTube</u> University of Alaska, virtual, <u>YouTube</u> University of Maryland, in-person German Research Center for Geosciences, virtual, <u>YouTube</u>	July 2023 Mar 2023 Mar 2023 Dec 2022 May 2022 May 2022 Dec 2021 Dec 2021 Dec 2021 Oct 2021 Sept 2021 Sept 2021 Feb 2021
American Geophysical Union, invited talk Southern East African Rift Workshop, speaker GAGE/SAGE Community Science Workshop, invited plenary University of Colorado, Boulder American Geophysical Union, invited talk European Geosciences Union CSDMS Keynote American Geophysical Union, oral presentation AfricaArray keynote presentation, virtual AIKE keynote presentation, virtual Stony Brook University, virtual, <u>YouTube</u> University of Alaska, virtual, <u>YouTube</u> University of Maryland, in-person German Research Center for Geosciences, virtual, <u>YouTube</u> Virginia Tech, Department of Geosciences, virtual	July 2023 Mar 2023 Mar 2023 Dec 2022 May 2022 Dec 2021 Dec 2021 Dec 2021 Oct 2021 Sept 2021 Sept 2021 Feb 2021 Feb 2021
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American Geophysical Union, invited talk Southern East African Rift Workshop, speaker GAGE/SAGE Community Science Workshop, invited plenary University of Colorado, Boulder American Geophysical Union, invited talk European Geosciences Union CSDMS Keynote American Geophysical Union, oral presentation AfricaArray keynote presentation, virtual AIKE keynote presentation, virtual Stony Brook University, virtual, <u>YouTube</u> University of Alaska, virtual, <u>YouTube</u> University of Maryland, in-person German Research Center for Geosciences, virtual, <u>YouTube</u> Virginia Tech, Department of Geosciences, virtual American Geophysical Union, invited, virtual University of California, Los Angeles, virtual	July 2023 Mar 2023 Mar 2023 Dec 2022 May 2022 Dec 2021 Dec 2021 Dec 2021 Oct 2021 Sept 2021 Sept 2021 Feb 2021 Feb 2021 Dec 2020 Apr 2020
American Geophysical Union, invited talk Southern East African Rift Workshop, speaker GAGE/SAGE Community Science Workshop, invited plenary University of Colorado, Boulder American Geophysical Union, invited talk European Geosciences Union CSDMS Keynote American Geophysical Union, oral presentation AfricaArray keynote presentation, virtual AIKE keynote presentation, virtual Stony Brook University, virtual, <u>YouTube</u> University of Alaska, virtual, <u>YouTube</u> University of Maryland, in-person German Research Center for Geosciences, virtual, <u>YouTube</u> Virginia Tech, Department of Geosciences, virtual American Geophysical Union, invited, virtual University of California, Los Angeles, virtual Vertical Land Motions in the Chesapeake Bay Workshop, Hampton, VA	July 2023 Mar 2023 Mar 2023 Dec 2022 May 2022 May 2022 Dec 2021 Dec 2021 Dec 2021 Oct 2021 Sept 2021 Sept 2021 Feb 2021 Feb 2021 Dec 2020 Apr 2020 Feb 2020
American Geophysical Union, invited talk Southern East African Rift Workshop, speaker GAGE/SAGE Community Science Workshop, invited plenary University of Colorado, Boulder American Geophysical Union, invited talk European Geosciences Union CSDMS Keynote American Geophysical Union, oral presentation AfricaArray keynote presentation, virtual AIKE keynote presentation, virtual Stony Brook University, virtual, <u>YouTube</u> University of Alaska, virtual, <u>YouTube</u> University of Maryland, in-person German Research Center for Geosciences, virtual, <u>YouTube</u> Virginia Tech, Department of Geosciences, virtual American Geophysical Union, invited, virtual University of California, Los Angeles, virtual	July 2023 Mar 2023 Mar 2023 Dec 2022 May 2022 Dec 2021 Dec 2021 Dec 2021 Oct 2021 Sept 2021 Sept 2021 Feb 2021 Feb 2021 Dec 2020 Apr 2020

14.0 SKILLS

Language: English, Swahili (professional)

<u>Computer:</u> GAMIT-GLOBK GNSS/GPS processing software maintained at MIT, Generic Mapping Tools, Matlab, TDEFNODE, LaTeX, SHELLS, AWK, vi, USGS Coulomb 3, sparse codes in Fortran (Holt and Haines, 1993; Flesch et al., 2001; Stamps et al., 2010, 2014, 2018, Rui and Stamps, 2019), SELEN 4.0, Visit, Git, CHORDS, Grafana, Jupyter Notebook, GitHub community code development and contributions ASPECT (Computational Infrastructure for Geodynamics Community Code) in C++, USGS dMODELS

<u>Teaching:</u> Certificate in Effective Teaching, Certified Carpentries Instructor, HHMI Inclusive Excellence Faculty Scholar

15.0 PROFESSIONAL AFFILIATIONS/MEMBERSHIPS

- American Geophysical Union
- European Geosciences Union
- Geological Society of America
- Seismological Society of America

- American Association for the Advancement of Science
- International Association for Geoscience Diversity
- Association for Women Geoscientists

16.0 COLLABORATORS AND OTHER AFFILIATIONS

<u>International Collaborators</u>: Giorgio Spada (Universita` di Bologna), Daniele Melini (Istituto Nazionale di Geofisica e Vulcanologia), Max Moorkamp (University of Leicester, UK), Kang-Hyeun Ji (Korea Institute for Geosciences and Mineral Resources), Xu Rui (Sichuan Earthquake Agency), Elifuraha Saria (Ardhi University, Tanzania), Fred Tugume (Geological Survey and Mines Department, Ministry of Energy and Mineral Development of Uganda), Gladys Kianji (University of Nairobi), Stewart Fishwick (University of Leicester), Sascha Brune (GFZ), Jean Mary Kiberu (Makerere University, Uganda), Giampiero Iaffaldano (University of Copenhagen), Charles Williams (GNS, New Zealand), Sæmundur Halldórsson (University of Iceland)

<u>U.S. Collaborators:</u> Maurizio Battaglia (USGS, VDAP), Mong-Han Huang (University of Maryland), Corné Kreemer (University of Nevada, Reno), Estella and Elliot Atekwana (University of California, Davis), Bill Moore (Hampton University), John Naliboff (New Mexico Tech), Suzan Van der Lee (Northwestern University), Mike Taylor (University of Kansas), Andrew Katumwehe (Mid-Western State University), Rob Evans (WHOI), Tyrone Rooney (University of Michigan)

Major Graduate Advisor: Eric Calais, Ecole Normale Supérieure (formerly Purdue University)

Major Postdoctoral Advisor: Brad Hager, Massachusetts Institute of Technology

17.0 REPORTS AND TECHNICAL NON-REFERRED PUBLICATIONS

- [11] NSF GEOPRISMS WORKSHOP REPORT: Janiszewski, Helen; Condit, Cailey; Kitajima, Hiroko; Stamps, D. Sarah (2023): Report of the Structure and Deformation at Plate Boundaries GeoPRISMS Synthesis Workshop. 10.5281/zenodo.7482699
- [10] WHITE PAPER: Evans, Eileen L.; Nikulin, Alex; Ford, Heather A.; Stamps, D. Sarah; Creasy, Neala; Swiatlowski, Jeryln; et al. (2020): An Early Career Investigator Community Vision for the Future NSF Geophysical Facility: Education, Workforce, and Outreach Needs. figshare. Online resource. https://doi.org/10.6084/m9.figshare.12398372.v1
- [9] WHITE PAPER: Ford, Heather A.; Floyd, Michael; Stamps, D. Sarah; Mendoza, Manuel; Bozdag, Ebru; Bowden, Daniel; et al. (2020): An Early Career Investigator Community Vision for the Future NSF Geophysical Facility: Data Services Needs. figshare. Online resource. <u>https://doi.org/10.6084/m9.figshare.12398321.v1</u>
- [8] WHITE PAPER: Stamps, D. Sarah; Eilon, Zach; Fan, Wenyuan; Lynner, Colton; Kehoe, Haiyang; Ford, Heather A.; et al. (2020): An Early Career Investigator Community Vision for the Future NSF Geophysical Facility: Instrumentation Services Needs. figshare. Online resource. https://doi.org/10.6084/m9.figshare.12398288.v1
- [7] NSF EARTHCUBE: A Position Paper on EarthCube adoption/promotion of principles embodied in the FAIR acronym for current and future activities, 2019, Rubin, K.H., Kelbert, A., Stamps, D.S., Meier, O., Koskela, R. and the EarthCube Leadership Council
- [6] NSF EARTHCUBE REPORT: Ouida Meyer, D. Sarah Stamps, Lynne Schreiber, and the EarthCube Science Committee, 2018, EarthCube Resources for GEO-CI Workshops, <u>https://doi.org/10.5281/zenodo.3371777</u>
- [5] NSF EARTHCUBE REPORT: David Arctur, Scott Peckham, D. Sarah Stamps, Bob Arko, Janet Fredericks, 2016, AIP Tiger Team Response to the Xenity Architecture Implementation Plan

- [4] NSF EARTHCUBE SCIENCE COMMITTEE REPORT: Aronson E, Bristol S, Burgess AB, Chandrasekar V, Close H, van Eyken T, Ferrini V, Gomez B, Kinkade D, Kelbert A, Martin RL, Ritterbush K, Rubin K, Schmittner A, Slota S, Stamps DS, Stocks K, Tzeng MW, Wiebe P, Wood-Charlson E, 2015, Geoscience 2020: Cyberinfrastructure to reveal the past, comprehend the present, and envision the future, EarthCube Working Paper ECWP-2015-1, dx.doi.org/10.7269/P3MG7MDZ
- [3] WHITE PAPER: Douglas B., R, Bennett, D.S. Stamps, N. Niemi, B. Wang, E. Nissan, M, Oskin, A. Duvall, M.Hamburger, 2015, Current directions of field science education with respect to geodetic technologies, White Paper for Workshop on Future Seismic and Geodetic Facility Needs in the Geosciences, May 4-6, 2015.
- [2] WHITE PAPER: Stamps D.S. et al., 2013, An investigation of rift-parallel surface deformation along the East African Rift System, GeoPRISMS Planning Workshop for East African Rift, Morristown, NJ, 10/25/13-10/27/13.
- [1] WHITE PAPER: Stamps D.S. et al., 2013, An investigation of plate boundary formation in Madagascar, GeoPRISMS Planning Workshop for East African Rift, Morristown, NJ, 10/25/13-10/27/13.

18.0 PUBLICATIONS SUBMITTED, IN REVIEW/REVISIONS, OR IN PREPARATION

*GTL graduate student author, **GTL researcher authored, ***GTL undergraduate student author

- Rui, X., D.S. Stamps (in prep), Euler-pole Clustering of GNSS Velocities Using Unsupervised Machine Learning in the Southeastern Tibetan Plateau: Block Identification and the Dominance of Sinistral-slip Faults, *Geology*
- Iaffaldano, G., J.M. de Blas, X. Rui, D.S. Stamps, B. Zhao, (in review) South China motion modified by the 2008 Mw 7.9 Great Wenchuan earthquake, *Sci. Reports*
- Michael J. Vadman, Max M. Garvue, James A. Spotila, Sean P. Bemis, D. Sarah Stamps, Lewis A. Owen (in review), Evidence for a Prehistoric Multi-fault Rupture Along the Southern Calico Fault System, Eastern California Shear Zone, USA
- Asenath Kwagalakwe, D. Sarah Stamps, Emmanuel Njinju, Estella Atekwana, John Mary Kiberu, Michael Taylor, Rob L. Evans, Andrew B. Katumwehe, Peter H. Barry, Hillary Mwongyera, Albert Kabanda (in review) Investigating Melt Generation Beneath the Northern Western Branch of the East African Rift Using 3D Geodynamic Modeling with ASPECT, *Tectonophysics*
- Karen Williams, D. Sarah Stamps, Jaqueline Austermann, Scott King, Emmanuel Njinju (in review) Effects of Using the Consistent Boundary Flux Method on Dynamic Topography Estimates: Geophysical Implications for Improved Solutions, *Geophysical Journal International*

19.0 OPEN-ACCESS DATA PRODUCTS, JUPYTER NOTEBOOKS, AND SOFTWARE

*GTL graduate student author, **GTL undergraduate student author

- [46] ***Fry, Anabelle, ***Kronebusch, Madeline, ***Hughes, Holly, Stamps, D. Sarah, Duda, James, Brem, Nichole J., Inzana, Eddy D., Hensel, Philippe, Hippenstiel, Ryan, Moore, William B., Geohegan, Charlie, Ulizio, Thomas P., Anderson, Roy, Jordan, Kevin S., Walters, David, Crossman, Brendan, Lerberg, Scott, Demeo, Alex, Fernish, Kyle, Quinn, Heather, Staley, Andrew, Downey, Luke, Gavin, Ben, Kramer, Lauren, McKenna, Thomas, Warner, Daniel L., He, Changming, Hazewski, June, 2023, Chesapeake Bay Vertical Land Motions 2022, GAGE Facility, GPS/GNSS Observations Dataset, <u>https://doi.org/10.7283/6BKC-4A59</u>
- [45] **Kronebusch, Madeline, **Troia, Gabrielle, Stamps, D. Sarah, Duda, James, Hensel, Philippe, Hippenstiel, Ryan, Moore, William B., Geohegan, Charlie, Ulizio, Thomas P., Franco, Sean, Anderson, Roy, Giron, Marco, Jordan, Kevin S., Walters, David, Crossman, Brendan, Lerberg, Scott, Demeo, Alex, Fernish, Kyle, Quinn, Heather, Lynch, James, Staley, Andrew, Downey, Luke, Gavin,

Ben, 2022, Chesapeake Bay Vertical Land Motions 2021, The GAGE Facility operated by UNAVCO, Inc., GPS/GNSS Observations Dataset, <u>https://doi.org/10.7283/4ENN-6906</u>.

- [44] Ntambila, Daud, Saria, Elifuraha, Stamps, D. Sarah, 2022, Tanzania, Natron Rift 2022, The GAGE Facility operated by UNAVCO, Inc., GPS/GNSS Observations Dataset, https://doi.org/10.7283/HBCH-9Y46.
- [43] Troia, Gabrielle, Stamps, D. Sarah, Hensel, Philippe, Lotspeich, Robert R., McCoy, Kurt, Moore, William B., Nash, Jonathan, Hippenstiel, Ryan, McKenna, Thomas, Andreasen, David, Lokken, Scott, Geoghegan, Charles, Covington, Scott, Winn, Neil, Quinn, Heather, Staley, Andrew, Ulizio, Thomas P., Carr, Joel, Walters, David, Kronebusch, Madeline, 2022, Chesapeake Bay Vertical Land Motions 2020, UNAVCO, GPS/GNSS Observations Dataset, <u>https://doi.org/10.7283/98DG-AJ14</u>
- [42] Stamps, D. Sarah, Tugume, Fred, Nyago, Joseph, Kwagalakwe, Asenath, 2022, Uganda GPS Network
 UGN5-Hoima 2 P.S., The GAGE Facility operated by UNAVCO, Inc., GPS/GNSS Observations Dataset, <u>https://doi.org/10.7283/5HQ8-JK20</u>.
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- [40] Stamps, D. Sarah, Tugume, Fred, Nyago, Joseph, Kwagalakwe, Asenath, 2022, Uganda 2022 BIIS and HYDP, The GAGE Facility operated by UNAVCO, Inc., GPS/GNSS Observations Dataset, <u>https://doi.org/10.7283/FBVR-K683</u>.
- [39] Stamps, D. Sarah, Saria, Elifuraha, Hyeun Ji, Kang, Jones, J. Robert, Ntambila, Daud, Daniels, Mike, Mencin, Dave, 2021, Tanzania Volcano Observatory - OLO9-OLO9_OLO_TZA2021 P.S., The GAGE Facility operated by UNAVCO, Inc., GPS/GNSS Observations Dataset, <u>https://doi.org/10.7283/EW7F-Z179</u>.
- [38] *Ntambila, Daud, Saria, Elifuraha, Stamps, D. Sarah, 2021, Tanzania, Natron Rift 2021, The GAGE Facility operated by UNAVCO, Inc., GPS/GNSS Observations Dataset, <u>https://doi.org/10.7283/J0RZ-2C35</u>.
- [37] **Mason, Myles, John Wenskovitch, D. Sarah Stamps, *Joshua Robert Jones, Mike Dye, 2021, Volcanic activity detection and noise characterization using machine learning, EarthCube Annual Meeting, <u>https://github.com/earthcube2021/ec21_mason_etal</u>
- [36] Dye, Mike, D. Sarah Stamps, **Myles Mason, 2021, Jupyter Notebook: Toward autonomous detection of anomalous GNSS data via applied unsupervised artificial intelligence, EarthCube Annual Meeting 2021, <u>https://github.com/earthcube2021/ec21_dye_etal</u>
- [35] Scott Dale Peckham, Maria Stoica, D. Sarah Stamps, James Gallagher, Nathan Potter, David Fulker, 2020, An Interactive GUI for BALTO in a Jupyter notebook, https://github.com/earthcube2020/ec20_peckham_etal
- [34] **Troia, Gabrielle, Stamps, D. Sarah, Hensel, Philippe, Lotspeich, Robert R., McCoy, Kurt, Moore, William B., Nash, Jonathan, Layton, Janelle, Hippenstiel, Ryan, McKenna, Thomas, Andreasen, David, Lokken, Scott, Geoghegan, Charles, Covington, Scott, Winn, Neil, Quinn, Heather, Staley, Andrew, Ulizio, Thomas P., *Williams, Karen, 2020, Chesapeake Bay Vertical Land Motions 2019, UNAVCO, GPS/GNSS Observations Dataset, <u>https://doi.org/10.7283/M6D3-T837.</u>

- [33] *Rajaonarison, Tahiry A; Stamps, D Sarah; Fishwick, Stewart; Brune, Sascha; Glerum, Anne; Hu, Jiashun (2019): Synthetic Splitting Parameters and Synthetic Lattice Preferred Orientation (LPO) derived from Edge Driven Convection and Mantle Wind Models in Madagascar. PANGAEA, https://doi.org/10.1594/PANGAEA.909406, Supplement to: Rajaonarison, Tahiry A; Stamps, D Sarah; Fishwick, Stewart; Brune, Sascha; Glerum, Anne; Hu, J, 2020, Numerical Modeling of Mantle Flow Beneath Madagascar to Constrain Upper Mantle Rheology Beneath Continental Regions. Journal of Geophysical Research: Solid Earth, 125(2), e2019JB018560, https://doi.org/10.1029/2019JB018560
- [32] *Njinju, Emmanuel A; Atekwana, Estella A; Stamps, D Sarah; Abdelsalam, Mohamed G; Atekwana, Eliot A; Mickus, Kevin L; Fishwick, Stewart; Kolawole, Folarin; Rajaonarison, Tahiry A; Nyalugwe, Victor N (2019): Depth to Moho and depth to LAB beneath the Malawi Rift and surroundings generated from spectral analysis of WGM2012 Bouguer gravity anomalies. PANGAEA, https://doi.org/10.1594/PANGAEA.905100, Supplement to: Njinju, EA et al., 2019, Lithospheric Structure of the Malawi Rift: Implications for Magma-Poor Rifting Processes. Tectonics, 38(11), 3835-3853, https://doi.org/10.1029/2019TC005549
- [31] *Njinju, Emmanuel A; Kolawole, Folarin; Atekwana, Estella A; Stamps, D Sarah; Atekwana, Eliot A; Abdelsalam, Mohamed G; Mickus, Kevin L, 2019, Terrestrial heat flow in the Malawi Rifted Zone, East Africa. PANGAEA, https://doi.org/10.1594/PANGAEA.905368, Supplement to: Njinju, EA et al. (2019): Terrestrial heat flow in the Malawi Rifted Zone, East Africa: Implications for tectonothermal inheritance in continental rift basins. Journal of Volcanology and Geothermal Research, 387, 106656, https://doi.org/10.1016/j.jvolgeores.2019.07.023
- [30] *Njinju, Emmanuel A; Atekwana, Estella A; Stamps, D Sarah; Abdelsalam, Mohamed G; Atekwana, Eliot A; Mickus, Kevin L; Fishwick, Stewart; Kolawole, Folarin; Rajaonarison, Tahiry A; Nyalugwe, Victor N, 2019, Depth to the lithosphere-asthenosphere boundary (LAB) beneath the Malawi Rift and surroundings generated from spectral analysis of WGM2012 Bouguer gravity anomalies. PANGAEA, https://doi.org/10.1594/PANGAEA.905098, In supplement to: Njinju, EA et al. (2019): Lithospheric Structure of the Malawi Rift: Implications for Magma-Poor Rifting Processes. Tectonics, 38(11), 3835-3853, https://doi.org/10.1029/2019TC005549
- [29] *Njinju, Emmanuel A; Atekwana, Estella A; Stamps, D Sarah; Abdelsalam, Mohamed G; Atekwana, Eliot A; Mickus, Kevin L; Fishwick, Stewart; Kolawole, Folarin; Rajaonarison, Tahiry A; Nyalugwe, Victor N, 2019, Depth to Mohorovicic Discontinuity (Moho) beneath the Malawi Rift and surroundings generated from spectral analysis of WGM2012 Bouguer gravity anomalies. PANGAEA, https://doi.org/10.1594/PANGAEA.905099, In supplement to: Njinju, EA et al. (2019): Lithospheric Structure of the Malawi Rift: Implications for Magma-Poor Rifting Processes. Tectonics, 38(11), 3835-3853, https://doi.org/10.1029/2019TC005549
- [28] Stamps, D. Sarah, Nyblade, Andy, Tugume, Fred, 2019, Uganda-Kenya Eastern Branch GNSS Network - UGN1, UNAVCO, Inc., GPS/GNSS Observations Dataset, <u>https://doi.org/10.7283/5YWS-G946</u>
- [27] Stamps, D. Sarah, Nyblade, Andy, Tugume, Fred, 2019, Uganda-Kenya Eastern Branch GNSS Network - UGN2, UNAVCO, Inc., GPS/GNSS Observations Dataset, <u>https://doi.org/10.7283/96K9-CY19</u>
- [26] Stamps, D. Sarah, Nyblade, Andy, Tugume, Fred, 2019, Uganda-Kenya Eastern Branch GNSS Network - UGN3, UNAVCO, Inc., GPS/GNSS Observations Dataset, <u>https://doi.org/10.7283/NCNX-MF08</u>

- [25] Stamps, D. Sarah, Nyblade, Andy, Kianji, Gladys, 2019, Uganda-Kenya Eastern Branch GNSS Network - KYN1, UNAVCO, Inc., GPS/GNSS Observations Dataset, <u>https://doi.org/10.7283/PGZG-QN51</u>
- [24] Stamps, D. Sarah, Nyblade, Andy, Kianji, Gladys, 2019, Uganda-Kenya Eastern Branch GNSS Network - KYN2, UNAVCO, Inc., GPS/GNSS Observations Dataset, <u>https://doi.org/10.7283/879W-ZH24</u>
- [23] Stamps, D. Sarah, Nyblade, Andy, Kianji, Gladys, 2019, Uganda-Kenya Eastern Branch GNSS Network - KYN3, UNAVCO, Inc., GPS/GNSS Observations Dataset, <u>https://doi.org/10.7283/JW25-DC44</u>
- [22] Stamps, D. Sarah, Nyblade, Andy, Kianji, Gladys, 2019, Uganda-Kenya Eastern Branch GNSS Network - KYN4, UNAVCO, Inc., GPS/GNSS Observations Dataset, <u>https://doi.org/10.7283/0ZK5-HF19</u>.
- [21] Stamps, D. Sarah, Nyblade, Andy, Kianji, Gladys, 2019, Uganda-Kenya Eastern Branch GNSS Network - KYN5, UNAVCO, Inc., GPS/GNSS Observations Dataset, <u>https://doi.org/10.7283/MC7S-S138</u>
- [20] Stamps, D. Sarah, Nyblade, Andy, Kianji, Gladys, 2019, Uganda-Kenya Eastern Branch GNSS Network - KYN6, UNAVCO, Inc., GPS/GNSS Observations Dataset, <u>https://doi.org/10.7283/GWTD-X957</u>.
- [19] Stamps, D. Sarah, Nyblade, Andy, Kianji, Gladys, 2019, Uganda-Kenya Eastern Branch GNSS Network - KYN7, UNAVCO, Inc., GPS/GNSS Observations Dataset, <u>https://doi.org/10.7283/TDCA-Z146</u>
- [18] Stamps, D.S., Saria, Elifuraha, Hyeun Ji, Kang, *Jones, J. Robert, *Ntambila, Daud, Daniels, Mike and Mencin, Dave, 2017a, TZVOLCANO: OLO6-OLO6_OLO_TZA2017 P.S., UNAVCO, GPS Data Set, doi:10.7283/T51V5CR2
- [17] Stamps, D.S., Saria, Elifuraha, Hyeun Ji, Kang, *Jones, J. Robert, *Ntambila, Daud, Daniels, Mike and Mencin, Dave, 2017b, TZVOLCANO: OLO7-OLO7_OLO_TZA2017 P.S., UNAVCO, GPS Data Set, doi:10.7283/T5F47MW0
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20.0 SELECTED CONFERENCE PROCEEDINGS AND ABSTRACTS

<u>2023</u>

Stamps, D.S. (plenary) Towards Volcanic Hazards Assessment Using Transient Detection in the Natron Rift, Tanzania, GAGE/SAGE 2023 Community Science Workshop

<u>2022</u>

D.S. Stamps, E. Njinju, A. Kwagalakwe, J. Naliboff, T. Rajaonarison (2022) Continental rifting advances using 3D computational modeling of lithospheric deformation, asthenospheric flow, and deep melt generation with ASPECT, European Geosciences Union Meeting

D.S. Stamps, E. Njinju, A. Kwagalakwe, J. Naliboff, T. Rajaonarison (2022) Continental rifting advances using 3D computational modeling of lithospheric deformation, asthenospheric flow, and deep melt generation with ASPECT, CSDMS Meeting

Stamps, D.S., Kreemer, C., Fernandes, R.M.S., Rajaonarison, T.A.A. and Rambolamanana, G., 2022, December. A Revision of East African Rift System Kinematics from GPS Observations and Block Modeling. In *Fall Meeting 2022*. AGU.

Masungulwa, N.S.D., Stamps, D.S., Ji, K.H. and Saria, E., 2022, December. Transient Signal Detection Using GNSS Measurements of the Active Volcano Ol Doinyo Lengai, Tanzania. In *Fall Meeting 2022*. AGU.

Williams, K., Stamps, D.S., Austermann, J., Rajaonarison, T.A. and Njinju, E., 2022. Towards an Investigation of the Effects of Dynamic Topography on Vertical Land Motions Along the North American Atlantic Coast. *Authorea Preprints*.

Njinju, E.A., Stamps, D.S., Rooney, T.O., Atekwana, E.A. and Rajaonarison, T.A., 2022. Tomography-Based Convection and Melt Generation Beneath the Rungwe Volcanic Province, East Africa. *Authorea Preprints*.

D. Sarah Stamps, Estella Atekwana, Eliot Atekwana, et al. The DRIAR Project: Dry-Rifting In the Albertine-Rhino Graben, Uganda. *Authorea*. January 30, 2022.

Stamps, D.S., C. Kreemer, M-H Huang, K Williams, J Duda, W Moore, P. Hensel, R Hippenstiel (2022), Investigating Vertical Land Motions in the Chesapeake Bay of Eastern North America with GPS and InSAR, In *Fall Meeting 2022*. AGU.

Rui Xu, D.S. Stamps, Euler-pole Clustering of GNSS Velocities Using Unsupervised Machine Learning in the Southeastern Tibetan Plateau: Block Identification and the Dominance of Sinistral-slip Faults (2022), In *Fall Meeting 2022*. AGU.

<u>2021</u>

M. Dye, D. S. Stamps, M. Mason, and E. Saria (2021), Toward autonomous detection of anomalous GNSS data via applied unsupervised artificial intelligence, Third International Conference on Transdisciplinary AI (TransAI), 2021, pp. 85-91, doi: 10.1109/TransAI51903.2021.00023.

Stamps, DS, J Gallagher, S Peckham, A Sheehan, N Potter, K Neumiller, E Njinju, M Stoica, EA Easton, D Fuka, D Fulker (2021), Seamless Long-Tail and Big Data Access via the EarthCube Brokering Cyberinfrastructure BALTO, EarthCube Annual Meeting

D.S. Stamps, J.R. Jones, E. Saria, D. Ntambila, M. Daniels, D. Mencin, K.H. Ji, A. Adams (2021), Implementing Real-Time GNSS Monitoring with the EarthCube Cyberinfrastructure CHORDS for Ol Doinyo Lengai, Tanzania, Seismological Society of America (oral presentation)

Stamps, D.S., Shirzaei, M., Troia, G., Sherpa, S., Hensel, P., Moore, W., Lotspeich, R.R., Duda, J., Williams, K., Kreemer, C. and Weiss, J., 2022. Towards a New Baseline of Vertical Land Motions in the Chesapeake Bay Using GNSS and InSAR. *Authorea Preprints*.

<u>2020</u>

Peckham, S, M Stoica, DS Stamps, J Gallagher, N Potter, D Fulker (2020), The BALTO Jupyter Notebook GUI, Jupyter Meets Earth Meeting

Peckham, S, M Stoica, DS Stamps, J Gallagher, N Potter, D Fulker (2020), The BALTO Jupyter Notebook GUI, EarthCube Annual Meeting

Stamps, DS, J Gallagher, S Peckham, A Sheehan, N Potter, K Neumiller, E Njinju, M Stoica, A Easton, D Fuka, D Fulker (2020), Seamless Long-Tail and Big Data Access via the EarthCube Brokering Cyberinfrastructure BALTO, EarthCube Annual Meeting

Njinju E, DS Stamps, K Neumuller, J Gallagher (2020), Lithospheric control of melt generation beneath the Rungwe Volcanic Province and the Malawi Rift, East Africa, EarthCube Annual Meeting

K Neumiller, J. Gallagher, DS Stamps, E. Njinju, Maria, (2020), Remote data processing inside the ASPECT analysis tool, EarthCube Annual Meeting

<u>2019</u>

DS Stamps, JHR Gallagher, SD Peckham, AF Sheehan, N Potter, M Stoica, EA Njinju, ZM Easton, DW Fulker, DR Fuka (2019) The Open-Source EarthCube Cyberinfrastructure BALTO: Applications in Earth Science, AGU Fall Meeting

Jones, JR, DS Stamps, B Aagaard, C Wauthier (2019) Investigation of Volcano-tectonic Interactions in the Natron Rift of the East African Rift System using Numerical Modeling, AGU Fall Meeting

Daniels, MD, SJ Graves, V Chandrasekar, DS Stamps, B Kerkez, C Martin, SR Gooch, JR Jones, MD Bartos (2019) CHORDS: Helping to build the Internet of Things for the Geosciences (IoT-G), AGU Fall Meeting

Rajaonarison, TA, J Naliboff, DS Stamps (2019) The relationship between lithospheric structure and observed deformation centered on the Eastern Branch of the East Africa Rift System, AGU Fall Meeting

Fuka, DR, ME Apple, JHR Gallagher, DW Fulker, N Potter, R Duerr, MB Wagena, E Lingerfelt, MD Daniels, A Ameko, SD Peckham, K Neumiller, A Collick, EM Bock, RR White, DS Stamps, ZM Easton (2019) IoT Sensors and Their Pathway to HPC, AGU Fall Meeting

Njinju, EA, DS Stamps, JHR Gallagher, K Neumiller (2019) Sources of Melt Generation in the Malawi Rift Implemented with ASPECT and the EarthCube Cyberinfrastructure BALTO, AGU Fall Meeting

<u>2018</u>

Stamps, DS, E Saria, M Daniels, D Mencin, JR Jones, D Ntambila, KH Ji (2018) Tanzania Volcano Observatory (TZVOLCANO): Implementing Real-Time GNSS Monitoring with the EarthCube Cyberinfrastructure CHORDS, poster, UNAVCO Science Workshop

Malloy S, M Stoica, DS Stamps, S Peckham, C Meertens (2018) Towards Open Access GNSS/GPS Velocity Solutions at UNAVCO, UNAVCO Science Workshop

Gallagher, J, N Potter, DS Stamps (2018) Using JSON-LD to power dataset search and discovery in the Hyrax data server, AGU Fall Meeting

Daniels M, B Kerkez, V Chandrasekar, S Graves, DS Stamps, A Botnick, C Martin, K Keiser, R Gooch, JR Jones, M Bartos, C Collins (2018) CHORDS: Building the Internet of Things for the Geosciences (IoT-G), Poster, AGU Fall Meeting

Stamps, DS, J Gallagher, S Peckham, A Sheehan, N Potter, M Stoica, S Malloy, E Njinju, ZM Easton, DR Fuka (2018) Towards Brokered Alignment of Long¬Tail Observations (BALTO), iPoster, AGU Fall Meeting

Malloy S, CM Puskas, M Stoica, DS Stamps, D Phillips, S Peckham (2018) Towards Open Access GNSS/GPS Velocity Solutions at UNAVCO, AGU Fall Meeting

Daniels M, B Kerkez, V Chandrasekar, S Graves, DS Stamps, A Botnick, C Martin, K Keiser, R Gooch, JR Jones, M Bartos, C Collins (2018) Cloud-Hosted Real-time Data Services for the Geosciences (CHORDS): Developing interfaces to systems that visualize, process, analyze and archive real-time geoscience data, poster, EarthCube All-Hands Meeting

Njinju, EA, DS Stamps, S Fishwick (2018) Investigating Seismic Anisotropy Beneath the Malawi Rift, East Africa with Geodynamic Modeling, poster, AGU Fall Meeting

Rajaonarison T, DS Stamps, S Fishwick S, Brune, A Glerum (2018) Small-Scale Flow Induced Azimuthal Seismic Anisotropy beneath Madagascar: Implications for Rheology, poster, AGU Fall Meeting

Stamps, DS, J Gallagher, S Peckham, A Sheehan, N Potter, M Stoica, S Malloy, E Njinju, ZM Easton, DR Fuka (2018) Towards Brokered Alignment of Long-Tailed Observations (BALTO), a, poster, EarthCube All-Hands Meeting

<u>2017</u>

Jones, JR, DS Stamps (2017) A case study in graduate student development, EarthCube All-Hands Meeting, 2017, invited talk

Stamps, DS, E. Saria, J.R. Jones, K.H. Ji, M. Daniels, D. Mencin, D. Ntambila (2017) Potential volcanic deformation signals at Ol Doinyo Lengai in 2017: detection and Response, EarthCube All-Hands Meeting

Schobelock, J, DS Stamps, M Pagani, J Garcia, RH Styron, (2017) The Role of Long-Term Tectonic Deformation on the Distribution of Present-Day Seismic Activity in the Caribbean and Central America, AGU Fall Meeting

Stamps, D.S., E Saria, T. Rajaonarison (2017) Advances in the kinematics and dynamics of Africa, AfricaArray Meeting

T Nguyen, D.S. Stamps (2017) Visualizing TZVOLCANO GNSS Data with Grafana via the EarthCube Cyberinfrastructure CHORDS: an Example of Dashboard Creation for the Geosciences, AGU Fall Meeting

Stamps, DS, C. Kreemer, T Rajaonarison (2017) Is Active Tectonics on Madagascar Consistent with Somalian Plate Kinematics?, AGU Fall Meeting

Njinju, E, E Atekwana, DS Stamps, M Abdelsalam, VA Nyalugwe (2017) Evidence for crustal and subcontinental lithospheric mantle decoupling beneath the Malawi Rift, AGU Fall Meeting

Kolawole, F, EA Atekwana, S Malloy, DS Stamps, R Grandin, MG Abdelsalam, K Leseane, EM Shemang (2017) April 3, 2017 Mw 6.5 Moiyabana, Botswana Earthquake resulted from extensional reactivation of Precambrian Limpopo Belt thrust splay: Evidence from potential field data and Differential Interferometric Synthetic Aperture Radar (DInSAR) analyses, AGU Fall Meeting

Jones, JR, DS Stamps, C. Wauthier, MD Daniels, E Saria, Elifuraha, K-H Ji, D Mencin, D Ntambila (2017) Implementing real-time GNSS monitoring to investigate continental rift initiation processes, AGU Fall Meeting

Jones, JR, J Schobelock, TT Nguyen, TA Rajaonarison, S Malloy, EA Njinju, L Guerra, DS Stamps, GB Glesener (2017) A Hands-on Physical Analog Demonstration of Real-Time Volcano Deformation Monitoring with GNSS/GPS, AGU Fall Meeting

Malloy, S. DS Stamps (2017) Implications of Seismically Active Fault Structures in Ankay and Alaotra Regions of Central Madagascar, AGU Fall Meeting Abstracts

Rajaonarison, TA, Stamps, DS, Fishwick, Stewart (2017) Geodynamic Constraints on the Sources of Seismic Anisotropy Beneath Madagascar, AGU Fall Meeting

Muirhead, J, H Lee, SA Kattenhorn, TP Fischer, CJ Ebinger, S Mana, BD Turrin, G Kianji, E Dindi, SW Roecker, SJ Oliva, A Weinstein, DS Stamps (2016) Early-stage continental rifting in East Africa assisted by magma and magmatic Volatiles, AGU Fall Meeting Abstracts

<u>2016</u>

Rajaonarison, T.A., DS Stamps (2016) The Malagasy Lithosphere-Asthenosphere System Constrained by Independent Initial Temperature Conditions: Implications for Extensional Processes, AGU Fall Meeting Abstracts

Jones, JR, DS Stamps (2016) Investigating Stress Interactions Between the Active Ol Doinyo Lengai Volcano and Adjacent Natron Border Fault in a Young Segment of the East African Rift System, AGU Fall Meeting Abstracts

Stamps, DS, E Saria, JR Jones, MD Daniels, D Mencin (2016) Tectono-Magmatic Investigations with Societal Implications: Progress on the Tanzania Volcano Observatory (TZVOLCANO, AGU Fall Meeting Abstracts

Schobelock, J., DS Stamps (2016) Toward a Regional Tectonic Strain Rate Model: A Geodetic Model of the Caribbean and Central America, AGU Fall Meeting Abstracts

Daniels, MD, B Kerkez, V Chandrasekar, SJ Graves, DS Stamps, MJ Dye, K. Keiser, CL Martin, SR Gooch (2016) Using Cloud-Hosted Real-time Data Services for the Geosciences (CHORDS) in a range of geoscience applications, AGU Fall Meeting Abstracts

<u>2015</u>

Kreemer, G. Blewitt, DS Stamps, E. Saria (2015), Plate Tectonics 2.0: Using GPS to Refine Global Crustal Kinematics and Rewrite Textbooks, American Geophysical Union Fall Meeting.

Stamps, DS, T. Rajaonarison, and G. Rambolamanana (2015), Continental Deformation in Madagascar from GNSS Observations (Invited), American Geophysical Union Fall Meeting.

Stamps, DS, W. Bangerth, B. Hager, C. Kreemer, and E. Saria (2015), Kinematics and Dynamics of Observed Along-Rift Surface Motions in the East African Rift System, American Geophysical Union Fall Meeting.

Stamps, DS, W. Bangerth, and B. Hager (2015), Topside Driven 3D Convection Model of the East African Rift System with Comparison to Observed Rift-Parallel Surface Motions, LPI Contributions, 1839, 5019, Caltech.

Stamps, DS, W. Bangerth, and B. Hager (2015), Influence of Edge-Driven 3D Convection on Mantle-Lithosphere Interactions in East Africa, 14th International Workshop on Modelling of Mantle and Lithospheric Dynamics, France.

21.0 PRE-FACULTY CONFERENCES AND WORKSHOPS

Nov 2014	UNAVCO Field Education Workshop, USA
16 0014	

May 2014 ASPECT Hack-a-thon, USA

Dec 2005-14 American Geophysical Union Fall Meeting, USA

CIG Mantle-Lithosphere Dynamics Workshop, USA		
ExxonMobil Student Scientist Conference, USA		
AfricaArray Workshop, USA		
Advanced Workshop on Monitoring, Evaluating, and Communicating Seismic and		
Volcanic Hazards in East Africa – Trieste, Italy		
NSF MARGINS Rupturing Continental Lithosphere Workshop, USA		
European Geosciences Union, Austria		
Purdue Univ. Sigma Xi Research Forum, USA		
Purdue Univ. Ecological Sciences and Engineering Symposium, USA		
Purdue Univ. Earth & Atmospheric Sci. Graduate Student Expo, USA		
MAERC Research Experiences for Undergraduates, USA		
International Conference on the East African Rift - Kampala, Uganda		
UNAVCO Science Workshop, USA (special session leader, 2012)		
UNAVCO GAMIT/GLOBK Workshop, USA		
Tennessee Honors Council, USA		

22.0 FIELDWORK EXPERIENCE

Uganda	GNSS deployment, student training, PI	2022
Kenya	GNSS deployment, student training, PI	2017, 2019
Hampton Roads, VA	GNSS campaigns, student training, PI	2018, 2019, 2021
Rainbow Basin, CA	Geologic Mapping course, instructor	2015
Madagascar	GPS campaigns, student training, PI	2010, 2012, 2014
Uganda	GPS campaign, training, PI	2007-2010, 2012, 2014, 2018
La Jolla, California	Sedimentology	2011
Tanzania	GPS campaign, co-leader, PI	2006, 2008, 2012, 2014, 2016,
		2017, 2019
Haiti	GPS campaign, geodesist	2010
Texas and New Mexico Geologic mapping		2010
Black Hills, South Dakota	Geologic mapping	2007
Death Valley, California	Stratigraphy and mapping	2006
Northern Caribbean	GPS campaign	2005
New Madrid Seismic Zone	GPS network maintenance	2005-2007