Curriculum Vitae

Notarization. I have read the following and certify that this *curriculum vitae* is a current and accurate statement of my professional record.

Signatur Date **November 22, 2016**

I. Personal Information

I.A. UID, Last Name, First Name, Middle Name, Contact Information

UID 110425700

Evans, Michael, Neil

University of Maryland

Department of Geology and Earth System Science Interdisciplinary Center

Geology Bldg. (#237), Rm 1120

8000 Regents Dr

College Park, MD 20742

Phone: (301) 405-8763

email: mnevans@umd.edu

Internet: http://one.geol.umd.edu/

Google Scholar public profile at: http://scholar.google.com/citations?user=R7k9AvMAAAAJ

I.B. Academic Appointments at UMD

2008–present, Associate Professor, Geology & ESSIC

2009–present, Affiliate Assoc. Prof., Atmos. & Oceanic Sciences

2009–present, Affiliate Assoc. Prof., Appl. Math and Sci. Computing

I.C. Administrative Appointments at UMD

I.D. Other Employment

1992–1999, Graduate Fellow, Columbia University

1999–2000, Postdoctoral Research Scientist, Lamont-Doherty Earth Observatory, Columbia University

2000–2001, NCAR Climate & Global Change Postdoctoral Fellow, Earth & Planetary Sciences, Harvard University

2001–2007 Assistant Professor, Laboratory of Tree-Ring Research, University of Arizona

2003–2008 Courtesy Asst. Prof., Geosciences, University of Arizona

2004–2008 Joint appointment, Atmospheric Sci., University of Arizona

2007–2008 Associate Prof., Laboratory of Tree-Ring Research, University of Arizona

2008–present Adj. Assoc. Prof., Laboratory of Tree-Ring Research, University of Arizona

I.E. Educational Background

1988–1992, A.B. *magna cum laude*, Special Concentration in Environmental Science and Policy, Harvard College

1992–1999 Ph.D., Earth and Environmental Sciences, Columbia University

I.F. Professional Certifications and Licenses

II. Research, Scholarly and Creative Activities

⋆ Senior author
Corresponding or presenting author underlined
♣ Undergraduate student
† Graduate student
‡Postdoctoral research scientist
§Invited contribution for workshop, conference or journal

II.A. Books *(include full citation information and ISBN)*

II.A.1. Books Authored *(specify original or revised edition)*

II.A.2. Books Edited

II.A.3. Books Translated *(as translator)*

II.A.4. Textbooks

II.A.5. Major Reference Works

II.A.6. Exhibition Catalogs

II.A.7. Other

II.B. Chapters

II.B.1. Books

2011 Vaganov, E.A., K.J. Anchukaitis† and **M.N. Evans**, How well understood are the processes that create dendroclimatic records? A mechanistic model of the climatic control on conifer tree-ring growth dynamics, in: M.K. Hughes, T.W. Swetnam and H.F. Diaz (eds), Dendroclimatology: Progress and Prospects, Springer-Verlag, 365pp.

2004 **Evans, M.N.** and A. Kaplan, The Pacific sector Hadley and Walker Circulation in historical marine wind analyses: Potential for reconstruction from proxy data, in H.F. Diaz and R.S. Bradley (eds.), The Hadley Circulation: Past, Present, Future, Vol. 21 in: Advances in Global Change Research, Springer (ISBN: 1-4020-2943-8), 511pp.

2001 **Evans, M.N.**, A. Kaplan, M.A. Cane and R. Villalba, Globality and Optimality in Climate Field Reconstructions from Proxy Data, in V. Markgraf (ed.), Inter-hemispheric Climate Linkages, Cambridge University Press, 2001, pp. 53–72.

1999 Bond, G.C., W. Showers, M. Elliot, **M. Evans**, R. Lotti, and S. Johnson, Tracing the North Atlantic's $\approx$ 1.5 kyr Climate Cycle to 80 Kyrs B.P. - Relation to Heinrich Events, Dansgaard/Oeschger Cycles and the Little Ice Age, in Mechanisms of Global Climate Change at Millennial Time Scales, ed. P.U. Clark, R.S. Webb, and L.D. Keigwin. Washington, D.C.: American Geophysical Union (AGU), Geophysical Monograph Series, 112.

II.B.2. Collections

II.B.3. Encyclopedia

II.B.4. Series

II.B.5. Research Paper

II.B.6. Other

II.C. Articles in Refereed Journals

2016 Abram, N.J., H.V. McGregor, J.E. Tierney, **M.N. Evans**, N.P. McKay, D.S. Kaufman and the PAGES 2k Consortium, Early onset of industrial-era warming across the oceans and continents, Nature 536, 411–418, DOI: 10.1038/nature19082, dataset and reconstructions archived as: Global and Regional 500 Year Temperature Reconstructions, https://www.-ncdc.noaa.gov/paleo/study/20083, 8/2016.

2016 **Evans, M.N.**, K.J. Selmer†, B.T. Breeden†, A.S. Lopatka†, R.E. Plummer, Correction algorithm for on-line continuous flow δ^{13}C and δ^{18}O carbonate and cellulose stable isotope analyses, G-Cubed, DOI: 10.1002/2016GC006469.

2016 Lorrey, A.M., T.H. Brookman†, **M.N. Evans**, N.C. Fauchereau, C. Macinnis-Ng, M.A. Barbour, A. Criscitiello, G. Eischeid, A.M. Fowler, T.W. Horton and D.P. Schrag, Stable oxygen isotope signatures of early season wood in New Zealand kauri *Agathis australis* tree rings: Prospects for palaeoclimate reconstruction, Dendrochronologia, 40, 1-14, DOI: 10.1016/j.dendro.2016.03.012.

2016 Zeng, X.†, X. Liu, **M.N. Evans**, W. Wang, W. An, G. Xu, G. Wu, Seasonal incursion of Indian monsoon humidity and precipitation onto the southeastern Tibetan Plateau inferred from intra-seasonal resolution tree ring oxygen isotopic measurements, Earth and Planetary Sci. Letters, 443, 9-19, DOI: 10.1016/j.epsl.2016.03.011.

2015 PAGES2k-PMIP3 group (including H. Goosse and **M.N. Evans**), Continental-scale temperature variability in PMIP3 simulations and PAGES 2k regional temperature reconstructions over the past millennium, Clim. Past., DOI: 10.5194/cp-11-1673-2015, www.clim-past.net/11/1673/2015/.

2015 McGregor, H.V., **M.N. Evans**, H. Goosse, G. Leduc, B. Martrat, J.A. Addison, P.G. Mortyn, D.W. Oppo, M.-S. Seidenkrantz, M.-A. Sicre, S.J. Phipps, K. Selvaraj, K. Thirumalai, H.L. Filipsson and V. Ersek, Robust global ocean cooling trend for the pre-industial Common Era, Nat. Geosci., DOI: 10.1038/NGEO2510, dataset archived as: PAGES Ocean2k Synthesis Data Set, www.ncdc.noaa.gov/paleo/study/18718, 8/2015.

2015 Zhang, Q.-B., **M.N. Evans**, and L. Lyu, Moisture dipole over the Tibetan Plateau during the past five and a half centuries, Nat. Comm., 6, 8062, doi: 10.1038/ncomms9062.

2015 Comboul, M.E.‡, J. Emile-Geay, G.J. Hakim, **M.N. Evans**, Paleoclimate sampling as a sensor placement problem, J. Clim., 28(19), 7717-7740, DOI: 10.1175/JCLI-D-14-00802.1.

2015 Dee, S.†, J. Emile-Geay, **M.N. Evans**, A. Allam, E.J. Steig, D.M. Thompson, PRYSM: An open-source framework for PRoxY System Modeling, with applications to oxygen isotope systems, J. Adv. Mod. Earth Sys., 7(3), 1220-1247, doi: 10.1002/2015MS000447.

2015 Tierney, J.E., N.J. Abram, K.J. Anchukaitis, **M.N. Evans**, C. Giry, K.H. Kilbourne, C.P. Saenger, H.C. Wu, J. Zinke, Tropical sea surface temperature for the past four centuries reconstructed from coral archives, Paleoceanography, 30, doi: 10.1001/2014PA002717, dataset and reconstructions archived as: PAGES Ocean2K 400 Year Coral Data and Tropical SST Reconstructions, http://ncdc.noaa.gov/paleo/study/17267, 3/2015.

2014 **Evans, M.N.**, J.E. Smerdon, A. Kaplan, S.E. Tolwinski-Ward and J.F. Gonzalez-Rouco, Climate field reconstruction uncertainty arising from multivariate and nonlinear properties of predictors, Geophysical Res. Lett., DOI: 10.1002/2014GL062063.

2014 Boysen, B.M.M.♣, **M.N. Evans**, P.J. Baker, δ^{18}O in the tropical conifer *Agathis robusta* records ENSO-related precipitation variations, PLOS One, 9(7), doi: 10.1371/journal.pone.0102336.

2014 Tolwinski-Ward, S.E.†, M.P. Tingley, **M.N. Evans**, M.K. Hughes, and D.W. Nychka, Probabilistic reconstructions of local temperature and soil moisture from tree-ring data with potentially time-varying climatic response, Clim. Dyn., doi: 10.1007/s00382-014-2139-z.

2014 Comboul, M.E.‡, J. Emile-Geay, **M.N. Evans**, N. Mirnateghi, K.M. Cobb and D.M. Thompson‡, A probabilistic model of chronological errors in layer-counted climate proxies: applications to annually-banded coral archives, Clim. Past., 10, 825-841, doi: 10.5194/cp-10-825-2014.

2013 §**M.N. Evans**, S.E. Tolwinski-Ward†, D.M. Thompson†, and K.J. Anchukaitis, Applications of proxy system modeling in high resolution paleoclimatology, Quat. Sci. Rev., 76, 16–28, doi: 10.1016/j.quascirev.2013.05.024.

2013 Tolwinski-Ward, S.E.†, K.J. Anchukaitis and **M.N. Evans**, Bayesian parameter estimation and interpretation for an intermediate model of tree-ring width, Clim. Past., 9, 615–645, doi: 10.5194/cp-9-1481-2013.

2012 Anchukaitis, K.J., P. Breitenmoser, K.R. Briffa, A. Buchwal, U. Buntgen, E.R. Cook, R.D. D'Arrigo, J. Esper, **M.N. Evans**, D. Frank, Gunnarson, B.E., M.K. Hughes, A.V. Kirdyanov, C. Korner, P.J. Krusic, B. Luckman, T.M. Melvin, M.W. Salzer, A.V. Shashkin, C. Timmreck, E.A. Vaganov, R.J.S. Wilson, Tree rings and volcanic cooling, Nature Geosci., doi: 10.1038/ngeo1645.

2011 Thompson, D.M.†, T.R. Ault†, **M.N. Evans**, J.E. Cole, and J. Emile-Geay, Comparison of observed and simulated tropical climate trends using a forward model of coral δ^{18}O, Geophys. Res. Lett., doi: 10.1029/2011GL048224.

2011 Smerdon, J.E., A. Kaplan, E. Zorita, J.F. Gonzlez-Rouco, and **M.N. Evans**, Spatial Performance of Four Climate Field Reconstruction Methods Targeting the Common Era, Geophys. Res. Lett., doi: 10.1029/2011GL047372.

2011 Tolwinski-Ward, S.E.†, **M.N. Evans**, M.K. Hughes, K.J. Anchukaitis‡, An efficient forward model of the climate controls on interannual variation in tree-ring width, Clim.

Dyn., doi:10.1007/s00382-010-0945-5. An Erratum is in Vol. 36(11-12), 2441-2445, doi: 10.1007/s00382-011-1062-9.

2010 Smerdon, J.E., A. Kaplan, D. Chang♣, and **M.N. Evans**, A pseudoproxy evaluation of the CCA and RegEM methods for reconstructing climate fields of the last millennium, J. Clim., 23, 4856-4880, doi: 10.1175/2010JCLI3328.1. This article was subject to a corrigendum because of a production error at the publisher; see doi: 10.1175/2010JCLI4110.1.

2010 Anchukaitis, K.J.† and **M.N. Evans**, Tropical cloud forest climate variability and the demise of the Monteverde Golden Toad, Proc. Nat'l Acad. Sci., doi: 10.1073/pnas.0908572107.

2009 Wilson, R.J.S., E.R. Cook, E., R.D. DArrigo, N. Riedwyl, **M.N. Evans**, A.W. Tudhope and R.J. Allan, Reconstructing ENSO – Methods, Proxy Data and Teleconnections, J. Quat. Sci., 25(1), Special Issue SI, 62-78.

2009 Ault, T.R.†, J.E. Cole, **M.N. Evans**, H. Barnett†, N.J. Abram, A.W. Tudhope, B.K. Linsley, Intensified decadal tropical climate variability during the late 19th century, Geophys. Res. Lett., 36, L08602, DOI: 10.1029/2008GL036924.

2008 **Evans, M.N.**, A reactor for high temperature pyrolysis and oxygen isotopic analysis of cellulose via induction heating, Rapid Comm. Mass Spectrom., 22: 2211-2219, DOI:10.1002/rcm.3603.

2008 Anchukaitis, K.J.†, **M.N. Evans**, N.T. Wheelwright, D.P. Schrag, 2008: Stable isotope chronology and climate signal calibration in neotropical montane cloud forest trees, J. Geophys. Res., 113, G03030, DOI: 10.1029/2007JG000613.

2008 Anchukaitis, K.J.†, **M.N. Evans**, T. Lange, D.R. Smith, S.W. Leavitt and D.P. Schrag, Consequences of a rapid cellulose extraction technique for oxygen isotope and radiocarbon analyses, Analytical Chemistry, 10.1021/ac7020272.

2007 St. George, R.S.†, D.M. Meko, and **M.N. Evans**, Regional tree growth and inferred summer climate in the Winnipeg River Basin, Canada, since AD 1783, Quaternary Research, 70(2), 158-172, DOI:10.1016/j.yqres.2008.004.009.

2007 **Evans, M.N**, Toward forward modeling for paleoclimatic proxy signal calibration: a case study with oxygen isotopic composition of tropical woods, Geochemistry, Geophysics, Geosystems, 8, Q07008, DOI:10.1029/2006GC001406.

2006 **Evans, M.N.**, B.K. Reichert‡, A. Kaplan, K.J. Anchukaitis†, E.A. Vaganov, M.K. Hughes and M.A. Cane, A forward modeling approach to paleoclimatic interpretation of tree-ring data, J. Geophys. Res., 111, G03008, doi:10.1029/2006JG000166.

2006 Anchukaitis, K.J.†, **M.N. Evans**, A. Kaplan, E.A. Vaganov, M.K. Hughes, H.D. Grissino-Mayer, M.A. Cane, Forward modeling of regional scale tree-ring patterns in the southeastern United States and the recent influence of summer drought, Geophysical Research Letters, 33, L04705, doi:10.1029/2005GL025050.

2005 Rodriguez, R., A. Mabres, B. Luckman, **M. Evans**, M. Masiokas and T. Ektvedt, El Niño events recorded in dry-forest species of the lowlands of northwest Peru, Dendrochronologia, 22, 181-187.

2004 Poussart, P.F., **M.N. Evans** and D.P. Schrag, Resolving seasonality in tropical trees: multi-decade, high-resolution oxygen and carbon isotopic records from Indonesia and Thailand, Earth and Planetary Science Letters, 218, 301-316.

2004 **Evans, M.N.** and D.P. Schrag, A stable isotope-based approach to tropical dendroclimatology, Geochim. et Cosmochim. Acta, 68(16), 3295-3305, DOI: 10.1016/j.gca.2004.01.006.

2002 **Evans, M.N.**, A. Kaplan and M.A. Cane, Pacific sea surface temperature field reconstruction from coral δ^{18}O data using reduced space objective analysis, Paleoceanography, 17, DOI: 10.1029/2000PA000590.

2001 **Evans, M.N.**, M.A. Cane, D.P. Schrag, A. Kaplan, B.K. Linsley, R. Villalba and G.M. Wellington, 2001: Support for tropically-driven Pacific decadal variability based on paleoproxy evidence, Geophysical Research Letters, 28, 3,689-3692, 2001.

2001 Bond, G.C., B. Kromer, J. Beer, R. Muscheler, **M.N. Evans**, W. Showers, S. Hoffman, R. Lotti-Bond, I. Hajdas, and G. Bonani, Persistent Solar Influence on North Atlantic Climate During the Holocene, Science, 294, 2130–2136, 2001.

2000 **Evans, M.N.**, A. Kaplan and M.A. Cane, Intercomparison of coral oxygen isotope data and historical sea surface temperature (SST): Potential for coral-based SST field reconstructions, Paleoceanography, 15(5), 551–563.

1999 Black, D.E., L.C. Peterson, J.T. Overpeck, A. Kaplan, **M.N. Evans**, and M. Kashgarian, M., Eight centuries of North Atlantic Ocean Atmosphere variability, Science, 286, 1709–1713.

1999 **Evans, M.N.**, R.G. Fairbanks, and J.L. Rubenstone, The thermal oceanographic signal of ENSO reconstructed from a Kiritimati Island coral, J. Geophys. Res., 104, 13,409–13,421.

1998 **Evans, M.N.**, R.G. Fairbanks and J.L. Rubenstone, A proxy index of ENSO teleconnections, Nature, 394, 732-3.

1998 **Evans, M.N.**, A. Kaplan, and M. A. Cane, Optimal sites for coral-based reconstruction of sea surface temperature, Paleoceanography, 13, 502–516.

1997 Fairbanks, R.G., **M.N. Evans**, J.L. Rubenstone, R.A. Mortlock, K. Broad, M.D. Moore, and C.D. Charles, Evaluating climate indices and their geochemical proxies measured in corals, Coral Reefs, 16(Suppl.), S93-S100.

II.D. Published Conference Proceedings

II.D.1. Refereed Conference Proceedings

II.D.2. Non-Refereed Conference Proceedings

II.D.3. Historical Conference Proceedings (10+ years ago)

II.D.4. Other

II.E. Conferences, Workshops, and Talks

II.E.1. Keynotes

2013 **M.N. Evans**§, Modeling and interpretation of paleodata, keynote lecture delivered at the 12th International Swiss Climate Summer School "From Climate Reconstructions to Climate Predictions", Grindelwald, Switzerland, 1-6 Sept.

2011 **M.N. Evans**§, S.E. Tolwinski-Ward†, D.M. Thompson†, K.J. Anchukaitis, Applications of proxy system modeling in high resolution paleoclimatology, talk presented at the INQUA XVIII Congress, Bern, Switzerland, July.

2007 **M.N. Evans**§, "Tropical isotope dendroclimatology" – problems and possible benefit, Workshop on Stable isotopes and dendroclimatology – Current Status and Future Prospects, European Science Foundation, Potsdam, Germany, 15 Feb.

II.E.2. Invited Talks

2017 planned **M.N. Evans**§, Building a PAGES working group: Lessons from Ocean2k, Morillo de Tou, Spain, 7-9 May.

2016 **M.N. Evans**§ and H.V. McGregor, The PAGES2k network: Overview and recent progress, University of Wollongong, Wollongong, NSW Australia, 4 August.

2016 **M.N. Evans**§ and H.V. McGregor, The PAGES2k network: Overview and recent progress, Australian Nuclear Science and Technology Organization, Lucas Heights, NSW Australia, 2 August.

2016 **M.N. Evans**§ and N.J. Abram, The PAGES2k network: Overview and recent progress, Australian National University, Canberra, NSW Australia, 29 July.

2016 M.S. Allen and **M.N. Evans**§, On the Tail of the Tuna and the Road of the Winds: Past and Future Human-Climate Interactions in Tropical Polynesia, University of Washington Quaternary Research Center, Seattle, Washington, 12 May 2016 (invited talk and panel discussion in conjunction with collaborator Melinda S. Allen).

2016 **M.N. Evans**§, The PAGES/Ocean2k Project: Past and Future, University of Maryland Center for Environmental Science/Chesapeake Bay Laboratory, Solomons, MD, 27 Jan.

2015 **M.N. Evans**§, The Ocean2k project: Introduction and welcome to the first in-person conference; a vision for phase 2, Barcelona, Spain, 4 Oct (not delivered because of personal situation).

2015 **M.N. Evans**§, Climate change fingerprinting using paleoclimate observations directly, Oeschger Center for Climate Change Research Biannual Colloquium, Bern, Switzerland, 3 Sept.

2015 **M.N. Evans**§, Proxy system modeling: Principles, Applications, Challenges, Last Millennium Reanalysis Project Workshop on Proxy System Modeling, Catalina Island, CA, 4 May.

2014 J. Emile-Geay§, S.G. Dee, **M.N. Evans**, J. Adkins, The Paleoclimate Uncertainty Cascade: Tracking Proxy Errors Via Proxy System Models, Abstract PP44B-01 presented at the AGU Fall Meeting, San Francisco, 15-19 Dec.

2014 M. Comboul‡ §, J. Emile-Geay, **M.N. Evans**, N. Mirnateghi‡, K. Cobb, D. Thompson‡, A Probabilistic Model of Chronological Errors in Layer-Counted Climate Proxies, Abstract PP44B-04 presented at the AGU Fall Meeting, San Francisco, 15-19 Dec.

2014 **M.N. Evans**§ and the Ocean2k Working Group, Marine surface temperature records for the past two millennia: the PAGES/Ocean2k project, USGS/Powell Center/PAGES Nam2K Workshop, Fort Collins, CO, 23-27 June.

2013 J. Emile-Geay§, M. Comboul‡, D. Guillot, **M.N. Evans**, T. Correge, M. Carre, R.E. Driscoll, M. Elliott, H.V. McGregor, A.W. Tudhope, J.E. Cole, B. Rajaratnam, Multiproxy reconstructions of the El Niño-Southern Oscillation: Progress and Challenges, Abstract PP23D-08 presented at the 2013 Fall Meeting, AGU, San Francisco, Calif., 9-13 Dec.

2013 **Evans, M.N.**§, G.A. Schmidt, Uncertainty estimation for intercomparison of paleoclimatic observations and simulations, Abstract PP41D-01 presented at the 2013 Fall Meeting, AGU, San Francisco, Calif., 9-13 Dec.

2013 M. Widmann§, H. Goosse§, and **M.N. Evans**§, Data assimilation for reconstructing paleoclimate, PMIP3/PAGES2K workshop on integrated analyses of reconstructions and multi-model simulations for the past two millennia, Madrid, Spain, 4-6 Nov.

2013 Tierney, J.E.§, N. Abram, K. Anchukaitis, **M. Evans**, C. Giry, H. Kilbourne, C. Saenger, H. Wu, J. Zinke and the Ocean2k Working Group, Tropical SSTs for the past 400 years: A synthesis of coral archives, Lecture L-012 delivered at the 11th International Conference on Paleoceanography, Barcelona, Spain, 1-6 Sept.

2013 **M.N. Evans**§, Marine surface climate change over the past two millennia: First-order results from the PAGES/Ocean2k project, Northern Illinois University, Geology and Environmental Sciences, 25 April.

2012 **M.N. Evans**§, S.E. Tolwinski-Ward†, D.M. Thompson†, K.J. Anchukaitis, Applications of proxy system modeling in high resolution paleoclimatology, Abstract PP23E-06 presented at the 2012 Fall Meeting, AGU, San Francisco, Calif., 5-9 Dec.

2012 **M.N. Evans**§ and the Ocean2K Working Group, Synthesis of marine sediment-derived sea surface temperature records for the past 2 millennia: First-order results from the PAGES/-Ocean2K project, Department of Earth and Planetary Sciences, Johns Hopkins University, Sept. 20.

2012 M.N. Evans§, An introduction to ENSO theory, history and outstanding questions, National Institute of Water and Atmosphere, Auckland, New Zealand, 1 Jul.

2011 M.N. Evans§ and A. Kaplan, Pacific Basin ensemble SST field reconstructions from marine paleoproxy data, Lamont-Doherty Earth Observatory Hydroclimatology seminar series, Palisades, NY, Nov 9.

2011 M.N. Evans§, Paleodata for Bayesians: A primer, Bayesian Hierarchical Models for High-Resolution Climate Reconstructions. 24-25 March 2011, NCAR, Boulder CO.

2010 §**M.N. Evans**, What can historical climate analysis "learn" from paleoclimate reconstructions?, 11th International Meetings in Statistical Climatology, Edinburgh, Scotland, 12-16 Jul.

2010 M.N. Evans§ and A. Kaplan, Coral-based, multicentury, ensemble climate field reconstructions of Pacific basin sea surface temperatures, First Australasian (AUS2K) PAGES Regional Workshop: Towards Data Synthesis, Melbourne, Australia, 31 May - 2 June.

2010 M.N. Evans§, Applications of proxy system modeling in climate field reconstruction, CSCAMM seminar series, Univ. Maryland, 28 Apr.

2009 §**M.N. Evans**, What caused the late 16th century drought across western North America? Atmospheric and Oceanic Sciences Dept., Univ. Maryland, 12 Mar.

2010 M.N. Evans§, Are there lessons for historical climate field reconstruction from paleoclimatology? CICS seminar series, Univ. Maryland, 25 Mar.

2009 M.N. Evans§, What caused the late 16th century drought across western North America? Atmospheric and Oceanic Sciences Dept., Univ. Maryland, 12 Mar.

2008 M.N. Evans§, K.J. Anchukaitis, S.R. White, T.M. Ektvedt†, R.C. Penniston♣, M.M. Rheaume♣, D.M. Bowman, Prospects and challenges in tropical isotope dendroclimatology, Eos Trans. AGU, 89(53), Fall Meet. Suppl. Abstract PP52A-01, 15-19 Dec.

2008 M.N. Evans§, Sources of uncertainty in tree-ring proxy data and reconstructions based on them, with some notes on ways forward, Workshop on Studying Uncertainty in Paleoclimate Reconstructions (SUPRAnet), Leverhulme Trust and NERC, Sheffield, UK, 24 June.

2008 M.N. Evans§, Adventures in materials science: induction-derived pyrolysis and oxygen isotope analysis for paleoclimatology, Geochemistry seminar series, Geology Dept., Univ. Maryland, 8 Oct.

2008 K.J. Anchukaitis§ and **M.N. Evans**, High resolution tropical isotope dendroclimatology: Prospects and challenges, Abstract 1502, Goldschmidt 2008, Vancouver, CA, July 13-18.

2008 M.N. Evans§, Coral-based, multiproxy, multicentury, ensemble climate field reconstructions of Pacific Basin sea surface temperatures, Workshop on reconciling ENSO chronologies for the past 500 years, NOAA/METEO-France, Moorea, French Polynesia, 2-3 April.

2007 K.J. Anchukaitis† §, **M.N. Evans**, R.D. D'Arrigo, J.E. Smerdon, M.K. Hughes, A. Kaplan, E.A. Vaganov, Process model simulations of the divergence effect, Eos Trans. AGU, 88(52), Fall Meet. Suppl. Abstract PP54A-08.

2007 **M.N. Evans**§, Tracking ENSO with tropical trees: Chronology, calibration and case studies, Tree-Ring Day 2007, University of Arizona, 30 Nov.

2007 **M.N. Evans**§, Tracking ENSO with tropical trees: Chronology, calibration and case studies, Laboratory of Tree-Ring Research Summer School in Dendrochronology, University of Arizona, 22 May.

2007 **M.N. Evans**§, How will El Niño change in a greenhouse world? NSF/ADVANCE Data Blitz Series, University of Arizona, 19 Apr.

2007 **M.N. Evans**§, Tracking ENSO with tropical trees: Chronology, calibration and case studies, IGERT in Archaeological Sciences Colloquium, University of Arizona, 2 Feb.

2006 **M.N. Evans**§, A stable isotope approach to tropical dendroclimatology, invited lecture, course in isotope dendrochronology, University of Arizona, 7 Nov.

2006 **M.N. Evans**§, Applications of process modeling in high resolution paleoclimatology, Dept. of Atmospheric Sciences/Laboratory of Tree-Ring Research, University of Arizona, 19 Sept.

2006 **M.N. Evans**§, A stable isotope approach to tropical dendroclimatology, Carleton College, Northfield, Minnesota, 24 May.

2006 **M.N. Evans**§, Research in paleoclimatology, Undergraduate Biology Research Program, University of Arizona, 2 Mar.

II.E.3. Refereed Presentations

II.E.4. Refereed Abstracts

II.E.5. Refereed Posters

II.E.6. Refereed Panels

II.E.7. Non-Refereed Presentations

2016 Schollaert-Uz, S.†, A.J. Busalacchi, T.M. Smith, **M.N. Evans**, C. Brown, The impact of multi-decadal sub-surface circulation changes on sea surface chlorophyll patterns in the tropical Pacific, Abstract OS43C-03 to be presented at the AGU Fall Meeting, San Francisco, 12-16 Dec.

2016 Trachsel, M., **M.N. Evans**, G.C. Duke, K. Ide, Towards a proxy model for maximum latewood density, Abstract PP33D-08 to be presented at the AGU Fall Meeting, San Francisco, 12-16 Dec.

2016 Saenger, C.P. and **M.N. Evans**, Proxy surrogate reconstructions of Common Era Atlantic meridional overturning circulation, Abstract PP52A-03 to be presented at the AGU Fall Meeting, San Francisco, 12-16 Dec.

2016 Evans, M.N. and the PAGES 2k Working Groups, PAGES 2k - Overview of recent products and progress, PAGES Central and Eastern Europe Paleoscience Symposium: From Local to Global, Cluj, Romania, 23 May.

2015 Addison, J.A. and the PAGES2K Consortium (including **M.N. Evans**), The importance of cooperation in international paleoclimate science: examples from the PAGES 2k Network and its Ocean2k regional working group, Abstract PA23A-2189 presented at the AGU Fall Meeting, San Francisco, 14-18 Dec.

2014 N. English, R. Duffy, D. Balanzategui, P. Baker, **M. Evans**, The Reconstruction Potential of a 350 year-long, Mid-Elevation Proxy for PDSI in a Tree-Ring Record from Tropical North Queensland, Australia, Abstract PP33A-1218 presented at the AGU Fall Meeting, San Francisco, 15-19 Dec.

2014 S.G. Dee†, J. Emile-Geay, **M.N. Evans**, D.C. Noone, A Proxy System Modeling Toolbox for Comparing Water Isotope Observations to Simulations, Abstract PP34B-05 presented at the AGU Fall Meeting, San Francisco, 15-19 Dec.

2014 M. Comboul‡, J. Emile-Geay, G. Hakim, **M.N. Evans**, Paleoclimate Sampling as a Sensor Placement Problem, Abstract PP22A-07 presented at the AGU Fall Meeting, San Francisco, 15-19 Dec.

2014 N. Abram and the PAGES/Ocean2k Working Group (including **M.N. Evans**), Progression of Recent Warming Trends Across the Continents and Oceans, Abstract PP33A-1211 presented at the AGU Fall Meeting, San Francisco, 15-19 Dec.

2014 I.S. Nurhati, **M.N. Evans** and R. D'Arrigo, Indonesian tree isotope records of ENSO-sensitive rainfall variations, Abstract BG01-A009, 11th Annual AOGS Meeting, Hokkaido, Japan, 28 Jul. - 1 Aug.

2014 H. Goosse and the Ocean2k Working Group (including **M.N. Evans**), Robust global ocean cooling trend for the past two millennia, poster presented at the 3rd PMIP-3 Workshop, Namur, Belgium, 25-30 May.

2014 S.G. Dee†, J. Emile-Geay, **M.N. Evans** and D.C. Noone, Multi-proxy system model simulations: A first principles look at tropical paleoclimate interpretations, abstract presented at the 2014 EGU General Assembly, vol. 16, EGU2014-9636, Vienna, Austria, 27 Apr. - 2 May.

2014 **M.N. Evans**, K.J. Steele†, B. Breeden, A. Lopatka†, R. Plummer, Correction algorithm for on-line continuous flow stable isotope analyses, 9th International Conference on Dendrochronology, Melbourne, Australia, 13-17 Jan.

2014 B. Boysen♣, **M.N. Evans**, P.J. Baker, Oxygen isotopic composition in the tropical conifer Agathis robusta records ENSO-related precipitation variations, 9th International Conference on Dendrochronology, Melbourne, Australia, 13-17 Jan.

2014 **M.N. Evans**, S. Tolwinski-Ward, K. Anchukaitis, G. Duke♣, M. Hughes, Applications of proxy system modeling in dendroclimatology, 9th International Conference on Dendrochronology, Melbourne, Australia, 13-17 Jan.

2014 **M.N. Evans**, J.E. Smerdon, A. Kaplan, S.E. Tolwinski-Ward, J. F. Gonzalez-Rouco (presented by K.J. Steele†), Climate field reconstruction uncertainty arising from tree ring width-like predictors, 9th International Conference on Dendrochronology, Melbourne, Australia, 13-17 Jan.

2013 Dee, S.G.†, J. Emile-Geay, D.C. Noone, N.H. Buenning, **M.N. Evans**, Refining the interpretation of hydroclimatic proxies via the integration of a new, efficient isotope-enabled AGM and proxy system modeling: A comparative study, Abstract PP23C-1990 presented at the 2013 Fall Meeting, AGU, San Francisco, Calif., 9-13 Dec.

2013 **Evans, M.N.** and the PAGES/Ocean2k Working Group, Intercomparison of modeled and observed marine surface climate variations over the pre-anthropogenic last millennium: First-order results from the PAGES/Ocean2k project, Abstract PP51A-1925 presented at the 2013 Fall Meeting, AGU, San Francisco, Calif., 9-13 Dec.

2013 H.V. McGregor and the Ocean2K Working Group (including **M.N. Evans**), A global synthesis of marine sediment-deroved SST records for the past two millennia: Results from the PAGES/Ocean2k project, 11th International Conference on Paleoceanography, Barcelona, Spain, 1-6 Sept.

2013 Gedalof, Z., M.G. Clark, K. Schutten and **M.N. Evans**, The stable isotope record of tropical hurricanes in southwestern Ontario – A test of concept, poster presented at the 2nd American Dendrochronology Conference, Tucson, May 13-17.

2013 Leduc, G. and the Ocean2k working group (including **M.N. Evans**), A 2000-year synthesis of marine-derived SST records: Results from the Ocean2k project, talk presented at the 4th PAGES Open Science Meeting, Goa, India, 11-15 Feb.

2013 Tierney, J.E., K.J. Anchukaitis, C. Giry, K.H. Kilbourne, C. Saenger, H. Wu, J. Zinke, and the Ocean2k working group (including **M.N. Evans**), Reconstruction of tropical ocean SST during the last millennium: Results from the PAGES/Ocean2k project, talk presented at the 4th PAGES Open Science Meeting, Goa, India, 11-15 Feb.

2012 K.J. Anchukaitis, P. Breitenmoser, K.R. Briffa, A. Buchwal, U. Büntgen, E.R. Cook, R.D. D'Arrigo, J. Esper, **M.N. Evans**, D. Frank, H. Grudd, B. Gunnarson, M.K. Hughes, A.V. Kirdyanov, C. Körner, P.J. Krusic, B. Luckman, T.M. Melvin, M.W. Salzer, A.V. Shashkin, C. Timmreck, E.A. Vaganov, R.J.S. Wilson, The dendroclimatology of Common Era volcanic eruptions, Abstract PP11F-02 presented at the 2012 Fall Meeting, AGU, San Francisco, Calif., 5-9 Dec.

2012 **M.N. Evans** and the Ocean2K Working Group, Synthesis of marine sediment-derived sea surface temperature records for the past 2 millennia: First-order results from the PAGES/-

Ocean2K project, Abstract PP11F-07 presented at the 2012 Fall Meeting, AGU, San Francisco, Calif., 5-9 Dec.

2012 G.T. Rustic†, A. Koutavas, B.K. Linsley, **M.N. Evans**, T.M. Marchitto, T. Herbert, Variability of eastern tropical Pacific climate during the last two millennia from δ^{18}O of individual foraminifera, Abstract PP21B-1982 presented at the 2012 Fall Meeting, AGU, San Francisco, Calif., 5-9 Dec.

2011 S.E. Tolwinski-Ward†, M.P. Tingley, **M.N. Evans**, D.W. Nychka, Probabilistic reconstructions of bivariate climate using a biologically-motivated model of tree-ring width, Abstract PP42B-03 presented at the 2011 Fall Meeting, AGU, San Francisco, Calif., 5-9 Dec.

2011 D.M. Thompson†, **M.N. Evans**, J.E. Cole, T.R. Ault, L. Emile-Geay, Tropical climate trends inferred from coral δ^{18}O: A comparison of CMIP5 forward model results with paleoclimatic observations, Abstract GC53A-10 presented at the 2011 Fall Meeting, AGU, San Francisco, Calif., 5-9 Dec.

2011 J.E. Smerdon, A. Kaplan, **M.N. Evans**, E. Zorita, J. Fidel Gonzalez-Rouco, A comparison of multiple methods used to reconstruct climate fields during the Common Era, Poster 2742, INQUA XVIII Congress, Bern, Switzerland, 21-27 July.

2010 J.E. Smerdon, A. Kaplan, and **M.N. Evans**, A pseudoproxy evaluation of the spectral fidelity of reconstructed temperature fields, Abstract PP43A-1667 presented at the 2010 Fall Meeting, AGU, San Francisco, Calif., 13-17 Dec.

2010 D.M. Thompson†, T.R. Ault†, **M.N. Evans**, J.E. Cole, J. Emile-Geay, Intercomparison of 20th century tropical climate model hindcasts and coral δ^{18}O data using a forward proxy system model, Abstract PP53A-05 presented at the 2010 Fall Meeting, AGU, San Francisco, Calif., 13-17 Dec.

2010 **M.N. Evans**, J.E. Smerdon, A. Kaplan, Climate field reconstruction uncertainty arising from the multivariate/nonlinear nature of realistic proxy systems, Abstract PP43A-1665 presented at the 2010 Fall Meeting, AGU, San Francisco, Calif., 13-17 Dec.

2010 A. Kaplan, J.E. Smerdon, **M.N. Evans**, Optimal interpolation framework for evaluating the skill and error of climate field reconstructions, Abstract PP43A-1668 (not presented) at the 2010 Fall Meeting, AGU, San Francisco, Calif., 13-17 Dec.

2010 S.E. Tolwinski-Ward†, **M.N. Evans**, K.J. Anchukaitis, and M.K. Hughes, Mechanistic Modeling of proxy data for Bayesian climate reconstructions, 11th International Meetings in Statistical Climatology, Edinburgh, Scotland, 12-16 Jul.

2010 **M.N. Evans** and N.A. Gava†, Plans for Isotope dendroclimatology in Queensland, First Australasian (AUS2K) PAGES Regional Workshop: Towards Data Synthesis, 31 May - 2 June, Melbourne, Australia.

2009 J.E. Smerdon, A. Kaplan, E. Zorita, F.J. Gonzalez-Rouco, **M.N. Evans**, Common deficiencies in existing methods for reconstructing high-resolution temperature fields during

the last millennium, Eos Trans. AGU, 90(52), Fall Meet. Suppl., Abstract PP23B-1386.

2009 D.M. Thompson†, **M.N. Evans**, T.R. Ault†, J.E. Cole, J. Emile-Geay, Intercomparison of 20th century tropical climate model hindcasts and coral δ^{18}O data using a forward proxy model, Eos Trans. AGU, 90(52), Fall Meet. Suppl., Abstract PP23B-1387.

2008 H.S. Jenkins†, P.A. Baker, **M.N. Evans**, Oxygen isotopes in tree rings: A 345 year record of precipitation in Amazonia, Eos Trans. AGU, 89(53), Fall Meet. Suppl. Abstract PP31B-1488.

II.E.8. Non-Refereed Abstracts

II.E.9. Non-Refereed Posters

II.E.10. Non-Refereed Panels

II.E.11. Symposia

II.E.12. Workshops

II.E.13. Colloquia

II.E.14. Historical Conferences, Workshops, Talks (10+ years ago)

2005 **M.N. Evans**§, P.F. Poussart, K.J. Anchukaitis, D.P. Schrag, Progress in stable isotope dendroclimatology, EOS Trans. AGU, 86(52), Abstract PP14B-06.

2005 **M.N. Evans**§, A stable isotope approach to paleoclimatic records from tropical trees, University of Arizona, Summer School in Dendrochronology, 5 June.

2005 **M.N. Evans**§, How can paleoclimatology inform climate change scenario policymaking?, Planning workshop to develop hydroclimatic reconstructions for decision support in the Colorado River Basin, Institute for the Study of Planet Earth, University of Arizona, 4 May.

2005 **M.N. Evans**§, (1) A stable isotope approach to paleoclimatic records from tropical trees; (2) Objective Interpretation of paleoproxy data for improved paleoclimatic reconstructions, Dept. of Geosciences, Brown University, 5-6 Apr.

2005 **M.N. Evans**§, A new mass spectrometer for high resolution paleoclimatic research, Laboratory of Tree-Ring Research, University of Arizona, 2 Mar.

2005 **M.N. Evans**§, (1) A stable isotope approach to paleoclimatic records from tropical trees; (2) Objective Interpretation of paleoproxy data for improved paleoclimatic reconstructions, Dept. of Geology and Geophysics, University of Minnesota, 24-25 Jan.

2004 §**M.N. Evans**, A stable isotope approach to paleoclimatic records from tropical trees, Dept. of Earth and Environmental Sciences, Columbia University/Lamont-Doherty Earth Observatory, 5 Oct.

2004 §**M.N. Evans**, Progress in Tropical Isotope Dendroclimatology (in Spanish), Civil Engineering Dept., University of Piura, Peru, June.

2004 Reichert, B.K., **M.N. Evans**, A. Kaplan, E.A. Vaganov, M.K. Hughes, and M.A. Cane, A forward modeling approach to paleoclimatic interpretation of tree-ring data, Tree-Rings and Climate: Sharpening the Focus, Tucson, AZ, 6-9 Apr.

2004 **M.N. Evans**, P.F. Poussart†, D.P. Schrag and S.R. Saleska, A stable isotope approach to tropical dendroclimatology, Tree-Rings and Climate: Sharpening the Focus, Tucson, AZ, 6-9 Apr.

2004 K.J. Anchukaitis†, **M.N. Evans**, A. Kaplan, E.A. Vaganov, B.K. Reichert, M.K. Hughes, and M.A. Cane. A Forward-Modeling Approach to Assessing Proxy-Climate Stability in the southeastern United States. A Poster presented at the Conference on Tree-Rings and Climate: Sharpening the Focus, 6-9 April, Tucson, AZ.

2004 K.J. Anchukaitis†, **M.N. Evans**, A. Kaplan, E.A. Vaganov, B.K. Reichert, M.K. Hughes, and M.A. Cane, A Forward-Modeling Approach for Assessing Proxy-Climate Stability in the southeastern United States. Paper presented at the 100th Annual Meeting of the Association of American Geographers, Philadelphia, PA, March 14-19.

2004 §**M.N. Evans**, A stable isotope approach to tropical dendroclimatology, Dept. of Geography, Univ. California-Berkeley, 16 Mar.

2004 §**M.N. Evans**, Progress in Tropical Isotope Dendroclimatology (in Spanish), Civil Engineering Dept., University of Piura, Peru.

2004 §**M.N. Evans**, A stable isotope approach to paleoclimatic records from tropical trees, Dept. of Earth and Environmental Sciences, Columbia University/Lamont-Doherty Earth Observatory.

2003 A. Gershunov, **M.N. Evans**, M.K. Hughes and H. Douville, Recent observed changes in the Tropical and North Pacific connection examined in an extended context provided by proxy reconstruction and coupled models, EOS, Trans. AGU, 84(46), Fall 2003 Meet. Suppl., Abstract PP52A-0961.

2003 A. Gershunov, **M.N. Evans**, M.K. Hughes, and H. Douville, Vascillations of the tropical and North Pacific co-relation diagnosed in observations, proxy reconstruction, and in a coupled model, Climate Diagnostics and Prediction Workshop, Reno, NV, 20-23 Oct.

2003 §K.J. Anchukaitis†, **M.N. Evans**, D.P. Schrag, and S. R. Saleska, The potential for upper elevation tropical paleoclimatic reconstructions using isotope dendroclimatology, paper presented at the Fourth Annual Science Meeting, IAI CRN03. Climate Variability from Treeline Environments: The Assessment of Present, Past and Future Climate Variability in the Americas from Treeline Environments. Mendoza, Argentina, October 9-14.

2003 §**M.N. Evans**, Tracking ENSO with tropical trees: Progress in stable isotope dendroclimatology, Dept. of Geosciences, University of Arizona, 3 Sept.

2003 A. Gershunov, **M.N. Evans**, and M.K. Hughes, Proxy Reconstruction of the Entire Pacific Sea Surface Temperature Field, Conference Proceedings, PACLIM, Pacific Grove, CA,

6-9 April.

2003 §**M.N. Evans**, (1) Tracking ENSO with tropical trees: Progress in stable isotope dendroclimatology; (2) Valuing Biodiversity (a guest lecture in Geosciences 308, Global Change and Earth Sciences), Dept. of Geosciences, Oregon State University, 3 Mar.

2002 A.P. Ballantyne, P. A. Baker, R. Jackson, M. Silman, **M. Evans**, and S. W. Leavitt, Oxygen Isotopes and Ring Widths in the Tropical Tree Species Polylepis tarapacana as Proxies of Past Precipitation in the Tropical Andes of South America. EOS, Trans. AGU, 83(47), Fall 2002 Meet. Suppl., Abstract PP51B-11.

2002 P.F. Poussart†, D.P. Schrag, **M.N. Evans**, and R.D. D'Arrigo, High-resolution cellulose oxygen isotope records from Indonesian trees, EOS, Trans. AGU, 83(47), Fall 2002 Meet. Suppl., Abstract PP52B-05, December 2002.

2002 **M.N. Evans**, P.F. Poussart, S.R. Saleska, and D.P. Schrag, Tracking ENSO with tropical trees: Progress in stable isotope dendroclimatology, Eos, Trans. AGU, 83(47), Fall 2002 Meet. Suppl., Abstract PP51A-0302.

2002 §**M.N. Evans** and A. Kaplan, Hadley and Walker Circulation variability based on 150 years of instrumental and proxy observations, Conference Proceedings, Hadley Circulation: Past, Present, Future, Honolulu, Hawaii.

2002 §**M.N. Evans**, Is Global Warming Changing ENSO?, Biosphere 2 Center, Oracle, AZ.

2002 §**M.N. Evans**, Paleoclimatology of ENSO, Dept. of Atmospheric Sciences, University of Arizona.

2002 §**M.N. Evans**, Progress in Tropical Isotope Dendroclimatology (in Spanish), Civil Engineering Dept., University of Piura, Peru.

2002 §**M.N. Evans** and A. Kaplan, Hadley and Walker Circulation variability based on 150 years of instrumental and proxy observations, Conference Proceedings, Hadley Circulation: Past, Present, Future, Honolulu, Hawaii, 8 Nov.

2002 B.K. Reichert, E.A. Vanagov, A. Kaplan, **M.N. Evans**, M.K. Hughes, M.A. Cane, and L. Bengtsson, Process-Based Simulation of Paleoclimatic Tree-Ring Records, European Geophysical Society Meeting, 21-26 April, 2002, Nice, France.

2001 G.C. Bond, B. Kromer, **M.N. Evans**, J. Beer, R. Muscheler, W. Showers, S. Hoffman, R. Lotti, Persistent Solar Influence on North Atlantic Surface Circulation During the Holocene, Eos. Trans. AGU, 82(47), Fall 2001 Meet. Suppl., Abstract U22B-02, p. F11.

2001 **M.N. Evans**, A. Kaplan, B.K. Reichert and M.A. Cane, Reconstruction Deconstruction: Toward better paleoclimate estimates, Eos. Trans. AGU, 82(47), Fall 2001 Meet. Suppl., Abstract GC21A-08, p. F300.

2001 A. Kaplan, **M.N. Evans**, B.K. Reichert and M.A. Cane, Constraints From the Instrumental and Paleo Data on 19th Century Climate, Eos. Trans. AGU, 82(47), Fall 2001 Meet. Suppl., Abstract GC21A-07, p. F299.

2001 §**M.N. Evans**, Paleoclimatology of ENSO, Dept. of Atmospheric Sciences, University of Arizona, 27 Feb.

2001 §A. Kaplan, **M.N. Evans**, B.K. Reichert and M.A. Cane, Large-scale Climate Reconstruction with Tree Rings and Corals, presentation at Reconstructing Late Holocene Climate: A PAGES/CLIVAR workshop, Charlottesville, Virginia, Apr.

2001 §**M.N. Evans**, A. Kaplan, B.K. Reichert and M.A. Cane, Objective Interpretation of Paleoproxy Data, presentation at the NOAA Climate Change Data and Detection Review Panel Meeting, Chicago, IL.

2001 **M.N. Evans**, M.A. Cane, D.P. Schrag, A. Kaplan, B.K. Linsley, R. Villalba, and G.M. Wellington, Support for tropically-driven Pacific decadal variability based on paleoproxy evidence. Page 12 of Abstracts of the 18th annual PACLIM workshop, Pacific Grove, CA, 18-21 March.

2001 §**M.N. Evans** and D.P. Schrag, Tropical Isotope Dendroclimatology: Early Results. Addendum page of Abstracts of the First Annual Records in Tropical Systems (ARTS) Open Sciences Meeting, Noumea, New Caledonia, Oct.

2001 §**M.N. Evans**, A. Kaplan, M.A. Cane and B.K. Reichert, Pacific Basin SST Field Reconstruction from Coral δ^{18}O data: Update through October 2001. Page 34 of Abstracts of the First Annual Records in Tropical Systems (ARTS) Open Sciences Meeting, Noumea, New Caledonia, Oct.

II.E.15. Other

II.F. Professional Publications

II.F.1. Reports and Non-Refereed Monographs

II.F.2. Pre-Print/Working Paper (Not Work in Progress)

II.F.3. Legal Briefs

II.F.4. Policy Briefs

II.F.5. Other

II.G. Book Reviews, Notes, and Other Contributions

II.G. 1. Book Reviews

2005 §**Evans, M.N.**, Review of Weather Cycles: Real or Imaginary? (2nd ed.) by W.J. Burroughs, Cambridge University Press, 2003, 330p. In Oceanography, 18(1), March, The Oceanography Society.

II.G. 2. Essays

II.G. 3. Notes

2016 E. Dassie, K. DeLong, H. Kilbourne, B. Williams, N. Abram, L. Brenner, C. Brahmi, K. Cobb, T. Corrège, D. Dissard, J. Emile-Geay, H. Evangelista, **M. Evans**, J. Farmer,

T. Felis, M. Gagan, D. Gillikin, N. Goodkin, M. Khodri, A.C. Lavagnino, M. LaVigne, C. Lazareth, B. Linsley, J. Lough, H. McGregor, I. Nurhati, G. Ouellette, L. Perrin, M. Raymo, B. Rosenheim, M. Sanstrom, B. Schöne, A. Sifeddine, S. Stevenson, D. Thompson, A. Waite, A. Wanamaker, and H. Wu, Save our Marine Annually-Resolved Proxy Archives (MARPA)!, EOS Trans. AGU, revised.

2014 D. Kaufman, K. Anchukaitis, U. Büentgen, J. Emile-Geay, **M. Evans**, H. Goosse, J. Luterbacher, J. Smerdon, M. Tingley, L. von Gunten, D. Anderson, E. Cook, Fidel González-Rouco, J. Gergis, M. Grosjean, A. Hormes, A. Lorrey, N. McKay, R. Neukom, J. Tierney, E. Wahl, H. Wanner, J. Werner, A community-driven framework for climate reconstructions, EOS Trans. AGU, 95(40), 361.

2012 **Evans, M.N.**, H. Goosse, T. Kiefer, V. Masson-Delmotte, H.V. McGregor and D.W. Oppo, Ocean2k Working Group – Call for Participation, PAGES News 20(1), 4.

2012 Ocean2k Project Members (including **M.N. Evans**), Placing historical marine conditions into the context of the past 2000 years, CLIVAR/Exchanges 58(17(1)), 15-17.

2006 **Evans, M.N.**, The woods fill up with snow. Nature, 440, 1120-1.

2006 Clement, A.C., J. Emile-Geay, R. Seager, M. Cane and **M.N. Evans**, Solar forcing of the tropical Pacific climate and impacts over North America for the last millennium, PAGES News, 14(2), 12-14.

2000 Cane, M.A. and **M.N. Evans**, Do the Tropics Rule? Science, 290, 1107-1108.

1999 Cook, E.R. and **M.N. Evans**, Improving estimates of drought variability and extremes from centuries-long tree ring chronologies: A PAGES/CLIVAR example, PAGES/CLIVAR Newsletter, 8(1):9-10.

II.G. 4. Manuals

II.G. 5.Other

II.H. Completed Creative Works

II.H.1. Digital Media (e.g., CDs, DVDs)

II.H.2. Datasets

II.H.3. Constructed Projects

II.H.4. Demonstrations

II.H.5. Inventions

II.H.6. Original Plans and Designs

II.H.7. Photography

II.H.8. Software and Applications

II.H.9. Websites

2010– Stable Isotope Laboratory, http://www.geol.umd.edu/facilities/SIL/

2010– Paleoclimate CoLaboratory Intranet, http://one.geol.umd.edu/intranet

2008– Michael N. Evans, Research Interests pages, http://one.geol.umd.edu/research/

2008– Michael N. Evans, Teaching Portfolio pages, http://one.geol.umd.edu/tp/

2008– Michael N. Evans, Data and Contributions, http://one.geol.umd.edu/data/

2001–2008 Michael N. Evans, Research and Teaching webpages, Univ Arizona http://ic.ltrr.arizona.edu/ic/tp/

II.H.10. Exhibitions and Installations

II.H.11. Curatorial Practice

II.H.12. Performance or Interpretation — Performing Arts

II.H.13. Direction - Performing Arts

II.H.14. Production - Performing Arts

II.H.15. Costume, Stage, Multimedia, and Theatrical Design

II.H.16. Artistic and Graphic Design

II.H.17. Dramaturgy

II.H.18. Artwork

II.H.19. Choreography

II.H.20. Playwriting, Screenwriting, and Musical Composition

II.H.21. Works of Creative Writing

II.H.22. Performance or Interpretation - Film, Video, and Multimedia

II.H.23. Direction - Film, Video, and Multimedia

II.H.24. Production - Film, Video, and Multimedia

II.H.25. Citations and Reviews

II.H.26. Historical Completed Creative Works (10+ years ago)

II.H.27. Other

II.I Significant Works in Public Media

II.I.1. Explanatory, Investigative, or Long-Form Journalism

II.I.2. Other Significant Journalism

II.I.3. Commentary/Analysis

II.I.4. Interactive Online Database

II.I.5. Other

II.J. Sponsored Research

II.J.1. Grants

- **2017-2019 pending** "Indicators to Support Coastal Climate Resilience", PI: M.A. Kenney, co-PIs: A.C. Janetos, M.D. Gerst, M.N. Evans, NOAA/COM, $300,000, 7/1/2017-6/30/2019.

- **2017-2019 pending** "P2C2: Evaluation of the potential for high resolution stable isotope dendroclimatology in Kalimantan, Indonesia", PI: M.N. Evans, NSF/P2C2, $213,216, 8/1/2017-7/31/2019.

  2016-2018 "P2C2: Hydroclimatic response of the tropical Pacific to past changes in mean state: Observations and synthesis", PI: M.N. Evans, NSF/AGS, $140,988, 8/15/2016-7/31/2018.

  2015-2017 "Collaborative Research: Common Era Climate Variability from Marine Proxy Surrogate Reconstructions", PIs: C. Saenger, M.N. Evans, NSF/MG&G, $205,790 (UMD component: $60,014), 8/15/2015-7/31/2017.

  2013-2014 "Tree isotope records of past rainfall variability in the Indonesian Maritime Region", PI: S.Y. Cahyarini (US partner: M.N. Evans), USAID/NSF/PEER, $80,000 (UMD component: $36,000), 5/2013-11/2015.

  2011–2014 "Kauri chemistry tells a tempestuous tale", PI: A. Lorrey, co-PIs: M.N. Evans, D.P. Schrag, T. Horton, A. Fowler, Marsden Foundation (New Zealand), NZD$260,870 (USD-$41,600 at UMD).

  2011–2014 "Detecting prehistoric human-climate dynamics in central Polynesia using high-precision marine archives", PI: M.S. Allen, co-PIs: A. Lorrey, M.N. Evans, Marsden Foundation (New Zealand), NZD$826,293 (USD$48,844 at UMD).

  2009–2012 "Global decadal hydroclimate variability, predictability and change: A data-enriched modeling study", PIs: R. Seager, M. Cane, M. Ting, Y. Kushnir, J. Smerdon, A. Kaplan, M. Evans, L. Polvani, NOAA OCP, $2,383,473.

  2009–2012 "ENSO paleoclimatology in Queensland, Australia", PI: M.N. Evans, NSF AGS09-02794, $485,258.

  2009–2012, "Maximizing the potential of tropical climate proxies through integrated climate-proxy forward modeling", Lead PI: J. Emile-Geay, co-PIs: M.N. Evans, D.C. Noone, D. Thompson, NOAA NA10OAR4310116, $428,983 ($44,177 at UMD).

  2009–2012, "Locally-constrained climate field reconstruction of the last millennium: Methods and application", PI: J.E. Smerdon, co-PIs: A. Kaplan and M.N. Evans, NSF ATM09-02436, $274,418.

  2009–2011 "Acquisition of a continuous flow mass analyzer for tropical paleoclimatology", PI: M.N. Evans, NSF EAR09-29983, $173,181.

  2007–2010 "Spectral characteristics of climate proxies and their expression in climate field reconstructions", PIs: J.E. Smerdon, A. Kaplan, E.R. Cook and M.N. Evans, NOAA NA07-OAR4310060, $312,184.

  2007–2011 "Computational Methods in the Geosciences Collaborative Research: Development of Bayesian Hierarchical Models to reconstruct climate over the past millennium", PIs: C.M. Ammann, T. Hoar, D.W. Nychka, E.R. Wahl, L.M. Berliner, M.N. Evans, M.K. Hughes, NSF CMG07-24802, $937,509 (UA component: $169,201).

2007–2008 "El Niño: A new atmospheric perspective via GPS radio occultation", PI: C.O. Ao, co-PIs: E.R. Kursinski, D.E. Waliser, M.N. Evans, D.H. Rind, Director's Research and Development Fund, JPL, $199,000.

2006-2008 "Developing and using realistic synthetic tree-ring data to constrain climate models", PI: M.K. Hughes, co-PI: M.N. Evans, NOAA NA060AR4310115, $189,142.

2004–2008 "CAREER: A Research and Education Program in Dynamical Paleoclimatology", PI: M.N. Evans, NSF ATM03-49356, $416,151.

2003–2006 "Acquisition of an Analytical Facility for High Resolution Paleoclimatology", PI: M.N. Evans, Co-PIs: J.W. Beck, J.E. Cole, M.K. Hughes and J.T. Overpeck, NSF MRI03-21438, $339,915.

2002–2004 "Collaborative Research: Pilot Studies in Tropical Isotope Dendroclimatology", PIs: M.N. Evans and D.P. Schrag, NSF ATM02-14130, $57,540 (UA Component).

2002–2003 "Tracking ENSO with Tropical Trees: Isotope Dendroclimatology in Peru", PI: M.N. Evans, UA Faculty Small Grant Program, $9977.

2002–2003 "Registros Dendrocronologicos e Impacto en Poblaciones Rurales de La Costa Norte del Peru Debidos a "El Niño" , PI: R. Rodriguez; Co-PIs: B.R. Luckman, J.C. Atavena, M.N. Evans, Inter American Institute, $30,000 (no funds to UA).

2001–2003 "Collaborative Research: Objective Interpretation of Paleoproxy Data for Improved Multiproxy Climate Reconstructions", PIs: M.N. Evans, A. Kaplan, B.K. Reichert, M.A. Cane, NOAA NA16GP1616, $109,043 (UA component).

1998–2001 "Methodology and Application of Objective Analysis Climate Field Reconstruction from Proxy Data", PI: M.A. Cane, NOAA NA86-GP0437, $374,821.

II.J.2. Contracts

2016 δ^{18}O/δ^{13}C analysis of 4166 α-cellulose samples USD$12/sample, USD$49,992 for K. Anchukaitis, University of Arizona, November, cost center account 2-95261.

2016 δ^{18}O/δ^{13}C analysis of 750 α-cellulose samples, materials, training USD$7253.32, for X. Liu, Chinese Acad. Sci., November, cost center account 2-95261. 2016-18.

2016 δ^{18}O/δ^{13}C analysis of 1029 carbonate samples USD$9/sample, USD$126, for I.S. Nurhati, LIPI, November, cost center account 2-95261.

2016 δ^{18}O/δ^{13}C analysis of 60 carbonate samples USD$9/sample, USD$540, for A.J. Kaufman, Univ. Maryland, September, cost center account 2-95261.

2016 δ^{18}O/δ^{13}C analysis of 228 carbonate samples USD$9/sample, USD$2052, for A.J. Kaufman, Univ. Maryland, September, cost center account 2-95261.

2016 δ^{18}O/δ^{13}C analysis of 257 α-cellulose samples USD$12/sample, USD$3084 for S. Belmecheri, University of Arizona, September, cost center account 2-95261.

2016 $\delta^{18}O/\delta^{13}C$ analysis of 510 α-cellulose samples USD$12/sample, USD$6120.00 for L. Andreu-Hayles, Lamont-Doherty Earth Observatory, September, cost center account 2-95261.

2016 $\delta^{18}O/\delta^{13}C$ analysis of 260 α-cellulose samples USD$12/sample, USD$3120.00 for L. Andreu-Hayles, Lamont-Doherty Earth Observatory, August, cost center account 2-95261.

2016 $\delta^{18}O/\delta^{13}C$ analysis of 391 α-cellulose samples USD$12/sample, USD$4692 for L. Andreu-Hayles, Lamont-Doherty Earth Observatory, August, cost center account 2-95261.

2016 $\delta^{18}O/\delta^{13}C$ analysis of 174 α-cellulose samples USD$12/sample, USD$2088.00 for L. Andreu-Hayles, Lamont-Doherty Earth Observatory, August, cost center account 2-95261.

2016 $\delta^{18}O/\delta^{13}C$ analysis of 341 α-cellulose samples USD$12/sample, USD$18000.00 for S. Belmecheri, Lamont-Doherty Earth Observatory, June, cost center account 2-95261.

2016 $\delta^{13}C$ analysis of DIC, 36 water samples $14/sample, USD$504, for A.J. Kaufman, Univ. Maryland, April, cost center account 2-95261.

2016 $\delta^{18}O/\delta^{13}C$ analysis of 359 α-cellulose samples USD$12/sample, USD$4308.00 for S. Belmecheri, Lamont-Doherty Earth Observatory, February, cost center account 2-95261.

2016 $\delta^{18}O/\delta^{13}C$ analysis of 123 α-cellulose samples USD$12/sample, USD$1476.00 for S. Belmecheri, Lamont-Doherty Earth Observatory, February, cost center account 2-95261.

2016 $\delta^{18}O/\delta^{13}C$ analysis of 40 carbonate samples USD$9/sample, USD$360, for A.J. Kaufman, Univ. Maryland, January, cost center account 2-95261.

2016 $\delta^{18}O/\delta^{13}C$ analysis of 14 carbonate samples USD$9/sample, USD$126, for A.J. Kaufman, Univ. Maryland, January, cost center account 2-95261.

2016 $\delta^{18}O/\delta^{13}C$ analysis of 19 carbonate samples USD$9/sample, USD$171, for A.J. Kaufman, Univ. Maryland, January, cost center account 2-95261.

2016 $\delta^{18}O/\delta^{13}C$ analysis of 88 carbonate samples USD$9/sample, USD$792, for A.J. Kaufman, Univ. Maryland, January, cost center account 2-95261.

2016 $\delta^{18}O/\delta^{13}C$ analysis of 90 α-cellulose samples USD$12/sample, USD$1080.00 for L. Andreu-Hayles, Lamont-Doherty Earth Observatory, January, cost center account 2-95261.

2015 $\delta^{13}C$ analysis of DIC, 38 water samples $13/sample, USD$494, for S. Kaushal, Univ. Maryland, April, cost center account 2-95261.

2015 $\delta^{18}O/\delta^{13}C$ analysis of 33 α-cellulose samples USD$12/sample, USD$330.00 for L. Andreu-Hayles, Lamont-Doherty Earth Observatory, July, cost center account 2-95261.

2015 $\delta^{18}O/\delta^{13}C$ analysis of 1581 α-cellulose samples USD$5.14/sample, USD$8126.34 for A. Lorrey, National Institute of Water and Atmosphere, July, cost center account 2-95261.

2015 experimental method development for $\delta^{18}O/\delta^{13}C$ of lignin samples, USD$3060, for Benjamin Hook/Gus Fomradas, Diavik Diamond Mines, Inc., April, cost center account 2-95261.

2015 δ^{13}C analysis of DIC, 40 carbonate samples USD$14/sample, USD$560, for A.J. Kaufman, Univ. Maryland, April, cost center account 2-95261.

2015 δ^{18}O/δ^{13}C analysis of 71 carbonate samples USD$9/sample, USD$639, for A.J. Kaufman, Univ. Maryland, April, cost center account 2-95261.

2014 δ^{18}O/δ^{13}C analysis of 333 α-cellulose samples USD$12/sample, USD$3996.00 for L. Andreu-Hayles, Institut Calata de Ciencies Del Clima, June, cost center account 2-95261.

2014 δ^{18}O/δ^{13}C analysis of 1000 α-cellulose samples USD$10/sample, USD$10,000.00, for L. Andreu-Hayles, Lamont-Doherty Earth Observatory, Jan, cost center account 2-95261.

2014 δ^{18}O/δ^{13}C analysis of 414 carbonate samples USD $9-11/sample, USD$3912.00, for A.J. Kaufman, Univ. Maryland, July, cost center account 2-95261.

2014 Calibration of 4 lignin candidate working standards and δ^{18}O/δ^{13}C analysis of 120 lignin samples USD$12/sample, USD$1690.00, for B. Hook, Univ Toronto, Mississauga, Ontario, Nov, cost center account 2-95261.

2013 δ^{18}O/δ^{13}C analysis of 1750 carbonate samples $10.40/sample, USD$18200.00, for H. McGregor, Univ. Wollongong, Sept, cost center account 2-95261.

2013 δ^{18}O/δ^{13}C analysis of 191 α-cellulose samples USD$10/sample, USD$1910.00, for B. Hook, Univ Toronto, Mississauga, Ontario, Nov, cost center account 2-95261.

2013 δ^{18}O/δ^{13}C analysis of 1000 α-cellulose samples USD$12/sample, USD$10,000.00, for K. Anchukaitis, Woods Hole Oceanographic Institution, Sept, cost center account 2-95261.

2013 δ^{18}O/δ^{13}C analysis of 95 α-cellulose samples USD$10/sample, USD$950.00, for B. Hook, Univ Toronto, Mississauga, Ontario, June, cost center account 2-95261.

2013 δ^{18}O/δ^{13}C analysis of 66 carbonate samples USD$8/sample, USD$528.00, for A.J. Kaufman, Univ. Maryland, July, cost center account 2-95261.

2013 δ^{18}O/δ^{13}C analysis of 155 carbonate samples @ $8/sample, USD$1240.00, for A.J. Kaufman, Univ. Maryland, Jan-July, cost center account 2-95261.

2012 δ^{18}O/δ^{13}C analysis of 2000 carbonate samples USD $8/sample, USD$16020.00, for I.S. Nurhati, Singapore/MIT Alliance for Research and Technology, Aug, cost center account 2-95261.

2012 δ^{18}O/δ^{13}C analysis of 900 carbonate samples USD $8/sample, USD$7220.00, for I.S. Nurhati, Singapore/MIT Alliance for Research and Technology, Feb, cost center account 2-95261.

2011–2012 δ^{18}O/δ^{13}C analysis of 2083 carbonate samples @ $5/sample, USD$10,415.00, for A.J. Kaufman, Univ. Maryland, Jan-July, cost center account 2-95261.

2011 δ^{18}O/δ^{13}C analysis of 125 carbonate samples USD $8/sample, USD$1000.00, for A. Koutavas, CUNY College of Staten Island, Dec, cost center account 2-95261.

2011 $\delta^{18}O/\delta^{13}C$ analysis of 20 carbonate samples USD $8/sample, USD$180.00, for D. Oppo, Woods Hole Oceanographic Institute, Nov, cost center account 2-95261.

2011 Training: micro wood sampling and α-cellulose extraction, $\delta^{18}O$ analysis of 500 cellulose samples USD $5.75/sample, USD$1000.00, for Z. Gedalof, Univ. of Guelph. Ontario, Canada, Feb, cost center account 2-95261.

2011 $\delta^{18}O$ analysis of 1000 α-cellulose samples USD$9/sample, for T. Swetnam, Univ of Arizona, Apr, cost center account 2-95261.

2011 Training: micro wood sampling and α-cellulose extraction, materials and $\delta^{18}O$ analysis of 500 cellulose samples USD $5.75/sample, USD$9200.00, for P. Baker, Monash Univ., Melbourne, Australia, Mar, cost center account 2-95261.

II.J.3. Other

II.K. Fellowships, Gifts and Other Funded Research

II.K.1. Fellowships

II.K.2. Gifts

II.K.3. Other

II.L. Submissions and Works in Progress

II.L.1. Current Grant Applications

II.L.2. Manuscripts in Preparation

2016 Lopatka, A.S.†, **M.N. Evans**, A.M. Lorrey, H.V. McGregor, M.S. Allen, A.E. Morrison‡, Tropical Pacific climate variability during intervals of the past millennium and its potential impact on Polynesian society, in preparation for submission to The Holocene.

II.L.3. Manuscripts under Review

2016 revised X. Zeng†, X. Liu, K. Treydte, **M.N. Evans**, W. Wang, W. An, W. Sun, G. Xu, G. Wu, X.Zhang, Stronger coherence in intra-seasonal, earlywood, latewood and multi-decadal tree-ring series for $\delta^{18}O$ than for $\delta^{13}C$: Results of a study from the southeastern Tibetan Plateau, New Phytologist.

2016 submitted Hackert, E.C.†, A.J. Busalacchi, J.A. Carton, R. Murtugudde, P.A. Arkin, **M.N. Evans**, The role of the Indian Ocean sector for prediction of the coupled Indo-Pacific system: Impact of atmospheric coupling, J. Geophys. Res. – Oceans.

2016 revised Schollaert-Uz, S.†, T.M. Smith, **M.N. Evans**, A.J. Busalacchi, Decadal variability in tropical Pacific basin-wide chlorophyll from a statistical reconstruction: 1958-2008, J. Clim.

2016 revised Emile-Geay, J.E. and the PAGES 2k Consortium (103 total authors including **M.N. Evans**), A global multiproxy database for temperature reconstructions of the Common Era, in preparation for submission to Nature Scientific Data.

II.L.4. Working Papers in Preparation

II.L.5. Designs in Preparation

II.L.6. Other

II.M. Centers for Research, Scholarship, and Creative Activities

II.M.1. Centers Established

2010–, Paleoclimate CoLaboratory: Computational, wet laboratory and isotope ratio mass spectrometry facilities for education, training, in high resolution paleoclimatology data acquisition and analysis.

II.M.2. Centers Directed

2010– Paleoclimate CoLaboratory

II.M.3. Symposia Organized (through center)

II.M.4. Other

II.N. Patents

II.N.1. Device

II.N.2. Other

II.O. Other Research/Scholarship/Creative Activities

III. Teaching, Mentoring and Advising.

III.A. Courses Taught

Year	Course	Enrollment
Fall 2016	351/651/Statistics for Geosci.	21
	on sabbatical AY 2015-2016	
Spring 2015	123 (I-series) Causes & Conseq. of Global Change	119 (sole instructor)
Fall 2014	351/651/Statistics for Geosci.	7
Spring 2014	437/Global Climate Change	14
Spring 2014	789C/Adv. Data Analysis Wksp	2
Fall 2013	789G/Geosci. Modeling	9
Spring 2013	123 (I-Series) Causes & Conseq. of Global Change	118 (sole instructor)
Fall 2012	489V/789V/Statistics for Geosci.	12
Spr 2012	123/Causes and Consequences of Global Change	188 (team-taught; lead instructor)
Spr 2012	437/Global Climate Change	14
Spr 2011	437/Global Climate Change	9
Spr 2011	123/Causes and Consequences of Global Change	198 (team-taught)
Fall 2010	489V/789V/Statistics for Geoscientists	8
Spr 2010	437/Global Climate Change	14

III.B. Teaching Innovations

III.B.1. Major Programs Established

III.B.2. Education Abroad Established

III.B.3. Software, Applications, Online Education, etc.

III.B.4. Instructional Workshops and Seminars Established

III.B.5. Course or Curriculum Development

Fall 2016 wrote UMD/Elevate proposal to "flip" classroom for GEOL 351/651 (Statistics for Geoscientists) and 362/652 (Geoscientific Modeling).

Fall 2015, 2016 created and led informal graduate fellowship design workshop for Geology graduate and senior undergraduate students applying to national competitions.

Spring 2014 GEOL 789C Advanced Data Analysis Workshop created.

Spring 2013, 2015 AOSC/GEOL 123 I-Series course created and revised/updated.

Fall 2011, 2013 GEOL 489G/789G Geoscientific Modeling created and revised.

Fall 2010, 2012, 2014 GEOL 489V/789V Statistics for Geoscientists (pilot offerings) created and revised; GEOL 351/651 established.

Spr 2009 GEOL 437/Global Climate Change revised.

2008 Decadal Climate Variability, a course in the dynamics and predictability of low frequency climatic variations, designed, offered, revised (at Univ. Arizona).

2005 GEO 101IN/Introduction to Weather and Climate at Tohono O'odham Community College, conception, development, first offering, teacher training and advising.

III.B.6. Historical Innovations (10+ years ago)

2004, 2006, 2008 Spatiotemporal Data Analysis Workshop, a course in practical geostatistics, designed, offered, revised (at Univ. Arizona).

2002, 2003, 2006 ENSO: Past, Present, Future, a course in the physics and paleoclimatology of ENSO, designed, offered, revised (at Univ. Arizona).

2001, 2002, 2003, 2005, 2007 Introduction to Global Change, an Honors College course in global change topics (water resources, biodiversity, climate, population), designed, offered, revised (at Univ. Arizona).

III.B.7. Other

III.C. Advising: Research or Clinical

III.C.1. Undergraduate

2015–2016, advisor Grace Duke, GEOL (B.S. awarded with high honors).

2014–2015, advisor Grace Duke, AOSC (B.S. awarded with high honors).

2013, advisor Grace Duke, GEOL 499 independent study.

2012, advisor Christina Justice, B.S. (2014), Environmental Science and Policy Program; Geography M.S. program, Univ Maryland.

2012, advisor Laura-Ray Diederich, Biology B.S. (2014).

2011, advisor Bjorn Boysen, B.S. (Hons, 2012), Monash Univ (Melbourne, Australia); Australian Dept. of Environment and Primary Industries.

2011, supervisor Kristina Taylor, B.S. (2013), Biochemistry; placement unknown.

2011, advisor Leandra Bitterfeld, College Park Scholars program in Science and Global Change, B.S. (2014), Biology; Trip Leader with Backroads.

2010–2011, advisor Adam Farrell, B.S. (2011), Geology; current position unknown.

2010–2012, advisor Austin Green, College Park Scholars program in Science and Global Change, B.S. (2013), Geology-Honors; research assistant in geophysics, Geology.

2010–2013, advisor, supervisor Grant Jiang, B.S. (2013), Geology-Honors; research assistant, Paleoclimate CoLaboratory.

2009, advisor, supervisor Megan Rheaume, B.S. (2009), Geosciences, Univ. Arizona; placement unknown.

2006–2009, advisor, supervisor Ruth Penniston, B.S. (2011) Environmental Science and Natural Resources Program-Honors, Univ. Arizona; Fulbright Fellow (Norway) 2011–2012.

2008–2009, supervisor Micheal Hailey, Biology B.S. (2007), Univ Arizona; placement unknown.

2007–2008, supervisor Sarah White, B.S. (2007), Ecology and Evol. Biol. Dept.; Masters Program, Geosciences, Univ Arizona.

2005–2006, 2007–2008, advisor, supervisor Brooke Rabe, B.S. (2009), Math Dept., Univ Arizona; Ph.D. program in Statistics, Ohio State University.

2005–2006, supervisor Mau-Chuang Foo, B.S. (2008), Elec. and Comp. Eng. Dept., Univ Arizona; placement unknown.

2005–2007, supervisor Jonathan Buchanan, B.S. (2007), Physics; Raytheon Missile Systems.

2005, supervisor Erin Gleeson, B.S. (2006), Geosciences Dept., Univ Arizona; placement unknown.

2004–2005, supervisor Brianna Muhlenkamp, B.S. (2005), Civil. Eng. Dept., Univ Arizona; Shell Exploration and Production.

2002–2004 Praveen Kundurthy, B.S. (2005), Astrophysics and Biology; Research Scientist, NASA Astrobiology Institute, Data Scientist, Microsoft.

III.C.2. Master's

2013–14, MS Cte. A. Statkiewicz, M.S. (2014), GEOL; seeking employment in the Cleveland, OH area.

2010–11, MS Cte. M. Occhi, M.S. (2011), GEOL; PhD program in hydrology, Penn State.

2009–2011, advisor Nicholas A. Gava, GEOL; Rockville Climbing Center, Rockville, MD.

2009–2010, advisor Matt Glazewski, GEOL; Technical Operations Coordination Meteorologist, Ocean Applications Branch, Ocean Prediction Center, Portland, OR.

2003–2004, advisor Cristina M. Luis, M.S. (2004), Geosciences Dept., Univ Arizona; US Air Force.

2006, MS Cte. T. Damassa, M.S. (2006), Geosciences, Univ Arizona; environmental consulting.

2004, MS Cte. H.R. Barnett, M.S. (2004), Geosciences, Univ Arizona; Ph.D. program, Geosciences, Univ Arizona.

III.C.3. Doctoral

2015–, PhD Cte. C. Gao, GEOL (exp 2017); in progress.

2013–2014, advisor Kaitlyn J. Steele, GEOL; research assistant, Paleoclimate CoLaboratory; research assistant, Department of Environmental Sci. and Technol. and USDA/Beltsville.

2013–, PhD Cte. C. Plank, Ph.D. (exp 2016), GEOL; degree in progress.

2013, Dean's Rep, PhD Cte. M. Ganeshan (AOSC)

2012, Dean's Rep, PhD Cte. S. Rabenhorst (AOSC)

2012, Dean's Rep, PhD Cte. M. Martini (AOSC)

2012, Dean's Rep, PhD Cte. E. Nussbaumer (AOSC)

2012–, PhD Cte. Eric C. Hackert (AOSC)

2012–, advisor Alex S. Lopatka, Ph.D. (exp 2017), GEOL, in progress.

2011-2015, PhD Cte. S. Schollaert-Uz (AOSC)

2011, PhD Cte., T.R. Ault (Geosciences, Univ Arizona); Asst. Prof, Cornell Univ.

2010–2011, advisor Diane Thompson, Ph.D. (2013), Geosciences Dept., University of Arizona; NCAR ASP postdoctoral fellow, 2013-2016.

2010–11, PhD Cte. L. Murphy (AOSC)

2010–11, PhD Cte. H. Oduro (GEOL)

2010, Dean's Rep D. Barrie (AOSC)

2010–12, PhD Cte. N. Wu (GEOL)

2010–12, PhD Cte. X. Liu (GEOL)

2010–2011, advisor Andrew W. Gonyo, GEOL; proposal developer, DynCorp International.

2009, PhD Cte. K. Klochko (GEOL)

2009, PhD Cte. K. Scheiderich (GEOL)

2009, Dean's Rep M. Hoffman (AOSC)

2009, PhD Cte. H. Jenkins (Geosciences, Duke Univ)

2008–2011 PhD Cte/co-advisor Adam Csank, Ph.D. (2011), Geosciences Dept., Univ Arizona; Assistant Professor, Geography, Nipissing Univ (North Bay, ON).

2008–2012, advisor Susan M. Tolwinski-Ward, PhD (2012), Applied Math, Univ Arizona; on leave from NSF postdoctoral fellowship at NCAR/IMAGe (2012–2015); Scientist, AIR Worldwide, Boston, MA.

2008, host visiting PhD student, Y. Zhang (Ecosystem Dyn, Univ Greifswald, Germany)

2007–2008, host visiting PhD student, T.M. Ektvedt (Biol, Univ Bergen, Norway)

2006–7, PhD Cte. C. Minjarez (Atmos. Sci, Univ Arizona)

2006, Rotation host C.L. Lamanna, (Ecol & Evol Biol, Univ Arizona)

2005, advisor April M. Chiriboga, Ph.D. (exp 2014), Geosciences Dept., Univ Arizona; degree in progress.

2003–2007, advisor R. Scott St. George, Ph.D. (2007), Geosciences Dept., Univ Arizona; Assistant Professor, Geography, Univ. Minnesota-Twin Cities.

2002–2007, advisor Kevin J. Anchukaitis, Ph.D. (2007), Geosciences Dept., Univ. Arizona; Assistant Research Scientist, Woods Hole Oceanographic Institution.

III.C.4. Post-doctoral

2016–2018, supervisor Matthias Trachsel, Dept of Geology and Swiss National Research Foundation Research Fellow.

2008–2009, supervisor Ana Kursinski, Atmospheric Sciences Dept, Univ Arizona; Research Scientist, Univ Arizona.

III.C.5. Other Research Directions (K-12 Interactions)

2016–2017, supervisor Brendan Shimizu, Eleanor Roosevelt H.S. (exp. 2017).

2014–2015, supervisor Ivie Ebhojiaye, Eleanor Roosevelt H.S. (2014); undergraduate and Banneker-Key Fellow, UMD.

2013–2014, supervisor Ann-Marie Stringer, Eleanor Roosevelt H.S. (2014); undergraduate, Georgia Tech.

2012–2013, supervisor Emily Boluda, Eleanor Roosevelt H.S. (2013); undergraduate, Case Western Reserve University.

2011–2012, supervisor Leah Mudd, Eleanor Roosevelt H.S. (2012); undergraduate, Towson Univ.

2010–2011, supervisor Heagan Ahmed, Eleanor Roosevelt H.S. (2011); undergraduate, Cornell Univ.

2001–2002 Elizabeth Sciacca, Our Lady of Victory H.S., Dobbs Ferry, NY (2001); placement unknown.

III.D. Mentorship

III.D.1. Junior Faculty

III.D.2. Other

III.E. Advising: Other than Research Direction

III.E.1. Undergraduate

2013–2014 Mentor, G. Jiang, graduate school and NSF/GRFP applicant.

2012-13 Mentor, B.T. Breeden, graduate school applicant; matriculated at UT Austin.

III.E.2. Master's

III.E.3. Doctoral

III.E.4. Post-doctoral

2004,2006, host visiting scientist, Patricia Povoa de Mattos, EMBRAPA (Brazil)

III.E.5. Other Advising Activities

2012–2015 Mentor, NSF graduate research fellowship applicants from Geology Dept. and CMNS.

2013 New Faculty Mentor, J.P. Dodd (Asst. Prof, Northern Illinois University, Dept. of Geology and Environmental Sciences).

2008 ADVANCE program, mentoring workshop leader.

2003 Facilitator, NSF/NAGT 2003 Cutting Edge Workshops, "Preparing for an Academic Career in the Geosciences: A workshop for graduate and post-doctoral fellows" (R.H. MacDonald and R.W. Dunbar, organizers), Stanford University, Stanford, CA.

III.F. Professional and Extension Education

III.F.1. Professional Programs Established

III.F.2. Major Extension Programs

III.F.3. Workshops

III.F.4. Other

III.G. Other Teaching Activities

Fall 2015, 2016: Graduate fellowship proposal development workshop, Department of Geology, 7 students participating in three workshop meetings.

IV. Service and Outreach

IV.A. Editorships, Editorial Boards, and Reviewing Activities

IV.A.1. Editorships

2013– Associate Editor, J. Climate

IV.A.2. Editorial Boards

IV.A.3. Reviewing Activities for Journals and Presses

1998–, Reviewer: Canad. J. For. Res., Chem. Geol., J. Climate, Clim. Change, Clim. Dyn., Clim. Past, Earth Interactions, Earth and Planet. Res. Lett., Ecology, Elsevier, Geophys. Res. Lett., Geochim et Cosmochim Acta, Geology, G-Cubed, Glob. and Planet. Change, Int. J. Climatol., J. Geophys. Res.-Atm, JGR-Oceans, JGR-Biogeosci, J. Ocean Technol., Nature, Nature-Geosci., Nature-Clim. Change, Paleoceanography, Palaeo3, Plant Cell and Env, PLOS One, Princeton Univ Press, Science, Trees-Structure and Function, Springer, Tree Physiology, Quat. Sci. Rev.

IV.A.4. Reviewing Activities for Agencies and Foundations

1998– NSF, NAGT, NOAA, NERC (UK), IODP, Washington Sea Grant, CONICYT (Argentina), Graduate Women in Science (GWIS) Deutsche Forschungsgeinschaft (DFG, Germany), Smithsonian Institution, Swiss National Research Foundation (SNRF).

2012, 2013, 2014, 2015, 2017 Panelist, Geosciences-I, NSF Graduate Research Fellowship Program.

2013 Panelist, NSF/AGS.

IV.A.5. Reviewing Activities for Conferences

IV.A.6. Historical Editorships, etc. (10+ years ago)

IV.A.7. Other

2014 Panelist, AGU/AGI Heads and Chairs webinar on recruiting and retaining graduate students, 21 Feb.

IV.B. Committees, Professional & Campus Service

IV.B.1. Campus Service - Department

2013 Member, Merit Pay Committee, ESSIC.

2013 Representative participant, RTUGeoEd workshop to develop a TUES (Transforming Undergraduate Education) proposal for submission in 2013, PI: K. Prestegaard, co-PI's V. Lekic, M.N. Evans, USF/Tampa, 15-17 Feb.

2010, 2011, 2012 Member, Best Scientific Paper Award Committee, ESSIC.

2009/10, 2011/12, 2012/13, 2014/15 Member, admissions committee, Geology.

2004–2008 Evaluator, Geosciences graduate student symposia, Geosciences Dept., Univ Arizona.

IV.B.2. Campus Service - College

2012, 2014 Scholars Service Day, faculty on-site supervisor, Science and Global Change Program, Kenilworth Park and Aquatic Gardens, Washington DC, August.

2013 College Park Scholars, Climate and Global Change program, colloquium speaker, April 10.

2012 Participant, NSF Graduate Research Fellowship introduction, CMNS.

2011 Member, Search committee, Director of Facilities, CMNS.

2010 Member, Search Committees, CIRUN Director and regional hydrometeorology, CMNS (3 hires ultimately made).

2009 Member, Dean's Award for Excellence in Teaching, CMPS.

2006 Member, Exploratory working group, proposed water-climate-ecological research in "Biosphere 2, Version 3", College of Science, Univ Arizona.

IV.B.3. Campus Service - University

2010, 2011, 2012, 2013, 2014, 2015 Exhibitor, Maryland Day, Earth Sciences Tent.

2010-11 Member, UMD Data Management Committee (to develop guidelines for NSF data management requirements, organized by Interim Vice President for Research Norma Allewell, Interim V.P. for Research and CIO Joseph JaJa, and Dean of Libraries Patricia Steele).

2009–2011 Geology Senator, University Senate.

2008– Design input, development, funding, commissioning, management and maintenance of Paleoclimate CoLaboratory Cost Center for stable isotope analysis (since 2010 and as of 10/2014, a total of 12,980 carbonate and organic samples have been analyzed in support of 33 projects in paleoclimatology, archaeology, and geobiology on two IRMSes. Another 23,869 analyses have been contracted, with analyses to be made when samples are delivered.

2007–2008 ADVANCE program, Data Blitz speaker; mentoring workshop leader; distinguished early career scientist host, Univ Arizona.

2007–2008 Core faculty, undergraduate Integrated Science Program, College of Science, Univ Arizona.

2006– Member, Graduate Interdisciplinary Program in Statistics, Univ Arizona.

2003–5 Member, University Committee on Elections, Univ Arizona.

IV.B.4. Campus Service - Special Administrative Assignment

IV.B.5. Campus Service - Other

IV.B.6. Offices and Committee Memberships

IV.B.7. Leadership Roles in Meetings and Conferences

2017 Co-organizer, Data Assimilation and Proxy Systems (DAPS) workshop, Louvaine-le-Neuve, Belgium (proposal pending).

2015 Co-organizer, 1st PAGES/Ocean2k Workshop, 6-8 October, Barcelona, Spain (PAGES-IPO support of EUR$15,000 awarded).

2013– Working group 3 (methods), PAGES2K-PMIP3 Working Group on Data-Model Comparison (role developed from 2013 Madrid conference).

2011 Organizer, Session 12.g, Modeling of Geochemical Proxies, Goldschmidt Conference, Prague, Austria, August 14-19.

2010 Organizer, Session PP53, Studying Uncertainty in Paleoclimate Reconstructions, AGU Fall Meeting, San Francisco, 13-17 December.

2008 Organizer, Session PP51, Advancing Process Understanding in Proxy Climate Records, AGU Fall Meeting, San Francisco, 15-19 December.

2008 Organizer, Session 18d, Recent developments in traditional stable isotope research: Approaches and instrumentation, Davos, Switzerland, June 21-26.

IV.B.8. Other Non-University Committees, Memberships, Panels, etc.

IV.B.9. Historical Committees, etc. (10+ years ago)

2004– Member, Committee/Graduate Interdisciplinary Program in Global Change, Univ Arizona.

2003–5 Member, University Committee on Elections, University of Arizona.

2003 Member, USGS/UA Earth Surfaces Processes Research Institute (ESPRI), Biogeochronology working group, Univ Arizona.

2002–3 Graduate Program Assessment Cte., Laboratory of Tree-Ring Research, Univ Arizona.

2001– Library liaison, Laboratory of Tree-Ring Research, Univ Arizona.

2001– Member, Institute for the Study of Planet Earth (ISPE), Univ Arizona.

IV.B.10. Other

IV.C. External Service and Consulting

IV.C.1. Community Engagements, Local, State, National, International

IV.C.2. International Activities

2016-2018 selected for PAGES/Future Earth Scientific Steering Committee, International Geosphere-Biosphere Program. Responsible for implementation of the PAGES project, scientific guidance and coordination of project activities; annual meeting attendance and participation via email.

2012–2013 UNEP/Intergovernmental Panel on Climate Change, 5th Assessment Report, Expert Reviewer, First and Second Order Drafts.

2012– PAGES 2K Program Coordinating Committee member. Responsible for overview and direction of the nine PAGES 2K Working Groups, a community-based analysis of climate variation by geographic region (Africa, Antarctica, Arctic, Asia, Australasia, Europe, South America, North America, and the global Oceans).

2011–2015 Overall lead, PAGES Ocean2k Working Group, PAGES Ocean2k Working Group. Founded and developed a consensus-based organizational structure for this community science project, including transparent 'crowdsourced' data gathering; organization of communications and records of work; mentoring of junior colleagues in the design, execution and communication of syntheses of marine surface climate over the past 2000 years, resulting in 3 contributed presentations at AGU Fall Meetings (2012, 2013, 2014); 9 other invited and contributed presentations; 3 notes; 2 manuscripts published (*Tierney et al., Paleoceanography*, 2015; *McGregor et al., Nature Geosciences*, 2015); two additional manuscripts submitted or in preparation for submission to the peer reviewed literature; planning/organization of 1st Ocean2k workshop, Barcelona, Spain, 6-8 Oct 2015.

IV.C.3. Corporate and Other Board Memberships

IV.C.4. Entrepreneurial Activities

IV.C.5. Consultancies (to local, state and federal agencies; companies; organizations)

IV.C.6. Historical External Service and Consulting (10+ years ago)

IV.C.7. Other

IV.D. Non-Research Presentations

IV.D.1. Outreach Presentations

2014 Activity leader (3x), Takoma Park 4H.

2013 Activity leader, Takoma Park 4H.

2006 Public speaker, Rotary Club of Tucson.

2003 Public speaker, Tucson Jewish Community Center.

IV.D.2 Other

IV.E. Media Contributions

IV.E.1. Internet

IV.E.2. TV

IV.E.3. Radio

IV.E.4. Digital Media

IV.E.5. Print Media

IV.E.6. Blogs

IV.E.7. Feeds

IV.E.8. Other

IV.F Community & Other Service

V. Awards, Honors and Recognition

V.1. Research Fellowships, Prizes and Awards

2015 Visiting Scientist Grant, Oeschger Center for Climate Change Research, University of Bern, Switzerland.

2015 Visiting Scientist Grant, Sigrist Foundation, Switzerland.

2015 Visiting International Scientist Short Stay Grant, Swiss National Research Foundation, Switzerland.

2015 Vice Chancellor's International Scholarship, University of Wollongong, Wollongong, Australia.

2004–2009 NSF CAREER Award.

2000–2001 NOAA/UCAR Climate and Global Change Postdoctoral Fellowship.

1993–1996 NASA Global Change Research Fellowship.

V.2 Teaching Awards

V.3 Service Awards and Honors

V.4 Recognition in Media

V.5 Other Special Recognition

VI. Other Information