

VITA

Oct 2020

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DATE AND PLACE OF BIRTH: April 1968, Ramapo, New York

EDUCATION:

B.Sc.: 1990, Applied and Engineering Physics, Cornell University, Ithaca, New York
M.Sc.: 1995, Astrophysical Planetary and Atmospheric Sci., University of Colorado, Boulder, Colorado
Ph.D.: 1997, Astrophysical Planetary and Atmospheric Sci., University of Colorado, Boulder, Colorado

PROFESSIONAL EXPERIENCE and EDITORSHIPS

University of Colorado: Boulder, Colorado	
Research Assistant	1992–1997
Goddard Institute for Space Studies, NASA: New York, New York	
Postdoctoral Research Associate	1997–1998
Climate Diagnostics Center, NOAA: Boulder, Colorado	
Research Associate	1998–1999
University of Colorado: Boulder, Colorado	
Research Associate	1999–present
National Center for Atmospheric Research: Boulder, CO	
Associate Scientist II	2004 – 2007
National Center for Atmospheric Research: Boulder, CO	
Project Scientist I	2007– 2010
National Center for Atmospheric Research: Boulder, CO	
Project Scientist II	2010– 2015
National Center for Atmospheric Research: Boulder, CO	
Project Scientist III	2015– present
Editor, Meteorology and Atmospheric Physics	2003– 2018

PROFESSIONAL SOCIETIES:

American Geophysical Union	2005- present
American Association for the Advancement of Science	2017- present

PROFESSIONAL ACTIVITIES:

CERES Science Team Member	2007-present
NASA ASDC User Working Group Member	2012-present
PAGES Global Monsoon Working Group Member	2010-present
Supervisor of a CGD Project Scientist	2014-2017

PROFESSIONAL Awards:

AMS Journal of Climate Editors Award	2014
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CGD Special Recognition Award 2008
NCAR Outstanding Publication Award Nominee, CGD 2012, 2015, 2016, 2017

International

Contributor, Intergovernmental Panel on Climate Change (IPCC), *Scientific Assessment of Climate Change*, WMO/UNEP, 2007

Contributor, Intergovernmental Panel on Climate Change (IPCC), *Scientific Assessment of Climate Change*, WMO/UNEP, 2013

Participation in numerous conferences and workshops.

PROFESSIONAL EXPERIENCE: EIS studies 1990-1992, expert witness testimony, 2003, 2013.

Invited participation in workshops, conferences, and community activities, 2008-2020

Invited speaker Fall AGU meeting, “Dynamic and thermodynamic controls of the global water cycle in the 20th and 21st centuries”, 15-19 December 2008, San Francisco.

Invited speaker 2nd Global Monsoon Symposium, “A Mechanism for Weakening of the Global Monsoon in a Warming World”, 13-15 September 2010, Shanghai, China.

Invited speaker Fall AGU meeting, “Atmospheric moisture transports from ocean to land in reanalyses”, 13-17 December 2010, San Francisco.

Invited speaker Fall AGU meeting, “Tracking Earth’s “Missing Energy” with the NCAR CCSM4”, 13-17 December 2010, San Francisco.

Invited speaker Fall AGU meeting, “A Mechanism for Land-Ocean Contrasts in Global Monsoon Trends in a Warming Climate”, San Francisco, CA, 7 Dec 2011.

Invited speaker Workshop on Earth’s Energy Imbalance, “Getting Our Heads Out of the Clouds: The Role of Subsident Teleconnections in Climate Sensitivity”, Brookhaven, NY, 16 May 2012.

Speaker 2012 Fall AGU meeting, “Getting our heads out of the clouds: The role of subsident teleconnections in climate sensitivity”, San Francisco, CA, 4 Dec 2012.

Invited speaker Workshop on Using GRACE Data for Water Cycle Analysis and Climate Modeling, “Australia’s Unique Influence on Sea Level in 2010-2011”, Pasadena, CA, July 2013.

Invited speaker Fall AGU meeting, “ENSO’s Variable Influence on Global Mean Sea Level”, San Francisco, CA, Dec 2013.

Invited speaker Fall AGU meeting, “Australia: The Little Continent that Can Influence Global Sea Level”, San Francisco, CA, Dec 2013.

Invited expert discussant, “Challenges in Constraining Climate Sensitivity: Should IPCC AR5’s Lower Bound Be Revised Upward?”, Climate Dialogue (<http://www.climatedialogue.org>), May 2014.

Invited speaker, “IPCC AR5 Chapter 12: Long-term Climate Change”, Reading the IPCC Report – A CIRES-ATOC Seminar Series, Boulder, CO, Oct. 28, 2014.

Invited speaker, “Earth’s Energy Budget in a Changing Climate?”, Keynote, ATOC Poster Conference, Boulder, CO, Nov. 2014.

Invited speaker, “Understanding Global Mean Sea Level as an Indicator of Climate Variability and Change”, NCAR Climate Variability and Change Working Group Meeting, Feb. 2015.

Invited speaker, “Understanding Sea Level as a Constraint on Climate Variability and Sensitivity”, WCRP Workshop on Earth’s Climate Sensitivities, Ringberg, Germany, Mar. 2015.

Quantifying Interannual Variability of Global Mean Sea Level in Observations and the NCAR CESM, IUGG, Prague CZ, July 2015 (invited, presented by F. Landerer).

An Early Term Report Card for CESM1.5 Energy and Water Budgets, Boulder, CO, 11 Feb 2016, invited.

Understanding Global Warming’s “Hiatus”: invited lecture for ATOC4800; Boulder, CO, 2 Mar 2016, invited.

Beneath the Surface: Understanding Sea Level Using CERES and other DATA; CERES Science Team Meeting, Newport News, Apr 26, 2016, invited.

A Mid-Term Report Card for CESM1.x Energy and Water Budgets, CESM Annual Meeting, Breckenridge, CO, 80309, invited.

Understanding Climate Change and Variability through the Altimeter Record of Sea Level Rise, Fourth Santa Fe Conference on Global & Regional Climate Change . Santa Fe NM, Feb 2017, invited.

Earth's Energy Budget, Les Houches Winter School on Planetary Circulations . Les Houches, France, Mar 2017, invited.

The role of increased ocean stratification in a future year without a summer, CESM Winter Meeting, Boulder, CO, Feb. 2017.

Hemispherically Dependent Responses of the Global Monsoon to Volcanic Eruptions in the CESM Last Millennium Ensemble, CESM Annual Workshop, Boulder, CO, June, 2017.

Hemispherically Dependent Responses of the Global Monsoon to Volcanic Eruptions in the CESM Last Millennium Ensemble, AGU Fall Meeting, New Orleans, CO, Dec, 2017.

An Introduction to Climate Models and their Application, invited lecture for CU COEN3210, Boulder, CO: Mar 2018.

Geoengineering: Ideas, benefits, and risks, invited lecture for CU COEN3210, Boulder, CO: 19 Apr 2018.

The amplifying influence of increased ocean stratification on a future year without a summer, NCAR Day of Discovery, Boulder, CO, 20 Apr, 2018.

Persistent Polar Ocean Warming in a Strategically Geoengineered Climate, 2018 CESM Workshop, Boulder, CO, 19 June, 2018.

CESM2 development AS viewed through the lens of the NCAR climate model analysis tool (CMAT), 2018 Energy Radiation Budget Workshop, Boulder, CO, 13 Sep 2018.

Persistent Polar Ocean Warming in a Strategically Geoengineered Climate, 2018 AGU Fall Meeting, Boulder, CO, 14 Dec 2018.

Altimeter-Era Emergence of the Patterns of Forced Sea Level Rise and Implications for the Future, CGD Research Reports, Boulder, CO, 20 Dec 2018.

Seasonal and Hemispheric Dependence of the Global Monsoon Response to Major Extratropical Eruptions in the CESM LME, CESM Paleoclimate Working Group Meeting, Boulder, CO, 5 Feb 2019.

Altimeter-Era Emergence of the Patterns of Forced Sea Level Rise and Implications for the Future, NASA Sea Level Science Team Working Group, Annapolis, MD, 12 Mar 2019.

Persistent Polar Ocean Warming in a Strategically Geoengineered Climate, Workshop on Climate Extremes and Resilience, Riederalp, Switzerland, 20 Mar 2019.

NCAR's Climate Model Assessment Tool, CMIP6 Model Analysis Workshop, Barcelona, Spain, 25 Mar 2019.

Drivers of Altimeter-Era Forced Response in Regional Sea Level and Consequences for the Coming Decades, San Francisco, CA, 9 Dec 2019.

Ocean subsurface salinity change yields an Anthropogenic Climate Signal, Boulder, CO, 22 Mar 2020.

Evaluation of Leading Modes of Climate Variability in the CMIP Archives, Boulder, CO, 17 Jun 2020.

Reviewer of manuscripts: Multiple reviews for AMS, AGU, RMS, JMS, and Tellus Journals, Wright Architecture

Reviewer of proposals: National Science Foundation, NOAA, NASA

Student Mentorship: Dimitris Herrera Hernandez (Cornell), Garrison Loope (Arizona), Jonathan King (Arizona), Luke Parsons (Arizona), Hrishikesh Arvind Chandanpurkar (postdoc, JPL)

Public Service and Other Activities:

Congressional Outreach: AGU's Geosciences Congressional Visits Day 21 Sep 2011.

Second annual Climate Science Day on Capitol Hill, 1 Feb 2012.

Seminar Coordinator: 2008/9 CGD Seminar Host and Coordinator.

Participation on national radio programs and other media: (see home page, above, for media coverage listing)

Interview and commentary on global climate change and modeling NPR, 2002.

Interviews on the Earth's Energy Flow, April 2010: NPR, Time Magazine, Climate Central, The Daily Camera, KGNU. Related interviews with Media Matters, Climate Central, and the Boston Globe.

Interviews on *Science* paper: The role of subsident teleconnections in climate sensitivity: NPR, Climate Central, and many others.

Interviews on *GRL* article: Australia's unique influence on global sea level in 2010-2011: NPR, Climate Central, and many others.

Interviews on *Scientific Reports* article: Is the detection of accelerated sea level rise imminent?: Washington Post, Bloomberg, Climate Central, and many others.

Invited lecturer: Nanjing Institute of Science and Technology, Summer Monsoon Workshop, July, 2007: *The Asian Monsoon: Its Origins, and Interactions*

University of Colorado Teaching experience:

ATOC 1060 Our Changing Environment: El Niño, Ozone & Climate, 1999-2001

ATOC 3600 Principles of Climate 2000-2001

ATOC 6020 Tracking Earth's Missing Energy, University of Colorado, Oceanography seminar, Boulder, CO Sep. 27, 2010, Invited seminar speaker.

ATOC 4800 Policy implications of Critical Issues in Climate and the Environment, Boulder, CO Mar. 2, 2016, Invited seminar speaker.

COEN3210 Invited lectures on climate models and geoengineering, Spring 2018, 2019, 2020.

Current research grants and contracts

Title (Sponsor): Collaborative Research to Narrow Uncertainties in Precipitation and the Hydrological Cycle in Climate Models (DOE)

Period: 8/2014-7/2017

Capacity: Co-P.I. (P.I. Trenberth)

Title: Collaborative Research: EaSM2—Quantifying and Conveying the Risk of Prolonged Drought in Coming Decades (NSF)

Period: Feb 2013-Jan 2018

Capacity: Team member

Title: NASA Sea Level Science Team (NASA)

Period: Nov 2017-Oct 2020

Capacity: co-I

Publications (4 book contributions, 127 publications - 121 peer-reviewed, 12501 citations, h-index=51, Oct 2020; Altmetric Mentions 12164)

BOOKS AND BOOK CHAPTERS

- Contributor to "*Ice: Portraits of Vanishing Glaciers*" by James Balog and the Extreme Ice Survey Team, Rizzoli (New York), 2012. 288 pp.
- Webster, P. J., and J. Fasullo, 2003: *Monsoon: Dynamical Theory*. Encyclopedia of Atmospheric Sciences. Eds. J. Holton and J. A. Curry. Academic Press, 1370-1385.
- Webster, P. J., C. Clark, G. Chirikova, J. Fasullo, W. Han, J. Loschnigg, and K. Sahami, 2002: "*The Monsoon as a self-regulating coupled ocean-atmosphere system.*" Meteorology at the Millennium. Academic Press, 198-219.
- Fasullo, J. 2018: *Sea Level Rise*, MacMillian Encyclopedia.

JOURNALS (In Press or Published)

- Stevenson, S., A. Wittenberg; J. Fasullo, S. Coats, B. Otto-Bliesner, 2020; Understanding Diverse Model Projections of Future Extreme El Niño, *J. Climate*, accepted.
- Cheng, L., K.E. Trenberth, N. Gruber, M. E. Mann, J. P. Abraham, J.T. Fasullo, G. Li, X. Zhao, J. Zhu, 2020: Improved estimates of changes in upper ocean salinity and the hydrological cycle, *J. Climate*, doi:10.1175/JCLI-D-20-0366.1.
- Coats, S., J. E. Smerdon, S. Stevenson, J. T. Fasullo, B. Otto-Bliesner, T. R. Ault, Paleoclimate constraints on the spatiotemporal character of past and future droughts, *J. Climate*, doi:10.1175/JCLI-D-20-0004.1.
- Liu, Y., J. Li, J. Fasullo, D. L. Galloway, 2020: Land subsidence contributions to relative sea level rise at tide gauge Galveston Pier 21, Texas, *Scientific Reports*, accepted.
- Herrera, D., T. R. Ault, C. M. Carrillo, J. T. Fasullo, X. Li, C. P. Evans, M. J. Alessi, N. M. Mahowald, 2020: Dynamical characteristics of drought in the Caribbean from observations and simulations, *J. Clim.*, accepted.
- Fasullo, J.T. 2020: Evaluating Simulated Climate Patterns from the CMIP Archives Using Satellite and Reanalysis Datasets, *Geo. Mod. Dev.*, doi: .
- Orbe, C. and coauthors, 2020: Representation of Modes of Variability in 6 U.S. Climate Models *J. Clim.*, accepted.
- Fasullo, J.T., P. Gent, R.S. Nerem 2020; Sea Level Rise in the CESM Large Ensemble: The Role of Individual Climate Forcings and Consequences for the Coming Decades, *J. Clim.*, doi: 10.1029/2019JC016030.
- Hamlington, B. C. G. Piecuch, J.T. Reager, H. Chandanpurkar, T. Frederikse, R. S. Nerem, J. T. Fasullo, S.-H. Cheon 2020; Origin of Interannual Variability in Global Mean Sea Level, *Proc. Nat. Aca. Sci.*, doi:10.1073/pnas.1922190117
- Fasullo, J.T., P. Gent, R.S. Nerem 2020; Forced Patterns of Sea Level Rise in the Community Earth System Model Large Ensemble from 1920 to 2100, *J. Geo. Res. - Oceans*, doi: 10.1029/2019JC016030.
- Fasullo, J.T., A. Phillips, C. Deser 2020; Evaluation of Leading Modes of Climate Variability in the CMIP Archives, *J. Climate*, doi: 10.1175/JCLI-D-19-1024.1
- Hamlington and Coauthors 2020; Understanding of Contemporary Regional Sea Level Change and the Implications for the Future, *Rev. Geophys*, doi:10.1029/2019RG000672
- Hamlington, B., T. Frederikse, R.S. Nerem, J.T. Fasullo, S. Adhikari 2020: Acceleration of Regional Sea-level Rise During the Satellite Altimeter Era, *Geo. Res. Lett.*, doi:10.1029/2019GL086528
- Danabasoglu et al. 2020: The Community Earth System Model version 2 (CESM2), *J. Adv. Modeling Earth Systems*, 10.1029/2019MS00191.
- Cheng et al. 2020: Record-Setting Ocean Warmth Continued in 2019, *Advances in Atmospheric Sciences*, doi: 10.1007/s00376-020-9283-7.
- Simpson, I. et al. 2019: The regional hydroclimate response to stratospheric sulfate geoengineering and the role of stratospheric heating, *J. Geo. Res. Atm.*, doi: 10.1029/2019JD031093
- Chandanpurkar, H., J. Fasullo, J. Reager, Robert Nerem, James Famiglietti 2019: Asymmetric Response of Land Storage to ENSO Phase and Duration, *Water*, doi:10.3390/w11112249
- Fasullo, J.T., B. Otto-Bliesner, S. Stevenson 2019: The Influence of Volcanic Aerosol Meridional Structure on Monsoon Responses over the Last Millennium, *Geo. Res. Lett.*, doi:10.1029/2019GL084377
- Gottelman, A., J. T. Bacmeister, C. Hannay, R. B. Neale, A. G. Pendergrass, G. Danabasoglu, J.-F. Lamarque, J. T. Fasullo 2019: High Climate Sensitivity in the Community Earth System Model version 2 (CESM2), *Geo. Res. Lett.*, 10.1029/2019GL083978
- Tokarska, K.B., G. C. Hegerl, A. P. Schurer, A. Ribes, and J.T. Fasullo 2019: Quantifying human contributions to past and future ocean warming and thermocline sea level rise, *Environ. Res. Lett.*

- Trenberth, K.T., Y. Zhang, J.T. Fasullo, L. Cheng, 2019: Observation-based estimate of global and basin ocean meridional heat transport time series, *J. Clim.*, 10.1175/JCLI-D-18-0872.1.
- Hamlington, Fasullo, Nerem, Kim, Landerer, Uncovering the Pattern of Forced Sea Level Rise in the Satellite Altimeter Record, *Geophysical Research Letters*, doi: 10.1029/2018GL081386.
- Cheng, L. K. E. Trenberth, J.T. Fasullo, M. Mayer, M. Balmaseda, J. Zhu, Evolution of ocean heat content related to ENSO, *Journal of Climate*, doi: 10.1175/JCLI-D-18-0607.1
- Cheng, Zhu, Abraham, Trenberth, Fasullo, Boyer, Locarini, Zhang, Wan, Chen, Song, 2018 Continues Record Global Ocean Warming, *Adv. Atm. Sci.*,10.1007/s00376-019-8276-x
- Nerem, R. S., and J. Fasullo, Observations of the Rate and Acceleration of Global Mean Sea Level Change, *Bull. Amer. Meteor. Soc.*, Explaining Extreme Events of 2017 from a Climate Perspective, pp. S1-S4, DOI:10.1175/BAMS-D-18-0247.1, 2018.
- Fasullo, J.T., R. S. Nerem, Altimeter-Era Emergence of the Patterns of Forced Sea Level Rise and Implications for the Future, *Proc. Nat. Aca. Sci.*, 10.1073/pnas.1813233115.
- Herrera, T. Ault, J.T. Fasullo, S. Coats, C. Carillo, and Benjamin Cook, 2017: Unprecedented 2013–2016 Caribbean drought intensified by climate change, *Geo. Res. Lett.*, 10.1029/2018GL079408.
- Fasullo, J.T., and coauthors; Persistent Polar Ocean Warming in a Strategically Geoengineered Climate, *Nature Geoscience*, 10.1038/s41561-018-0249-7.
- Fasullo, J.T., B. Otto-Bliesner, S. Stevenson, 2018; ENSO Teleconnections to Temperature, Precipitation and Wildfire in a Warming Climate, *Geo. Res. Lett.*, doi: 10.1029/2018GL079022.
- Tilmes, S., and coauthors; CESM1(WACCM) Stratospheric Aerosol Geoengineering Large Ensemble (GLENS) Project, *Bull. Amer. Met. Soc.*, doi: 10.1175/BAMS-D-17-0267.1.
- Trenberth, K.T., L. Cheng, P. Jacobs, Y. Zhang J.T. Fasullo; Hurricane Harvey links to ocean heat content and climate change adaptation, *Earth's Future*, doi: 10.1029/2018EF000825.
- Trenberth, K.T. and J.T. Fasullo, 2018: Applications of an updated atmospheric energetics formulation, *J. Clim.*, doi:10.1175/JCLI-D-17-0838.1.
- Fasullo, J.T., 2018: Sea Level Rise, *McGraw-Hill Encyclopedia of Science and Technology*, doi: 10.1036/1097-8542.609550.
- Mishra, S.K., Anand A., Bhagat S., and J.T. Fasullo, 2018: Importance of the Resolution of Surface Topography in Indian Monsoon Simulation, *J. Clim.*, doi:10.1175/JCLI-D-17-0324.1.
- Stevenson, S, J. Overpeck, J.T. Fasullo, S. Coats, L. Parsons, T. Ault, B. Otto-Bliesner, G. Loope, J. Cole, 2018: Climate Variability, Volcanic Forcing, and Last Millennium Hydroclimate Extremes, *J. Clim.*,doi:10.1175/JCLI-D-17-0407.1.
- Tilmes, S., and coauthors, 2018: CESM1(WACCM) Stratospheric Aerosol Geoengineering Large Ensemble (GLENS) Project, *Bull. Amer. Met. Soc.*, in press
- Trenberth, K.T., L. Cheng, P. Jacobs, Y. Zhang J. T. Fasullo; 2018: Hurricane Harvey links to ocean heat content and climate change adaptation, *Earth's Future*, doi: 10.1029/2018EF000825.
- Trenberth, K.T. and J. Fasullo, 2018: Applications of an updated atmospheric energetics formulation, *J. Clim.*, in press.
- Mishra, S.K., Anand A., Bhagat S., and J.T. Fasullo, 2018: Importance of the Resolution of Surface Topography in Indian Monsoon Simulation, *J. Clim.*, doi:10.1175/JCLI-D-17-0324.1.
- Stevenson, S, J. Overpeck, J. T. Fasullo, S. Coats, L. Parsons, T. Ault, B. Otto-Bliesner, G. Loope, J. Cole, 2018: Dynamical Controls on Last Millennium Hydroclimate Extremes, *J. Clim.*,doi:10.1175/JCLI-D-17-0407.1.
- Nerem, R.S., B. D. Beckley, J. T. Fasullo, B. D. Hamlington, D. Masters and G. T. Mitchum. Climate-change–driven accelerated sea-level rise detected in the altimeter era. *PNAS*, 2018 DOI: 10.1073/pnas.1717312115.
- Mishra, S.K., Anand A., Bhagat S., and J.T. Fasullo, 2018: Importance of the Resolution of Surface Topography in Indian Monsoon Simulation, *J. Clim.*, in press.
- Owens, M.J., M. Lockwood, E. Hawkins, I. Usoskin, G. Jones, L. Barnard, A. Schurer; J.T. Fasullo, 2017: The Maunder minimum and the Little Ice Age: an update from recent reconstructions and climate simulations, *J. Space Weather Space Clim.*,7,A33, doi: <https://doi.org/10.1051/swsc/2017034>.
- Fasullo, J.T., and P. R. Gent, 2017: On the Relationship between Regional Ocean Heat Content and Sea Surface Height, *J. Climate*, **30**, 9195–9211, <https://doi.org/10.1175/JCLI-D-16-0920.1>.
- Fasullo, J.T., R. Tomas, S. Stevenson, B. Otto-Bleisner, E. Brady, and E. Wahl, 2017: The Amplifying Influence of Increased Ocean Stratification on A Future Year Without A Summer, *Nature Communications*, doi: 10.1038/s41467-017-01302-z.
- Cheng, L., K. E. Trenberth, J. Fasullo, J. Abraham, T. Boyer, K. von Schuckmann, J. Zhu, 2018: Taking the pulse of the planet. *Earth and Space Science News, Eos*, **99**, 14-16. Doi: 10.1029/2017EO081839.

- Wang, P. X., Wang, B., Cheng, H., Fasullo, J., Guo, Z. T., Kiefer, T., and Liu, Z. Y.: 2017, The Global Monsoon across Time Scales: Mechanisms and outstanding issues, *Earth Science Reviews*, **174**, 84-121, <https://doi.org/10.1016/j.earscirev.2017.07.006>.
- Trenberth, K. E. and J. T. Fasullo, 2017: Atlantic meridional heat transports computed from balancing Earth's energy locally, *Geo. Phys. Res. Lett.*, **44**, doi:10.1002/2016GL072475..
- Cheng, L., K. Trenberth, J.T. Fasullo, T. Boyer, J. Abraham, J. Zhu, 2017: Re-assessment of Earth's energy imbalance since 1960 based on ocean heat content changes, *Science Advances*, **3**, doi: 10.1126/sciadv.1601545.
- Stevenson, S., A. Capotondi, J. Fasullo and B. Otto-Bliesner, 2017: Forced Changes to 20th Century ENSO Diversity in a Last Millennium Context, *Climate Dynamics*, doi:10.1007/s00382-017-3573-5.
- Stevenson, S., B. Otto-Bliesner, J. Fasullo, 2017: Considering Eruption Season to Reconcile Model and Proxy Responses to Tropical Volcanism, *Proc. Nat. Acad. Sci.*, **114**, 1822-1826, doi: 10.1073/pnas.1612505114.
- Fasullo, J. T., and R. S. Nerem, 2016: Interannual Variability in Global Mean Sea Level Estimated from the CESM Large and Last Millennium Ensembles, *Water*, **8** (11), 491; doi:10.3390/w8110491.
- Fasullo, J. T., R. S. Nerem, and B. Hamlington, 2016: Is detection of accelerated sea level rise imminent? Scientific Reports, **6**, 31245, doi:10.1038/srep31245.
- Trenberth, K. E., J. T. Fasullo, K. von Schuckmann and L. Cheng, 2016: Insights into Earth's energy imbalance from multiple sources. *J. Climate*, doi:10.1175/JCLI-D-16-0339, in press.
- Covey, C., P.J. Gleckler, C. Doutriaux, D.N. Williams, A. Dai, J.T. Fasullo, K.E. Trenberth, and A. Berg, 2016: Metrics for the Diurnal Cycle of Precipitation: Toward Routine Benchmarks for Climate Models, *J. Clim.*, <http://dx.doi.org/10.1175/JCLI-D-15-0664.1>.
- Fasullo, J.T., D. Lawrence, and S. Swenson, 2016: Are GRACE-Era Terrestrial Water Trends Driven By Anthropogenic Climate Change? *Advances in Meteorology*, doi:10.1155/2016/4830603.
- Mayer, M., J. Fasullo, K E. Trenberth, L. Haimberger, 2016: ENSO-Driven Energy Budget Perturbations in CMIP models, *Clim. Dyn.*, doi:10.1007/s00382-016-3057-z.
- Stevenson, S., B. Otto-Bliesner, J. Fasullo, and E. Brady, 2016: 'El Nino Like' Hydroclimate Responses to Last Millennium Volcanic Eruptions *J. Clim.*, <http://dx.doi.org/10.1175/JCLI-D-15-0239.1>.
- Trenberth, K. E., Y. Zhang, and J. T. Fasullo 2015: Relationships among top-of- atmosphere radiation and atmospheric state variables in observations and CESM, *J. Geophys. Res. Atmos.*, **120**, doi:10.1002/2015JD023381
- Grise, K., L. M. Polvani, and J.T. Fasullo, 2015: Re-examining the emergent constraint between climate sensitivity and the Southern Hemisphere radiation budget in CMIP models *J. Clim.* doi: <http://dx.doi.org/10.1175/JCLI-D-15-0031.1>
- Loeb, N.G., H. Wang, A. Cheng, S. Kato, J. T. Fasullo, K.M. Xu, R. P. Allan, 2015: Observational Constraints on Atmospheric and Oceanic Cross-Equatorial Heat Transports, *Clim. Dyn.* doi:10.1007/s00382-015-2766-z.
- Otto-Bliesner, B. et al., The Last Millennium Ensemble Project with the Community Earth System Model (CESM): A Resource for Studying Climate Variability and Change since 850, *Bull. Amer. Met. Soc.*, doi:<http://dx.doi.org/10.1175/BAMS-D-14-00233.1>.
- Trenberth, K.E., J.T. Fasullo and T. Shephard, 2015: Attribution of climate extreme events *Nature Climate Change*, doi:10.1038/nclimate2657.
- Stevens, B., A Abe-Ouchi, S Bony, G Hegerl, G Schmidt, S Sherwood, M Webb; Contributors: M Allen, T Andrews, J Annan, K Armour, N Bellouin, R Caballero, J Church, M Crucifix, A Dessler, T Edwards, J Fasullo, O Geoffrey, C Golaz, J Gregory, R Knutti, M Latif, N Lewis, T Mauritsen, D Sexton, G Stephens, R Sutton, J Vial, K Yu, M Zelinka, 2015: RINGBERG15: EARTH'S CLIMATE SENSITIVITIES, Report from a workshop held on 23-27 March 2015, Schloss Ringberg, Germany WCRP Report No. 11/2015.
- Fasullo, J.T., B.W. Sanderson, and K.E. Trenberth, 2015: Recent Progress in Constraining Climate Sensitivity with Models *Current Climate Change Reports*, **1**, 268-275, doi: 10.1007/s40641-015-0021-7.
- Trenberth, K. E., Y. Zhang, J. T. Fasullo, and S. Taguchi, 2015: Climate variability and relationships between top-of-atmosphere radiation and temperatures on Earth. *J. Geophys. Res.*, **120**, 3642-3659, Doi: 10.1002/2014JD022887.
- Phillips, A. S., C. Deser, and J. Fasullo, 2014: A new tool for evaluating modes of variability in climate models. *EOS*, **95**, 453-455, doi: 10.1002/2014EO490002.
- Wang, P. X., Wang, B., Cheng, H., Fasullo, J., Guo, Z. T., Kiefer, T., and Liu, Z. Y.: The global monsoon across timescales: coherent variability of regional monsoons, *Clim. Past*, **10**, 2007-2052, doi:10.5194/cp-10-2007-2014, 2014.
- Abraham, J., Fasullo, J., & Laden, G., 2014: Continued Global Warming in the Midst of Natural Climate Fluctuations. *Reports of the National Center for Science Education*, **34**(6).
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