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Google Scholar: https://scholar.google.com/citations?user=v7zIehDVGS4C

Education and Training

Ph.D., Earth System Science, 06/2015, University of California, Irvine, California, USA.
M.S., Earth System Science, 12/2012, University of California, Irvine, California, USA.
M.S., Physics, 12/2004, University of Tennessee, Knoxville, Tennessee, USA.
B.S., Physics, 08/1991, University of Tennessee, Knoxville, Tennessee, USA.

Research and Professional Experience

- November 1993–present: Oak Ridge National Laboratory, Oak Ridge, Tennessee, USA.
  - October 2025–present: **Corporate Fellow & Computational Earth System Scientist** in the Computational Sciences & Engineering Division (CSED)
  - June 2024–present: **Group Leader** for the Integrated Computational Earth Sciences (ICES) Group, Computational Sciences & Engineering Division (CSED)
  - May 2019–September 2025: **Distinguished Computational Earth System Scientist** in the Computational Sciences & Engineering Division (CSED)
  - March 2020–May 2024: **Group Leader** for the Computational Earth Sciences (CES) Group, Computational Sciences & Engineering Division (CSED)
  - April 2017–May 2019: **Senior Computational Earth System Scientist** in Computational Sciences & Engineering Division (CSED)
  - October 2012–September 2022: **Earth System Modeling (ESM) Theme Lead** for the Climate Change Science Institute (CCSI)
  - September 2018–March 2020: **Acting Group Leader** for the Computational Earth Sciences (CES) Group, Computational Sciences & Engineering Division (CSED)
  - April 2017–May 2019: **Senior Computational Earth System Scientist** in Computational Sciences & Engineering Division (CSED)
  - May 2014–March 2017: **Senior Computational Earth System Scientist** in the Computer Science & Mathematics Division (CSMD)
  - October 2003–May 2014: **Computational Earth System Scientist** in Computer Science & Mathematics Division (CSMD)
  - November 1993–September 2003: **Research Staff Member** in the Environmental Sciences Division (ESD)
- June 2016–present: **Joint Faculty Professor**, Department of Civil & Environmental Engineering, University of Tennessee, Knoxville, Tennessee, USA.
- January 2002–October 2006: **Contributing Editor and Columnist**, "Extreme Linux" column, *Linux Magazine*.

- July 1992–November 1993: **Scientific Programmer/Analyst**, Department of Geological Sciences, University of Tennessee, position at Environmental Sciences Division, Oak Ridge National Laboratory, Oak Ridge, Tennessee, USA.
- May 1989–June 1992: **Knowledge Engineer**, Automated Sciences Group, Inc., position at Environmental Sciences Division, Oak Ridge National Laboratory, Oak Ridge, Tennessee, USA.
- September 1988–May 1989: **Researcher Intern**, Oak Ridge Associated Universities (ORAU), position at Environmental Sciences Division, Oak Ridge National Laboratory, Oak Ridge, Tennessee, USA.
- 1987–September 1988: **Observer/Telescope Operator**, High Altitude Observatory, National Center for Atmospheric Research, position at Mauna Loa Solar Observatory, Hilo, Hawai'i, USA.

Non-Programmatic Leadership Activities

Group Leader for the Integrated Computational Earth Sciences (ICES) Group, Computational Sciences and Engineering Division (CSED), Oak Ridge National Laboratory, June 2024–present. The ICES Group was created after splitting the former Computational Earth Sciences (CES) Group, led by Dr. Forrest Hoffman, in June 2024. In the first six months, I hired 1 new staff member, bringing the total to 9 staff members.

Group Leader for the Computational Earth Sciences (CES) Group, Computational Sciences and Engineering Division (CSED), Oak Ridge National Laboratory, March 2020–May 2024. Over the course of four years, the size of the group grew from 8 staff members to 15 (88% growth, after 10 hires and 3 departures) with commensurate growth in programmatic funding across multiple agencies. After doubling in size, the group was split into two groups: the Integrated Computational Earth Sciences (ICES) Group, led by Dr. Forrest Hoffman, and the Computational Hydrology and Atmospheric Sciences (CHAS) Group, led by Dr. Salil Mahajan.

Earth System Modeling (ESM) Theme Lead for the Climate Change Science Institute (CCSI), Oak Ridge National Laboratory, 2012–2022.

Acting Group Leader for the Computational Earth Sciences Group, Computational Sciences and Engineering Division (CSED), Oak Ridge National Laboratory, September 2018–March 2020.

Programmatic Leadership Activities

Principal Investigator (PI) for the DOE Earth System Grid Federation 2-US (ESGF2-US) Project, October 2021–present. The project received $3.0M/year plus $1.0M/year for hardware (October 2021–September 2024) and $3.5M/year plus $1.0M/year for hardware (October 2024–present).

Laboratory Research Manager (Lead PI) for the DOE Science Focus Area, *Reducing Uncertainties in Biogeochemical Interactions through Synthesis and Computation (RUBISCO)*, October 2017–present. The project received $2.6M/year (October 2017–September 2021) and $3.2M/year (October 2021–present).

Principal Investigator (PI) for the US Department of Agriculture (USDA) Forest Service project, *Big Data Methods for Detecting Forest Disturbance and Recovery Patterns and Imputing Expected Productivity Measures*, ORNL Project No. 1774-Z146-17, 2017–2022. The project received approximately $60,000/year (2017–2022).

Principal Investigator (PI) for the ORNL Laboratory Directed Research and Development (LDRD) Directors' Research and Development (DRD) project, *Development of a Land Model Testbed (LMT) for Rapid Assessment and Benchmarking of Multiscale Complex Biogeochemistry in Earth System Models*, October 2018–September 2020.

Laboratory Research Manager (Lead PI) for the DOE Science Focus Area, *Quantifying Feedbacks and Uncertainties of Biogeochemical Processes in Earth System Models*, October 2014–September 2017. The project received $2.16M/year (October 2014–September 2017). The project was replaced by the new DOE Science Focus Area, *Reducing Uncertainties in Biogeochemical Interactions through Synthesis and Computation (RUBISCO)*.

Principal Investigator (PI) for the ORNL Laboratory Directed Research and Development (LDRD) Directors' Research and Development (DRD) project, *Model-Inspired Science Priorities for Evaluating Tropical Ecosystem Response to Climate Change*, 2013–2015.

Lead Principal Investigator (PI) for the multi-institutional DOE project, *Quantification and Reduction of Critical Uncertainties Associated with Carbon Cycle–Climate System Feedbacks*, 2013–2014. The project received approximately $1.85M/year (2013–2014). The project was replaced by the new DOE Science Focus Area, *Quantifying Feedbacks and Uncertainties of Biogeochemical Processes in Earth System Models*.

Lead Principal Investigator (PI) for the multi-institutional DOE SciDAC-3 project, *Applying Computationally Efficient Schemes for BioGeochemical Cycles (ACES4BGC)*, 2012–2015.

Principal Investigator (PI) for the US Department of Agriculture (USDA) Forest Service project, *Development and Testing of Methods for Detecting Disturbance and Recovery Patterns and Imputing Expected Productivity Measures Using Big Data*, ORNL Project No. 1774-V598-12, 2012–2018.

ORNL Site Principal Investigator (PI) for the multi-Laboratory SciDAC-2 project, *A Scalable and Extensible Earth System Model for Climate Change Science*, 2010–2011.

Principal Investigator (PI) for the US Department of Agriculture (USDA) Forest Service project, *Development, Testing, and Automation of a Prototype Forest Incident Response and State Tracking (FIRST) Early Warning System for the USDA Forest Service*, ORNL Project No. 1774-T335-07, 2007–2012.

Co-Principal Investigator (Co-PI) for the TN & Associates project, *Identifying Next Potential Invaders to the Great Lakes*, ORNL Project No. NFE-06-00082, 2006–2008.

Co-Principal Investigator (Co-PI) for The Nature Conservancy project, *New Guinea and China Spatial Data Processing*, ORNL Project No. ERD-05-02504, 2005–2006.

Synergistic Activities

Chapter Author for Chapter 3: Earth Systems Processes, *Fifth U.S. National Climate Assessment (NCA5)*, U.S. Global Change Research Program (USGCRP), Released November 14, 2023.

Lead Author for Chapter 2: Program Elements and Leading Initiatives for the Future and Chapter 3.4: Predictions: Model Development, Evaluation and Prediction; Contributing Author for Chapter 1: Introduction: Motivation, History, Goals, Achievements and Challenges and Chapter 3.2: Integration, Synthesis and Assessment; *2022 North American Carbon Program (NACP) Science Implementation Plan*, U.S. Global Change Research Program (USGCRP), Released February 1, 2023, doi:10.5065/kwe1-w815.

Secretary, American Association for the Advancement of Science (AAAS) Atmospheric and Hydrospheric Section (Section W), 2022–present.

Contributing Author for Chapter 2: Changing State of the Climate System, and Chapter 5: Global Carbon and Other Biogeochemical Cycles and Feedbacks, Working Group I contribution to *Sixth Assessment Report (AR6) Climate Change 2021: The Physical Science Basis*, Intergovernmental Panel on Climate Change (IPCC), Released August 9, 2021.

Core Team Member, DOE-BER Earth and Environmental Systems Sciences Division's Artificial Intelligence for Earth System Predictability (AI4ESP) Workshop and Report activity, October 2020–2021.

Member, American Geophysical Union (AGU) Fall Meeting Planning Committee (FMPC) for the Biogeosciences Section, 2020–2022, 2024; FMPC Lead for the Biogeosciences Section, 2022.

Member, NOAA Climate and Global Change (C&GC) Steering Committee, participating in evaluation and selection for NOAA's C&GC Postdoctoral Fellows, 2020–2022.

Member, National Energy Research Supercomputing Center (NERSC) Users Group Executive Committee (NUGEX), representing users from DOE's Biological and Environmental Research Office programs, 2019–2022.

Co-organizer for the DOE CMIP6 Hackathon, July 31–August 6, 2019.

Editorial Board, *Scientific Reports* (ISSN: 2045-2322), 2023–present.

Editorial Board, *AI in Geosciences* (ISSN: 2666-5441), 2020–present.

Editor-in-Chief, Climate and Environment Section, *Climate* (ISSN 2225-1154; CODEN: CLIMC9), 2020–present; Editorial Board, *Climate* (ISSN 2225-1154; CODEN: CLIMC9), 2018–present.

Editorial Board, *Modelling* (ISSN 2673-3951), 2020–2024.

Associate Editor, *Frontiers in Big Data*, Data-Driven Climate Sciences (ISSN: 2624-909X), 2018–present.

Frontiers Topic Editor, *Integrating Big Data with Earth System Models of Natural and Human Systems: Confronting Models with Observations to Constrain Emergent Behavior* in *Frontiers in Big Data*, Data-Driven Climate Sciences, 2018–present.

Lead Author for Chapter 10: Changes in Land Cover and Terrestrial Biogeochemistry, *Climate Science Special Report (CSSR): Fourth National Climate Assessment (NCA4), Volume 1*, U.S. Global Change Research Program (USGCRP), 2017.

Member of the Steering Committee for the Coupled Climate–Carbon Cycle Model Intercomparison Project (C^4MIP) for the Sixth Phase of the Coupled Model Intercomparison Project (CMIP6), 2014–present.

Co-organizer of the International Land Model Benchmarking (ILAMB) Project, 2010–present.

DOE Laboratory lead for the Carbon-Land Model Intercomparison Project (C-LAMP), 2006–2009.

Teaching Experience

- **ENVE 691: Global Ecohydrology & Biogeochemistry**, University of Tennessee, Department of Civil & Environmental Engineering, Spring 2025.
- **ENVE 691: Global Ecohydrology & Biogeochemistry**, University of Tennessee, Department of Civil & Environmental Engineering, Spring 2023.
- **ENVE 595: Global Ecohydrology & Biogeochemistry**, University of Tennessee, Department of Civil & Environmental Engineering, Spring 2021.

- **ENVE 595, ENVE 691: Global Ecohydrology & Biogeochemistry**, University of Tennessee, Department of Civil & Environmental Engineering, Spring 2017.

Refereeing, Convening, and Chairing Experience
Funding Agencies:

- Austrian Science Fund (Der Wissenschaftsfonds, FWF)
- National Aeronautics and Space Agency (NASA), Earth Science Division
- National Science Foundation (NSF)
- US Department of Energy (DOE), Office of Science, Biological and Environmental Research (BER)
- Oak Ridge National Laboratory (ORNL), Laboratory Director's Research & Development (LDRD) Fund
- Oak Ridge National Laboratory (ORNL), Oak Ridge Leadership Computing Facility (OLCF)

Peer Reviewed Journals:

- *Biogeochemistry*
- *Biogeosciences*
- *Climate*
- *Environmental Modelling & Software*
- *Frontiers in Big Data*
- *Geophysical Model Development*
- *Geophysical Research Letters*
- *Global Biogeochemical Cycles*
- *Global Change Biology*
- *Journal of Advances in Modeling Earth Systems*
- *Journal of Climate*
- *Journal of Computing in Civil Engineering*
- *Journal of Geophysical Research – Biogeosciences*
- *Journal of Hydrometeorology*
- *New Phytologist*
- *Proceedings of the National Academy of Sciences*
- *Remote Sensing of the Environment*
- *Scientific Reports*

Sessions and Workshops Convened and Chaired at Conferences:

- American Meteorological Society (AMS) Annual Meetings
- American Geophysical Union (AGU) Fall Meetings
- Asia Oceania Geosciences Society (AOGS) Annual Meetings
- Ecological Society of America (ESA) Annual Meetings
- International Workshop on Data Mining in Earth System Science (DMESS)
- International Conference on Computational Science (ICCS)
- IEEE International Conference on Data Mining (ICDM)
- International Workshop on Spatial and Spatio-Temporal Data Mining (SSTDM)
- International Workshop on Knowledge Discovery from Sensor Data (SensorKDD)
- Japan Geoscience Union (JpGU) Meetings and JpGU-AGU Joint Meetings

Workshops and Meetings Convened and Chaired:

- **2010 International Land Model Benchmarking (ILAMB) Workshop**, The Beckman Center, Irvine, California, USA, January 24–26, 2010.
- **2016 International Land Model Benchmarking (ILAMB) Workshop**, DoubleTree by Hilton Hotel Washington DC, Washington, District of Columbia, USA, May 16–18, 2016.
- **2025 International Land Model Benchmarking (ILAMB) Hybrid Meeting**, Renaissance New Orleans Pere Marquette French Quarter Area Hotel, New Orleans, Louisiana, USA, December 11–13, 2025.

Awards

- **Senior Member of the Institute of Electrical and Electronics Engineers (IEEE)**, December 2023.
- **Distinguished Researcher Award**, Awards Night 2021. Oak Ridge National Laboratory/UT-Battelle LLC, December 2021.
- **2020 Fellow of the American Association for the Advancement of Science (AAAS)**, elected for distinction in developing, comparing, and evaluating Earth system models with an emphasis on global biogeochemical cycles and feedbacks to the climate system, December 2020.
- **Certificate of Excellence** in appreciation of leadership in conducting the First RGMA Hackathon for CMIP6 Analyses. Regional & Global Model Analysis Program Area, Earth and Environmental Systems Sciences Division, U.S. Department of Energy, October 2020.
- **Outstanding Reviewer** for the American Geophysical Union (AGU) for 2019.
- **Significant Event Award** for contributing to the release, simulations, and analysis of coupled biogeochemistry in the Energy Exascale Earth System Model (E3SM). Oak Ridge National Laboratory/UT-Battelle LLC, October 2019.
- **Significant Event Award** for leading coordination of the 2016 International Land Model Benchmarking (ILAMB) Workshop and development of the 2016 ILAMB Workshop Report. Oak Ridge National Laboratory/UT-Battelle LLC, October 2016.
- **Significant Event Award** for contributions to development of the Next Generation Ecosystem Experiments (NGEE) Tropics Project. Oak Ridge National Laboratory/UT-Battelle LLC, April 2015.
- **Significant Event Award** for contributions to development of the Accelerated Climate Modeling for Energy (ACME) Scientific Focus Area (SFA). Oak Ridge National Laboratory/UT-Battelle LLC, October 2014.
- **Employee of the Quarter** in the Computer Science & Mathematics Division. Oak Ridge National Laboratory/UT-Battelle LLC, July–September 2014.
- **Outstanding Paper in Landscape Ecology** for "Representativeness-based sampling network design for the State of Alaska" awarded by the U.S. Regional Association of the International Association of Landscape Ecology (US-IALE), May 2014.
- **Significant Event Award** for contributions to Intergovernmental Panel on Climate Change & National Climate Assessment Work. Oak Ridge National Laboratory/UT-Battelle LLC, May 2014.

- **2013 Chief's Honor Award** from Thomas L. Tidwell, Chief, U.S. Department of Agriculture Forest Service. Co-recipient for ORNL contribution to the *ForWarn* Forest Disturbance Monitoring Project with the U.S. Department of Agriculture Forest Service, NASA Stennis Space Center, and the U.S. Geological Survey EROS Data Center, March 2014.
- **2013 Southern Research Station Director's Award for Partnerships** from Dr. Robert Doudrick, Station Director of the U.S. Department of Agriculture Forest Service, Southern Research Station. Co-recipient for ORNL contribution to the *ForWarn* Forest Disturbance Monitoring Project with the U.S. Department of Agriculture Forest Service, NASA Stennis Space Center, and the U.S. Geological Survey EROS Data Center, December 2013.
- **Group Achievement Award** from Charles Bolden, Administrator of the National Aeronautics and Space Administration (NASA). Co-recipient for ORNL contribution to the *ForWarn* Forest Disturbance Monitoring Project with the U.S. Department of Agriculture Forest Service, NASA Stennis Space Center, and the U.S. Geological Survey EROS Data Center, August 2013.
- **2013 Interagency Partnership Award** from the Federal Laboratory Consortium (FLC) for Technology Transfer. Co-recipient for ORNL contribution to the *ForWarn* Forest Disturbance Monitoring Project with the U.S. Department of Agriculture Forest Service, NASA Stennis Space Center, and the U.S. Geological Survey EROS Data Center (plus congratulatory letters from Secretary of Energy Ernest Moniz and Secretary of Agriculture Thomas Vilsack), April 2013.
- **2012 Partnership Award** from the Federal Laboratory Consortium (FLC) for Technology Transfer, Southeastern Region. Co-recipient for ORNL contribution to the *ForWarn* Forest Disturbance Monitoring Project with the U.S. Department of Agriculture Forest Service, NASA Stennis Space Center, and the U.S. Geological Survey EROS Data Center, March 2013.
- **Most Distinguished Scientific or Technical Contribution Award** from Dr. Barney Maccabe, Director of the ORNL Computer Science & Mathematics Division, for the ORNL contribution to the *ForWarn* Forest Disturbance Monitoring Project, December 2012.
- **2012 Southern Research Station Director's Science Delivery Award** from Dr. Robert Doudrick, Station Director of the U.S. Department of Agriculture Forest Service, Southern Research Station. Co-recipient for ORNL contribution to the *ForWarn* Forest Disturbance Monitoring Project with the U.S. Department of Agriculture Forest Service, NASA Stennis Space Center, and the U.S. Geological Survey EROS Data Center, October 2012.
- **Distinguished Employee Award** from the ORNL Computing and Computational Science Directorate, May 2012.
- **1st Place, People's Choice Poster Award** for *A Cluster Analysis Approach to Comparing Atmospheric Radiation Measurement (ARM) Data with Global Climate Model (GCM) Results*, by Forrest M. Hoffman, Salil Mahajan, William W. Hargrove, Richard T. Mills, and Anthony Del Genio. The U.S. Department of Energy, Atmospheric Radiation Measurement (ARM) Program, at the 18th Annual ARM Science Team Meeting in Norfolk, Virginia, March 10–14, 2008.
- **ORNL Outstanding Mentor Award**. U.S. Department of Energy, Oak Ridge National Laboratory, and Oak Ridge Associated Universities, February 2008.

- **Significant Event Award** for contribution to NSF's National Ecological Observatory Network (NEON) Design Committee. Oak Ridge National Laboratory/UT-Battelle LLC, March 2006.
- **Outstanding Paper in the Discipline of Landscape Ecology Award**. W. W. Hargrove, F. M. Hoffman and P. M. Schwartz, "A fractal landscape realizer for generating synthetic maps," *Cons. Ecol.* 6(1):2 (2002). Awarded by the International Association for Landscape Ecology (IALE), U. S. Regional Chapter, April 2004.
- **World-Class Teamwork Award** for building and using the Stone SouperComputer, the first Beowulf-style supercomputer at ORNL. Oak Ridge National Laboratory Values Committee, October 19, 1999.
- **President's Award for Continuous Improvement**. Oak Ridge National Laboratory/Lockheed Martin Energy Research Corp., November 1997.
- **ORNL Technical Achievement Award**. Oak Ridge National Laboratory/Lockheed Martin Energy Research Corp., 1996.
- **Distinguished Achievement Award for Operational Support**. Oak Ridge National Laboratory, Environmental Sciences Division, August 1995.
- **Significant Event Award**. Oak Ridge National Laboratory/Martin Marietta Energy Systems, June 1995.

Professional Organizations

- American Association for the Advancement of Science (AAAS), 2007–present.
- American Geophysical Union (AGU), 1996–present.
- American Meteorological Society (AMS), 2011–present. AMS Smoky Mountain Chapter, 1998–present; Chapter President, 2005.
- Association for the Advancement of Artificial Intelligence (AAAI), 2021–present.
- Association for Tropical Biology and Conservation (ATBC), 2016–present.
- Ecological Society of America (ESA), 2015–present.
- European Geosciences Union (EGU), 2024–present.
- International Association for Landscape Ecology, North America Regional Association (IALE-NA), 2014–present.
- Institute of Electrical and Electronics Engineers (IEEE), IEEE Computer Society, 1998–present.
- National Speleological Society (NSS), 2013–present.
- Sigma Pi Sigma ($\Sigma\Pi\Sigma$), Physics Honor Society, 1995–present.
- Sigma Xi ($\Sigma\Xi$), The Scientific Research Honor Society, 2021–present.

Publications (Total: 180; h-index: 67; citations: 23,635; Google Scholar on 11 March 2026)

B. Hassler, F. M. Hoffman, R. Beadling, E. Blockley, B. Huang, J. Lee, V. Lembo, J. Lewis, J. Lu, L. Madaus, E. Malinina, B. Medeiros, W. Pokam, E. Scoccimarro, and R. Swaminathan. Systematic benchmarking of climate models: Methodologies, applications, and new directions. *Rev. Geophys.*, 64(1):e2025RG000891, Mar. 2026. doi:10.1029/2025RG000891.

E. C. Massoud, S. K. Ames, N. Collier, P. J. Durack, D. Feldman, P. J. Gleckler, F. M. Hoffman, J. Kumar, F. Lipschultz, K. E. Taylor, and P. Ullrich. Hosting downscaled decision-relevant community data products in ESGF2-US. *Environ. Res.: Climate*, 5(1):011002, Mar. 2026a. doi:10.1088/2752-5295/ae27ea.

E. C. Massoud, N. Collier, M. Xu, M. Shi, and F. M. Hoffman. Diagnosing the representation of surface and layered soil moisture in Earth system models. *Environ. Res. Lett.*, 21(2):024032, Jan. 2026b. doi:10.1088/1748-9326/ae2f72.

F. M. Hoffman, B. Hassler, R. Swaminathan, J. Lewis, B. Andela, N. Collier, D. Hegedűs, J. Lee, C. Pascoe, M. Pflüger, M. Stockhause, P. Ullrich, M. Xu, L. Bock, F. Chun, B. K. Gier, D. I. Kelley, A. Lauer, J. Lenhardt, M. Schlund, M. G. Sreeush, K. Weigel, E. Blockley, R. Beadling, R. Beucher, D. D. Dugassa, V. Lembo, J. Lu, S. Brands, J. Tjiputra, E. Malinina, B. Mederios, E. Scoccimarro, J. Walton, P. Kershaw, A. L. Marquez, M. J. Roberts, E. O'Rourke, E. Dingley, B. Turner, H. Hewitt, and J. P. Dunne. Rapid evaluation framework for the CMIP7 assessment fast track. *EGUsphere*, 2025:1–57, 2025. doi:10.5194/egusphere-2025-2685.

R. Zhao, X. Luo, A. P. Walker, F. M. Hoffman, and L. P. Koh. Vegetation biogeography is a main source of uncertainty in modelling the land carbon cycle. *Nat. Commun.*, 17(1):912, Dec. 2025. doi:10.1038/s41467-025-67636-1.

N. Parazoo, D. Carroll, J. B. Abshire, Y. M. Bar-On, R. A. Birdsey, A. A. Bloom, K. W. Bowman, R. K. Braghiere, L. M. Bruhwiler, B. Byrne, A. Chatterjee, D. Crisp, L. Duncanson, A. F. Feldman, A. M. Fox, C. Frankenberg, B. A. Gay, F. Hopkins, F. M. Hoffman, J. R. Holmquist, L. R. Hutyra, M. Keller, C. D. Koven, J. L. Laughner, J. Liu, N. S. Lovenduski, N. Macbean, G. A. McKinley, G. McNicol, D. Menemenlis, A. M. Michalak, C. E. Miller, H. Nesser, T. Oda, E. M. Ordway, L. E. Ott, K. Paustian, Z. A. Pierrat, B. Poulter, S. C. Reed, D. S. Schimel, S. P. Serbin, S. S. Saatchi, H. Suto, L. Windham-Myers, and D. Wunch. A U.S. scientific community vision for sustained Earth observations of greenhouse gases to support local to global action. *AGU Adv.*, 6(6):e2025AV001914, Dec. 2025. doi:10.1029/2025AV001914.

D. Saedi Nia, E. C. Massoud, B. Sharma, J. Kumar, N. Collier, and F. M. Hoffman. ESGF-Assistant: A domain-specific large language model for navigating Earth system data. In *2025 IEEE International Conference on Data Mining Workshops (ICDMW)*, pages 836–845. Institute of Electrical and Electronics Engineers (IEEE), Conference Publishing Services (CPS), Nov. 2025. doi:10.1109/ICDMW69685.2025.00100.

T. Zhang, M. R. Steckler, A. L. Breen, F. M. Hoffman, W. W. Hargrove, V. G. Salmon, C. M. Iversen, S. D. Wullschleger, and J. Kumar. Mapping wall-to-wall fractional cover of Arctic tundra plant functional types in Alaska using 20-m spatial resolution satellite imagery and harmonized plot observations. *Int. J. Appl. Earth Obs. Geoinf.*, 144:104892, Nov. 2025a. doi: 10.1016/j.jag.2025.104892.

R. Limber, F. M. Hoffman, J. Schwenk, and J. Kumar. Long short-term memory model to forecast river ice breakup throughout Alaska USA. *Water Resour. Res.*, 61(9):e2025WR040635, Sept. 2025. doi:10.1029/2025WR040635.

J. T. Randerson, Y. Li, W. Fu, F. Primeau, J. E. Kim, M. Mu, F. M. Hoffman, A. T. Trugman, L. Yang, C. Wu, J. A. Wang, W. R. L. Anderegg, A. Baccini, M. A. Friedl, S. S. Saatchi, A. S. Denning, and M. L. Goulden. The weak land carbon sink hypothesis. *Sci. Adv.*, 11(37):eadr5489, Sept. 2025. doi:10.1126/sciadv.adr5489.

D. Kennedy, K. Dagon, D. M. Lawrence, R. A. Fisher, B. M. Sanderson, N. Collier, F. M. Hoffman, C. D. Koven, E. Kluzek, S. Levis, X. Lu, K. W. Oleson, C. M. Zarakas, Y. Cheng, A. C. Foster, M. D. Fowler, L. R. Hawkins, T. Kavoo, S. Kumar, A. J. Newman, P. J. Lawrence, F. Li, D. L. Lombardozzi, Y. Luo, J. K. Shuman, A. L. S. Swann, S. C. Swenson, G. Tang, W. R. Wieder, and A. W. Wood. One-at-a-time parameter perturbation ensemble of the Community Land Model, version 5.1. *J. Adv. Model. Earth Sy.*, 17(8):e2024MS004715, Aug. 2025. doi: 10.1029/2024MS004715.

M. R. Steckler, J. Kumar, A. L. Breen, T. Zhang, F. M. Hoffman, W. W. Hargrove, D. A. Walker, A. F. Wells, A. Droghini, T. W. Nawrocki, S. D. Wullschleger, M. J. Macander, G. V. Frost, V. G. Salmon, D. T. Barnett, and C. M. Iversen. PAVC: The foundation for a Pan-Arctic Vegetation Cover database. *Sci. Data*, 12(1):1271, July 2025. doi:10.1038/s41597-025-05326-9.

T. Zhang, J. Kumar, F. M. Hoffman, V. Ivanov, J. Wang, A. Y. Sheshukov, W. Zhou, P. Montesano, and D. Liu. A region-growing segmentation approach to delineating timberline from satellite-derived tree fractional cover products. *Remote Sens.*, 17(12):2002, June 2025b. doi: 10.3390/rs17122002.

Y. Hao, J. Mao, C. M. Bachmann, F. M. Hoffman, G. Koren, H. Chen, H. Tian, J. Liu, J. Tao, J. Tang, L. Li, L. Liu, M. Apple, M. Shi, M. Jin, Q. Zhu, S. Kannenberg, X. Shi, X. Zhang, Y. Wang, Y. Fang, and Y. Dai. Soil moisture controls over carbon sequestration and greenhouse gas emissions: A review. *npj Clim. Atmos. Sci.*, 8(1):16, Jan. 2025. doi:10.1038/s41612-024-00888-8.

Y. Zhang, J. Mao, G. Sun, Q. Guo, J. Atkins, W. Li, M. Jin, C. Song, J. Xiao, T. Hwang, T. Qiu, L. Meng, D. M. Ricciuto, X. Shi, X. Li, P. Thornton, and F. M. Hoffman. Earth's record-high greenness and its attributions in 2020. *Remote Sens. Environ.*, 316:114494, Jan. 2025c. doi: 10.1016/j.rse.2024.114494.

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F. M. Hoffman, J. T. Randerson, I. Y. Fung, P. E. Thornton, Y.-H. J. Lee, C. C. Covey, G. B. Bonan, and S. W. Running. The Carbon-Land Model Intercomparison Project (C-LAMP): A protocol and evaluation metrics for global terrestrial biogeochemistry models. In M. Sànchez-Marrè, J. Béjar, J. Comas, A. E. Rizzoli, and G. Guariso, editors, *Proceedings of the iEMSs Fourth Biennial Meeting: International Congress on Environmental Modelling and Software Society (iEMSs 2008)*, pages 1039–1046, July 2008b. ISBN 978-84-7653-074-0.

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F. M. Hoffman. A Unix print filter for controlling an HP Laserjet printer. Technical Memorandum ORNL/TM-12190, Oak Ridge National Laboratory, Oak Ridge, Tennessee, USA, Sept. 1992.

Invited Presentations

Hoffman, Forrest M. and the ESGF2-US Team. May 20, 2025. "Integrated Data Analytics Needs in ESGF2-US." Hawai'i Scientific Data Workshop (May 20–22, 2025), Wailea, Maui, Hawai'i, USA. Invited.

Hoffman, Forrest M. and the ESGF2-US Team. April 9, 2025. "Integrated Data Analytics Needs in ESGF2-US." ESnet Confab25 (April 7–10, 2025), San Francisco, California, USA. Invited.

Hoffman, Forrest M., Ian Foster, and Sasha Ames. March 20, 2025. "International Consortium Developing the Next Generation Earth System Grid Federation (ESGF) Distributed Data Infrastructure." Interagency Arctic Research Policy Committee (IARPC) Collaborations Meeting of MOMP, Data Management, and Modelers Teams, USA. Invited.

Hassler, Birgit, and Forrest M. Hoffman. March 11, 2025. "The History and Future of Systematic Assessment of Earth System Models." UK Met Office Science Seminar, Exeter, Devon, United Kingdom. Invited.

Hoffman, Forrest M. February 15, 2025. "Representing Forests in Earth System Models." American Association for the Advancement of Science (AAAS) Annual Meeting (February 13–15, 2025), Boston, Massachusetts, USA. Invited.

Hoffman, Forrest M. February 4, 2025. "Artificial Intelligence for Sustainable Development: Optimizing Land Cover for India's Growing Population." Department of Development Studies & Agri Business Management Seminar, Vivekananda Global University (VGU), Jaipur, Rajasthan, India. Invited.

Hoffman, Forrest M., Nathan Collier, Mingquan Mu, Min Xu, Gretchen Keppel-Aleks, David M. Lawrence, Charles Koven, Weiwei Fu, William J. Riley, and James T. Randerson. December 12, 2024. "Systematic Assessment of Terrestrial Biogeochemistry in Earth System Models." Abstract B43H-04 presented at the 2024 American Geophysical Union (AGU) Annual Meeting (December 9–13, 2024), Washington, District of Columbia, USA. Invited.

Hoffman, Forrest M., Jitendra Kumar, Zachary L. Landford, V. Shashank Konduri, Auroop R. Ganguly, Zheng Shi, Elias Massoud, Nathan Collier, Min Xu, William W. Hargrove, Nicki L. Hickmon, Scott M. Collis, Charuleka Varadharajan, and Haruko Wainwright. November 15, 2024. "Exploiting Artificial Intelligence and Machine Learning for Advancing Earth System Prediction." Sustainability and Data Sciences (SDS) Laboratory Interactive Seminar (Virtual), Northeastern University, Boston, Massachusetts, USA. Invited.

Hoffman, Forrest M., Jitendra Kumar, Zachary L. Landford, V. Shashank Konduri, Auroop R. Ganguly, Zheng Shi, Elias Massoud, Nathan Collier, Min Xu, William W. Hargrove, Nicki L. Hickmon, Scott M. Collis, Charuleka Varadharajan, and Haruko Wainwright. October 9, 2024. "Exploiting Artificial Intelligence and Machine Learning for Advancing Earth System Prediction." Oak Ridge National Laboratory's Core Universities Artificial Intelliegnece (AI) Workshop (October 9–10, 2024), Park Alumni Center, North Carolina State University, Raleigh, North Carolina, USA. Invited.

Hoffman, Forrest M., Nathan Collier, Mingquan Mu, Min Xu, Weiwei Fu, Cheng-En Yang, Gretchen Keppel-Aleks, David M. Lawrence, Charles D. Koven, William J. Riley, and James T. Randerson. June 24, 2024. "Systematic Assessment of Terrestrial and Marine Biogeochemistry in Earth System Models." Biogeosciences (BG) Distinguished Lecture, 21st Annual Meeting of the Asia Oceania Geosciences Society (AOGS) (June 24–28, 2024), Alpensia Convention Center, Pyeongchang, Gangwon-do, South Korea. Invited.

Hoffman, Forrest M., Nathan Collier, Mingquan Mu, Min Xu, Weiwei Fu, Cheng-En Yang, Gretchen Keppel-Aleks, David M. Lawrence, Charles D. Koven, William J. Riley, and James T. Randerson. June 21, 2024. "Systematic Assessment and Benchmarking of Earth System Models." International Workshop on Earth System Analysis: Modeling, Remote Sesnisng, Uncertainties, and International Collaboration (June 21, 2024), Korea Advanced Institute of Science & Technology (KAIST), Daejeon, South Korea. Invited.

Hoffman, Forrest M., Jitendra Kumar, Zachary L. Landford, V. Shashank Konduri, Auroop R. Ganguly, Zheng Shi, Elias Massoud, Nathan Collier, Min Xu, William W. Hargrove, Nicki L. Hickmon, Scott M. Collis, Charuleka Varadharajan, and Haruko Wainwright. June 21, 2024. "Exploiting Artificial Intelligence and Machine Learning for Advancing Earth System Prediction." COEAI-SPARC Workshop on Hybrid Physics-AI Models for Climate, Weather and Water Hybrid Meeting (June 19–21, 2024), Indian Institute of Technology (IIT) Kharagpur, Kharapur, India. Invited.

Hoffman, Forrest M., Nathan Collier, Mingquan Mu, Min Xu, Weiwei Fu, Cheng-En Yang, Gretchen Keppel-Aleks, David M. Lawrence, Charles D. Koven, William J. Riley, and James T. Randerson. June 18, 2024. "Systematic Assessment and Benchmarking of Earth System Models." Resource Competition, Environmental Security and Stability (RECESS) Virtual Meeting (June 18, 2024), USA. Invited.

Hoffman, Forrest M. May 3, 2024. "Update on ESGF and Model Benchmarking." Presented virtually at the 10th United States Climate Modeling Summit (May 2–3, 2024), Princeton, New Jersey, USA. Invited.

Hoffman, Forrest M., Nathan Collier, Mingquan Mu, Min Xu, Weiwei Fu, Cheng-En Yang, Gretchen Keppel-Aleks, David M. Lawrence, Charles D. Koven, William J. Riley, and James T. Randerson. August 17, 2023. "Component and Process-level Benchmarks: Prospects for Systematic Assessment of Hybrid Earth System Models." Interagency Council for Advancing Meteorological Services (ICAMS) Machine Learning/Artificial Intelligence (MLAI) Subcommittee Virtual Meeting (August 17, 2023), USA. Invited.

Hoffman, Forrest M. June 22, 2023. "Enabling GeoAI for Advancing Earth System Science." GeoAI Trillion Pixel Challenge Workshop (June 21–22, 2023), Oak Ridge National Laboratory, Oak Ridge, Tennessee, USA. Invited.

Hoffman, Forrest M. June 20, 2023. "Panelist Comments." Physical Dimensions Panel in Session 1: Cross Cutting Issues, Needs and Opportunities; Climate Intervention in an Earth Systems Science Framework: A Workshop; National Academies of Science, Engineering, and Medicine (NASEM) Virtual Workshop (June 20 and 22, 2023), USA. Invited.

Hoffman, Forrest M., Jitendra Kumar, Zachary L. Langford, V. Shashank Konduri, Auroop R. Ganguly, Zheng Shi, Elias Massoud, Nathan Collier, Min Xu, William W. Hargrove, Nicki L. Hickmon, Scott M. Collis, Charuleka Varadharajan, and Haruko Wainwright. June 16, 2023. "Exploiting Artificial Intelligence and Machine Learning for Advancing Carbon Cycle Science." Presented virtually at the 6th Training Course on New Advances in Land Carbon Cycle Modeling (June 5–16, 2023), Cornell University, Ithaca, New York, USA. Invited.

Hoffman, Forrest M., Jitendra Kumar, Zachary L. Langford, V. Shashank Konduri, Auroop R. Ganguly, Zheng Shi, Elias Massoud, Nathan Collier, Min Xu, William W. Hargrove, Nicki L. Hickmon, Scott M. Collis, Charuleka Varadharajan, and Haruko Wainwright. May 25, 2023. "Exploiting Artificial Intelligence and Machine Learning for Advancing Carbon Cycle Science." 2023 Japan Geoscience Union (JpGU) Meeting (May 21–26, 2023), Makuhari Messe, Chiba, Japan. Invited.

Hoffman, Forrest M., Ian Foster, Sasha Ames, Rachana Ananthakrishnan, Jason Boutte, Nathan Collier, Scott M. Collis, Carlos Downie, Maxwell Grover, Robert Jacob, Michael Kelleher, Jitendra Kumar, Giri Prakash, Sarat Sreepathi, Min Xu, and Justin Hnilo. May 9, 2023. "The Next Generation Earth System Grid Federation." US Department of Energy 2023 Cybersecurity and Technology Innovation Conference (May 8–11, 2023), Minneapolis, Minnesota, USA. Invited.

Hoffman, Forrest M. April 26, 2023. "The Next Generation Earth System Grid Federation." Presented virtually at the 9th United States Climate Modeling Summit (April 25–26, 2023), Princeton, New Jersey, USA. Invited.

Hoffman, Forrest M. April 21, 2023. "The Next Generation Earth System Grid Federation." Presented virtually at the US Department of Energy Biological and Environmental Research Advisory Committee (BERAC) Meeting (April 20–21, 2023), Bethesda, Maryland, USA. Invited.

Hoffman, Forrest M. April 11, 2023. "The Next Generation Earth System Grid Federation." Presented virtually at the National Center for Atmospheric Research (NCAR) Computational and Information Systems Laboratory (CISL) Seminar, Boulder, Colorado, USA. Invited.

Hoffman, Forrest M., Nathan Collier, Mingquan Mu, Min Xu, Weiwei Fu, Cheng-En Yang, Gretchen Keppel-Aleks, David M. Lawrence, Charles D. Koven, William J. Riley, and James T. Randerson. April 5, 2023. "Have Land Surface Processes in Earth System Models Improved Over Time?" ORNL-US Air Force Technical Interchange Meeting (TIM), Oak Ridge, Tennessee, USA. Invited.

Hoffman, Forrest M. February 16, 2023. "Artificial Intelligence for Exploring Climate Change Mitigation Strategies and Advancing Earth System Prediction." University of Tennessee Knoxville (UTK) Bredesen Center Recruiting Day at Oak Ridge National Laboratory, Oak Ridge, Tennessee, USA. Invited.

Hoffman, Forrest M., Jitendra Kumar, Zachary L. Langford, V. Shashank Konduri, Auroop R. Ganguly, Cheng-En Yang, Nathan Collier, Min Xu, William W. Hargrove, Nicki L. Hickmon, Scott M. Collis, Charuleka Varadharajan, and Haruko Wainwright. December 12, 2022. "Artificial Intelligence for Exploring Climate Change Mitigation Strategies and Advancing Earth System Prediction." Abstract INV14A-02 presented at the 2022 American Geophysical Union (AGU) Fall Meeting (December 12–16, 2022), Chicago, Illinois, USA. Invited.

Hoffman, Forrest M., Jitendra Kumar, Zachary L. Langford, V. Shashank Konduri, Auroop R. Ganguly, Cheng-En Yang, Nathan Collier, Min Xu, William W. Hargrove, Nicki L. Hickmon, Scott M. Collis, Charuleka Varadharajan, and Haruko Wainwright. December 12, 2022. "Exploiting Artificial Intelligence for Advancing Earth and Environmental System Science." Abstract B16D-01 presented at the 2022 American Geophysical Union (AGU) Fall Meeting (December 12–16, 2022), Chicago, Illinois, USA. Invited.

Hoffman, Forrest M., Nathan Collier, Mingquan Mu, Min Xu, Gretchen Keppel-Aleks, David M. Lawrence, Charles D. Koven, Weiwei Fu, William J. Riley, and James T. Randerson. October 27, 2022. "Evaluating Land Carbon Cycle Processesin Earth System Models: Have Models Improved Over Time?" 4th Carbon from Space Workshop (October 25–28, 2022), European Space Agency Centre for Earth Observation (ESA-ESRIN), Frascati (Rome), Italy. Invited.

Hoffman, Forrest M. August 27, 2022. "Artificial Intelligence for Exploring Climate Change Mitigation Strategies and Advancing Earth System Prediction." 7 Day Online International Lecture Series on Building Resilient Communities across Global Landscapes and their Technological Advancements (August 22–28, 2022), Sophia Girls College, Department of Geography, Ajmer, India. Invited.

Hoffman, Forrest M., Jitendra Kumar, Zachary L. Langford, V. Shashank Konduri, Auroop R. Ganguly, Cheng-En Yang, Nathan Collier, Min Xu, William W. Hargrove, Nicki L. Hickmon, Scott M. Collis, Charuleka Varadharajan, and Haruko Wainwright. August 15, 2022. "Artificial Intelligence for Exploring Climate Change Mitigation Strategies and Advancing Earth System Prediction." Workshop on Fragile Earth 2022: AI for Climate Mitigation, Adaptation, and Environmental Justice, 28th Association for Computing Machinery (ACM) SIGKDD Conference on Knowledge Discovery and Data Mining (KDD 2022; August 14–18, 2022), Washington DC Convention Center, Washington, District of Columbia, USA. Invited.

Hoffman, Forrest M., Jitendra Kumar, Zachary L. Langford, V. Shashank Konduri, Nathan Collier, Min Xu, and William W. Hargrove. June 2, 2021. "Exploiting Artificial Intelligence for Advancing Earth and Environmental Systems Science." Moon Soul Graduate School of Future Strategy Webinar, Korea Advanced Institute of Science and Technology (KAIST), Daejeon, South Korea. Invited.

Hoffman, Forrest M., Ian Foster, Sasha Ames, Rachana Ananthakrishnan, Jason Boutte, Nathan Collier, Scott Collis, Carlos Downie, Robert Jacob, Jitendra Kumar, Giri Prakash, Sarat Sreepathi, and Min Xu. May 10, 2022. "Building the Next Generation Earth System Grid Federation (ESGF2)." GlobusWorld 2022 (May 10–12, 2022), Chicago, Illinois, USA. Invited.

Hoffman, Forrest M. March 22, 2022. "Multidisciplinary Earth System Science and the Global Carbon Cycle." (Virtual) International Webinar for the Parishkar College of Global Excellence, Jaipur, India. Invited.

Hoffman, Forrest M., Ian Foster, and Sasha Ames. December 9, 2021. "ESGF2 Project Overview." (Virtual) 24th Session of the World Climate Research Programme (WCRP) Working Group on Coupled Modeling (WGCM) (December 7–9, 2021). Invited.

Hoffman, Forrest M., Jitendra Kumar, Zachary L. Langford, V. Shashank Konduri, Nathan Collier, Min Xu, and William W. Hargrove. November 13, 2021. "Exploiting Artificial Intelligence for Advancing Earth and Environmental Systems Science." (Virtual) International Conference on Ecological Informatics (ICEI 2020+1), (November 9–13, 2021), Digital University Kerala, Kerala, India. Invited.

Hoffman, Forrest M., Jitendra Kumar, Zachary L. Langford, V. Shashank Konduri, Nathan Collier, Min Xu, and William W. Hargrove. November 6, 2021. "Exploiting Artificial Intelligence for Advancing Earth and Environmental Systems Science." Second Symposium on Science-Guided Artifical Intelligence (SGAI), Association for the Advancement of Artificial Intelliegnce (AAAI) (Virtual) Fall Symposium Series 2021 (November 4–6, 2021), USA. Invited.

Hoffman, Forrest M. April 22, 2021. "Exploiting Artificial Intelligence for Advancing Earth System Predictability." GeoAI Trillion-Pixel Challenge Conference (April 21–22, 2021), USA. Invited.

Hoffman, Forrest M. February 22, 2021. "Exploiting Artificial Intelligence for Advanced Earth System Predictability." SciDAC FASTMath Data and Optimization Symposium, USA. Invited.

Hoffman, Forrest M., Nathan Collier, Charles D. Koven, David M. Lawrence, Gretchen Keppel-Aleks, James T. Randerson, Mingquan Mu, William J. Riley, Qing Zhu, Jiafu Mao, Hyungjun Kim, J. Keith Moore, and Weiwei Fu. February 18, 2021. "Have Land Surface Processes in Earth System Models Improved Over Time?" Department of Hydrology and Atmospheric Sciences (HAS) Weekly Colloquium, University of Arizona, USA. Invited.

Hoffman, Forrest M., Nathan Collier, Charles D. Koven, David M. Lawrence, Gretchen Keppel-Aleks, James T. Randerson, Mingquan Mu, William J. Riley, Qing Zhu, Jiafu Mao, Hyungjun Kim, J. Keith Moore, and Weiwei Fu. February 16, 2021. "Have Land Surface Processes in Earth System Models Improved Over Time?" Atmospheric Sciences Seminar, Department of Atmospheric Sciences, University of Illinois at Urbana-Champaign, USA. Invited.

Hoffman, Forrest M., Nathan Collier, Charles D. Koven, David M. Lawrence, Gretchen Keppel-Aleks, James T. Randerson, Mingquan Mu, William J. Riley, Qing Zhu, Jiafu Mao, Hyungjun Kim, J. Keith Moore, and Weiwei Fu. March 3, 2020. "Have Land Surface Carbon Cycle Models Improved Over Time?." Community Earth System Model (CESM) Joint Land Model and Biogeochemistry Working Group Meeting (March 3–5, 2020), National Center for Atmospheric Research (NCAR), Boulder, Colorado, USA. Invited.

Hoffman, Forrest M., Nathan Collier, Mingquan Mu, Min Xu, Weiwei Fu, Cheng-En Yang, Gretchen Keppel-Aleks, David M. Lawrence, Charles D. Koven, William J. Riley, and James T. Randerson. August 29, 2019. "Climate–Carbon Cycle Feedbacks Constrained by ILAMB." American Geophysical Union (AGU) Chapman Conference on Understanding Carbon Climate Feedbacks (August 26–29, 2019), Scripps Seaside Forum, La Jolla, California, USA. Invited.

Hoffman, Forrest M., J. Keith Moore, Weiwei Fu, James T. Randerson, Yang Chen, Natalie M. Mahowald, Keith Lindsay, Ernest Muñoz. July 6, 2018. "Sustained Climate Warming Drives Declining Marine Biological Productivity." Philosophical Society of the Oak Ridge Institute for Continued Learning (ORICL), Roane State Community College, Oak Ridge, Tennessee, USA. Invited.

Hoffman, Forrest M., James T. Randerson, J. Keith Moore, Michael L. Goulden, Weiwei Fu, Charles D. Koven, Abigail L. S. Swann, Natalie M. Mahowald, Keith Lindsay, and Ernest Muñoz. May 14, 2018. "Quantification and Reduction of Uncertainties Associated with Carbon Cycle–Climate System Feedbacks." Earth System Modeling: Past, Present, and Future, A Symposium in Honor of Robert Dickinson (May 14–15, 2018), Universtiy of Texas, Austin, Texas, USA. Invited.

Hoffman, Forrest M. May 1, 2018. "Land Model Benchmarking and Pathways to a Land Model Testbed." U.S. Department of Energy (DOE), Environmental System Science (ESS) Principal Investigator (PI) Meeting (May 1–2, 2018), William F. Bolger Center, Potomac, Maryland, USA. Invited.

Hoffman, Forrest M., Zachary L. Langford, Jitendra Kumar, Steve Norman, and William W. Hargrove. April 11, 2018. "Applying Google Earth Engine to Wildfire Disturbance Detection in the State of Alaska." 2018 U.S.-International Association for Landscape Ecology (US-IALE) Annual Meeting (April 8–12, 2018), Chicago, Illinois, USA. Invited.

Hoffman, Forrest M., Nathaniel O. Collier, Jitendra Kumar, Min Xu, and Cheng-En Yang. September 12, 2017. "Quantifying and Reducing Uncertainties Associated with Biogeochemical Feedbacks in Earth System Models." NOAA ATDD and UTK Science Workshop (September 12, 2017), Joint Institute for Advanced Materials, Knoxville, Tennessee, USA. Invited.

Hoffman, Forrest M., Min Xu, Nathaniel Collier, Chonggang Xu, Bradley Christoffersen, Yiqi Luo, Daniel Ricciuto, Paul Levine, and James T. Randerson. February 9, 2017. "Development of a Tropical Ecological Forecasting Strategy for ENSO Based on the ACME Modeling Framework." Fourth Santa Fe Conference on Global and Regional Climate Change (February 5–10, 2017), Santa Fe, New Mexico, USA. Invited.

Hoffman, Forrest M., Nathaniel Collier, James T. Randerson, Mingquan Mu, William J. Riley, Gretchen Keppel-Aleks, and Charles D. Koven. January 24, 2017. "Systematic Evaluation of Land Surface Models Using the International Land Model Benchmarking (ILAMB) Package (Invited Presentation)." Abstract presented at the 97th American Meteorological Society (AMS) Annual Meeting (January 22–26, 2017), Seattle, Washington, USA.

Hoffman, Forrest M., Jitendra Kumar, William Walter Hargrove, Steven P. Norman, and Bjorn-Gustaf Brooks. December 12, 2016. "Integrating Statistical and Expert Knowledge to Develop Phenoregions for the Continental United States (Invited)." Abstract B14C-01 presented at the 2016 American Geophysical Union (AGU) Fall Meeting (December 12–16, 2016), San Francisco, California, USA.

Hoffman, Forrest M. August 4, 2016. "Causes and Implications of Persistent Atmospheric Carbon Dioxide Biases in Earth System Models." Argonne National Laboratory (ANL) Environmental Science Division (EVS) Seminar, Argonne National Laboratory, Argonne, Illinois, USA. Invited.

Hoffman, Forrest M., James T. Randerson, William J. Riley, Gretchen Keppel-Aleks, David M. Lawrence, Nathan Collier, Jitendra Kumar, and William W. Hargrove. April 14, 2016. "Integrating Models and Observations: Reducing Biases in Earth System Models and Community Benchmarking of Land Models." Carbon Cycle Interagency Working Group (CCIWG) Workshop on Sustained Observations for Carbon Cycle Science and Decision Support (April 13–14, 2016), National Oceanic and Atmospheric Administration (NOAA) Earth System Research Laboratory, Boulder, Colorado, USA. Invited.

Hoffman, Forrest M., James T. Randerson, and William J. Riley. March 14, 2016. "CMIP5 Analysis and Model Benchmarking: Quantification and Reducton of Uncertainties Associated with Carbon Cycle–Climate System Feedbacks." Los Alamos National Laboratory (LANL) Earth & Environmental Sciences (EES) Division Seminar, Los Alamos National Laboratory, Los Alamos, New Mexico, USA. Invited.

Hoffman, Forrest M., William J. Riley, Gretchen Keppel-Aleks, David M. Lawrence, J. Keith Moore, and James T. Randerson. March 7, 2016. "Benchmark Analysis for Improved Prediction." Carbon Cycle Interagency Working Group (CCIWG)/North American Carbon Program (NACP) Workshop on Development of Predictive Carbon Cycle Science (March 7–9, 2016), National Oceanic and Atmospheric Administration (NOAA) National Center for Weather and Climate Prediction (NCWCP), College Park, Maryland, USA. Invited.

Hoffman, Forrest M., Jitendra Kumar, Zachary L. Langford, William W. Hargrove, James T. Randerson, William J. Riley, David M. Lawrence, and Gretchen Keppel-Aleks. February 1, 2016. "Computational Approaches for Model, Experiment, and Data Integration Supporting Site Characterization and Model Evaluation." 2016 Workshop on An Integrated Network for Terrestrial Ecosystem Research on Feedbacks to the Atmosphere and Climate (INTERFACE): Linking Experimentalists, Ecosystem Modelers, and Earth System Modelers (January 1–February 3, 2016), St. Pete Beach, Florida, USA. Invited.

Hoffman, Forrest M. September 26, 2015. "CMIP5 Analysis and Model Benchmarking: Quantification and Reduction of Uncertainties Associated with Carbon Cycle–Climate System Feedbacks." Processes Linked to Uncertainty Modelling Ecosystems (PLUME-MIP) Workshop, East China Normal University (ECNU), Shanghai, China. Invited.

Hoffman, Forrest M., William W. Hargrove, Jitendra Kumar, Zachary L. Langford, and Damian M. Maddalena. July 6, 2015. "High Performance Computational Landscape Ecology and Using Clustering to Define Climate Regimes." 9th International Association for Landscape Ecology (IALE) World Congress (July 5–10, 2015), Portland, Oregon, USA. Invited.

Hoffman, Forrest M., Jitendra Kumar, Zachary Langford, Stan D. Wullschleger, Damian Maddalena, William W. Hargrove, Mingquan Mu, William J. Riley, and James T. Randerson. May 28, 2015. "Computational Approaches for Model, Experiment, and Data Integration Supporting Site Characterization and Model Evaluation." Community Surface Dynamics Modeling System (CSDMS) 2015 Annual Meeting (May 26–28, 2015), Boulder, Colorado, USA. Invited.

Hoffman, Forrest M., Jitendra Kumar, Damian Maddalena, Zachary Langford, and William W. Hargrove. December 18, 2014. "Multivariate Spatio-Temporal Clustering: A Framework for Integrating Disparate Data to Understand Network Representativeness and Scaling Up Sparse Ecosystem Measurements." 2014 American Geophysical Union (AGU) Fall Meeting (December 15–19, 2014), San Francisco, California, USA. Abstract IN44A-06. Invited.

Hoffman, Forrest M., Pavel B. Bochev, Philip J. Cameron-Smith, Richard C. Easter Jr., Scott M. Elliot, Steven J. Ghan, Iulian R. Grindeanu, Robert B. Lowrie, Donald D. Lucas, Vijay S. Mahadevan, Kara J. Peterson, Bill Sacks, Manishkumar B. Shrivastava, Mark A. Taylor, Mariana Vertenstein, and Patrick H. Worley. July 31, 2014. "Applying Computationally Efficient Schemes for BioGeochemical Cycles (ACES4BGC)." U.S. Department of Energy Scientific Discovery through Advanced Computing (SciDAC-3) Principal Investigators Meeting (July 30–August 1, 2014), Omni Shoreham Hotel, Washington, District of Columbia, USA. Invited.

Hoffman, Forrest M., Jitendra Kumar, Damian Maddalena, and William W. Hargrove. July 1, 2014. "Representativeness based Sampling Network Design for NGEE and Identifying Phenoregions for the Conterminous U.S." Fourth Workshop on Understanding Climate Change from Data (June 30–July 2, 2014), National Center for Atmospheric Research (NCAR), Boulder, Colorado, USA. Invited.

Hoffman, Forrest M., James T. Randerson, Vivek K. Arora, Qing Bao, Patricia Cadule, Duoying Ji, Chris D. Jones, Michio Kawamiya, Samar Khatiwala, Keith Lindsay, Atsushi Obata, Elena Shevliakova, Katharina D. Six, Jerry F. Tjiputra, Evgeny M. Volodin, and Tongwen Wu. May 13, 2014. "Persistent Atmospheric Carbon Dioxide Biases in Earth System Models and Community Research Directions." U.S. Department of Energy Integrated Climate Modeling Principal Investigator Meeting (May 12–14, 2014), William F. Bolger Center, Potomac, Maryland, USA. Invited.

Hoffman, Forrest M., and James T. Randerson. April 30, 2014. "CMIP5 Global Carbon Cycle Model Evaluation Needs." Obs4MIPs–CMIP6 Planning Meeting (April 29–May 1, 2014), NASA Headquarters, Washington, District of Columbia, USA. Invited.

Hoffman, Forrest M., James T. Randerson, Vivek K. Arora, Qing Bao, Katharina D. Six, Patricia Cadule, Duoying Ji, Chris D. Jones, Michio Kawamiya, Samar Khatiwala, Keith Lindsay, Atsushi Obata, Elena Shevliakova, Jerry F. Tjiputra, Evgeny M. Volodin, and Tongwen Wu. December 9, 2013. "Causes and Implications of Persistent Atmospheric Carbon Dioxide Biases in Earth System Models." 2013 American Geophysical Union (AGU) Fall Meeting (December 9–13, 2013), San Francisco, California, USA. Abstract B13M-07. Invited.

Hoffman, Forrest M., Jitendra Kumar, and William W. Hargrove. November 17, 2013. "Integrating Unsupervised Classification and Expert Knowledge to Develop Phenoregion Maps Using Remotely Sensed Imagery." 4th SC Workshop on Petascale (Big) Data Analytics: Challenges and Opportunities (BDAC-13) Workshop, ACM/IEEE Supercomputing 2013 Conference (SC13) (November 17–22, 2013), Denver, Colorado, USA. Invited.

Hoffman, Forrest M., Jitendra Kumar, and William W. Hargrove. September 5, 2013. "Data Mining for Climate Change Model Intercomparison and Big Data in the Geosciences: Data Mining Methods for Characterizing Ecoregions, Designing Sampling Networks, Detecting Forest Threats, and Understanding Climate Change Predictions." Smoky Mountains Computational Sciences and Engineering Conferece (September 3–5, 2013), The Park Vista Hotel, Gatlinburg, Tennessee, USA. Invited.

Hoffman, Forrest M., Jitendra Kumar, and William W. Hargrove. August 13, 2013. "Data Mining for Climate Change Model Intercomparison and Phenoregions." National Phenology Network (NPN) Seasonal Timing Working Group Meeting (August 12–13, 2013), University of Wisconsin – Milwaukee, Milwaukee, Wisconsin, USA. Invited.

Hoffman, Forrest M., Jitendra Kumar, and William W. Hargrove. July 18, 2013. "Data Mining for Climate Change Model Intercomparison and Sampling Domain Representativeness and Threat Detection for Forest Health." Next Generation Climate Data Products Workshop (July 15–19, 2013), National Center for Atmospheric Research (NCAR), Boulder, Colorado, USA. Invited.

Hoffman, Forrest M., James T. Randerson, Samar Khatiwala, and CMIP5 Carbon Cycle Model Leads. March 21, 2013. "The Causes and Implications of Persistent Atmospheric Carbon Dioxide Biases in Earth System Models." Climate 2013: Next-generation Climate Models and Knowledge Discoveries through Extreme High-Performance Simulations and Big Data Workshop (March 20–22, 2013), Lawrence Berkeley National Laboratory, Berkeley, California, USA. Invited.

Hoffman, Forrest M., Jitendra Kumar, Richard T. Mills, William W. Hargrove, and Joseph P. Spruce. February 15, 2013. "Data Mining for Climate Change Model Intercomparison" and "A Data Mining Methology for Detecting Forest Threats and Mapping Representativeness." SAMSI/NCAR Workshop on Massive Datasets in Environment and Climate (February 15–17, 2013), National Center for Atmospheric Research (NCAR), Boulder, Colorado, USA. Invited.

Hoffman, Forrest M., James T. Randerson, David M. Lawrence, Eleanor M. Blyth, Minquan Mu, Gretchen Keppel-Aleks, Kathe Todd-Brown, Brendan M. Rogers, Miguel D. Mahecha, Nuno Carvalhais, Jannis von Buttlar, Markus Reichstein, Martin Best, James Ehleringer, Yiqi Luo. January 23, 2013. "The International Land Model Benchmarking (ILAMB) Project." DataONE Exploration, Visualization, and Analysis (EVA) Workshop (January 22–23, 2013), Polytechnic Institute of New York University (NYU-Poly), Brooklyn, New York, USA. Invited.

Hoffman, Forrest M., Jitendra Kumar, and William W. Hargrove. January 22, 2013. "Data Mining for Climate Change Model Intercomparison." DataONE Exploration, Visualization, and Analysis (EVA) Workshop (January 22–23, 2013), Polytechnic Institute of New York University (NYU-Poly), Brooklyn, New York, USA. Invited.

Hoffman, Forrest M., James T. Randerson, David M. Lawrence, Eleanor M. Blyth, Minquan Mu, Gretchen Keppel-Aleks, Kathe Todd-Brown, Brendan M. Rogers, Miguel D. Mahecha, Nuno Carvalhais, Jannis von Buttlar, Markus Reichstein, Martin Best, James Ehleringer, Yiqi Luo. January 8, 2013. "The International Land Model Benchmarking (ILAMB) Project." 93rd American Meteorological Society (AMS) Annual Meeting (January 6–10, 2013), Austin, Texas, USA. Invited.

Hoffman, Forrest M., James T. Randerson. "Measurements to Models: ILAMB and Representativeness / Scaling." Heterotrophic Respiration (RH) Workshop (October 30–November 1, 2012), H. J. Andrews Experimental Forest, Blue River, Oregon, USA. Invited.

Hoffman, Forrest M., James T. Randerson, and Jiafu Mao. September 14, 2012. "Using Remotely-sensed Data Sets for Model Evaluation and Benchmarking." ForestSAT 2012 (September 11–14, 2012), Oregon State University, Corvallis, Oregon, USA. Invited.

Hoffman, Forrest M., Pavel B. Bochev, Philip J. Cameron-Smith, Richard C. Easter, Jr., Scott M. Elliott, Xiaohong Liu, Robert B. Lowrie, Donald D. Lucas, Richard T. Mills, Timothy J. Tautges, Mark A. Taylor, Mariana Vertenstein, and Patrick H. Worley. June 19, 2012. "Applying Computationally Efficient Schemes for BioGeochemical Cycles (ACES4BGC)." Software Engineering Working Group Meeting, 17th Annual Community Earth System Model (CESM) Workshop (June 18–21, 2012), Breckenridge, Colorado, USA. Invited.

Hoffman, Forrest M., and James T. Randerson. October 14, 2011. "International Land Model Benchmarking (ILAMB) Project." Multi-Scale Synthesis and Terrestrial Biospheric Model Intercomparison Project (MsTMIP) Meeting, NASA Ames Research Center, Moffett Field, California, USA. Invited.

Hoffman, Forrest M., Jitendra Kumar, and William W. Hargrove. August 16, 2011. "Data Mining for Climate Change Model Intercomparison." First Workshop on Understanding Climate Change from Data (August 15–16, 2011), University of Minnesota, Minneapolis, Minnesota, USA. Invited.

Hoffman, Forrest M., James T. Randerson, Peter E. Thornton, Natalie M. Mahowald, Gordon B. Bonan, Steven W. Running, and Inez Y. Fung. July 11, 2011. "The Carbon-Land Model Intercomparison Project (C-LAMP) and the International Land Model Benchmarking (ILAMB) Project for the IPCC AR5." Scientific Discovery through Advanced Computing (SciDAC 2011) Conference (July 10–14, 2011), Denver, Colorado, USA. Invited.

Hoffman, Forrest M., Pierre Friedlingstein, Chris D. Jones, and James T. Randerson. May 19, 2011. "International Land Model Benchmarking (ILAMB) Project." Advancing Land-Use Modeling and Analysis for Carbon Cycling Studies (May 17–19, 2011), Princeton University, Princeton, New Jersey, USA. Invited.

Hoffman, Forrest M., and James T. Randerson. May 2, 2011. "Reducing Uncertainties in Climate-Carbon Cycle Feedbacks." β & γ Workshop (May 2–3, 2011), Exeter, Devon, United Kingdom. Invited.

Hoffman, Forrest M., Richard T. Mills, Jitendra Kumar, Joseph P. Spruce, and William W. Hargrove. April 29, 2011. "Geospatiotemporal Data Mining in an Early Warning system for Forest Threats in the United States." USDA Forest Service, Southern Research Station (SRS), Asheville, North Carolina, USA. Invited.

Hoffman, Forrest M., Richard T. Mills, Jitendra Kumar, Joseph P. Spruce, and William W. Hargrove. April 29, 2011. "Geospatiotemporal Data Mining Applications in Forest Ecology." USDA Forest Service, Southern Research Station (SRS), Asheville, North Carolina, USA. Invited.

Hoffman, Forrest M., William W. Hargrove, Richard T. Mills, Jitendra Kumar, and Salil Mahajan. April 28, 2011. "Determining Shifts in Climate Regimes Using Earth System Model Projections." U.S. Department of Energy (DOE) Computer Graphics Forum, Asheville, North Carolina, USA. Invited.

Hoffman, Forrest M. April 14, 2011. "Earth System Modeling and Model Evaluation." Guest Lecture for Environmental Fellows Discussion, University of Illinois, Ubrana-Champaign, Illinois, USA. Invited.

Hoffman, Forrest M., James T. Randerson, Peter E. Thornton, Natalie M. Mahowald, Keith Lindsay, Yen-Huei Lee, Cynthia D. Nevison, Scott C. Doney, Gordon B. Bonan, Reto Stöckli, Curtis C. Covey, Steven W. Running, and Inez Y. Fung. August 21, 2009. "The Carbon-Land Model Intercomparison Project (C-LAMP)." Australian National University (ANU) Environmental Biology Seminar, Canberra, Australia. Invited.

Hoffman, Forrest M., James T. Randerson, Peter E. Thornton, Natalie M. Mahowald, Keith Lindsay, Yen-Huei Lee, Cynthia D. Nevison, Scott C. Doney, Gordon B. Bonan, Reto Stöckli, Curtis C. Covey, Steven W. Running, and Inez Y. Fung. July 21, 2009. "The Carbon-Land Model Intercomparison Project (C-LAMP)." Space Mission Challenges for Information Technology (SMC-IT), Workshop on IT for Climate Research, Pasadena, California, USA. Invited.

Hoffman, Forrest M., William W. Hargrove, Richard T. Mills, Salil Mahajan, David J. Erickson, and Robert J. Oglesby. June 25, 2009. "Multivariate Spatio-Temporal Clustering (MSTC) as a Data Mining Tool for Environmental Applications." IEEE Seminar, London Metropolitan University, London, United Kingdom. Invited.

Hoffman, Forrest M., James T. Randerson, Peter E. Thornton, Natalie M. Mahowald, Keith Lindsay, Yen-Huei Lee, Cynthis D. Nevison, Scott C. Doney, Gordon B. Bonan, Reto Stöckli, Curtis C. Covey, Steven W. Running, and Inez Y. Fung. June 24, 2009. "The Carbon-Land Model Intercomparison Project (C-LAMP)." QUEST/GLASS Benchmarking Meeting (June 22–24, 2009), Exeter, Devon, United Kingdom. Invited.

Hoffman, Forrest M., James T. Randerson, Inez Y. Fung, Peter E. Thornton, Natalie M. Mahowald, Gordon B. Bonan, and Steven W. Running. March 17, 2009. "A Coupled Climate-Carbon Cycle Model Evaluation Methodology for IPCC AR5." 11th International Specialist Meeting on Next Generation Models on Climate Change and Sustainability for Advanced High Performance Computing Facilities (March 16–18, 2009), Oak Ridge, Tennessee, USA. Invited.

Hoffman, Forrest M. March 3, 2005. "Analysis of Reflected Spectral Signatures and Detection of Geophysical Disturbance Using Hyperspectral Imagery." North Carolina Geographic Information Systems Conference 2005, Winston-Salem, North Carolina, USA. Invited.

Hoffman, Forrest M., William W. Hargrove, David J. Erickson, and Robert Oglesby. June 25–28, 2002. "Animations and Early Clustering Results Using PCM Model Output." Community Climate System Model (CCSM) Annual Meeting, Climate Change and Assessment Working Group, Breckenridge, Colorado, USA. Invited.

Hoffman, Forrest M., William W. Hargrove. June 22–25, 2002. "Data Mining with Multivariate Spatio-Temporal Clustering." C. Warren Neel Conference on the New Frontiers of Statistical Data Mining and Knowledge Discovery, Knoxville, Tennessee, USA. Invited.

Contributed Presentations

Hoffman, Forrest M. February 18, 2026. "My Non-traditional Journey and a Little Advice." Oak Ridge National Laboratory (ORNL) Corporate Fellows Council Professional Development Series, Oak Ridge, Tennessee, USA.

Hoffman, Forrest M., Nathan Collier, Jitendra Kumar, Min Xu, Elias Massoud, Mingquan Mu, David M. Lawrence, Charles D. Koven, Gretchen Keppel-Aleks, Weiwei Fu, and James T. Randerson. January 15, 2026. "Systematic Evaluation of Earth System Models." Next Generation Ecosystem Experiment Arctic (NGEE Arctic) MODEX Workshop (January 14–16, 2026), Santa Fe, New Mexico, USA.

Hoffman, Forrest M., Birgit Hassler, Ranjini Swaminathan, the REF Delivery Team, obs4MIPs Steering Panel, and CMIP Model Benchmarking Task Team. December 16, 2025. "Rapid Evaluation Framework for the CMIP7 Assessment Fast Track." Abstract A24D-08 presented at the 2025 American Geophysical Union (AGU) Annual Meeting (December 15–19, 2025), New Orleans, Louisiana, USA.

Hoffman, Forrest M., Philip Kershaw, Sasha Ames, Rachana Ananthakrishnan, Laura Carriere, Stephan Kindermann, Christian Pagé, Aparna Radhakrishnan, and Andrew Robinson. December 16, 2025. "The Next Generation Earth System Grid Federation (ESGF) Distributed Data Infrastructure." Abstract IN21C-0344 presented at the 2025 American Geophysical Union (AGU) Annual Meeting (December 15–19, 2025), New Orleans, Louisiana, USA.

Hoffman, Forrest M., Nathan Collier, Mingquan Mu, Min Xu, Gretchen Keppel-Aleks, David M. Lawrence, Charles D. Koven, Weiwei Fu, William J. Riley, and James T. Randerson. December 11, 2025. "International Land Model Benchmarking (ILAMB)." 2025 International Land Model Benchmarking (ILAMB) Hybrid Meeting (December 11–13, 2025), New Orleans, Louisiana, USA.

Hoffman, Forrest M. August 28, 2025. "Reconciling Uncertainties in Biogeochemical Interactions through Synthesis and Computation." Energy Exascale Earth System Model (E3SM) All Hands Meeting (August 26–28, 2025), Bethesda, Maryland, USA.

Hoffman, Forrest M., Jitendra Kumar, Zachary L. Langford, V. Shashank Konduri, Auroop R. Ganguly, Zheng Shi, Elias Massoud, Nathan Collier, Min Xu, William W. Hargrove, Nicki L. Hickmon, Scott M. Collis, Charuleka Varadharajan, and Haruko Wainwright. August 20, 2025. "Artificial Intelligence and Machine Learning for Advancing Predictive Process Understanding." Artificial Intelligence for Environmental System Science (AI4ESS) Virtual Roundtable Discusssion, USA.

Hoffman, Forrest M., Birgit Hassler, and the CMIP Climate Model Benchmarking Task Team. December 13, 2024. "Climate Model Benchmarking for CMIP7 – A CMIP Task Team." Abstract GC51X-0294 presented at the 2024 American Geophysical Union (AGU) Annual Meeting (December 9–13, 2024), Washington, District of Columbia, USA.

Hoffman, Forrest M., Philip Kershaw, Sasha Ames, Rachana Ananthakrishnan, Laura Carriere, Benjamin J. K. Evans, Stephan Kindermann, Christian Pagé, and Aparna Radhakrishnan. December 10, 2024. "International Consortium Developing the Next Generation Earth System Grid Federation (ESGF) Distributed Data Infrastructure." Abstract IN23B-2202 presented at the 2024 American Geophysical Union (AGU) Annual Meeting (December 9–13, 2024), Washington, District of Columbia, USA.

Hoffman, Forrest M. August 8, 2024. "Reducing Uncertainties in Biogeochemical Interactions through Synthesis and Computation." U.S. Department of Energy (DOE), 2024 Earth and Environmental Science Modeling (EESM) Principal Investigators (PI) Meeting (August 6–9, 2024), Bethesda North Marriott Hotel & Conference Center, Rockville, Maryland, USA.

Hoffman, Forrest M. June 27, 2024. "Model Benchmarking." Presented at the Coupled Model Intercomparison Project (CMIP) Townhall, 21st Annual Meeting of the Asia Oceania Geosciences Society (AOGS) (June 24–28, 2024), Alpensia Convention Center, Pyeongchang, Gangwon-do, South Korea.

Hoffman, Forrest M. April 15, 2024. "Climate Model Benchmarking for CMIP7." European Geophysical Union (EGU) General Assembly (April 14–19, 2024), Vienna, Austria.

Hoffman, Forrest M. February 21, 2024. "Global Impacts of SRM on the Carbon Cycle, Agriculture and Ocean Biodiversity." Gordon Research Conference on Climate Engineering (February 18–23, 2024), Lucca, Italy.

Hoffman, Forrest M., Min Xu, Wei Zhang, Salil Mahajan, Hyun-Gyu Kang, Xiaojuan Yang, and Cheng-En Yang. February 19, 2024. "Quantifying Feedbacks of Climate Intervention Under Climate Change." Gordon Research Conference on Climate Engineering (February 18–23, 2024), Lucca, Italy.

Hoffman, Forrest M., Jitendra Kumar, W. Robert Bolton, Stan D. Wullschleger, and Colleen Iversen. December 12, 2023. "Pan-Arctic Representativeness for Site Selection and Model Evaluation." Abstract B21D-07 presented at the 2023 American Geophysical Union (AGU) Fall Meeting (December 11–15, 2023), San Francisco, California, USA.

Hoffman, Forrest M., Nathan Collier, Mingquan Mu, Min Xu, Gretchen Keppel-Aleks, David M. Lawrence, Charles D. Koven, Weiwei Fu, William J. Riley, and James T. Randerson. October 24, 2023. "Evaluating Land Carbon Cycle Processes in Earth System Models: Have Models Improved Over Time?" World Climate Research Program (WCRP) Open Science Conference (OSC) 2023 (October 23–27, 2023), Kigali, Rwanda.

Hoffman, Forrest M., Philip Kershaw, Sasha Ames, Rachana Ananthakrishnan, Laura Carriere, Ben Evans, Stephan Kindermann, Christian Pagé, and Aparna Radhakrishnan. October 23, 2023. "International Consortium Developing the Next Generation Earth System Grid Federation (ESGF) Distributed Data Infrastructure." World Climate Research Program (WCRP) Open Science Conference (OSC) 2023 (October 23–27, 2023), Kigali, Rwanda.

Hoffman, Forrest M., Nathan Collier, Mingquan Mu, Min Xu, Gretchen Keppel-Aleks, David M. Lawrence, Charles D. Koven, Weiwei Fu, William J. Riley, and James T. Randerson. August 2, 2023. "Evaluating Land Carbon Cycle Processes in Earth System Models: Have Models Improved Over Time?" 20th Annual Meeting of the Asia Oceania Geosciences Society (AOGS) (July 30–August 4, 2023), SUNTEC Convention Center, Singapore, Singapore.

Hoffman, Forrest M., Jitendra Kumar, Zachary L. Langford, V. Shashank Konduri, Russell Limber, and William W. Hargrove. March 28, 2023. "Prospects for Satellite Remote Sensing to Identify Evolving Anthromes and Quantify Carbon Cycle Dynamics." Anthromes, CO_2, and Terrestrial Carbon (March 27–30, 2023), William F. Bolger Center, Potomac, Maryland, USA.

Hoffman, Forrest M., Ian Foster, Sasha Ames, Rachana Ananthakrishnan, Jason Boutte, Nathan Collier, Scott M. Collis, Carlos Downie, Maxwell Grover, Robert Jacob, Michael Kelleher, Jitendra Kumar, Giri Prakash, Sarat Sreepathi, Min Xu, and Justin Hnilo. January 10, 2023. "ESGF2-US: Building the Next Generation Earth System Grid Federation." 103rd American Meteorological Society (AMS) Annual Meeting (January 8–12, 2023), Denver, Colorado, USA.

Hoffman, Forrest M., Ian Foster, Sasha Ames, Rachana Ananthakrishnan, Jason Boutte, Nathan Collier, Scott Collis, Carlos Downie, Robert Jacob, Jitendra Kumar, Giri Prakash, Sarat Sreepathi, and Min Xu. December 12, 2022. "ESGF2-US: Building the Next Generation Earth System Grid Federation." Abstract IN13A-01 presented at the 2022 American Geophysical Union (AGU) Fall Meeting (December 12–16, 2022), Chicago, Illinois, USA.

Hoffman, Forrest M., Ian Foster, and Sasha Ames. November 29, 2022. "The Next Generation Earth System Grid Federation (ESGF2)." US Department of Energy Urban-Integrated Field Laboratory (IFL) Kickoff Meeting, USA.

Hoffman, Forrest M., Wilbert Weijer, Paul A. Ullrich, and Michael Wehner. October 12, 2022. "The CMIP6 Data Lake at NERSC." NERSC Users Group Annual Meeting (October 12–14, 2022), USA.

Hoffman, Forrest M. September 15, 2022. "Model Evaluation Mini Talk." Land Surface Modeling Summit 2022 (September 11–15, 2022), School of Geography and the Environment, Oxford University, Oxford, United Kingdom.

Hoffman, Forrest M., Min Xu, Wei Zhang, Salil Mahajan, Xiaojuan Yang, Cheng-En Yang, and the Climate Intervention Biology Working Group. June 29, 2022. "Quantifying Feeedbacks of Climate Intervention Under Climate Change." Gordon Research Conference on Climate Engineering (June 27–July 1, 2022), Newry, Maine, USA.

Hoffman, Forrest M. June 22, 2022. "International Land Model Benchmarking (ILAMB)." Climate Intervention Biology Working Group Meeting (June 22–25, 2022), Newry, Maine, USA.

Hoffman, Forrest M., Ian Foster, and Sasha Ames. May 23, 2022. "Building the Next Generation Earth System Grid Federation (ESGF2)." U.S. Department of Energy (DOE) Data Days (D3) Virtual Workshop (June 1–3, 2022), USA.

Hoffman, Forrest M., Ian Foster, Sasha Ames, Rachana Ananthakrishnan, Jason Boutte, Nathan Collier, Scott Collis, Carlos Downie, Robert Jacob, Jitendra Kumar, Giri Prakash, Sarat Sreepathi, and Min Xu. May 23, 2022. "Building the Next Generation Earth System Grid Federation (ESGF2)." U.S. Department of Energy (DOE), Environmental System Science (ESS) Cyberinfrastructure Group Virtual Meeting (May 23, 2022), USA.

Hoffman, Forrest M., Jitendra (Jitu) Kumar, Morgan Steckler, Bharat Sharma, and William W. Hargrove. April 11, 2022. "Quantifying Phenological Variations in Tropical Forests Using High Spatio-Temporal Resolution Satellite Remote Sensing." 2022 International Association for Landscape Ecology - North America (IALE-NA) Virtual Annual Meeting (April 11–14, 2022), USA.

Hoffman, Forrest M., Min Xu, Wei Zhang, Salil Mahajan, Xiaojuan Yang, Cheng-En Yang, and the Climate Intervention Biology Working Group. March 29, 2022. "Quantifying Feeedbacks of Climate Intervention Under Climate Change." Battelle Conference on Innovations in Climate Resilience (March 29–30, 2022), Columbus, Ohio, USA.

Hoffman, Forrest M., Nathan Collier, Mingquan Mu, Cheng-En Yang, Gretchen Keppel-Aleks, David M. Lawrence, Charles D. Koven, Min Xu, Jiafu Mao, Qing Zhu, Zheng Shi, J. Keith Moore, Weiwei Fu, Hyungjun Kim, William J. Riley, and James T. Randerson. August 4, 2021. "Have Land Surface Processes in Earth System Models Improved Over Time?" 2021 Ecological Society of America (ESA) Annual (Virtual) Meeting (August 2–6, 2021), USA.

Hoffman, Forrest M., Nathan Collier, Mingquan Mu, Min Xu, Gretchen Keppel-Aleks, David Lawrence, Charles Koven, Jiafu Mao, Qing Zhu, William Riley, and James Randerson. March 5, 2021. "Diagnosing Climate–Carbon Cycle Feedbacks Constrained by ILAMB." North American Carbon Program (NACP) 7th Open Science Meeting (March 5–26, 2021), USA.

Hoffman, Forrest M., Nathan Collier, Mingquan Mu, Cheng-En Yang, Charles Koven, David M. Lawrence, Gretchen Keppel-Aleks, Min Xu, Qing Zhu, Weiwei Fu, Jiafu Mao, Hyungjun Kim, Jefferson Keith Moore, William J. Riley and James Tremper Randerson. December 7, 2020. "Have Land Surface and Carbon Cycle Processes in Earth System Models Improved Over Time?." Abstract B019-0010 presented at the 2020 American Geophysical Union (AGU) Fall Meeting (December 1–17, 2020), San Francisco, California, USA.

Hoffman, Forrest M., Rao Kotamarthi, Haruko Wainwright, and the EES Writing Team. October 16, 2020. "AI for Science Town Hall – Earth and Environmental Sciences." U.S. Department of Energy (DOE), Regional and Global Model Analysis (RGMA) 2020 Principal Investigators Meeting (October 13–16, 2020), USA.

Hoffman, Forrest M. October 13, 2020. "Reducing Uncertainty in Biogeochemical Interactions Through Synthesis and Computation." U.S. Department of Energy (DOE), Regional and Global Model Analysis (RGMA) 2020 Principal Investigators Meeting (October 13–16, 2020), USA.

Hoffman, Forrest M., Nathan Collier, Mingquan Mu, Min Xu, Weiwei Fu, Cheng-En Yang, Gretchen Keppel-Aleks, David M. Lawrence, Charles D. Koven, William J. Riley, and James T. Randerson. August 5, 2020. "International Land Model Benchmarking (ILAMB)." Coupling of Land and Atmospheric Subgrid Parameterizations (CLASP) Project Meeting (August 5, 2020), USA.

Hoffman, Forrest M., Jitendra Kumar, Zachary L. Langford, V. Shashank Konduri, Nathan Collier, and William W. Hargrove. August 5, 2020. "Exploiting Artificial Intelligence for Advancing Earth and Environmental System Science." 2020 Ecological Society of America (ESA) Annual (Virtual) Meeting (August 3–6, 2020), USA.

Hoffman, Forrest M., Nathan Collier, Mingquan Mu, Cheng-En Yang, Gretchen Keppel-Aleks, David M. Lawrence, Charles D. Koven, William J. Riley, and James T. Randerson. July 14, 2020. "Diagnosing Climate–Carbon Cycle Feedbacks Constrained by ILAMB." 2020 Joint Japan Geoscience Union (JpGU) / American Geophysical Union (AGU) Virtual Meeting (July 12–16, 2020), Chiba, Japan.

Hoffman, Forrest M. July 14, 2020. "Workflow in the Computational Earth Sciences Group." Workshop on Computational and Autonomous Workflows (CAW; July 14–15, 2020), Oak Ridge National Laboratory, Oak Ridge, Tennessee, USA.

Hoffman, Forrest M. May 12, 2020. "Update on the International Land Model Benchmarking (ILAMB) Package and IOMB." U.S. Department of Energy (DOE), Environmental System Science (ESS) Cyberinfrastructure Group Meeting (May 12, 2020), USA.

Hoffman, Forrest M. February 25, 2020. "Quantification and Reduction of Uncertainties Associated with Carbon Cycle–Climate System Feedbacks." ORNL Computational Earth Sciences Group Leader Interview, Oak Ridge National Laboratory, Oak Ridge, Tennessee, USA.

Hoffman, Forrest M., and Abigail L. S. Swann. February 16, 2020. "The Global Carbon Cycle: Implications for Life Beyond the 21st Century." American Association for the Advancement of Science (AAAS) Annual Meeting (February 13–16, 2020), Seattle, Washington, USA.

Hoffman, Forrest M., Nathan Collier, Mingquan Mu, Min Xu, Cheng-En Yang, Gretchen Keppel-Aleks, David M. Lawrence, Charles D. Koven, William J. Riley, and James T. Randerson. December 13, 2019. "Diagnosing Climate–Carbon Cycle Feedbacks Constrained by ILAMB." Abstract A51E-01 presented at the 2019 American Geophysical Union (AGU) Fall Meeting (December 9–13, 2019), San Francisco, California, USA.

Hoffman, Forrest M., Jitendra Kumar, Zachary L. Langford, V. Shashank Konduri, Nathan Collier, and William W. Hargrove. December 11, 2019. "Exploiting Artificial Intelligence for Advanced Earth and Environmental System Science." Abstract H33A-08 presented at the 2019 American Geophysical Union (AGU) Fall Meeting (December 9–13, 2019), San Francisco, California, USA.

Hoffman, Forrest M. July 19, 2019. "Projecting the Future of Life on Earth: Challenges in Earth System Modeling and Analysis." NERSC User Group (NUG) 2019 Meeting (July 19, 2019), Hilton Washington Hotel & Executive Meeting Center, Rockville, Maryland, USA.

Hoffman, Forrest M., Cheng-En Yang, Simone Tilmes, Douglas G. MacMartin, Lili Xia, Joshua S. Fu, Jadwiga H. Richter, Ben Kravitz, and Michael J. Mills. May 28, 2019. "Assessing Terrestrial Biogeochemistry Feedbacks in a Strategically Geoengineered Climate." 2019 Japan Geoscience Union (JpGU) Meeting (May 26–30, 2019), Makuhari Messe, Chiba, Japan.

Hoffman, Forrest M., Min Xu, Paul A. Levine, Nathan Collier, and James T. Randerson. April 30, 2019. "Tropical Ecological Forecasting for ENSO Using a Global Modeling Framework." U.S. Department of Energy (DOE), Environmental System Science (ESS) Principal Investigator (PI) Meeting (April 30–May 2, 2019), William F. Bolger Center, Potomac, Maryland, USA.

Hoffman, Forrest M. April 29, 2019. "Model–Data Integration: ILAMB, IOMB, and the Soil Carbon Dynamics Working Group." U.S. Department of Energy (DOE), Environmental System Science (ESS) Cyberinfrastructure Group Meeting (April 29, 2019), William F. Bolger Center, Potomac, Maryland, USA.

Hoffman, Forrest M., and Xingyuan Chen. April 29, 2019. "CESD Cyberinfrastructure Working Group on Model–Data Integration." U.S. Department of Energy (DOE), Environmental System Science (ESS) Cyberinfrastructure Working Group Meeting (April 29, 2019), William F. Bolger Center, Potomac, Maryland, USA.

Hoffman, Forrest M., Zachary L. Langford, and Jitendra Kumar. April 10, 2019. "Wildfire Mapping in Interior Alaska Using Deep Neural Networks on Imbalanced Datasets." 2019 U.S.-International Association for Landscape Ecology (US-IALE) Annual Meeting (April 7–11, 2019), Fort Collins, Colorado, USA.

Hoffman, Forrest M., Nathan Collier, David M. Lawrence, Gretchen Keppel-Aleks, Charles D. Koven, William J. Riley, Mingquan Mu, and James T. Randerson. April 9, 2019. "International Land Model Benchmarking (ILAMB) Project." U.S. Global Change Research Program (USGCRP) Interagency Working Group on Integrated Observations (ObsIWG) Conference Call (April 9, 2019), Washington, District of Columbia, USA.

Hoffman, Forrest M., Nathan Collier, Mingquan Mu, Gretchen Keppel-Aleks, David M. Lawrence, Charles D. Koven, Min Xu, Cheng-En Yang, Jiafu Mao, William J. Riley, and James T. Randerson. March 26, 2019. "Benchmarking CMIP Terrestrial Carbon Cycle and Biogeochemistry Models with the ILAMB Package." World Climate Research Programme (WCRP) Sixth Phase Coupled Model Intercomparison Project (CMIP6) Analysis Workshop (March 25–28, 2019), Barcelona Supercomputing Center, Barcelona, Spain.

Hoffman, Forrest M., James T. Randerson, J. Keith Moore, Oluwaseun O. Ogunro, Weiwei Fu, Michael L. Goulden, Charles D. Koven, Abigail L. S. Swann, Natalie M. Mahowald, Keith Lindsay, and Ernesto Muñoz. December 8, 2018. "Nonlinear Interactions between Climate and Carbon Dioxide Drivers of Marine and Terrestrial Carbon Cycle Changes." Ocean Carbon and Biogeochemistry (OCB) Ocean Carbon Uptake in CMIP6 Models Synthesis and Intercomparison Workshop (December 8–9, 2018), Washington, District of Columbia, USA.

Hoffman, Forrest M., James T. Randerson, J. Keith Moore, Michael L. Goulden, Keith Lindsay, Ernesto Muñoz, Weiwei Fu, Abigail L. S. Swann, Charles D. Koven, Natalie M. Mahowald, and Gordon B. Bonan. October 5–8, 2018. "Nonlinear Interactions between Climate and Atmospheric Carbon Dioxide Drivers of Terrestrial and Marine Carbon Cycle Changes from 1850 to 2300." DOE Earth and Environmental Systems Modeling (EESM) Principal Investigators (PI) Meeting (October 5–9, 2018), William F. Bolger Center, Potomac, Maryland, USA.

Hoffman, Forrest M., Jitendra Kumar, Nathan Collier, and William W. Hargrove. October 24, 2018. "Understanding the Representativeness of FLUXNET for Upscaling Carbon Fluxes." AmeriFlux Principal Investigators (PI) Meeting (October 24–25, 2018), Monroe Convention Center, Bloomington, Indiana, USA.

Hoffman, Forrest M., Nathan Collier, David M. Lawrence, Gretchen Keppel-Aleks, Charles D. Koven, William J. Riley, Mingquan Mu, and James T. Randerson. October 12, 2018. "International Land Model Benchmarking (ILAMB) Update." CRESCENDO 3rd General Assembly and LandMIP Meeting (October 8–12, 2018), Météo-France, Toulouse, France.

Hoffman, Forrest M., James T. Randerson, J. Keith Moore, Michael L. Goulden, Weiwei Fu, Charles D. Koven, Abigail L. S. Swann, Natalie M. Mahowald, Keith Lindsay, and Ernesto Muñoz. October 10, 2018. "Nonlinear Interactions between Climate and Atmospheric Carbon Dioxide Drivers of Terrestrial and Marine Carbon Cycle Changes from 1850 to 2300." CRESCENDO 3rd General Assembly and LandMIP Meeting (October 8–12, 2018), Météo-France, Toulouse, France.

Hoffman, Forrest M., James T. Randerson, J. Keith Moore, Michael L. Goulden, Keith Lindsay, Ernesto Muñoz, Weiwei Fu, Abigail L. S. Swann, Charles D. Koven, Natalie M. Mahowald, and Gordon B. Bonan. October 1, 2018. "Nonlinear Interactions between Climate and Atmospheric Carbon Dioxide Drivers of Terrestrial and Marine Carbon Cycle Changes from 1850 to 2300." DOE Site Visit (October 1–3, 2018), Oak Ridge National Laboratory (ORNL), Oak Ridge, Tennessee, USA.

Hoffman, Forrest M., Jitendra Kumar, William W. Hargrove, Martijn Pallandt, and Mathias Goeckedei. September 27, 2018. "Representativeness-Based Sampling Network Design for the Arctic." 10th International Conference on Ecological Informatics (September 24–28, 2018), Friedrich Schiller University Jena, Germany.

Hoffman, Forrest M., and David Durden. August 23, 2018. "B05: Measurement Integration for Global Scale Inference." 2018 AmeriFlux Decadal Synthesis Workshop (August 23–24, 2018), Lawrence Berkeley National Laboratory, Berkeley, California, USA.

Hoffman, Forrest M., Nathan Collier, Oluwaseun O. Ogunro, Gretchen Keppel-Aleks, David M. Lawrence, William J. Riley, and James T. Randerson. August 10, 2018. "Systematic Model–Data Comparison for Advancing Global Carbon Cycle Models." 2018 Ecological Society of America (ESA) Annual Meeting (August 5–10, 2018), Ernest N. Morial Convention Center, New Orleans, Louisiana, USA.

Hoffman, Forrest M., Brian Beckage, Louis J. Gross, Katherine Lacasse, Eric Carr, Sara S. Metcalf, Jonathan M. Winter, Peter D. Howe, Nina Fefferman, Travis Franck, Asim Zia, and Ann Kinzig. June 20, 2018. "Linking Models of Human Behavior and Climate Alters Projected Climate Change." 23rd Annual Community Earth System Model (CESM) Workshop (June 18–20, 2018), National Center for Atmospheric Research (NCAR), Boulder, Colorado, USA.

Hoffman, Forrest M., James T. Randerson, J. Keith Moore, Michael L. Goulden, Weiwei Fu, Charles D. Koven, Abigail L. S. Swann, Natalie M. Mahowald, Keith Linday, and Ernesto Muñoz. June 7, 2018. "BG04-A003: Nonlinear Interactions between Climate and Atmospheric Carbon Dioxide Drivers of Terrestrial and Marine Carbon Cycle Changes." 15th Annual Meeting of the Asia Oceania Geosciences Society (AOGS) (June 3–8, 2018), Hawai'i Convention Center, Honolulu, Hawai'i, USA.

Hoffman, Forrest M., Jitendra Kumar, and Zachary Langford. May 1–2, 2018. "Mapping Arctic Representativeness and Vegtation using Data Mining and Machine Learning Techniques." U.S. Department of Energy (DOE), Environmental System Science (ESS) Principal Investigator (PI) Meeting (May 1–2, 2018), William F. Bolger Center, Potomac, Maryland, USA.

Hoffman, Forrest M. April 30, 2018. "International Land Model Benchmarking (ILAMB)." U.S. Department of Energy (DOE), Energy Exascale Earth System Model (E3SM) Land Model (ELM) Meeting (April 30, 2018), William F. Bolger Center, Potomac, Maryland, USA.

Hoffman, Forrest M., and Xingyuan Chen. April 30, 2018. "CESD Cyberinfrastructure Working Group on Model–Data Integration." U.S. Department of Energy (DOE), Environmental System Science (ESS) Cyberinfrastructure Working Group Meeting (April 30, 2018), William F. Bolger Center, Potomac, Maryland, USA.

Hoffman, Forrest M., Min Xu, Nathaniel Collier, Paul Levine, and James T. Randerson. January 8, 2018. "A Tropical Ecological Forecasting Strategy for ENSO Based on a Global Modeling Framework." Abstract presented at the 98th American Meteorological Society (AMS) Annual Meeting (January 7–11, 2018), Austin, Texas, USA.

Hoffman, Forrest M., James T. Randerson, J. Keith Moore, Michael L. Goulden, Weiwei Fu, Charles D. Koven, Abigail L. S. Swann, Natalie M. Mahowald, Keith Lindsay, and Ernesto Muñoz. December 11, 2017. "Nonlinear Interactions between Climate and Atmospheric Carbon Dioxide Drivers of Terrestrial and Marine Carbon Cycle Changes." Abstract GC14-07 presented at the 2017 American Geophysical Union (AGU) Fall Meeting (December 11–15, 2017), New Orleans, Louisiana, USA.

Hoffman, Forrest M., James T. Randerson, J. Keith Moore, Michael L. Goulden, Weiwei Fu, Charles D. Koven, Abigail L. S. Swann, Natalie M. Mahowald, Keith Lindsay, Ernesto Muñoz, and Gordon B. Bonan. August 24, 2017. "Nonlinear Interactions between Climate and Atmospheric Carbon Dioxide Drivers of Terrestrial and Marine Carbon Cycle Changes from 1850 to 2300." 10th International Carbon Dioxide Conference (ICDC10) (August 21–25, 2017), Congress Centre Kursaal Interlaken, Interlaken, Switzerland.

Hoffman, Forrest M., Min Xu, Nathaniel O. Collier, Paul Levine, and James T. Randerson. August 8, 2017. "Development of a Tropical Ecological Forecasting Strategy for ENSO Based on a Global Modeling Framework." 2017 Ecological Society of America (ESA) Annual Meeting (August 6–11, 2017), Oregon Conference Center, Portland, Oregon, USA.

Hoffman, Forrest M., James T. Randerson, William J. Riley, J. Keith Moore, Michael L. Goulden, Weiwei Fu, Charles D. Koven, Abigail L. S. Swann, Natalie M. Mahowald, Keith Lindsay, Ernesto Muñoz, and Gordon B. Bonan. June 27, 2017. "Quantification and Reduction of Uncertainties Associated with Biogeochemistry–Earth System Feedbacks." Accelerated Climate Modeling for Energy (ACME) Coupled Biogeochemistry (CBGC) Science Presentation.

Hoffman, Forrest M., William J. Riley, and James T. Randerson. June 5, 2017. "BGC Feedbacks SFA Tropical Research Agenda." Accelerated Climate Modeling for Energy (ACME) All Hands Meeting (June 5–7, 2017), William F. Bolger Center, Potomac, Maryland, USA.

Hoffman, Forrest M., Jitendra Kumar, William W. Hargrove, Steven P. Norman, and Björn-Gustaf J. Brooks. May 22, 2017. "Integrating Statistical and Expert Knowledge to Develop Phenoregions for the Continental United States." Japanese Geoscience Union (JpGU)-American Geophysical Union (AGU) Joint Meeting (May 20–25, 2017), Makuhari Messe International Conference Hall, Chiba, Japan.

Hoffman, Forrest M., and Nathaniel O. Collier. May 18, 2017. "Systematic Evaluation of Land Surface Models Using the International Land Model Benchmarking (ILAMB) Package." 4th International Conference of Hydrology delivers Earth System Sciences to Society (HESSS4) Meeting (May 16–19, 2017), University of Tokyo, Tokyo, Japan.

Hoffman, Forrest M. April 24, 2017. "NGEE-Tropics ENSO Model Simulation Efforts." Next Generation Ecosystem Experiments (NGEE) Tropics Gathering at the 2017 Environmental System Science (ESS) Principal Investigators (PI) Meeting (April 25–26, 2017), Potomac, Maryland, USA.

Hoffman, Forrest M., Nathan Collier, James T. Randerson, Mingquan Mu, William J. Riley, David M. Lawrence, Gretchen Keppel-Aleks, and Charles D. Koven. April 24, 2017. "Systematic Evaluation of Land Surface Models Using the International Land Model Benchmarking (ILAMB) Package." 2017 Climate & Environmental Sciences Division (CESD) Cyberinfrastructure Working Group Meeting (April 24, 2017), Potomac, Maryland, USA.

Hoffman, Forrest M., Jitendra Kumar, William W. Hargrove, and Nathaniel Collier. April 10, 2017. "Understanding the Representativeness of FLUXNET for Upscaling Carbon Flux from Eddy Covariance Measurements." 2017 U.S.-International Association for Landscape Ecology (US-IALE) Annual Meeting (April 9–13, 2017), Baltimore, Maryland, USA.

Hoffman, Forrest M., Min Xu, Nathan Collier, Chonggang Xu, Bradley O. Christoffersen, Yiqi Luo, Daniel M. Ricciuto, Paul A. Levine, and James T. Randerson. December 15, 2016. "Development of a tropical ecological forecasting strategy for ENSO based on the ACME modeling framework." Abstract B42A-08 presented at the 2016 American Geophysical Union (AGU) Fall Meeting (December 12–16, 2016), San Francisco, California, USA.

Hoffman, Forrest M., and Xingyuan Chen. December 12, 2016. "Community-Based Cyberinfrastructure Town Hall: Model–Data Integration." 2016 American Geophysical Union (AGU) Fall Meeting (December 12–16, 2016), San Francisco, California, USA.

Hoffman, Forrest M., William J. Riley, James T. Randerson, Gretchen Keppel-Aleks, and David M. Lawrence. December 10, 2016. "International Land Model Benchmarking (ILAMB)." 2016 Next Generation Ecosystem Experiments – Arctic (NGEE-Arctic) All Hands Meeting (December 10–11, 2016), Parc 55 Hotel, San Francisco, California, USA.

Hoffman, Forrest M., Jitendra Kumar, Nathaniel Collier, William W. Hargrove, and James T. Randerson. September 23, 2016. "Understanding the Evolving Representativeness of Measurement Networks for Scaling Carbon Flux, Optimizing Network Coverage, and Benchmarking Models." 2016 AmeriFlux Principal Investigators Meeting (September 21–23, 2016), Golden, Colorado, USA.

Hoffman, Forrest M., Min Xu, Nathan Collier, Nate McDowell, Chonggang Xu, Brad Christoffersen, Paul Levine, and James T. Randerson. September 21, 2016. "A Forecasting Strategy for Tropical Ecosystems Using ACME." Next Generation Ecosystem Experiments – Tropics (NGEE-Tropics) Annual Meeting (September 21–22, 2016), Smithsonian S. Dillon Ripley Center, Washington, District of Columbia, USA.

Hoffman, Forrest M., Sarat Sreepathi, Richard T. Mills, Jitendra Kumar, and William W. Hargrove. September 9, 2016. "Co-design of Large Scale Climate Data Analytics for Emerging Supercomputing Architectures." Advancing Cross-cutting Ideas for Computational Climate Science (AXICCS 2016) Meeting (September 9–10, 2016), Rockville, Maryland, USA.

Hoffman, Forrest M., James T. Randerson, J. Keith Moore, Michael L. Goulden, Weiwei Fu, Charles D. Koven, Abigail L. S. Swann, Natalie M. Mahowald, Keith Lindsay, Ernesto Muñoz, and Gordon B. Bonan. August 16, 2016. "Nonlinear Interactions between Climate and Atmospheric Carbon Dioxide Drivers of Terrestrial and Marine Carbon Cycle Changes from 1850 to 2300." CCSI Earth System Modeling (ESM) Workshop / Dr. David J. Erickson III Memorial Lectures (August 16, 2016), Oak Ridge, Tennessee, USA.

Hoffman, Forrest M. August 16, 2016. "Climate Change Science Institute (CCSI) Earth System Modeling (ESM) Theme." CCSI Earth System Modeling (ESM) Workshop / Dr. David J. Erickson III Memorial Lectures (August 16, 2016), Oak Ridge, Tennessee, USA.

Hoffman, Forrest M., Jitendra Kumar, James T. Randerson, and Stuart J. Davies. August 11, 2016. "Characterizing Forest Representativeness for Optimizing Sampling Network Coverage." 101st Annual Ecological Society of America (ESA) Meeting (August 7–12, 2016), Fort Lauderdale, Florida, USA.

Hoffman, Forrest M., William J. Riley, James T. Randerson, Nathaniel Collier, Mingquan Mu, David M. Lawrence, and Gretchen Keppel-Aleks. June 22, 2016. "International Land Model Benchmarking (ILAMB) Update." 21st Biogeochemistry Working Group (BGCWG) Meeting, Community Earth System Model (CESM) Workshop (June 20–23, 2016), The Village at Breckenridge, Breckenridge, Colorado, USA.

Hoffman, Forrest M., Min Xu, Nathan Collier, William J. Riley, Daniel M. Ricciuto, Xiaojuan Wang, and Peter E. Thornton. June 8, 2016. "Evaluating the ACME Land Model (ALM) with ILAMBv2." Accelerated Climate Modeling for Energy (ACME) All Hands Meeting (June 7–10, 2016), Hilton Washington Hotel & Executive Meeting Center, Rockville, Maryland, USA.

Hoffman, Forrest M., James T. Randerson, J. Keith Moore, Michael L. Goulden, Weiwei Fu, Charles D. Koven, Abigail L. S. Swann, Natalie M. Mahowald, Keith Lindsay, Ernesto Muñoz, and Gordan B. Bonan. May 23, 2016. "Nonlinear Interactions between Climate and Atmospheric Carbon Dioxide Drivers of Terrestrial and Marine Carbon Cycle Changes from 1850 to 2300." Japanese Geoscience Union (JpGU) Meeting (May 22–26, 2016), Makuhari Messe International Conference Hall, Chiba, Japan.

Hoffman, Forrest M., James T. Randerson, Vivek K. Arora, Qing Bao, Patricia Cadule, Duoying Ji, Chris D. Jones, Michio Kawamiya, Samar Khatiwala, Keith Lindsay, Atsushi Obata, Elena Shevliakova, Katharina D. Six, Jerry F. Tjiputra, Evgeny M. Volodin, and Tongwen Wu. May 16, 2014. "Causes and Implications of Persistent Atmospheric Carbon Dioxide Biases in Earth System Models." International Land Model Benchmarking (ILAMB) Workshop (May 16–18, 2016), DoubleTree by Hilton Hotel Washington DC, Washington, District of Columbia, USA.

Hoffman, Forrest M., Jitendra Kumar, William W. Hargrove, and Steven P. Norman. April 5, 2016. "Detecting and Tracking Shifts in National Vegetation Composition." 2016 U.S.-International Association for Landscape Ecology (US-IALE) Annual Meeting (April 3–7, 2016), Asheville, North Carolina, USA.

Hoffman, Forrest M., Jiafu Mao, Xiaojuan Yang, Nathan Collier, Xiaoying Shi, Gangsheng Wang, Min Xu, and Cheng-En Yang. February 10, 2016. "Biogeochemistry–Climate Feedbacks." Oak Ridge National Laboratory (ORNL) Computing and Computational Sciences Directorate (CCSD) Advisory Committee Meeting (February 9–10, 2016), Oak Ridge National Laboratory, Oak Ridge, Tennessee, USA.

Hoffman, Forrest M., James T. Randerson, J. Keith Moore, Michael Goulden, Keith Lindsay, Ernesto Muñoz, Weiwei Fu, Abigail L. S. Swann, Charles D. Koven, Natalie Mahowald, and Gordon B. Bonan. December 15, 2015. "Nonlinear Interactions between Climate and Atmospheric Carbon Dioxide Drivers of Terrestrial and Marine Carbon Cycle Changes from 1850 to 2300." 2015 American Geophysical Union (AGU) Fall Meeting (December 14–18, 2015), San Francisco, California, USA. Abstract B23G-062.

Hoffman, Forrest M., Jitendra Kumar, Zachary Langford, Richard T. Mills, and William W. Hargrove. December 12–13, 2015. "Representativeness-Based Sampling Network Design and Scaling Strategies for Measurements in Arctic Ecosystems." Next Generation Ecosystem Experiments (NGEE) Arctic All Hands Meeting (December 12–13, 2015), San Francisco, California, USA.

Hoffman, Forrest M., Jitendra Kumar, Steven P. Norman, Bjørn-Gustaf J. Brooks, William M. Christie, William W. Hargrove, Joseph P. Spruce. November 17, 2015. "Applying a Big Data Approach to Detecting Fire Disturbances and Recovery at a Continental Scale Using Satellite Remote Sensing." 6th International Fire Ecology and Management Congress (November 16–20, 2015), San Antonio, Texas, USA.

Hoffman, Forrest M., Daniel M. Ricciuto, William J. Riley, and Peter E. Thornton. November 3, 2015. "Evaluation of the ACME Land Model using the ILAMB Prototype." Accelerated Climate Modeling for Energy (ACME) All Hands Meeting (November 2–4, 2015), Sheraton Albuquerque Uptown, Albuquerque, New Mexico, USA.

Hoffman, Forrest M. October 8, 2015. "Uncertainty Quantification in the BGC Feedbacks SFA." U.S. Department of Energy Regional and Global Climate Modeling (RGCM) Program Team Leads Meeting (October 6–8, 2015), Hyatt Regency Bethesday, Bethesda, Maryland, USA.

Hoffman, Forrest M. October 7, 2015. "Example Metrics and Diagnostics." U.S. Department of Energy Regional and Global Climate Modeling (RGCM) Program Team Leads Meeting (October 6–8, 2015), Hyatt Regency Bethesday, Bethesda, Maryland, USA.

Hoffman, Forrest M., William J. Riley, James T. Randerson, Scott M. Elliott, Gretchen Keppel-Aleks, Charles D. Koven, David M. Lawrence, Umakant Mishra, J. Keith Moore, and Xiaojuan Yang. October 6, 2015. "Biogeochemistry–Climate Feedbacks: Quantifying Feedbacks and Uncertainties of Biogeochemical Processes in Earth System Models." U.S. Department of Energy Regional and Global Climate Modeling (RGCM) Program Team Leads Meeting (October 6–8, 2015), Hyatt Regency Bethesday, Bethesda, Maryland, USA.

Hoffman, Forrest M. September 30, 2015. "Climate Change Science Institute – Earth System Modeling." Briefing for the National Geospatial Intelligence Agency (NGA), Oak Ridge National Laboratory, Oak Ridge, Tennessee, USA.

Hoffman, Forrest M., Xiaojuan Yang, Richard J. Norby, and Peter E. Thornton. September 19, 2015. "Global Earth System Model–Data Integration: Advancing Terrestrial Model Representation of Fundamental Processes." Seasonally Dry Tropical Forests Project Meeting (September 19–20, 2015), University of Minnesota, Itasca Biological Field Station, Park Rapids, Minnesota, USA.

Hoffman, Forrest M., Jitendra Kumar, Zachary Langford, Richard T. Mills, and William W. Hargrove. September 2, 2015. "Representativeness-Based Sampling Network Design and Scaling Strategies for Measurements in Arctic Ecosystems." Next Generation Ecosystem Experiments (NGEE) Arctic Phase 2 Review (September 2–3, 2015), Washington, District of Columbia, USA.

Hoffman, Forrest M., Jitendra Kumar, Damian M. Maddalena, Zachary L. Langford, William W. Hargrove, and James T. Randerson. August 9, 2015. "Characterizing Tropical Forest Representativeness for Optimizing Sampling Network Coverage." 1st Annual Next Generation Ecosystem Experiments (NGEE) Tropics Meeting (August 9, 2015), The Westin Baltimore Washington Airport - BWI, Linthicum Heights, Maryland, USA.

Hoffman, Forrest M., Jitendra Kumar, Damian M. Maddalena, Zachary L. Langford, William W. Hargrove, and James T. Randerson. July 14, 2015. "Characterizing Tropical Forest Representativeness for Optimizing Sampling Network Coverage." 52nd Annual Meeting of the Association for Tropical Biology and Conservation (ATBC) (July 12–16, 2015), Hawai'i Convention Center, Honolulu, Hawai'i, USA.

Hoffman, Forrest M. June 9, 2015. "Quantification and Reduction of Uncertainties Associated with Carbon Cycle–Climate System Feedbacks." Earth System Modeling Workshop, Climate Change Science Institute (CCSI), Oak Ridge National Laboratory (ORNL), Oak Ridge, Tennessee, USA.

Hoffman, Forrest M., Jitendra Kumar, and J. Walter Larson. June 2, 2015. "Data Mining in Earth System Science (DMESS 2015)." International Conference on Computational Science (ICCS 2015; June 1–3, 2015), Reykjavík University, Reykjavík, Iceland.

Hoffman, Forrest M. May 22, 2015. "Quantification and Reduction of Uncertainties Associated with Carbon Cycle–Climate System Feedbacks." Doctor of Philosophy Dissertation Defense, Department of Earth System Science, University of California Irvine, Irvine, California, USA.

Hoffman, Forrest M., James T. Randerson, Weiwei Fu, Abigail L. S. Swann, Natalie M. Mahowald, Charles D. Koven, Keith Lindsay, Ernesto Muñoz, and Gordon B. Bonan. April 9, 2015. "Long-term Terrestrial Carbon and Water Cycle Responses to Projected Climate Change Beyond 2100." Oak Ridge National Laboratory (ORNL) Climate Change Science Institute (CCSI) Scientific Advisory Board (SAB) Meeting (April 8–10, 2015), Oak Ridge, Tennessee, USA.

Hoffman, Forrest M., James T. Randerson, Weiwei Fu, Abigail L. S. Swann, Natalie M. Mahowald, Charles D. Koven, Keith Lindsay, Ernesto Muñoz, and Gordon B. Bonan. March 3, 2015. "Long-term Terrestrial Carbon and Water Cycle Responses to Projected Climate Change Beyond 2100." Community Earth System Model (CESM) Biogeochemistry Working Group Meeting, National Center for Atmospheric Research (NCAR), Boulder, Colorado, USA.

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Hoffman, Forrest M., James Randerson, Weiwei Fu, Keith Lindsay, Ernesto Muñoz, Natalie Mahowald, and Gordon Bonan. December 18, 2014. "Long-term Terrestrial Carbon and Water Cycle Responses to Projected Climate Change Beyond 2100." 2014 American Geophysical Union (AGU) Fall Meeting (December 15–19, 2014), San Francisco, California, USA. Abstract GC41C-0573.

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Hoffman, Forrest M., Jitendra Kumar, William W. Hargrove, Zachary Langford, Damian Maddalena, William J. Riley, and James T. Randerson. October 29, 2014. "Integrating Earth Science Research through Model, Experiment, and Data Synthesis." U.S. Department of Energy Green Ocean Amazon (GOAmazon) Joint Principal Investigators Meeting, Woodrow Wilson International Center for Scholars, Washington, DC, USA.

Hoffman, Forrest M., David Lawrence, James T. Randerson, Mingquan Mu, William J. Riley, J. Keith Moore, Gretchen Keppel-Aleks, Erik Kluzek, and Charles D. Koven. September 8, 2014. "Model Benchmarking: An Informal Tour of the International Land Model Benchmarking (ILAMB) Prototype." U.S. Department of Energy, Climate and Environmental Sciences Division Presentation, Germantown, Maryland, USA.

Hoffman, Forrest M., and ESM Theme Members. July 28, 2014. "CCSI Earth System Modeling (ESM) Theme Discussion of Future CCSI." ORNL Climate Change Science Institute (CCSI) Strategic Planning Discussion, Oak Ridge National Laboratory, Oak Ridge, Tennessee, USA.

Hoffman, Forrest M. June 13, 2014. "Earth System Modeling (ESM) Theme and Projects." University of Wisconsin visit to Oak Ridge National Laboratory, Oak Ridge, Tennessee, USA.

Hoffman, Forrest M. May 28, 2014. "CCSI Earth System Modeling (ESM) Theme." South Dakota School of Mines & Technology visit to Oak Ridge National Laboratory, Oak Ridge, Tennessee, USA.

Hoffman, Forrest M., Jitendra Kumar, Damian Maddalena, Richard T. Mills, and William W. Hargrove. May 19, 2014. "Representativeness-Based Sampling Network Design for the Arctic." Annual U.S.-International Association for Landscape Ecology (US-IALE) Symposium (May 18–22, 2014), Anchorage, Alaska, USA.

Hoffman, Forrest M., James T. Randerson, Vivek K. Arora, Qing Bao, Patricia Cadule, Duoying Ji, Chris D. Jones, Michio Kawamiya, Samar Khatiwala, Keith Lindsay, Atsushi Obata, Elena Shevliakova, Katharina D. Six, Jerry F. Tjiputra, Evgeny M. Volodin, and Tongwen Wu. May 12–14, 2014. "Causes and Implications of Persistent Atmospheric Carbon Dioxide Biases in Earth System Models." U.S. Department of Energy Integrated Climate Modeling Principal Investigator Meeting (May 12–14, 2014), William F. Bolger Center, Potomac, Maryland, USA.

Hoffman, Forrest M., Jitendra Kumar, Zachary Langford, Damian Maddalena, Nathan Collier, Victoria Sloan, Richard T. Mills, and William W. Hargrove. May 6, 2014. "Representativeness-Based Sampling Network Design and Scaling Strategies for Measurements in Arctic and Tropical Ecosystems." U.S. Department of Energy Joint Terrestrial Ecosystem Science and Subsurface Biogeochemistry Research Principal Investigator Meeting (May 6–7, 2014), William F. Bolger Center, Potomac, Maryland, USA.

Hoffman, Forrest M., Jitendra Kumar, William W. Hargrove, and Richard T. Mills. February 17, 2014. "Developing U.S. Phenoregions from Remote Sensing and the Award-Winning ForWarn System." Climate Change Science Institute (CCSI) Seminar, Oak Ridge National Laboratory, Oak Ridge, Tennessee, USA.

Hoffman, Forrest M., Jitendra Kumar, and William W. Hargrove. January 24, 2014. "Using Satellite Imagery to Track Forest Disturbances." Great Smoky Mountains Institute at Tremont visit to Oak Ridge National Laboratory, Oak Ridge, Tennessee, USA.

Hoffman, Forrest M., Jitendra Kumar, and William W. Hargrove. December 13, 2013. "Integrating Statistical and Expert Knowledge to Develop Phenoregions for the Continental United States." 2013 American Geophysical Union (AGU) Fall Meeting (December 9–13, 2013), San Francisco, California, USA. Abstract B43C-0490.

Hoffman, Forrest M., Jitendra Kumar, and William W. Hargrove. December 12, 2013. "Integrating Statistical and Expert Knowledge to Develop Phenoregions for the Continental United States." 2013 American Geophysical Union (AGU) Fall Meeting (December 9–13, 2013), San Francisco, California, USA. Abstract B43C-0490.

Hoffman, Forrest M., Richard Norby, Xiaojuan Yang, Lianhong Gu, Anna M. Jensen, Jitendra Kumar, Damian M. Maddalena, Ying Sun, Anthony P. Walker Jeffrey M. Warren, and David Weston. September 25, 2013. "Model-Inspired Science Priorities for Evaluating Tropical Ecosystem Response to Climate Change – Part II: Model Simulations and the Implications for Field Experiments." Laboratory Directors' Research and Development Program Poster Session, Oak Ridge National Laboratory, Oak Ridge, Tennessee, USA.

Hoffman, Forrest M., Jitendra Kumar, and William W. Hargrove. September 18, 2013. "Data Mining for Climate Change Model Intercomparison and Big Data in the Geosciences: Data Mining Methods for Characterizing Ecoregions, Designing Sampling Networks, Detecting Forest Threats, and Understanding Climate Change Predictions." Briefing for the National Geospatial Intelligence Agency (NGA), Oak Ridge National Laboratory, Oak Ridge, Tennessee, USA.

Hoffman, Forrest M., Jitendra Kumar, Richard T. Mills, and William W. Hargrove. August 5, 2013. "Representativeness-Based Sampling Network Design for the Arctic." 98th Annual Ecological Society of America (ESA) Meeting (August 4–9, 2013), Minneapolis, Minnesota, USA.

Hoffman, Forrest M., Pavel B. Bochev, Philip J. Cameron-Smith, Richard C. Easter, Jr., Scott M. Elliott, Iulian Grindeanu, Oksana Guba, Xiaohong Liu, Robert B. Lowrie, Donald D. Lucas, Richard T. Mills, William J. Sacks, Timothy J. Tautges, Mark A. Taylor, Mariana Vertenstein, and Patrick H. Worley. July 24–26, 2013. "Enhancing Global Biogeochemical Cycles in the Community Earth System Model." Scientific Discovery through Advanced Computing (SciDAC-3) Principal Investigators Meeting (July 24–26, 2013), Rockville, Maryland, USA.

Hoffman, Forrest M., James T. Randerson, Vivek K. Arora, Qing Bao, Katharina D. Six, Patricia Cadule, Duoying Ji, Chris D. Jones, Michio Kawamiya, Samar Khatiwala, Keith Lindsay, Atsushi Obata, Elena Shevliakova, Jerry F. Tjiputra, Evgeny M. Volodin, and Tongwen Wu. June 6, 2013. "Causes and Implications of Persistent Atmospheric Carbon Dioxide Biases in Earth System Models." Oral presentation at the 9th International Carbon Dioxide Conference (ICDC9) (June 3–7, 2013), Beijing International Conference Center, Beijing, China.

Hoffman, Forrest M., James T. Randerson, Vivek K. Arora, Qing Bao, Katharina D. Six, Patricia Cadule, Duoying Ji, Chris D. Jones, Michio Kawamiya, Samar Khatiwala, Keith Lindsay, Atsushi Obata, Elena Shevliakova, Jerry F. Tjiputra, Evgeny M. Volodin, and Tongwen Wu. June 3–7, 2013. Poster #285: "Causes and Implications of Persistent Atmospheric Carbon Dioxide Biases in Earth System Models." Poster presentation at the 9th International Carbon Dioxide Conference (ICDC9) (June 3–7, 2013), Beijing International Conference Center, Beijing, China.

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Hoffman, Forrest M., Jitendra Kumar, William W. Hargrove, Joseph P. Spruce, and Richard T. Mills. April 17, 2013. "Developing Phenoregion Maps Using Remotely Sensed Imagery." 28th Annual U.S.-International Association for Landscape Ecology (US-IALE) Symposium (April 14–18, 2013), Austin, Texas, USA.

Hoffman, Forrest M., Joel Rowland, Haruko Wainwright, Jitendra Kumar, Victoria Sloan, and Cathy Wilson. April 10, 2013. "Multiscale Arctic Landscape Characterization." Next Generation Ecosystem Experiment (NGEE-Arctic) Scaling Workshop (April 9–11, 2013), Oak Ridge National Laboratory, Oak Ridge, Tennessee, USA.

Hoffman, Forrest M., Richard Norby, Xiaojuan Yang, Lianhong Gu, Anna M. Jensen, Jitendra Kumar, Ying Sun, Anthony P. Walker, Jeffrey M. Warren, and Daid Weston. March 6, 2013. "Model-Inspired Science Priorities for Evaluating Tropical Ecosystem Response to Climate Change." Oak Ridge National Laboratory (ORNL) Climate Change Science Institute (CCSI) Scientific Advisory Board Poster Session, Oak Ridge, Tennessee, USA.

Hoffman, Forrest M., James T. Randerson, and CMIP5 Carbon Cycle Model Leads. March 6, 2013. "The Causes and Implications of Persistent Atmospheric Carbon Dioxide Biases in Earth System Models." Oak Ridge National Laboratory (ORNL) Climate Change Science Institute (CCSI) Scientific Advisory Board Poster Session, Oak Ridge, Tennessee, USA.

Hoffman, Forrest M. March 6, 2013. "Biogeochemistry and Land Model Benchmarking." Oak Ridge National Laboratory (ORNL) Climate Change Science Institute (CCSI) Scientific Advisory Board Meeting, Oak Ridge, Tennessee, USA.

Hoffman, Forrest M., Richard Norby, Xiaojuan Yang, Lianhong Gu, Anna M. Jensen, Jitendra Kumar, Ying Sun, Anthony P. Walker, Jeffrey M. Warren, and Daid Weston. March 6, 2013. "Model-Inspired Science Priorities for Evaluating Tropical Ecosystem Response to Climate Change." Oak Ridge National Laboratory (ORNL) Climate Change Science Institute (CCSI) Scientific Advisory Board Meeting, Oak Ridge, Tennessee, USA.

Hoffman, Forrest M. March 6, 2013. "Integrated Water Cycle Research." Oak Ridge National Laboratory (ORNL) Climate Change Science Institute (CCSI) Scientific Advisory Board Meeting, Oak Ridge, Tennessee, USA.

Hoffman, Forrest M., James T. Randerson, and CMIP5 Carbon Cycle Model Leads. February 21, 2013. "The Causes and Implications of Persistent Atmospheric Carbon Dioxide Biases in Earth System Models." Community Earth System Model (CESM) Joint Land Model Working Group and Biogeochemistry Working Group Meeting (February 19–22, 2013), National Center for Atmospheric Research (NCAR), Boulder, Colorado, USA.

Hoffman, Forrest M., Jitendra Kumar, William W. Hargrove, and Richard T. Mills. February 26, 2013. "Large Scale Climate Data Analytics." Oak Ridge National Laboratory (ORNL) Computing and Computational Sciences Directorate (CCSD) Scientific Advisory Board (SAB) Meeting, Oak Ridge National Laboratory, Oak Ridge, Tennessee, USA.

Hoffman, Forrest M., James T. Randerson, and CMIP5 Carbon Cycle Model Leads. December 6, 2012. "The Causes and Implications of Persistent Atmospheric CO_2 Biases in Earth System Models." 2012 American Geophysical Union (AGU) Fall Meeting (December 3–7, 2012), San Francisco, California, USA. Abstract B41C-0290.

Hoffman, Forrest M., Pavel B. Bochev, Philip J. Cameron-Smith, Richard C. Easter, Jr., Scott M. Elliott, Xiaohong Liu, Robert B. Lowrie, Donald D. Lucas, Richard T. Mills, Timothy J. Tautges, Mark A. Taylor, Mariana Vertenstein, and Patrick H. Worley. September 11, 2012. "Computational Challenges of the Applying Computationally Efficient Schemes for BioGeochemical Cycles (ACES4BGC) Project." Scientific Discovery through Advanced Computing (SciDAC-3) Principal Investigators Meeting (September 10–12, 2012), Rockville, Maryland, USA.

Hoffman, Forrest M., Pavel B. Bochev, Philip J. Cameron-Smith, Richard C. Easter, Jr., Scott M. Elliott, Xiaohong Liu, Robert B. Lowrie, Donald D. Lucas, Richard T. Mills, Timothy J. Tautges, Mark A. Taylor, Mariana Vertenstein, and Patrick H. Worley. September 10, 2012. "Applying Computationally Efficient Schemes for BioGeochemical Cycles (ACES4BGC)." Scientific Discovery through Advanced Computing (SciDAC-3) Principal Investigators Meeting (September 10–12, 2012), Rockville, Maryland, USA.

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Hoffman, Forrest M., Richard T. Mills, Jitendra Kumar, William W. Hargrove, and Joseph P. Spruce. April 9, 2012. "A Data Mining Methodology for Detecting Change in Forest Ecosystems using Remotely Sensed Imagery." 27th Annual U.S.-International Association for Landscape Ecology (US-IALE) Symposium (April 8–12, 2012), Newport, Rhode Island, USA.

Hoffman, Forrest M., James T. Randerson, Peter E. Thornton, and Keith Lindsay. March 6, 2012. "CMIP5 Multi-Model Analysis of Global Carbon Cycle Feedbacks: Developing Benchmarks for ILAMB." World Climate Research Programme (WCRP) Coupled Model Intercomparsion Project Phase 5 (CMIP5) Analysis Workshop (March 5–9, 2012), University of Hawai'i East-West Center, Honolulu, Hawai'i, USA.

Hoffman, Forrest M., James T. Randerson, Peter E. Thornton, and Keith Lindsay. February 29, 2012. "Systematic Evaluation of Earth System Models: Developing Benchmarks for ILAMB." Community Earth System Model (CESM) Joint Land Model and Biogeochemistry Working Group Meeting (February 29–March 2, 2012), National Center for Atmospheric Research (NCAR), Boulder, Colorado, USA.

Hoffman, Forrest M., and James T. Randerson. February 14, 2012. "Quantifying and Reducing Climate-Carbon Cycle Feedback Uncertainties: Analysis of Earth System Model Feedbacks." NIMBioS Workshop on Disturbance Regimes and Climate-Carbon Feedbacks (February 13–15, 2012), National Institute for Mathematical and Biological Synthesis (NIMBioS), University of Tennessee, Knoxville, Tennessee, USA.

Hoffman, Forrest M., Jitendra Kumar, Richard T. Mills, and William W. Hargrove. January 31, 2012. "Site Representativeness and Sampling Network Design for the Next Generation Ecosystem Experiment (NGEE)-Arctic." Oak Ridge Climate Change Science Institute (CCSI) Scientific Advisory Board Meeting (January 31–February 2, 2012), Oak Ridge, Tennessee, USA.

Hoffman, Forrest M., James T. Randerson, Mingquan Mu, Keith Lindsay, and Peter E. Thornton. December 9, 2011. "Quantifying and Reducing Climate-Carbon Cycle Feedback Uncertainties: Analysis of CMIP5 Earth System Model Feedbacks." 2011 American Geophysical Union (AGU) Fall Meeting (December 5–9, 2011), San Francisco, California, USA. Abstract GC54A-07.

Hoffman, Forrest M., and James T. Randerson. October 26, 2011. "The Impact of the Temperature Sensitivity of Ecosystem Respiration on the Climate-Carbon Cycle Feedback Strength." World Climate Research Programme Open Science Conference (October 24–28, 2011), Sheraton Denver Downtown Hotel, Denver, Colorado, USA.

Hoffman, Forrest M., and James T. Randerson. October 3, 2011. "A New Model Evaluation Framework for the International Land Model Benchmarking (ILAMB) Project." 2011 NASA Carbon Cycle & Ecosystem Joint Science Workshop (October 3–7, 2011), Alexandria, Virginia, USA.

Hoffman, Forrest M., James T. Randerson, Peter E. Thornton, Gordon B. Bonan, Natalie M. Mahowald, Keith Lindsay, Yen-Huei Lee, Cynthia D. Nevison, Steven W. Running, Scott C. Doney, and Inez Y. Fung. September 19, 2011. "The Carbon-Land Model Intercomparison Project (C-LAMP) and the International Land Model Benchmarking (ILAMB) Project for the IPCC AR5." U.S. Department of Energy Climate and Earth System Modeling PI Meeting (September 19–23, 2011), Washington, District of Columbia, USA.

Hoffman, Forrest M., and James T. Randerson. June 20, 2011. "The International Land Model Benchmarking (ILAMB) Project." 16th Annual Community Earth System Model (CESM) Workshop (June 20–23, 2011), Breckenridge, Colorado, USA.

Hoffman, Forrest M., J. Walter Larson, Richard Tran Mills, Bjørn-Gustaf J. Brooks, Auroop R. Ganguly, William W. Hargrove, Jian Huang, Jitendra Kumar, and Ranga R. Vatsavai. June 2, 2011. "Data Mining in Earth System Science (DMESS 2011)." International Conference on Computational Science (ICCS 2011; June 1–3, 2011), Nanyang Executive Centre, Nanyang Technological University, Singapore.

Hoffman, Forrest, William Hargrove, Richard Mills, Jitendra Kumar, and Salil Mahajan. April 4, 2011. "Determining Shifts in Climate Regimes Using Earth System Model Projections." 2011 U.S.-International Association for Landscape Ecology (US-IALE) Symposium (April 3–7, 2011), Portland, Oregon, USA.

Hoffman, Forrest M., and James T. Randerson. March 16, 2011. "International Land Model Benchmarking (ILAMB) Project." Community Earth System Model (CESM) Joint Land Model, Climate Chemistry, and Biogeochemistry Working Group Meetings (March 15–17, 2011), Boulder, Colorado, USA.

Hoffman, Forrest M., and James T. Randerson. February 8, 2011. "International Land Model Benchmarking (ILAMB) Project." Oak Ridge Climate Change Science Institute (CCSI) Lunchtime Seminar, Oak Ridge, Tennessee, USA.

Hoffman, Forrest M., and James T. Randerson. February 2, 2011. "International Land Model Benchmarking (ILAMB) Project." Ameriflux Science Meeting & 3rd North American Carbon Program (NACP) All-Investigators Meeting (January 31–February 4 2011), New Orleans, Louisiana, USA.

Hoffman, Forrest M., James T. Randerson, Peter E. Thornton, Gordon B. Bonan, Natalie M. Mahowald, Keith Lindsay, Yen-Huei Lee, Cynthia D. Nevison, Steven W. Running, Scott C. Doney, and Inez Y. Fung. January 24, 2011. "The Carbon-Land Model Intercomparison Project (C-LAMP)." The International Land Model Benchmarking (ILAMB) Workshop (January 24–26, 2011), Irvine, California, USA.

Hoffman, Forrest M., and James T. Randerson. December 16, 2010. "The Impact of the Temperature Sensitivity of Ecosystem Respiration on the Climate-Carbon Cycle Feedback Strength." 2010 American Geophysical Union (AGU) Fall Meeting (December 13–17, 2010), San Francisco, California, USA. Abstract B44A-02.

Hoffman, Forrest M., James T. Randerson, Peter E. Thornton, Natalie M. Mahowald, Gordon B. Bonan, Steven W. Running, and Inez Y. Fung. August 31, 2010. "The Carbon-Land Model Intercomparison Project (C-LAMP) and an International Land-Biosphere Model Benchmarking Activity for the IPCC AR5." Current Challenges in Computing: Climate Modeling (August 30–September 1, 2010), Napa, California, USA.

Hoffman, Forrest M., Richard T. Mills, Jitendra Kumar, Srinivasa S. Vulli, and William W. Hargrove. July 26, 2010. "Geospatiotemporal Data Mining in an Early Warning System for Forest Threats in the United States." 2010 IEEE International Geoscience and Remote Sensing Symposium (IGARSS 2010; July 25–30, 2010), Honolulu, Hawai'i, USA.

Hoffman, Forrest M., James T. Randerson, Peter E. Thornton, Gordon B. Bonan, Natalie M. Mahowald, Keith Lindsay, Yen-Huei Lee, Cynthia D. Nevison, Steven W. Running, Scott C. Doney, and Inez Y. Fung. March 31, 2010. "The Carbon-Land Model Intercomparison Project (C-LAMP) and an International Land-Biosphere Model Benchmarking Activity for the IPCC AR5." U.S. Department of Energy Climate Change Modeling Program Science Team Meeting (March 29–April 2, 2010), Gaithersburg, Maryland, USA.

Hoffman, Forrest M., J. T. Randerson, P. E. Thornton, G. B. Bonan, B. J. Brooks, D. J. Erickson, and I. Fung. December 2009. "An International Land-Biosphere Model Benchmarking Activity for the IPCC Fifth Assessment Report (AR5)." 2009 American Geophysical Union (AGU) Fall Meeting (December 14–18, 2009), San Francisco, California, USA. Abstract B23G-08.

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Hoffman, Forrest M., James T. Randerson, Peter E. Thornton, Natalie M. Mahowald, Gordon B. Bonan, Steven W. Running, and Inez Y. Fung. September 15, 2009. "The Carbon-Land Model Intercomparison Project (C-LAMP): A Model-Data Comparison System for Evaluation of Coupled Biosphere-Atmosphere Models." 8th International Carbon Dioxide Conference (September 13–19, 2009), Jena, Germany.

Hoffman, Forrest M., James T. Randerson, Inez Y. Fung, Peter E. Thornton, Natalie M. Mahowald, Gordon B. Bonan, and Steven W. Running. August 27, 2009. "The Carbon-Land Model Intercomparison Project (C-LAMP): A Prototype for Coupled Biosphere-Atmosphere Model Benchmarking for the IPCC Fifth Assessment Report (AR5)." 6th Global Energy and Water Experiment (GEWEX) and 2nd International Land Ecosystem-Atmosphere Processes Study (iLEAPS) Joint Science Conferences (August 24–28, 2009), Melbourne, Victoria, Australia.

Hoffman, Forrest M., James T. Randerson, Peter E. Thornton, Natalie M. Mahowald, Keith Lindsay, Yen-Huei Lee, Cynthia D. Nevison, Scott C. Doney, Gordon B. Bonan, Reto Stöckli, Curtis C. Covey, Steven W. Running, and Inez Y. Fung. April 7, 2009. "A Systematic Assessment of Terrestrial Biogeochemistry Models in the Community Climate System Model (CCSM)." U.S. Department of Energy Climate Change Prediction Program (CCPP) Science Team Meeting (April 7–9, 2009), Bethesda, Maryland, USA.

Hoffman, Forrest M., James T. Randerson, Inez Y. Fung, Peter E. Thornton, Curtis C. Covey, Gordon B. Bonan, and Steven W. Running. February 17, 2009. "The Carbon-Land Model Intercomparison Project (C-LAMP): A Protocol and Metrics for Model-Data Comparison." 2nd North American Carbon Program (NACP) All-Investigators Meeting (February 17–20, 2009), San Diego, California, USA.

Hoffman, Forrest M., James T. Randerson, Inez Fung, Peter Thornton, Curt Covey, Gordon Bonan, Steve Running, and Rich Norby. December 19, 2008. "Comparison of Global Model Results from the Carbon-Land Model Intercomparison Project (C-LAMP) with Free-Air Carbon Dioxide Enrichment (FACE) Manipulation Experiments." 2008 American Geophysical Union (AGU) Fall Meeting (December 15–19, 2008), San Francisco, California, USA. Abstract B51E-0447.

Hoffman, Forrest M., and Martial Mancip. November 20, 2008. "Model Evaluation Discussion." Marie Curie/Integrated Land Ecosystem-Atmosphere Processes Study (iLEAPS) Workshop (November 17–20, 2008), Hyères, France.

Hoffman, Forrest M., James T. Randerson, Inez Y. Fung, Peter E. Thornton, Natalie M. Mahowald, Gordon B. Bonan, and Steven W. Running. November 19, 2008. "The Carbon-Land Model Intercomparison Project (C-LAMP): A Protocol and Evaluation Metrics for Global Terrestrial Biogeochemistry Models." Marie Curie/Integrated Land Ecosystem-Atmosphere Processes Study (iLEAPS) Workshop (November 17–20, 2008), Hyères, France.

Hoffman, Forrest M., Jim T. Randerson, Inez Y. Fung, Peter E. Thornton, Yeh-Huei "Jeff" Lee, Curtis C. Covey, Gordon B. Bonan, and Steven W. Running. October 3, 2008. "The Carbon-Land Model Intercomparison Project (C-LAMP): A Protocol and Evaluation Metrics for Global Terrestrial Biogeochemistry Models." ORNL FishHeads Presentation, Oak Ridge National Laboratory, Oak Ridge, Tennessee, USA.

Hoffman, Forrest M., Jim T. Randerson, Inez Y. Fung, Peter E. Thornton, Yeh-Huei "Jeff" Lee, Curtis C. Covey, Gordon B. Bonan, and Steven W. Running. July 10, 2008. "The Carbon-Land Model Intercomparison Project (C-LAMP): A Protocol and Evaluation Metrics for Global Terrestrial Biogeochemistry Models." International Congress on Environmental Modelling and Software (iEMSs 2008), Barcelona, Catalonia, Spain.

Hoffman, Forrest M., William W. Hargrove, Richard T. Mills, Salil Mahajan, David J. Erickson, and Robert J. Oglesby. July 9, 2008. "Multivariate Spatio-Temporal Clustering (MSTC) as a Data Mining Tool for Environmental Applications." International Congress on Environmental Modelling and Software (iEMSs 2008), Barcelona, Catalonia, Spain.

Hoffman, Forrest M., James T. Randerson, Inez Fung, Peter Thornton, Jeff Lee, Curt Covey, David Erickson, Gordon Bonan, and Steve Running. June 17–19, 2008. "The Carbon-Land Model Intercomparison Project (C-LAMP): A Protocol and Metrics for Model-Data Comparison." 13th Annual Community Climate System Model (CCSM) Workshop, Breckenridge, Colorado, USA.

Hoffman, Forrest M., James T. Randerson, Inez Fung, Peter Thornton, Jeff Lee, Curt Covey, David Erickson, Gordon Bonan, and Steve Running. April 28–May 2, 2008. "The Carbon-Land Model Intercomparison Project (C-LAMP): A Protocol and Metrics for Model-Data Comparison." NASA Carbon Cycle & Ecosystems Joint Science Workshop, University of Maryland Inn and Conference Center, Adelphi, Maryland, USA.

Hoffman, Forrest M., James T. Randerson, Inez Fung, Peter Thornton, Jeff Lee, Curt Covey, Gordon Bonan, and Steve Running. April 7–10, 2008. "The Carbon-Land Model Intercomparison Project (C-LAMP): A Protocol and Metrics for Model-Data Comparison." 23rd Annual Symposium of the International Association for Landscape Ecology, United States Regional Association (US-IALE), Madison, Wisconsin, USA.

Hoffman, Forrest M., Salil Mahajan, William W. Hargrove, Richard T. Mills, Anthony D. Del Genio. March 12, 2008. "A Cluster Analysis Approach to Comparing Atmospheric Radiation Measurement (ARM) Data and Global Climate Model (GCM) Results." 18th Atmospheric Radiation Measurement (ARM) Science Team Meeting, Norfolk, Virginia, USA. *Winner of the First Place People's Choice Award at the 18th ARM Science Team Meeting.*

Hoffman, Forrest M., Jim Randerson, Inez Fung, Peter Thornton, and Jeff Lee. February 22, 2008. "Update on the Carbon-Land Model Intercomparison Project (C-LAMP)." Community Climate System Model (CCSM) Biogeochemistry Working Group Meetings, Boulder, Colorado, USA.

Hoffman, Forrest M., Jim Randerson, Inez Fung, Peter Thornton, Jeff Lee, and Curt Covey. December 2007. "Results from the Carbon-Land Model Intercomparison Project (C-LAMP)." 2007 American Geophysical Union (AGU) Fall Meeting, San Francisco, California, USA. Abstract B31B-0324.

Hoffman, Forrest M., Jim Randerson, Inez Fung, Peter Thornton, Jeff Lee, and Nan Rosenbloom. October 18, 2007. "The Carbon-Land Model Intercomparison Project (C-LAMP) and Its Relationship to C4MIP." AmeriFlux Science Team Meeting, Boulder, Colorado, USA.

Hoffman, Forrest M., W. Mac Post, David Erickson, Marcia Branstetter, Anthony King, Jonathan Foley, Bala Govindasamy, Art Mirin. September 18, 2007. "Assessment of a Fully Coupled Global Model Based on CCSM3 Using the IBIS Biogeochemistry and Dynamic Global Vegetation Model." U.S. Department of Energy Climate Change Prediction Program (CCPP) Science Team Meeting, Indianapolis, Indiana, USA.

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