

Michele M. Thornton

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EDUCATION

M.S., Biology (emphasis in Stream Ecology), Idaho State University, 1997

B.S., Biological Sciences, minor chemistry, Michigan State University, 1989

Certification: Secondary Education

PROFESSIONAL EXPERIENCE

2014 - present	ORNL DAAC, Oak Ridge National Laboratory, Oak Ridge, TN	Technical Professional: Daymet Production Lead, Airborne Data Lead, Learning Resources Lead, Earthdata Forum Lead, Data Ingest/Curation, ESCO Staff, Openscapes Mentor
2008 - 2014	Information International Associates, Inc. (IIA), Oak Ridge, TN / NCAR, GIS Program, Boulder, CO	Daymet - Production/Tool/Website Developer: North American Carbon Program Modeling and Synthesis Thematic Data Center (MAST-DC); Geospatial Analyst: ORNL DAAC
2002 - 2004	AllPoints GIS, Denver, CO	Geospatial Curriculum Developer for USFS Training Modules
1998 - 2001	NTSG, University of Montana, Missoula, MT	Forestry Coordinator, EOS Training Center
1996 - 1998	Wildlife Spatial Analysis Lab, University of Montana, Missoula, MT	Image Analyst/GIS Technician; Montana GAP Analysis
1996	Plum Creek Timber Company, Missoula, MT	Biological Technician; Riparian/Stream Surveys, Snorkeling Fish Inventories
1993 - 1996	Idaho State University, Stream Ecology Center, Pocatello, ID	Field and Laboratory Technician
1992 - 1993	Teton Science School, Kelly, WY	Lead Instructor, Greater Yellowstone Ecosystem
1989 - 1992	Webber Jr High, Saginaw, MI	Secondary Science Teacher

AWARDS AND HONORS

- **Community Outreach, 2021** (UT-Battelle Award)

PROJECTS AND AFFILIATIONS

2020 – 2024: North American Carbon Program: Project Lead, Daymet V4 (DOE, NASA)
 2008 – present: Daymet Workflow and Production Lead
 2022 – present: ORNL DAAC Openscapes mentor
 2021 – present: ESDIS Standards Coordination Office (ESCO) Staff Member
 2021 – present: Earthdata Forum, ORNL DAAC Lead
 2020 – present: ORNL DAAC Airborne Data Lead
 2018 – present: ORNL DAAC Learning Resources Lead
 2017 – present: ORNL DAAC User Needs Point of Contact (POC)
 1998 – 2001: NTSG EOS Training Center, Forestry Coordinator

PUBLISHED DATASETS

Daymet Funding Sources

Funding Period	Version	Funding Source	Details
2006 – 2014	V2	NACP Project Profile: A Modeling and Synthesis Thematic Data Center for the North American Carbon Program MAST-DC	Standardized inputs, ancillary files, software workflow and scripting, file distribution standardization, web site design and creation, web site public launch, file optimization, Single Pixel Extraction Tool, Tile Selection Tool, V2 release
2013 – 2015	V3	NASA: Terrestrial Ecology NRA: 2012	Algorithm update to allow low station estimates, standardized inputs and re-run of entire temporal period, V3 release
2018	V4	NGEE- Tropics: U.S. Department of Energy (DOE), Office of Science, Office of Biological and Environmental Research (BER)	Puerto Rico temporal extent extended to 1950 – 1979. Version 4
2018 - 2019	V4	Energy Exascale Earth System Modeling (E3SM) : Office of Biological and Environmental Research within the U.S. Department of Energy's Office of Science	Algorithm improvements to reductions in the timing bias of input reporting weather station measurements; improvement to the three-dimensional regression model techniques in the core algorithm; and a novel approach to handling high elevation temperature measurement biases. Standardized inputs for entire temporal period. V4 Dataset release.

Daymet: <https://daymet.ornl.gov/>

Daymet Daily (sub-daily) Data: Version History and Reference/Citations

Thornton, M.M., R. Shrestha, Y. Wei, P.E. Thornton, S-C. Kao, and B.E. Wilson. 2022. Daymet: Daily Surface Weather Data on a 1-km Grid for North America, Version 4 R1. ORNL DAAC, Oak Ridge, Tennessee, USA. <https://doi.org/10.3334/ORNLDAAC/2129>

Kao, S-C., P.E. Thornton, **M.M. Thornton**, R. Shrestha, and A.P. Walker. 2022. Sub-daily Climate Forcings for Puerto Rico. ORNL DAAC, Oak Ridge, Tennessee, USA. <https://doi.org/10.3334/ORNLDAAC/1977>

Thornton, M.M., R. Shrestha, P.E. Thornton, S. Kao, Y. Wei, and B.E. Wilson. 2021. Daymet Version 4 Monthly Latency: Daily Surface Weather Data. ORNL DAAC, Oak Ridge, Tennessee, USA. <https://doi.org/10.3334/ORNLDAAC/1904>

Thornton, M.M., R. Shrestha, Y. Wei, P.E. Thornton, S. Kao, and B.E. Wilson. 2020. Daymet: Daily Surface Weather Data on a 1-km Grid for North America, Version 4. ORNL DAAC, Oak Ridge, Tennessee, USA. <https://doi.org/10.3334/ORNLDAAC/1840>

Thornton, P.E., **M.M. Thornton**, B.W. Mayer, Y. Wei, R. Devarakonda, R.S. Vose, and R.B. Cook. 2016. Daymet: Daily Surface Weather Data on a 1-km Grid for North America, Version 3. ORNL DAAC, Oak Ridge, Tennessee, USA. <https://doi.org/10.3334/ORNLDAAC/1328>

Thornton, P.E., **M.M. Thornton**, B.W. Mayer, N. Wilhelmi, Y. Wei, R. Devarakonda, and R.B. Cook. 2014. Daymet: Daily Surface Weather Data on a 1-km Grid for North America, Version 2. ORNL DAAC, Oak Ridge, Tennessee, USA. Date accessed: YYYY/MM/DD. Temporal range: YYYY/MM/DD-YYYY/MM/DD. Spatial range: N=DD.DD, S=DD.DD, E=DDD.DD, W=DDD.DD. <https://doi.org/10.3334/ORNLDAAC/1219>

Thornton, Peter E, **Thornton, Michele M**, Mayer, Benjamin W, Wilhelmi, Nate, Wei, Yaxing, Devarakonda, Ranjeet, and Cook, Robert B. 2014. "Daymet: Daily Surface Weather Data on a 1-km Grid for North America, Version 2." United States. <https://www.osti.gov/biblio/1148868>

Thornton, Peter E, **Thornton, Michele M**, Mayer, Benjamin W, Wilhelmi, Nate, Wei, Yaxing, Devarakonda, Ranjeet, and Cook, Robert B. 2012. "Daymet: Daily surface weather on a 1 km grid for North America, 1980-2008". United States. <https://www.osti.gov/biblio/1149782>

Daymet Uncertainty and Station Data: Version History and Reference/Citations

Thornton, M.M., R. Shrestha, Y. Wei, P.E. Thornton, S-C. Kao, and B.E. Wilson. 2022. Daymet: Station-Level Inputs and Cross-Validation for North America, Version 4 R1. ORNL DAAC, Oak Ridge, Tennessee, USA. <https://doi.org/10.3334/ORNLDAAC/2132>

Thornton, M.M., Y. Wei, P.E. Thornton, R. Shrestha, S. Kao, and B.E. Wilson. 2020. Daymet: Station-Level Inputs and Cross-Validation Result for North America, Version 4. ORNL DAAC, Oak Ridge, Tennessee, USA. <https://doi.org/10.3334/ORNLDAAC/1850>

Thornton, M.M., P.E. Thornton, Y. Wei, R.S. Vose, and A.G. Boyer. 2017. Daymet: Station-Level Inputs and Model Predicted Values for North America, Version 3. ORNL DAAC, Oak Ridge, Tennessee, USA. <https://doi.org/10.3334/ORNLDAAC/1391>

Thornton, P.E., **M.M. Thornton**, and R.S. Vose. 2017. Daymet: Annual Tile Summary Cross-Validation Statistics for North America, Version 3. ORNL DAAC, Oak Ridge, Tennessee, USA. <https://doi.org/10.3334/ORNLDAAC/1348>

Thornton, P.E., and **M.M. Thornton**. 2016. Daymet: Annual 2-degree Tile Summary Cross-Validation Statistics for North America. ORNL DAAC, Oak Ridge, Tennessee, USA. <https://doi.org/10.3334/ORNLDAAC/1303>

Daymet Climatologies: Version History and Reference/Citations

Thornton, M.M., R. Shrestha, Y. Wei, P.E. Thornton, S-C. Kao, and B.E. Wilson. 2022. Daymet: Annual Climate Summaries on a 1-km Grid for North America, Version 4 R1.

ORNL DAAC, Oak Ridge, Tennessee, USA. <https://doi.org/10.3334/ORNLDAAC/2130>

Thornton, M.M., R. Shrestha, Y. Wei, P.E. Thornton, S-C. Kao, and B.E. Wilson. 2022. Daymet: Annual Climate Summaries on a 1-km Grid for North America, Version 4. ORNL DAAC, Oak Ridge, Tennessee, USA. <https://doi.org/10.3334/ORNLDAAC/1852>

Thornton, M.M., P.E. Thornton, Y. Wei, B.W. Mayer, R.B. Cook, and R.S. Vose. 2016. Daymet: Annual Climate Summaries on a 1-km Grid for North America, Version 3. ORNL DAAC, Oak Ridge, Tennessee, USA. <https://doi.org/10.3334/ORNLDAAC/1343>

Thornton, M.M., R. Shrestha, Y. Wei, P.E. Thornton, S-C. Kao, and B.E. Wilson. 2022. Daymet: Monthly Climate Summaries on a 1-km Grid for North America, Version 4 R1. ORNL DAAC, Oak Ridge, Tennessee, USA. <https://doi.org/10.3334/ORNLDAAC/2131>

Thornton, M.M., R. Shrestha, Y. Wei, P.E. Thornton, S-C. Kao, and B.E. Wilson. 2022. Daymet: Monthly Climate Summaries on a 1-km Grid for North America, Version 4. ORNL DAAC, Oak Ridge, Tennessee, USA. <https://doi.org/10.3334/ORNLDAAC/1855>

Thornton, M.M., P.E. Thornton, Y. Wei, B.W. Mayer, R.B. Cook, and R.S. Vose. 2016. Daymet: Monthly Climate Summaries on a 1-km Grid for North America, Version 3. ORNL DAAC, Oak Ridge, Tennessee, USA. <https://doi.org/10.3334/ORNLDAAC/1345>

Thornton, P.E., **M.M. Thornton**, B.W. Mayer, N. Wilhelmi, Y. Wei, R. Devarakonda, and R.B. Cook. 2015. Daymet: Monthly Climate Summaries on a 1-km Grid for North America, Version 2. ORNL DAAC, Oak Ridge, Tennessee, USA. Date accessed: YYYY/MM/DD. Temporal range: YYYY/MM/DD-YYYY/MM/DD. Spatial range: N=DD.DD, S=DD.DD, E=DDD.DD, W=DDD.DD. <https://doi.org/10.3334/ORNLDAAC/1281>

Thornton, P.E., **M.M. Thornton**, B.W. Mayer, N. Wilhelmi, Y. Wei, R. Devarakonda, and R.B. Cook. 2015. Daymet: Annual Climate Summaries on a 1-km Grid for North America, Version 2. ORNL DAAC, Oak Ridge, Tennessee, USA. Date accessed: YYYY/MM/DD. Temporal range: YYYY/MM/DD-YYYY/MM/DD. Spatial range: N=DD.DD, S=DD.DD, E=DDD.DD, W=DDD.DD. <https://doi.org/10.3334/ORNLDAAC/1277>

Other Dataset Publications

Liu, Shishi, Y. Wei, W.M. Post, R.B. Cook, K. Schaefer, and **M.M. Thornton**. 2014. NACP MsTMIP: Unified North American Soil Map. ORNL DAAC, Oak Ridge, Tennessee, USA. <https://doi.org/10.3334/ORNLDAAC/1242>

Wei, Y., D.J. Hayes, **M.M. Thornton**, W.M. Post, R.B. Cook, P.E. Thornton, A.R. Jacobson, D.N. Huntzinger, T.O. West, L.S. Heath, K. McKain, G. Stinson, W. Kurz, B. de Jong, I.T. Baker, J.M. Chen, F. Chevallier, F.M. Hoffman, A.K. Jain, R. Lokupitiya, D.A. McGuire, A.M. Michalak, G.G. Moisen, R.P. Neilson, P. Peylin, C.S. Potter, B. Poulter, D. Price, J.T. Randerson, C. Rodenbeck, H. Tian, E. Tomelleri, G.R. van der Werf, N. Viovy, J. Xiao, N. Zeng, and M. Zhao. 2013. NACP Regional: National Greenhouse Gas Inventories and Aggregated Gridded Model Data. ORNL DAAC, Oak Ridge, Tennessee, USA. <https://doi.org/10.3334/ORNLDAAC/1179>

Montana Gap Analysis Program - Land Cover

Fisher, F.B., J.C. Winne, **M.M. Thornton**, T.P. Tady, Z. Ma, M.M. Hart, and R.L. Redmond. 1998. Montana land cover atlas. Montana Cooperative Wildlife Research Unit, The University of Montana, Missoula. viii + 50 pp. On-line at

<https://ftpgeoinfo.msl.mt.gov/Documents/Metadata/MtGap1998Atlas.pdf>

Data available: Montana State Library

https://mslservices.mt.gov/geographic_information/data/datalist/datalist_Details.aspx?did=%7BC9D309C9-C1B8-4F34-AD3A-717FEEEE59162%7D

Daymet Tools

[Single Pixel Extraction Tool](#)

Ranjeet Devarakonda, Kavya Guntupally, **Michele Thornton**, Yaxing Wei, Debjani Singh, and Dalton Lunga. 2021. FAIR Interfaces for Geospatial Scientific Data Searches. In Proceedings of the 1st ACM SIGSPATIAL International Workshop on Searching and Mining Large Collections of Geospatial Data (GeoSearch'21). Association for Computing Machinery, New York, NY, USA, 1–4. <https://doi.org/10.1145/3486640.3491391>

R. Devarakonda, Y. Wei and **M. Thornton**, "Accessing and distributing large volumes of NetCDF data," 2016 IEEE International Conference on Big Data (Big Data), 2016, pp. 3966-3967, doi: [10.1109/BigData.2016.7841077](https://doi.org/10.1109/BigData.2016.7841077).

PUBLICATIONS

Ranjeet Devarakonda, Kavya Guntupally, **Michele Thornton**, Yaxing Wei, Debjani Singh, and Dalton Lunga. 2021. FAIR Interfaces for Geospatial Scientific Data Searches. In Proceedings of the 1st ACM SIGSPATIAL International Workshop on Searching and Mining Large Collections of Geospatial Data (GeoSearch'21). Association for Computing Machinery, New York, NY, USA, 1–4. <https://doi.org/10.1145/3486640.3491391>

Thornton, P.E., Shrestha, R., **Thornton, M.** et al. Gridded daily weather data for North America with comprehensive uncertainty quantification. *Sci Data* 8, 190 (2021). <https://doi.org/10.1038/s41597-021-00973-0>

Wei, Y., Shrestha, R., Pal, S., Gerken, T., Feng, S., McNelis, J., Singh, D., **Thornton, M.M.**, et al. (2021). Atmospheric Carbon and Transport – America (ACT-America) data sets: Description, management, and delivery. *Earth and Space Science*, 8, e2020EA001634. <https://doi.org/10.1029/2020EA001634>

ESRI Book Chapter Contribution

NASA Earth Science Division et al., 2021, GIS for Science, Vol 3: Maps for Saving the Planet, ISBN: 9781589486713 <https://www.gisforscience.com/>

NASA Earth Science Chapter: Mapping Extreme Events from Space
<https://drive.google.com/file/d/1iUKySDMHP6jxvarIsfoeDAPPhEh67C0o/view>

R. Devarakonda, Y. Wei, **M. Thornton**, B. Mayer, P. Thornton and B. Cook, "Preparing, Storing, and Distributing Multi-dimensional Scientific Data." Proceedings of the IEEE International Conference on Big Data, DOI: 10.1109/BigData.2015.7364085, pgs. 2811 - 2813 (2015).

Liu, S., Wei, Y., Post, W. M., Cook, R. B., Schaefer, K., and **Thornton, M. M.**: The Unified North American Soil Map and its implication on the soil organic carbon stock in North America, *Biogeosciences*, 10, 2915-2930, doi:10.5194/bg-10-2915-2013, 2013.

Steven W. Running, Lloyd Queen, **Michele Thornton**, The Earth Observing System and Forest

Management, Journal of Forestry, Volume 98, Issue 6, June 2000, Pages 29–31,
<https://doi.org/10.1093/jof/98.6.29>

Fisher, F.B., J.C. Winne, **M.M. Thornton**, T.P. Tady, Z. Ma, M.M. Hart, and R.L. Redmond. 1998. Montana land cover atlas. Unpublished report. Montana Cooperative Wildlife Research Unit, The University of Montana, Missoula, Montana.

Redmond, R.L., M.M. Hart, J.C. Winne, W.A. Williams, P.C. Thornton, Z. Ma, C.M. Tobalske, **M.M. Thornton**, K.P. McLaughlin, T.P. Tady, F.B. Fisher, S.W. Running. 1998. The Montana Gap Analysis Project: final report. Montana Cooperative Wildlife Research Unit, The University of Montana, Missoula. xiii + 136 pp. + appendices. This is on-line at
<https://ftpgeoinfo.msl.mt.gov/Documents/Metadata/MtGap1998Report.pdf>.

Redmond, R.L.; Tady, T.P.; Fisher, F.B.; **Thornton, M.**; and Winne, J.C. 1997. LANDSAT vegetation mapping of the southwest and central Idaho ecogroups. Final Report: Contract # 53-0261-6-25. Wildlife Spatial Analysis Lab, Montana Cooperative Wildlife Research Unit, University of Montana, Missoula, MT 59812. 139p.

Redmond, R.L.; Winne, J.C.; Tady, T.P.; **Thornton, M.**; Troutwine, J.; Ma, Z. 1997. Existing vegetation and land cover of the Little Missouri, Grand River, and Sheyenne National Grasslands. Final Report, Contract #53-034304-000012, submitted to US. Department of Agriculture, Forest Service, Northern Regional Office. Montana Cooperative Wildlife Research Unit, The University of Montana, Missoula. 174 p.

Thornton, Michele M. "Use of Geomorphic Variables to Predict Riparian Vegetation Patterns: A Comparison of Field and GIS Techniques." Thesis, Idaho State University, 1996.

WEBINARS

Toward Analysis Ready Data - Programmatically Discover, Access, and Subset Daymet V4 Data with Python and ArcGIS (NASA Earthdata Webinar: 900 views)

Earthdata YouTube Recording: <https://www.youtube.com/watch?v=0jCKiqrcYaU>

GitHub Notebook Tutorial: <https://github.com/ornlداac/daymet-python-opensap-xarray>

NetCDF Why and How: Creating Publication Quality NetCDF Datasets (NASA Earthdata Webinar: 8K views)

Earthdata YouTube Recording: <https://www.youtube.com/watch?v=7YYTXa4qyfo>

GitHub Notebook Tutorial: https://github.com/ornlداac/create_publication_quality_netcdf

NetCD-what? An Ecologist's Guide to Working with Daymet and other NetCDF-formatted Data (NASA Earthdata Webinar: 17K views)

Earthdata YouTube Recording: https://www.youtube.com/watch?v=Y_f0L62TleE

GitHub Notebook Tutorial: https://github.com/ornlداac/daymet_netcdf_season-avg

Accessing Daymet Data Through Web-Based Tools and Services (NASA Earthdata Webinar: 9K views)

Earthdata YouTube Recording: <https://www.youtube.com/watch?v=IR--GmLCkPU>

WORKSHOPS

Ecological Society of America: 2022 Annual Meeting, Montreal, Canada

Exploring Changes in Vulnerable Ecosystems with NASA Airborne Data

<https://www.eventscribe.net/2022/ESA/fsPopup.asp?Mode=presInfo&PresentationID=1072242>

ESIP Meeting, July 19-22, 2022, Pittsburg, PA

Airborne for All - Engaging the ESIP community to explore findings from a recent Airborne and Field data workshop and identify synergies across organizations

<https://2022esipjulymeeting.sched.com/event/12etM/airborne-for-all-engaging-the-esip-community-to-explore-findings-from-a-recent-airborne-and-field-data-workshop-and-identify-synergies-across-organizations>

Improving NASA Airborne and Field Data Workshop. March 29-30, 2022. Virtual. Sara Lubkin, Deborah Smith, Bruce Wilson, **Michele Thornton**.

<https://www.earthdata.nasa.gov/esds/impact/admg/nasa-airborne-and-field-data-workshop>

NASA Terrestrial Ecology Scientist Meeting, 2019, College Park, MD

Data Management and Publishing for NASA Terrestrial Ecology Projects Workshop

Developer and presenter: <https://daac.ornl.gov/resources/workshops/nasa-te-workshop/>

Ecological Society of America Annual Meeting, Louisville, KY 2019.

Extracting and Exploring NASA Earthdata for Your Study Site or Region

<https://eco.confex.com/eco/2019/meetingapp.cgi/Session/15767>

Swiss Federal Institute for Forest, Snow and Landscape Research WSL, 2000, Birmensdorf, Switzerland

New approaches to RS-based ecosystem modelling and monitoring: Transformation, Integration and Application of MODIS sensor data

<https://www.wsl.ch/staff/niklaus.zimmermann/napemm/prog.ehtml>

University of Montana, 1999, Missoula, MT

EOS Training Center: MODIS Workshop: An Introduction to NASA's Earth Observing System (EOS), Terra, and the MODIS Instrument.

<https://www.slideserve.com/adair/an-introduction-to-nasa-s-earth-observing-system-eos-terra-and-the-modis-instrument>

DATA SCIENCE TUTORIALS

2008, NCAR GIS Program

[Temperature Anomaly Demonstration Project](#)

[Exploring NCAR Climate Change Data Using GIS](#)

Highlighted by ESRI: <http://www.esri.com/news/arcnews/winter0405articles/ncar.html> .

SELECTED SCIENCE PRESENTATIONS

Moderator: Leo Thomas; Speakers: **Michele Thornton**, Monica Youngman, Tom Augspurger, Vincent Sarago. Invited Panel Speaker: Managing Planetary Scale Archive in the Cloud: SatSummit, 2022. <https://2022.satsummit.io/agenda#28-1525-managing-planetary-scale-archives>

Michele M. Thornton, Yaxing Wei, Rupesh Shrestha, Jerrold Williams, Daine Wright, and Peter E. Thornton. 2022. Daymet: Open-Source Science Leverages Standardized Interoperable Data. ESIP, July 19-22, 2022. Pittsburgh, PA https://esip.figshare.com/articles/poster/Daymet_Open-Source_Science_Leverages_Standardized_Interoperable_Data/20343792

Yuan, Fengming, Kao, S.C., Tesfa T., Wang, D., Schwartz, P., **Thornton, M.**, Thornton, P.E., and S.

- Wullschleger. High-resolution Forcing Driven Offline ELM Snow Processing and Comparing to Observations in Two Alaska Tundra Regions. 2021. AGU Fall Meeting Abstract
<https://ui.adsabs.harvard.edu/abs/2021AGUFM.C35D0910Y>
- Shi, Mingjie, Keller, M., Koven, C., Kueppers, L., Needham, J., Knox, R., Kao, S.C., Thornton, P., **Thornton, M.**, Ruby, L. 2021. Studies of hurricane disturbance and recovery in Puerto Rico using ELM-FATES. AGU Fall Meeting Abstracts
<https://ui.adsabs.harvard.edu/abs/2021AGUFM.B55F1269S>
- Thornton, M.**, Shrestha, R., Thornton, P. E., Kao, S. C., Wei, Y., Wilson, B. E. 2020. Improvements in Daymet Continental-Scale Gridded Daily Precipitation and Temperature Estimates. American Geophysical Union, Fall Meeting 2020, abstract #H141-0014
<https://ui.adsabs.harvard.edu/abs/2020AGUFMH141.0014T>
- Ecological Society of America Annual Meeting. Virtual. 2020
<https://eco.confex.com/eco/2020/meetingapp.cgi/Paper/87080>
- Michele M. Thornton**, Hong Xu, Yaxing Wei, Bruce E. Wilson, Rupesh Shresha and Peter E. Thornton. “Daymet: Continental-Scale Daily Weather Parameters and ESRI Multidimensional Functionality” ESRI User Conference. Virtual. 2020
<https://mapgallery.esri.com/submission-detail/609d7f1a95ac006b2090827b>
- Thornton, M.**, Wilson, B.E., Shrestha, R., Wei, Y., Blanco, H. “Open data and accessible services and tools foster science and software collaboration” Poster. Ecological Society of America Annual Meeting, Louisville, KY 2019.
<https://eco.confex.com/eco/2019/meetingapp.cgi/Paper/80151>
- M Thornton**, Y Wei, A Boyer, P Thornton, S Vannan. 2018. Customized web-based services to access the the Daymet product: Analysis of user-based downloads provide insights into how scientists access large, complex data for their research needs. ForestSAT 2018, College Park, Maryland
<https://agritrop.cirad.fr/590369/7/program-online-3.pdf>
- Thornton, M.**, Wei, Y., Devarakonda, R., Boyer, A., Vannan, K.S., Thornton, P.E. “Customized web-based services to access the Daymet product: Analysis of user-based downloads provide insights into how scientists access large, complex data for their research needs” Author – Session Talk. Presented at Ecological Society of America Annual Conference. Portland, OR. 2017.
<https://eco.confex.com/eco/2017/meetingapp.cgi/Paper/65638>
- Devarakonda, R.; **Thornton, M.**; Wei, Y.; Krishna, B.; Frame, M. T.; Zolly, L., Records, R.; Palanisamy, G. “New approaches in cataloging and distributing multi-dimensional scientific data: Federal Data Repositories example” American Geophysical Union, Fall Meeting 2016, abstract #IN23B-1771. <https://agu.confex.com/agu/fm16/meetingapp.cgi/Paper/161117>
- Peter E. Thornton, **Michele M. Thornton**, Benjamin W. Mayer, Robert B. Cook, Ranjeet Devarakonda, Yaxing Wei, Suresh Kumar Santhana Vannan. 2015. “Gridded daily surface weather for North America: development and uncertainty analysis of the Daymet dataset.” 2015 NASA Carbon Cycle & Ecosystems Joint Science Workshop Poster
https://cce.nasa.gov/cgi-bin/cce/cce_profile.pl?project_group_id=718
- Michele M Thornton**, Peter E Thornton, Robert B. Cook, Yaxing Wei, Suresh Kumar Santhana Vannan, Peter I. Eby, Ranjeet Devarakonda. 2011. “Daymet Gridded subdaily weather data for North America”. NASA Carbon Cycle and Ecosystems Joint Workshop, October 3-7, 2011, Alexandria, VA
https://cce.nasa.gov/meeting_2011/mtg2011_ab_poster_detagenda.html#search

http://cce.nasa.gov/meeting_2011/abs_and_discussions/mtg2011_ab_searchab_id173.html

Hayes, D. J.; McGuire, D.; Post, W. M.; Heath, L. S.; Kurz, W.; Stinson, G.; **Thornton, M.**; Wei, Y.; West, T. O. "Towards better-constrained assessments of the carbon balance of North America in the 21st Century: a comparison of recent model and inventory-based estimates" American Geophysical Union, Fall Meeting 2009, abstract id. B51D-0333

Robert B. Cook, Wilfred M. Post, Peter E. Thornton, Latha M. Baskaran, Lisa M. Olsen, **Michele M. Thornton**, Carroll N. Curtis, Jerry Y. Pan, Yaxing Wei, Steve L. Campbell, 2009. "Modeling and Synthesis Support for the North American Carbon Program" NACP All-Investigators Meeting, San Diego, CA https://www.nacarbon.org/meeting_2009/mtg2009_ab_poster_agenda.html

COMMUNITY SERVICE

2017-2019: Mentor, NASA CubeSat Launch Initiative, Robertsville Middle School, Oak Ridge, TN
(RamSat Project)

2012-2014: Mentor, Technology Student Association (TSA), Robertsville Middle School, Oak Ridge, TN