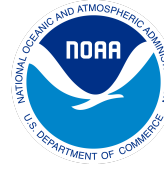




UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL WEATHER SERVICE



NATIONAL CENTERS FOR ENVIRONMENTAL PREDICTION

ENVIRONMENTAL MODELING CENTER

External Review

June 6-8, 2023

EMC Extramural Service

2019–2023

This document collects service performed by EMC Federal employees in addition to regular work duties since 2019

Extramural service is reported under the following categories:

1. Service in Technical and Scientific Societies
2. Service for Scientific Journals, Reports, and Publications
3. U.S. National Service
4. International Service
5. Additional Service (for all other service)

Service in Technical and Scientific Organizations

| Name | Service | Organization | Dates |
|-----------------------|------------------------|---|--------------|
| Jeff Ator | Co-chair | Interagency Council for Advancing Meteorological Services (ICAMS), Interagency Meteorological Coordination Office (IMCO), Working Group on Observational Data (WG-OD) | 2019-2023 |
| Vladimir Krasnopolsky | Co-organizer, Co-chair | 1st NOAA Workshop on leveraging AI in the exploitations of satellite Earth observation and Numerical Weather Prediction | 2019 |
| | Collaborator | NOAA/NESDIS - Using AI for data assimilation & post-processing | 2018-2022 |
| | Member | Environmental Data Management Committee (EDMC) | 2019 |
| | Member | NOAA AI Working Group | 2019-2021 |
| | Lead | NOAA-Korean Meteorological Agency Collaboration, AI applications | 2019 |
| | Member | NOAA AI Strategic Plan Writing Team | 2019-2020 |
| | Member | NOAA AI Executive Committee | 2019-2020 |
| | Session Chair | AMS Annual Meeting | 2020 |
| | Member | Working Group - ML for Radiative Transfer | 2020-2021 |
| | Lead | NOAA-Google OTA Group, ML postprocessing team | 2020-2023 |
| Jessica Meixner | Member | World Meteorological Organization, Expert Team on Coastal and Emergency Response (ET-CER) | 2021 |
| Alicia Bentley | Science Lead | National Centers for Environmental Prediction (NCEP), Strategic Implementation Planning Committee | 2021-2022 |
| Jacob Carley | Technical Evaluator | Weather and Climate Operational Supercomputing System, Source Selection Team | 2019-2020 |
| Jason Levit | Member | American Meteorological Society | 2019-2023 |
| Neil Barton | Member | Interagency Council for Advancing Meteorological Services (ICAMS), Content Standards Implementation Team Working Group | 2022-present |

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|--------------------|------------------------|--|--------------|
| | Member | Interagency Council for Advancing Meteorological Services (ICAMS), Coupled Global Meeting Committee | 2022-present |
| | Member | American Meteorological Society | 2023 |
| Hui-Ya Chuang | Co-chair | Developmental Testbed Center, Science Advisory Board | 2022-2023 |
| | Member | Developmental Testbed Center, Science Advisory Board | 2020-2026 |
| | Representative | System Architecture and Infrastructure Cross Cutting Team, Post Processing | 2023 |
| | Member | 9th NOAA Ensemble Users Workshop Committee | 2023 |
| Avichal Mehra | Co-chair | Interagency Council for Advancing Meteorological Services (ICAMS), Coupled Global Modeling Implementation Team | 2021-2023 |
| | Member | Unified Forecast System, Steering Committee | 2020-2023 |
| | Co-Lead | Unified Forecast System, MRW/S2S Application Team | 2021-2023 |
| | Member, Co-Lead | Unified Forecast System, Hurricane Application Team | 2019-2023 |
| Daryl Kleist | Member | ICAMS Committee on Research and Innovations, Subcommittee on Data Assimilation and Observations | 2022-2023 |
| Vijay Tallapragada | Co-chair | Interagency Council on Advancing Meteorological Services (ICAMS), Earth System Modeling & Prediction (ESMP) subcommittee | 2021-present |
| | Co-Lead | Unified Forecast System (UFS), Research to Operations (R2O) Project | 2019-present |
| | Member | Developmental Testbed Center (DTC), Scientific Advisory Board (SAB) | 2017-2020 |
| | Co-chair | Atmospheric Rivers Reconnaissance Project, Modeling and Data Assimilation Steering Committee | 2016-present |
| | Development Manager | Hurricane Forecast Improvement Project | 2016-present |

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|-------------------|----------|---|--------------|
| | Co-PI | NASA's Investigation of Microphysics and Precipitation for Atlantic Coast-Threatening Snowstorms (IMPACTS) | 2020-present |
| | Co-PI | Atmospheric River Reconnaissance | 2016-present |
| Raffaele Montuoro | Co-chair | Interagency Council for Advancing Meteorological Services (ICAMS), Contents Standards Implementation Team Working Group | 2022-present |
| L. Gwen Chen | Member | American Society of Civil Engineers (ASCE), Environmental & Water Resources Institute (EWRI), Risk, Uncertainty, and Probabilistic Approaches Committee | 2007-present |

Service for Scientific Journals, Reports, and Publications

| Name | Service | Publication | Dates |
|----------------|--------------------------------|---|-----------|
| Cory Martin | Editorial Board Member | Experimental Results | 2020-2023 |
| | Reviewer | Atmospheric Environment | 2021-2022 |
| | Reviewer | International Journal of Environmental Research and Public Health | 2021-2022 |
| L. Gwen Chen | Reviewer | Journal of Hydrometeorology | 2023 |
| | Reviewer | Weather, Climate, and Society (a journal of the American Meteorological Society) | 2023 |
| Alicia Bentley | Reviewer | Monthly Weather Review | 2018-2023 |
| | Reviewer | Weather and Forecasting | 2020-2023 |
| | Reviewer | Geophysical Research Letters | 2016-2023 |
| Jacob Carley | Associate Editor | Journal of Weather and Forecasting | 2014-2023 |
| | Reviewing Editor | Experimental Results | 2019-2023 |
| | Reviewer | The Bulletin of the American Meteorological Society | 2016-2023 |
| | Reviewer | Monthly Weather Review | 2018-2023 |
| Avichal Mehra | Chapter Coordinator, Co-author | WMO/IOC's Guide on Operational Ocean and Marine Forecast Systems | 2020-2022 |
| | Special Editor | Frontiers in Marine Science | 2022-2023 |
| | Guest Editor | Atmosphere | 2020 |
| | Reviewer | Journal of Climate | 2021-2022 |
| | Reviewer | Journal of Geophysical Research – Atmosphere | 2020 |
| | Reviewer | International Journal of Numerical Methods in Fluids | 2019 |
| Daryl Kleist | Associate Editor | Weather and Forecasting | 2018-2023 |
| | Associate Editor | Monthly Weather Review | 2013-2021 |
| | Editor | Monthly Weather Review | 2021-2023 |
| | Reviewer | AMS (MWR, WAF, BAMS), QRJRM, JAMES, AGU (JGR, GRL), Japan JMSJ | 2012-2023 |
| | Co-chair | National Science Foundation, Site Visit Team of NCAR, Modeling and Data | 2021 |

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| | | Assimilation | |
| Robert Grumbine | Reviewer | AMS journals, including BAMS and J. Tech | 2019-present |
| Vijay Tallapragada | Editor | Mausam, Indian Meteorological Society | 2023 |
| | Guest Editor | MDPI's Atmosphere Special Issue, 2020 on "Modeling and Data Assimilation for Tropical Cyclone Forecasts" | 2020 |
| | Editor | Frontiers in Climate, Editorial Board of Predictions and Projections | 2020-present |
| | Reviewer | AMS Journals (BAMS, MWR, WAF, JAS) , AGU Journals (JGR, GRL, Review of Geophysics), Springer Journals, Elsevier Journals, MDPI Journals, Wiley' Journals (QJRM, Met Applications, Weather), Japan's JMSJ | 2010-present |
| Fanglin Yang | Associate Editor | Weather and Forecasting | 2017-2023 |
| | Reviewer | Manuscripts for more than 15 scientific journals; proposals for various funding agencies | 2000-present |
| | Section Editor | Encyclopedia of Atmospheric Sciences, Third Edition | 2022-2023 |

U.S. National Service

| Name | Service | Organization | Dates |
|-----------------|-------------------------------|---|-----------|
| Cory Martin | Member | Unified Forecast System (UFS), Air Quality Application Team | 2021-2023 |
| | Member | Unified Forecast System (UFS), Aerosols and Atmospheric Composition Component Working Group Team | 2021-2023 |
| | Member | Unified Forecast System (UFS), Data Assimilation, Reanalysis, and Reforecast Component Working Group Team | 2021-2023 |
| Jessica Meixner | Member | Unified Forecast System (UFS), Steering Committee | 2022 |
| Alicia Bentley | Member | American Meteorological Society (AMS), Weather Analysis and Forecasting (WAF) Committee | 2018-2024 |
| | Program Chair | American Meteorological Society (AMS), 32nd Conference on Weather Analysis and Forecasting/28th Conference on Numerical Weather Prediction | 2022-2023 |
| | Program Chair | American Meteorological Society (AMS), Daniel Keyser Symposium: A Celebration of Synoptic–Dynamic Meteorology, Past, Present, and Future | 2022-2024 |
| | Session Chair | 101st American Meteorological Society (AMS) Annual Meeting | 2021 |
| Jacob Carley | Co-Chair | Unified Forecast System Short Range Weather Application Team | 2018-2023 |
| | Session Co-Chair | 100th American Meteorological Society Annual Meeting | 2020 |
| | Panel Member | 8th NCEP Ensemble User Workshop - Panel discussion on model development (UFS, retirement of SREF) | 2019 |
| | Stakeholder Representative | National Severe Storms Laboratory Review | 2021 |
| Jason Levit | Member | Unified Forecast System Steering Committee | 2019-2023 |
| | Member | Unified Forecast System Verification and Validation Working Group | 2019-2023 |

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| | Co-Chair | Unified Forecast System Post-Processing Working Group | 2019-2023 |
| Neil Barton | Proposal Reviewer | Department of Energy (DOE), BER, Science Focus Area, Energy Exascale Earth System Model (E3SM) | 2022 |
| | Member | Department of Energy (DOE), CICE Consortium Sponsors | 2022 |
| Hui-Ya Chuang | Member | Unified Forecast System (UFS), Post Processing Team | 2017 |
| Avichal Mehra | Member | Unified Forecast System (UFS) Steering Committee | 2021-2023 |
| | Co-Chair | Unified Forecast System (UFS), MRW-S2S Application Team | 2021-2023 |
| | Member, Co-Chair | Unified Forecast System (UFS), Hurricane Application Team | 2019-2021 |
| | Session Chair | American Meteorological Society, 2023 Annual Meeting | 2022-2023 |
| | Session Chair | AMS, 34th Conference on Hurricanes and Tropical Meteorology | 2022 |
| | Member | First Operational Satellite Oceanography Symposium, Program Committee | 2019 |
| Daryl Kleist | Co-Chair | UFS Data Assimilation and Ensembles Working Group | 2018-2023 |
| | Executive Team & Associate Director | Joint Center for Satellite Data Assimilation | 2018-2023 |
| | Session Chair | AMS Annual Meeting | 2021 |
| Robert Grumbine | Member | NOAA Cross-Line Office, Sea Ice Group Committee | 2020-2023 |
| | Team member | CICE Consortium | 2016-2023 |
| Vijay Tallapragada | Co-Chair, Co-Host | Annual NOAA-CWB Taiwan West Pacific Global Forecast System Development Workshop in Taipei, Taiwan | 2017-present |
| | Organizer, Co-Chair | Conference on the Transition of Research to Operations, AMS Annual Meeting | 2019-present |
| | Contributor | AMS Education Program K-12 Teachers and Project Atmosphere | 2019-2020 |
| | Co-Chair and Convener | 2022 NOAA-KMA Workshop on Artificial Intelligence (AI) for NWP Applications | 2022 |

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| Fanglin Yang | Co-Chair | Unified Forecast System (UFS), MRW-S2S Application Team | 2019-2020 |
| | Co-Chair | Unified Forecast System (UFS), Physics and Dynamics Cross-Cutting Team | 2011-2023 |
| | Session Chairs | American Meteorological Society, Annual Meeting and WAF/NWP etc | 2020-2023 |
| | Member | NOAA AI Executive Committee (NAIEC) member | 2022-2023 |
| | Member | Interagency Council for Advancing Meteorological Services (ICAMS) PI Implementation Team | 2020-2023 |
| Arun Chawla | Member | Unified Forecast System (UFS) Steering Committee | 2018- 2023 |
| | Co-chair | UFS Model Infrastructure Team | 2019 - 2023 |
| | Co-chair | Software Architecture Working Group | 2020-2023 |

International Service

| Name | Service | Organization | Dates |
|-----------------|--|---|-----------|
| Jeff Ator | Member | World Meteorological Organization (WMO), Task Team on Table-Driven Code Forms (TT-TDCF) | 2019-2023 |
| | NCEP Representative | World Meteorological Organization (WMO), Task Team on the WIGOS Data Quality Monitoring System (TT-WDQMS) | 2019-2023 |
| | NCEP Representative | International Working Group on Global Data Exchange for Numerical Weather Prediction (GODEX-NWP) | 2019-2023 |
| Jessica Meixner | Member | Waves and Sea State in the Earth System (WISE) Annual Conference, Organizing Committee | 2022 |
| Avichal Mehra | NOA/NWS representative | WMO/IOC's Expert Team on Operational Ocean Forecast Systems | 2018-2023 |
| | NOA/NWS representative | IOC/GOOS Ocean Predict Science Steering Team | 2018-2023 |
| | Member | IOC/GOOS Ocean Predict Coupled Modeling Task Team | 2021-2023 |
| | Chapter coordinator, Contributing author | WMO/IOC Guide on Operational Ocean and Marine Forecast Systems | 2019-2022 |
| | Expert Evaluator | European Commission Proposals | 2019 |
| | Proposal reviewer | European Union, Copernicus Marine Environment Monitoring Service (CMEMS) | 2019 |
| | NWS/NCEP representative | Typhoon Committee Technical Team | 2017-2023 |
| Daryl Kleist | Co-Chair | Data Assimilation and Observing Systems Working group (WMO World Weather Research Programme) | 2017-2021 |
| | Member | WMO World Weather Research Programme, Scientific Steering Committee | 2022-2025 |
| | Organizer, Co-Chair | Joint WWRP-WCRP Symposium on Data Assimilation and Reanalysis | 2021 |

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| | Liaison, Data Assimilation | Taiwan Central Weather Bureau Modeling and Assimilation Collaboration | 2017-2023 |
| | Organizer, Co-Chair | 4th Taiwan West Pacific Global Forecasting System Workshop | 2021 |
| Robert Grumbine | Member | WMO Polar Prediction Project, Steering Group | 2016-2022 |
| Fanglin Yang | Member | WMO Working Group for Numerical Experimentation (WGNE) | 2018-2023 |
| | Member | WWRP Aviation Research and Development Project – avRDP Scientific Steering Committee | 2022-2023 |
| | Liaison, Model Physics | Taiwan Central Weather Bureau Modeling and Assimilation Collaboration | 2018-2023 |
| Vijay Tallapragada | Core Member | World Meteorological Organization, Infrastructure Commission, Standing Committee on Data Processing for Applied Earth System Modelling and Prediction & Projection (SC-ESMP) | 2020-present |
| | Member | Government of India, Panel on Vaishwik Bharatiya Vaigyanik Summit (VAIBHAV) | 2020-2021 |
| | Member | Korean Institute for Atmospheric Prediction System (KIAPS), Scientific Advisory Committee (SAC) | 2018-present |
| | Member | Shanghai Innovative Center of High-Resolution Regional Numerical Weather Prediction, International Advisory Committee (IAC) | 2015-present |
| | Member | China Meteorological Administration, Key Laboratory of Numerical Modeling for Tropical Cyclones, Scientific Steering Committee (SSC) | 2013-present |
| | Member | China Meteorological Administration (CMA), Earth Prediction and Modeling and Prediction Center (CEMC), Scientific Steering Committee | 2022-2025 |
| | Advisor | Central Weather Bureau | 2017-present |

Additional Service

Service not reported under the previous categories

| Name | Service | Organization/Project Description | Dates |
|--------------------|--|--|--------------|
| Cory Martin | Invited speaker | University of Maryland Dept. of Atmospheric and Oceanic Science | 2023 |
| | Member | University of Maryland Atmospheric and Oceanic Science Alumni Committee | 2021-present |
| | Founding member | Vice-president/president-elect The Ohio State University Atmospheric Sciences Alumni Society | 2022-present |
| | Mentorship | Participated as mentor for multiple interns | 2022-present |
| Alicia Bentley | Mentorship | National Weather Service (NWS) Mentoring Program | 2023 |
| Jacob Carley | Member | University of Maryland Doctoral Committee | 2020-2021 |
| | Co-Advisor | University of Maryland Doctoral Committee | 2016-2022 |
| Jason Levit | Member | METplus Governance Board | 2020-present |
| | Member | AWIPS Data Management and Activation Committee | 2022-present |
| Neil Barton | Lecturer | American Meteorological Society (AMS) – Project Atmosphere Professional development course for K-12 teachers | 2022 |
| Avichal Mehra | Member | Steering Committee Joint Hurricane Testbed | 2021-present |
| | Member | Tropical Pacific Observing System (TPOS)-2020 Working Group on Planetary Boundary layers | 2018-present |
| | Member | ICAMS's Working Group on Tropical Cyclone Operations and Research | 2017-present |
| Robert Grumbine | Volunteer | NOAA Ambassador | 2023 |
| Vijay Tallapragada | Advisor and adjudicator for Masters and Ph.D. students | Howard University, Washington DC, University of Maryland, Baltimore County, National Institute of Technology, Rourkela, India, Purdue University, Indian Institute of Technology, Kharagpur, India, Bangladesh Institute of Technology (BIT), Khulna, Bangladesh | 2010-2022 |
| Daryl Kleist | Adjunct Assistant Professor | University of Maryland-College Park, Department of Atmospheric and Oceanic Science | 2017-2023 |

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| | PhD Advisor | University of Maryland-College Park, Department of Atmospheric and Oceanic Science (D. Lippi, Graduated Spring 2023) | 2016-2023 |
| Fanglin Yang | Thesis Committee | University of Illinois at Urbana-Champaign Department of Atmospheric Sciences | 2019-2023 |