

Senate Commerce Committee Nominee Questionnaire, 117th Congress

Instructions for the nominees: The Senate Committee on Commerce, Science, and Transportation asks you to provide typed answers to each of the following questions. It is requested that the nominee type the question in full before each response. Do not leave any questions blank. Type "None" or "Not Applicable" if a question does not apply to the nominee. Return printed answers to Committee. Begin each section (i.e., "A", "B", etc.) on a new sheet of paper.

A. BIOGRAPHICAL INFORMATION AND QUALIFICATIONS

1. Name (Include any former names or nicknames used):

Michael Cottman Morgan

2. Position to which nominated:

Assistant Secretary for Environmental Observation and Prediction

3. Date of Nomination:

January 12, 2022

4. Address (List current place of residence and office addresses):

[REDACTED]

Office: 1225 W. Dayton Street, Room 1401; Madison, WI 53706

5. Date and Place of Birth:

November 28, 1966; Northampton, MA

6. Provide the name, position, and place of employment for your spouse (if married) and the names and ages of your children (including stepchildren and children by a previous marriage).

Not applicable.

7. List all college and graduate degrees. Provide year and school attended.

SB (1988) and PhD (1994), Massachusetts Institute of Technology

8. List all post-undergraduate employment, and highlight all management-level jobs held and any non-managerial jobs that relate to the position for which you are nominated.

Massachusetts Institute of Technology

September 1988 through August 1994: *Graduate student*. Served as a research assistant and as a teaching assistant. Advisor for first two years, Dr. Randall Dole, for final four, Prof. Kerry Emanuel.

Atmospheric Environmental Research (Cambridge, MA):

Summer 1988: Research directed by Dr. William Gutowski concerning climate change.

University of Wisconsin – Madison

August 1994-August 1995: Supervised by Prof. John Nielsen-Gammon, Post-doctoral researcher, work performed at Texas A&M University; research on mid-latitude tropopause dynamics funded by UW-Madison.

August 1995-present: Tenured Professor, Department of Oceanic and Atmospheric Sciences; teaching, research, service, mentoring of graduate and undergraduate students.

Office of US Senator Benjamin Cardin

September 2007 – August 2008: I worked as a Senior legislative fellow on his Maryland “Projects Team.” This position was an AAAS Congressional Science Fellowship funded by the University Corporation for Atmospheric Research and the American Meteorological Society. I supported Energy and Environmental issues for Senator Cardin’s office.

IPA Assignment National Science Foundation (Arlington, VA)

June 2010 – June 2014: Division Director, Atmospheric and Geospace Sciences

CrossFit, LLC

July/August 2017,2018,2019,2021: Independent Contractor; lead a team to provide weather forecast support for the safety of CrossFit athletes, vendors, spectators, grounds crews for about a week to 10 days centered around the event.

9. Attach a copy of your resume.

Attached.

10. List any advisory, consultative, honorary, or other part-time service or positions with Federal, State, or local governments, other than those listed above, within the last ten years.

North Carolina State University

Member, external review team for the Department of Marine, Earth, and Atmospheric Sciences, Fall 2014.

11. List all positions held as an officer, director, trustee, partner, proprietor, agent, representative, or consultant of any corporation, company, firm, partnership, or other business, enterprise, educational, or other institution within the last ten years.

American Meteorological Society (since at least 2006) Professional society for my discipline. I have served as an elected councilor (by the membership) to the AMS, and at various times on their planning, ethics, and diversity and inclusiveness committees

American Institute of Physics (since 2018) Member Board of Directors and AIP Public Policy Advisory Committee

University Corporation for Atmospheric Research, Officer.

12. Please list each membership you have had during the past ten years or currently hold with any civic, social, charitable, educational, political, professional, fraternal, benevolent or religiously affiliated organization, private club, or other membership organization. (For this question, you do not have to list your religious affiliation or membership in a religious house of worship or institution.). Include dates of membership and any positions you have held with any organization. Please note whether any such club or organization restricts membership on the basis of sex, race, color, religion, national origin, age, or disability.

African American and Jewish Friendship Group, Madison, WI (since 2017) no formal membership.

Poor People's Campaign of Wisconsin (Wisconsin affiliate of the national Poor People's Campaign) (since September 2020) no formal membership.

DaneDems (since approximately 2019) Dane County, WI Democratic Party organization.

I have never been a member of any club or organization that restricts membership on the basis of sex, race, color, religion, national origin, age, or disability.

13. Have you ever been a candidate for and/or held a public office (elected, non-elected, or appointed)? If so, indicate whether any campaign has any outstanding debt, the amount, and whether you are personally liable for that debt.

No.

14. List all memberships and offices held with and services rendered to, whether compensated or not, any political party or election committee within the past ten years. If you have held a paid position or served in a formal or official advisory position (whether compensated or not) in a political campaign within the past ten years, identify the particulars of the campaign, including the candidate, year of the campaign, and your title and responsibilities.

DaneDems (since approximately 2019) Dane County, WI Democratic Party organization. No office held, just dues paying member.

Delegate, Wisconsin Democratic Convention, 2020.

Delegate, Democratic National Convention 2020

15. Itemize all political contributions to any individual, campaign organization, political party, political action committee, or similar entity of \$200 or more for the past ten years.

Not applicable.

16. List all scholarships, fellowships, honorary degrees, honorary society memberships, military medals, and any other special recognition for outstanding service or achievements.

Department of Atmospheric and Oceanic Sciences, University of Wisconsin – Madison, Ned P. Smith Chair in Meteorology (2019-2022)

Elected Fellow, American Meteorological Society (2019)

Congressional Record

<https://www.congress.gov/congressional-record/2008/7/31/senate-section/article/s78974?q=%7B%22search%22%3A%5B%22Michael+Morgan+University+of+Wisconsin%22%2C%22Michael%22%2C%22Morgan%22%2C%22University%22%2C%22of%22%2C%22Wisconsin%22%5D%7D&s=6&r=90>

Recipient American Meteorological Society-University Corporation for Atmospheric Research Congressional Science Fellowship: 2007-2008

Recipient, University of Wisconsin – Madison, Vialas Associates Research Award (1999-2000)

National Collegiate Weather Forecasting Competition, First Place Graduate Student Division (1992) and Faculty/Staff Division (2003)

Recipient, Ford Foundation Graduate Fellowship (1988-1990)

17. Please list each book, article, column, Internet blog posting, or other publication you have authored, individually or with others. Include a link to each publication when possible. Also list any speeches that you have given on topics relevant to the position for which you have been nominated. Do not attach copies of these publications unless otherwise instructed.

Please see attached list.

18. List all digital platforms (including social media and other digital content sites) on which you currently or have formerly operated an account, regardless of whether or not the account was held in your name or an alias. Include the name of an “alias” or “handle” you have used on each of the named platforms. Indicate whether the account is active, deleted, or dormant. Include a link to each account if possible.

Facebook: <https://www.facebook.com/profile.php?id=8626916>
(dormant)

Linkedin: <https://www.linkedin.com/in/michael-morgan-8206396/>
(active)

Twitter: [@michaelcmorgan](https://twitter.com/michaelcmorgan)
(active)

19. Please identify each instance in which you have testified orally or in writing before Congress in a governmental or non-governmental capacity and specify the date and subject matter of each testimony.

Not applicable.

20. Given the current mission, major programs, and major operational objectives of the department/agency to which you have been nominated, what in your background or employment experience do you believe affirmatively qualifies you for appointment to the position for which you have been nominated, and why do you wish to serve in that position?

My background as a university professor in the Atmospheric and Oceanic Sciences Department of the University of Wisconsin – Madison, my service to U.S. Senator Benjamin Cardin as a senior legislative fellow responsible for energy and environmental issues, my service as Director of the Division of Atmospheric and Geospace Sciences at the National Science Foundation, and my international service on the World Weather Research Scientific Steering Committee affirmatively qualifies me for appointment to the position of Assistance Secretary for Environmental Observations and Prediction and, if confirmed, will allow me to fully support NOAA’s mission of science, service, and stewardship.

My research as a faculty member has focused on understanding the dynamics of weather systems and improving prediction of weather systems through improved use of observations in predictive models. My service at the NSF introduced me to a broader perspective of the atmospheric and related sciences as my portfolio of responsibility included weather, climate, atmospheric chemistry, and space weather (all with links to NOAA activities). Additionally, I had responsibility for the oversight of the management of NSF observational assets (aircraft and ground based observing systems or AGS) used by the NSF supported atmospheric sciences research community.

As AGS Division Director, I fostered greater interagency ties with federal agencies involved in atmospheric and geospace phenomena, including NOAA and NASA. As an example, in recognizing the need for the GEO/AGS PI community to become more engaged with social science and engineering communities to advance NSF's Hazard SEES initiative, I led an NSF effort to support NSF-funded principal investigators (PIs) in AGS and PIs in the Social, Behavioral, and Economic Sciences Directorate (SBE) to participate in two co-funded national workshops with NOAA:

- *Weather Ready Nation: A Vital Conversation on Tornadoes and Severe Weather* 13 – 15 December 2011
- *Weather Ready Nation: Science Imperatives for Severe Thunderstorm Research* 24-26 April 2012.

I served on the executive planning team for both meetings and led the NSF coordination of identifying potential PI participants from the AGS and SBE science communities. The latter workshop's 63 participants, representing the disciplines of civil engineering, communication, economics, emergency management, geography, meteorology, psychology, public health, public policy, sociology, and urban planning, met to identify research issues needed to be addressed to make the Nation more resilient to severe thunderstorms. My actions on behalf of this activity supported the Geosciences Directorate and the Foundation interest in advancing sustainability science, and helped NOAA with promoting its strategic vision of creating a "weather ready nation".

I worked in the Office of the Federal Coordinator for Meteorology while serving as the NSF member of the Program Council for National Operational Processing Centers and the Interdepartmental Committee for Meteorological Services and Supporting Research. Through this service, I developed a deeper appreciation for the importance of federal coordination of meteorological services and the unique role individual Federal agencies have in supporting the operational and research components of the weather enterprise.

Finally, I have served as a member of the World Meteorological Organizations World Weather Research Program's Scientific Steering Committee. In this capacity, I have developed professional relationships with members of the international weather, water, climate, and social

sciences communities engaged in improving operational prediction and delivery of actionable forecast information. Specific responsibilities included: providing scientific guidance for the WWRP on major project activities; and facilitating, coordinating, and prioritizing weather research and development activities.

I would like to bring the skills and knowledge built during the myriad experiences I have had the great privilege and pleasure to experience throughout my career to serve our country in this position. I am excited about the challenges of ensuring and enhancing the provision of high quality, actionable, environmental data, including weather forecast and climate projections, to the public and private sectors.

21. What do you believe are your responsibilities, if confirmed, to ensure that the department/agency has proper management and accounting controls, and what experience do you have in managing a large organization?

If confirmed, my main responsibility will be to support the NOAA Administrator in advancing the mission of the agency, and help to develop the programs, budgets, and policies necessary to accomplish the components of that mission. I would be responsible for being knowledgeable about the agency's controls for management and accounting and insisting on our adherence to those controls.

As an NSF Division Director, I was responsible for developing and executing the Division's approximate \$250 million budget. I administered human, financial, material, and information resources in a manner that I believe would instill public trust and accomplish NSF's mission. Further, I used technology to enhance organizational effectiveness and decision-making. I recognize that an organization is effective when all business processes work to optimize administrative efficiencies, provide business intelligence for data-driven decision-making, and enable organizational agility while being fully consistent with agency policies.

22. What do you believe to be the top three challenges facing the department/agency, and why?

The top challenge facing NOAA relates directly to its mission of understanding and predicting changes in climate, weather, oceans, and coasts – the challenge of developing and delivering a robust earth

system prediction capability. Public and private sector requirements and expectations for increasingly detailed, seamless, and longer-lead earth system predictions to support planning and action by emergency managers, public planners, and private sector business requirements will require that NOAA make the necessary investments in fundamental research, model development, enhanced observational and computational infrastructure, and improved use of available and future observations (data assimilation). This is a significant challenge as it requires not only work internal to NOAA, but also collaboration across all agencies on advancing fundamental research in the earth system and social system processes and their interactions, next generation cyberinfrastructure and surface- and space-based observing capabilities, and collaboration with users of such predictions in co-designing such a system and evaluating its fitness for purposes.

The second challenge facing NOAA also relates to its mission of sharing its gathered knowledge and information with others. NOAA is seen as an authoritative, trusted source of environmental intelligence (particularly focused on weather, oceans, and climate) by the public and by the private sectors. This data has been particularly useful in envisioning the impacts of changing climate scenarios on infrastructure, but when carefully coupled with other data including land use, ecosystem function, and socioeconomic data could also be used to ascertain the impacts of weather and changing climate on communities across our Nation and the world. The challenges for NOAA in this space are the development of a carefully curated, integrated data set and the development of a data service platform to make distribution and integration of this data straightforward for researchers, communities, and the private sector. Such a data platform would also support the earth system modeling challenge by providing a basis for deeper exploration of interactions between natural and human social systems.

The third challenge for NOAA is supporting and hiring a diverse workforce with the necessary skills and knowledge to advance earth systems science understanding and prediction as well as communicating effectively the knowledge and information produced by NOAA. The workforce needed to accomplish the first two challenges described above would be drawn from scientists with training and expertise across the natural, social, computational, and data sciences.

B. POTENTIAL CONFLICTS OF INTEREST

1. Describe all financial arrangements, deferred compensation agreements, and other continuing dealings with business associates, clients, or customers. Please include information related to retirement accounts.

My arrangements are described in Part 3 of my Public Financial Disclosure Report.

2. Do you have any commitments or agreements, formal or informal, to maintain employment, affiliation, or practice with any business, association or other organization during your appointment? If so, please explain.

As described in my Ethics Agreement, I will take an unpaid leave of absence from my tenured professor position, as well as my position as Associate Chair of the Undergraduate Program of the Department of Atmospheric and Oceanic Services with the University of Wisconsin-Madison. I have consulted with Department of Commerce ethics officials and the Office of Government Ethics regarding this leave of absence and will resolve any conflict that may arise in accordance with the terms of the ethics agreement that I have entered into with the Department of Commerce, which I understand will be provided to this Committee.

3. Indicate any investments, obligations, liabilities, or other relationships which could involve potential conflicts of interest in the position to which you have been nominated. Explain how you will resolve each potential conflict of interest.

In connection with the nomination process, I have consulted with Department of Commerce ethics officials and the Office of Government Ethics to identify any potential conflict of interest. Any potential conflict of interest will be resolved according to the terms of the ethics agreement that I have entered into with the Department of Commerce, which I understand will be provided to this Committee. I am not aware of any potential conflict of interest other than those identified in my ethics agreement. In the event that an actual or potential conflict of interest arises during my appointment, I will consult with the Commerce Department's ethics officials and take the actions necessary to resolve the conflict.

4. Describe any business relationship, dealing, or financial transaction which you have had during the last ten years, whether for yourself, on behalf of a client, or acting as an agent, that could in any way constitute or result in a possible conflict of interest in the position to which you have been nominated. Explain how you will resolve each potential conflict of interest.

None.

5. Identify any other potential conflicts of interest, and explain how you will resolve each potential conflict of interest.

I am not aware of any other potential conflicts of interest that may arise other than those identified in my ethics agreement. However, should a conflict arise during my appointment, I will consult with the Commerce Department's ethics officials and take the actions necessary to resolve the conflict.

6. Describe any activity during the past ten years, including the names of clients represented, in which you have been engaged for the purpose of directly or indirectly influencing the passage, defeat, or modification of any legislation or affecting the administration and execution of law or public policy.

Not applicable.

C. LEGAL MATTERS

1. Have you ever been disciplined or cited for a breach of ethics, professional misconduct, or retaliation by, or been the subject of a complaint to, any court, administrative agency, the Office of Special Counsel, professional association, disciplinary committee, or other professional group? **No.** If yes:

- a. Provide the name of agency, association, committee, or group;
- b. Provide the date the citation, disciplinary action, complaint, or personnel action was issued or initiated;
- c. Describe the citation, disciplinary action, complaint, or personnel action;
- d. Provide the results of the citation, disciplinary action, complaint, or personnel action.

2. Have you ever been investigated, arrested, charged, or held by any Federal, State, or other law enforcement authority of any Federal, State, county, or municipal entity, other than for a minor traffic offense? If so, please explain.

No.

3. Have you or any business or nonprofit of which you are or were an officer ever been involved as a party in an administrative agency proceeding, criminal proceeding, or civil litigation? If so, please explain.

No.

4. Have you ever been convicted (including pleas of guilty or *nolo contendere*) of any criminal violation other than a minor traffic offense? If so, please explain.

No.

5. Have you ever been accused, formally or informally, of sexual harassment or discrimination on the basis of sex, race, religion, or any other basis? If so, please explain.

No.

6. Please advise the Committee of any additional information, favorable or unfavorable, which you feel should be disclosed in connection with your nomination.

None.

D. RELATIONSHIP WITH COMMITTEE

1. Will you ensure that your department/agency complies with deadlines for information set by congressional committees, and that your department/agency endeavors to timely comply with requests for information from individual Members of Congress, including requests from members in the minority?

Yes.

2. Will you ensure that your department/agency does whatever it can to protect congressional witnesses and whistle blowers from reprisal for their testimony and disclosures?

Yes.

3. Will you cooperate in providing the Committee with requested witnesses, including technical experts and career employees, with firsthand knowledge of matters of interest to the Committee?

Yes.

4. Are you willing to appear and testify before any duly constituted committee of the Congress on such occasions as you may be reasonably requested to do so?

Yes.

(Nominee is to include this signed affidavit along with answers to the above questions.)

F. AFFIDAVIT

MICHAEL C. MORGAN being duly sworn, hereby states that he/she has read and signed the foregoing Statement on Biographical and Financial Information and that the information provided therein is, to the best of his/her knowledge, current, accurate, and complete.



Signature of Nominee

Subscribed and sworn before me this 8 day of Feb., 2022.

Denise A. Kaminski
Notary Public 01-24-2025



Michael C. Morgan, PhD

EDUCATION

Massachusetts Institute of Technology, Ph.D. - Meteorology 1988 - 1994

- Dissertation title: "An observationally and dynamically determined basic state to study synoptic-scale waves"
- Dissertation advisor: Prof. Kerry A. Emanuel

Massachusetts Institute of Technology, S.B. – Mathematics 1984 - 1988

PROFESSIONAL EXPERIENCE

UNIVERSITY OF WISCONSIN-MADISON

DEPARTMENT OF ATMOSPHERIC AND OCEANIC SCIENCES

Professor

September 2005 – present

Associate Professor

September 2002 – August 2005

Assistant Professor

September 1995 – August 2002

- Advised 19 graduate students (5 Ph.D. and 14 M.S.) over the last 22 years
- Supervised eight undergraduate students on senior research projects and theses
- Taught
 - Undergraduate courses in weather and climate, atmosphere and ocean fluid dynamics, synoptic and mesoscale meteorology, numerical weather prediction
 - Graduate courses in geophysical fluid dynamics, data assimilation, synoptic laboratory, rotating tank laboratory, atmospheric data analysis
- Developed and taught a course "An introduction to weather analysis and forecasting" for undergraduate students with an interest in the major and a calculus background
- Developing and teaching a graduate course on atmospheric data assimilation and predictability
- Organized and convened a national workshop on atmospheric predictability in March 2004 which brought together meteorologists, forecast consumers to discuss the state of the science for medium-range forecasts and how uncertainty is conveyed to forecast consumers
(<http://helios.aos.wisc.edu/workshop>)

Chair, Department of Atmospheric and Oceanic Sciences

January 2021 – August 2021

Associate Chair, Undergraduate Affairs

September 2003 – June 2010

Associate Chair, Undergraduate Affairs

September 2015 – present

- Responsible for evaluation of Atmospheric and Oceanic Sciences undergraduate major
- Responsible for advising approximately 40 junior and senior undergraduates each year
- Responsible for advising students expressing an interest in the Department's major and navigating them through freshman and sophomore year course planning
- Responsible for meeting with prospective students and their parents to discuss the Department's program
- Developed monthly social and professional development event "Evening with Faculty" which provides opportunity for students to meet with faculty in non-academic setting to discuss profession and personal background.

COLLEGE OF LETTERS AND SCIENCE

Curriculum Committee, Chair

August 2009 – June 2010

Curriculum Committee, Member

August 2005 – June 2010

- Responsible for advising the Dean for the College of Letters & Science on the integrity of the undergraduate degree requirements and programs and advising the Dean on changes to requirements for L&S majors
- Responsible for review of course change proposals

NATIONAL SCIENCE FOUNDATION, DIRECTORATE FOR GEOSCIENCES**Director, Division of Atmospheric and Geospace Sciences****June 2010 - June 2014**

- Served as a member of the Directorate for Geosciences leadership team and as the Foundation's principal spokesperson in the area of atmospheric sciences
- Assessed the needs and trends associated with the atmospheric and geospace sciences research
- Implemented strategic planning and policy setting for the Division
- Provided leadership and guidance to Division staff members
- Responsible for recruitment and selection of Section Heads
- Budget preparation and execution
 - Determined funding requirements across the Division by balancing program needs
 - Prepared and justified budget estimates
 - Allocated resources to Division's sections for research awards and provided stewardship over the Division's portion of the Agency Operations and Award Management account
- Oversaw the evaluation of proposals and recommendations for awards and declinations
- Established new program "Education and Cross-disciplinary Programs" to coordinate Division support of education activities and to support Division's involvement with inter- and trans-disciplinary activities across the NSF
- U.S. representative to the World Meteorological Organization Commission for Atmospheric Sciences
 - Member, US delegation to the 16th WMO Congress (2011)
 - Member, US delegation to the Sixteenth Session of the Commission for Atmospheric Sciences (CAS-16; 2013)
- NSF principal representative to the Office of the Federal Coordinator for Meteorology
 - Member, Program Council for National Operational Processing Centers
 - Member, National Space Weather Council
 - Member, Interdepartmental Committee for Meteorological Services and Supporting Research
- Worked with U.S. research community and NOAA/NCEP on devising and implementing a Visiting Scientists Opportunity for currently funded NSF principal investigators
- Represented NSF to external groups

UNITED STATES SENATE, OFFICE OF UNITED STATES SENATOR BENJAMIN CARDIN**Senior Legislative Fellow****September 2007 - August 2008**

- Briefed the Senator for legislative hearings in the Environment and Public Works (EPW) Committee
- Provided recommendations on legislation related to science funding, environmental, and energy issues
- Worked as a member of Senator Cardin's Maryland Projects Team on transportation, environment, and appropriations issues
- Worked with staff in Senate offices and committees in developing legislative strategies
- Developed a climate change science funding amendment to S. 3036 "America's Climate Security Act" which received the support of the American Chemical Society, the Ecological Society of America, and UCAR.
- Worked with staff in other Senate offices, Environment and Public Works (EPW) Committee staff, and environmental and industry groups, on behalf of Senator Cardin, to advance bills through the EPW committee on limiting mercury emissions and on the simplification of tracking of hazardous waste
- Became knowledgeable in the legislative, budgetary, and appropriations processes.
- Communicated and cooperated with technical experts, Federal and state agencies, industry and non-industry groups.

TEXAS A&M UNIVERSITY

DEPARTMENT OF ATMOSPHERIC SCIENCES

Postdoctoral Researcher**September 1994 – August 1995**

- Postdoctoral supervisor: Prof. John Nielsen-Gammon

SERVICE**NORTH CAROLINA STATE UNIVERSITY**

Member, external review team for the Department of Marine, Earth, and Atmospheric Sciences, Fall 2014

WORLD METEOROLOGICAL ORGANIZATION

- Member, World Weather Research Program Science Steering Committee (2014 – present)

AMERICAN METEOROLOGICAL SOCIETY

- Councilor, American Meteorological Society Council (elected; 2014 – 2017)
- Member, American Meteorological Society Planning Commission (2017 –2021)
- Member, American Meteorological Society Nominations Committee (2020 – present)
- American Meteorological Society non-resident Policy Fellow (2020 – present)

NATIONAL CENTER FOR ATMOSPHERIC RESEARCH

- Member, Mesoscale, Microscale Meteorology Division Advisory Committee (2005 – 2010)
- Member, Computational and Information Systems Laboratory Advisory Panel (2002 – 2010)

UNIVERSITY CORPORATION FOR ATMOSPHERIC RESEARCH

- Member: UCAR Board of Trustees (February 2016 – present)
- Member: UCAR 2009 NOAA/NCEP EMC/NCO review panel (January 2009 – June 2010)
- Member, University Relations Committee (2001-2007)
 - Chair, Review Committee for NCAR and UCAR Office of Programs proposals
- Member, Unidata Users Committee (1996-2004)
 - Co-chair 2003 Unidata workshop planning committee
 - Organized workshop "Expanding Horizons: Using Environmental Data for Education, Research, and Decision Making"

AMERICAN INSTITUTE OF PHYSICS

- Member: Board of Directors (November 2017 – present)
- Chair: AIP Public Policy Advisory Committee (August 2017 – present)

INTERDEPARTMENTAL WEATHER RESEARCH COORDINATION COMMITTEE

- Member: Community Weather Research Coordination Committee (November 2017 – November 2020)

AWARDS AND RECOGNITION

- Department of Atmospheric and Oceanic Sciences, University of Wisconsin – Madison, Ned P. Smith Chair in Meteorology, 2019-2022.
- Elected Fellow, American Meteorological Society, 2019
- "Certificate of Appreciation" in "recognition of ... service to the World Meteorological Organization THORPEX Programme for the years 2005-2014", November 2014
- National Science Foundation, *Commendation for Dedicated Service* in "appreciation of ... service as Division Director for Atmospheric and Geospace Sciences" from NSF Director, June 2014
- Office of the Federal Coordinator for Meteorology, *Washington Monument Award*, for my service at NSF to the broader atmospheric sciences activities within the federal government, June 2014
- "TRIBUTE TO DR. MICHAEL C. MORGAN": Congressional Record, United States Senate, 31 July 2008, page S7898
- Recipient American Meteorological Society-University Corporation for Atmospheric Research Congressional Science Fellowship: 2007-2008
- Recipient University of Wisconsin-Madison Vilas Associates Research Award: 1999-2000
- Recipient Ford Foundation Minority Graduate Fellowship: 1988-1990

OTHER NOTABLE ACCOMPLISHMENTS

- Participant in National Collegiate Weather Forecasting Contest – September 1990 – April 2006
 - First place overall, Graduate student division – 1991-1992 academic year
 - First place overall, Faculty/staff division – 2002-2003 academic year
 - First place Faculty/staff division individual cities (1995-96, 1996-97, 2000-01, 2002-03, 2003-04, 2004-05, 2005-06)
- Participant in Weather Challenge (wxchallenge) – September 2006 – present
 - First place overall, Cincinnati, OH (2008-09)

SELECTED PUBLICATIONS

- Bauer, P., Morgan, M., and Sbil, S., 2019: Extreme-scale Computing and Data Handling - the Heart of Progress in Weather and Climate Prediction in WMO for the 21st Century, *WMO Bulletin*, 68(1), 17-20. (https://library.wmo.int/doc_num.php?explnum_id=5843)
- Morgan, M. C., 2018: On the dynamics of adjustment in the f -plane shallow water adjoint system, *J. Atmos. Sci.*, **75**, 1571-1585.
- Park, S.-Y.; Kim, Hyun Mee; Lee, Tae-Yueng and Morgan, M. C., 2013: Statistical distributions of singular vectors for tropical cyclones affecting Korea over a 10-year period. *Meteorology and Atmospheric Physics*, **120**, 107-122.
- Rappin, E. D.; Morgan, M. C. and Tripoli, G. J., 2011: The impact of outflow environment on tropical cyclone intensification and structure. *J. Atmos. Sci.*, **68**, 177-194.
- Hoover, B. T. and Morgan, M. C., 2011: Dynamical sensitivity analysis of tropical cyclone steering using an adjoint model. *Mon. Wea. Rev.*, **139**, 2761-2775.
- Bi, Li; Jung, James A.; Morgan, M. C. and Le Marshall, J. F., 2011: Assessment of assimilating ASCAT surface wind retrievals in the NCEP global data assimilation system. *Mon. Wea. Rev.*, **139**, 3405-3421.
- Hoover, B. T. and Morgan, M. C., 2010: Validation of a tropical cyclone steering response function with a barotropic adjoint model. *J. Atmos. Sci.*, **67**, 1806-1816.
- Bi, Li; Jung, James A.; Morgan, Michael C. and Le Marshall, John G., 2010: A two-season impact study of the WindSat surface wind retrievals in the NCEP global data assimilation system. *Wea. Forecasting*, **25**, 931-949.
- Illari, L.; Marshall, J.; Bannon, P.; Botella, J.; Clark, R.; Haine, T.; Kumar, A.; Lee, S.; Mackin, K. J.; McKinley, G. A.; Morgan, M.; Najjar, R.; Sikora, T. and Tandon, A., 2009: 'Weather in a Tank': Exploiting laboratory experiments in the teaching of meteorology, oceanography, and climate. *Bull. Amer. Meteor. Soc.*, **90**, 1619-1632.
- Keller, L. M.; Houghton, David D. and Morgan, M. C., 2007: The future of medium-extended-range weather prediction: User perspectives. *Bull. Amer. Meteor. Soc.*, **88**, 634-638.
- Morgan, M. C.; Houghton, D. D. and Keller, L. M., 2007: The future of medium-extended-range weather prediction: Challenges and a vision. *Bull. Amer. Meteor. Soc.*, **88**, 631-634.
- Le Marshall, J.; Bi, Li; Jung, J.; Zapotocny, T. and Morgan, M., 2007: WindSat polarimetric microwave observations improve southern hemisphere numerical weather prediction. *Australian Meteorological Magazine*, **56**, 35-40.
- Keller, Linda M.; Morgan, Michael C.; Houghton, David D. and Lazear, Ross A., 2006: Synoptic-dynamic climatology of large-scale cyclones in the North Pacific. *Mon. Wea. Rev.*, **134**, 3567-3587.
- Kruger, Anton; Laufersweiler, M. and Morgan, M. C., 2005: Expanding horizons. *Bulletin of the American Meteorological Society*, **86**, 167-168.
- Kleist, Daryl T. and Morgan, M. C., 2005: Interpretation of the structure and evolution of adjoint-derived forecast sensitivity gradients. *Mon. Wea. Rev.*, **133**, 466-484.
- Kleist, D. T. and Morgan, M. C., 2005: Application of adjoint-derived forecast sensitivities to the 24-25 January 2000 U.S. east coast snowstorm. *Mon. Wea. Rev.*, **133**, 3148-3175.
- Kim, Hyun Mee; Morgan, M. C. and Morss, R. E., 2004: Evolution of analysis error and adjoint-based sensitivities: Implications for adaptive observations. *J. Atmos. Sci.*, **61**, 795-812.
- Morgan, M. C. and Chen, C-C, 2002: Diagnosis of optimal perturbation evolution in the Eady model. *J. Atmos. Sci.*, **59**, 169-185.
- Risbey, J. S.; Lamb, P. J.; Miller, Ron L.; Morgan, M. C. and Roe, G. H., 2002: Exploring the structure of regional climate scenarios by combining synoptic and dynamic guidance and GCM output. *Journal of Climate*, **15**, 1036-1050.
- Kim, Hyun Mee and Morgan, M. C., 2002: Dependence of singular vector structure and evolution on the choice of norm. *J. Atmos. Sci.*, **59**, 3099-3116.
- Morgan, M. C., 2001: A potential vorticity and wave activity diagnosis of optimal perturbation evolution. *J. Atmos. Sci.*, **58**, 2518-2544.
- Morgan, M. C., 1999: Using piecewise potential vorticity inversion to diagnose frontogenesis, Part 1: A partitioning of the Q vector applied to diagnosing surface frontogenesis and vertical motion. *Mon. Wea. Rev.*, **127**, 2796-2821.
- Morgan, M. C. and Nielsen-Gammon, J. W., 1998: Using tropopause maps to diagnose midlatitude weather systems. *Mon. Wea. Rev.*, **126**, 2555-2579.
- Haines, K.; Malanotte-Rizzoli, P. and Morgan, M., 1993: Persistent jet stream intensifications: A comparison between theory and data. *J. Atmos. Sci.*, **50**, 145-154.

RECENT INVITED ACTIVITIES

July 2019: NCAR Advanced Study Program Colloquium: Quantifying and communicating uncertainty in high-impact weather prediction: "Adjoint sensitivity as a means to investigate atmospheric predictability"

July 2019: NCAR Advanced Study Program Networking Dinner: Table mentor (met with colloquium students and answered questions related to professional development)

CITIZENSHIP: United States

ADVISEES**CURRENT ADVISEES**

Zoë Brooke Zibton (2017 – present)

Nuo Chen (2019 – present)

Karimar Ledesma-Maldonado (2018 – present)

PREVIOUS ADVISEES

Raymond Ramos (M.S.)

Christopher Smallcomb (M.S.)

Katherine LaCasse (M.S.)

Hyun-Mee Kim (Ph.D.)

Rebecca Schultz (M.S.)

Zhaoxiangrui He (M.S.)

Chih-Chieh Chen (M.S.)

Jeremy Herbst (M.S.)

Daryl T. Kleist (M.S.)

Eric Rappin (Ph.D)

Dianna Nelson (Ph.D)

Craig Oswald (M.S.)

Ross Lazear (M.S.)

Li Bi (Ph.D.)

Brett Hoover (Ph.D.)

Nicholas Bassill (Ph.D.)

Alexander Goldstein (Ph.D)