

CURRICULUM VITAE

Minghua Zhang

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Employment:

2010-2016	Dean and Director School of Marine and Atmospheric Sciences Stony Brook University, State University of New York
2003-2010	Professor and Associate Dean School of Marine and Atmospheric Sciences Stony Brook University, State University of New York
2001-2010	Director Institute for Terrestrial and Planetary Atmospheres Stony Brook University, State University of New York
2001-	Professor Institute for Terrestrial and Planetary Atmospheres Stony Brook University, State University of New York
1990-2001	Assistant and Associate Professor Institute for Terrestrial and Planetary Atmospheres Stony Brook University, State University of New York
1998-1999	Visiting Fellow Laboratory for Atmospheres NASA Goddard Space Flight Center
1988-1990	Post-doc Visiting Scholar Institute for Terrestrial and Planetary Atmospheres Stony Brook University, State University of New York
1984-1988	Research Assistant Institute of Atmospheric Physics Chinese Academy of Sciences

Education:

Ph.D., 1987 Institute of Atmospheric Physics
 Chinese Academy of Sciences

M.S., 1984 Nanjing Institute of Meteorology

B. S., 1982 Nanjing Institute of Meteorology

Research Interests:

- Climate modeling and climate feedback processes
- Climate change and analysis
- Development of physical parameterizations of clouds and convection in General Circulation Models (GCMs)
- Variational integration and synthesis of field experimental data

Honors

2015 Fellow, American Meteorological Society

2010 Honorary Professor, Tsinghua University

2010 Honorary Professor, Institute of Atmospheric Physics, Chinese Academy of Science

2007 Contributing Author to the Intergovernmental Panel on Climate Change (IPCC) that shared the Nobel Peace Prize with Al Gore.

2003 Elected Member, International Eurasian Academy of Sciences China Center

2001 Oversea Expert Assessor appointed by the President of the Chinese Academy of Sciences

1996 Young Faculty Career Award, National Science Foundation

1988: Young Scientist Achievement Award of the Year, Beijing Association of Science and Technology

1988 Outstanding Ph.D Award, Chinese Ministry of Education

Professional Activities

Editor-in-Chief, Journal of Geophysical Research (JGR): Atmospheres

Steering Committee Member, International Global Water and Energy Experiment (GEWEX)
(2011-2016)

Member, DOE Biological and Environmental Research Advisory Committee (BERAC)
(2010-present)

Member, President Council of the Stony Brook University (2010-2016)

Member, Provost Advisory Group of the Stony Brook University (2010-2016)

Executive Member, Board of Governors, New York Sea Grant (2013-2016)

Member, Advisory Committee of the DOE ACME Project (2014-present)
Director, New York State Resilience Institute for Storms and Emergencies (NYS RISE)
(2013-present)
Co-Chairman, Atmospheric Model Working Group (AMWG) of the NCAR Community Earth
System Model (CESM) (2006-2015)
Member, Board of Higher Education, American Meteorological Society (2011-2014)
Chairman, Committee of Visitors to the Climate and Environmental Sciences Division
Programs, Office of Sciences, US Department of Energy Committee (2012)
Associate Editor, *Journal of Climate* (2008-present)
Editor (2007-2008) and Associate Editor (2009-2015), *Journal of Advances in Modeling Earth
Systems (JAMES)*
Member, NSF Climate Simulation Laboratory (CSL) Advisory Committee (2007-2011)
Member, DOE OBER Roadmap Writing Team (2010)
Lead Author, US Climate Change Science Program (CCSP) Assessment and Synthesis
Product (SAP3.1) (2006-2008)
Member, American Meteorological Society, since 1990
Member, American Geophysical Union, since 1991

Other Professional Services

Reviewer for the *Journal of Climate*; *Journal of Atmospheric Sciences*; *Monthly Weather
Review*, *Journal of Geophysical Research-Atmospheres*; *Geophysical Research
Letter*; *Quarterly Journal of the Royal Meteorology Society*; *Tellus*; *Advances in
Atmospheric Sciences*; *Environmental Research Letters*; *Atmospheric Chemistry
and Physics*; *Climate Dynamics*; *Science*; *Nature*.

Reviewer for funding agencies of the National Science Foundation, National Administration
for Space and Aeronautics; National Ocean and Atmosphere Administrations;
Department of Energy; The European Union; the Chinese National Science
Foundation

Initiated and led the application of the Stony Brook University to join UCAR

Reviewer, Tenure and Promotions for several universities

Teaching Activities

Undergraduate Courses:

1. Advanced Atmospheric Thermodynamics and Dynamics, ATM346

2. Introduction to atmospheric sciences, ATM205
3. Atmospheric Physics ATM348

Graduate Courses:

1. Numerical methods in atmospheric sciences MAR574
2. Climate dynamics MAR596
3. Atmospheric Radiation, MAR 572
4. Theoretical Meteorology I, MAR 593
5. Atmospheric Sciences Seminar, OCN694
6. General circulation of the atmospheres, Graduate Student Seminar

Graduate Dissertation Supervised

<u>Name</u>	<u>Title</u>	<u>Status</u>	<u>Date</u>
Matthias Franz	Suppression and creation of chaotic behavior in a periodic forced Lorenz system	MS	9/93
Shaocheng Xie	Analysis of simulation biases from the NCAR CCM column model and the impact of the convection triggering function.	Ph.D	9/1998
Jun Xu	Laboratory measurements of aerosol properties	Ph.D	9/1999
Jialin Lin	Multi-scale analysis of convection using observational data	Ph.D	9/2000
Wuyin Lin	Influence of convection on the variability of upper-tropospheric water	Ph.D	9/2002
Jun Zheng	Measurement and modeling of atmospheric radicals	Ph.D	5/2005
Jingbo Wu	Cloud resolving modeling of the ARM March 2000 Cases	Ph.D	7/2006
Yue Li	Cloud radiative forcing over hurricanes	M.S.	7/2007
Hua Song	Changes of tropical circulation in a warmer climate,	Ph.D	2009
Jun Huang	Incorporation of time covariance variational analysis,	Ph.D	2013
Ying Chen	Coupling the WRF with the CCSM	Ph.D	2013
Parama Murkerjee	Relationships between cloud-climate feedbacks and present-day climate variability in global models ,	Ph.D	2015
Shuaiqi Tang	3-D variational integration of heterogeneous data from multiple measurement platforms	Ph.D	2015

Tingyin Xiao	Climate variability from the paleoclimate record of the Carioca basin	Ph.D	in progress
Xin Xie	Parameterization of cloud subgrid scale inhomogeneity in climate models	Ph.D	in progress
Jingyi Chen	Impact of entrainment on cloud microphysics and aerosol indirect effect	Ph.D	in progress
Jia Wang	Decadal predictability of extreme weather and regional climate	Ph.D	in progress
Haiyang Yu	Double ITCZ in observations and in climate model	Ph.D	in progress

Graduate Committees Served (Advisor in parenthesis)

Sean Forrester (Knopf)	Ph.D.	in progress
Sara Ganetics (Colle)	Ph.D.	in progress
Jungmin Lee (Khairoutdinov)	Ph.D.	2016 graduation
Shuaiqi Tang (Zhang)	Ph.D.	2015 graduation
Michael Erikson (Colle)	Ph.D.	2015 graduation
David Fuchs (Sherwood)	Ph.D.	2014 graduation
Bingbing Wang (Knopf)	Ph.D.	2013 graduation
Keyhong Park (Mak)	Ph.D.	2012 graduation
Kelly Lombardo (Colle)	Ph.D.	2011 graduation
Yanjuan Guo (Chang)	Ph.D.	2010 graduation
Zhihui Wang	Ph.D.	2009 graduation
Jie Gong (Geller)	Ph.D.	2009 graduation
Hua Song (Zhang)	Ph.D.	2009 graduation
David Novik (Colle)	Ph.D.	2008 graduation
Keyi Chen (Riemer)	MS.	2008 graduation
Yuanlan Lin (Colle)	Ph.D.	2007 graduation
Xiaosong Yang (Chang)	Ph.D.	2007 graduation
Jae Lee (Hameed)	Ph.D.	2007 graduation
Tiehan Zhou (Geller)	Ph.D.	2006 graduation
Jingbo Wu (Zhang)	Ph.D.	2006 graduation
Jun Zheng (Zhang)	Ph.D.	2005 graduation
Matt Jones (Colle)	MS	2004 graduation
Taotao Qian (Cess)	Ph.D.	2003 graduation
Keeyoon Sung (Varanasi)	Ph.D.	2003 graduation

Yangang Zeng (Colle)	MS.	2003 graduated
Yuanxing Zheng (Waliser)	MS.	2003 graduation
Ling Wang (Geller)	Ph.D.	2003 graduation
Tomoko Matsuno (Geller)	Ph.D.	2003 graduation
Moguo Sun (Cess)	Ph.D.	2003 graduation
Wuyin Lin (Zhang)	Ph.D.	2002 graduated
Qunjun Zou (Varanasi)	Ph.D.	2001 graduated
Jialin Lin (Zhang)	Ph.D.	1999 graduated
Wanru Wu (Geller)	Ph.D.	2000 graduated
Xuelong Zhou (Geller)	Ph.D.	2000 graduated
Yaping Zhou (Cess)	Ph.D.	8/1999 graduated
Bing Ye (Anthony Del Genio)	Ph.D.	1999 graduated, Columbia University
Jun Xu (Zhang)	Ph.D.	1998 graduated
Shaocheng Xie (Zhang)	Ph.D.	1998 graduated
Wei Shi (Hameed)	Ph.D.	1998 graduated
Xiaodu Jing (Cess)	Ph.D.	1998 graduated
William Shen (Geller)	Ph.D.	1997 graduated
Danny Luo (Cess)	Ph.D.	1997 graduated
Victor Dortsov (Geller)	Ph.D.	1997 graduated
Boris Khattatov (Geller)	Ph.D.	1996 graduated
Iqbal Pittalwala (Hameed)	Ph.D.	1996 graduated
Victor Chan (De Zafra)	MS	1996 graduated
Drew Shindell (De Zafra)	Ph.D.	1995 graduated
Minghang Chen (Cess)	Ph.D.	1995 graduated
Matthias Franz (Zhang)	MS	1993 graduated

Publications of Minghua Zhang

[\(Google scholar profile\)](#)