CURRICULUM VITAE

Haiyan Jiang

Department of Earth & Environment
Florida International University
11200 SW 8th Street, AHC5 Rm371, Miami, FL 33199
Phone: (305) 348-2984 Email: haiyan.jiang@fiu.edu
Research Group Webpage: http://tcpf.fiu.edu/Jiang/

Education

2004 Ph.D. Meteorology, University of Utah
1995 M.S. Atmospheric Remote Sensing, Chinese Academy of Meteorological Sciences (CAMS)
1992 B.S. (with honors) Atmospheric Physics, Nanjing Institute of Meteorology, China

Professional Experience

2014-present: Associate Professor, Florida International University
2010-2014: Assistant Professor, Florida International University
2007-2009: Research Assistant Professor, University of Utah
2004-2006: Research Associate, Joint Center for Earth Systems Technology, University of Maryland Baltimore County, and NASA Goddard Space Flight Center, Greenbelt, MD
2000-2004: Research Assistant, University of Utah
2001: Summer work, NOAA Hurricane Research Division (HRD)
1998-2000: Research Associate, Research Center for Disastrous Weather, CAMS, China
1995-1998: Research Assistant, Institute of Mesoscale Meteorology, CAMS

Honors and Awards

FIU Top Scholar Award	2014
NASA GRIP Group Achievement Award	2010
Travel Fellowship for University Corporation of Atmospheric Research Annual Board Meeting	2009
NASA New Investigator Award in Earth Science	2008-2011
Travel Award for the Workshop on Tropical Cyclone and Climate, NSF & Columbia University	2006
NASA Earth System Science Fellowship Award	2003-2004
Excellent Honor Graduate Student, Nanjing Institute of Meteorology, China	1992
Excellent Student, Nanjing Institute of Meteorology, China	1990, 1991, 1992
1st, 2nd, 3rd-class scholarship, Nanjing Institute of Meteorology, China	1989-1992

Funded Research Proposals

- 2017-2020: NASA Weather and Atmospheric Dynamics (WAAD program): The Evolution and Contribution of Different Precipitation Types during the Symmetric Process of Tropical Cyclone Rapid Intensification. (Principal Investigator)
- 2017-2019: NOAA Joint Hurricane Testbed (JHT) FY17: Estimation of Tropical Cyclone Intensity Using Satellite Passive Microwave Observations. (Principal Investigator)
- 2015-2017: NOAA Joint Hurricane Testbed (JHT) FY15: Improvement an Implementation of the Probability-based Microwave Ring Rapid Intensification Index for NHC/JTWC Forecast Basins. (Principal Investigator)
- 2014-2017: NASA Earth System Science Fellowship for Yongxian Pei: Quantifying Asymmetries of Precipitation and Convection in Tropical Cyclones and Their Relationship to Storm Intensity Changes Based on 14 Years of TRMM Data. (HJ as the Principal Investigator)
- 2013-2015: NOAA Joint Hurricane Testbed (JHT) FY13: Improvement to the Satellite-based 37 GHz Ring Rapid Intensification Index. (Principal Investigator)
- 2011-2014: NASA Earth System Science Fellowship for Cheng Tao: Climatology of Hot Towers in Tropical Cyclones and Their Role in Tropical Cyclone Intensity Changes Based on 12 years of TRMM data. (HJ as the Principal Investigator)

- 2011-2014: NASA Earth System Science Fellowship for Joseph Zagrodnik: Diurnal Cycle of Precipitation Features and Quantitative Comparison of Precipitation Algorithms in Tropical Cyclones. (HJ as the Principal Investigator)
- 2011-2014: NASA Supplemental Education Awards for ROES Investigators: Undergraduate Summer Education and Research Program in Hurricane Monitoring and Forecasting Using Remote Sensing Observations. (Principal Investigator)
- 2011-2013: NOAA Joint Hurricane Testbed (JHT): Enhancement of SHIPS Rapid Intensification (RI) Index Using Satellite 37 GHz Microwave Ring Pattern. (Principal Investigator)
- 2011: FIU Summer Faculty Development Award.
- 2009-2013: NASA Hurricane Science Research Program (HSRP): A TRMM-based Tropical Cyclone Precipitation Feature Database and Its usage on Intensification Study. (Principal Investigator)
- 2008-2012: NASA New Investigator Program (NIP) in Earth Science: The Relationships between Environmental Factors, Convection, and Precipitation in Tropical Cyclones. (Principal Investigator)
- 2008-2011: NASA Precipitation Processing System (PPS): Population of Precipitation Systems Observed by Space-borne Radar and Microwave Radiometers. (Co- Investigator)
- 2007-2010: NASA Precipitation Measuring Mission (PMM): Differences and Similarities of Tropical Cyclone Rainfall Over Land and Sea Using Multisatellite Analyses: Implications for Inland Flooding Prediction. (Principal Investigator)
- 2003-2004: NASA Earth System Science (ESS) Fellowship: Variability of Ice and Liquid Precipitation Contents and Shape of Radar Reflectivity Profiles in Tropical Cyclones. (Principal Investigator)

Teaching Experience

At Florida International University

MET 3502 & MET 3502L, Synoptic Meteorology and Lab, Fall 2017, Spring 2016, Fall 2015, Fall 2014, Fall 2013, Spring 2013, Fall 2010, & Fall 2011
MET 5561 & MET 5561L, Midlatitude Synoptic Meteorology and Lab, Fall 2014, Fall 2013
MET4990L/5990L, Weather Discussion, Fall 2017, Fall 2015
MET 4410/5412, Remote Sensing in Meteorology, Spring 2014, Spring 2011
MET 4300/MET5355, Severe Weather, Spring 2015, Spring 2012,
IDS3211c, Global Climate Change: Science, Society and Solutions, Spring 2014
OCE 3014, Oceanography, Fall 2012

At University of Utah

METEO 6310, Tropical Meteorology, Fall 2008 (Co-Instructor)
METEO 6140, Radar and Mesoscale Meteorology, Fall 2002 (Teaching Assistant)

Service and Outreach Experience

2008-present: Developed and have maintained a 14+yr Tropical Rainfall Measurement Mission (TRMM) satellite based Tropical Cyclone Precipitation Feature (TCPF) database for the hurricane research community and general public (**http://tcpf.fiu.edu**)
2010-present: Faculty Sponsor of the FIU WxChallenge Competition Team (http://tcpf.fiu.edu/Jiang/education/wxchallenge/index.html)
Summer 2011, 2012, & 2013: NASA/FIU Hurricane and Remote Sensing Summer Education and Research Internship Program (HRSSERP, **http://tcpf.fiu.edu/Jiang/education/HRSSERP/index.html**)
2008-2009: Severe Weather Module Designed for Water, the Environment, Science and Teaching (WEST) Program, University of Utah (**http://www.inscc.utah.edu/~u0180931/hjiang/west/severe_weather_module.html**).

Graduate Student Supervised

Logan Saucer, M.S. (Spring 2017- Present)
Tyler Wieland, M.S. (Fall 2014-Fall 2016)
Bradley Klotz, Ph.D. (Fall 2013-Spring 2017; defensed on March 30, 2017)
Yongxian Pei, Ph.D. (Fall 2012-present)
Margaret Kieper, Ph.D. (Fall 2012-Spring 2016)
Cheng Tao, Ph.D. Student (Fall 2010-Spring 2016; defensed on Nov. 23, 2015)

Joseph Zagrodnik, M.S. Student (Fall 2010-summer 2013; defensed on Nov. 5, 2012; currently in the PhD program at Univ. of Washington)
Ellen M. Ramirez, M.S. Student (Fall 2008-Fall 2010; defensed on Dec. 9, 2010; currently at NOAA NESDIS SAB)

Research Staff & Postdoc Scholar Supervised
Cheng Tao (Postdoc Research Associate, Jun. 2016-present)
Jonathan Zawislak (Research Assistant Professor, Oct. 2014 - present)
Tie Yuan (Postdoc Visiting Scholar, Sep. 2010-Sep. 2011; Mar. 2012-Aug. 2012)

Professional Service and Activities

Associate Editor, Monthly Weather Review	2017-present
NASA Global Hydrology Resource Center (GHRC) User Working Group	2016-present
Proposal reviewer for NSF	2012, 2016, 2017
Proposal reviewer for Hongkong Research Grants Council	2014, 2015, 2016, 2017
Panel Review Committees for NASA	2009, 2011, 2012, 2013
Proposal reviewer for NASA	2009, 2011, 2012, 2015
Proposal reviewer for Maryland Industrial Partnerships (MIPS)	2014
Journal article reviewer for AMS and AGU journals	2003-present
Member, American Meteorological Society	2001-Present
Life Member, American Geophysical Union	2001-Present

Chair of Session 13B "*Tropical Cyclone Rainbands and Precipitation I"* at the American Meteorological Society 32nd Conference on Hurricanes and Tropical Meteorology, San Juan, Puerto Rico, USA, April 17-22, 2016.
Chair of Session 10A "*Tropical Cyclone Rainbands and Precipitation"* at the American Meteorological Society 31st Conference on Hurricanes and Tropical Meteorology, San Diego, California, USA, March 30- April 4, 2014.
Convener of the session "*Remote Sensing of Tropical Cyclones and Tropical Convective Systems: Observations and Data Assimilation"* at the American Geophysical Union Fall Meeting, San Francisco, CA, December 3-7, 2012.
Chair of Session on "*Comparisons of the 2008 and 2010 Snapshots of Tropical Cyclone R & D*" at the NOAA 65th Interdepartmental Hurricane Conference, Miami, Florida, Feb. 28-Mar. 3, 2011.

Refereed Publications
33. Yang, Z., T. Yuan, H. Jiang, L. Zhang, and C. Zhang, 2017: Stratiform and Convective Precipitation Properties of Tropical Cyclones in the Northwest Pacific. *J. Geophys. Res.*, in review.
32. Klotz, B. W., and H. Jiang, 2017: Examination of Surface Wind Asymmetries in Tropical Cyclones: Part II. Intensity Change. *Mon. Wea. Rev*., submitted.
31. Jiang, H., J. P. Zagrodnik, C. Tao, and E. J. Zipser 2017: What type of precipitation is represented by different color regions in the NRL 37 GHz color tropical cyclone product? *J. Geophys. Res.*, under major revision.
30. Klotz, B. W., and H. Jiang, 2017: Examination of Surface Wind Asymmetries in Tropical Cyclones: Part I. General Structure and Wind Shear Impacts. *Mon. Wea. Rev*., **145**, 3989-4009.
29. Tao, C., H. Jiang, and J. Zawislak 2017: The Relative Importance of Stratiform and Convective Rainfall in Rapidly Intensifying Tropical Cyclones, *Mon. Wea. Rev*., **145**, 795-809.
28. Klotz, B. W., and H. Jiang, 2016: Global Composites of Surface Wind Speeds in Tropical Cyclones based on a 12-year Scatterometer Database. *Geophys. Res. Lett.*, **43**, doi:10.1002/2016GL071066.
27. Rogers, R. F., J. Zhang, Zawislak, J., H. Jiang, G. R. Alvey III, E. J. Zipser, and S. Stevenson, 2016: Observations of the structure and evolution of Hurricane Edouard (2014) during intensity change. Part II: Kinematic structure and the distribution of deep convection. *Mon. Wea. Rev*., **144**, 3355–3376.
26. Zawislak, J., H. Jiang, G. R. Alvey III, E. J. Zipser, R. F. Rogers, J. Zhang, and S. Stevenson, 2016: Observations of the structure and evolution of Hurricane Edouard (2014) during intensity change. Part I: Relationship between the thermodynamic structure and precipitation. *Mon. Wea. Rev*., **144**, 3333–3354.
25. Tao, C. and H. Jiang, 2015: Distributions of shallow to very deep Precipitation–Convection in rapidly intensifying tropical cyclones. *J. Climate*, **28**, 8791-8824.
24. Zagrodnik, J., and H. Jiang, 2014: Rainfall, Convection, and Latent Heating Distributions in Rapidly Intensifying Tropical Cyclones. *J. Atmos. Sci.*, **71**, 2789-2809.
23. Jiang, H. and C. Tao, 2014: Contribution of tropical cyclones to global deep convection. *J. Climate*, **27**, 4313-4336.

22. Xu, W., H. Jiang, and X. Kang, 2014: Rainfall Asymmetries of Tropical Cyclones Prior to, During, and After Making Landfall in South China and Southeast United States. *Atmospheric Research*, **139**, 18-26.
21. Zagrodnik, J., and H. Jiang, 2013: Investigation of PR and TMI Version 6 and Version 7 Rainfall Algorithms in Landfalling Tropical Cyclones Relative to the NEXRAD Stage-IV Multi-sensor Precipitation Estimate Dataset. *J. Appl. Meteor. Climatol.*, **52**, 2809-282.
20. Jiang, H., and E. M. Ramirez, 2013: Necessary conditions for tropical cyclone rapid intensification as derived from 11 years of TRMM data. *J. Climate*., **26**, 6459-6470.
19. Tao, C., and H. Jiang, 2013: Global distribution of hot towers in tropical cyclones based on 11-year TRMM data. *J. Climate*, **26**, 1371–1386.
18. Zagrodnik, J., and H. Jiang, 2013: Properties of Tropical Rainfall Measuring Mission (TRMM) Precipitation Radar (PR) and Microwave Imager (TMI) Rainfall Retrievals in Tropical Cyclone Inner Cores and Rainbands. *J. Geophys. Res.*, **118**, 29-42, DOI: 10.1029/2012JD017919.
17. Jiang, H., E. M. Ramirez, and D. J. Cecil, 2013: Convective and rainfall properties of tropical cyclone inner cores and rainbands from 11 years of TRMM data. *Mon. Wea. Rew.*, **141**, 431-450.
16. Kieper, M., and H. Jiang, 2012: Predicting tropical cyclone rapid intensification using the 37 GHz ring pattern identified from passive microwave measurements. *Geophys. Res. Lett.*, **39,** L13804, doi:10.1029/2012GL052115.
15. Jiang, H., 2012: The relationship between tropical cyclone intensity change and the strength of inner core convection. *Mon. Wea. Rev*., **140**, 1164-1176.
14. Jiang, H., C. Liu, and E. J. Zipser, 2011: A TRMM-based Tropical Cyclone Cloud and Precipitation Feature Database. *J. Appl. Meteor. Climatol.*, **50**,1255-1274.
13. Xu, W., E. J. Zipser, C. Liu, and H. Jiang, 2010: On the relationships between lightning frequency and thundercloud parameters of regional precipitation systems. *J. Geophys. Res.*, **115**, D12203, doi:10.1029/2009JD013385.
12. Jiang, H., and E. J. Zipser, 2010: Contribution of tropical cyclones to the global precipitation from eight seasons of TRMM data: Regional, seasonal, and interannual variations. *J. Climate*., **23,** 1526-1543.
11. Jiang, H., J. B. Halverson, and E. J. Zipser, 2008: Effects of environmental moisture on tropical cyclone precipitation: Land/ocean difference. *Geophys. Res. Lett.*, **35**, L17806, doi:10.1029/2008GL034658.
10. Jiang, H., J. B. Halverson, J. Simpson, and E. J. Zipser, 2008: Hurricane "rainfall potential" derived from satellite observations aids overland rainfall prediction. *J. Appl. Meteor. Climatol.*, **47**, 944–959.
9. Jiang, H., J. B. Halverson, J. Simpson, and E. J. Zipser, 2008: On the differences in storm rainfall from Hurricanes Isidore and Lili. Part II: Water budget. *Wea. Forecasting*, **23**, 44-61.
8. Jiang, H., J. B. Halverson, and J. Simpson, 2008: On the differences in storm rainfall from Hurricanes Isidore and Lili. Part I: Satellite observations and rain potential. *Wea. Forecasting*, **23**, 29-43.
7. Jiang, H., and E. J. Zipser, 2006: Retrieval of hydrometeor profiles in tropical cyclones and convection from combined radar and radiometer observations. *J. Appl. Meteor. Climatol.*, **45**, 1096-1115.
6. Jiang, H., P. G. Black, E. J Zipser, F. D. Marks, and E. W. Uhlhorn, 2006: Validation of rain rate estimation in hurricanes from the Stepped Frequency Microwave Radiometer: algorithm correction and error analysis. *J. Atmos. Sci.*, 63, 252–267.
5. Jiang, H., R. Ge, and X. Zhu, 2001: Preliminary analysis on the flow structure of heavy precipitation on June 9 in Changle area during HUAMEX, *Quarterly Journal of Applied Meteorology*, **12(1),** 97-101 (in Chinese).
4. Ge, R., X. Zhu, and H. Jiang, 2000: A method for improving the probing ability of Doppler weather radar in the clear air, *Quarterly Journal of Applied Meteorology*, **11(3)**, 257-263 (in Chinese).
3. Ge, R., H. Jiang, and H. Peng, 1998: Flow structure of hailstorm in Beijing area, *Quarterly Journal of Applied Meteorology*, **9(1),** 1-7 (in Chinese).
2. Jiang, H. and R. Ge, 1997: A new retrieval technique for single-Doppler radar, *Quarterly Journal of Applied Meteorology*, **8(2),** 219-223 (in Chinese).
1. Gu, S., H. Jiang, and X. Liu, 1993: Doppler Velocity Display with TVGA Graphics Adaptor, *Journal of Nanjing Institute of Meteorology*, **16(4),** 446-450 (in Chinese).

Dissertation and Thesis Supervised

Yongxian P., 2017: Quantification of Precipitation Asymmetries in Tropical Cyclones and Their Relationship to Storm Intensity Changes using TRMM Data. Ph.D. dissertation, Florida International University, defensed on Oct. 12, 2017, 130 pp.

Klotz, B., 2017: Evaluation and predictability of observation-based surface wind asymmetric structure in tropical cyclones. Ph.D. dissertation, Florida International University, defensed on Mar. 30, 2017, 170 pp.

Tao, C., 2015: Climatology of overshootings in tropical cyclones and their roles in tropical cyclone intensity change using TRMM data. Ph.D. dissertation, Florida International University, defensed on Nov. 23, 2015, 193 pp.

Zagrodnik, J. P., 2012: Comparison of Tropical Rainfall Measuring Mission (TRMM) Rainfall Algorithms in Tropical Cyclones. M. S. thesis, Florida International University, defensed on Nov. 5, 2012, 106 pp.

Ramirez, E. M., 2010: Convective and rainfall properties of tropical cyclone inner cores and rainbands in relation to tropical cyclone intensity changes using 12 years of TRMM data. M. S. thesis, University of Utah, defensed on Dec. 9, 2010, 144 pp.

Invited Presentations

Jiang, H. 2016, The 37 GHz Cyan+Pink Ring and Tropical Cyclone Rapid Intensification. HFIP Biweekly Telecon, November 16.

Jiang, H. 2016, The TRMM Tropical Cyclone Precipitation Feature (TCPF) Database and Its Usage in Rapid Intensification Studies. Nanjing University of Information & Technology, Nanjing China, June 8.

Jiang, H. 2016, The TRMM Tropical Cyclone Precipitation Feature (TCPF) Database and Its Usage in Rapid Intensification Studies. Shanghai Typhoon Institute, Shanghai, China, June 6.

Jiang, H. and C. Tao 2015, The Importance of Shallow and Moderate Precipitation in the Upshear Quadrants to Tropical Cyclone Rapid Intensification as Derived from 14 Years of TRMM Data. *AGU Fall Meeting Session A43L (invited talk),* San Francisco, CA, December 14-18.

Jiang, H. 2014: The relative importance of deep/very deep vs. shallow/moderate convection to rapid intensification: Results from 14 years of TRMM. *NOAA Hurricane Forecast Improvement program (HFIP) Workshop on Rapid Intensification of Tropical Cyclones.* Univ. of Miami RASMS, Nov 18, 2014.

Jiang, H., 2013: Necessary conditions for tropical cyclone rapid intensification as derived from 11 years of Tropical Rainfall Measuring Mission (TRMM) data. Seminar for National Hurricane Center, Miami Florida, April 8.

Jiang, H. 2011: Satellite Observations of Tropical Cyclone Rainfall. Pre-HFIP workshop in celebration of Frank Marks' 60th birthday, NOAA HRD, November 7.

Jiang, H. 2009: Toward Improving the Prediction of Hurricane Rainfall and Intensity Change Using TRMM Satellite Observations. Florida International University, March 10.

Jiang, H. 2009: Precipitation and Convection in Tropical Cyclones as Seen from TRMM. University of Utah, January 28.

Jiang, H. 2008: Precipitation and Convection in Tropical Cyclones: A Vision from TRMM. University of Nebraska Lincoln, December 2.

Jiang, H. 2008: Contribution of tropical cyclones to the global precipitation from 9 years of TRMM data: Regional, seasonal, and interannual variations. Chinese National Climate Center, October 17.

Jiang, H. 2008: Precipitation and Convection in Tropical Cyclones: A Vision from TRMM. University of Nebraska Lincoln, December 2.

Jiang, H. 2008: Severe Weather Teaching Module. *WEST Fall Retreat, University of Utah*, September 20.

Jiang, H. 2006: Hydrometeor content retrieval and rainfall analysis in tropical cyclones from remote sensing observations. *Cooperative Institute for Meteorological Satellite Studies, University of Wisconsin-Madison*, May 22.

Jiang, H. 2006: Hydrometeor content retrieval and rainfall analysis in tropical cyclones from remote sensing observations, *Brookhaven National Laboratory*, April 10.

Jiang, H. 2006: Hydrometeor content retrieval and rainfall analysis in tropical cyclones from remote sensing observations, *CIMSS, University of Wisconsin-Madison*, May 22.

Jiang, H. and J. B. Halverson, 2004: A TRMM rainfall and water budget study on two tropical cyclones: flooding vs. non-flooding storms. *JCET, University of Maryland Baltimore County,* Nov. 10.

Jiang, H., 2004: Retrieval of hydrometeor profiles in tropical cyclones and convection by a combined radar-radiometer algorithm. *Mesoscale Atmospheric Processes Branch, NASA Goddard Space Flight Center*, Greenbelt, MD, March 18.

Conference Proceedings, Talks, and Presentations

Jiang, H., B. You, and C. Tao 2017: Estimation of Tropical Cyclone Intensity Using Satellite Passive Microwave Observations. 71st *Interdepartmental Hurricane Conference/2017 Tropical Cyclone Research Forum*, Mar 14-16, 2017.

Jiang, H., J. Zawislak, Y. Pei, C. Tao, K. Musgrave, and G. Chirokova 2017: JHT Project 3: "Improvement and Implementation of the Probability-based Microwave Ring Rapid Intensification Index for NHC/JTWC Forecast Basins" 71*st* *Interdepartmental Hurricane Conference/2017 Tropical Cyclone Research Forum*, Mar 14-16, 2017.

Pei*, Y. and H. Jiang, 2017: Shear-motion Combined Effects on Tropical Cyclone Low-wavenumber Precipitation Asymmetry. AMS 97th Annual Meeting, Seattle, Washington, Jan 22-26, 2017 (Poster presentation).

Jiang, H. and C. Tao, 2016: The TRMM Tropical Cyclone Precipitation Feature (TCPF) database and Its Usage in Rapid Intensification Studies. *AMS 32nd Conference on Hurricanes and Tropical Meteorology Session 15B.6*, San Juan, Puerto Rico, April 17-22, 2016.

Zawislak, J., C. Tao, H. Jiang, T. Alvey, and E. Zipser, 2016: Precipitation Characteristics of the Tropical Cyclone Life Cycle as Derived from a Satellite-borne Passive Microwave and Radar Dataset. *NASA Precipitation Measuring Mission Science Team Meeting*, Clear Lake, TX. October 24-28, 2016.

Tao, C., J. Zawislak, and H. Jiang, 2016: The Relative Importance of Stratiform and Convective Rainfall in Rapidly Intensifying Tropical Cyclones. The *2016 JPL Workshop on "Integrating satellite observations and airborne data with model forecast to understand hurricane processes and evaluate models."* Pasadena, CA. June 21-23, 2016.

Pei, Y. and H. Jiang, 2016: Quantification of Shear-relative Precipitation Asymmetries of Tropical Cyclones in Different Intensity Change Stages. *AMS 32nd Conference on Hurricanes and Tropical Meteorology Session 9D.2*, San Juan, Puerto Rico, April 17-22, 2016.

Klotz, B. W. and H. Jiang, 2016: Using a Scatterometer-based, Low-wavenumber Analysis Tool to Evaluate Surface Wind Asymmetries in Tropical Cyclones. *AMS 32nd Conference on Hurricanes and Tropical Meteorology Session 9D.1*, San Juan, Puerto Rico, April 17-22, 2016.

Tao, C. and H. Jiang, 2016: The Evolution of Rainfall and Convection in Rapidly Intensifying Tropical Cyclones based on 16 years of TRMM Data. *AMS 32nd Conference on Hurricanes and Tropical Meteorology Session 6D.1*, San Juan, Puerto Rico, April 17-22, 2016.

Rogers, R. F., J. Zhang, J. Zawislak, H. Jiang, G. R. Alvey III, E. J. Zipser, and S. Stevenson, 2016: Observations of the structure and evolution of Hurricane Edouard (2014) during intensity change. Part II: Kinematic structure and the distribution of deep convection. *AMS 32nd Conference on Hurricanes and Tropical Meteorology Session 1C.2*, San Juan, Puerto Rico, April 17-22, 2016.

Zawislak, J., H. Jiang, G. R. Alvey III, E. J. Zipser, R. F. Rogers, J. Zhang, and S. Stevenson, 2016: Observations of the structure and evolution of Hurricane Edouard (2014) during intensity change. Part I: Relationship between the thermodynamic structure and precipitation. *AMS 32nd Conference on Hurricanes and Tropical Meteorology Session 1C.1*, San Juan, Puerto Rico, April 17-22, 2016.

Jiang, H., 2016: JHT Project 5: Improvement and Implementation of the Probability-based Microwave Ring Rapid Intensification Index for NHC/JTWC Forecast Basins. 70*th* *Interdepartmental Hurricane Conference/2016 Tropical Cyclone Research Forum*, Mar 15-17, 2016.

Jiang, H., Y. Pei, C. Tao, M. Kieper, and, J. Zagrodnik 2015: Improvement to the Satellite-based 37 GHz Ring Rapid Intensification Index—A Year-2 Update. 69*th* *Interdepartmental Hurricane Conference/Tropical Cyclone Research Forum*, Mar 2-5, 2015.

Jiang, H., Y. Pei and J. Zagrodnik, 2014: Rainfall and Convection Asymmetries of Tropical Cyclones from TRMM Precipitation Radar Observations. *AMS 31st Conference on Hurricanes and Tropical Meteorology*, San Diego, California, March 30- April 4, 2014.

Jiang, H., M. Kieper, and Y. Pei, 2014: Improvement to the Satellite-based 37 GHz Ring Rapid Intensification Index. 67*th* *Interdepartmental Hurricane Conference/Tropical Cyclone Research Forum*, Mar 4-7, 2014.

Kieper, M., C. Landsea, and H. Jiang, 2014: The Internal Structure of 1969 Hurricane Camille for the Atlantic Hurricane Database Reanalysis Project. *AMS 31st Conference on Hurricanes and Tropical Meteorology Session 5C.7*, San Diego, California, March 30- April 4, 2014.

Tao, C. and H. Jiang, 2014: Distributions of convection in rapidly intensifying tropical cyclones. *AMS 31st Conference on Hurricanes and Tropical Meteorology Session 6D.1*, San Diego, California, March 30- April 4, 2014.

Pei, Y. and H. Jiang, 2014: Asymmetries of Tropical Cyclone Convection in Different Intensity Change Stages as Derived from Satellite 85 and 37 GHz observations. *AMS 31st Conference on Hurricanes and Tropical Meteorology Session 9C.6*, San Diego, California, March 30- April 4, 2014.

Fischer, M., J. Zagrodnik, H. Jiang, and M. E. Kieper, 2014: An Analysis of Rapidly Intensifying Tropical Cyclones Derived from 13 Years of TRMM Data. *AMS 31st Conference on Hurricanes and Tropical Meteorology*, San Diego, California, March 30- April 4, 2014.

Jiang, H., M. Kieper, and Y. Pei, 2014: Improvement to the Satellite-based 37 GHz Ring Rapid Intensification Index. 68th *Interdepartmental Hurricane Conference/Tropical Cyclone Research Forum*, Mar 4-7, 2014.

Jiang, H., M. Kieper, T. Yuan, E. Zipser, and J. Kaplan, 2013: Enhancement of SHIPS RI Index Using Satellite 37 GHz Microwave Ring Pattern: A Year-2 Update. 67th *Interdepartmental Hurricane Conference/Tropical Cyclone Research Forum*, Mar 5-7, 2013.

Jiang, H. and E. M. Ramirez 2012, Necessary Conditions for Tropical Cyclone Rapid Intensification as Derived from 11 Years of TRMM Data. *AGU Fall Meeting Session A23K (oral),* San Francisco, CA, December 3-7.

Kieper, M. and H. Jiang, 2012: Quantifying Intensity Forecasts for Rapid Intensification of Tropical Cyclones. *AGU Fall Meeting Session A13L (poster),* San Francisco, CA, December 3-7, 2012.

Tao, C. and H. Jiang, 2012: Contribution of tropical cyclones to global deep convection with overshooting tops. *AGU Fall Meeting Session A13L (poster),* San Francisco, CA, December 3-7, 2012.

Zagrodnik, J. P., and H Jiang, 2012: Comparison of TRMM PR and TMI Version 6 and Version 7 rainfall algorithms in Tropical Cyclones relative to the NEXRAD Stage-IV Multi-sensor Precipitation Estimate dataset. *AGU Fall Meeting Session H33C (poster),* San Francisco, CA, December 3-7, 2012.

Jiang, H., M. Kieper, and E. Zipser, 2012: The "Warm Rain" Ring Pattern and Tropical Cyclone Rapid Intensification. *NASA GRIP Science Team Meeting,* Wallops Flight Facility, VA, May 9-10, 2012, 2012.

Jiang, H., and E. M. Ramirez, 2012: Necessary Conditions for Rapid Intensification as Derived from 11 Years of TRMM Tropical Cyclone Precipitation Feature Database (TCPF). *NASA GRIP Science Team Meeting,* Wallops Flight Facility, VA, May 9-10, 2012.

Jiang, H., E. M. Ramirez, and D. J. Cecil, 2012: Convective and Rainfall Properties in the Inner Core and Tropical Cyclone Intensity Change Using 11-yr TRMM Data. AMS 30th *Conference on Hurricane and Tropical Meteorology*, Ponte Vedra Beach, FL, April 15-20, 2012.

Kieper, M., and H. Jiang, 2012: The 37 GHz Cyan Ring and Tropical Cyclone Rapid Intensification: What Does the Cyan Color Truly Represent? AMS 30th *Conference on Hurricane and Tropical Meteorology*, Ponte Vedra Beach, FL, April 15-20, 2012.

Tao, C., and H. Jiang, 2012: Climatology of Hot Towers in Tropical Cyclones Based on 12-year TRMM Data. AMS 30th *Conference on Hurricane and Tropical Meteorology*, Ponte Vedra Beach, FL, April 15-20, 2012.

Yuan, T., and H. Jiang, 2012: Evaluation of 37 GHz Microwave Ring Pattern for Forecasting Rapid Intensification of Tropical Cyclones from SSM/I, SSMI/S and AMSR-E data. AMS 30th *Conference on Hurricane and Tropical Meteorology*, Ponte Vedra Beach, FL, April 15-20, 2012.

Zagrodnik, J. P., and H. Jiang, 2012: Quantitative Comparison of TRMM Precipitation Algorithms in Tropical Cyclones. AMS 30th *Conference on Hurricane and Tropical Meteorology*, Ponte Vedra Beach, FL, April 15-20, 2012.

Jiang, H., M. Kieper, T. Yuan, E. Zipser, and J. Kaplan, 2012: Enhancement of SHIPS Rapid Intensification Index Using The 37-GHz Ring Pattern. 66th *Interdepartmental Hurricane Conference*, Charleston, SC, Mar 5-8, 2012.

Jiang, H., M. Kieper, T. Yuan, E. Zipser, and J. Kaplan, 2011: The 37-GHz Ring Pattern as An Early Indicator of Tropical Cyclone Rapid Intensification. *NASA GRIP Science Team Meeting,* Los Angeles, CA, Jun 6-9.

Jiang, H., C. Liu, and E. J. Zipser, 2011: The 13-yr TRMM-based Tropical Cyclone Cloud and Precipitation Feature (TCPF) Database. *NASA GRIP Science Team Meeting,* Los Angeles, CA, Jun 6-9.

Jiang, H., M. Kieper, T. Yuan, E. Zipser, and J. Kaplan, 2011: Improving SHIPS rapid intensification (RI) index using 37 GHz microwave ring pattern around the center of tropical cyclones. 65th *Interdepartmental Hurricane Conference*, Miami, FL, Feb. 28-Mar. 3.

Yuan, T., Jiang, H., and M. Kieper, 2011: Forecasting rapid intensification of tropical cylones in the Western North Pacific using TRMM/TMI 37 GHz microwave signal. 65th *Interdepartmental Hurricane Conference*, Miami, FL, Feb. 28-Mar. 3.

Jiang, H., 2010: Global distribution of convection in tropical cyclones based on 12 years of TRMM data. AMS *29th Conference on Hurricane and Tropical Meteorology*, Tucson, AZ, May 10-14.

Ramirez, E. M., H. Jiang, and E. J. Zipser, 2010: Convective Properties of Tropical Cyclone Inner Core and Rainband Precipitation Features for Different Storm Intensity and Intensity Change Stages from 11 years of TRMM Data. AMS *29th Conference on Hurricane and Tropical Meteorology*, Tucson, AZ, May 10-14.

Jiang, H., E. M. Ramirez, E. J. Zipser, 2009: Comparing the Strength of Eyewall, Inner Rainband, and Outer Rainband Convection Using 10 years of TRMM Data. Poster, *AGU Fall Meeting, San Francisco, CA, December 14-18.*

Jiang, H., 2009: The diurnal cylce of rainfall and convective intensity in tropical cyclones from 11 years of TRMM observations. Poster, 2009 *NASA Precipitation Measurement Missions (PMM) Science Meeting*, Salt Lake City, UT, October 26-29.

Ramirez, E. M. and H. Jiang, 2009: Relating Outer Band Convective Proxies to Tropical Cyclone Intensity Changes. Oral, *AMS 13th Conference on Mesoscale Processes*, Sheraton Hotel Centre, Salt Lake City, UT, August 17-20.

Jiang, H., E. J. Zipser, C. Liu, J. B. Halverson, and T. Liu, 2009: A TRMM based tropical cyclone precipitation feature database and its usage on intensification study. Oral, *2009 NASA Hurricane Science Research Team Meeting (GRIP)*, Florida State University, Tallahassee, FL, April 6-8.

Jiang, H., E. J. Zipser, J. B. Halverson, and R. Rogers, 2009: Use of total precipitable water to aid hurricane rainfall prediction. Poster, *63rd Interdepartmental Hurricane Conference*, St. Petersburg, FL, March 2-5.

Jiang, H., and E. J. Zipser, 2008: Intense convection in hurricane eyewalls: A predictor or symptom of hurricane intensification? Oral, *2008 AGU Fall Meeting*, San Francisco, CA, December 15-19.

Jiang, H., and E. J. Zipser, 2008: Global distribution of tropical cyclone rainfall and its contribution tototal precipitation from 9 years of TRMM 2A25, 2A12, and 3B42. *Fourth Workshop of the International Precipitation Working Group (IPWG)*, Beijing, China, October 13-17, 2008.

Jiang, H., C. Liu, E. J. Zipser, and E. Ramirez, 2008: A TRMM based tropical cyclone precipitation feature database. Poster, *2008 NASA Precipitation Measurement Missions (PMM) Science Meeting*, Fort Collins, CO, August 4-7.

Liu, C., H. Jiang, E. J. Zipser, and E. F. Stocker, 2008: Online applications of the University of Utah TRMM precipitation feature database. Poster, *2008 NASA Precipitation Measurement Missions (PMM) Science Meeting*, Fort Collins, CO, August 4-7.

Jiang, H., and E. J. Zipser, 2008: Is tropical cyclone intensity change related to the strength of its convective precipitation features? Using 9 years of TRMM data to find an answer. *28th Conference on Hurricane and Tropical Meteorology*, Orlando, FL, April 28-May 2.

Jiang, H., J. B. Halverson, and E. J. Zipser, 2008: Effects of environmental moisture on tropical cyclone precipitation: Land/ocean difference. Oral, *Third International TRMM Science Conference*, Las Vegas, NV, February 4-8.

Jiang, H., E. J. Zipser, and B. Kerns, 2008: Contribution of tropical cyclones to the global precipitation from 9 years of TRMM data: Regional, seasonal, and interannual variations. Poster, *Third International TRMM Science Conference*, Las Vegas, NV, February 4-8.

Jiang, H., J. B. Halverson, and E. J. Zipser, 2007: Study on tropical cyclone rainfall over land and sea using TRMM 3B42: Implications for inland flooding prediction. Poster, *NASA Precipitation Measurement Missions (PMM) Science Team Meeting*, Atlanta, GA, May 7-10.

Jiang, H., J. B. Halverson, and J. Simpson, 2006: Difference of Rainfall Distribution for Tropical Cyclones Over Land and Ocean and Rainfall Potential Derived from Satellite Observations and Its Implication on Hurricane Landfall Flooding Prediction. Oral, *27th Conference on Hurricane and Tropical Meteorology*, Monterey, CA, April 24-28.

Jiang, H., J. B. Halverson, and J. Simpson, 2006: Hurricane "Rainfall Potential" Derived from Satellite Observations Aids Landfall Flooding Prediction. Poster, *Workshop on Tropical Cyclones and Climate*, The International Research Institute for Climate and Society of Columbia University, Palisades, NY March.

Jiang, H., J. B. Halverson, and J. Simpson, 2005: On the difference of storm wetness of Hurricane Isidore and Lili: Satellite Observations, Rain Potential, and Water budget. Poster, *NASA Precipitation Measurement Missions (PMM) Science Team Meeting*, Monterey, CA, December.

Halverson, J. B., H. Jiang, and J. Simpson, 2005: Use of the Goddard Multi-Satellite Precipitation Analysis (MPA or TRMM 3B42) and a global forecast model to diagnose rainfall intensity and water budget differences on two tropical cyclones. Poster, *59th Interdepartmental Hurricane Conference*, Jacksonville, FL, March.

Jiang, H. and E. J. Zipser, 2004: Combined radar-radiometer retrieval of hydrometer profiles in tropical cyclones: A TRMM case study. Poster, *First Symposium for the Earth System Scholars Network.* Adelphi, MD, Water and Energy Cycle Session.

Jiang, H. and E. J. Zipser, 2004: Combined radar-radiometer retrieval of hydrometer profiles in tropical cyclones: A TRMM case study. Oral & Preprints, *2nd TRMM International Science Conference*, Tokyo, Japan, Session 3.5.

Jiang, H. and E. J. Zipser, 2004: Retrieval of hydrometeor profiles in tropical cyclones and convection by a combined radar-radiometer algorithm. Oral & Preprints, *26th Conference on Hurricane and Tropical Meteorology*, Miami, FL , Amer. Meteor. Soc., Session 6D.1, pp 194-195.

Jiang, H. and E. J. Zipser, 2003: A combined radar-radiometer algorithm to estimate hydrometeor profiles in tropical cyclones. Oral & Preprints, *31st International Conference on Radar Meteorology*, Seattle, Washington, Session 6.3, pp 379-382.

Zipser, E. J. and H. Jiang, 2003: Variability of ice and liquid precipitation contents and shape of radar reflectivity profiles in tropical cyclones. Oral & Preprints, *31st International Conference on Radar Meteorology*, Seattle, Washington, Session 6.2, pp 375-379.

Jiang, H., P. G. Black, E. W. Uhlhorn, P. A. Leighton, E. J Zipser, and F. D. Marks, 2002: Optimal rain rate estimation tropical cyclones: Validation of SFMR remote sensing rain rates. Oral & Preprints, *25th Conference on Hurricane and Tropical Meteorology*, San Diego, CA, Session 12A.1, pp 475-476.

Zipser, E. J., and H. Jiang, 2002: Large storm-to-storm variations in estimated ice water content and liquid water content: how do Chantal, Erin, and Humberto (EDOP data) compare with a larger sample from TRMM? Oral, *CAMEX Workshop*, Huntsville, Alabama, November 20-22, Microphysics and Lightening Session.

Jiang, H., R. Ge, and X. Zhu, 2000: Primary Analysis on the Flow Structure of the Strong Precipitation on June 9 in Changle Area During HUAMEX (IOP#6). Oral & Preprints, *4th International Conference on East Asia and Western Pacific Meteorology and Climate*, Hangzhou, China.

Jiang, H. and R. Ge, 2000: A new retrieval technique for single-Doppler radar. Oral & Preprints, *WMO Technical Conference on Meteorological and Environmental Instruments and Methods of Observations (TECO-2000)*, Beijing, China, Session 1.3(7); *WMO Instruments and Observing Methods Report*, No. 24, 269-272.

Ge, R., X. Zhu, H. Jiang, and L. Wang, 2000: China new generation radar. *Oral & Preprints, WMO Technical Conference on Meteorological and Environmental Instruments and Methods of Observations (TECO-2000)*, Beijing, China, Session 1.3(5); *WMO Instruments and Observing Methods Report*, No. 24, 262-264.

Jiang, H. and R. Ge, 1997: A new technique retrieval for single-Doppler radar. Oral & Preprints, *International Seminar on Mesoscale Meteorology and Radar Meteorology*, Taegu, Korea, 27-32.

Jiang, H. and R. Ge, 1996: Retrieving 2-D horizontal wind field from single Doppler radar data by Vorticity-Divergence method. Oral & Preprints, *Conference on Atmospheric Probing Technique*, Lu Mountain, Jiangxi, China