

# CURRICULUM VITAE

## Haiyan Jiang

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<http://faculty.fiu.edu/~hajian/Jiang/>

### Education

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

### Professional Experience

2020-present: Professor, Florida International University  
2014-2020: Associate Professor, Florida International University  
2010-2014: Assistant Professor, Florida International University  
2007-2009: Research Assistant Professor, University of Utah  
2004-2006: Postdoctoral Research Associate, Joint Center for Earth Systems Technology, University of Maryland Baltimore County, and NASA Goddard Space Flight Center  
2000-2004: Graduate Research Assistant, University of Utah  
2001: Summer Intern, NOAA Hurricane Research Division  
1998-2000: Research Associate, Research Center for Disastrous Weather, CAMS, China  
1995-1998: Research Assistant, Institute of Mesoscale Meteorology, CAMS

### Honors and Awards

FIU CASE Communication Award	2018-2019
Awarded Sabbatical Leave from FIU	2016-2017 academic year
FIU Top Scholar Award	2014
FIU Summer Faculty Development Award	2011
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
1 <sup>st</sup> , 2 <sup>nd</sup> , and 3 <sup>rd</sup> -class scholarship, Nanjing Institute of Meteorology, China	1989-1992

### Funded Research Proposals

- 2020-2023: NSF: Examining the Rainfall Distribution and Asymmetries during the Landfalling Process of Tropical Cyclones. (Principal Investigator)
- 2017-2021: 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)
- 2017-2020: NOAA Joint Hurricane Testbed (JHT) FY17: Estimation of Tropical Cyclone Intensity Using Satellite Passive Microwave Observations. (Principal Investigator)
- 2015-2018: NOAA Joint Hurricane Testbed (JHT) FY15: Improvement and Implementation of the Probability-based Microwave Ring Rapid Intensification Index for NHC/JTWC Forecast Basins. (Principal Investigator)
- 2014-2017: NASA Earth and Space 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 and Space 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 and Space 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)

### Professional Service and Activities

Associate Editor, <i>Monthly Weather Review</i>	2017-present
Editorial Board, <i>Climate</i>	2012-2014
Member, NASA Global Hydrology Resource Center (GHRC) User Working Group	2016-present
Member, World Meteorology Organization (WMO) 8 <sup>th</sup> & 9 <sup>th</sup> International Workshops on Tropical Cyclones (IWTC-8 &9) Working Group for Topic 2.6 Intensity Change: Internal Influences	2014, 2018
Member, WMO 3 <sup>rd</sup> and 4 <sup>th</sup> International Workshops on Tropical Cyclone Landfall Processes (IWTCLP-III &IV) Working Group for Focus Area TC Rainfall	2014, 2017
Review Panels/Committees for NASA	2009, 2011, 2012, 2013, 2018
Review Panels/Committees for NSF	2018, 2019
Journal article reviewer for Nature Geosciences, & various AMS and AGU journals	2003-present

### Convener, Coordinator, and Chair of Scientific Conferences or Special Sessions

8. Co-Chair of Session 14 “Tropical Cyclone II and Maritime Diurnal Cycle” at the American Meteorological Society 18<sup>th</sup> Conference on Mesoscale Processes, Savannah, GA, July 29 – Aug 01, 2019.
7. Coordinator of the “*Tropical Cyclone and Remote Sensing*” topic for the American Meteorological Society 33<sup>rd</sup> Conference on Hurricanes and Tropical Meteorology, Ponte Vedra, FL April 16 – 20, 2018.
6. Chair of Session 10D “*Tropical Cyclone and Remote Sensing I*” at the American Meteorological Society 33<sup>rd</sup> Conference on Hurricanes and Tropical Meteorology, Ponte Vedra, FL April 16 – 20, 2018.
5. Co-host of 2018 Tropical Cyclone Operations and Research Forum (TCORF)/72nd Interdepartmental Hurricane Conference (IHC), FIU Graham Center, Miami, FL, March 13-15, 2018 (co-host with the NOAA’s Office of the Federal Coordinator for Meteorology).
4. Chair of Session 13B “*Tropical Cyclone Rainbands and Precipitation I*” at the American Meteorological Society 32<sup>nd</sup> Conference on Hurricanes and Tropical Meteorology, San Juan, Puerto Rico, USA, April 17-22, 2016.
3. Chair of Session 10A “*Tropical Cyclone Rainbands and Precipitation*” at the American Meteorological Society 31<sup>st</sup> Conference on Hurricanes and Tropical Meteorology, San Diego, California, USA, March 30- April 4, 2014.
2. Co-Convener and Co-Chair of 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.

1. Chair of Session on “Comparisons of the 2008 and 2010 Snapshots of Tropical Cyclone R & D” at the NOAA 65<sup>th</sup> Interdepartmental Hurricane Conference, Miami, Florida, Feb. 28-Mar. 3, 2011.

### **Teaching Experience**

*At Florida International University*

MET 3502 & MET 3502L, Synoptic Meteorology and Lab, Fall 2019, Fall 2018, 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 2018, Fall 2014, Fall 2013  
MET4520L/5533L, Weather Discussion, Fall 2017, Fall 2015  
MET 4410/5412, Remote Sensing in Meteorology, Spring 2020, Spring 2018, 2014, 2011  
MET 4300/MET5355, Severe Weather, Fall 2020, Spring 2019, 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)

### **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](http://www.inscc.utah.edu/~u0180931/hjiang/west/severe_weather_module.html)).

### **Graduate Students Supervised**

10. Oscar Guzman, Ph.D. (Fall 2018-present)
9. Adrian Lopez, Ph.D. (Fall 2017-present)
8. Xinxi Wang, Ph.D. (Fall 2017-present)
7. Tyler Wieland, M.S. (Fall 2014-Fall 2016)
6. Yongxian Pei, Ph.D. (Fall 2012-Fall 2017; defended on Oct. 12, 2017; currently as Quantitative Analyst at Yintech Data Science Company)
5. Bradley Klotz, Ph.D. (Fall 2013-Spring 2017; defended on March 30, 2017; currently as Research Scientist at Applied Research Laboratories, University of Texas at Austin)
4. Margaret Kieper, Ph.D. (Fall 2012-Spring 2016)
3. Cheng Tao, Ph.D. Student (Fall 2010-Spring 2016; defended on Nov. 23, 2015; currently as Research Scientist at DOE Lawrence Livermore National Laboratory)
2. Joseph Zagrodnik, M.S. Student (Fall 2010-summer 2013; defended on Nov. 5, 2012; currently as Postdoctoral Research Associate at Washington State University AgWeatherNet)
1. Ellen M. Ramirez, M.S. Student (Fall 2008-Fall 2010; defended on Dec. 9, 2010; currently as Physical Scientist at NOAA NESDIS Office of Satellite and Product Operations, Satellite Analysis Branch)

### **Undergraduate Students Supervised for Research**

3. Michael Fischer (Spring 2013-Summer 2013): Research project titled, “An analysis of rapidly intensifying tropical cyclones in Atlantic and Eastern North Pacific basins derived from 13 years of TRMM data”
2. Brian Matilla, (Fall 2014-Spring 2015): Thesis titled, “The relationship between lightning and precipitation in tropical cyclones”
1. Logan Saucer, (Spring 2017- Fall 2017)

**Peer-Reviewed Articles (\*\*M.S. Student, †Ph.D. Student, ††Postdoc)**

39. †Wang, X. and **H Jiang**, 2020: Contrasting behaviors between the rapidly intensifying and slowly intensifying tropical cyclones in the North Atlantic and Eastern Pacific basins. *J. Climate*, accepted.
38. ††Wang, X., **H Jiang**, J. A. Zhang, and K. Peng 2020: Satellite-observed warm-core structure in relation to tropical cyclone intensity change. *Atmospheric Research*, **240(2020)**, 104931. <https://doi.org/10.1016/j.atmosres.2020.104931>
37. ††Qian, B., **H. Jiang**, F. Weng, and Y. Wu, 2020: Climatology of Passive Microwave Brightness Temperatures in Tropical Cyclones and their Relations to Storm Intensities as seen by FY-3B/MWRI. *Remote Sensing*, **12(1)**, 147; <https://doi.org/10.3390/rs12010147>.
36. ††Wang, X. and **H Jiang**, 2019: A 13-Year Global Climatology of Tropical-Cyclone Warm-Core Structures from AIRS Data. *Mon. Wea. Rev.*, **147**, 773–790.
35. **Jiang, H.**, ††C. Tao, and ††Y. Pei, 2019: Estimation of Tropical Cyclone Intensity in the North Atlantic and Northeastern Pacific Basins Using TRMM Satellite Passive Microwave Observations. *J. Appl. Meteor. Climatol.*, **58**, 185–197.
34. †Pei, Y. and **H. Jiang**, 2018: Quantification of Precipitation Asymmetries of Tropical Cyclones Using 16-yr TRMM Observations. *J. Geophys. Res.*, **123**, 8091–8114.
33. **Jiang, H.**, \*\*J. P. Zagrodnik, †C. Tao, and E. J. Zipser, 2018: Classifying precipitation types in tropical cyclones using the NRL 37 GHz color product. *J. Geophys. Res.*, **123**, 5509–5524.
32. Cheung, K., Z. Yu, R. L. Elsberry, M. Bell, **H. Jiang**, T. C. Lee, K.-C. Lu, Y. Oikawa, L. Qi, R. F. Rogers, K. Tsuboki, 2018: Recent Advances in Research and Forecasting of Tropical Cyclone Rainfall. *Tropical Cyclone Research and Review*, **7(2)**, 106-127.
31. Yang, Z., T. Yuan, **H. Jiang**, L. Zhang, and C. Zhang, 2018: Stratiform and Convective Precipitation Properties of Tropical Cyclones in the Northwest Pacific. *J. Geophys. Res.*, **123**, 3513-3529.
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**, 1-9. 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 very 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: Comparison of TRMM precipitation radar and microwave imager 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. Rev.*, **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: Influence of environmental moisture on TRMM-derived tropical cyclone precipitation over land and ocean. *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.
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.
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.
2. **Jiang, H.** and R. Ge, 1997: A new retrieval technique for single-Doppler radar, *Quarterly Journal of Applied Meteorology*, **8(2)**, 219-223.
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.

#### **Online Database Publication:**

1. Jiang, H. C. Liu, E. J. Zipser, and D. J. Cecil, 2015: TRMM Tropical Cyclone Precipitation Feature (TCPF) Database - Level 1. *Global Hydrology Resource Center, NASA Distributed Active Archive Center*. DOI: 10.5067/TRMM/TCPF-L1/DATA201

#### **Dissertation and Thesis Supervised**

6. Pei, Y., 2017: Quantification of Precipitation Asymmetries in Tropical Cyclones and Their Relationship to Storm Intensity Changes Using TRMM Data. Ph.D. dissertation, Florida International University, defended on Oct. 12, 2017, 127 pp.
5. Klotz, B., 2017: Evaluation and predictability of observation-based surface wind asymmetric structure in tropical cyclones. Ph.D. dissertation, Florida International University, defended on Mar. 30, 2017, 170 pp.
4. 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, defended on Nov. 23, 2015, 193 pp.
3. Matilla, B., 2015: The relationship between lightning and precipitation in tropical cyclones. Undergraduate Honor Thesis, the Honors College Advanced Research and Creativity in Honors Curriculum, Florida International University, 2015.
2. Zagrodnik, J. P., 2012: Comparison of Tropical Rainfall Measuring Mission (TRMM) Rainfall Algorithms in Tropical Cyclones. M.S. thesis, Florida International University, defended on Nov. 5, 2012, 106 pp.

1. 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, defended 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' 60<sup>th</sup> 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: 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.** 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 Papers and Abstracts Presented (\*Undergraduate student, \*\*M.S. Student, †Ph.D. Student, ††Postdoc)**

79. **Jiang, H.** and X. Wang<sup>††</sup>, 2019: Satellite-Observed Warm-Core Structure in Relation to Tropical Cyclone Intensity and Intensity Change. *AMS 18<sup>th</sup> Conference on Mesoscale Processes, Session 13*, Savannah, GA, July 29-August 1, 2019.
78. Lopez<sup>†</sup>, A. and **H. Jiang**, 2019: Climatology of Lightning in Tropical Cyclones as Observed by TRMM Lightning Imaging Sensor. *AMS 18<sup>th</sup> Conference on Mesoscale Processes, Session 14*, Savannah, GA, July 29-August 1, 2019.
77. Guzman<sup>†</sup>, O. R. and **H. Jiang**, 2019: Climatology of Tropical Cyclone Rainfall Derived from TRMM/GPM 3B42 Data. *AMS 18<sup>th</sup> Conference on Mesoscale Processes, Session 13*, Savannah, GA, July 29-August 1, 2019.
76. Wang<sup>†</sup>, X. and **H. Jiang**, 2019: A Refined Relationship between Tropical Cyclone Intensification Rate and Precipitation and Convective Features in the Inner Core. *AMS 18<sup>th</sup> Conference on Mesoscale Processes, Session 8*, Savannah, GA, July 29-August 1, 2019.

75. **Jiang, H.**, Y. Pei††, and X. Wang†, 2019: Estimation of Tropical Cyclone Intensity Using Satellite Passive Microwave Observations: Year 2 Update, *73rd Interdepartmental Hurricane Conference/2019 Tropical Cyclone Research Forum*, Miami, Florida, Mar 12-14, 2019.
74. **Jiang, H.** 2018: Tropical Cyclone Passive Microwave Intensity Estimation (PMW-IE) Model. *AMS 33rd Conference on Hurricanes and Tropical Meteorology Session 15C*, Ponte Vedra, FL, April 16-20, 2018.
73. Lopez†, A. and **H. Jiang**, 2018: Climatology of Lightning in Tropical Cyclones as Observed by TRMM Lightning Imaging Sensor. *AMS 33rd Conference on Hurricanes and Tropical Meteorology Session 14C*, Ponte Vedra, FL, April 16-20, 2018.
72. Pei††, Y. and **H. Jiang**, 2018: Quantification of Shear-relative Precipitation Asymmetries of Tropical Cyclones in Different Intensity Change Stages and during the Evolution of Rapid Intensification Using 16 years of TRMM Data. *AMS 33rd Conference on Hurricanes and Tropical Meteorology Session 14C*, Ponte Vedra, FL, April 16-20, 2018.
71. Tao††, C. and **H. Jiang**, 2018: Climatology of Precipitation Types in Tropical Cyclones using Version 7 of the TRMM PR 2A23 Product. *AMS 33rd Conference on Hurricanes and Tropical Meteorology Session 11D.6A*, Ponte Vedra, FL, April 16-20, 2018.
70. Wang†, X. and **H. Jiang**, 2018: Evolution of Environmental Characteristics in Rapidly Intensifying and Slowly Intensifying Tropical Cyclones in the North Atlantic and Eastern North Pacific. *AMS 33rd Conference on Hurricanes and Tropical Meteorology Session 9C*, Ponte Vedra, FL, April 16-20, 2018.
69. Pei†, Y., **H. Jiang**, K. Musgrave, J. Zawislak††, and G. Chirokova, 2018: Improvement and Implementation of the Probability-based Microwave Ring Rapid Intensification Index (PMWRing RII) for NHC/JTWC Forecast – Year 3 Update, *72nd Interdepartmental Hurricane Conference/2018 Tropical Cyclone Research Forum*, Miami, Florida, Mar 13-15, 2018.
68. **Jiang, H.**, Y. Pei†, and C. Tao†, 2018: Estimation of Tropical Cyclone Intensity Using Satellite Passive Microwave Observations, *72nd Interdepartmental Hurricane Conference/2018 Tropical Cyclone Research Forum*, Miami, Florida, Mar 13-15, 2018.
67. **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.
66. **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” *71st Interdepartmental Hurricane Conference/2017 Tropical Cyclone Research Forum*, Mar 14-16, 2017.
65. 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).
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