

Robert E. Hart

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Florida State University

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Florida State University

404 Love Building

1017 Academic Way

Tallahassee, FL 32306-4520

GENERAL INFORMATION

PERSONAL

Birthdate: 14 December 1972 (Age 37), North Branford, CT, United States
Citizenship: United States

EDUCATION (Meteorology)

2001	Ph.D.	Pennsylvania State University. Major Professor: J. Evans
1997	M.S.	Pennsylvania State University. Major Professor: G. Forbes
1995	B.S.	Pennsylvania State University (Honors). Computer Science Minor

PROFESSIONAL POSITIONS

2009-	Associate Professor, Dept. of Meteorology, Florida State University
2003-2009	Assistant Professor, Dept. of Meteorology, Florida State University
2002-2003	UCAR Visiting Scientist

PROFESSIONAL ORGANIZATIONS

American Meteorological Society
American Geophysical Union

HONORS AND AWARDS

2008	BAMS Editor's Papers of Note, Amer. Met. Society (for Hart et al. 2007, MWR)
2007	American Meteorological Society Banner Miller Award (for Hart 2003, MWR)
2001, 2002	Special Award for Teaching, Pennsylvania State University
1998-2001	Environmental Protection Agency STAR Fellowship
1998-2000	NASA Space Grant Fellowship
1999	National Weather Service Eastern Region Outstanding Service Award
1998	NCAR Advanced Studies Program (ASP) Hurricanes Colloquium
1998	Pennsylvania State University Robert O. Cole Scholarship
1997-1998	Pennsylvania State University Earth System Science Center Fellowship
1995-1997	UCAR COMET Graduate Fellowship
1995-1997	Pennsylvania State University Ann Wilson Graduate Fellowship
1995	Pennsylvania State University John A. Dutton Dynamics Award
1994	Web Page Content Awards awarded by Point.com and Magellan.com
1991	Valedictorian, High School, North Branford, CT

NATIONAL AND INTERNATIONAL CHAIRS AND COMMITTEES

2009	Chair, UCAR URC/PACUR NSF Proposal Review Subcommittee
2009	Member, UCAR URC/PACUR NSF Proposal Review Subcommittee
2008	Session Chair, AMS Hurricanes and Tropical Meteorology Conference
2008	Conference Chair, AMS Special Hurricanes Symposium
2007-	Member, UCAR URC/PACUR Committee
2007	Session Chair, 1 st International Summit on Hurricanes and Climate Change
2007-2008	Chair, Florida State University Tropical Meteorology Faculty Search Committee
2006-	Member, AMS Hurricanes and Tropical Meteorology Steering Committee
2006	Chair, AMS Max Eaton Award Selection Committee
2005	Group Chair, 6 th International Workshop on Tropical Cyclones
2004	Member, AMS Max Eaton Award Selection Committee
2003	Session Chair, Cyclone Workshop, Val-Morin, Quebec

DEPARTMENT AND UNIVERSITY SERVICE

System Administrator	Beowulf Cluster, Self-Created: 121CPUS, 283GB memory, and 50TB of disk space utilized by seven faculty members and 65 students since 2003. Also, Linux installation on approximately one dozen student and faculty laptops
Developer	Department Electronic Maproom
Chair	EOAS Department Merger Infrastructure Committee

Chair	Faculty Search Committee
Chair	Chi Epsilon Pi Meteorology Honor Society
Member	EOAS Department Merger Strategic Planning Committee
Member	Department Chair Search Committee
Member	Departmental Awards Committee
Member	Undergraduate Curriculum Committee
Member	Graduate Curriculum Committee
Member	AMS Annual Meeting Travel Committee
Member	Department Computer Committee
Member	Department Father McElwane Evaluation Committee
Member	Department Publicity Committee
Member	University High Performance Computing Committee

EDITORSHIPS

2006-2009 Associate Editor, Monthly Weather Review

JOURNAL & PROPOSAL REVIEWER

2009	Nature Geoscience
2009	NOAA
2009	Quarterly Journal Royal Met. Society
2009	Meteorology and Atmospheric Physics
2007	Climate Research
2007-	Journal of Geophysical Research
2007-	Geophysical Research Letters
2006-	Bulletin of the American Meteorological Society
2005-	National Science Foundation
2005	International Journal of Climatology
2004	Journal of Applied Meteorology
2003	Meteorologische Zeitschrift
2002	Atmosphere-Ocean
2002-	Weather and Forecasting
2000-	Journal of Climate
1999-	Monthly Weather Review
1999-2002	Earth and Sky

GRADUATES, Theses and current positions

2009 (MS) Murray, Andrew, "Improved short-term Atlantic hurricane intensity forecasts using reconnaissance-based core measurements." Instructor, Univ. South Alabama.

- 2009 (PhD) Evans, Clark, "The thermodynamic evolution of recurving tropical cyclone Bonnie (1998)." NCAR ASP Fellow.
- 2008 (MS) Bloemer, Matthew, "The Post-Landfall Decay of U.S. Tropical Cyclones: Climatology & Characteristics of Anomalous Decay." NWS Eureka.
- 2008 (BS) Molina, Maria, "An analysis of the factors driving the motion of Hurricane Andrew (1992)." (Honors Thesis)
- 2008 (BS) Deal, Robert, "Climatology and trends in Atlantic recon reports as compared to best-track." (Honors Thesis), M.S. Candidate, Florida State University.
- 2007 (MS) Piech, David, "Atlantic reconnaissance vortex message climatology and composites and their use in characterizing eyewall cycles." Impact Weather, Houston, TX.
- 2007 (MS) Manning, Danielle, "The utility of the ERA40 CPS in Trend Diagnosis and North Atlantic Tropical Cyclone Reanalysis." National Weather Service, Slidell, LA.
- 2006 (MS) Durante, Andrew, "The development of forecast confidence measures using NCEP ensembles." Constellation Energy, Baltimore, MD.
- 2006 (MS) Evans, Clark, "Dynamics of the wind field expansion associated with extratropically Transitioning tropical cyclones."
- 2005 (MS) Watson, Michael, "A recalculation of MPI using upper-ocean depth-averaged temperatures: Climatology and Case Studies." Surfline-Wavetrack, Melbourne, FL.

CURRENT STUDENTS

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|-------------------------------|---|
| 2011 (PhD) Schenkel, Benjamin | Climate memory of tropical cyclones |
| 2010 (MS) Truchelut, Ryan | Pre-satellite forensic signals of tropical cyclones within 20th Century Reanalysis. |
| 2010 (B.S) Cossuth, Joshua | Dvorak-based analysis of tropical cyclogenesis. (Honors thesis) |

DISSERTATION COMMITTEE

- | | | | |
|------------------|-------|-------------|--------------------------|
| Aarolyn Thompson | M.S. | Meteorology | Florida State University |
| Adam O'Shay | Ph.D. | Meteorology | Florida State University |
| Amanda Hopkins | Ph.D. | Meteorology | Florida State University |

Andrew Kimball	M.S.	Meteorology	Florida State University
Andrew Latto	M.S.	Meteorology	Florida State University
Andrew Martin	M.S.	Meteorology	Florida State University
Ashlee Hicks	M.S.	Meteorology	Florida State University
Benjamin Schenkel	M.S.	Meteorology	Florida State University
Brian Jackson	M.S.	Meteorology	Florida State University
Bruce Veenhuis	M.S.	Meteorology	Florida State University
Chris Morrow	M.S.	Meteorology	Florida State University
Dante Diaz	M.S.	Meteorology	Florida State University
David Rock	M.S.	Meteorology	Florida State University
David Ryglicki	M.S.	Meteorology	Florida State University
Derrick Weitlich	M.S.	Meteorology	Florida State University
Donald Van Dyke	M.S.	Meteorology	Florida State University
Donald Van Dyke	Ph.D.	Meteorology	Florida State University
Elizabeth Minter	Ph.D.	Meteorology	Florida State University
Emily Fogarty	Ph.D.	Geography	Florida State University
Geoffrey Stano	Ph.D.	Meteorology	Florida State University
Gloria Arrocha	M.S.	Meteorology	Florida State University
Heather Szymczak	M.S.	Meteorology	Florida State University
Henry Winterbottom	Ph.D.	Meteorology	Florida State University
Holly Anderson	M.S.	Meteorology	Florida State University
Jeff Wood	M.S.	Geography	Florida State University
Jeffrey Baum	Ph.D.	Meteorology	Florida State University
Jeremy Ross	Ph.D.	Meteorology	Pennsylvania State University
Jessica Fieux	M.S.	Meteorology	Florida State University
Jim Waller	M.S.	Meteorology	Florida State University
Jordanna Sheermohamed	M.S.	Meteorology	Florida State University
Julie Lesko	M.S.	Meteorology	Florida State University
Justin Arnott	Ph.D.	Meteorology	Pennsylvania State University
Kathleen Kulgren	M.S.	Meteorology	Florida State University
Kelsey Scheitlin	Ph.D.	Geography	Florida State University
Lawrence Pologne	M.S.	Meteorology	Florida State University
Leela Ramaswamy	Ph.D.	Meteorology	Florida State University
Mark Guishard	Ph.D.	Meteorology	Pennsylvania State University
Mark Yorsaner	M.S.	Meteorology	Florida State University
Matthew Carrier	Ph.D.	Meteorology	Florida State University
Melanie Kramer	M.S.	Meteorology	Florida State University
Michael Jordan	Ph.D.	Meteorology	Florida State University
Michael Lowry	M.S.	Meteorology	Florida State University
Michelle Stewart	M.S.	Meteorology	Florida State University
Peter Bogenshutz	M.S.	Meteorology	Florida State University
Phil Hayes	Ph.D.	Meteorology	Florida State University

Phil Shafer	Ph.D.	Meteorology	Florida State University
Qin Li	Ph.D.	Mathematics	Florida State University
Ryan Maue	M.S.	Meteorology	Florida State University
Ryan Maue	Ph.D.	Meteorology	Florida State University
Scott Rudlosky	Ph.D.	Meteorology	Florida State University
Shane Young	M.S.	Meteorology	Florida State University
Stephen Guimond	M.S.	Meteorology	Florida State University
Stephen Guimond	Ph.D.	Meteorology	Florida State University
Tammy Lytek	M.S.	Meteorology	Florida State University
Travis Smith	Ph.D.	Meteorology	Florida State University
William Maxham	M.S.	Meteorology	Florida State University

PUBLICATIONS

BOOK AND BOOK CHAPTERS

1. Evans, J.E. and **R. E. Hart**, 2006: "Extratropical Transition of tropical cyclones". Atmosphere-Ocean Interaction. Wessex Institute of Technology. Ed: William Perrie.

PEER-REVIEWED JOURNAL PUBLICATIONS (Underline is student)

1. Guishard, M.P., J. L. Evans, **R.E. Hart**, 2009: Atlantic Subtropical Storms. Part II: Climatology. *J. Climate*, 22, 3574-3594.
2. Junker, N.W, Richard. H. Grumm, **R. E. Hart**, L.F. Bosart, K. M. Bell, and Frank J. Pereira, 2008: Use of anomalous fields to anticipate extreme rainfall in the mountains of northern California. *Wea. And Forecasting*, 23, 336-356.
3. Evans, C. and **R.E. Hart**, 2008: Analysis of the wind field evolution associated with the extratropical transition of Bonnie (1998). *Mon. Wea. Rev.*, 136, 2047-2065.
4. **Hart, R.E.**, R. Maue, and M. Watson, 2007: Estimating the atmospheric and SST memory of tropical cyclones through MPI anomaly evolution. *Mon. Wea. Rev.*, 135, 3990-4005.
5. Maue, R. and **R. E. Hart**, 2007: Comment on "Low frequency variability in globally integrated tropical cyclone power dissipation." *Geo. Res. Let.*, 34, L11703, doi:1029/2006GL028283.
6. Manning, D. and **R. E. Hart**, 2007: Evolution of North Atlantic ERA40 Tropical Cyclone

- Representation. *Geo. Res. Let.*, 34, L05705, doi:10.1029/2006GL028266.
7. Guishard, M.P., E. A. Nelson, J. L. Evans, **R. E. Hart**, and D. G. O'Connell, 2007: Bermuda subtropical storms. *Meteor. And Atmos. Phys.*, doi: 10.1007/s00703-006-0255-y.
 8. **Hart, R.**, J. L. Evans, and C. Evans, 2006: Synoptic Composites of the Extratropical Transition Lifecycle of North Atlantic Tropical Cyclones: Factors Determining Post-Transition Evolution. *Mon. Wea. Rev.*, 134, 553-578.
 9. **Hart, R.**, 2003: A cyclone phase space derived from thermal wind and thermal asymmetry. *Mon. Wea. Rev.*, 131, 585-616.
 10. Evans, J.L. and **R. Hart**, 2003: Objective indicators of the extratropical transition lifecycle of Atlantic tropical cyclones. *Mon. Wea. Rev.*, 131, 909-925.
 11. Jones, S.C., P.A. Harr, J. Abraham, L.F. Bosart, P.J. Bowyer, J.L. Evans, D. E. Hanley, B. N. Hanstrum, **R.E. Hart**, F. Lalaurette, M.R. Sinclair, R.K. Smith, and C. Thorncroft, 2003: The extratropical transition of tropical cyclones: Forecast challenges, current understanding, and future directions. *Wea. Forecasting*, 18, 1052-1092.
 12. Grumm, R. H. and **R. Hart**, 2001: Standardized Anomalies Applied to Significant Cold Season Weather Events: Preliminary Findings *Wea. Forecasting*, 16, 736-754.
 13. **Hart, R.** and R.H. Grumm, 2001: Using normalized climatological anomalies to objectively rank extreme synoptic-scale events. *Mon. Wea. Rev.*, 129, 2426-2442.
 14. **Hart, R.** and J.L. Evans, 2001: A climatology of the extratropical transition of Atlantic tropical cyclones. *J. Climate*, 14, 546-564.
 15. **Hart, R.E.** and G. S. Forbes, 1999: The use of hourly model-generated soundings to forecast mesoscale phenomena: Part II: Forecasting non-convective strong wind gusts. *Wea and Forec.*, 14, 461-469.
 16. **Hart, R.**, and J.L. Evans, 1999: Simulations of dual-vortex interaction within Environmental Shear. *J. Atm. Science.*, 56, 3605-3621.
 17. **Hart, R.E.**, G. S. Forbes, and R. H. Grumm, 1998: The use of hourly model-generated soundings to forecast mesoscale phenomena: Part I: Forecasting warm-season phenomena. *Wea and Forecasting*, 13, 1165-1185.

OTHER PEER-REVIEWED PUBLICATIONS

1. **Hart, R.**, 2005: "Hurricanes: A Primer on Formation, Structure, Intensity Change, and Frequency. Ed: Jeff Kueter. Marshall Institute. 20pp.
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GRANTS

CURRENT GRANTS

Hart, R., "Quantifying the spatial and temporal extent of the memory of tropical cyclones." NSF, 2/2009 – 1/2012. \$430,221.

Hart, R. and H. Fuelberg, "Breaking through the barrier of short-term hurricane intensity forecasting by interrogating remotely-sensed and reconnaissance datasets to predict core evolution." NASA, 12/2008-11/2012. \$599,994

Hart, R., and P. Reasor, H. Fuelberg, "Improved Analysis And Understanding Of The Meteorology Underlying The Various Components Of The Hurricane Risk Problem." Florida Catastrophic Storm Risk Management Center, 12/2008 – 12/2009. \$163,043.

Hart, R. "Extending the TC track database to TC dissipation and its use in regional climatological landfall probabilities." Bermuda Institute for Oceanic Sciences / Risk Prediction Initiative. 07/2008-7/2009. \$46,762.

Hart, R. "FSU CRC Travel Grant." FSU, August 2008. \$450

PAST GRANTS

Hart, R. "Optimizing the winter climate-TC relationship through sensitivity testing of aggregate tropical cyclone activity measures." Bermuda Institute for Oceanic Sciences / Risk Prediction Initiative. 08/2008-12/2008. \$12,065

Hart, R. "Hemispheric recurving tropical cyclone frequency as a potential indicator of subsequent North Atlantic winter severity." Bermuda Biological Station for Research/ Risk Prediction Initiative, 1 August 2007 – 31 July 2008. \$40,021

Fuelberg, H. and **R. Hart**, "Determining surface winds from Doppler radar data during Hurricanes affecting the FPL Service area." Florida Power and Light. 1 January - 31 December 2007. \$83,468

Hart, R., "The development of anomalous probability forecasts for the threat of higher latitude hurricane impacts." Bermuda Biological Station for Research / Risk Prediction Initiative, 1 August 2006 – 31 July 2007. \$26,000

Hart, R. SGER: “Significance Testing of the Role of Recurring Tropical Cyclones in Subsequent Winter Climate Modulation.” NSF, 1 June 2006-31 May 2007. \$23,836.

Hart, R. “FSU CRC Travel Grant.” FSU, August 2005. \$450

Landsea, C., **R. Hart**, D. Roth, and A. Solow: “A reanalysis and testing of trends in tropical cyclone data during the aircraft reconnaissance and satellite era.” NOAA OGP, 1 August 2005 – 31 July 2007. \$100,079 (Hart component)

Hart, R. and I. Watson, “The development of forecast confidence measures using NCEP ensembles and their real-time implementation within NWS web-based graphical forecasts”, University Corporation for Atmospheric Research COMET/National Weather Service (NWS) Cooperative Project. 1 June 2004 – May 31 2007. \$119,190

Hart, R. \$39,497: “An examination of the relationship between climate indices and tropical cyclone frequency and intensity.” Bermuda Biological Station for Research / Risk Prediction Initiative, 1 January 2005 – 31 December 2005. \$39,497

Hart, R., “A statistical-physical model as the foundation for a conceptual model for wind field evolution in extratropically transitioning tropical cyclones.” Florida State University First Year Assistant Professor Program (FYAP). 7 May 2004 - 9 August 2004. \$13,000

TEACHING

INVITED LABS

2003-2009 COMET/UCAR NORLAT/Midlatitude Training: Cyclone phase space
2005 3rd International Workshop on Extratropical Transition: Cyclone phase space
2003 2nd International Workshop on Extratropical Transition: Cyclone phase space
2000 Binghamton NWS Office Winter Weather Workshop: Ensembling
1995 Pennsylvania State University: GrADS laboratory

COURSES TAUGHT

Met2101	Undergraduate	Physical Climatology	Florida State University
Met2700	Undergraduate	General Meteorology	Florida State University
Met6561	Advanced Graduate	Advanced Hurricanes	Florida State University
Met4500	Undergraduate	Synoptic Meteorology I	Florida State University
Met5505	Undergraduate	Synoptic Meteorology II	Florida State University
Met5534	Graduate	Tropical Meteorology II	Florida State University

WEB PAGE DEVELOPMENT (Asterisk is research-funded)

2007	Real-time mesoscale fire condition modeling	moe.met.fsu.edu/fire/mm5*
2007	Real-time global weather extremes	coolwx.com/extreme
2007	Real-time record occurrence by year	moe.met.fsu.edu/recyear
2007	FSU 5 th Floor Map Room	moe.met.fsu.edu/maproom
2006	Real-time and historical snowcover statistics	moe.met.fsu.edu/snow*
2005	Real-time hurricane modeling	moe.met.fsu.edu/mm5
2005	GFS Forecasts for anywhere on Earth	coolwx.com/globe
2004	Ensemble-based forecast confidence measures	moe.met.fsu.edu/confidence*
2002	Mesoscale precipitation banding diagnostics	moe.met.fsu.edu/banding
2001	Cyclone phase diagnostics and forecasts	moe.met.fsu.edu/cyclonephase
2000	Atmospheric rarity: historical and forecast	eyewall.met.psu.edu/ranking
1998	Tropical cyclone genesis fields	moe.met.fsu.edu/tcgengifs
1999	NCEP Precipitation type forecasts	coolwx.com/ptype
1999	NCEP Ensemble MOS Graphics	eyewall.met.psu.edu/mos*
1999	NWP Ensemble output and comparison	eyewall.met.psu.edu*
1999	Normalized departures from climatology	eyewall.met.psu.edu*
1996	Hourly model time-series forecasts	coolwx.com/modelts*
1996	North American Mesoscale analyses	coolwx.com/analysis
1995	Hourly U.S. Weather Statistics	coolwx.com/usstats
1994	Decoded offshore weather data	coolwx.com/buoydata
1994	Internet user weather observations	coolwx.com/userobs

SOFTWARE DEVELOPMENT (see website for downloads)

2007-2008	GFDL/GFS compositing software for global TC merger and model init.
2003-2004	GrADS compositing function
2001	NCAR/NCEP Reanalysis-based MM5 initialization routines
2001	Cyclone phase diagnostics software
2001	GrADS-based cyclone tracker
1999	GrADS isentropic, isobaric, and height interpolators
1999	Matlab resonant mountain wave simulator
1997	GrADS Legend function
1996	GrADS SkewT/LogP function

CONSULTING

2009	Paine PR / Duracell
2008-2009	Risk Management Solutions (London, England)
2008	State Farm Insurance
2007-2008	Risk Management Solutions (Newark, CA)
2005-2006	South Carolina Department of Insurance
2006	George Marshall Institute
2002	WTNH-TV New Haven, CT (Volunteer)
2000	Environmental Technologies Group (Reston, VA)
1998	General Re Reinsurance (Hartford, CT)
1997	Pennsylvania Academy of Science

SEMINARS AND TALKS

INVITED (Underline is international)

2009	Albany, NY	Univ. at Albany Seminar
2009	Cambridge, MA	Mass. Institute of Technology MASS Seminar
2009	Boulder, CO	UCAR NORLAT Training Lab
2009	<u>Bermuda</u>	Bermuda Institute for Oceanic Sciences
2009	Arlington, VA	2009 Scatterometry and Climate Meeting
2009	<u>Corfu, Greece</u>	2 nd International Summit on Hurricanes and Climate Change
2008	San Francisco, CA	Fall Meeting of AGU
2008	Boulder, CO	UCAR NORLAT Training Lab
2008	<u>Rio de Janeiro, Brazil</u>	Southern Hemisphere Cyclone Conference
2008	<u>Tsukuba, Japan</u>	MRI: Meteorological Research Institute
2008	<u>Komaba, Japan</u>	3 rd International Conference on Reanalysis
2007	Tallahassee, FL	FSU Department of Physics
2007	Tallahassee, FL	North Florida Local Chapter American Meteorology Society
2007	Boulder, CO	UCAR NORLAT Training Lab
2007	<u>Crete</u>	1 st International Summit on Hurricanes and Climate Change
2007	State College, PA	Penn State Department of Meteorology Seminar
2006	Milton, MA	NWS Taunton S. New England Winter Weather Workshop
2006	Boulder, CO	UCAR NORLAT Training Lab
2006	Mobile, AL	Univ. of South Alabama SeCAPS Conference
2005	<u>Perth, Australia</u>	3 rd International Conference on Extratropical Transition

2005	<u>Bermuda</u>	Bermuda Biological Station for Research
2004	State College, PA	Penn State Department of Meteorology Seminar
2003	<u>Halifax, NS</u>	2 nd International Conference on Extratropical Transition
2003	Boulder, CO	UCAR NORLAT Training Lab
2003	Tallahassee, FL	North Florida Local Chapter American Meteorology Society
2003	State College, PA	Pennsylvania State University Meteorology Class Lecture
2003	Raleigh, NC	Mid-Atlantic AMS Regional Hurricane Conference
2003	Miami, FL	University of Miami Departmental Seminar
2003	Miami, FL	National Hurricane Center
2003	Tallahassee, FL	Florida State University Departmental Seminar
2003	Silver Springs, MD	NOAA/EMC Seminar
2002	Tallahassee, FL	Florida State University Departmental Seminar
2002	West Lafayette, IN	Purdue University Departmental Seminar
2001	State College, PA	NRC Committee on Partnerships in Weather and Climate
2000	Binghamton, NY	NWS Winter Weather Workshop
1999	<u>Bermuda</u>	Bermuda Biological Station for Research

ALL PRESENTATIONS & CONFERENCE PROCEEDINGS (Underlined name is student)

2009

Hart, R.E., and R.N. Maue, 2009: The atmospheric and SST memory of TCs and potential winter implications. 89th Annual Meeting of the American Meteorological Society. Phoenix, AZ.

2008

Hart, R.E., 2008: Tropical cyclones as climate integrators, active forcing mechanisms, or accidental correlators of winter climate?. AGU Fall Meeting. San Francisco, CA. December 2008.

Hart, R.E., 2008: Cyclone phase space: One method to diagnose current and forecast cyclone structure, or "Terapia para o ciclone com uma crise de identidade." Proceedings, Southern Hemisphere Cyclone Conference. Rio de Janeiro, Brazil.

Hart, R.E., 2008: The surprising relationship between hemispheric hurricane activity and the following winter: Causation or Red Herring? RPI Research Workshop. Hamilton, Bermuda.

Majumdar, S. and **coauthors**, 2008: Analysis of the inner-core characteristics of Noel (2007) during its extratropical transition. Proceedings of the 28th AMS Conference on Hurricanes and Tropical Meteorology. Orlando, FL.

Hart, R.E., 2008: The inability of winter to forget the memory of tropical cyclones. Proceedings of the 28th AMS Conference on Hurricanes and Tropical Meteorology. Orlando, FL.

Evans, C. and **R. E. Hart**, 2008: Daily to seasonal higher latitude North Atlantic tropical cyclone threat prediction. Proceedings of the 28th AMS Conference on Hurricanes and Tropical Meteorology. Orlando, FL.

- Hayes, P. , H.E. Fuelberg, and **R. Hart**, 2008: Determining surface winds from Doppler radar during hurricane passages over Florida. Proceedings of the 28th AMS Conference on Hurricanes and Tropical Meteorology. Orlando, FL.
- Piech, D. and **R. E. Hart**, 2008: Atlantic reconnaissance vortex message climatology and their use in characterizing eyewall cycles. Proceedings of the 28th AMS Conference on Hurricanes and Tropical Meteorology. Orlando, FL.
- Hart, R.E.**, R. Maue, and M. Watson, 2008: Estimating the atmospheric and SST memory of tropical cyclones. Proceedings of the 28th AMS Conference on Hurricanes and Tropical Meteorology. Orlando, FL.
- Bloemer, M. and **R. E. Hart**, 2008: An analysis of the of the mean decay rate and decay abnormalities of tropical cyclones over land in the North Atlantic Basin. Proceedings of the 28th AMS Conference on Hurricanes and Tropical Meteorology. Orlando, FL.
- Manning, D. and **R. E. Hart**, 2008: The utility of ERA40 cyclone phase space in trend diagnosis and north Atlantic tropical cyclone reanalysis. Proceedings of the 28th AMS Conference on Hurricanes and Tropical Meteorology. Orlando, FL.
- Maue, R. and **R. E. Hart**, 2008: Historical northern hemisphere tropical cyclone inactivity during 2007. Proceedings of the 28th AMS Conference on Hurricanes and Tropical Meteorology. Orlando, FL.
- Hart, R.E.**, 2008: Improved TC forecasting through Initalization of MM5 with GFDL/GFS Merger. Proceedings of the 28th AMS Conference on Hurricanes and Tropical Meteorology. Orlando, FL.
- Hart, R.E.**, Durante, A., R. Hart, A. I. Watson, 2008: The development of forecast confidence measures using NCEP ensembles and. Proceedings of the 19th AMS meeting on Probability and Statistics. New Orleans, LA.
- Hart, R.E.**, L.F. Bosart, and C. Hosler, 2008: The possible winter impact from recurving tropical cyclones. Proceedings of the Tropical Meteorology Special Symposium. New Orleans, LA.
- Hart, R.E.**, R. Maue, and M.C. Watson, 2008: Estimating local memory of tropical cyclones through MPI anomaly evolution. Proceedings of the Tropical Meteorology Special Symposium. New Orleans, LA.
- Manning, D. and **R. Hart**, 2008: The utility of ERA40 cyclone phase space in trend diagnosis and North Atlantic Tropical Cyclone Reanalysis. Proceedings of the Tropical Meteorology Special Symposium. New Orleans, LA.
- Piech, D. and **R. Hart**, 2008: Eye & eyewall climatology derived from reconnaissance vortex reports and their use toward using an eyewall phase diagram to improve hurricane intensity forecasts. Proceedings of the Tropical Meteorology Special Symposium. New Orleans, LA.
- Maue, R., **R. Hart**, and M. Bourassa, 2008: Tropical cyclone trends and attribution from reanalysis datasets. Proceedings of the Tropical Meteorology Special Symposium. New Orleans, LA.
- Evans, C. and **R. Hart**, 2008: Analysis of the wind field evolution associated with the Extratropical transition of Bonnie (1998). Proceedings of the Tropical Meteorology Special Symposium. New Orleans, LA.

2007

- Hart, R.E.**, 2007: The climate memory of tropical cyclones and the inability of the winter to forget. Florida State University Department of Physics Seminar. November 2007.
- Hart, R.E.**, L.F. Bosart, and C. Hosler, 2007: The possible seasonal climate impact from anomalous frequency of recurring tropical cyclones. Proceedings, 19th Conference on Climate Variability and Climate Change. American Meteorological Society. San Antonio, TX.
- Piech, D. and **R. E. Hart**, 2007: Eye and Eyewall Structure Climatology Derived From Recon Vortex Message Reports and Their Use Toward Statistical Intensity Forecasting. Proceedings, 19th Conference on Climate Variability and Climate Change. American Meteorological Society. San Antonio, TX.
- Hart, R.E.**, R. N. Maue, M. Watson, L.F. Bosart, 2007: The atmospheric and oceanic memory of tropical cyclones and their ability to modulate climate. Pennsylvania State University Departmental Seminar. State College, PA. 5 March 2007.
- Hart, R.E.**, R. N. Maue, M. Watson, L.F. Bosart, C. Hosler, 2007: The atmospheric/oceanic memory of tropical cyclones and their aggregate role in modifying climate. Proceedings, 1st International Summit on Hurricanes and Climate Change. Crete.
- C. Evans, and **R. E. Hart**, 2007: Understanding the wind field evolution associated with the extratropical transition of tropical cyclone Bonnie (1998). Proceedings, 1st International Summit on Hurricanes and Climate Change. Crete
- R. N. Maue and **R. E. Hart**, 2007: Using reanalysis datasets for tropical cyclone intensity trends. Proceedings, 1st International Summit on Hurricanes and Climate Change. Crete
- R.N. Maue and **R. E. Hart**, 2007: Midlatitude-tropical intrusions and extrusions: territory invasion. Proceedings, 22nd Conference on Weather Analysis and Forecasting / 18th Conference on Numerical Weather Prediction. American Meteorological Society. Park City, UT.
- Hart, R.E.**, R. N. Maue, M. Watson, L.F. Bosart, C. Hosler, 2007: The atmospheric/oceanic memory of tropical cyclones and their aggregate role in modifying climate. Proceedings, Fall Meeting of American Geophysical Union. San Francisco, CA.
- Hart, R.E.**, 2007: Taxes, Taxis, Tornados, Tropical Cyclones, Temperature and Global Warming: From coincident correlation to cautious causation and the desperate demand for a devil's advocate in a dynamic world. Northern Florida Local AMS Chapter Meeting. 11 September 2007.

2006

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