Walter Hannah

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Curriculum Vitae
2015

Education

2014 **Colorado State University** — Fort Collins, CO
Department of Atmospheric Science — *GPA: 3.9*
Ph.D. - Atmospheric Science (Tropical Meteorology)
DISSERTATION: Tropical Deep Convection, Entrainment, and Dilution During the DYNAMO Field Campaign

2010 **Colorado State University** — Fort Collins, CO
Department of Atmospheric Science — *GPA: 3.9*
M.S. - Atmospheric Science (Tropical Meteorology)
THESIS: The Role of Moisture-Convection Feedbacks in Simulating the Intraseasonal Oscillation

2006 **Ithaca College** — Ithaca, NY
Department of Mathematics — *GPA: 3.6*
B.A. – Mathematics with Honors (Fractal Geometry)
THESIS: Internal Rays of the Mandelbrot Set

Professional Positions

2015-2017 **North Carolina State University** – Dept. of Atmospheric Science — Raleigh, NC
Postdoctoral Fellow
Research to understand the effects of anthropogenic CO_2 emissions on future variability of the African monsoon system and Atlantic hurricanes

2014-2015 **University of Miami** – Atmospheric Science Dept. — Miami,
Postdoctoral Researcher
Research on how cloud specific cloud populations can influence the net moisture tendency of a Lagrangian atmospheric column

2007-2014 **Colorado State University** – Atmospheric Science Dept**.** — Fort Collins, CO
Graduate Research Assistant
Research on the interaction between convection and large-scale dynamics to guide the improvement of convection in climate models

2004 **Oregon State University** – HMSC — Newport, OR
Summer REU Intern – Computer Science
Embedded system software development for autonomous hydrophones

2003 **Oregon State University** – HMSC — Newport, OR
Sub-Contracted Software Engineer
Data logger software development for the SOSUS moored hydrophone array in Puget Sound used for marine geological research.

Teaching Experience / Outreach

2012 **CMMAP Summer Undergraduate Intern** — Fort Collins, CO
Mentor
Mentored undergraduate research experience on convectively coupled equatorial waves and convective parameterization in a global model

2012-2013 **Loveland High School** — Loveland, CO
Guest Speaker
Introductory presentation on atmospheric science and severe weather to several high school student audiences

2011 **Colorado State University** — Fort Collins, CO

Graduate Teaching Assistant
100-level introductory class on understanding climate and climate change

2008 **Colorado State University** Fort Collins, CO
Graduate Teaching Assistant
300-level lab to foster an understanding of basic weather concepts

Publications

Hannah, W. M, 2015: Entrainment vs. Dilution in Tropical Deep Convection. In preparation.

Hannah, W. M., B. E. Mapes, and G. S. Elsaesser, 2015: A Lagrangian View of Moisture Dynamics During DYNAMO. *J. Atmos. Sci.*, Accepted.

Hannah, W. M., E. D. Maloney, and M. S. Pritchard, 2015: Consequences of Systematic Model Drift in DYNAMO Hindcasts with SP-CAM and CAM5. *J. Adv. Earth Sys. Mod.*, **7**.

Hannah, W. M., and E. D. Maloney, 2014: The moist static energy budget in NCAR CAM5 Hindcasts during DYNAMO. *J. Adv. Earth Sys. Mod.*, **6**, 420-440.

Hannah, W. M. and E. D. Maloney, 2011: The Role of Moisture-Convection Feedbacks in Simulating the Madden-Julian Oscillation, *J. Climate*, **24**, 2754-2770.

Maloney, E. D., A. H. Sobel and **W. M. Hannah**, 2010: Intraseasonal Variability in an Aquaplanet General Circulation Model, *J. Adv. Modeling. Earth. Sys*, **2**, 24 pp.

Matsumoto, H., and **Coauthors**, 2006: Autonomous Hydrophones at NOAA/OSU and a New Seafloor Sentry System for Real-time Detection of Acoustic Events, *Oceans'06 MTS/IEEE-Boston*, Boston, MA, 18–21.

Conference Presentations

2014	Research Intersections	*oral*	Miami, FL
2014	AGU Fall Meeting	*oral*	San Francisco, CA
2014	AMS Tropical Conference	*oral*	San Diego, CA
2013	AGU Fall Meeting	*poster*	San Francisco, CA
2013	Young Scientist Symposium on Atmospheric Research	*oral*	Fort Collins, CO
2012	AGU Fall Meeting	*poster*	San Francisco, CA
2012	NOAA Climate Diagnostics and Prediction Workshop	*poster*	Fort Collins, CO
2012	Young Scientist Symposium on Atmospheric Research	*oral*	Fort Collins, CO
2012	MJO Workshop	*poster*	Honolulu, HI
2011	CMMAP Winter Team Meeting	*oral*	Berkeley, CA
2010	AMS Tropical Conference	*oral*	Tucson, AZ
2008	AGU Fall Meeting	*poster*	San Francisco, CA

Field Experience

2012 **Dynamics of the MJO (DYNAMO/CINDY) Project** Diego Garcia, BIOT
Launched soundings and maintained meteorological instruments

Professional Honors and Awards

2012 **NSF East Asia and Pacific Summer Institute (EAPSI) Fellow** Ulsan, S. Korea
Cumulus scheme development to improve the diurnal cycle of precipitation with Prof. Myong-In Lee.

Professional Workshops

2014	AAAS Science Communication Workshop	Miami, FL
2012	NCAR ASP Summer Colloquium – Weather-Climate Intersection	Boulder, CO
2010	NOAA Summer School on Atmospheric Modeling	Boulder, CO
2007-2013	CMMAP Summer graduate student colloquium	Fort Collins, CO