

Hanii Takahashi

Postdoctoral Scholar

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EDUCATION:

Aug 2009 – June 2013: Ph.D., Earth and Environmental Science, City University of New York, New York

Aug 2007 – May 2009: M.S., Pure Mathematics, New York University, Courant Institute, New York

Aug 2005 – May 2007: B.S., Pure Mathematics, Purdue University, Indianapolis Campus, Indiana

Apr 2000 – Mar 2004: B.S., Physics, Chuo University, Tokyo, Japan

EMPLOYMENT:

July 2013 – Present: Postdoctoral Scholar, Jet Propulsion Laboratory - California Institute of Technology, California

Aug 2009 – June 2013: Research Assistant, City College of New York

Aug 2010 – June 2013: Teaching Assistant, City College of New York

- EAS 311/B9014: Fundamentals of Atmospheric Science
- EAS 488/B8800: Climate & Climate Change
- EAS 417/B9025: Satellite Meteorology
- EAS426/Engr301: Introduction to Remote Sensing/Image Analysis

INTERNSHIP:

NASA Jet Propulsion Laboratory, Microwave Atmospheric Science Group, California, May 2012 – Aug 2012

- The water vapor measurements from the Aura Microwave Limb Sounder and Aqua Atmospheric Infrared Sounder are analyzed to study the variations of water vapor during the 2006-7 and 2009-10 El Niños.
- Regression of water vapor anomalies onto the Niño-3.4 SST for the A-Train period is conducted.
- GFDL model simulations of water vapor and clouds were studied and compared with the satellite observations.

United Nations Headquarters, DESA, Population Estimates and Projection Section, New York, Sep 2008 – Dec 2008

- Adult mortality estimates in Central Asian countries of former USSR
- Producing population projections and estimates by demographic, statistical and computer science expertise

TEACHING:

EAS10400: Climate Change and Global Warming (lab), City College of New York

SCI200: Scientific Computing, Measurements and Modeling, City College of New York

PUBLICATIONS:

Peer-Reviewed Articles:

Takahashi, H., Hui Su, J. H. Jiang, Z. J. Luo, S.-P. Xie, and J. Hafner, 2013: Tropical Water Vapor Variations During the 2006-07 and 2009-10 El Niños: Satellite Observation and GCM Simulation, *J. Geophys. Res.*, in press.

Takahashi, H. and Z. Luo, 2012: Where is the level of neutral buoyancy for deep convection? *Geophys. Res. Letts.*, 39, L15809, doi:10.1029/2012GL052638

Other Publications:

Takahashi, H., Hui Su, J. H. Jiang, Z. J. Luo, S.-P. Xie, and J. Hafner: Tropospheric Water Vapor Anomalies During the 2006-07 and 2009-10 El Niños. American meteorological Society (AMS), 25th Conference on Climate Variability and Change, 25CVS, 590, 2013

Takahashi, H. and Z. Luo, 2012: On the level of neutral buoyancy for deep convection. American Geophysical Union (AGU), Fall Meet., Suppl., A33S-06, 2012

Takahashi, H. and Z. J. Luo, 2011: Tropical overshooting convection: Cloud properties and convective system evolution, *EOS Trans. American Geophysical Union (AGU)*, Fall Meet., Suppl., A23D, 2011

Takahashi, H. and Z. J. Luo, 2010: Tropical overshooting convection from CloudSat and ISCCP, *EOS Trans. American Geophysical Union (AGU)*, Fall Meet., Suppl., A21, 2010

EXPERIENCES:

Invited Talk, RIGC/JAMSTEC, Yokohama, Japan, Jan 2011

- Presentation: "Tropical Convection from the A-Train satellite Perspective"

Graduation Research, New York University, Courant Institute, May 2008 – May 2009

- Research on flow and dynamics of the West Antarctic Ice Sheet
- Compute and analyze stick-slip behavior at GPS site

Capstone Project, IUPUI, Jan 2007 – May 2007

- Research on the statistic of dimers on a lattice
- To prove the main result which is an expression of the configuration generating function of the dimer model on the 2D lattice in terms of a Pfaffian

Graduation Research, Chuo University, Apr 2003– Mar 2004

- Research on crystal growth of the ascorbic acid in methanol solution
- Create morphological diagram and analysis of the crystal pattern by temperature and humidity

Youngster's Science Festival, Chiba, Japan, Summer 1999

- Demonstrate how to make snowflakes in the refrigerator and analyze the pattern formations of snowflakes.