

Cheng, Yu

CONTACT INFORMATION	Graduate Student / Assistant RSMAS University of Miami 4600 Rickenbacker Causeway Miami, FL 33149-1098 USA	<i>Mobile:</i> +1-786-503-3366 <i>Email:</i> yucheng@miami.edu <i>Website:</i> http://fischcheng.github.io/
RESEARCH INTERESTS	Climate variability, large-scale ocean circulation , High-resolution coupled climate modeling, ocean's role in climate, air-sea interaction, Python applications in oceanography, Data visualization	
EDUCATION	Rosenstiel School of Marine & Atmospheric Science, University of Miami	
	Graduate student, Meteorology and Physical Oceanography	August 2012 - Present
	<ul style="list-style-type: none">• Advisor: Professor Lisa Beal• Co-advisor: Professor Ben Kirtman• Topic: Agulhas Leakage and its impact on Atlantic Meridional Overturning Circulation in a high-resolution coupled climate model	
	National Taiwan University , Taipei, Taiwan	September 2006 - June 2010
	B.S., Atmospheric Science	
	<ul style="list-style-type: none">• Award of Dean (<i>Summa cum Laude</i>), College of Science	
	Freie Universitat Berlin , Berlin, Germany	October 2008 - July 2009
	Direct Exchange Program, Institute for Meteorology	
	<ul style="list-style-type: none">• Sponsored by FU, 7000 Euros / Year• Accomplished courses in German: Atmospheric Dynamics I/II, Physical Climatology, Applied Statistics	
PROFESSIONAL EXPERIENCE	Research Assistant	September 2011 - July 2012
	Laboratory for Climate Change Research, Academia Sinica	
	<ul style="list-style-type: none">• Supervisor: Dr. Huang-Hsiung Hsu• Climate data analysis and visualization, with the aid of NCL, CDO and FORTRAN;Topic: Teleconnections and jet stream waveguide	
TEACHING EXPERIENCE	<ul style="list-style-type: none">• Teaching assistant for <i>Current topics of Weather and Climate (ATM/MSC 118)</i>; undergraduate course, Spring 2014, Instructor: Chidong Zhang<ul style="list-style-type: none">• Gave one 50-min lecture titled "Oceans and Climate Change"• Graded weekly quizzes and led the discussion sessions• Wrote the final exam questions and graded term papers• Teaching assistant for <i>Climate & Global Change (MSC 220)</i>; Fall 2014, Instructor: Igor Kamenkovich<ul style="list-style-type: none">• Gave two 50-min lectures titled "Water, aerosols and ozone" and "Climate change mitigation"• Graded homework and exams• Collected climate change related news articles as class discussion materials	

AWARDS	<p>National Taiwan University</p> <ul style="list-style-type: none"> • Award of Dean, College of Science, June 2010 • Two times Presidential Award (top 5% in the class), March and October 2007
ACADEMIC ACTIVITIES	<ul style="list-style-type: none"> • Ocean Science Meeting, New Orleans, 2016 Poster titled "Investigating the relationship between Agulhas leakage and Southern Hemisphere westerlies in a coupled system" • Lagrangian Ocean Modeling Workshop, Imperial College, London, September 2015, Talk titled "Assessing the skill of 30-day climate model output for Lagrangian analyses of Agulhas Leakage" • IUGG general assembly, Prague 2015, Talk titled "Quantifying Agulhas leakage in coupled climate models" • Participated in the METEOR 100/2 Research Cruise, from Namibia to Mauritius, October 2013: CTD operation, onboard meteorological data monitoring, provided daily maps of operational ocean forecasts and satellite SST observations. • Participated in the NCAR Community Earth System Model tutorial, NCAR, Boulder, August 2013 • Reviewer for: Climate Dynamics
SOFTWARE SKILLS	<p>Computer Programming:</p> <ul style="list-style-type: none"> • UNIX shell, Fortran, Python, \LaTeX, Git <p>Numerical Analysis and climate data processing:</p> <ul style="list-style-type: none"> • MATLAB, CDO, NCO <p>Gridded-data visualization:</p> <ul style="list-style-type: none"> • NCL, python-matplotlib, python-cartopy
LANGUAGES	<ul style="list-style-type: none"> • Chinese: Native • German: Two years living in Germany as an exchange student, fluent in reading, listening and speaking, B1 certificated • Japanese: intermediate knowledge, N4 certificated • Spanish: intermediate knowledge
PUBLICATIONS	<ul style="list-style-type: none"> • Cheng, Y., D. Putrasahan, L. Beal, and B. Kirtman, 2016: Quantifying Agulhas Leakage in a High-Resolution Climate Model. <i>J. Climate</i>, 29, 6881-6892, doi: 10.1175/JCLI-D-15-0568.1. • Putrasahan, D. A., L. M. Beal, B. P. Kirtman, and Y. Cheng, 2015: A new Eulerian method to estimate spicy Agulhas leakage in climate models. <i>Geophys. Res. Lett</i>, 42, 4532-4539, doi:10.1002/2015GL064482.