

CONTACT INFORMATION	Department of Atmospheric and Oceanic Sciences University of California, Los Angeles 7343 Math Sciences Building Los Angeles, CA 90095 USA	Phone: (310) 206-5257 Fax: (310) 206-5219 E-mail: sun@atmos.ucla.edu Web: www.atmos.ucla.edu/~sun
RESEARCH INTERESTS	Climate variability and change, boundary layer cloudiness, global and regional ocean-atmosphere interactions and modelling, ENSO dynamics	
EDUCATION	<p>University of California, Irvine, Irvine, CA USA</p> <p>Ph.D., Earth System Science, 09/2003-07/2008</p> <ul style="list-style-type: none"> • Dissertation Title: “ENSO Decadal Modulation and Tropical Pacific Mean Climate” • Committee: Professor Jin-Yi Yu, Advisor (Climate Dynamics); Professor Gudrun Magnusdottir (Atmospheric Dynamics); Professor Francois Primeau (Oceanography); Professor James Randerson (Terrestrial Ecosystem). <p>M.S., Earth System Science, 07/2005</p> <ul style="list-style-type: none"> • Thesis Topic: “Impacts of Central America Gap Winds on the SST Annual Cycle in the Eastern Pacific Warm Pool” <p>Nanjing University, Nanjing, China</p> <p>B.S., Atmospheric Sciences, 09/1996-07/2000</p>	
RESEARCH EXPERIENCE	<p>Postdoctoral Scholar, University of California, Los Angeles 08/2008-present</p> <p><i>Regional applications of climate variability and change</i>; Advised by Professor Alex Hall.</p> <p>Investigated the climatology and temporal and spatial variability of stratocumulus topped boundary layer in the southeast Pacific Ocean.</p> <p>Developed and implemented Weather Research and Forecasting (WRF) stratocumulus simulations and validated with ship cruise and satellite observations.</p> <p>Participated the Variability of the American Monsoon System (VAMOS) Ocean-Cloud-Atmosphere-Land Study (VOCALS) regional modeling intercomparisons.</p> <p>Graduate Researcher, University of California, Irvine 09/2003-07/2008</p> <p><i>Ocean-atmosphere interactions</i>; Advised by Professor Jin-Yi Yu.</p> <p>Explored the decadal modulation of El Niño-Southern Oscillation (ENSO) intensity and its interactions with the tropical Pacific decadal climate variability.</p> <p>Evaluated the Intergovernmental Panel on Climate Change Fourth Assessment Report (IPCC-AR4) coupled General Circulation Models (GCMs) in simulating ENSO modulation and asymmetries.</p> <p>Developed Regional Ocean Modeling System (ROMS) experiments and differentiated the thermal and mechanical roles of Central America gap winds in determining eastern Pacific warm pool SST annual cycle.</p> <p>Additional research foci including investigating the contributions of the Indian Ocean and monsoon to the excessive biennial ENSO simulation bias in the Community Climate System Model Version 3 (CCSM3).</p>	

REFERRED
PUBLICATIONS

Sun F., and J.-Y. Yu, 2008: A 10-15year Modulation Cycle of ENSO Intensity. *Journal of Climate*, In Press, doi: 10.1175/2008JCLI2285.1.

Yu J.-Y., **F. Sun** and H.-Y. Kao, 2008: Contributions of Indian Ocean and Monsoon Biases to the Excessive Biennial ENSO in CCSM3. *Journal of Climate*, In Press, doi: 10.1175/2008JCLI2706.1.

Sun, F., and J.-Y. Yu, 2006: Impacts of Central America Gap Winds on the SST Annual Cycle in the Eastern Pacific Warm Pool. *Geophysical Research Letter*, **33**, L06710, doi:10.1029/2005GL024700.

Sun F., and J.-Y. Yu, 2009: Decadal Variability of ENSO Intensity in the IPCC-AR4 CGCMs. *Climate Dynamics*, to be submitted.

Sun F., and A. Hall, 2009: Evaluation of Southeast Pacific Stratocumulus simulation in the WRF Model. *Geophysical Research Letter*, in preparation.

CONFERENCE
PROCEEDINGS

Sun, F., and A. Hall, 2008: Stratocumulus Cloud Top Height Simulations in Southeast Pacific, *UCLA VOCALS meeting*, Los Angeles, California, November 14

Sun, F., and J.-Y. Yu, 2008: A 10-15year Modulation Cycle of ENSO Intensity and its ENSO Asymmetry-Basic State Interaction Mechanism, *U.S. CLIVAR Science Symposium*, Irvine, California, July 14-15

Yu, J.-Y., **F. Sun** and H.-Y. Kao, 2008: A Two-Oscillator View of ENSO and its Decadal Modulation, *the 88th annual AMS meeting*, New Orleans, Louisiana, January 20-24

Sun, F., and J.-Y. Yu, 2007: A 10-15year Modulation Cycle of ENSO Intensity and its ENSO Asymmetry-Basic State Interaction Mechanism, *Eos Trans. AGU*, 88(52), Fall Meet. Suppl., Abstract OS13A-1011, December 10-14

Yu, J.-Y., H.-Y., Kao and **F. Sun**, 2007: Using a Two-Oscillator View to Examine the CGCM Deficiency in ENSO, *the 12th Annual CCSM Workshop*, Breckenridge, Colorado, June 19-21

Yu, J.-Y., **F. Sun** and H.-Y., Kao, 2007: A Two-Oscillator View of Decadal ENSO Modulation, *the 7th Workshop on Decadal Climate Variability*, Kona, Hawaii, April 30-May 03

Sun, F., and J.-Y. Yu, 2006: A Decadal Modulation Cycle of ENSO Intensity, *Bjerknes Centre for Climate Research Workshop*, Bergen, Norway, September 19-22

Sun, F., and J.-Y. Yu, 2006: Modeling Studies on the Central America Gap Wind Forcing to the Eastern Pacific Warm Pool SST Annual Cycle, *Multidecadal Climate Variability and Teleconnection Dynamics Bjerknes Summer School*, Finse, Norway, September 10-18

Sun, F., and J.-Y. Yu, 2005: Impacts of Central America Gap Winds on the SST Annual Cycle in the Eastern Pacific Warm Pool, *Eos Trans. AGU*, 86(52), Fall Meet. Suppl., Abstract A53B-05, December 05-09

TEACHING
EXPERIENCE

Teaching Assistant, University of California, Irvine

Earth System Science 5: The Atmosphere	04-06/2007
Earth System Science 3: Oceanography	01-03/2007
Earth System Science 1: The Physical Environment	09-12/2006

HONORS AND AWARDS	Outstanding Teaching Assistant Award, University of California, Irvine	2007
	Climate Variability and Change Scholarship, American Meteorological Society	2007
	Travel Grant, School of Physical Sciences, University of California, Irvine	2007
	Outstanding Contributions to the Department of Earth System Science, University of California, Irvine	2006-2007
	Bjerknes Scholarship, Bjerknes Centre for Climate Research, University of Bergen	2006
	Travel Grant, School of Physical Sciences, University of California, Irvine	2005
	IGPP fellowship, University of California, Irvine	2003-2004
	May 4th Medal for Outstanding Youth (top 10 of 20000), Nanjing University	1999
	Guanghua Scholarship, Guanghua Education Foundation	1998
	Renmin Scholarship, Nanjing University	1997-1999
PROFESSIONAL MEMBERSHIPS	American Association for the Advancement of Science	2007-present
	American Geophysics Union	2005-present
	American Meteorological Society	2005-present
TECHNICAL SKILLS	Extensive analytical and numerical skills in climate science research	
	Familiar with atmospheric and oceanic climate models: WRF, CAM3, CCSM3, ROMS	
	Programming: MATLAB, FORTRAN, UNIX/LINUX shell scripting, HTML	
	Application tools: MATLAB, NCL, GrADS, Microsoft Office, L ^A T _E X	
	Operating Systems: Microsoft Windows Vista/XP/2000, Apple OS X, LINUX, IRIX, AIX and other UNIX variants	