Georgy E Manucharyan

Woods Hole Oceanographic Institution 266 Woods Hole Rd, MS# 21, Woods Hole, MA 02543-1050, USA E-mail: gmanucharvan@whoi.edu; Phone: +1 (203) 435-7450

EDUCATION

Ph.D., Atmosphere Ocean and Climate Dynamics,

2014

Department of Geology & Geophysics, Yale University, New Haven, CT, USA.

B.S. with Honors in Applied Physics and Mathematics,

2007

Department of Aerophysics and Space Research,

Moscow Institute of Physics and Technology, Dolgoprudny, Russia.

RESEARCH **EXPERIENCE**

• Weston Howland Jr. Postdoctoral Scholar, WHOI

2014-present

Research topics: "Arctic Ocean Halocline" and "Marginal-Ice-Zone Eddy Formation"

• Graduate Research Fellow, Yale University

2008 - 2014

PhD thesis: "The Role of Upper-Ocean Mixing in Large-Scale Ocean and Climate Dynamics". M. Phil thesis: "Ocean's Response to Tropical Cyclones".

- CLIVAR Carbon and Hydrographic Oceanography Cruise, R/V Melville (PO2) 2013 Research topic: "Oceanic Quasi-Geostrophic Currents and Mixed Layer Turbulence".
- Yale School of Engineering and Applied Science, Yale University 2012 Research Topic: "Markov Chain Representation of Chaotic Dynamical Systems".
- Geophysical Fluid Dynamics Independent Research Group 2010 - 2013Depts of Applied Mathematics and Geology & Geophisics, Yale University. Research topic: "Steady rotating density currents on a slope".
- Geophysical Fluid Dynamics Summer School at WHOI Fellow 2010 Research topic: "Dynamics of the Mixed Layers in Stratified Sheared Flows".
- Shirshov Institute of Oceanology, Moscow, Russia Research Assistant 2005-2007 Research topic: "Ocean Data Assimilation Techniques".

- PUBLICATIONS Manucharyan G.E. & C.P. Caulfield (2015), Entrainment and mixed-layer dynamics of a surfacestress-driven stratified fluid, Journal of Fluid Mechanics, Vol. 765, pp 653 - 667
 - Manucharyan G.E. & A.V. Fedorov (2014), Robust ENSO across a wide range of climates, Journal of Climate 27, 5836-5850.
 - Manucharyan G.E., W. Moon, F. Sévellec, A.J. Wells, J.-Q. Zhong, & J.S. Wettlaufer (2014), Steady turbulent density currents on a slope in a rotating fluid, Journal of Fluid Mechanics, Vol 746, pp 405-436.
 - Manucharyan G.E. & M.-L. Timmermans (2013), Generation and separation of mesoscale eddies from surface ocean fronts, Journal of Physical Oceanography, 43, 2545–2562.
 - Manucharyan G.E., C.M. Brierley, & A.V. Fedorov (2011), Climate impacts of intermittent upper ocean mixing induced by tropical cyclones, Journal of Geophysical Research, 116, C11038.
 - Manucharyan G.E. (2010), Dynamics of the Mixed Layers in Stratified Shear Flows, WHOI GFD Summer School, Ann. Proc. Vol. 2010, pp 240–259.

In preparation (drafts available upon request)

- Manucharyan G.E. & A.V. Fedorov, Impacts of tropical cyclones' vorticity forcing on largescale oceanic circulation (in prep. for J. Phys. Oceanogr.)
- Manucharyan G.E. & A.V. Fedorov, Walker circulation response to east-west SST gradients (in prep. for J. Clim.).

TEACHING	Yale University	
EXPERIENCE	· ·	2010,11,13,14
	• Introduction to Concepts in Geology & Geophysics – Guest Lecturer	2013
	• Asymptotic Methods – Guest Lecturer	2012
	• Physics of Weather and Climate – Teaching Assistant.	2012
	• Atmosphere, Ocean, and Environmental Change – Laboratory Instructor.	2009
	Physics & Technology Evening High School, Dolgoprudny, Russia • Advanced Mathematics – Lecturer.	2007-2008
	 Advanced Mathematics – Lecturer. Physics, Mathematics – Teaching Assistant. 	2007-2008
	Trysics, Mathematics Teaching Assistant.	2004 2000
FELLOWSHIPS & AWARDS	Weston Howland Jr. Postdoctoral Scholar, Woods Hole Oceanographic Institution	2014
	Philip M. Orville Prize "For recognition of outstanding research and scholarship in the Earth Sciences", Yale University.	2014
	Elias Loomis Prize for "Excellence in Studies of Physics of the Earth", Yale Unive	rsity. 2011
	Charlton Dows Cooksey Jr. Memorial Fellowship, Yale University.	2010-2012
	Geophysical Fluid Dynamics Fellowship, Woods Hole Oceanographic Institution.	2010
	Bateman Fellowship, Yale University.	2008
	Full Undergraduate Scholarship, Moscow Institute of Physics and Technology.	2003-2007
	run Undergraduate Scholarship, Moscow Institute of I hysics and Technology.	2003-2007
CONFERENCES & WORKSHOPS	Geophysical Fluid Dynamics Summer School, WHOI, Woods Hole, MA.	2009-12,14
& WORKSHOPS	Conference on Atmospheric and Oceanic Fluid Dynamics, Newport, RI Title: "Generation and Separation of Mesoscale Eddies from Surface Ocean Fronts"	2013
	65 th annual meeting of APS, Division of Fluid Dynamics, San Diego, CA Titles: "Entrainment and Mixing Dynamics of Surface-Stress-Driven Linearly Stratified Flow in a Cylinder"; "Steady Rotating Density Currents on a Slope".	2012
	American Geophysical Union Fall Meeting, San Francisco, CA Title: "Global Impacts of Intermittent Mixing Induced by Tropical Cyclones".	2011
	Ocean Science Meeting, Portland, OR.	2010
	Fundamental Problems in Climate Dynamics, PCTS, Princeton, NJ.	2009
	Tundamental Frontens in Chinate Dynamics, 1 C15, 1 inccoon, 145.	2003
INVITED	• "Generation and separation of mesoscale eddies from surface ocean fronts"	
SEMINARS	Massachusetts Institute of Technology, EAPS, Sack Lunch Seminar	10/2014
	University of Washington, Applied Physics Laboratory Was de Hele Ocean a graphic Institution, Department of Physical Ocean a graphy	03/2014
	Woods Hole Oceanographic Institution, Department of Physical Oceanography Courant Institute for Mathematical Sciences, CAOS	10/2013 $09/2013$
	University of Miami, Rosenstiel School of Marine and Atmospheric Science	11/2012
	• "Persistent ENSO in climates with reduced climatological SST gradients"	,
	Columbia University, Lamont-Doherty Earth Observatory	01/2014
	Princeton University, Program in Atmospheric and Oceanic Sciences	10/2013
	• "The influence of hurricanes on the large-scale oceanic circulation"	
	MIT-WHOI Joint Program Student Seminar	10/2014
	Yale University, Department of Geology & Geophysics	10/2011
COLLABO- RATORS	Alexey Fedorov (Yale), Mary-Louise Timmermans (Yale), Andrew Wells (Oxford) laufer (Yale, Oxford), Colm-cille Caulfield (Cambridge), Jin-Qiang Zhong (Tongji Moon (Cambridge), Florian Sévellec (U. Southampton), Chris Brierley (U. Coll Michael Spall (WHOI).	U.), Woosok