Publications

Manuscripts submitted or in press:

- 2020 Xiaoyu Long, et al., Seasonal forecasting of sea level anomalies in a multi-model prediction framework. Submitted to *JGR Oceans*. Reviews received and revision submitted March 2021.
- 2020 Thompson et al., Projected high-tide flooding in the United States: Rapid increases and extreme months. Submitted to *Nature Climate Change*. Reviews received and revision submitted February 2021.
- 2020 Yingli Zhu (my student) et al., Diagnosis of Large-scale, Low-frequency Sea Level Variability in the Northeast Pacific Ocean. Submitted to *JGR Oceans*. Reviews received and revision submitted February 2021.

Refereed publications and book chapters:

2020 Thompson, P.R., M.J. Widlansky, E. Leuliette, W. Sweet, D.P. Chambers, B.D. Hamlington, S. Jevrejeva, J.J. Marra, M. A. Merrifield, G. T. Mitchum, R. S. Nerem, Sea level variability and change [in "State of the Climate in 2020"]. *Bull. Amer. Met. Soc.*, **101(8)**, S153-156, <u>https://doi.org/10.1175/BAMS-D-20-0105.1</u>

- 2019 Thompson, P.R., M.J. Widlansky, E. Leuliette, W. Sweet, D.P. Chambers, B.D. Hamlington, S. Jevrejeva, J.J. Mara, M.A. Merrifield, G.T. Mitchum, and R.S. Nerem, Sea level variability and change [in "State of the Climate in 2018"]. *Bull. Amer. Met. Soc.*, 100(9), S84-87, <u>https://doi:10.1175/2019BAMSStateoftheClimate</u>.
- 2019 Cazenave and 17 others including **Mitchum**, Observational Requirements for Long-Term Monitoring of the Global Mean Sea Level and Its Components Over the Altimetry Era. *Front. Mar. Sci.*, 6:582, doi: 10.3389/fmars.2019.00582. (Note: This was a review paper that had a lead author, Cazenave, and contributors. I was

- 2014 Thompson, P., **G.T. Mitchum**, Coherent Sea Level Variability on the North Atlantic Western Boundary. *J. Geophys. Res. Oceans*, **119**, 5676-5689, doi:10.1002/2014JC00999.
- 2014 Liu, Y., R.H. Weisberg, S. Vignudelli, G.T. Mitchum, Evaluation of Altimetry-Derived Surface Current Products Using Lagrangian Drifter Trajectories in the Eastern Gulf of Mexico. *J. Geophys. Res. Oceans*, **119**, 2827-2842, doi:10.1002/2013JC009710.
- 2013 Merrifield, M.A., P. Thompson, R.S. Nerem, D.P. Chambers, **G.T. Mitchum**, M. Menéndez, E. Leuliette, L. Miller, J.J. Marra, W. Sweet, and S. Holgate, Sea level variability and change, *in* 3(3)Tj223(c)1,fK

- 2007 Merrifield, M., **G.T. Mitchum**, S. Gill and P. Woodworth, Sea Level, *in* State of the Climate in 2006, Arguez, A., , ed., *Bull. Amer. Met. Soc.*, **88**, S1-S135, doi:10.1175/bams-88-6-929.
- 2006 Nerem, R.S., A. Cazenave, D. Chambers, L. Fu, E. Leuliette and **G.T. Mitchum**, Comment on "Estimating future sea level change from past records" by Nils-Axel Morner, *Global and Planetary Change*, doi: 10.1016/j.gloplacha.2006.08.002.
- 2006 Merrifield, M., S. Gill, and G.T. Mitchum

- 2000 **Mitchum, G.T.**, An improved calibration of satellite altimetric heights using tide gauge sea levels with adjustment for land motion. *Marine Geodesy*, **23**, 145-166.
- 1999 Nerem, R., D. Chambers, E. Leuliette, **G.T. Mitchum** and B. Giese, Variations in global mean sea level associated with the 1997-

- 1989 Roach, D., **G.T. Mitchum** and K. Wyrtki, Length scales of interannual sea level variability along the Pacific margin. *J. Phys. Oceanogr.*, **19**, 122-128.
- 1988 Mitchum, G.T., and K. Wyrtki, An overview of Pacific sea level variability. *Marine Geodesy*, 12, 235-245.
- 1987 Mitchum, G.T., and R. Lukas, Latitude-frequency structure of Pacific sea level variance. J. Phys. Oceanogr., 17, 2362-2365.
- 1987 Mitchum, G.T., Trade wind fluctuations associated with El Niño-Southern Oscillation events. *J. Geophys. Res.*, 92, 9464-9468.
- 1987 **Mitchum, G.T.**, A bias in the satellite-observed low-level cloud motion winds over the central tropical Pacific. *J. Geophys. Res.*, **92**, 3861-3865.
- 1986 **Mitchum, G.T.**

- 1999 **Mitchum, G.T.**, R, Cheney, L.-L. Fu, C. Le Provost, Y. Menard, and P. Woodworth, The future of sea surface height observations, in Proceedings of the OCEANOBS 99, St. Raphael, France, October, 1999.
- 1999 Garzoli, S., D. Enfield, G. Reverdin, **G.T. Mitchum**, R. Weisberg, P. Chang, and J. Carton, COSTA: A climate observing system for the tropical Atlantic, in Proceedings of the OCEANOBS 99, St. Raphael, France, October, 1999.
- 1999 **Mitchum, G.T.**, R, Cheney, L.-L. Fu, C. Le Provost, Y. Menard, and P. Woodworth, Sea surface height observations from altimeters and tide gauges, CLIVAR Exchanges, **4** (3), 11-15.
- 1998 **Mitchum, G.T.**, A. Busalacchi, and G. Lagerloef, Studies of Tropical Pacific Variability. AVISO Altimetry Newsletter, Number 6, 77-79.
- Mitchum, G.T., A Tide Gauge Network for Altimeter Calibration. In the *Proceedings of Methods for Monitoring Sea Level: GPS and Tide Gauge Benchmark Monitoring, GPS Altimeter Calibration*, Pasadena, CA, March, 1997 (eds. R. Neilan and P. Woodworth). Mitchum, G.T. 79.

Infrastructure Support Projects as Associate Dean (Both Current and Completed)

USGS: Co-PI with Jacqueline Dixon, Support of Facilities at the USF/USGS St. Petersburg Science Center, \$5666K for August 2017 to August 2022.

USGS: Principal Investigator, Support for the CMS Machine Shop, \$50K to date beginning August 2017 (open-ended).

Projects completed at University of South Florida (1996-present)

NASA/JPL: Principal Investigator, Mitchum contribution to "A Climate Data Record of sea level, its steric and mass components" proposal headed by Willis at JPL, \$320K for October 2013 to June 2019.

NASA/OSTST: Principal Investigator, Mitchum contribution to "The Climate Data Record of Sea Level Change: Are We Missing Something?" proposal headed by Nerem at the University of Colorado, \$161K for January 2013 to March 2018.

USGS: Principal Investigator, Access to the CMS Electron Microscope Laboratory, \$96K for September 2013 to September 2017.

USGS: Principal Investigator, Support for the CMS Machine Shop, \$50K for July 2015 to July 2017.

USGS: Co-PI with Jacqueline Dixon, Support of Facilities at the USF/USGS St. Petersburg Science Center, \$5671K for August 2012 to August 2017, which includes \$110K for the CMS Seminar series.

NASA/IDS: Co-Investigator with Don Chambers, Contribution to "The Response of Sea Level to Changes in Climate: Has There Been a Fundamental Shift in the Rate of Sea Level Rise?" proposal headed by Nerem at the University of Colorado, \$213K for August 2011 to August 2015.

NASA/GSFC: Principal Investigator, Mitchum contribution to "Integrated Multi-mission Ocean Altimeter Data for Climate Research" proposal headed by Ray at GSFC, \$251K for July 2008 to July 2014.

NASA/OSTM: Principal Investigator, Mitchum contribution to "Studies of upper ocean dynamics related to the Pacific Decadal Oscillation using satellite altimeter data and derived velocity fields" proposal headed by Lagerloef at ESR, \$161K for March 2009 to June 2012.

NASA/OSTM: Principal Investigator, Mitchum contribution to "Building a Climate Data Record for Sea Level Change" proposal headed by Nerem at University of Colorado, \$162K for March 2009 to September 2012.

NASA/IDS: Principal Investigator, Mitchum contribution to "An Independent Assessment of the Ice Melt Contribution to Sea Level Change" proposal headed by Nerem at University of Colorado, \$180K for June 2007 to June 2010, NCE to June 2011.

NOAA/NASA: Principal Investigator, "Development of Operational Products for the Calibration of Satellite Altimeters Against the Global Tide Gauge Network", \$318K for September 2005 to August 2009.

NASA: Principal Investigator, "Mean Flow Effects on Mesoscale Eddy Propagation", \$427K for September 2005 to July 2009.

NOAA/NASA: Principal Investigator, Mitchum contribution to "OSCAR-2: Ocean Surface Current Analyses Real-time" proposal headed by Lagerloef at ESR, \$277K for September 2005 to March 2009.

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NASA/JASON: Principal Investigator, Studies of tropical variability, \$278K for April 1998 to June 2005.

NOAA/NOPP: Principal Investigator, Mitchum contribution to "Establishing a NOAA Operational Data Center for Surface Currents Derived from Satellite Altimeters and Scatterometers: Pilot Study for the Tropical Pacific Including the Hawaiian and US Territorial Island" proposal headed by Lagerloef at ESR, \$190K for October 2001 to September 2004.

NASA/JASON: Principal Investigator, Mitchum contribution to "An investigation of very low frequency sea level change using altimeter data" headed by S. Nerem at University of Colorado, \$178K for June 1997 to April 2004.

NASA/JASON: Principal Investigator, Mitchum contribution to "A study of sigma naught bloom effects on radar altimeters" headed by G. Hayne at Wallops Flight Facility, \$110K for 1 April 1998 to 31 December 2003.

NOAA/CLIVAR: Principal Investigator, "Prospects for sea level data archaeology in the Atlantic", \$40K for September 2000 to August 2001.

PFRP/NOAA: Principal Investigator, "Extension of PFRP investigation of swordfish catch in North Pacific", \$48K for September 2001 to June 2002.

NASA: Principal Investigator, "El Nino/Southern Oscillation in the Antarctic Circumpolar Current", \$66K for September 1, 1998 to August 31, 2001. This is funding for a NASA Fellowship won by Christina Holland based on her proposed dissertation research.

NOAA/PFRP: Principal Investigator, "Evaluation of remdi.9(i)2.9(o00)12(1.)3()/1.8(e-4(ect)2.9)8(o)n0(i)-8(e)(o00).

NOAA/NOS: Co-

OCE 7910 (9 hrs) Directed Research for Y. Zhu Directed Individual Study for various students

Spring 2016

OCE 7910 (9 hrs) Directed Research for Y. Zhu OCE 6934 (3 hrs) Geophysical Fluid Dynamics

Fall 2015

OCE 7910 (9 hrs) Directed Research for Y. Zhu

Summer 2015

OCE 7910 (9 hrs) Directed Research for Y. Zhu Directed Individual Study for various students

Spring 2015

OCE 7910 (3 hrs) Directed Research for Y. Zhu OCE 6934 (3 hrs) Geophysical Fluid Dynamics

Fall 2014

OCP 6050 (3 hrs) Physical Oceanography OCE 7910 (9 hrs) Directed Research for Y. Zhu

Summer 2014

OCE 7910 (9 hrs) Directed Research for Y. Zhu Directed Individual Study for various students

Spring 2014

OCE 7910 (3 hrs) Directed Research for Y. Zhu

Fall 2013

OCE 7910 (3 hrs) Directed Research for Y. Zhu

Summer 2013

OCE 7910 (9 hrs) Directed Research for Y. Zhu Directed Individual Study for various students

Spring 2013

OCE 6934 (3 hrs) Ocean Waves OCE 7910 (3 hrs) Directed Research for Y. Zhu

Fall 2012

OCP 6050 (3 hrs) Physical Oceanography OCE 7910 (3 hrs) Directed Research for Y. Zhu

Summer 2012

OCE 7910 (9 hrs) Directed Research for Y. Zhu

Spring 2012

OCE 6934 (3 hrs) Advanced Data Analysis Methods OCE 7980 (2 hrs) Dissertation for P. Thompson OCE 7910 (3 hrs) Directed Research for Y. Zhu

Fall 2011

OCE 6934 (3 hrs) Readings in Climate Variability (team tau-7(.2(y)062Rh)1rs) Directed Research for Y. Zhu

Spring 2011

OCE 6972 (2 hrs) Thesis for K. Doran OCE 6972 (6 hrs) Directed Research for M. Robinson

OCE 6971 (5 hrs) Thesis for J. Law

Summer 2001

OCE 7910 (1 hrs) Directed Research for C. Holland OCE 6972 (1 hrs) Directed Research for J. Law OCE 7980 (1 hrs) Dissertation for C. Holland OCE 6971 (1 hrs) Thesis for J. Law

Spring 2001

OCE 6908 (1 hrs) Independent Study (Physics) with K. Kilbourne OCE 7910 (1 hrs) Directed Research for C. Holland OCE 6972 (3 hrs) Directed Research for S. Gilbert OCE 6972 (3 hrs) Directed Research for J. Law OCE 7980 (8 hrs) Dissertation for C. Holland OCE 6971 (2 hrs) Thesis for S. Gilbert OCE 6971 (6 hrs) Thesis for J. Law

Fall 2000

OCP 6050 (3 hrs) Physical Oceanography OCE 7910 (1 hrs) Directed Research for C. Holland OCE 6972 (7 hrs) Directed Research for S. Gilbert OCE 6972 (6 hrs) Directed Research for J. Law OCE 7980 (8 hrs) Dissertation for C. Holland OCE 6971 (2 hrs) Thesis for S. Gilbert OCE 6971 (3 hrs) Thesis for J. Law

Summer 2000

OCE 6972 (1 hrs) Directed Research for S. Gilbert OCE 6972 (2 hrs) Directed Research for J. Law OCE 7980 (2 hrs) Dissertation for C. Holland OCE 6971 (1 hrs) Thesis for S. Gilbert

Spring 2000

OCE 6934 (3 hrs) Ocean Waves II OCE 7910 (1 hrs) Directed Research for C. Holland OCE 6972 (4 hrs) Directed Research for S. Gilbert OCE 6972 (3 hrs) Directed Research for J. Law OCE 7980 (3 hrs) Dissertation for C. Holland OCE 6971 (3 hrs) Thesis for S. Gilbert

Fall 1999

OCE 6934 (3 hrs) Continental Shelf Dynamics OCE 7910 (9 hrs) Directed Research for C. Holland OCE 6972 (4 hrs) Directed Research for S. Gilbert OCE 6972 (3 hrs) Directed Research for J. Law

Summer 1999

OCE 7910 (2 hrs) Directed Research for C. Holland OCE 6972 (2 hrs) Directed Research for S. Gilbert OCE 6972 (2 hrs) Directed Research for J. Law

Spring 1999

OCE 6934 (3 hrs) Marine Time Series Analysis OCE 7910 (6 hrs) Directed Research for C. Holland OCE 6972 (3 hrs) Directed Research for S. Gilbert OCE 6972 (1 hrs) Directed Research for J. Law

Fall 1998

OCP 6050 (3 hrs) Physical Oceanography

OCE 7910 (9 hrs) Directed Research for C. Holland OCE 6972 (3 hrs) Directed Research for S. Gilbert OCE 6972 (1 hrs) Directed Research for J. Law

Summer 1998

OCE 7910 (2 hrs) Directed Research for C. Holland OCE 6972 (2 hrs) Directed Research for S. Gilbert

Spring 1998

OCE 6934 (3 hrs) Ocean Waves II OCE 7910 (6 hrs) Directed Research for C. Holland OCE 6972 (2 hrs) Directed Research for S. Gilbert

Fall 1997

OCE 6934 (3 hrs) Ocean Waves I OCE 7910 (5 hrs) Directed Research for C. Holland OCE 6972 (3 hrs) Directed Research for S. Gilbert OCE 6908 (2 hrs) Independent Study (Satellite Altimetry) for P. Filippi

Summer 1997

OCE 7910 (2 hrs) Directed Research for C. Holland OCE 6908 (2 hrs) Independent Study (Satellite Altimetry) for P. Filippi

Spring 1997

OCE 6934 (2 hrs) Marine Time Series Analysis OCE 6934 (3 hrs) Statistics for Marine Research - teamed with R. Wilson OCE 7910 (2 hrs) Directed Research for C. Holland

Fall 1996

OCP 6050 (3 hrs) Physical Oceanography OCE 6908 (1 hrs) Independent Study (Statistics) for K. Donaldson OCE 7910 (3 hrs) Directed Research for C. Holland

Graduate student advising at USF

Yingli Zhu PhD Advisor, 2012-2019 Philip Thompson

Marina Marrari Heidi Souder	Member of PhD Committee, 2004-2008 Member of PhD Committee, 2006-2007
Yonggang Liu	Member of PhD Committee, 2004-2006
Jyotika Virmani	Member of PhD Committee, 1997-2005
Bob Helber	Member of PhD Committee, 1997-2003
Ruoying He	Member of PhD Committee, 1999-2002
Denis Nadeau	Member of PhD Committee, 1999-2002
Nan Schmidt	Member of PhD Committee, 1997-2001
M. Dotherow-McField	Member of PhD Committee, 1997-2001
	,
Zhenjiang Li	Member of PhD Committee, 1996-1997
Juan Milan	Member of MS Committee, 2012-2015
Jessica Makowski	Member of MS Committee, 2012-2013
Charles Lichtenwalner	Member of MS Committee, 2005-2008
Kristine DeLong	Member of MS Committee, 2004-2006
Laura Fauver	Member of MS Committee, 2004-2005
Elizabeth Carnahan	Member of MS Committee, 2003-2005
Steve Gustafson	Member of MS Committee, 1996-1998, 2004 - 2006
Hali Kilbourne	Member of MS Committee, 2001-2003
Jack Parrish	Member of MS Committee, 1996-2002
Jennifer Jacukiewicz	Member of MS Committee, 2000-2002
Haiying Zhang	Member of MS Committee, 2000-2000
Matt Patterson	Member of MS Committee, 1997-1999
Jen Jarrell	Member of MS Committee, 1997-1999
Eric Siegel	Member of MS Committee, 1997-1999

Graduate student advising at UH

Cheryl Kilstrom	Chair of MS Committee, 1994-2000
Jiye Yu	Chair of MS Committee, 1992-1997
Christina Munch	Chair of MS Committee, 1993-1996
James Potemra	Member of PhD Committee, 1992-1997
Jack Li	Member of PhD Committee, 1995-1996
Reka Domokos	Member of MS Committee, 1994-1996
Michael Sawyer	Member of MS Committee, 1992-1996
Kathryn Ozimek	Member of MS Committee, 1990-1991
George Parrish	Member of MS Committee, 1988-1992

Professional Service

College of Marine Science

Standing committees	
1997 - present	Honors and Awards
1996 - present	Seminar (Chair until 2004)
1996 - 2020	Student recruiting
1996 - 2011	Curriculum
2003 - 2011	CMS Tenure and Promotion Committee (Chair 2004 to 2011)
2008 - 2011	Space
2002 - 2004	Dean's Advisory Committee (Chair for 2003-2004)
1997 - 2002	Long-range planning

- 2008 2009 Ocean-Atmosphere Modeling Search Committee
- 2008 2008 Remote Sensing and Fisheries Search Committee
- 2007 2008 Strategic Planning Committee
- 2004 2005 Ranked NTE Faculty Promotion Guidelines Committee
- 2005 2006 Post Retreat Planning Committee
- 2003 2005 Search Committee, Biological Oceanographer faculty position
- 2002 2003 Staff Reorganization Oversight Committee
- 2002 2003 CMS Endowed Postdoctoral Associates Committee
- 2002 2003 EPAY Committee
- 2001 2002 Building Program for the College of Marine Science
- 2002 2002 Sackett Prize Selection Committee
- 1997 1999 Education Degree Committee
- 1999 1999 Annual Faculty Review Committee

University

- 2017 present Advisory Board for USF Office of Corporate Partnerships
- 2017 present Infrastructure Support Committee, subcommittee of Associate Deans for Research
- 2016 present Export Control Advisory Committee (Chair)
- 2012 present Associate Deans for Research group at the Office of Research and Innovation
- 2018 2019 Co-Chair of Planning Committee for University Climate Change Coalition Summit
- 2015 2018 F&A Transition Plan Workgroup
- 2013 2017 CDDI (Center for Drug Discovery and Innovation) Advisory Committee
- 2009 2010 CMS Dean Search Committee
- 2009 2010 Ad Hoc Committee on Tenure and Promotion Guidelines

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- 2008 2009 Task Force on Faculty Roles, Rewards and Responsibilities
- 2006 2007 CMS Dean Search Committee
- 2005 2006 Mathematics search committee for ES&P on USF St. Pete campus
- 2005 2005 Discipline Committee (Chair) for R. Weisberg's nomination as Distinguished University Professor
- 2001 2002 Strategic Committee on Research (as Chair of Research Council)
- 2001 2002

2011 - 2011	Review panel member for NASA, GRACE Science Team competition
2011 - 2011	Committee member for the GCOOS-RA plan for Water Level Measurements
2010 - 2010	Ocean Sciences panelist for the National Science Foundation
2009 - 2010	Review panel member for NASA Gulf of Mexico Climate Change program
2007 - 2007	Ocean Sciences panelist for the National Science Foundation
2000 - 2003	Associate Editor, Journal of Physical Oceanography
2000 - 2000	Review panel member for the NASA Oceanography Program
1998 - 1998	Ocean Sciences panelist for the National Science Foundation
1996 - 1997	Science Steering Group for NOAA/NOS Sea Level Observations
1996 - 1997	Organizing Committee for IGS/JPL Workshop on Tide Gauge Benchmarks
1992 - 1997	Advisory Panel for the Florida State University Sea Level Center
1995 - 1995	NOAA/NOS Global Sea Level Task Force
1993 - 1994	NOAA/NESDIS Advisory Panel for Information Management Project
1991 - 1992	NOAA/NOS Advisory Panel for Global Sea Level Project
1988 - 1990	U.S. WOCE Sea Level Implementation Panel (Chair)
1987 - 1989	U.S. WOCE Data Management Working Group

1987 - 1989 U.S. WOCE Data Management Working Group

International

2011 - present	Member, WMO-IOC JCOMM Observation Coordination Group
2011 - present	Chair of the Global Sea Level Observing System (GLOSS) Group of Experts
2011 - present	President of the IUGG/IAPSO Commission on Mean Sea Level and Tides
2001 - present	Steering committee member, Pilot Project for TIGA under the IGS Governing Board
2000 - present	IERS Working Group on ITRF Datum, ITRF2000 Sub-group
1997 - present	IGS/PSMSL Technical Committee on Tide Gauge Positioning
1996 - present	Permanent Service for Mean Sea Level (PSMSL) Advisory Group
1998 - 2017	JASON/OSTM Science Working Team
2013 - 2017	WCRP CLIVAR Atlantic Implementation Panel
1999 - 2011	Chair of the GLOSS Science Steering Group
1987 - 2011	Member, IUGG/IAPSO Commission on Mean Sea Level and Tides
1987 - 2011	Global Sea Level Observing System (GLOSS) Group of Experts
2008 - 2009	Organizer, IOC Workshop on Precise Vertical Motion Estimates at Tide Gauges
2005 - 2007	

- Science, Strategies and Solutions: Addressing Climate Change in Tampa Bay, Tampa, FL, November 2019 Co-Chair of the Planning committee, organized one of the four panels and both of the keynote speakers.
- FDEP Resiliency Workshop, Tampa, FL, August 2019 (Invited) Panelist to represent USF's activities in climate research
- SECOORA Annual Meeting, Wilmington, NC, June 2019 Participated as the USF Representative to SECOORA
- CLIVAR workshop "Sea Level Hotspots from Florida to Maine: Drivers, Impacts, and Adaptation, April 2019 Invited to serve on Planning Committee and serve as panelist at the meeting.
- *IOC GLOSS Group of Experts X, Busan, South Korea, April 2019* As Chair of GLOSS Group of Experts I was the convener for this meeting.
- NAS committee meeting, Irvine, CA, February, 2019 (Invited) workshop participant to discuss geodetic infrastructure needs to support the Decadal Survey

Calendar year 2018

- Fall AGU meeting, Washington, DC, December 2018 Liu, Y., R. Weisberg, S. Vignudelli, and G.T. Mitchum, Dual Self-Organizing Map (SOM) and Joint SOM-Wavelet Analyses: An Application in the Gulf of Mexico Loop Current System
- Air and Waste Management Association Annual Meeting, Jupiter Beach, Florida, October 2018 Mitchum, G.T., (invited) Talk on sea level rise as part of the Sea Level Rise/Resiliency Forum
- *WCRP Sea Level Grand Challenge, Boulder, Colorado, October 2018* **Mitchum, G.T.**, (invited) Presentation on GLOSS sea level activities relevant to regional sea level variations
- 25 Years of Progress in Radar Altimetry, Ponta Delgado, Azores, September 2018 Beckley, B., X. Yang, G.T. Mitchum, R. Ray, F. Lemoine, N. Zelensky, and B. Loomis, Monitoring Jason-3 Sea Surface Height Stability for Global and Regional Sea Level Estimates
- *Tidally United Summit 2018, Sarasota, Florida, August 2018* **Mitchum, G.T.**, (invited) Featured talk on sea level rise as part of the Public Connections Forum
- 42nd COSPAR Scientific Assembly, Pasadena, California, July 2018
 Nerem, R., B. Beckley, A. Cazenave, J. Church, J. Fasullo, B. Hamlington, B. Meyssignac, G.T. Mitchum, and J. Willis (invited), A 25-Year Record of Global Mean Sea Level Change: What Have We Learned?
- Sea Level Futures Conference, Liverpool, United Kingdom, July 2018 Zhu, Y., and G.T. Mitchum, Coastal versus Open Sea Level Trends – A Revisit
- *Environmental Summit 2018, Sarasota, Florida, April 2018* **Mitchum, G.T.**, (invited) Featured presentation in CLIMATE: The Times, They are A-Changin'
- Citizens' Climate Lobby Climate Action 2018, Tampa, Florida, February 2018 Mitchum, G.T., (invited) Talking About Sea Level Rise and Climate Change

Calendar year 2017

- Zhu, Y., and **G.T. Mitchum**, A Statistical Simulation Model for Global Mean Sea Level from Altimetry and Tide Gauge Reconstructions.
- GOMRI, Tampa, February 2016
 - Chanton, J., **G.T. Mitchum**, S. Locker, H. Parker, R.E. Turner, and O. Pilkey, Climate and Sea Level Rise (SLR) The Nuts and Bolts of an Inescapable Coastal Driver.

Calendar year 2015

Fall AGU meeting, San Francisco, December 2015

- Mitchum, G.T., (invited) GNSS Estimates of Vertical Land Motion at Tide Gauges: Brief History, Present Status and Current Challenges.
- Wdowinski, S., P. Thompson, **G.T. Mitchum**, and J. Park, Decadal-scale sea level rise acceleration along the Florida Atlantic coast and its relations to sea level variability along the Florida Current.

University of Luxembourg, July 2015

Mitchum, G.T., (invited) Sea surface heights from altimetry and sea levels from tide gauges: How do these compare and a couple of examples of what do I do with them.

26th IUGG General Assembly, Prague, Czech Republic, June 2015

Mitchum, G.T., (Session Chair) Sea Level Change and Variability: Past, Present and Future. Mitchum, G.T., (invited) Rigorous statistical testing of model fits to global mean sea level time series.

University of Florida, March 2015

Mitchum, G.T., (invited) Climate Lessons from the Venerable Tide Gauge.

Calendar year 2014

Fall AGU meeting, San Francisco, December 2014

Beckley, B.D., R. D. Ray, F.G. Lemoine, N.P. Zelensky, X. Yang, S. Desai, S. Brown, **Mitchum, G.T.**, and M. Ricko, Maintaining the accuracy of a sea surface height climate record from multi-mission altimeter data.

Webinar for the Global Ocean Observing System (GOOS), November 2014 Mitchum, G.T. (invited), GLOSS, The Global Sea Level Observing System.

Ocean Surface Topograph

Calendar year 2013

IOC GLOSS Group of Experts XIII, Liverpool, England, October 2013 As Chair of GLOSS Group of Experts I was the convener for this meeting.

Ocean Surface Topography Science Team, Boulder, October 2013

Beckley, B., F. Lemoine, N. Zelensky, G.T. Mitchum, R. Ray, X. Yang, S. Melachroinos, D. Chinn an S.B. Luthcke, Impace3 of recent mass flux and revised geodetic standards on geocentric sea level estimates.
 Leuliette, E., G.T. Mitchum, R. Scharroo and J. Lillibridge, Inter-mission and tide gauge comparison with Jason-2.

Invited seminar - Sea level rise: What do we know and what do we need to know?

- 50th Anniversary Meeting of the National Council of University Research Administrators, Washington, DC, November, 2008 Invited as a panelist in the Climate Change session and as a speaker on Sea Level Rise in the same session
- NASA Ocean Surface Topography Mission, Science Working Team Meeting, Nice, France, November 2008
 - Beckley, B.D., N.P. Zelensky, F.G. Lemoine, R.D. Ray, S. Desai, S. Brown, **G.T. Mitchum** and S. Labroue, Extending the sea surface height climate data record with OSTM data.
 - Nerem, R.S., D. Chambers, **G.T. Mitchum**, J. Ries, J. Choe and T. Sazonova, Building and understanding a climate record of sea level change.
 - Lagerloef, G., F. Bonjean and **G.T. Mitchum**, Upper ocean dynamics related to the Pacific Decadal Oscillation using altimeter derived velocity fields.
 - Lillibridge, J., R. Scharroo, E. Leuliette and G.T. Mitchum, Jason-2/OSTM near real-time product validation at NOAA.

Calendar year 2007

University of Hawai'i at Manoa, Department of Oceanography, March 2007 Invited to give a seminar on Sea Level Rise

Ocean Surface Topography Science Team meeting, Hobart, Australia, March 2007

- Mitchum, G.T., B. Beckley, N. Bernier, and K. Sedwick, Improved Comparisons of Altimeter Sea Surface Heights and Tide Gauge Sea Levels.
- Nerem, R.S., **G.T. Mitchum**, D.P. Chambers, J. Choe, and E. Leuliette, An Assessment of Jason GDR-Bs for Monitoring Long-term Sea Level Change.
- Merrifield, M.A., **G.T. Mitchum**, B. Giese, S.T. Merrifield, J. Foster, B. Brooks, and M. Bevis, Global Sea Level Estimates from the GCOS Tide Gauge Network.

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Mitchum, G.T., R.S. Nerem, and M. Merrifield (invited)

AGU Western Pacific Geophysics Meeting, Honolulu, Hawaii, August 2004

Mitchum, G.T., and C. Vonesch, Low frequency Modulations in the Response of Coastal Sea Level to Winter Storms.

Holland, C., and G.T. Mitchum, Interannual Volume Changes and Heat Transport Pathways in the Tropical Pacific.

Lagerloef, G., G.T. Mitchum, F. Bonjean, and R. Cheney, OSCAR (Ocean Surface Currents Analysis - Real time): An Operational Resource for Various Maritime Applications and El Nino Monitoring Using JASON-1 Data.

- Leuliette, E., R.S. Nerem, J. Parker, **G.T. Mitchum**, and D. Chambers, Results of TOPEX/Poseidon-JASON Calibration to Construct a Continuous Record of Global Mean Sea Level.
- *Bathymetry from satellite altimetry planning meeting, San Diego, California, October 2002* Invited as an expert in satellite altimetry.

 TOPEX/Poseidon/JASON-1 Science Working Team meeting, New Orleans, Louisiana, October 2002
 Mitchum, G.T., (Invited) Updated JASON-1 stability estimates from global tide gauge measurements. Holland, C., and G.T. Mitchum, Lagrangian Analyses of Interannual Volume Changes in the Tropical Pacific Lagerloef, G., G.T. Mitchum, R. Cheney, L. Miller, M. Bourassa, F. Bonjean, J. Gunn, E. Johnson, N. Soreide, W. GPI05.5(S)4.2f,)3000, SPE232143, Werk Tossky, V.ª. Eue, 9: 4606 vina, and G.Jacobs, OSCAR (Ocean Surface Current Analysis Real time): A Processing System and Web-server using JASON IGDR Data to Provide Timely Surface Velocity Fields in the Tropical Pacific.

NASA Workshop on Decadal Variability, Madison, Wisconsin, October 2002 Mitchum, G.T., and C. Vonesch, Low frequency modulations in winter storm frequency from tide gauge measurements of sea level.

GPS workshop, Toulouse, France, September 2002 Invited as an expert in altimetry and GPS and to serve as a session chair.

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TOPEX/Poseidon/JASON-1 Science Working Team meeting, Miami, Florida, November 2000

Mitchum, G.T., (invited) An update on monitoring the stability of satellite altimeters with tide gauge data **Mitchum, G.T.**, D. Hancock, G. Hayne, and D. Vandemark, (invited) Description of sigma-naught blooms in

TOPEX altimeter data

Mitchum, G.T., A. Busalacchi, and G. Lagerloef, Studies of tropical variability

Mitchum, G.T., and R. Scharroo, Intercomparison of TOPEX and ERS and tide gauge sea levels

Lagerloef, G., G.T. Mitchum, A. Busalacchi, and J. Gunn, Tropical surface currents estimated from satellite altimeter sea levels and winds

Gilbert, S., and G.T. Mitchum, Can TOPEX/Poseidon observe equatorial inertia-gravity waves?

Nerem, S., and G.T. Mitchum, Studies of vertical crustal motion and sea level using TOPEX/Poseidon

Department of Geology, University of South Florida, Invited seminar speaker on 17 April 2000 Mitchum, G.T., How much is sea level rising?

Ocean Sciences 2000, San Antonio, Texas, January 2000

- Mitchum, G.T., Combining data from satellite altimetry and tide gauges for studies of low frequency sea surface height variations
- G. Lagerloef, G.T. Mitchum, and P. Niiler, Altimeter-derived surface geostrophic currents apparently underestimated relative to surface drifters

J. Gunn, G. Lagerloef, **G.T. Mitchum**, and A. Busalacchi, Towards a real **MiT.hu2.8(r)]T.422**

American Meteorological Society Annual meeting, Dallas, January 1999

G.T. Mitchum (invited), A System for Measuring Long-term Regional to Global Sea Level Change, talk was presented by C. Holland

Calendar year 1998

Fall meeting of the American Geophysical Union, San Francisco, CA, December, 1998
 Lagerloef, G.T. Mitchum, R. Lukas and A. Busalacchi, Tropical Pacific Surface Currents During the 1997-1998 El
 Nino-S>>BDCA) (98)]TJuem14.9 Of-(LaNemthi.ETLthi9-2.3(P)-8.3g g.cemur,ahi7fD A2 1 Tf -0.007 Tc 0.01 Tw 4.398 02.1(T)-2(.)-

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Lagerloef, G., G.T. Mitchum and A. Busalacchi, Tropical Pacific Surface Circulation Polovina, J., D. Kobayashi, M. Seki and G.T. Mitchum, Application of Altimeter-derived Surface Currents to Fisheries Research and Management

International Sea Level Workshop, Honolulu, HI, June, 1997

Served as a member of the Science Steering Group for the workshop. **G.T. Mitchum** (invited), Altimeter Calibration

Methods for Monitoring Sea Level: GPS and Tide Gauge Benchmark Monitoring, GPS Altimeter Calibration, Pasadena, CA, March, 1997 Chair of Session 2 -- An Introduction to the Measurements

G.T. Mitchum (invited), An Overview of Tide Gauge MeasurementsG.T. Mitchum (invited), Using Tide Gauges to Calibrate Satellite Altimeter Measurements

- Global Sea Level Observing System (GLOSS) Group of Experts, Pasadena, CA, March, 1997 Invited as a member of the Group of Experts to review the global sea level observing system, and to assist in the revision of the IOC's Global Sea Level Observing System Implementation Plan.
- Microgal Gravimetry: Instruments, Observations, and Applications, St. Augustine, FL, March, 1997 Invited by conference organizer (W. Carter, UF) to attend because of experience with sea level issues.

Calendar year 1996

Fall meeting of the 0Tc 051Fo7.7(a)1[(M)7.7(i)6.an, Gl mr UMialat, M, Grvarna, C4.2Dl mrteicch996