

## **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, <https://doi.org/10.1175/BAMS-D-20-0105.1>

- 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, <https://doi:10.1175/2019BAMSStateoftheClimate>.
- 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. Wyrski, Length scales of interannual sea level variability along the Pacific margin. *J. Phys. Oceanogr.*, **19**, 122-128.
- 1988 **Mitchum, G.T.**, and K. Wyrski, 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.
- 1998 **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 taught equally with Chambers, Shin and Flower)  
OCE 6971 (3 hrs) Thesis for M. Robinson  
OCE 6972 (6 hrs) Directed Research for M. Robinson  
OCE 7980 (3 hrs) Dissertation for P. Thompson  
OCE 7910 (3 hrs) Directed Research for P. Thompson

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	Member of PhD Committee, 2004-2008
Heidi Souder	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, 1999-2001
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
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

### **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

*42<sup>nd</sup> 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.

*26<sup>th</sup> 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 and 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?

*50<sup>th</sup> 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.

Lagerloef, G., F. Bonjean, J. Choe, J. Ries, J. Milliman, 4 9 4 d 9 1 . 0 4 8 3 9 0 0 3 T c - 2 3 . 1

**Mitchum, G.T.**, R.S. Nerem, and M. Merrifield (invited), Instrumental estimates of 20<sup>th</sup> Century Sea Level Rise.  
Nerem, R.S., E. Leuliette, **G.T. Mitchum**, D. Chambers, and J. Willis, Sea Level Change: What have we  
learned from satellite altimetry, satellite gravity, and ocean temperature measurements?

*European Geophysical Union General Assembly, Vienna, Austria, April 2006*

Bosch, W., C.K. Shum, P. Woodworth, and **G.T. Mitchum**, The International Altimetry Service (IAS) – Servicing  
Interdisciplinary Earth Science and Applications.

*Ocean Surface Topography Science Team meeting and 15 Years of Radar Altimetry Symposium, Venice, Italy, March 2006*

Bonjean, F., G. Lagerloef, **G.T. Mitchum**, L. Miller, R. Leg Leg Lul>>BDC /TT2 1 Tf -42.386 -1.157 Td ( )Tj EMC /H5

*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. Zhai, R. Legeckis, V. Kousky, Y. Zue, G. Polovina, 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

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*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>>BDC (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 Measurements

**G.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 American Geophysical Union, San Francisco, CA, December, 1996*

C. Holland and **G.T. Mitchum**, The Fate of Eddies Generated off the Big Island of Hawaii

S. Nerem and **G.T. Mitchum** (invited), Very Low Frequency Sea Level Change Observed by TOPEX/POSEIDON

R. Ray and **G.T. Mitchum** (invited), Surface Manifestation of Internal Tides in the Deep Ocean

S. Nerem and **G.T. Mitchum**, Combined Use of Tide Gauges and Satellite Altimetry for Measuring Changes in  
Global Mean Sea Level

*TOPEX/Poseidon Science Working Team Meeting, Southampton, UK, October, 1996*

**G.T. Mitchum** (invited), Estimating the stability of altimeters from tide gauge sea levels

G. Lagerloef, **G.T. Mitchum**, R. Lukas, A. Busalacchi and P. Niiler, Tropical Pacific near Surface Currents  
Estimated from Altimeter, Wind and Drifter Data

*Tidal Science 96, London, England, UK, October, 1996*

R. Ray, **G.T. Mitchum** and S. Chiswell (invited), Two aspects of observed internal tides in the deep ocean:  
altimetry vs. island gauges