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Education:

B.S., Aerospace Engineering, University of Texas at Austin, December 1990.

Ph. D., Aerospace Engineering, The University of Texas at Austin, December 1996.

Supervisor: Byron D. Tapley

Title of Dissertation: Time-Varying Sea Surface Topography from Satellite Altimetry

Professional Experience:

Aug. 2009 – Present	Associate Professor, College of Marine Science, University of South Florida
Sept. 2003 – Aug. 2009	Research Scientist, Center for Space Research, The University of Texas at Austin
June 2000 – Aug. 2003	Research Associate, Center for Space Research
Aug. 1997 – May 2000	Research Engineer/Scientist Associate IV, Center for Space Research
Jan. 1997 – Aug. 1997	Postdoctoral Fellow, Center for Space Research

Honors and Awards:

2008, Geodesy Section Award, American Geophysical Union “*For pioneering satellite geodetic investigations of global ocean circulation and sea level change*”

2003, NASA Group Achievement Award for Jason-1 Project Team

2003, NASA Group Achievement Award for GRACE Project Team

1995, Outstanding Student Paper, Geodesy Section, American Geophysical Union, Fall Meeting for “*Basin-scale, low-frequency variability of the dynamic ocean topography in the Pacific and Atlantic Oceans*”

Membership and Service in Technical and Professional Organizations:

Lead Author, IPCC Fifth Assessment Report Chapter 3 “Ocean Observations”, 2010-2013

Member, American Geophysical Union

Member, European Geosciences Union

Member, NASA Ocean Surface Topography, GRACE, Energy/Water, Aquarius, and Interdisciplinary Science Teams

Member, NASA JPL Physical Oceanography Data Archive Center (PO.DAAC) User Working Group

Member, US CLIVAR Panel on Phenomena, Observations, and Synthesis, 2010-2013

Contributing Author, IPCC Fourth Assessment Report, 2004-2007

Member, Whitten Medal Committee, AGU, 2010-2013

Session Chair, Meeting of the American Geophysical Union: 1998, 1999, 2003

Session Chair, Ocean Sciences Meeting: 2000

Session Chair, Scientific Assembly of International Association of Geodesy: 2001, 2005, 2007

Session Chair, European Geosciences Union General Assembly: 2004, 2005, 2008

Refereed Journal Articles/Book Chapters:

* indicates my student; ** indicates my Post-Doc

27 as lead author, 29 as co-author

H-Index = 21 (13 as lead author)

Citations calculated on 19 January 2013 from ISI Web of Knowledge database

2013

- Tsimplis, M. N., F. M. Calafat**, F. M., M. Marcos, G. Jordà, D. Gomis, L. Fenoglio-Marc, M. V. Struglia, S. A. Josey, and **D. P. Chambers** (2013), The effect of the NAO on Sea level and on mass changes in the Mediterranean Sea. *J. Geophys. Res.*, in press.
- Calafat**, F. M., **D. P. Chambers** (2013) Interannual to decadal sea level variability along the Norwegian coast and in the Arctic Ocean; a link with the Eastern North Atlantic, *J. Geophys. Res.*, in press.

2012

- Chambers, D. P.**, M. A. Merrifield, and R. S. Nerem (2012), Is there a 60-year oscillation in global mean sea level?, *Geophys. Res. Lett.*, 39, L18607, doi:10.1029/2012GL052885.
- Calafat**, F. M., **D. P. Chambers**, and M. N. Tsimplis (2012), Mechanisms of decadal sea level variability in the eastern North Atlantic and the Mediterranean Sea, *J. Geophys. Res.*, 117, C09022, doi:10.1029/2012JC008285.
- Chambers, D. P.**, J. Wahr, M. E. Tamisiea, and R. Steven Nerem (2012), Reply to Comments by Peltier et al., 2012 ("Concerning the Interpretation of GRACE Time Dependent Gravity Observations and the Influence Upon them of Rotational Feedback in Glacial Isostatic Adjustment.") *J. Geophys. Res.*, 117, DOI: 10.1029/2012JB009441.
- Chambers, D. P.**, and J. A. Bonin** (2012), Evaluation of Release-05 GRACE time-variable gravity coefficients over the ocean, *Ocean Science*, 8, 1–10, www.ocean-sci.net/8/1/2012/doi:10.5194/os-8-1-2012

2011

- Bonin**, J., and **D.P. Chambers**, Evaluation of high-frequency oceanographic signal in GRACE data: Implications for de-aliasing, *Geophys. Res. Lett.*, 38, L17608, doi:10.1029/2011GL048881, 2011.
- Chambers, D. P.**, ENSO-correlated fluctuations in ocean bottom pressure and wind-stress curl in the North Pacific, *Ocean Sci.*, 7, 685-692, doi:10.5194/os-7-685-2011, 2011.
- Chambers, D. P.**, and J. Schröter, Measuring Ocean Mass Variability from Satellite Gravimetry, *J. Geodynamics*, 52,333-343, doi:10.1016/j.jog.2011.04.004, 2011.

2010

- Chambers, D. P.**, J. Wahr, M. E. Tamisea, and R. Steven Nerem, Ocean Mass from GRACE and Glacial Isostatic Adjustment. *J. Geophys. Res.*, 115, B11415, doi:10.1029/2010JB007530, 2010.
- Chambers, D. P.** and J. K. Willis, A Global Evaluation of Ocean Bottom Pressure from GRACE, OMCT, and Steric-Corrected Altimetry, *J. Atmos. Ocean. Tech.*, 27, 1395-1402, DOI: 10.1175/2010JTECH0738.1, 2010.
- Jin, S., **D. P. Chambers**, and B. D. Tapley, Hydrological and oceanic effects on polar motion from GRACE and models, *J. Geophys. Res.*, 115, B02403, doi:10.1029/2009JB006635, 2010.
- Nerem, R. S., **Chambers, D. P.**, Orbit Determination and Sea Level Rise: How Astrodynamics Informs Us of about the Climate, *J. Astronaut. Sci.*, 57, 767-776, October–December 2010.

- Nerem, R. S., **D. P. Chambers**, C. Choe, and G. T. Mitchum, Estimating mean sea level change TOPEX and from the Jason missions, *Marine Geodesy*, 33, Supplement 1, 435-446, doi: 10.1080/01490419.2010.491031, 2010.
- Roemmich, D., J. Willis, J. Gilson, D. Stammer, A. Koehl, T. Yemenis, **D. P. Chambers**, F. Landerer, J. Marotzke, J. Gregory, T. Suzuki, J. Church, N. White, C. Domingues, A. Cazenave, and P.-Y. LeTraon, Global Ocean Warming and Sea Level Rise, in *Understanding Sea-Level Rise and Variability*, J. A. Church, P. L. Woodworth, T. Aarup, and W. S. Wilson (eds.), Wiley-Blackwell, 2010.
- Syed, T. H., J. S. Famiglietti, **D. P. Chambers**, J. K. Willis, and K. Hilburn, Satellite-Based Global Ocean Mass Balance Reveals Water Cycle Acceleration and Increasing Continental Freshwater Discharge, 1994-2006, *Proc. National Acad. Sci.*, doi: 10.1073/pnas.1003292107, 2010.
- Willis, J. K., **D. P. Chambers**, C. K. Shum, and C-Y Kuo, Global Sea Level Rise: Recent Progress and Challenges for the Decade to Come, *Oceanography*, 23, 26-35, 2010.
- Wouters, B., and **D. P. Chambers**, Analysis of Seasonal Ocean Bottom Pressure Variability in the Gulf of Thailand from GRACE, *Global and Planetary Change*, 74, doi:10.1016/j.gloplacha.2010.08.002, 2010.

2009

- Cadden D. D. H., B. Subrahmanyam, **D.P. Chambers**, and V.S.N. Murty, Surface and Subsurface Geostrophic Current Variability in the Indian Ocean From Altimetry, *Marine Geodesy*, 32, 19-29, DOI:10.1080/01490410802661955, 2009.
- Chambers D. P.** and J. K. Willis, Low-frequency exchange of mass between ocean basins, *J. Geophys. Res.*, 114, C11008, doi:10.1029/2009JC005518, 2009.
- Chambers D. P.**, Calculating Trends from GRACE in the Presence of Large Changes in Continental Ice Storage and Ocean Mass, *Geophys. J. Int.*, 176, 415-419, doi: 10.1111/j.1365-246X.2008.04012.x, 2009
- Maximenko N., P. Niiler, M.-H. Rio, O. Melnichenko, L. Centurioni, **D. Chambers**, V. Zlotnicki, and B. Galperin, Mean dynamic topography of the ocean derived from satellite and drifting buoy, *J. Atmos. Ocean. Tech.*, 26, 1910-1919, 2009
- Strassberg G., B. Scanlon, and **D. P. Chambers**, Evaluation of Groundwater Storage Monitoring with the GRACE Satellite: Case Study High Plains Aquifer, Central USA, *Water Resources Res.*, 45, W05410, doi:10.1029/2008WR006892, 2009.
- Syed T. H., J. Famiglietti, and **D. P. Chambers**, GRACE-based estimates of terrestrial freshwater discharge from basin to continental scales, *J. Hydrometeorology*, 10, 22-40, 2009

2008

- Chambers D. P.** and J. K. Willis, Analysis of large-scale ocean bottom pressure variability in the North Pacific, *J. Geophys. Res.*, 113, C11003, doi:10.1029/2008JC004930, 2008
- Swenson S. C., **D. P. Chambers**, and J. Wahr Estimating geocenter variations from a combination of GRACE and ocean model output, *J. Geophys. Res.*, 113, B08410, doi:10.1029/2007JB005338, 2008
- Willis, J. K., **D. P. Chambers**, and R. S. Nerem, Assessing the Globally Averaged Sea Level Budget on Seasonal to Interannual Time Scales, *J. Geophys. Res.*, 113, C06015, doi:10.1029/2007JC004517, 2008
- Wouters B., **D. P. Chambers**, and E. J. O. Schrama, GRACE observes small-scale mass loss in Greenland, *Geophys. Res. Lett.*, 35, L20501, doi:10.1029/2008GL034816, 2008

2007

- Chambers D. P.**, Gravimetric Methods – Spacecraft Altimeter Measurements, in *Treatise on Geophysics, Vol. 3 – Geodesy*, G. Schubert (ed.), Oxford: Elsevier Ltd, pp. 123-162, 2007
- Chambers D.**, M. Tamisiea, R. S. Nerem, J. Ries, Effects of Ice Melting on GRACE Observations of Ocean Mass Trends, *Geophys. Res. Ltrs*, 34, L05610, doi:10.1029/2006GL029171, 2007
- Vianna M. L., V. V. Menezes, and **D. P. Chambers**, A High Resolution Satellite-Only GRACE-based Mean Dynamic Topography of the South Atlantic Ocean, *Geophys. Res. Lett.*, 34, doi:10.1029/2007GL031912, L24604, 2007

2006

- Chambers D. P.**, Evaluation of new GRACE time-variable gravity data over the ocean, *Geophys. Res. Ltrs*, 33, L17603, doi:10.1029/2006GL027296, 2006
- Chambers D.**, Observing seasonal steric sea level variations with GRACE and satellite altimetry, *J. Geophys. Res.*, 111 (C3), C03010, 10.1029/2005JC002914, 2006
- Nerem R. S., A. Cazenave, **D. P. Chambers**, L. Fu, E. W. Leuliette, G. T. Mitchum, Comment on “Estimating future sea level change from past records” by Nils-Axel Mörner, *Glob. Planet. Change*, doi:10.1016/j.gloplacha.2006.08.002, 2006

2000-2005

- Chambers D. P.**, J. Wahr, R. S. Nerem Preliminary observations of global ocean mass variations with GRACE, *Geophys. Res. Ltrs*, 31, L13310, doi:10.1029/2004GL020461, 2004
- Chambers D. P.**, J. C. Ries, and T. J. Urban, Calibration and Verification of Jason-1 Using Global Along-Track Residuals with TOPEX, *Marine Geodesy, Special Issue on Jason-1 Calibration/Validation, Part 1, Vol. 26*, 305-318, 2003
- Chambers D. P.**, Effect of Sea Level Variability on the Estimation of Mean Sea Surface Gradients, *Marine Geodesy*, 25, 273-288, 2002
- Chambers D. P.**, C. A. Mehlhaff, T. J. Urban, and R. S. Nerem, Analysis of Interannual and Low-Frequency Variations in Sea Level from Altimetry and Tide Gauges, *Phys. Chem. Earth*, 27, 1407-1411, 2002
- Chambers D. P.**, C. A. Mehlhaff, T. J. Urban, D. Fujii, and R. S. Nerem, Low Frequency Variations in Global Mean Sea Level: 1950-2000, *J. Geophys. Res.*, 107, 10.1029/2001JC001089, 2002
- Chambers D. P.**, Seasonal and Low-Frequency Variability in Global and Basin-Scale Sea Level, *Vistas for Geodesy in the New Millennium, Intl. Assoc. of Geodesy Symposia, Vol. 125*, J. Adam and K. P. Schwarz (eds), Springer, Berlin, 481-486, 2002.
- Chambers D. P.**, S. A. Hayes, J. C. Ries, and T. J. Urban, New TOPEX Sea State Bias Models and Their Effect on Global Mean Sea Level, *J. Geophys. Res.*, 108 (C10), 3305, 10.1029/2003JC001839, 2003
- Chambers D. P.**, J. L. Chen, R. S. Nerem, and B. D. Tapley, Interannual Sea Level Change and the Earth’s Water Mass Budget, *Geophys. Res. Ltrs*, 27, 3073-3076, 2000
- Chen, J. L., C. R. Wilson, B. D. Tapley, **D. P. Chambers**, and T. Pekker, Hydrological Impacts on Seasonal Sea Level Change, *Global and Planetary Change*, 32, 25-32, 2001
- Chen, J.L., C.K. Shum, C.R. Wilson, and **D.P. Chambers**, B.D. Tapley, Seasonal Sea Level Change from TOPEX/Poseidon Observation and Thermal Contribution, *Journal of Geodesy*, 73, 638-647, 2000
- Cunningham J. D., **D. P. Chambers**, C. O. Davis, A. Gerber, R. Hetz, J. P. McGuire, W. Pichel, Ocean Observer Study: A Proposed National Asset to Augment the Future U. S. Operational Satellite System, *Marine Tech. Soc. Journal*, 37 (3), 142-157, 2003

- Shum C., Y. Yi, K. Cheng, C. Kuo, A. Braun, S. Calmant, and **D. Chambers**, Calibration of Jason-1 altimeter over Lake Erie, *Marine Geodesy, Special Issue on Jason-1 Calibration/Validation, Part 1, Vol. 26*, 335-354, 2003
- Tapley B., J. Ries, S. Bettadpur, **D. Chambers**, M. Cheng, F. Condi, B. Gunter, Z. Kang, P. Nagel, R. Pastor, T. Pekker, S. Poole, and F. Wang, GGM02 - An Improved Earth Gravity Field Model from GRACE, *J. Geod.*, 10.1007/s00190-005-0480-z, 2005
- Tapley B. D., **D. P. Chambers**, S. Bettadpur, and J. C. Ries Large Scale Ocean Circulation from the GRACE GGM01 Geoid, *Geophys. Res. Ltrs.*, 30(22), 2163, doi:10.1029/2003GL018622, 2003

1994-1999

- Chambers D. P.**, B. D. Tapley and R. H. Stewart, Anomalous warming in the Indian Ocean coincident with El Niño, *J. Geophys. Res.*, 104, 3035-3047, 1999
- Chambers D. P.**, B. D. Tapley and R. H. Stewart, Measuring heat storage changes in the equatorial Pacific: A comparison between TOPEX altimetry and Tropical Atmosphere-Ocean buoys, *J. Geophys. Res.*, 103 (C9), 18591-18598, 1998
- Chambers D. P.**, J. C. Ries, C. K. Shum, and B. D. Tapley, On the use of tide gauges to determine altimeter drift, *J. Geophys. Res.*, 103 (C6), 12885-12890, 1998
- Chambers D. P.**, B. D. Tapley and R. H. Stewart Reduction of geoid gradient error in ocean variability from satellite altimetry, *Mar. Geod.*, 21, 25-39, 1998
- Chambers D. P.**, B. D. Tapley and R. H. Stewart, Long-Period Ocean Heat Storage Rates and Basin-Scale Heat Fluxes from TOPEX Altimetry, *J. Geophys. Res.*, 102 (C5), 10525-10533, 1997
- Chen, J. L., C. R. Wilson, **D. P. Chambers**, R. S. Nerem, and B. D. Tapley, Seasonal global water mass balance and mean sea level variations, *Geophys. Res. Ltrs.*, 25, 3555-3558, 1998
- Nerem R. S., **D. P. Chambers**, E. Leuliette, G. T. Mitchum, and B. S. Giese Variations In Global Mean Sea Level During The 1997-98 ENSO Event, *Geophys. Res. Ltrs.*, 26, 3005-3008, 1999
- Shum C. K., **D. P. Chambers**, J. C. Ries, B. D. Tapley, and D. N. Yuan, Determination of large scale ocean circulation and its variations using satellite altimetry, *Gravimetry and Space Techniques Applied to Geodynamics and Ocean Dynamics, Geophys. Monogr. Ser.*, vol. 82, AGU, Washington, D. C., 21-32, 1994
- Tapley B. D., **D. P. Chambers**, C. K. Shum, R. J. Eanes, J. C. Ries, and R. H. Stewart), Accuracy assessment of the large-scale dynamic ocean topography from TOPEX/POSEIDON altimetry, *J. Geophys. Res.*, 99 (C12), 24605-24617, 1994

Proceedings of Technical Meetings and Technical Reports (non-reviewed):

- Rodell, M., J.S. Famiglietti, **D.P. Chambers**, and J. Wahr, Global Climate: Contributions of GRACE to Climate Monitoring. In "State of the Climate in 2010", H. Dolman, B. Hall, K. Willett, and P. Thornes, Eds. *Bull. Amer. Meteor. Soc.*, 92, S50-S51, 2011.
- Rodell, M., **D.P. Chambers**, and J.S. Famiglietti, Global Climate: Groundwater and Terrestrial Water Storage. In "State of the Climate in 2010", H. Dolman, B. Hall, K. Willett, and P. Thornes, Eds. *Bull. Amer. Meteor. Soc.*, 92, S49&S52, 2011.
- Merrifield, M., G. Mitchum, E. Leuliette, **D. Chambers**, S. Nerem, P. Woodworth, S. Holgate, L. Miller, and S. Gill: Sea Level Variations. In "State of the Climate in 2010", H. Dolman, B. Hall, K. Willett, and P. Thornes, Eds. *Bull. Amer. Meteor. Soc.*, 92, S98-100, 2011.

Chambers, D. P., C. A. Mehlhaff, T. J. Urban, D. Fujii, and B. D. Tapley. ENSO Variability in the Indian and Pacific Oceans from Tide Gauge Data and TOPEX/Poseidon Empirical Orthogonal Functions, *Abstracts of Presentations at Workshops during the 7th Session of the IOC Group of Experts on the Global Sea Level Observing System (GLOSS), Intergovernmental Oceanographic Commission Workshop Report 180*, 4, 2002

Allan R., **D. Chambers**, W. Drosowsky, H. Hendon, M. Latif, N. Nicholls, I. Smith, R. Stone, Y. Toure). Is there an Indian Ocean dipole, and is it independent of the El Niño – Southern Oscillation?, *CLIVAR Exchanges*, 6 (3), 18-22, 2001.

Tapley, B. D., C. K. Shum, **D. P. Chambers**, G. E. Peterson, and J. C. Ries. Oceanographic results from analysis of ERS-1 altimetry, *Proceedings Second ERS-1 Symposium - Space at the Service of our Environment, ESA SP-361*, Hamburg, Germany, 489-494, 1994.

Presentations at Scientific Meetings († denotes an invited presentation)

Note: I have only listed presentations where I was the lead author and presenter.

2012

Is there a 60-year oscillation in global mean sea level?, presented at Fall Meeting of American Geophysical Union, San Francisco, CA, 3-7 December 2012 (D. P. Chambers, S. Kwon, M. A. Merrifield, R. S. Nerem).

† Ocean Warming and Recent Sea Level Change, presented at Sea Level Symposium sponsored by Leopoldina, the German Academy of Sciences, Potsdam, Germany, September 2012 (Chambers, D. P. and K. von Schuckmann)

Measuring Zonal Transport Variability of the Antarctic Circumpolar Current Using GRACE Ocean Bottom Pressure, presented at GRACE Science Team Meeting, Potsdam, Germany, September 2012 (Chambers, D. P., Makowski, J.)

2011

ENSO-Correlated Fluctuations in Non-Steric Sea Level and Wind-Stress Curl in the North Pacific, presented at Fall Meeting of AGU, San Francisco, CA, December, 2011 (Chambers, D. P.)

† Observations of historical and current-day sea level rise, XXV Assembly of International Union of Geodesy and Geophysics, Melbourne, Australia, June 2011 (Chambers, D. P.)

† Ocean mass variations from 2003 to 2011: Implications for the Global Water Cycle, Assembly of European Geosciences Union, Vienna, Austria, April 2011. (Chambers, D. P., J. Bonin, J. Famiglietti)

† Decadal-scale non-steric sea level changes in the North Pacific, World Climate Research Program Workshop of Regional Sea Level Change, Paris, France, February 2011 (D. P. Chambers).

2010

Decadal-scale barotropic sea level changes in the North Pacific, presented at Fall Meeting of AGU, San Francisco, CA, December, 2010 (D. P. Chambers).

† The modern sea level observing system, presented at Fall Meeting of AGU, San Francisco, CA, December, 2010 (D. P. Chambers).

† Recent ocean results utilizing satellite gravity measurements, Workshop on Gravity from Space for Oceans, Land Ice, and Sea Level Rise, Hamburg, Germany, 29-30 September 2010 (D. P. Chambers and J. Morison).

† Measurements Needed to Understand Causes of Present-Day Sea Level Change, 4th Oceans from Space Symposium, Venice, Italy, 28 April 2010. (D. P. Chambers)

† The importance of continued satellite gravity missions for understanding ocean mass variability, Assembly of European Geosciences Union, Vienna, Austria, 5 May 2010. ([D. P. Chambers](#))

2009

† Measuring mean ocean mass variability with GRACE, NASA Sea Level Workshop, Austin, TX, 2-3 November 2009 ([D. P. Chambers](#))

† The Global Water Cycle 2003-2008: Implications for Long-Period Sea Level Change, presented at EGU General Assembly, Vienna, Austria, April, 2009 ([D. P. Chambers](#), James Famiglietti & Isabella I. Velicogna, R. Steven Nerem).

Detecting Low-Frequency Mass Exchange between Ocean Basins, presented at EGU General Assembly, Vienna, Austria, April, 2009 ([D. P. Chambers](#) and J. K. Willis).

2008

Analysis of basin-scale mass exchange between the Atlantic/Indian Oceans and the Pacific, presented at Fall Meeting of AGU, San Francisco, CA, December, 2008 ([D. P. Chambers](#) and J. K. Willis).

† Measuring sea level change with satellites (Keynote Presentation), presented at the William Smith Meeting on Sea Level, London, England, Sept. 1-2, 2008 ([D. P. Chambers](#)).

† Measuring changes in ocean mass with GRACE, presented at the Pacific Congress on Marine Science and Technology, Honolulu, Hawaii, June 2008 ([D. P. Chambers](#)).

The hunt for Ice-Melting Fingerprints in GRACE ocean data, presented at EGU General Assembly, Vienna, Austria, April, 2008 ([D. P. Chambers](#), R. S. Nerem, and J. K. Willis).

Analysis of large-scale ocean bottom pressure variability in the North Pacific, presented at EGU General Assembly, Vienna, Austria, April, 2008 ([D. P. Chambers](#) and J. K. Willis).

† Causes and effects of sea level rise, Meeting of the National Academy of Sciences Board on Earth Sciences and Resources Mapping Science Committee, Irvine, CA, April 24, 2008 ([D. P. Chambers](#)).

Modes of low-frequency ocean bottom pressure variability in the North Pacific, presented at the 2008 Ocean Sciences Meeting, Orlando, FL, March, 2008 ([D. P. Chambers](#)).

2007

Low-Frequency Ocean Bottom Pressure Signals in the North Pacific, presented at Fall Meeting of AGU, San Francisco, CA, December, 2007 ([D. P. Chambers](#) and J. K. Willis).

† Causes and effects of sea level rise, Meeting of the National Academy of Sciences Board on Earth Sciences and Resources Roundtable “Impacts of Coastal Inundation”, Irvine, CA, November 7, 2007 ([D. P. Chambers](#)).

Observing steric sea level variations from a combination of Jason-1, GRACE, and Argo, presented at XXIV Meeting of International Union of Geodesy and Geophysics, Perugia, Italy, July, 2007 ([D. P. Chambers](#)).

Measuring variations in mean ocean mass with GRACE, presented at EGU General Assembly, Vienna, Austria, April, 2007 ([D. P. Chambers](#), M. E. Tamisiea, and R. S. Nerem).

† Measuring variations in mean ocean mass, presented at “Satellite Observations of the Global Water Cycle Workshop”, Irvine, CA, March, 2007 ([D. P. Chambers](#)).

2006

Analysis of Barotropic Sea Level Variations in the North Pacific Observed by GRACE, presented at Fall Meeting of AGU, San Francisco, CA, December, 2006 ([D. P. Chambers](#)).

† Orbit Selection Issues for Wide-Swath Altimeter, presented at Wide-Swath Ocean Sciences and

Hydrology Workshop, Arlington, VA, October 2006 (D. P. Chambers).

† The Potential to Estimate Ocean Thermal Expansion by Combining GRACE and Satellite Altimeter Data, presented at “Understanding Sea-Level Rise and Variability”, World Climate Research Programme Workshop, Paris, France, June 2006 (D. P. Chambers).

Combining Jason-1 Altimetry and GRACE Time-Variable Gravity to Study Steric Sea Level, presented at EGU General Assembly, Vienna, Austria, April, 2006 (D. P. Chambers).

2000-2005

† Assessment of GRACE Time-Variable Gravity over the Ocean, presented at Fall Meeting of AGU, San Francisco, CA, December, 2005 (D. P. Chambers).

† The NPOESS Radar Altimeter, presented at Fall Meeting of AGU, San Francisco, CA, December, 2005 (D. P. Chambers, T. J. Urban, B. D. Tapley).

† Estimating heat storage from a combination of satellite altimetry and GRACE data (keynote address), presented at Dynamic Planet 2005 Conference, Cairns, Australia, August, 2005 (D. P. Chambers)

Observing Steric Sea Level Variations with GRACE and Satellite Altimetry, presented at Spring Meeting of AGU, New Orleans, LA, May, 2005 (D. P. Chambers)

† Determination of steric level variations from a combination of altimetry and GRACE, presented at 2nd EGU General Assembly, Vienna, Austria, April, 2005 (D. P. Chambers)

GRACE observations over the ocean, presented at Fall Meeting of AGU, San Francisco, CA, December, 2004 (D. P. Chambers).

† Observing the ocean water cycle with GRACE, presented at Fall Meeting of AGU, San Francisco, CA, December, 2004 (D. P. Chambers, R. S. Nerem, and J. Wahr).

† Observing Low-Frequency Variability in the Indian Ocean with Satellite Altimetry, 2004 IEEE International Geoscience and Remote Sensing Symposium, Anchorage, AK, September, 2004 (D. P. Chambers and B. Subrahmanyam).

Global Ocean Mass Variations from GRACE Gravity Fields, 2004 Joint Assembly of AGU, Montreal, Quebec, May, 2004 (D. P. Chambers, R. S. Nerem, J. Wahr)

† Evaluation of rates from an EOF reconstruction of sea level for 1950-2002, 1st EGU Assembly, Nice, France, April, 2004 (D. P. Chambers)

Evaluation of non-steric sea level variations from GRACE, 1st EGU Assembly, Nice, France, April, 2004 (D. P. Chambers)

Large-scale ocean circulation from satellite altimetry and a preliminary GRACE geoid, presented at EGS-AGU-EUG Joint Assembly, Nice, France, April, 2003 (D. P. Chambers, S. Bettadpur, B. Gunter, J. Ries, B. Tapley)

Basin-scale thermosteric sea level variations: 1993-2002, presented at EGS-AGU-EUG Joint Assembly, Nice, France, April, 2003 (D. P. Chambers)

Results from the TOPEX/Poseidon-Jason Calibration/Verification Mission, presented at Fall meeting of AGU, San Francisco, CA, December, 2002 (D P Chambers, J C Ries, T J Urban).

On The Use of Steric Models and Satellite Altimetry to Estimate Ocean Mass Variability, presented at XXVII General Assembly of European Geophysical Society, Nice, France, April, 2002 (D. P. Chambers, J. L. Chen, X. Hu).

Effect of Sea Level Variability on the Estimation of Mean Sea Surface Gradients, presented at XXVII General Assembly of European Geophysical Society, Nice, France, April, 2002 (D. P. Chambers).

- Evaluation of Thermosteric Global Mean Sea Level Change from Analyzed Temperature Data: 1945-1996, presented at XXVII General Assembly of European Geophysical Society, Nice, France, April, 2002 (D. P. Chambers, R S Nerem, and E W Leuliette).
- Orbit Design Analysis for Future Altimeter Missions, presented at 2002 Ocean Sciences Meeting, Honolulu, HI, February, 2002 (D. P. Chambers, S. A. Hayes, J. C. Ries, T. J. Urban, and B. D. Tapley, G. A. Jacobs and C. N. Barron, and J. McGuire).
- † Variations in Global Mean Sea Level from a Combination of Tide Gauges and Altimetry, presented at Fall meeting of AGU, San Francisco, CA, December, 2001 (D. P. Chambers, C. A. Mehlhaff, T. J. Urban, D. Fujii, and R. S. Nerem).
- Seasonal and Low-Frequency Variability in Global and Basin-Scale Sea Level, presented at 2001 Scientific Assembly of International Association of Geodesy, Budapest, Hungary, September, 2001 (D. P. Chambers).
- ENSO Variability in the Indian and Pacific Oceans, presented at the Asia-Pacific Space Geodynamic Project Sea Level Workshop, GLOSS Experts 7th Meeting, Honolulu, Hawaii, April, 2001 (D. P. Chambers, T. J. Urban, and B. D. Tapley).
- Determination of Mean Sea Level Change from Altimeter and Tide Gauge Data, presented at XXVI General Assembly of European Geophysical Society, Nice, France, March, 2001 (D. P. Chambers, D. Fujii, C. A. Mehlhaff, R. S. Nerem, and T. J. Urban).
- Separating Sea Level Variations from Interannual Climate Signals, presented at Fall meeting of AGU, San Francisco, CA, December, 2000 (D. P. Chambers, and T. J. Urban).
- † Sea Level Variability and its Relationship to Ocean Heat-Storage Change, presented at XXV General Assembly of European Geophysical Society, Nice, France, April, 2000 (D. P. Chambers).
- Global Mean Sea Level Change and the Earth's Water Mass Budget, presented at XXV General Assembly of European Geophysical Society, Nice, France, April, 2000 (D. P. Chambers, J. L. Chen, R. S. Nerem, and B. D. Tapley).
- The TEG-4 Earth Gravity Field Model, presented at XXV General Assembly of European Geophysical Society, Nice, France, April, 2000 (D. P. Chambers, M. K. Cheng, M. C. Kim, S. Poole, J. C. Riese, and B. D. Tapley).
- Global Mean Sea Level Change and the Earth's Water Mass Budget, presented at 2000 Ocean Sciences Meeting, San Antonio, TX, January, 2000 (D. P. Chambers, J. L. Chen, R. S. Nerem, and B. D. Tapley).

1993-1999

- Separation of Thermal and Mass Signals in Sea Level Variability by Combining Satellite Altimetry and Expendable Bathythermograph Data, presented at 1999 meeting of International Union of Geodesy and Geophysics, Birmingham, U.K., July, 1999 (D. P. Chambers, J. L. Chen, and B. D. Tapley).
- Improvements in Global Ocean Geoid Models for Ocean Circulation Studies, presented at 1999 meeting of International Union of Geodesy and Geophysics, Birmingham, U.K., July, 1999 (D. P. Chambers, M. C. Kim, S. Poole, J. C. Ries, and B. D. Tapley).
- Thermal and Mass Signals in Sea Level Variability from TOPEX/Poseidon, presented at Spring meeting of AGU, Boston, MA, May, 1999 (D. P. Chambers, J. L. Chen, and B. D. Tapley).
- Interannual variability in the Indian Ocean during the 1994 and 1997 El Niño events, presented at Fall meeting of AGU, San Francisco, CA, December, 1998, (D. P. Chambers and B. D. Tapley).
- † Improvements in global gravity models for ocean circulation studies, presented at Fall meeting of AGU, San Francisco, CA, December, 1998, (D. P. Chambers, M. C. Kim, S. Poole, J. C. Ries, and B. D. Tapley).

- † Interannual warming in the Indian Ocean coincident with El Niño, presented at 1997 Western Pacific Geophysics Meeting, Taipei, Taiwan, July, 1998, (D. P. Chambers and B. D. Tapley).
- Accuracy assessment of recent global geoid models, presented at Spring meeting of AGU, Boston, MA, May, 1998, (D. P. Chambers, M. C. Kim, J. C. Ries, and B. D. Tapley).
- Measuring heat-storage changes in the tropical Pacific: A comparison between TOPEX altimetry and TAO buoys, presented at Spring meeting of AGU, Baltimore MD, May, 1997, (D. P. Chambers, B. D. Tapley, and R. H. Stewart).
- Assessment of systematic errors in satellite altimetry using tide gauge measurements, presented at Fall meeting of AGU, San Francisco, CA, December, 1996, (D. P. Chambers, G. L. H. Kruizinga, J. C. Ries, C. K. Shum, and B. D. Tapley).
- † Long-period ocean heat storage rates and basin-scale heat fluxes from TOPEX altimetry, presented at Fall meeting of AGU, San Francisco, CA, December, 1996, (D. P. Chambers, B. D. Tapley, and R. H. Stewart).
- Basin-scale, low-frequency variability of the dynamic ocean topography in the Pacific and Atlantic Oceans, presented at Fall meeting of AGU, San Francisco, CA, December, 1995, (D. P. Chambers, C. K. Shum, B. D. Tapley, and R. H. Stewart).
- Large-scale, low-frequency variability of the ocean topography observed by satellite altimetry, presented at XXI General Assembly of IUGG, Boulder, CO, July, 1995, (D. P. Chambers, C. K. Shum, B. D. Tapley, and R. H. Stewart).
- Time-varying dynamic ocean topography observed by TOPEX/POSEIDON altimetry, presented at Fall meeting of AGU, San Francisco, CA, December, 1994, (D. P. Chambers, B. D. Tapley, C. K. Shum, J. C. Ries, and R. H. Stewart).
- Oceanographic results from analysis of TOPEX/POSEIDON altimetry, presented at Fall meeting of AGU, San Francisco, CA, December, 1993, (D. P. Chambers, B. D. Tapley, C. K. Shum, J. C. Ries, and G. E. Peterson).

Current Research Contracts and Grants

Note: I have only listed amounts that I have direct control over and not amounts sent to co-Investigators or co-PIs.

2008-2013	NASA JPL: An Earth System Data Record of Changes in Earth Masses (Co-Investigator; Institutional PI). Total Amount: \$250k
2008-2013	NASA: Mass Changes in Earth's Global Water Reservoirs (Co-Investigator; Institutional PI). Total Amount: \$200k
2008-2013	NASA: Building a Climate Record of Sea Level Change (Co-Investigator). Total Amount: \$243k
2009-2013	NASA JPL: Assessing the Quality of Aquarius Sea Surface Salinity Measurements Using an Ocean State Estimation System (Co-Investigator; Institutional PI). Total Amount: \$80k
2011-2014	NASA: The Response of Sea Level to Changes in Climate: Has There Been a Fundamental Shift in the Rate of Sea Level Rise? (Co-Investigator; Institutional PI). Total Amount: \$231k
2012-2015	NASA: Investigating low-frequency barotropic transport fluctuations in the Southern Ocean, North Pacific, and Atlantic using GRACE (Principal Investigator). Total Amount: \$522k
2012-2015	NASA: Improved Estimates of Southern Ocean Transport by Combining Satellite Altimetry and Temperature/Salinity Profile Data (Principal Investigator). Total Amount: \$349k
2013-2017	NASA: An Earth System Data Record of Earth's Surface Mass Variations from GRACE, Geodetic Satellites, and GPS (Co-Investigator; Institutional PI). Total Amount: \$251k

Previously Funded Research Contracts and Grants

2008-2012	NASA: Steric Sea Level Variations from a Combination of GRACE, Jason-1, and Argo Float Data (Principal Investigator). Total Amount: \$427k
2007-2010	NASA: An independent assessment of the contribution of ice melt to sea level change from an analysis of satellite altimetry, satellite gravity, and ocean temperature measurements (Co-Investigator). Total Amount: \$169k
2005-2008	NASA: A Study of the first global measurement of the water cycle (Co-Investigator). Total Amount: \$150k
2004-2008	NASA: An Investigation of Very Low Frequency Sea Level Change Using Satellite Altimeter Data (Co-Investigator). Total Amount: \$133k
2004-2008	NASA JPL: Grace Products For Hydrology And Oceanography (Co-Investigator). Total Amount: \$409k
2004-2008	NASA: A Multidisciplinary Investigation of Present-Day Sea Level Change (Co-Investigator). Total Amount: \$180k
2004-2007	NASA Grant NNG04GF11G: Application of GRACE Data to Improving Ocean Heat Storage Estimates from Satellite Altimetry (Principal Investigator). Total Amount: \$239k.
2003-2006	NSF Grant OCE-0326515: Quantifying The Contribution Of Ocean Dynamics To SST Anomaly Formation (Co-Investigator). Total Amount: \$60k.

- 2000-2003 NASA: Water Mass Variability in the Earth System (Principal Investigator). **Total Amount:** \$300k.
- 1999-2005 NOAA IPO: Assessment of NPOESS Altimeter Accuracy (Co-Investigator)
- 2000-2003 NASA Grant NAG5-9163: Improvements in Global Geoid Models for Ocean Circulation Studies (Co-Investigator)
- 2000-2003 NASA Grant NAG5-9144: Reconstruction of Historical Sea Level Variations Using Tide Gauge Data and Empirical Orthogonal Functions from T/P (Principal Investigator). **Total Amount:** \$75k.
- 2000-2003 NASA JPL Grant 1226830: Sea Level Variations from Tide Gauge Data and Jason-1 Altimetry (Principal Investigator). **Total Amount:** \$75k.

Teaching Experience:

- ASE372, Satellite Navigation, Dept. of Aerospace Engineering, UT-Austin, Fall, 2000.
- ASE366L, Applied Orbital Mechanics, Dept. of Aerospace Engineering, UT-Austin, Spr., 2001-2003.
- OCE6934.637, Data Analysis Methods, College of Marine Science, USF, Spring 2010, Fall 2011
- OCE6934.637, Active Satellite Oceanography, College of Marine Science, USF, Fall 2010, 2012
- OCE6934.637, Global Water and Energy Cycle, College of Marine Science, USF, Spring 2011
- OCE6934.637, Dynamics of the Southern Ocean, College of Marine Science, USF, Spring 2012

Student Supervision

At University of Texas

As a Research Scientist, I was not allowed to be an academic advisor for students. However, I was allowed to pay students out of my grants as Graduate Research Assistants and direct their work, while a Faculty member supervised their academic work. The following students are ones whose research under my supervision comprised the majority of their MS thesis work. I served as a Reader on all the theses.

- 1998, Thesis, Dochul Yang, Effect of Center of Mass Offset Variations on Topex/Poseidon Altimeter Crossovers (Faculty Supervisor: B. D. Tapley).
- 2000, Thesis, Christopher A. Mehlhaff, Reconstructing Sea Level Change from Tide Gauges and Empirical Orthogonal Functions Derived from Topex/Poseidon Altimetry, (Faculty Supervisor: R. S. Nerem).
- 2002, Thesis Hyo-Jin Kim, Design and Assessment of Along-Track Mean Sea Surface Models from TOPEX Altimeter Data (Faculty Supervisor: B. D. Tapley)
- 2002, Thesis, Daisuke Fujii, Low-Frequency Sea Level Change in the North Atlantic from Altimetry and Tide Gauges (Faculty Supervisor: G. Lightsey)
- 2002, Thesis, Shawn Hayes, The Determination of Relative Biases between Satellite Altimeters Using Tide Gauge Data (Faculty Supervisor: B. D. Tapley)

At University of South Florida

- 2010-present, Jessica Makowski, MS student (Major Supervisor)
- 2011-present, Michael Kosempa, Ph. D. student (Major Supervisor)
- 2012-present, Sarah Kwon, MS student (Major Supervisor)

Post-Doc Supervision

At University of South Florida

2010-present, Jennifer Bonin

2011-present, Francisco Mir Calafat

Service to College of Marine Science and University of South Florida

- Ongoing Member, CMS Curriculum Committee
- Ongoing Member, CMS Recruitment Committee
- Ongoing Member, CMS Space Committee

- 2010 to 2013 Member, USF Research Council
- 2012 to 2013 Member, CMS Chemical Oceanography Faculty Search Committee
- 2012 to 2013 Member, CMS Paleo-Oceanography Faculty Search Committee

- April 2011 Member, CMS Faculty Review Committee
- 2010 Member, CMS Dean Search Committee
- 2009 to 2010 Member, CMS Endowed Research Associate Search Committee