CURRICULUM VITAE
TONG (TONY) LEE

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PROFESSIONAL EXPERIENCE

- Jet Propulsion Laboratory
  - Project Scientist for Aquarius satellite mission (2013-present)
  - Supervisor, Ocean Circulation & Air-Sea Interaction Group (2015-present)
  - Supervisor, Oceans and Ice Group (2011-2015)
  - Principal Scientist (2006-present)
  - Scientist/Research Scientist (1996-2006)
- Massachusetts Institute of Technology
  - Postdoctoral Research Associate (1994-1996)

EDUACATION

- Ph.D. in Oceanography, 1994, University of Rhode Island, Kingston, RI.
- M.S. in Marine Studies, 1989, University of Delaware, Newark, DE.
- B.S. in Mechanics, 1984, Sun Yat-Sen University, Guangzhou, P.R. China.

RESEARCH INTEREST AND EXPERTISE

Generally: physical oceanography and linkages of the ocean with climate variability and water cycle. Specifically: intraseasonal-to-decadal variability, upper-ocean heat and salt budgets, meridional circulation and heat/freshwater transports, inter-basin linkages, El Niño-Southern Oscillation (ENSO) diversity and teleconnections/impacts, ocean and coupled ocean-atmosphere data assimilation.

PEER-REVIEWED PUBLICATIONS (including two book chapters)

90. Wickert, J., E. Cardellach, J. Bandeiras, L. Bertino,.O. Andersen, A. Camps, N. Catarino, B. Chapron, F. Fabra, N. Floury, G. Foti, C. Gommenginger, J. Hatton, P. Høeg, A. J¨aggi, M. Kern, T. **Lee**, Z. Li, M. Martin-Neira, H. Park, N. Pierdicca, G. Ressler, A. Rius, J. Rosell´o, J. Saynisch, F.¸ois Soulat, C.K. Shum, Maximilian Semmling, A. Sousa, J. Xie, and C. Zuffada, 2016: GEROS-ISS: GNSS REflectometry, Radio Occultation and Scatterometry onboard the International Space Station. IEEE Trans. Geosci. Remote Sens., accepted

89. Kwok, R., J.C. Comiso, **T. Lee**, and P.R. Holland, 2016: Linked trends in sea ice edge and Southern Oscillation Index in the Pacific sector of the Southern Ocean: 1982-2013. Geophys. Res. Lett., accepted.

88. Li, Z., C. Zuffada, S.T. Lowe, **T. Lee**, V. Zlotnick, 2016: Analysis on GNSS-R Altimetry for Mapping Ocean Mesoscale Sea Surface Heights Using High-Resolution Model Simulations. IEEE JSTAR, In press.

87. Fournier, S., J.T. Reager, and **T. Lee** et al., 2016: SMAP observes flooding from land to sea: The Texas event of 2015. Geophys. Res. Lett., 43, 10.1002/2016GL068822. Sept. 2016.

86. Fournier, S., **T. Lee**, and M. Gierach, 2016: Seasonal and interannual variations of sea surface salinity associated with the Mississippi River plume observed by SMOS and Aquarius. Remote Sensing. Environ. 180, 431-439. July 2016

85. Li, J.-L. F., Y.-H. Wang, and **T. Lee**, et al., 2016: The Impacts of Precipitating Cloud Radiative Effects on Ocean Surface Evaporation, Precipitation, and Ocean Salinity in Coupled GCM Simulations. J. Geophys. Res. – Atmos., 121, doi:10.1002/2016JD024911. July 2016.

84. **Lee, T.** 2016: Consistency of Aquarius sea surface salinity with Argo products on various spatial and temporal scales. Geophys. Res. Lett., 43, 10.1002/2016GL068822. April 2016.

83. Kidwell, A., **T. Lee**, Y.-H. Jo, and X.-H. Yan, 2016: Characterization of the variability of the South Pacific Convergence Zone using satellite and reanalysis wind products. J. Clim. 29, 1717-1732. DOI: 10.1175/JCLI-D-15-0536.1. Mar. 2016

82. Durack, P.J., **T. Lee**, N. Vinogradova, D. Stammer, 2016: Keeping the lights on for global ocean salinity observations. Nature Climate Change. 3, 2228-231. Mar. 2016.

81. Llovel, W., and **T. Lee**, 2015: Importance and origin of halosteric contribution to sea level change in the southeast Indian Ocean during 2005-2013. 42, 1148-1157, Geophys. Res. Lett., DOI: 10.1002/2014GL062611. Feb. 2015.

80. Song, Y.T., **T. Lee**, J.-H. Moon, et al., 2015: Modeling skin-layer salinity: focus on seasonal variability and global means. J. Geophys. Res., 120, 1079–1095. DOI:10.1002/2014JC010346. Feb. 2015.

79. Halkides, D.J., D.E. Waliser, **T. Lee**, et al., 2015: Quantifying the processes controlling intraseasonal mixed-layer temperature variability in the tropical Indian Ocean. J. Geophys. Res., 120, 692-715. DOI: 10.1002/2014JC010139. Feb. 2015.

78. Li, Y., W. Han, and **T. Lee**, 2015: Intraseasonal Sea Surface Salinity Variability in the Equatorial Indo-Pacific Ocean Induced by Madden-Julian Oscillations. J. Geophys. Res., 120, 2233–2258, DOI: 10.1002/2014JC010647. Mar. 2015.

77. Li, J., W. Lee, **T. Lee**, et al., 2015: The Impacts of Cloud Snow Radiative Effects on Pacific Ocean Surface Heat Fluxes, Surface Wind Stress, and Ocean Temperatures in Coupled GCM Simulations. J. Geophys. Res., 120, 2242–2260, DOI:10.1002/2014JD022538. Mar. 2015.

76. Yu, J.-Y., H.- Paek, E.S. Saltzman, and **T. Lee**, 2015: The early-1990s change in ENSO-PSA-SAM relationships and its impacts on Southern Hemisphere climate. J. Clim, **28**, 9393–9408. doi: http://dx.doi.org/10.1175/JCLI-D-15-0335.1. December 2015.

75. Fujii, Y., J. Cummings, Y. Xue, A. Schiller, **T. Lee**, M. Balmaseda, E. Remy, S. Masuda, G. Brassington, O. Alves, B. Cornuelle, M. Martin, P. Oke, G. Smith, and X. Yang, 2015: Evaluation of the tropical Pacific observing system from the ocean data assimilation perspective. Q. J. Rol. Meteorol. Soc., DOI: 10.1002/qj.2579. Oct. 2015.

74. Capotondi, A., A.T. Wittenberg, M. Newman, E. Di Lorenzo, J.-Y. Yu, P. Braconnot, J. Cole, B. Dewitte, B. Giese, E. Guilyardi, F.-F. Jin, K. Karnauskas, B. Kirtman, **T. Lee**, N. Schneider, Y. Xue, and S. –W. Yeh, 2015: Understanding ENSO Diversity. Bull. Amer. Meteorol. Soc., 96, 921–938, doi:10.1175/BAMS-D-13-00117.1. June 2015.

73. Boutin, J., Y. Chao, W.E. Asher, T. Delcroix, R. Drucker, K. Drushka, N. Kolodziejczyk, **T. Lee**, N. Reul, G. Reverdin, J. Schanze, A. Soloviev, L. Yu, J. Anderson, L. Brucker, E. Dinnat, A.S. Garcia, W.L. Jones, C. Maes, T. Meissner, W. Tang, N. Vinogradova, B. Ward, 2015: Satellite and in situ salinity: understanding near surface stratification and sub-footprint variability. Bull. Amer. Meteorol. Soc., DOI: http://dx.doi.org/10.1175/BAMS-D-15-00032.1. Nov. 2015.

72. Storto, A., S. Masina, M. Balmaseda, S. Guinehut, Y. Xue, T. Szekely, I. Fukumori, G. Forget, Y. Chang, S. A. Good, A. Köhl, G. Vernieres, N. Ferry, K. A. Peterson, D. Behringer, M. Ishii, S. Masuda, Y. Fujii, T. Toyoda, Y. Yin, M. Valdivieso, B. Barnier, T. Boyer, **T. Lee**, J. Gourrion, O. Wang, P. Heimback, A. Rosati, R. Kovach, F. Hernandez, M. J. Martin, M. Kamachi, T. Kuragano, K. Mogensen, O. Alves, K. Haines and X. Wang, 2015: Steric sea level variability (1993-2010) in an ensemble of ocean reanalyses and objective analyses. Clim. Dyn., DOI 10.1007/s00382-015-2554-9. Mar. 2015.

71. Toyoda, T., Y. Fujii, T. Kuragano, N. Kosugi, D. Sasano, M. Kamachi, Y. Ishikawa, S. Masuda, K. Sato, T. Awaji, F. Hernandez, N. Ferry, S. Guinehut. M. Martin, K.A. Peterson, S. A. Good, M. Valdivieso, K. Haines, A. Storto, S. Masina, A. Köhl, Y. Yin, L. Shi, O. Alves, G. Smith, Y. –S. Chang, G. Vernieres, X. Wang, G. Forget, P. Heimbach, O. Wang, I. Fukumori, **T. Lee**, H. Zuo, and M. Balmaseda 2015: Intercomparison and validation of the mixed layer depth fields of global ocean synthesis/reanalyses. Clim. Dyn., DOI:10.1007/s00382-015-2637-7. Apr. 2015.

70. Balmaseda, M.A., F. Hernandez, F., A. Storto, M.D. Palmer, O. Alves, L. Shi, G.C. Smith, T. Toyoda, M. Valdivieso, B. Barnier, D. Behringer, T. Boyer, Y-S. Chang, G.A. Chepurin, N. Ferry, G. Forget, Y. Fujii, S. Good, S. Guinehut, K. Haines, Y. Ishikawa, S. Keeley, A. Köhl, **T. Lee**, M.J. Martin, S. Masina, S. Masuda, B. Meyssignac, K. Mogensen, L. Parent, K.A. Peterson, Y.M. Tang, Y. Yin, G. Vernieres, X. Wang, J. Waters, R. Wedd, O. Wang, Y. Xue, M. Chevallier, J-F. Lemieux, F. Dupont, T. Kuragano, M. Kamachi, T. Awaji, A. Caltabiano, K. Wilmer-Becker, and F. Gaillard, 2015: The ocean reanalysis Intercomparison project (ORA-IP). J. Oper. Oceanogr., 8, 80-97, DOI:10.1080/1755876X.2015.1022329. June 2015.

69. Toyoda, T., Y. Fujii, T. Kuragano, N. Kosugi, D. Sasano, M. Kamachi, Y. Ishikawa, S. Masuda, K. Sato, T. Awaji, F. Hernandez, N. Ferry, S. Guinehut. M. Martin, K.A. Peterson, S. A. Good, M. Valdivieso, K. Haines, A. Storto, S. Masina, A. Köhl, Y. Yin, L. Shi, O. Alves, G. Smith, Y. –S. Chang, G. Vernieres, X. Wang, G. Forget, P. Heimbach, O. Wang, I. Fukumori, **T. Lee**, H. Zuo, and M. Balmaseda 2015: Interannual-decadal variability of wintertime mixed layer depths in the North Pacific detected by an ensemble of ocean syntheses. Clim. Dyn., DOI:10.1007/s00382-015-2762-3. Aug. 2015.

68. Palmer, M.D., C.D. Robert, M. Balmaseda, Y.-S. Chang, G. Chepurin, N. Ferry, Y. Fujii, S.A. Good, S. Guinehut, K. Haines, F. Hernandez, A. Köhl, **T. Lee**, M. J. Martin, S. Masina, S. Masuda, K. A. Peterson, A. Storto, T. Toyoda, M. Valdivieso, G. Vernieres, O. Wang, Y. Xue, 2015: Ocean heat content variability and change in an ensemble of ocean reanalyses. Clim. Dyn. DOI:10.1007/s00382-015-2801-0. Sept. 2015.

67. Valdivieso, M., H. Keith, M. Balmaseda, Y.-S. Chang, M. Drevillon, Y. Fujii, A. Koejl, A. Storto, T. Toyoda, X. Wang, J. Waters, Y. Xue, Y. Yin, B. Bariner, F. Hernandez, **T. Lee**, and M. Martin, 2015: Surface heat fluxes from ocean and coupled reanalyses. Clim. Dyn., DOI 10.1007/s00382-015-2843-3. Oct. 2015.

66. Tonani, M., M. Balmaseda, L. Bertino, E. Blockley, G. Brassington, F. Davidson, Y. Drillet, P. Hogan, T. Kuragano, **T. Lee**, A. Mehra, F. Paranathara, C.A.S. Tanajura, and H. Wang, 2015: Status and future of global and regional ocean prediction systems. J. Oper. Oceanogr., DOI:10.1080/1755876X.2015.1049892. Nov. 2015.

65. **Lee, T.**, G. Lagerloef, H.-Y. Kao, M.J. McPhaden, J. Willis, M. Gierach, 2014: The influence of salinity on tropical Atlantic instability waves. J. Geophys. Res., 119, DOI:10.1002/2014JC010100.

64. Zhang, D., M.J. McPhaden, **T. Lee**, 2014: Observed interannual variability of zonal currents in the equatorial Indian Ocean thermocline and their relation to Indian Ocean Dipole. Geophys. Res. Lett., 41, doi:10.1002/2014GL061449.

63. Han, W., J. Vialard, M. McPhaden, **T. Lee,** Y. Masumoto, M. Feng, and W. de Ruijter, 2014: Indian Ocean decadal variability: a review. Bull. Amer. Meteorol. Soc., 95, 1679-1703. 10.1175/BAMS-D-13-00028.1.

62. Yin, X., J. Boutin, G. Reverdin, **T. Lee**, S. Arnualt, and N. Martin, 2014: SMOS sea surface salinity signals of tropical instability waves. J. Geophys. Res., 119, 7811–7826, DOI: 10.1002/2014JC009960.

61. Guan, B, D. Waliser, **T. Lee**, and D. Halkides, 2014: Influence of the Madden-Julian Oscillation on the Indian Ocean cross-equatorial heat transport. Geophys. Res. Lett., DOI: 10.1002/2014GL061789.

60. Landerer, F.W, P.J. Gleckler, **T. Lee**, 2014: Evaluation of dynamic sea surface height in CMIP3 and CMIP5 models against satellite observations. Clim. Dyn., DOI 10.1007/s00382-013-1939-x.

59. Tang, W., S. H. Yueh, A. G. Fore, A. Hayashi, **T. Lee**, and G. Lagerloef, 2014: Uncertainty of Aquarius sea
surface salinity retrieved under rainy conditions and its implication on the water cycle study, J. Geophys. Res. Oceans,119, 4821–4839, doi:10.1002/2014JC009834.

58. Sprintall, J., A. Gordon, A. Koch-Larrouy, **T. Lee**, J. Potemra, K. Pujiana, and S. Wijffels, 2014: The central Role of the Indonesian Seas and throughflow in the coupled ocean-climate system. Nature Geosci., doi:10.1038/ngeo2188.

57. Reul, N., B. Chapron, **T. Lee**, C. Donlon, J. Boutin, G. Alory, 2014: Sea surface salinity structure of the meandering Gulf Stream revealed by SMOS sensor. Geophys. Res. Lett., DOI: 10.1002/2014GL059215.

56. Guan, B, **T. Lee**, D. Waliser, and D. Halkides, 2014: Aquarius Surface Salinity and the Madden-Julian Oscillation: the Role of Salinity in Surface Layer Density and Potential Energy. Geophys. Res. Lett., 41, doi:10.1002/2014GL059704.

55. Li, J.-L. F., W.-L. Lee, D.E. Waliser, J.D. Needlin, J.P. Statchnik, and **T. Lee**, 2014: Cloud-Precipitation-Radiation-Dynamics Interaction in Global Climate Models: A Snow and Radiation Interaction Sensitivity Experiment. J. Geophys. Res. – Atmos., 119, DOI: 10.1002/2013JD021038.

54. Zou, Y., J.-Y. Yu, **T. Lee**, M.-M. Lu, and S.T. Kim, 2014: CMIP5 Model Simulations of the Changing Impacts of El Niño on US Winter Temperature. J. Geophys. Res., 119, DOI: 10.1002/2013JD021064.

53. Liu, W.T., X. Xie, **T. Lee**, 2014: Solar warming of the south-central Pacific Ocean during the 2009-10 El Niño. Int. J. Remote Sensing. DOI: 10.1080/01431161.2014.926426.

52. **Lee, T.,** D.E. Waliser, J.-L. Li, F.W. Landerer, and M.M. Gierach, 2013: Evaluation of CMIP3 and CMIP5 wind stress climatology using satellite measurements and atmospheric reanalysis products. *J. Clim.*, 26, 5810-5826, doi:10.1175/JCLI-D-12-00591.1.

51. Gierach, M.M., J. Vazquez, **T. Lee**, and V. Tsontos, 2013: Aquarius and SMOS detect effects of an extreme Mississippi River flooding event in the Gulf of Mexico. Geophys. Res. Lett., 40, doi:10.1002/grl.50995.

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49. Schiller, A.**, T. Lee**, and S. Masuda, 2013: Methods and applications of ocean state estimation and data assimilation in climate research. Chapter 22 in "Ocean Circulation and Climate – A 21st century perspective", International Geophysics Series, Vol.103, 868pp. Edited by G. Sielder, J. Church, S. Griffes, J. Gould, and J. Church. Academic Press, Elsevier. ISBN: 978-0-12-391851-2.

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47. Yu, J.-Y., Y. Zou, S.-T. Kim, and **T. Lee**, 2012: The changing impact of El Nino on US winter temperatures. *Geophys. Res. Letts.*, 39, L15702, doi:10.1029/2012GL052483.

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45. Gierach, M.M., **T. Lee**, DD. Turk, M. McPhadden, 2012: Biological response to the 1997-98 and 2009-10 El Nino events in the equatorial Pacific Ocean. *Geophy. Res. Lett*., 39, L10602, doi:10.1029/2012GL051103.

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41. Halkides, D., **T. Lee**, and S. Kida, 2011: Mechanisms controlling seasonal mixed layer temperature and salinity of the Indonesian Seas. *Ocean Dyn.*, vol.6, issue 4, 481, DOI 10.1007/s10236-010-0374-3.

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37. **Lee, T.**, W. Hobbs, and J. Willis, et al., 2010: Record warming in the South Pacific and western Antarctica associated with the strong central-Pacific El Niño in 2009-10. *Geophys. Res. Lett.*, 37, L19704, doi:10.1029/2010GL044865.

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T. Lee, M.J. Martin, S. Meu and M. Tonani. 2009: GODAE Systems in operation, Oceanography, Volume 22-3: 83,95.

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4. **Lee, T.** and P. Cornillon, 1996: Propagation of Gulf Stream meanders between 74 and 70W. *J. Phys. Oceanogr.*, vol. 26, 205-224.

3. **Lee, T.** and P. Cornillon, 1996: Propagation and growth of Gulf Stream meanders between 75 and 45W. *J. Phys. Oceanogr.*, vol. 26, 225-241.

2. **Lee, T.** and P. Cornillon, 1995: Temporal variation of meandering intensity and domain-wide lateral oscillations of the Gulf Stream. *J. Geophys. Res.*, vol. 100, 13603-13613.

1. Cornillon, P., **T. Lee**, and G. Fall, 1994: On the probability that a Gulf Stream meander crest detaches to form a warm core ring. *J. Phys. Oceanogr.*, vol. 96, 132-155.

SELECTED AWARDS

- 2015 JPL People Leadership Award
- 2012 NASA Exceptional Scientific Achievement Medal
- 2012 JPL Team Achievement Award for contribution to IPCC Fifth Assessment Report
- 2011 JPL Mariner Award for extraordinary scientific productivity
- 2010 NASA Exceptional Achievement Medal
- 2009 NASA Group Achievement Award: PO.DAAC Team
- 2003 and 2008 JPL Team Achievement Award: ECCO Ocean Data Assimilation Team

SIGNIFICANT CONTRIBUTION TO NASA MISSIONS

- Played a key role (as the Project Scientist) in putting together the 2015 NASA Senior Review Proposal for Aquarius Extended Mission, leading to the extended mission beyond its prime mission.
- Played significant roles in preparing Aquarius Phase-F proposal and the proposal for a five-year (2016-2020) Ocean Salinity project beyond Aquarius Phase-F.
- Played a significant role in the cal/val effort for ocean salinity retrievals from NASA's SMAP mission.
- Played key roles (served as lead-authors) for community white papers in response to NRC Decadal Survey in Earth Science and Applications from Spae 2017-2027 RFI#1 and RFI#2.

AFFILIATION WITH PROFESSIONAL SOCIETIES

- Member of American Geophysical Union since 1998
- Member of American Meteorology Society since 2006

COMMUNITY LEADERSHIP – COMMITTEE & PANEL CHAIRS AND MEMBERSHIPS

- Co-chair of International Climate Variability and Predictability (CLIVAR) Program's Global Synthesis and Observations Panel (2012-present) and member since 2010.
- Co-chair of US CLIVAR Phenomena, Observations, and Synthesis Panel (2010-2011) and member 2007-2009.
- Tropical Pacific Observing System (TPOS) 2020 Backbone System Task Team member since 2015.
- International CLIVAR Indonesian Throughflow Task Force member (2011-2014).
- International CLIVAR ENSO in a Changing Climate Task Team member (2013-present).
- US CLIVAR ENSO Diversity Working Group member (2012-2015).
- International CLIVAR and IOC/GOOS Indian Ocean Panel member (2006-2013).
- International GODAE Steering Team member (2003-2008).
- International GODAE-OceanView Science Team member (since 2009).
- US Atlantic Meridional Overturning Circulation (AMOC) Program Executive Committee and task team leader (2007-2010).
- US Argo Program panel member (2004-2009).

OTHER COMMUNITY LEADERSHIP EFFORTS AND PROFESSIONAL SERVICES

Initiatives

- Leadership role for a US CLIVAR initiative on Integrated Earth System Analysis (IESA); represented ocean assimilation/synthesis community in National Research Council Climate Research Committee meeting in 2006 on IESA.
- Leadership role under International CLIVAR and GODAE for a coordinated international effort on the evaluation and intercomparison of global ocean synthesis products during 2006-2010 and with a renewed effort from 2013 onward.
- Served as US AMOC Program Executive Committee member to help draft the US AMOC Program Implementation Plan (2007).
- Initiated the US CLIVAR ENSO Diversity Working (2012).
- Helped establish ENSO in a changing climate as one of the key research foci of International CLIVAR and formed an international task team for this research focus (2013).

Community whitepapers and review articles

- Lead-authored an International CLIVAR whitepaper on a framework for the evaluation and Intercomparison of global ocean synthesis products (2006).
- Lead-authored a US CLIVAR whitepaper on the strategy for a US Integrated Earth System Analysis (2007).
- Lead-authored an OceanObs'99 community whitepaper on ocean state estimation for climate research (2009).
- Lead-authored a review article in Oceanography Magazine article on ocean state estimation for climate research (2009).
- Lead-authored a review article in Oceanography Magazine on applications of satellite observations for ocean and climate research (2010).
- IPCC Assessment Report 5, Chapter 9 contributing author (2013).
- Co-led two community whitepapers for Tropical Observing System (TPOS) 2020 on ENSO and on satellite observing systems, and contributed to a third one on data assimilation (2014).
- Co-authored a review article in AMS's BAMS on ENSO diversity (2014).
- Co-authored a review article in AMS's BAMS on Indian Ocean decadal variability (2014).
- Co-authored a review article in Nature Geosciences on the role of the Indonesian throughflow in the coupled ocean-atmosphere system (2014).

- Lead author of community whitepaper on ocean salinity and water cycle research priorities in response to US National Academy of Sciences 2017-2027 Decadal Survey in Earth Science and Technology from Space RFI#1 (2015).
- Lead author of community whitepaper on ocean salinity and sea ice thickness in response to US National Academy of Sciences 2017-2027 Decadal Survey in Earth Science and Technology from Space RFI#2 (2016).
- Co-author a Nature Climate Change commentary on in-situ and satellite ocean salinity observing systems (2016).

Organizations of professional workshops and conference special sessions:

- Co-convened Ocean Sciences Meeting special session on high-wavenumber and high-frequency wind forcing of the ocean (2004).
- Key organizer of Global Ocean Data Assimilation Experiment (GODAE) Symposium, Beijing, China (2006).
- Co-convened Fall AGU Meeting special session on earth system data assimilation (2006).
- Co-convened Ocean Sciences Meeting special session on global and regional ocean synthesis (2008).
- Key organizer for US CLIVAR Integrated Earth System Analysis workshop (2008).
- Co-organized a decadal variability workshop (2009).
- Organized and chaired a joint US-Europe AMOC Science Team meeting (2010).
- Co-organized a US CLIVAR ENSO Diversity workshop (2013).
- Co-convened International CLIVAR workshop on surface fluxes and ocean synthesis (2013).
- Served as a key organizer of the COSPAR/WCRP/ESA/IOC sponsored capability-building workshop for the Indonesian throughflow (2014).
- Served as member of scientific organizing committee for Tropical Pacific Observing System (TPOS) 2020 International workshop (2014).
- Co-convened Ocean Sciences Meeting special session on ocean salinity and water cycle (2014).
- Co-convened two special sessions in 2014 Fall AGU meeting ("Maritime Continent" and "From QuikSCAT to RapidSCAT").
- Co-organized "Ocean Salinity Science & Salinity Remote Sensing" workshop in UK Met Office, 2014.
- Co-organized International "Global Heat Balance and Ocean Heat Content" workshop in UK Met Office, 2015.
- Co-organized International Conference on "Ocean Salinity and Freshwater Changes" in Hamburg, Germany, 2015.
- Main organizer of Aquarius/SAC-D Science Team Meeting, Buenos Aires, Argentina, Nov. 2015.
- Co-convener of EGU Ocean Remote Sensing Session for 2014-2016.
- Scientific Organizing Committee member, European Space Agency Living Planet Symposium 2016.
- Co-convener of 2016 Fall AGU special session on ocean salinity and water cycle, 2016.

Review panels and reviewers:

- Panel members in various NASA and NOAA review panels and as mail reviewers for NASA, NOAA, and NSF since 1998.
- Committee for Space Research (COSPAR) review committee member for COSPAR fellowships (since 2014).
- Reviewers for the over a dozen journals: including Journal of Climate, Journal of Physical Oceanography, Journal of Atmospheric Sciences, Bulletin of the American Meteorological Society, Monthly Weather Reviews, Journal of Geophysical Research (-Oceans and -Atmosphere), Geophysical Research Letters, Deep-Sea Research, Dynamics of the Atmosphere and Oceans, Global and Planetary Change, Ocean Dynamics, Climate Dynamics, Oceanography, Environmental Research Letters, etc.

SELECTED INVITED PRESENTATIONS IN INTERNATIONAL CONFERENCES

- International Union of Geodesy and Geophysics (IUGG) Conference, Cairns, Australia, 2005 (two invited presentations).
- Ocean Surface Topography Science Team Meeting, Hobart, Australia, 2007.
- Pan Ocean Remote Sensing Conference, Guangzhou, China, 2008.
- Global Ocean Data Assimilation Experiment (GODAE) Final Symposium, Nice, France, 2008.
- International Workshop on Decadal Variability and Predictability, St. Michaels, MD, 2009.
- 10th International Conference on Southern-hemisphere Meteorology and Oceanography, Noumea, New Caledonia, 2013.
- International Union of Geodesy and Geophysics (IUGG) Conference, Gothenburg, Sweden, 2014.
- Ocean Salinity Science & Salinity Remote Sensing Workshop in UK Met Office, 2014.
- Keynote presentation in International Global Navigation Satellite System (GNSS) Reflection Conference in Potsdam, Germany, 2015.
- IEEE International Geoscience and Remote Sensing Society (IGARSS) conference, Milan, Italy, 2015.
- Keynote presentation in International Conference on Ocean Salinity and Freshwater Changes, Hamburg, Germany, 2015.
- Keynote presentation in EU Cooperation in Science and Technology (COST) Action Evaluation of Ocean Synthesis Consortium workshop, Porto, Portugal, March 2016.
- Keynote presentation, EUMETSAT Satellite Meteorology Conference, Darmstadt, Germany, September 2016.