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INTERESTS & EXPERTISE

Earth System Science; Environment, Society and Resilience; Satellite Mission Formulation and Applications; Earth and Environmental Modeling, Climate Dynamics and Change; Global Water Cycle; Weather-Climate Linkages & Extremes

EDUCATION

B.S. Physics	Oregon State University, 1985.
B.S. Computer Science	Oregon State University, 1985.
M.S. Physics	University of California, San Diego (UCSD), 1987.
Ph.D. Physical Oceanography	Scripps Institution of Oceanography, UCSD, 1992.

PROFESSIONAL EXPERIENCE

2010 - Present: Chief Scientist, Earth Science and Technology Directorate, Jet Propulsion Laboratory, Pasadena, CA.
2007 - Present: Senior Research Scientist, Science Division, Jet Propulsion Laboratory (JPL), Pasadena, CA.
2007 - Present: Adjunct Professor in the Department of Atmospheric and Oceanic Sciences and Fellow of the Joint Institute for Regional Earth System Science and Engineering, U. California, Los Angeles, CA.
2004 - Present: Visiting Associate, Geological and Planetary Sciences, California Institute of Technology, Pasadena, CA.
2004 - 2007: Principal Scientist, Water and Carbon Cycle Group, Science Division, JPL, Pasadena, CA.
1999 - 2004 Associate Professor, Institute for Terrestrial and Planetary Atmospheres (ITPA), Marine Science Research Center (MSRC), State University of New York (SUNY), Stony Brook.
1993 - 1999: Assistant Professor, IPTA, MSRC, SUNY, Stony Brook.
1992 - 1993: Postdoctoral Associate, Atmospheric Sciences, University of California, Los Angeles, CA.

PUBLICATIONS & BOOKS

H-Index 94
Over 270 Peer-Reviewed Publications, Including:

KISS Continuity Study Team, 2024, Towards a U.S. Framework for Continuity of Satellite Observations of Earth's Climate and for Supporting Societal Resilience, Earth's Future, DOI: 10.1029/2023EF003757.

Waliser, D. E., and B. Guan, 2017: Extreme winds and precipitation during landfall of atmospheric rivers, Nature Geosciences, DOI: 10.1038/NGEO2894.

Waliser, D. E., K. M. Lau, W. Stern, C. Jones, 2003: Potential Predictability of the Madden-Julian Oscillation, Bull. Amer. Meteor. Soc, 84, 33-50.

Waliser, D. E., 1996: Some Considerations on the Thermostat Hypothesis. Bull. Amer. Met. Soc., 77, 357-360.

Ralph, F.M., M. Dettinger, J. Rutz, D. E. Waliser, Eds., 2020. Atmospheric Rivers, Springer, Switzerland, pp. 252.

Lau, W. K. M. and D. E. Waliser, Eds., 2005 (2011): Intraseasonal Variability of the Atmosphere-Ocean Climate System, 1st Edition (2nd Edition) Springer, Heidelberg, Germany, pp. 474 (613).

SELECTED HONORS & AWARDS

American Institute of Aeronautics and Astronautics (AIAA), Losey Atmospheric Sciences Award, 2024
NASA Blue Marble Award, NASA Climate Adaptation Science Investigators Workgroup Initiative (CASI), 2024
JPL Fellow, 2022
JPL Magellan Award, Advancing Science of Atmospheric River, 2018.
California Department of Water Resources Climate Science Service Award, 2017.
NASA Group Achievement Award, obs4MIPs, 2015.
JPL People Leadership Award, 2014.
Fellow, American Meteorological Society, 2014.
JPL Magellan Award, Earth Science and Technology Leadership, Science Leadership, 2012.

NASA Exceptional Achievement Award, 2010.
NASA Group Achievement Award, Aura Microwave Limb Sounder Science Team, 2006.
NOAA Postdoctoral Fellowship for Climate and Global Change, 1992-93.
NASA Graduate Student Fellowship Recipient, 1988-1991.

PROFESSIONAL AFFILIATIONS

Member, American Geophysical Union
Member. American Meteorological Society

SELECTED PROFESSIONAL SERVICE & LEADERSHIP

National Academy of Sciences, Engineering and Medicine (NASEM) Activities

- Member, Study on *Assessment of Commercial Space Platforms for Earth Science Instrument, 2021-2022.*
- Member*, Committee on Earth Science and Applications from Space* (CESAS), 2018-2022.
- Member, *Board on Atmospheric Science and Climate* (BASC), 2016-2022.
- Member, Study on *Lessons-Learned in the Implementation of NASA's Earth Venture Class*, 2022.
- Member, Study on *Next Generation Earth Systems Science at the National Science Foundation,* 2021*.*
- Member, Weather and Air Quality Panel, Earth Science and Applications from Space Decadal Survey, 2017.
- Member, Study on *US Research Agenda for Subseasonal to Seasonal Prediction*, 2016.
- Member, Study on *Intraseasonal and Interannual Climate Predictability*, 2010.

Co-Lead, Developing a Continuity Framework for Satellite Observations of Climate, Keck Institute of Space Studies, Caltech & JPL, 2022.
Member, Science and Applications Leadership Team, Clouds, Convection & Precipitation and Aerosol Earth Science and Applications Decadal Survey Designated Observable GSFC-led Mission Study for NASA, 2018- present.
Contributing Author, Climate Change Science Report, U.S. National Climate Assessment, 2016-2017.
Member, World Climate Research Program (WCRP) / World Weather Research Program (WWRP) Subseasonal to Seasonal (S2S) Project Steering Group, 2011-2019.
Co-Chair, with P. Gleckler, World Meteorological Organization (WMO) World Climate Research Program (WCRP) Data Advisory Council (WDAC) obs4MIPs Task Team, 2014-2020.
Co-chair, with Mitch Moncrieff, WMO joint WCRP/WWRP – THORPEX Program Year of Tropical Convection (YOTC) Activity, 2006–2015.
Co-chair, with Matthew Wheeler, WCRP/WWRP, Madden Julian Oscillation (MJO) Task Force, 2009–2011.
Co-chair, with K. Sperber, US CLIVAR Madden-Julian Oscillation Working (MJO) Group, 2006–2009.

MENTORING

High School and Undergraduate Students – 13
Graduate Students – 23
Postdoctoral Scientists – 26

COMPETITIVE RESEARCH FUNDING

Principle Investigator Awards (1993-2018)

- National Aeronautics and Space Administration (NASA) $10M
- California Department of Water Resources (CA DWR) $2.6M
- National Science Foundation (NSF) $1.3M
- National Oceanographic and Atmospheric Administration (NOAA) $750k
- Office of Naval Research (ONR) $800k

Co-Principle Investigator Awards

- NASA $5M, NSF $1.9M; NOAA $3.5M; ONR 7.5M

May 2025

DUANE E. WALISER
Curriculum Vitae – Companion Material

1. PUBLICATIONS

A. PEER REVIEWED

1990-1999

1. Jury, M. R., and **D. E. Waliser**, 1990: Satellite Microwave Measurements of Atmospheric Water Vapour and Marine Wind Speed: Case Study Application, *S.A.J. Marine Sci.*, 9, 309-316.
2. Van Woert, M. L., R. H. Whritner, **D. E. Waliser**, D. H. Bromwich and J. C. Comiso, 1992: The Antarctic Research Center: A Source of Multi-Sensor Satellite Data for Polar Science, *Trans. Amer. Geo. Union*, 73, 65.
3. Jury, M. R., B. Pathack and **D. E. Waliser**, 1993: Satellite OLR and Microwave Data as a Proxy for Rainfall in the Southern Africa - Madagascar Region, *Int. J. Clim.,* 13, 257-269.
4. **Waliser, D. E.**, N. E. Graham, C. Gautier, 1993: Comparison of the Highly Reflective Cloud and Outgoing Longwave Data Sets for use in Estimating Tropical Deep Convection, *J. Climate,* 6, 331-353.
5. **Waliser, D. E.** and C. Gautier, 1993: A Global Climatology of the ITCZ. *J. Climate,* 6, 2162-2174.
6. **Waliser, D. E.** and N. E. Graham, 1993: Convective Cloud Systems and Warm-Pool SSTs: Coupled Interactions and Self-Regulation. *J. Geoph. Res.*, 98, 12881-12893.
7. **Waliser, D. E.**, and R. C. J. Somerville, 1994: The Preferred Latitudes of the Intertropical Convergence Zone. *J. Atmos. Sci.*, 51, 1619-1639.
8. **Waliser, D. E.**, B. Blanke, J. D. Neelin and C. Gautier, 1994: Shortwave Feedbacks and ENSO: Forced Ocean and Coupled Ocean-Atmosphere Modeling Experiments. *J. Geophys. Res.*, 99, 25109-25125.
9. Jury, M. R., B. Pathack, **D. E. Waliser**, 1994: Evolution and Variability of the ITCZ in the SW Indian Ocean: 1988-90, *Theor. Appl. Clim.,* 48, 187-194.
10. **Waliser, D. E.**, 1996: Formation and Limiting Mechanism for Very High SST: Linking the Dynamics and Thermodynamics. *J. Climate,* 9, 161-188.

11. **Waliser, D. E.**, 1996: Some Considerations on the Thermostat Hypothesis. *Bull. Amer. Met. Soc.,* 77, 357-360.
12. **Waliser, D. E.**, W. D. Collins and S. P. Anderson, 1996: An Estimate of the Surface Shortwave Cloud Forcing over the Western Pacific During TOGA COARE. *Geoph. Res. Let.,* 23, 519-522.
13. **Waliser, D. E.**, 1996: Climate Controls on High Sea Surface Temperatures. *World Resource Review,* 8, 289-310.
14. **Waliser, D. E.** and W. Zhou, 1997: Removing Satellite Equatorial Crossing Time Biases from the OLR and HRC data sets. *J. Climate,* 10, 2125-2146.
15. Jones, C., **D. E. Waliser** and C. Gautier, 1998: The Influence of the Madden Julian Oscillation on Ocean Surface Heat Fluxes and Sea Surface Temperature. *J. Climate,* 11, 1057-1072.
16. **Waliser, D. E.**, W. K. Lau, J. H. Kim, 1999: The Influence of Coupled Sea Surface Temperatures on the Madden Julian Oscillation: A Model Perturbation Experiment. *J. Atmos. Sci.*, 56, 333-358.
17. **Waliser, D. E.**, C. Jones, J. K. Schemm and N. E. Graham, 1999: A Statistical Extended-Range Tropical Forecast Model Based on the Slow Evolution of the Madden-Julian Oscillation. *J. of Climate,* 12, 1918-1939.
18. **Waliser, D. E.**, Z. Shi, J. Lanzante and A. Oort, 1999: The Hadley Circulation: Assessing Reanalysis and Sparse In-Situ Estimates. *Clim. Dyn.,* 15, 719-735..
19. **Waliser, D. E.**, R. A. Weller, R. D. Cess, 1999: Comparisons Between Buoy-Observed, Satellite-Derived and Modeled Surface Shortwave Flux over the Subtropical North Atlantic During the Subduction Experiment. *J. Geophys. Res.,* 104, 31,301-31,320.

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20. **Waliser, D. E.**, and T. Hogan, 2000: Analysis of NOGAPS Surface Heat Fluxes: Coupling To Convection, Cloud And Dynamical Processes. *J. Geoph. Res.,* 105, 4587-4606.
21. Jones, C., **D. E. Waliser**, J. K. Schemm, and W. K. Lau, 2000: Prediction skill of the Madden-Julian Oscillation in Dynamical Extended Range Forecasts. *Climate Dynamics,* 16, 273-289.

2001

22. Lucas, L. E., **D. E. Waliser**, J. E. Janowiak, B. Liebmann, 2001: Removing the Satellite Equatorial Crossing Time Biases from the Daily, Global Outgoing Longwave Radiation Data Set. *J. Climate,* 14, 2583-2605.
23. **Waliser, D. E.,** Z. Zhang, K. M. Lau, and J. H. Kim, 2001: Interannual Sea Surface Temperature Variability and the Predictability of Tropical Intraseasonal Variability. *J. Atmos. Sci.,* 58, 2595-2614.
24. Medovaya, M., **D. E. Waliser**, R. A. Weller, M. McPhaden, 2002: Assessing Ocean Buoy Shortwave Observations using Clear-Sky Model Calculations. J. Geophys. Res.; Oceans., 107, No. C2, 10.1029/2000JC000558.

2002

25. Kang IS, Jin K, Wang, B., Lau KM, Shukla J, Schubert SD, **Waliser DE,** Krishnamurthy V, Stern WF, Satyan V, Kitoh A, Meeh GA, Kanamitsu M, Galin VY, Kim JK, Sumi A, Wu G, Liu Y, 2002: Intercomparison of the climatological variations of Asian summer monsoon precipitation simulated by 10 GCMs. *Clim. Dym.,* 19, 383-395.
26. Kang I.S., Jin K, Lau K.M., Shukla J., Krishnamurthy V., Schubert S.D., **Waliser D.E.,** Stern W.F., Satyan V., Kitoh A., Meeh G.A., Kanamitsu M., Galin V.Y., Kim J.K., Sumi A., Wu G., Liu Y., 2002: Intercomparion of GCM simulated anomalies associated with the 1997-98 El Niño. *J. Climate,* 15, 2791–2805
27. **Waliser, D. E.,** J. Ridout, S. Xie, and M. Zhang, 2002: Variational Objective Analysis for Atmospheric Field Programs: A Model Assessment, J. Atmos. Sci., 59, 3436-3456.

28. Wu, M. L. C., S. Schubert, I. S. Kang, and **D. E. Waliser,** 2002: Forced and Free Intra-Seasonal Variability Over the South Asian Monsoon Region Simulated by 10 AGCMs, J. Climate, 15, 2862–2880.

2003

29. Myers, D., and **D. E. Waliser**, 2003: Three dimensional water vapor and cloud variations associated with the Madden-Julian Oscillation during Northern Hemisphere winter. J. Climate, 16, 929–950.
30. **Waliser, D. E.,** K. M. Lau, W. Stern, C. Jones, 2003: Potential Predictability of the Madden-Julian Oscillation, Bull. Amer. Meteor. Soc, 84, 33-50.
31. Collimore, C. D. W. Martin, M. H. Hitchman, A. Huesmann, and **D. E. Waliser**, 2003: On the Relationship Between the QBO and Tropical Deep Convection, J. Climate, 16, No. 15, 2552–2568.
32. **Waliser, D. E.,** W. Stern, S. Schubert, K. M. Lau, 2003: Dynamic Predictability of Intraseasonal Variability Associated with the Asian Summer Monsoon, Quart. J. Royal Meteor. Soc., 129, 2897–2925
33. **Waliser, D. E.,** R. Murtugudde, and L. Lucas, 2003: Indo-Pacific Ocean Response to Atmospheric Intraseasonal Variability. Part I: Austral Summer and the Madden-Julian Oscillation, J. Geoph. Res. – Oceans. 108, C5, 3160, 10.1029/2002JC001620.
34. **Waliser, D. E.,** K. Jin, I.-S. Kang, W. F. Stern, S. D. Schubert, M.L.C. Wu, K.-M. Lau, M.-I. Lee, V. Krishnamurthy, A. Kitoh, G. A. Meehl, V. Y. Galin, V. Satyan, S. K. Mandke, G. Wu, Y. Liu, and C.-K. Park, 2003: AGCM Simulations of Intraseasonal Variability Associated with the Asian Summer Monsoon, Clim. Dyn., 21, 423-446.

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35. Jones, C., L. M. V. Carvalho, R. W. Higgins, **D. E. Waliser**, and J.-K. E. Schemm, 2004: Climatology of tropical intraseasonal convective anomalies. J. Climate, 17, 523-539.
36. Jones, C., **D. E. Waliser,** K. M. Lau, and W. Stern, 2004: The Madden-Julian Oscillation and its Impact on Northern Hemisphere Weather Predictability, Mon. Wea. Rev., 132, 6, 1462–1471.
37. **Waliser, D. E.,** R. Murtugudde, and L. Lucas, 2004: Indo-Pacific Ocean Response to Atmospheric Intraseasonal Variability. Part II: Boreal Summer and the Intraseasonal Oscillation, J. Geoph. Res. – Oceans. 109, C03030, 10.1029/2003JC002002.
38. Jones, C., L. M. V. Carvalho, R. W. Higgins, **D. E. Waliser**, and J.-K. E. Schemm, 2004: A Statistical Forecast Model of Tropical Intraseasonal Convective Anomalies. J. Climate: 17, 11, 2078–2095.
39. Zheng, Y., **D. E. Waliser,** W. Stern, and C. Jones, 2004: The Role of Coupled Sea Surface Temperatures in the Simulation of the Tropical Intraseasonal Oscillation, J. Climate. 17, 4109-4134.
40. Jones, C., **D. E. Waliser,** K.-M. Lau and W. Stern, 2004: Global Occurrences of Extreme Precipitation and the Madden-Julian Oscillation: Observations and Predictability, J. Climate, 17, 4575-4589

2005

41. Liess, S., **D. E. Waliser**, and S. Schubert, 2005: Predictability studies of the intraseasonal oscillation with the ECHAM5 GCM. *J. Atmos. Sci.*, 62, 3320-3336.
42. **Waliser, D. E**., R. Murtugudde, P. Strutton, J.-L. Li, 2005, Subseasonal Organization of Ocean Chlorophyll: Prospects for Prediction Based on the Madden-Julian Oscillation, Geoph. Res. Lett., 32, L23602, doi:10.1029/2005GL024300.
43. Li, J.-L., **D. E. Waliser**, J. H. Jiang, D. L. Wu, W. Read, J. W. Waters, A. Tompkins, L. J. Donner, J. Chern, W.-K. Tao, R. Atlas, Y. Gu, K.L. Liou7, A. Del Genio, M. Khairoutdinov, and A. Gettelman, 2005, Comparisons of EOS MLS Cloud Ice Measurements with ECMWF analyses and GCM Simulations: Initial Results, Geoph. Res. Lett., 32, L18710, doi:10.1029/2005GL023788.

44. Jiang, X., D. B. A. Jones, R. Shia, **D. E. Waliser**, and Y. L. Yung, 2005, Spatial Patterns and Mechanisms of the Quasi-biennial Oscillation - Annual Beat of Ozone, J. Geophys. Res, 110, D23308, doi:10.1029/2005JD006055.
45. Wu, M.-L. C., S. D. Schubert, M. J. Suarez, P. J. Pegion, and **D. E. Waliser**, 2005: Seasonality and Meridional Propagation of the MJO. J. Climate, J. Atmos. Sci., 19, 1901-1921.

2006

46. **Waliser, D. E.**, K. Weickmann, R. Dole, S. Schubert, O. Alves, C. Jones, M. Newman, H-L Pan, A. Roubicek, S. Saha, C. Smith, H. van den Dool, F. Vitart, M. Wheeler, J. Whitaker, 2006: The Experimental MJO Prediction Project. Bull. Amer. Meteorol. Soc., 87, 425-431.
47. Tian, B., **D. E. Waliser**, E. Fetzer, B. Lambrigtsen, Y. Yung, and B. Wang, 2006: Vertical Moist Thermodynamic Structure and Spatial-temporal Evolution of the Madden-Julian Oscillation in Atmospheric Infrared Sounder Observations. J. Atmos. Sci., 63, 10, 2462-2485.
48. Lin, X., J.-L. Li, M. J. Suarez, A. M. Tompkins, **D. E. Waliser**, M. M. Rienecker, J. Bacmeister, J. Jiang, H.-T. Wu, C. M. Tassone, J. D. Chern, B. D. Chen, and H. Su, 2006: A View of Hurricane Katrina with Early 21st Century Technology, EOS, 87, No. 41, 433.
49. Su, H., **D. E. Waliser**, J. H. Jiang, J-L. Li, W. G. Read, J. W. Waters, A. Thompkins, 2006: Relationships among upper tropospheric water vapor, clouds and SST: MLS observations, ECMWF analyses and GCM simulations, Geophys. Res. Lett., 33, L22802, doi:10.1029/2006GL027582.
50. Tian, B., **D. E. Waliser**, E. Fetzer, 2006: Modulation of the Diurnal Cycle of Deep Convective Clouds by the Madden-Julian Oscillation. Geophys. Res. Lett., 30, L20704, 10.1029/2006GL027752.

2007

51. Fu, X., B. Wang, **D. E. Waliser**, and T. Li, 2007: Impact of Atmosphere-Ocean Coupling on the Predictability of Monsoon Intraseasonal Oscillations (MISO), J. Atmos. Sci., 64, 157–174.
52. Li, J.-L., J. H. Jiang, **D. E. Waliser**, A. Tompkins, 2007: Assessing Consistency between EOS MLS and ECMWF Analyzed and Forecast Estimates of Cloud Ice, *Geoph. Res. Lett*., 34, L08701, doi:10.1029/2006GL029022.
53. Tian, B., Y. L. Yung, **D. E. Waliser**, T. Tyranowski, L. Kuai, E. J. Fetzer, and F. W. Irion, 2007: Intraseasonal variations of the tropical total ozone and their connection to the MJO. *Geophys. Res. Lett*., 34, L08704, 10.1029/2007GL029471.
54. **Waliser, D. E.**, K. Seo, S. Schubert, E. Njoku, 2007: Global Water Cycle Agreement in IPCC AR4 Model Simulations, Geoph. Res. Let., 34, L16705, doi:10.1029/2007GL030675.

2008

55. Seo, K., C. R. Wilson, J. Chen and **D. E. Waliser**, 2008: GRACE's spatial aliasing error, Geophys. J. Int., 172, 41-48, doi: 10.1111j.1365-246X.2007.03611.x.
56. Wu, D. L., J. H. Jiang, R. T. Austin, M. Deng, S. L. Durden, A. J. Heymsfield, B. H. Kahn, J.-L. Li, G. G. Mace, G. M. McFarquhar, C. J. Nankervis, H. C. Pumphrey, W. G. read, G. L. Stephens, S. Tanelli, D. G. Vane, **D. E. Waliser**, and J. W. Waters, 2008: Aura MLS cloud ice measurements and comparisons with CloudSat and other correlative data. J. Geophys. Res., In Press.
57. Seo, K., C. R. Wilson, S.-C. Han and **D. E. Waliser**, 2008: Gravity Recovery and Climate Experiment (GRACE) alias error from ocean tides. J. Geophys. Res, 113, B03405, doi:10.1029/2006JB004747.
58. Jiang, X., **D. E. Waliser**, M. C. Wheeler, C. Jones, M.-I. Lee, S. D. Schubert, 2008, Assessing the Skill of an All-Season Statistical Forecast Model for the Madden-Julian Oscillation, Mon. Wea. Rev., 136, 1940-1956.

59. Tian, B. J., **D. E. Waliser**, R. A. Kahn, Q. B. Li, Y. L. Yung, T. Tyranowski, I. V. Geogdzhavev, M. I. Mishchenko, O. Torres, and A. Smirnov, 2008: Does the Madden-Julian Oscillation influence aerosol variability?, J. Geophys. Res., doi:10.1029/2007JD009372.
60. Schwartz, M. J., **D. E. Waliser**, B. Tian, J. F. Li, D. L. Wu, J. H. Jiang, and W. G. Read, 2008: MJO in EOS MLS cloud ice and water vapor. *Geophys. Res. Lett.,* 35, L08812, doi:10.1029/2008GL033675.
61. Vavrus, S., and **D. E. Waliser,** 2008: An improved parameterization for simulating Arctic cloud amount in the CCSM3 climate model. J. Climate. 21(21): 5673.
62. Jiang, X., and **D. E. Waliser**, 2008, Northward Propagation of the Subseasonal Variability over the Eastern Pacific Warm Pool, Geophys. Res. Lett., doi:10.1029/2008GL033723.
63. Woods, C. P., **D. E. Waliser**, J.-L. Li, R. T. Austin, G. L. Stephens, D. G. Vane, 2008, Evaluating CloudSat Ice Water Content Retrievals Using a Cloud Resolving Model: Sensitivities to Frozen Particle Properties, J. Geophys. Res. Special CloudSat Section, 113, D00A11, doi:10.1029/2008JD009941.
64. Li, J.-F., **D. E. Waliser,** C. Woods, J. Teixeira, J. Bacmeister, J. Chern, B. W. Shen, A. Tompkins, and M. Kohler, 2008: Comparisons of Satellites Liquid Water Estimates with ECMWF and GMAO Analyses, 20th Century IPCC AR4 Climate Simulations, and GCM Simulations. Geophys. Res. Lett., 35, L19710, doi:10.1029/2008GL035427.
65. Sperber, K.R., and **D. E. Waliser,** 2008: New Approaches to Understanding, Simulating, and Forecasting the Madden-Julian Oscillation, Bull. Am. Meteor. Soc., DOI: 10.1175/2008BAMS2700.1.
66. Stephens, G.L., D. G. Vane, S. Tanelli, E. Im, S. Durden, M. Rokey, D. Reinke, P. Partain, G. G. Mace, R. Austin, T.S. L'Ecuyer, J. Haynes, M. Lebsock, K. Suzuki, **D. E. Waliser**, D. Wu, J. Kay, A. Gettleman, Z. Wang, and R. Marchand, 2008, CloudSat mission: Performance and early science after the first year of operation, J. Geophys. Res., doi:10.1029/2008JD009982.
67. Sperber, K.R., J.M. Slingo, **D.E. Waliser,** P.M. Inness, 2008: Coarse-Resolution Models Only Partly Cloudy, Science 320 (5876), 612a, DOI: 10.1126/science.320.5876.612a. *Comment on paper by H. Miura, M. Satoh, T. Nasuno, A.T. Noda, and K. Oouchi, 2008: Madden-Julian Oscillation Event Realistically Simulated by a Global Cloud-Resolving Model, Science 318 (5857), 1763. [DOI: 10.1126/science.1148443].*
68. Fetzer, E. J., W. G. Read, **D. E. Waliser,** B. H. Kahn, B. Tian, H. Vomel, F. W. Irion, H. Su, A. Eldering, M. d. l. T. Juarez, J. H. Jiang, and V. Dang, 2008: Comparison of Upper Tropospheric Water Vapor Observations from the Microwave Limb Sounder and Atmospheric Infrared Sounder. *J. Geophys. Res.*, 113, D22110, doi:10.1029/2008JD010000.
69. Vavrus S., **D. E. Waliser**, A. Schweiger, J. Francis, 2008: Simulations of 20th and 21st century Arctic cloud amount in the global climate models assessed in the IPCC AR4, Climate Dynamics, DOI 10.1007/s00382-008-0475-6.

2009

70. **Waliser, D. E**., J. F. Li, C. Woods, R. Austin, J. Bacmeister, J. Chern, A. Del Genio, J. Jiang, Z. Kuang, H. Meng, P. Minnis, S. Platnick, W.B. Rossow, G. Stephens, S. Sun-Mack, W.K. Tao, A. Tompkins, D. Vane, C. Walker, D. Wu, 2009: Cloud Ice: A Climate Model Challenge With Signs and Expectations of Progress, J. Geophys. Res.- CloudSat Special Section, 114, D00A21, doi:10.1029/2008JD010015.
71. Wu, D. L., R. T. Austin, M. Deng, S. L. Durden, A. J. Heymsfield, J.-L. Li, G. M. McFarquhar, I. V. Pittman, G. L. Stephens, S. Tanelli, D. G. Vane, **D. E. Waliser,** 2009, Comparisons of Global Cloud Ice from MLS, CloudSat, and Correlative Data Sets, JGR Special CloudSat Section, 114, D00A24, doi:10.1029/2008JD009946.
72. Tao, W.-K., J.-D. Chern, R. Atlas, D. Randall, M. Khairoutdinov, J.-L. Li, **D. E. Waliser,** A. Hou, X. Lin, C. Peters-Lidard, W. Lau, J. Jiang, and J. Simpson, 2009: A Multi-scale Modeling System: Developments, Applications and Critical Issues. Bull. Amer. Meteor. Soc. 90, 515-534.

73. Liu, P., Y. Kajikawa, B. Wang, A. Kitoh, T. Yasunari, T. Li, H. Annamalai, X. Fu, K. Kikuchi, R. Mizuta, K.Rajendran, **D. E. Waliser**, D. Kim, 2009: Tropical Intraseasonal Variability in the MRI-20km60L AGCM. J. Climate, 22, 2006–2022, doi: 10.1175/2008JCLI2406.1.
74. **CLIVAR Madden-Julian Oscillation Working Group**, 2009: MJO Simulation Diagnostics, J. Clim., 22, DOI: 10.1175/2008JCLI2731.1.
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243. Pagano, T. J., **Waliser, D. E**., Guan, B., Ye, H., Ralph, F. M., & Kim, J., 2021. Extreme Surface Winds during Landfalling Atmospheric Rivers: The Modulating Role of Near-Surface Stability, Journal of Hydrometeorology, 22(6), 1681-1693.
244. Prince, H. D., Gibson, P. B., DeFlorio, M. J., Corringham, T. W., Cobb, A., Guan, B., Ralph, F.M., **Waliser, D.E.,** 2021. Genesis locations of the costliest atmospheric rivers impacting the western United States. Geophysical Research Letters, 48, e2021GL093947.

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245. Chakraborty, S., Guan, B., **Waliser, D. E**., and da Silva, A. M.: Aerosol atmospheric rivers: climatology, event characteristics, and detection algorithm sensitivities, Atmos. Chem. Phys., 22, 8175–8195, doi.org/10.5194/acp-22-8175-2022, 2022.
246. Frederikse, T., Lee, T., Wang, O., Kirtman, B., Becker, E., Hamlington, B., Limonadi, D., **Waliser, D.E**., 2022. A hybrid dynamical approach for seasonal prediction of sea-level anomalies: A pilot study for Charleston, South Carolina. J. Geoph. Res: Oceans, 127, e2021JC018137, doi.org/10.1029/2021JC018137
247. Jiang, X., & **D. E. Waliser**, Gibson, P. B., Chen, G., & Guan, W., 2022, Why seasonal prediction of California winter precipitation is challenging. Bulletin of the American Meteorological Society, 103(12), E2688-E2700.
248. Massoud, E., Massoud, T., & **D. Waliser**, Guan, B., & Sengupta, A., 2022, Atmospheric Rivers and Precipitation in the Middle East. In Satellite Monitoring of Water Resources in the Middle East (pp. 49-70). Springer International Publishing.
249. Massoud, E., Massoud, T., & **D. Waliser**, Guan, B., & Sengupta, A., 2022, Correction to: Atmospheric Rivers and Precipitation in the Middle East. In Satellite Monitoring of Water Resources in the Middle East (p. C1). Springer International Publishing.
250. Raymond, C., L. Suarez-Gutierrez, K. Kornhuber, M. Pascolini-Campbell, J Sillmann, and **D.E. Waliser**, 2022. Increasing spatiotemporal proximity of heat and precipitation extremes in a warming world quantified by a large model ensemble. Environ. Res. Lett., 17 035005.

251. Raymond, C.**, D.E. Waliser**, B. Guan, H. Lee, P. Loikith, E. Massoud, A. Sengupta, D. Singh, A. Wooten, 2022. Regional and elevational patterns of extreme heat stress change in the US, Environmental Research Letters, 17, 064046.
252. Sengupta, A., **Waliser, D. E**., Massoud, E. C., Guan, B., Raymond, C., & Lee, H., 2022. Representation of Atmospheric Water Budget and Uncertainty Quantification of Future Changes in CMIP6 for the Seven U.S. National Climate Assessment Regions, J. Climate. doi.org/10.1175/JCLI-D-22-0114.1.
253. Sengupta, A., Singh, B., DeFlorio, M. J., Raymond, C., Robertson, A. W., Zeng, X., ... & **D. E. Waliser**, 2022, Advances in subseasonal to seasonal prediction relevant to water management in the western United States. Bulletin of the American Meteorological Society, 103(10), E2168-E2175.
254. Taylor, G.P., Loikith, P.C., Aragon, C.M., Lee, H., **Waliser, D.E**., 2022. CMIP6 model fidelity at simulating large-scale atmospheric circulation patterns and associated temperature and precipitation over the Pacific Northwest. Clim Dyn, doi.org/10.1007/s00382-022-06410-1.
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256. Zhou, Y., Kim, H., & **D. Waliser**, 2022, Atmospheric River Life Cycle Responses to the Madden Julian Oscillation. Geophysical Research Letters, 48 (3).

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257. Chakraborty, S., Guan, B., **D. E. Waliser**, & Jiang, J. H., 2023, Aerosol Atmospheric Rivers as Drivers of Extreme Poor Air Quality Events and Record PM2. 5 Levels. Authorea Preprints.
258. Guan, B., & **D. E. Waliser**, & Ralph, F. M., 2023, Global application of the atmospheric river scale. Journal of Geophysical Research: Atmospheres, 128(3), e2022JD037180.
259. Sengupta, A., & **D. E. Waliser**, Massoud, E., & Lee, H., 2023, Assessing sensitivities of climate model weighting to multiple methods, variables, and domains in the south-central United States. Earth System Dynamics, 14(1), 121-145.
260. Taylor, G. P., Loikith, P. C., Aragon, C. M., Lee, H., & **D. E. Waliser**, 2023, CMIP6 model fidelity at simulating large-scale atmospheric circulation patterns and associated temperature and precipitation over the Pacific Northwest. Climate Dynamics, 60(7), 2199-2218.
261. Wang, X., & **D. Waliser**, Jiang, X., Asharaf, S., Vitart, F., & Jie, W., 2023, Evaluating western North Pacific tropical cyclone forecast in the subseasonal to seasonal prediction project database. Frontiers in Earth Science, 10, 1064960.
262. Wootten, A. M., Massoud, E. C., **Waliser, D. E**., & Lee, H. (2023). Assessing sensitivities of climate model weighting to multiple methods, variables, and domains in the south-central United States. *Earth System Dynamics*, *14*(1), 121-145.
263. Zhang, Z., DeFlorio, M. J., Delle Monache, L., Subramanian, A. C., Ralph, F. M., ... & **D. E. Waliser**, 2023, Multi-model subseasonal prediction skill assessment of water vapor transport associated with atmospheric rivers over the western US. Journal of Geophysical Research: Atmospheres, 128(7), e2022JD037608.

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264. Asharaf, S., Guan, B., & **D. E. Waliser**, 2024, ROTATE: A coordinate system for analyzing atmospheric rivers. Geophysical Research Letters, 51(7), e2023GL106736.
265. DeFlorio, M. J., Sengupta, A., Castellano, C. M., Wang, J., Zhang, Z., Gershunov, A., ... & **Waliser, D. E.**, 2024, From California's extreme drought to major flooding: evaluating and synthesizing experimental seasonal and subseasonal forecasts of landfalling atmospheric rivers and extreme … *Bulletin of the American Meteorological Society*, *105*(1), E84-E104.
266. Guan, B., & **D. E. Waliser**, 2024, A regionally refined quarter-degree global atmospheric rivers database based on ERA5. Scientific Data, 11(1), 440.
267. KISS Continuity Study Team, 2024, *Lead Author*, Toward a US framework for continuity of satellite observations of Earth's climate and for supporting societal resilience. Earth's Future, 12(2), e2023EF003757.
268. Raymond, C., Shreevastava, A., Slinskey, E., & **Waliser, D**, 2024. Linkages between atmospheric rivers and humid heat across the United States. Natural Hazards and Earth System Sciences*,* 24*(3), 791-801.*
269. Waters, J. W., Livesey, N. J., Santee, M. L., Stek, P. C., Cofield, R. E., Siegel, P. H., ... & **D. E. Waliser**, 2024, A Conical-Scanning Microwave Limb Sounder for Atmospheric Measurements. IEEE Journal of Microwaves, 3.
270. Weatherhead, E. C., Abdalati, W., Baker, N. L., Boland, S. W., Bonadonna, M., ... & **D. E. Waliser**, 2024, Towards a US framework for continuity of satellite observations of Earth's climate and for supporting societal resilience. Earth's Future, 12(2), e2023EF003757.
271. Sengupta, A., & **D. E. Waliser**, & DeFlorio, M. J., Guan, B., Delle Monache, L., ... , 2025, Role of evolving sea surface temperature modes of variability in improving seasonal precipitation forecasts. Communications Earth & Environment, 6(1), 256.

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272. Rai, M., Miyazaki, K., Payne, V., Guan, B., and **Waliser, D.**: Trace gas atmospheric rivers: remote drivers of air pollutants, EGUsphere [preprint], https://doi.org/10.5194/egusphere-2025-399, 2025.
273. Sengupta, A., & **D. E. Waliser**, & DeFlorio, M. J., Guan, B., Delle Monache, L., ... , 2025, Role of evolving sea surface temperature modes of variability in improving seasonal precipitation forecasts. Communications Earth & Environment, 6(1), 256.

B. BOOKS

Lau, W. K. M. and **D. E. Waliser**, Eds., 2005: Intraseasonal Variability of the Atmosphere-Ocean Climate System, Springer, Heidelberg, Germany, 474.

Lau, W. K. M. and **D. E. Waliser**, Eds., 2011: Intraseasonal Variability of the Atmosphere-Ocean Climate System, 2nd Edition, Springer, Heidelberg, Germany, pp. 613.

Ralph, F.M., M. D. Dettinger, J. J. Rutz, **D. E. Waliser**, Eds., 2020. Atmospheric Rivers, Springer Nature, Switzerland, pp. 252, ISBN 978-3-030-28905-8, 10.1007/978-3-030-28906-5.

C. BOOK CHAPTERS

Waliser, D. E., 2002, Tropical Meteorology: Intertropical Convergence Zones (ITCZ). Encyclopedia of Atmospheric Sciences. Edited by J. Holton, J. Pyle, J. Curry. Academic Press.

Waliser, D. E., 2005: Predictability and Forecasting. Chapter 12, Intraseasonal Variability of the Atmosphere-Ocean Climate System, W. K. M. Lau and **D. E. Waliser**, Eds., Springer, Heidelberg, Germany, 474.

Waliser, D. E., 2006: Intraseasonal Variability. Chapter 5, Asian Monsoon, Editor Bin Wang., Springer, Heidelberg, Germany, 787.

Waliser, D. E., 2006: Predictability of Tropical Intraseasaonal Variability. Chapter 11, Predictability of Weather and Climate, T. Palmer and R. Hagedorn, Eds., Cambridge University Press, 718.

Waliser, D. E., 2011: Predictability and Forecasting. Chapter 12, Intraseasonal Variability of the Atmosphere-Ocean Climate System, 2nd Edition, W. K. M. Lau and **D. E. Waliser**, Eds., Springer, Heidelberg, Germany, 2nd Edition, pp. 613.

Tian, B., and **D. E. Waliser,** 2011: Chemical and biological impacts, Chapter 18, Intraseasonal Variability of the Atmosphere-Ocean System, 2nd Edition, W. K. M. Lau and **D. E. Waliser**, Eds., Springer, Heidelberg, Germany 2nd Edition, pp. 613.

Mattmann, C., D. Crichton, A. Hart, C. Goodale, J. S. Hughes, S. Kelly, L. Cinquini, T. H. Painter, J. Lazio, **D. E. Waliser,** N. Medvidovic, J. Kim, P. Lean. 2011: Architecting Data-Intensive Systems. Handbook of Data Intensive Computing, B. Furht, A. Escalante, eds. 1st Edition. Springer Verlag.

Tian, B., and **D. E. Waliser**, 2012: Madden-Julian Oscillation. Encyclopedia of Remote Sensing, Edited by Eni Njoku, Springer Reference (www.springerreference.com), Springer-Verlag Berlin Heidelberg.

Waliser, D. E., and X. Jiang**,** 2012, Tropical Meteorology: Intertropical Convergence Zones (ITCZ). Encyclopedia of Atmospheric Sciences. Edited by G. North, F. Zhang and J. Pyle. Academic Press, doi: 10.1016/B978-0-12-382225-3.00417-5.

Mattmann, C., P. Zimdars, C. Goodale, A. Hart, J. Kim, **D. E. Waliser**, P. Lean. 2012: Rapid and Elastic Ingestion of Remote Sensing Data into the Regional Climate Model Evaluation System. Programming Hive. E. Capriolo, D. Wampler, J. Rutherglen, eds. 1st edition. O'Reilly Media, Inc.

Moncrieff, M., and **D.E. Waliser**, 2015: Organized Convection in YOTC Context, in Multi-scale Convection-Coupled Systems in the Tropics, edited by W. W. Tung and R. Fovell, AMS Monograph Series Tribute to Michio Yanai.

Moncrieff, M, and **D.E. Waliser**, 2015: Organized Convection And The YOTC Project, *Seamless Prediction of the Earth System: from Minutes to Months*, Editors: G Brunet, S Jones, PM Ruti, World Meteorological Organization, WMO-No. 1156, ISBN 978-92-63-11156-2, Geneva.

Waliser, D. E., and X. Jiang**,** 2015, Tropical Meteorology: Intertropical Convergence Zones (ITCZ). Encyclopedia of Atmospheric Sciences. Edited by G. North, F. Zhang and J. Pyle. Academic Press, doi: 10.1016/B978-0-12-382225-3.00417-5.

Li, J.-L., **D. E. Waliser**, G. Stephens, S. Lee, 2016: Characterizing and Understanding Cloud Ice and Radiation Budget Biases in Global Climate Models and Reanalysis, edited by W. W. Tung and R. Fovell, Chapter 13, AMS Monograph Series, Tribute to Michio Yanai, DOI: 10.1175/ AMSMONOGRAPHS-D-15-0007.1

Tao, W.-K., Y. N.Takayabu, S. Lang, S. Shige, W. Olson, A.Hou, X. Jiang, C. Zhang, W. Lau, T. Krishnamurti, **D.E. Waliser**, M. Grecu, P. E. Ciesielski, R. H. Johnson, R. Houze, R. Kakar, K. Nakamura, S. Braun, S. Hagos, R. Oki, and A. Bhardwaj, 2016: TRMM Latent Heating Retrieval and Comparisons with Field Campaigns and Large-Scale Analyses, in Multi-scale Convection-Coupled Systems in the Tropics, Chapter 2, AMS Monograph Series, Tribute to Michio Yanai, DOI: 10.1175/AMSMONOGRAPHS-D-15-0013.1

D. E. Waliser, and J. Cordeira, 2020. Chapter 6, Atmospheric River Modeling: Forecasts, Climate Simulations, and Climate Projections, in Atmospheric Rivers, Springer Nature, Switzerland, pp. 252, ISBN 978-3-030-28905-8, 10.1007/978-3-030-28906-5.

2. SELECT PROFESSIONAL SERVICE

Co-Lead, Keck Institute for Space Studies, Study Program on Report on Developing a Continuity Framework for Satellite Observations of Climate, 2022.

Member, NASEM Study on Assessment of Commercial Space Platforms for Earth Science Instrument, 2021-2022.

Member, National Academy of Sciences, Engineering and Medicine (NASEM) Board on Atmospheric Sciences (BASC), 2016 to 2022.

Member, NASEM Committee on Earth Science and Applications from Space (CESAS), 2018 to 2023.

Member, Science and Applications Leadership Team (SALT), Clouds, Convection & Precipitation and Aerosol Earth Science and Applications Decadal Survey Designated Observable GSFC-led Mission Study for NASA, June 2018- 2023.

Member, NASEM Study on Lessons-Learned in the Implementation of NASA's Earth Venture Class, 2021--2022.

Member, NASEM Study on Next Generation Earth Systems Science at the National Science Foundation, 2021.

Member, NASEM study on Decadal Survey for Earth Science and Applications from Space, Weather and Air Quality: Minutes to Subseasonal Panel, April 2016 to December 2017.

Co-Chair, S2S Component, Weather Research Science Working Group, Interagency Weather Research Coordination Committee, Office of Federal Coordinator for Meteorology, 2017-present.

Member, National Academy of Sciences study on US Research Agenda for Subseasonal to Seasonal Prediction, August 2014 to March 2016.

Member, World Climate Research Program (WCRP) / World Weather Research Program (WWRP) Subseasonal Planning Group, September 2011-Present.

Co-Chair, with P. Gleckler, World Meteorological Organization (WMO) World Climate Research Program (WCRP) Data Advisory Council (WDAC) obs4MIPs Task Team, 2014-2020.

Lead Author, Climate Change Science Report (CCSR), National Climate Assessment, USGCRP, March 2016-March 2017.

Co-chair, with Mitch Moncrieff, World Meteorological Organization (WMO) joint World Climate Research Program (WCRP)/ World Weather Research Program (WWRP) – THORPEX Program Year of Tropical Convection Activity, 2006 – 2015.

Chair, NASA obs4MIPs Science Working Group, 2011-2015.

International Organization Committee, Workshop on Intraseasonal Processes and Prediction in the Maritime Continent, Sponsored by World Climate Research Program (WCRP) and World Weather Research Program (WWRP), Singapore, April 2016.

Member, CalWater 2 Science Steering Group, 2011-2016.

Member, World Climate Research Program (WCRP)/ World Weather Research Program (WWRP) – THORPEX Program, Madden Julian Oscillation (MJO) Task Force, November 2012 – 2014.

Member, WMO THORPEX International Core Steering Committee (ICSC), 2009 – 2012.

Member, Science Steering Committee, Center For Prototype Climate Modeling, New York University Abu Dhabi Institute, 2012-2013.

Member, GEOS-5 Collaboration Group, Telecons & Meetings, 2009-2014.

Co-chair, with Matthew Wheeler, World Climate Research Program (WCRP) / World Weather Research Program (WWRP) – THORPEX Program, Madden Julian Oscillation (MJO) Task Force, November 2009 – 2011.

Member, National Research Council, National Academy of Sciences study on Intraseasonal and Interannual Climate Predictability, January 2009 to September 2010.

Co-chair, with E. Maloney, NSF Science and Technology Center, Center for Multi-Scale Modeling and Atmospheric Processes (CMMAP) Madden Julian Oscillation (MJO) Working Group. January 2008 to 2011.

Co-chair, with K. Sperber, US CLIVAR Madden-Julian Oscillation Working Group (www.usclivar.org), 2006 – 2009.

Member, CALIPSO/CloudSat Science Team, 2008 to 2011.

Member, International Committee, 4th WMO International Workshop on Monsoons, 20-15 October 2008, Beijing, China.

Member of the Scientific Steering Group of the World Climate Research Program's (WCRP; wcrp.wmo.int) Climate Variability and Predictability (CLIVAR; www.clivar.org) Program, 2005 – 2009.

Member, International Committee, 3rd WMO International Workshop on Monsoons, 2-6 November 2004, Hangzhou, China

Interim co-chair, US CLIVAR Indian Sector Panel, December 2004 – 2005.

Developer/Investigator of Long Island Sound Ferry-Based Marine and Atmospheric Observing System (www.stonybrook.edu/soundscience), 2002-04.

Member, US CLIVAR Asian-Australian Monsoon Working Group, 2001-2004.

Participant, CLIVAR Monsoon Study on GCM Asian-Australian Monsoon Intercomparison, 2001-2003.

Member, NCAR Coupled System Modeling Atmospheric Model Working Group, 1999-2003.

Member, NASA Data Analysis and Archive Center (DAAC) Working Group, Fall 1994 to Fall 1997.

Member, Sequoia 2000 Visiting SoftWare Assessment Team (SWAT), Fall 1992 to Spring 1993.

3. MENTORING

A. POSTDOCTORAL SCIENTISTS

Name and Year	Current Position
Mukesh Rai, JPL, Postdoc, 2023-2025.	Baylor – postdoc
Colin Raymond, JPL Postdoc, 2019-2022.	JIFRESSE
Shakeel Ashraf, JPL Postdoc, 2019-2021.	JIFRESSE
Agniv Sengupta, JPL Postdoc, 2019-2021.	Scripps Institution of Ocean. – research scientist
Elias Massoud, JPL Postdoc, 2018-2021.	Oak Ridge National Laboratory – research scientist
Peter Gibson, JPL Postdoc, 2017-2020.	NIWA, climate scientist
Alex Gonzales, JIFRESSE Postdoc, 2018.	Iowa State - faculty
Michael DeFlorio, JPL Postdoc, 2015-2019.	Scripps Institution of Ocean. – research scientist
Darek Baronowski, JIFRESSE Postdoc, 2015-2017.	Inst. of Geophysics Polish Acad. of Sciences – faculty
Gregory Cesana, JPL/Caltech Postdoc, 2014-2017.	NASA/GISS
Suhas Ettammal, JPL/Caltech Postdoc, 2014-2016.	Indian Institute of Science - faculty
Justin Stachnik, JIFRESSE Postdoc, 2013-2016.	Kansas State University – faculty; NASA ESD
Huikyo Lee, JPL/Caltech Postdoc, 2012-2015.	JPL hire – Section 398
Paul Loikith, JPL/Caltech Postdoc, 2012-2015.	Portland State University - faculty
Yanjuan Guo, JIFRESSE Postdoc, 2012-2015.	Texas A&M– research Scientist
Neena Joseph Mani, JIFRESSE Postdoc, 2012-2015.	Indian Institute of Science - faculty
Wei-Ting Chen, JPL/Caltech Postdoc, 2009-2012.	Taiwan National University - faculty
Ju-Me Ryoo, JPL/Caltech Postdoc, 2009-2012.	AMES/NASA
Bin Guan, JPL/Caltech Postdoc, 2009-2012.	JIFRESSE
Terry Kubar, NPP Postdoc, 2008-2011.	JIFRESSE
Ki-Weon Seo, NPP/NRC Postdoc, 2005-2007.	Seoul National University – faculty
Christopher Woods, JPL/Caltech Postdoc, 2006-08.	Aerospace Industry
Xianan Jiang, JPL/Caltech Postdoc, 2006-2008.	JIFRESSE
Jon Bergengren, JPL/Caltech Postdoc, 2004-2006	ecodiversity.org
Baijun Tian, Caltech Postdoc, 2004-2007	JPL hire – Section 329
Stefan Liess, University of Stony Brook, 2003-2005.	U. of Minnesota – research faculty

B. GRADUATE STUDENTS

Charlie Chen, Ph.D. student, Intern, UC Davis, 6/24-5/25.
Alex Daniels, M.S. student, Intern, UNC Chapel Hill, 6/24-5/25.
Michelle de Luna, M.S. student, Intern, Cal State, Los Angeles, 9/19-9/21.
Emily Slinksey, Ph.D. student, Intern, Portland State University, 6/19-8/19.
Emily Slinksey, M.S. student, Intern, Portland State University, 6/18-8/18.
Antonio Monge M.S. student, Intern, Cal State, Los Angeles, 9/17-9/19.
Terrence Pagano M.S. student, Intern, Cal State, Los Angeles, 9/17-9/19.
Homero Paltan Lopez, Ph.D. student, Oxford, Summer Intern 5/16-8/16.
Vicky Espinoza, M.S. student, USC, Intern, 6/16-9/17.
Deanna Nash, M.S. student, Intern, Cal State, Los Angeles, 9/15-9/17.
Jinny Lee, M.S. student, Intern, Cal State, Los Angeles, 6/15-9/16.
Danielle Groenen, Ph.D. student, FSU, Summer Intern, 2014.
Da Yang, Caltech, Ph.D. student, Thesis Committee Member. 2010-2014.
King-Fai Li, Caltech, Ph.D. student, Informal co-supervision. 2009-2013.
Sandy Lucas, SUNY Ph.D, graduated 12/07.
Yasmine Bennouna, Foreign M.S. Internship, 3/02-8/02.

Travis Baggett, SUNY, M.S., 9/02-9/04.
Yangxing Zheng, SUNY M.S., graduated 6/03.
Masha Medovaya, SUNY M.S., graduated 12/99.
Zhenzhou Zhang, SUNY M.S., graduated 8/99.
Sandy Lucas, SUNY M.S., graduated 8/99.
Zhixiong Shi, SUNY M.S., graduated 9/97.
Wufeng Zhou, SUNY M.S., graduated 9/96.

C. HIGH SCHOOL AND UNDERGRADUATE

Preston Ancello, Cornell University, JPL Summer Intern, 2019.
Sophia Uluatam, Cornell University, JPL Summer Intern, 2019.
Danielle Groenen, FSU, JPL Summer Intern, 2014.
Jenny Marion, UC Berkeley, JPL Summer Intern, with Prof. Y. Yung, 2013.
Benjamin Wu, Caltech, JPL Summer Intern, with Prof. Y. Yung, 2013.
Cosmo Smith, JPL Summer Intern, with K. McDonald, 2010.
Ben Slawski, Caltech, Caltech Summer Program, with Prof. Yung, 2009, 2010, 2011.
Colin Logan, Caltech, Caltech Summer Program, with Prof. Yung, 2009.
Andrew Atwong, GATE Science Project, Paper on Global Change, Spring 2008.
Tomasz Tyranowski, University of Krakow, Poland, Caltech Summer Program, with Prof. Yung, 2006.
Michele Balcom, SUNY Atmospheric Sciences, NSF/RAIRE Fellowship, 1998.
Joseph Giannotti, SUNY Atmospheric Sciences, NWS/NOAA Support, 2002-03.
Matthew Gross, SUNY Summer Research Institute for High School Students, 1999.

4. RESEARCH FUNDING

JPL Environmental Risks, Infrastructure Vulnerability, and Strategic Adaptation Report, Climate Adaptation Science Investigators (CASI) – NASA, 2024-2025, $200k.

Subseasonal Prediction of Atmospheric Rivers for Water Management in California, Dept. Water Resources, CA, PI: Waliser (JPL), Period: 2017-2022, Amount: $2,600k.

Enabling Regional Climate Model Evaluation: A Critical Use of Observations for Establishing Core National Climate Assessment Capabilities - Renewal, NASA NCA, PI: D.Waliser (JPL), Period 2014-2022, Amount: $3.9M.

Characterizing MJO and Multi-Scale Interactions Over the Maritime Continent With CYGNSS: Validation, Process Study and Model Evaluation, NASA/Weather; PI: Waliser (JPL), Period: 2017-2019, Amount: $421k.

A Gridded Climate Indicator for Extreme Precipitation Events over the Continental United States, NASA Indicators, PI: Loikith (PSU), Period: 2016-2019, co-I/JPL Amount $161k.

Leveraging the MJO for Multi-Week Predictions: Improving Understanding of MJO - MC Interactions, ONR, PI: D. Waliser (UCLA), Period 2016-2019, Amount $360k.

Towards an Improved Understanding of the Initiation and Propagation of the Madden-Julian Oscillation, NOAA Climate Process Team, PI: X. Jiang (JIFRESSE/UCLA), Period 2015-18, Amount: $1.45M.

Atmospheric Rivers: Water Extremes that Impact Global Climate, Regional Weather and Water Resources, NASA Energy and Water, PI: D. Waliser (JPL), Period 2014-2016, Amount $427k.

Advancing Monsoon Weather-Climate Fidelity in the NCEP CFS through Improved Cloud-Radiation-Dynamical Representation, India National Monsoon Mission, PI: D. Waliser (UCLA), Period: 2013-2017, Amount: $327k.

Enabling Regional Climate Model Evaluation: A Critical Use of Observations for Establishing Core NCA Capabilities, NASA NCA, PI: D. Waliser (JPL), Period: Extended to 2014, Amount: $399k.

Advancing MJO Research with CYGNSS: Multi-Scale, MCS and Ocean Interactions, NASA/Weather; PI: Waliser (JPL), Period: 2013-2017, Amount: $444k.

Characterizing and Understanding Cloud-Radiation-Dynamics using CloudSat/CALIPSO and other A-Train observations as well as Reanalysis for Model Improvement, NASA/CloudSat; PI: J.-L. Li (JPL), Period: 2013-2015. Amount $473k

Bridging Observations and Models to Improve Cloud-Radiation-Dynamical Interactions and Provide Guidance on Future Satellite Observations, NASA/MAP; PI: Waliser (JPL), Period: 2013-2017, Amount: $990k.

Physics Constrained Stochastic-Statistical Models for Extended Range Environmental Prediction, ONR-MURI, PI: A. Majda (NYU), co-I: D. Waliser (UCLA); 2012-2017, Amount: $7.5M; UCLA Amount: $391k.

Leveraging the MJO for Predicting Envelopes of Tropical Wave and Synoptic Activity at Multi-Week Lead Times, ONR, PI : D. Waliser (UCLA), Period: 2012-2015, Amount: $575k.

Understanding the Role of Convective Momentum Transport for the Madden-Julian Oscillation, NSF; PI: X. Jiang (UCLA), co-PI: D. Waliser (UCLA); Period: 2012-2015, Amount: $496k.

Modulation of Tropical Cyclone (TC) Activity over the Intra-Americas Sea by the Intraseasonal Variability: Implications for Dynamical TC Prediction on Intraseasonal Time Scales, NOAA MAPP; PI: X. Jiang (UCLA), co-PI: D. Waliser (UCLA); Period: 2012-2015, Amount: $349k.

Diabatic Processes of the MJO: Enabling and Analyzing an MJO TF and GASS Global Model Evaluation Project, NSF, PI : D. Waliser (UCLA), Period: 2012-2015, Amount: $497k.

Enabling Regional Climate Model Evaluation: A Critical Use of Observations for Establishing Core NCA Capabilities, NASA NCA, PI: D. Waliser (JPL), Period: 2011-2013, Amount: $950k.

ExArch: Climate analytics on distributed exascale data archives, NSF G8 Initaitive, PI: M. Juckes (STFC-UK), co-PI: D. Waliser (UCLA), Period 2011-2015. UCLA Amount: $300k.

Using Satellite Data and ECCO Ocean Analysis In Support of CLIVAR/DYNAMO: Model Evaluation and Hypothesis Testing, NASA/PO, PI: D. Waliser (JPL), Period: 2011-2014, Amount: $680k.

Coupled Ocean-Atmosphere Dynamics and Predictability of MJO's, ONR, PI: A. Miller (SIO/UCSD), co-PI: D. Waliser (UCLA0, Period: 2010-2013. co-I Amount: $120k.

Multi-Model Ensemble Forecast of MJO, NOAA CBT, PI: B. Wang (UH), co-PI: D. Waliser (UCLA), Period: 2010-2013, Amount: $480.

Integrating CloudSat and A-Train Observations of Upper-Tropospheric Cloud and Hydrological Processes: Application to GCM Evaluation and Improvement: PI: Waliser (JPL), CloudSat Mission Support/JPL, Period: 2010-2011. Amount: $100k.

Vertical heating structure in large-scale coupled tropical waves, NSF; PI: X. Jiang (UCLA), co-PI: D. Waliser (UCLA); Period: 2009-2012, Amount: $420k.

Collaborative Research: Exploring the Chemical Reach of the Madden-Julian Oscillation: Satellite / In-Situ Data Analysis and Chemistry/Transport Modeling, NSF; PI: B. Tian (UCLA), co-PI: D. Waliser (UCLA); Period 2009-2012, Amount: $299k

Northward Propagation Mechanisms of Subseasonal Eastern Pacific ITCZ Variability: Connections between Extreme Events, Subseasonal and Interannual Variability, NOAA; PI: X. Jiang (UCLA), co-PI: D. Waliser (UCLA); Period: 2009-2012, Amount: $380k.

Observationally Constrained Climate Prediction and Risk Assessment, PI: Teixeira (JPL), co-I: D. Waliser (JPL), RTD/JPL, Period: 2009, Amount: $400k.

Intraseasonal Variations of Atmospheric Composition and Their Connection to the Madden-Julian Oscillation: Satellite/In-Situ Data Analysis and Chemistry/Transport Modeling, NSF; PI: B. Tian (UCLA), co-I: D. Waliser (UCLA); Period: 2009-2012, Amount: $380k.

Physical-Biological Interactions Associated with Tropical Subseasonal Variability and Their Impacts on SST NASA/PO; PI: R. Murtugudde (UMD), Period: 2008-2012, Amount for co-I: $225k.

Improving the representation of shallow cumulus convection in coupled systems: Integrating satellite observations, high-resolution models and new parameterzations NASA/MAP; PI: J. Teixeira (JPL), co-I: Waliser, Period: 2008-2012, Amount for co-I: $80k.

Judicious Application of Satellite Observations To Evaluate And Improve Cloud Ice and Liquid Water Representations In Conventional and Multi-Scale Weather & Climate Models, NASA/MAP; PI: Waliser (JPL), Period: 2008-2012, Amount: $1,100k.

Observationally Constrained Climate Prediction and Risk Assessment, PI: Teixeira (JPL), co-Is: A. Braverman, K. Bowman, R. Duren, A. Eldering, E. Fetzer, C. Miller, M. Santee, D. Waliser (JPL), RTD/JPL, $200k, 2008.

Evaluating Key Uncertainties in IPCC Climate Change Projections of California Snowpack: Topography, Snow Physics, and Aerosol Deposition, PI: Waliser (JPL), co-Is: Liou, Xue, Hall, Fovell, Kim (UCLA) and Li, Eldering, Chao, Saatchi (JPL), DRDF/JPL, $200k, 2007-08.

PBL Height Climatology from GNSS/RO Measurements: A New Resource for Evaluating and Improving Weather and Climate Models, PI: Ao (JPL), co-I: Waliser (JPL), NASA, $460k, 2007-10.

Using Large Inland Water Bodies to Characterize and Predict Regional Climate Change, PI: Hook (JPL), co-I: Waliser (JPL), EOS/NASA, $450k, 2007-10.

Integrating CloudSat and A-Train Observations of Upper-Tropospheric Cloud and Hydrological Processes: Application to GCM Evaluation and Improvement: PI: Waliser (JPL), CloudSat Mission Support/JPL, ~200k/yr, 2007-2010.

Deriving a PBL Height Climatolgy from GPS and AIRS: A Valuable Resource for Evaluating and Improving Weather and Climate Models, PI: Waliser (JPL), co-I: Ao (JPL), Spontaneous Concept/RTD/JPL, $30k, 2007.

Coupling Regional and Global Processes: Towards the Next Generation of Space Missions, PI: Waliser (JPL), co-Is: Liou, Xue, Hall, Fovell (UCLA) and Li, Eldering and Chao (JPL), DRDF/JPL, $200k, 2006-07.

Predictability and Model Verification of the Water and Energy Cycles: Linking Local, Regional and Global Scales, PI: Waliser (JPL), co-I: Schubert (GSFC/NASA), NEWS/NASA, $600k, 2007-10.

Investigation of climatic impacts on US west coast atmospheric and terrestrial processes using numerical downscaling techniques, PI: Waliser (JPL), co-I: Xue (UCLA), DRDF/JPL, $25k, 2006-07.

A Merged Atmospheric Water Data Set from the A-Train, PI: Fetzer (JPL), several other co-Is including Waliser (JPL), NEWS/NASA, $1.5M, 2005-10.

Pathways to predictability on subseasonal time scales: assessing the role of tropical forcing and land surface conditions, PI: Schubert (GSGC/NASA), 9 other Co-Is including Waliser (JPL), MAP/NASA, $1.5M, 2005-10.

Exploiting Satellite Observations And Cloud-Resolving Models To Improve GCM Representations Of Cloud-Radiation-Dynamical Interactions, PI: Waliser (JPL), co-Is: Yung (Caltech), Kuang (Harvard), Wu (GSFC/NASA), MAP/NASA, $300k, 2005-06.

Atmospheric Hydrological Cycle Thrust, PI: Waliser (JPL), co-Is: Salawitch and Gunson (JPL), RTD/JPL, $600k, 2004-07.

Dynamical Predictability and Present-Day Forecast Skill of the Subseasonal Variability, PI: Waliser (JPL), co-Is: Schubert (GSFC/NASA), Kirtman (COLA/GMU), Pan (NCEP/NOAA), OGP/NOAA, $182k, 2005-06.

Using Ferry-Based Marine And Atmospheric Observations To Improve Our Understanding And Modeling Capabilities Of Long Island Sound Hypoxia And The Roles Of Natural Versus Anthropogenic Forcing, PI: Wilson (SUNY), co-PI: Waliser (SUNY), EPA, $120k, 2004-05.

Exploring the Benefits and Limits of Dynamical Predictions of the Tropical Intraseasonal Oscillation: Steps Towards an Experimental Prediction Program, PI: Waliser (SUNY), co-Is: Schubert (GSFC/NASA), Stern (GFDL/NOAA), M. Latif and S. Liess (MPI), OGP/NOAA, $324k, 2001-04.

A Ferry-Based Observing System for Long Island Sound: Application to Physical Influences on Hypoxia, PI: Waliser (SUNY), co-PI: Wilson (SUNY), co-I: Reynolds (BNL), NY Sea Grant, $243k, 2002-2004.

The Nature and Predictability of the Madden-Julian Oscillation in the Coupled Ocean-Atmosphere System. PI: Waliser (SUNY), co-PI: Jones (UCSB), co-Is: Lau (GSFC/NASA) and Stern (GFDL/NOAA), NSF, $372k, 2001-2004.

The Relationship Between American Lobster Mortality in Long Island Sound and Prevailing Environmental Water Column Conditions, PI: Wilson (SUNY), co-Is: Waliser and Swanson (SUNY), NY & CT Sea Grant/NOAA, $176k, 2001-03.

Intraseasonal Variability in the Indian Ocean: Scale Interactions and Climate Impacts, PI: Waliser (SUNY) and co-PI: Murtugudde (U. Maryland), NASA, $299k, 2000-03.

Acquisition of a Real-Time Satellite Receiving System for Regional Environmental Research and Education, PI: Waliser (SUNY), co-PI: J. Tichler (BNL), SUNY President's Office, $76k, 1999-2000.

Water Vapor Variations Associated with the Life Cycle of the MJO: Analysis of NCAR CCM and TOVS Pathfinder, PI: Waliser (SUNY), NSF, 25k, 1999-2000.

Ocean Buoy Shortwave (OBS): A Data Set for Satellite Retrieval and GCM Validation. Waliser (SUNY), co-Is: Weller (WHOI), McPhaden (PMEL/NOAA) and Wielicki (Langley/NASA), NASA, $126k, 1998-2000.

Earth Remote Sensing Facilities for Research and Teaching at the State University of New York at Stony Brook, PI: Geller (SUNY), co-PIs: Lwiza, Waliser, Zhang, Cess, Lerdau, NASA, $105, 1998-99.

The Nature and Predictability of the Madden-Julian Oscillation in the Coupled Ocean-Atmosphere System. PI: Waliser (SUNY), co-PI: Jones (UCSB), co-Is: Lau (GSFC/NASA) and Schemm (NCEP/NOAA), NSF, $245k, 1998-2000.

Removing Satellite Equatorial-Crossing-Time Biases from the Global Outgoing Longwave Radiation Data Set, PI: Waliser (SUNY) and co-PI: Janowiak (NCEP/NOAA), NOAA/NASA, $109k, 1997-99.

Analysis of the Shortwave Cloud Forcing and Surface Shortwave Flux in the Meteorological and Oceanographic (METOC) Modeling and Prediction Systems, PI: Waliser (SUNY), ONR, $230k, 1997-2000.

Large-Scale Convection: Local and Remote Interactions in the Pan-American Climate System, PI: Waliser (SUNY), PACS/NOAA, $96k, 1995-97.

Relationship Between Clouds, SST and Surface Fluxes on Seasonal & Interannual Time Scales Over the Western Pacific, PI: Waliser (SUNY) and co-PI: Gautier (UCSB), NSF, $171k, 1994-97.