

**Education**

- 1996 Ph.D., University of Washington, Atmospheric Sciences.
- 1985-86 Additional coursework, University of Southern California, Artificial Intelligence and Probability Theory.
- 1983 B.S., Brown University, Geology-Physics/Mathematics, magna cum laude.

**Professional Employment**

- 2007- Associate Professor, Department of Marine, Earth and Atmospheric Sciences, North Carolina State University, Raleigh, NC
- 2005-07 Assistant Professor, Department of Marine, Earth and Atmospheric Sciences, North Carolina State University, Raleigh, NC
- 2004-05 Research Associate Professor, Department of Atmospheric Sciences, University of Washington, Seattle, WA
- 1999-04 Research Assistant Professor, Department of Atmospheric Sciences, University of Washington, Seattle, WA
- 1998 Temporary Lecturer, Department of Atmospheric Sciences, University of Washington, Seattle, WA
- 1996-99 Research Scientist, Mesoscale Group, Department of Atmospheric Sciences, University of Washington, Seattle, WA
- 1988-90 Software Engineer III, Research Data Program, National Center for Atmospheric Research, Boulder, CO
- 1986-88 Technical Marketing Engineer, Graphics Division, Symbolics Inc., Los Angeles, CA
- 1983-86 Member of Technical Staff, Data Systems Laboratory, TRW Defense Systems Group, Redondo Beach, CA

**Affiliations**

- 2005- Affiliate Associate Professor, Department of Atmospheric Sciences, University of Washington, Seattle, WA

**Field Program Experience**

- 2010 Boulder Snow Experiment: Colorado, Co-chief Scientist
- 2010 Inhibition of Snowfall by Pollution Aerosols: Colorado, Radar scientist
- 2008 VAMOS Ocean Cloud Atmosphere Land Study (VOCALS): Southeastern Pacific, Radar scientist
- 2006-09 Poga Mountain, NC, Meteorological Observatory, Chief Scientist
- 2004 HYDROMET 2004: California, Disdrometer scientist
- 2003 PACJET 2003: California, Disdrometer scientist
- 2001 IMPROVE II: Oregon, Disdrometer scientist
- 2001 EPIC Stratocumulus Study: Southeastern Pacific, Senior Scientist
- 1998-99 KWAJEX: Kwajalein, Marshall Islands, Project Science Coordinator
- 1997 PACS TEPPS: Tropical eastern Pacific, Chief Scientist
- 1995 COAST II: Washington, Aircraft flight planning and mission summary preparation
- 1993 COAST: Washington, Aircraft radar scientist and cloud physics scientist

- 1992-93 TOGA-COARE: Honiara, Solomon Islands, Aircraft radar scientist and cloud physics scientist
- 1991 CaPE: Florida, Doppler and dual polarization radar scientist, aircraft scientist, scan coordinator
- 1988-90 Several field projects in Denver, CO area related to demonstration of Terminal Doppler Weather Radar (TDWR) and nowcasting for the FAA

**Committees, Fellowships and Awards**

- 2010- NCAR Earth Observing Laboratory-Observing Facilities Assessment Panel
- 2009- DOE ARM Climate Research Facility Science Advisory Board Member
- 2009 NOAA National Severe Storms Laboratory Review Board Member
- 2008-09 Co-chair, American Meteorological Society, 13th Conference on Mesoscale Processes
- 2006-08 DOE ARM Climate Research Facility Science Advisory Board Member
- 2006- American Meteorological Society, Mesoscale Processes Committee
- 2005-07 Co-chair, Sierra Hydrometeorology Atmospheric River Experiment (SHARE) Scientific Steering Committee
- 2005-07 World Meteorological Organization/IUGG Science Assessment of Aerosol Effects on Precipitation Working Group
- 2005-06 NASA Global Precipitation Mission, Advisory Panel on Ground Measurements
- 2003-05 NASA Global Precipitation Mission, Ground Validation International Steering Group
- 2003 NASA Certificate of Appreciation for contributions to the Instrument Incubator Program and to the Earth Science Enterprise
- 2001- American Geophysical Union, Atmospheric Sciences/Precipitation and Cloud Committee
- 2001-03 Co-chair, NASA Global Precipitation Mission, Calibration and Validation of Satellite Precipitation Measurements Working Group
- 2000-06 NASA Precipitation Measurement Missions Science Team
- 1996 Promise of Excellence Award, Seattle Chapter, Women in Communications, Inc.
- 1992-95 EOS Global Change Fellowship
- 1990-92 NASA Space Grant Fellowship
- 1983 Sigma Xi Scientific Research Society
- 1979 Westinghouse Science Talent Search Honors for project on hydroponics for space missions.

**Publications** (numbers indicate peer-reviewed articles and book chapters, underlined names are students directly supervised)

**2011**

- Hardin, N. R., S. E. Yuter and K. Friedrich, 2011: Observed vertical structure of snow storms in Steamboat Springs, CO: Orographic enhancement in a high altitude environment. *Abstracts, 24th Conference on Weather and Forecasting.*, 23–27 Jan. 2011, Seattle, WA.
- Stark, D. A., B. A. Colle and S. E. Yuter, 2011: Microphysical evolution within snow storms over Long Island, NY. *Abstracts, 24th Conference on Weather and Forecasting.*, 23–27 Jan. 2011, Seattle, WA.
- Yuter, S. E., A. M. Hall, J. G. Cunningham, N. R. Hardin and B. A. Colle , 2011: Cool-season intermittent precipitation cells in the Pacific Northwest. *Abstracts, 24th Conference on Weather and Forecasting.*, 23–27 Jan. 2011, Seattle, WA.

## 2010

- Burleyson, C., D. H. Sobel, and S. E. Yuter, 2010: Rain on tropical islands. *Abstracts, 29<sup>th</sup> Conference on Hurricanes and Tropical Meteorology*, 10-14 May 2010, Tucson, AZ.
- Cunningham, J. G., S. E. Yuter and B. A. Colle, 2010: Quantitative comparisons of 3-D operational radar observations and model output over the Oregon Cascades. *Abstracts, 14<sup>th</sup> Conference on Mountain Meteorology*, Lake Tahoe, NV, 30 Aug-1 Sep 2010.
- de Szoeki, S. P., S. E. Yuter, P. Zuidema, C. W. Fairall, and W. A. Brewer, 2010: Ship-based observation of drizzling stratocumulus clouds from EPIC to VOCALS, *CLIVAR Exchanges*, **53**, 11-13.
- de Szoeki, S. P., and S. E. Yuter, 2010: When do stratocumulus clouds drizzle? *Abstracts, 13<sup>th</sup> Conference on Cloud Physics*, 28-June – 2 July 2010, Portland, OR.
- Mechem, D. B., S. E. Yuter, S. P. deSzoeki, 2010: Thermodynamic and aerosol controls on Eastern Pacific stratocumulus precipitation processes in VOCALS. *Abstracts, 13<sup>th</sup> Conference on Cloud Physics*, 28-June – 2 July 2010, Portland, OR.
- (46) Miller, M.A., and S. E. Yuter, 2010: Satellite observations of atypically-thick low marine clouds. Submitted to *J. Geophysical Research*.
- Smith, B. L. J. Blaes, and S. E. Yuter, 2010: Examination of a winter storm using a Micro-Rain Radar and AMDAR aircraft soundings, *Abstracts, 35<sup>th</sup> Annual meeting of the National Weather Association*, 2-7 October 2010, Tucson, AZ.
- (45) Smith, B. L., S. E. Yuter, P. J. Neiman, and D. E. Kingsmill, 2010: Water vapor fluxes and orographic precipitation over Northern California associated with a land-falling atmospheric river. *Mon. Wea. Rev.*, **138**, 74-100.
- (44) Sobel, A. H., C. D. Burleyson, and S. E. Yuter, 2010: Rainfall on small tropical islands. Submitted to *J. Geophysical Research* in July 2010.
- (43) Wood, R., C. S. Bretherton, C. R. Mechoso, R. A. Weller, B. Huebert, B. Albrecht, H. Coe, G. Allen, G. Vaughan, P. Daum, C. Fairall, D. Chand, L. Gallardo Klenner, C. Grado Quispe, D. S. Covert, T. S. Bates, R. Krejci, F. Straneo, L. M. Russell, S. de Szoeki, A. Brewer, S. E. Yuter, A. Chaigneau, T. Toniazzo, P. Minnis, S. Abel, W. Brown, and S. Williams, 2010: The VAMOS Ocean-Cloud-Atmosphere-Land Study Regional Experiment (VOCALS-REx): Goals, platforms, and field operations. Submitted to *Atmos. Chem. Phys. Discuss.*
- Yuter, S. E., M. Biasutti, A. H. Sobel, and C. D. Burleyson, 2010: Seasonal and diurnal spatial patterns of precipitation frequency from the TRMM Precipitation Radar. *Abstracts, EGU, General Assembly 2010*, 2-7 May 2010, Vienna, Austria.
- Yuter, S. E., B. A. Colle, J. G. Cunningham, and D. J. Freeman, 2010: The role of low-level blocked flow on orographic precipitation enhancement in the Cascade Mountains, *Abstracts, Sixth European Conference on Radar in Meteorology and Hydrology*. September 2010, Sibiu, Romania.
- (42) Yuter, S. E., D. A. Stark, J. A. Crouch, M. J. Payne and B. A. Colle, 2010: The impact of varying environmental conditions on the spatial and temporal patterns of orographic precipitation over the Pacific Northwest near Portland, Oregon., *J. Hydrometeorology*, conditionally accepted.

## 2009

- Brewer, W. A., S. C. Tucker, G. Feingold, H. Wang, C. Fairall and S. E. Yuter, 2009: Combined shipborne Doppler lidar and radar measurements made during the VAMOS Ocean-Cloud-Atmosphere-Land Study Regional Experiment (VOCALS-REx), *Abstracts, International Symposium on Tropospheric Profiling*, Netherlands, October 2009.
- Crouch, J. A. and S. E. Yuter, S. E., 2009: Multi-season observational study of precipitation structures along the Oregon Cascade windward slope. *Abstracts, 13<sup>th</sup> Conference on Mesoscale Processes*, August 2009, Salt Lake City, UT.
- de Szoeke, S. P. C. W. Fairall, S. Yuter, S. Tucker, D. E. Wolfe, A. Brewer, L. Bariteau, K. Moran, and S. Pezoa, 2009: Variability and vertical structure of clouds and turbulence in the stratocumulus-capped boundary layer during VOCALS. *Abstracts, AGU 2009 Fall Meeting*, December 2009, San Francisco, CA.
- Fairall, C., D. E. Wolfe, S. Pezoa, S. P. deSzoeke, and S. E. Yuter, 2009: Surface-layer and boundary-layer observations from the VOCALS-REX field program: Preliminary look at observations from the NOAA Ship Ronald H. Brown. *Abstracts, 16th Conference on Air-Sea Interaction*. January 2009, Phoenix, AZ.
- (41) Keighton, S., L. Lee, B. Holloway, D. Hotz, S. Zubrick, J. Hovis, G. Votaw, B. Perry, G. Lackmann, S. Yuter, C. Konrad, D. Miller, and B. Etherton, 2009: A collaborative approach to study northwest flow snow in the southern Appalachians. *Bull. Amer. Meteor. Soc.*, **90**, 979-991.
- Mechem, D.B., S. E. Yuter, S. P. deSzoeke, and C. W. Fairall, 2009: Near-LES modeling of Eastern Pacific stratocumulus drizzle and cloud variability in VOCALS. *Abstracts, AGU 2009 Fall Meeting*, December 2009, San Francisco, CA.
- Perry, L. B., D. K. Miller, S. E. Yuter and J. L'Heureux, 2009: Snowfall Patterns and Processes in the Southern Appalachians: Preliminary results from an interdisciplinary field campaign, 2006-2009. *Abstracts, 64<sup>th</sup> Southeastern Division of the Association of American Geographers Meeting*, November 2009, Knoxville, TN.
- Sobel, A., C. Burleyson and S. Yuter, 2009: Rain on tropical islands. *Abstracts, Northeast Tropical Meteorology Conference*, June 2009, Rensselaerville, NY.
- (40) Sukovich, E. M., D. E. Kingsmill, and S. E. Yuter, 2009: Variability of graupel and ice crystal aggregates observed in tropical oceanic convection by aircraft during TRMM KWAJEX. *J. Appl. Meteor. Clim.*, **48**, 185-198.
- Yuter, S. E., D. B. Mechem, C. W. Fairall and W. A. Brewer, 2009: Unexpectedly strong convection under an inversion-topped marine boundary layer. *Abstracts, 13<sup>th</sup> Conference on Mesoscale Processes*, August 2009, Salt Lake City, UT.

## 2008

- (39) Barrie, L., U. Lohmann, S. Yuter, 2008: Ch 1—Introduction in *Aerosol pollution impacts on precipitation: A scientific review*. WMO/IUGG International Aerosol Precipitation Science Assessment Group, Springer, 1-12.
- (38) Cifelli, R., S. W. Nesbitt, S. A. Rutledge, W. A. Petersen, and S. E. Yuter, 2008: Diurnal characteristics of precipitation features in the east Pacific: A comparison of the EPIC and TEPPS regions. *J. Climate*, **21**, 4068-4086.

- (37) Cotton, W. and S. Yuter, 2008: Ch 2—Principles of Cloud and Precipitation Formation in *Aerosol pollution impacts on precipitation: A scientific review*. WMO/IUGG International Aerosol Precipitation Science Assessment Group, Springer, 13-43.
- (36) Holder, C. T., S. E. Yuter, A. H. Sobel, and A. Aiyyer, 2008: The mesoscale characteristics of tropical oceanic precipitation during Kelvin waves and mixed-Rossby gravity waves. *Mon. Wea. Rev.*, **9**, 3446-3464.
- Holder, C. T., S. E. Yuter, A. H. Sobel, and A. Aiyyer, 2008: The mesoscale characteristics of tropical oceanic precipitation during Kelvin waves and mixed-Rossby gravity waves. *Abstracts, TRMM 3<sup>rd</sup> NASA/JAXA International Science Conference*, February 2008, Las Vegas, NV.
- Kingsmill, D. E., S. E. Yuter, and E. M. Sukovich, 2008: Variability of graupel and ice crystal aggregates observed by aircraft during TRMM KWAJEX. *Abstracts, TRMM 3<sup>rd</sup> NASA/JAXA International Science Conference*, February 2008, Las Vegas, NV.
- (35) Martner, B. E., S. E. Yuter, A. B. White, S. Y. Matrosov, D. E. Kingsmill, and F. M. Ralph: 2008: Raindrop size distributions and rain characteristics in California coastal rainfall for periods with and without a radar brightband. *J. Hydrometeorology*, **9**, 408-425.
- Miller, M. A., and S. E. Yuter, 2008: Spurious precipitation in TMI retrievals within marine stratus. *Abstracts, TRMM 3<sup>rd</sup> NASA/JAXA International Science Conference*, February 2008, Las Vegas, NV.
- Miller, M. A., and S. E. Yuter, 2008: Characteristics of shallow non-precipitating clouds as observed by the Tropical Rainfall Measuring Mission satellite. *Abstracts, AGU 2008 Joint Assembly*, May 2008, Ft. Lauderdale, FL.
- (34) Miller, M. A., and S. E. Yuter, 2008: Lack of correlation between chlorophyll a and cloud droplet effective radius in shallow marine clouds. *Geophys. Res. Lett.*, **35**, L13807, doi:10.1029/2008GL034354.
- (33) Novak, D. R., B. A. Colle, S. E. Yuter, 2008: A high resolution observational and modeling study of an intense mesoscale snowband over the northeast U.S. *Mon. Wea. Rev.*, **136**, 1433–1456.
- Perry, L. B., D. Miller, S. E. Yuter, L. G. Lee, S. Keighton, 2008: Atmospheric controls on snowfall density in the southern Appalachian mountains. USA. *Abstracts, 65<sup>th</sup> Eastern Snow Conference*, May 2008, Fairlee, VT.
- (32) Tanré, D., P. Artuxo, S. Yuter, and Y. Kaufman, 2008: Ch 5—In Situ and Remote Sensing Techniques for Measuring Aerosols, Clouds, and Precipitation in *Aerosol pollution impacts on precipitation: A scientific review*. WMO/IUGG International Aerosol Precipitation Science Assessment Group, Springer, 143-203.
- Yuter, S. E., and D. E. Kingsmill, 2008: Joint Variability of Airborne Passive Microwave and Ground-based Radar Observations Obtained in the TRMM Kwajalein Experiment. *Abstracts, TRMM 3<sup>rd</sup> NASA/JAXA International Science Conference*, February 2008, Las Vegas, NV.
- Yuter, S. E., J. A. Crouch, B. A. Colle, and Y. Lin, 2008: Storm structure, freezing level height, and precipitation in the US Pacific Northwest. *Proceedings, Fifth European Conference on Radar in Meteorology and Hydrology*. June 2008, Helsinki, Finland.

- Yuter, S. E. , K. K. Comstock, R. Wood and C. S. Bretherton, 2008: The three-dimensional structure and kinematics of drizzling stratocumulus in the southeast Pacific. *Abstracts, AGU 2008 Joint Assembly*, May 2008, Ft. Lauderdale, FL.
- Yuter, S. E., M. J. Payne, and B. A. Colle, 2008: Orographic precipitation and kinematic flow structures of winter storms over the U.S. Pacific Northwest. *Abstracts, 13th Conference on Mountain Meteorology*. August 2008, Whistler, Canada.
- Yuter, S. E., D. A. Stark, M. T. Bryant, B. A. Colle, L. B. Perry, J. Blaes, J. Wolfe, and G. Peters, 2008: Forecasting and characterization of mixed precipitation events using the MicroRainRadar. *Abstracts, Fifth European Conference on Radar in Meteorology and Hydrology*. June 2008, Helsinki, Finland.

## 2007

- (31) Cifelli, R., S. Nesbitt, S. A. Rutledge, W. A. Petersen, and S. Yuter, 2007: Radar characteristics of precipitation features in the EPIC and TEPPS regions of the East Pacific. *Mon. Wea. Rev.*, **135**, 1576-1595.
- (30) Colle, B. A., and S. E. Yuter, 2007: The impact of coastal boundaries and small hills on the precipitation distribution across southern Connecticut and Long Island, NY. *Mon. Wea. Rev.*, **135**, 933-954.
- (29) Comstock, K., S. E. Yuter, R. Wood, and C. S. Bretherton, 2007: The three-dimensional structure and kinematics of drizzling stratocumulus. *Mon. Wea. Rev.*, **135**, 3767-3784.
- Fitz-Coy, N., W. W. Edmonson and S. Yuter, 2007: Microsatellites for studying Earth's energy balance. *NSF Workshop on Small Satellite Missions for Space Weather and Atmospheric Research*, May 2007, Arlington, VA.
- Holder, C. T., S. E. Yuter, A. H. Sobel, and A. Aiyyer, 2007: The mesoscale characteristics of tropical oceanic precipitation during Kelvin waves and mixed-Rossby gravity waves. *Abstracts, 12<sup>th</sup> Conference on Mesoscale Processes*, August 2007, Waterville Valley, NH.
- Novak, D. R., B. A. Colle, and S. E. Yuter, 2007: A high-resolution observational and modeling comparison of mesoscale band life cycle during three recent northeast U.S. snowstorms. *Preprints, 22nd Conference on Weather Analysis and Forecasting/18th Conference on Numerical Weather Prediction*, June 2007, Park City, Utah, 3A.2.
- Novak, D. R., B. A. Colle, and S. E. Yuter, 2007: A comparison of mesoscale band life cycle during three recent northeast U.S. snowstorms. *Abstracts, 12<sup>th</sup> Conference on Mesoscale Processes*, August 2007, Waterville Valley, NH.
- Yuter, S. E., B. A. Colle, M. J. Payne, and Y. Lin, 2007: Three-dimensional microphysical and dynamical structures of winter storms in the U.S. Pacific Northwest: 3-year radar climatology and comparisons between operational weather radar observations and regional mesoscale model output. *Abstracts, 12<sup>th</sup> Conference on Mesoscale Processes*, August 2007, Waterville Valley, NH.
- Yuter, S. E., and D. E. Kingsmill, 2007: Joint variability of airborne passive microwave and ground-based radar observations obtained in the TRMM Kwajalein Experiment. *Abstracts, AGU 2007 Fall Meeting*, San Francisco, CA.

Yuter, S. E., and L. B. Perry, 2007: Storm structures and precipitation characteristics of snow events in the southern Appalachian mountains. *Abstracts, 12<sup>th</sup> Conference on Mesoscale Processes*, August 2007, Waterville Valley, NH..

## 2006

Cifelli, R., S. Nesbitt, S. A. Rutledge, W. A. Petersen, and S. Yuter, 2006: Diurnal cycle characteristics of precipitation in the East Pacific. *27th Conference on Hurricanes and Tropical Meteorology*, Monterey, CA, 23-28 April, American Meteorological Society, 14D.7.

Holder, C., S. Yuter, and A. Sobel, 2006: The effects of equatorial Kelvin waves and Mixed-Rossby gravity waves on the mesoscale structure of tropical oceanic convection. *Preprints, 4<sup>th</sup> European Conference on Radar in Meteorology and Hydrology*. 18-22 September 2006, Barcelona, Spain, P4.1.

Kingsmill, D., and S. Yuter, 2006: Integrated analyses of microphysical, radar, and radiometric observations from TRMM/KWAJEX. *Abstracts, EGU General Assembly 2006*, Vienna, Austria, 1607-7962/gra/EGU06-A-09508.

Kingsmill, D., S. E. Yuter, B. A. Colle, R. A. Houze, B. Geerts, D. P. Lettenmaier, P. J. Neiman, G. S. Poulos, R. B. Smith, B. F. Smull, W. J. Steenburgh, and M. Steiner, 2006: Overview of the Sierra Hydrometeorology Atmospheric River Experiment (SHARE). *12th Conference on Mountain Meteorology*, Sante Fe, NM, 28 August – 1 September 2006, American Meteorological Society, P1.1.

Miller, M. and S. Yuter, 2006: Phantom precipitation and other problems in TRMM products. *Proceedings, Proceedings, 3<sup>rd</sup> Workshop on Precipitation Measurements*, Melbourne, Australia, 23-27 October 2006, International Precipitation Working Group, 10 pp.

(28) Swann, A., A. H. Sobel, S. E. Yuter, and G. N. Kiladas, 2006: Observed radar reflectivity in convectively coupled Kelvin and Mixed Rossby-gravity waves. *GRL*, **33**, L10804, doi:10.1029/2006GL025979.

Swann, A., A. H. Sobel, S. E. Yuter, and G. N. Kiladas, 2006: Precipitation structures and atmospheric waves over the tropical ocean. *27th Conference on Hurricanes and Tropical Meteorology*, Monterey, CA, 23-28 April 2006, American Meteorological Society, P8.3.

(27) Yuter, S. E., D. Kingsmill, L. B. Nance, and M. Löffler-Mang, 2006: Observations of precipitation size and fall speed characteristics within coexisting rain and wet snow. *J. Appl. Meteor. Climo.*, **45**, 1450–1464. [Paper of Note highlighted in the Bulletin of American Meteorological Society, Sept 2006]

Yuter, S., B. Colle, T. Downing, Y. Lin, C. Spooner, J. Payne, and K. Comstock, 2006: Microphysical and dynamical structures of winter storms in the U. S. Pacific Northwest: Comparisons between regional mesoscale model output and operational weather radar observations. *Preprints, 4<sup>th</sup> European Conference on Radar in Meteorology and Hydrology*. 18-22 September 2006, Barcelona, Spain, P4.3.

Yuter, S., M. Miller, J. Stout, R. Wood, J. Kwiatkowski, D. Horn, and C. Spooner, 2006: Remaining challenges in satellite precipitation estimation for the Tropical Rainfall Measuring Mission. *Preprints, 4<sup>th</sup> European Conference on Radar in Meteorology and Hydrology*. 18-22 September 2006, Barcelona, Spain, 11.6.

## 2005

- Colle, B. A., and S. E. Yuter, 2005: Understanding Precipitation Enhancement over Long Island, NY Using the WSR-88D and High Resolution Simulations. *11th Conference on Mesoscale Meteorology*, Albuquerque, NM, 24-29 October, American Meteorological Society.
- (26) Comstock, K. K., C. S. Bretherton, and S. E. Yuter, 2005: Mesoscale variability and drizzle in southeast Pacific stratocumulus. *J. Atmos. Sci.* **62**, 3792-3807.
- Comstock, K., S. Yuter, R. Wood, 2005: Microphysical and kinematic structures within drizzling stratocumulus in the southeast Pacific, *Abstracts, AGU 2005 Fall Meeting*, San Francisco, CA, A16A-0008.
- MacLeod, A., J. Roering, S. Yuter: 2005: Comparing spatial and temporal patterns of landslides and rainfall using remote sensing. *Abstracts, AGU 2005 Fall Meeting*, San Francisco, CA, P41B-0932.
- Martner, B., S. Yuter, A. White, D. Kingsmill, and F. M. Ralph, 2005: Raindrop size distributions and Z-R relations in coastal rainfall for periods with and without a radar bright band. *Preprints, 11th Conference on Mesoscale Processes*, Albuquerque, NM, 24-29 October, American Meteorological Society.
- Swann, A., A. Sobel, S. Yuter, and G. Kiladis, 2005: Precipitation structures and tropical waves over the tropical ocean. *Abstracts, AGU 2005 Fall Meeting*, San Francisco, CA, A16A-0021.
- Yuter, S. and K. Comstock, 2005: Satellite and radar characteristics of drizzling marine stratocumulus in the southeast Pacific, *Abstracts, AGU 2005 Fall Meeting*, San Francisco, CA, A16A-0009.
- (25) Yuter, S. E., R. A. Houze, Jr., E. A. Smith, T. T. Wilheit, and E. Zipser, 2005: Physical characterization of tropical oceanic convection observed in KWAJEX. *J. Appl. Meteor.*, **44**, 385-415.
- Yuter, S. E., B. A. Colle, C. L. Spooner, and T. K. Downing, 2005: Structural characteristics of winter storms in southern Washington and northern Oregon: Prototypes for routine comparison between regional model output and WSR-88D radar observations. *11th Conference on Mesoscale Meteorology*, Albuquerque, NM, 24-29 October, American Meteorological Society.
- Yuter, S. E., C. L. Spooner, and T. K. Downing, 2005: Structural characteristics of winter storms in southern Washington and northern Oregon. *Abstracts, Pacific Northwest Weather Conf.*, March 2005, Seattle, WA.
- Yuter, S. E., J. Stout, R. Wood, J. Kwiatkowski and D. Horn, 2005: Relative errors in TRMM satellite Version 5 and Version 6 products: Steps forward and backward. *Preprints, 32st Conference on Radar Meteorology*, Albuquerque, NM, 24-29 October, American Meteorological Society.

## 2004

- (24) Bretherton, C. S., T. Uttal, C. W. Fairall, S. Yuter, R. Weller, D. Baumgardner, K. Comstock, and R. Wood, 2004: The EPIC 2001 stratocumulus study. *Bull. Amer. Meteor. Soc.*, **85**, 967-977.
- Cifelli, R., S. W. Nesbitt, S. A. Rutledge, W. A. Petersen, and S. E. Yuter, 2004: Convective variability across the East Pacific: A comparison of precipitation structure in the TEPPS and EPIC domains. *Preprints, 26th Conference on Hurricanes and Tropical Meteorology*, Miami, FL, American Meteorological Society.

- (23) Comstock, K. K., R. Wood, S. E. Yuter, and C. S. Bretherton, 2004: Reflectivity and rain rate in and below drizzling stratocumulus. *Quart. J. Roy. Meteor. Soc.*, **130**, 2891-2918.
- (22) Houze, R. A., Jr., S. Brodzik, C. Schumacher, S. E. Yuter, and C. R. Williams, 2004: Uncertainties in oceanic radar rain maps at Kwajalein and implications for satellite validation. *J. Appl. Meteor.*, **43**, 1114-1132.
- (21) Kingsmill, D. E., S. E. Yuter, A. J. Heymsfield, P. V. Hobbs, A. V. Korolev, J. L. Stith, A. Bansemer, J. A. Haggerty, and A. L. Rangno, 2004: TRMM common microphysics products: A tool for evaluating spaceborne precipitation retrieval algorithms. *J. Appl. Meteor.*, **43**, 1598-1611.
- (20) Sobel, A. H., S. E. Yuter, C. S. Bretherton, and G. N. Kiladis, 2004: Large-scale meteorology and deep convection during TRMM KWAJEX. *Mon. Wea. Rev.*, **132**, 422-444.
- Yuter, S. E., 2004: The structure and variability of tropical oceanic precipitation in the western Pacific warm pool and eastern Pacific ITCZ. *Proceedings, 3<sup>rd</sup> European Conference on Radar in Meteorology and Hydrology*. 6-10 September 2004, Visby, Sweden.
- Yuter, S. E., J. Koistinen, S. Di Michele, M. Hagen, A. Illingworth, S. Shimizu, and D. Wolff, 2004: GPM Ground Validation Basic Radar Products and Implications for Observation Strategies. Accessible at: [www.arxiv.org](http://www.arxiv.org), arXiv:physics/0401101, 11 pp.
- Yuter, S. E., C. Spooner, P. Freitag, Y. Serra, and M. McPhaden, 2004: Comparison of four types of rain measurements in a tropical oceanic environment. *Abstracts, Eighth International Conference on Precipitation*. 8-11 August 2004. Vancouver, BC.
- Yuter, S. E., R. Wood, D. Horn, E. Foufoula-Georgiou, V. Vuruputur, and S. Basu, 2004: Error characterization of TRMM and GPM precipitation maps based on a probabilistic evaluation methodology. *Abstracts, Eighth International Conference on Precipitation*. 8-11 August 2004, Vancouver, Canada.

## 2003

- Bidwell, S. W., W. J. Adams, I. K. Bibyk, D. F. Everett, E. A. Smith, and S. E. Yuter, 2003: Validation and error characterization for the Global Precipitation Measurement. *Preprints, 2003 International Geoscience and Remote Sensing Symposium*, Toulouse, France.
- (19) Hagen, M. and S. E. Yuter, 2003: Relation between radar reflectivity and rainfall rate during the MAP-SOP. *Quart. J. Roy. Meteor. Soc.*, **129**, 477-493.
- (18) Yuter, S. E., and R. A. Houze, Jr., 2003: Microphysical modes of precipitation growth determined by vertically pointing radar in orographic precipitation during MAP. *Quart. J. Roy. Meteor. Soc.*, **129**, 455-476.
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### **Supervision of Graduate Students (chair or co-chair of committee)**

- Ph. D. Kimberly Comstock, 2006: *Thesis title*: Mesoscale variability and drizzle in southeast Pacific stratocumulus. Department of Atmospheric Sciences, University of Washington, co-advised with Christopher Bretherton.
- Ph. D. Matthew A. Miller, 2010: *Thesis title*: Satellite observations of low marine clouds. Department of Marine, Earth, and Atmospheric Sciences, North Carolina State University. Funded in part by a NASA and Space Science Fellowship.
- M.S. Christopher Holder, 2007: *Thesis title*: The mesoscale characteristics of tropical oceanic convection within Kelvin and mixed Rossby-gravity wave events. Department of Marine, Earth, and Atmospheric Sciences, North Carolina State University.
- M.S. Matthew A. Miller, 2007: *Thesis title*: Evaluation of TRMM satellite precipitation retrievals and satellite-observed characteristics of marine shallow clouds. Department of Marine, Earth, and Atmospheric Sciences, North Carolina State University.
- M.S. M. Jordan Payne, 2007: *Thesis title*: Three-Dimensional microphysical and dynamical structures of winter storms in the U.S. Pacific Northwest. Department of Marine, Earth, and Atmospheric Sciences, North Carolina State University.
- M.S. Barrett L. Smith II, 2007: *Thesis title*: The interaction of moisture fluxes and orographic precipitation over the mountains of northern California associated with a landfalling atmospheric river. Department of Marine, Earth, and Atmospheric Sciences, North Carolina State University.
- M.S. Justin A. Crouch, 2009: *Thesis title*: Multi-season observational study of the thermodynamic, kinematic and precipitation structures within flooding and typical storms in the Oregon Cascades. Department of Marine, Earth, and Atmospheric Sciences, North Carolina State University.
- M.S. Katherine Rojowsky, 2010: *Non-thesis degree*. Department of Marine, Earth, and Atmospheric Sciences, North Carolina State University.

### **Current graduate students:**

Casey Burleyson (Ph.D., NASA and Space Science Fellowship), Jeffrey Cunningham (Ph.D., US Air Force), Nathan Hardin (Ph.D.).