



AGU FALL MEETING

San Francisco | 15–19 December 2014

A33Q:
Precipitation From Too Little to Too Much: Emerging Understanding of Atmospheric Rivers and Calwater Aerosol-Cloud Interaction Studies I

Session ID#: 2471

Wednesday, 17 December 2014: 1:40 PM-3:40 PM

Chairs:

F Martin Ralph, Scripps Institute of Oceanography, La Jolla, CA, United States and **Kimberly A Prather**, University of California San Diego, La Jolla, CA, United States

Primary Conveners:

F Martin Ralph, Scripps Institute of Oceanography, La Jolla, CA, United States

Co-conveners:

Daniel Rosenfeld, Hebrew University of Jerusalem, Jerusalem, Israel, **Duane Edward Waliser**, NASA Jet Propulsion Laboratory, Pasadena, CA, United States and **Kimberly A Prather**, University of California San Diego, La Jolla, CA, United States

Co-Sponsor(s):

H - Hydrology

Index Terms:

1817 Extreme events [HYDROLOGY]
3329 Mesoscale meteorology [ATMOSPHERIC PROCESSES]
3354 Precipitation [ATMOSPHERIC PROCESSES]
3364 Synoptic-scale meteorology [ATMOSPHERIC PROCESSES]

Virtual Option?: No

Abstracts Submitted to this Session:

A33Q-01

Landfalling Atmospheric Rivers in California—Historical and Future Impacts

Michael D Dettinger, U.S. Geological Survey, Scripps Institution of Oceanography, La Jolla, CA, United States and **F Martin Ralph**, Scripps Institution of Oceanography, La Jolla, CA, United States

A33Q-02

CalWater 2 – Precipitation, Aerosols, and Pacific Atmospheric Rivers Experiment

J. Ryan Spackman¹, **F Martin Ralph**², **Kimberly A Prather**³, **Daniel R Cayan**³, **Paul J DeMott**⁴, **Michael D Dettinger**², **Chris W Fairall**⁵, **L. Ruby Leung**⁶, **Daniel Rosenfeld**⁷, **Steven A Rutledge**⁴, **Duane Edward Waliser**⁸ and **Allen B White**⁵, (1)Science and Technology Corporation, Boulder, CO, United States, (2)Scripps Institute of Oceanography, La Jolla, CA, United States, (3)University of California San Diego, La Jolla, CA, United States, (4)Colorado State University, Fort Collins, CO, United States, (5)NOAA Boulder, Boulder, CO, United States, (6)PNL / Climate Physics, Richland, WA, United States, (7)Hebrew University of Jerusalem, Jerusalem, Israel, (8)NASA Jet Propulsion Laboratory, Pasadena, CA, United States

A33Q-03

Computation of Air-Sea Fluxes in Five Atmospheric Rivers over the Northeast Pacific Using Dropsonde Observations

Chris W Fairall¹, **Byron Blomquist**¹, **Chelle L Gentemann**², **F Martin Ralph**³, **J. Ryan Spackman**¹, **Janet M Intrieri**¹ and **Allen B White**¹, (1)NOAA Boulder, Boulder, CO, United States, (2)Remote Sensing Systems, Santa Rosa, CA, United States, (3)Scripps Institute of Oceanography, La Jolla, CA, United States

A33Q-04

Dominant Factors Controlling the Hydrometeorology of Northern California: Landfalling Atmospheric Rivers and Sierra Barrier Jets

Paul J Neiman¹, **F Martin Ralph**², **Mimi Hughes**^{3,4}, **Ellen Sukovich**^{3,4}, **David E. Kingsmill**⁴, **Robert J Zamora**¹ and **Benjamin J Moore**⁵, (1)NOAA/Earth System Research Lab, Boulder, CO, United States, (2)Scripps Institute of Oceanography, La Jolla, CA, United States, (3)University of Colorado at Boulder, Boulder, CO, United States, (4)NOAA/Earth System Research Laboratory/CIRES, Boulder, CO, United States, (5)SUNY Albany, Albany, NY, United States

A33Q-05

Atmospheric Rivers over Europe: Hydrological Impacts and Predictability

David Anthony Lavers, UCSD/Scripps Institution of Oceanography/Center for Western Weather and Water Extremes (CW3E), La Jolla, CA, United States

Poleward Tropical Moisture Transport and its Link to Four Sequential Extreme Weather Events over North America in October 2007

A33Q-06

Lance F Bosart, *SUNY Albany, Atmospheric and Environmental Sciences, Albany, NY, United States*, **Jason M Cordeira**, *Plymouth State University, Plymouth, NH, United States*, **Heather M. Archambault**, *Naval Postgraduate School, Monterey, CA, United States* and **Benjamin J Moore**, *SUNY Albany, Albany, NY, United States*

A33Q-07

DEVELOPING A CLIMATOLOGY OF ATMOSPHERIC RIVERS IMPACTING GREENLAND USING THE TWENTIETH CENTURY REANALYSIS

William D Neff and **Gilbert P Compo**, *Cooperative Institute for Research in Environmental Sciences, Boulder, CO, United States*

A33Q-08

Extreme Daily Precipitation Events in Spitzbergen: A High Arctic Island

Mark C Serreze, **Andrew P Barrett** and **Alexander Crawford**, *National Snow and Ice Data Center, Boulder, CO, United States*

See more of: [Atmospheric Sciences](#)

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AGU FALL MEETING

San Francisco | 15–19 December 2014

A34E: Precipitation From Too Little to Too Much: Emerging Understanding of Atmospheric Rivers and Calwater Aerosol-Cloud Interaction Studies II

Session ID#: 5320

Wednesday, 17 December 2014: 4:00 PM-6:00 PM

Chairs:

Daniel Rosenfeld, Hebrew University of Jerusalem, Jerusalem, Israel and **F Martin Ralph**, Scripps Institute of Oceanography, La Jolla, CA, United States

Primary Conveners:

F Martin Ralph, Scripps Institute of Oceanography, La Jolla, CA, United States

Co-conveners:

Daniel Rosenfeld, Hebrew University of Jerusalem, Jerusalem, Israel, **Duane Edward Waliser**, NASA Jet Propulsion Laboratory, Pasadena, CA, United States and **Kimberly A Prather**, University of California San Diego, La Jolla, CA, United States

Co-Sponsor(s):

H - Hydrology

Index Terms:

1817 Extreme events []

3329 Mesoscale meteorology []

3354 Precipitation []

3364 Synoptic-scale meteorology []

Virtual Option?: No

Abstracts Submitted to this Session:

A34E-01 [The CalWater 2 - ARM Cloud Aerosol Precipitation Experiment \(ACAPEX\)](#)

Lai-Yung Leung¹, **Kimberly A Prather**², **F Martin Ralph**², **Daniel Rosenfeld**³, **J. Ryan Spackman**⁴, **Chris W Fairall**⁵, **Paul J DeMott**⁶, **Jiwen Fan**¹ and **Chun Zhao**⁷, (1)Pacific Northwest National Laboratory, Richland, WA, United States, (2)University of California San Diego, La Jolla, CA, United States, (3)Hebrew University of Jerusalem, Jerusalem, Israel, (4)Science and Technology Corporation, Boulder, CO, United States, (5)NOAA Boulder, Boulder, CO, United States, (6)Colorado State University, Fort Collins, CO, United States, (7)PNNL / Climate Physics, Richland, WA, United States

A34E-02 [Ice Nucleating Particles and their Role in California Winter Clouds](#)

Paul J DeMott¹, **Kimberly A Prather**², **Thomas Christopher James Hill**¹, **Christina S McCluskey**¹, **Ezra JT Levin**¹, **Kaitlyn J Suski**³, **Jessie Creamean**⁴, **Douglas B Collins**², **Andrew Martin**⁵, **Gavin Cornwell**², **Hashim Al-Mashat**², **Daniel Rosenfeld**⁶, **L. Ruby Leung**⁷, **Jennifer M Comstock**⁸, **Jason M Tomlinson**⁸, **Sonia M Kreidenweis**⁹ and **Markus D Petters**¹⁰, (1)Colorado State University, Fort Collins, CO, United States, (2)University of California San Diego, La Jolla, CA, United States, (3)Colorado State University, Atmospheric Sciences, Fort Collins, CO, United States, (4)NOAA, Boulder, CO, United States, (5)University Corporation for Atmospheric Research, Boulder, CO, United States, (6)Hebrew University of Jerusalem, Jerusalem, Israel, (7)Pacific NW Nat'l Lab-Atmos Sci, Richland, WA, United States, (8)Pacific Northwest National Laboratory, Richland, WA, United States, (9)Colorado State Univ, Fort Collins, CO, United States, (10)North Carolina State Univ., Raleigh, NC, United States

A34E-03 [Storm dynamics orographic kinematics and naturally emitted aerosols conspire to create a natural cloud seeding environment over California](#)

Andrew Martin, University Corporation for Atmospheric Research, Boulder, CO, United States, **Kimberly A Prather**, University of California San Diego, La Jolla, CA, United States, **L. Ruby Leung**, Pacific Northwest National Laboratory, Richland, WA, United States and **Kaitlyn J Suski**, Colorado State University, Atmospheric Sciences, Fort Collins, CO, United States

A34E-04 [Influence of Large-scale Climate Modes on Atmospheric Rivers That Drive Regional Precipitation Extremes](#)

Bin Guan¹, **Noah P Molotch**², **Duane Edward Waliser**³, **Eric J Fetzer**³ and **Paul J Neiman**⁴, (1)University of California Los Angeles, Los Angeles, CA, United States, (2)University of Colorado at Boulder, Geography / INSTAAR, Boulder, CO, United States, (3)NASA Jet Propulsion Laboratory, Pasadena, CA, United States, (4)NOAA, Boulder, CO, United States

A34E-05 [Untangling the Impacts of Climate Variability on Atmospheric Rivers and Western U.S. Precipitation Using PERSIANN-CONNECT](#)

Scott L Sellars, **Xiaogang Gao**, **Kuo-lin Hsu**, **Soroosh Sorooshian** and **Staryl McCabe-Glynn**, University of California Irvine, Irvine,

CA, United States

A34E-06

[Implementation and Initial Application of an Atmospheric River Detection Tool Based on Integrated Vapor Transport](#)
Gary A Wick, NOAA/ESRL, Boulder, CO, United States

A34E-07

[Atmospheric Rivers in the CESM: Validation, Connections to Extreme Precipitation, and Projections for the Future](#)
Christine A Shields, NCAR, Boulder, CO, United States and **Jeffrey Theodore Kiehl**, Natl Ctr Atmospheric Research, Boulder, CO, United States

A34E-08

[Atmospheric Rivers in a Hierarchy of High-Resolution Global Atmospheric Models](#)
Marie-Estelle Demory¹, **Reinhard Schiemann**², **David Anthony Lavers**³, **Matthew Mizielinski**⁴, **Pier Luigi Vidale**⁵ and **Malcolm Roberts**⁴, (1)University of Reading, Reading, United Kingdom, (2)NCAS Climate, Reading, United Kingdom, (3)University of Iowa, Iowa City, IA, United States, (4)Met Office Hadley center for Climate Change, Exeter, United Kingdom, (5)University of Reading, Reading, RG6, United Kingdom

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AGU FALL MEETING

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A53J:
Precipitation From Too Little to Too Much: Emerging Understanding of Atmospheric Rivers and Calwater Aerosol-Cloud Interaction Studies III Posters

Session ID#: 5321

Friday, 19 December 2014: 1:40 PM-6:00 PM

Chairs:

Gary A Wick, NOAA/ESRL, Boulder, CO, United States and **Andrew Martin**, University Corporation for Atmospheric Research, Boulder, CO, United States

Primary Conveners:

F Martin Ralph, Scripps Institute of Oceanography, La Jolla, CA, United States

Co-conveners:

Daniel Rosenfeld, Hebrew University of Jerusalem, Jerusalem, Israel, **Duane Edward Waliser**, NASA Jet Propulsion Laboratory, Pasadena, CA, United States and **Kimberly A Prather**, University of California San Diego, La Jolla, CA, United States

Co-Sponsor(s):

H - Hydrology

Index Terms:

1817 Extreme events []

3329 Mesoscale meteorology []

3354 Precipitation []

3364 Synoptic-scale meteorology []

Virtual Option?: No

Abstracts Submitted to this Session:

A53J-3328 [A Dynamical Analysis of Present and Future Atmospheric River Behavior over the North Pacific in MERRA Reanalysis and CMIP5 RCP 8.5 Projections](#)

Ashley E Payne and **Gudrun Magnusdottir**, University of California Irvine, Earth System Science, Irvine, CA, United States

A53J-3329 [End-of-Century Projections of North American Atmospheric River Events in CMIP5 Climate Models](#)

Michael Warner¹, **Cliff Mass**¹ and **Eric P Salathe Jr**², (1)University of Washington, Seattle, WA, United States, (2)University of Washington, Science and Technology Program, Bothell, WA, United States

A53J-3330 [Atmospheric River Model Simulation Diagnostics and Performance Metrics](#)

Duane Edward Waliser¹, **Bin Guan**², **Jinwon Kim**², **L. Ruby Leung**³ and **F Martin Ralph**⁴, (1)NASA Jet Propulsion Laboratory, Pasadena, CA, United States, (2)University of California Los Angeles, Los Angeles, CA, United States, (3)Pac NW National Lab, Richland, WA, United States, (4)Scripps Institute of Oceanography, La Jolla, CA, United States

A53J-3331 [Climatology and Predictability of Atmospheric Rivers in the GFDL FLOR Model](#)

Sarah B Kapnick, Princeton University, Princeton, NJ, United States, **Thomas L Delworth**, NOAA, Princeton, NJ, United States and **Gabriel Andres Vecchi**, Geophysical Fluid Dynamics Laboratory, Princeton, NJ, United States

A53J-3332 [Future of landfalling atmospheric rivers with extreme precipitation in British Columbia](#)

Valentina Radic¹, **Brian Menounos**², **Alex J Cannon**³ and **Caroline Gi**¹, (1)University of British Columbia, Vancouver, BC, Canada, (2)University of Northern British Columbia, Prince George, BC, Canada, (3)University of Victoria, Vancouver, BC, Canada

A53J-3333 [Effect of Landscape Modification on the Synoptic and Inland Patterns of Atmospheric River \(AR\) Events in the Western United States: Observational and Modeling Analysis.](#)

Abel T Woldemichael, Tennessee Technological University, Civil and Environmental, Cookeville, TN, United States and **Faisal Hossain**, University of Washington Seattle Campus, Seattle, WA, United States

A53J-3334 [Advancing the Parameter-elevation Regressions on Independent Slopes Model \(PRISM\) to Accommodate Atmospheric River Influences Using a Hierarchical Estimation Structure](#)

Chengmin Hsu, University of Colorado at Boulder, Boulder, CO, United States, **Robert Cifelli**, NOAA ESRL, Physical Science Division, Boulder, CO, United States, **Robert J Zamora**, NOAA/OAR R/PSD2, Boulder, CO, United States and **Timothy Schneider**, NOAA Boulder, ESRL Global Systems Division, Boulder, CO, United States

A53J-3335 [The Impacts of California's San Francisco Bay Area Gap on Precipitation Observed in the Sierra Nevada during Hmt and Calwater](#)

Allen B White¹, **Paul J Neiman**², **Jessie Creamean**², **Timothy Coleman**², **F Martin Ralph**³ and **Kimberly A Prather**⁴, (1)NOAA Boulder, Boulder, CO, United States, (2)NOAA, Boulder, CO, United States, (3)Scripps Institute of Oceanography, La Jolla, CA, United States, (4)University of California San Diego, La Jolla, CA, United States

A53J-3336 [Extreme daily precipitation in the Northern Sierra Precipitation 8-Station index: The combined impact of landfalling atmospheric rivers and the Sierra barrier jet](#)

Jason M Cordeira, Plymouth State University, Plymouth, NH, United States, **F Martin Ralph**, Scripps Institute of Oceanography, La Jolla, CA, United States, **Paul J Neiman**, NOAA, Boulder, CO, United States and **Mimi Hughes**, University of Colorado at Boulder, Boulder, CO, United States

A53J-3337 [The Inland Penetration of Atmospheric Rivers over Western North America: A Lagrangian Analysis](#)

Jonathan J Rutz¹, **William J Steenburgh**¹ and **F Martin Ralph**², (1)University of Utah, Salt Lake City, UT, United States, (2)Scripps Institute of Oceanography, La Jolla, CA, United States

A53J-3338 [Moisture Pathways into the US Intermountain West Associated with Heavy Winter Precipitation Events](#)

Michael A Alexander¹, **James D Scott**², **Dustin J Swales**³, **Mimi Hughes**³, **Kelly M Mahoney**² and **Catherine Anne Smith**², (1)NOAA Denver, DENVER, CO, United States, (2)Cooperative Institute for Research in Environmental Sciences, Boulder, CO, United States, (3)University of Colorado at Boulder, Boulder, CO, United States

A53J-3339 [Total Water Vapor Transport Observed in Twelve Atmospheric Rivers over the Northeastern Pacific Ocean Using Dropsondes](#)

F Martin Ralph¹, **Sam Iacobellis**², **Paul J Neiman**³, **Jason M Cordeira**⁴, **J. Ryan Spackman**⁵, **Duane Edward Waliser**⁶, **Gary A Wick**⁷, **Allen B White**⁸ and **Chris W Fairall**⁹, (1)Scripps Institute of Oceanography, La Jolla, CA, United States, (2)University of California San Diego, La Jolla, CA, United States, (3)NOAA, Boulder, CO, United States, (4)Plymouth State University, Plymouth, NH, United States, (5)Science and Technology Corporation, Boulder, CO, United States, (6)NASA Jet Propulsion Laboratory, Pasadena, CA, United States, (7)NOAA/ESRL, Boulder, CO, United States, (8)NOAA Boulder, Boulder, CO, United States

A53J-3340 [A New Marine Atmospheric Emitted Radiance Interferometer \(M-AERI\) for Shipboard Atmospheric and Oceanic Observations](#)

P Jonathan Gero¹, **Robert O Knuteson**¹, **Denny Hackel**¹, **Fred A Best**¹, **Ray Garcia**¹, **Coda Phillips**¹, **Henry E Revercomb**¹, **William L Smith**¹, **Eric Verret**², **Stephane M Lantagne**² and **Claude B Roy**², (1)University of Wisconsin Madison, Madison, WI, United States, (2)ABB Ltd., Quebec, QC, Canada

A53J-3341 [Investigating Atmospheric Rivers using GPS PW from Ocean Transits](#)

Vanessa Almanza¹, **James H Foster**² and **Steven Businger**¹, (1)University of Hawaii at Manoa, Honolulu, HI, United States, (2)University of Hawaii, Hawaii Institute of Geophysics and Planetology, Honolulu, HI, United States

A53J-3342 [Assessing the Ability of IR Sounders to Detect Atmospheric Rivers and Related Extreme Flooding Events](#)

Jacola Roman¹, **Robert O Knuteson**², **Steven A Ackerman**² and **Henry E Revercomb**³, (1)University of WI, Madison AOS/SSEC, Madison, WI, United States, (2)University of Wisconsin Madison, Madison, WI, United States, (3)University of Wisconsin, Madison, WI, United States

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AGU FALL MEETING

San Francisco | 15–19 December 2014

A53K: Precipitation From Too Little to Too Much: Emerging Understanding of Atmospheric Rivers and Calwater Aerosol-Cloud Interaction Studies IV Posters

Session ID#: 5322

Friday, 19 December 2014: 1:40 PM-6:00 PM

Chairs:

Andrew Martin, University Corporation for Atmospheric Research, Boulder, CO, United States and **Gary A Wick**, NOAA/ESRL, Boulder, CO, United States

Primary Conveners:

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Index Terms:

1817 Extreme events []
 3329 Mesoscale meteorology []
 3354 Precipitation []
 3364 Synoptic-scale meteorology []

Virtual Option?: No

Abstracts Submitted to this Session:

A53K-3343 [Interannual Variations in Aerosol Sources and Their Impact on Orographic Precipitation over California's Central Sierra Nevada](#)
Jessie Creamean¹, **Andrew P Ault**², **Allen B White**¹, **Paul J Neiman**¹, **Patrick Minnis**³ and **Kimberly A Prather**⁴, (1)NOAA, Boulder, CO, United States, (2)University of Michigan Ann Arbor, Ann Arbor, MI, United States, (3)Nasa Larc, Hampton, VA, United States, (4)University of California San Diego, La Jolla, CA, United States

A53K-3344 [The Dominant Snow-forming Process in Warm and Cold Mixed-phase Orographic Clouds: Effects of Cloud Condensation Nuclei and Ice Nuclei](#)

Jiwen Fan, Pacific Northwest National Laboratory, Richland, WA, United States, **Daniel Rosenfeld**, Hebrew University of Jerusalem, Jerusalem, Israel, **L. Ruby Leung**, Pac NW National Lab, Richland, WA, United States and **Paul J DeMott**, Colorado State University, Fort Collins, CO, United States

A53K-3345 [Characterization of the Rainfall Associated with Atmospheric Rivers during the Ifloods Campaign over the Central United States](#)
Munir Ahmad Nayak¹, **Gabriele Villarini**¹, **David Anthony Lavers**² and **Allen Bradley**¹, (1)The University of Iowa, IIHR-Hydroscience & Engineering, Iowa City, IA, United States, (2)European Centre for Medium-Range Weather Forecasts, Reading, United Kingdom

A53K-3346 [Impact of the Middle and Upper Tropospheric Cooling over Central Asia on the Summer Rainfall in the Tarim Basin, China](#)
Anning Huang, Nanjing University, Nanjing, China

A53K-3347 [Atmospheric Rivers and the Connection to Heavy Rainfall Events in the Southeastern U.S.](#)
Kelly M Mahoney, Cooperative Institute for Research in Environmental Sciences, Boulder, CO, United States, **Darren L Jackson**, University of Colorado at Boulder, Boulder, CO, United States, **Ellen Sukovich**, NOAA/Earth System Research Laboratory/CIRES, Boulder, CO, United States, **Gary A Wick**, NOAA/ESRL, Boulder, CO, United States, **Paul J Neiman**, NOAA, Boulder, CO, United States, **Robert Cifelli**, NOAA ESRL, Physical Science Division, Boulder, CO, United States, **Allen B White**, NOAA Boulder, Boulder, CO, United States and **Benjamin J Moore**, SUNY Albany, Albany, NY, United States

A53K-3348 [Spatiotemporal Structure of Tropical Moisture Exports and their Precursors associated with High Precipitation induced Floods over the Continental United States](#)

Mengqian Lu, Columbia University of New York, Palisades, NY, United States and **Upmanu Lall**, Columbia Univ, New York, NY, United States

A53K-3349

Classification of atmospheric river events on the U.S. west coast using a trajectory model

Ju-Mee Ryoo¹, Duane Edward Waliser², Darryn W Waugh³, Sun Wong², Eric J Fetzer² and Inez Y Fung¹, (1)University of California Berkeley, Berkeley, CA, United States, (2)NASA Jet Propulsion Laboratory, Pasadena, CA, United States, (3)Johns Hopkins Univ, Baltimore, MD, United States

A53K-3350

Arctic and Tropical Influence on Extreme Precipitation Events, Atmospheric Rivers, and Associated Isotopic Values in the Western U.S.

Staryl E McCabe-Glynn¹, Kathleen R Johnson¹, Yuhao Zou¹, Jeffrey M Welker², Courtenay Strong³, Jonathan J Rutz⁴, Jin-Yi Yu¹, Kei Yoshimura⁵, Scott L Sellars¹ and Ashley E Payne¹, (1)University of California Irvine, Irvine, CA, United States, (2)University of Alaska Anchorage, Anchorage, AK, United States, (3)University of Utah, Salt Lake City, UT, United States, (4)NOAA, Boulder, CO, United States, (5)Atmosphere and Ocean Research Institute University of Tokyo, Tokyo, Japan

A53K-3351

Extreme Precipitation Events Over the Iberian Atlantic Margin: The Role of Atmospheric Rivers

Jorge Eiras-Barca and Gonzalo Miguez-Macho, Universidade de Santiago de Compostela, Santiago de Compostela, Spain

A53K-3352

Atmospheric River Development and Effects on Southern California

Sarah May Harris and Leila V Carvalho, University of California Santa Barbara, Santa Barbara, CA, United States

A53K-3353

Atmospheric Rivers in Southeast Alaska and British Columbia: The Bella Coola Event of 2010 and Alaska Events of 2012

David Anthony Lavers, UCSD/Scripps Institution of Oceanography/Center for Western Weather and Water Extremes (CW3E), La Jolla, CA, United States, F Martin Ralph, Scripps Institution of Oceanography, La Jolla, CA, United States, Paul J Neiman, NOAA, Boulder, CO, United States, Gary A Wick, NOAA/ESRL, Boulder, CO, United States, Carven Allen Scott, National Weather Service Alaska Region Headquarters, Environmental Scientific Services Division, Anchorage, AK, United States, Douglas McCollor, BC Hydro, Vancouver, BC, Canada and Thomas White, British Columbia Ministry of the Environment, Vancouver, BC, Canada

A53K-3354

Dynamical processes and forecast uncertainty associated with an extreme-rain-producing atmospheric river over the southeastern U.S. during late October 2007

Benjamin J Moore, Lance F Bosart and Daniel Keyser, SUNY Albany, Atmospheric and Environmental Sciences, Albany, NY, United States

A53K-3355

Understanding the Role of Water Vapor Transport in Extreme Precipitation Events in Nepal

Kritika Thapa, State University of New York, Syracuse, NY, United States, Theodore A Endreny, SUNY ESF, Syracuse, NY, United States and Craig R Ferguson, SUNY at Albany, Albany, NY, United States

A53K-3356

The Onset of Early Season Rainfall and its Mid-Summer Cessation in the Caribbean

Theodore L Allen, University of Miami, Miami, FL, United States and Brian E Mapes, RSMAS, University of Miami, Atmospheric Sciences, Miami, FL, United States

A53K-3357

Case Study of a Land Falling Atmospheric River in Northern California: In Situ Dropsonde Observations Compared to WRF Model Outputs and NCEP Final Analysis

Reuben Demirdjian, Scripps Institution of Oceanography, La Jolla, CA, United States

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