

AGU Fall Meeting 2013 Planner
 CSD Oral and Poster Presentations

Monday, December 09, 2013

Time	Session Info
8:00 AM-12:20 PM, Hall A-C (Moscone South),	A11B. Biological Aerosols: Characterization, Identification, Environmental Impacts Posters [SWIRL_DA]
8:00-8:00 AM	A11B-0022. Measurements of Fluorescent Bioaerosol Particles in the Colorado Front Range <u>A.E. Perring</u> ; J.B. Emerson; N. Fierer; J.P. Schwarz; D.W. Fahey
10:20 AM-12:20 PM, 3010 (Moscone West),	A12A. Climate Sensitivity and Feedbacks: Advances and New Paradigms II [SWIRL_CU] (cosponsored by AMS)
10:35-10:50 AM	A12A-02. A stratospheric water vapor feedback <u>A.E. Dessler</u> ; M.R. Schoeberl; T. Wang; S.M. Davis; K.H. Rosenlof
10:20 AM-12:20 PM, 3008 (Moscone West),	A12B. From Air Pollution to Climate Changes in Asia II [SWIRL_DA] (cosponsored by AMS)
11:05-11:20 AM	A12B-04. Contributions of Asian SO₂ Pollution to the Upper Troposphere and Lower Stratosphere <u>R.R. Neely</u> ; P. Yu; K.H. Rosenlof; O.B. Toon; J.S. Daniel; S. Solomon; H.L. Miller
1:40 PM-6:00 PM, Hall A-C (Moscone South),	A13A. Air Quality and Climate in the Southeast US I Posters (cosponsored by AMS)
1:40-1:40 PM	A13A-0156. Long-term trends and weekday-to-weekend differences in ozone, its precursors, and other secondary pollutants in Atlanta, Georgia <u>I.B. Pollack</u> ; T.B. Ryerson; K. Baumann; E.S. Edgerton; J.A. De Gouw; J. Gilman; M. Graus; J. Holloway; B.M. Lerner; J.A. Neuman; J.M. Roberts; P.R. Veres; C. Warneke; M. Trainer; D.D. Parrish
1:40 PM-6:00 PM, Hall A-C (Moscone South),	A13D. Sources and Chemistry of Atmospheric Oxidants I Posters
1:40-1:40 PM	A13D-0227. In-situ airborne measurements of nitrous acid in power plant and biomass burning plumes <u>J.A. Neuman</u> ; J.B. Nowak; J. Holloway; M. Trainer; I.B. Pollack; T.B. Ryerson
1:40 PM-3:40 PM, 2011 (Moscone West),	Impacts of Cosmic Dust in Planetary Atmospheres II [SWIRL_DA]

3:10-3:25 PM	SA13C-07. Meteoritic material in stratospheric particles <u>D.M. Murphy;</u> K. Froyd; D.J. Cziczo
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Tuesday, December 10, 2013

Time	Session Info
8:00 AM-12:20 PM, Hall A-C (Moscone South), A21B. Climate Sensitivity and Feedbacks: Advances and New Paradigms III Posters [SWIRL CU] (cosponsored by AMS)	
8:00-8:00 AM	A21B-0033. Stratospheric Water Vapor in Coupled Models: Assessing the Feedback Strength <u>R.W. Portmann; S.M. Davis</u>
8:00 AM-10:00 AM, 3006 (Moscone West), A21K. Sources and Chemistry of Atmospheric Oxidants II	
8:00-8:20 AM	A21K-01. Long-Term Baseline Ozone Changes: Disagreement between 3 ACCMIP/CMIP5 Models and Observations (<i>Invited</i>) <u>D.D. Parrish; J. Lamarque; V. Naik; L.W. Horowitz; D. Shindell</u>
8:00 AM-10:00 AM, 3008 (Moscone West), A21H. Air Quality and Climate in the Southeast US II (cosponsored by AMS)	
8:02-8:22 AM	A21H-01. Photochemistry in Power Plant and Urban Plumes over Forested and Agricultural Regions during SOS (1990s) and SENEX (2013) field intensives (<i>Invited</i>) <u>M. Trainer; G.J. Frost; S. Kim; T.B. Ryerson; I.B. Pollack; J.M. Roberts; P.R. Veres; F.M. Flocke; J.A. Neuman; J.B. Nowak; A. Nenes; C. Warneke; M. Graus; J. Gilman; B.M. Lerner; W. Kuster; E.L. Atlas; T.F. Hanisco; G.M. Wolfe; F.N. Keutsch; J. Kaiser; Y. Lee; C.A. Brock; A.M. Middlebrook; J. Liao; A. Welti; D.D. Parrish; F.C. Fehsenfeld; J.A. De Gouw</u>
8:22-8:36 AM	A21H-02. Measurements of Biogenic and Anthropogenic Ozone and Aerosol Precursors during the SENEX (Southeast Nexus) Campaign 2013 <u>C. Warneke; M. Trainer; J.A. De Gouw</u>
8:36-8:50 AM	A21H-03. Nighttime aircraft measurements of power plant plumes in the Southeast U.S. <u>S.S. Brown; R.W. Womack; P.M. Edwards; W.P. Dube; K. Min; T.B. Ryerson; J. Peischl; I.B. Pollack; J.M. Roberts; P.R. Veres; B. Lee; F. Lopez-Hilfiker; J.A. Thornton; J.A. Neuman; J.B. Nowak; M. Graus; C. Warneke; J.A. De Gouw; C.A. Brock; M. Trainer; D.D. Parrish</u>
9:04-9:18 AM	A21H-05. Nocturnal oxidation chemistry from night flights in the Southeastern US during SENEX <u>P.M. Edwards; J.A. De Gouw; M. Graus; W.P. Dube; J. Gilman; J. Holloway; B. Lee; B.M. Lerner; J. Liao; F. Lopez-Hilfiker; A.M. Middlebrook; K. Min; J.A. Neuman; D.D. Parrish; I.B. Pollack; J.M. Roberts; T.B. Ryerson; J.A. Thornton; M. Trainer; P.R. Veres; C. Warneke; R.W. Womack; S.S. Brown</u>

9:18-9:32 AM	A21H-06. Cloud condensation nuclei measurements during the NOAA SENEX mission <u>J.J. Lin; A. Bougiatioti; A. Nenes; C.A. Brock; T. Gordon; D. Lack; D.C. Law; M. Richardson; N.L. Wagner; J. Liao; A.M. Middlebrook; A. Welti; J. Holloway; M. Graus; C. Warneke; J.A. De Gouw</u>
9:32-9:46 AM	A21H-07. Aircraft measurement of glyoxal (CHOCHO) over southeast U.S. during SENEX2013 <u>K. Min; W.P. Dube; R.A. Washenfelder; A.O. Langford; S.S. Brown; K. Aikin; A. Bougiatioti; C.A. Brock; J.A. De Gouw; P.M. Edwards; J. Gilman; M. Graus; T.F. Hanisco; J. Holloway; J. Kaiser; F.N. Keutsch; B.H. Lee; B.M. Lerner; J. Liao; J.J. Lin; F. Lopez-Hilfiker; A.M. Middlebrook; A. Nenes; J. Peischl; I.B. Pollack; J.M. Roberts; T.B. Ryerson; J.A. Thornton; P.R. Veres; C. Warneke</u>
1:40 PM-6:00 PM, Hall A-C (Moscone South), A23A. Atmospheric Composition and Chemistry Posters	
1:40-1:40 PM	A23A-0195. Atmospheric Chemistry of Six Methyl-perfluoroheptene-ethers Used as Heat Transfer Fluid Replacement Compounds: Measured OH Radical Reaction Rate Coefficients, Atmospheric Lifetimes, and Global Warming Potentials <u>A.M. Jubb; T. Gierczak; M. Baasandorj; R.L. Waterland; J.B. Burkholder</u>
1:40-1:40 PM	A23A-0196. CHBr₃ (bromoform): Revised UV Absorption Spectrum and Atmospheric Photolysis Rates <u>J.B. Burkholder; D. Papanastasiou; S.A. McKeen</u>
1:40-1:40 PM	A23A-0212. CFCI₃ (CFC-11): UV Absorption Spectrum Temperature Dependence Measurements and the Impact on Atmospheric Lifetime Uncertainty <u>M. McGillen; E.L. Fleming; C.H. Jackman; J.B. Burkholder</u>
1:40 PM-6:00 PM, Hall A-C (Moscone South), A23C. Effects of Aerosol on Convective Clouds Posters [SWIRL_CM]	
1:40-1:40 PM	A23C-0258. Sensitivity of aerosol-induced effects on numerically simulated squall lines to the vertical distribution of aerosols <u>Z.J. Lebo</u>
1:40 PM-6:00 PM, Hall A-C (Moscone South), A23F. Weather, Dynamics and Climate Posters	
1:40-1:40 PM	A23F-0366. 1,2-dichlorohexafluoro-cyclobutane (1,2-c-C₄F₆Cl₂, R-316c) a Potent Ozone Depleting Substance and Greenhouse Gas: Atmospheric Loss Processes, Lifetimes, and Ozone Depletion and Global Warming Potentials for the (E)- and (Z)- Stereoisomers <u>V.C. Papadimitriou; M.R. McGillen; S. . Smith; A.M. Jubb; R.W. Portmann; B.D. Hall; E.L. Fleming; C.H. Jackman; J.B. Burkholder</u>
1:40 PM-3:40 PM, 3008 (Moscone West), A23G. Air Quality and Climate in the Southeast US III (cosponsored by AMS)	

2:44-2:58 PM	A23G-05. Vertical Profiles of Aerosol Extinction over the Southeastern US during the Summer <u>N.L. Wagner</u> ; C.A. Brock; T. Gordon; D. Lack; M. Richardson; D.C. Law; A. Welti; A.M. Middlebrook; J. Liao; J. Holloway; J. Peischl; I.B. Pollack; T.B. Ryerson; M. Graus; J.A. Neuman; J.B. Nowak
4:00 PM-6:00 PM, 3008 (Moscone West), A24A. Air Quality and Climate in the Southeast US IV (cosponsored by AMS)	
4:50-5:04 PM	A24A-04. Particle Emission, Formation, and Growth in Industrial and Urban Plumes in the Southeastern United States <u>C.A. Brock</u> ; <u>N.L. Wagner</u> ; D. Lack; D.C. Law; T. Gordon; M. Richardson; A.M. Middlebrook; J. Liao; A. Welti; J. Holloway; I.B. Pollack; T.B. Ryerson; M. Graus; J.A. De Gouw; C. Warneke; M. Trainer; J.J. Lin; A. Bougiatioti; A. Nenes
5:04-5:18 PM	A24A-05. Airborne measurements of black carbon aerosol over the Southeastern U.S. during the Southeast Atmosphere Study (SAS) experiment <u>M.Z. Markovic</u> ; A.E. Perring; J.P. Schwarz; D.W. Fahey; R. Gao; L. Watts; J. Holloway; M. Graus; C. Warneke; J.A. De Gouw; P.R. Veres; J.M. Roberts; A.M. Middlebrook; A. Welti; J. Liao

Wednesday, December 11, 2013

Time	Session Info
8:00 AM-12:20 PM, Hall A-C (Moscone South), A31C. Measurements, Modeling, and Evaluation of Emissions I Posters	
8:00-8:00 AM	A31C-0069. GEIA's Vision for Improved Emissions Information <u>G.J. Frost</u> ; C. Granier; P. Middleton; L. Tarrason
8:00 AM-12:20 PM, Hall A-C (Moscone South), A31D. Molecular Chemistry and Physicochemical Properties of Organic Aerosols I Posters [SWIRL_DA]	
8:00-8:00 AM	A31D-0130. Field Studies of Broadband Aerosol Optical Extinction in the Ultraviolet Spectral Region <u>R.A. Washenfelder</u> ; A. Attwood; C.A. Brock; S.S. Brown
8:00 AM-12:20 PM, Hall A-C (Moscone South), A31F. The Madden-Julian Oscillation: Its Initiation, Identification, and Structure I Posters (cosponsored by AMS)	
8:00-8:00 AM	A31F-0157. Ship-based Observations of Turbulence and Mass Flux Transport in the Indian Ocean from the DYNAMO Field Program <u>A. Choukulkar</u> ; A. Brewer; C.R. Williams; A.A. Grachev; C.W. Fairall
8:00 AM-10:00 AM, 3010 (Moscone West), A31J. Atmospheric Ice Nuclei and Ice Cloud Formation I	
8:45-9:00 AM	A31J-04. Mineral dust as ice nuclei in the upper troposphere (Invited) <u>K. Froyd</u> ; D.J. Cziczo; D.M. Murphy

10:20 AM-12:20 PM, 2022 (Moscone West), A32B. New Atmospheric Sciences Fellows Presentations (Virtual Option)

10:50-11:05 AM	A32B-03. How resilient are cloud systems to aerosol perturbations? <u>G. Feingold</u>
10:20 AM-12:20 PM, 3006 (Moscone West), A32C. The Southern Ocean: Clouds, Aerosols, and the Air-Sea Interface I [SWIRL_DA]	
11:50-12:05 PM	A32C-07. Observed and Projected Ocean Wind Speed Trends and Marine Boundary Layer Clouds <u>J. Kazil</u> ; G. Feingold
10:20 AM-12:20 PM, 3007 (Moscone West), OS32A. Thirty Years of ENSO Research: Dynamics, Predictability, Modeling, Impacts I	
11:50-12:05 PM	OS32A-07. Distinguishing the tropospheric and stratospheric pathways of El Niño-Southern Oscillation teleconnections A.H. Butler; L.M. Polvani; C. Deser
1:40 PM-6:00 PM, Hall A-C (Moscone South), A33G. Understanding Emissions of Air Pollutants and Greenhouse Gases in China II Posters	
1:40-1:40 PM	A33G-0314. Constraining NOx emissions over East Asia using satellite NO2 column retrievals with emphasis on the role of NOx transport <u>H. Lee</u> ; S. Kim; J.F. Brioude; O.R. Cooper; G.J. Frost; C. Kim; M. Trainer
1:40 PM-3:40 PM, 3010 (Moscone West), A33I. Molecular Chemistry and Physicochemical Properties of Organic Aerosols II [SWIRL_DA]	
2:05-2:20 PM	A33I-02. Aircraft measurements of organosulfates (IEPOX sulfate and glycolic acid sulfate) in the continental US <u>J. Liao</u> ; K. Froyd; D.M. Murphy; F.N. Keutsch; G. Yu; P.O. Wennberg; J.M. St Clair; J. Crounse; A. Wisthaler; T. Mikoviny; J.L. Jimenez; P. Campuzano Jost; D.A. Day; T.B. Ryerson; I.B. Pollack; J. Peischl; B.E. Anderson; G.S. Diskin; G. Chen
1:40 PM-3:40 PM, 3008 (Moscone West), A33H. Air Quality and Climate in the Southeast US VI (cosponsored by AMS)	
2:44-2:58 PM	A33H-05. The Influence of Chemical Composition and Relative Humidity on the Optical Properties of Aerosols During the Southern Oxidant and Aerosol Study (SOAS) <u>A.R. Attwood</u> ; R.A. Washenfelder; C.A. Brock; S.S. Brown; W. Hu; P. Campuzano Jost; D.A. Day; B.B. Palm; S. Simoes de Sa; J.L. Jimenez
3:12-3:26 PM	A33H-07. Measurements of Volatile Organic Compounds by GC-MS in Rural Alabama during the 2013 SOAS Campaign <u>A. Koss</u> ; K.F. Olson; J.A. De Gouw; A.H. Goldstein
4:00 PM-6:00 PM, 3012 (Moscone West), A34C. The Madden-Julian Oscillation: Its Initiation, Identification, and Structure III (cosponsored by AMS)	

5:15-5:30 PM	<p>A34C-06. Statistics of Tropical Atmospheric Cold Pool Structure and Occurrence as Sampled by a Scanning Doppler Lidar and In-situ Sensors Aboard the RV Revelle during the Dynamics of the Madden Julian Oscillation (DYNAMO) Experiment. <u>A. Brewer</u>; C.W. Fairall; S.P. de Szoeke; P. Zuidema; R.J. Alvarez; A. Weickmann; S. Sandberg; A. Choukulkar; R.M. Hardesty</p>
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Thursday, December 12, 2013

Time	Session Info
8:00 AM-12:20 PM, Hall A-C (Moscone South), OS41D. Thirty Years of ENSO Research: Dynamics, Predictability, Modeling, Impacts IV Posters	
8:00-8:00 AM	OS41D-1846. The Signature of ENSO Diversity in the Boreal Winter Extratropics and in the Tropical Tropopause Layer <u>C. Garfinkel</u> ; M. Hurwitz; D.W. Waugh; A.H. Butler; L. Oman
8:00 AM-10:00 AM, 3006 (Moscone West), A41K. Ozone-Climate Connections I (cosponsored by AMS)	
9:30-9:45 AM	A41K-07. Modeling the impact of late 20th century stratospheric ozone changes: Sensitivity to different ozone forcing data sets and zonal asymmetry <u>S.M. Davis</u>
8:00 AM-10:00 AM, 103 (Moscone South), C41D. Dust and Black Carbon in the Cryosphere I [SWIRL_DA] (Virtual Option)	
9:45-10:00 AM	C41D-08. Early inventory of black carbon particulate size in accumulated snow and ice <u>J.P. Schwarz</u> ; R. Gao; A.E. Perring; M.Z. Markovic; S.J. Doherty; C. Polashenski; S. Kaspari; J.E. Dibb; E.M. Scheuer; D.W. Fahey
1:40 PM-6:00 PM, Hall A-C (Moscone South), A43D. Multi-sensor and Model Aerosol Data Synergy for Climate and Air Quality Applications I Posters [SWIRL_DA]	
1:40-1:40 PM	A43D-0288. A small, sensitive, light-weight, and disposable aerosol spectrometer for balloon and UAV applications D.W. Fahey; <u>R. Gao</u> ; T.D. Thornberry; D.W. Rollins; J.P. Schwarz; A.E. Perring
1:40 PM-3:40 PM, 3008 (Moscone West), A43I. Measurements, Modeling, and Evaluation of Emissions V	

2:55-3:10 PM	A43I-04. Evaluation of NOx emission inventories in California using multi-satellite data sets, AMAX-DOAS and in-situ airborne measurements, and regional model simulations during the CalNex field campaign <u>S. Kim</u> ; S. Baidar; F. Boersma; J.F. Brioude; E.J. Bucsela; J.P. Burrows; E.A. Celarier; R.C. Cohen; G.J. Frost; R.A. Harley; N.A. Krotkov; L.N. Lamsal; R. Martin; B.C. McDonald; S.A. McKeen; H. Oetjen; I.B. Pollack; A. Richter; A. Russell; T.B. Ryerson; M. Trainer; L.C. Valin; R. Volkamer
4:00 PM-6:00 PM, 3004 (Moscone West), A44A. Atmospheric Impacts of Oil and Gas Development I (cosponsored by AMS)	
4:30-4:45 PM	A44A-03. Increased Use of Natural Gas for Power Generation in the U.S. and the Resulting Reductions in Emissions of CO₂, NOx and SO₂ <u>J.A. De Gouw</u> ; D.D. Parrish; M. Trainer

Friday, December 13, 2013

Time	Session Info
8:00 AM-12:20 PM, Hall A-C (Moscone South), A51D. Multiphase Chemistry: Impacts on Aerosol Formation and Processing and on the Budgets of Trace Gases I Posters [SWIRL_DA] (cosponsored by AMS)	
8:00-8:00 AM	A51D-0053. Key parameters controlling the formation of secondary organic aerosol in the aqueous phase (aqSOA) <u>B. Ervens</u> ; Y.B. Lim; A. Sorooshian; B.J. Turpin
8:00 AM-12:20 PM, Hall A-C (Moscone South), A51F. The Tropical Tropopause Layer: Observations, Theory, and Modeling I Posters	
8:00-8:00 AM	A51F-0096. Observational Evidence for Incomplete Dehydration in the TTL <u>D.W. Rollins</u> ; T.D. Thornberry; R. Gao; P. Lawson; T.V. Bui; D.W. Fahey
8:00-8:00 AM	A51F-0097. Validation of Aura Microwave Limb Sounder stratospheric water vapor measurements by the NOAA frost point hygrometer <u>D.F. Hurst</u> ; A. Lambert; W.G. Read; S.M. Davis; K.H. Rosenlof; E.G. Hall; A.F. Jordan; S.J. Oltmans
8:00-8:00 AM	A51F-0102. OH in the TTL and its relationships to solar radiation and reactive nitrogen <u>R. Gao</u> ; K.H. Rosenlof; D.W. Fahey; P.O. Wennberg; E.J. Hintsa; T.F. Hanisco
8:00 AM-10:00 AM, 3004 (Moscone West), A51H. Atmospheric Impacts of Oil and Gas Development II (cosponsored by AMS)	

8:15-8:30 AM	A51H-02. Lidar Observations of the Vertical Structure of Ozone and Aerosol during Wintertime High-Ozone Episodes Associated with Oil and Gas Exploration in the Uintah Basin C.J. Senff; A.O. Langford; R.M. Banta; R.J. Alvarez; A. Weickmann; S. Sandberg; R.D. Marchbanks; A. Brewer; R.M. Hardesty
8:45-9:00 AM	A51H-04. Reactive Nitrogen Partitioning and its Relationship to Winter Ozone Events in Utah R.J. Wild; R.C. Cohen; W.P. Dube; P.M. Edwards; J. Holloway; J.P. Kercher; L. Lee; R. McLaren; J.M. Roberts; J. Stutz; P.R. Veres; C. Warneke; E.J. Williams; B. Yuan; S.S. Brown
9:30-9:45 AM	A51H-07. Measurement of Organic and Inorganic Acids in the Uintah Basin, Utah during UBWOS 2012 and 2013 B. Yuan; J.M. Roberts; C. Warneke; J. Gilman; S. Li; P.M. Edwards; R. Wild; K. Min; S.S. Brown; J.E. Johnson; T.S. Bates; P. Quinn; A. Koss; P.R. Veres; J.A. De Gouw
9:45-10:00 AM	A51H-08. Sensitivities of winter ozone pollution events in oil and gas producing regions to VOCs, NOx and radicals (<i>Invited</i>) P.M. Edwards; K. Aikin; J.A. De Gouw; W.P. Dube; F. Geiger; J. Gilman; D. Helmig; J. Holloway; J.P. Kercher; A. Koss; B.M. Lerner; R.S. Martin; R. McLaren; K. Min; D.D. Parrish; J. Peischl; J.M. Roberts; T.B. Ryerson; J.A. Thornton; P.R. Veres; C. Warneke; R.J. Wild; E.J. Williams; C. Young; B. Yuan; S.S. Brown
1:40 PM-6:00 PM, Hall A-C (Moscone South), A53A. Atmospheric Impacts of Oil and Gas Development III Posters (cosponsored by AMS)	
1:40-1:40 PM	A53A-0134. Measurement of hydrogen sulfide from oil and natural gas production in the Uintah Basin, Utah using PTR-MS R. Li; C. Warneke; M. Graus; R.A. Field; P.R. Veres; F. Geiger; J. Soltis; S. Li; S.M. Murphy; J.A. De Gouw
1:40-1:40 PM	A53A-0139. Measurements of Nitryl Chloride and Acyl Peroxynitrates (PANs) in the Uintah Basin, Utah during the 2012 and 2013 Uintah Basin Winter Ozone Study (UBWOS 2012, 2013) P.R. Veres; J.M. Roberts; B. Yuan; P.M. Edwards; R. Wild; S.S. Brown; T.S. Bates; P. Quinn; R. McLaren; J.P. Kercher; J.A. Thornton; E.J. Williams; J.A. De Gouw; C. Warneke; J. Holloway
1:40-1:40 PM	A53A-0143. Characterizing Emissions of Volatile Organic Compounds (VOCs) from Oil and Natural Gas Operations in Haynesville, Fayetteville, and Marcellus Shale Regions via Aircraft Observations During SENEX 2013 J. Gilman; B.M. Lerner; M. Dumas; D. Hughes; A. Jaksich; C.D. Hatch; M. Graus; J. Peischl; I.B. Pollack; T.B. Ryerson; J. Holloway; M. Trainer; K. Aikin; J. Kaiser; F.N. Keutsch; G.M. Wolfe; T.F. Hanisco; C. Warneke; J.A. De Gouw

1:40-1:40 PM	A53A-0144. Radical Sources in the Uintah Basin during 2013 Winter Ozone Episodes <u>J.M. Roberts</u> ; B. Yuan; P.R. Veres; C. Warneke; J.A. De Gouw; F. Geiger; S.S. Brown; P.M. Edwards; R. Wild; K. Min; T.S. Bates; P. Quinn; R.M. Banta; R.J. Zamora; R. McLaren; C. Young; J.P. Kercher; J.A. Thornton; E.J. Williams
1:40-1:40 PM	A53A-0152. Modeling of meteorology, tracer transport and chemistry for the Uintah Basin Winter Ozone Studies 2012 and 2013 <u>R. Ahmadov</u> ; S.A. McKeen; W.M. Angevine; G.J. Frost; J.M. Roberts; J.A. De Gouw; C. Warneke; J. Peischl; S.S. Brown; P.M. Edwards; R.J. Wild; Y.L. Pichugina; R.M. Banta; A. Brewer; C.J. Senff; A.O. Langford; G. Petron; A. Karion; C. Sweeney; R.C. Schnell; B. Johnson; R.J. Zamora; D. Helmig; J. Park; J. Evans; C.R. Stephens; J.B. Olson; M. Trainer
1:40-1:40 PM	A53A-0154. Meteorological and Topographic Conditions in the Wintertime Uintah Basin Leading to High Ozone Concentrations <u>R.M. Banta</u> ; A. Brewer; R.S. Martin; R.C. Schnell; B. Johnson; G. Petron; C. Sweeney; A. Karion; D. Helmig; C.R. Stephens; J. Evans; C.J. Senff; S. Sandberg; A. Weickmann; R.M. Hardesty; R. Ahmadov; J.M. Roberts; S.A. Conley; R.J. Zamora
1:40 PM-6:00 PM, Hall A-C (Moscone South), A53E. Measuring and Modeling the Greenhouse Gas Emissions of Cities and Localized Rural Sources III Posters [SWIRL_US] (cosponsored by AMS)	
1:40-1:40 PM	A53E-0226. Characterizing Boundary Layer Properties for Estimating Urban Greenhouse Gas Emissions <u>R.M. Hardesty</u> ; A. Brewer; S. Sandberg; A. Weickmann; C. Sweeney; A. Karion; K.J. Davis; P.B. Shepson; T. Lauvaux; M.L. Cambaliza; N.L. Miles; J.R. Whetstone
1:40 PM-3:40 PM, 3002 (Moscone West), A53H. Atmospheric Impacts of Oil and Gas Development IV (Virtual Option: On-Demand Only) (cosponsored by AMS)	
1:55-2:10 PM	A53H-02. Quantification of methane emissions from natural gas extraction from the Haynesville, Fayetteville, and northeastern Marcellus shale regions <u>J. Peischl</u> ; T.B. Ryerson; M. Trainer; J.A. De Gouw; C. Warneke; D.D. Parrish
1:40 PM-3:40 PM, 3001 (Moscone West), A53K. Multi-sensor and Model Aerosol Data Synergy for Climate and Air Quality Applications II [SWIRL_DA]	
2:40-2:55 PM	A53K-05. Direct and indirect radiative effects from regional aerosol shifts (Invited) <u>D.M. Murphy</u>
4:00 PM-6:00 PM, 3008 (Moscone West), A54I. The Tropical Tropopause Layer: Observations, Theory, and Modeling III	
4:00-4:15 PM	A54I-01. Water Vapor and Cirrus Clouds in the Pacific TTL during ATREX 2013 (Invited) <u>T.D. Thornberry</u> ; D.W. Rollins; R. Gao; D.W. Fahey; T.V. Bui; P. Lawson; M.J. McGill

4:00 PM-6:00 PM, 2022 (Moscone West), **A54E. Constraining Aerosol Indirect Forcing in Climate Models With Observations II [SWIRL_DA]** (Virtual Option:On-Demand Only)
(cosponsored by AMS)

5:30-5:45 PM	A54E-07. Aerosol Indirect Effects from the Cloud to Climate Scale: Implications of Observational Scale for Constraining Forcing (<i>Invited</i>) <u>A.C. McComiskey; G. Feingold</u>
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4:00 PM-6:00 PM, 3008 (Moscone West), **A54I. The Tropical Tropopause Layer: Observations, Theory, and Modeling III**

5:45-6:00 PM	A54I-08. Mixing into the TTL: What can we learn from black carbon measurements? <u>E.A. Ray; J.P. Schwarz; F. Moore; R. Gao; S.C. Wofsy; D.W. Fahey; K.H. Rosenlof</u>
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