

CalNex 2010 Data Analysis Workshop Agenda May 16 – 19, 2011

Joe Serna Jr. Cal/EPA Headquarters Building
1001 I Street, Sacramento CA

Monday, May 16

Session Chair: Eileen McCauley

1:00		Welcome	James Goldstene
1:10		Logistics	Eileen McCauley
		Session Chair: Chet Koblinsky	
1:15		Introduction	Chet Koblinsky
1:20		Science Questions to Improve California's Climate and Air Quality Programs	Bart Croes
1:35		NOAA and CalNex: Goals and Contributions	David Parrish
1:50		Collaboration of the Broader Science Community in CalNex	Steven Wofsy
2:05		NOAA's Contribution to Policy Relevant Information: CalNex	A. Ravishankara
2:20		Discussion and Questions	Chet Koblinsky
2:30		Science Questions Related to Emissions & Inventories	David Parrish
2:40		Volatile organic compounds (VOCs) in the greater Los Angeles Basin: Compilation of multi-platform measurements in order to characterize the chemical evolution of air masses and their relative contribution to OH reactivity and potential SOA formation	Gilman, J.B.
3:00		Airborne measurements of volatile organic compounds in the Los Angeles Basin and the Central Valley, California	Warneke, Carsten
3:20		Measurements of pollutants and their spatial distributions over the Los Angeles Basin	Cheung, Ross

3:40		Airborne observations of the weekend ozone effect and precursor emissions in the California Los Angeles Air Basin during CalNex	Pollack, I.B.
4:00		BREAK (20 minutes)	
4:20		Emission and trends of VOC precursors in Los Angeles megacity	Borbon, Agnes
4:40		Traffic related emissions of radical precursors HCHO and HONO in Los Angeles during CalNex	Rappenglück, B.
5:00		Diurnal variations of CO ₂ emissions during CalNex-LA: magnitude and sources	Newman, Sally
5:20		Urban CO ₂ Emissions from the Los Angeles Basin: Assessing chemistry and dynamics using the suite of tracers measured aboard the CalNex WP-3 Aircraft	Wofsy, Steven

Tuesday Morning, May 17

Session Chair: Joost DeGouw

8:30		Methane Emissions from Point and Area Sources in California	Peischl, J.
8:50		Constraints on Methane Emissions from California's Central Valley using CalNex WP-3 Aircraft Data and a Lagrangian Transport Model	Santoni, Gregory
9:10		Remote Sensing of Spatial Distributions of Greenhouse Gases in the Los Angeles Basin	Fu, Dejian
9:30		Nitrous Oxide Emissions from California Based on Airborne Measurements During CalNex	Xiang, Bin
9:50		A Tale of Two Extremes: Contrasting NH ₃ at the Bakersfield and Pasadena Supersites	Murphy, J. G.
10:10		Airborne Measurements of Ammonia and Implications for Ammonium Nitrate Formation in the Central Valley and the South Coast Air Basin of California	Nowak, John B.
10:30	BREAK (20 minutes)		
10:50		Column observations of NO _x and OVOC over California during the CalNex and CARES	Volkamer, Rainer
11:10	Poster Previews - 2 minutes each		
11:10	P1	In-situ measurements of a broad range of volatile organic compounds at the CalNex-Bakersfield supersite	Gentner, Drew
11:12	P2	Measurement of Greenhouse Gases (GHGs) and source apportionment in Bakersfield, CA during CalNex 2010	Guha, Abhinav
11:14	P3	Atmospheric Ammonia Measurements in the Northern San Joaquin Valley Using Cavity Ring-Down Spectroscopy	Pendergrass, Will
11:16	P4	Measurements of hydrocarbons and halogenated hydrocarbons over the Southern California Air Basin and the California Central Valley during the CalNex-2010 mission	Atlas, Elliot
11:18	P5	CU Airborne MAX-DOAS measurements over California during the CalNex and CARES field campaigns	Baidar, Sunil
11:20	P6	Distribution of chlorofluorocarbons (CFCs) and their replacements measured over the South Coast Air Basin (SoCAB) and the Central Valley during the CalNex-2010 study	Barletta, Barbara
11:20	P7	CIMS measurements of gas-phase acids during CalNex - SJV	Beaver, Melinda R.
11:22	P8	Constraints on PAN precursors from day of week measurements of column NO ₂	Valin, L. C.

11:24	p9	Measurements of Formaldehyde and Carbonyl Sulfide aboard R/V Atlantis during CalNex	Herndon, Scott
11:26		Discussion of insights, planned papers and potential collaborations in emissions & inventories	David Parrish & Joost deGouw
11:45 - 1:00		LUNCH	

Tuesday Afternoon, May 17

Session Chair Jochen Stutz

1:00		Science Questions Related to Atmospheric Chemistry and transport	Jochen Stutz
1:10		Aircraft measurements of NO ₃ and N ₂ O ₅ over Los Angeles during CalNex 2010	Brown, Steven
1:30		Nocturnal Vertical Gradients of O ₃ , NO ₂ , NO ₃ , HONO, HCHO, and SO ₂ in Los Angeles, CA, during CalNex 2010	Tsai, C.
1:50		Glyoxal and Formaldehyde Measurements in the Southern San Joaquin Valley: Comparison with CMAQ Model Results and Analysis of Formaldehyde Sources	Keutsch, Frank N.
2:10		Nocturnal Chemistry Observed from the R/V Atlantis during CalNex	Wagner, Nicholas
2:30		Airborne Measurements of Nitryl Chloride and Implications for Chlorine Activation in the South Coast Air Basin of California	Roberts, James M.
2:50		BREAK (40 minutes)	
3:30		Sensitivity of ozone production to organic nitrate formation in the urban outflows of Sacramento and Los Angeles	Browne, E. C.
3:50		Contribution of nitrous acid to the urban Los Angeles radical budget	Young, C. J.
4:10		WRF/Chem Simulation of Ozone and NO _x Precursors in the LA Basin during the 2010 CalNex Campaign	Chen, Dan
4:30		Photochemical Air Quality Modeling in California during the CalNex Period	Kaduwela, Ajith
4:50		Chemical and Aerosol Data Assimilation and Forecasting Experiments during CalNex	Pierce, R. Bradley
		Poster Previews - 2 minutes each	
5:10	P10	VH-TDMA measurements on board the R/V Atlantis during the CalNex 2010 Campaign	Hakala, Jani

5:12	P11	Measurements of OH, HO ₂ and total OH reactivity during CalNex LA 2010	Griffith, Stephen
5:14	P12	<i>In-situ</i> , Quantitative Speciation of Aerosols in Pasadena, CA during CalNex 2010	Issacman, Gabriel
5:16	P13	Monoterpene oxidation products in aerosols collected in Los Angeles during the 2010 CalNex campaign	Kristensen, Kasper
5:18	P40	The Use of Photochemical Ages from Different Hydrocarbon Ratios To Describe Emissions and Chemistry of Volatile Organic Compounds in the Los Angeles Basin	de Gouw, Joost
5:20	P41	Molecular Characterization of Organic Compounds in Atmospheric Aerosols	Laskin or Nizkorodov
5:22	P14	Off-line UPLC/ESI-HR-Q-TOFMS Analyses of SOA Heterogeneous-Reaction Products in PM _{2.5} Collected from the CalNex-Pasadena Ground Site	Lin, Y.-H.
5:24	P15	Quantification and analysis of nitryl chloride (ClNO ₂) during CalNex-LA 2010	Mielke, Levi H.
5:26	P16	Measurements of soluble composition of fine atmospheric particulate matter (PM _{2.5}) and associated precursor gases in Bakersfield, CA during CalNex 2010	Murphy, J. G.
5:28	P17	Gas-particle partitioning of atmospheric ammonia at the CalNex-LA ground site	Murphy, J. G.
5:30	P18	Southern San Joaquin Valley ozone production: Relationships with NO _x abundance, alkyl nitrate formation, VOC reactivity, and rates of primary HO _x production	Pusede, Sally E.
5:32	P19	On the relationship between nitryl chloride and molecular chlorine and their relative importance as Cl-atom sources from simultaneous ship-borne observations in coastal California	Riedel, Theran P.
5:34	P43	Estimating Fossil Fuel CO ₂ , CH ₄ , and N ₂ O Emissions Using Tower Measurements in California.	Fischer, Mark
5:36	P44	Urban Energy Balance Measurements During CalNex 2010	Pendergrass, Will
5:45 - 7:30		Poster Session P1 - P19, P40, 41, 43, 44	2nd Floor Lobby

Wednesday morning, May 18

Session Chairs: Jochen Stutz & Jose Jimenez

8:30		Ozone transport from the free troposphere into the Los Angeles basin	Neuman, J. A.
8:50		Airborne lidar measurements of horizontal and vertical ozone transport in southern California during CalNEX 2010	Senff, C. J.
9:10		Stratosphere-troposphere transport in southern California during CalNex or LRT of Asian pollutants in Central California during CalNex	Langford, A
9:30		Discussion of insights, planned papers and potential collaborations related to atm chemistry and transport	Jochen Stutz
9:50		Science Questions Related to Aerosols	Jose Jimenez
10:00		Characterization of black carbon containing aerosol particles measured by the soot particle aerosol mass spectrometer (SP-AMS) on board the R/V Atlantis during the 2010 CalNex study.	Massoli, Paola
10:20		BREAK (20 minutes)	
10:40		Absorption by ambient aerosols during CalNex	Cappa, Chris
11:00		Measurements of light absorption spectra of fine particle aqueous extracts during CalNex	Zhang, Xiaolu
11:20		Black Carbon and Coating Measurements at Pasadena	Allan, James
11:40 - 1:00		LUNCH	

Wednesday afternoon, May 18

Session Chair: Jose Jimenez

1:00		The study of cloud and aerosol properties during CalNex using spectral methods	McBride, Patrick J.
1:20		Regional Assessment of Organic PM during CalNex, Cal-Mex, and CARES	Russell, Lynn M.
1:40		Chemical and Physical Properties of Aerosols Measured Onboard the R/V Atlantis during CalNEX	Bates, Tim
2:00		Optical and Cloud Nucleating Properties of Aerosols Measured during CalNex: Dependence on Sources and Aging	Quinn, Trish

2:20		Molecular Characterization of Organic Aerosols from the Los Angeles Ground Site during the CalNex 2010 Campaign Using High-Resolution Mass Spectrometry	Laskin, Alex
2:40		Aerosol Composition in Los Angeles During the 2010 CalNex Campaign Studied by High Resolution Aerosol Mass Spectrometry	Hayes, Patrick
3:00		Results from thermal-desorption proton-transfer-reaction mass-spectrometry (TD-PTR-MS) measurements at the Caltech ground site in May/June 2010	Holzinger, Rupert
3:20		BREAK (20 minutes)	
3:40		Aircraft Aerosol Mass Spectrometer Measurements over the Los Angeles Basin during CalNex	Craven, Jill
4:00		Poster Previews - 2 minutes each	
4:05	P20	Regional CO ₂ simulation in the Los Angeles Basin with WRF-VPRM mode	Park, Changhyoun
4:07	P21	Los Angeles and Bakersfield HCl During CalNex: Acid Displacement, Reactive Cl Reservoir and Partitioning	VanderBoer, T.C.
4:09	P22	Ozone in the Lower Free Troposphere and its Impact on Surface Levels in the Northern Sacramento Valley	Faloona, Ian
4:13	P23	Black Carbon Measurements over the Los Angeles Basin during CalNex	Metcalf, Andrew R.
4:15	P24	Understanding the aerosol-cloud droplet link in California: A perspective derived from CalNex data	Nenes, A
4:17	P25	High time-resolution elemental composition of particulate matter in Pasadena	Prévôt, André S.H.
4:19	P26	On the Nature of Water-Soluble Organic Aerosols in the Southern California Region	Sorooshian, Armin
4:21	P27	Contribution of glyoxal to the secondary organic aerosol budget in Los Angeles	Washenfelder, R. A.
4:23	P28	Secondary aerosol formation and oxidation during CalNex-LA: Real-time measurements from a photooxidation flow reactor using high-resolution aerosol mass spectrometry	Ortega, Amber
4:25	P29	Impact of aerosols on photolysis frequencies	Grossberg, Nicole
4:27	P30	Isoprene- and Monoterpene-Derived Organosulfates in PM _{2.5} During the CALNEX Campaign in Bakersfield, CA	Rubitschun, Caitlin L.
4:29	P31	Molecular-level Analysis of Size Resolved Secondary Organic Aerosol (SOA) Samples from CALNEX Bakersfield Using High Resolution Mass Spectrometry.	Sellon, R.
4:31	P32	Major components of summertime atmospheric organic aerosols in Bakersfield, CA during CalNex	Zhao, Yunliang
4:33	P33	TEM study of CalNex aerosol particles	Adachi, Kouji

4:35	P34	Polarimetric remote sensing of clouds and aerosols during CALNEX 2010	Cairns, Brian
4:37	P35	Aerosol extinction profiles and columns distribution of NO ₂ obtained in the CALNEX field Campaign by means of the CU-MAXDOAS instrument	Ortega, Ivan
4:39	P36	Investigating the partitioning of organic acids in LA During the 2010 CalNex Campaign	Liu, Jiumeng
4:41	P37	LED-CE-DOAS and MAX-DOAS measurements of glyoxal and NO ₂ at Milliken Library during CalNex	Thalman, Ryan
4:43	P38	Heterogeneous ice nucleation on organic containing particles collected during CalNex campaign	Wang, Bingbing
4:45	P39	Aerosol Composition in Los Angeles During the 2010 CalNex Campaign Studied by High Resolution Aerosol Mass Spectrometry	Hayes, Patrick
4:47	P42	Long Range Transport of Asian pollutants in Central California during CalNex or Stratosphere-troposphere transport in SoCal	Langford, A
4:49	P45	Airborne High Spectral Resolution Lidar Aerosol Measurements during CalNex and CARES	Ferrare, Richard
4:51	P46	A Summary of the Optical Properties of Aerosols Observed at the Pasadena CALNEX Site	Thompson, Jon
4:53	P47	Organic compound analysis from CalNex-LA PM filter samples	van Drooge, Barend

Thursday, May 19

Session Chair: Allen Goldstein

8:30-10:30		Poster Session 2nd Floor Lobby	
10:30		Temporal variations of aerosol components in Tijuana, Mexico, during the Cal-Mex campaign	Takahama, S.
10:50		Source Signatures of Organic Compounds and Particle Growth in Bakersfield, CA	Liu, Shang
11:10		Secondary Organic Aerosol Contributions during CALNEX, Bakersfield	Kleindienst, T.E.
11:30		Ambient aerosol measurement during CalNex2010 using a newly developed combined Thermal desorption Aerosol GC (TAG) and Aerodyne Aerosol Mass Spectrometer (AMS) instrument: TAG-AMS	Hohaus, Thorsten
11:50 - 1:00		LUNCH	
1:00		Insights from the CARES Campaign in Northern California – Biogenic SOA formation and roles in New Particle Growth	Setyan, A
1:20		Characterization of Organic Aerosol Formation and Processing in California from Airborne Measurements	Bahreini, Roya
1:40		Contrasting SOA formation mechanisms observed at two urban sites	Zhang, Xiaolu
2:00		Diurnal cycle of fossil and non-fossil total carbon using ¹⁴ C analyses during CalNex	Zotter, P.
2:20		Discussion of insights, planned papers and potential collaborations related to aerosols	Allen Goldstein
2:40		Policy Relevant Summary Document	Parrish, David
2:50		Future Activities	
3:00		End	