Potential Papers, Breakout Group on Aerosol Optical Properties & Radiative Effects

Categories:

[1]Comparisons
[2]Local m[3] closure of size distribution, composition, scattering, absorption, f(RH), CCN concentration
[3]Local column radiation closure
[4]Upscaling from land based and in-situ aircraft to satellites, local to regional
[5]Validation and comparison of remote sensing measurements

	Category:	Comparisons[1]	Local m[3] closure[2]	Local column closure[3]	Up-scaling[4]	Val & comp rem sens[5]
Measurement comparisons #1 **Measurement comparisons #2** Gao Chen		**x** **x**				
¶Airborne Measurements of Aerosol Size Distributions and Related Physiochemical and Optical Properties During MILAGRO. Antony Clarke, Jingchuan Zhou, Yohei Shinozuka, Cameron McNaughton, Vladimir Kapustin, Steven Howell, Chris Hostetler, Phil Russell and Peter DeCarlo			x			
In-situ intercomparisons of BC absorption Dubey			**x**			
Local column radiation closure Using G-1, T1 and other surface data Jim Slusser, Barry Lefer				**x**		
T2 narrow band closure, SSA, radiative closure, AERONET Jim Barnard + AERONET person				**x**		
T0 size distribution, chemical composition, APS, SMPS, optical properties, mixing status				**x**		

Moffet, Nancy Marley	
Vertical distribution of aerosols and ultraviolet radiation in the southern Mexico City basin and the rural area southeast of Mexico and Puebla Wolfgang Junkermann and Rainer Steinbrecher Wolfgang Junkermann, Forschungszentrum Karlsruhe, wolfgang.junkermann@imk.fzk.de	**x**
9 papers **Lidar measurements of boundary layer in Mexico City at T0** William E. Eichinger, The University of Iowa; Piotr A. Lewandowski, The University of Iowa; Heidi Holder, Duke University; John Prueger, The National Soil Tilth Laboratory William E. Eichinger, The University of Iowa, william-eichinger@uiowa.edu	**Up-scal-ing[4]** **x**
Downwind Measurements of Mexico City Plume by Lidar William E. Eichinger, The University of Iowa; Piotr A. Lewandowski, The University of Iowa; Heidi Holder, Duke University; John Prueger, The National Soil Tilth Laboratory William E. Eichinger, The University of Iowa, william-eichinger@uiowa.edu	x
The T1-T2 study: evolution of aerosol properties downwind of Mexico City J.C. Doran, J.C. Barnard, J.D. Fast, E.I. Kassianov, N.S. Laulainen, M.S. Pekour, W.J. Shaw, X-Y Yu, Pacific Northwest National Laboratory W.P. Arnott, L. Paredes-Miranda, Desert Research Institute R. Coulter, T. Martin, Argonne National Laboratory L. Kleinman, S. R. Springston, Brookhaven National Laboratory R. Cary, D. F. Smith, Sunset Laboratory, Inc. Chris Doran, PNNL, christopher.doran@pnl.gov	**x**
Wavelength dependence of Aerosol Optical Properties Nancy A. Marley and Jeffrey S. Gaffney, University of Arkansas at Little Rock, talk with Tony Clarke namarley@ualr.edu	x

Aerosol Absorption and Scattering in Mexico City Claudio Mazzoleni, Manvendra K. Dubey, Adam Loeffler, Petr Chylek, Timothy Onash, Pat, Lupita Claudio Mazzoleni, claudio@lanl.gov	x
¶Photoacoustic Measurements of Aerosol Light Absorption and Scattering at Four Sites in and Near Mexico City Guadalupe Paredes-Miranda, University of Nevada Reno, and the Desert Research Institute; William P. Arnott, University of Nevada Reno,and the Desert Research Institute; Jeffrey S. Gaffney, University of Arkansas; Nancy A. Marley, University of Arkansas.	x
Particulate absorption and its variation with mixing status observed in-situ over Mexico Yohei Shinozuka, Antony D. Clarke, Vladimir N. Kapustin, Steven G. Howell, Jingchuan Zhou, Cameron S. McNaughton, Mitchell Pinkerton Yohei Shinozuka, University of Hawaii, yohei@hawaii.edu	x
Satellite detection of Mexico City pollution plumes **What conditions** **How far downwind** **Satellite resolution** **Which variable to characterize mega cities** **MODIS OMI MISR TES MOPITT MLS AIRS etc.** Steve Massie	**x**
Mixing of boundary layer and background Rich Coulter and Will Shaw	**x**
Twin otter, closure, mixing at top of boundary layer Darin Toohey, Marsha Fisher	**x**
18 papers	**Val & comp**

	rem sens[5]
¶Aerosol optical depth retrieval with MODIS data and comparison with Microtops II sunphotometer network and CIMEL/AERONET during MILAGRO 2006 Campaign Andrea D. de Almeida Castanho, Massachusetts Institute of Technology; Ronald G. Prinn, Massachusetts Institute of Technology; Jose Vanderlei Martins,JCET/University of Maryland Baltimore County and Luisa T. Molina, Molina Center for Energy and the Environment,California and MIT. Andrea D. de Almeida Castanho, Massachusetts Institute of Technology, castanho@mit.edu	x
Solar Radiometry Studies of Mexico City Plume Piotr A. Lewandowski, The University of Iowa; William E. Eichinger, The University of Iowa; Heidi Holder, Duke University; John Prueger, The National Soil Tilth Laboratory Piotr A. Lewandowski, The University of Iowa, piotr-lewandowski@uiowa.edu	**x**
Airborne Solar Spectral Irradiance Measurements during the MILAGRO field campaign. **1. Surface albedo** **2. Spectral aerosol forcing** **3. Flux Divergence** K Sebastian Schmidt, University of Colorado; Odele Coddington, University of Colorado; Peter Pilewskie, University of Colorado K Sebastian Schmidt, University of Colorado, sebastian.schmidt@lasp.colorado.edu	 **x** **x** **x**
Polarimetric remote sensing of aerosols and clouds during MILAGRO	**x**
Aerosol retrieval over land, AATS measurement validation, comparison with MISR, MODIS, POLDER over land, surface properties, … Brian Cairns, Columbia University,bc25@columbia.edu	**x**
Surface Albedo: Include MISR and MODIS products	x

Brian Cairns, Fabien Waquet and Kirk Knobelspiesse, Columbia University; Michael Mishchenko and Larry Travis, NASA GISS; Philip Russell, NASA Ames; Jens Redemann, BAERI/NASA Ames; Rose Dominguez, NASA Ames University-Affiliated Research Center; Warren Gore, NASA Ames Research Center; Chris Hostettler and Richard Ferrare, NASA Langley; Antony Clarke, University of Hawaii; Brent Holben, Vanderlei Martins, Charles Gatebe, Michael King, NASA Goddard; Peter Pilewskie, Sebastian Schmidt, University of Colorado	
Airborne Spectral Measurements of BRDF over Different Surfaces in Mexico Charles Gatebe, Michael King, Tom Arnold, Juliao Cumbane, and Gala Wind	**x**
Surface albedo of Mexico City, Comparison with CAR, SSFR, RSP, G-1 teams Charles Gatebe, Michael King, Tom Arnold, Juliao Cumbane, and Gala Wind, Jim Barnard, PNNL, John Hubbe, PNNL, Stephen Springston, BNL, Evgueni Kassianov, PNNL, John Schmelzer, PNNL, Jerome Fast, PNNL, Telma Castro, Brian Cairns, Fabien Waquet and Kirk Knobelspiesse, Columbia University; Michael Mishchenko and Larry Travis, NASA GISS;	**x**
Retrieval of aerosol optical properties from airborne and ground based radiation measurements (AATS AERONET) Charles Gatebe, Michael King, Tom Arnold, Juliao Cumbane, and Gala Wind Charles Gatebe, gatebe@climate.gsfc.nasa.gov	**x**
AATS-14 on the J31 in INTEX-B/MILAGRO: Comparisons to data collected by aerosol sensors on Terra & Aqua Jens Redemann, BAERI/NASA Ames; John Livingston, SRI/NASA Ames; Philip Russell, NASA Ames; Qin Zhang, BAERI/NASA Ames; Stephanie Ramirez, BAERI/NASA Ames; Roy Johnson, NASA Ames, MISR and MODIS Team members Jens Redemann, BAERI/NASA Ames, jredemann@mail.arc.nasa.gov	**x**

¶Aerosol optical depths from airborne sunphotometry in INTEX-B/MILAGRO as a validation tool for the Ozone Monitoring Instrument (OMI) on Aura John Livingston, SRI International/NASA Ames; Philip Russell, NASA Ames; Jens Redemann, Stephanie Ramirez, and Qin Zhang, BAERI/NASA Ames; Omar Torres and Alexander Smirnov, UMBC/NASA Goddard; Brent Holben, NASA Goddard; Edward Browell and John Hair, NASA Langley; Cameron McNaughton, Antony Clarke, and Y. Shinozuka, University of Hawaii John Livingston, SRI International, jlivingston@mail.arc.nasa.gov		**x**
¶Airborne High Spectral Resolution Lidar Observations of Aerosol Spatial Distribution and Optical Properties from MILAGRO		x
#1: HSRL Validation		**x**
#2: Airborne High Spectral Resolution Lidar Observations of Aerosol Spatial Distribution, Optical Properties and types from MILAGRO		
Combined active and passive retrieval HSRL, RSP … (included in Cairns paper) John Hair, Rich Ferrare, Chris Hostetler, David Harper, Anthony Cook, NASA Langley; Larry Kleinman, Brookhaven National Laboratory; Philip Russell, NASA Ames; Jens Redemann, BAERI/NASA Ames; John Livingston, SRI/NASA Ames; Antony Clarke, University of Hawaii; Brian Cairns, Columbia University		**x**
¶MILAGRO/INTEX-B Coordinated Satellite + Sub-orbital Platform + models Experiments: March 06 & 10, 2006 R Kahn, D Nelson, K Yau, B Gaitley and the MISR Team, Jet Propulsion Laboratory/Caltech, P Russell, NASA Ames Research Center, J Redemann, Bay Area Environmental Research Institute, J Livingston. SRI International, and the J-31 Team, C Hostetler, R Ferrare, J Hair and the B-200 Team, NASA Langley Research Center, A. Clarke, Y. Shinozuka, J Zhou and the HiGear Team, U. Hawai'i, G. Carmichael, and M Mena, STEM Model Team, U. Iowa.	**x**	**x**

R Kahn, Jet Propulsion Laboratory/Caltech, ralph.kahn@jpl.nasa.gov	
Environmental snapshots Someone	**x**
Megacity Radiative Forcing: A Mexico City Case Study Seth Olsen, Manvendra K. Dubey, Petr Chylek, Claudio Mazzoleni, Yongxin Zhang, James T. Randerson, Larry Horowitz, Lupita Paredes, and Pat Arnott Manvendra K Dubey, dubey@lanl.gov Seth Olsen, solsen@lanl.gov	

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