## NSF EarthCube Domain End-User Workshop: Engaging the Atmospheric Cloud/Aerosol/Composition Community

Mason Inn Conference Center Fairfax, VA October 21-22, 2013

Monday, Octo	ber 21, 2013	08:00 - 17:00	
Registration  Monday, October 21, 2013		Junior Prefunction  9:00 – 12:10	
			Opening ceren
Chair: Liping D	i (George Mason University)		
09:00-09:15	Opening Ceremony & welcome address	1	
	Prof. Vikas Chandhoke, Vice President for Research, George Mason University		
09:15-9:50	Dr. Steve Ghan (Pacific Northwest National Laboratory)		
	Science Challenges in Cloud-Aerosol Interactions		
9:50-10:30	Drs. J.F. Lamarque and S. Madronich (NCAR Atmospheric Chemistry Division)		
	Observing and Modeling Atmospheric Composition: Data Challenges		
	Coffee break (10:30-10:50)		
10:30-11:15	Dr. Jorgen B. Jensen ( NCAR Earth Observation Center)		
	Accessing aerosol - cloud - atmospheric sciences data: A user's view of capabilities, limitations and the future		
11:15-11:55	Dr. Chris Mattmann (Jet Propulsion Laboratory)		
	Opportunities and Strategies for Big Data, Open Source Software in the Geosciences		
11:55-12:00	Briefing on workshop schedule		
12:00-13:00	Lunch Buffet provided to all participants (Location: Boxwood)		
13:00-13:30	Dr. Barbara Ransom (National Science Foundation)		

Monday, October 21, 2013	13:30-14:40
Concurrent breakout discussion session 1.1	Location: Ballroom C
Scientific challenges for next 10-15 years in cloud and related areas	
Convener: Athanasios Nenes (Georgia Tech)	
Concurrent breakout discussion session 1.2	Location: Meeting room 2
Scientific challenges for next 10-15 years in aerosol and related areas	
Convener: Dr. Jorgen B. Jensen (UCAR)	
Concurrent Breakout discussion session 1.3	Location: Meeting room 3
Scientific challenges for next 10-15 years in atmospheric chemistry/composition and related areas	
Convener: Akua Asa-Awuku (UC-Riverside)	
Concurrent Breakout discussion session 1.4	Location: Meeting room 4
Scientific challenges for next 10-15 years in inter-disciplinary atmospheric research	
Convener: Xiaoqing Wu (Iowa State)	
Monday, October 21, 2013	14:40- 15:00
Brief reports on breakout session discoveries (each breakout session conveners give 5 minutes briefing)	Location: Junior Ballroom
Chair: Athanasios Nenes	
Coffee break (15:00-15:30)	
Monday, October 21, 2013	15:30-16:40
Concurrent breakout discussion session 2.1	Location: Ballroom C
Data & cyber-infrastructure constraints in cloud and related areas	
Convener: Athanasios Nenes (Georgia Tech)	
Concurrent breakout discussion session 2.2	Location: Meeting room 2

Data & cyber-infrastructure constraints in aerosol and related areas	
Convener: Jorgen B. Jensen (UCAR)	
Concurrent Breakout discussion session 2.3	Location: Meeting room 3
Data & cyber-infrastructure constraints in atmospheric chemistry/composition and related areas	
Convener: Stefan Falke	
Concurrent Breakout discussion session 2.4	Location: Meeting room 4
Data & cyber-infrastructure constraints in inter-disciplinary atmospheric research	
Convener: Xiaoqing Wu (Iowa State)	
Monday Oct 21, 2013	16:40 -17:00
Brief reports on breakout session discoveries (each breakout session conveners give 5 minutes briefing)	Location: Junior Ballroom
Chair: Akua Asa-Awuku (UC-Riverside)	

18:00-20:00 Dinner buffet provided to participants staying overnight at Mason Inn (Boxwood)

Tuesday, October 22, 2013	08:30 - 15:00
Registration	Junior Prefunction
Tuesday, October 22, 2013	09:00-10:10
Concurrent breakout discussion session 3.1	Location: Ballroom C
Existing community data and cyberinfrastructure resources in cloud and related areas	
Convener: Gilberto Vicente (NASA Goddard Space Flight Center)	
Concurrent breakout discussion session 3.2	Location: Meeting room 2
Existing community data and cyberinfrastructure resources in aerosol and related areas	
Convener: Rudolf Husar (Washington University)	
Concurrent Breakout discussion session 3.3	Location: Meeting room 3
Existing community data and cyberinfrastructure resources in atmospheric chemistry/composition and related areas	
Co-Conveners: : Akua Asa-Awuku (UC-Riverside) , Meixia Deng (George Mason University)	
Concurrent Breakout discussion session 3.4	Location: Meeting room 4
Existing community data and cyberinfrastructure resources in inter-disciplinary atmospheric research	
Convener: Hook Hua (JPL)	
Tuesday, October 22, 2013	10:10 -10:30
Brief reports on breakout session discoveries (each breakout session conveners give 5 minutes briefing)	Location: Junior Ballroom
Chair: Liping Di (GMU)	
Coffee break (10:30-11:00)	
Tuesday, October 22, 2013	11:00-12:00
Concurrent breakout discussion session 4.1	Location: Ballroom C

Capability and function requirements on EarthCube in Cloud and related areas	
Convener: Gilberto Vicente (NASA Goddard Space Flight Center)	
Concurrent breakout discussion session 4.2	Location: Meeting room 2
Capability and function requirements on EarthCube in Aerosol and related areas	
Convener: Rudolf Husar (Washington University)	
Concurrent Breakout discussion session 4.3	Location: Meeting room 3
Capability and function requirements on EarthCube in Atmospheric	
chemistry/composition and related areas	
Convener: Meixia Deng (George Mason University)	
Concurrent Breakout discussion session 4.4	Location: Meeting room 4
Capability and function requirements on EarthCube in inter-disciplinary atmospheric research	
Convener: Hook Hua (JPL)	
Tuesday Oct 22, 2013	12:00 -12:20
Brief reports on breakout session discoveries (each breakout session conveners	Location: Junior Ballroom
give 5 minutes briefing)	
Chair: Hook Hua (JPL)	

12:30-13:30 Lunch Buffer provided to all participants (Location: Boxwood)

Tuesday, October 22, 2013	13:30-14:30
Concurrent breakout discussion session 5.1	Location: Ballroom C
EarthCube use case development in Cloud and related areas	
Co-Conveners: Athanasios Nenes (Georgia Tech), Gilberto Vicente (NASA Goddard Space Flight Center)	
Concurrent breakout discussion session 5.2	Location: Meeting room 2
EarthCube use case development in Aerosol and related areas	
Co-Conveners: Jorgen B. Jensen (UCAR), Rudolf Husar (Washington University)	

Concurrent Breakout discussion session 5.3	Location: Meeting room 3
EarthCube use case development in Atmospheric chemistry/composition and related areas	
Co-Conveners: Meixia Deng (George Mason University)	
Concurrent Breakout discussion session 5.4	Location: Meeting room 4
EarthCube use case development in inter-disciplinary atmospheric research	
Co-Conveners: Xiaoqing Wu (Iowa State), Hook Hua (JPL)	
Tuesday Oct 22, 2013	14:30 -15:00
Prof. Joel Cutcher-Gershenfeld (University of Illinois, Urbana-Champaign)	Location: Junior Ballroom
Stakeholder Alignment for EarthCube: Presentation for Atmospheric Clouds and Aerosols Composition Workshop	
Coffee break (15:00-15:30)	
Tuesday, October 22, 2013	15:30- 16:30
Brief reports on breakout session discoveries (each breakout session conveners give ~5 minutes briefing)	Location: Junior Ballroom
Chair: Liping DI (GMU)	
Closing Remark	Location: Junior Ballroom
Clifford Jacobs, NSF	
Summary of workshop, Synthesis and Outline of Next Steps	Location: Junior Ballroom

18:00-20:00 Dinner buffet provided to participants staying overnight at Mason Inn (Boxwood)