

National Aeronautics and Space Administration



NOTE ADDED BY JPL WEBMASTER: This document was prepared by the Langley Research Center. The content has not been approved or adopted by, NASA, JPL, or the California Institute of Technology. This document is being made available for information purposes only, and any views and opinions expressed herein do not necessarily state or reflect those of NASA, JPL, or the California Institute of Technology.

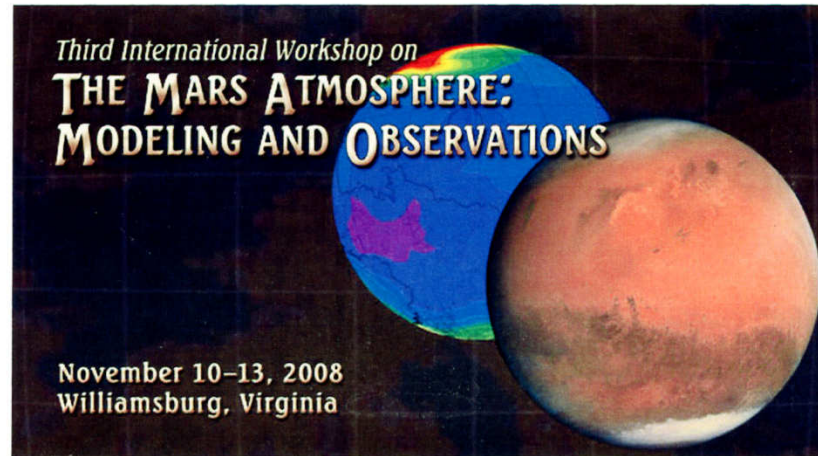
Third International Workshop on THE MARS ATMOSPHERE: MODELING AND OBSERVATIONS

**November 10-13, 2008
Williamsburg, Virginia**

**Dr. Joel S. Levine
Science Directorate,
NASA Langley Research Center
Hampton, VA 23681-2199
joel.s.levine@nasa.gov**

**Dr. Francois Forget
Laboratoire de Meteorologie
Dynamique,
Université Paris, France
forget@lmd.jussieu.fr**

www.nasa.gov



Program

Third International Workshop on
THE MARS ATMOSPHERE:
MODELING AND OBSERVATIONS

November 10–13, 2008

Williamsburg, Virginia

Sponsored By

Lunar and Planetary Institute
NASA Mars Exploration Program
Centre National d'Etudes Spatiales (CNES)
NASA Mars Program Office

Workshop Co-Chairs

Francois Forget, *Laboratoire de Meteorologie Dynamique, France*

Joel S. Levine, *NASA Langley Research Center, United States*

Workshop Scientific Committee

Francois Forget, *Laboratoire de Meteorologie Dynamique, France*

Joel S. Levine, *NASA Langley Research Center, United States*

Steven W. Bougher, *University of Michigan, United States*

Marie-Christine Desjean, *Centre National d'Etudes Spatiales (CNES), France*

Therese Encrenaz, *Observatoire de Paris, France*

Robert M. Haberle, *NASA Ames Research Center, United States*

James W. Head, *Brown University, United States*

Oleg Korablev, *Space Research Institute of Russian Academy of Sciences (IKI), Russia*

Steve Lewis, *The Open University, United Kingdom*

Miguel Lopez-Valverde, *Instituto de Astrofisica de Andalucia, Spain*

Daniel J. McCleese, *Jet Propulsion Laboratory, United States*

Michael A. Mischna, *Jet Propulsion Laboratory, United States*

Franck Montmessin, *Service D'Aeronomie, France*

Scott Rafkin, *Southwest Research Institute, United States*

Peter Read, *University of Oxford, United Kingdom*

Michael D. Smith, *NASA Goddard Space Flight Center, United States*

John Wilson, *Geophysical Fluid Dynamics Laboratory, United States*

Olivier Witasse, *European Space Technology Centre, The Netherlands*

Richard W. Zurek, *Jet Propulsion Laboratory, United States*

Third International Workshop on The Mars Atmosphere: Modeling and Observations

Attendance by Country

United States	86
France	19
United Kingdom	6
Belgium	4
Germany	4
Japan	4
Canada	3
Italy	3
Netherlands	2
Spain	2
New Zealand	1
Total	134

Guide to Sessions

**Third International Workshop on
THE MARS ATMOSPHERE:
MODELING AND OBSERVATIONS**

November 10–13, 2008 • Williamsburg, Virginia

Monday, November 10, 2008

8:30 a.m.	Dogwood Room	Mars Atmosphere General Circulation and Climate: Observations
11:00 a.m.	Dogwood Room	Mars General Circulation and Climate: Models
2:00 p.m.	Dogwood Room	Mars General Circulation and Climate: Models (continued)
4:00 p.m.	Dogwood Room	Mars Upper Atmosphere
5:30 p.m.	Cascade Room	Poster Session

Tuesday, November 11, 2008

9:00 a.m.	Dogwood Room	Mesoscale and Microscale: News from Phoenix, MER, and Modeling
11:40 a.m.	Dogwood Room	Water, Clouds, and Dust: Water Vapor
2:00 p.m.	Dogwood Room	Water, Clouds, and Dust: Water Vapor (continued)
2:48 p.m.	Dogwood Room	Water, Clouds, and Dust: Dust and Cloud Observations

Wednesday, November 12, 2008

9:00 a.m.	Dogwood Room	Water, Clouds, and Dust: Understanding the Dust Cycle
11:00 a.m.	Dogwood Room	Water, Clouds, and Dust: Understanding Clouds
11:50 a.m.	Dogwood Room	Mars Seasonal Polar Caps: CO ₂ Ice and H ₂ O Frost
2:00 p.m.	Dogwood Room	Mars Seasonal Polar Caps: CO ₂ Ice and H ₂ O Frost (continued)
4:00 p.m.	Dogwood Room	Trace Species and Photochemistry

Thursday, November 13, 2008

9:00 a.m.	Dogwood Room	Trace Species and Photochemistry (continued)
11:10 a.m.	Dogwood Room	Atmospheric Sciences to Understand the Past of Mars
2:00 p.m.	Dogwood Room	Reference Atmospheres, Database and Entry, Descent, Landing Issues
4:00 p.m.	Dogwood Room	Future Observations
6:00 p.m.		Meeting Adjourned

Third International Workshop on The Mars Atmosphere: Modeling and Observations

	Papers	Posters
Monday, November 10, 2008		
Mars Atmosphere General Circulation and Climate: Observations	7	3
Mars General Circulation and Climate: Models	12	6
Mars Upper Atmosphere	6	6
Tuesday, November 11, 2008		
Mesoscale and Microscale: News from Phoenix, MER, and Modeling	8	6
Water, Clouds, and Dust: Water Vapor	7	
Water, Clouds, and Dust: Dust and Cloud Observations	10	6
Wednesday, November 12, 2008		
Water, Clouds, and Dust: Understanding the Dust Cycle	6	
Water, Clouds, and Dust: Understanding Clouds	4	1
Mars Seasonal Polar Caps: CO ₂ Ice and H ₂ O Frost	8	1
Trace Species and Photochemistry	13	1
Thursday, November 13, 2008		
Trace Species and Photochemistry (Continued)		
Atmospheric Sciences to Understand the Past of Mars	5	1
References Atmosphere, Database and Entry, Descent, Landing Issues	6	3
Future Observations	7	

Atmospheric Measurements from Mars Spacecraft

Accelerometer, Mars Odyssey

Alpha Particle X-Ray Spectrometer (APXS), Mars Exploration Rovers (MER)

Atmospheric Drag Data, Mars Global Surveyor (MGS)

Compact Reconnaissance Imaging Spectrometers for Mars (CRISM), Mars Reconnaissance Orbiter (MRO)

High Resolution Stereo Camera (HRSC), Mars Express (MEx)

Mars Climate Sounder (MCS), MRO

Mars Color Imager (MARCI), MRO

Mars Orbital Camera (MOC), MGS

Meteorological Station, Phoenix

Planetary Fourier Spectrometer (PFS), MEx

Spectroscopy for Investigation of Characteristics of the Atmosphere of Mars (SPICAM), MEx

Thermal Emission Spectrometer (TES), MGS

Ultraviolet Spectrometer, Mariner 6, 7, 9 and MEx

Visible and Infrared Mineralogical Mapping Spectrometer (OMEGA), MEx

Third International Workshop on The Mars Atmosphere: Modeling and Observations

Workshop Program and Abstracts On-Line at:

<http://www.lpi.usra.edu/meetings/modeling2008/>

