

Tuesday, March 18, 2003  
POSTER SESSION I  
7:00 p.m. Fitness Center

**Mars Atmosphere and Climate**

Buhler C. R. Calle C. I. Nelson E.

*Electrical Breakdown in a Martian Gas Mixture* [#1765]

Experimental measurements of the Paschen breakdown of a Mars gas mixture is compared with that of pure carbon dioxide. Results indicate that the minimum in the breakdown curves are different between the two gases.

Hale A. S. Tamppari L. K. Christensen P. R. Smith M. D. Bass D. Pearl J. C.

*Water Ice Clouds in the Martian Atmosphere: A Comparison of Two Methods* [#1657]

We examine Martian water ice clouds, specifically the aphelion cloud belt, with both Viking IRTM and MGS TES data, and compare the results of two different methods for cloud retrieval.

Nakamura T. Tajika E.

*Climate Change of Mars: Effects of Obliquity Changes* [#1286]

We will present important effects of the obliquity variations of Mars on the Martian climate.

Abe Y. Abe-Ouchi A.

*The Effect of Obliquity and Surface Condition on the Freezing Condition of a Planet: Implications for Paleo-Mars Climate and Habitable Condition* [#1617]

The freezing condition suggests that (1) Mars may have experienced the period while only the low latitude area is covered by permanent snow, and (2) a wet land planet without oceans has better chance of unfrozen climate than an aqua planet with oceans.

Kereszturi A.

*The Role of Subsurface Melting in the Global Climate Cycles on Mars* [#1533]

We present a model where the pressure driven compaction can cause subsurface melting in the ice filled pores and this can take part in the global climate cycles on Mars.