



Josh Bandfield



Richard Gibson/State Press

Joshua Bandfield, a planetary geologist who graduated from ASU, prepares an earth sample for analysis in the spectrometer lab at the new Mars imaging facility in ASU's Moear Building.

Mars facility gives students first-hand look

By EMILY MURPHY
STATE PRESS

NASA officials and state legislators, along with ASU President Lattie Coor and the Moear family, will dedicate the Moear building for a Mars imaging facility on Friday.

Opening remarks will begin at 10 a.m. and tours start at 10:30 a.m. The building will still be called the Moear building, which was named after Benjamin Moear, the governor of Arizona from 1933-1937.

The Moear building will be used as a center where all levels of students and scientists from across the country can study and collect data from THEMIS, or the Thermal Emissions Imaging System, which is aboard the Mars Odyssey satellite.

"I remember when I was a kid, I really followed the space program and was interested in space," said Philip Christensen, an ASU geology professor and the principal investigator of Mars Odyssey. "Even as a graduate student I thought it would be cool to be able to take pictures of Mars and wasn't allowed to. So I thought this would be a great opportunity to get kids involved."

THEMIS will take the infrared images and pho-

Turn to STUDENTS Page 2



Composition of martian surface materials, 2000

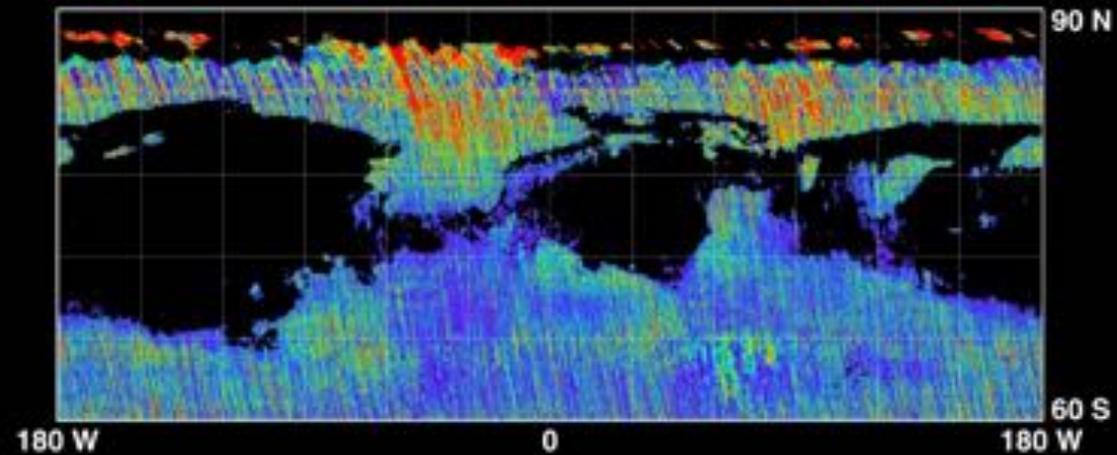
REPORTS

A Global View of Martian Surface Compositions from MGS-TES

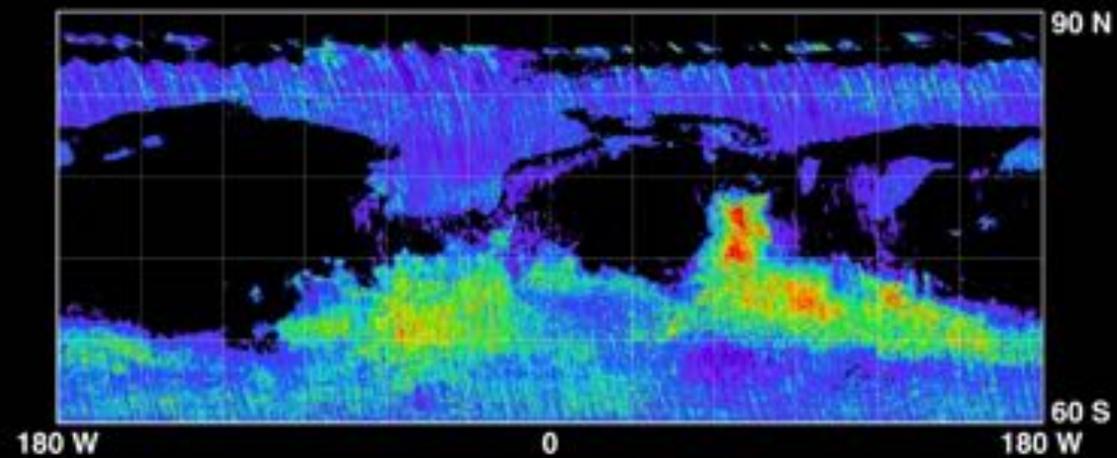
Joshua L. Bandfield,* Victoria E. Hamilton, Philip R. Christensen

3 MARCH 2000 VOL 287 SCIENCE www.sciencemag.org

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Type 1 – Basalt



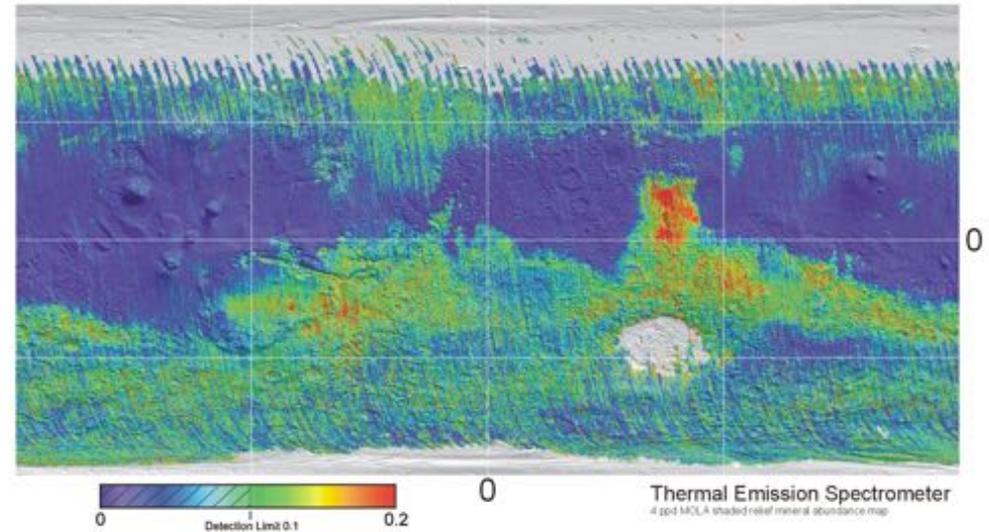
Global mineral mapping on Mars, 2002

Global mineral distributions on Mars

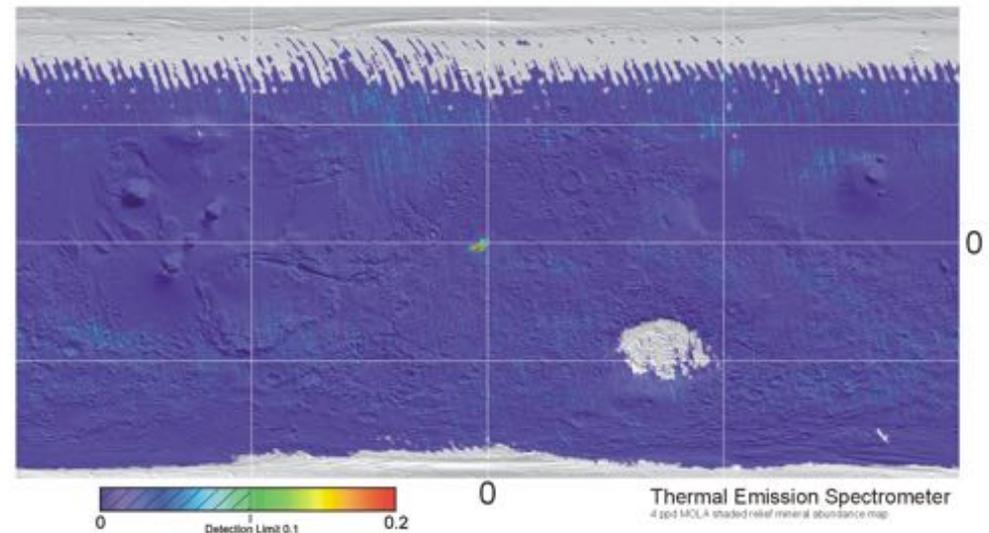
Joshua L. Bandfield

JOURNAL OF GEOPHYSICAL RESEARCH, VOL. 107, 1

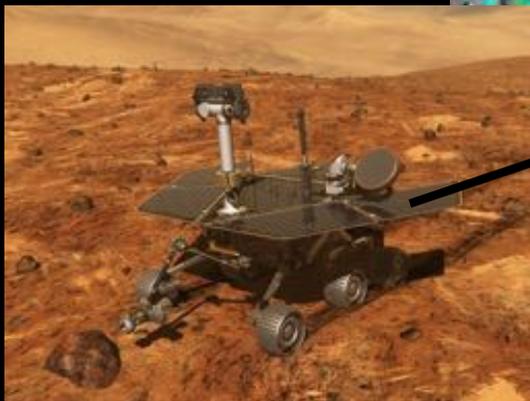
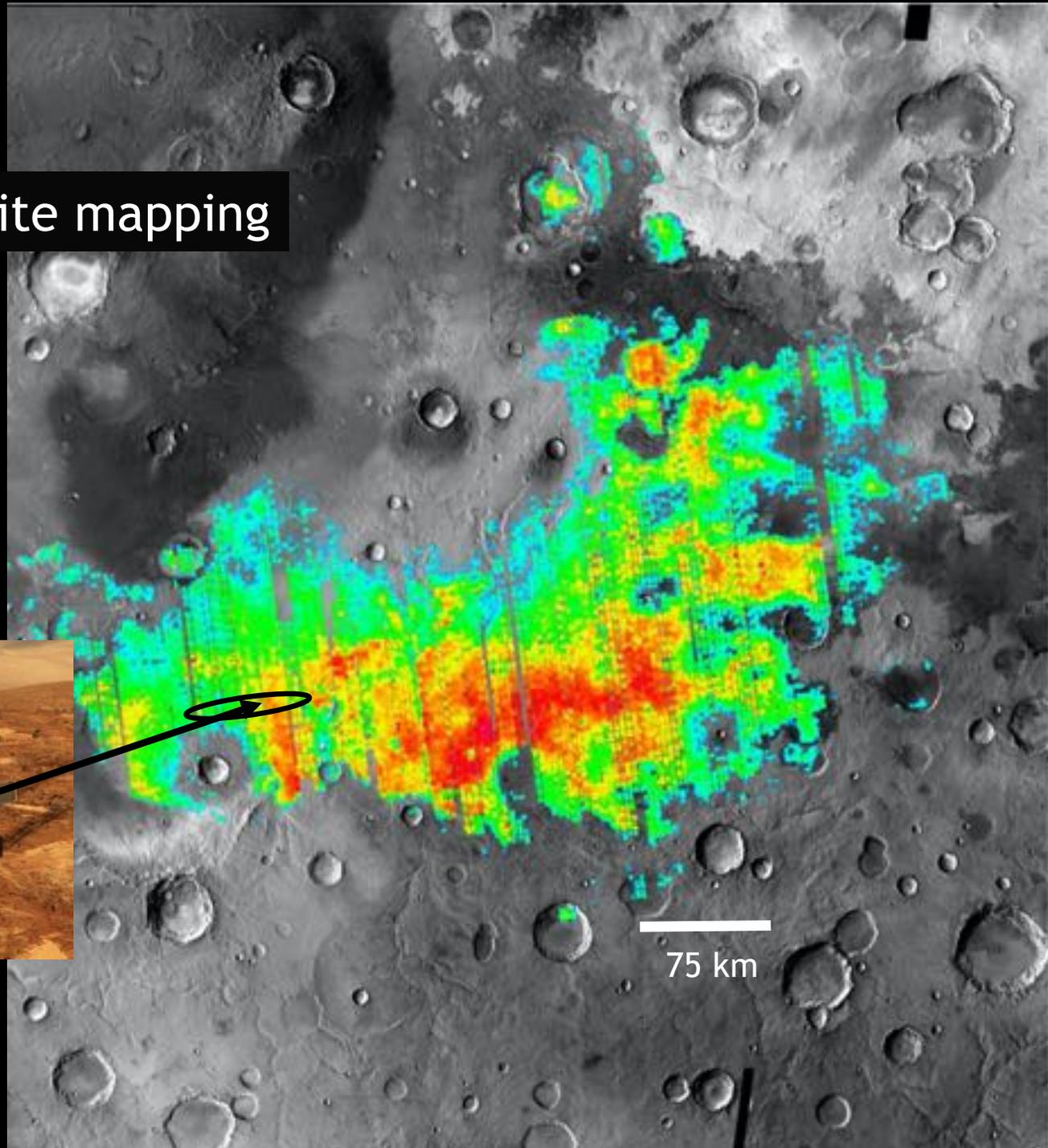
Plagioclase



Hematite



TES Hematite mapping



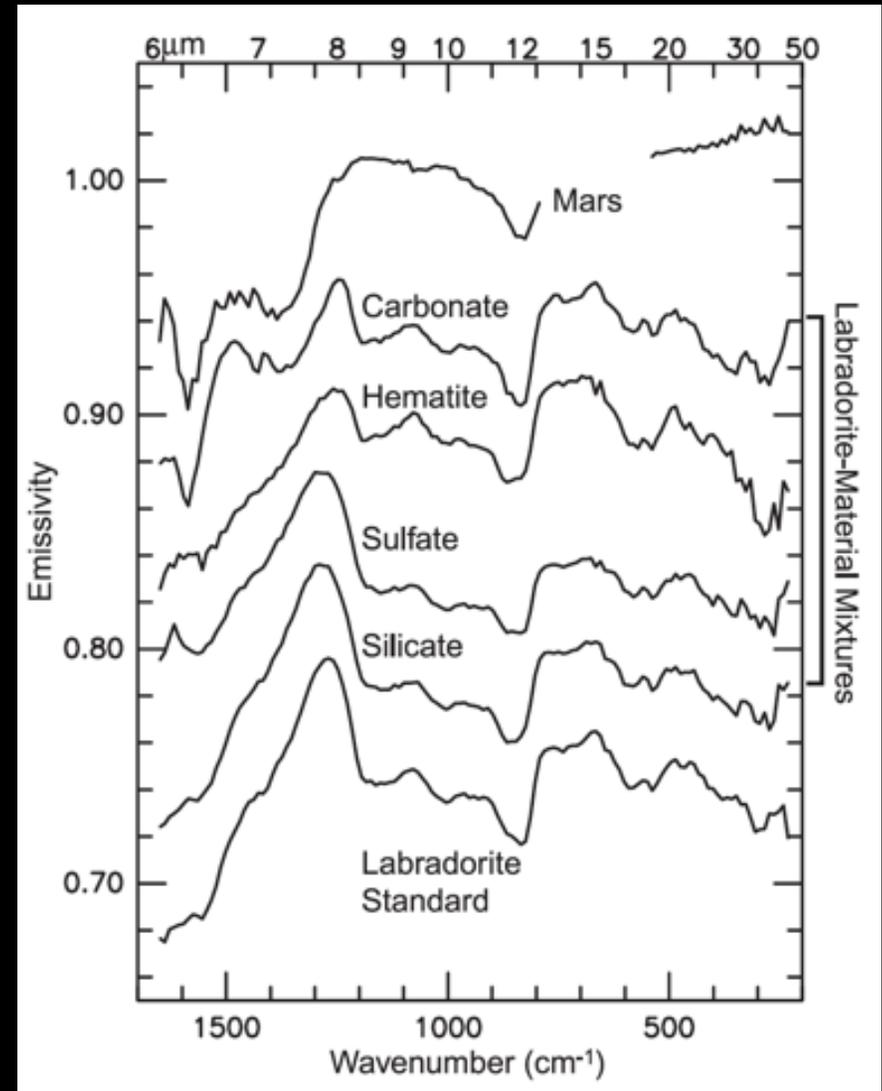
75 km

Occurrence of carbonate on Mars, 2003

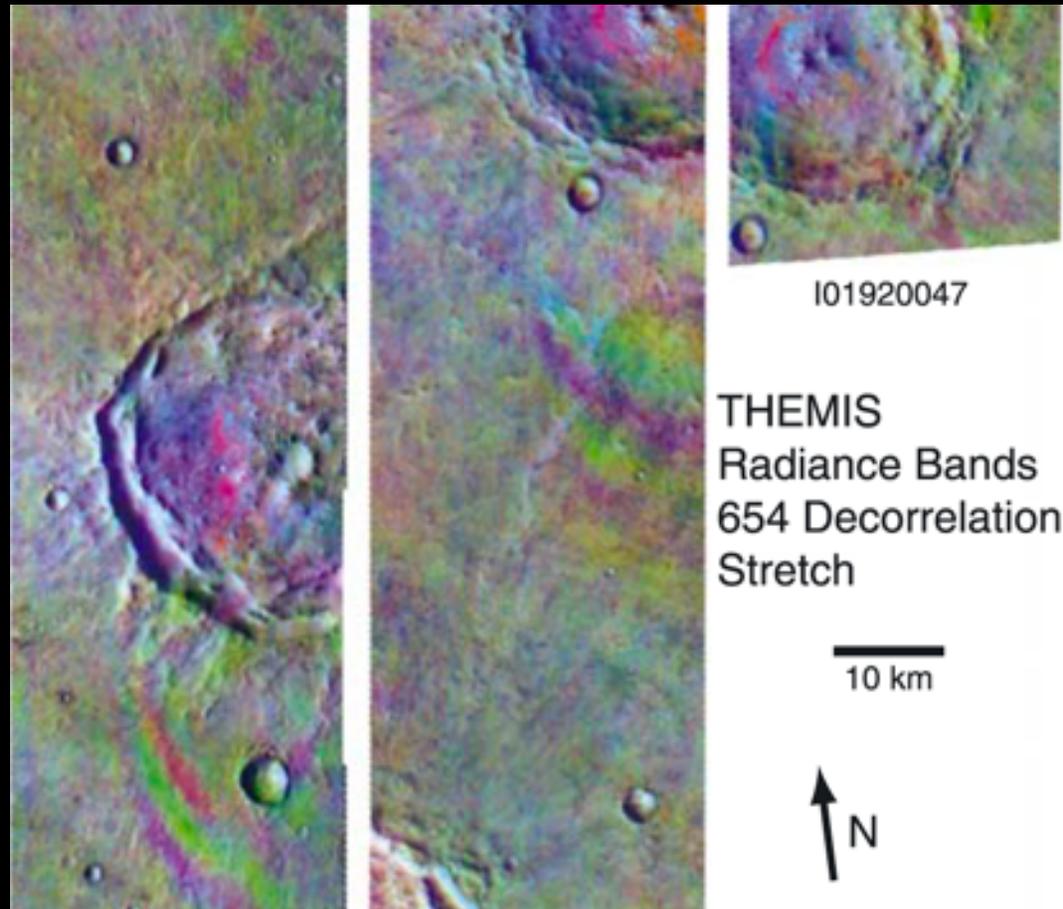
Spectroscopic Identification of Carbonate Minerals in the Martian Dust

Joshua L. Bandfield,* Timothy D. Glotch, Philip R. Christensen

22 AUGUST 2003 VOL 301 SCIENCE



High-silica igneous rocks on Mars, 2004



Identification of quartzofeldspathic materials on Mars

Joshua L. Bandfield,¹ Victoria E. Hamilton,² Philip R. Christensen,¹
and Harry Y. McSween Jr.³

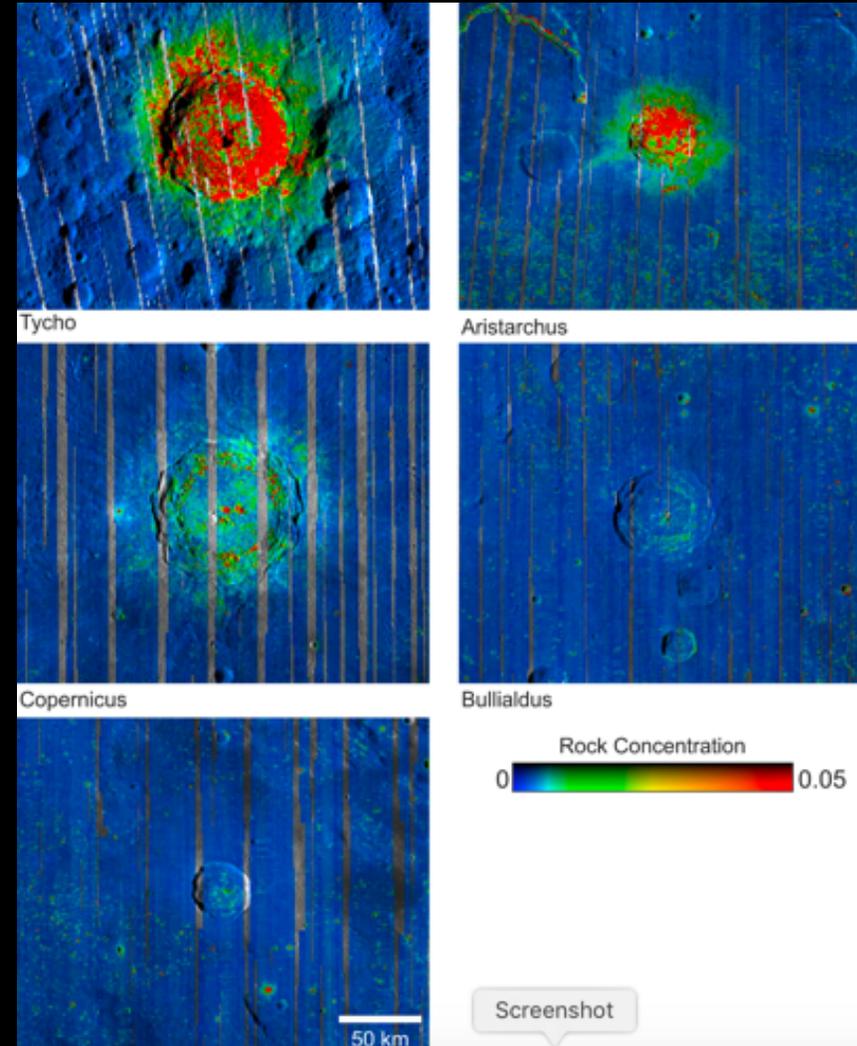
JOURNAL OF GEOPHYSICAL RESEARCH, VOL. 109, E10009, doi:10.1029/2004JE002290, 2004

Rock distribution on the Moon, 2011

Lunar surface rock abundance and regolith fines temperatures derived from LRO Diviner Radiometer data

Joshua L. Bandfield,¹ Rebecca R. Ghent,² Ashwin R. Vasavada,³ David A. Paige,⁴
Samuel J. Lawrence,⁵ and Mark S. Robinson⁵

JOURNAL OF GEOPHYSICAL RESEARCH, VOL. 116, E00H02, doi:10.1029/2011JEO



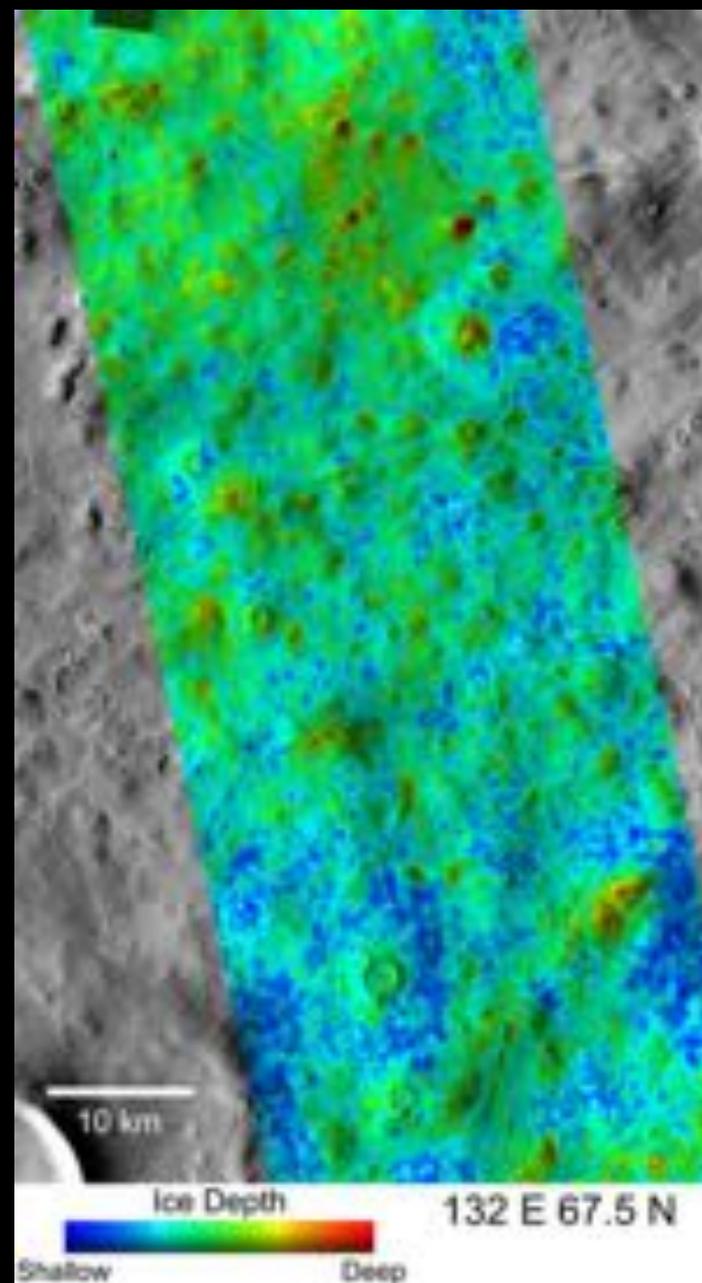
Depth to buried ice on Mars, 2007

LETTERS

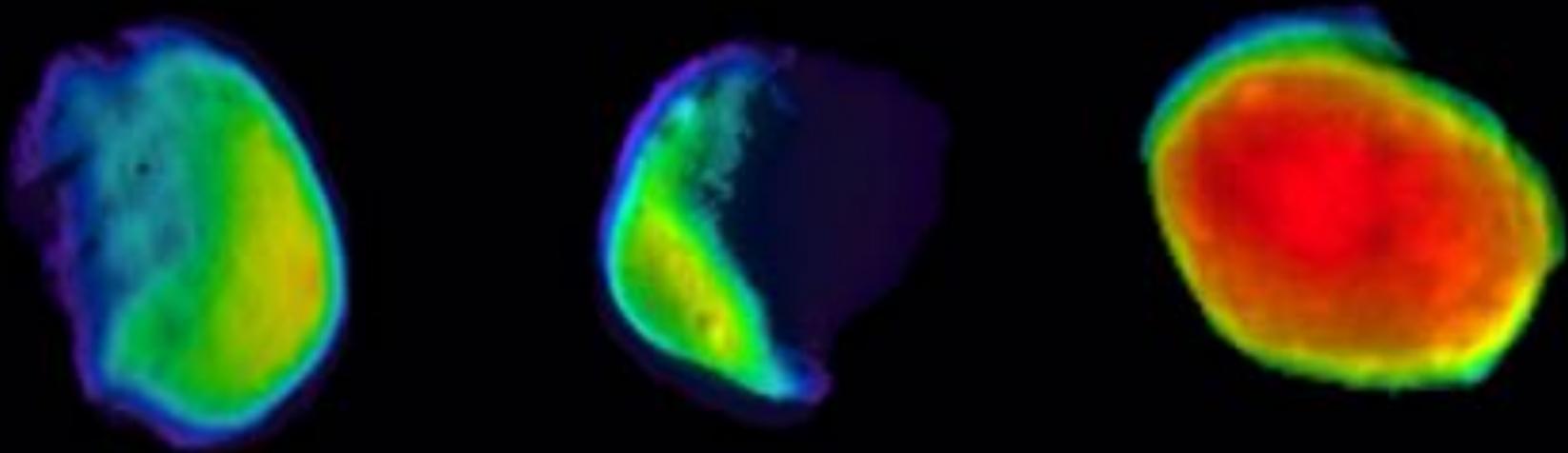
High-resolution subsurface water-ice distributions on Mars

Joshua L. Bandfield¹

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Temperature mapping of Phobos



Bandfield et al, 2019





