A mosaic of visible to near-infrared images of the surface of Mercury, obtained by the MESSENGER spacecraft on 14 January 2008. The circular feature in the upper right is the Caloris impact basin, 1500 kilometers in diameter. Results from the flyby are discussed in a special section beginning on page 58.


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Reflectance and Color Variations on Mercury: Regolith Processes and Compositional Heterogeneity
M. S. Robinson et al.

Volcanism on Mercury: Evidence from the First MESSENGER Flyby
J. W. Head et al.

Geology of the Caloris Basin, Mercury: A View from MESSENGER
S. L. Murchie et al.

Laser Altimeter Observations from MESSENGER’s First Mercury Flyby
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Mercury Cratering Record Viewed from MESSENGER’s First Flyby
R. G. Strom et al.

The Structure of Mercury’s Magnetic Field from MESSENGER’s First Flyby
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Mercury’s Magnetosphere After MESSENGER’s First Flyby
J. A. Slavin et al.

MESSENGER Observations of the Composition of Mercury’s Ionized Exosphere and Plasma Environment
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Where Have All Thoreau’s Flowers Gone?

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Shotgun sequencing of 27–base pair segments of messenger RNA from human kidney and immune cells identifies previously undescribed transcriptional units and splice junctions.
10.1126/science.1160342

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BREVIA: N₂O₅ Oxidizes Chloride to Cl₂ in Acidic Atmospheric Aerosol
Laboratory studies affirm that the oxidation of chloride ions in aerosols by N₂O₅ is a significant source of chlorine in the troposphere, a major reactant that helps form ozone.
10.1126/science.1158777

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S. Faham et al.
The structure of a sugar transporter suggests how these proteins may rearrange to permit the sugar to enter and leave the binding site on opposite sides of the membrane.
10.1126/science.1160406

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www.sciencenow.org
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Don’t Judge a Plant by Its Species
An ant, an aphid, and a milkweed are changing thoughts about community ecology.

African Lion-Killer Had Help
Virus conspired with tick-borne parasites and extreme droughts.

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SCIENCESIGNALING
www.sciencesignaling.org
THE SIGNAL TRANSDUCTION KNOWLEDGE ENVIRONMENT

REVIEW: Tissue Inhibitors of Metalloproteinases in Cell Signaling—Metalloproteinase-Independent Biological Activities
W. G. Stetler-Stevenson
TIMPs can act directly through cell surface receptors or indirectly through modulation of proteases.

PERSPECTIVE: The Cytoplasmic Tail of MUC1—A Very Busy Place
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The cytoplasmic domain of mucin 1 (MUC1) plays numerous roles in intracellular signaling pathways.

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SCIENCECAREERS
www.sciencecareers.org/career_development
FREE CAREER RESOURCES FOR SCIENTISTS

Educated Woman, Postdoc Edition, Chapter 18:
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M. P. DeWhye
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Taken for Granted: By the Numbers
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A committee calls for better government data collection about jobs for scientists.

In Person: Research in France
A. Bikfalvi
Understanding the French public research system is critical to foreign scientists coming into the country.

July 2008 Funding News
J. Fernández
Learn about the latest in research funding, scholarships, fellowships, and internships.

SCIENCEPODCAST
www.sciencemag.org/multimedia/podcast
FREE WEEKLY SHOW
Download the 4 July Science Podcast to hear about MESSENGER’s first Mercury flyby, possible clues to sudden infant death syndrome, preserving Iraqi antiquities, and more.
Science 321 (5885), 12-144.