

**“Recent Spacecraft Observations of Mars and the Distribution of Water”**  
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The National Aeronautics and Space Administration (NASA) has initiated a long-term systematic program of Mars exploration. The scientific objectives of this program are to: (1) search for evidence of past or present life, (2) understand the climate and volatile history of Mars, (3) determine the evolution of the surface and interior of Mars, and (4) prepare for human exploration. The common thread of these objectives is to understand water on Mars. The program seeks to identify past and present sources and sinks; interaction and exchange between subsurface, surface, and atmospheric reservoirs; and the evolution of the volatile composition over time. Water is a key to future exploration because it is vital to life, and there appears to be clear evidence that water has altered the face of Mars in the past. Currently, data are being collected by the Odyssey orbiting spacecraft. This talk will provide the status of our understanding of water on Mars from recently acquired data.