

## **MARS DEEP DRILLING REMAINS A HIGH PRIORITY**

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In 1992, The University of Texas Center for Space Research (CSR) submitted a proposal to the NASA Scout Program to drill a “deep” well on Mars. The proposal was unsuccessful. However, the mission remains viable, and can still be accomplished for a very low cost.

The science of this mission remains of utmost interest to the science community, and no deep drilling mission is scheduled currently. Deep drilling is the only way to verify the character of the Martian subsurface, particularly to characterize any water to be found there, and eventually to explore for liquid water.

During the preparation of the Scout proposal, a very strong team was forged, and several of the team members, including NASA Centers, have expressed a strong interest in pursuing this mission in the near future.

In its existing programs (GRACE, ICESAT, others), CSR has developed strong international ties, particularly with Germany. The GRACE partnership resulted in a sharing of mission expenses between the two countries. This type of partnership remains very viable for a Mars Deep Drilling Mission.

Baker Hughes, Inc., and the NASA Johnson Space Center have built and tested a prototype Mars deep drill, so the technology risk has been greatly reduced.

All of these factors come together to suggest that a very low cost, low risk mission can be proposed to NASA, either in response to a future Scout mission call, or as an independent international mission.