

Exploration of Mars (08)  
Robotic Mars Exploration (1)

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DRAGON DERIVED MARS LANDER FOR AFFORDABLE SCIENTIFIC AND HUMAN  
PRECURSOR INVESTIGATIONS

**Abstract**

SpaceX's Falcon Heavy and Dragon spacecraft could enable low-cost scientific and human precursor missions to Mars. The Dragon spacecraft, designed and developed to deliver cargo and crew to the International Space Station, already has most of the necessary capabilities to land on Mars. A mission would include launching a modified Dragon aboard a Falcon Heavy that would land on the Martian surface using the current abort thrusters. At a fraction of the cost of past and current missions, this concept enables near-term and affordable research on Mars.