

Recent results from the MAVEN mission

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The Mars Atmosphere and Volatile Evolution (MAVEN) mission has been making science observations from Mars orbit since November, 2014, with the science goal of assessing the role that loss of atmospheric gas to space has played in changing the Martian climate through time. To achieve this objective, MAVEN measures the energetic inputs to the Martian upper atmosphere from the Sun (“drivers”), the properties of the regions of the upper atmosphere from which escaping particles are drawn (“reservoirs”), and the different escape processes as they occur today (“escape”). These data, and the models used to help understand them, allow us to constrain the influence of escape on the evolution of the Martian atmosphere over time. In this presentation we will summarize the main findings of MAVEN over more than 4 years of science observations, with an emphasis on recent results released over the past year. We will then present the status and future science plans for the mission as the spacecraft’s orbit is changed to prepare for increased relay activities in the coming months and years.

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