

Abstract Submitted
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Effects of Solar Irradiance on the Atmosphere of Mars JONAH POLLENS-DEMPSEY, Eastern Michigan University — The MAVEN spacecraft has been in orbit around Mars for more than two years. This study focuses on variability in the neutral density observations obtained by MAVEN's accelerometer between February 2015 and April 2016. The main objective has been to quantify the correlation of these measurements with the solar irradiance, one of the main inputs to the Mars upper atmosphere. The correlation was examined for several short periods when the spacecraft was orbiting on the planet's dayside. The results indicate that Mars's upper atmosphere is more often under solar control when the radiation input from the Sun is more significant.

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