



## **Correlations between wave activity and electron temperature in the Martian upper ionosphere**

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Prior to the Mars Atmosphere and Volatile Evolution (MAVEN) mission, only two electron temperature profiles of the Martian ionosphere existed, made by the Viking landers in the late 70s. Since MAVEN's arrival at Mars in late 2014, electron temperature (and density) profiles have been measured every orbit, once every 4.5 hours. Recent analysis of this new dataset has shown that the Martian ionospheric electron temperature is significantly warmer than expected by factors of 2-3 above the exobase and within the upper ionosphere. We present correlations between electron temperature and electric field wave power (also measured by MAVEN), and discuss the possibility that such waves (which are likely produced by the Mars-solar wind interaction) may drive electron heating and contribute to the observed high temperatures.