

Mars thermospheric warming during the Planet Encircling Dust Event of 2018

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See Table 1 for a brief timeline of the PEDE-2018 storm.

Table 1. Timeline of the PEDE-2018 Evolution

Observation.: Narrative	Date(s)	Ls (deg)	Reference
MRO/MARCI: Onset of dust storm	1 June	185	Cantor and Malin [2018]
MRO/MCS: temperature signatures	2-4 June	186-187	Kass et al. [2019]
MVN/ACC: and NGIMS density signatures	8 June	189	Elrod et al. [2019]
MRO/MCS: Planet Encircling Dust Event	17 June	195	Kass et al. [2019]
MVN: periapsis to nightside	27 June	200	Elrod et al. [2019]
MRO/MCS: storm temperature peak	7 July	207	Kass et al. [2019]
MRO/MCS: storm enters decay phase	18 July	213	Kass et al. [2019]
MRO/MCS: storm end	mid-late October	270-280	Kass et al. [2019]

References

- Cantor, B. A., and M. C. Malin (2018), MRO MARCI Observations of the Evolution of the 2018 Planet-Encircling Dust Event, *AGU Fall Meeting Abstracts*.
- Elrod, M., K. Roeten, S. W. Bougher, R. Sharrar, and J. Murphy (2019), Structural and compositional changes in the upper atmosphere related to the PEDE-2018 dust event on Mars as observed by MAVEN NGIMS, *Geophys. Res. Lett.*, doi: 10.1029/2019GL084378.
- Kass, D. M., J. T. Schofield, A. Kleinböhl, D. J. McCleese, N. G. Heavens, J. H. Shirley, and L. J. Steele (2019), Mars Climate Sounder observation of Mars' 2018 global dust event, *Geophys. Res. Lett.*, doi:10.1029/2019GL083931.