

P5 Recent developments in planetary atmospheric modeling with WRF and MPAS.

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A planetary version of the WRF model has been developed and maintained over the past 15 years and has been applied to study of the atmospheres of Venus, Mars, Jupiter, Saturn, Titan, and Pluto. The Mars version of the model in particular has been used to examine time and length scales varying from boundary layer convection to orbital parameter driven variations in global climate. Starting in 2013, we have also been enhancing the MPAS core with planetary physics routines that we have developed for WRF. We will provide a review of the planetWRF and planetMPAS developments and results to date.