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Room:Convention Hall

Time:May 24 14:00-16:30

Classification and evaluation of noise and signal components in ENA data from Mars Express

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Characteristics of noise and signal of Neutral Particle Imager (NPI) on board of Mars Express was analysed. The NPI data contain various types of noise. We fitted a Gaussian mixture model to the recorded data for four of 32 channels of NPI and classified the data into multiple patterns. Each pattern would correspond to a different type of noise or signal. By examining the conditions of spacecraft position and attitude for each pattern, we will evaluate the quality of the recorded data.

Keywords: Mars, energetic neutral atom, ENA, Venus