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titled

DEVELOPMENT OF A METHODOLOGY FOR DATA INTEGRATION OF MULTIPLE DATASETS IN THE STUDY OF MARTIAN DUST STORMS

by

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Abstract

The research investigates the distribution of dust on Mars. In general, the study is inspired by the need to provide findings that will improve the study about extraterrestrial phenomena. The research explains the practical effects of extraterrestrial physics considering it entails assessing the extraterrestrial matter. The research seeks to validate the correctness of multiannual data pertaining to the optical depth of column dust, which would assist in determining the necessity of evaluating the existing map reconstruction approaches. The methodological section has several steps which combine qualitative and quantitative optical depth and visual imagery to define Martian dust storms. First, visible image datasets on Martian years between 24 and 27 and the CDOP map are reviewed. Second, there is the use of JMars or ENVI to develop image and map visualization. Lastly, graphic features are used to assess the dataset for each sol to record statistical features and the extent of matching of the dust storms. The results will be graphic and written.

Keywords: Mars Science, Mars Dust Storms, Mars Dust Climatology, Mars Data Analysis.