



Charged Particles in the Crustal Magnetic Field of Mars

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One way to address the Martian crustal magnetization is to use the classical source models, where the field created by a volume of magnetized material is compared with the observed one. These source models allow introducing additional constraints related to the available information of the magnetic field. In this context, our goal is to try to find the relevant features of the charged particle dynamics at low altitude in the Martian atmosphere. To this purpose, we analyze the motion of a charged particle moving in different uniformly magnetized sources and in the gravitational field.