



Deflection of solar wind protons from the Lunar magnetic anomalies

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The first measurements, which was made on the lunar orbits, has shown that Moon has no its intrinsic dipolar magnetic field. However the residual magnetization in returned lunar samples and also the anomalous magnetization of lunar surface (till several hundred nT) was found even in Apollo missions. Observations of Kaguya and Chandrayaan reveal the significant solar wind protons deflection from the lunar surface in particular from the magnetic anomalies regions. Such deflection implies that the magnetic anomalies may act as magnetosphere-like obstacles (mini-magnetospheres), modifying the upstream plasma. We examined the conditions in solar wind and estimated plasma parameters in solar wind and in crustal magnetic field. Then we made the estimation of the possibility of mini-magnetosphere and shock-like structure formation. Also we applied our calculations to the case of big anomaly.