



The moon plasma environment: present understanding and models

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The Moon, the Earth's satellite, attract an attention not only as celestial body but also as a source for mineral and other resources and as possible base for fundamental scientific researches. To present approaches to the concept of lunar orbiter for carrying out *in situ* measurements of Moon environment we tried to review the observational data of the lunar crustal magnetic fields beginning from the data of the Apollo and Luna missions till Lunar Prospector data. The investigation of the correlation between magnetic anomalies, their position related to the major basins and composition of the surface was made. Also the comparison of different models for the formation of the magnetic field anomalies and the models of the interaction of the solar wind and magnetic field anomalies was performed.

Such comparison is important for the investigation of the plasma environment around the Moon, which is the prime objective of the future Russian Luna-Glob mission scheduled for launch in 2010.

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