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СОЛНЕЧНЫЕ И МЕЖПЛАНЕТНЫЕ ИСТОЧНИКИ ГЕОМАГНИТНЫХ БУРЬ: АСПЕКТЫ КОСМИЧЕСКОЙ ПОГОДЫ

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Приведен краткий обзор современных представлений о солнечно-земных связях, отвечающих за передачу солнечных возмущений и генерацию магнитных бурь на Земле. Даны количественные оценки вероятности возбуждения магнитных бурь различными солнечными и межпланетными явлениями; сравнивается эффективность процессов генерации бурь различными типами течений солнечного ветра.

Ключевые слова: магнитные бури, вспышки, выбросы корональной массы, магнитные облака.

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SOLAR AND INTERPLANETARY SOURCES OF GEOMAGNETIC STORMS: SPACE WEATHER ASPECTS

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Abstract. A brief review of modern concept on solar-terrestrial links responsible for transportation of solar disturbances and generation of magnetic storms on the Earth is presented. Quantitative estimations for probabilities of magnetic storm generation by different solar and interplanetary phenomena are made and discussed, efficiencies of processes of magnetic storm generation by different large-scale solar wind streams are compared.

Key-words: magnetic storms, flares, coronal mass ejections, magnetic clouds.