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Possible influence of helio-geophysical factors on the realization of rockbursts

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The problem of rockburst forecasting is of a great social and economic importance. Several more important helio-geophysical and moon factors were investigated which seem to influence on the rockburst occurrence. Totally we investigated more than 700 events occurred at several coal mines of the former Soviet Union between 1950-1995 years. It has been shown that the events were appeared at rising and descending parts of the 11-year Sunspot cycle. The most of them were observed as well in 2-3 days after maximal development of the ring currents in the Earth magnetosphere. The most rockbursts were realized also during time intervals when the Earth rotational velocity demonstrated noticeable changes. And at the last, it was noted some visible tendency of the rockburst realization during new and full moon phases. A possible physical mechanism of helio-geophysical effects in rockburst realization is discussed.

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