



Interplanetary magnetic field and ^{10}Be

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Cross-correlation analysis has been performed between Beryllium10 (^{10}Be) and the geomagnetic activity index aa during the common period 1868-1985. The two parameters are well cross anticorrelated, with cross correlation coefficient (CCC) = 0.8. The index aa leads ^{10}Be by 1 year. The aa index is also well correlated to the product of the interplanetary magnetic field strength and the square of the solar wind speed (BV^2) during the interval 1963-1995. Hence we can predict the condition of interplanetary space before space age from ^{10}Be data. ^{10}Be is better correlated with aa index during the negative solar polarity ($qA < 0$) than during positive solar polarity ($qA > 0$) epochs.