

## **LONG-TERM VARIATIONS OF THE SOLAR PLASMA PARAMETERS AND GEOMAGNETIC ACTIVITY**

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We examine the dependence of the solar plasma parameters observed near 1 AU upon the level of solar activity during the 33-year period 1965-1997. The interplanetary magnetic field strength  $B$  and all the other plasma parameters namely: solar wind speed  $V$ , temperature  $T$ , number flux  $NV$  and entropy  $S$  display obvious solar activity cycle as well as magnetic cycle variation. The product  $VB$  and the geomagnetic activity as characterized by the index  $A_p$  display both of those cycles as well. The solar wind speed, temperature, number flux, the product  $VB$  and the geomagnetic activity index  $A_p$  are negatively correlated with the level of solar activity, they lead the solar activity by 2-3 years. They are also positively correlated with the solar activity, as they lag by 1-3 years.