Fourteen years of geomagnetic daily variation at Mario Zucchelli Station (Antarctica)

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Abstract

During the 1986-87 austral summer a geomagnetic observatory was installed at the Italian Antarctic Base Mario Zucchelli Station. In the first three years continuous time variation monitoring and absolute measurements of the geomagnetic field were carried out only during summer expeditions. Starting 1991 an automatic acquisition system, operating through all the year, was put in operation. We present here some peculiarities of the daily variation as observed for fourteen years (1987-2000). The availability of a long series of data has allowed the definition of seasonal, as well as solar cycle effects, on short time variations as observed at a cusp-cap observatory. In particular, contrary to mid latitude behaviour, a clear dependence of the daily variation amplitude on the global geomagnetic K index was well defined.

Keywords

Geomagnetic daily variation, polar areas

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References

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KEYWORDS

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