



## **On the occurrence of Earth's magnetic field changes during the last century**

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The Earth's magnetic field is characterized by different temporal chaotic fluctuations such as reversals, excursions, archeomagnetic and geomagnetic jerks. During the last decades the number of geomagnetic jerks has increased up to recent rates of one jerk every 3 years. In addition, the dipolar field is continuously decreasing since the time we had geomagnetic instrumental or historical measurements and the non-dipolar harmonic contributions are taking an important role in the present geomagnetic field behaviour, as reflected by the rapid growth of the region covered by the South Atlantic Anomaly. These mentioned facts seem to indicate that something is changing in the Earth's outer core where the main part of the geomagnetic field has its origin, pointing out a possible imminent reversal or excursion. In this work we analyse with different techniques the occurrence of this geomagnetic changes during the last decades, paying attention to the most recent years, thanks to the most accurate geomagnetic data provided by the ESA's Swarm satellite mission