Abstract Details

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Abstract title:

Geomagnetic Field Disturbances in Coimbra (Portugal) and The Earthquake of February 28 in 1969

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The earthquake of February 28 in 1969 occurred in the horseshoe plain located in the Atlantic Ocean to the NW of Sagres, having magnitude of 8.
Surveys conducted in the days after the earthquake include descriptions of phenomena that could be associated with changes in the Earth's magnetic field. The work is based on data from the records obtained by the Magnetic Observatory of the University of Coimbra, located in Coimbra (Portugal). Published data of average values, calculated in time intervals of one hour, of the horizontal and vertical components of the field and magnetic declination are used. Data for February, March and April of 1969 are analysed, with special attention being given to the month of February, before and after the earthquake occurrence and March. The measured values are compared with the values provided with the model IGRF12 for the same region and date of occurrence.
Basically major magnetic field disturbances are identified on days 3, 11 and 27 of February. The disturbances are observed in the horizontal component and in the vertical component of the magnetic field as well as in the values of the magnetic declination.