**OBSERVED GEOMAGNETIC FIELD ANOMALIES AND POSSIBLE CONSEQUENCES**

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Geomagnetic field data recorded by Magnetic Observatories, located in the Iberian Peninsula, at the end of February 1969, and inserted in Anais of the Observatories referred in the form of average hourly values of the vertical field, horizontal field and magnetic declination [1],[2] were used in the present work. The analysis of the records studied shows the occurrence of identical anomalies in days 26th and 27th but with less amplitude in day 26th. At the end of the great variation occurred on day 27 it is observed in all the Observatories an increase of the vertical component by about 9-10 nT and a decrease of the horizontal component from -35 to -22 nT. The comparison of the values obtained in Coimbra on February 26th and 27th shows an increase in the intensity of the field, between hour 10 and hour 15, which is essentially due to an increase in the horizontal component of the field. Another increase was observed, between hours 18 and 20, which is essentially due to an increase in the vertical component of the field. Given that these are variable magnetic fields, we can say that the horizontal component may be associated with ion movement in the vertical direction while the increase of the vertical component of the field may be associated with horizontal movement of ions. If this hypothesis is valid, we could have had, on the 27th, mainly vertical followed by mainly horizontal, ion movements. Between hours 14 and 17 there were large variations in the horizontal component and in the vertical component that led to significant changes in the slope and direction of the field. Thus, we will have electric fields associated with magnetic fields changing in intensity and direction, in an ocean environment.

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