



Auroral electrojet and magnetospheric ring current effects in the disturbance field recorded at European Observatories

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The disturbance geomagnetic field recorded at European observatories in the time interval 1-10 august 2010 is studied and discussed in terms of the effect of the auroral electrojet and magnetospheric ring current. The two current systems form as results of the solar wind and heliospheric magnetic field interaction with magnetosphere and ionosphere, and are represented by the AE and, respectively, the Dst index. A moderate geomagnetic storm (Dst min = - 70 nT) occurred in the study interval (August 3-4), with is recovery phase spanning to the August 10. Data were processed to show to disturbed variation by subtracting a mean diurnal solar quiet variation inferred from the recordings in the five quietest days of the month. The geographical distribution of the disturbance field is discussed as well.