

AUTUMNAL ASYMMETRY IN SEASONAL VARIATIONS OF THE GEOMAGNETIC ACTIVITY

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Seasonal variations in geomagnetic activity were studied for the period of 1990-2007 using Dst and AE indices. Over 150 events, characterised by the increase in geomagnetic activity of varying strength (from -90nT up to -1800 nT), were statistically analysed. Although the Russell McPherron effect plays major role in the equinoctial asymmetry of the geomagnetic activity occurrence, other effects may also take place. During this study we found a statistically significant October-November peak in the geomagnetic activity occurrence for the Northern Hemisphere. This peak was sufficiently larger than March-April peak. Hypotheses for the cause of such effect are discussed.