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SEASONAL VARIATION OF WORLDWIDE SQ (H)

Abstract

The seasonal variation of world wide Sq (H) exhibit north, south, east and west asymmetry in the study area. Data from 64 geomagnetic stations for the year 1996 spread across the globe were analyzed for the study of world wide sq (H). The seasons were classified as follows: Winter (November, December, January and February), Summer (May, June, July, August), Autumn (September, October) and Spring (March, April). Latitudinal and Longitudinal profiles were obtained from the cross sections made on the contour plots. The results depict that the geomagnetic stations at high latitudes N/S has the highest magnitude of Sq (H) of about 420nT. The equatorial region experienced an abnormal enhancement in Sq (H) magnitude between 220-320nT. This enhancement may be as result of equatorial electrojet effect. It was observed that high magnitudes in Sq (H)nT at the high latitudes were pronounced at eastern part of the globe.