



Features of Sq magnetic variation at station Swider during registration period 1921-1967

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The solar quiet daily variation in the horizontal component of the magnetic field measured at Polish station Swider (Geogr. Lat. 52.12, Geogr. Long. 21.25) during the long period 1921-1967 is studied and compared with Sq variations registered at several stations localized in two ranges of latitudes, namely low-latitude stations Honolulu, Kakioka, Cheltenham, Fredericksburg, and moderate-latitude station Abisko. Sq variation is obtained by averaging the H component data with one hour resolution over the 5 most quiet days of the month. It is well known that the dominant role in the Sq variation forming belongs to the current system generated by tidal motion due to solar illumination periodicity and neutral winds blowing ionization across magnetic field lines. We discuss the seasonal changes and long-term development of the current system which can be deduced from Sq variation data at Swider.