Global characteristics of drift measurements using Digisondes; synchronised drift Measurements

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Modern digital ionosondes provide routine ionospheric drift measurements in addition to classical vertical ionospheric sounding. The data measured by Digisonde network are shared in the international database GIRO forming a unique Digisonde drift database on a global scale.

Various papers dealing with variety of measurements of the ionospheric plasma drifts have been published. Most of the studies have focused on the equatorial region, much less attention has been paid to the drift behavior in mid-latitudes. Up to now a complex information showing various aspects of the drift characteristics is still missing. The core of the paper is analysis of the ionospheric plasma drift behavior and new information about plasma drift characteristics in a global scale. Special attention is paid to European region using data from European-network of Digisondes. A special synchronised drift measurements for stations Pruhonice and Sopron (distance about 300 km) are presented and discussed.

Our results can to be further implemented into the ionospheric variability models and predictions.