



GPS ionospheric scintillations monitoring: bipolar capabilities during IPY

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Several European Institutions manage ionospheric scintillation monitors of the same type: GISTM (GPS Ionospheric Scintillation and TEC Monitor). They are specially modified GPS receivers capable of recording the phase and amplitude of the L1 signals during events of ionospheric scintillation and values of ionospheric TEC (Total Electron Content) from L1 and L2 signals. These receivers have been installed at high latitudes of both the hemispheres starting from 2001 providing information on the origin, evolution and dynamics of the ionospheric irregularities, with related studies published in several peer-reviewed papers.

This paper gives an overview of the current capabilities coming from the synergy of different groups working together for the understanding of the ionospheric plasma under disturbed conditions.