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Characteristics of the polar wind ion flux on ∼20000 km altitude

D. Chugunin

Spase Research Institute of RAS, Space Plasma Dep., Moscow, Russian Federation (dimokch@iki.rssi.ru)

Characteristics of the polar wind ion flux on ∼20000 km altitude are presented. Measurements of the ion fluxes were made by Hyperboloid instrument onboard Interball-2 satellite. Characteristics were done for ionospheric H+, He+ and O+ ion moving upward from the sunlit polar cap in the period of solar minimum. From the analysis it were excluded measurements when simultaneously high energy ion and electrons were detected. Cleft ion fountain ions also were excluded from the statistics. It was found with high probability that cases when only H+ ion were detected (another didn't have enough velocity value to overcome positive potential barrier) is the polar wind flux. The characteristics of that fluxes have very good correspond to several models simulations and are n∼1.5 cm-3, Vpar∼21 km/s, par∼3500 , Tperp∼2000 . In case when also He+ and O+ ions were detected the temperatures were significantly higher modeled ones, and parallel velocity of O+ ion occurs higher model in several times.