

ION DISTRIBUTION FUNCTION CHARACTERISTICS OF THE POLAR WIND ON ~20000 KM ALTITUDES

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Characteristics (density, parallel velocity, temperature) of polar wind ions (H^+ , He^+ , O^+) are presented measured on Interball-2 satellite by Hyperboloid mass-spectrometer. Presented characteristics were measures during quiet times and minimum solar activity above sunlit ionosphere. From analysis measurements with auroral and ion cleft fountain outflow were excluded. It was found that cases when only H^+ ions reached the detector are revealed measurements of the polar wind. Characteristics of the ions very good coincides with model calculations. In other cases, when both H^+ and O^+ ions reached the detector, it was found that the temperatures of ions are much higher than modeled and O^+ ion flux parallel velocity was higher modeled several times. Moreover it was found that polar wind outflows were detected in the region with minimum polar rain intensity.

polar wind, M-I coupling

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