

The impact of interplanetary magnetic field intensity on stratospheric polar air circulation form

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The variations of the Solar-climate changes over longer periods occur as well. In the search of a physical mechanism it is important to examine the Sun's output energy over short periods and its influence in the Earth's atmosphere. After reconnection among interplanetary and Earth's magnetic field, the Solar wind particles get into Earth's atmosphere mostly in the polar magnetic funnel. Proton and electron separate, the Lorentz force affect them, electrons deviate on the right, the protons on the left and they are moving through Earth's atmosphere along resultant magnetic field lines (vorticity moving). Because of interaction with air atoms and molecules which concentrations increases, Solar wind particles losses part of its kinetic energy on the impel of the air circulation (cyclone and anticyclone). Interplanetary magnetic field is very weak at minimum Solar activity and the impact of geomagnetic field increases on resultant magnetic field. Stratospheric polar air circulation form depends upon the relation of interplanetary and Earth's magnetic field intensity. In this paper we will tray to explain possible physical mechanism of Solar wind impact on polar cyclone circulation.