

Ulysses Observations of the Polar Solar Wind - - the Outer Boundary
Condition for the Interpretation of Coronal Data

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Observations by the Ulysses spacecraft from 1993 through the present. can be used as outer boundary conditions for the interpretation of data acquired by remote sensing of the polar corona by white light. and UV observations with the Spartan 201 and SOHO, by X-ray observations with Yohkoh, and by stimulation data obtained by ground-based radio techniques. During this period, the polar solar wind was relatively free of large-scale interaction regions and transient disturbances. The plasma and field data acquired by Ulysses place relatively stringent constraints on the fluxes of mass, momentum, energy, helium abundance, magnetic field, and Alfvén waves in the solar wind emanating from the polar coronal holes. Some of the fine structures (e.g., microstreams and pressure balance structures) in the polar solar wind must also be related to solar phenomena or structures. The Ulysses data will be reviewed, with special attention paid to the solar-wind conditions corresponding to the times of the Spartan 201 observations,