The induced scattering of Alfven waves in the fast solar wind

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The analysis of energy balance of coronal holes gives that to accelerate the fast solar wind streams the energy flux of the order of 800 erg/cm² s is needed. Such flux can be originated in processes of impulsive reconnection of magnetic field lines in the coronal base and is accompanied by the Alfven and fast magnetosonic waves generation (Axford and McKenzie model).

On the basis of kinetic equation the model for the evolution of Alfven waves in solar wind is suggested. For the dominant mechanism of dissipation of Alfven waves the induced scattering of these waves by plasma ions are considered.