



Magnetic field turbulence spectra observed by Wind from 1994 to 2010

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We have analyzed the magnetic field turbulence spectra of >100 000 hourly solar wind intervals from 1994 to 2010 obtained by the Morlet wavelet transform of the IMF instrument measurements aboard the Wind spacecraft. The time resolution of the magnetic field data (normally 92 ms and occasionally 46 and 184 ms, obtained as onboard averages of the 22.7 ms measurements) allows the investigation of both inertial and dissipation ranges. For each hourly spectrum, we compute the inertial and dissipation range spectral indices and the spectral break frequency. We investigate the dependencies of the spectral parameters on the magnetic field and plasma conditions. We also investigate the spectrum anisotropy in directions parallel and perpendicular to the mean magnetic field.