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## Scale dependent anisotropy of electric field fluctuations in solar wind turbulence

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We study the variation of average powers and spectral indices of electric field fluctuations with respect to the angle between average flow direction and the mean magnetic field in solar wind turbulence. Cluster spacecraft data from the years 2002 and 2007 are used for the present analysis. We perform a scale dependent study with respect to the local mean magnetic field using wavelet analysis technique. Prominent anisotropies are found for both the spectral index and power levels of the electric power spectra. Similar to the magnetic field fluctuations, the parallel (or antiparallel) electric fluctuation spectrum is found to be steeper than the perpendicular spectrum. However the parallel (or antiparallel) electric power is found to be greater than the perpendicular one. Below 0.1 Hz, the slope of the parallel electric power spectra deviates substantially from that of the total magnetic power spectra, supporting the existence of Alfvénic turbulence.