Turbulence and magnetic reconnection

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We propose a technique to correlate the turbulence and magnetic reconnection. The turbulence is to be measured with the new techniques which make use of the position-position-velocity data cubes, while the magnetic field is to be measured using the far infrared polarization from dust. Using the Velocity Coordinate Spectrum (VCS) technique, which we have recently tested both numerically and with the 21cm Arecibo telescope data, we show that it is possible to map the variations of the characteristics of turbulence which arise from turbulent reconnection of magnetic fields. The latter change of topology are tested with the use of dust alignment polarization data.