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Kolmogorov-like and Iroshnikov-Kraichnan-like scaling in solar wind turbulence.

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Scaling properties of structure functions has been long recognised as an important factor in studies of solar wind turbulence. Direct comparison of the structure function scaling with that predicted by Kolmogorov 1941 (K41) and Iroshnikov-Kraichnan (IK) phenomenology is, however, extremely difficult due to data considerations as well as the presence of intermittency. We compare values of intermittency free scaling exponents for velocity and magnetic field magnitudes as well as quantities used in conservative form of MHD equations. We find that velocity and magnetic field magnitudes exhibit scaling closer to that of Iroshnikov-Kraichnan while other quantities show Kolmogorov-like scaling.