

EGU21-14974

<https://doi.org/10.5194/egusphere-egu21-14974>

EGU General Assembly 2021

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## Cross helicity of magnetic clouds observed by Parker Solar Probe

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Magnetic clouds are large-scale transient structures in the solar wind with low plasma  $\beta$ , low-amplitude magnetic field fluctuations, and twisted field lines with both ends often connected to the Sun. We analyse the normalised cross helicity,  $\sigma_c$ , and residual energy,  $\sigma_r$ , in magnetic clouds observed by Parker Solar Probe (PSP). In the November 2018 cloud observed at 0.25 au, a low value of  $\sigma_c$  was present in the cloud core, indicating that wave power parallel and anti-parallel to the mean field was approximately balanced, while the cloud's outer layers displayed larger amplitude Alfvénic fluctuations with high  $\sigma_c$  values and  $\sigma_r \sim 0$ . These properties are compared and contrasted to those found in clouds observed by PSP at larger heliocentric distances. We suggest that low  $\sigma_c$  is likely a common feature of magnetic clouds given their typically closed field structure, in contrast to the generally higher  $\sigma_c$  found on the open field lines of the solar wind.