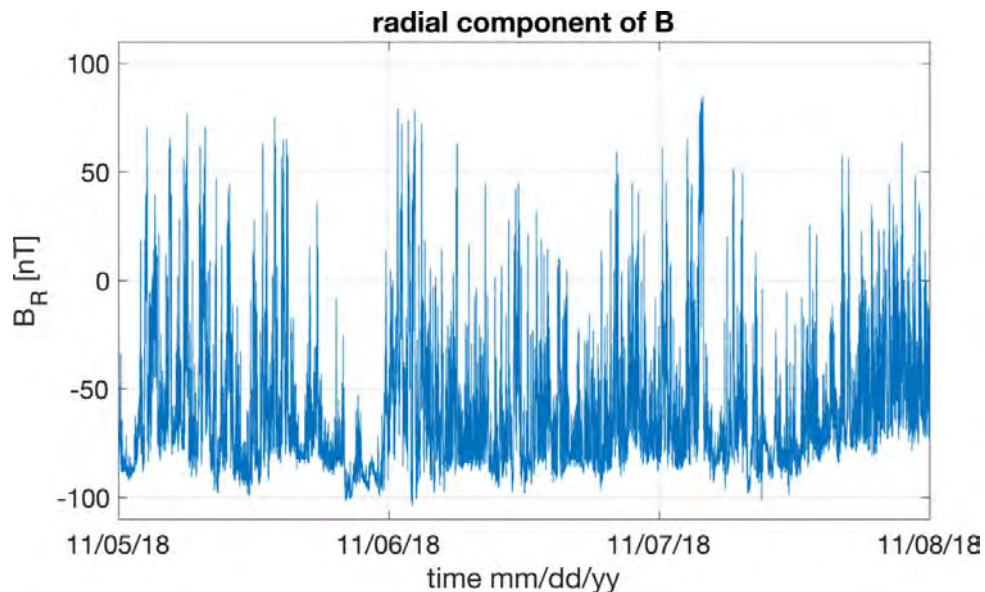


# Long Memory in Switchbacks

[Dudok de Wit et al., ApJS 246 (2020)]



- Switchbacks are omnipresent reversals of the magnetic field that are important because they strongly affect the dynamics of the solar wind at perihelion
- From their statistical properties only, these switchbacks are found to be :
  - multifractal (self-similar, without a typical scale)
  - deeply rooted in the corona (long memory)
  - turbulence outside of them has a more extended  $1/f$  spectral range (= more pristine solar wind)



Power spectral density of  $B_R$  with switchbacks and away from switchbacks

