

# Radial Evolution and Kinetics of Ion Species with Helios

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- Despite being measured in the 1970s, Helios data can still be exploited to understand the inner heliosphere
- For kinetic studies, having fits to the proton core, proton beam and alpha-particles is important
- We extended previous code to fit the proton beam in Helios 3D velocity distribution functions
- We show various statistics and radial dependencies of ion populations, including the evolution of each ion population in  $\beta$ -anisotropy space
- This is a good start for more in-depth kinetic studies considering instabilities and evolution of the solar wind
- Future work includes adapting the beam fit for slow solar wind

