^{3}He-rich Solar Particle Mean Free Paths

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We have used the largest ^{3}He-rich flux events of Kahler et al. (1 985) to examine potential wave-particle interactions as the particles travel from the Sun to 1 AU. We: 1) search ISEE-3 magnetic field data for in situ waves generated by beam instabilities, 2) examine the particle mfp determined by scattering due to interactions with preexisting "fossil" waves and turbulence, and 3) intercompare the latter with the mfp determined from the particle measurements themselves. Our goal is to attempt to explain why the ^{3}He-rich events at 1 AU appear to be "scatter-free".

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