Figure 1. from The Pitch-angle Distributions of Suprathermal Ions near an Interplanetary Shock null 2020 APJL 888 L22 doi:10.3847/2041-8213/ab629d https://dx.doi.org/10.3847/2041-8213/ab629d © 2020. The American Astronomical Society. All rights reserved.

# of He<sup>2+</sup> PHAs (a) (b) 3000 -20° |v| (km/s)  $|\vec{V}|$  (km/s) PSV  $10^{-14}$ ws 3 ' 10<sup>19.5</sup> PSD (arb. unit) 10<sup>-16</sup> 10<sup>-18</sup> 10<sup>19.0</sup> 1018.5 -1.01.0 0.8 0.6 0.4 10<sup>-19</sup> (c) 0.2 0.5 1.0 1.5 W<sub>sw</sub> -1.0 -0.5 0.0 *U* 0.5 With Weight No Weight 1.2  $1.5 \leq w_{sw} \leq 4$ DSD 1.0 Normalized F Normalized P 0.2 0.2 0.01.0 0.01.0 0.5 -0.5 0.0 µ -0.5 0.5 0.0 µ 1.0 1.75 With Weight No Weight 1.50  $0.5 \le W_{sw} \le 1$ 1.50  $0.5 \le W_{sw} \le 1$ Normalized PSD 1.00 0.75 0.75 0.50 S 1.25 1.00 Z No.75 0.75 0.25 0.25 0.001.0 -0.5 0.0 U 0.5 1.0 -0.5 0.5