

Abstract Submitted
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Density correlations between solar wind and pick-up ions with New Horizons/SWAP near 11 AU BRENT RANDOL, UTSA/SwRI, DAVID MCCOMAS, SwRI/UTSA — The Solar Wind Around Pluto (SWAP) instrument aboard the New Horizons spacecraft measured ion energy spectra of the solar wind and pick-up ions between 11 and 12 AU in late 2008. We report on detailed fitting of these spectra using an empirical model that includes major solar wind ions (H^+ , He^{2+} , and O^{6+}) as well as pick-up ions (from the interstellar and inner sources). We find a correlation between the densities of the solar wind H^+ ions and all other populations. The two strongest correlations are with the interstellar pick-up ions and the inner source pick-up ions. These results could have implications for transport of pick-up ions through the heliosphere.

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