

Abstract Submitted
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Analyzing Interstellar Gas Flow Distributions Observed with IBEX Using a Maximum Likelihood Method TREVOR LEONARD, Space Science Center & Department of Physics, University of New Hampshire, IBEX-LO TEAM — The Interstellar Boundary Explorer (IBEX) observes interstellar neutral gas flow distributions of species that remain neutral to a large part in the interstellar gas, such as He and O. In order to fit model distributions to the data a maximum likelihood method is used to extract more information even with low counting statistics, compared with using a least chi square fit. Parameters, such as peak position, distribution height, width, and skewness may be obtained with the maximum likelihood method to characterize, for example, flow velocity, density, and temperature of the interstellar source as well as ionization rates. We will give an introduction to the application of the maximum likelihood method to the IBEX observations.

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