

Abstract Submitted
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AKARI MLHES Data Set Processing with FAST RACHAEL TOMASINO, TOSHIYA UETA, University of Denver, ISSEI YAMAMURA, Institute of Space and Astronomical Science, Japanese Aerospace Exploration Agency — The AKARI MLHES (excavating Mass Loss History in Extended dust shells of Evolved Stars) data set is the largest collection of the most sensitive far-infrared images of the cold extended circumstellar dust shells of evolved stars and it is the key to understanding the dusty mass loss phase of stellar evolution. This data will be processed with a new imaging tool kit FAST (FIS-AKARI Slow-scan Tools). This program allows for an interactive assessment of the data quality and on-the-fly corrections to the time-series data on pixel-by-pixel bases in order to manually correct glitches that would have been missed in the automated process. These corrections include: eliminate bad on-sky calibration sequences, flag out cosmic-rays and their after-effect affected time-series readings from the data stream and remove real sources from local sky-flat frames, among other options. These extra processes result in better-calibrated noise reduced images and would be by far the best detection limit among all existing far-infrared data of extended evolved star dust-shells. Suggestions to improve to the GUI interface and problems with the data visualization were recorded and plan to be implemented in subsequent versions.

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