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ORIGINAL ARTICLE

The Herschel PACS photometer calibration

A time dependent flux calibration for the PACS chopped point-source photometry AOT mode

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Abstract We present a flux calibration scheme for the PACS chopped point-source photometry observing mode based on the photometry of five stellar standard sources. This mode was used for science observations only early in the mission. Later, it was only used for pointing and flux calibration measurements. Its calibration turns this type of observation into fully validated data products in the Herschel Science Archive. Systematic differences in calibration with regard to the principal photometer observation mode, the scan map, are derived and amount to $5-6$ %. An empirical method to calibrate out an apparent response drift during the first 300 Operational Days is presented. The relative photometric calibration accuracy (repeatability) is as good as 1 % in the blue and green band and up to 5 % in the red band. Like for the scan map mode, inconsistencies among the stellar calibration models become visible

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