Correcting the ISOCAM field-of-view distortion.

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We define the distortion effects as any departure from an ideal detector, as described by the standard FITS astrometry keywords. For ISOCAM, we model the distortion as a combination of a zero-point offset and an overall distortion pattern described by a 3^{rd} order polynomial including cross-terms.

In order to provide more accurate measurements of the ISOCAM field-of-view distortion, the positions of over 6000 stars observed by ISOCAM were compared with those measured by the Two Micron All Sky Survey (2MASS). We find that our model can duplicate the discrepancy between the ISOCAM observed and the 2MASS positions to a 1-σ accuracy of about 0.1 pixels. In this contribution we describe the procedure to determine the magnitude of the ISOCAM distortion, the implementation of a distortion correction method and the subsequent effects on ISOCAM astrometry, mosaicking and flux calibration.