SYSTEMATIC COMPARISON OF ISOPHOT AND DIRBE SURFACE BRIGHTNESS CALIBRATION

Philippe Héraudeau[1], Péter Ábrahám[12], Ulrich Klaas[1], Csaba Kiss[2]

[1] *Max–Planck–Institut für Astronomie, Königstuhl 17, D-69117 Heidelberg, Germany*
[2] *Konkoly Observatory,P.O. BOX 67, Budapest, H-1525, Hungary*

The DIRBE database is the most extensively used reference for surface brightness calibration in the infrared. We performed a thorough analysis of the ISOPHOT surface brightness calibration using a large number of observations and reduced using PIA. This includes all large rasters, absolute photometry observations and minimaps in the ISO archive. We will describe the method we used at the following steps of the comparison: a) retrieve DIRBE values for each ISOPHOT observation, b) interpolate DIRBE values at the proper wavelength; c) color correct the data and c) take into account the smaller beam size of ISOPHOT using the ISSA maps will be described. Finally we will present and discuss our preliminary results for all the filters as transformations between the 2 photometric systems.