ISOCAM Field of View Distortion

Measurements and Correction

Status Report

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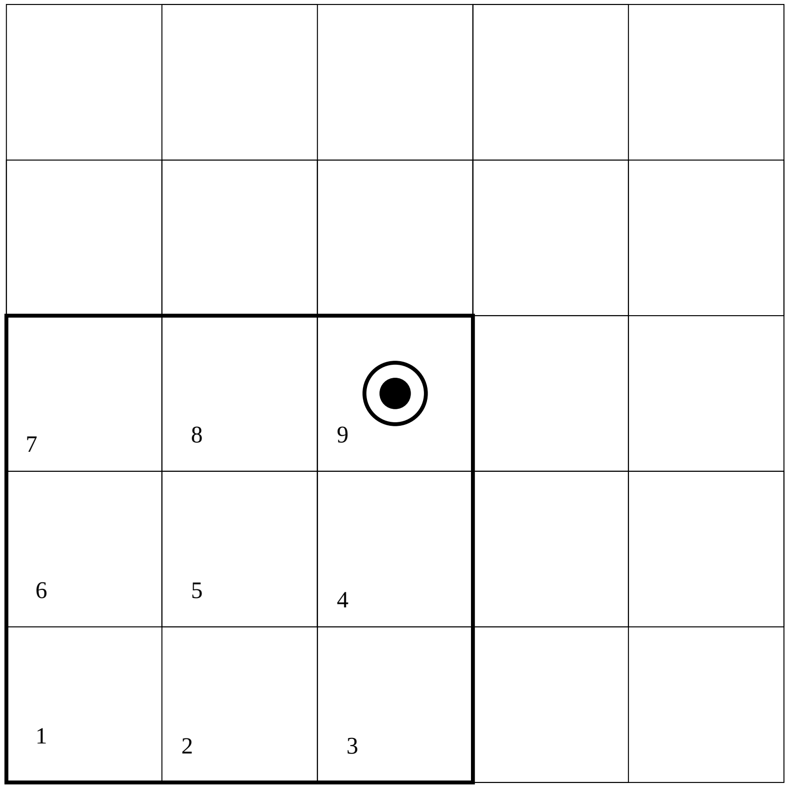
Who's next ?

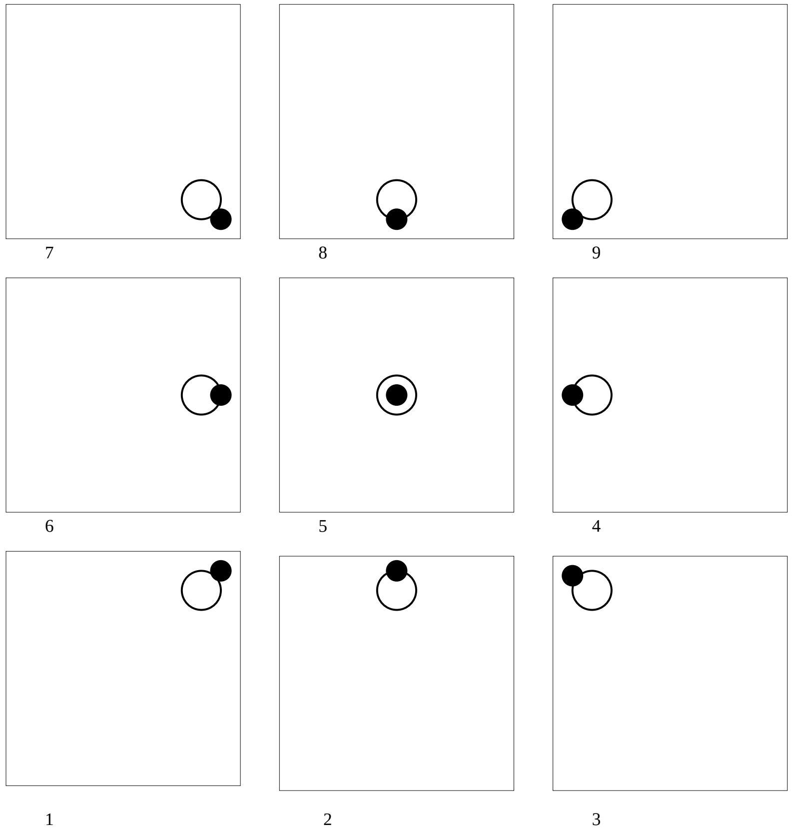
Requirements

Tools to correct for the distortion	**• projection** **is projection optimal ?**
Calibration files **forward and <u>backward</u>**	**•filter** **•lens PFOV** **∼lens jitter** **Fabry mirror ?**

Measurements : principle



Ideal 3 by 3 raster observation of a point source



Images of an ideal (O) and real (•)raster of a point source

Measure of the point source position asuming no displacement along the optical axis

Measurements : Requirements

Measurements	Requirements	Solutions
point source position	0.1 pixel test on Jitter	PSF fitting no 1.5 arcsec
relative pointing accuracy	0.01 pixel	ok
dataset	position at center good detector sampling lens jitter control good S/N	Gamma ray burst Straylight

Measurements : Status

- **Only forward calibration files have been so far produced**
- **Not all configurations are available**
- **Some configurations are wrong**

Name of a calibration file : lw+pfov+side+filter.dis

ﬄ **The situation is not as bad as it appears !**

Left/Right problem : better use wrong lens position than no correction

Filter problem : better use the nearest filter.

Wrong files : not worse than without correction

dataset	FCVF	PFOV	Jitter	file	comments	derived files
GRB	LW10	6”	Left	lw6asl10	mild S/N	lw6asl3 lw6asl2??
GRB	LW10	6”	Right	old lw6asr10	mild S/N	lw6asr9 lw6asr8 lw6asr7 lw6asr6? lw6asr5?? lw6asr4?? lw6asr1??
GHOST	LW3	6”	?	lw6asr3	good S/N	
GHOST	12μm	6”	?	lw6asr10	good S/N	
GHOST	7μm	6”	?	lw6asr2	good S/N	
GRB	LW10	3”	Right	lw3asr10	mild S/N	lw3asr1??
GHOST	LW3	3”	?	lw3asr3	good S/N	
GHOST	LW2	3”	?	lw3asr2	good S/N	

- **No Left files at 3”** • **No lw3asr4,5,6,7,8,9** • **No lw6asl1,4,5,6,7,8,9**

Future plans

- **Brush-up of calibration files**
- **Production of CVF files (GHOST)**
- **Production of backward calibration files**
- **Assesment of measurement methods : impact of transients**
- **Assesment of correction methods : CVF / Filter**
- **Comparaison with instrument model ?**

At least 2 Man/month (including week-ends)

Who's next ?