

V&V Reference Report

L2 ASCDS Version : 10.2.4

Observation 15722 - L2 Version 1
Chandra X-Ray Center

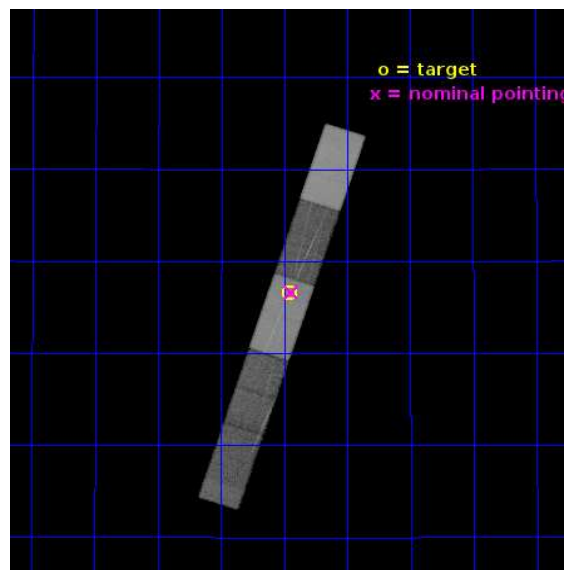
L2 Processing Date : Oct 23 2014

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1 Front

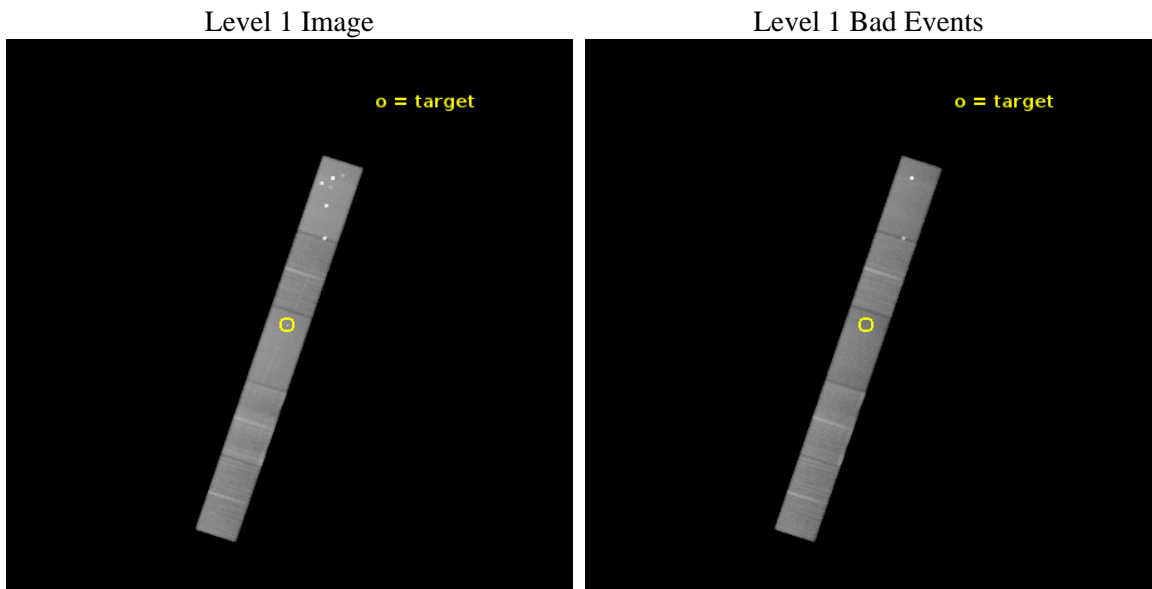
seq_num	200935	Sequence number
obs_id	15722	Observation id
title	Coronal and Shock Emission in the Accreting T Tauri Star RY Tau	Pr
observer	Dr. Stephen SKINNER	Principal investigator
object	RYTau	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	65.489167	Observer's specified target RA [deg]
dec_targ	28.443194	Observer's specified target Dec [deg]
ra_nom	65.485749442836	Nominal RA [deg]
dec_nom	28.444017879807	Nominal Dec [deg]
roll_nom	108.15825922946	Nominal Roll [deg]
revision	1	Processing version of data
ontime	87589.099385858	Sum of GTIs [s]
livetime	85524.438815856	Livetime [s]
ontime5	87589.099385858	Sum of GTIs [s]
ontime6	87589.066895783	Sum of GTIs [s]
ontime7	87589.099385858	Sum of GTIs [s]
ontime8	87589.02585578	Sum of GTIs [s]
ontime9	87587.243755579	Sum of GTIs [s]
l2events	411561	Number of level 2 events



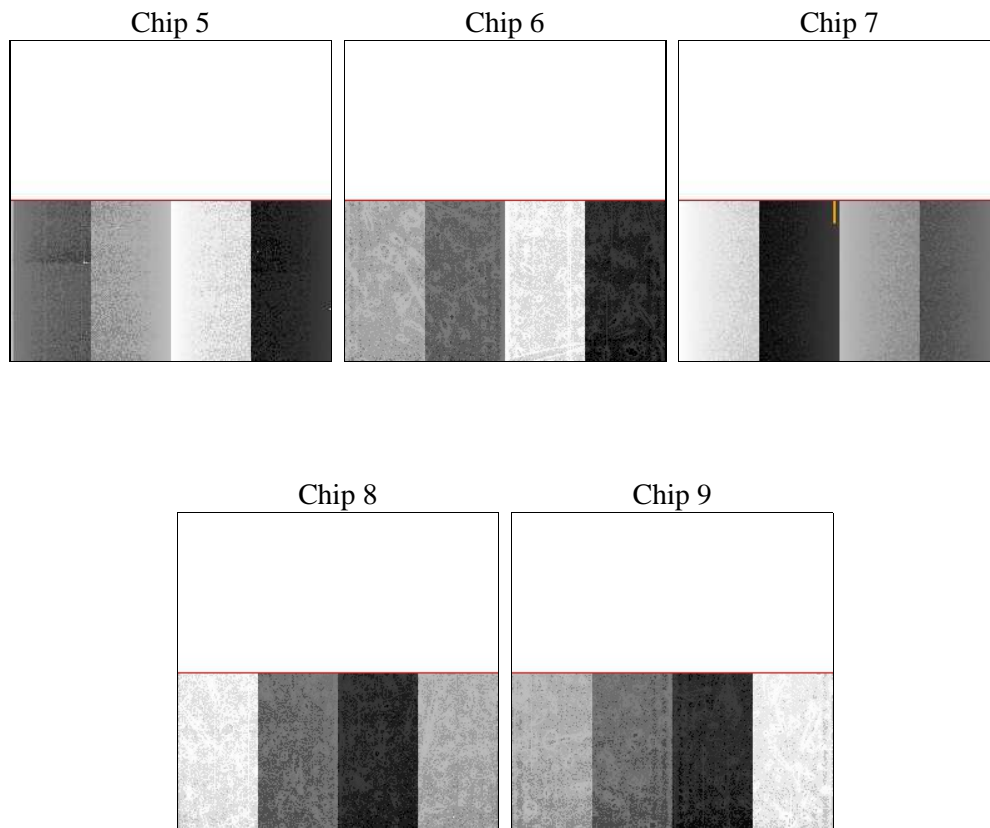
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	87500.000000	[s] Scheduled observation exposure time
ascdsver	10.2.4	Processing system revision	ontime	87589.099385858	Sum of GTIs [s]
caldbver	4.6.3	 	ontime5	87589.099385858	Sum of GTIs [s]
date	2014-10-23T20:46:38	Date and time of file creation	ontime6	87589.066895783	Sum of GTIs [s]
revision	1	Processing version of data	ontime7	87589.099385858	Sum of GTIs [s]
			ontime8	87589.02585578	Sum of GTIs [s]
			ontime9	87587.243755579	Sum of GTIs [s]
			l1events	1638321	Number of level 1 events
			tgmethod	TGDETECT	Method used to create src1a file
			zo_pos	(4073.23, 4089.43)	src1a sky pixel position

2.1.4 Events

	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	520082	244779	318388	318815	236257
rejected events	238900	210170	170972	228905	202906
rejected %	45%	85%	53%	71%	85%

	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	79018	12357	13966	24956	11450
	15%	5%	4%	7%	4%
grade 1 events	857	107	370	171	106
	0%	0%	0%	0%	0%
grade 2 events	60183	7235	30917	20449	7173
	11%	2%	9%	6%	3%
grade 3 events	15768	3742	13761	10056	3681
	3%	1%	4%	3%	1%
grade 4 events	12871	3721	13619	9566	3598
	2%	1%	4%	3%	1%
grade 5 events	44673	11490	31973	16618	12307
	8%	4%	10%	5%	5%
grade 6 events	113355	7555	75160	24884	7450
	21%	3%	23%	7%	3%
grade 7 events	193357	198572	138622	212115	190492
	37%	81%	43%	66%	80%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-56789	ACIS-56789	Obspar file type	PREDICTED	ACTUAL
Grating	HETG	HETG	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	65.509282	65.48574944283575	CCD I2 on	N	N
[deg] Pointing Dec	28.425980	28.44401787980664	CCD I3 on	N	N
[deg] Pointing Roll	107.990428	108.1582592294588	CCD S0 on	O1	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-183.992523	-183.985022191653	CCD S3 on	Y	Y
[mm] SIM translation stage offset	-6.14	-6.147500391354811	CCD S4 on	Y	Y
[s] Observation start time (MET)	530332323.184000	530330802.39829	CCD S5 on	O2	Y
Observation start date	2014-10-22T02:30:56	2014-10-22T02:06:42	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	530419823.184000	530420798.94079	On-chip summing requested	N	N
Observation end date	2014-10-23T02:49:16	2014-10-23T03:06:38	Subarray requested	CUSTOM	1/2
Read mode	TIMED	TIMED	Subarray start row	1	1
			Subarray row count	512	512
			Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	1.7

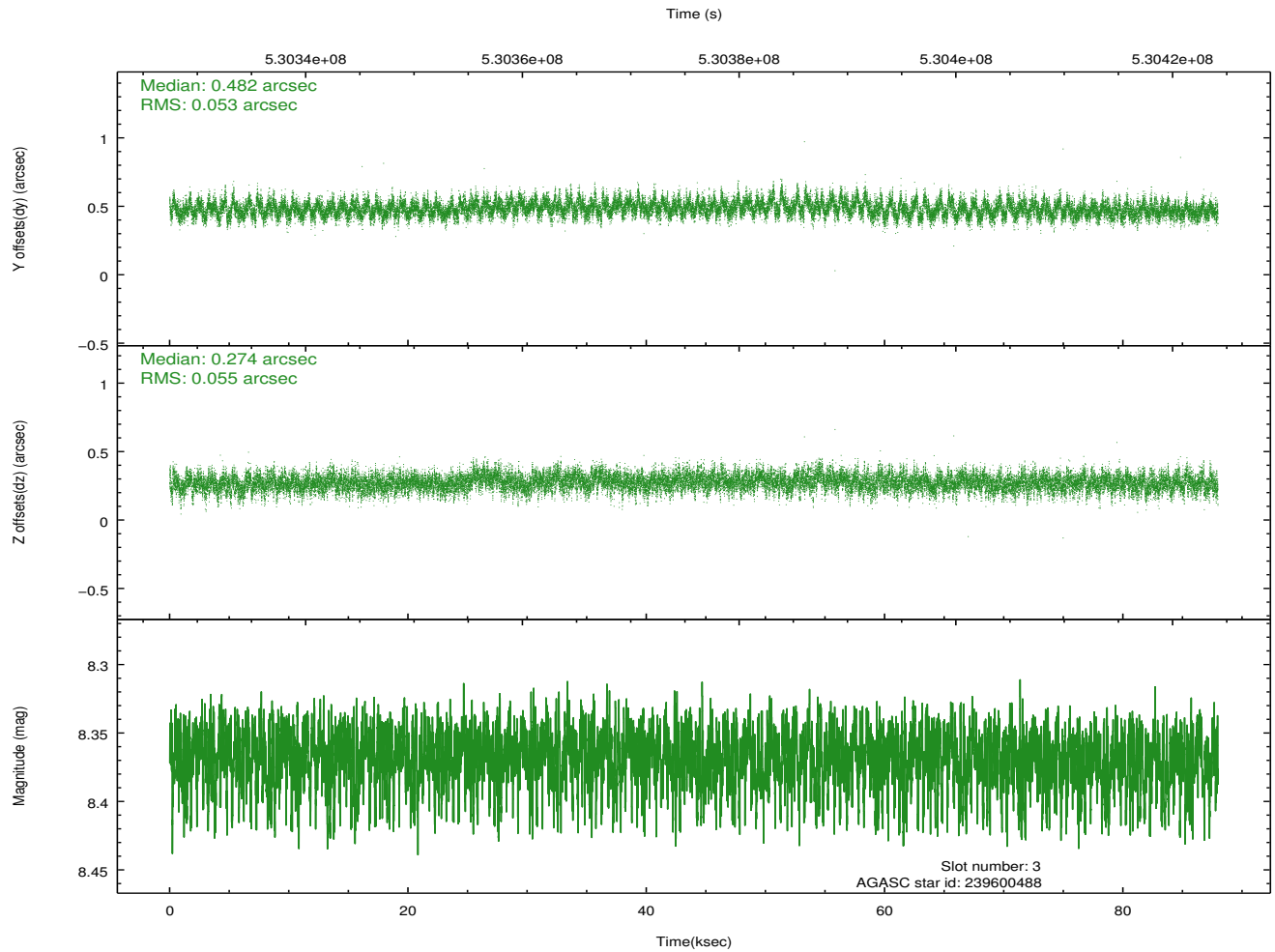
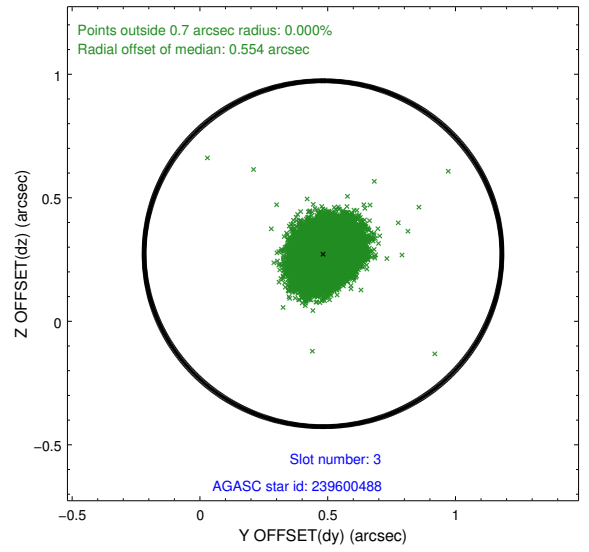
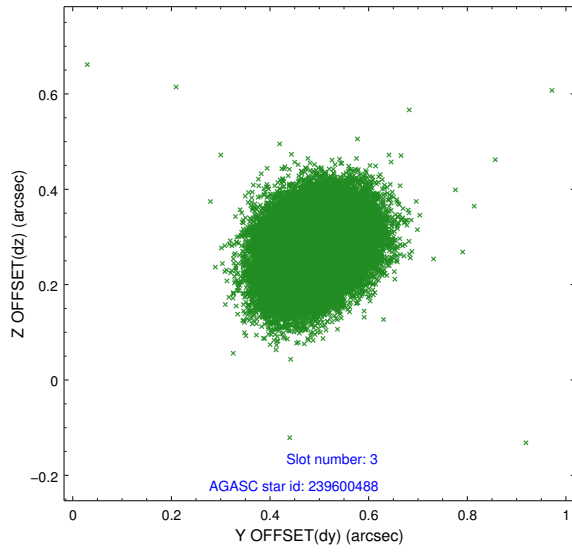
2.3 Aspect

Slot Statistics

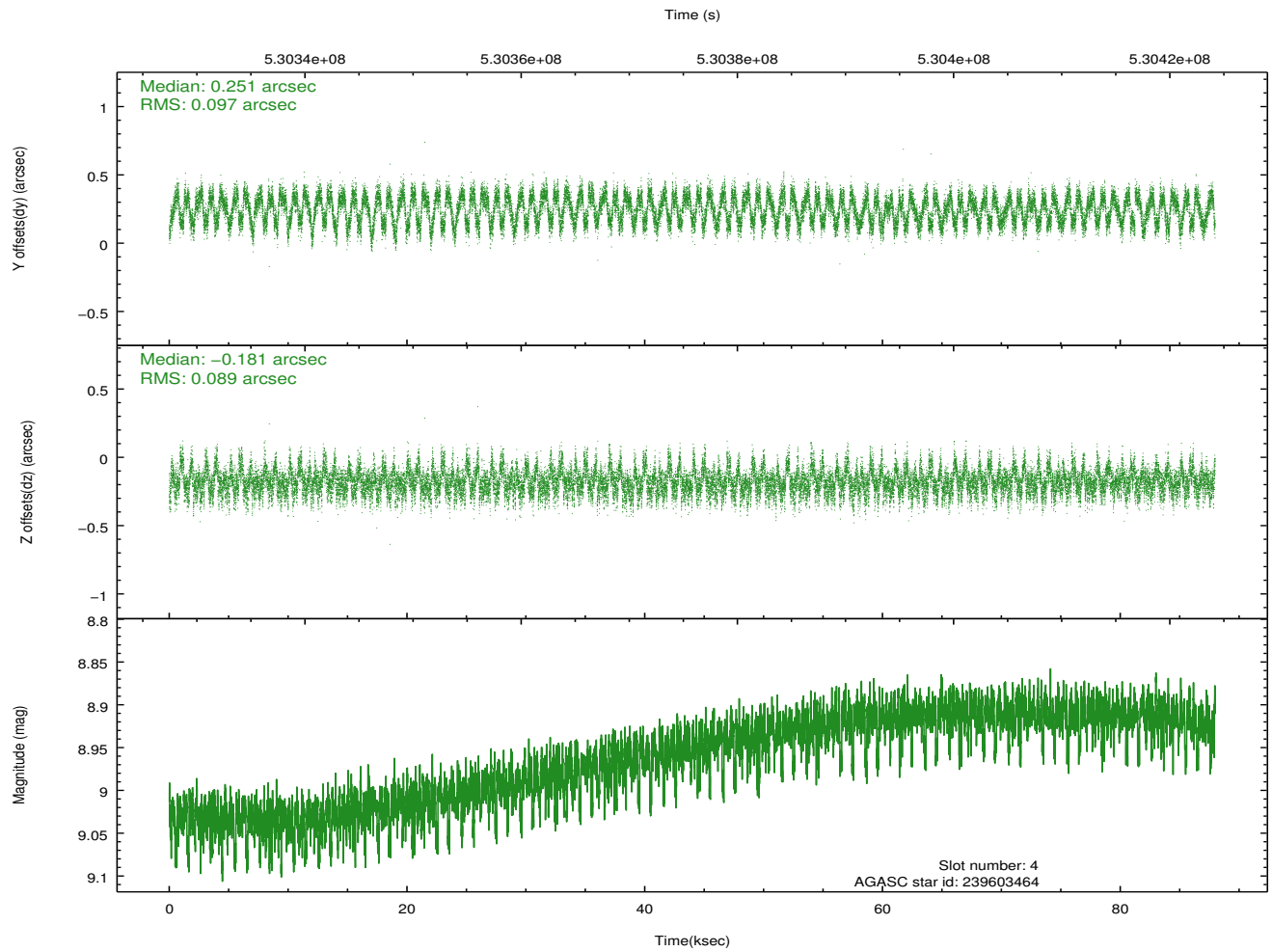
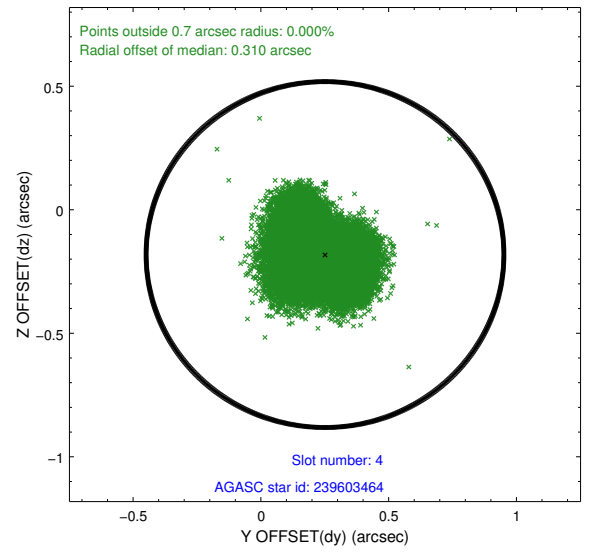
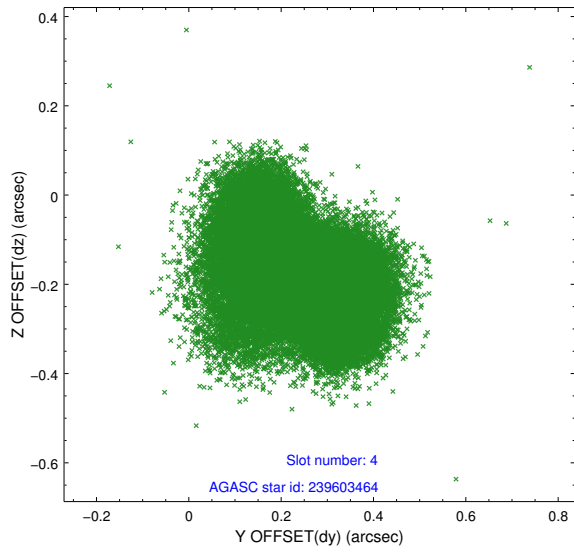
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.01	21456	-0.192	-0.151	0.010	0.049	0.000000	0.000000	-778.51	-1868.63
1	FID	ACIS-S-4	7.10	21455	0.414	0.132	0.012	0.020	0.000000	0.000000	2135.45	40.12
2	FID	ACIS-S-5	7.14	21454	-0.252	0.027	0.015	0.042	0.000000	0.000000	-1831.47	33.69
3	GUIDE	239600488	8.37	42893	0.482	0.274	0.081	0.133	65.933091	28.186307	-1234.83	-1012.98
4	GUIDE	239603464	8.96	42872	0.251	-0.181	0.143	0.221	65.495198	28.301805	-411.18	180.55
5	GUIDE	239606272	8.16	42903	-0.231	0.345	0.097	0.154	65.782047	29.028160	1797.78	-1486.02
6	GUIDE	239612528	8.19	42902	-0.266	-0.255	0.096	0.149	65.157445	28.892017	1939.49	535.81
7	GUIDE	239613168	8.39	42895	-0.237	-0.183	0.085	0.138	65.055525	28.814853	1775.99	927.88

2.4 Star Slots

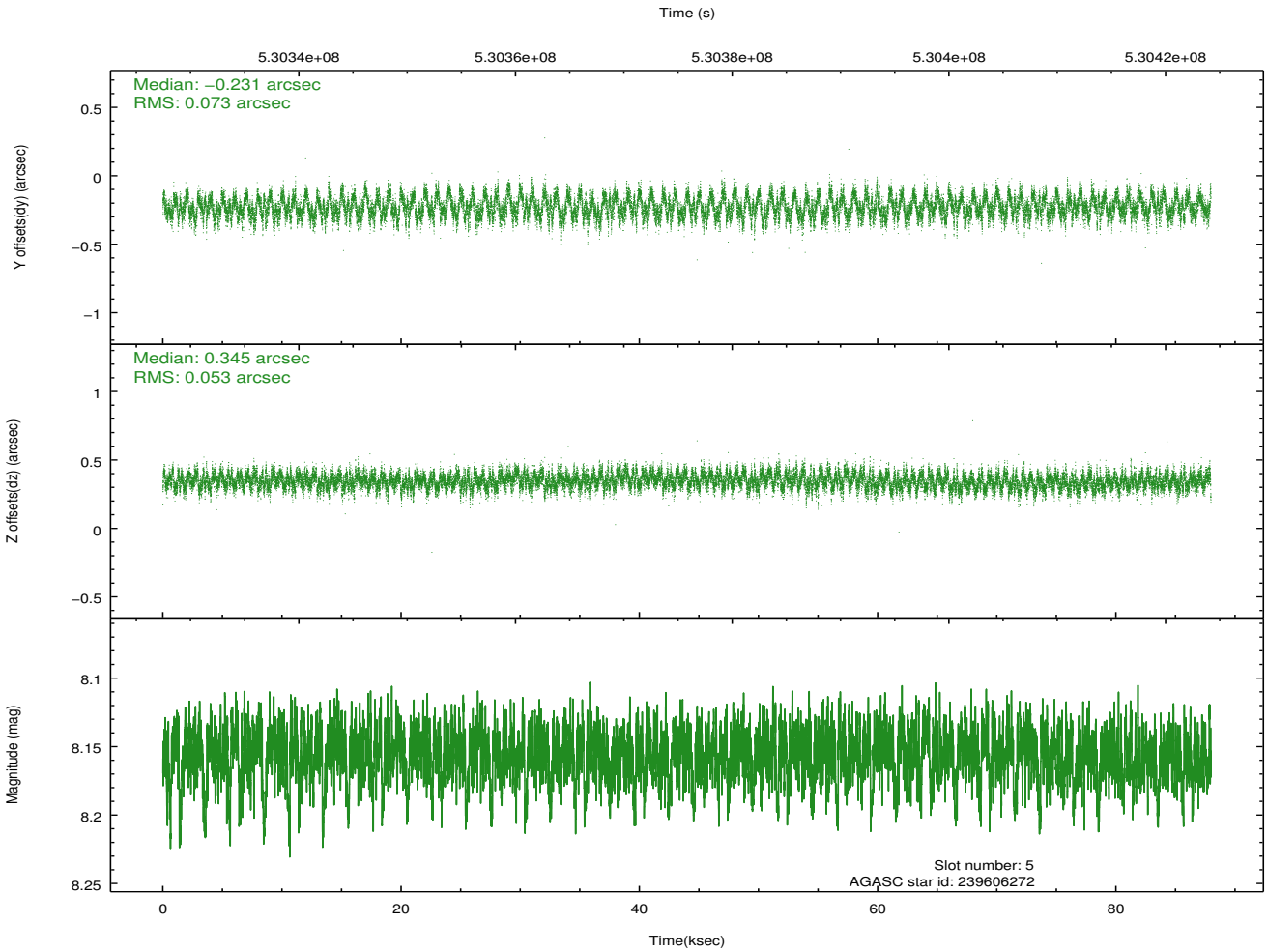
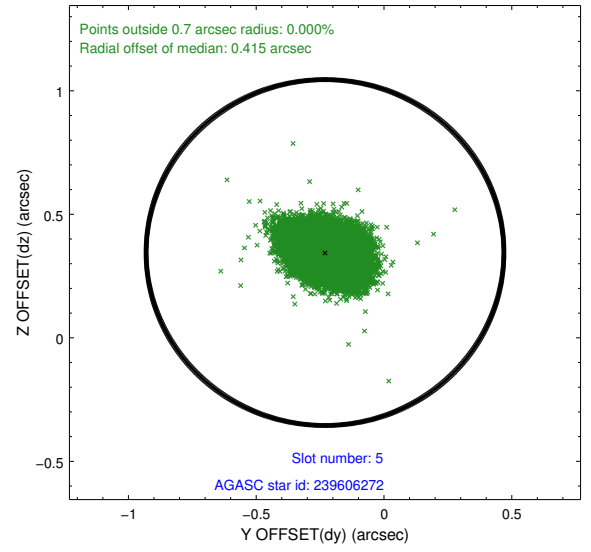
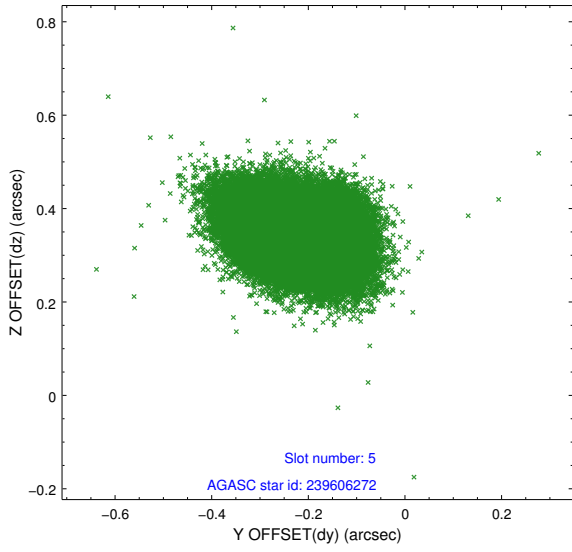
2.4.1 Slot 3



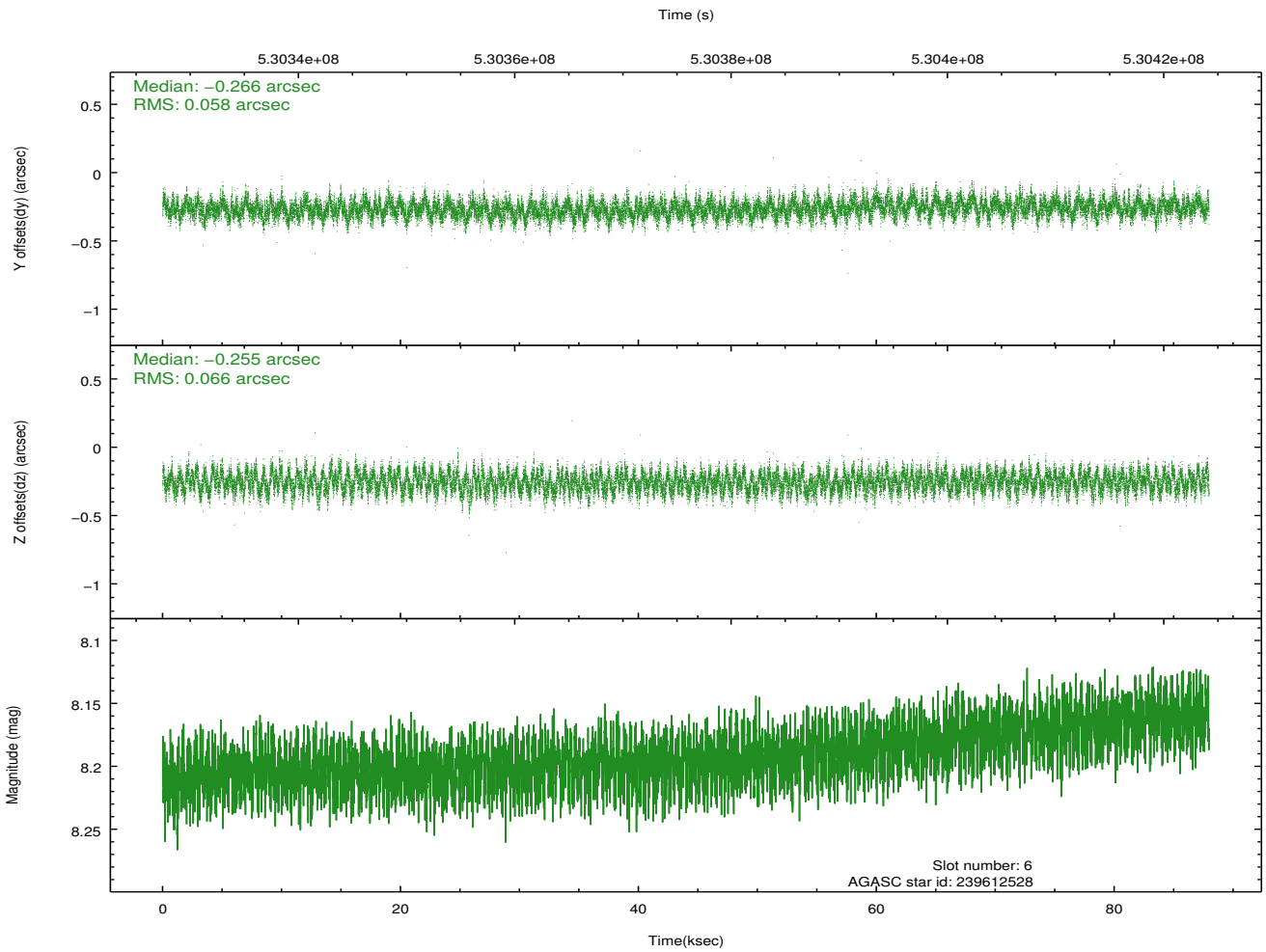
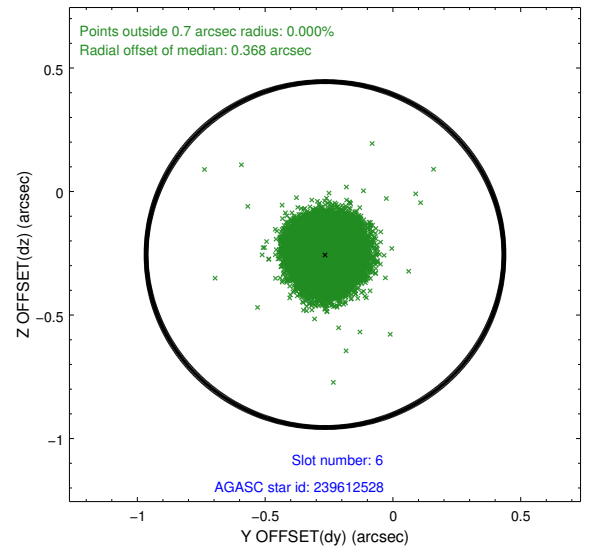
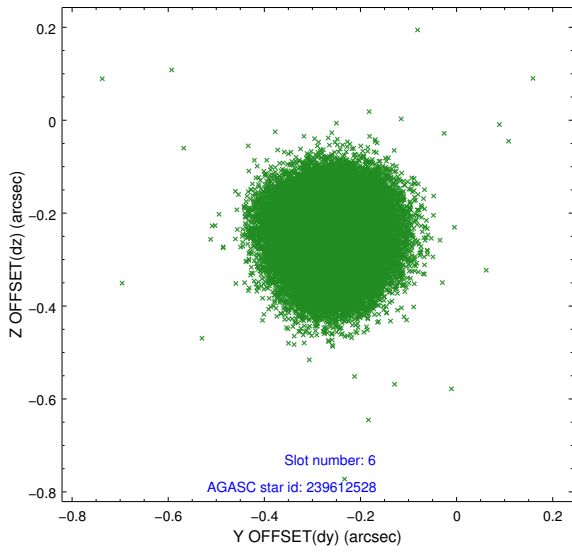
2.4.2 Slot 4



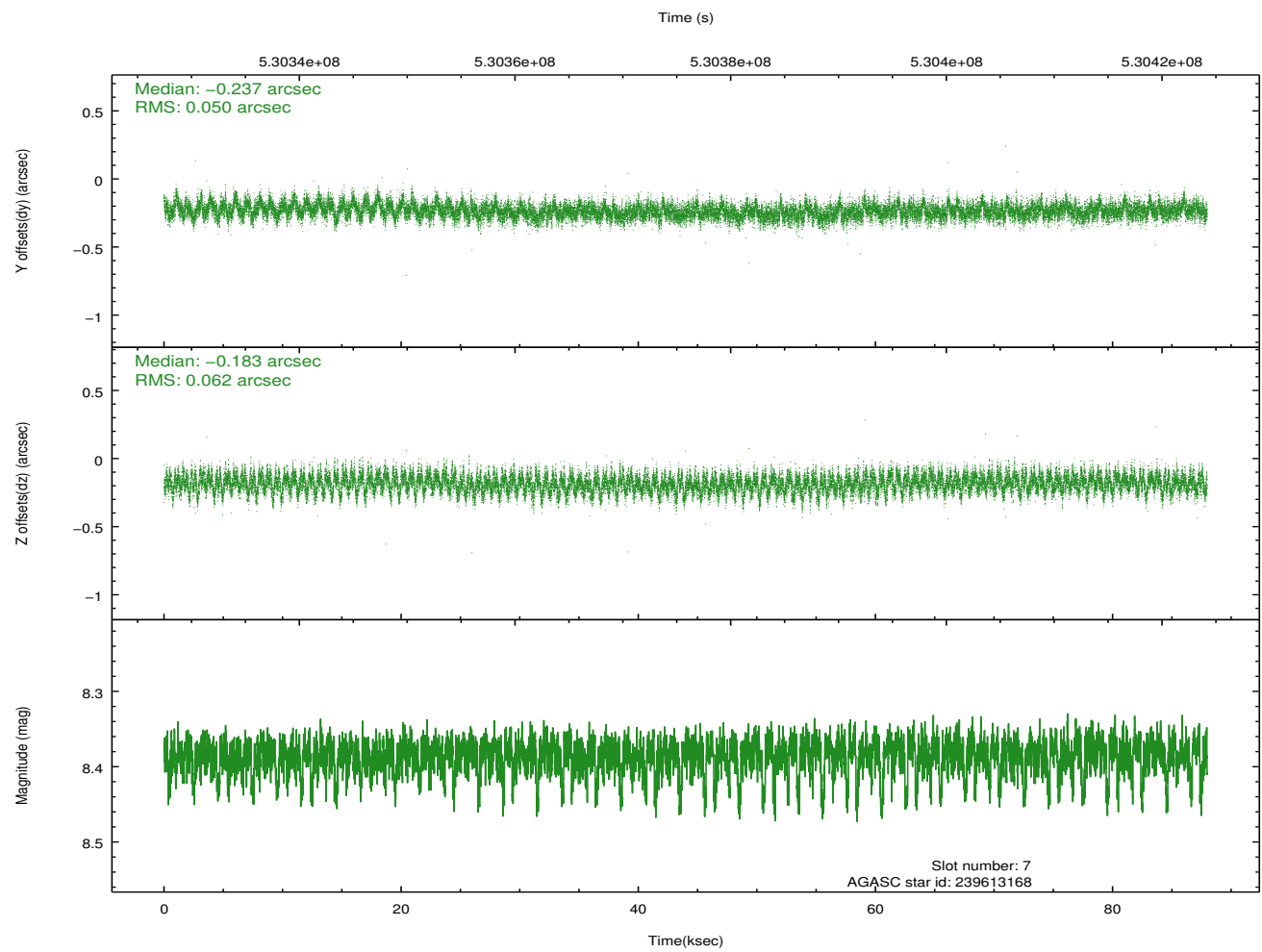
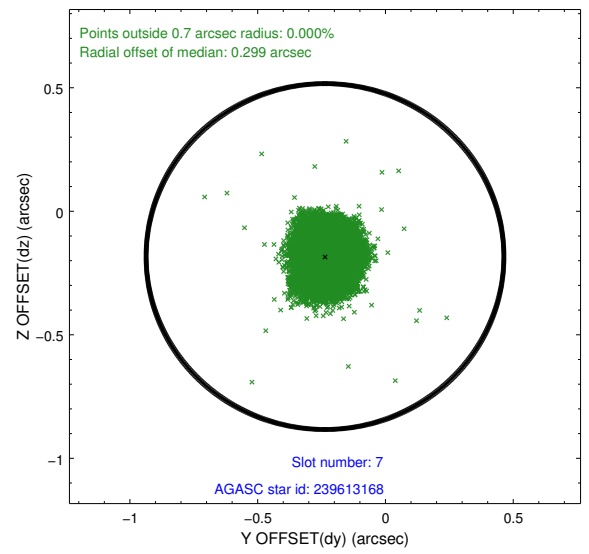
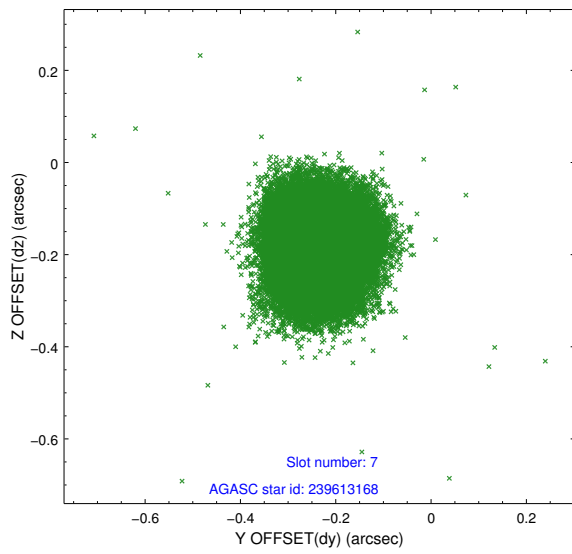
2.4.3 Slot 5



2.4.4 Slot 6

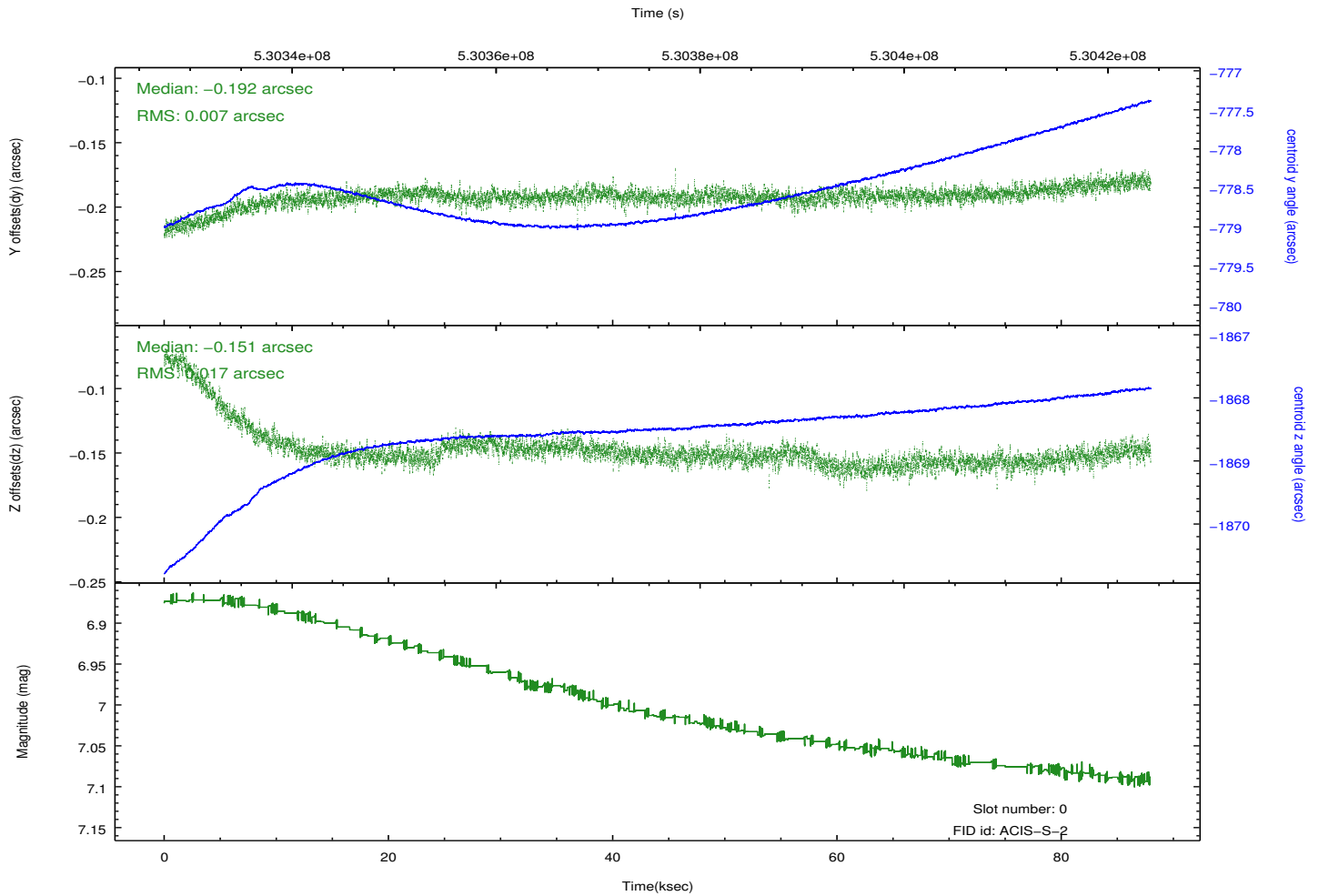
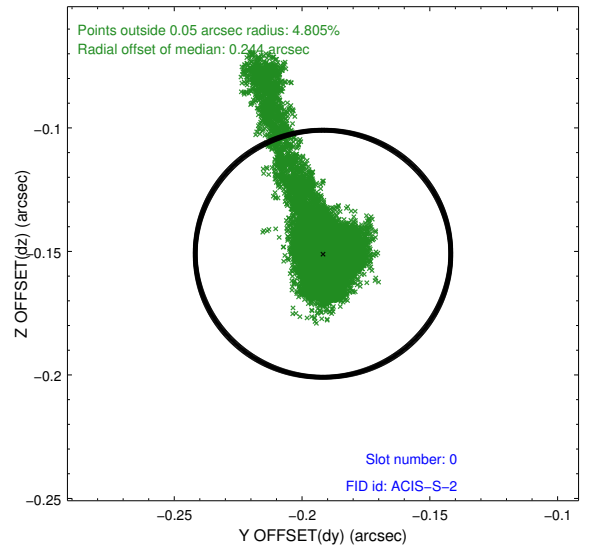
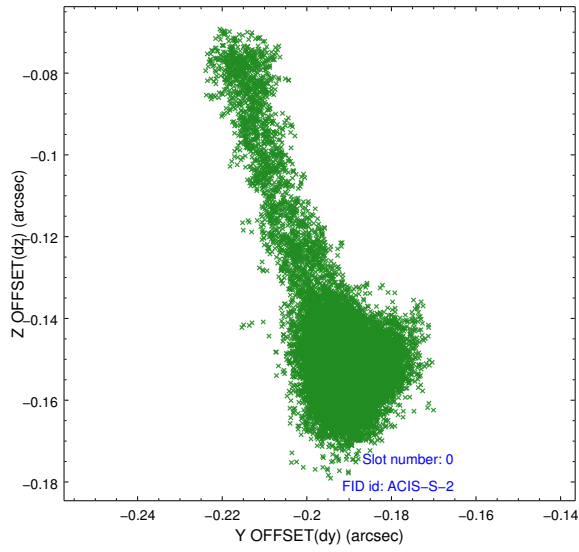


2.4.5 Slot 7

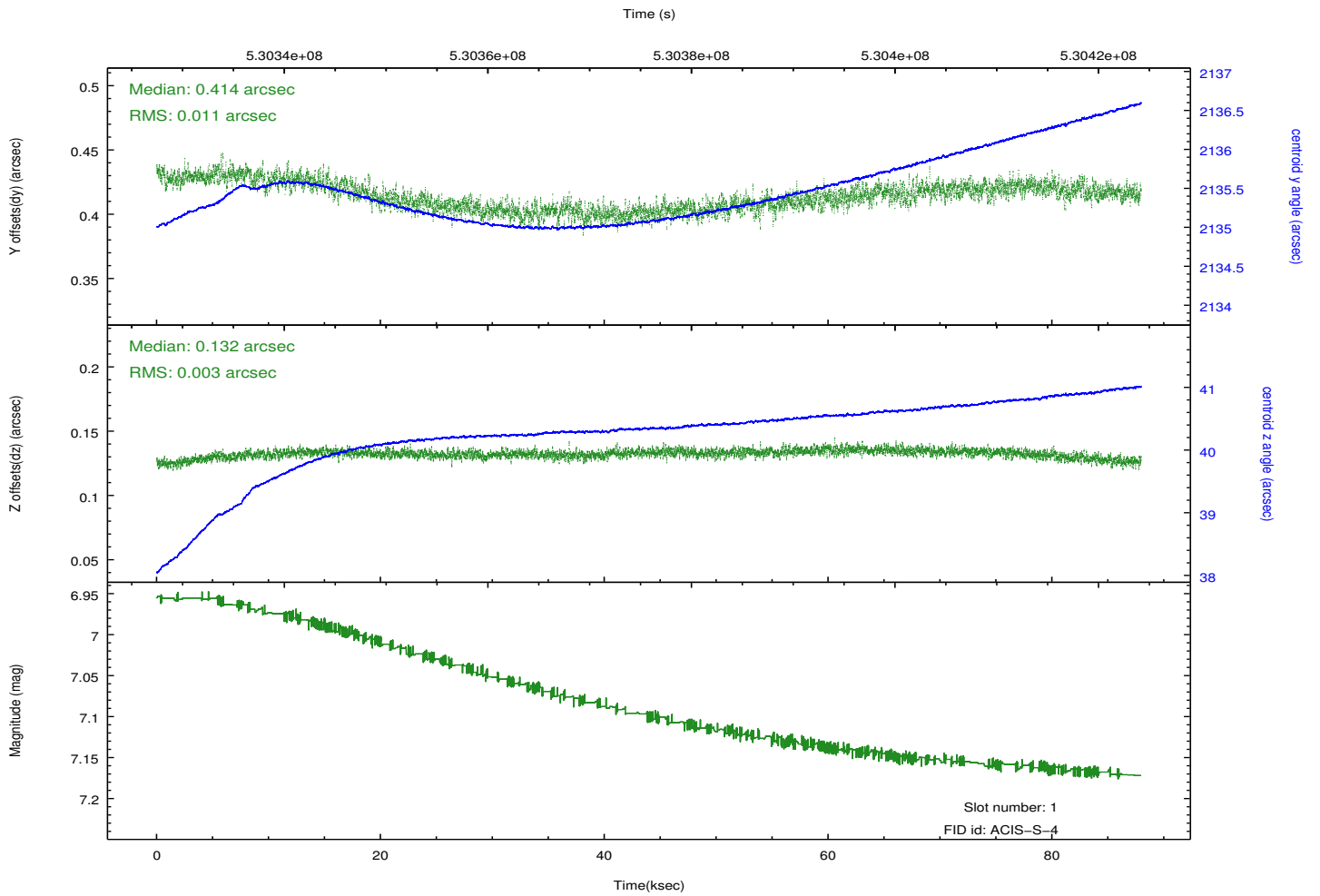
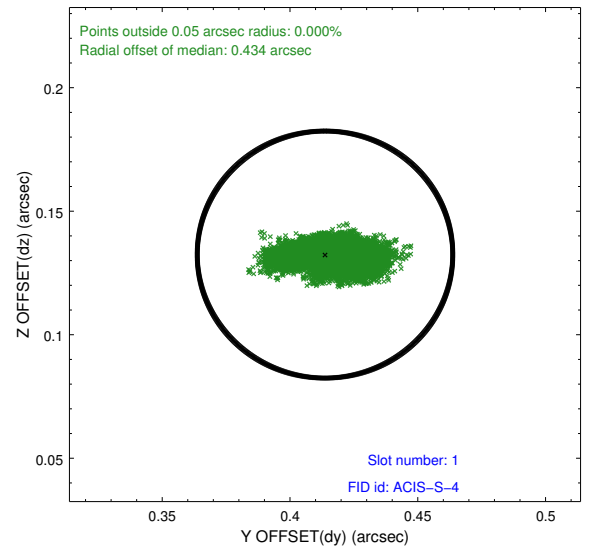
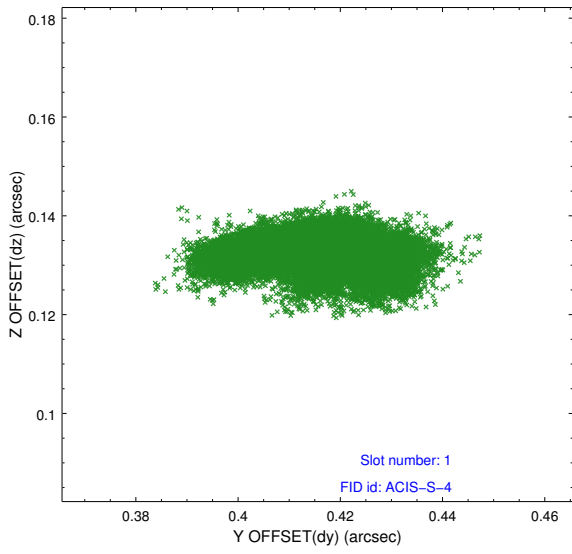


2.5 FID Slots

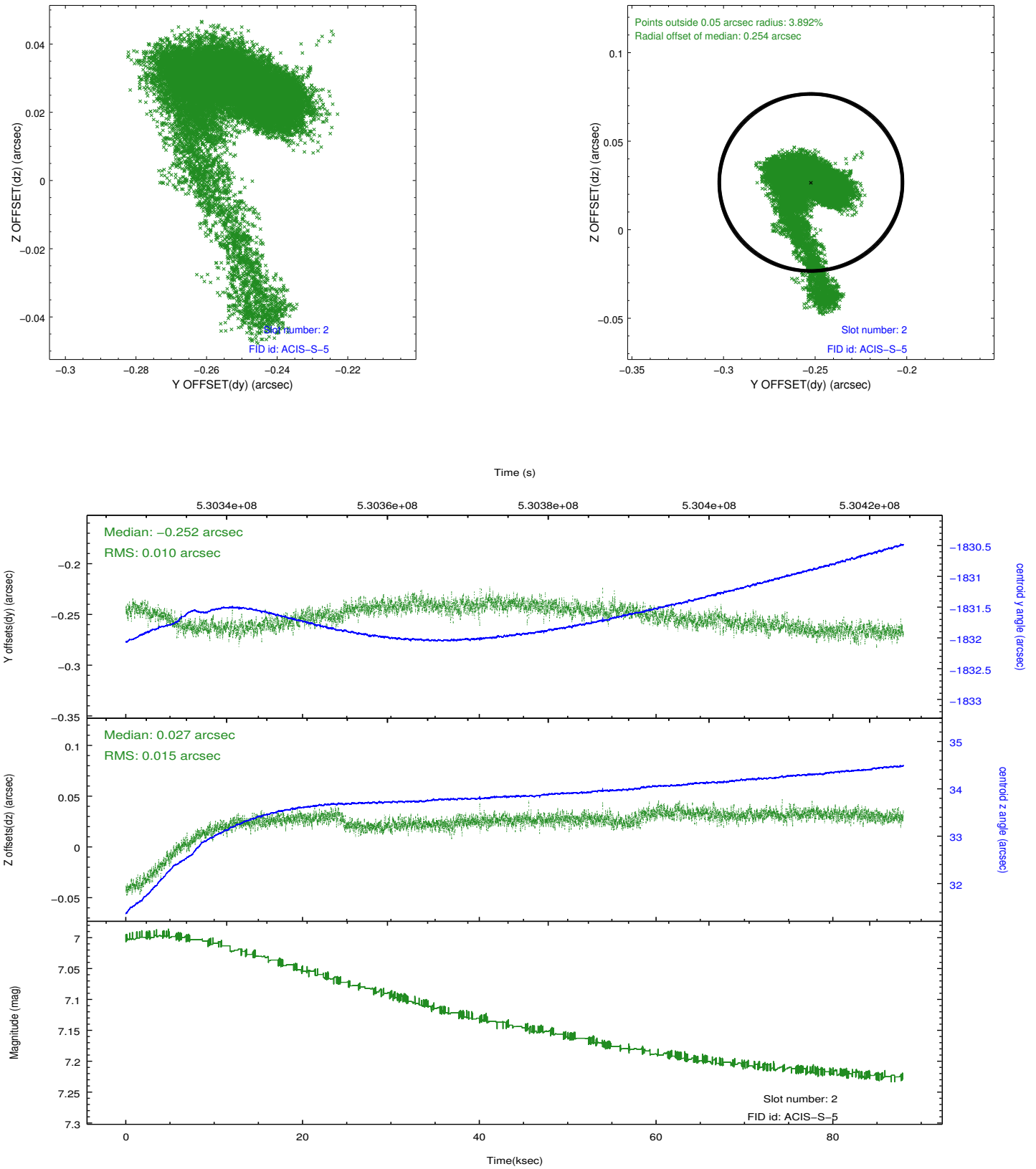
2.5.1 Slot 0



2.5.2 Slot 1

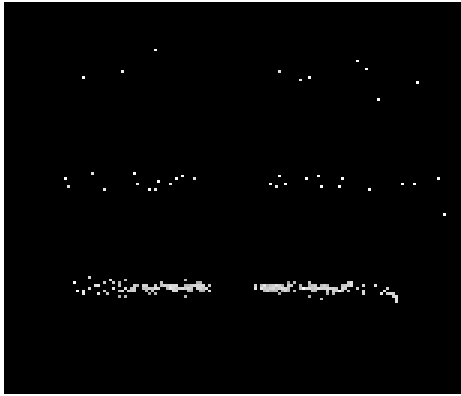


2.5.3 Slot 2

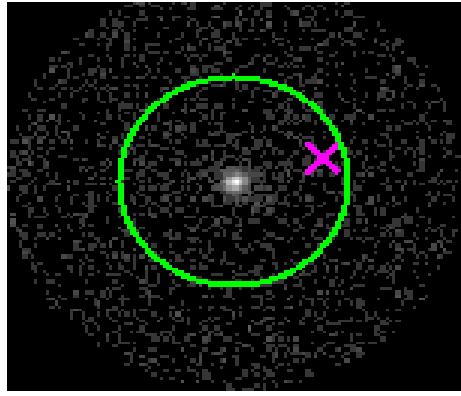


3 Gratings

3.1 HEG Arm



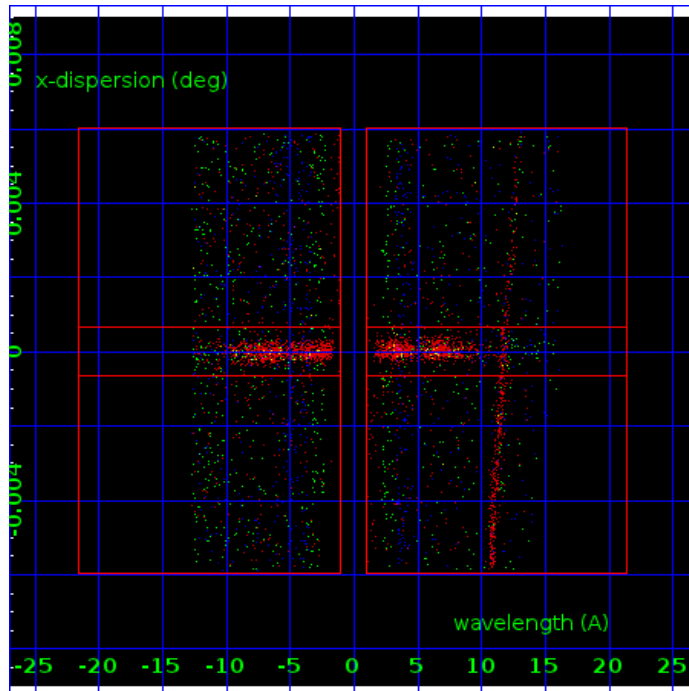
HEG Order Sort 123



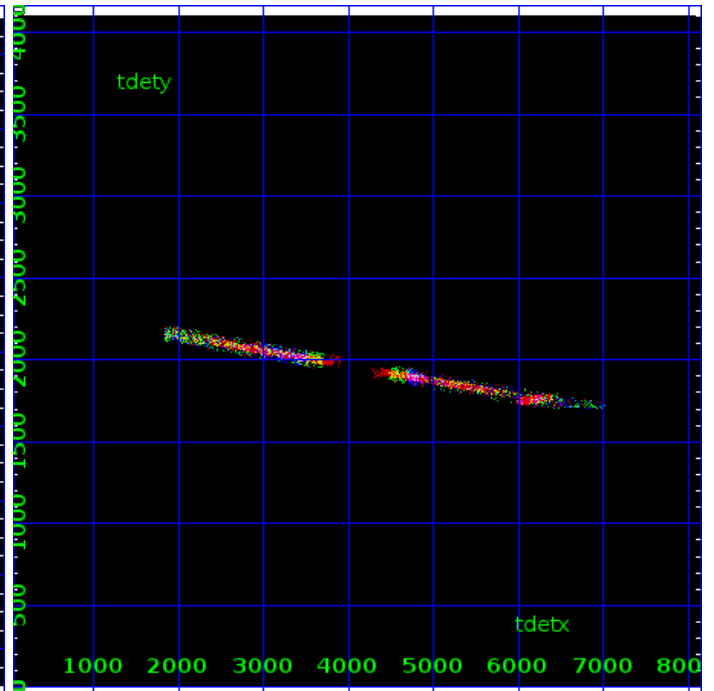
HEG Zero Order



HEG Order Sort ALL

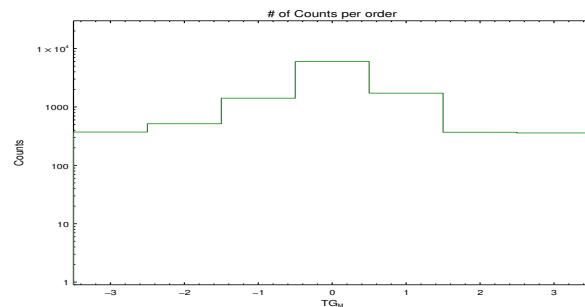


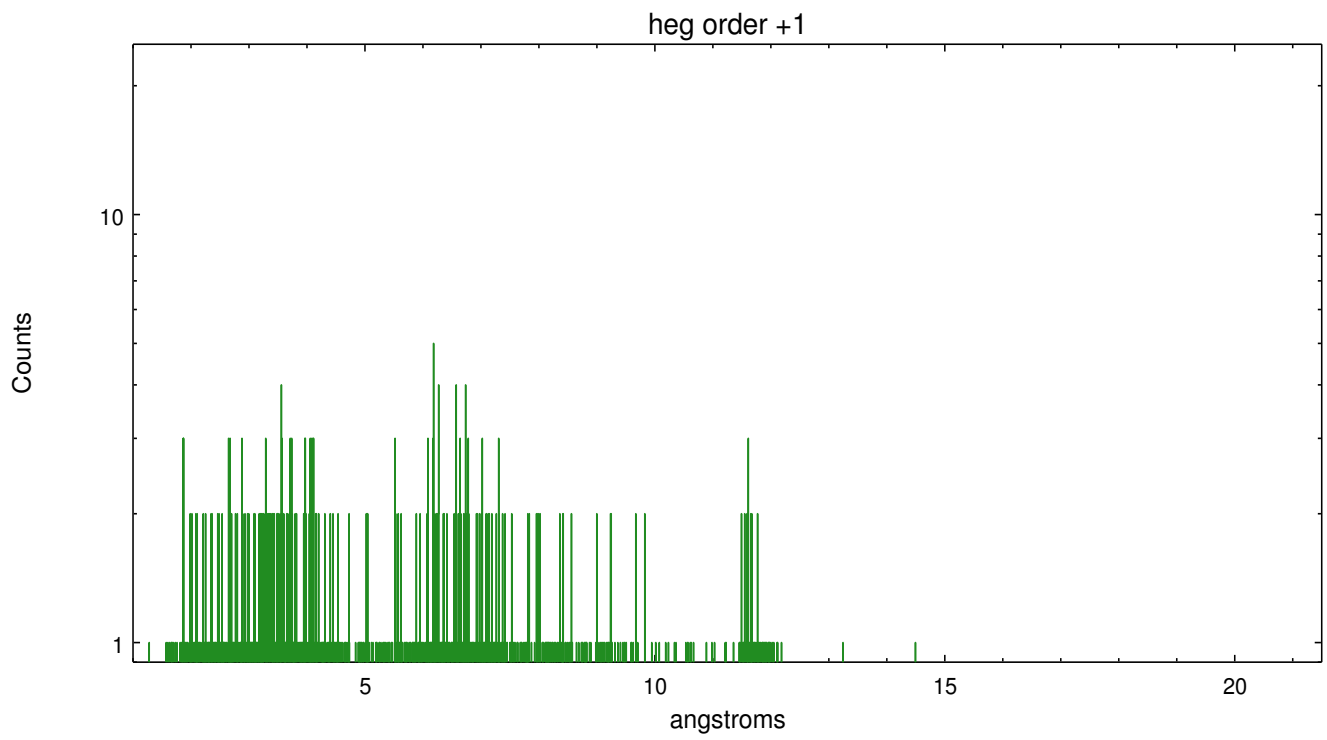
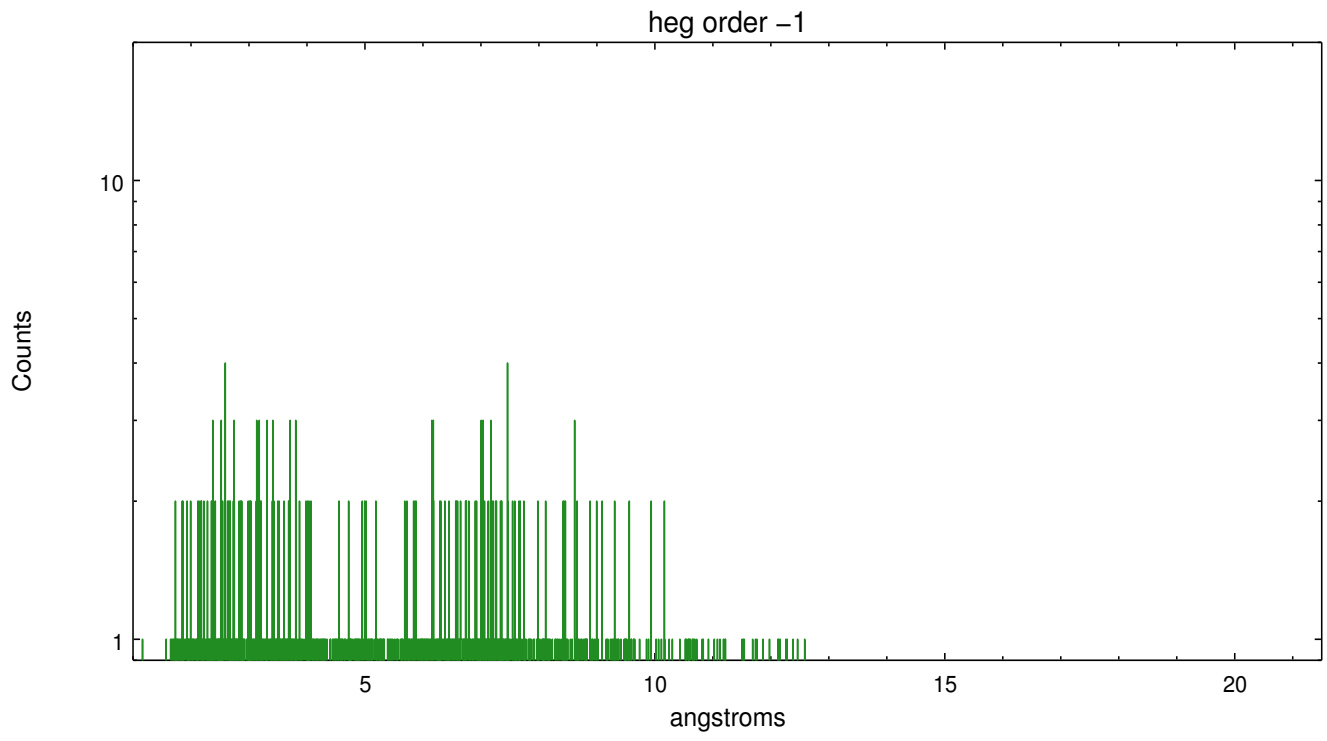
Spot Image HEG



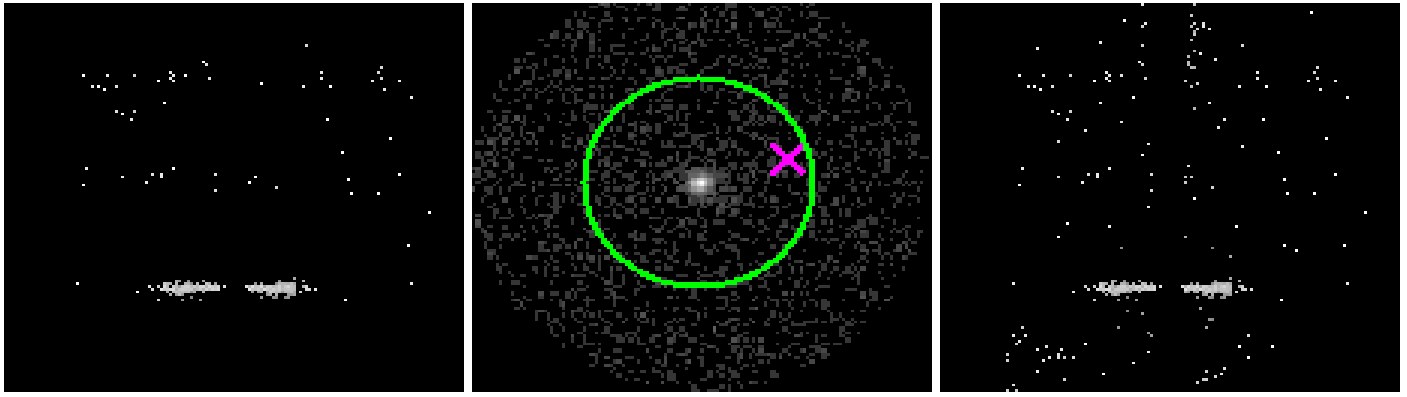
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	372	516	1414	5990	1724	369	359





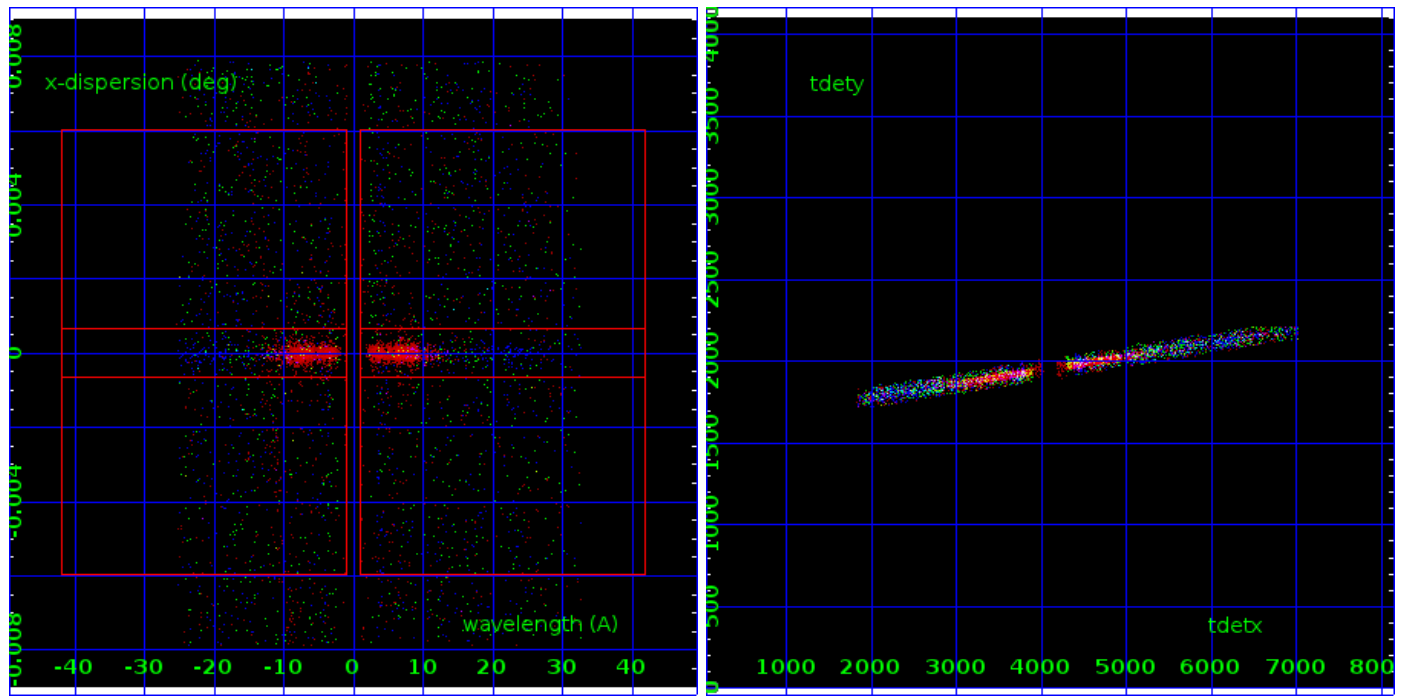
3.2 MEG Arm



MEG Order Sort 123

MEG Zero Order

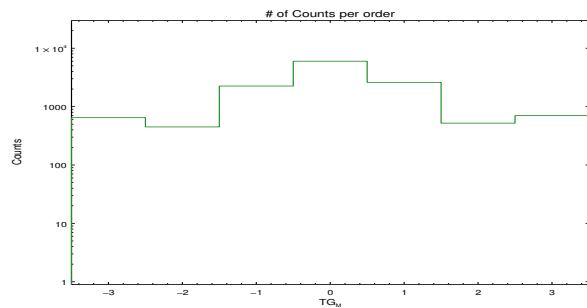
MEG Order Sort ALL



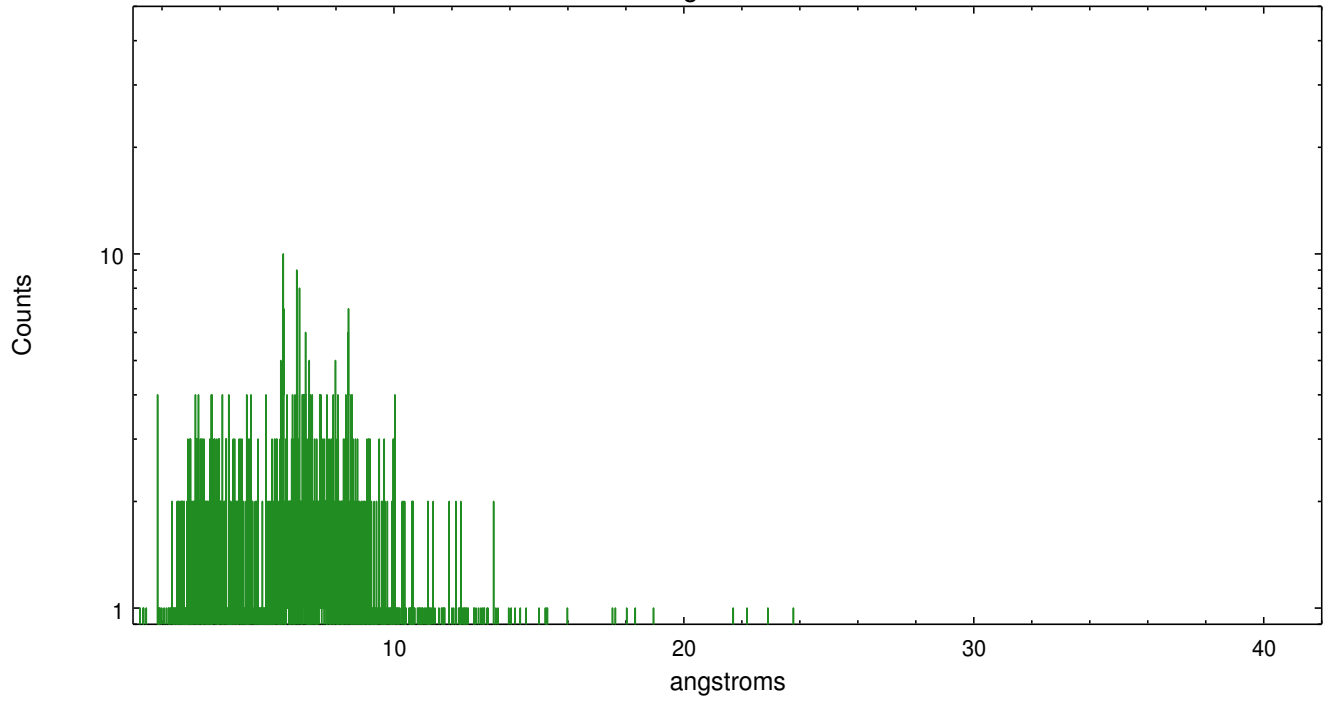
Spot Image MEG

Full Detector MEG

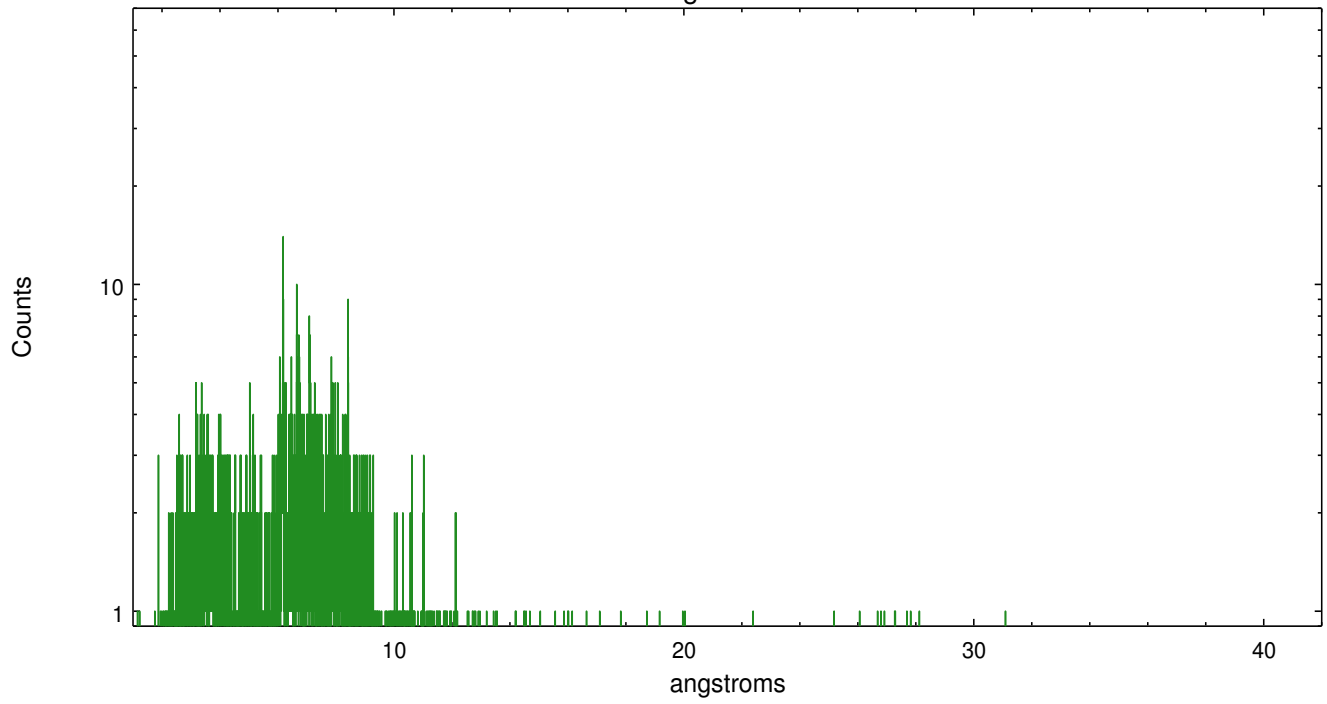
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	647	449	2252	5990	2602	521	701



meg order -1



meg order +1



A Summary

A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2014.10.24
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	87.589099385858

A.2 Comments

Comments for Obi 0

Fid in slot 1 radial offset > 0.400000 arcsec