

V&V Reference Report

L2 ASCDS Version : 10.8.4

Observation 23298 - L2 Version 1
Chandra X-Ray Center

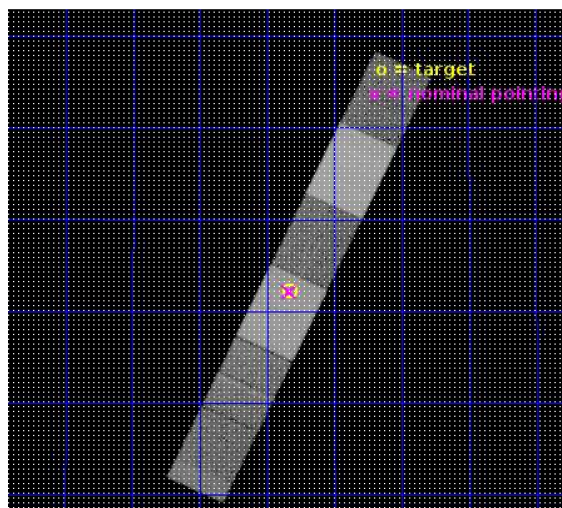
L2 Processing Date : Jul 2 2020

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1 Front

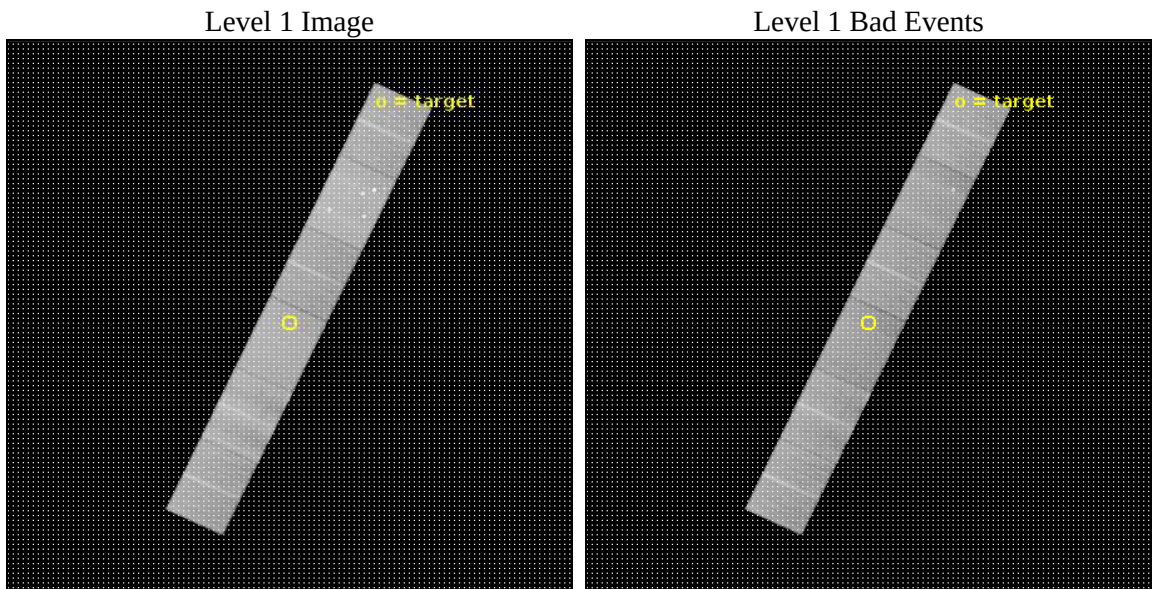
seq_num	704049	Sequence number
obs_id	23298	Observation id
title	INVESTIGATION ON MRK 335 IN AN INTERMEDIATE STATE	Proposal title
observer	Rozenn Boissay-Malaquin	Principal investigator
object	Mrk 335	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	1.581417	Observer's specified target RA [deg]
dec_targ	20.20295	Observer's specified target Dec [deg]
ra_nom	1.58367683232	Nominal RA [deg]
dec_nom	20.2025559038	Nominal Dec [deg]
roll_nom	115.159822021	Nominal Roll [deg]
revision	1	Processing version of data
ontime	30079.256756544	Sum of GTIs [s]
livetime	29593.45067034	Livetime [s]
ontime4	30079.297796488	Sum of GTIs [s]
ontime5	30079.215716481	Sum of GTIs [s]
ontime6	30079.174676538	Sum of GTIs [s]
ontime7	30079.256756544	Sum of GTIs [s]
ontime8	30079.133636475	Sum of GTIs [s]
ontime9	30079.092596531	Sum of GTIs [s]
l2events	310810	Number of level 2 events



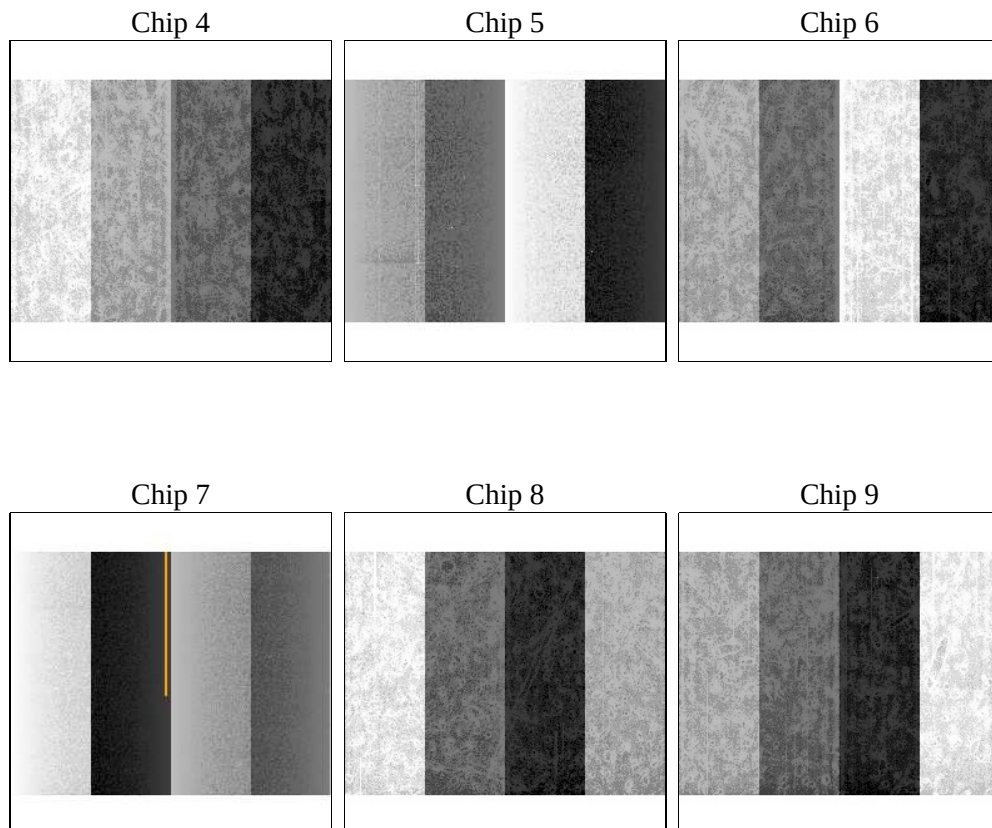
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	30000.000000	[s] Scheduled observation exposure time
ascdsver	10.8.4	Processing system revision	ontime	30079.256756544	Sum of GTIs [s]
caldsver	4.9.1	 	ontime4	30079.297796488	Sum of GTIs [s]
date	2020-07-02T23:15:54	Date and time of file creation	ontime5	30079.215716481	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	30079.174676538	Sum of GTIs [s]
			ontime7	30079.256756544	Sum of GTIs [s]
			ontime8	30079.133636475	Sum of GTIs [s]
			ontime9	30079.092596531	Sum of GTIs [s]
			l1events	1381482	Number of level 1 events
			tgmethod	TGDETECT	Method used to create src1a file
			src1a_pos	(4111.04, 4000.01)	src1a sky pixel position

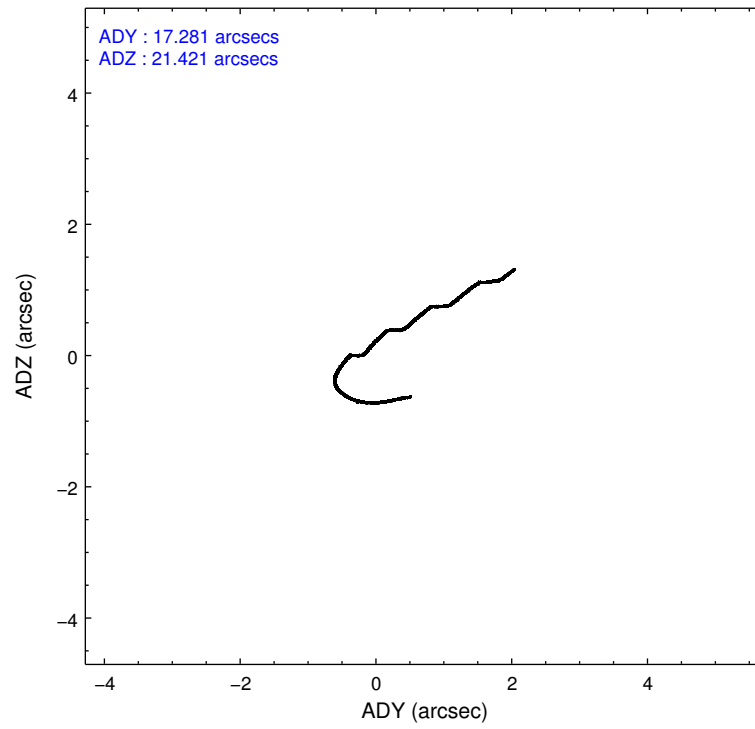
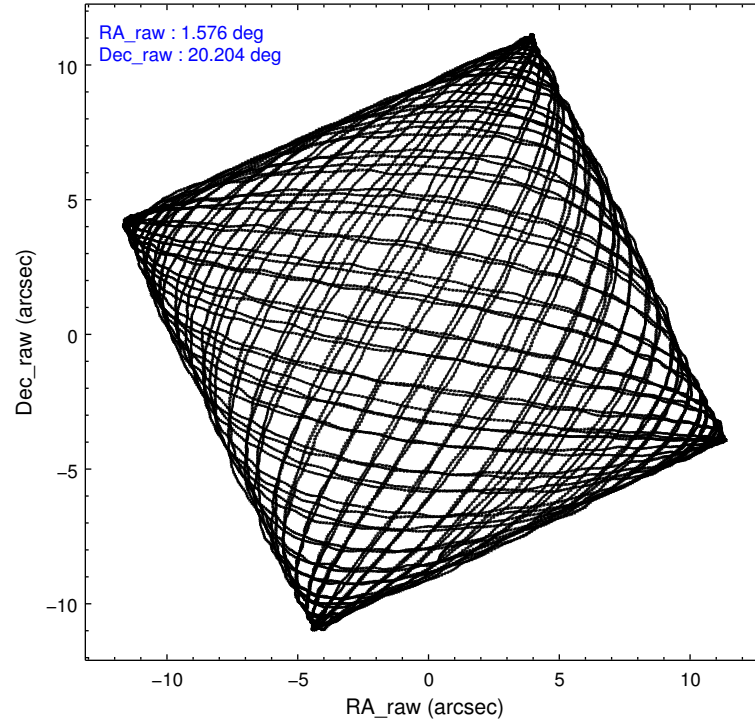
2.1.4 Events

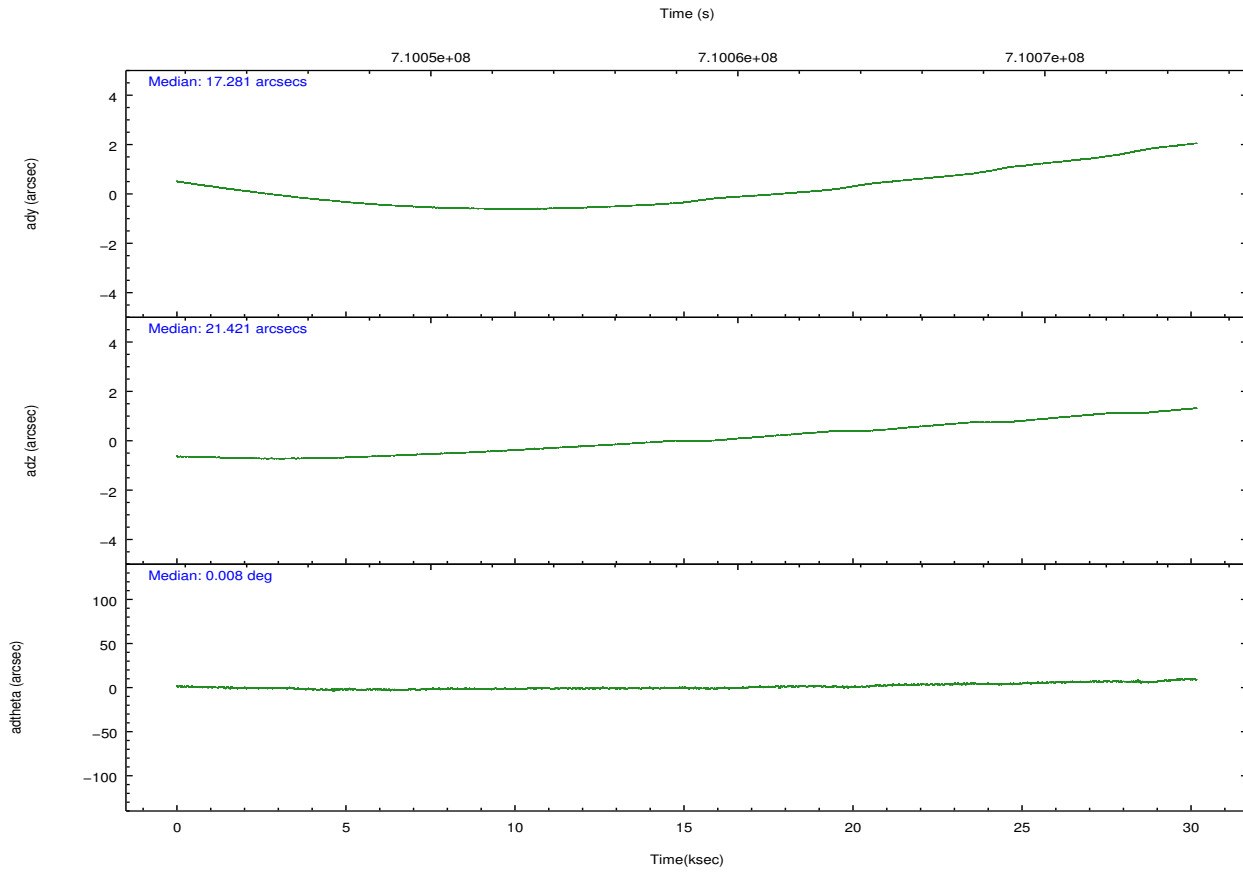
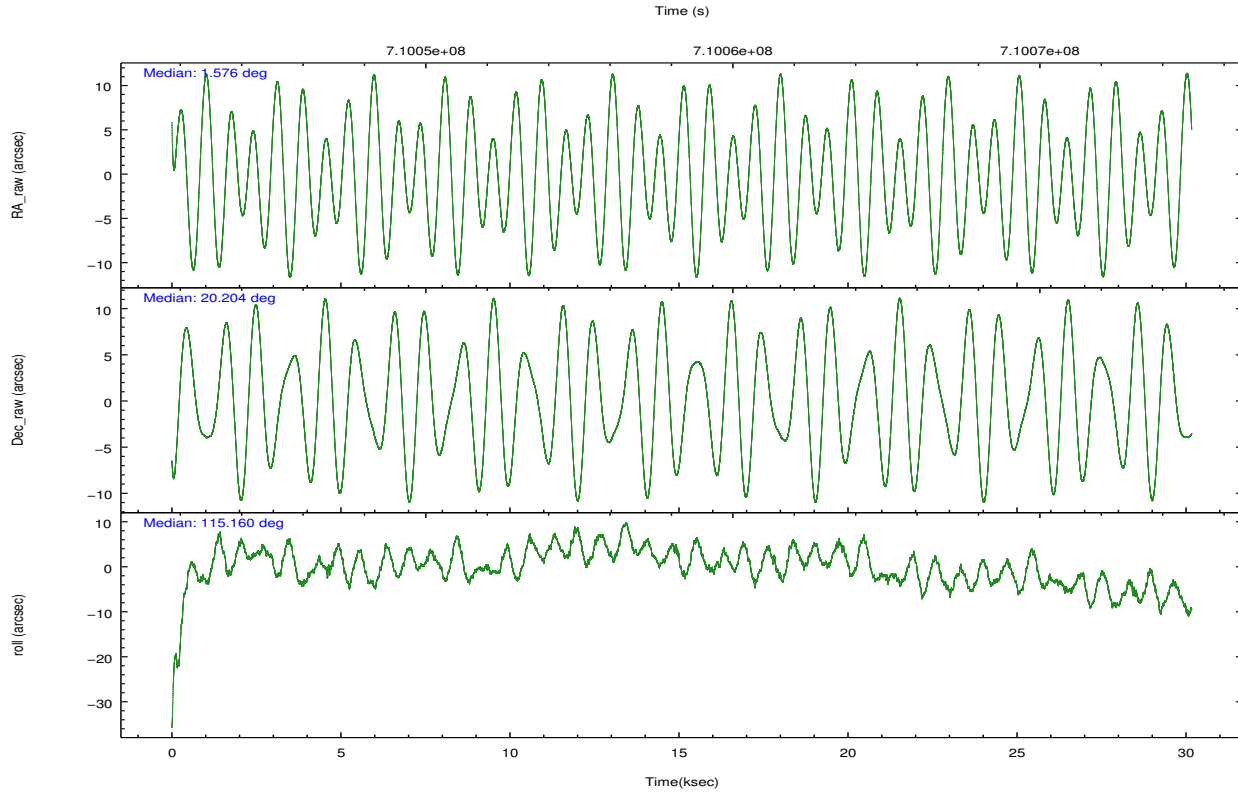
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	218865	309149	186609	236426	240101	190332	grade 0 events	8135	21724	6368	8931	17726	7372
rejected events	196969	155197	165815	132845	176499	168260		3%	7%	3%	3%	7%	3%
rejected %	89%	50%	88%	56%	73%	88%	grade 1 events	180	2150	65	409	188	95
								0%	0%	0%	0%	0%	0%
							grade 2 events	5233	45770	5108	22392	15629	5117
								2%	14%	2%	9%	6%	2%
							grade 3 events	2406	4395	2024	8493	6345	2292
								1%	1%	1%	3%	2%	1%
							grade 4 events	2373	4573	1970	8242	6114	2211
								1%	1%	1%	3%	2%	1%
							grade 5 events	8509	19149	7794	22959	12552	9307
								3%	6%	4%	9%	5%	4%
							grade 6 events	3754	77514	5328	55537	17797	5082
								1%	25%	2%	23%	7%	2%
							grade 7 events	188275	133874	157952	109463	163750	158856
								86%	43%	84%	46%	68%	83%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-456789	ACIS-456789	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	1.599395	1.58367683232	CCD I2 on	N	N
[deg] Pointing Dec	20.189169	20.2025559038	CCD I3 on	N	N
[deg] Pointing Roll	114.993795	115.159822021	CCD S0 on	O1	Y
[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	-190.132523	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	Y	Y
[s] Observation start time (MET)	710043416.184000	710042362.98768	CCD S5 on	O2	Y
Observation start date	2020-07-02T02:15:47	2020-07-02T01:59:22	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	710073416.184000	710074227.67713	On-chip summing requested	N	N
Observation end date	2020-07-02T10:35:47	2020-07-02T10:50:27	Subarray requested	CUSTOM	CUSTOM
Read mode	TIMED	TIMED	Subarray start row	125	125
			Subarray row count	774	774
			Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	2.5

2.3 Aspect



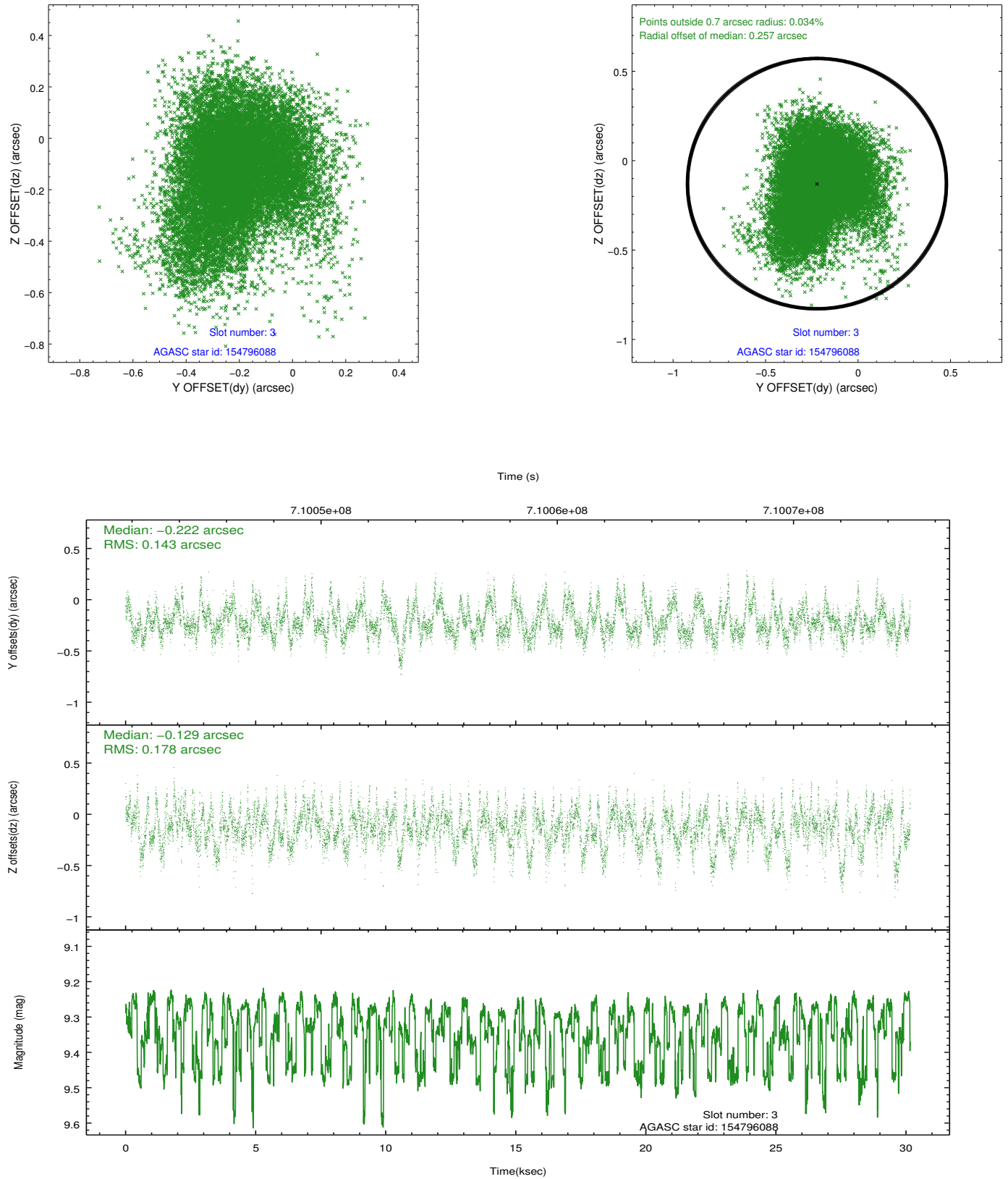


Slot Statistics

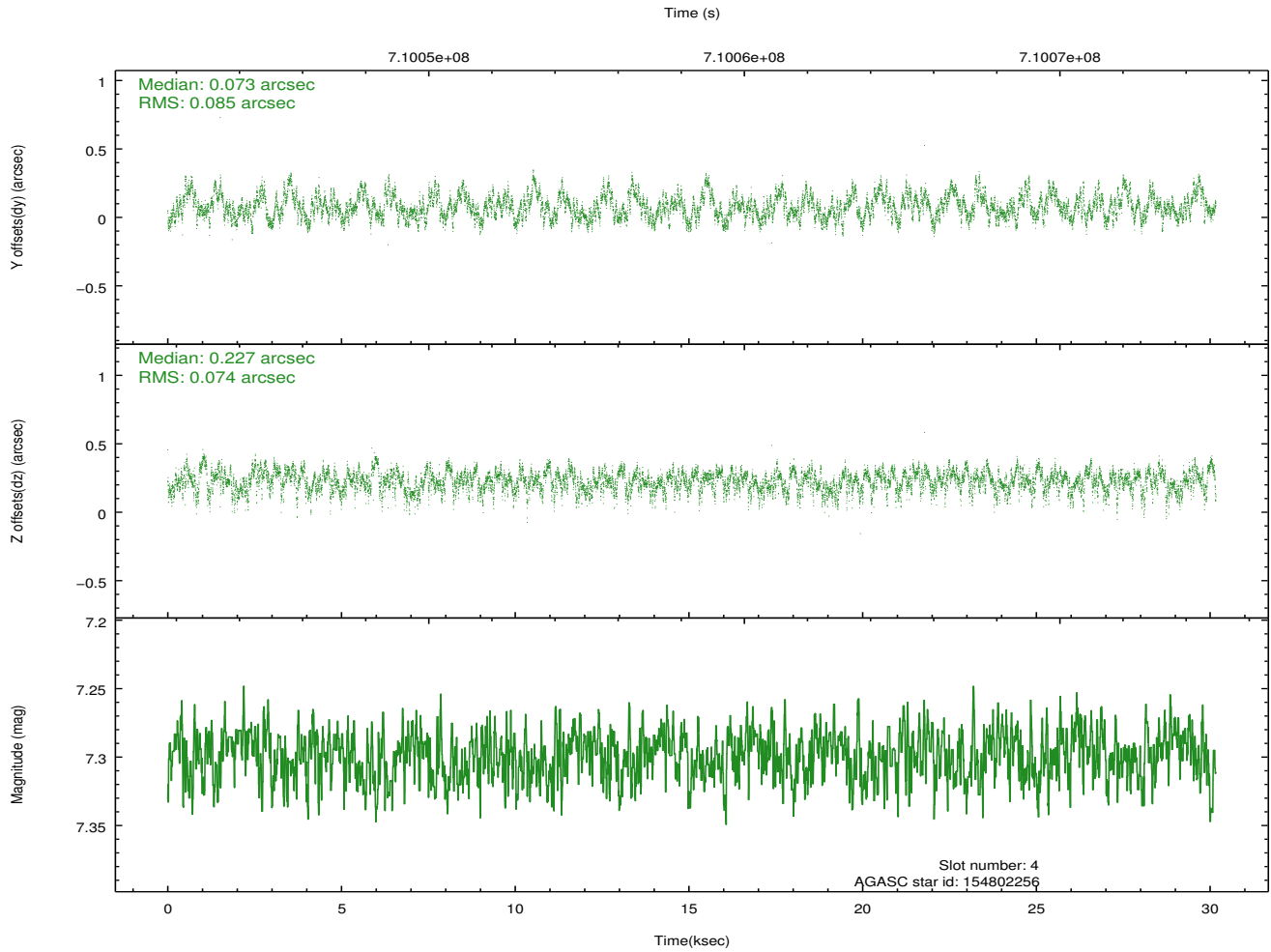
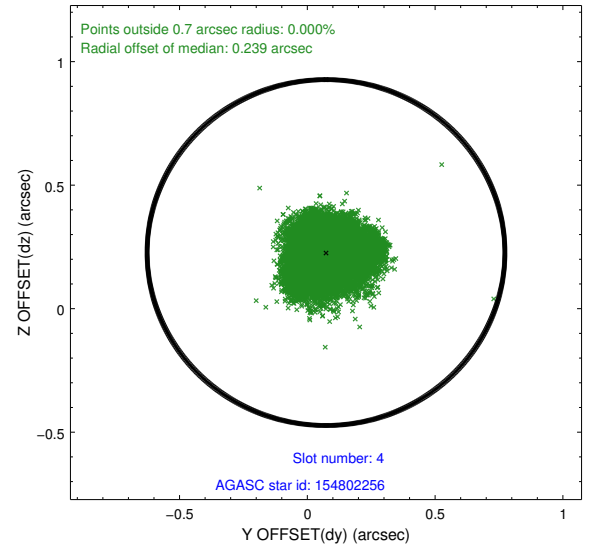
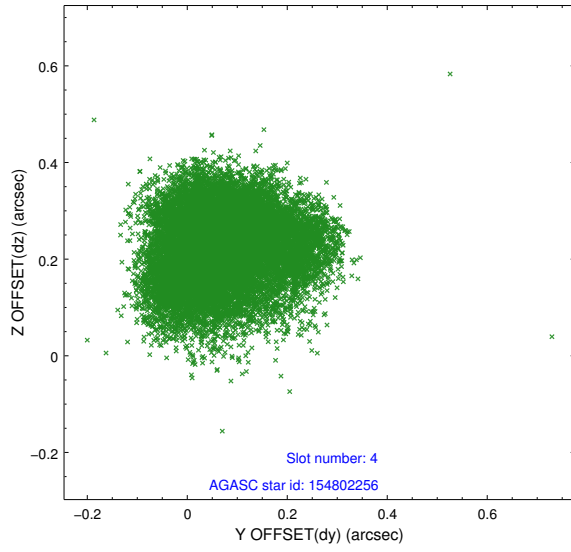
id	status	used	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_x
0	FID		7.10	7358	1.000	0.247	-0.122	0.033	0.044	0.000000	0.000000	-770.67	-1742
1	FID		7.24	7357	1.000	0.096	-0.083	0.026	0.046	0.000000	0.000000	2142.82	164
2	FID		7.20	7358	1.000	-0.367	0.212	0.031	0.046	0.000000	0.000000	-1823.63	159
3	GUIDE	used	9.34	14678	1.000	-0.222	-0.129	0.241	0.404	1.327954	19.982770	-284.74	1146
4	GUIDE	used	7.30	14712	1.000	0.073	0.227	0.122	0.189	2.267963	19.924686	-1814.10	-1649
5	GUIDE	used	9.06	14704	1.000	0.257	0.150	0.163	0.273	2.130274	20.267286	-500.06	-1743
6	GUIDE	used	8.09	14702	1.000	-0.040	-0.115	0.168	0.243	1.710987	20.559760	1051.04	-904
7	GUIDE	used	7.54	14710	1.000	-0.071	-0.131	0.123	0.198	1.810289	20.555714	896.52	-1201

2.4 Star Slots

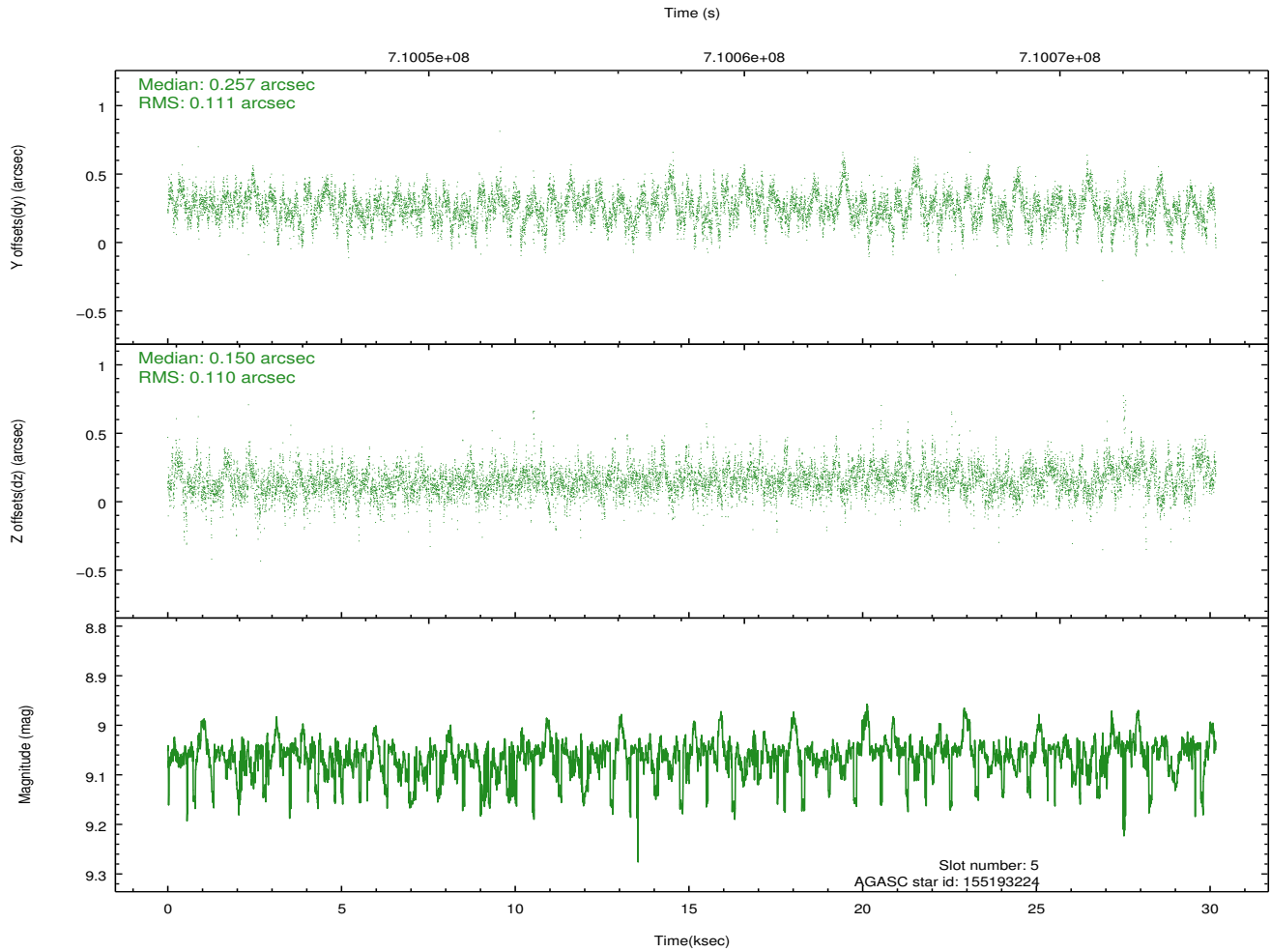
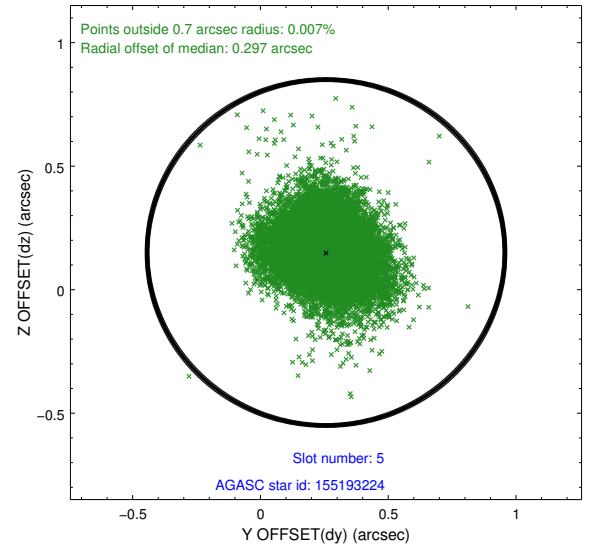
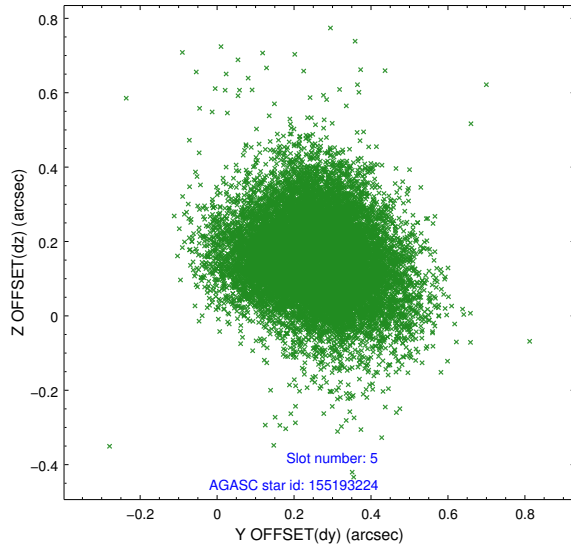
2.4.1 Slot 3



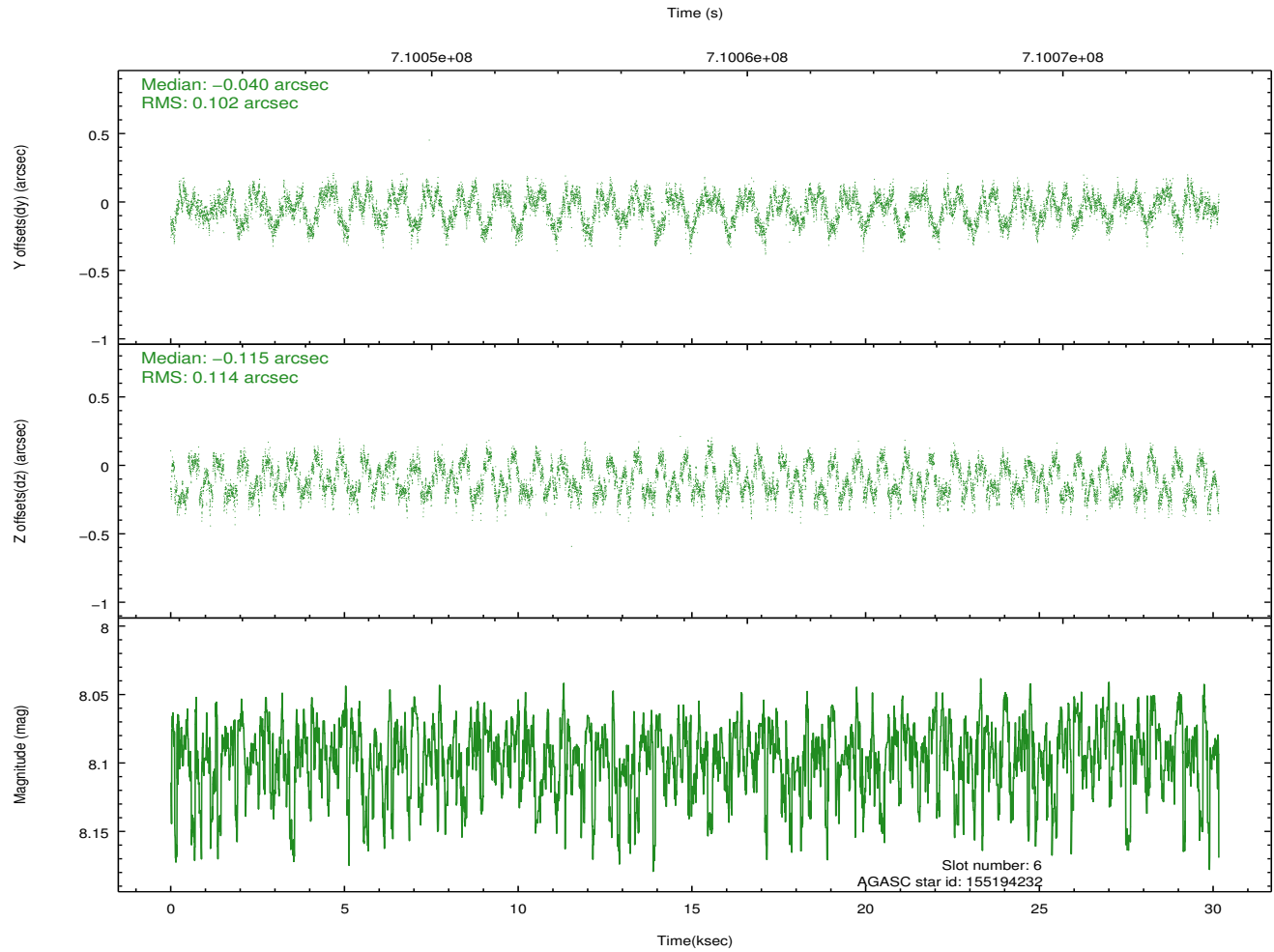
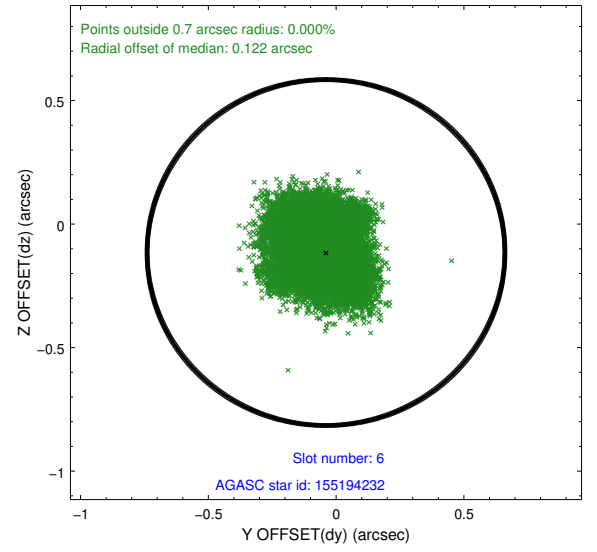
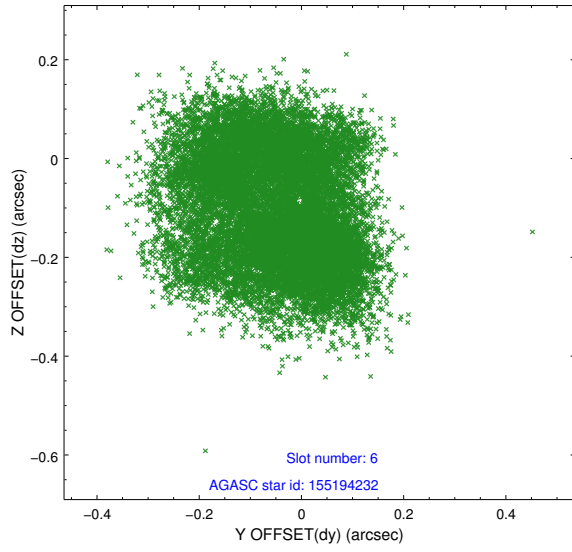
2.4.2 Slot 4



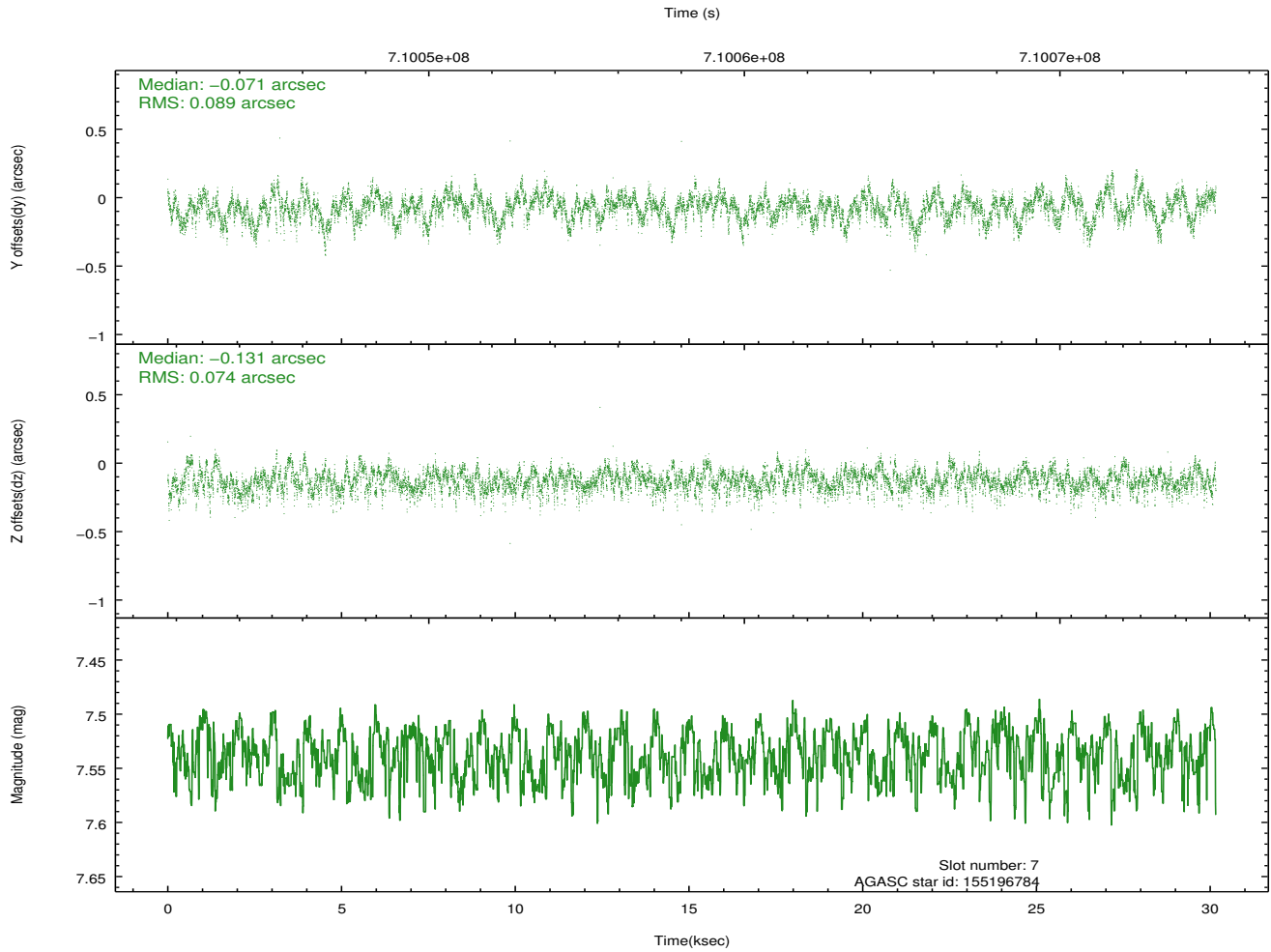
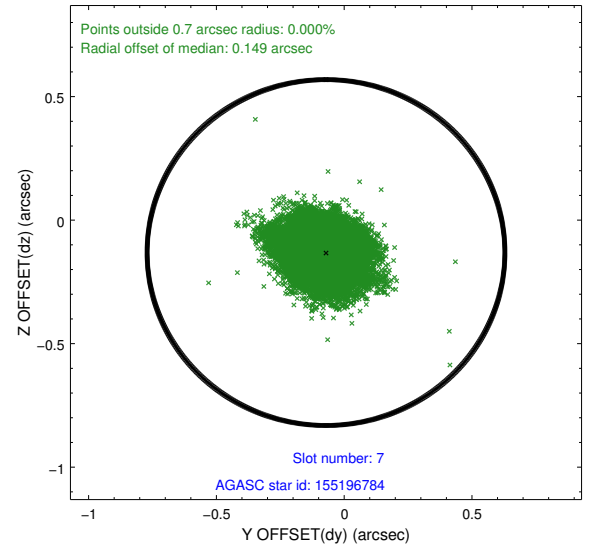
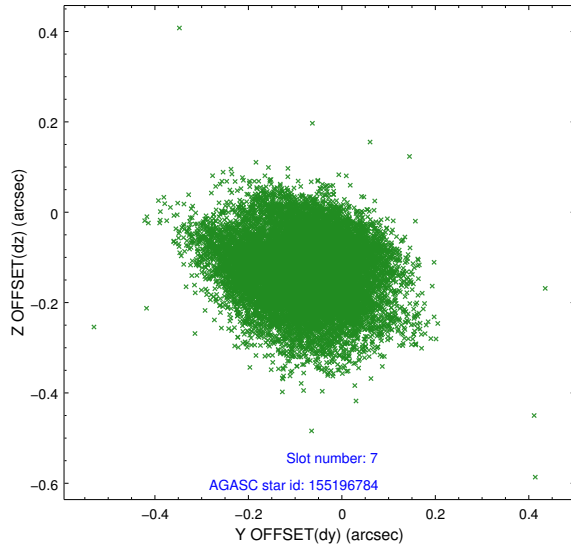
2.4.3 Slot 5



2.4.4 Slot 6

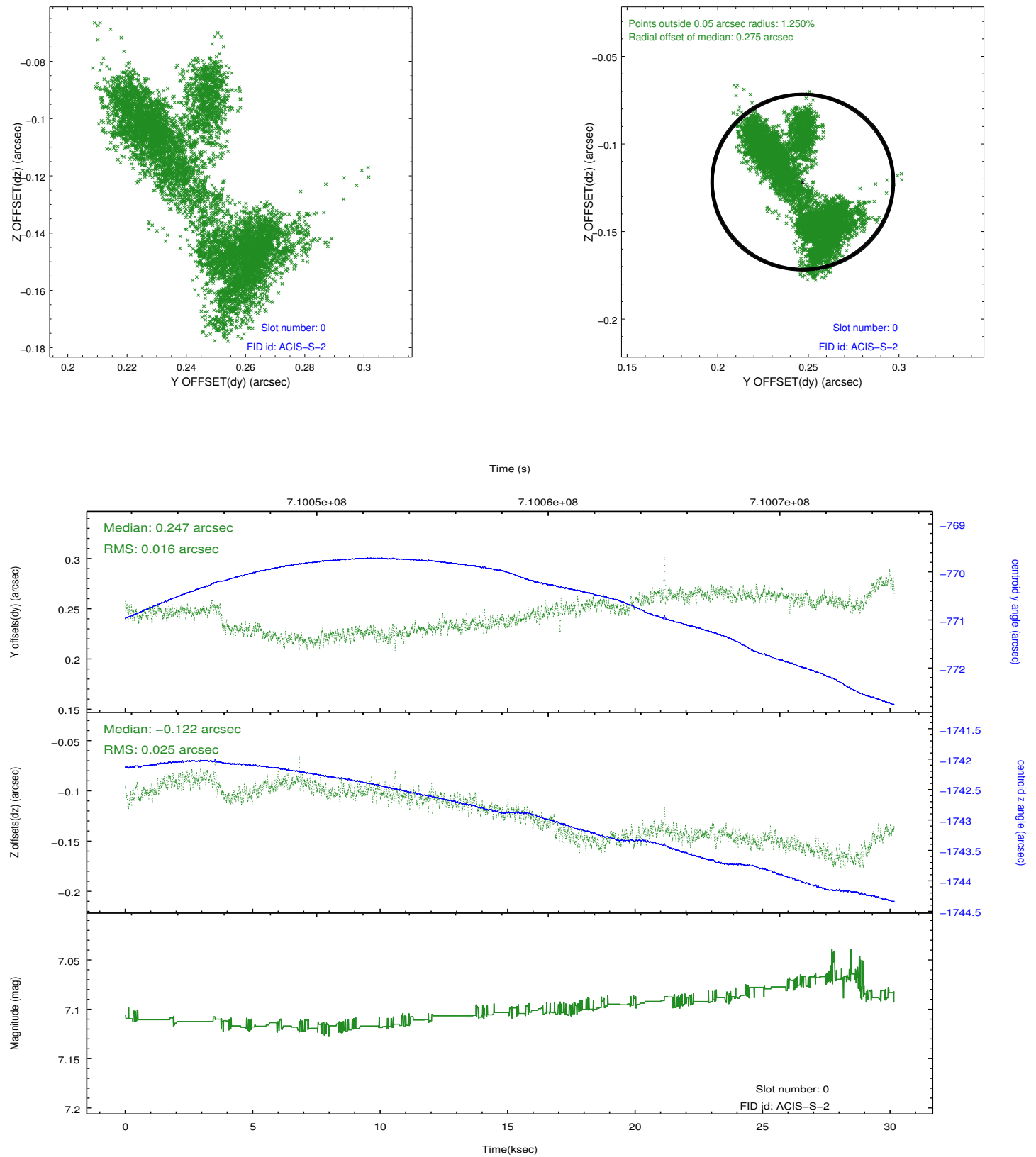


2.4.5 Slot 7

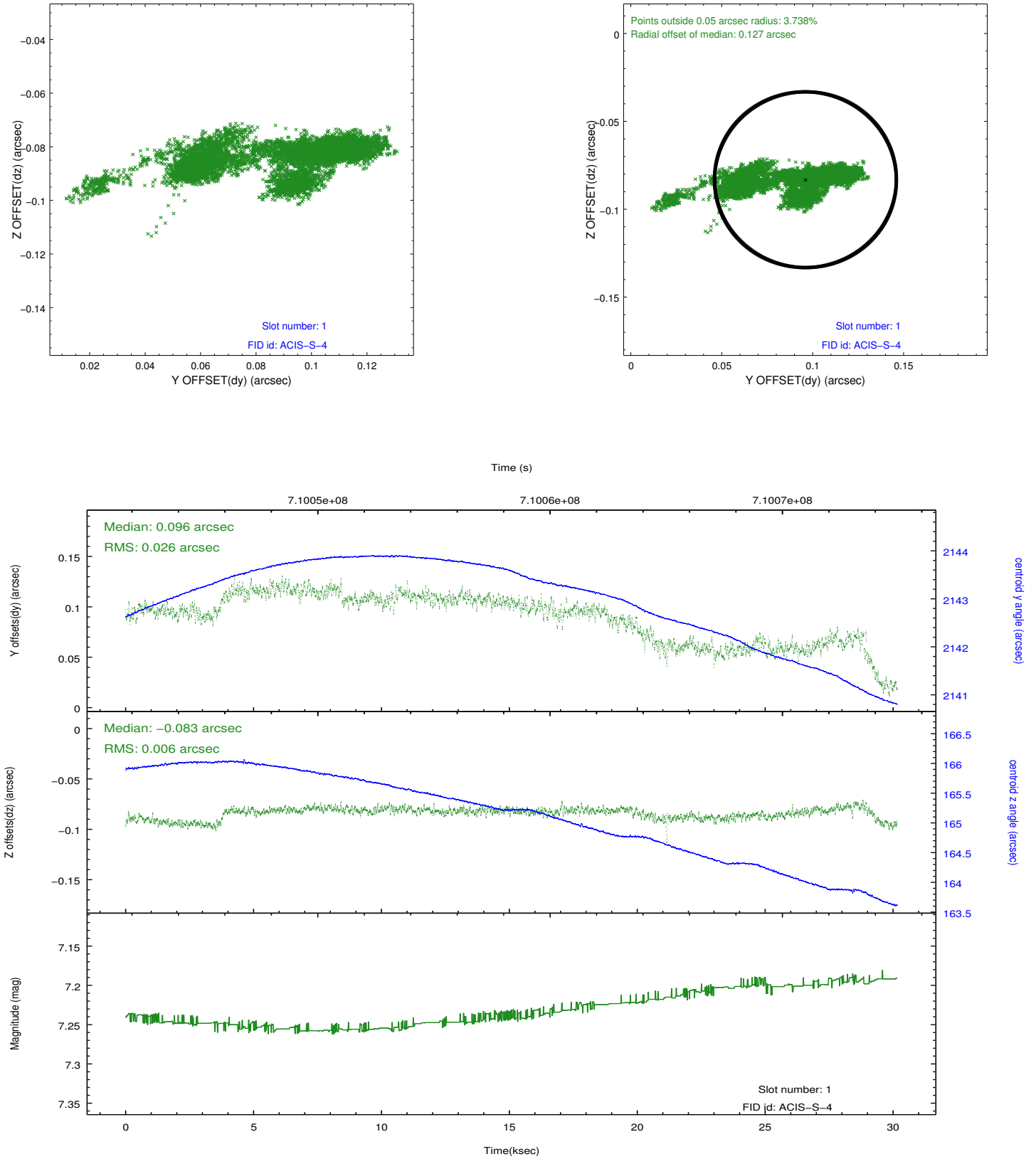


2.5 FID Slots

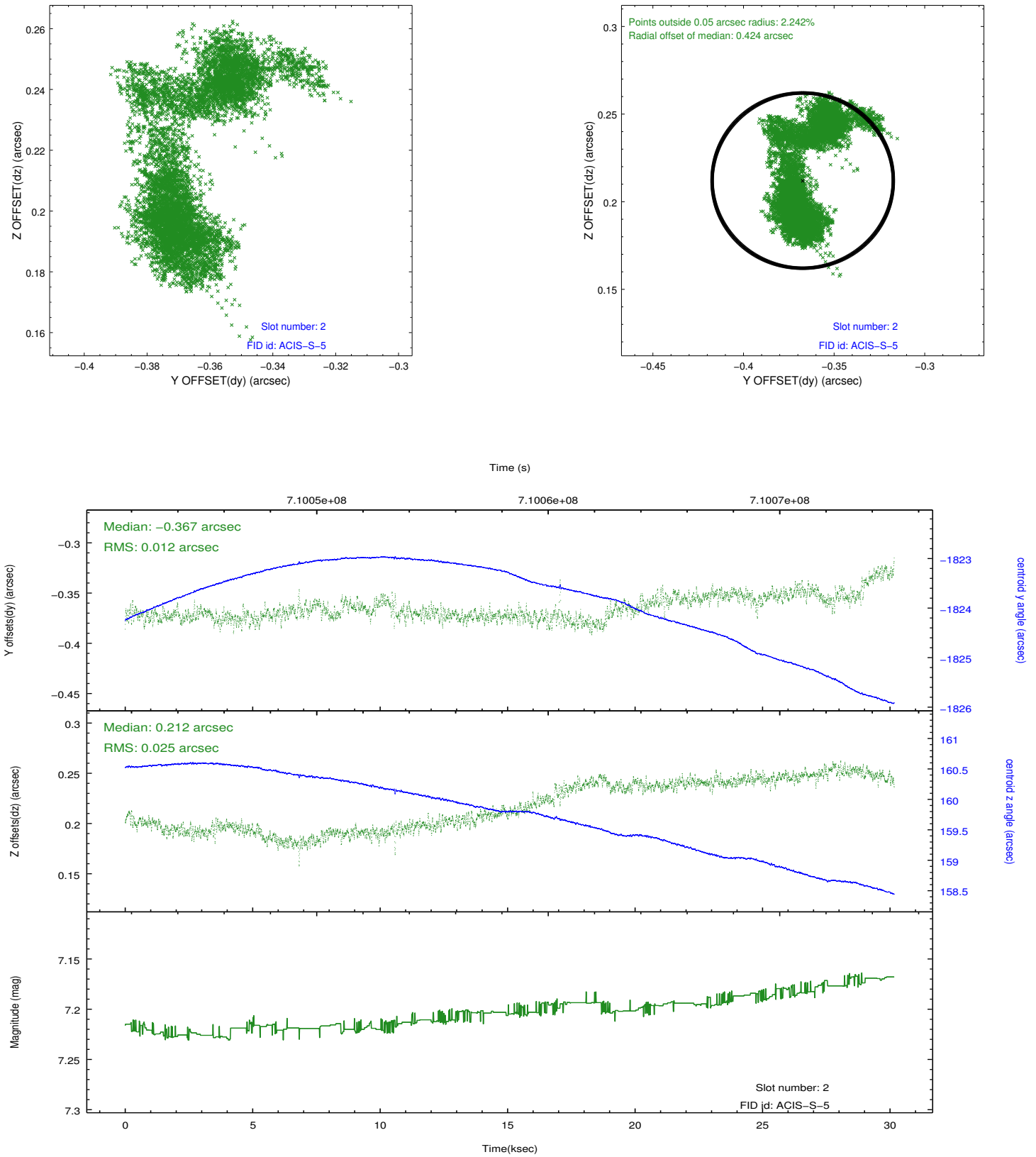
2.5.1 Slot 0



2.5.2 Slot 1

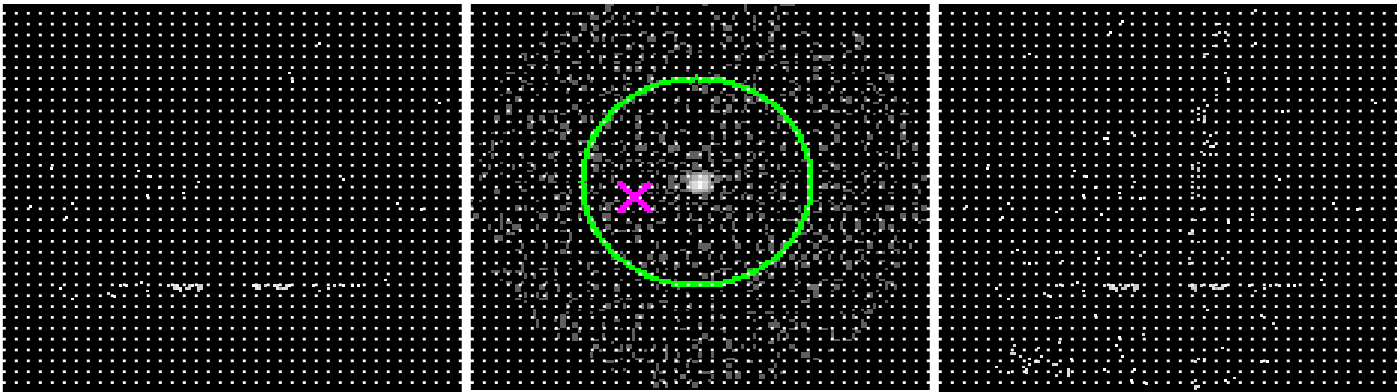


2.5.3 Slot 2



3 Gratings

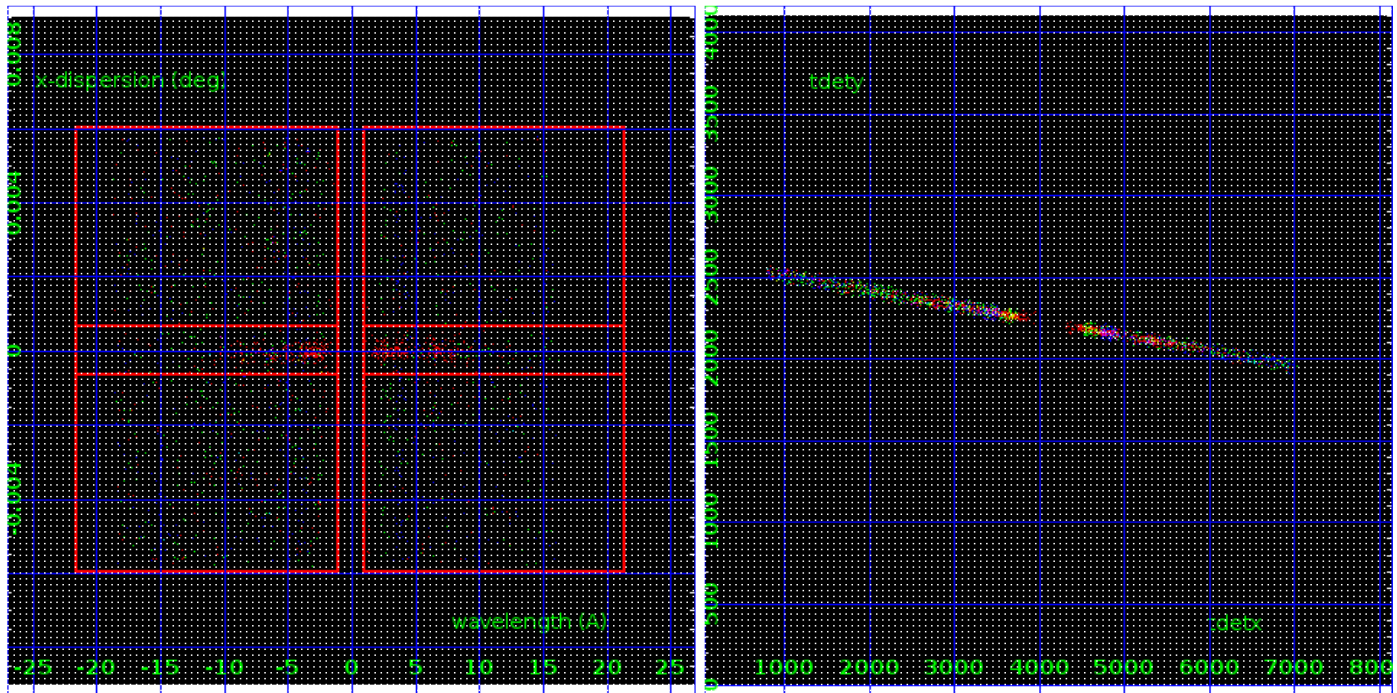
3.1 HEG Arm



HEG Order Sort 123

HEG Zero Order

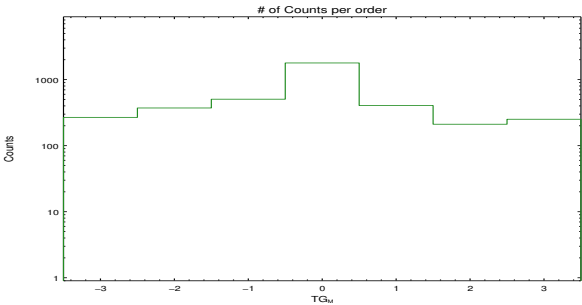
HEG Order Sort ALL

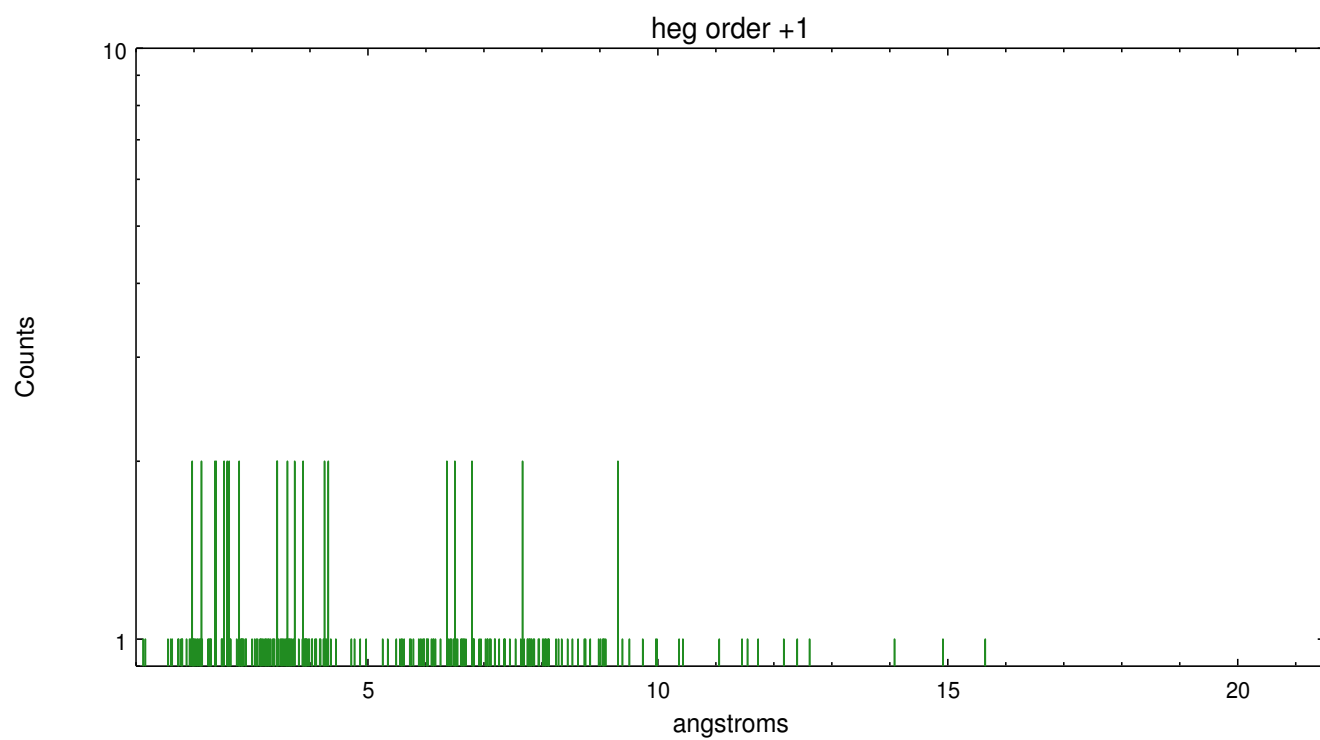
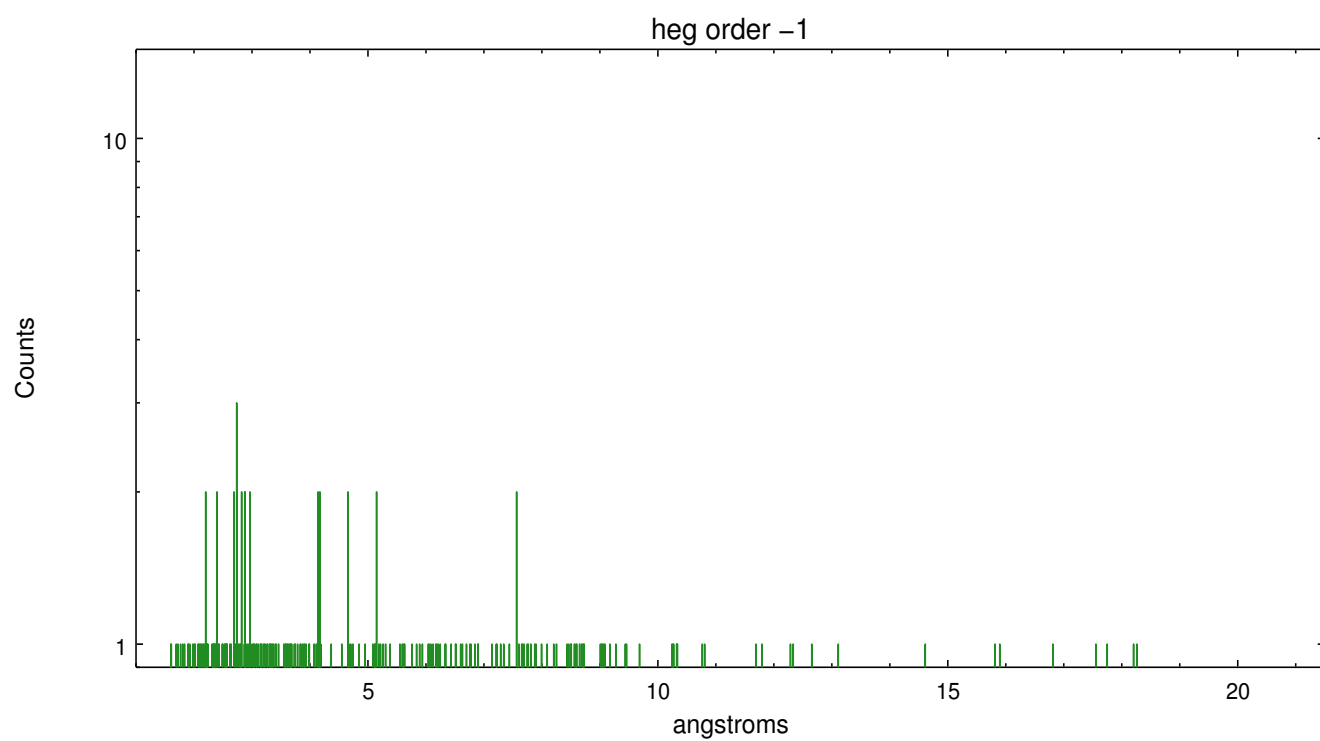


Spot Image HEG

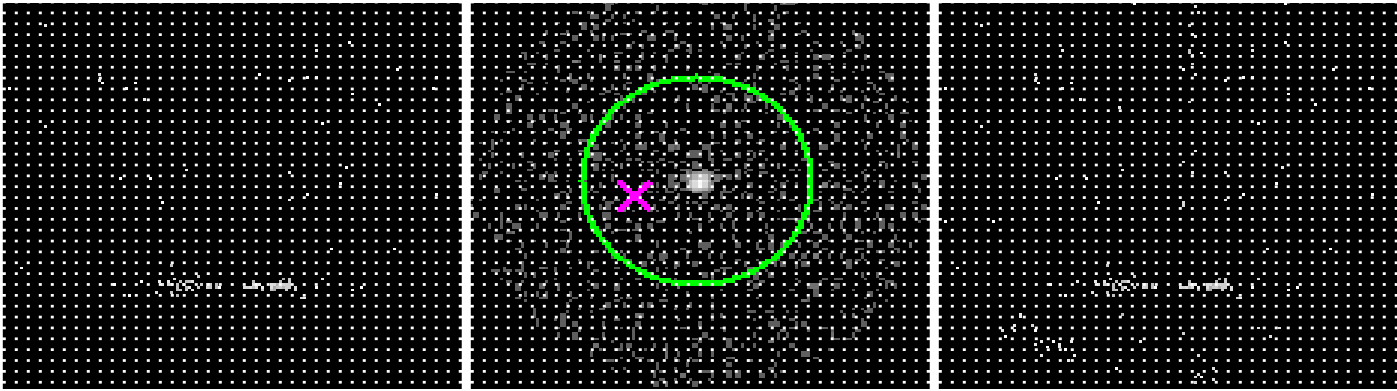
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	268	372	505	1787	405	211	251





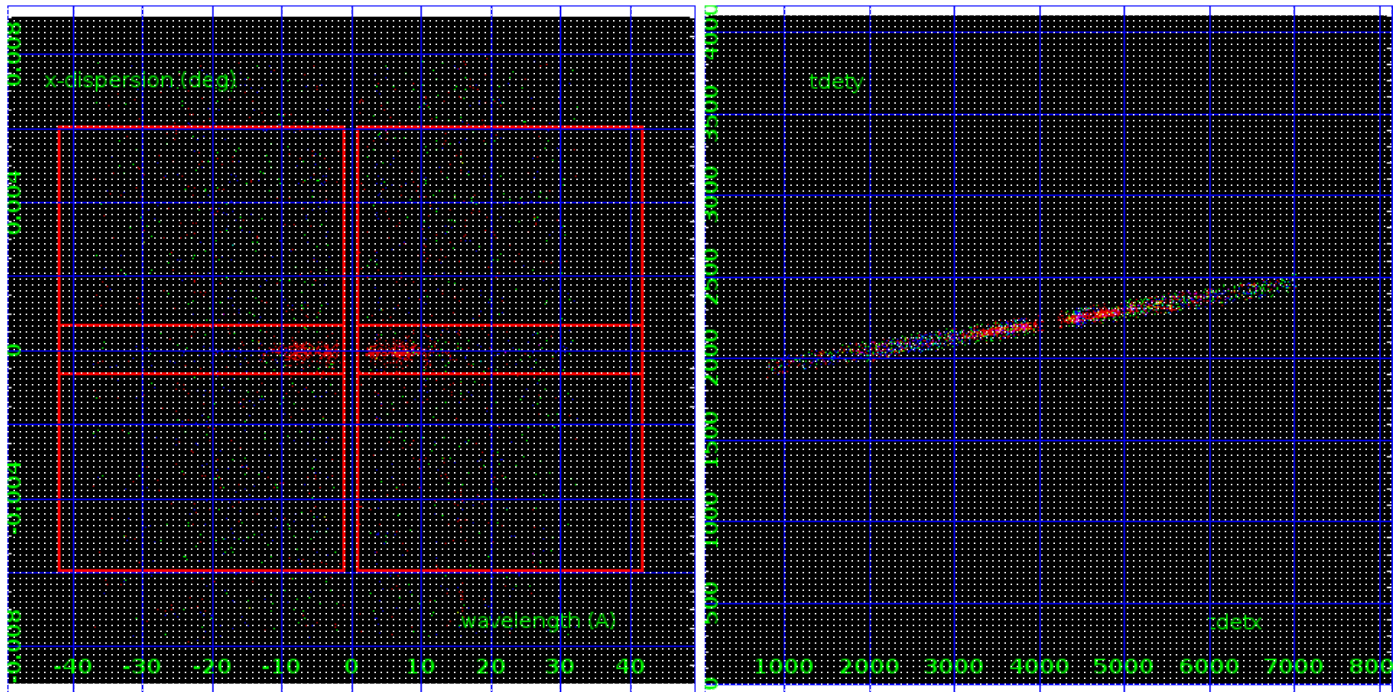
3.2 MEG Arm



MEG Order Sort 123

MEG Zero Order

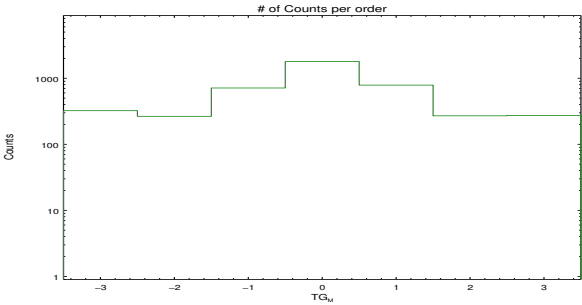
MEG Order Sort ALL

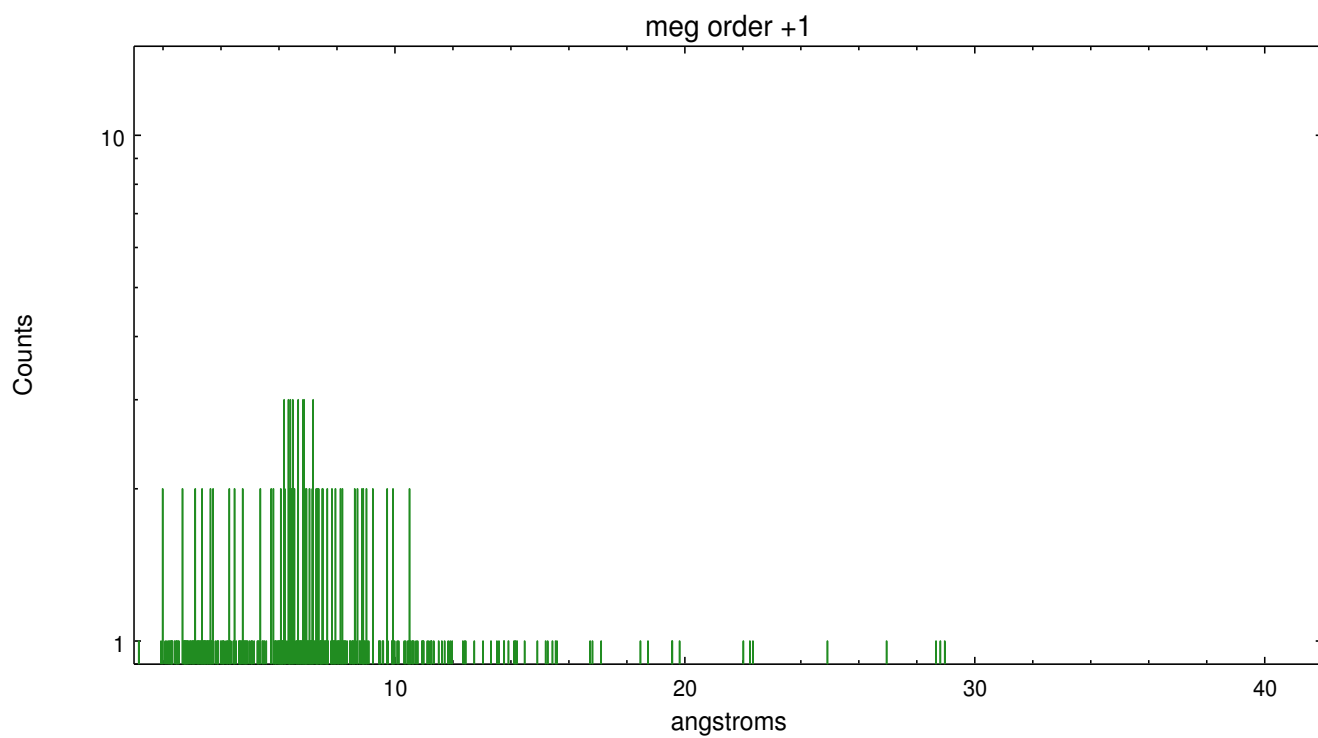
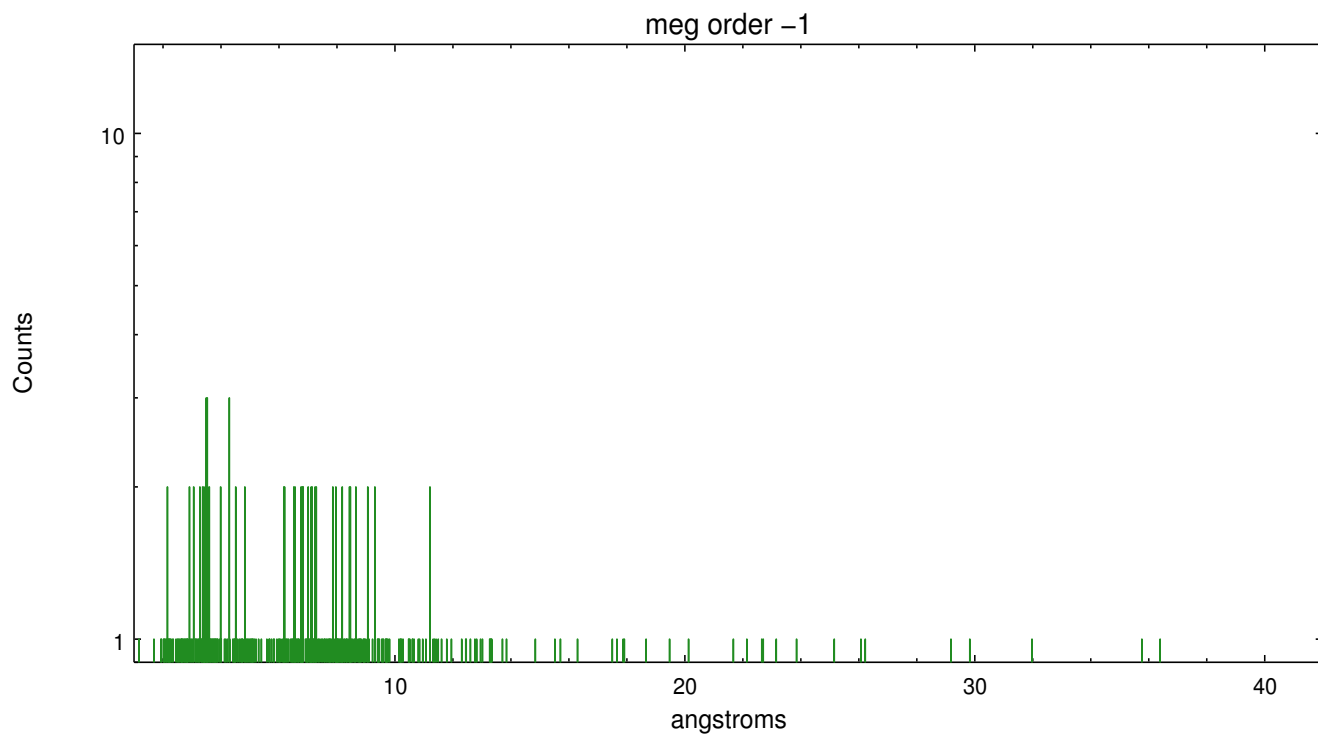


Spot Image MEG

Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	323	265	712	1787	787	270	273





A Summary

A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2020.07.05
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.079256756544

A.2 Comments