

V&V Reference Report

L2 ASCDS Version : 10.3.3

Observation 15706 - L2 Version 2
Chandra X-Ray Center

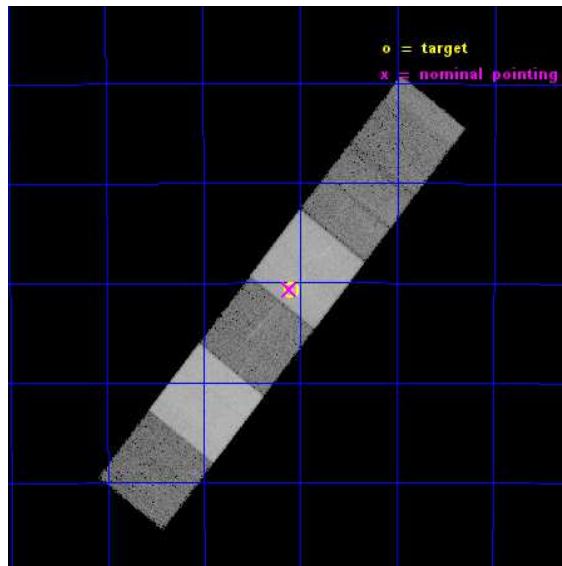
L2 Processing Date : Mar 24 2015

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
3	Gratings	17
3.1	HEG Arm	17
3.2	MEG Arm	19
A	Summary	21
A.1	Status	21
A.2	Comments	21

1 Front

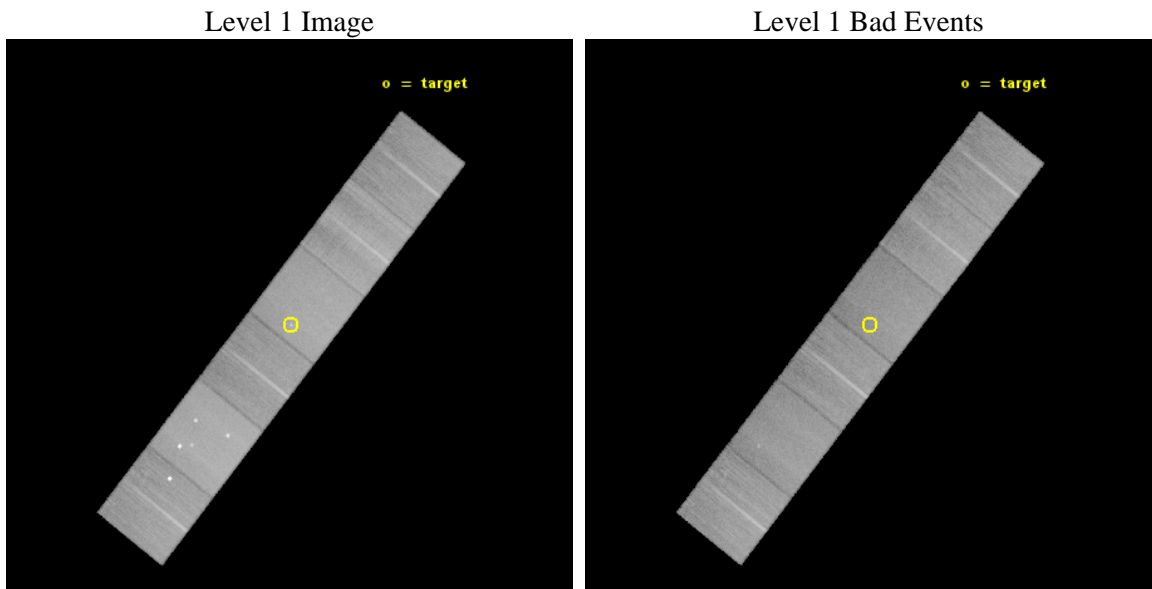
seq_num	200919	Sequence number
obs_id	15706	Observation id
title	Wind Properties in a Very Young Pup	Proposal title
observer	Dr. Norbert Schulz	Principal investigator
object	RCW38/IRS2	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	134.773333	Observer's specified target RA [deg]
dec_targ	-47.511361	Observer's specified target Dec [deg]
ra_nom	134.77791093419	Nominal RA [deg]
dec_nom	-47.511109421348	Nominal Dec [deg]
roll_nom	308.15999617208	Nominal Roll [deg]
revision	2	Processing version of data
ontime	48139.452015042	Sum of GTIs [s]
livetime	47529.88128753	Livetime [s]
ontime4	48136.252004743	Sum of GTIs [s]
ontime5	48139.410974979	Sum of GTIs [s]
ontime6	48139.369935036	Sum of GTIs [s]
ontime7	48139.452015042	Sum of GTIs [s]
ontime8	48136.087824702	Sum of GTIs [s]
ontime9	48139.287855029	Sum of GTIs [s]
l2events	379249	Number of level 2 events



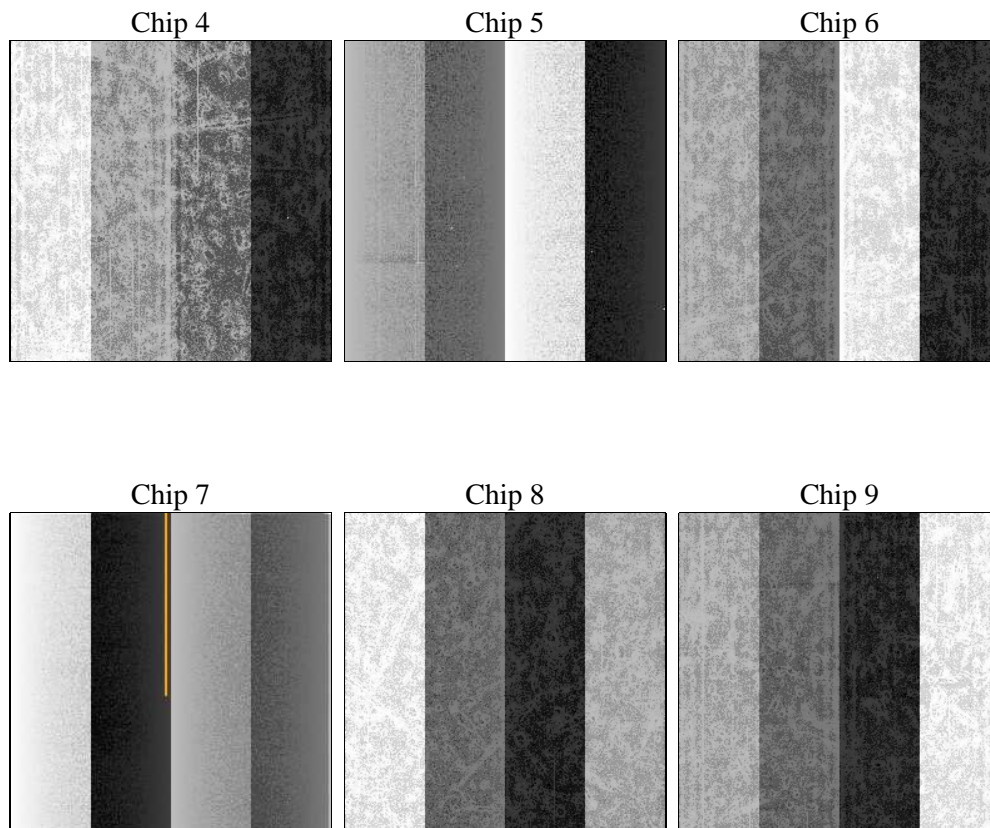
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	48199.581000	[s] Scheduled observation exposure time
ascdsver	10.3.3	Processing system revision	ontime	48139.452015042	Sum of GTIs [s]
caldbver	4.6.7	 	ontime4	48136.252004743	Sum of GTIs [s]
date	2015-03-24T06:35:30	Date and time of file creation	ontime5	48139.410974979	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	48139.369935036	Sum of GTIs [s]
			ontime7	48139.452015042	Sum of GTIs [s]
			ontime8	48136.087824702	Sum of GTIs [s]
			ontime9	48139.287855029	Sum of GTIs [s]
			l1events	1634852	Number of level 1 events
			tgmethod	TGDETECT	Method used to create src1a file
			zpc_pos	(4117.62, 4004.60)	src1a sky pixel position

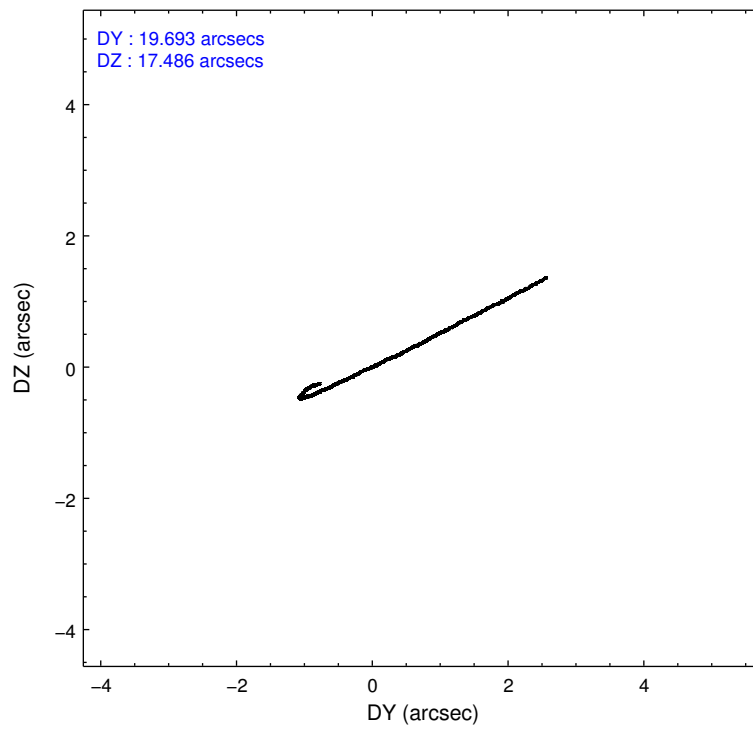
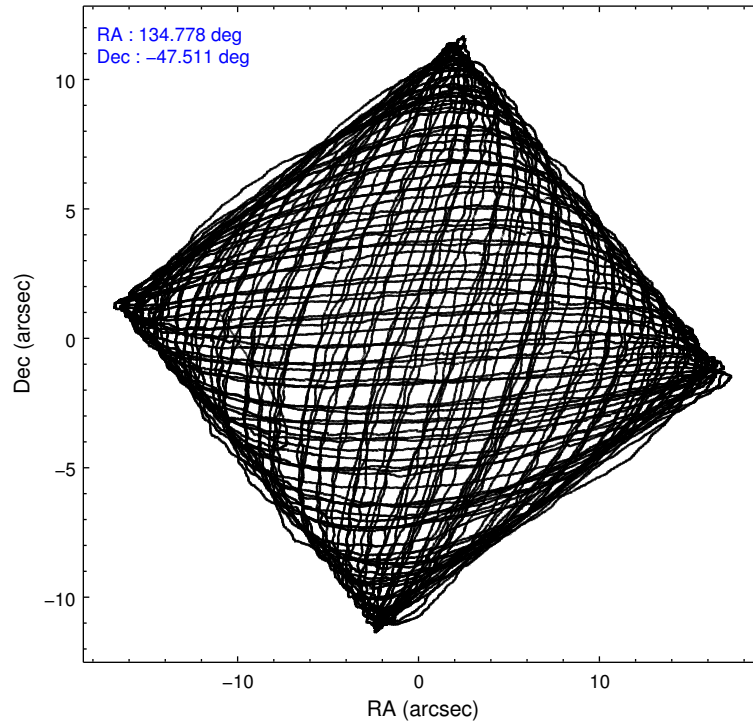
2.1.4 Events

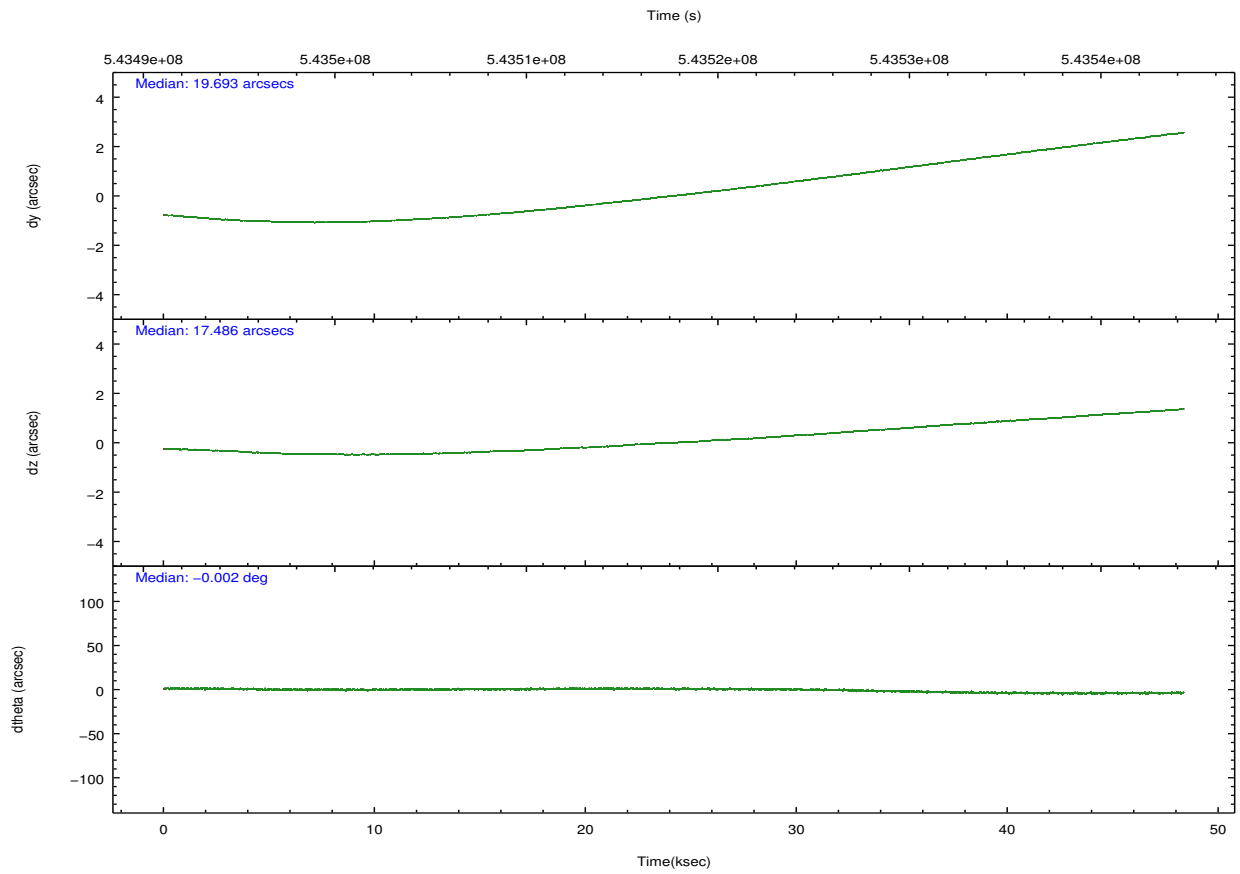
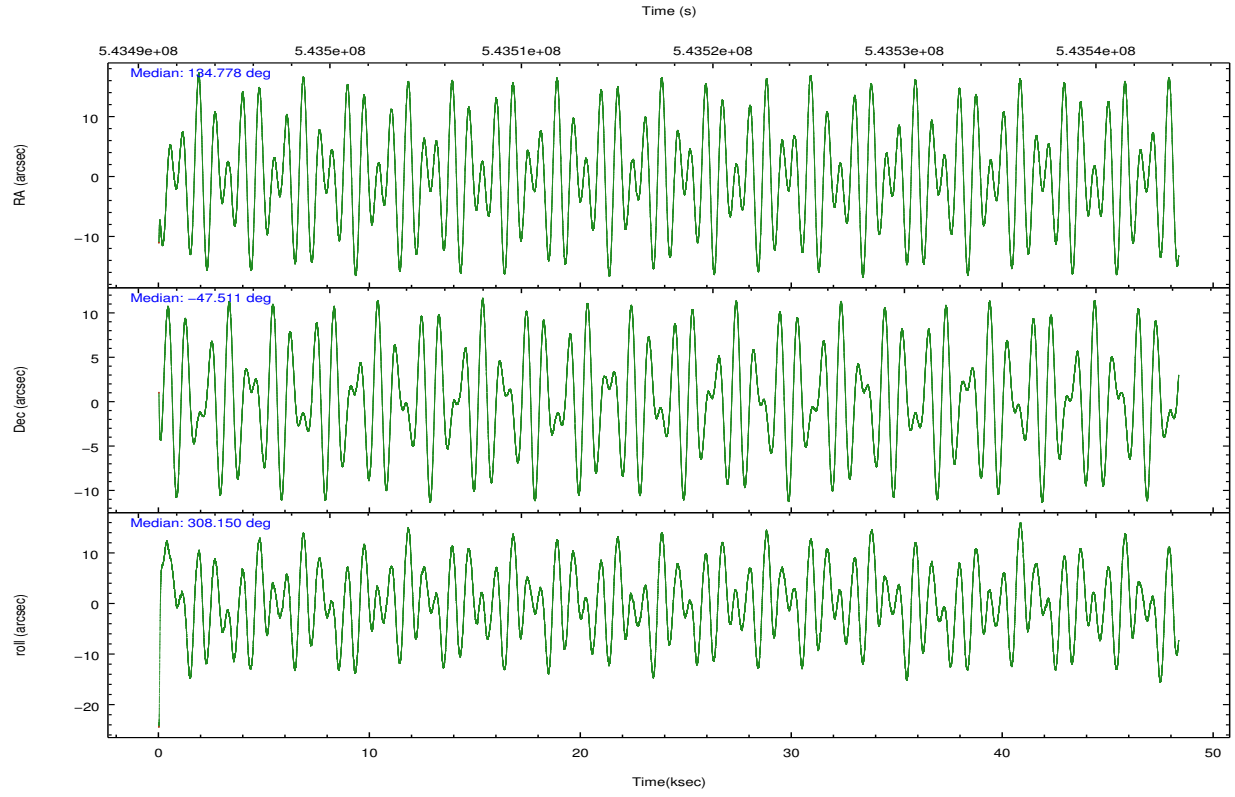
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	254432	363773	218384	298224	284299	215740	grade 0 events	17738	18541	9686	11465	19773	9514
rejected events	219952	187514	190885	168426	213115	188316		6%	5%	4%	3%	6%	4%
rejected %	86%	51%	87%	56%	74%	87%	grade 1 events	237	792	109	326	172	115
								0%	0%	0%	0%	0%	0%
							grade 2 events	6253	54343	6230	27195	17207	6030
								2%	14%	2%	9%	6%	2%
							grade 3 events	2859	4909	2606	10545	7447	2878
								1%	1%	1%	3%	2%	1%
							grade 4 events	2879	4698	2539	10281	7044	2759
								1%	1%	1%	3%	2%	1%
							grade 5 events	11289	23758	11036	29096	16406	12486
								4%	6%	5%	9%	5%	5%
							grade 6 events	4752	93793	6438	70318	19715	6249
								1%	25%	2%	23%	6%	2%
							grade 7 events	208425	162939	179740	138998	196535	175709
								81%	44%	82%	46%	69%	81%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
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	134.740020	134.7779109341904	CCD I2 on	N	N
[deg] Pointing Dec	-47.501223	-47.51110942134775	CCD I3 on	N	N
[deg] Pointing Roll	307.975438	308.1599961720819	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)	543493672.184000	543492374.57004	CCD S5 on	O2	Y
Observation start date	2015-03-23T10:26:45	2015-03-23T10:06:14	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	543541871.184000	543542100.39782	On-chip summing requested	N	N
Observation end date	2015-03-23T23:50:04	2015-03-23T23:55:00	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



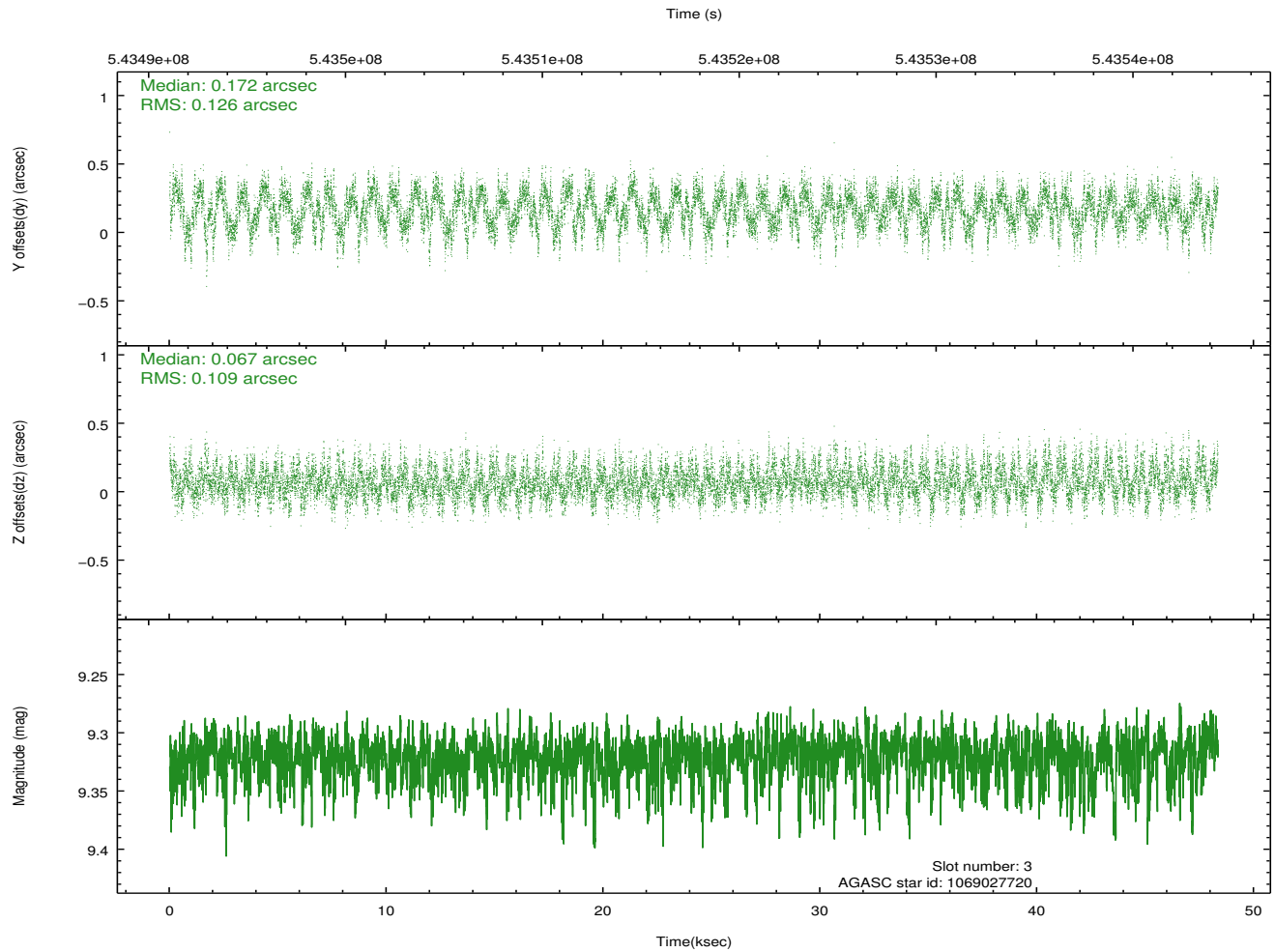
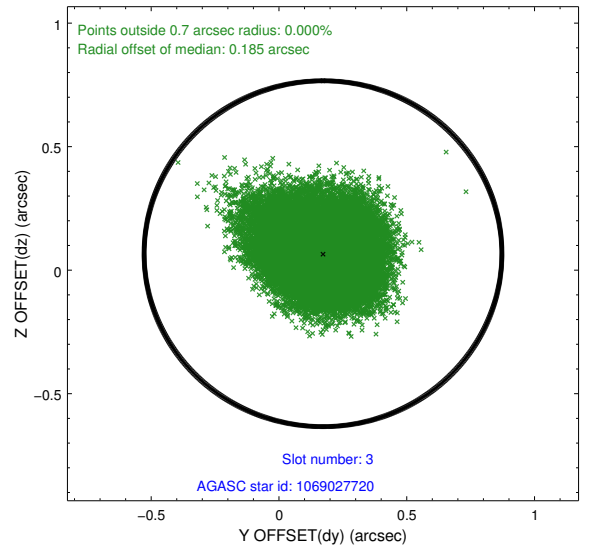
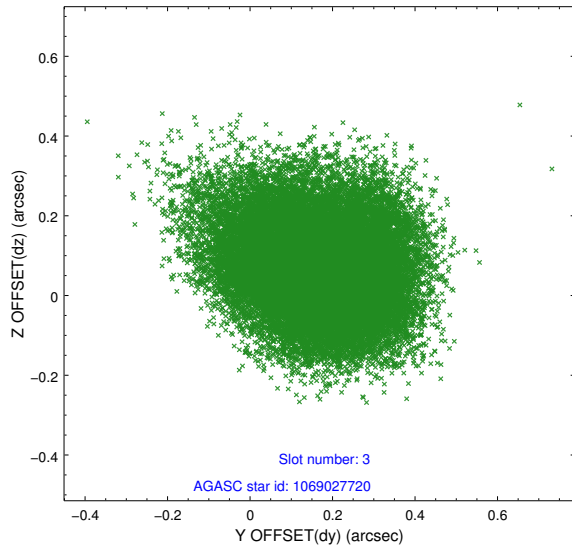


Slot Statistics

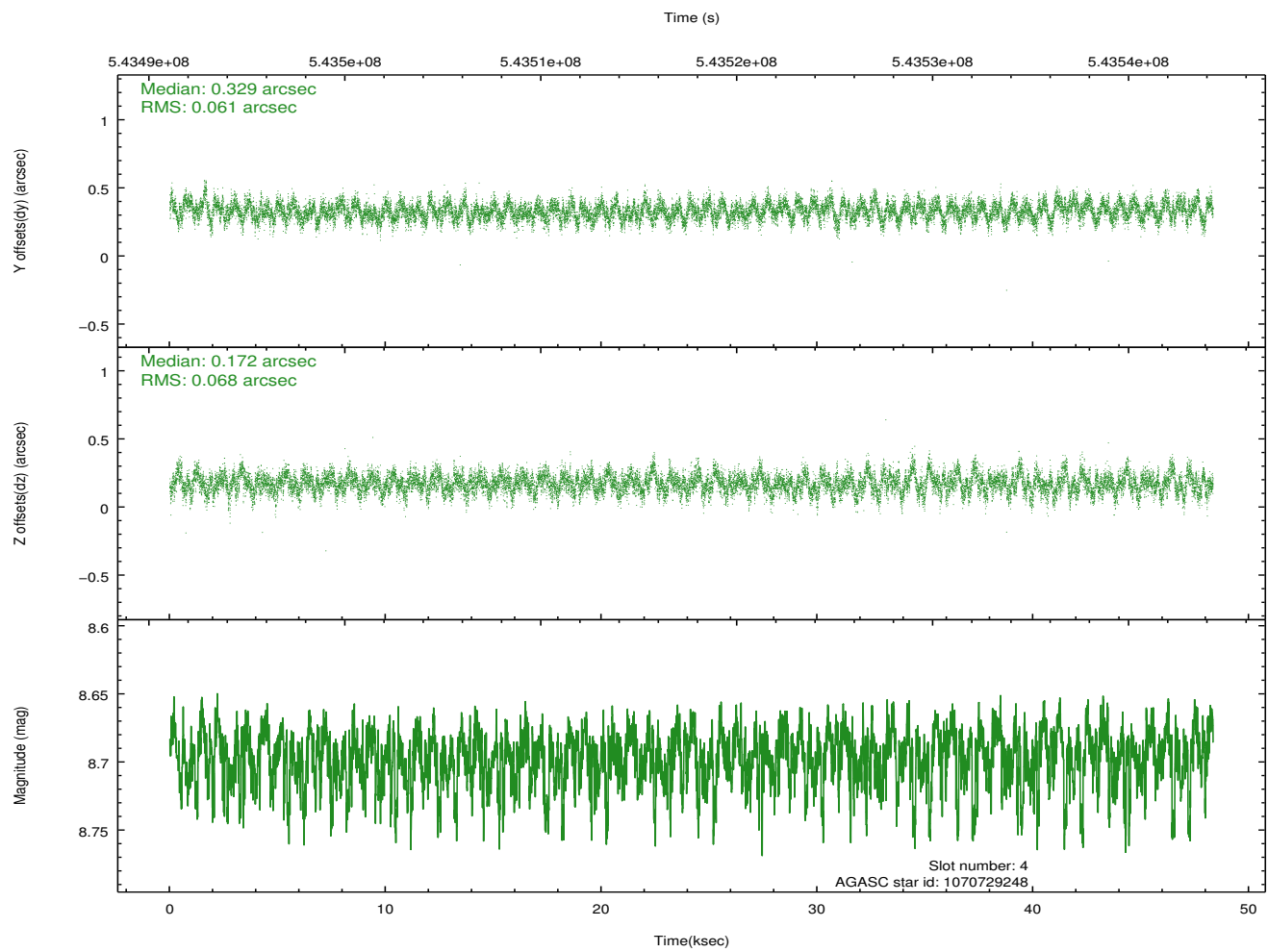
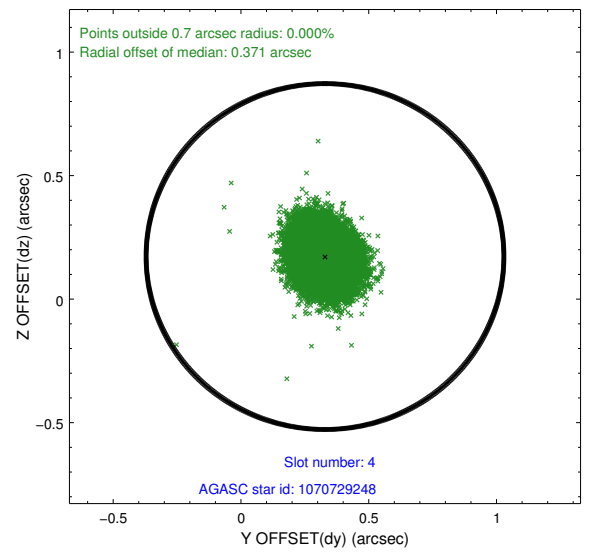
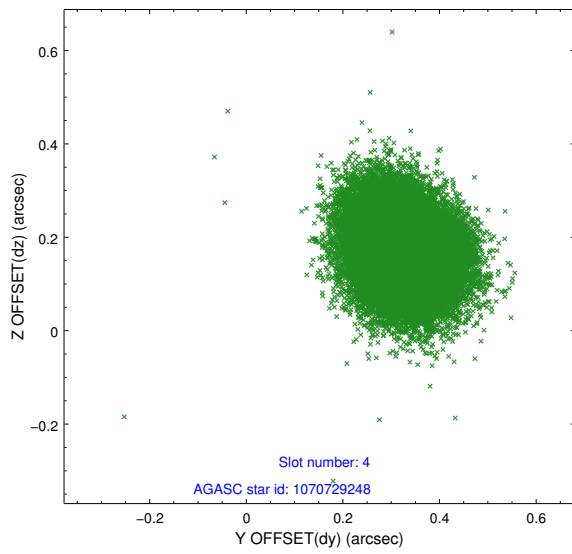
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.13	11791	-0.204	-0.129	0.010	0.016	0.000000	0.000000	-773.31	-1739.16
1	FID		ACIS-S-4	7.22	11791	0.241	0.110	0.013	0.021	0.000000	0.000000	2140.47	169.50
2	FID		ACIS-S-6	7.36	11790	-0.065	0.027	0.012	0.021	0.000000	0.000000	388.86	806.84
3	GUIDE	used	1069027720	9.32	23564	0.172	0.067	0.178	0.278	134.335715	-48.204942	1402.80	-2324.70
4	GUIDE	used	1070729248	8.70	23569	0.329	0.172	0.098	0.156	135.048995	-47.118313	-619.64	1444.15
5	GUIDE	used	1070729592	7.40	23582	-0.400	-0.081	0.072	0.114	135.107946	-47.337671	89.53	1068.73
6	GUIDE	used	1070731648	8.02	23578	-0.005	-0.085	0.091	0.142	135.285038	-47.251382	113.38	1600.42
7	GUIDE	used	1069026568	7.14	23580	-0.088	-0.079	0.072	0.120	134.843519	-48.291320	2395.66	-1554.33

2.4 Star Slots

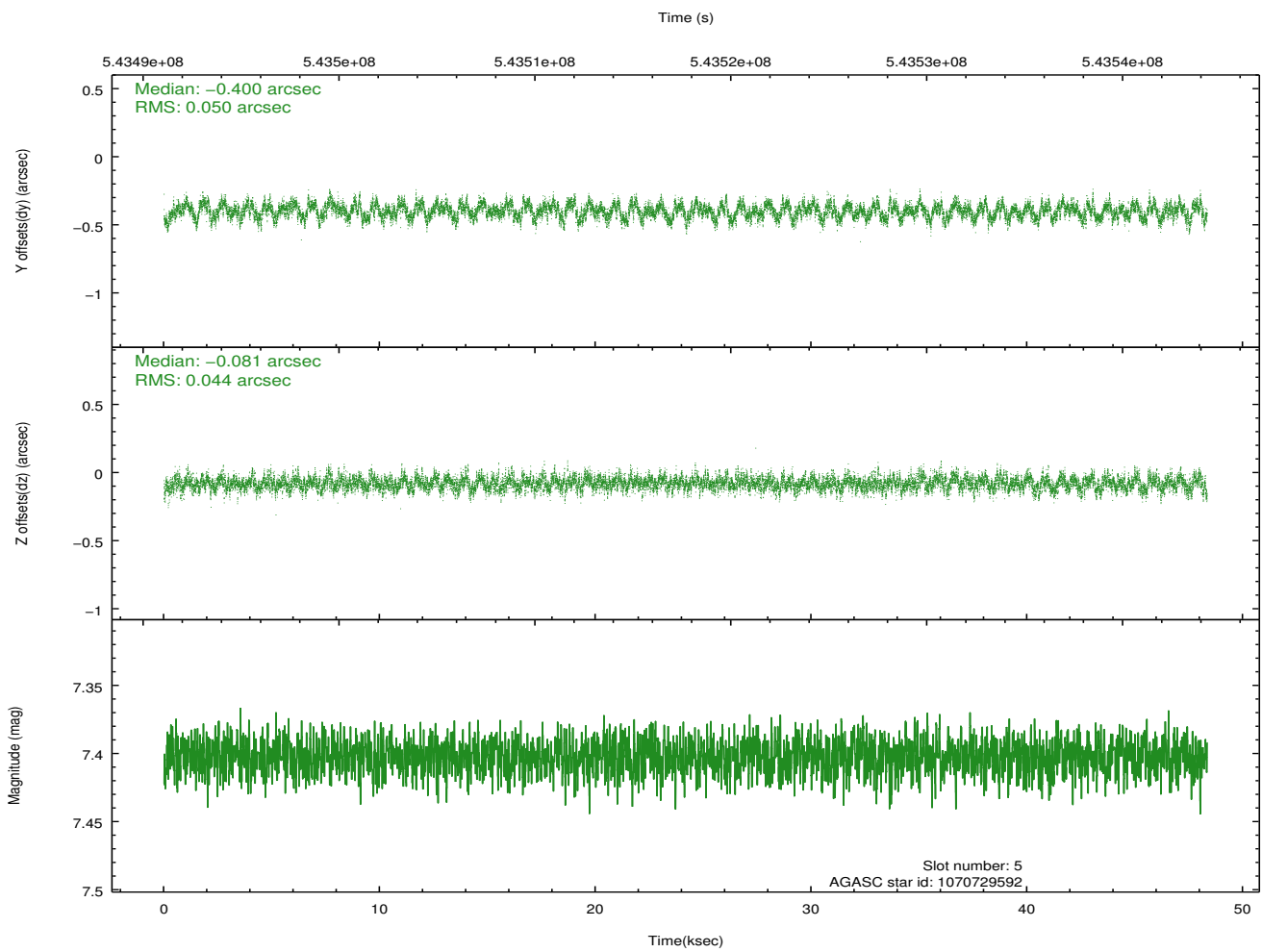
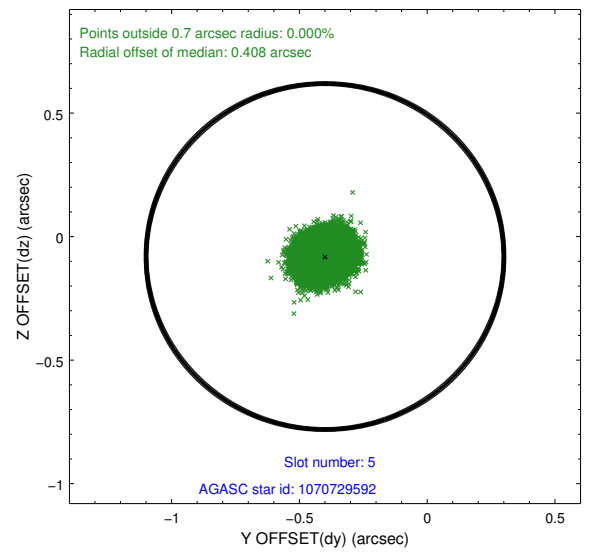
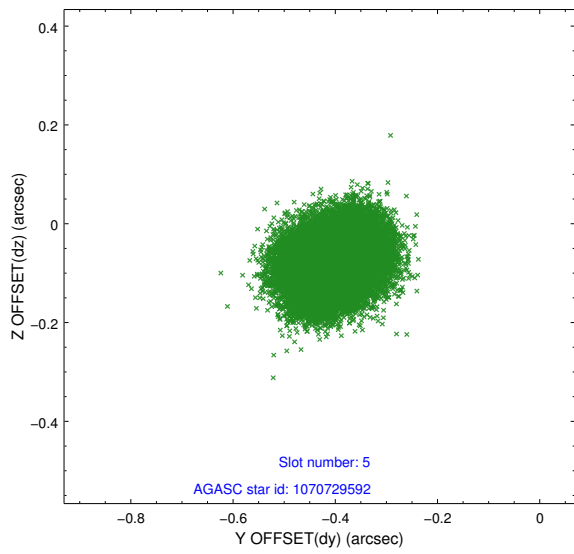
2.4.1 Slot 3



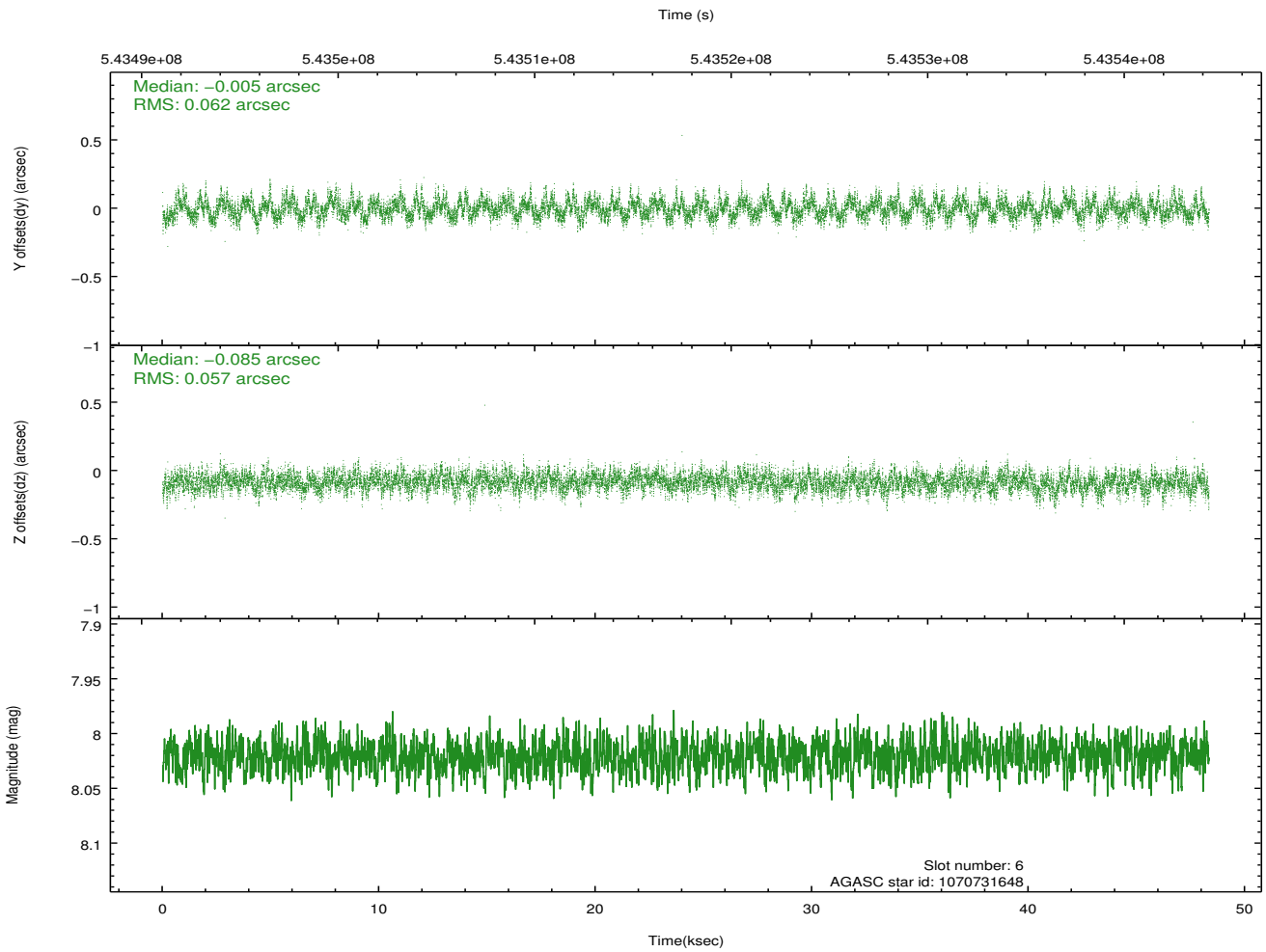
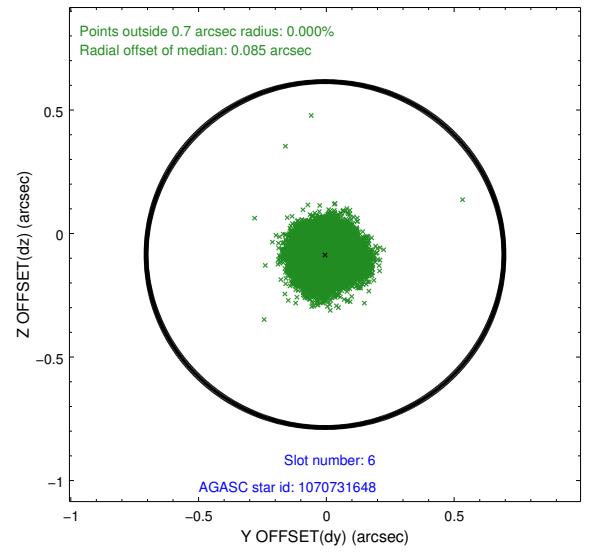
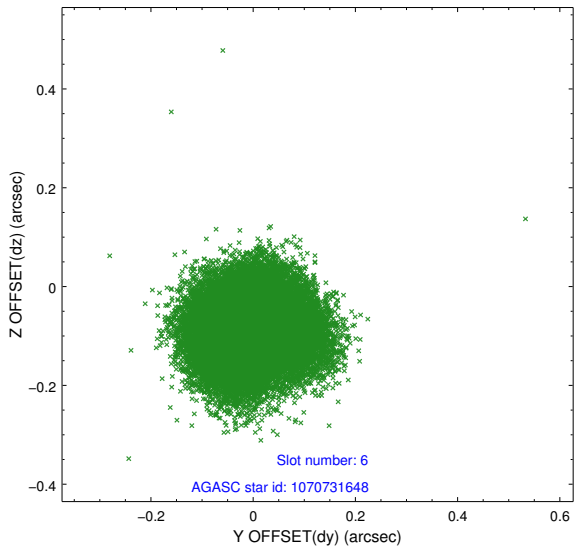
2.4.2 Slot 4



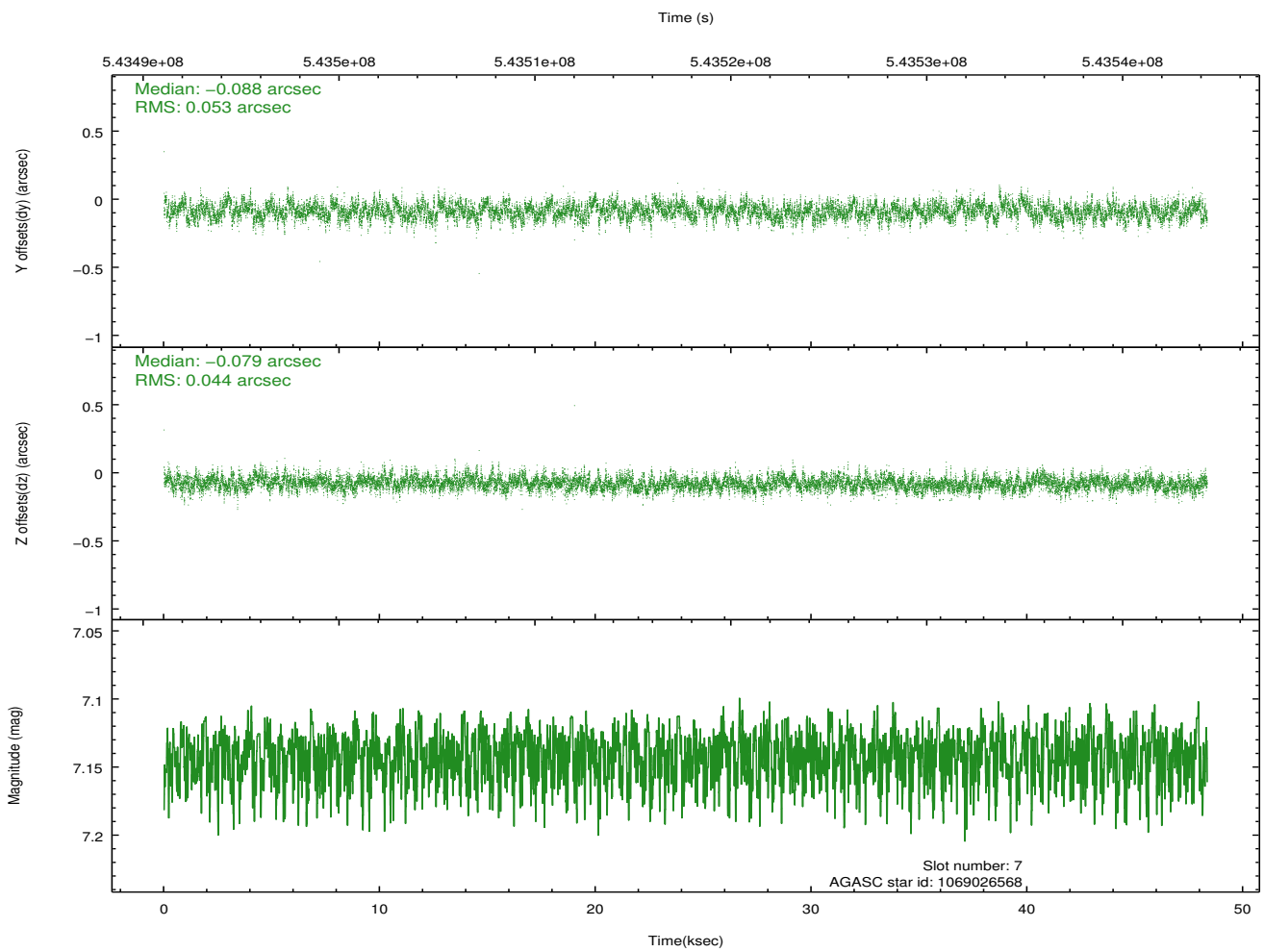
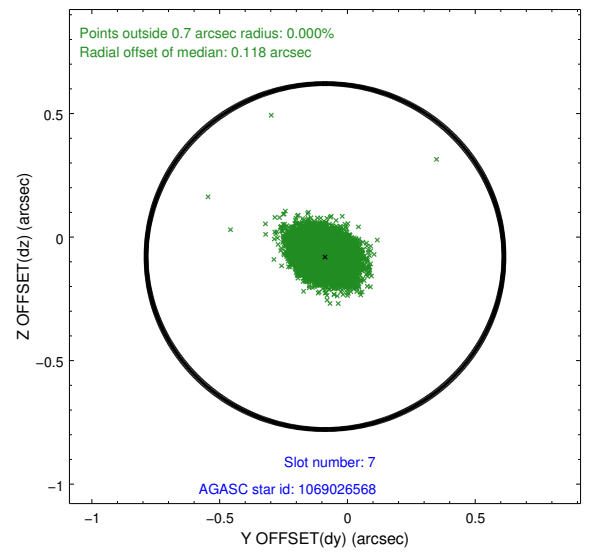
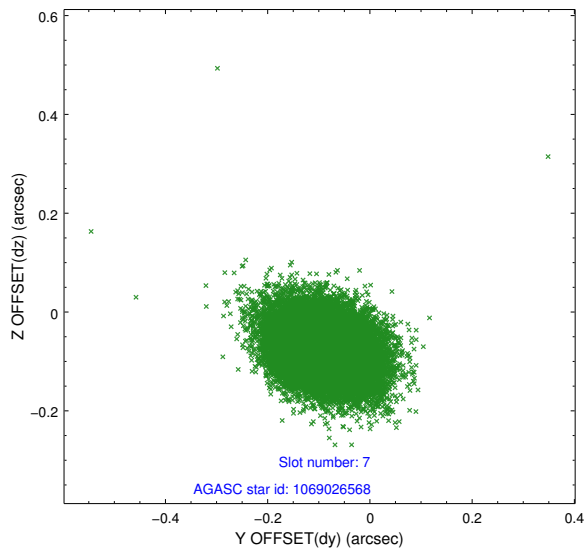
2.4.3 Slot 5



2.4.4 Slot 6

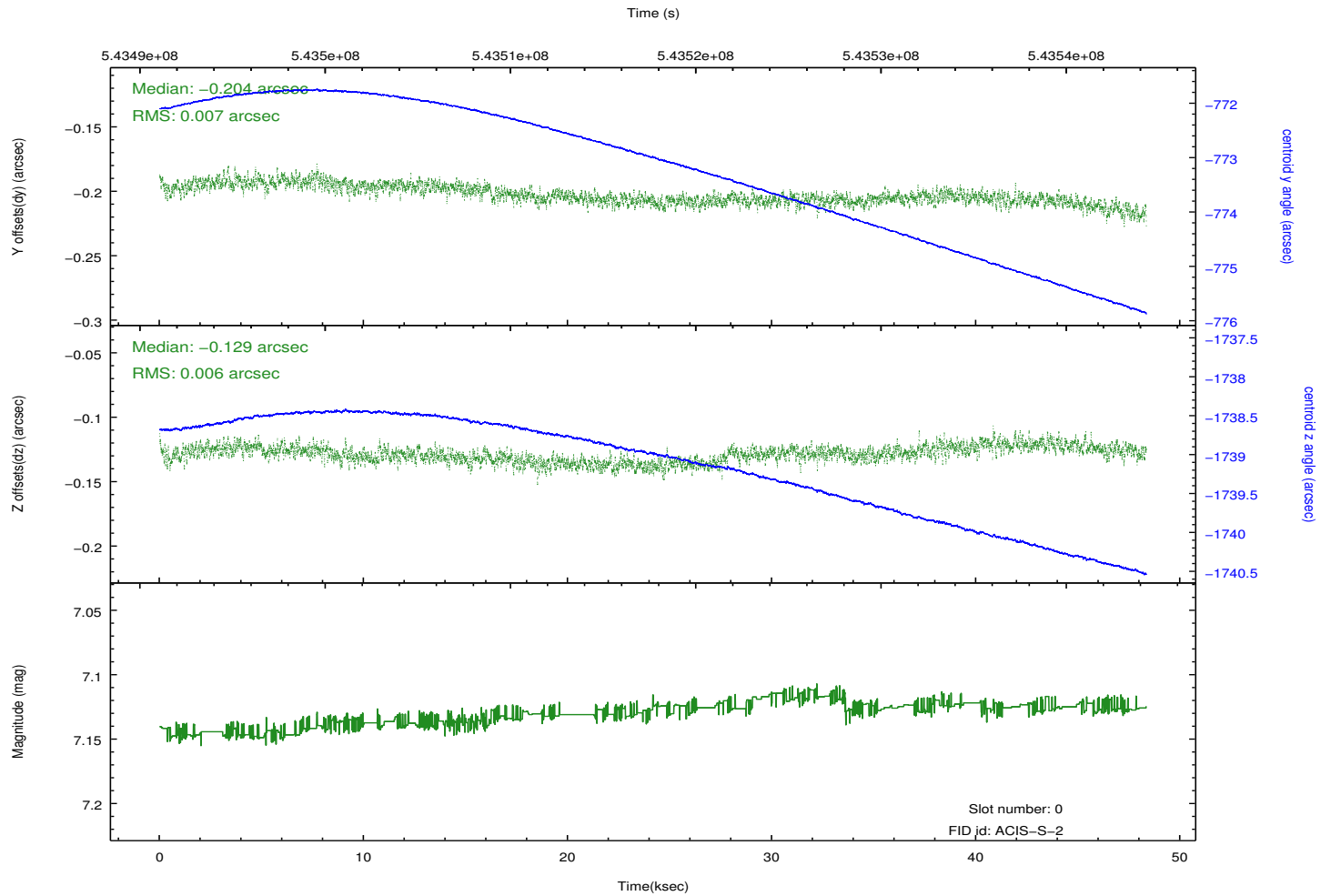
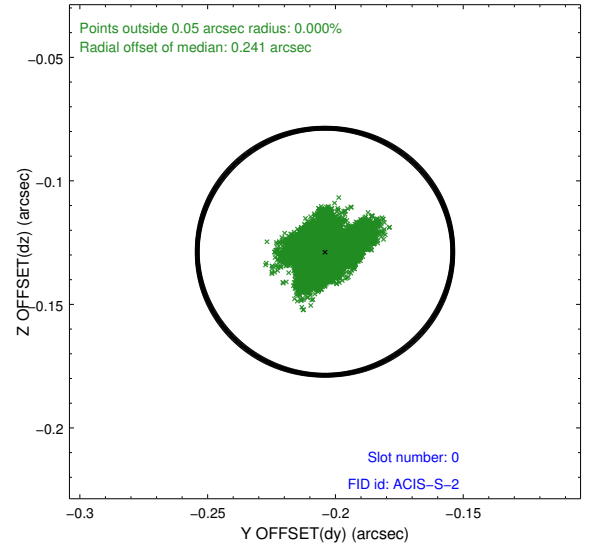
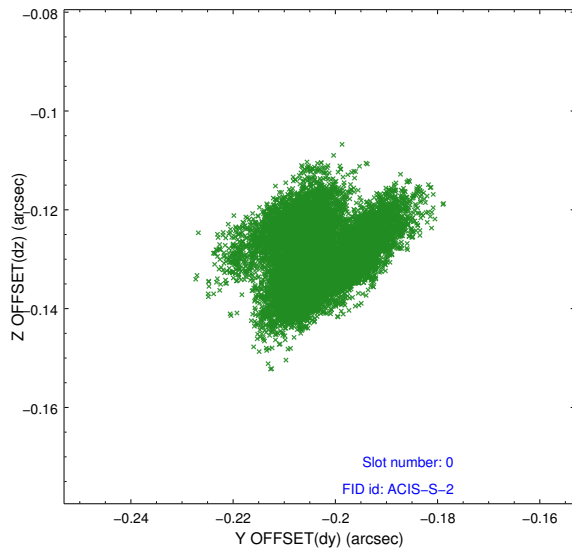


2.4.5 Slot 7

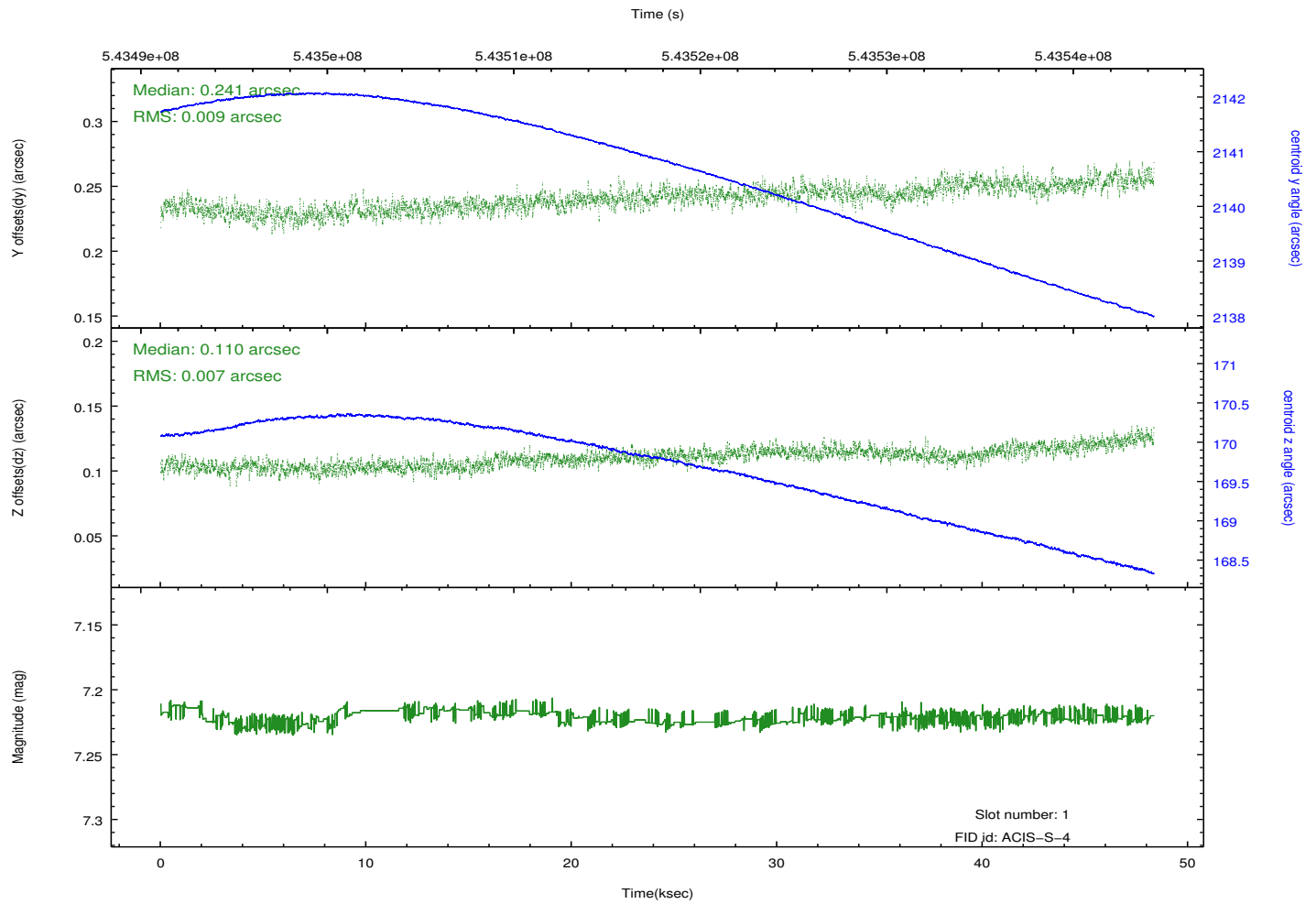
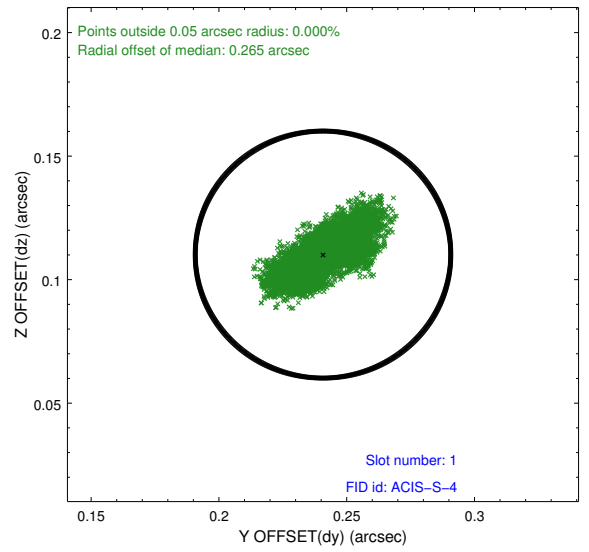
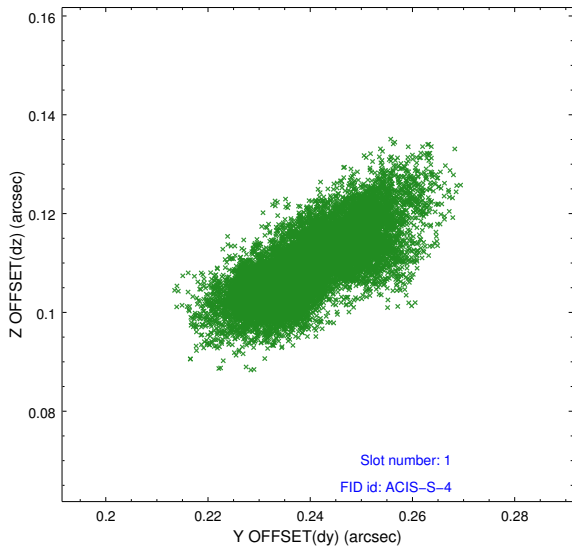


2.5 FID Slots

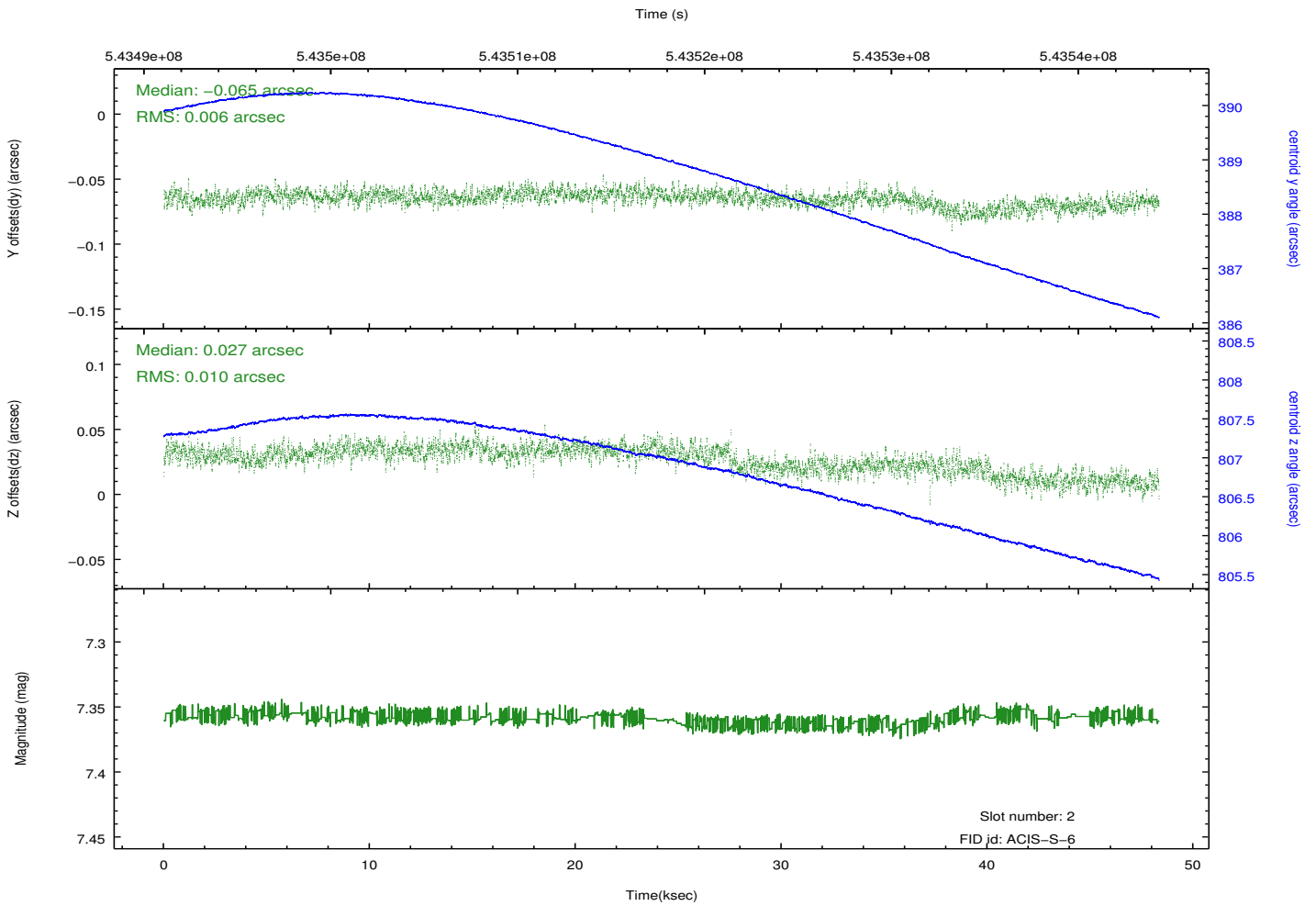
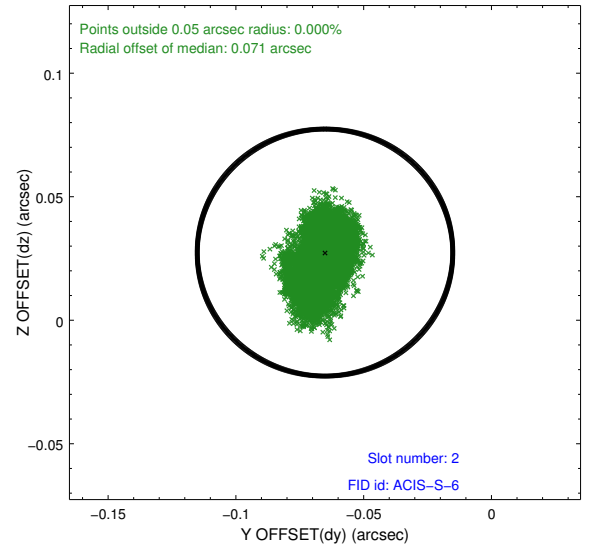
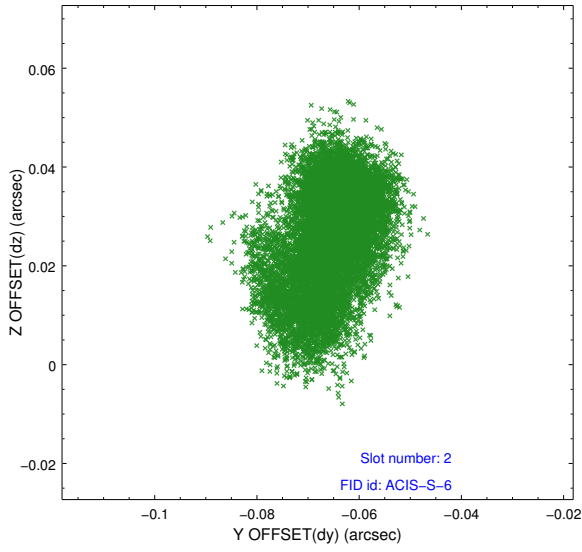
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

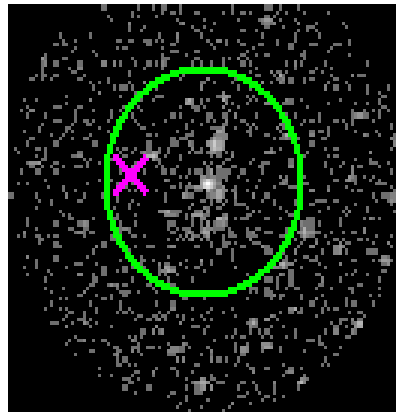


3 Gratings

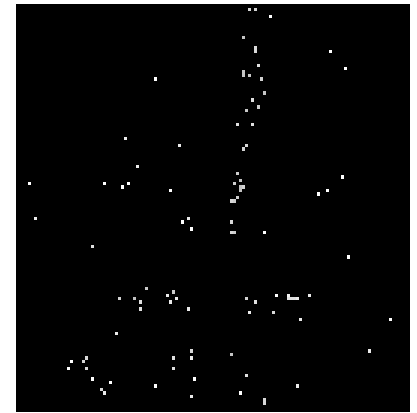
3.1 HEG Arm



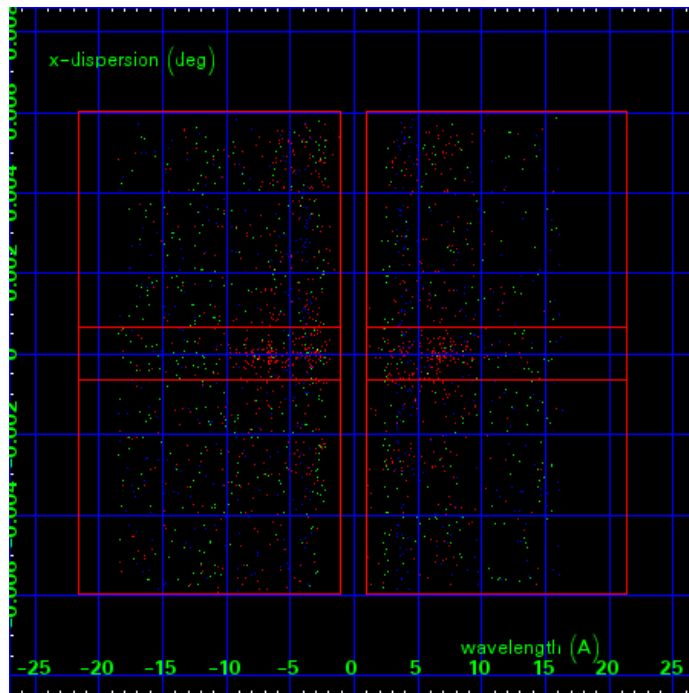
HEG Order Sort 123



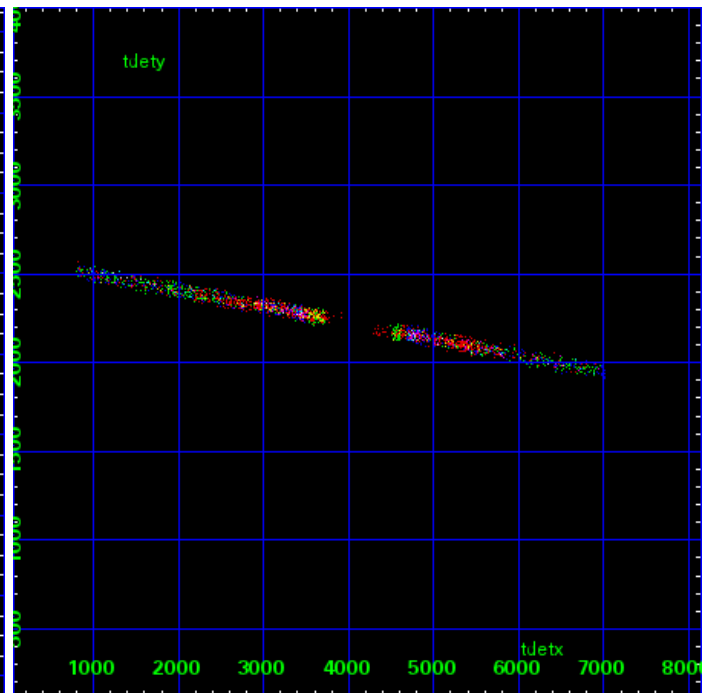
HEG Zero Order



HEG Order Sort ALL

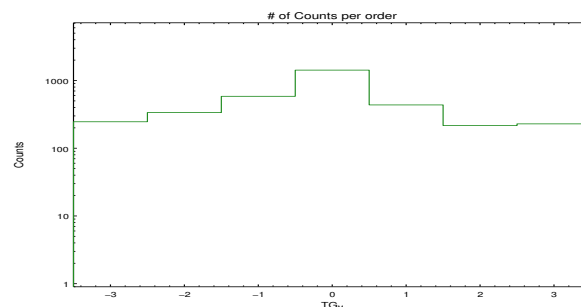


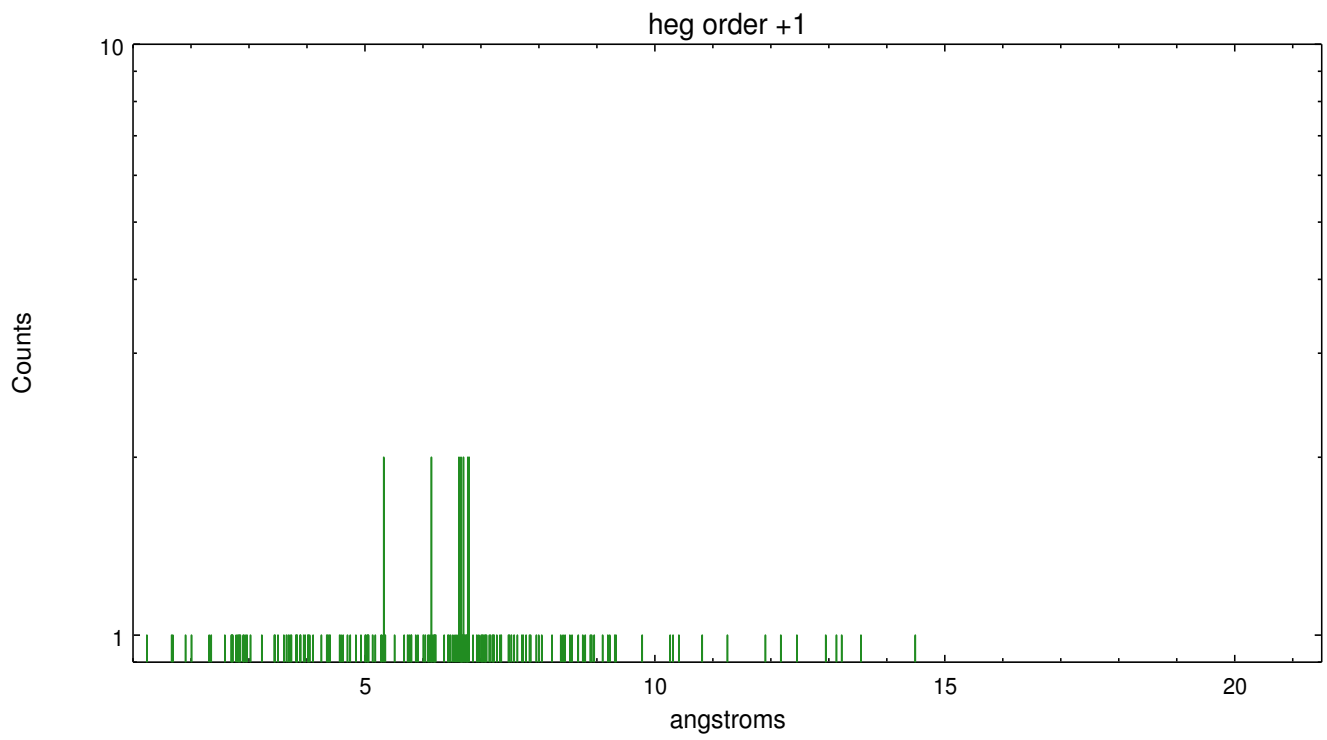
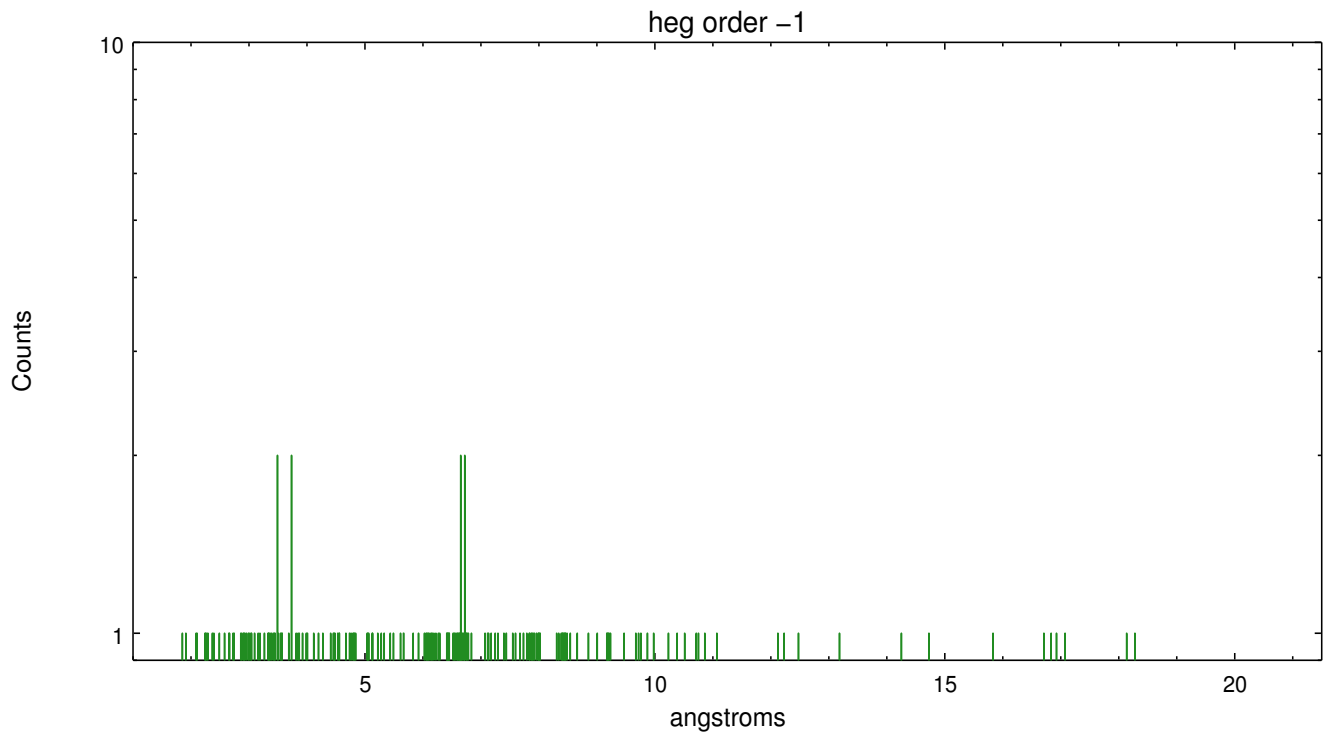
Spot Image HEG



Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	246	336	584	1423	436	216	229

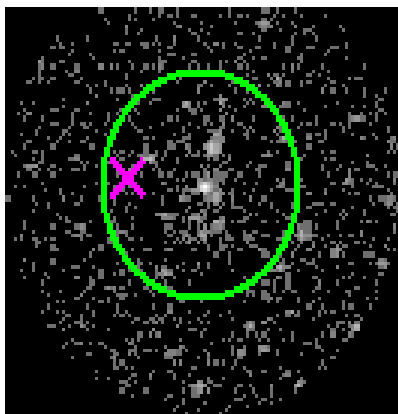




3.2 MEG Arm



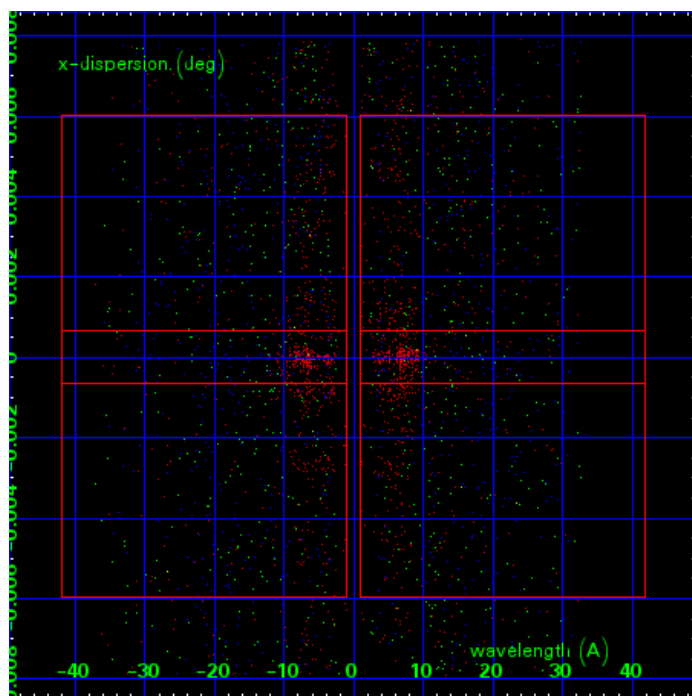
MEG Order Sort 123



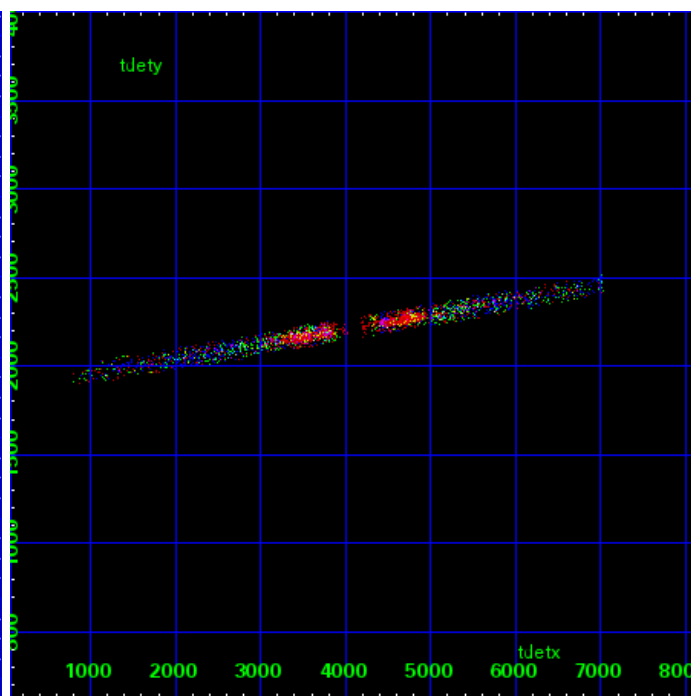
MEG Zero Order



MEG Order Sort ALL

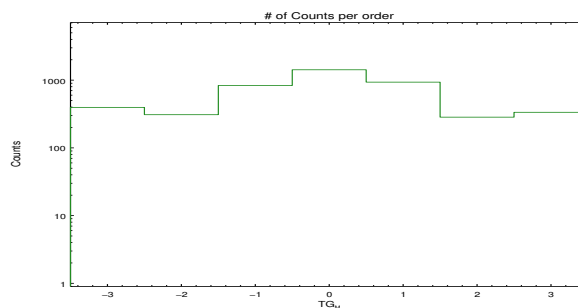


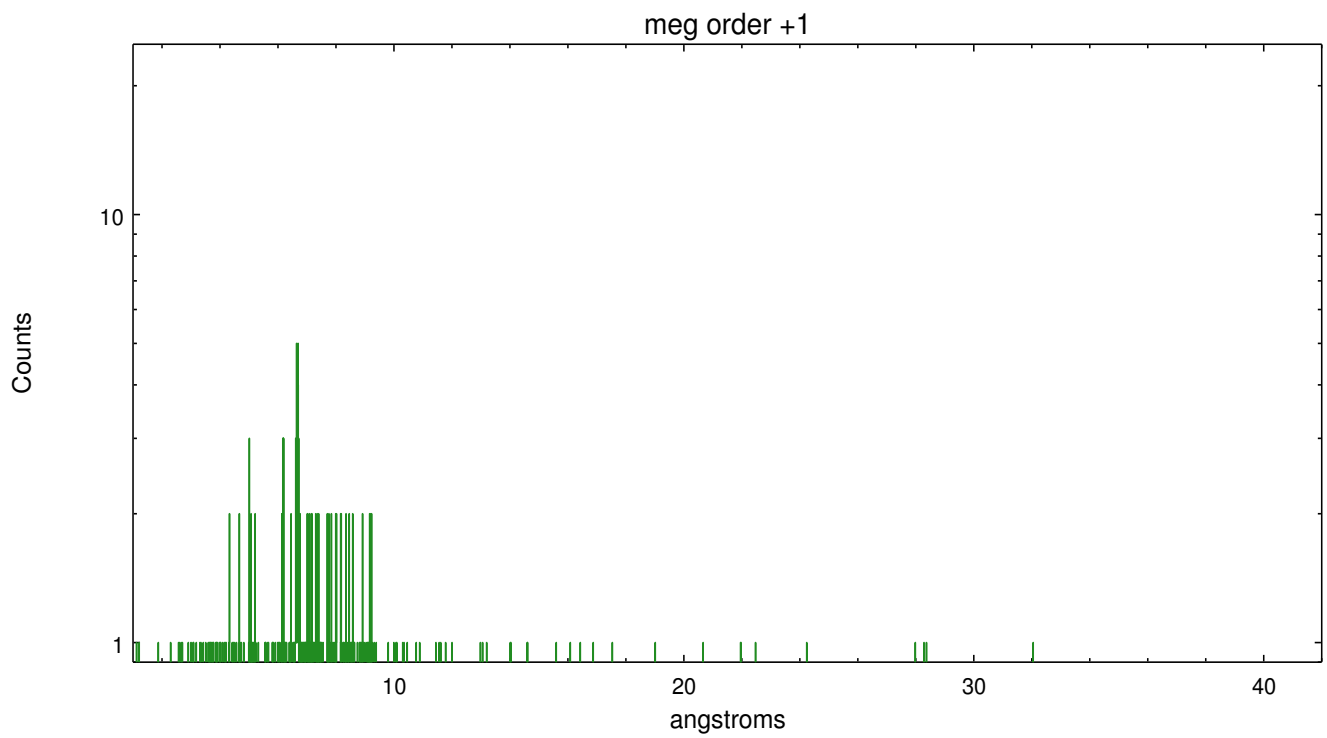
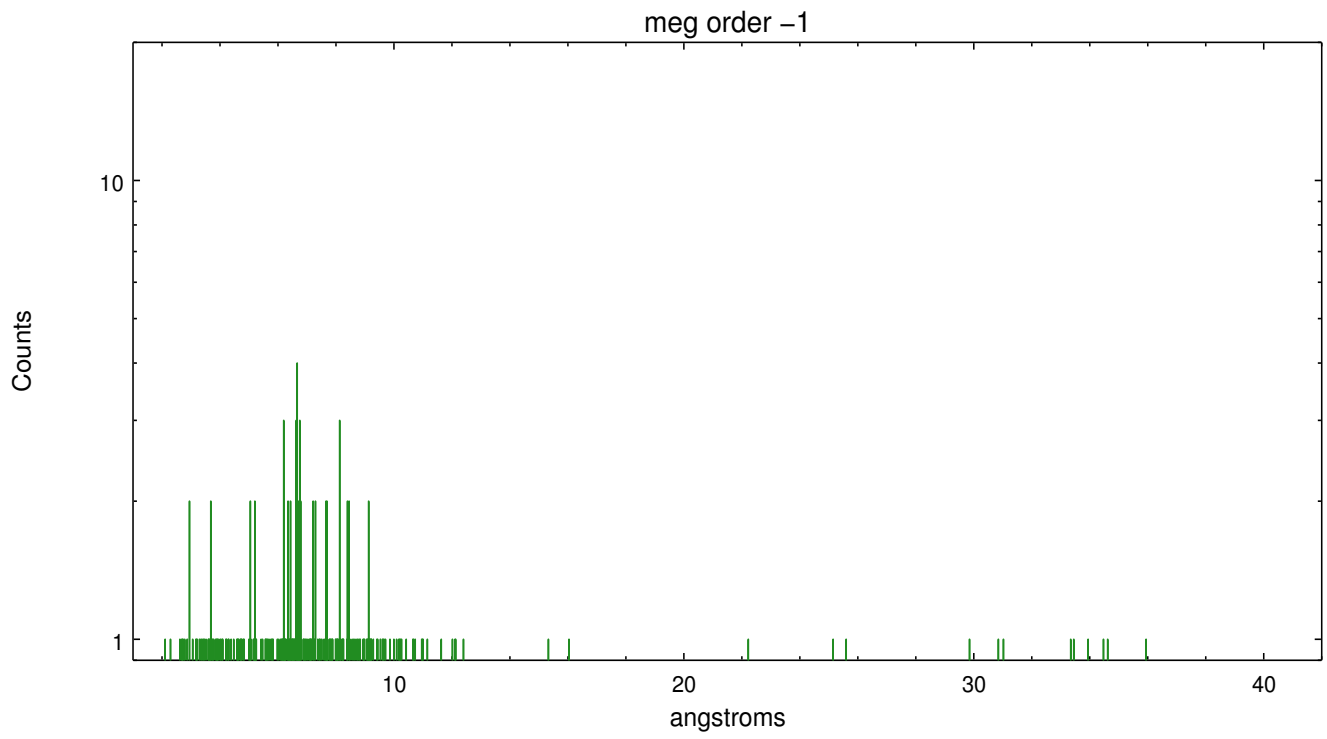
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	396	309	833	1423	934	284	335





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2015.03.25
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	48.139452015042

A.2 Comments

Crowded field required manual identification of target star position for zeroth order. Zeroth order for this processing is at ra=8:59:05.672, dec=-47:30:40.92.