

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 10675 - L2 Version 2
Chandra X-Ray Center

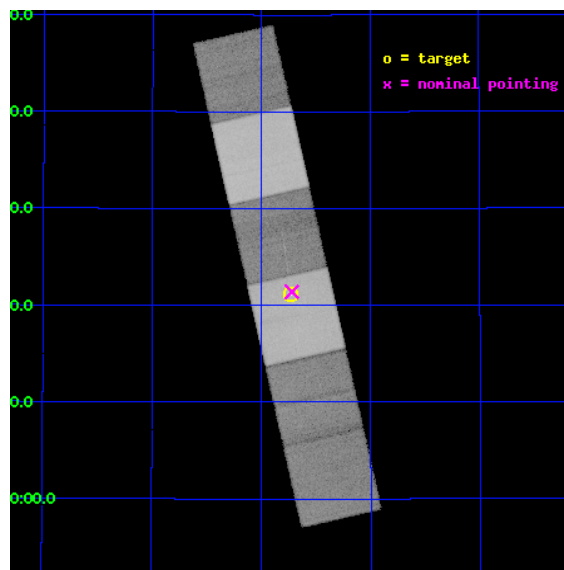
L2 Processing Date : Jun 4 2012

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1 Front

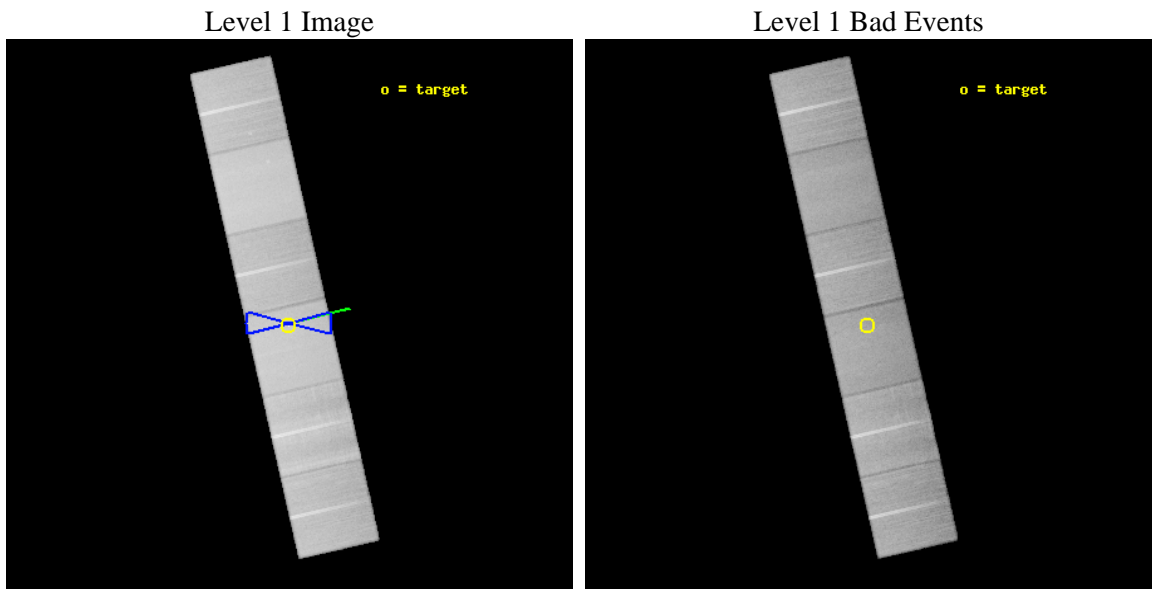
seq_num	200556	Sequence number
obs_id	10675	Observation id
title	Testing the Colliding Wind Paradigm: X-rays from the Wolf-Rayet Binary System WR 147	Proposal title
observer	Dr Svetozar ZHEKOV	Principal investigator
object	WR 147	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	309.182083	Observer's specified target RA [deg]
dec_targ	40.352028	Observer's specified target Dec [deg]
ra_nom	309.18003820134	Nominal RA [deg]
dec_nom	40.356608935119	Nominal Dec [deg]
roll_nom	77.157966315051	Nominal Roll [deg]
revision	2	Processing version of data
ontime	43942.399836361	Sum of GTIs [s]
livetime	43385.974710697	Livetime [s]
ontime4	43939.158866107	Sum of GTIs [s]
ontime5	43942.399836361	Sum of GTIs [s]
ontime6	43942.399836361	Sum of GTIs [s]
ontime7	43942.399836361	Sum of GTIs [s]
ontime8	43942.399836361	Sum of GTIs [s]
ontime9	43942.359532535	Sum of GTIs [s]
l2events	782229	Number of level 2 events



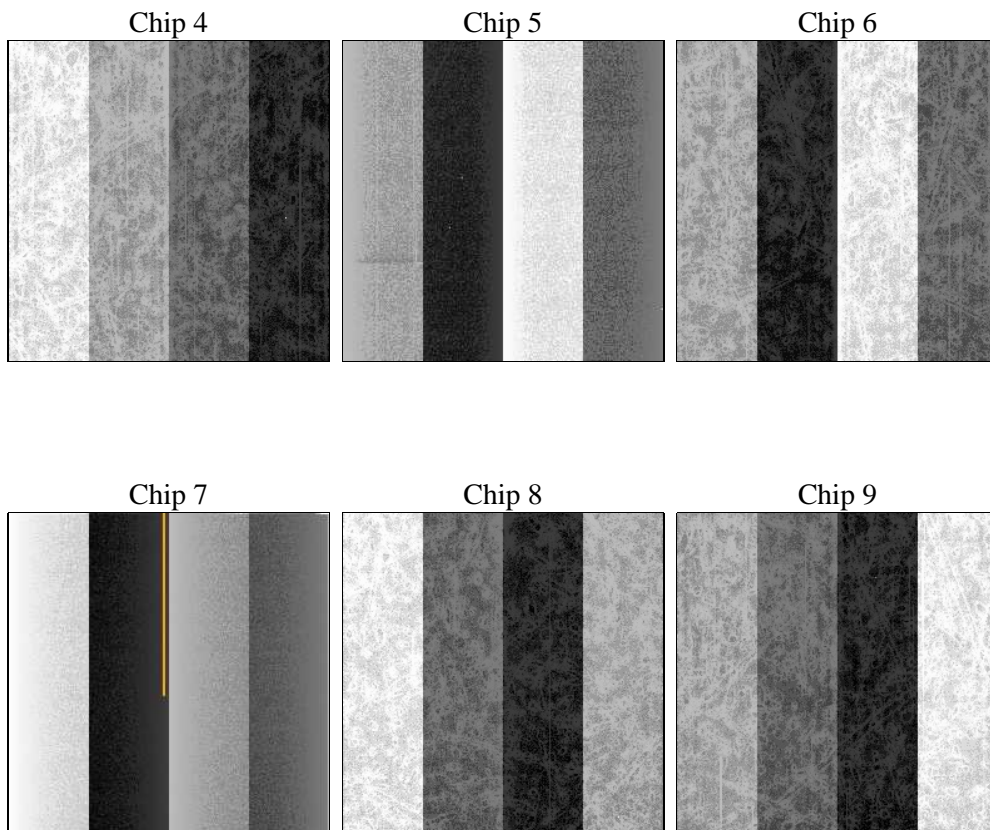
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	44000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	43942.399836361	Sum of GTIs [s]
caldbver	4.4.9	 	ontime4	43939.158866107	Sum of GTIs [s]
date	2012-06-03T23:56:47	Date and time of file creation	ontime5	43942.399836361	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	43942.399836361	Sum of GTIs [s]
			ontime7	43942.399836361	Sum of GTIs [s]
			ontime8	43942.399836361	Sum of GTIs [s]
			ontime9	43942.359532535	Sum of GTIs [s]
			l1events	3392105	Number of level 1 events

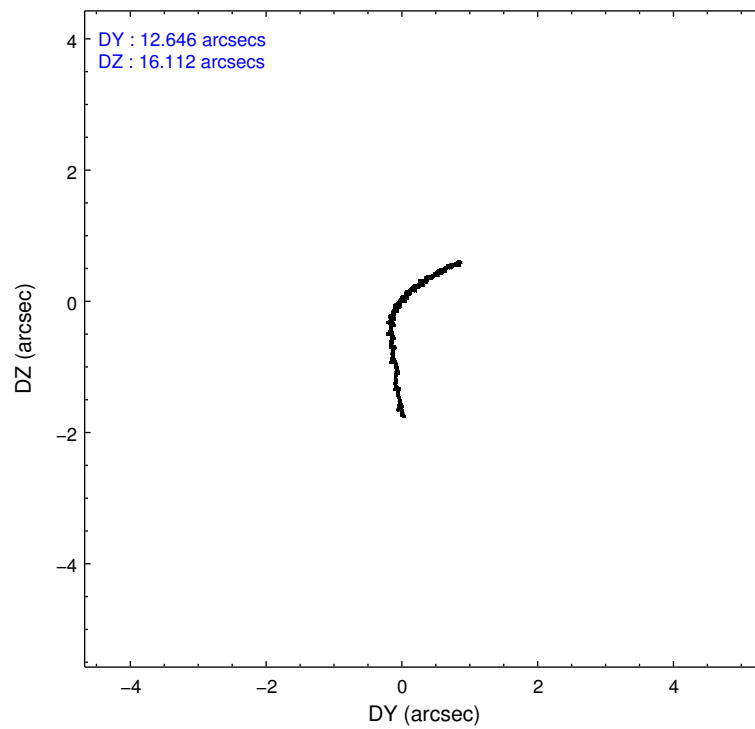
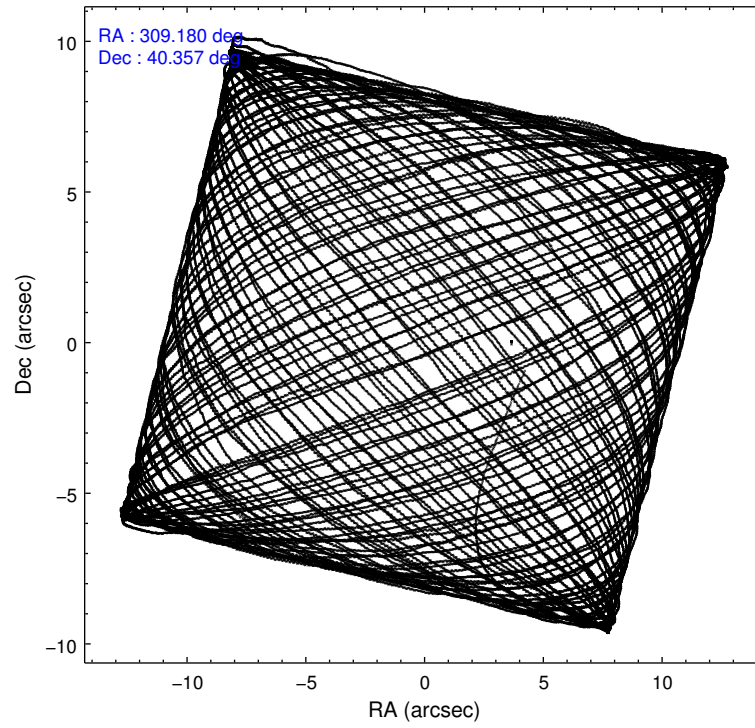
2.1.4 Events

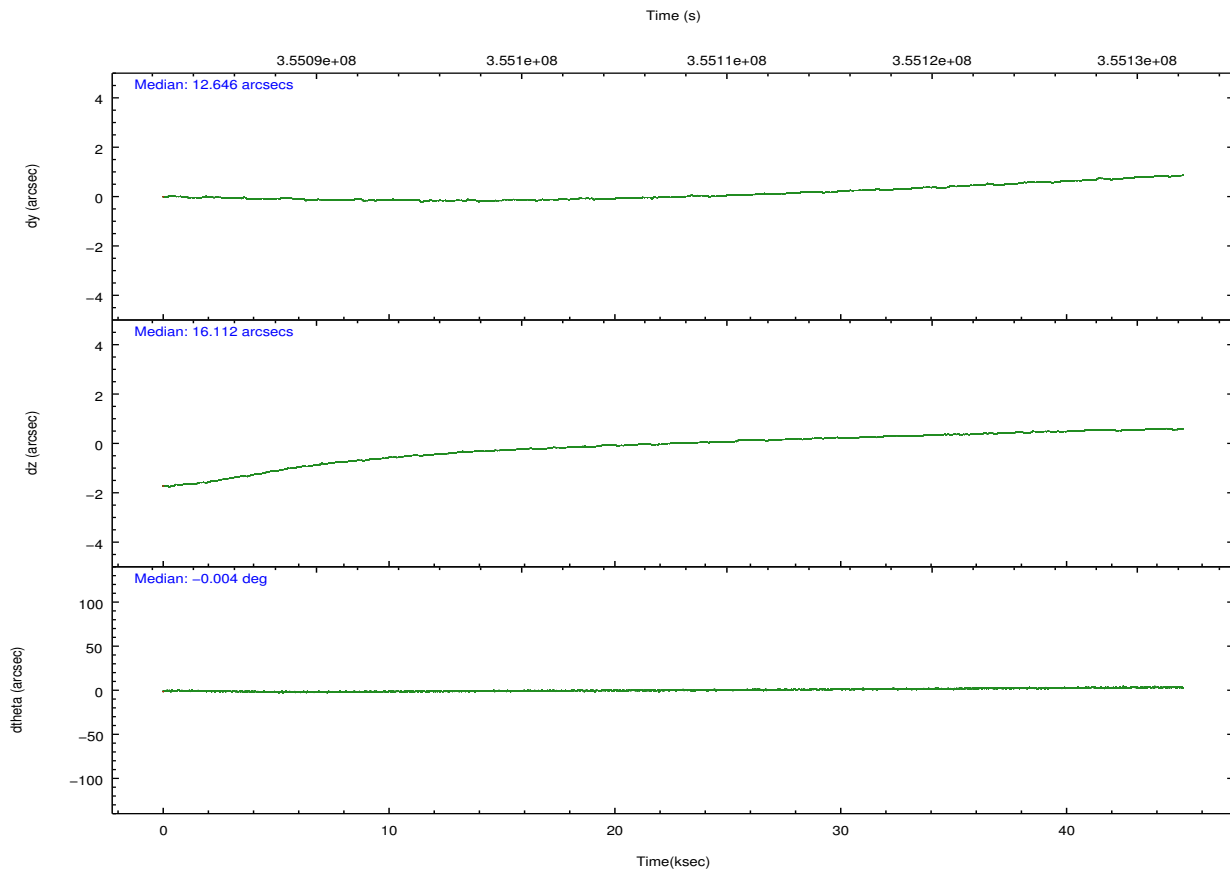
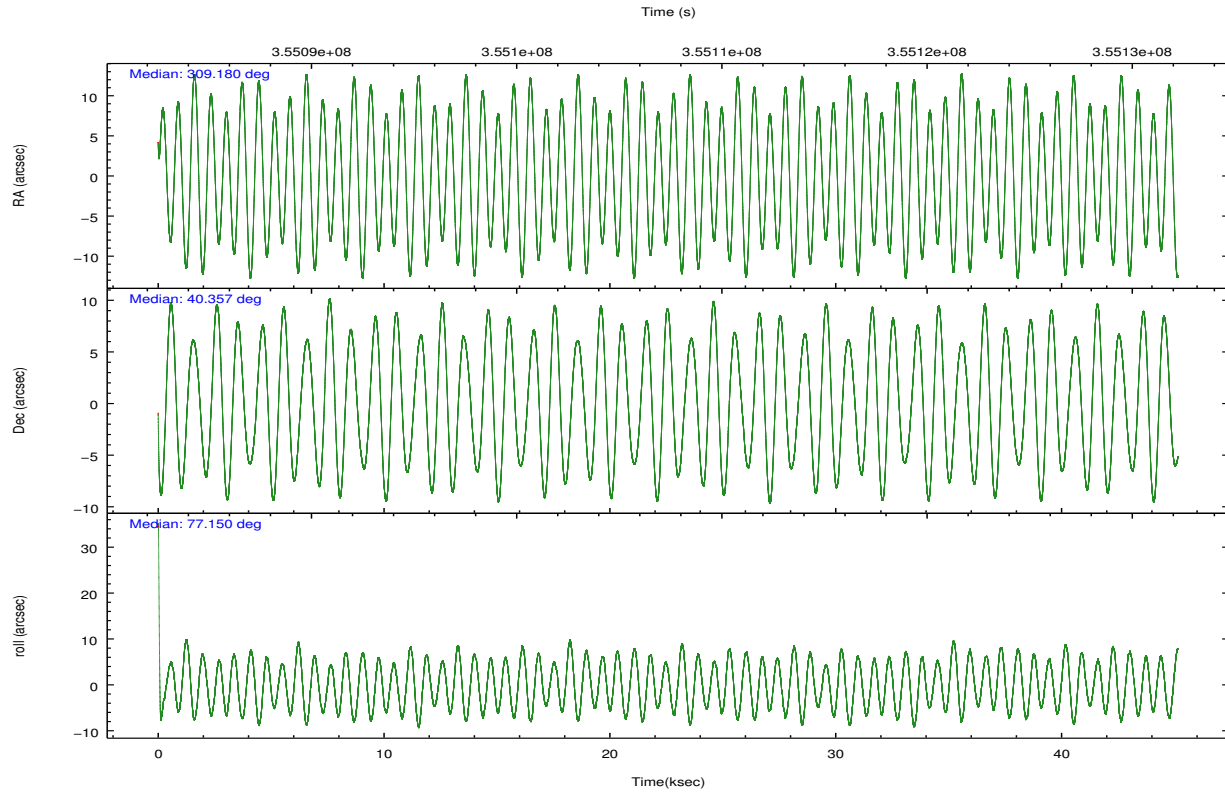
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	517260	708163	467334	646791	591818	460739	grade 0 events	27332	17738	21843	22353	42674	23515
rejected events	455776	386539	410830	377363	453670	402833		5%	2%	4%	3%	7%	5%
rejected %	88%	54%	87%	58%	76%	87%	grade 1 events	497	994	264	656	465	307
								0%	0%	0%	0%	0%	0%
							grade 2 events	13053	102001	12869	55831	31995	11997
								2%	14%	2%	8%	5%	2%
							grade 3 events	6100	12063	5273	22249	14266	5620
								1%	1%	1%	3%	2%	1%
							grade 4 events	5642	11640	5030	22157	13186	5265
								1%	1%	1%	3%	2%	1%
							grade 5 events	22043	50980	22190	60116	29439	23441
								4%	7%	4%	9%	4%	5%
							grade 6 events	9365	178246	11511	146878	36048	11520
								1%	25%	2%	22%	6%	2%
							grade 7 events	433228	334501	388354	316551	423745	379074
								83%	47%	83%	48%	71%	82%

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	309.191070	309.1800382013359	CCD I2 on	N	N
[deg] Pointing Dec	40.330606	40.35660893511877	CCD I3 on	N	N
[deg] Pointing Roll	76.994190	77.1579663150514	CCD S0 on	O1	Y
[deg] Roll angle	90.000000	90.000000	CCD S1 on	Y	Y
[deg] Roll tolerance	15.000000	15.000000	CCD S2 on	Y	Y
Roll constraint allows 180D rotation	Y	Y	CCD S3 on	Y	Y
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S4 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S5 on	O2	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	Number of optional ACIS chips dropped	0	0
[mm] SIM translation stage offset	0	0.00754346686406393	On-chip summing requested	N	N
[s] Observation start time (MET)	355085951.184000	355083730.11588	Subarray requested	NONE	NONE
Observation start date	2009-04-02T18:58:05	2009-04-02T18:22:10	Alternating exposures requested	N	N
[s] Observation end time (MET)	355129951.184000	355130618.23071	[s] Primary exposure time	0.000000	3.2
Observation end date	2009-04-03T07:11:25	2009-04-03T07:23:38			
Read mode	TIMED	TIMED			

2.3 Aspect



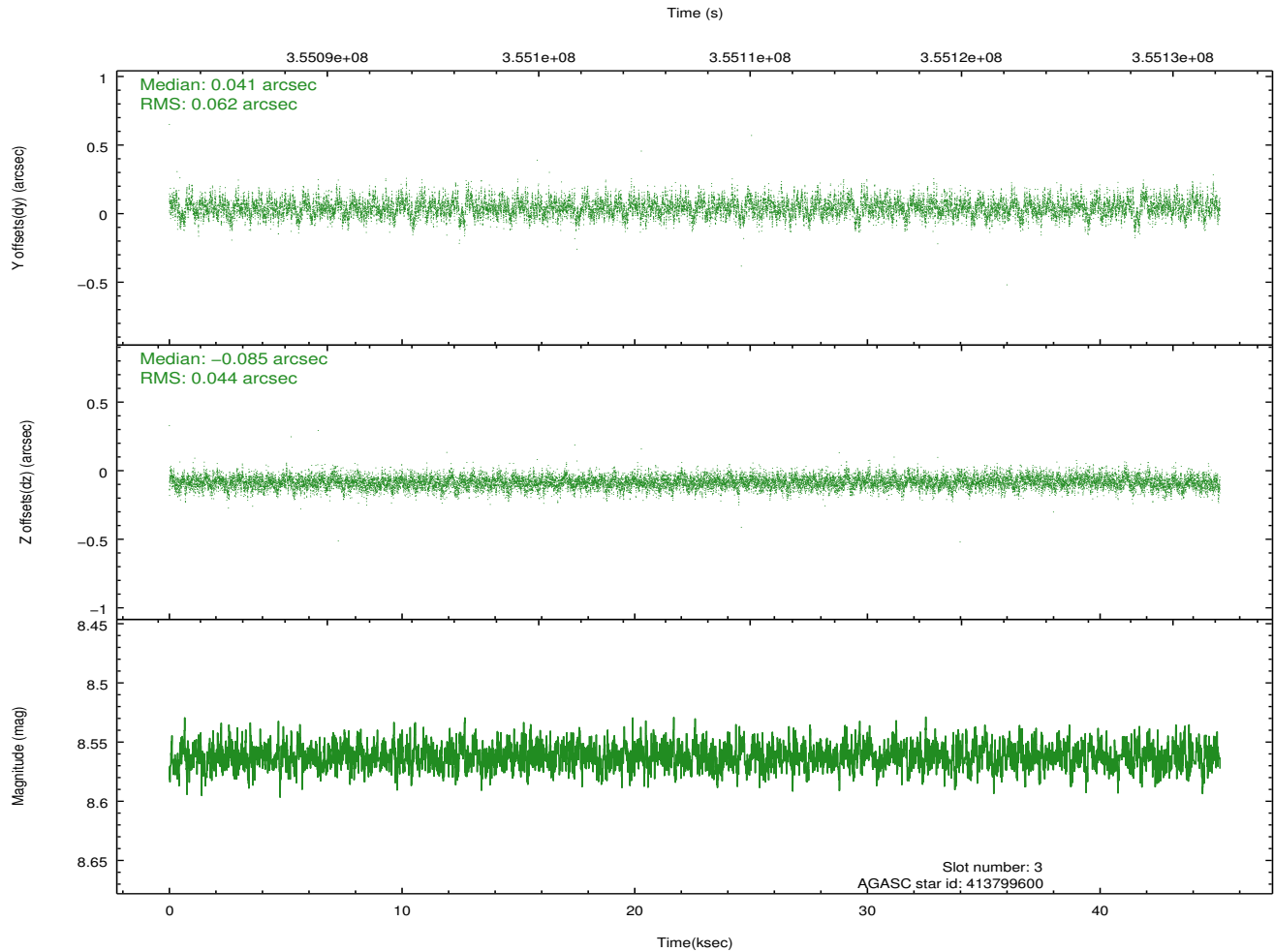
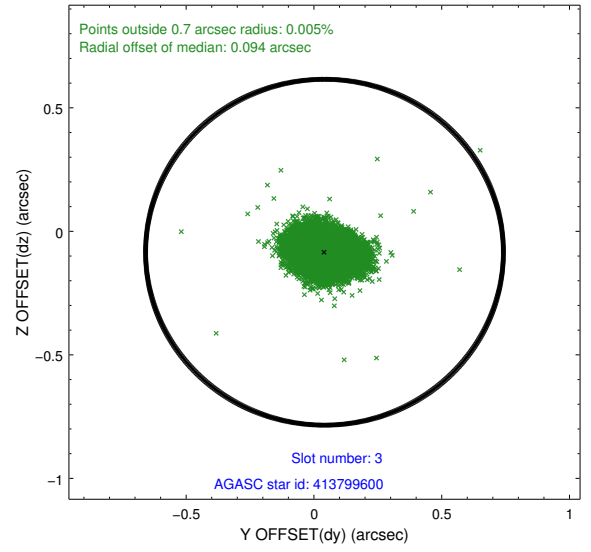
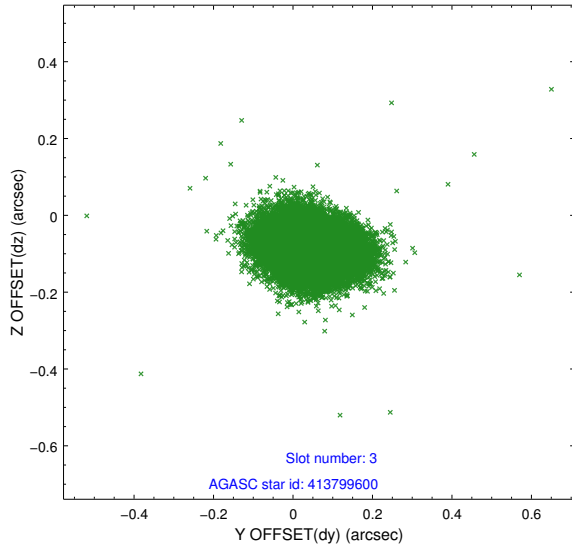


Slot Statistics

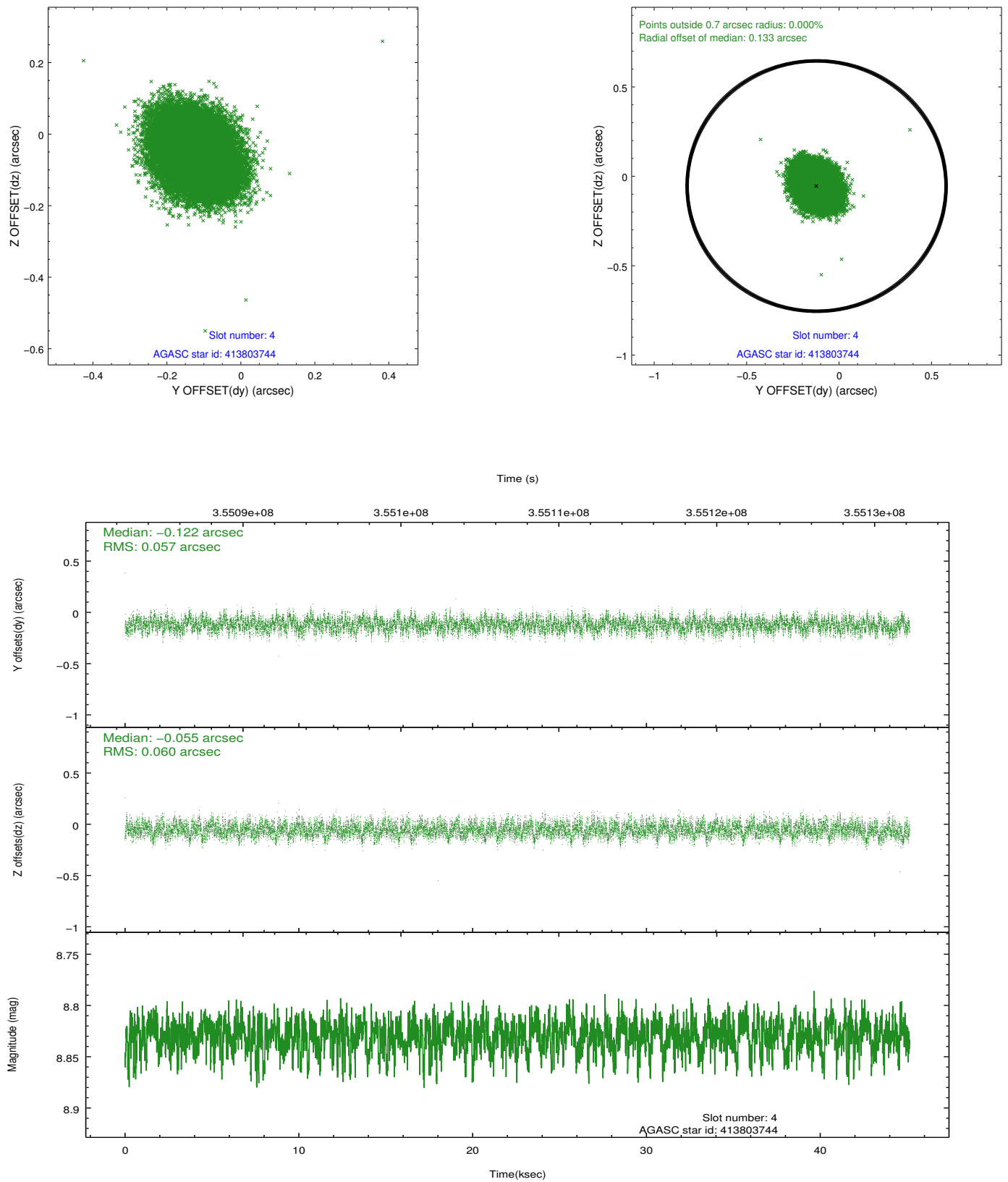
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.90	11014	-0.034	-0.016	0.012	0.018	0.000000	0.000000	-765.72	-1737.38
1	FID	ACIS-S-4	6.98	11014	0.141	0.021	0.010	0.019	0.000000	0.000000	2147.72	171.16
2	FID	ACIS-S-5	7.01	11014	-0.134	0.004	0.017	0.032	0.000000	0.000000	-1818.68	164.79
3	GUIDE	413799600	8.56	22021	0.041	-0.085	0.079	0.132	308.280373	39.866891	-2180.46	2079.03
4	GUIDE	413803744	8.83	22004	-0.122	-0.055	0.088	0.141	308.586342	40.704904	946.89	1912.93
5	GUIDE	415508568	9.00	22007	-0.175	0.240	0.084	0.133	310.015866	40.581838	1399.28	-1990.53
6	GUIDE	413805632	9.06	22000	0.121	-0.273	0.106	0.168	308.281827	40.295563	-672.31	2406.85
7	GUIDE	413794944	7.61	22018	0.133	0.176	0.059	0.094	309.554319	39.690543	-2016.37	-1498.20

2.4 Star Slots

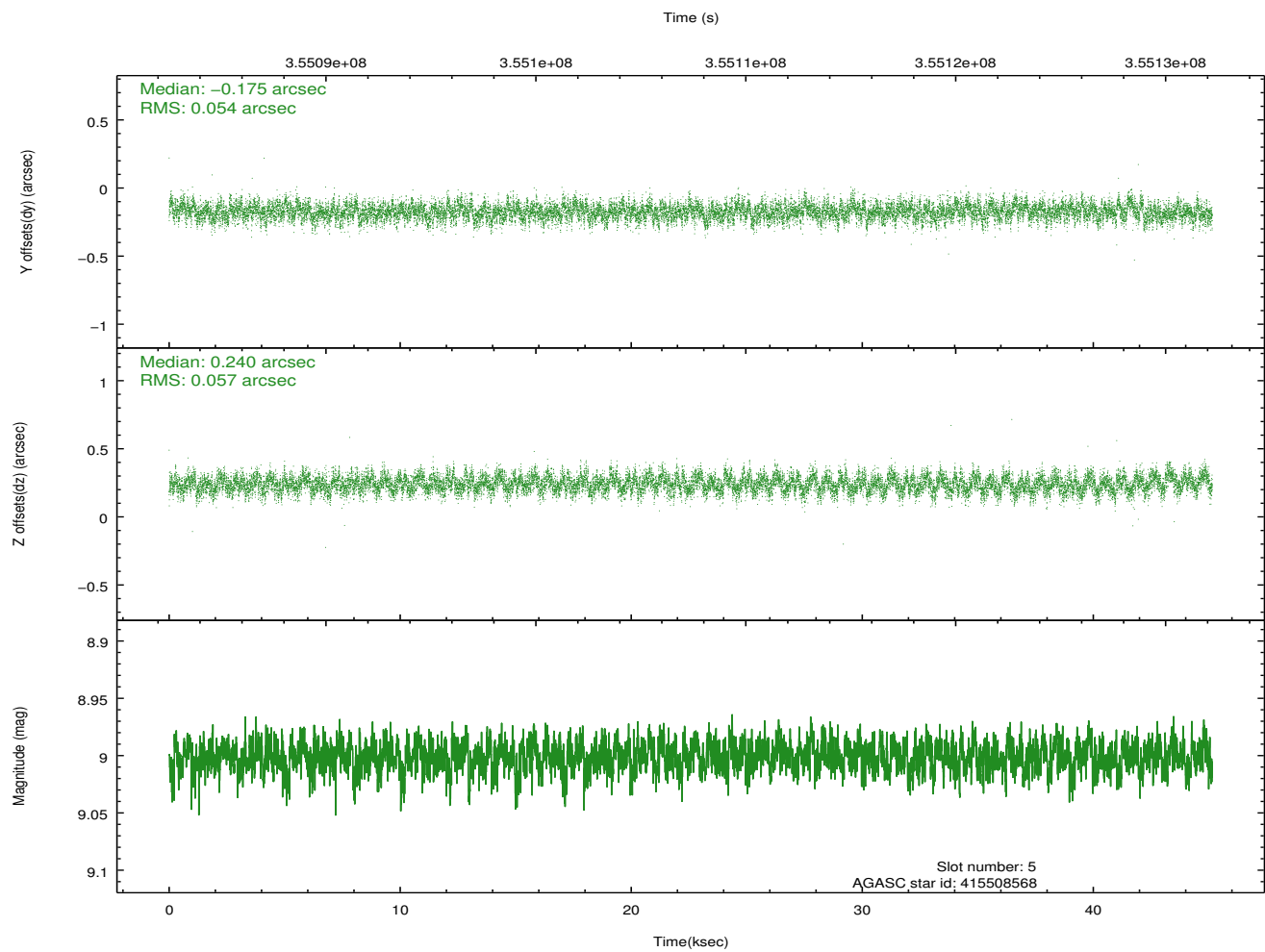
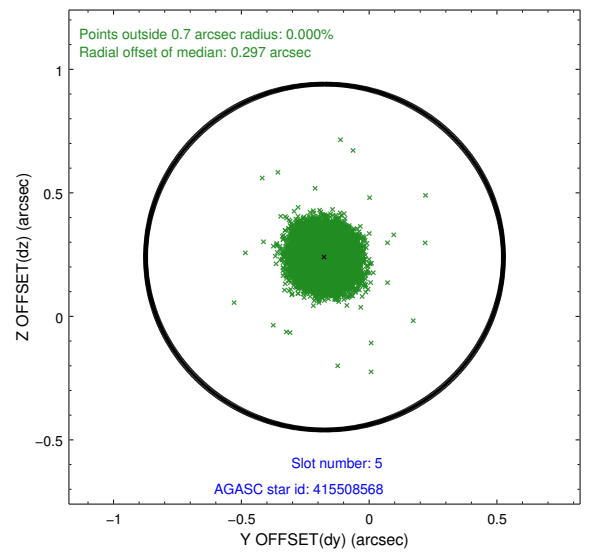
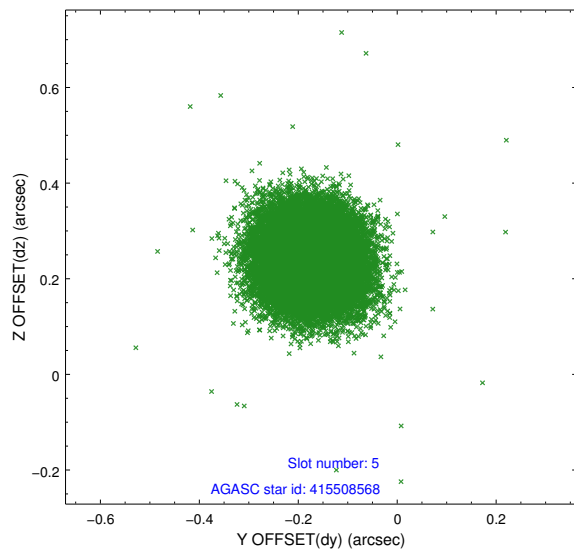
2.4.1 Slot 3



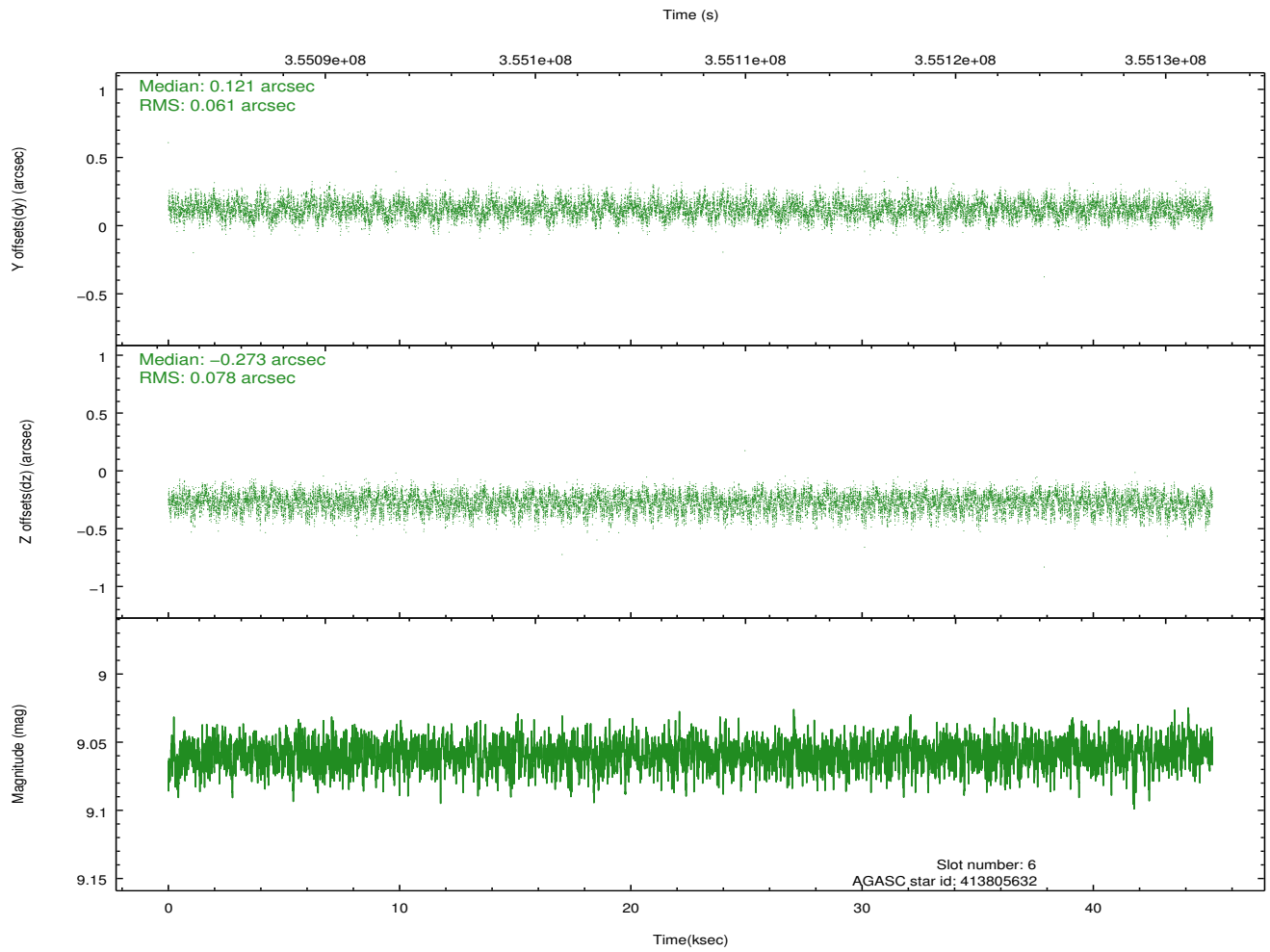
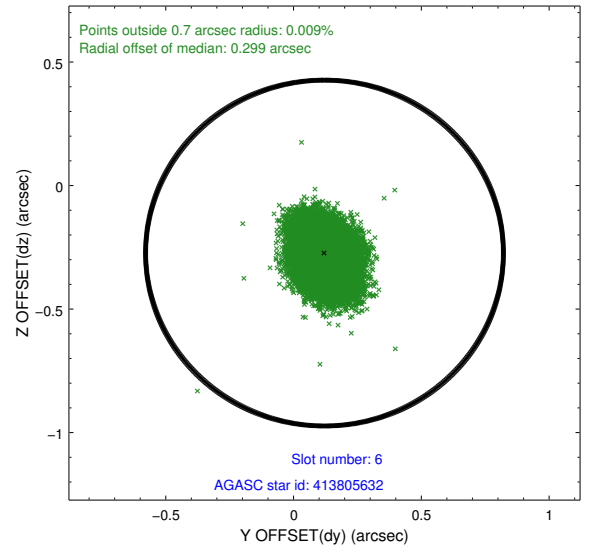
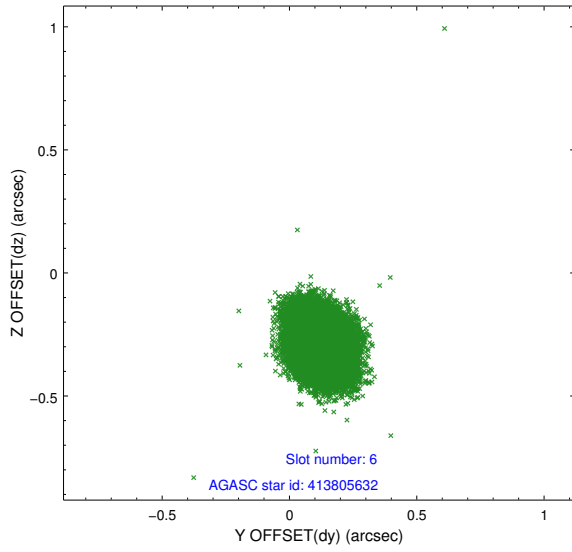
2.4.2 Slot 4



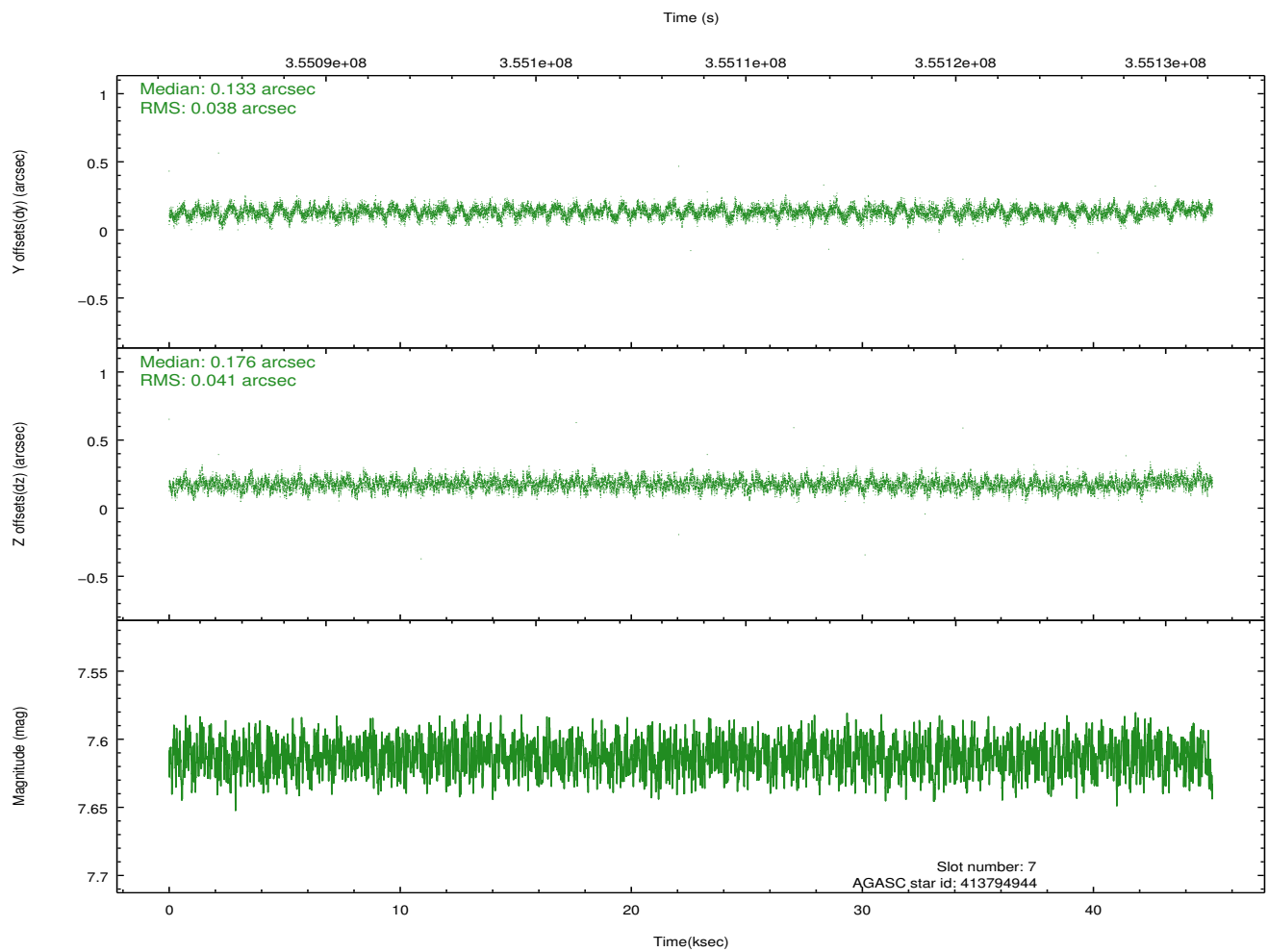
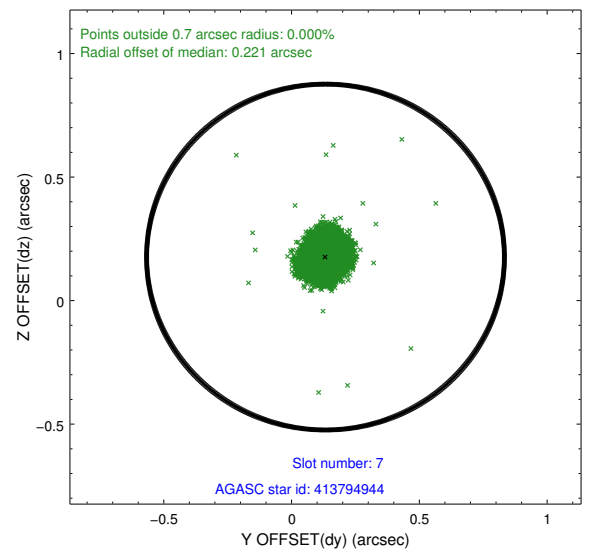
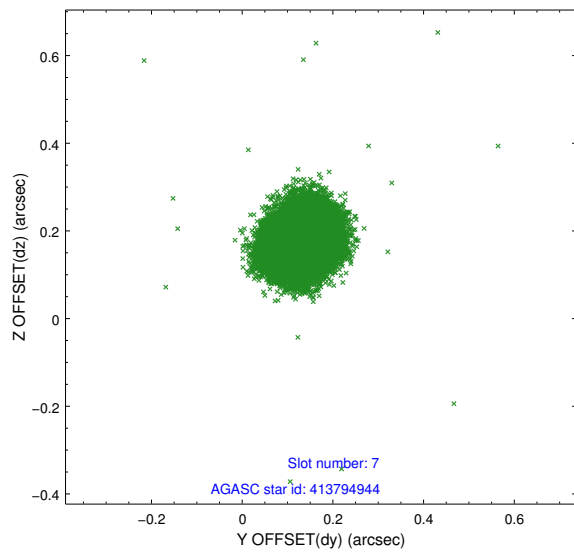
2.4.3 Slot 5



2.4.4 Slot 6

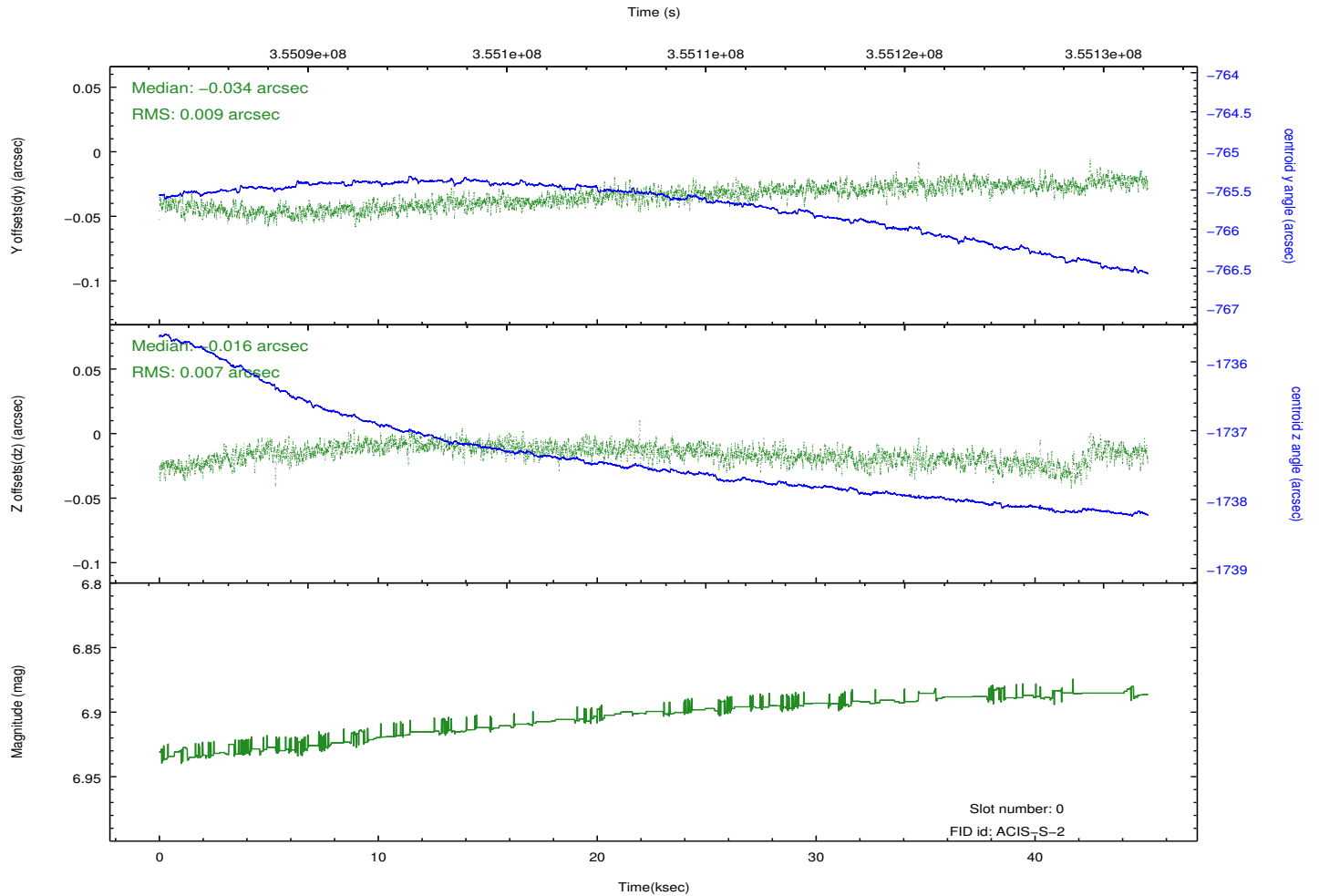
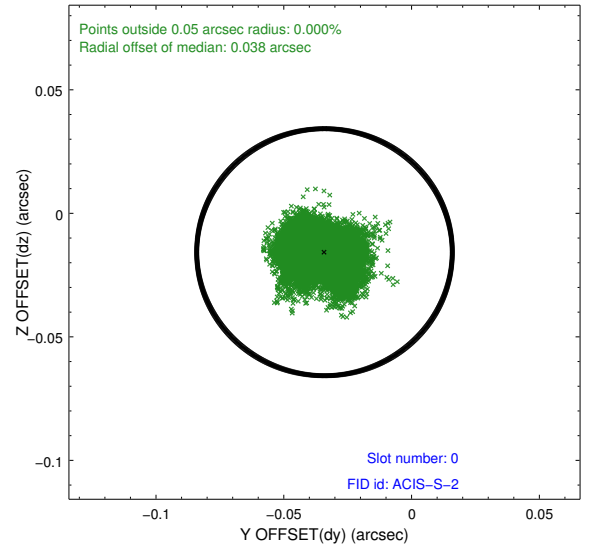
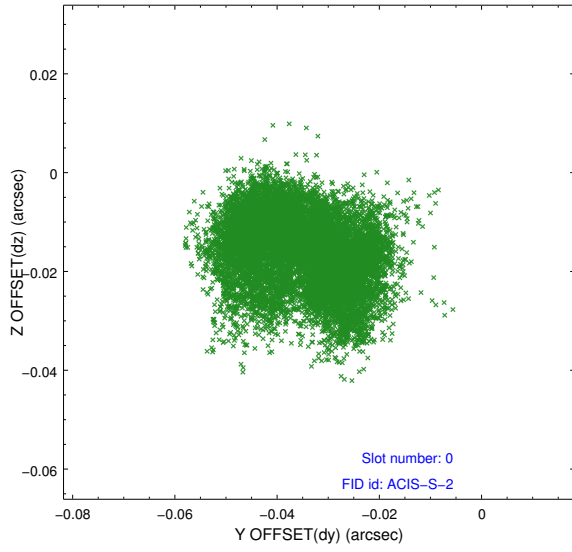


2.4.5 Slot 7

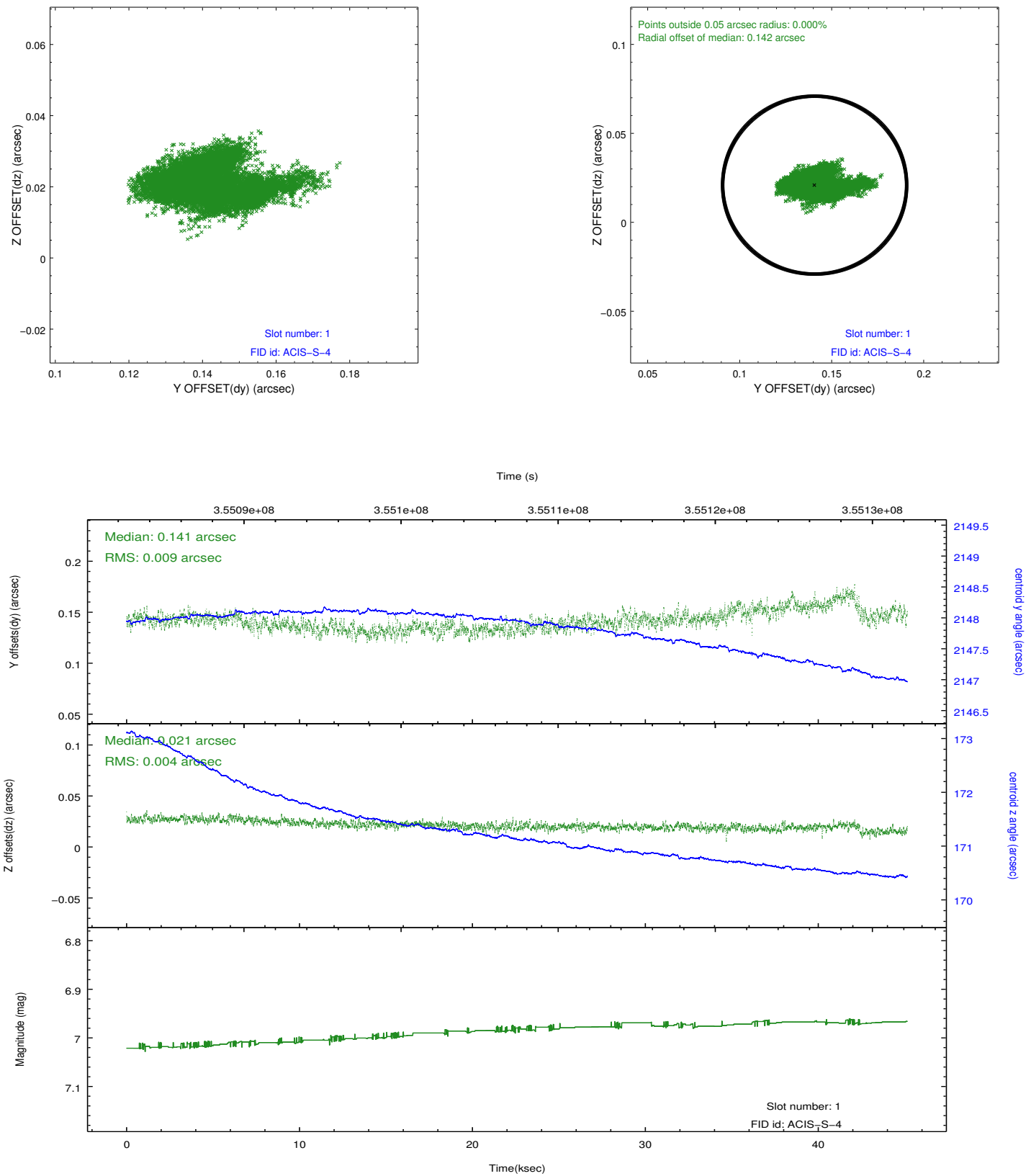


2.5 FID Slots

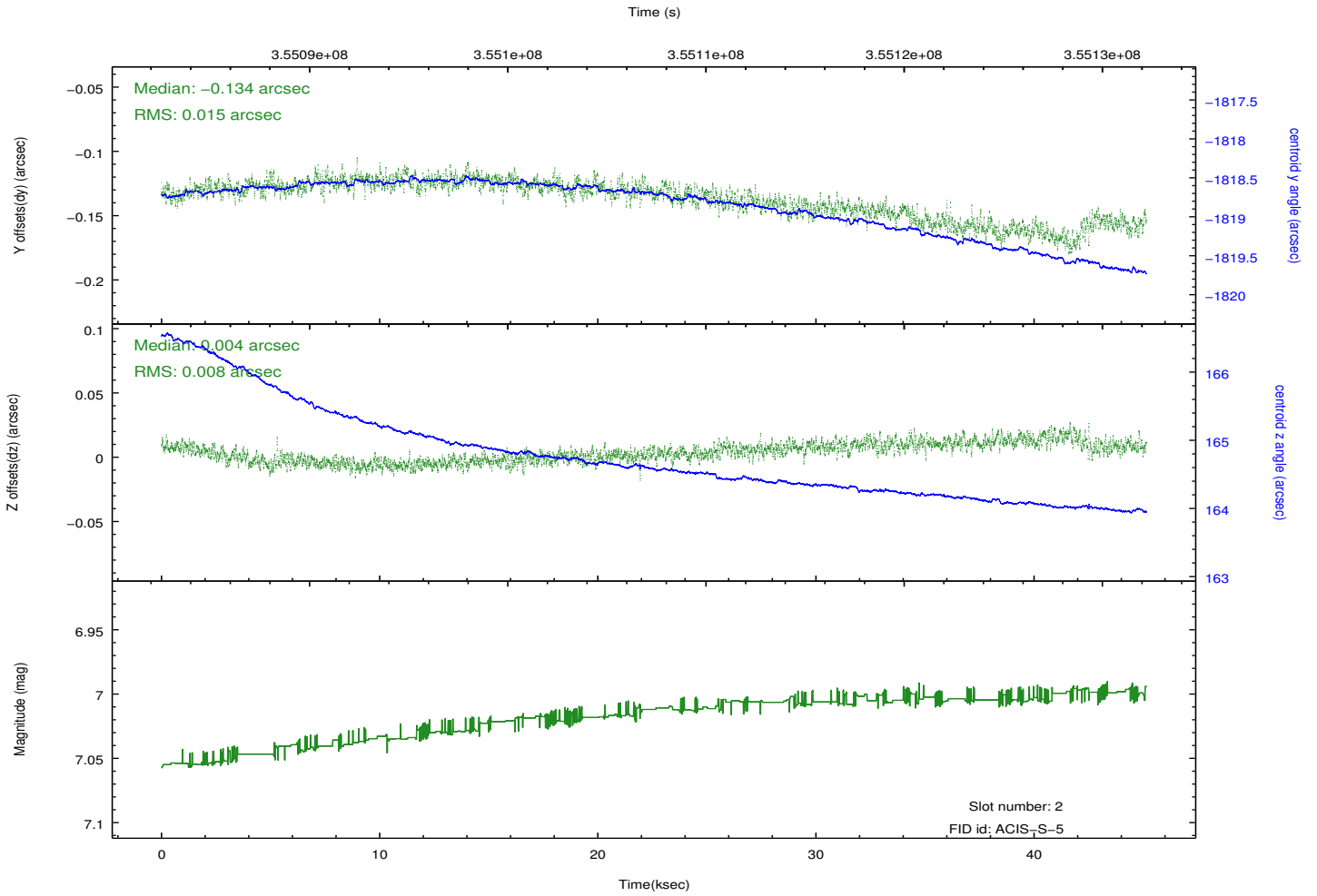
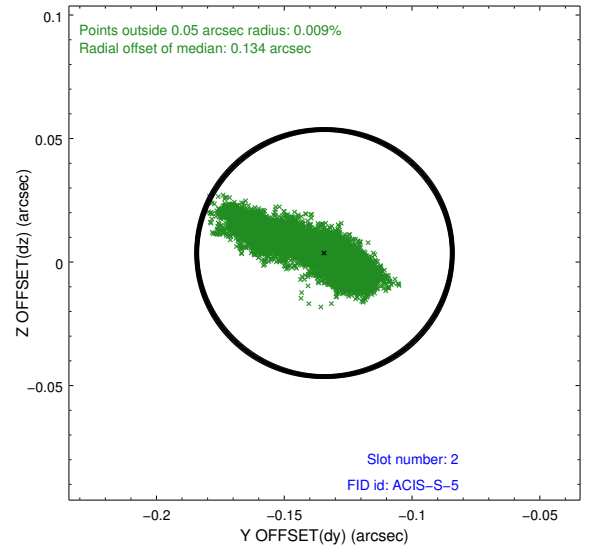
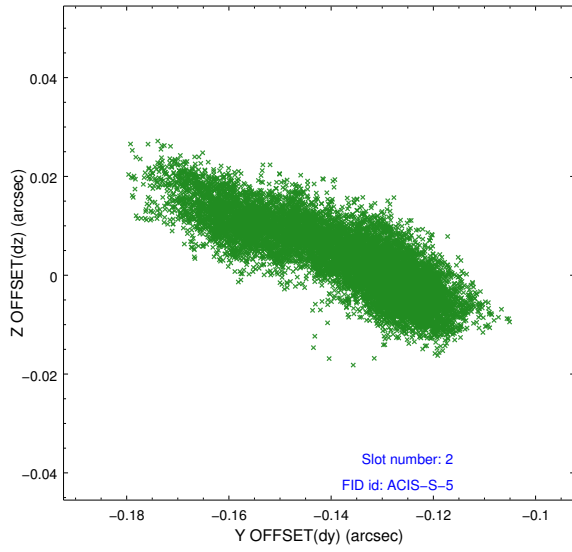
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

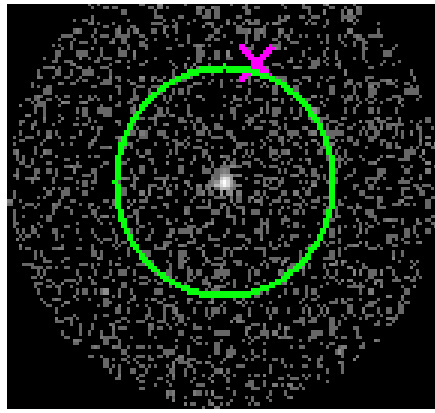


3 Gratings

3.1 HEG Arm



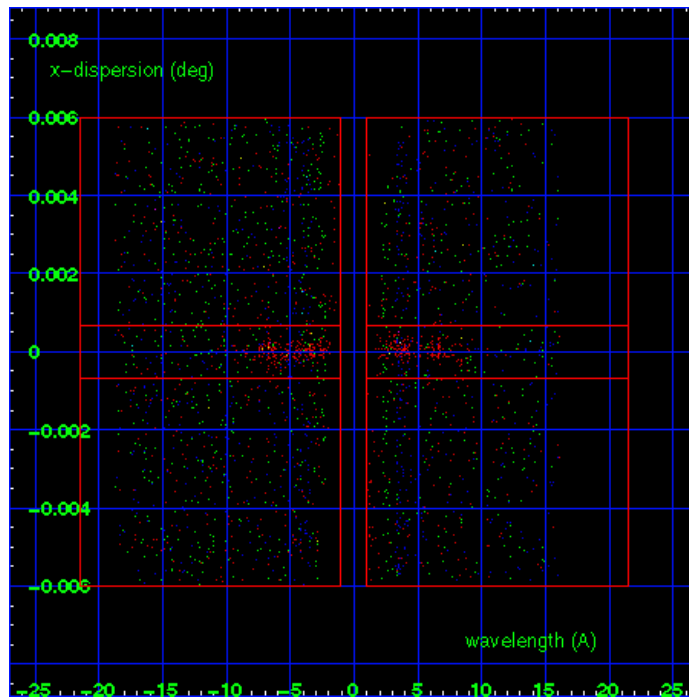
HEG Order Sort 123



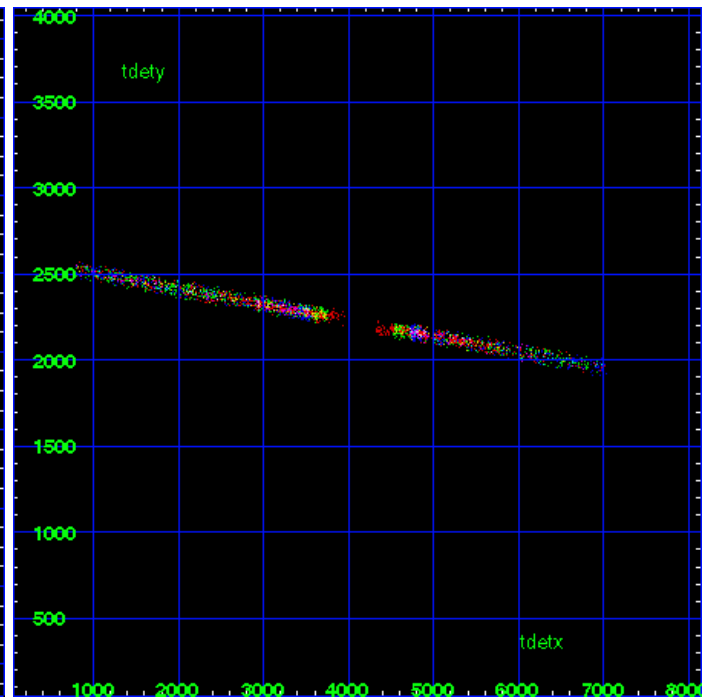
HEG Zero Order



HEG Order Sort ALL

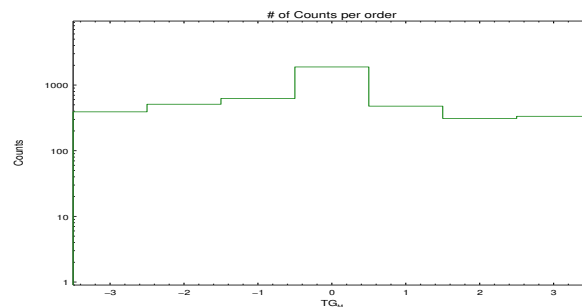


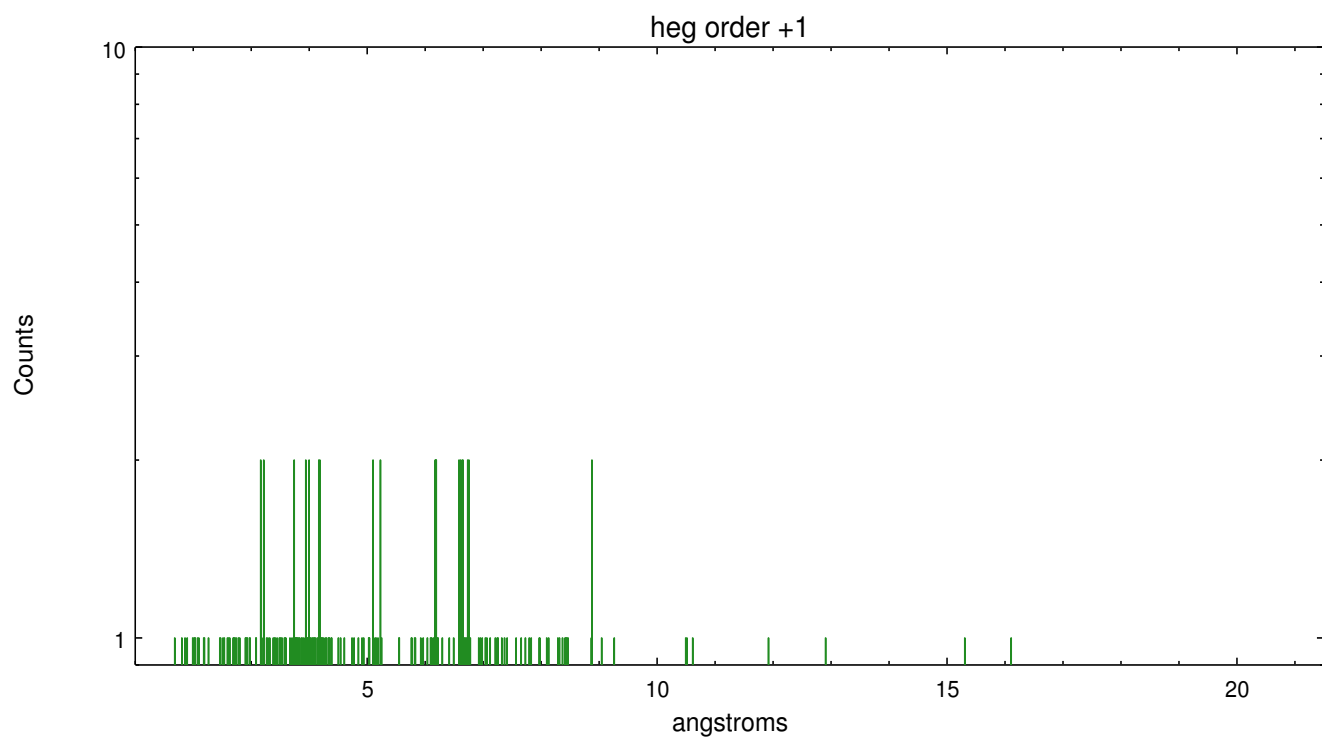
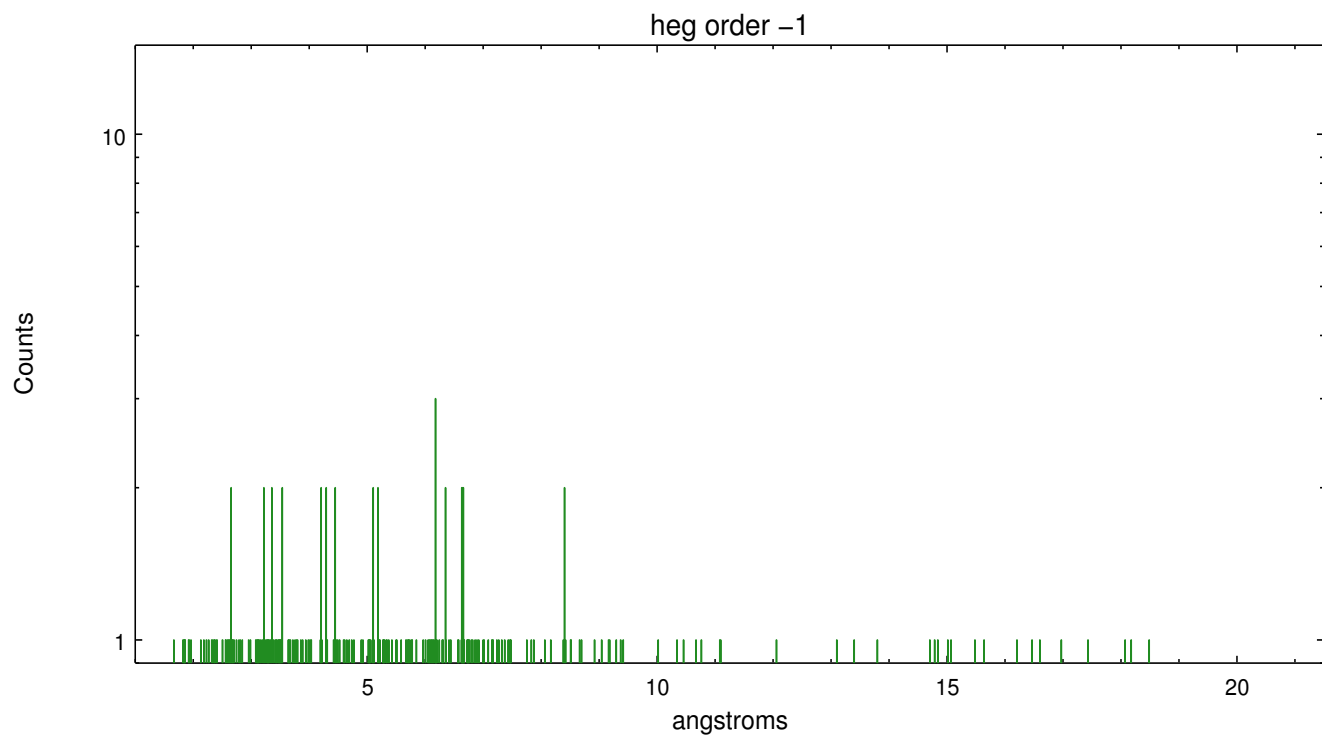
Spot Image HEG



Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	391	510	624	1887	477	310	334

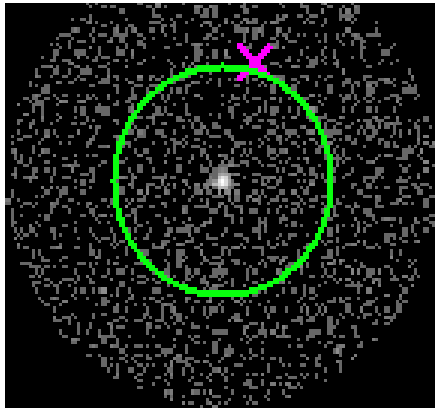




3.2 MEG Arm



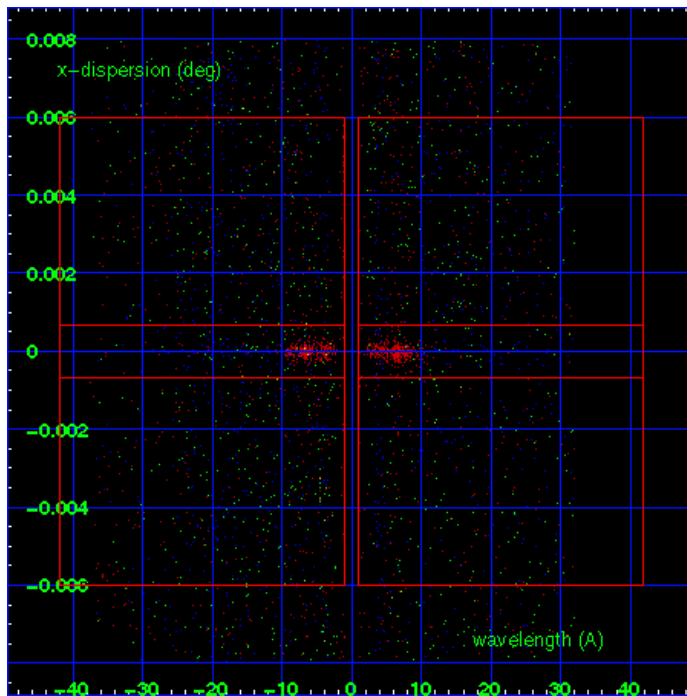
MEG Order Sort 123



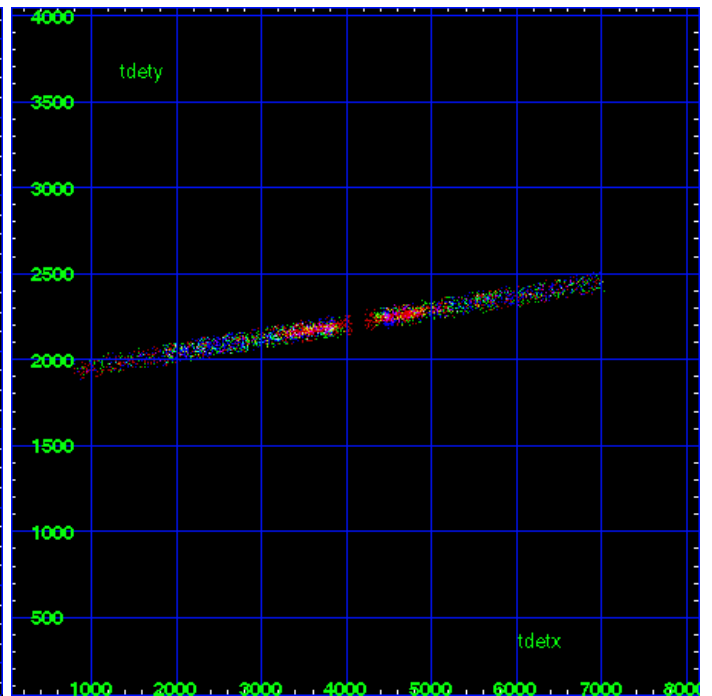
MEG Zero Order



MEG Order Sort ALL

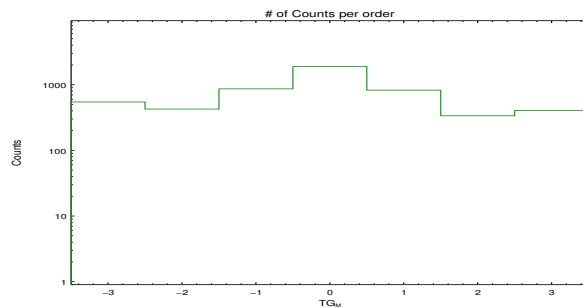


Spot Image MEG

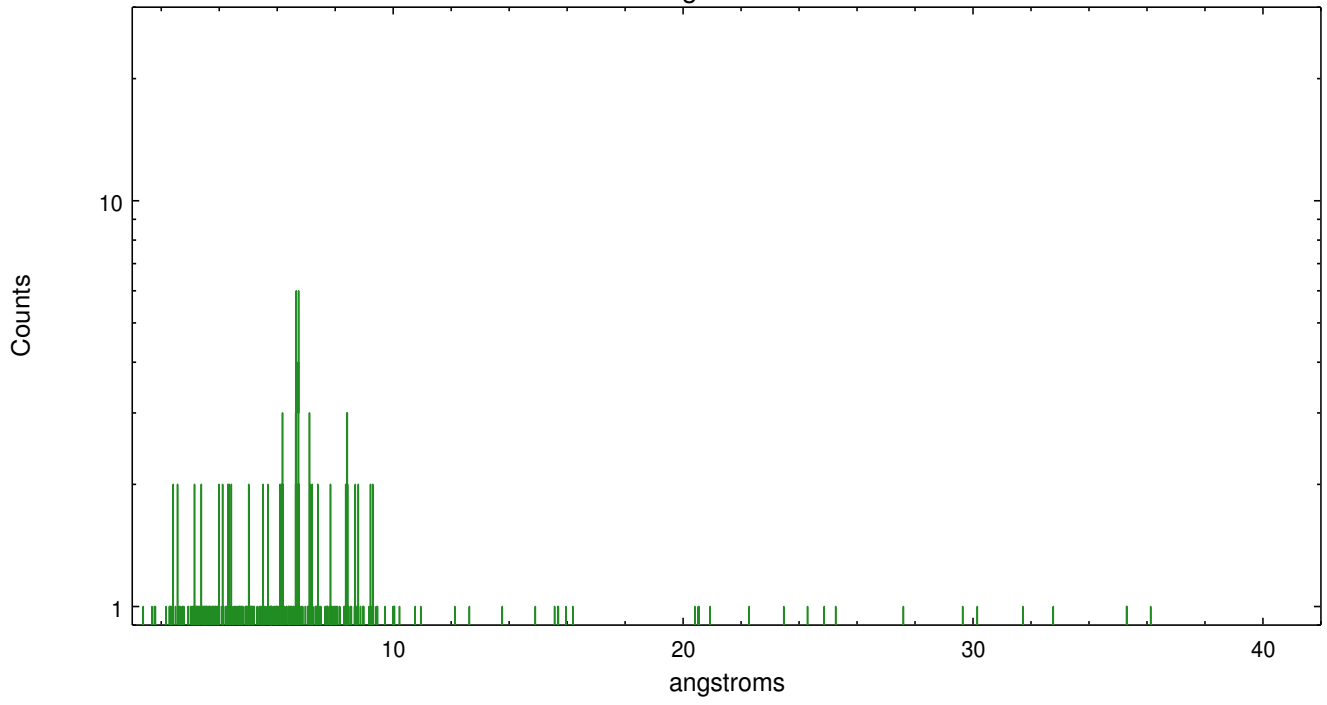


Full Detector MEG

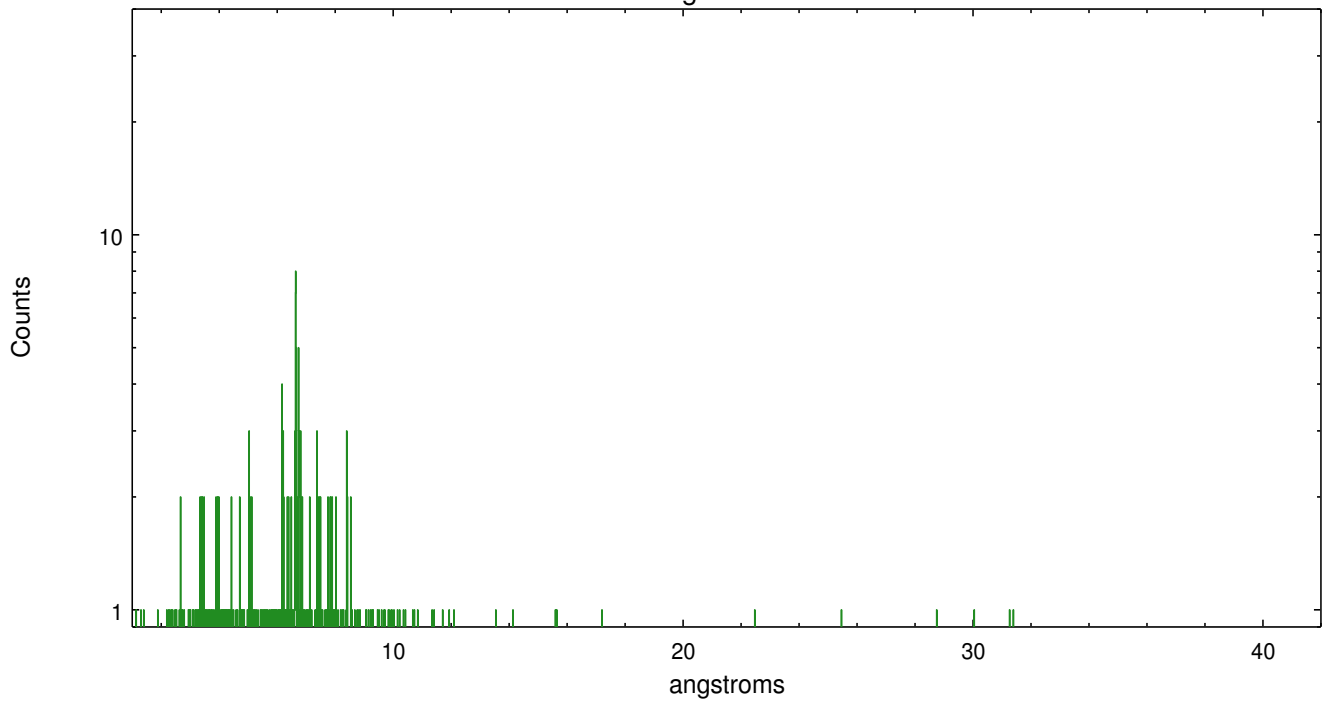
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	545	425	864	1887	825	336	405



meg order -1



meg order +1



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.06.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	43.9423998

A.2 Comments

Roll constraint met.