

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 12296 - L2 Version 2
Chandra X-Ray Center

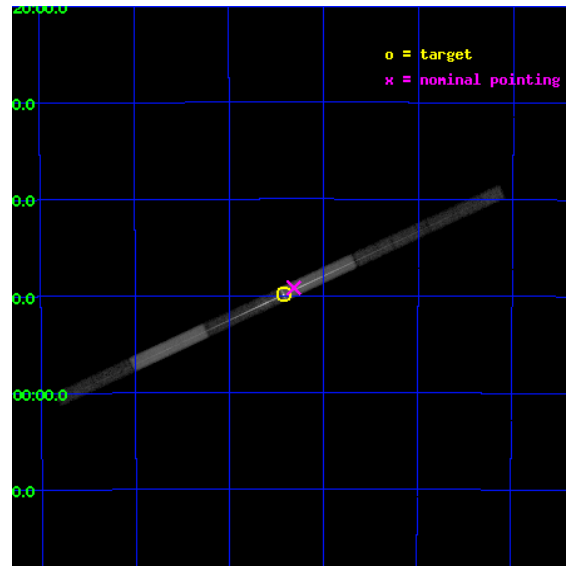
L2 Processing Date : Jul 1 2012

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1 Front

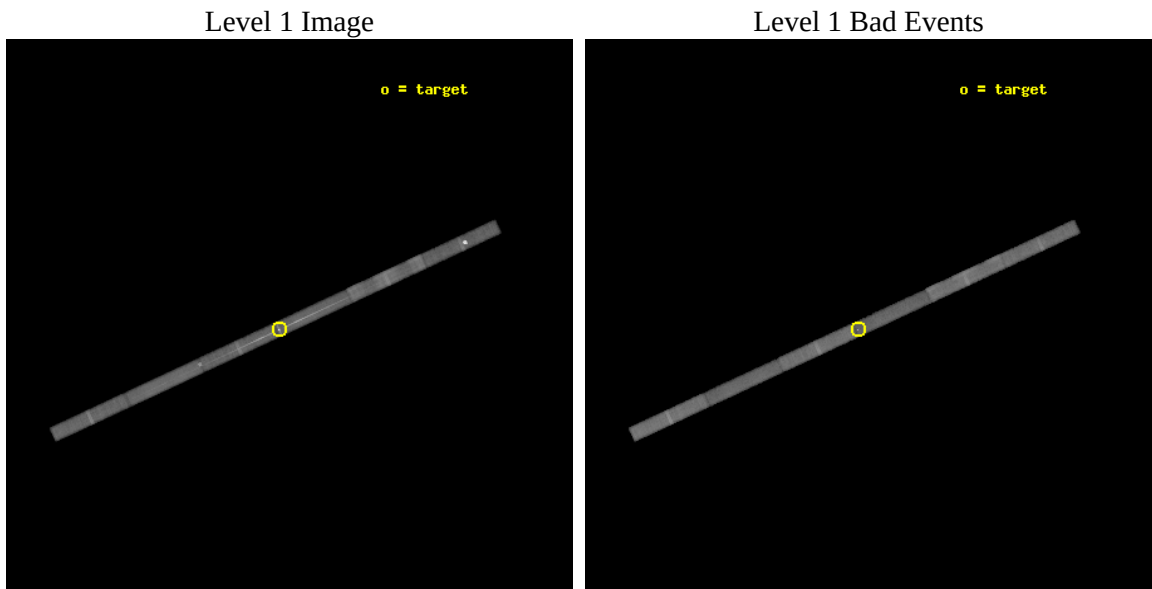
seq_num	900950	Sequence number
obs_id	12296	Observation id
title	Detecting the Hot Wind Escaping from the Galactic Center of the Milky Way	Proposal title
observer	Dr. John Stocke	Principal investigator
object	PKS 2005-489	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	302.355833	Observer's specified target RA [deg]
dec_targ	-48.831	Observer's specified target Dec [deg]
ra_nom	302.32872986211	Nominal RA [deg]
dec_nom	-48.819856719015	Nominal Dec [deg]
roll_nom	335.13622799815	Nominal Roll [deg]
revision	2	Processing version of data
ontime	50025.444011033	Sum of GTIs [s]
livetime	47254.953589176	Livetime [s]
ontime4	50025.485051036	Sum of GTIs [s]
ontime5	50025.402971029	Sum of GTIs [s]
ontime6	50025.361931026	Sum of GTIs [s]
ontime7	50025.444011033	Sum of GTIs [s]
ontime8	50025.320891023	Sum of GTIs [s]
ontime9	50025.279851019	Sum of GTIs [s]
l2events	189691	Number of level 2 events



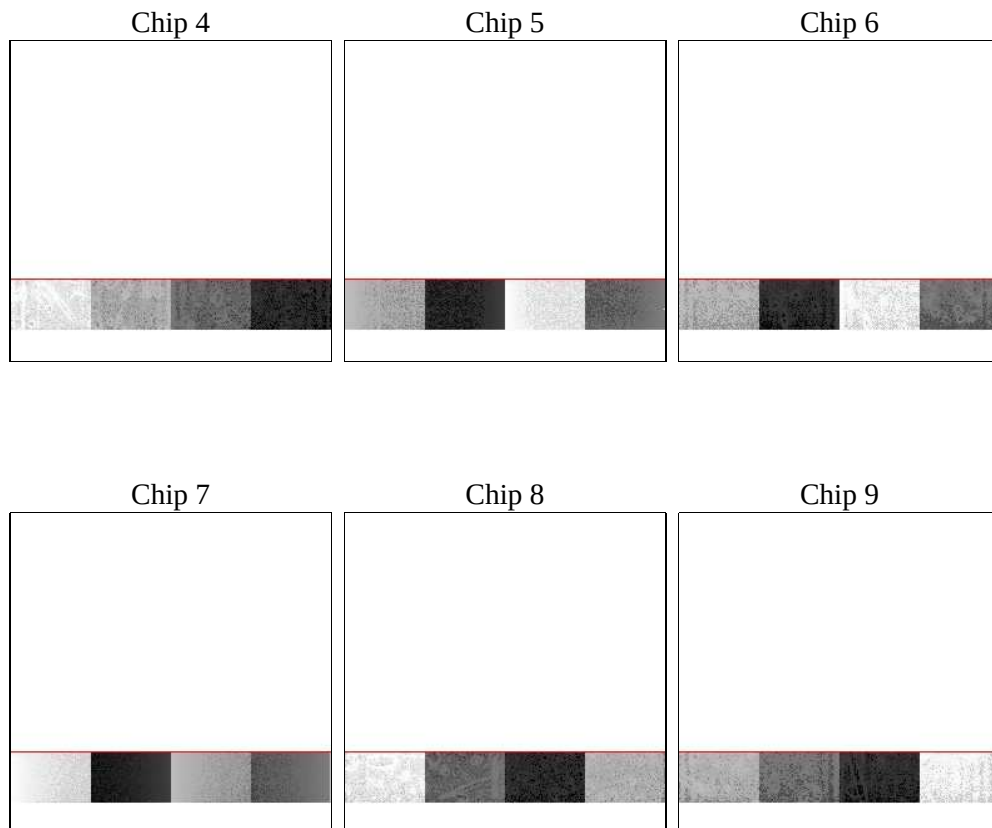
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	49950.097000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	50025.444011033	Sum of GTIs [s]
caldsver	4.5.0	 	ontime4	50025.485051036	Sum of GTIs [s]
date	2012-07-01T03:45:25	Date and time of file creation	ontime5	50025.402971029	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	50025.361931026	Sum of GTIs [s]
			ontime7	50025.444011033	Sum of GTIs [s]
			ontime8	50025.320891023	Sum of GTIs [s]
			ontime9	50025.279851019	Sum of GTIs [s]
			l1events	679296	Number of level 1 events

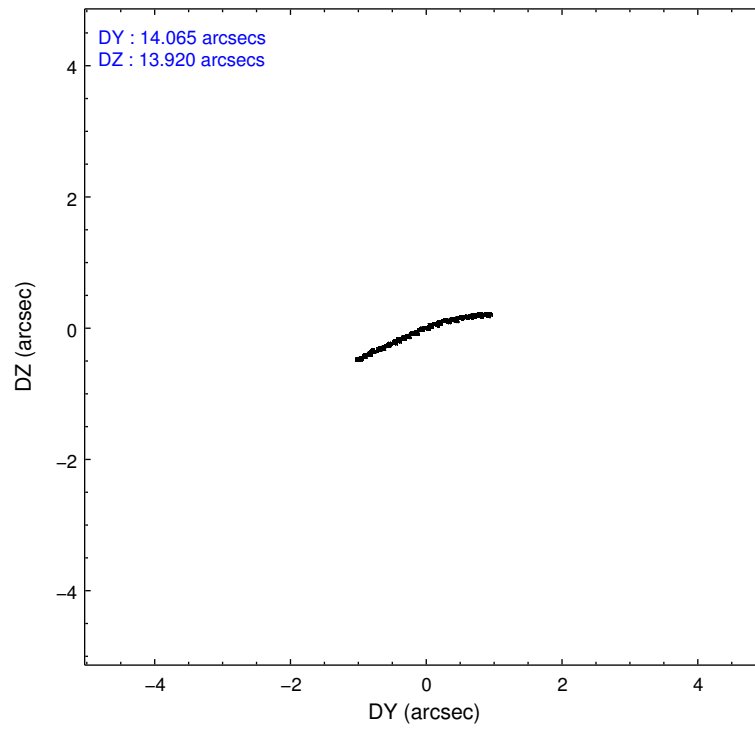
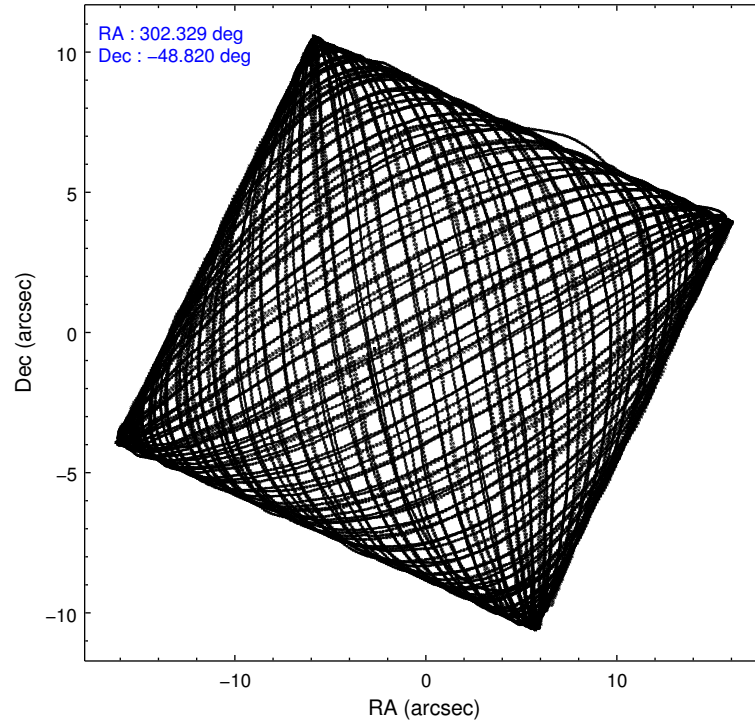
2.1.4 Events

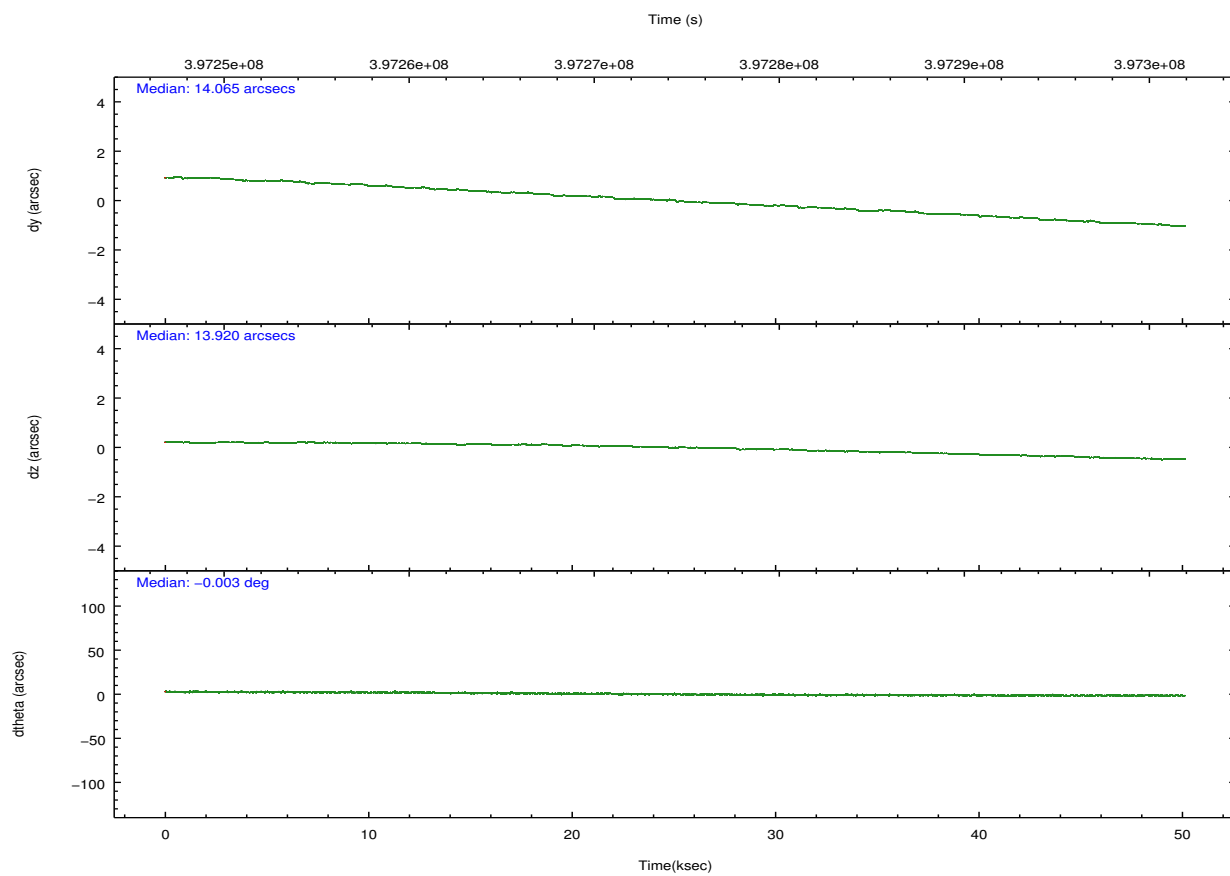
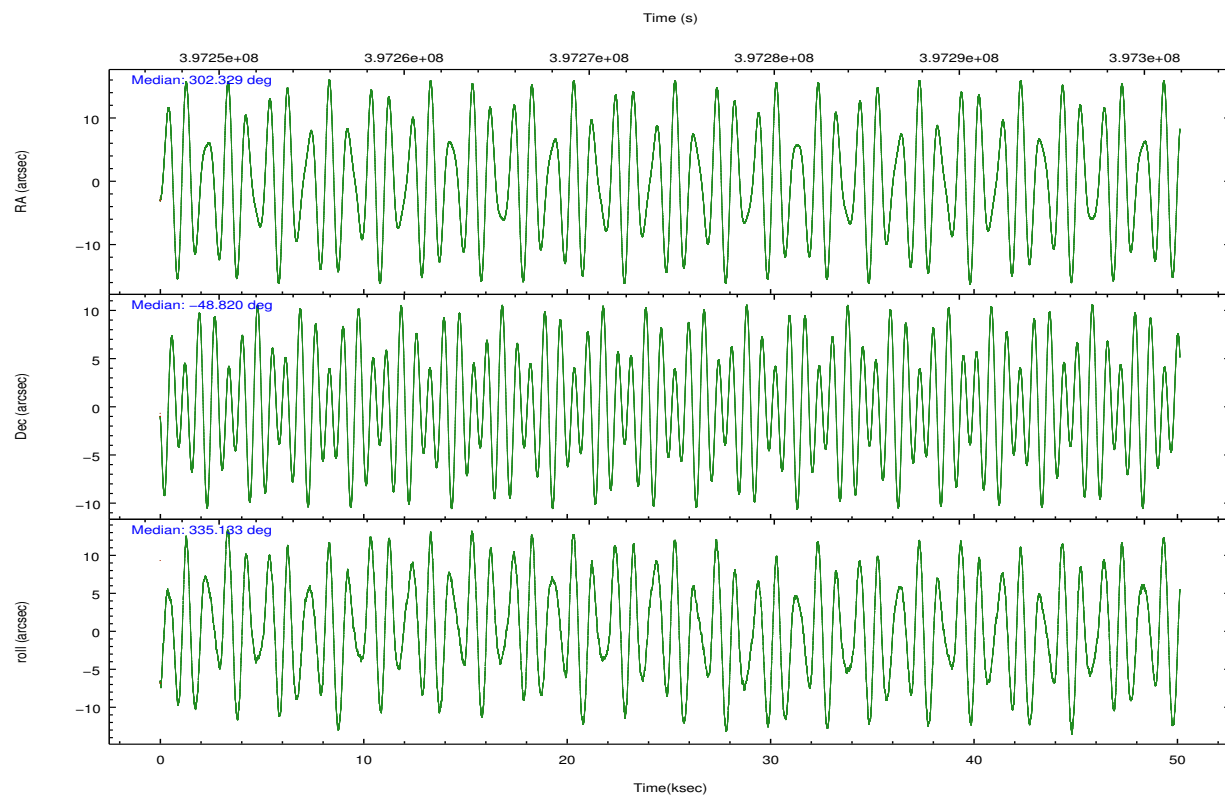
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	87795	98283	98576	136324	122129	136189	grade 0 events	3475	8934	18915	18450	13249	69937
rejected events	77474	45296	69770	43192	80140	60095		3%	9%	19%	13%	10%	51%
rejected %	88%	46%	70%	31%	65%	44%	grade 1 events	34	321	55	417	79	116
								0%	0%	0%	0%	0%	0%
							grade 2 events	2418	13203	3863	22501	6185	1691
								2%	13%	3%	16%	5%	1%
							grade 3 events	1456	4322	2021	10900	7070	1405
								1%	4%	2%	7%	5%	1%
							grade 4 events	1416	4107	2001	10401	6388	1410
								1%	4%	2%	7%	5%	1%
							grade 5 events	2488	8244	2468	8834	3631	2646
								2%	8%	2%	6%	2%	1%
							grade 6 events	1556	22422	2008	30883	9098	1654
								1%	22%	2%	22%	7%	1%
							grade 7 events	74952	36730	67245	33938	76429	57330
								85%	37%	68%	24%	62%	42%

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	LETG	LETG	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	302.287432	302.3287298621119	CCD I2 on	N	N
[deg] Pointing Dec	-48.822669	-48.81985671901478	CCD I3 on	N	N
[deg] Pointing Roll	334.948520	335.1362279981548	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	-182.132523	-182.1370004450064	CCD S3 on	Y	Y
[mm] SIM translation stage offset	-8	-7.995522138001405	CCD S4 on	Y	Y
[s] Observation start time (MET)	397249483.184000	397248452.55526	CCD S5 on	O2	Y
Observation start date	2010-08-03T19:03:37	2010-08-03T18:47:32	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	397299433.184000	397299656.94538	On-chip summing requested	N	N
Observation end date	2010-08-04T08:56:07	2010-08-04T09:00:56	Subarray requested	CUSTOM	CUSTOM
Read mode	TIMED	TIMED	Subarray start row	102	102
			Subarray row count	162	162
			Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	0.7

2.3 Aspect



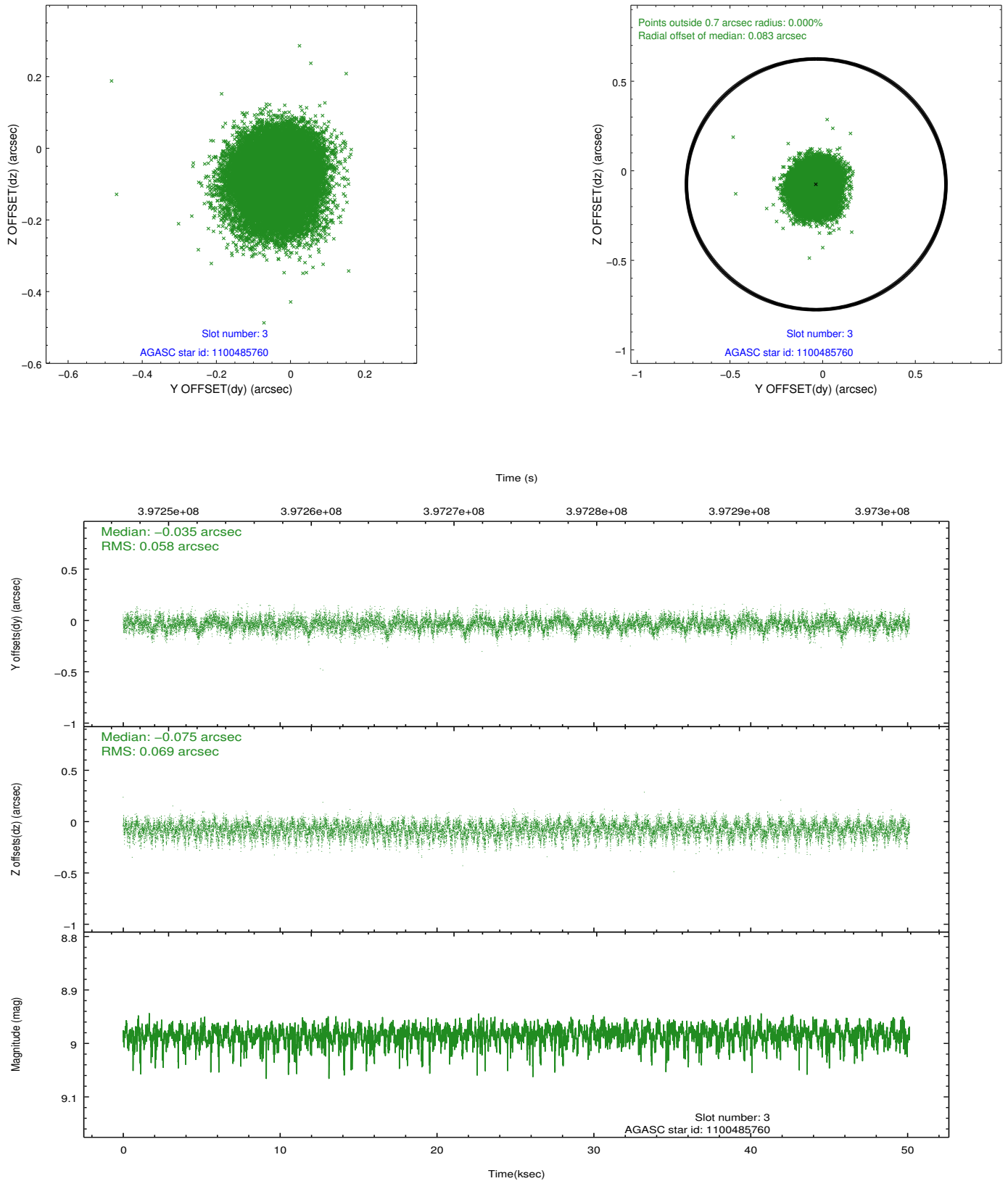


Slot Statistics

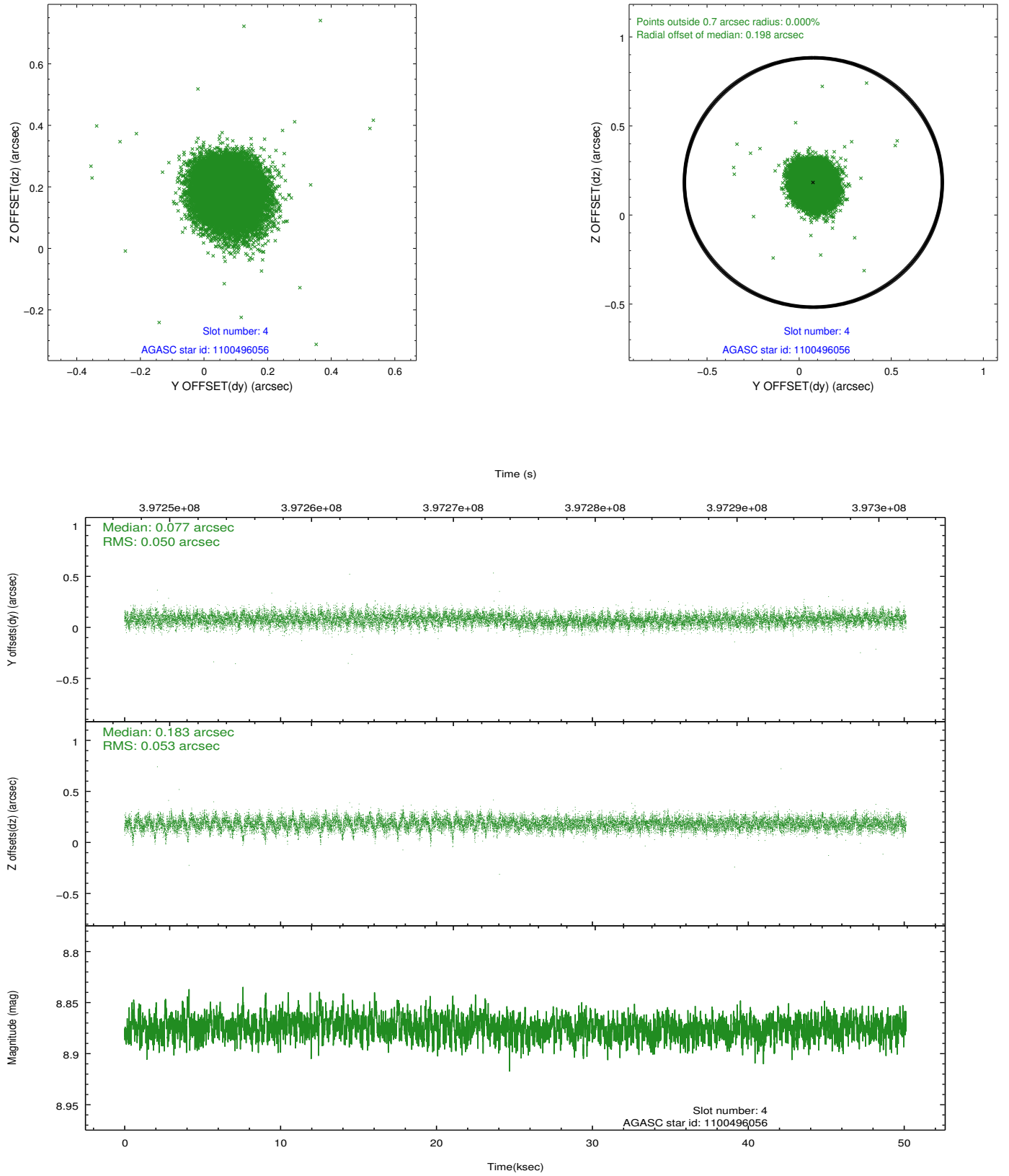
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.93	12227	-0.148	-0.096	0.022	0.031	0.000000	0.000000	-766.62	-1900.01
1	FID	ACIS-S-4	7.00	12226	0.146	0.088	0.024	0.033	0.000000	0.000000	2147.01	8.58
2	FID	ACIS-S-6	7.23	12225	-0.026	0.015	0.019	0.027	0.000000	0.000000	395.53	645.92
3	GUIDE	1100485760	8.98	24436	-0.035	-0.075	0.096	0.154	303.009671	-48.533957	1123.28	1663.02
4	GUIDE	1100496056	8.87	24444	0.077	0.183	0.076	0.125	301.571771	-48.709419	-1708.70	-357.64
5	GUIDE	1101020840	9.01	24438	0.024	-0.061	0.092	0.147	302.241123	-49.078372	291.49	-880.39
6	GUIDE	1100497552	9.24	24430	-0.075	-0.141	0.103	0.163	302.848311	-48.379409	541.60	2008.76
7	GUIDE	1101013008	9.28	24428	0.011	0.097	0.103	0.166	303.172188	-49.140382	2377.57	-164.54

2.4 Star Slots

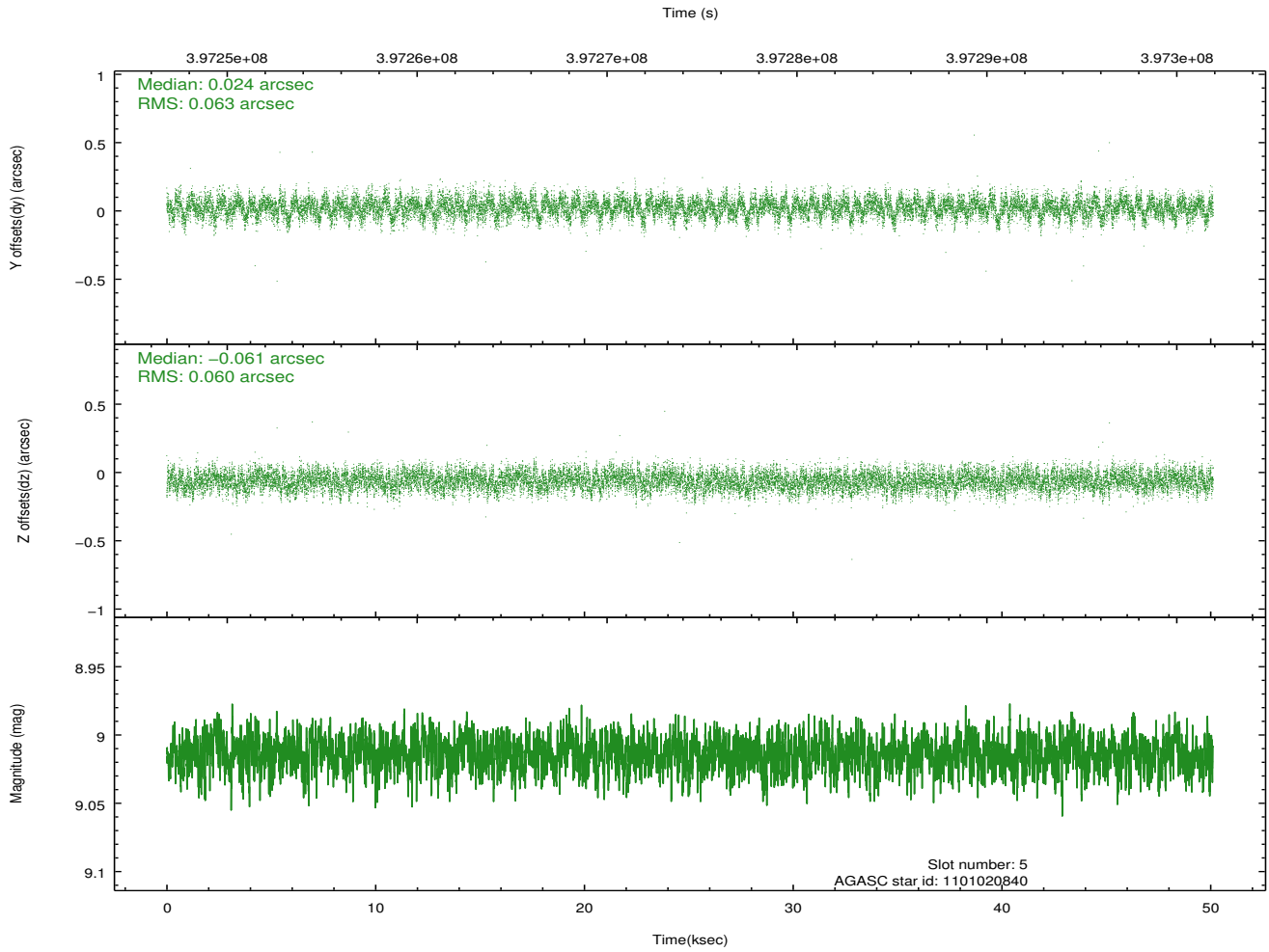
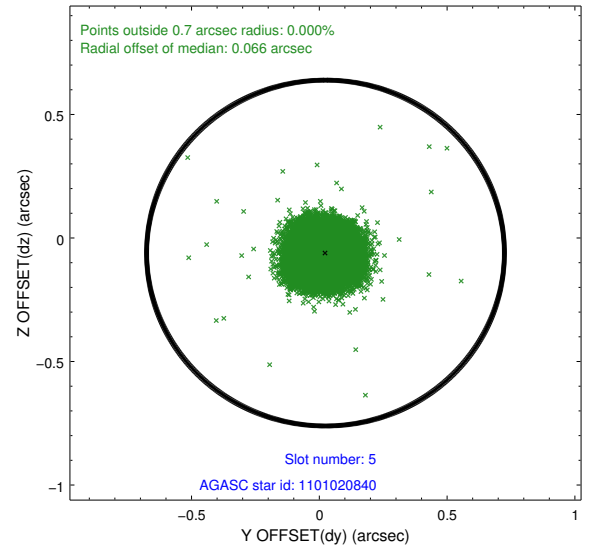
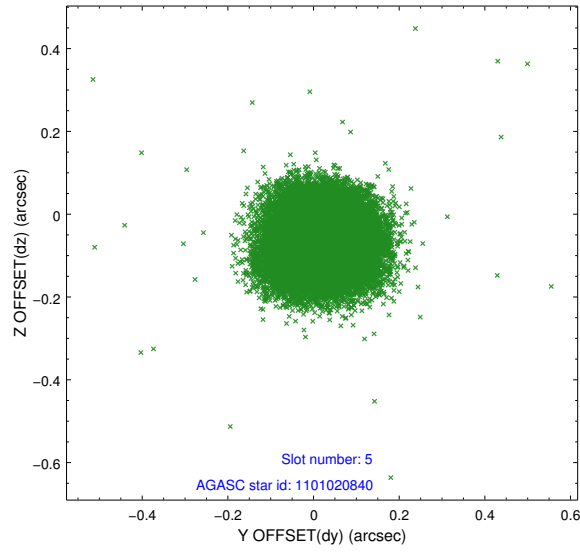
2.4.1 Slot 3



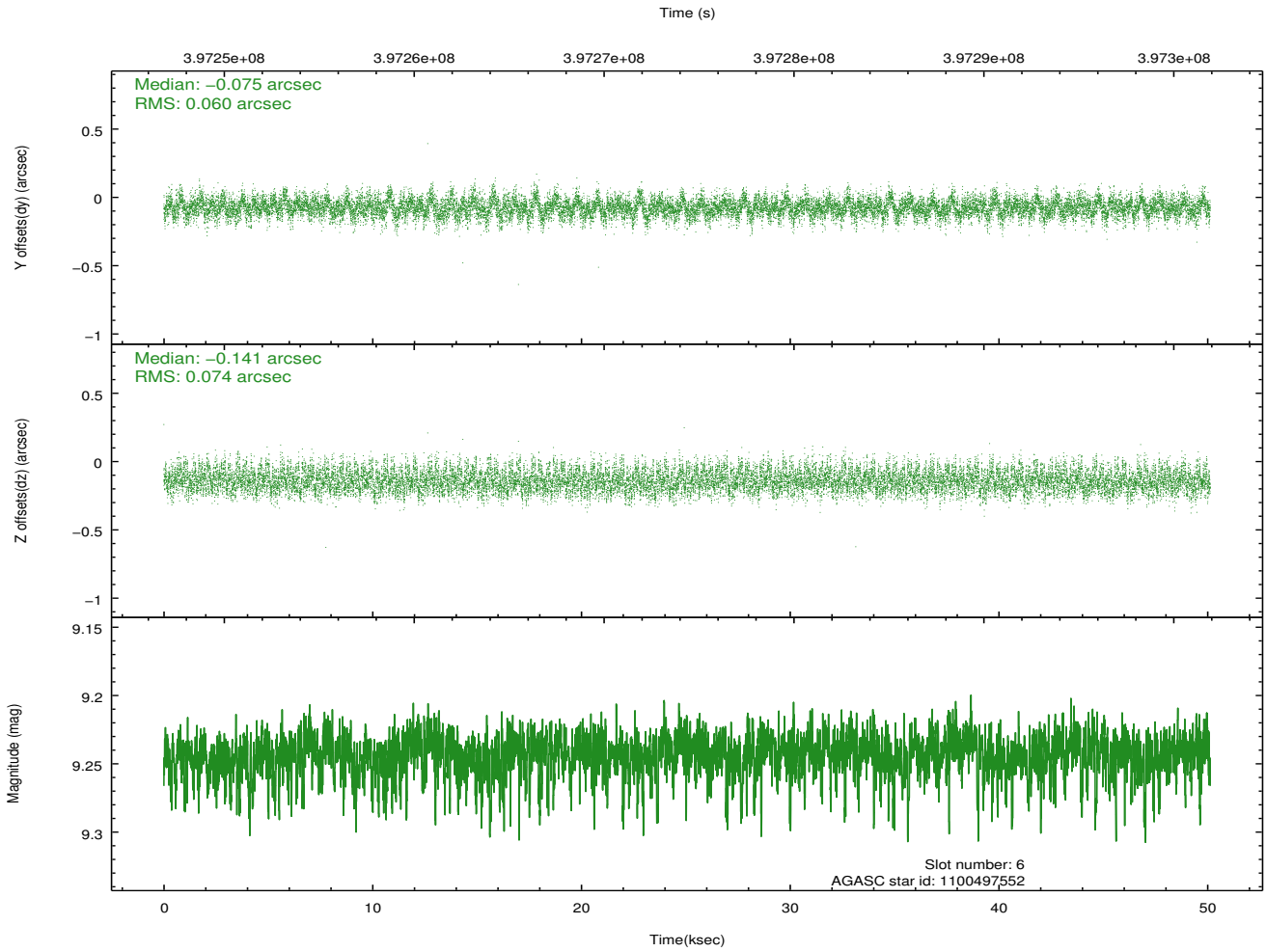
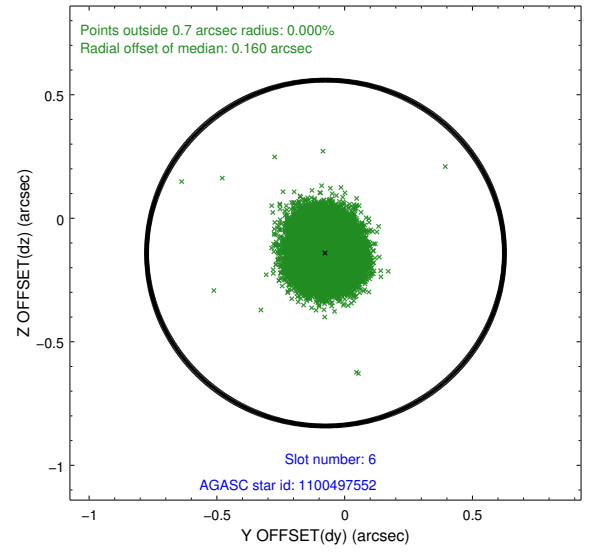
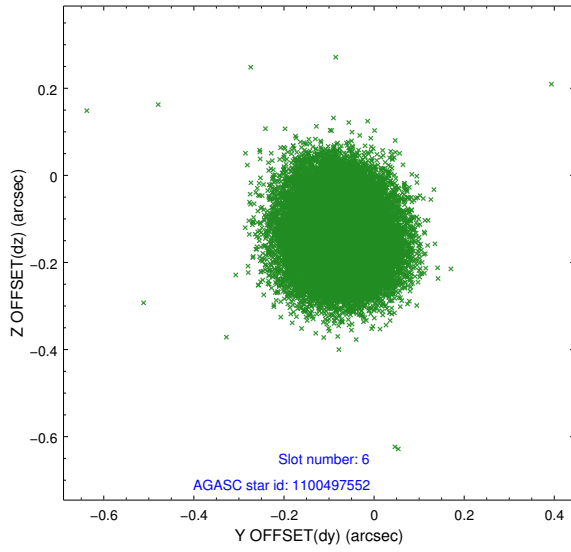
2.4.2 Slot 4



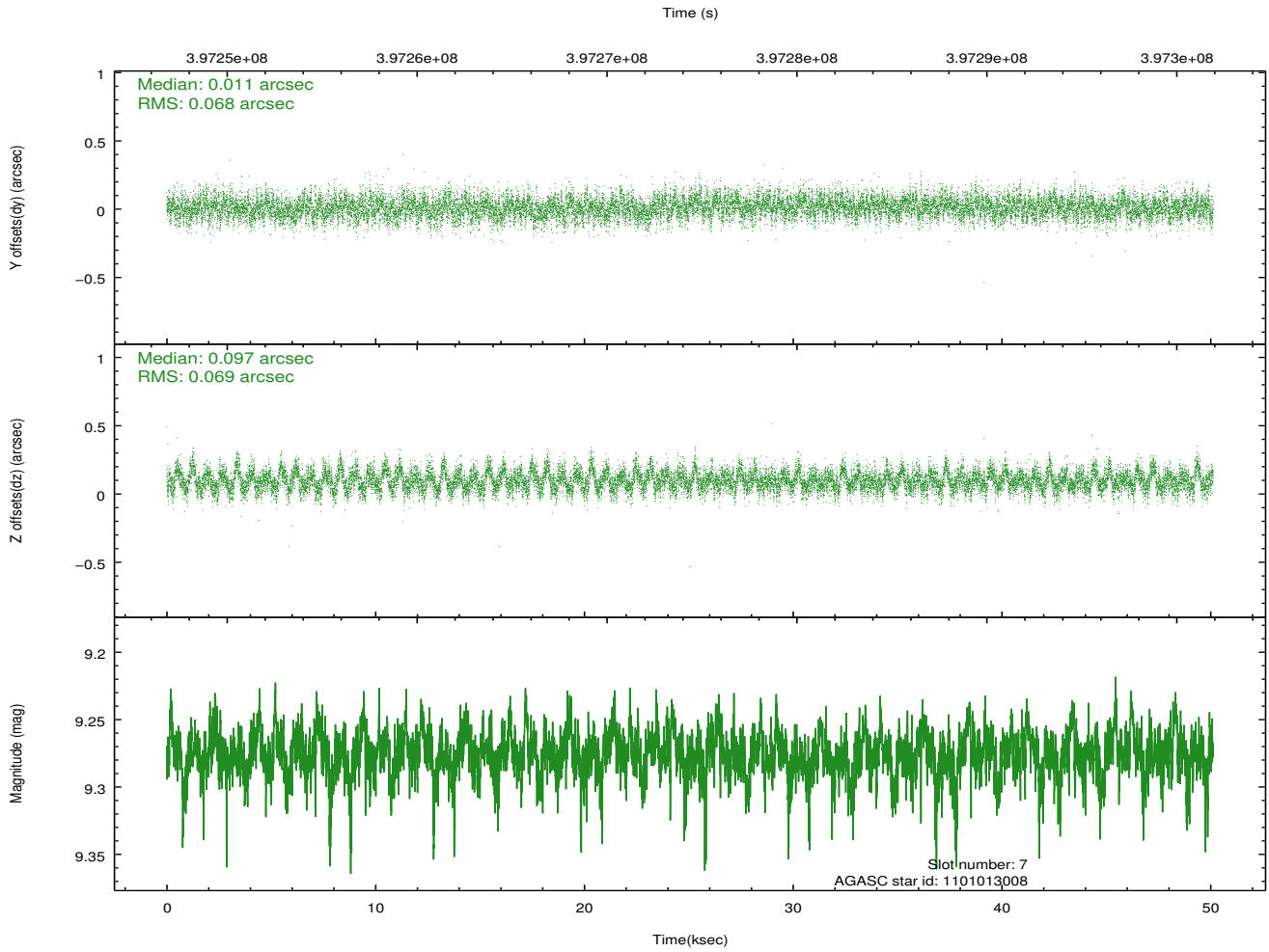
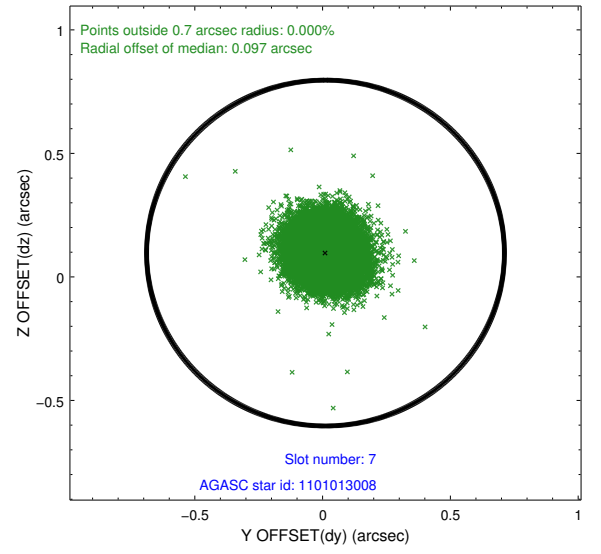
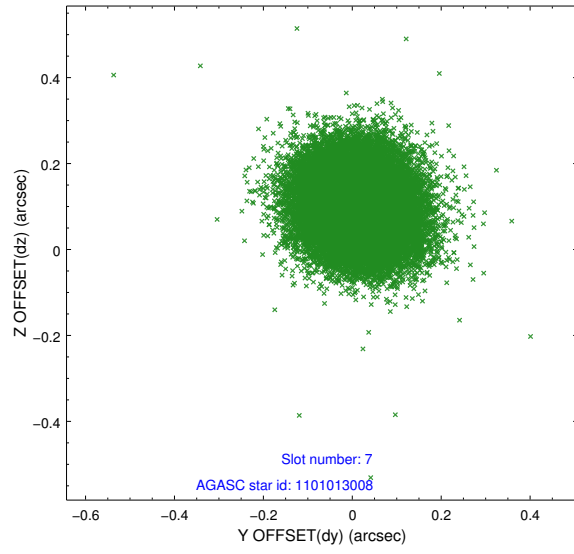
2.4.3 Slot 5



2.4.4 Slot 6

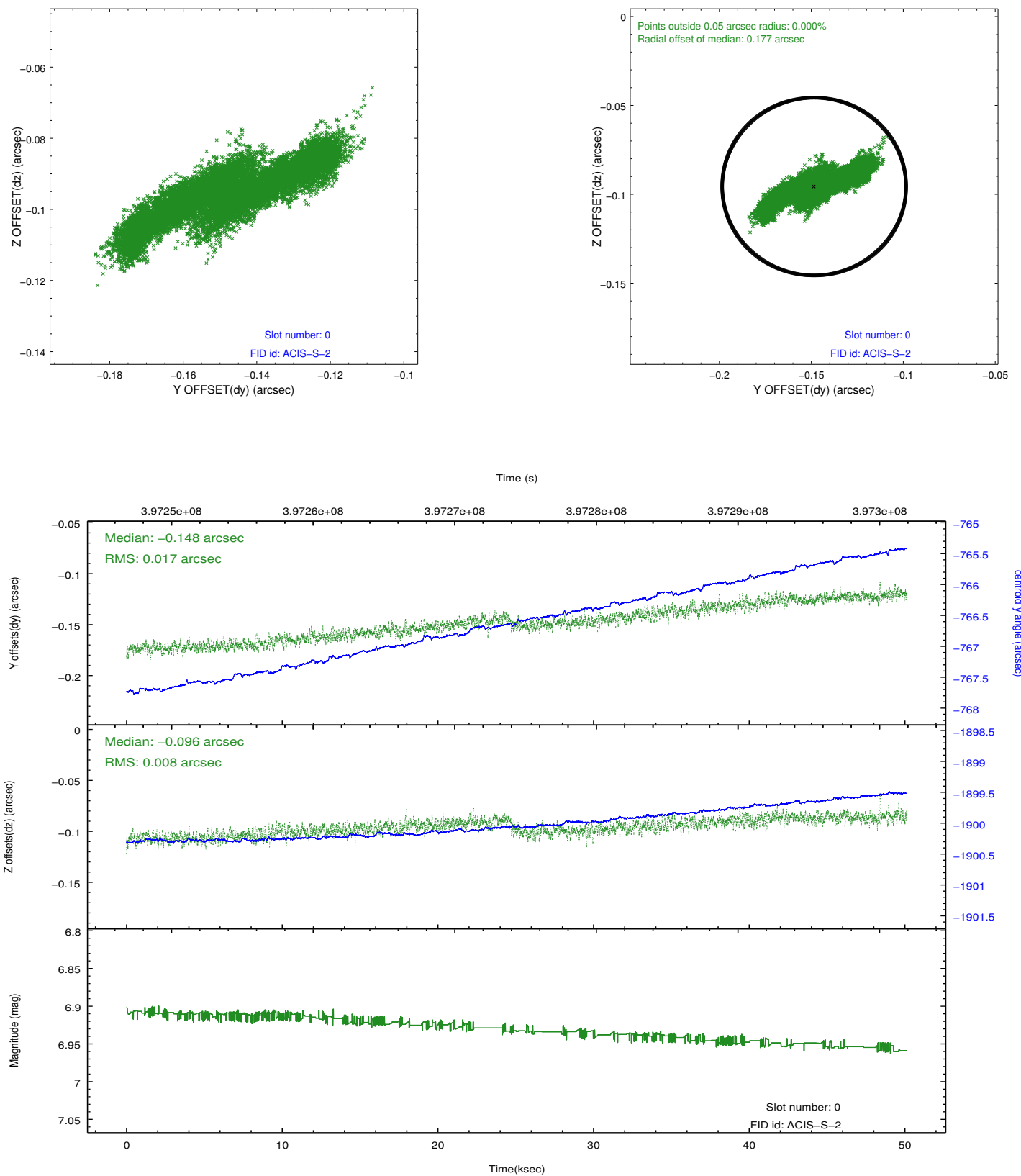


2.4.5 Slot 7

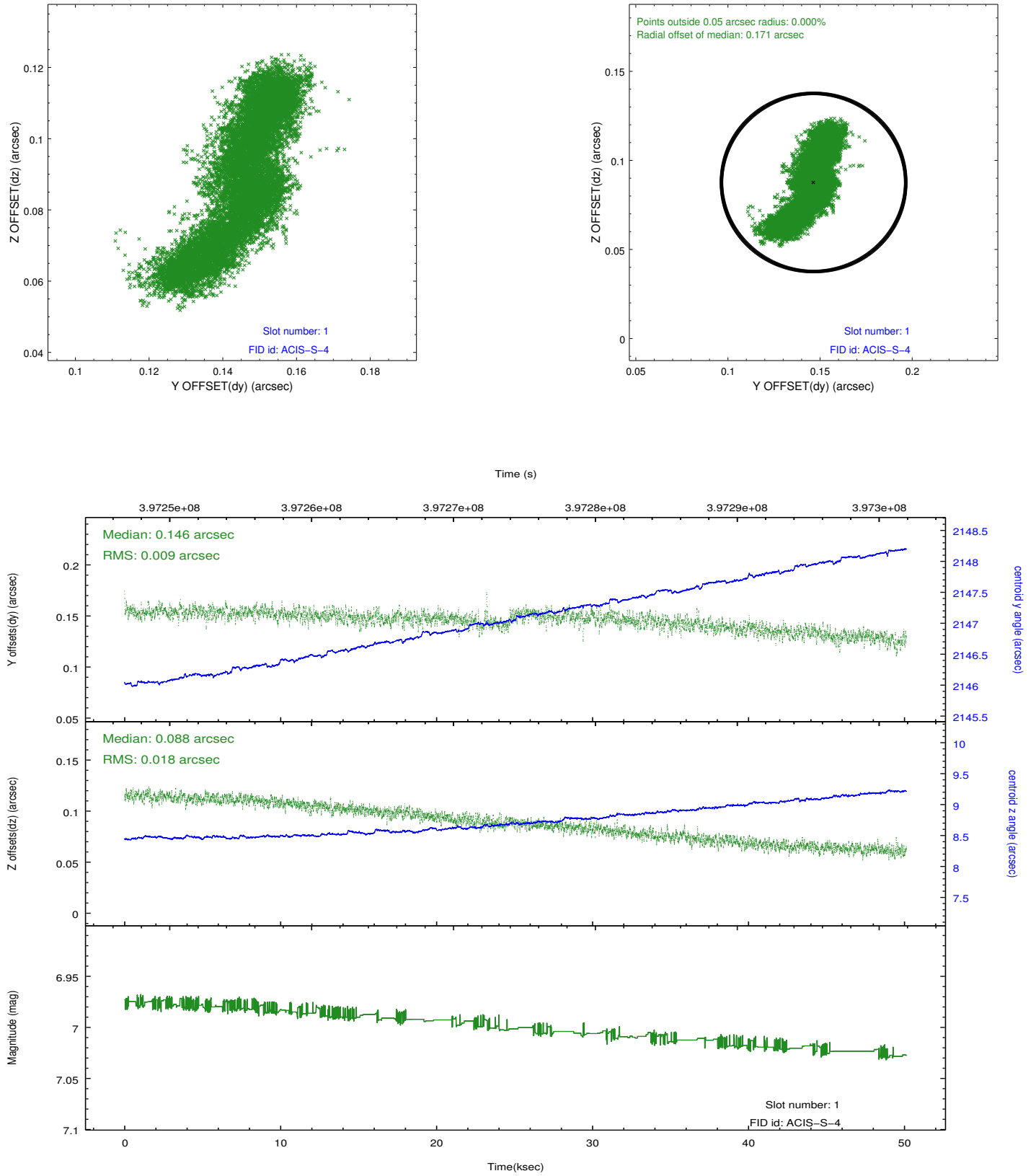


2.5 FID Slots

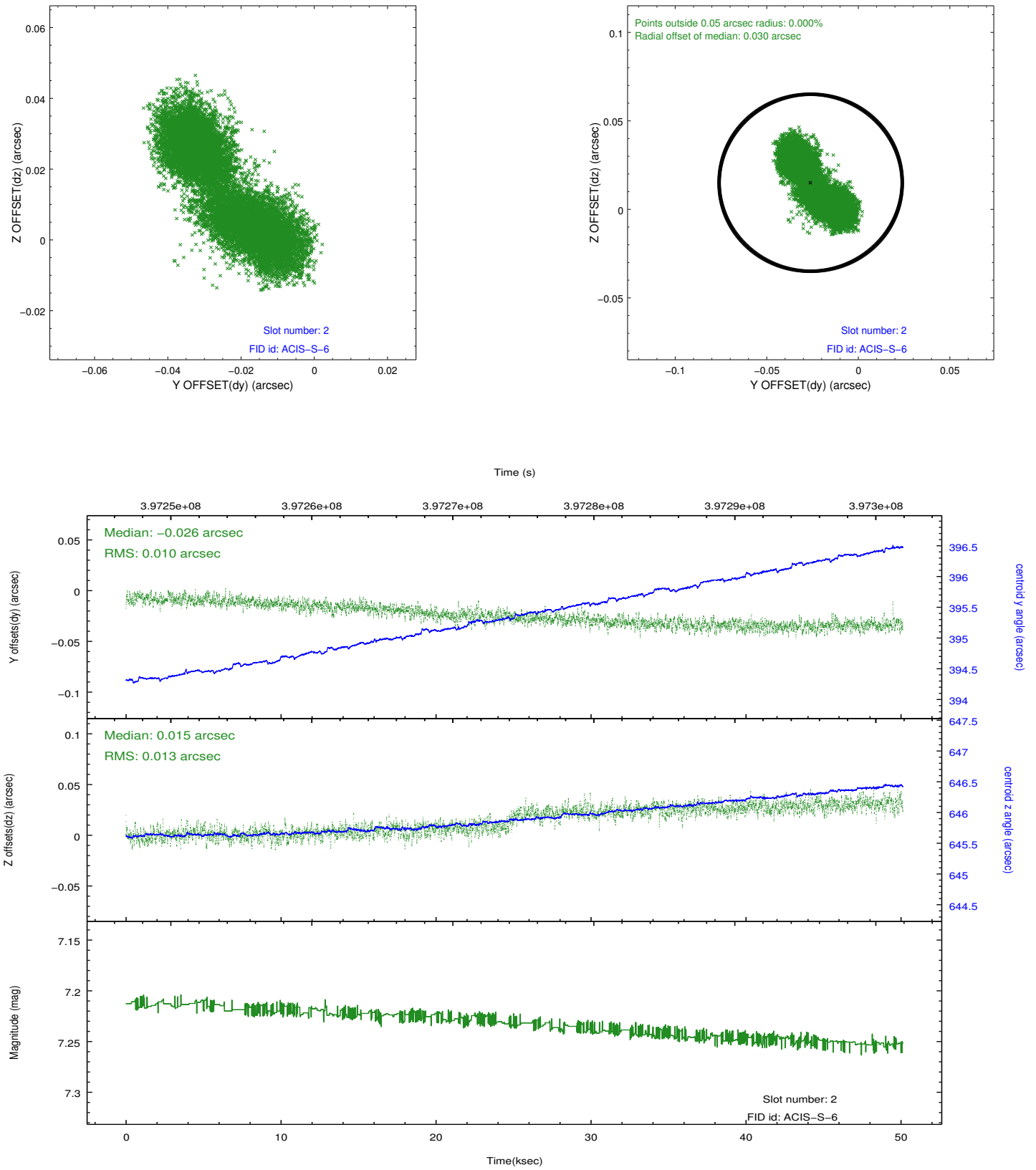
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

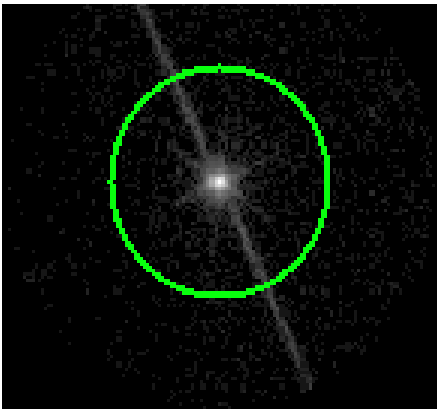


3 Gratings

3.1 LETG Arm



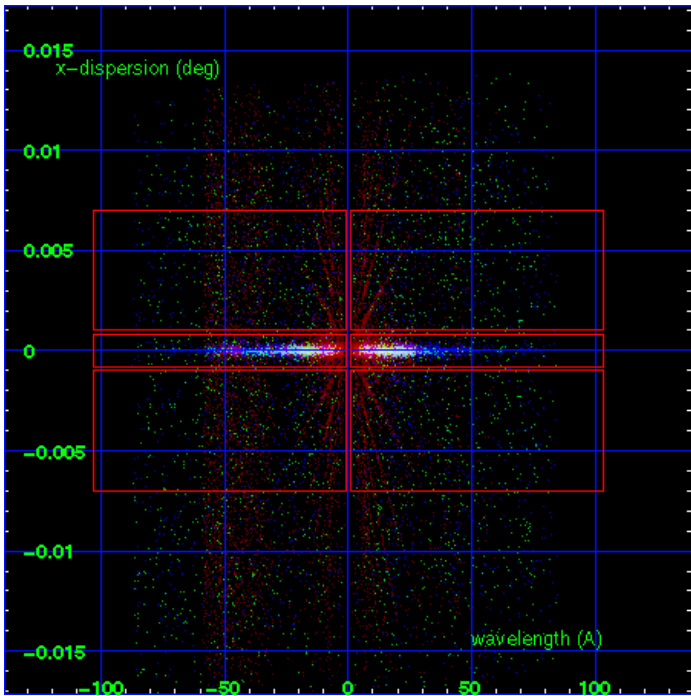
LETG Order Sort 123



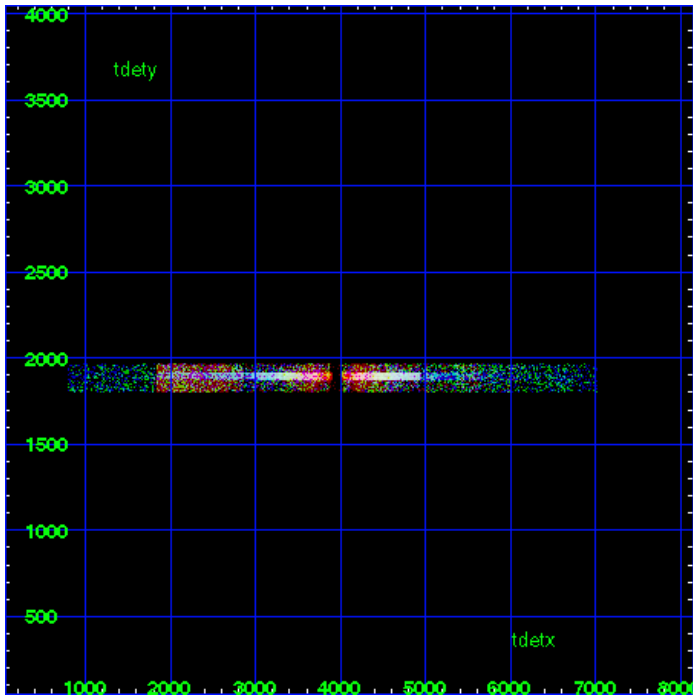
LETG Zero Order



LETG Order Sort ALL

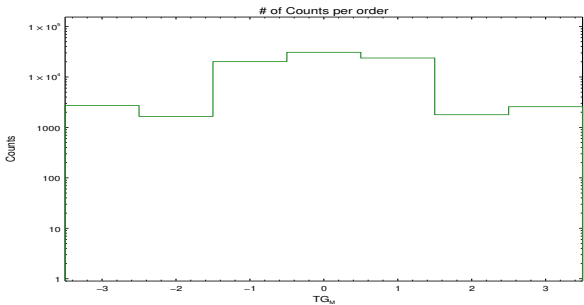


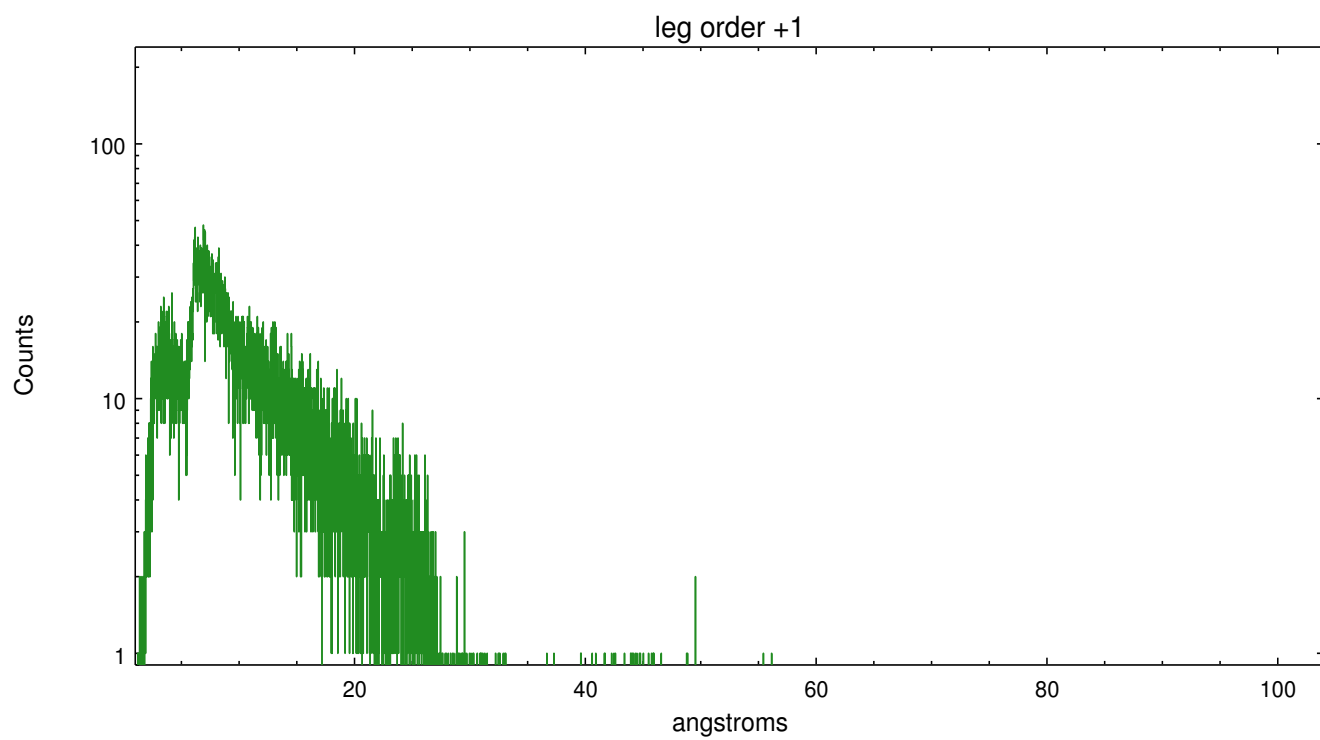
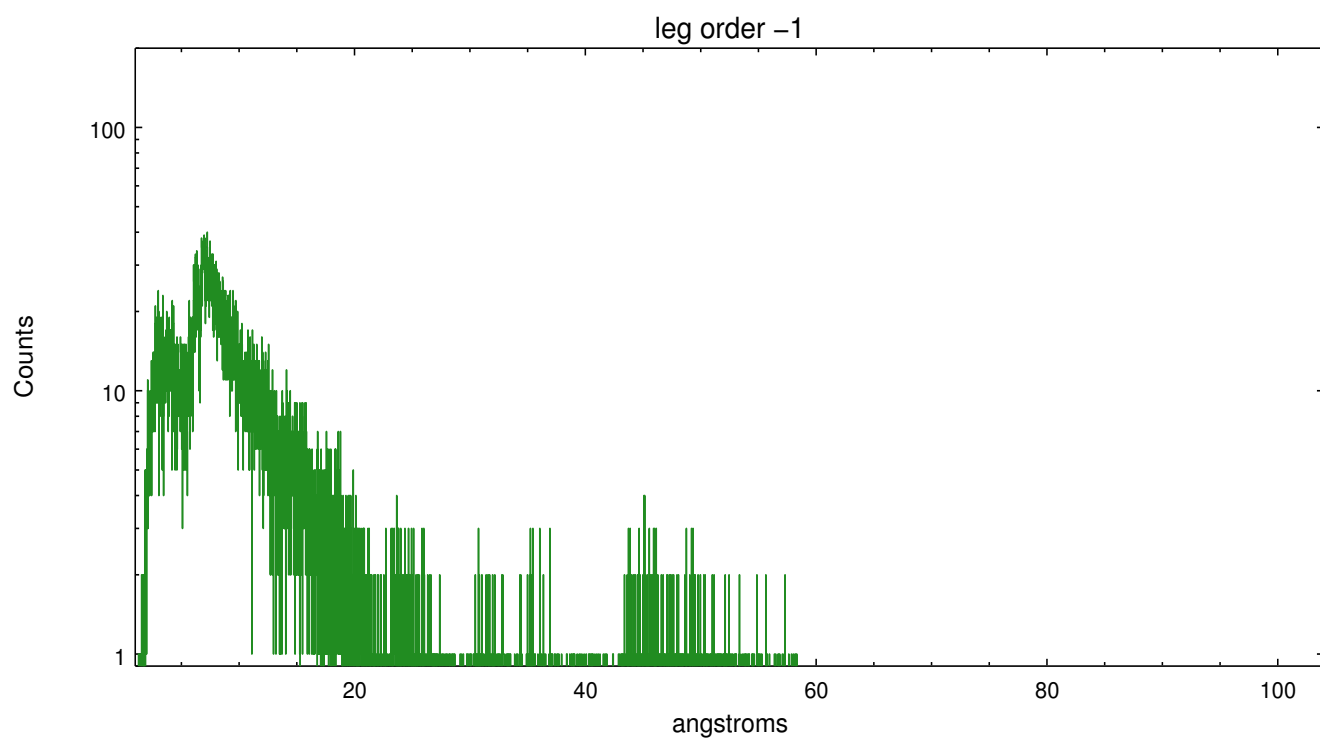
Spot Image LETG



Full Detector LETG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	2708	1652	20152	30835	23757	1786	2575





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.07.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	50.025444012761

A.2 Comments

Gain and CTI correction are not well calibrated on CCD_ID 5 (ACIS-S1). Default order sorting can clip some regions, particularly longward of 30A (first order). User-specified custom processing parameters may be required in `tg_resolve_events` (`osipfile=None`, `osort_lo`, `osort_hi ~0.5`) though this can allow more zeroth order background at short wavelengths.