

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 14267 - L2 Version 1
Chandra X-Ray Center

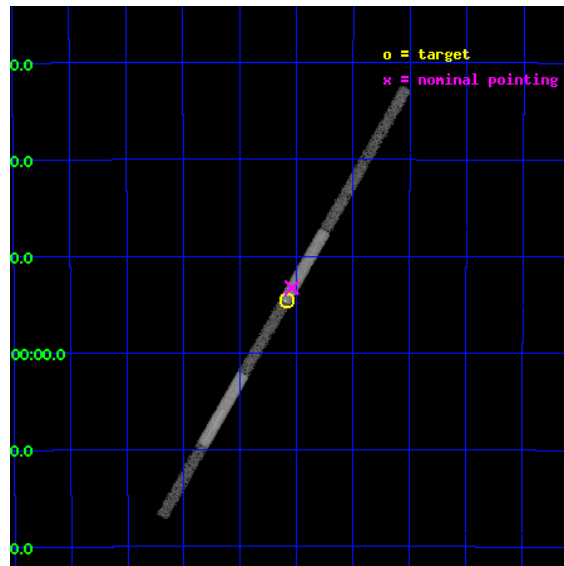
L2 Processing Date : Aug 4 2012

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1 Front

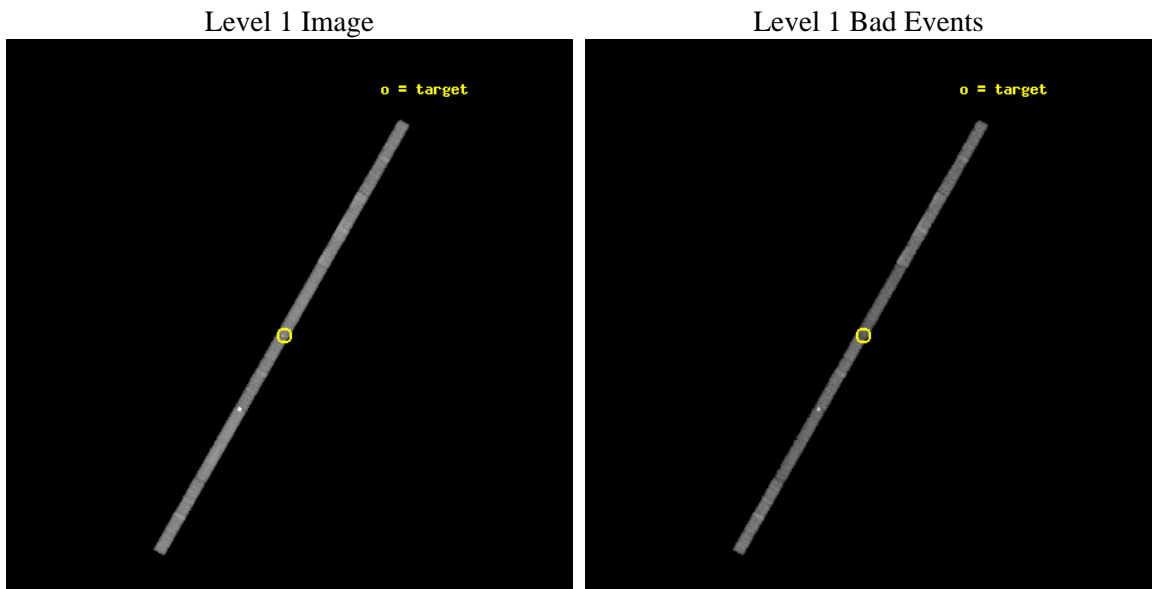
seq_num	790238	Sequence number
obs_id	14267	Observation id
title	AO-12 Calibration Observations of RXJ 1856	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	RXJ 1856.5-3754	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	284.147083	Observer's specified target RA [deg]
dec_targ	-37.909611	Observer's specified target Dec [deg]
ra_nom	284.13516044916	Nominal RA [deg]
dec_nom	-37.888060391922	Nominal Dec [deg]
roll_nom	299.98347302639	Nominal Roll [deg]
revision	1	Processing version of data
ontime	30053.799488127	Sum of GTIs [s]
livetime	28389.371210311	Livetime [s]
ontime4	30053.799488127	Sum of GTIs [s]
ontime5	30053.758993983	Sum of GTIs [s]
ontime6	30053.71795398	Sum of GTIs [s]
ontime7	30053.799488127	Sum of GTIs [s]
ontime8	30053.676913977	Sum of GTIs [s]
ontime9	30053.635873973	Sum of GTIs [s]
l2events	40555	Number of level 2 events



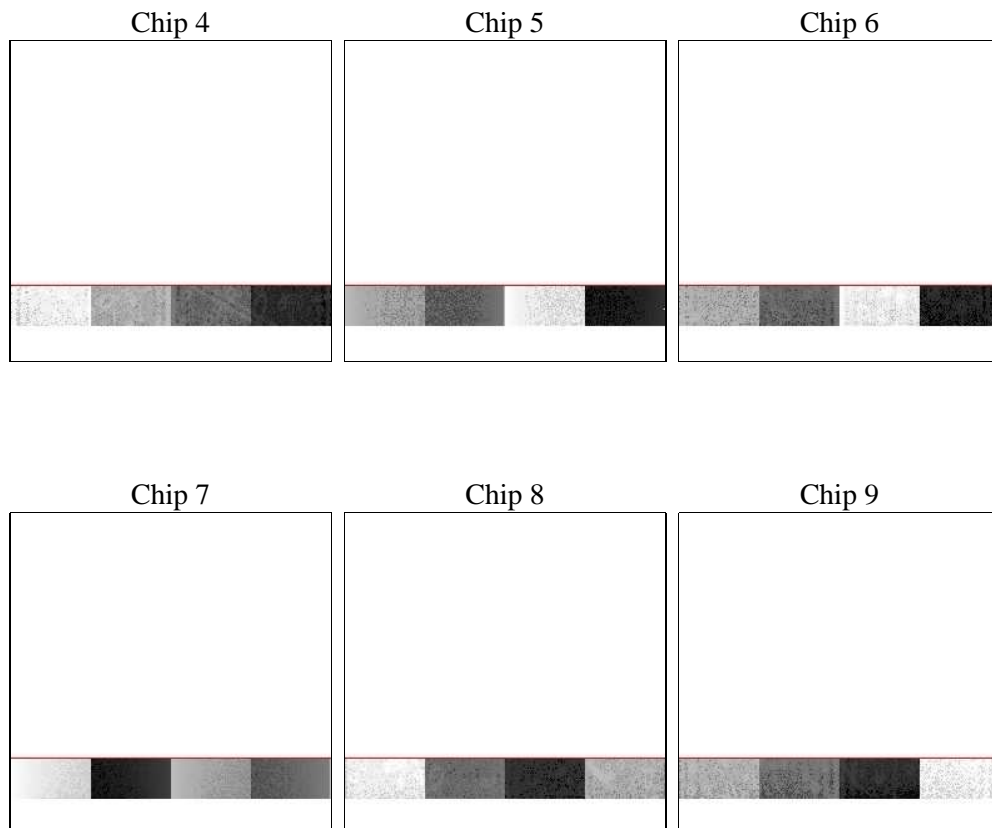
2 OBI

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	8.4.5	Processing system revision	ontime	30053.799488127	Sum of GTIs [s]
caldbver	4.5.1	 	ontime4	30053.799488127	Sum of GTIs [s]
date	2012-08-04T19:11:19	Date and time of file creation	ontime5	30053.758993983	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	30053.71795398	Sum of GTIs [s]
			ontime7	30053.799488127	Sum of GTIs [s]
			ontime8	30053.676913977	Sum of GTIs [s]
			ontime9	30053.635873973	Sum of GTIs [s]
			l1events	193434	Number of level 1 events

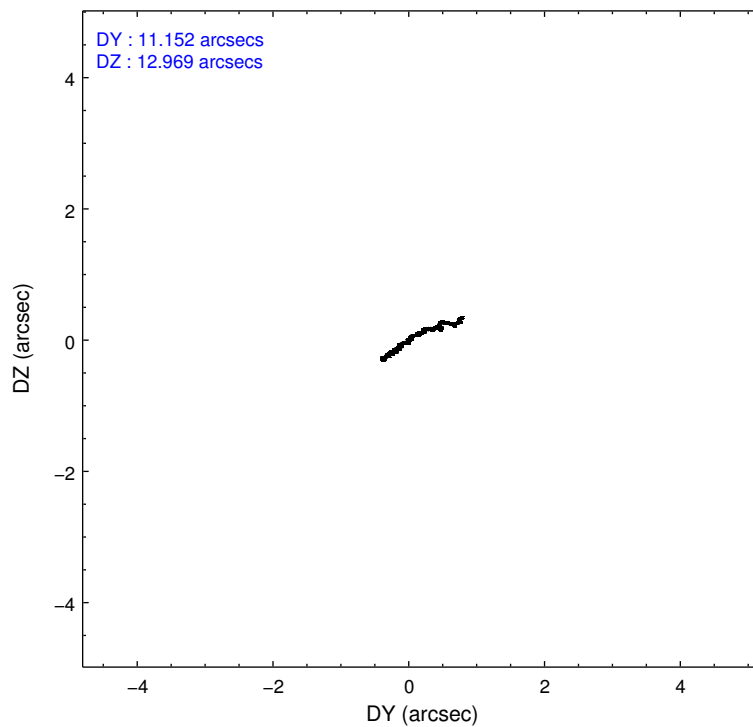
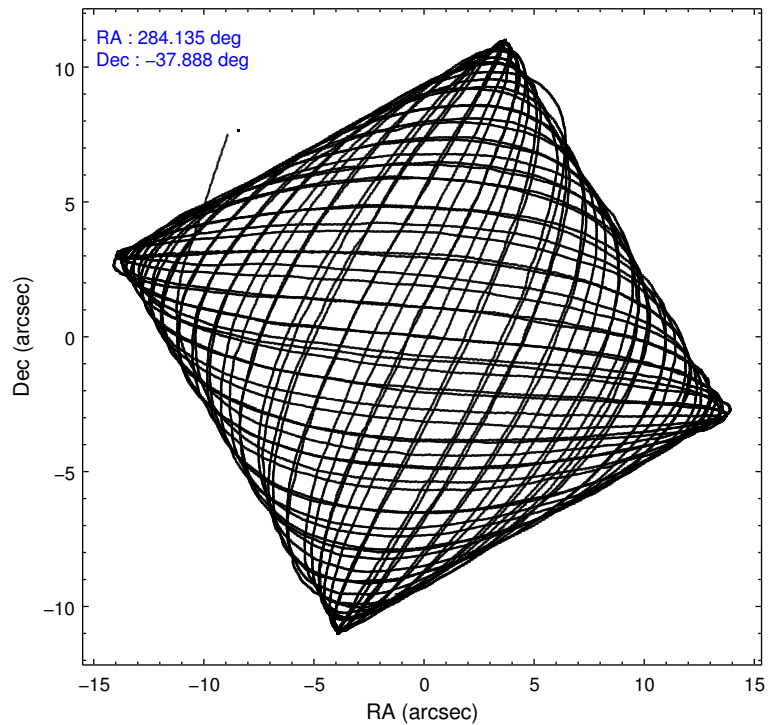
2.1.4 Events

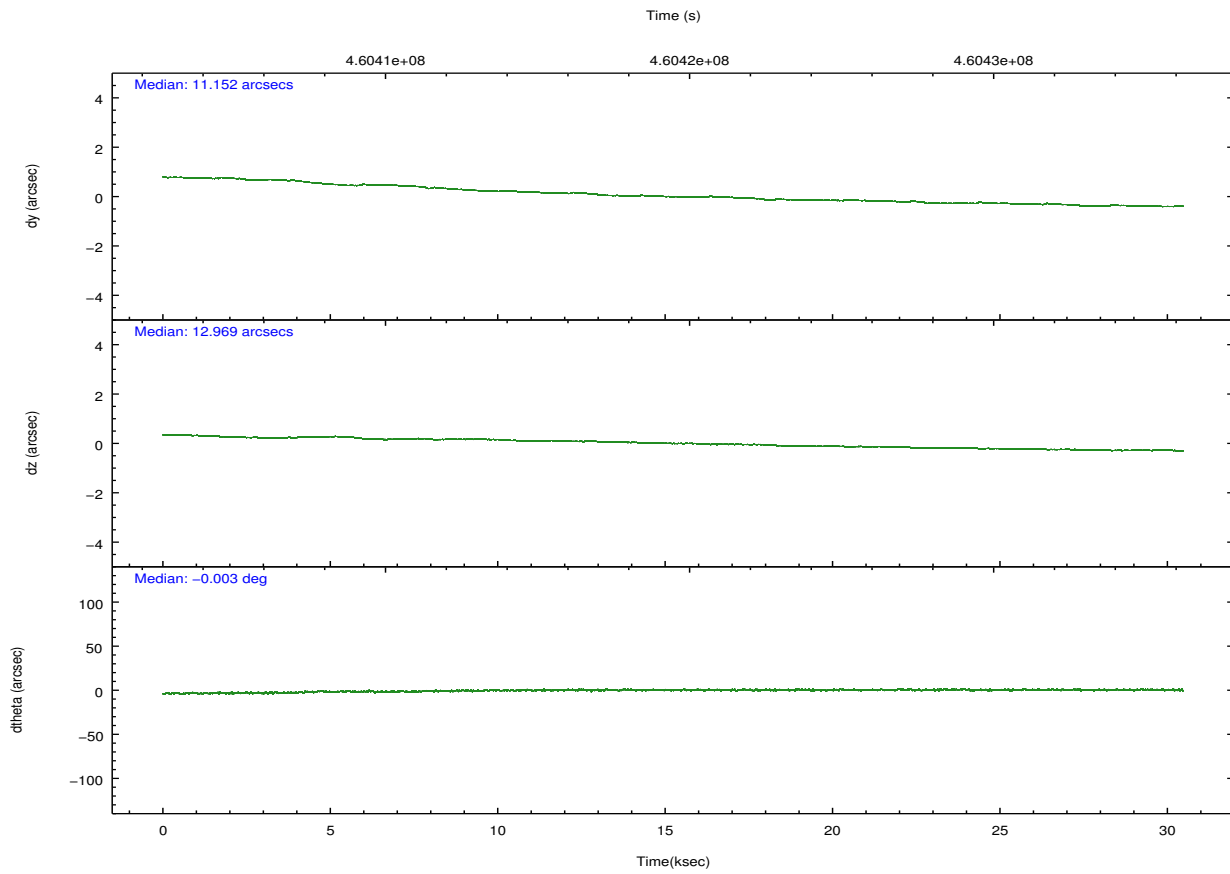
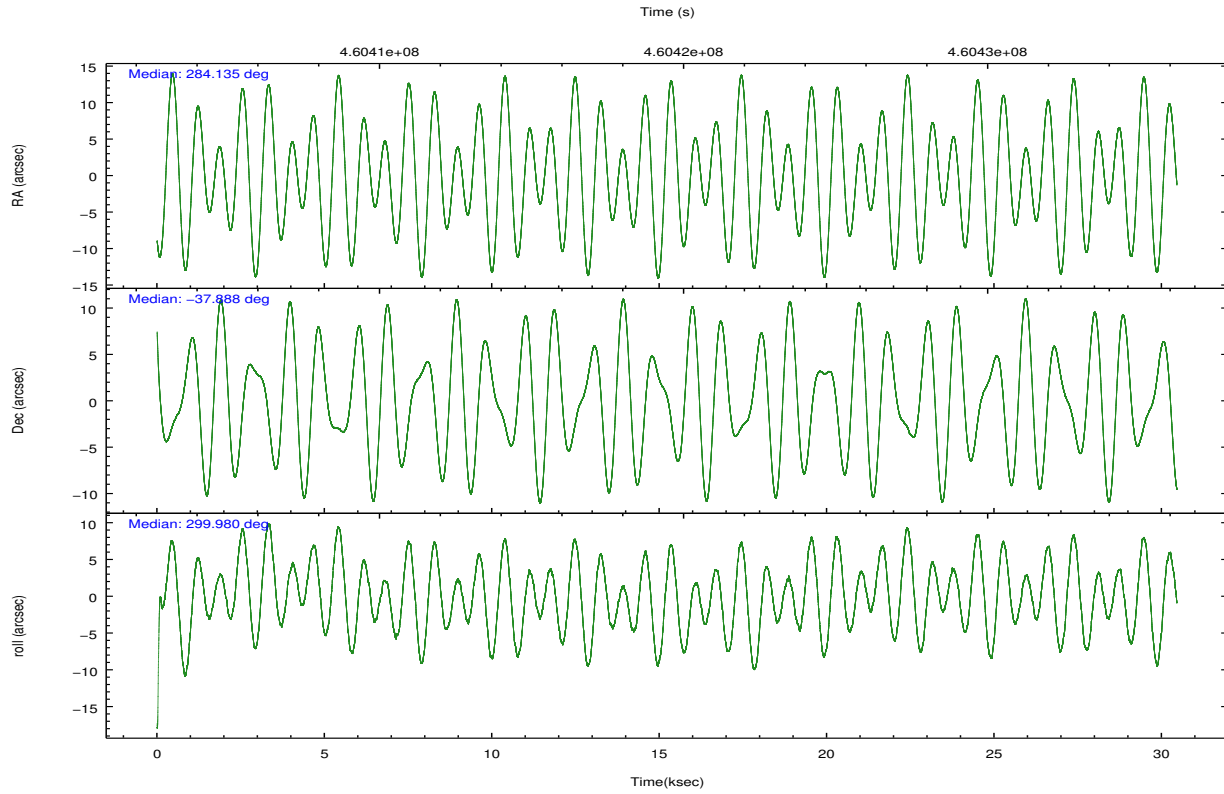
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	28499	53650	23714	29211	35807	22553	grade 0 events	878	9795	832	2840	1841	867
rejected events	25414	19480	20792	14359	27351	19725		3%	18%	3%	9%	5%	3%
rejected %	89%	36%	87%	49%	76%	87%	grade 1 events	7	1675	3	43	14	3
								0%	3%	0%	0%	0%	0%
							grade 2 events	701	6174	548	3000	1852	488
								2%	11%	2%	10%	5%	2%
							grade 3 events	499	4774	491	1537	1029	506
								1%	8%	2%	5%	2%	2%
							grade 4 events	450	3828	486	1536	951	452
								1%	7%	2%	5%	2%	2%
							grade 5 events	914	4665	884	2745	1287	999
								3%	8%	3%	9%	3%	4%
							grade 6 events	557	9603	565	5941	2783	516
								1%	17%	2%	20%	7%	2%
							grade 7 events	24493	13136	19905	11569	26050	18722
								85%	24%	83%	39%	72%	83%

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	284.104932	284.1351604491596	CCD I2 on	N	N
[deg] Pointing Dec	-37.874707	-37.88806039192157	CCD I3 on	N	N
[deg] Pointing Roll	299.808293	299.9834730263855	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	-182.1344861297048	CCD S3 on	Y	Y
[mm] SIM translation stage offset	-8	-7.998036453302973	CCD S4 on	Y	Y
[s] Observation start time (MET)	460404689.184000	460403484.84437	CCD S5 on	Y	Y
Observation start date	2012-08-03T18:10:22	2012-08-03T17:51:24	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	460434689.184000	460435123.00856	On-chip summing requested	N	N
Observation end date	2012-08-04T02:30:22	2012-08-04T02:38:43	Subarray requested	CUSTOM	1/8
Read mode	TIMED	TIMED	Subarray start row	113	113
			Subarray row count	128	128
			Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	0.7

2.3 Aspect



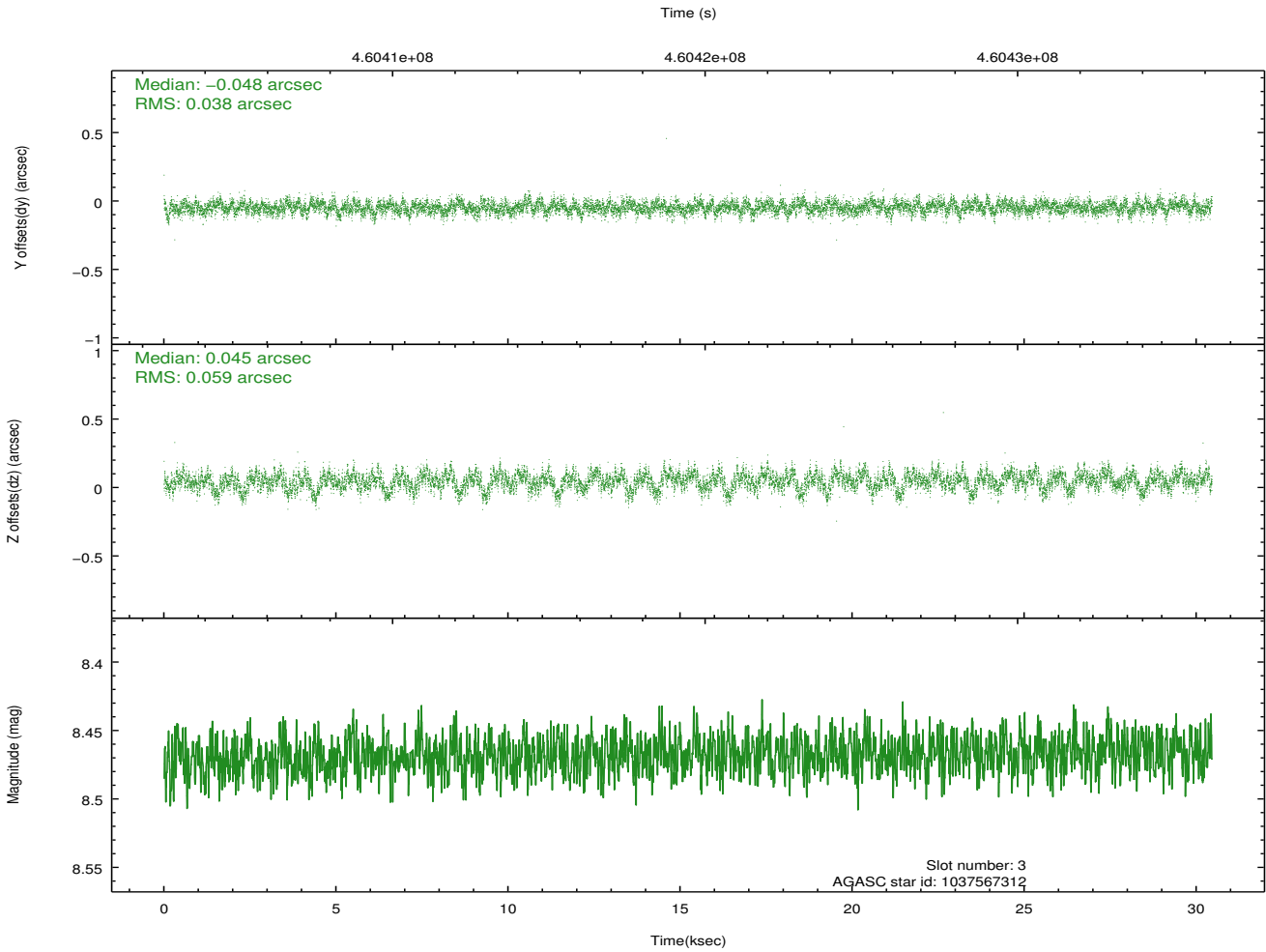
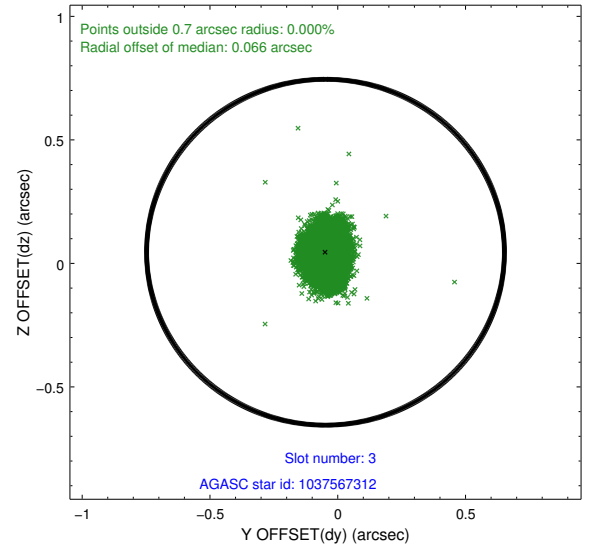
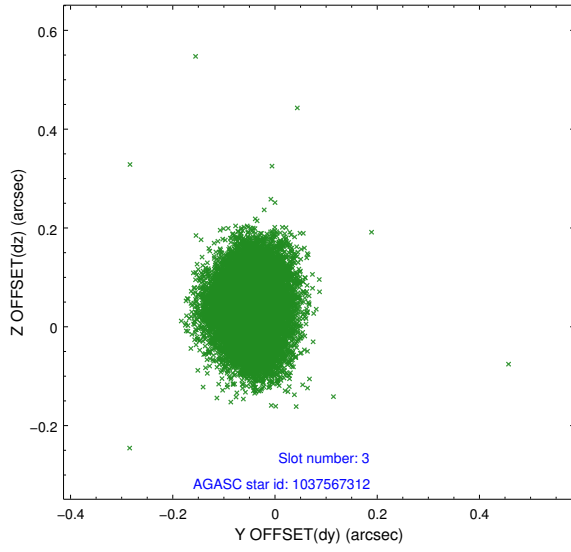


Slot Statistics

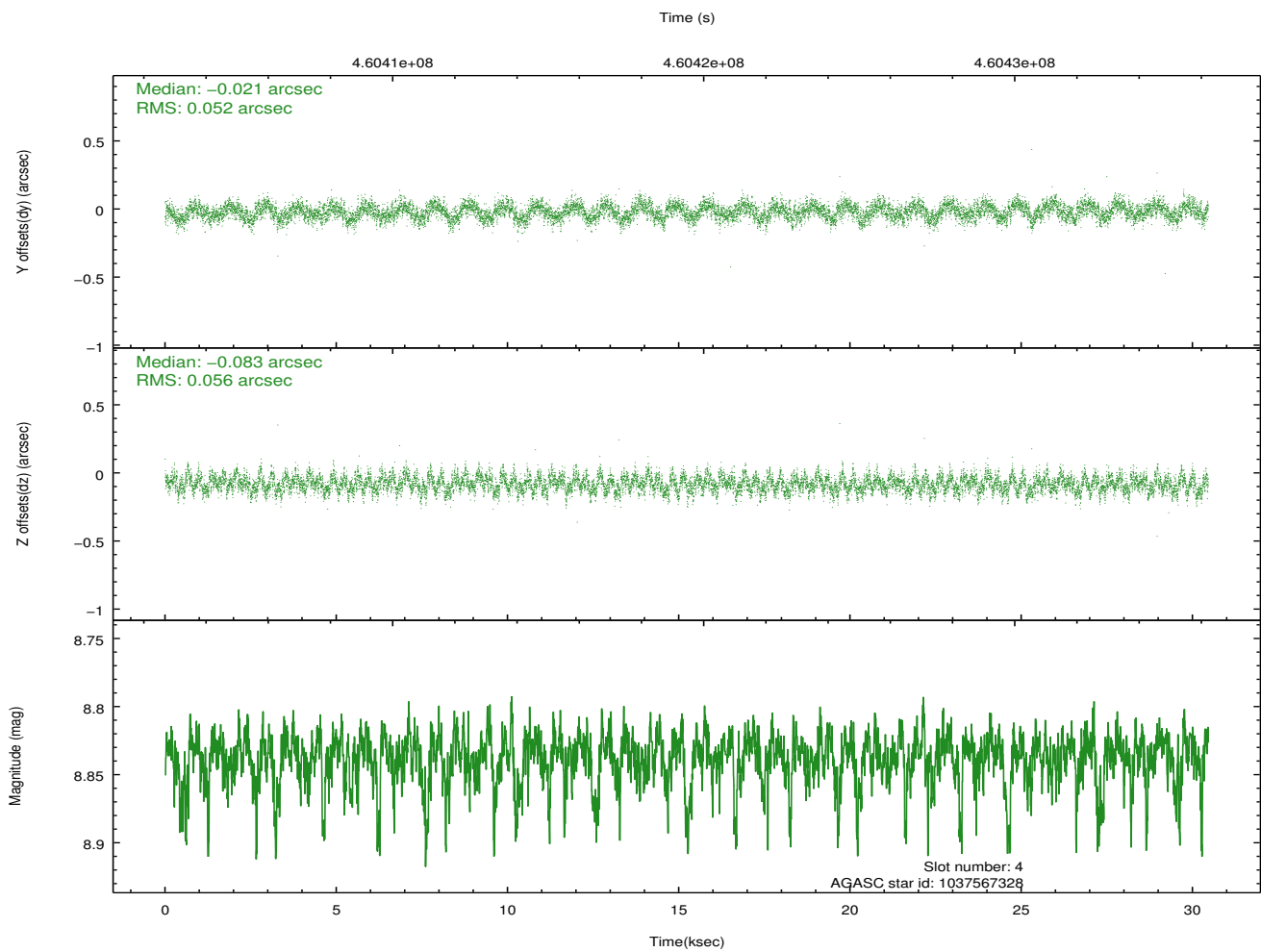
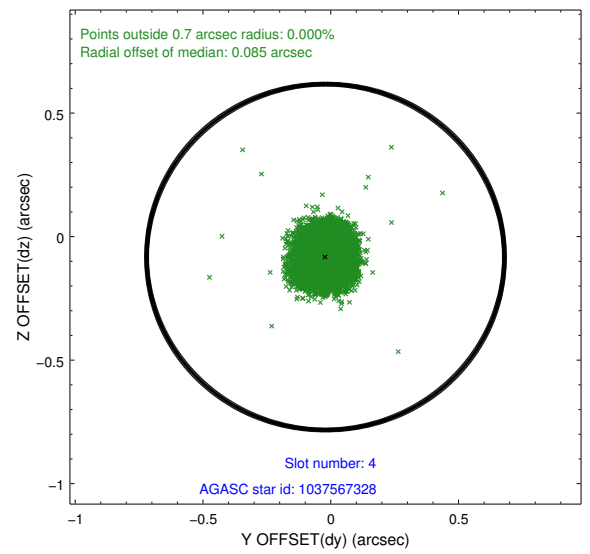
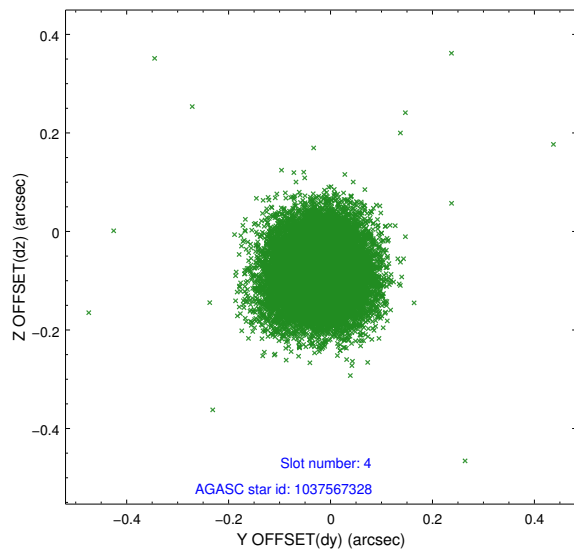
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.07	7429	-0.002	0.179	0.010	0.017	0.000000	0.000000	932.43	-1894.55
1	FID	ACIS-S-4	7.05	7428	0.074	-0.084	0.009	0.014	0.000000	0.000000	2150.02	9.20
2	FID	ACIS-S-6	7.28	7429	-0.095	-0.084	0.008	0.014	0.000000	0.000000	398.46	646.70
3	GUIDE	1037567312	8.47	14854	-0.048	0.045	0.073	0.123	283.456056	-37.976515	-591.31	-1783.00
4	GUIDE	1037567328	8.84	14843	-0.021	-0.083	0.081	0.129	284.052016	-37.647288	-785.01	275.91
5	GUIDE	1037568192	8.68	14844	-0.015	-0.040	0.076	0.120	284.446060	-38.037443	990.99	547.28
6	GUIDE	1037576824	8.73	14852	-0.011	0.126	0.065	0.104	284.177029	-38.323536	1503.79	-626.24
7	GUIDE	1037578168	8.11	14849	0.095	-0.044	0.070	0.110	284.493659	-38.169059	1470.93	425.30

2.4 Star Slots

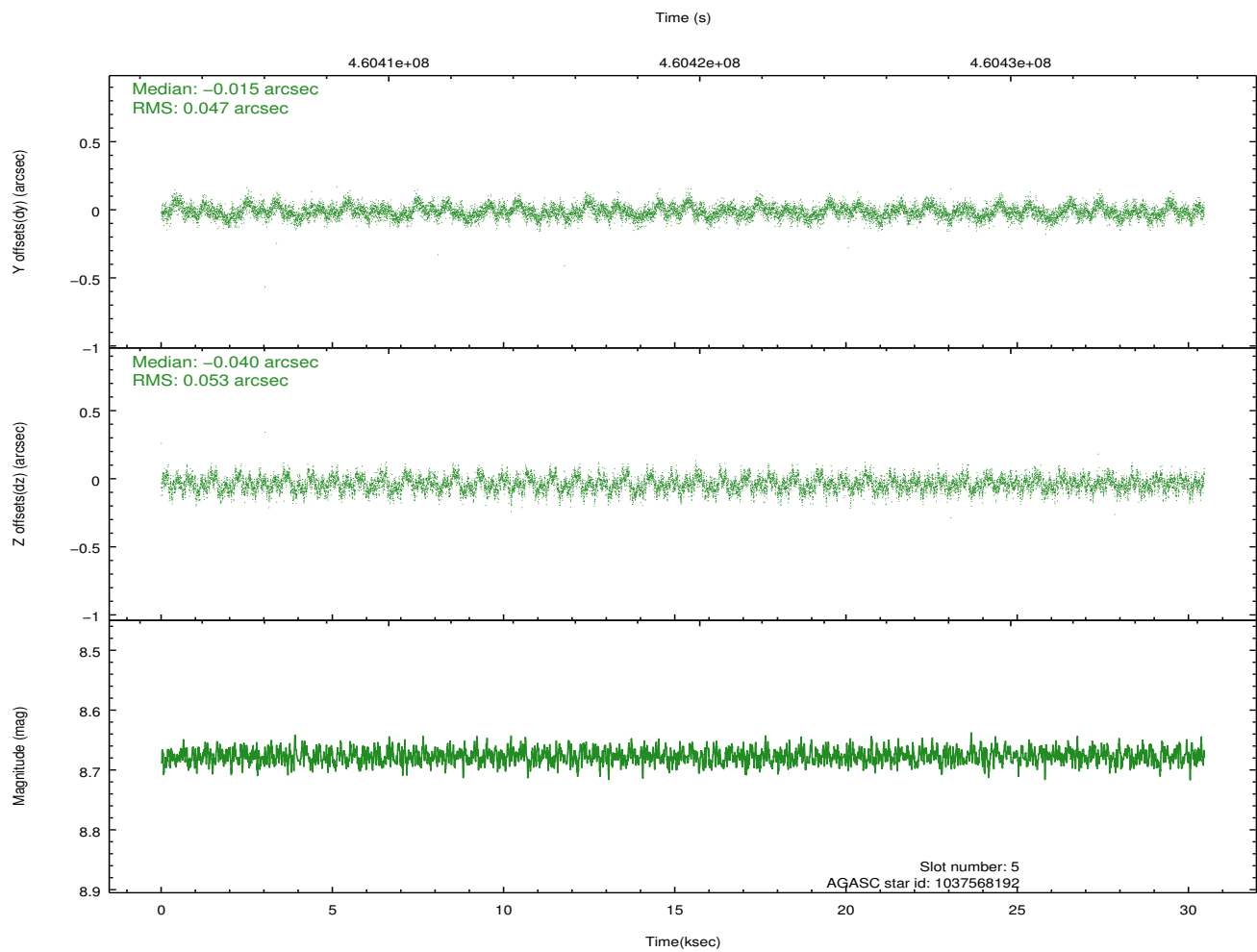
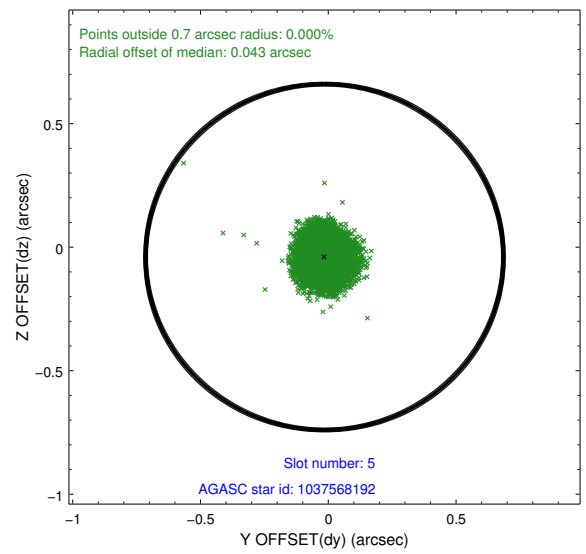
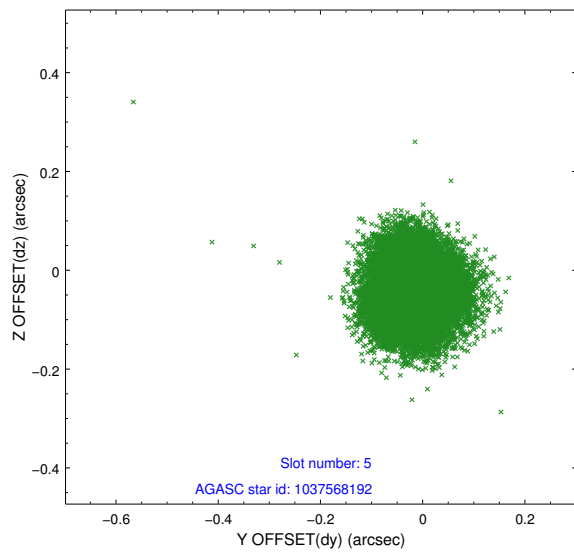
2.4.1 Slot 3



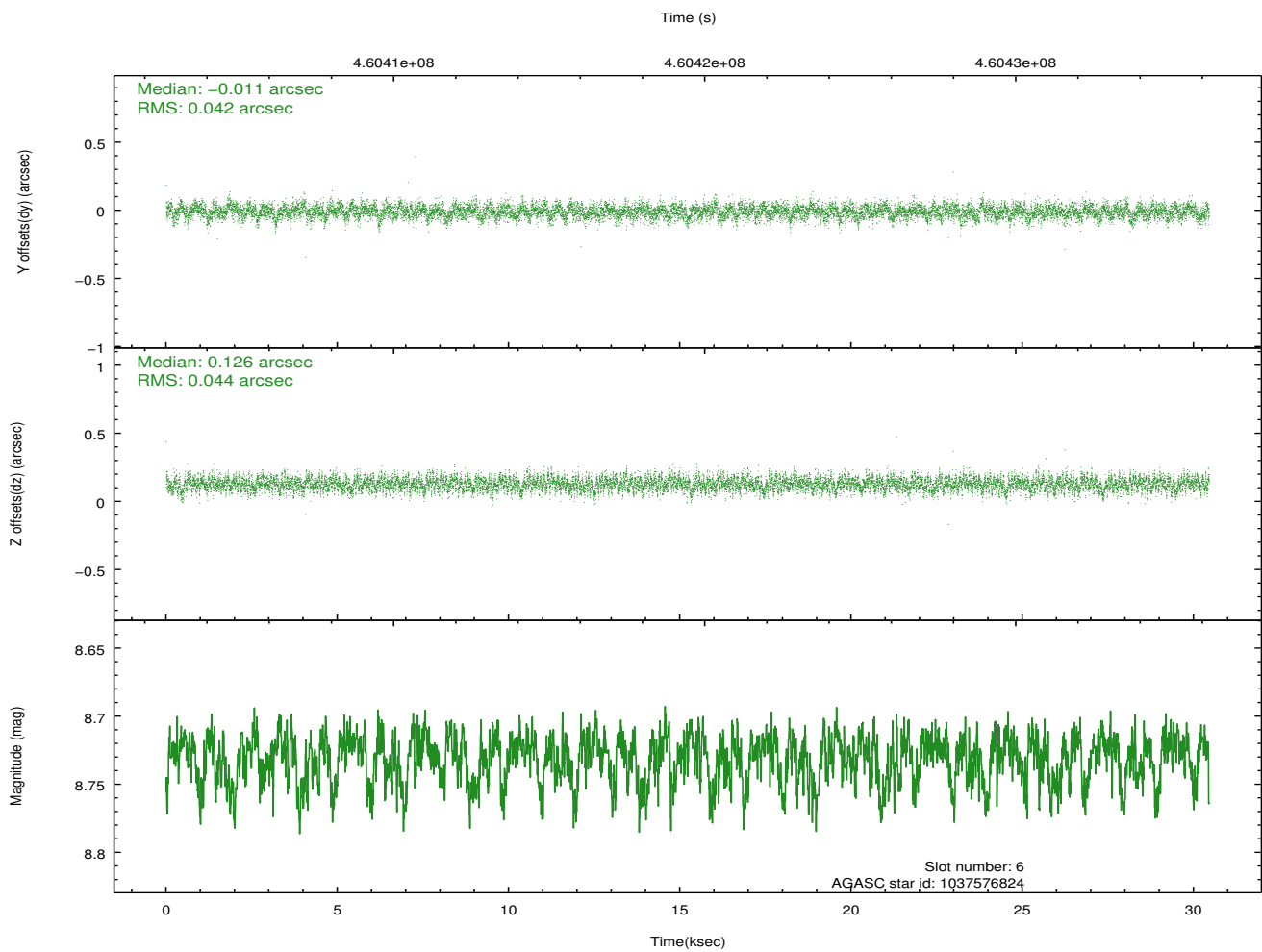
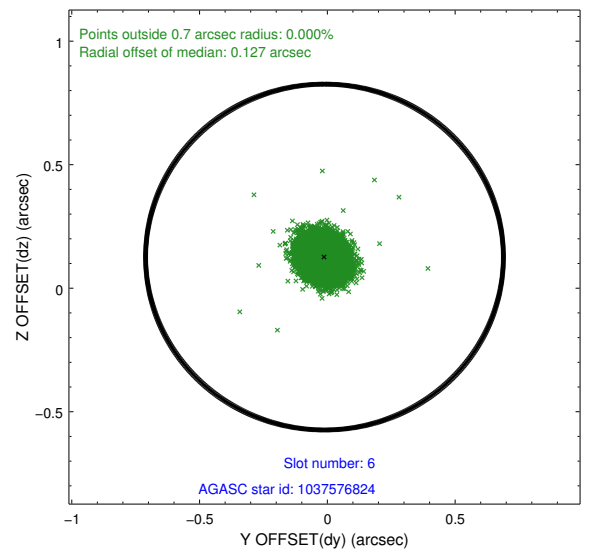
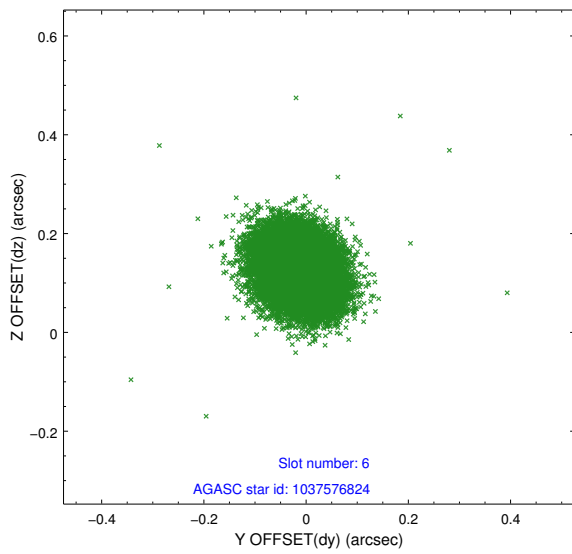
2.4.2 Slot 4



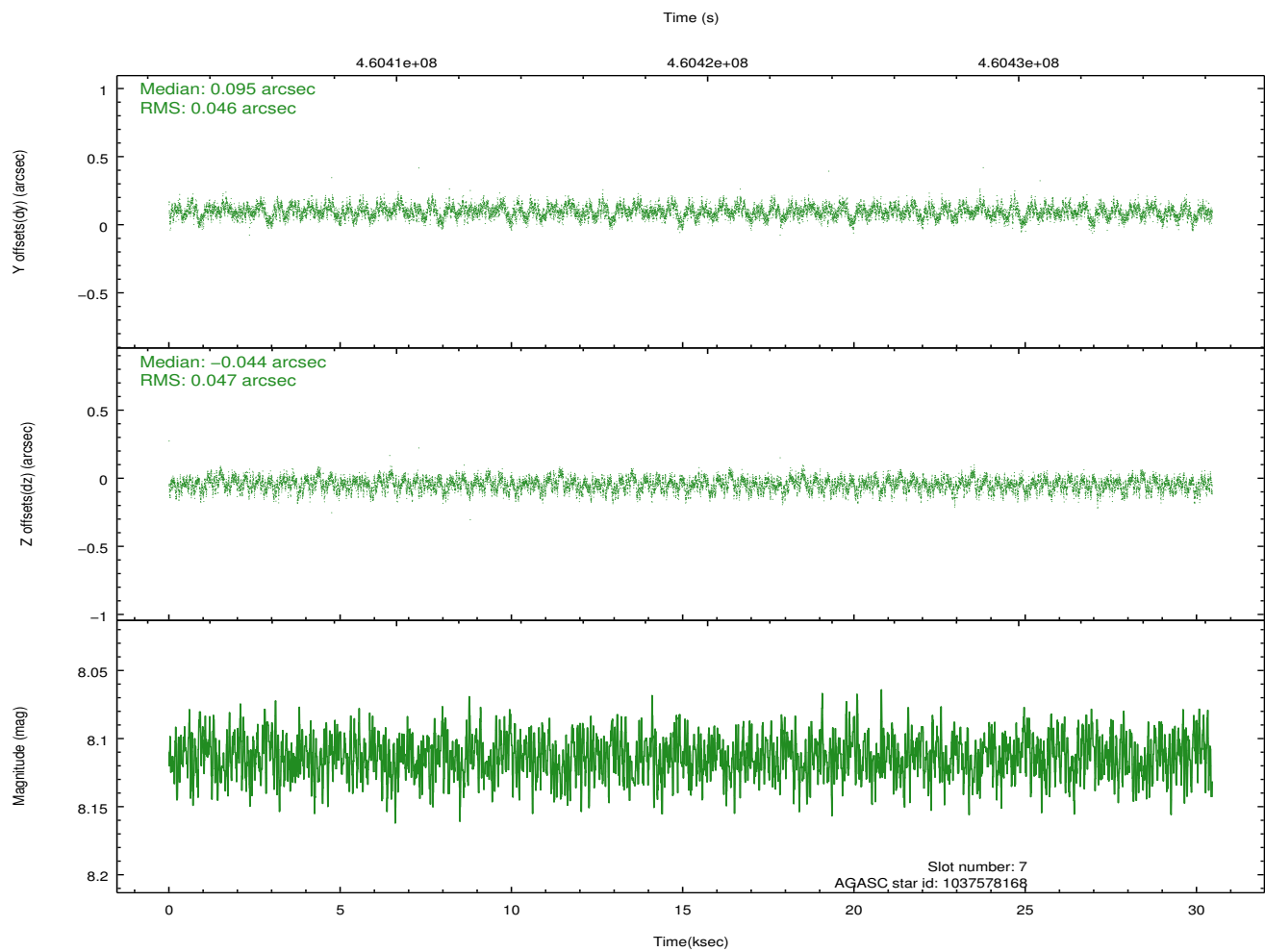
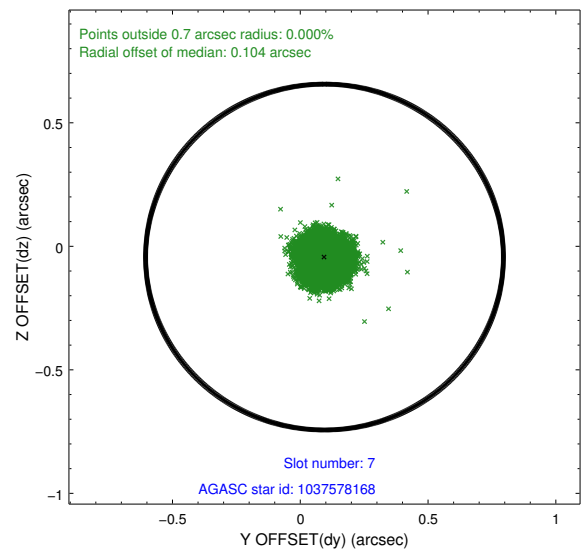
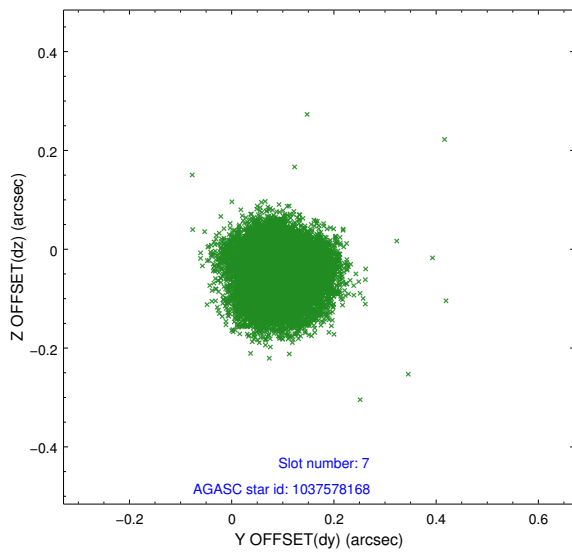
2.4.3 Slot 5



2.4.4 Slot 6

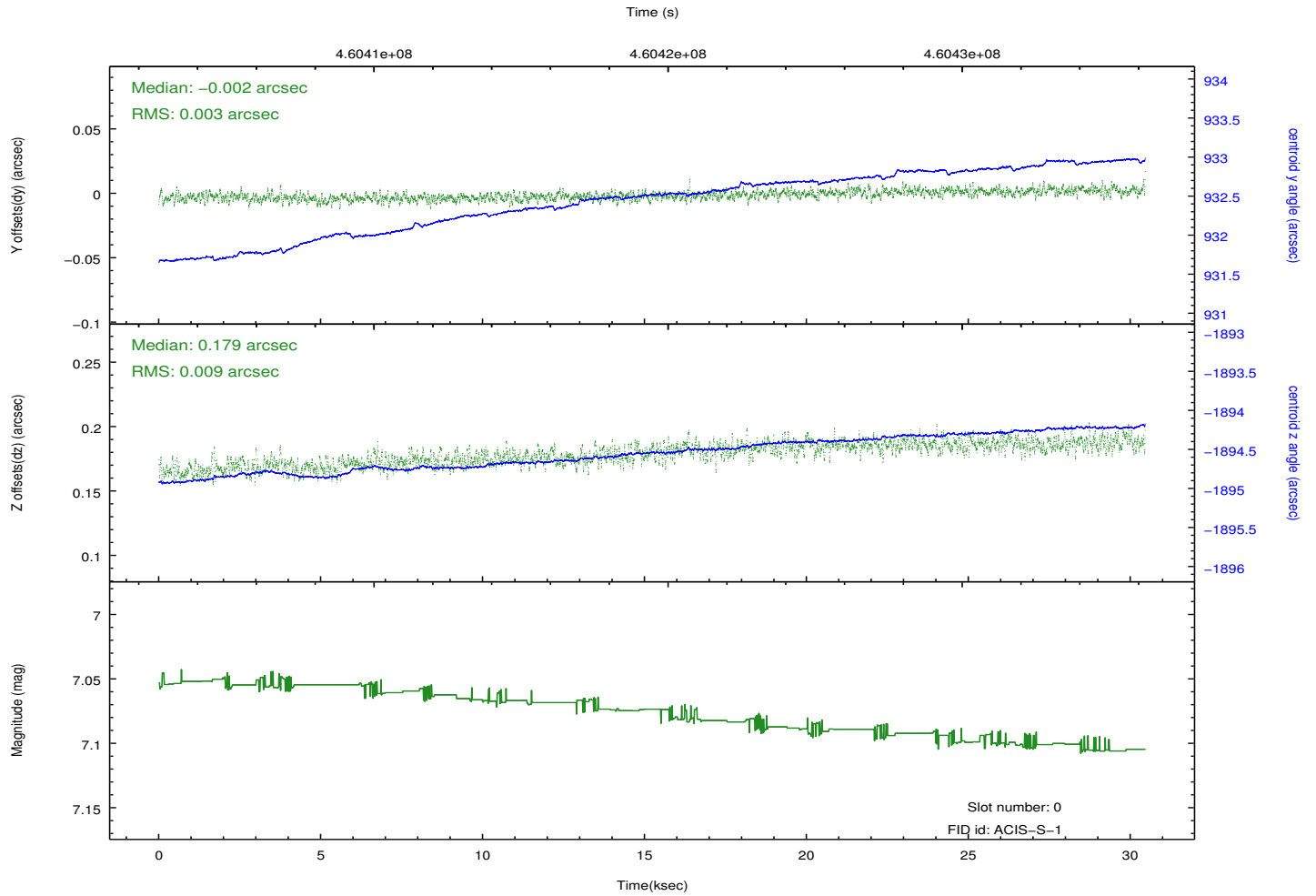
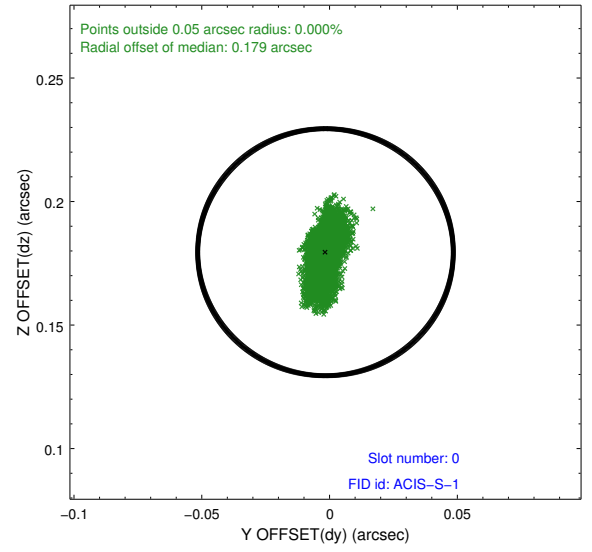
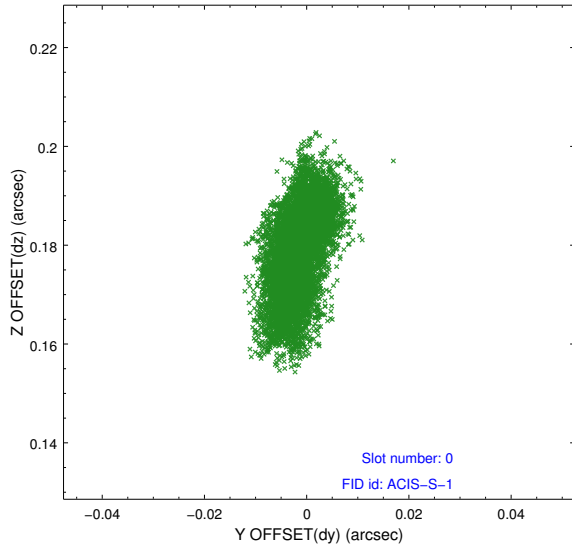


2.4.5 Slot 7

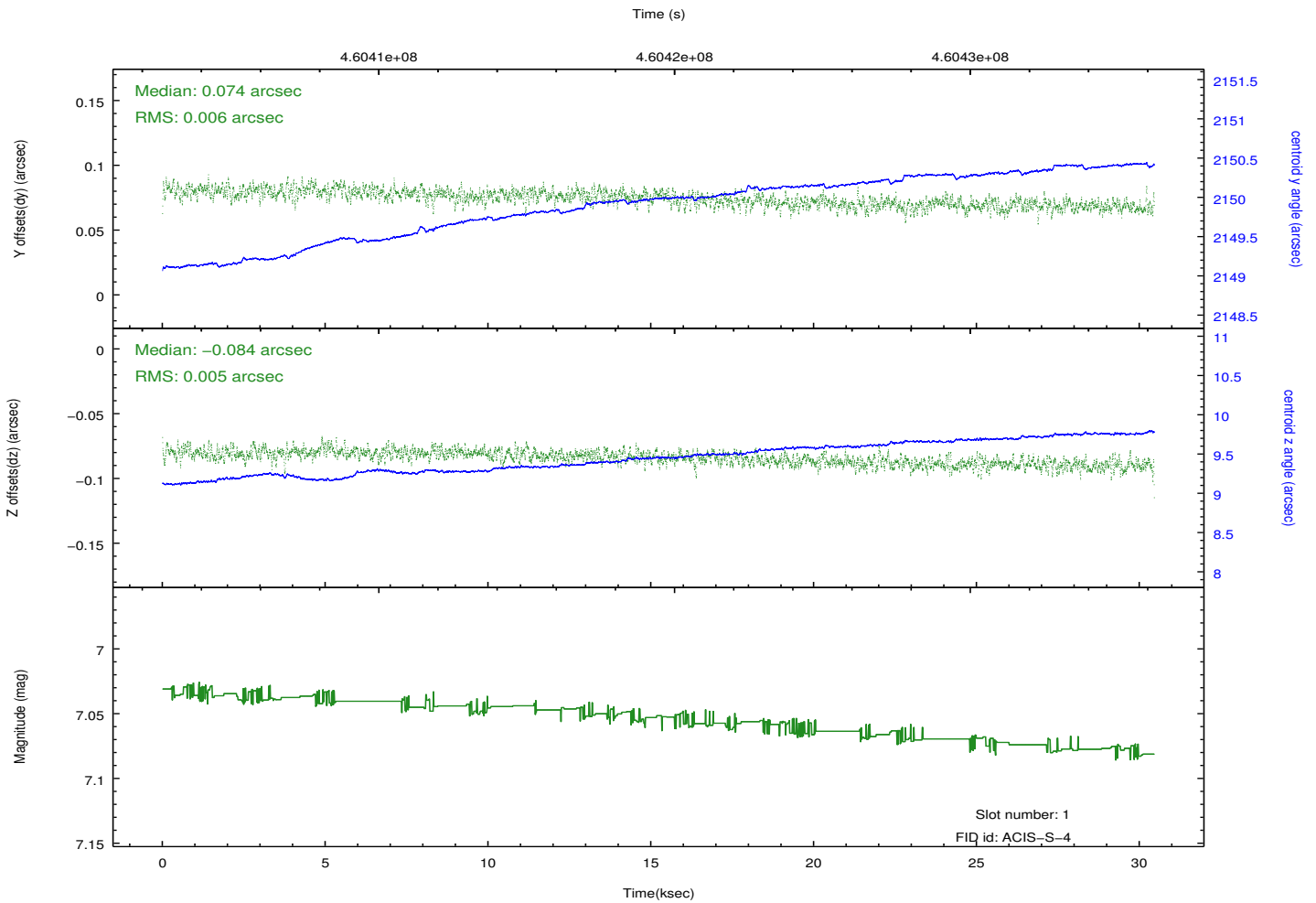
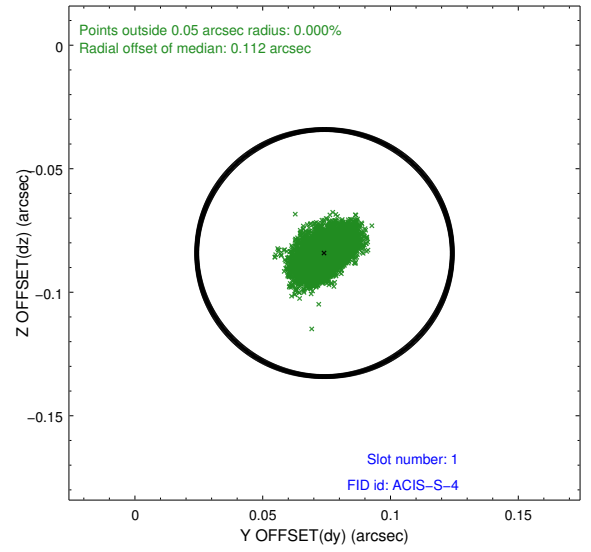
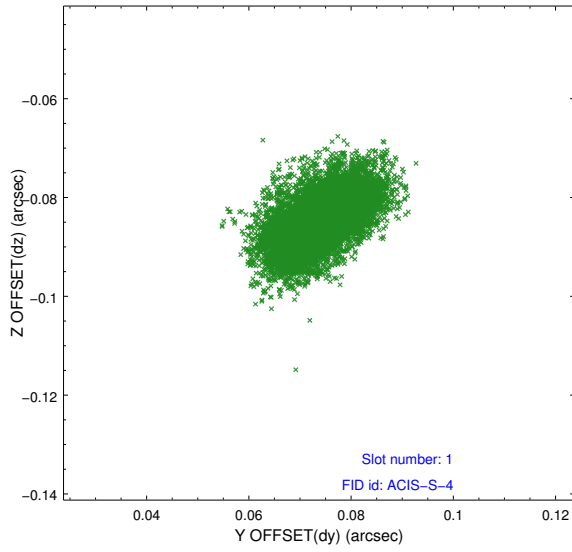


2.5 FID Slots

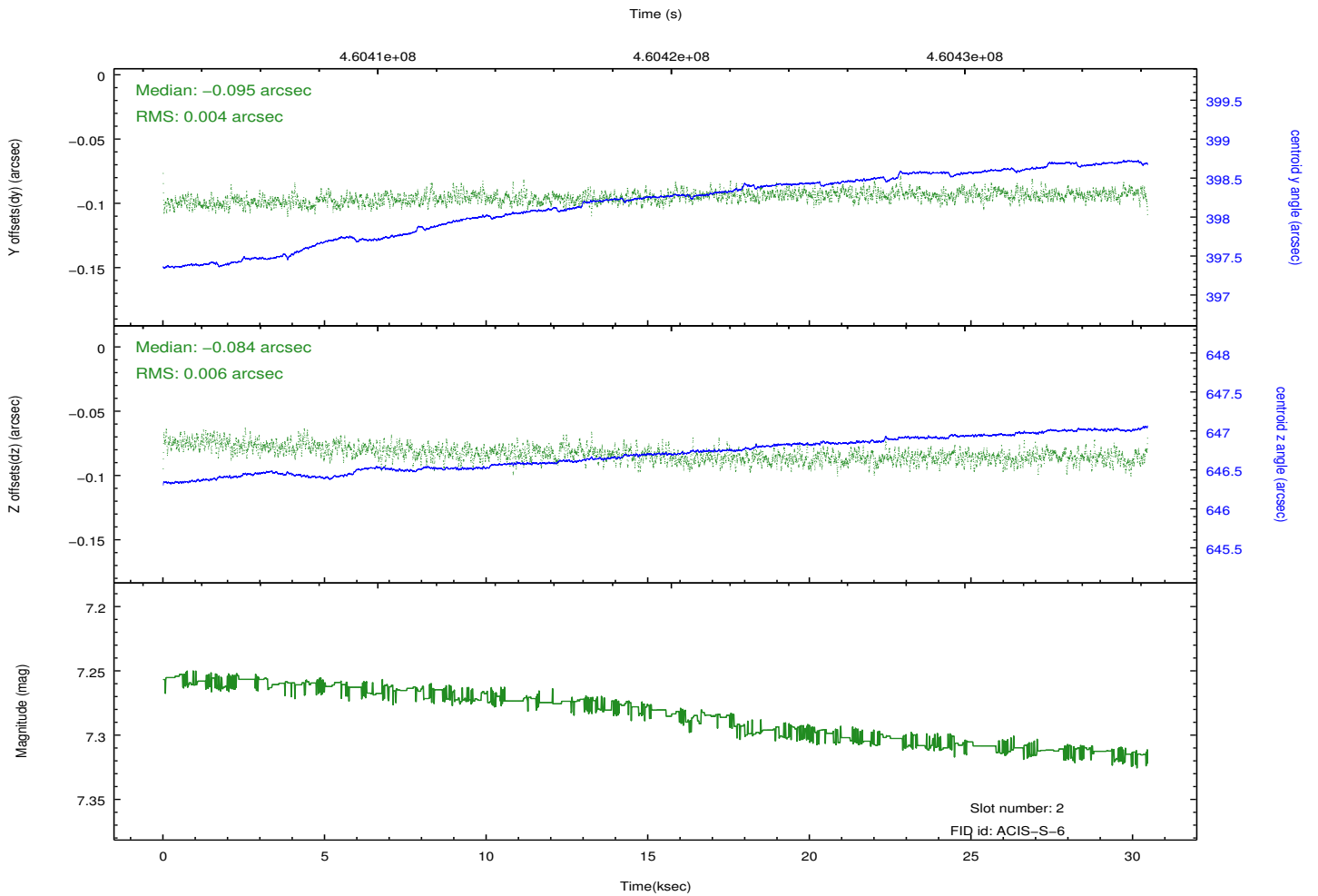
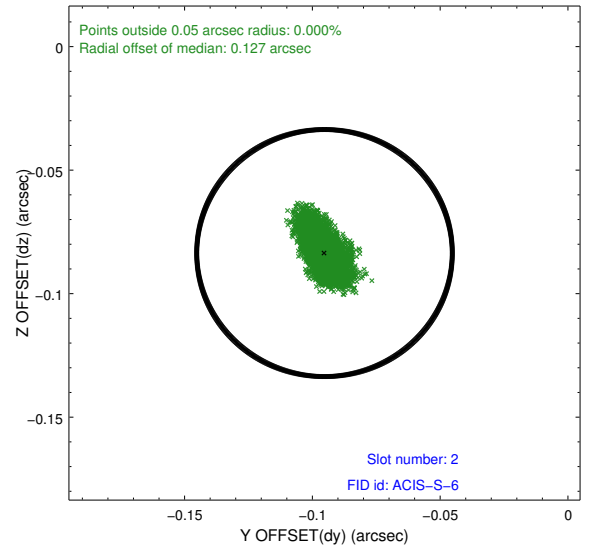
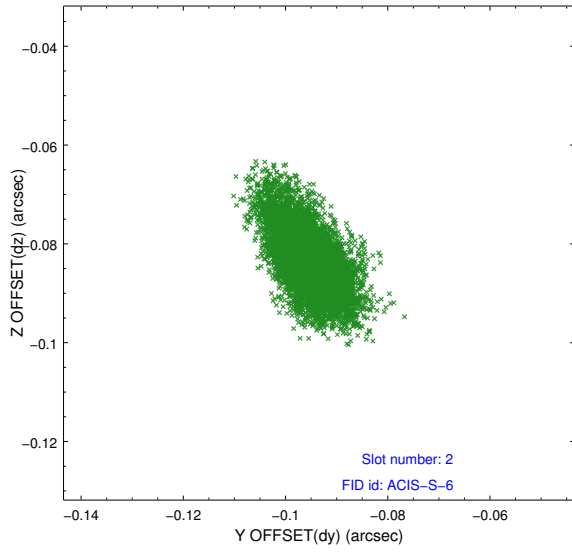
2.5.1 Slot 0



2.5.2 Slot 1

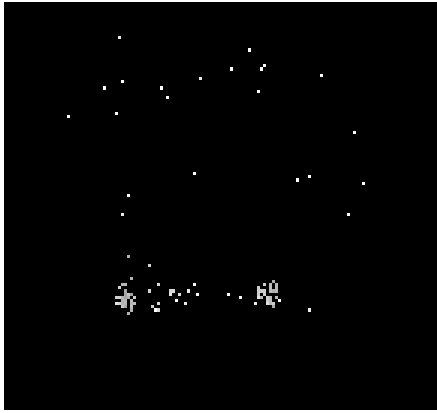


2.5.3 Slot 2

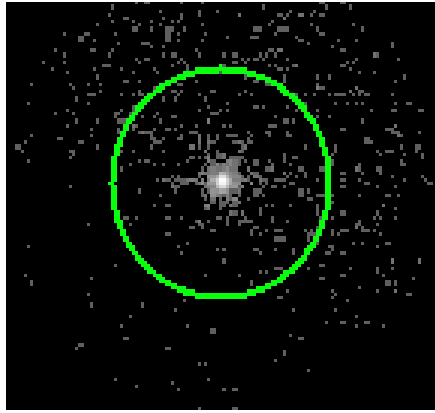


3 Gratings

3.1 LETG Arm



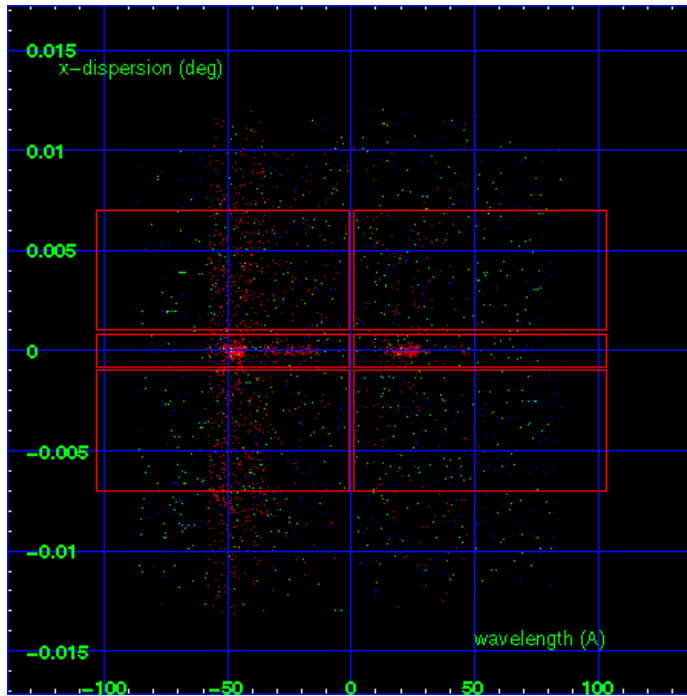
LETG Order Sort 123



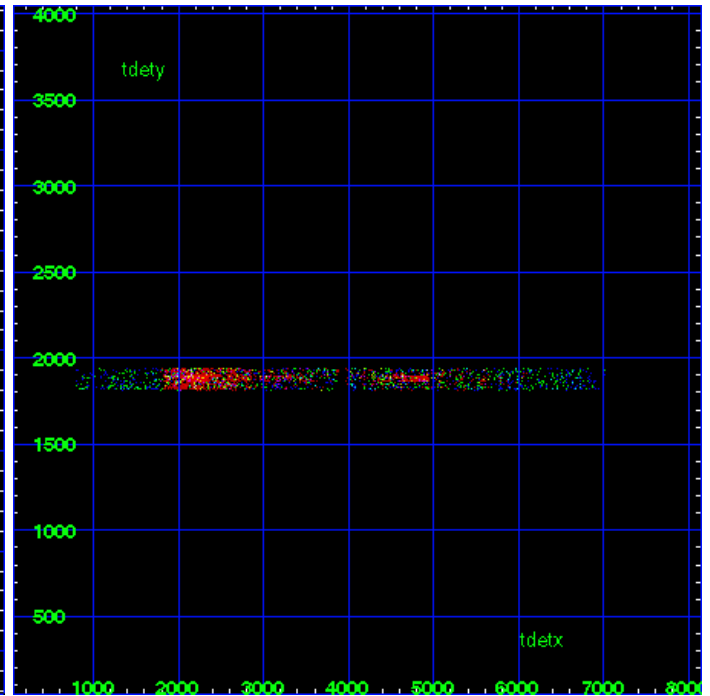
LETG Zero Order



LETG Order Sort ALL

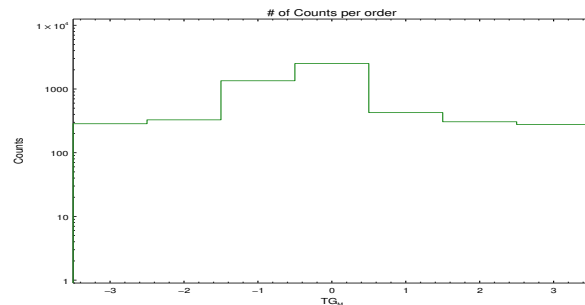


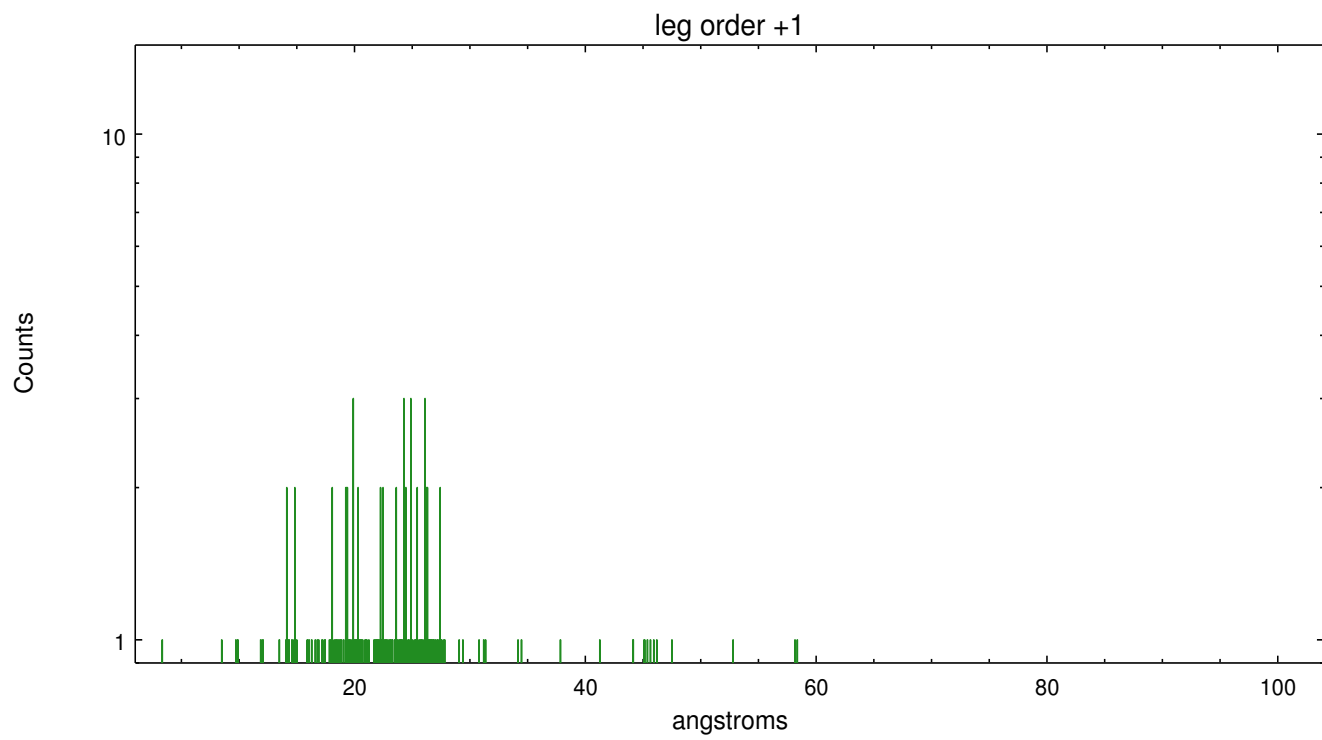
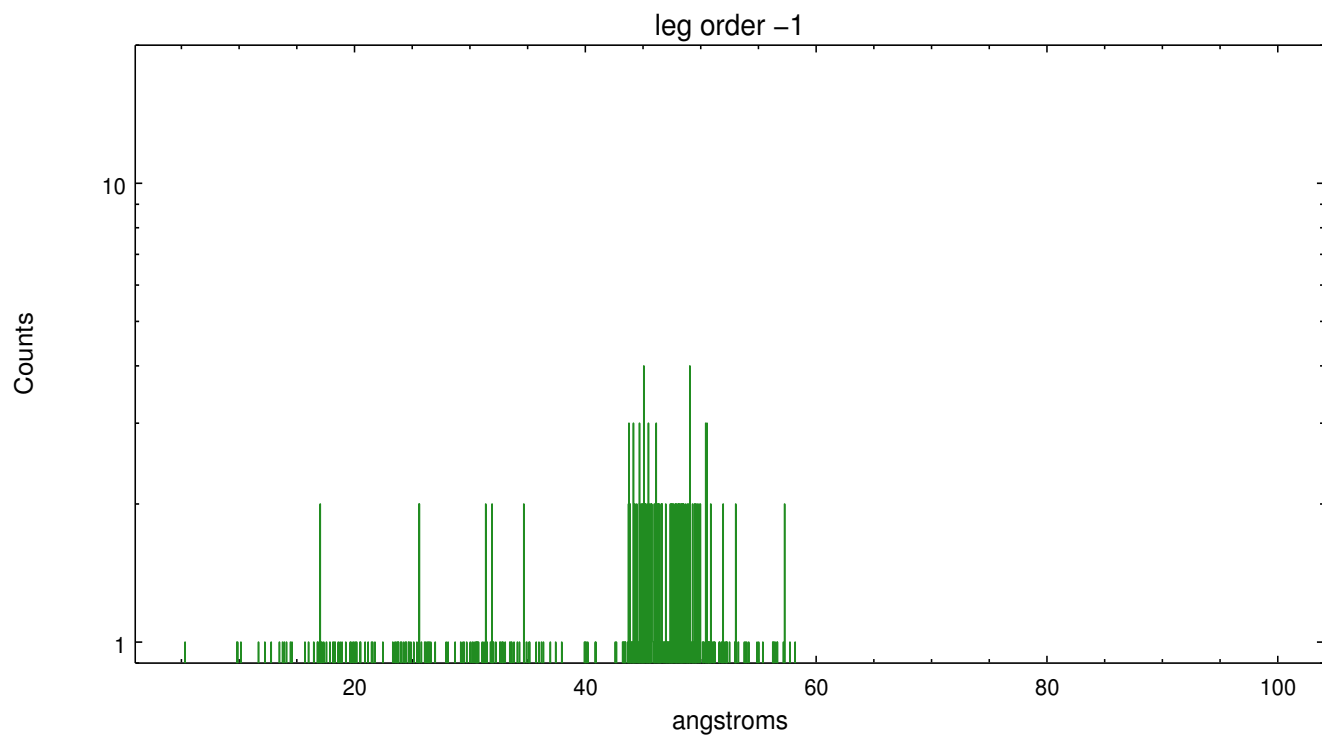
Spot Image LETG



Full Detector LETG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	285	328	1347	2506	426	306	277





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.08.06
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.053799488127

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.