

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12898 - L2 Version 2
Chandra X-Ray Center

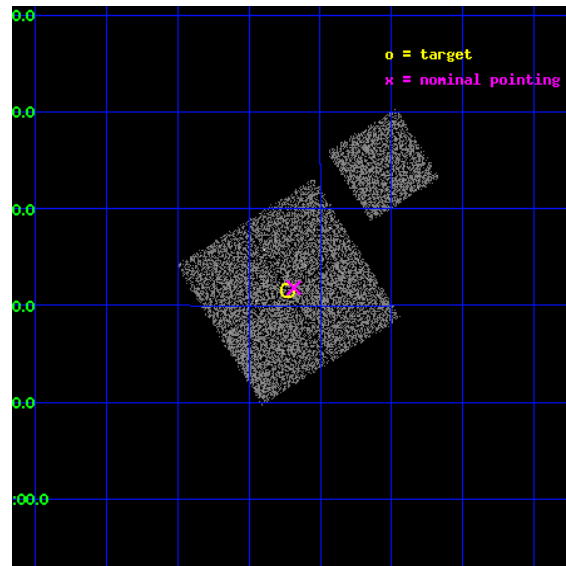
L2 Processing Date : Feb 2 2012

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1 Front

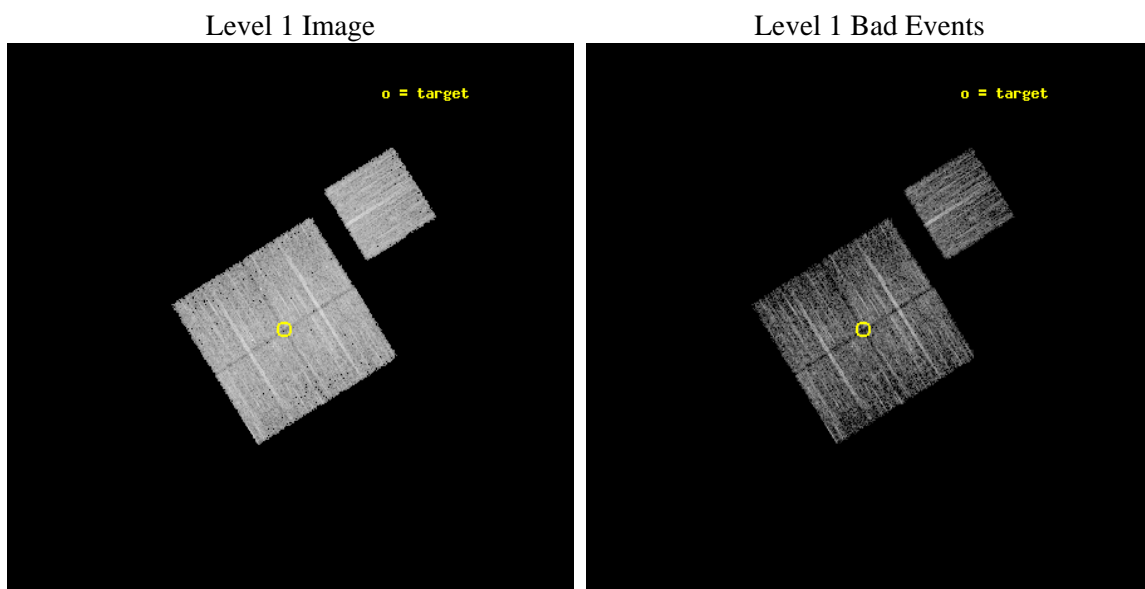
seq_num	801035	Sequence number
obs_id	12898	Observation id
title	The Outer Limits of Clusters with Chandra and Suzaku	Proposal titl
observer	Dr. Eric Miller	Principal investigator
object	A2204_Field4	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	248.05727	Observer's specified target RA [deg]
dec_targ	5.359696	Observer's specified target Dec [deg]
ra_nom	248.04620521703	Nominal RA [deg]
dec_nom	5.3639143756686	Nominal Dec [deg]
roll_nom	57.960202490713	Nominal Roll [deg]
revision	2	Processing version of data
ontime	5051.686996758	Sum of GTIs [s]
livetime	4985.6829871475	Livetime [s]
ontime0	5051.6459567547	Sum of GTIs [s]
ontime1	5051.686996758	Sum of GTIs [s]
ontime2	5051.7280367613	Sum of GTIs [s]
ontime3	5045.4871657491	Sum of GTIs [s]
ontime6	5051.6049167514	Sum of GTIs [s]
l2events	18038	Number of level 2 events



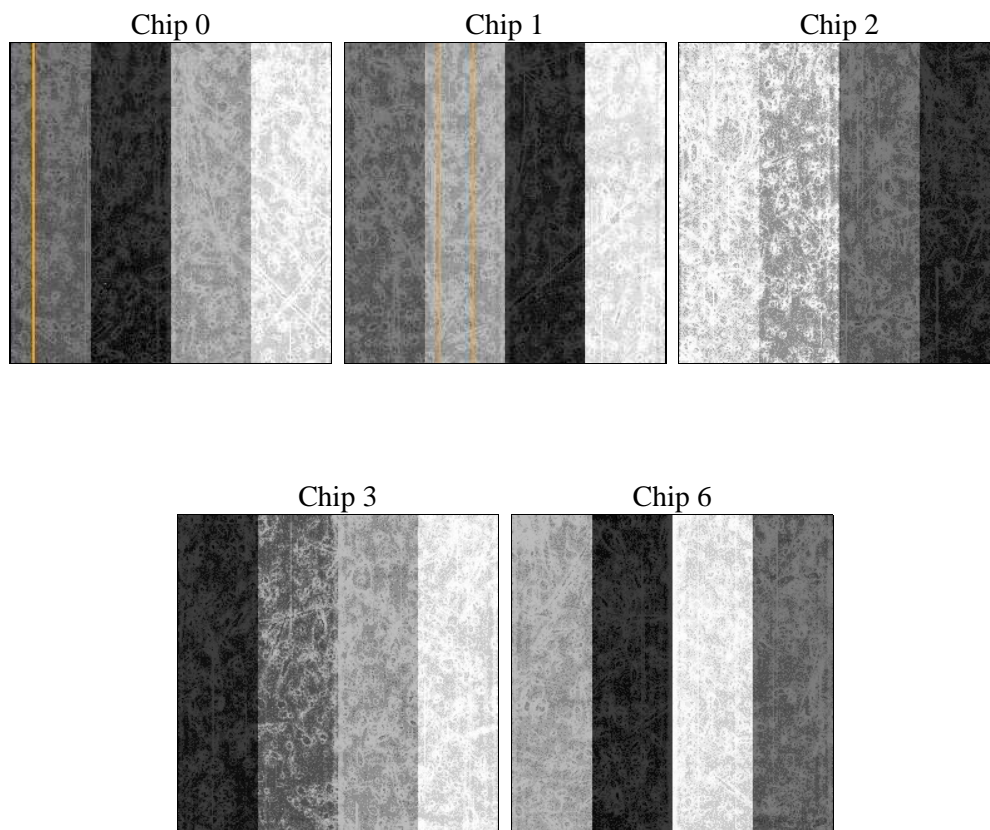
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	5051.686996758	Sum of GTIs [s]
caldsver	4.4.7	 	ontime0	5051.6459567547	Sum of GTIs [s]
date	2012-02-02T03:21:15	Date and time of file creation	ontime1	5051.686996758	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	5051.7280367613	Sum of GTIs [s]
			ontime3	5045.4871657491	Sum of GTIs [s]
			ontime6	5051.6049167514	Sum of GTIs [s]
			l1events	175800	Number of level 1 events

2.1.4 Events

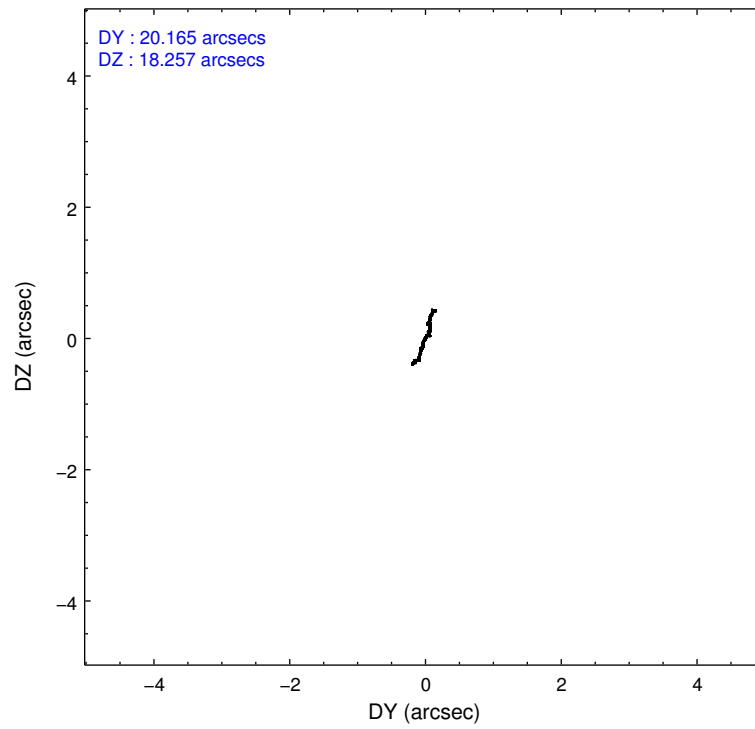
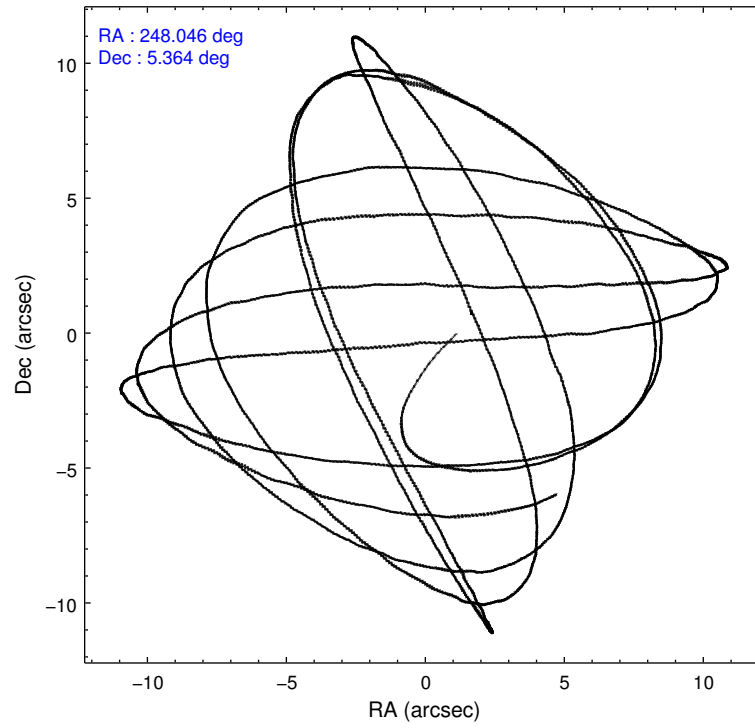
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	33031	34120	35913	36726	36010
rejected events	28670	29470	31730	32764	31810
rejected %	86%	86%	88%	89%	88%

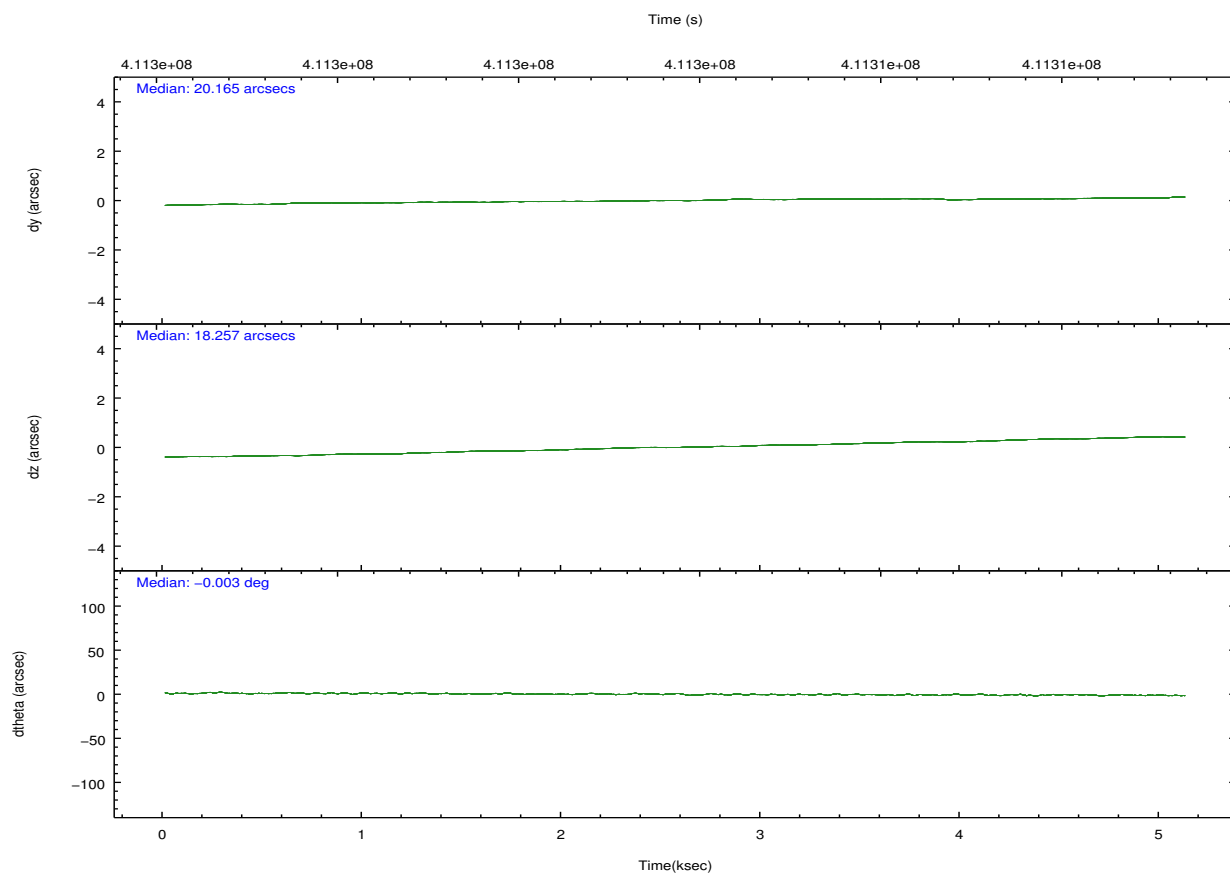
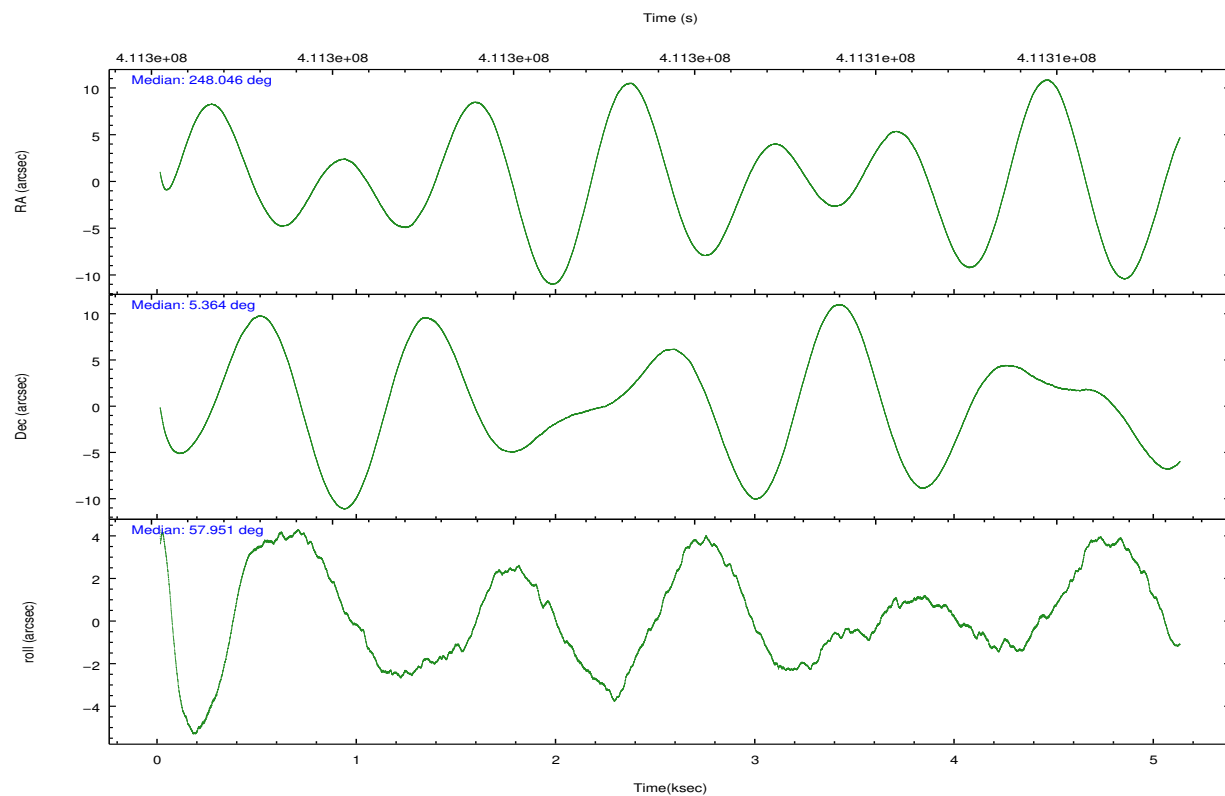
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	1716	1767	1648	1482	1530
	5%	5%	4%	4%	4%
grade 1 events	28	26	33	17	10
	0%	0%	0%	0%	0%
grade 2 events	1023	1022	940	886	900
	3%	2%	2%	2%	2%
grade 3 events	459	456	373	422	459
	1%	1%	1%	1%	1%
grade 4 events	403	479	427	403	421
	1%	1%	1%	1%	1%
grade 5 events	1509	1594	1368	1679	1645
	4%	4%	3%	4%	4%
grade 6 events	767	928	799	773	895
	2%	2%	2%	2%	2%
grade 7 events	27126	27848	30325	31064	30150
	82%	81%	84%	84%	83%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	248.045318	248.0462052170335	CCD I2 on	Y	Y
[deg] Pointing Dec	5.336462	5.363914375668603	CCD I3 on	Y	Y
[deg] Pointing Roll	57.751591	57.96020249071341	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	O1	Y
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	N	N
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	411302438.184000	411300905.00306	CCD S5 on	N	N
Observation start date	2011-01-13T10:39:32	2011-01-13T10:15:05	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	411307438.184000	411308464.89095	On-chip summing requested	N	N
Observation end date	2011-01-13T12:02:52	2011-01-13T12:21:04	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



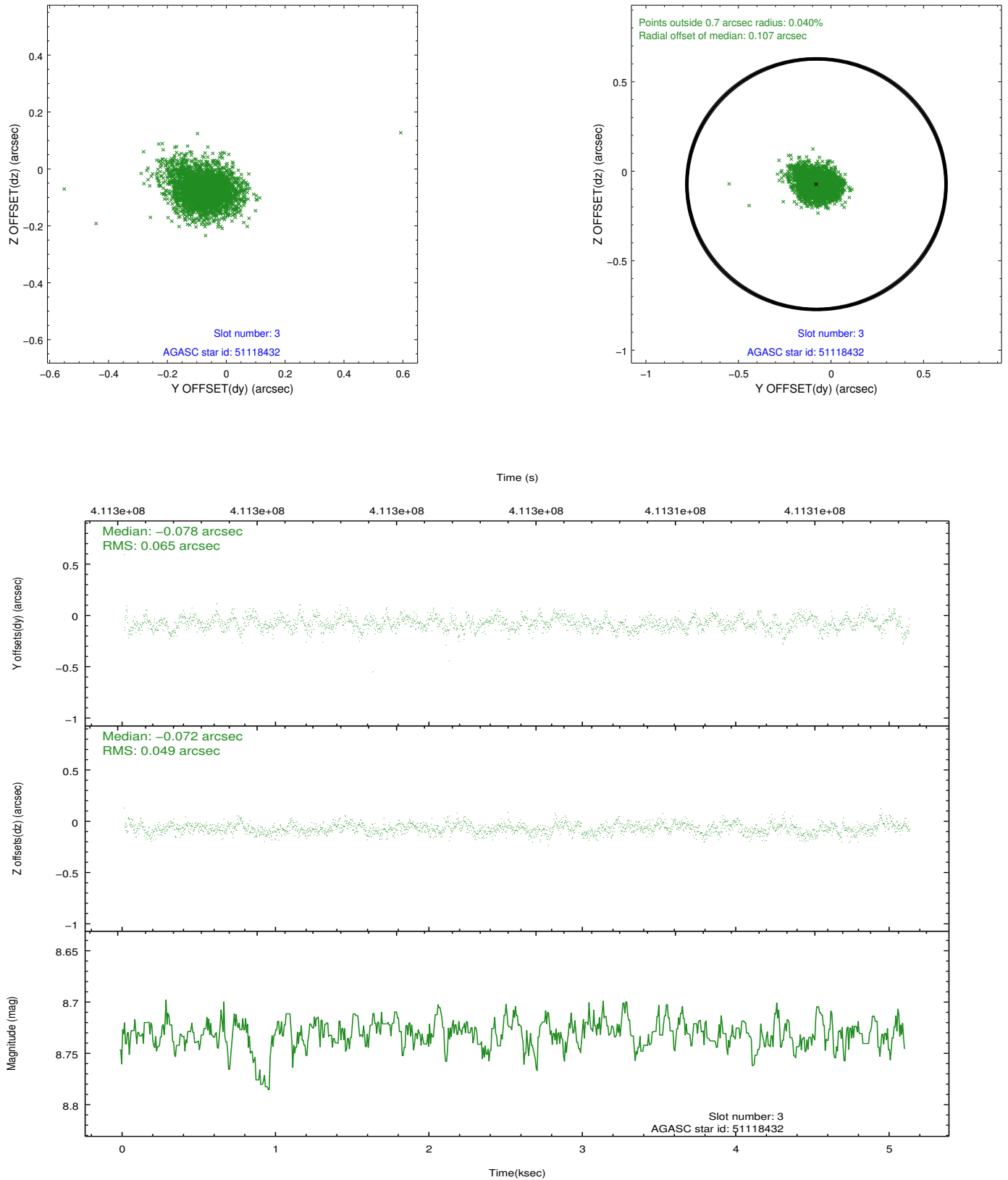


Slot Statistics

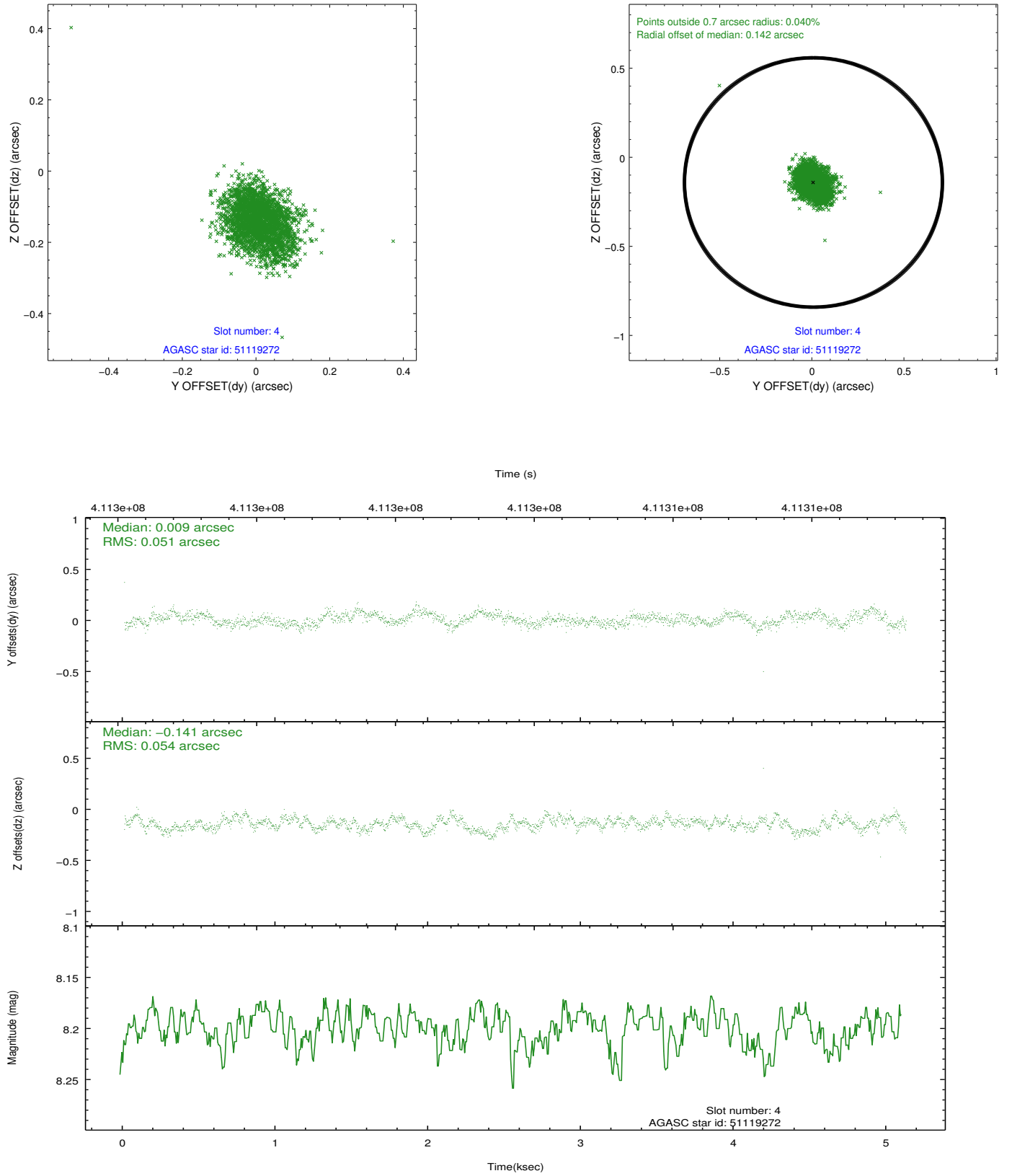
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.05	1249	0.030	0.053	0.010	0.018	0.000000	0.000000	919.21	-841.87
1	FID	ACIS-I-5	7.03	1249	-0.228	0.045	0.008	0.012	0.000000	0.000000	-1828.55	1054.96
2	FID	ACIS-I-6	7.06	1249	0.105	-0.026	0.008	0.012	0.000000	0.000000	383.48	1700.78
3	GUIDE	51118432	8.73	2496	-0.078	-0.072	0.085	0.139	248.800425	5.517897	1998.32	-1938.57
4	GUIDE	51119272	8.20	2498	0.009	-0.141	0.078	0.124	247.573996	5.444578	-570.63	1635.80
5	GUIDE	51654128	9.48	2490	-0.160	-0.404	0.111	0.185	247.812718	5.709507	691.13	1421.95
6	GUIDE	51121024	9.19	2495	0.264	0.352	0.116	0.184	248.400758	4.661216	-1373.80	-2374.66
7	GUIDE	51123920	9.05	2495	-0.031	0.267	0.088	0.146	248.739818	5.153526	773.44	-2456.98

2.4 Star Slots

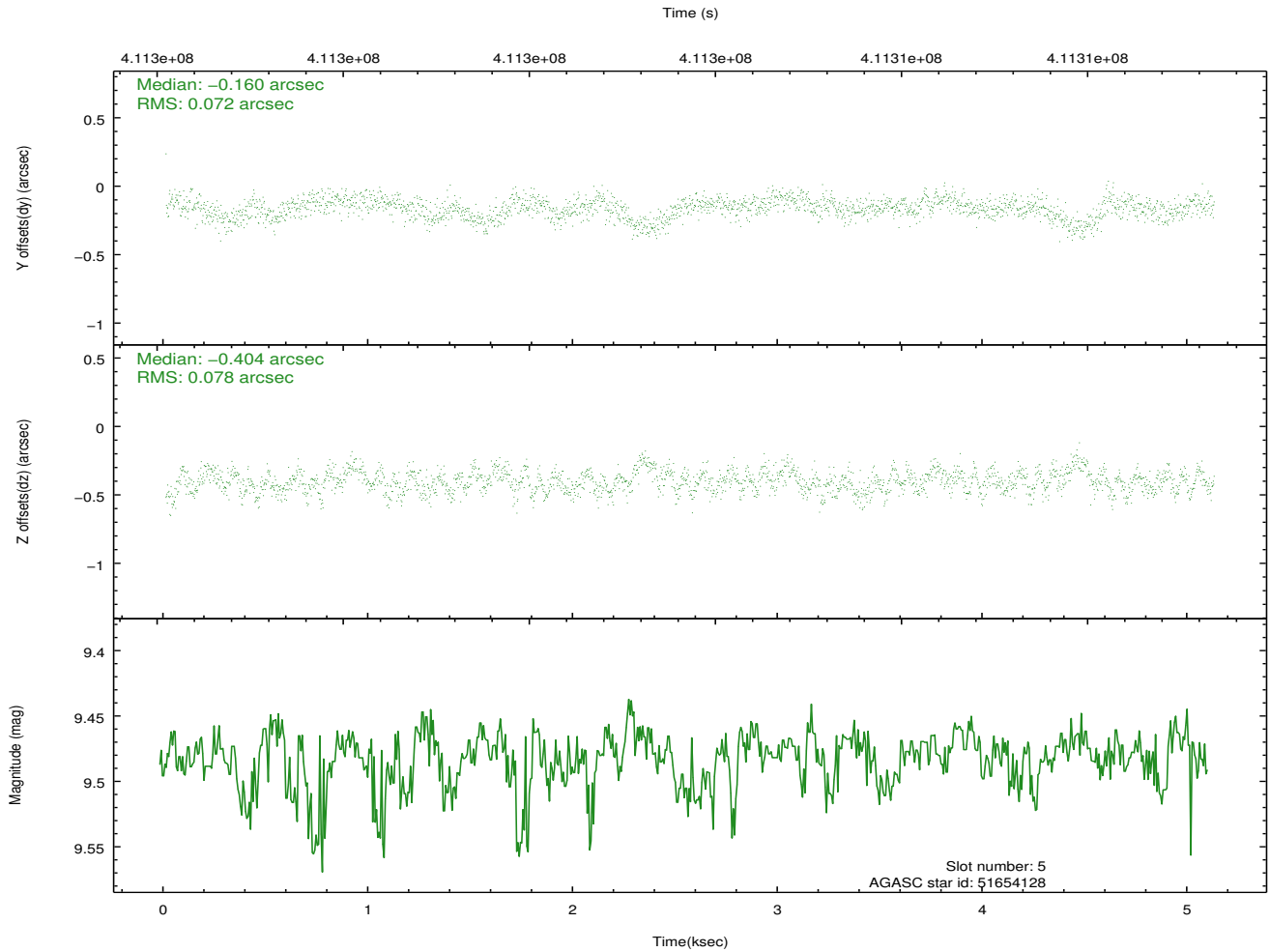
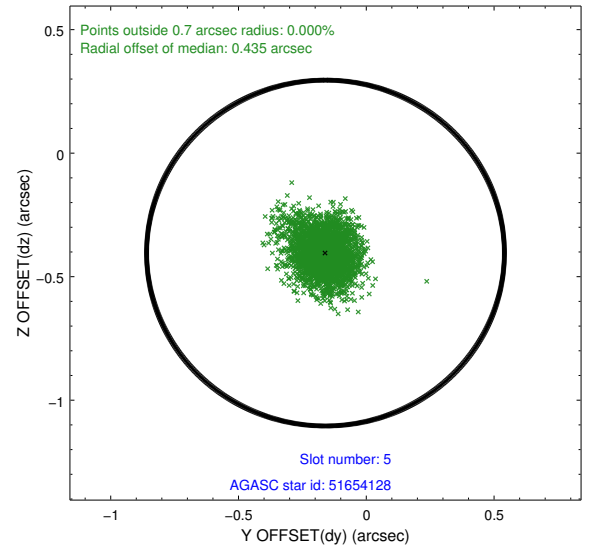
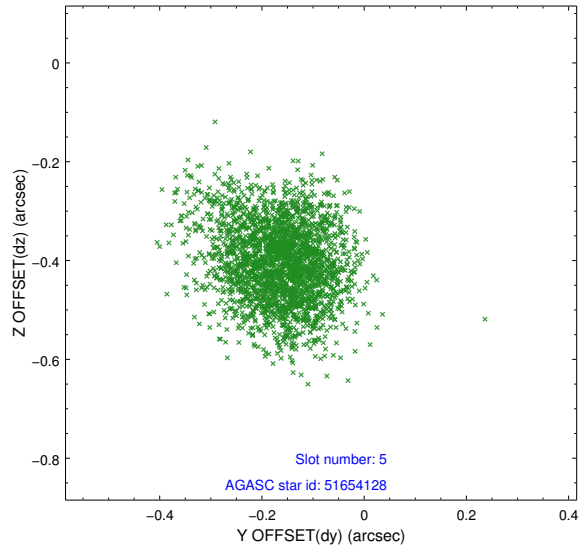
2.4.1 Slot 3



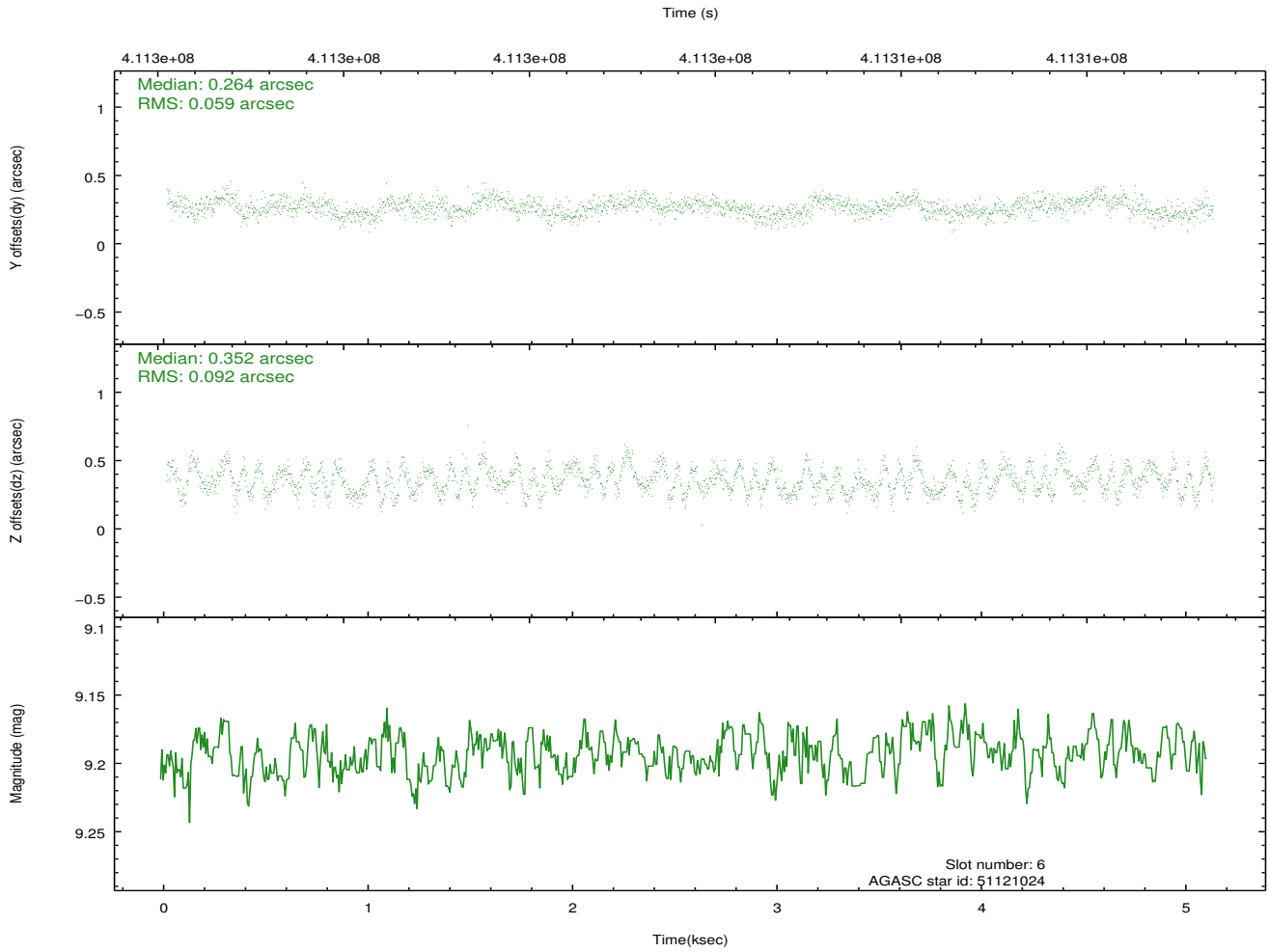
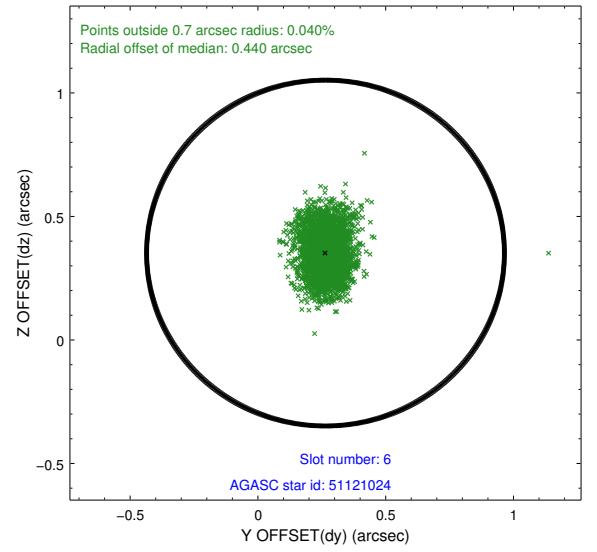
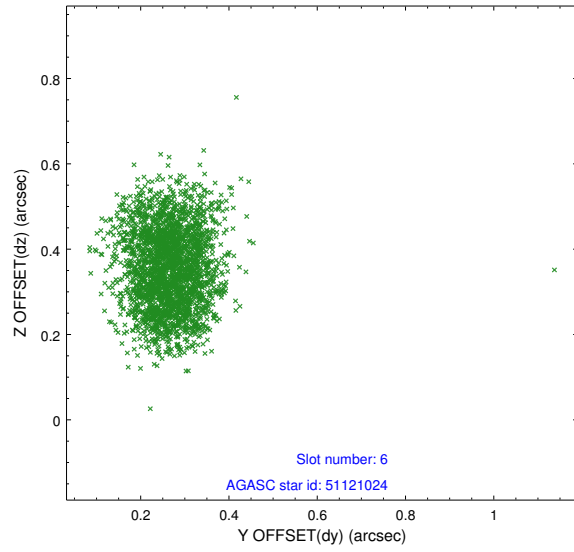
2.4.2 Slot 4



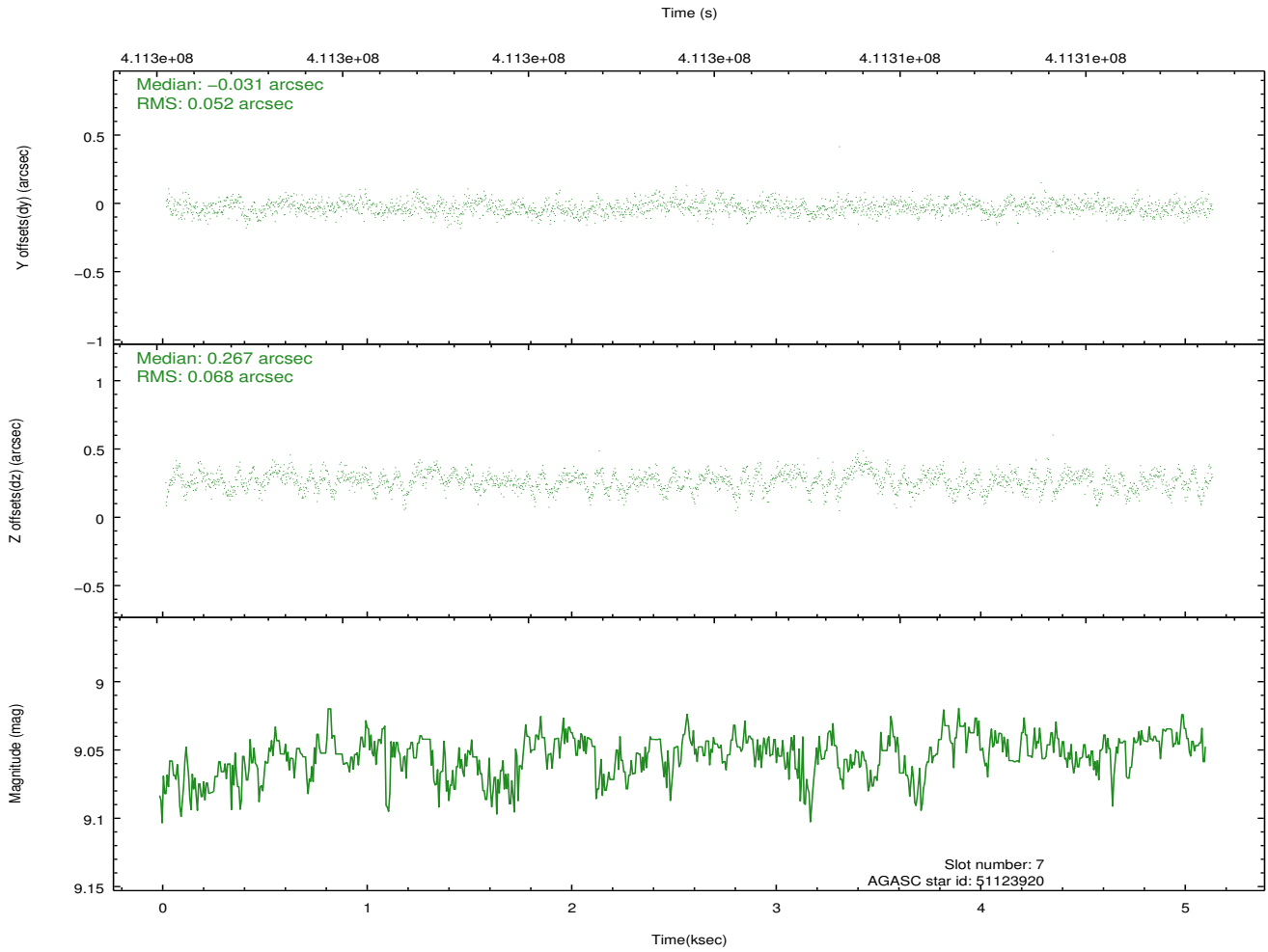
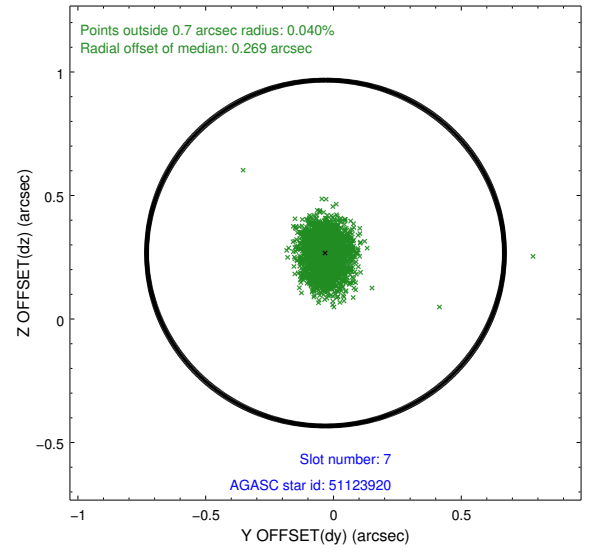
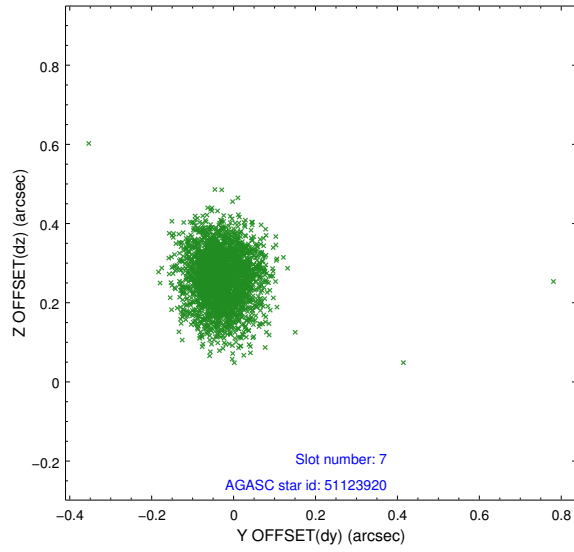
2.4.3 Slot 5



2.4.4 Slot 6

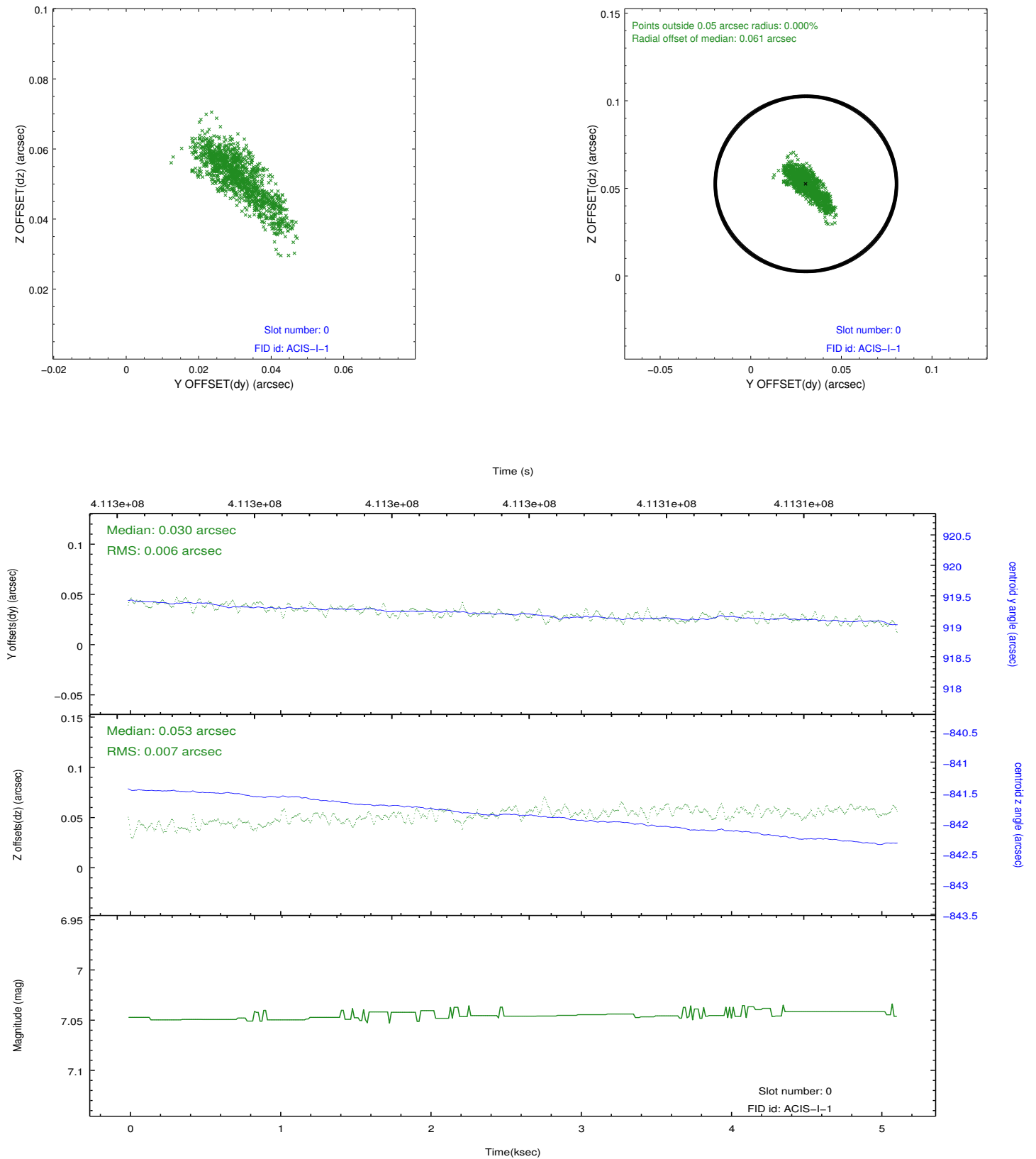


2.4.5 Slot 7

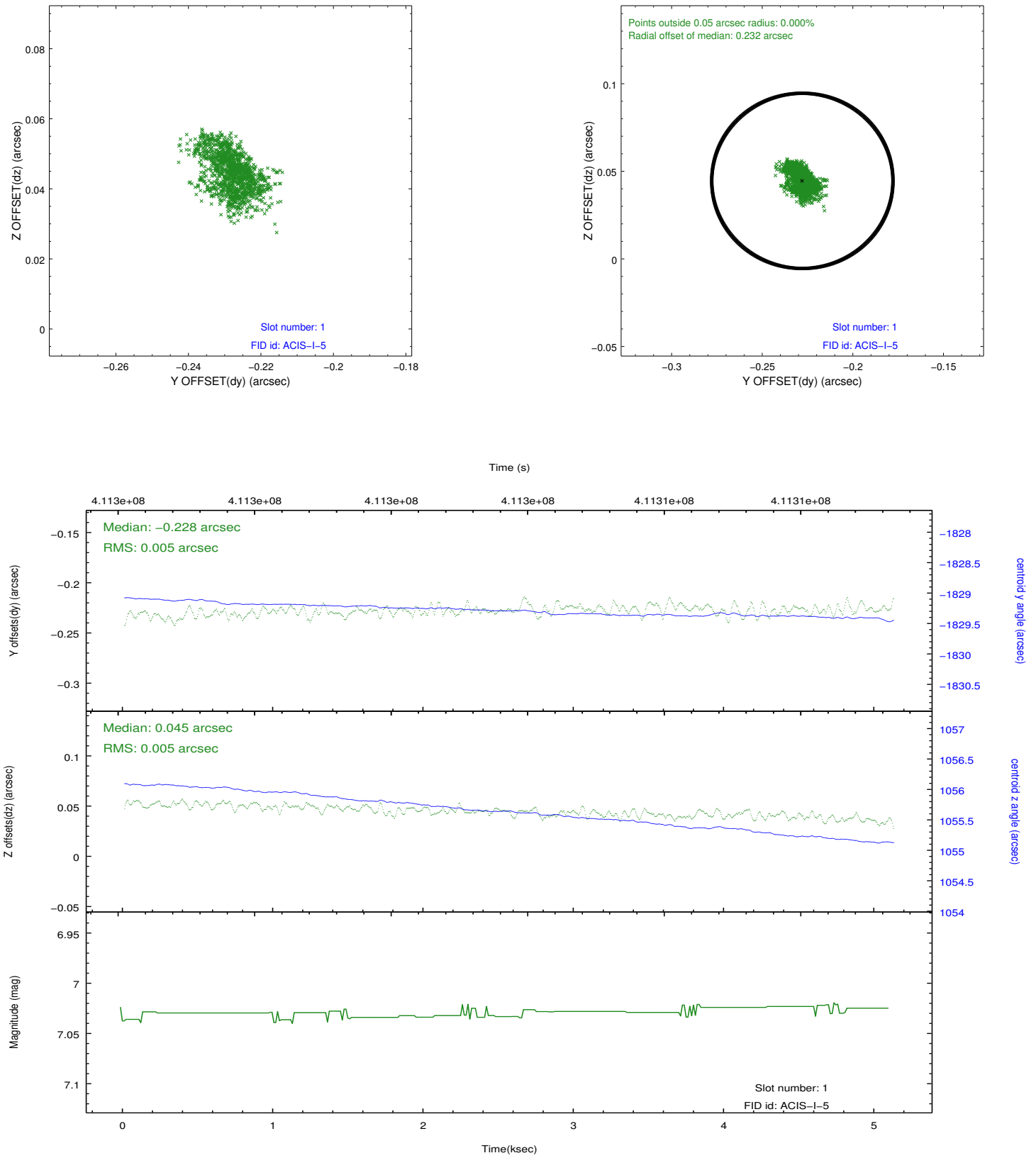


2.5 FID Slots

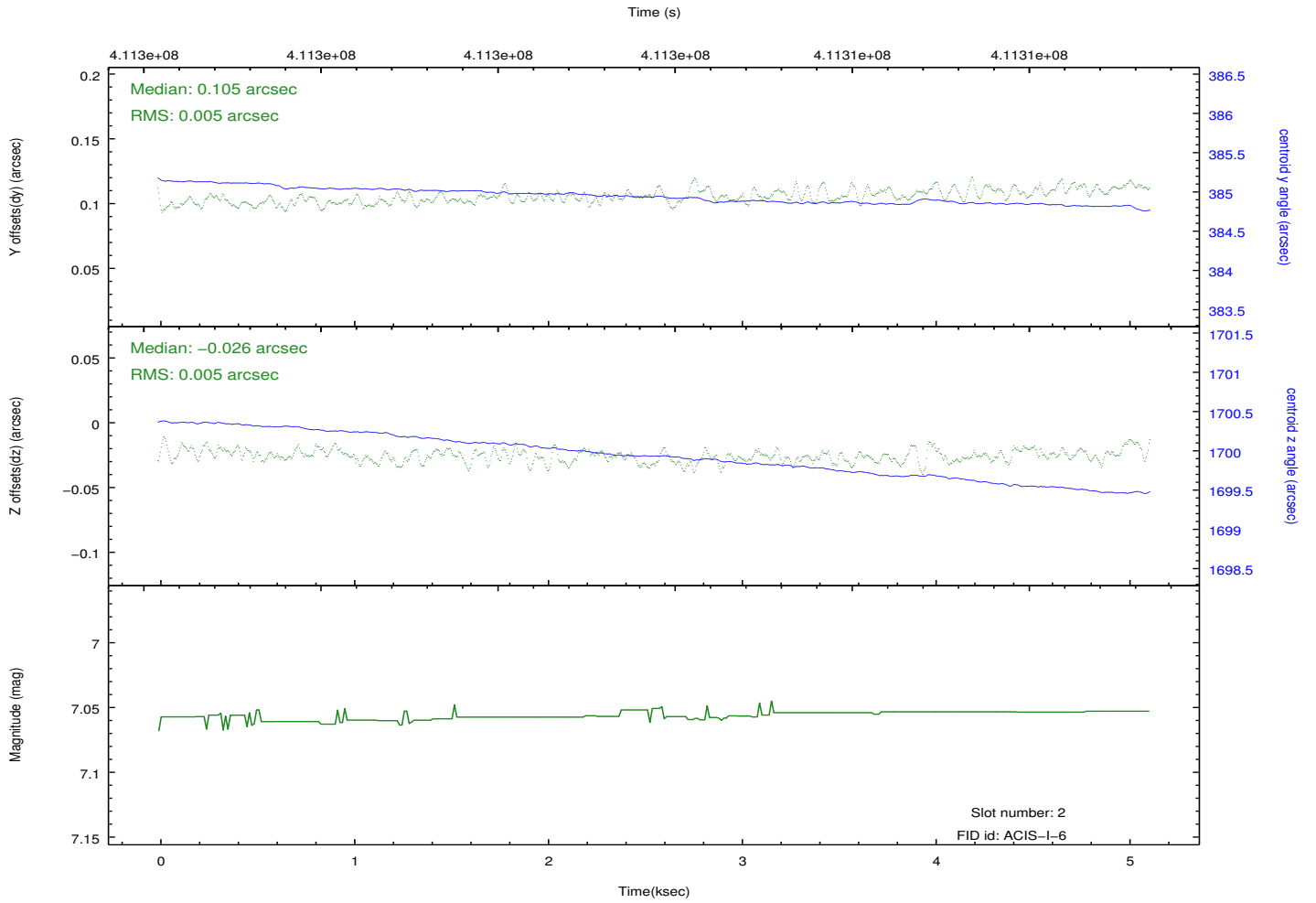
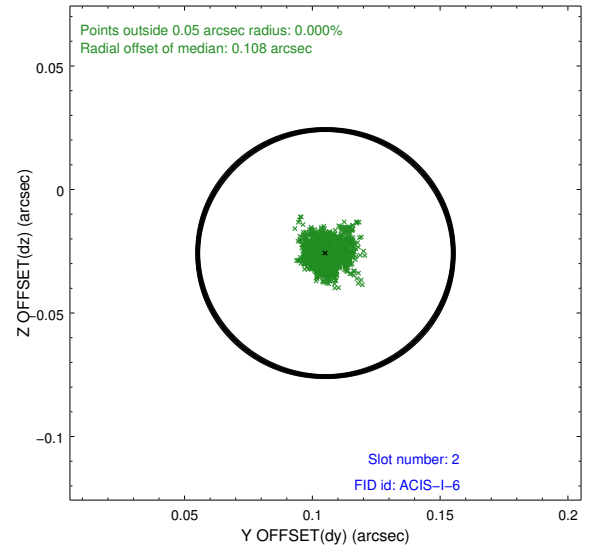
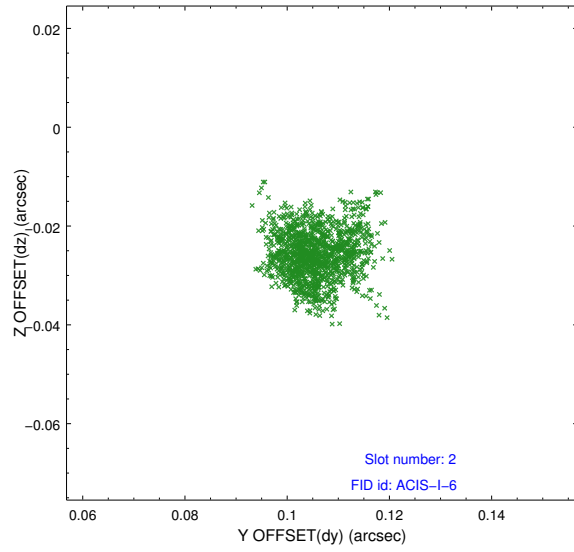
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.02.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.0516869984865

A.2 Comments

The data for this observation have been processed using the 'EDSER' sub-pixel event-repositioning algorithm of Li et al. (2004, ApJ, 610, 1204). Small-scale features should become sharper for sources near the aim point. The improvement will be less noticeable for off-axis sources where the size of the point-spread function is comparable to or larger than the size of an ACIS pixel. To take full advantage of the improvement, images should be binned on spatial scales smaller than the size of an ACIS pixel. Note that, at present, the point-spread function has not been calibrated for data to which the EDSER algorithm has been applied. If dither was disabled for the observation, then the algorithm can introduce artificial aliasing effects on spatial scales smaller than a pixel. If you would prefer to use no sub-pixel adjustment or to apply a coordinate randomization, then use `acis_process_events` to reprocess the data with the parameter `pix_adj=NONE` or `RANDOMIZE`, respectively.