

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12267 - L2 Version 2
Chandra X-Ray Center

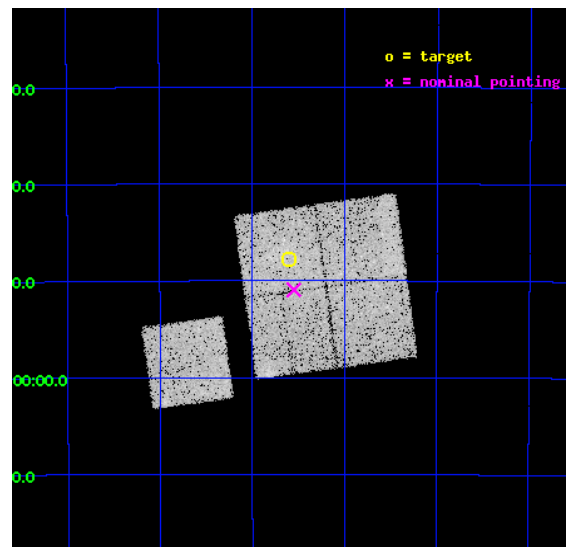
L2 Processing Date : Feb 7 2012

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1 Front

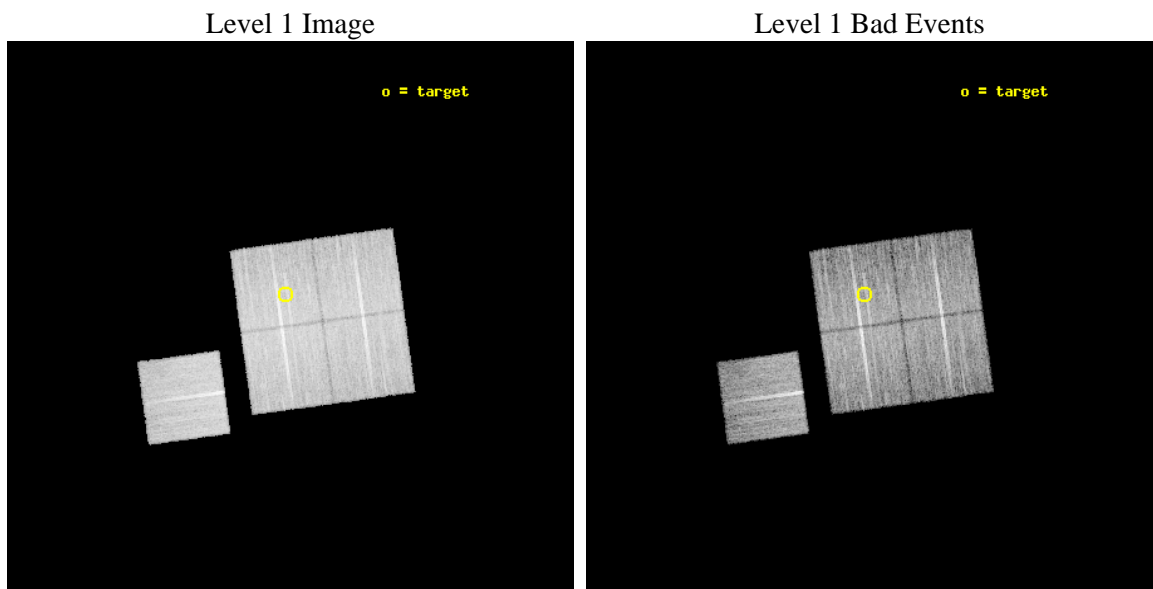
seq_num	800986	Sequence number
obs_id	12267	Observation id
title	Chandra Observations of the ACT Sample of SZE-Selected Galaxy Clusters	Proposal title
observer	Prof John Hughes	Principal investigator
object	ACT J0641-4948	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	100.401667	Observer's specified target RA [deg]
dec_targ	-49.795417	Observer's specified target Dec [deg]
ra_nom	100.38712556993	Nominal RA [deg]
dec_nom	-49.848999269607	Nominal Dec [deg]
roll_nom	262.11778381399	Nominal Roll [deg]
revision	2	Processing version of data
ontime	20057.000154257	Sum of GTIs [s]
livetime	19794.940681493	Livetime [s]
ontime0	20057.000154257	Sum of GTIs [s]
ontime1	20057.000154257	Sum of GTIs [s]
ontime2	20057.000154257	Sum of GTIs [s]
ontime3	20057.000154257	Sum of GTIs [s]
ontime6	20057.000154257	Sum of GTIs [s]
l2events	61125	Number of level 2 events



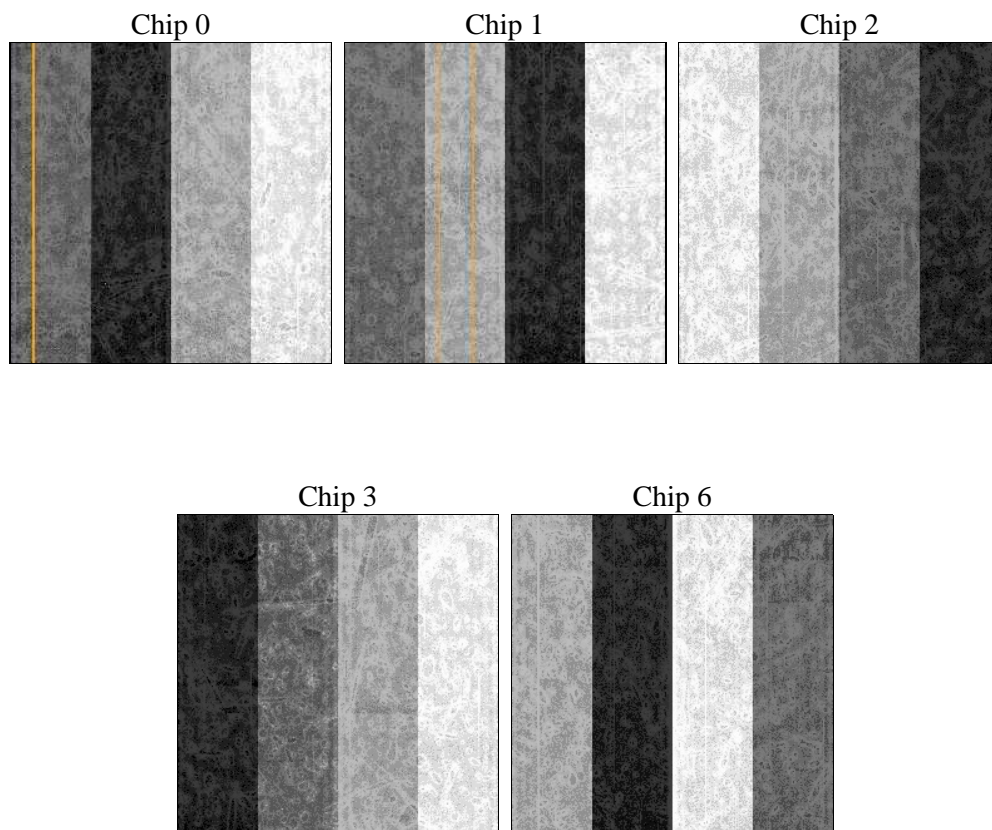
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	20000.485000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	20057.000154257	Sum of GTIs [s]
caldbver	4.4.7	 	ontime0	20057.000154257	Sum of GTIs [s]
date	2012-02-07T14:17:59	Date and time of file creation	ontime1	20057.000154257	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	20057.000154257	Sum of GTIs [s]
			ontime3	20057.000154257	Sum of GTIs [s]
			ontime6	20057.000154257	Sum of GTIs [s]
			l1events	593642	Number of level 1 events

2.1.4 Events

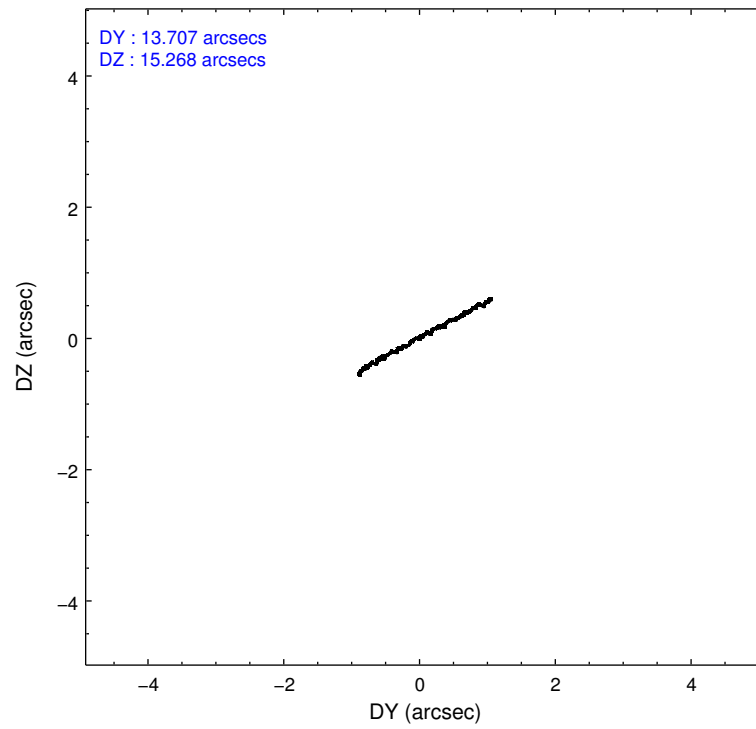
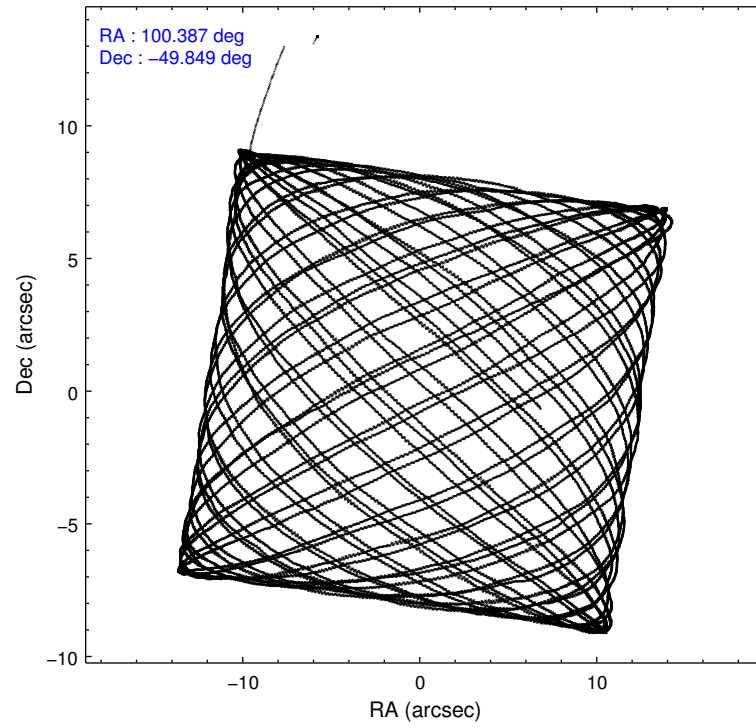
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	110916	114925	124196	120521	123084
rejected events	97075	99349	110312	105798	108775
rejected %	87%	86%	88%	87%	88%

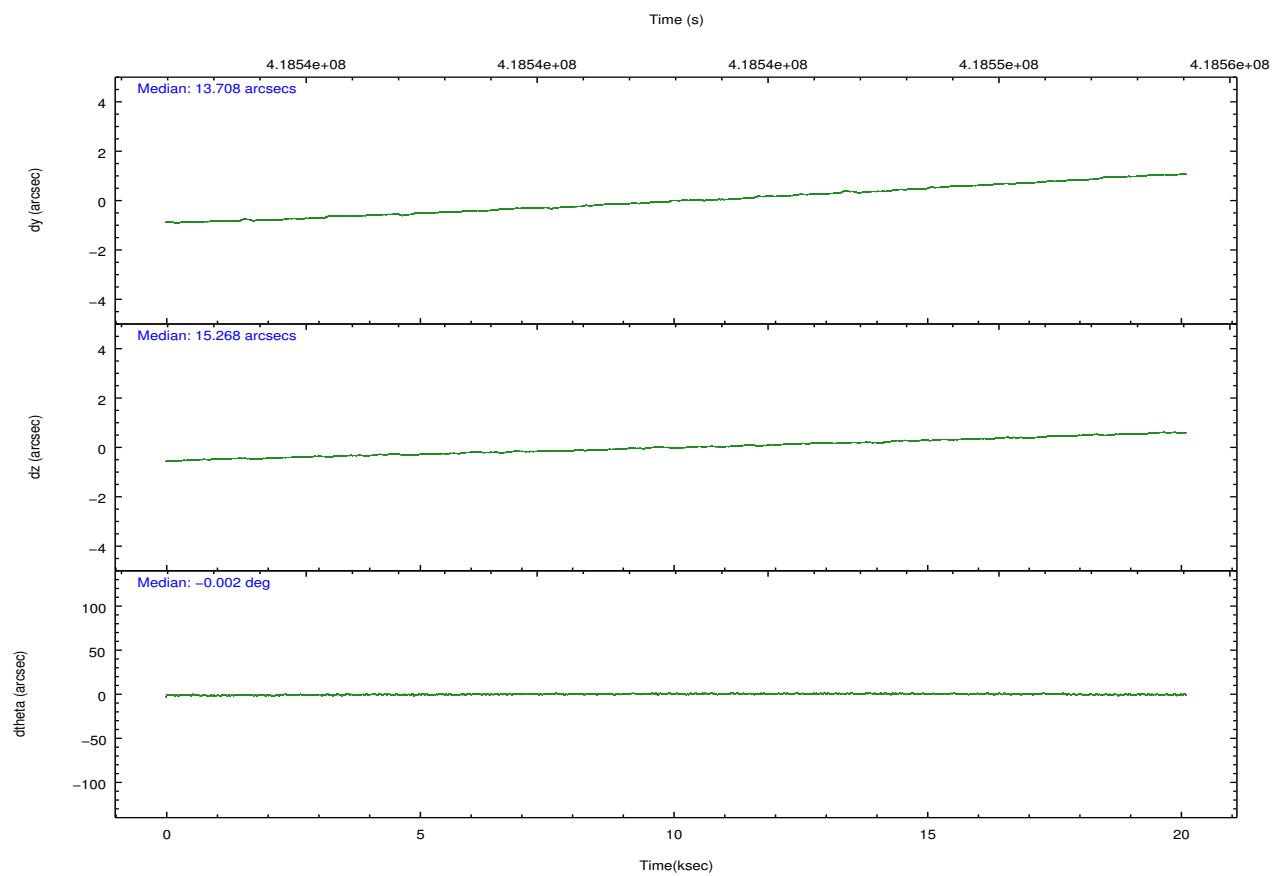
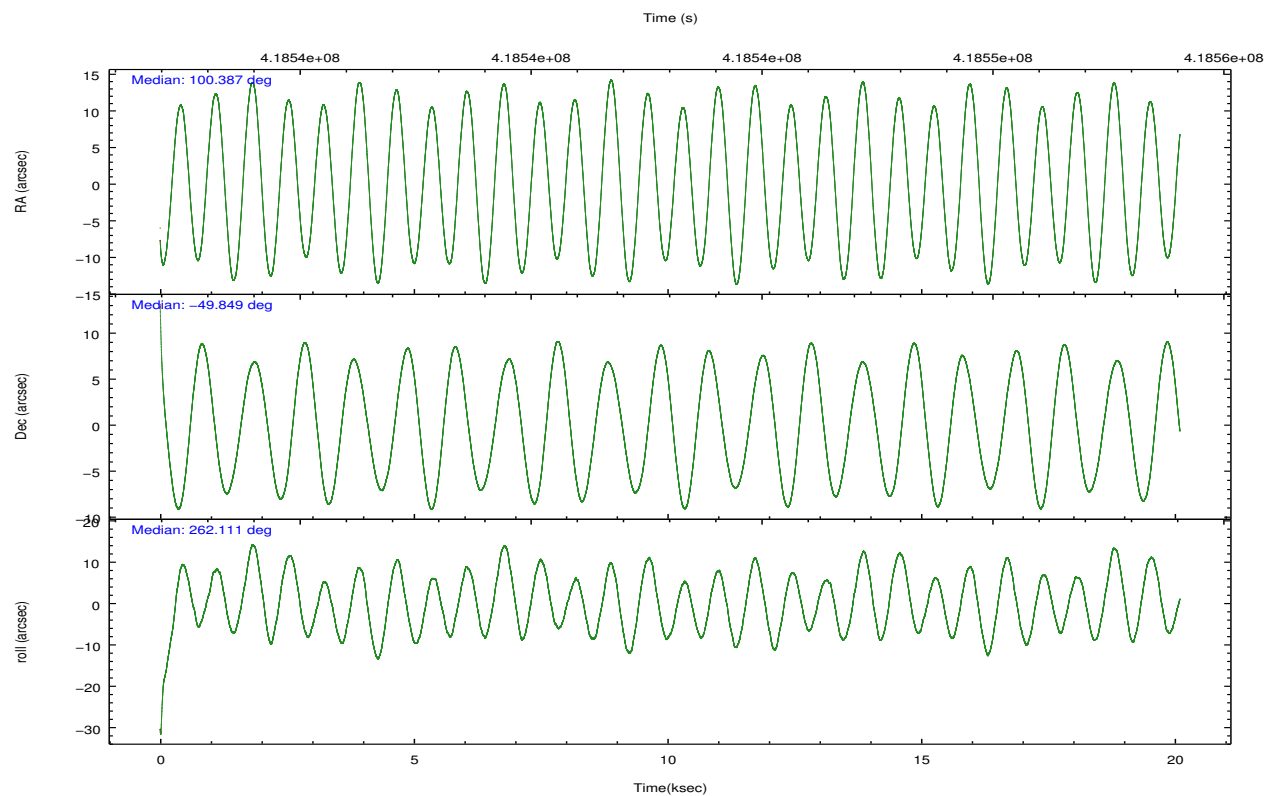
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	4953	5548	5319	5955	5058
	4%	4%	4%	4%	4%
grade 1 events	64	53	71	73	66
	0%	0%	0%	0%	0%
grade 2 events	3337	3615	3311	3109	3062
	3%	3%	2%	2%	2%
grade 3 events	1452	1598	1349	1442	1497
	1%	1%	1%	1%	1%
grade 4 events	1322	1580	1379	1470	1496
	1%	1%	1%	1%	1%
grade 5 events	5138	5518	4871	5939	5642
	4%	4%	3%	4%	4%
grade 6 events	2784	3239	2527	2747	3198
	2%	2%	2%	2%	2%
grade 7 events	91866	93774	105369	99786	103065
	82%	81%	84%	82%	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	100.370941	100.3871255699332	CCD I2 on	Y	Y
[deg] Pointing Dec	-49.823579	-49.84899926960745	CCD I3 on	Y	Y
[deg] Pointing Roll	261.896739	262.1177838139867	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	-225.792463	-225.7829997647864	CCD S3 on	N	N
[mm] SIM translation stage offset	-7.8	-7.809453238143249	CCD S4 on	N	N
[s] Observation start time (MET)	418533049.184000	418531265.11487	CCD S5 on	N	N
Observation start date	2011-04-07T03:09:43	2011-04-07T02:41:05	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	418553049.184000	418553284.16601	On-chip summing requested	N	N
Observation end date	2011-04-07T08:43:03	2011-04-07T08:48:04	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



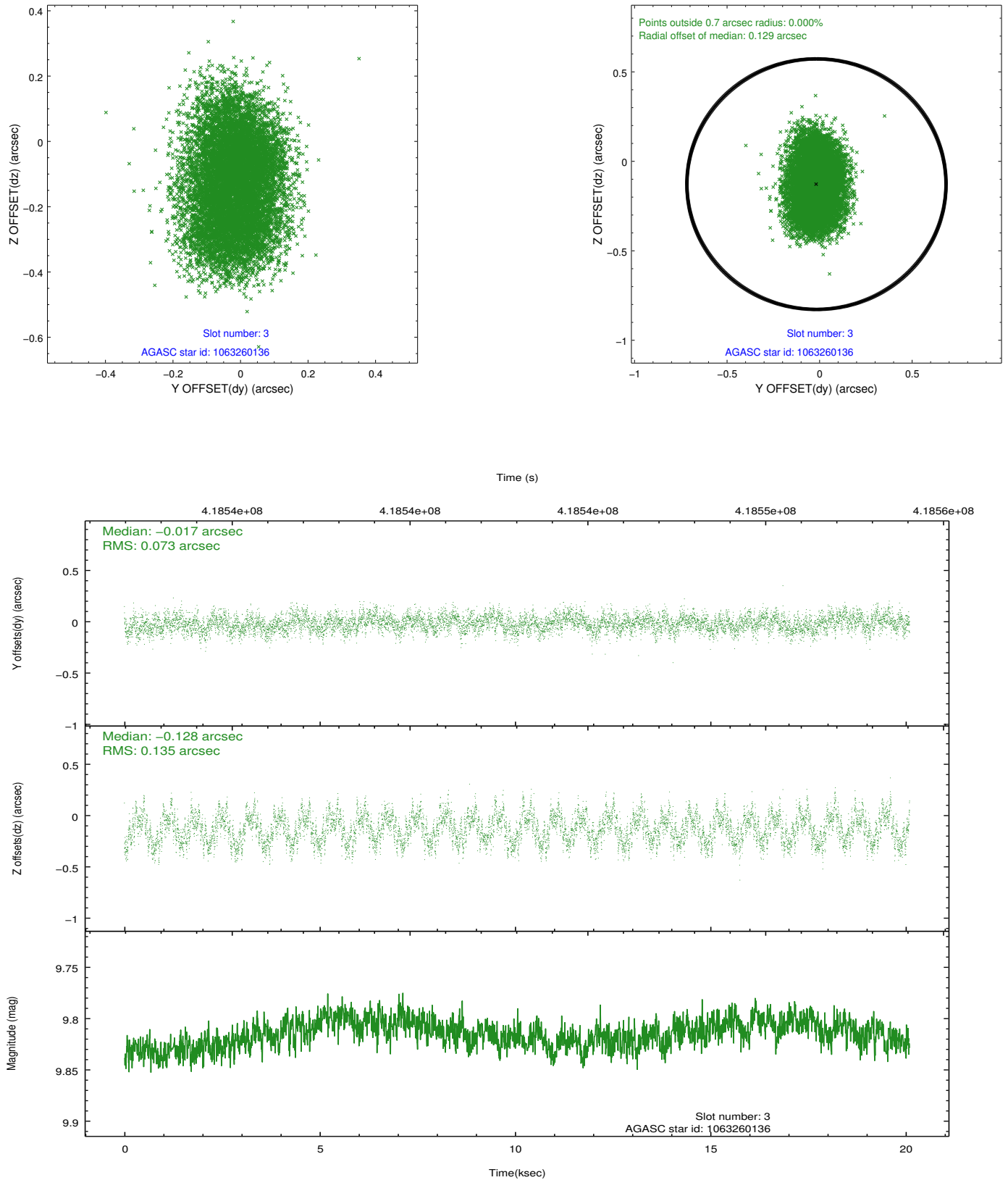


Slot Statistics

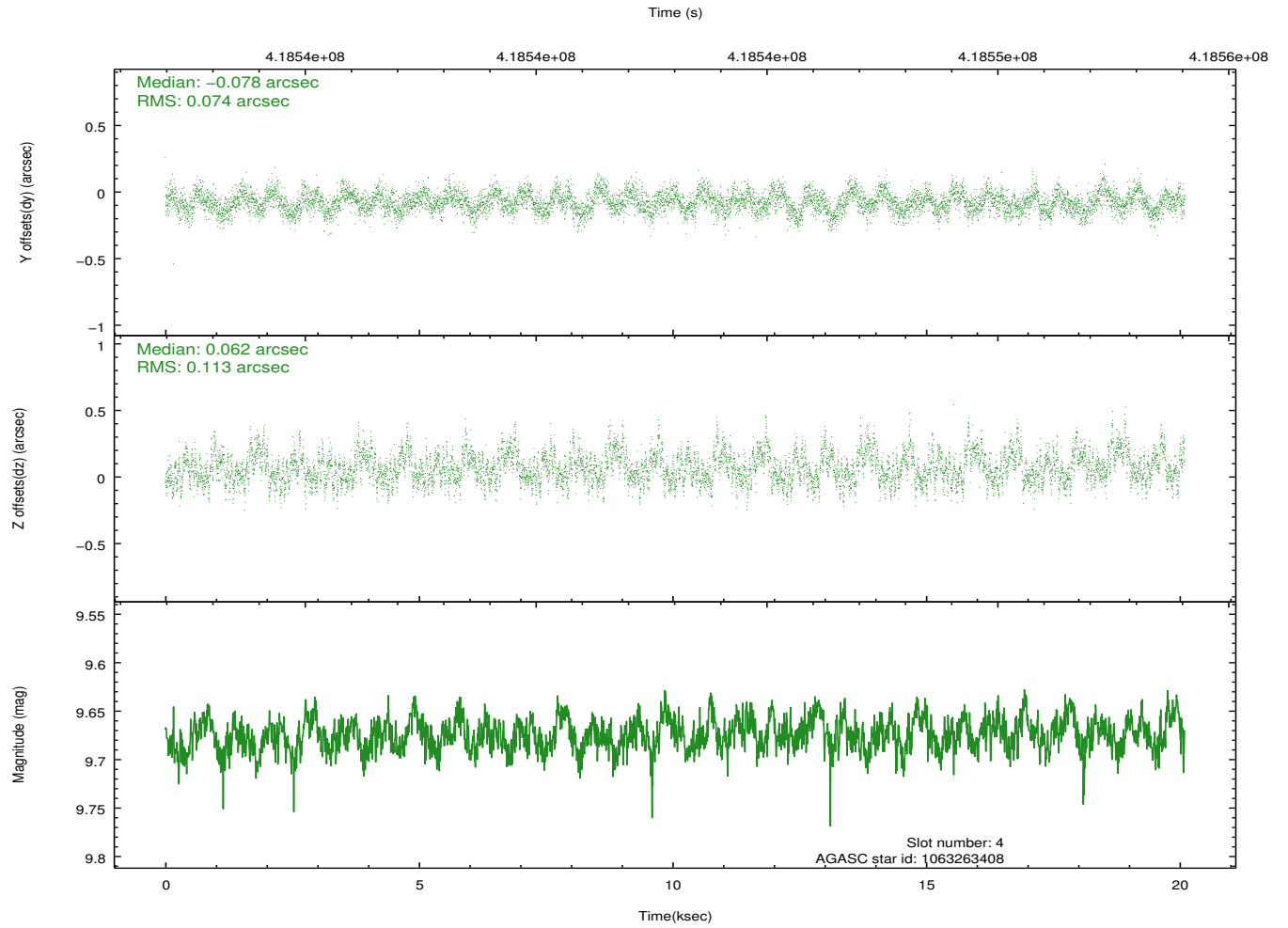
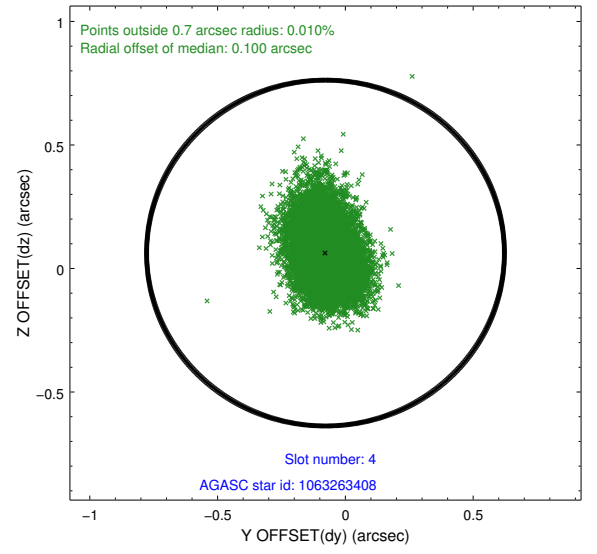
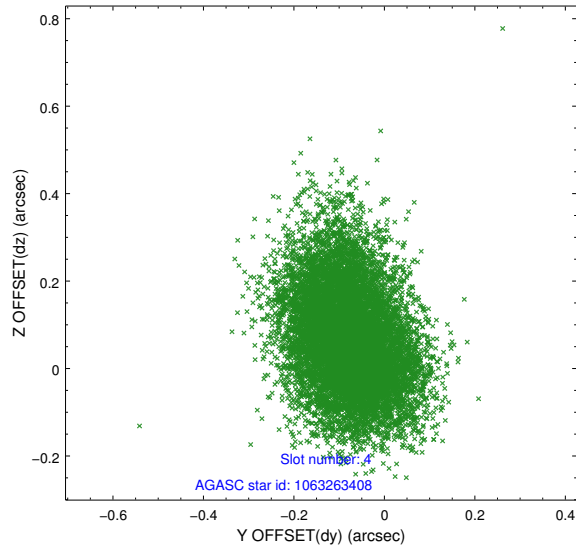
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.08	4903	0.141	-0.109	0.014	0.020	0.000000	0.000000	925.77	-999.32
1	FID	ACIS-I-5	7.07	4903	-0.278	0.118	0.020	0.029	0.000000	0.000000	-1822.64	898.29
2	FID	ACIS-I-6	7.09	4902	0.044	0.060	0.016	0.025	0.000000	0.000000	391.02	1542.94
3	GUIDE	1063260136	9.81	9796	-0.017	-0.128	0.166	0.262	99.705655	-49.332484	-1522.84	-1793.35
4	GUIDE	1063263408	9.67	9794	-0.078	0.062	0.142	0.235	99.401712	-49.842963	401.08	-2215.53
5	GUIDE	1063270848	9.20	9795	0.069	-0.111	0.149	0.251	99.574108	-50.395333	2305.86	-1518.59
6	GUIDE	1063266856	9.82	9780	-0.044	0.072	0.160	0.255	100.345776	-49.626296	-694.18	-157.97
7	GUIDE	1063272240	9.49	9727	0.063	0.121	0.129	0.227	101.231662	-50.572221	2402.23	2330.58

2.4 Star Slots

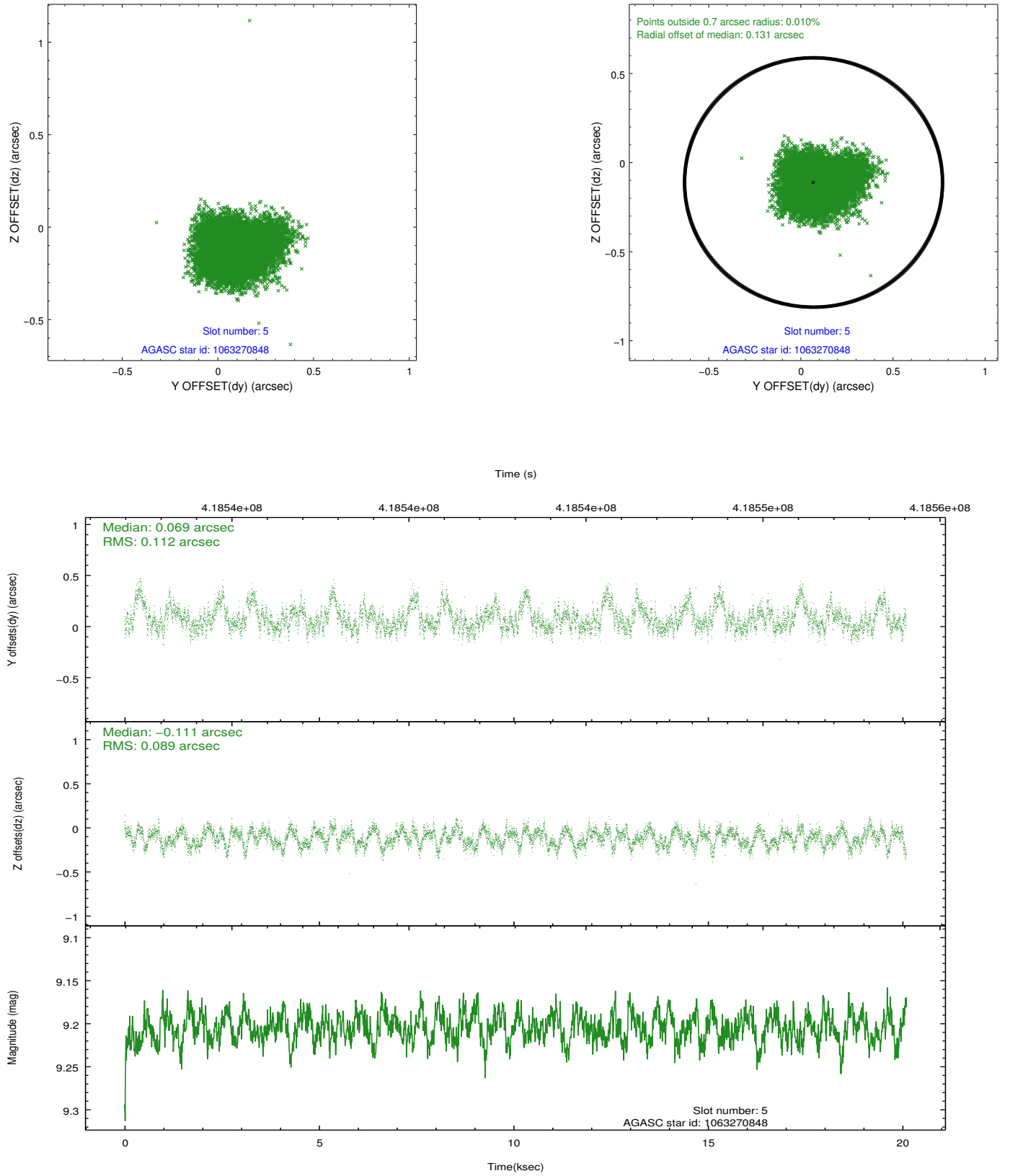
2.4.1 Slot 3



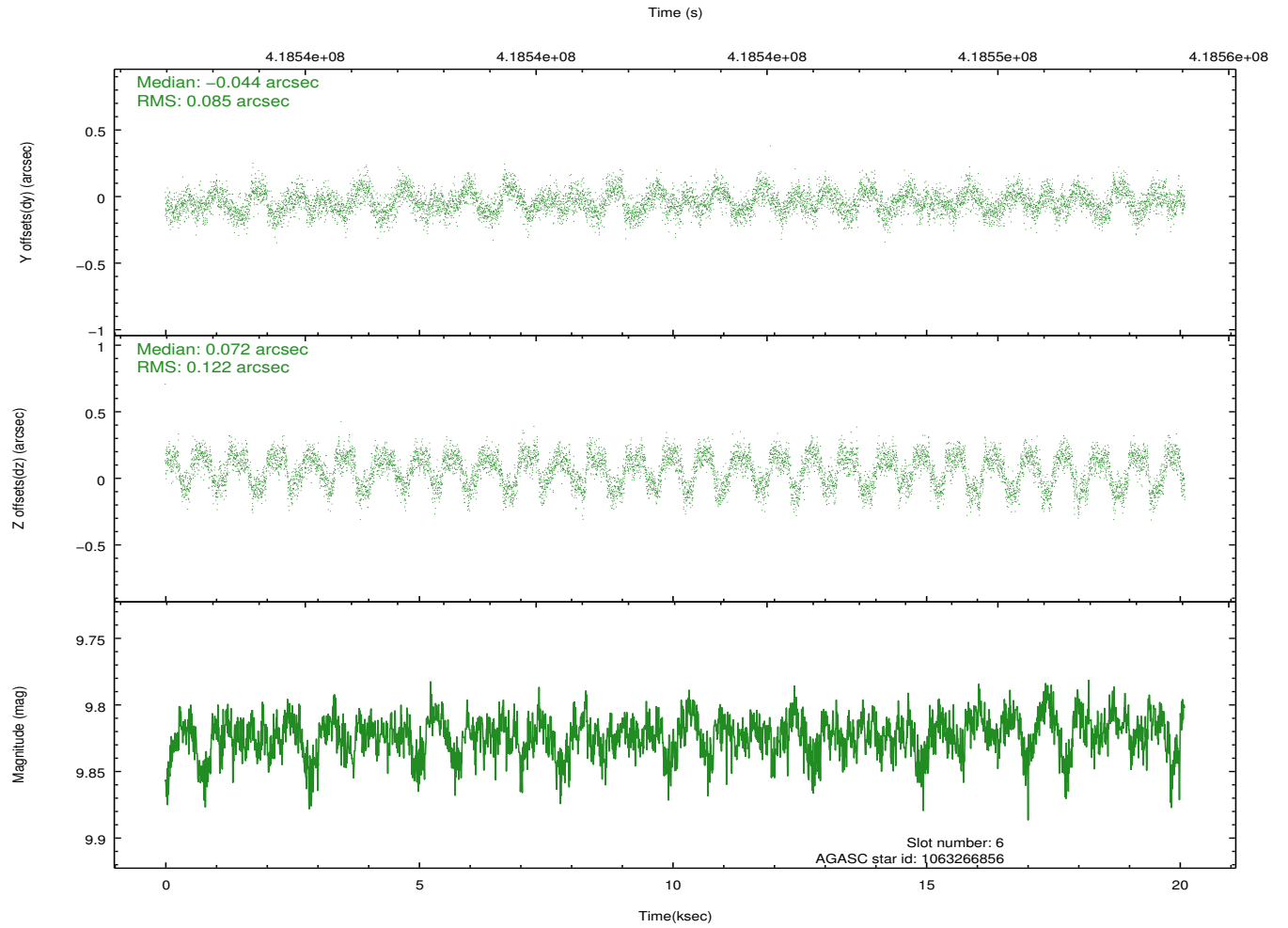
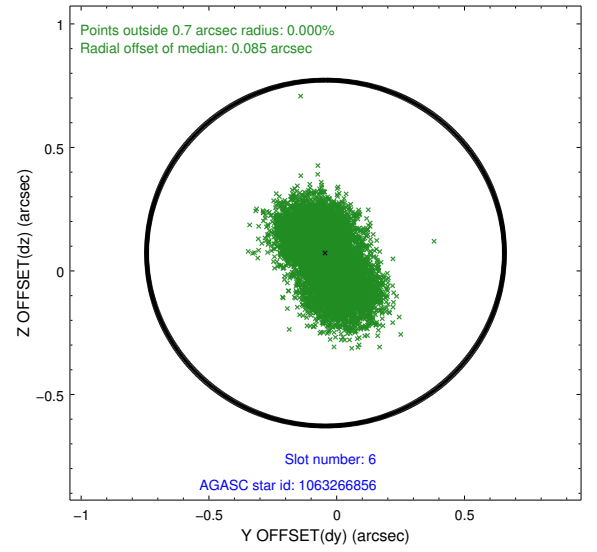
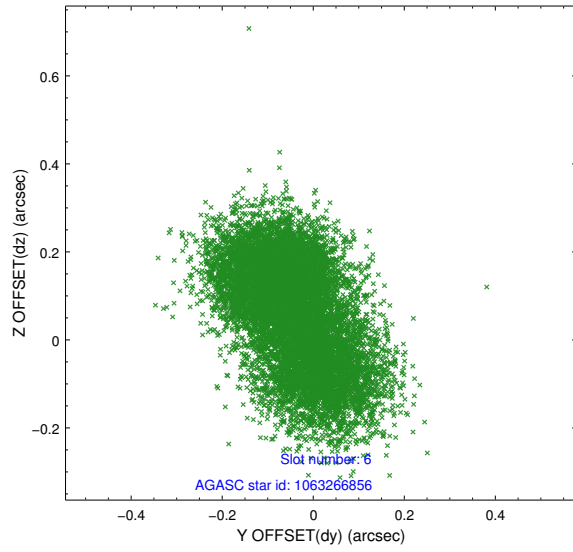
2.4.2 Slot 4



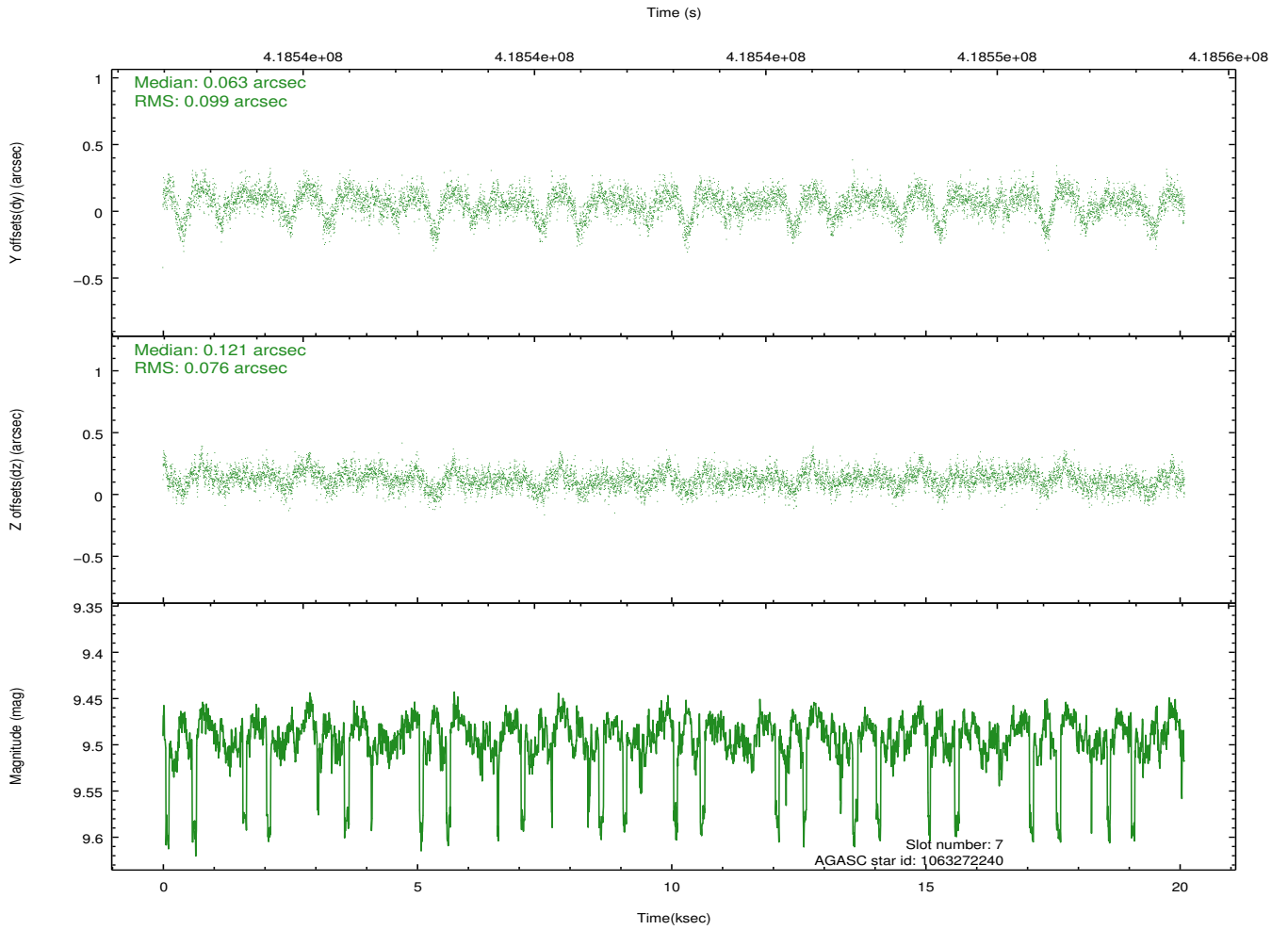
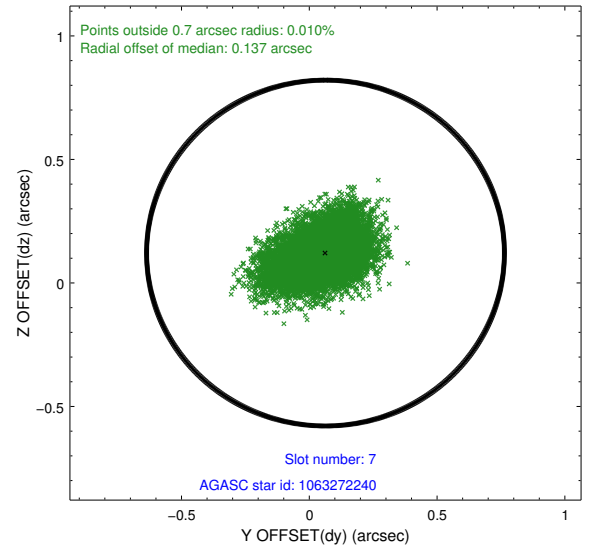
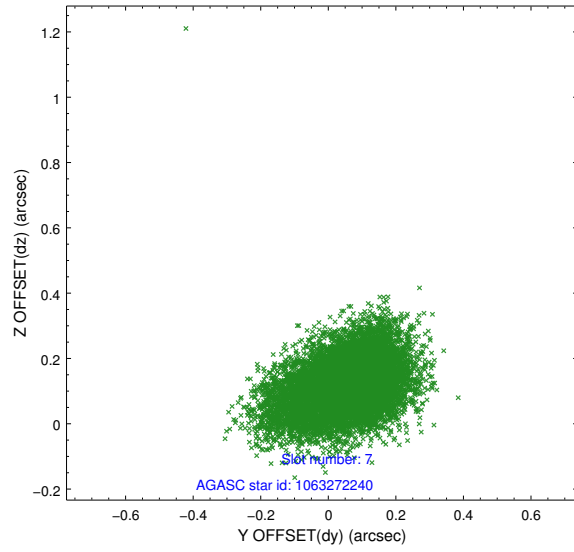
2.4.3 Slot 5



2.4.4 Slot 6

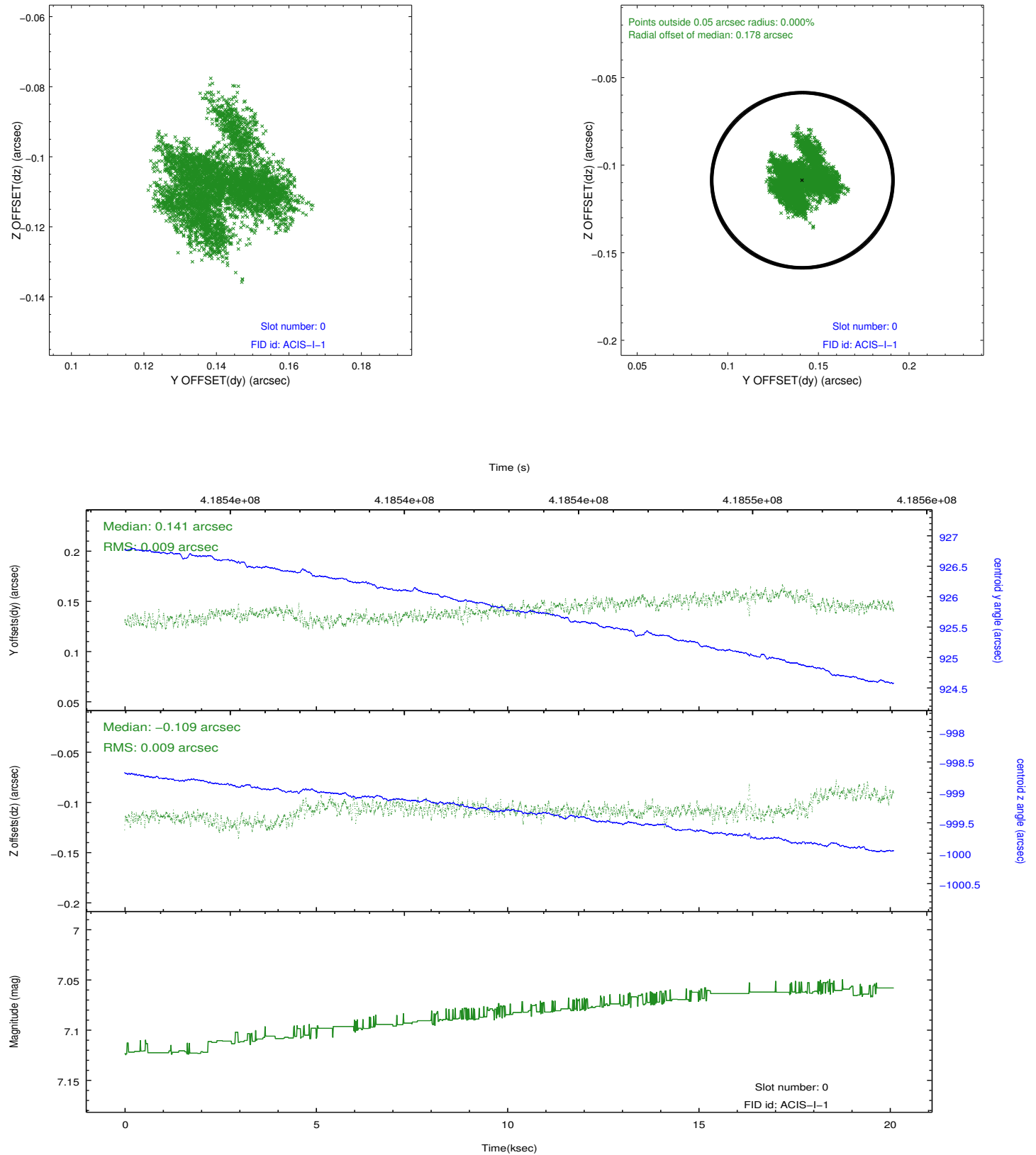


2.4.5 Slot 7

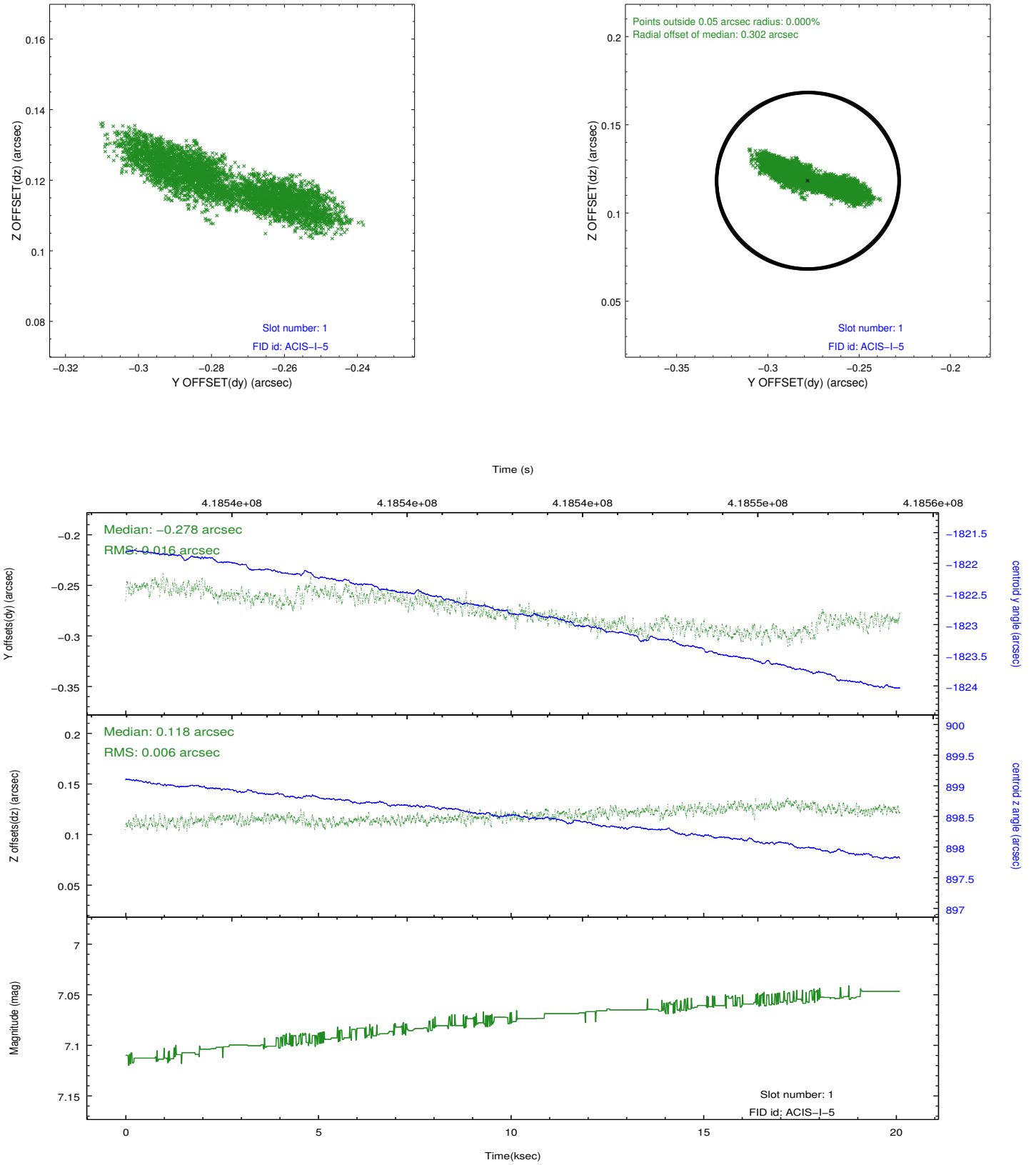


2.5 FID Slots

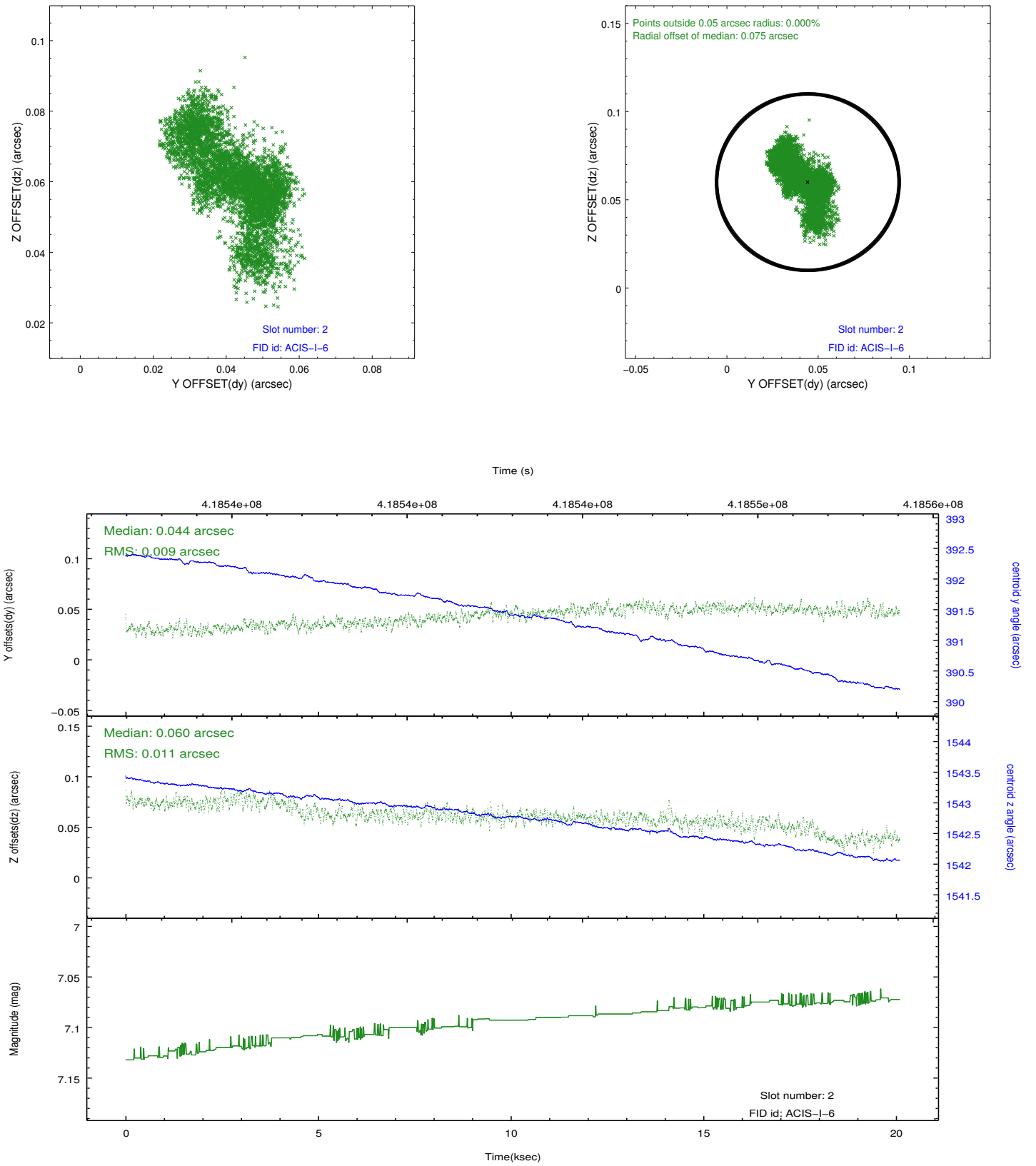
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2012.02.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.057000154257

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.