

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 6216 - L2 Version 4
Chandra X-Ray Center

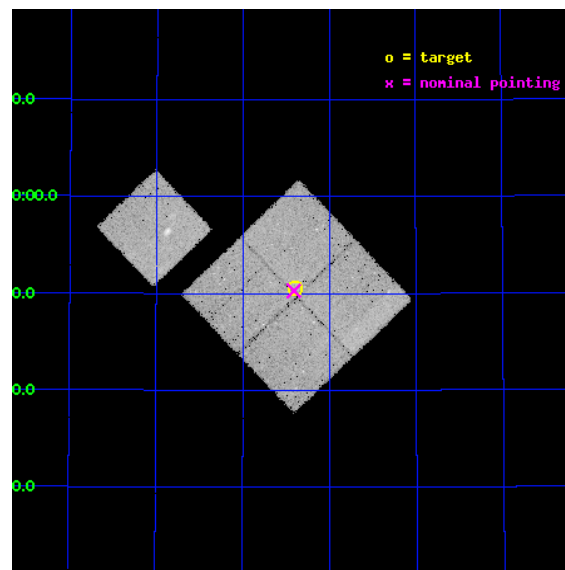
L2 Processing Date : Mar 7 2013

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1 Front

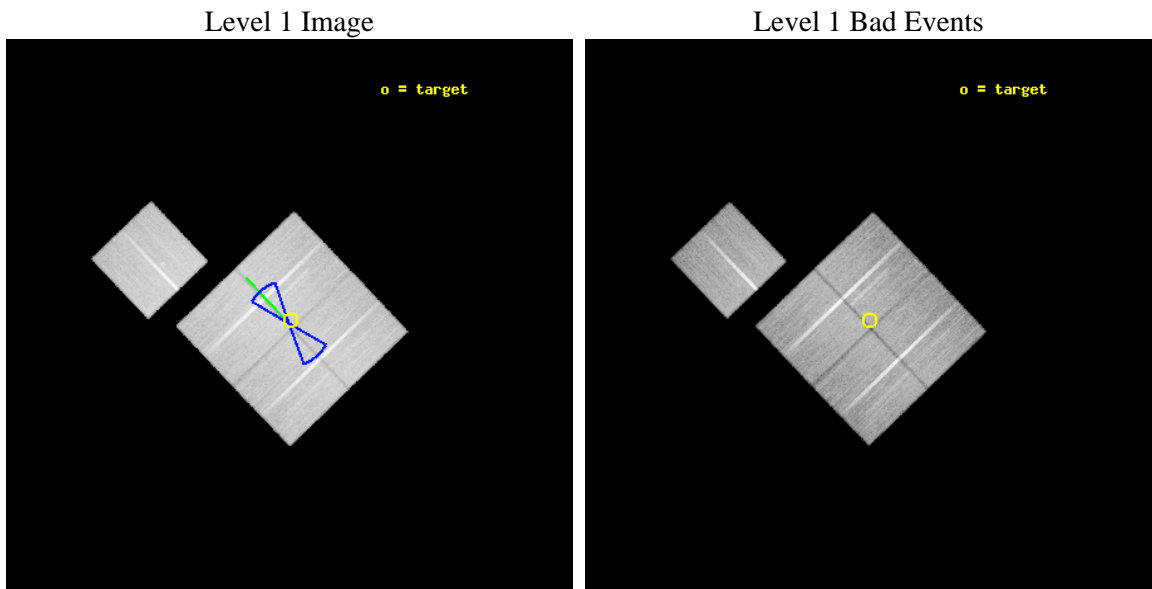
seq_num	900351	Sequence number
obs_id	6216	Observation id
title	Deep Chandra Imaging of the Extended Groth Strip: The Co-evolution of Black Holes and Galaxies	Proposal title
observer	Prof Kirpal Nandra	Principal investigator
object	EGS-4	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	214.849579	Observer's specified target RA [deg]
dec_targ	52.842415	Observer's specified target Dec [deg]
ra_nom	214.85261826313	Nominal RA [deg]
dec_nom	52.83814028995	Nominal Dec [deg]
roll_nom	316.20626390178	Nominal Roll [deg]
revision	4	Processing version of data
ontime	50133.158943295	Sum of GTIs [s]
livetime	49478.132314207	Livetime [s]
ontime0	50117.4540025	Sum of GTIs [s]
ontime1	50126.87691319	Sum of GTIs [s]
ontime2	50126.877052665	Sum of GTIs [s]
ontime3	50133.158943295	Sum of GTIs [s]
ontime6	50133.158933312	Sum of GTIs [s]
l2events	122526	Number of level 2 events



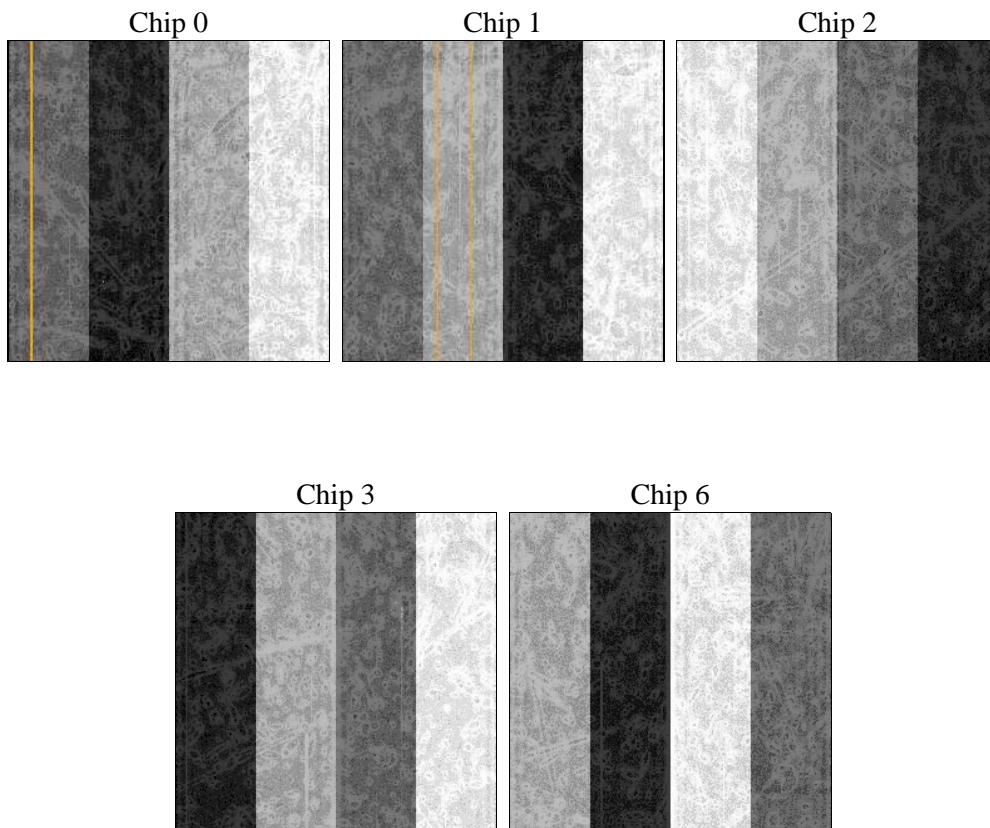
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	50000.000000	[s] Scheduled observation exposure time
ascdsver	8.5.1.1	Processing system revision	ontime	50133.158943295	Sum of GTIs [s]
caldbver	4.5.6	 	ontime0	50117.4540025	Sum of GTIs [s]
date	2013-03-07T21:14:52	Date and time of file creation	ontime1	50126.87691319	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	50126.877052665	Sum of GTIs [s]
			ontime3	50133.158943295	Sum of GTIs [s]
			ontime6	50133.158933312	Sum of GTIs [s]
			l1events	1370229	Number of level 1 events

2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	264556	263093	289586	275223	277771
rejected events	235518	230984	260576	248142	246759
rejected %	89%	87%	89%	90%	88%

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	10294	11589	10508	9730	11532
	3%	4%	3%	3%	4%
grade 1 events	124	117	147	135	120
	0%	0%	0%	0%	0%
grade 2 events	7086	7123	6893	5751	6670
	2%	2%	2%	2%	2%
grade 3 events	3257	3532	3143	3261	3377
	1%	1%	1%	1%	1%
grade 4 events	3052	3543	3238	3083	3296
	1%	1%	1%	1%	1%
grade 5 events	9719	10884	9353	11364	11589
	3%	4%	3%	4%	4%
grade 6 events	5608	6649	5493	5502	6407
	2%	2%	1%	1%	2%
grade 7 events	225416	219656	250811	236397	234780
	85%	83%	86%	85%	84%

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	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	214.808533	214.8526182631341	Subarray requested	NONE	NONE
[deg] Pointing Dec	52.844568	52.83814028994951	Alternating exposures requested	N	N
[deg] Pointing Roll	316.032711	316.2062639017813	[s] Primary exposure time	0.000000	3.1
[deg] Roll angle	50.756000	50.756000			
[deg] Roll tolerance	20.000000	20.000000			
Roll constraint allows 180D rotation	Y	Y			
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	243597310.184000	243596113.98186			
Observation start date	2005-09-20T09:54:06	2005-09-20T09:35:13			
[s] Observation end time (MET)	243647310.184000	243648916.85929			
Observation end date	2005-09-20T23:47:26	2005-09-21T00:15:16			
Read mode	TIMED	TIMED			

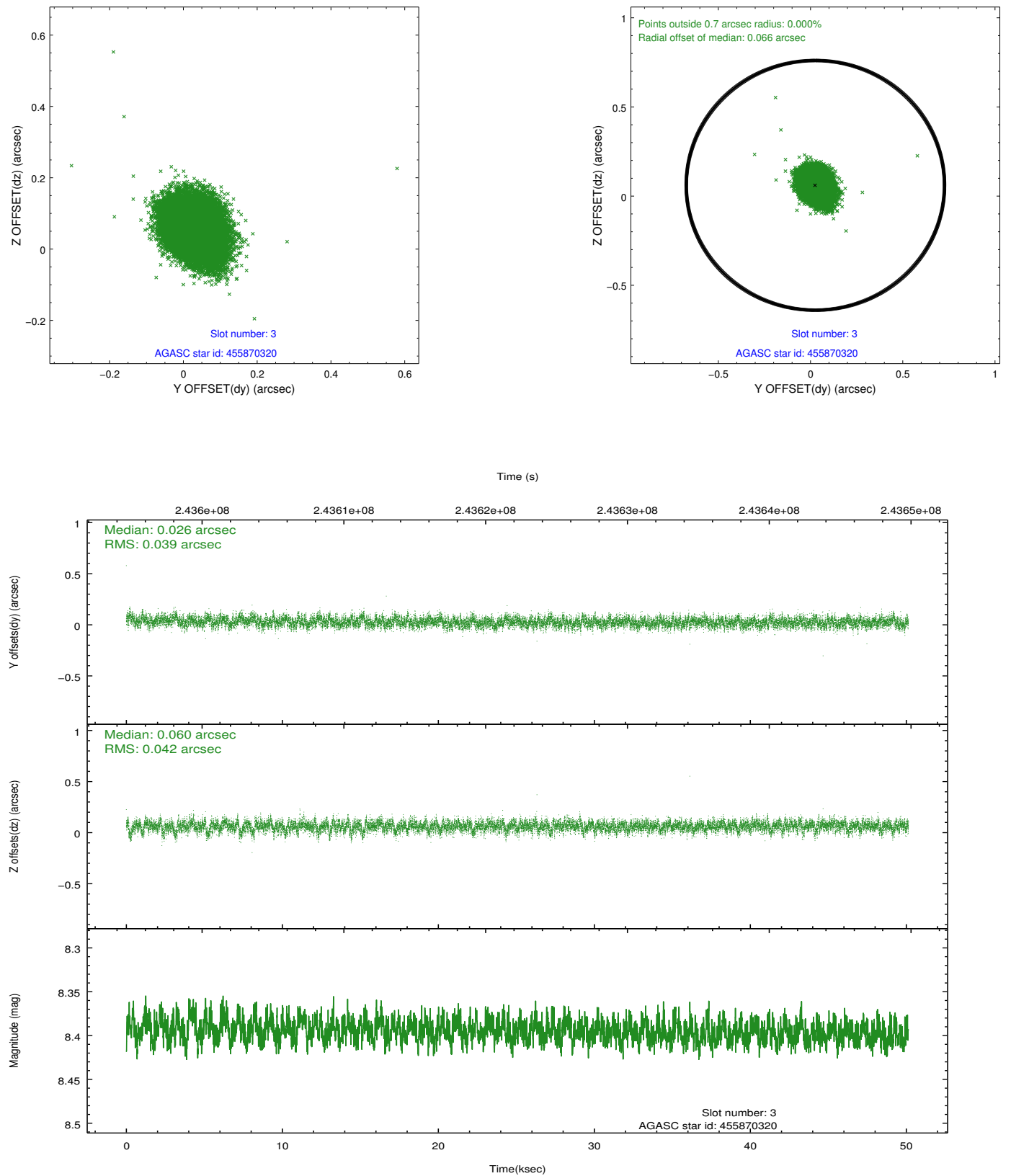
2.3 Aspect

Slot Statistics

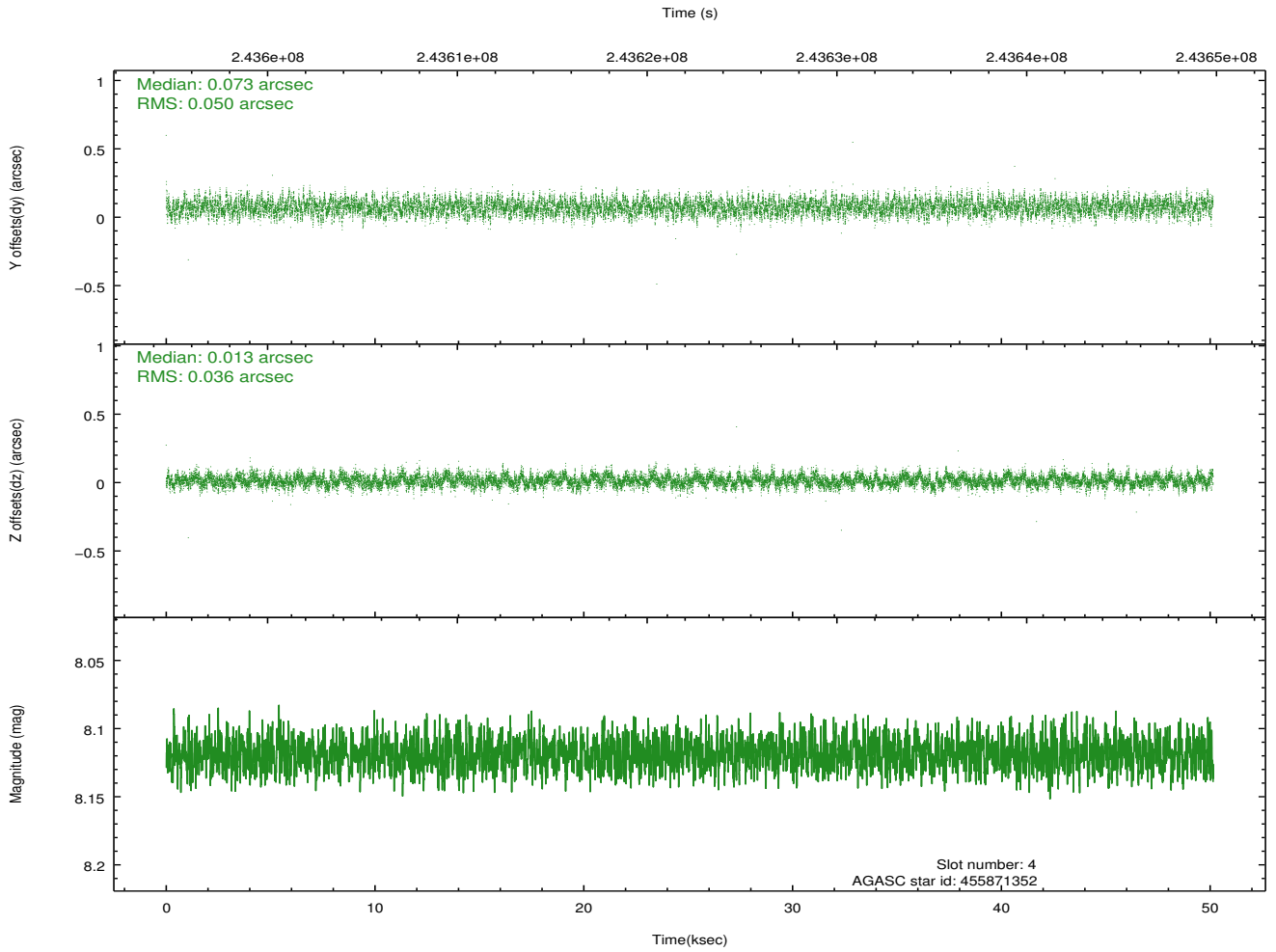
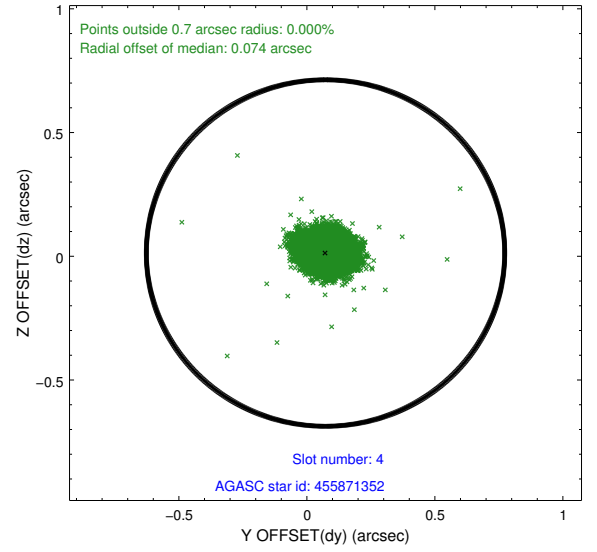
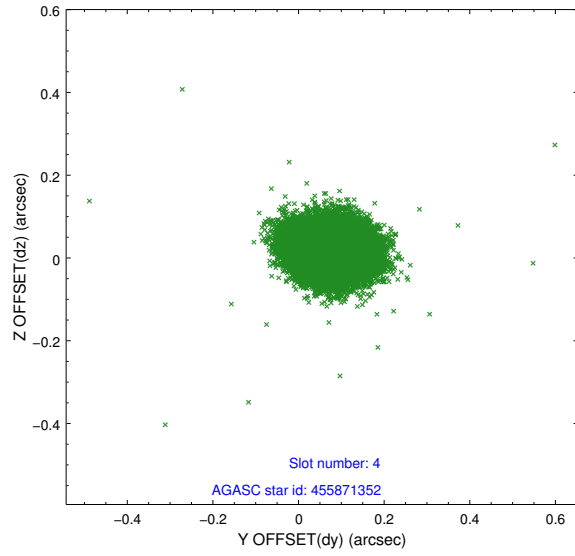
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.14	12229	-0.071	-0.107	0.014	0.034	0.000000	0.000000	-760.69	-841.27
1	FID	ACIS-I-4	7.17	12229	0.095	0.074	0.010	0.021	0.000000	0.000000	2153.55	1065.08
2	FID	ACIS-I-5	7.22	12231	-0.124	0.102	0.014	0.034	0.000000	0.000000	-1814.59	1062.94
3	GUIDE	455870320	8.39	24459	0.026	0.060	0.060	0.100	214.874440	52.401638	1211.74	-1046.71
4	GUIDE	455871352	8.12	24459	0.073	0.013	0.065	0.104	215.099961	52.172669	2142.10	-1292.92
5	GUIDE	505812088	8.14	24460	0.072	-0.046	0.066	0.102	214.186617	53.263562	-2014.54	160.11
6	GUIDE	505812376	7.65	24460	-0.190	0.041	0.059	0.093	214.039537	52.937930	-1440.20	-909.78
7	GUIDE	455870296	7.34	24460	0.018	-0.068	0.074	0.118	214.629779	52.033323	1742.85	-2376.23

2.4 Star Slots

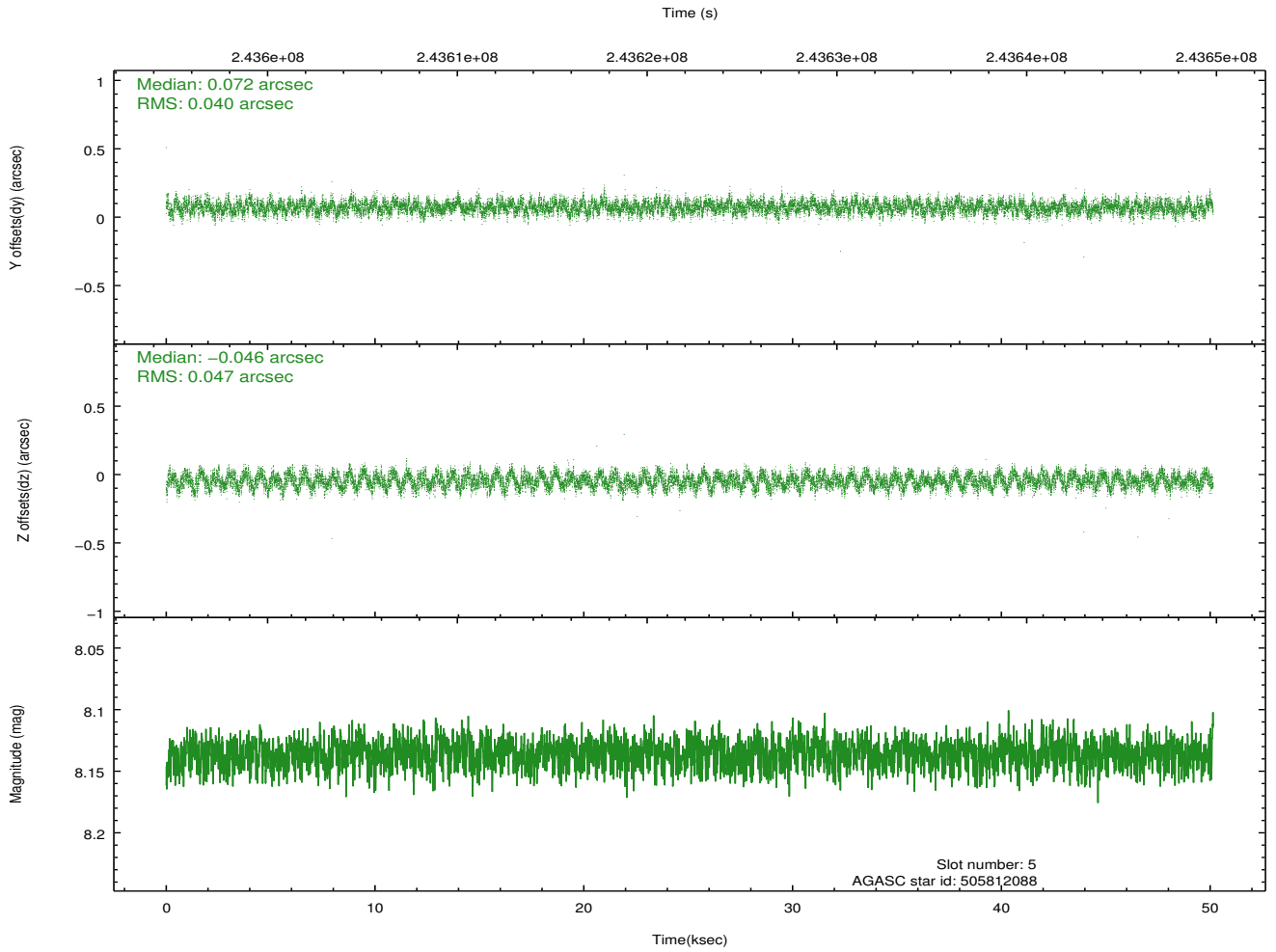
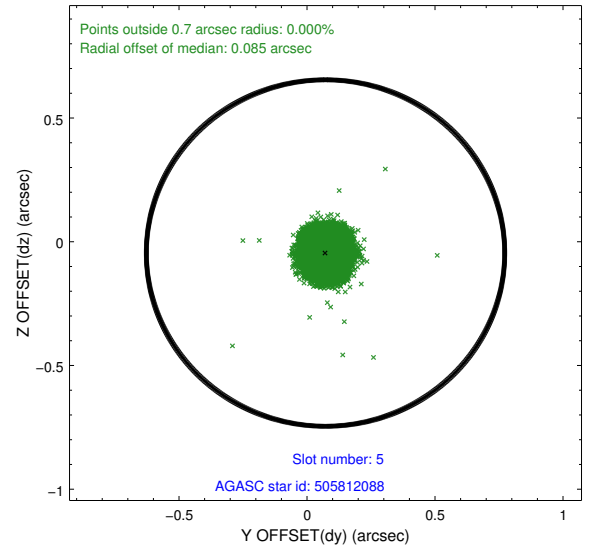
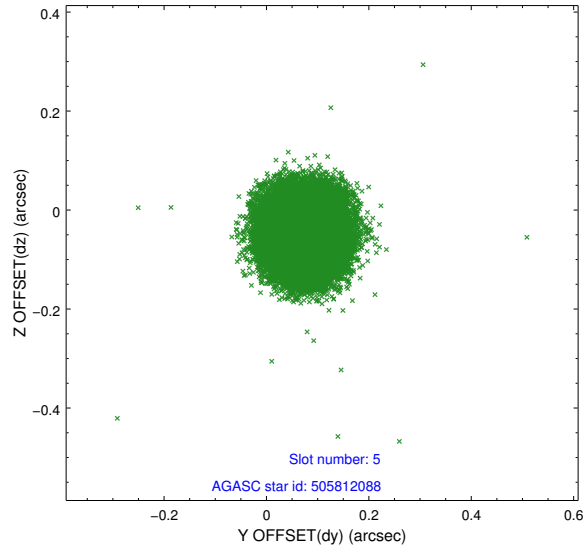
2.4.1 Slot 3



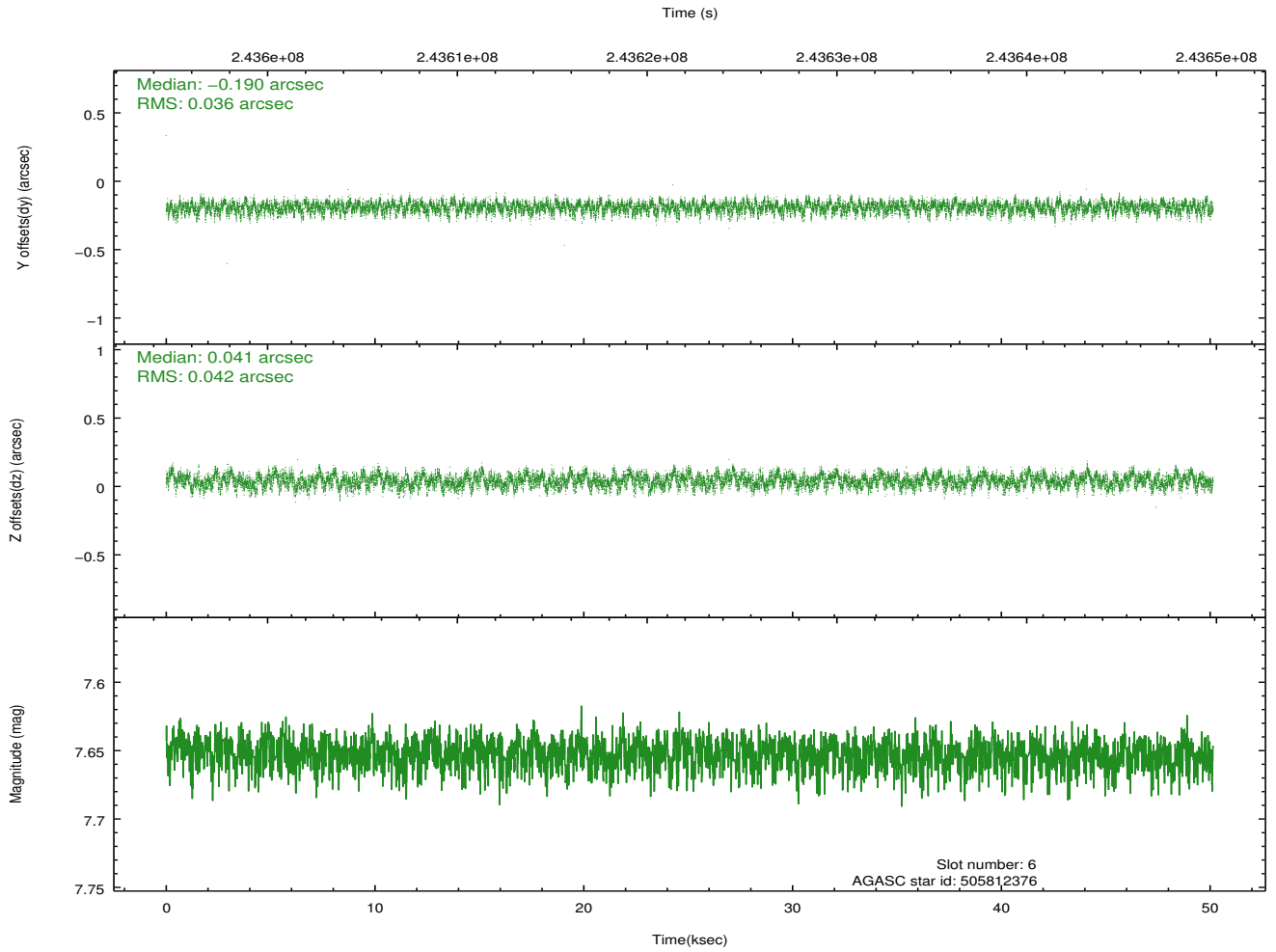
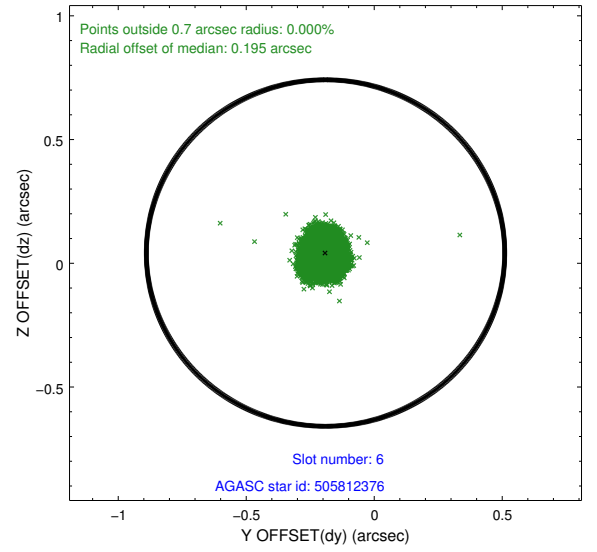
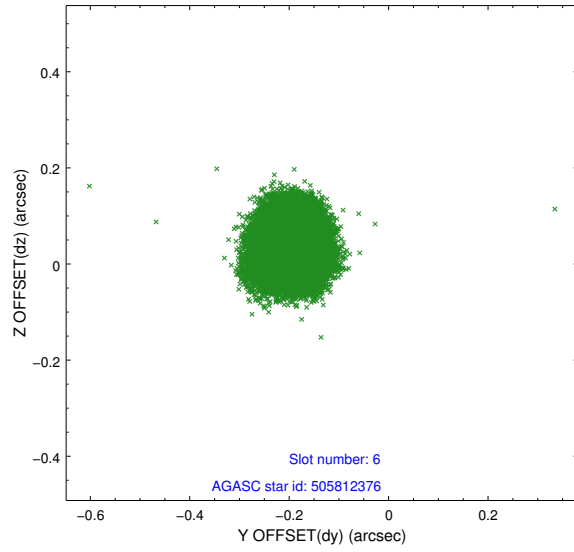
2.4.2 Slot 4



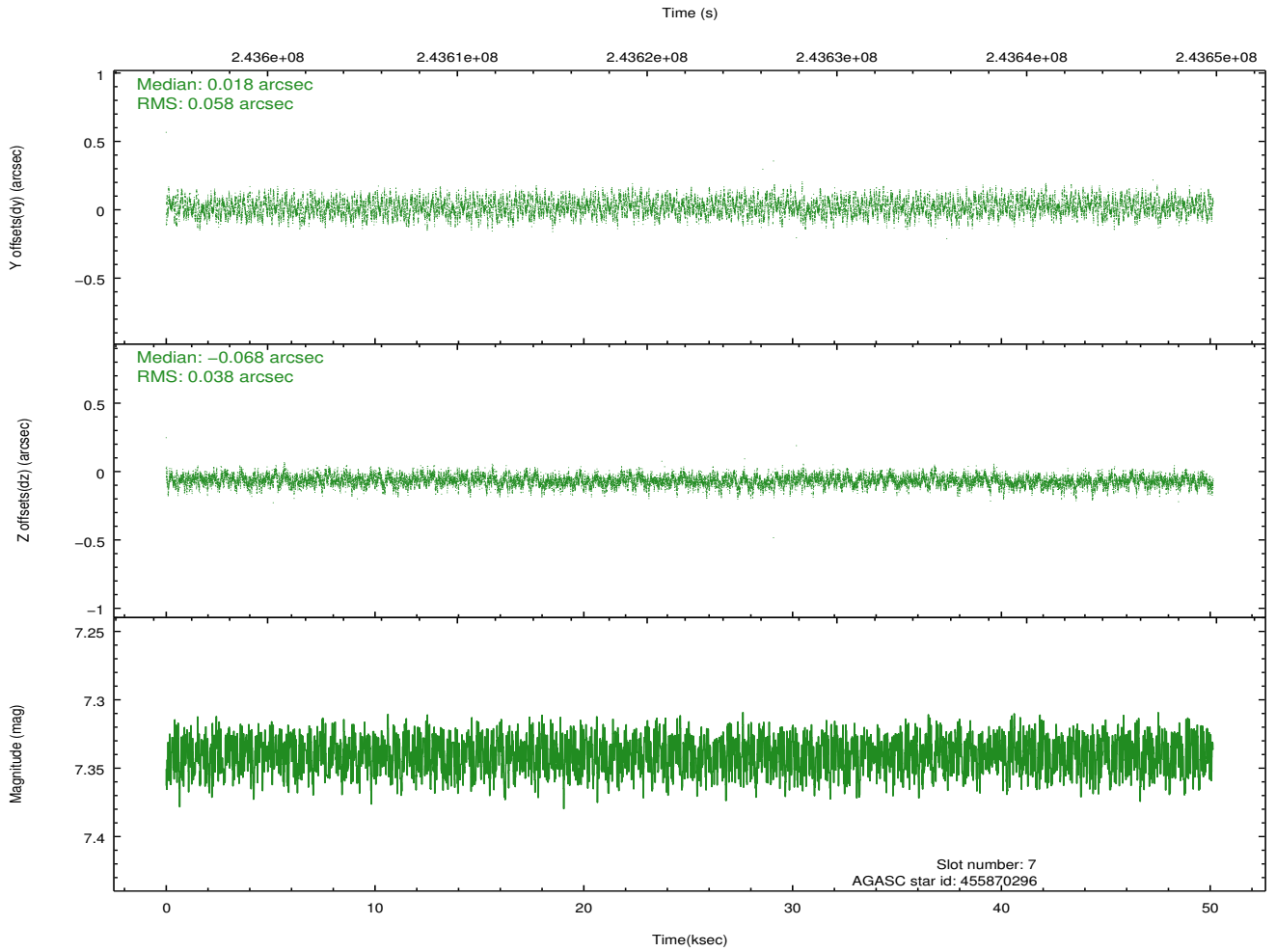
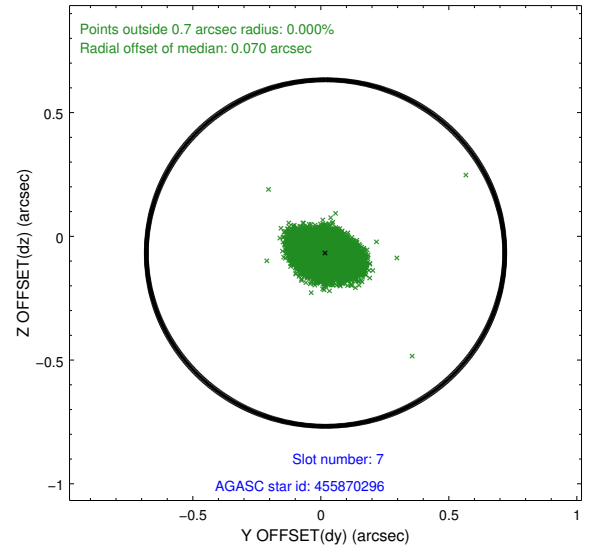
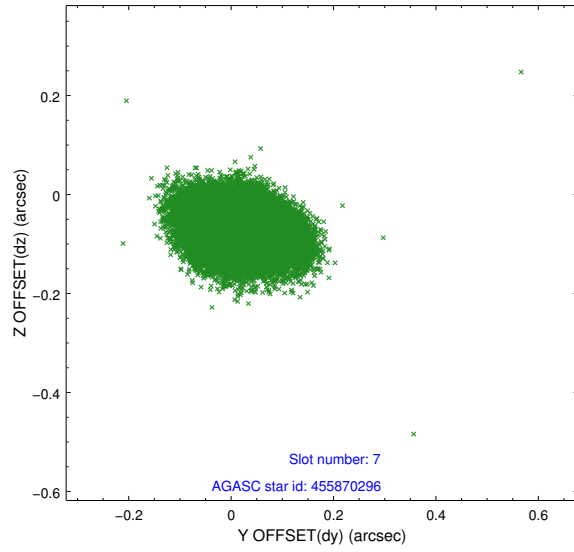
2.4.3 Slot 5



2.4.4 Slot 6

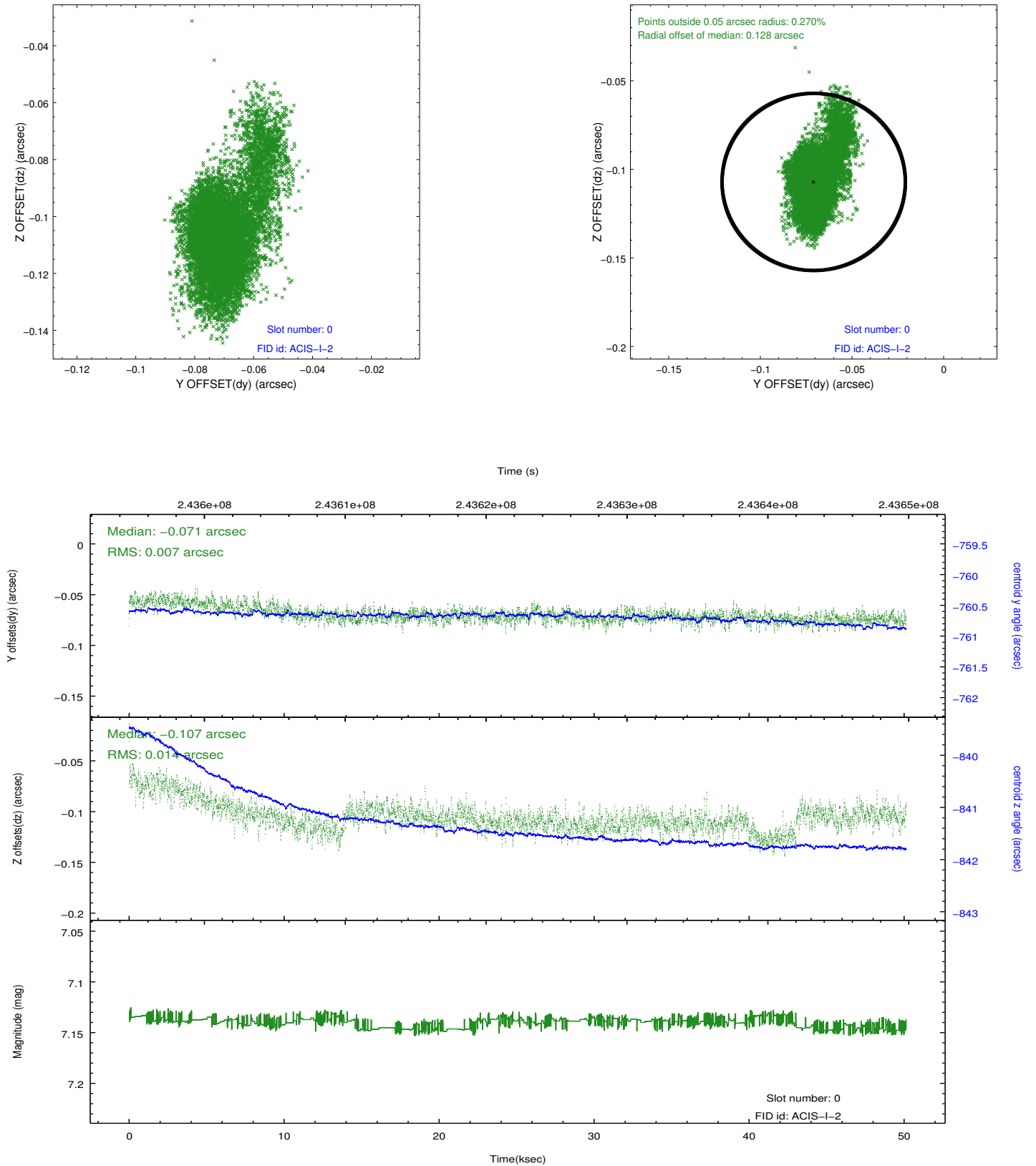


2.4.5 Slot 7

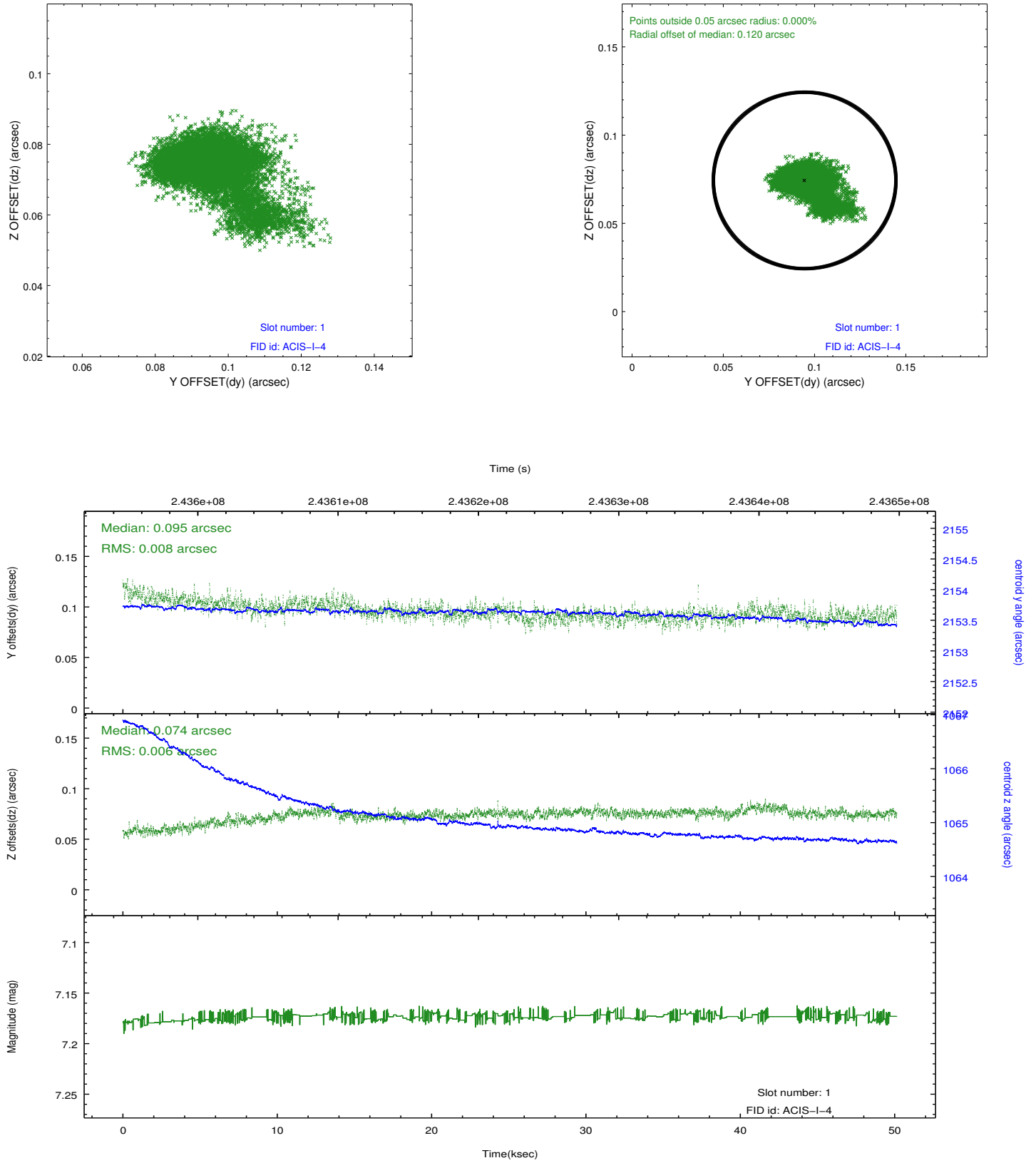


2.5 FID Slots

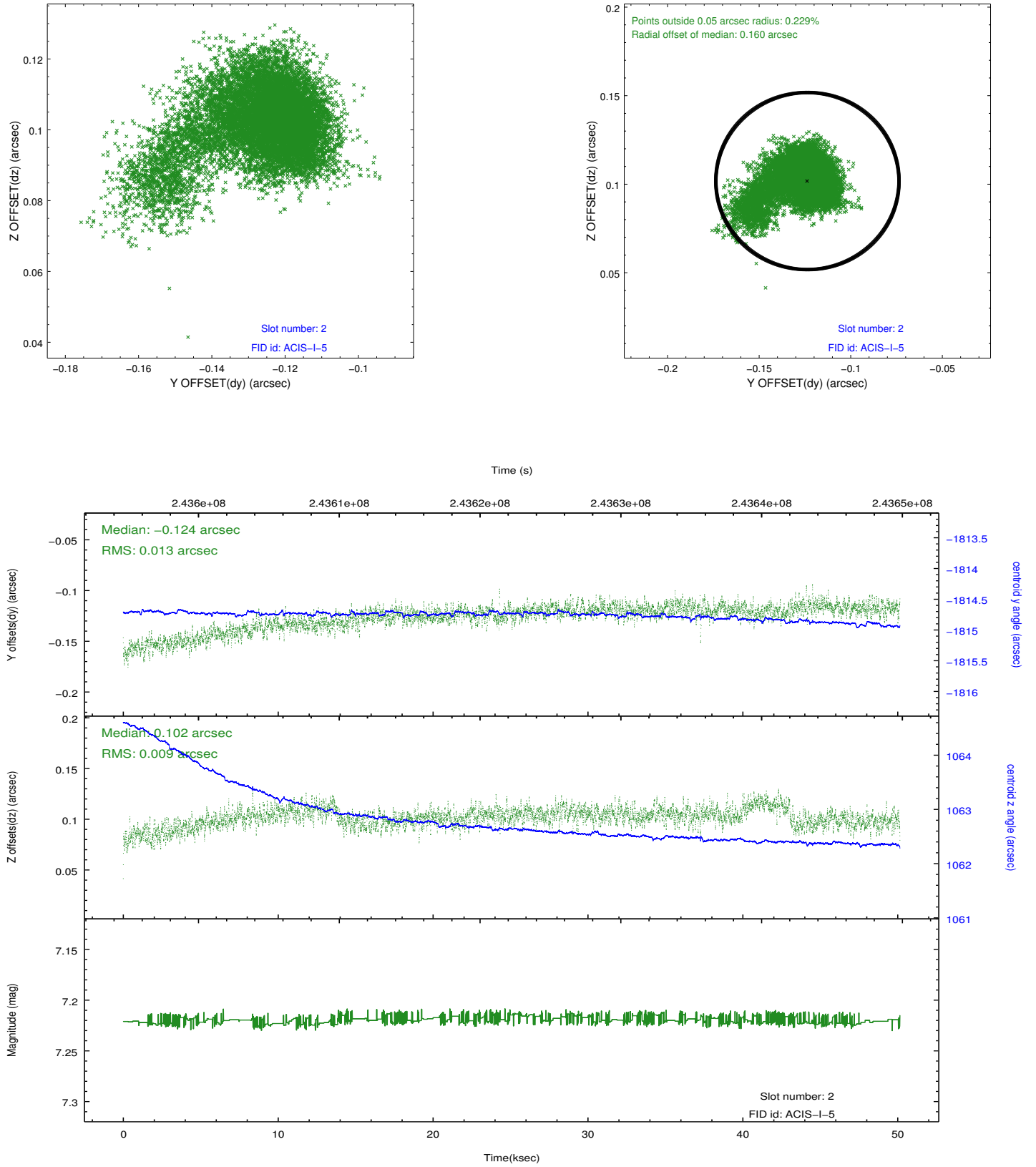
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2013.03.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	50.13315

A.2 Comments

As a consequence of the DEA-A shutdown anomaly on Sep 15th (DOY258), the reported value of the ACIS FP temperature was ~1.3 degrees warmer than the actual temperature. The value for FP temperature reported in the headers of the Level 2 event file and the Mission Timeline files are incorrect by this amount for this processing. However, the temperature is corrected in the processing in order to obtain the correct temperature for the CTI correction. So the calibrated data are correct. If using the FP temp values in the headers of data files (some CIAO tools require this information), investigators should subtract 1.3 degrees from the reported temperature to determine the true temperature.

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Roll constraint met.