

V&V Reference Report

L2 ASCDS Version : 8.2.1

Observation 1513 - L2 Version 3

Chandra X-Ray Center

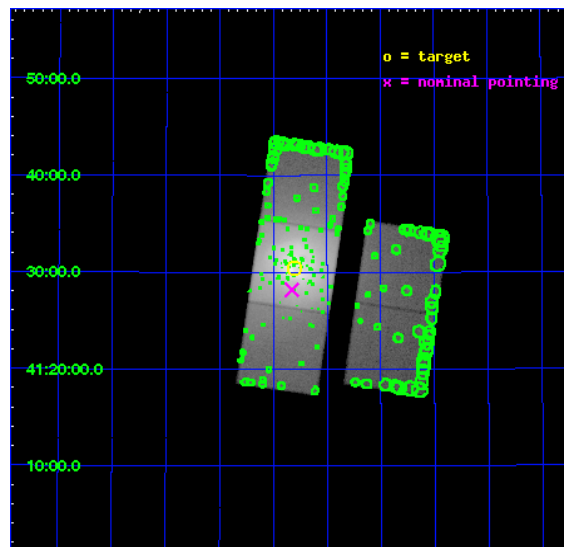
L2 Processing Date : Jan 29 2010

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1 Front

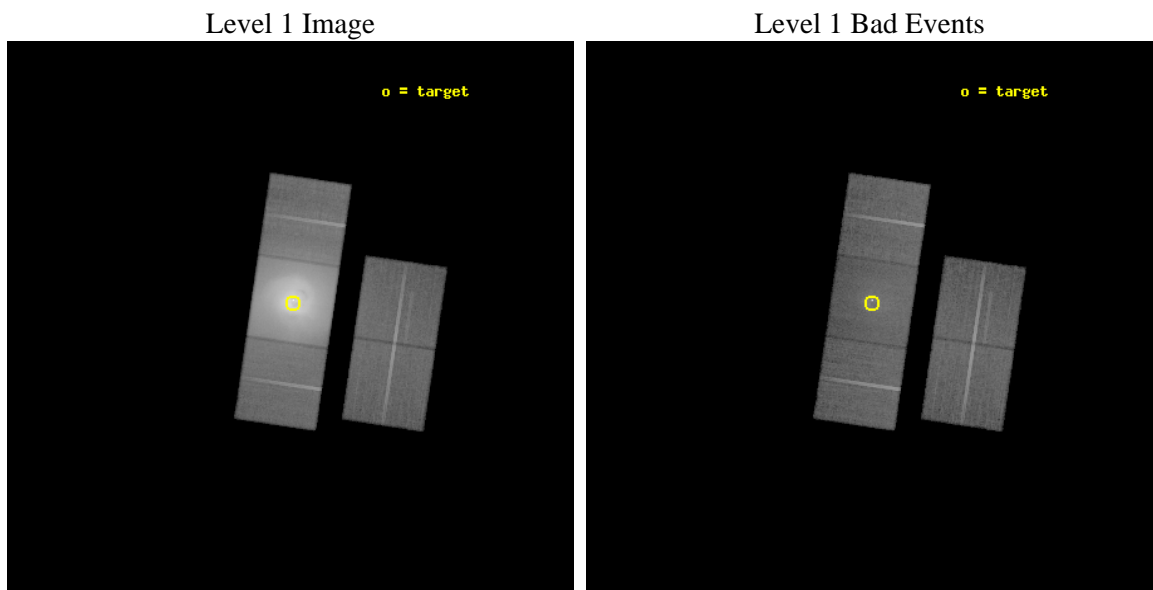
seq_num	800011	Sequence number
obs_id	1513	Observation id
title	THE COOLING FLOW IN THE PERSEUS CLUSTER	Proposal title
observer	Professor Andrew Fabian	Principal investigator
object	A426	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	49.952083	Observer's specified target RA
dec_targ	41.5075	Observer's specified target Dec
ra_nom	49.956831011484	Nominal RA
dec_nom	41.469809905144	Nominal Dec
roll_nom	278.38306584279	Nominal Roll
revision	3	Processing version of data
ontime	25196.431411453	Sum of GTIs [s]
livetime	24877.379025451	Livetime [s]
ontime2	25209.395272262	Sum of GTIs [s]
ontime3	25212.6361527	Sum of GTIs [s]
ontime6	25215.877162777	Sum of GTIs [s]
ontime7	25196.431411453	Sum of GTIs [s]
ontime8	25222.359063283	Sum of GTIs [s]
l2events	2910457	Number of level 2 events



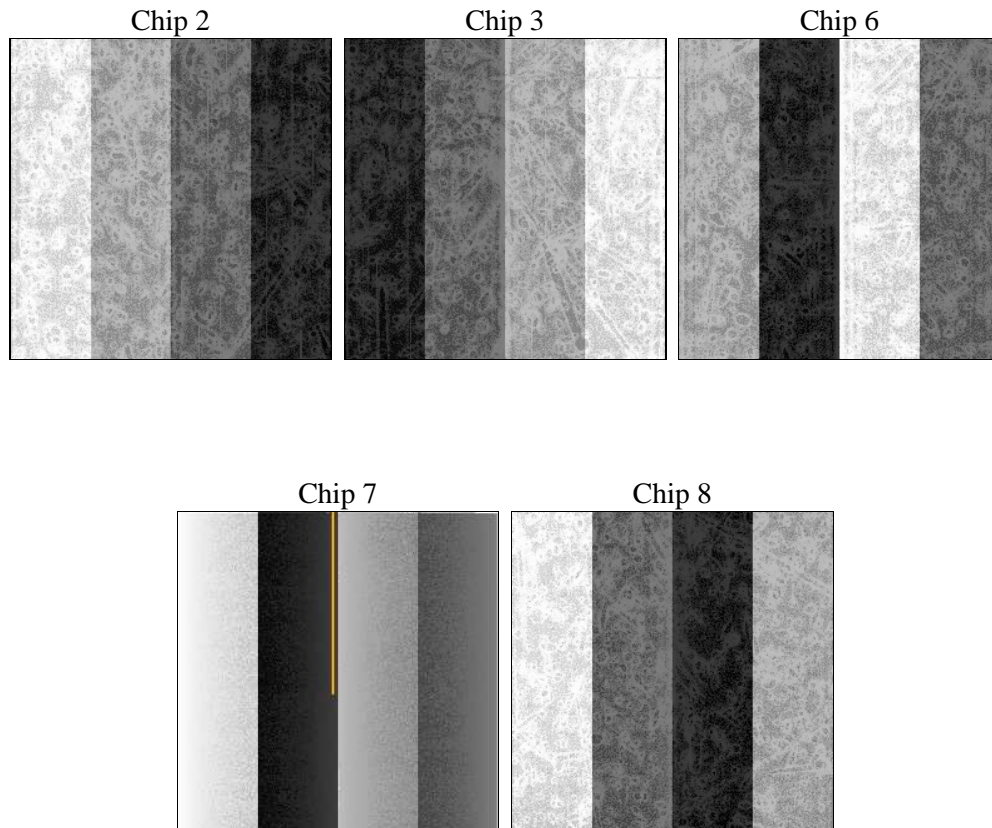
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	25468.000000	Scheduled observation exposure time
ascdsver	8.2.1	ASCDS version number	ontime	25196.431411453	Sum of GTIs [s]
caldsver	4.1.5	 	ontime2	25209.395272262	Sum of GTIs [s]
date	2010-01-29T20:15:36	Date and time of file creation	ontime3	25212.6361527	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	25215.877162777	Sum of GTIs [s]
			ontime7	25196.431411453	Sum of GTIs [s]
			ontime8	25222.359063283	Sum of GTIs [s]
			l1events	4014454	Number of level 1 events

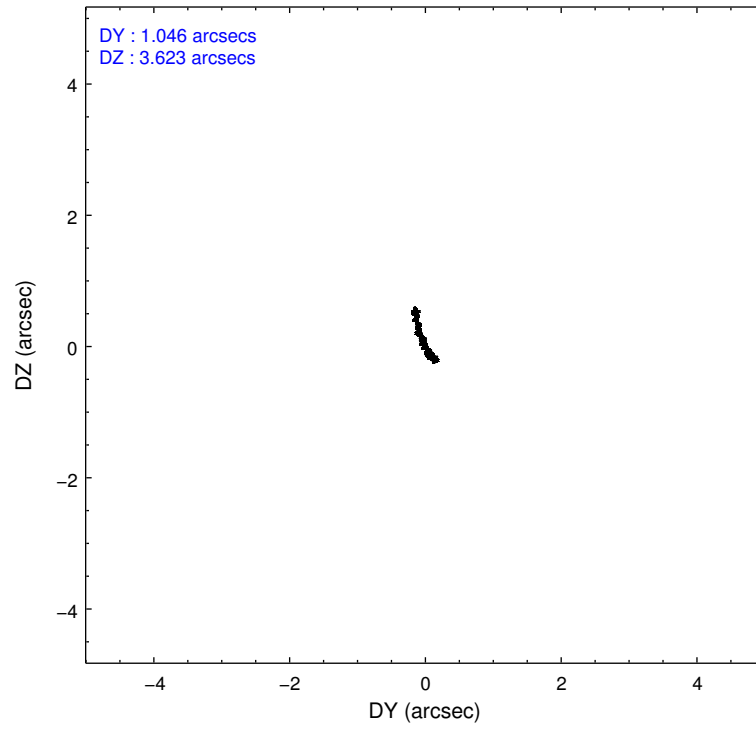
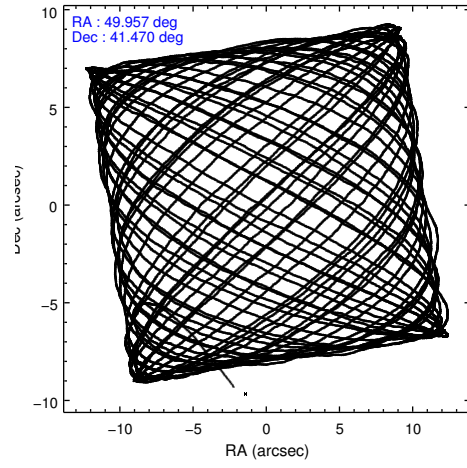
2.1.4 Events

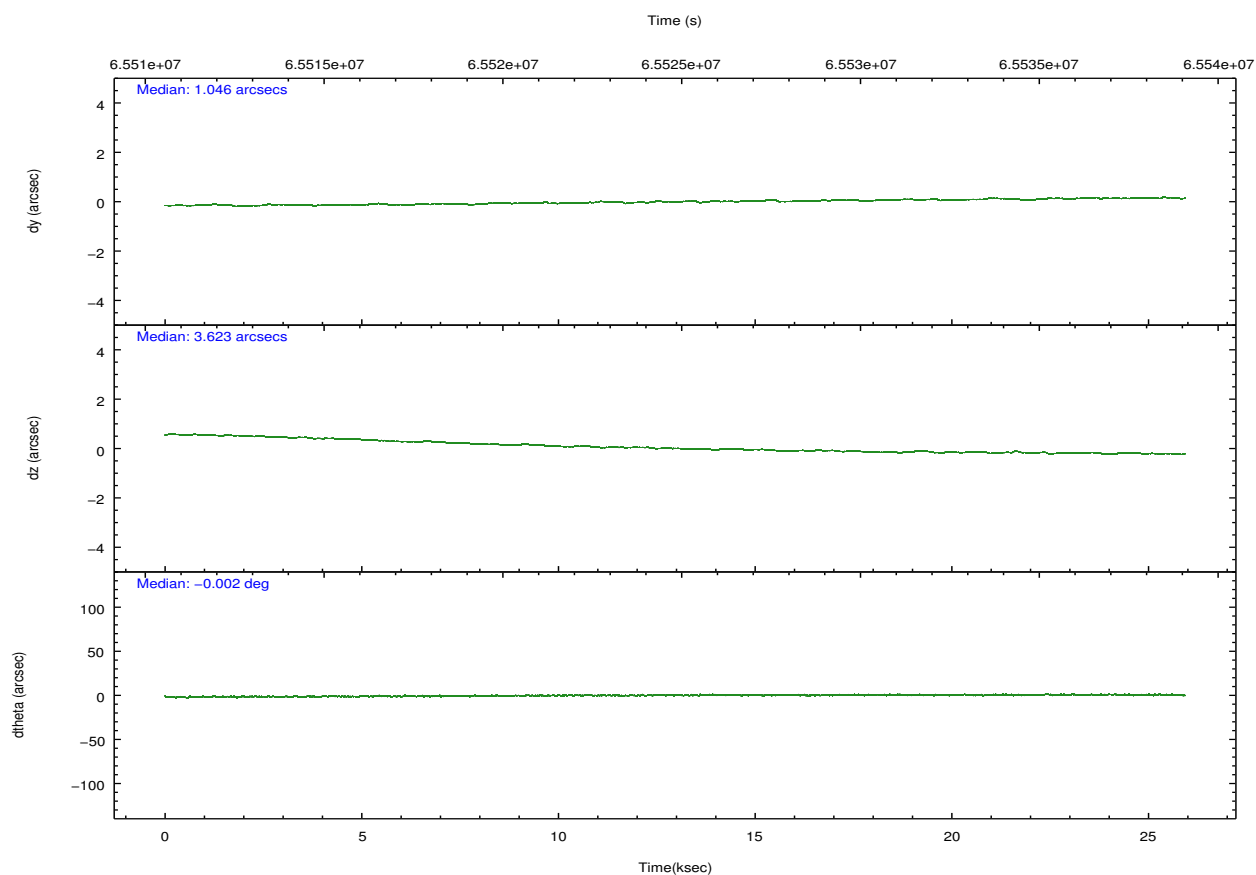
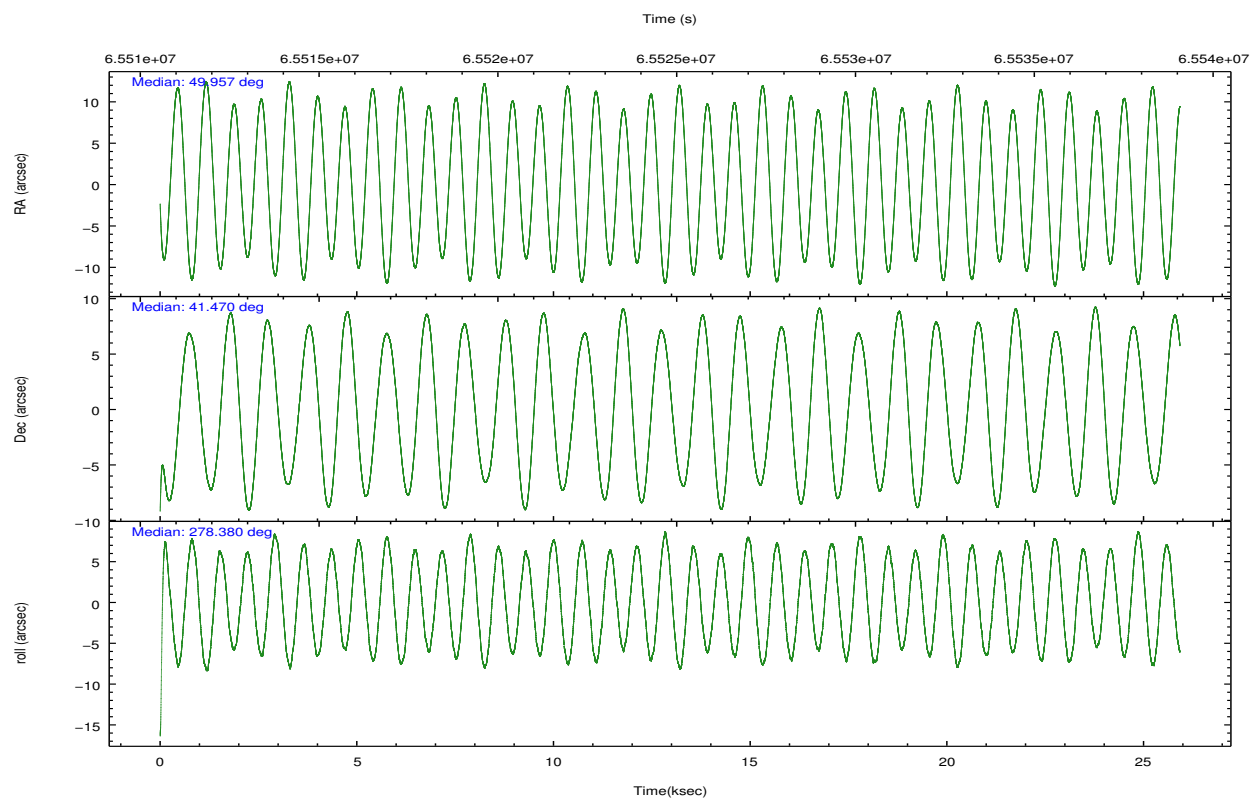
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	277558	284513	377304	2638187	436892	grade 0 events	33267	47458	95116	611543	122701
rejected events	206050	193151	203794	203416	217645		11%	16%	25%	23%	28%
rejected %	74%	67%	54%	7%	49%	grade 1 events	132	145	274	1770	490
							0%	0%	0%	0%	0%
						grade 2 events	26671	30506	57752	659705	55449
							9%	10%	15%	25%	12%
						grade 3 events	2318	2797	4346	267752	10680
							0%	0%	1%	10%	2%
						grade 4 events	2263	2689	4506	261115	9903
							0%	0%	1%	9%	2%
						grade 5 events	4009	4392	5100	34143	6884
							1%	1%	1%	1%	1%
						grade 6 events	7006	7943	11827	637271	20552
							2%	2%	3%	24%	4%
						grade 7 events	201892	188583	198383	164888	210233
							72%	66%	52%	6%	48%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-23678	ACIS-23678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
Pointing RA	49.934061	49.9568310114841	Subarray requested	NONE	NONE
Pointing Dec	41.491403	41.46980990514394	Alternating exposures requested	N	N
Pointing Roll	278.241530	278.3830658427902	Primary exposure time	0.000000	3.2
SIM focus pos (mm)	-0.684267	-0.6828225247311905			
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-190.132523	-190.1400660498719			
SIM translation stage offset (mm)	0	0.00754346686406393			
Observation start time	65512308.184000	65511149.498975			
Observation start date	2000-01-29T05:50:44	2000-01-29T05:32:29			
Observation end time	65537776.184000	65538421.674967			
Observation end date	2000-01-29T12:55:12	2000-01-29T13:07:01			
Read mode	TIMED	TIMED			

2.3 Aspect



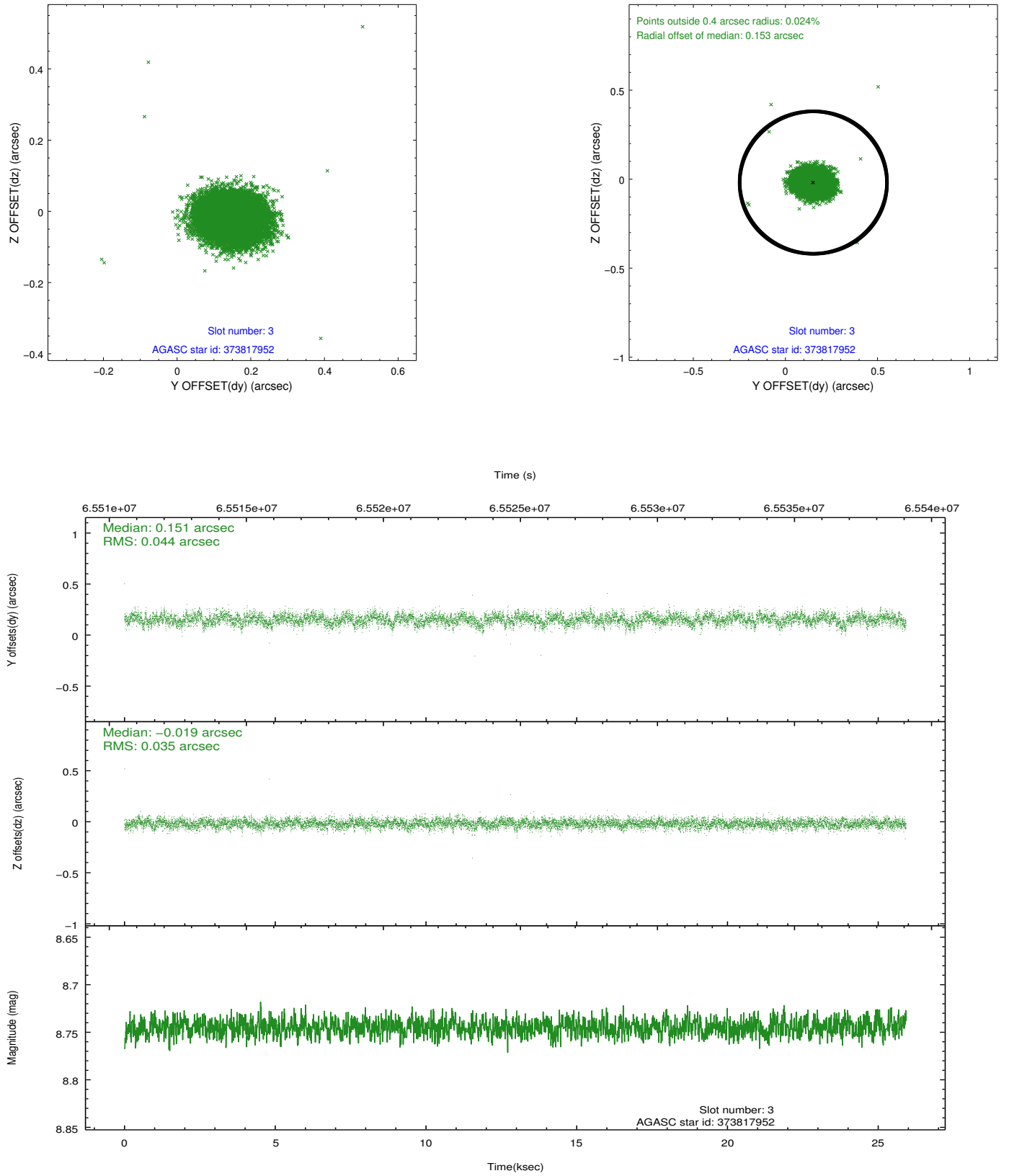


Slot Statistics

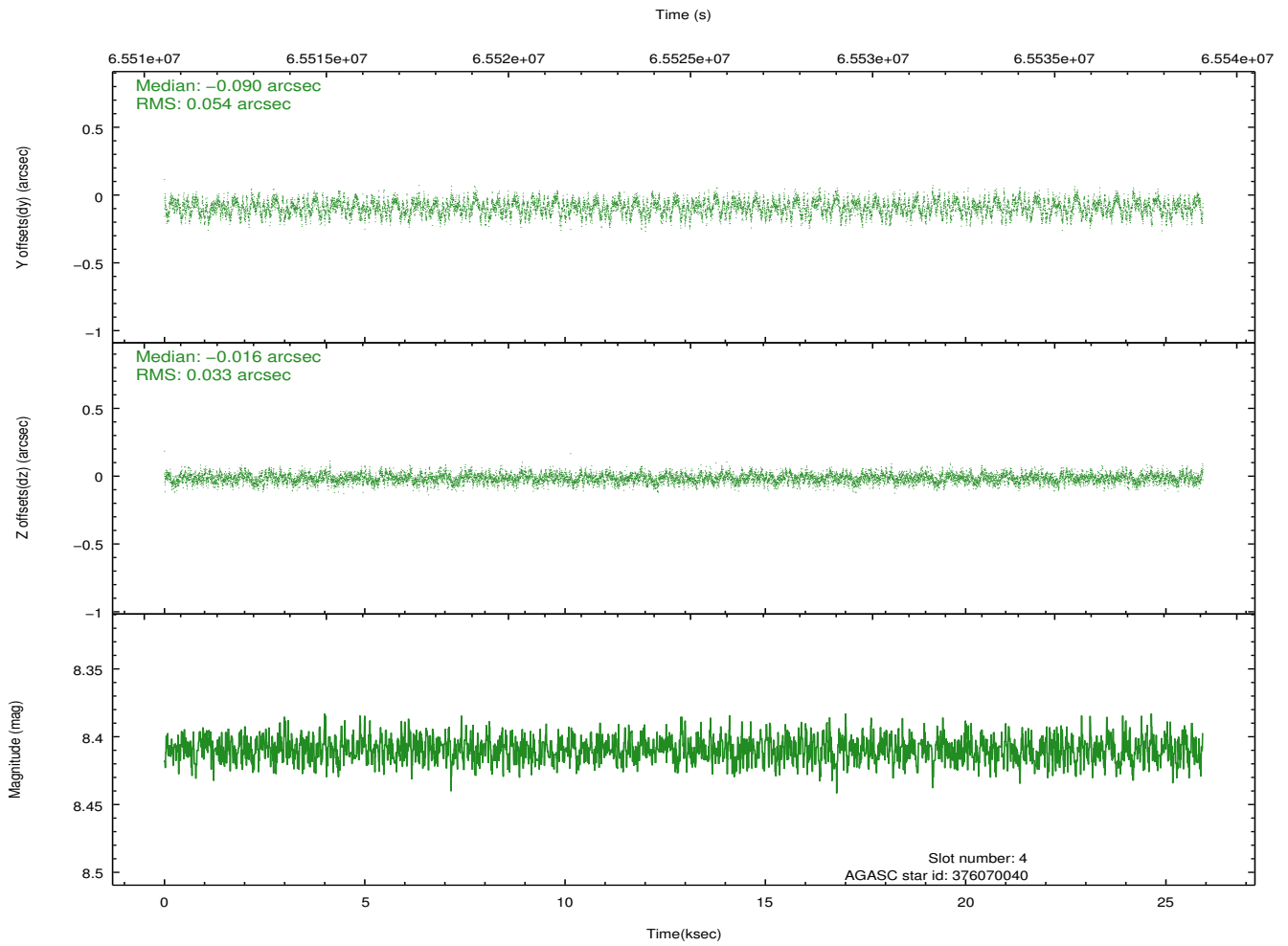
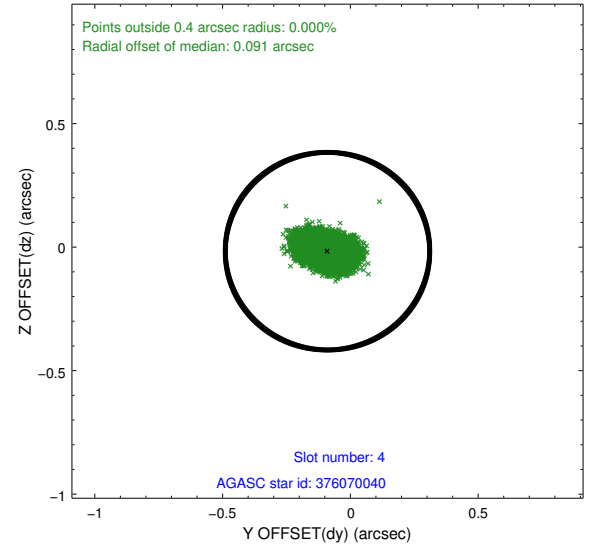
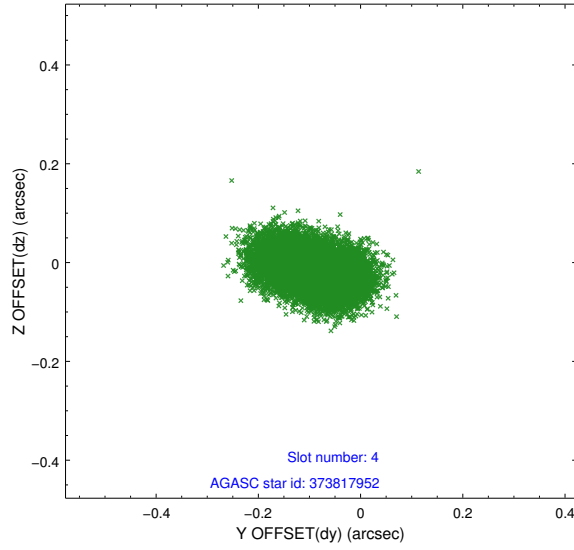
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-3	7.36	6318	0.007	-0.030	0.014	0.030	0.000000	0.000000	59.53	-1853.87
1	FID	ACIS-S-4	7.21	6314	-0.001	0.011	0.009	0.014	0.000000	0.000000	2159.73	183.53
2	FID	ACIS-S-5	7.24	6316	-0.034	0.029	0.010	0.021	0.000000	0.000000	-1806.36	177.47
3	GUIDE	373817952	8.75	12631	0.151	-0.019	0.059	0.097	49.913424	40.978510	1820.36	-319.78
4	GUIDE	376070040	8.41	12641	-0.090	-0.016	0.068	0.110	50.072031	41.897206	-1392.19	575.57
5	GUIDE	376068632	8.78	12636	-0.163	0.111	0.095	0.157	50.582093	42.167240	-2166.01	2061.44
6	GUIDE	373826120	8.90	12636	0.189	-0.137	0.055	0.092	49.738165	41.186341	1011.16	-682.19
7	GUIDE	374356920	9.47	12633	-0.095	0.057	0.080	0.130	49.733740	42.091452	-2214.31	-219.69

2.4 Star Slots

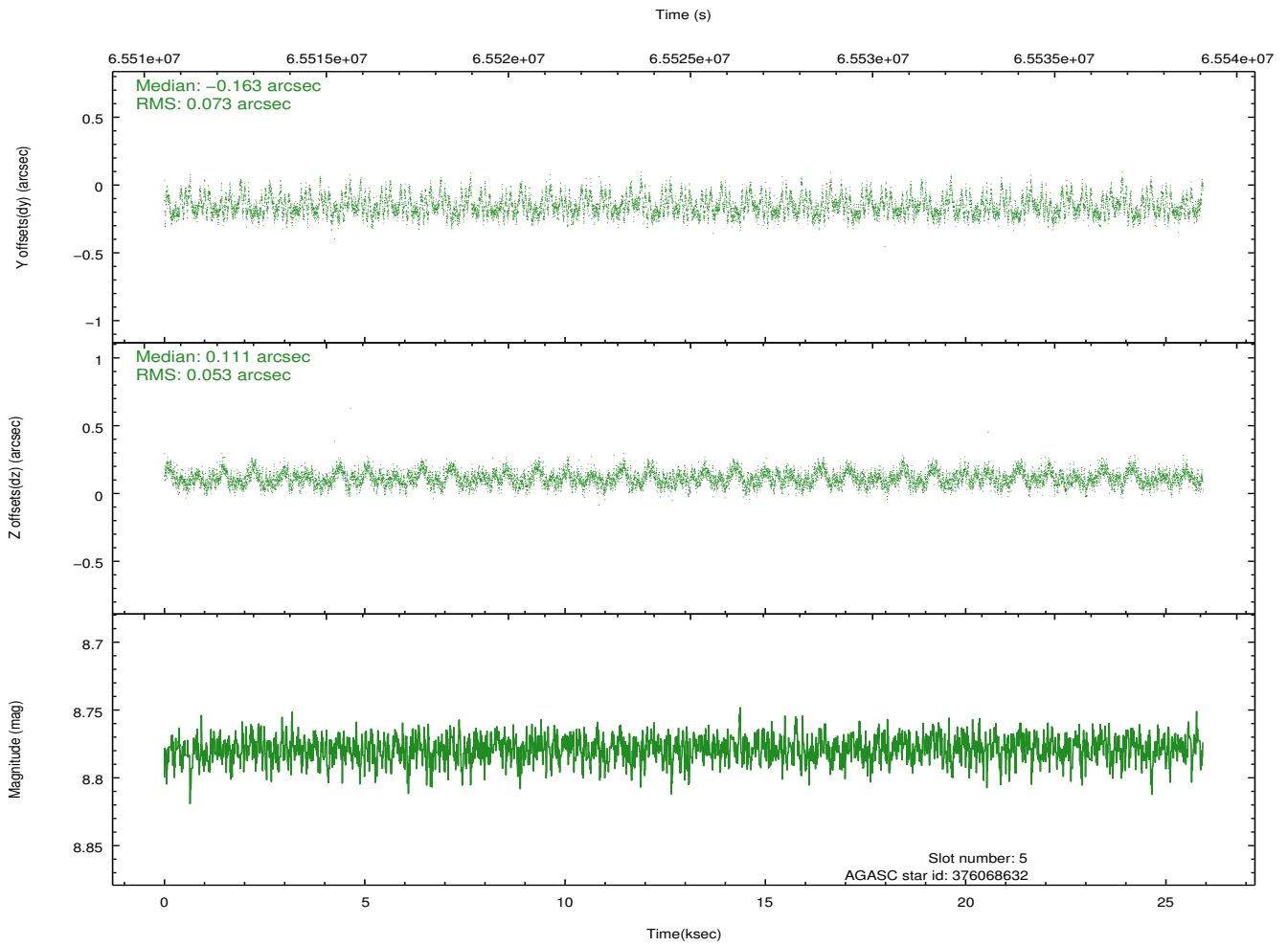
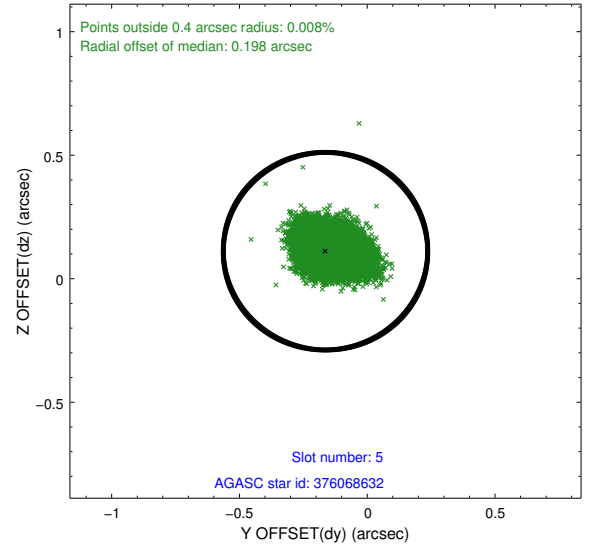
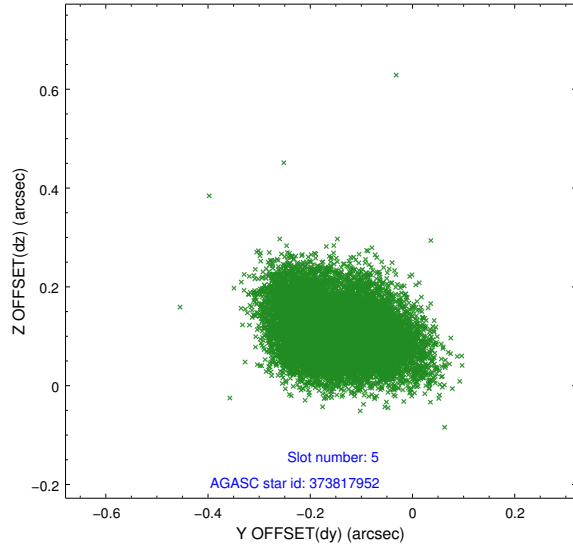
2.4.1 Slot 3



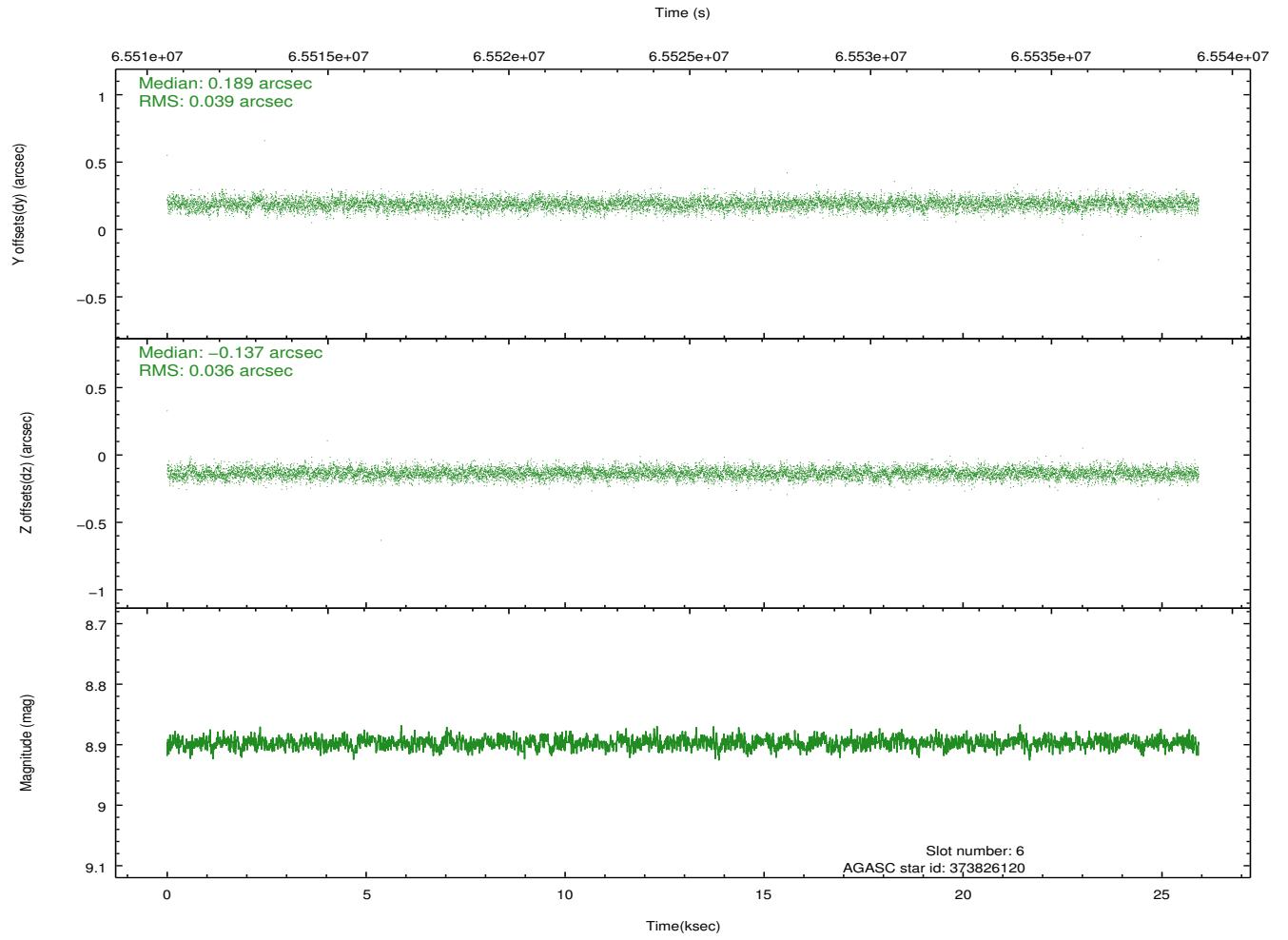
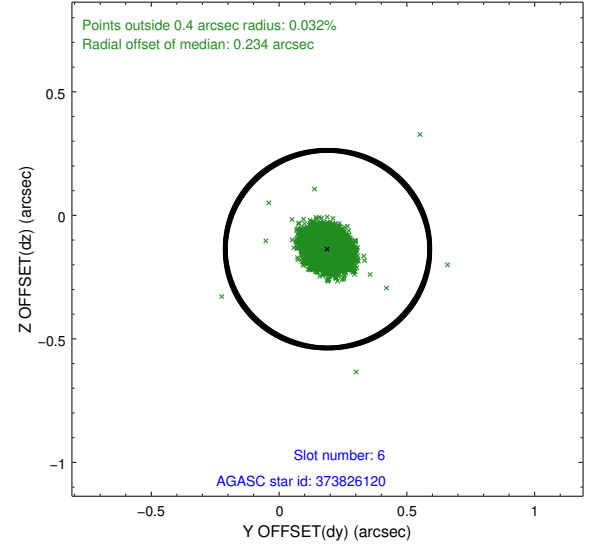
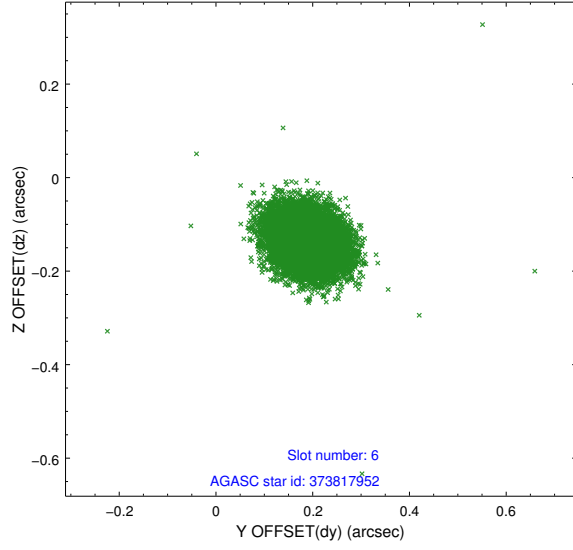
2.4.2 Slot 4



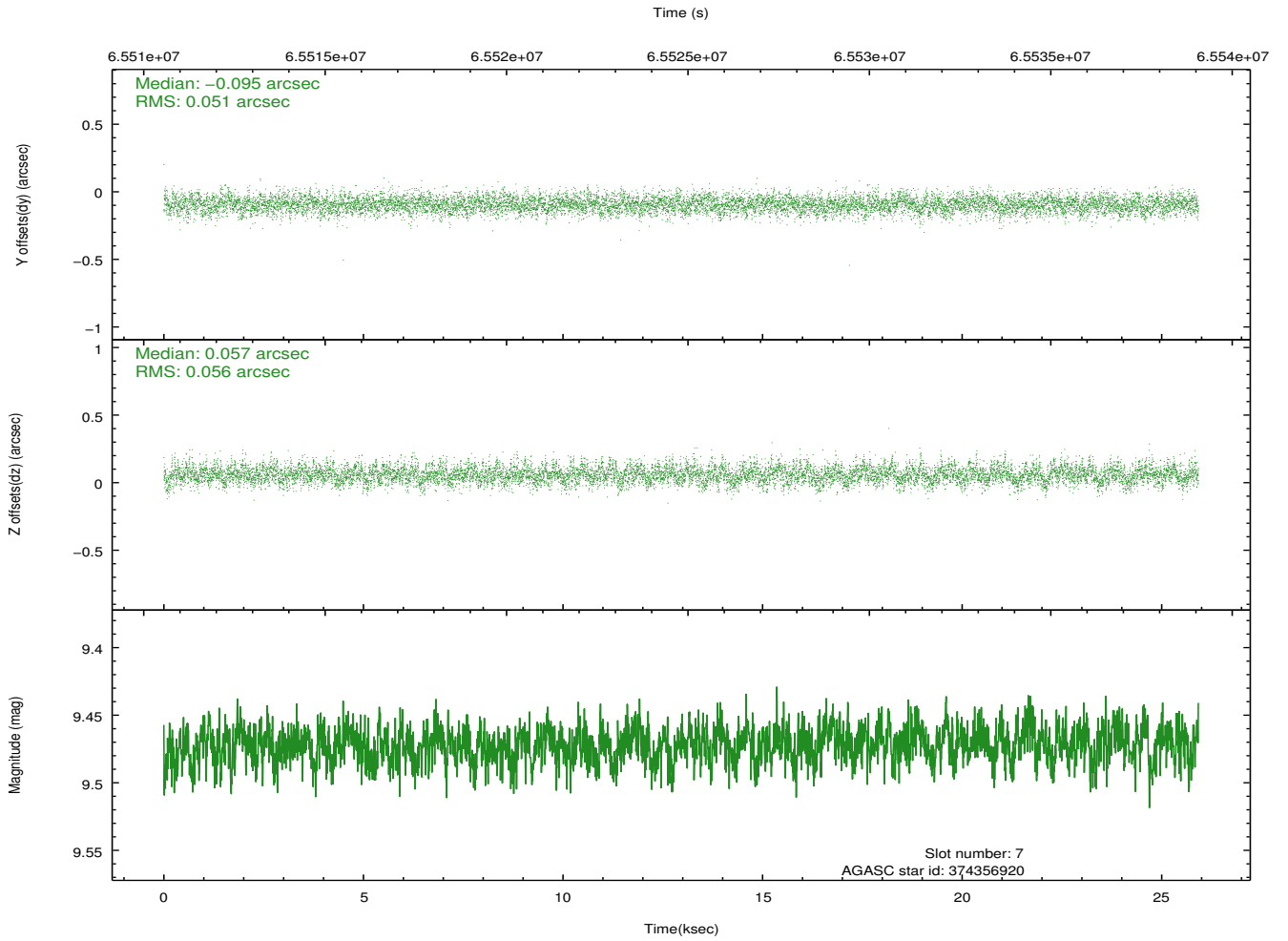
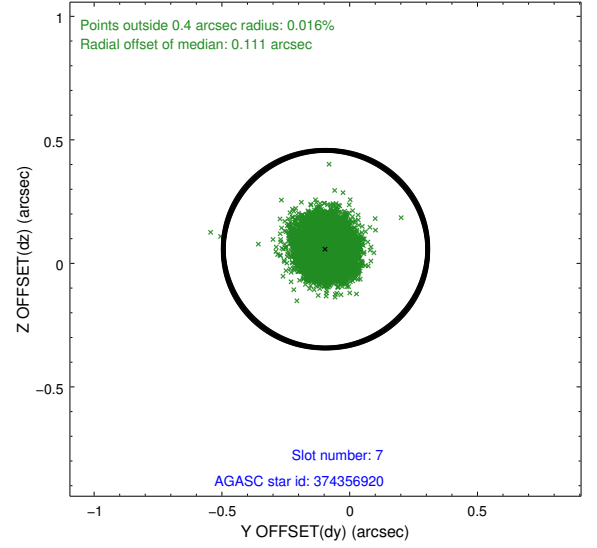
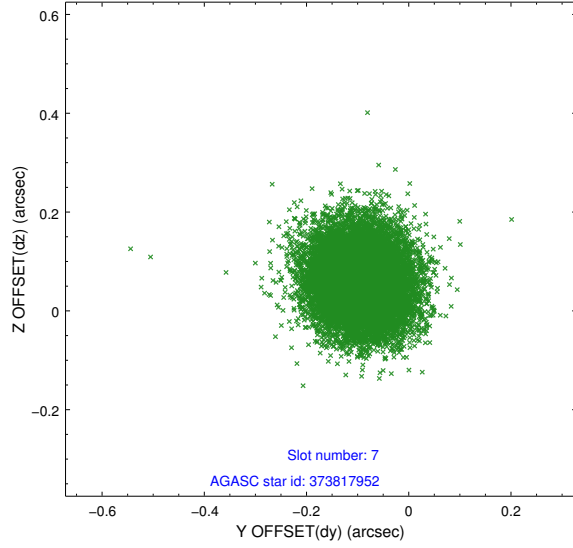
2.4.3 Slot 5



2.4.4 Slot 6

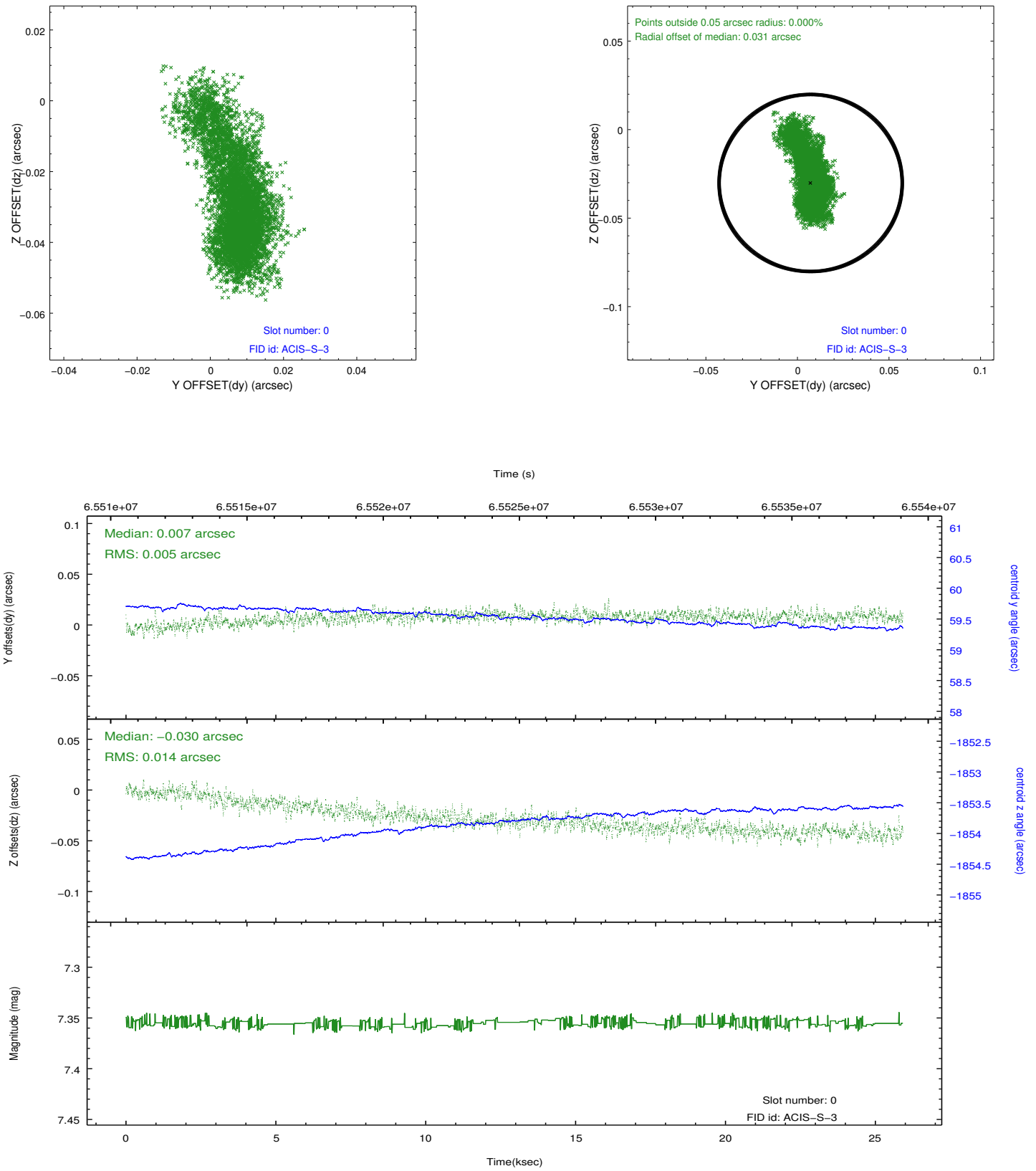


2.4.5 Slot 7

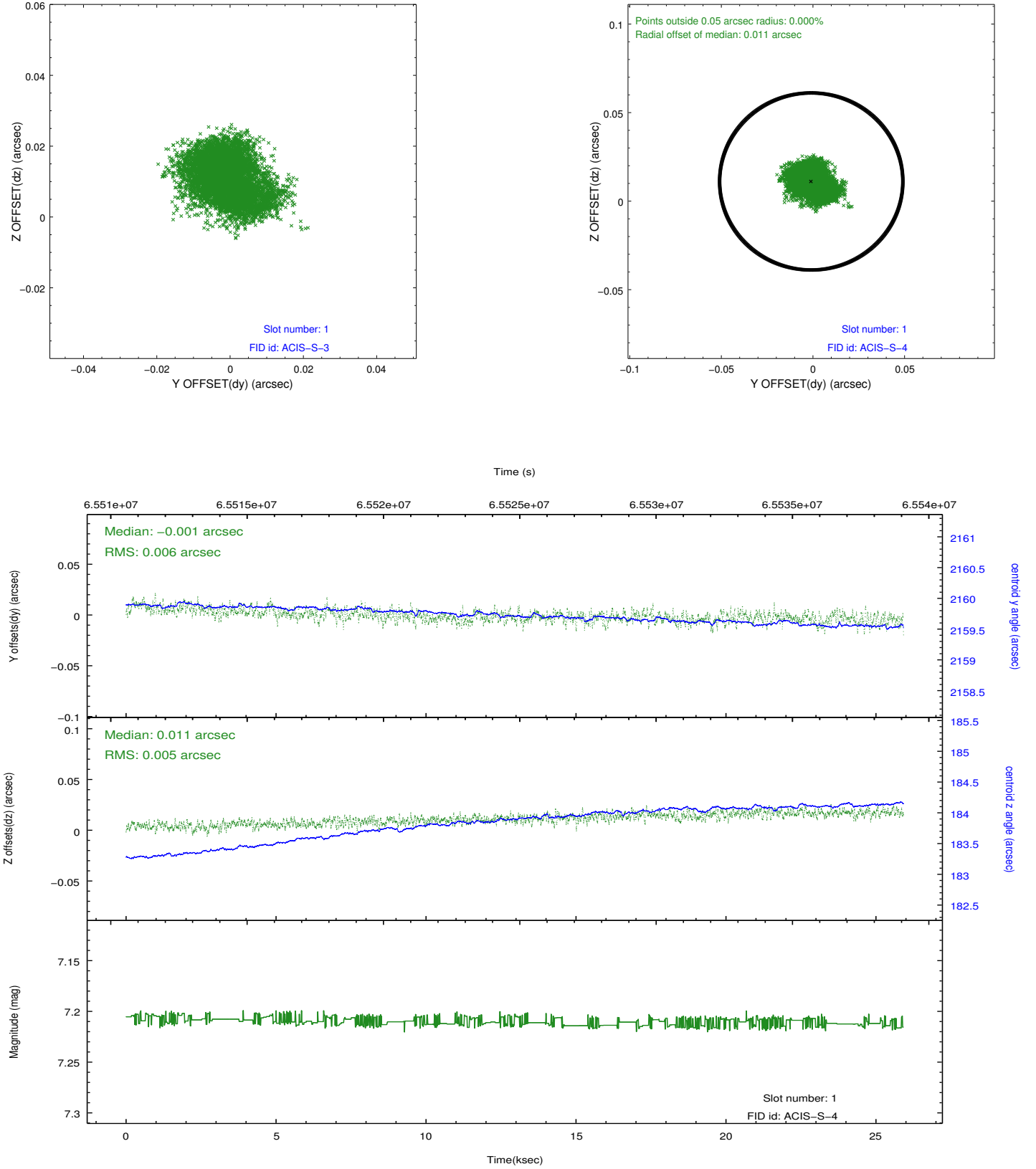


2.5 FID Slots

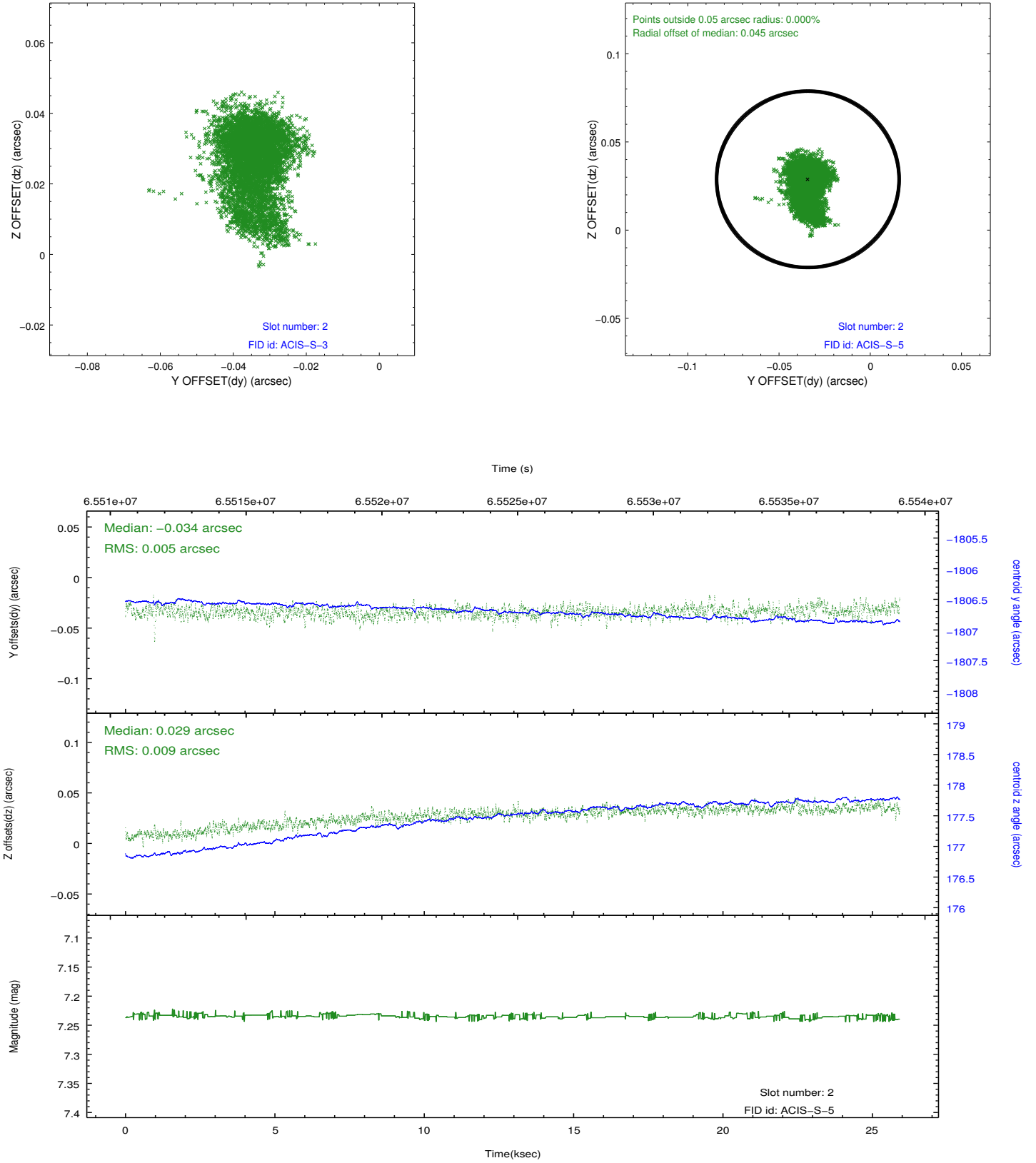
2.5.1 Slot 0



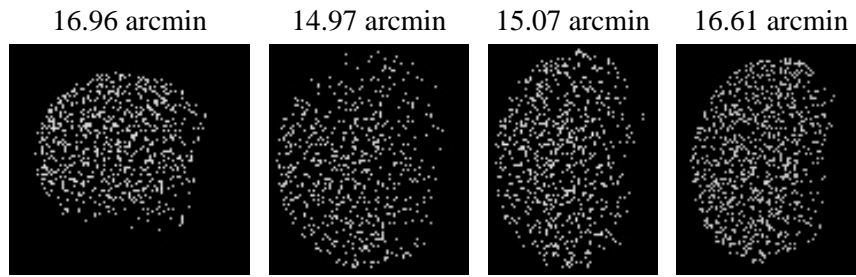
2.5.2 Slot 1



2.5.3 Slot 2



3 Point Sources



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2010.03.05
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	25.056

A.2 Comments

Charge time for this ObsId remains at original value of 25.056 ksec, although with the current processing the charge time would have been 26.196 ksec.

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The focal plane temperature is approximately -110C during this observation. This reprocessing of the data applies no CTI correction because none is available for this temperature at present.

The ACIS CTI correction has not been calibrated at this temperature, because it was early in the mission, and ACIS had not yet been lowered to the standard -119.7 C. Both front and back illuminated chips are affected. However a T_GAIN correction has been applied to the BI chips (ACIS-5 and ACIS-7) data included here.

The ACIS spectral response calibration is less accurate at these warmer temperatures than it is at -119.7 C. Users whose science objectives depend on the most accurate spectral response (ie: fitting line-rich spectra) may notice an effect. Users whose science objectives do not depend on the most accurate spectral response should not notice an effect.