

V&V Reference Report

L2 ASCDS Version : 8.1.2

Observation 1234 - L2 Version 3

Chandra X-Ray Center

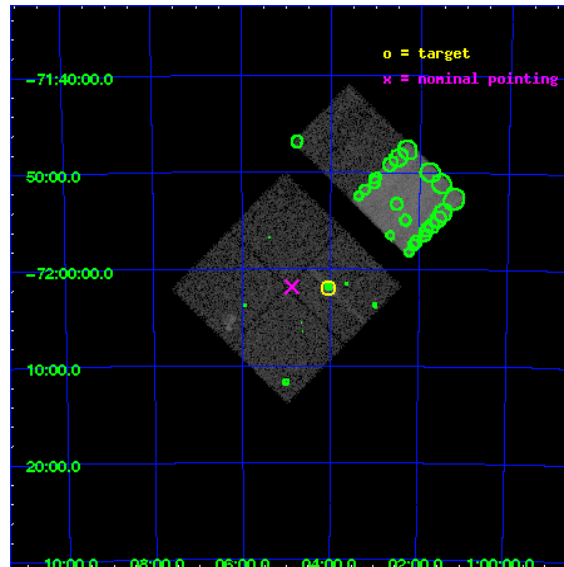
L2 Processing Date : Dec 17 2009

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 7	12
2.5	FID Slots	13
2.5.1	Slot 0	13
2.5.2	Slot 1	14
2.5.3	Slot 2	15
3	Point Sources	16
A	Summary	17
A.1	Status	17
A.2	Comments	17

1 Front

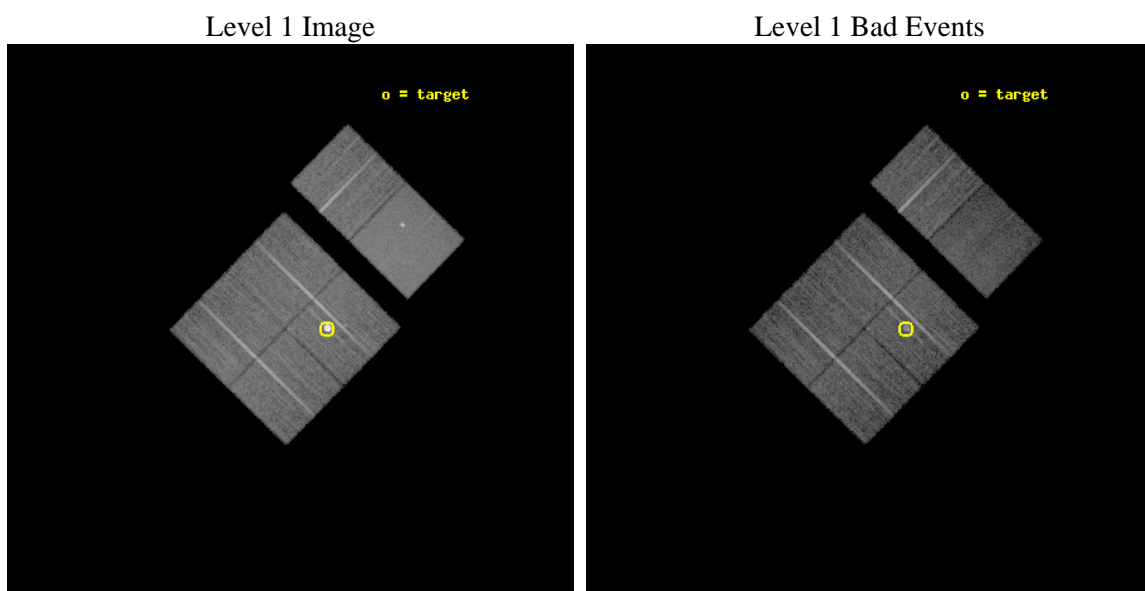
seq_num	580184	Sequence number
obs_id	1234	Observation id
title	ACIS CHIP RESPONSE TO LINES WITH E=0.6-1.5 KEV	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	E0102-72.3 [Chip I3, T=100, Offsets=-2,2,0]	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	16.01	Observer's specified target RA
dec_targ	-72.032028	Observer's specified target Dec
ra_nom	16.21834368173	Nominal RA
dec_nom	-72.031038430023	Nominal Dec
roll_nom	44.351048192385	Nominal Roll
revision	3	Processing version of data
ontime	9759.1991476417	Sum of GTIs [s]
livetime	9635.62229175	Livetime [s]
ontime0	9759.3222875595	Sum of GTIs [s]
ontime1	9759.2812475637	Sum of GTIs [s]
ontime2	9759.2401876375	Sum of GTIs [s]
ontime3	9759.1991476417	Sum of GTIs [s]
ontime6	9759.1581076384	Sum of GTIs [s]
ontime7	9759.36330764	Sum of GTIs [s]
l2events	144161	Number of level 2 events



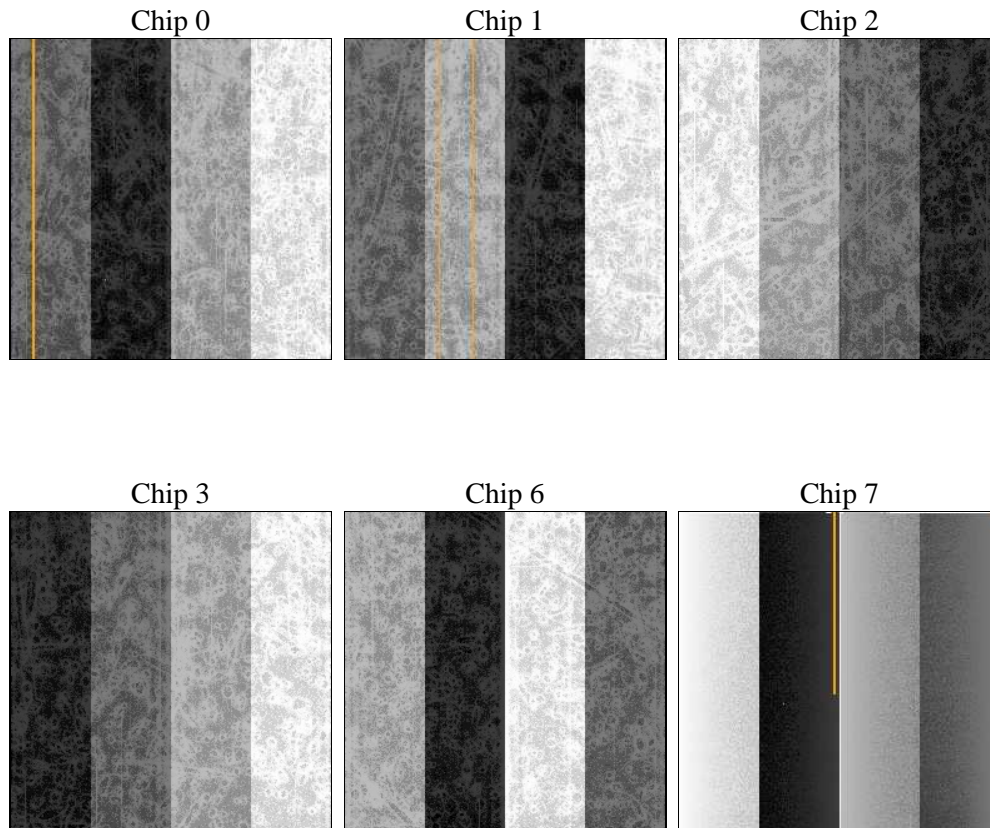
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	Scheduled observation exposure time
ascdsver	8.1.2	ASCDS version number	ontime	9759.1991476417	Sum of GTIs [s]
caldsver	4.1.4	 	ontime0	9759.3222875595	Sum of GTIs [s]
date	2009-12-17T09:28:56	Date and time of file creation	ontime1	9759.2812475637	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	9759.2401876375	Sum of GTIs [s]
			ontime3	9759.1991476417	Sum of GTIs [s]
			ontime6	9759.1581076384	Sum of GTIs [s]
			ontime7	9759.36330764	Sum of GTIs [s]
			l1events	653491	Number of level 1 events

2.1.4 Events

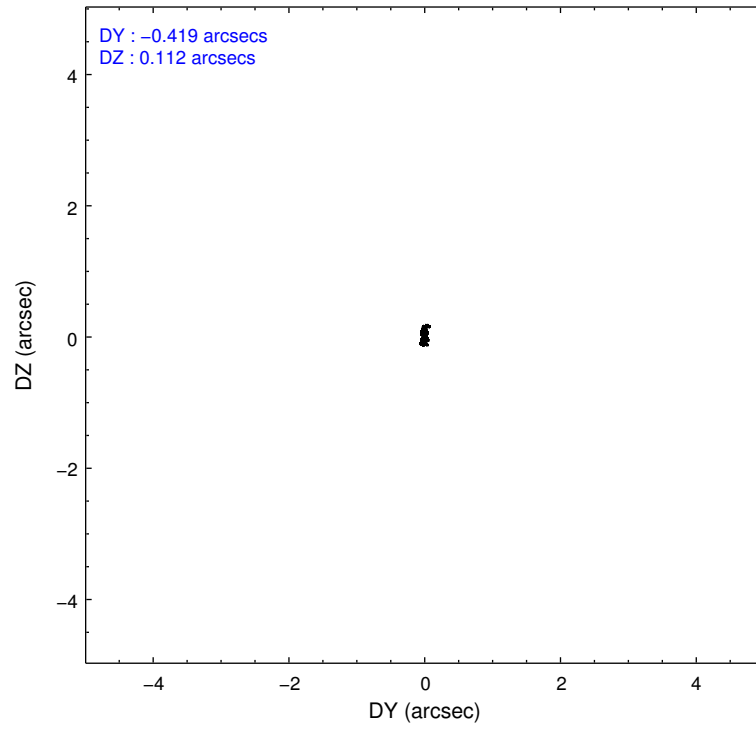
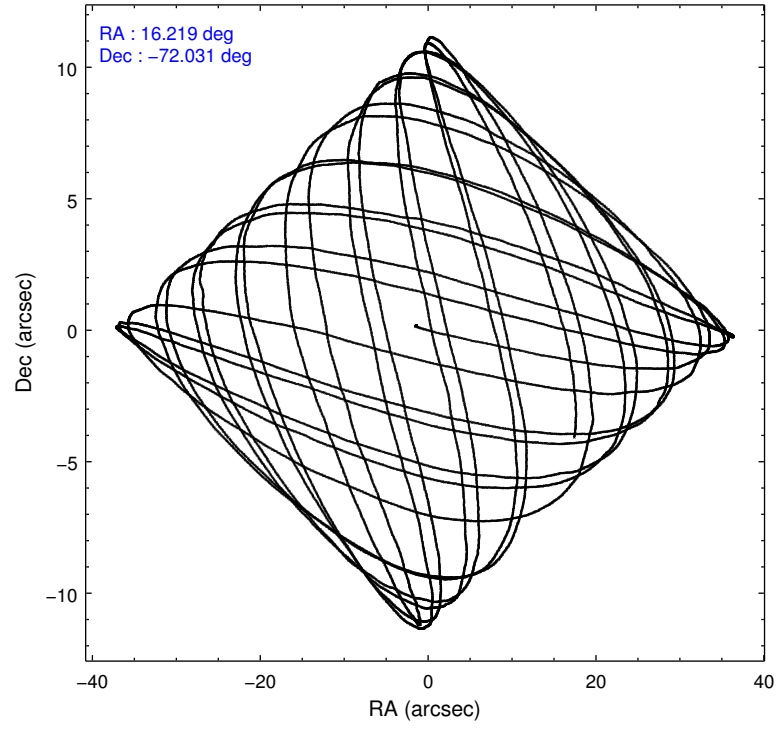
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	95749	94772	98099	141597	98115	125159	grade 0 events	3902	4328	3141	38740	2759	7538
rejected events	85706	83759	89238	91767	88748	61989		4%	4%	3%	27%	2%	6%
rejected %	89%	88%	90%	64%	90%	49%	grade 1 events	32	30	27	520	23	58
								0%	0%	0%	0%	0%	0%
							grade 2 events	2551	2631	2405	5795	2884	9995
								2%	2%	2%	4%	2%	7%
							grade 3 events	890	1071	851	1560	742	5913
								0%	1%	0%	1%	0%	4%
							grade 4 events	849	1028	764	1539	745	5058
								0%	1%	0%	1%	0%	4%
							grade 5 events	2178	2468	2038	2561	2210	6719
								2%	2%	2%	1%	2%	5%
							grade 6 events	1854	1962	1703	2239	2244	34686
								1%	2%	1%	1%	2%	27%
							grade 7 events	83493	81254	87170	88643	86508	55192
								87%	85%	88%	62%	88%	44%

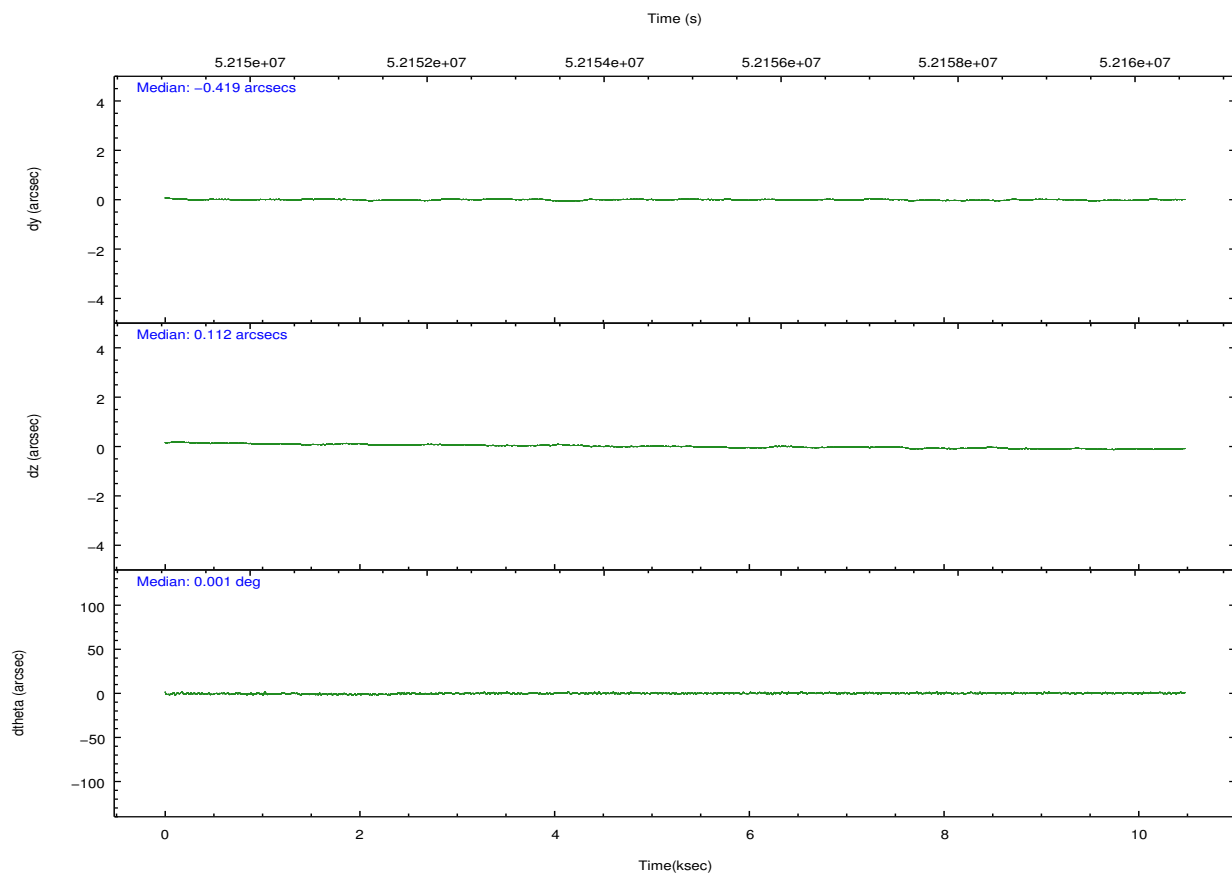
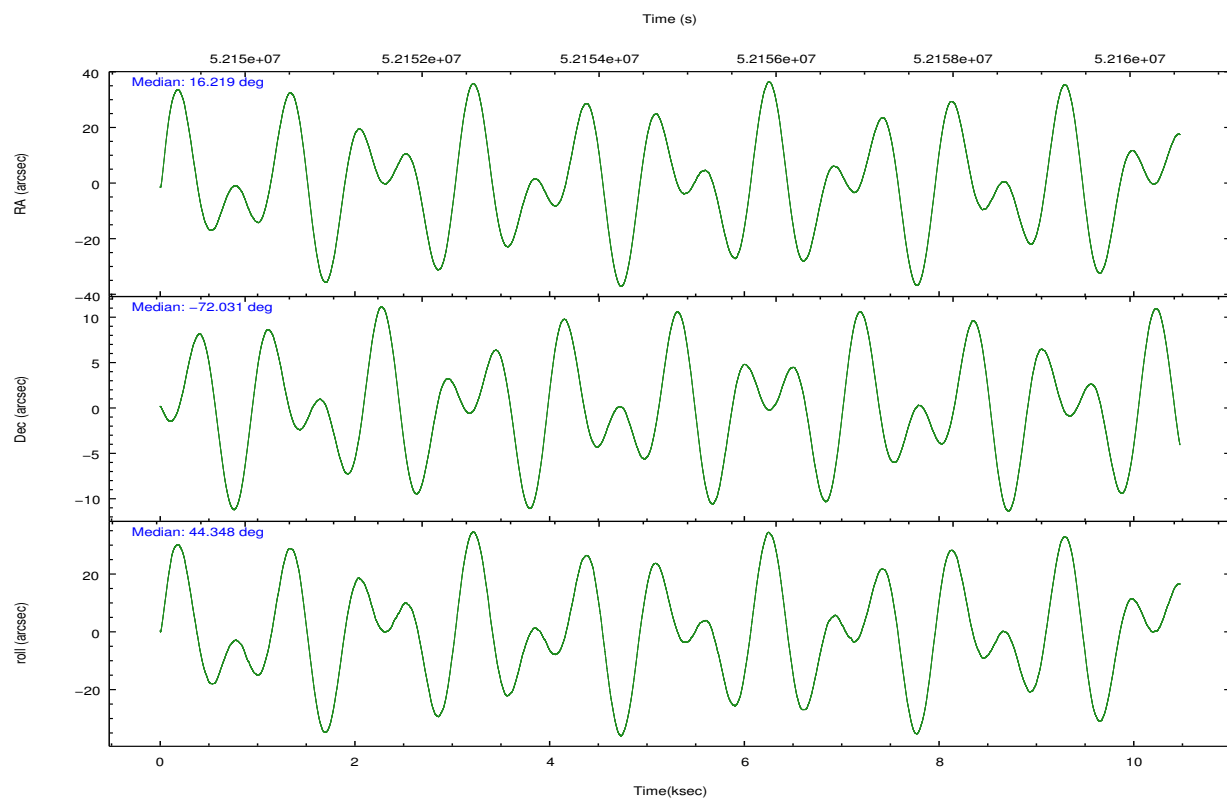
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-012367	ACIS-012367
Grating	NONE	NONE
Data mode	FAINT	FAINT
Observation mode	POINTING	POINTING
Pointing RA	16.191354	16.21834368172953
Pointing Dec	-72.057738	-72.03103843002276
Pointing Roll	44.116677	44.35104819238471
Window start time	49852864.184000	49852864.184000
Window stop time	55036864.184000	55036864.184000
SIM focus pos (mm)	-0.782348	-0.7809083437167272
SIM defocus (mm)	0	0.001439871863259334
SIM translation stage pos (mm)	-233.592463	-233.5874344608287
SIM translation stage offset (mm)	0	-0.005018542100998502
Observation start time	52150038.184000	52149372.523606
Observation start date	1999-08-27T14:06:14	1999-08-27T13:56:12
Observation end time	52160038.184000	52161443.43654
Observation end date	1999-08-27T16:52:54	1999-08-27T17:17:23
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	6	6
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
Primary exposure time	0.000000	3.2

2.3 Aspect



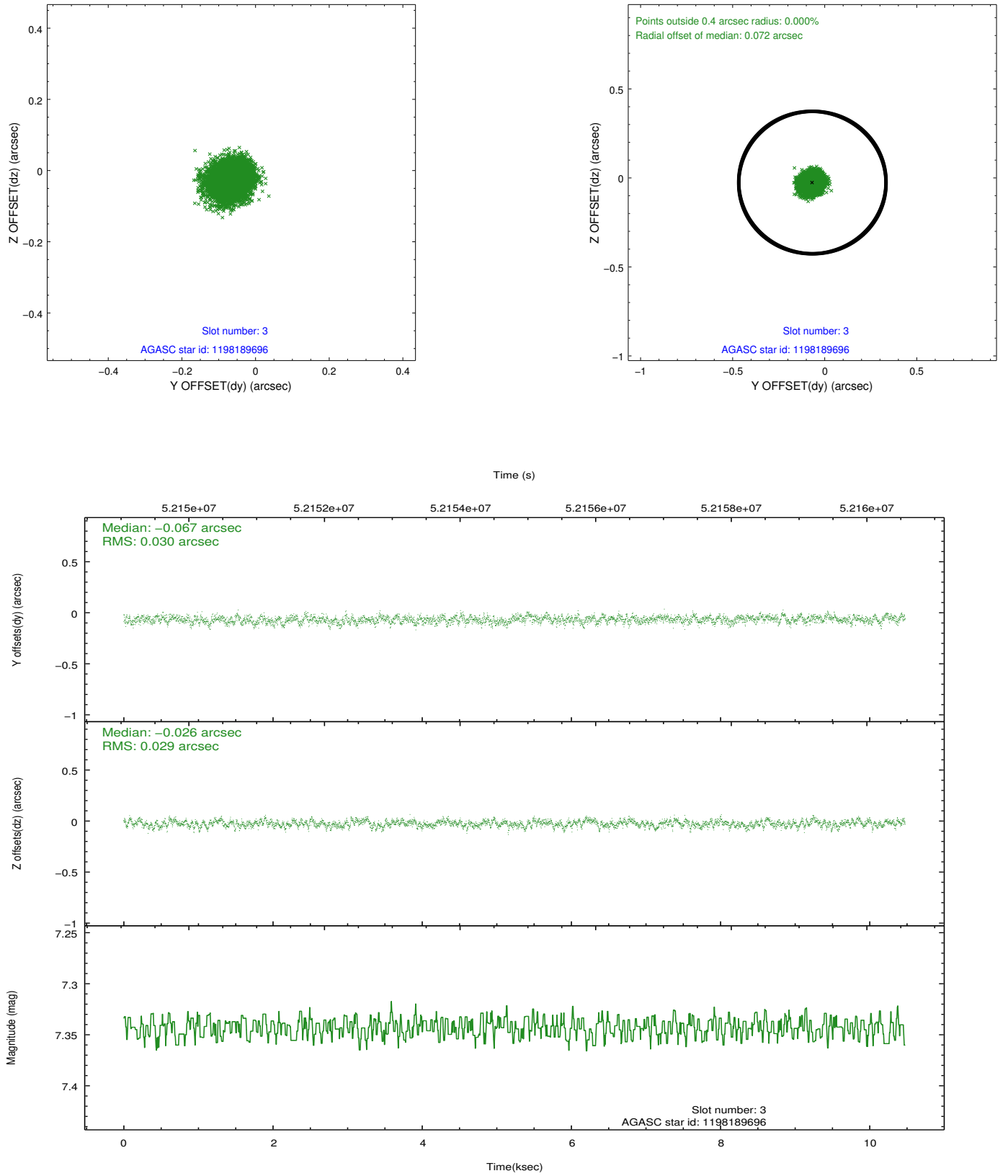


Slot Statistics

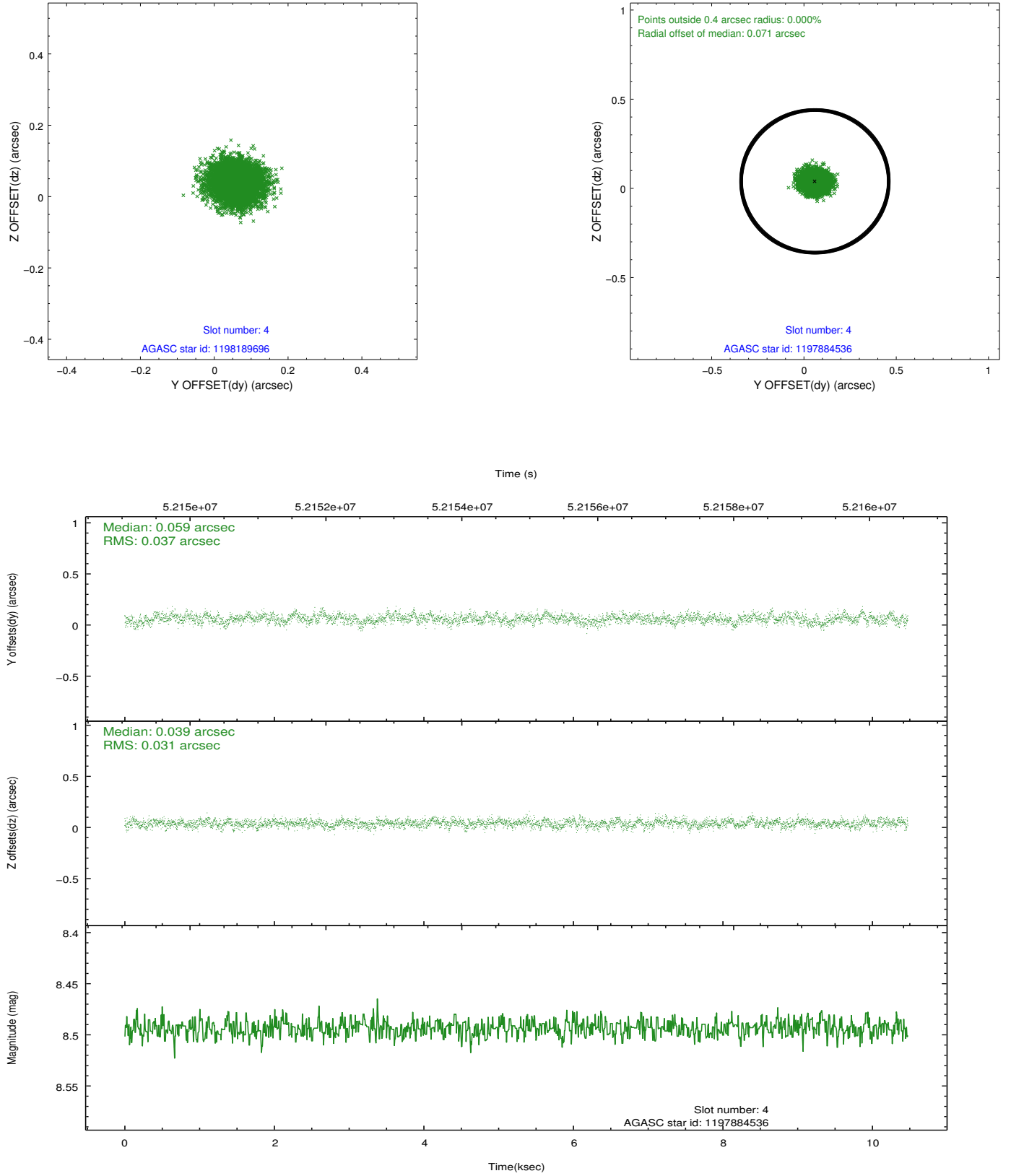
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.21	5110	-0.027	0.063	0.011	0.019	0.000000	0.000000	-753.94	-829.58
1	FID	ACIS-I-4	7.24	5109	0.113	0.008	0.010	0.019	0.000000	0.000000	2160.29	1076.29
2	FID	ACIS-I-5	7.23	5111	-0.186	-0.002	0.010	0.016	0.000000	0.000000	-1807.59	1074.54
3	GUIDE	1198189696	7.34	5111	-0.067	-0.026	0.046	0.071	15.223750	-72.697522	-2353.36	-937.68
4	GUIDE	1197884536	8.49	5111	0.059	0.039	0.051	0.083	17.160729	-71.835289	1331.56	-187.85
5	GUIDE	1197878768	9.62	5107	0.047	0.062	0.099	0.156	16.656786	-71.304581	2271.38	1572.29
6	UNUSED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
7	GUIDE	1197885104	9.36	5105	-0.038	-0.077	0.073	0.122	17.845067	-72.189368	959.99	-1624.45

2.4 Star Slots

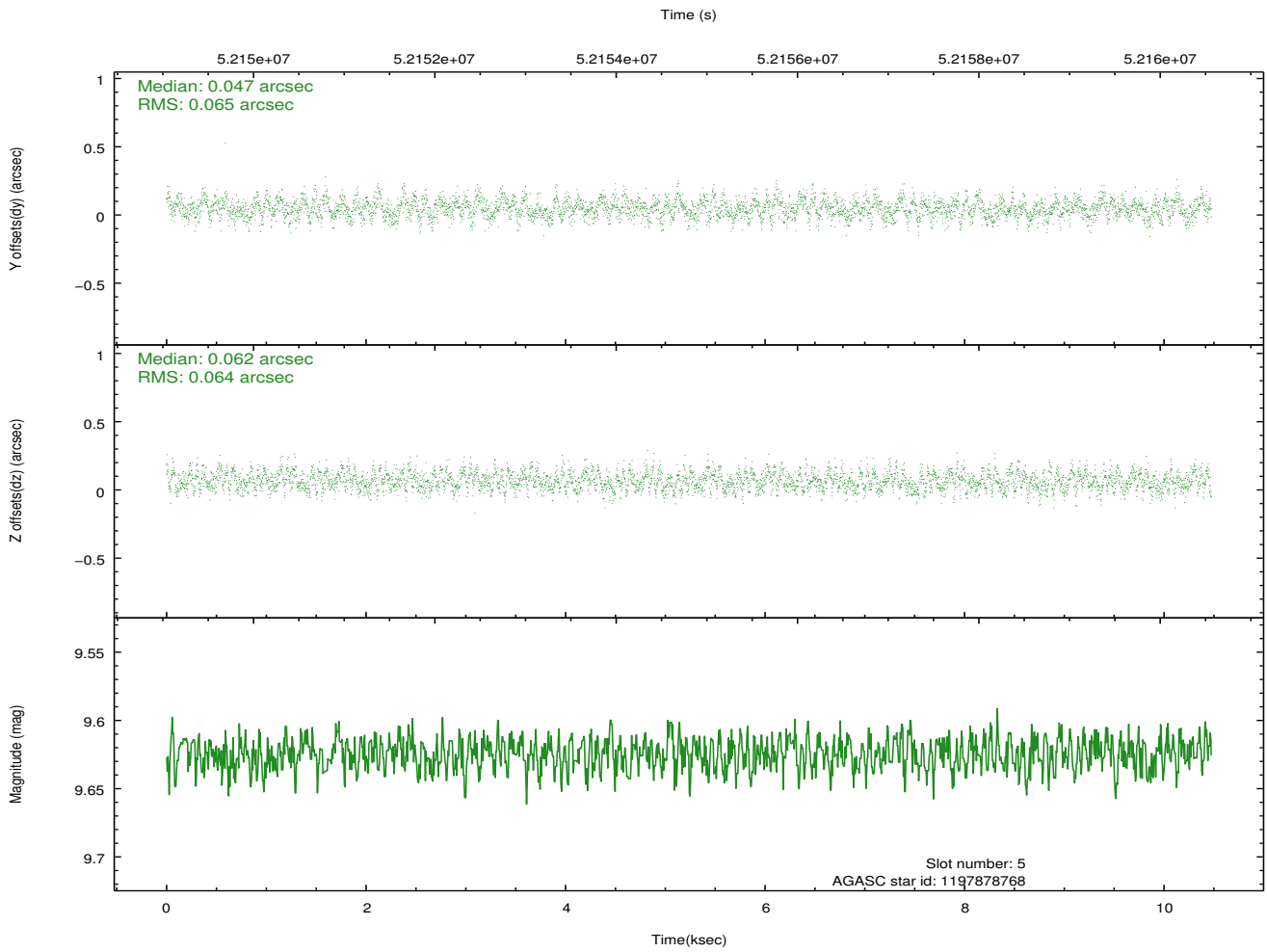
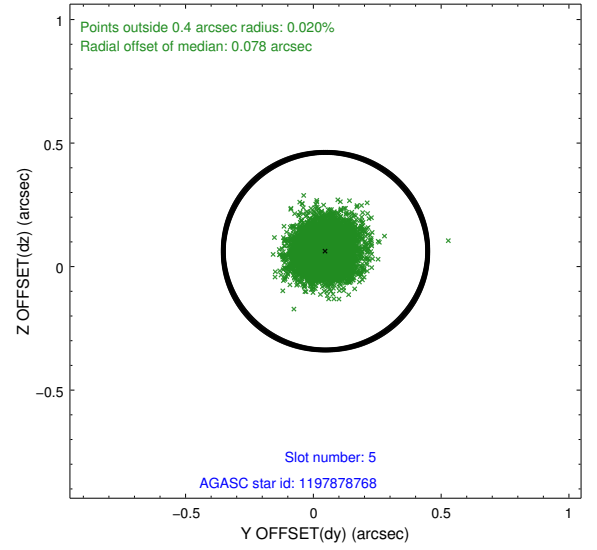
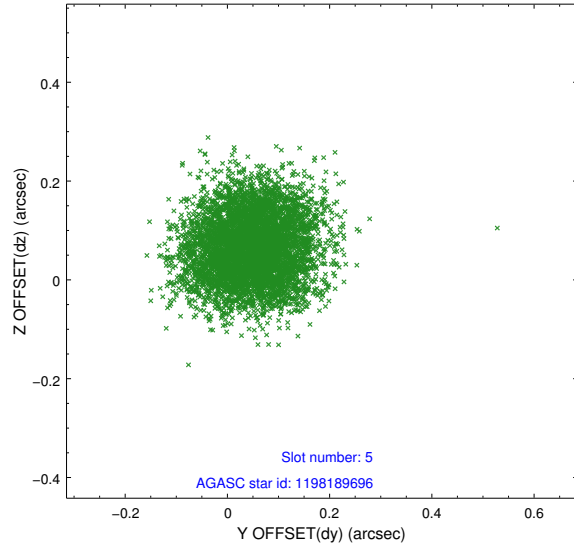
2.4.1 Slot 3



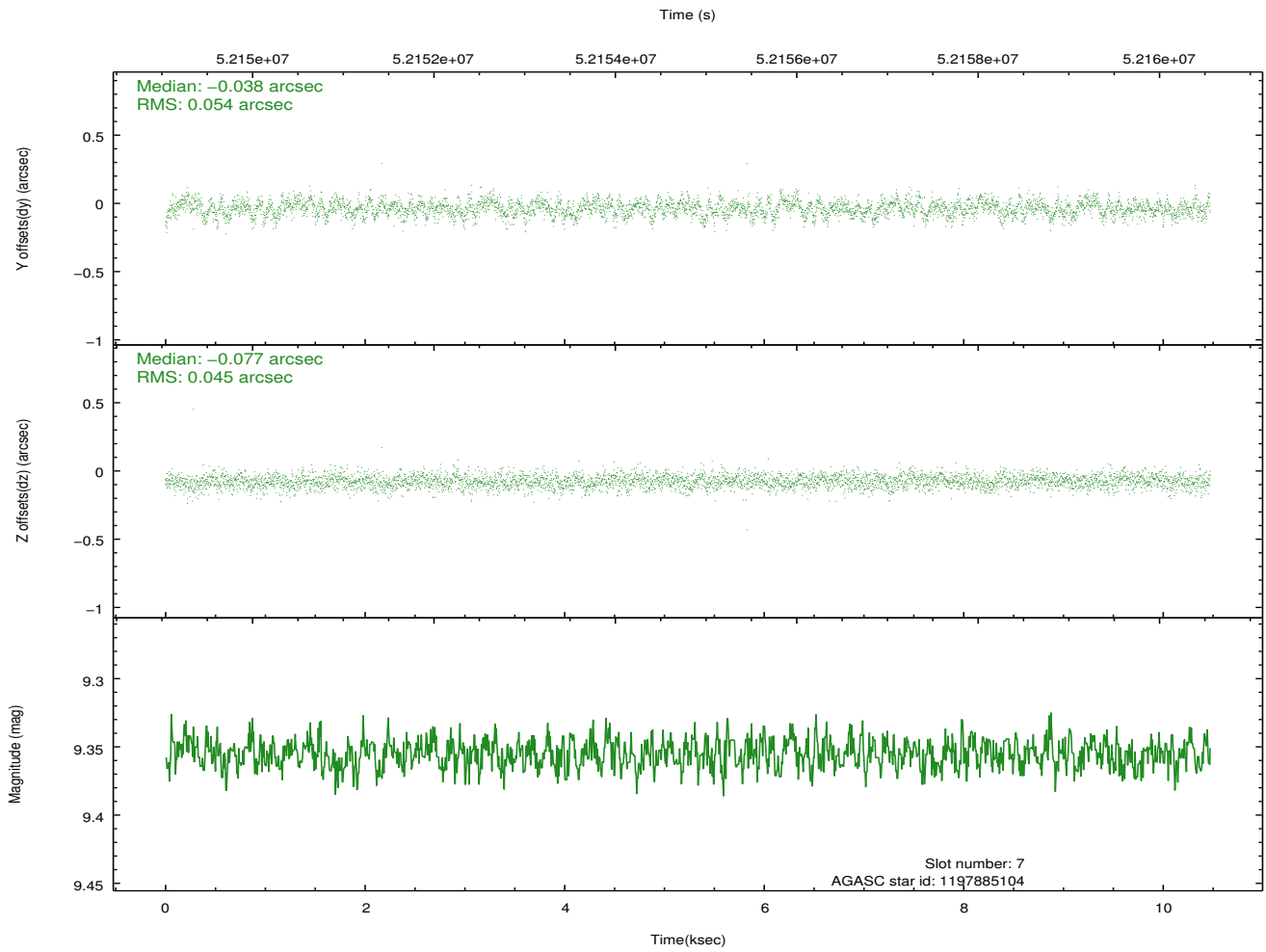
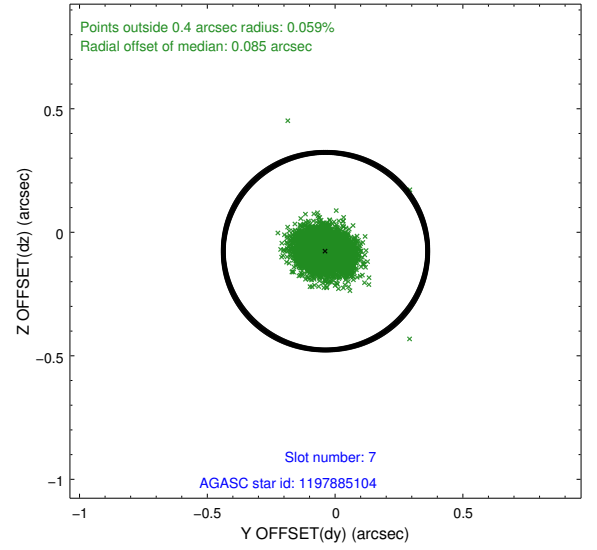
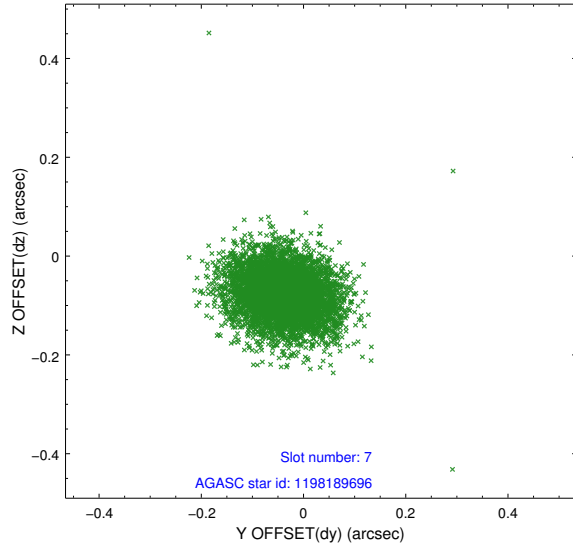
2.4.2 Slot 4



2.4.3 Slot 5

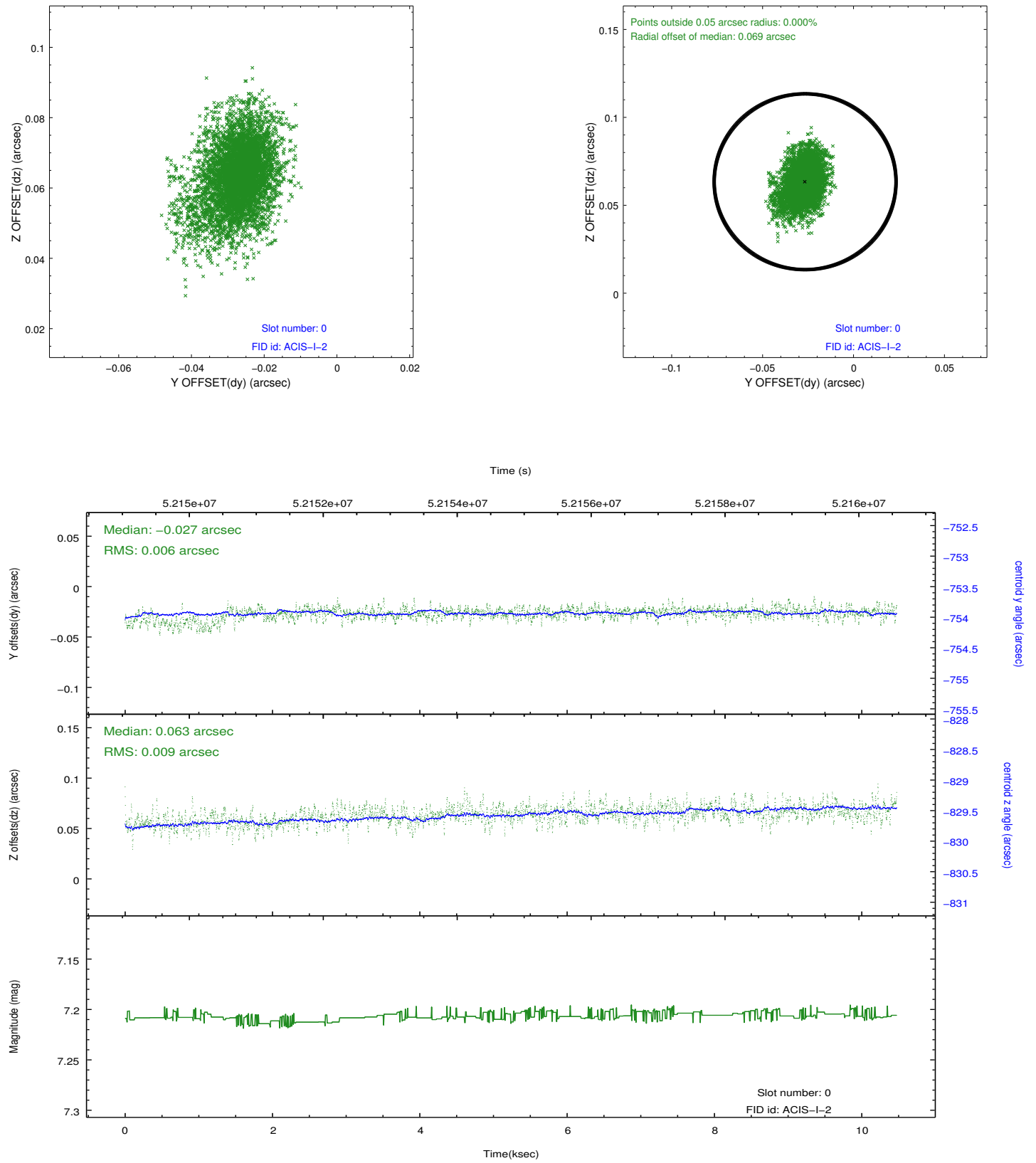


2.4.4 Slot 7

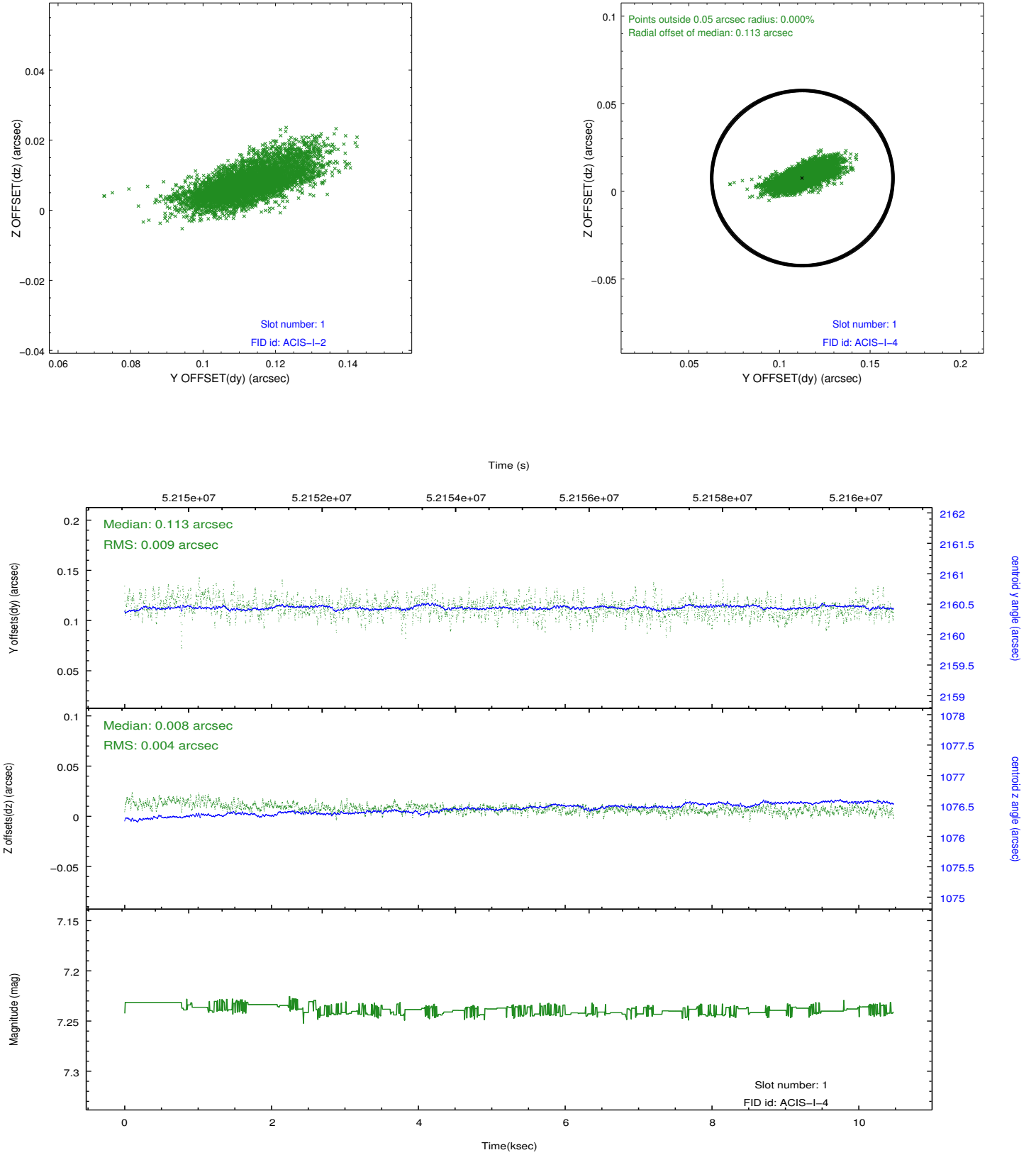


2.5 FID Slots

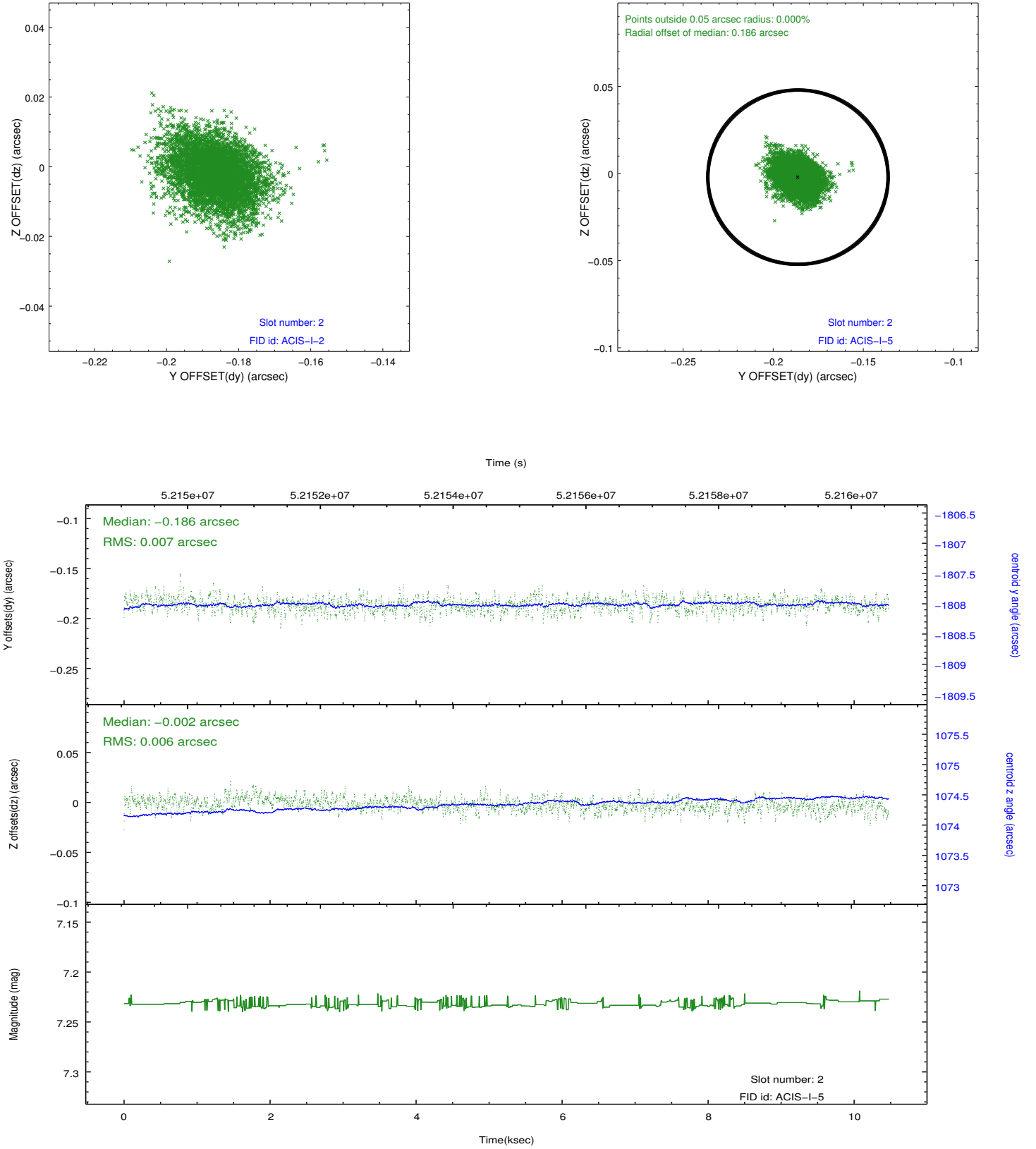
2.5.1 Slot 0



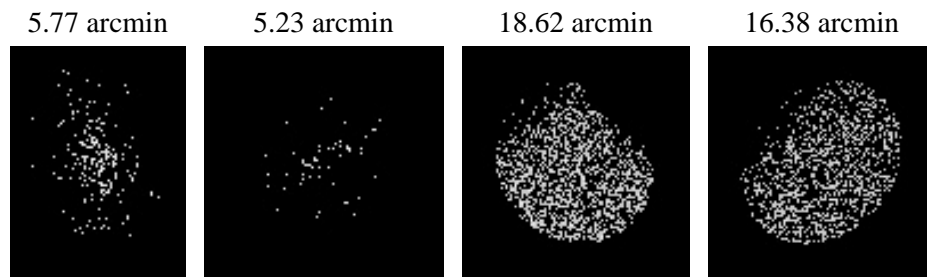
2.5.2 Slot 1



2.5.3 Slot 2



3 Point Sources



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2010.08.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.76

A.2 Comments

The focal plane temperature is approximately -100 C 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.