

V&V Reference Report

L2 ASCDS Version : 8.1.2

Observation 161 - L2 Version 3
Chandra X-Ray Center

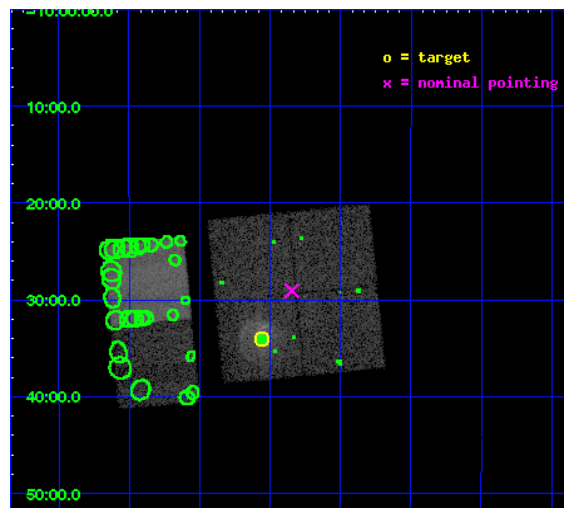
L2 Processing Date : Dec 17 2009

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 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
3	Point Sources	17
A	Summary	18
A.1	Status	18
A.2	Comments	18

1 Front

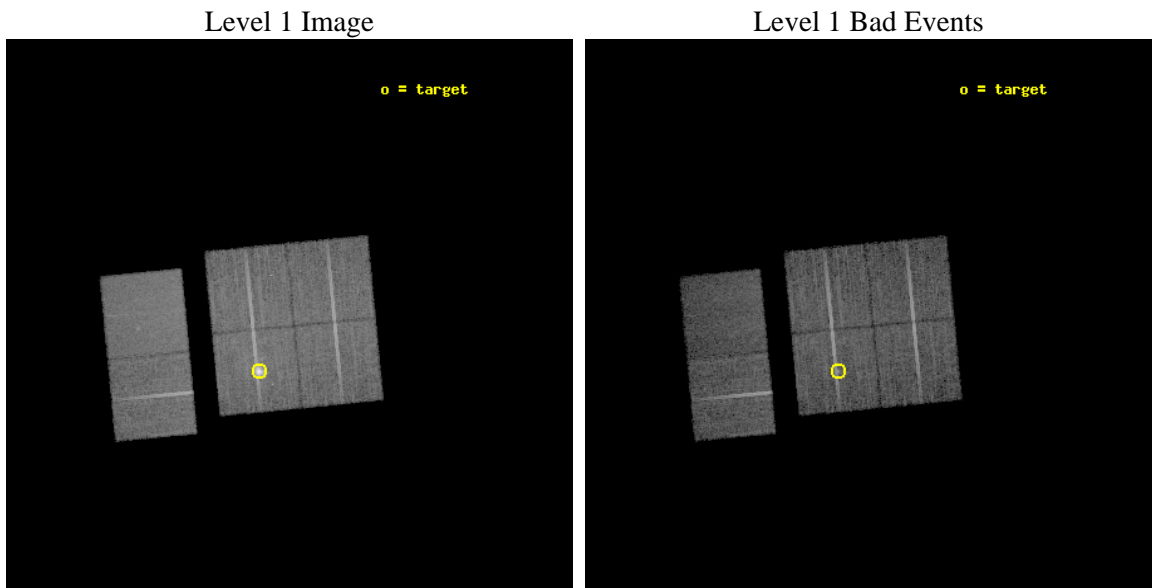
seq_num	590029	Sequence number
obs_id	161	Observation id
title	ACIS CHIP RESPONSE TO A CONTINUUM SOURCE	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	G21.5-0.9 [Chip I2, T=100, Offsets=5,3,0 Off-ax]	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	278.389583	Observer's specified target RA
dec_targ	-10.568528	Observer's specified target Dec
ra_nom	278.33616572951	Nominal RA
dec_nom	-10.484744431115	Nominal Dec
roll_nom	264.46411556315	Nominal Roll
revision	3	Processing version of data
ontime	9756.8000090867	Sum of GTIs [s]
livetime	9633.253532532	Livetime [s]
ontime0	9756.8000090867	Sum of GTIs [s]
ontime1	9756.8000090867	Sum of GTIs [s]
ontime2	9756.8000090867	Sum of GTIs [s]
ontime3	9756.8000090867	Sum of GTIs [s]
ontime6	9756.8000090867	Sum of GTIs [s]
ontime7	9756.8000090867	Sum of GTIs [s]
l2events	109563	Number of level 2 events



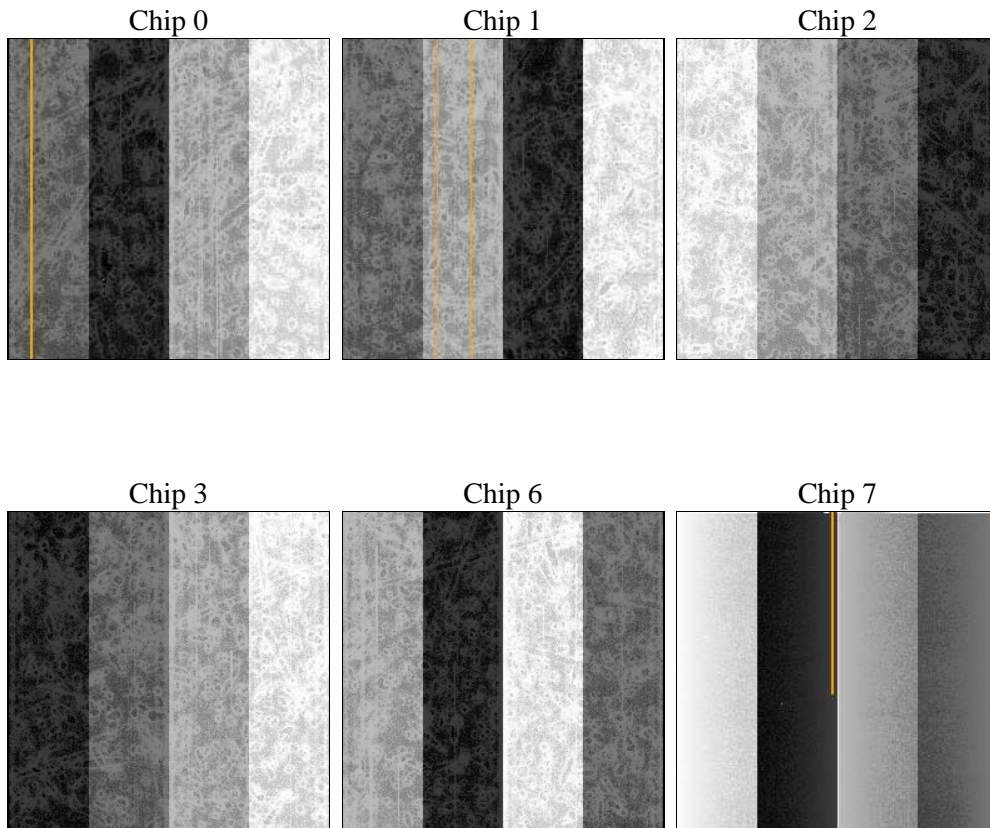
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	10000.000000	Scheduled observation exposure time
ascdsver	8.1.2	ASCDS version number	ontime	9756.8000090867	Sum of GTIs [s]
caldbver	4.1.4	 	ontime0	9756.8000090867	Sum of GTIs [s]
date	2009-12-17T07:28:55	Date and time of file creation	ontime1	9756.8000090867	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	9756.8000090867	Sum of GTIs [s]
			ontime3	9756.8000090867	Sum of GTIs [s]
			ontime6	9756.8000090867	Sum of GTIs [s]
			ontime7	9756.8000090867	Sum of GTIs [s]
			l1events	588420	Number of level 1 events

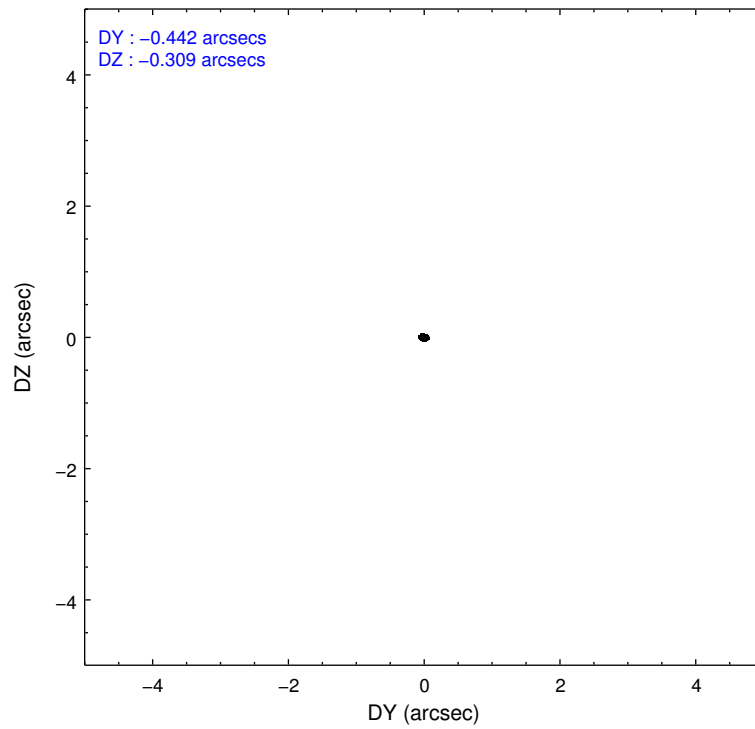
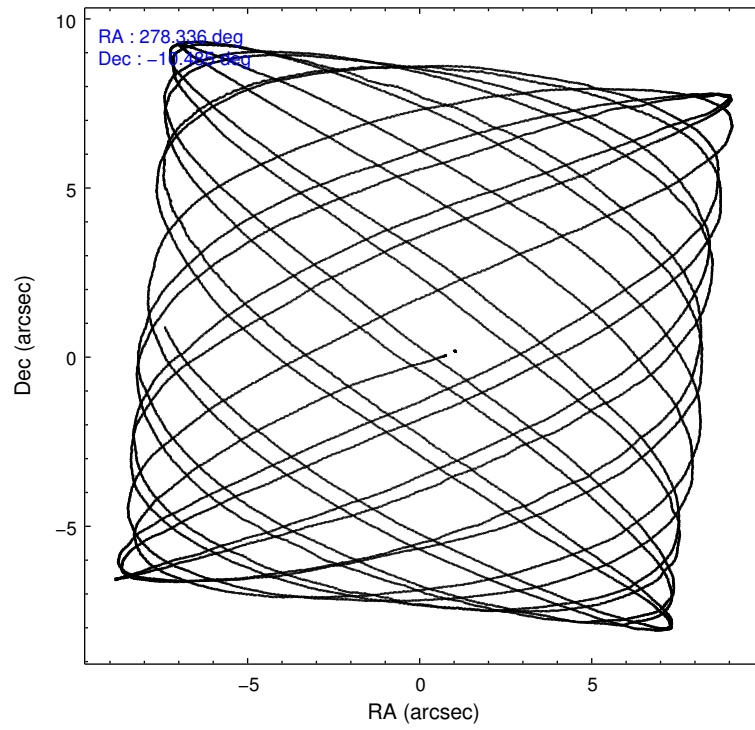
2.1.4 Events

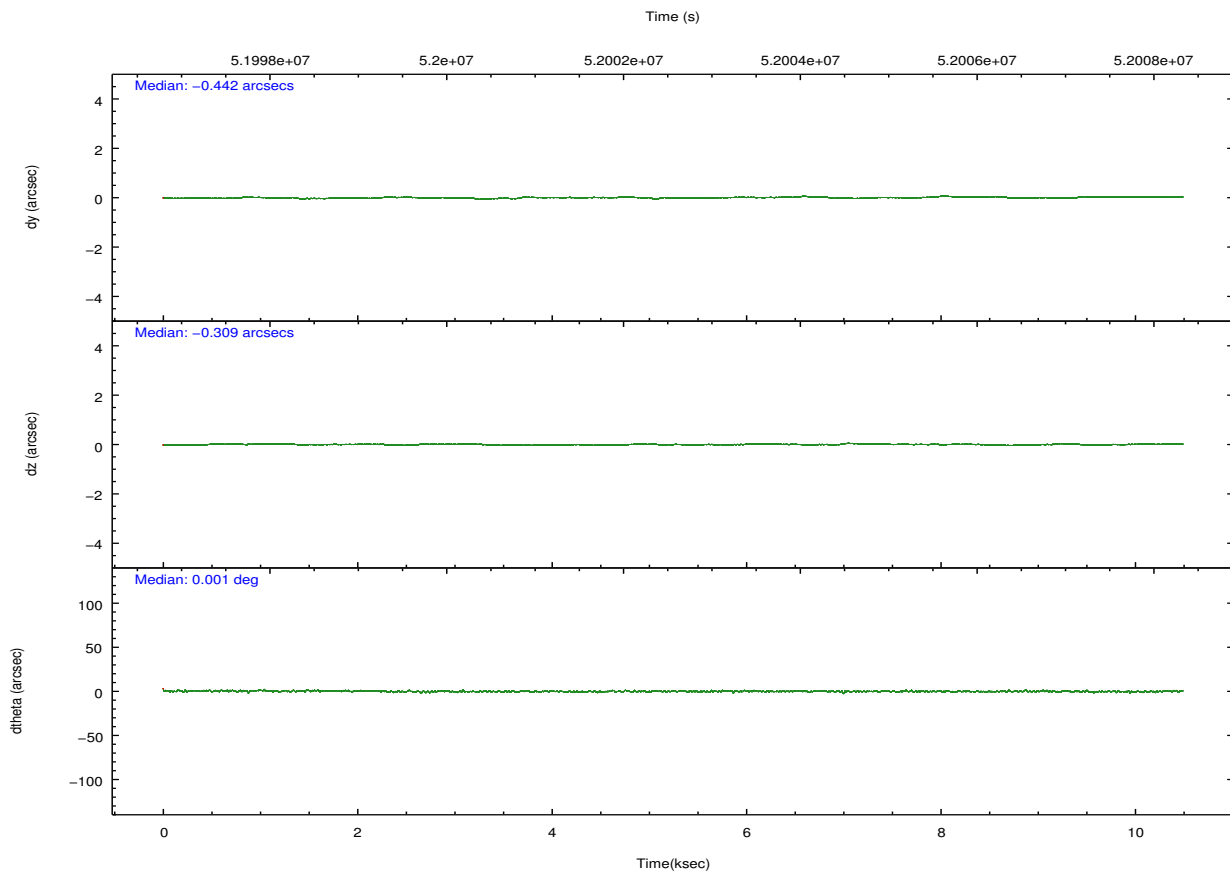
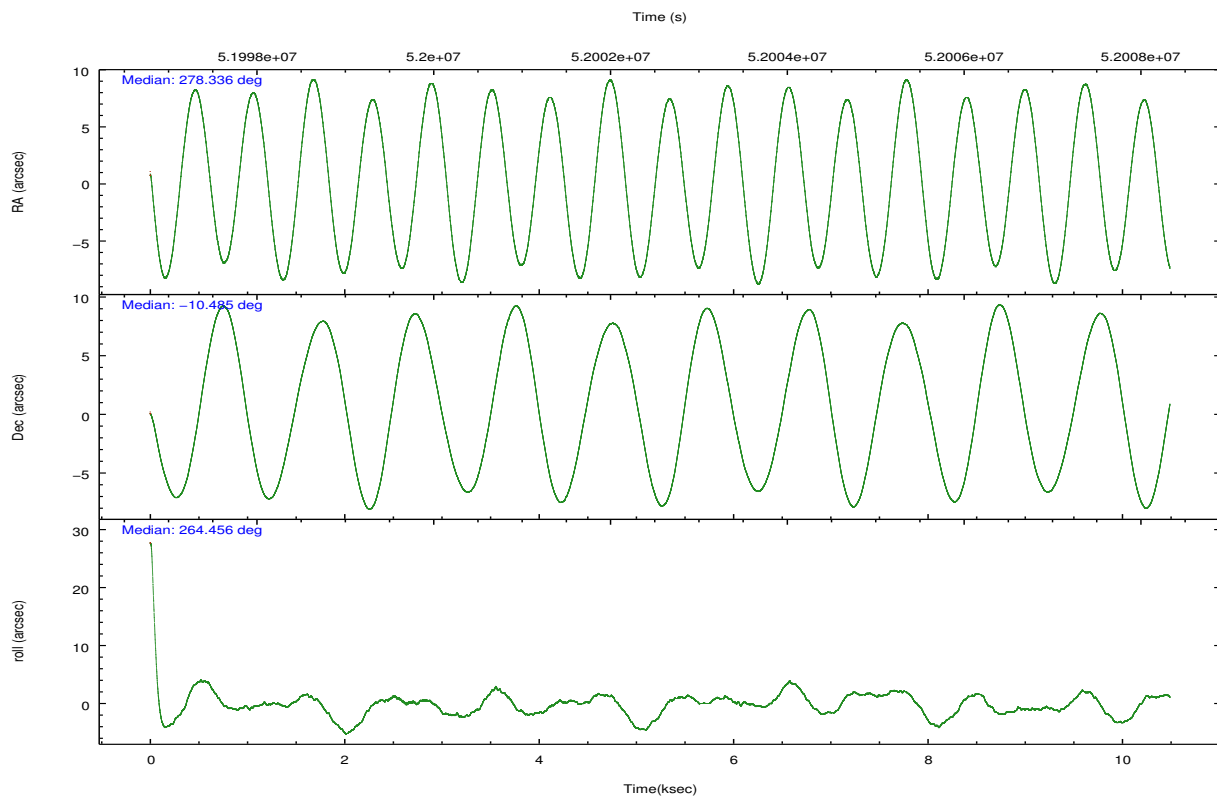
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	89511	88431	124873	97610	88831	99164	grade 0 events	4092	4239	23789	4629	2929	2781
rejected events	79839	78201	87676	87259	79997	59425		4%	4%	19%	4%	3%	2%
rejected %	89%	88%	70%	89%	90%	59%	grade 1 events	50	25	173	34	29	70
								0%	0%	0%	0%	0%	0%
							grade 2 events	2172	2164	6189	2299	2456	6245
								2%	2%	4%	2%	2%	6%
							grade 3 events	850	1019	2055	881	710	3826
								0%	1%	1%	0%	0%	3%
							grade 4 events	874	1042	2034	808	747	3319
								0%	1%	1%	0%	0%	3%
							grade 5 events	2317	2470	2230	2380	2366	6547
								2%	2%	1%	2%	2%	6%
							grade 6 events	1687	1768	3146	1739	1993	23574
								1%	1%	2%	1%	2%	23%
							grade 7 events	77469	75704	85257	84840	77601	52802
								86%	85%	68%	86%	87%	53%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-012367	ACIS-012367	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	278.325136	278.3361657295064	Subarray requested	NONE	NONE
Pointing Dec	-10.458976	-10.4847444311154	Alternating exposures requested	N	N
Pointing Roll	264.253394	264.4641155631511	Primary exposure time	0.000000	3.2
SIM focus pos (mm)	-0.782348	-0.7362356599963374			
SIM defocus (mm)	0	0.04611255558364913			
SIM translation stage pos (mm)	-233.592463	-233.5874344608287			
SIM translation stage offset (mm)	0	-0.005018542100998502			
Observation start time	51997805.184000	51997131.318131			
Observation start date	1999-08-25T19:49:01	1999-08-25T19:38:51			
Observation end time	52007805.184000	52008851.168552			
Observation end date	1999-08-25T22:35:41	1999-08-25T22:54:11			
Read mode	TIMED	TIMED			

2.3 Aspect



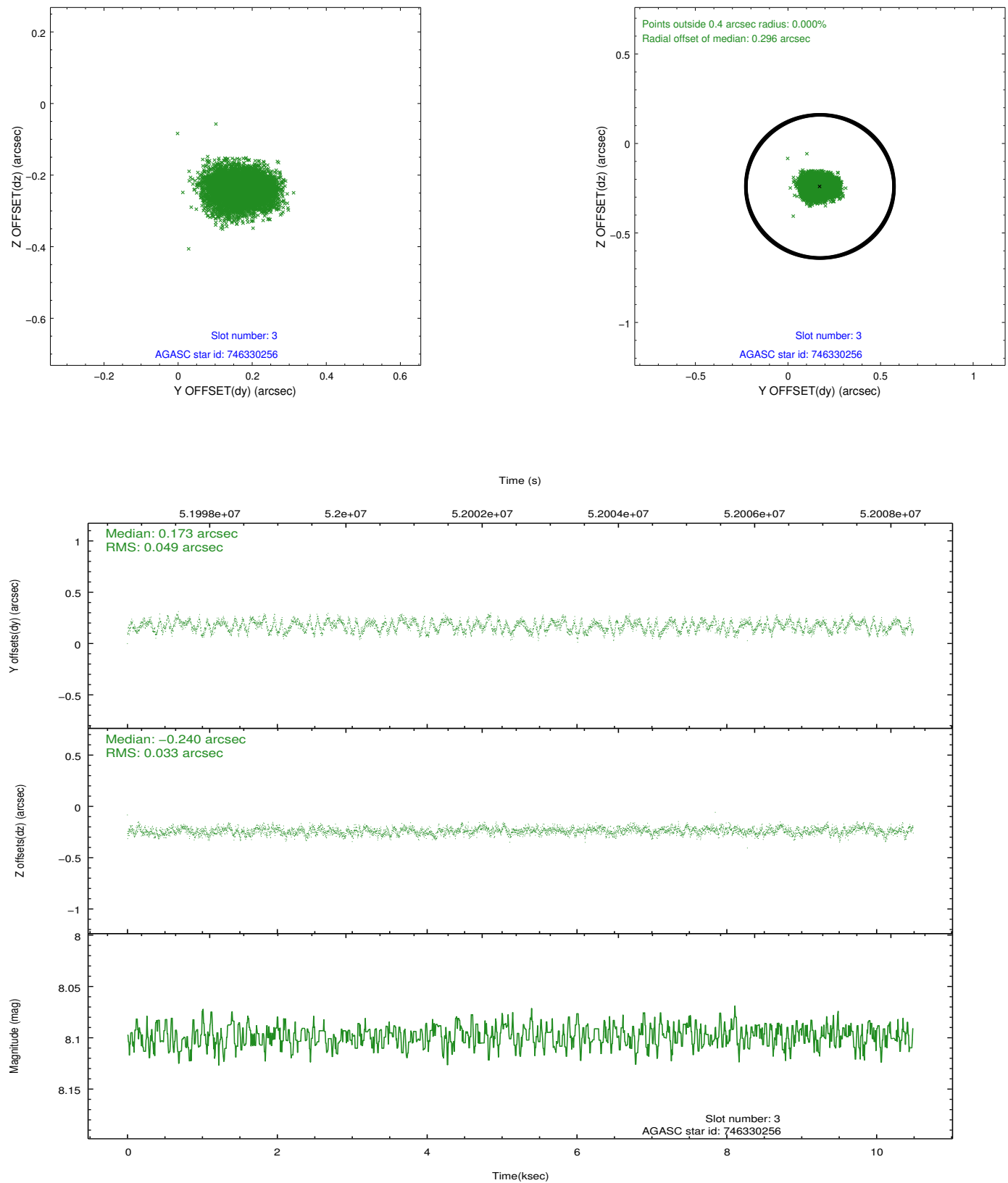


Slot Statistics

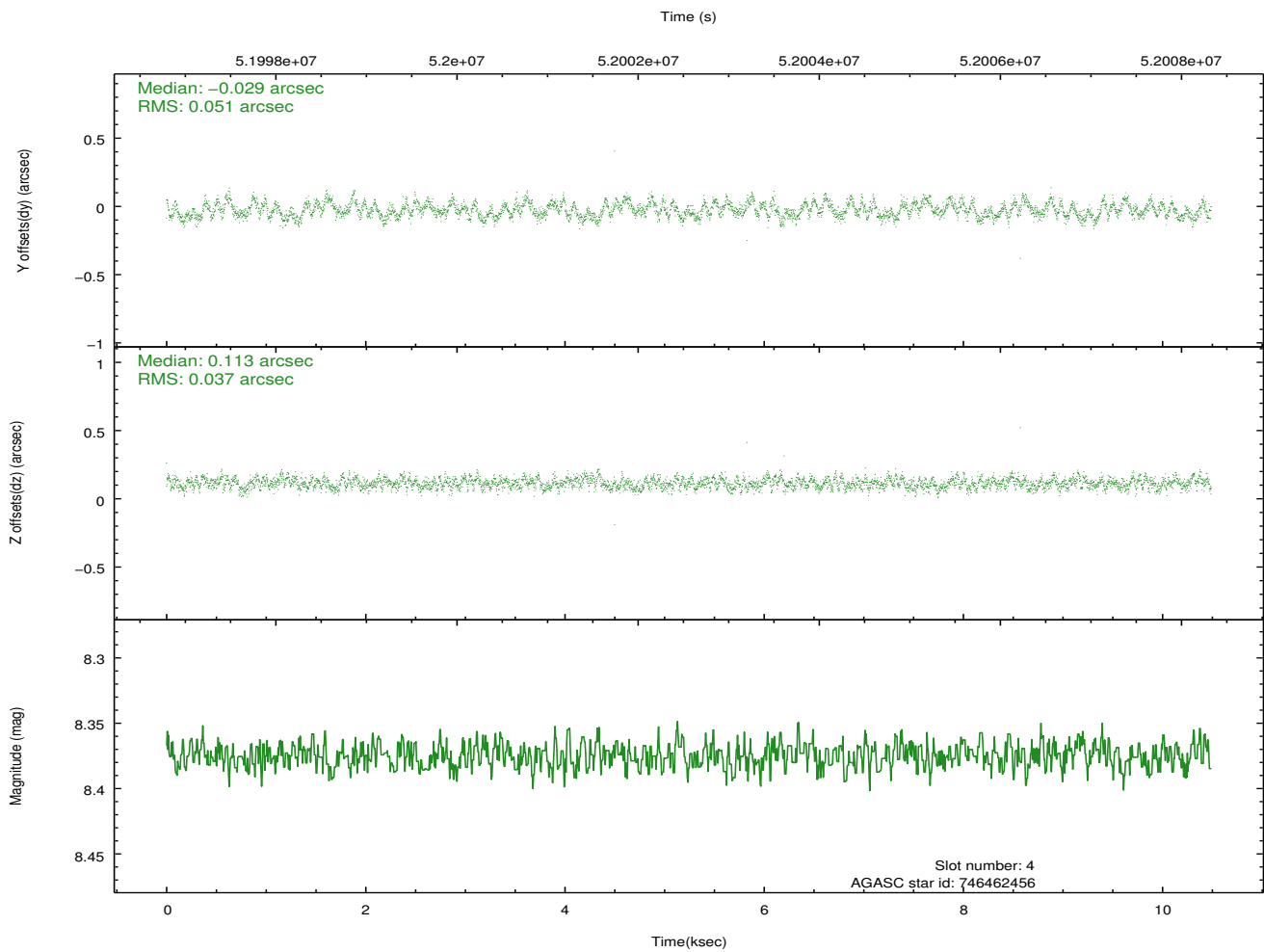
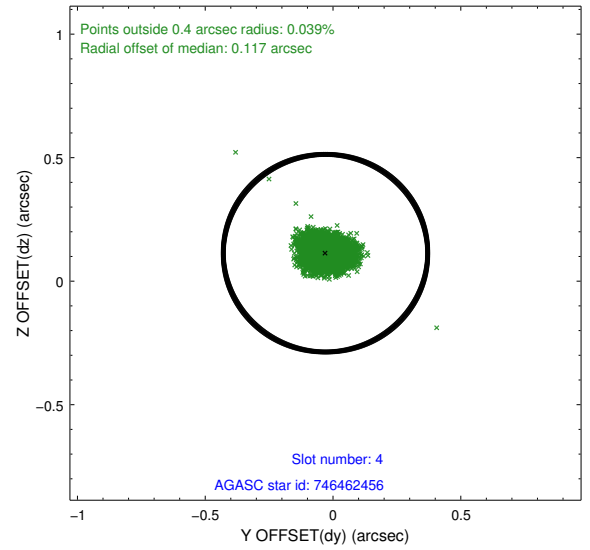
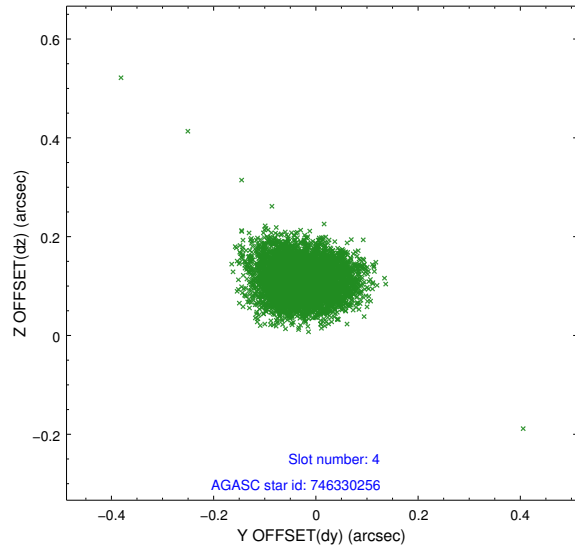
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.21	5118	-0.033	0.056	0.010	0.017	0.000000	0.000000	-753.93	-829.15
1	FID	ACIS-I-4	7.24	5117	0.144	0.012	0.008	0.013	0.000000	0.000000	2160.35	1076.73
2	FID	ACIS-I-5	7.23	5118	-0.211	-0.000	0.008	0.014	0.000000	0.000000	-1807.60	1074.99
3	GUIDE	746330256	8.10	5117	0.173	-0.240	0.064	0.099	277.634401	-10.863955	1698.43	-2282.94
4	GUIDE	746462456	8.38	5117	-0.029	0.113	0.066	0.104	278.652171	-10.530173	139.86	1177.76
5	GUIDE	746460272	8.93	5117	-0.072	0.089	0.075	0.122	278.847488	-10.152127	-1283.21	1732.11
6	GUIDE	746460328	9.81	5110	-0.093	0.028	0.122	0.188	278.603974	-9.898096	-2108.06	782.56
7	GUIDE	746461728	9.79	5112	0.022	0.009	0.102	0.160	278.986921	-10.530755	24.34	2357.49

2.4 Star Slots

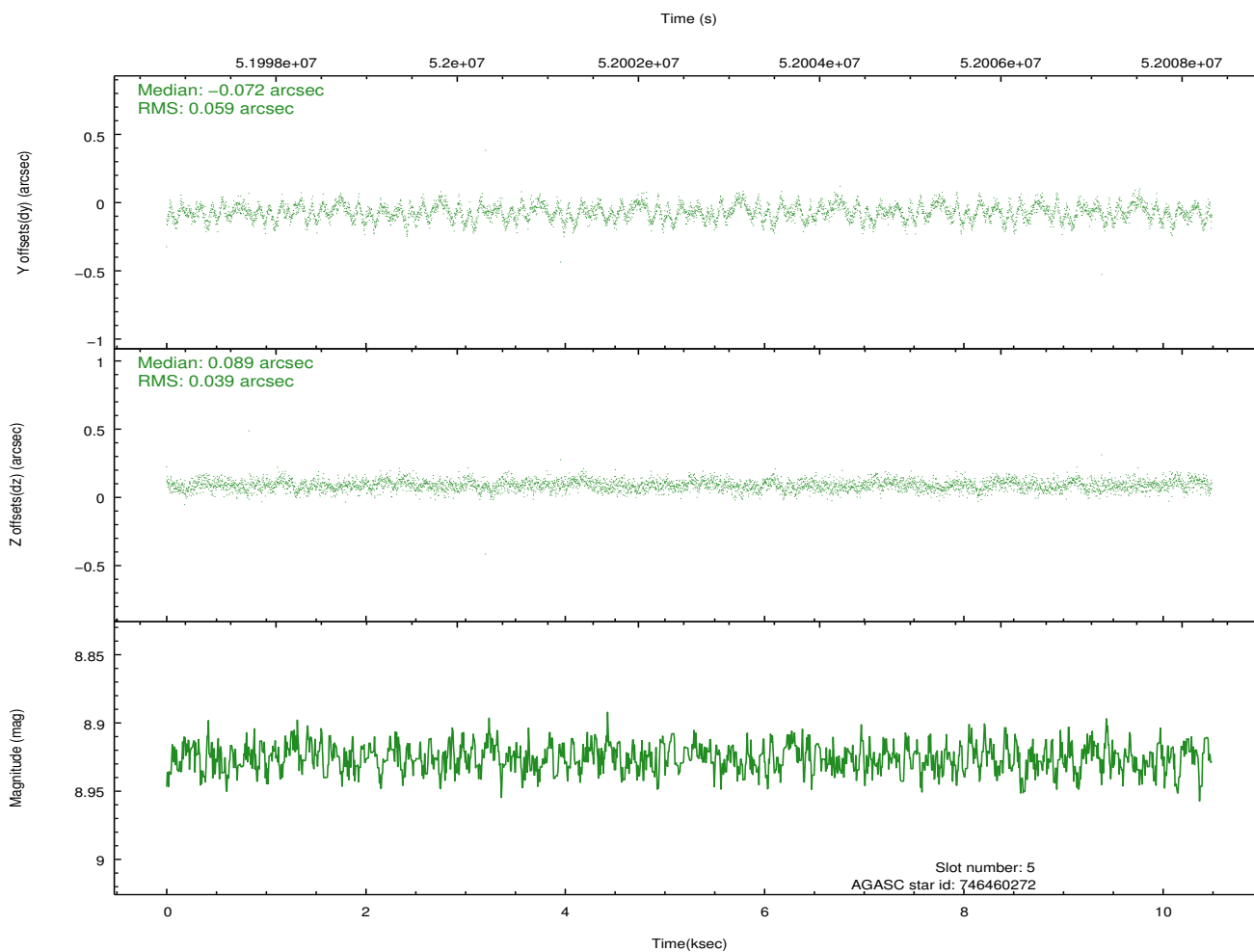
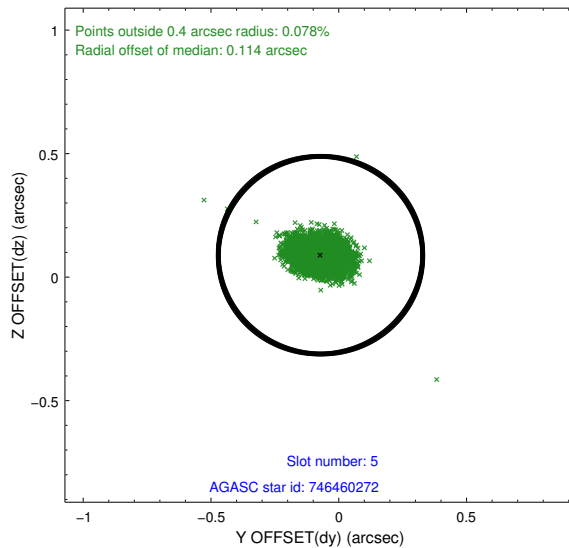
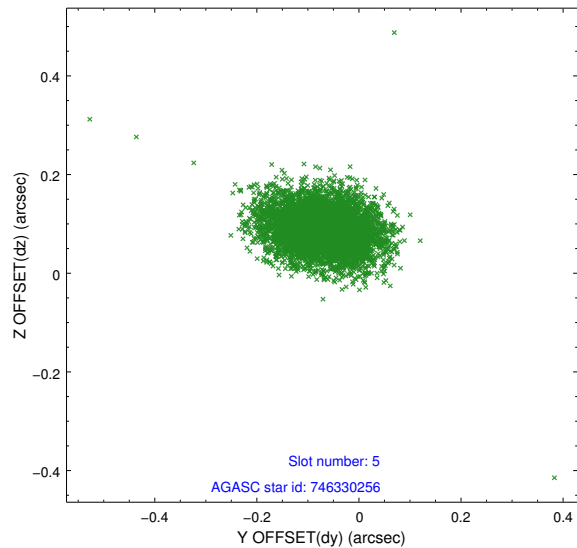
2.4.1 Slot 3



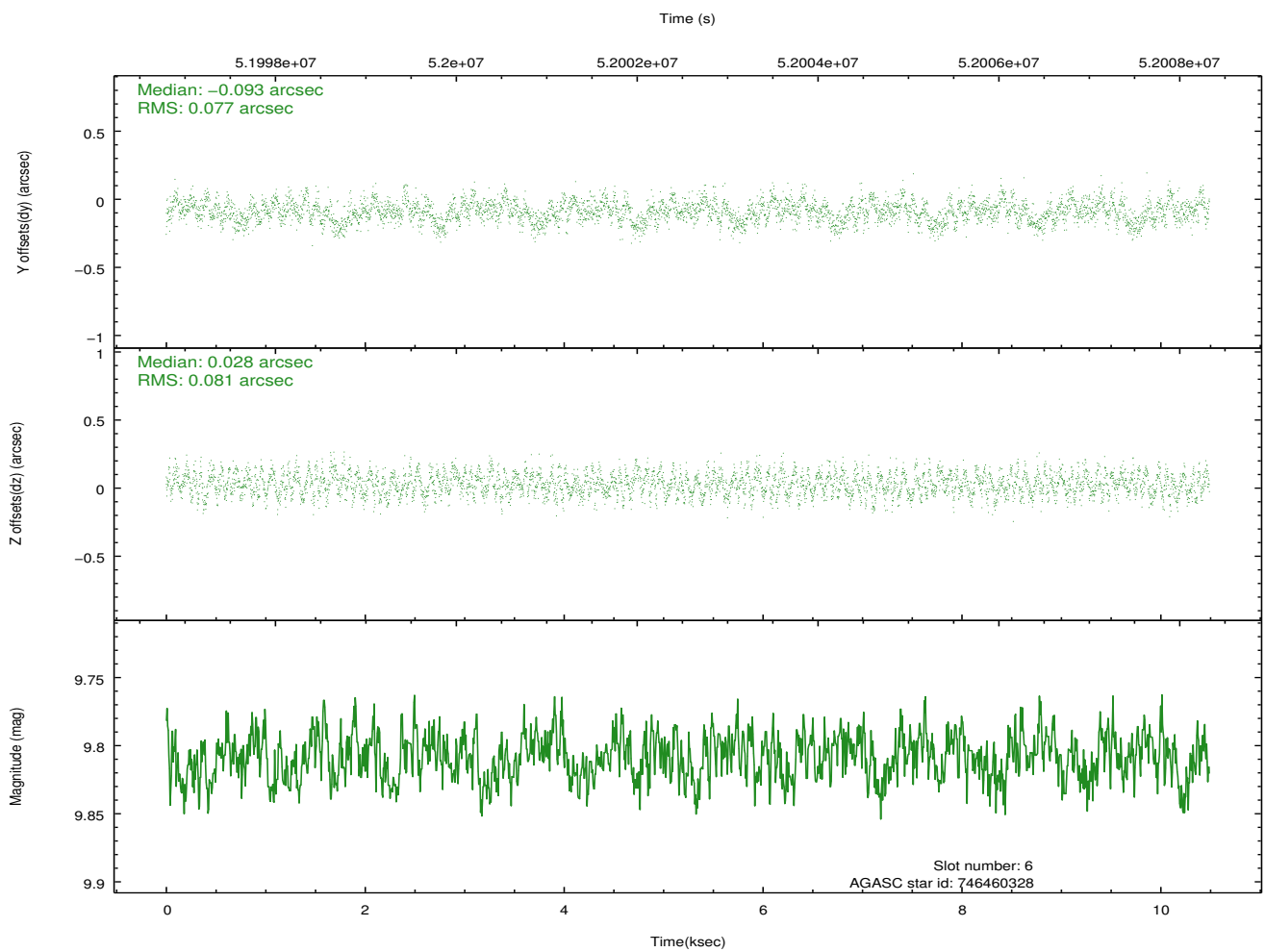
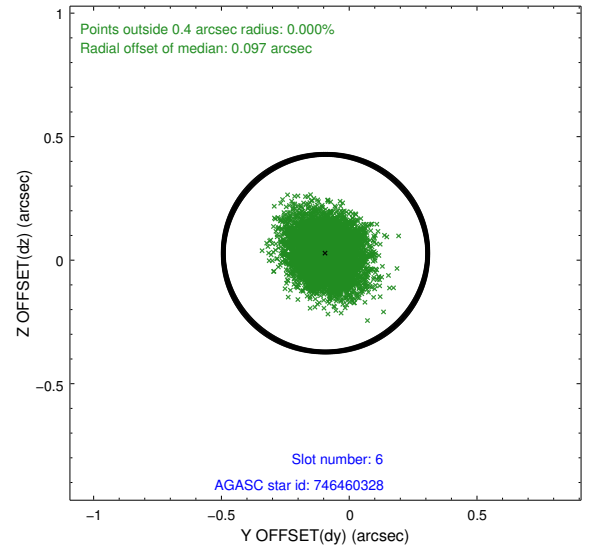
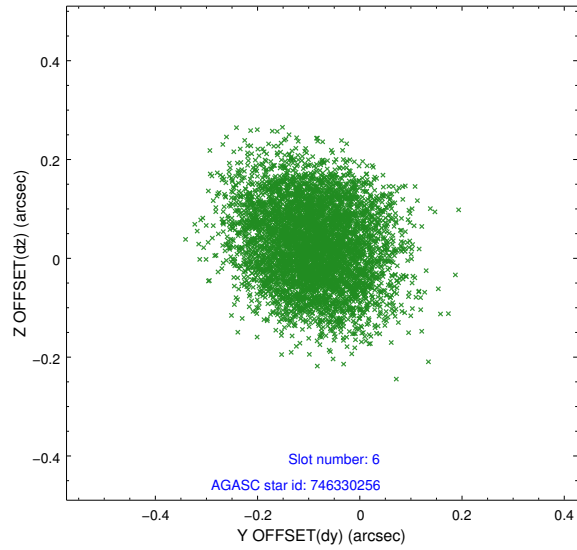
2.4.2 Slot 4



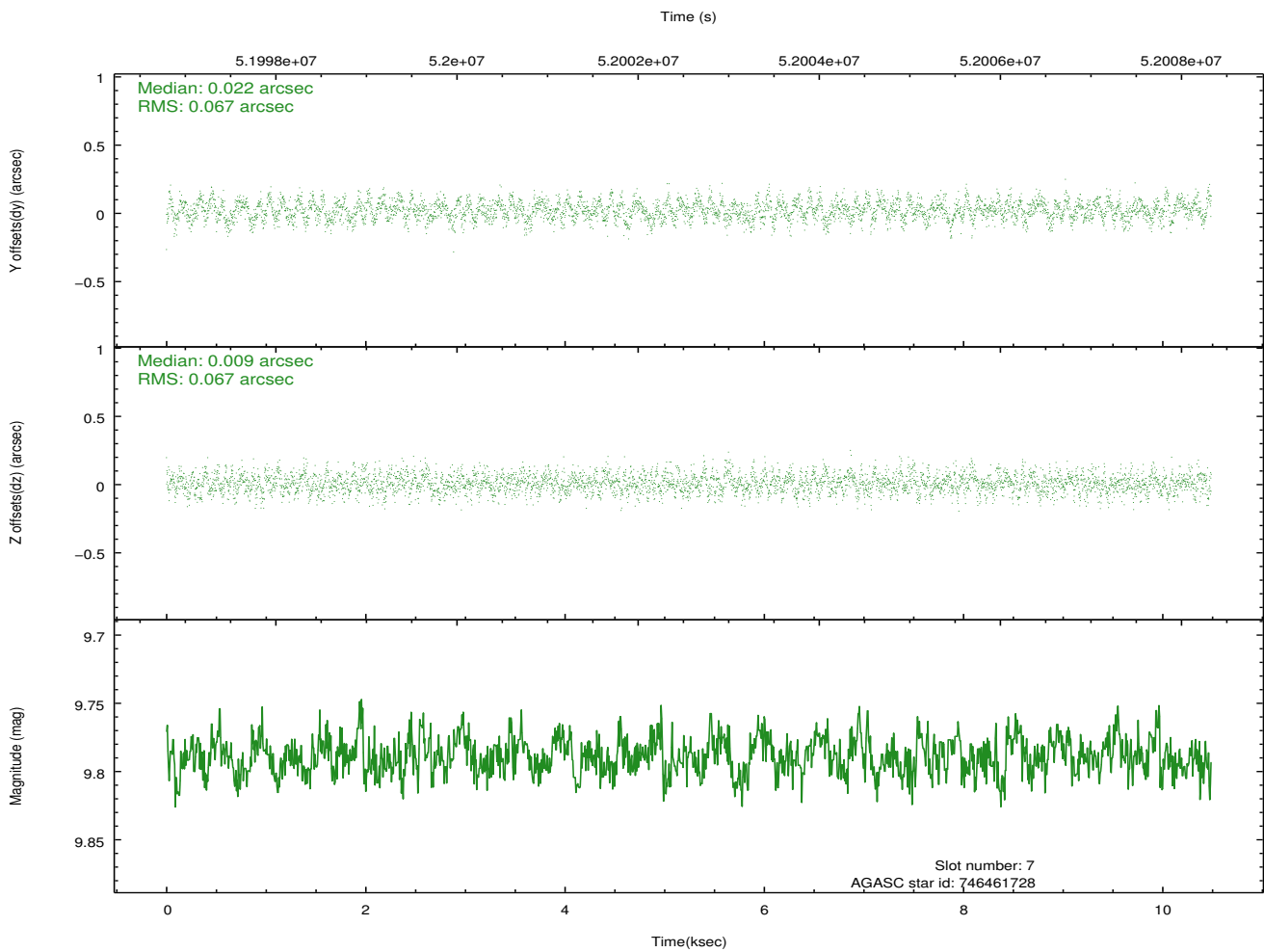
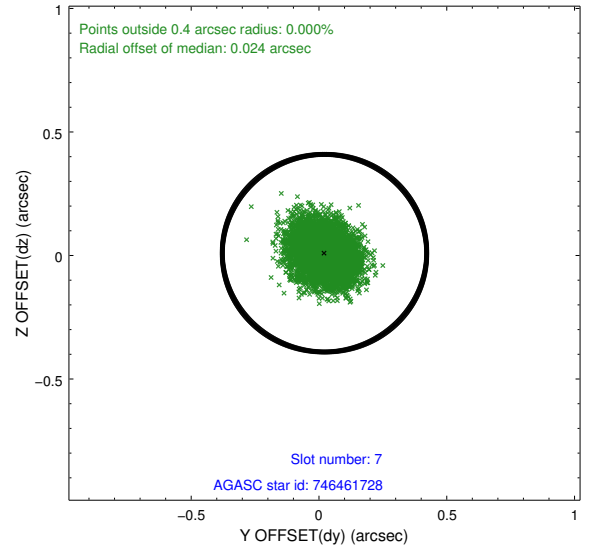
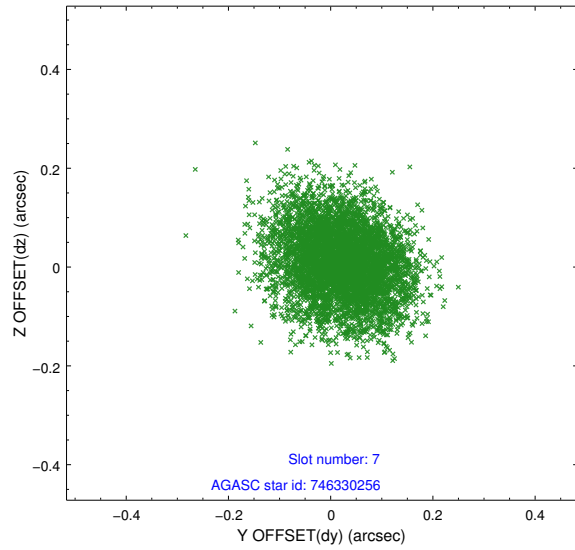
2.4.3 Slot 5



2.4.4 Slot 6

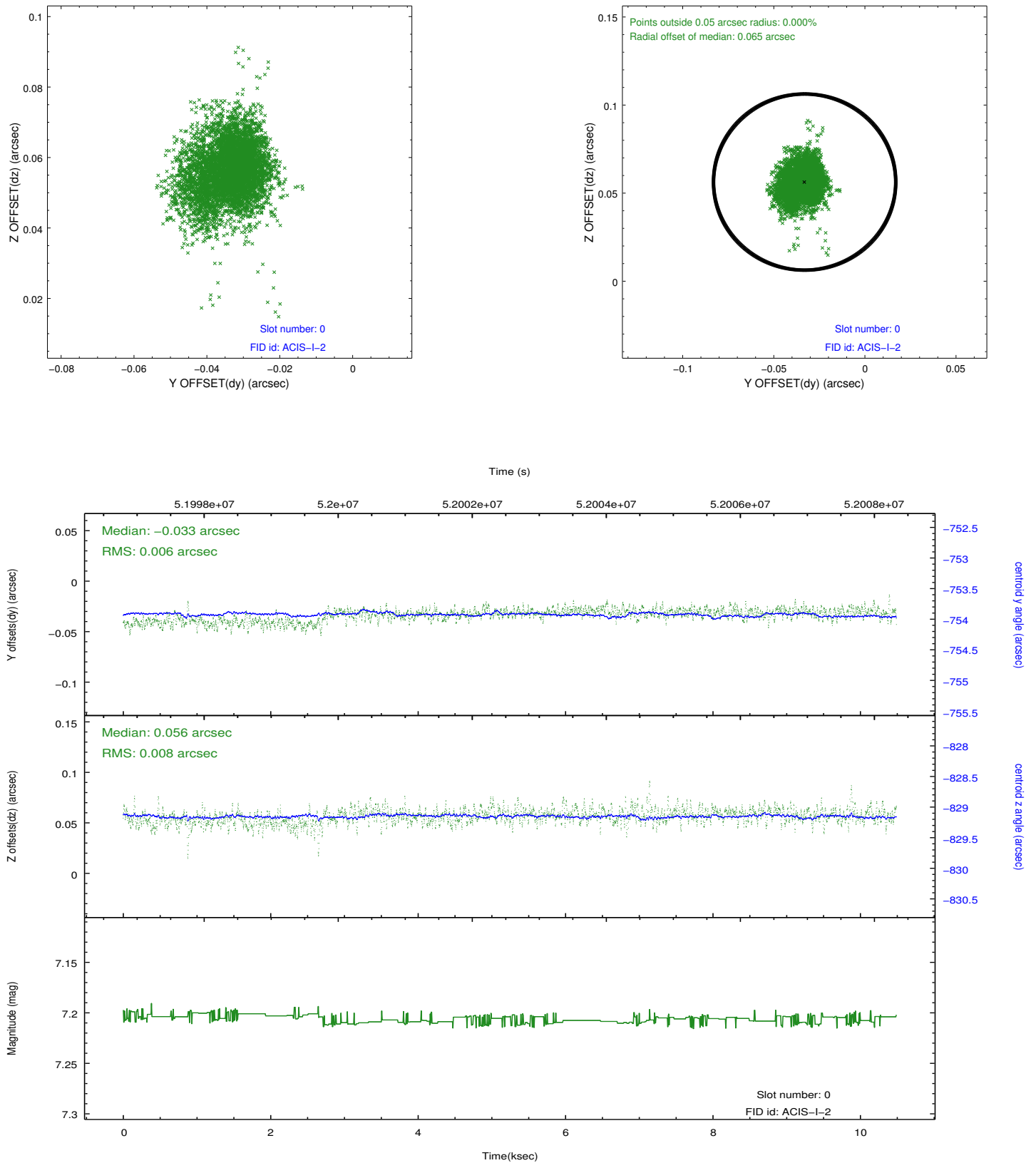


2.4.5 Slot 7

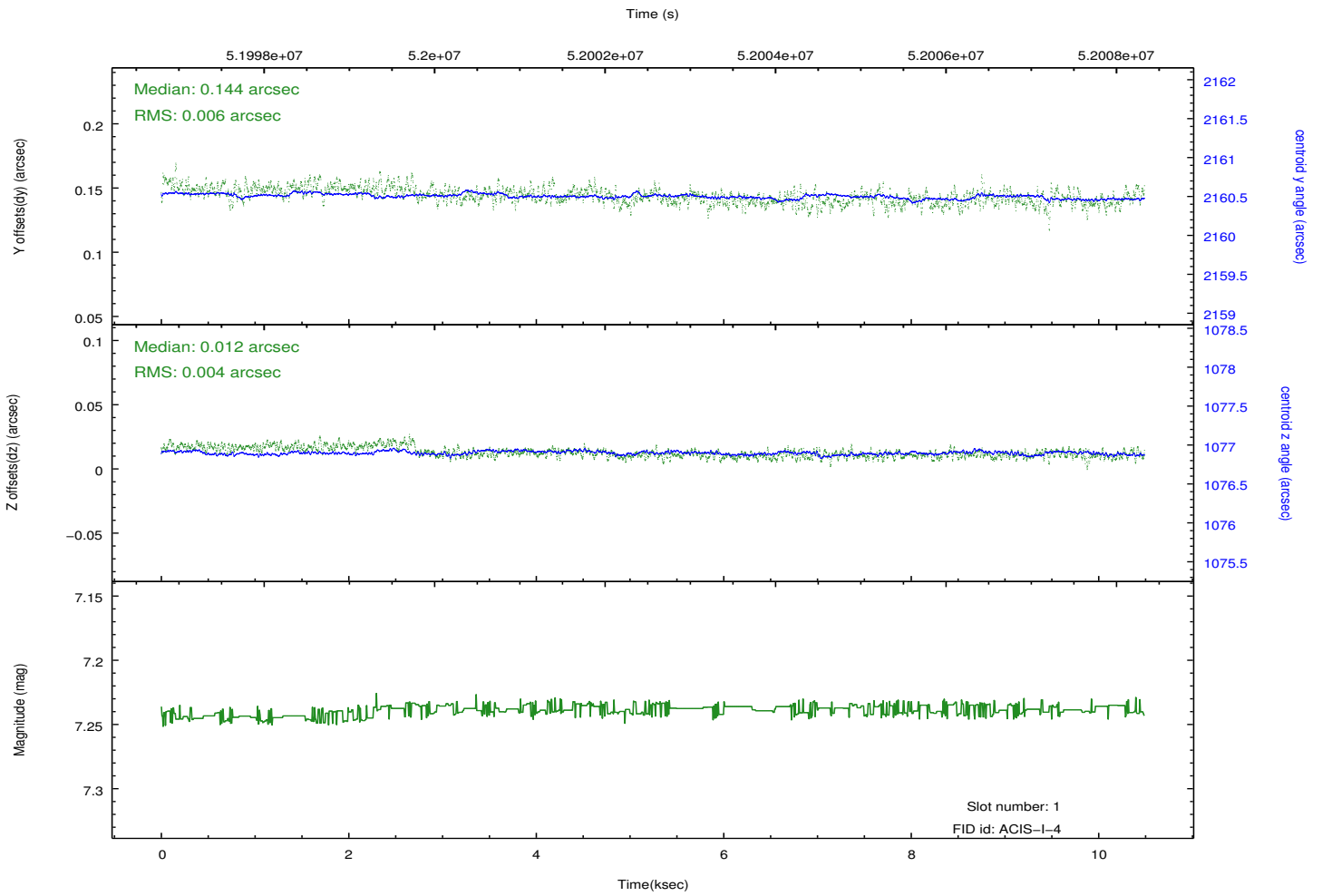
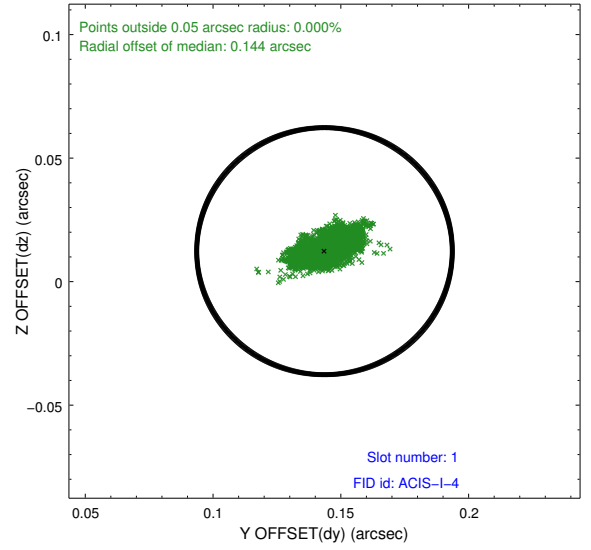
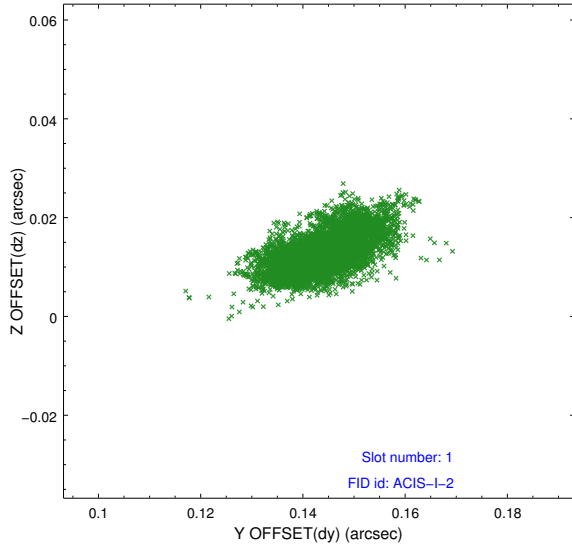


2.5 FID Slots

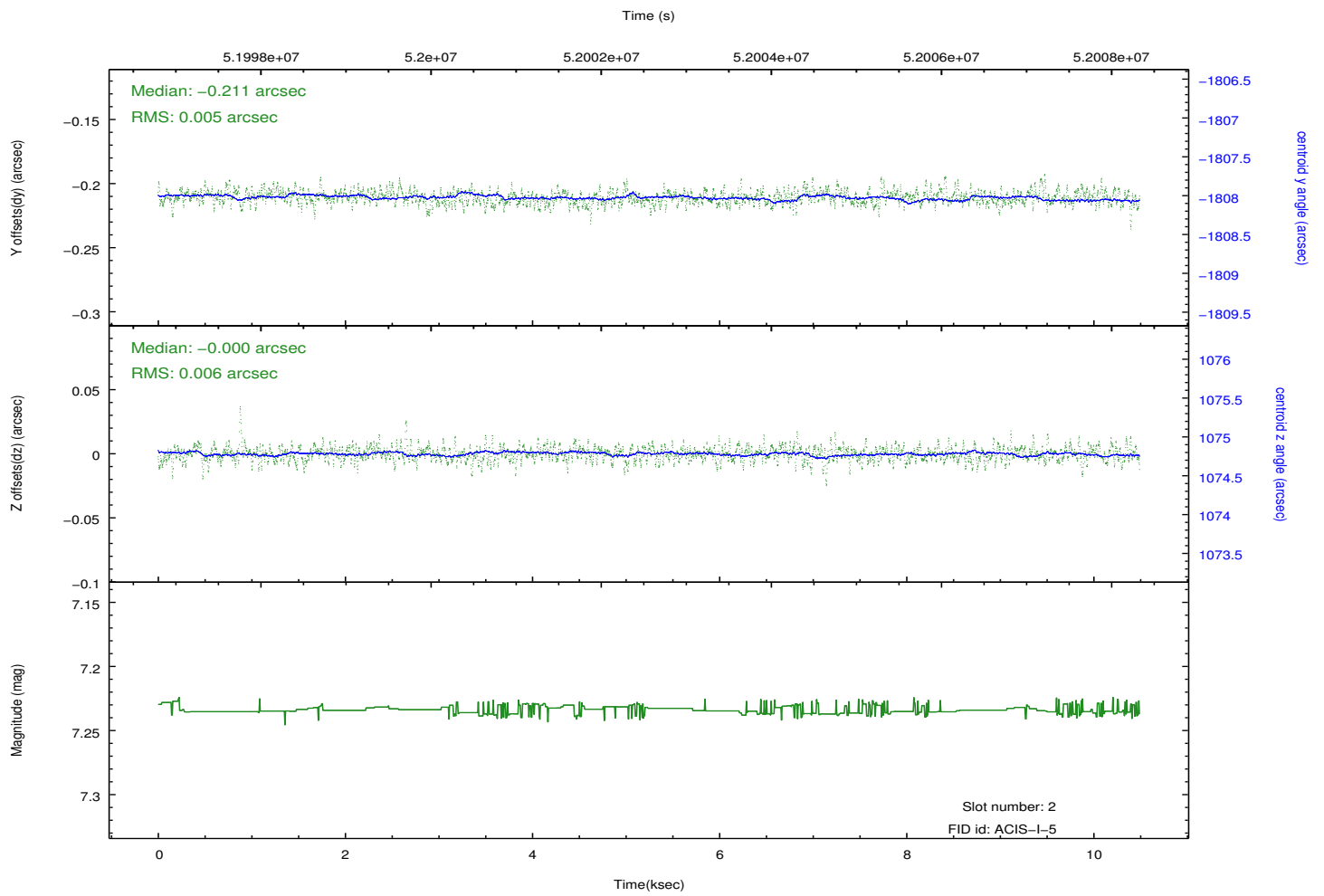
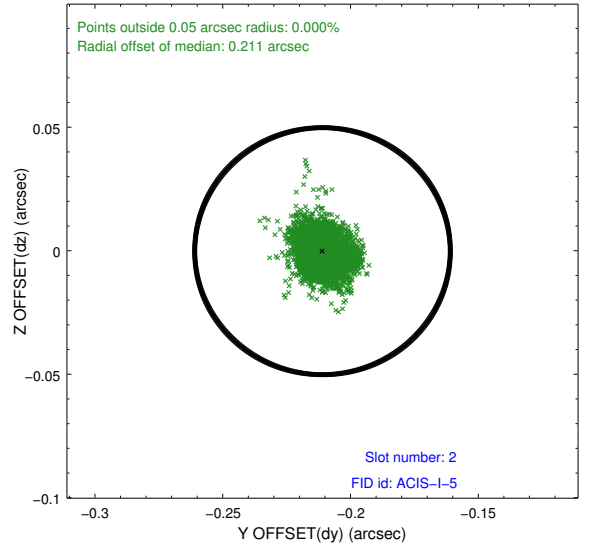
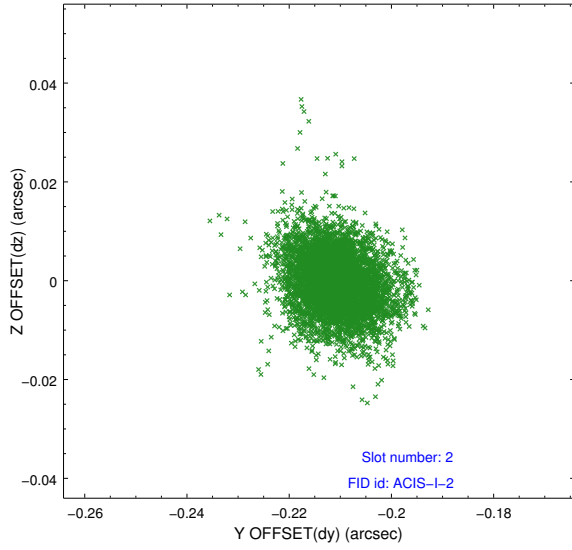
2.5.1 Slot 0



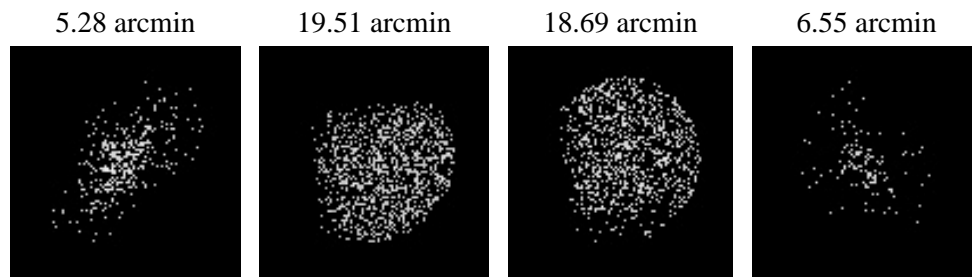
2.5.2 Slot 1



2.5.3 Slot 2



3 Point Sources



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2010.03.26
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.76

A.2 Comments

Off-axis effective area measurements in chip I2.

=====

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.