

V&V Reference Report

L2 ASCDS Version : 8.1.2

Observation 160 - L2 Version 3

Chandra X-Ray Center

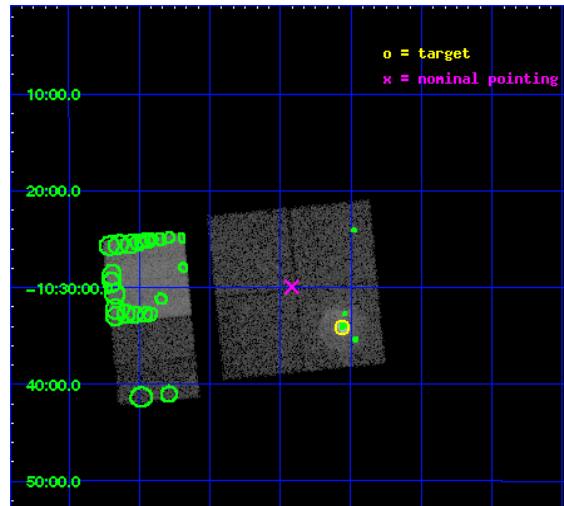
L2 Processing Date : Dec 17 2009

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1 Front

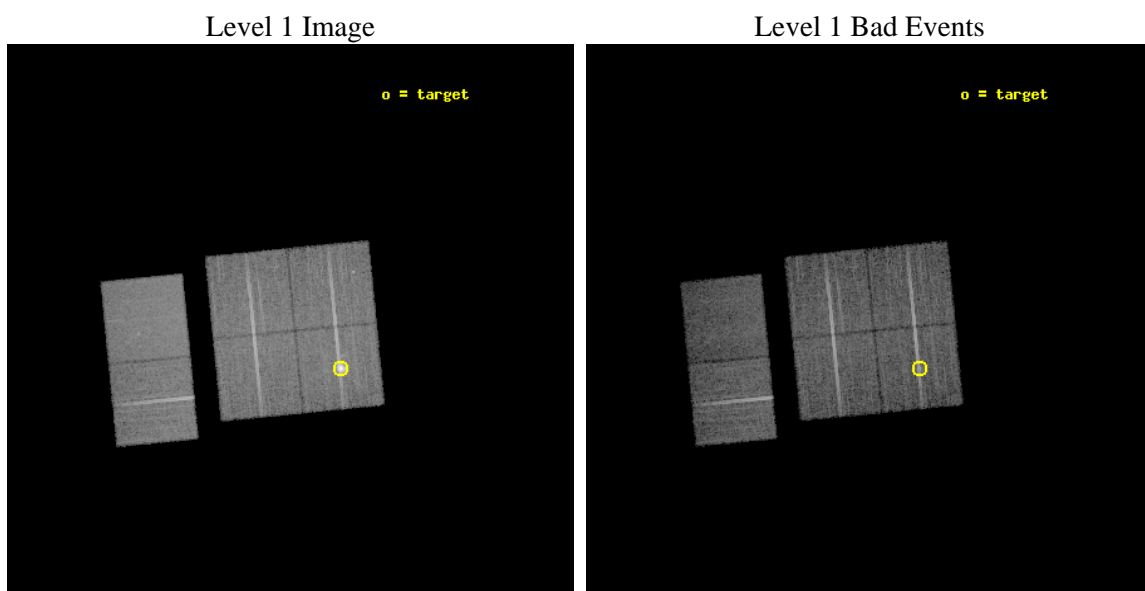
seq_num	590028	Sequence number
obs_id	160	Observation id
title	ACIS CHIP RESPONSE TO A CONTINUUM SOURCE	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	G21.5-0.9 [Chip I0, T=100, Offsets=5,-5,0 Off-ax]	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	278.389583	Observer's specified target RA
dec_targ	-10.568528	Observer's specified target Dec
ra_nom	278.47962789912	Nominal RA
dec_nom	-10.499030392595	Nominal Dec
roll_nom	264.40450977628	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	109690	Number of level 2 events



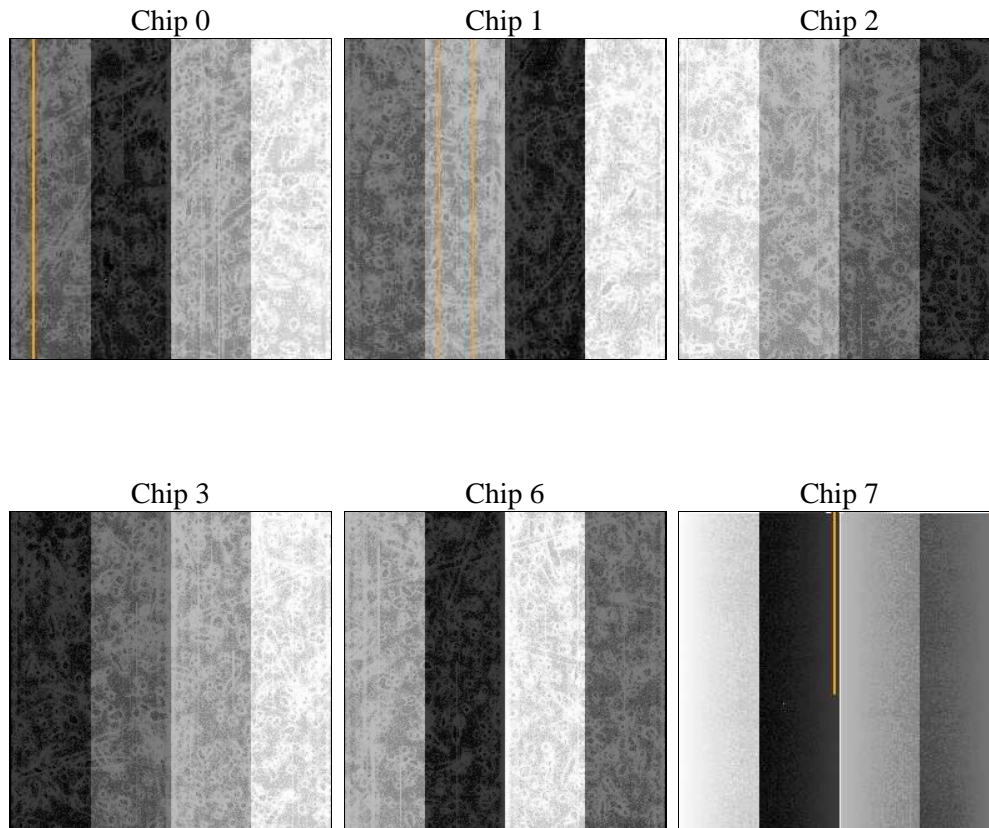
2 OBI

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]
caldsver	4.1.4	 	ontime0	9756.8000090867	Sum of GTIs [s]
date	2009-12-17T07:19:57	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	585387	Number of level 1 events

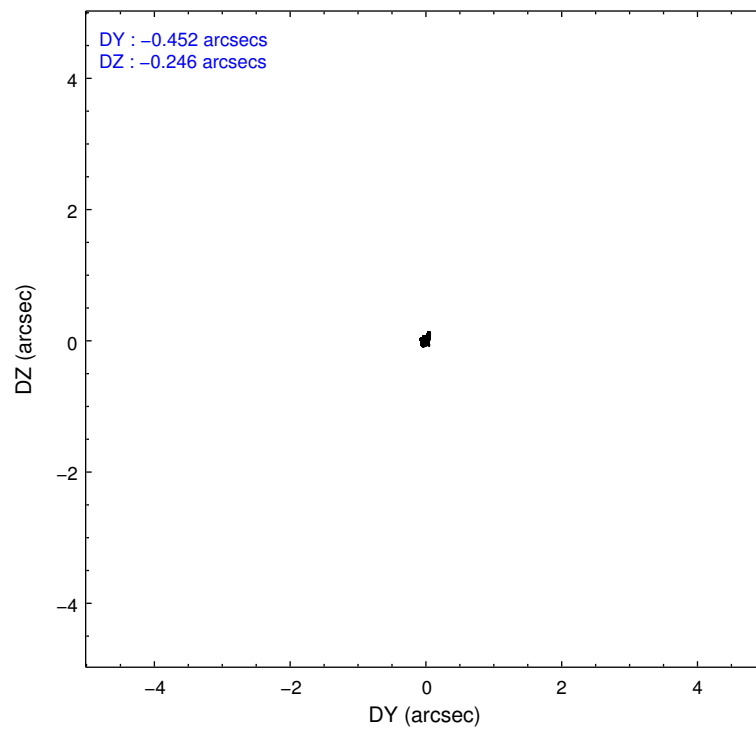
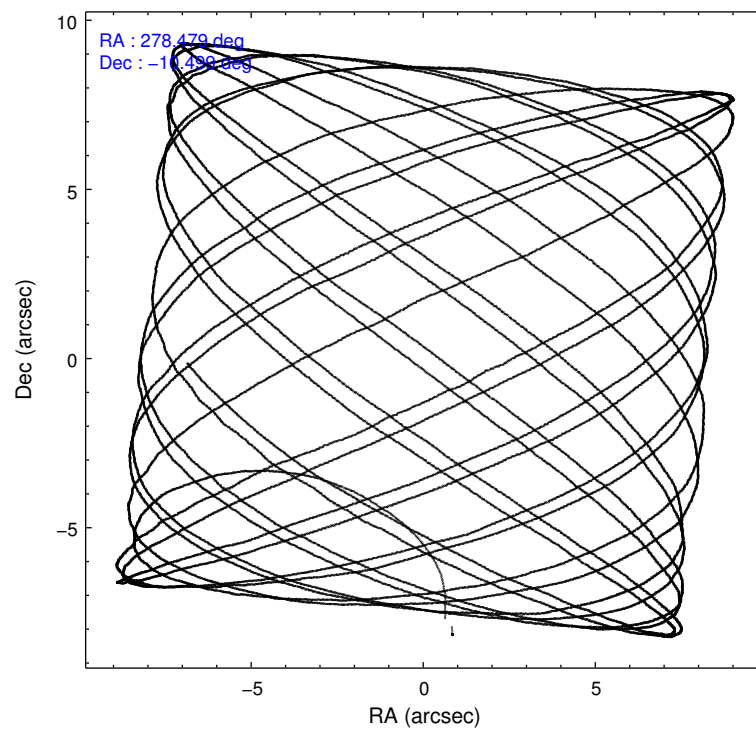
2.1.4 Events

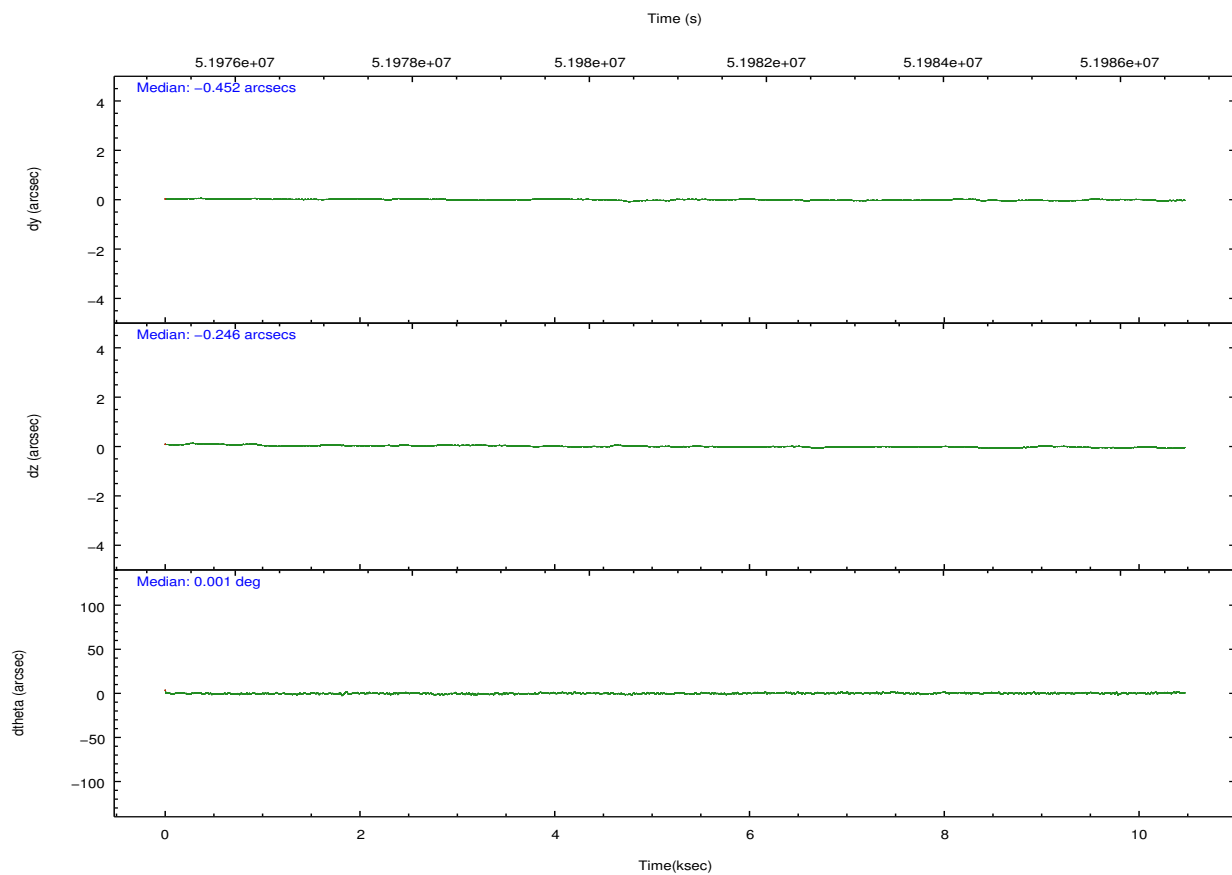
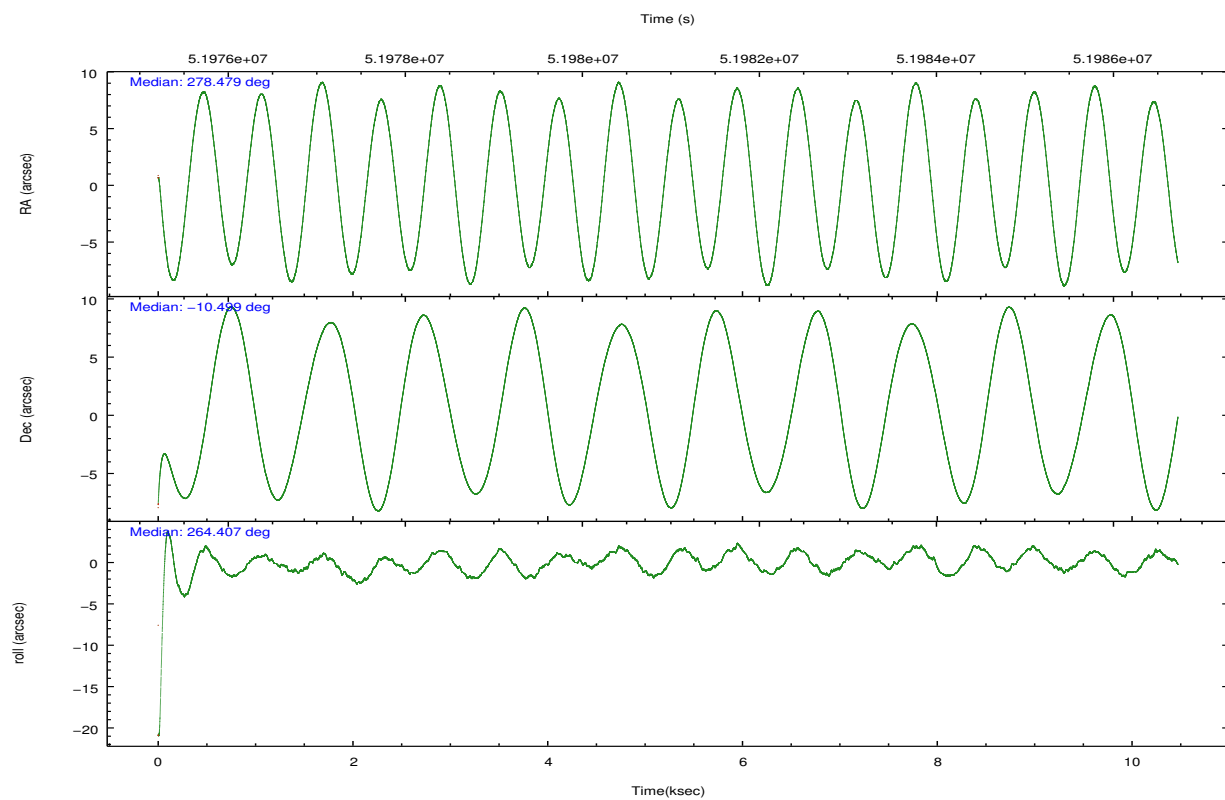
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	117080	89575	93273	91753	92767	100939	grade 0 events	23260	4610	3437	3776	2902	3157
rejected events	80724	78789	84696	82475	84031	58602		19%	5%	3%	4%	3%	3%
rejected %	68%	87%	90%	89%	90%	58%	grade 1 events	178	36	30	27	31	54
								0%	0%	0%	0%	0%	0%
							grade 2 events	5921	2250	2028	2163	2422	6821
								5%	2%	2%	2%	2%	6%
							grade 3 events	2139	1026	784	845	757	4108
								1%	1%	0%	0%	0%	4%
							grade 4 events	1954	1012	759	862	725	3304
								1%	1%	0%	0%	0%	3%
							grade 5 events	2494	2412	2018	2350	2391	6471
								2%	2%	2%	2%	2%	6%
							grade 6 events	3095	1895	1571	1635	1935	24963
								2%	2%	1%	1%	2%	24%
							grade 7 events	78039	76334	82646	80095	81604	52061
								66%	85%	88%	87%	87%	51%

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	278.468630	278.4796278991237	Subarray requested	NONE	NONE
Pointing Dec	-10.473236	-10.49903039259514	Alternating exposures requested	N	N
Pointing Roll	264.193854	264.4045097762848	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	51976205.184000	51974903.167331			
Observation start date	1999-08-25T13:49:01	1999-08-25T13:28:23			
Observation end time	51986205.184000	51986331.405242			
Observation end date	1999-08-25T16:35:41	1999-08-25T16:38:51			
Read mode	TIMED	TIMED			

2.3 Aspect



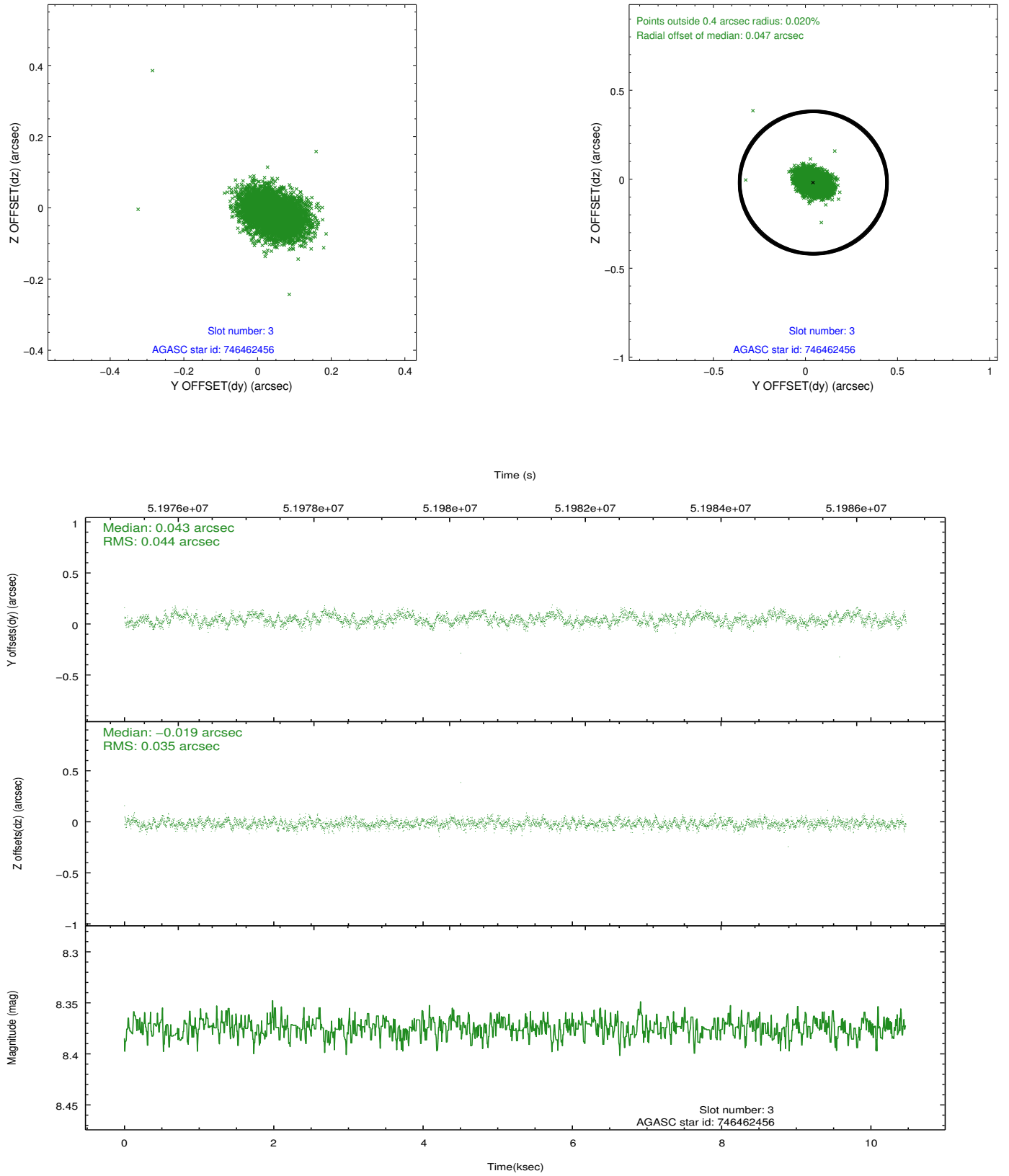


Slot Statistics

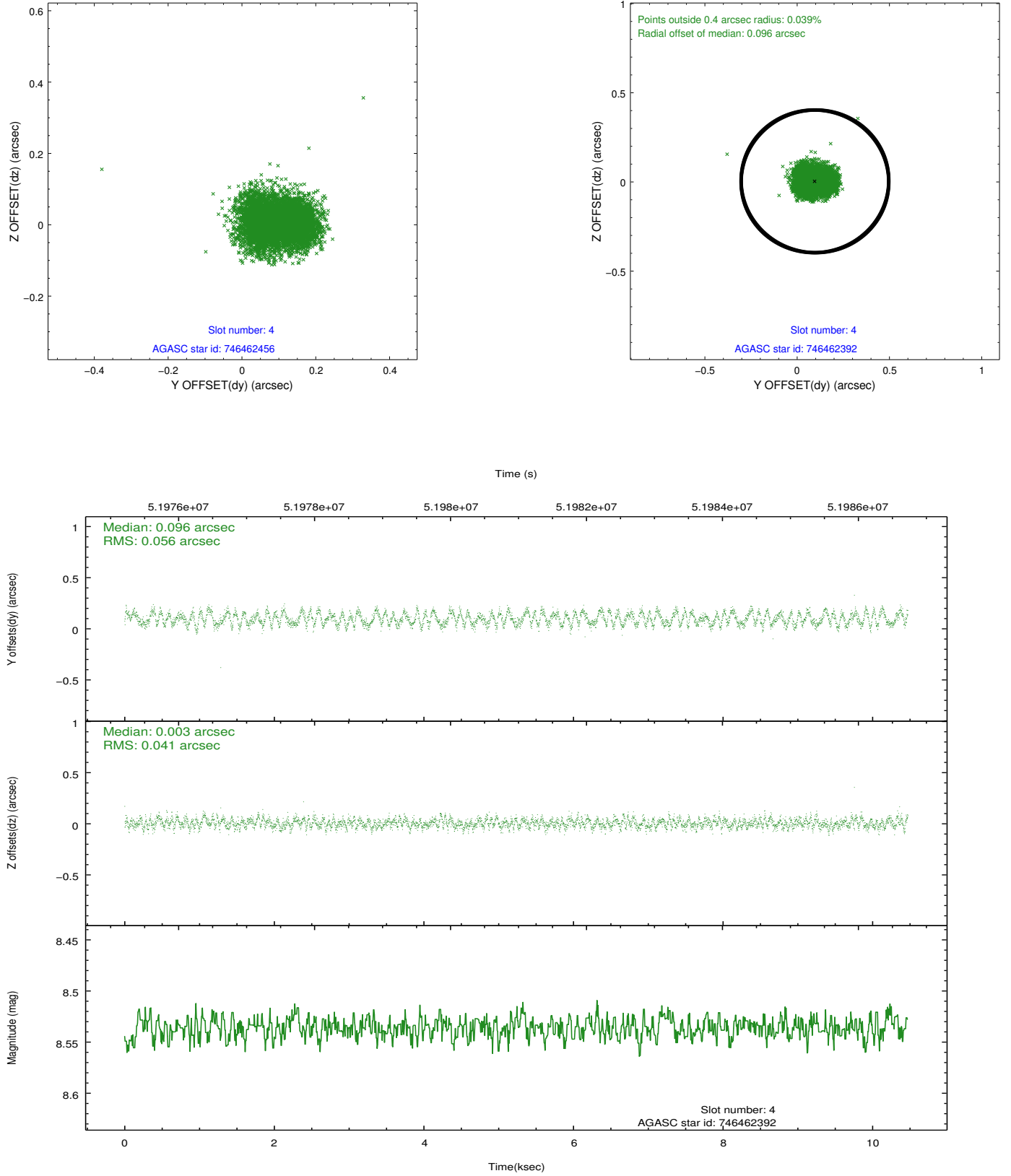
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.20	5109	-0.036	0.061	0.011	0.019	0.000000	0.000000	-753.91	-829.22
1	FID	ACIS-I-4	7.24	5108	0.142	0.013	0.007	0.013	0.000000	0.000000	2160.37	1076.66
2	FID	ACIS-I-5	7.23	5109	-0.207	-0.005	0.010	0.017	0.000000	0.000000	-1807.59	1074.91
3	GUIDE	746462456	8.37	5108	0.043	-0.019	0.060	0.095	278.652171	-10.530173	138.00	667.57
4	GUIDE	746462392	8.54	5109	0.096	0.003	0.075	0.113	279.038421	-10.890715	1293.05	2156.84
5	GUIDE	746460272	8.92	5106	-0.042	0.053	0.083	0.135	278.847488	-10.152127	-1285.26	1219.90
6	GUIDE	746460328	9.80	5102	-0.091	-0.103	0.095	0.158	278.603974	-9.898096	-2109.12	268.88
7	GUIDE	746461728	9.77	5039	-0.004	0.064	0.104	0.171	278.986921	-10.530755	21.22	1846.89

2.4 Star Slots

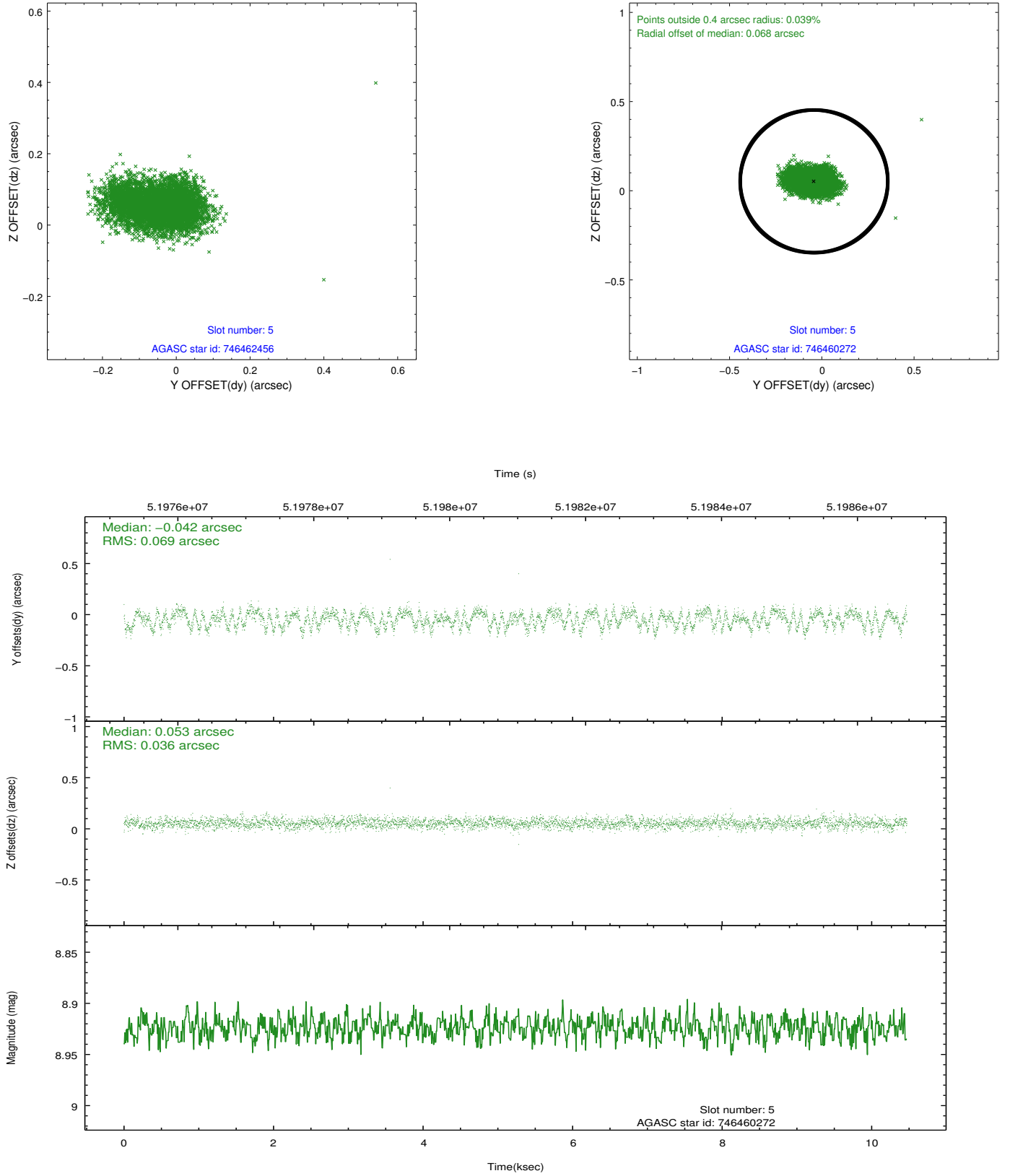
2.4.1 Slot 3



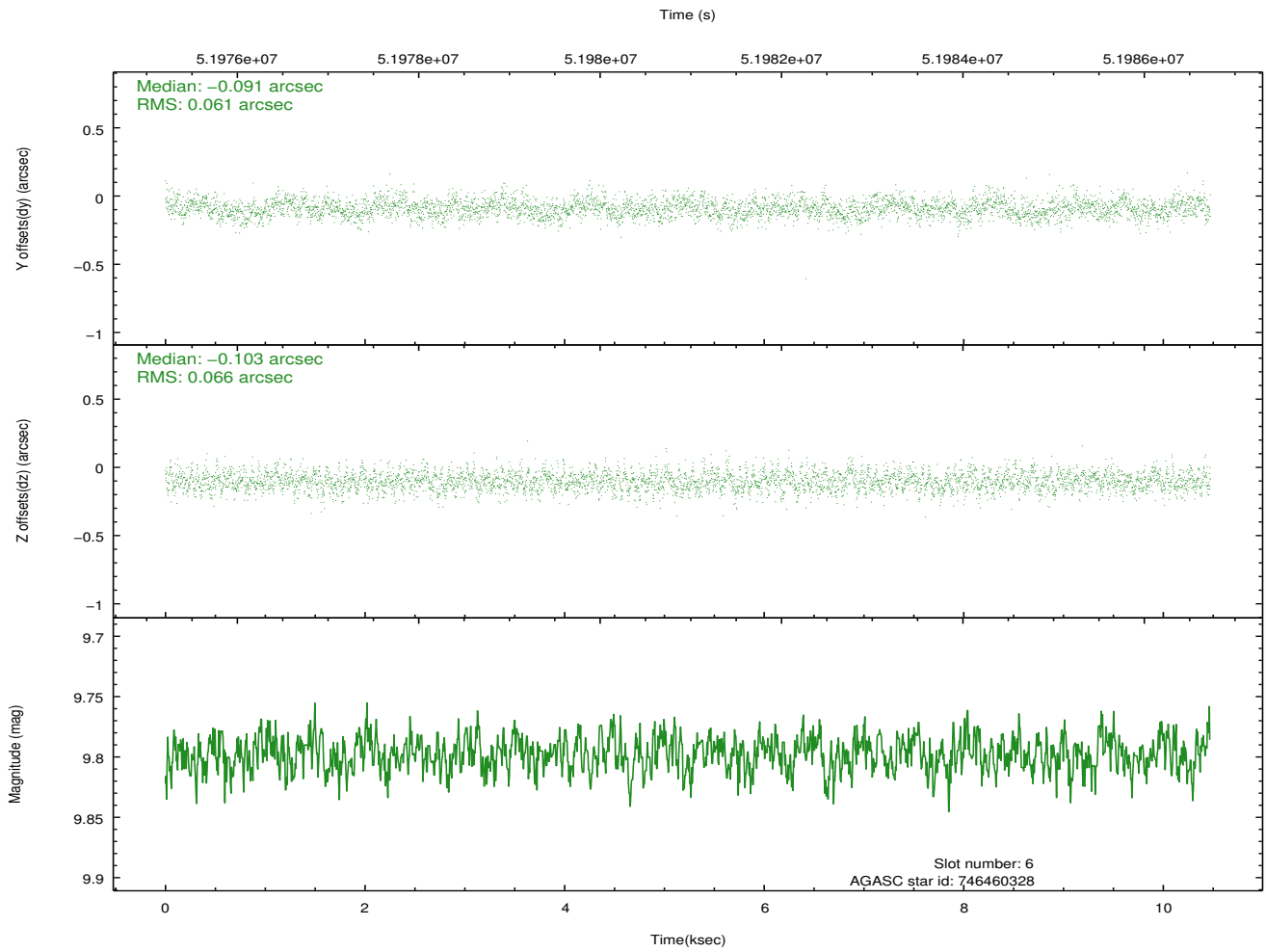
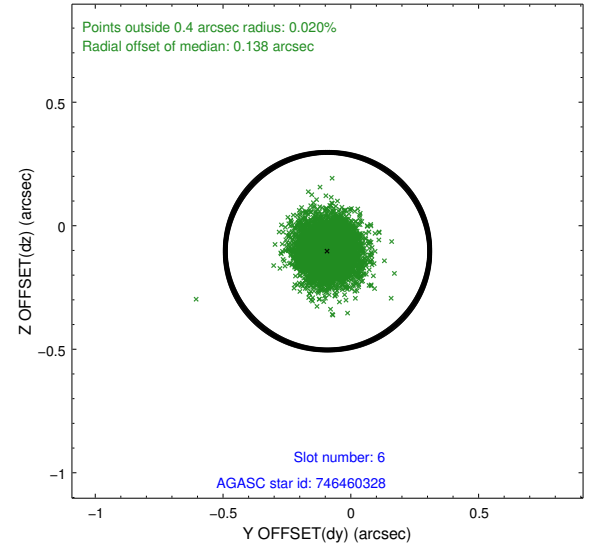
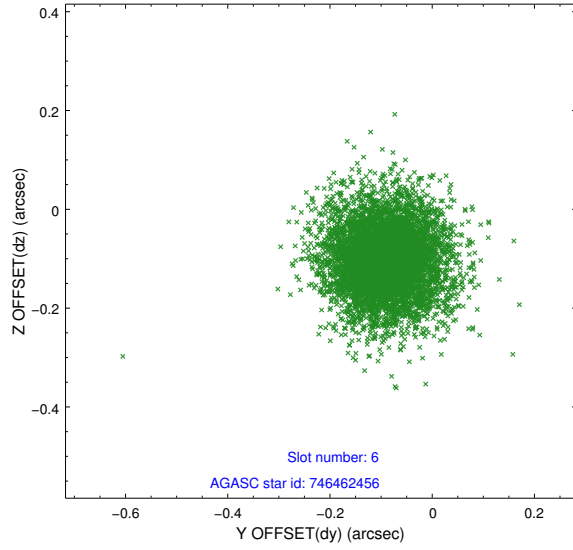
2.4.2 Slot 4



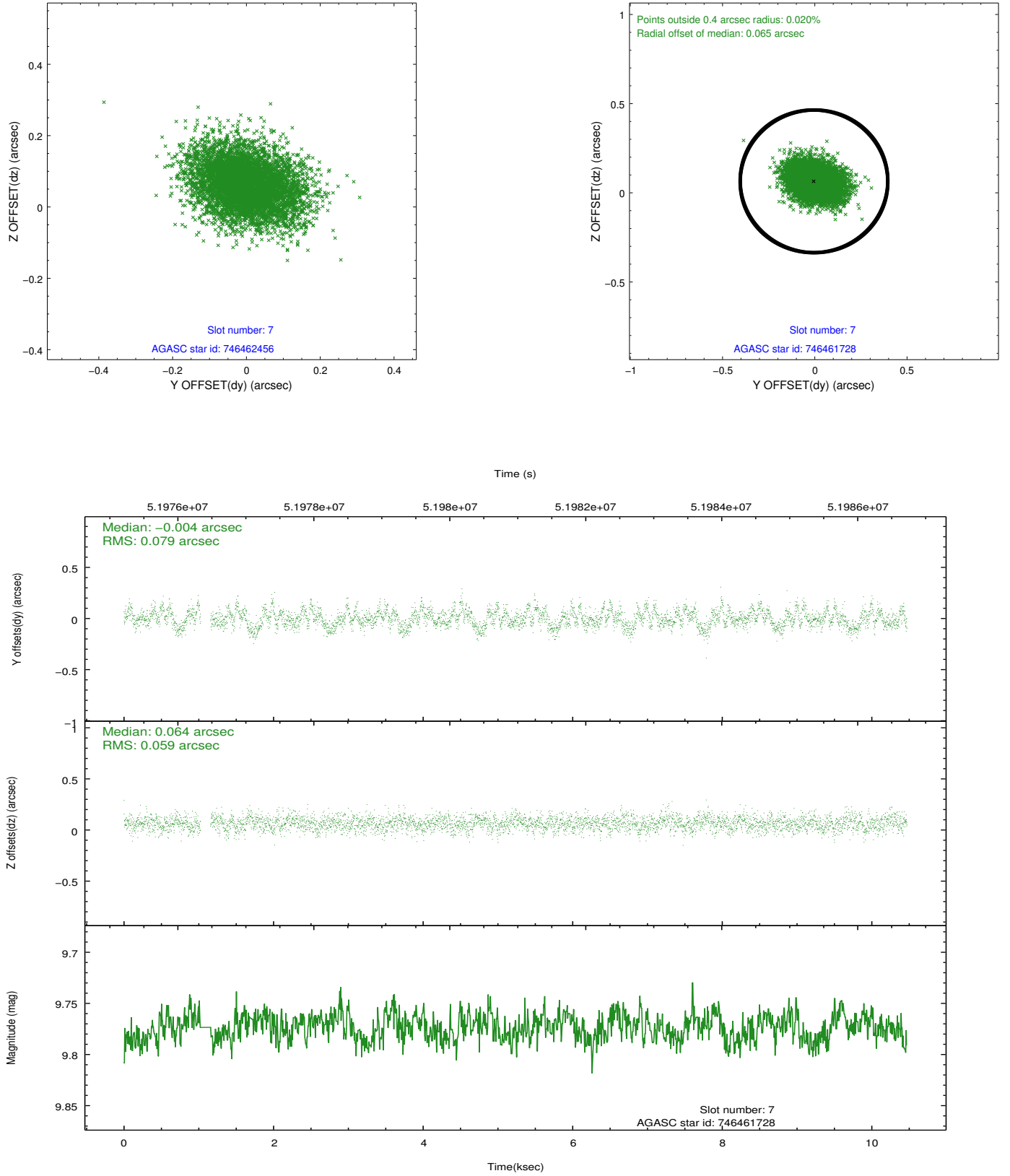
2.4.3 Slot 5



2.4.4 Slot 6

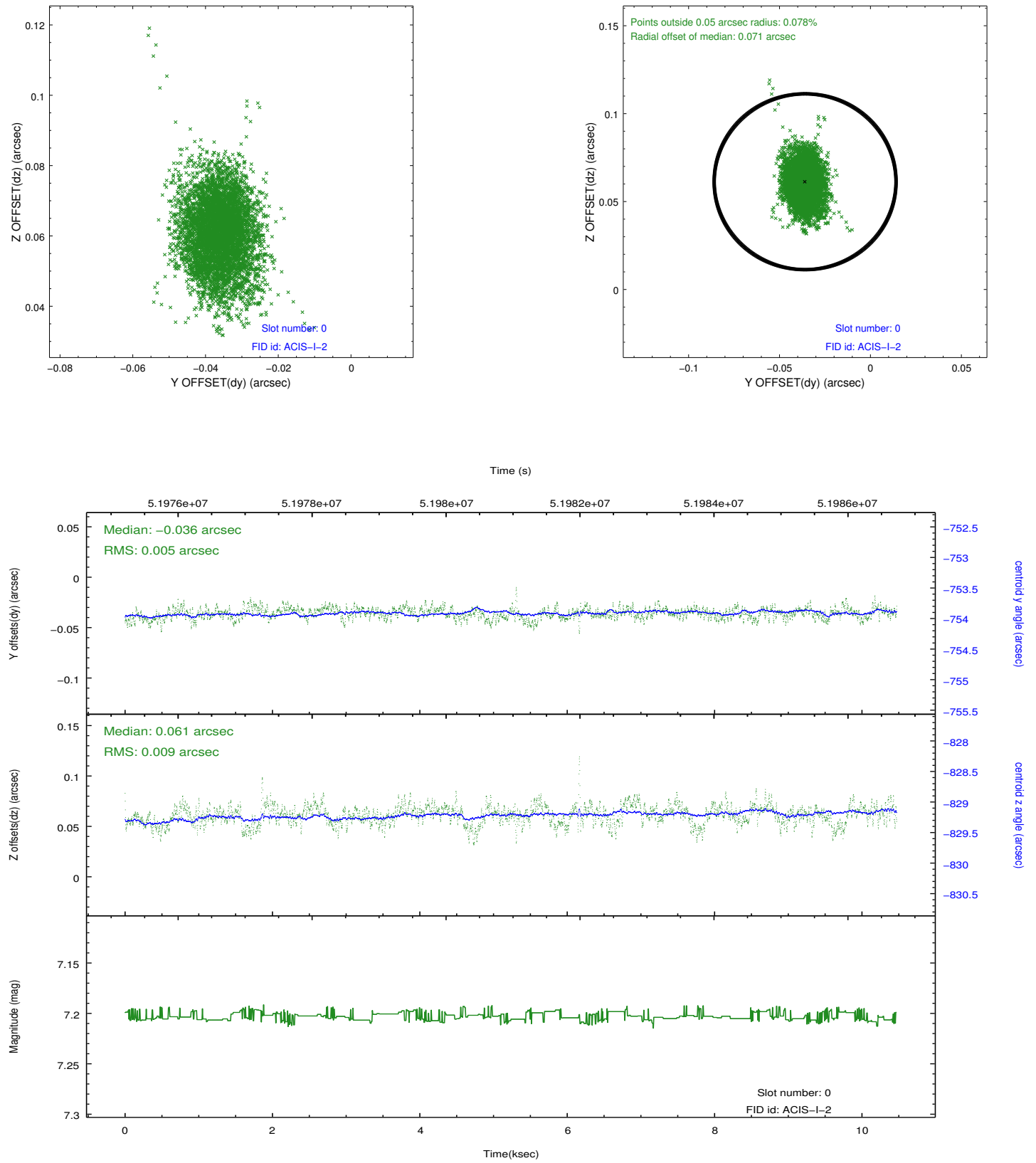


2.4.5 Slot 7

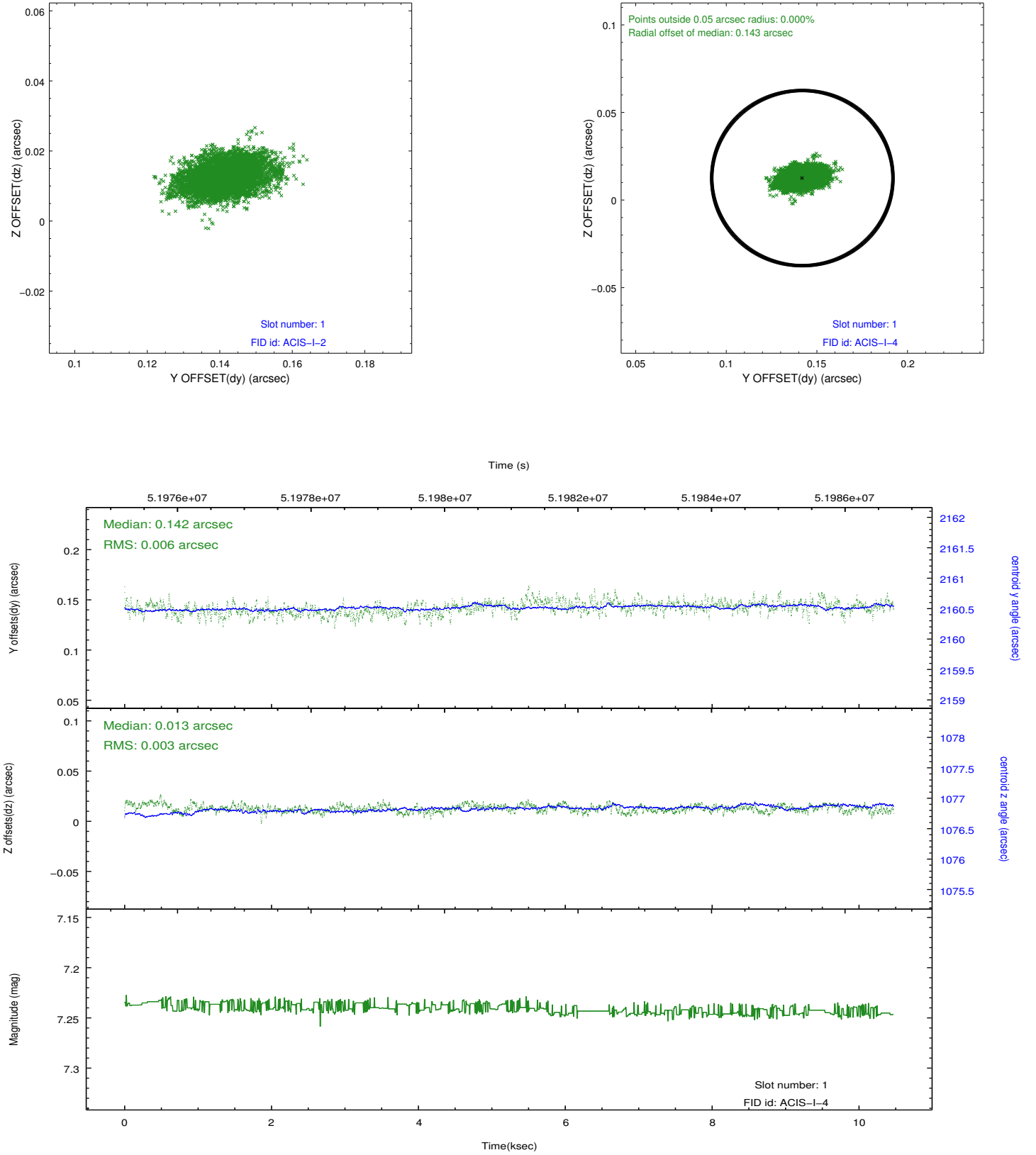


2.5 FID Slots

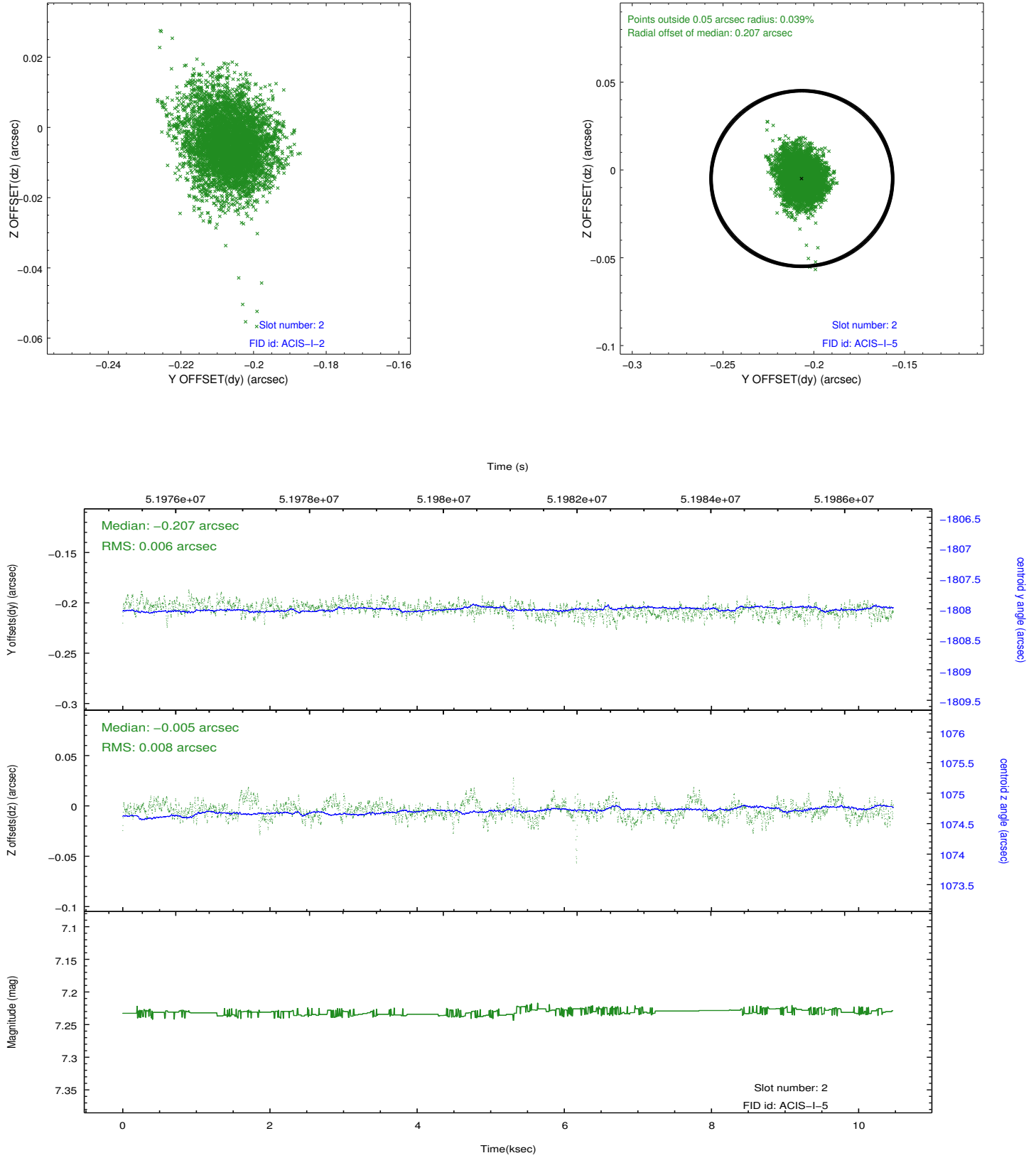
2.5.1 Slot 0



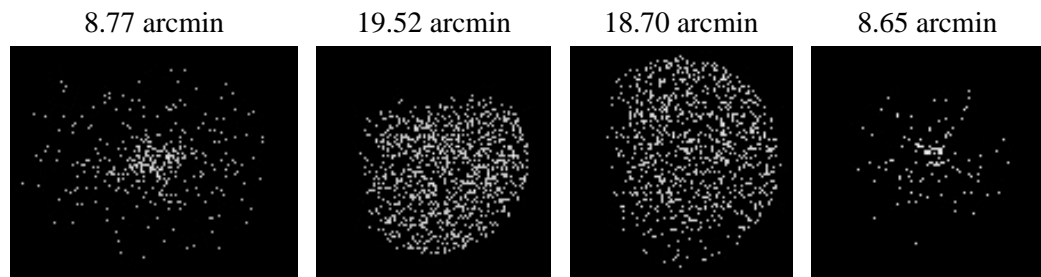
2.5.2 Slot 1



2.5.3 Slot 2



3 Point Sources



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2010.02.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.753

A.2 Comments

ACIS response to a continuum source. Standard candle observation.

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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.