

V&V Reference Report

L2 ASCDS Version : 8.1.1

Observation 541 - L2 Version 4
Chandra X-Ray Center

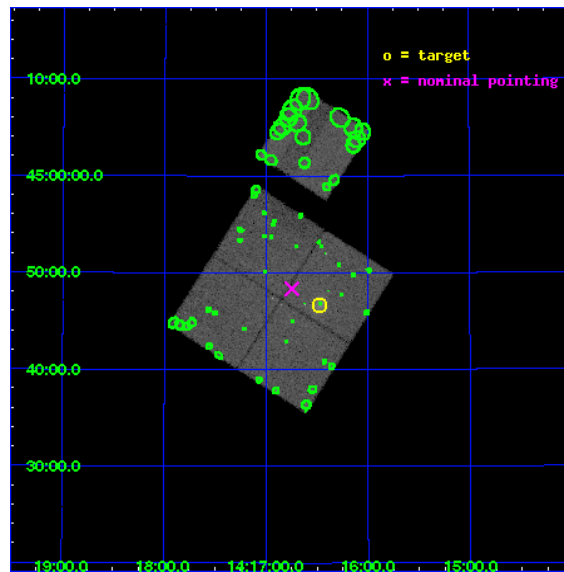
L2 Processing Date : Nov 25 2009

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1 Front

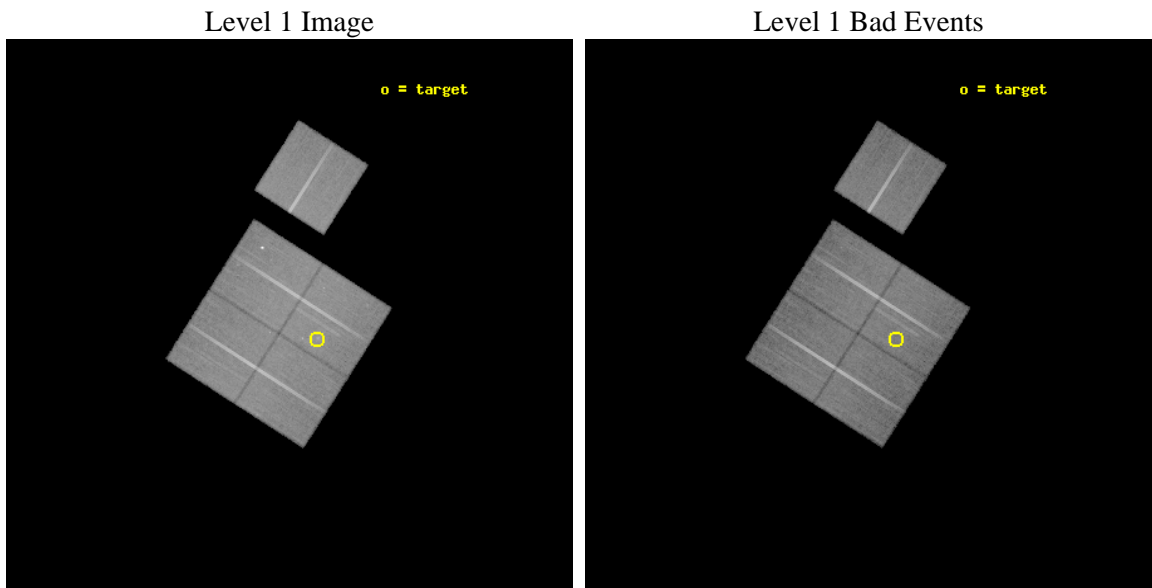
seq_num	800049	Sequence number
obs_id	541	Observation id
title	DETERMINATION OF H0/Q0	Proposal title
observer	DR. LEON VANSPEYBROECK	Principal investigator
object	V1416+4446	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	214.12	Observer's specified target RA
dec_targ	44.778	Observer's specified target Dec
ra_nom	214.18671408633	Nominal RA
dec_nom	44.805633249426	Nominal Dec
roll_nom	32.573174858063	Nominal Roll
revision	4	Processing version of data
ontime	31551.813401759	Sum of GTIs [s]
livetime	31152.285342244	Livetime [s]
ontime0	31551.959039249	Sum of GTIs [s]
ontime1	31555.177501887	Sum of GTIs [s]
ontime2	31548.654551461	Sum of GTIs [s]
ontime3	31551.813401759	Sum of GTIs [s]
ontime6	31551.85446167	Sum of GTIs [s]
l2events	158935	Number of level 2 events



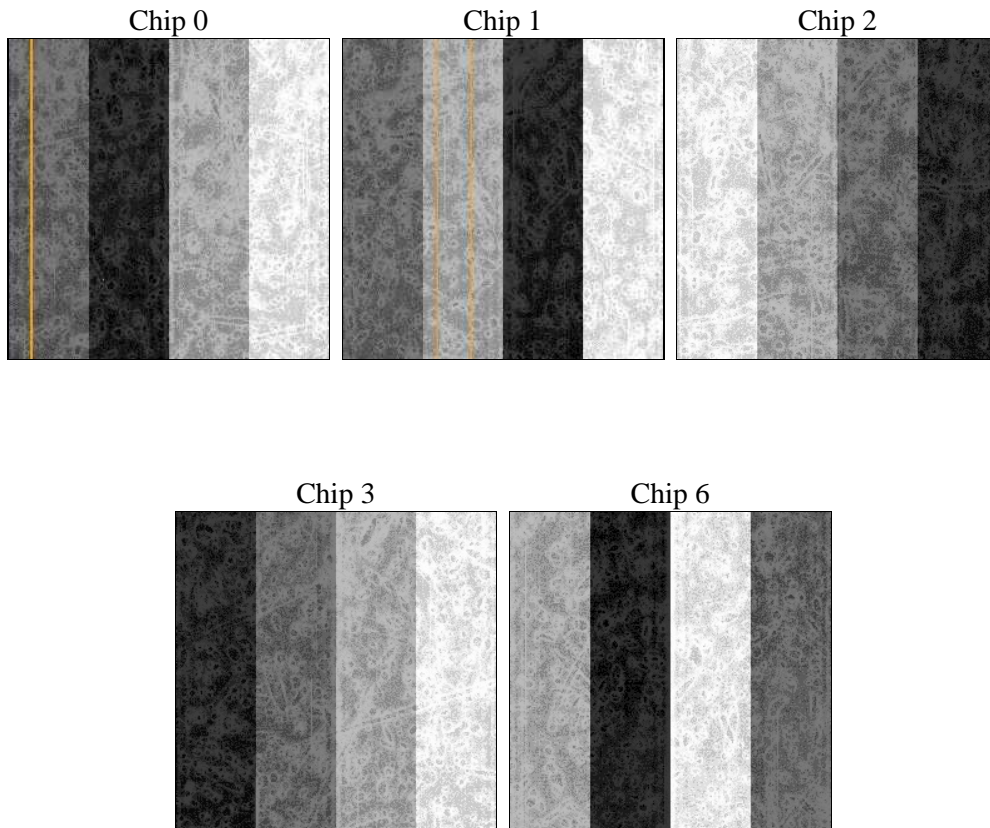
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	32375.536000	Scheduled observation exposure time
ascdsver	8.1.1	ASCDS version number	ontime	31551.813401759	Sum of GTIs [s]
caldbver	4.1.4	 	ontime0	31551.959039249	Sum of GTIs [s]
date	2009-11-25T09:47:44	Date and time of file creation	ontime1	31555.177501887	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	31548.654551461	Sum of GTIs [s]
			ontime3	31551.813401759	Sum of GTIs [s]
			ontime6	31551.85446167	Sum of GTIs [s]
			l1events	1381089	Number of level 1 events

2.1.4 Events

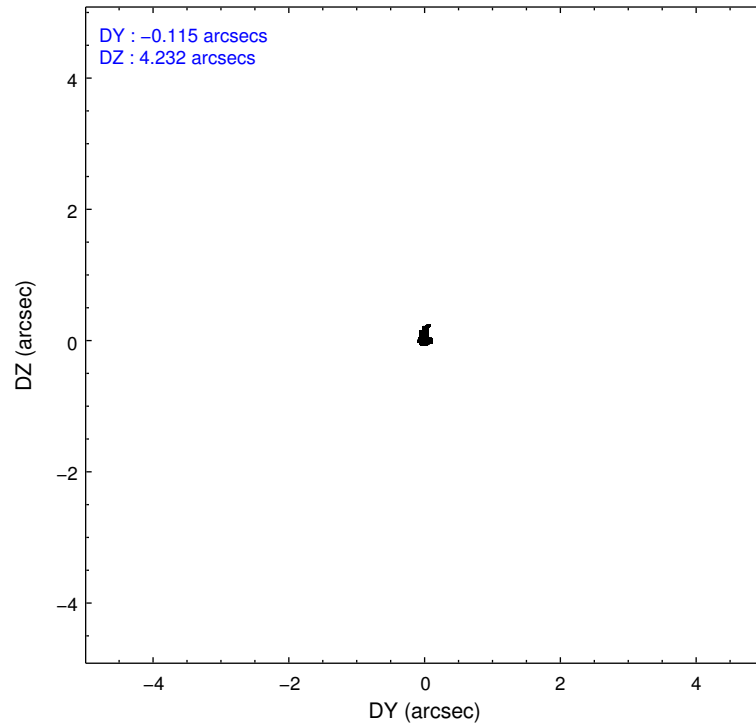
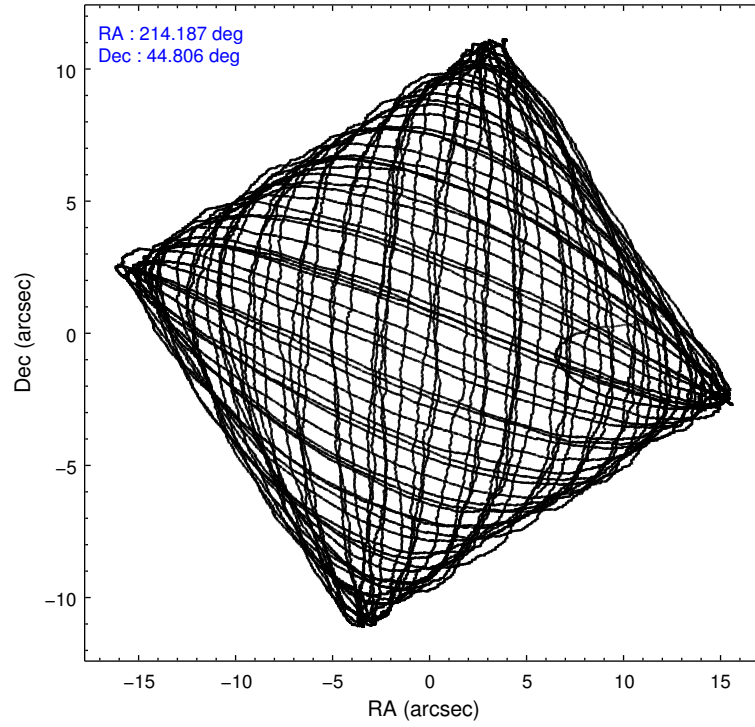
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	264523	259481	289692	284115	283278
rejected events	231666	224526	253476	248549	250690
rejected %	87%	86%	87%	87%	88%

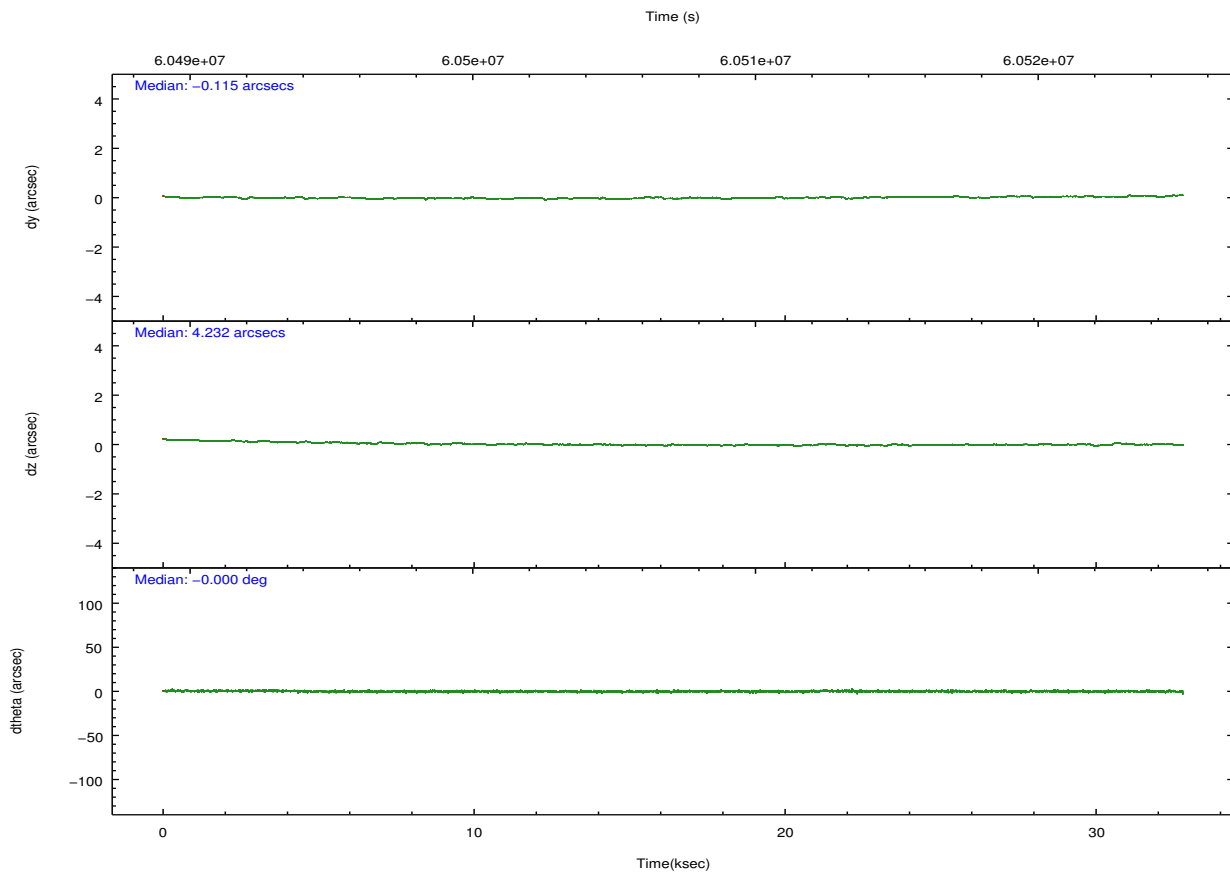
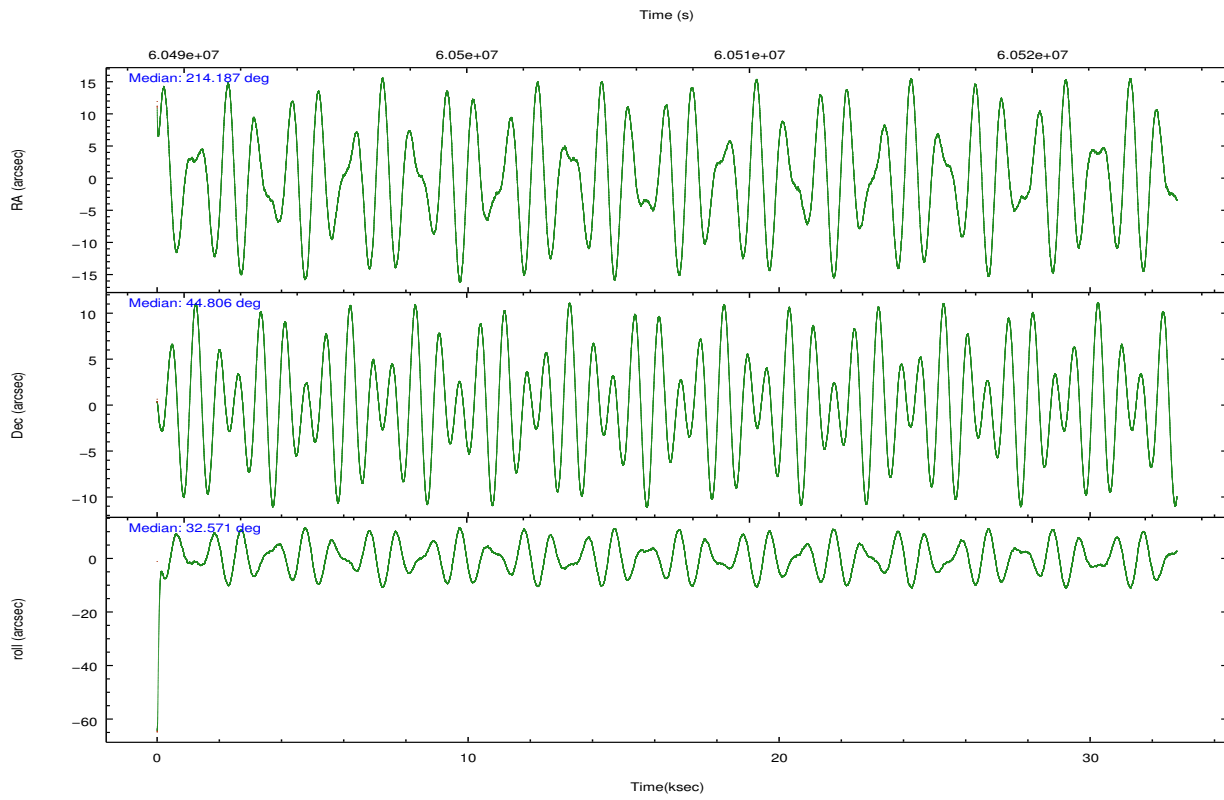
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	8044	8136	11990	9511	6705
	3%	3%	4%	3%	2%
grade 1 events	61	63	102	69	45
	0%	0%	0%	0%	0%
grade 2 events	14161	14748	13835	15470	14825
	5%	5%	4%	5%	5%
grade 3 events	1940	2322	1834	1796	1677
	0%	0%	0%	0%	0%
grade 4 events	1880	2190	1851	1781	1777
	0%	0%	0%	0%	0%
grade 5 events	5365	5559	4765	5112	5634
	2%	2%	1%	1%	1%
grade 6 events	6836	7563	6708	7018	7611
	2%	2%	2%	2%	2%
grade 7 events	226236	218900	248607	243358	245004
	85%	84%	85%	85%	86%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
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
Pointing RA	214.168312	214.1867140863285	Subarray requested	NONE	NONE
Pointing Dec	44.781203	44.80563324942644	Alternating exposures requested	N	N
Pointing Roll	32.377483	32.57317485806336	Primary exposure time	0.000000	3.2
SIM focus pos (mm)	-0.782348	-0.7809083437167272			
SIM defocus (mm)	0	0.001439871863259334			
SIM translation stage pos (mm)	-230.592463	-230.5903706213692			
SIM translation stage offset (mm)	-3	-3.002082381560513			
Observation start time	60491105.184000	60489714.291882			
Observation start date	1999-12-02T03:04:01	1999-12-02T02:41:54			
Observation end time	60523480.184000	60524002.080622			
Observation end date	1999-12-02T12:03:36	1999-12-02T12:13:22			
Read mode	TIMED	TIMED			

2.3 Aspect



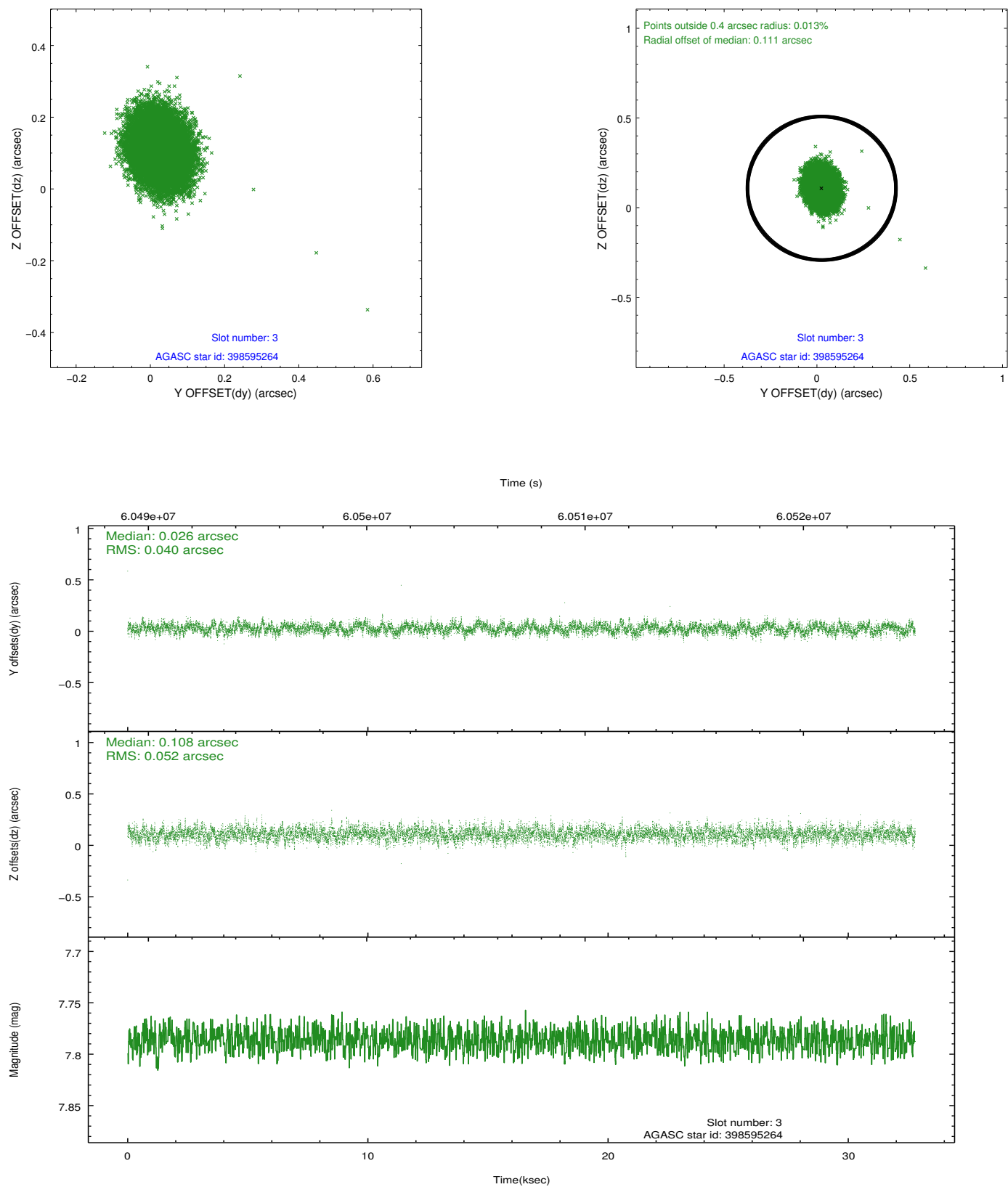


Slot Statistics

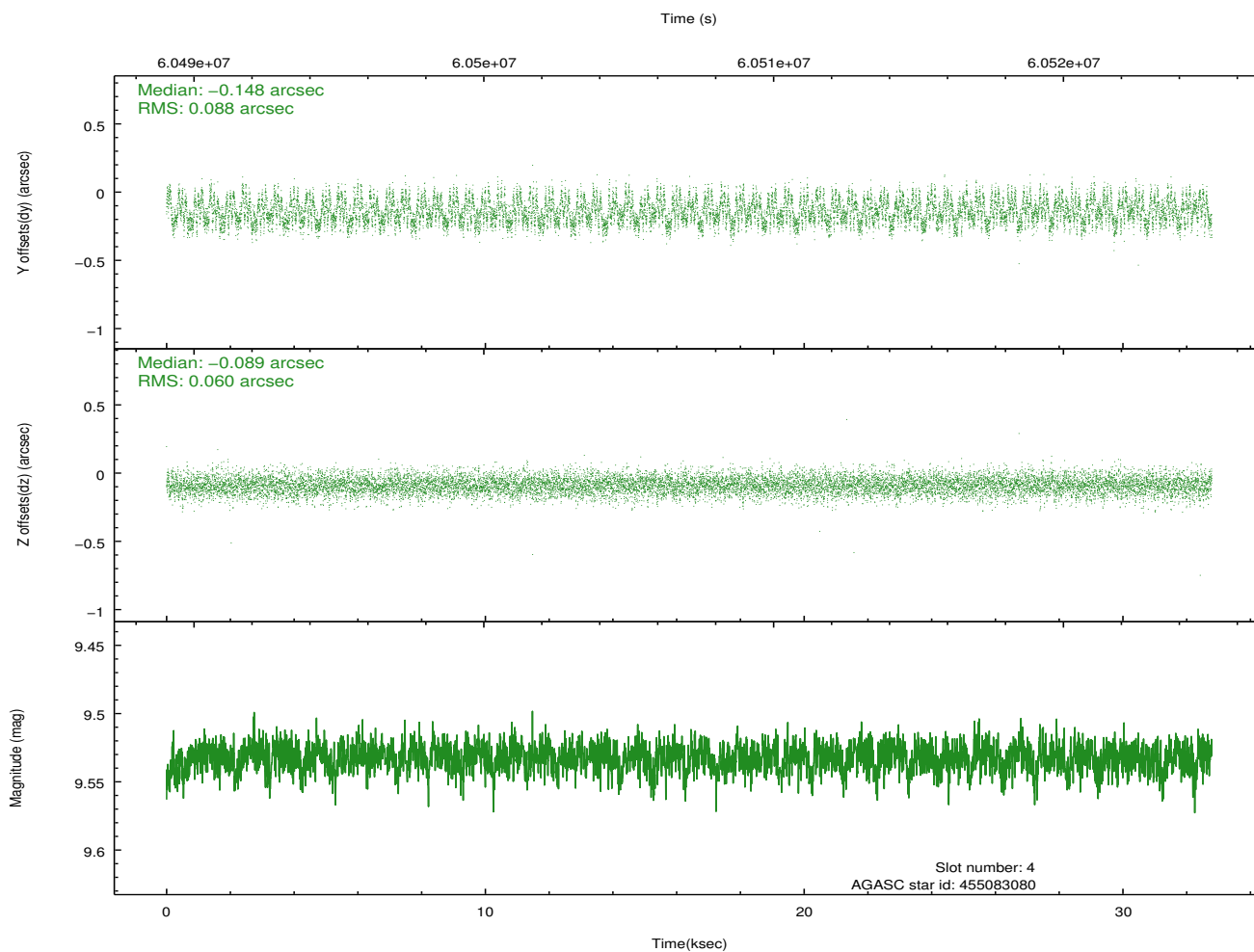
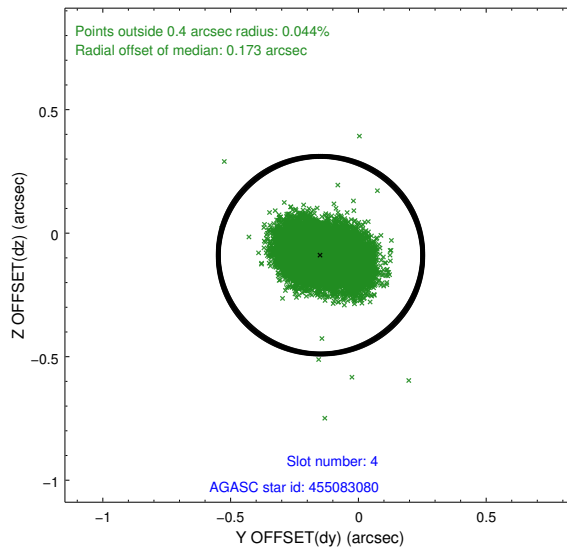
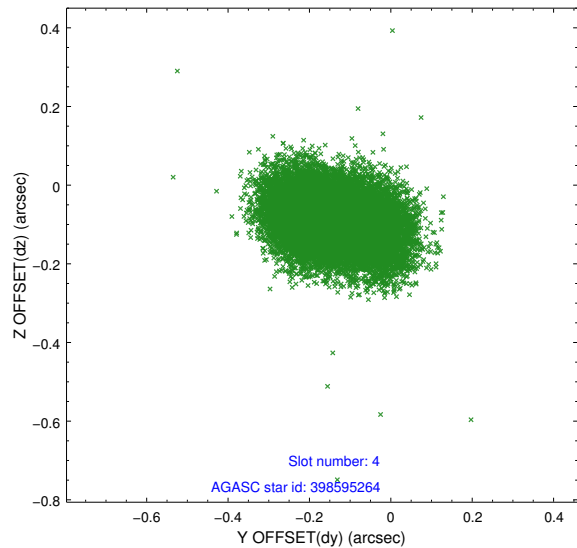
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-3	7.43	15996	0.049	0.139	0.008	0.014	0.000000	0.000000	57.37	-1022.23
1	FID	ACIS-I-4	7.21	15994	0.016	-0.074	0.011	0.018	0.000000	0.000000	2159.77	1010.92
2	FID	ACIS-I-5	7.23	15995	-0.164	0.004	0.010	0.017	0.000000	0.000000	-1808.26	1008.55
3	GUIDE	398595264	7.79	15992	0.026	0.108	0.069	0.113	213.755390	44.358723	-1711.06	-712.59
4	GUIDE	455083080	9.53	15986	-0.148	-0.089	0.114	0.182	214.351597	45.444471	1669.12	1769.51
5	GUIDE	398594136	9.27	15987	0.059	0.096	0.080	0.133	214.435206	44.736907	491.30	-498.54
6	GUIDE	455091736	9.50	15981	-0.088	-0.041	0.104	0.167	214.268261	45.478766	1557.33	1986.33
7	GUIDE	398462056	9.60	15979	0.155	-0.075	0.113	0.182	213.081877	44.910018	-2081.39	1891.02

2.4 Star Slots

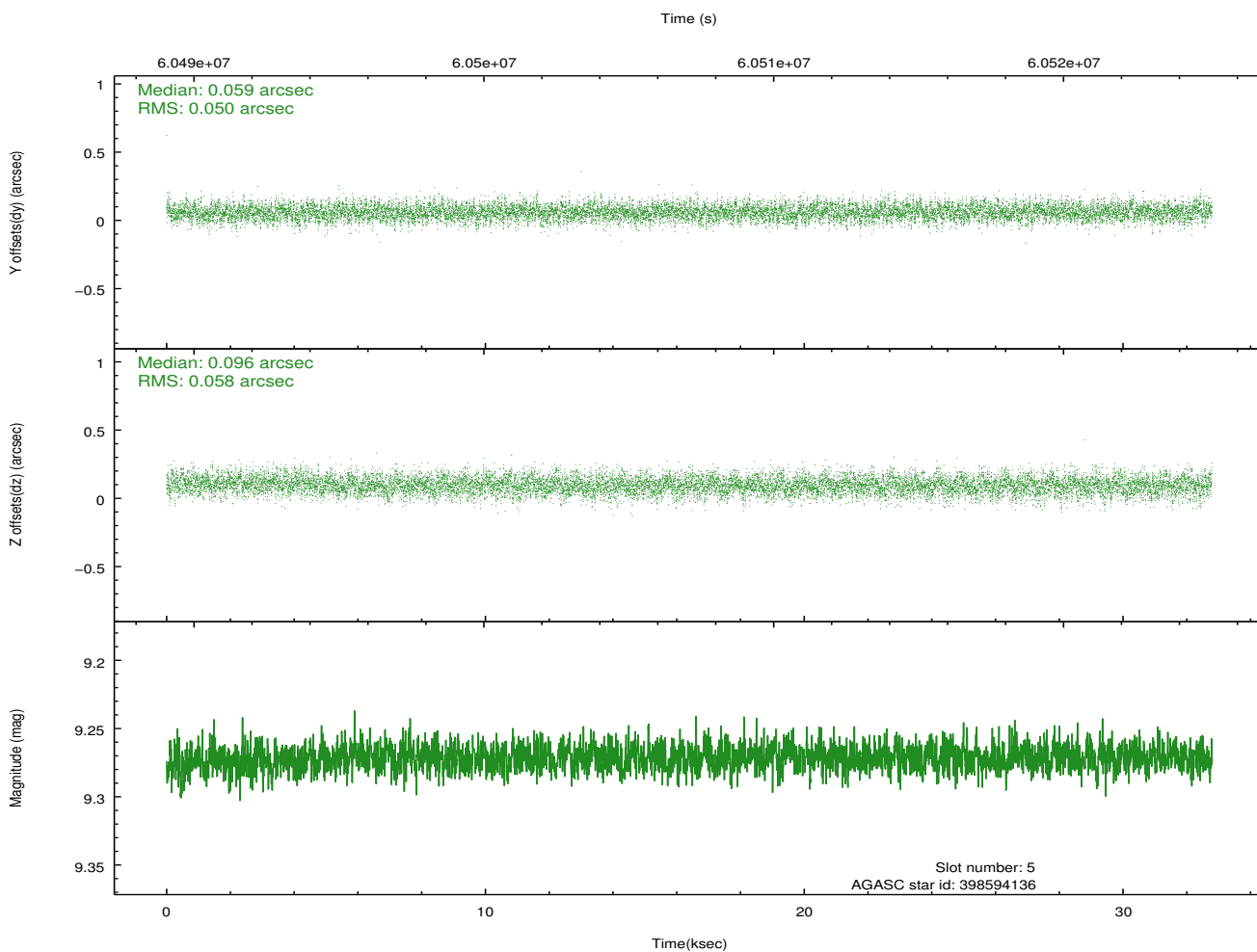
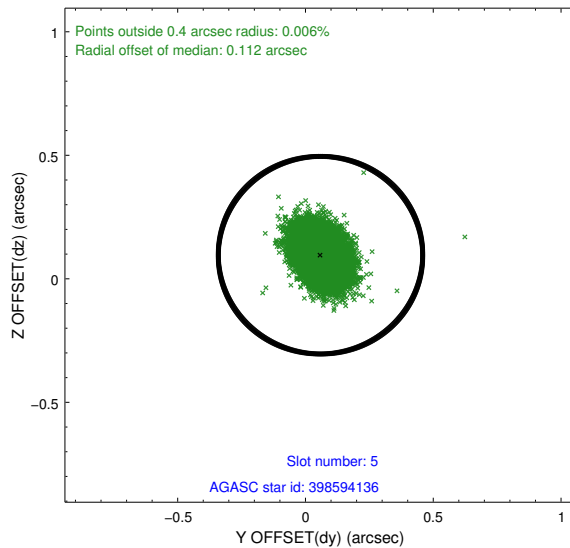
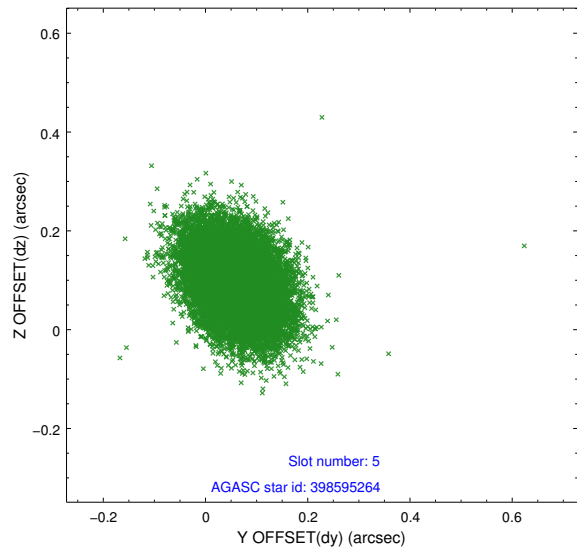
2.4.1 Slot 3



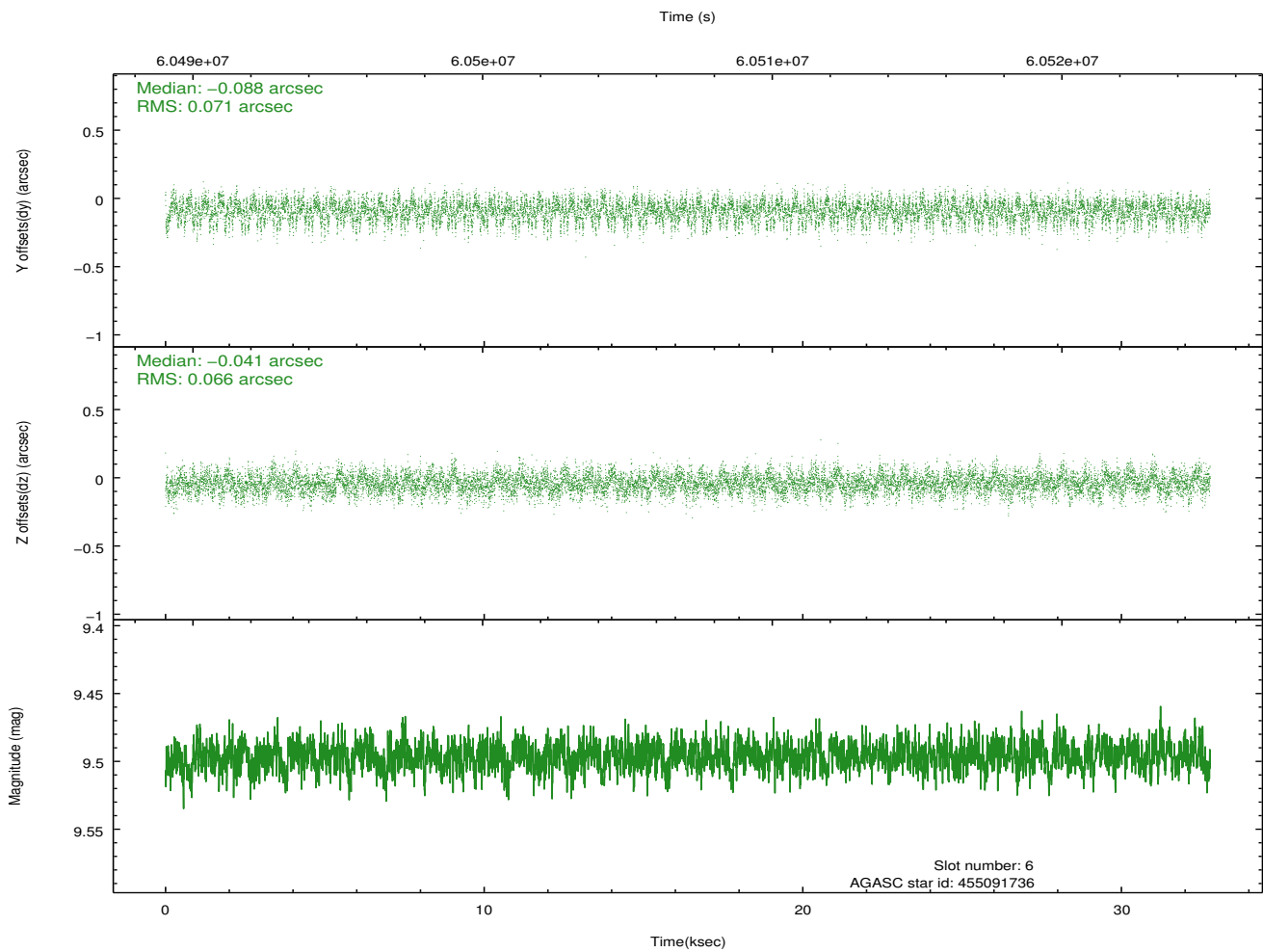
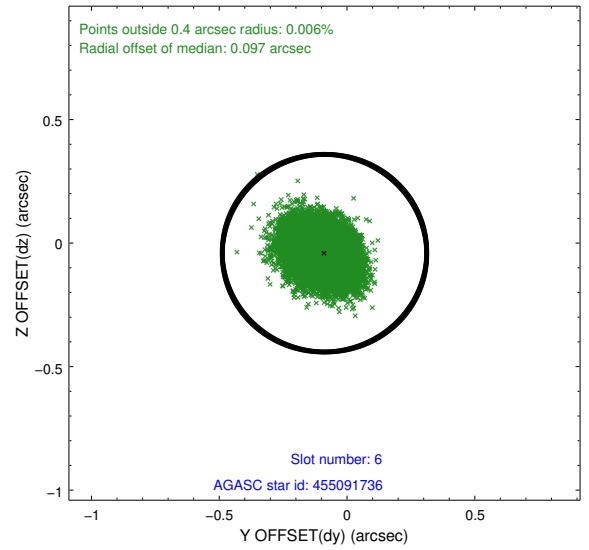
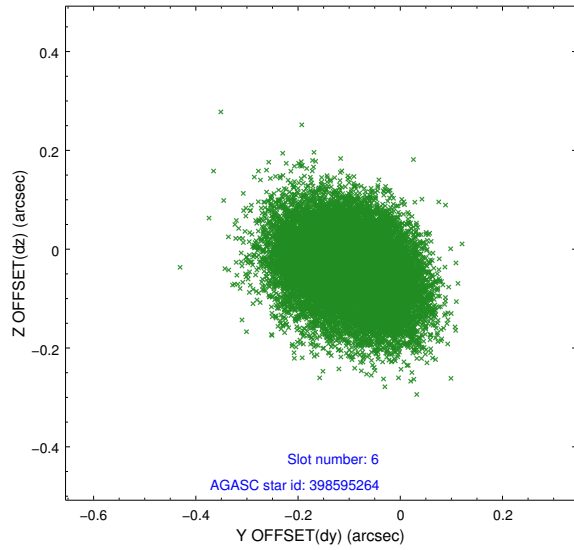
2.4.2 Slot 4



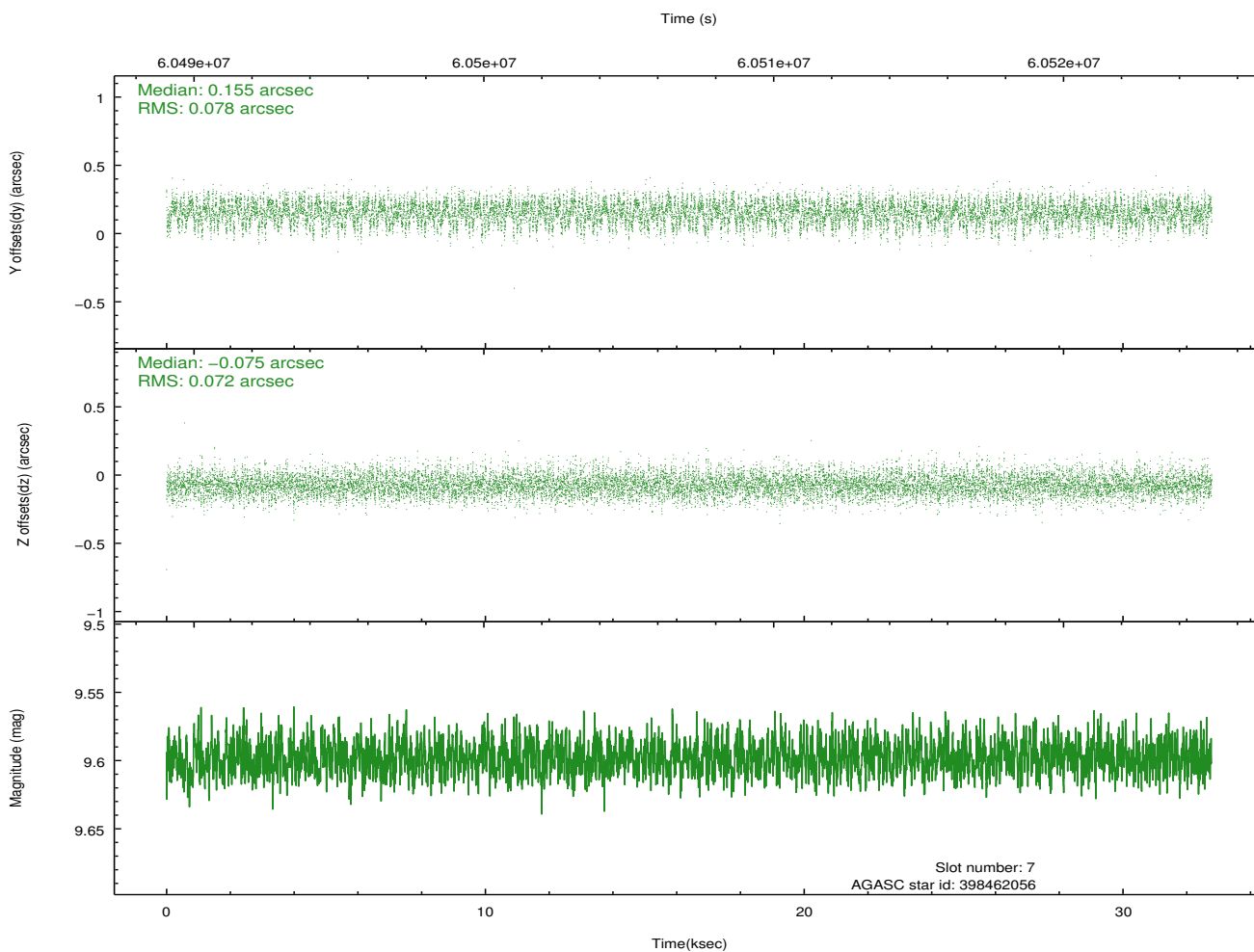
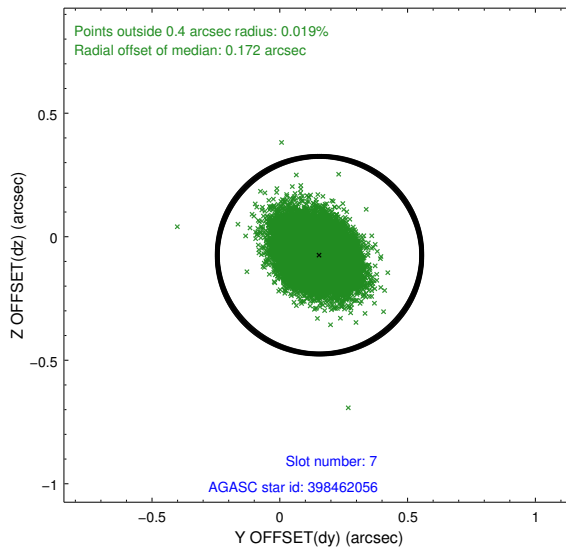
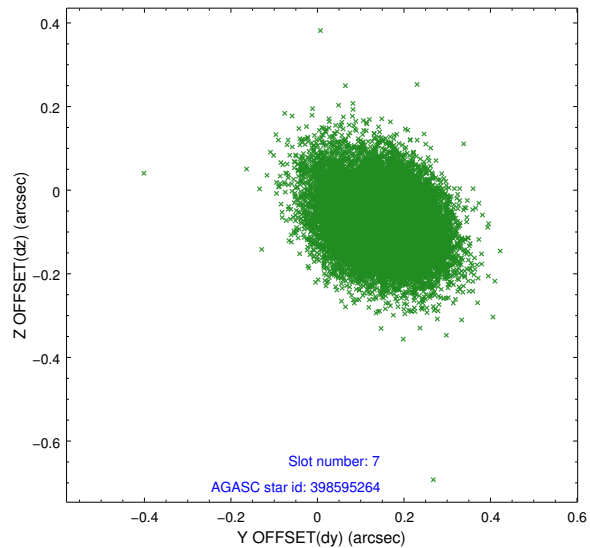
2.4.3 Slot 5



2.4.4 Slot 6

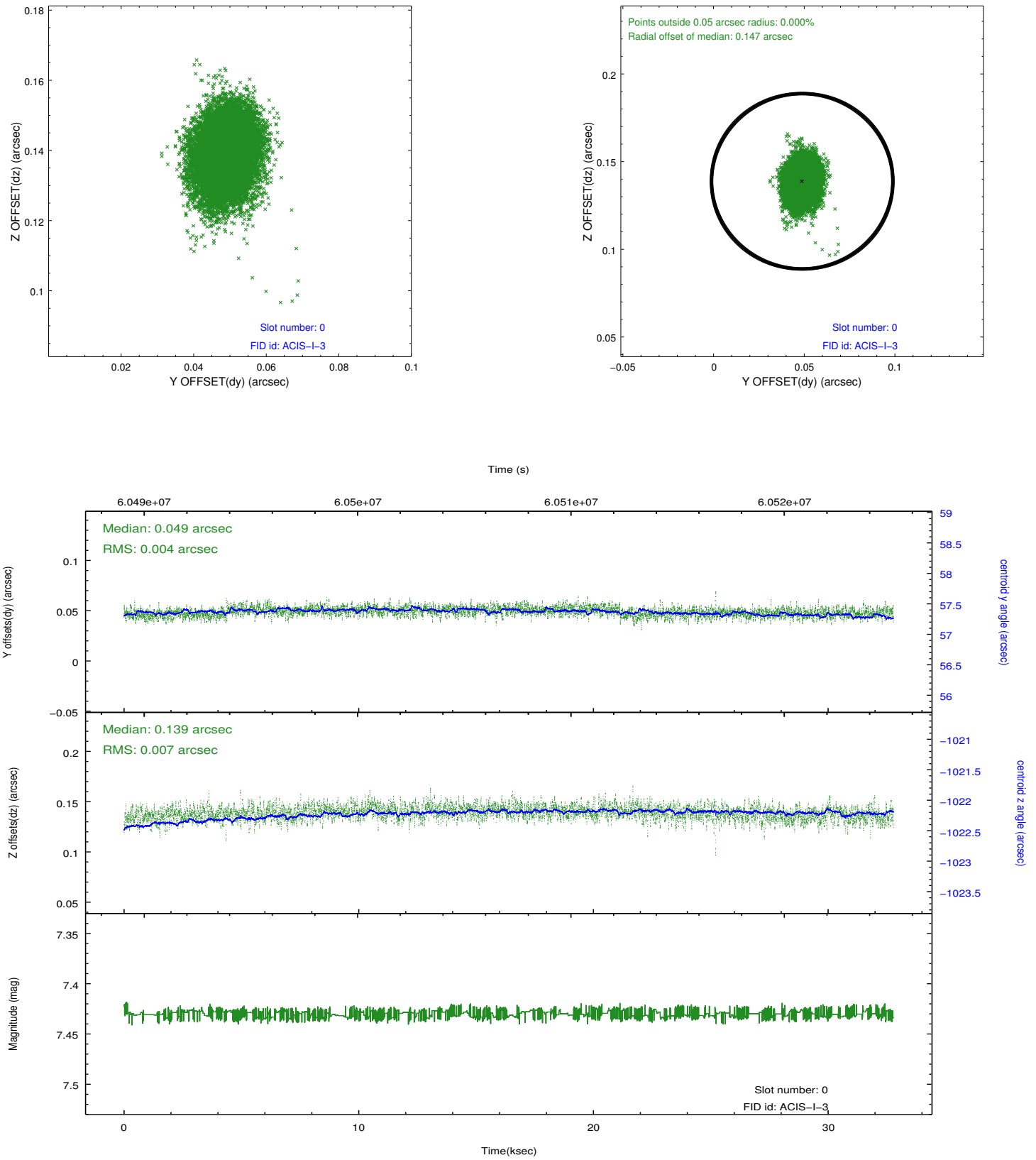


2.4.5 Slot 7

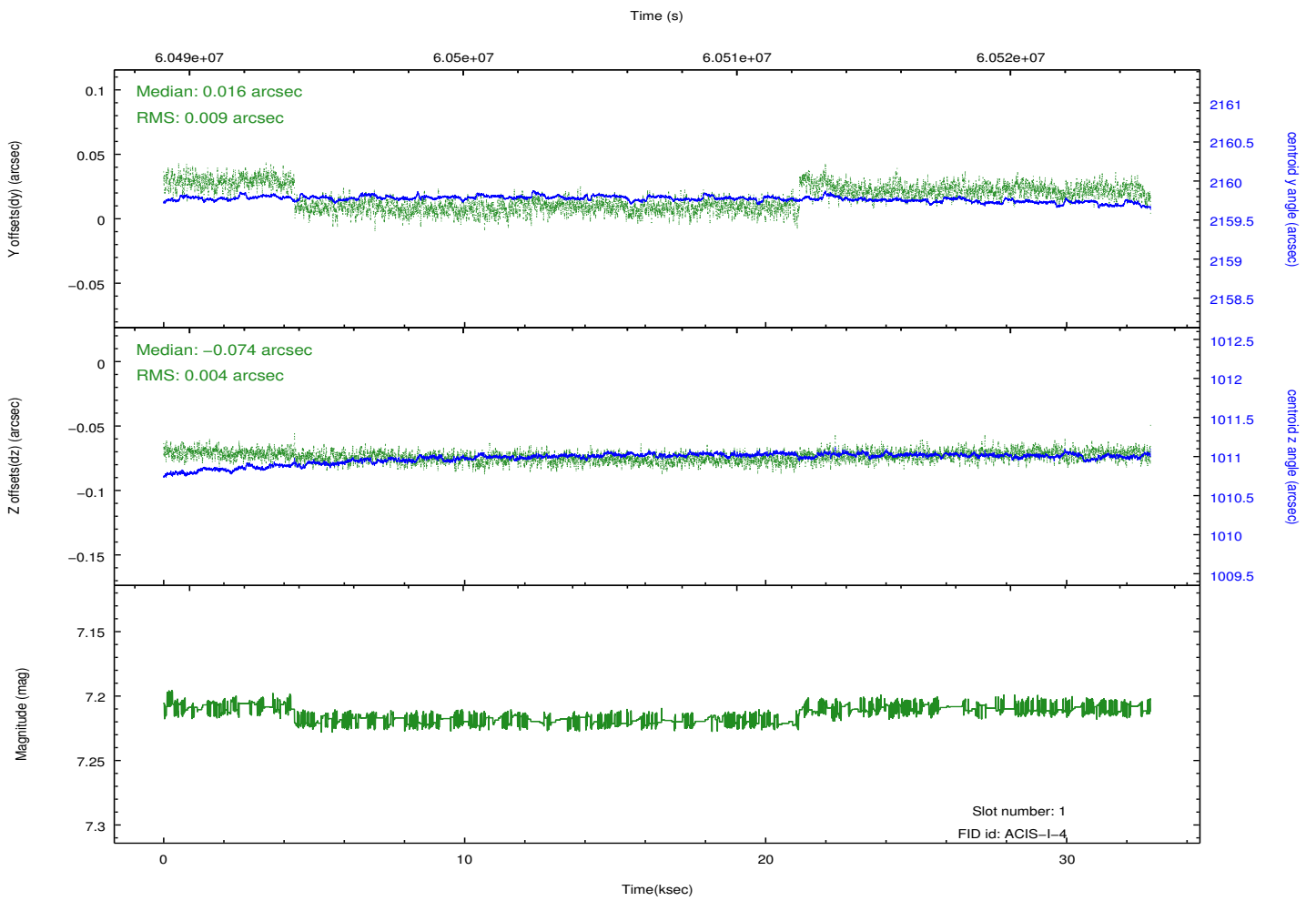
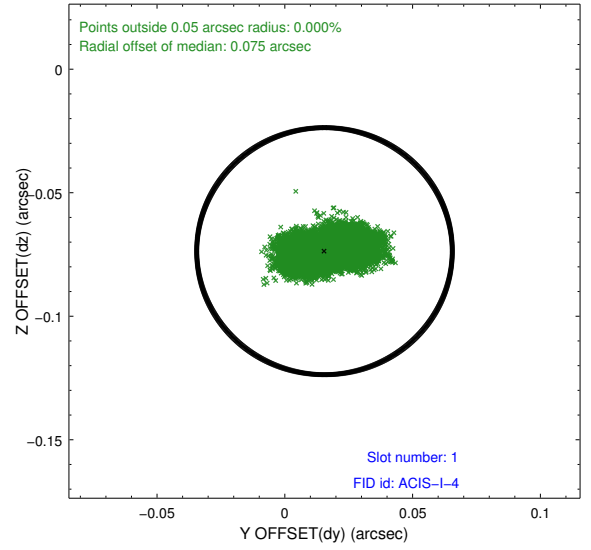
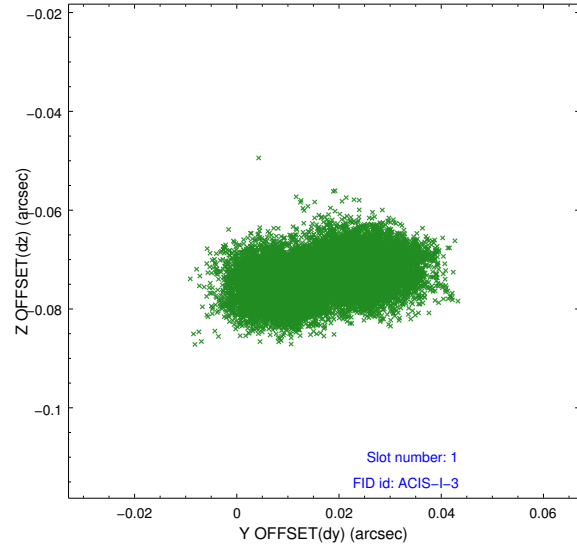


2.5 FID Slots

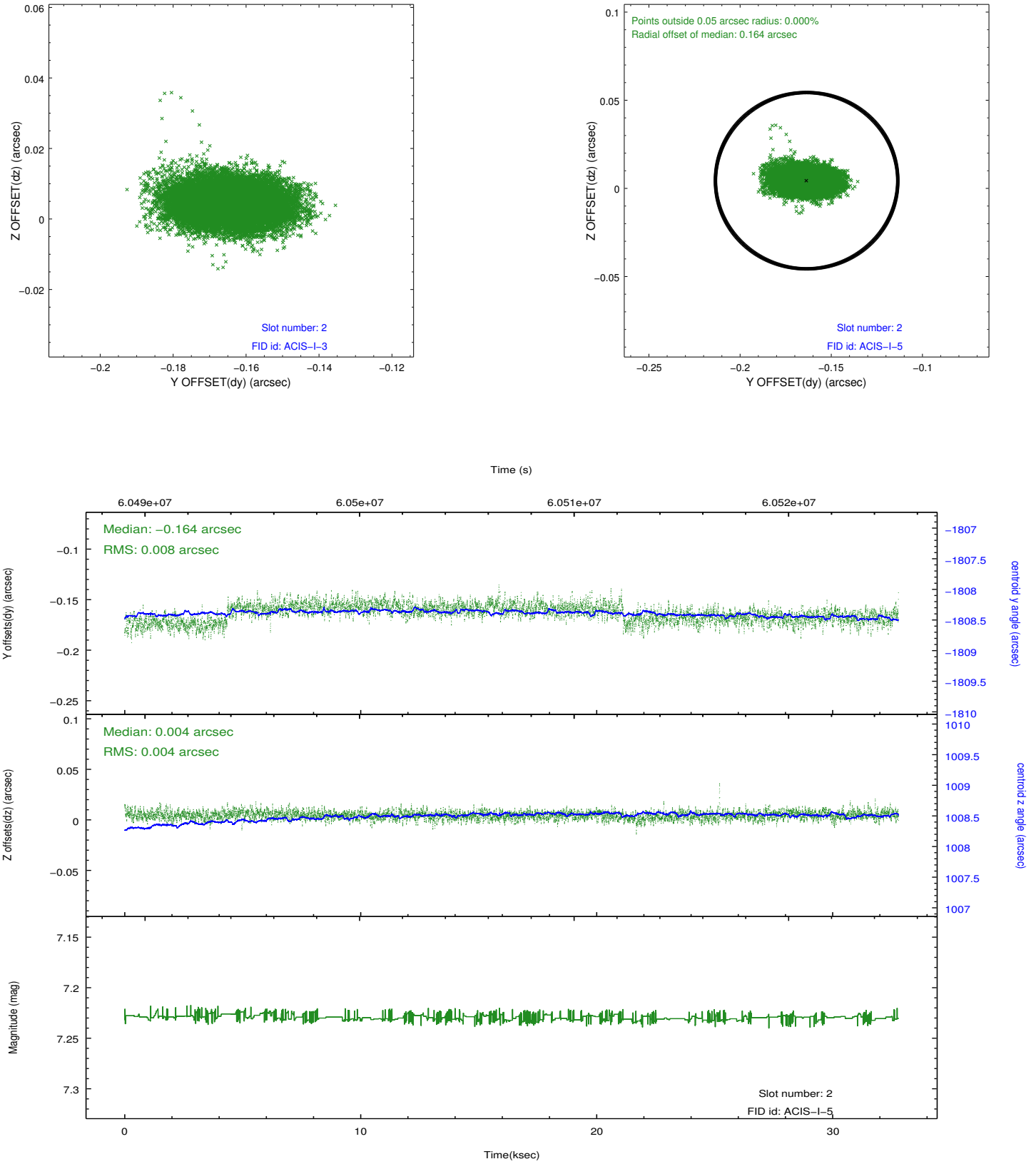
2.5.1 Slot 0



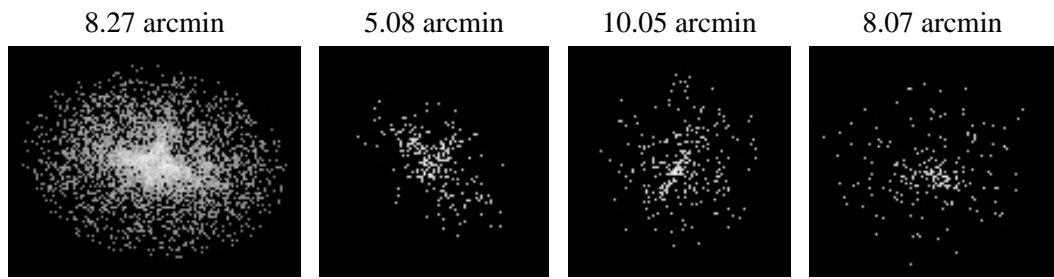
2.5.2 Slot 1



2.5.3 Slot 2



3 Point Sources



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2010.02.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	31.555

A.2 Comments

The focal plane temperature is approximately -110 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.