

V&V Reference Report

L2 ASCDS Version : 8.2.1

Observation 1249 - L2 Version 3

Chandra X-Ray Center

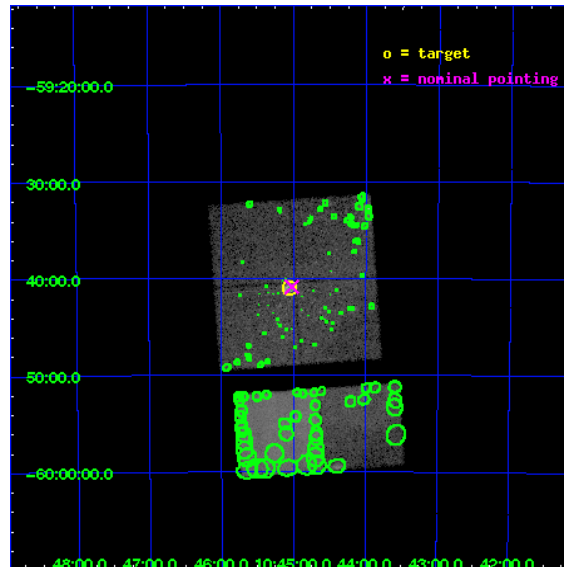
L2 Processing Date : Jan 13 2010

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

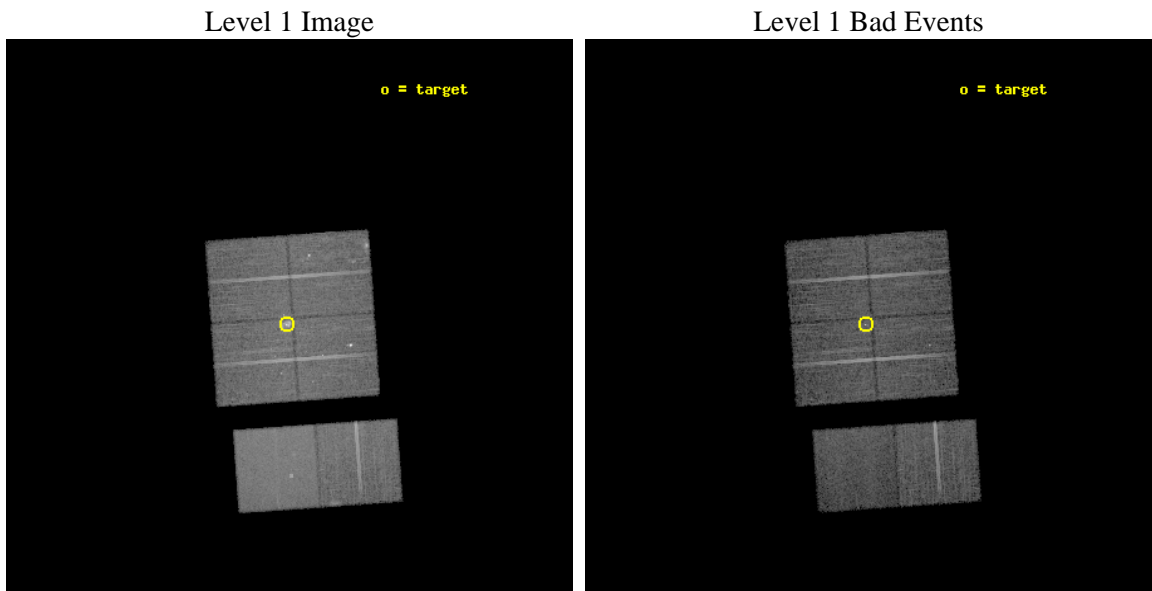
seq_num	280199	Sequence number
obs_id	1249	Observation id
title	DEMONSTRATION IMAGE OF ETA CARINAE	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	ETA CARINAE	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	161.265	Observer's specified target RA
dec_targ	-59.684167	Observer's specified target Dec
ra_nom	161.2551859245	Nominal RA
dec_nom	-59.681529984057	Nominal Dec
roll_nom	175.95073617178	Nominal Roll
revision	3	Processing version of data
ontime	9750.3590588644	Sum of GTIs [s]
livetime	9626.8941414997	Livetime [s]
ontime0	9753.6000090837	Sum of GTIs [s]
ontime1	9753.6000090837	Sum of GTIs [s]
ontime2	9753.6000090837	Sum of GTIs [s]
ontime3	9750.3590588644	Sum of GTIs [s]
ontime6	9753.6000090837	Sum of GTIs [s]
ontime7	9753.6000090837	Sum of GTIs [s]
l2events	188887	Number of level 2 events



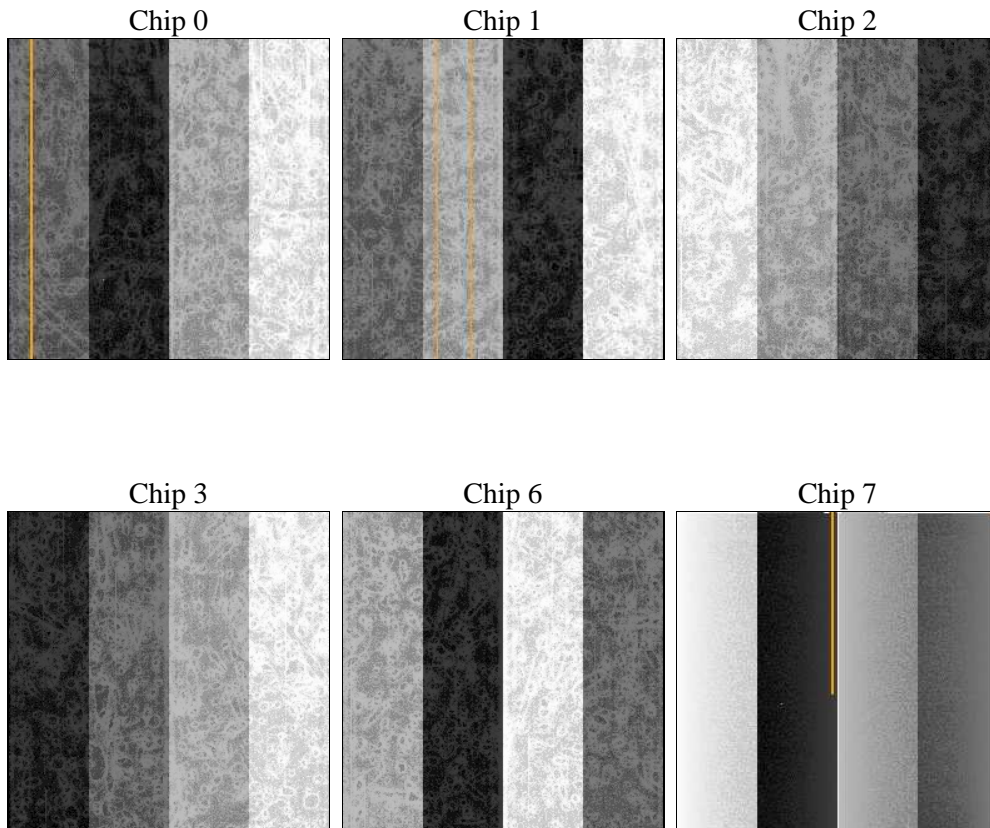
2 OBI

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	8.2.1	ASCDS version number	ontime	9750.3590588644	Sum of GTIs [s]
caldsver	4.1.5	 	ontime0	9753.6000090837	Sum of GTIs [s]
date	2010-01-13T07:01:41	Date and time of file creation	ontime1	9753.6000090837	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	9753.6000090837	Sum of GTIs [s]
			ontime3	9750.3590588644	Sum of GTIs [s]
			ontime6	9753.6000090837	Sum of GTIs [s]
			ontime7	9753.6000090837	Sum of GTIs [s]
			l1events	687496	Number of level 1 events

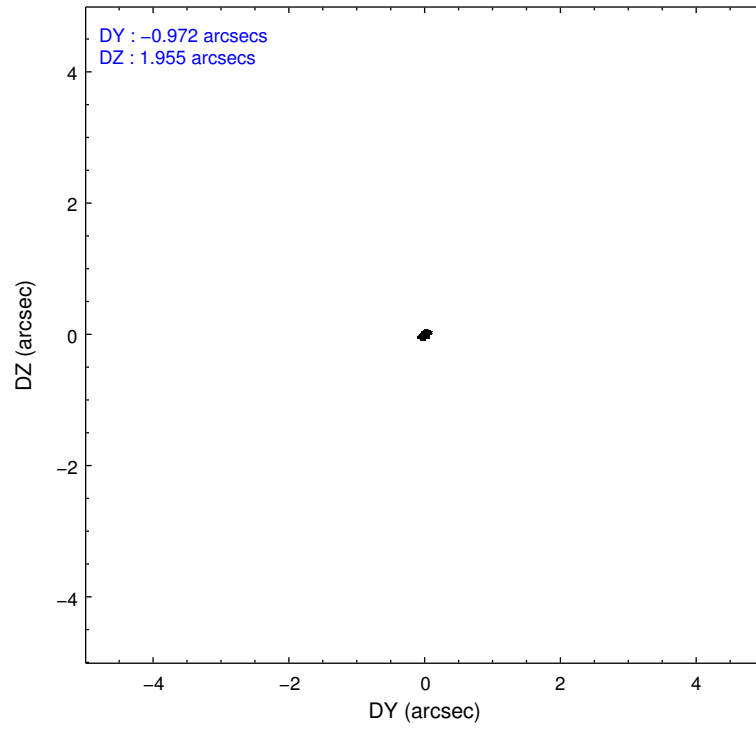
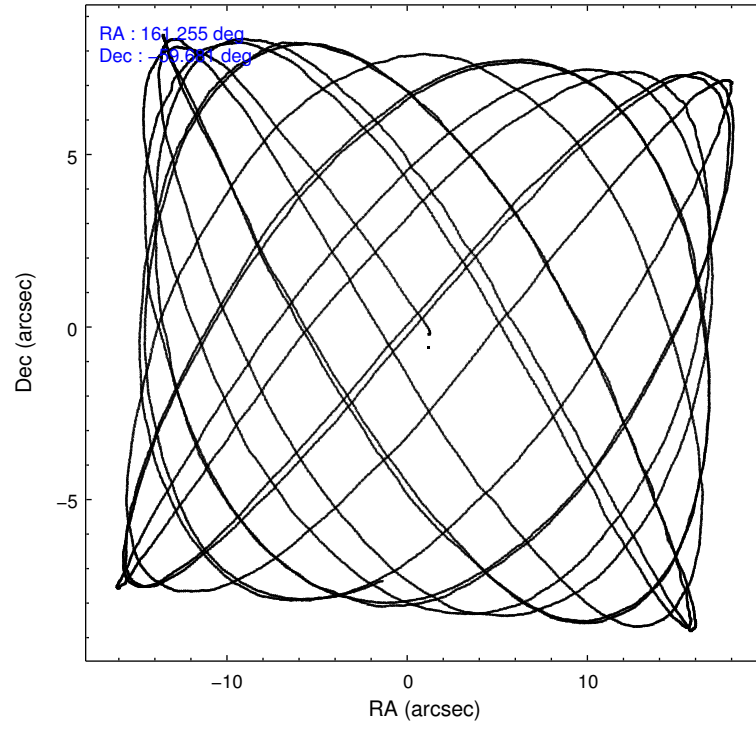
2.1.4 Events

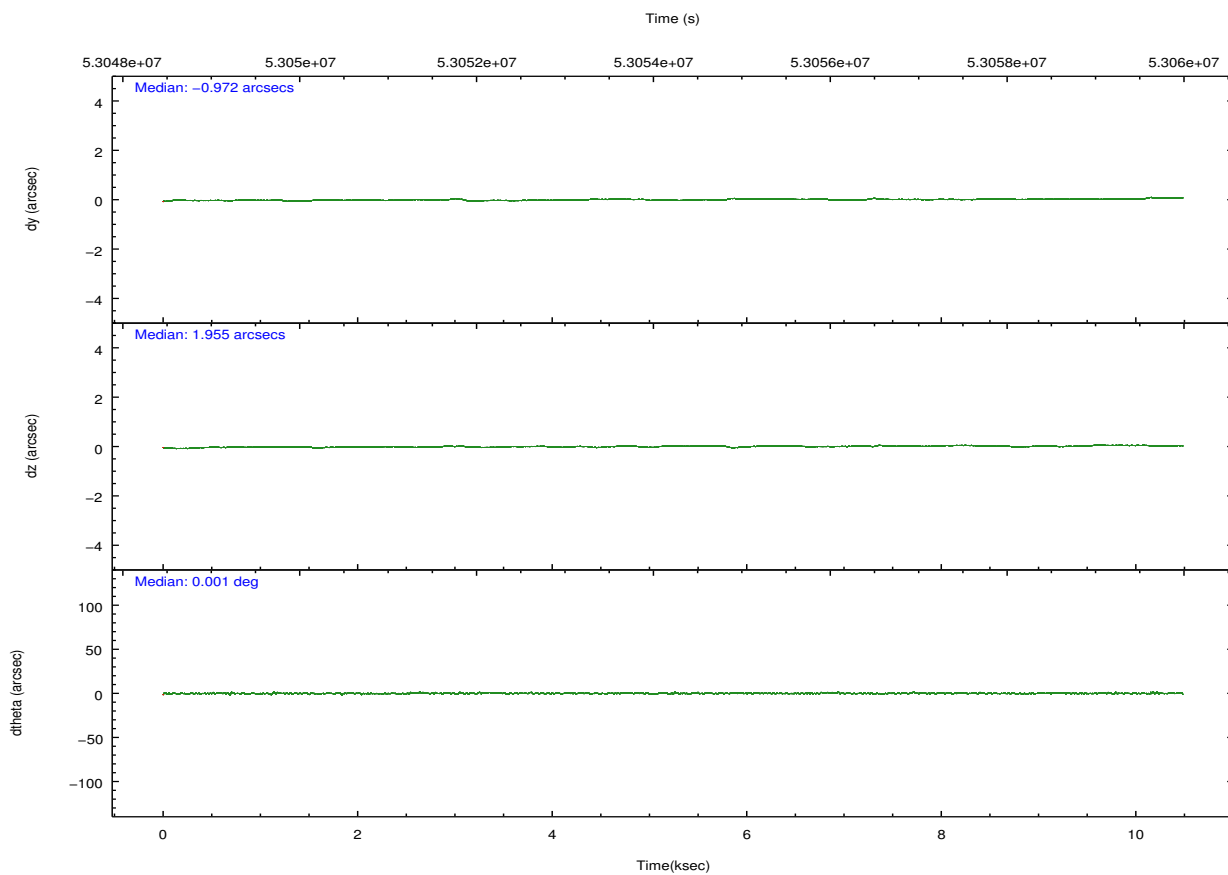
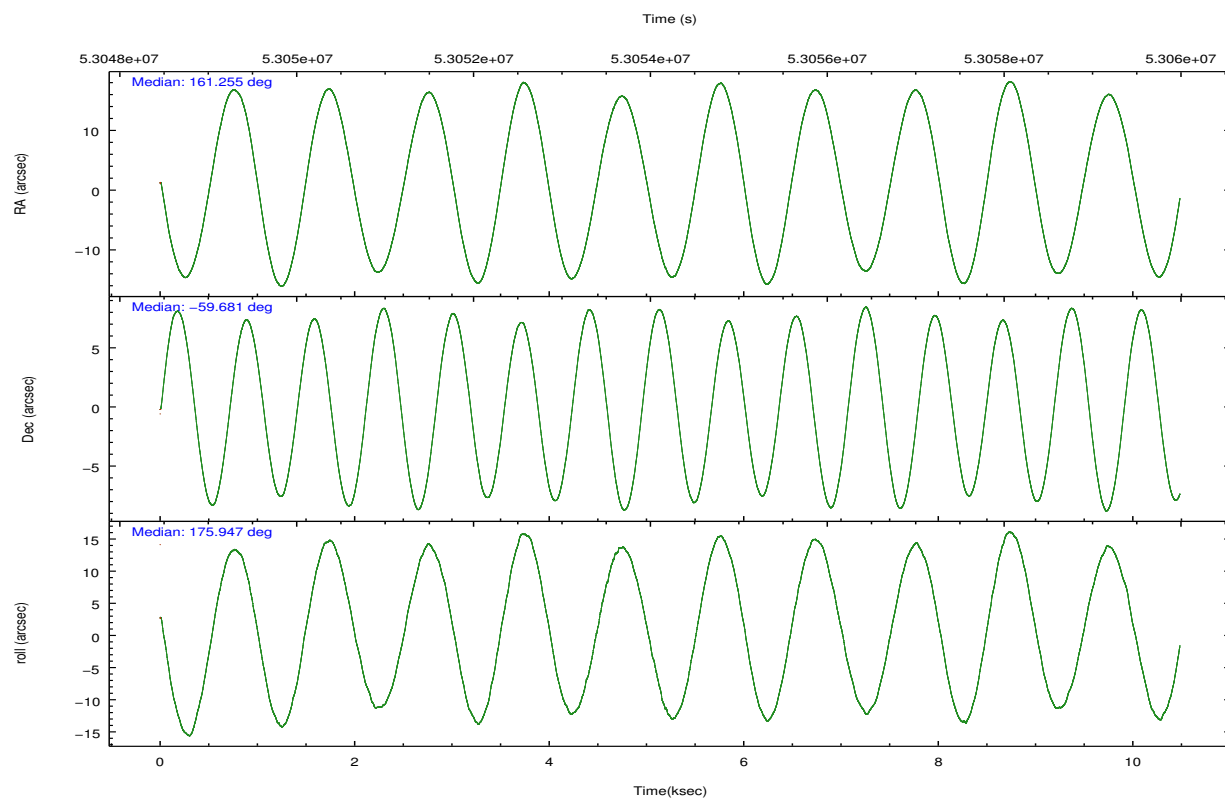
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	110068	97031	114771	115844	109143	140639	grade 0 events	15118	8360	18514	19614	14167	12335
rejected events	86725	81270	87479	86203	86849	62115		13%	8%	16%	16%	12%	8%
rejected %	78%	83%	76%	74%	79%	44%	grade 1 events	93	53	223	226	60	75
								0%	0%	0%	0%	0%	0%
							grade 2 events	3917	3204	4417	5059	4036	14226
								3%	3%	3%	4%	3%	10%
							grade 3 events	1168	1075	1158	1231	950	8234
								1%	1%	1%	1%	0%	5%
							grade 4 events	1104	1052	1186	1207	930	7231
								1%	1%	1%	1%	0%	5%
							grade 5 events	2211	2331	1982	2596	2197	6683
								2%	2%	1%	2%	2%	4%
							grade 6 events	2044	2079	2026	2543	2220	36525
								1%	2%	1%	2%	2%	25%
							grade 7 events	84413	78877	85265	83368	84583	55330
								76%	81%	74%	71%	77%	39%

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	161.305472	161.2551859244986	Subarray requested	NONE	NONE
Pointing Dec	-59.669975	-59.68152998405674	Alternating exposures requested	N	N
Pointing Roll	175.785454	175.9507361717758	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)	-233.592463	-233.5874344608287			
SIM translation stage offset (mm)	0	-0.005018542100998502			
Observation start time	53049464.184000	53048797.755912			
Observation start date	1999-09-06T23:56:40	1999-09-06T23:46:37			
Observation end time	53059464.184000	53059598.1813			
Observation end date	1999-09-07T02:43:20	1999-09-07T02:46:38			
Read mode	TIMED	TIMED			

2.3 Aspect



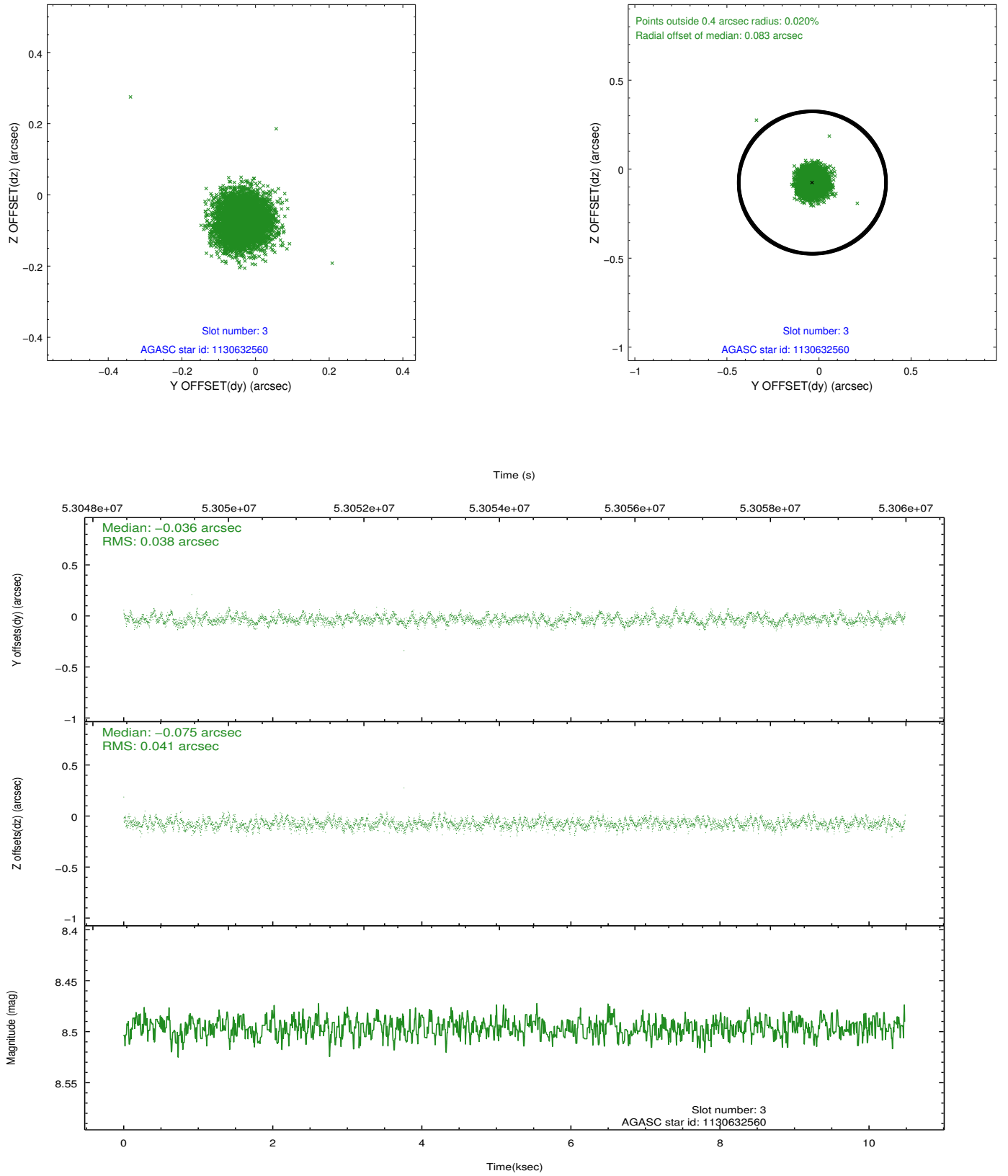


Slot Statistics

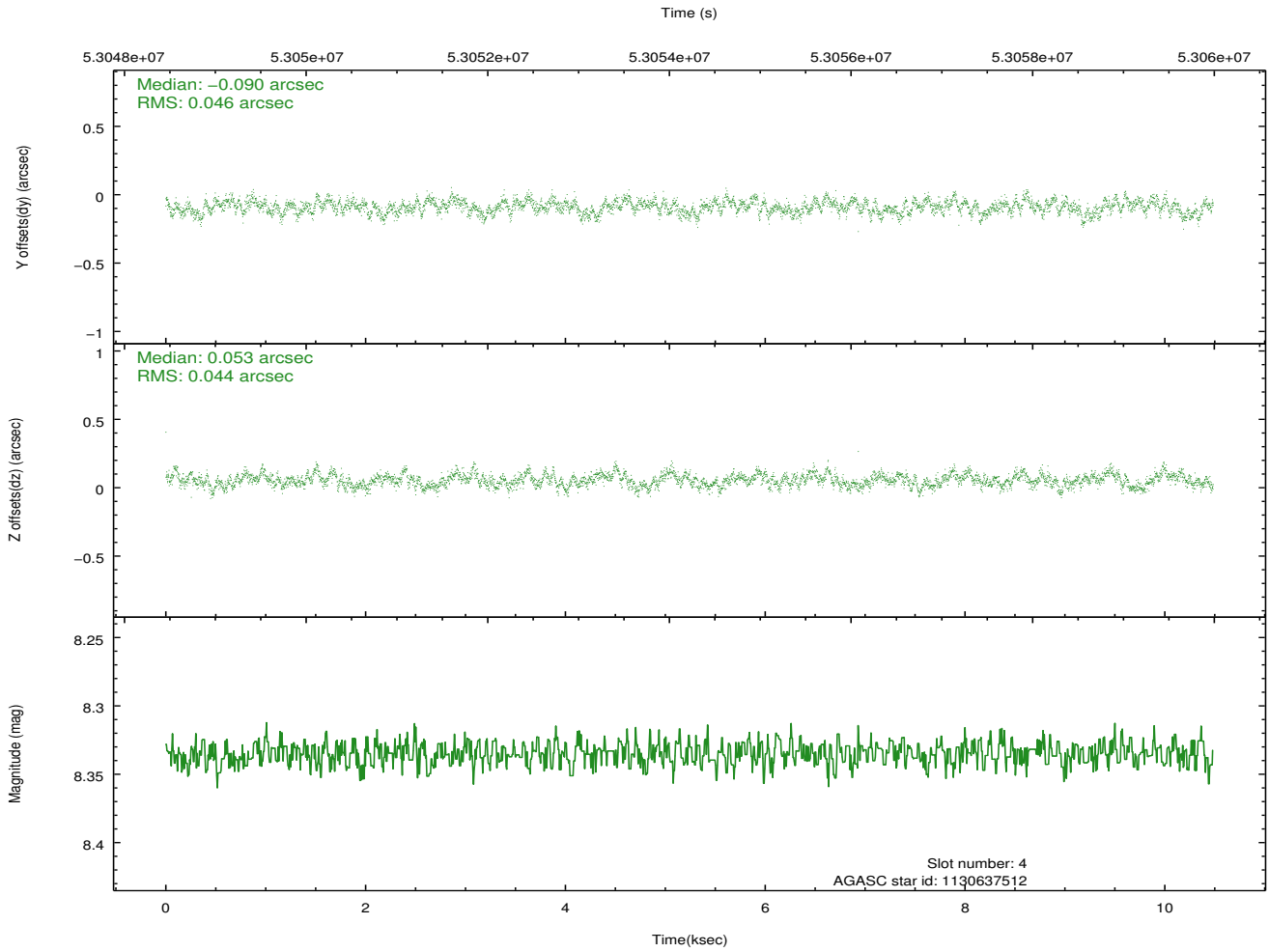
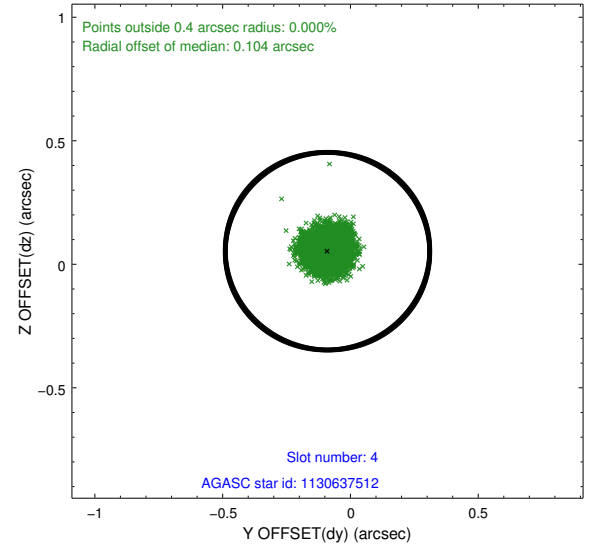
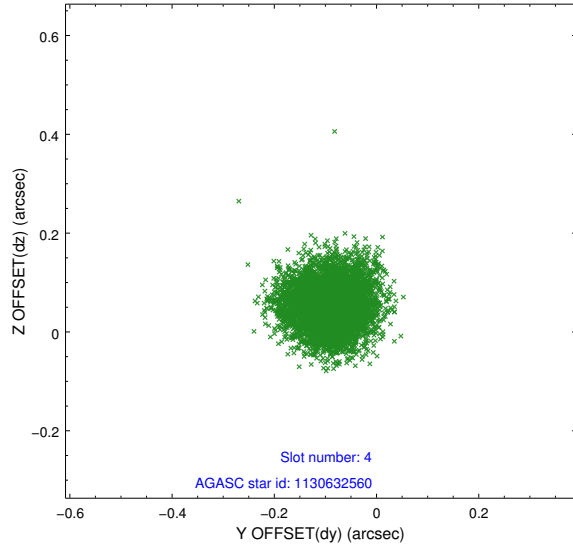
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.26	5115	0.002	0.024	0.008	0.013	0.000000	0.000000	940.84	-825.23
1	FID	ACIS-I-4	7.23	5115	0.089	0.006	0.007	0.012	0.000000	0.000000	2161.15	1074.42
2	FID	ACIS-I-5	7.23	5115	-0.189	0.040	0.006	0.011	0.000000	0.000000	-1807.04	1072.69
3	GUIDE	1130632560	8.50	5111	-0.036	-0.075	0.059	0.093	162.097550	-59.214101	-1336.58	-1735.04
4	GUIDE	1130637512	8.34	5114	-0.090	0.053	0.068	0.107	160.260704	-59.344159	1996.24	-1013.56
5	GUIDE	1130628248	8.82	5114	0.129	0.065	0.058	0.096	160.092155	-59.960260	2101.69	1223.31
6	GUIDE	1130645296	9.06	5108	-0.012	0.033	0.065	0.106	162.541185	-59.548371	-2218.36	-580.81
7	GUIDE	1174038520	9.72	5113	0.020	-0.078	0.111	0.181	161.745605	-60.289353	-948.92	2168.82

2.4 Star Slots

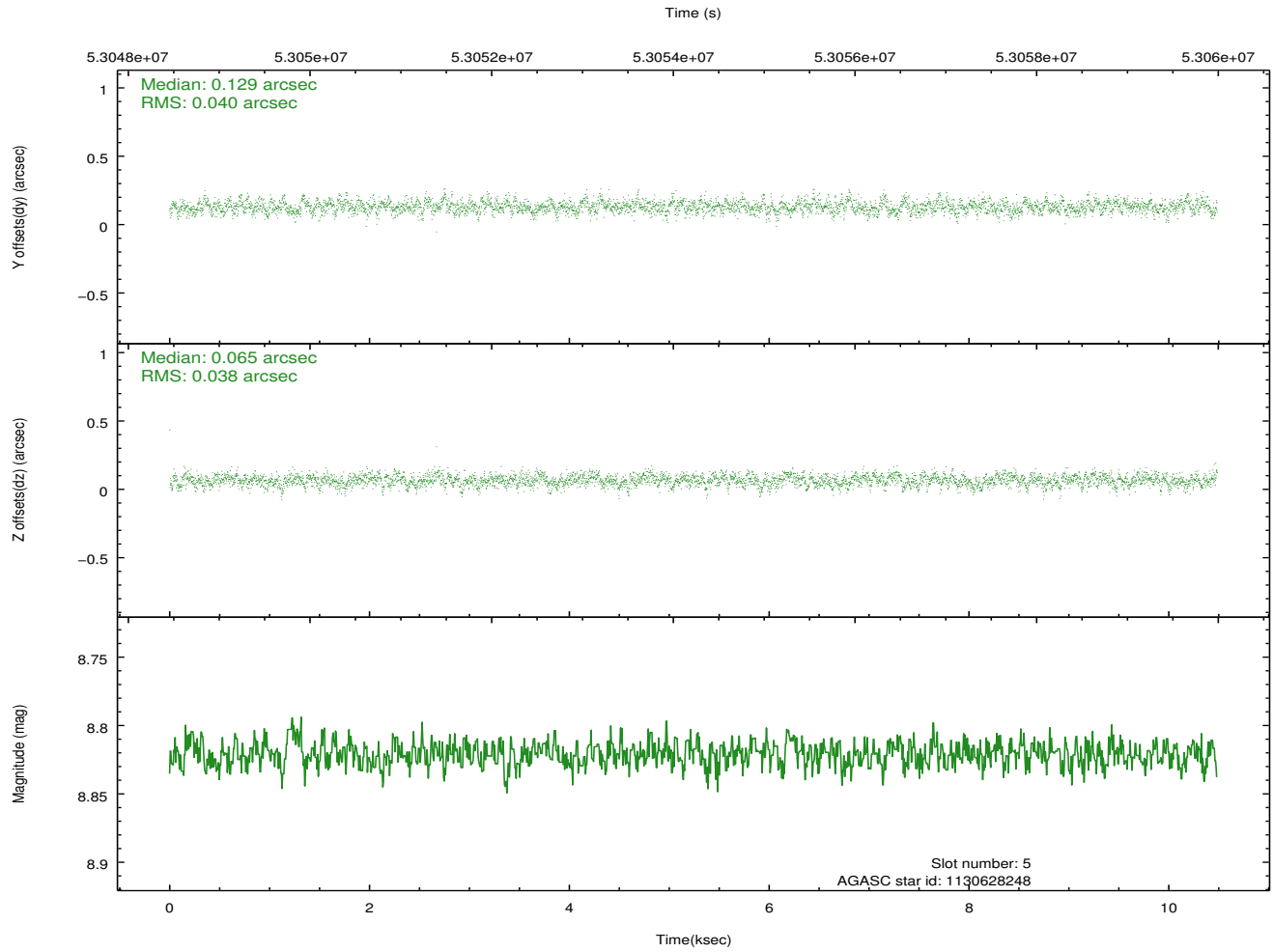
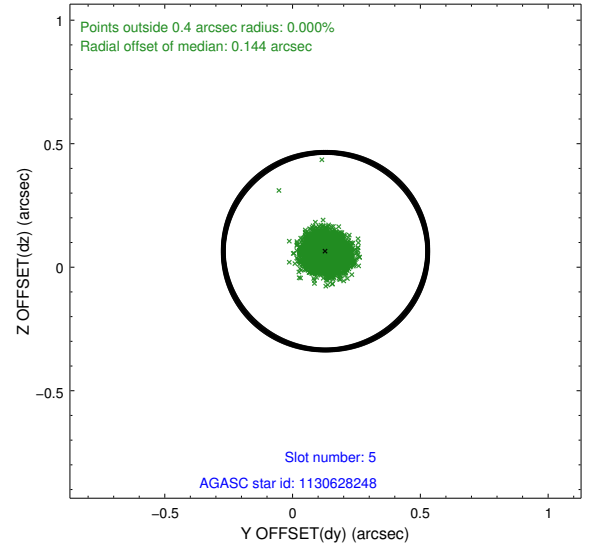
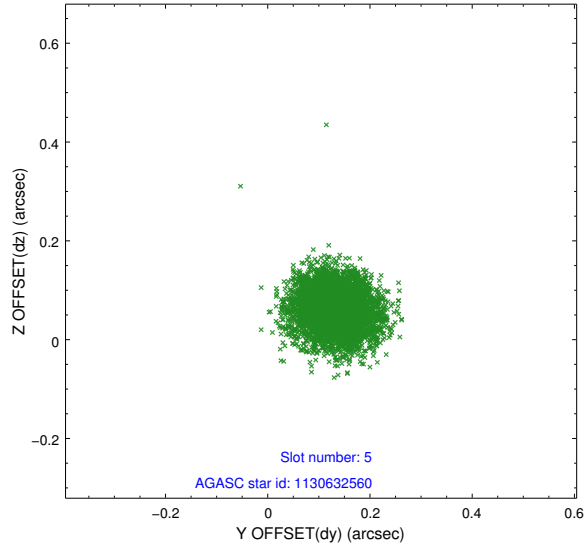
2.4.1 Slot 3



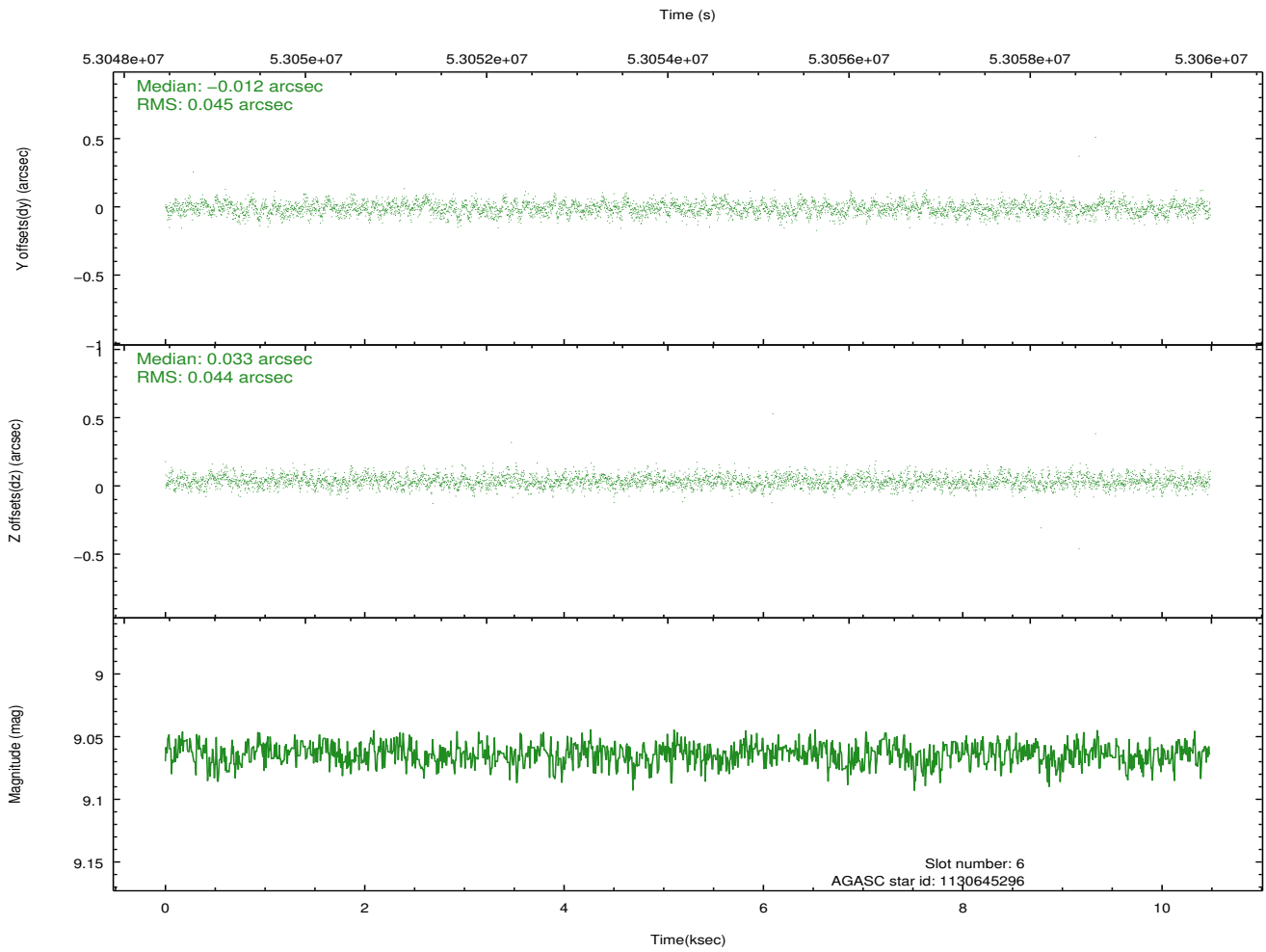
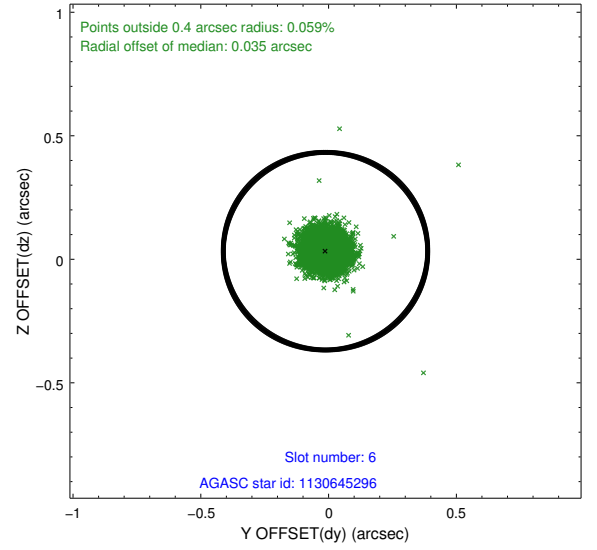
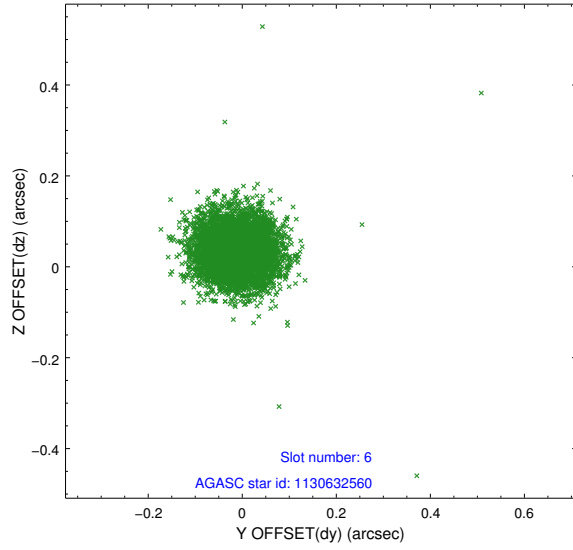
2.4.2 Slot 4



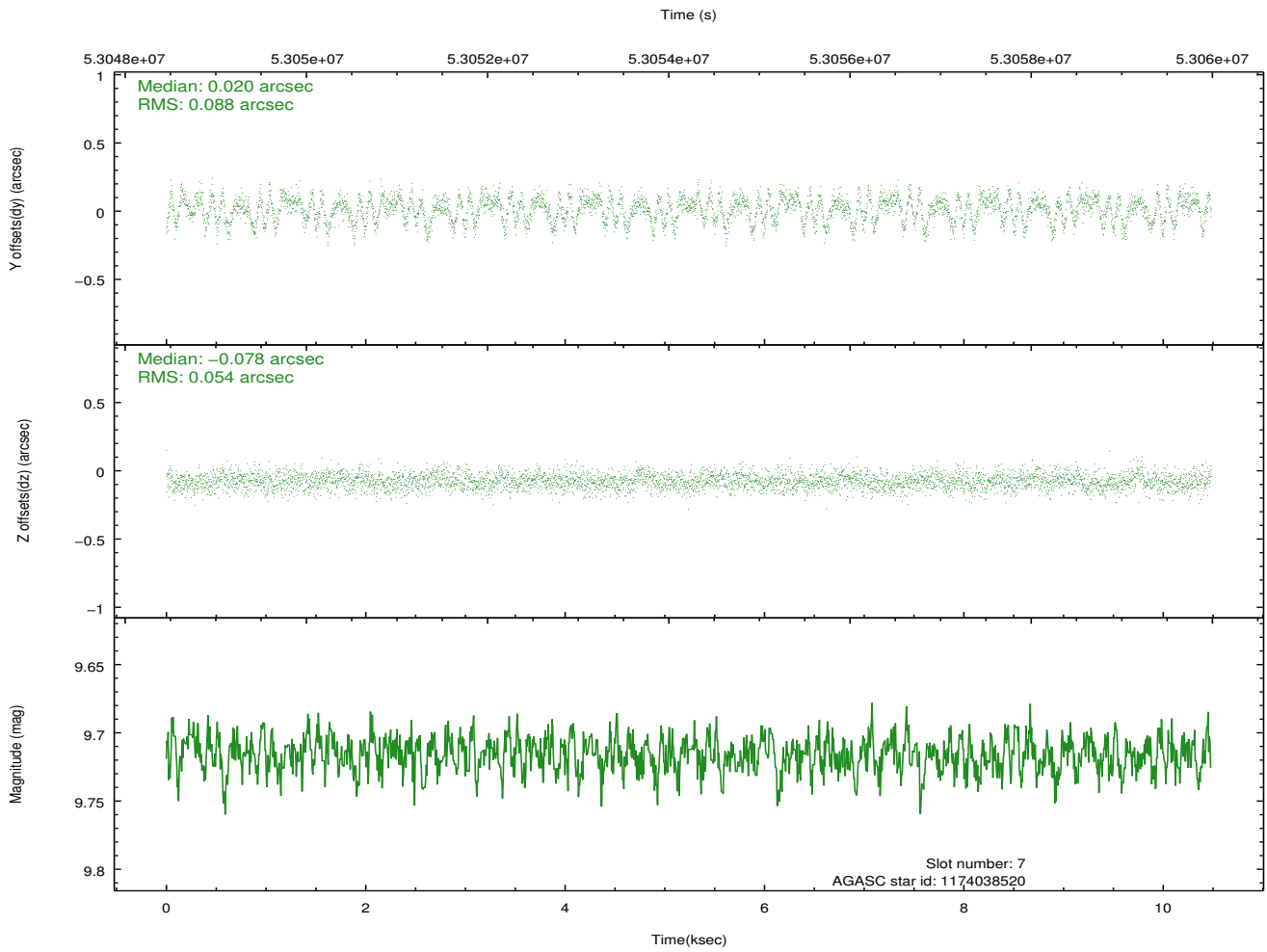
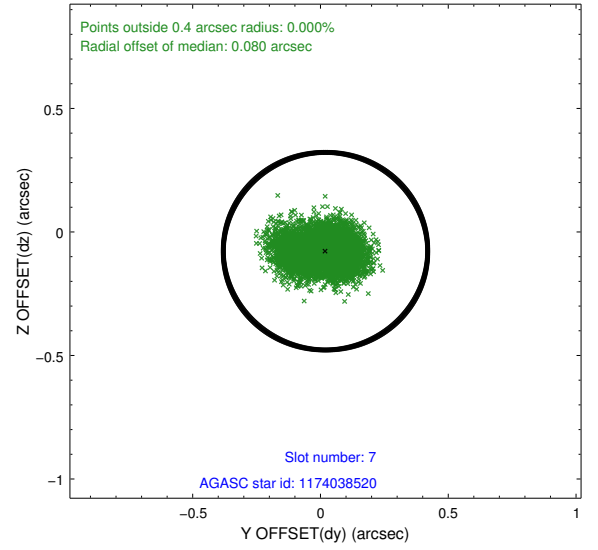
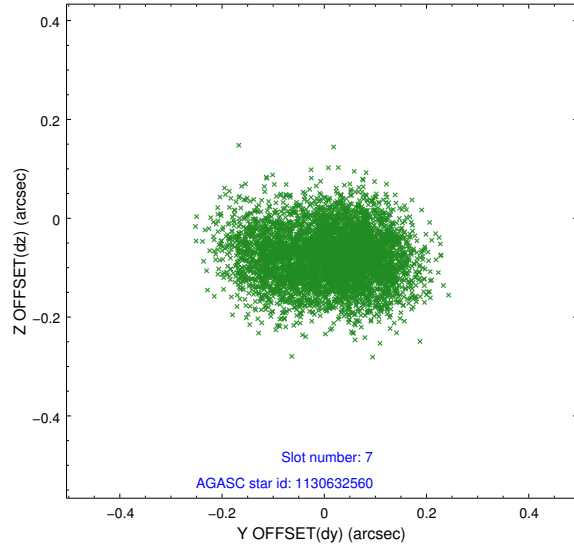
2.4.3 Slot 5



2.4.4 Slot 6

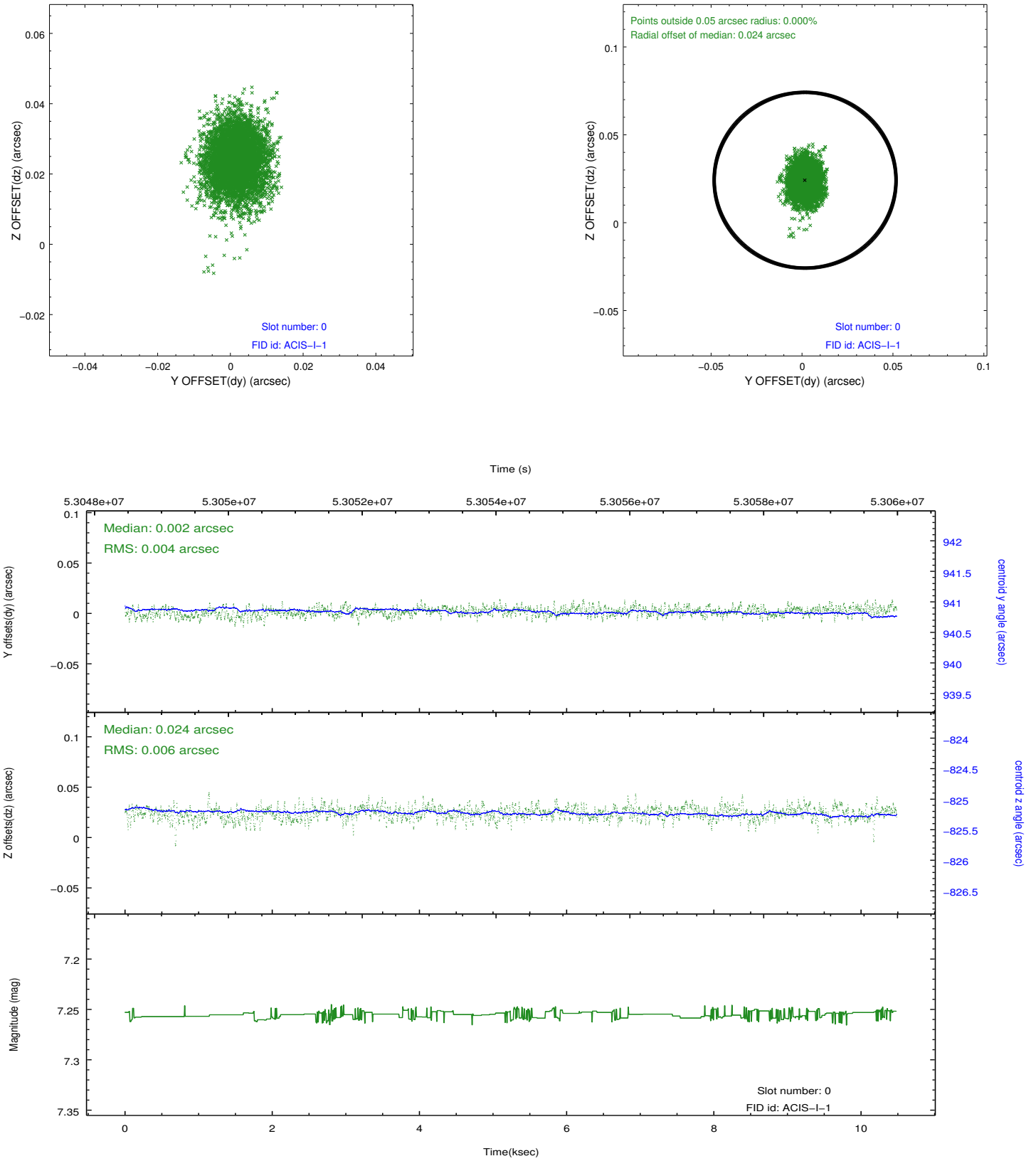


2.4.5 Slot 7

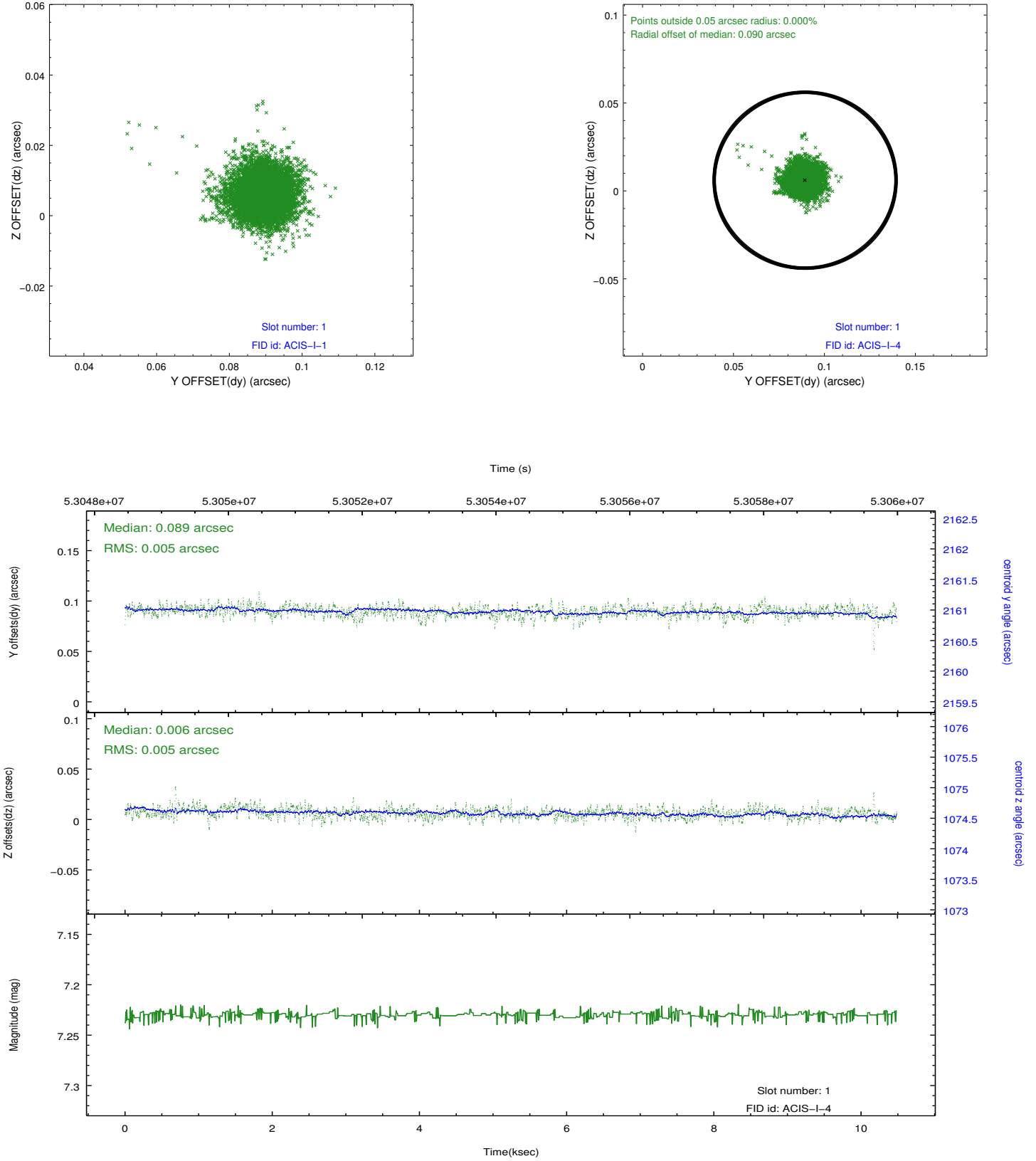


2.5 FID Slots

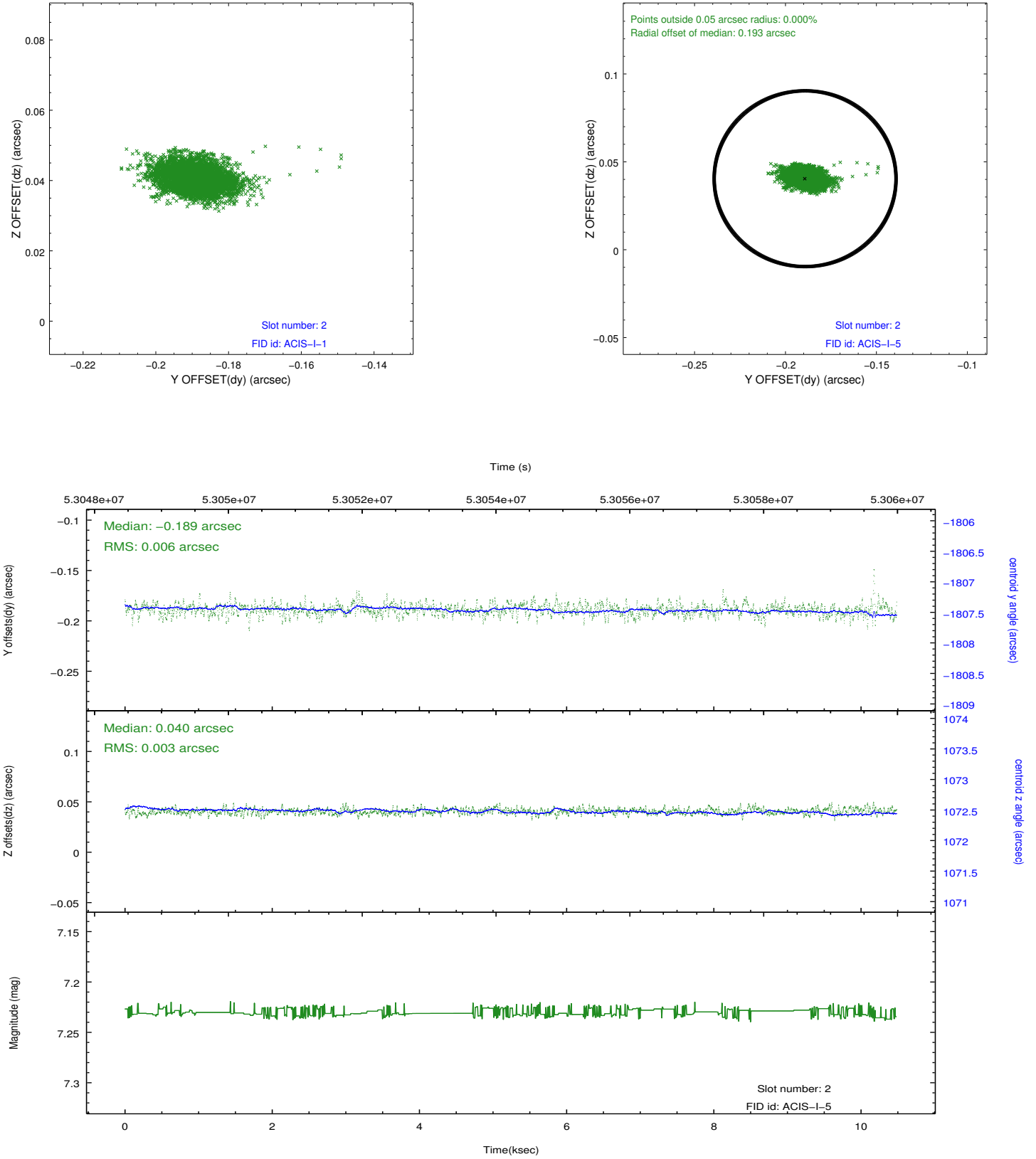
2.5.1 Slot 0



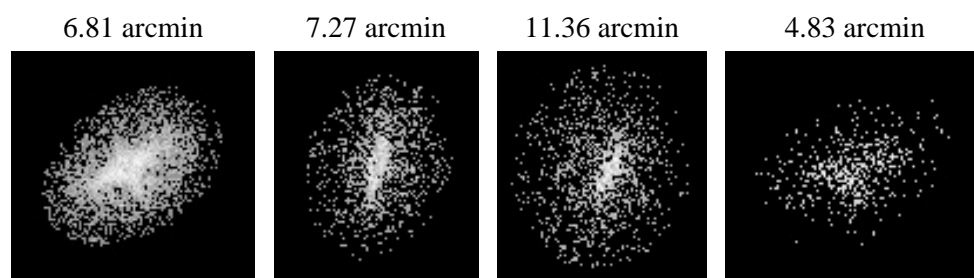
2.5.2 Slot 1



2.5.3 Slot 2



3 Point Sources



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2010.08.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.753

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.