

V&V Reference Report

L2 ASCDS Version : 8.1.1

Observation 361 - L2 Version 3
Chandra X-Ray Center

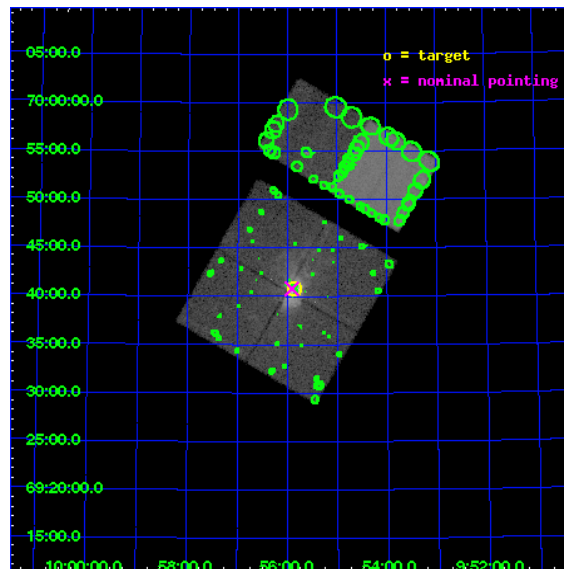
L2 Processing Date : Nov 17 2009

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1 Front

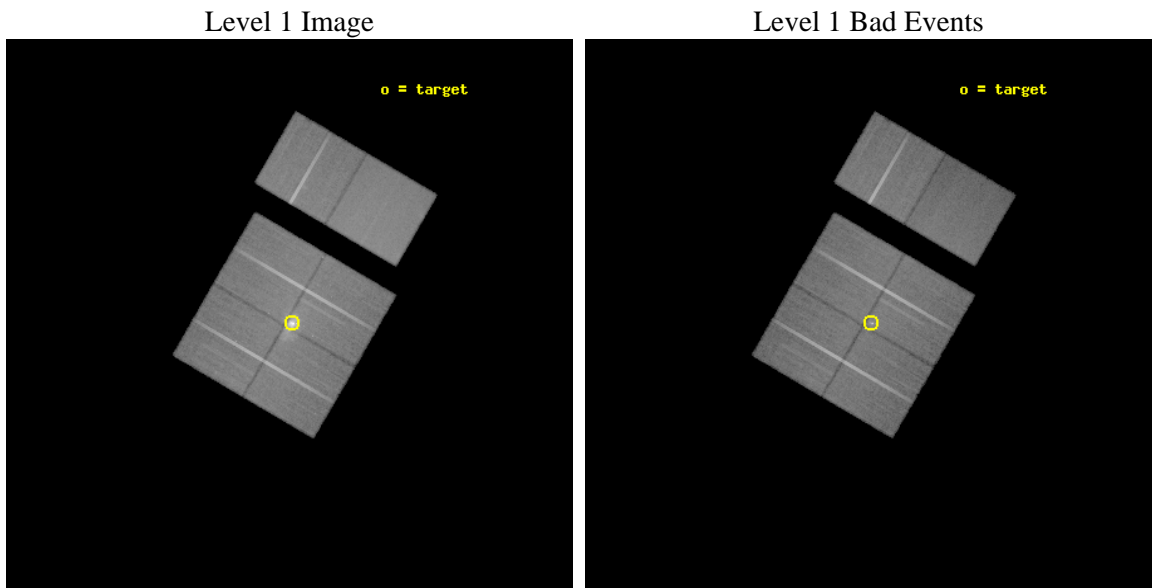
seq_num	700033	Sequence number
obs_id	361	Observation id
title	ACIS IMAGING OF THE STARBURST GALAXY M82	Proposal title
observer	Prof Gordon Garmire	Principal investigator
object	M82	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	148.962917	Observer's specified target RA
dec_targ	69.679167	Observer's specified target Dec
ra_nom	148.97856535585	Nominal RA
dec_nom	69.67975518202	Nominal Dec
roll_nom	30.280689180408	Nominal Roll
revision	3	Processing version of data
ontime	33675.816986345	Sum of GTIs [s]
livetime	33249.393514521	Livetime [s]
ontime0	33685.539737359	Sum of GTIs [s]
ontime1	33704.985747933	Sum of GTIs [s]
ontime2	33695.262717716	Sum of GTIs [s]
ontime3	33675.816986345	Sum of GTIs [s]
ontime6	33753.600031435	Sum of GTIs [s]
ontime7	33753.600031435	Sum of GTIs [s]
l2events	372115	Number of level 2 events



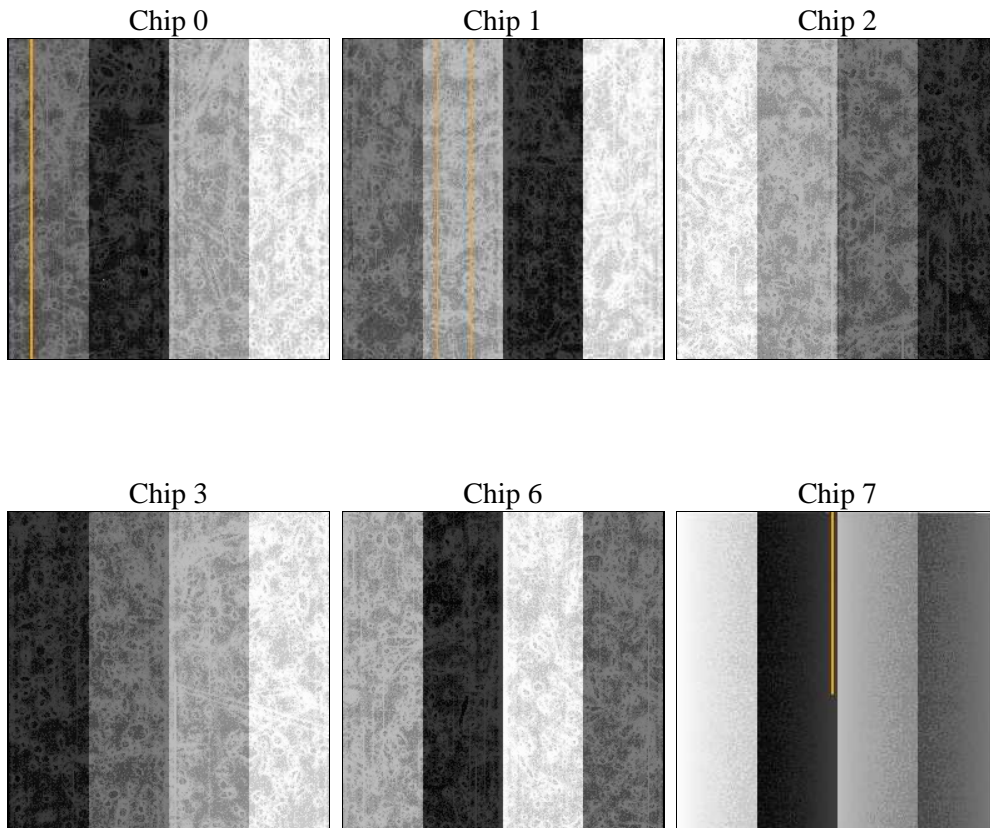
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	34000.000000	Scheduled observation exposure time
ascdsver	8.1.1	ASCDS version number	ontime	33675.816986345	Sum of GTIs [s]
caldbver	4.1.4	 	ontime0	33685.539737359	Sum of GTIs [s]
date	2009-11-17T11:11:52	Date and time of file creation	ontime1	33704.985747933	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	33695.262717716	Sum of GTIs [s]
			ontime3	33675.816986345	Sum of GTIs [s]
			ontime6	33753.600031435	Sum of GTIs [s]
			ontime7	33753.600031435	Sum of GTIs [s]
			l1events	2028735	Number of level 1 events

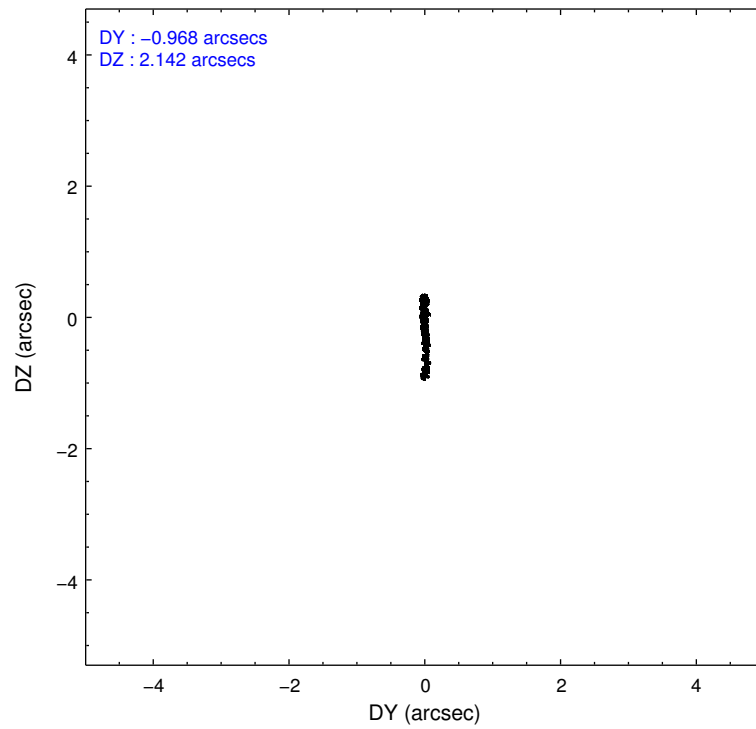
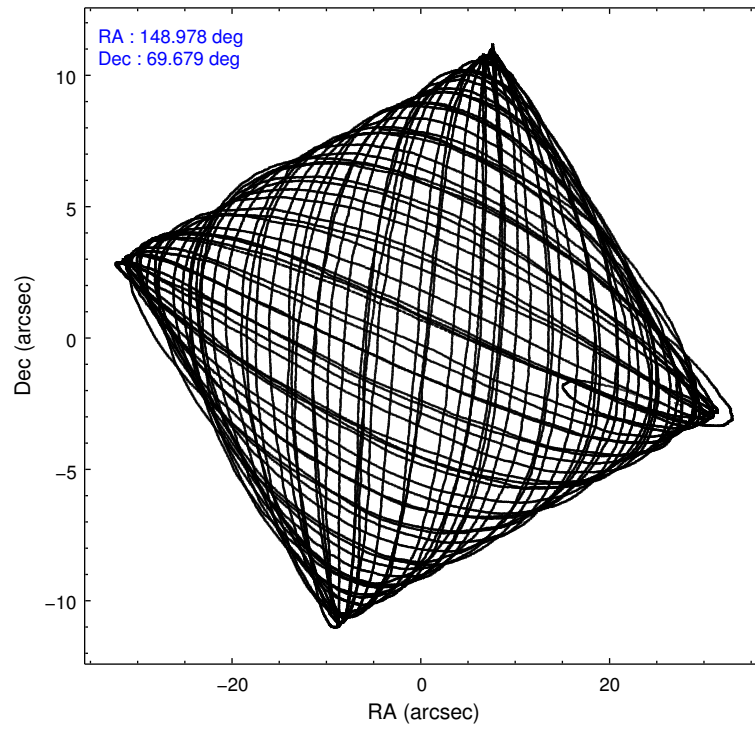
2.1.4 Events

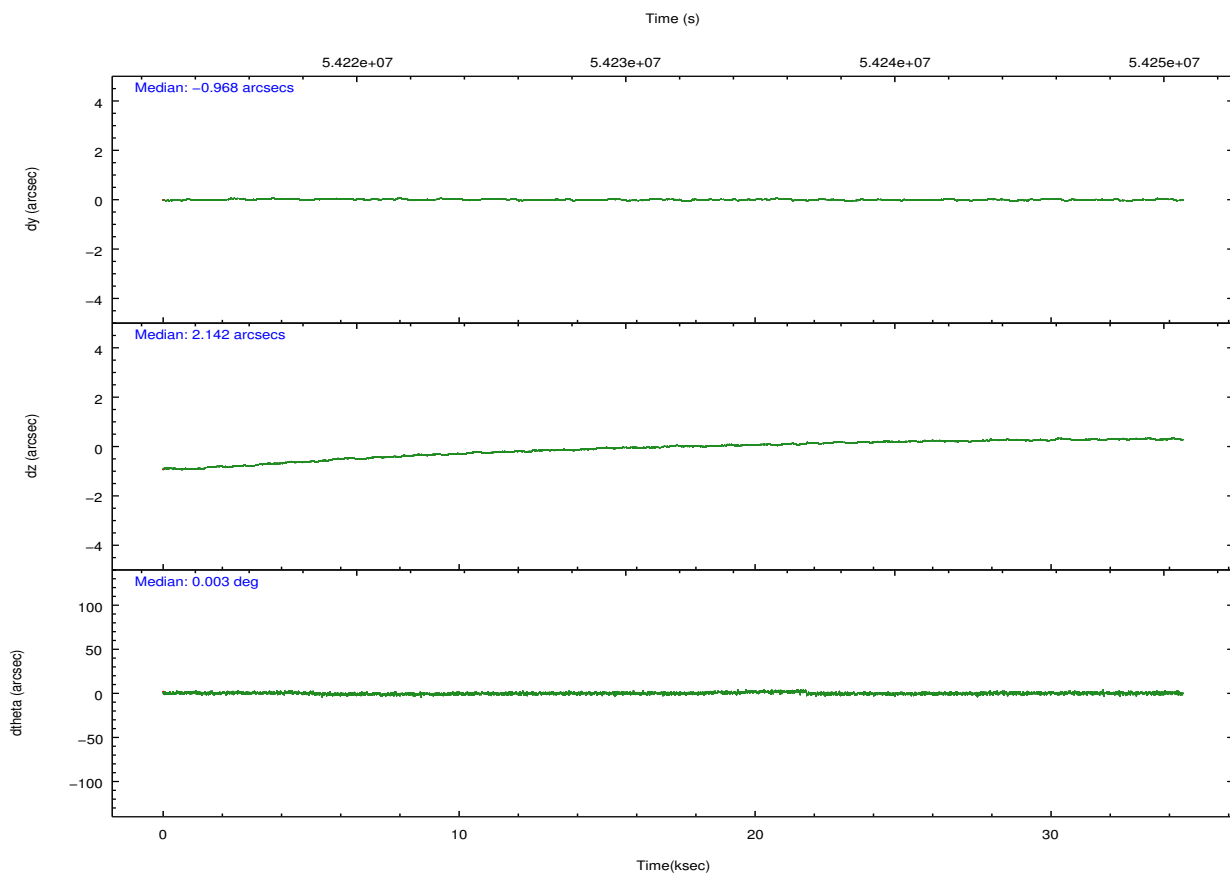
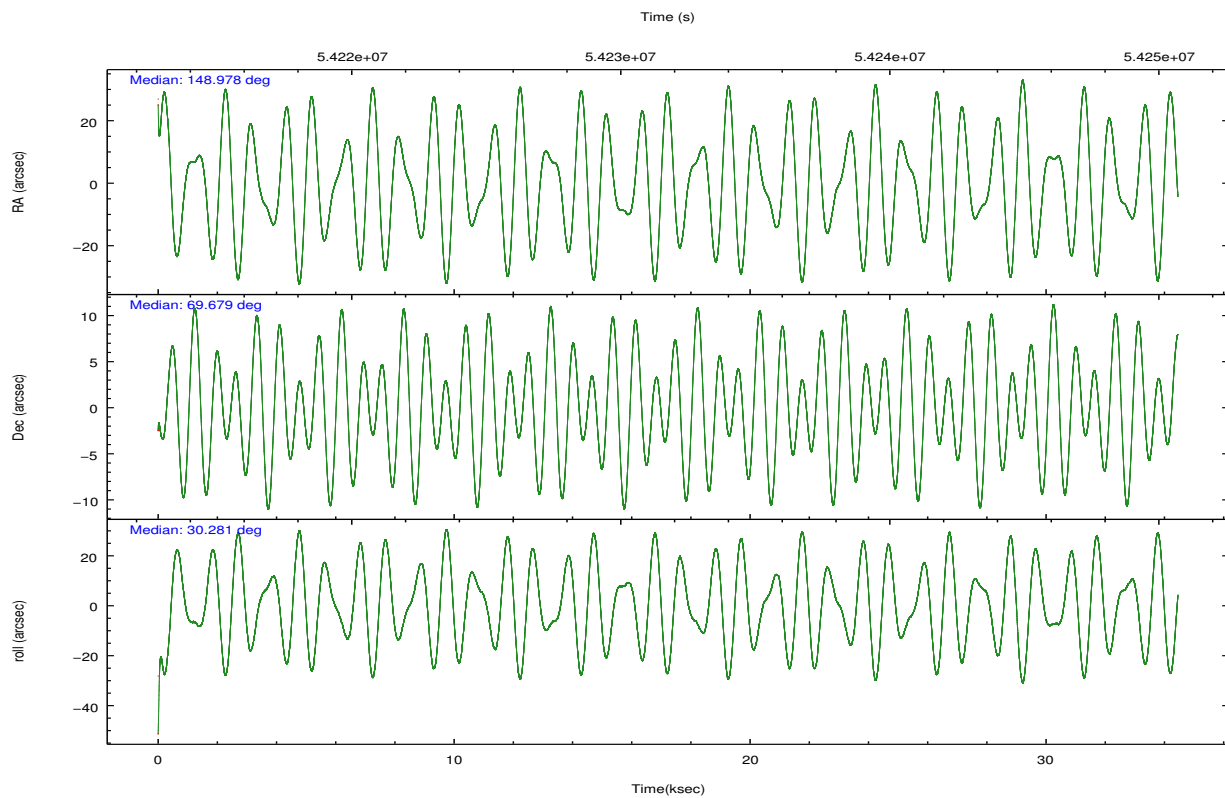
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	304929	315947	335867	390768	322378	358846	grade 0 events	9505	17825	11910	40652	6315	11417
rejected events	271592	269990	299729	296481	291733	207939		3%	5%	3%	10%	1%	3%
rejected %	89%	85%	89%	75%	90%	57%	grade 1 events	63	112	83	220	50	201
								0%	0%	0%	0%	0%	0%
							grade 2 events	12071	14492	13274	37828	12137	32084
								3%	4%	3%	9%	3%	8%
							grade 3 events	2335	2791	1984	2832	2047	9513
								0%	0%	0%	0%	0%	2%
							grade 4 events	2158	2745	1979	2699	1981	8502
								0%	0%	0%	0%	0%	2%
							grade 5 events	6010	6425	5361	6525	6233	20593
								1%	2%	1%	1%	1%	5%
							grade 6 events	7272	8108	6994	10283	8168	89407
								2%	2%	2%	2%	2%	24%
							grade 7 events	265515	263449	294282	289729	285447	187129
								87%	83%	87%	74%	88%	52%

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	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
Pointing RA	148.937386	148.9785653558457	Subarray requested	NONE	NONE
Pointing Dec	69.655918	69.67975518202007	Alternating exposures requested	N	N
Pointing Roll	30.110627	30.28068918040754	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	54214984.184000	54213744.63522			
Observation start date	1999-09-20T11:42:00	1999-09-20T11:22:24			
Observation end time	54248984.184000	54249117.89899			
Observation end date	1999-09-20T21:08:40	1999-09-20T21:11:57			
Read mode	TIMED	TIMED			

2.3 Aspect



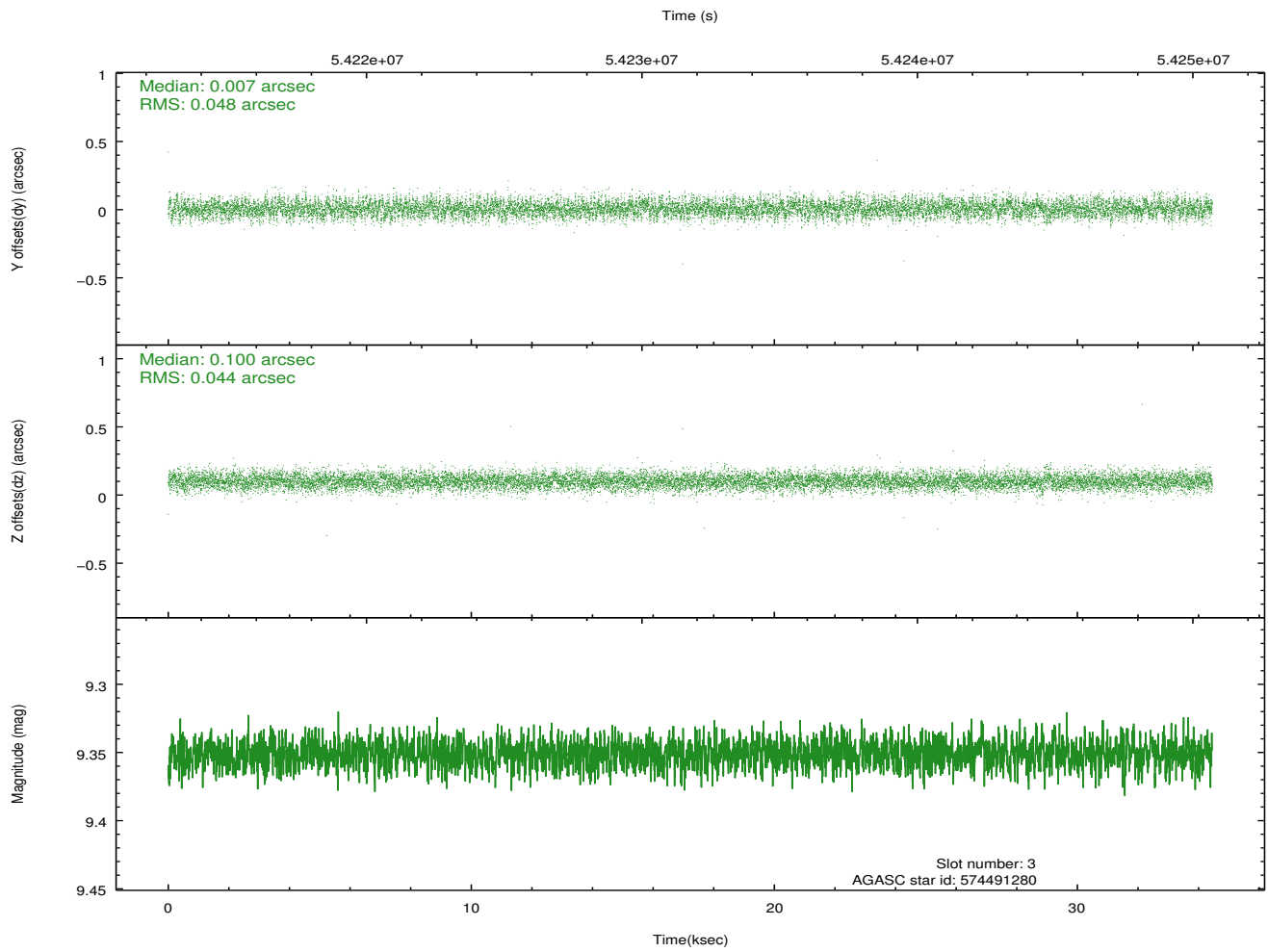
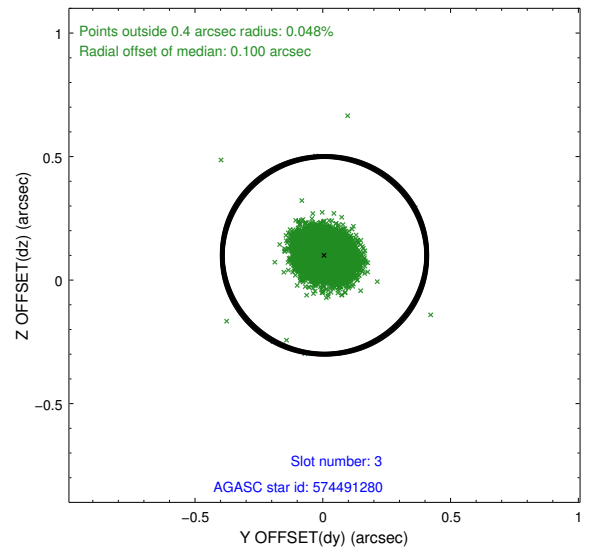
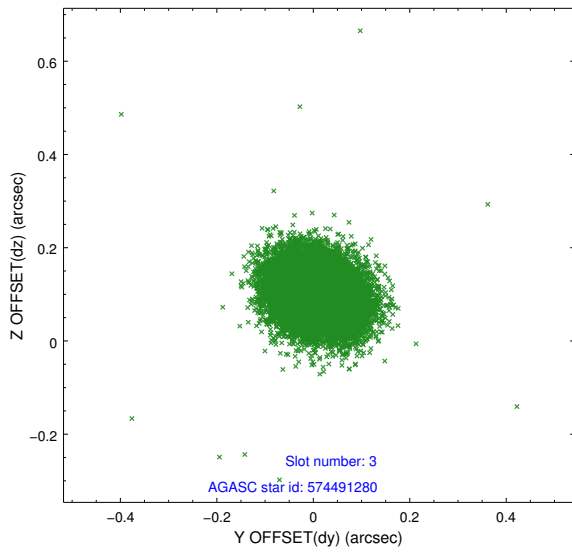


Slot Statistics

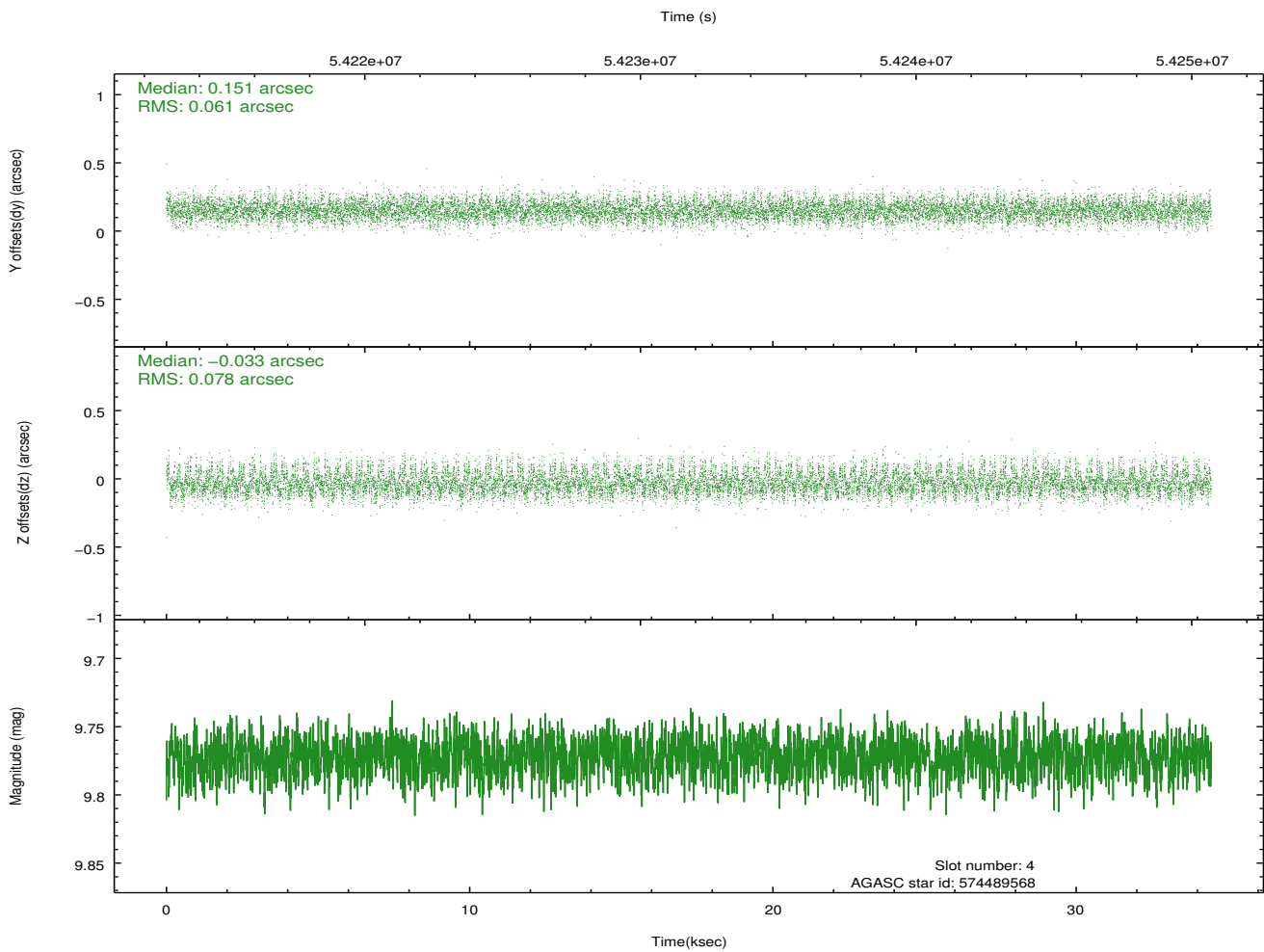
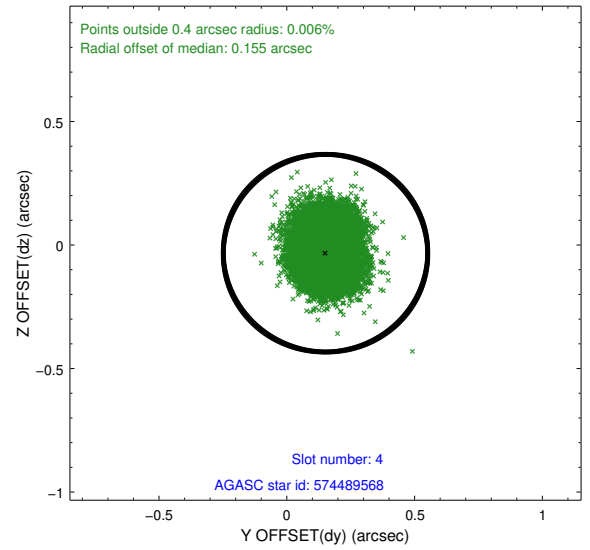
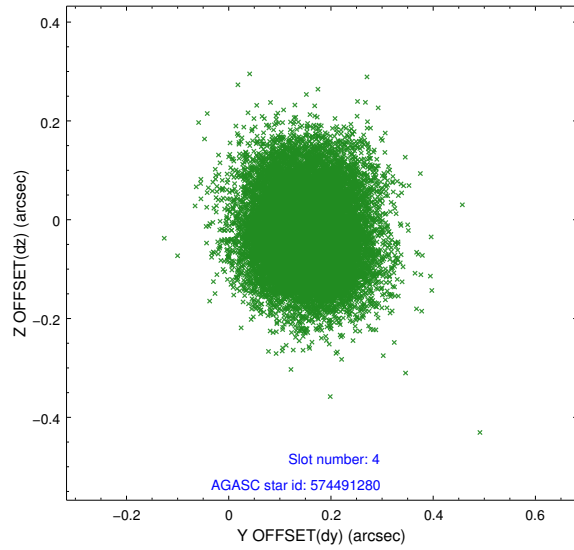
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.20	16805	-0.100	-0.023	0.007	0.014	0.000000	0.000000	-753.48	-831.61
1	FID	ACIS-I-4	7.22	16804	0.031	0.066	0.007	0.014	0.000000	0.000000	2160.91	1074.41
2	BAD	ACIS-I-5	7.23	6990	-0.238	-0.064	0.022	0.036	0.000000	0.000000	-1807.17	1072.90
3	GUIDE	574491280	9.35	16797	0.007	0.100	0.068	0.112	148.611567	69.450135	-726.71	-432.45
4	GUIDE	574489568	9.77	16793	0.151	-0.033	0.104	0.173	147.223974	69.438157	-2251.26	435.57
5	GUIDE	574490960	9.74	16786	0.059	-0.012	0.093	0.150	148.185918	69.658768	-804.97	486.45
6	GUIDE	574886464	9.82	16793	-0.114	-0.017	0.099	0.159	149.898674	70.203982	2008.67	1127.63
7	GUIDE	574886288	9.84	16789	-0.104	-0.044	0.110	0.174	149.952718	70.139627	1953.49	893.19

2.4 Star Slots

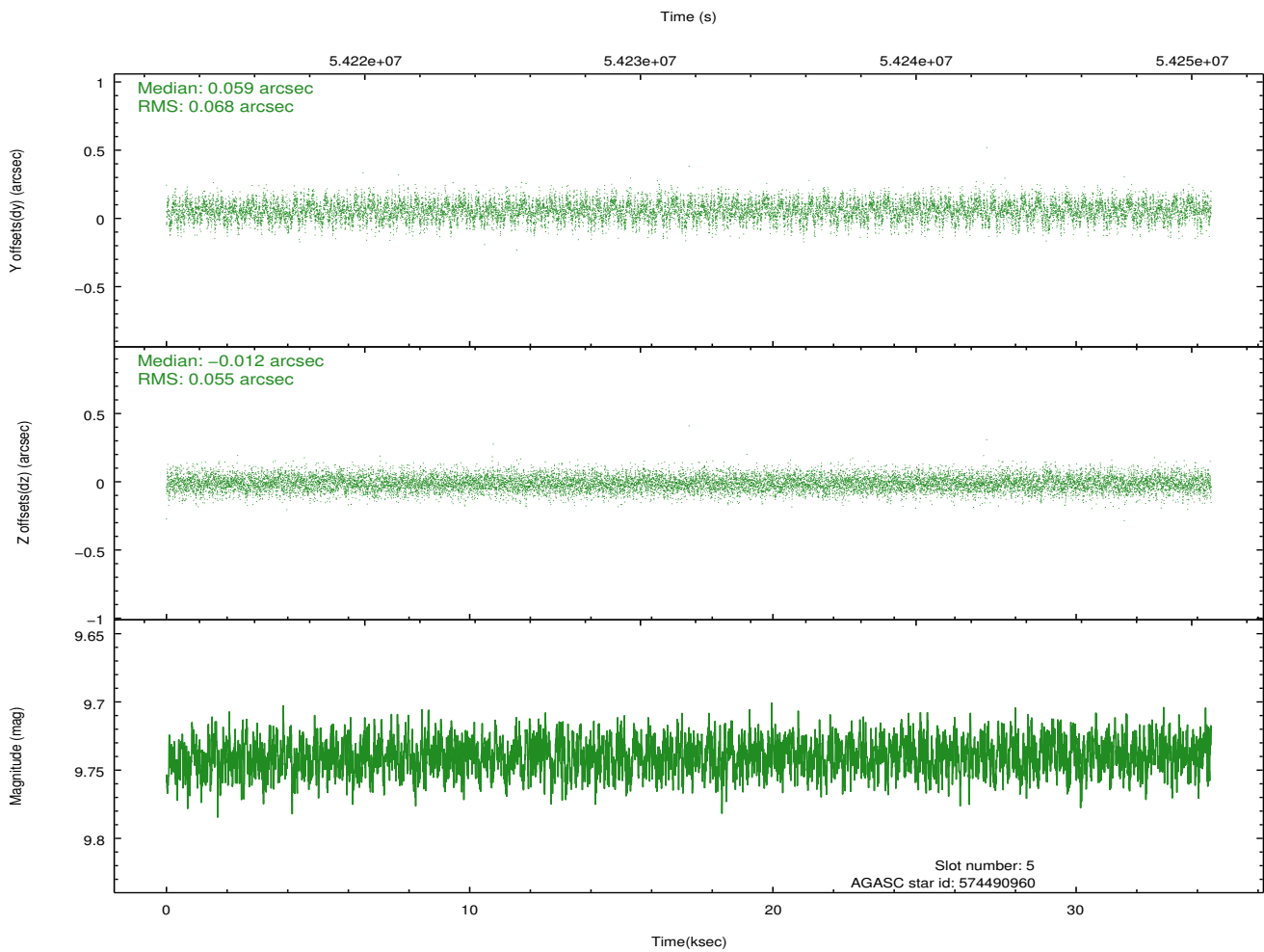
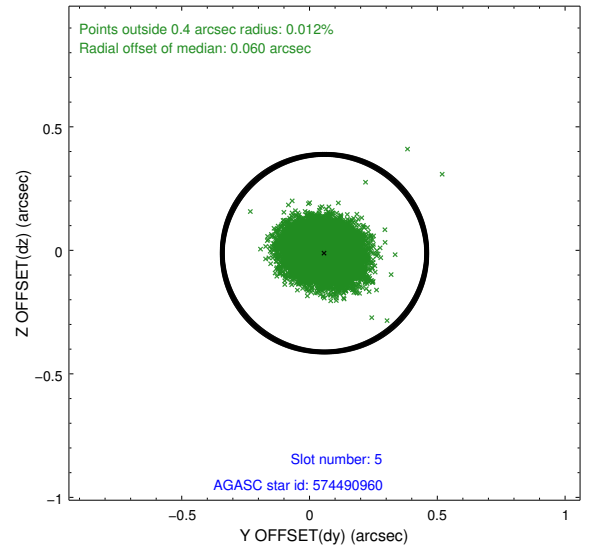
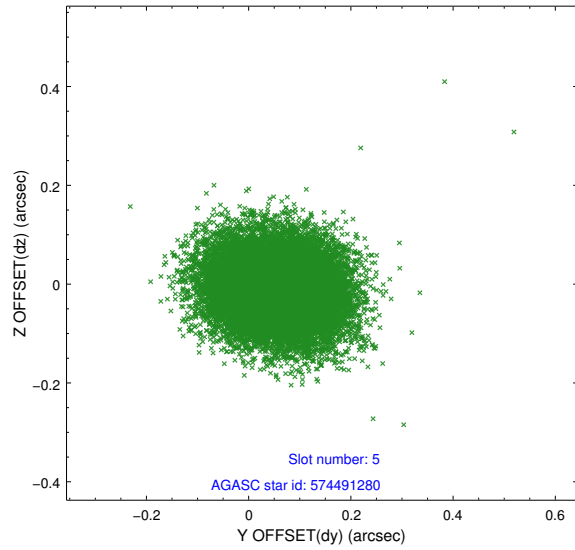
2.4.1 Slot 3



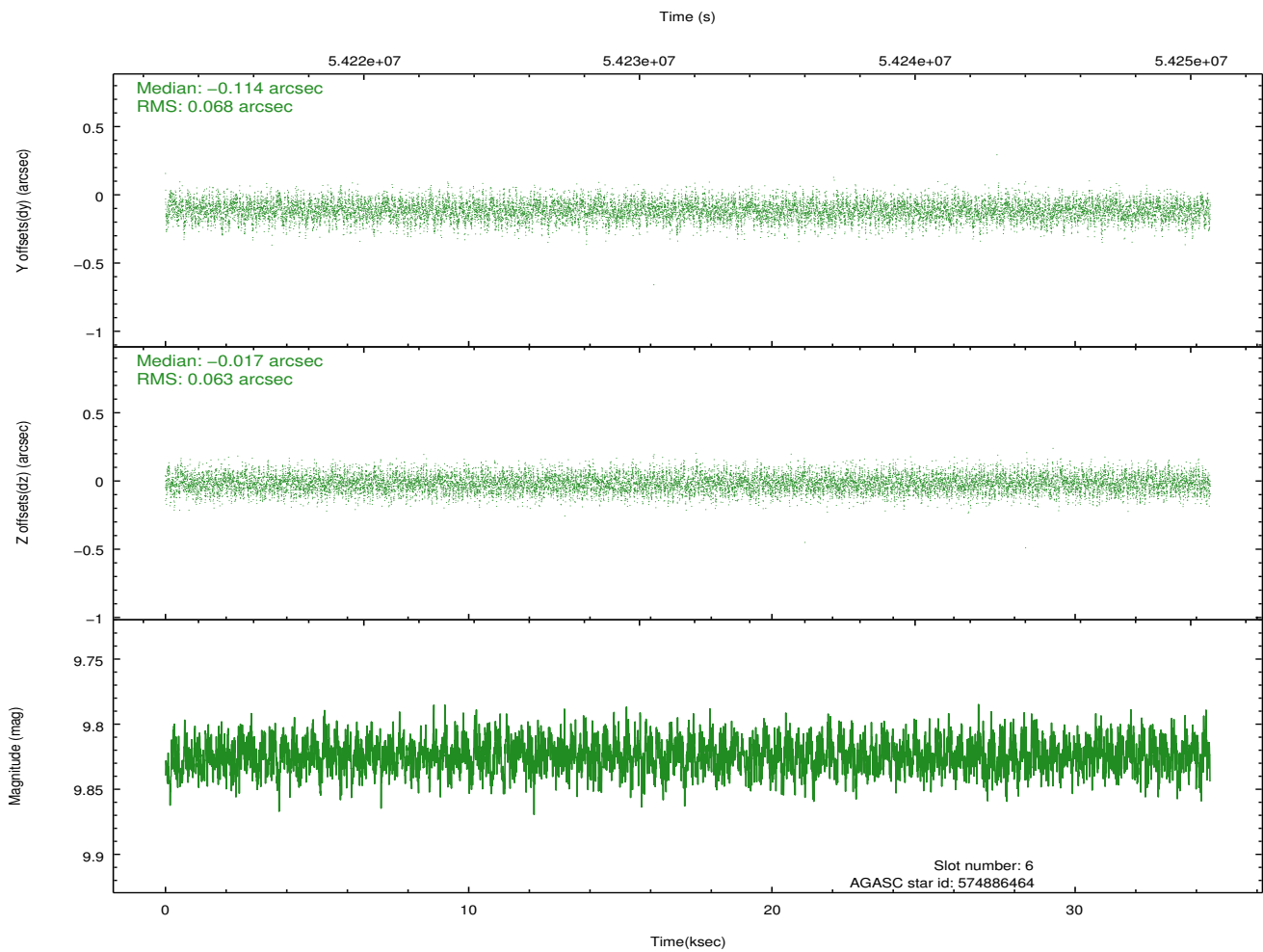
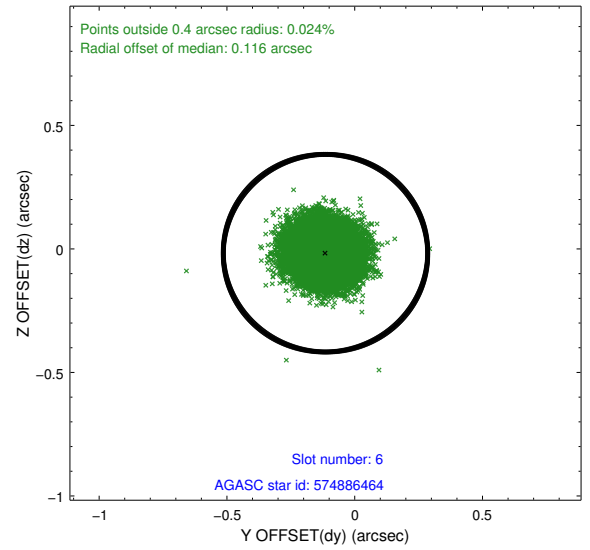
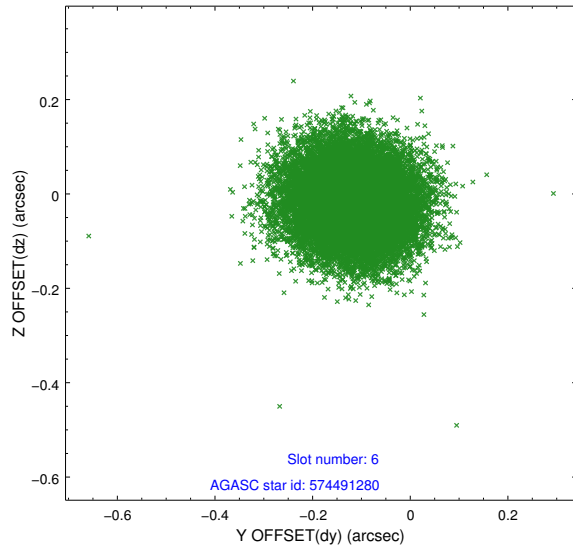
2.4.2 Slot 4



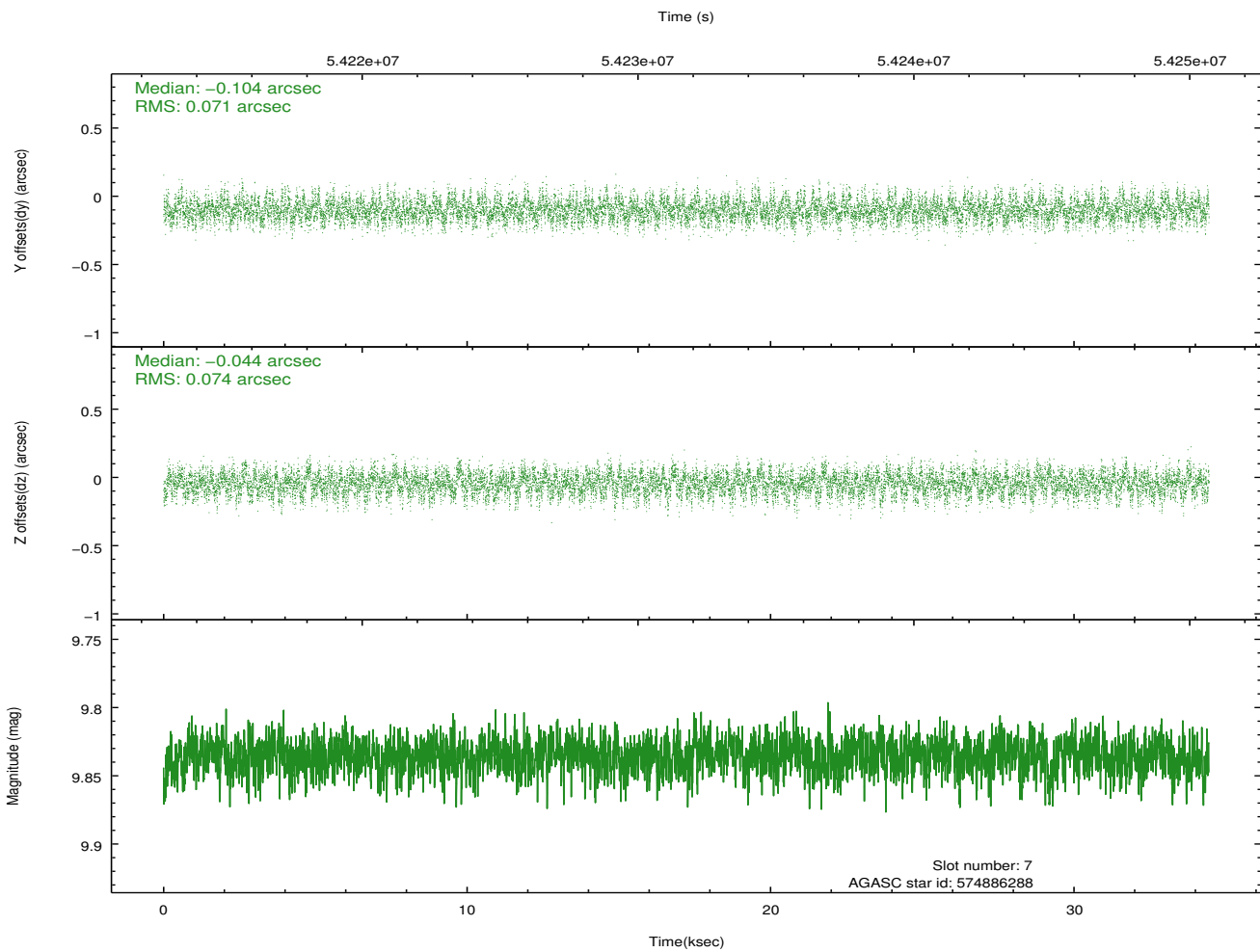
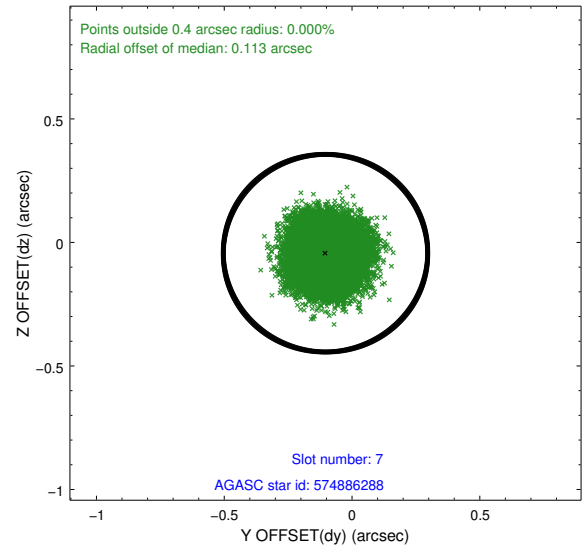
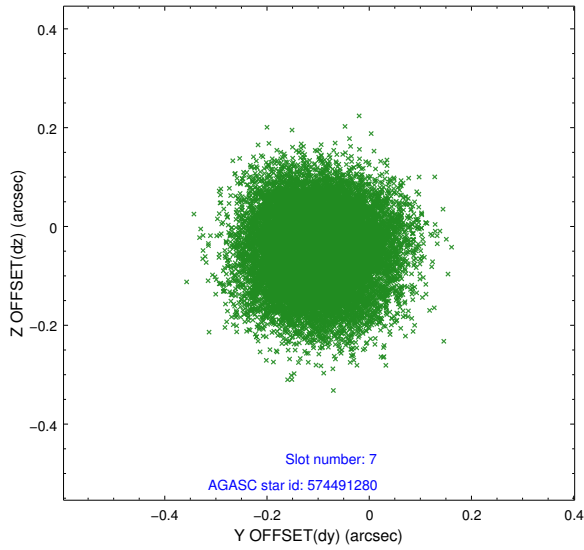
2.4.3 Slot 5



2.4.4 Slot 6

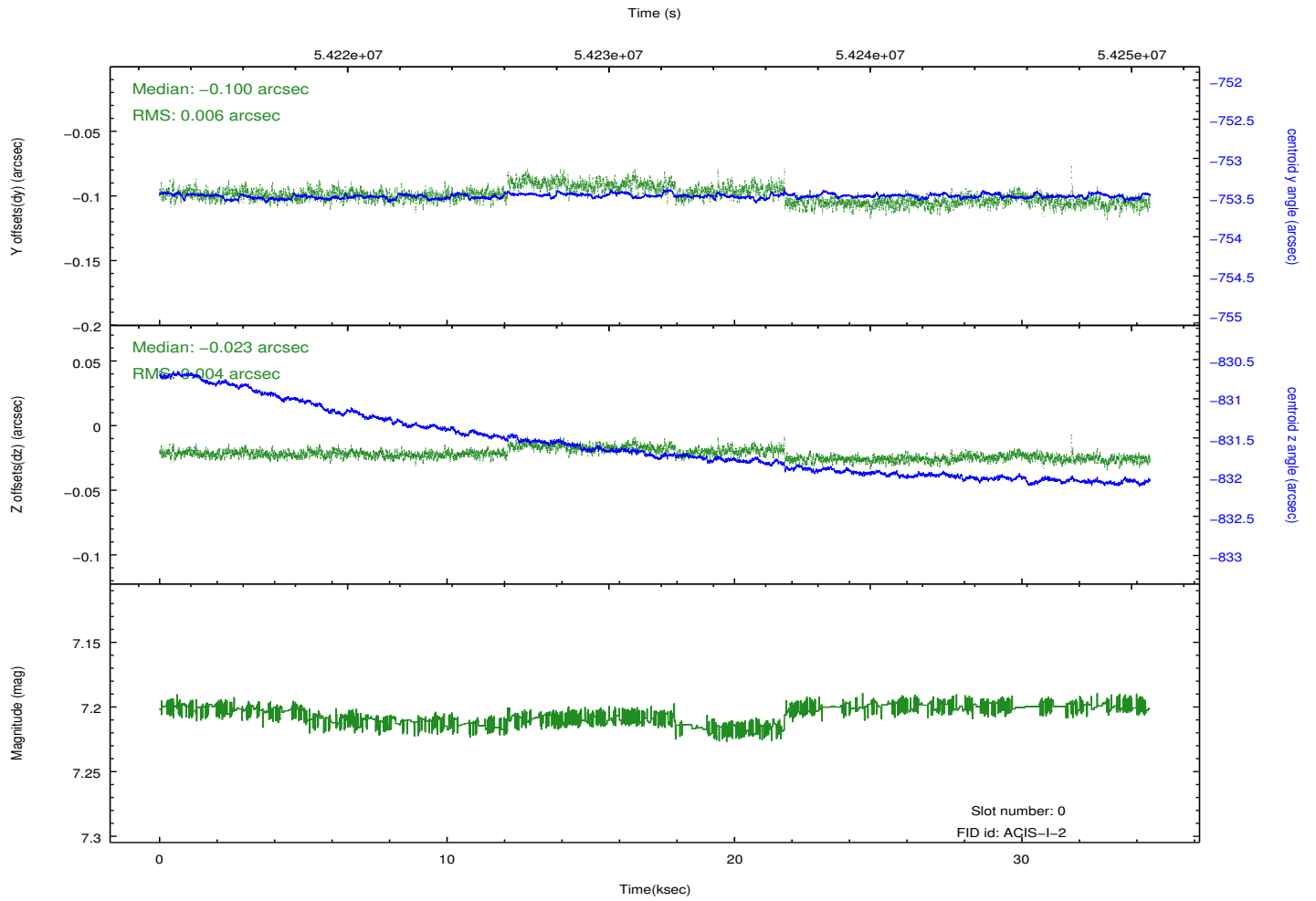
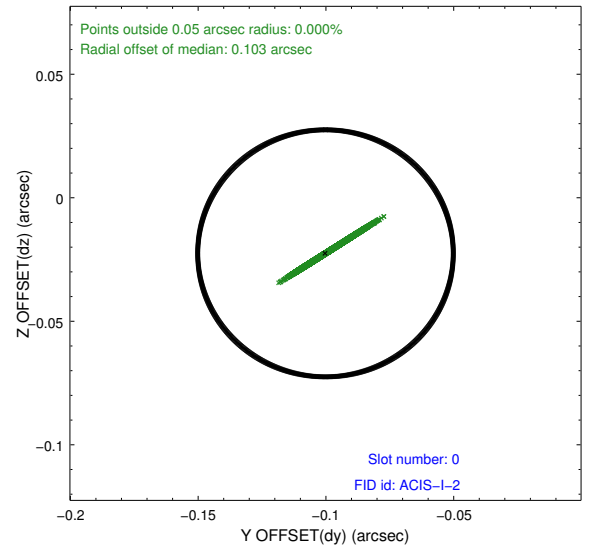
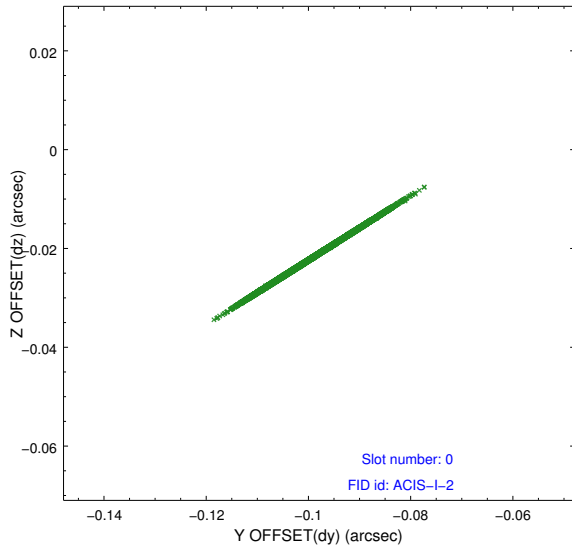


2.4.5 Slot 7

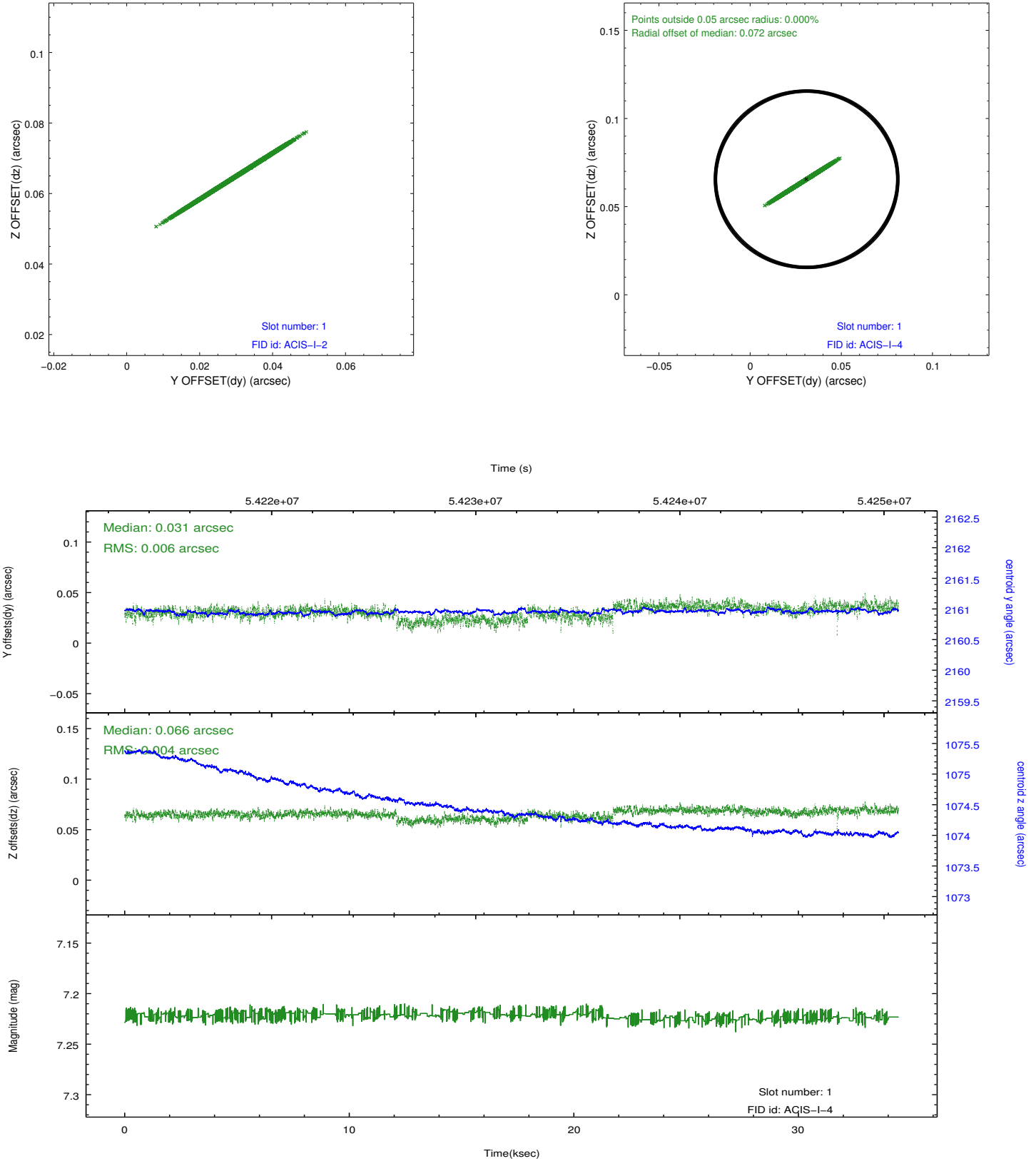


2.5 FID Slots

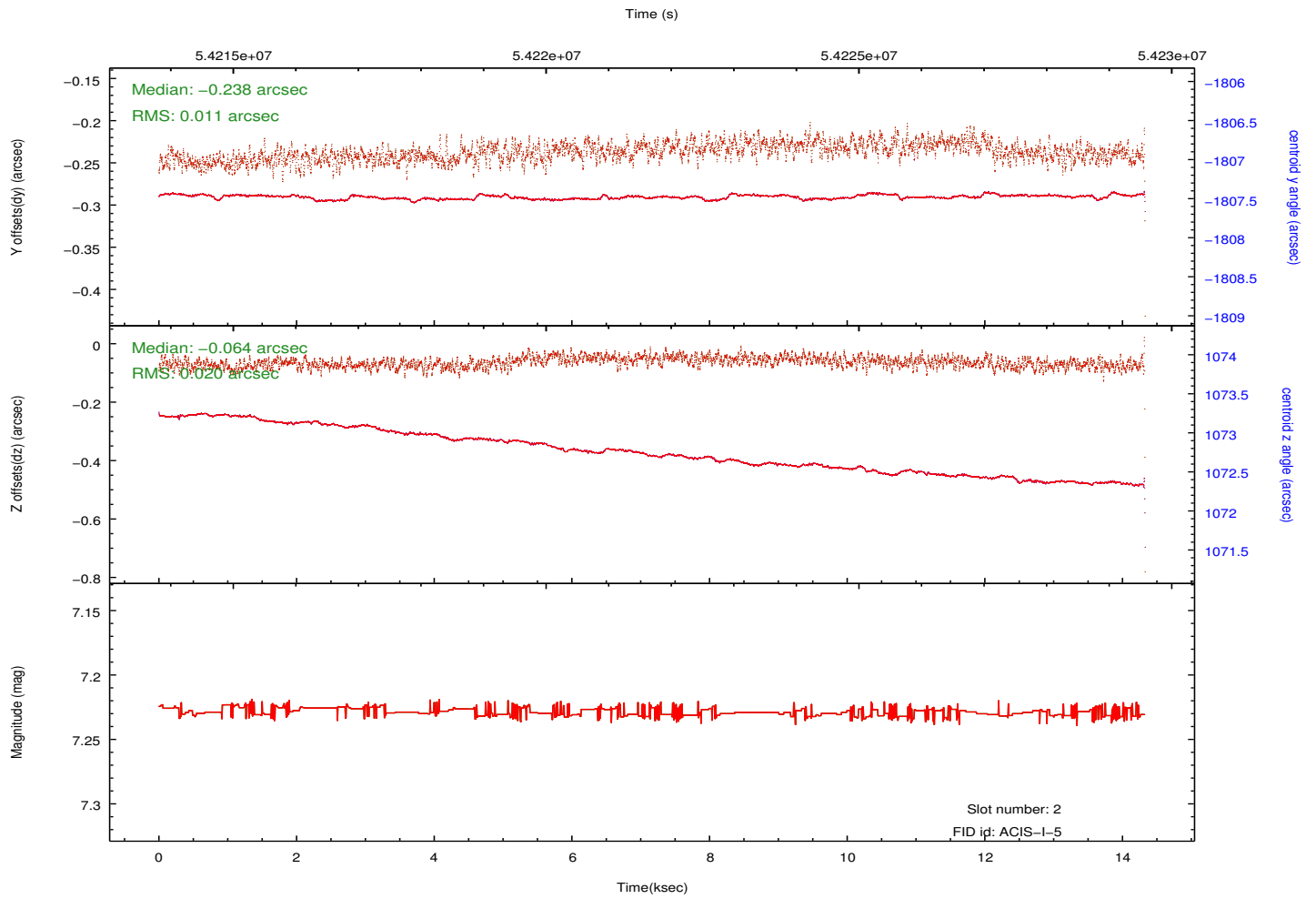
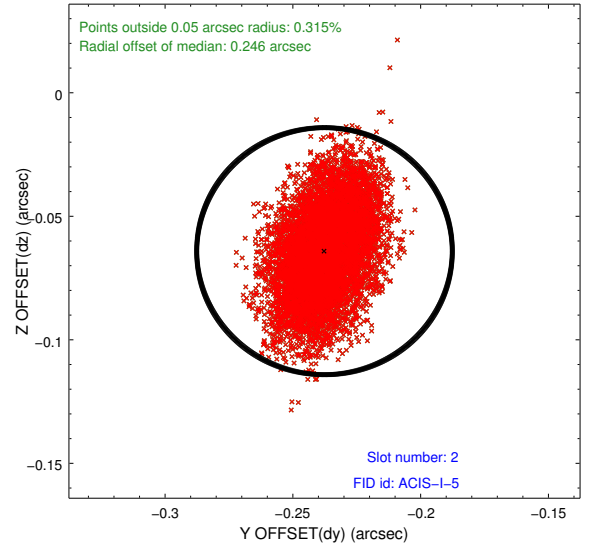
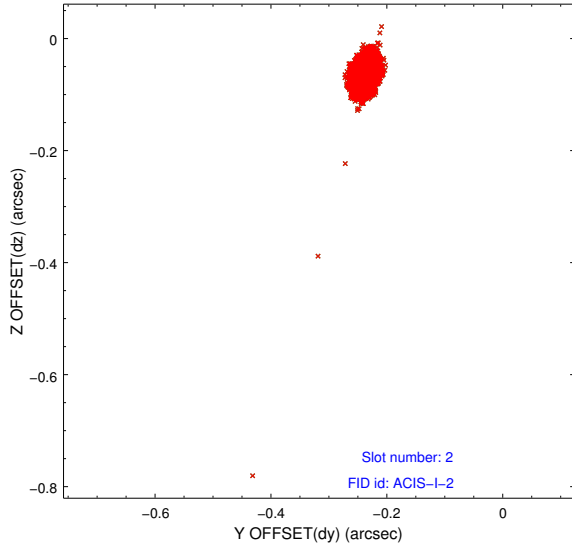
2.5.1 Slot 0



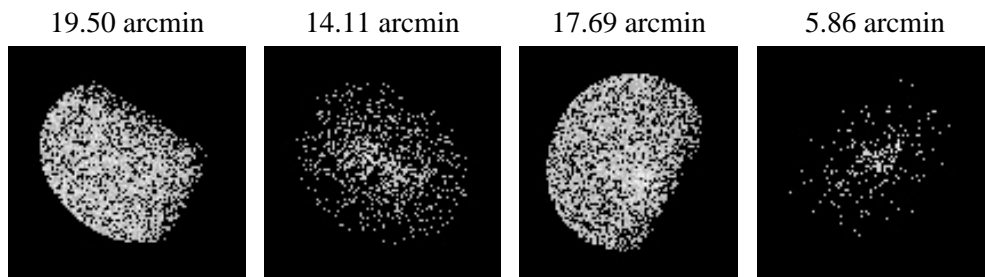
2.5.2 Slot 1



2.5.3 Slot 2



3 Point Sources



A Summary

A.1 Status

V&V Scientist	John Houck
V&V Date (YYYY-MM-DD)	2009.11.17
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	33.68

A.2 Comments

The fid light in slot 2 was removed from the aspect solution due to poor data quality. The aspect solution is not expected to be degraded by removing one fid light or guide star from the solution.

Focal plane temperature is warmer than -118.7 C degrees during the entire observation. This temperature is the upper limit of the verified ACIS calibration for the front-illuminated chips. The focal plane temperature is warmer than -116.7 degrees C throughout this observation. This temperature is the upper limit of the verified ACIS calibration for the back-illuminated chips. 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.