

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 15164 - L2 Version 2
Chandra X-Ray Center

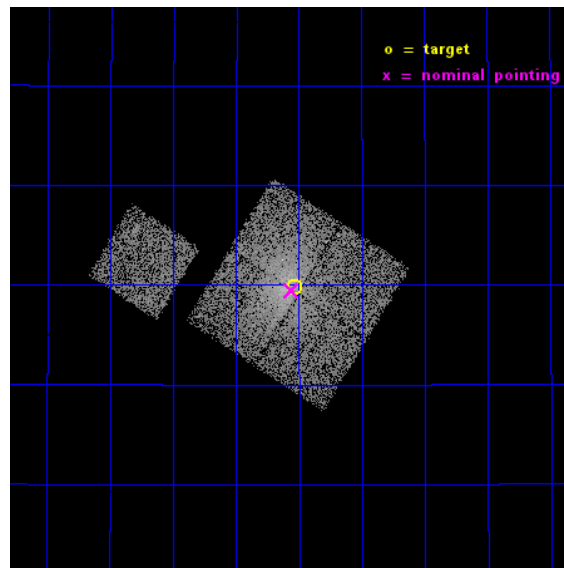
L2 Processing Date : Dec 1 2014

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1 Front

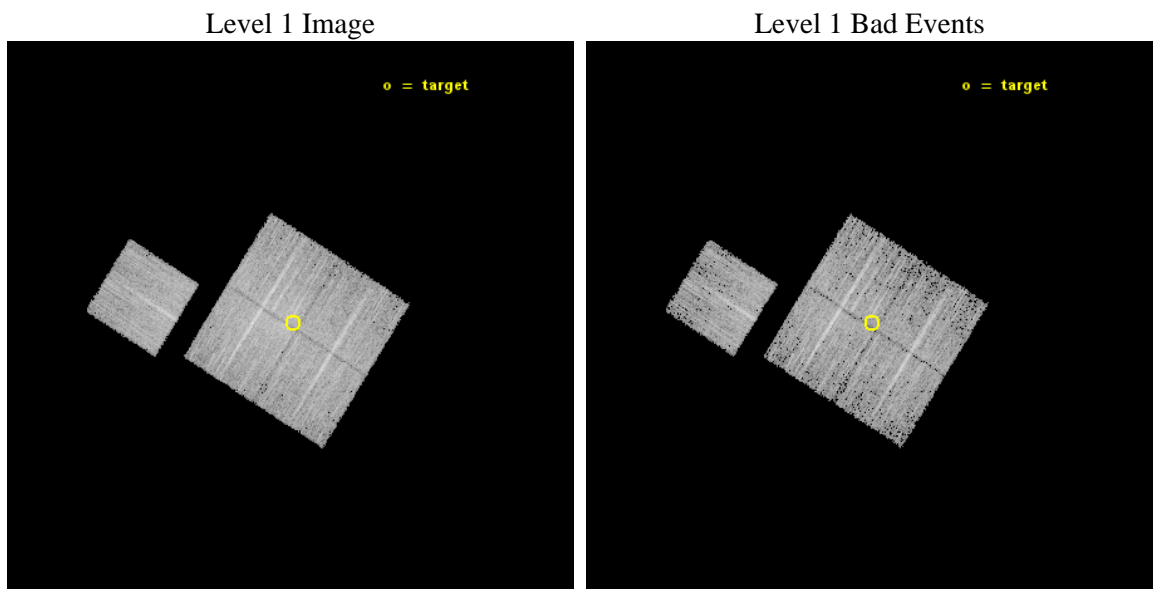
seq_num	801292	Sequence number
obs_id	15164	Observation id
title	COMPLETING eHIFLUGCS: THE ULTIMATE PRECISE AND ACCURATE LOCAL BASELINE	Proposal title
observer	Dr. Thomas Reiprich	Principal investigator
object	A21	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	5.132917	Observer's specified target RA [deg]
dec_targ	28.663	Observer's specified target Dec [deg]
ra_nom	5.1399363201837	Nominal RA [deg]
dec_nom	28.65773919384	Nominal Dec [deg]
roll_nom	302.21545478229	Nominal Roll [deg]
revision	2	Processing version of data
ontime	9079.9000698328	Sum of GTIs [s]
livetime	8961.2644908953	Livetime [s]
ontime0	9079.9000698328	Sum of GTIs [s]
ontime1	9079.9000698328	Sum of GTIs [s]
ontime2	9079.9000698328	Sum of GTIs [s]
ontime3	9079.9000698328	Sum of GTIs [s]
ontime6	9079.9000698328	Sum of GTIs [s]
l2events	31030	Number of level 2 events



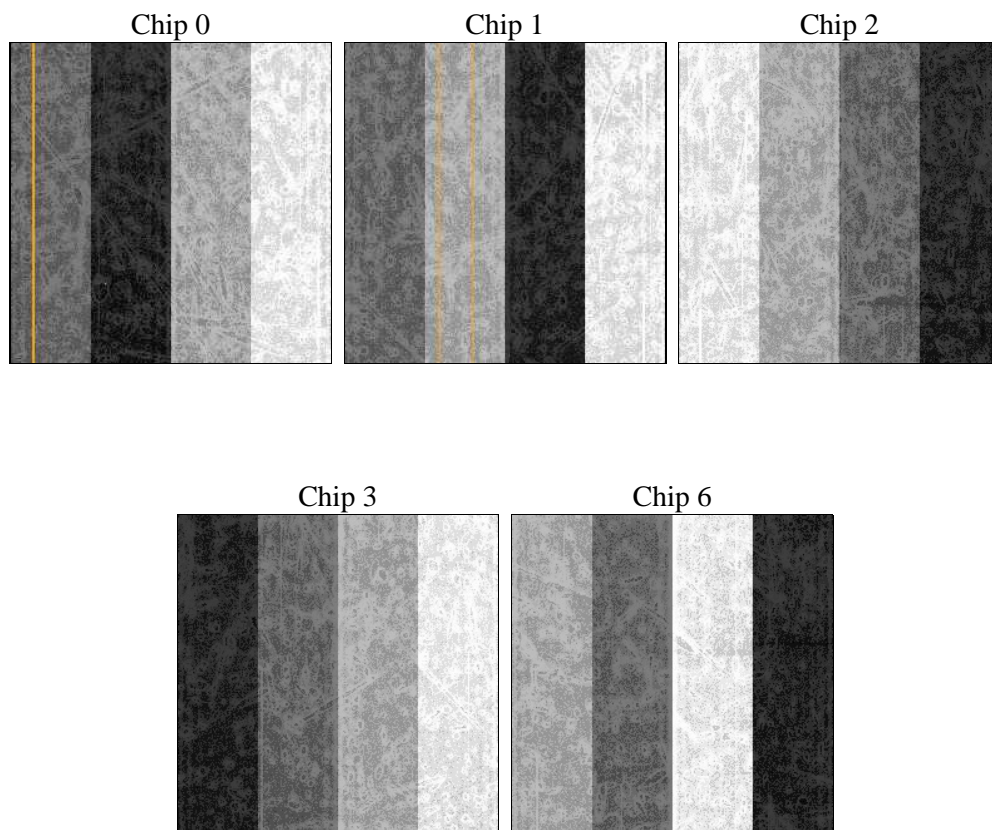
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	9000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	9079.9000698328	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	9079.9000698328	Sum of GTIs [s]
date	2014-12-01T08:25:05	Date and time of file creation	ontime1	9079.9000698328	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	9079.9000698328	Sum of GTIs [s]
			ontime3	9079.9000698328	Sum of GTIs [s]
			ontime6	9079.9000698328	Sum of GTIs [s]
			l1events	230350	Number of level 1 events

2.1.4 Events

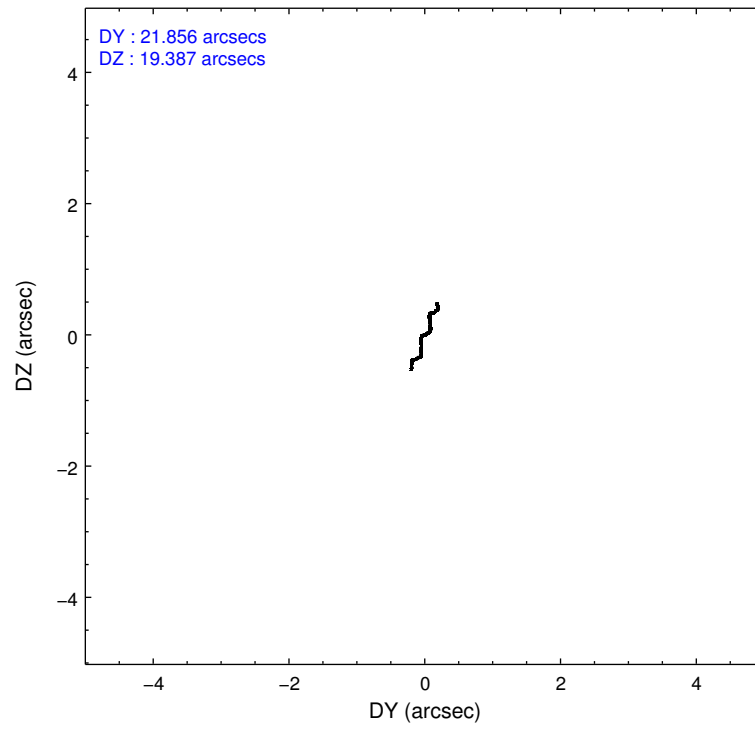
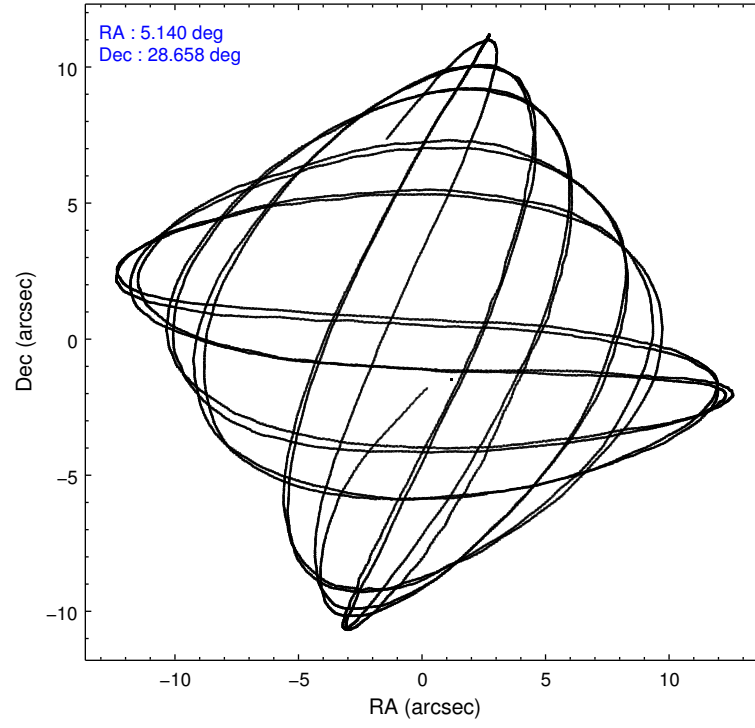
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	43055	42016	50958	48893	45428
rejected events	36538	35519	42039	40386	39998
rejected %	84%	84%	82%	82%	88%

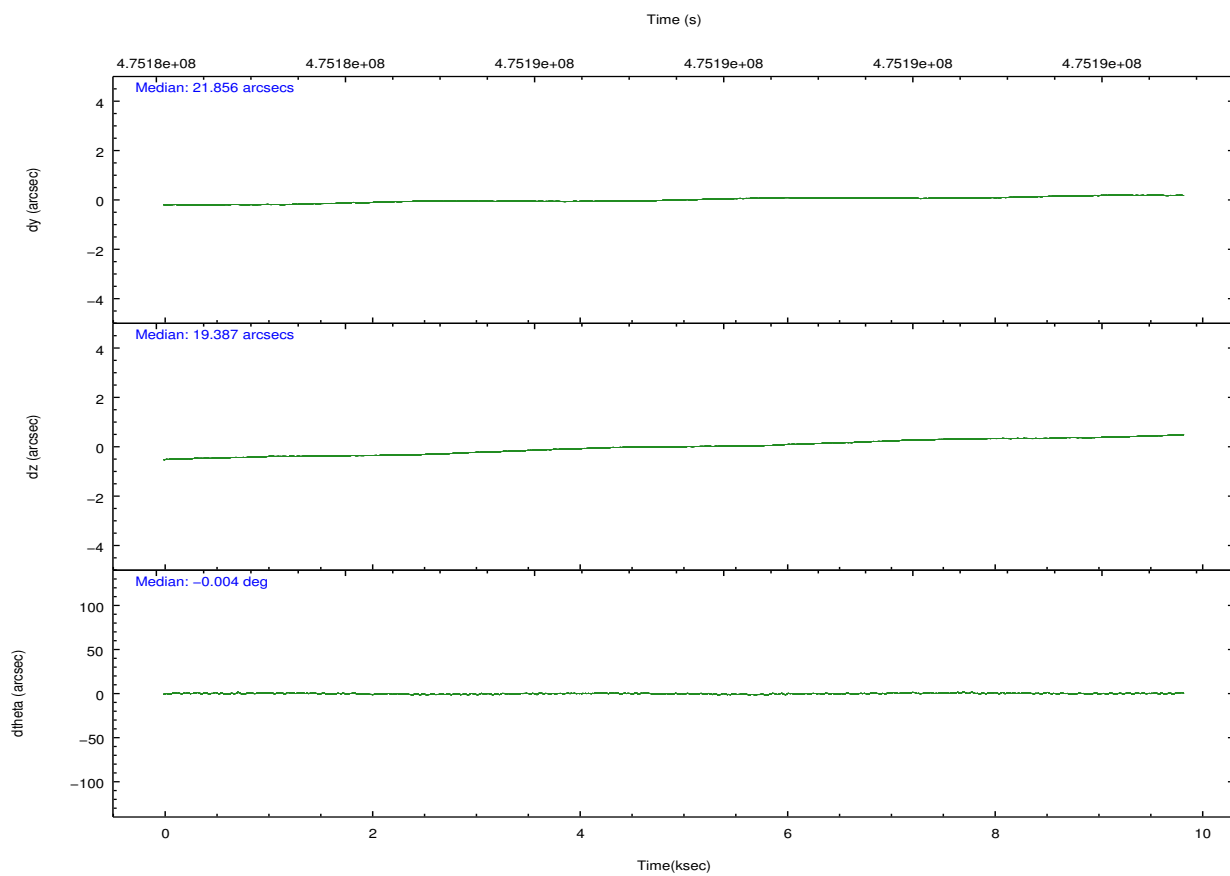
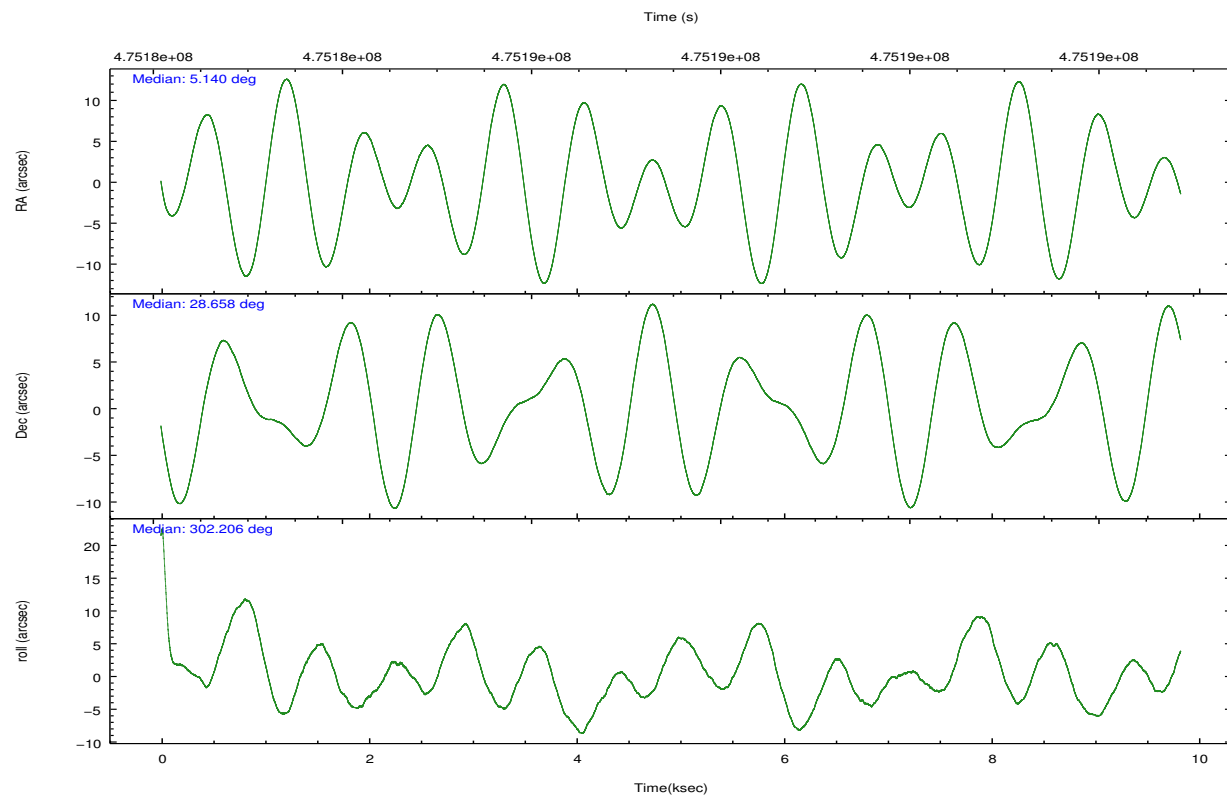
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	2919	2672	4919	4656	1950
	6%	6%	9%	9%	4%
grade 1 events	35	23	31	34	26
	0%	0%	0%	0%	0%
grade 2 events	1425	1432	1685	1540	1273
	3%	3%	3%	3%	2%
grade 3 events	586	564	637	647	551
	1%	1%	1%	1%	1%
grade 4 events	585	626	657	634	534
	1%	1%	1%	1%	1%
grade 5 events	1836	1917	1715	2084	1956
	4%	4%	3%	4%	4%
grade 6 events	1004	1209	1029	1042	1125
	2%	2%	2%	2%	2%
grade 7 events	34665	33573	40285	38256	38013
	80%	79%	79%	78%	83%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	5.112142	5.139936320183747	CCD I2 on	Y	Y
[deg] Pointing Dec	28.670472	28.65773919384004	CCD I3 on	Y	Y
[deg] Pointing Roll	302.020082	302.2154547822942	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	O1	Y
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	N	N
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	475183378.184000	475182114.50058	CCD S5 on	N	N
Observation start date	2013-01-21T19:21:51	2013-01-21T19:01:54	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	475192378.184000	475193451.51369	On-chip summing requested	N	N
Observation end date	2013-01-21T21:51:51	2013-01-21T22:10:51	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



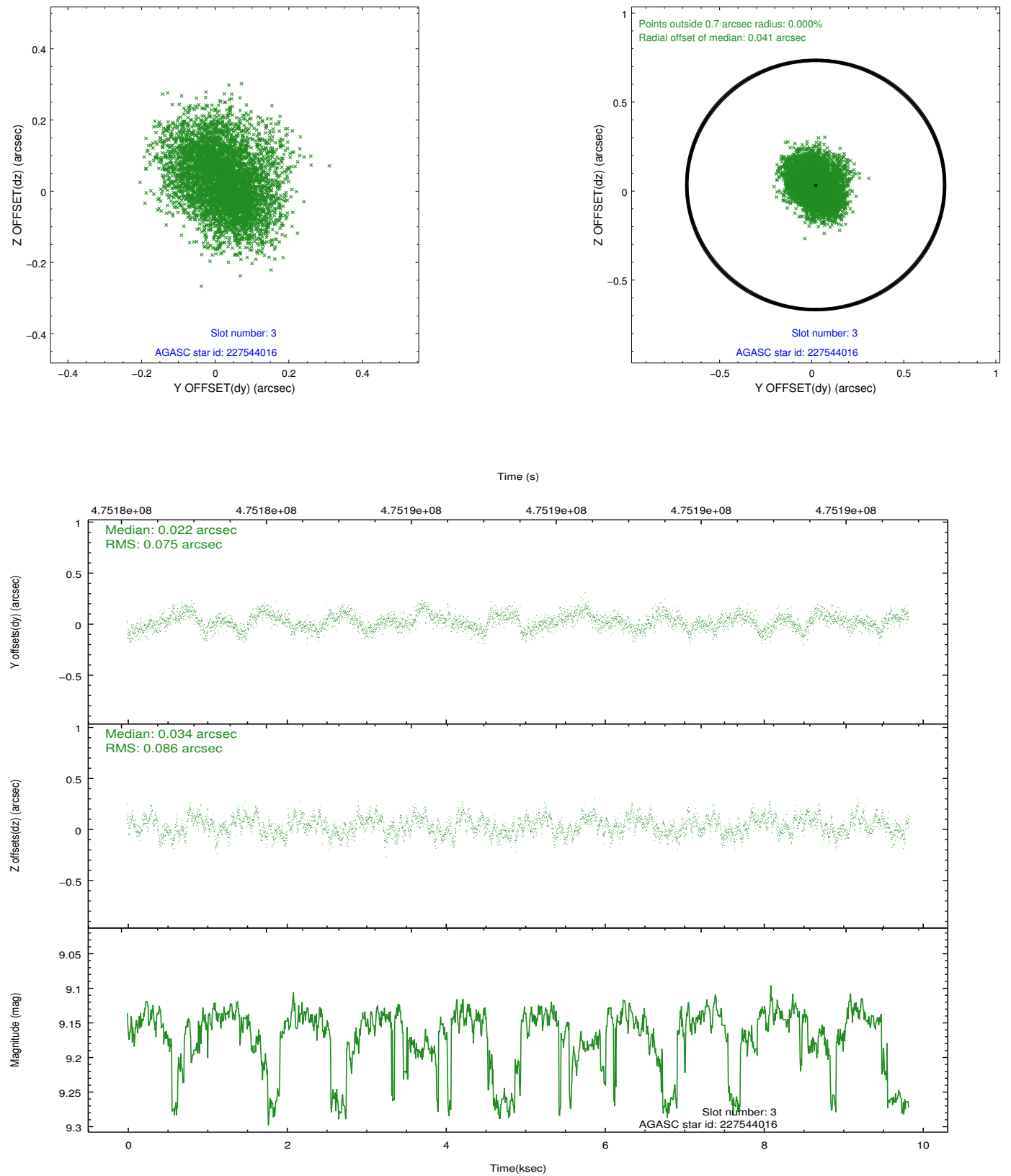


Slot Statistics

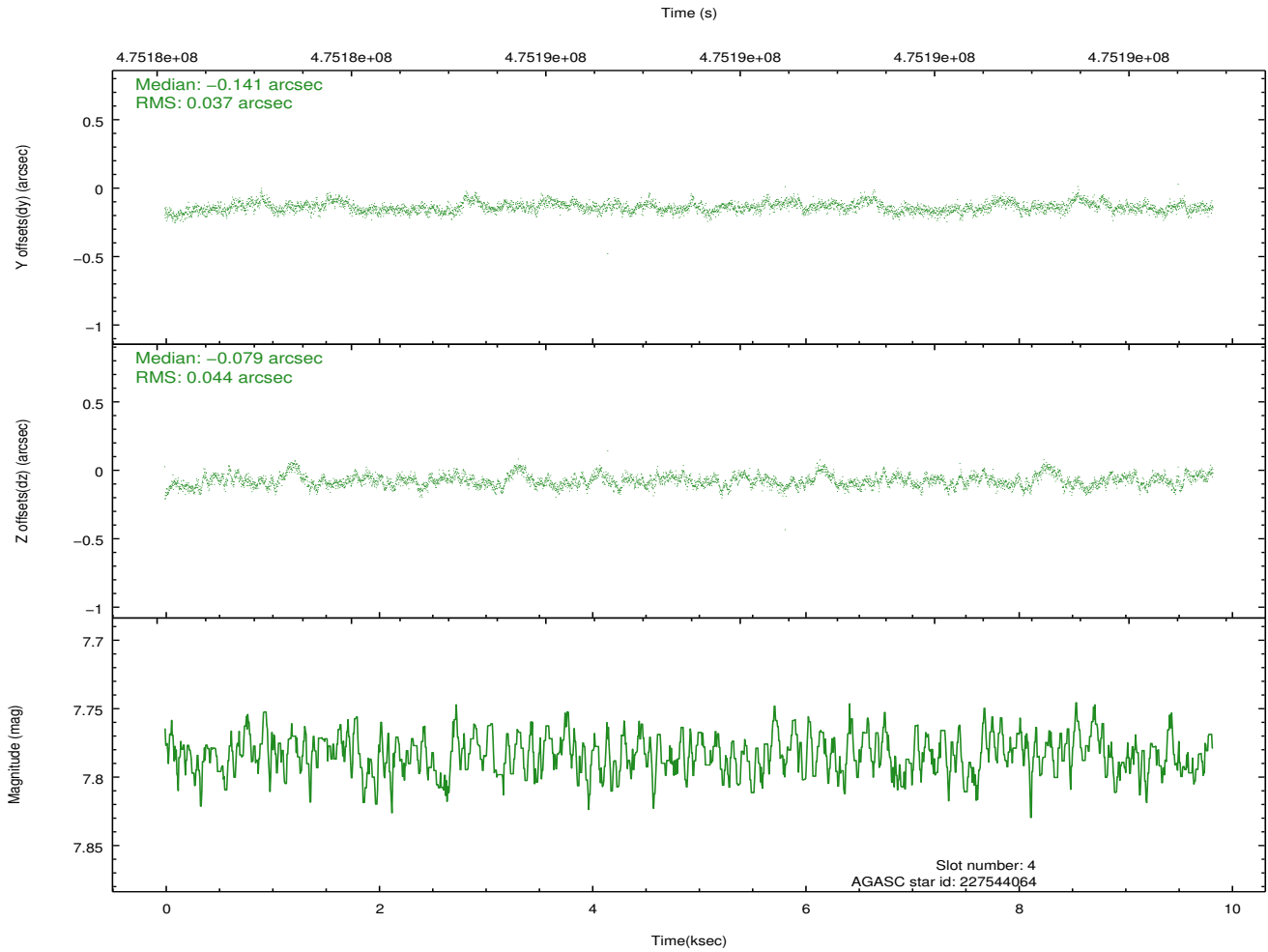
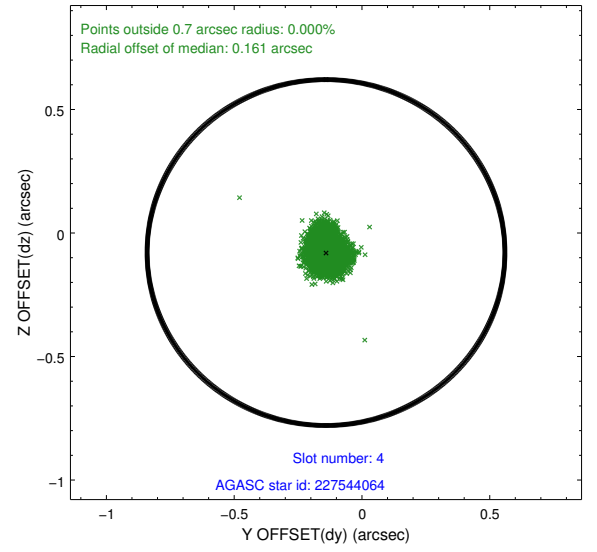
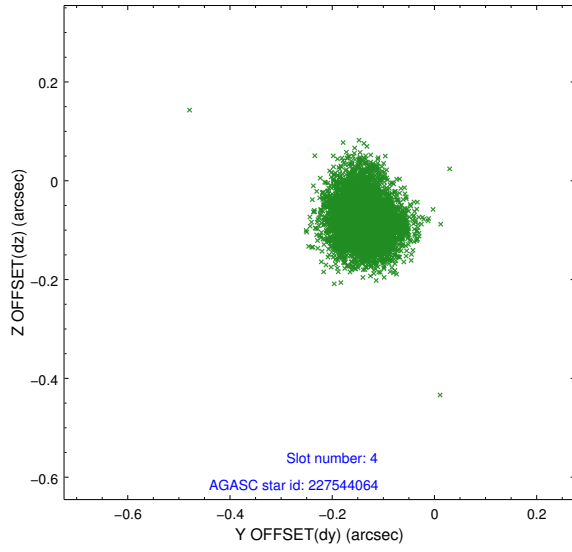
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.16	2398	0.046	0.007	0.014	0.023	0.000000	0.000000	917.49	-843.05
1	FID		ACIS-I-5	7.15	2398	-0.276	0.037	0.006	0.011	0.000000	0.000000	-1830.71	1054.11
2	FID		ACIS-I-6	7.16	2398	0.138	0.027	0.014	0.020	0.000000	0.000000	382.45	1699.29
3	GUIDE	used	227544016	9.16	4766	0.022	0.034	0.124	0.195	5.298344	28.904196	-402.34	943.92
4	GUIDE	used	227544064	7.78	4796	-0.141	-0.079	0.061	0.098	5.422859	28.903759	-193.95	1276.36
5	GUIDE	used	227544512	9.52	4793	0.291	0.304	0.158	0.255	5.412727	28.084191	2295.42	-308.00
6	GUIDE	used	227549808	9.56	4776	-0.244	-0.038	0.165	0.256	4.577381	28.304762	215.99	-2132.77
7	GUIDE	used	227559504	9.17	4790	0.074	-0.226	0.101	0.165	5.467582	28.262653	1841.46	177.72

2.4 Star Slots

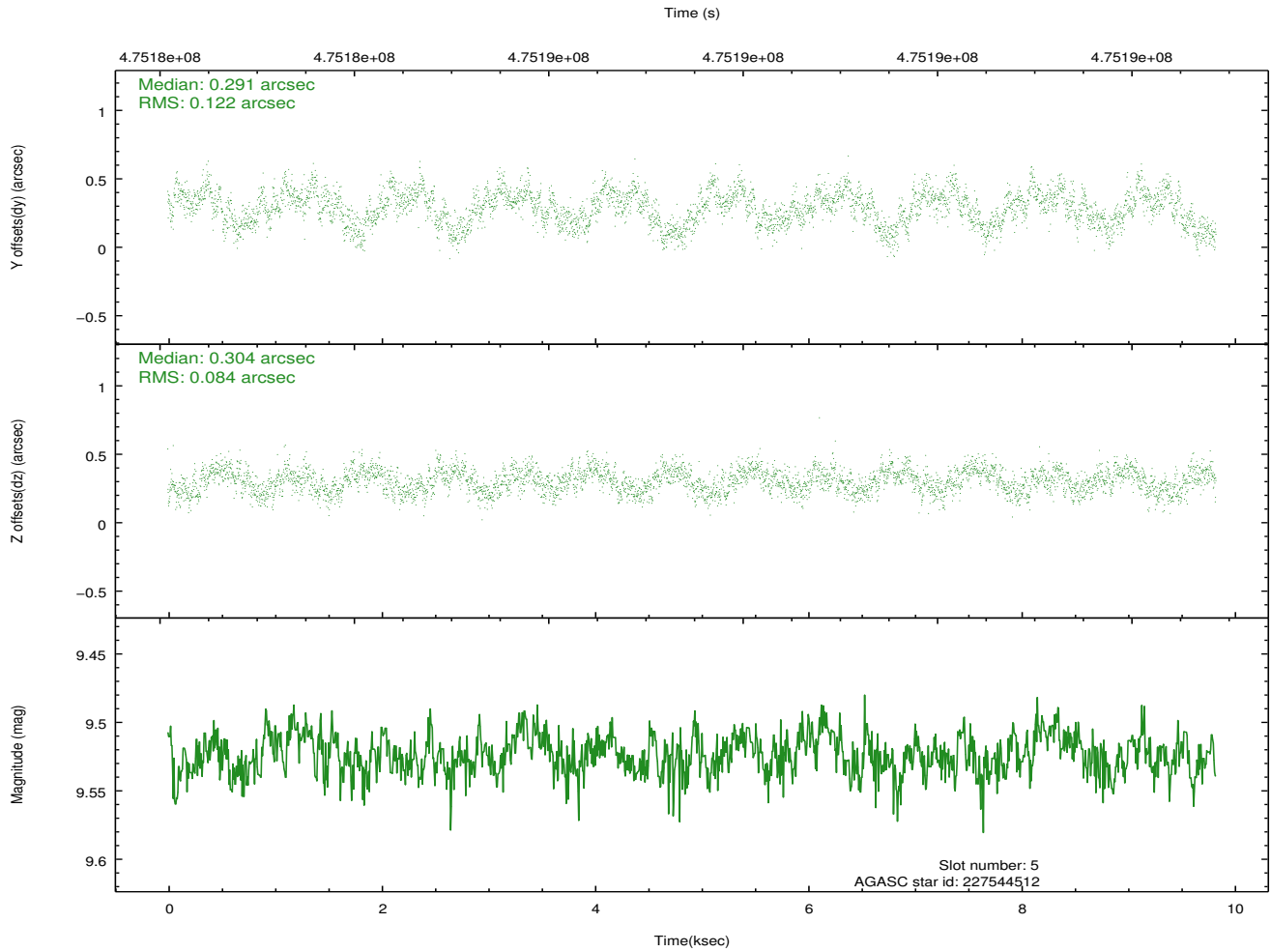
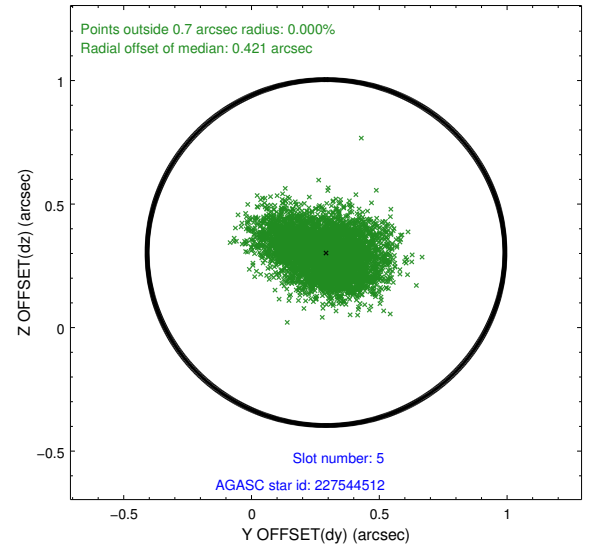
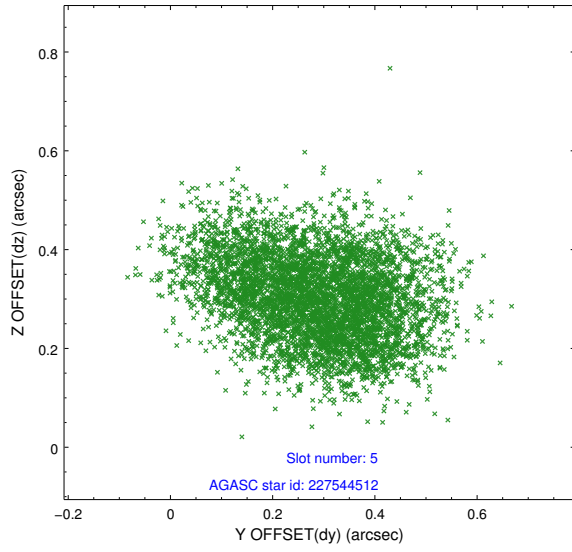
2.4.1 Slot 3



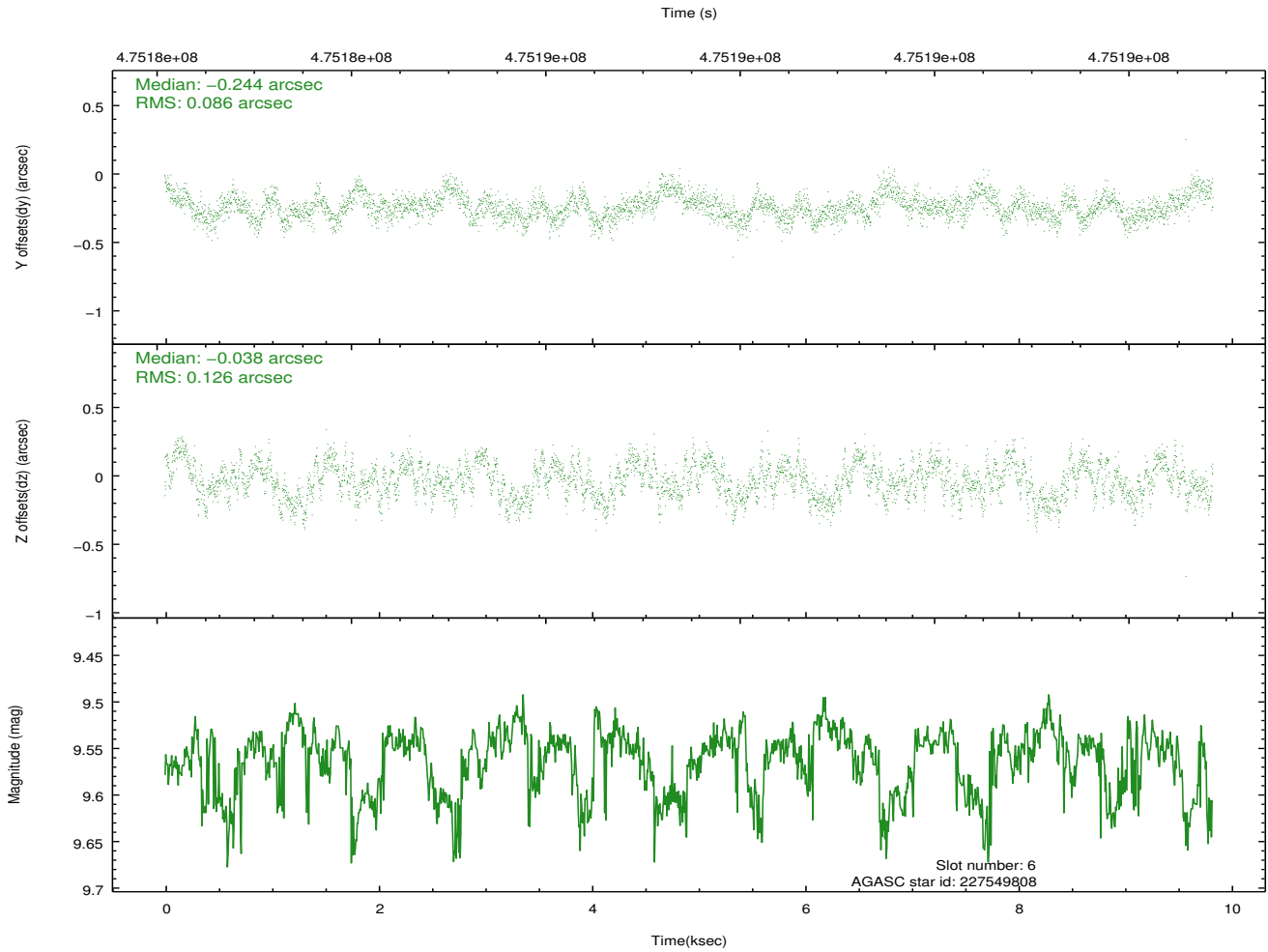
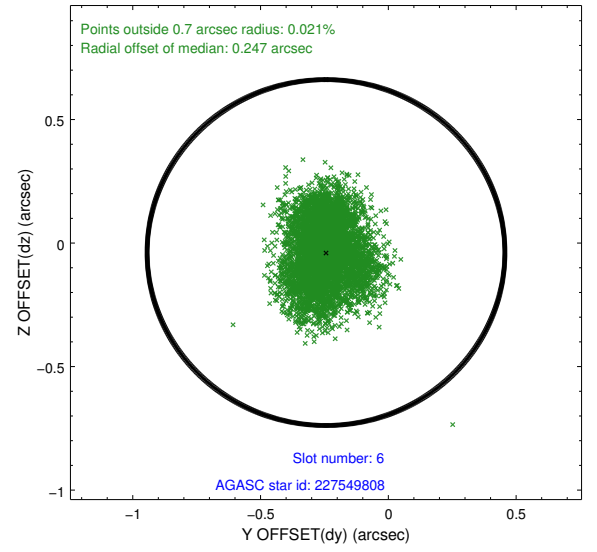
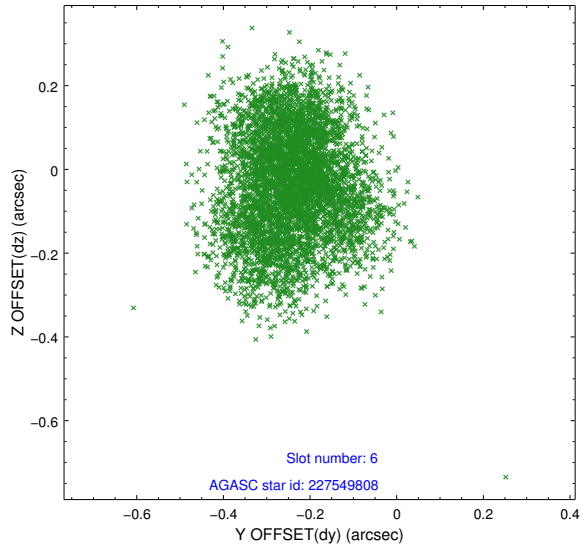
2.4.2 Slot 4



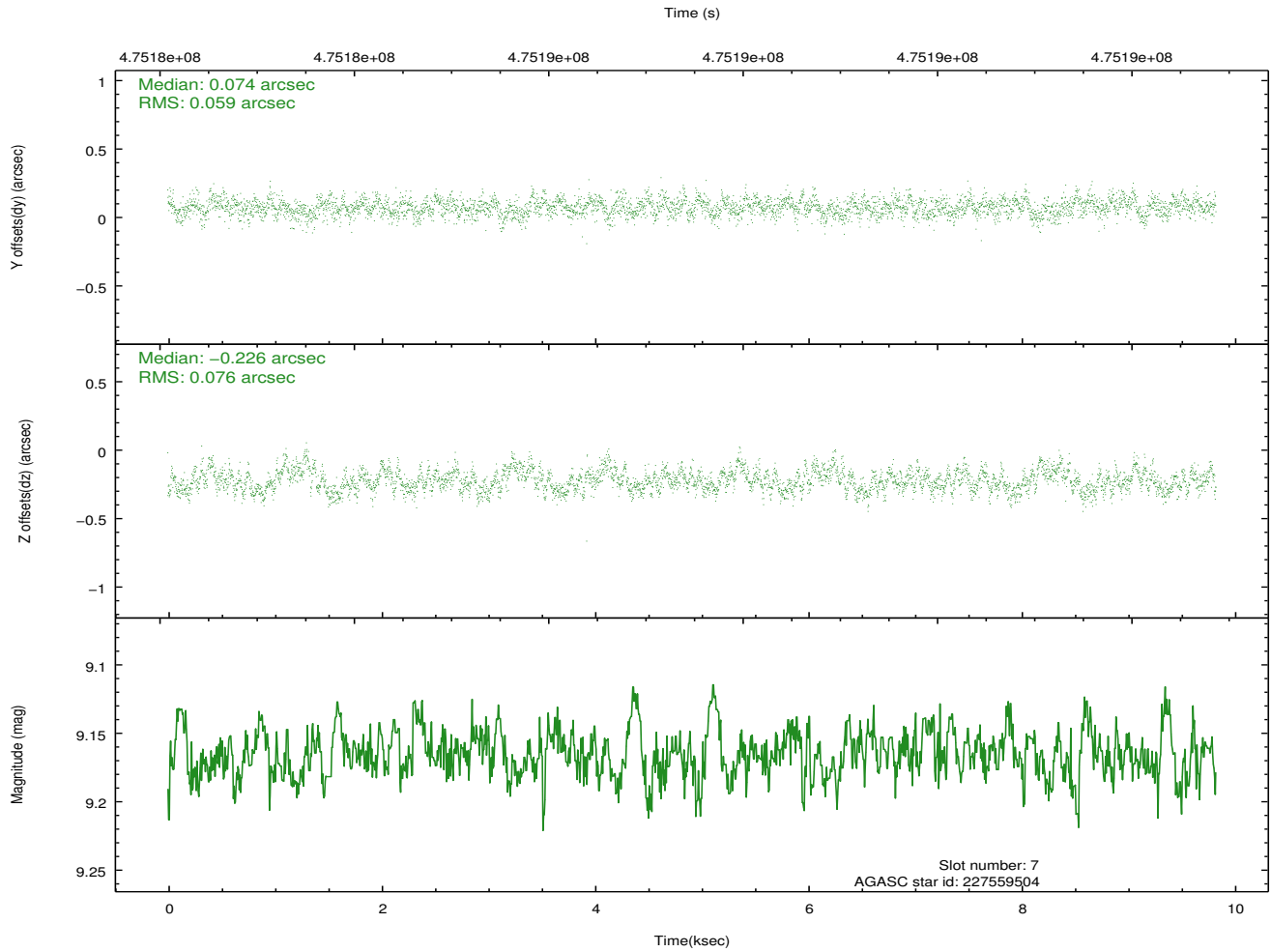
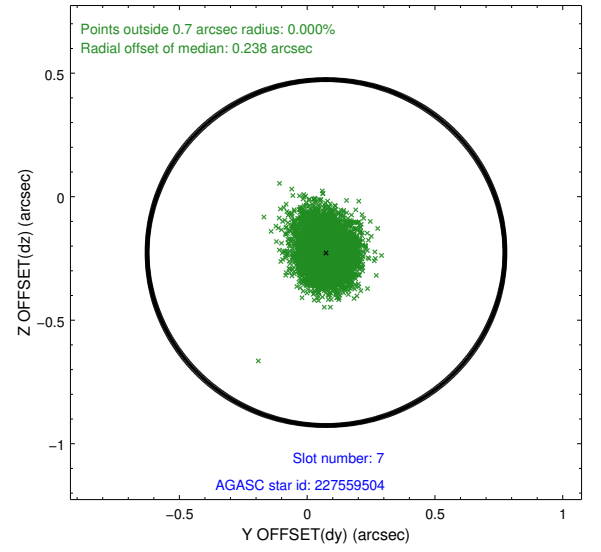
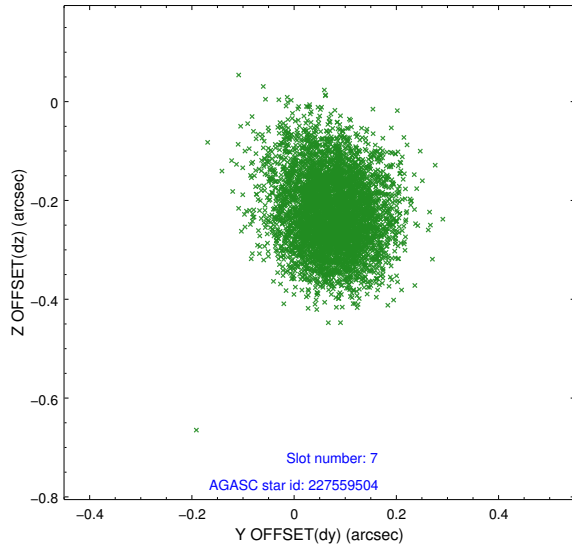
2.4.3 Slot 5



2.4.4 Slot 6

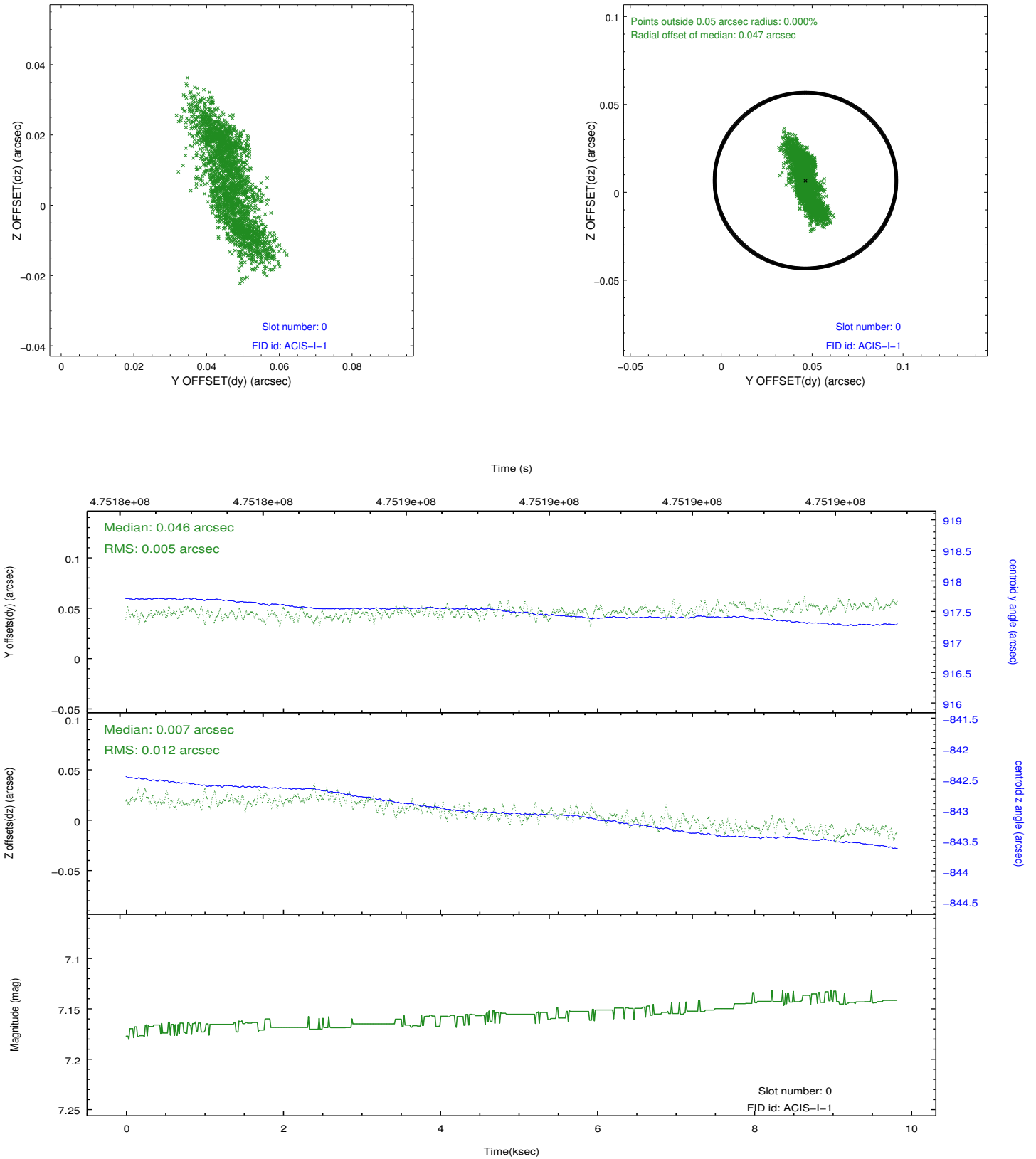


2.4.5 Slot 7

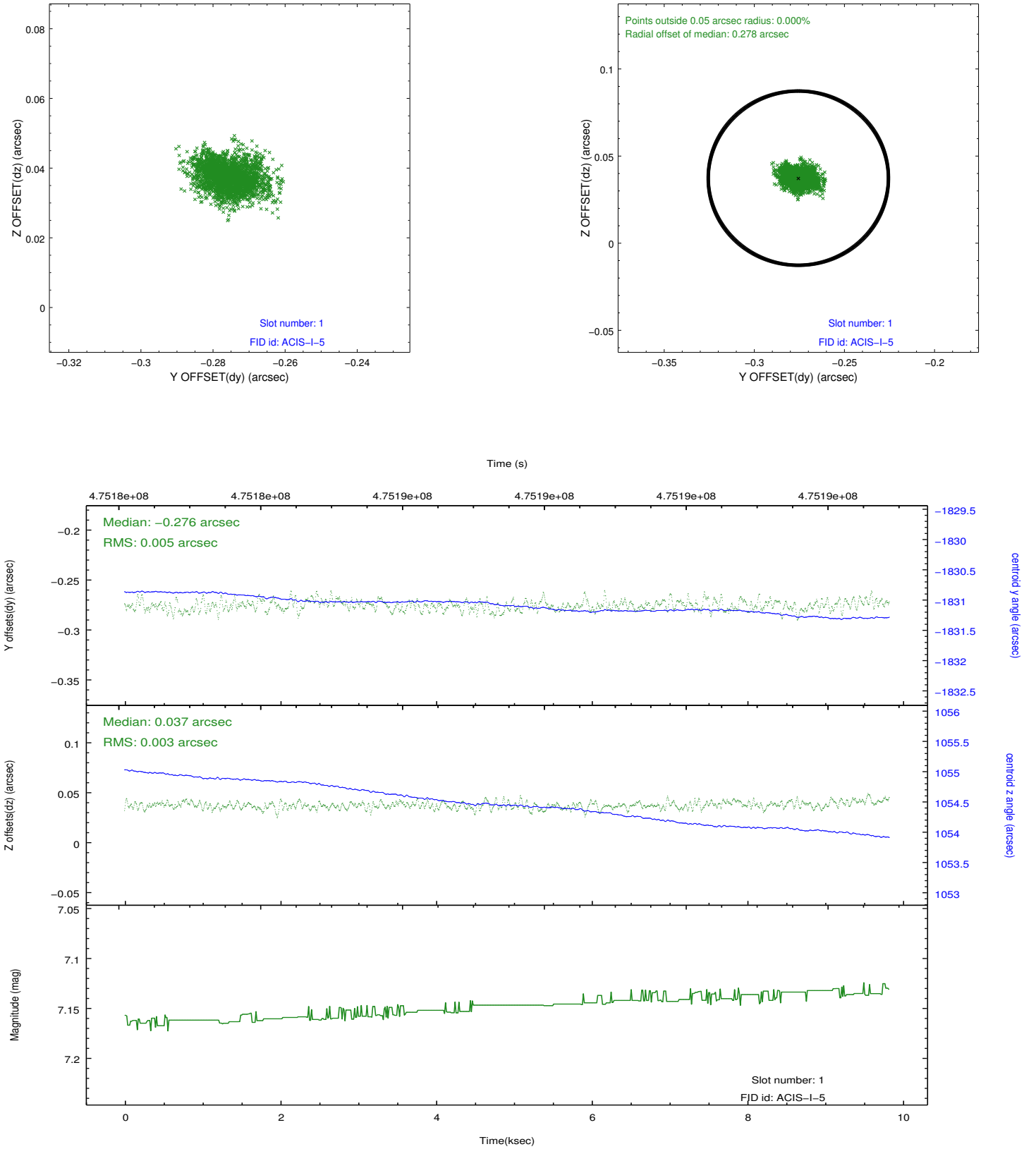


2.5 FID Slots

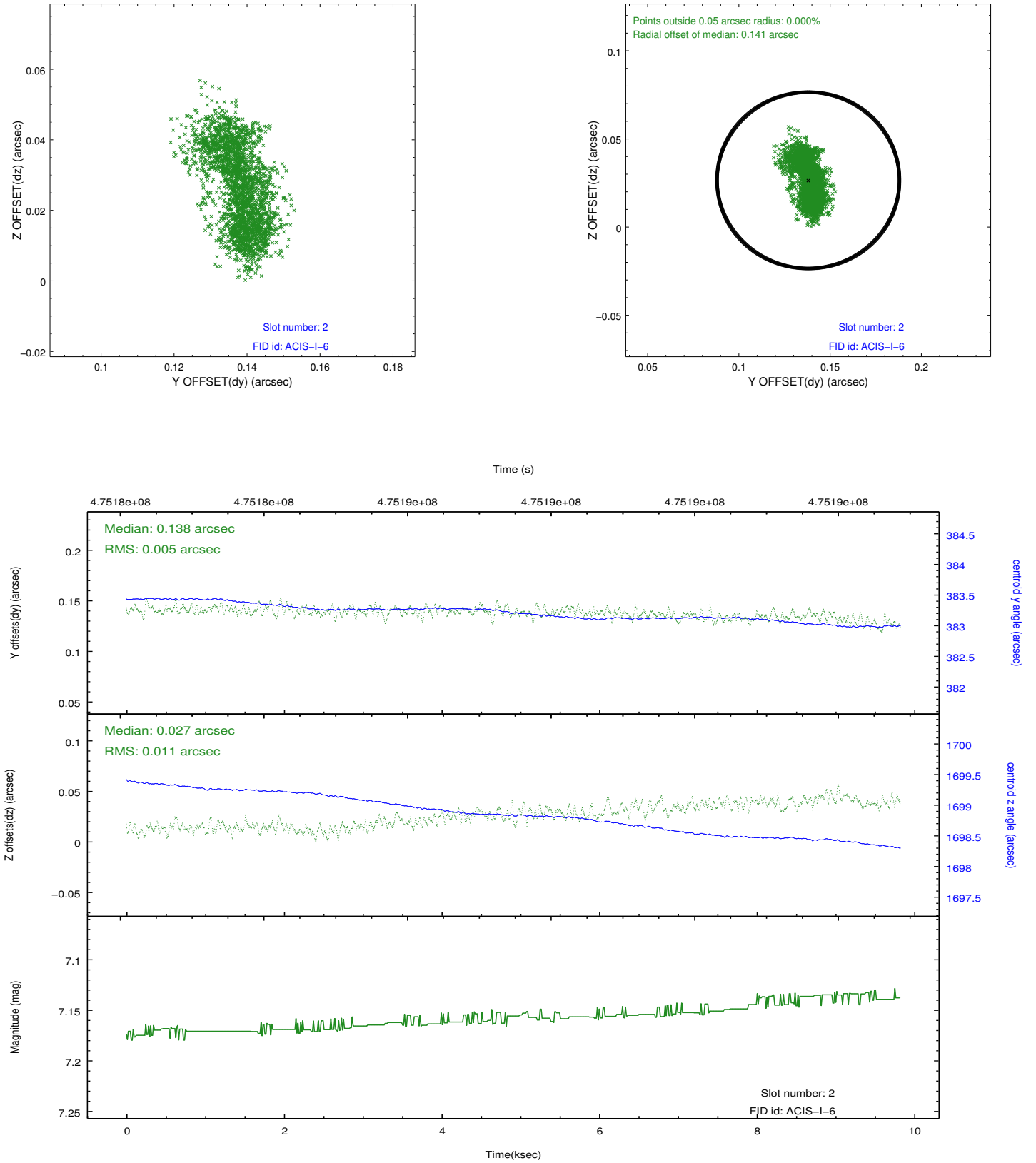
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2014.12.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.0799000698328

A.2 Comments

These data have been reprocessed with new aspect alignment calibration files that correct small mean offsets (up to 0.4 arcsecs) and improve overall astrometric accuracy. The new calibration was determined using data from the time period being reprocessed and was performed using cross-correlation of X-ray sources with radio and optical counterparts.