

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 15167 - L2 Version 3
Chandra X-Ray Center

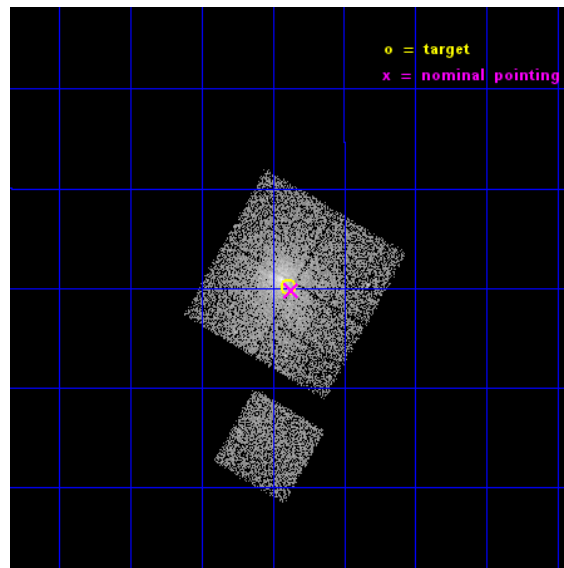
L2 Processing Date : Dec 3 2014

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1 Front

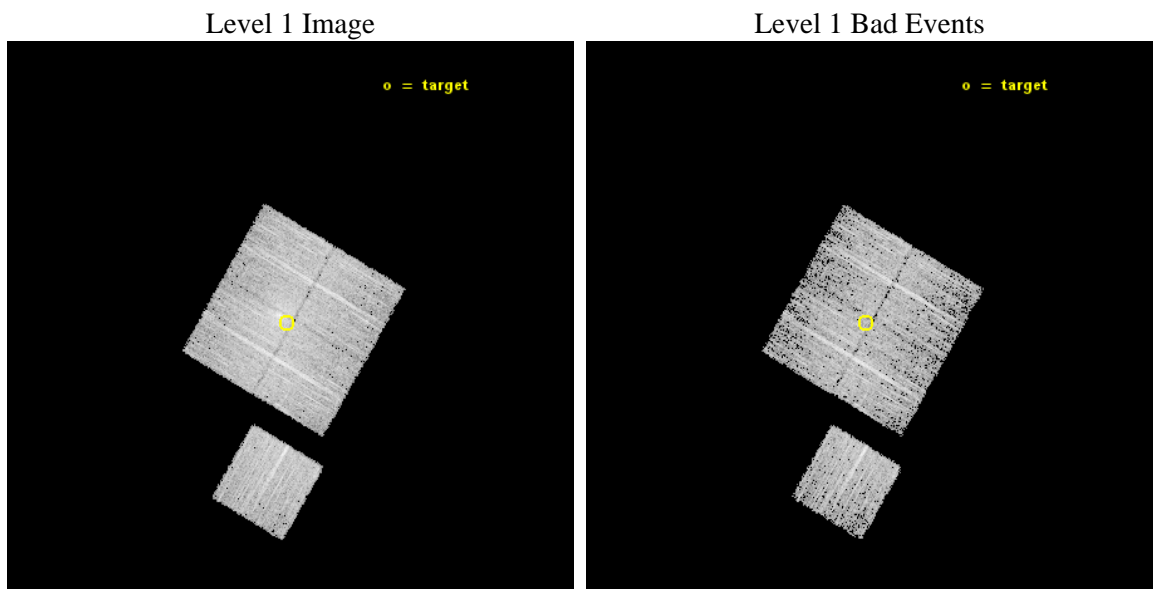
seq_num	801295	Sequence number
obs_id	15167	Observation id
title	COMPLETING eHIFLUGCS: THE ULTIMATE PRECISE AND ACCURATE LOCAL BASELINE	Proposal title
observer	Dr. Thomas Reiprich	Principal investigator
object	A2033	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	227.847917	Observer's specified target RA [deg]
dec_targ	6.335667	Observer's specified target Dec [deg]
ra_nom	227.84244246533	Nominal RA [deg]
dec_nom	6.3297030966451	Nominal Dec [deg]
roll_nom	210.20940244461	Nominal Roll [deg]
revision	3	Processing version of data
ontime	9082.9180294275	Sum of GTIs [s]
livetime	8964.2430186261	Livetime [s]
ontime0	9089.143168807	Sum of GTIs [s]
ontime1	9089.1842088103	Sum of GTIs [s]
ontime2	9086.0590494871	Sum of GTIs [s]
ontime3	9082.9180294275	Sum of GTIs [s]
ontime6	9089.1021288037	Sum of GTIs [s]
l2events	30521	Number of level 2 events



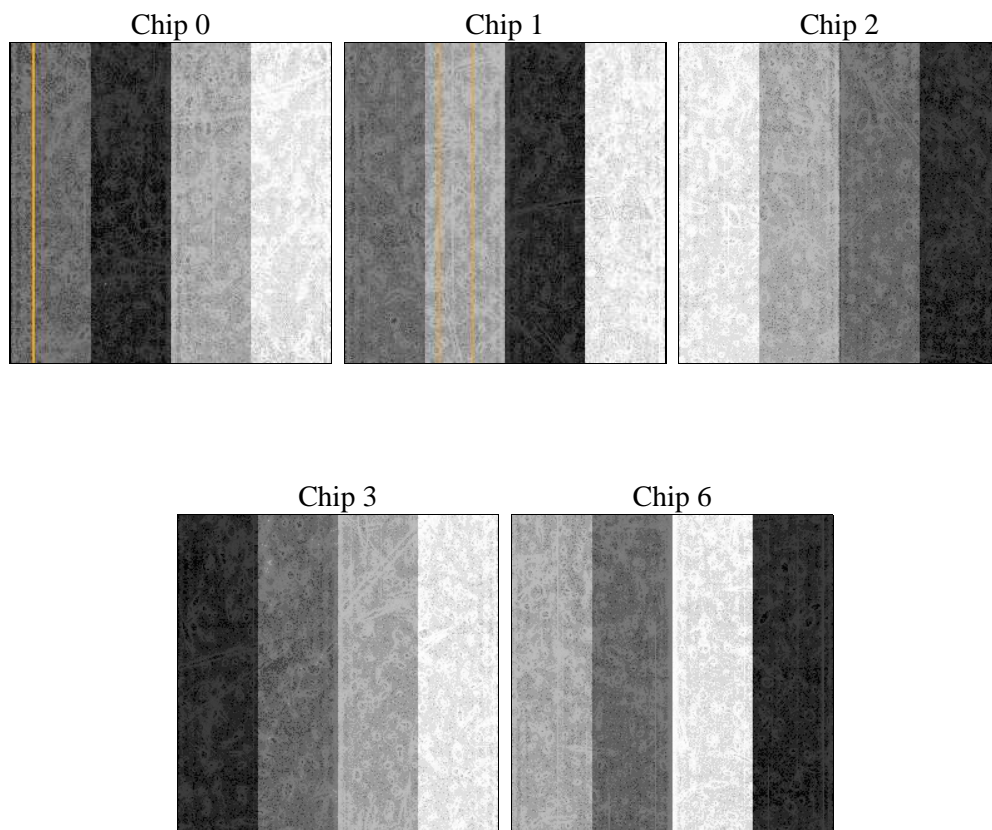
2 OBI

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	9082.9180294275	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	9089.143168807	Sum of GTIs [s]
date	2014-12-03T23:33:50	Date and time of file creation	ontime1	9089.1842088103	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	9086.0590494871	Sum of GTIs [s]
			ontime3	9082.9180294275	Sum of GTIs [s]
			ontime6	9089.1021288037	Sum of GTIs [s]
			l1events	193009	Number of level 1 events

2.1.4 Events

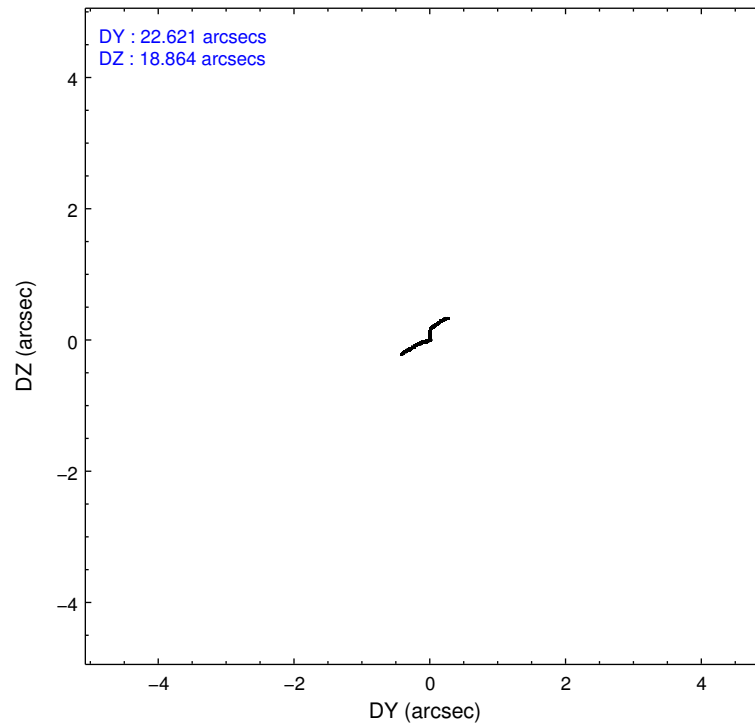
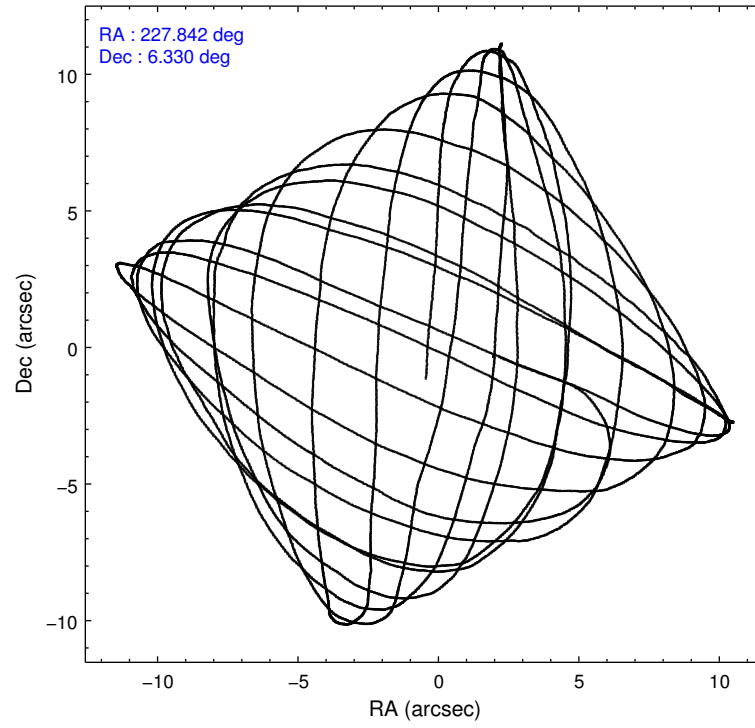
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	35888	38554	39634	40769	38164
rejected events	29951	30997	32841	31259	33192
rejected %	83%	80%	82%	76%	86%

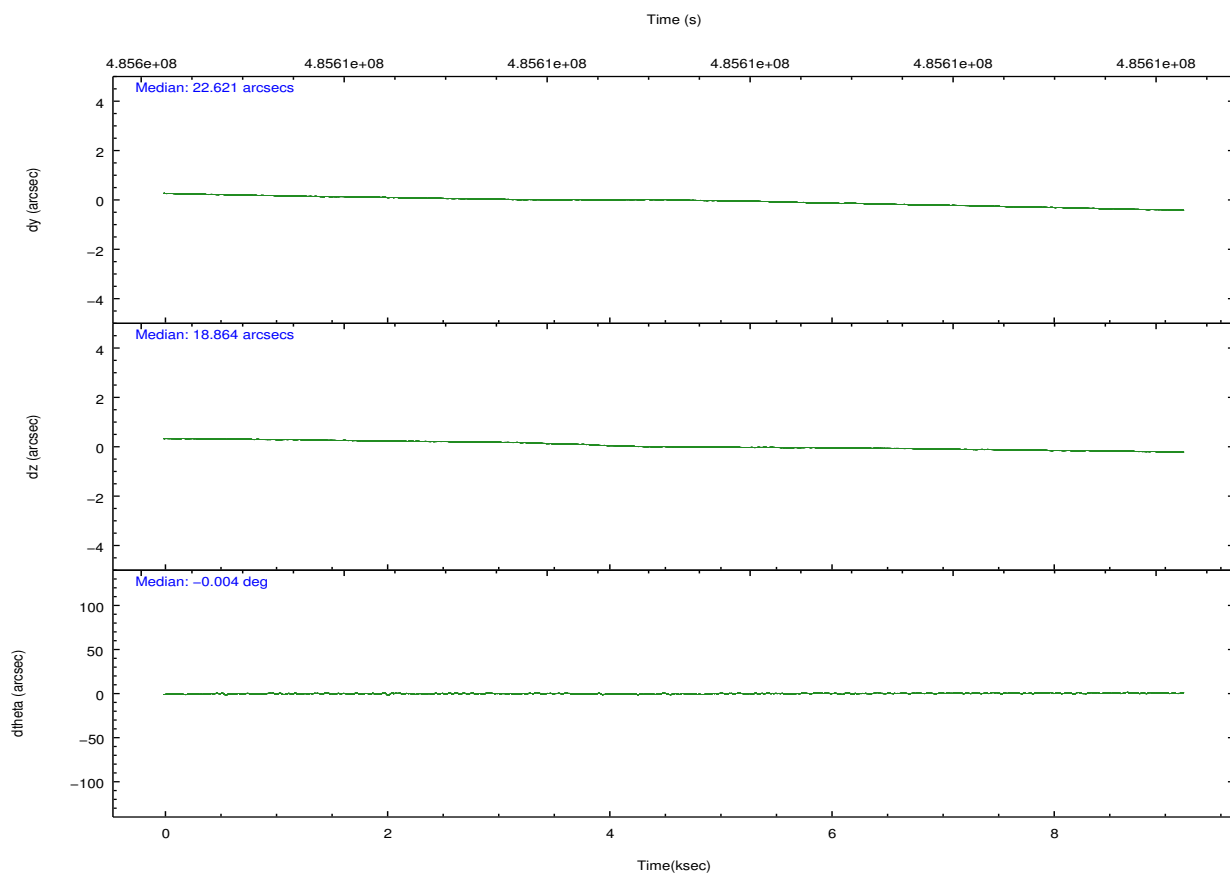
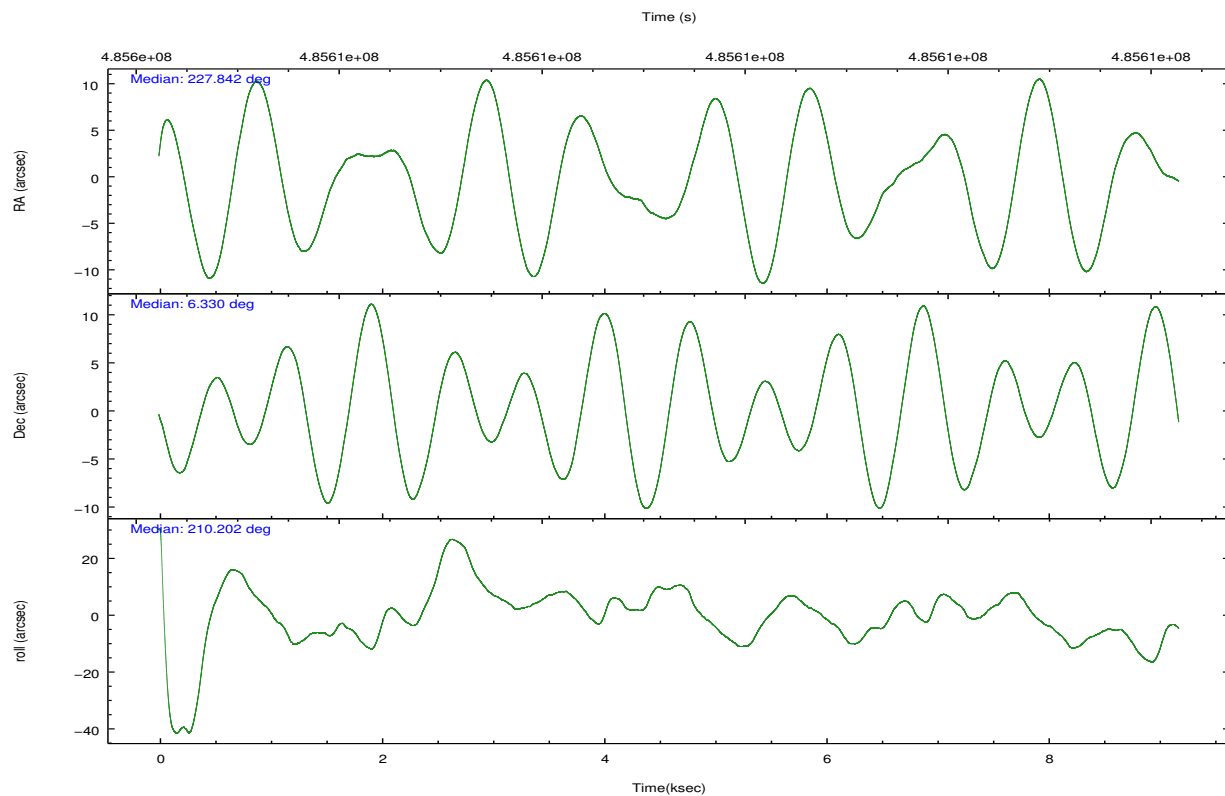
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	2710	3981	3605	5813	1999
	7%	10%	9%	14%	5%
grade 1 events	34	27	37	41	27
	0%	0%	0%	0%	0%
grade 2 events	1287	1397	1312	1466	1044
	3%	3%	3%	3%	2%
grade 3 events	543	583	494	601	475
	1%	1%	1%	1%	1%
grade 4 events	481	547	474	628	438
	1%	1%	1%	1%	1%
grade 5 events	1527	1699	1412	1744	1740
	4%	4%	3%	4%	4%
grade 6 events	918	1050	909	1005	1017
	2%	2%	2%	2%	2%
grade 7 events	28388	29270	31391	29471	31424
	79%	75%	79%	72%	82%

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	227.856072	227.8424424653293	CCD I2 on	Y	Y
[deg] Pointing Dec	6.353630	6.329703096645082	CCD I3 on	Y	Y
[deg] Pointing Roll	209.999098	210.2094024446101	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)	485604838.184000	485603320.81442	CCD S5 on	N	N
Observation start date	2013-05-22T10:12:51	2013-05-22T09:48:40	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	485613838.184000	485614733.67754	On-chip summing requested	N	N
Observation end date	2013-05-22T12:42:51	2013-05-22T12:58:53	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



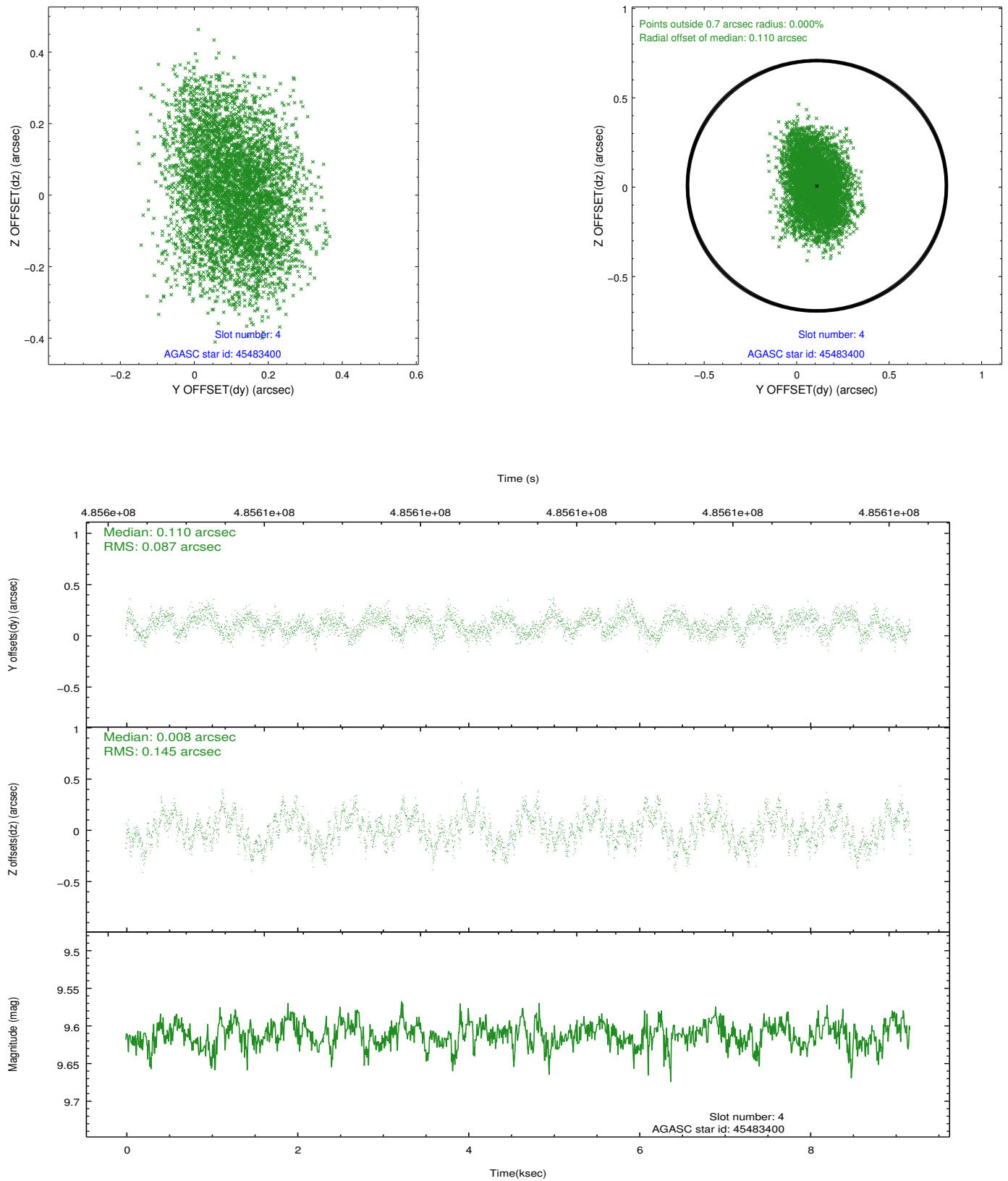


Slot Statistics

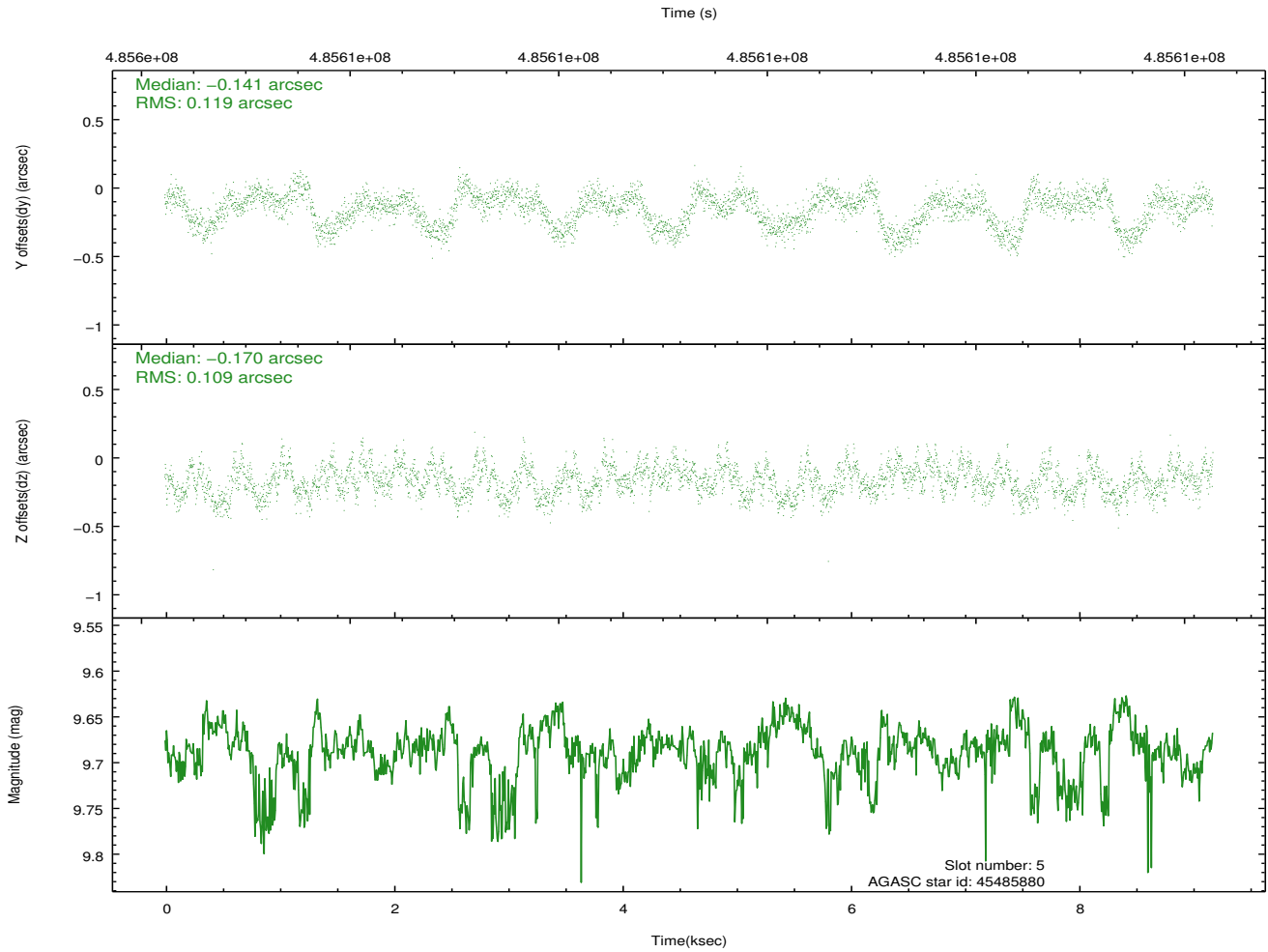
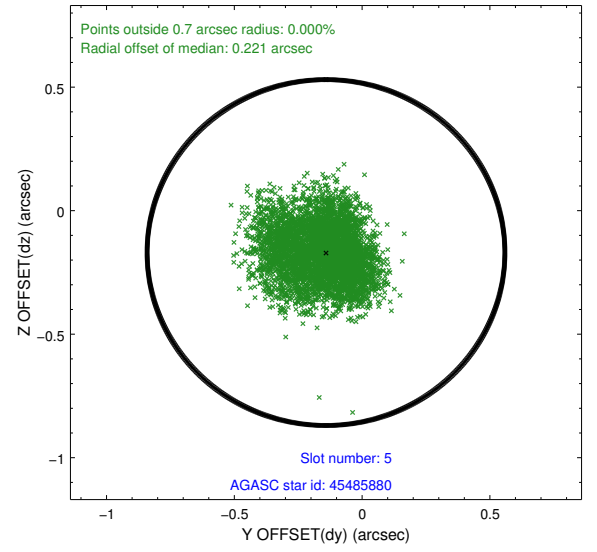
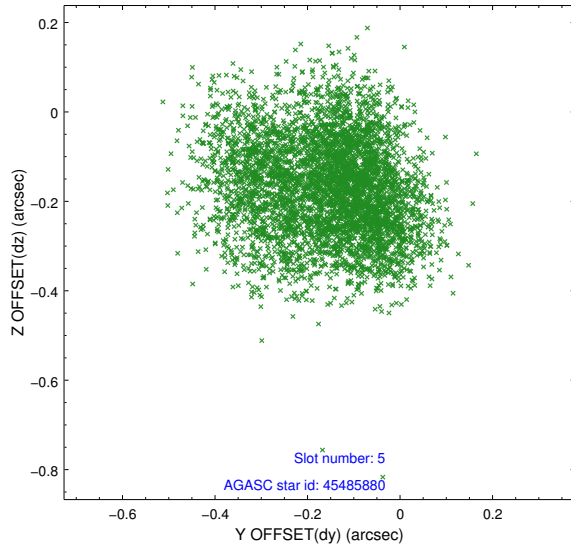
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.07	2239	0.023	0.049	0.007	0.014	0.000000	0.000000	916.74	-842.53
1	FID		ACIS-I-5	7.06	2239	-0.256	0.026	0.007	0.013	0.000000	0.000000	-1831.39	1054.53
2	FID		ACIS-I-6	7.07	2239	0.143	-0.004	0.008	0.013	0.000000	0.000000	381.66	1699.76
3	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
4	GUIDE	used	45483400	9.61	4469	0.110	0.008	0.183	0.294	228.040804	6.636037	-1079.46	-550.21
5	GUIDE	used	45485880	9.69	4459	-0.141	-0.170	0.175	0.271	228.190636	6.293142	-927.86	786.66
6	GUIDE	used	45488120	9.07	4477	0.028	0.039	0.124	0.196	228.199153	6.801822	-1868.91	-782.74
7	GUIDE	used	45488688	10.15	4460	0.020	0.119	0.212	0.339	228.524162	6.368026	-2097.07	1148.94

2.4 Star Slots

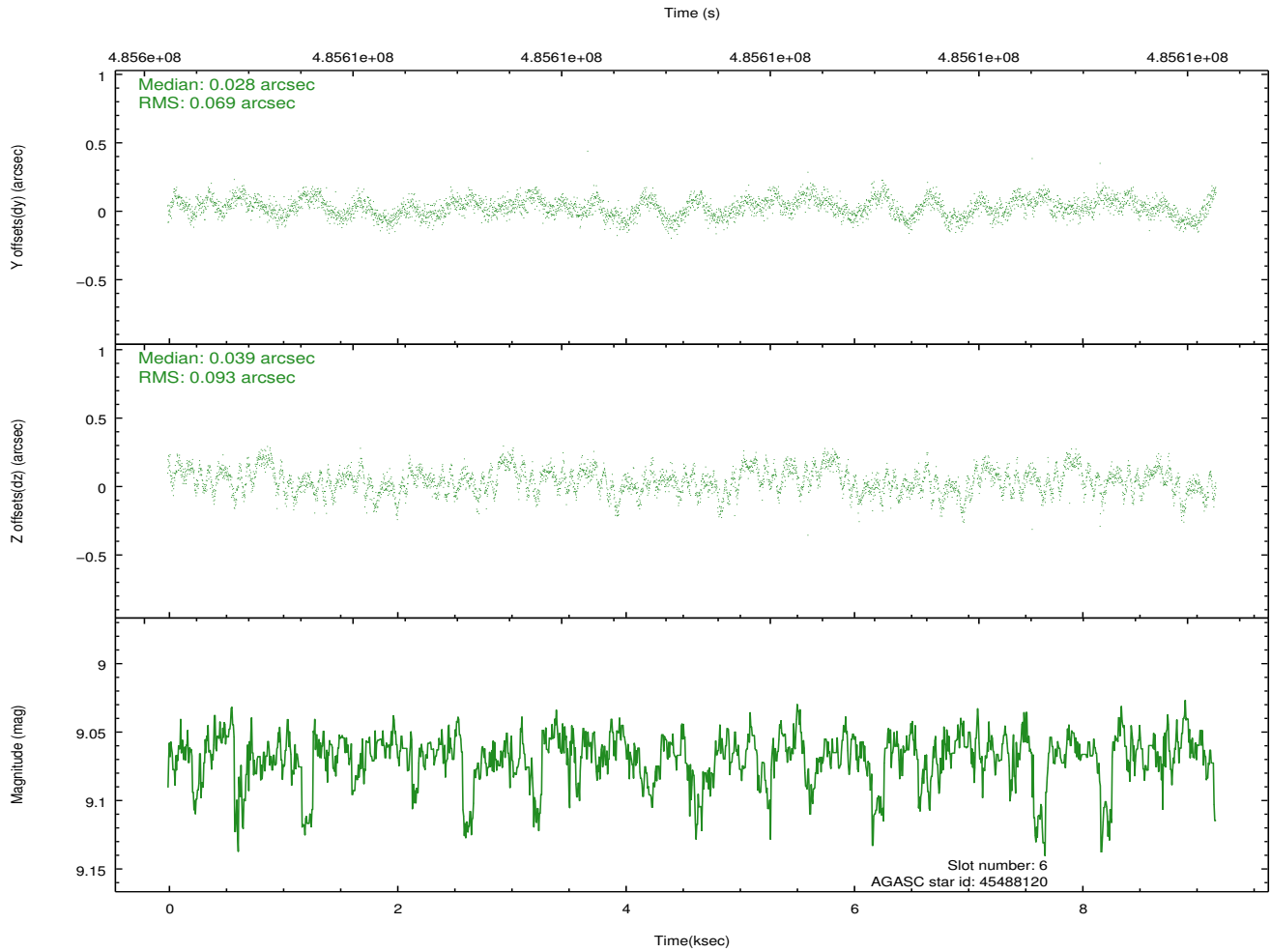
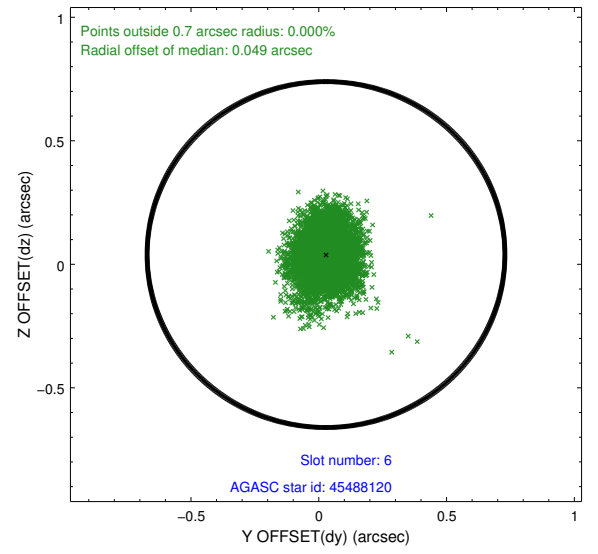
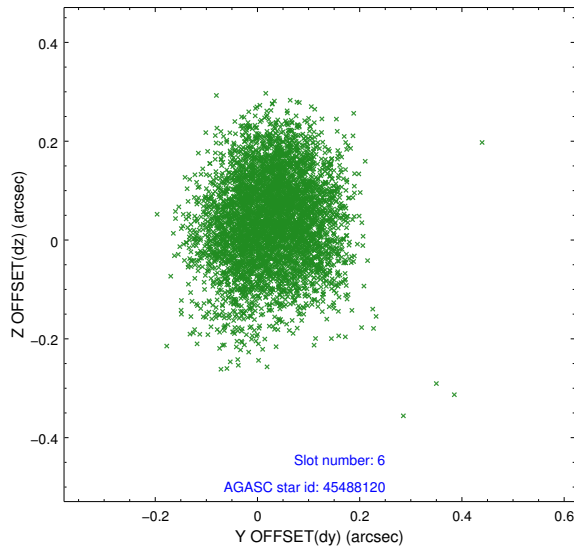
2.4.1 Slot 4



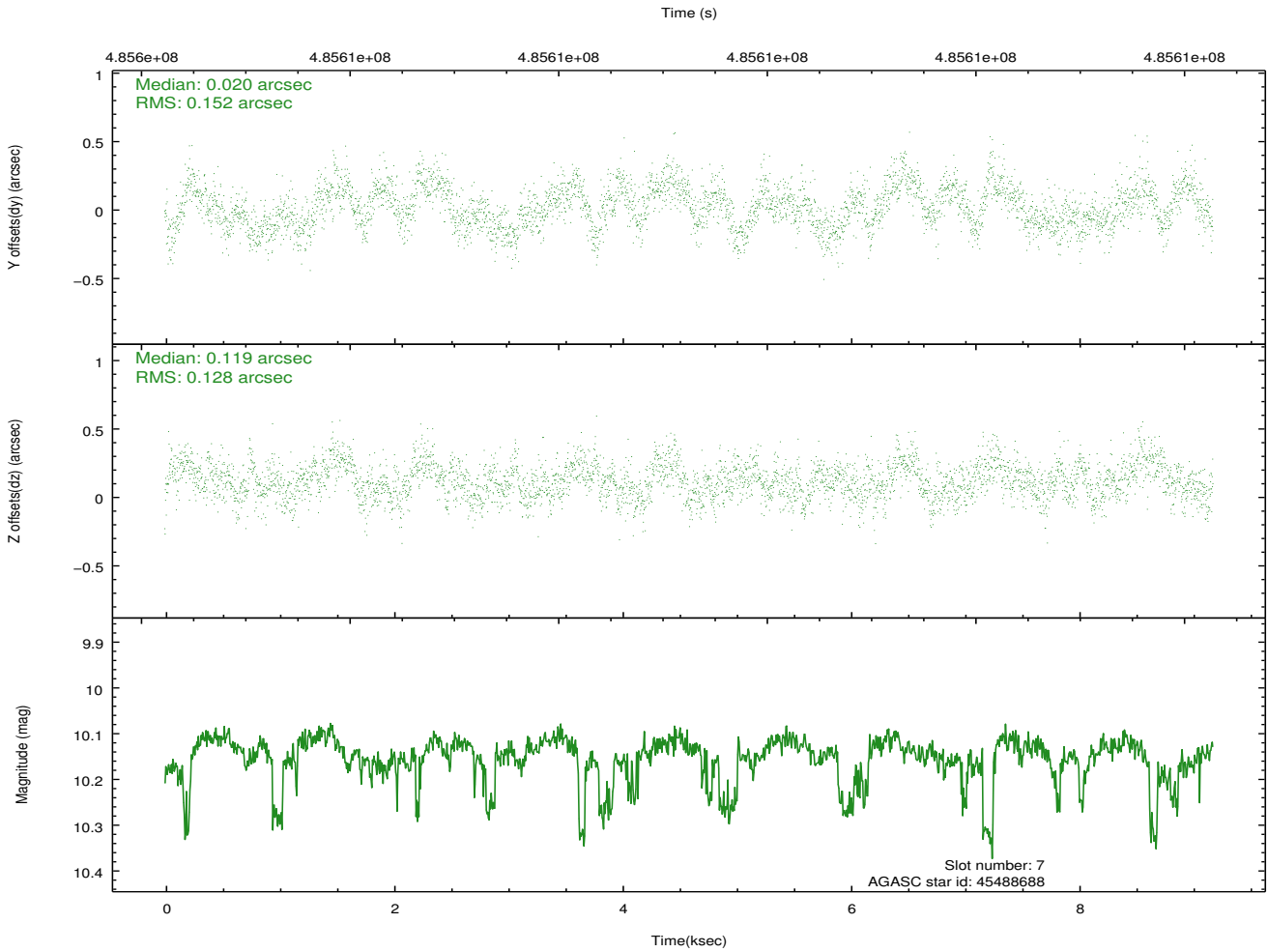
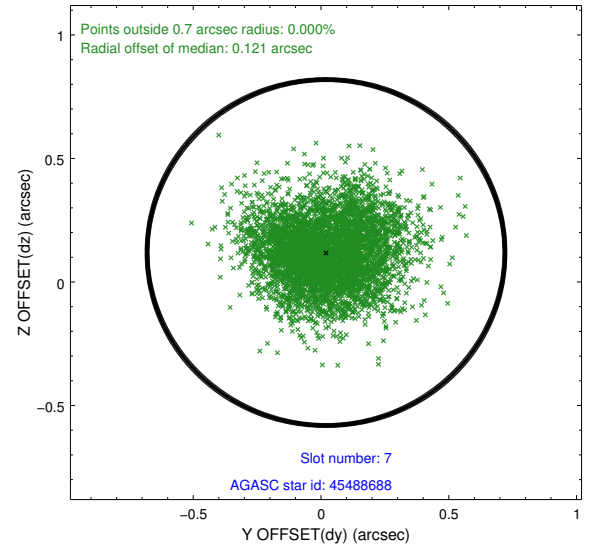
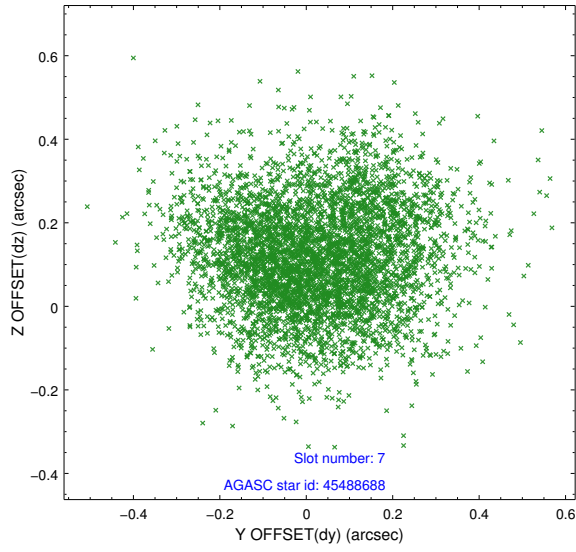
2.4.2 Slot 5



2.4.3 Slot 6

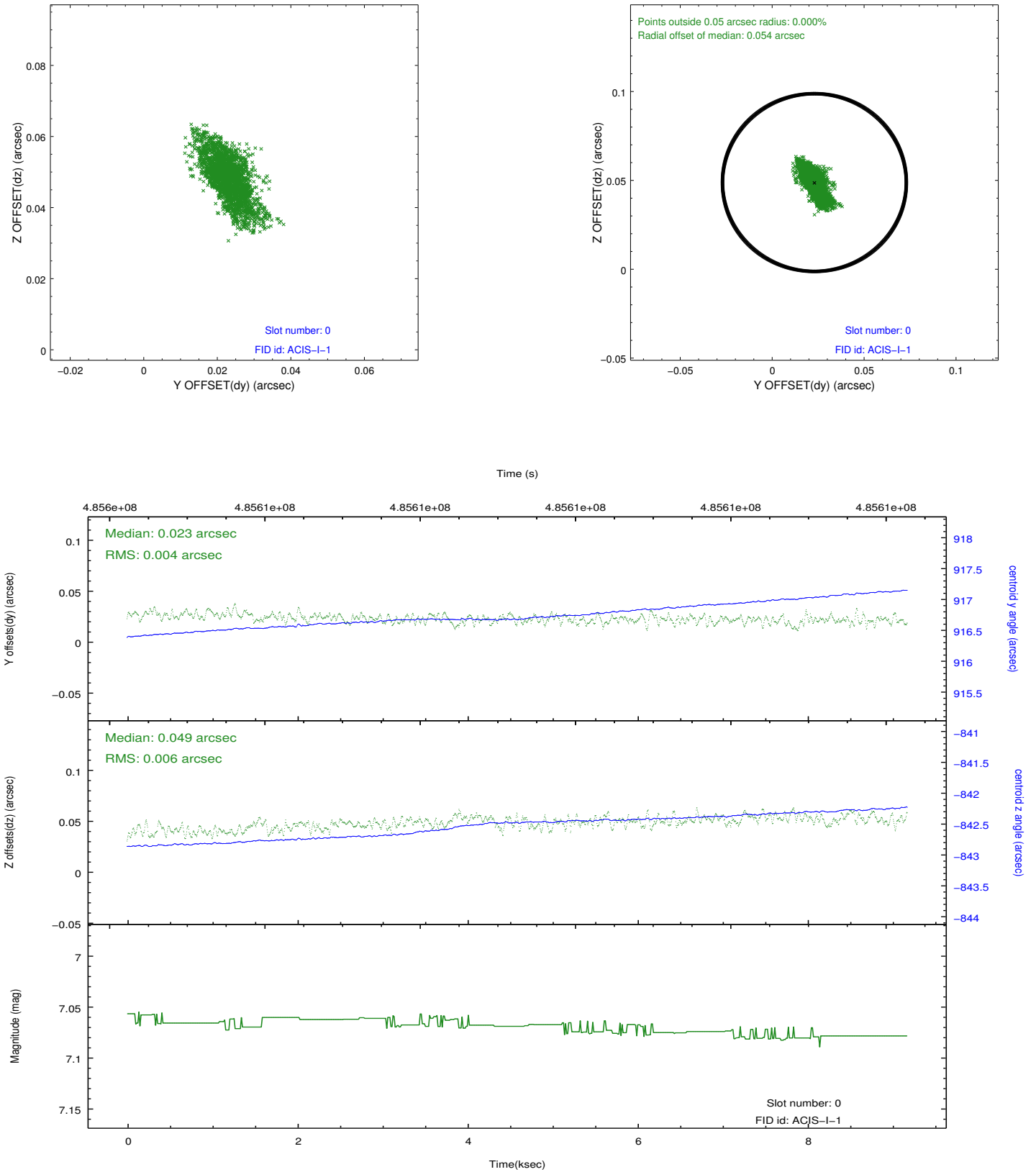


2.4.4 Slot 7

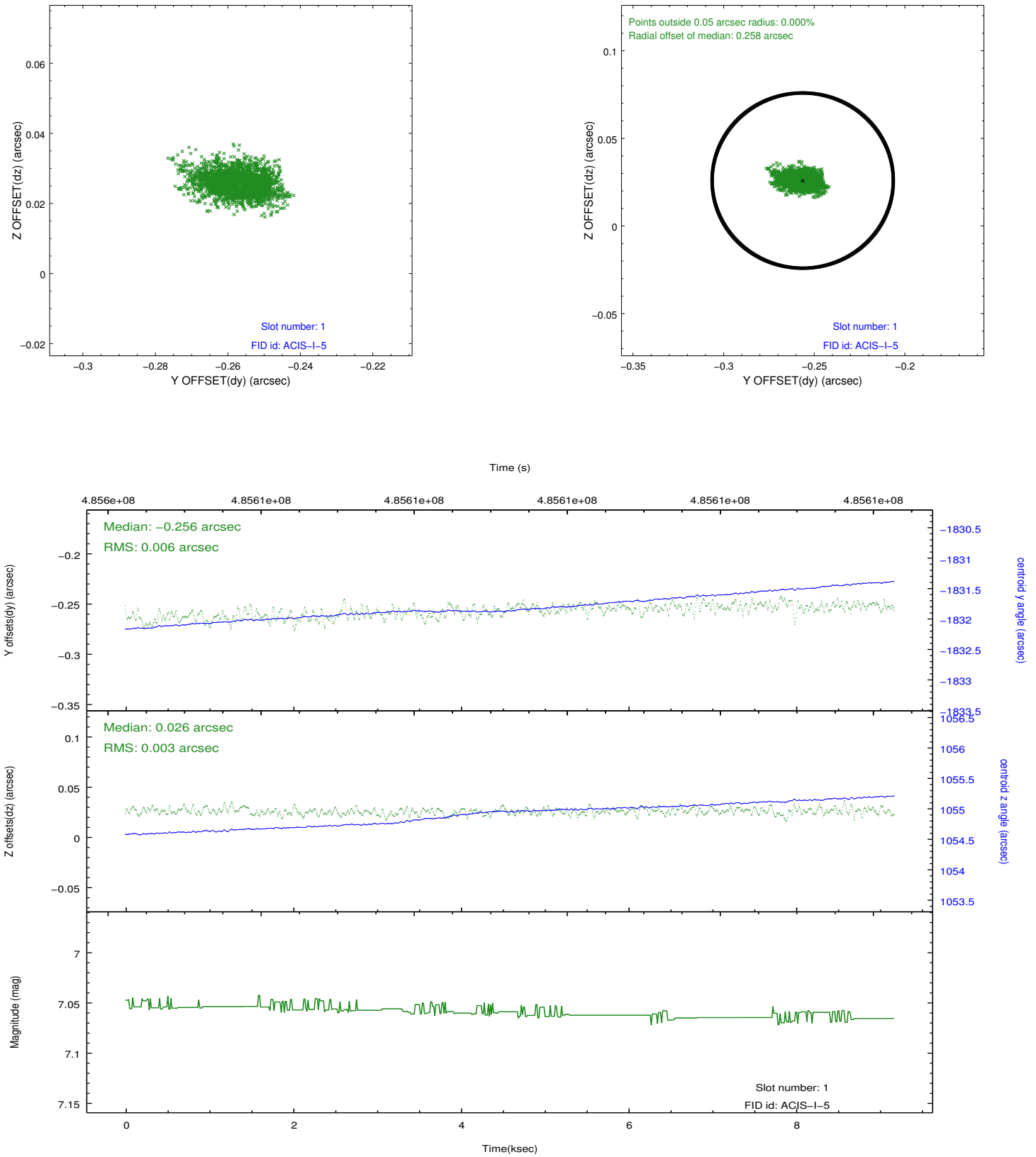


2.5 FID Slots

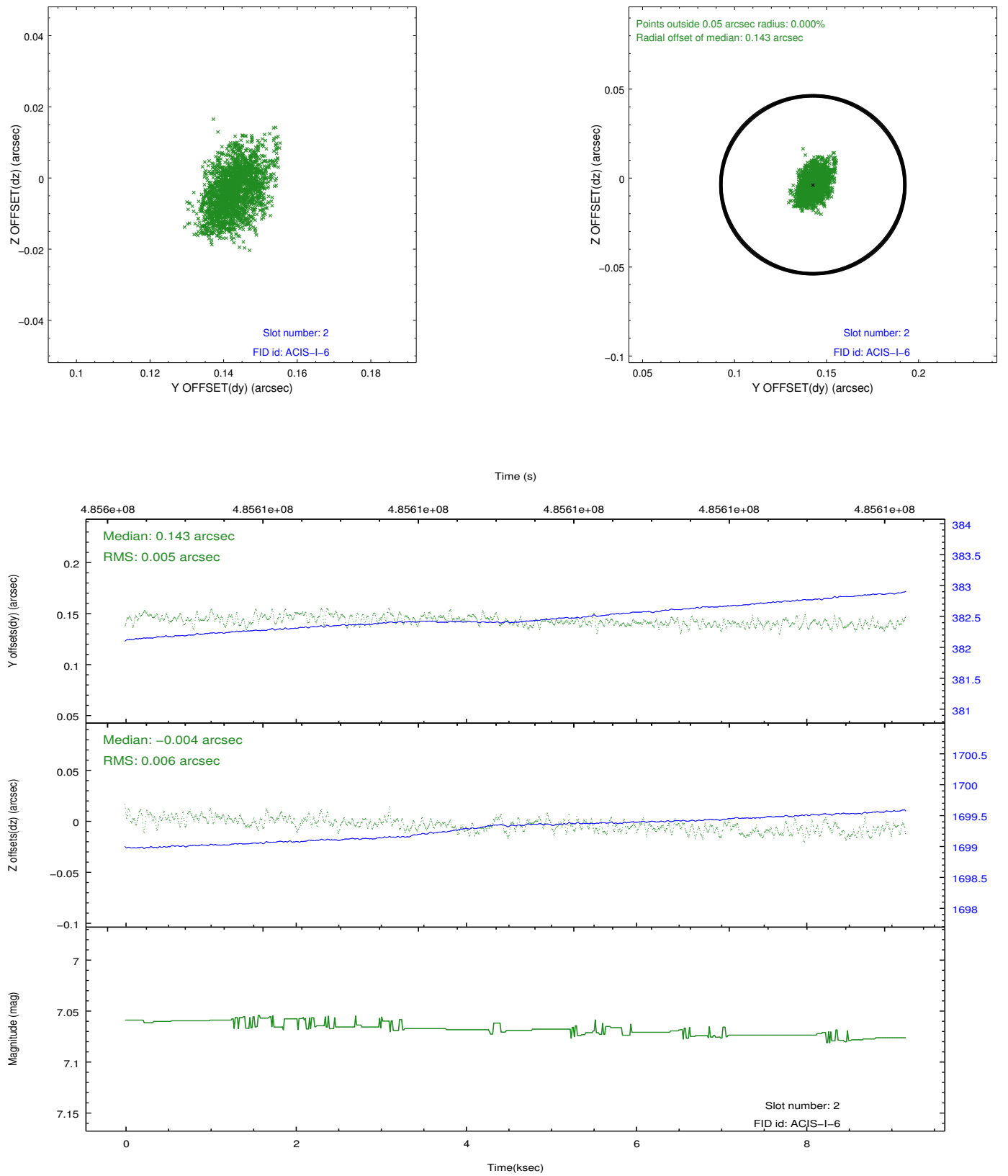
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2014.12.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.0829180294275

A.2 Comments

The guide star in slot 3 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this star from the solution.

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.