

V&V Reference Report

L2 ASCDS Version : 10

Observation 15160 - L2 Version 2
Chandra X-Ray Center

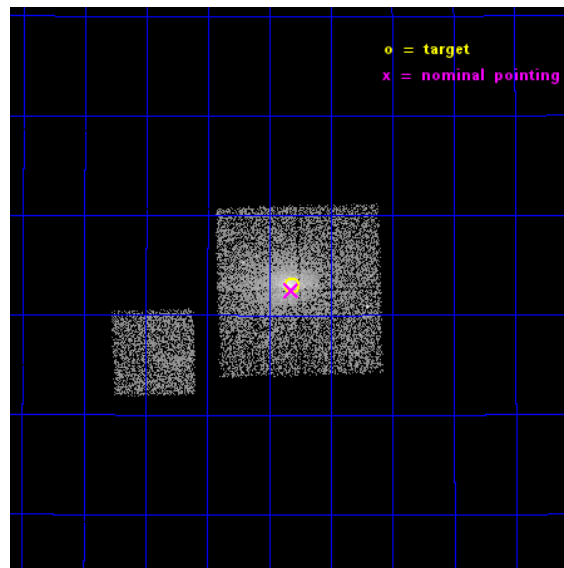
L2 Processing Date : Dec 6 2014

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1 Front

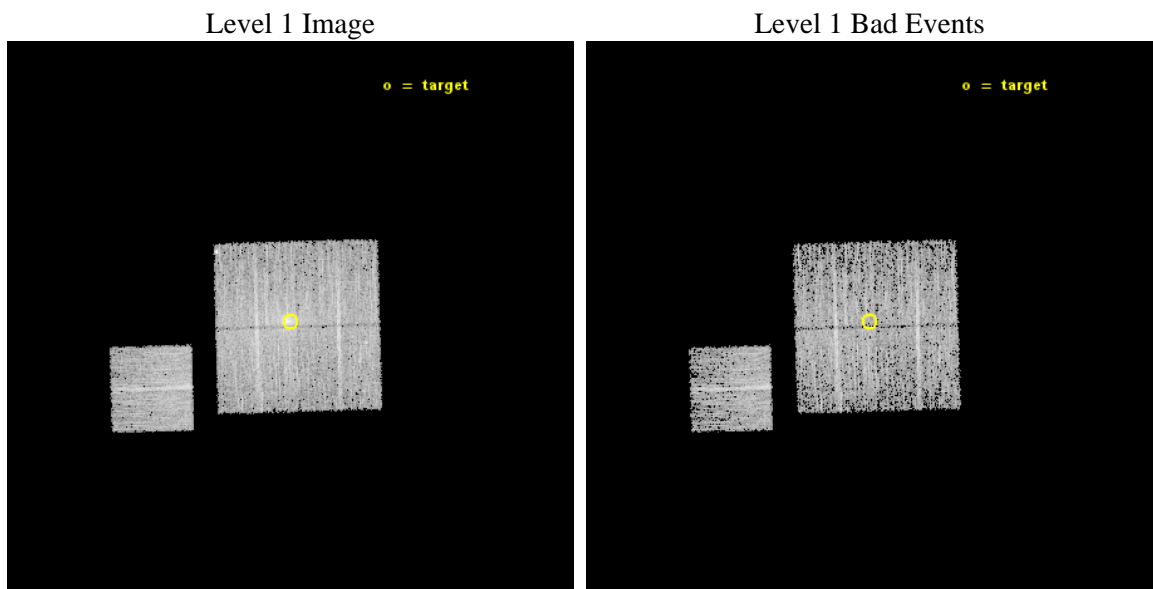
seq_num	801288	Sequence number
obs_id	15160	Observation id
title	COMPLETING eHIFLUGCS: THE ULTIMATE PRECISE AND ACCURATE LOCAL BASELINE	Proposal title
observer	Dr. Thomas Reiprich	Principal investigator
object	A2110	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	234.952083	Observer's specified target RA [deg]
dec_targ	30.716	Observer's specified target Dec [deg]
ra_nom	234.95456405564	Nominal RA [deg]
dec_nom	30.708238825639	Nominal Dec [deg]
roll_nom	268.4630066469	Nominal Roll [deg]
revision	2	Processing version of data
ontime	8087.8936790228	Sum of GTIs [s]
livetime	7982.2193938857	Livetime [s]
ontime0	8087.7705590129	Sum of GTIs [s]
ontime1	8087.8115990162	Sum of GTIs [s]
ontime2	8084.7116786838	Sum of GTIs [s]
ontime3	8087.8936790228	Sum of GTIs [s]
ontime6	8087.7295190096	Sum of GTIs [s]
l2events	25944	Number of level 2 events



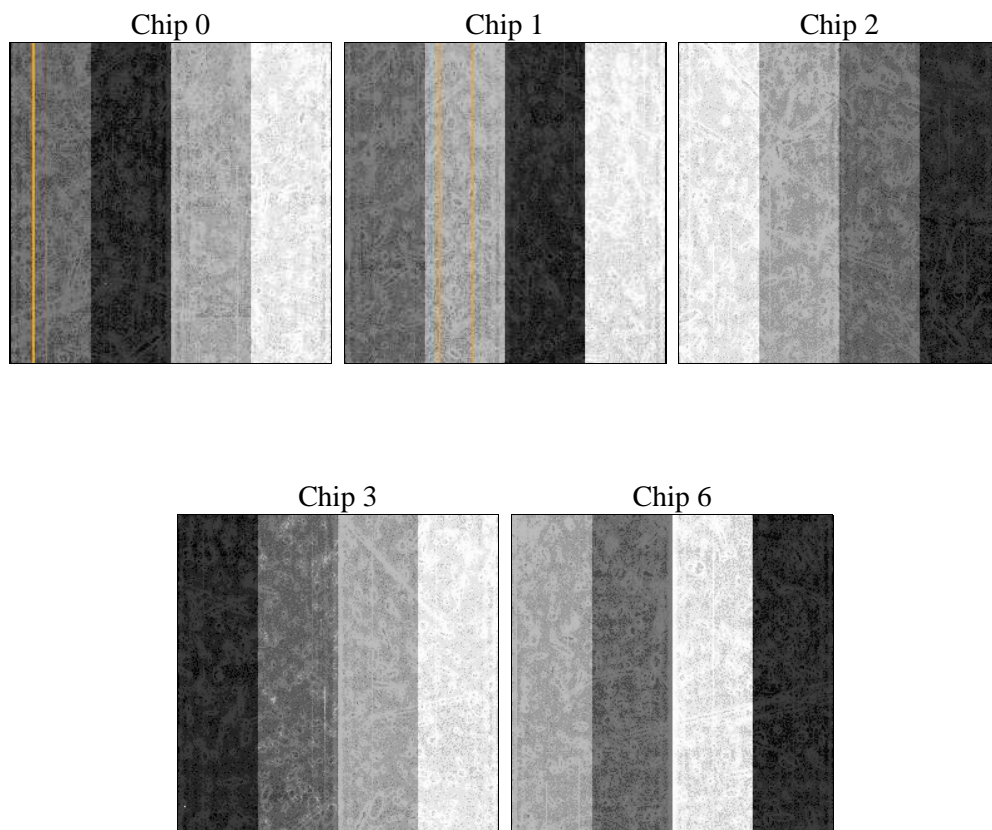
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	8000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	8087.8936790228	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	8087.7705590129	Sum of GTIs [s]
date	2014-12-06T07:41:19	Date and time of file creation	ontime1	8087.8115990162	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	8084.7116786838	Sum of GTIs [s]
			ontime3	8087.8936790228	Sum of GTIs [s]
			ontime6	8087.7295190096	Sum of GTIs [s]
			l1events	176018	Number of level 1 events

2.1.4 Events

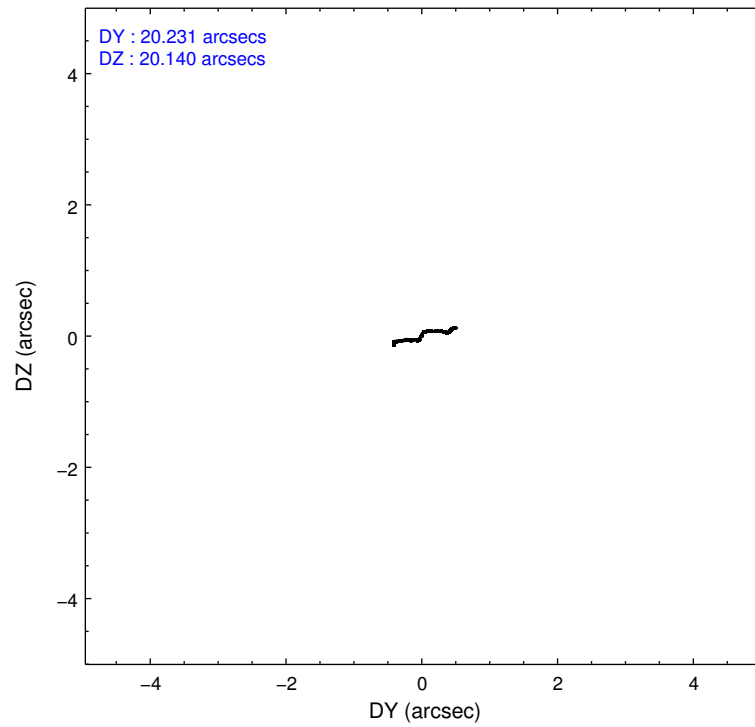
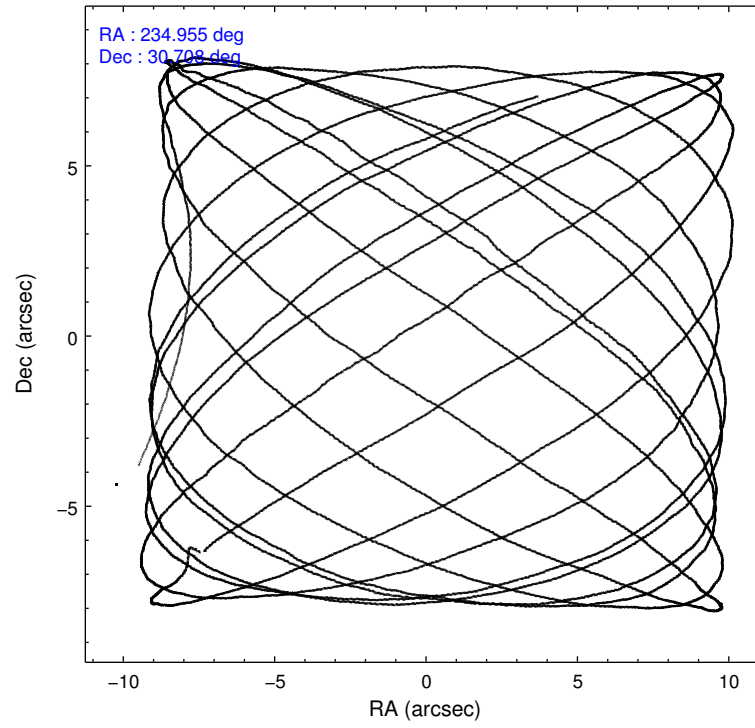
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	31630	33638	37315	38198	35237
rejected events	26665	28155	31581	28769	30898
rejected %	84%	83%	84%	75%	87%

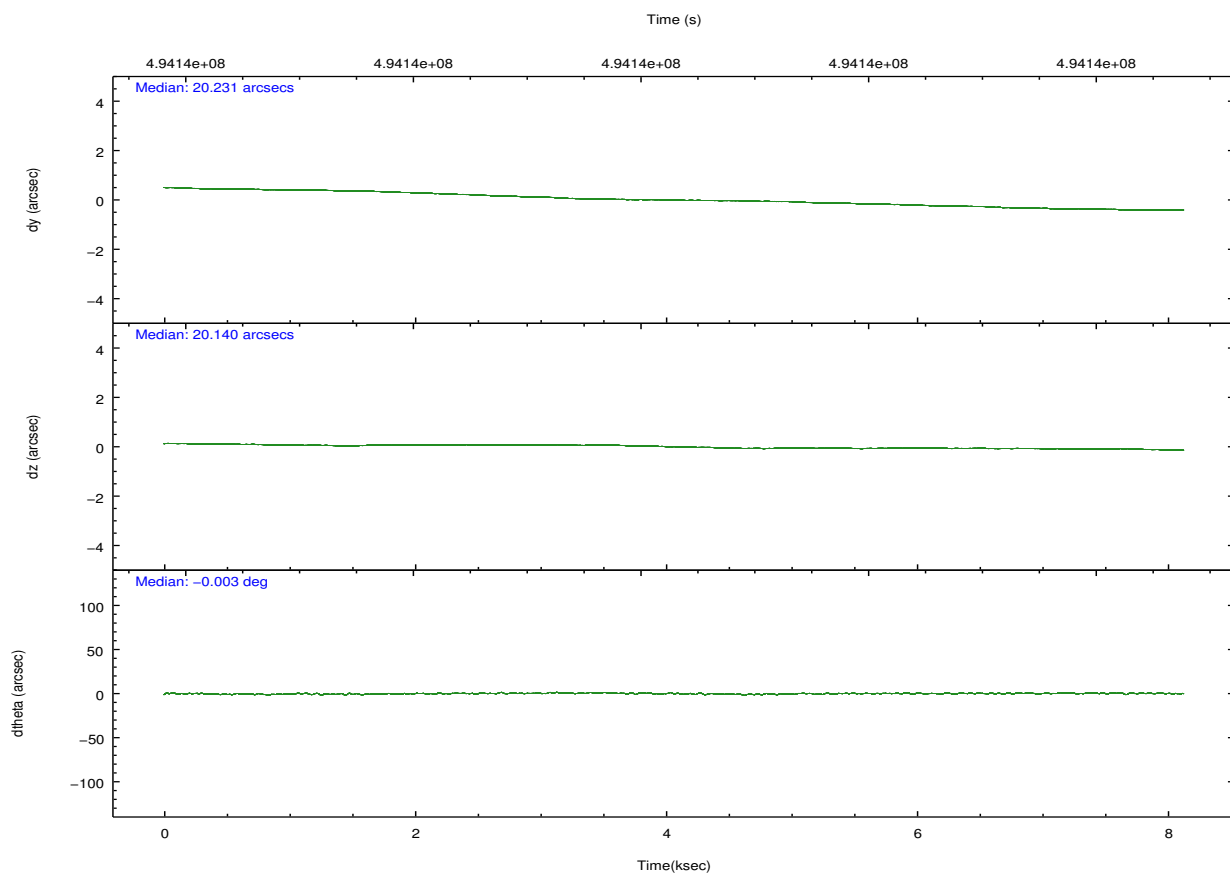
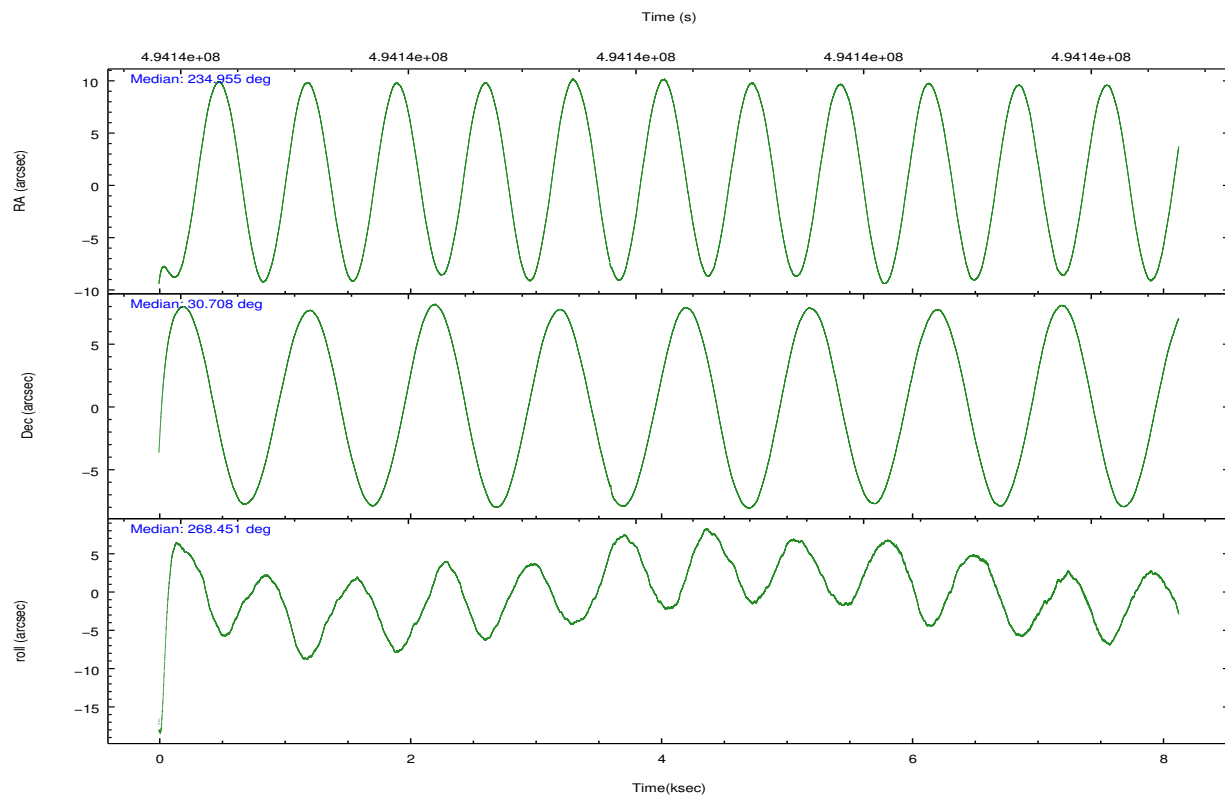
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	2072	2463	2944	5936	1512
	6%	7%	7%	15%	4%
grade 1 events	22	21	25	42	18
	0%	0%	0%	0%	0%
grade 2 events	1166	1124	1128	1378	994
	3%	3%	3%	3%	2%
grade 3 events	455	500	407	588	446
	1%	1%	1%	1%	1%
grade 4 events	431	472	448	581	443
	1%	1%	1%	1%	1%
grade 5 events	1459	1552	1327	1684	1621
	4%	4%	3%	4%	4%
grade 6 events	841	925	807	946	945
	2%	2%	2%	2%	2%
grade 7 events	25184	26581	30229	27043	29258
	79%	79%	81%	70%	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	234.939272	234.9545640556398	CCD I2 on	Y	Y
[deg] Pointing Dec	30.732337	30.70823882563865	CCD I3 on	Y	Y
[deg] Pointing Roll	268.262167	268.4630066469045	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)	494136346.184000	494135196.29099	CCD S5 on	N	N
Observation start date	2013-08-29T04:04:39	2013-08-29T03:46:36	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	494144346.184000	494145664.61656	On-chip summing requested	N	N
Observation end date	2013-08-29T06:17:59	2013-08-29T06:41:04	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



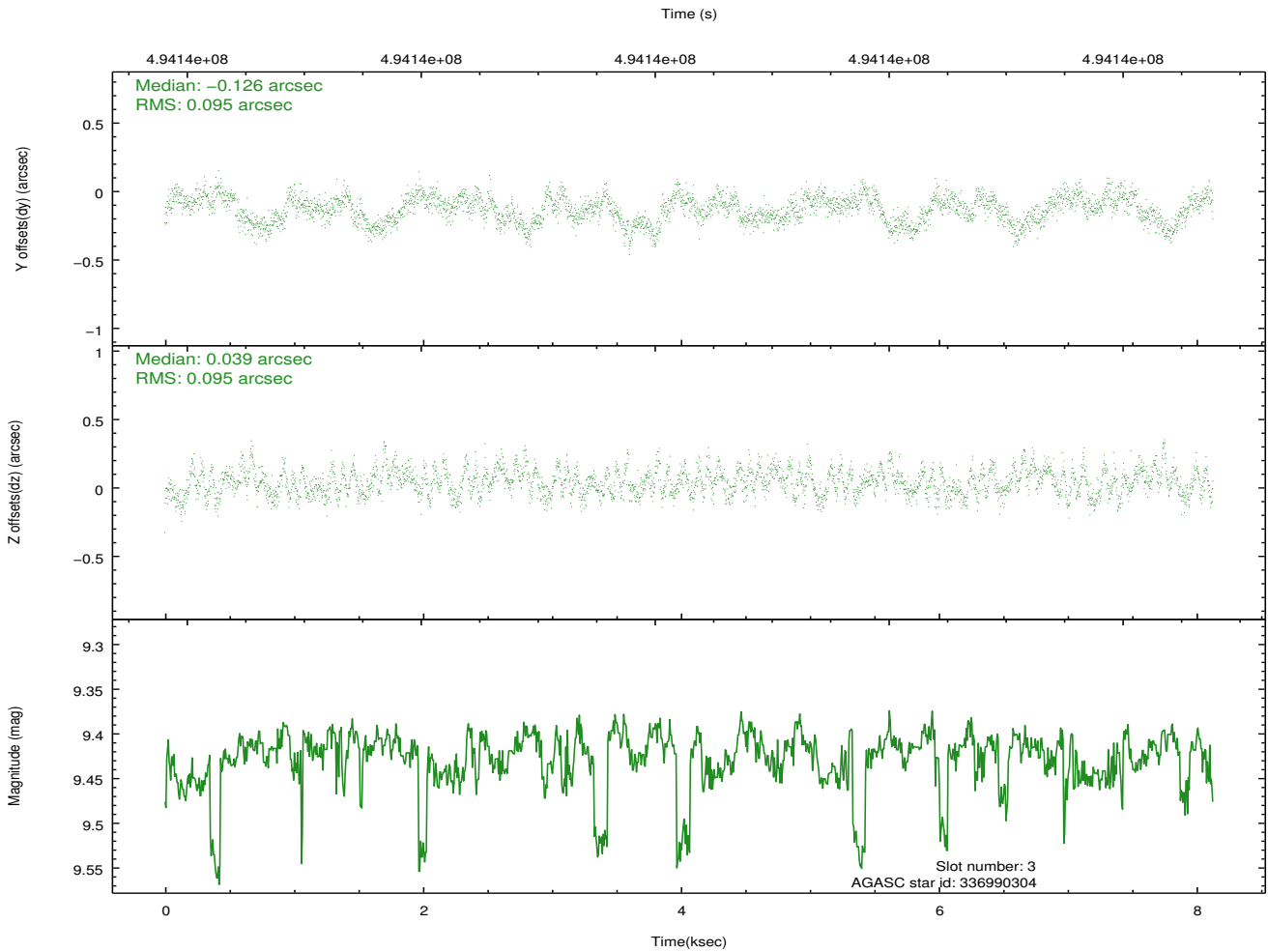
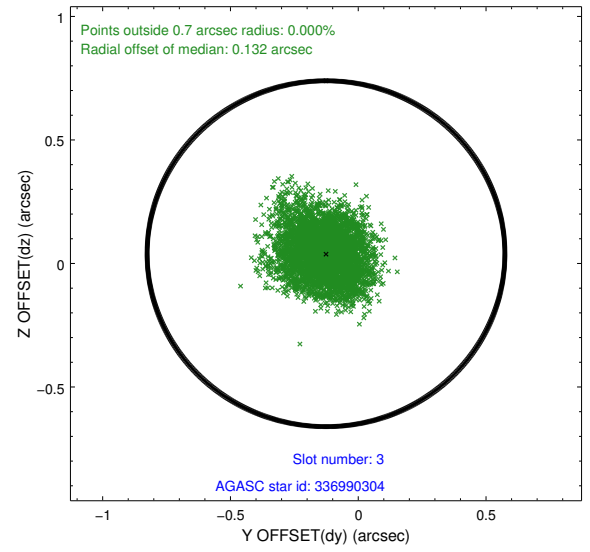
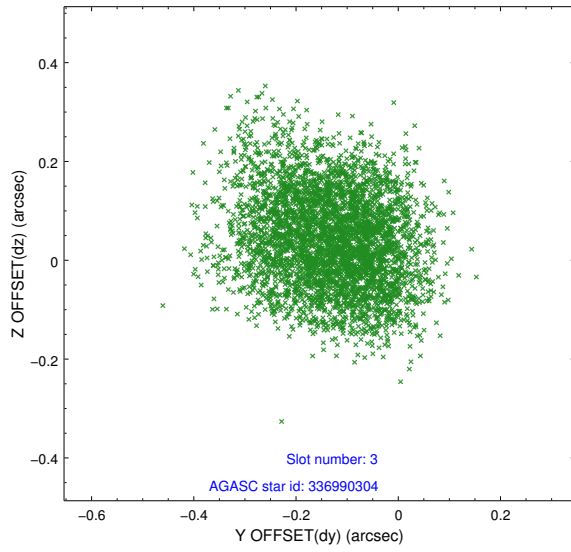


Slot Statistics

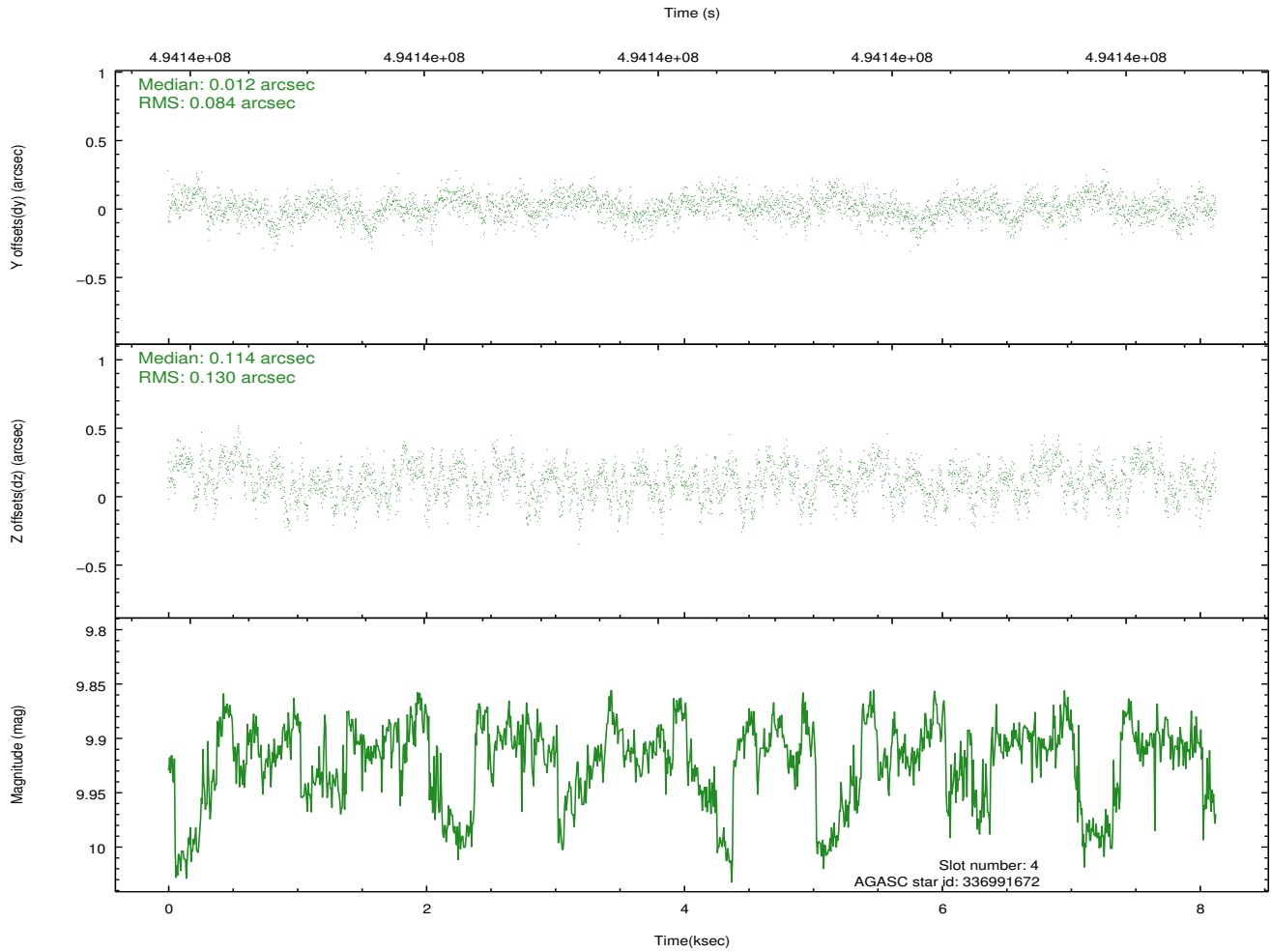
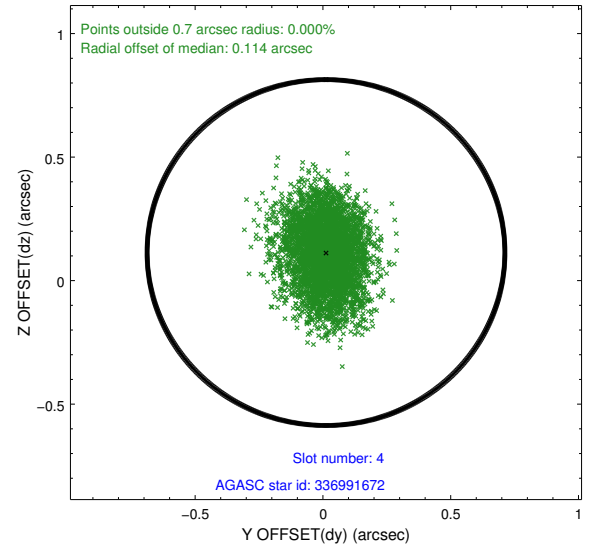
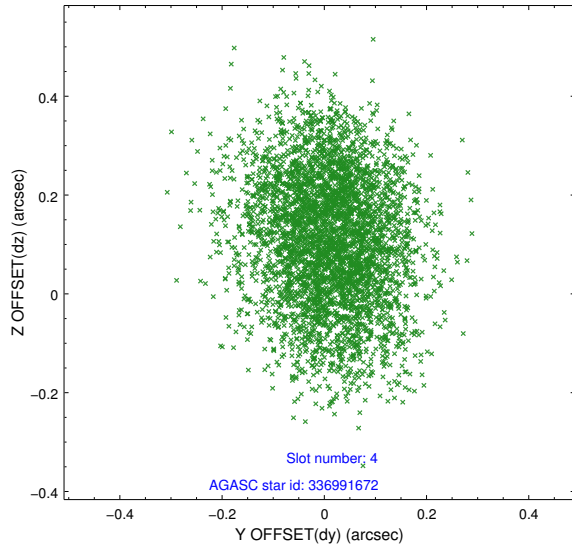
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.08	1983	0.034	0.001	0.009	0.015	0.000000	0.000000	919.11	-843.86
1	FID		ACIS-I-5	7.07	1983	-0.246	0.030	0.007	0.013	0.000000	0.000000	-1828.93	1053.27
2	FID		ACIS-I-6	7.08	1983	0.121	0.039	0.008	0.013	0.000000	0.000000	383.95	1698.60
3	GUIDE	used	336990304	9.42	3947	-0.126	0.039	0.144	0.227	235.565035	30.521208	696.49	1962.96
4	GUIDE	used	336991672	9.91	3956	0.012	0.114	0.164	0.267	234.190766	30.668219	294.33	-2309.17
5	GUIDE	used	336992880	8.73	3963	-0.034	-0.065	0.089	0.149	235.562220	30.470564	877.99	1960.08
6	GUIDE	used	336995616	10.08	3960	-0.151	-0.140	0.244	0.381	234.373217	30.219762	1894.28	-1702.81
7	GUIDE	used	336996568	8.25	3964	0.303	0.078	0.089	0.140	234.860171	30.207289	1898.08	-188.38

2.4 Star Slots

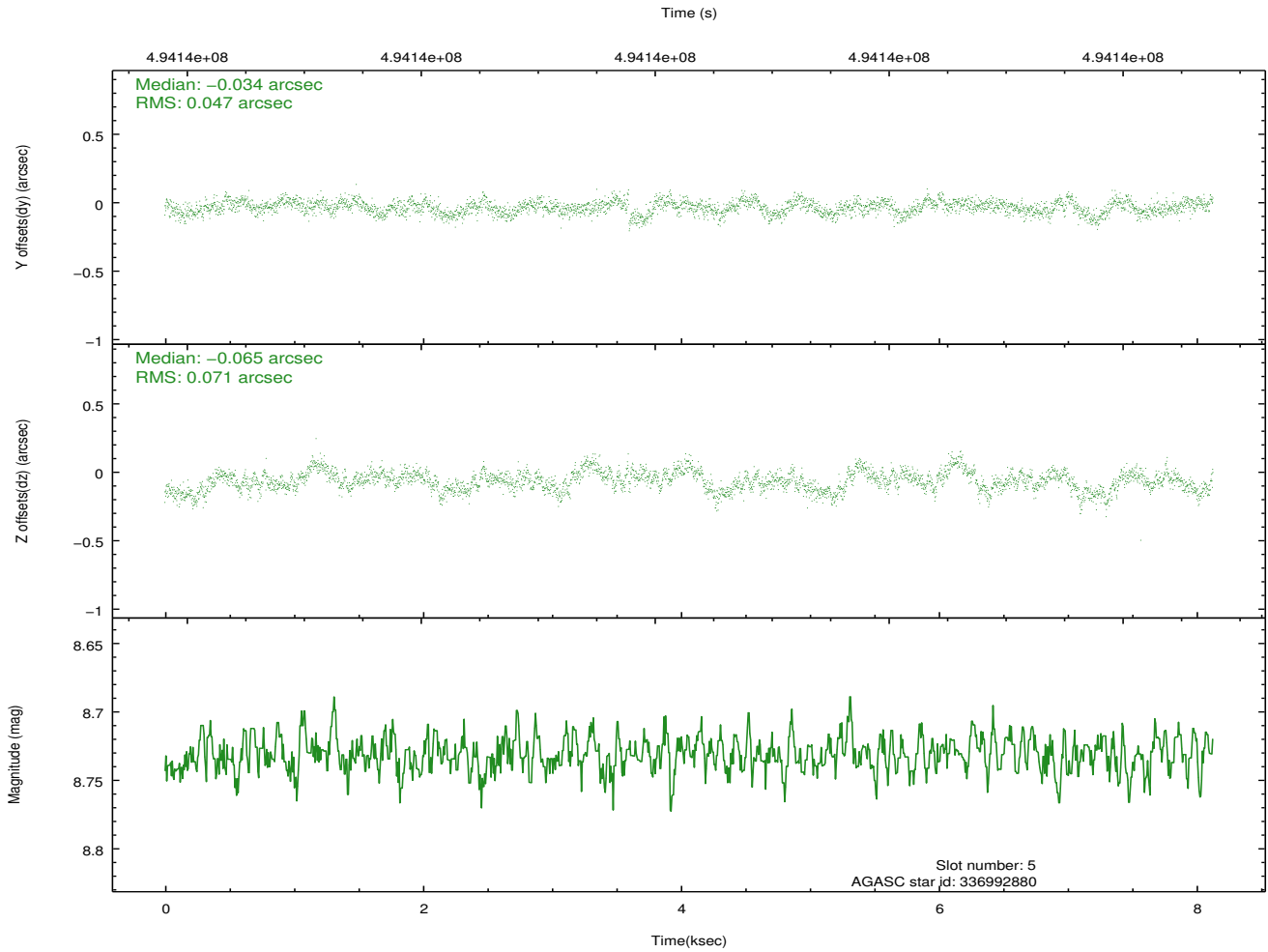
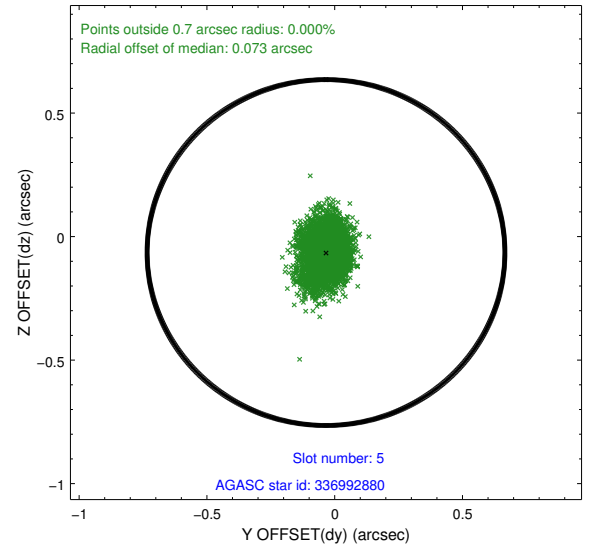
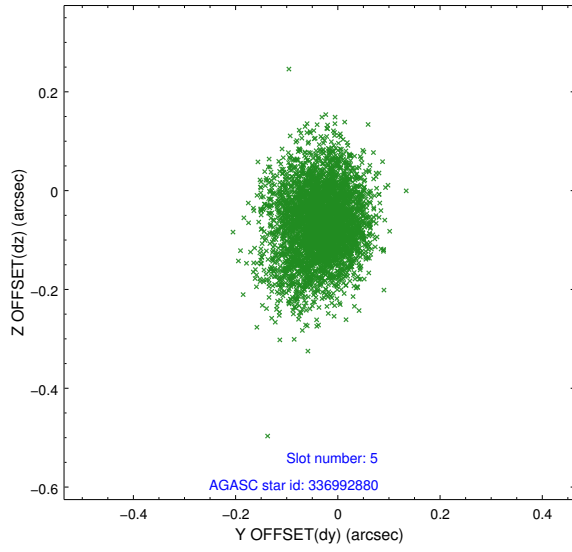
2.4.1 Slot 3



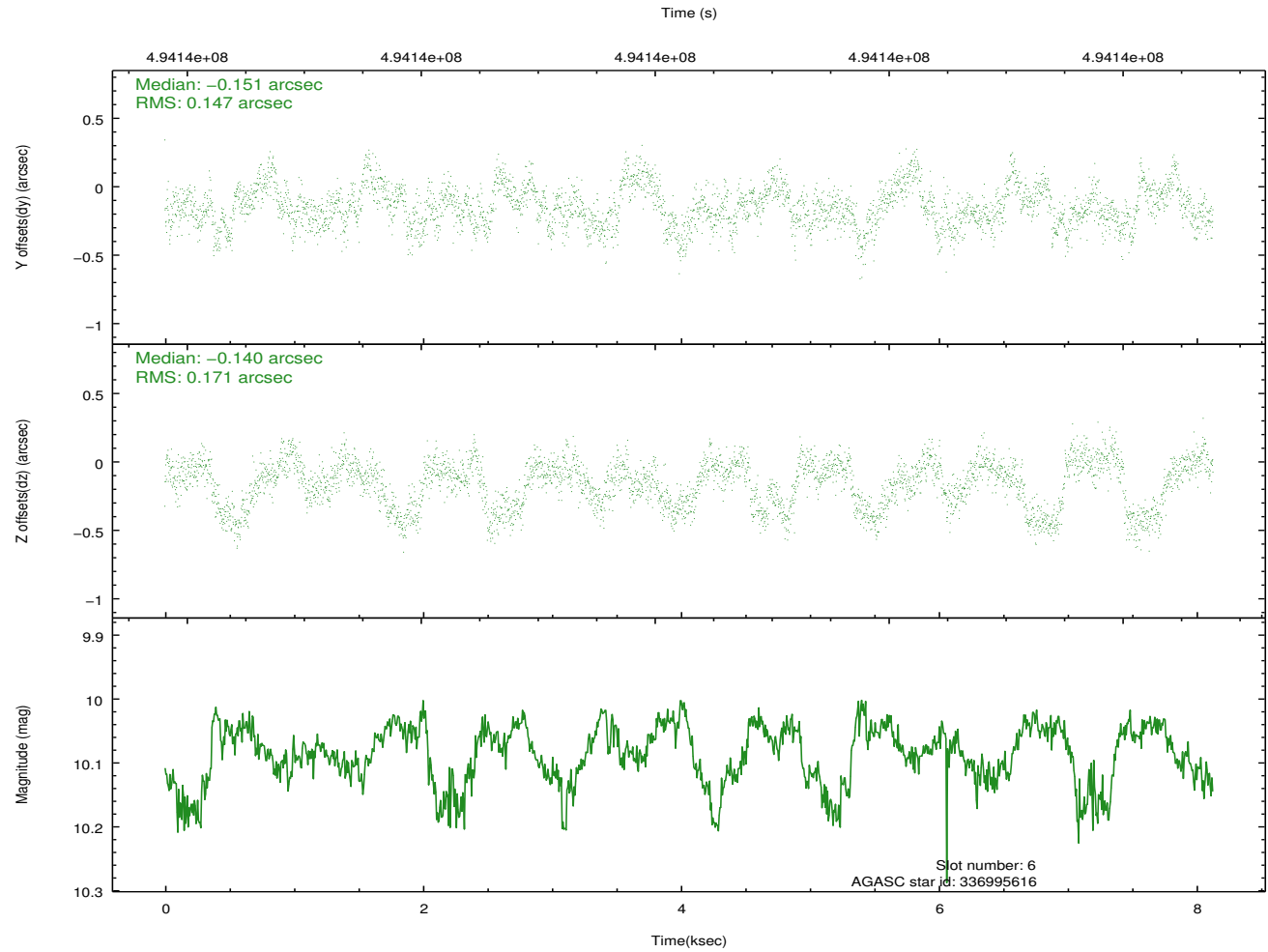
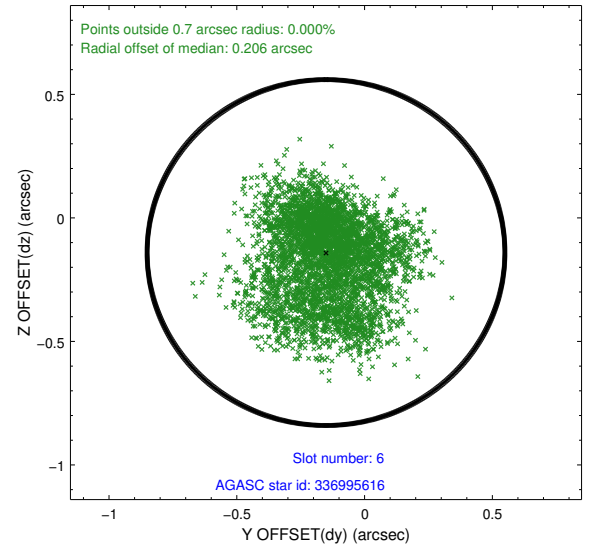
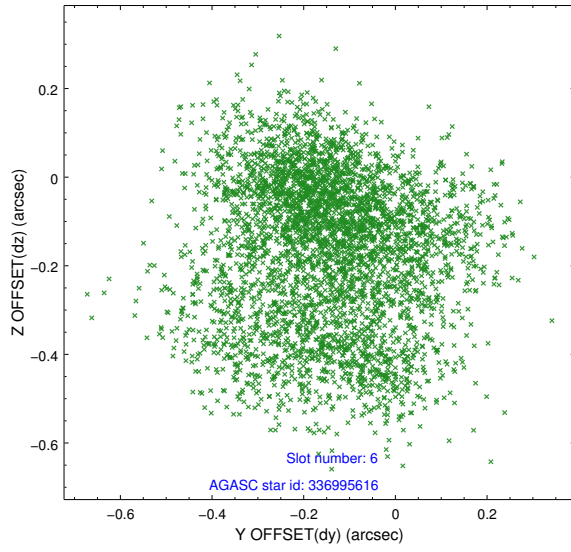
2.4.2 Slot 4



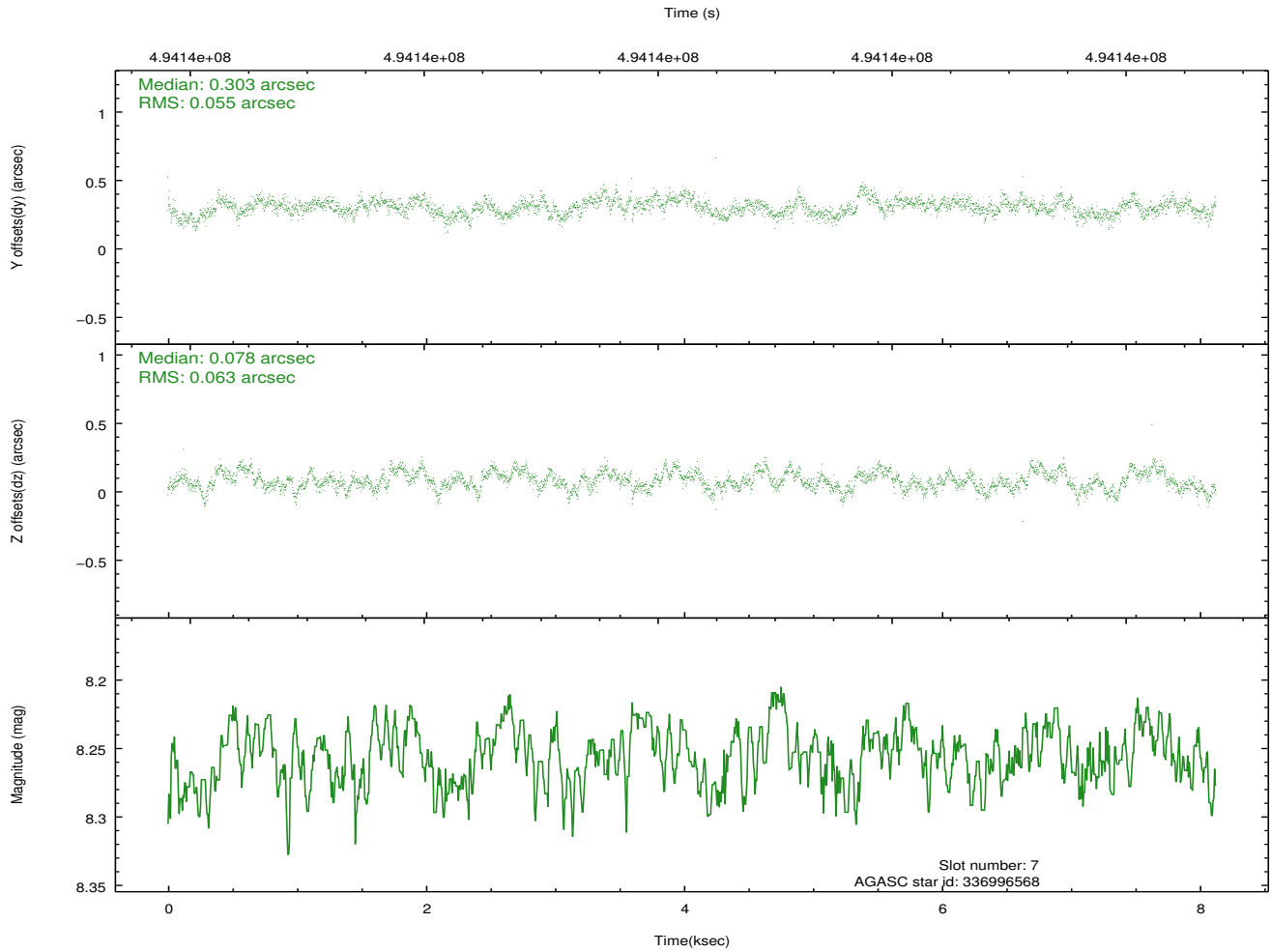
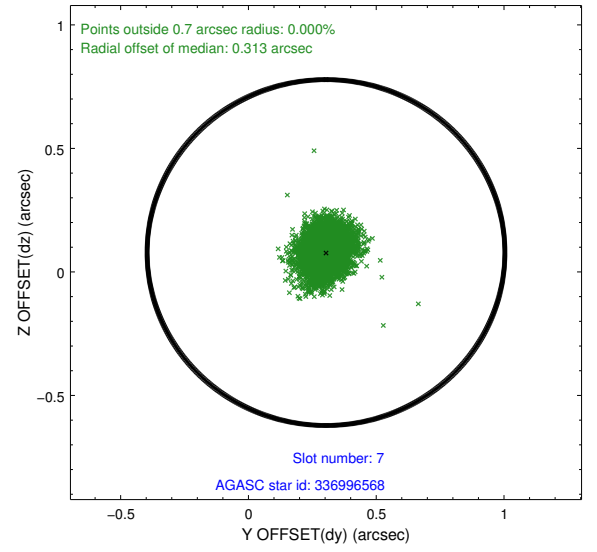
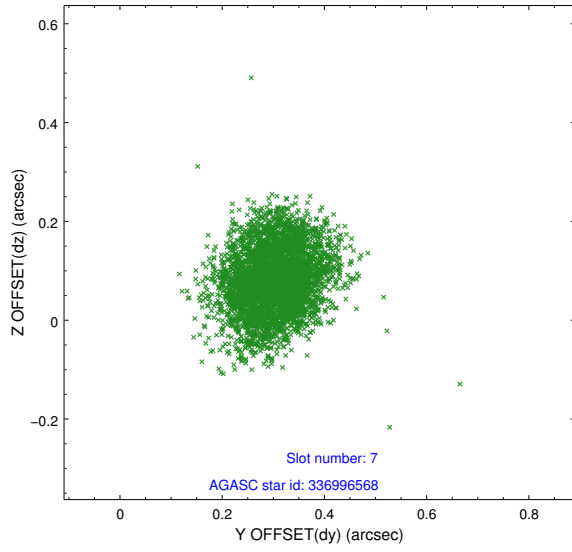
2.4.3 Slot 5



2.4.4 Slot 6

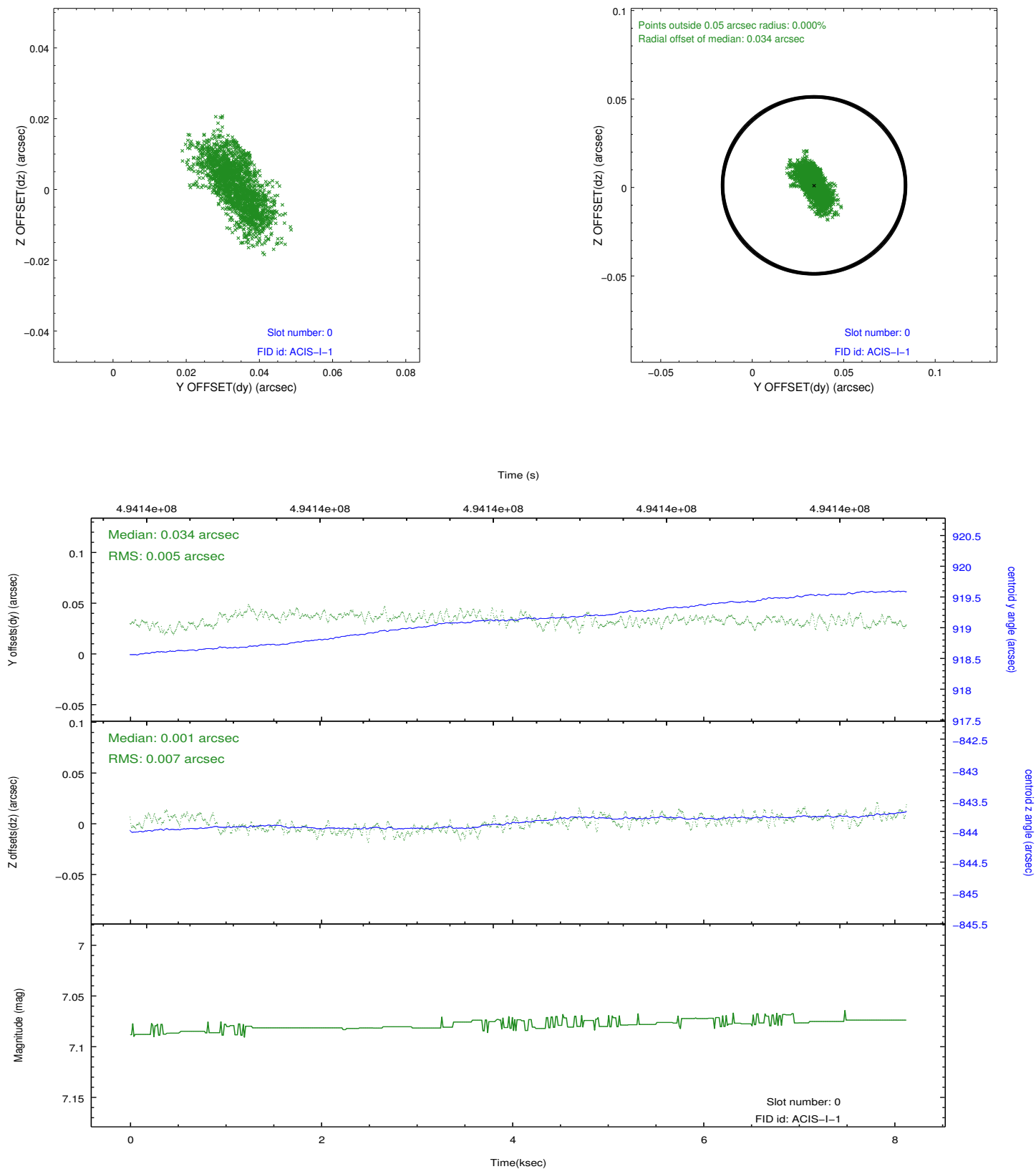


2.4.5 Slot 7

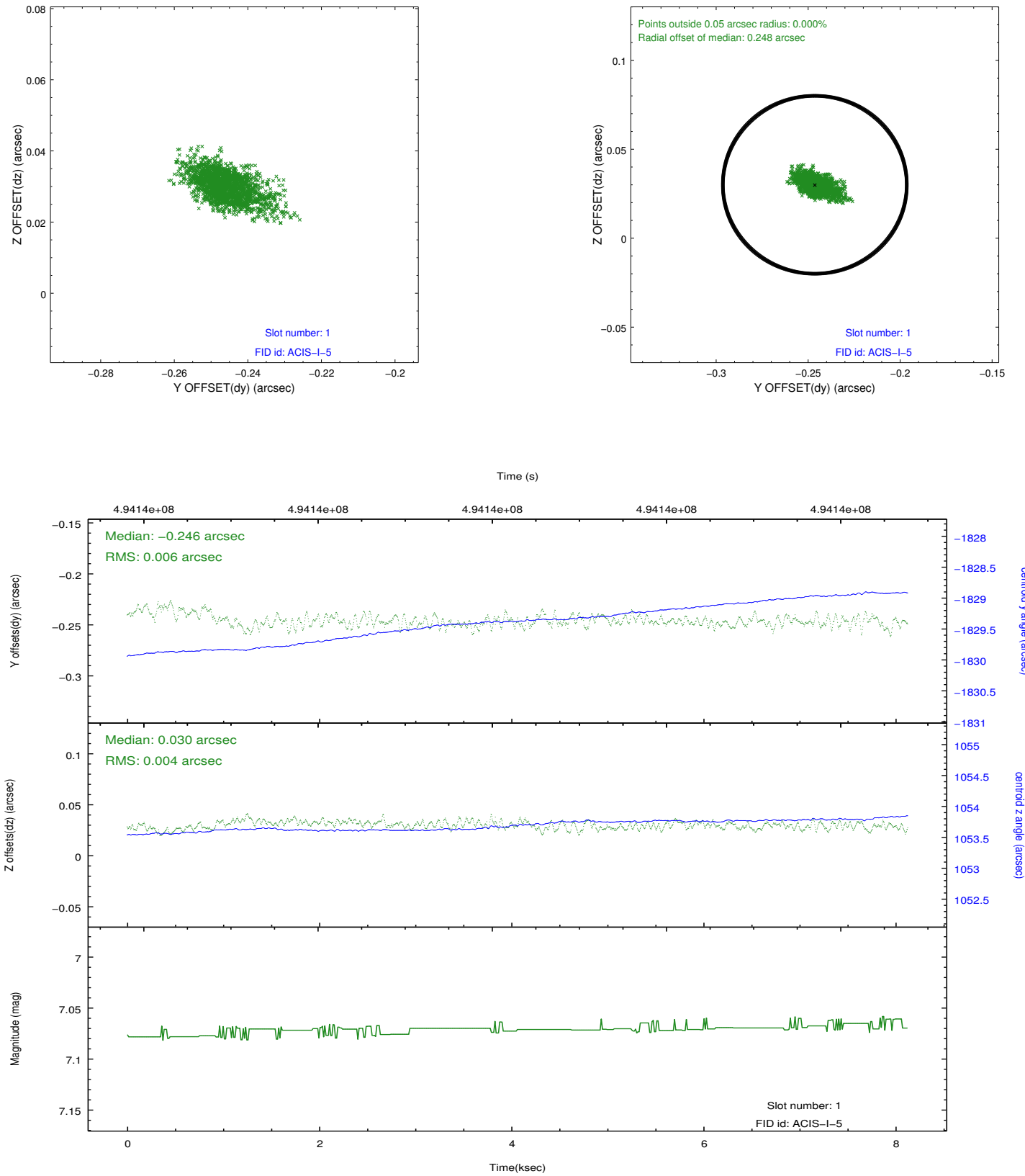


2.5 FID Slots

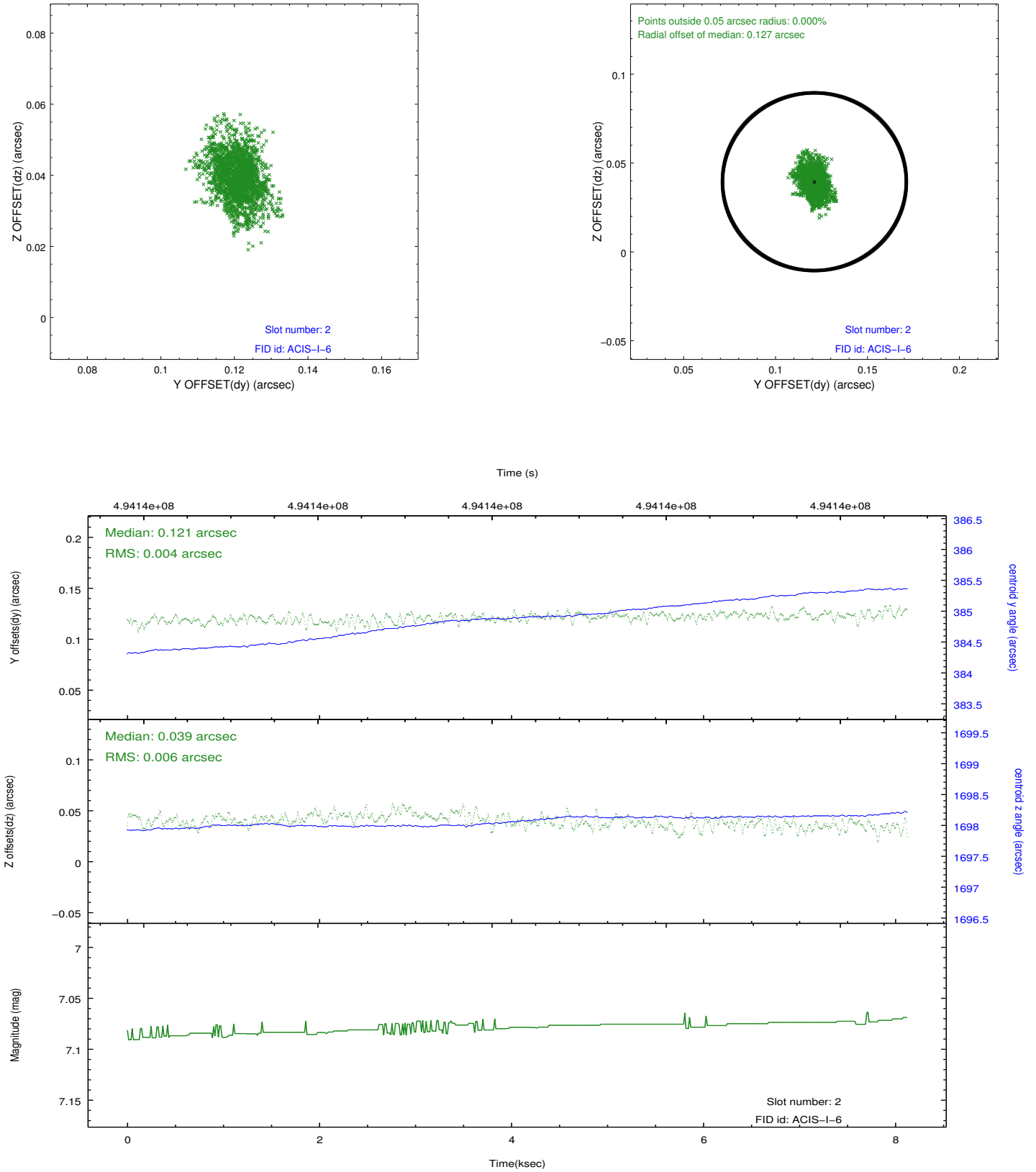
2.5.1 Slot 0



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)	2014.12.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.0878936790228

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.