

V&V Reference Report

L2 ASCDS Version : 10

Observation 16264 - L2 Version 2
Chandra X-Ray Center

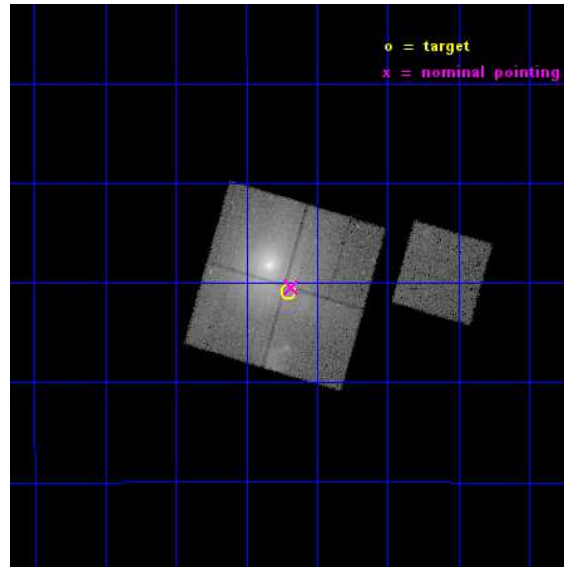
L2 Processing Date : Dec 6 2014

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1 Front

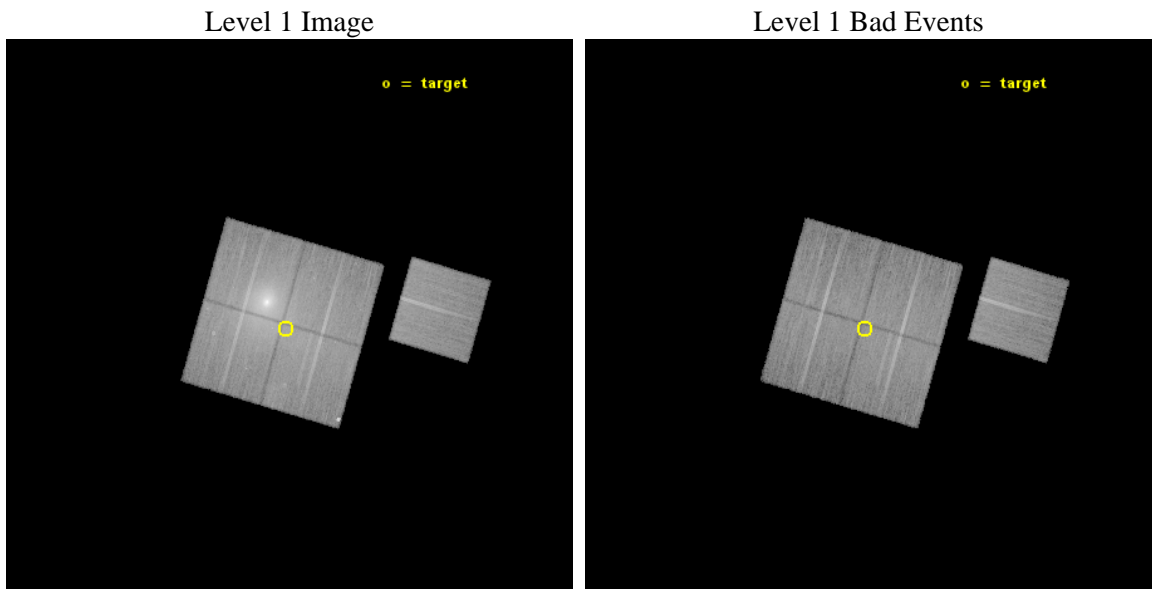
seq_num	801300	Sequence number
obs_id	16264	Observation id
title	Tracing a merger from start to finish in Abell 85	Proposal title
observer	Prof. Steven Allen	Principal investigator
object	Abell 85	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	10.424817	Observer's specified target RA [deg]
dec_targ	-9.347681	Observer's specified target Dec [deg]
ra_nom	10.420307128799	Nominal RA [deg]
dec_nom	-9.3409456288826	Nominal Dec [deg]
roll_nom	106.20795857863	Nominal Roll [deg]
revision	2	Processing version of data
ontime	37080.763253272	Sum of GTIs [s]
livetime	36596.275782907	Livetime [s]
ontime0	37071.217082202	Sum of GTIs [s]
ontime1	37083.822223663	Sum of GTIs [s]
ontime2	37074.440132797	Sum of GTIs [s]
ontime3	37080.763253272	Sum of GTIs [s]
ontime6	37077.458063006	Sum of GTIs [s]
l2events	364895	Number of level 2 events



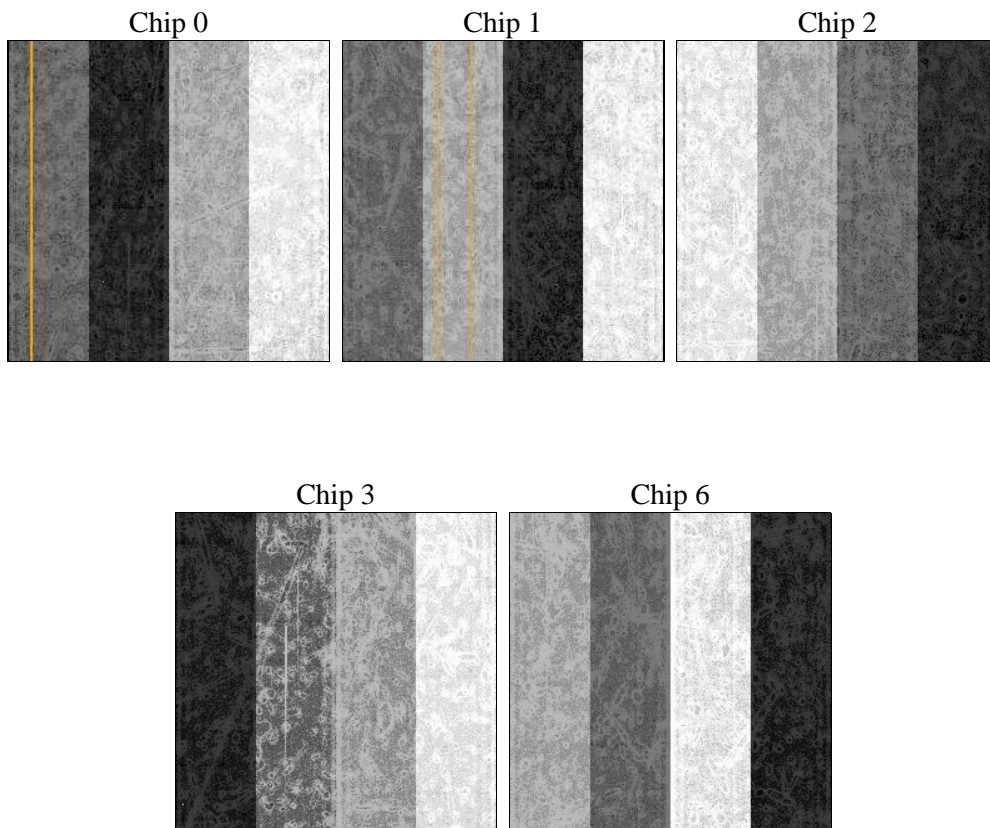
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	37000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	37080.763253272	Sum of GTIs [s]
caldbver	4.6.4	 	ontime0	37071.217082202	Sum of GTIs [s]
date	2014-12-06T06:10:34	Date and time of file creation	ontime1	37083.822223663	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	37074.440132797	Sum of GTIs [s]
			ontime3	37080.763253272	Sum of GTIs [s]
			ontime6	37077.458063006	Sum of GTIs [s]
			l1events	1170673	Number of level 1 events

2.1.4 Events

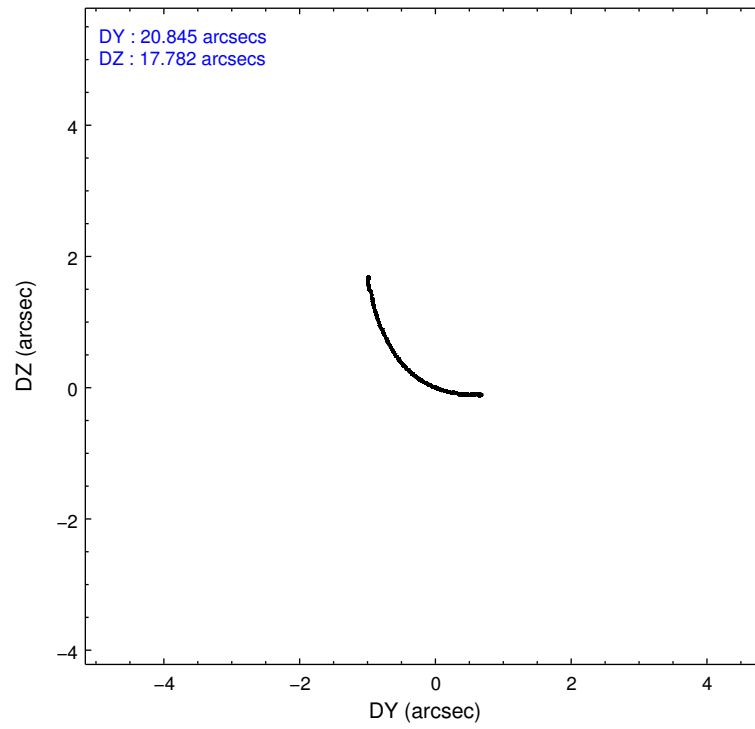
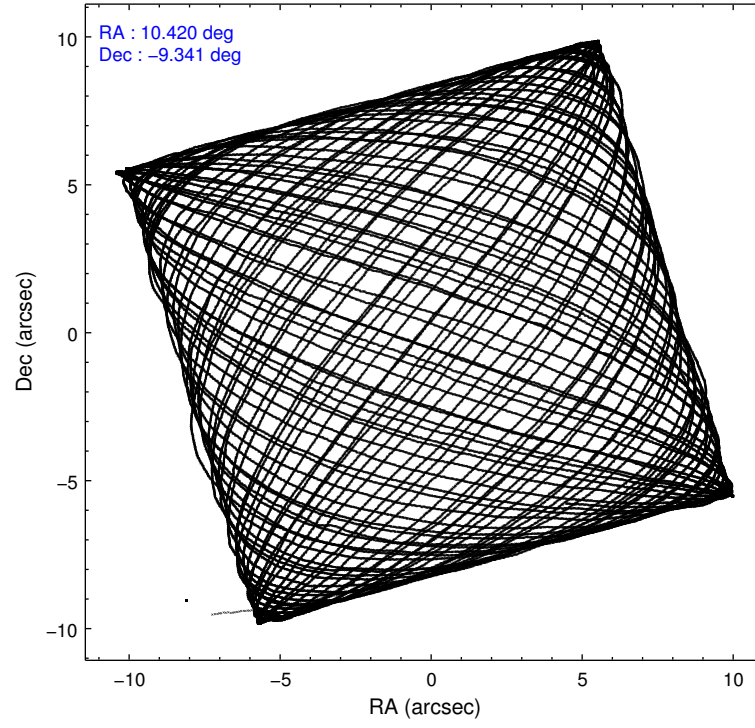
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	332173	228294	214441	214004	181761
rejected events	147764	146008	159102	159516	158607
rejected %	44%	63%	74%	74%	87%

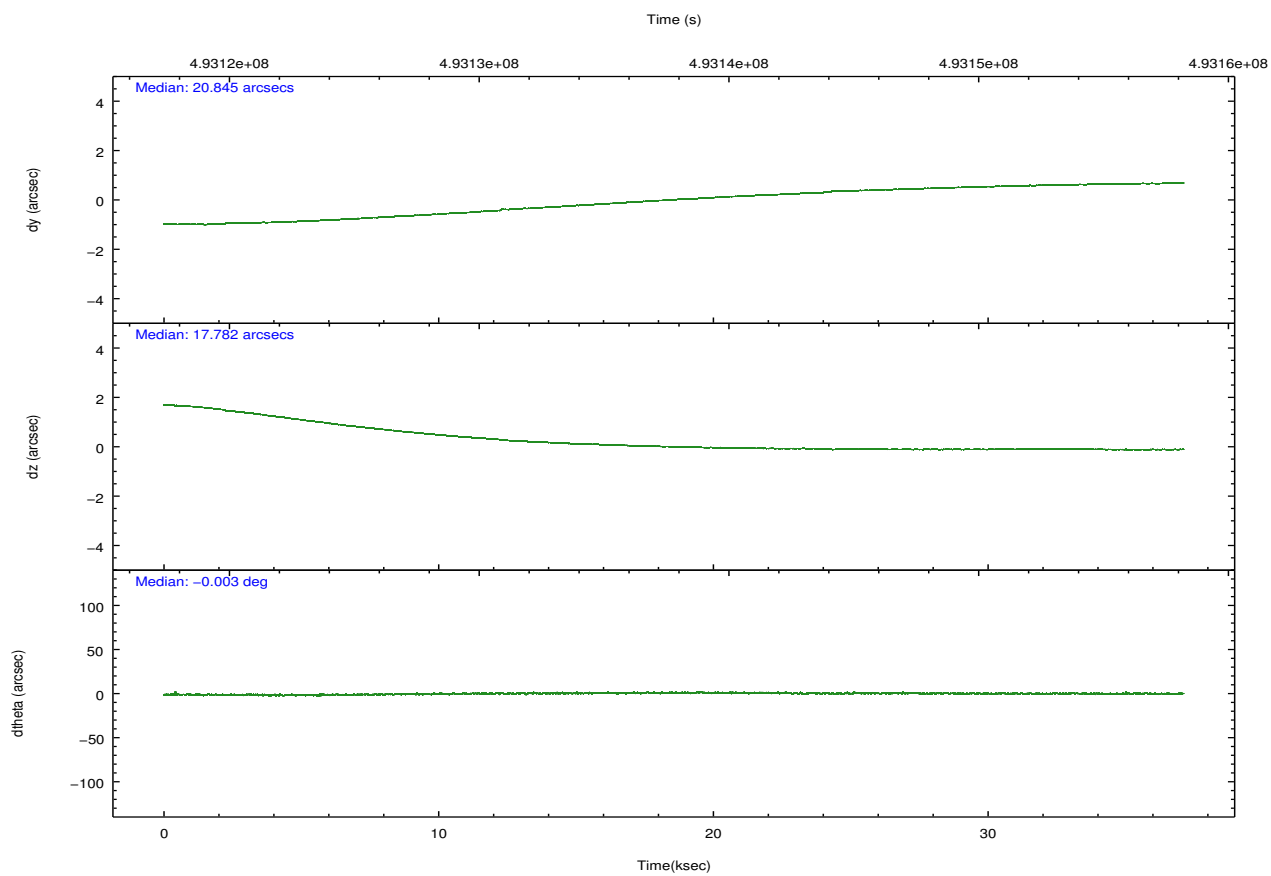
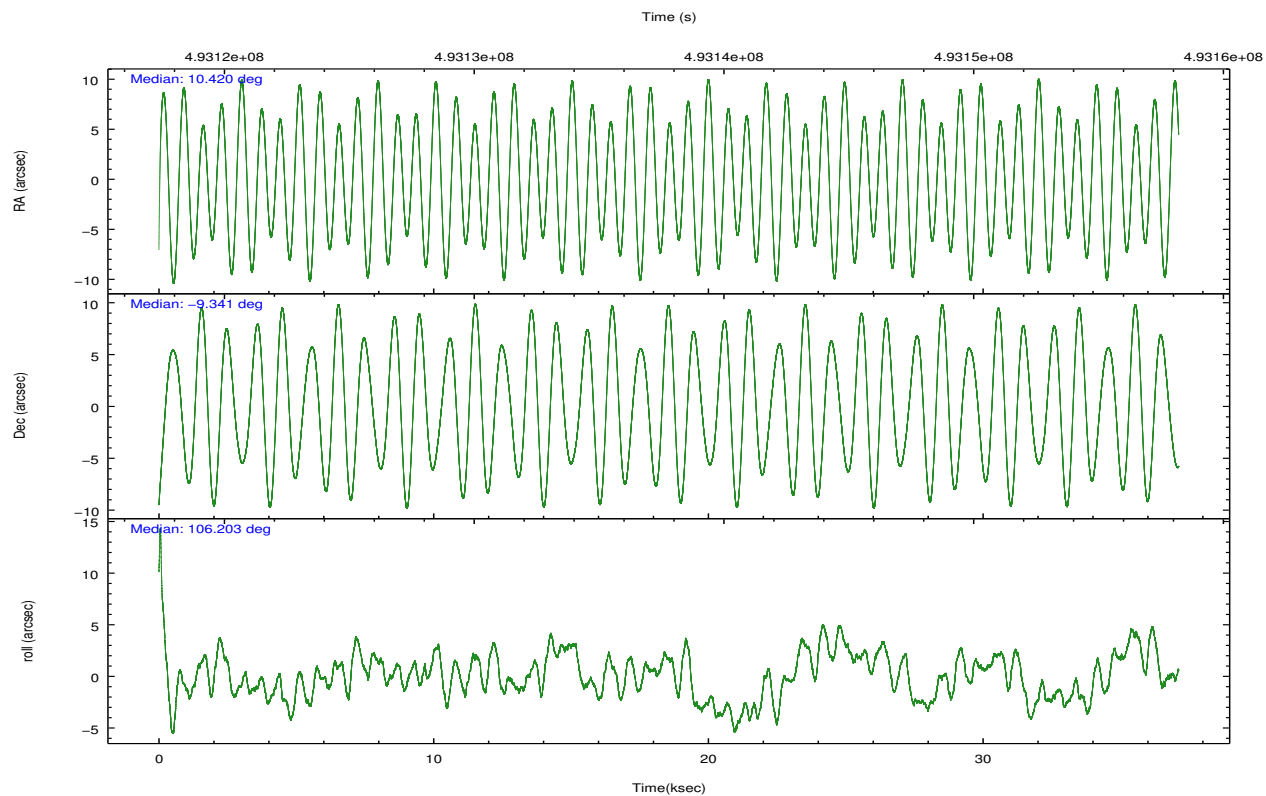
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	139441	54789	34727	35161	8268
	41%	23%	16%	16%	4%
grade 1 events	633	271	230	192	96
	0%	0%	0%	0%	0%
grade 2 events	21975	12079	8862	7796	5129
	6%	5%	4%	3%	2%
grade 3 events	7238	4177	3168	3153	2355
	2%	1%	1%	1%	1%
grade 4 events	7060	4153	3211	3171	2225
	2%	1%	1%	1%	1%
grade 5 events	8993	9197	8305	9930	9449
	2%	4%	3%	4%	5%
grade 6 events	8725	7095	5376	5215	5187
	2%	3%	2%	2%	2%
grade 7 events	138108	136533	150562	149386	149052
	41%	59%	70%	69%	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	10.440492	10.42030712879873	CCD I2 on	Y	Y
[deg] Pointing Dec	-9.359896	-9.340945628882613	CCD I3 on	Y	Y
[deg] Pointing Roll	106.002548	106.2079585786262	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)	493119351.184000	493118185.08552	CCD S5 on	N	N
Observation start date	2013-08-17T09:34:44	2013-08-17T09:16:25	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	493156351.184000	493157135.60014	On-chip summing requested	N	N
Observation end date	2013-08-17T19:51:24	2013-08-17T20:05:35	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



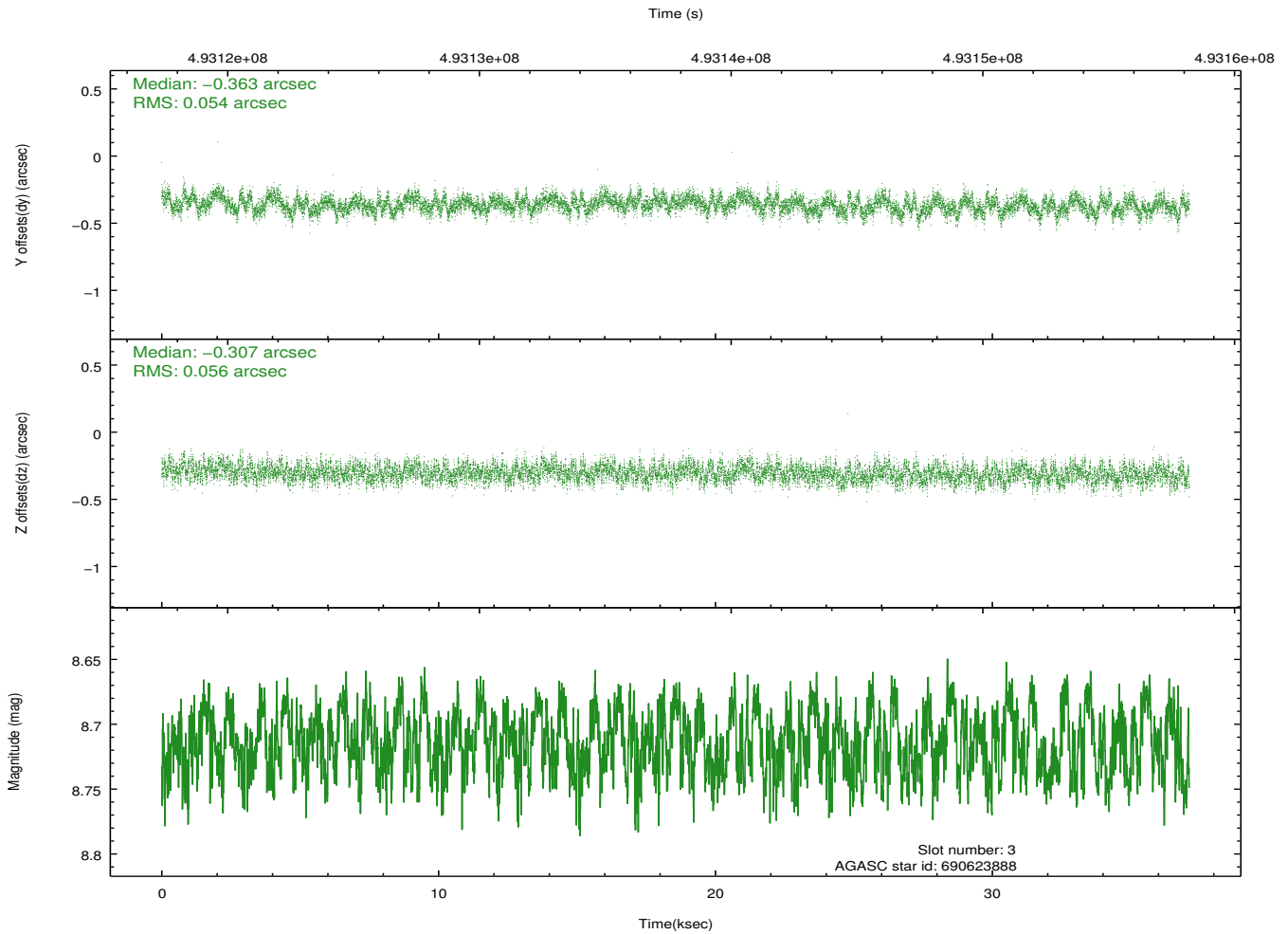
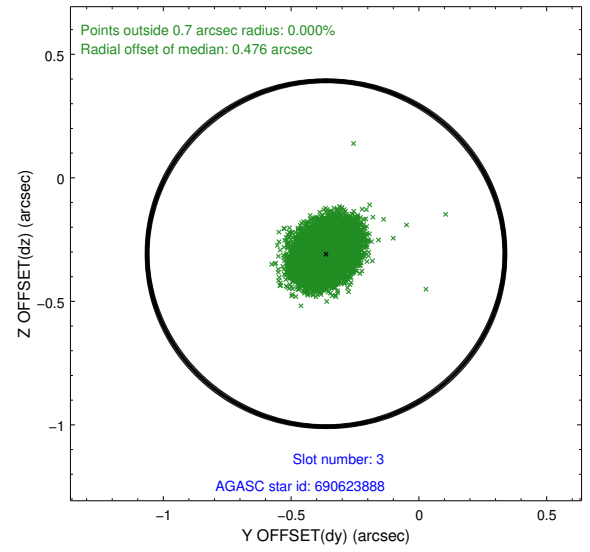
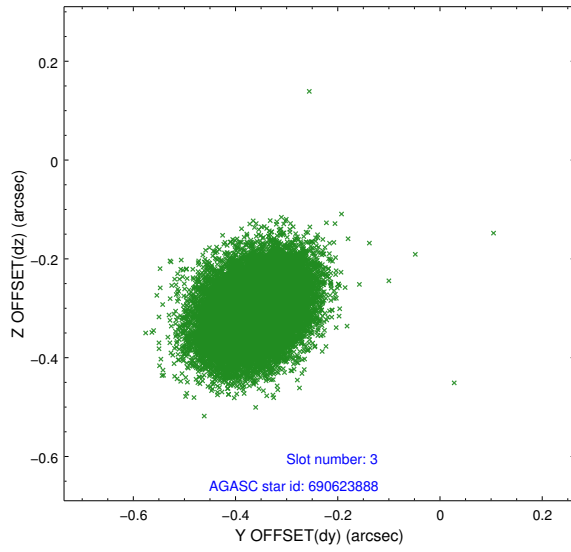


Slot Statistics

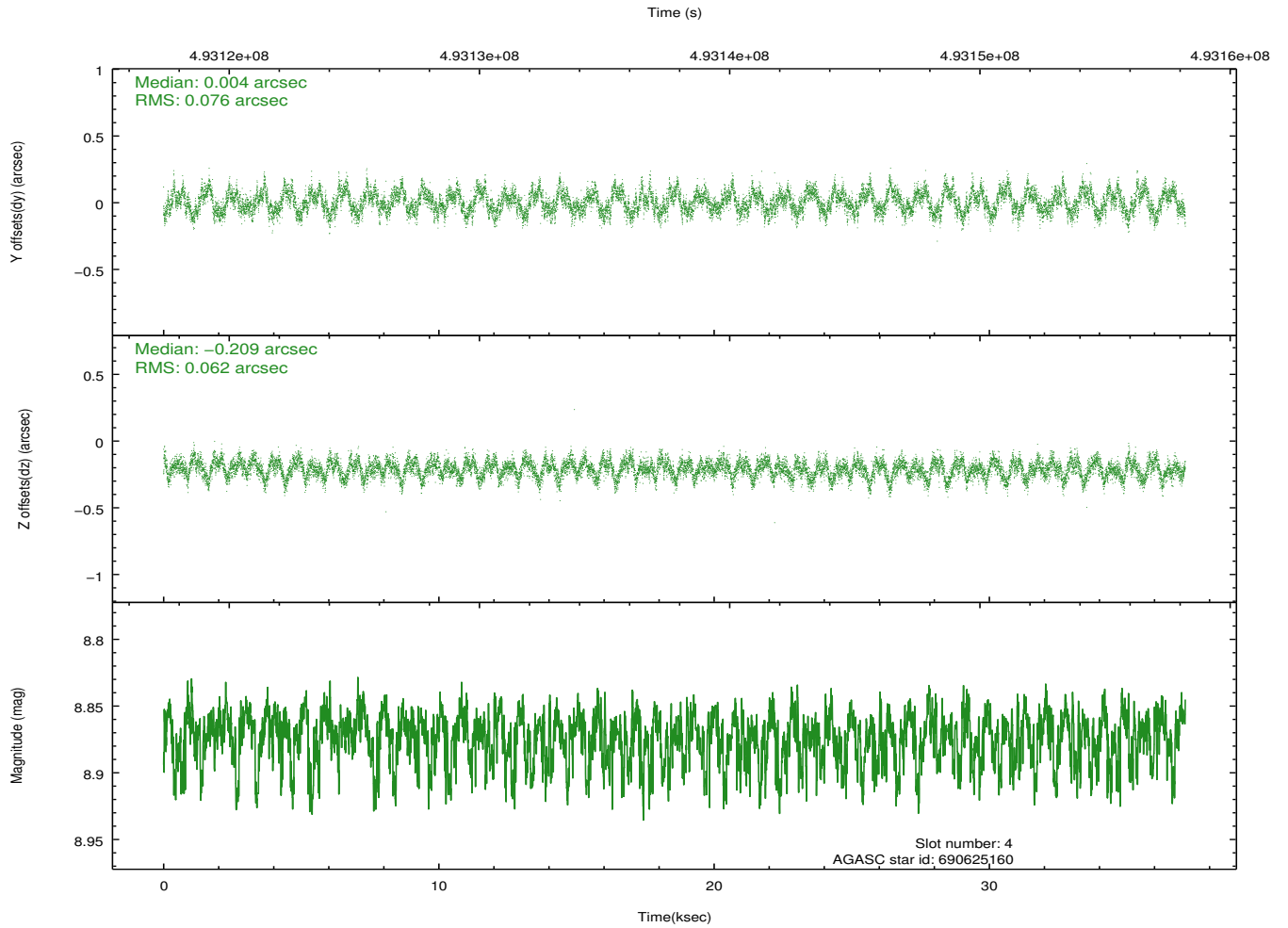
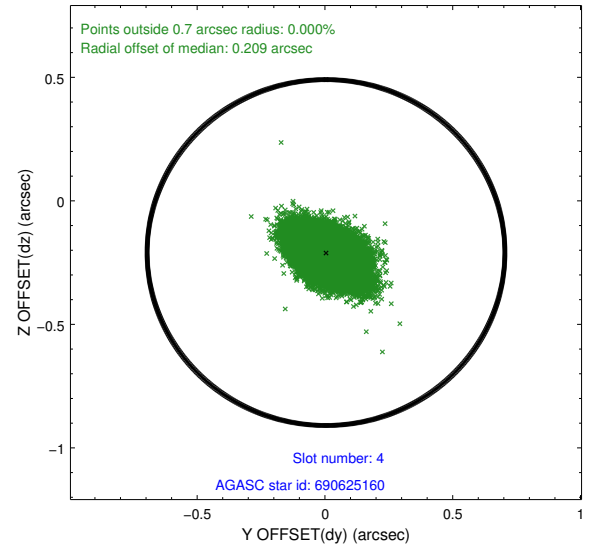
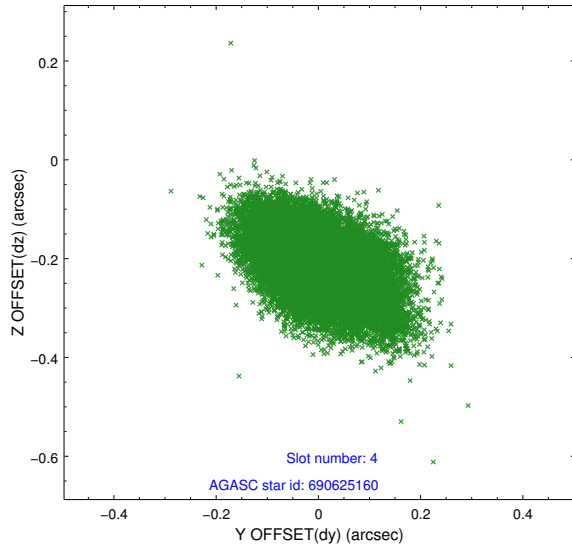
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.09	9055	0.049	0.020	0.012	0.026	0.000000	0.000000	918.60	-841.71
1	FID		ACIS-I-5	7.08	9054	-0.254	0.050	0.009	0.017	0.000000	0.000000	-1829.83	1055.73
2	FID		ACIS-I-6	7.09	9053	0.113	0.000	0.012	0.024	0.000000	0.000000	384.13	1700.26
3	GUIDE	used	690623888	8.71	18068	-0.363	-0.307	0.084	0.134	10.089843	-9.212040	854.22	1051.29
4	GUIDE	used	690625160	8.87	18104	0.004	-0.209	0.103	0.170	10.224219	-9.960066	-1865.58	1332.92
5	GUIDE	used	690632656	9.23	18095	0.059	-0.132	0.093	0.153	10.397747	-9.674983	-1048.67	458.95
6	GUIDE	used	690636928	9.24	17902	0.260	0.349	0.134	0.209	11.054156	-9.568424	-1323.46	-1885.96
7	GUIDE	used	690637960	6.80	18109	0.039	0.303	0.075	0.121	10.711431	-9.921690	-2209.29	-365.16

2.4 Star Slots

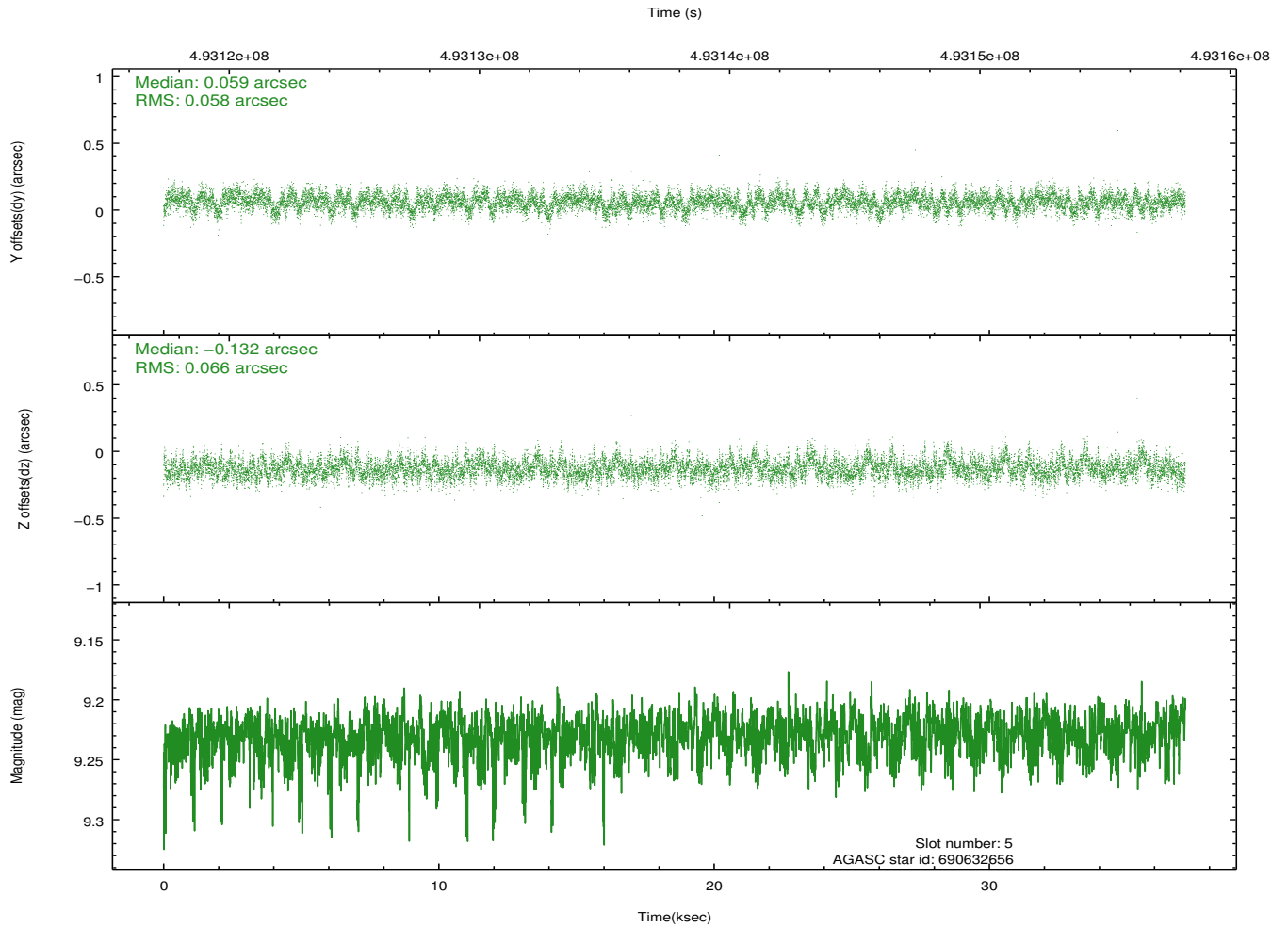
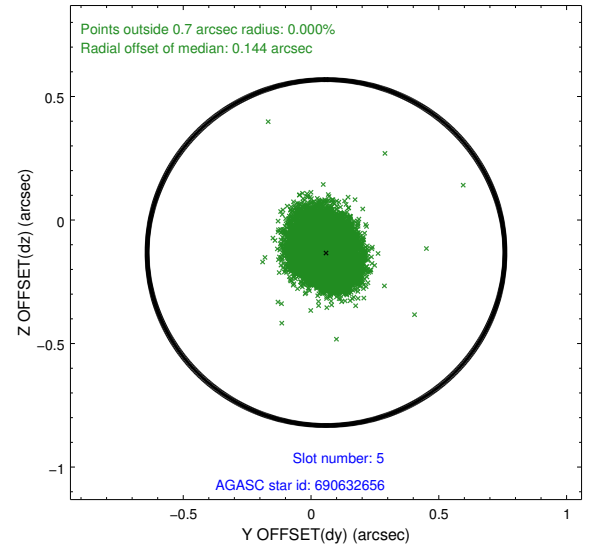
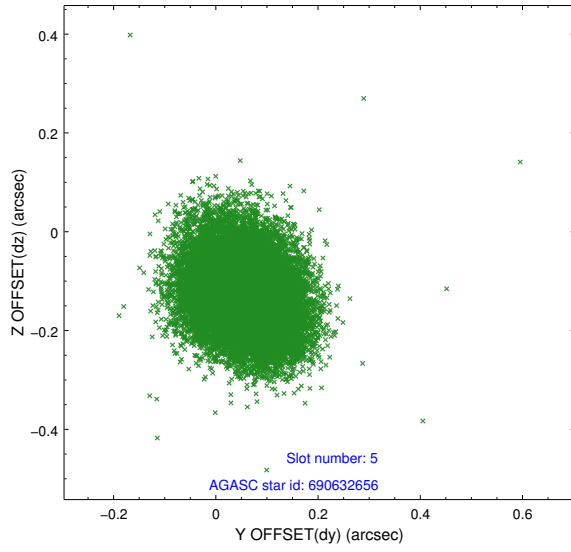
2.4.1 Slot 3



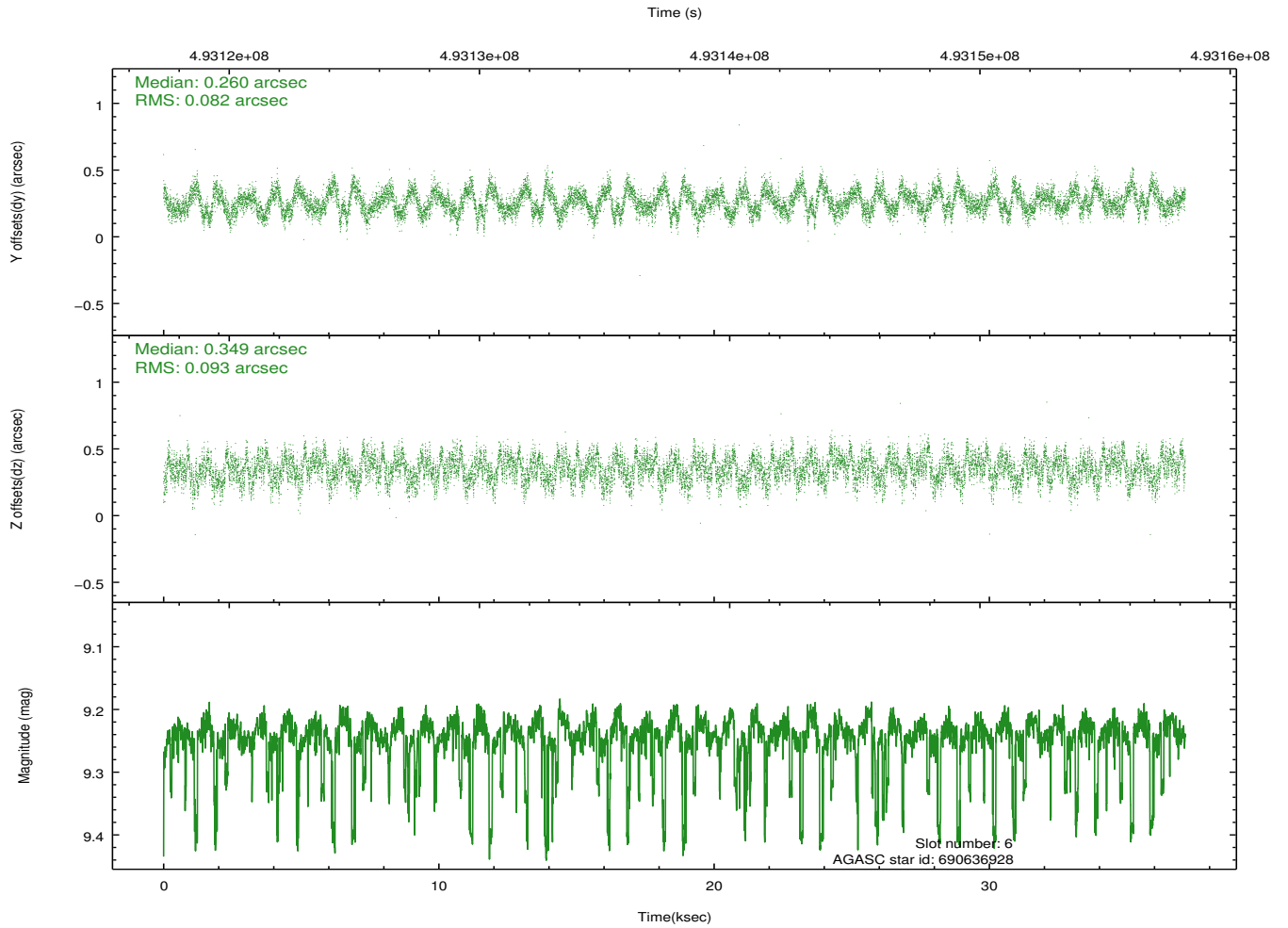
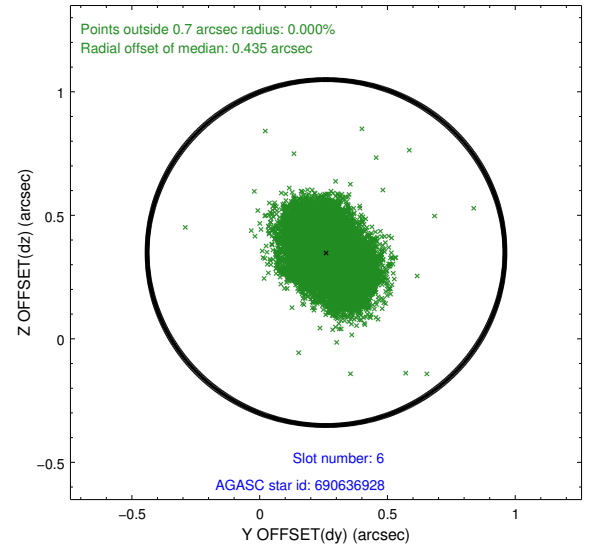
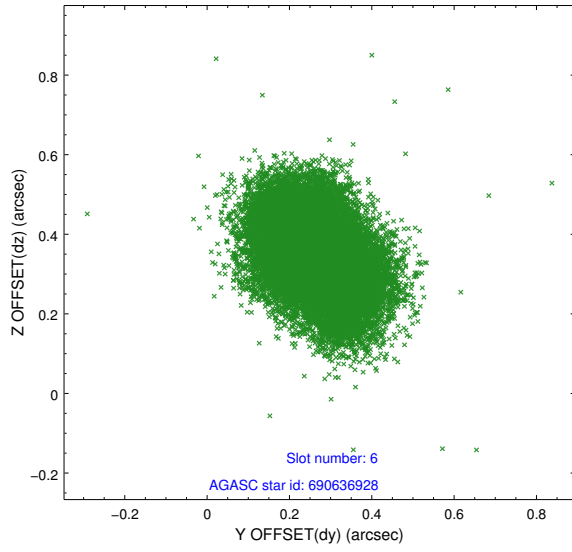
2.4.2 Slot 4



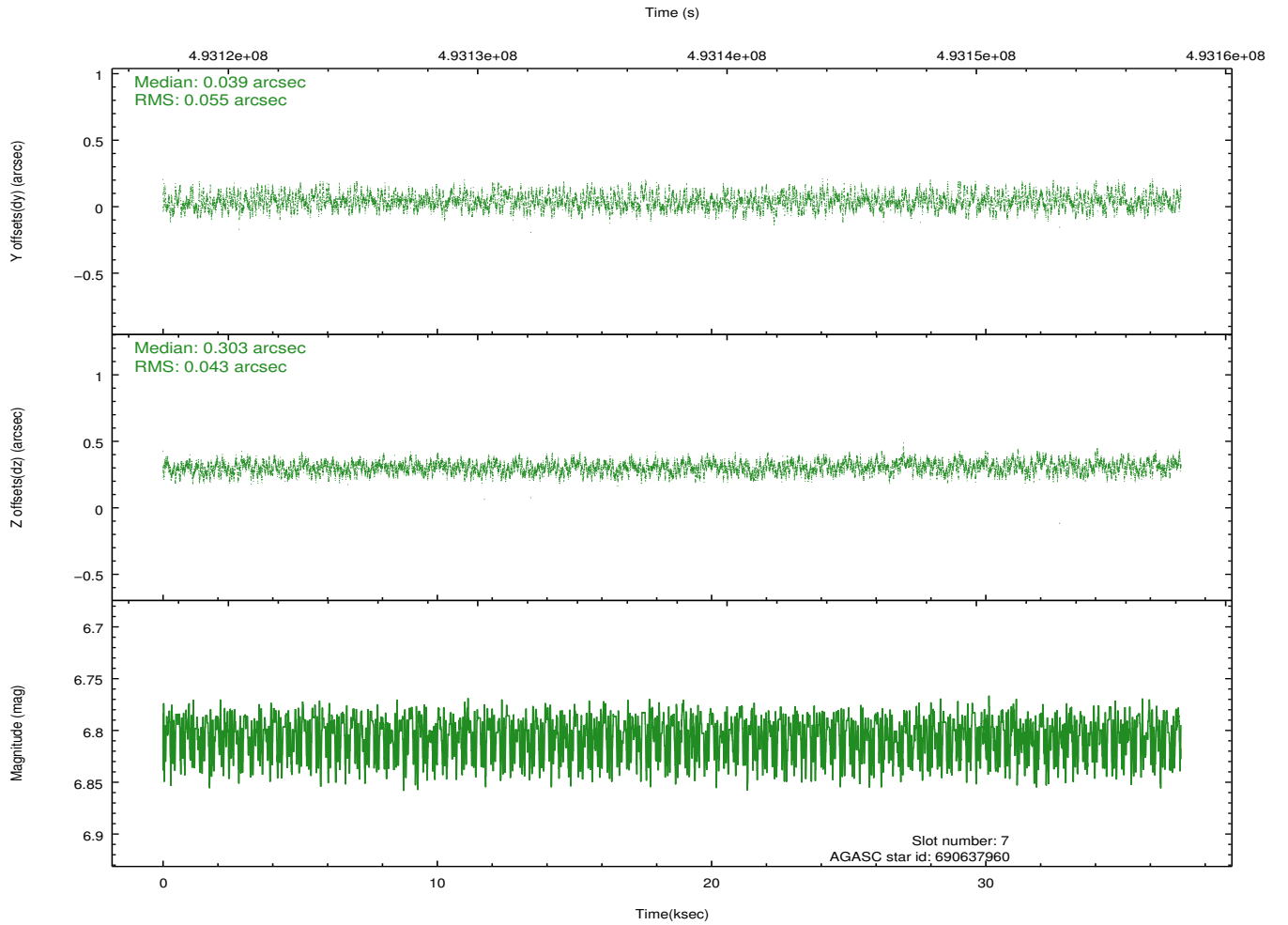
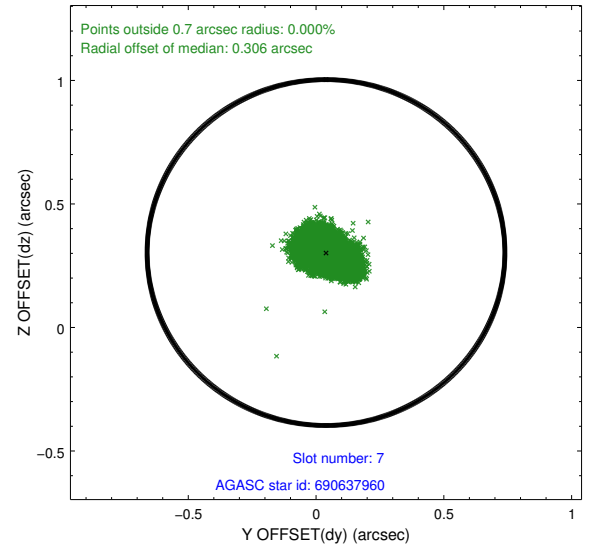
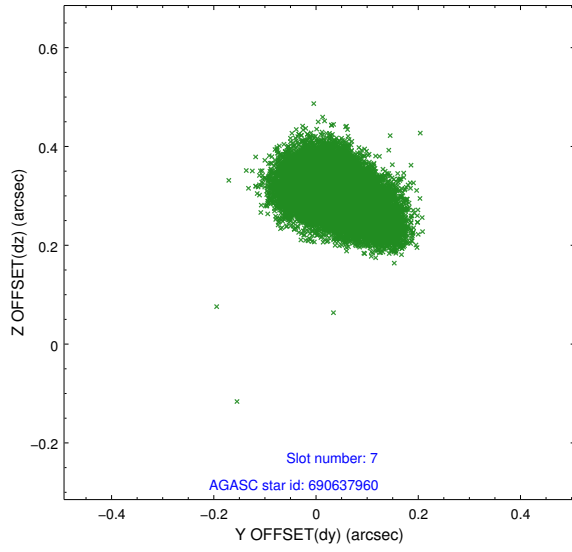
2.4.3 Slot 5



2.4.4 Slot 6

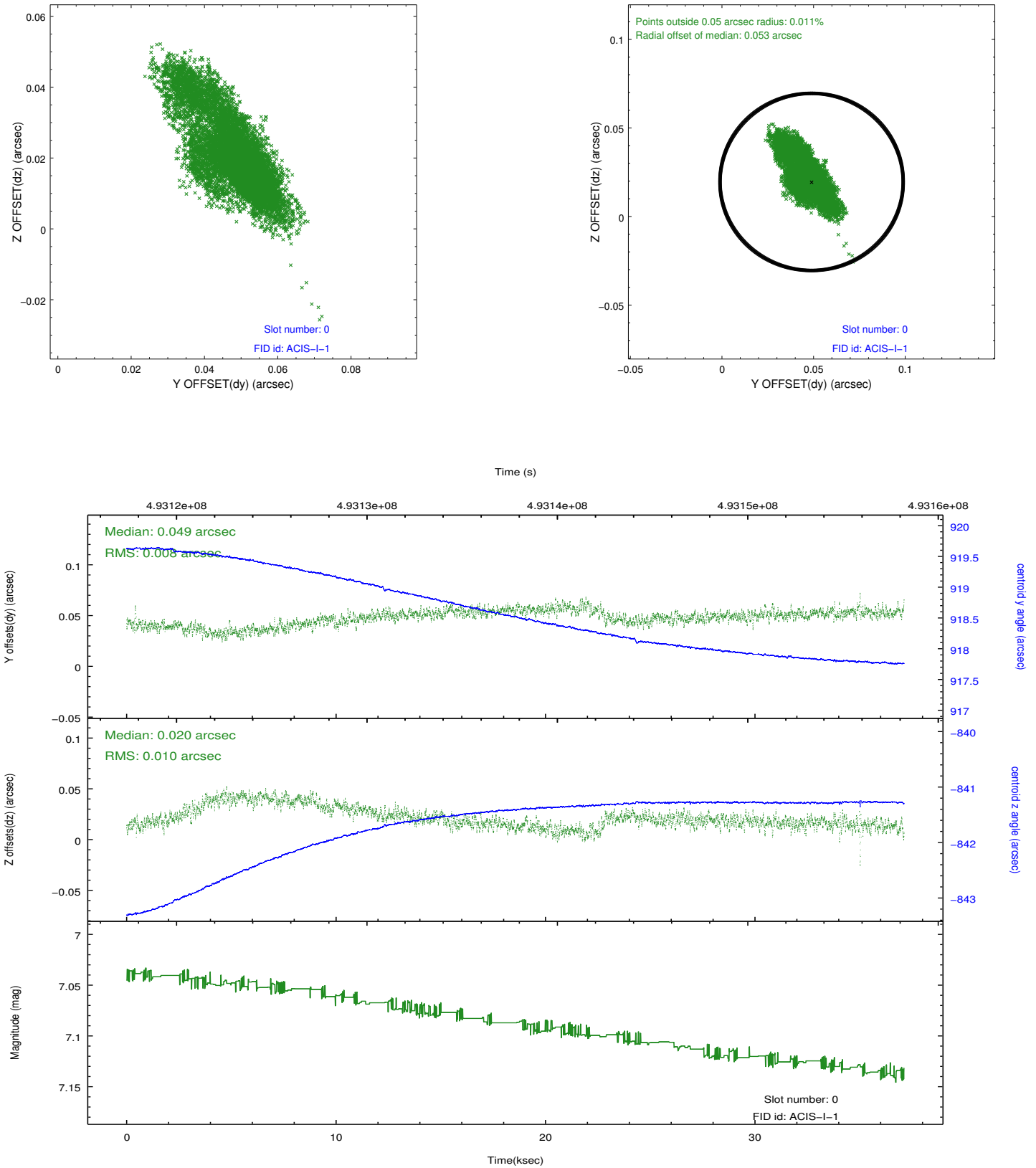


2.4.5 Slot 7

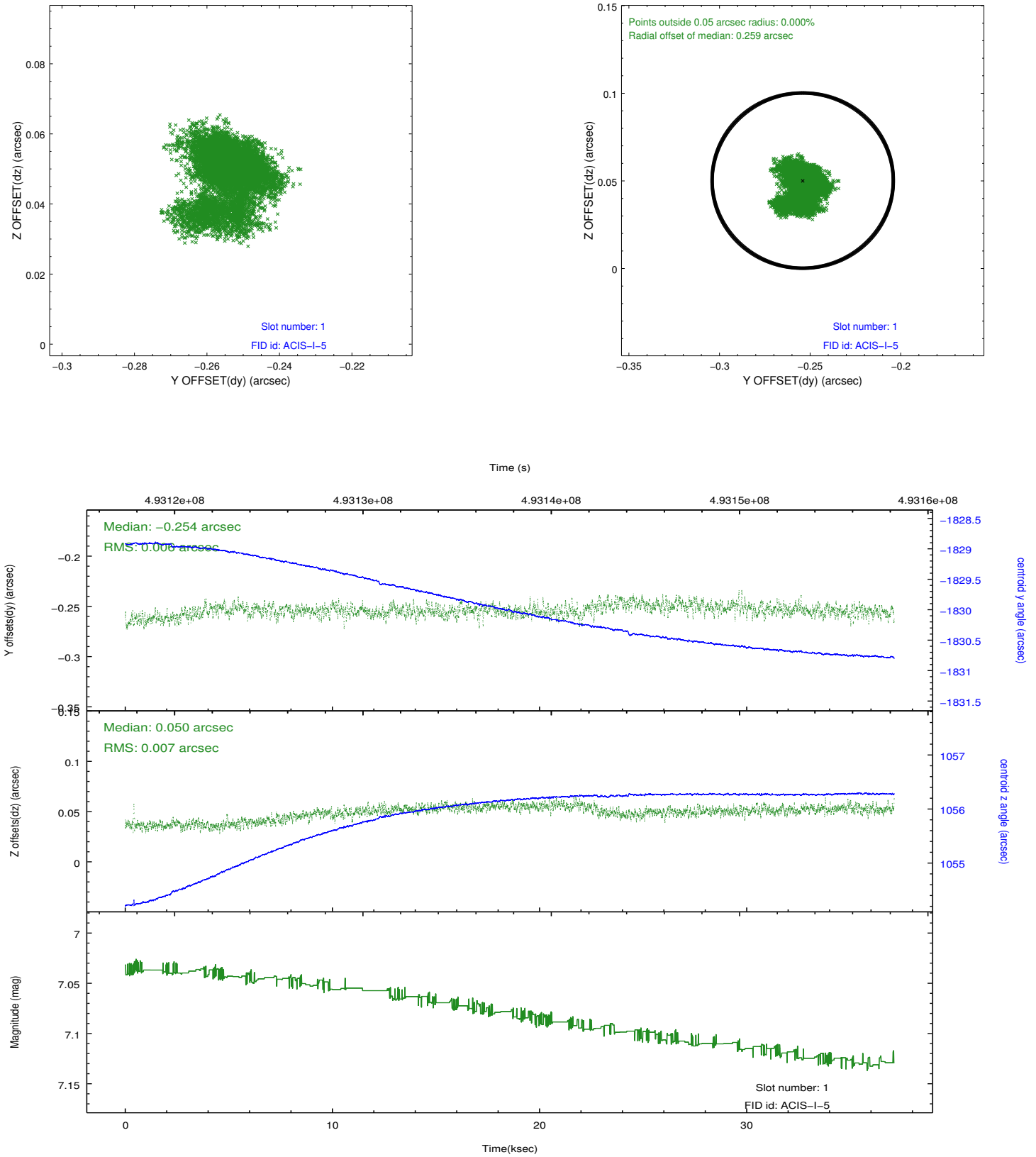


2.5 FID Slots

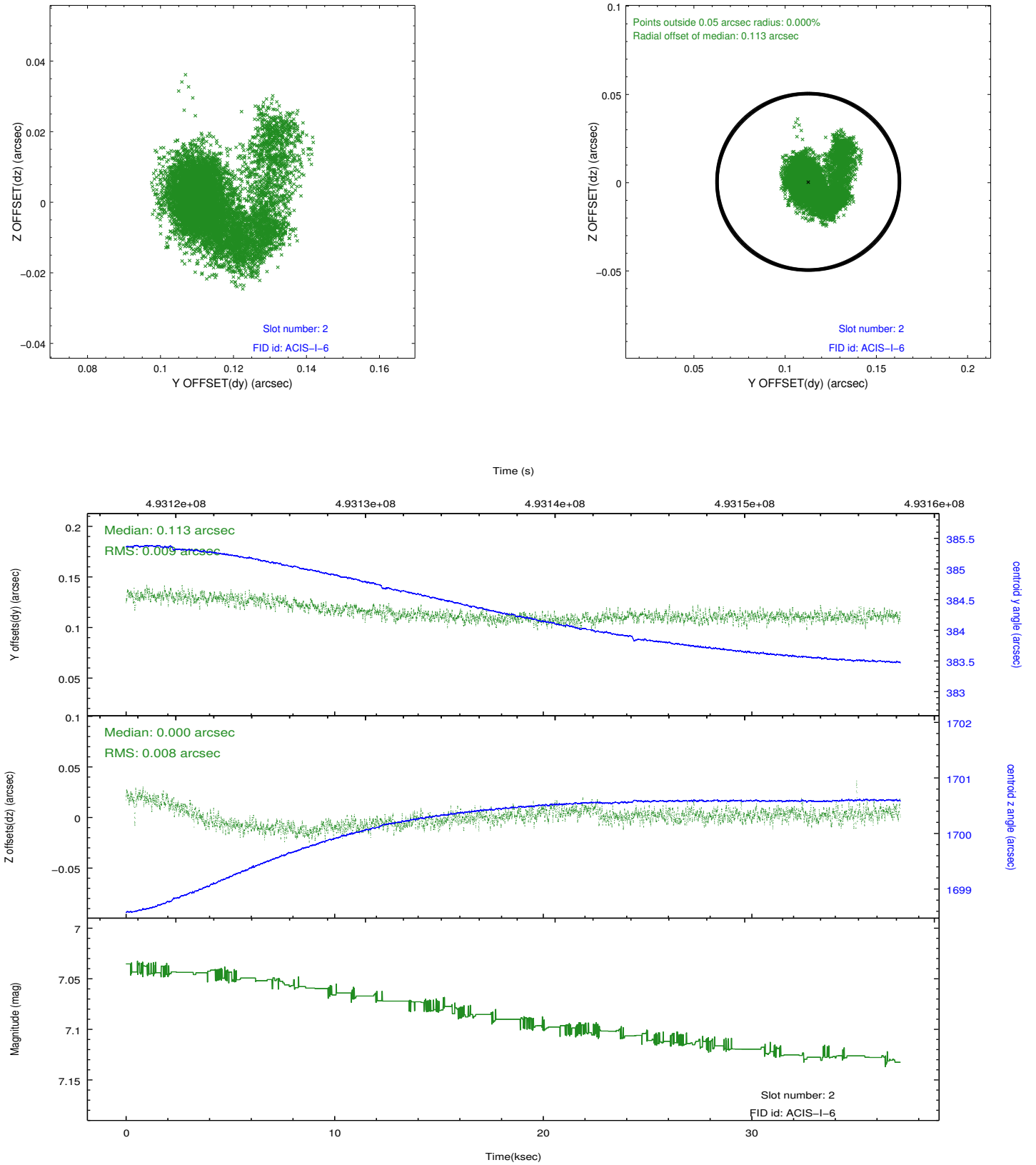
2.5.1 Slot 0



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	37.080763253272

A.2 Comments

Joint proposal with Suzaku.

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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.