

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 15583 - L2 Version 2
Chandra X-Ray Center

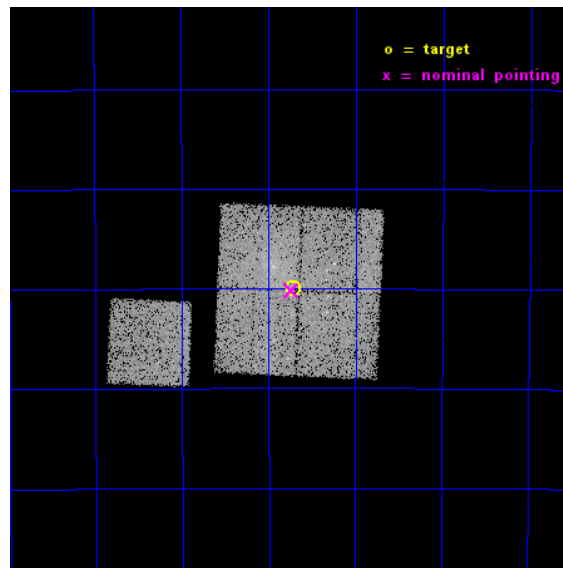
L2 Processing Date : Nov 29 2014

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1 Front

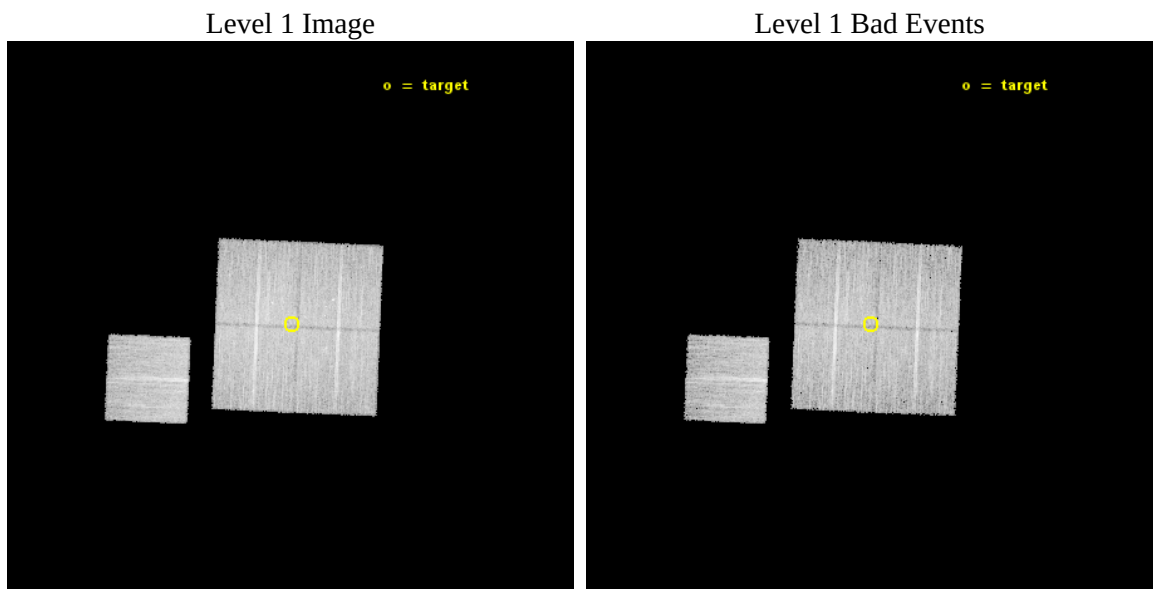
seq_num	801372	Sequence number
obs_id	15583	Observation id
title	A Chandra-Planck Legacy Program for Massive Clusters of Galaxies	P
observer	Dr. Christine Jones	Principal investigator
object	G345.40-39.34	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	312.930417	Observer's specified target RA [deg]
dec_targ	-52.665444	Observer's specified target Dec [deg]
ra_nom	312.93471446858	Nominal RA [deg]
dec_nom	-52.669696744069	Nominal Dec [deg]
roll_nom	272.43272927808	Nominal Roll [deg]
revision	2	Processing version of data
ontime	16082.022106469	Sum of GTIs [s]
livetime	15871.898648235	Livetime [s]
ontime0	16081.898986459	Sum of GTIs [s]
ontime1	16081.940026462	Sum of GTIs [s]
ontime2	16081.981066465	Sum of GTIs [s]
ontime3	16082.022106469	Sum of GTIs [s]
ontime6	16078.716946244	Sum of GTIs [s]
l2events	53654	Number of level 2 events



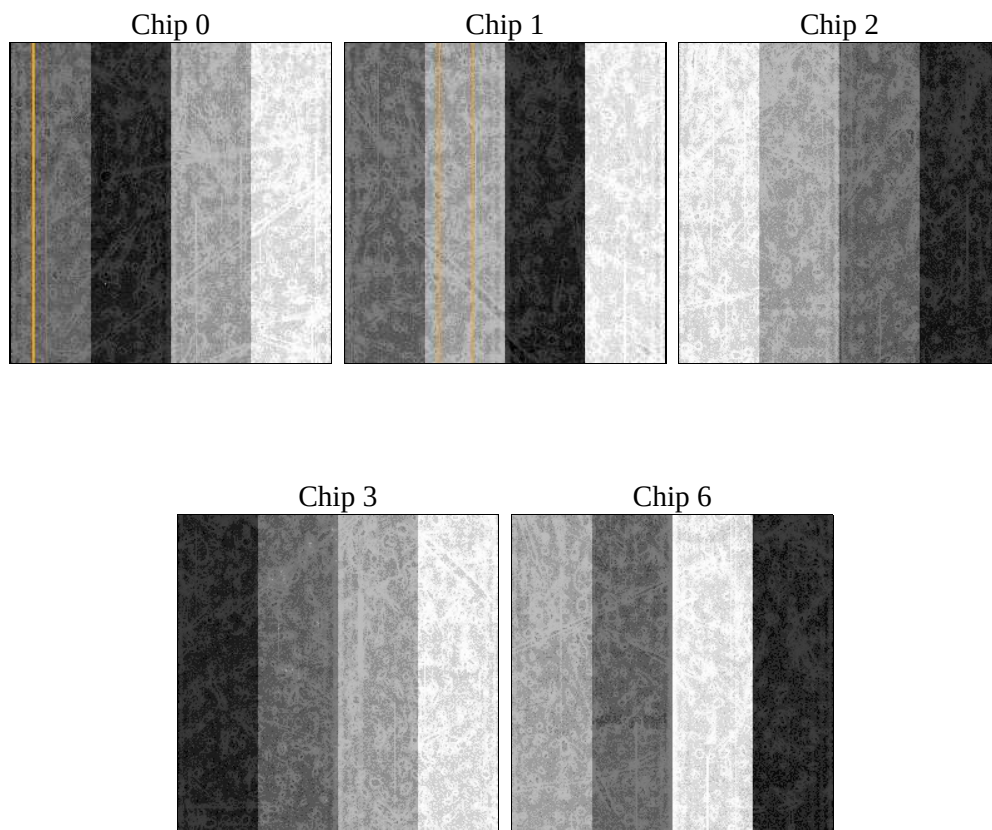
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	16000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	16082.022106469	Sum of GTIs [s]
caldbver	4.6.4	 	ontime0	16081.898986459	Sum of GTIs [s]
date	2014-11-29T15:10:52	Date and time of file creation	ontime1	16081.940026462	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	16081.981066465	Sum of GTIs [s]
			ontime3	16082.022106469	Sum of GTIs [s]
			ontime6	16078.716946244	Sum of GTIs [s]
			l1events	418050	Number of level 1 events

2.1.4 Events

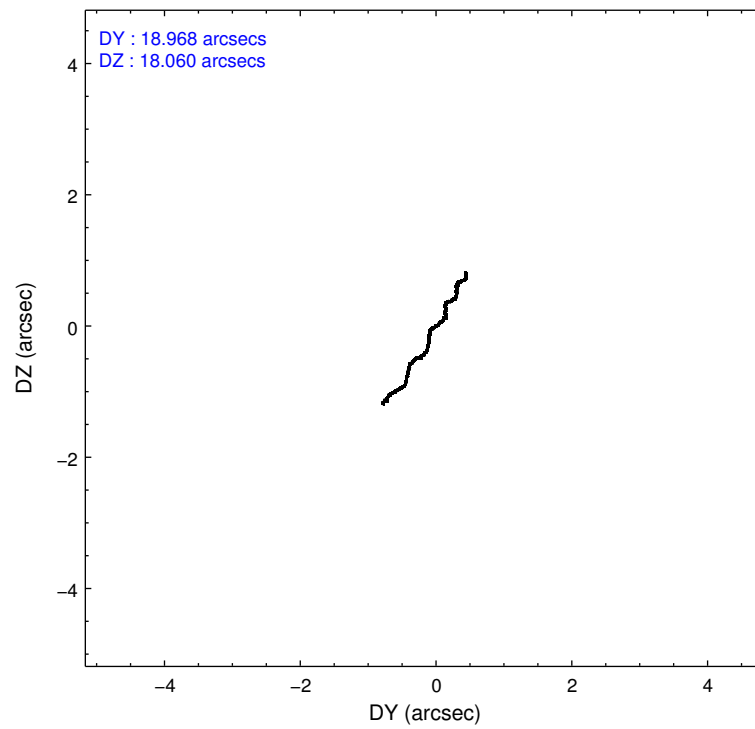
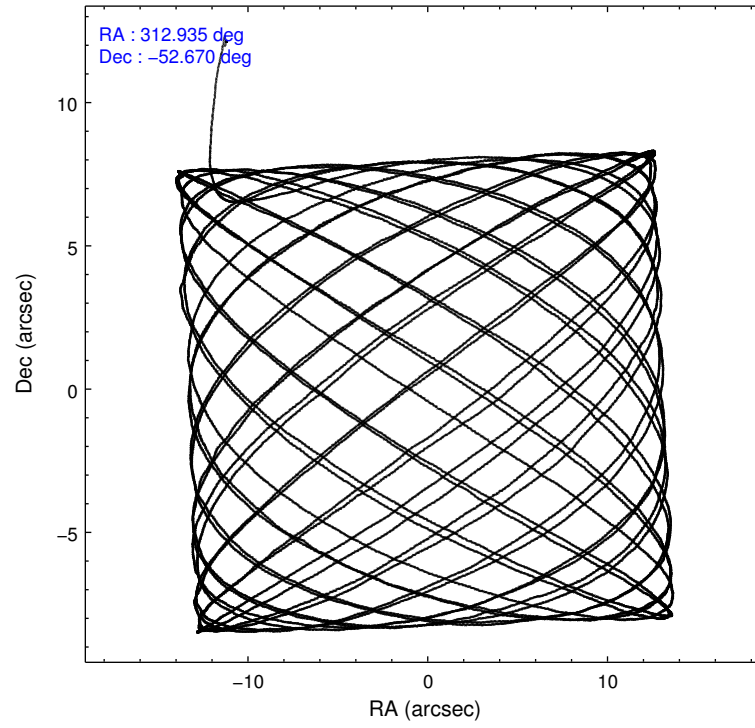
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	81005	80649	87370	84620	84406
rejected events	68894	67957	74055	71314	73852
rejected %	85%	84%	84%	84%	87%

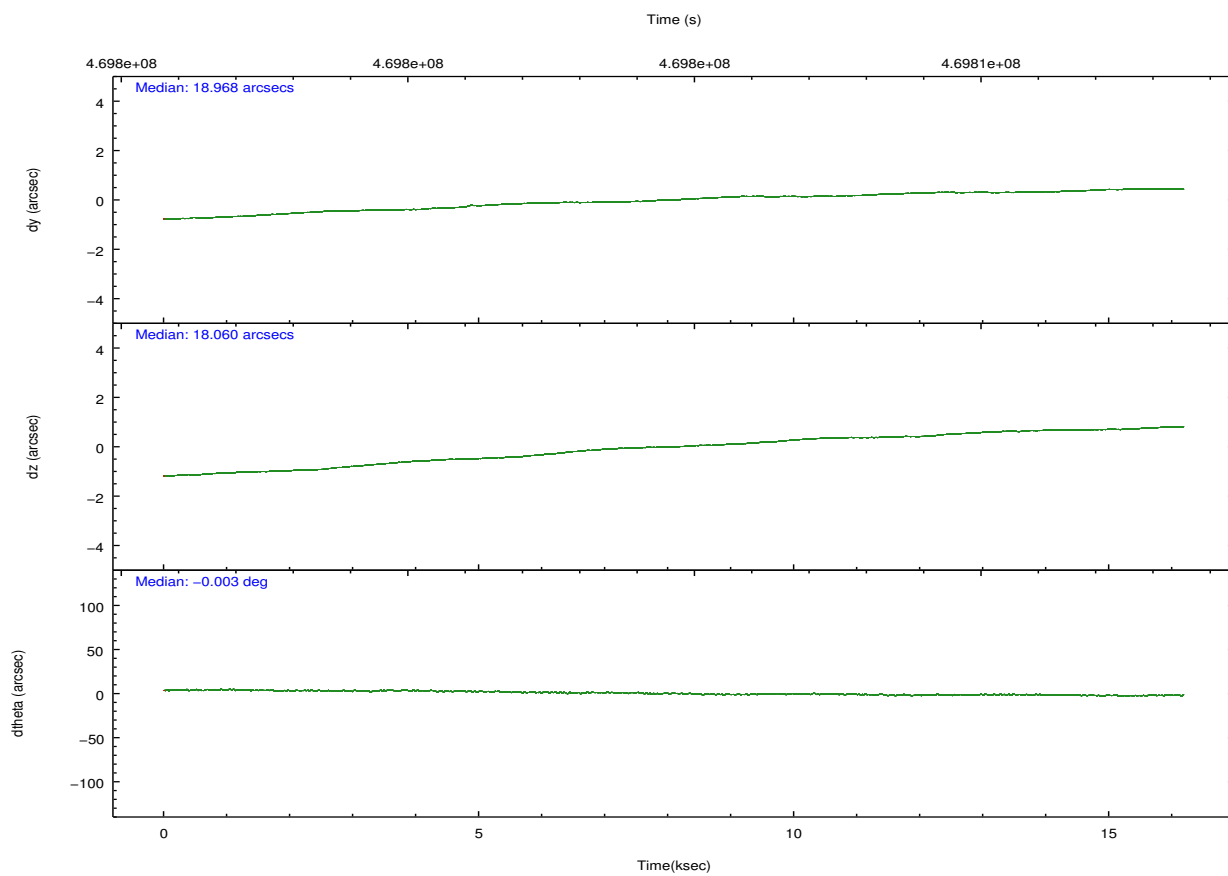
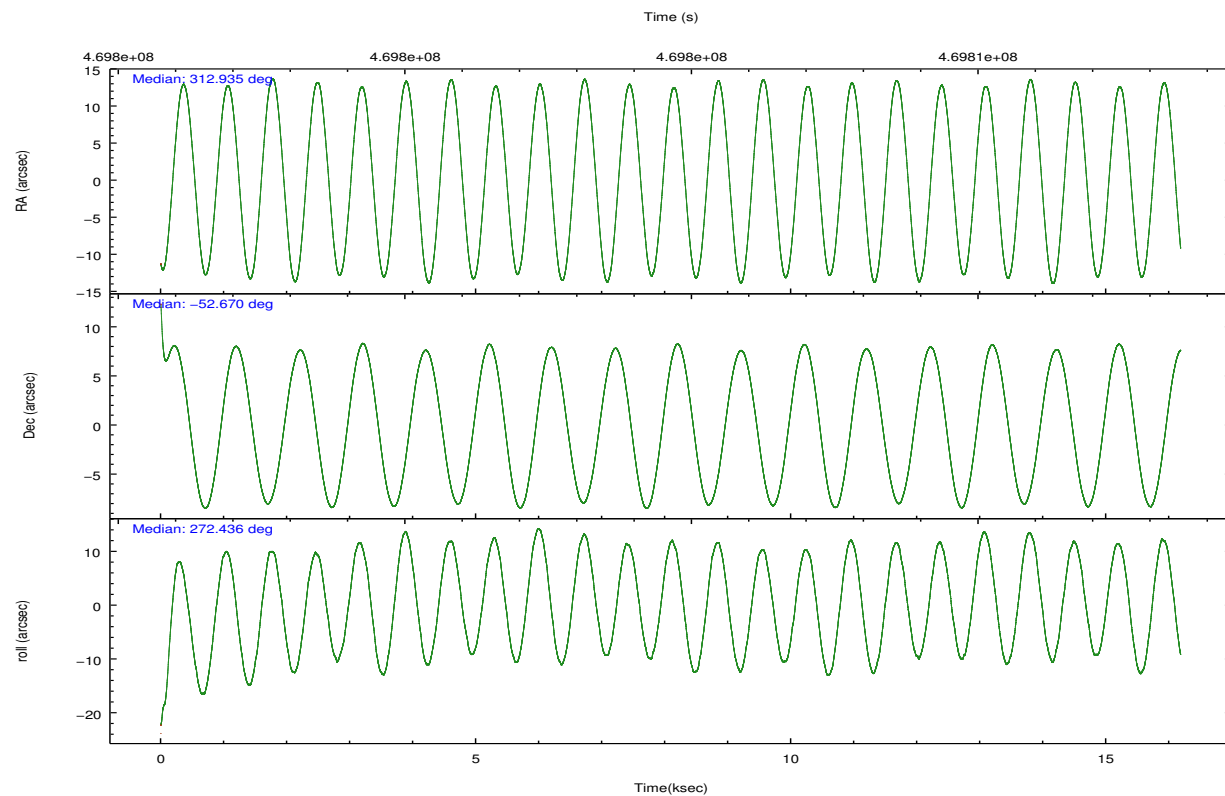
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	5184	5263	6398	6588	3687
	6%	6%	7%	7%	4%
grade 1 events	65	61	64	61	47
	0%	0%	0%	0%	0%
grade 2 events	2743	2871	2630	2516	2352
	3%	3%	3%	2%	2%
grade 3 events	1120	1077	1071	1055	1082
	1%	1%	1%	1%	1%
grade 4 events	1037	1089	1135	1073	1110
	1%	1%	1%	1%	1%
grade 5 events	4054	4122	3778	4418	4297
	5%	5%	4%	5%	5%
grade 6 events	2035	2397	2088	2076	2325
	2%	2%	2%	2%	2%
grade 7 events	64767	63769	70206	66833	69506
	79%	79%	80%	78%	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	312.910233	312.9347144685833	CCD I2 on	Y	Y
[deg] Pointing Dec	-52.646565	-52.66969674406856	CCD I3 on	Y	Y
[deg] Pointing Roll	272.204588	272.4327292780821	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)	469796735.184000	469795491.67299	CCD S5 on	N	N
Observation start date	2012-11-20T11:04:28	2012-11-20T10:44:51	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	469812735.184000	469813393.81148	On-chip summing requested	N	N
Observation end date	2012-11-20T15:31:08	2012-11-20T15:43:13	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



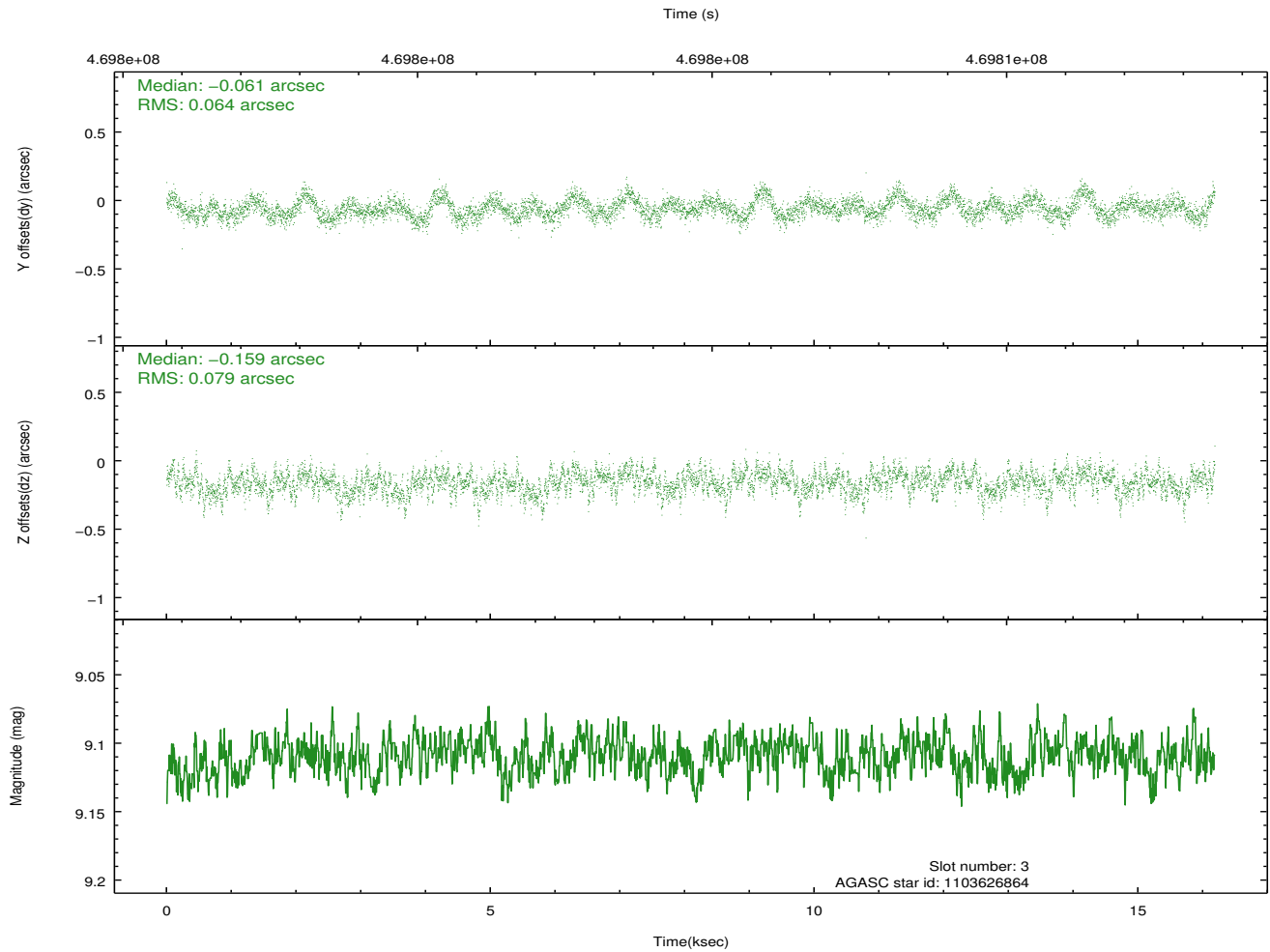
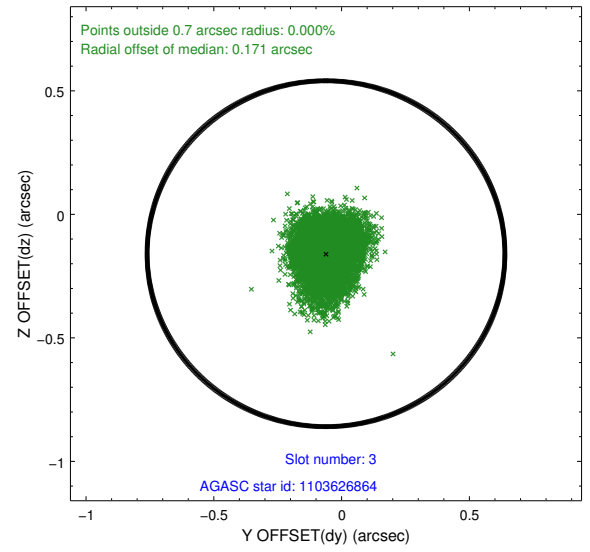
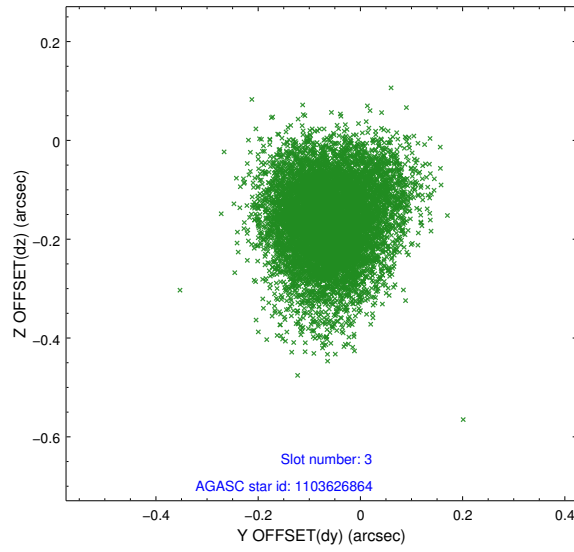


Slot Statistics

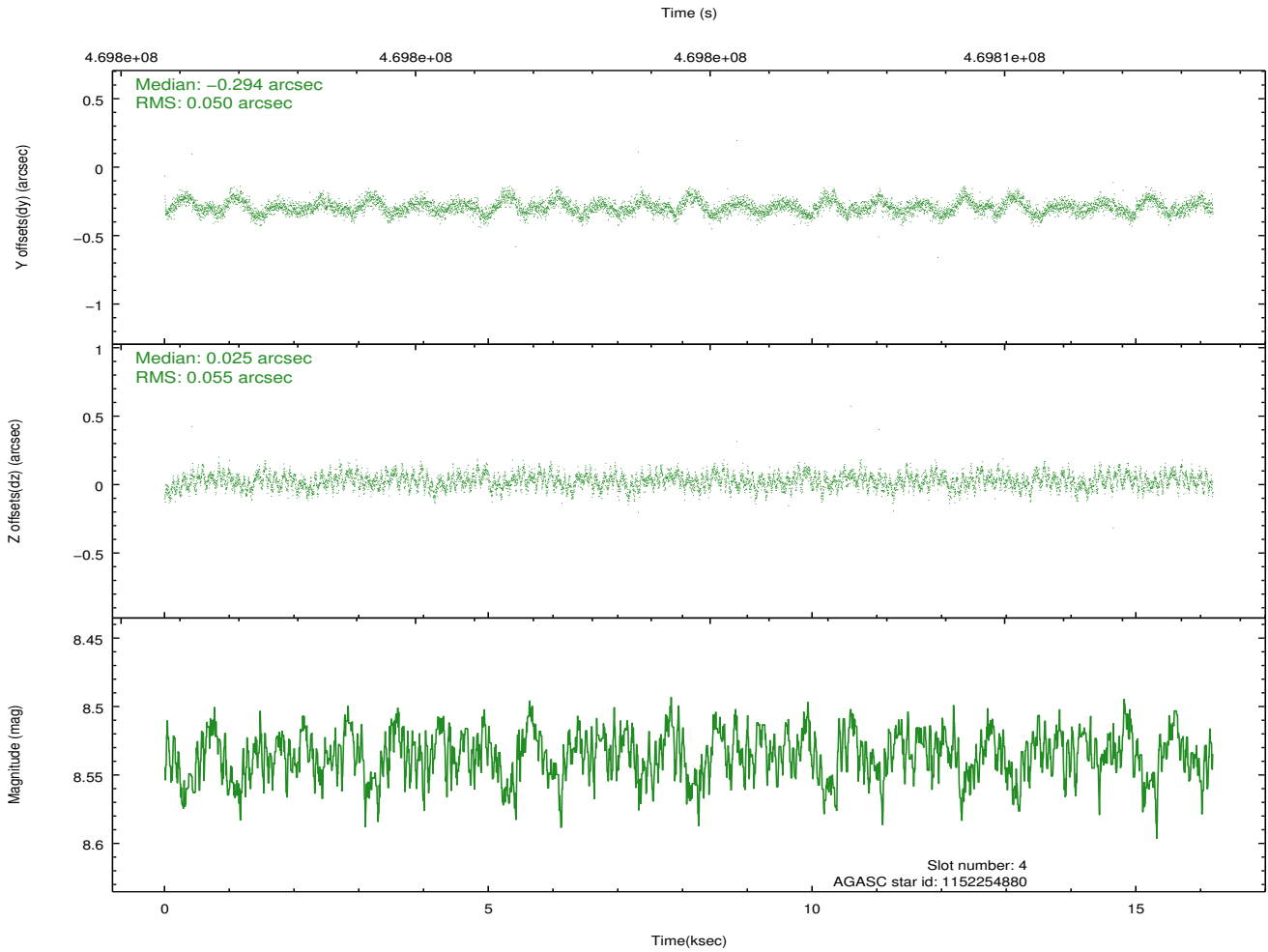
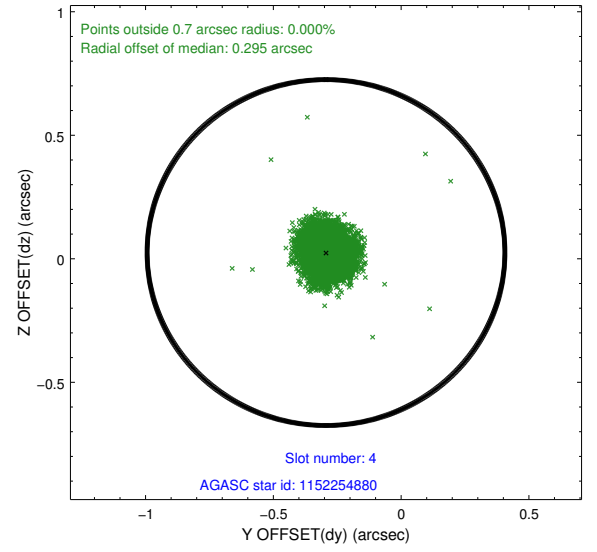
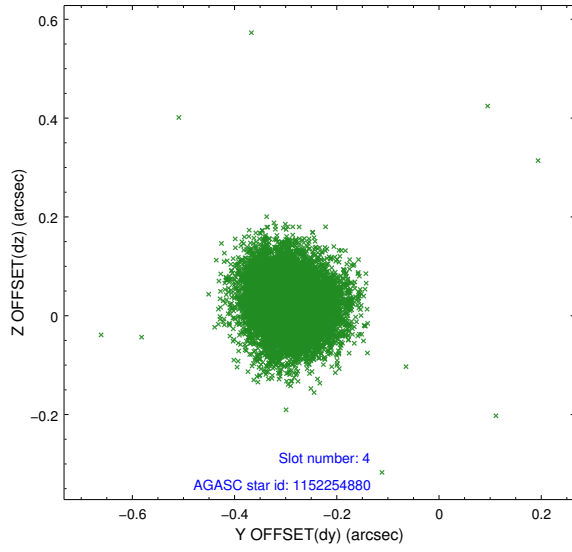
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.09	3948	0.052	0.025	0.041	0.066	0.000000	0.000000	920.50	-841.63
1	FID		ACIS-I-5	7.08	3948	-0.260	0.054	0.017	0.023	0.000000	0.000000	-1827.80	1055.73
2	FID		ACIS-I-6	7.08	3947	0.115	-0.004	0.020	0.047	0.000000	0.000000	385.78	1700.51
3	GUIDE	used	1103626864	9.11	7893	-0.061	-0.159	0.108	0.175	312.495552	-52.332634	-1161.30	-868.07
4	GUIDE	used	1152254880	8.54	7894	-0.294	0.025	0.078	0.124	313.184921	-52.768346	462.23	580.83
5	GUIDE	used	1152387392	9.24	7831	0.238	-0.033	0.103	0.183	313.612538	-52.816826	679.49	1502.98
6	GUIDE	used	1152388416	8.63	7895	0.109	0.060	0.079	0.125	313.642144	-52.523740	-371.37	1618.89
7	GUIDE	used	1152262400	7.87	7893	0.011	0.110	0.073	0.122	313.173441	-53.273407	2278.91	480.00

2.4 Star Slots

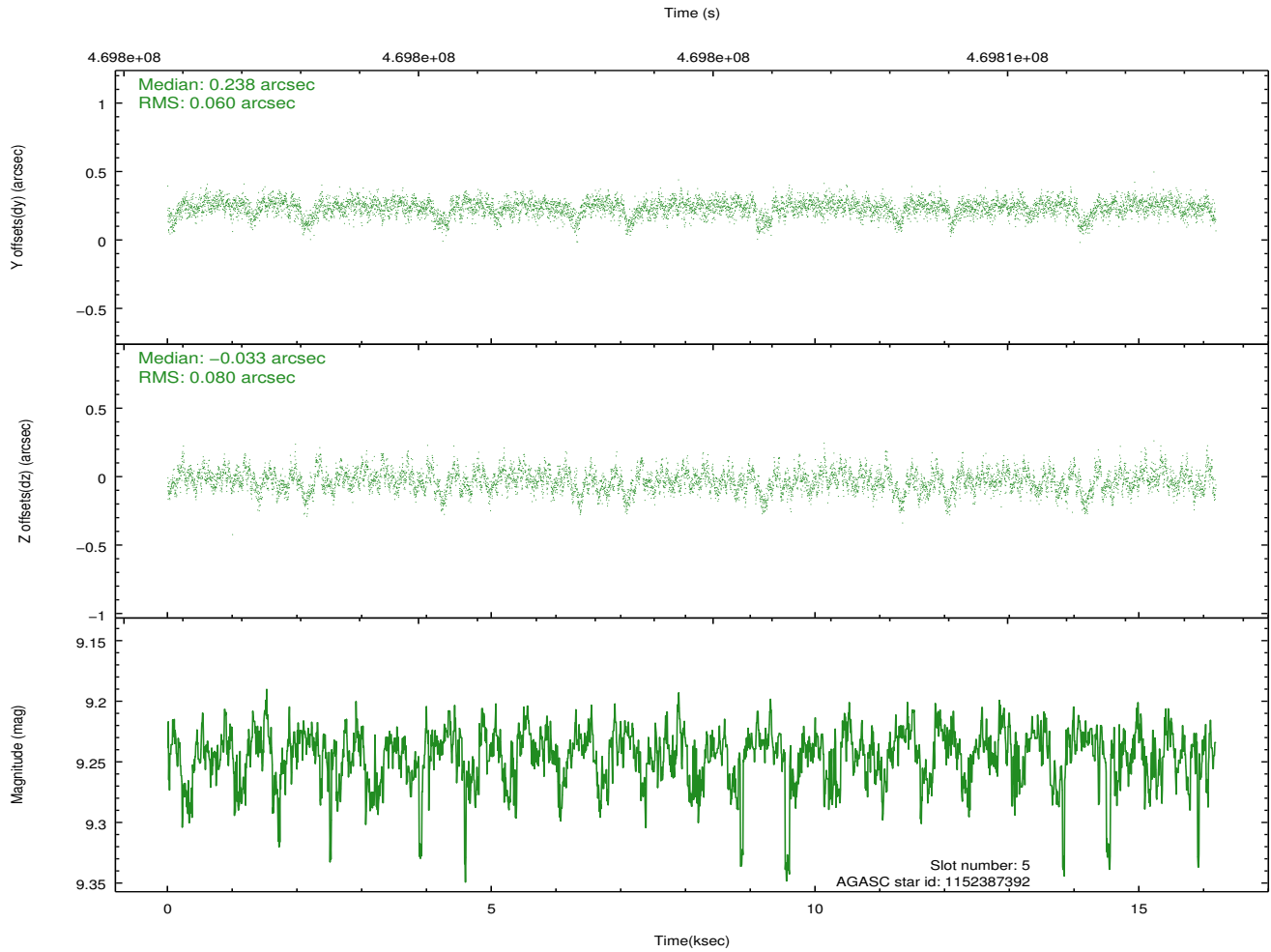
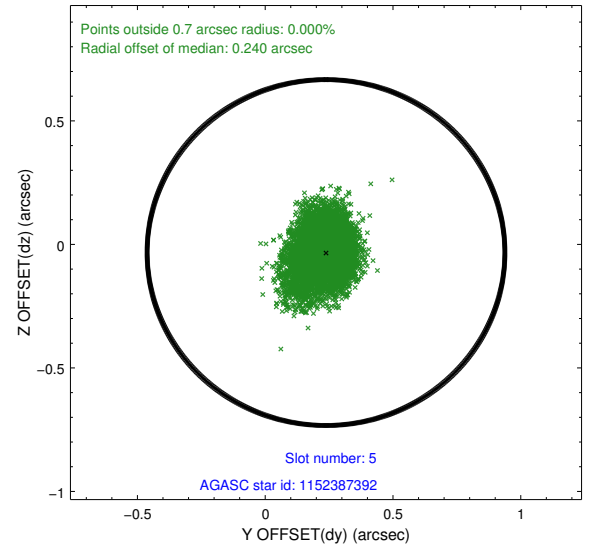
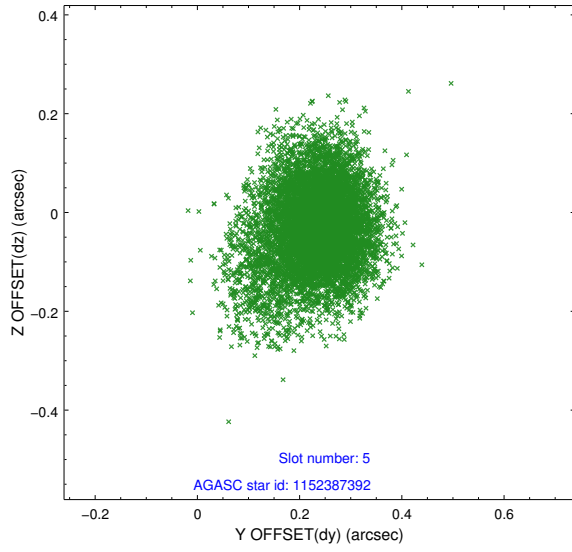
2.4.1 Slot 3



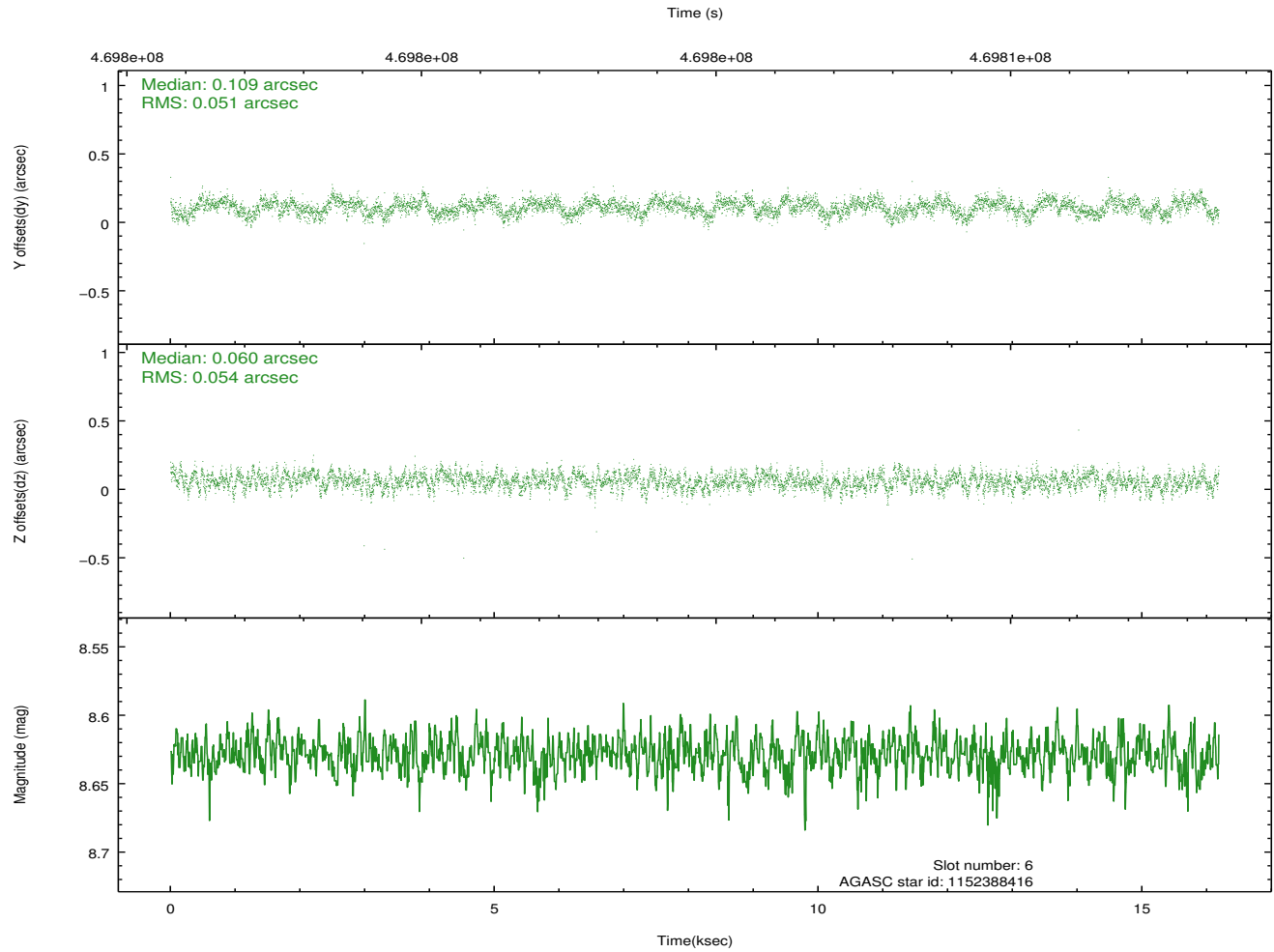
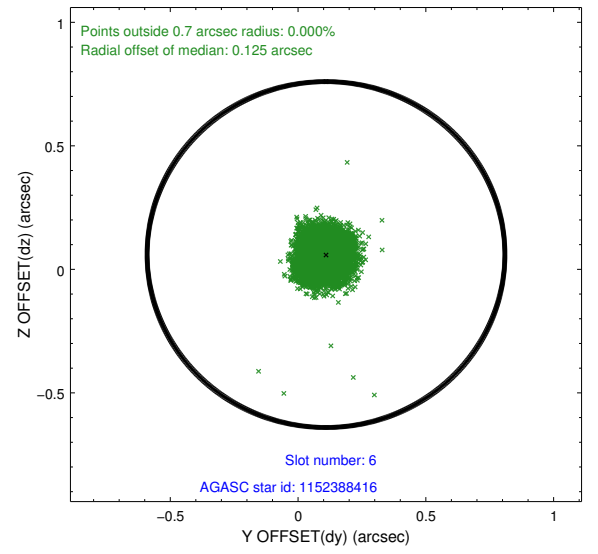
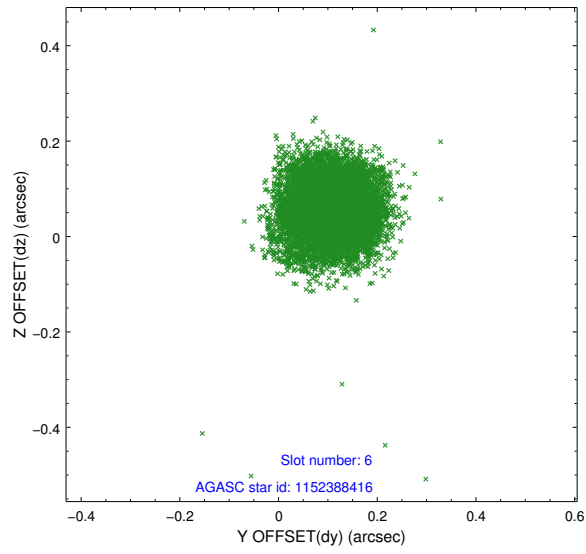
2.4.2 Slot 4



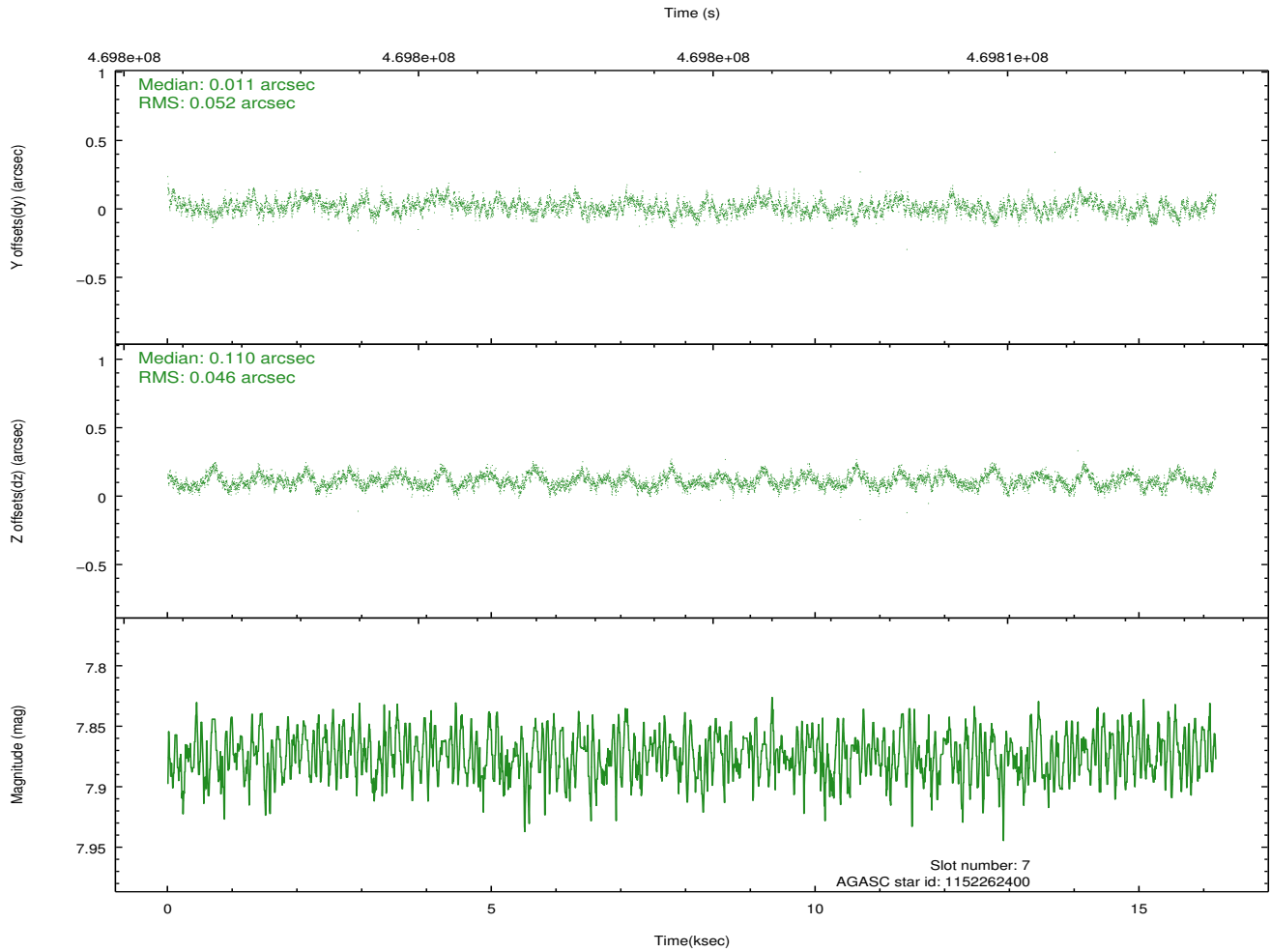
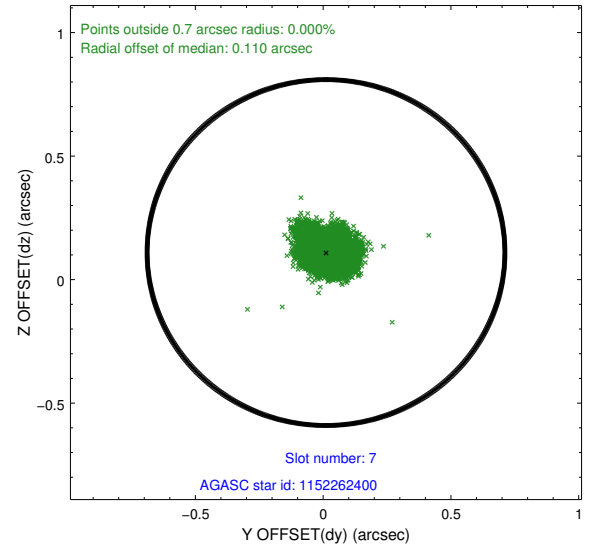
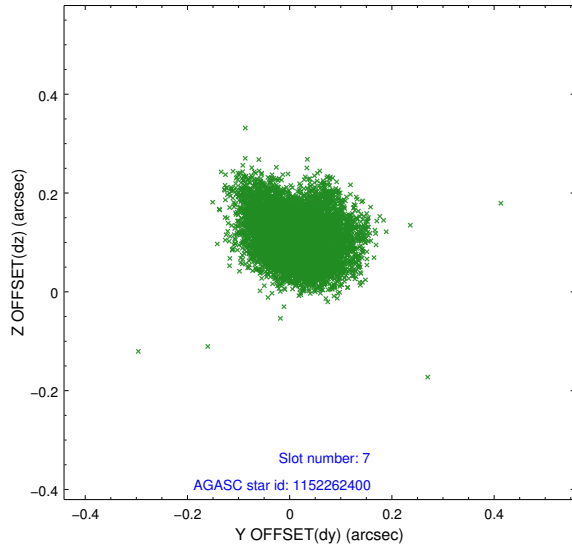
2.4.3 Slot 5



2.4.4 Slot 6

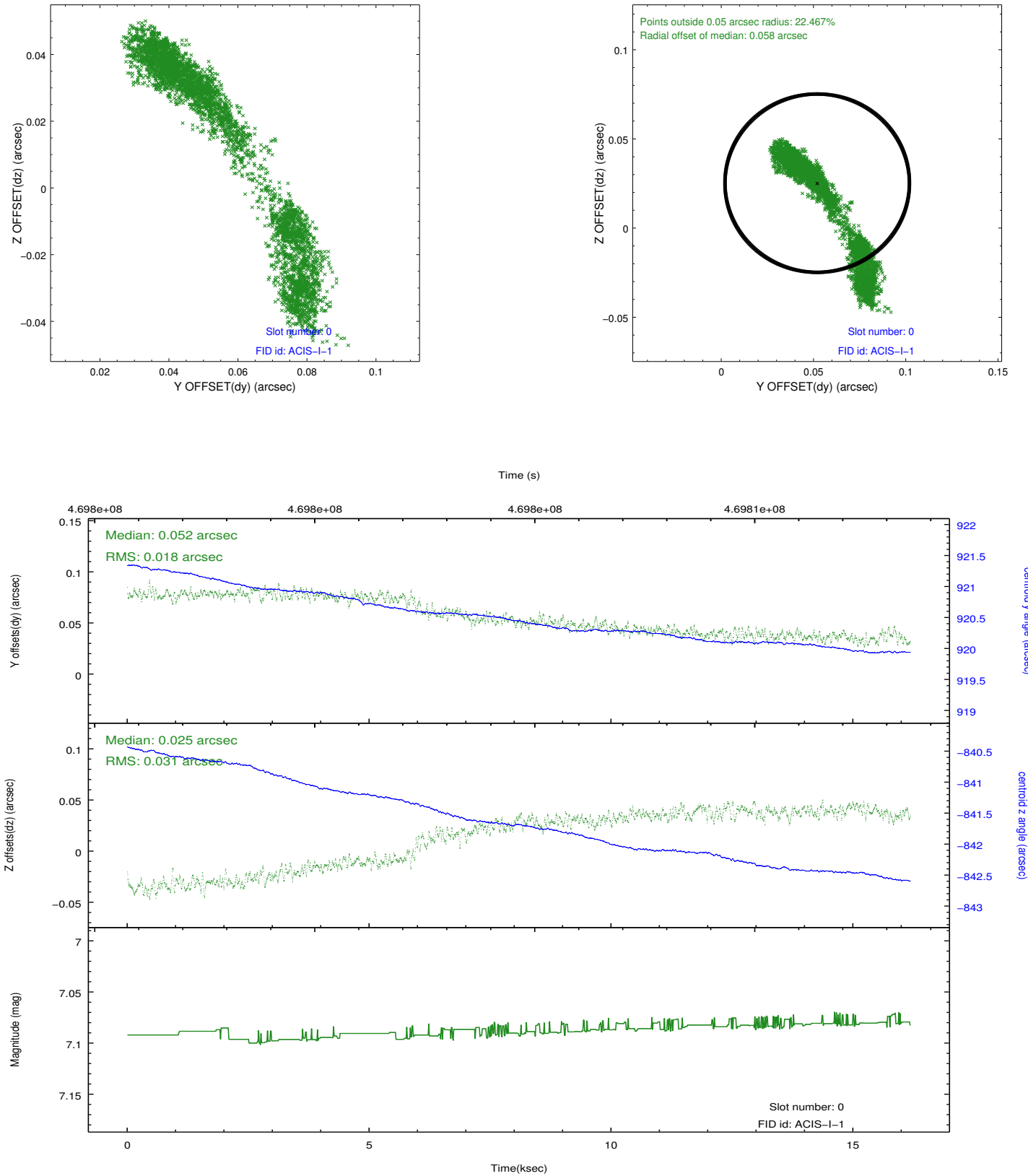


2.4.5 Slot 7

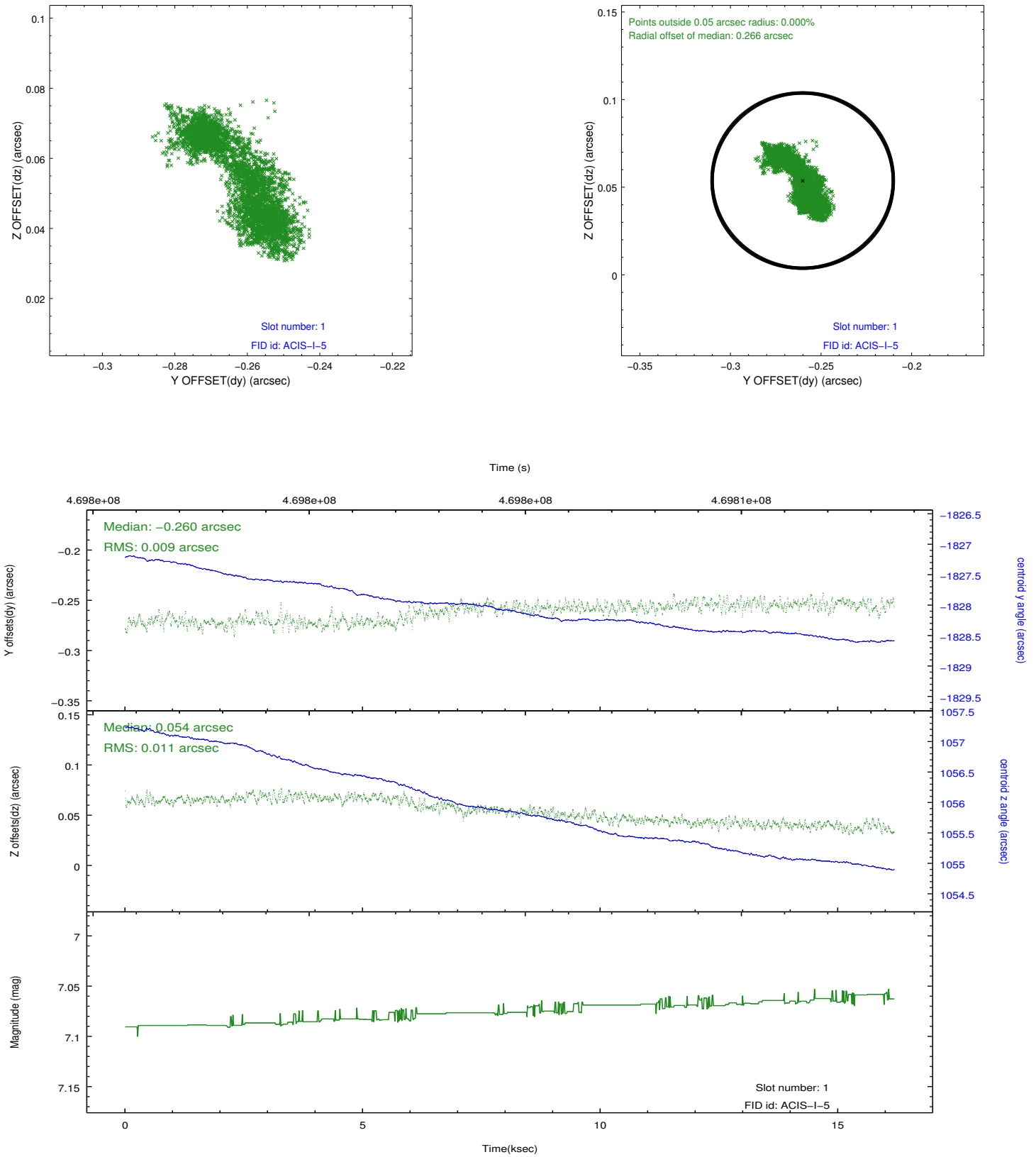


2.5 FID Slots

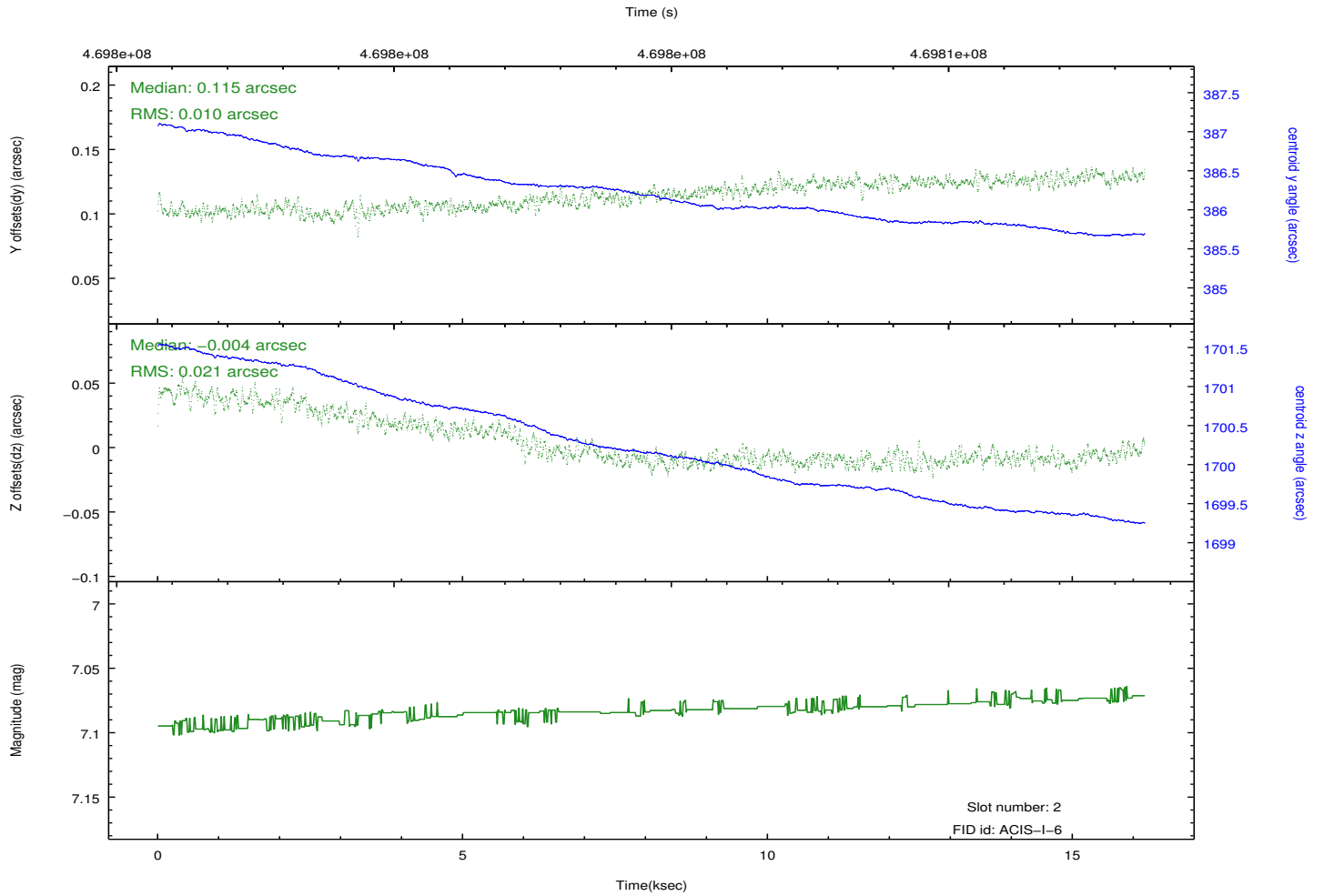
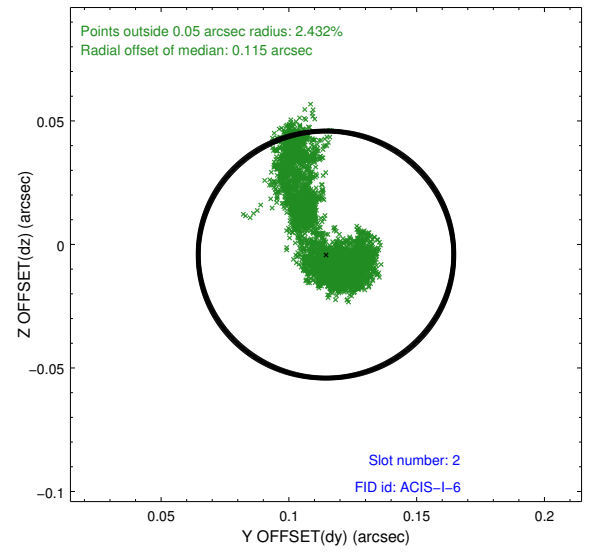
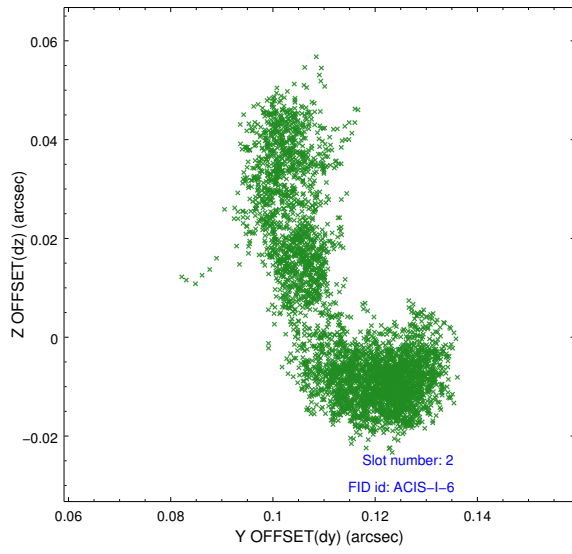
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2014.12.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	16.082022106469

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.