

V&V Reference Report

L2 ASCDS Version : 10

Observation 15371 - L2 Version 2
Chandra X-Ray Center

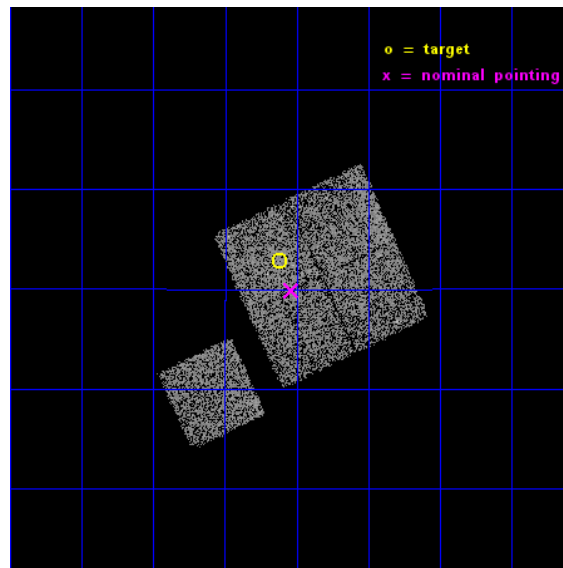
L2 Processing Date : Dec 4 2014

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1 Front

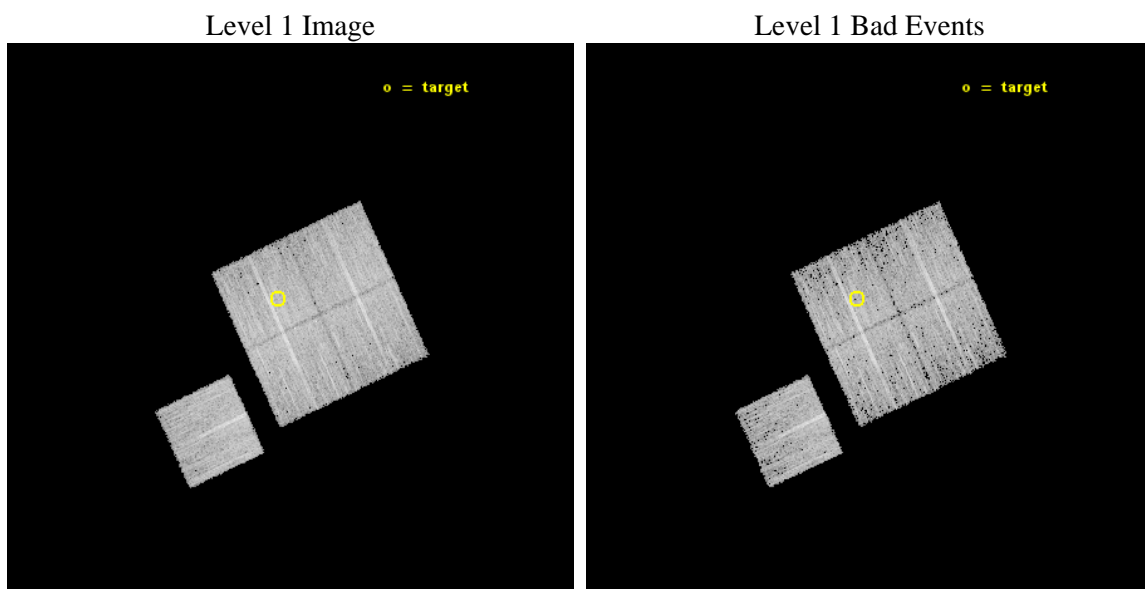
seq_num	801361	Sequence number
obs_id	15371	Observation id
title	A Search for Cool Cores in a Sample of $z = 0.4$ Galaxy Clusters	Pro
observer	Professor Gordon Garmire	Principal investigator
object	GMBCG J165.03085+02.04797	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	165.03	Observer's specified target RA [deg]
dec_targ	2.048	Observer's specified target Dec [deg]
ra_nom	165.00904126546	Nominal RA [deg]
dec_nom	1.9978329498619	Nominal Dec [deg]
roll_nom	244.99930778804	Nominal Roll [deg]
revision	2	Processing version of data
ontime	10087.400077581	Sum of GTIs [s]
livetime	9955.6007693319	Livetime [s]
ontime0	10087.400077581	Sum of GTIs [s]
ontime1	10087.400077581	Sum of GTIs [s]
ontime2	10087.400077581	Sum of GTIs [s]
ontime3	10087.400077581	Sum of GTIs [s]
ontime6	10087.400077581	Sum of GTIs [s]
l2events	24174	Number of level 2 events



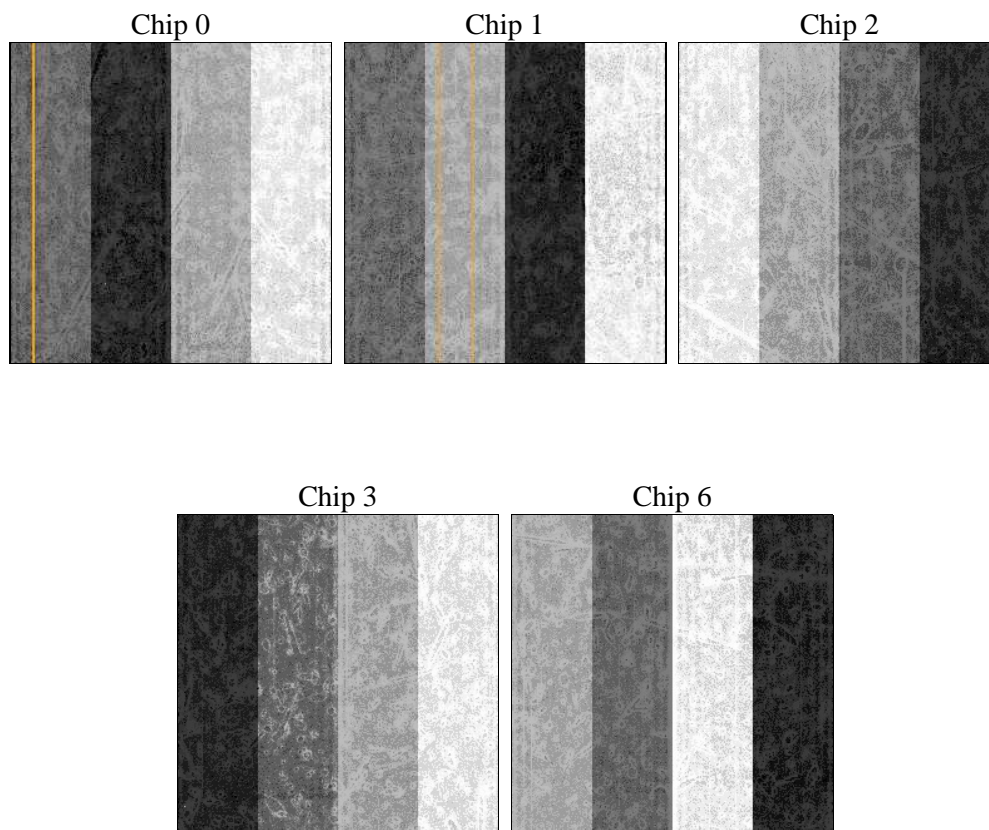
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.975000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	10087.400077581	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	10087.400077581	Sum of GTIs [s]
date	2014-12-04T09:53:56	Date and time of file creation	ontime1	10087.400077581	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	10087.400077581	Sum of GTIs [s]
			ontime3	10087.400077581	Sum of GTIs [s]
			ontime6	10087.400077581	Sum of GTIs [s]
			l1events	227517	Number of level 1 events

2.1.4 Events

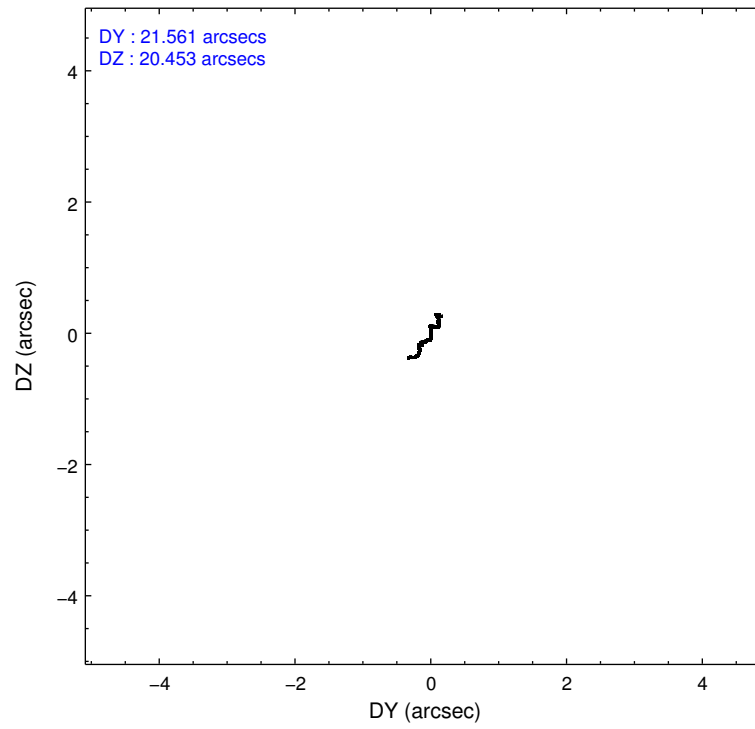
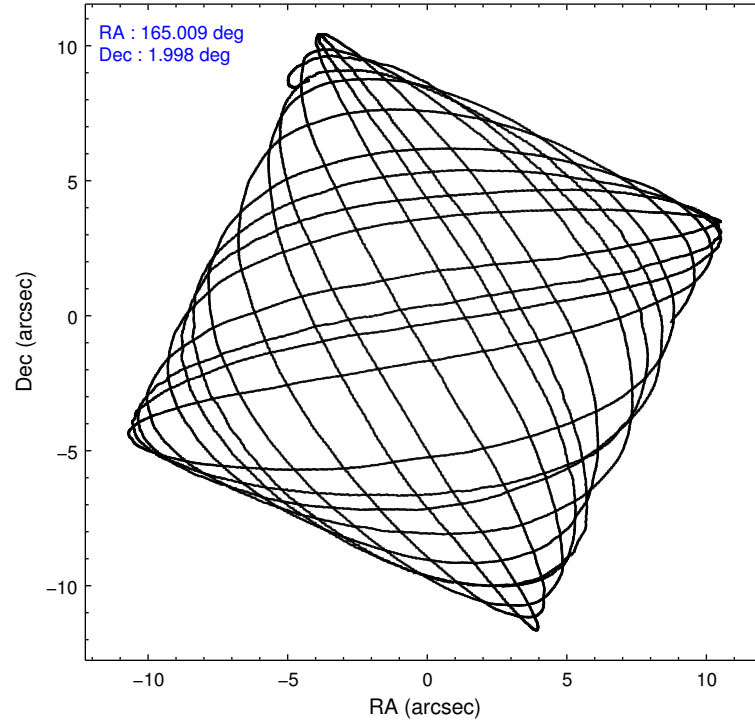
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	42106	44257	47197	47021	46936
rejected events	36540	38049	41660	41465	41395
rejected %	86%	85%	88%	88%	88%

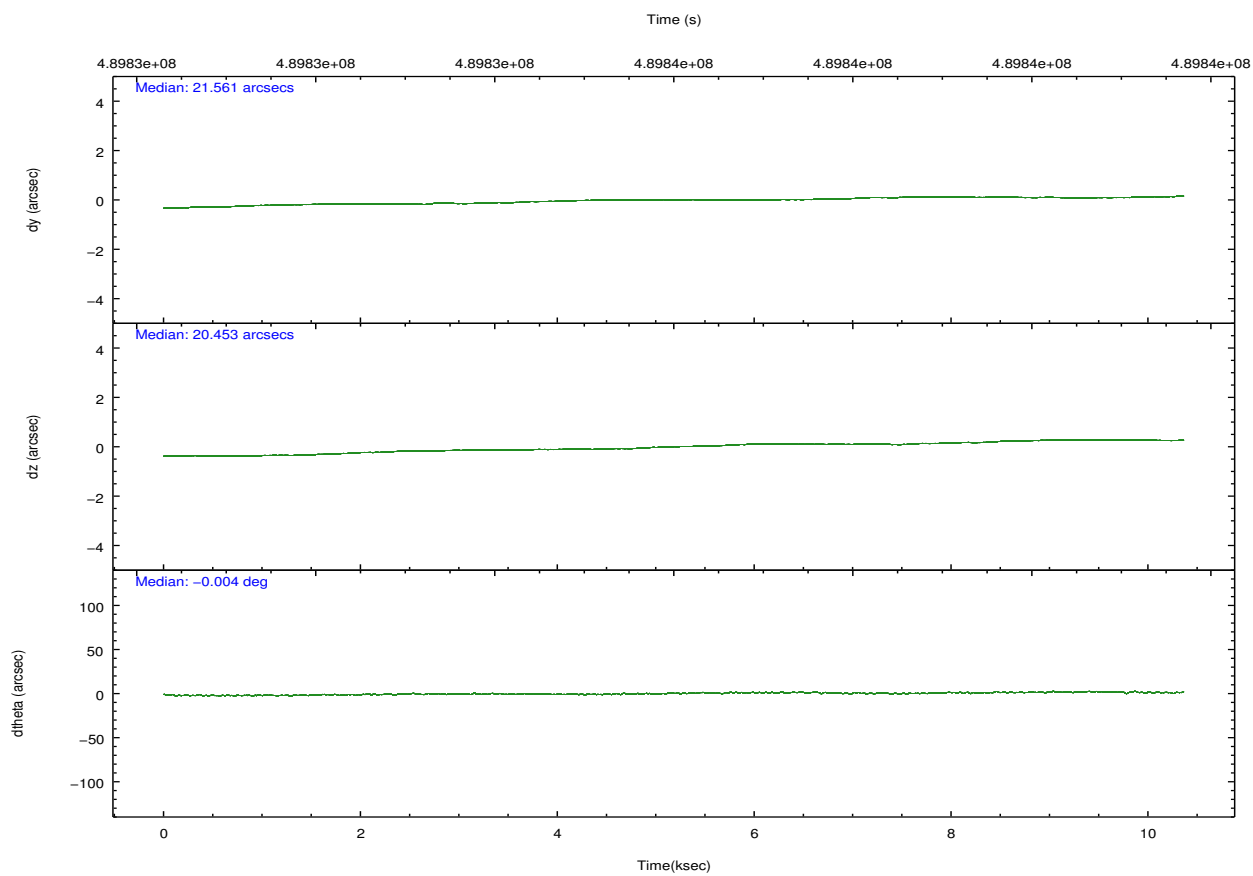
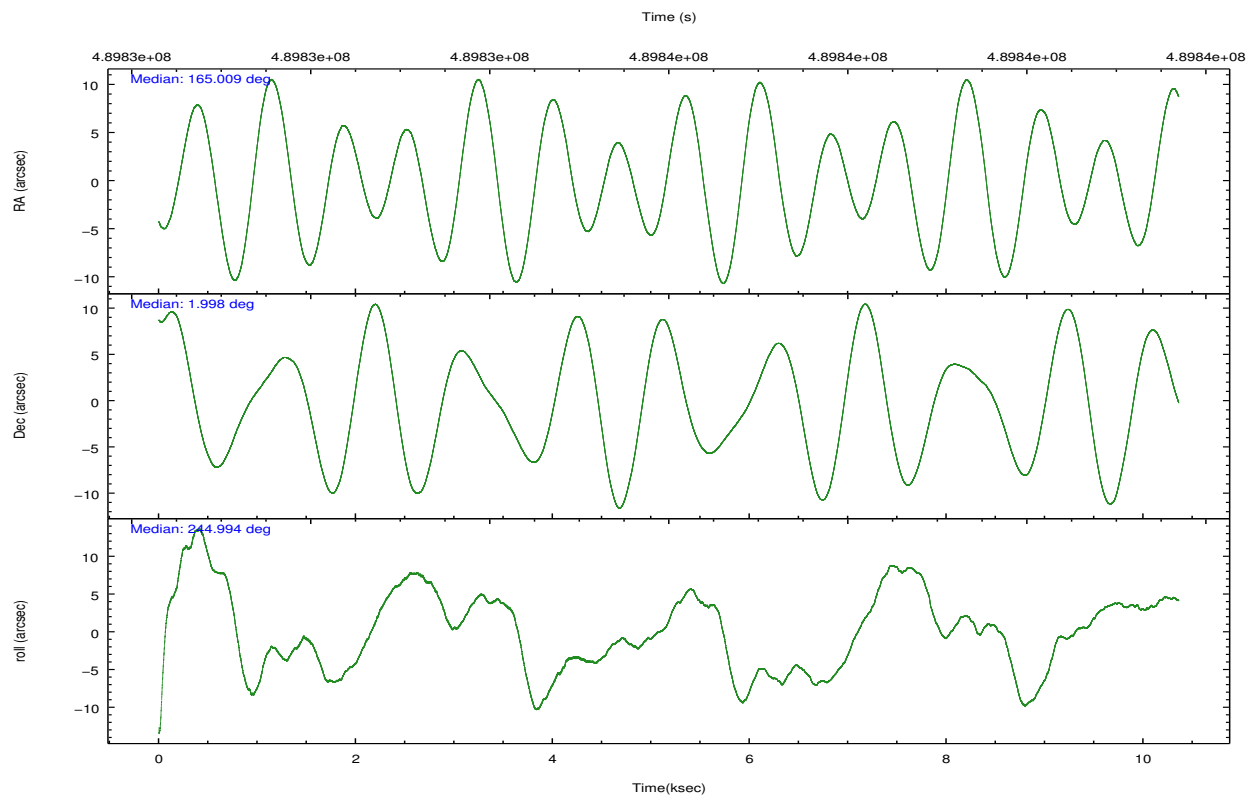
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	1895	2156	2046	2059	1835
	4%	4%	4%	4%	3%
grade 1 events	21	23	24	26	22
	0%	0%	0%	0%	0%
grade 2 events	1460	1520	1347	1206	1238
	3%	3%	2%	2%	2%
grade 3 events	550	625	541	579	593
	1%	1%	1%	1%	1%
grade 4 events	561	598	547	613	566
	1%	1%	1%	1%	1%
grade 5 events	2133	2354	2059	2596	2468
	5%	5%	4%	5%	5%
grade 6 events	1105	1315	1061	1101	1314
	2%	2%	2%	2%	2%
grade 7 events	34381	35666	39572	38841	38900
	81%	80%	83%	82%	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	165.006517	165.0090412654612	CCD I2 on	Y	Y
[deg] Pointing Dec	2.025157	1.997832949861899	CCD I3 on	Y	Y
[deg] Pointing Roll	244.790734	244.9993077880411	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	-225.842463	-225.8433433320239	CCD S3 on	N	N
[mm] SIM translation stage offset	-7.75	-7.749109670905796	CCD S4 on	N	N
[s] Observation start time (MET)	489831179.184000	489830151.98142	CCD S5 on	N	N
Observation start date	2013-07-10T08:11:52	2013-07-10T07:55:51	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	489841180.184000	489841415.19453	On-chip summing requested	N	N
Observation end date	2013-07-10T10:58:33	2013-07-10T11:03:35	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



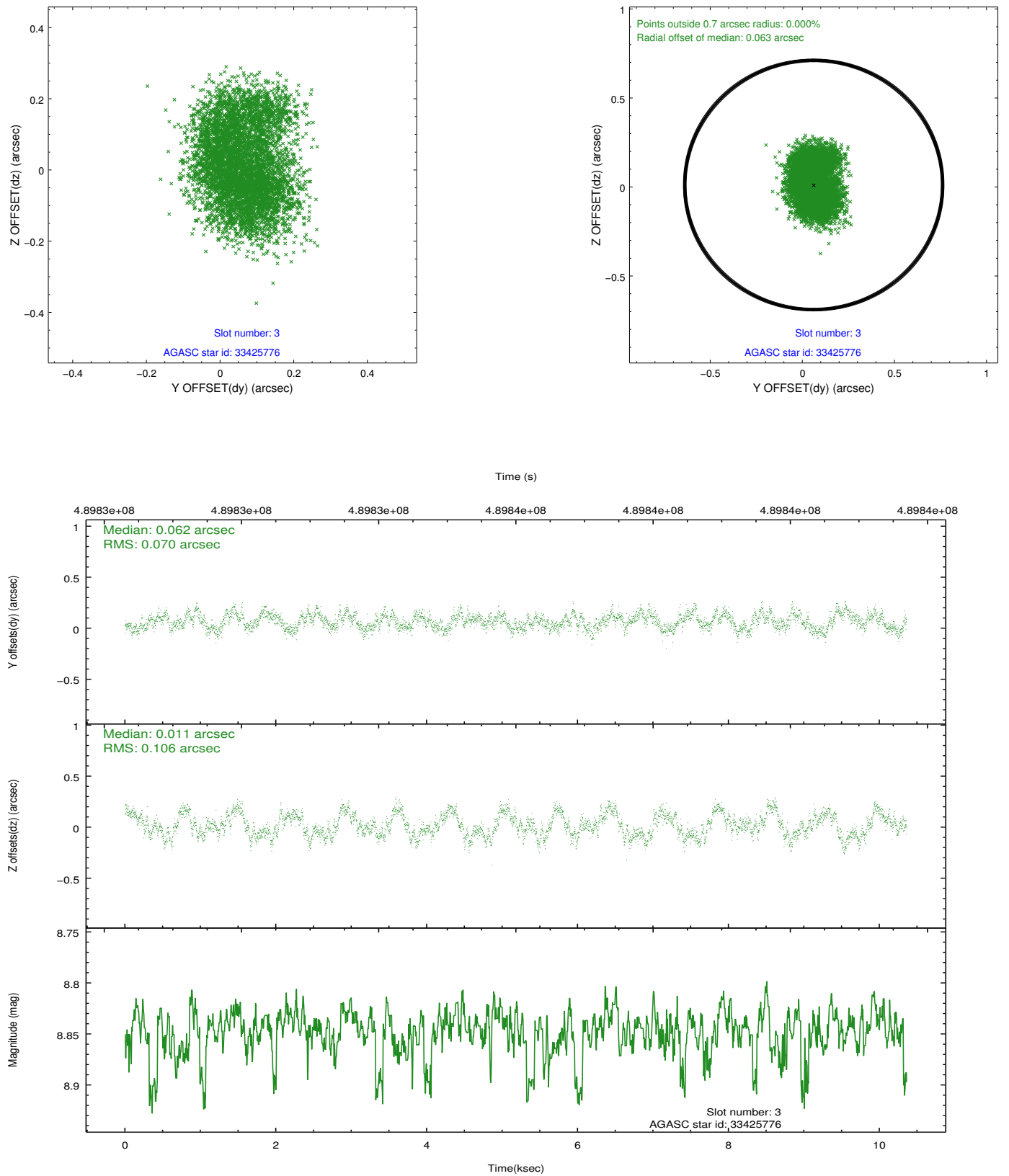


Slot Statistics

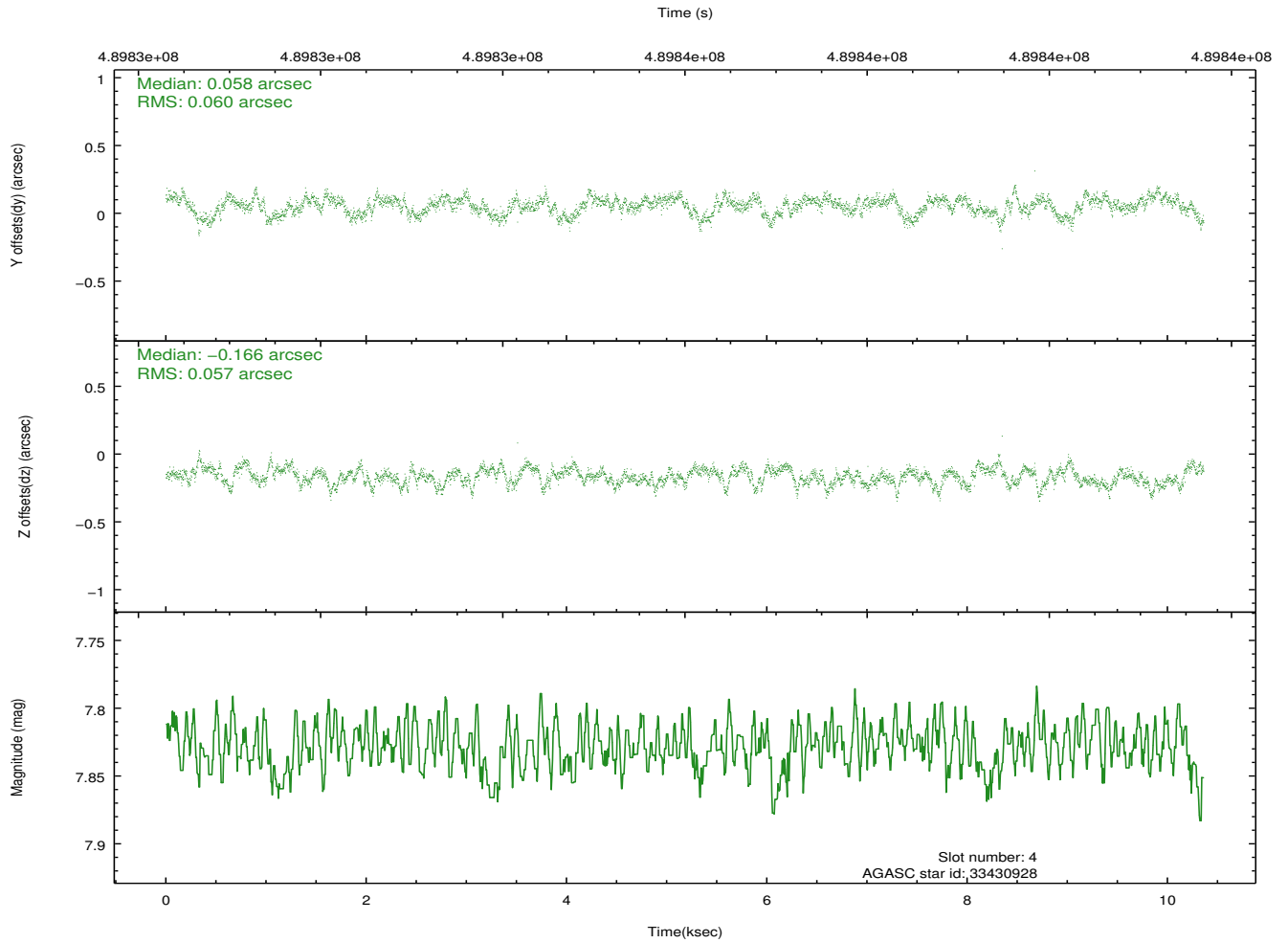
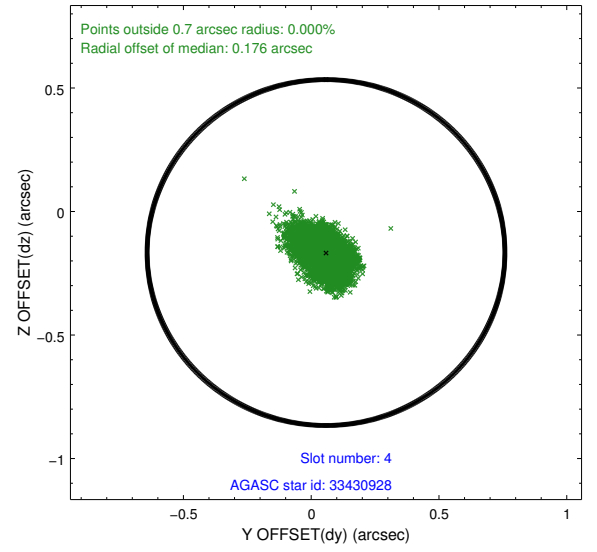
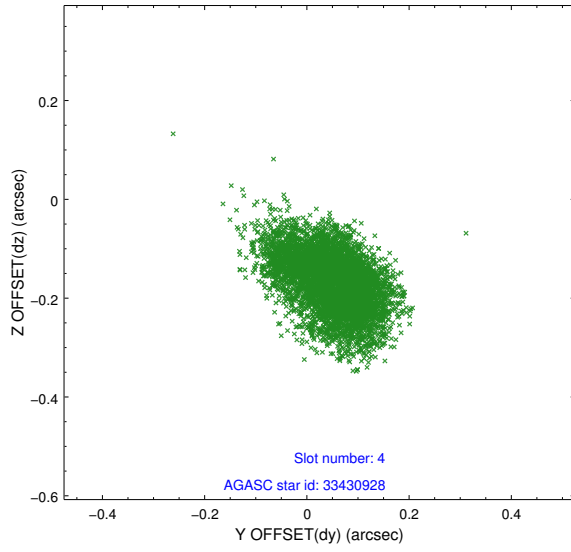
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.00	2527	0.129	-0.106	0.010	0.018	0.000000	0.000000	917.77	-1003.32
1	FID		ACIS-I-5	6.98	2527	-0.301	0.098	0.008	0.013	0.000000	0.000000	-1830.55	893.96
2	FID		ACIS-I-6	7.00	2527	0.080	0.078	0.008	0.013	0.000000	0.000000	382.63	1539.09
3	GUIDE	used	33425776	8.85	5041	0.062	0.011	0.140	0.210	164.749355	2.195075	-158.54	-1097.09
4	GUIDE	used	33430928	7.83	5055	0.058	-0.166	0.088	0.143	164.698903	1.729219	1436.65	-548.04
5	GUIDE	used	34341752	8.73	5032	-0.050	0.120	0.102	0.159	165.034896	2.226387	-697.75	-216.32
6	GUIDE	used	34341888	8.35	5054	-0.117	-0.045	0.117	0.234	165.574547	2.189540	-1405.83	1596.00
7	GUIDE	used	34348288	10.13	5021	0.050	0.056	0.272	0.426	165.335931	1.306415	1836.14	2175.49

2.4 Star Slots

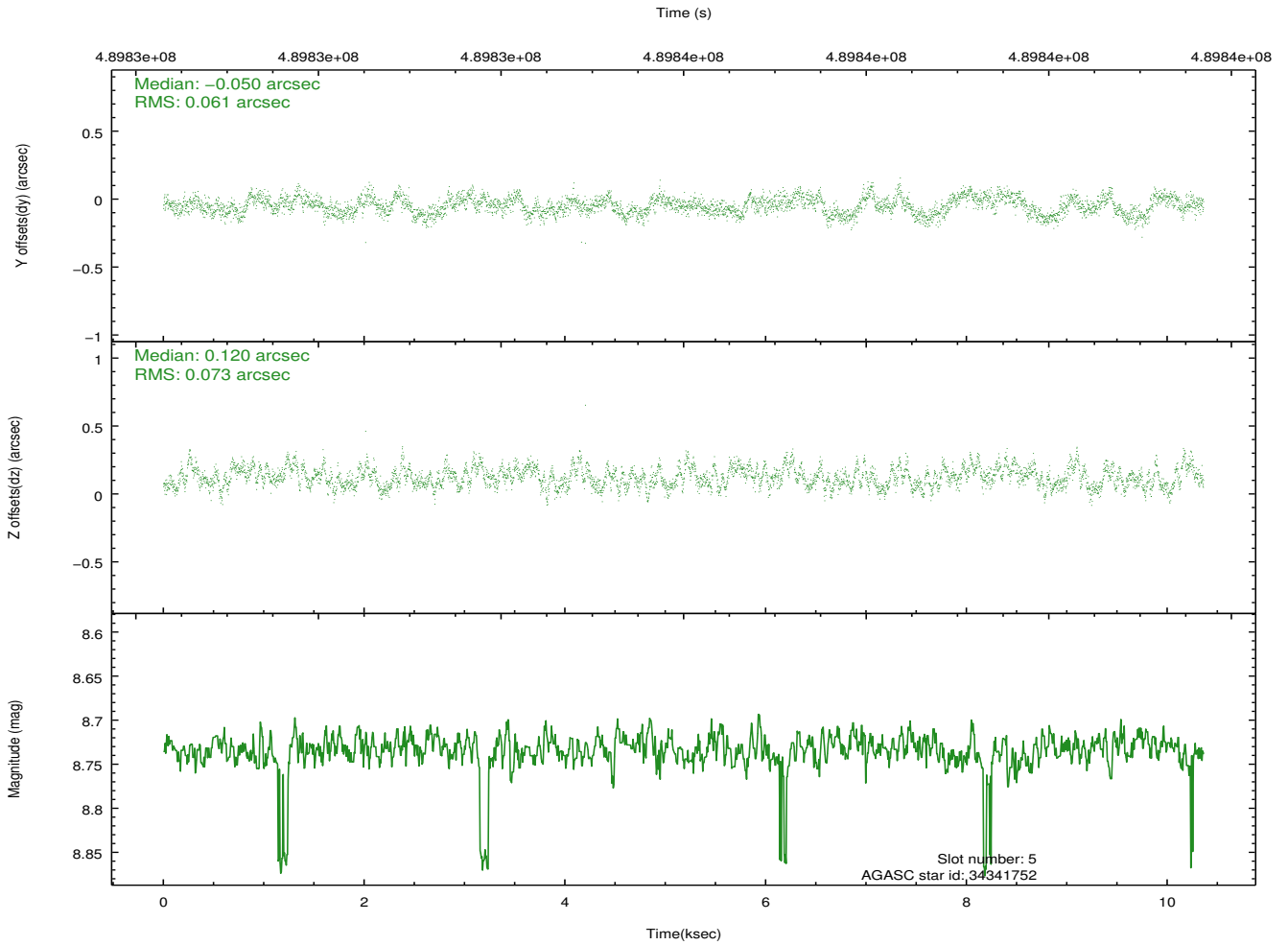
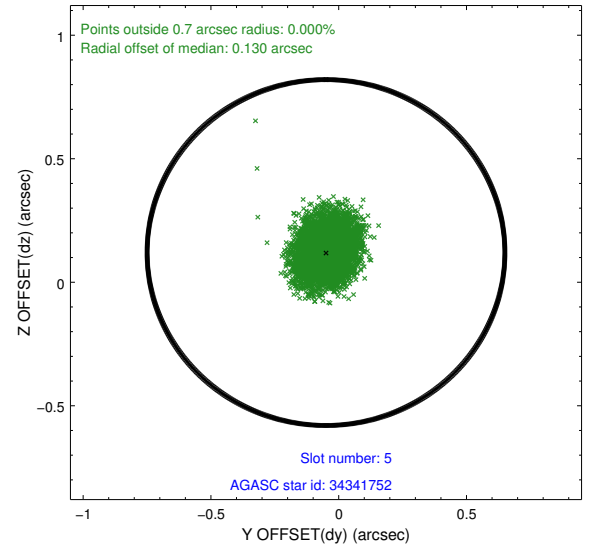
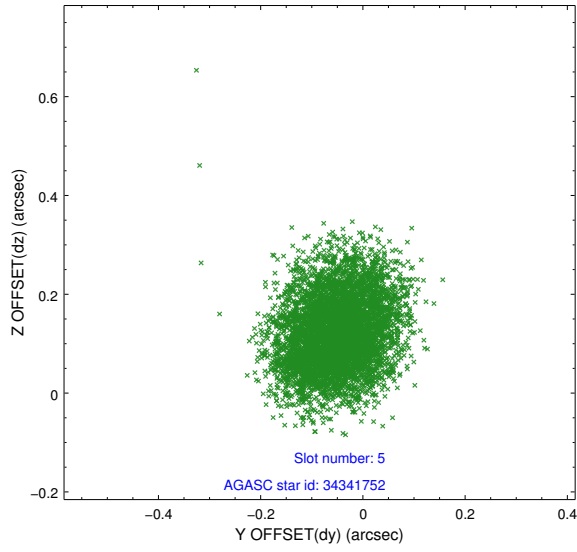
2.4.1 Slot 3



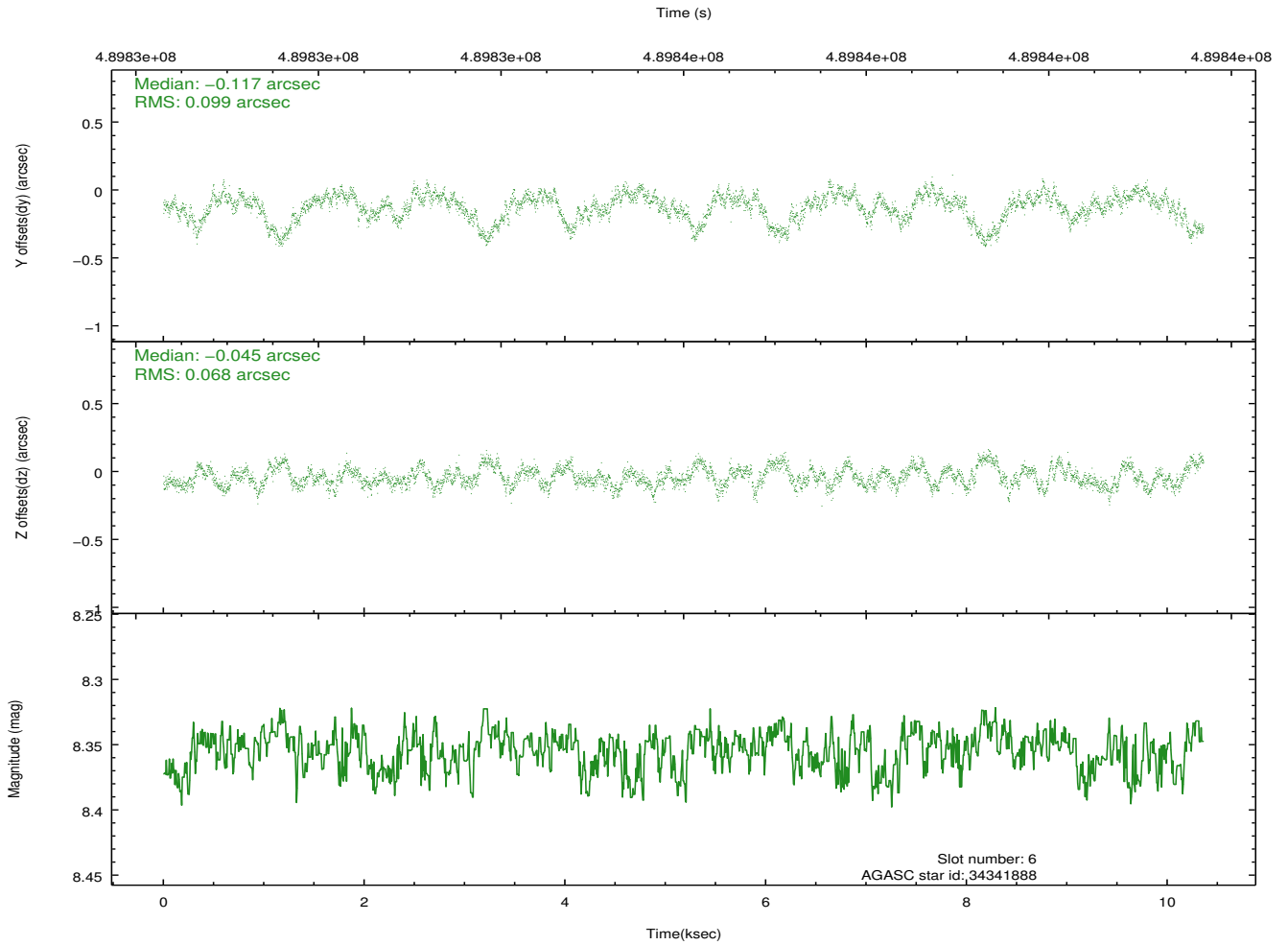
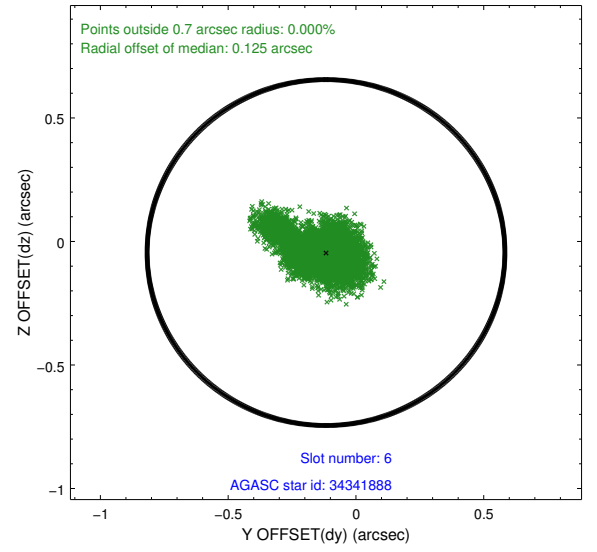
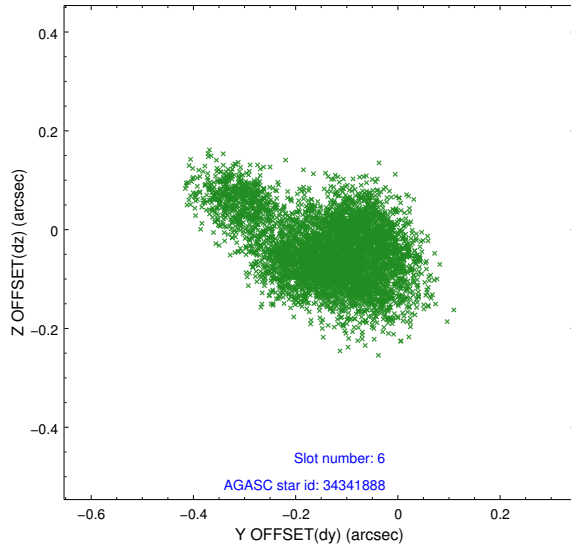
2.4.2 Slot 4



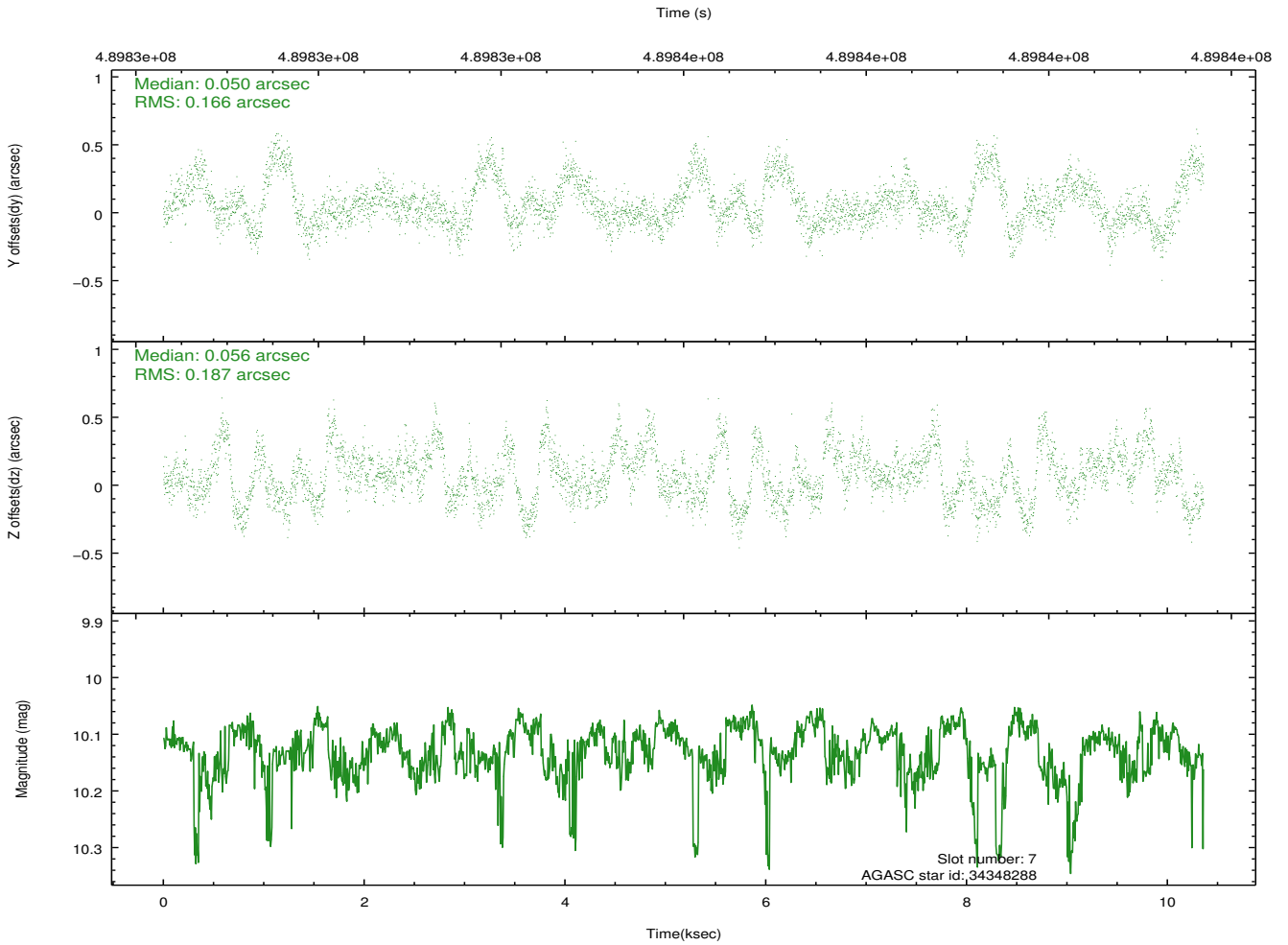
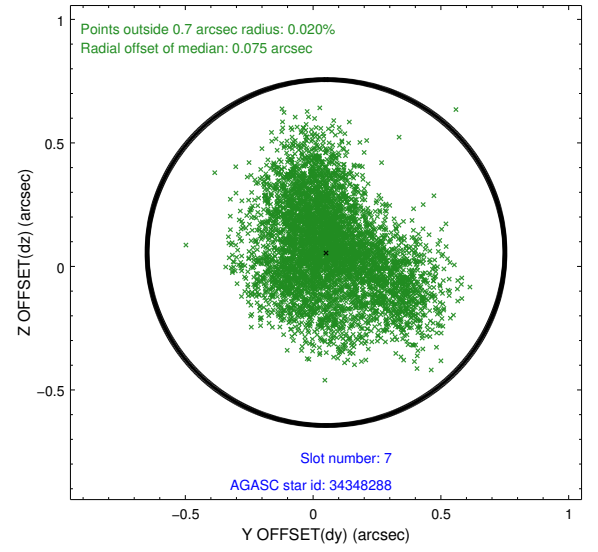
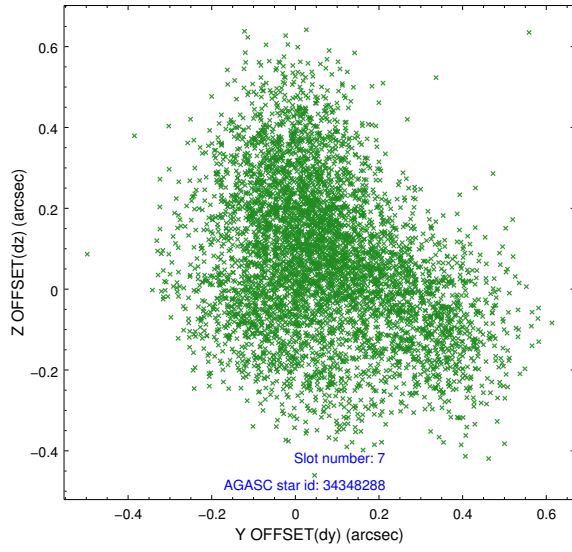
2.4.3 Slot 5



2.4.4 Slot 6

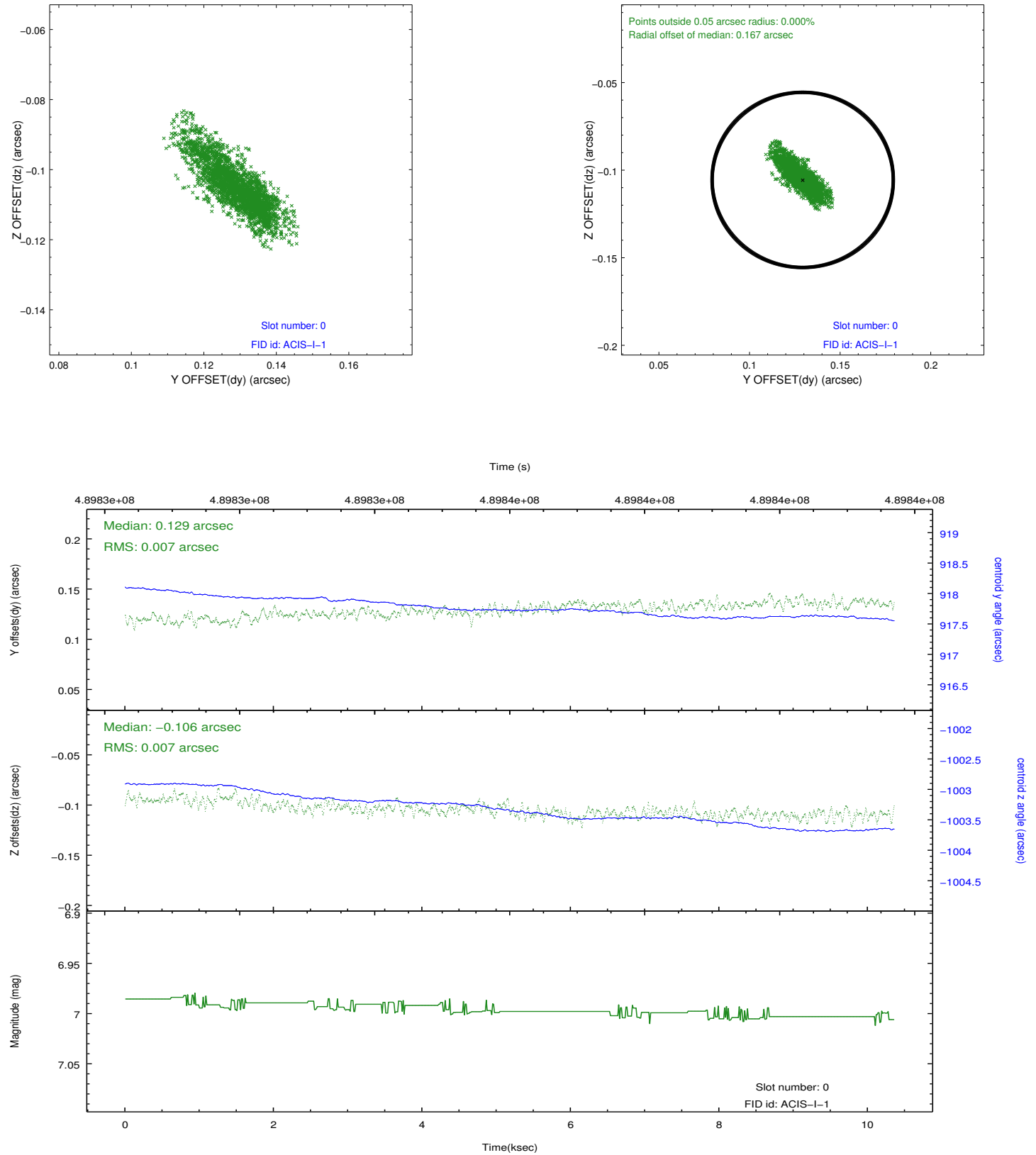


2.4.5 Slot 7

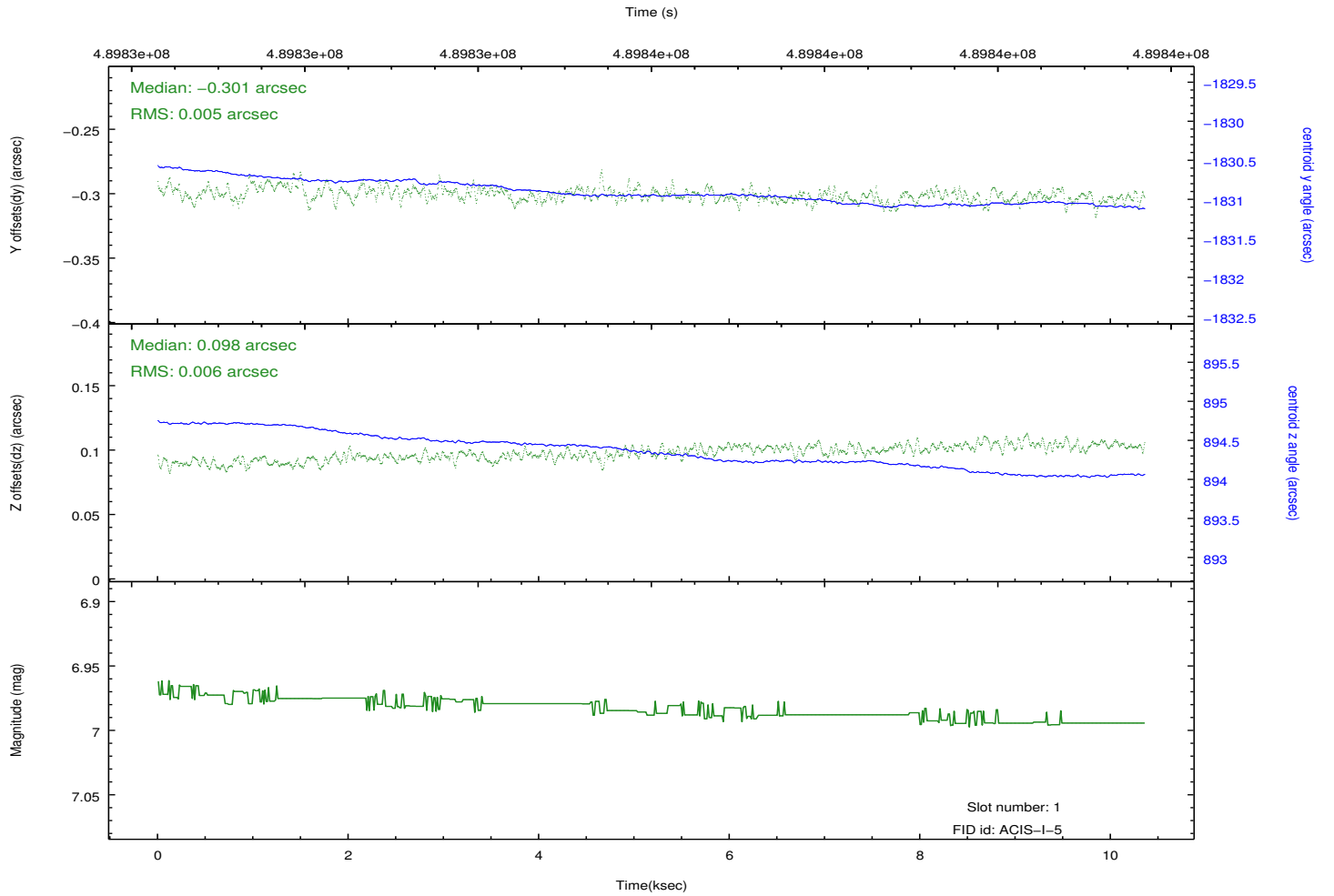
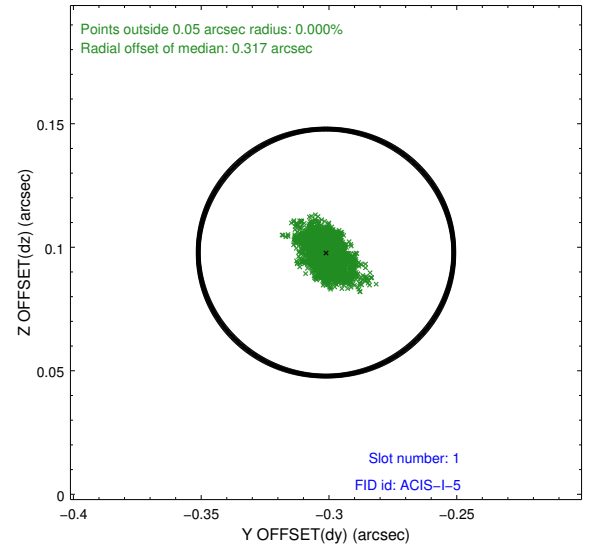
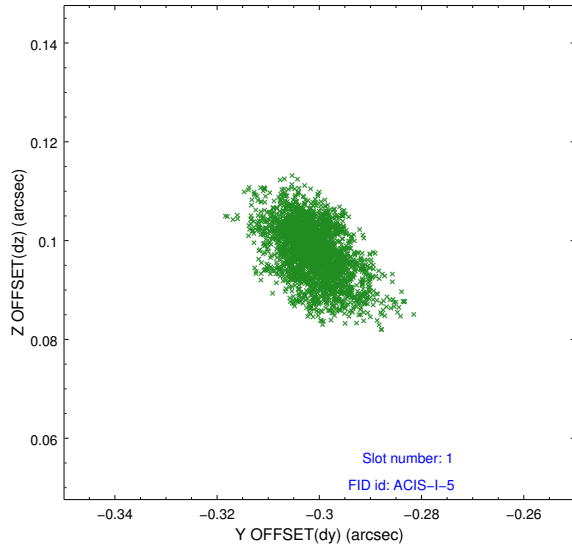


2.5 FID Slots

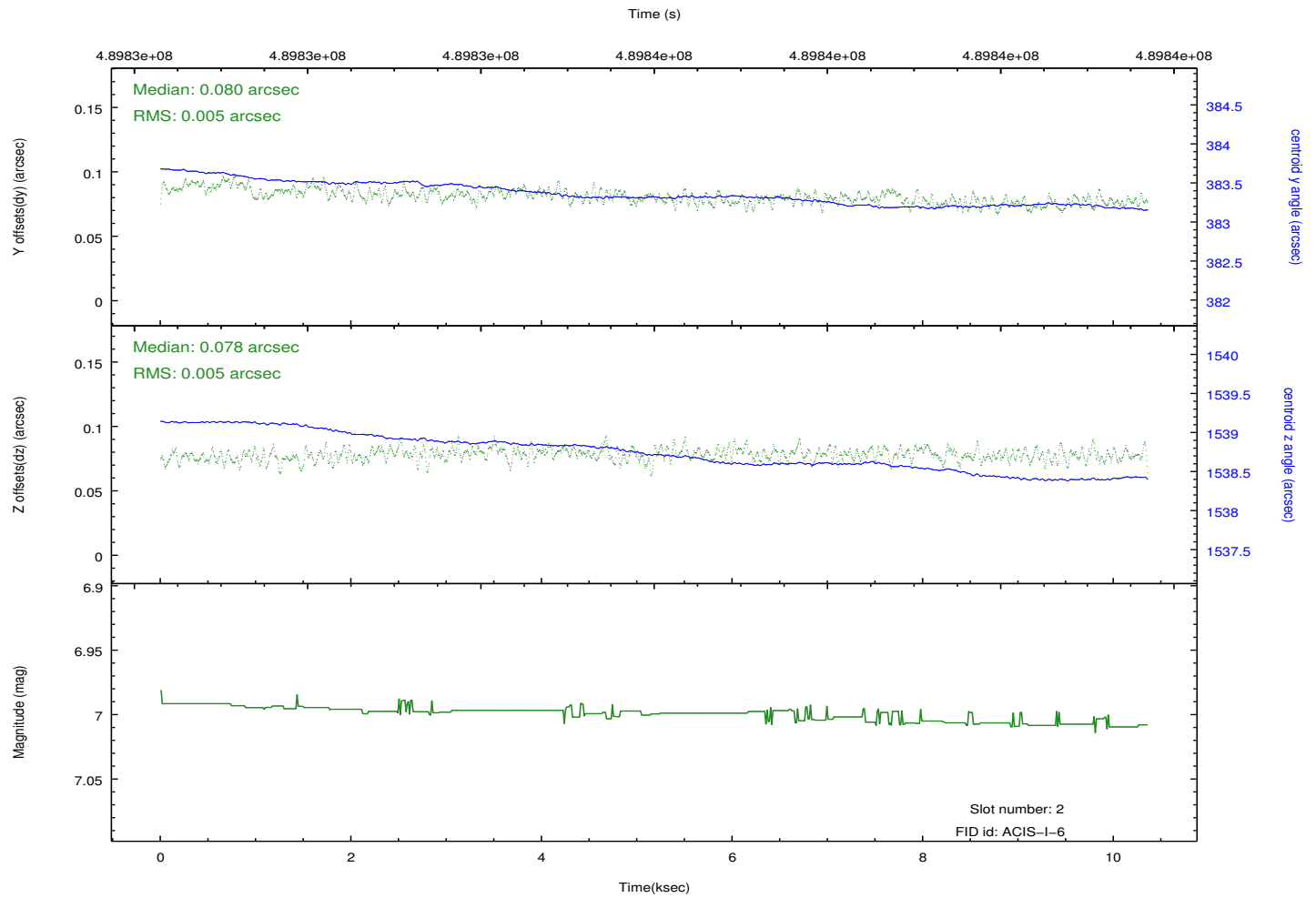
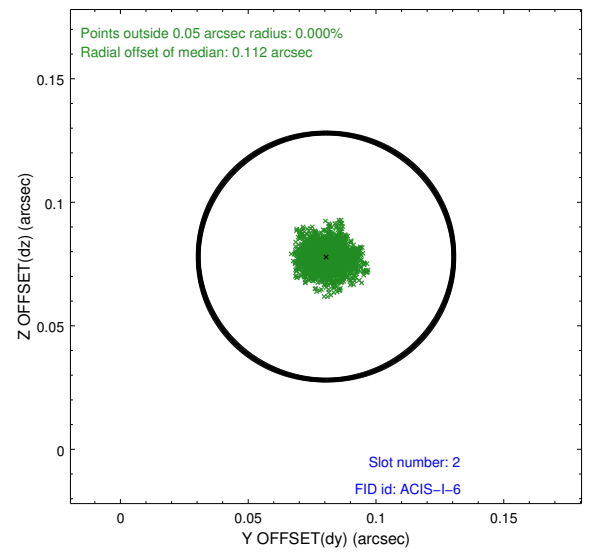
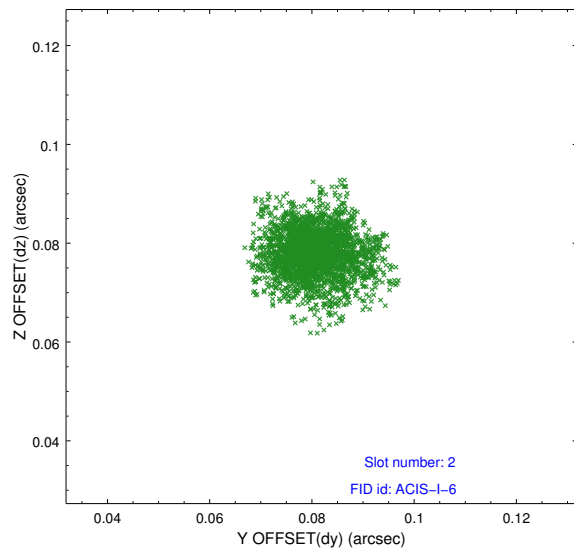
2.5.1 Slot 0



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)	2014.12.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.087400077581

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.