

V&V Reference Report

L2 ASCDS Version : 10.2.1

Observation 15756 - L2 Version 2
Chandra X-Ray Center

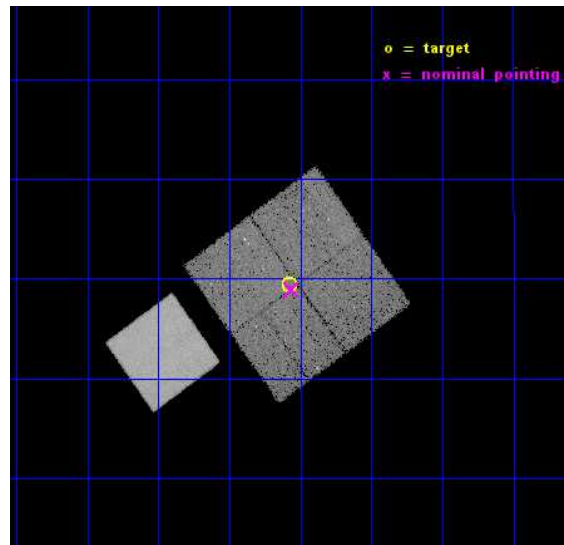
L2 Processing Date : Dec 10 2014

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1 Front

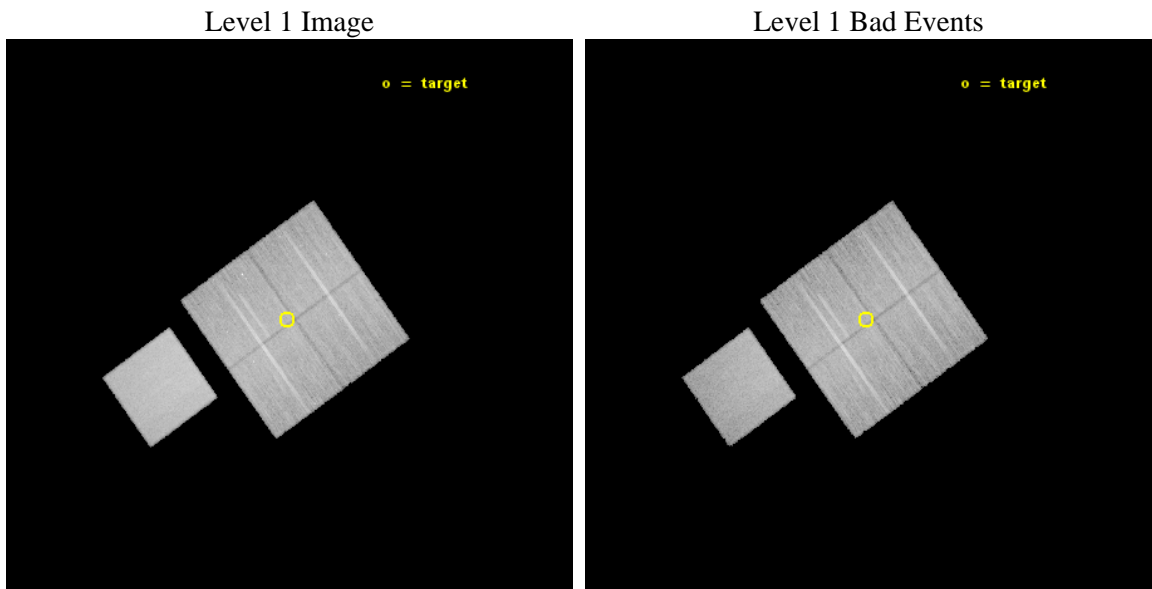
seq_num	401553	Sequence number
obs_id	15756	Observation id
title	Searching for a Metallicity Effect in Field X-ray Binaries	Proposa
observer	Prof. Thomas Maccarone	Principal investigator
object	NGC 4472 Halo-1	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	187.268333	Observer's specified target RA [deg]
dec_targ	7.823361	Observer's specified target Dec [deg]
ra_nom	187.26574400339	Nominal RA [deg]
dec_nom	7.8156875301718	Nominal Dec [deg]
roll_nom	234.20904110251	Nominal Roll [deg]
revision	2	Processing version of data
ontime	32499.398587942	Sum of GTIs [s]
livetime	32074.770019681	Livetime [s]
ontime0	32499.275467932	Sum of GTIs [s]
ontime1	32499.316507936	Sum of GTIs [s]
ontime2	32499.357547939	Sum of GTIs [s]
ontime3	32499.398587942	Sum of GTIs [s]
ontime7	32499.439627945	Sum of GTIs [s]
l2events	163977	Number of level 2 events



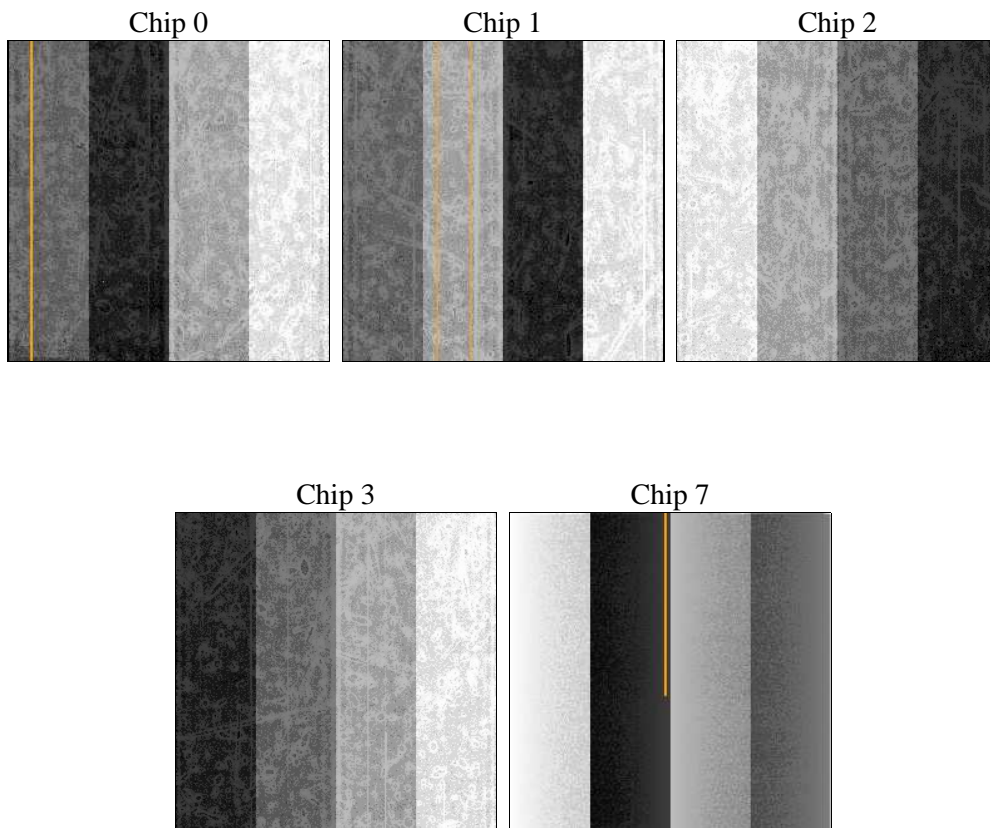
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	32428.522000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	32499.398587942	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	32499.275467932	Sum of GTIs [s]
date	2014-12-11T03:27:17	Date and time of file creation	ontime1	32499.316507936	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	32499.357547939	Sum of GTIs [s]
			ontime3	32499.398587942	Sum of GTIs [s]
			ontime7	32499.439627945	Sum of GTIs [s]
			l1events	806396	Number of level 1 events

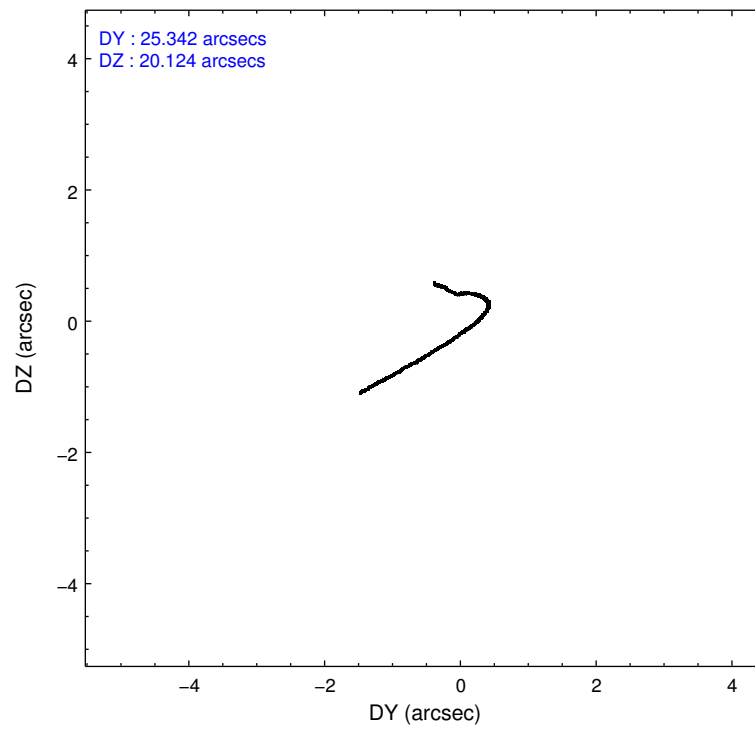
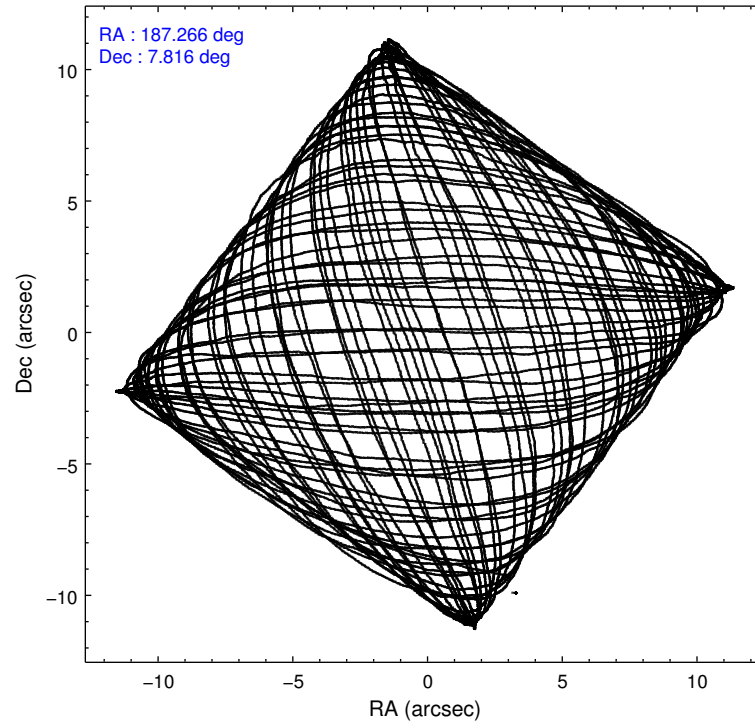
2.1.4 Events

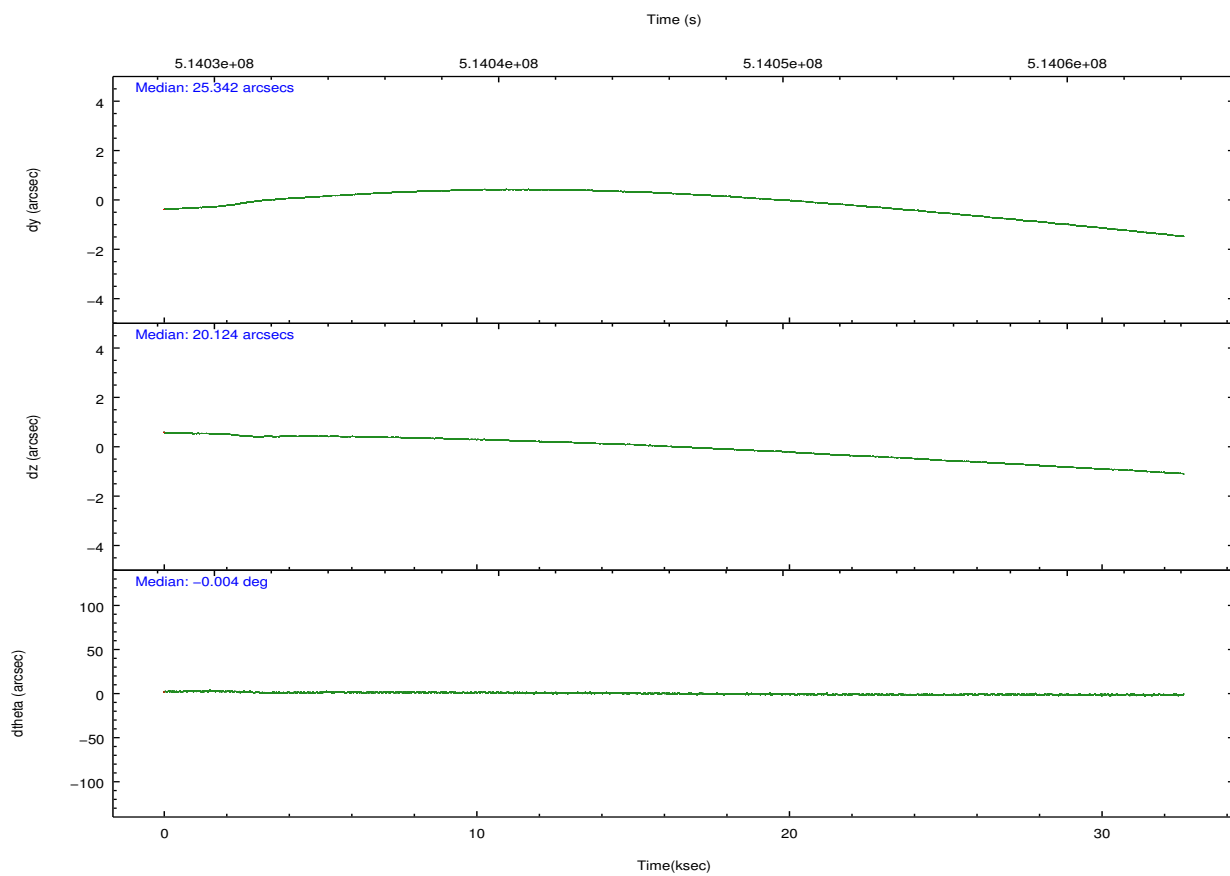
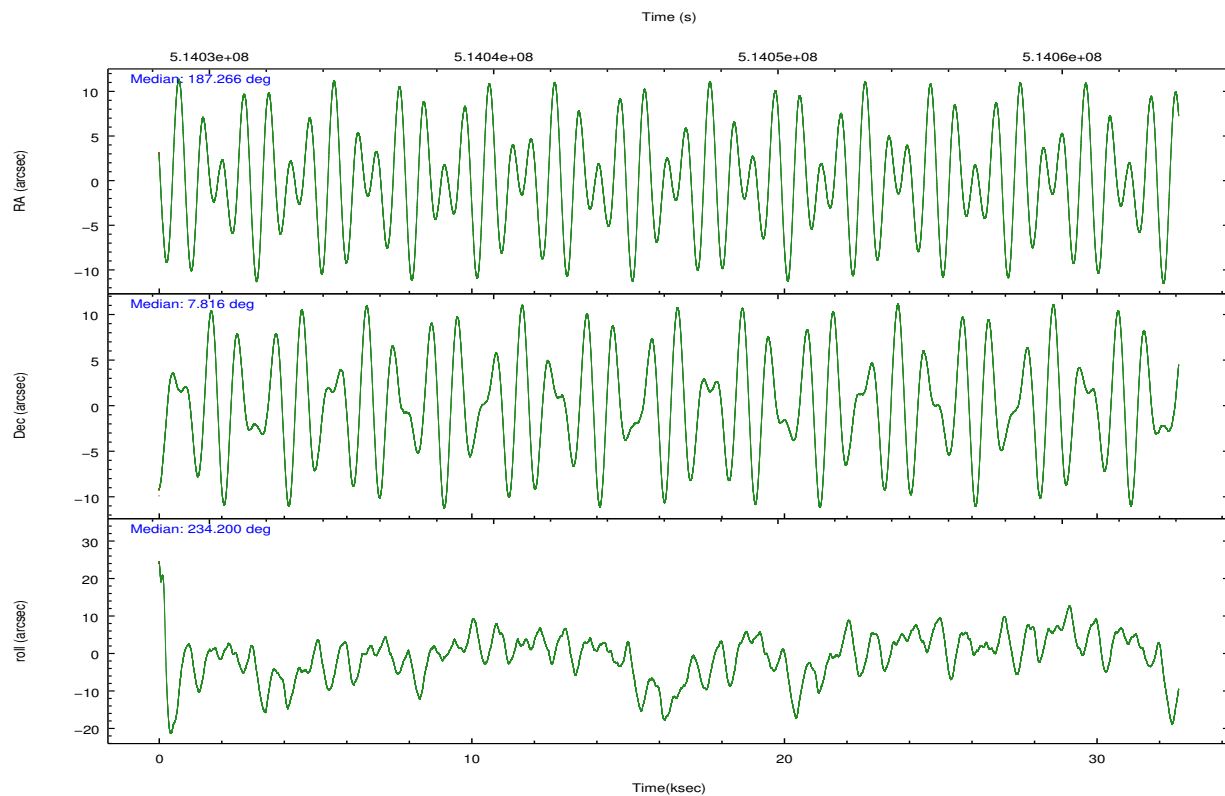
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
level 1 events	137653	144693	154148	151748	218154	grade 0 events	7098	9435	7737	9870	8605
rejected events	118447	121460	134709	129563	123907		5%	6%	5%	6%	3%
rejected %	86%	83%	87%	85%	56%	grade 1 events	84	91	80	97	232
							0%	0%	0%	0%	0%
						grade 2 events	4626	5170	4479	4534	19432
							3%	3%	2%	2%	8%
						grade 3 events	1961	2065	1864	2033	7795
							1%	1%	1%	1%	3%
						grade 4 events	1782	2130	1852	1945	7986
							1%	1%	1%	1%	3%
						grade 5 events	7590	7819	7000	8588	22349
							5%	5%	4%	5%	10%
						grade 6 events	3742	4435	3510	3805	50441
							2%	3%	2%	2%	23%
						grade 7 events	110770	113548	127626	120876	101314
							80%	78%	82%	79%	46%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01237	ACIS-01237	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	187.268439	187.2657440033934	CCD I2 on	Y	Y
[deg] Pointing Dec	7.843068	7.815687530171823	CCD I3 on	Y	Y
[deg] Pointing Roll	233.999989	234.2090411025112	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	N
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	O2	Y
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	514030039.184000	514029095.40791	CCD S5 on	N	N
Observation start date	2014-04-16T10:06:12	2014-04-16T09:51:35	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	514062468.184000	514062704.64726	On-chip summing requested	N	N
Observation end date	2014-04-16T19:06:41	2014-04-16T19:11:44	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



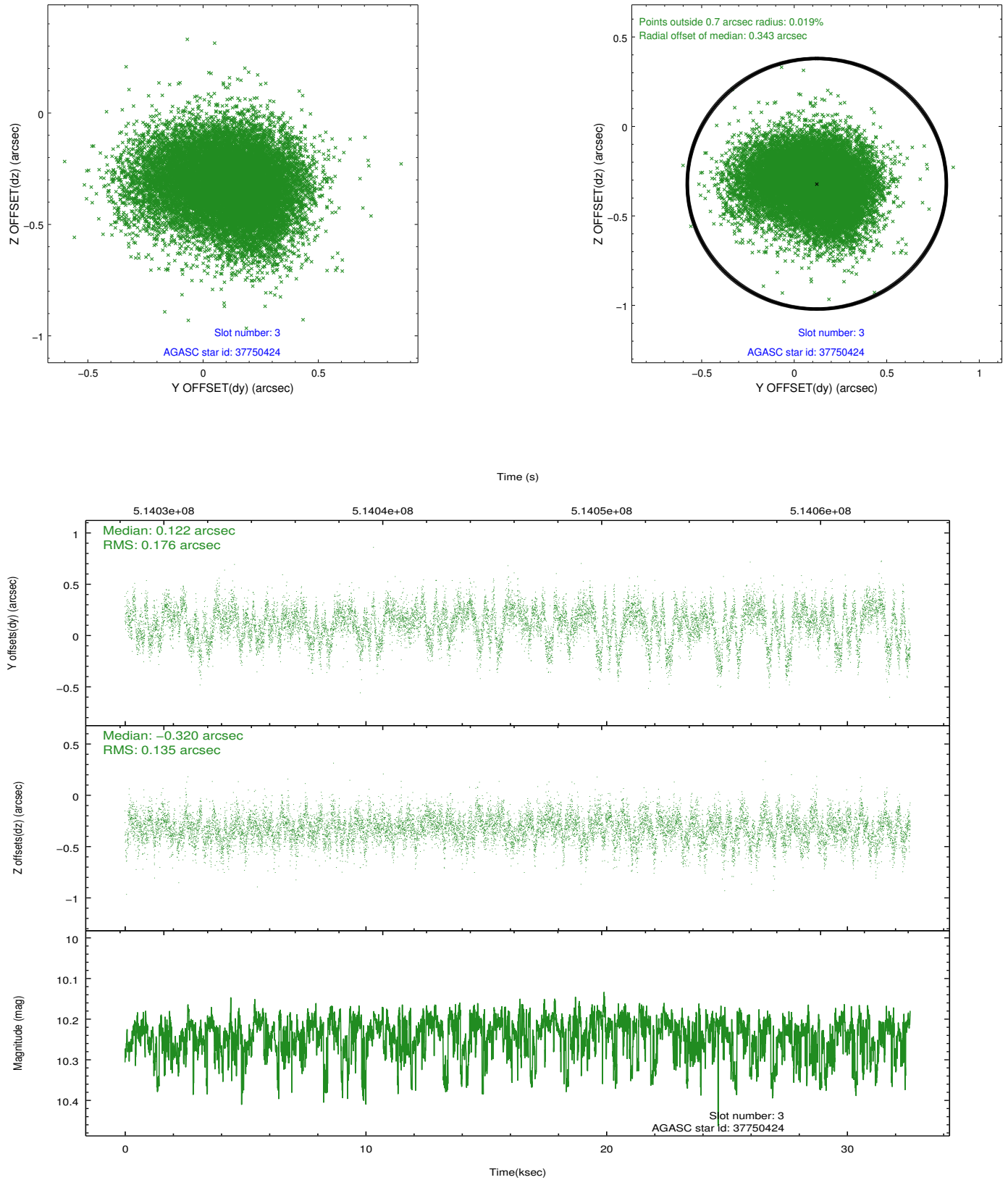


Slot Statistics

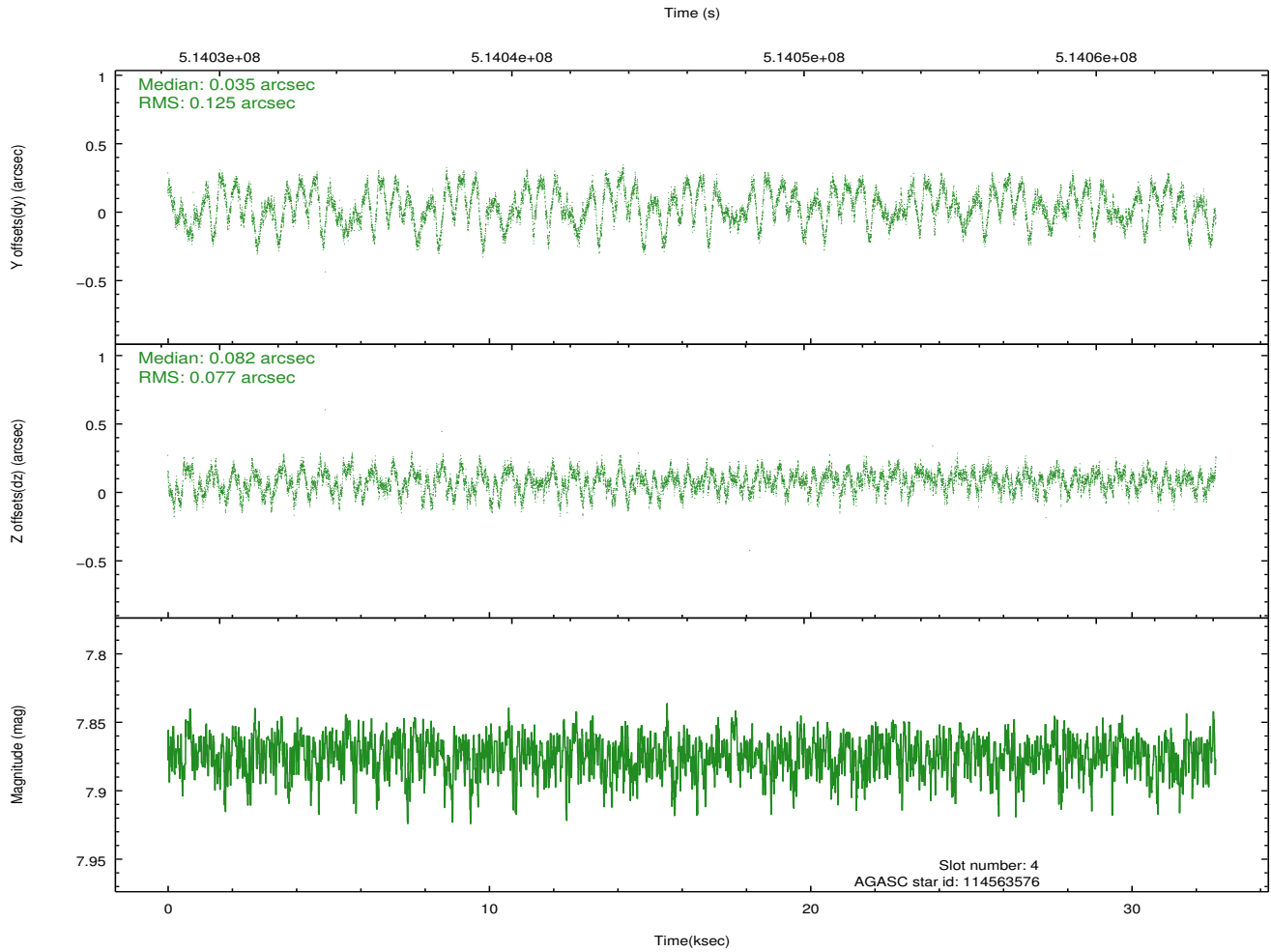
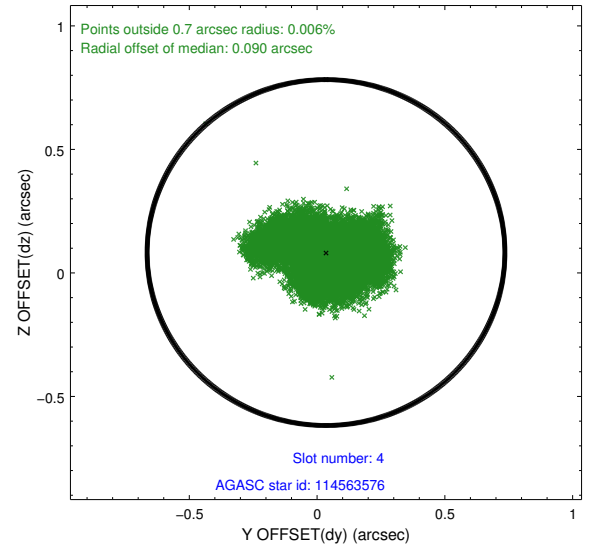
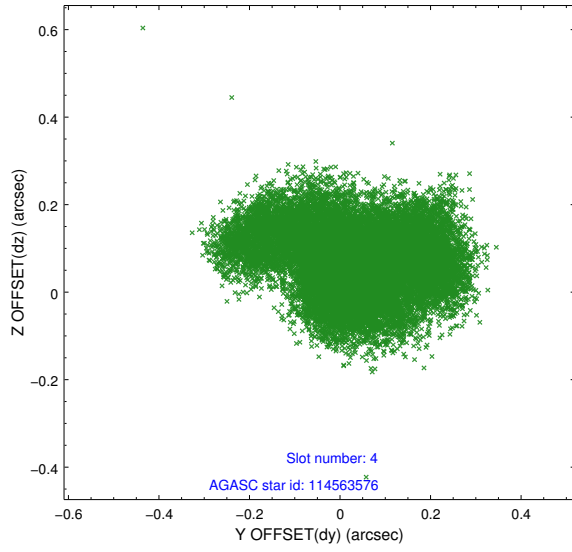
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.08	7957	0.032	0.006	0.027	0.048	0.000000	0.000000	914.07	-843.71
1	FID		ACIS-I-5	7.07	7956	-0.285	0.020	0.009	0.024	0.000000	0.000000	-1834.40	1053.66
2	FID		ACIS-I-6	7.08	7957	0.160	0.048	0.022	0.040	0.000000	0.000000	379.58	1698.33
3	GUIDE	used	37750424	10.23	15541	0.122	-0.320	0.234	0.388	187.394526	7.010452	2160.38	2126.60
4	GUIDE	used	114563576	7.87	15910	0.035	0.082	0.161	0.245	186.867039	8.012388	348.94	-1516.53
5	GUIDE	used	114563648	9.77	15892	0.029	0.170	0.187	0.284	187.009208	7.938475	265.63	-949.77
6	GUIDE	used	114565064	9.92	15809	-0.087	-0.186	0.226	0.368	187.898151	7.788605	-1162.66	1931.12
7	GUIDE	used	114565080	10.13	15607	-0.094	0.265	0.317	0.534	186.537681	7.759404	1774.61	-1932.29

2.4 Star Slots

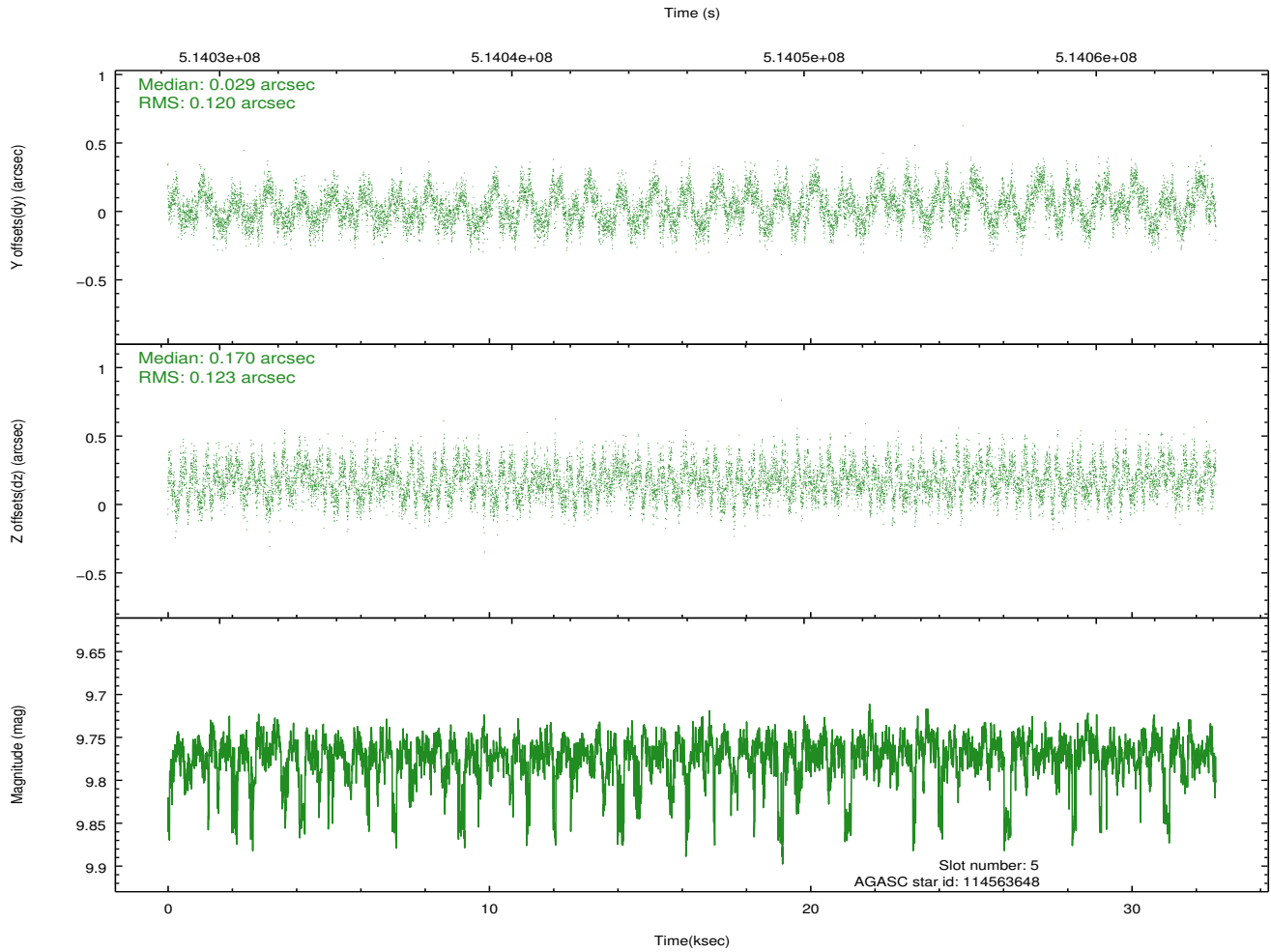
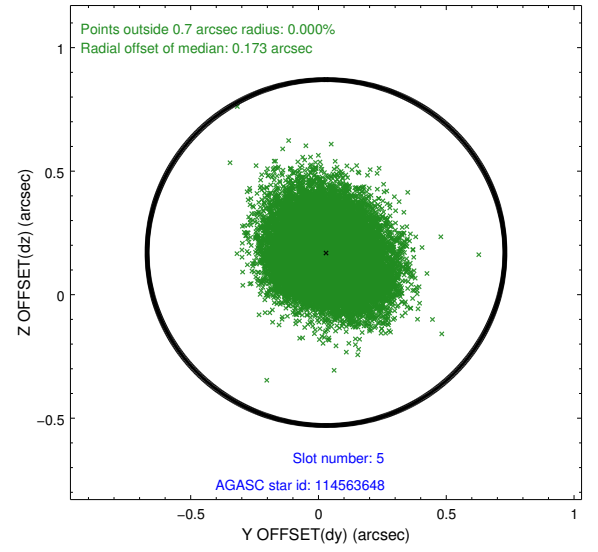
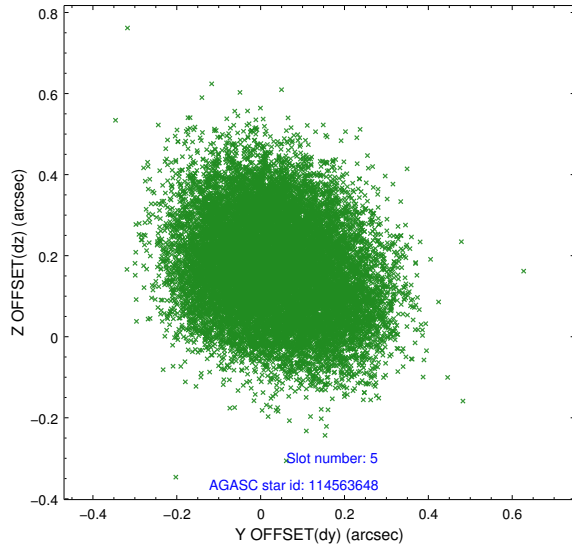
2.4.1 Slot 3



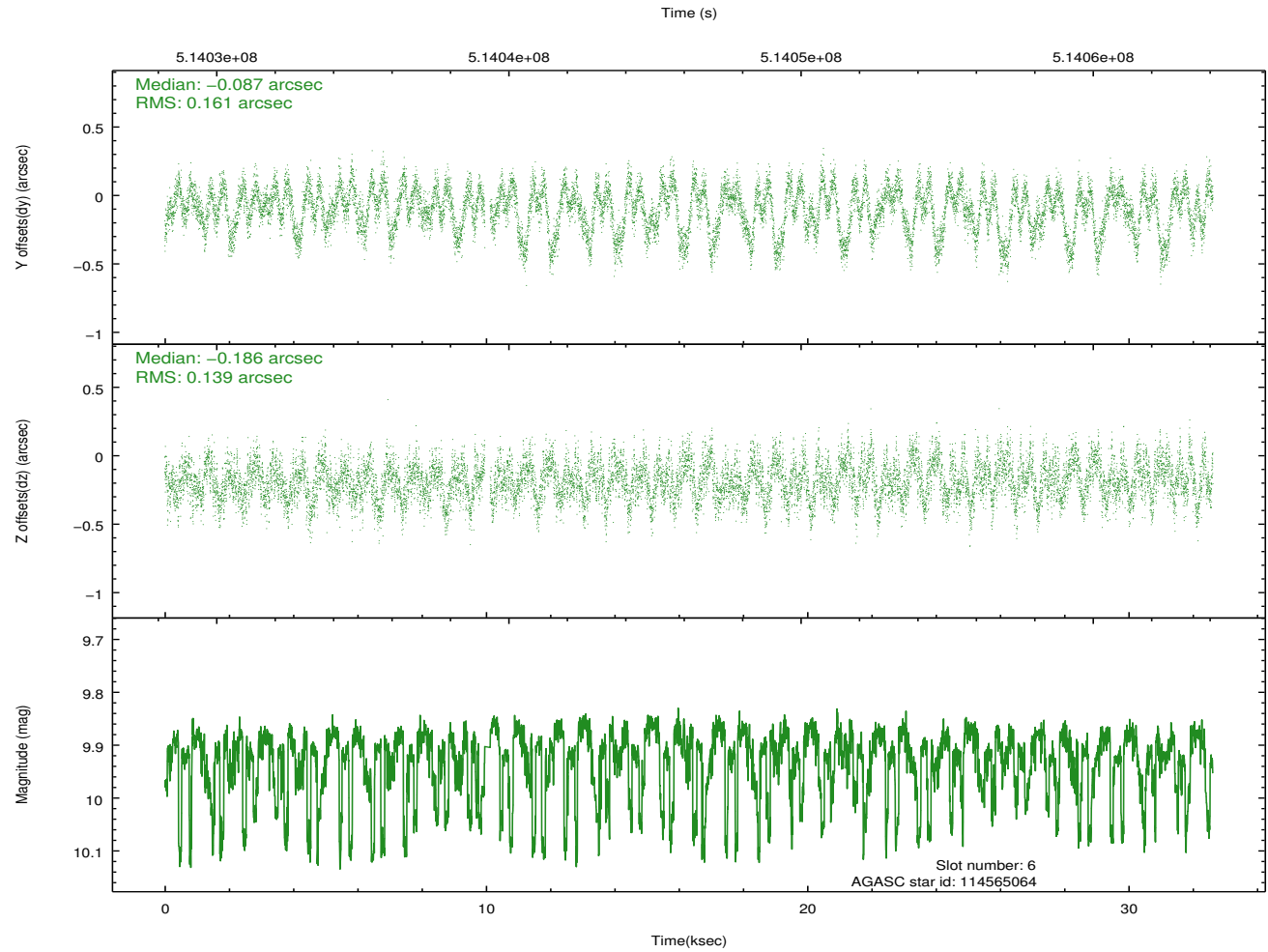
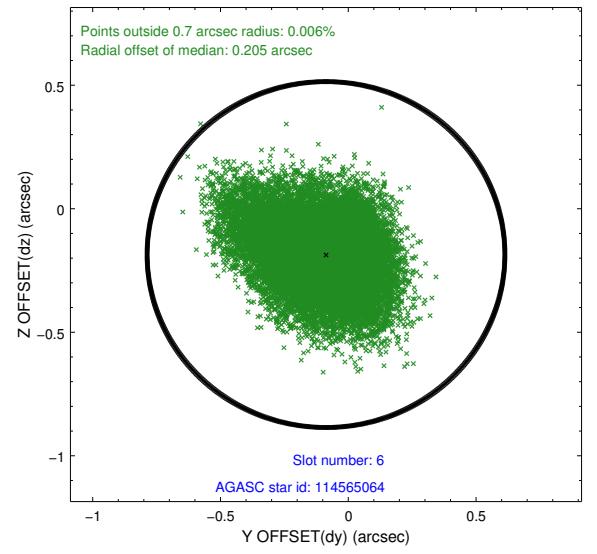
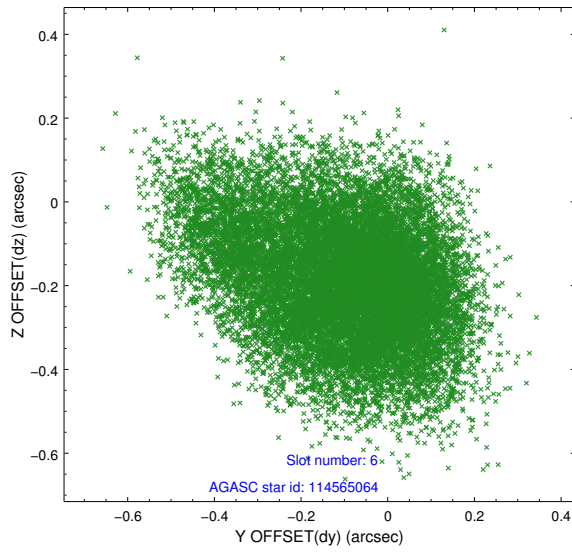
2.4.2 Slot 4



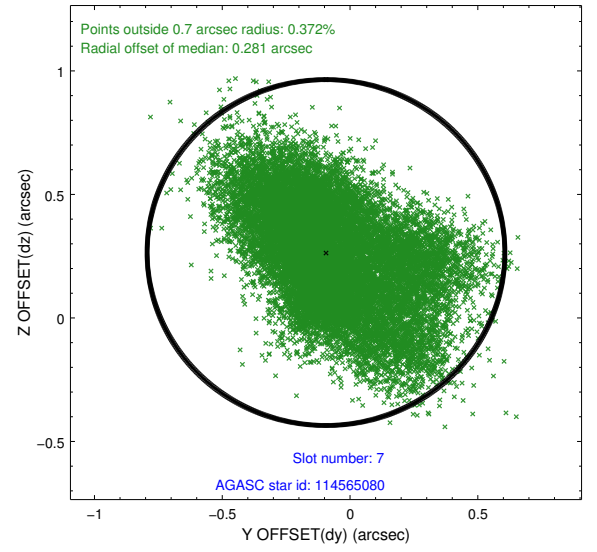
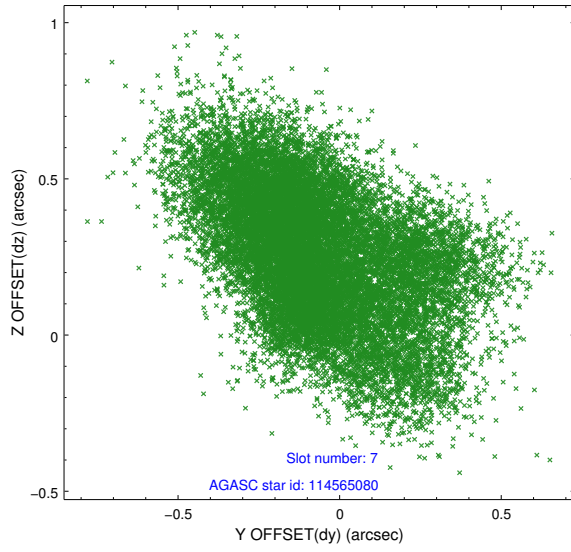
2.4.3 Slot 5



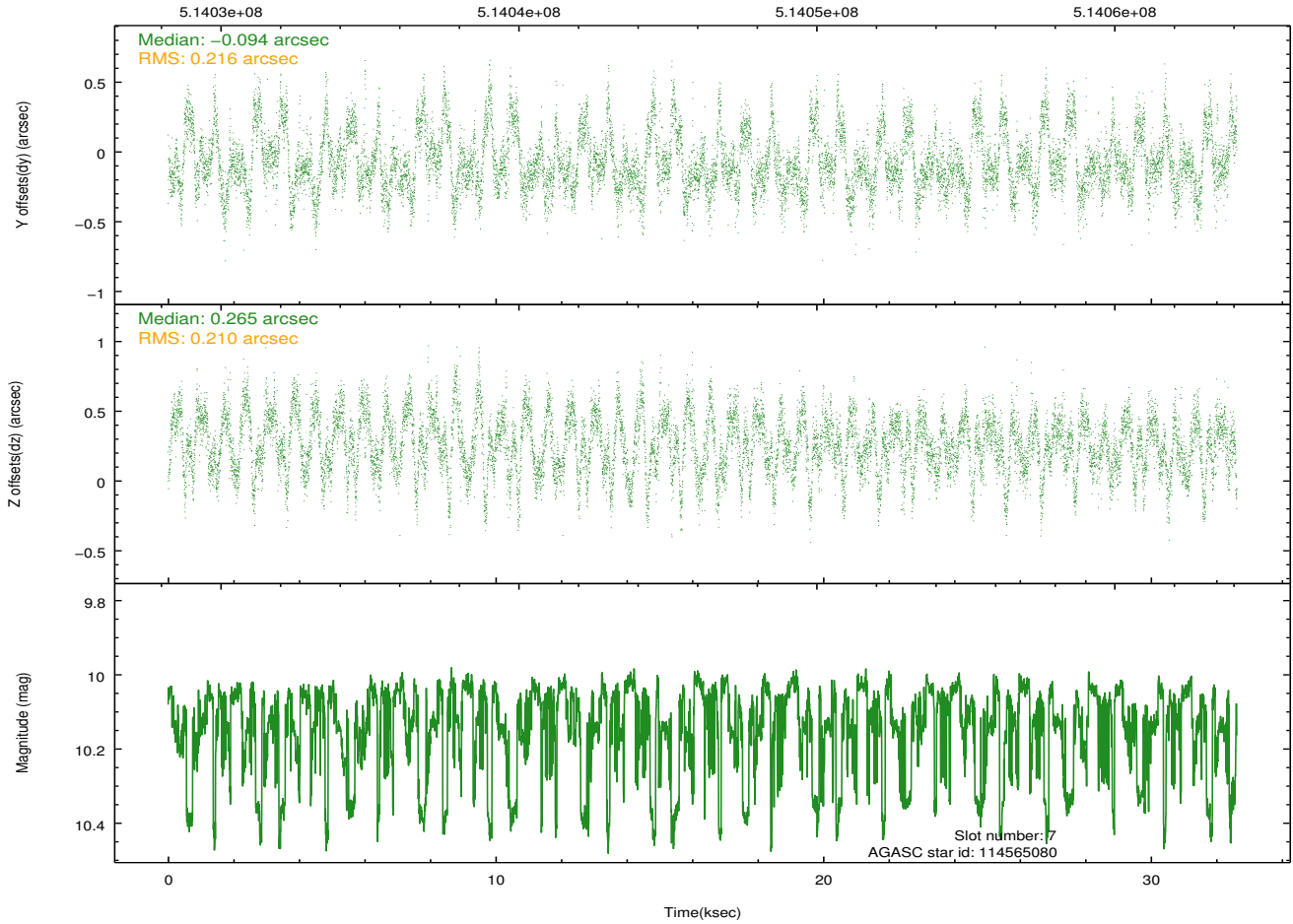
2.4.4 Slot 6



2.4.5 Slot 7

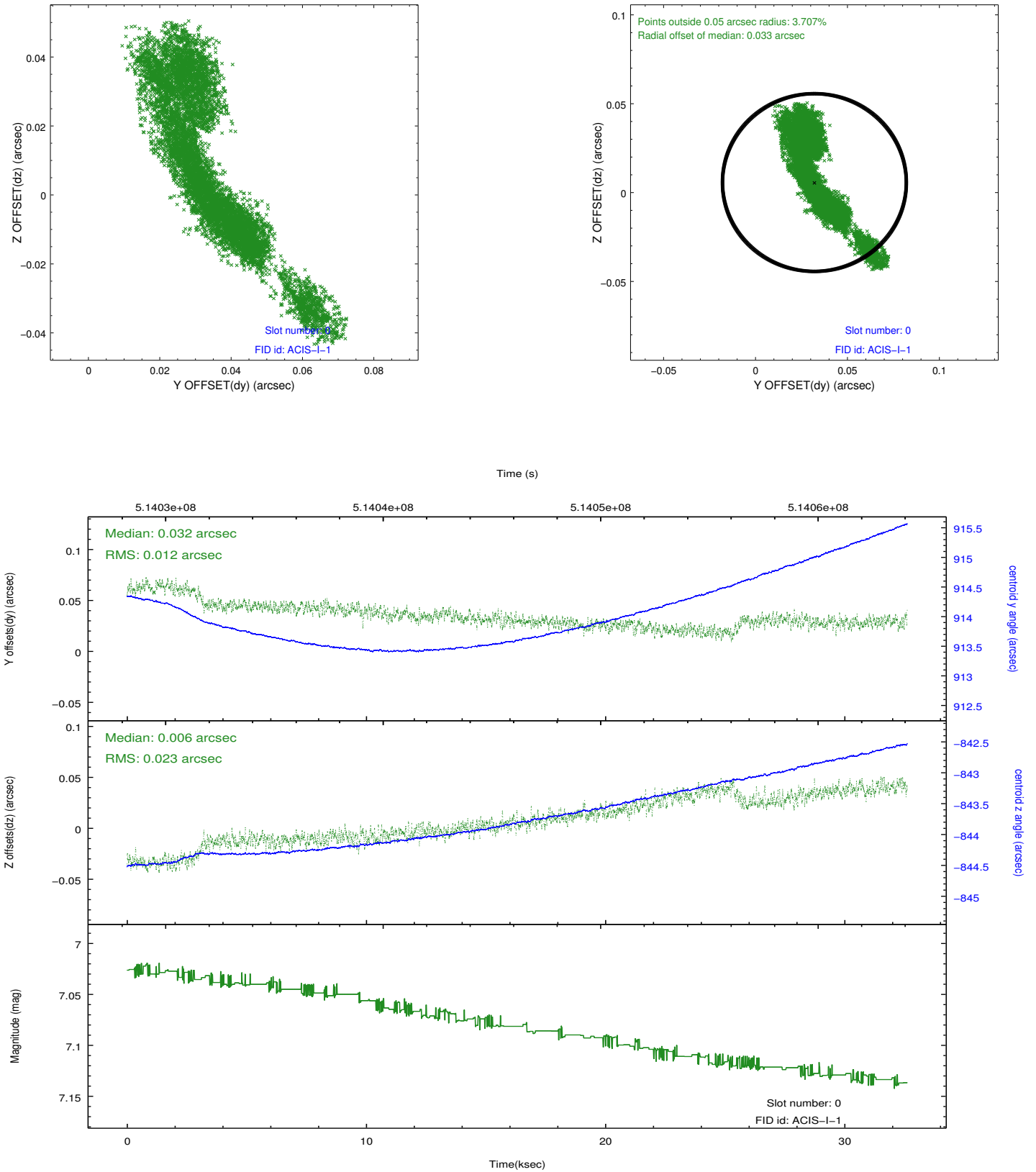


Time (s)

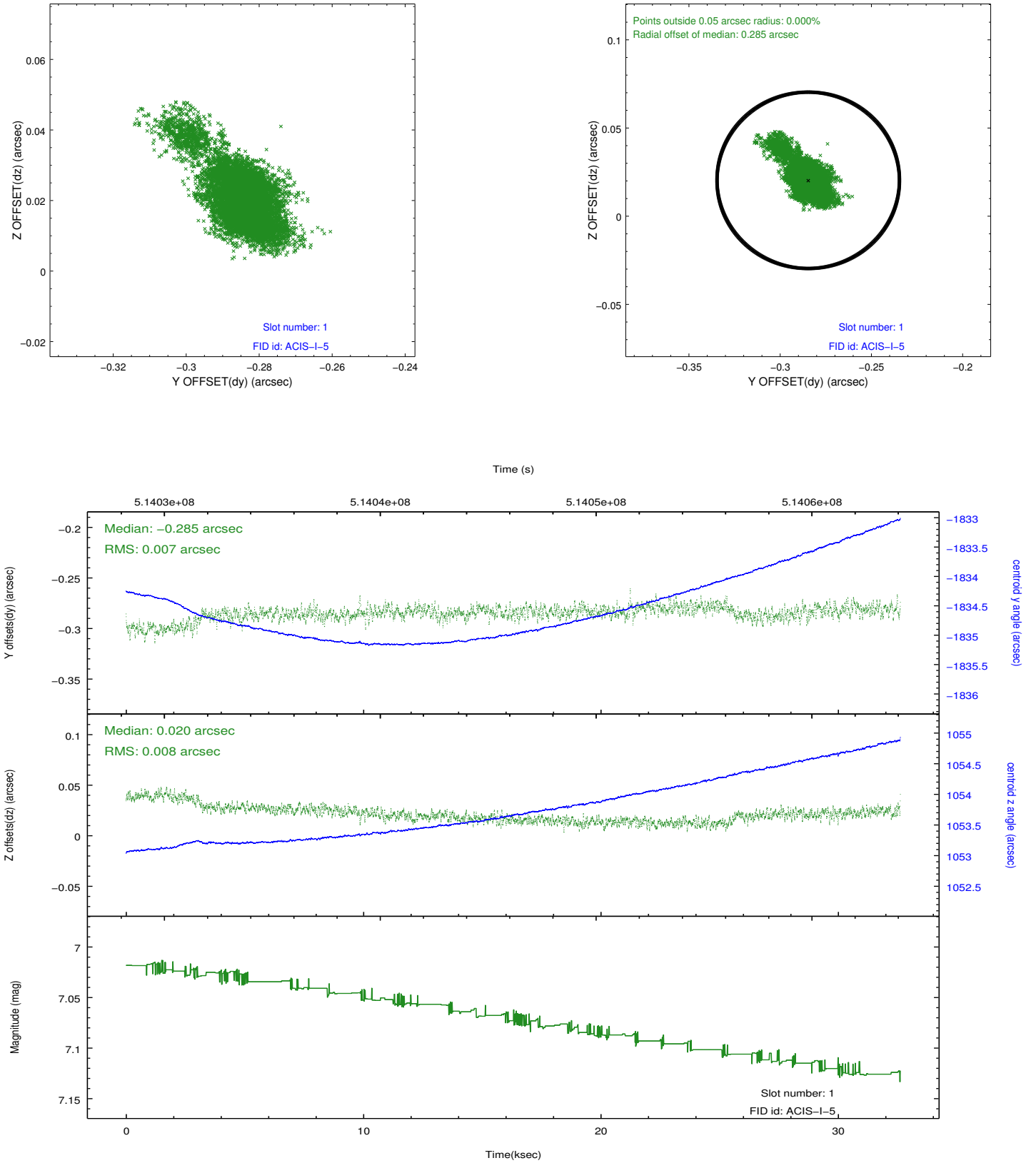


2.5 FID Slots

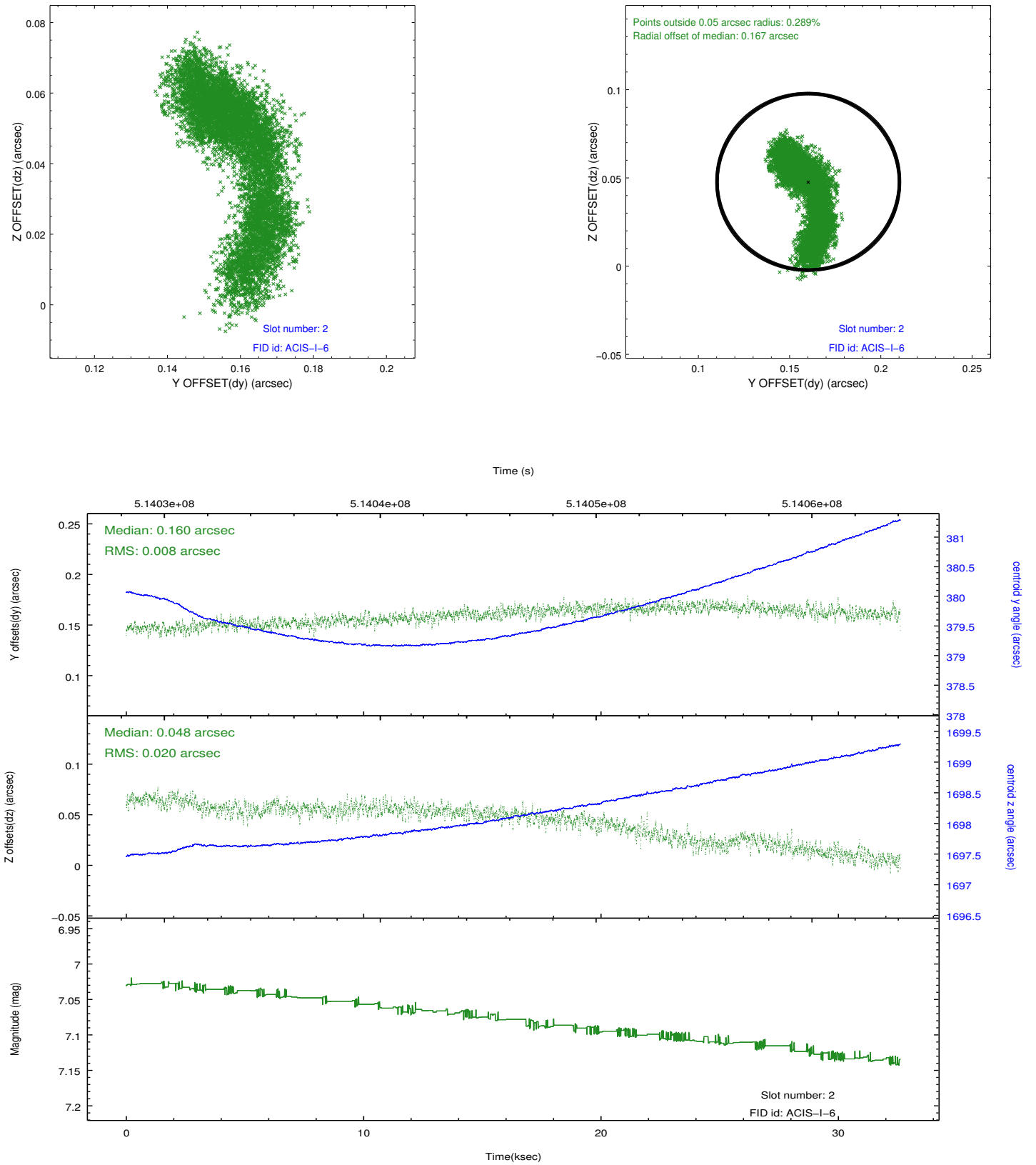
2.5.1 Slot 0



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)	2014.12.18
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	32.499398587942

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.