

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 13616 - L2 Version 2
Chandra X-Ray Center

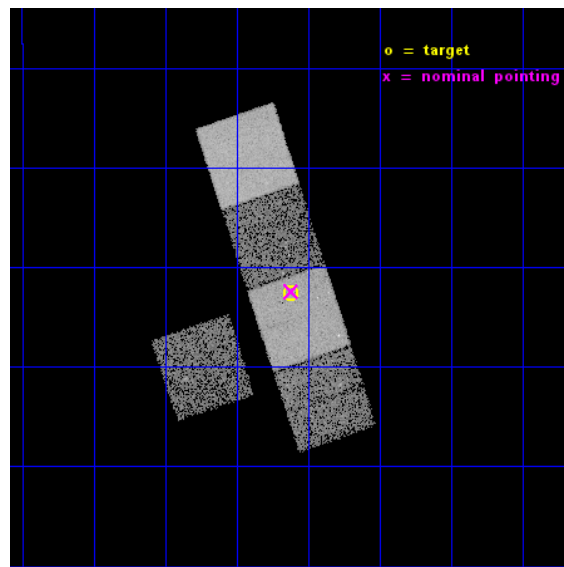
L2 Processing Date : Nov 28 2014

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
A	Summary	17
A.1	Status	17
A.2	Comments	17

1 Front

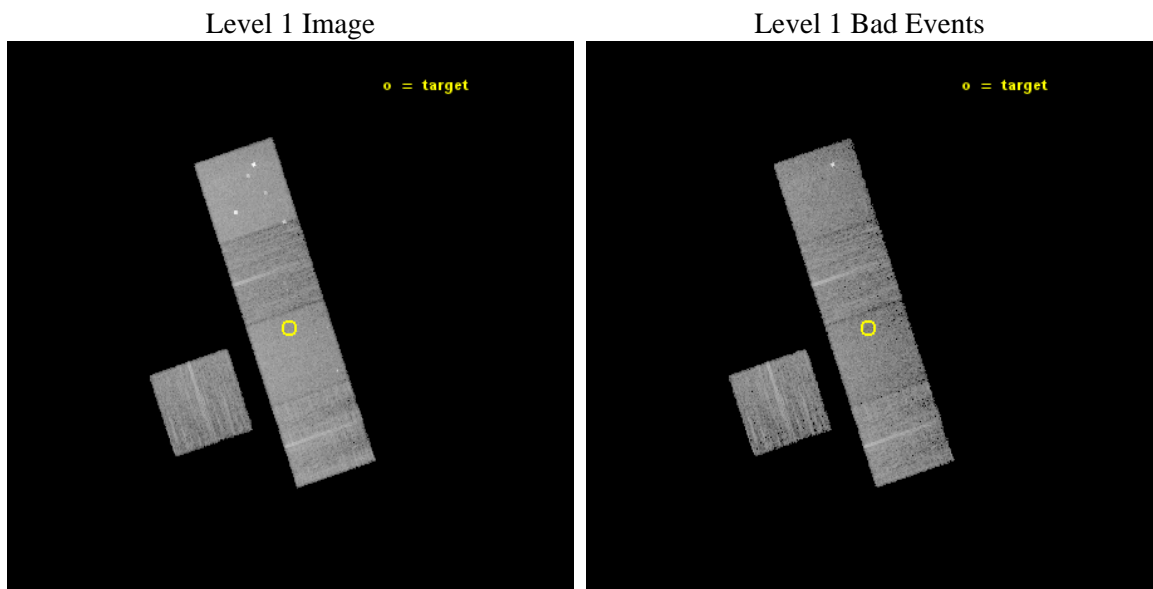
seq_num	200770	Sequence number
obs_id	13616	Observation id
title	The X-ray puzzle of late B and early A stars	Proposal title
observer	Dr. Jan Robrade	Principal investigator
object	HD 28843	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	68.15625	Observer's specified target RA [deg]
dec_targ	-3.209556	Observer's specified target Dec [deg]
ra_nom	68.154325909138	Nominal RA [deg]
dec_nom	-3.2071809545486	Nominal Dec [deg]
roll_nom	71.567909810286	Nominal Roll [deg]
revision	2	Processing version of data
ontime	12065.200092793	Sum of GTIs [s]
livetime	11907.559371309	Livetime [s]
ontime3	12065.200092793	Sum of GTIs [s]
ontime5	12065.200092793	Sum of GTIs [s]
ontime6	12065.200092793	Sum of GTIs [s]
ontime7	12065.200092793	Sum of GTIs [s]
ontime8	12065.200092793	Sum of GTIs [s]
l2events	103018	Number of level 2 events



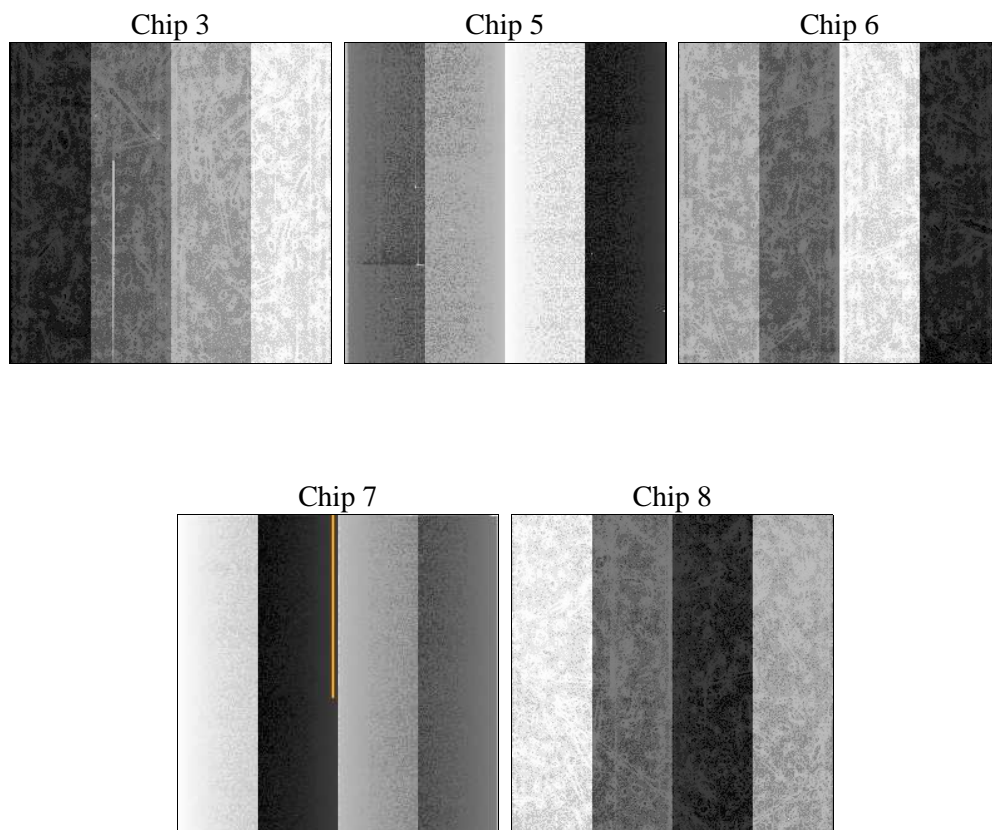
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	12000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	12065.200092793	Sum of GTIs [s]
caldsver	4.6.4	 	ontime3	12065.200092793	Sum of GTIs [s]
date	2014-11-28T23:52:50	Date and time of file creation	ontime5	12065.200092793	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	12065.200092793	Sum of GTIs [s]
			ontime7	12065.200092793	Sum of GTIs [s]
			ontime8	12065.200092793	Sum of GTIs [s]
			l1events	397941	Number of level 1 events

2.1.4 Events

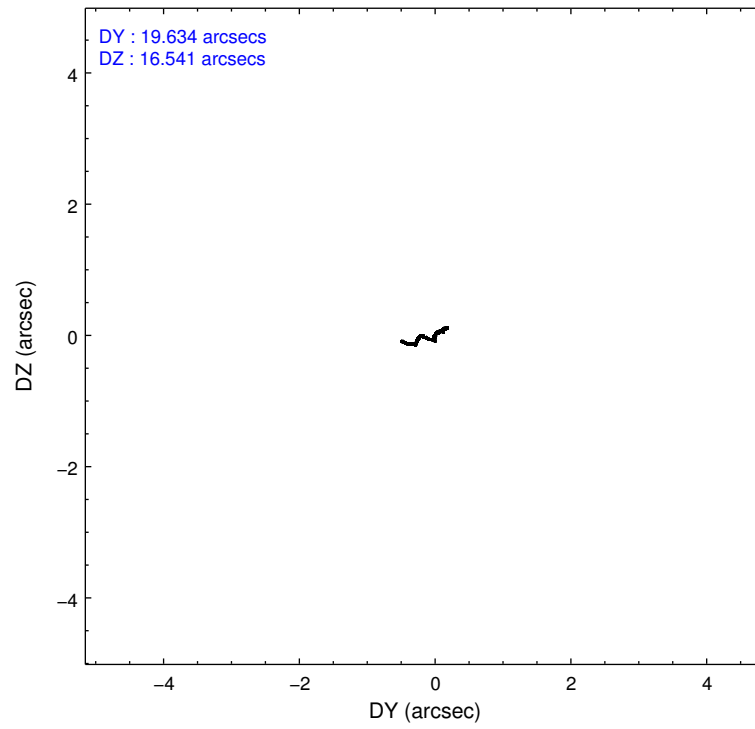
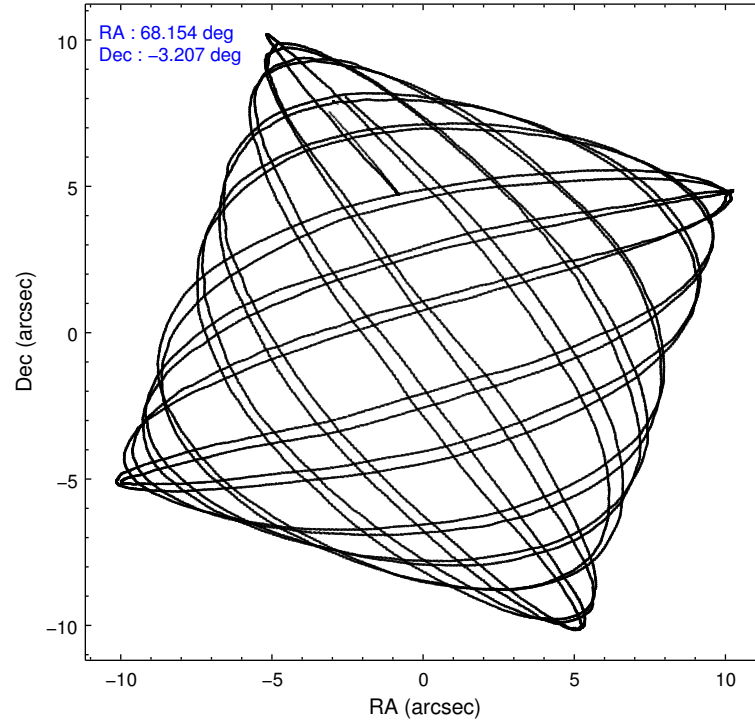
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	59595	109615	61958	84364	82409
rejected events	52864	54466	54309	47559	60625
rejected %	88%	49%	87%	56%	73%

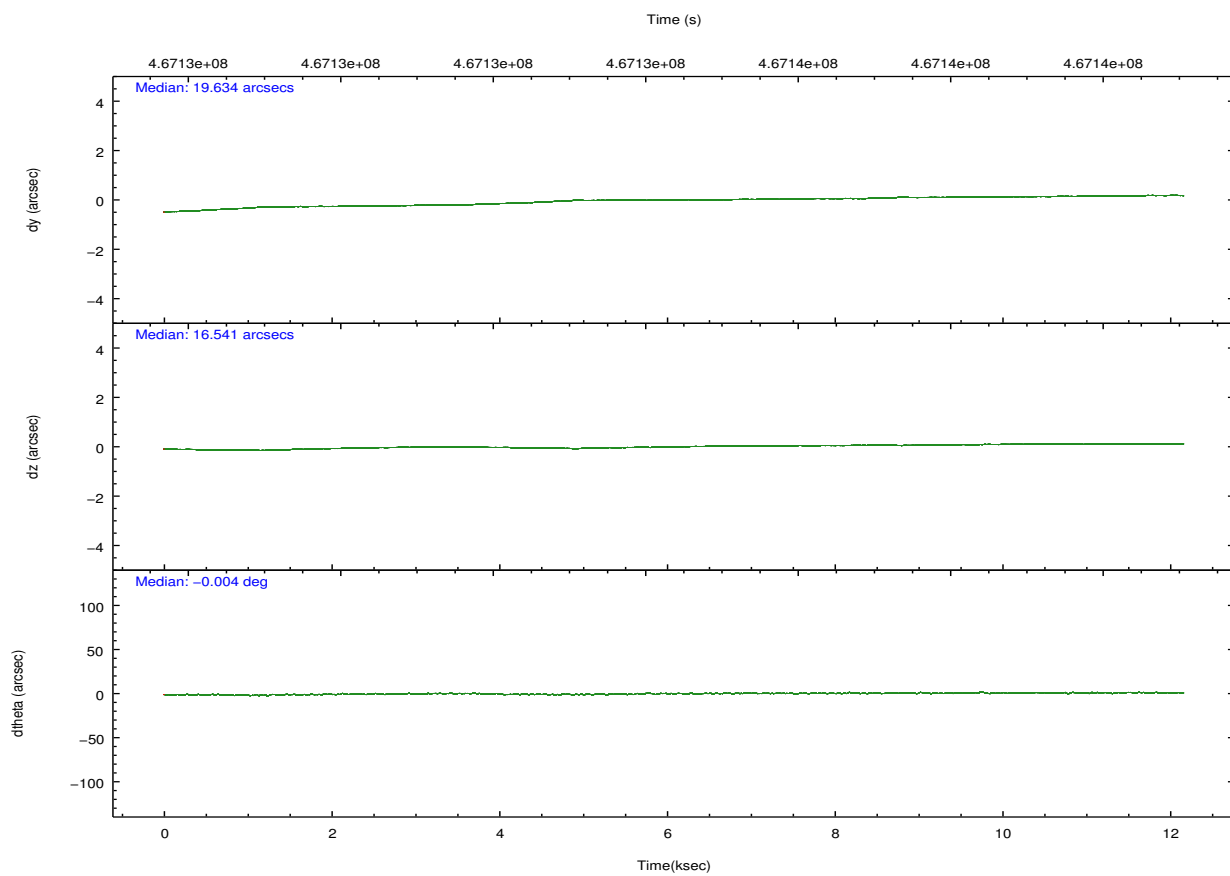
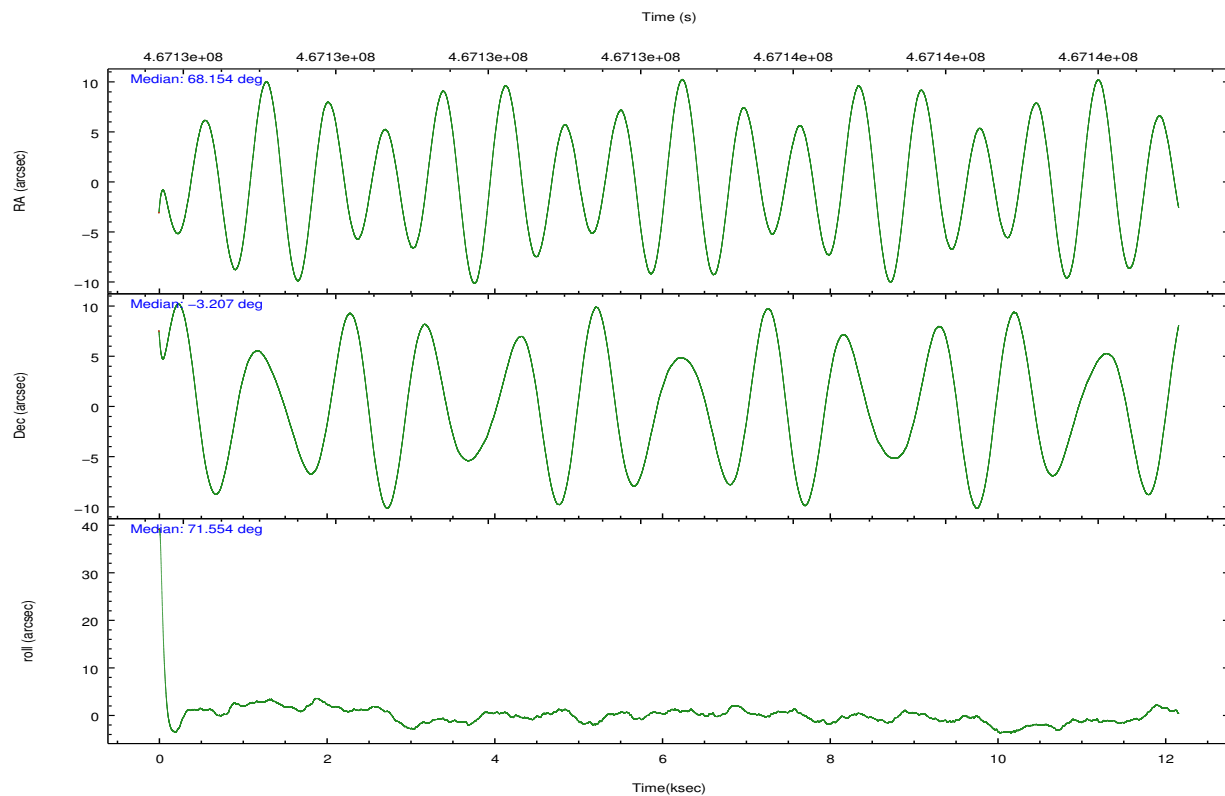
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	2285	7995	2680	3333	6276
	3%	7%	4%	3%	7%
grade 1 events	34	176	35	91	72
	0%	0%	0%	0%	0%
grade 2 events	1578	17192	1729	7407	5216
	2%	15%	2%	8%	6%
grade 3 events	715	1868	777	3169	2297
	1%	1%	1%	3%	2%
grade 4 events	730	1802	799	3135	2118
	1%	1%	1%	3%	2%
grade 5 events	3263	8291	3197	8542	4651
	5%	7%	5%	10%	5%
grade 6 events	1428	26331	1668	19779	5877
	2%	24%	2%	23%	7%
grade 7 events	49562	45960	51073	38908	55902
	83%	41%	82%	46%	67%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-35678	ACIS-35678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	68.160205	68.15432590913821	CCD I2 on	N	N
[deg] Pointing Dec	-3.233918	-3.207180954548646	CCD I3 on	O2	Y
[deg] Pointing Roll	71.411567	71.56790981028611	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O1	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	Y	Y
[s] Observation start time (MET)	467128443.184000	467127308.39217	CCD S5 on	N	N
Observation start date	2012-10-20T13:52:56	2012-10-20T13:35:08	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	467140443.184000	467141381.64293	On-chip summing requested	N	N
Observation end date	2012-10-20T17:12:56	2012-10-20T17:29:41	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



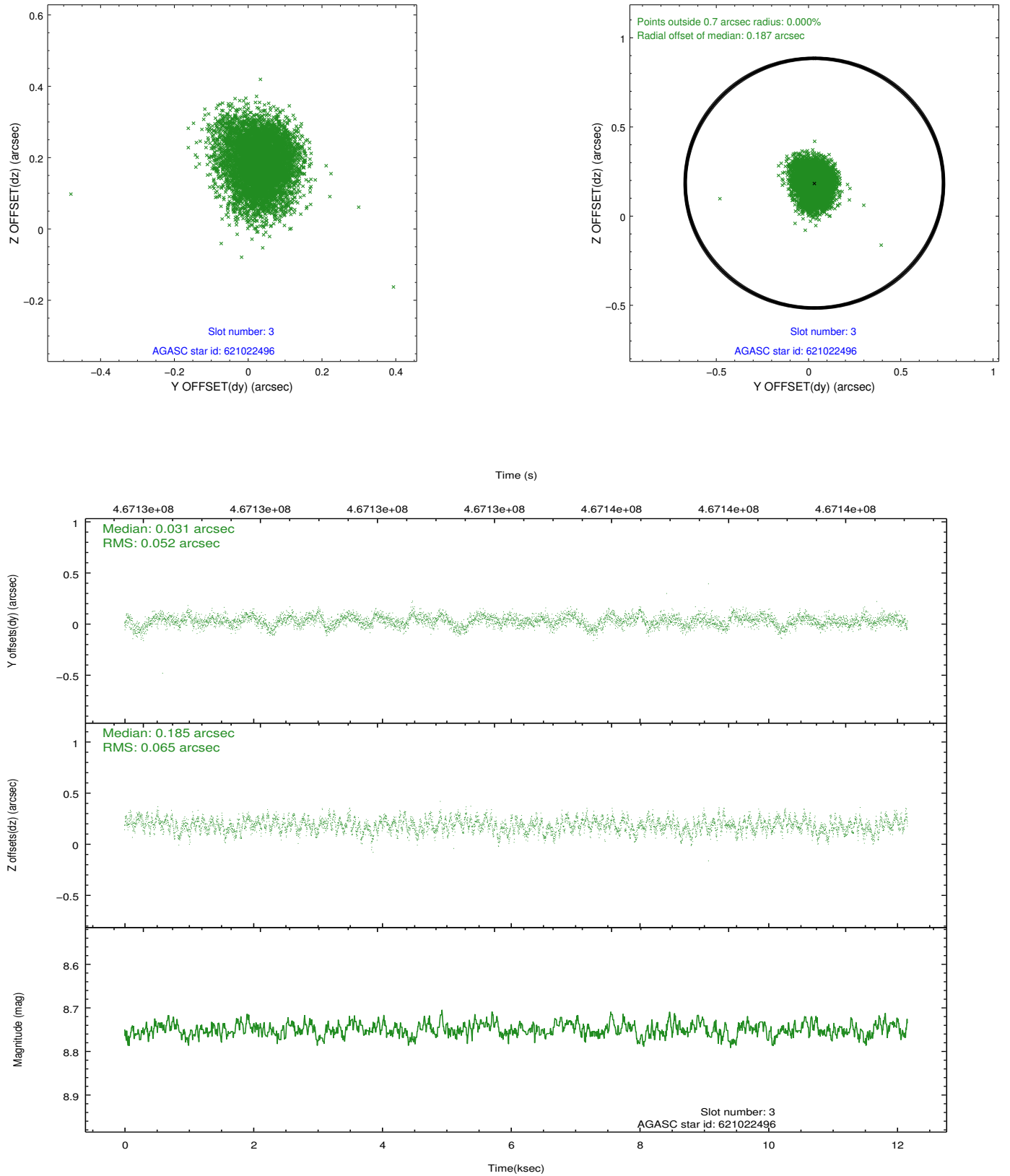


Slot Statistics

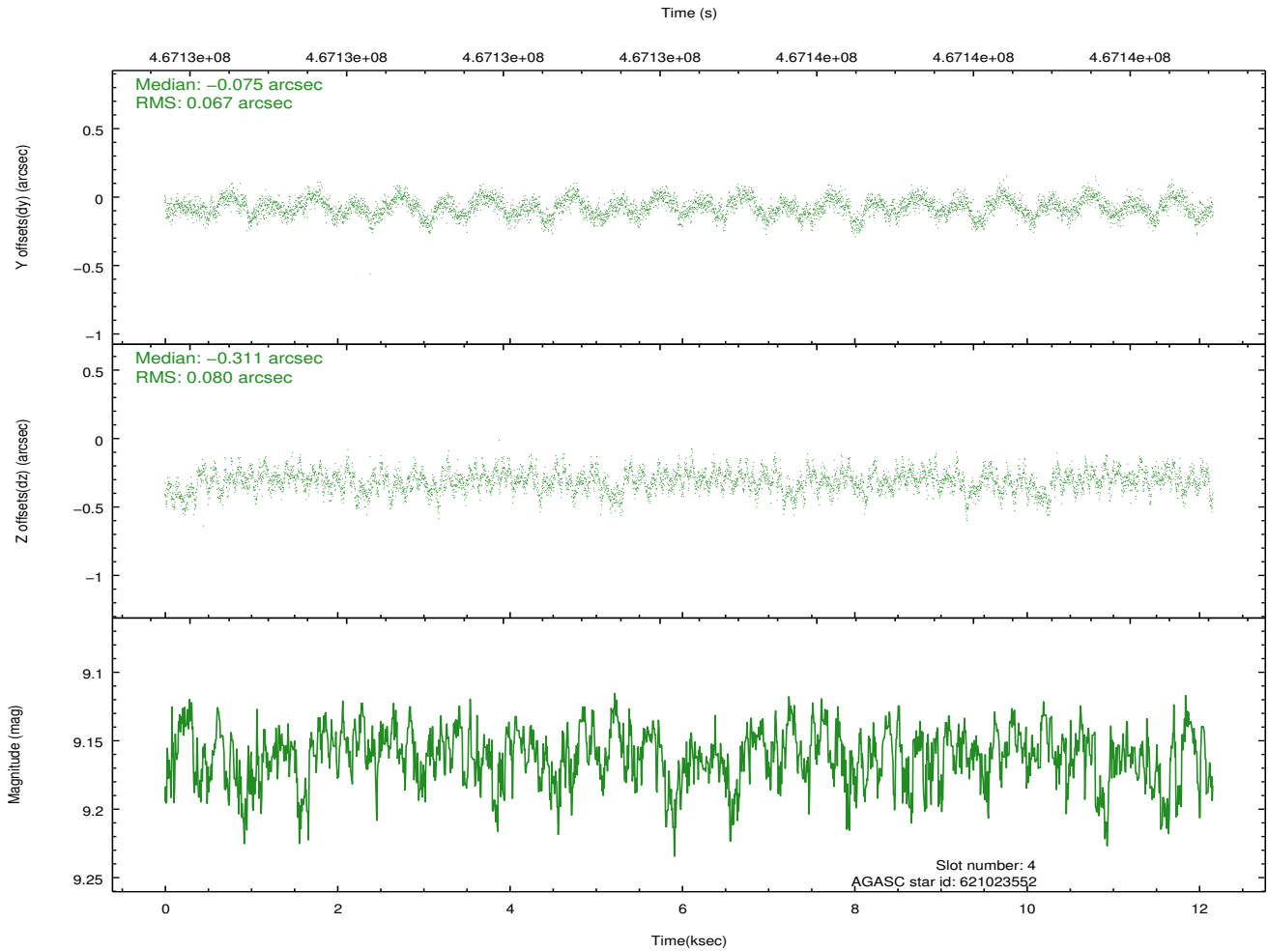
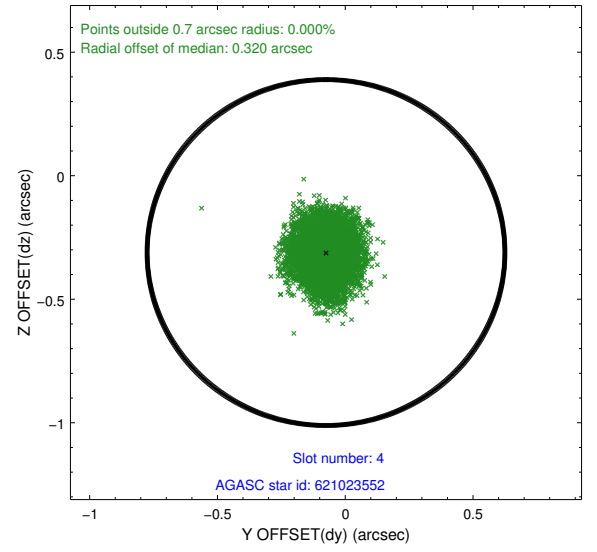
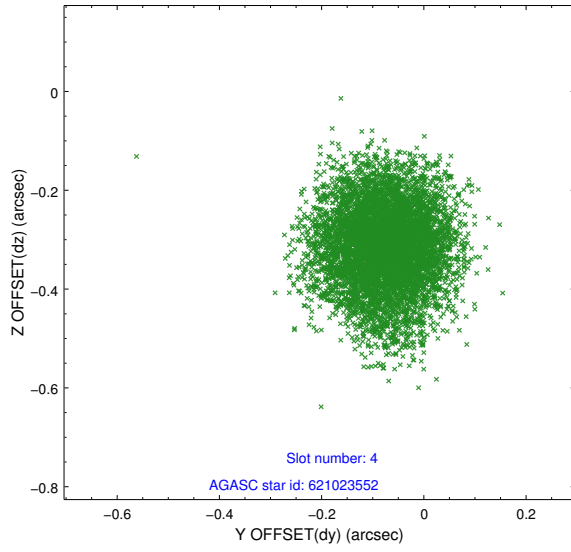
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.96	2967	-0.125	-0.020	0.008	0.015	0.000000	0.000000	-772.81	-1737.93
1	FID		ACIS-S-4	7.04	2967	0.285	0.066	0.006	0.010	0.000000	0.000000	2140.70	170.20
2	FID		ACIS-S-5	7.07	2967	-0.191	-0.037	0.008	0.013	0.000000	0.000000	-1825.18	164.26
3	GUIDE	used	621022496	8.75	5930	0.031	0.185	0.088	0.144	68.331372	-3.000098	994.10	-314.91
4	GUIDE	used	621023552	9.16	5925	-0.075	-0.311	0.112	0.178	67.702014	-2.971021	371.36	1862.56
5	GUIDE	used	621027264	8.56	5923	-0.159	0.349	0.076	0.122	68.757328	-3.353382	276.38	-2170.62
6	GUIDE	used	621029240	9.06	5928	0.053	0.191	0.086	0.139	68.874787	-3.150671	1102.97	-2339.40
7	GUIDE	used	621024696	9.04	5928	0.153	-0.410	0.094	0.152	67.509247	-3.063061	-164.37	2409.81

2.4 Star Slots

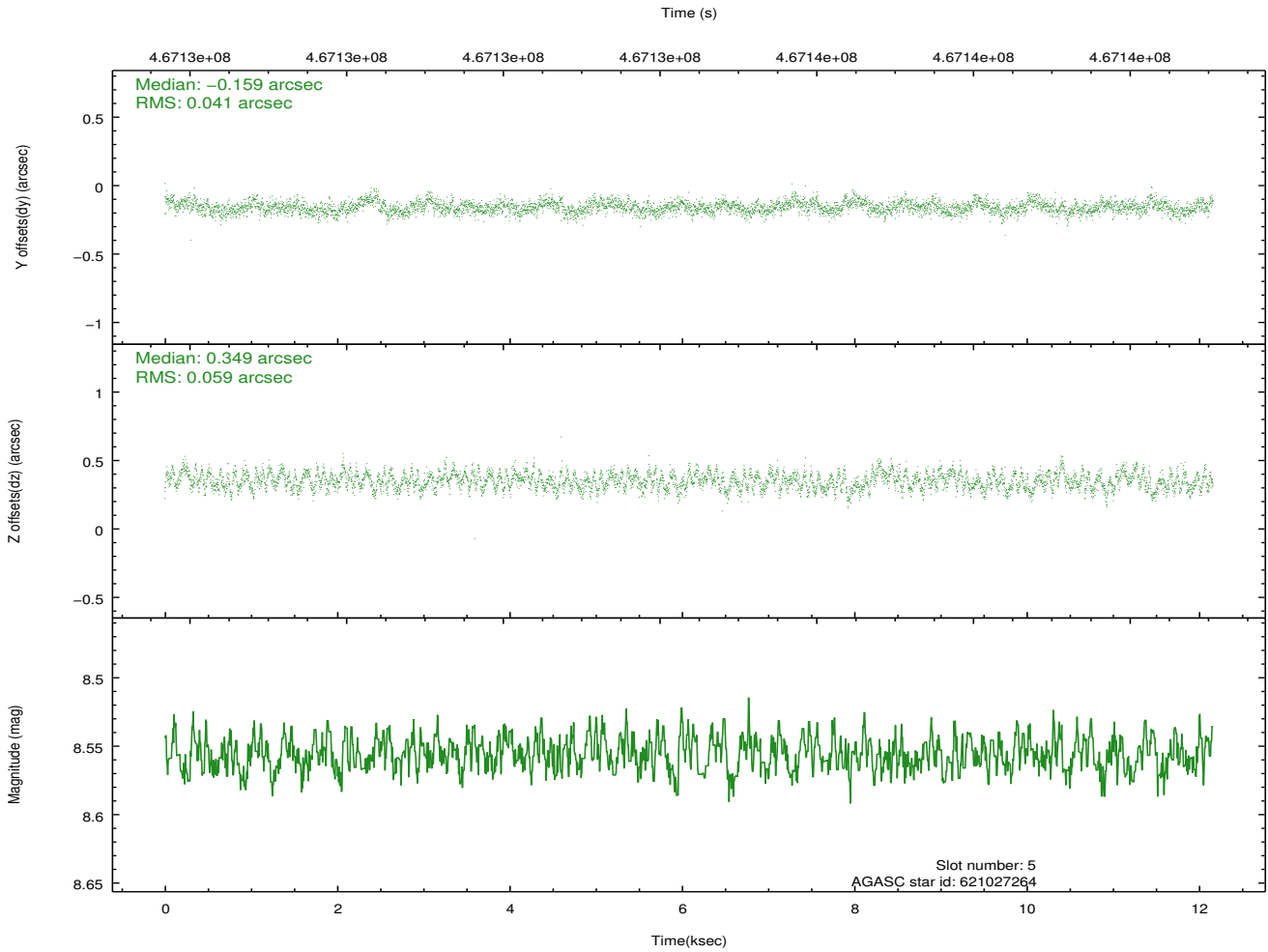
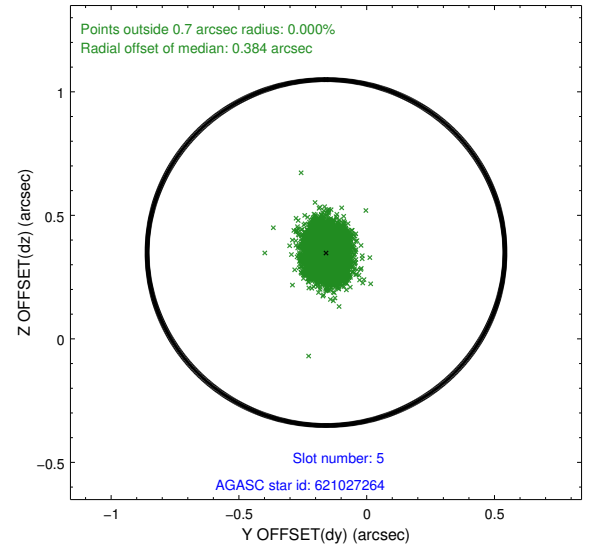
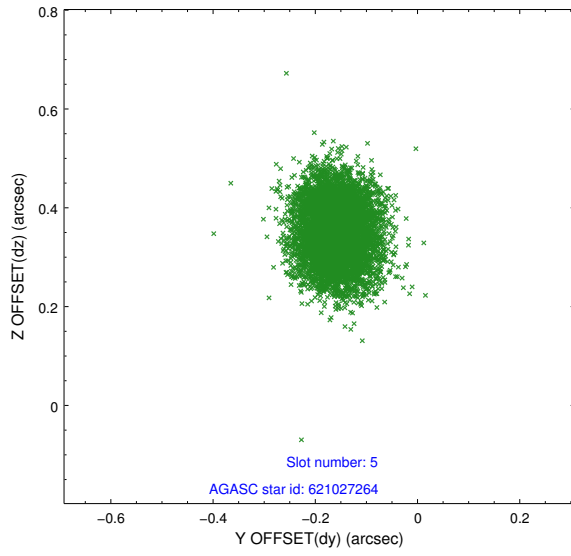
2.4.1 Slot 3



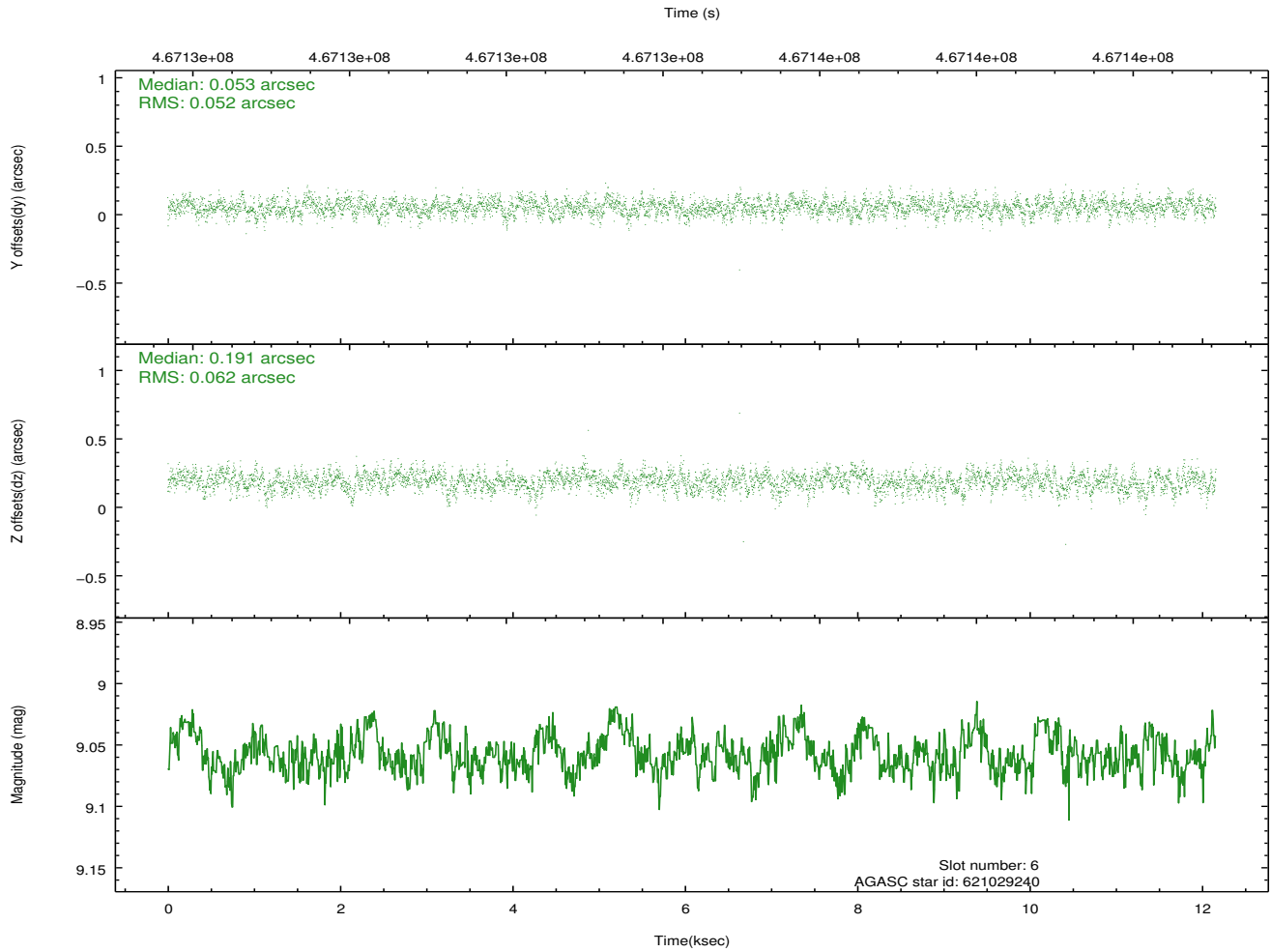
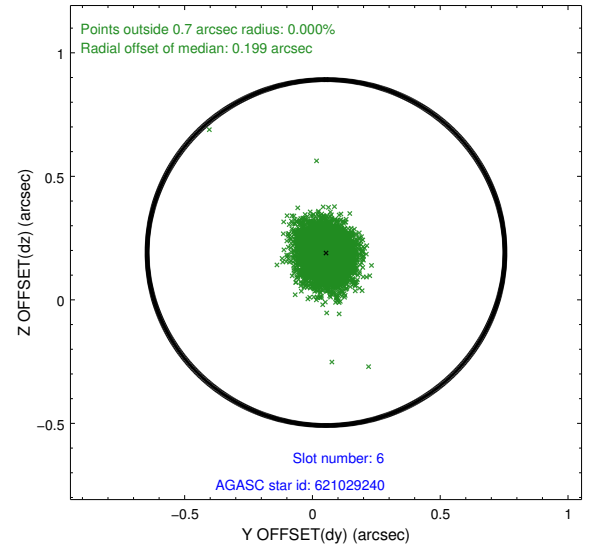
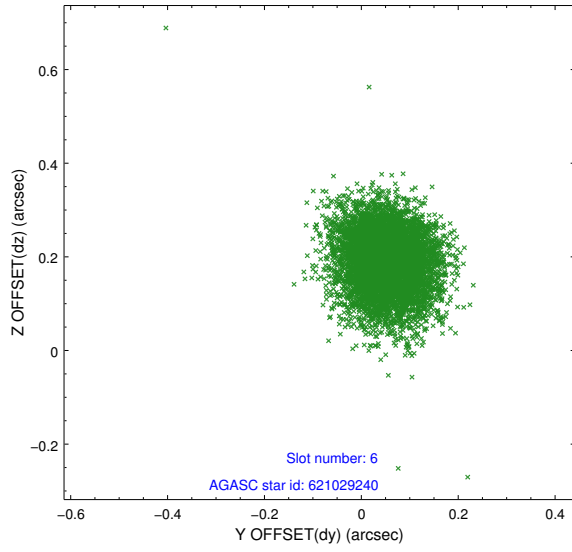
2.4.2 Slot 4



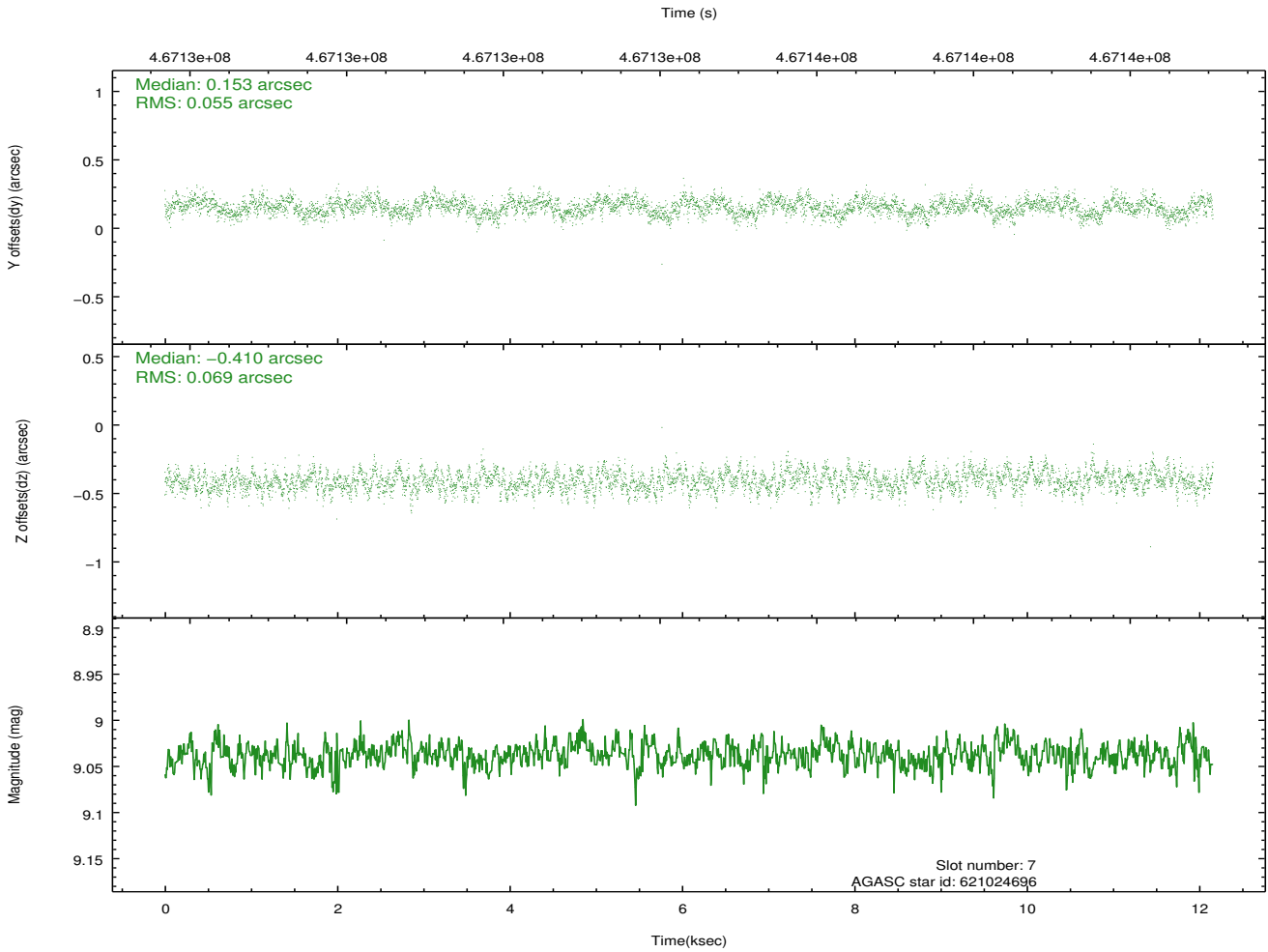
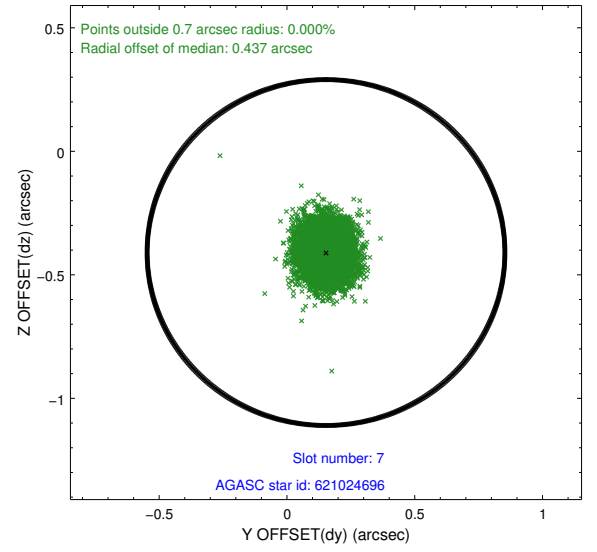
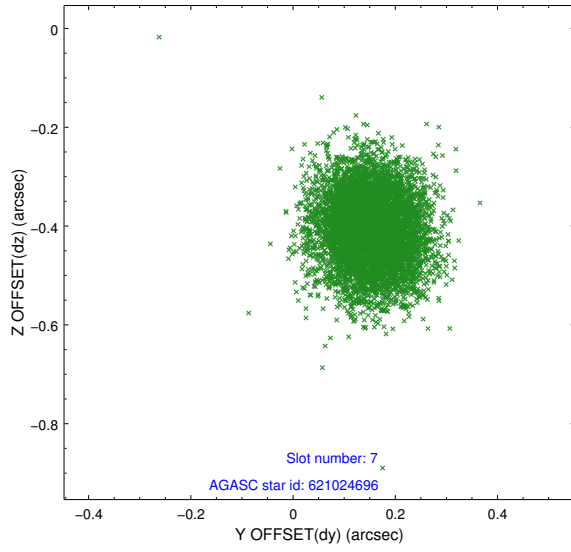
2.4.3 Slot 5



2.4.4 Slot 6

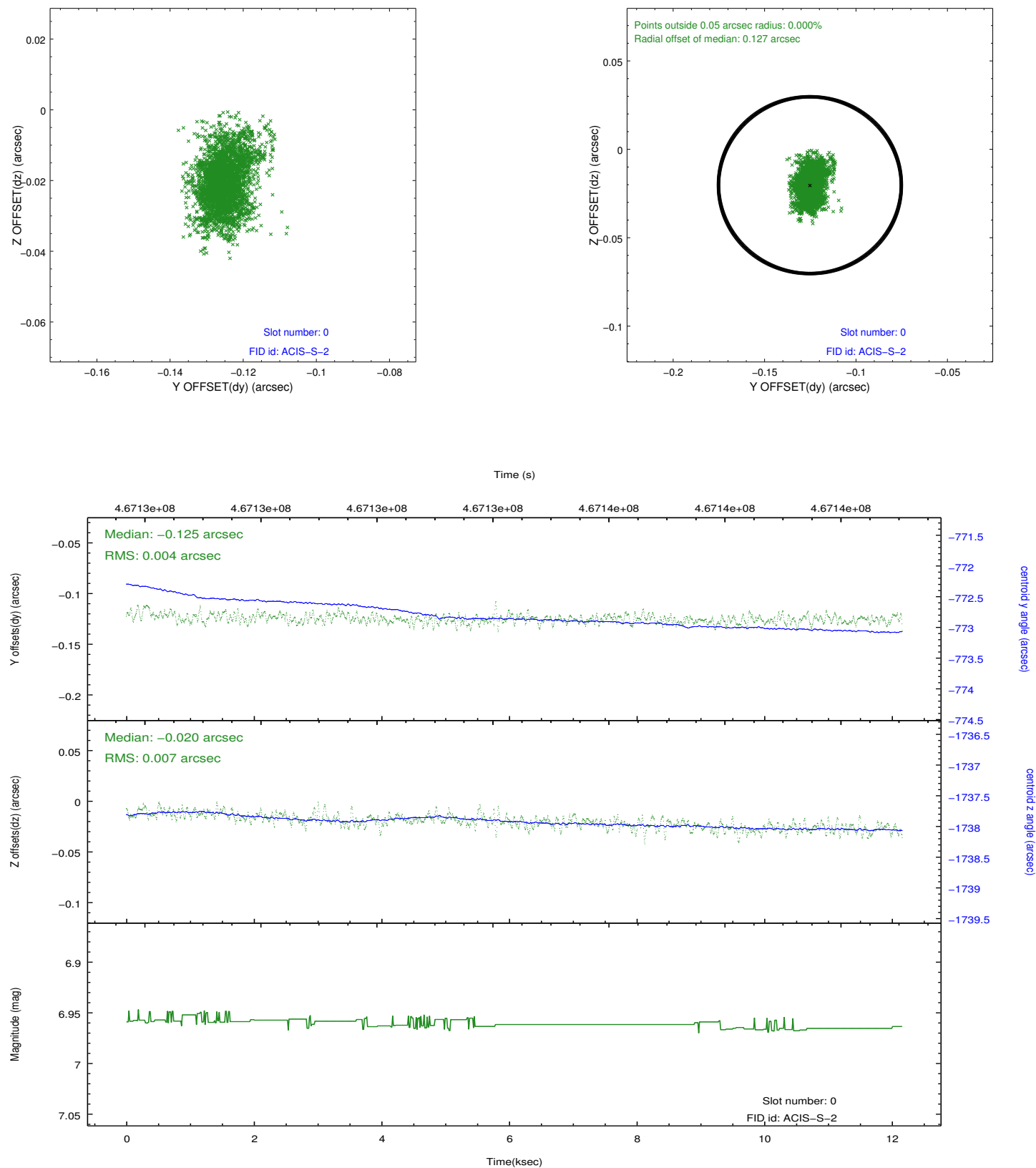


2.4.5 Slot 7

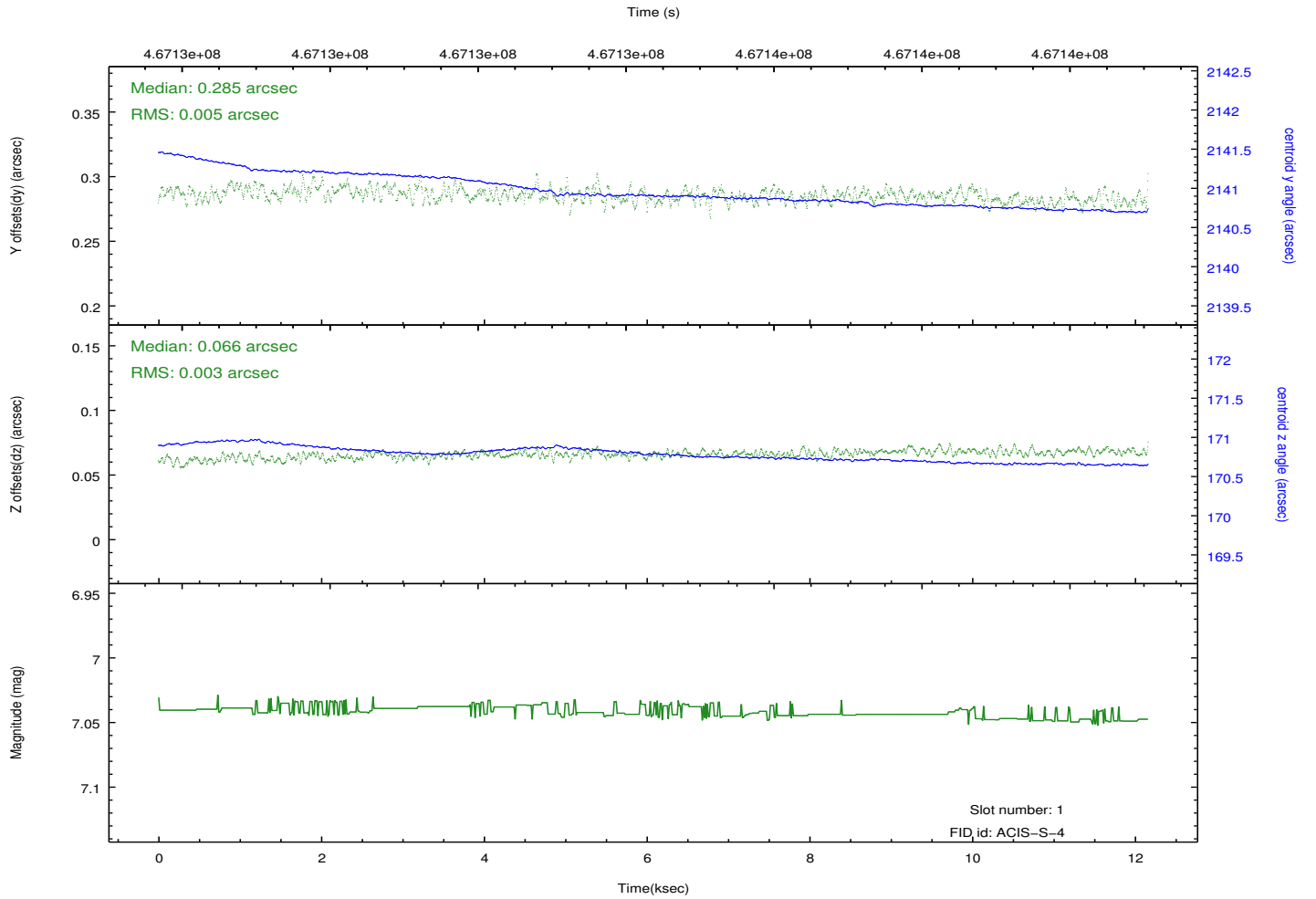
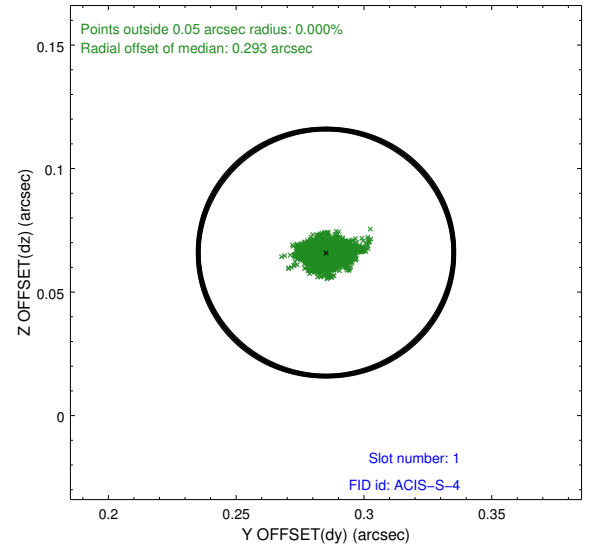
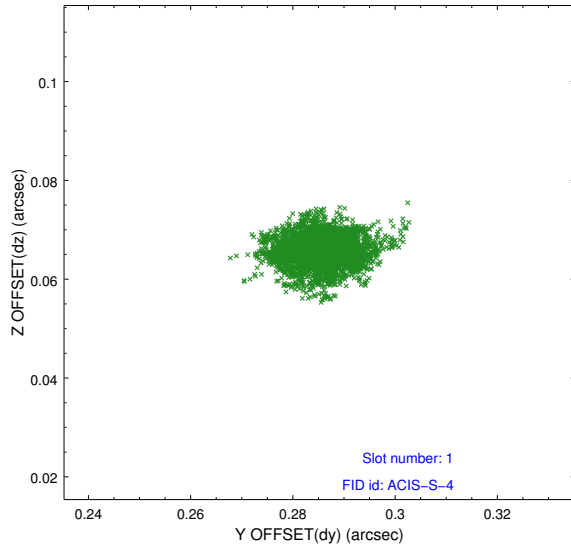


2.5 FID Slots

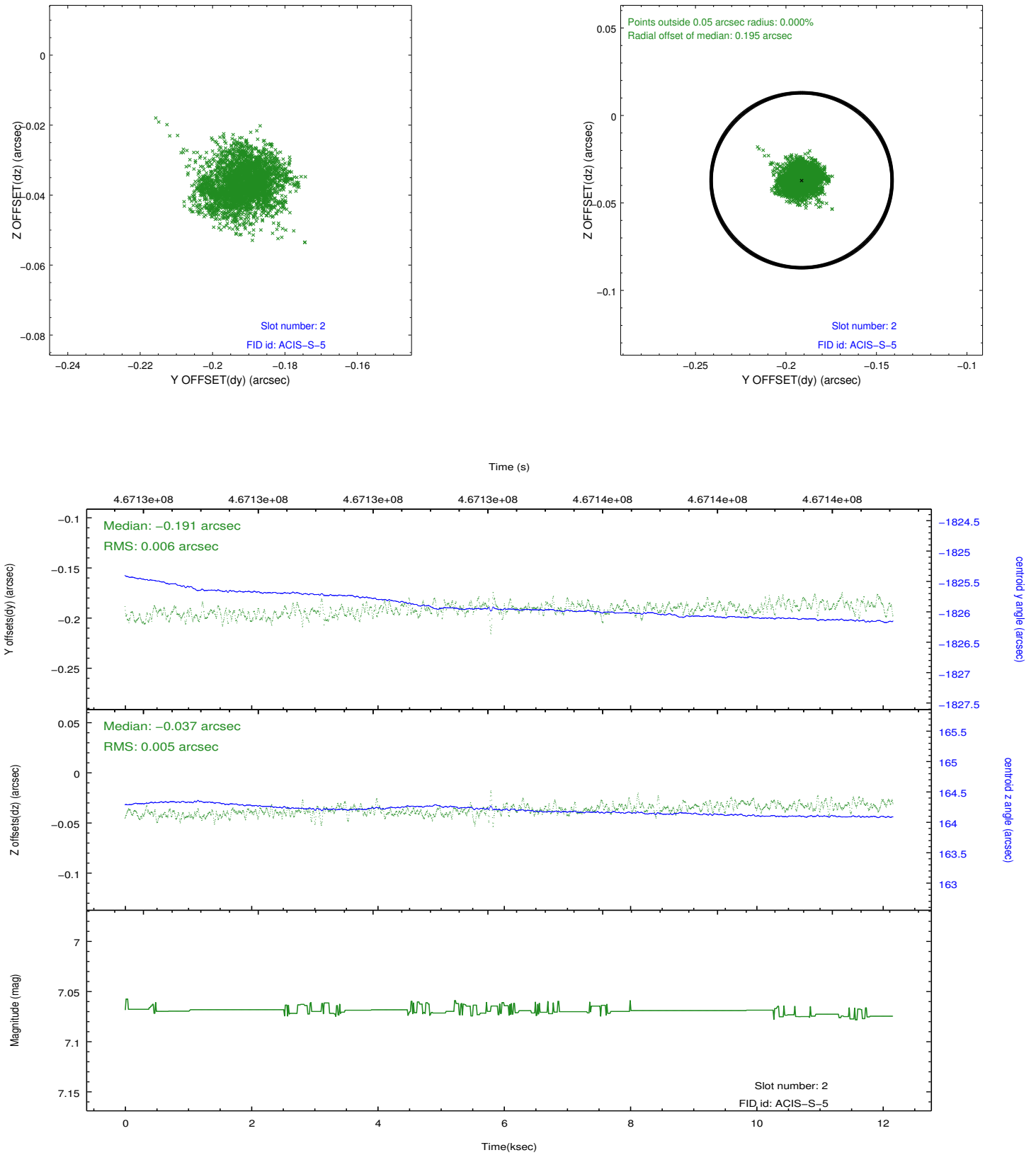
2.5.1 Slot 0



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	12.065200092793

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.