

V&V Reference Report

L2 ASCDS Version : 8.5.1

Observation 15210 - L2 Version 2
Chandra X-Ray Center

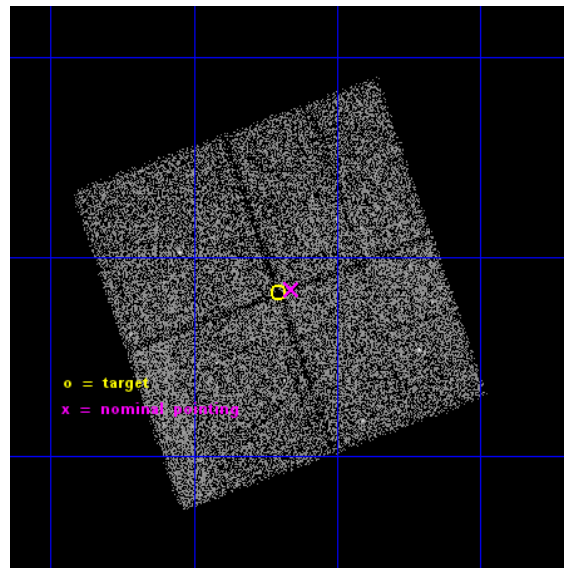
L2 Processing Date : Nov 30 2014

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

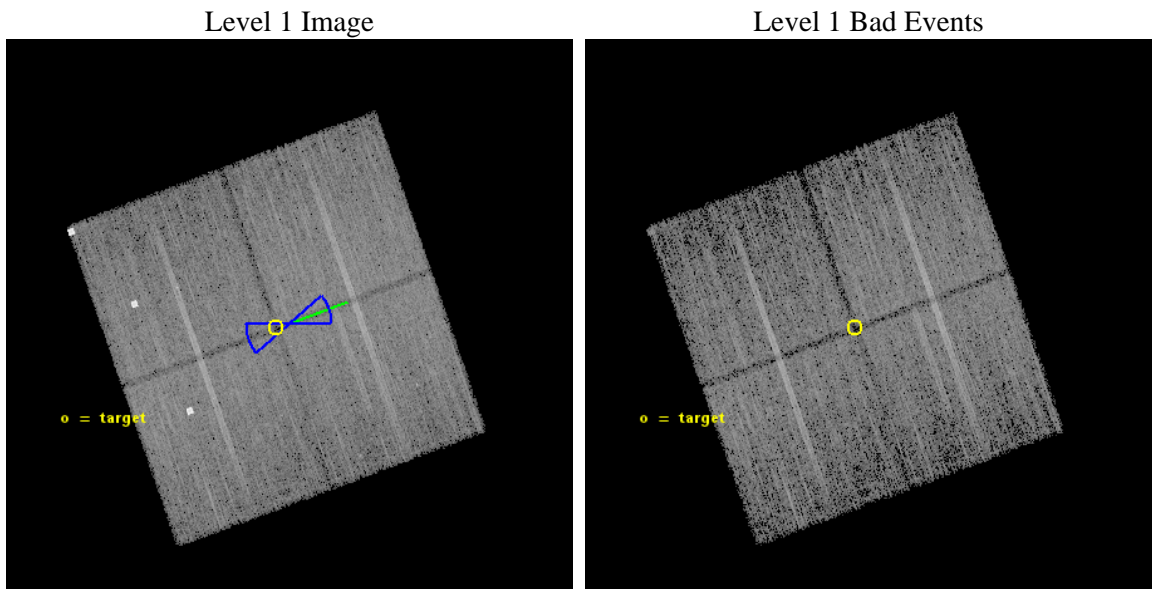
seq_num	901040	Sequence number
obs_id	15210	Observation id
title	The COSMOS Legacy Survey	Proposal title
observer	Dr Francesca Civano	Principal investigator
object	COSMOS Legacy	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	150.17615	Observer's specified target RA [deg]
dec_targ	2.637133	Observer's specified target Dec [deg]
ra_nom	150.16473830932	Nominal RA [deg]
dec_nom	2.6397091171693	Nominal Dec [deg]
roll_nom	70.209221994096	Nominal Roll [deg]
revision	2	Processing version of data
ontime	24688.400189877	Sum of GTIs [s]
livetime	24365.82806606	Livetime [s]
ontime0	24688.400189877	Sum of GTIs [s]
ontime1	24688.400189877	Sum of GTIs [s]
ontime2	24685.259169519	Sum of GTIs [s]
ontime3	24688.400189877	Sum of GTIs [s]
l2events	51820	Number of level 2 events



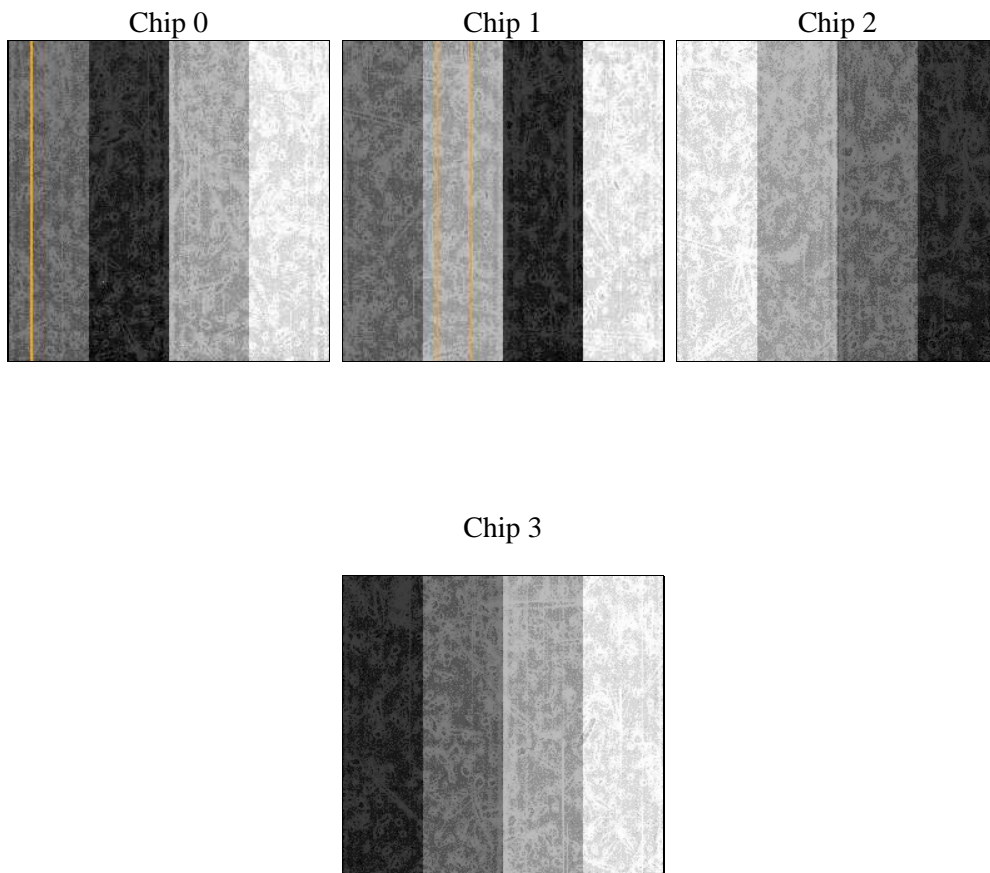
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	24600.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	24688.400189877	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	24688.400189877	Sum of GTIs [s]
date	2014-11-30T07:34:28	Date and time of file creation	ontime1	24688.400189877	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	24685.259169519	Sum of GTIs [s]
			ontime3	24688.400189877	Sum of GTIs [s]
			l1events	526527	Number of level 1 events

2.1.4 Events

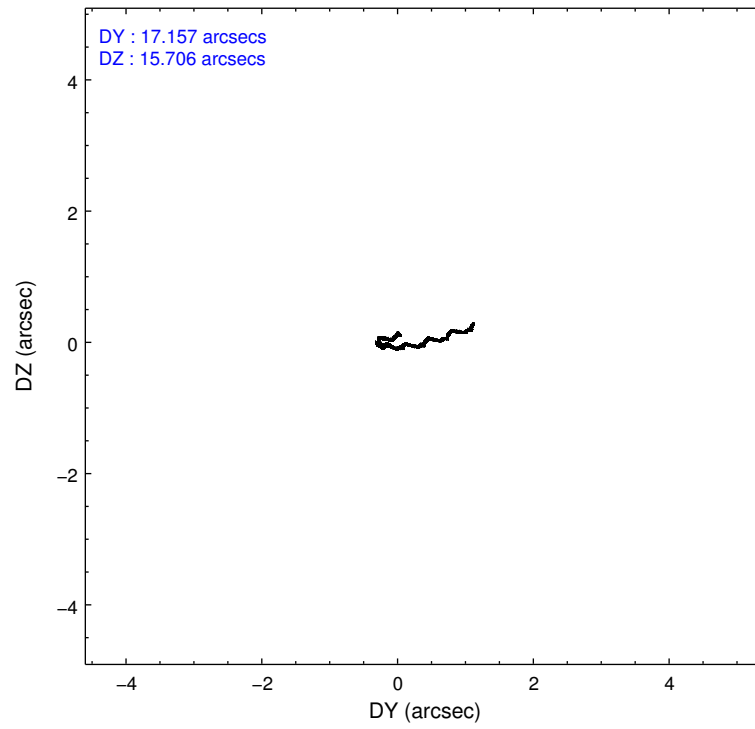
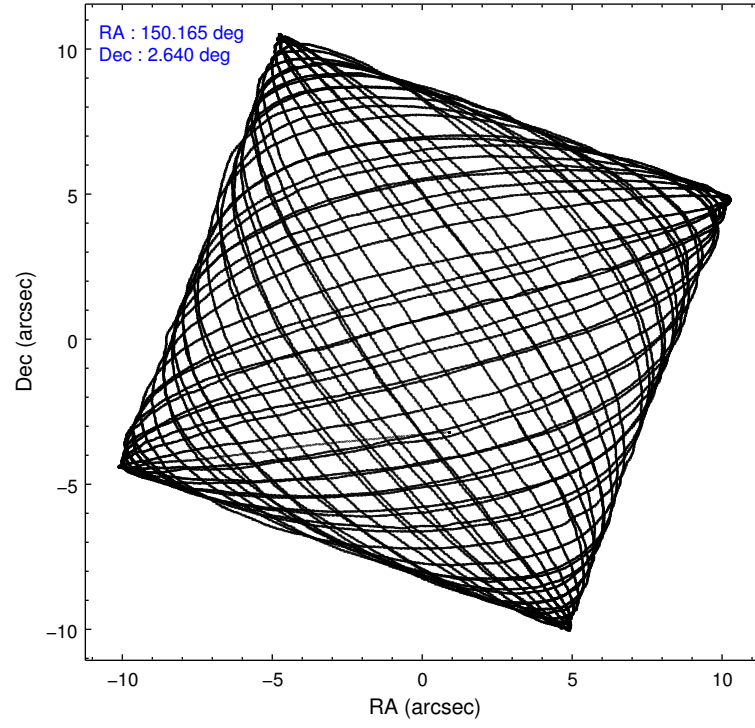
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	131041	132257	134099	129130
rejected events	100629	107569	118541	114339
rejected %	76%	81%	88%	88%

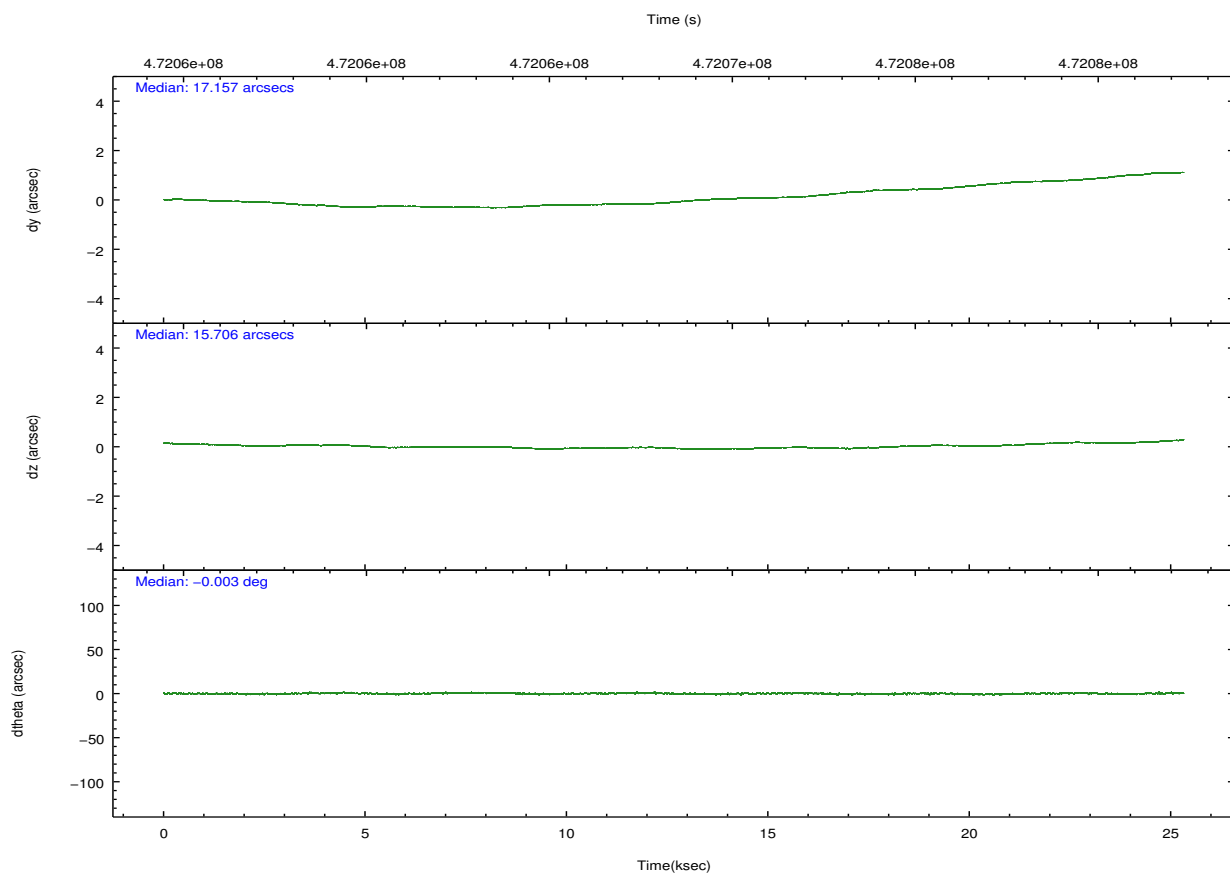
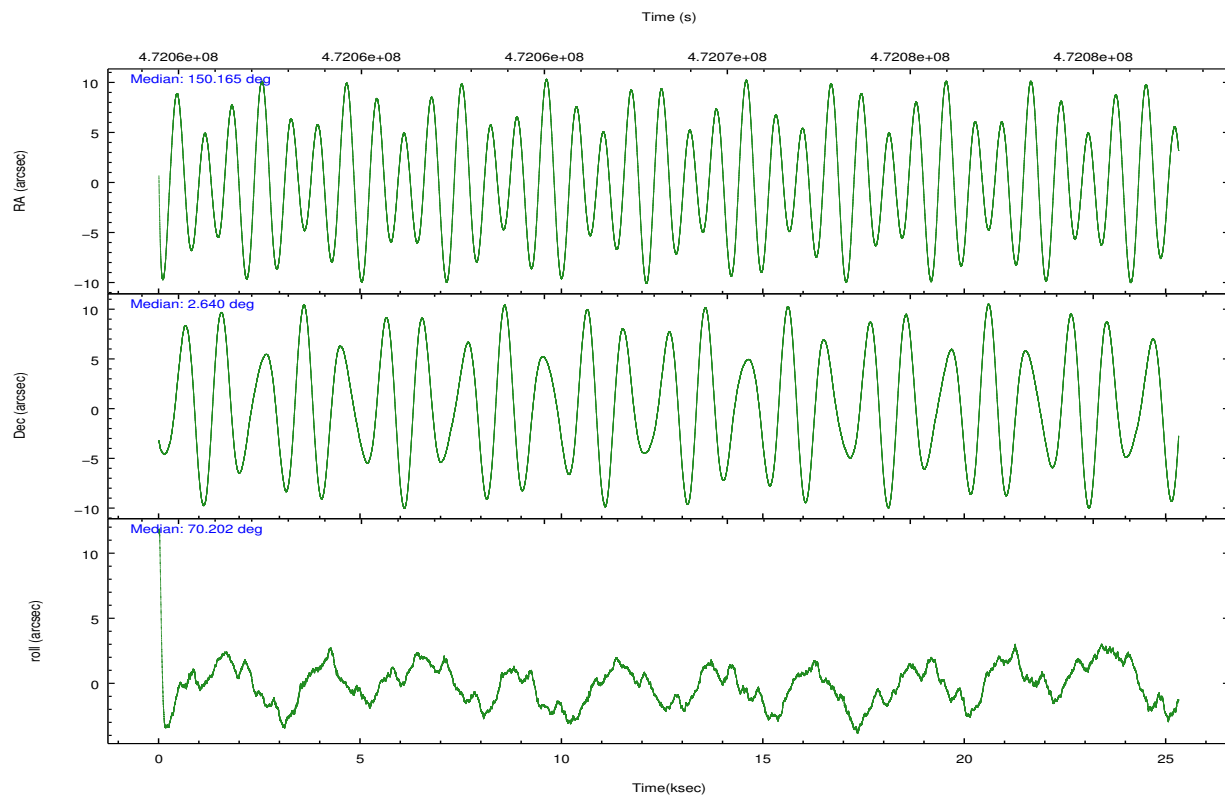
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	20291	13540	5711	5250
	15%	10%	4%	4%
grade 1 events	105	94	76	75
	0%	0%	0%	0%
grade 2 events	4013	4216	3914	3264
	3%	3%	2%	2%
grade 3 events	1584	1634	1412	1555
	1%	1%	1%	1%
grade 4 events	1461	1675	1636	1631
	1%	1%	1%	1%
grade 5 events	5895	6225	5681	6725
	4%	4%	4%	5%
grade 6 events	3072	3631	2889	3097
	2%	2%	2%	2%
grade 7 events	94620	101242	112780	107533
	72%	76%	84%	83%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-0123	ACIS-0123	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	150.169730	150.164738309318	Subarray requested	NONE	NONE
[deg] Pointing Dec	2.612683	2.639709117169343	Alternating exposures requested	N	N
[deg] Pointing Roll	70.000304	70.2092219940957	[s] Primary exposure time	0.000000	3.1
[deg] Roll angle	250.000000	250.000000			
[deg] Roll tolerance	20.000000	20.000000			
Roll constraint allows 180D rotation	Y	Y			
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	472056466.184000	472054957.71961			
Observation start date	2012-12-16T14:46:39	2012-12-16T14:22:37			
[s] Observation end time (MET)	472081066.184000	472081864.99606			
Observation end date	2012-12-16T21:36:39	2012-12-16T21:51:04			
Read mode	TIMED	TIMED			

2.3 Aspect



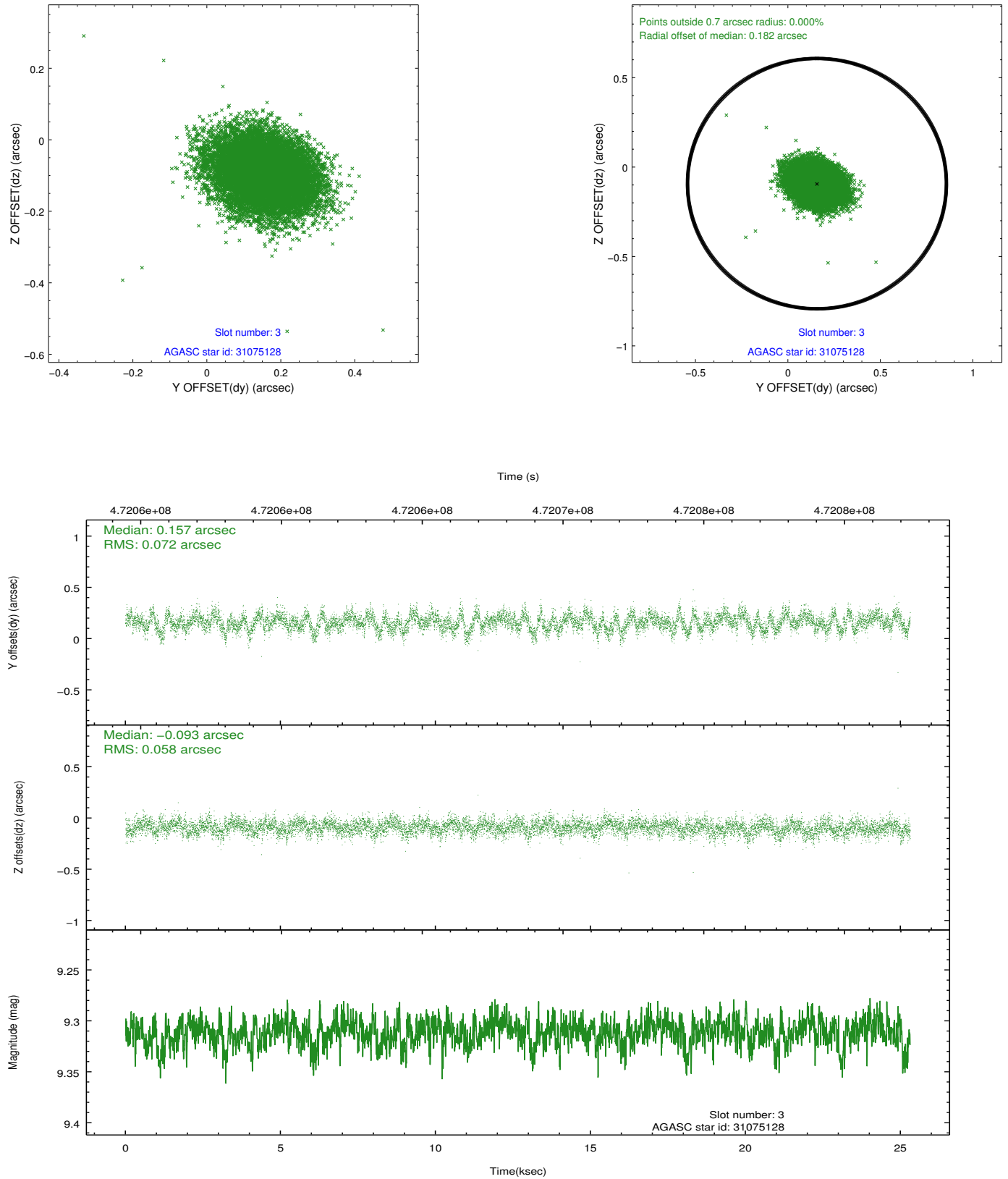


Slot Statistics

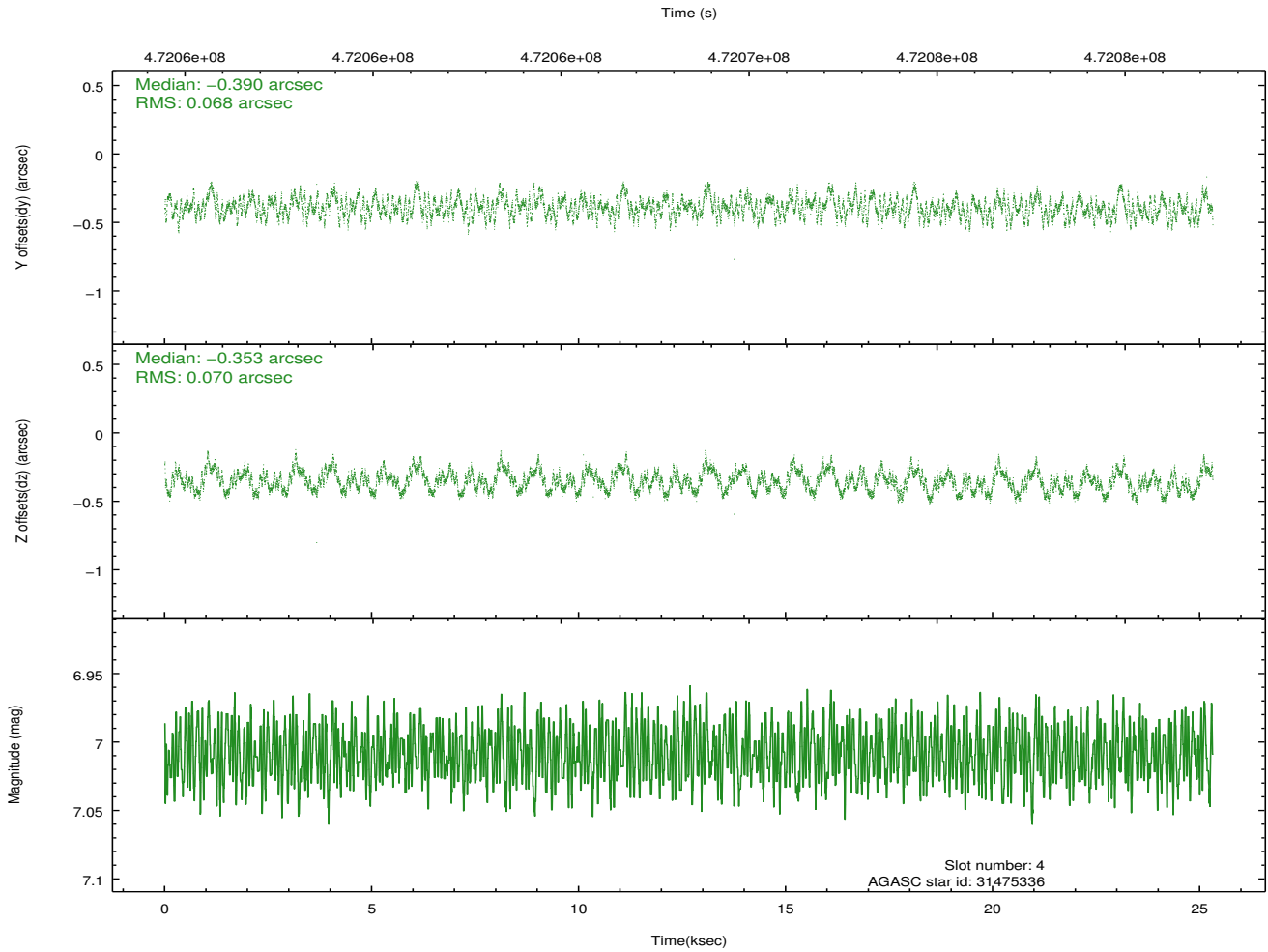
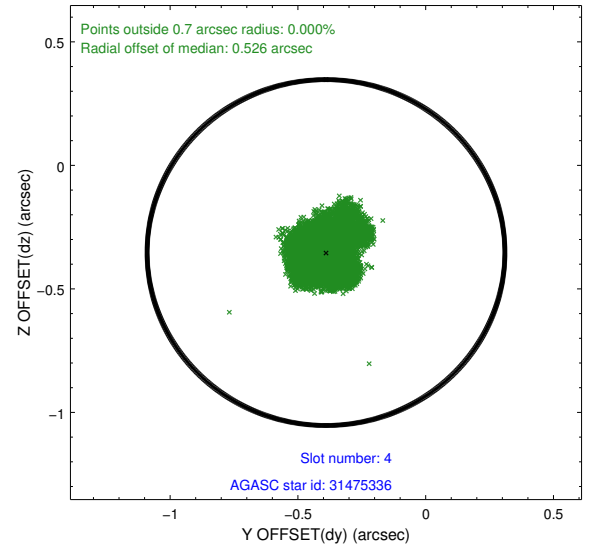
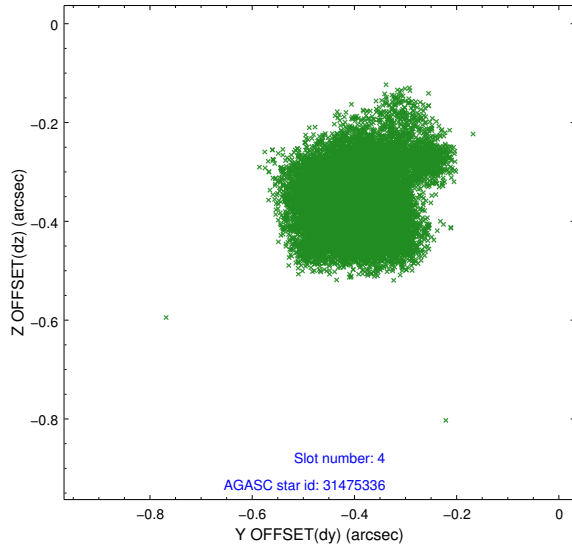
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.10	6175	0.061	-0.042	0.008	0.015	0.000000	0.000000	922.16	-839.38
1	FID		ACIS-I-5	7.09	6174	-0.261	0.047	0.010	0.019	0.000000	0.000000	-1826.23	1058.11
2	FID		ACIS-I-6	7.10	6175	0.108	0.065	0.009	0.013	0.000000	0.000000	387.60	1702.79
3	GUIDE	used	31075128	9.31	12333	0.157	-0.093	0.098	0.161	149.584516	2.364347	-1559.37	1672.30
4	GUIDE	used	31475336	7.01	12346	-0.390	-0.353	0.107	0.162	149.929497	3.384805	2316.43	1763.18
5	GUIDE	used	31983336	8.58	12347	0.526	0.289	0.088	0.145	150.429924	2.291234	-766.05	-1274.81
6	GUIDE	used	32374896	9.21	12263	-0.090	0.358	0.119	0.189	150.682269	2.512794	293.06	-1854.79
7	GUIDE	used	32387968	9.19	12295	-0.204	-0.195	0.098	0.156	150.106347	3.119099	1635.40	837.62

2.4 Star Slots

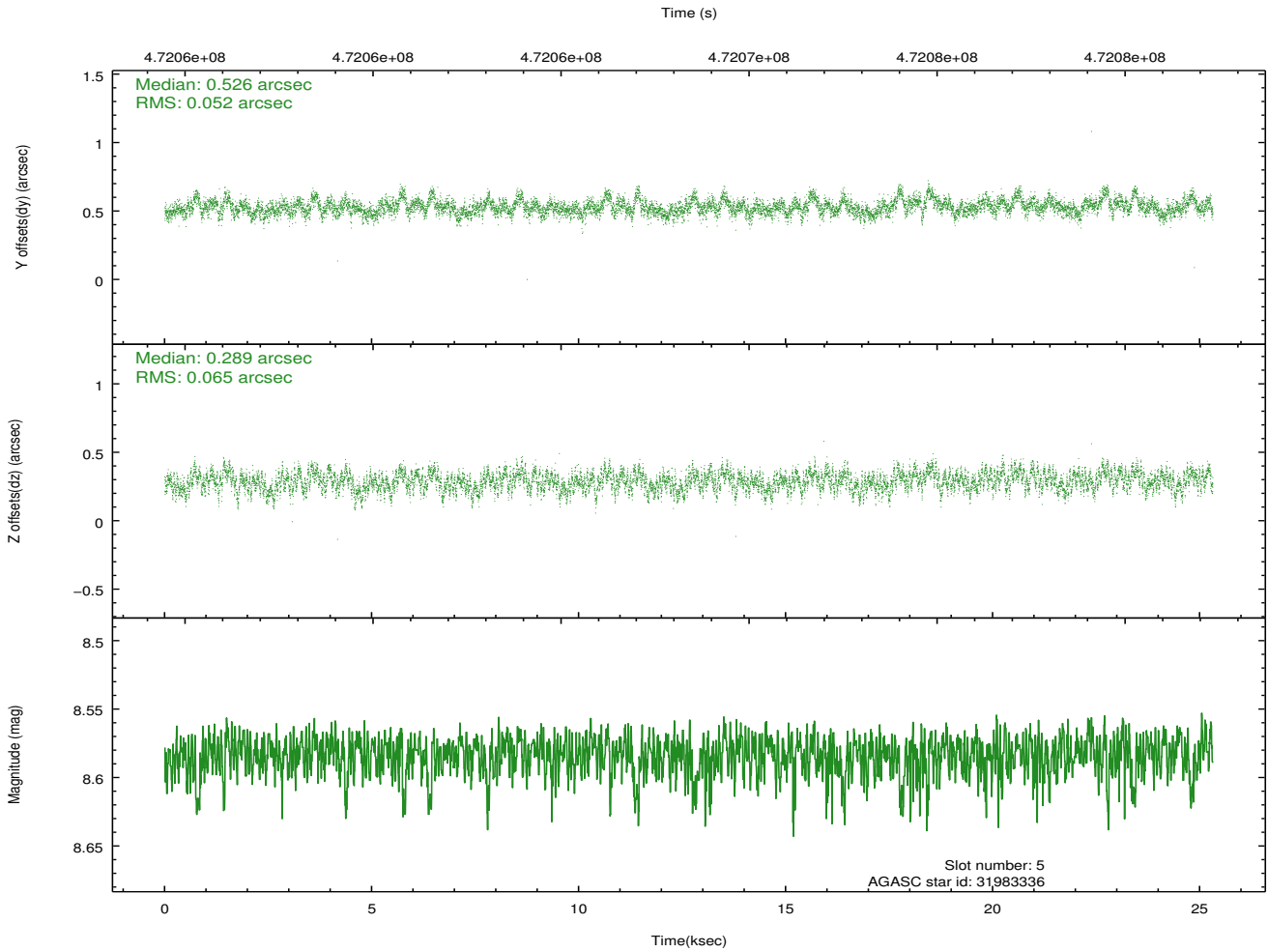
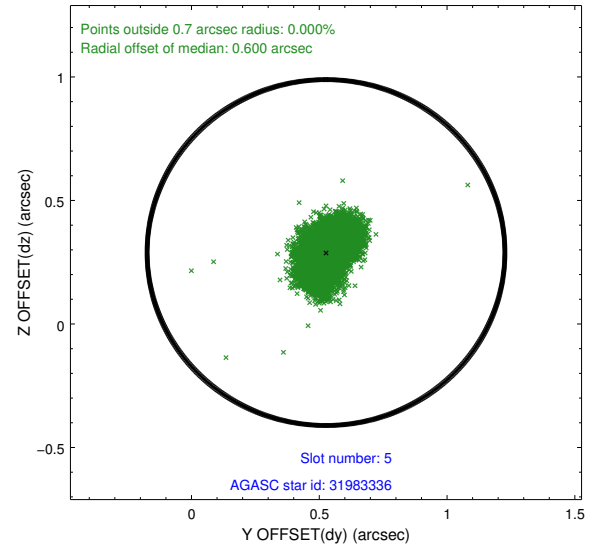
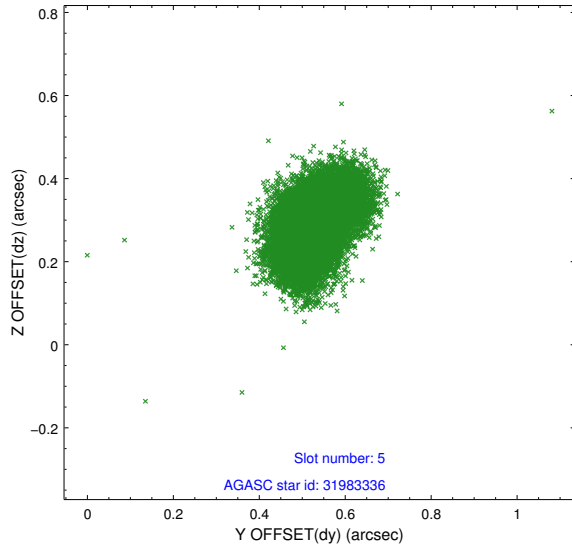
2.4.1 Slot 3



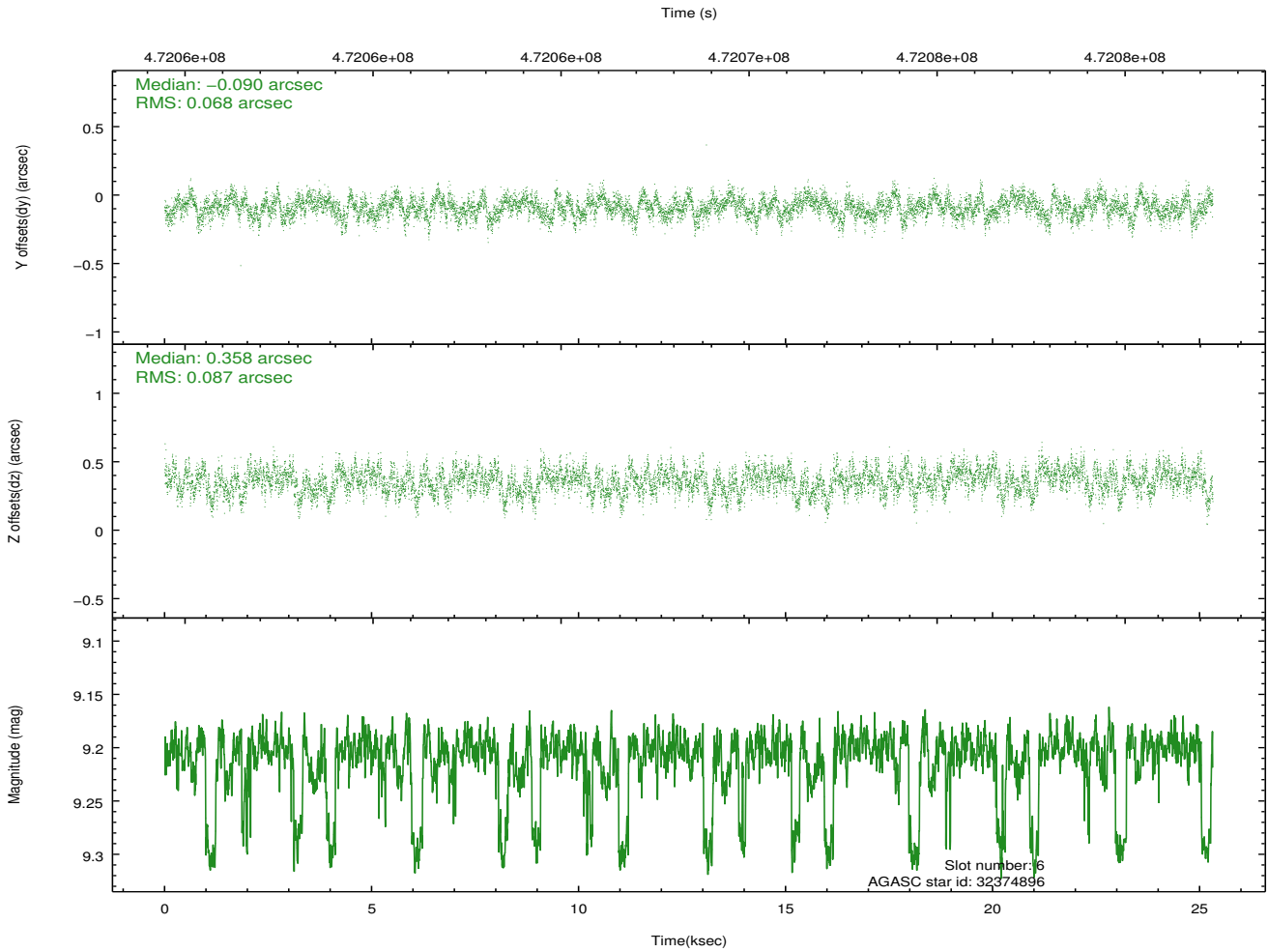
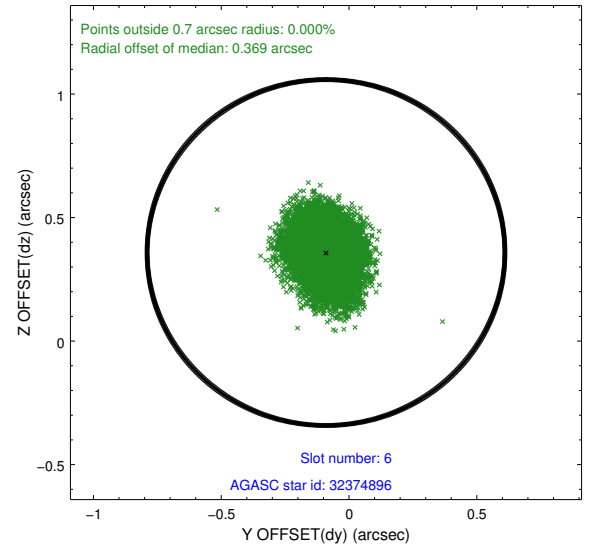
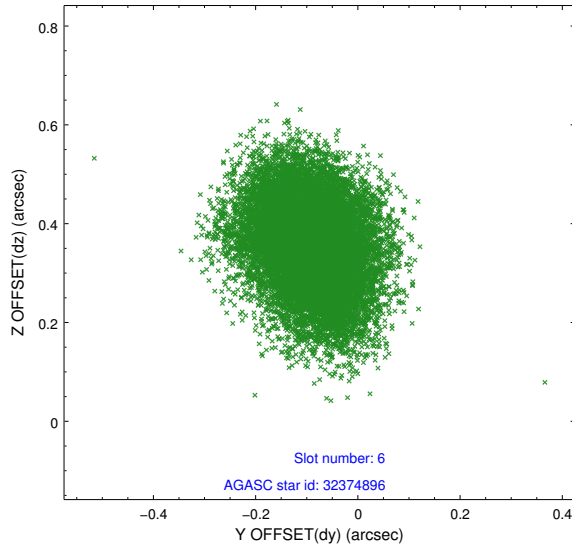
2.4.2 Slot 4



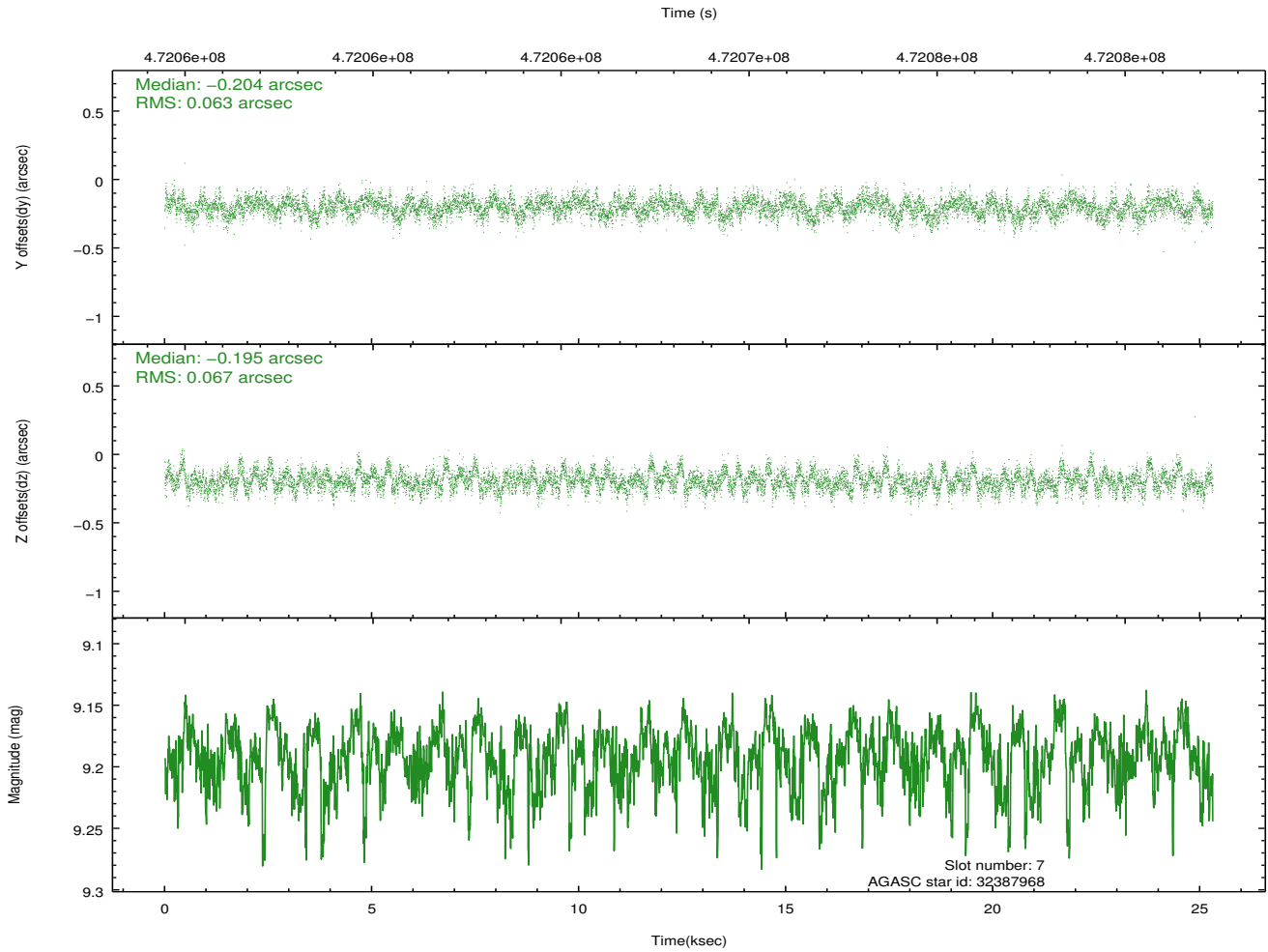
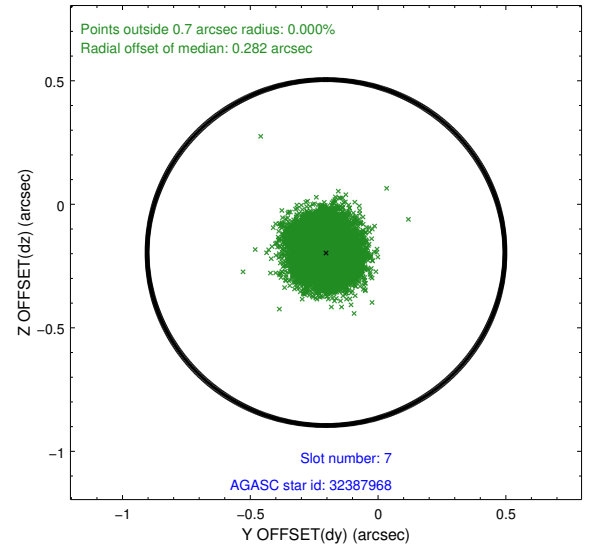
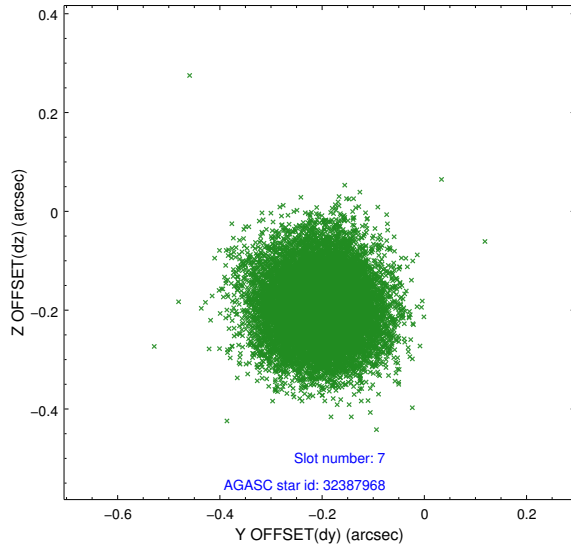
2.4.3 Slot 5



2.4.4 Slot 6

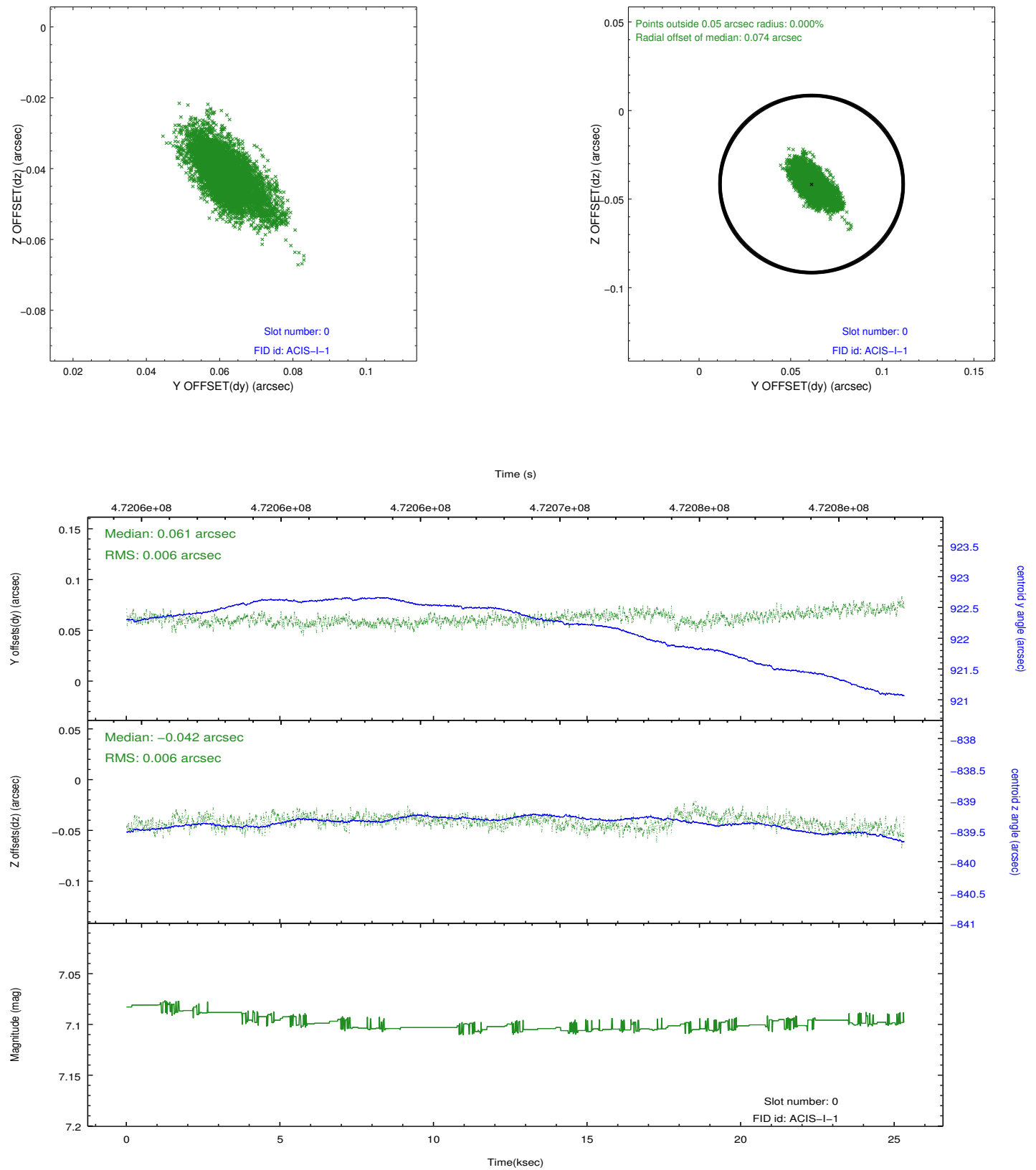


2.4.5 Slot 7

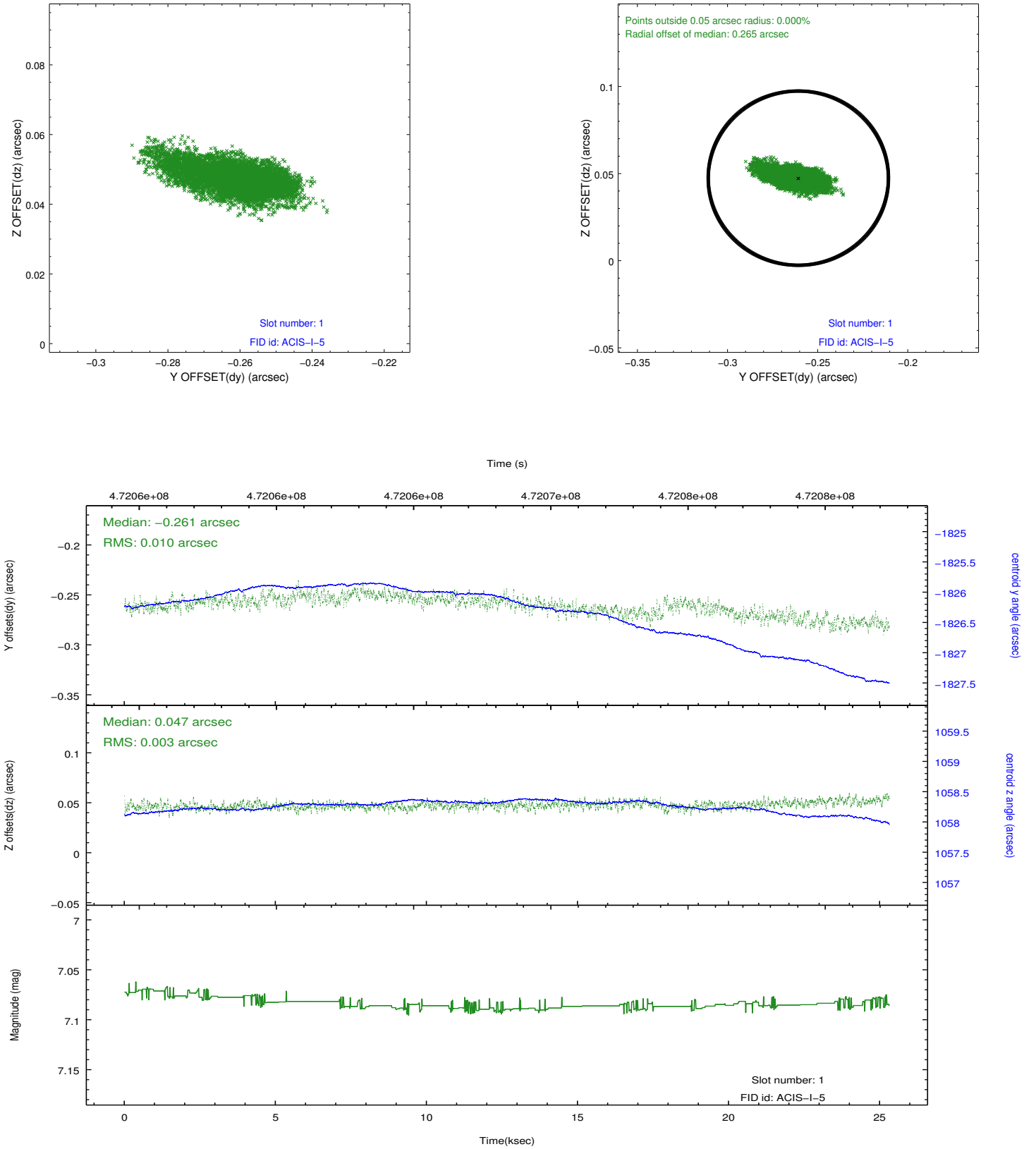


2.5 FID Slots

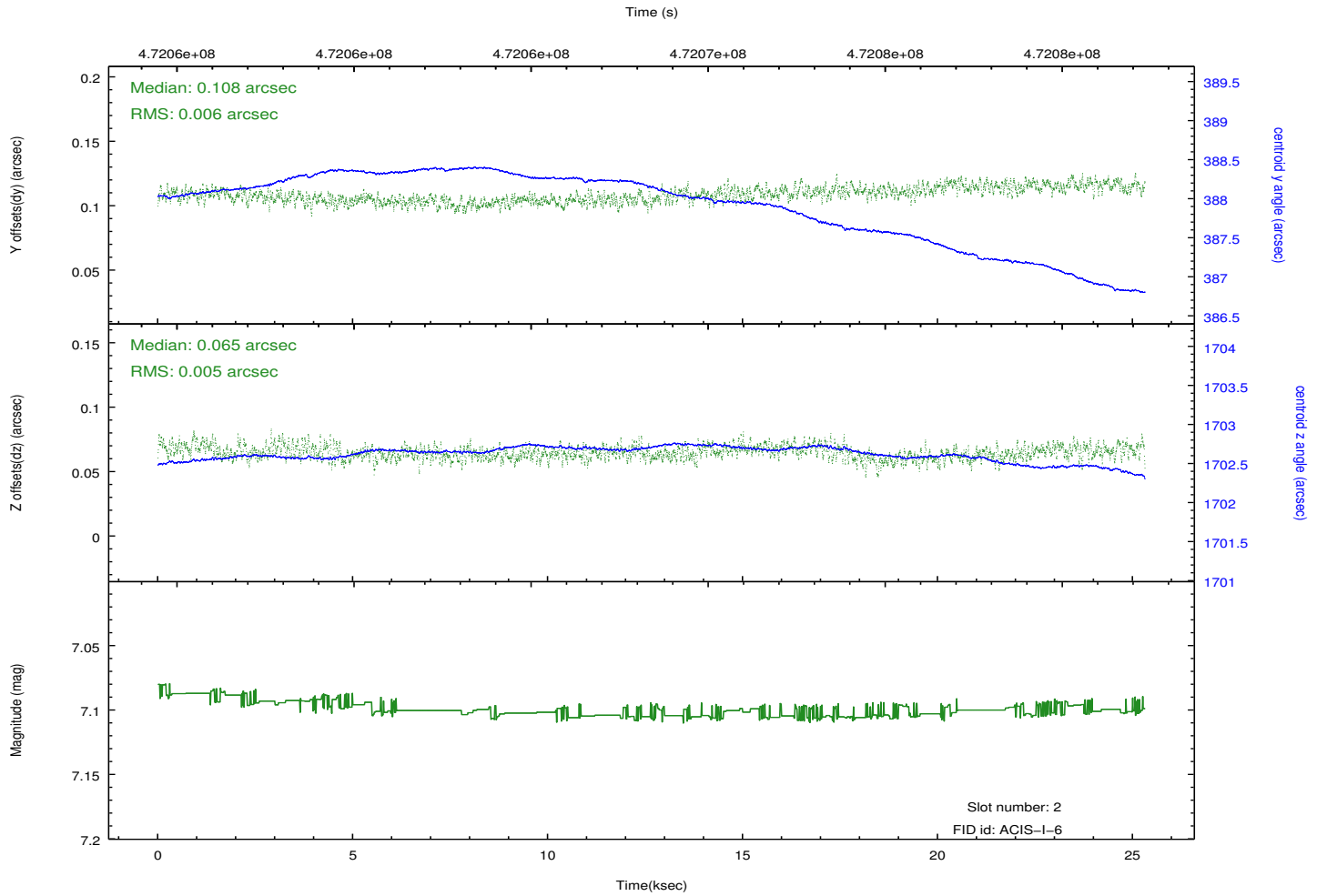
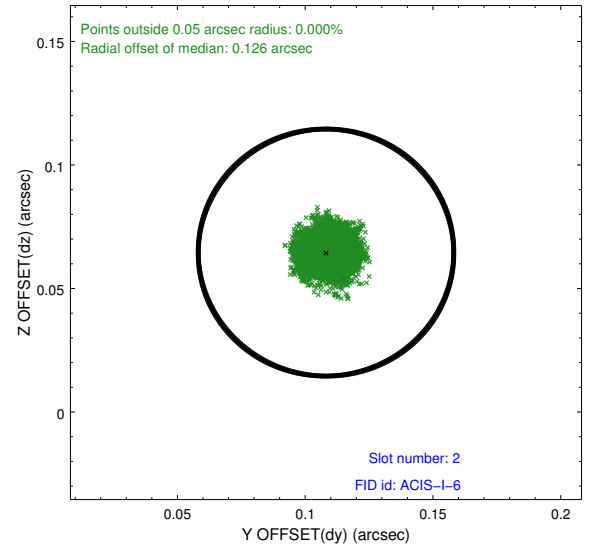
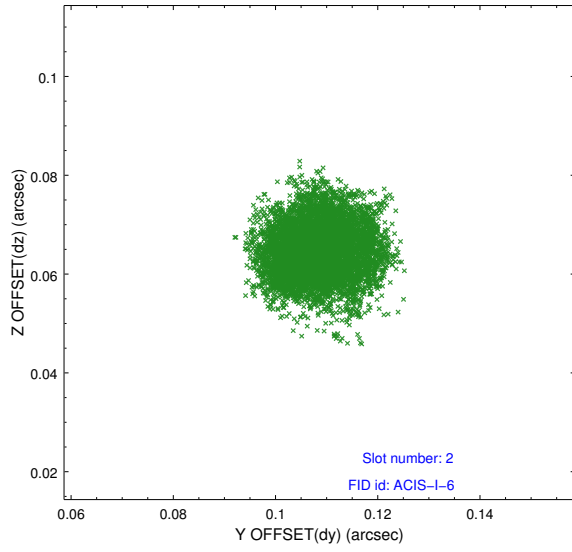
2.5.1 Slot 0



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)	2014.12.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	24.688400189877

A.2 Comments

Roll constraint met.

=====

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.