

V&V Reference Report

L2 ASCDS Version : 10

Observation 15655 - L2 Version 2
Chandra X-Ray Center

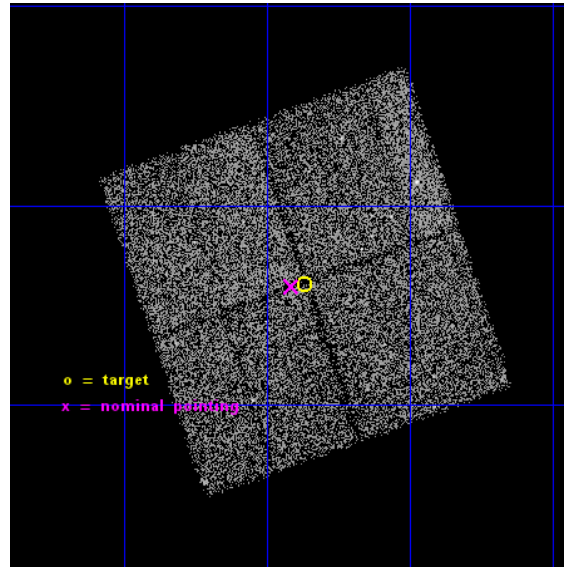
L2 Processing Date : Dec 3 2014

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

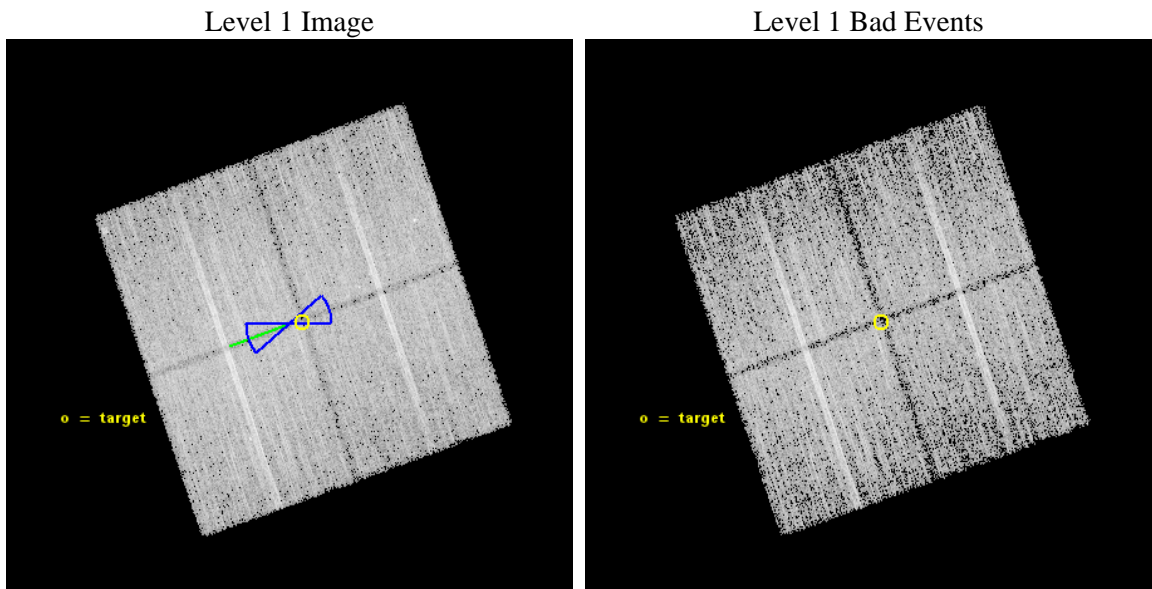
seq_num	901067	Sequence number
obs_id	15655	Observation id
title	The COSMOS Legacy Survey	Proposal title
observer	Dr Francesca Civano	Principal investigator
object	COSMOS Legacy	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	150.21716	Observer's specified target RA [deg]
dec_targ	2.767518	Observer's specified target Dec [deg]
ra_nom	150.22855062333	Nominal RA [deg]
dec_nom	2.76590718129	Nominal Dec [deg]
roll_nom	250.65813770866	Nominal Roll [deg]
revision	2	Processing version of data
ontime	24790.700190663	Sum of GTIs [s]
livetime	24466.791442024	Livetime [s]
ontime0	24790.700190663	Sum of GTIs [s]
ontime1	24790.700190663	Sum of GTIs [s]
ontime2	24790.700190663	Sum of GTIs [s]
ontime3	24787.559220254	Sum of GTIs [s]
l2events	46741	Number of level 2 events



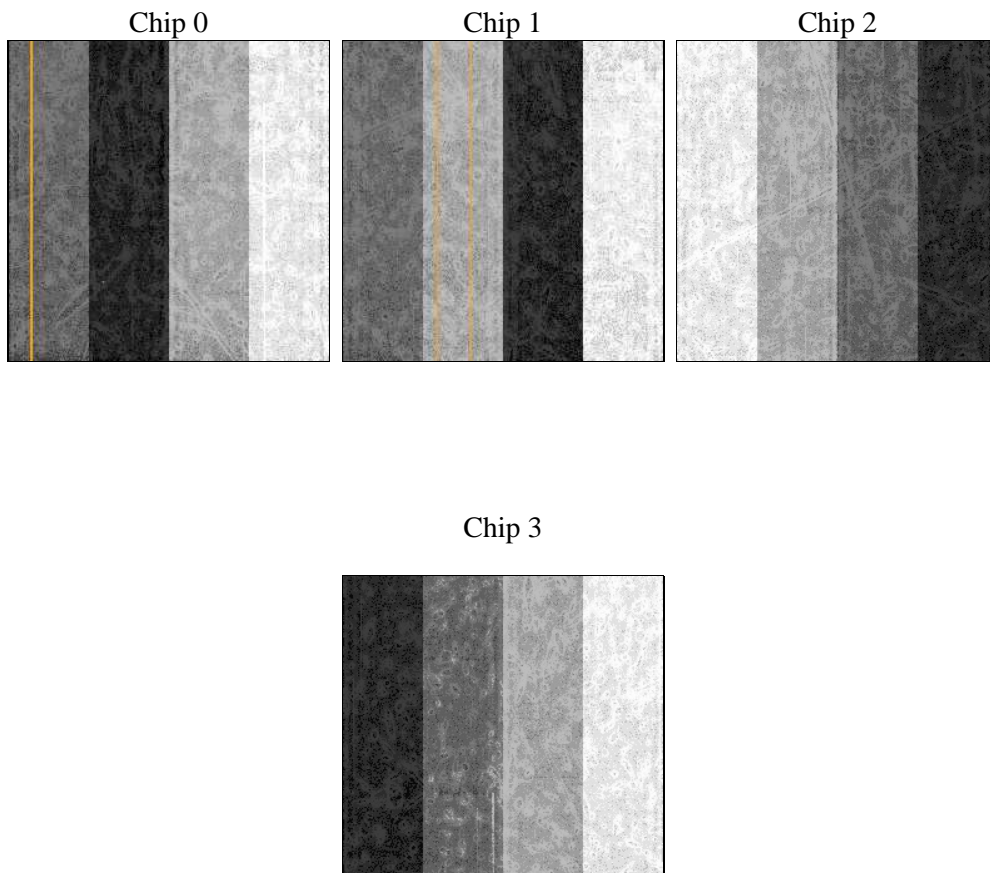
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	25000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	24790.700190663	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	24790.700190663	Sum of GTIs [s]
date	2014-12-03T16:43:26	Date and time of file creation	ontime1	24790.700190663	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	24790.700190663	Sum of GTIs [s]
			ontime3	24787.559220254	Sum of GTIs [s]
			l1events	435730	Number of level 1 events

2.1.4 Events

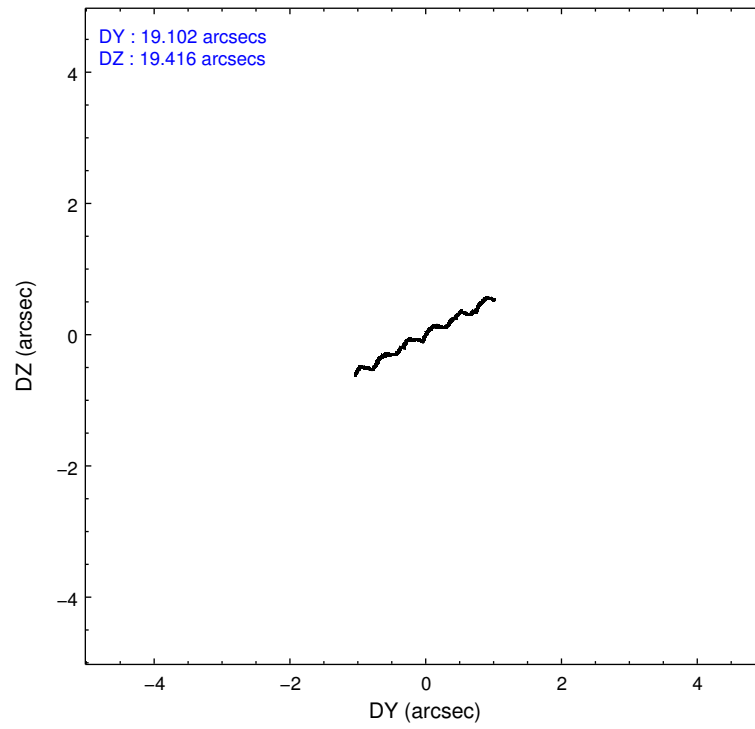
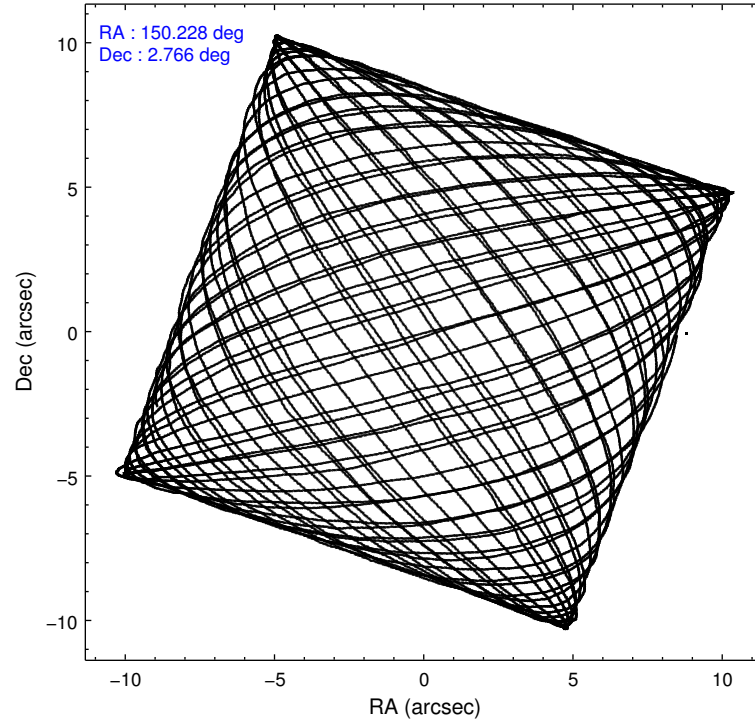
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	102210	105799	116921	110800
rejected events	88420	90465	103663	97104
rejected %	86%	85%	88%	87%

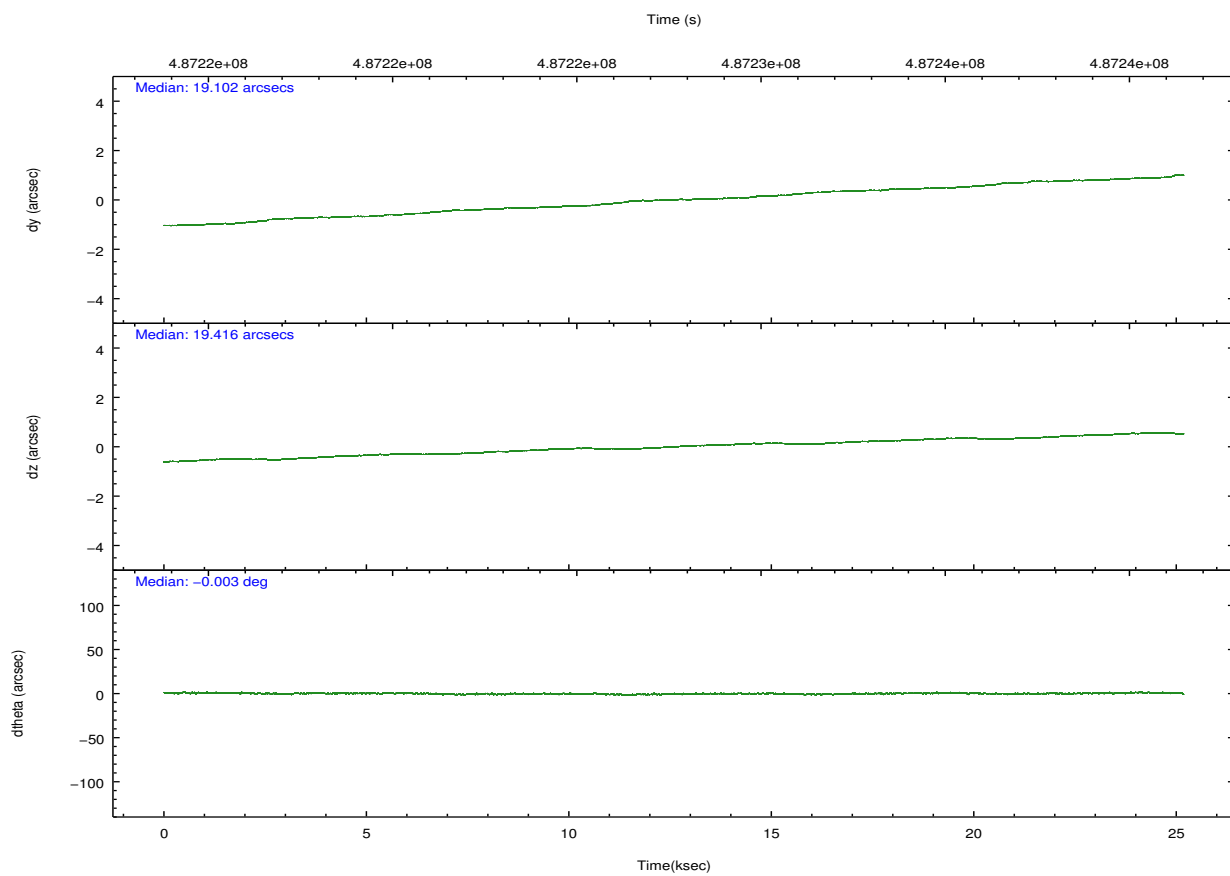
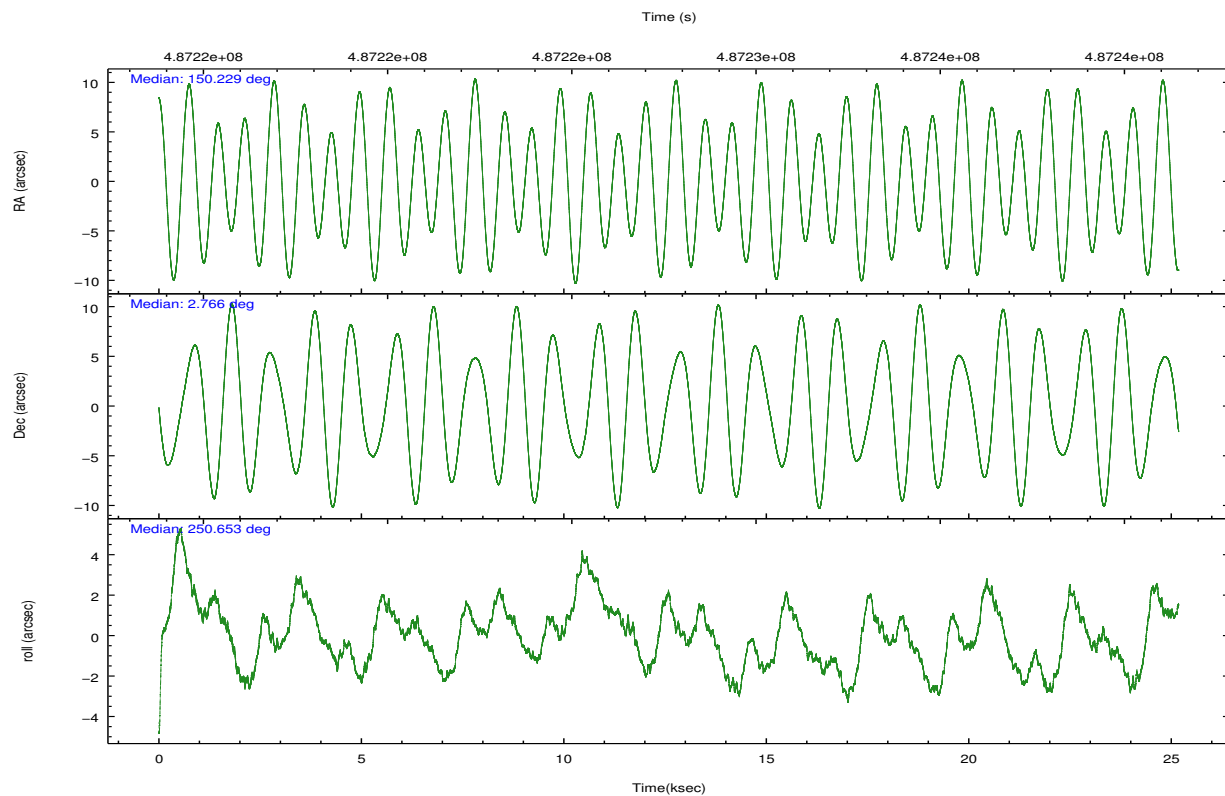
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	4728	5502	4608	5101
	4%	5%	3%	4%
grade 1 events	52	58	65	80
	0%	0%	0%	0%
grade 2 events	3435	3690	3265	2896
	3%	3%	2%	2%
grade 3 events	1446	1458	1403	1404
	1%	1%	1%	1%
grade 4 events	1381	1519	1362	1391
	1%	1%	1%	1%
grade 5 events	5280	5603	4951	6126
	5%	5%	4%	5%
grade 6 events	2801	3167	2621	2906
	2%	2%	2%	2%
grade 7 events	83087	84802	98646	90896
	81%	80%	84%	82%

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	150.223357	150.2285506233271	Subarray requested	NONE	NONE
[deg] Pointing Dec	2.792910	2.765907181290009	Alternating exposures requested	N	N
[deg] Pointing Roll	250.449710	250.6581377086589	[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)	487215224.184000	487214847.93933			
Observation start date	2013-06-10T01:32:37	2013-06-10T01:27:27			
[s] Observation end time (MET)	487240224.184000	487240602.60323			
Observation end date	2013-06-10T08:29:17	2013-06-10T08:36:42			
Read mode	TIMED	TIMED			

2.3 Aspect



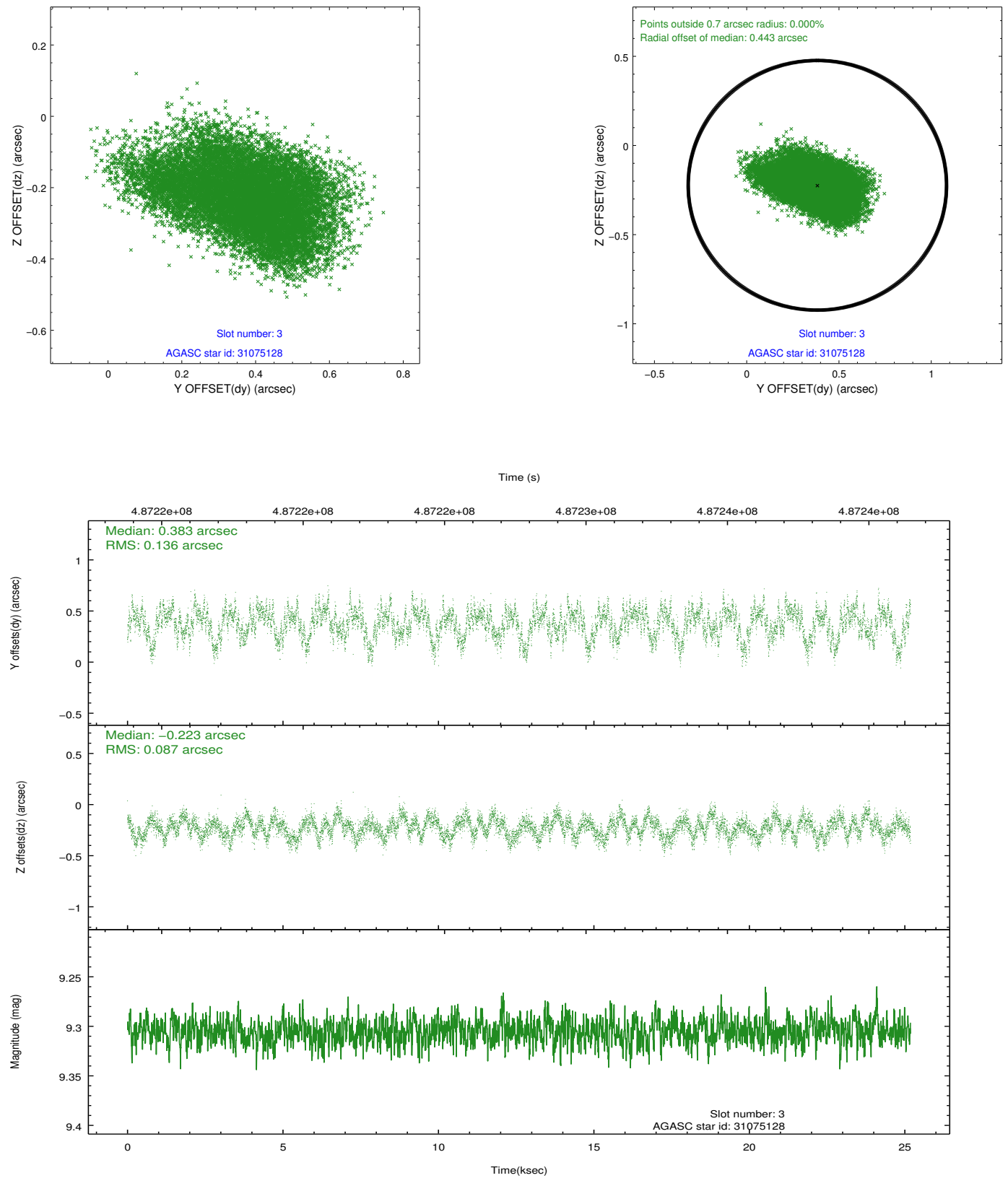


Slot Statistics

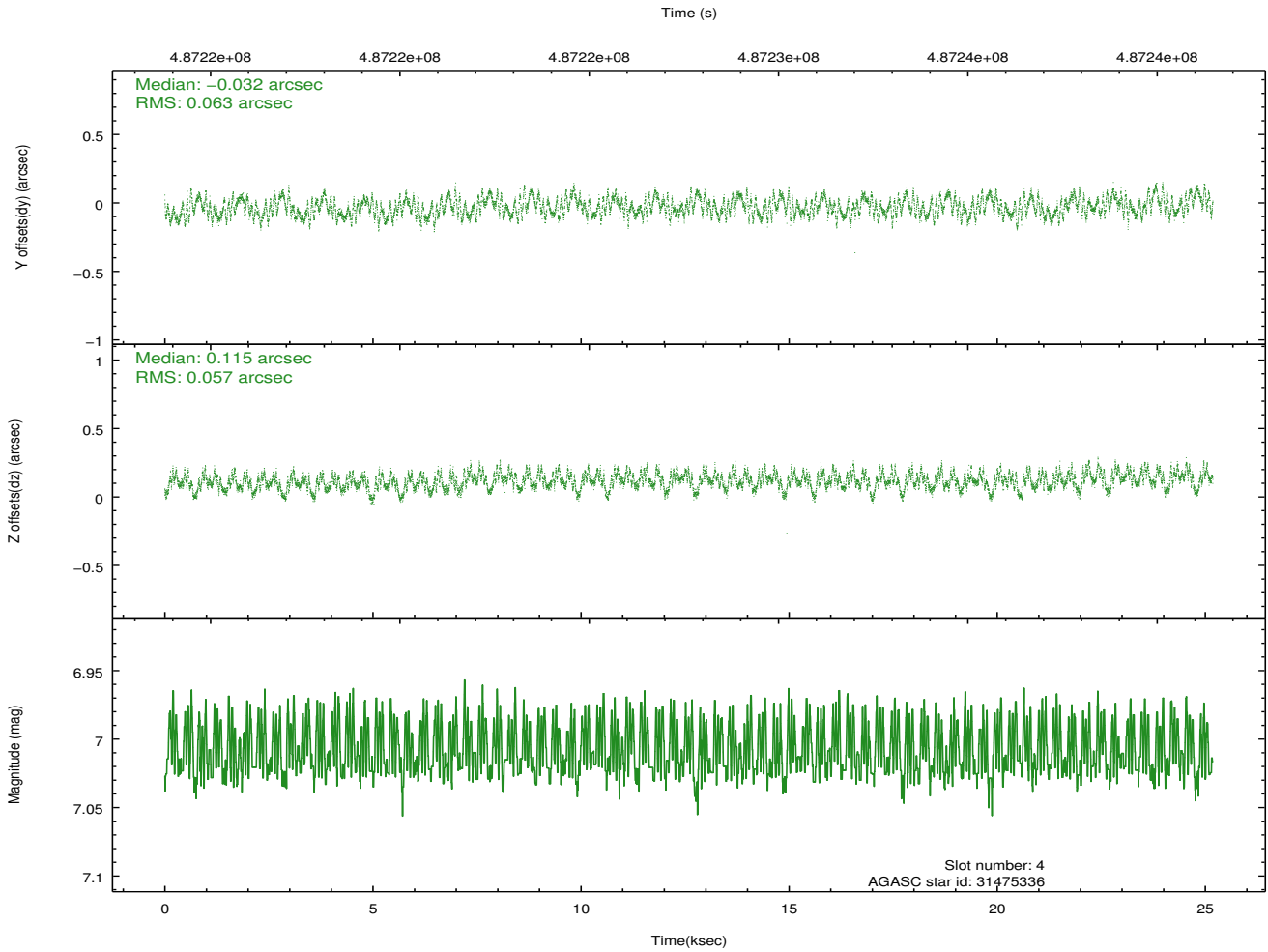
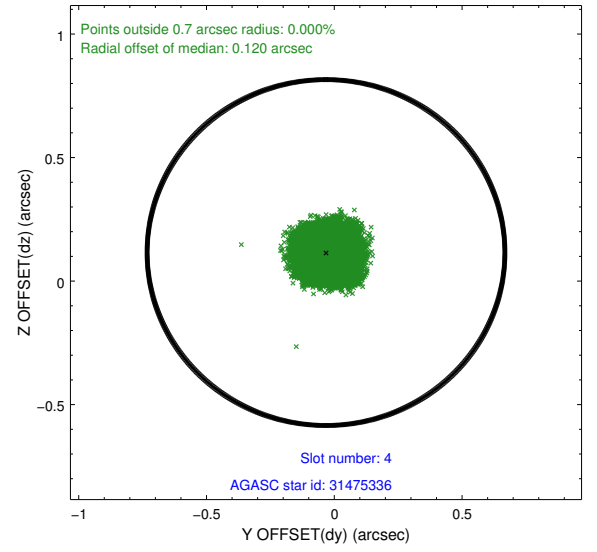
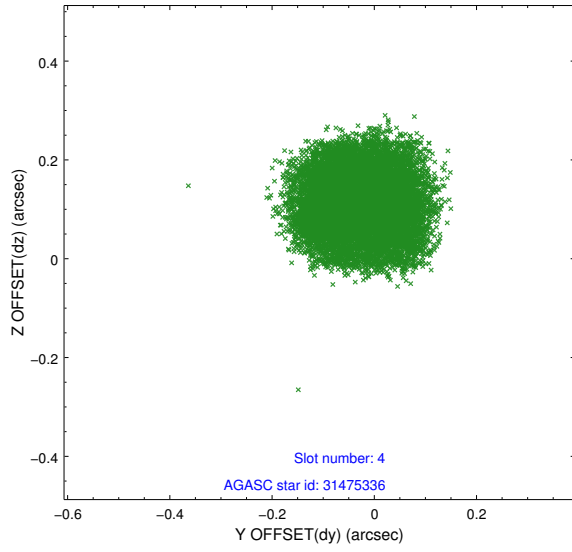
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.04	6142	0.028	0.038	0.012	0.019	0.000000	0.000000	920.31	-843.06
1	FID		ACIS-I-5	7.04	6143	-0.243	0.032	0.008	0.015	0.000000	0.000000	-1828.04	1054.30
2	FID		ACIS-I-6	7.04	6143	0.124	-0.002	0.015	0.022	0.000000	0.000000	385.77	1698.95
3	GUIDE	used	31075128	9.31	12279	0.383	-0.223	0.171	0.279	149.584516	2.364347	2222.92	-1649.14
4	GUIDE	used	31475336	7.01	12284	-0.032	0.115	0.093	0.139	149.929497	3.384805	-1654.37	-1709.15
5	GUIDE	used	31983336	8.57	12281	-0.173	-0.076	0.090	0.153	150.429924	2.291234	1452.86	1304.77
6	GUIDE	used	32374896	9.21	12275	0.058	0.022	0.126	0.202	150.682269	2.512794	398.00	1893.29
7	GUIDE	used	32388536	6.70	12285	-0.239	0.165	0.102	0.176	151.035133	3.201055	-2360.95	2257.54

2.4 Star Slots

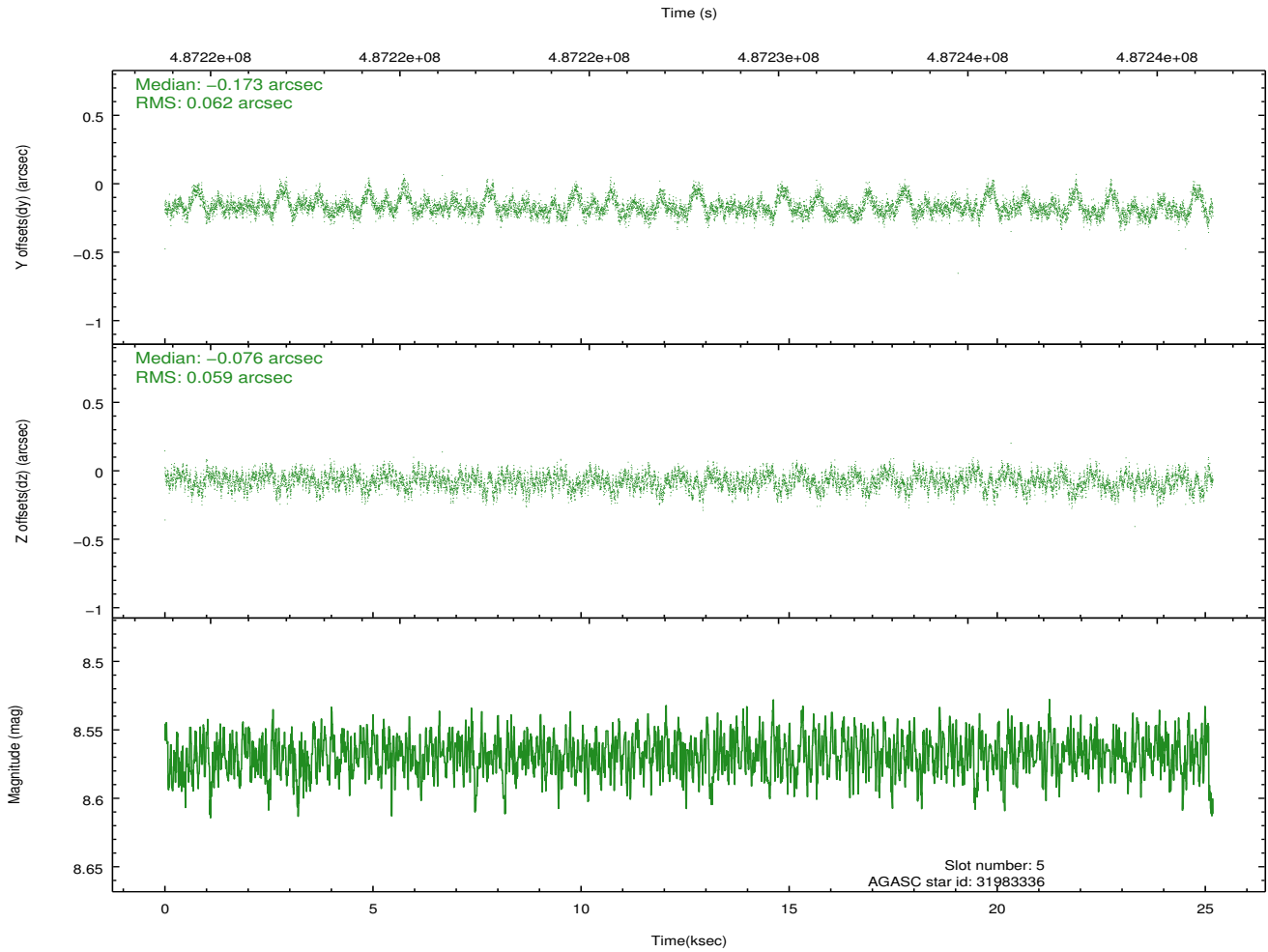
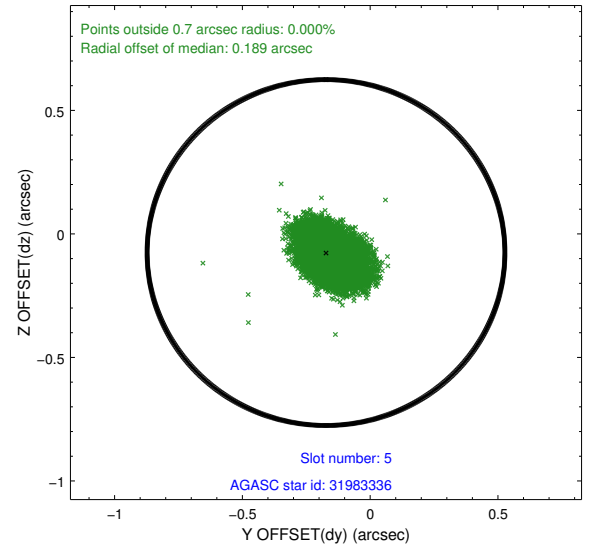
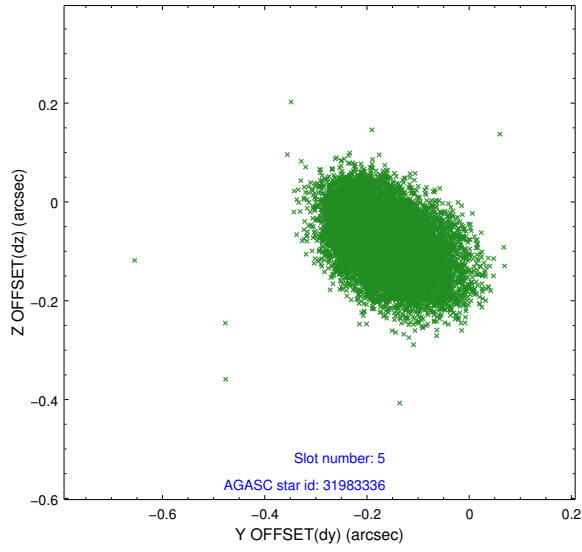
2.4.1 Slot 3



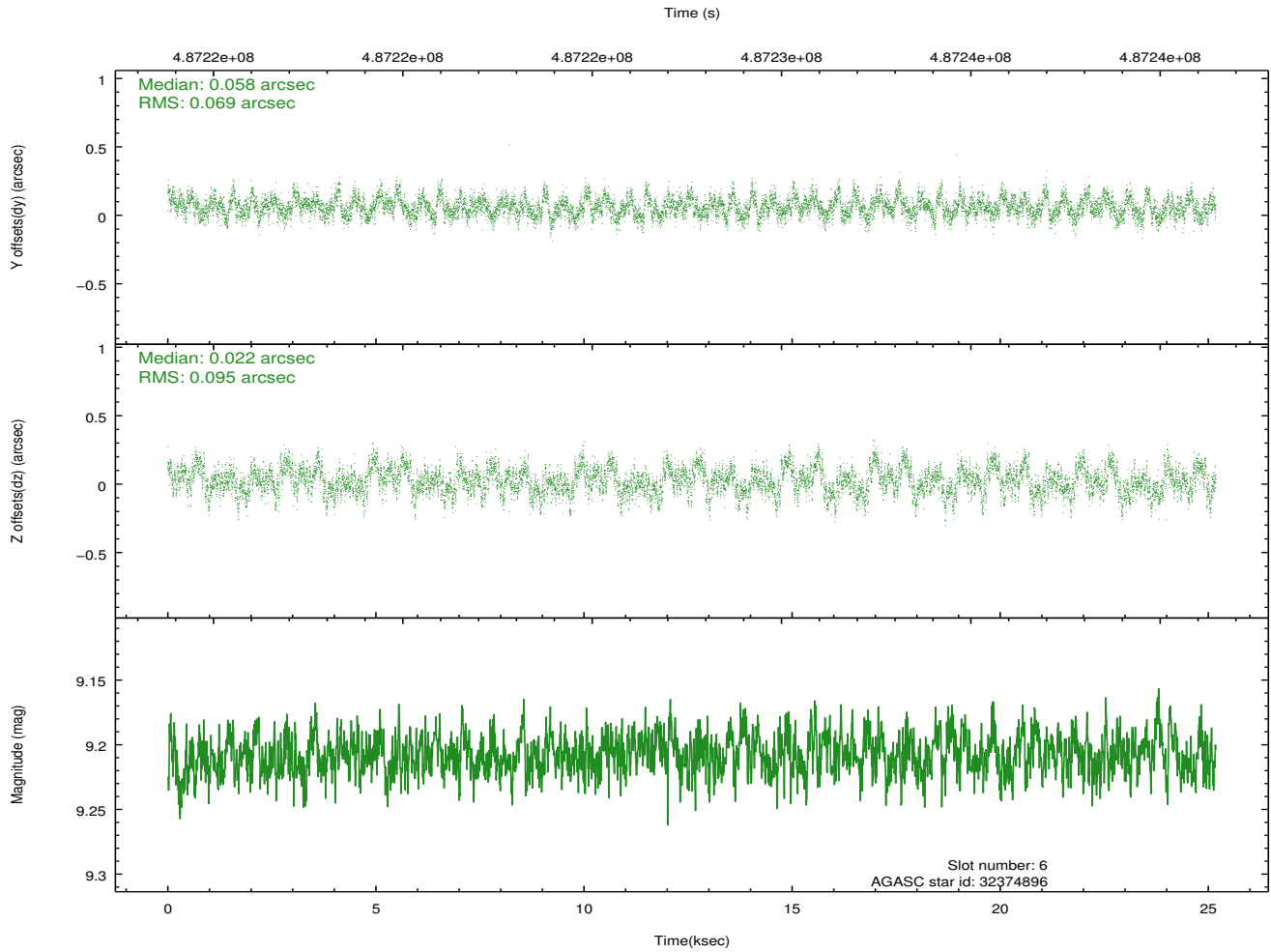
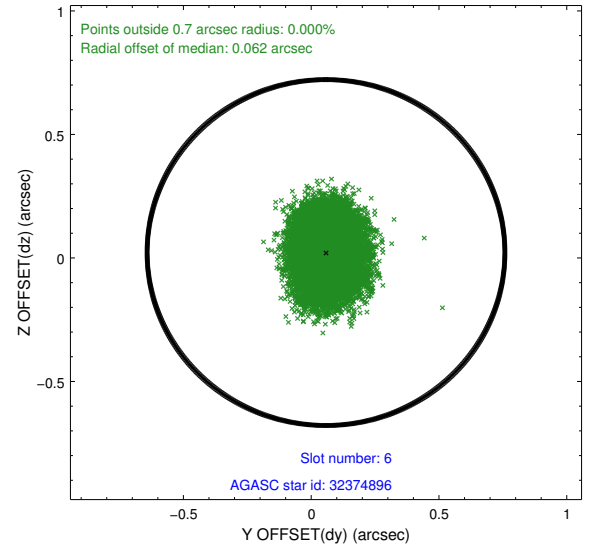
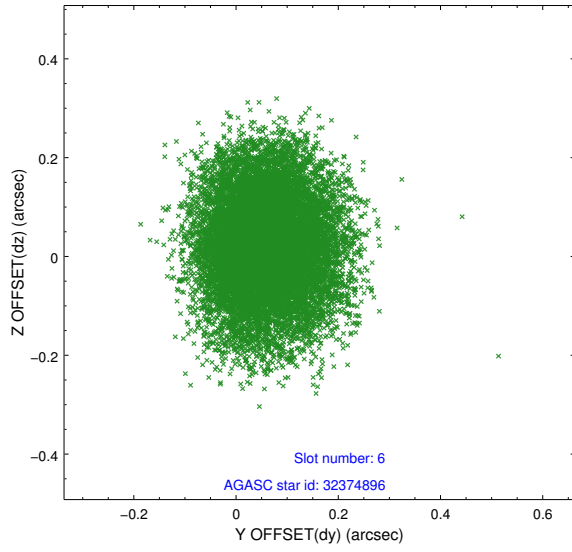
2.4.2 Slot 4



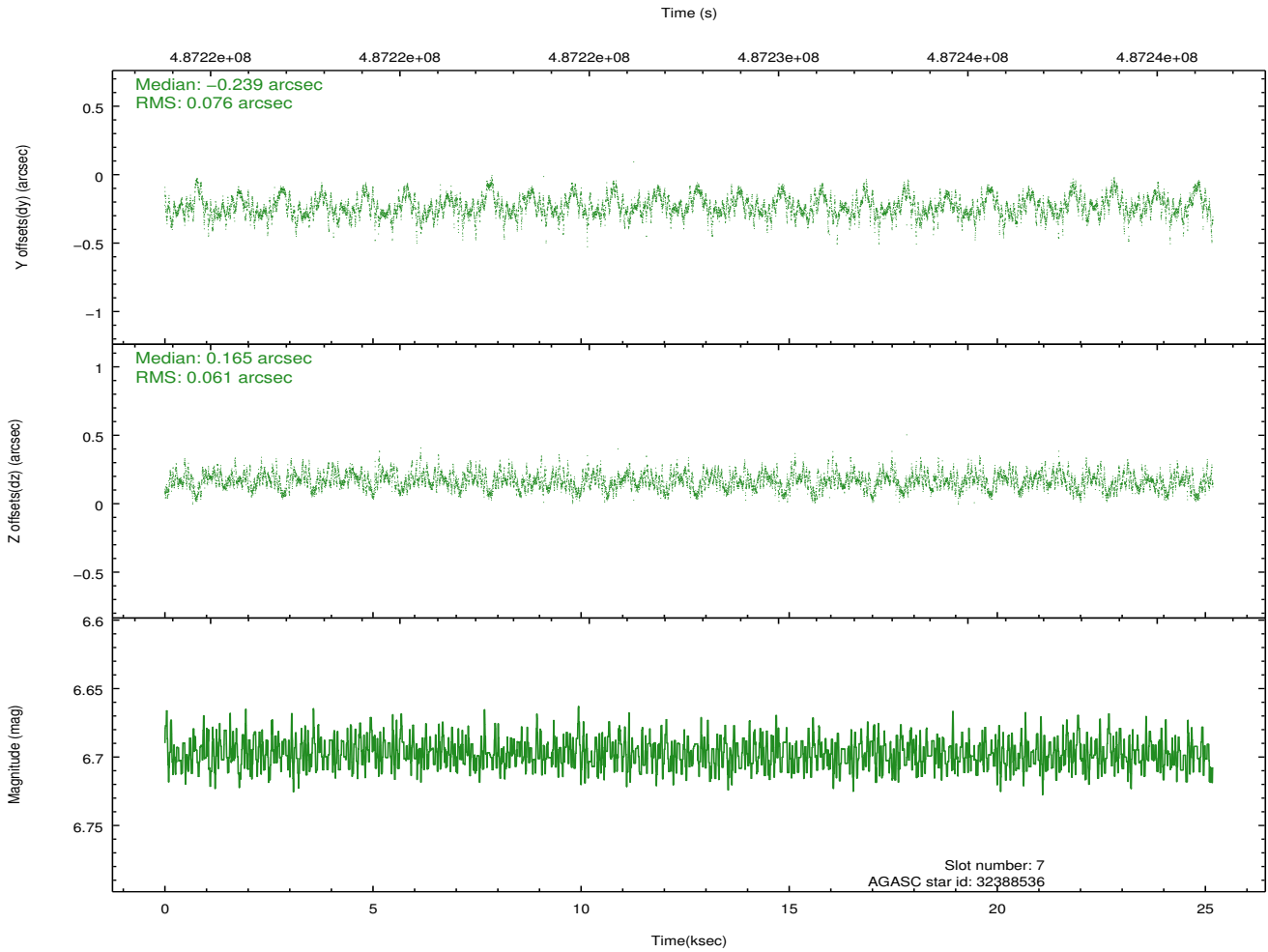
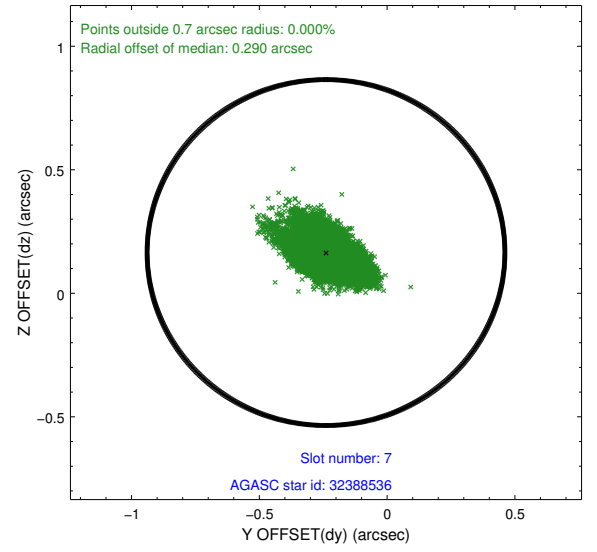
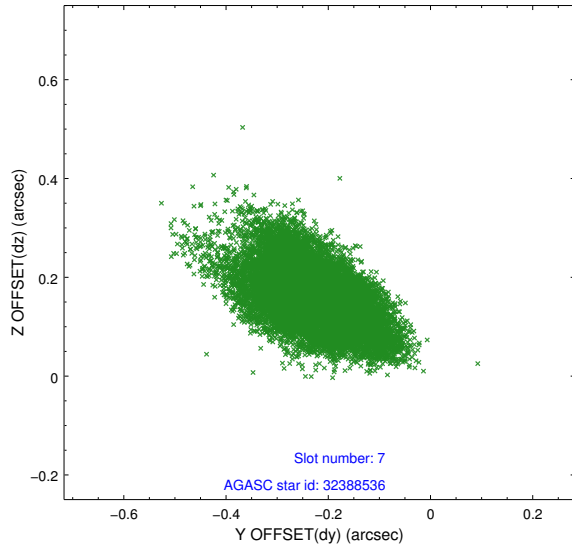
2.4.3 Slot 5



2.4.4 Slot 6

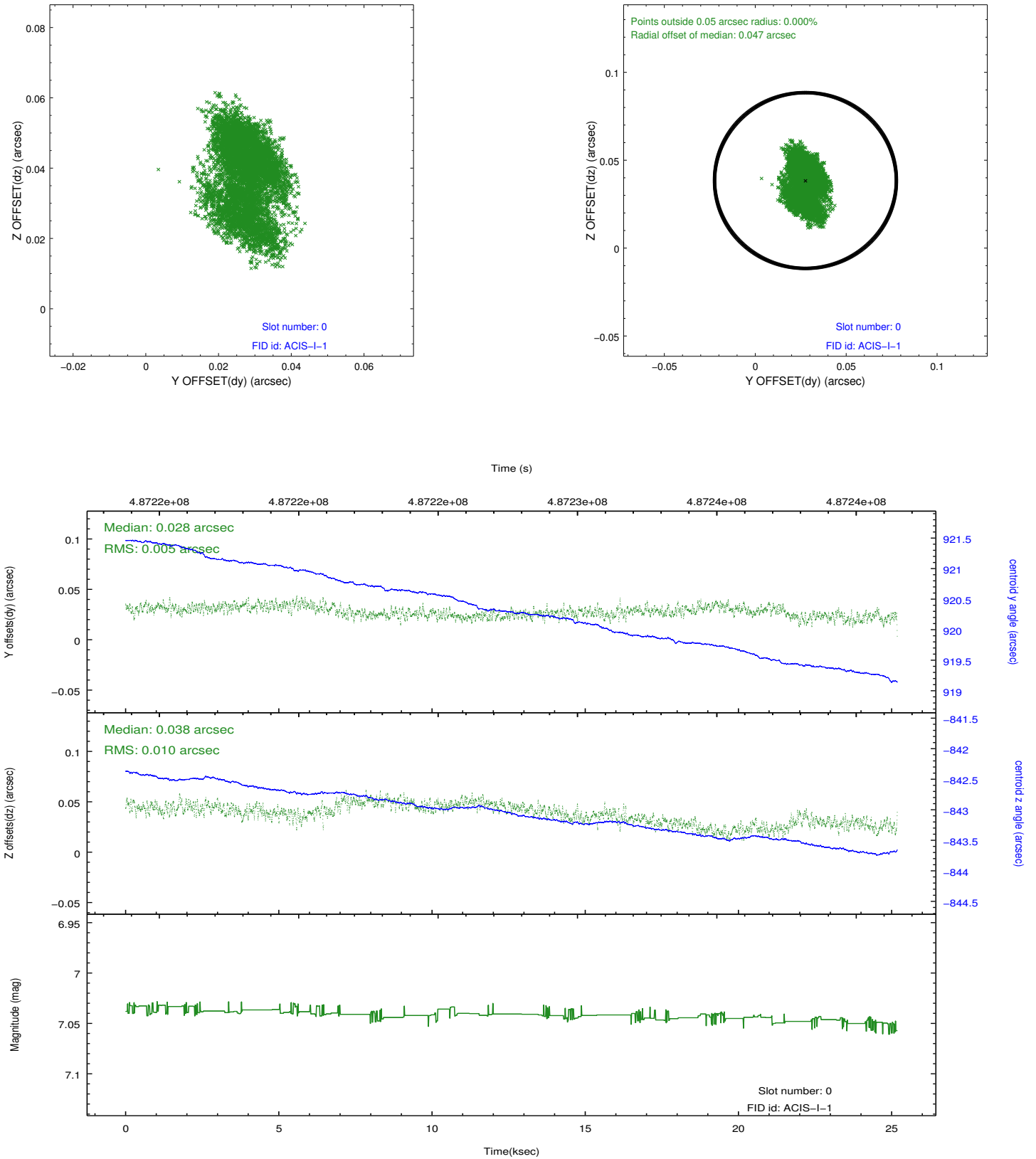


2.4.5 Slot 7

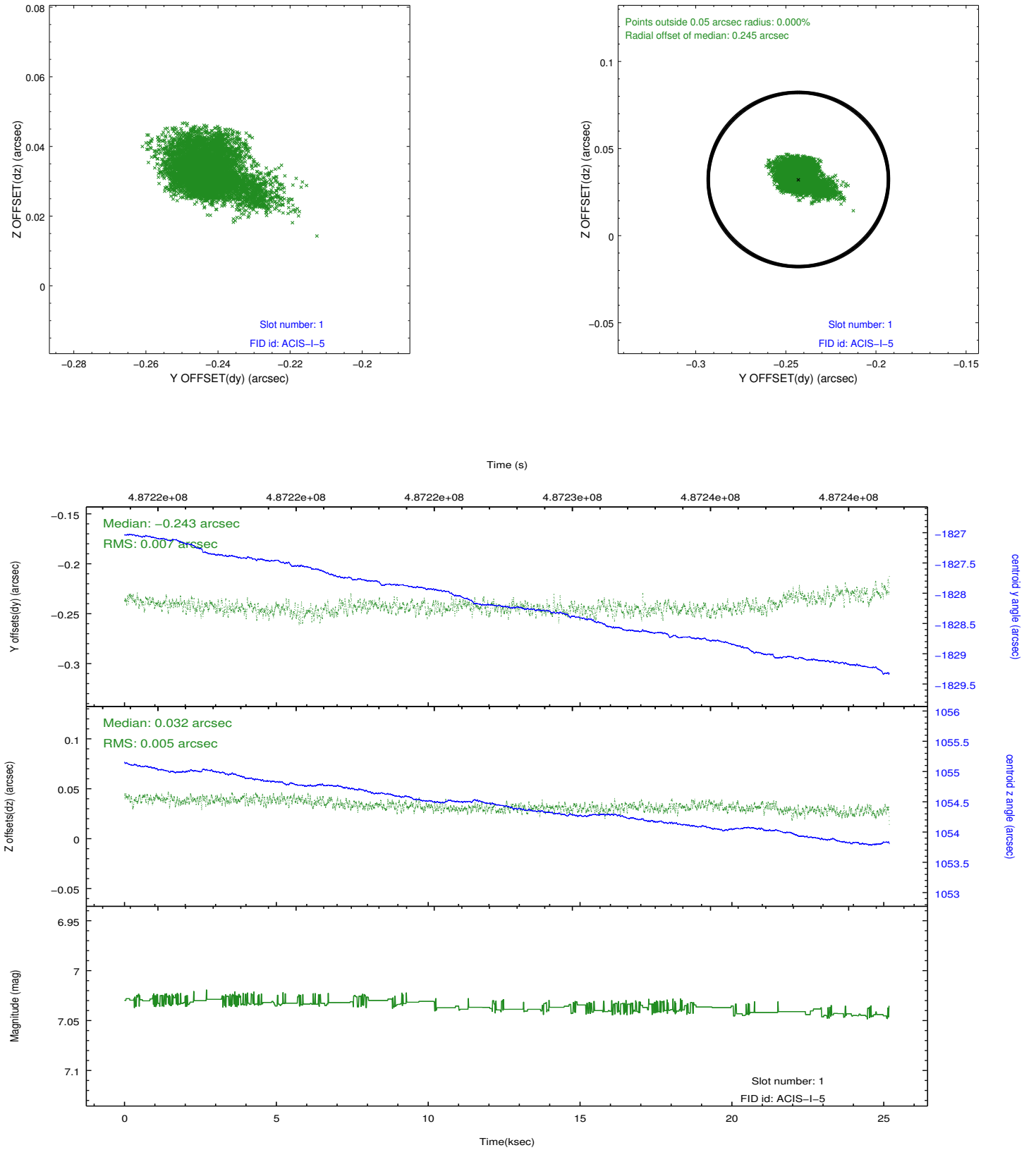


2.5 FID Slots

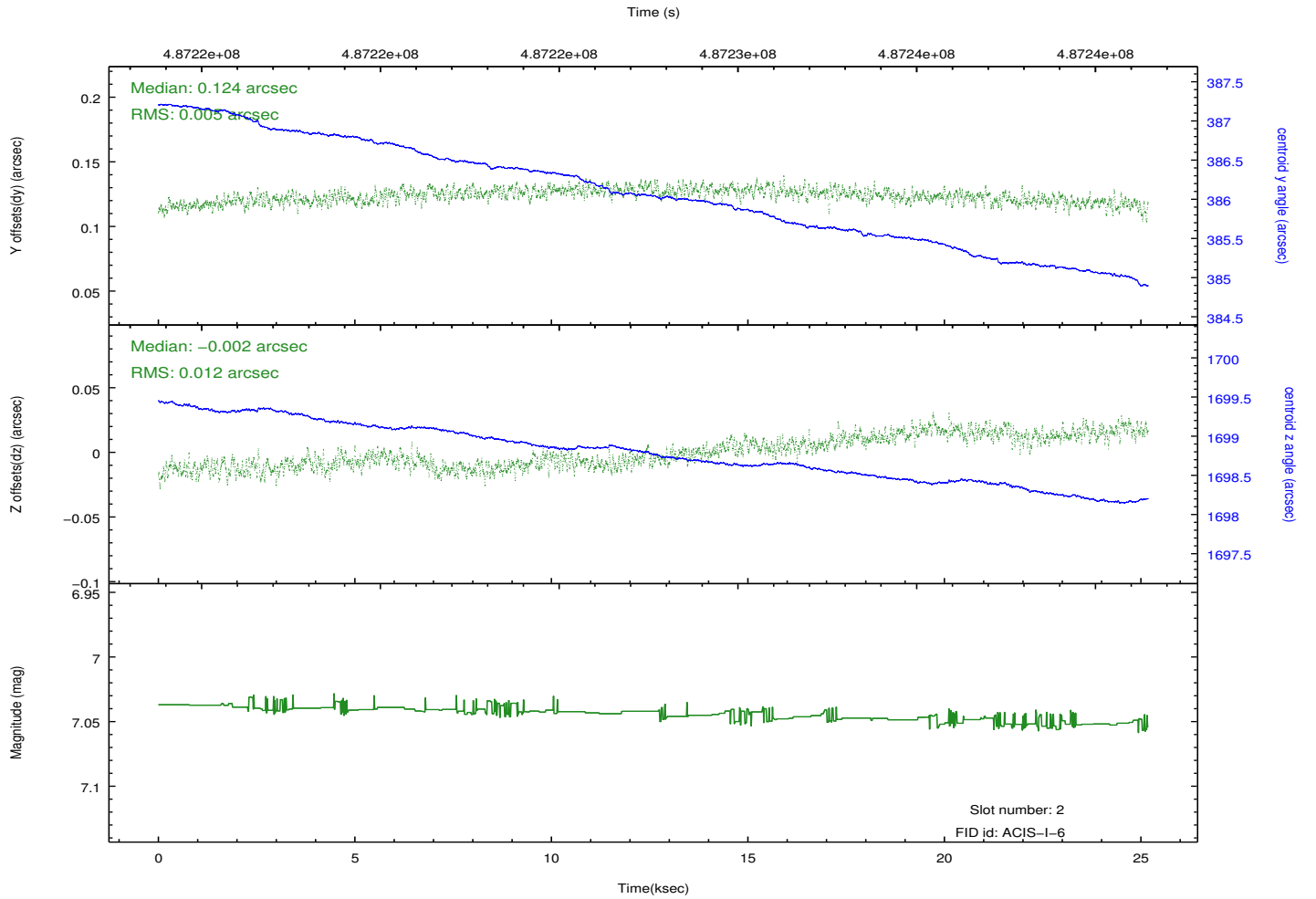
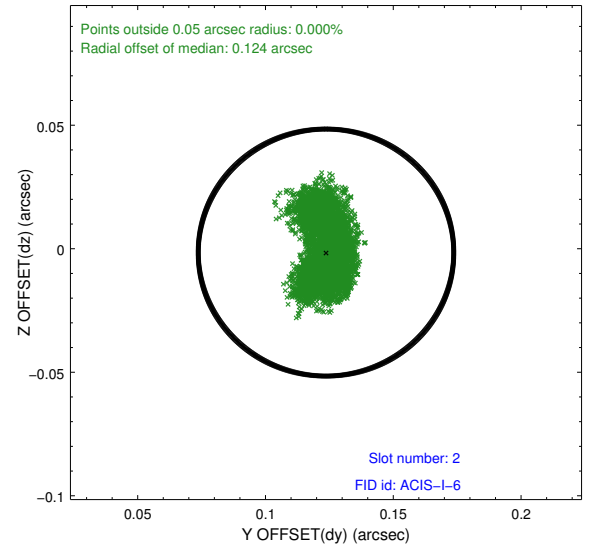
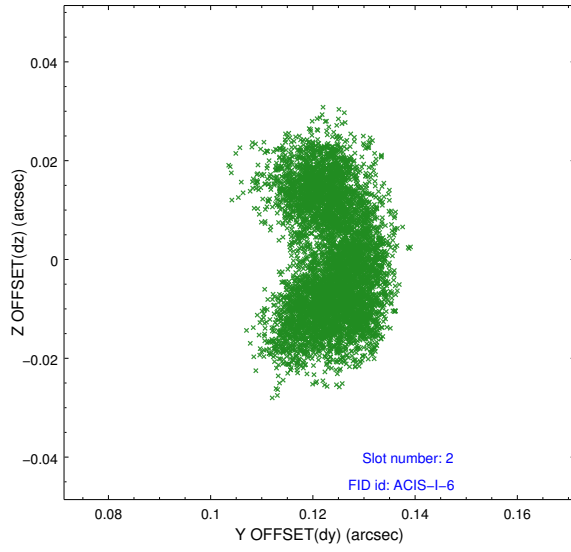
2.5.1 Slot 0



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)	2014.12.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	24.790700190663

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.