

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 15207 - L2 Version 2
Chandra X-Ray Center

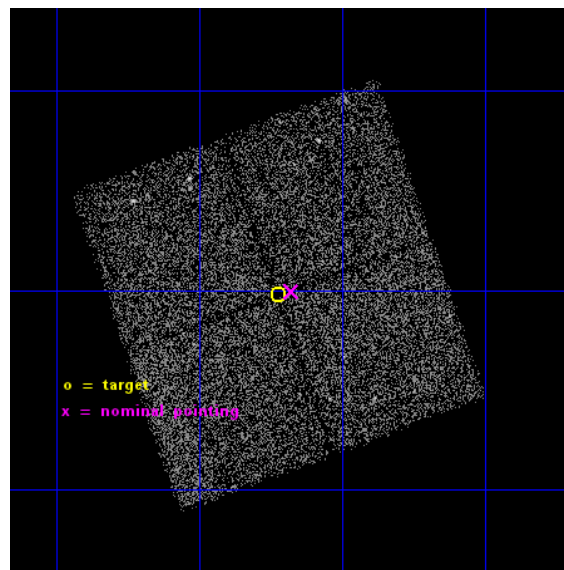
L2 Processing Date : Nov 29 2014

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

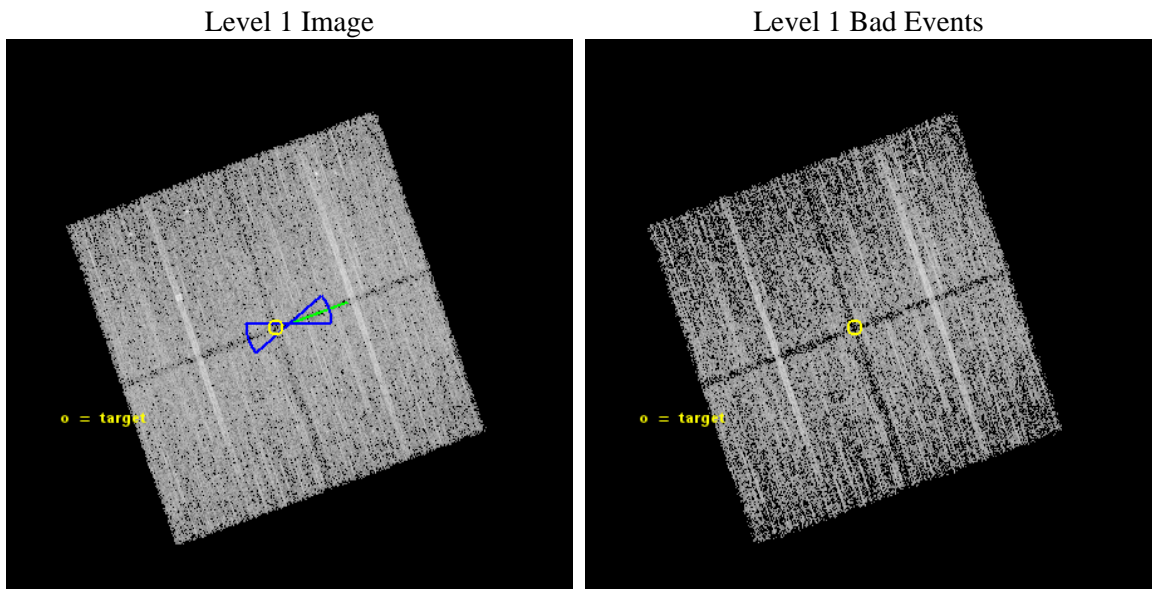
seq_num	901037	Sequence number
obs_id	15207	Observation id
title	The COSMOS Legacy Survey	Proposal title
observer	Dr Francesca Civano	Principal investigator
object	COSMOS Legacy	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	150.55584	Observer's specified target RA [deg]
dec_targ	2.496472	Observer's specified target Dec [deg]
ra_nom	150.54445175379	Nominal RA [deg]
dec_nom	2.4990454807126	Nominal Dec [deg]
roll_nom	70.20918780725	Nominal Roll [deg]
revision	2	Processing version of data
ontime	15080.055776179	Sum of GTIs [s]
livetime	14883.023745688	Livetime [s]
ontime0	15089.437627196	Sum of GTIs [s]
ontime1	15080.055776179	Sum of GTIs [s]
ontime2	15086.378746867	Sum of GTIs [s]
ontime3	15086.419756889	Sum of GTIs [s]
l2events	30972	Number of level 2 events



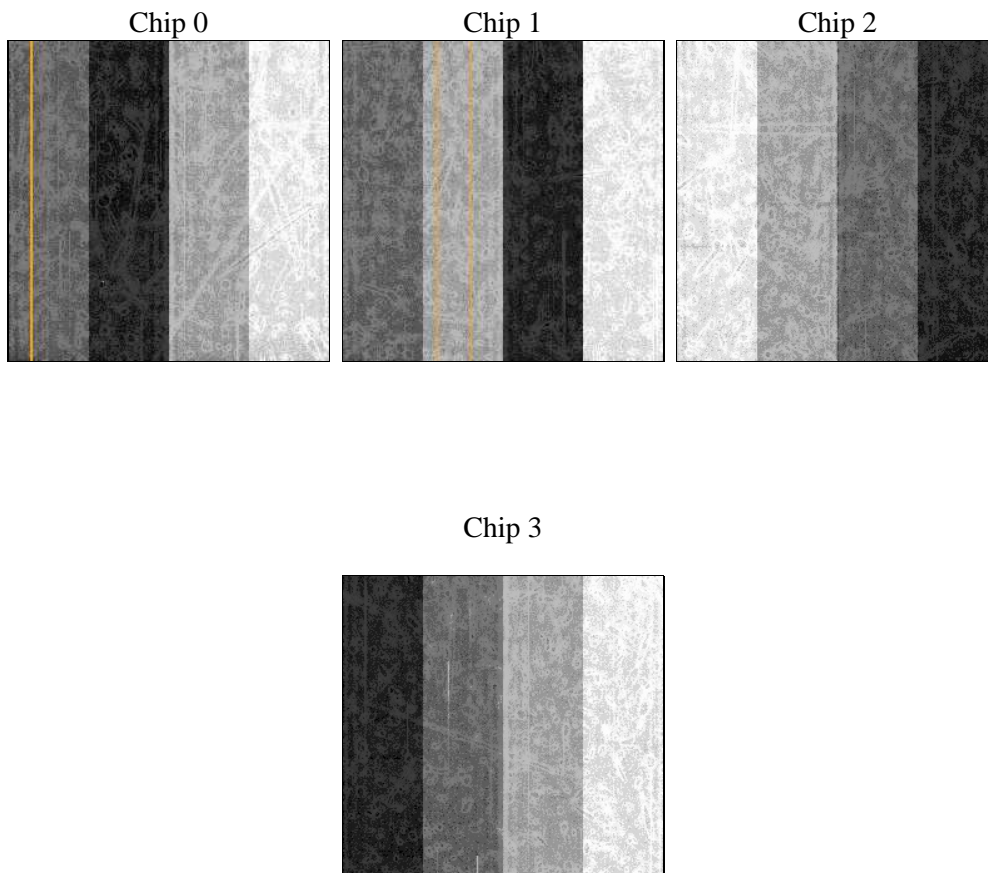
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	15000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	15080.055776179	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	15089.437627196	Sum of GTIs [s]
date	2014-11-30T05:43:10	Date and time of file creation	ontime1	15080.055776179	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	15086.378746867	Sum of GTIs [s]
			ontime3	15086.419756889	Sum of GTIs [s]
			l1events	287917	Number of level 1 events

2.1.4 Events

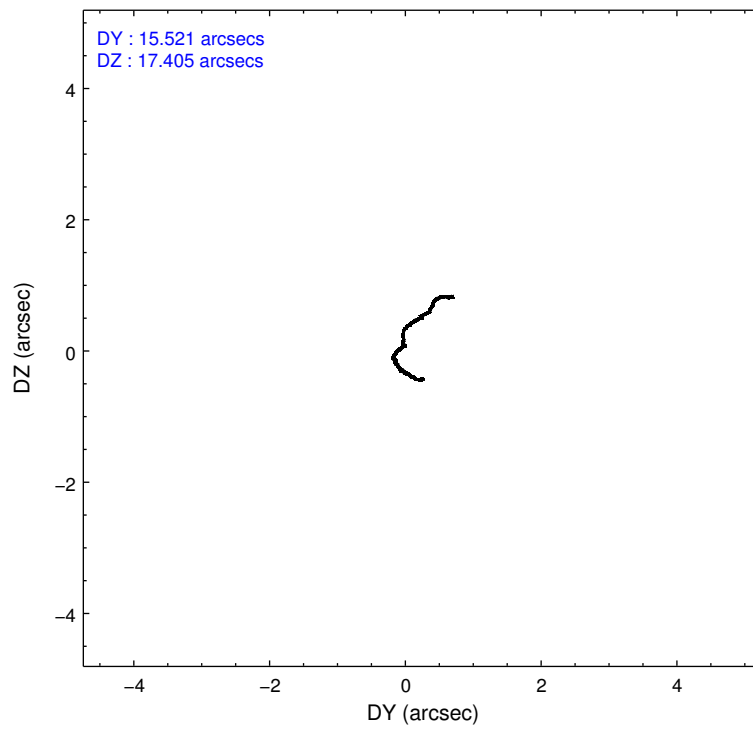
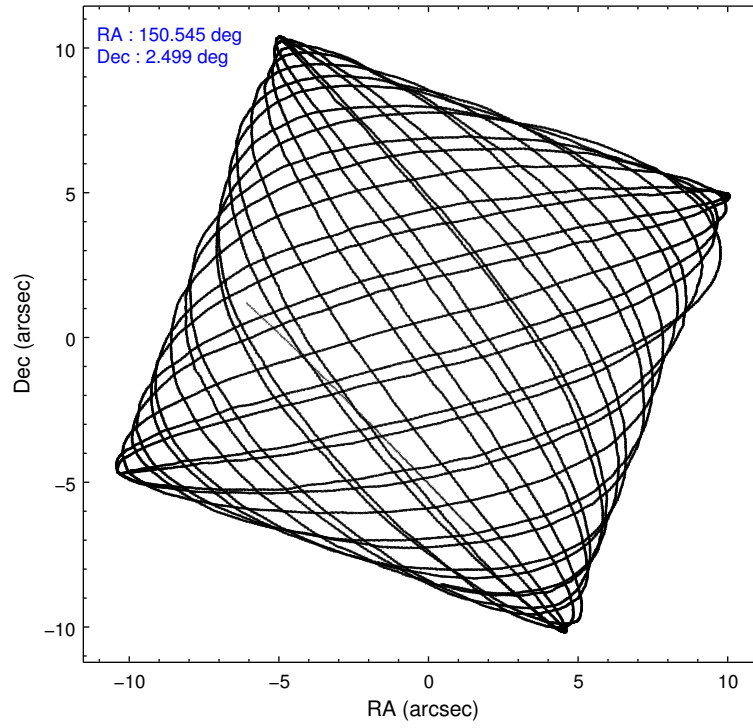
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	66417	70753	76880	73867
rejected events	56767	60896	67841	65028
rejected %	85%	86%	88%	88%

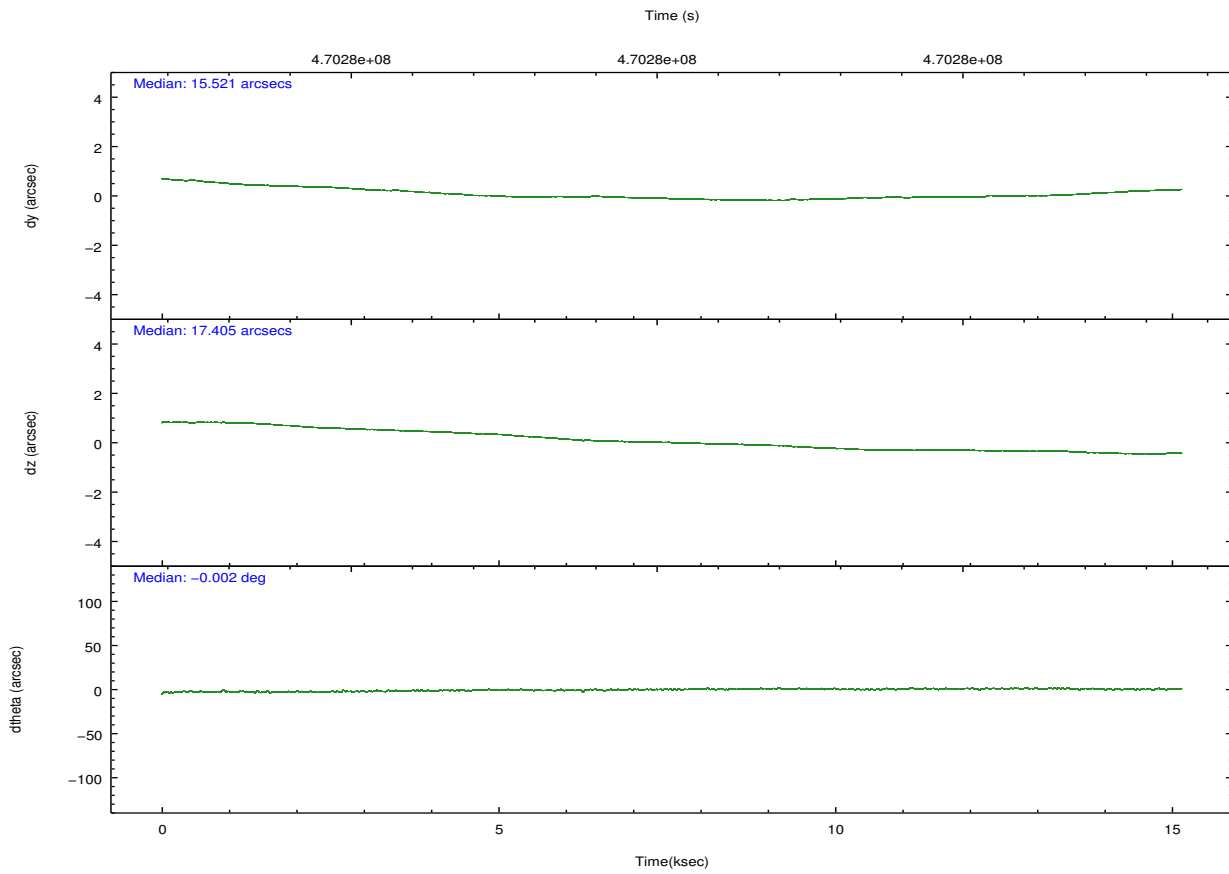
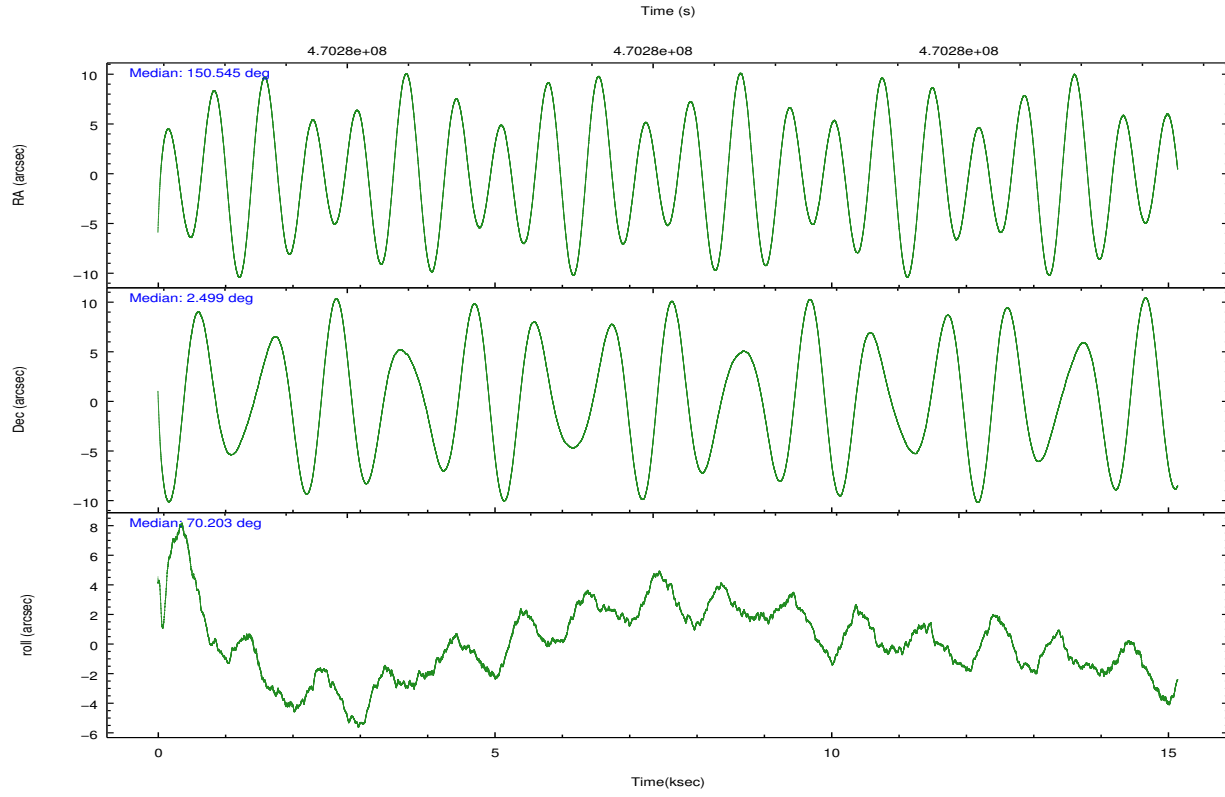
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	3390	3480	3356	3232
	5%	4%	4%	4%
grade 1 events	35	49	53	53
	0%	0%	0%	0%
grade 2 events	2703	2404	2218	1989
	4%	3%	2%	2%
grade 3 events	920	976	908	971
	1%	1%	1%	1%
grade 4 events	874	960	846	943
	1%	1%	1%	1%
grade 5 events	3416	3756	3298	3848
	5%	5%	4%	5%
grade 6 events	1763	2040	1717	1709
	2%	2%	2%	2%
grade 7 events	53316	57088	64484	61122
	80%	80%	83%	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	150.549418	150.5444517537942	Subarray requested	NONE	NONE
[deg] Pointing Dec	2.472018	2.499045480712615	Alternating exposures requested	N	N
[deg] Pointing Roll	70.000285	70.2091878072498	[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)	470272810.184000	470271839.43614			
Observation start date	2012-11-25T23:19:03	2012-11-25T23:03:59			
[s] Observation end time (MET)	470287810.184000	470288544.37454			
Observation end date	2012-11-26T03:29:03	2012-11-26T03:42:24			
Read mode	TIMED	TIMED			

2.3 Aspect



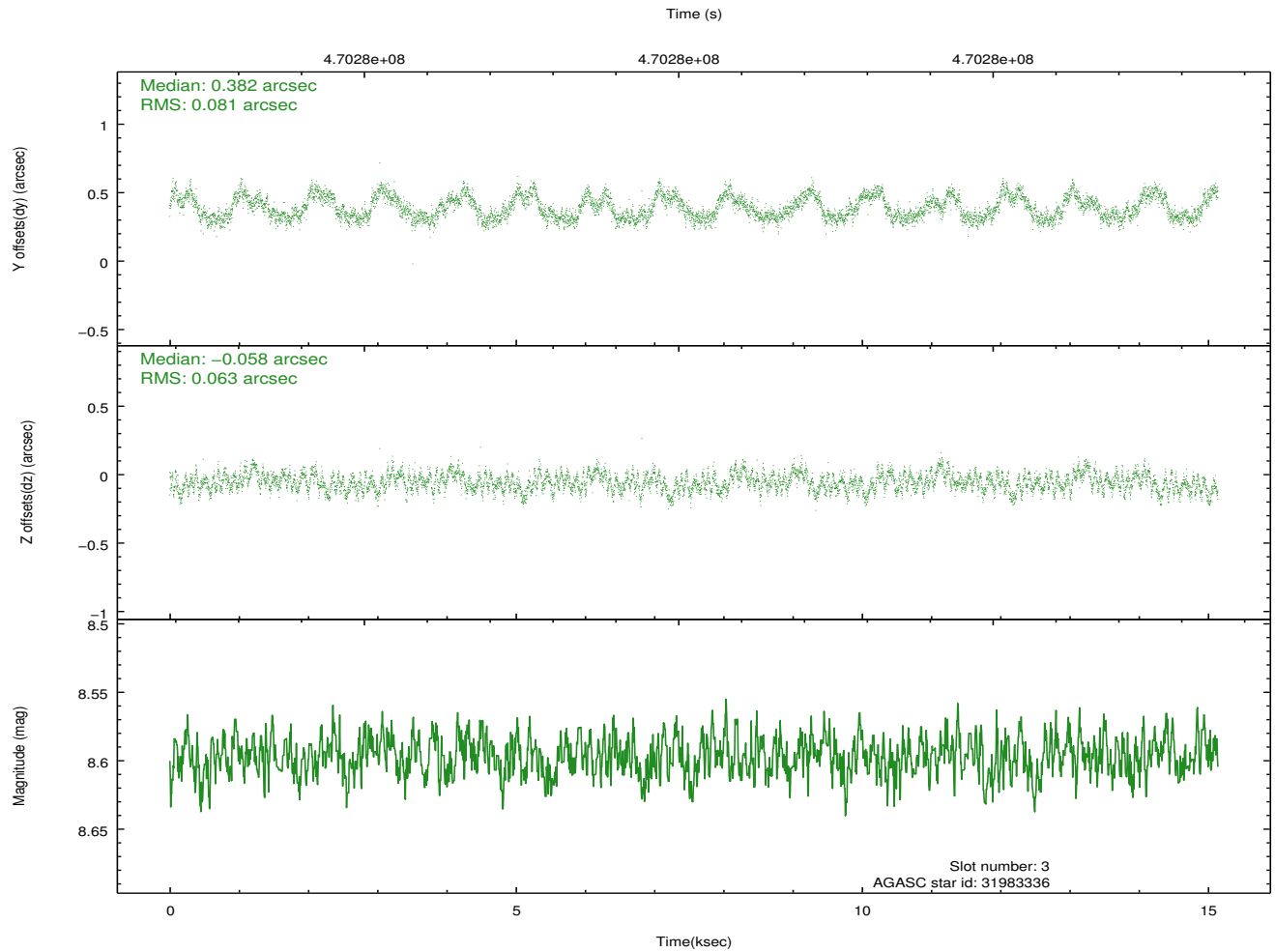
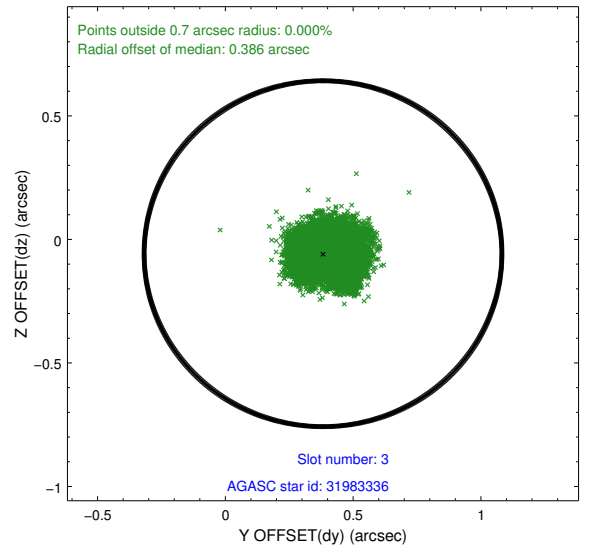
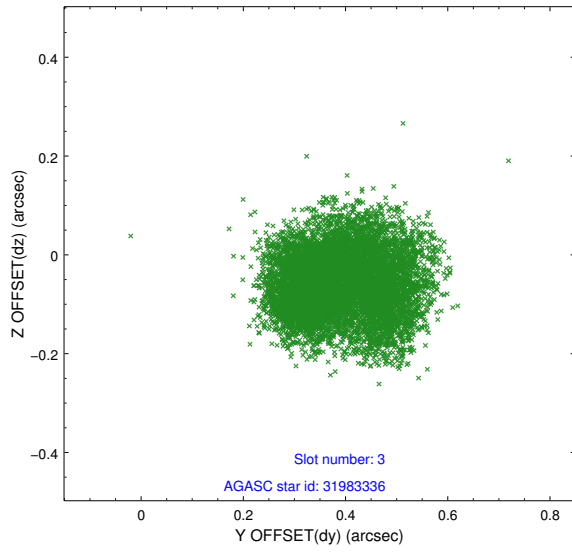


Slot Statistics

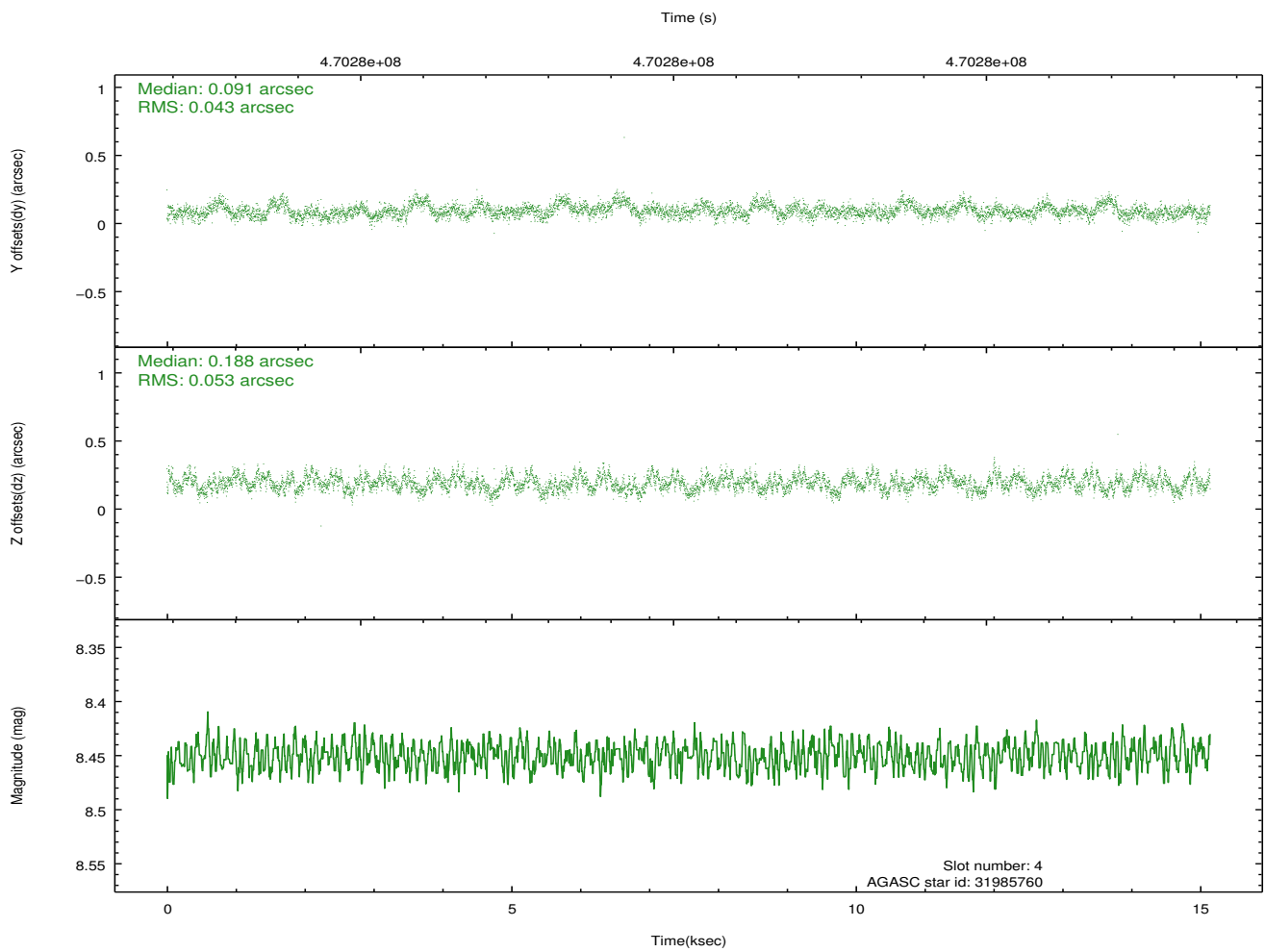
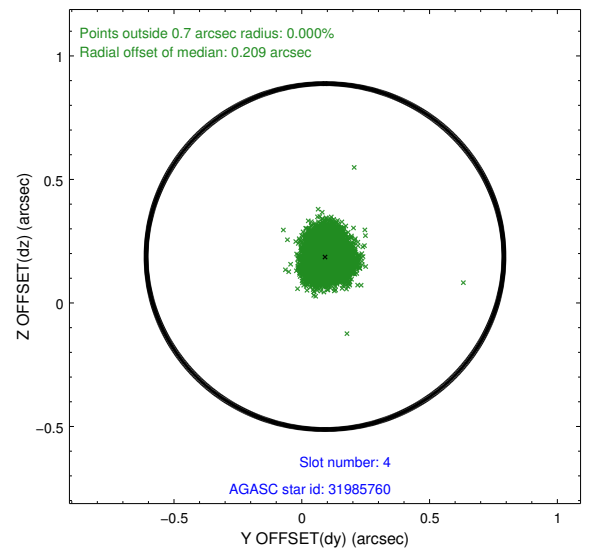
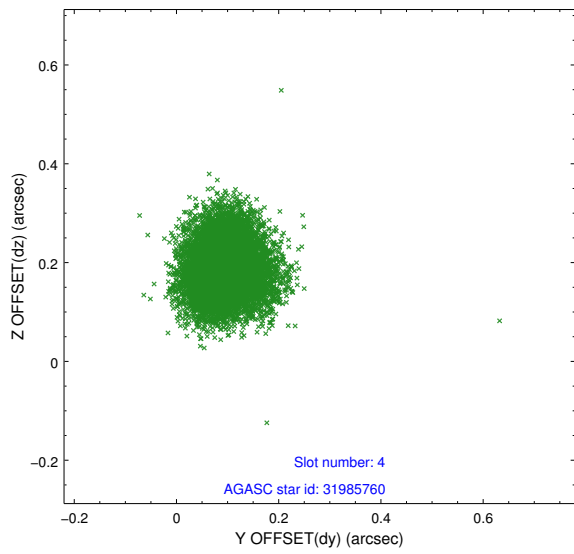
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.06	3694	0.061	-0.004	0.020	0.037	0.000000	0.000000	923.89	-841.17
1	FID		ACIS-I-5	7.05	3694	-0.220	0.067	0.009	0.017	0.000000	0.000000	-1824.33	1056.25
2	FID		ACIS-I-6	7.06	3694	0.068	0.004	0.017	0.025	0.000000	0.000000	389.13	1701.02
3	GUIDE	used	31983336	8.60	7386	0.382	-0.058	0.111	0.167	150.429924	2.291234	-757.78	181.46
4	GUIDE	used	31985760	8.45	7385	0.091	0.188	0.074	0.115	150.924581	2.094394	-815.50	-1732.65
5	GUIDE	used	31986152	8.99	7385	-0.006	0.024	0.105	0.167	150.840314	2.057585	-1043.81	-1493.23
6	GUIDE	used	32374896	9.22	7384	-0.167	0.240	0.105	0.173	150.682269	2.512794	301.29	-398.59
7	GUIDE	used	32387968	9.18	7381	-0.305	-0.393	0.112	0.169	150.106347	3.119099	1644.63	2293.52

2.4 Star Slots

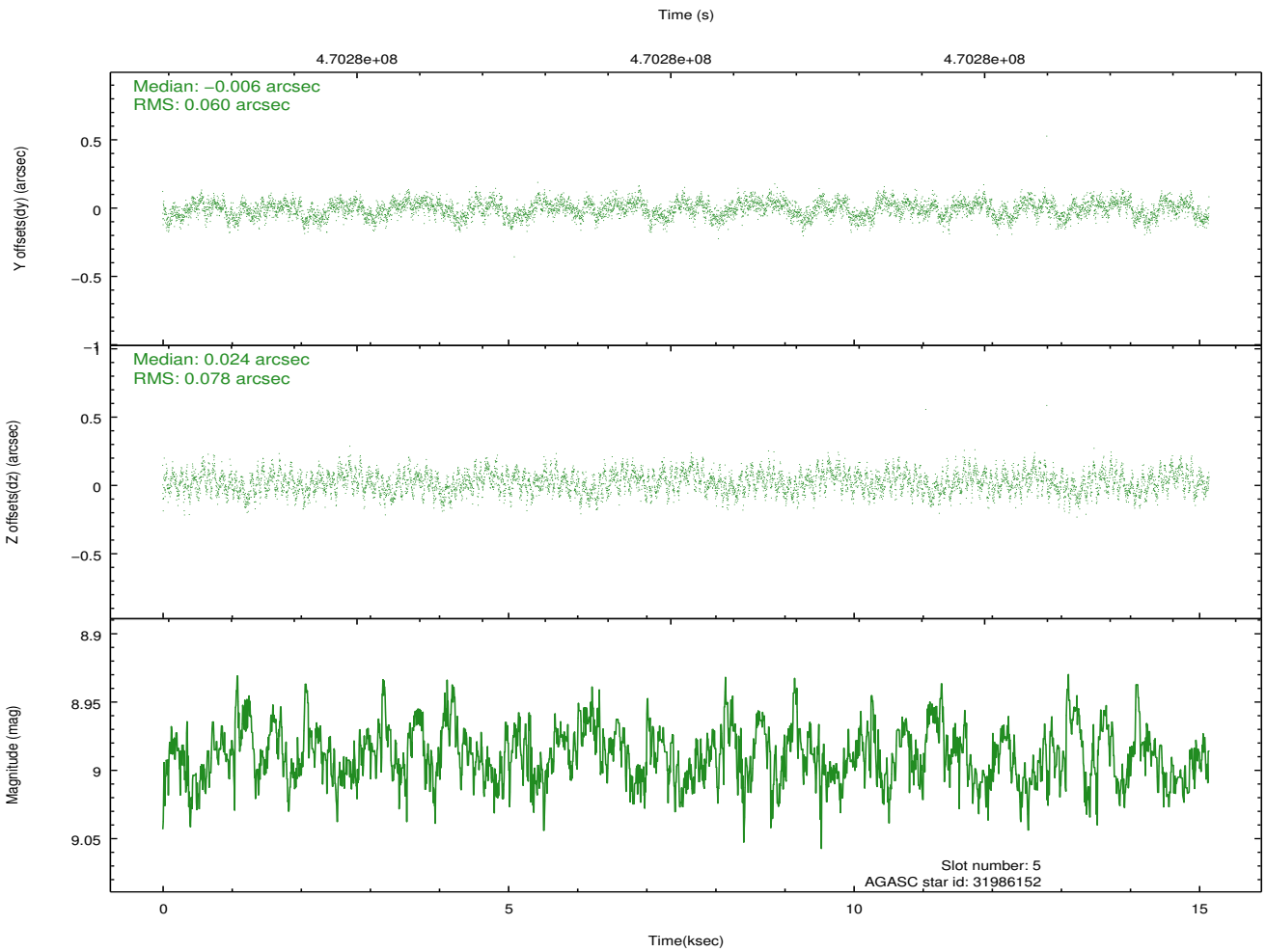
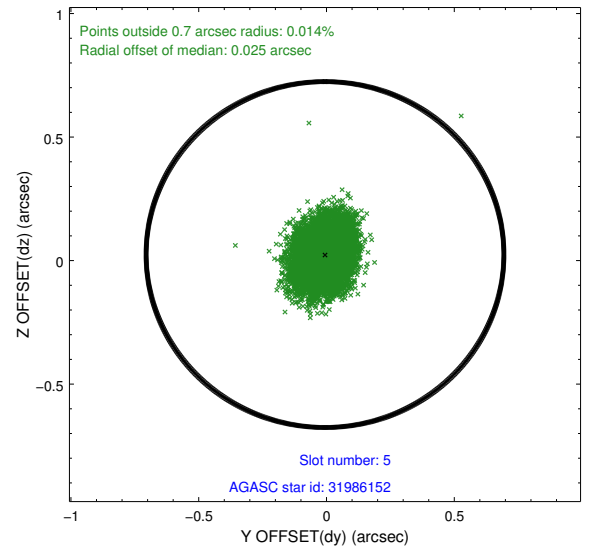
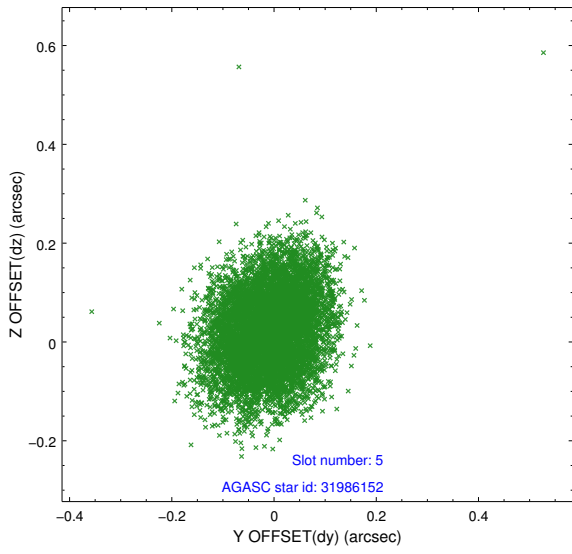
2.4.1 Slot 3



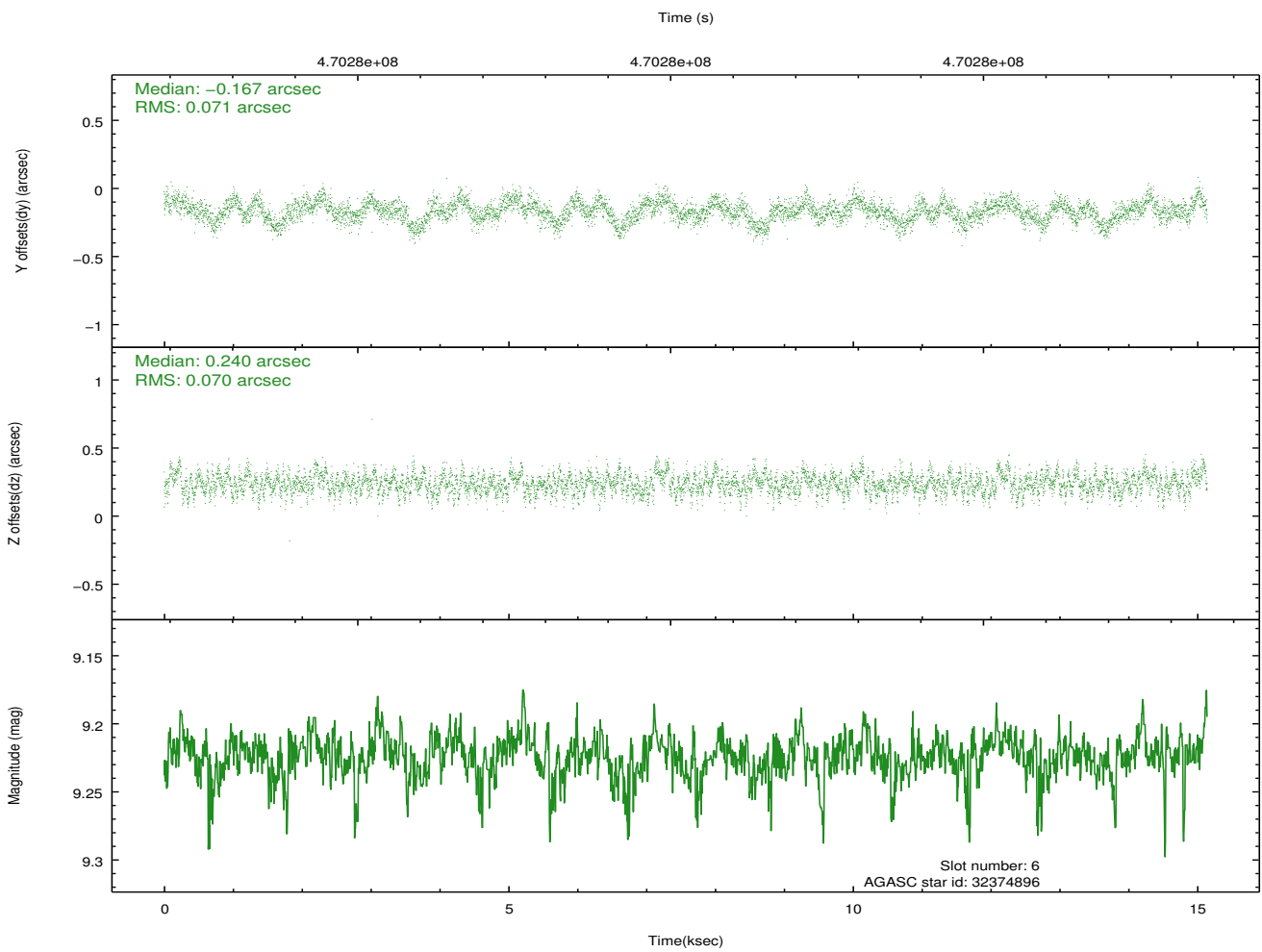
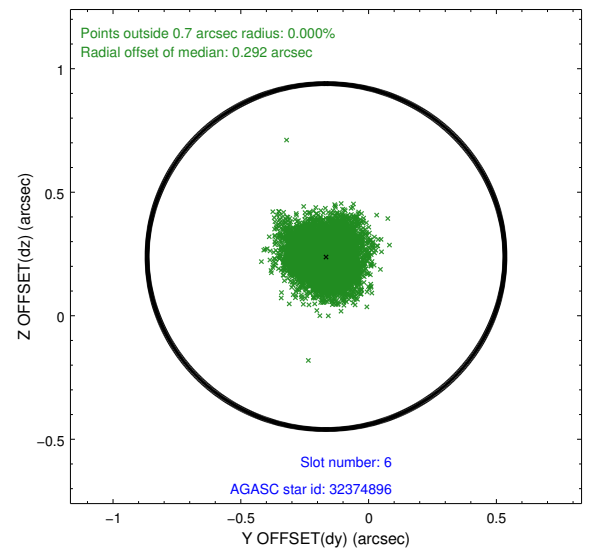
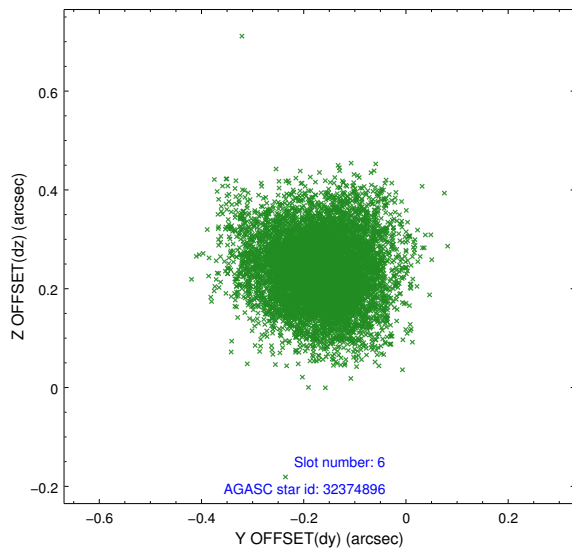
2.4.2 Slot 4



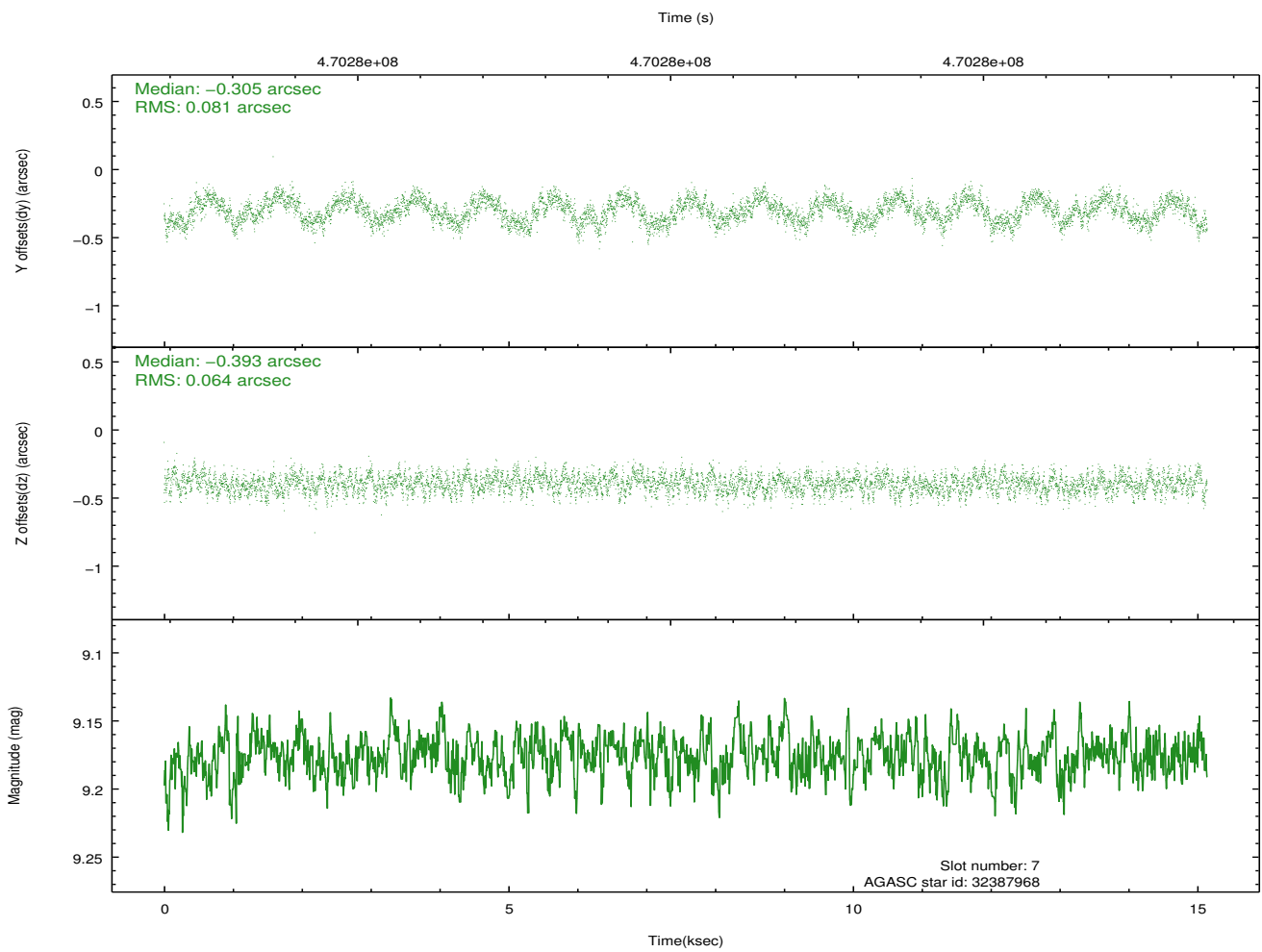
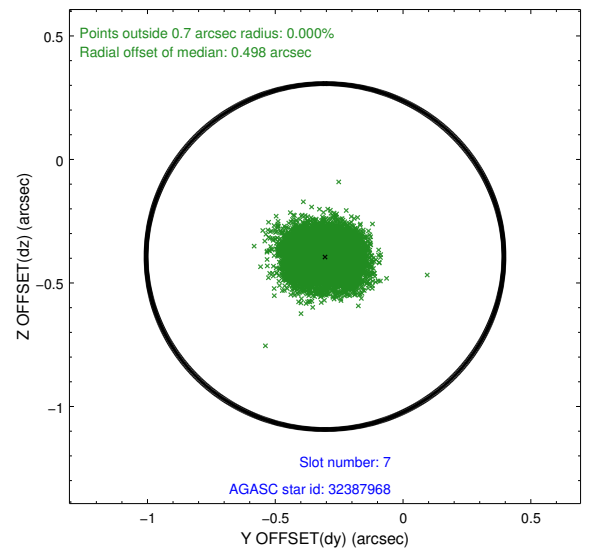
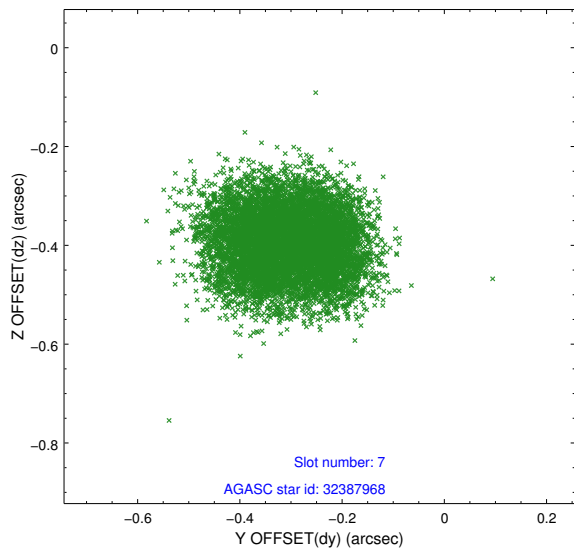
2.4.3 Slot 5



2.4.4 Slot 6

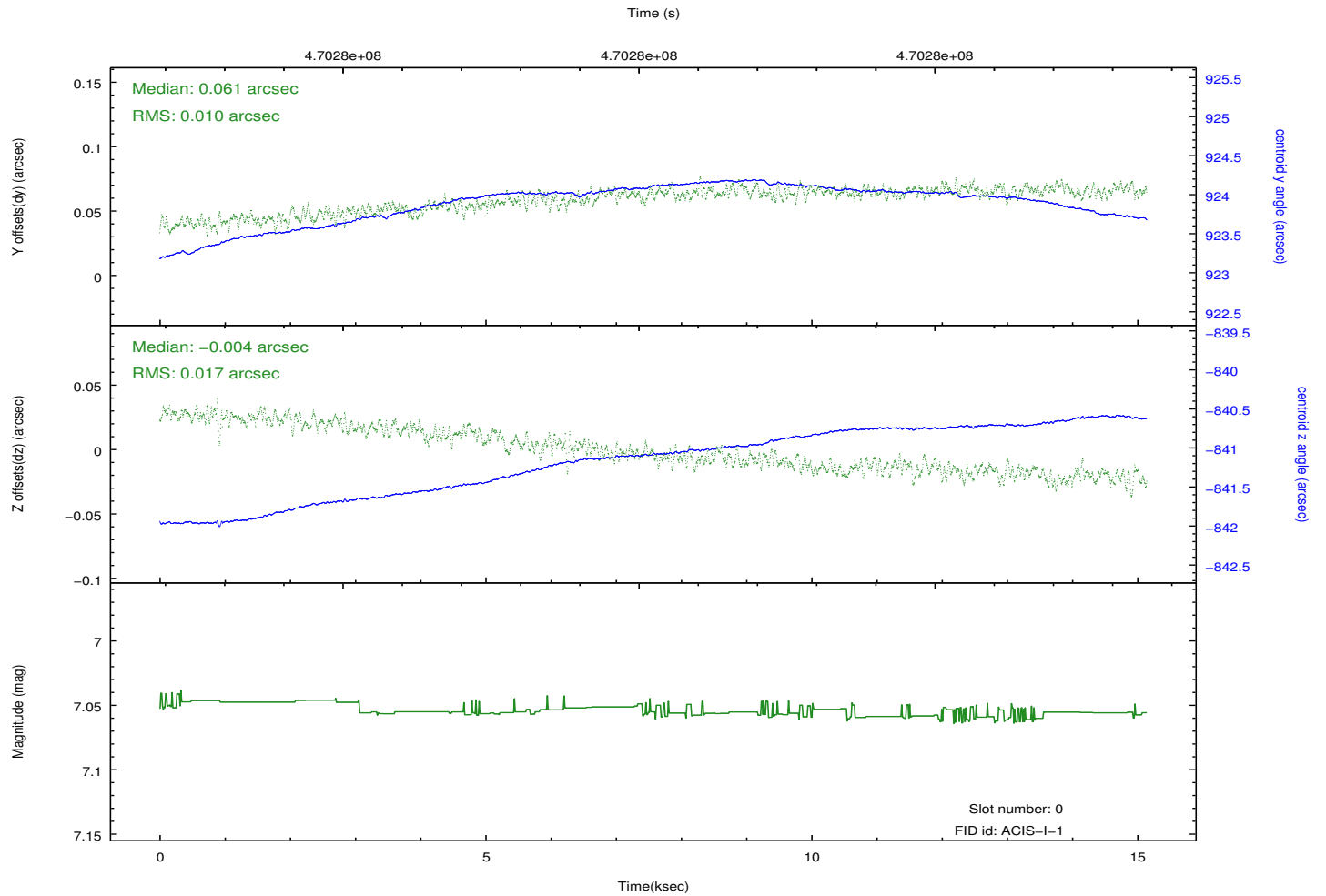
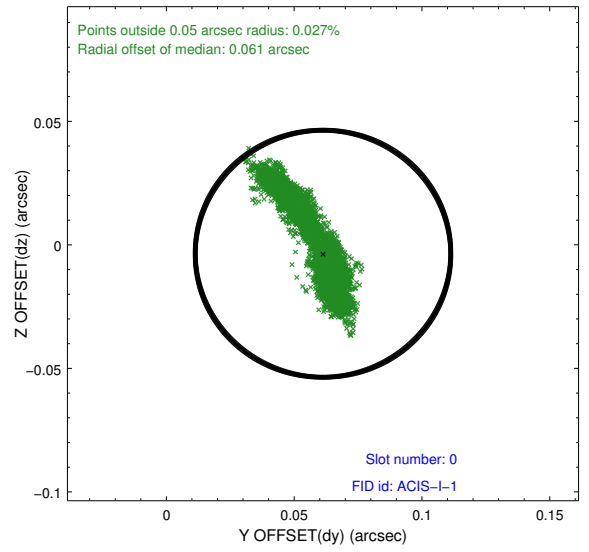
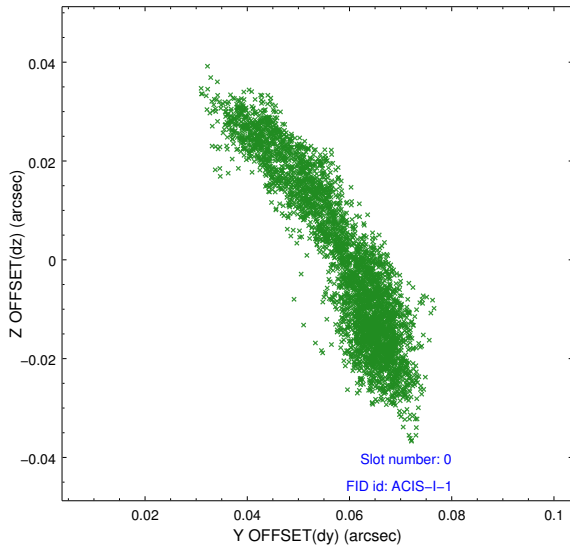


2.4.5 Slot 7

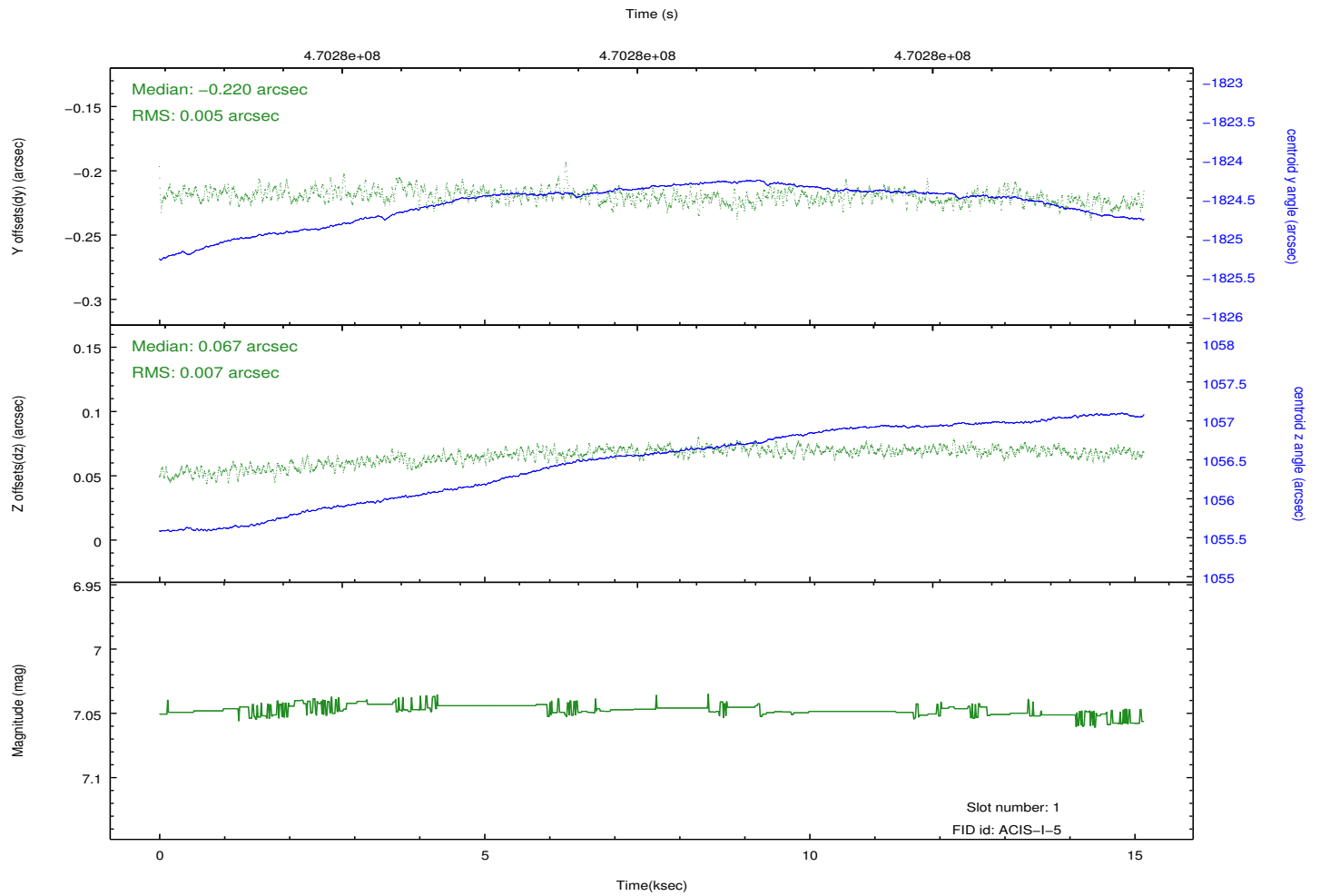
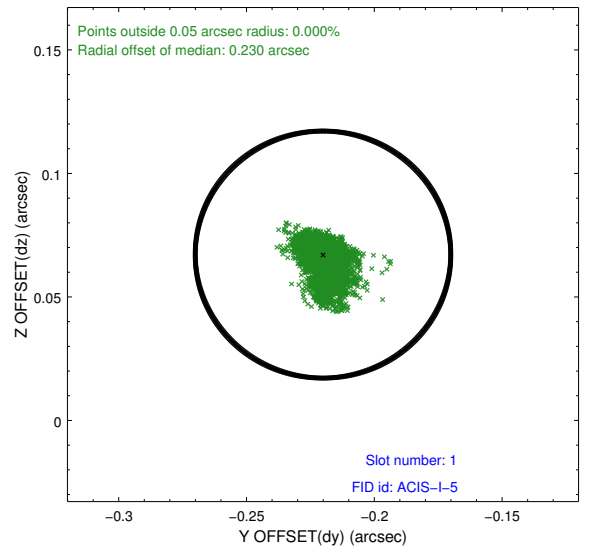
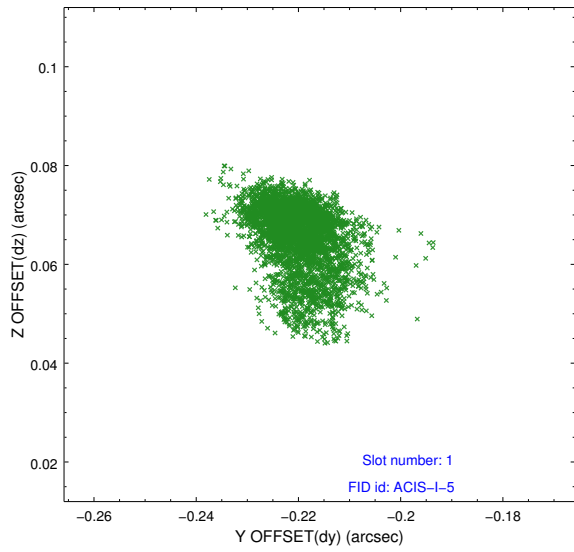


2.5 FID Slots

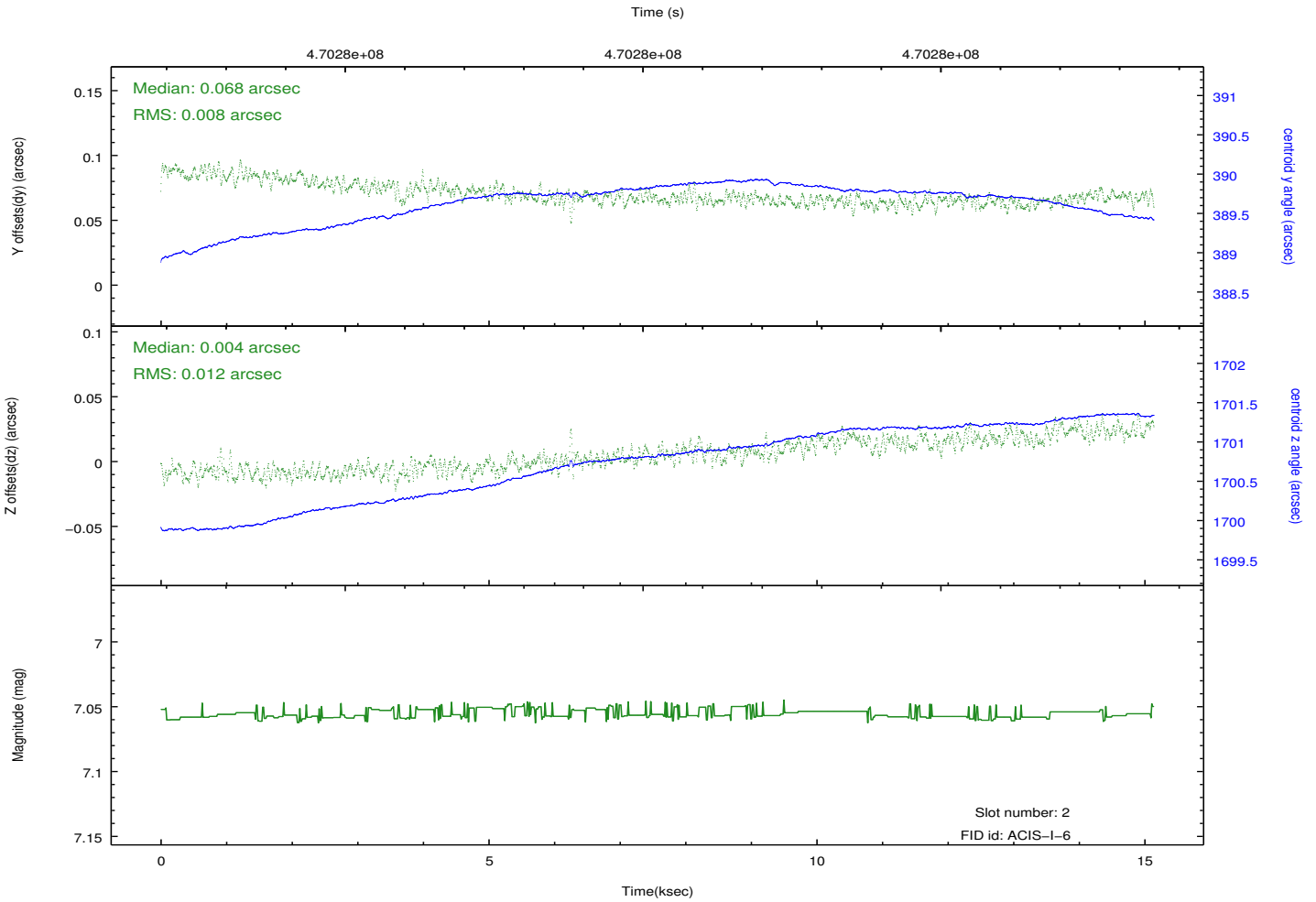
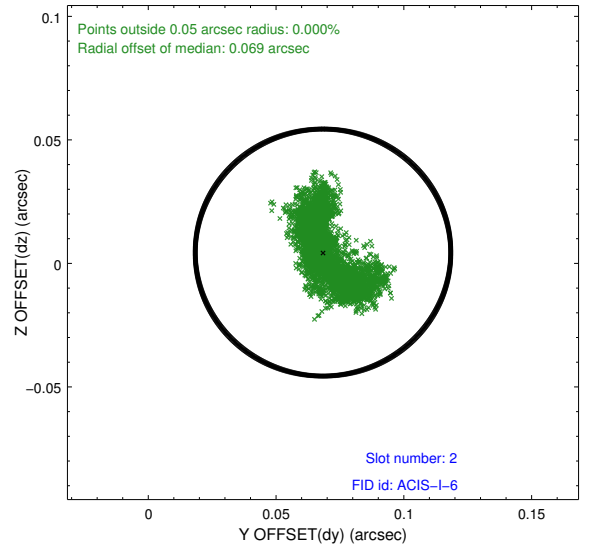
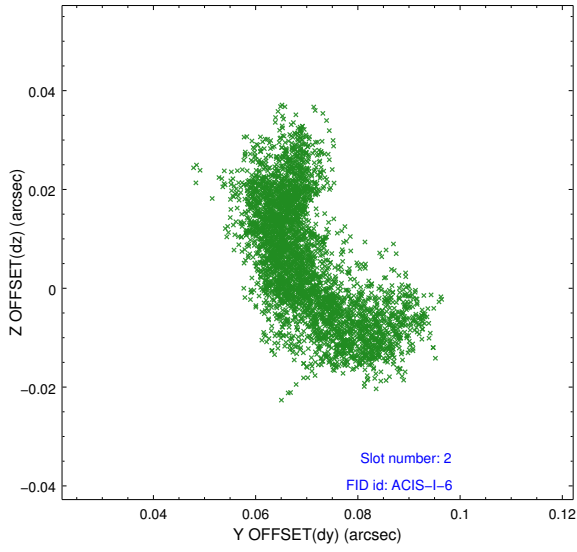
2.5.1 Slot 0



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	15.080055776179

A.2 Comments

Roll preference 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.