

# V&V Reference Report

## L2 ASCDS Version : 8.5

Observation 15208 - L2 Version 2  
Chandra X-Ray Center

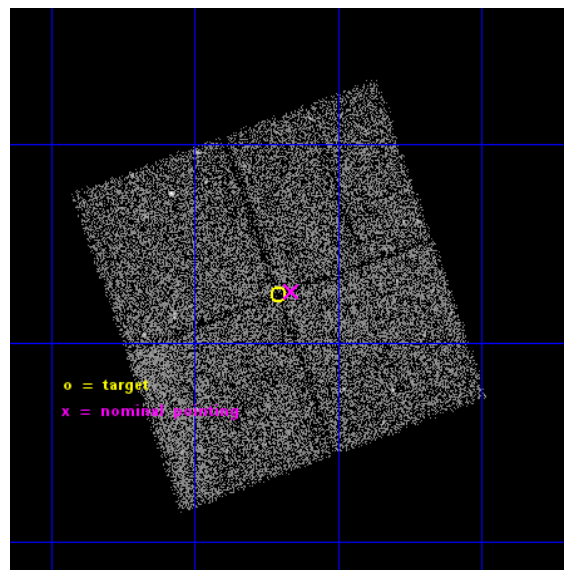
L2 Processing Date : Nov 29 2014

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# 1 Front

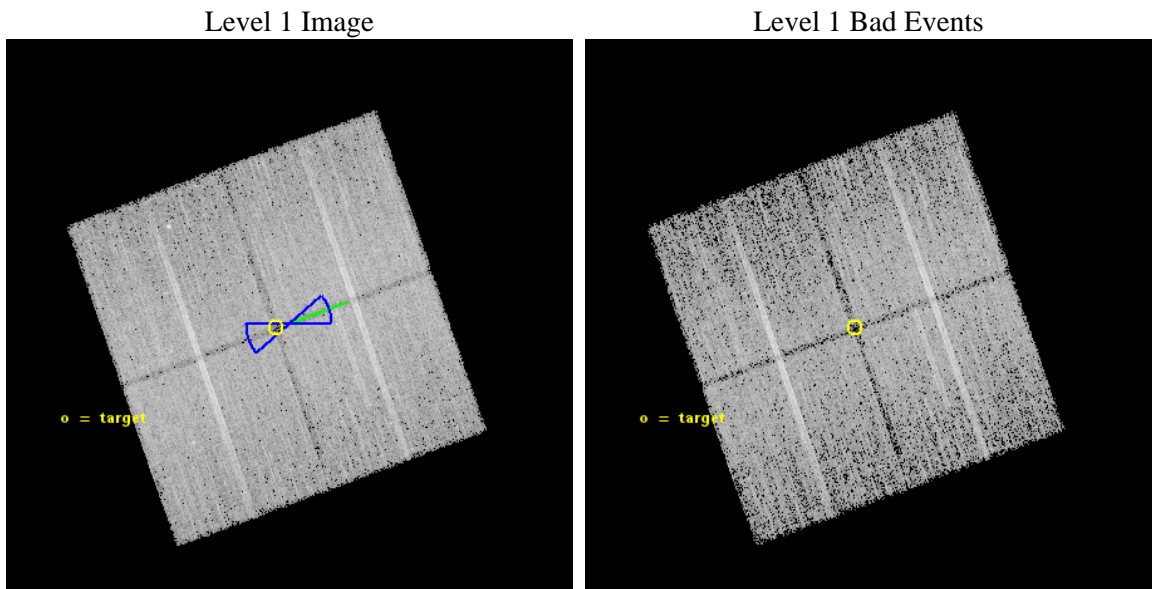
seq_num	901038	Sequence number
obs_id	15208	Observation id
title	The COSMOS Legacy Survey	Proposal title
observer	Dr Francesca Civano	Principal investigator
object	COSMOS Legacy	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	150.42705	Observer's specified target RA [deg]
dec_targ	2.540617	Observer's specified target Dec [deg]
ra_nom	150.41564300203	Nominal RA [deg]
dec_nom	2.5432252247639	Nominal Dec [deg]
roll_nom	70.209191151948	Nominal Roll [deg]
revision	2	Processing version of data
ontime	23290.300179124	Sum of GTIs [s]
livetime	22985.995261214	Livetime [s]
ontime0	23287.159178853	Sum of GTIs [s]
ontime1	23290.300179124	Sum of GTIs [s]
ontime2	23290.300179124	Sum of GTIs [s]
ontime3	23290.300179124	Sum of GTIs [s]
l2events	49360	Number of level 2 events



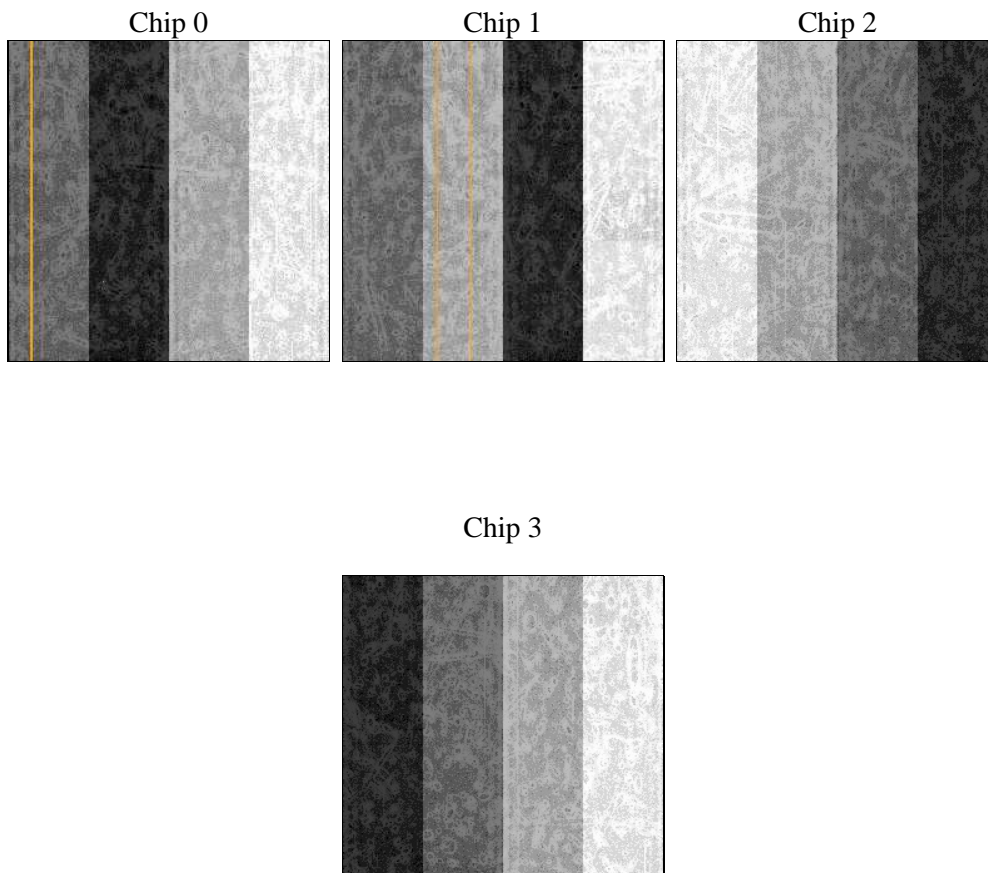
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	23200.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	23290.300179124	Sum of GTIs [s]
caldbver	4.6.4	&#160	ontime0	23287.159178853	Sum of GTIs [s]
date	2014-11-30T08:06:36	Date and time of file creation	ontime1	23290.300179124	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	23290.300179124	Sum of GTIs [s]
			ontime3	23290.300179124	Sum of GTIs [s]
			l1events	465017	Number of level 1 events

### 2.1.4 Events

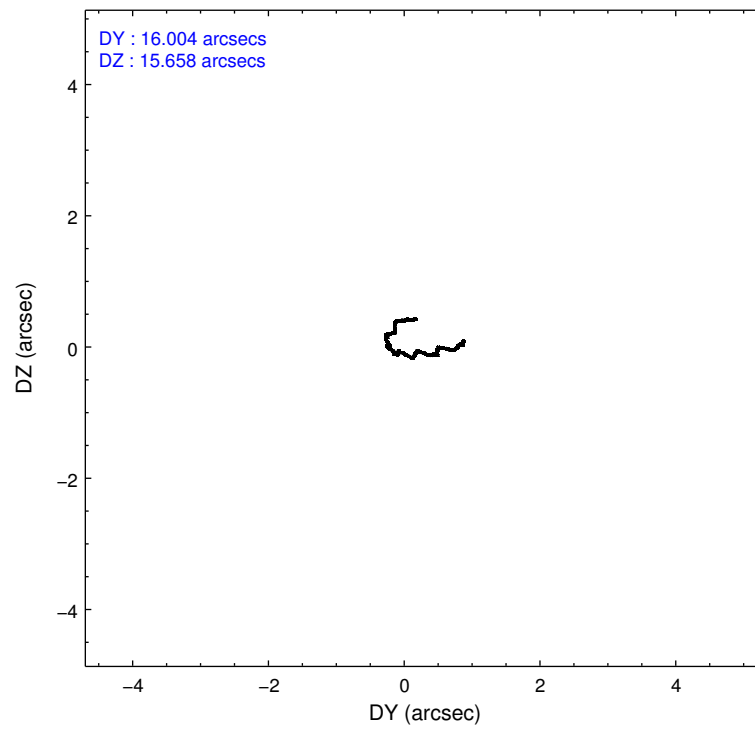
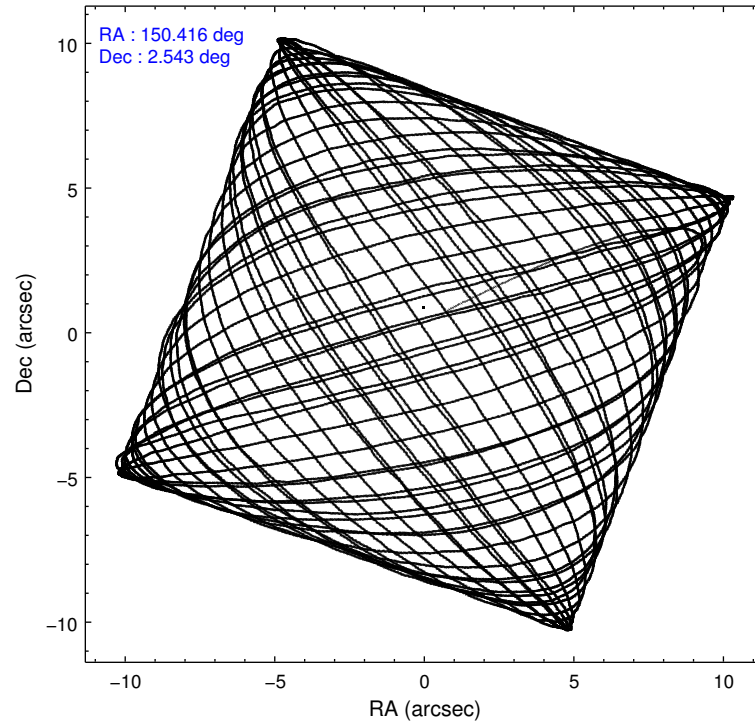
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	109188	113792	122828	119209
rejected events	94218	97547	108943	105517
rejected %	86%	85%	88%	88%

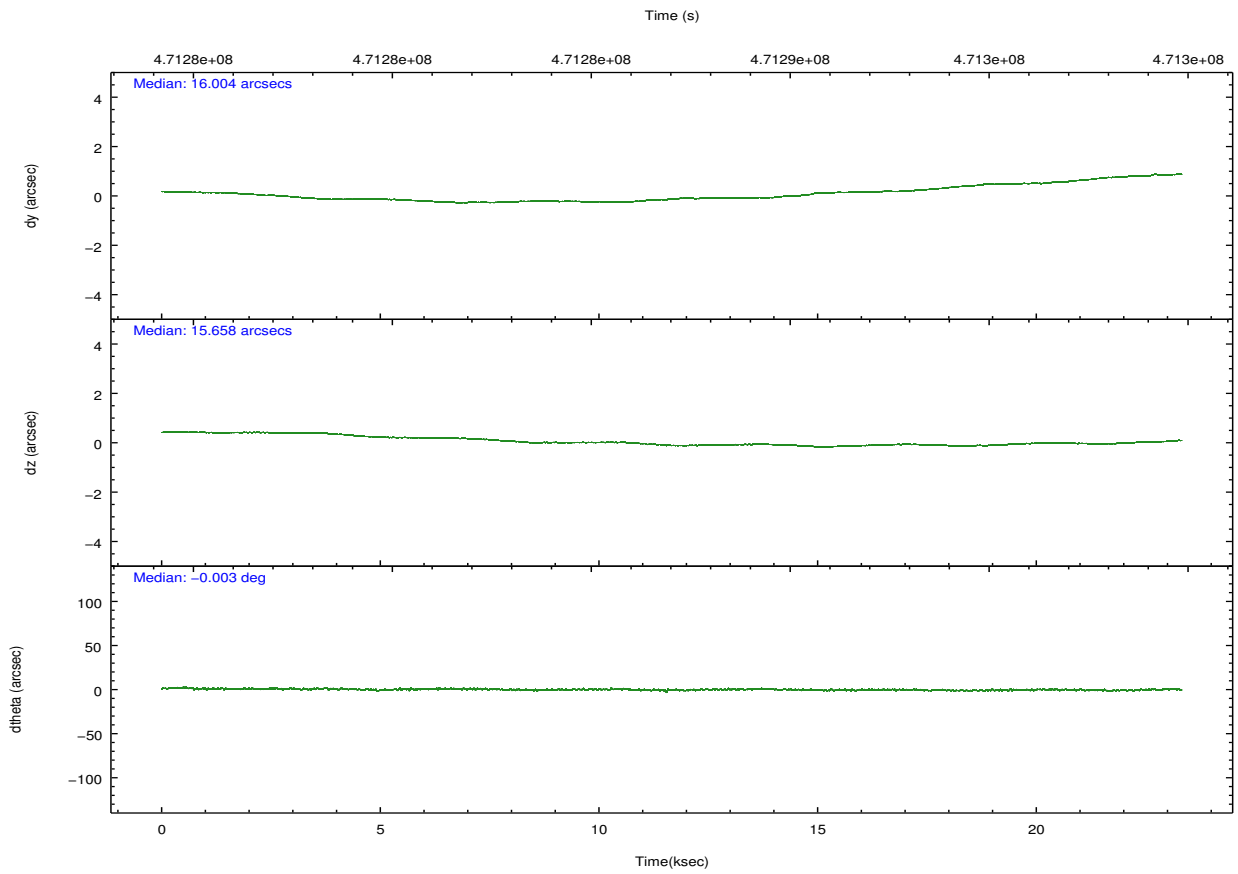
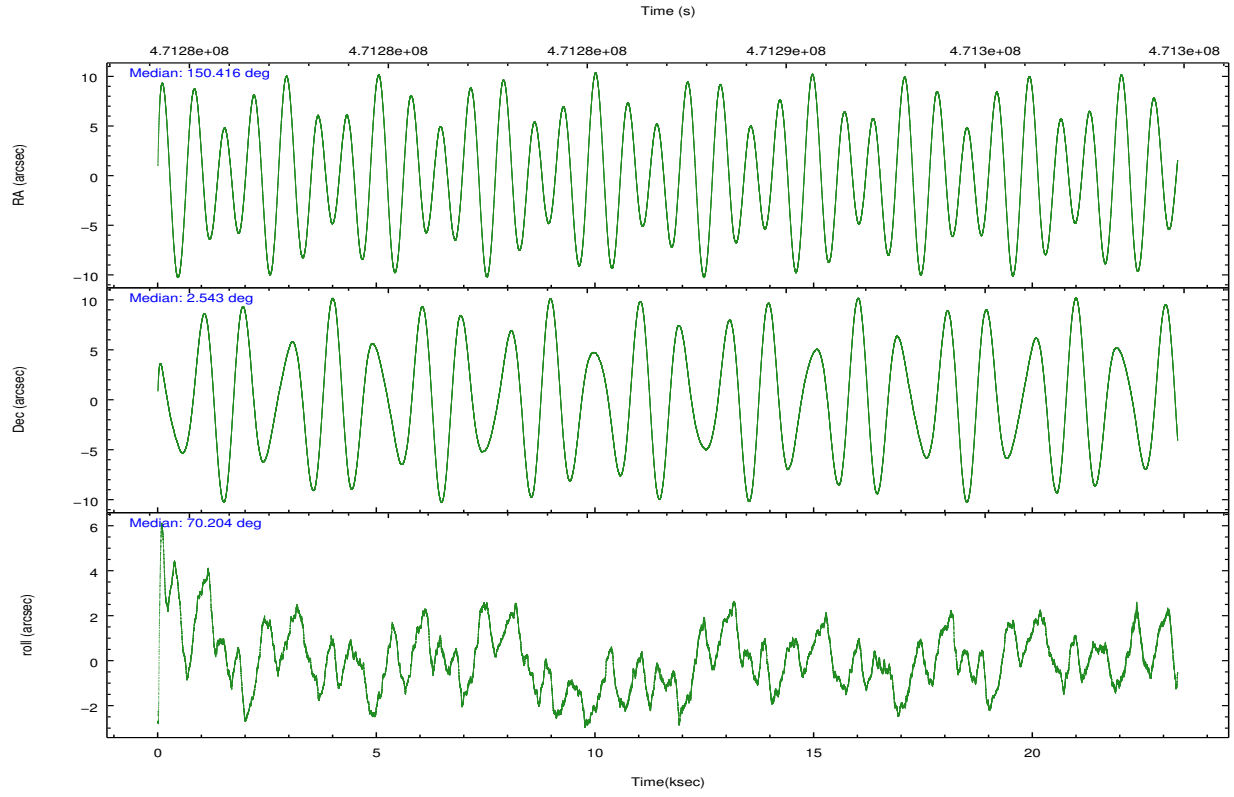
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	5329	5892	4891	4921
	4%	5%	3%	4%
grade 1 events	61	65	59	84
	0%	0%	0%	0%
grade 2 events	3689	3894	3381	2999
	3%	3%	2%	2%
grade 3 events	1537	1523	1393	1448
	1%	1%	1%	1%
grade 4 events	1438	1479	1430	1457
	1%	1%	1%	1%
grade 5 events	5598	5982	5391	6461
	5%	5%	4%	5%
grade 6 events	2980	3459	2793	2870
	2%	3%	2%	2%
grade 7 events	88556	91498	103490	98969
	81%	80%	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	150.420633	150.4156430020307	Subarray requested	NONE	NONE
[deg] Pointing Dec	2.516166	2.543225224763923	Alternating exposures requested	N	N
[deg] Pointing Roll	70.000294	70.20919115194823	[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)	471275484.184000	471274240.29004			
Observation start date	2012-12-07T13:50:17	2012-12-07T13:30:40			
[s] Observation end time (MET)	471298684.184000	471299379.44139			
Observation end date	2012-12-07T20:16:57	2012-12-07T20:29:39			
Read mode	TIMED	TIMED			

## 2.3 Aspect





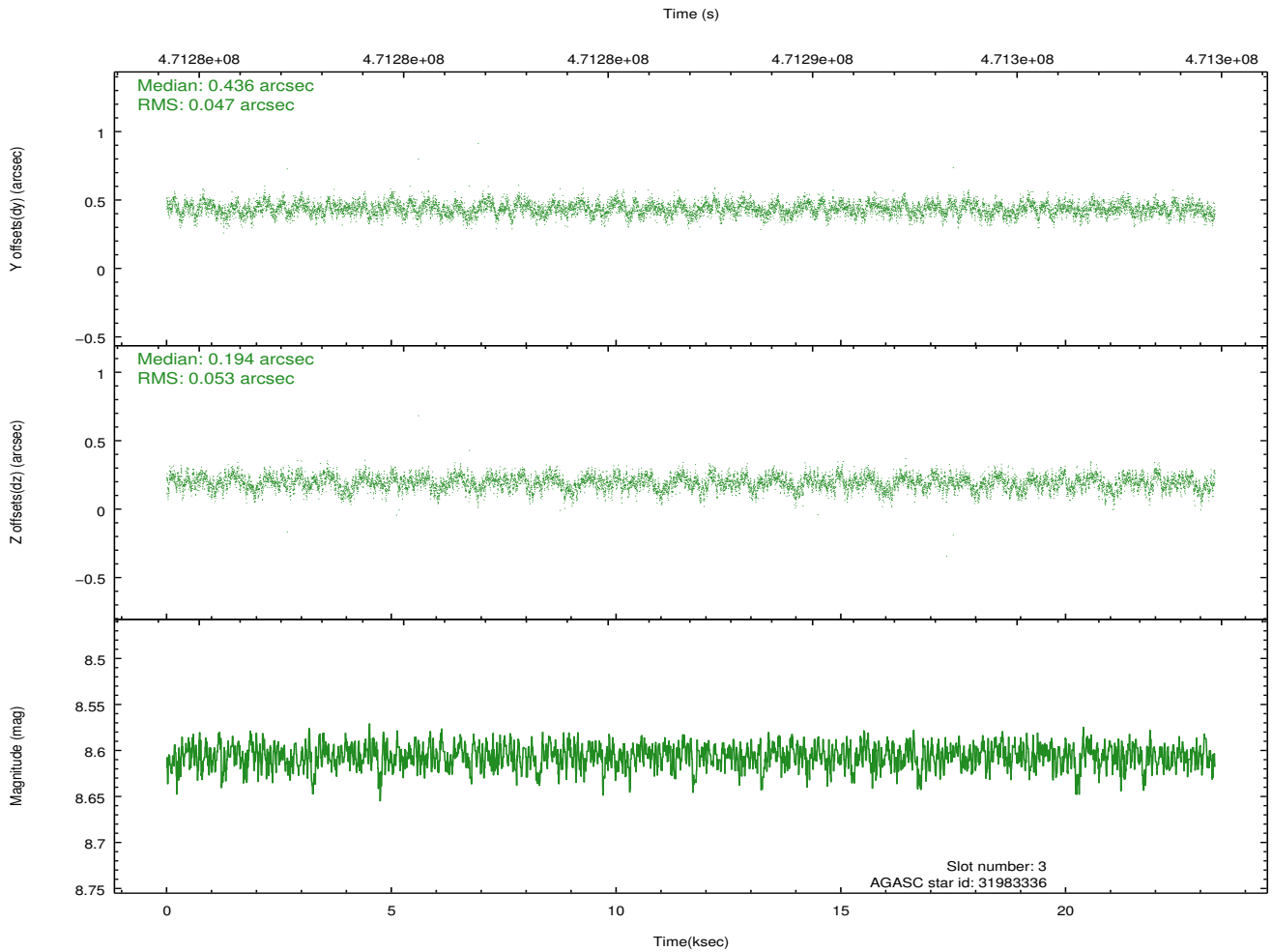
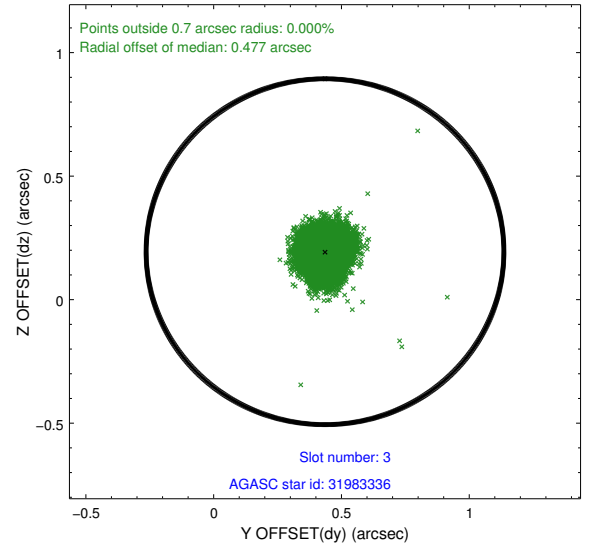
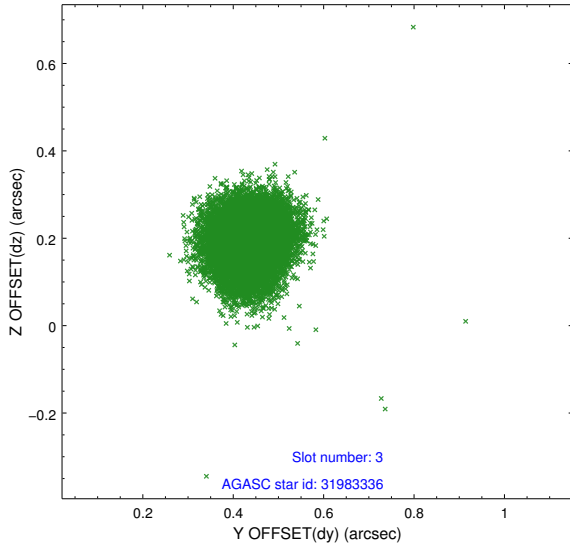
### Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.17	5688	-0.007	-0.056	0.019	0.040	0.000000	0.000000	923.34	-839.39
1	FID		ACIS-I-4	7.08	5687	0.176	0.067	0.020	0.040	0.000000	0.000000	2143.61	1060.50
2	FID		ACIS-I-5	7.16	5688	-0.268	0.060	0.016	0.033	0.000000	0.000000	-1824.78	1058.44
3	GUIDE	used	31983336	8.61	11352	0.436	0.194	0.075	0.120	150.429924	2.291234	-748.62	-307.96
4	GUIDE	used	31985760	8.47	11372	0.147	0.266	0.103	0.152	150.924581	2.094394	-806.16	-2222.30
5	GUIDE	used	31986152	9.00	11371	0.050	-0.054	0.125	0.219	150.840314	2.057585	-1034.48	-1982.96
6	GUIDE	used	32374896	9.21	11310	-0.229	0.111	0.118	0.186	150.682269	2.512794	310.43	-888.28
7	GUIDE	used	32387968	9.19	11364	-0.414	-0.516	0.095	0.150	150.106347	3.119099	1653.43	1803.89

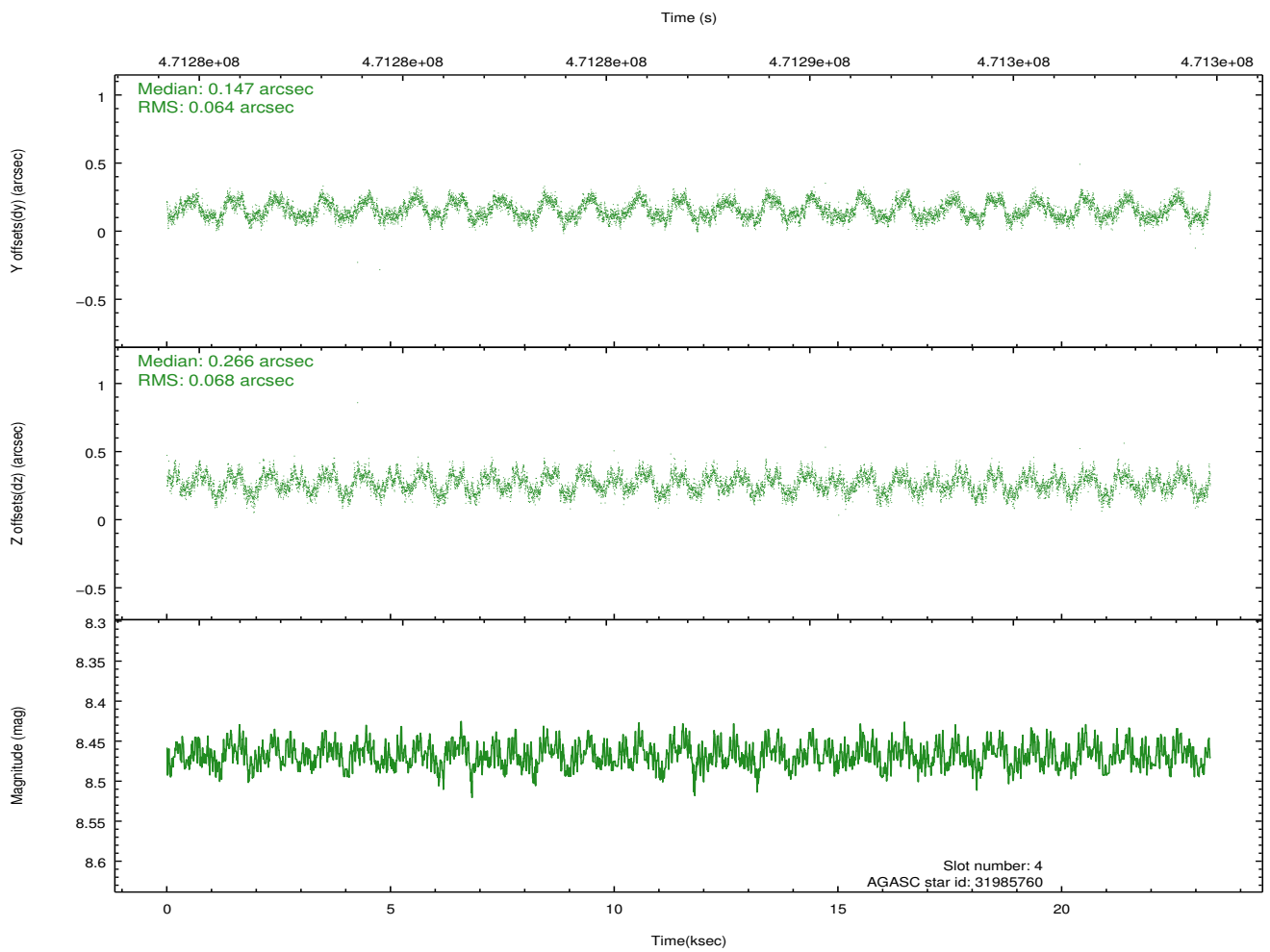
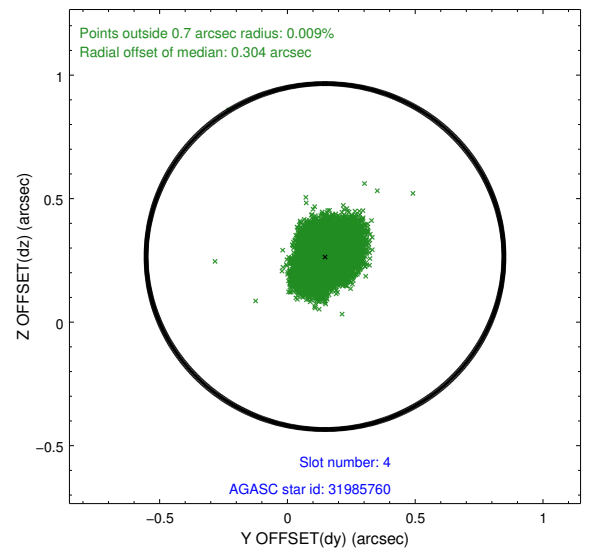
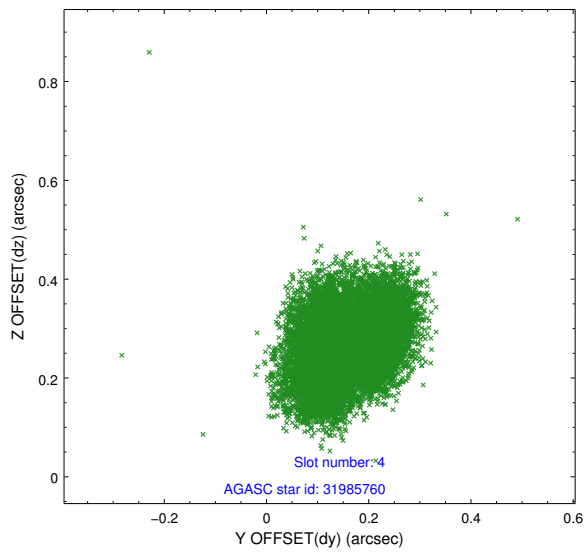
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## 2.4 Star Slots

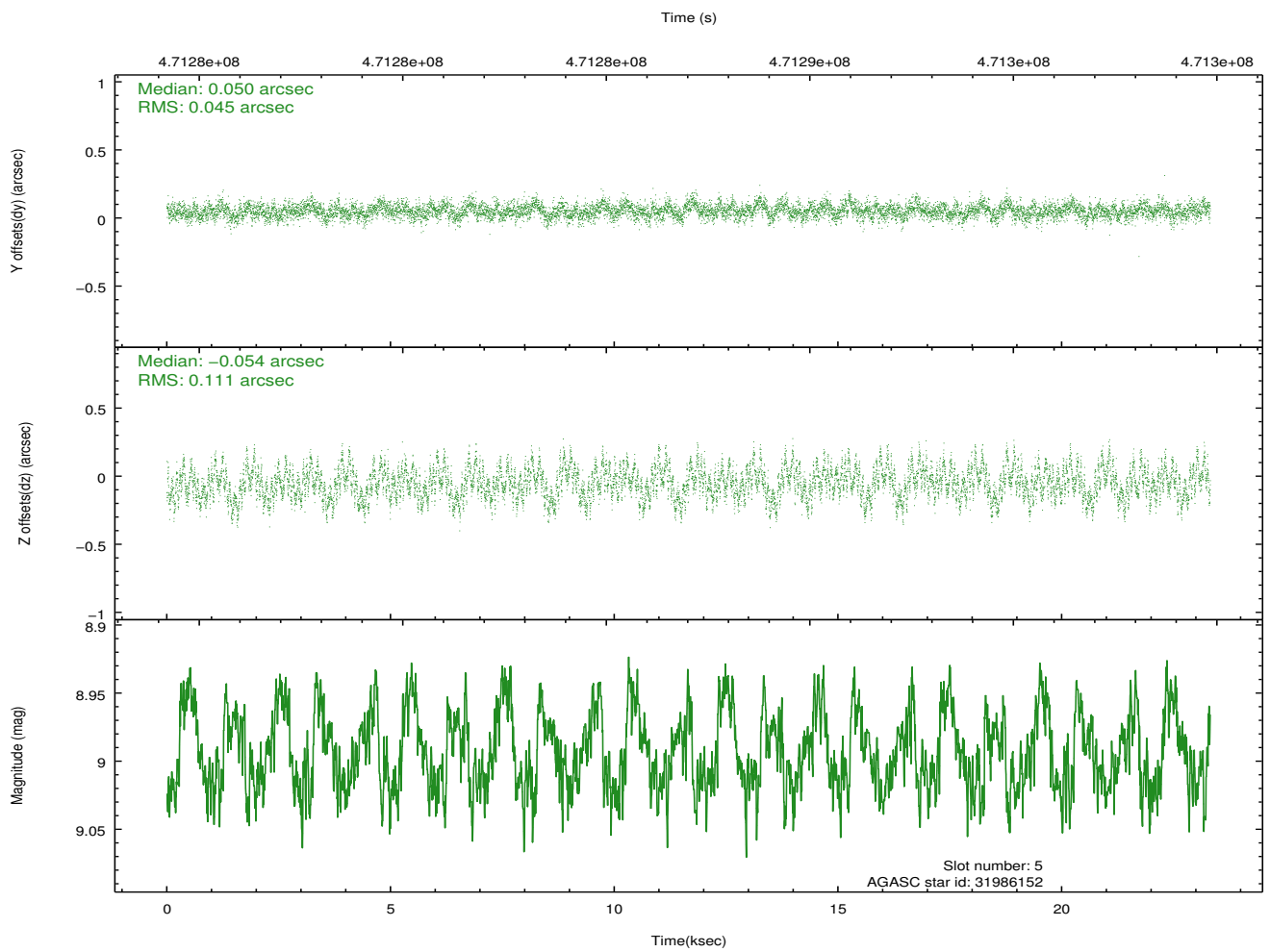
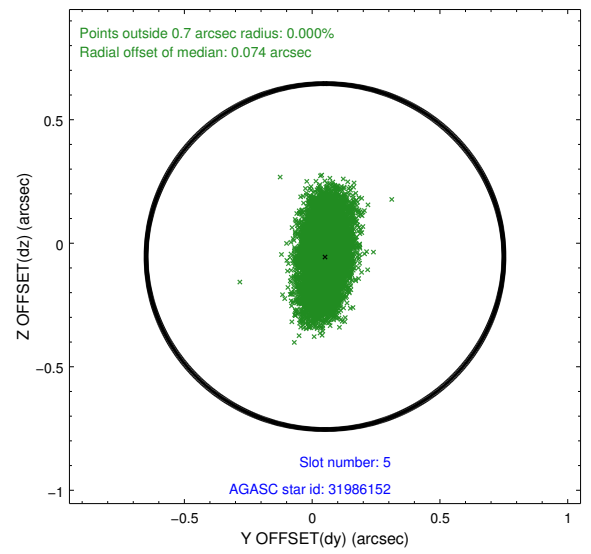
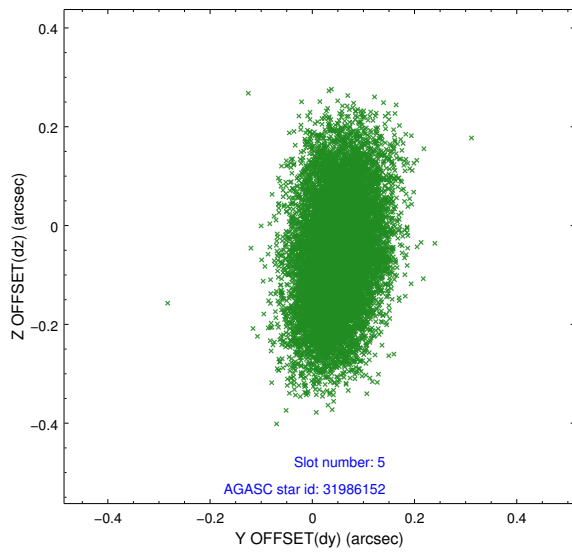
### 2.4.1 Slot 3



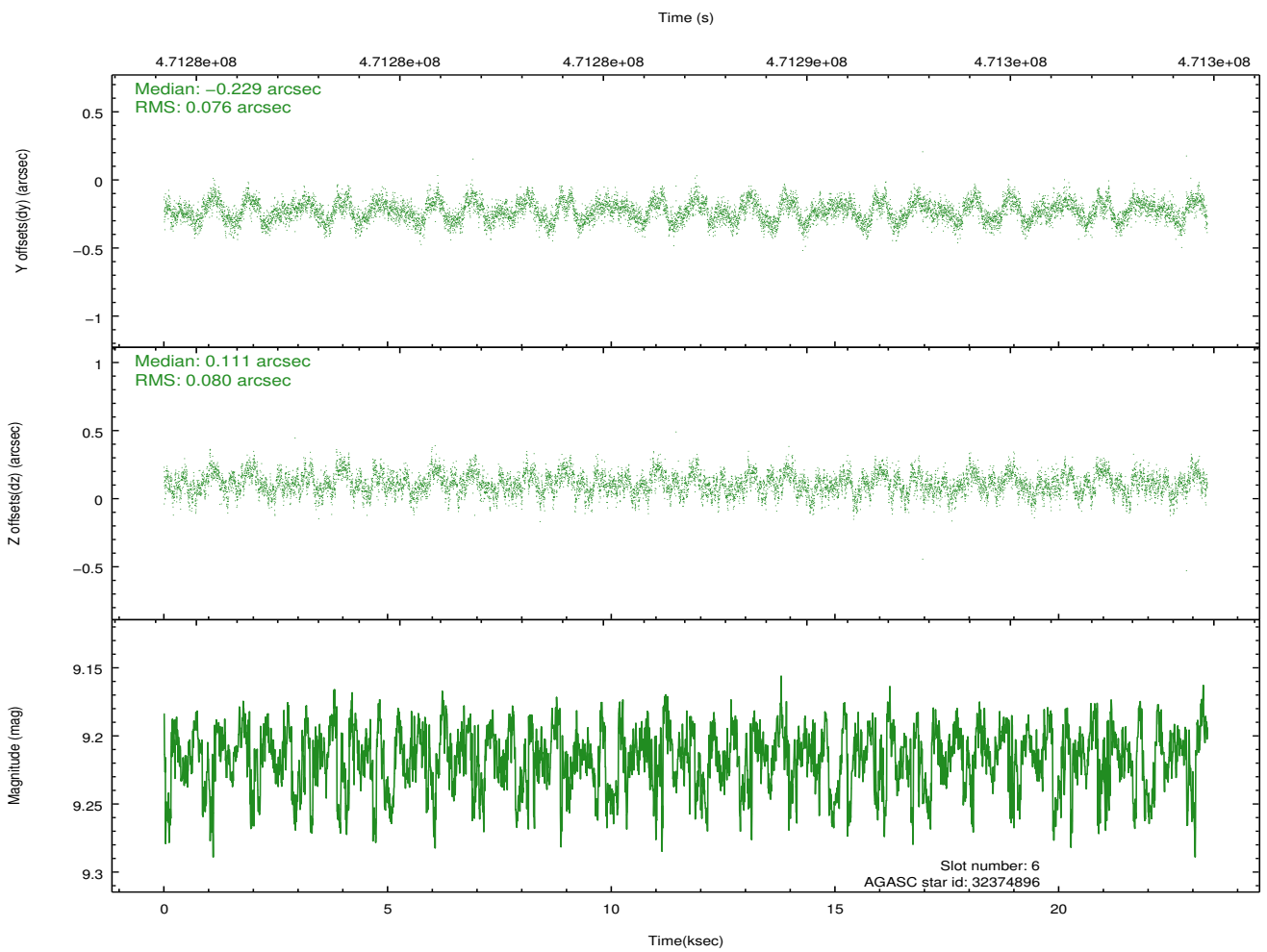
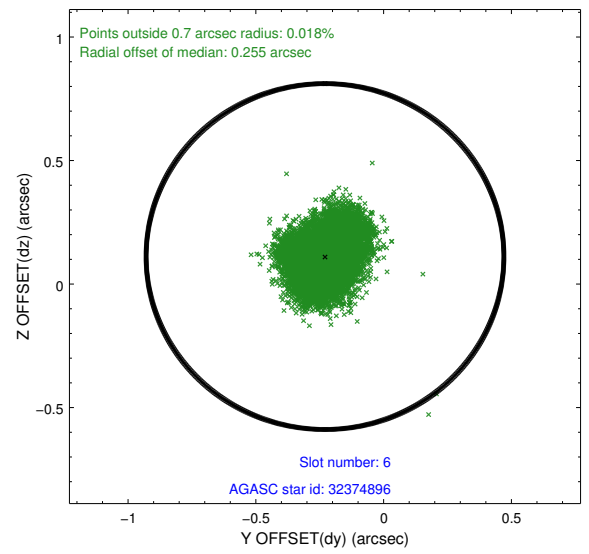
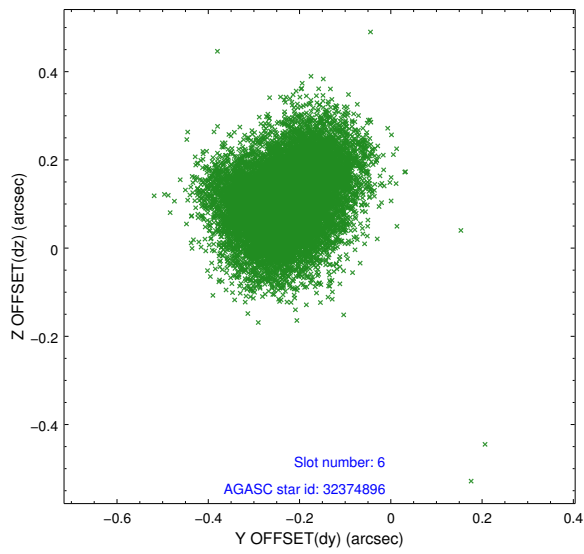
## 2.4.2 Slot 4



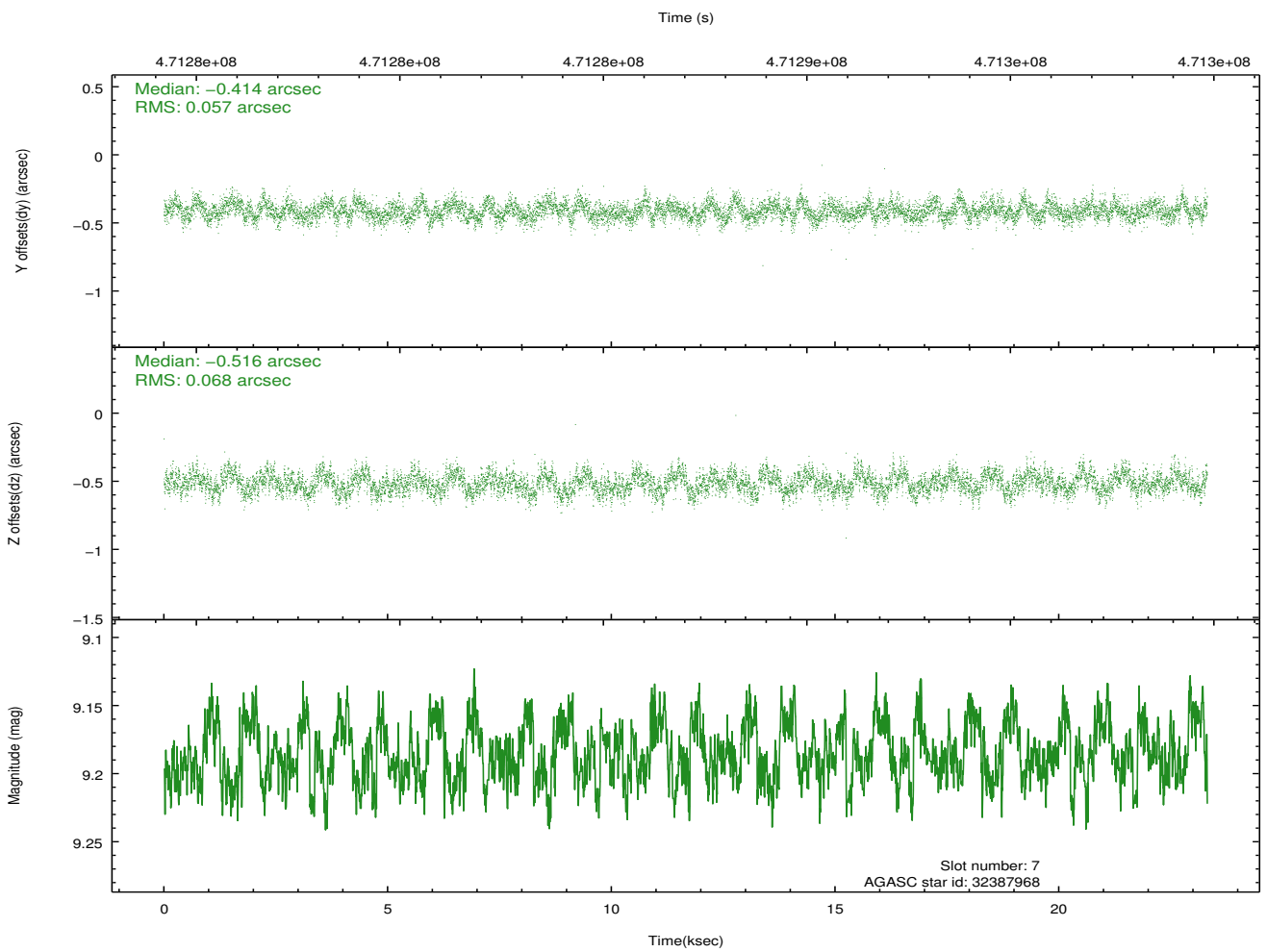
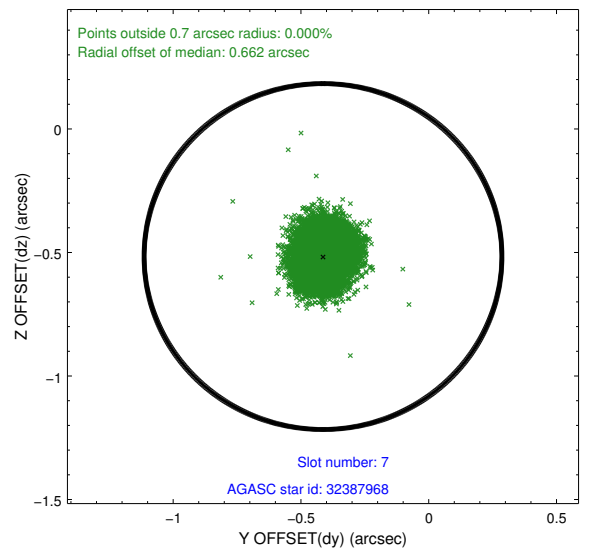
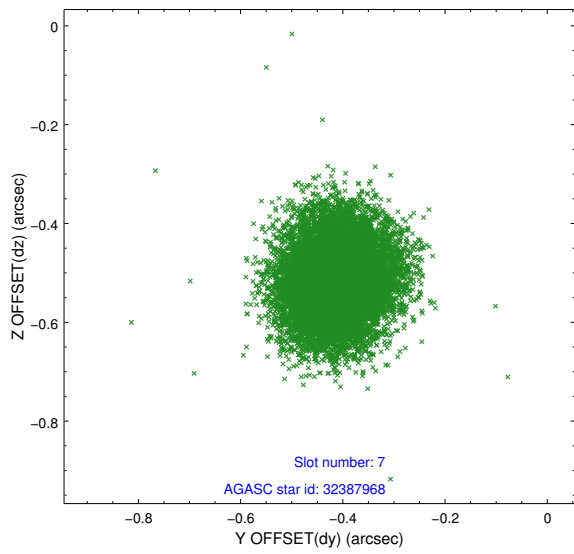
### 2.4.3 Slot 5



## 2.4.4 Slot 6

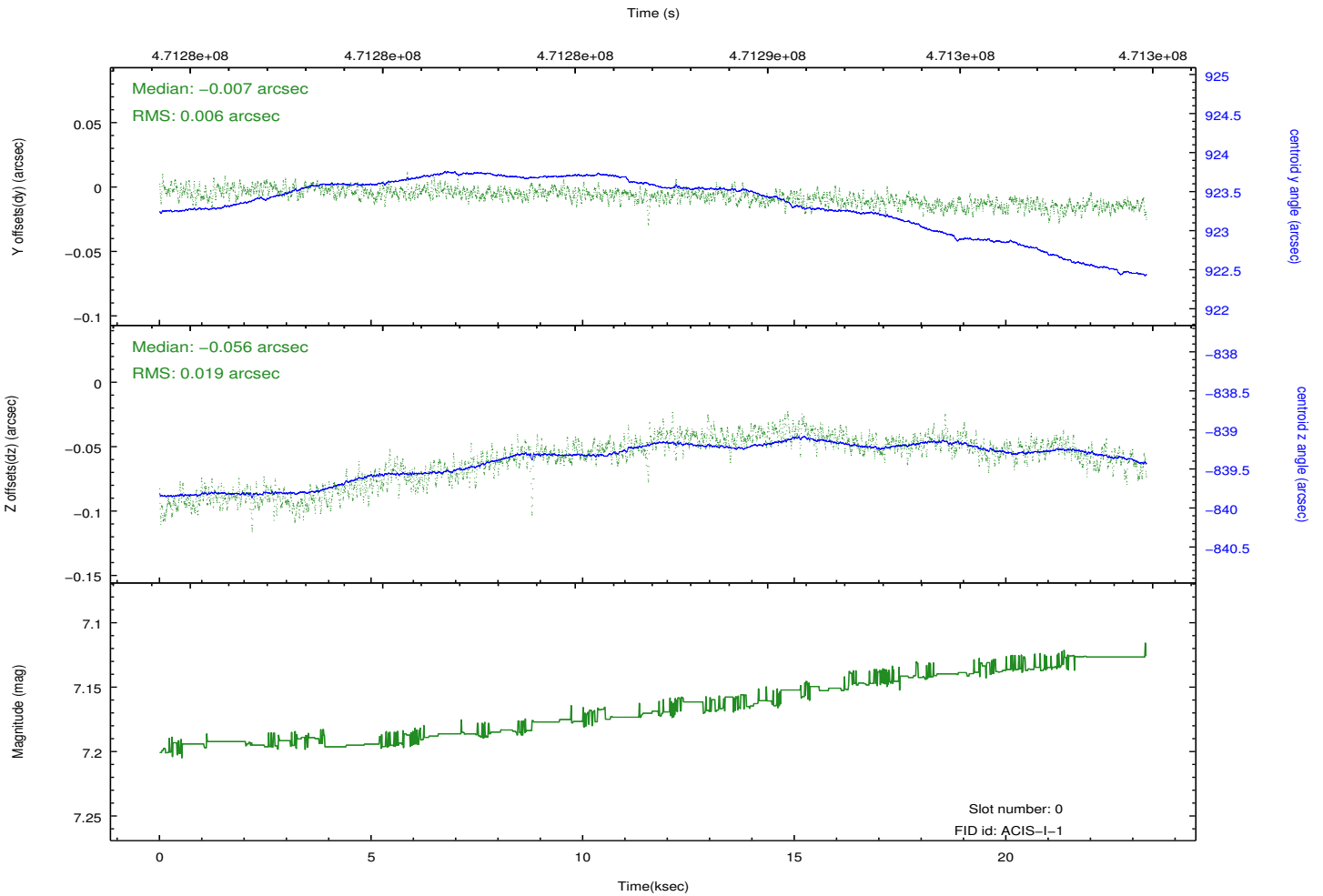
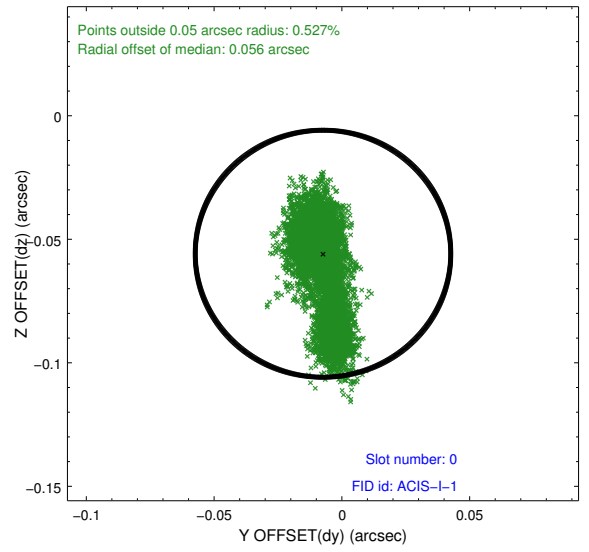
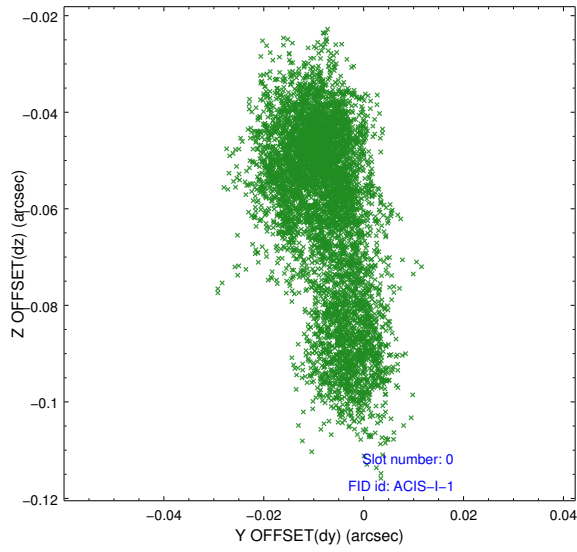


## 2.4.5 Slot 7

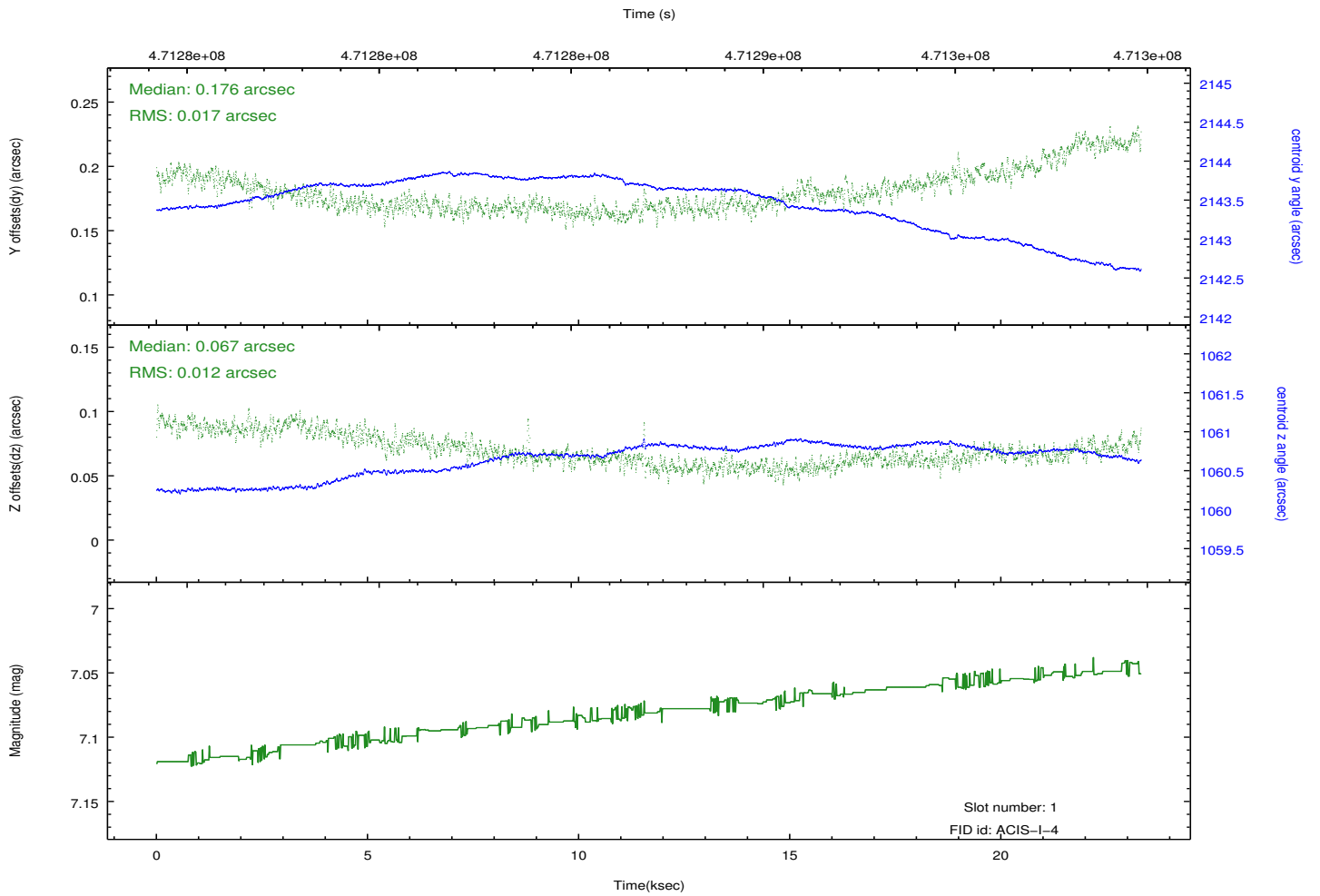
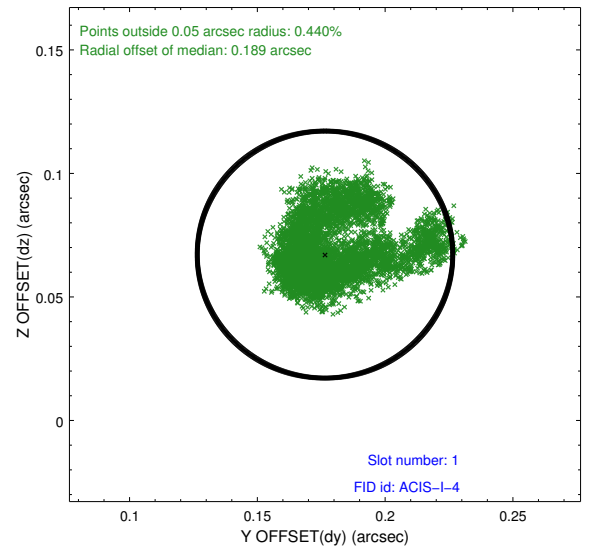
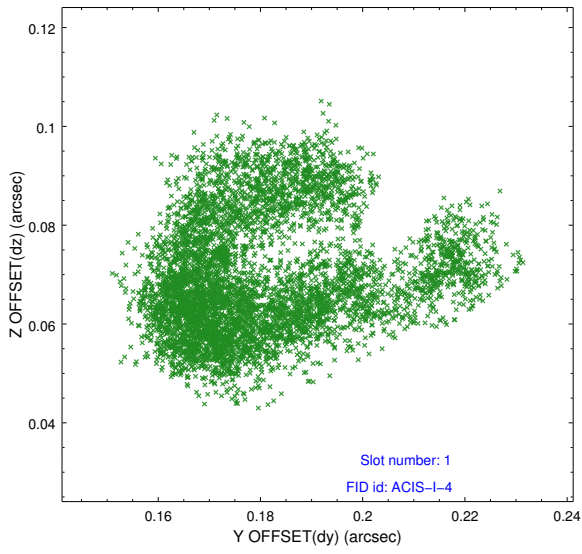


## 2.5 FID Slots

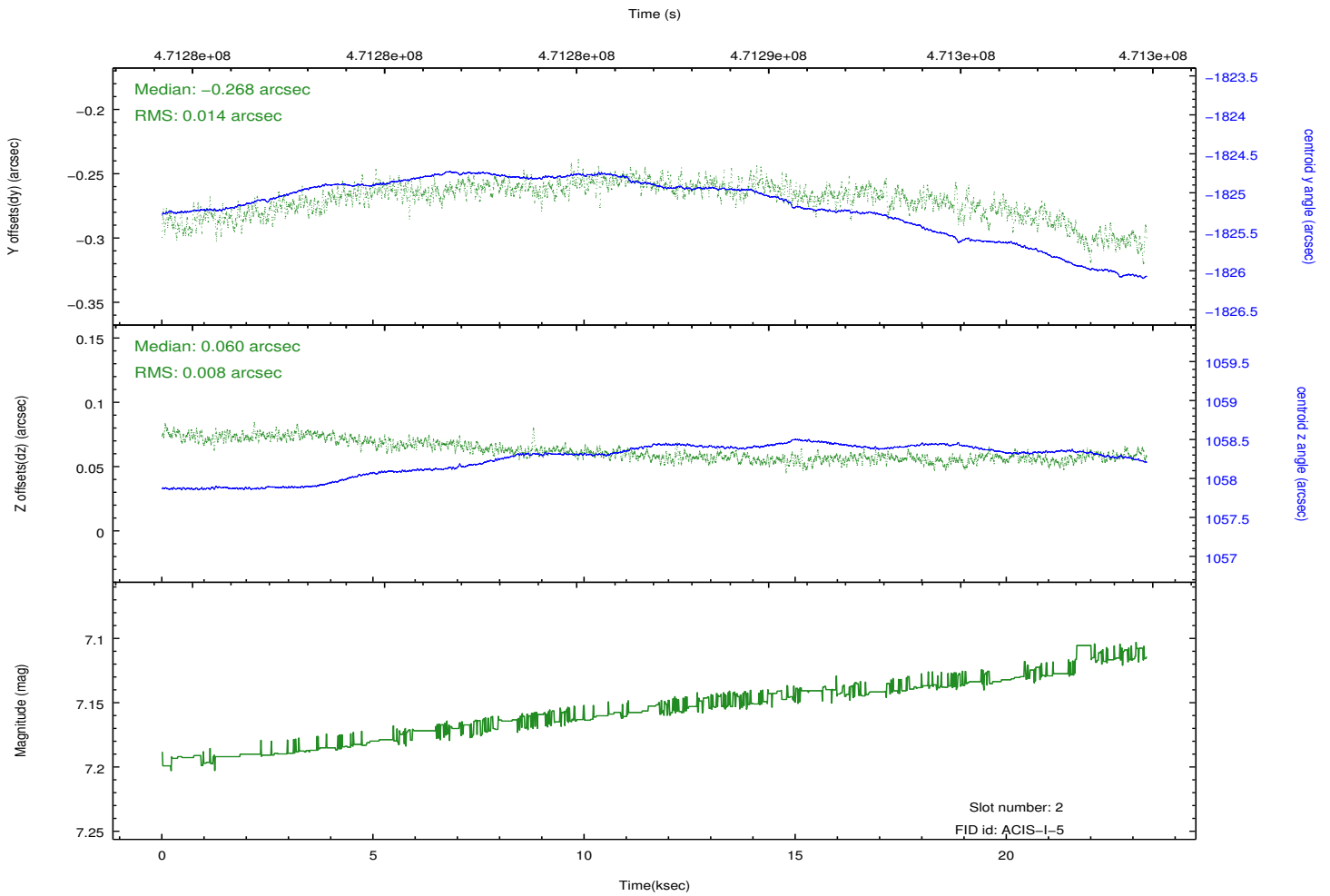
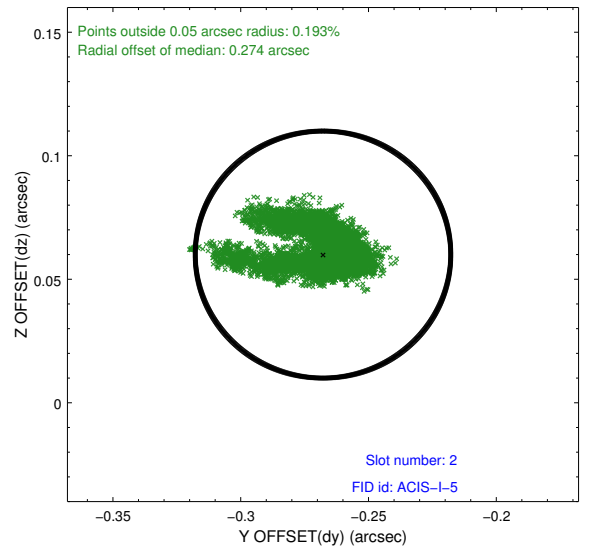
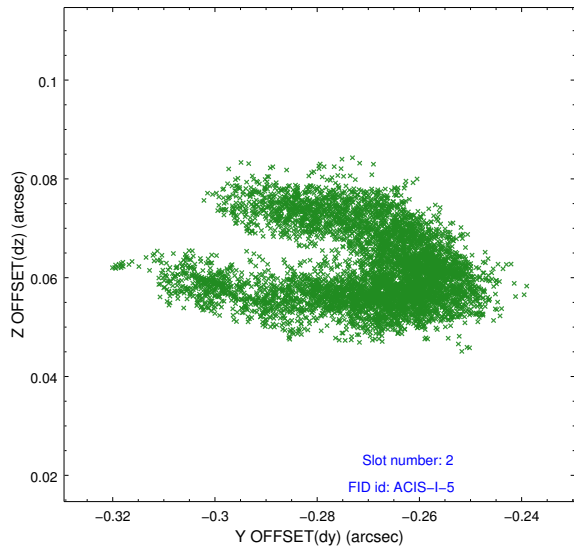
### 2.5.1 Slot 0



## 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)	2014.12.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	23.290300179124

## 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.