

# V&V Reference Report

## L2 ASCDS Version : 10

Observation 15021 - L2 Version 2  
Chandra X-Ray Center

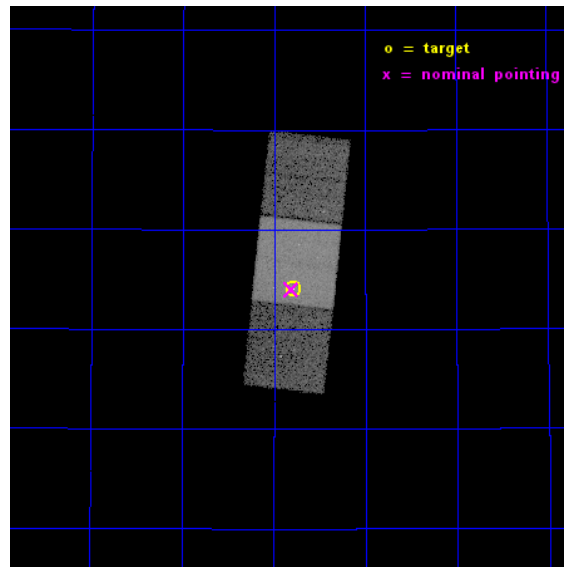
L2 Processing Date : Dec 4 2014

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# 1 Front

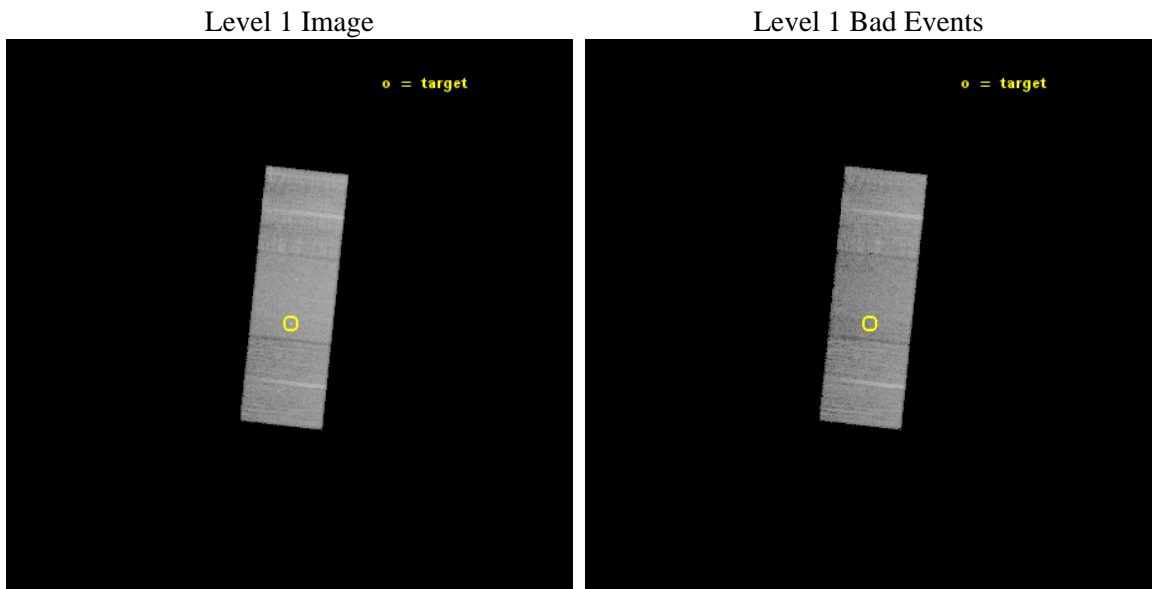
seq_num	702829	Sequence number
obs_id	15021	Observation id
title	Testing the slim disk scenario for active intermediate mass black holes	Proposal title
observer	Elena Gallo	Principal investigator
object	SDSS J111547.46+502405.6	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	168.947917	Observer's specified target RA [deg]
dec_targ	50.401556	Observer's specified target Dec [deg]
ra_nom	168.95217440269	Nominal RA [deg]
dec_nom	50.400246159184	Nominal Dec [deg]
roll_nom	276.1473922437	Nominal Roll [deg]
revision	2	Processing version of data
ontime	22078.200169802	Sum of GTIs [s]
livetime	21789.732230849	Livetime [s]
ontime6	22078.200169802	Sum of GTIs [s]
ontime7	22078.200169802	Sum of GTIs [s]
ontime8	22078.200169802	Sum of GTIs [s]
l2events	88099	Number of level 2 events



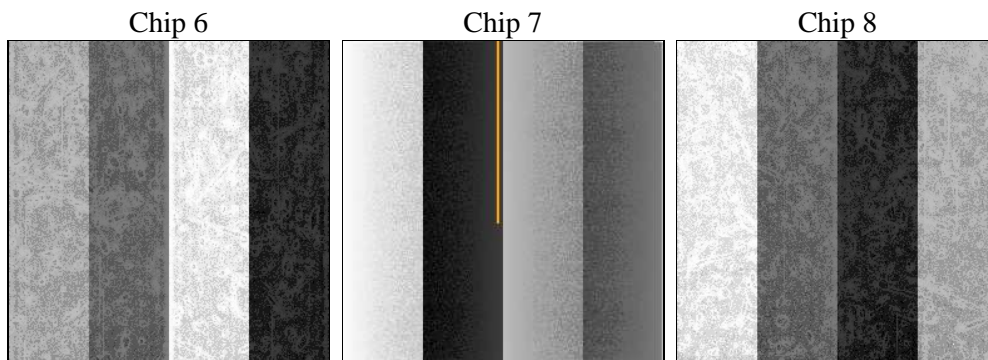
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	22000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	22078.200169802	Sum of GTIs [s]
caldbver	4.6.4	&#160	ontime6	22078.200169802	Sum of GTIs [s]
date	2014-12-04T10:30:10	Date and time of file creation	ontime7	22078.200169802	Sum of GTIs [s]
revision	2	Processing version of data	ontime8	22078.200169802	Sum of GTIs [s]
			l1events	394493	Number of level 1 events

### 2.1.4 Events

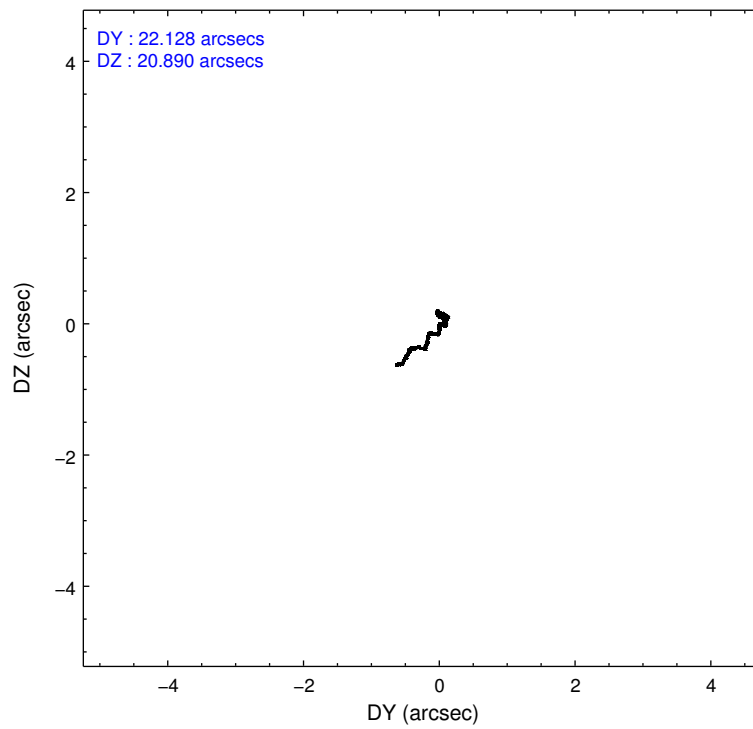
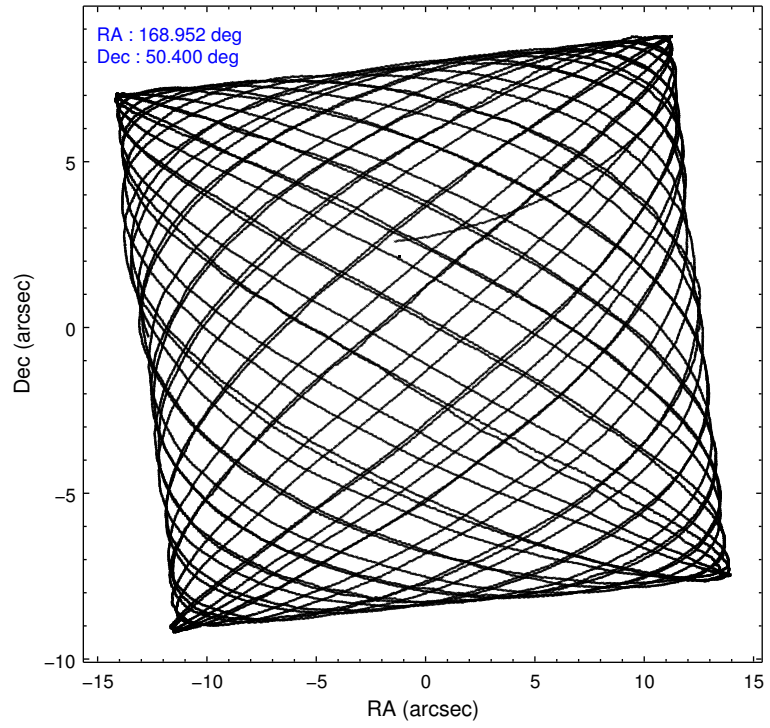
	ccd 6	ccd 7	ccd 8
level 1 events	106813	143608	144072
rejected events	93695	79529	105077
rejected %	87%	55%	72%

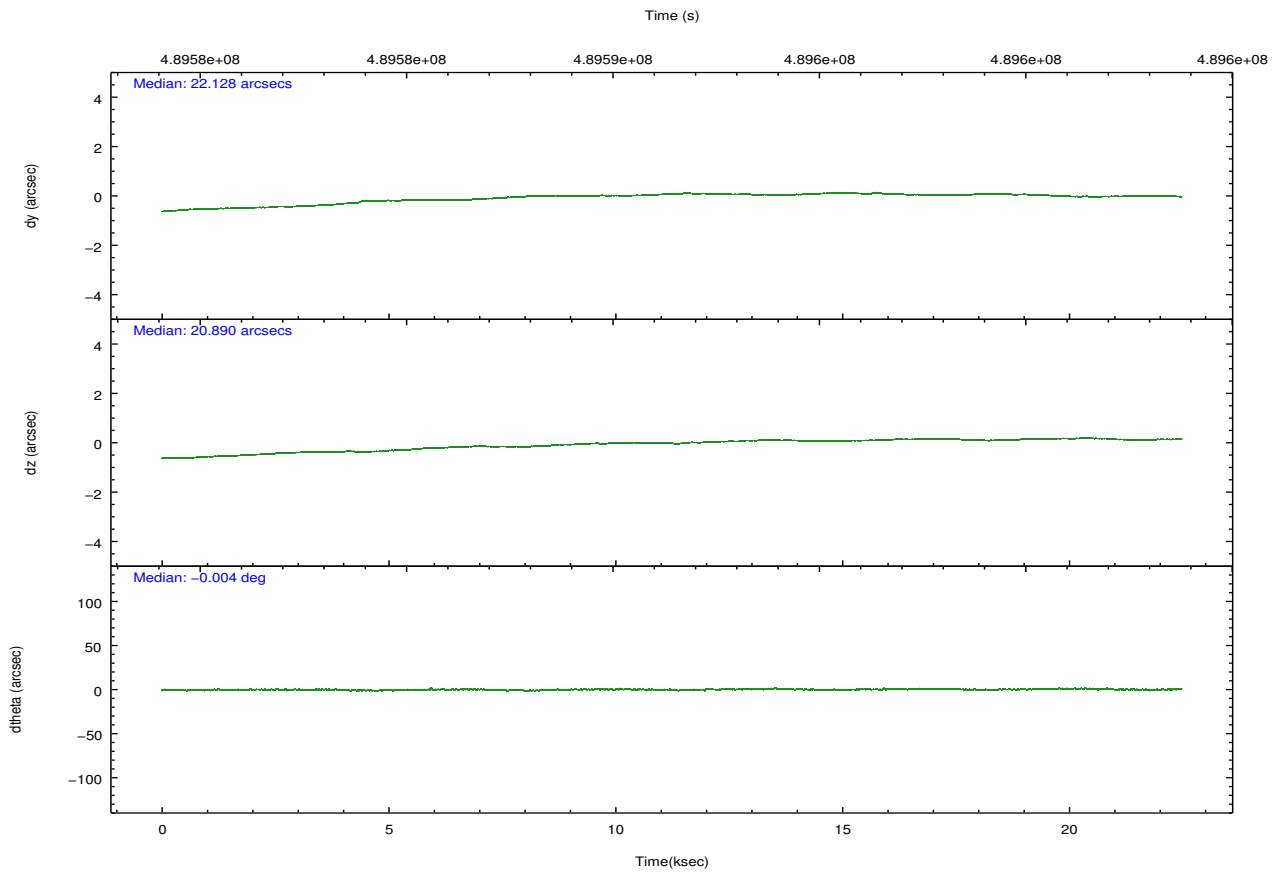
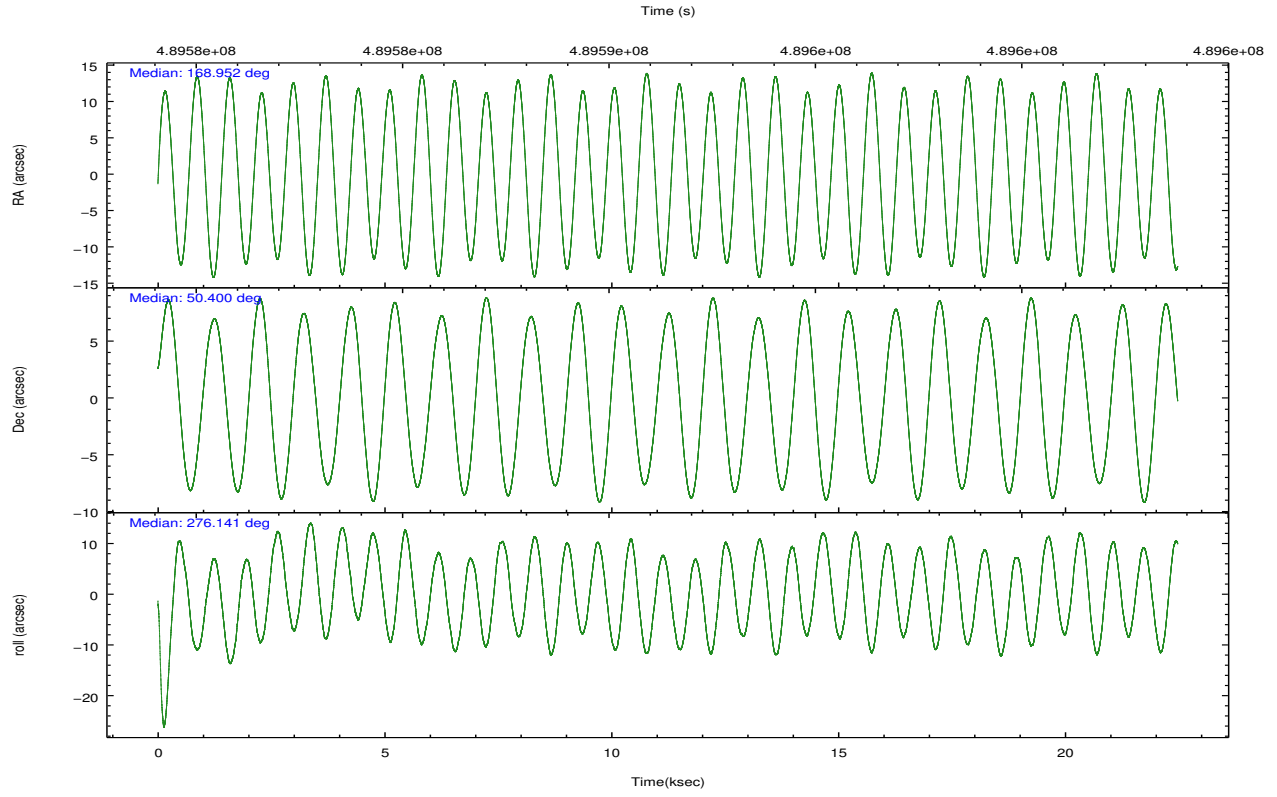
	ccd 6	ccd 7	ccd 8
grade 0 events	4382	5965	11421
	4%	4%	7%
grade 1 events	54	175	125
	0%	0%	0%
grade 2 events	3009	13115	9233
	2%	9%	6%
grade 3 events	1300	5546	4118
	1%	3%	2%
grade 4 events	1388	5526	3903
	1%	3%	2%
grade 5 events	5572	14923	8062
	5%	10%	5%
grade 6 events	3042	33944	10380
	2%	23%	7%
grade 7 events	88066	64414	96830
	82%	44%	67%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-678	ACIS-678	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	168.926387	168.9521744026891	CCD I2 on	N	N
[deg] Pointing Dec	50.422065	50.40024615918384	CCD I3 on	N	N
[deg] Pointing Roll	276.010625	276.1473922436974	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	O1	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	O2	Y
[s] Observation start time (MET)	489580664.184000	489579696.80534	CCD S5 on	N	N
Observation start date	2013-07-07T10:36:37	2013-07-07T10:21:36	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	489602664.184000	489603065.78161	On-chip summing requested	N	N
Observation end date	2013-07-07T16:43:17	2013-07-07T16:51:05	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect





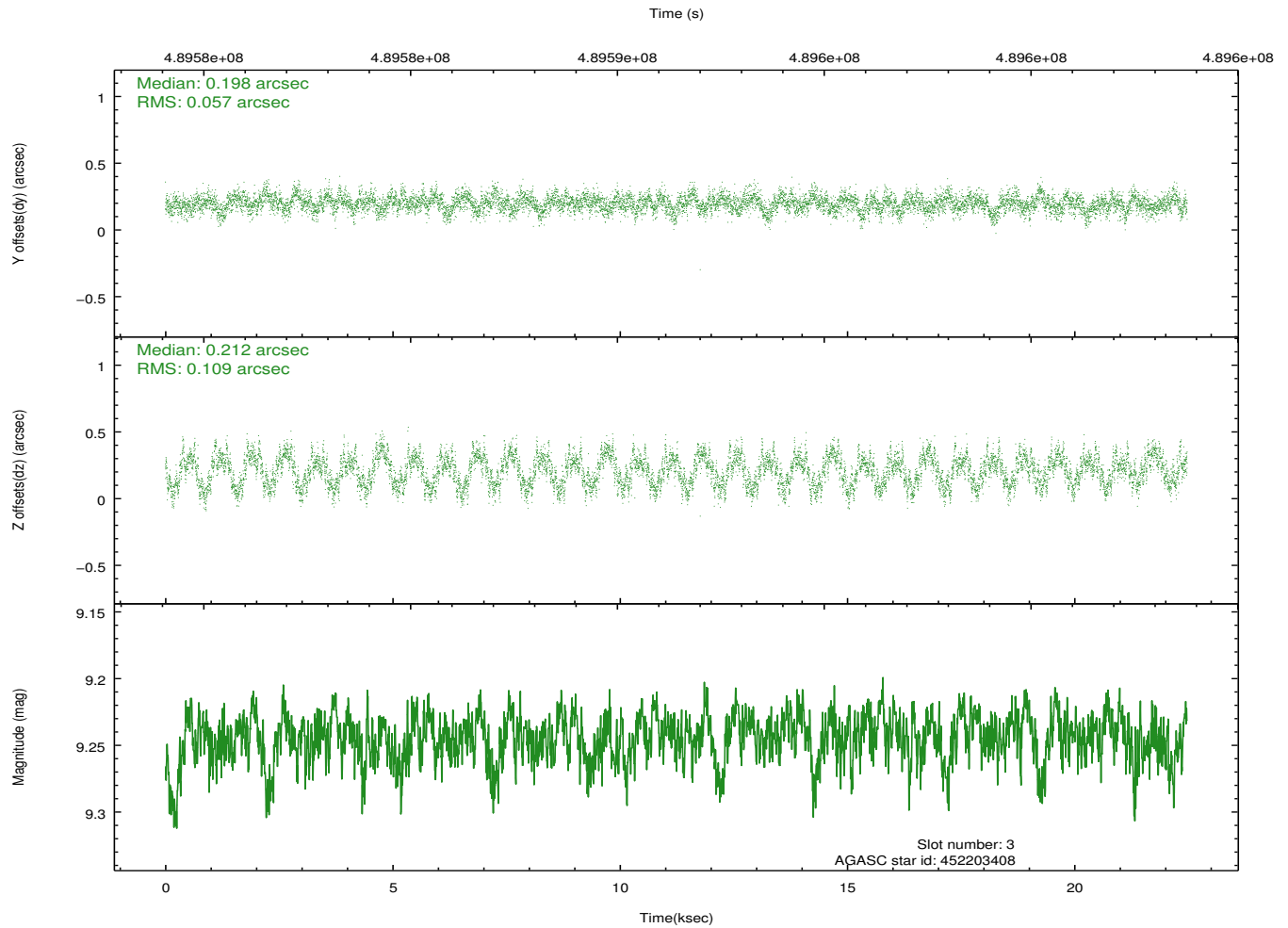
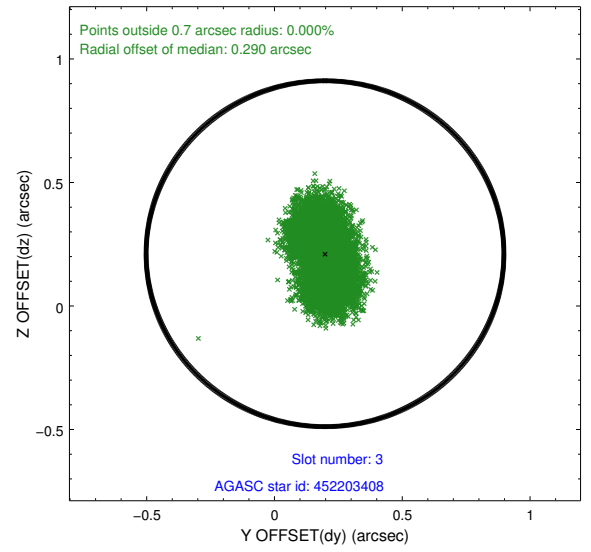
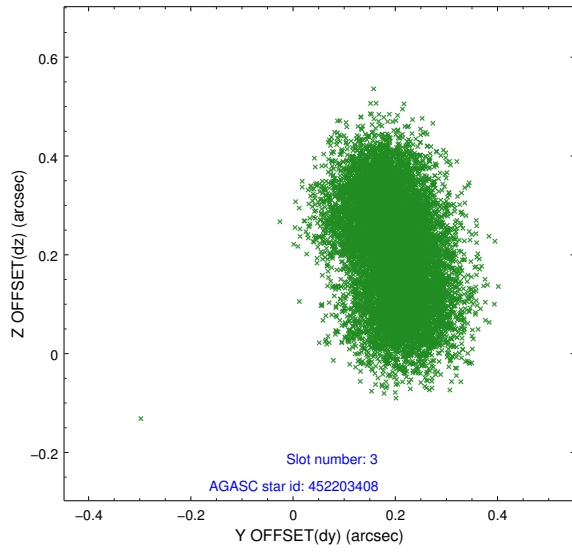
### Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.93	5482	-0.099	0.009	0.008	0.015	0.000000	0.000000	-775.30	-1742.28
1	FID		ACIS-S-4	7.01	5483	0.207	0.046	0.007	0.014	0.000000	0.000000	2138.21	166.09
2	FID		ACIS-S-5	7.04	5482	-0.140	-0.046	0.011	0.025	0.000000	0.000000	-1827.99	159.82
3	GUIDE	used	452203408	9.24	10956	0.198	0.212	0.134	0.208	168.266281	50.645559	-963.51	-1413.38
4	GUIDE	used	452205784	9.71	10922	-0.069	0.197	0.183	0.309	168.144677	50.005221	1295.70	-1955.77
5	GUIDE	used	452600064	8.96	10936	-0.141	-0.038	0.090	0.143	169.391515	50.257296	699.38	1003.08
6	GUIDE	used	452603592	8.58	10964	-0.063	-0.240	0.071	0.113	169.246622	49.955766	1746.10	562.37
7	GUIDE	used	452609952	9.38	10893	0.075	-0.106	0.141	0.231	168.991649	50.640855	-767.25	230.31

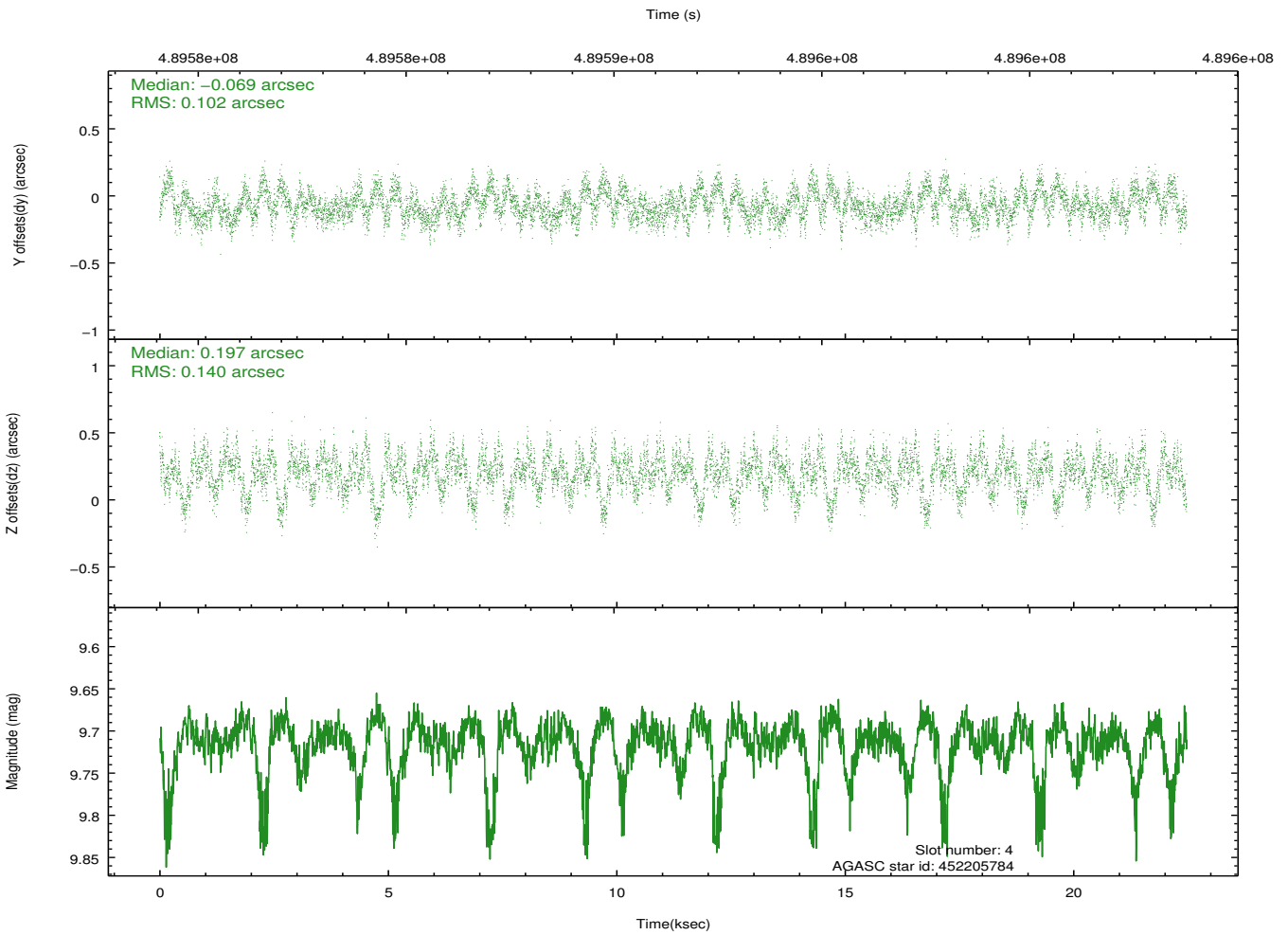
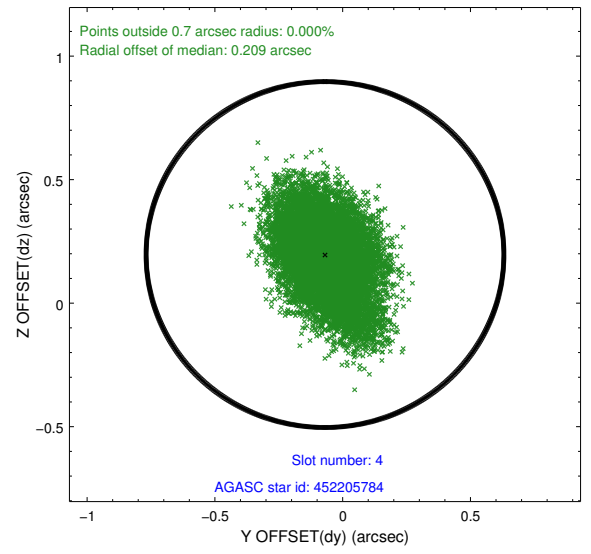
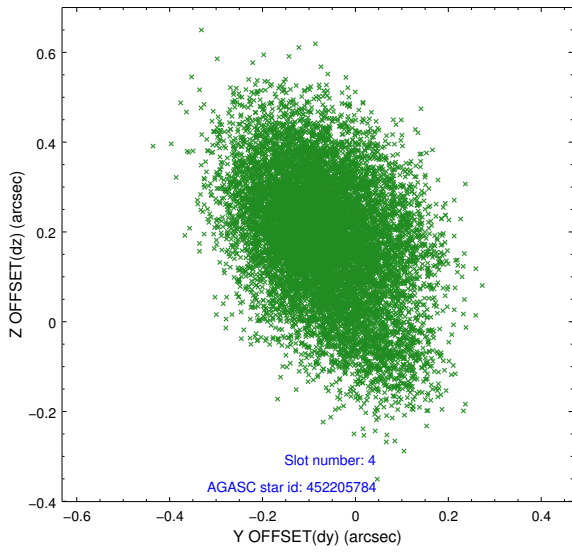
∞

## 2.4 Star Slots

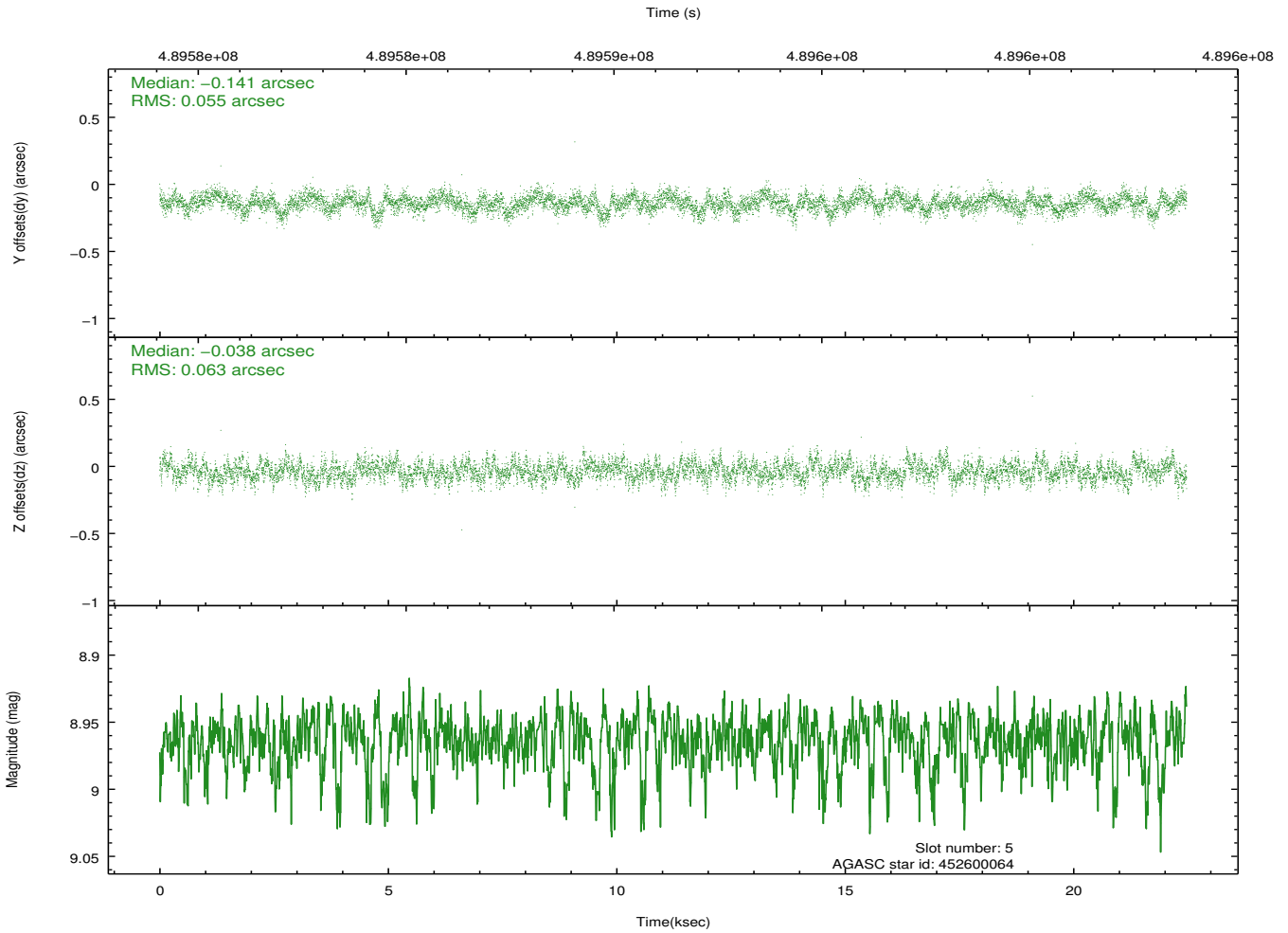
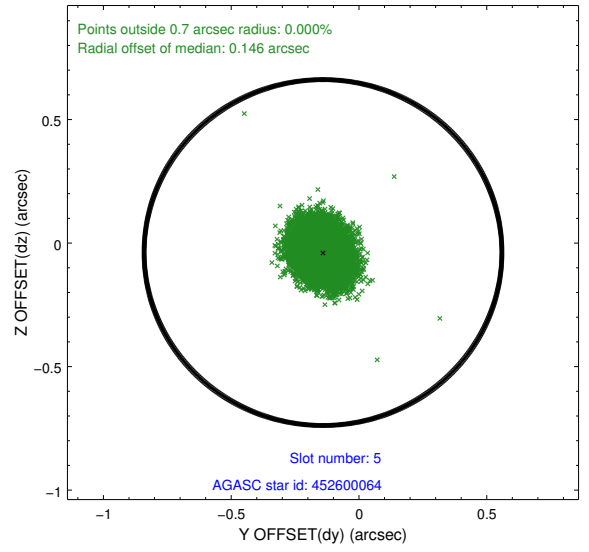
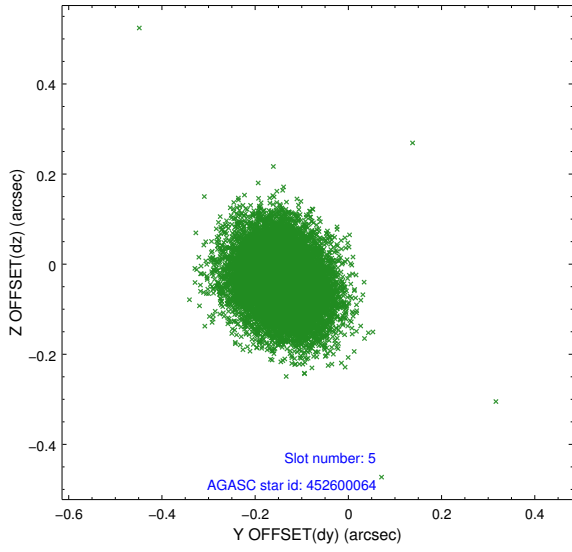
### 2.4.1 Slot 3



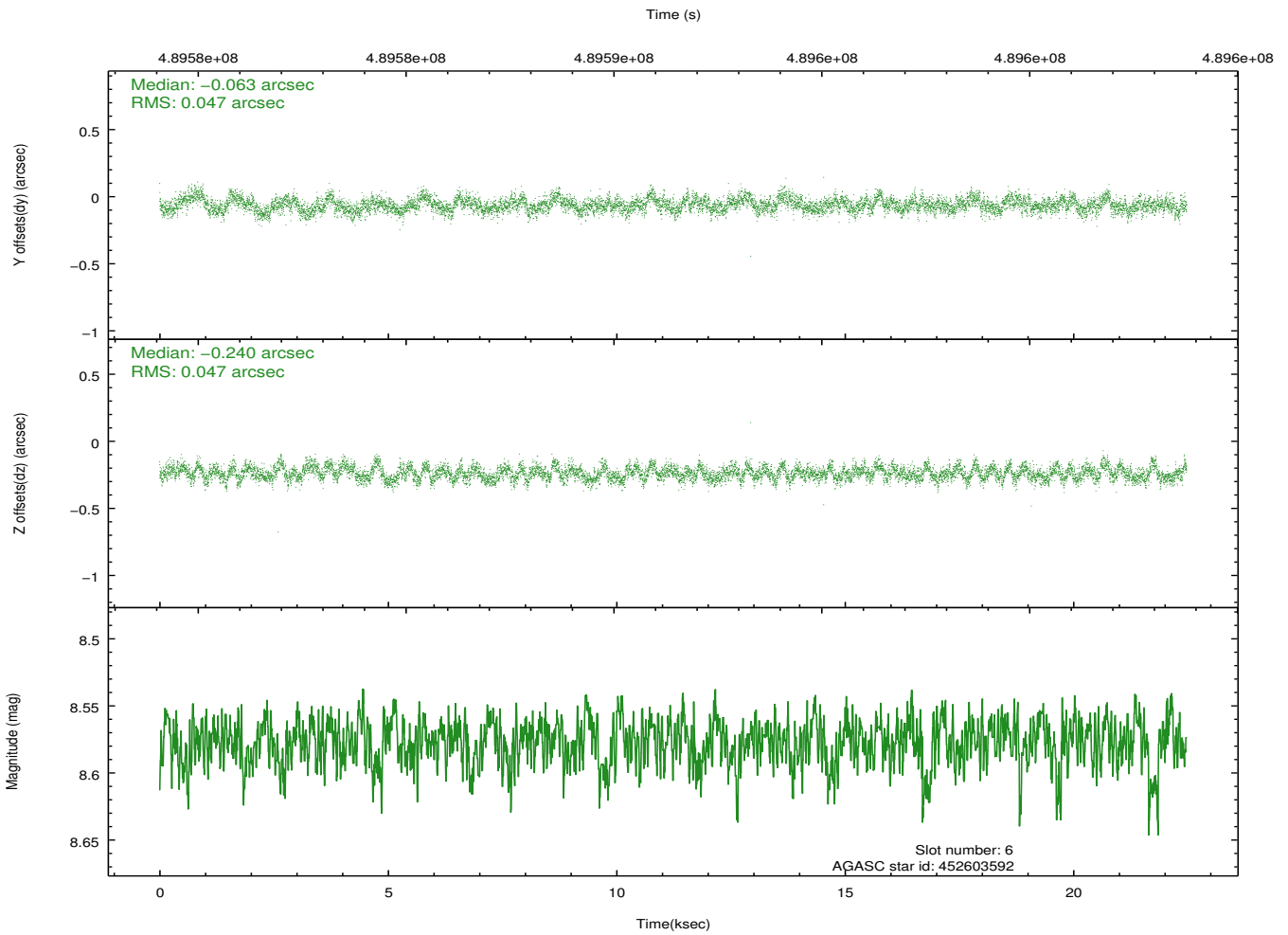
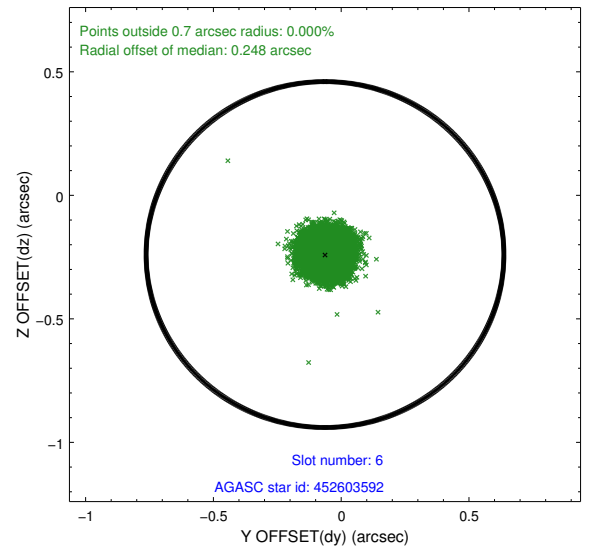
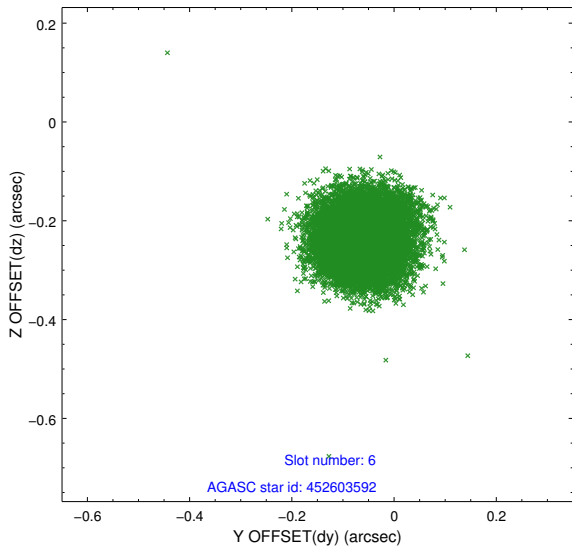
### 2.4.2 Slot 4



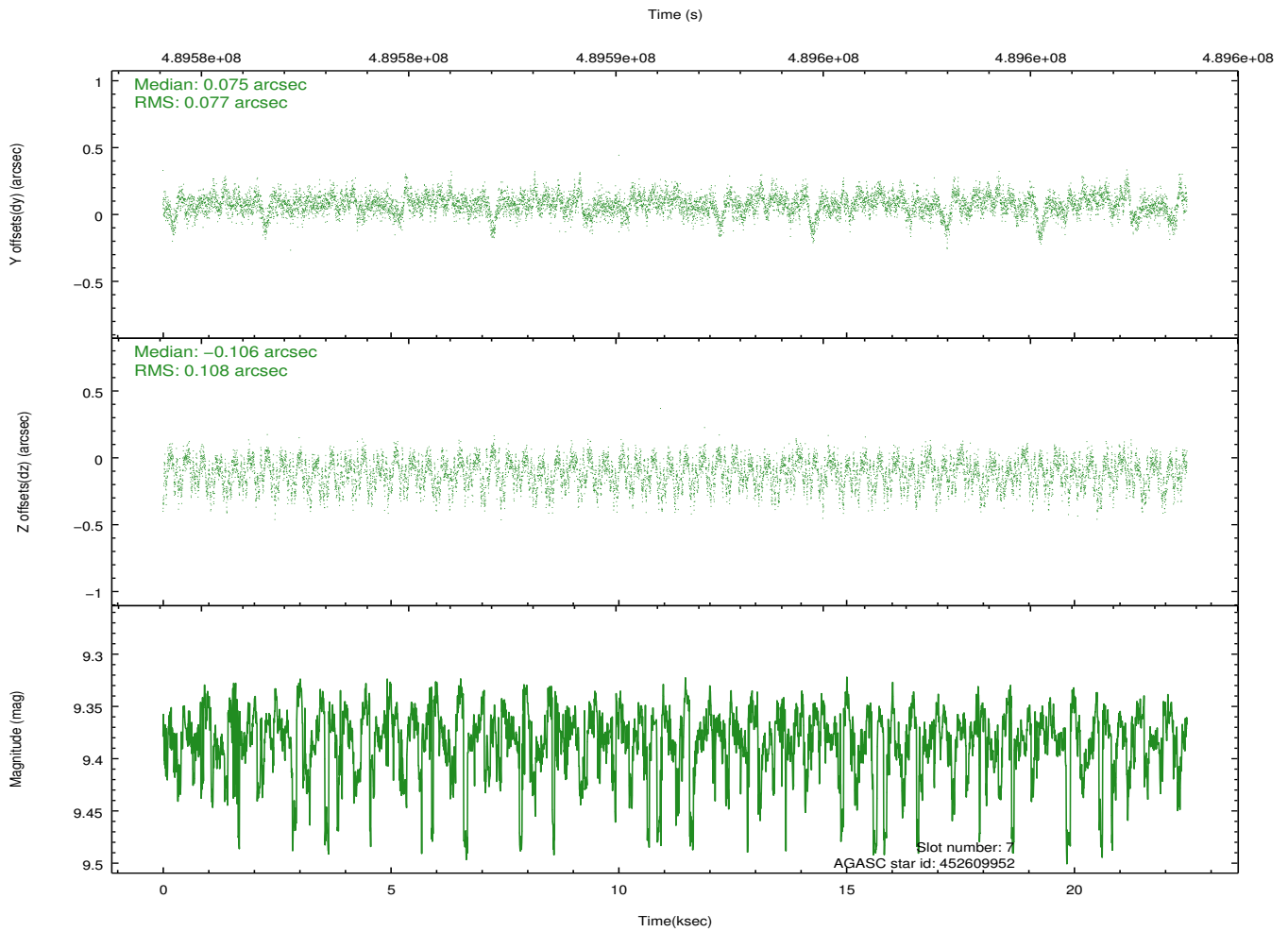
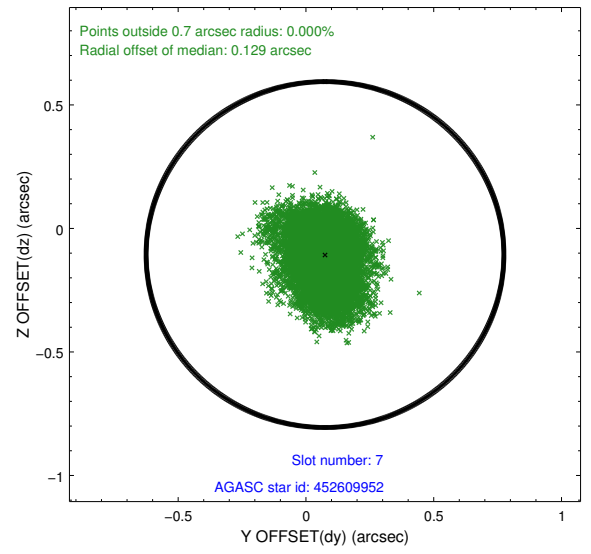
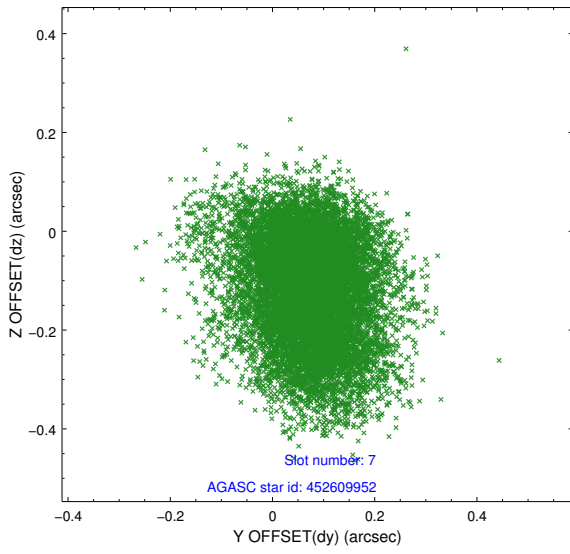
### 2.4.3 Slot 5



### 2.4.4 Slot 6

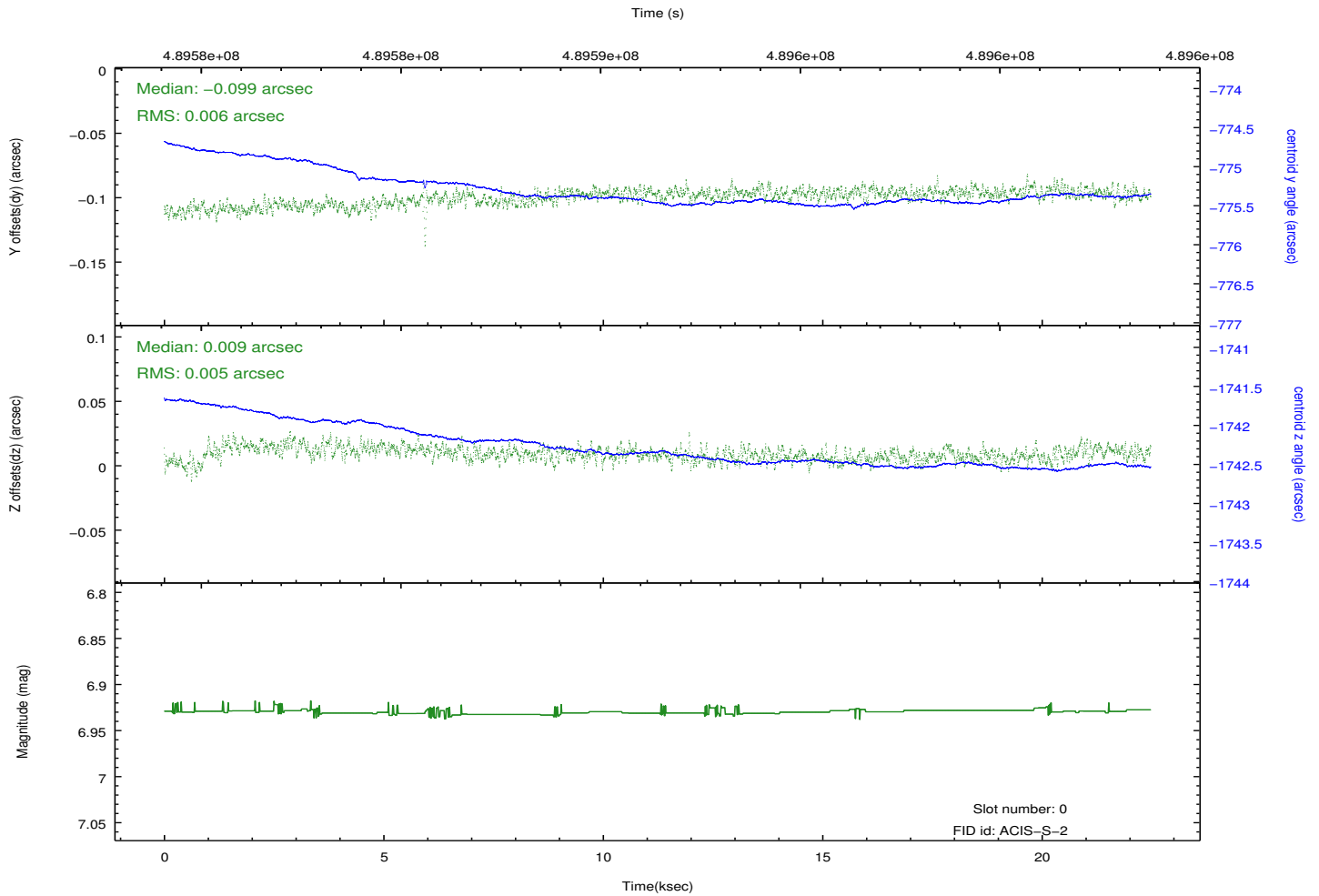
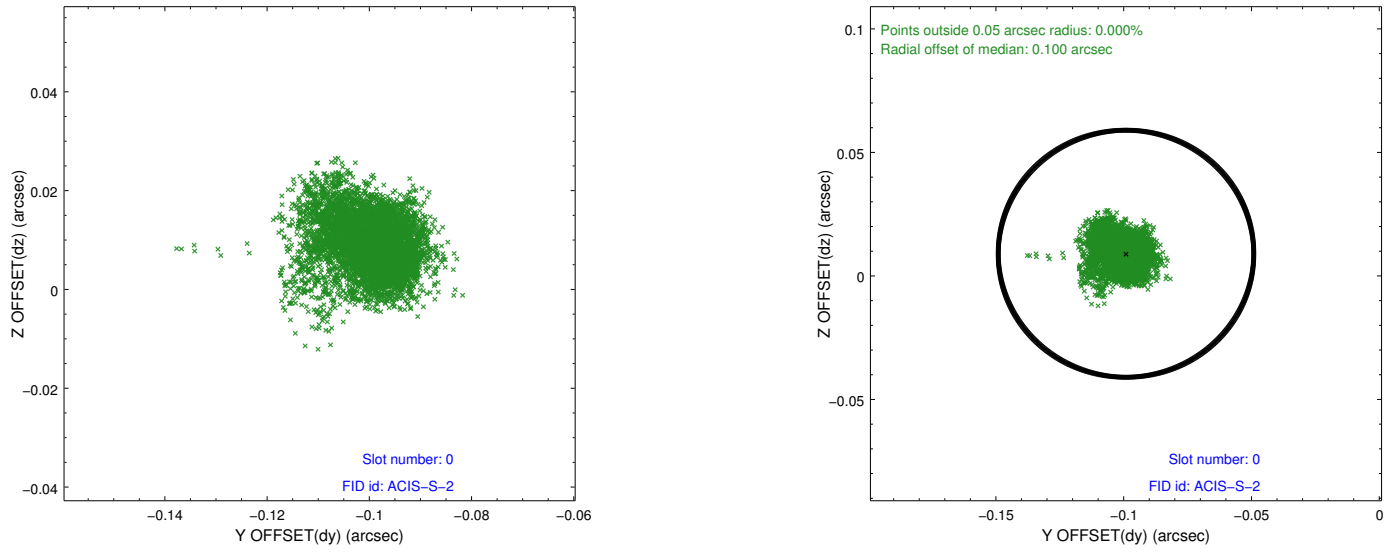


### 2.4.5 Slot 7

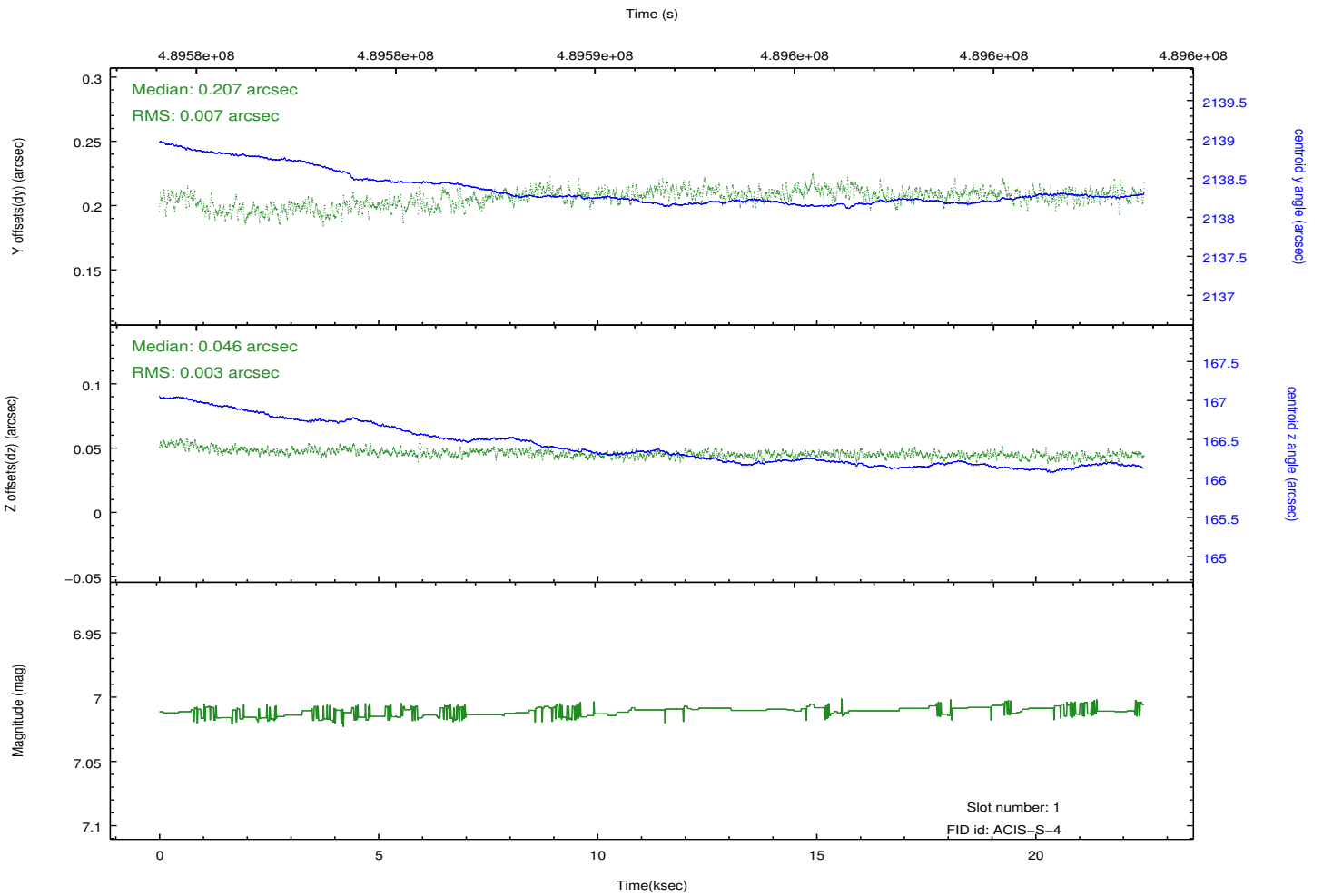
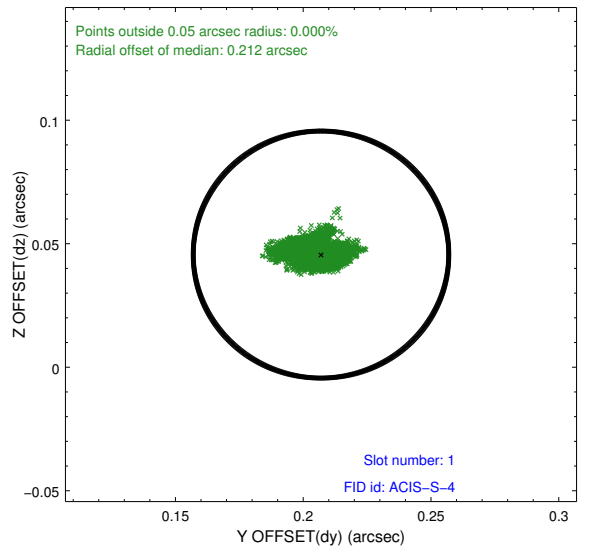
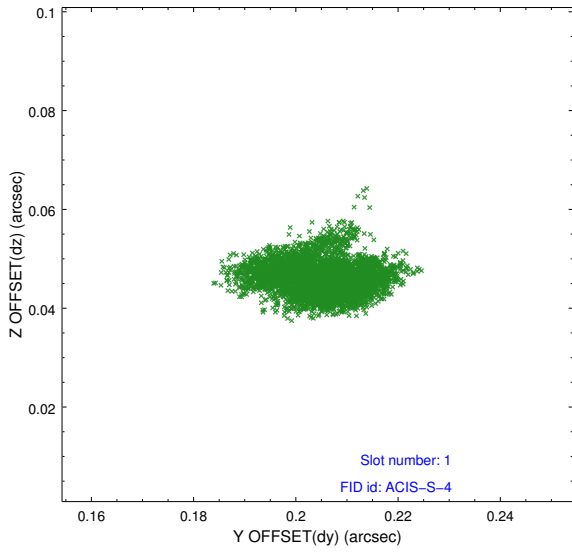


## 2.5 FID Slots

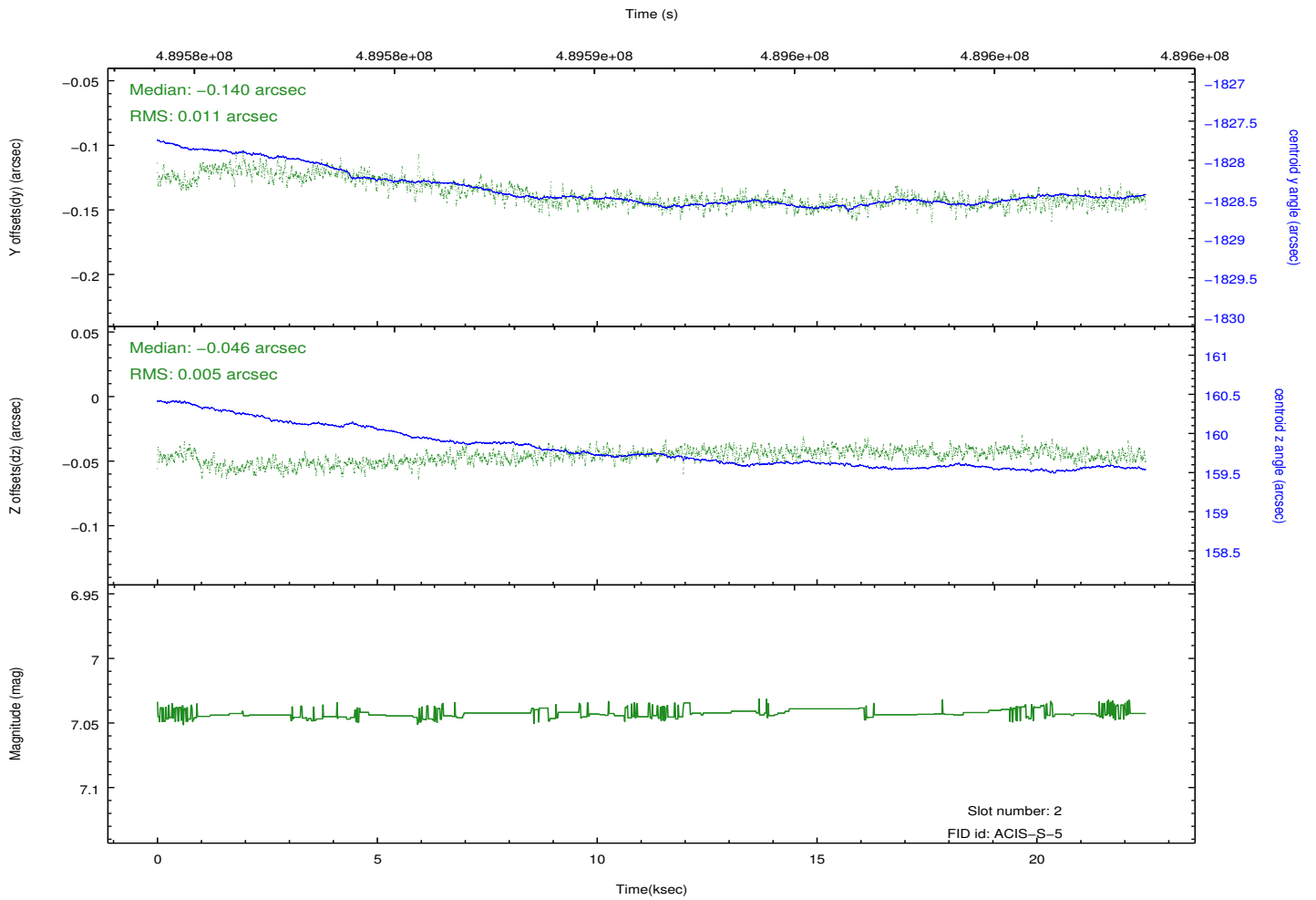
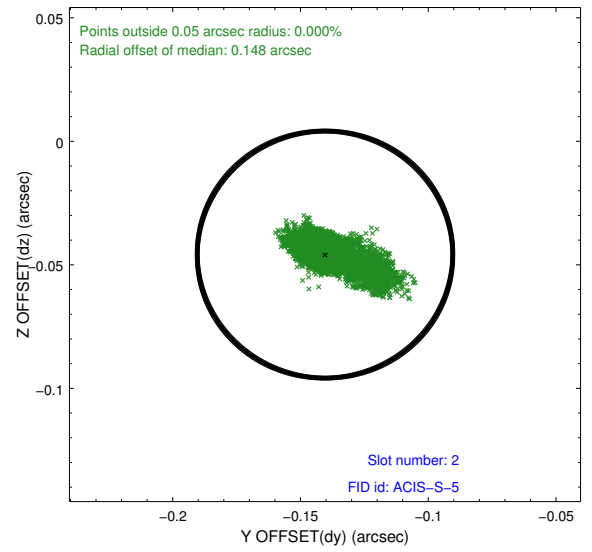
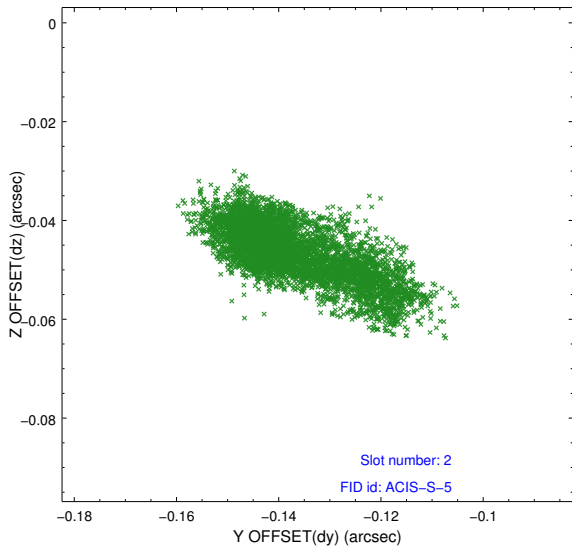
### 2.5.1 Slot 0



## 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)	2014.12.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	22.078200169802

## 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.