

# V&V Reference Report

## L2 ASCDS Version : 10.1

Observation 14943 - L2 Version 2  
Chandra X-Ray Center

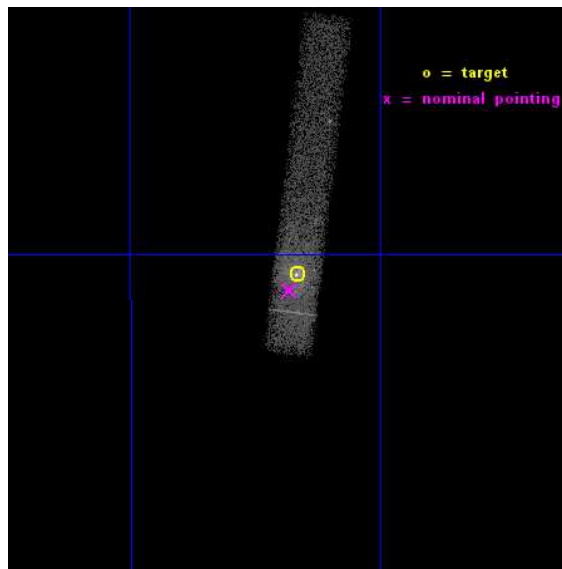
L2 Processing Date : Dec 9 2014

## Contents

<b>1</b>	<b>Front</b>	<b>2</b>
<b>2</b>	<b>OBI</b>	<b>3</b>
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
<b>A</b>	<b>Summary</b>	<b>17</b>
A.1	Status . . . . .	17
A.2	Comments . . . . .	17

# 1 Front

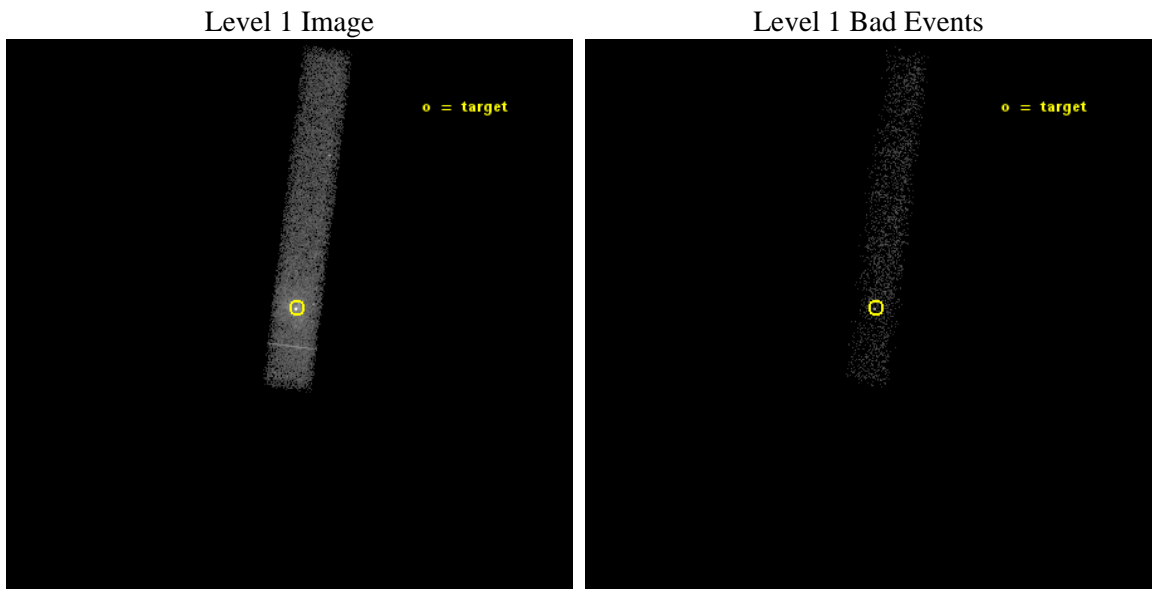
seq_num	601073	Sequence number
obs_id	14943	Observation id
title	Monitoring the Tidal Disruption of a Gas Cloud Approaching Sgr A*	&#160
observer	Dr. Frederick Baganoff	Principal investigator
object	Sgr A*	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	266.416667	Observer's specified target RA [deg]
dec_targ	-29.007806	Observer's specified target Dec [deg]
ra_nom	266.42058817071	Nominal RA [deg]
dec_nom	-29.014889939646	Nominal Dec [deg]
roll_nom	277.15853700161	Nominal Roll [deg]
revision	2	Processing version of data
ontime	20069.598803759	Sum of GTIs [s]
liveltime	18202.066754724	Livetime [s]
ontime7	20069.598803759	Sum of GTIs [s]
l2events	26250	Number of level 2 events



## 2 OBI

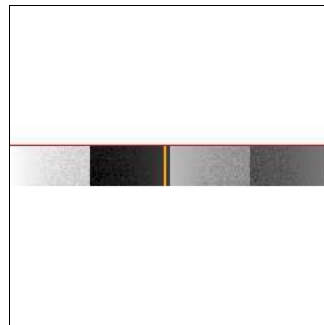
### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias

Chip 7



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	20000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	20069.598803759	Sum of GTIs [s]
caldbver	4.6.4	&#160	ontime7	20069.598803759	Sum of GTIs [s]
date	2014-12-09T04:32:10	Date and time of file creation	l1events	35972	Number of level 1 events
revision	2	Processing version of data			

### 2.1.4 Events

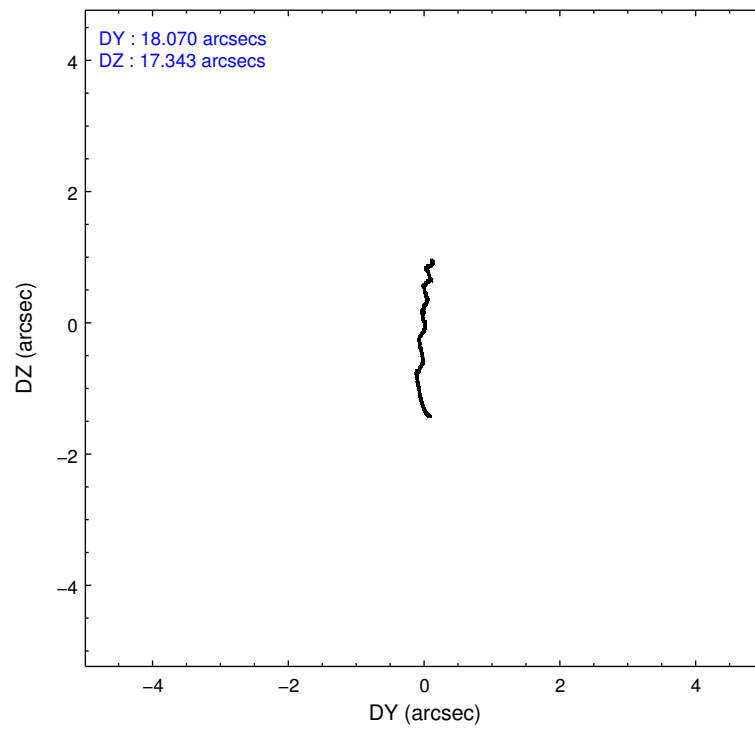
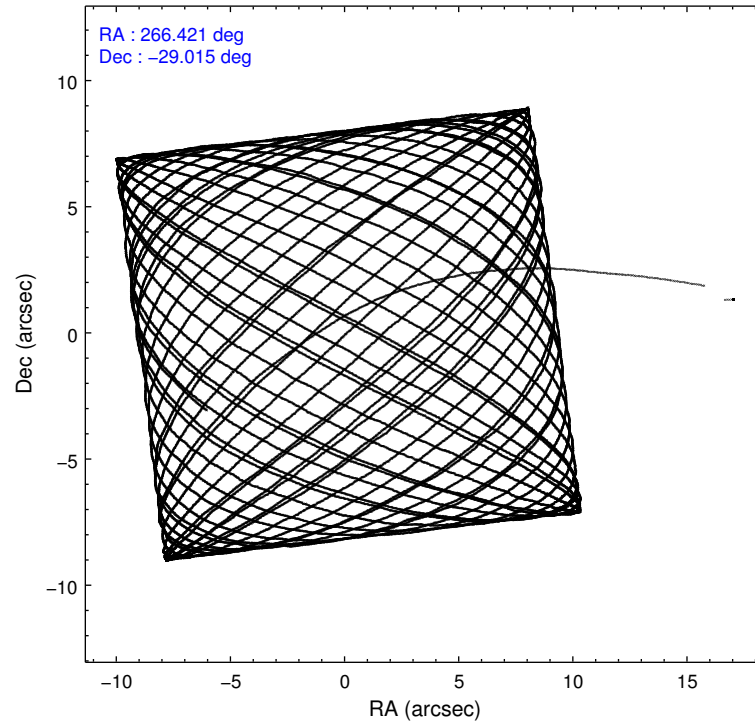
	<b>ccd 7</b>
level 1 events	35972
rejected events	9235
rejected %	25%

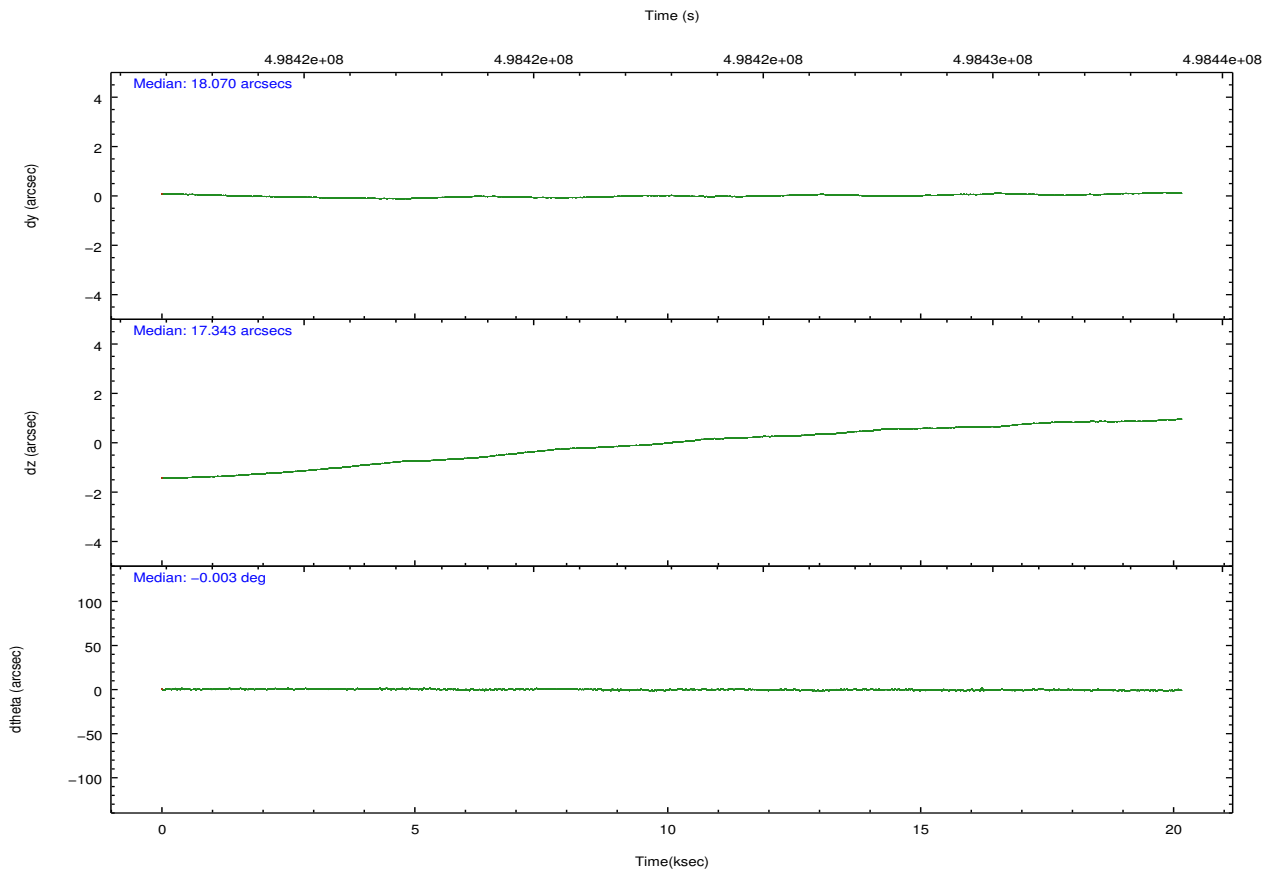
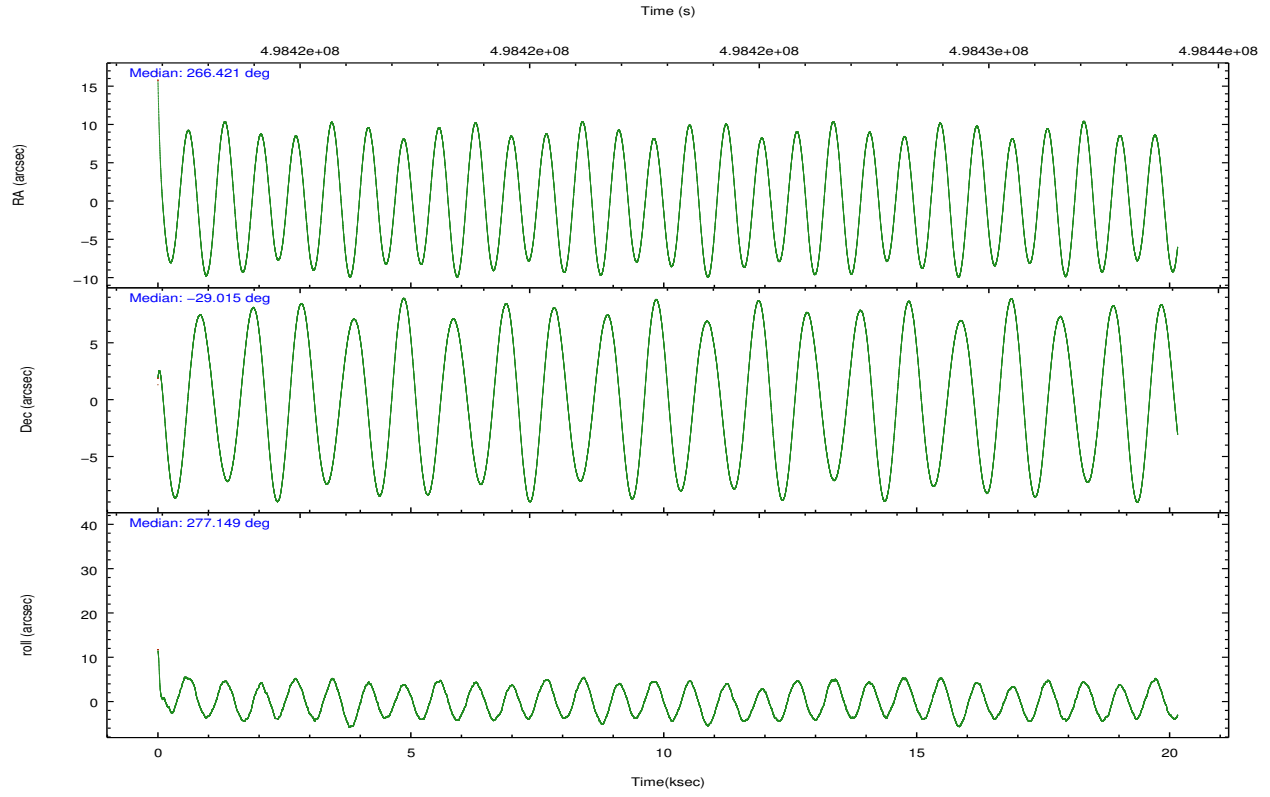
	<b>ccd 7</b>
grade 0 events	4493
	12%
grade 1 events	43
	0%
grade 2 events	5921
	16%
grade 3 events	3026
	8%
grade 4 events	2931
	8%
grade 5 events	1933
	5%
grade 6 events	10366
	28%
grade 7 events	7259
	20%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-7	ACIS-7	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	266.401386	266.4205881707059	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	-28.993327	-29.01488993964569	Subarray start row	449	449
[deg] Pointing Roll	276.992597	277.1585370016075	Subarray row count	128	128
[s] Window start time (MET)	498182467.184000	498182467.184000	Alternating exposures requested	N	N
[s] Window stop time (MET)	499132867.184000	499132867.184000	[s] Primary exposure time	0.000000	0.4
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	498413087.184000	498411665.64964			
Observation start date	2013-10-17T16:03:40	2013-10-17T15:41:05			
[s] Observation end time (MET)	498433087.184000	498433438.70083			
Observation end date	2013-10-17T21:37:00	2013-10-17T21:43:58			
Read mode	TIMED	TIMED			

## 2.3 Aspect





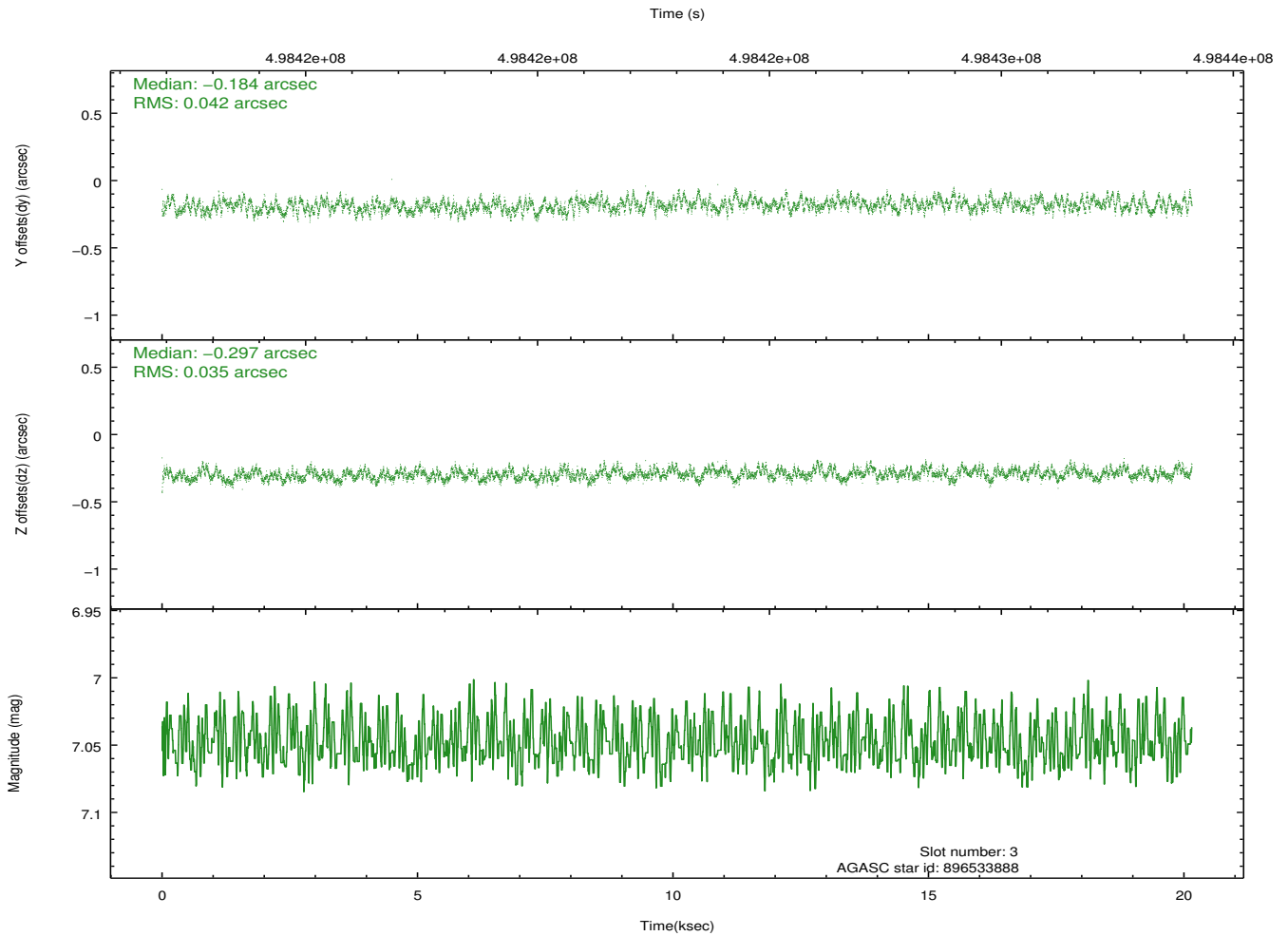
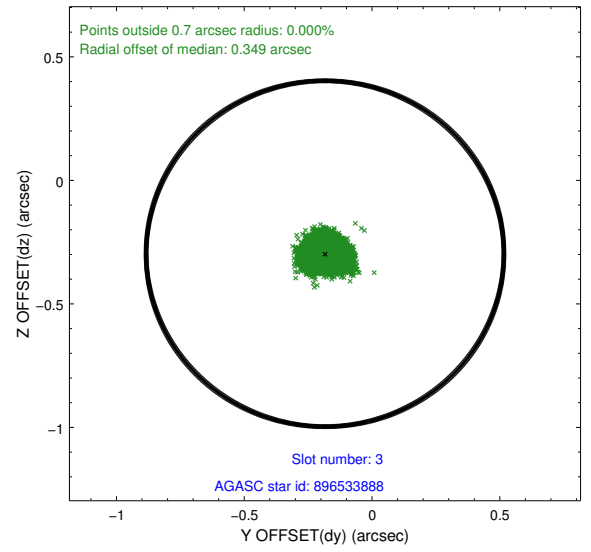
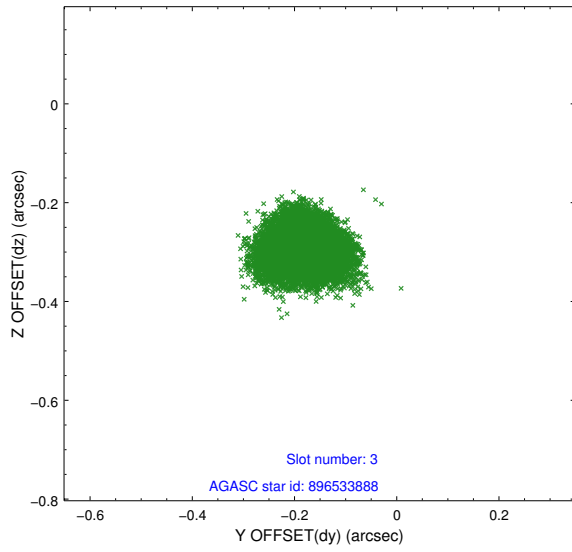
### Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.07	4918	-0.138	-0.100	0.007	0.014	0.000000	0.000000	-771.31	-1738.76
1	FID		ACIS-S-4	7.14	4917	0.180	0.057	0.008	0.012	0.000000	0.000000	2142.25	169.61
2	FID		ACIS-S-6	7.27	4918	-0.069	0.050	0.009	0.017	0.000000	0.000000	391.04	807.26
3	GUIDE	used	896533888	7.05	9834	-0.184	-0.297	0.059	0.092	266.666434	-29.392757	1529.70	650.18
4	GUIDE	used	896534664	8.18	9829	0.391	0.083	0.073	0.120	266.405570	-28.407461	-2090.72	269.97
5	GUIDE	used	896540808	7.50	9835	-0.301	0.014	0.059	0.096	265.985401	-29.308604	970.19	-1434.20
6	GUIDE	used	896541576	8.18	9834	-0.224	0.084	0.080	0.136	267.051055	-28.762912	-568.04	2135.36
7	GUIDE	used	896403520	8.98	9826	0.315	0.113	0.090	0.149	265.626481	-28.748780	-1162.48	-2321.05

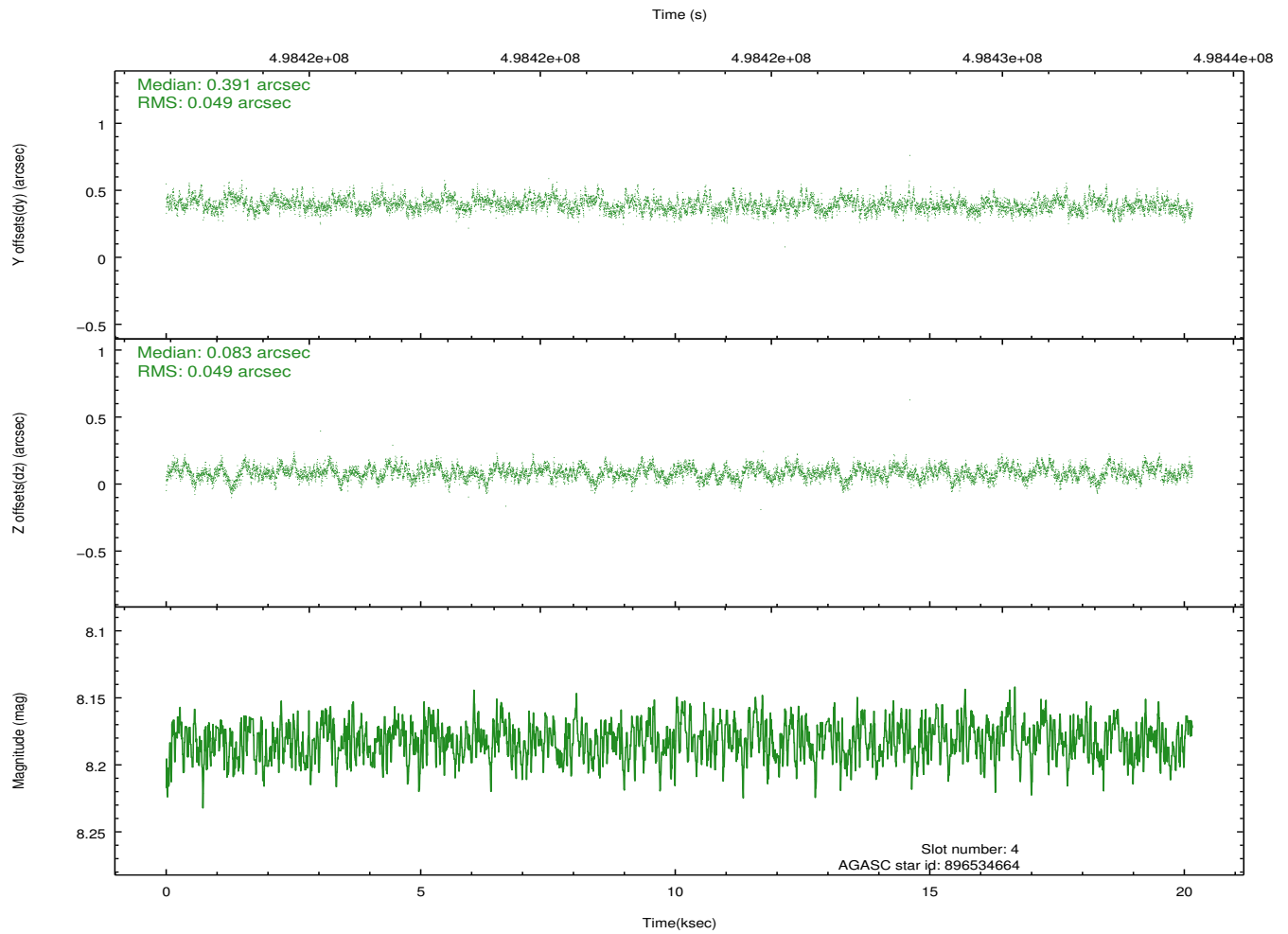
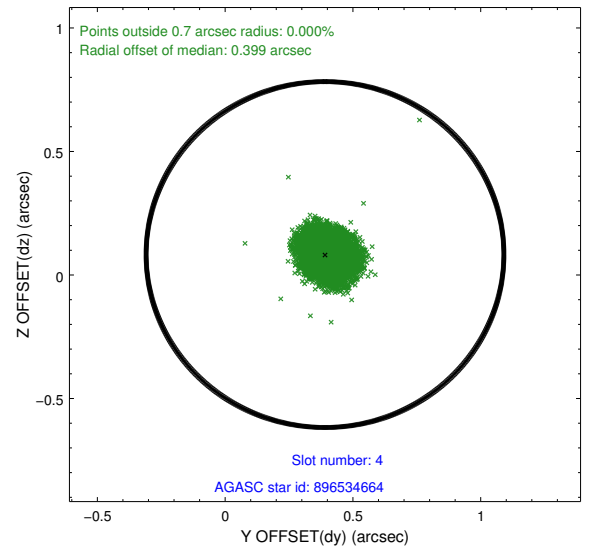
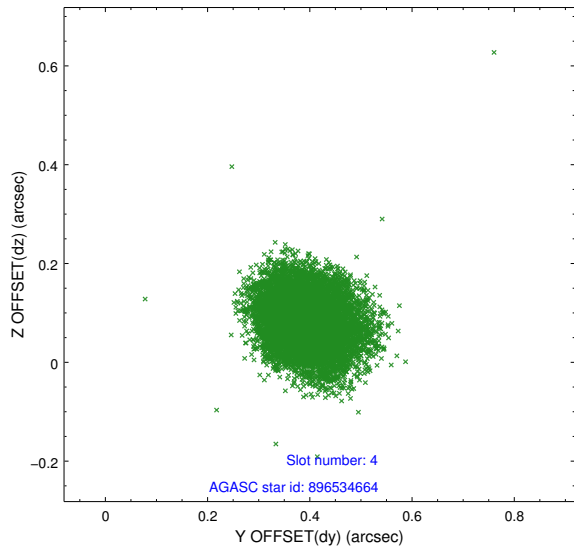
∞

## 2.4 Star Slots

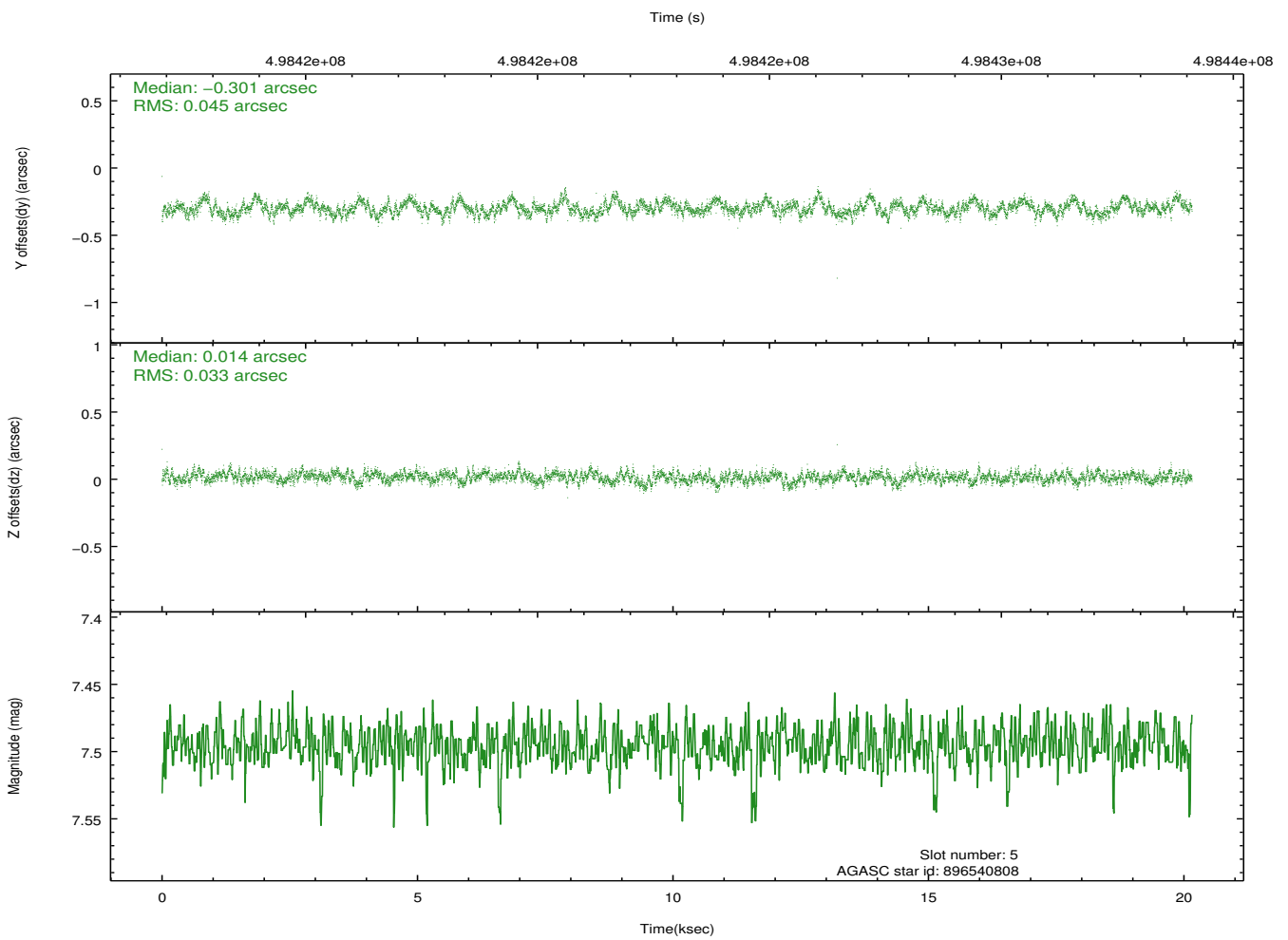
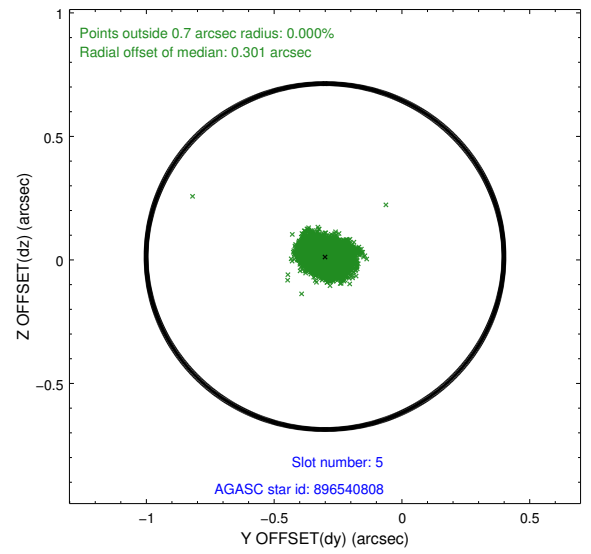
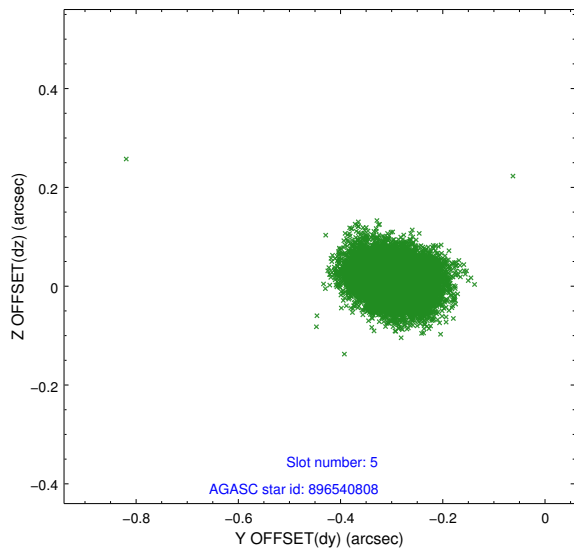
### 2.4.1 Slot 3



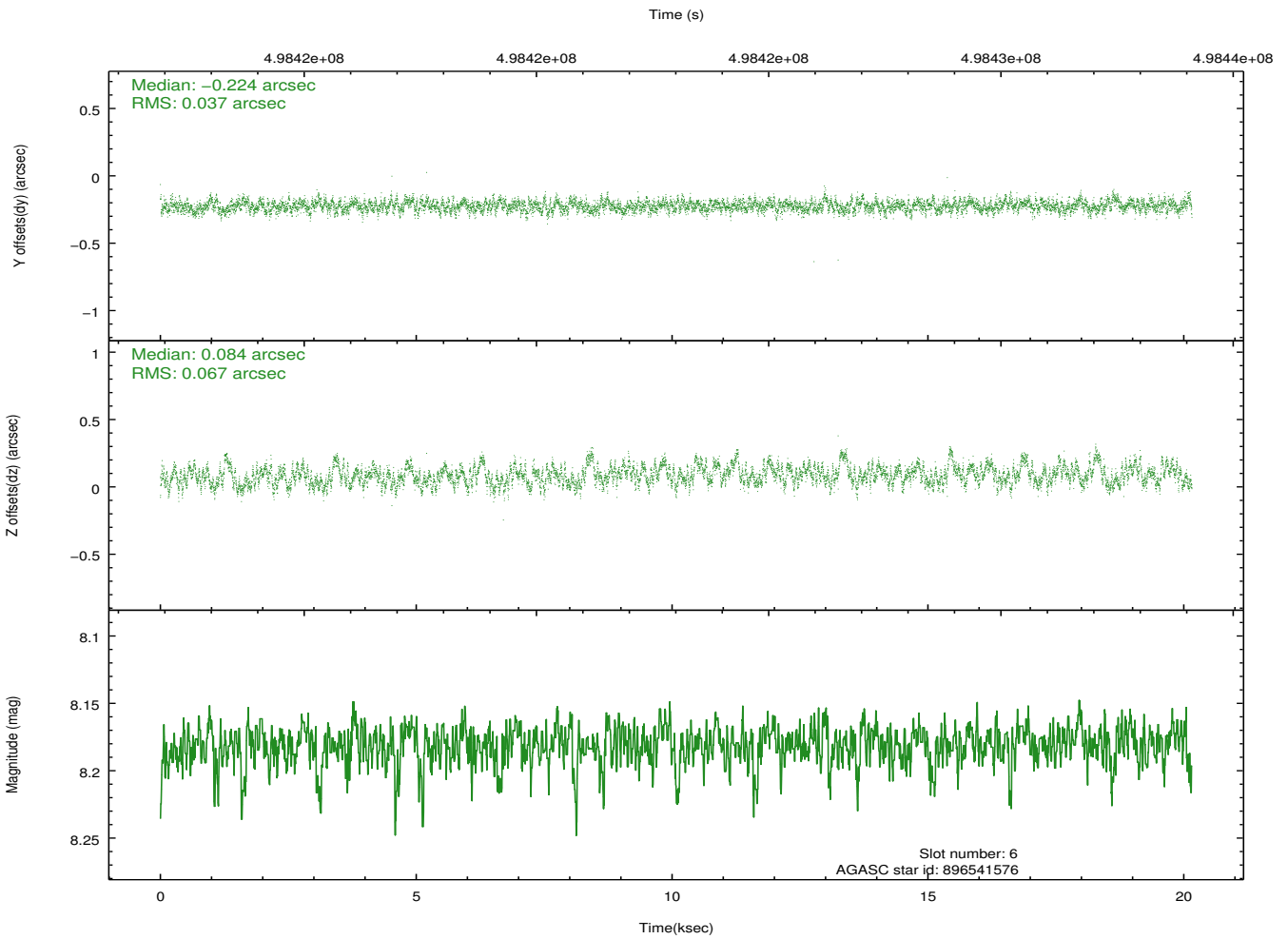
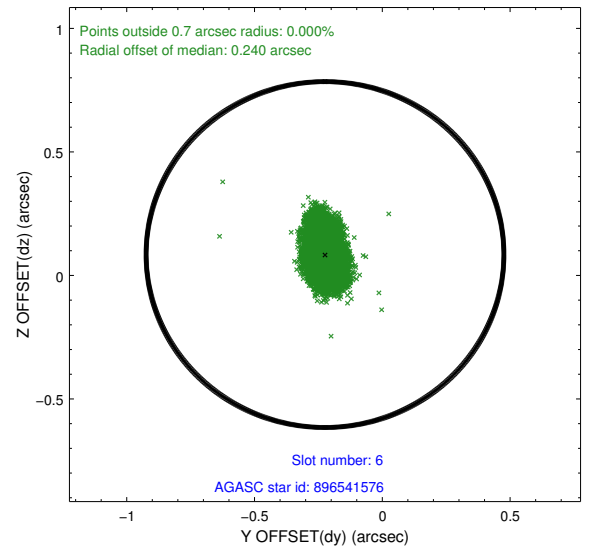
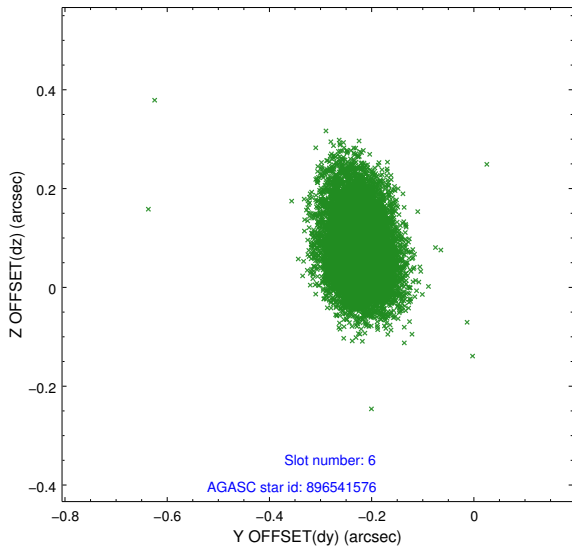
## 2.4.2 Slot 4



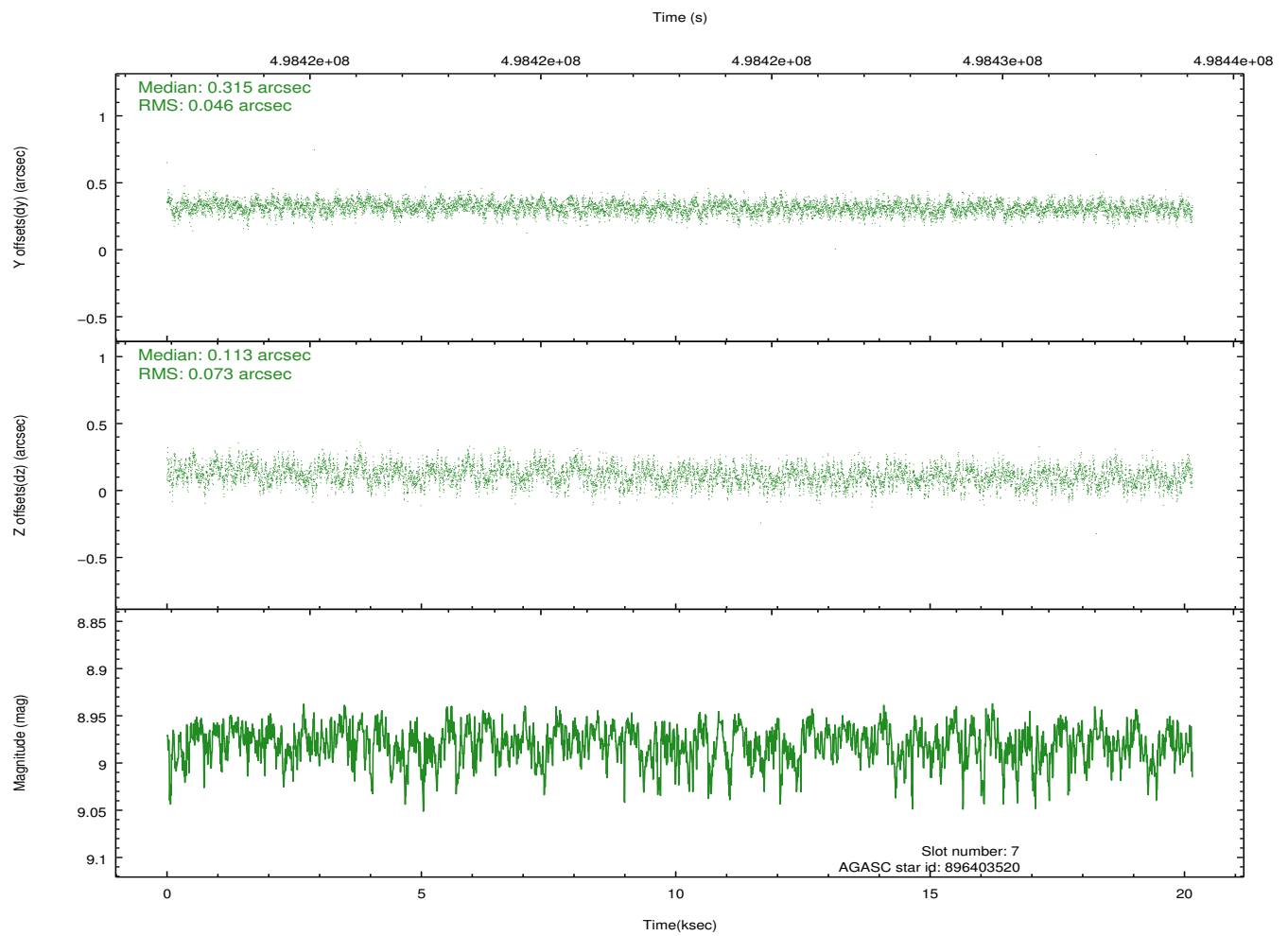
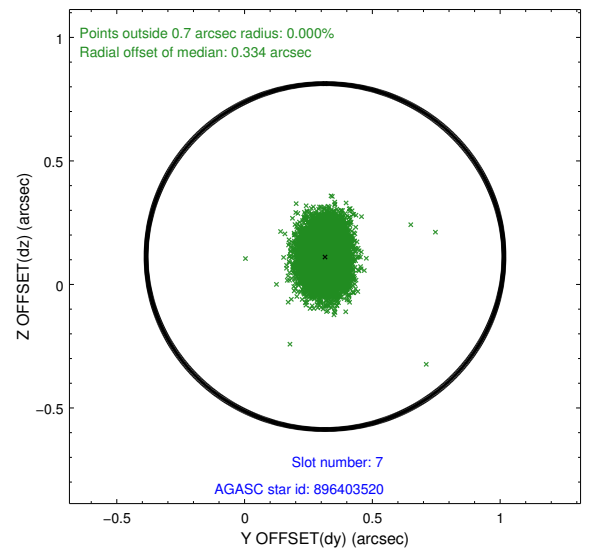
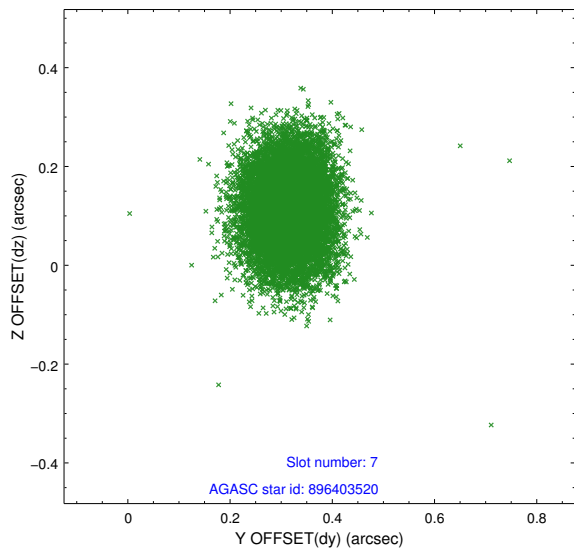
### 2.4.3 Slot 5



## 2.4.4 Slot 6

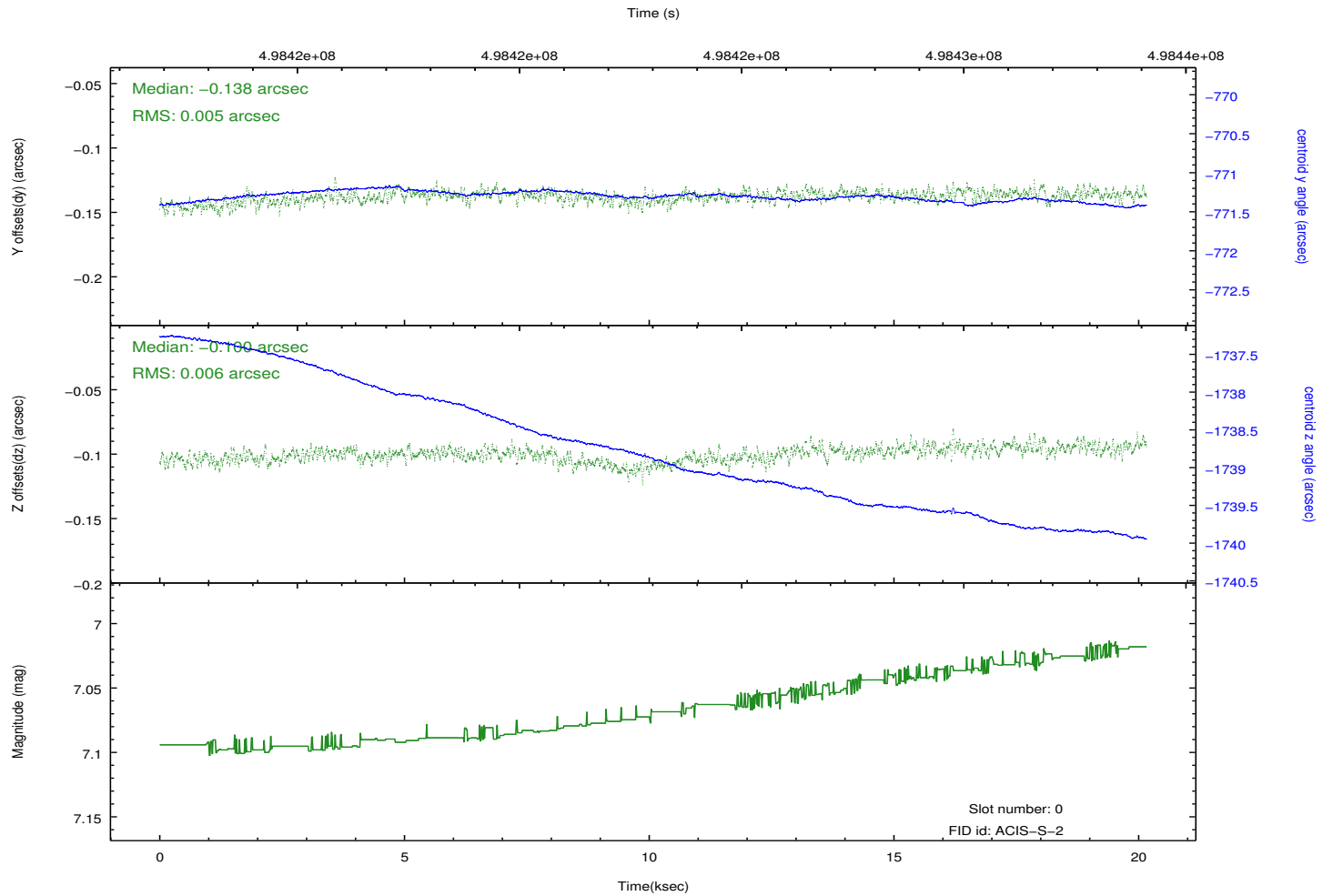
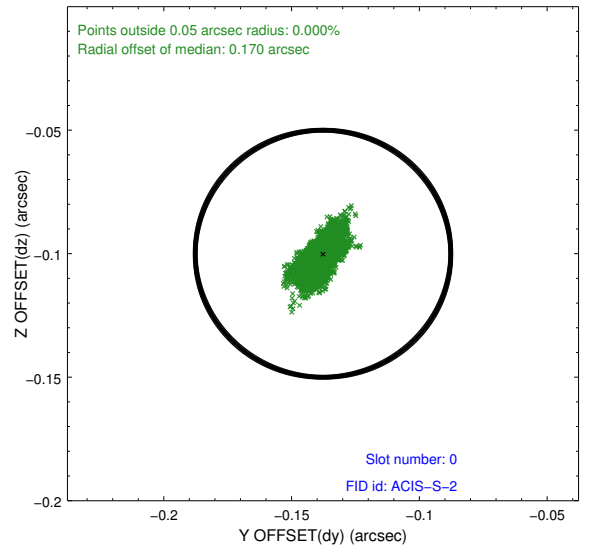
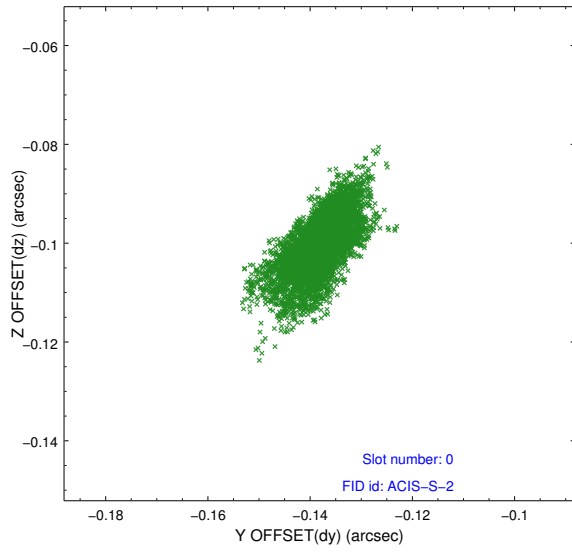


## 2.4.5 Slot 7

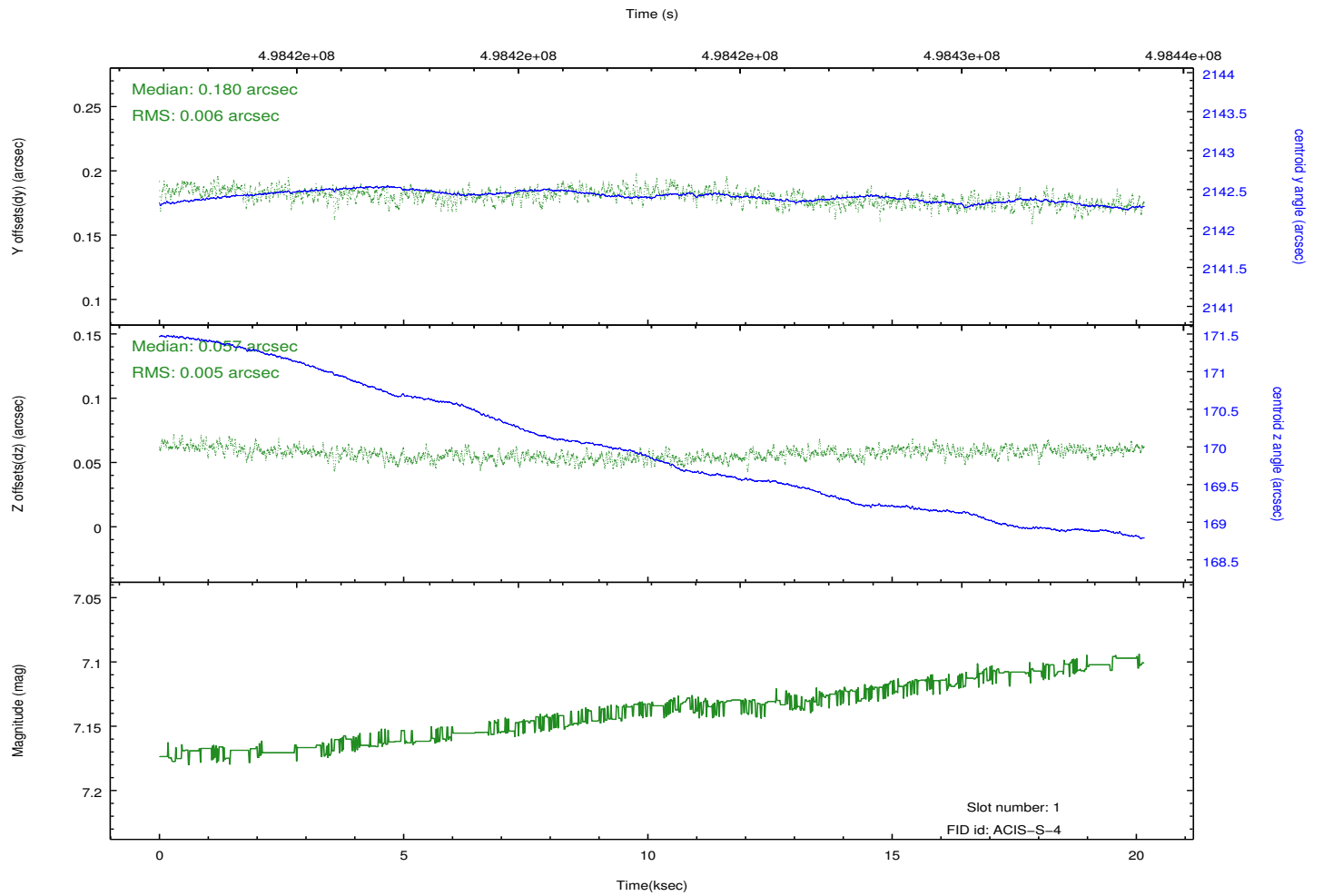
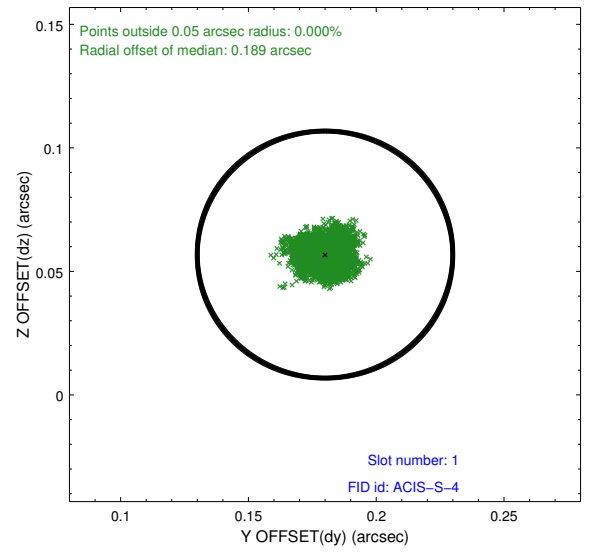
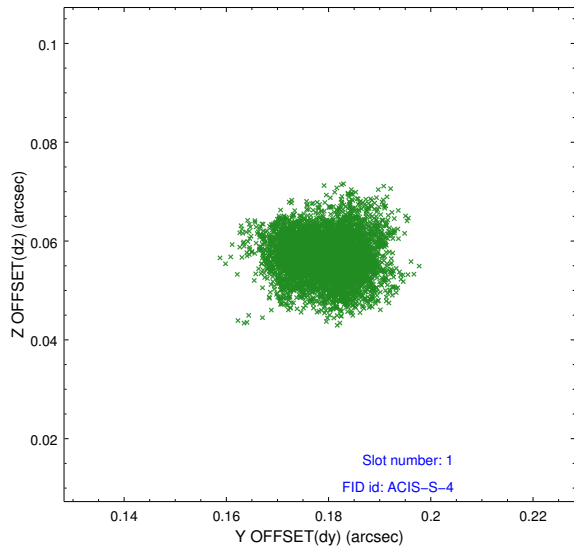


## 2.5 FID Slots

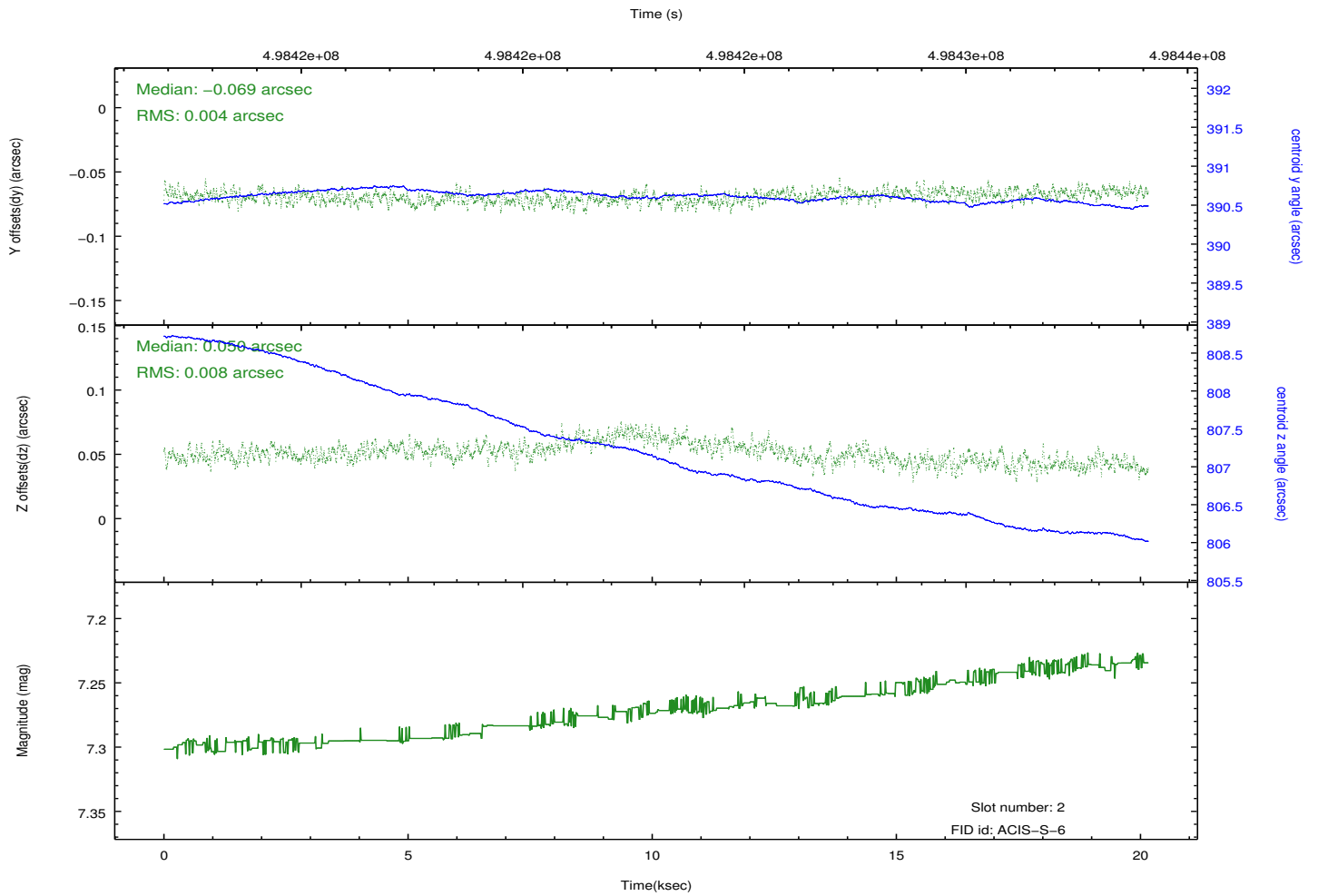
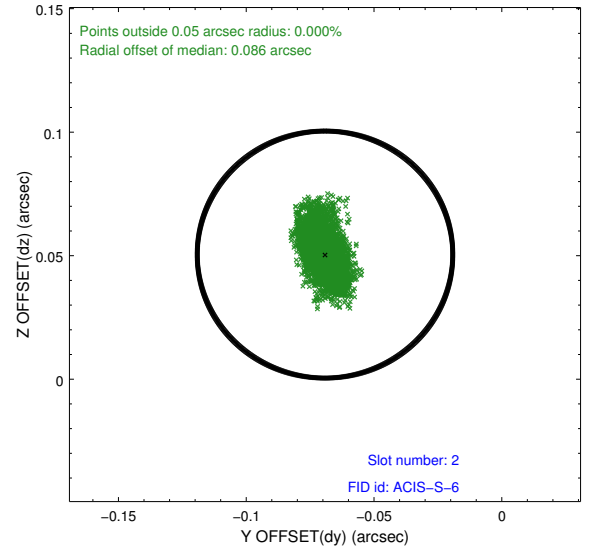
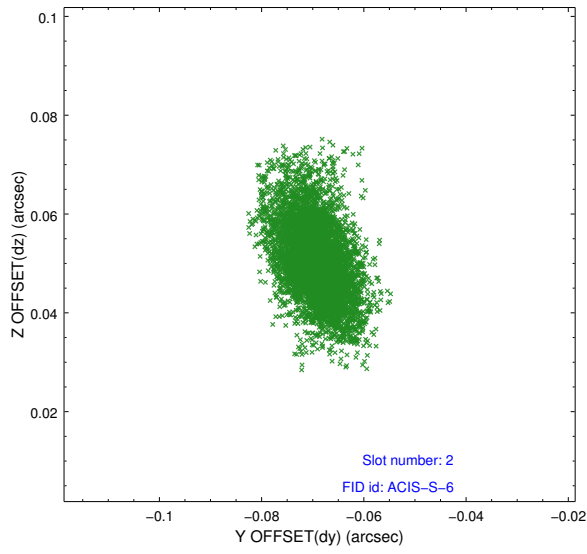
### 2.5.1 Slot 0



## 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)	2014.12.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.069598803759

## A.2 Comments

Window 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.