

# V&V Reference Report

## L2 ASCDS Version : 10.6

Observation 19621 - L2 Version 2  
Chandra X-Ray Center

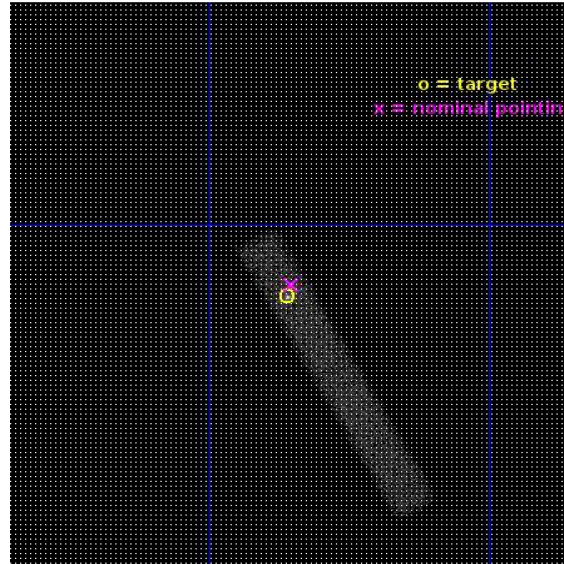
L2 Processing Date : Dec 12 2017

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# 1 Front

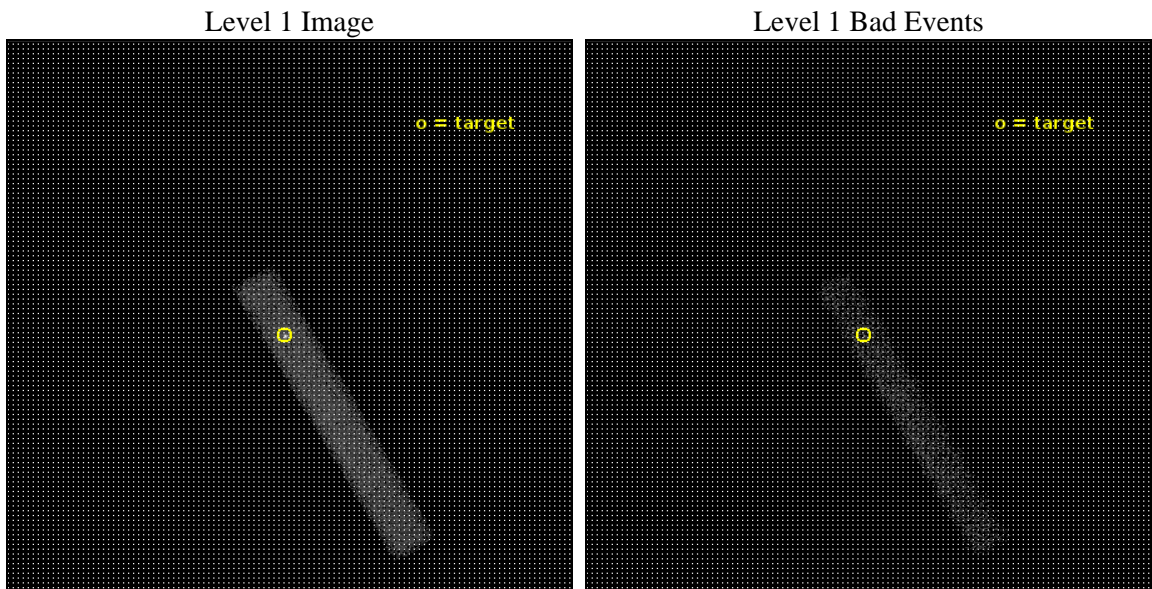
seq_num	703418	Sequence number
obs_id	19621	Observation id
title	MEASURING THE INNERMOST STABLE ORBIT USING MICROLENSING OF THE FE K LINE	Proposal title
observer	George Chartas	Principal investigator
object	RXJ1131-1231	Source name
dtycycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	172.965	Observer's specified target RA [deg]
dec_targ	-12.5325	Observer's specified target Dec [deg]
ra_nom	172.96307527876	Nominal RA [deg]
dec_nom	-12.52732981049	Nominal Dec [deg]
roll_nom	60.15618926322	Nominal Roll [deg]
revision	2	Processing version of data
ontime	24068.798565269	Sum of GTIs [s]
livetime	21829.129843342	Livetime [s]
ontime7	24068.798565269	Sum of GTIs [s]
l2events	21620	Number of level 2 events



## 2 OBI

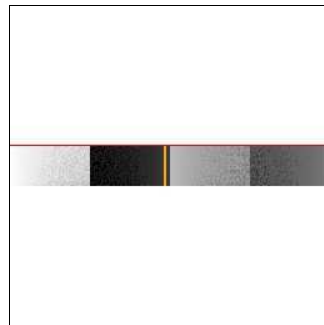
### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias

Chip 7



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	24000.000000	[s] Scheduled observation exposure time
ascdsver	10.6	Processing system revision	ontime	24068.798565269	Sum of GTIs [s]
caldbver	4.7.6	&#160	ontime7	24068.798565269	Sum of GTIs [s]
date	2017-12-12T15:12:54	Date and time of file creation	l1events	37880	Number of level 1 events
revision	2	Processing version of data			

### 2.1.4 Events

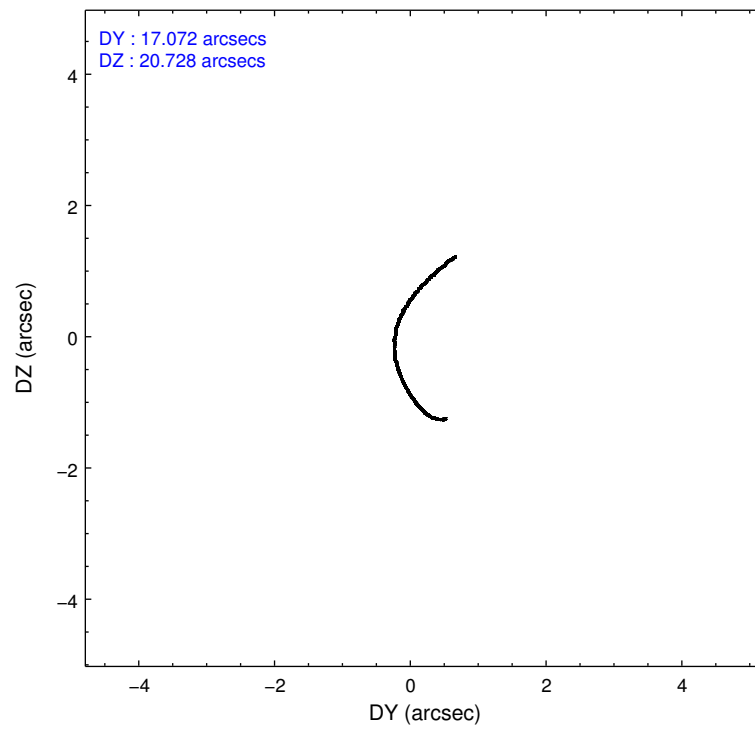
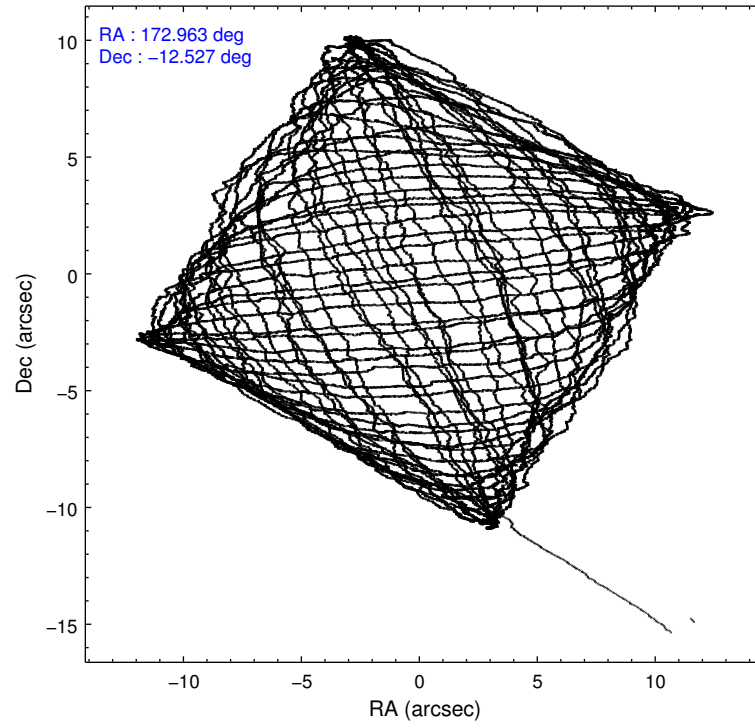
	<b>ccd 7</b>
level 1 events	37880
rejected events	15601
rejected %	<b>41%</b>

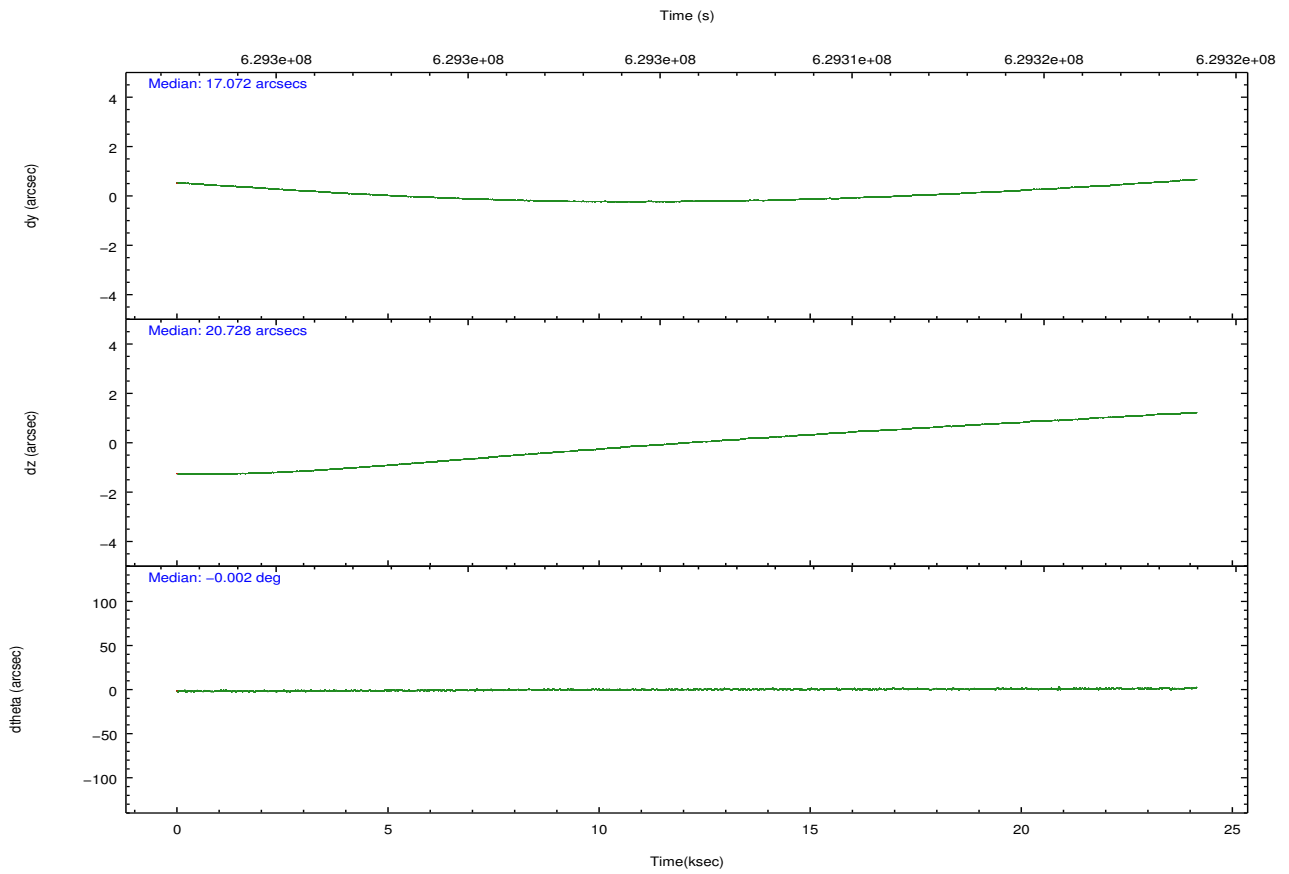
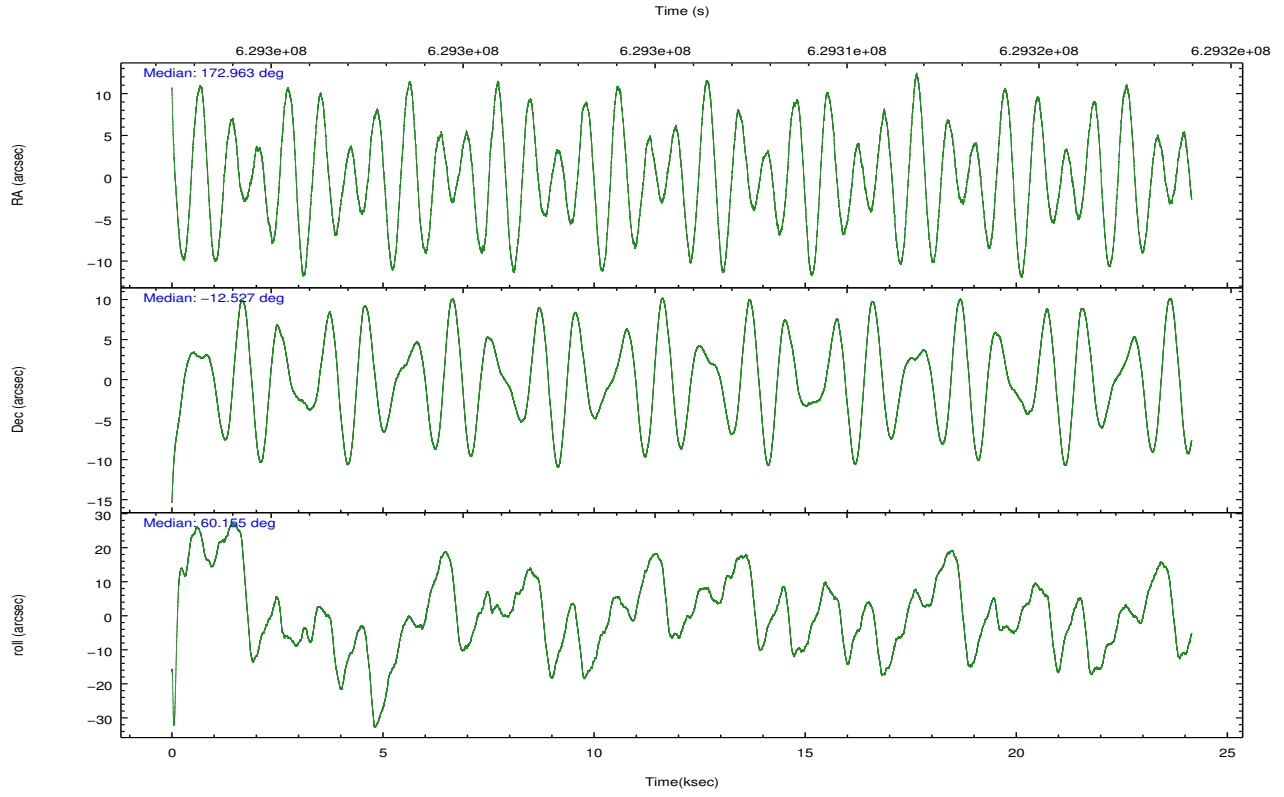
	<b>ccd 7</b>
grade 0 events	3458
	9%
grade 1 events	78
	0%
grade 2 events	4846
	12%
grade 3 events	2858
	7%
grade 4 events	2716
	7%
grade 5 events	3078
	8%
grade 6 events	8404
	22%
grade 7 events	12442
	32%

## 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	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	172.963525	172.9630752787636	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	-12.554756	-12.52732981048958	Subarray start row	449	449
[deg] Pointing Roll	59.999686	60.15618926321953	Subarray row count	128	128
[mm] SIM focus pos	-0.684267	-0.6828225247311905	Alternating exposures requested	N	N
[mm] SIM defocus	0	0.001444936568705701	[s] Primary exposure time	0.000000	0.4
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	629293786.184000	629292690.71776			
Observation start date	2017-12-10T11:48:37	2017-12-10T11:31:30			
[s] Observation end time (MET)	629317786.184000	629318640.13178			
Observation end date	2017-12-10T18:28:37	2017-12-10T18:44:00			
Read mode	TIMED	TIMED			

## 2.3 Aspect





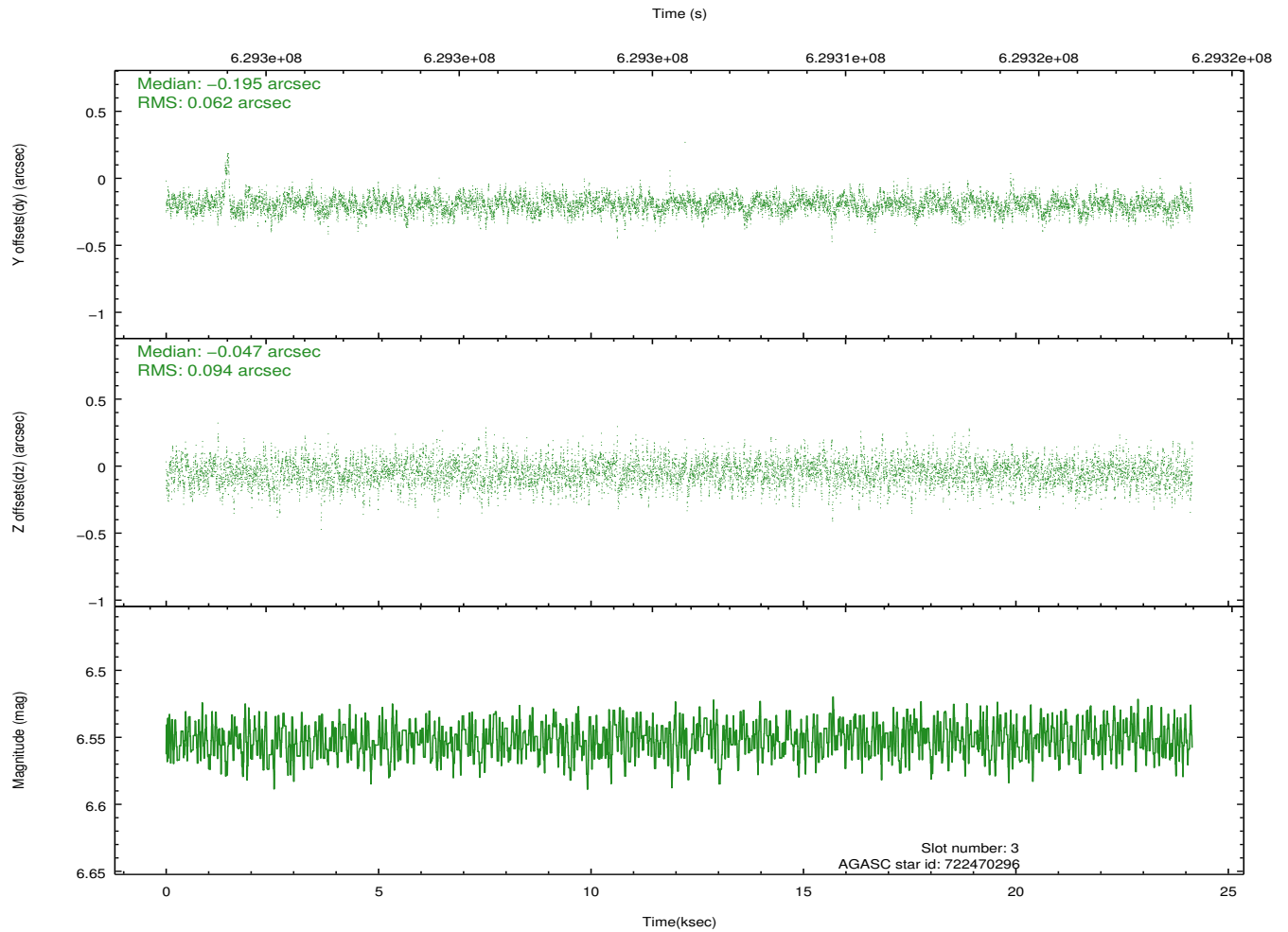
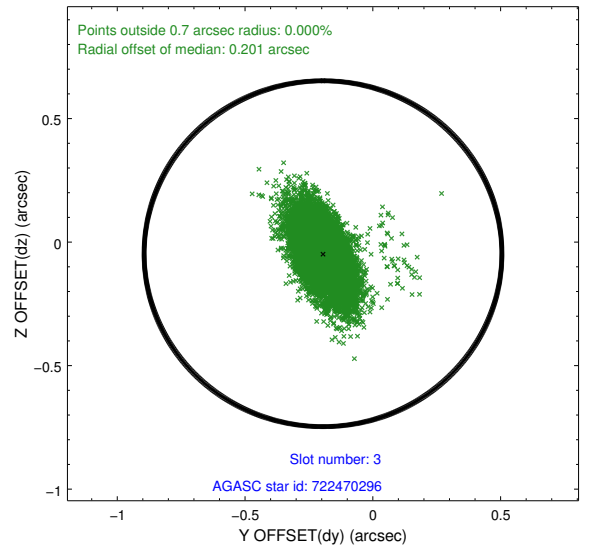
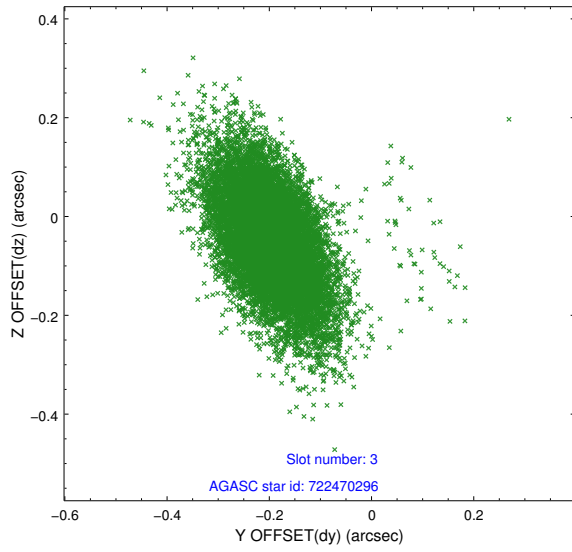
### Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.06	5892	-0.292	-0.186	0.011	0.019	0.000000	0.000000	-770.50	-1742.37
1	FID		ACIS-S-4	7.17	5892	0.331	0.167	0.013	0.019	0.000000	0.000000	2143.39	166.25
2	FID		ACIS-S-6	7.32	5892	-0.068	0.026	0.017	0.030	0.000000	0.000000	391.93	803.70
3	GUIDE	used	722470296	6.55	11783	-0.195	-0.047	0.113	0.206	172.921689	-12.381367	467.15	440.03
4	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
5	GUIDE	used	722473176	9.43	11769	-0.310	-0.195	0.175	0.295	172.599746	-12.066793	879.90	1987.19
6	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
7	GUIDE	used	722873464	7.29	11729	0.504	0.240	0.130	0.228	172.661543	-13.050266	-2074.47	24.43

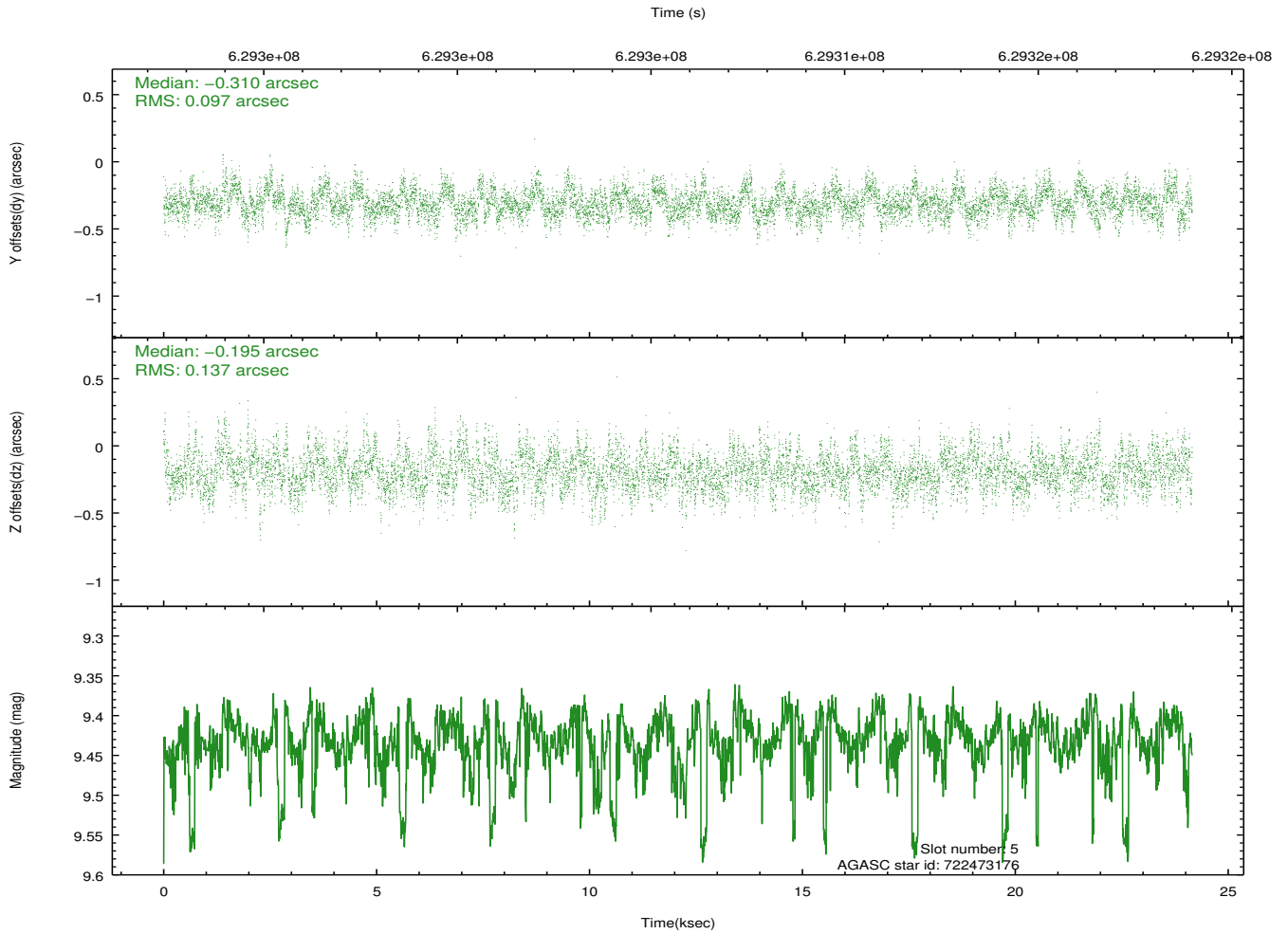
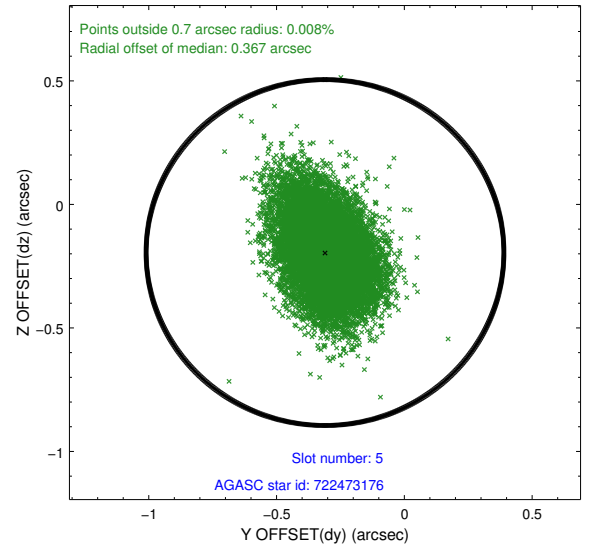
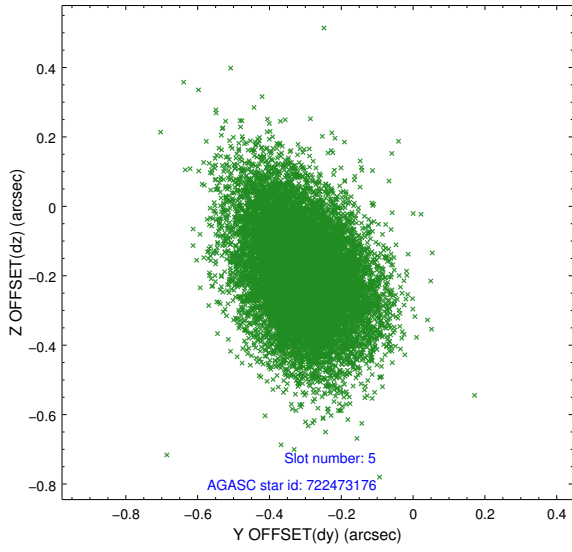
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## 2.4 Star Slots

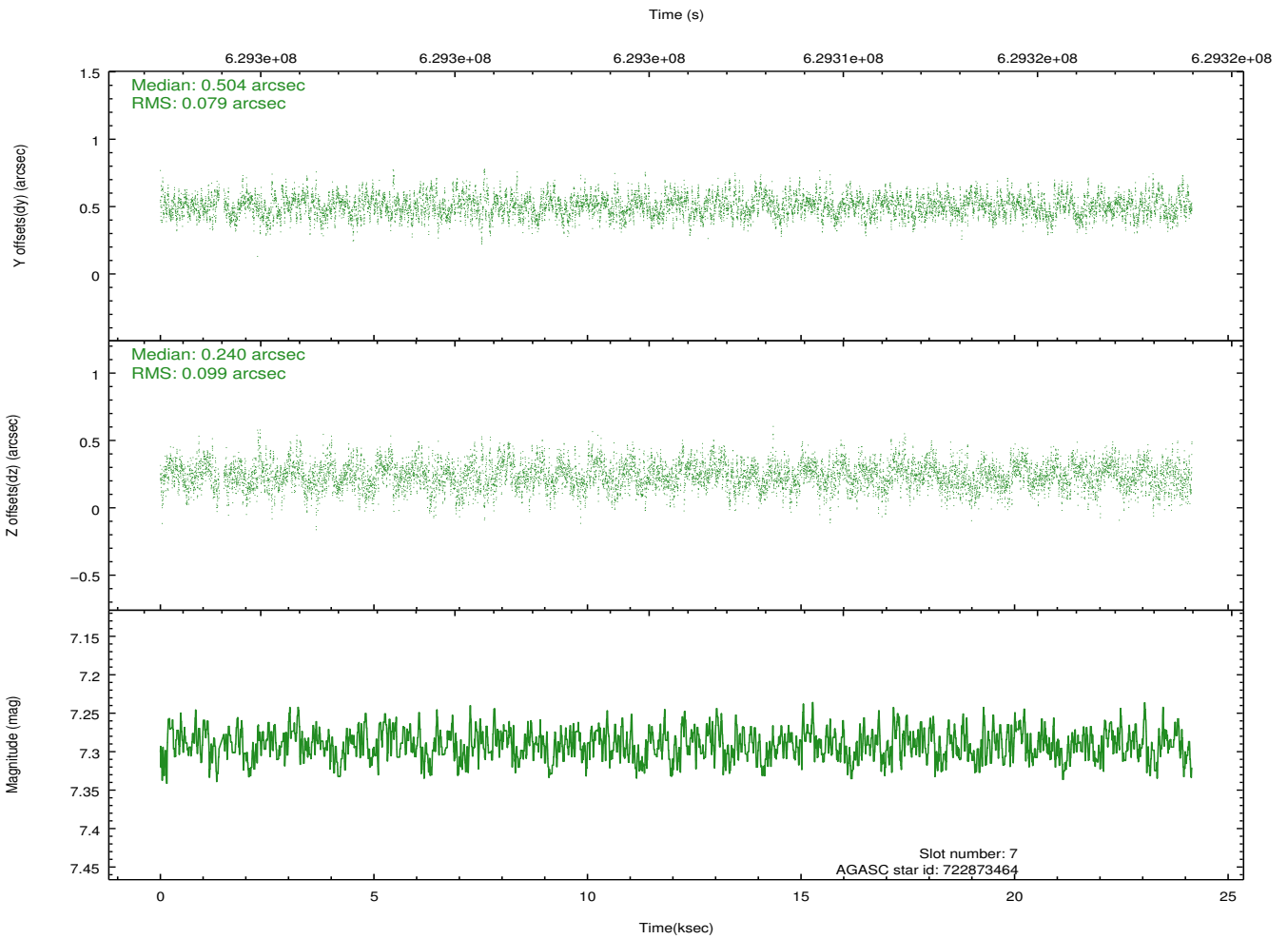
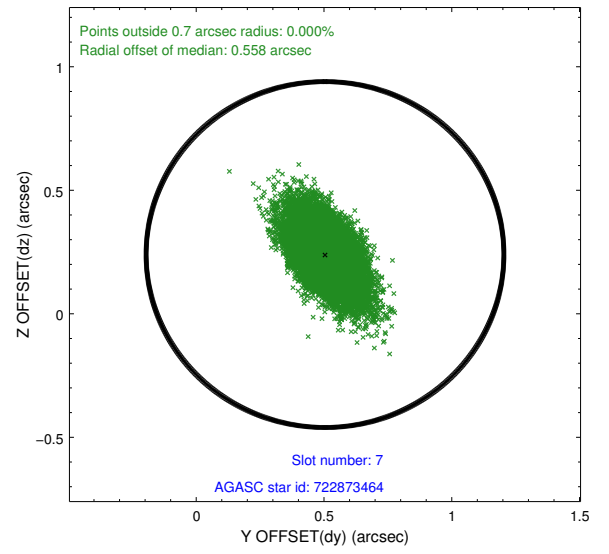
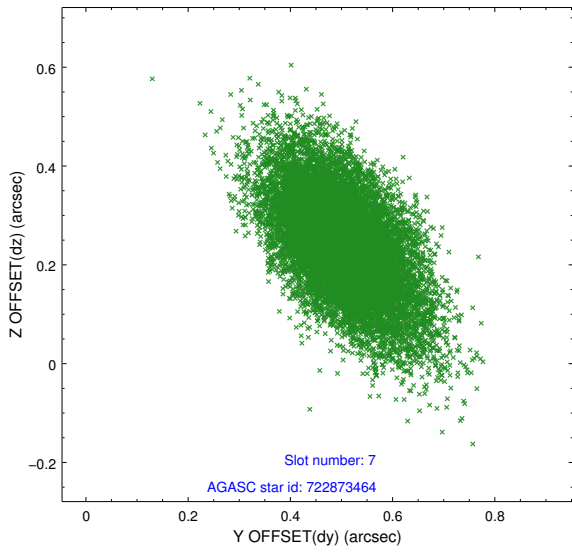
### 2.4.1 Slot 3



## 2.4.2 Slot 5

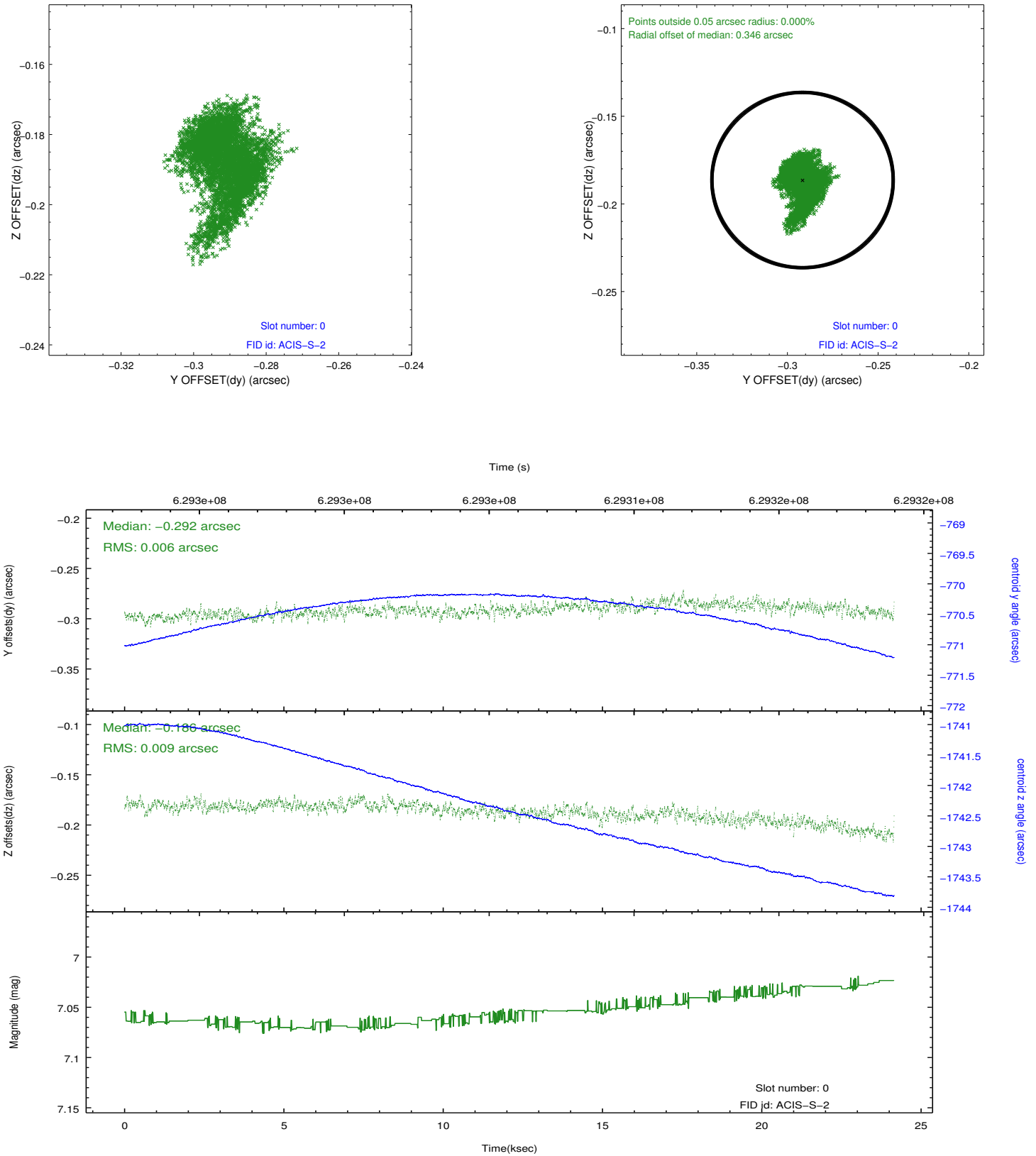


### 2.4.3 Slot 7

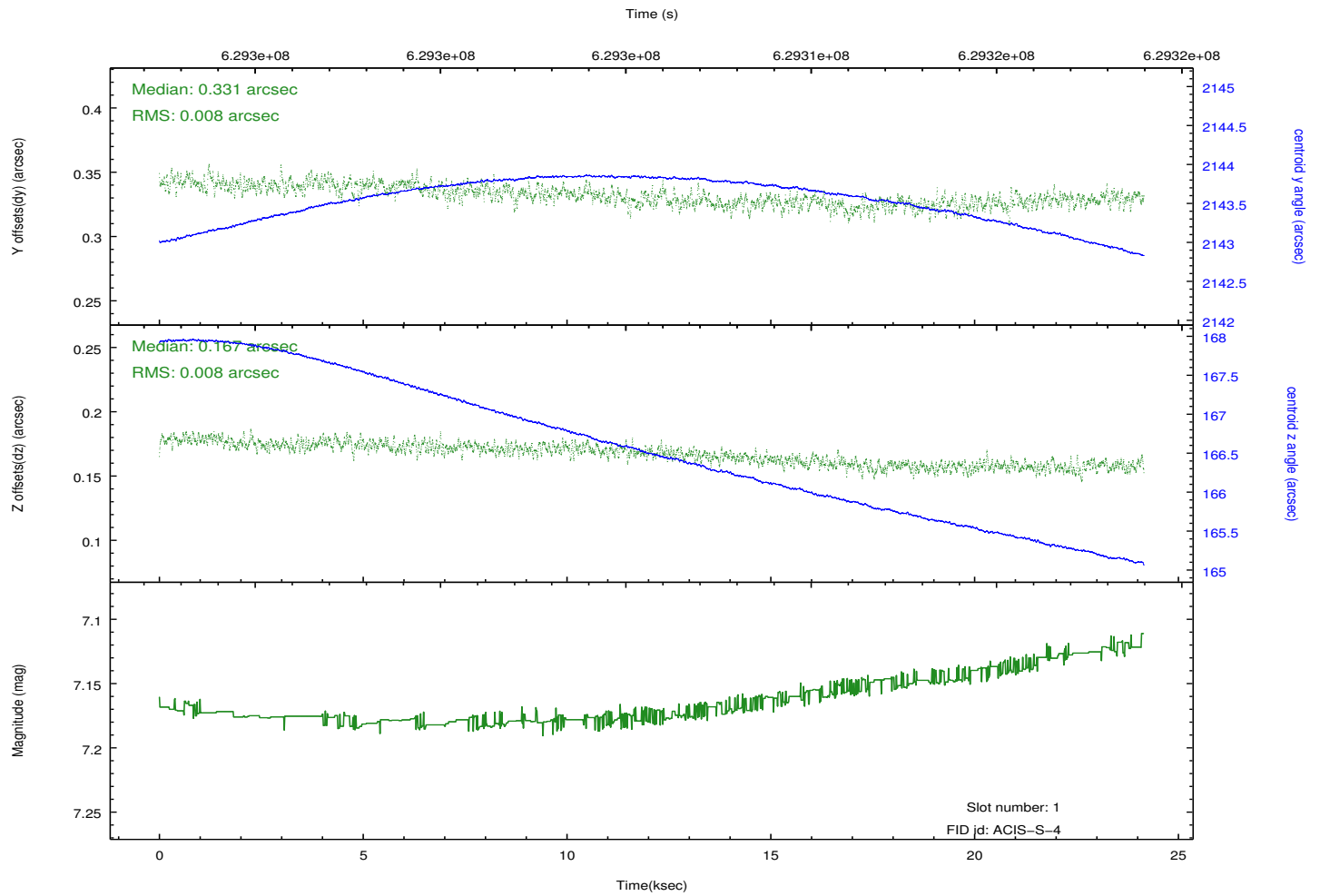
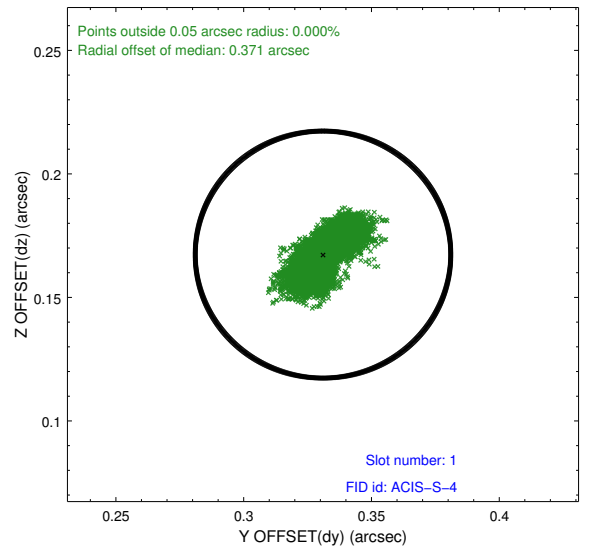
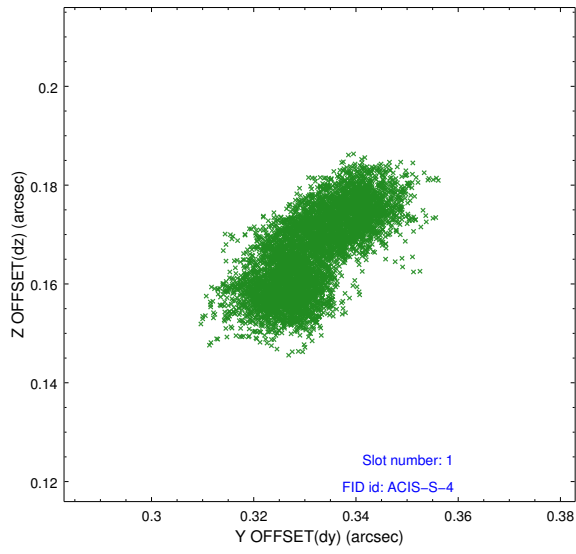


## 2.5 FID Slots

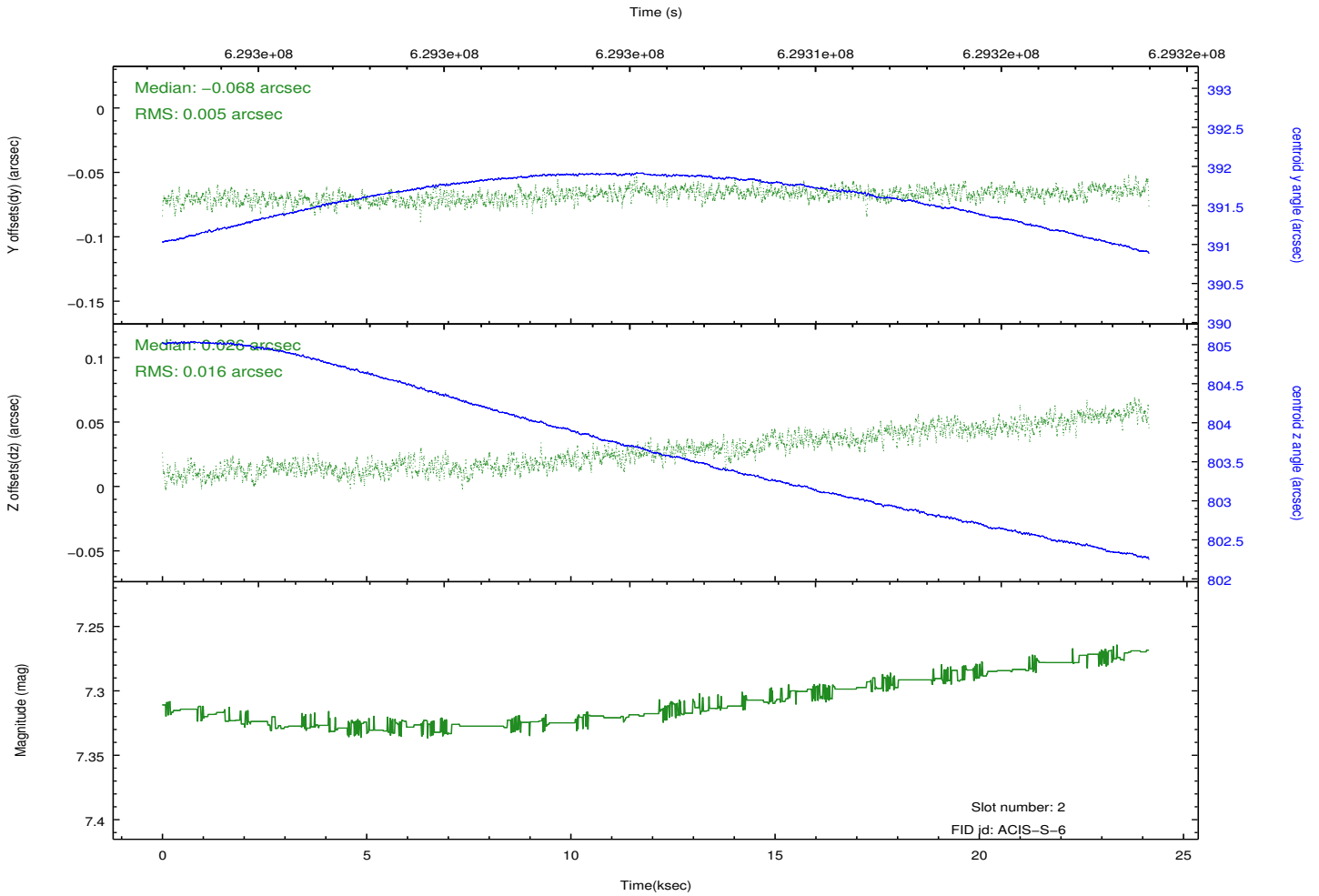
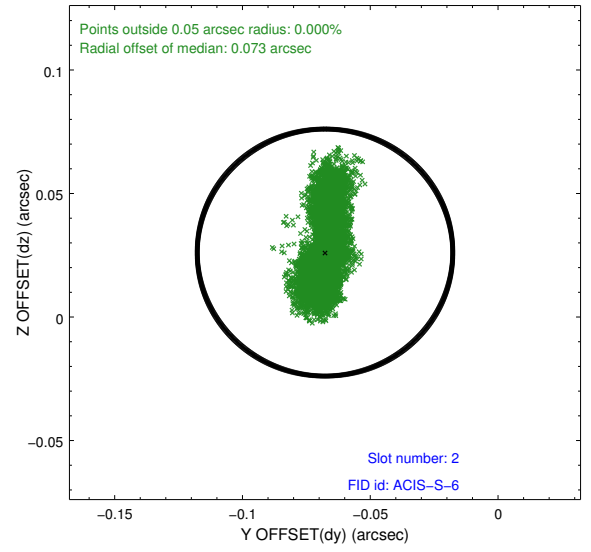
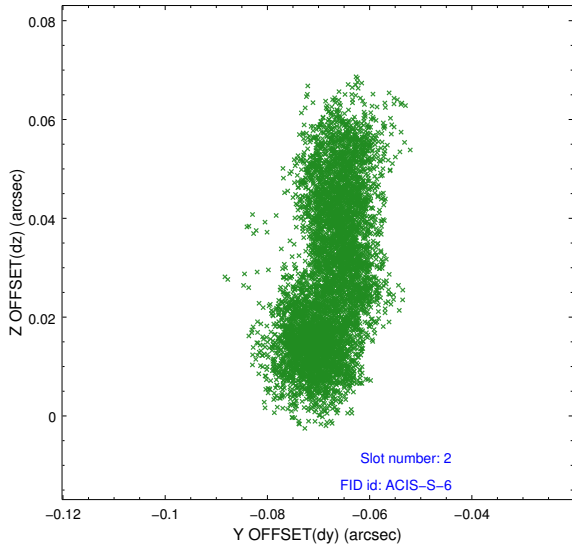
### 2.5.1 Slot 0



## 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)	2017.12.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	24.068798565269

## A.2 Comments

The guide stars in slots 4 and 6 were removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of these slots from the solution.