

# V&V Reference Report

## L2 ASCDS Version : 10.7

Observation 21976 - L2 Version 1  
Chandra X-Ray Center

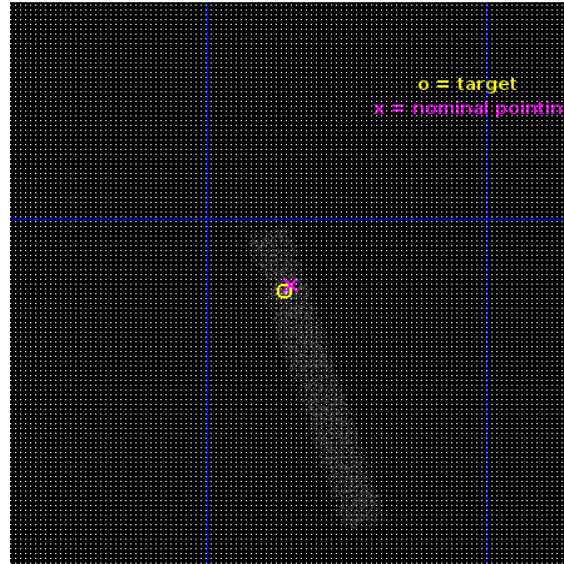
L2 Processing Date : Nov 27 2018

## 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

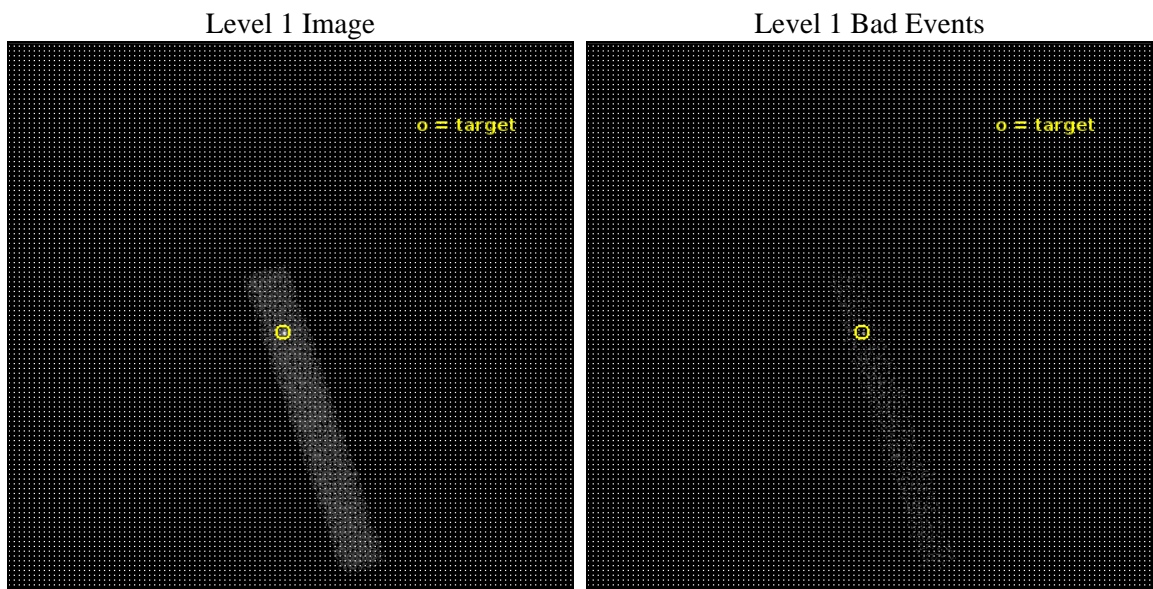
seq_num	703421	Sequence number
obs_id	21976	Observation id
title	MEASURING THE INNERMOST STABLE ORBIT USING MICROLENSING OF THE FE K LINE	Proposal title
observer	George Chartas	Principal investigator
object	RXJ1131-1231	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	172.965	Observer's specified target RA [deg]
dec_targ	-12.5325	Observer's specified target Dec [deg]
ra_nom	172.96215702035	Nominal RA [deg]
dec_nom	-12.529655165951	Nominal Dec [deg]
roll_nom	72.156002401769	Nominal Roll [deg]
revision	1	Processing version of data
ontime	11069.448730469	Sum of GTIs [s]
livetime	10039.405705123	Livetime [s]
ontime7	11069.448730469	Sum of GTIs [s]
l2events	13362	Number of level 2 events



## 2 OBI

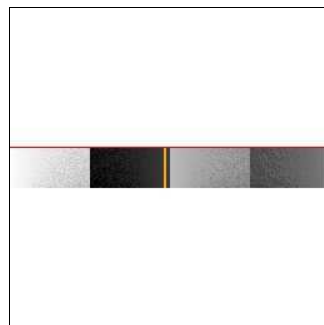
### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias

Chip 7



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	11000.000000	[s] Scheduled observation exposure time
ascdsver	10.7	Processing system revision	ontime	11069.448730469	Sum of GTIs [s]
caldsver	4.8.0.1	&#160	ontime7	11069.448730469	Sum of GTIs [s]
date	2018-11-27T23:24:36	Date and time of file creation	l1events	21300	Number of level 1 events
revision	1	Processing version of data			

### 2.1.4 Events

	<b>ccd 7</b>
level 1 events	21300
rejected events	7593
rejected %	35%

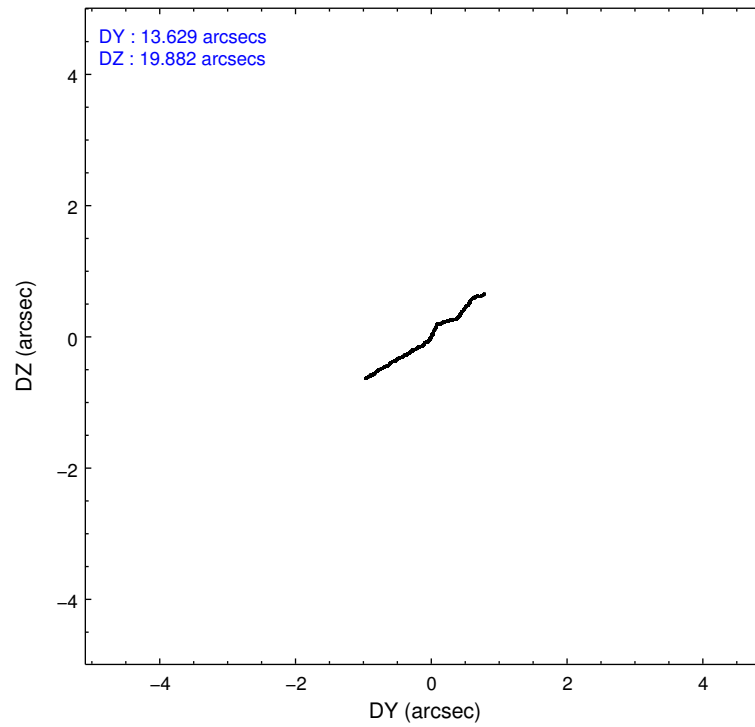
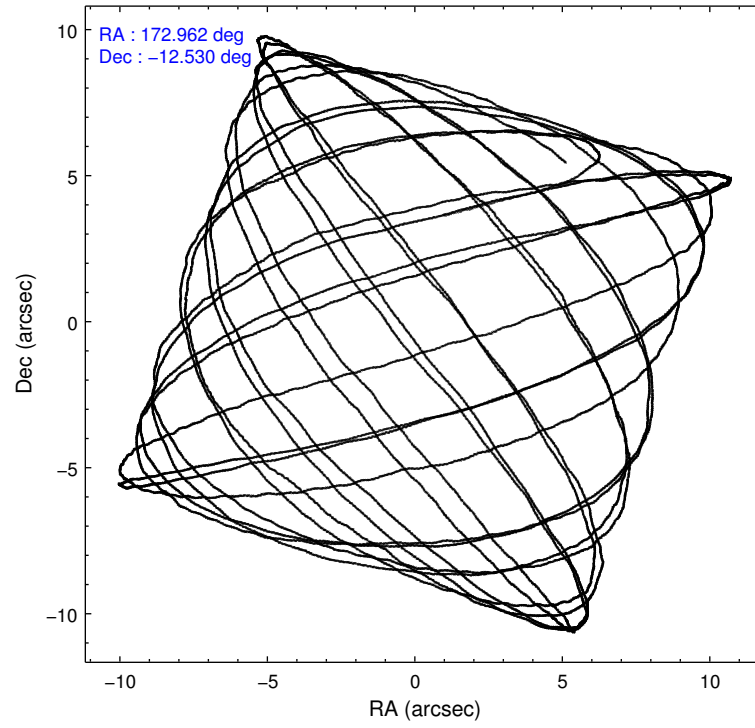
	<b>ccd 7</b>
grade 0 events	2448
	11%
grade 1 events	64
	0%
grade 2 events	3144
	14%
grade 3 events	1721
	8%
grade 4 events	1642
	7%
grade 5 events	1582
	7%
grade 6 events	4752
	22%
grade 7 events	5947
	27%

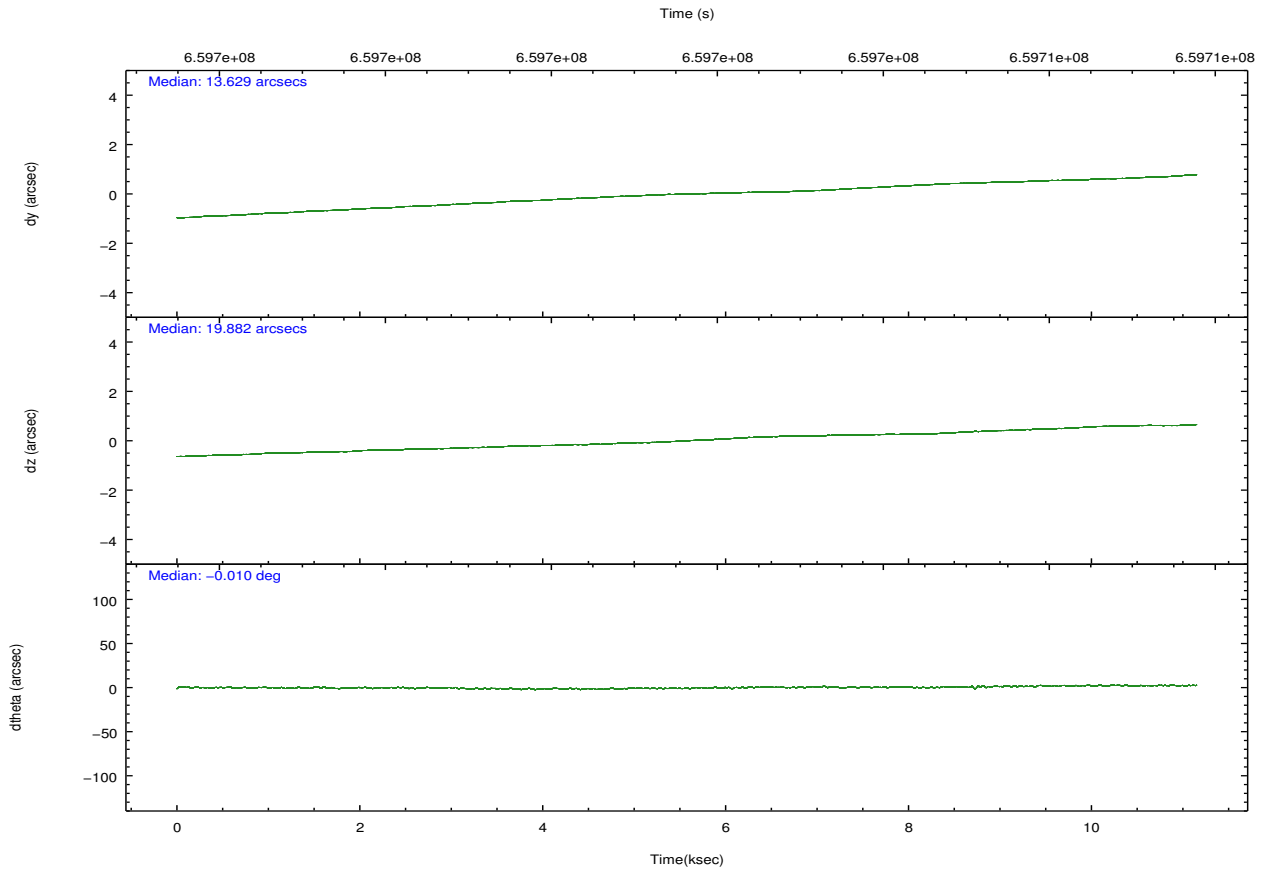
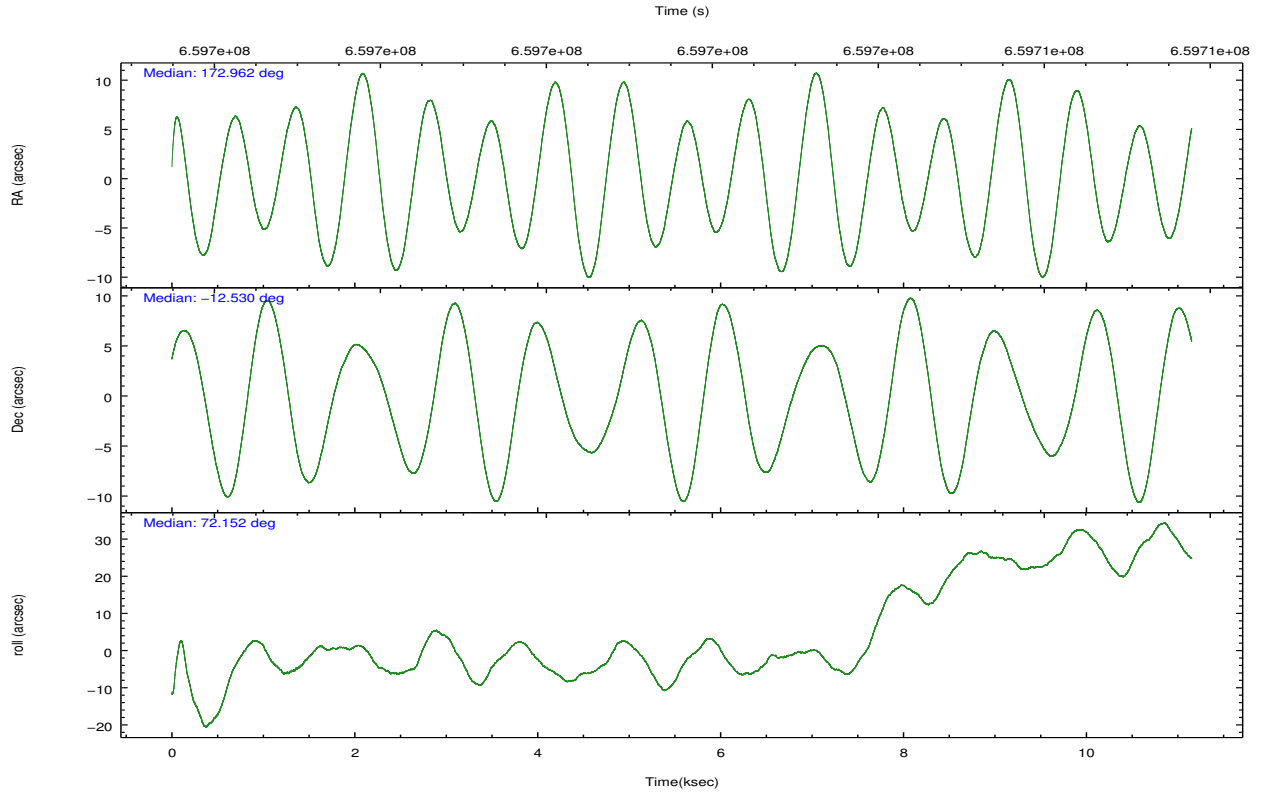


## 2.2 Compared Parameters

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	172.968465	172.9621570203467	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	-12.556444	-12.52965516595064	Subarray start row	449	449
[deg] Pointing Roll	72.000758	72.15600240176903	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)	659696191.184000	659695248.34623			
Observation start date	2018-11-27T08:55:22	2018-11-27T08:40:48			
[s] Observation end time (MET)	659707191.184000	659708085.44699			
Observation end date	2018-11-27T11:58:42	2018-11-27T12:14:45			
Read mode	TIMED	TIMED			

## 2.3 Aspect



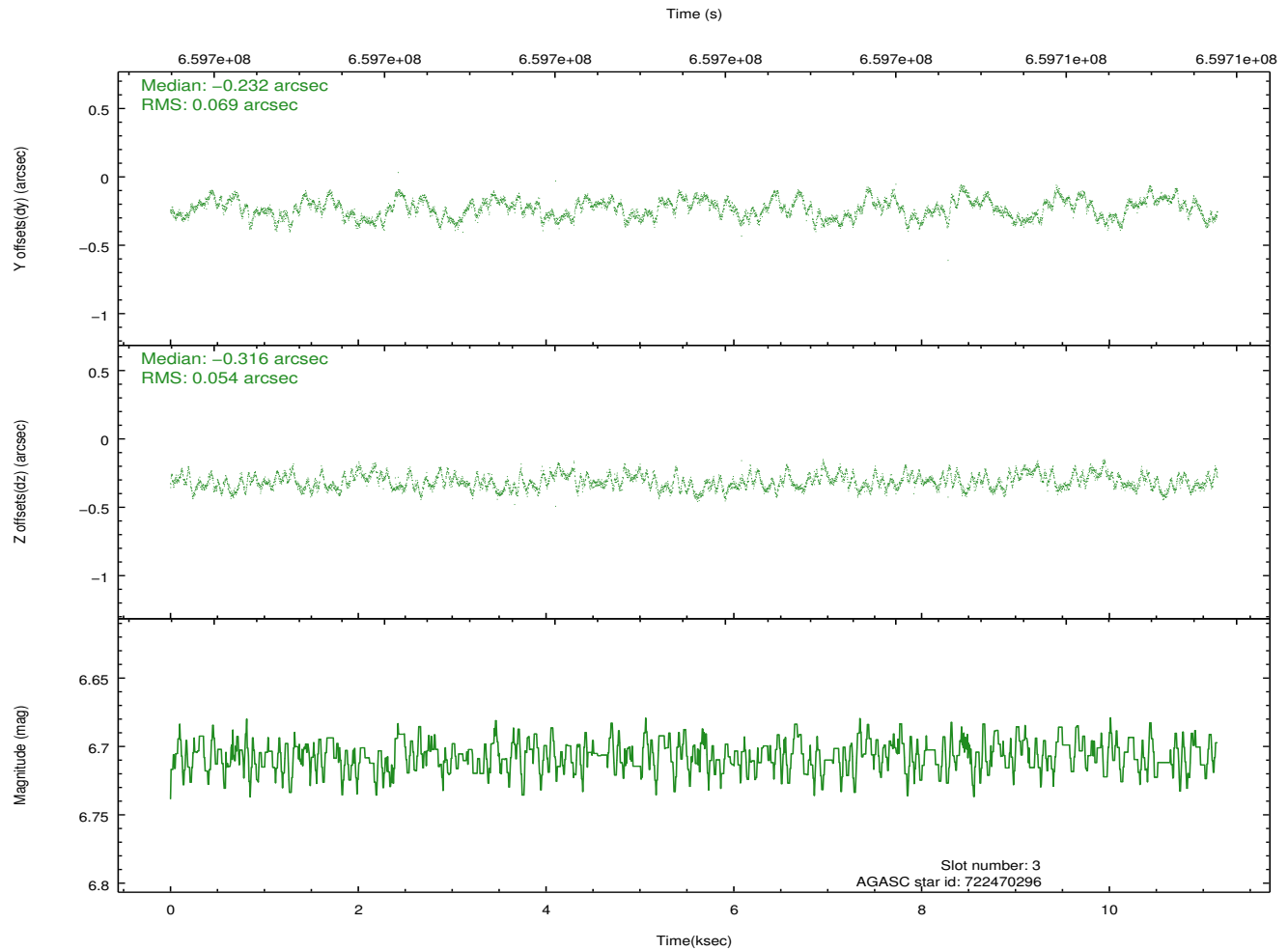
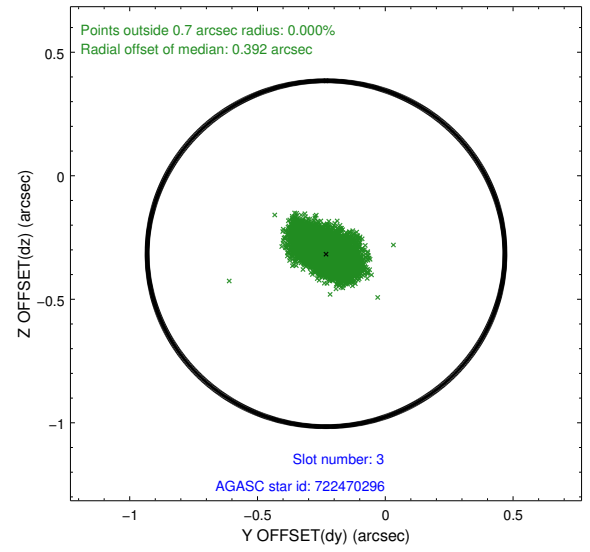
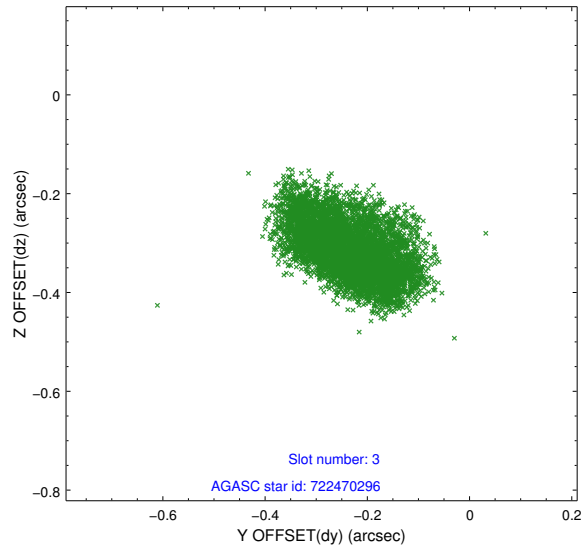


Slot Statistics

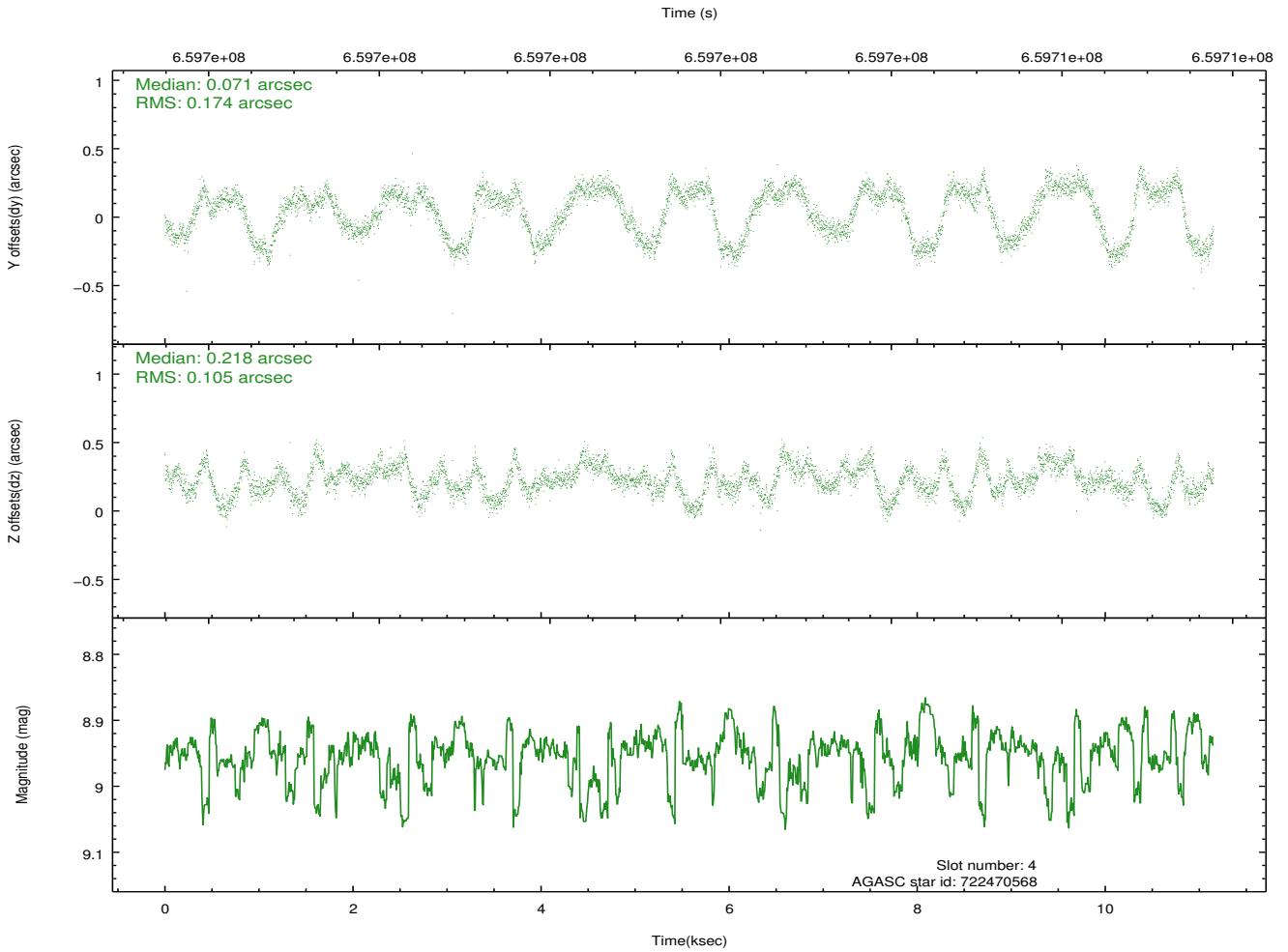
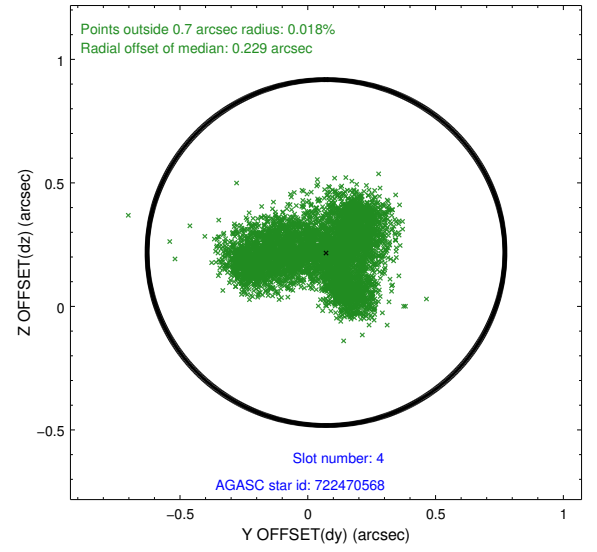
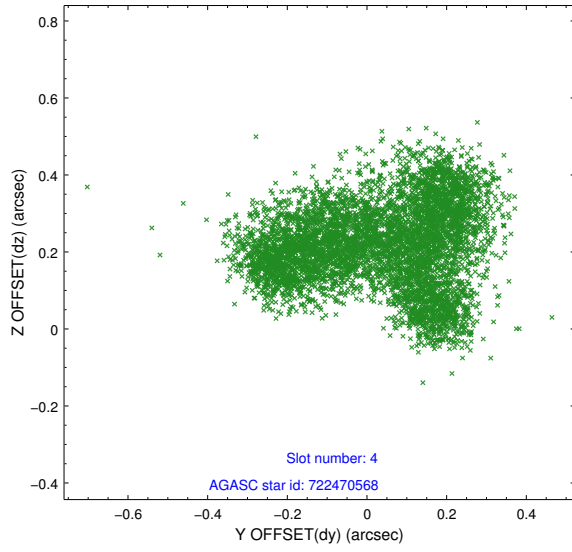
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-1	7.00	2719	1.000	0.166	-0.089	0.021	0.031	0.000000	0.000000	929.82	-1737
1	FID		ACIS-S-5	7.02	2720	1.000	-0.478	0.045	0.016	0.042	0.000000	0.000000	-1819.69	159
2	FID		ACIS-S-6	7.16	2720	1.000	0.291	0.056	0.035	0.054	0.000000	0.000000	394.82	804
3	GUIDE	used	722470296	6.71	5441	1.000	-0.232	-0.316	0.096	0.145	172.921689	-12.381367	548.65	351
4	GUIDE	used	722470568	8.95	5438	1.000	0.071	0.218	0.221	0.336	173.210269	-12.342558	995.11	-570
5	GUIDE	used	722473176	9.42	5430	1.000	-0.317	-0.439	0.277	0.416	172.599746	-12.066793	1274.21	1778
6	GUIDE	used	722871728	9.60	5435	1.000	0.165	0.449	0.265	0.398	173.202235	-12.568355	213.34	-793
7	GUIDE	used	722873464	7.30	5438	1.000	0.356	0.088	0.110	0.191	172.661543	-13.050266	-2024.10	473

## 2.4 Star Slots

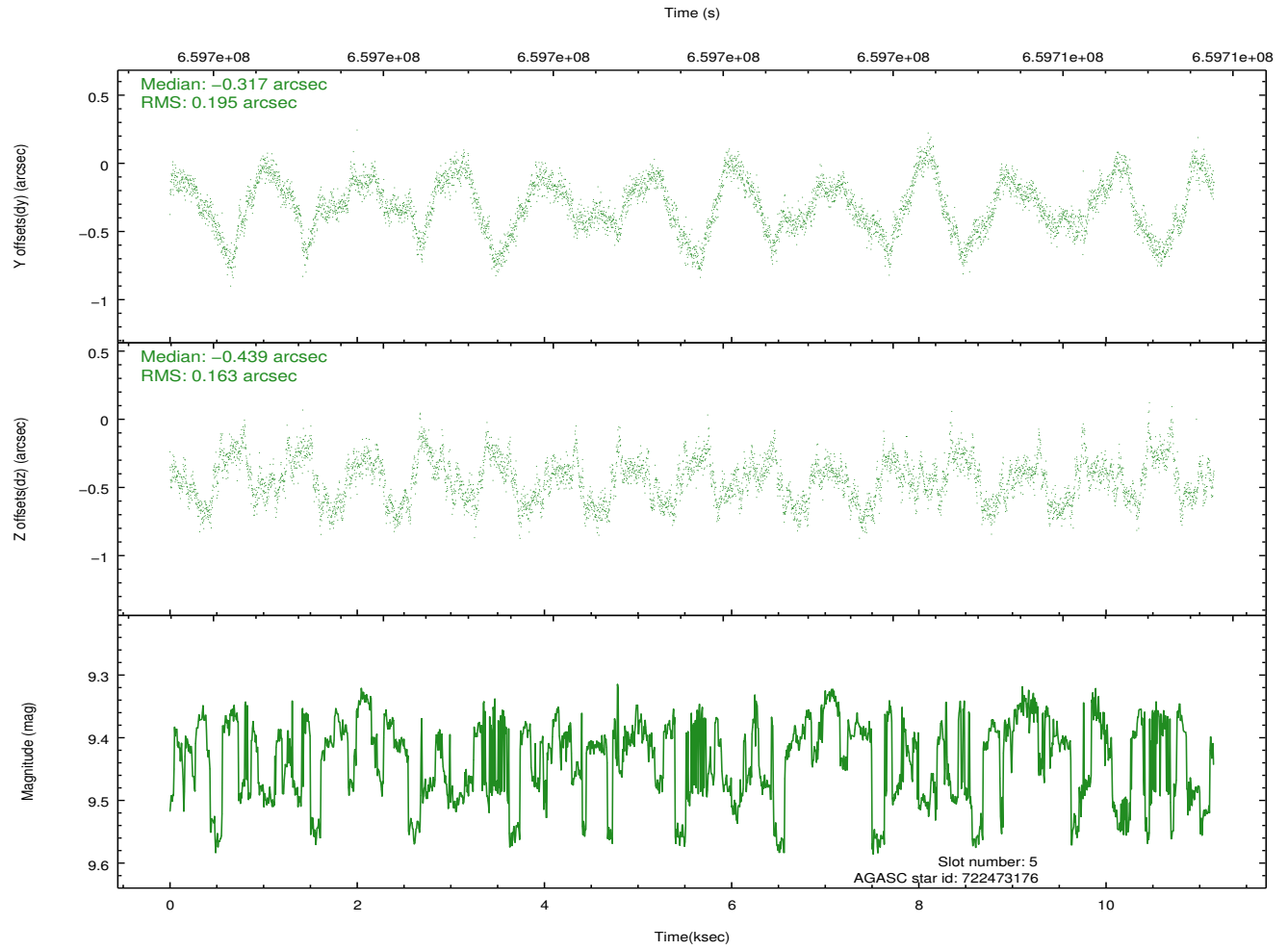
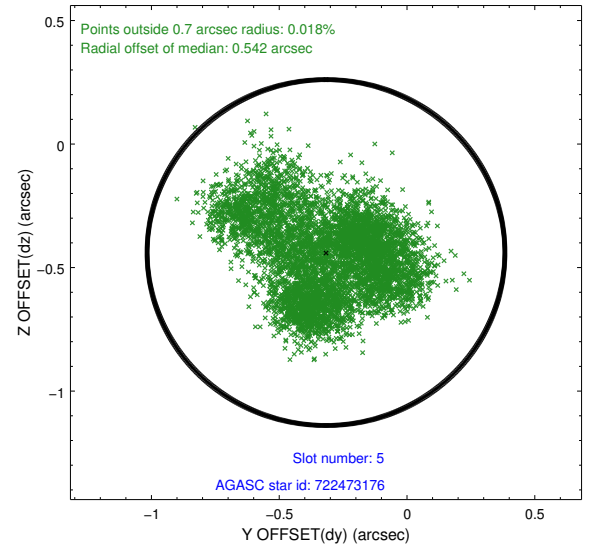
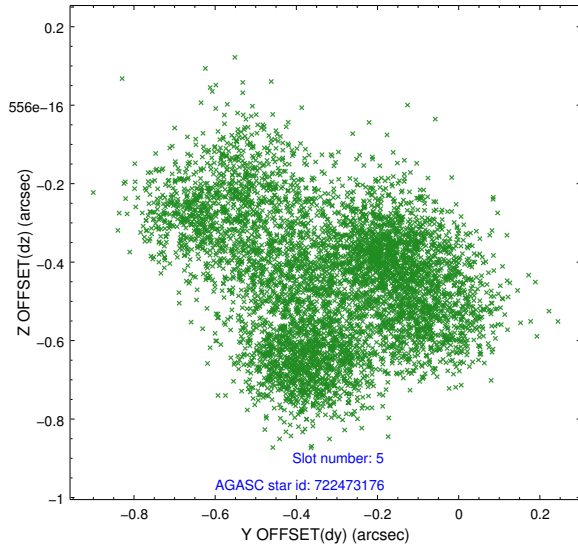
### 2.4.1 Slot 3



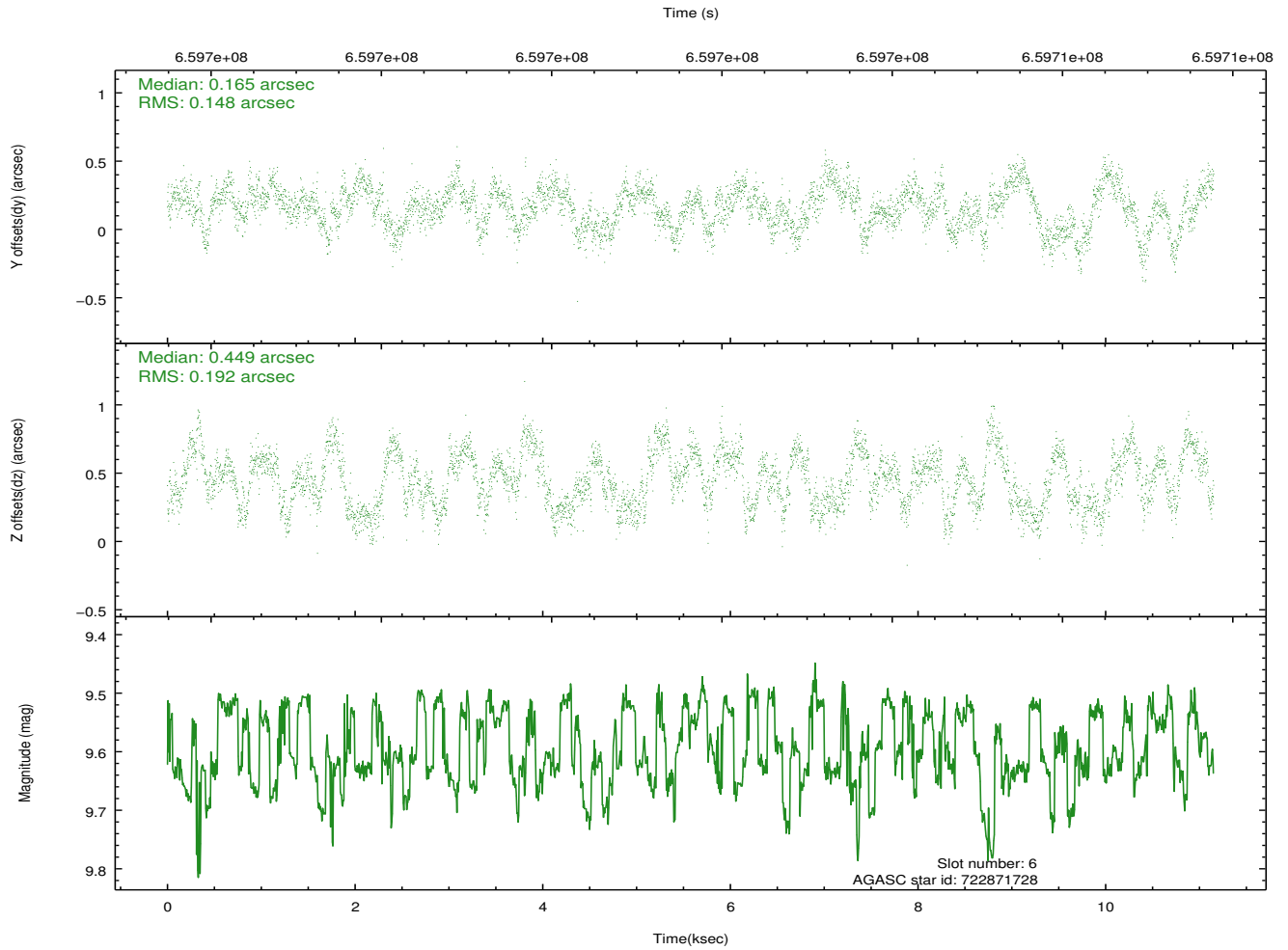
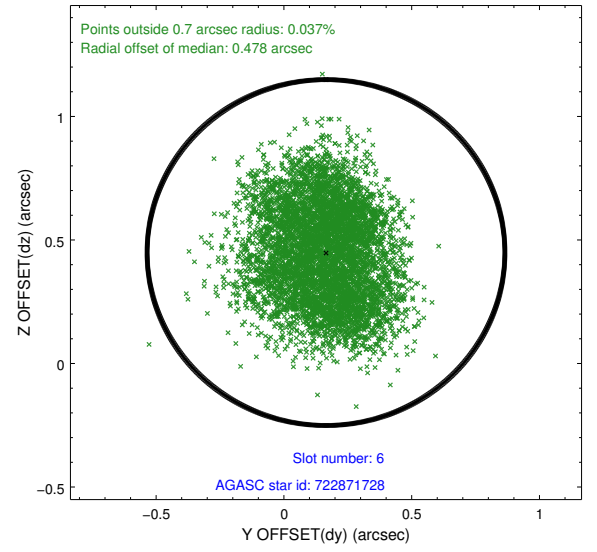
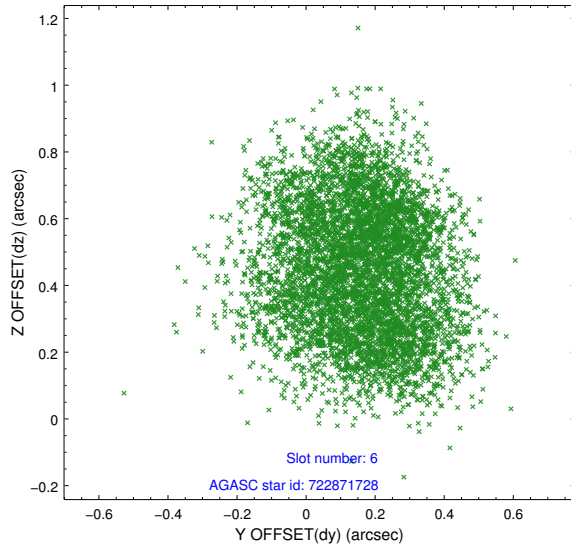
## 2.4.2 Slot 4



### 2.4.3 Slot 5

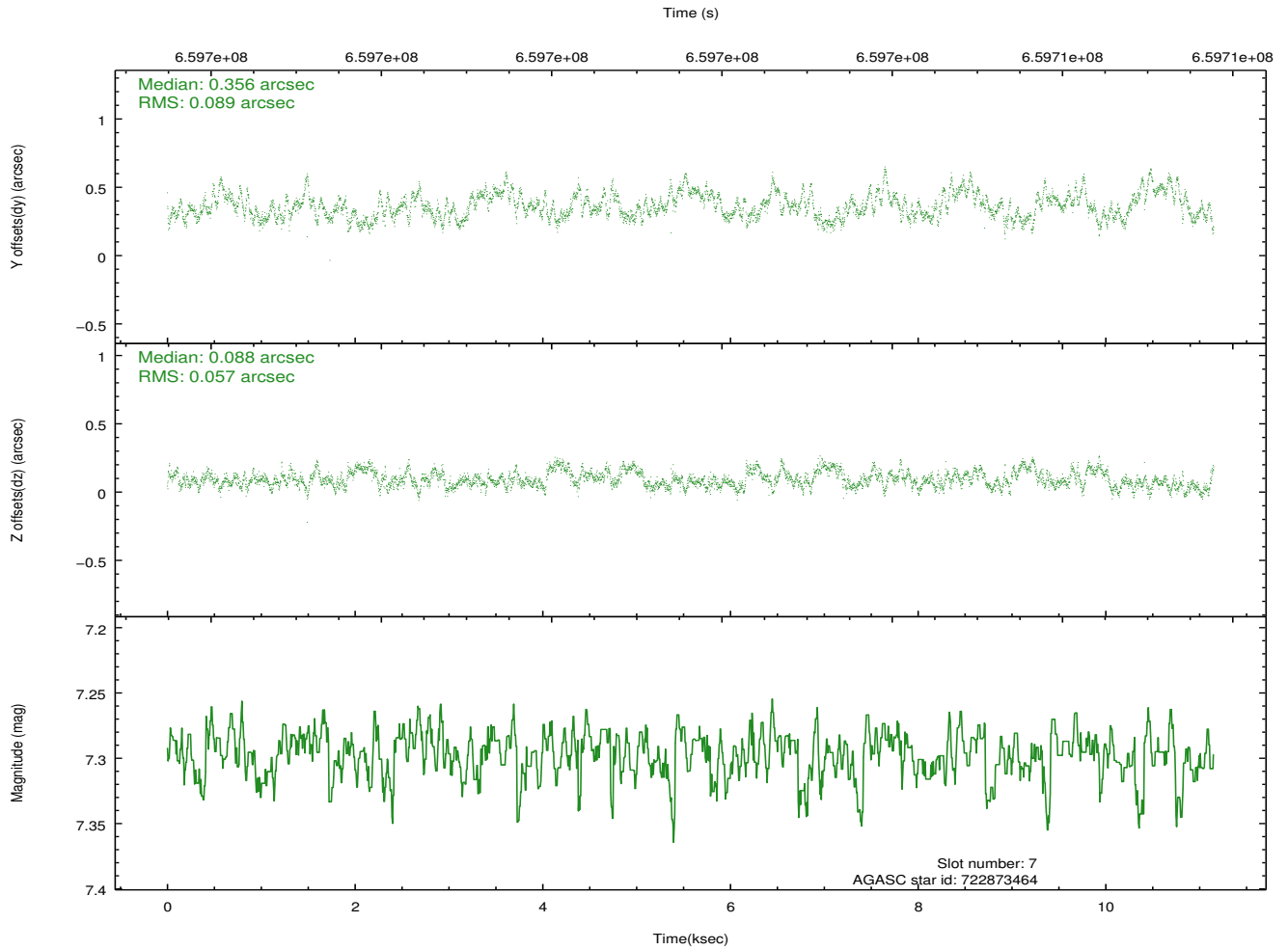
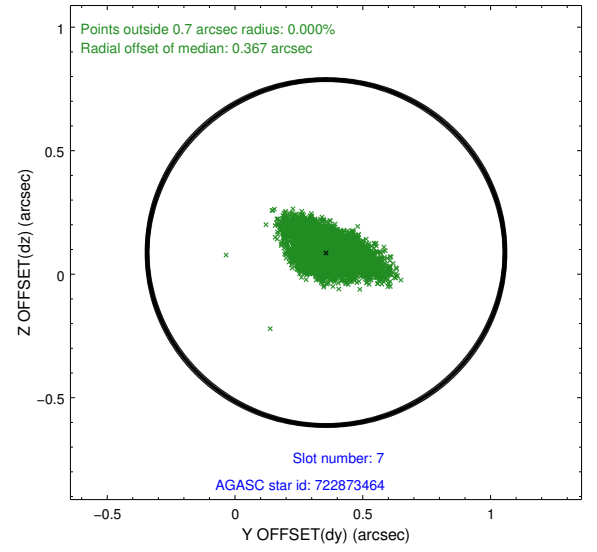
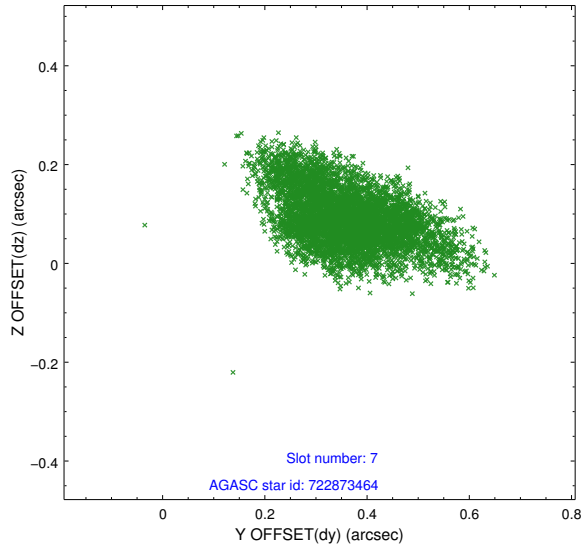


## 2.4.4 Slot 6



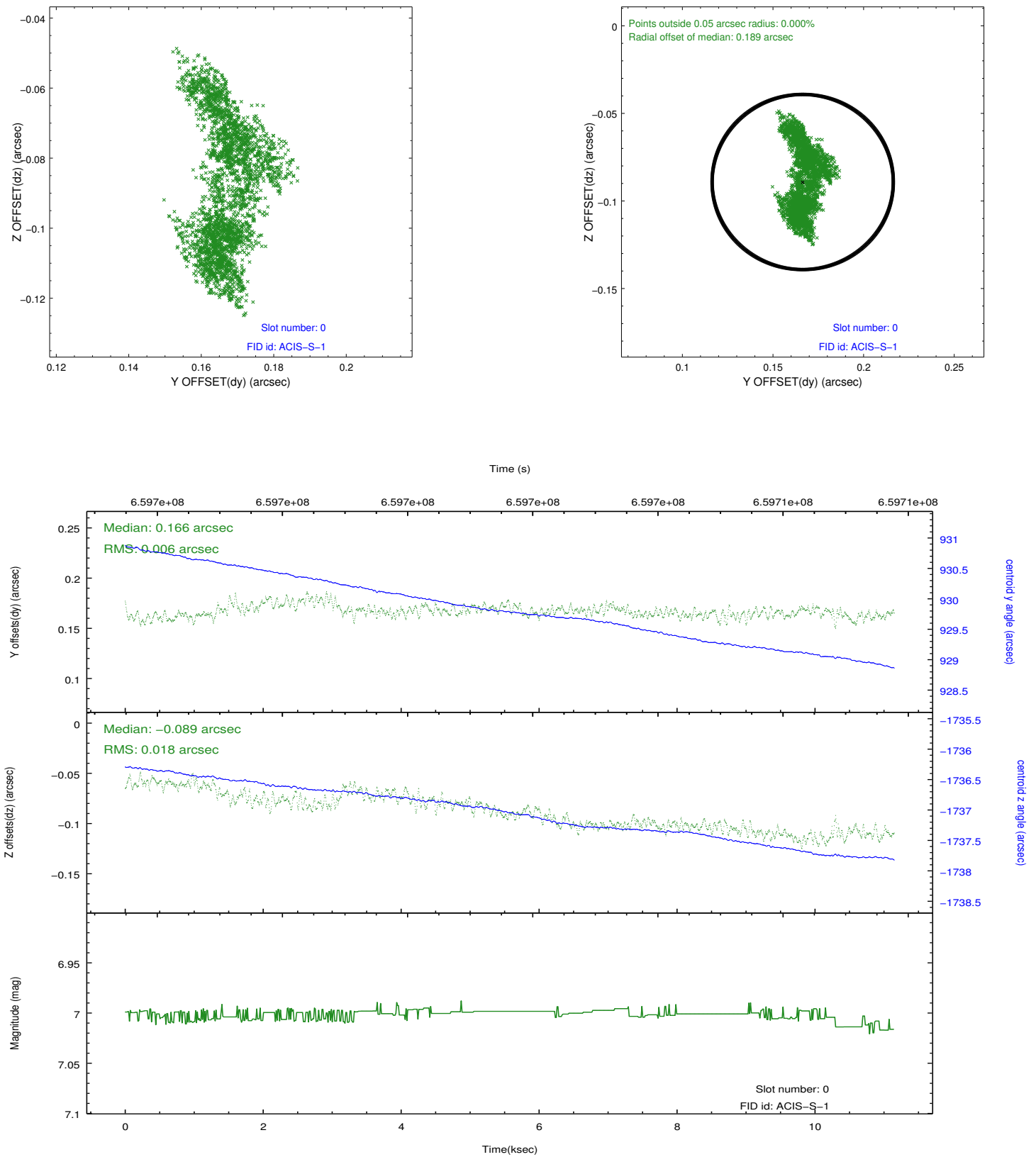


## 2.4.5 Slot 7

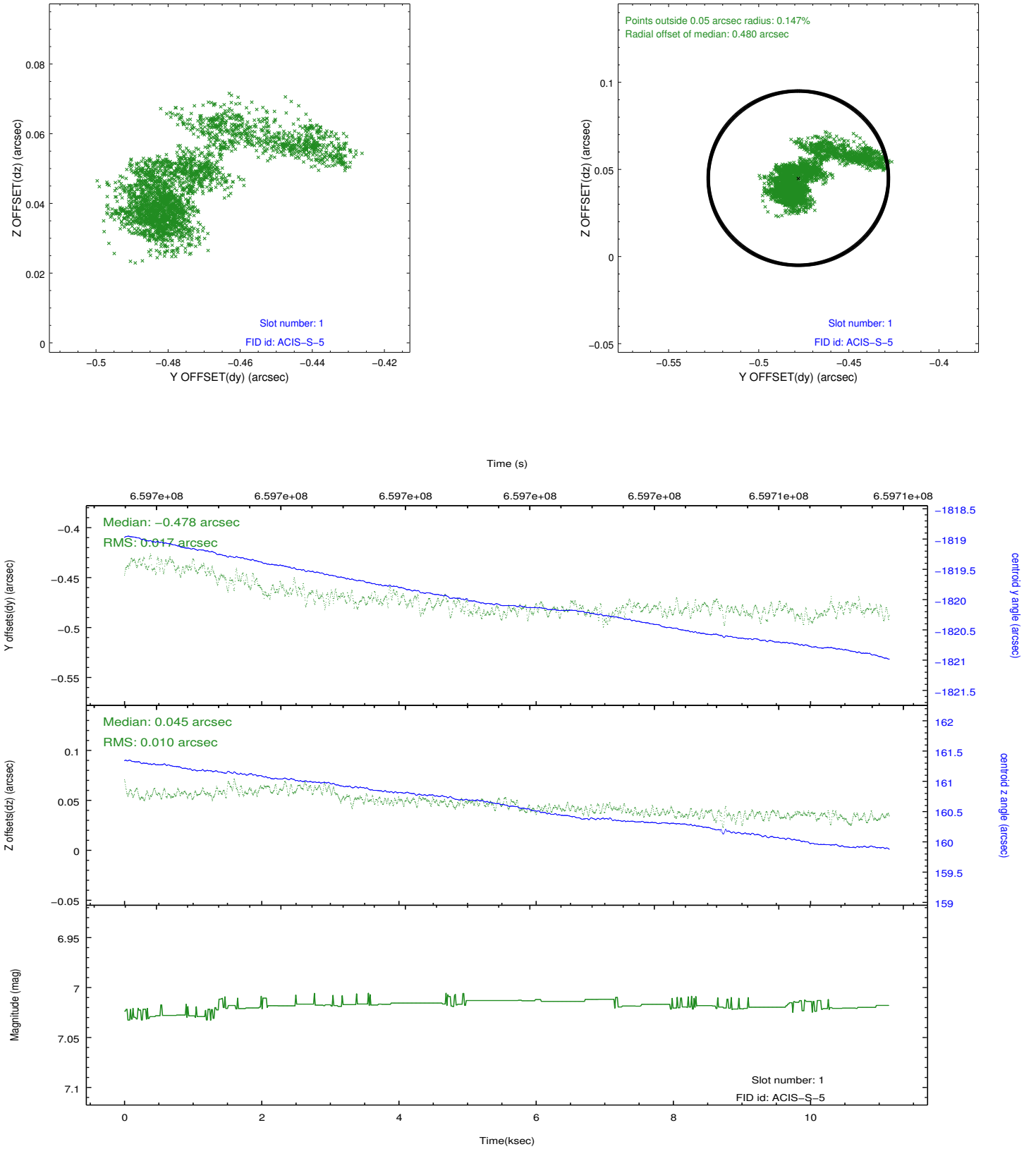


## 2.5 FID Slots

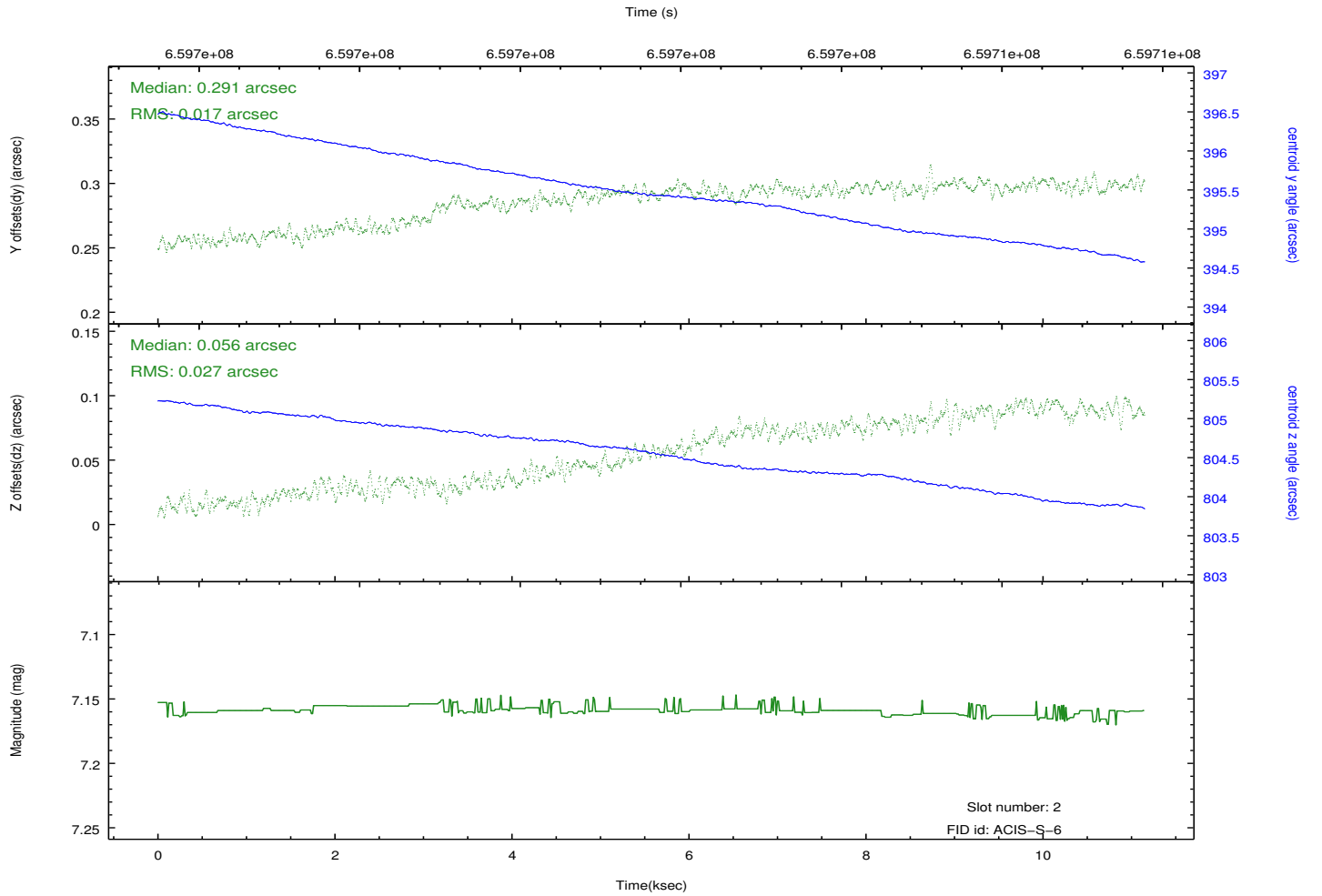
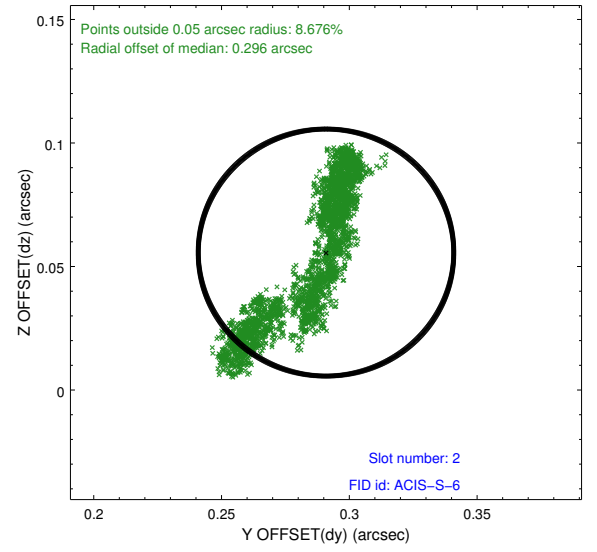
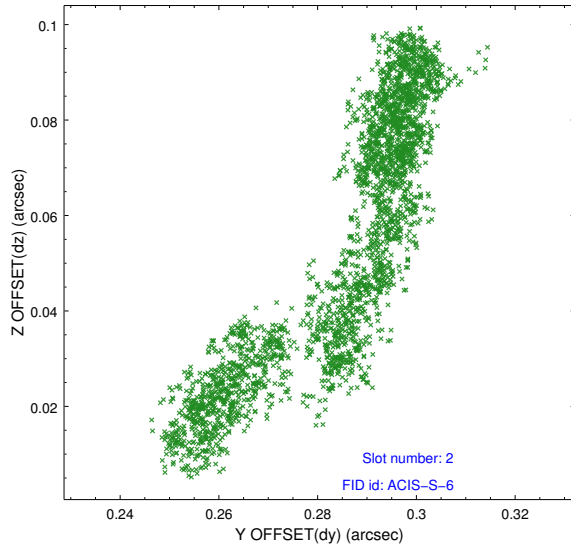
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2018.11.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	11.069448730469

### A.2 Comments