

# V&V Reference Report

## L2 ASCDS Version : 10.7.1

Observation 21438 - L2 Version 1  
Chandra X-Ray Center

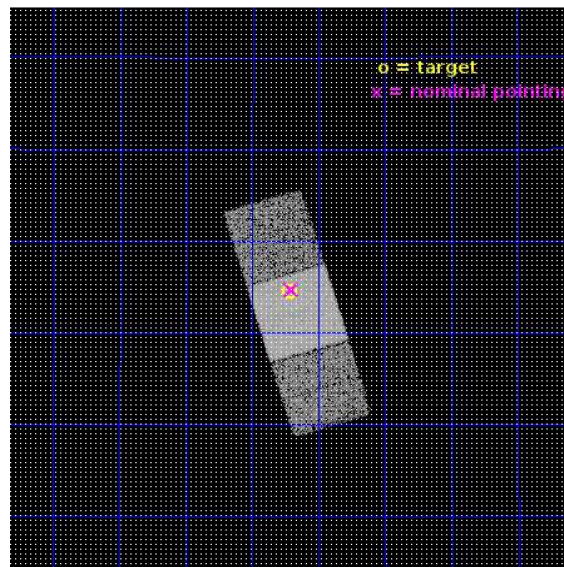
L2 Processing Date : Feb 14 2019

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# 1 Front

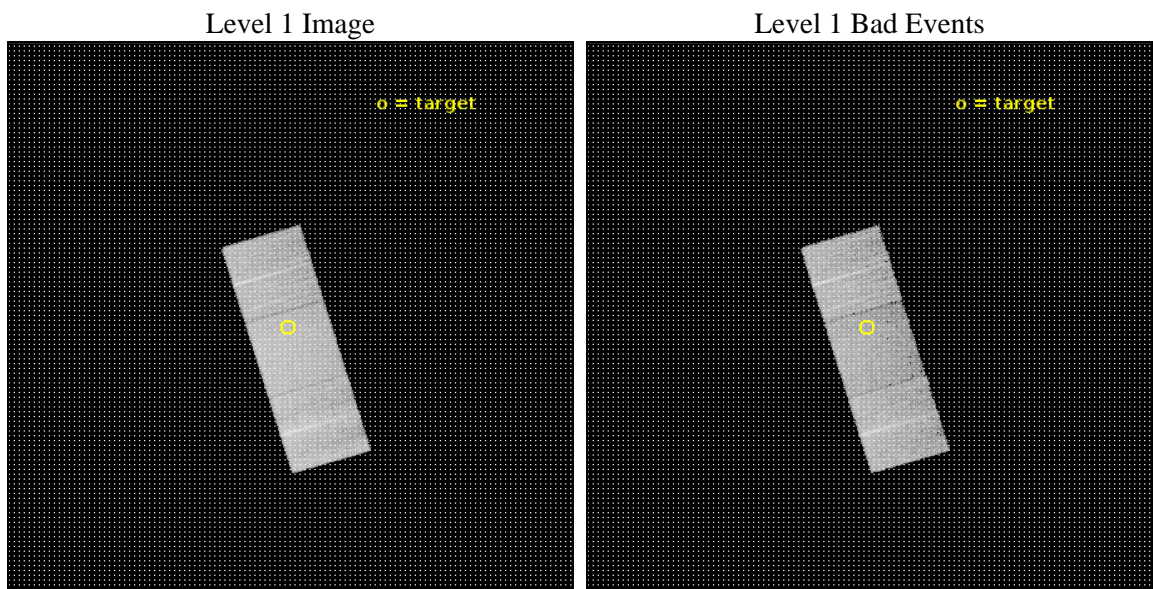
seq_num	703735	Sequence number
obs_id	21438	Observation id
title	Tidal disruption events unveiled: Directly probing the accretion disks through late-time Chandra observations	Proposal title
observer	Edo Berger	Principal investigator
object	PTF09axc	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	223.304583	Observer's specified target RA [deg]
dec_targ	22.242306	Observer's specified target Dec [deg]
ra_nom	223.30154627315	Nominal RA [deg]
dec_nom	22.244795428254	Nominal Dec [deg]
roll_nom	73.157868775427	Nominal Roll [deg]
revision	1	Processing version of data
ontime	10108.856641769	Sum of GTIs [s]
livetime	9976.7769877127	Livetime [s]
ontime6	10108.815601826	Sum of GTIs [s]
ontime7	10108.856641769	Sum of GTIs [s]
ontime8	10102.492521524	Sum of GTIs [s]
l2events	57477	Number of level 2 events



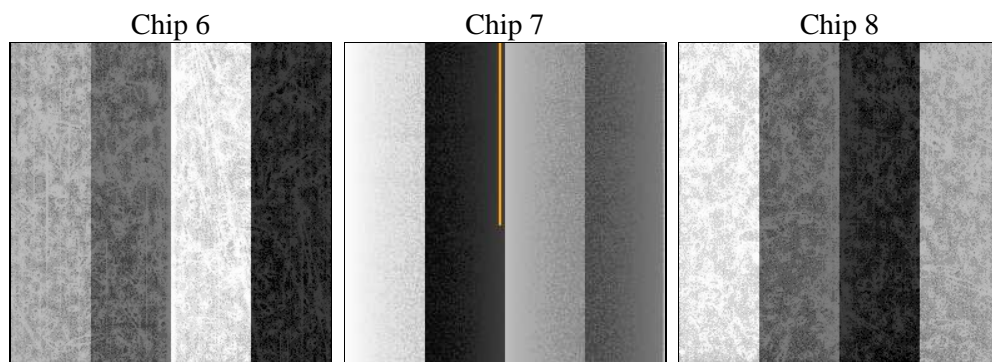
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	10.7.1	Processing system revision	ontime	10108.856641769	Sum of GTIs [s]
caldsver	4.8.2	&#160	ontime6	10108.815601826	Sum of GTIs [s]
date	2019-02-14T17:26:53	Date and time of file creation	ontime7	10108.856641769	Sum of GTIs [s]
revision	1	Processing version of data	ontime8	10102.492521524	Sum of GTIs [s]
			l1events	272981	Number of level 1 events

### 2.1.4 Events

	<b>ccd 6</b>	<b>ccd 7</b>	<b>ccd 8</b>
level 1 events	78528	96784	97669
rejected events	69697	54588	72399
rejected %	88%	56%	74%

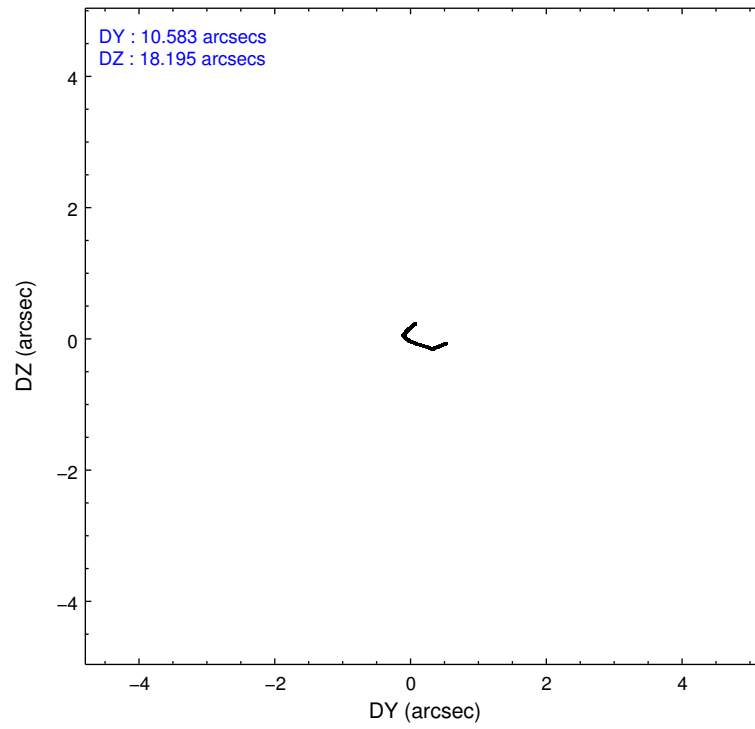
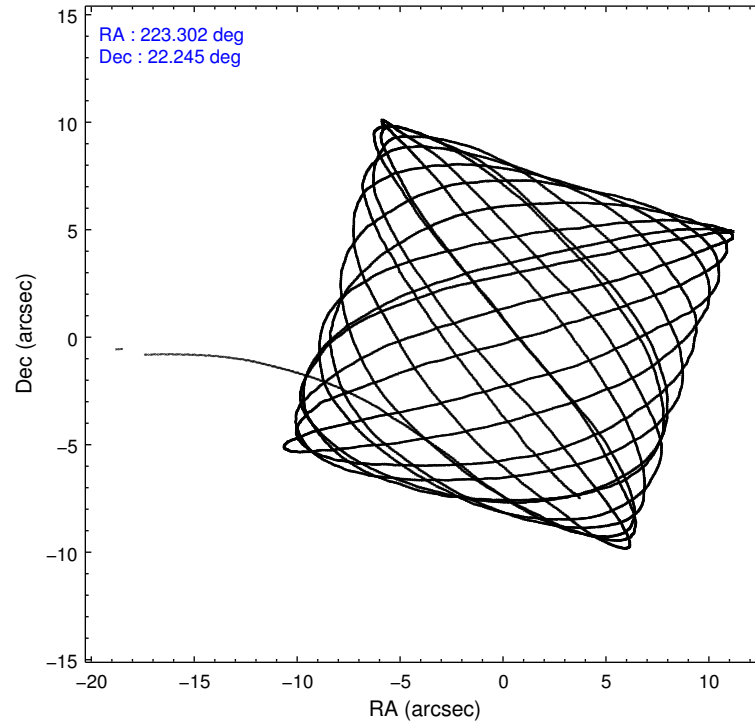
	<b>ccd 6</b>	<b>ccd 7</b>	<b>ccd 8</b>
grade 0 events	2705	3602	6944
	3%	3%	7%
grade 1 events	35	129	79
	0%	0%	0%
grade 2 events	2350	8713	6162
	2%	9%	6%
grade 3 events	788	3355	2579
	1%	3%	2%
grade 4 events	783	3307	2446
	0%	3%	2%
grade 5 events	3238	9474	5301
	4%	9%	5%
grade 6 events	2210	23243	7147
	2%	24%	7%
grade 7 events	66419	44961	67011
	84%	46%	68%

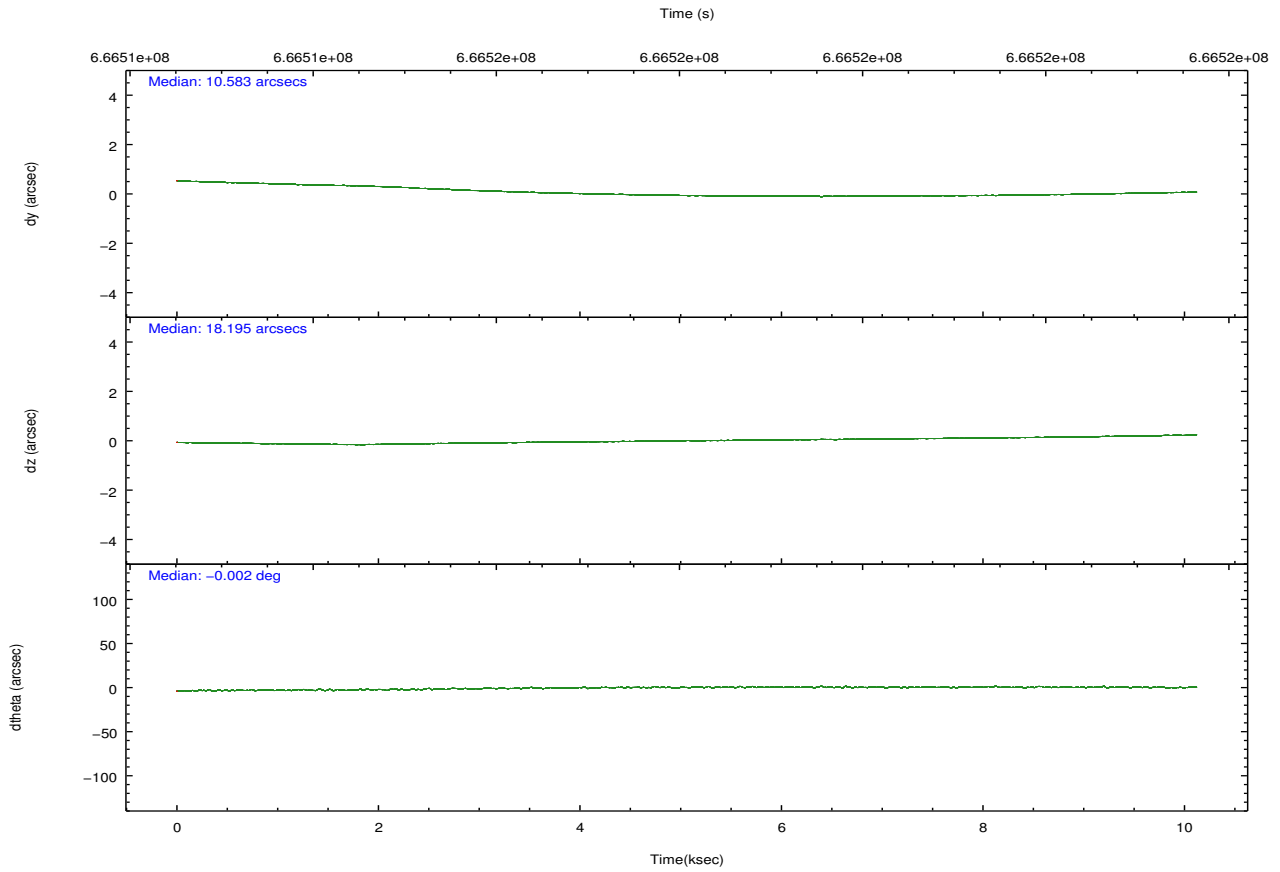
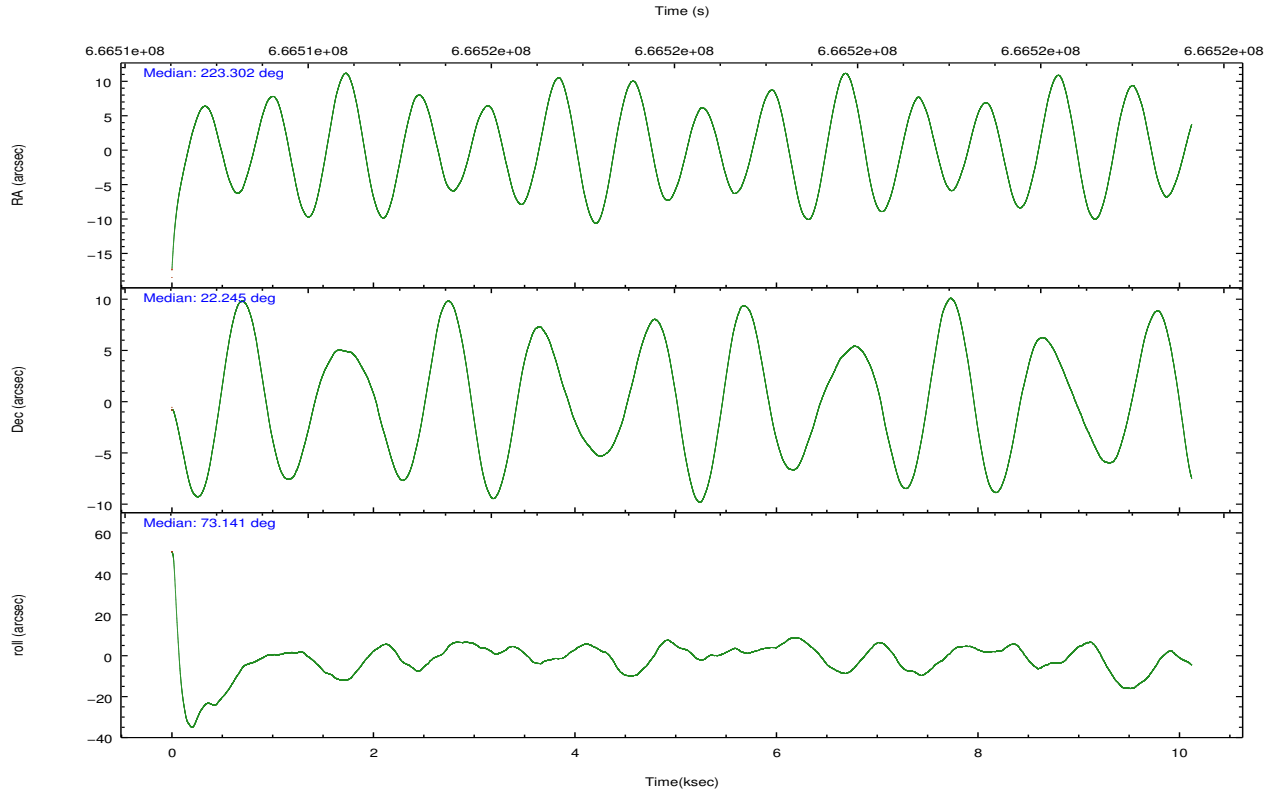


## 2.2 Compared Parameters

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	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	223.308708	223.301546273146	Subarray requested	NONE	NONE
[deg] Pointing Dec	22.218165	22.24479542825352	Alternating exposures requested	N	N
[deg] Pointing Roll	72.998446	73.15786877542679	[s] Primary exposure time	0.000000	3.1
[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)	666513144.184000	666511390.10299			
Observation start date	2019-02-14T06:31:15	2019-02-14T06:03:10			
[s] Observation end time (MET)	666523144.184000	666524342.51626			
Observation end date	2019-02-14T09:17:55	2019-02-14T09:39:02			
Read mode	TIMED	TIMED			

## 2.3 Aspect



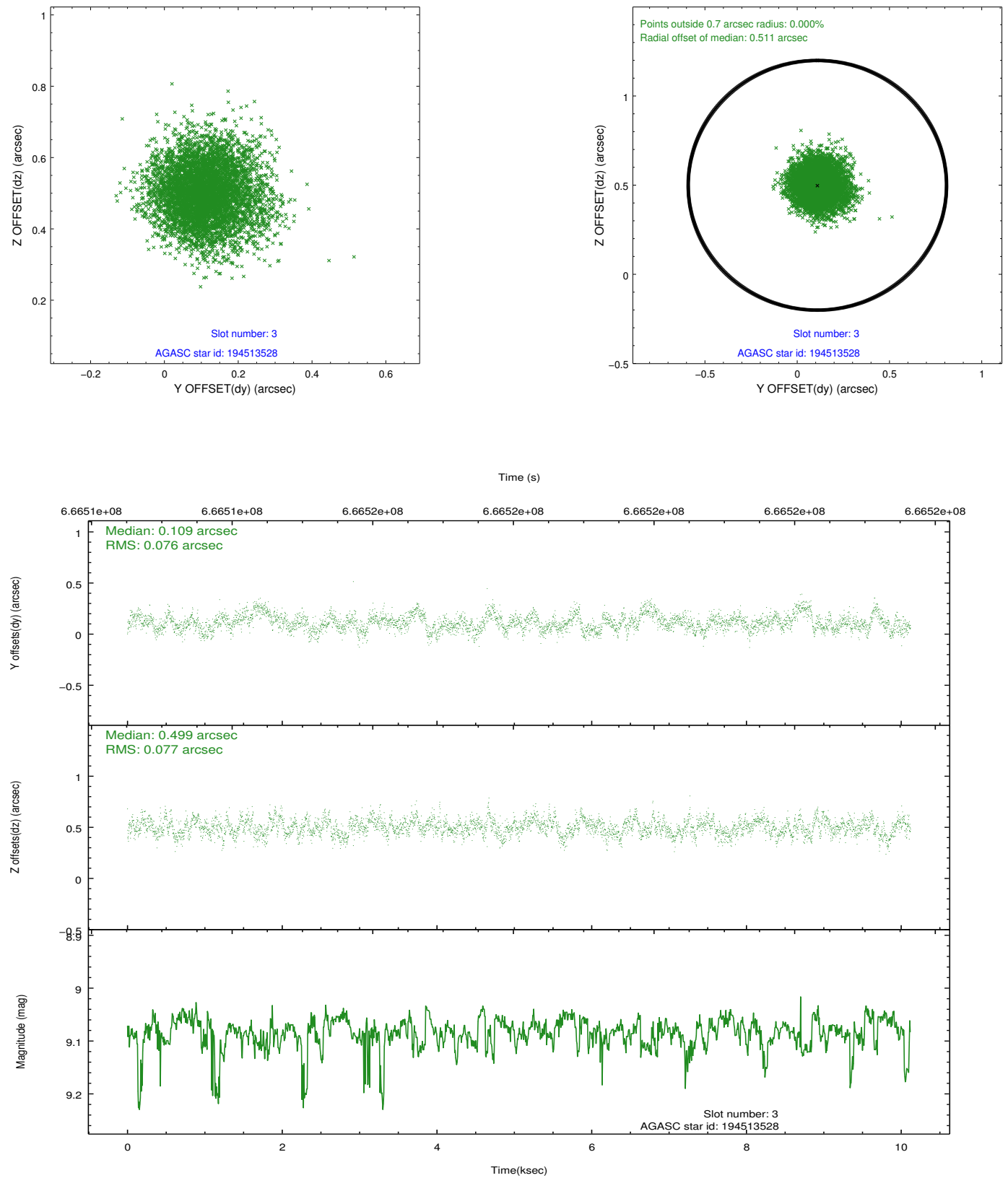


Slot Statistics

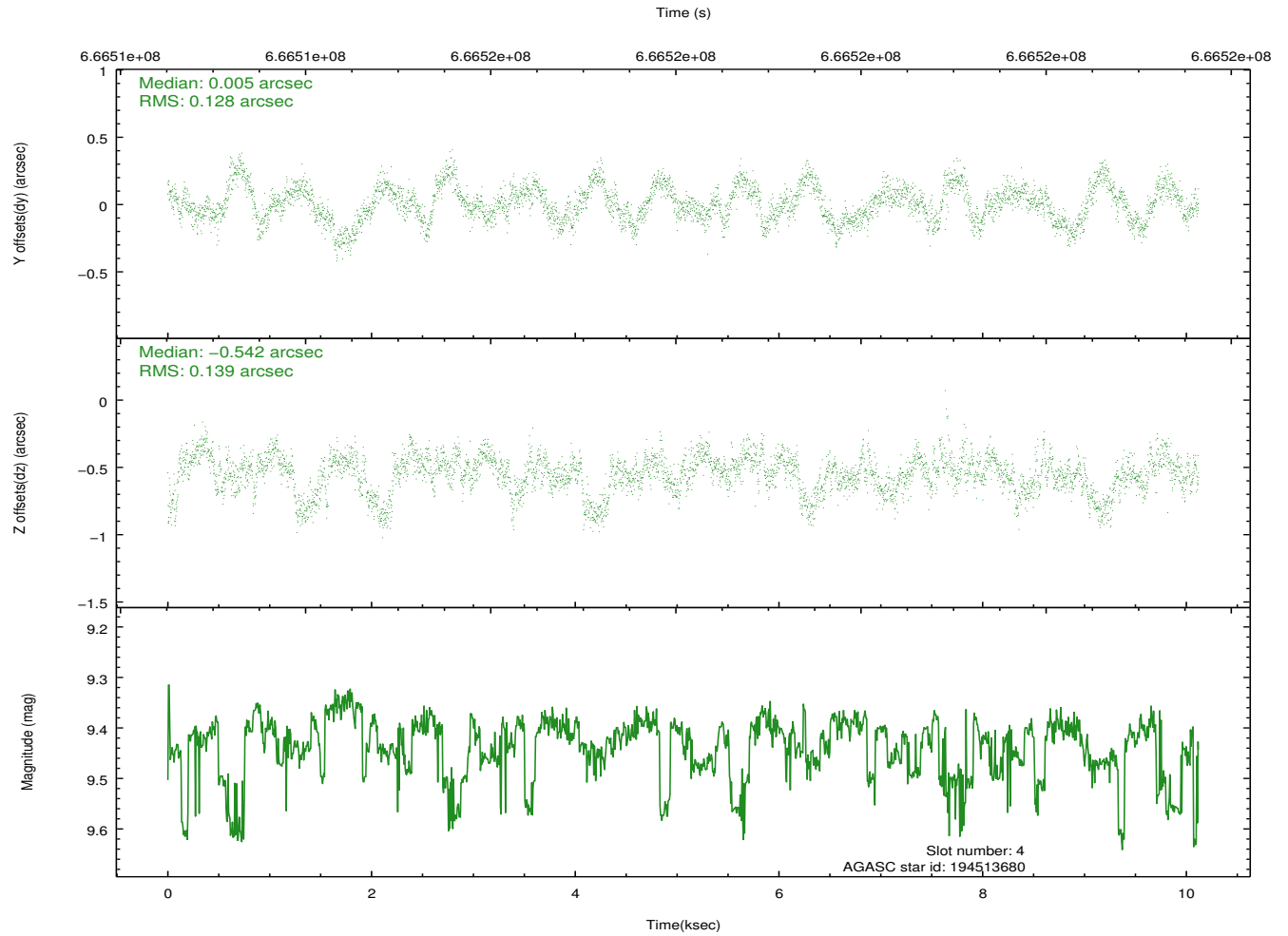
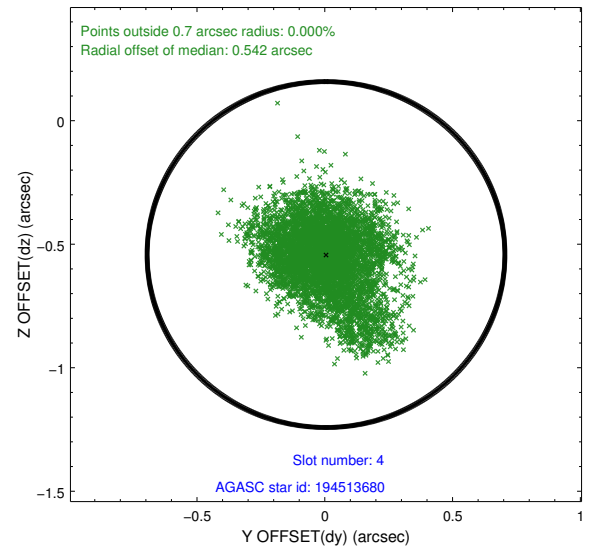
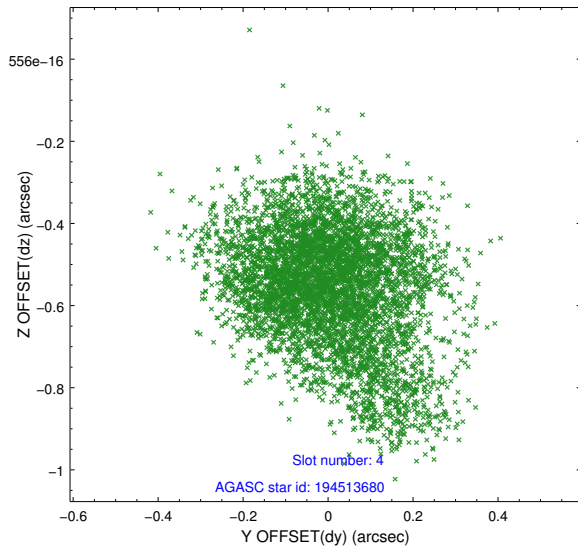
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.06	2469	1.000	-0.410	-0.255	0.007	0.012	0.000000	0.000000	-763.99	-1739
1	FID		ACIS-S-4	7.19	2469	1.000	0.439	0.254	0.008	0.012	0.000000	0.000000	2149.97	168
2	FID		ACIS-S-6	7.32	2469	1.000	-0.057	0.009	0.008	0.014	0.000000	0.000000	399.11	806
3	GUIDE	used	194513528	9.08	4932	1.000	0.109	0.499	0.116	0.185	223.452445	21.896019	-967.76	-797
4	GUIDE	used	194513680	9.43	4930	1.000	0.005	-0.542	0.200	0.340	222.794093	22.299945	-217.07	1725
5	GUIDE	used	194514736	9.12	4932	1.000	-0.152	0.294	0.226	0.371	223.996360	22.211386	653.01	-2195
6	GUIDE	used	194516600	8.71	4933	1.000	0.032	-0.260	0.112	0.199	222.565085	21.897195	-1825.71	2037
7	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0

## 2.4 Star Slots

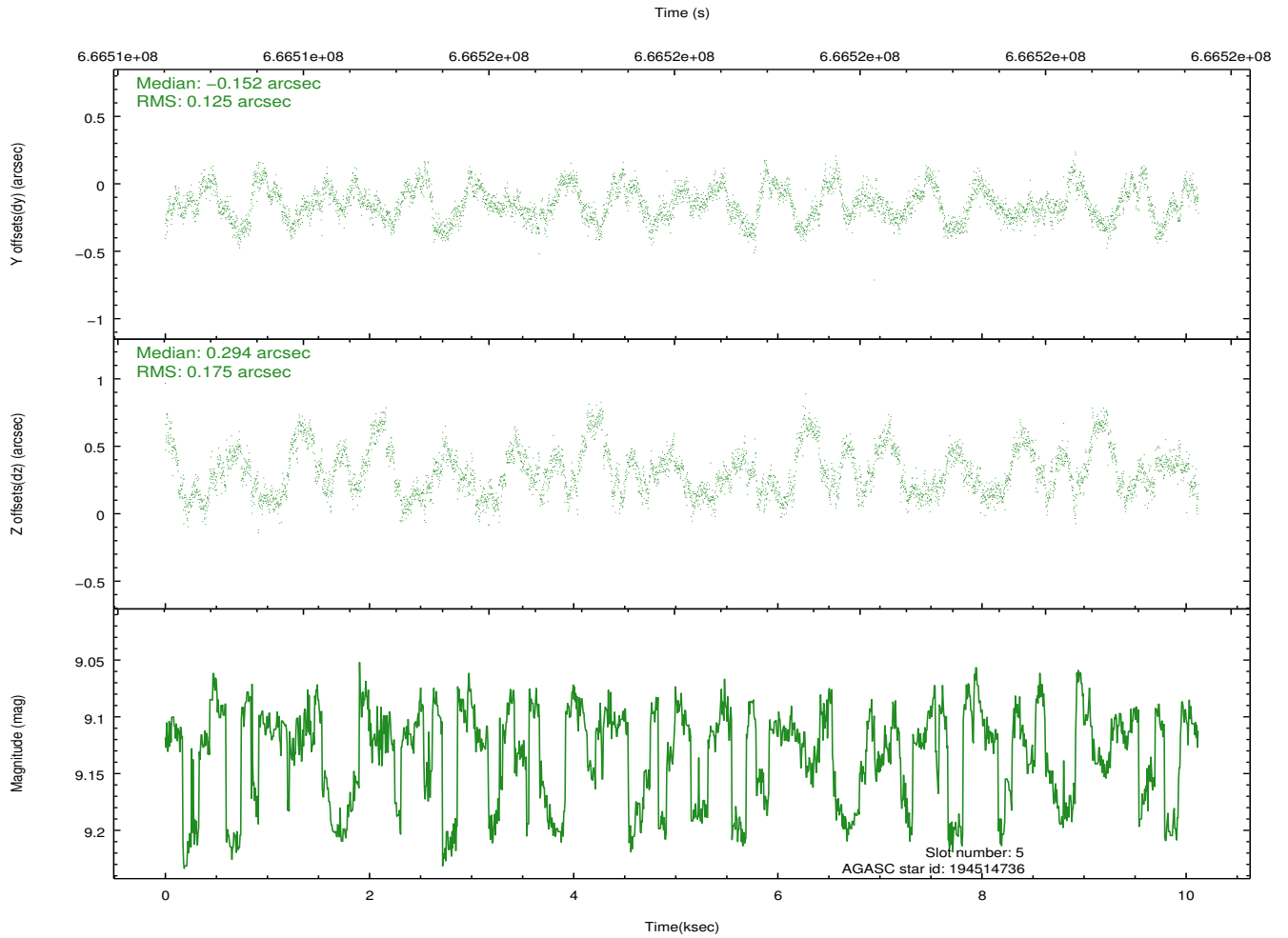
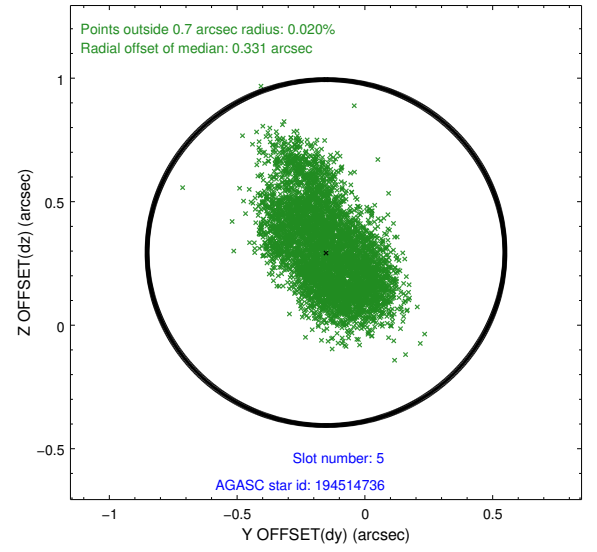
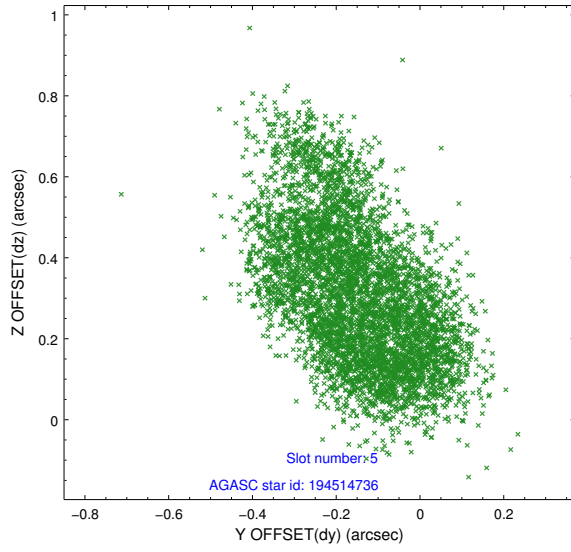
### 2.4.1 Slot 3



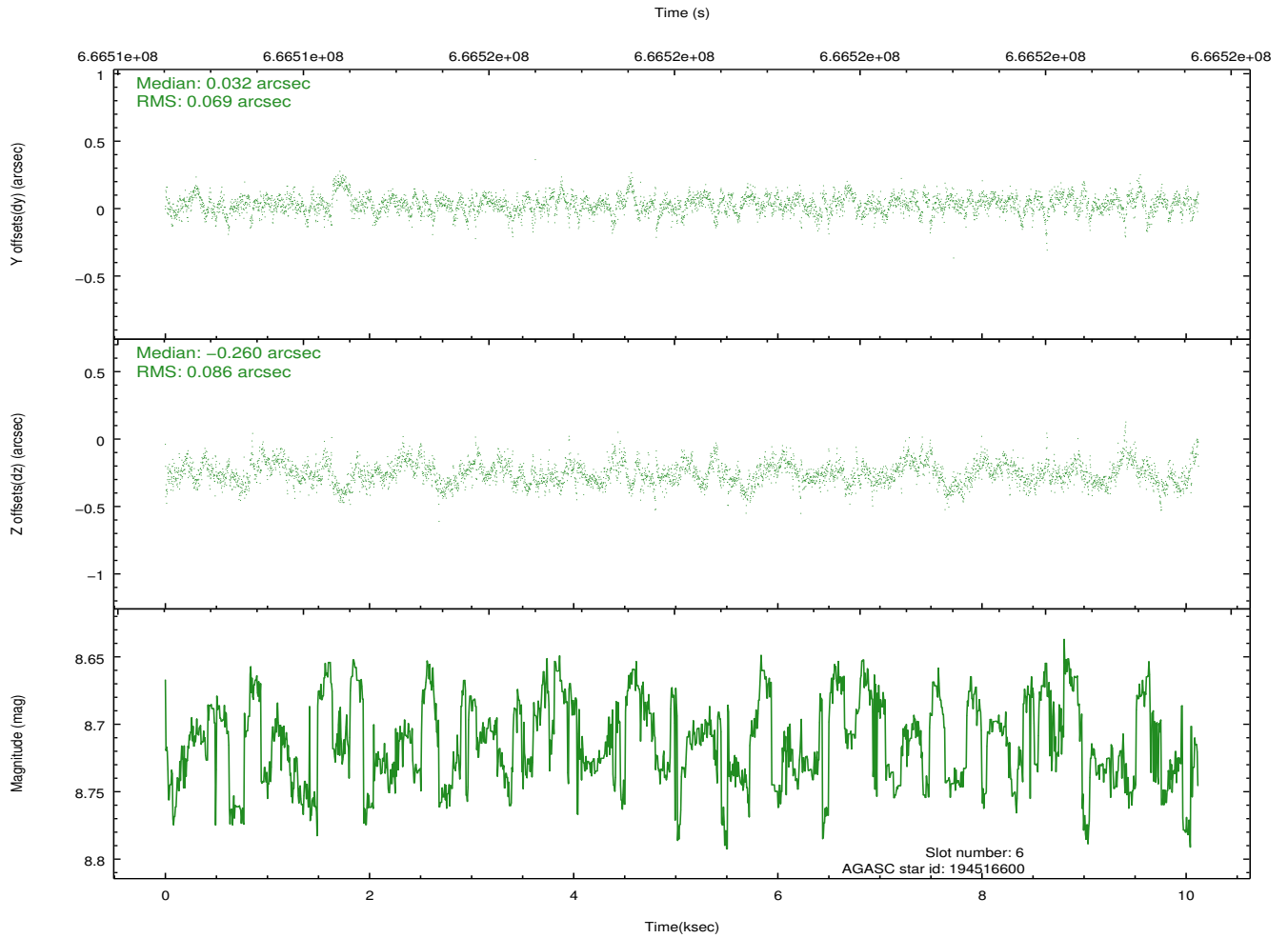
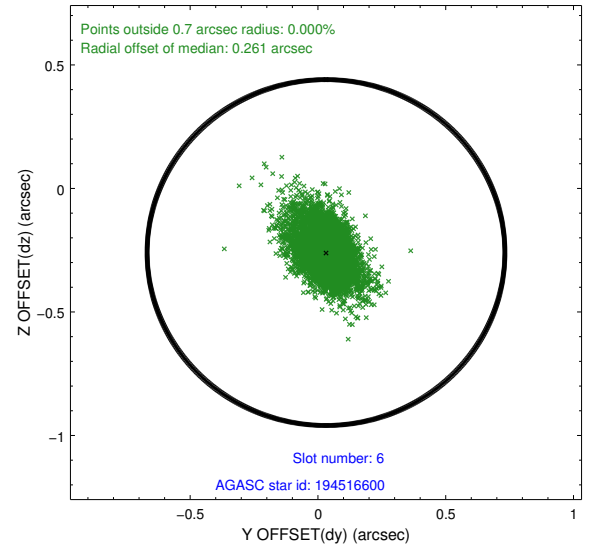
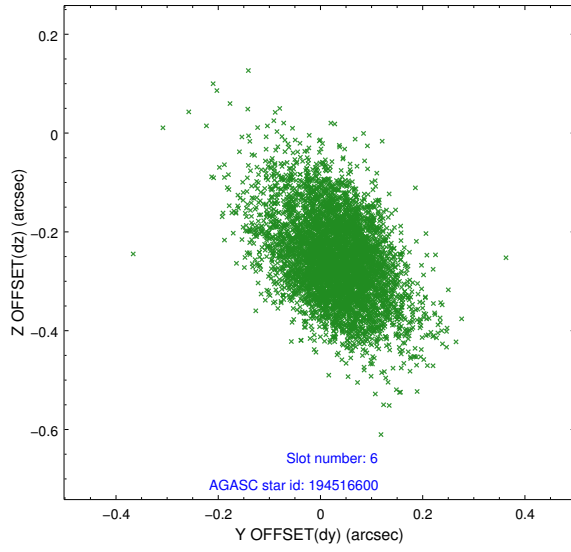
## 2.4.2 Slot 4



### 2.4.3 Slot 5



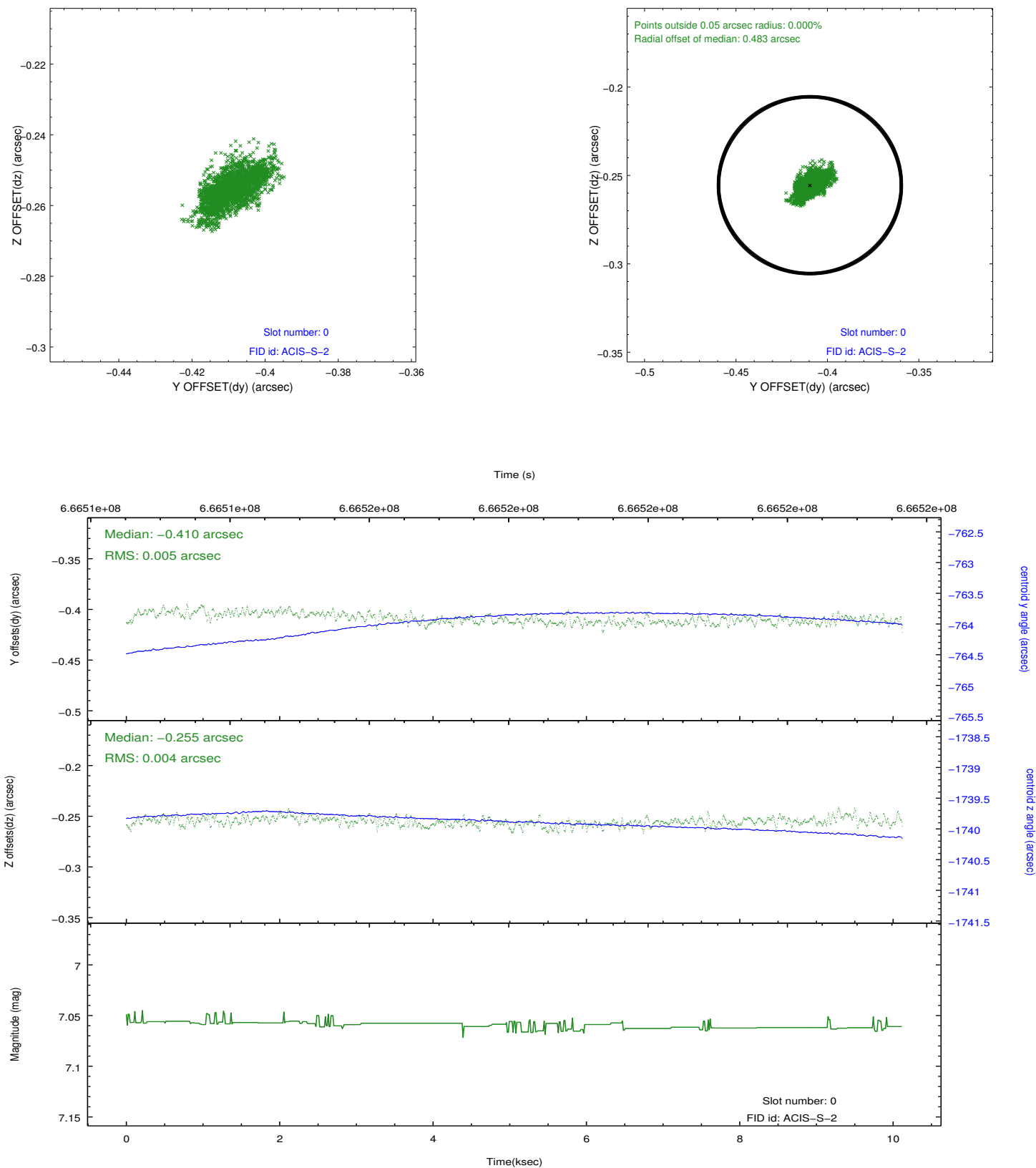
## 2.4.4 Slot 6



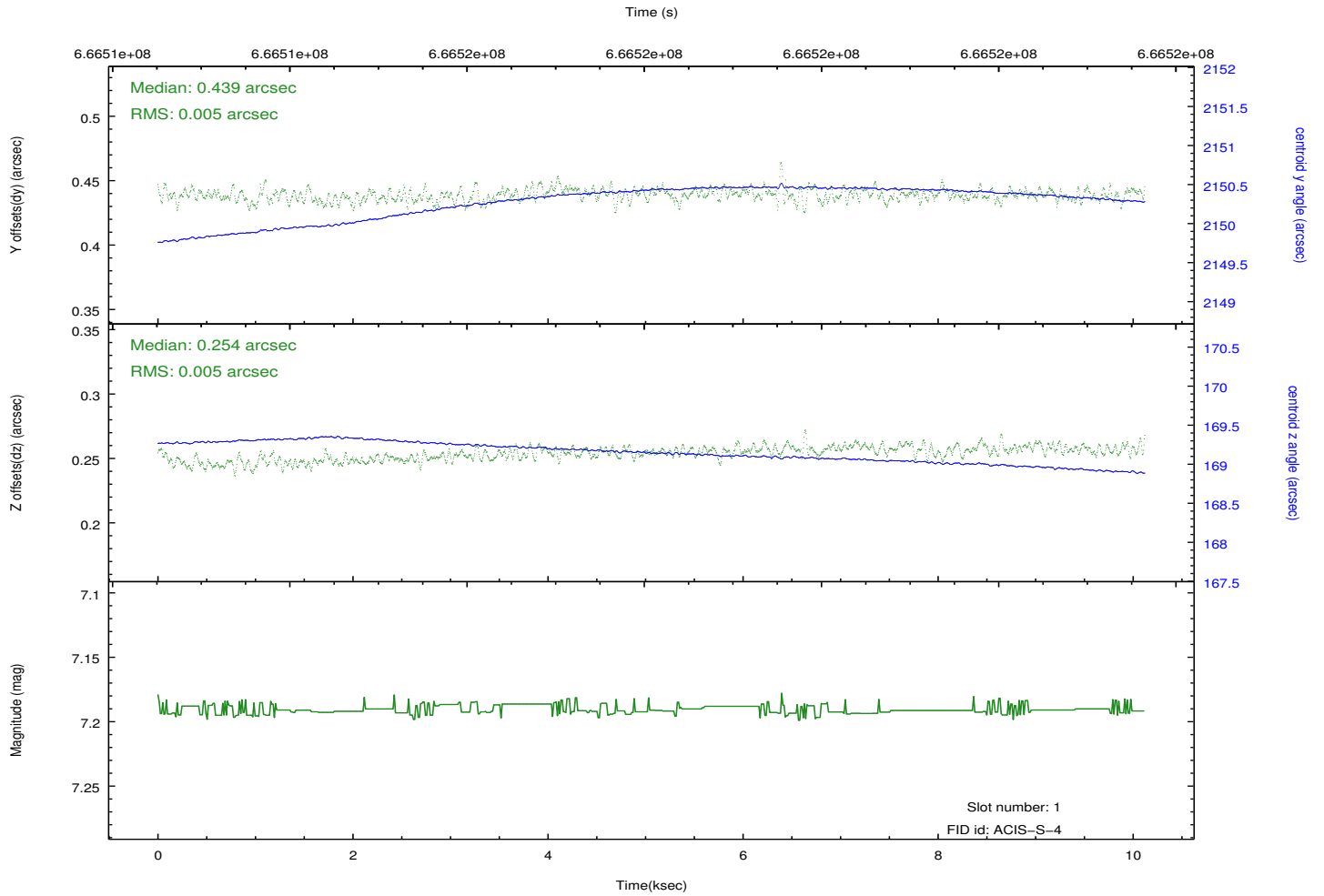
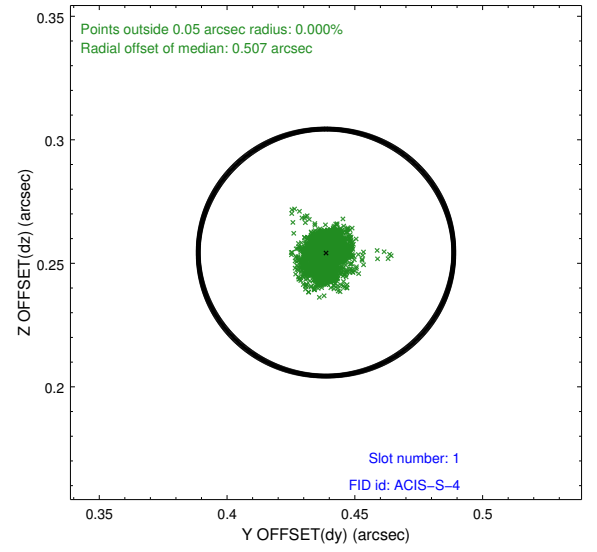
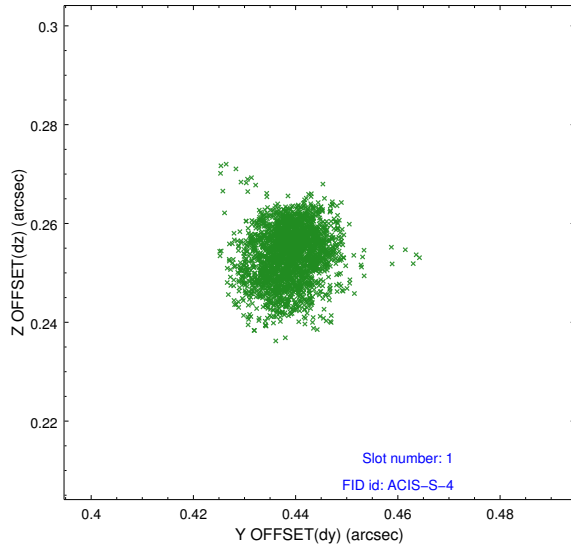


## 2.5 FID Slots

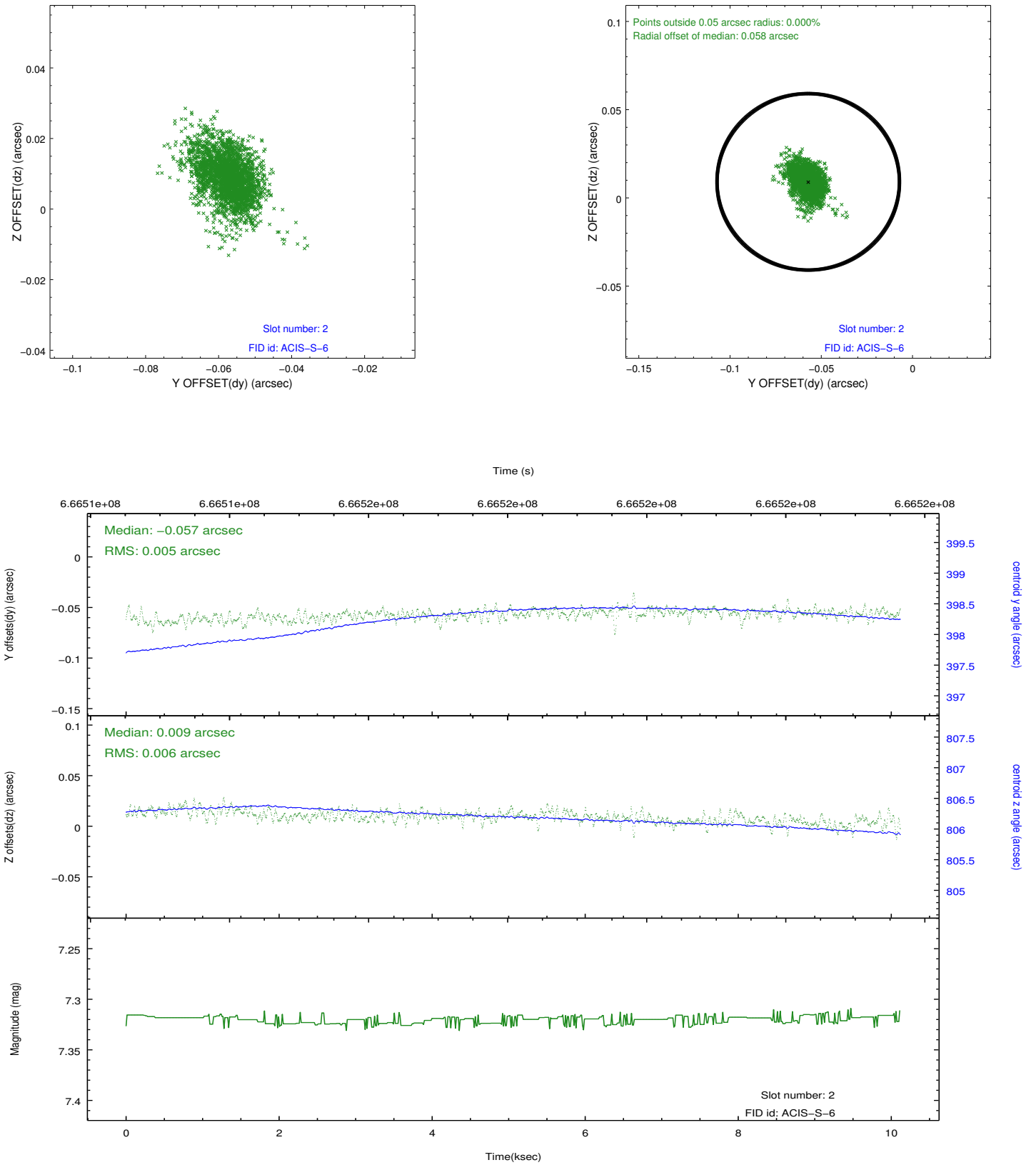
### 2.5.1 Slot 0



## 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)	2019.02.14
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.108856641769

### A.2 Comments

The guide star in slot 7 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this slot from the solution.