

# V&V Reference Report

## L2 ASCDS Version : 10.8

Observation 21587 - L2 Version 1  
Chandra X-Ray Center

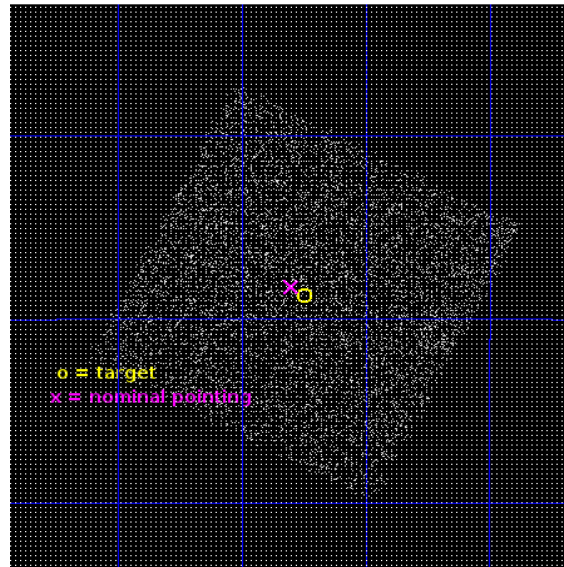
L2 Processing Date : Jul 2 2019

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# 1 Front

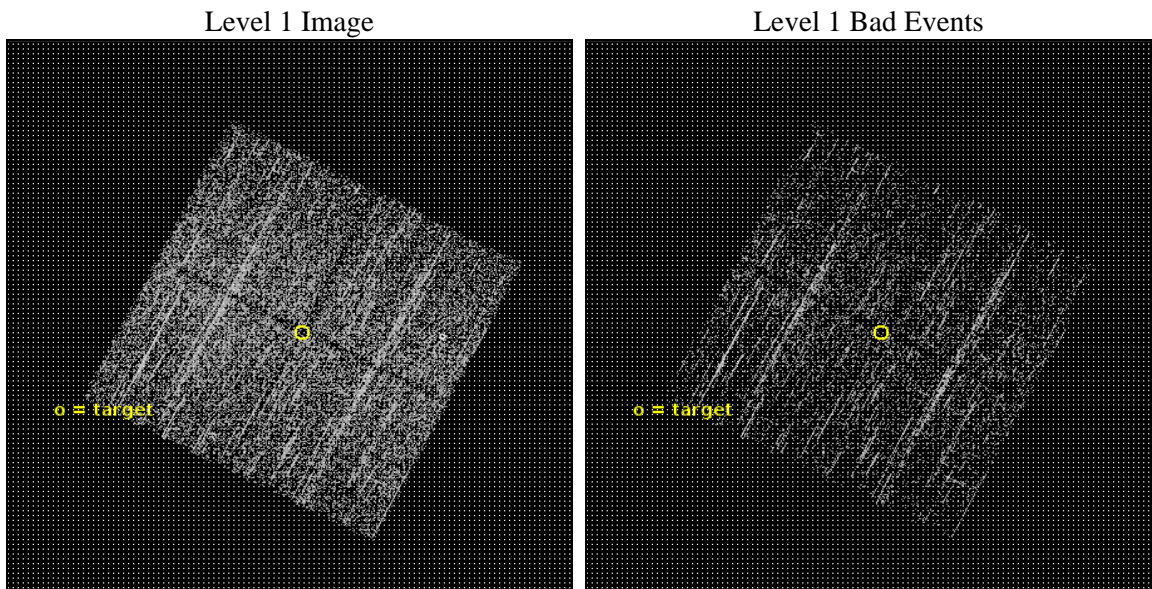
seq_num	300419	Sequence number
obs_id	21587	Observation id
title	Chandra Mapping of the Galactic Central Region	Proposal title
observer	Daniel Wang	Principal investigator
object	GCR Gap 1	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	266.31138	Observer's specified target RA [deg]
dec_targ	-30.145637	Observer's specified target Dec [deg]
ra_nom	266.32480878319	Nominal RA [deg]
dec_nom	-30.137388042665	Nominal Dec [deg]
roll_nom	297.21543135067	Nominal Roll [deg]
revision	1	Processing version of data
ontime	1906.500014782	Sum of GTIs [s]
livetime	1881.5901885439	Livetime [s]
ontime0	1906.500014782	Sum of GTIs [s]
ontime1	1906.500014782	Sum of GTIs [s]
ontime2	1906.500014782	Sum of GTIs [s]
ontime3	1903.3589645624	Sum of GTIs [s]
l2events	6010	Number of level 2 events



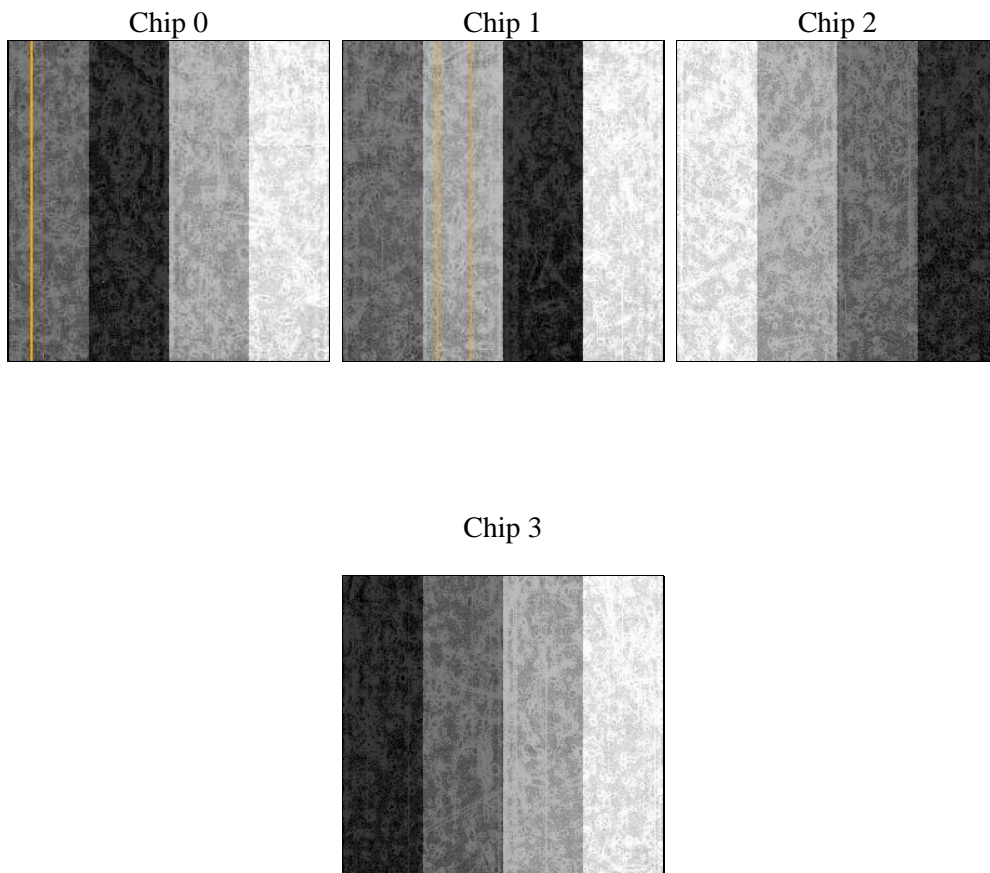
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	2000.000000	[s] Scheduled observation exposure time
ascdsver	10.8	Processing system revision	ontime	1906.500014782	Sum of GTIs [s]
caldsver	4.8.3	&#160	ontime0	1906.500014782	Sum of GTIs [s]
date	2019-07-02T14:03:12	Date and time of file creation	ontime1	1906.500014782	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	1906.500014782	Sum of GTIs [s]
			ontime3	1903.3589645624	Sum of GTIs [s]
			l1events	55978	Number of level 1 events

### 2.1.4 Events

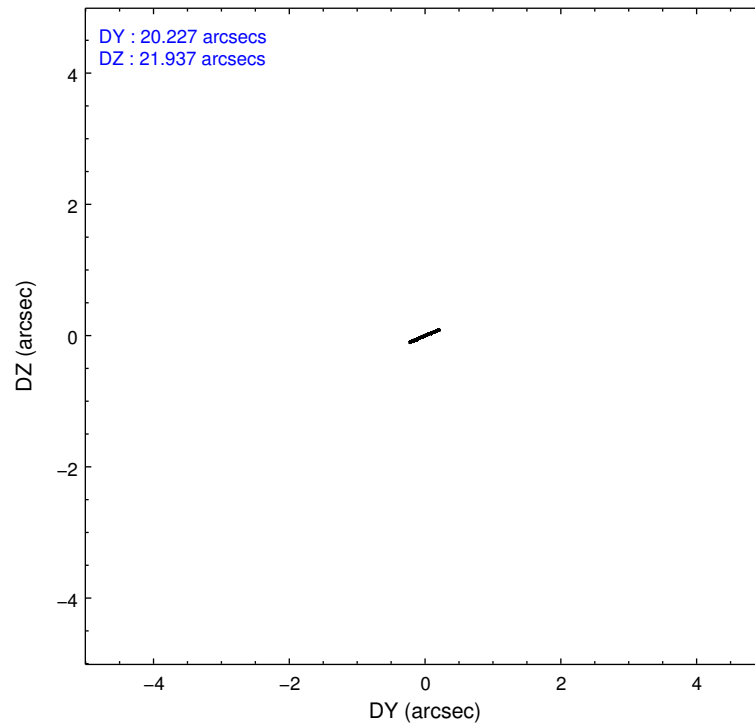
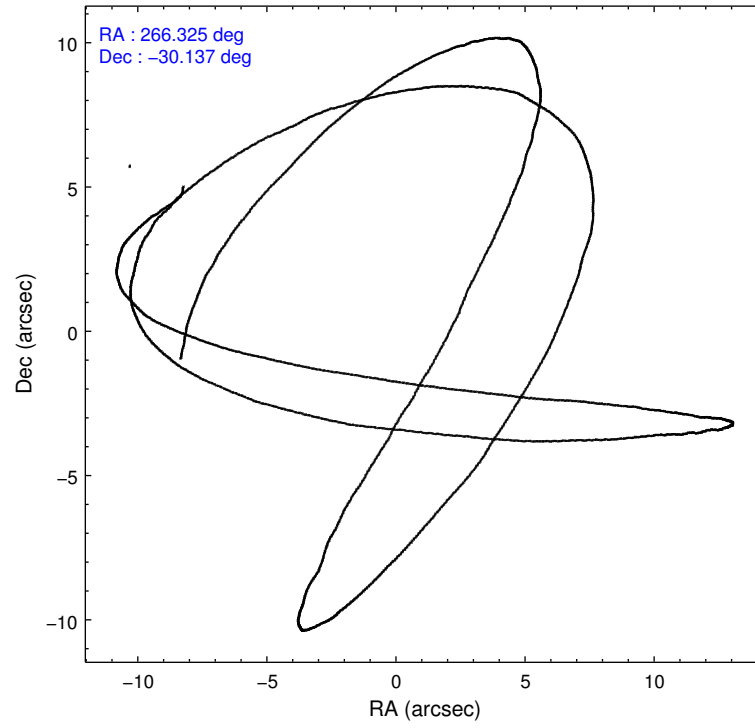
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	13769	13571	15484	13154
rejected events	12048	11188	13680	11446
rejected %	87%	82%	88%	87%

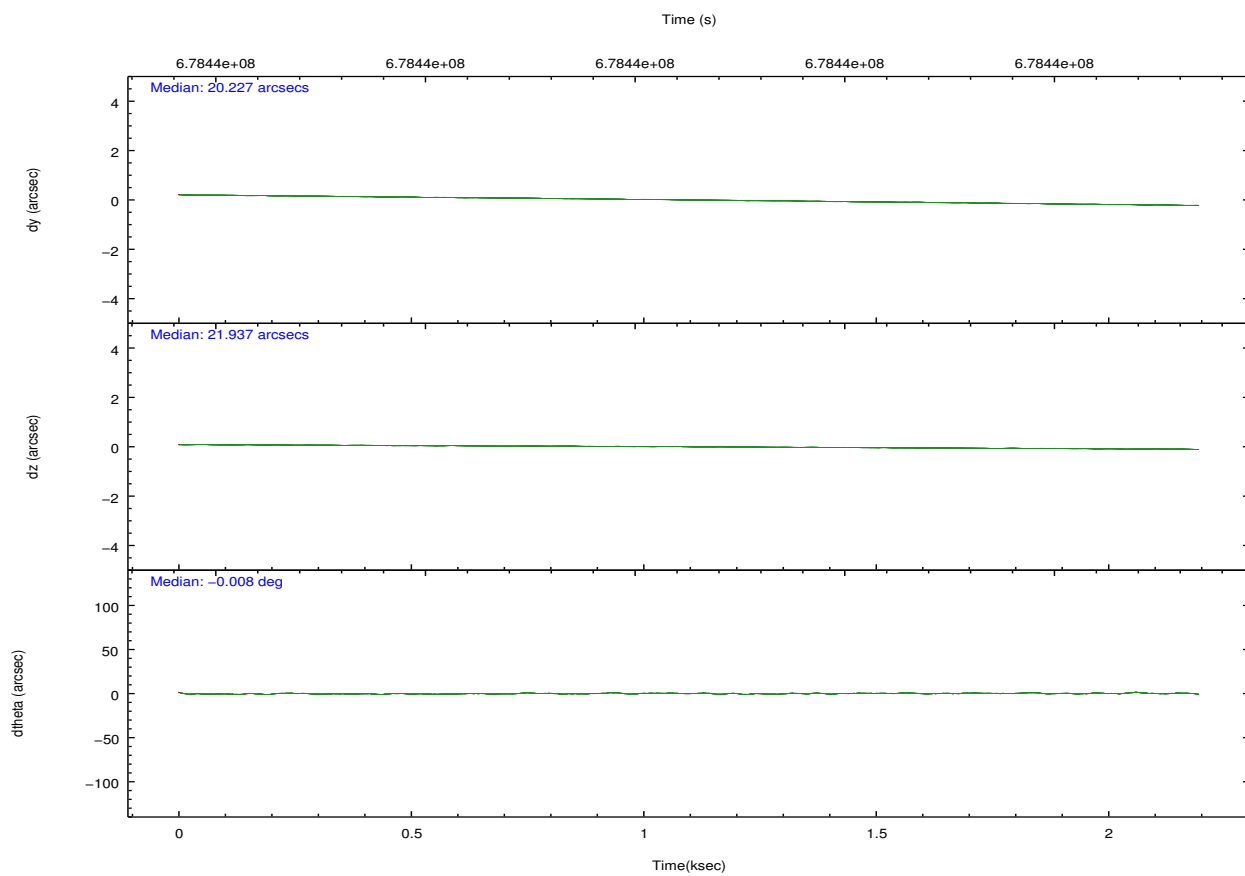
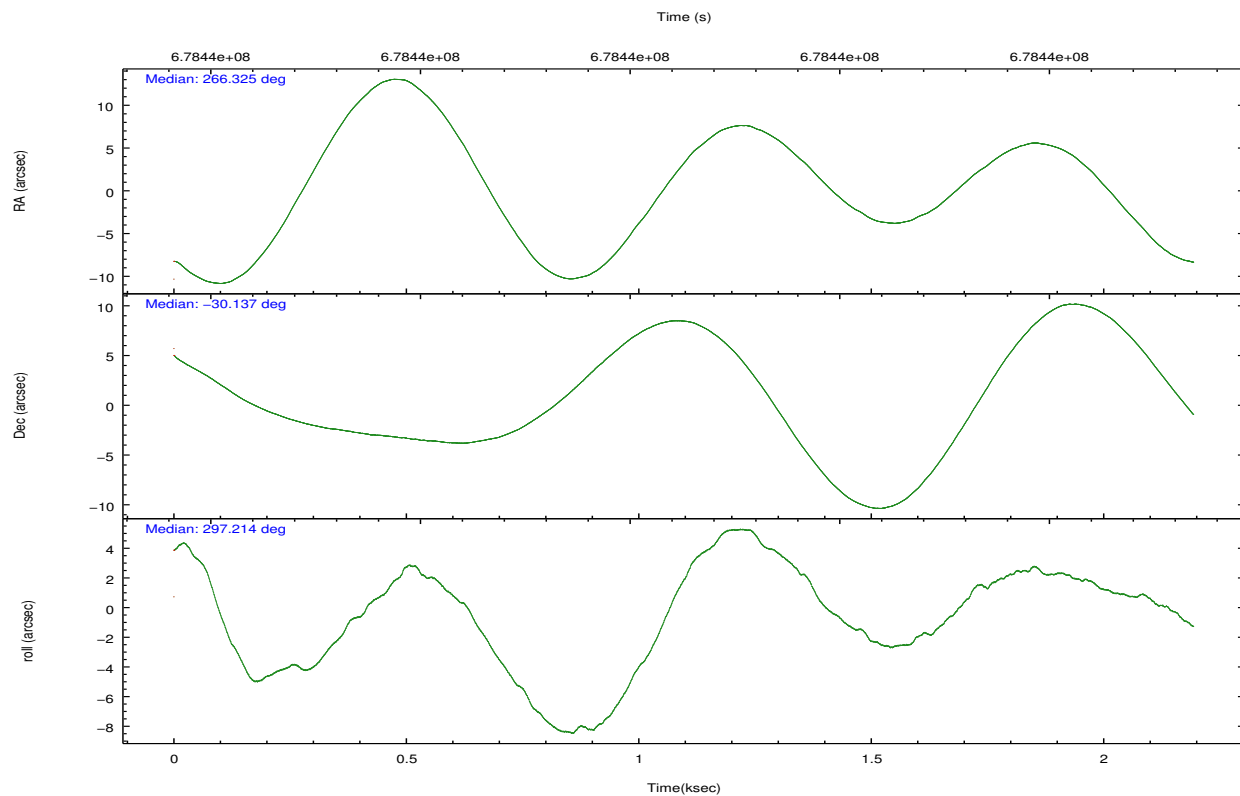
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	641	1068	716	673
	4%	7%	4%	5%
grade 1 events	13	17	15	7
	0%	0%	0%	0%
grade 2 events	401	524	405	363
	2%	3%	2%	2%
grade 3 events	185	188	170	168
	1%	1%	1%	1%
grade 4 events	157	168	172	166
	1%	1%	1%	1%
grade 5 events	622	666	638	704
	4%	4%	4%	5%
grade 6 events	343	445	345	345
	2%	3%	2%	2%
grade 7 events	11407	10495	13023	10728
	82%	77%	84%	81%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-0123	ACIS-0123	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	266.298018	266.3248087831927	Subarray requested	NONE	NONE
[deg] Pointing Dec	-30.122645	-30.13738804266477	Alternating exposures requested	N	N
[deg] Pointing Roll	296.993295	297.2154313506703	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	678439207.184000	678438830.9923			
Observation start date	2019-07-02T07:18:58	2019-07-02T07:13:50			
[s] Observation end time (MET)	678441207.184000	678441341.21745			
Observation end date	2019-07-02T07:52:18	2019-07-02T07:55:41			
Read mode	TIMED	TIMED			

## 2.3 Aspect





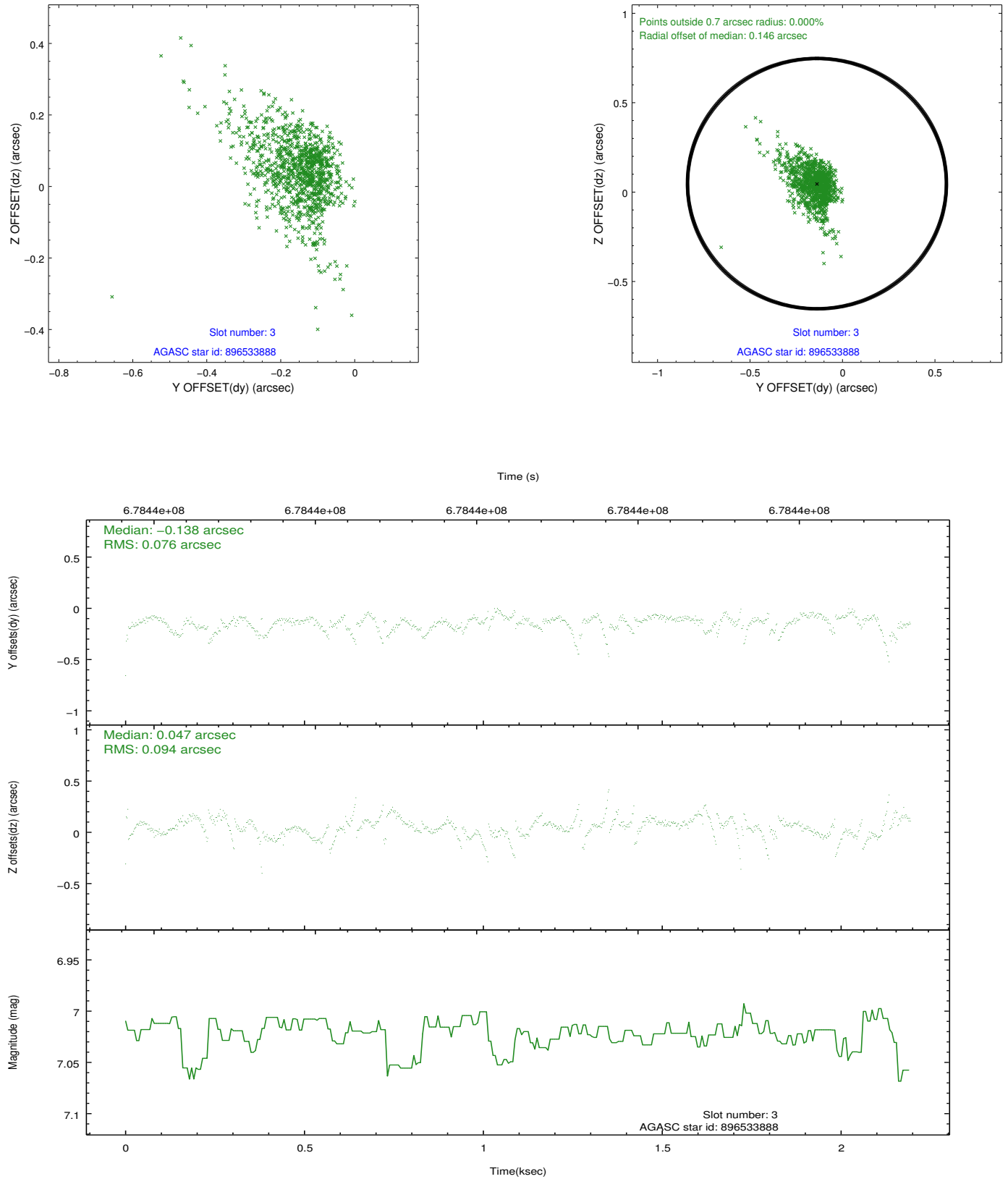
Slot Statistics

pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.18	536	1.000	0.133	-0.127	0.007	0.011	0.000000	0.000000	919.32	-845
1	FID		ACIS-I-5	7.16	536	1.000	-0.625	0.003	0.007	0.012	0.000000	0.000000	-1828.12	1050
2	FID		ACIS-I-6	7.18	536	1.000	0.400	0.195	0.007	0.014	0.000000	0.000000	381.61	1698
3	GUIDE	used	896533888	7.02	1070	1.000	-0.138	0.047	0.113	0.223	266.666434	-29.392757	-1814.33	2220
4	GUIDE	used	896537776	7.51	1071	1.000	-0.039	-0.000	0.102	0.186	266.655684	-29.665673	-957.32	1744
5	GUIDE	used	896541360	7.71	1071	1.000	0.067	0.028	0.097	0.179	266.684478	-29.453744	-1594.08	2172
6	GUIDE	used	966924920	8.08	1070	1.000	0.385	0.491	0.112	0.191	265.875401	-30.176961	-420.34	-1260
7	GUIDE	used	966926496	8.09	1069	1.000	-0.252	-0.548	0.099	0.156	267.109389	-30.299474	1720.06	1950

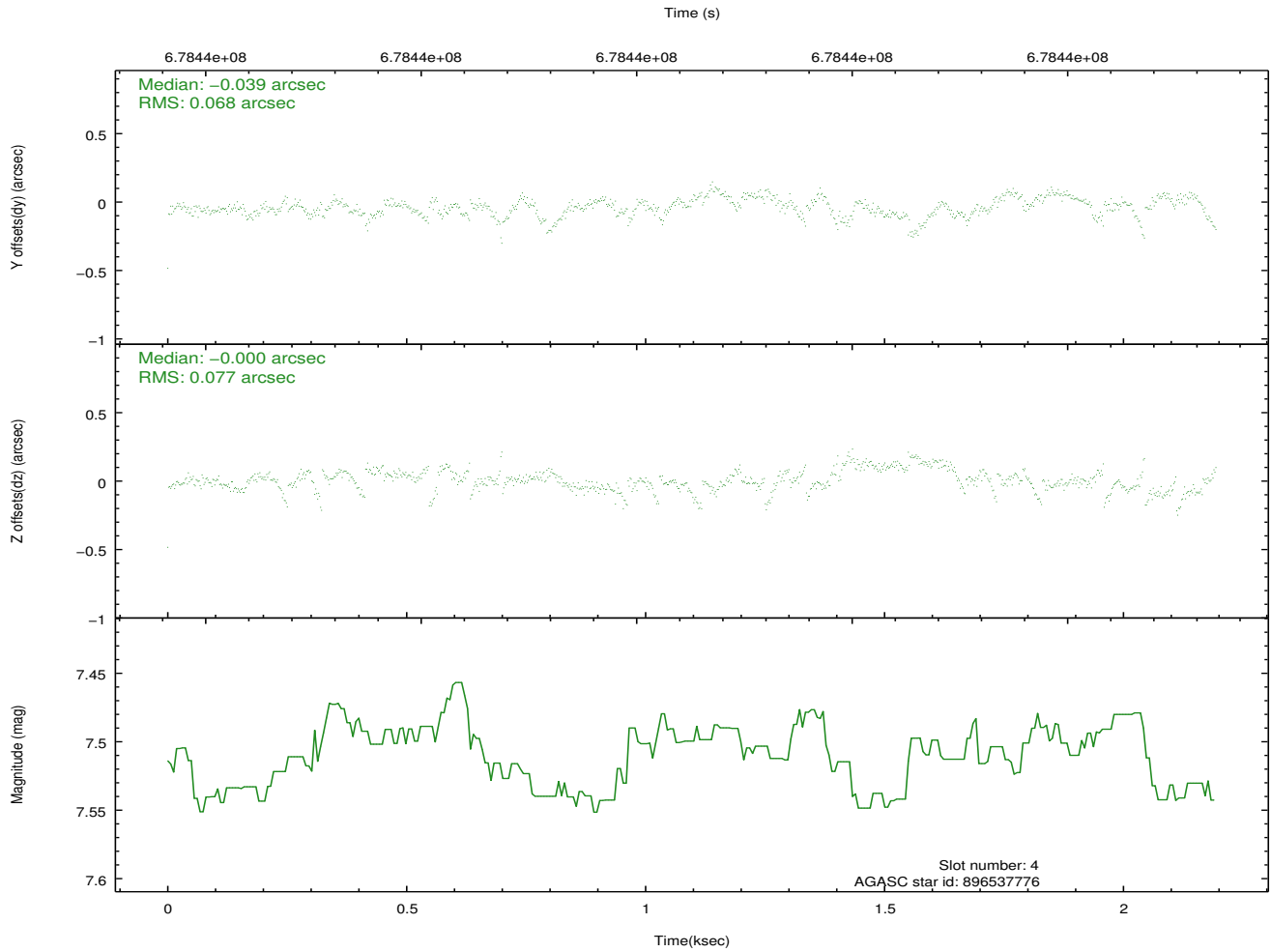
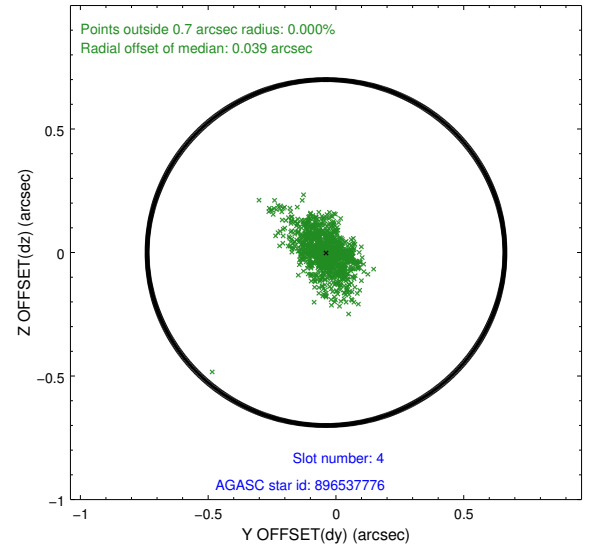
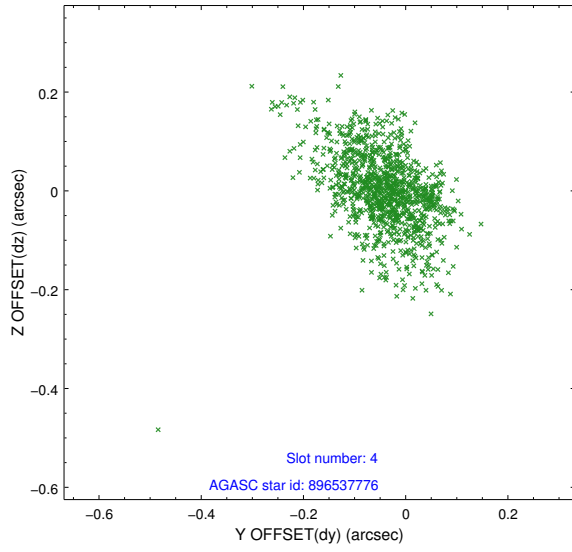


## 2.4 Star Slots

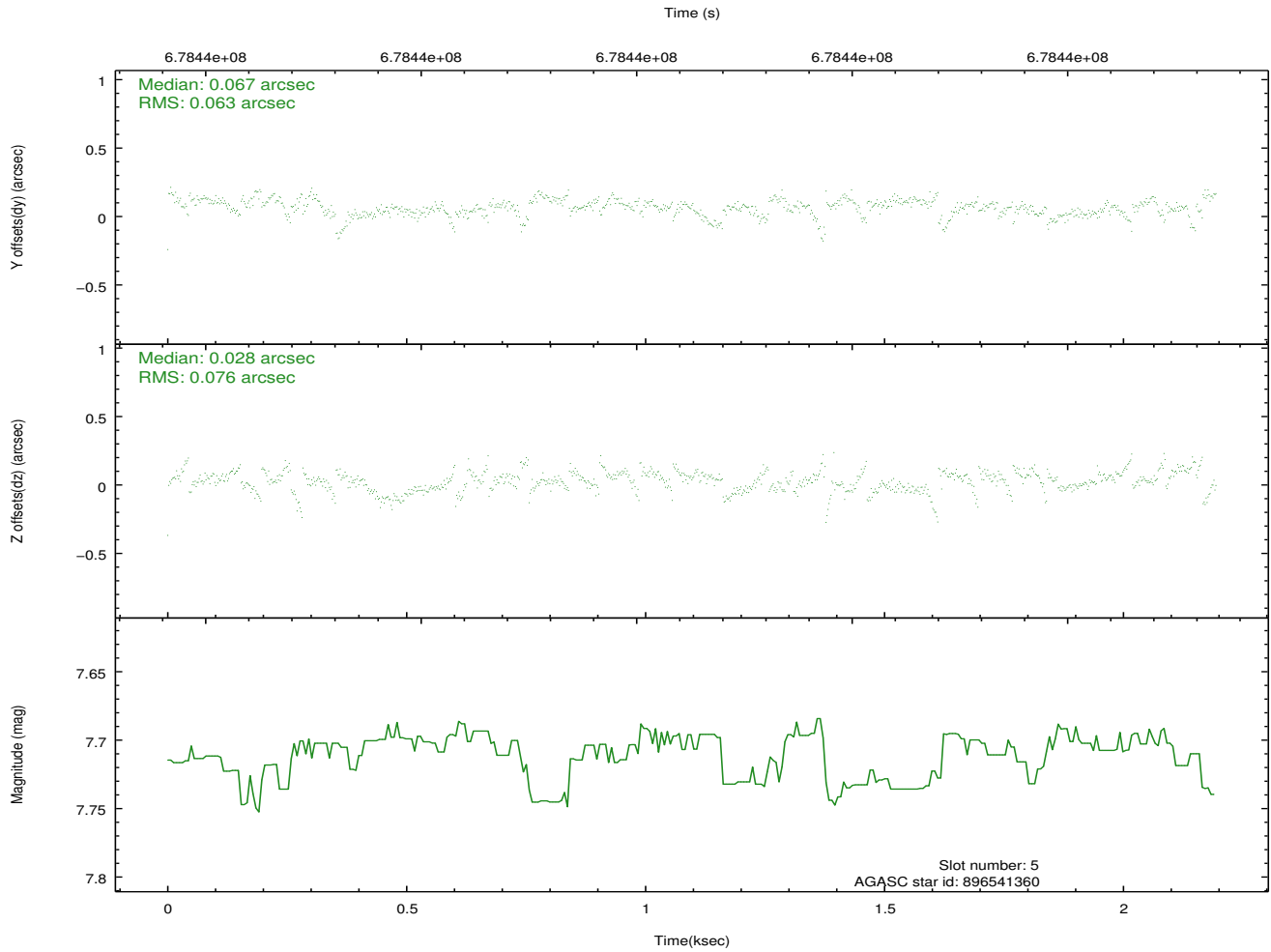
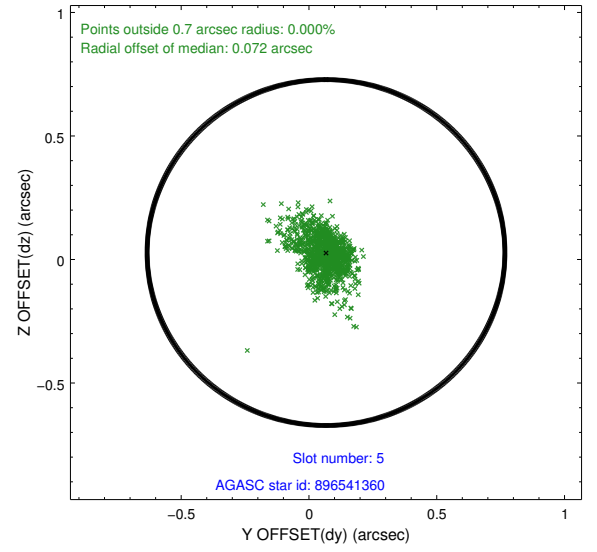
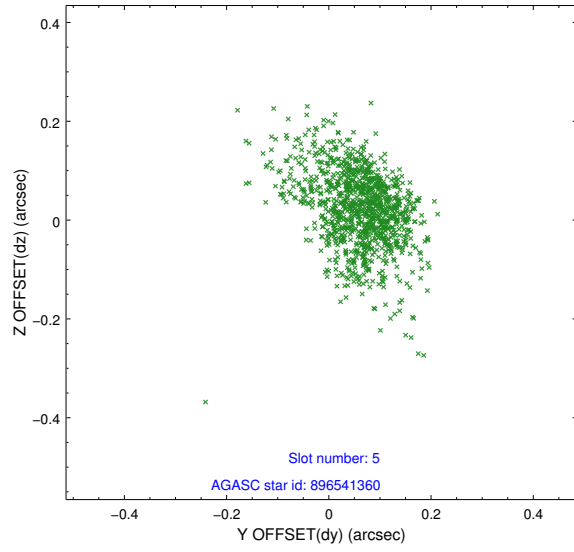
### 2.4.1 Slot 3



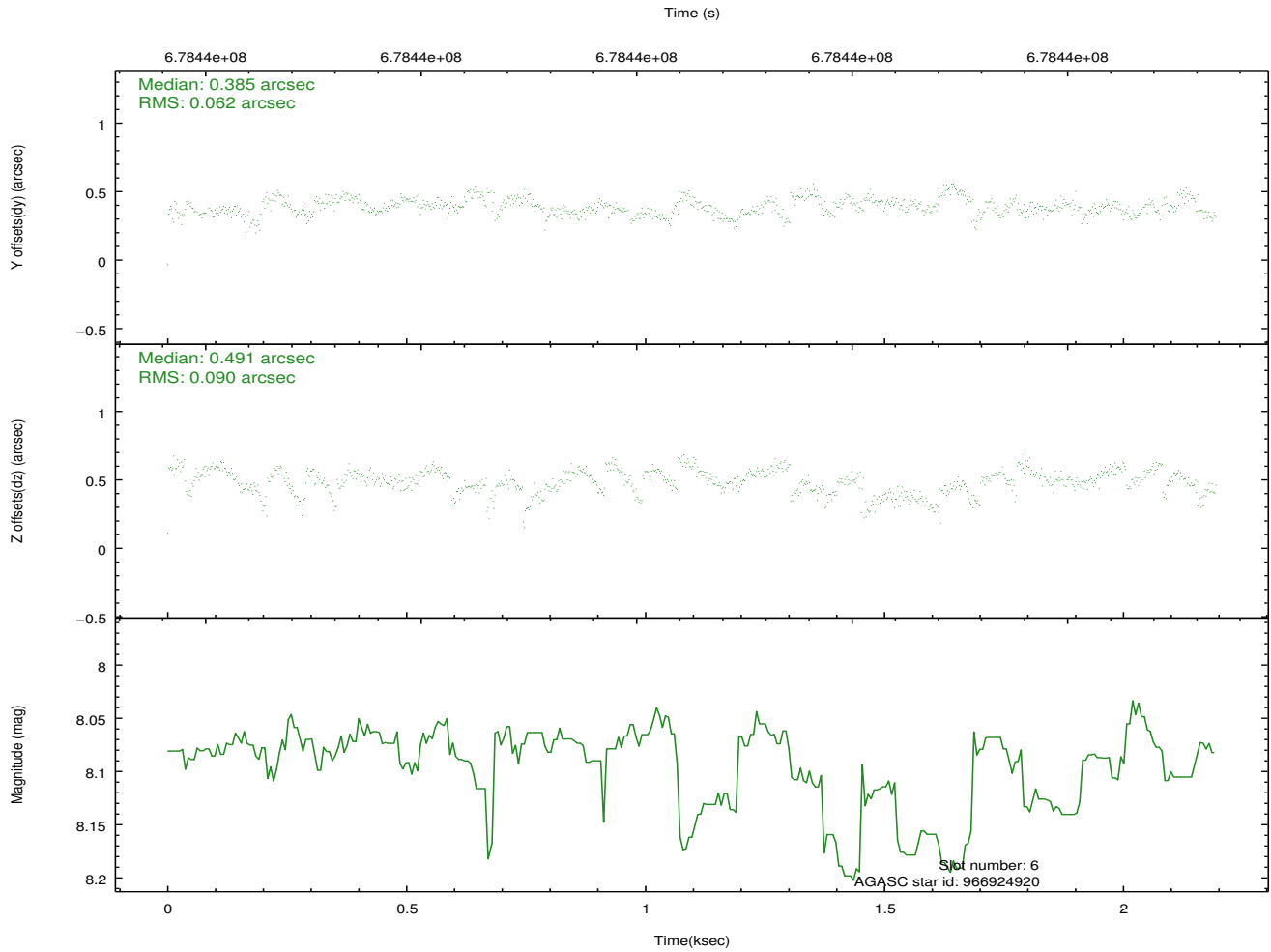
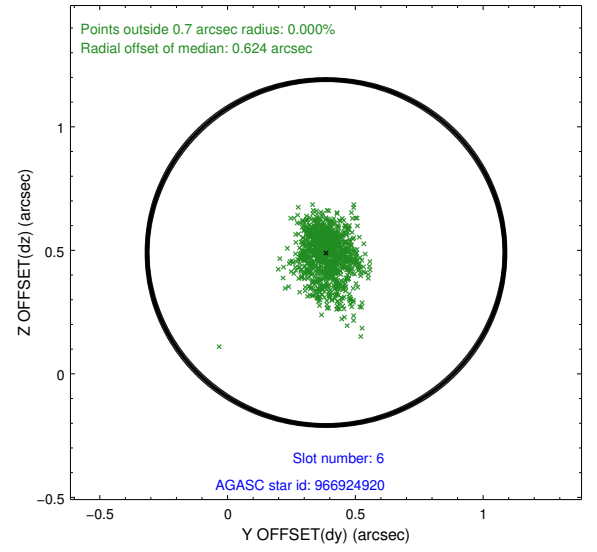
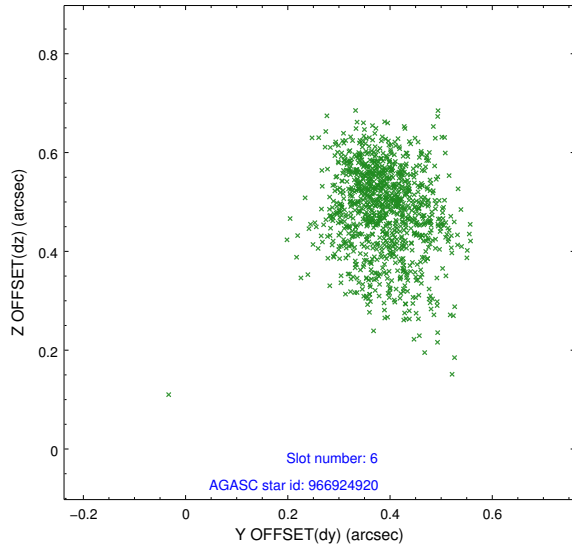
## 2.4.2 Slot 4



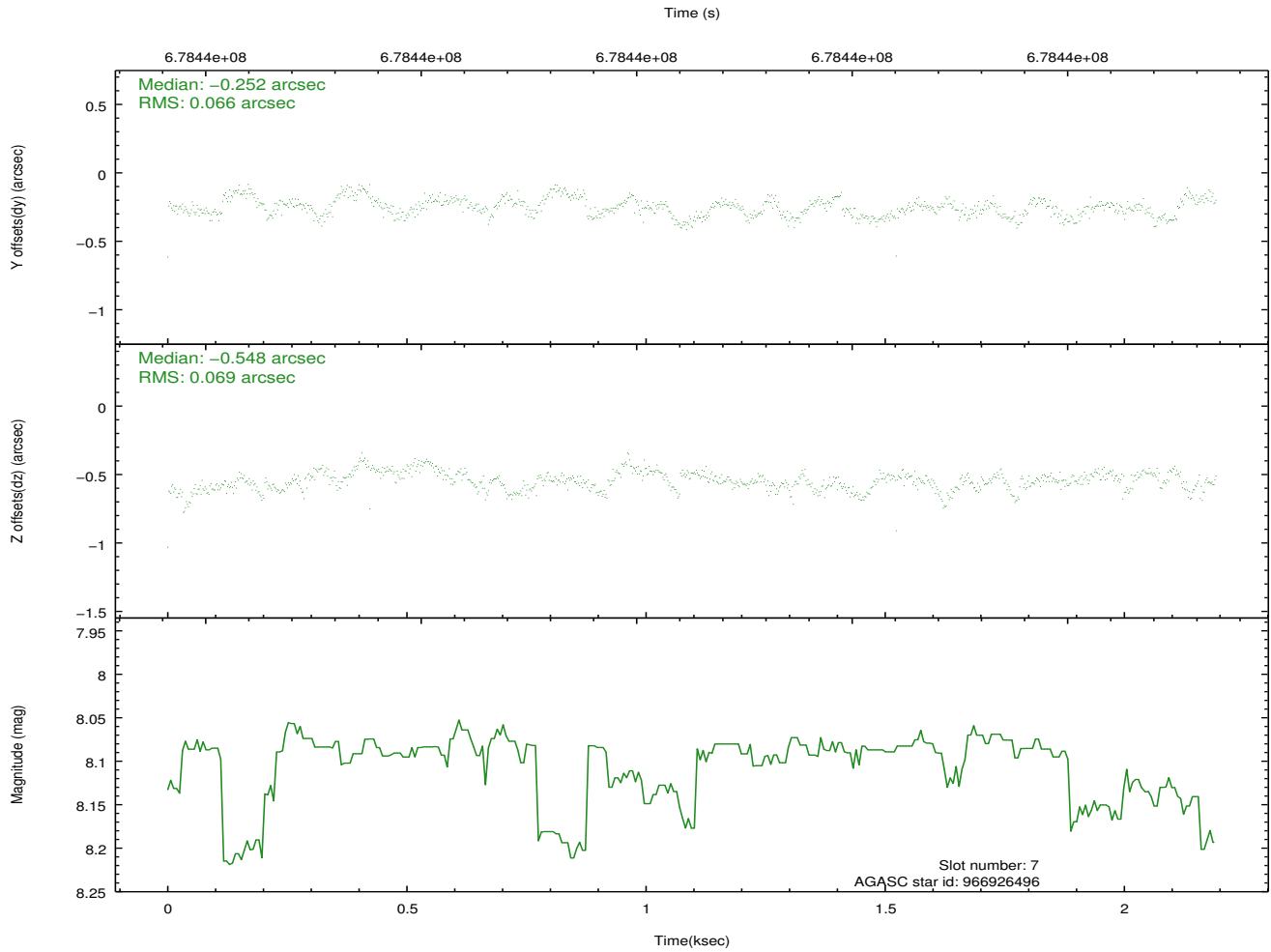
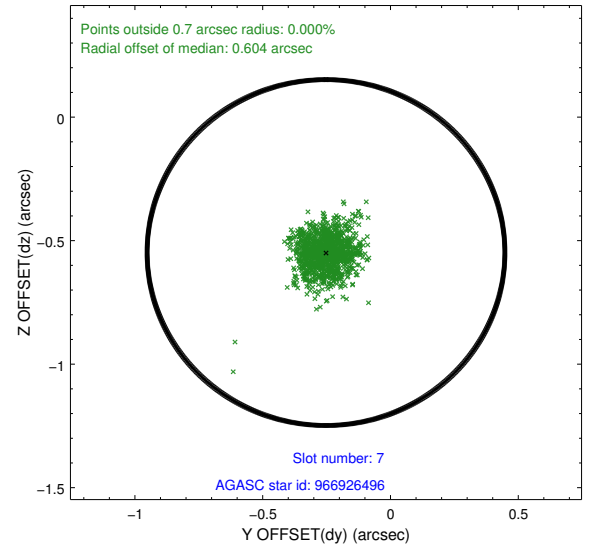
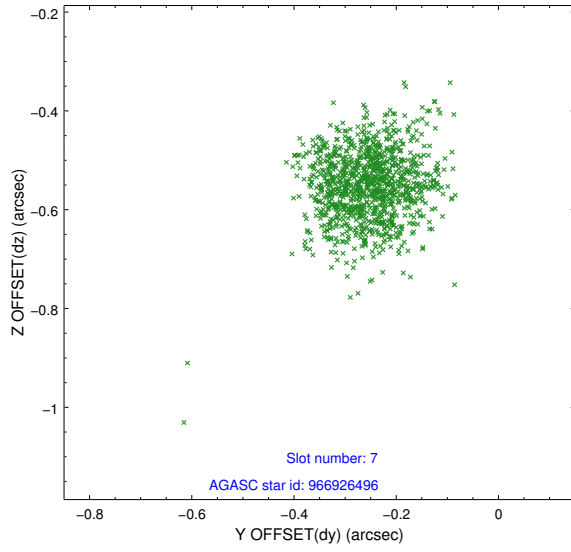
### 2.4.3 Slot 5



## 2.4.4 Slot 6

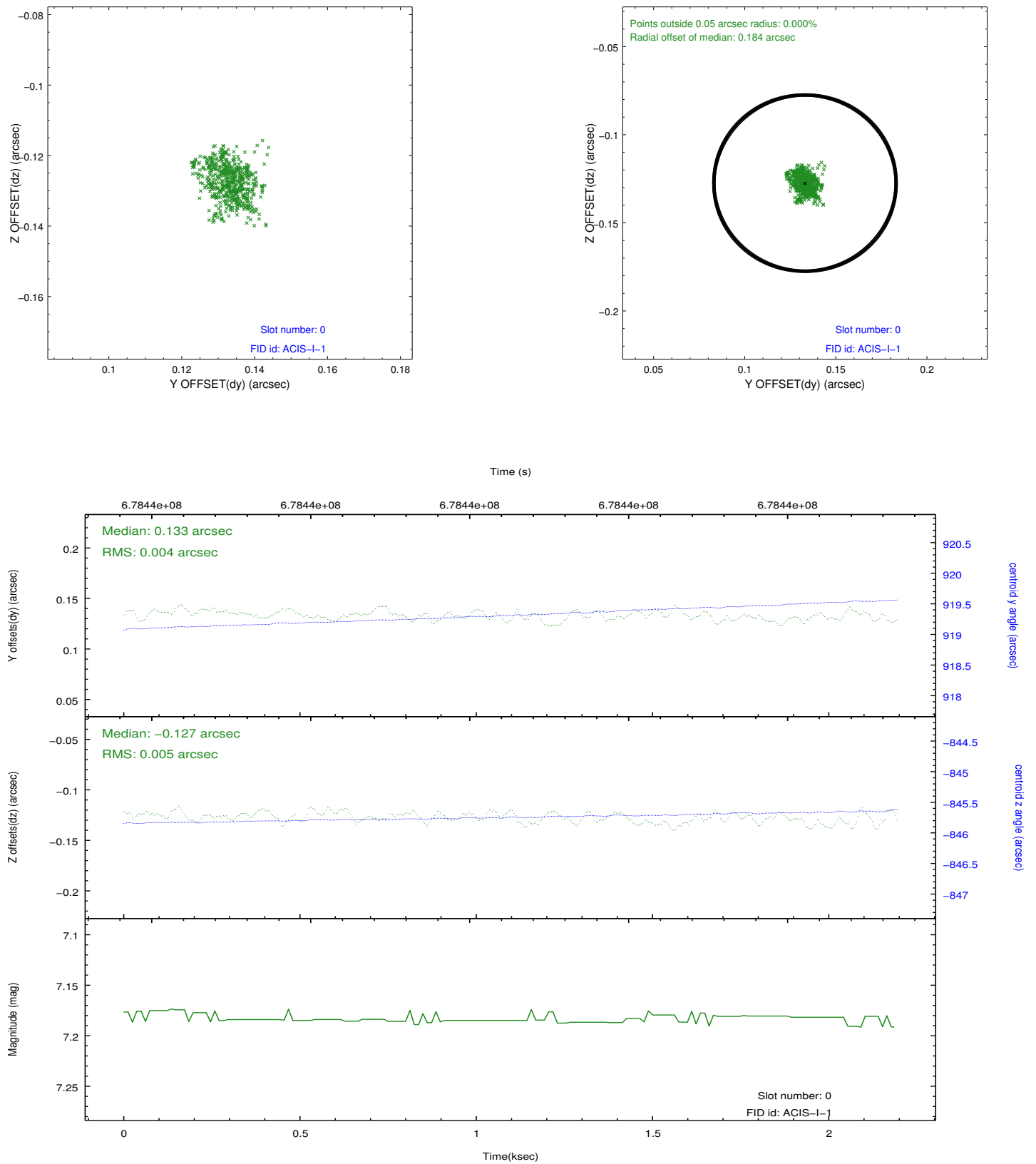


## 2.4.5 Slot 7

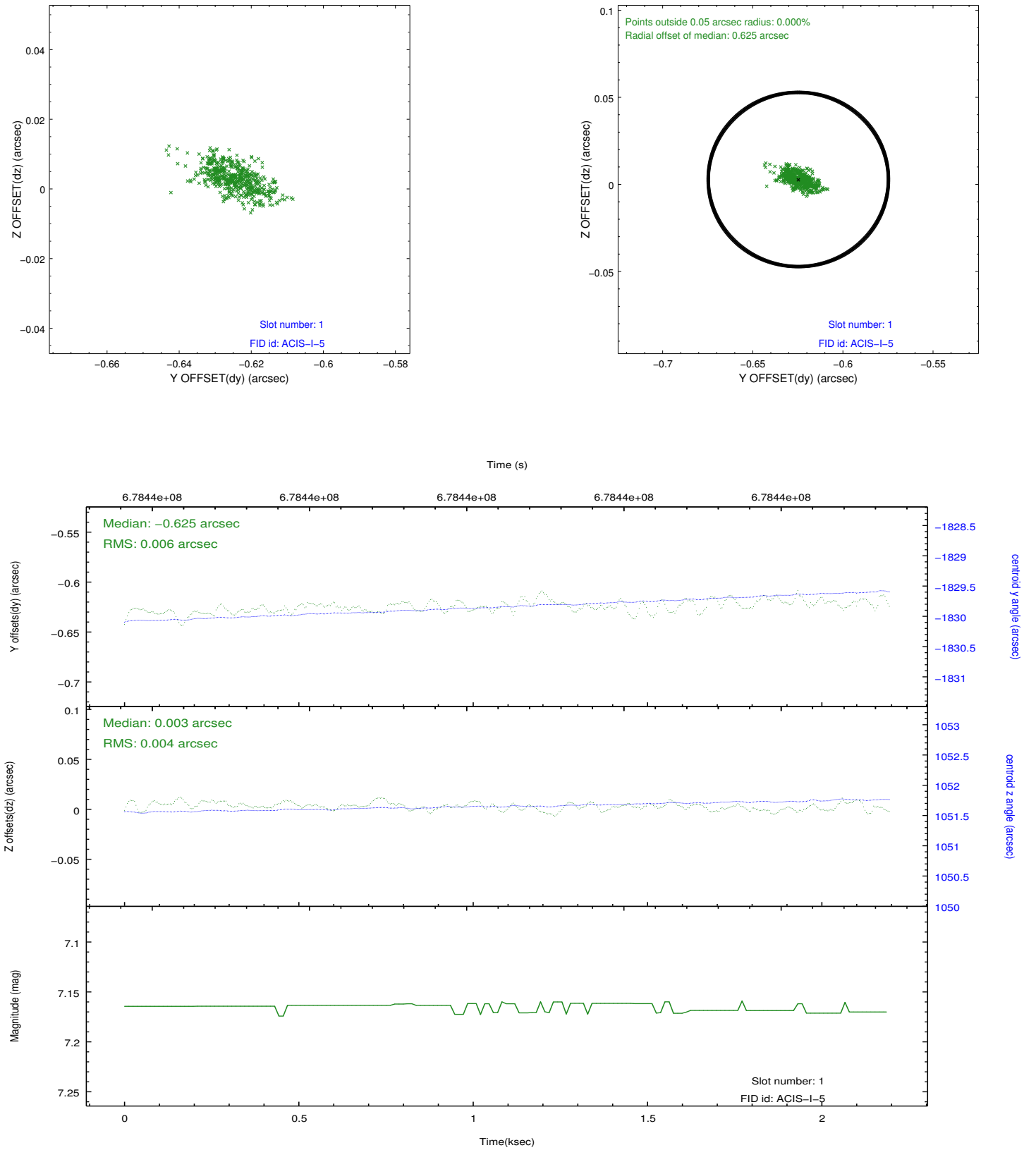


## 2.5 FID Slots

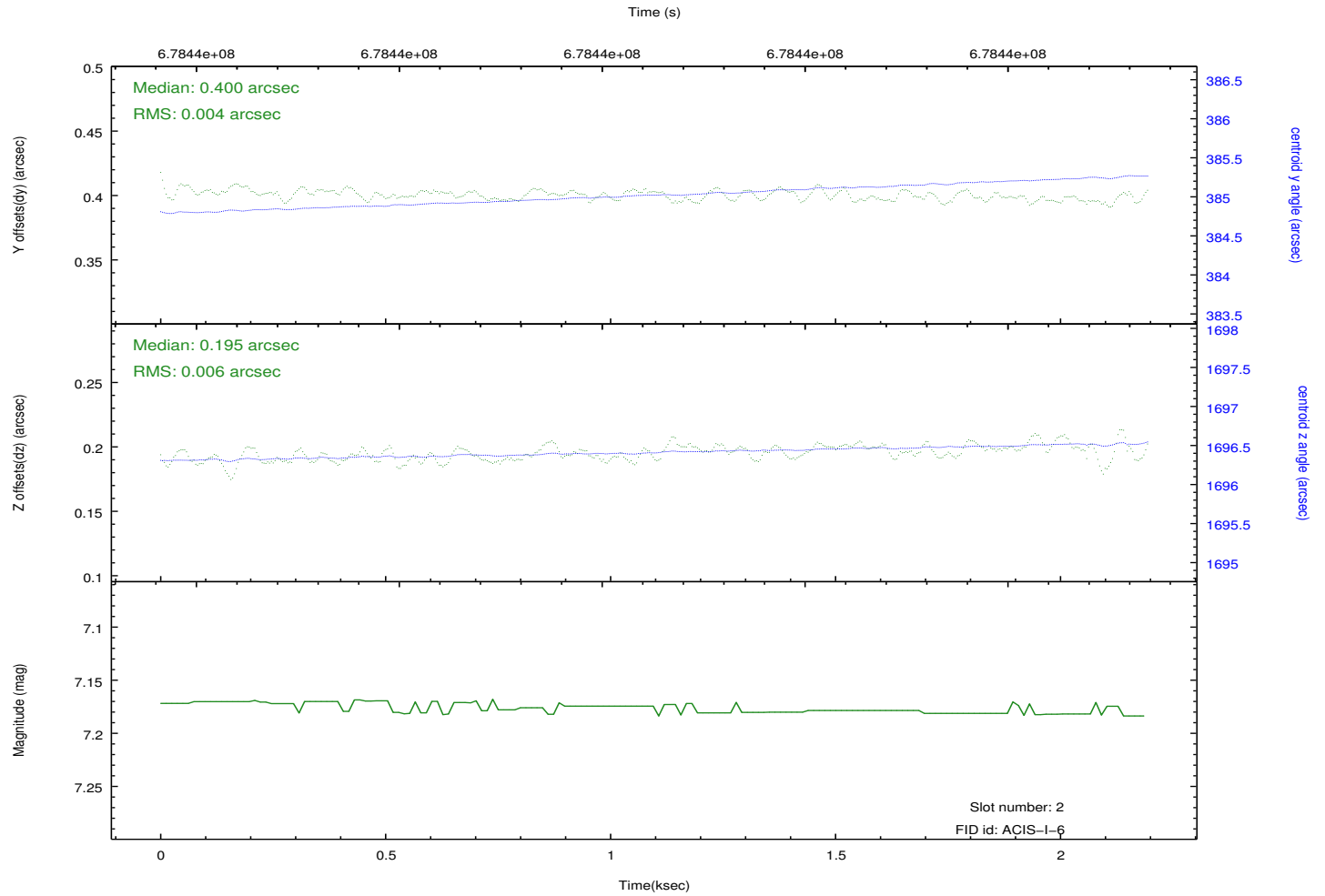
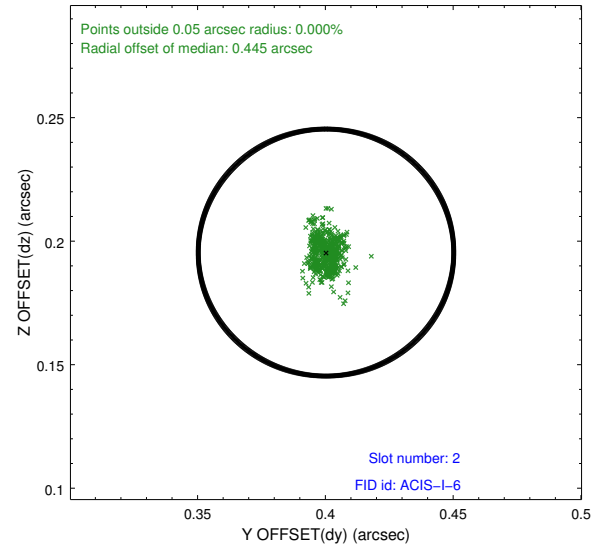
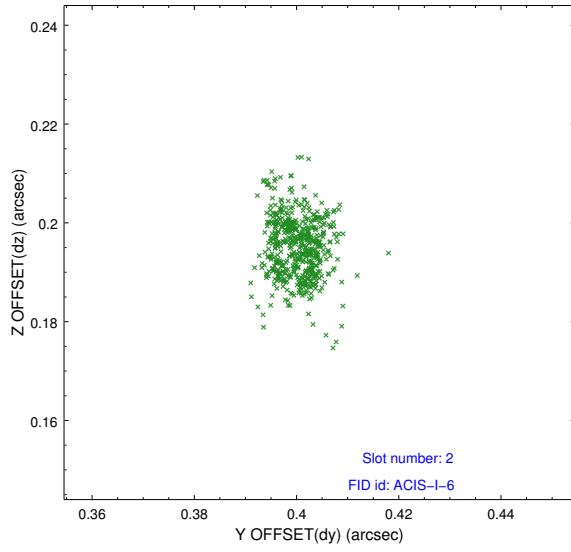
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2





## **A Summary**

### **A.1 Status**

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2019.07.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.906500014782

### **A.2 Comments**