

# V&V Reference Report

## L2 ASCDS Version : 10.8

Observation 21591 - L2 Version 1  
Chandra X-Ray Center

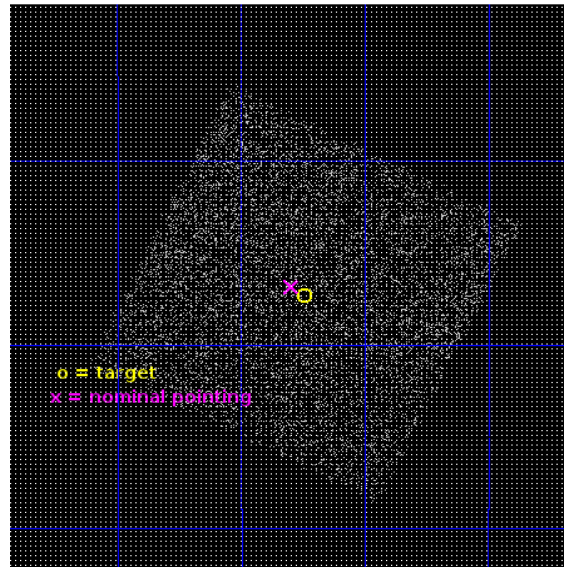
L2 Processing Date : Jul 3 2019

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# 1 Front

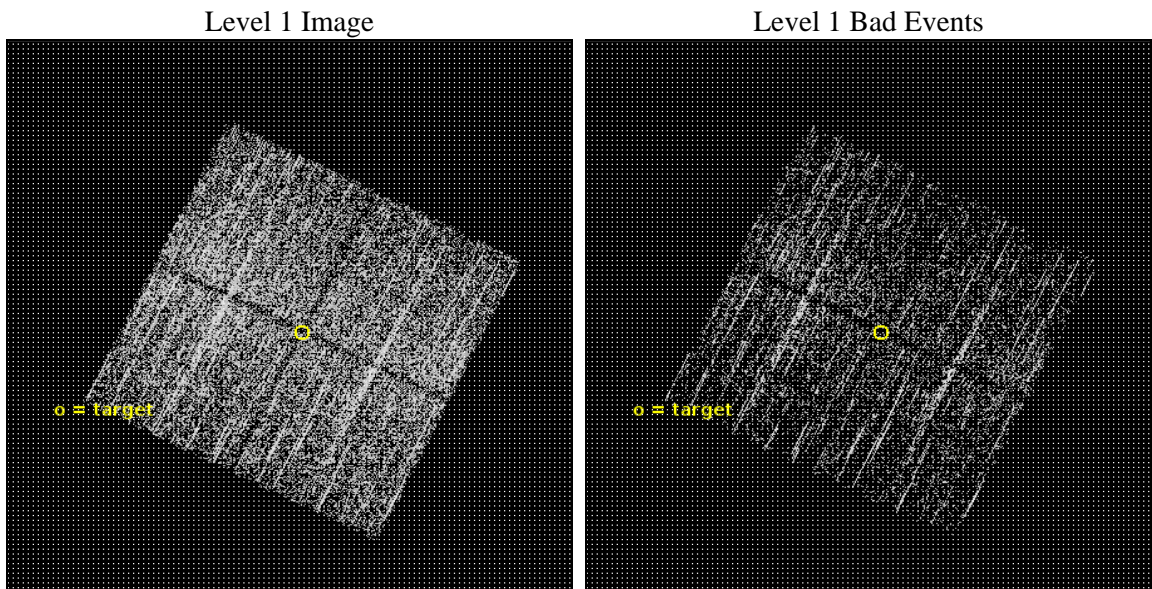
seq_num	300423	Sequence number
obs_id	21591	Observation id
title	Chandra Mapping of the Galactic Central Region	Proposal title
observer	Daniel Wang	Principal investigator
object	GCR Gap 2	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	266.68578	Observer's specified target RA [deg]
dec_targ	-30.288966	Observer's specified target Dec [deg]
ra_nom	266.69926391071	Nominal RA [deg]
dec_nom	-30.280823121701	Nominal Dec [deg]
roll_nom	296.21527225663	Nominal Roll [deg]
revision	1	Processing version of data
ontime	2080.1000161171	Sum of GTIs [s]
livetime	2052.9219780592	Livetime [s]
ontime0	2080.1000161171	Sum of GTIs [s]
ontime1	2080.1000161171	Sum of GTIs [s]
ontime2	2080.1000161171	Sum of GTIs [s]
ontime3	2080.1000161171	Sum of GTIs [s]
l2events	7150	Number of level 2 events



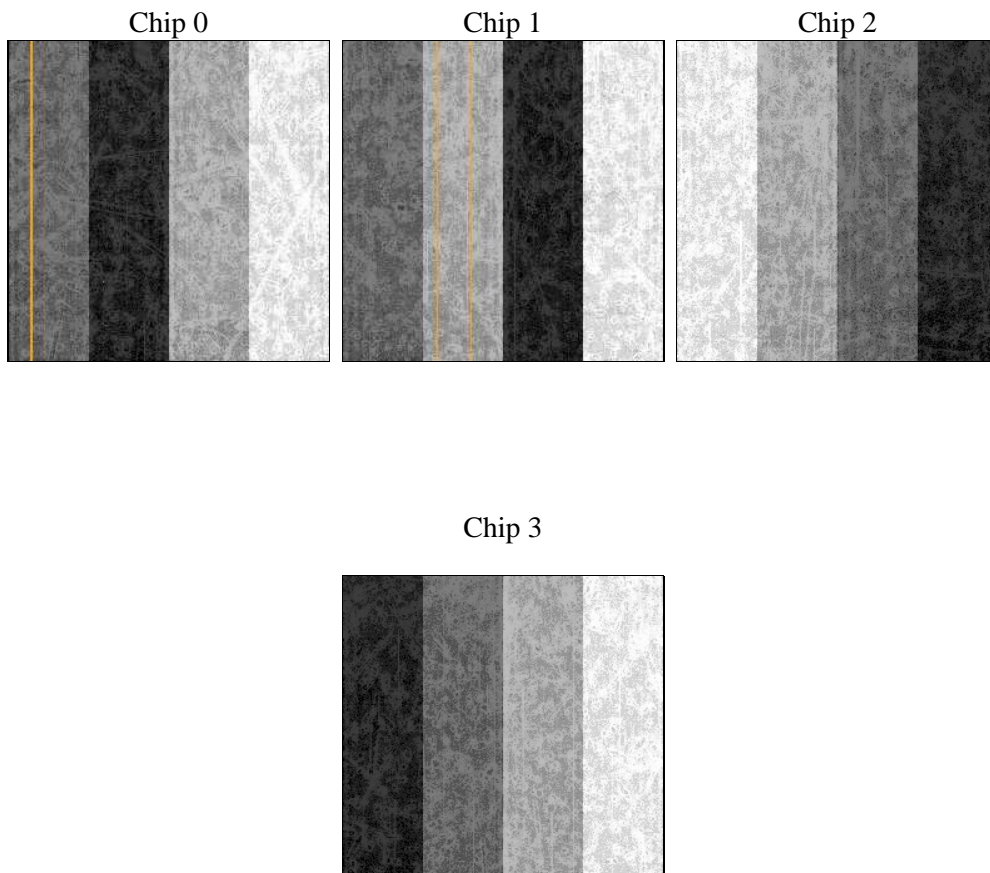
## 2 OBI

### 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	2080.1000161171	Sum of GTIs [s]
caldsver	4.8.3.1	&#160	ontime0	2080.1000161171	Sum of GTIs [s]
date	2019-07-03T20:54:01	Date and time of file creation	ontime1	2080.1000161171	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	2080.1000161171	Sum of GTIs [s]
			ontime3	2080.1000161171	Sum of GTIs [s]
			l1events	61483	Number of level 1 events

### 2.1.4 Events

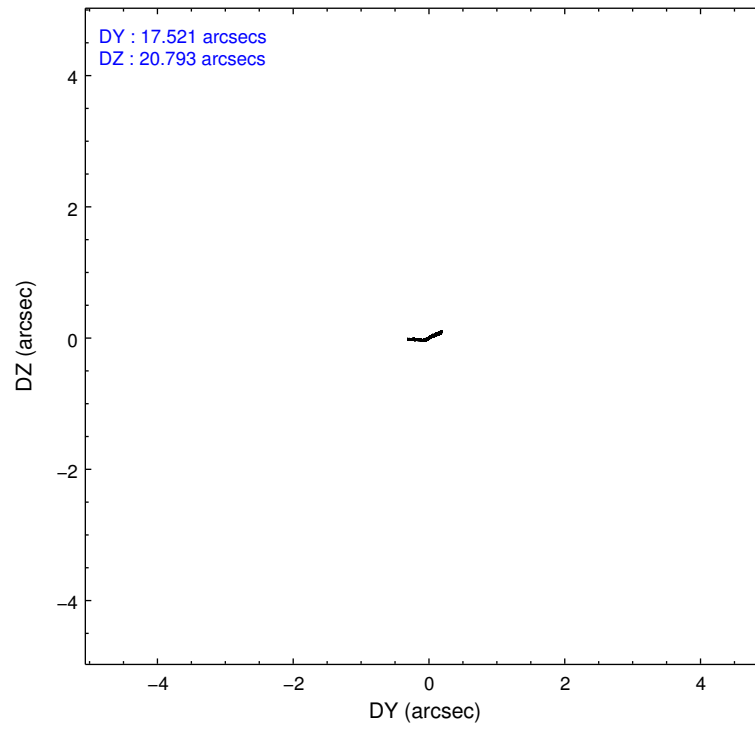
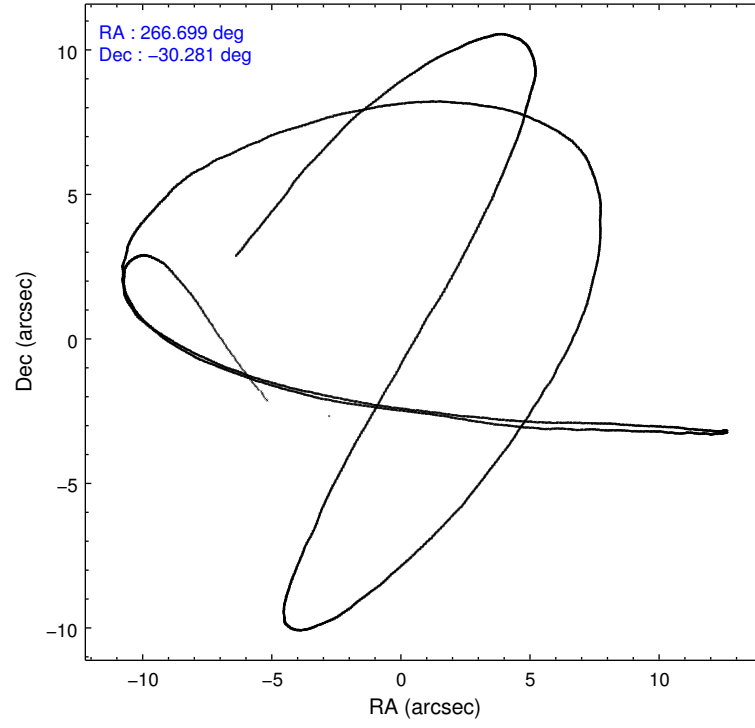
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	14789	14638	16187	15869
rejected events	12840	12455	14118	13667
rejected %	86%	85%	87%	86%

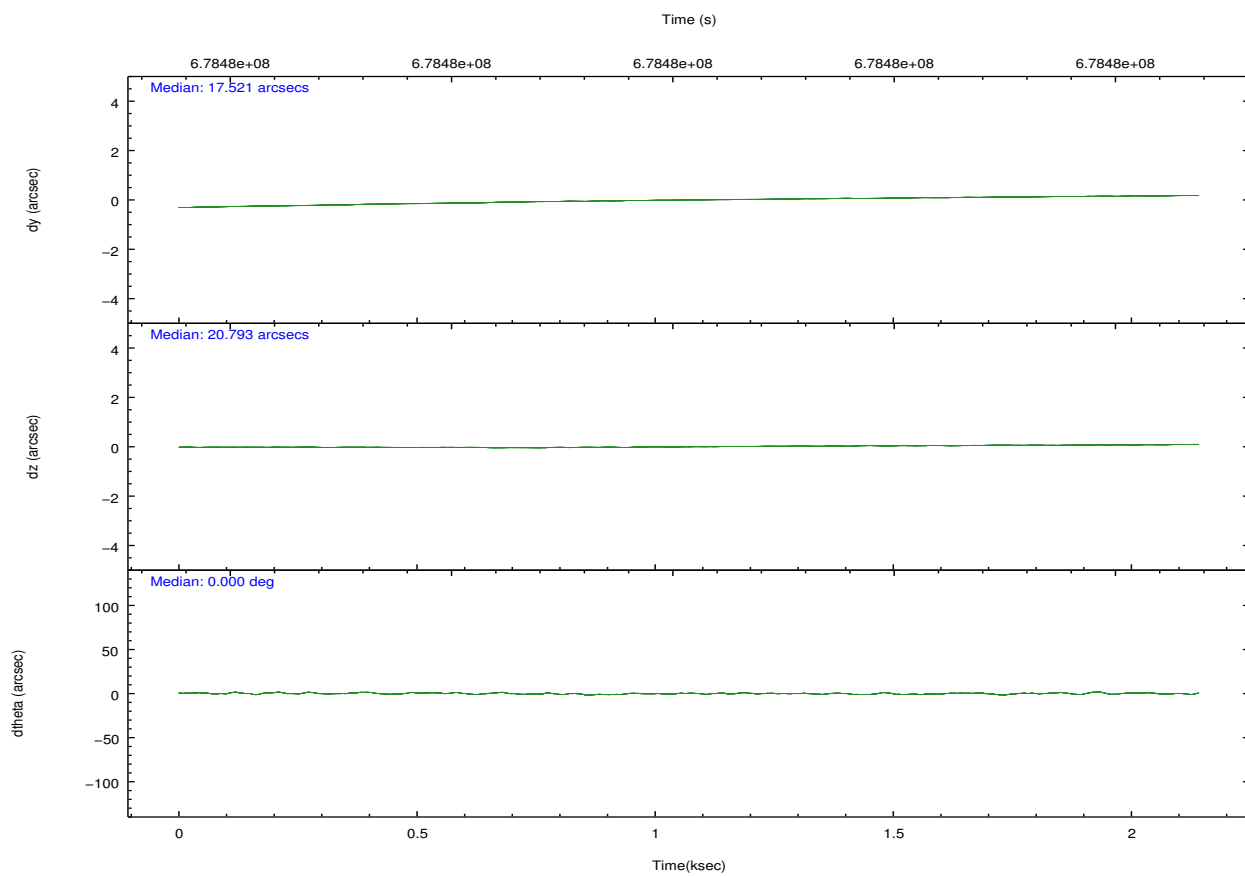
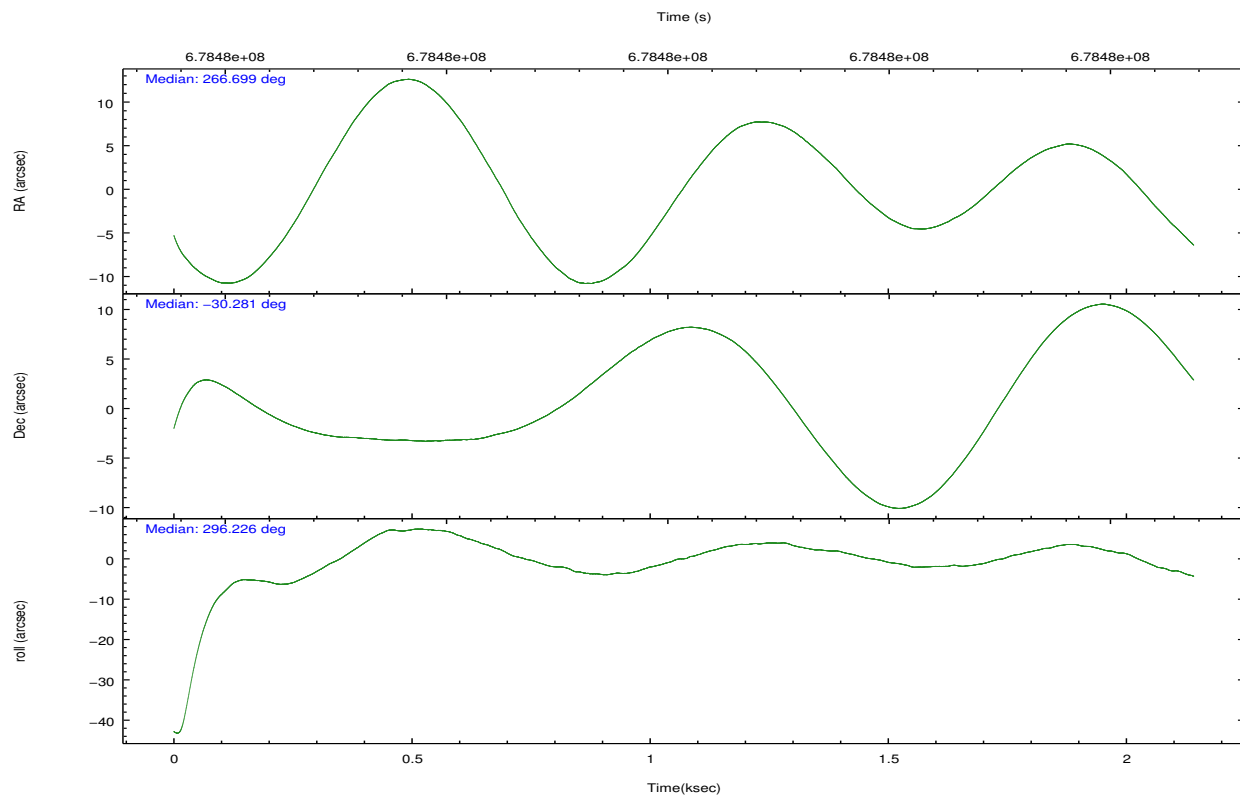
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	717	819	817	1052
	4%	5%	5%	6%
grade 1 events	7	13	11	14
	0%	0%	0%	0%
grade 2 events	464	581	490	392
	3%	3%	3%	2%
grade 3 events	193	197	192	195
	1%	1%	1%	1%
grade 4 events	166	180	184	189
	1%	1%	1%	1%
grade 5 events	750	720	720	851
	5%	4%	4%	5%
grade 6 events	414	410	387	378
	2%	2%	2%	2%
grade 7 events	12078	11718	13386	12798
	81%	80%	82%	80%

## 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	266.672661	266.6992639107119	Subarray requested	NONE	NONE
[deg] Pointing Dec	-30.265647	-30.28082312170096	Alternating exposures requested	N	N
[deg] Pointing Roll	295.993391	296.2152722566294	[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)	678480606.184000	678479517.8572299			
Observation start date	2019-07-02T18:48:57	2019-07-02T18:31:57			
[s] Observation end time (MET)	678482606.184000	678482782.48242			
Observation end date	2019-07-02T19:22:17	2019-07-02T19:26:22			
Read mode	TIMED	TIMED			

## 2.3 Aspect





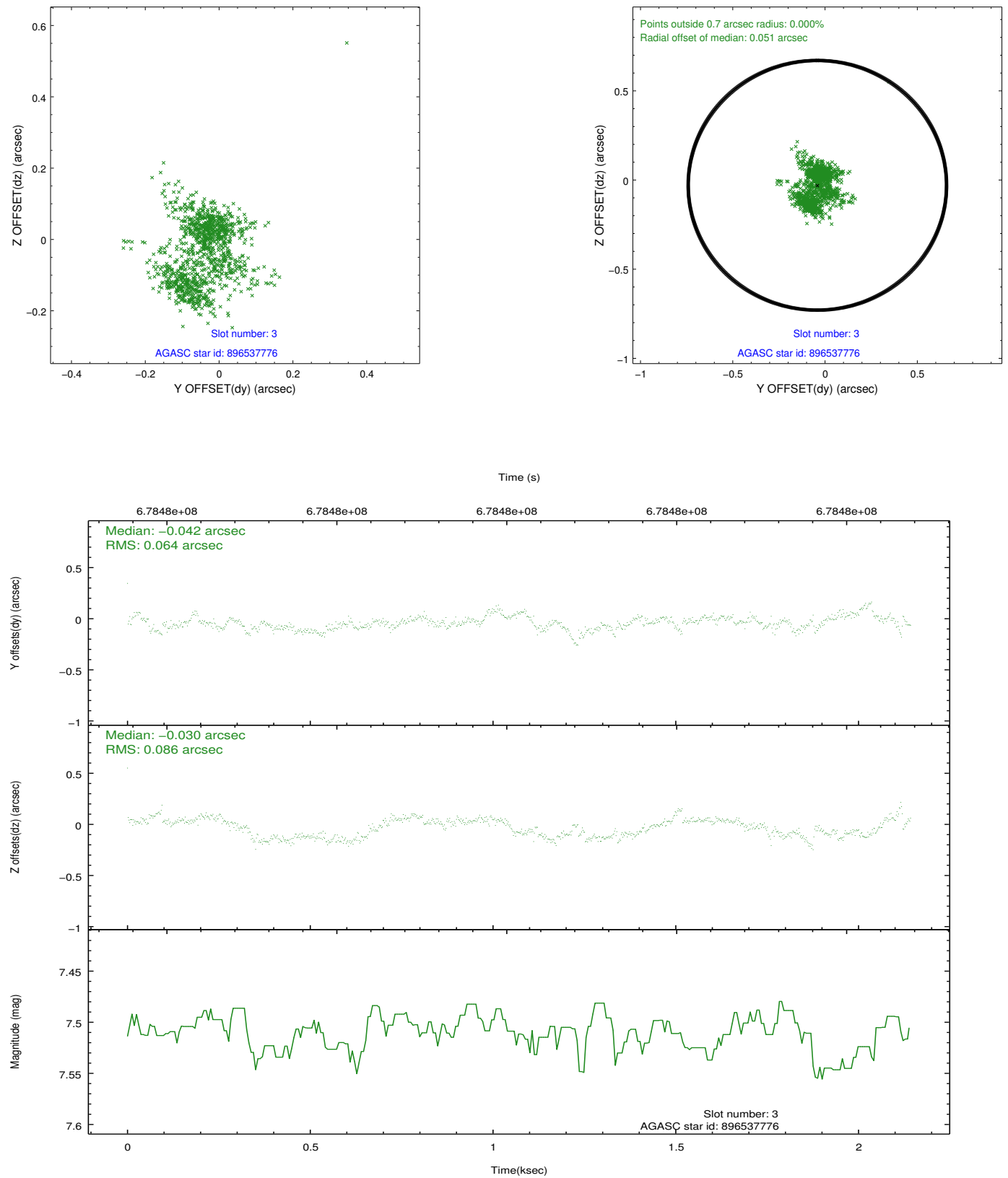
Slot Statistics

pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-3	7.42	523	1.000	-0.346	-0.120	0.008	0.013	0.000000	0.000000	38.92	-977
1	FID		ACIS-I-4	7.09	523	1.000	0.419	0.309	0.009	0.014	0.000000	0.000000	2142.39	1053
2	FID		ACIS-I-6	7.16	523	1.000	-0.170	-0.125	0.009	0.016	0.000000	0.000000	391.60	1699
3	GUIDE	used	896537776	7.51	1046	1.000	-0.042	-0.030	0.116	0.167	266.655684	-29.665673	-1963.70	899
4	GUIDE	used	896541168	8.13	1046	1.000	0.326	0.400	0.109	0.188	266.319970	-29.850801	-1824.11	-334
5	GUIDE	used	966919736	6.91	1046	1.000	-0.442	-0.452	0.107	0.161	267.322278	-30.597445	1961.27	1282
6	GUIDE	used	966924920	8.06	1045	1.000	0.652	0.432	0.103	0.171	265.875401	-30.176961	-1363.31	-2092
7	GUIDE	used	966920512	8.33	1044	1.000	-0.500	-0.357	0.079	0.122	267.231170	-30.494681	1503.55	1191

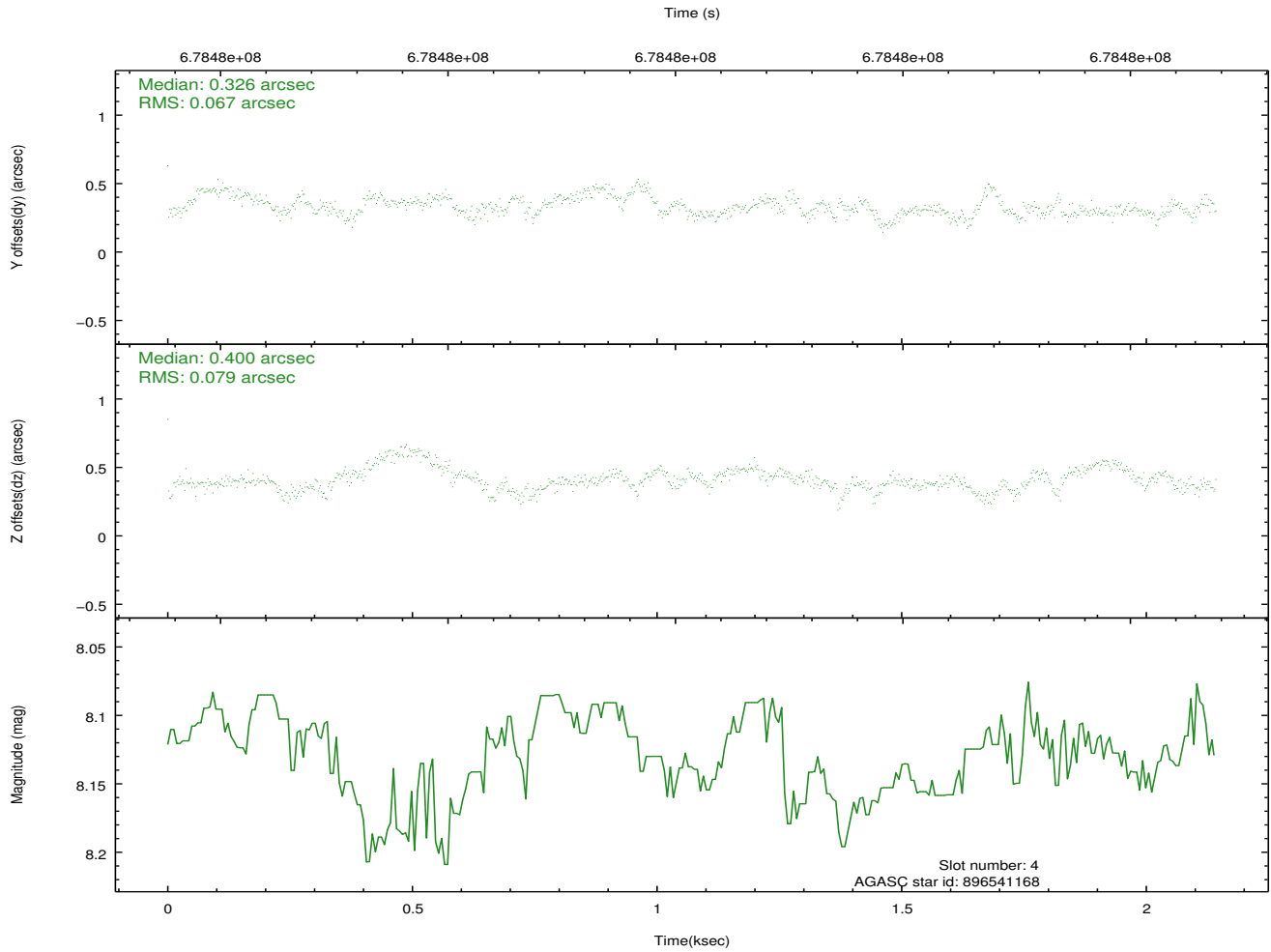
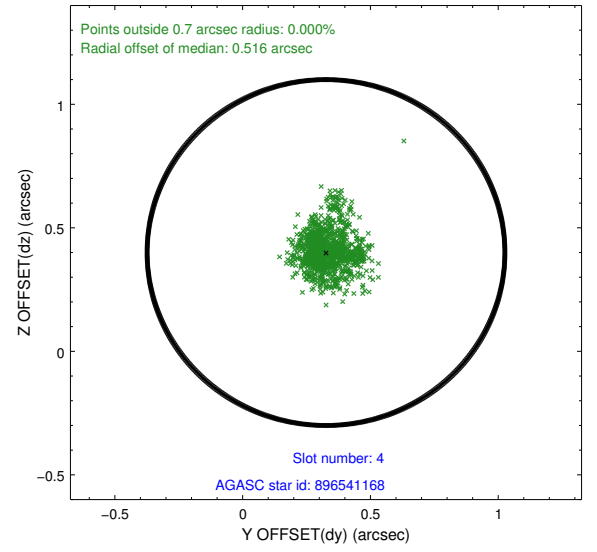
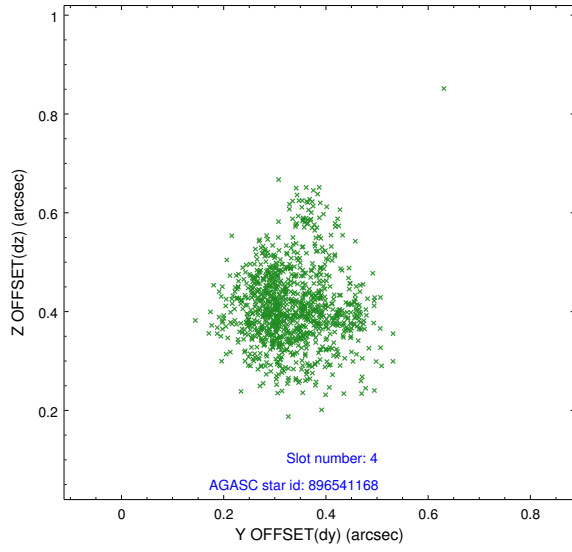


## 2.4 Star Slots

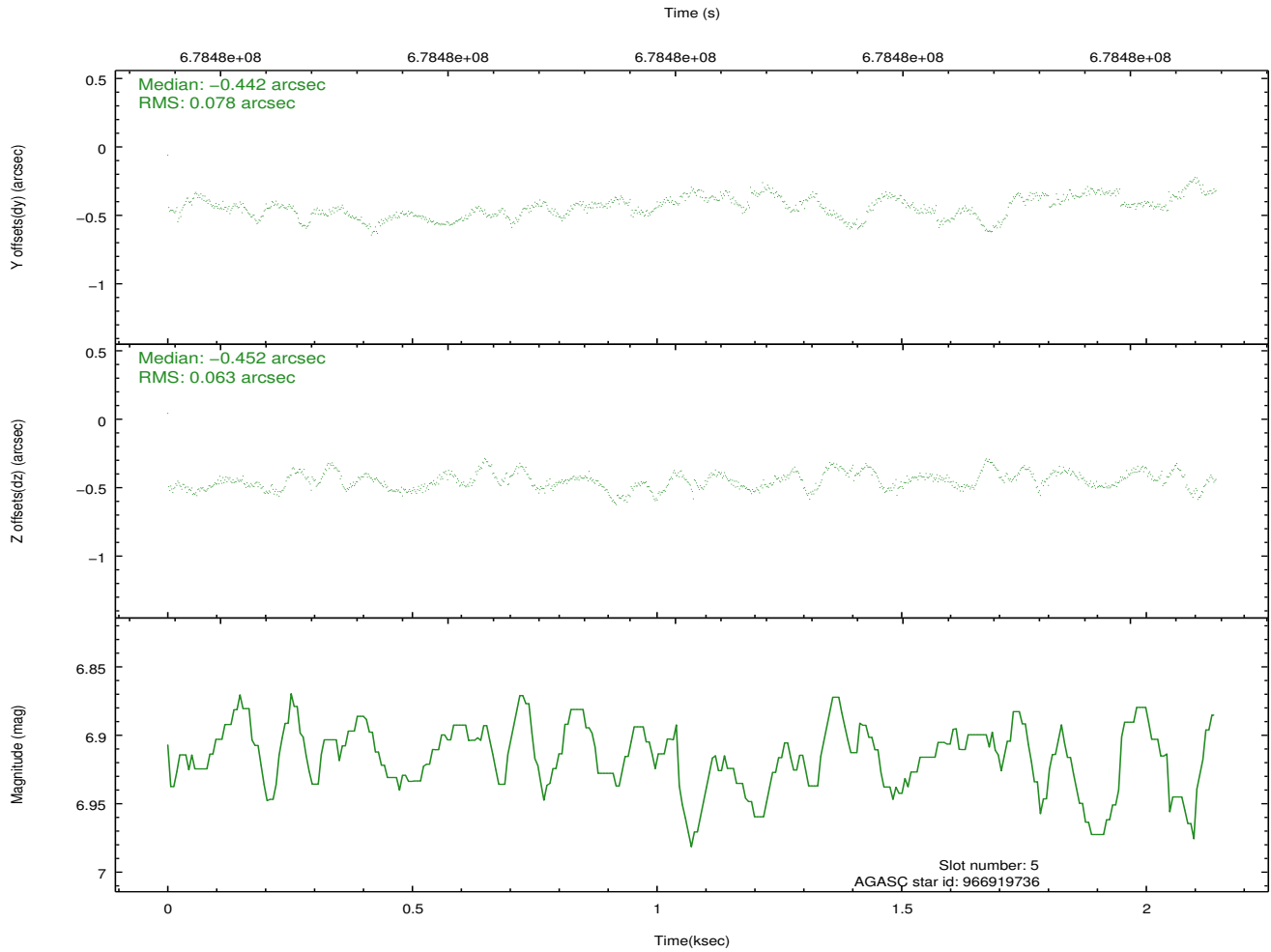
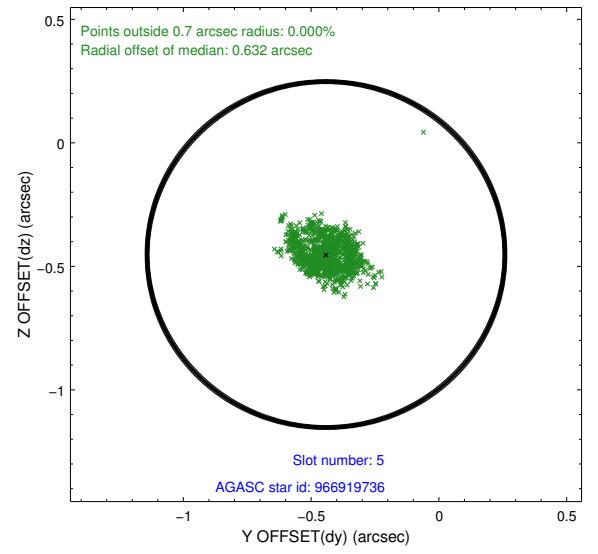
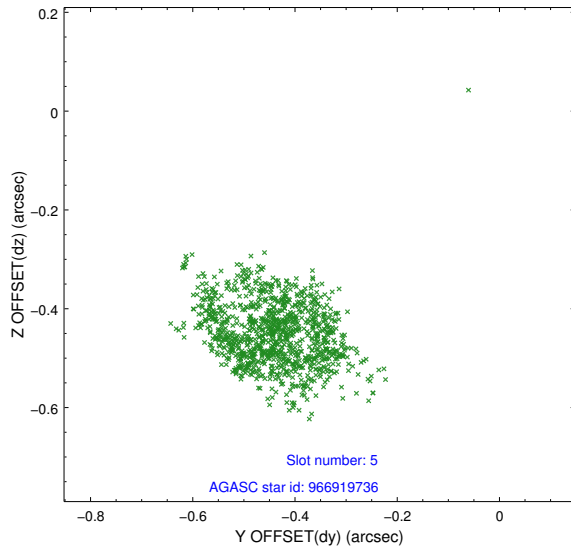
### 2.4.1 Slot 3



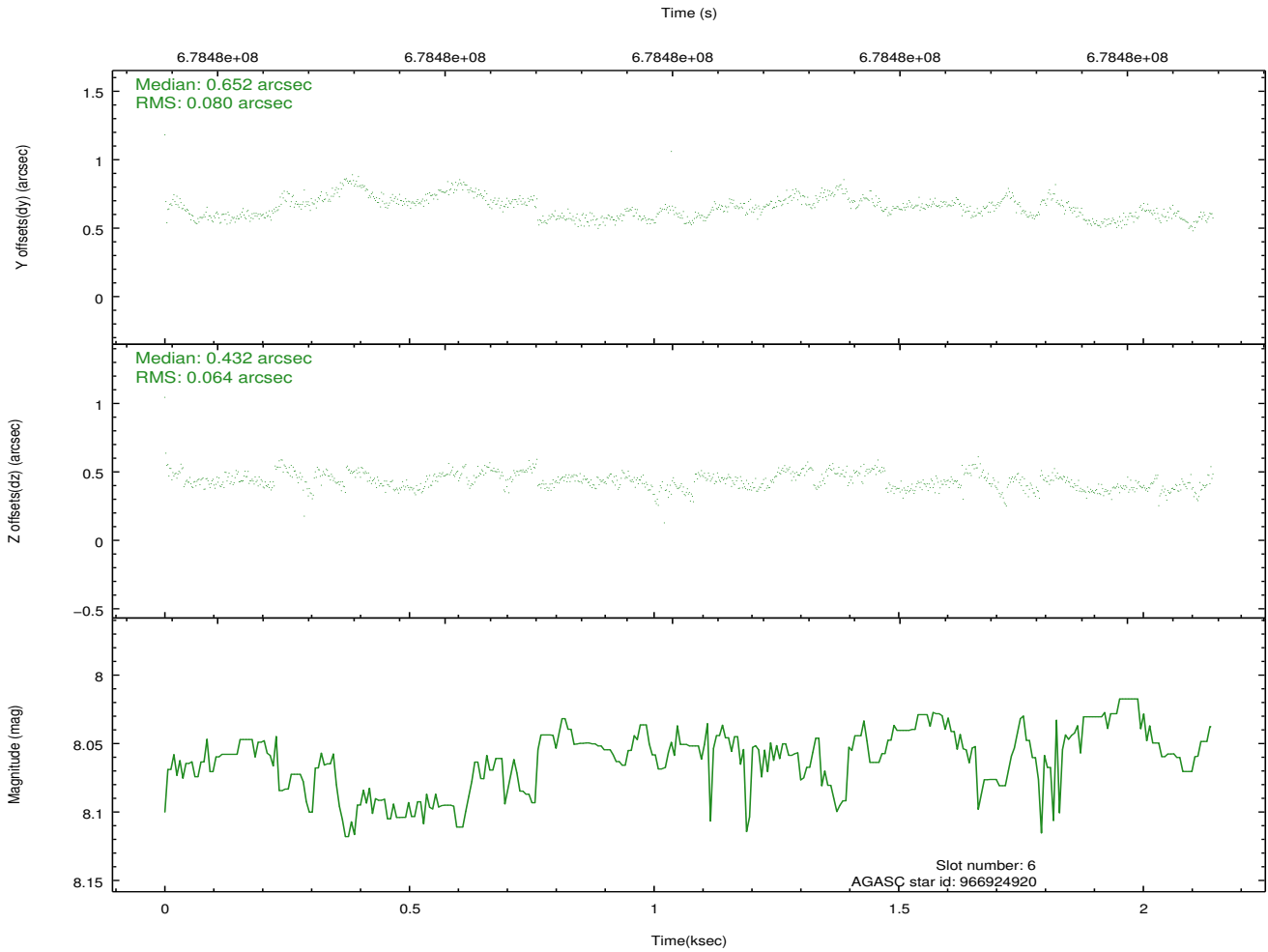
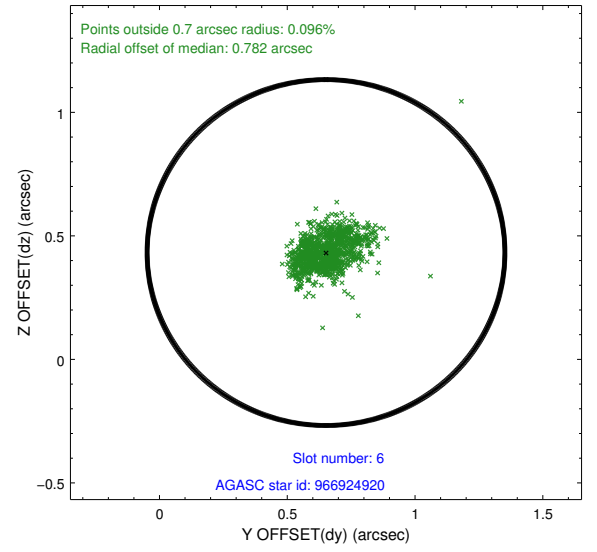
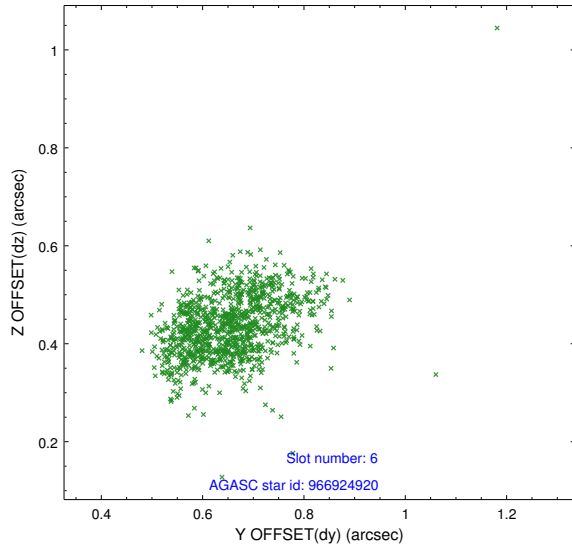
## 2.4.2 Slot 4



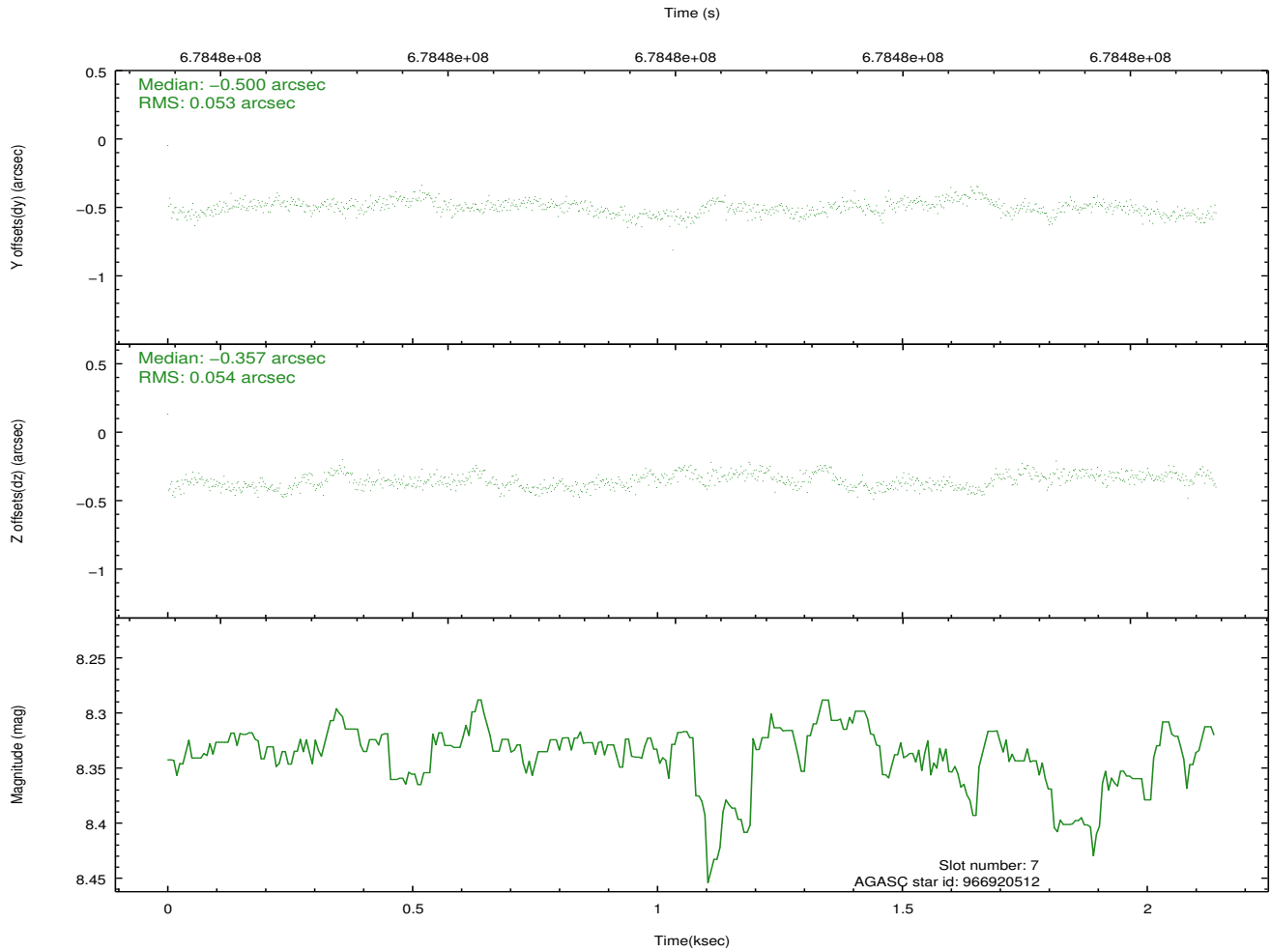
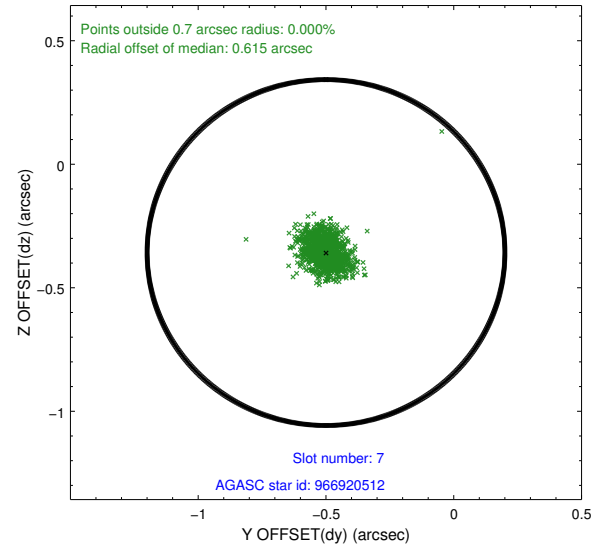
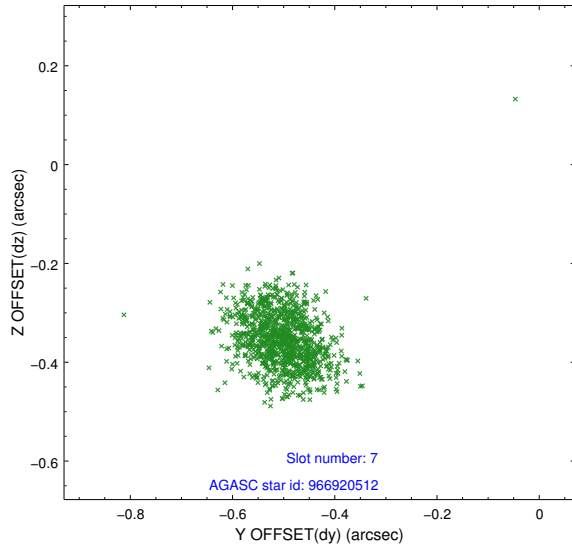
### 2.4.3 Slot 5



## 2.4.4 Slot 6

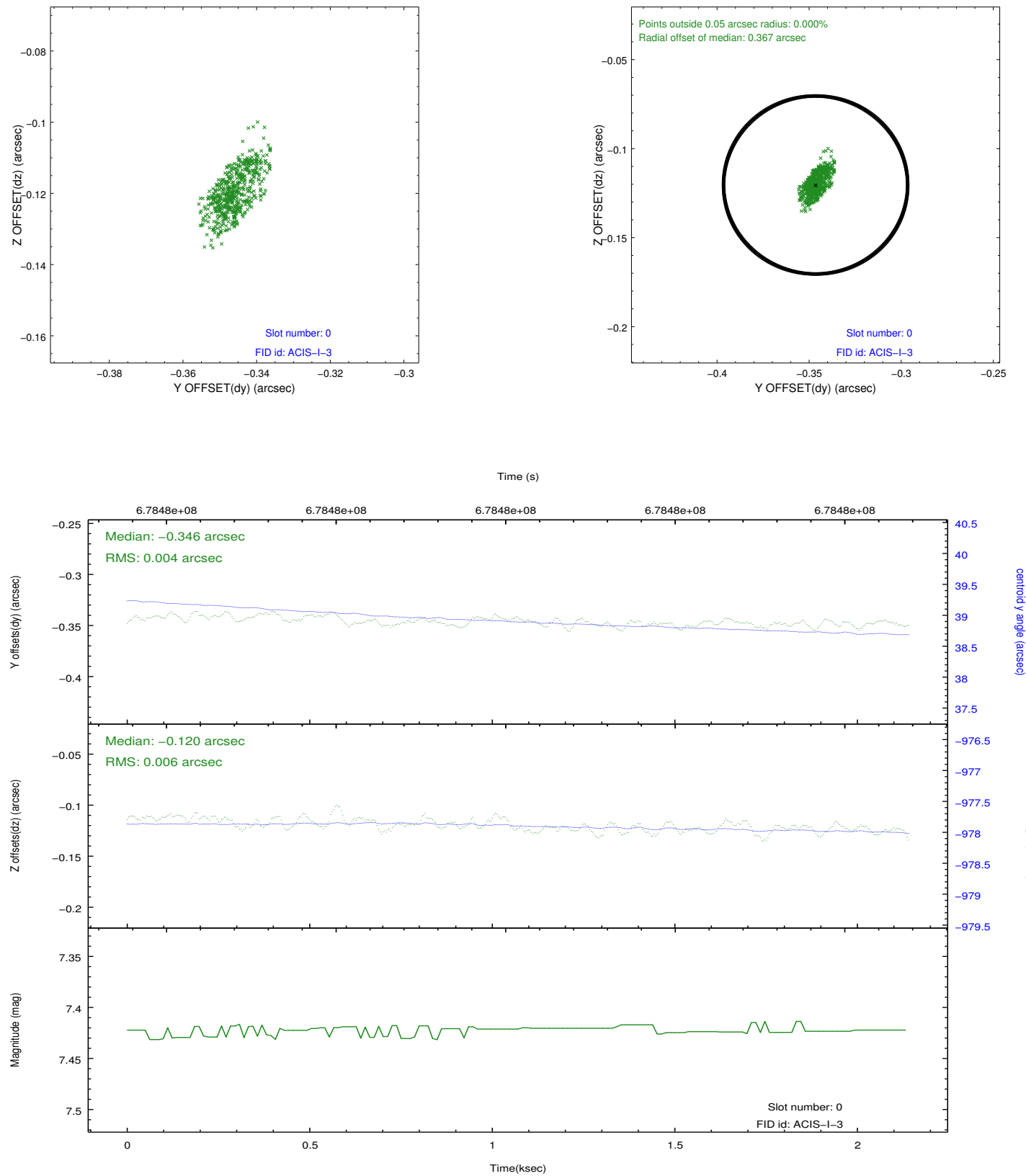


## 2.4.5 Slot 7

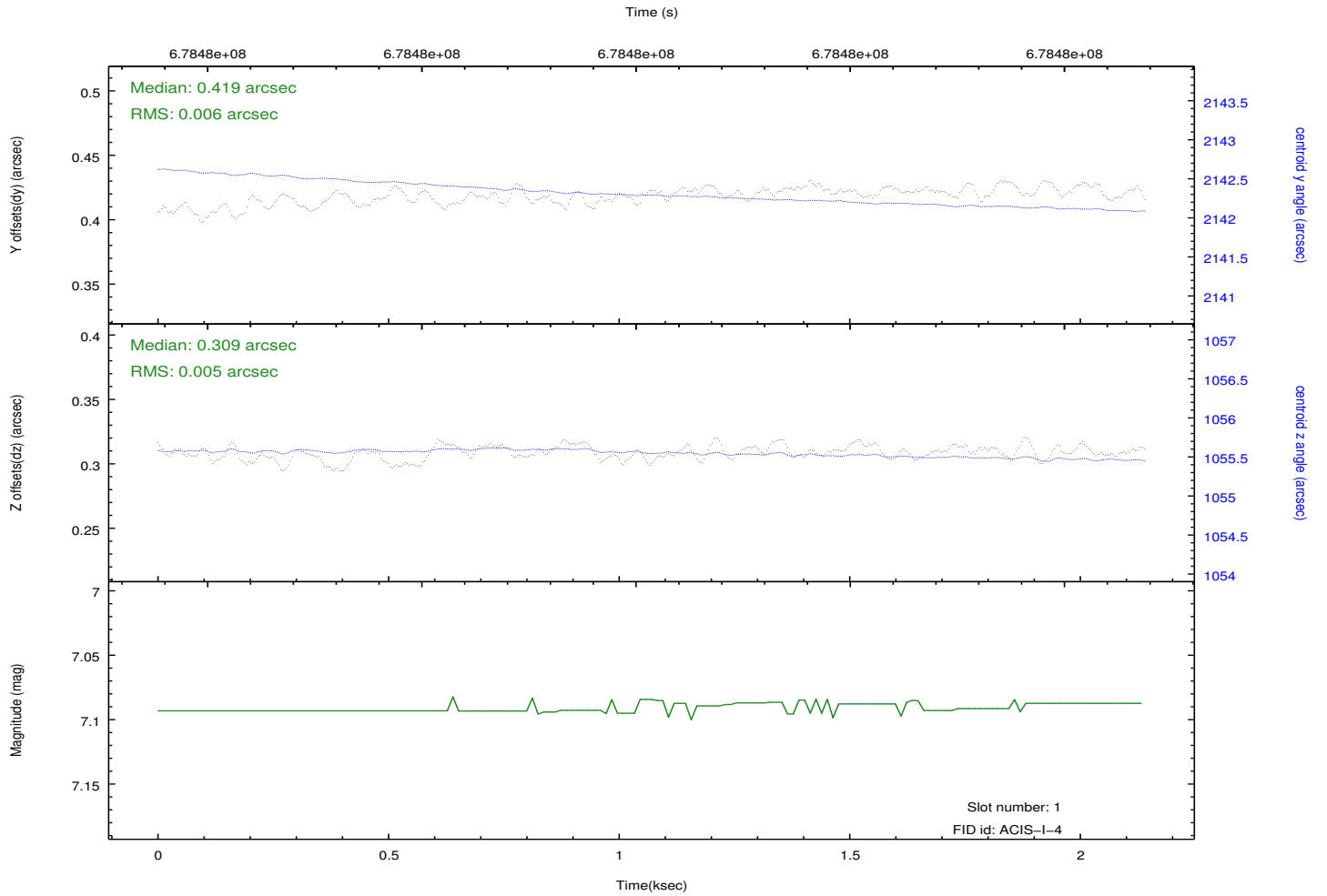
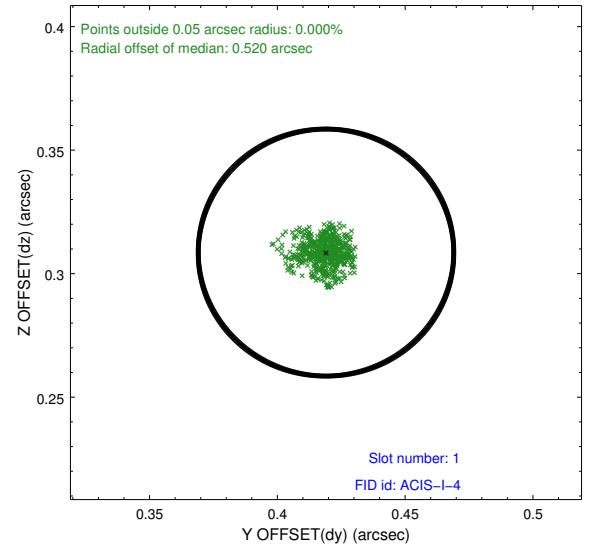
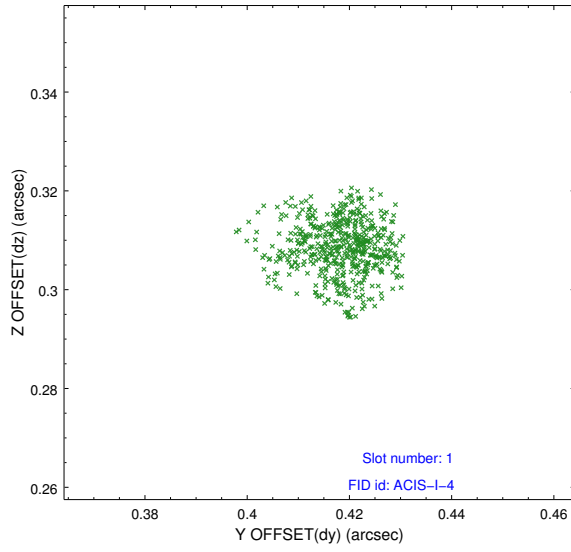


## 2.5 FID Slots

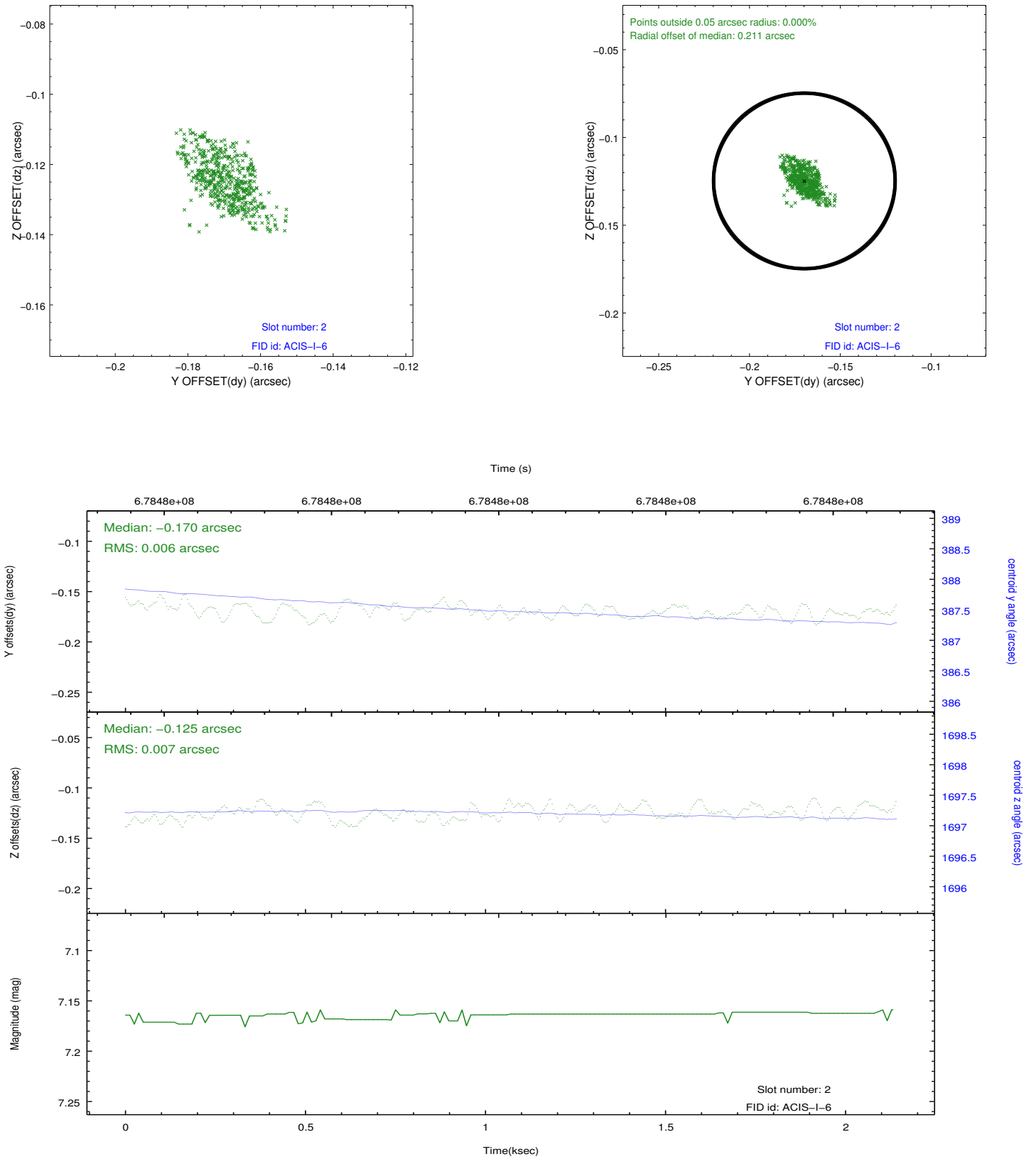
### 2.5.1 Slot 0



## 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)	2019.07.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	2.0801000161171

### A.2 Comments