

# V&V Reference Report

## L2 ASCDS Version : 10.8

Observation 21581 - L2 Version 1  
Chandra X-Ray Center

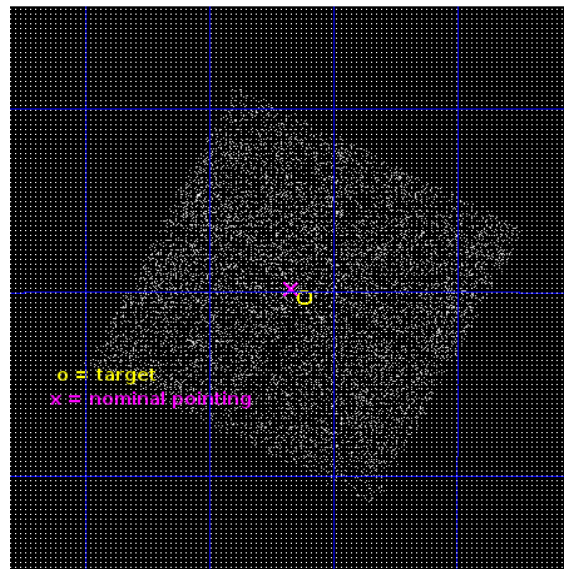
L2 Processing Date : Jul 2 2019

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# 1 Front

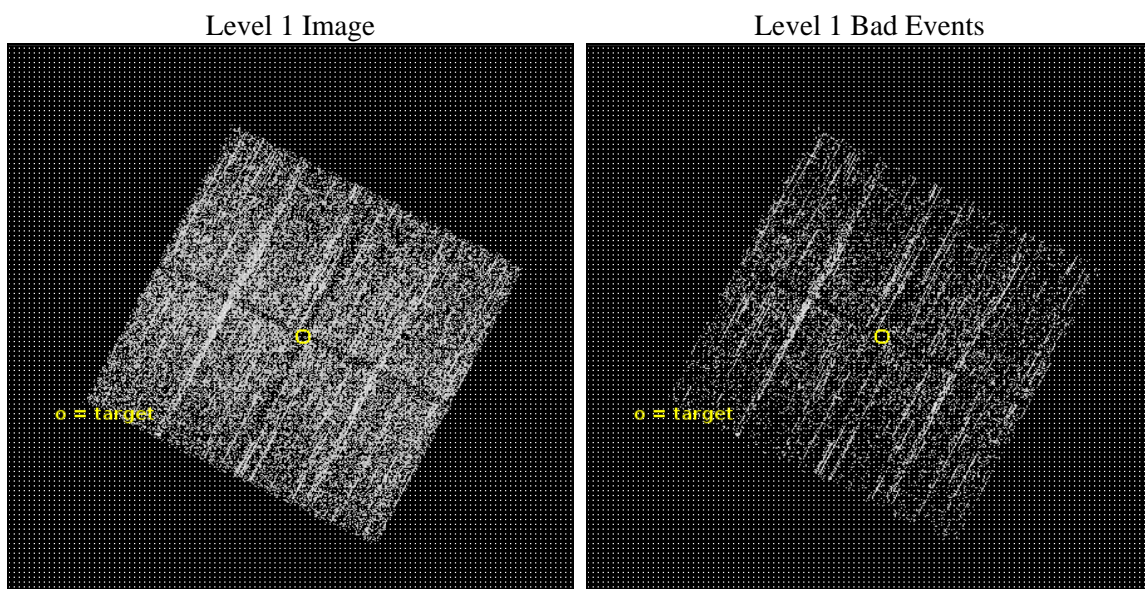
seq_num	300413	Sequence number
obs_id	21581	Observation id
title	Chandra Mapping of the Galactic Central Region	Proposal title
observer	Daniel Wang	Principal investigator
object	GCR Gap 1	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	266.52841	Observer's specified target RA [deg]
dec_targ	-30.171784	Observer's specified target Dec [deg]
ra_nom	266.54208489535	Nominal RA [deg]
dec_nom	-30.163665194547	Nominal Dec [deg]
roll_nom	297.21533674356	Nominal Roll [deg]
revision	1	Processing version of data
ontime	2079.4918099642	Sum of GTIs [s]
livetime	2052.3217185674	Livetime [s]
ontime0	2079.4507700205	Sum of GTIs [s]
ontime1	2079.4918099642	Sum of GTIs [s]
ontime2	2079.5328500271	Sum of GTIs [s]
ontime3	2079.5738899708	Sum of GTIs [s]
l2events	7060	Number of level 2 events



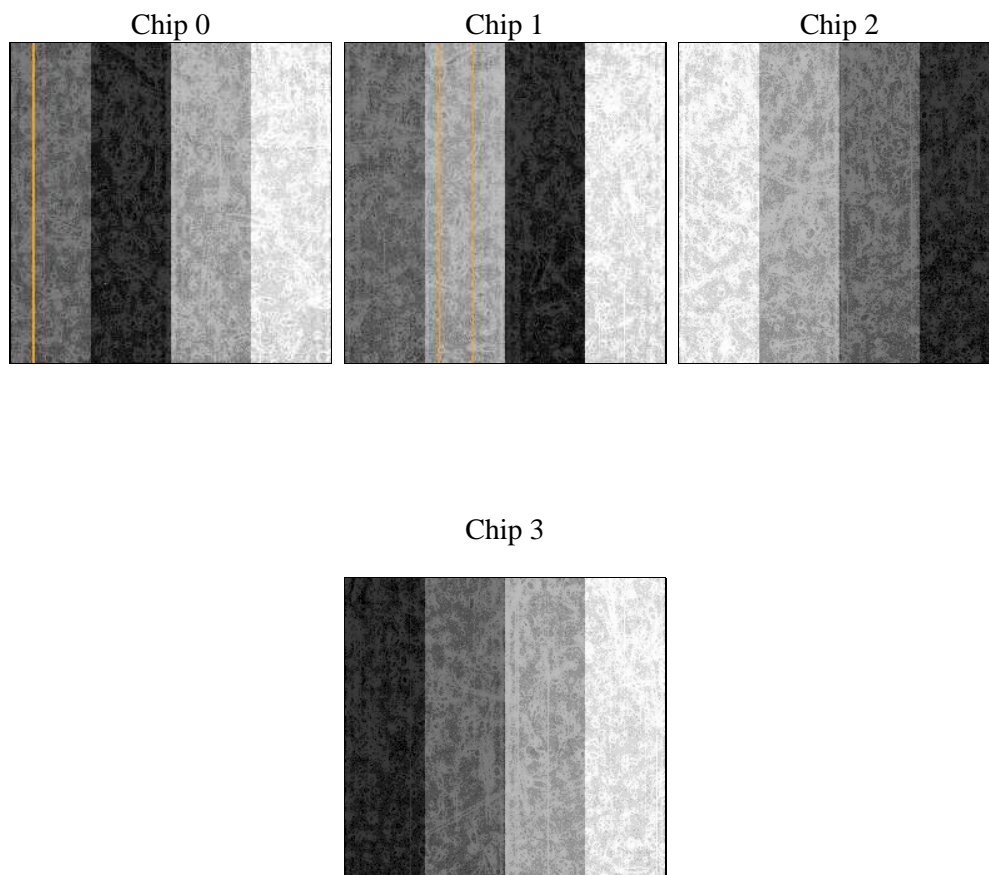
## 2 OBI

### 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	2079.4918099642	Sum of GTIs [s]
caldsver	4.8.3	&#160	ontime0	2079.4507700205	Sum of GTIs [s]
date	2019-07-02T14:00:47	Date and time of file creation	ontime1	2079.4918099642	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	2079.5328500271	Sum of GTIs [s]
			ontime3	2079.5738899708	Sum of GTIs [s]
			l1events	60859	Number of level 1 events

### 2.1.4 Events

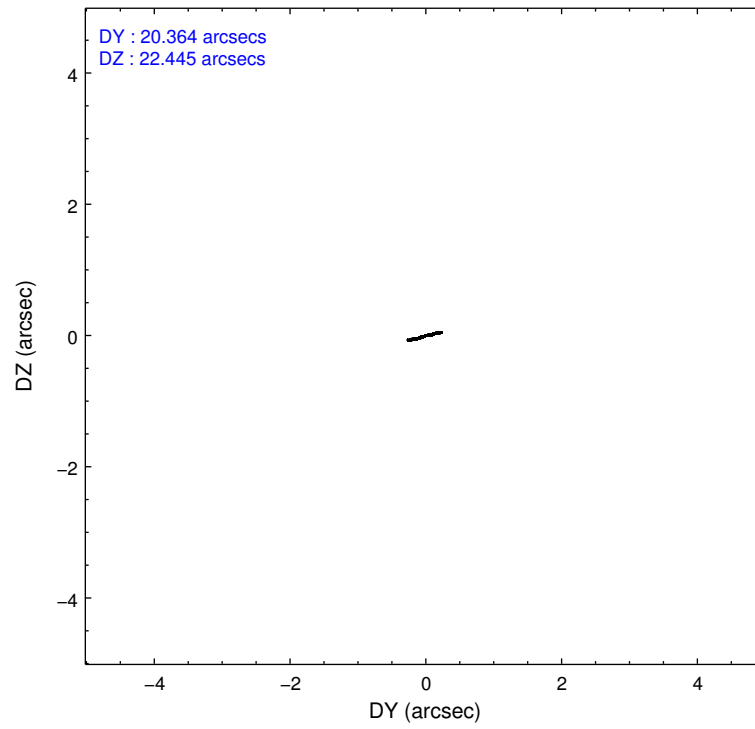
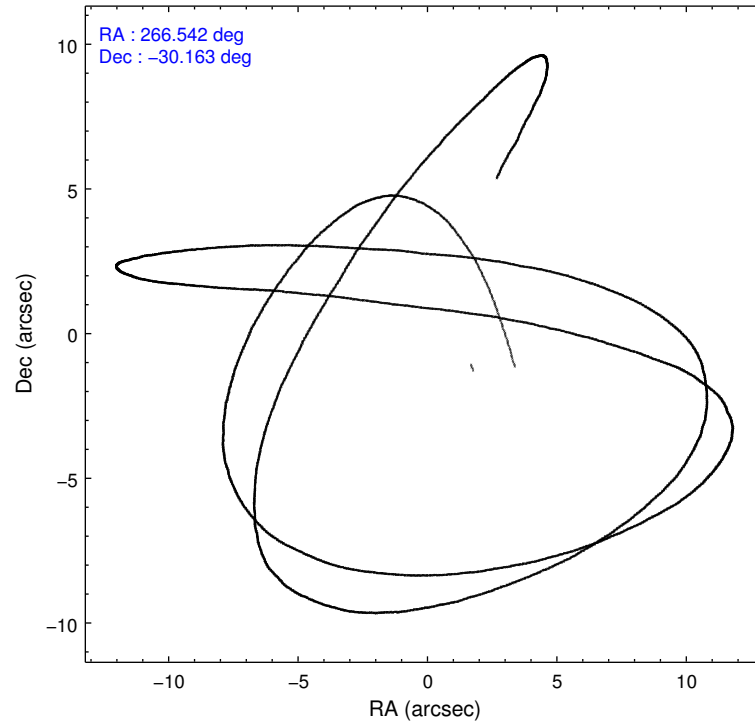
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	14842	14725	15298	15994
rejected events	12881	12491	13167	13945
rejected %	86%	84%	86%	87%

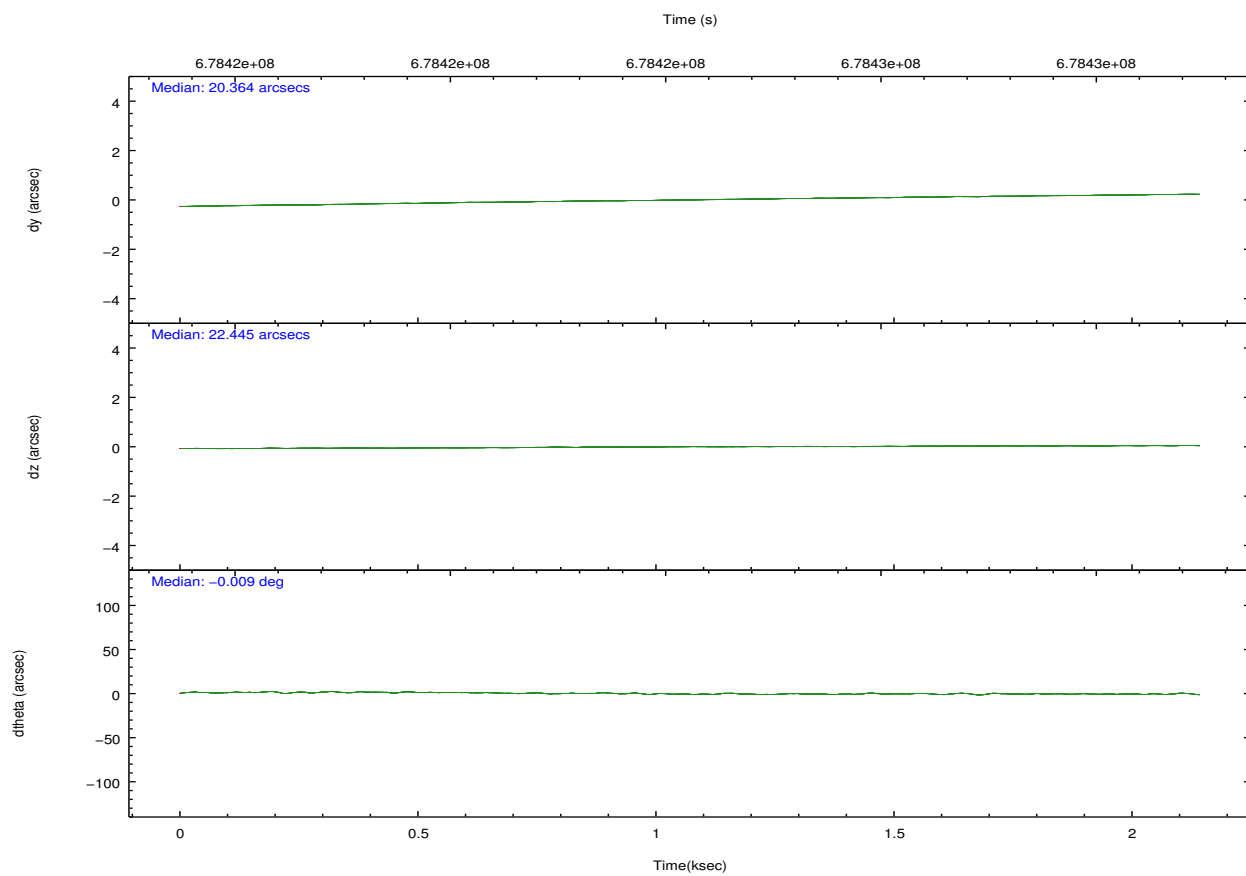
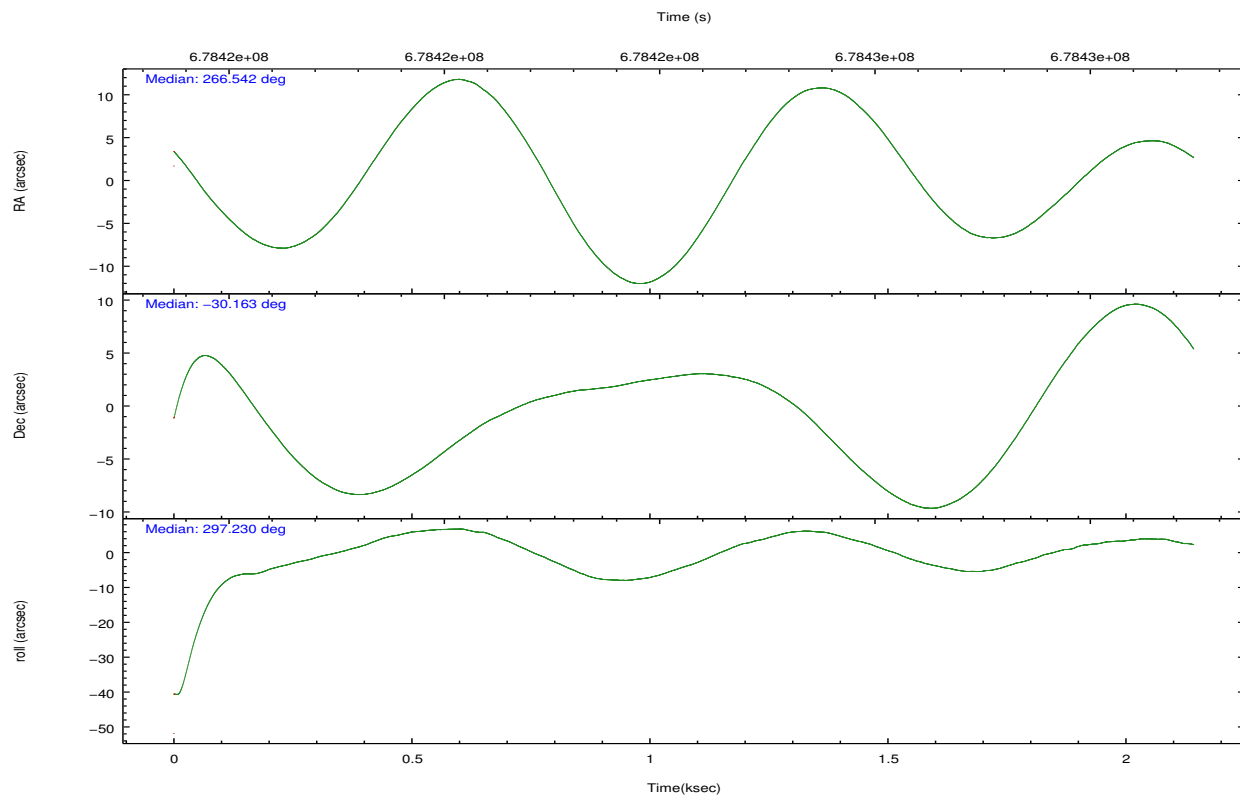
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	745	871	895	913
	5%	5%	5%	5%
grade 1 events	10	9	11	13
	0%	0%	0%	0%
grade 2 events	483	526	509	422
	3%	3%	3%	2%
grade 3 events	156	187	207	172
	1%	1%	1%	1%
grade 4 events	186	206	170	200
	1%	1%	1%	1%
grade 5 events	708	736	680	802
	4%	4%	4%	5%
grade 6 events	397	447	353	350
	2%	3%	2%	2%
grade 7 events	12157	11743	12473	13122
	81%	79%	81%	82%

## 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	266.515189	266.5420848953525	Subarray requested	NONE	NONE
[deg] Pointing Dec	-30.148902	-30.16366519454651	Alternating exposures requested	N	N
[deg] Pointing Roll	296.993362	297.2153367435645	[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)	678424147.184000	678423061.87885			
Observation start date	2019-07-02T03:07:58	2019-07-02T02:51:01			
[s] Observation end time (MET)	678426147.184000	678426281.40405			
Observation end date	2019-07-02T03:41:18	2019-07-02T03:44:41			
Read mode	TIMED	TIMED			

## 2.3 Aspect





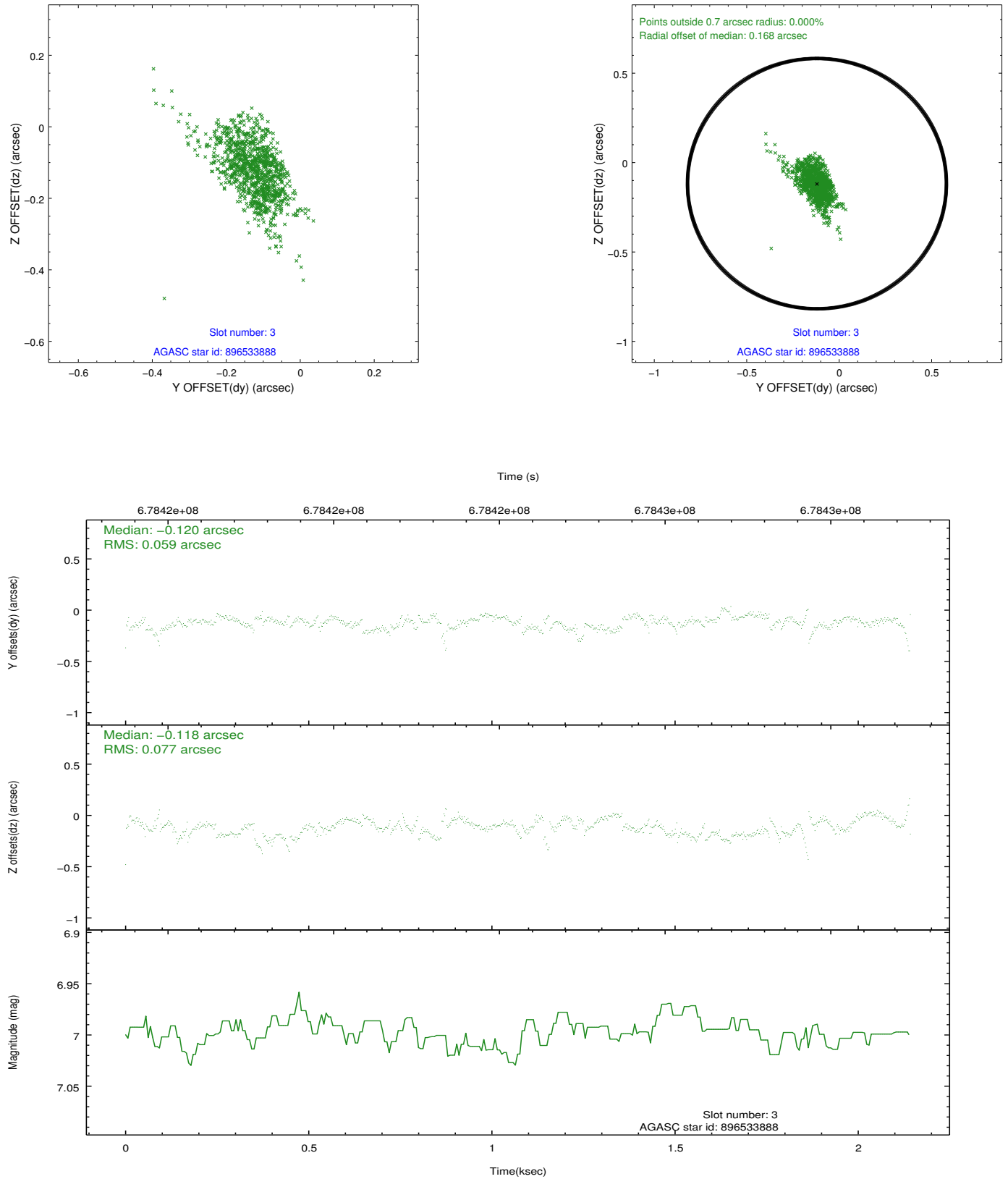
Slot Statistics

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	7.17	523	1.000	0.113	-0.080	0.010	0.022	0.000000	0.000000	919.16	-846
1	FID		ACIS-I-5	7.14	523	1.000	-0.591	0.001	0.007	0.013	0.000000	0.000000	-1828.20	1049
2	FID		ACIS-I-6	7.17	523	1.000	0.388	0.151	0.010	0.020	0.000000	0.000000	381.36	1697
3	GUIDE	used	896533888	7.00	1046	1.000	-0.120	-0.118	0.096	0.171	266.666434	-29.392757	-2209.26	1657
4	GUIDE	used	896541168	8.14	1045	1.000	0.540	0.482	0.103	0.174	266.319970	-29.850801	-1233.64	-55
5	GUIDE	used	966926496	8.11	1046	1.000	-0.156	-0.119	0.120	0.182	267.109389	-30.299474	1324.77	1395
6	GUIDE	used	896541360	7.69	1046	1.000	0.080	-0.043	0.083	0.141	266.684478	-29.453744	-1986.78	1609
7	GUIDE	used	966920512	8.34	1042	1.000	-0.348	-0.203	0.086	0.149	267.231170	-30.494681	2121.93	1410

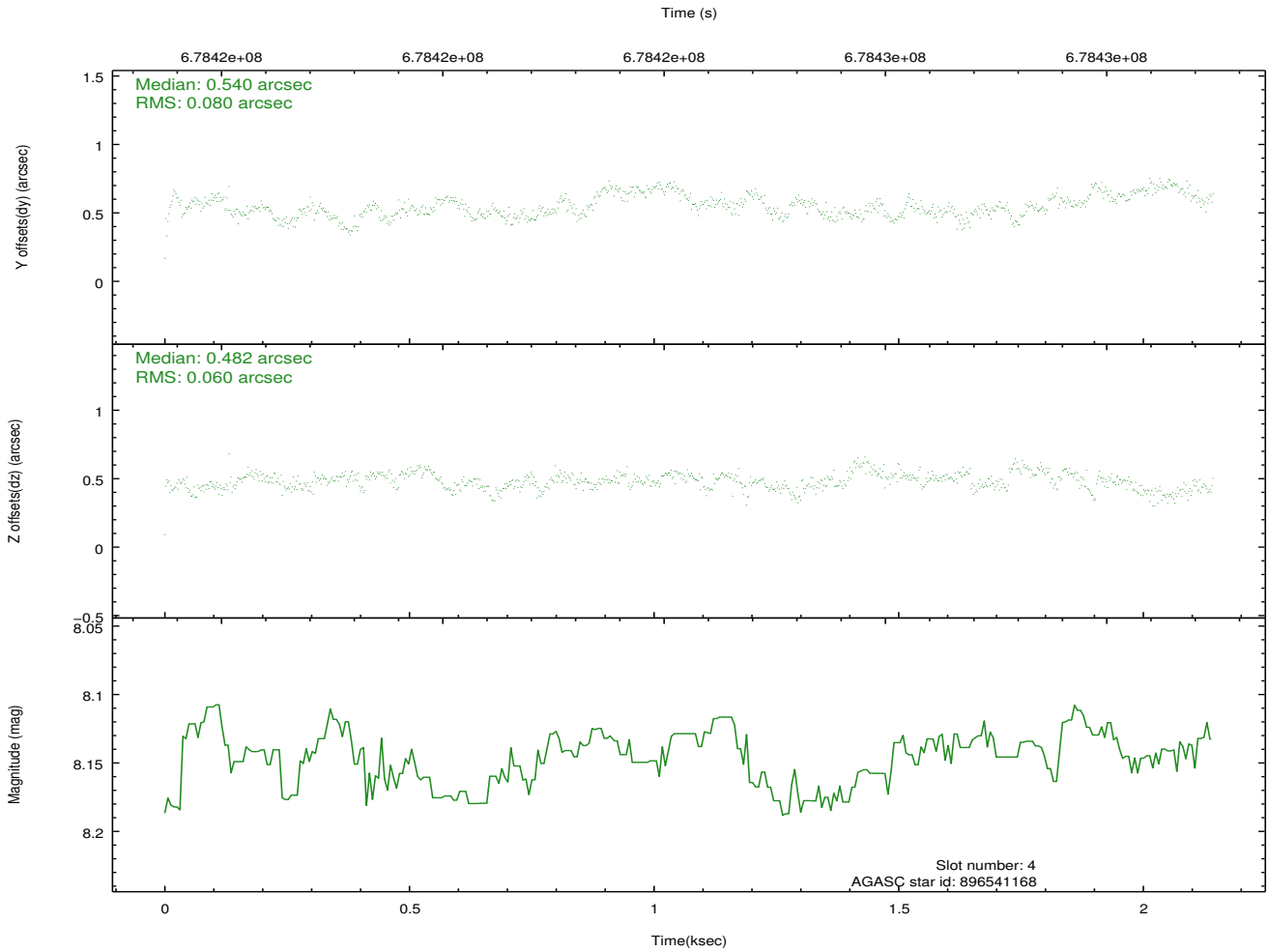
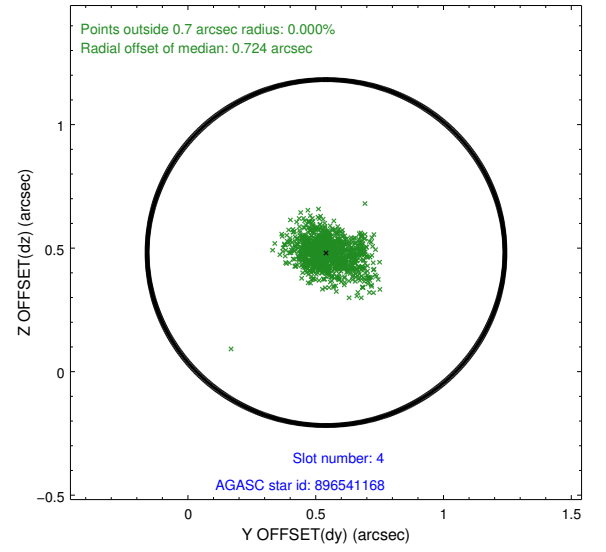
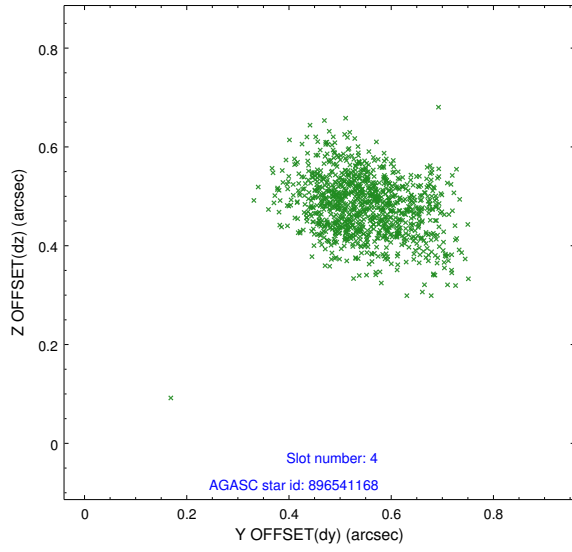


## 2.4 Star Slots

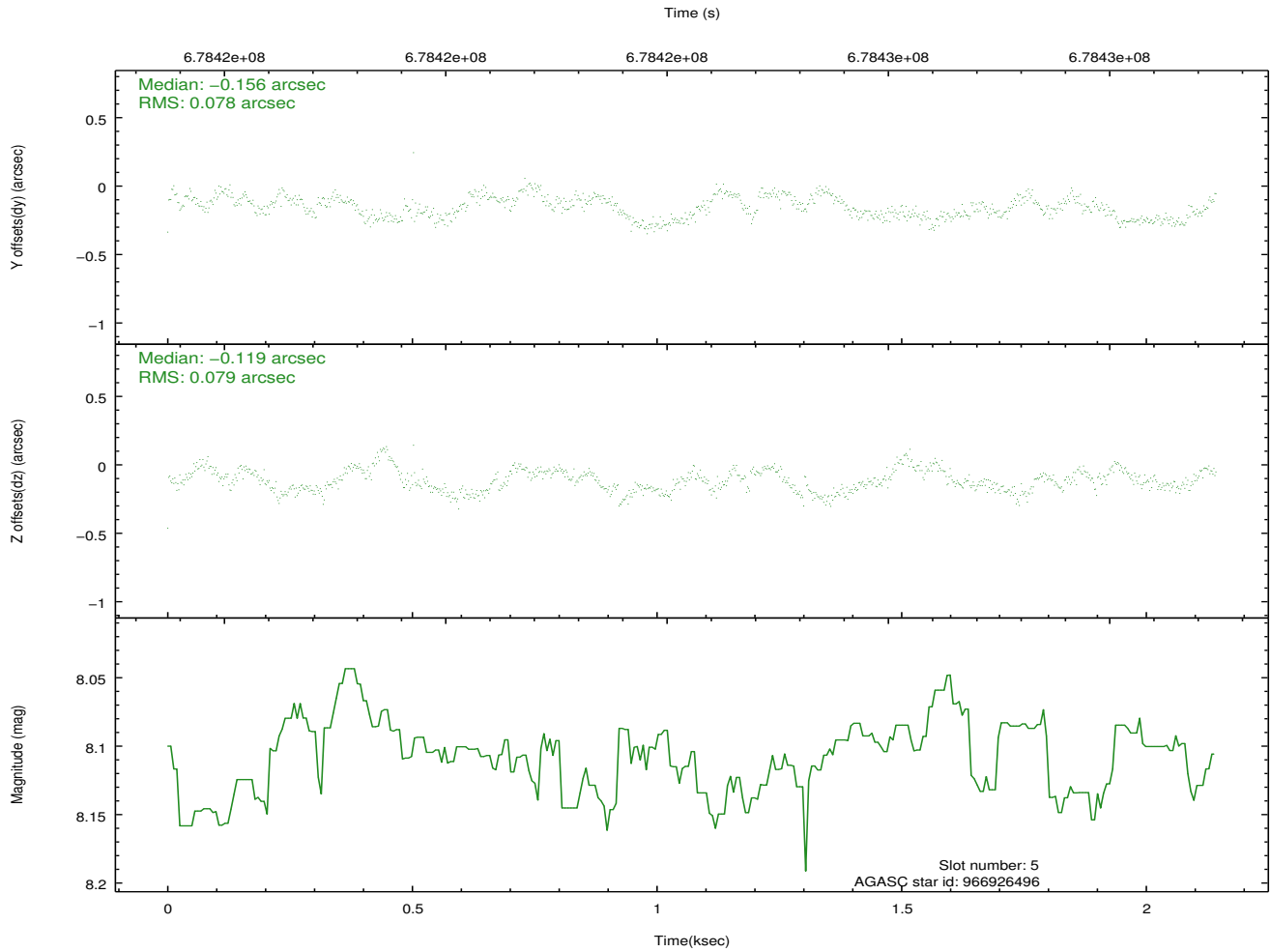
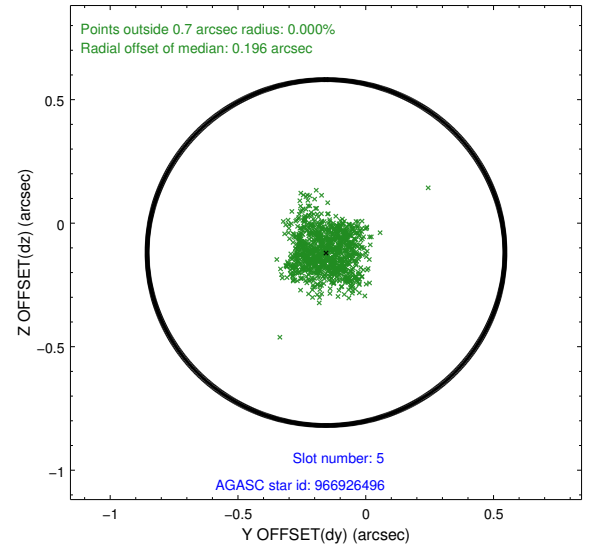
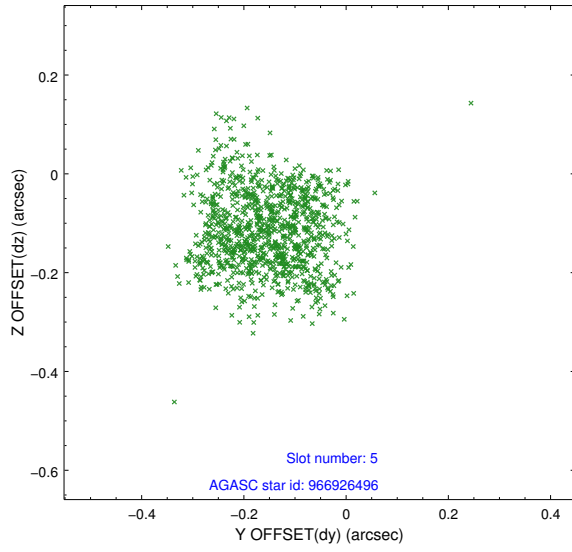
### 2.4.1 Slot 3



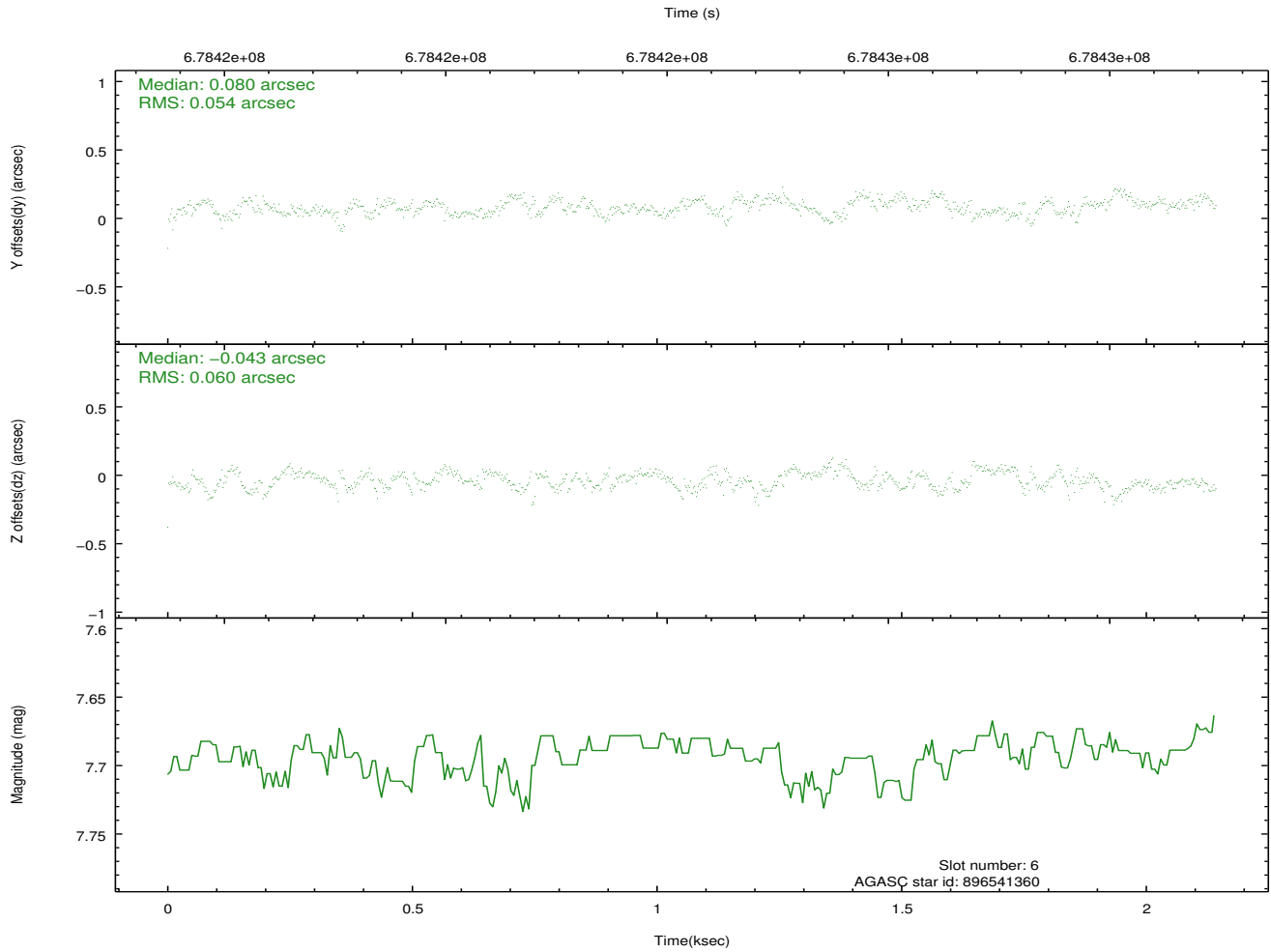
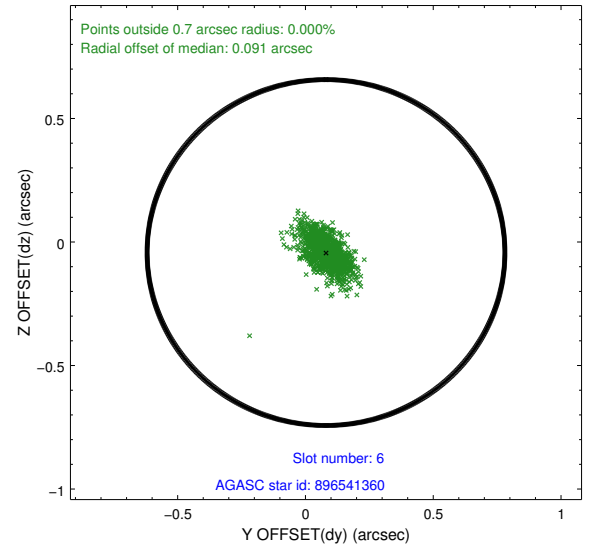
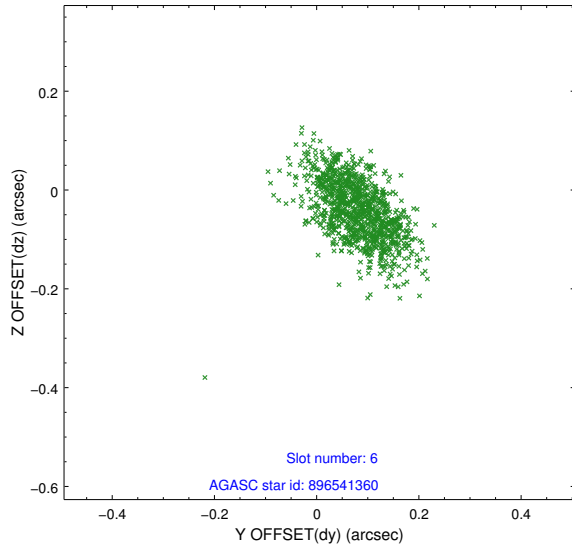
## 2.4.2 Slot 4



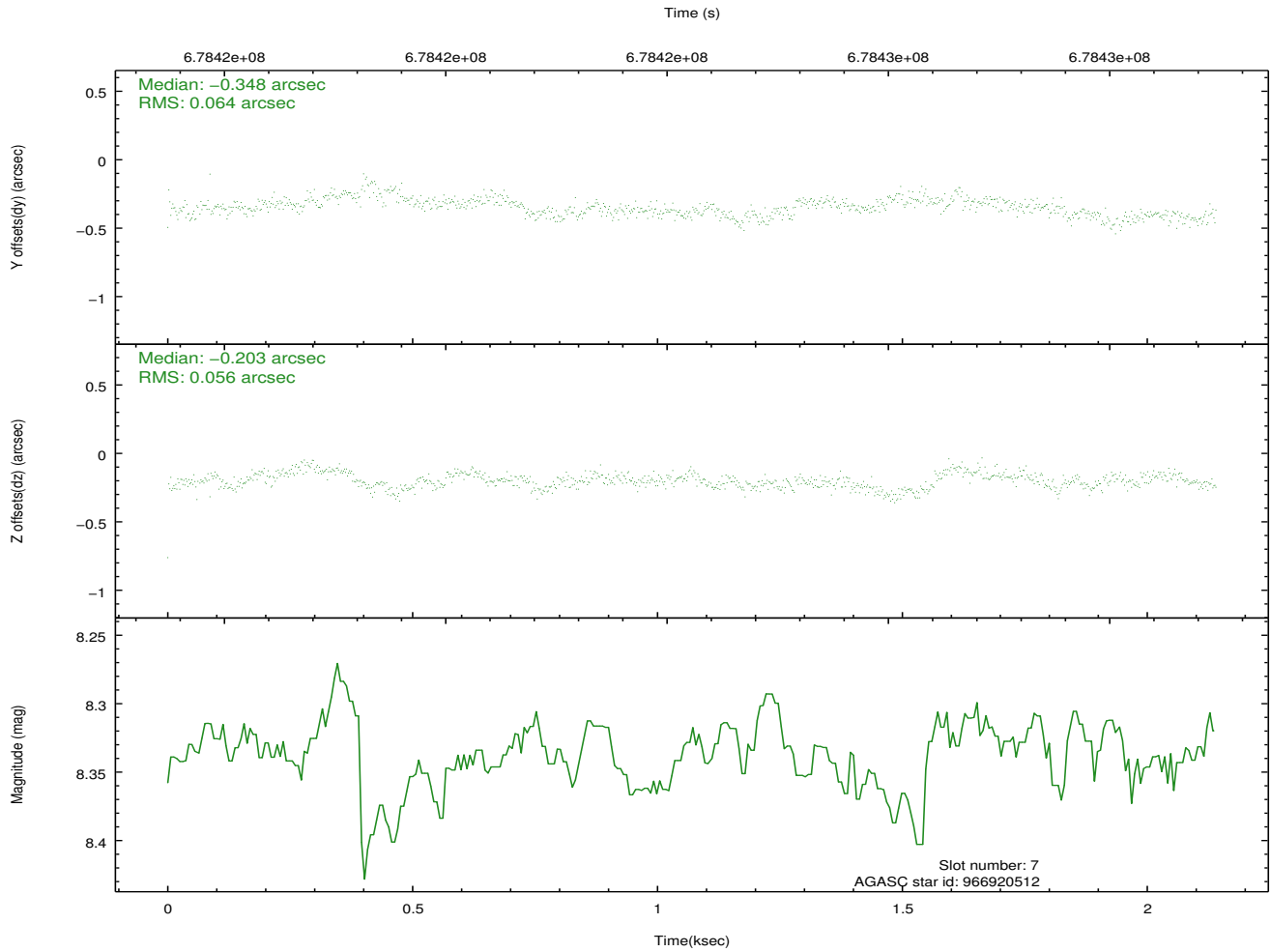
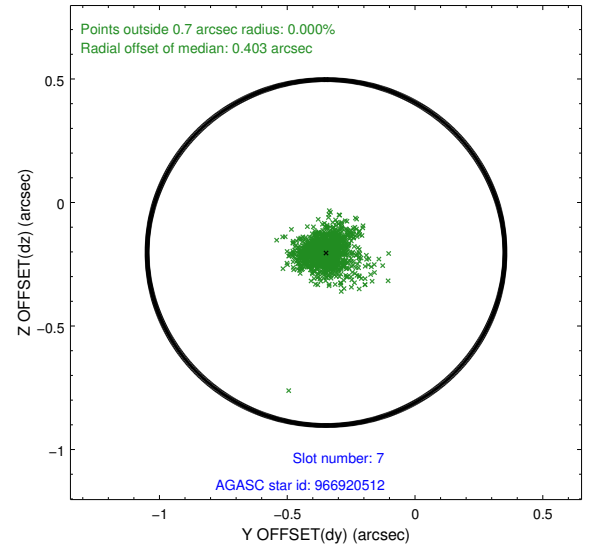
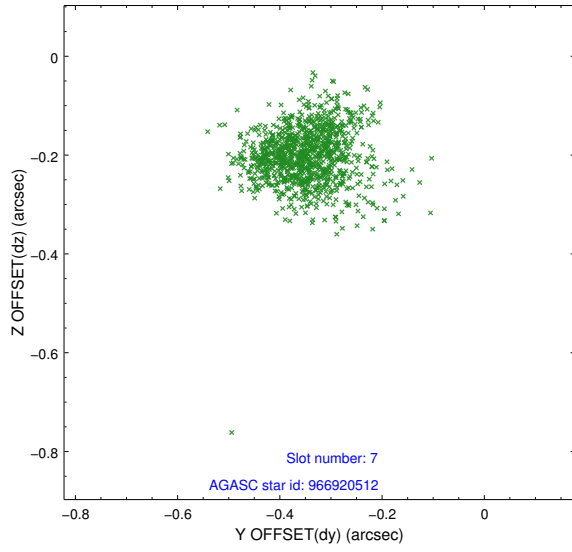
### 2.4.3 Slot 5



## 2.4.4 Slot 6

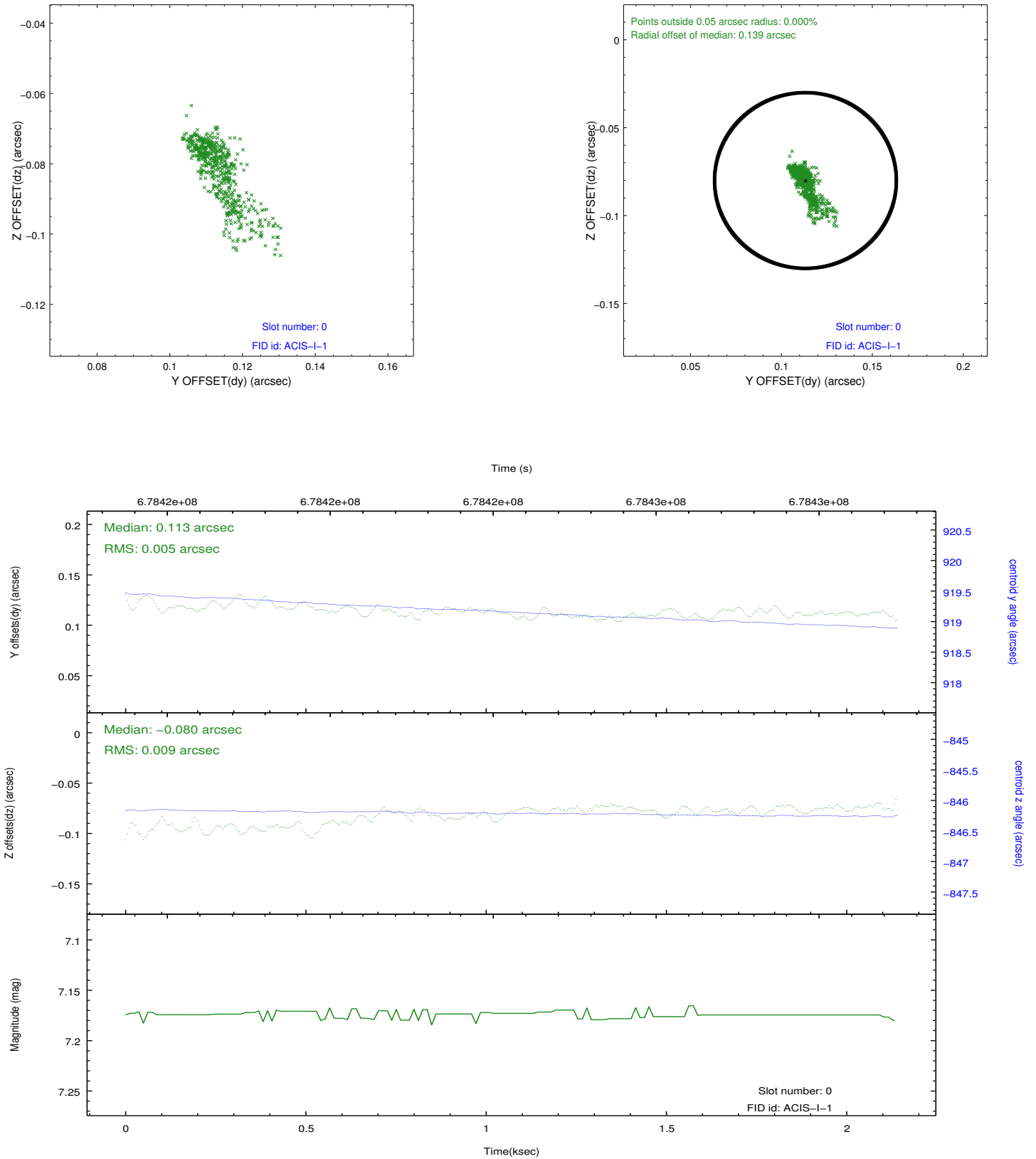


### 2.4.5 Slot 7

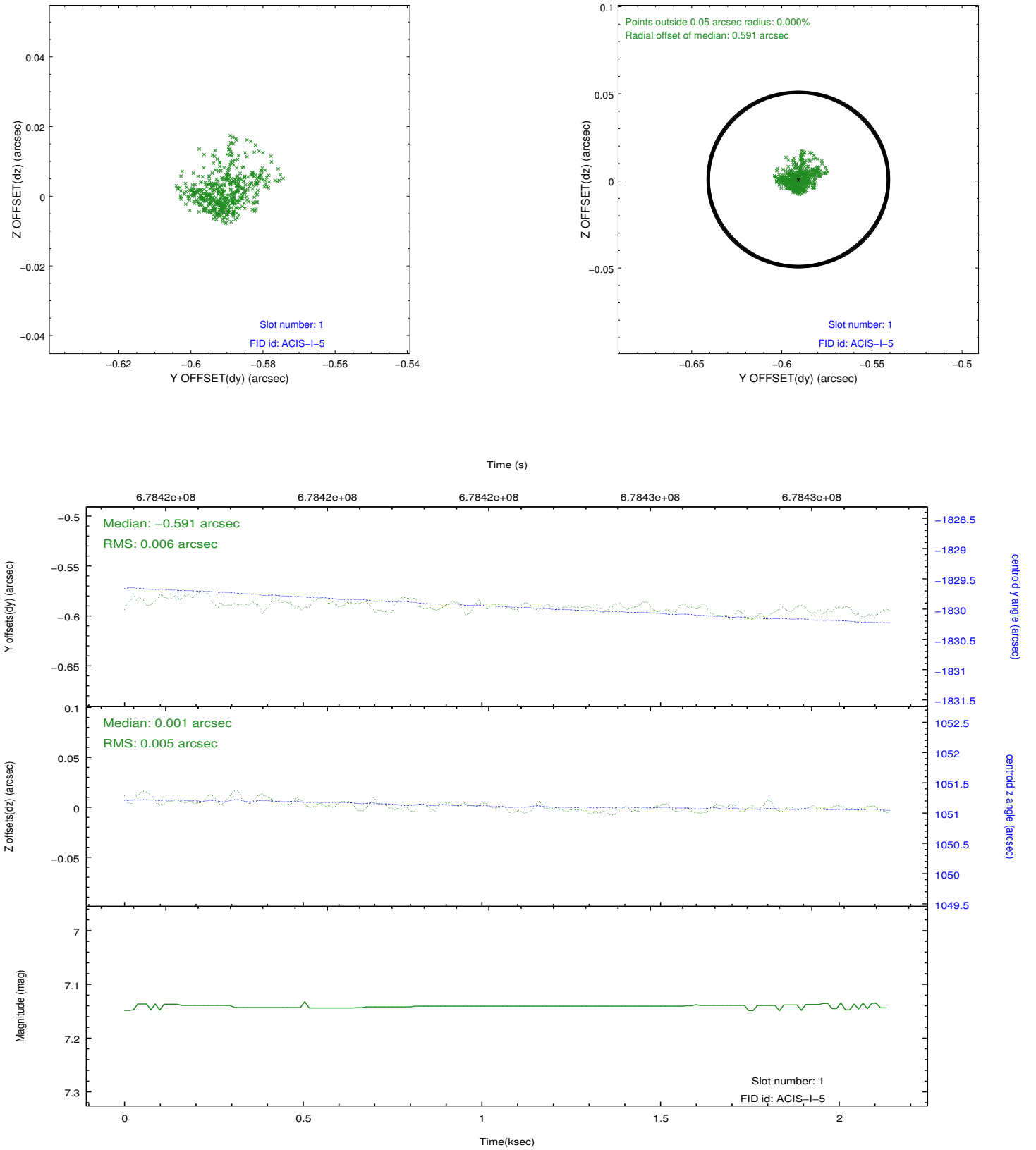


## 2.5 FID Slots

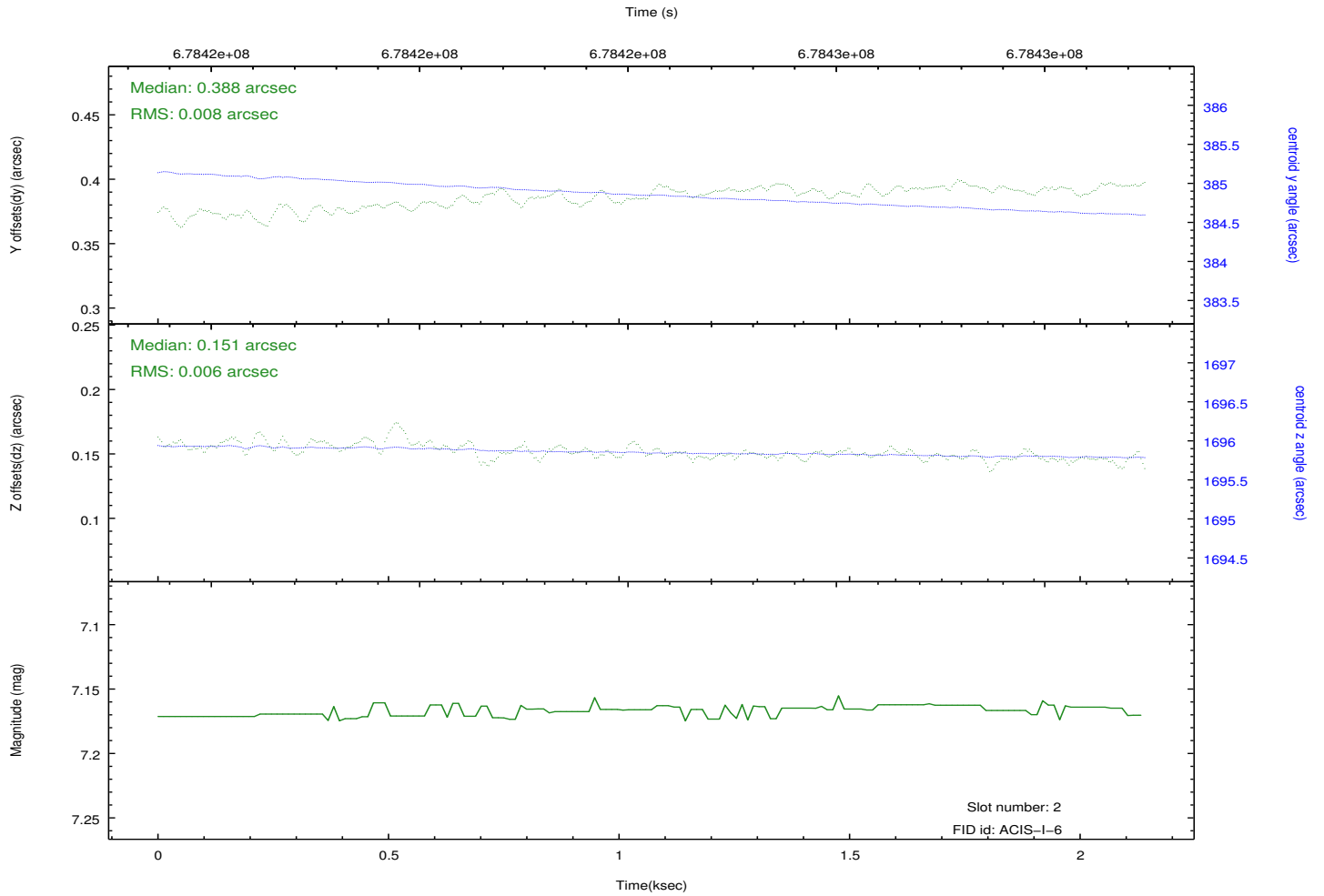
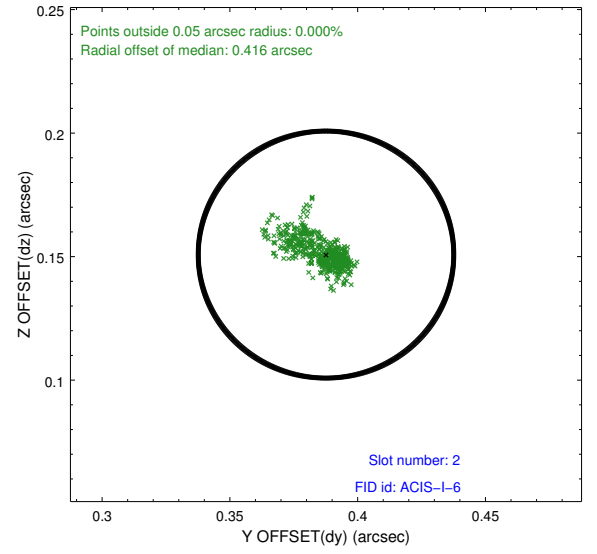
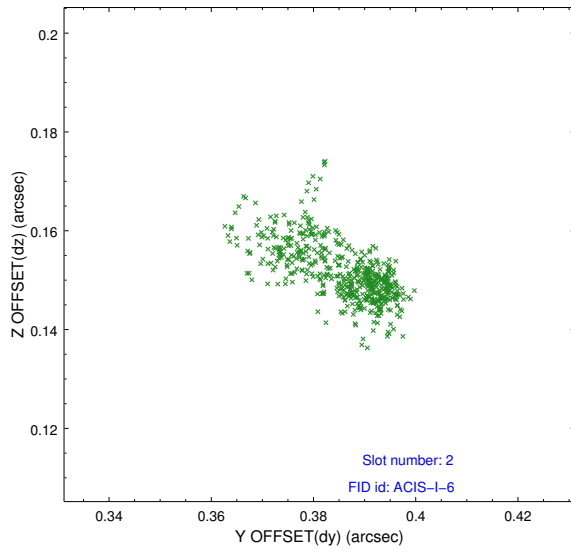
### 2.5.1 Slot 0



## 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	2.0794918099642

### A.2 Comments