

# V&V Reference Report

## L2 ASCDS Version : 10.8

Observation 21600 - L2 Version 1  
Chandra X-Ray Center

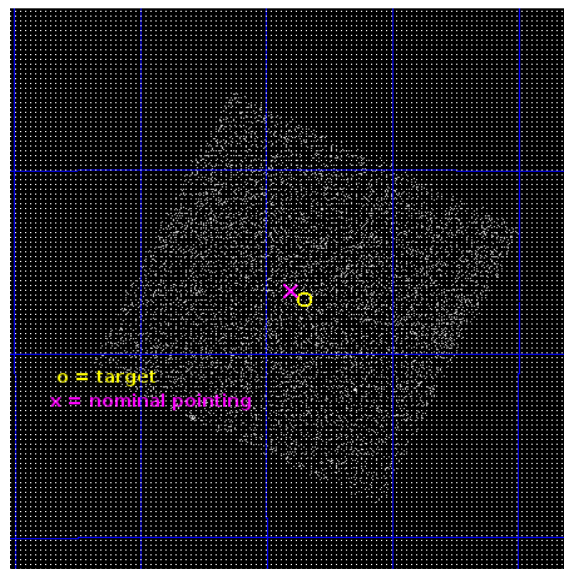
L2 Processing Date : Jul 3 2019

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# 1 Front

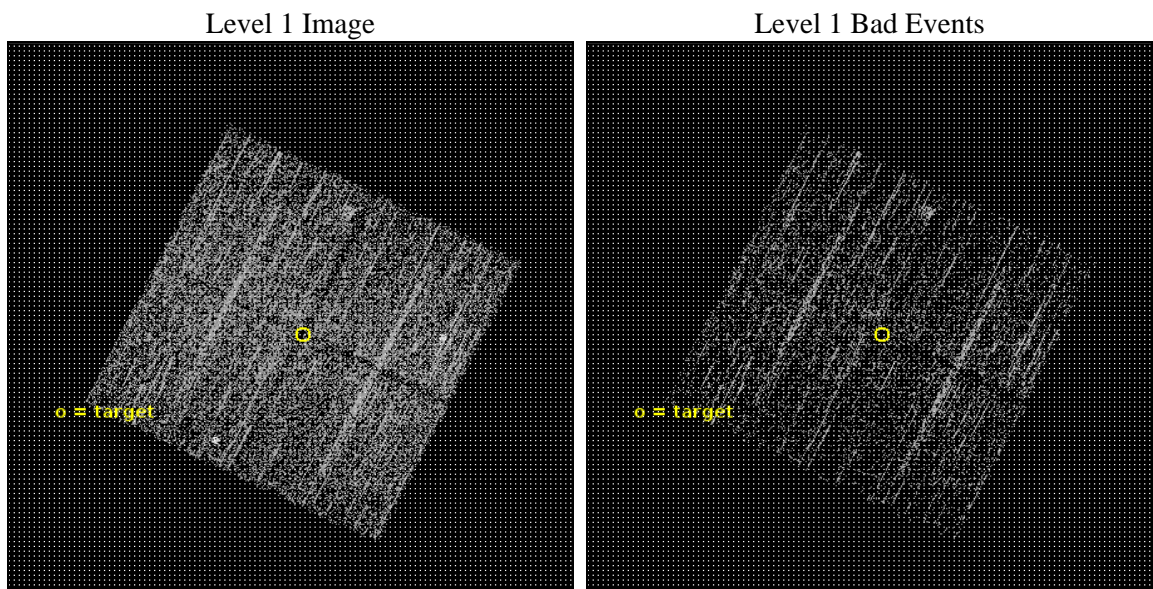
seq_num	300432	Sequence number
obs_id	21600	Observation id
title	Chandra Mapping of the Galactic Central Region	Proposal title
observer	Daniel Wang	Principal investigator
object	GCR Gap 2	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	267.21237	Observer's specified target RA [deg]
dec_targ	-28.451211	Observer's specified target Dec [deg]
ra_nom	267.22506954017	Nominal RA [deg]
dec_nom	-28.442759134621	Nominal Dec [deg]
roll_nom	296.21462388406	Nominal Roll [deg]
revision	1	Processing version of data
ontime	1908.7714598179	Sum of GTIs [s]
livetime	1883.8319554783	Livetime [s]
ontime0	1908.7304301262	Sum of GTIs [s]
ontime1	1908.7714598179	Sum of GTIs [s]
ontime2	1908.8124998808	Sum of GTIs [s]
ontime3	1908.8535398245	Sum of GTIs [s]
l2events	6119	Number of level 2 events



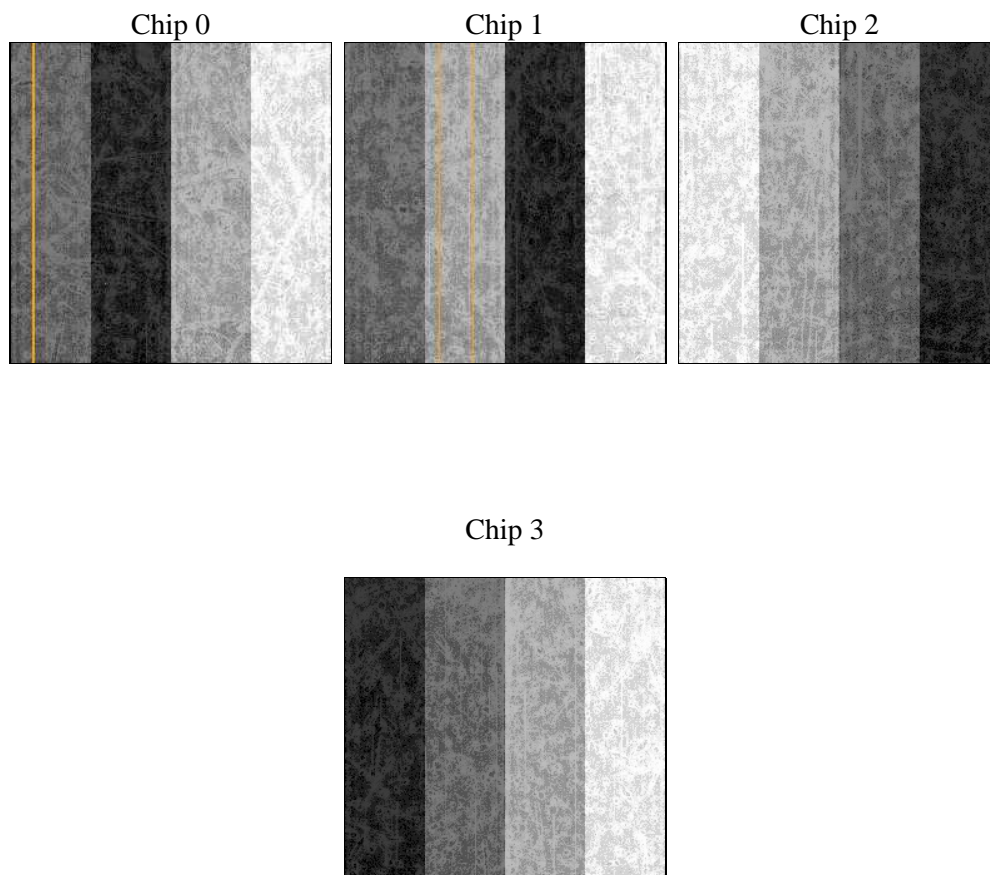
## 2 OBI

### 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	1908.7714598179	Sum of GTIs [s]
caldsver	4.8.3.1	&#160	ontime0	1908.7304301262	Sum of GTIs [s]
date	2019-07-03T21:00:07	Date and time of file creation	ontime1	1908.7714598179	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	1908.8124998808	Sum of GTIs [s]
			ontime3	1908.8535398245	Sum of GTIs [s]
			l1events	58491	Number of level 1 events

### 2.1.4 Events

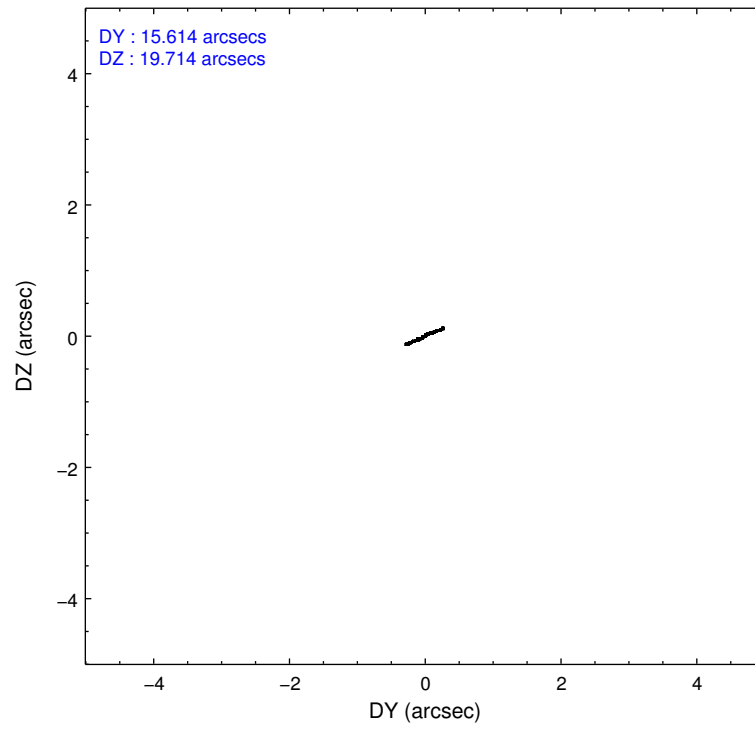
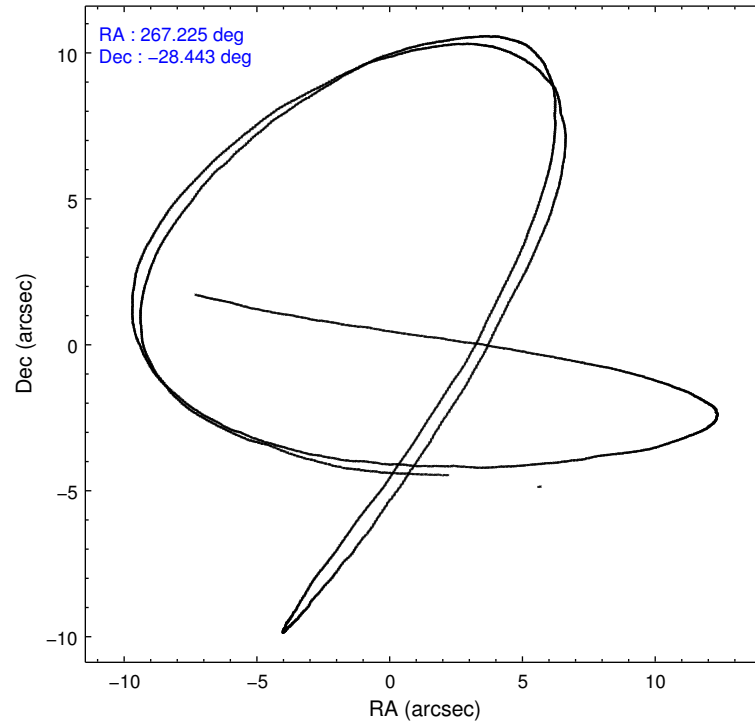
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	13140	15268	15135	14948
rejected events	11407	12729	12900	13264
rejected %	86%	83%	85%	88%

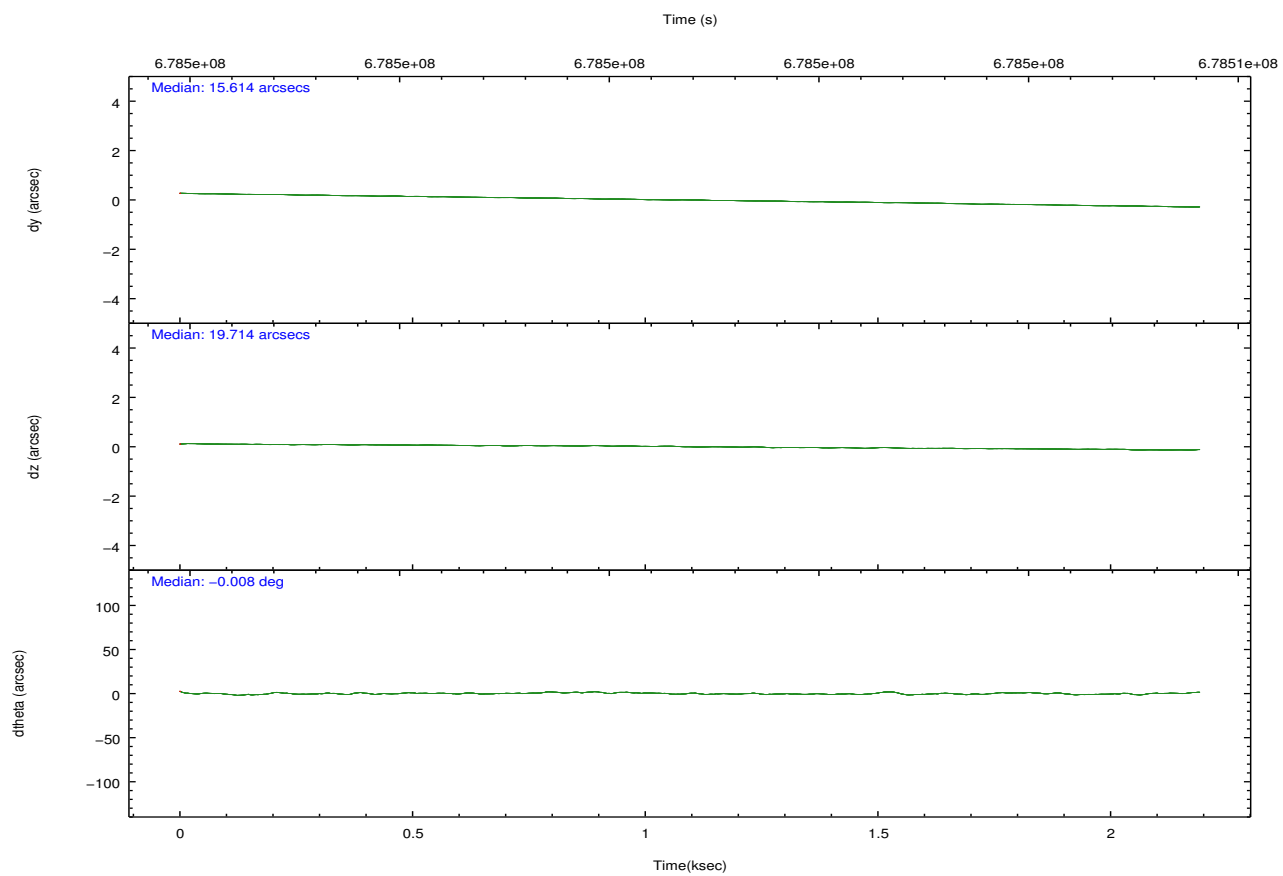
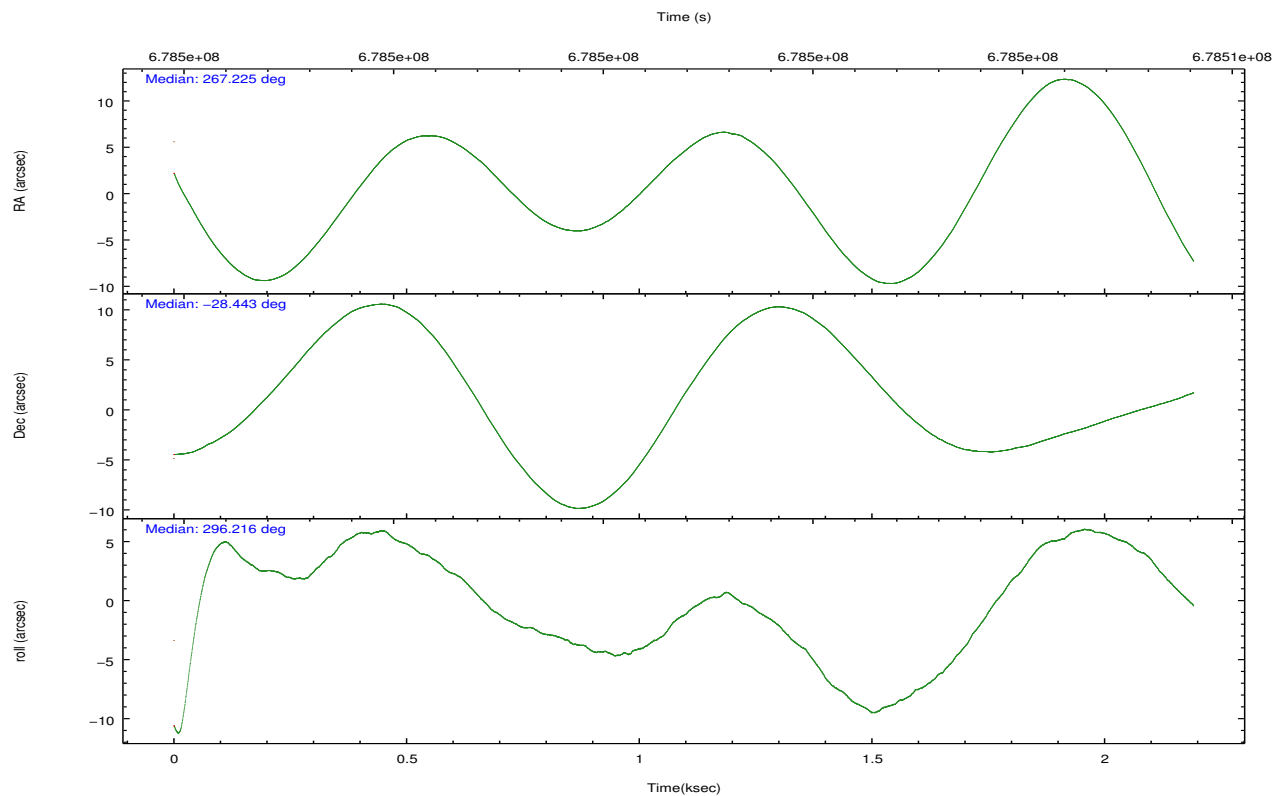
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	628	1133	1203	702
	4%	7%	7%	4%
grade 1 events	6	10	13	3
	0%	0%	0%	0%
grade 2 events	421	575	393	328
	3%	3%	2%	2%
grade 3 events	185	180	164	147
	1%	1%	1%	0%
grade 4 events	146	184	162	156
	1%	1%	1%	1%
grade 5 events	619	654	641	668
	4%	4%	4%	4%
grade 6 events	357	471	317	351
	2%	3%	2%	2%
grade 7 events	10778	12061	12242	12593
	82%	78%	80%	84%

## 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	267.198893	267.2250695401709	Subarray requested	NONE	NONE
[deg] Pointing Dec	-28.427462	-28.44275913462062	Alternating exposures requested	N	N
[deg] Pointing Roll	295.993589	296.2146238840623	[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)	678503280.184000	678502904.77113			
Observation start date	2019-07-03T01:06:51	2019-07-03T01:01:44			
[s] Observation end time (MET)	678505280.184000	678505414.99628			
Observation end date	2019-07-03T01:40:11	2019-07-03T01:43:34			
Read mode	TIMED	TIMED			

## 2.3 Aspect





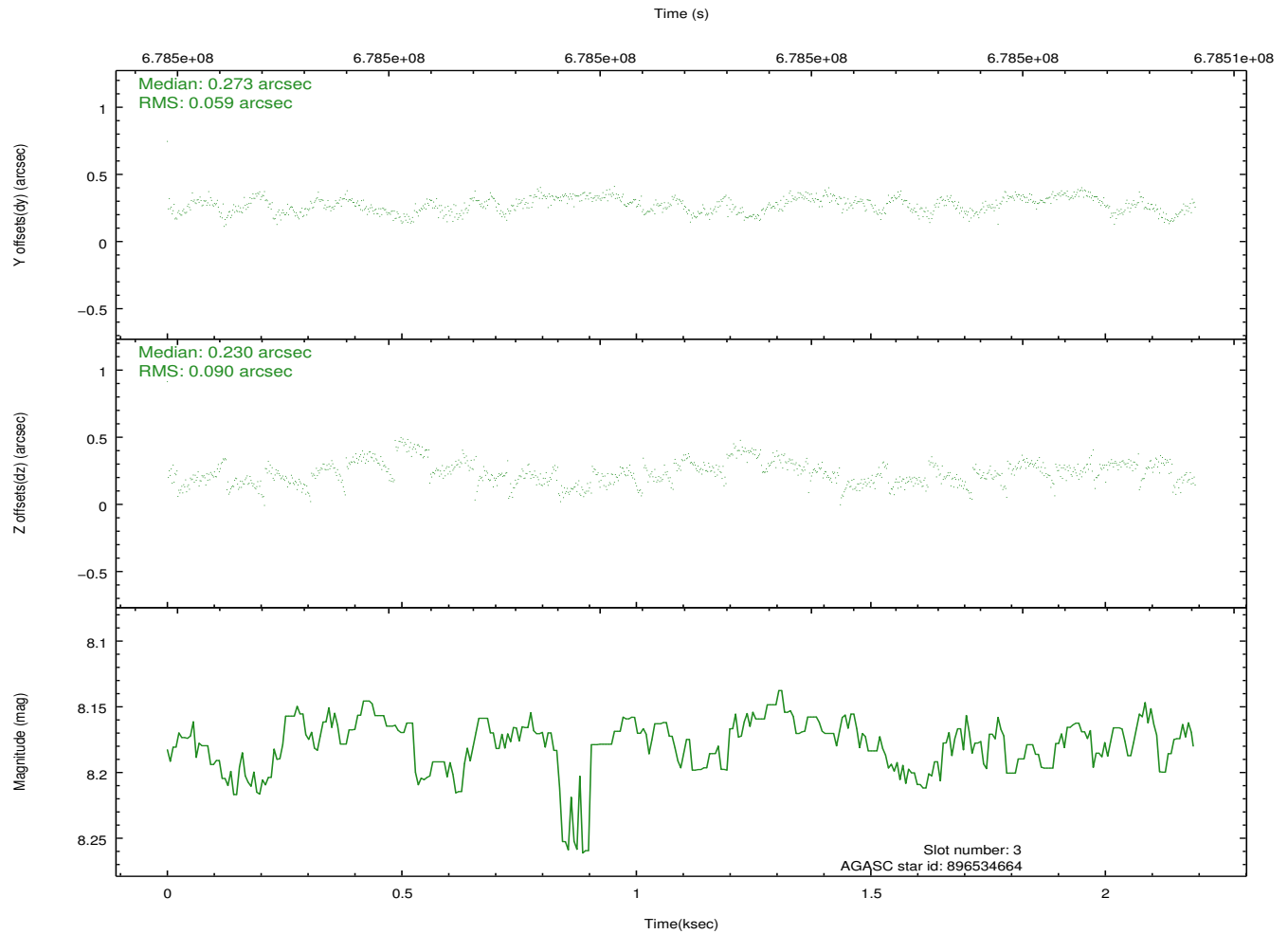
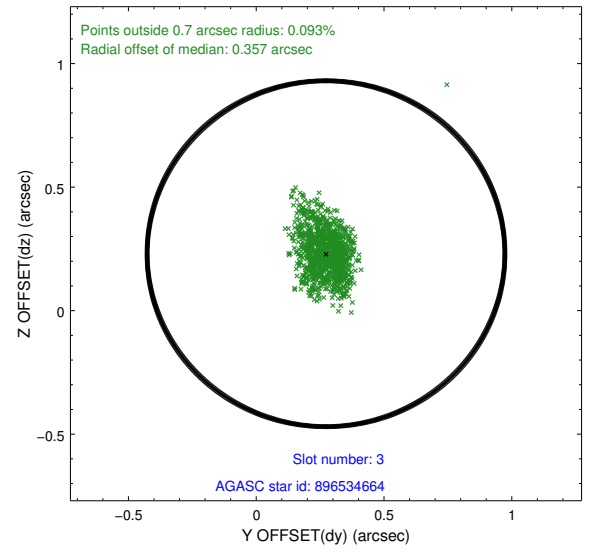
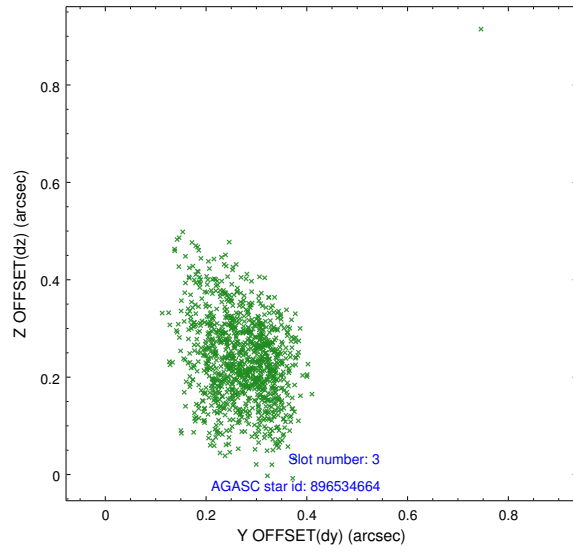
Slot Statistics

pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-2	7.11	535	1.000	-0.370	-0.085	0.011	0.018	0.000000	0.000000	-770.62	-849
1	FID		ACIS-I-4	7.14	535	1.000	0.799	0.212	0.008	0.013	0.000000	0.000000	2143.05	1055
2	FID		ACIS-I-5	7.19	535	1.000	-0.528	-0.059	0.015	0.022	0.000000	0.000000	-1820.99	1055
3	GUIDE	used	896534664	8.18	1070	1.000	0.273	0.230	0.109	0.184	266.405570	-28.407461	-1156.36	-2229
4	GUIDE	used	896537176	8.04	1069	1.000	0.206	0.289	0.100	0.179	266.498272	-28.678259	-152.35	-2388
5	GUIDE	used	896538696	6.89	1070	1.000	0.164	0.589	0.080	0.146	266.298470	-28.325572	-1569.95	-2409
6	GUIDE	used	896540888	7.91	1070	1.000	-0.077	-0.350	0.153	0.222	267.212234	-28.246138	-568.88	322
7	GUIDE	used	896543712	8.21	1069	1.000	-0.566	-0.770	0.110	0.165	267.764551	-28.659720	1539.25	1237

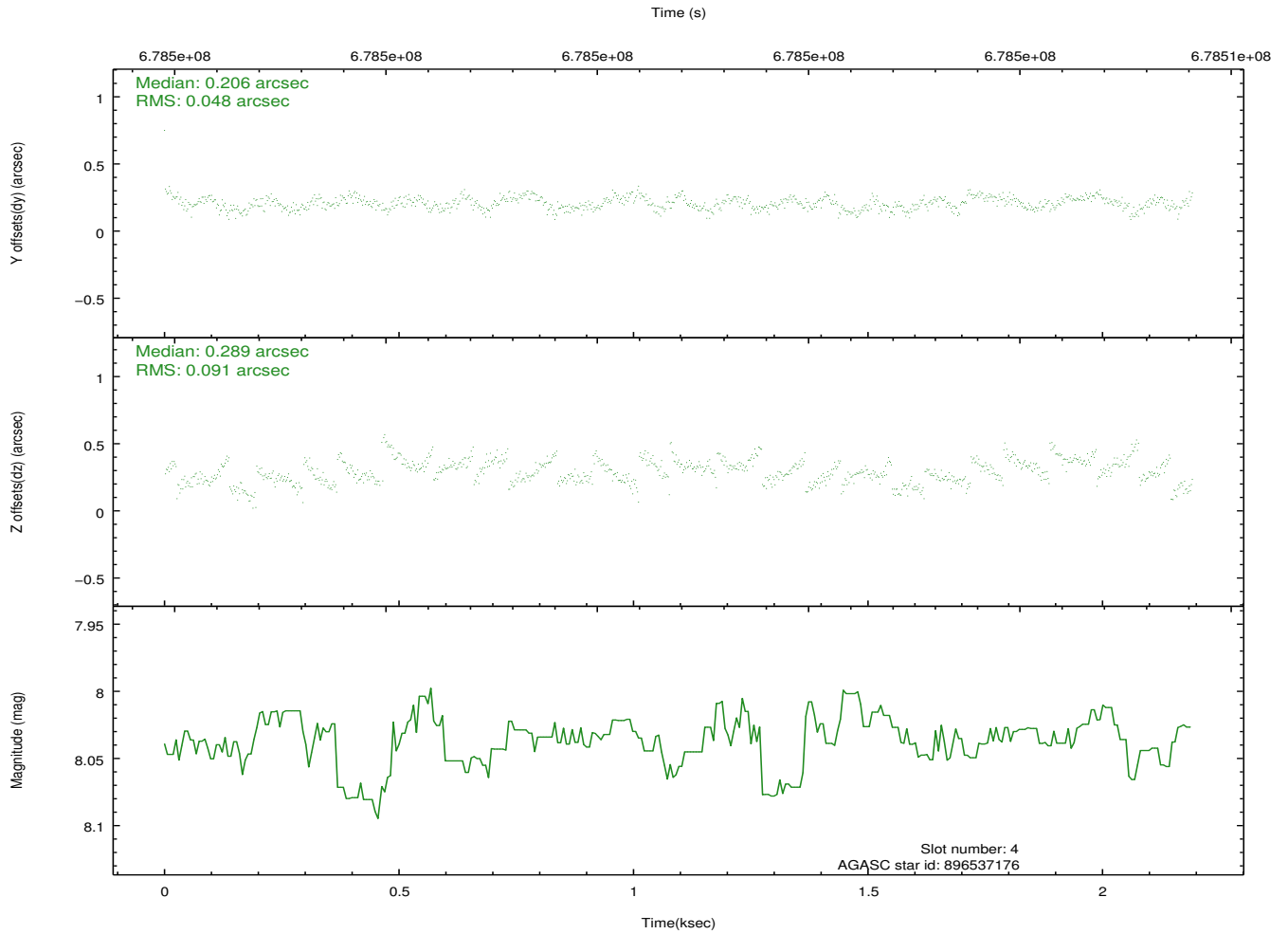
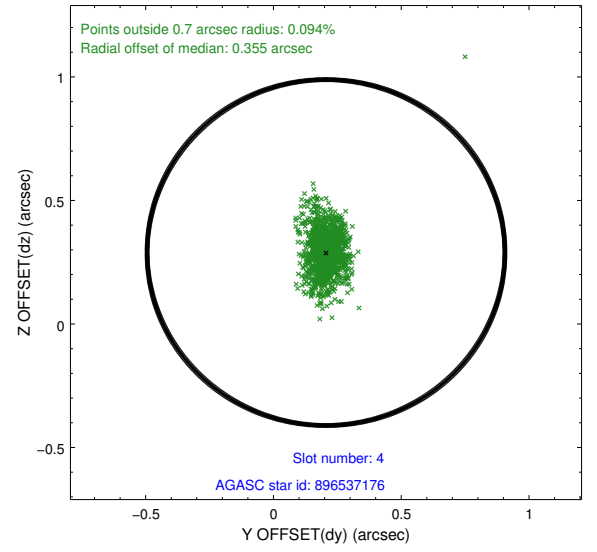
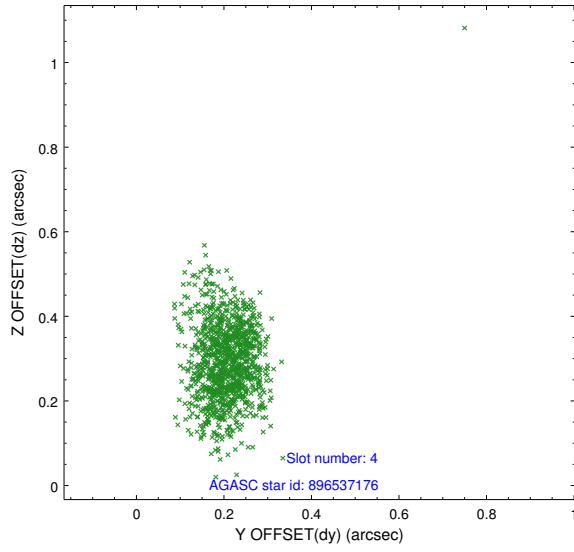


## 2.4 Star Slots

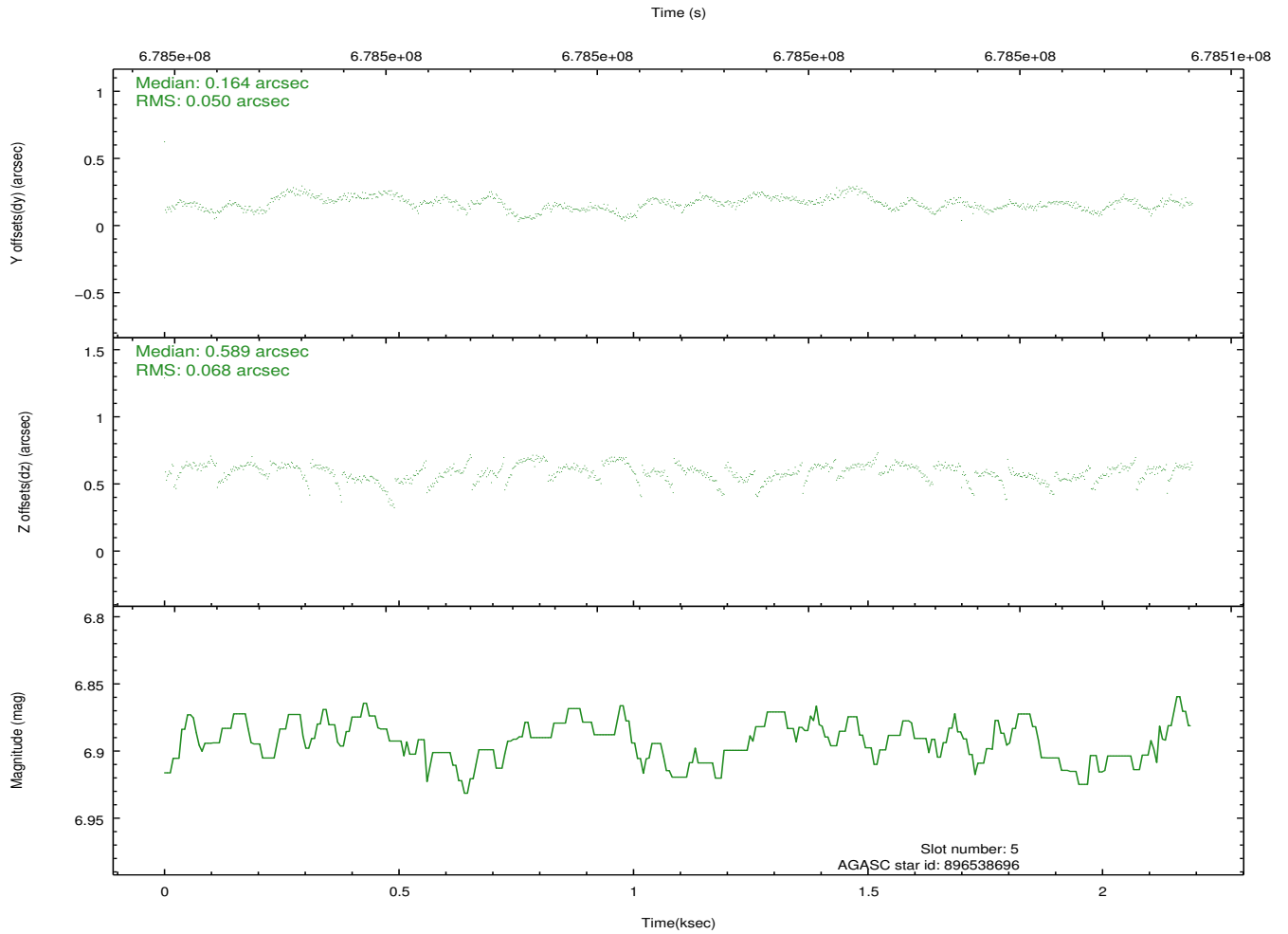
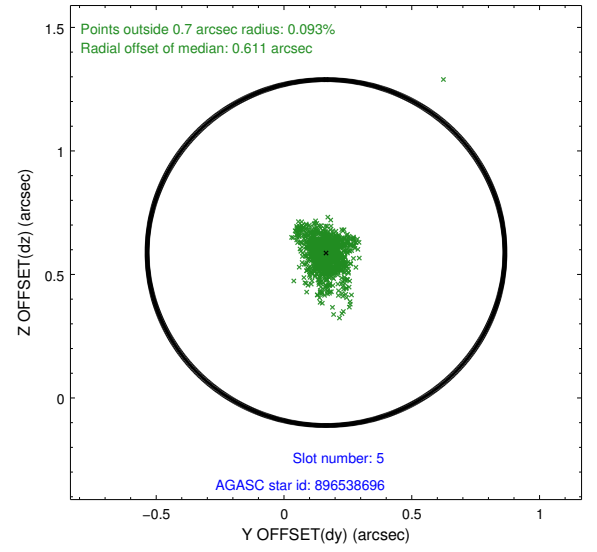
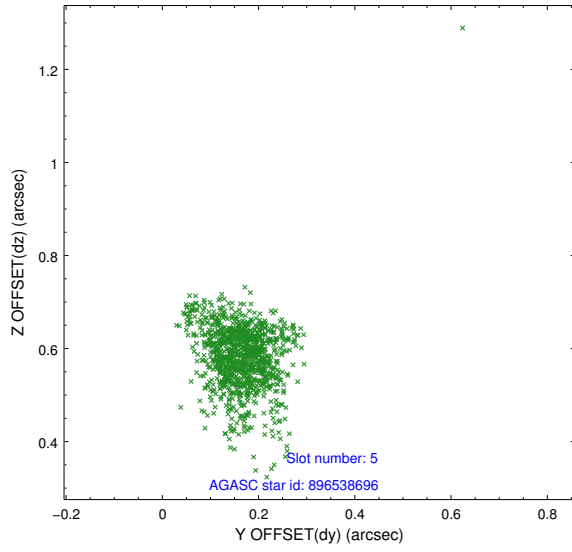
### 2.4.1 Slot 3



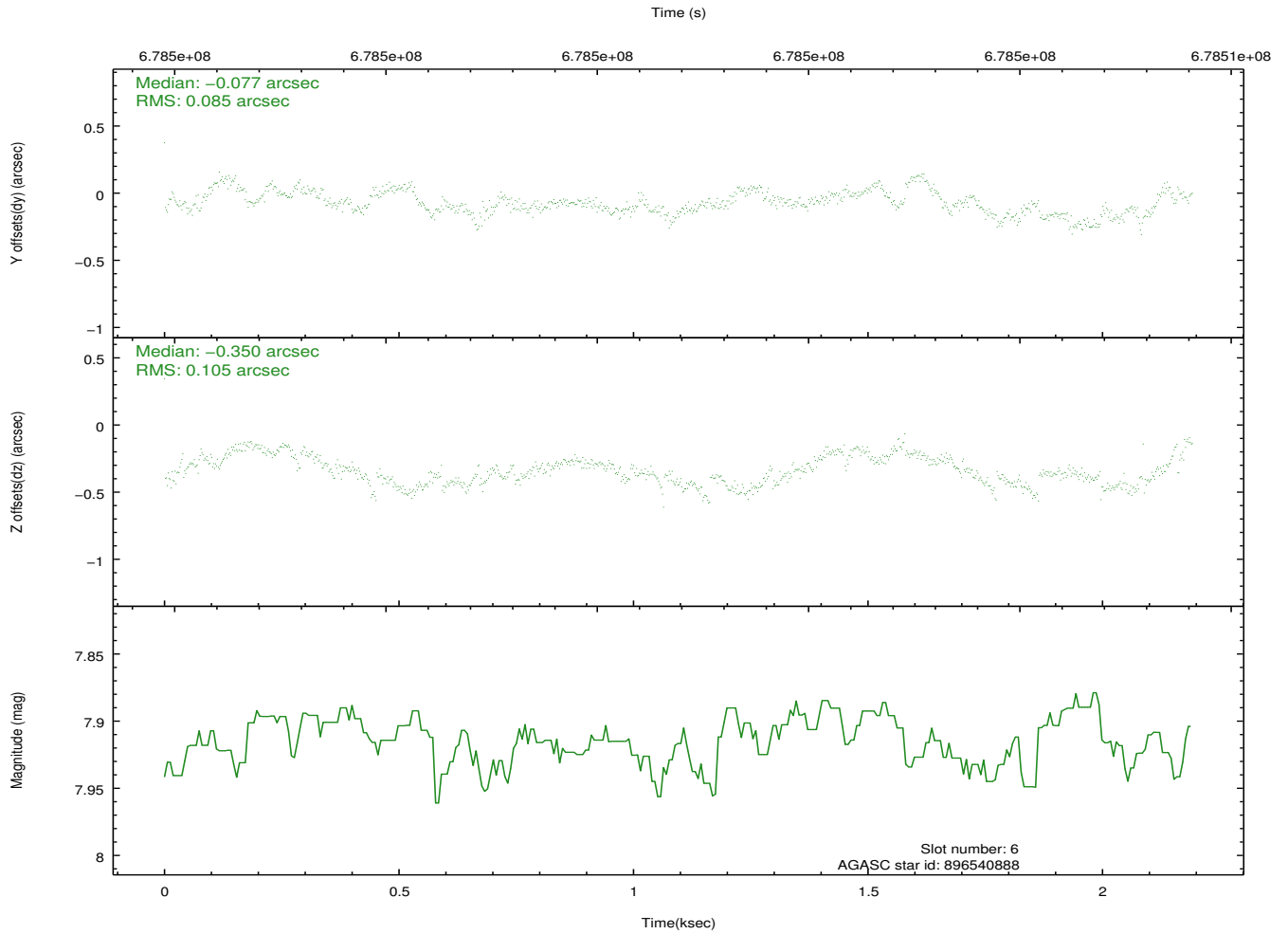
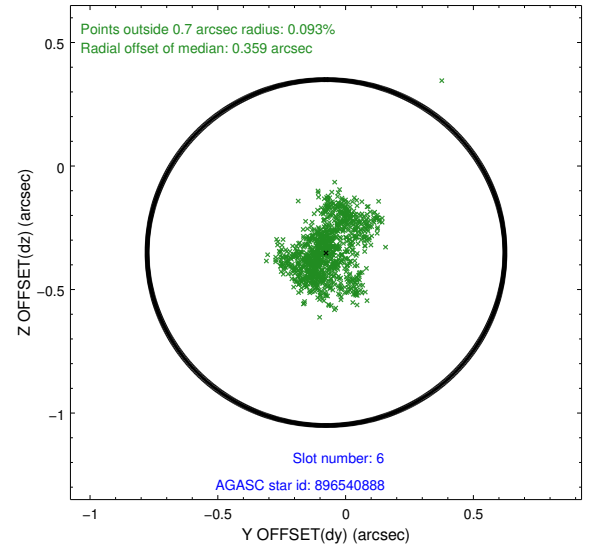
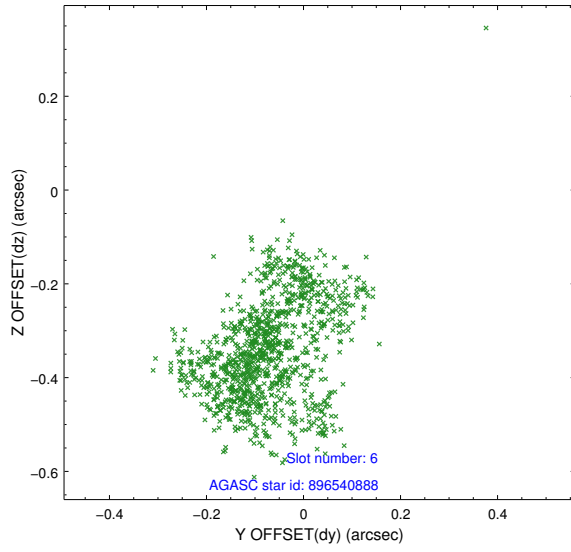
## 2.4.2 Slot 4



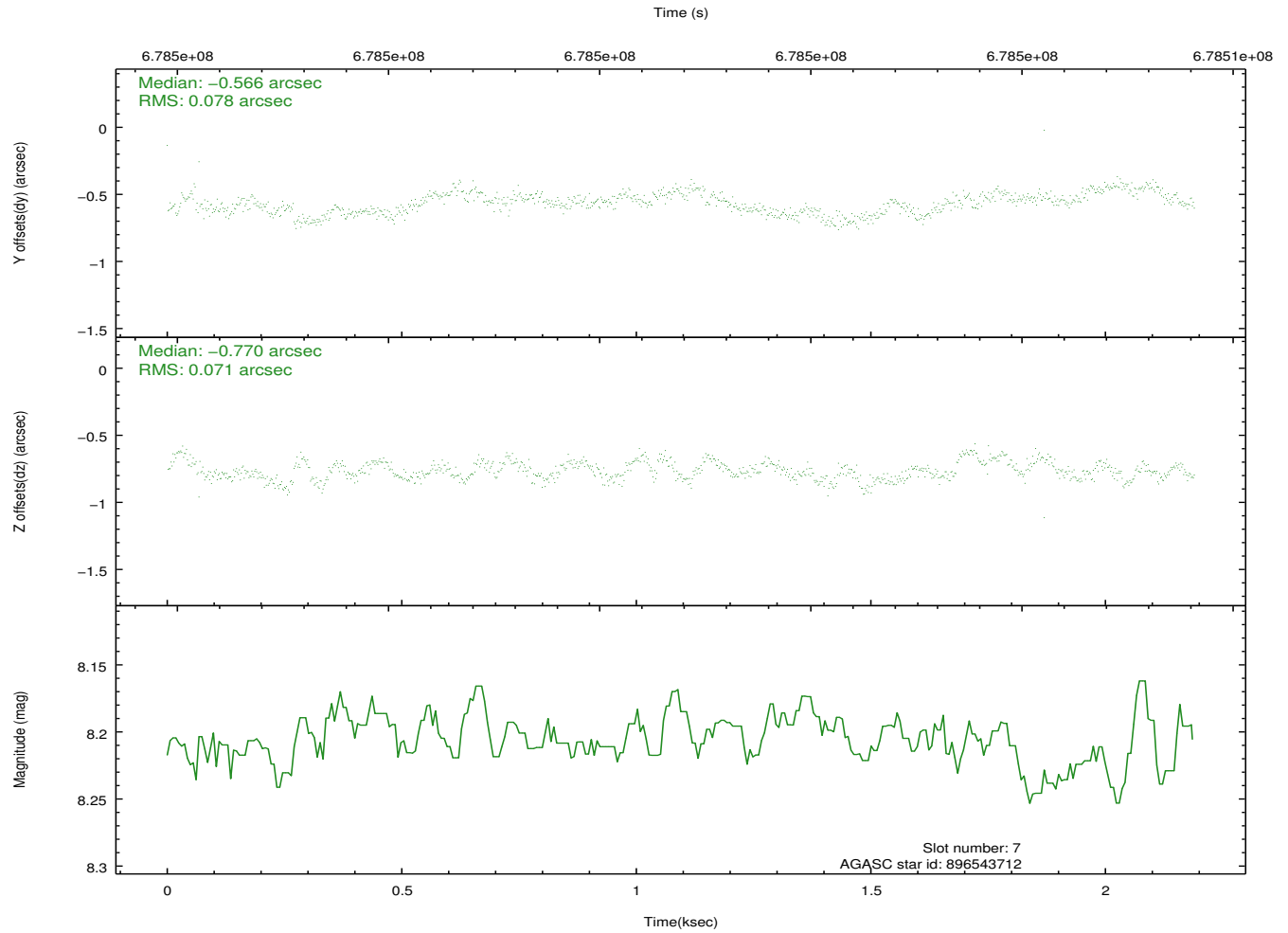
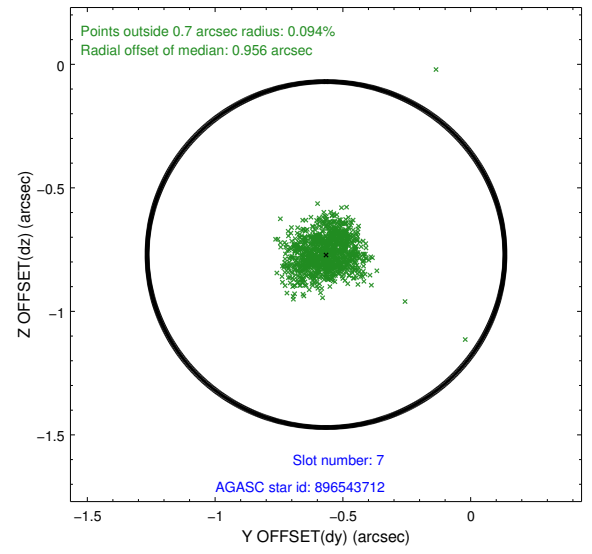
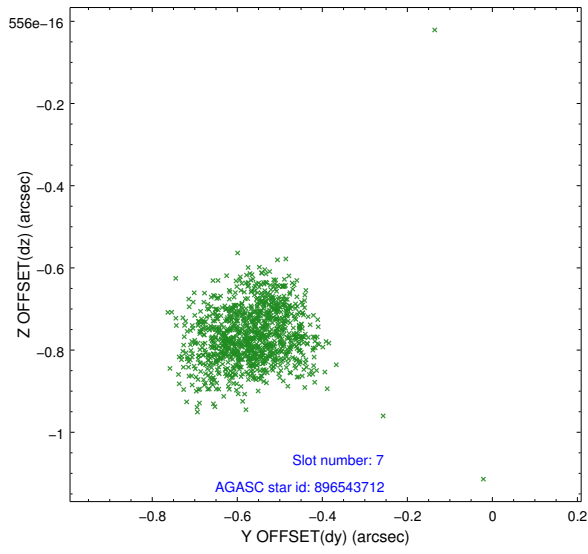
### 2.4.3 Slot 5



## 2.4.4 Slot 6

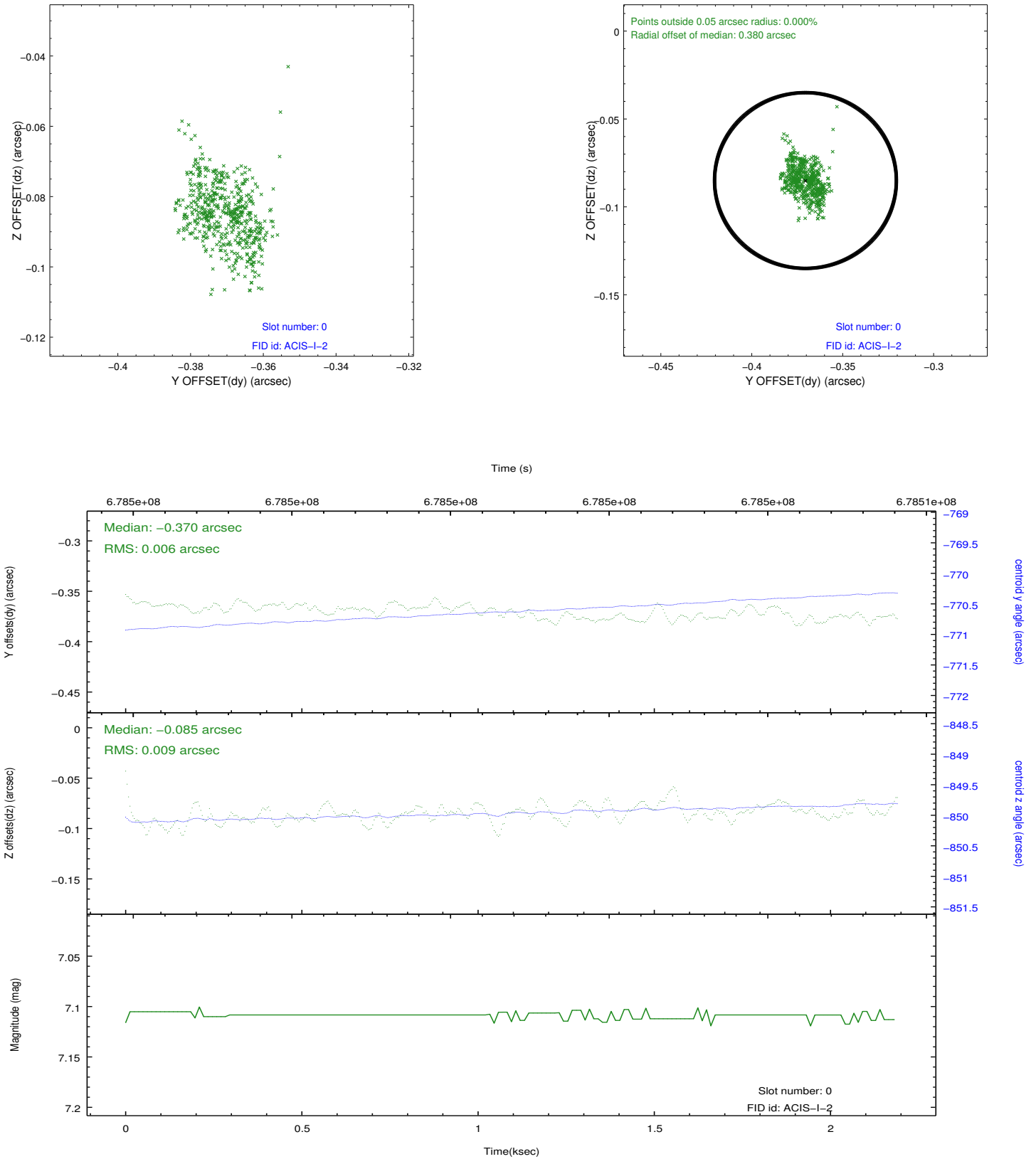


## 2.4.5 Slot 7

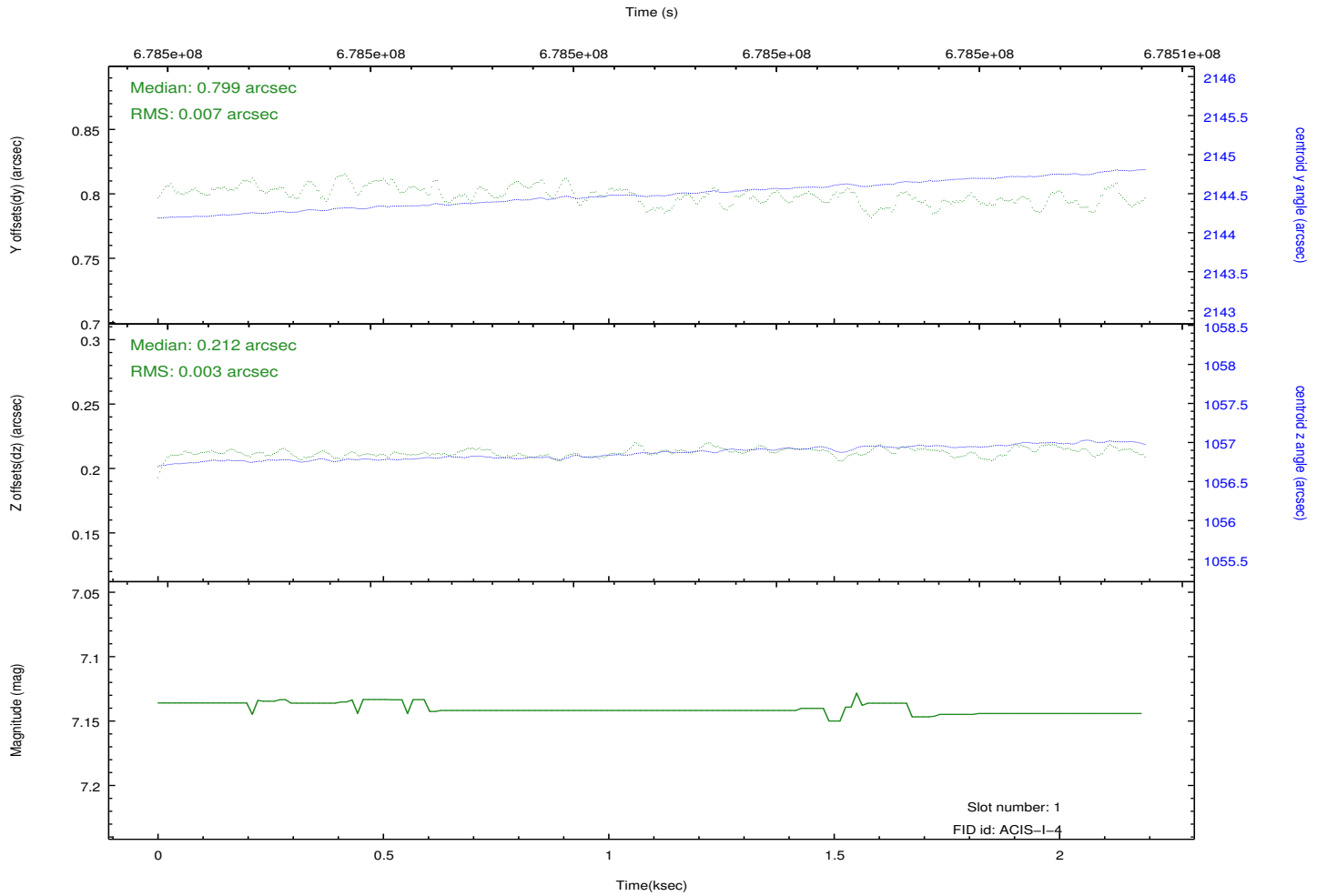
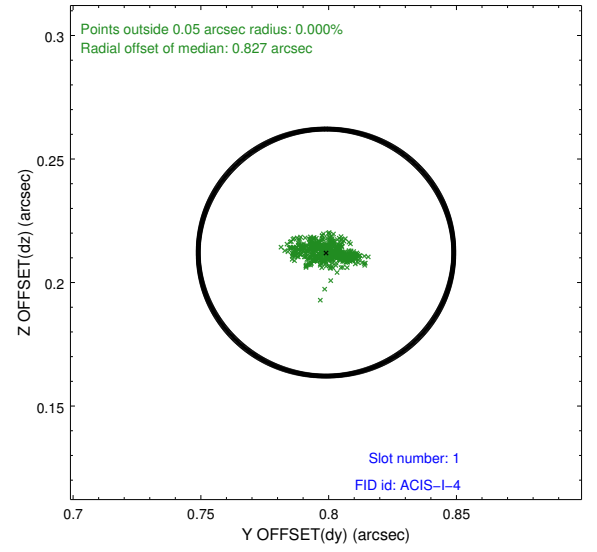
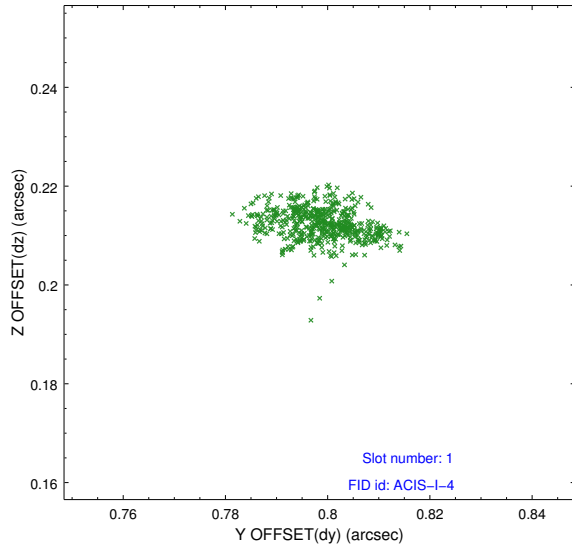


## 2.5 FID Slots

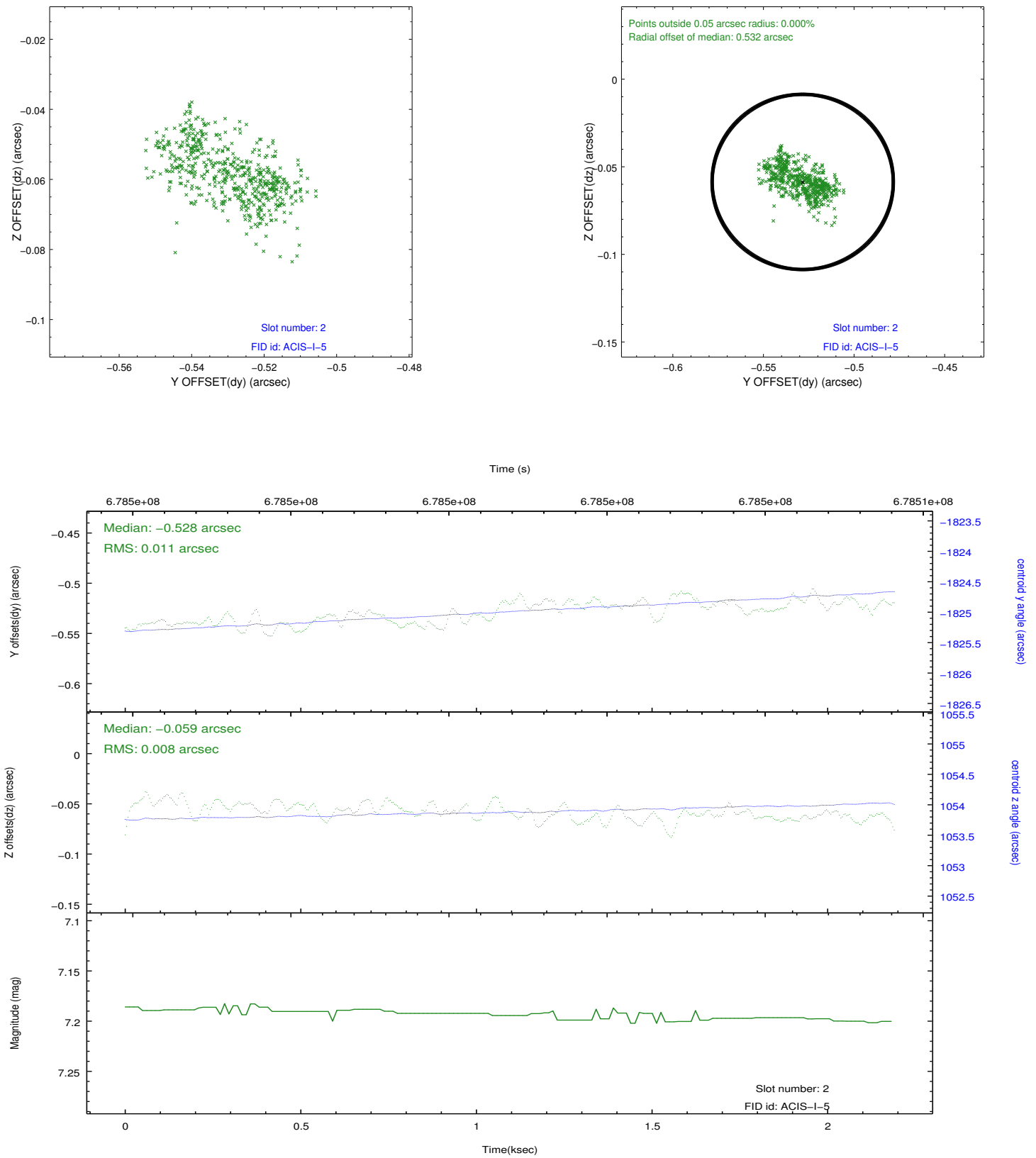
### 2.5.1 Slot 0



## 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)	2019.07.05
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.9087714598179

### A.2 Comments