

# V&V Reference Report

## L2 ASCDS Version : 10.8

Observation 21603 - L2 Version 1  
Chandra X-Ray Center

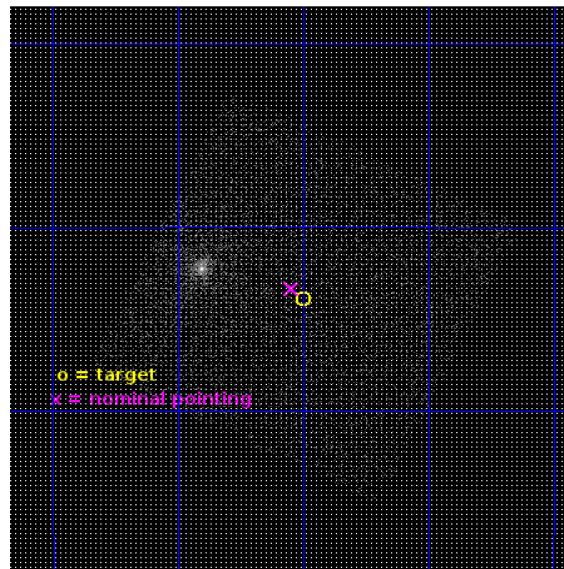
L2 Processing Date : Jul 3 2019

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# 1 Front

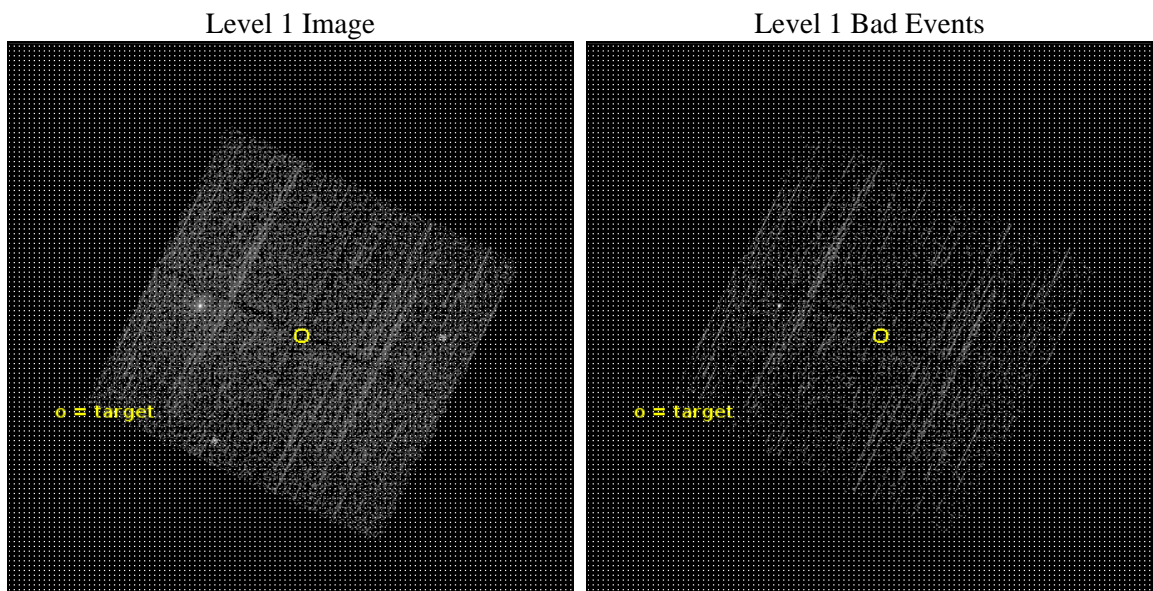
seq_num	300435	Sequence number
obs_id	21603	Observation id
title	Chandra Mapping of the Galactic Central Region	Proposal title
observer	Daniel Wang	Principal investigator
object	GCR Gap 2	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	267.49941	Observer's specified target RA [deg]
dec_targ	-29.064735	Observer's specified target Dec [deg]
ra_nom	267.51179827981	Nominal RA [deg]
dec_nom	-29.05587815475	Nominal Dec [deg]
roll_nom	296.21472861291	Nominal Roll [deg]
revision	1	Processing version of data
ontime	1908.442237854	Sum of GTIs [s]
livetime	1883.5070350417	Livetime [s]
ontime0	1908.4011979103	Sum of GTIs [s]
ontime1	1908.442237854	Sum of GTIs [s]
ontime2	1908.4832779169	Sum of GTIs [s]
ontime3	1908.5243178606	Sum of GTIs [s]
l2events	9953	Number of level 2 events



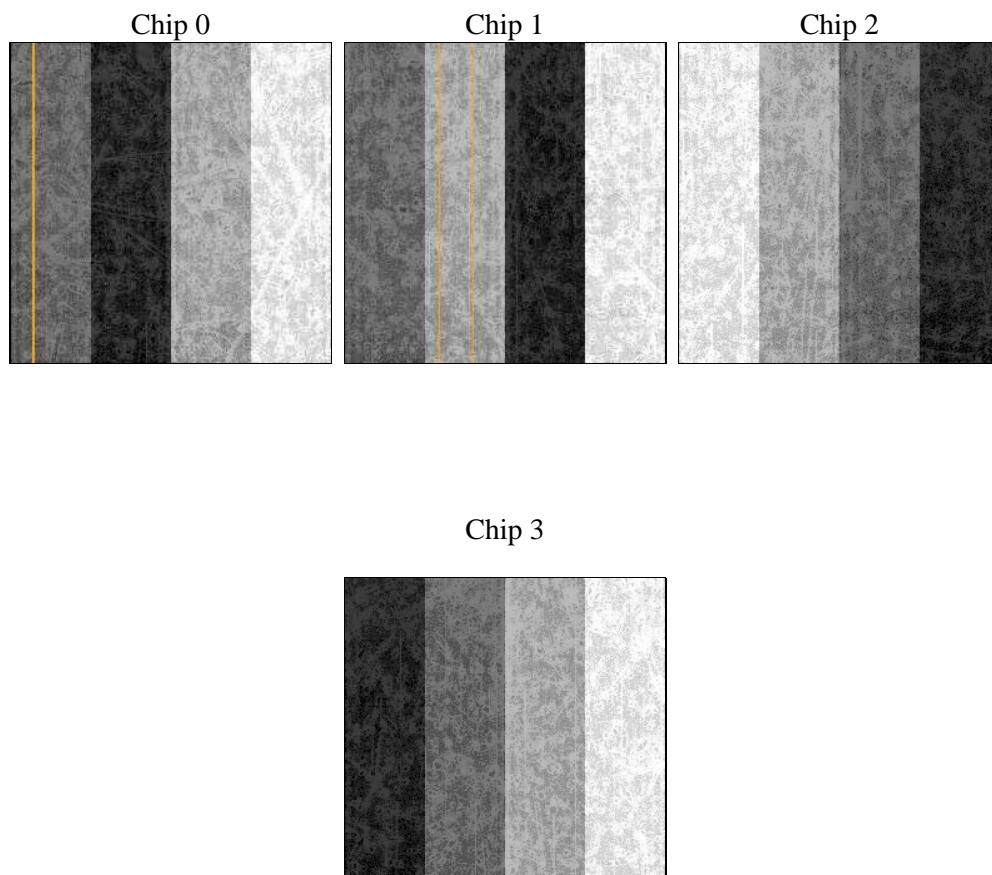
## 2 OBI

### 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	1908.442237854	Sum of GTIs [s]
caldsver	4.8.3.1	&#160	ontime0	1908.4011979103	Sum of GTIs [s]
date	2019-07-03T21:53:26	Date and time of file creation	ontime1	1908.442237854	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	1908.4832779169	Sum of GTIs [s]
			ontime3	1908.5243178606	Sum of GTIs [s]
			l1events	66861	Number of level 1 events

### 2.1.4 Events

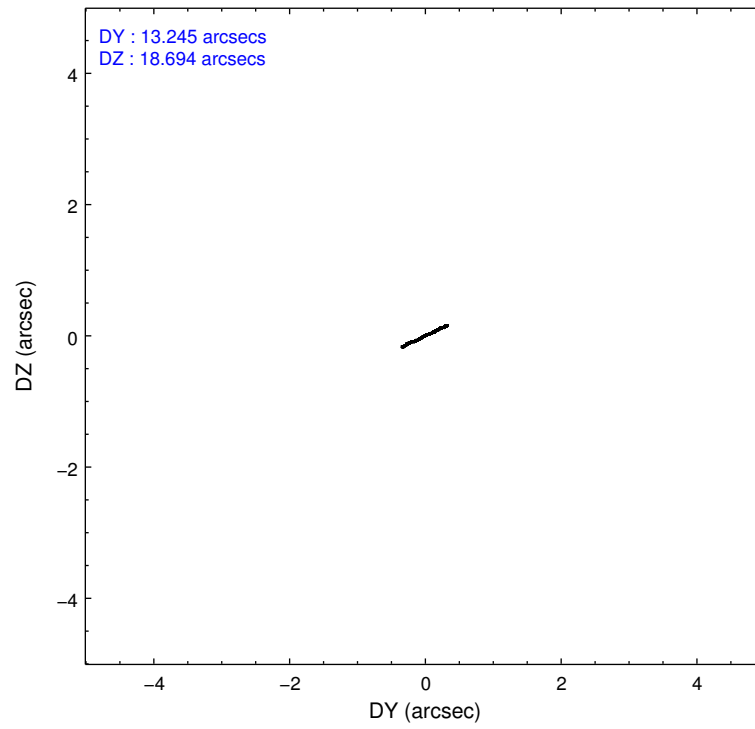
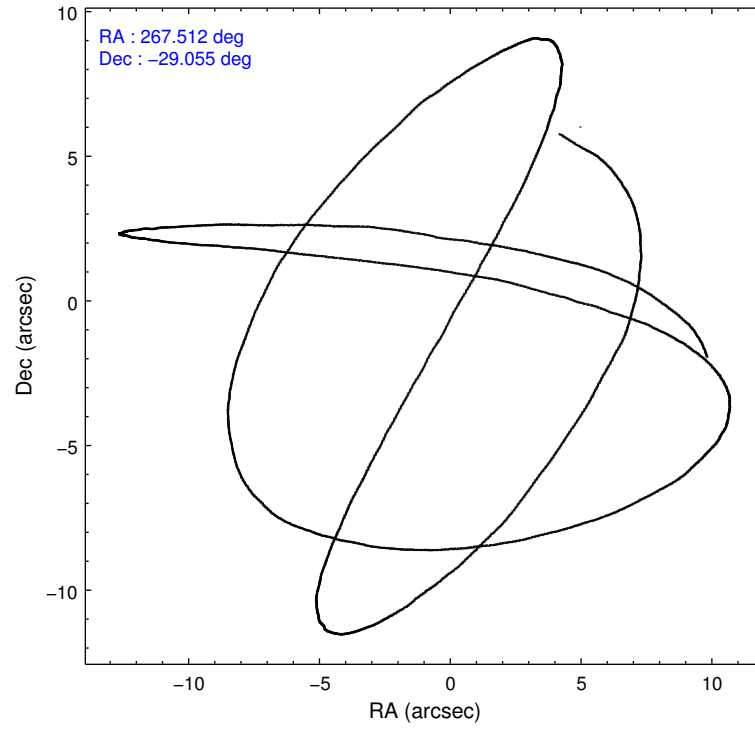
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	14689	15510	20989	15673
rejected events	12735	12846	15186	13539
rejected %	86%	82%	72%	86%

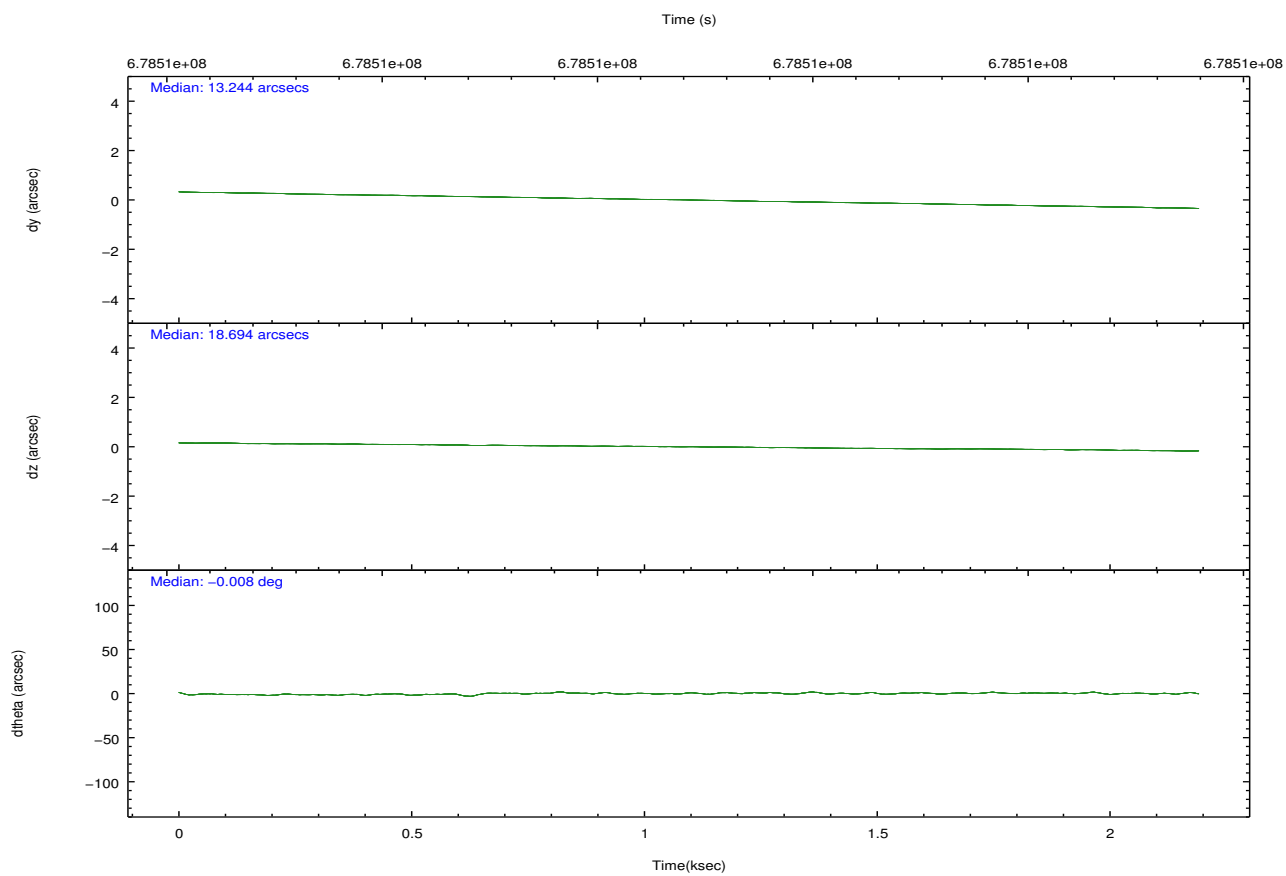
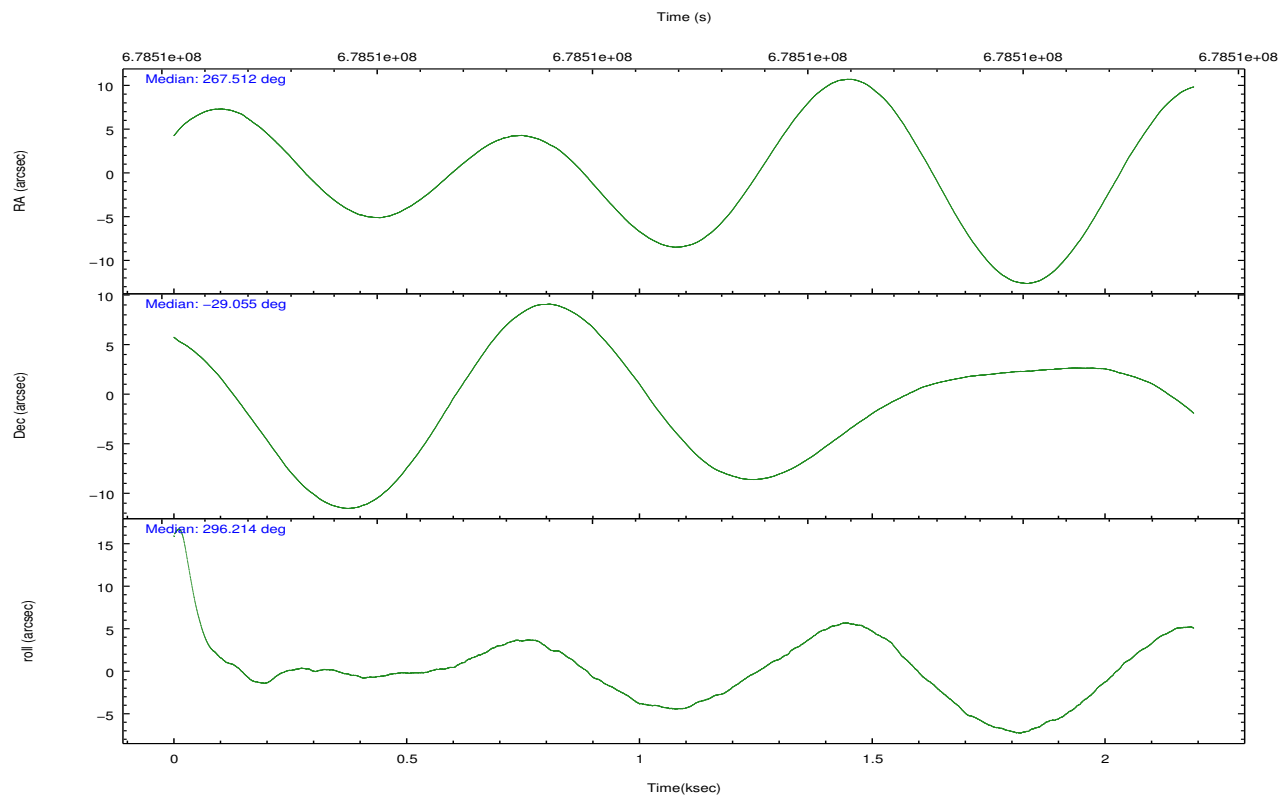
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	799	1386	3519	1015
	5%	8%	16%	6%
grade 1 events	13	10	384	10
	0%	0%	1%	0%
grade 2 events	426	505	853	433
	2%	3%	4%	2%
grade 3 events	164	170	374	173
	1%	1%	1%	1%
grade 4 events	178	158	380	146
	1%	1%	1%	0%
grade 5 events	541	582	911	700
	3%	3%	4%	4%
grade 6 events	389	448	689	371
	2%	2%	3%	2%
grade 7 events	12179	12251	13879	12825
	82%	78%	66%	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	267.485395	267.5117982798066	Subarray requested	NONE	NONE
[deg] Pointing Dec	-29.040659	-29.05587815474992	Alternating exposures requested	N	N
[deg] Pointing Roll	295.993198	296.2147286129115	[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)	678510810.184000	678510434.42158			
Observation start date	2019-07-03T03:12:21	2019-07-03T03:07:14			
[s] Observation end time (MET)	678512810.184000	678513733.38428			
Observation end date	2019-07-03T03:45:41	2019-07-03T04:02:13			
Read mode	TIMED	TIMED			

## 2.3 Aspect



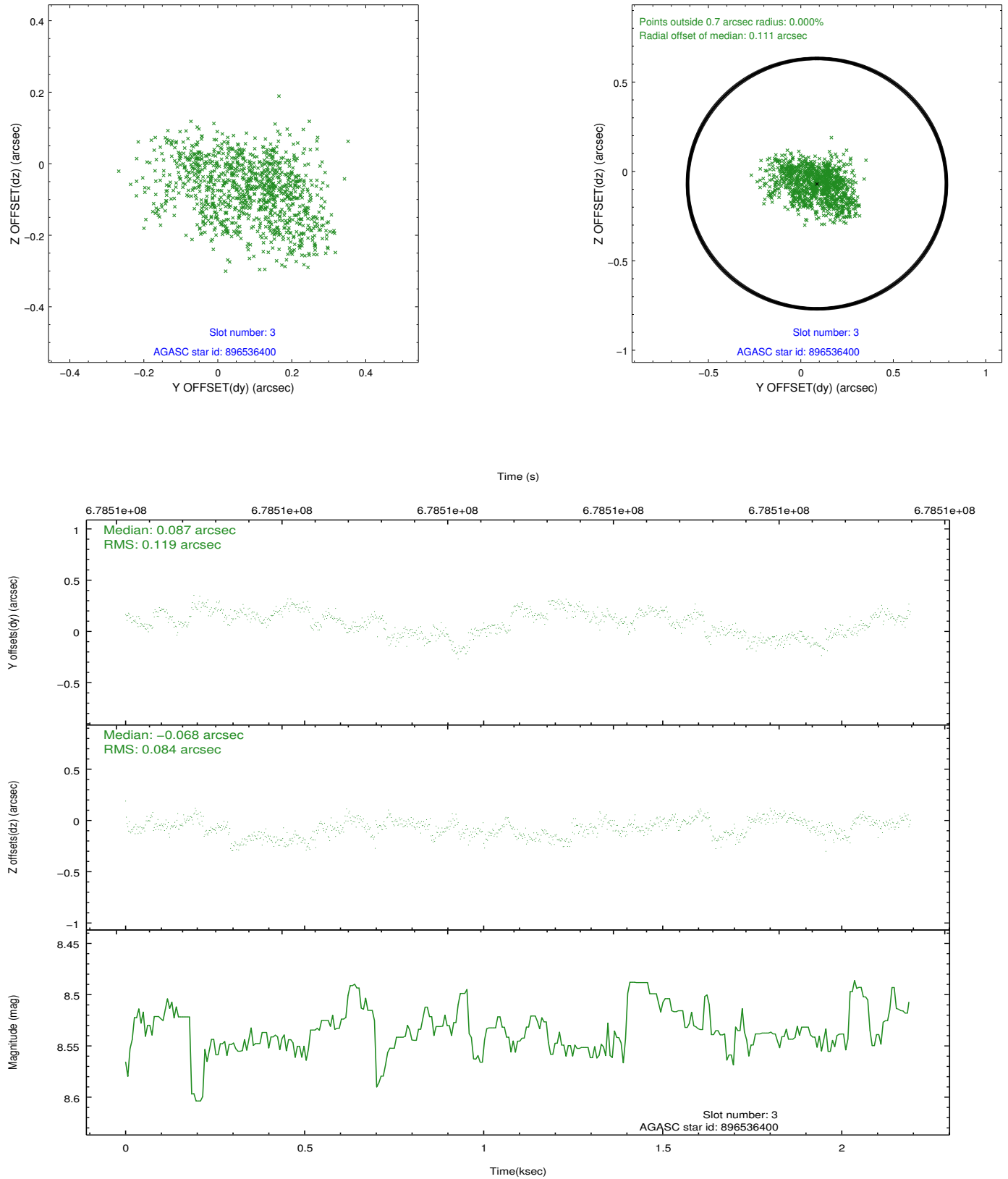


Slot Statistics

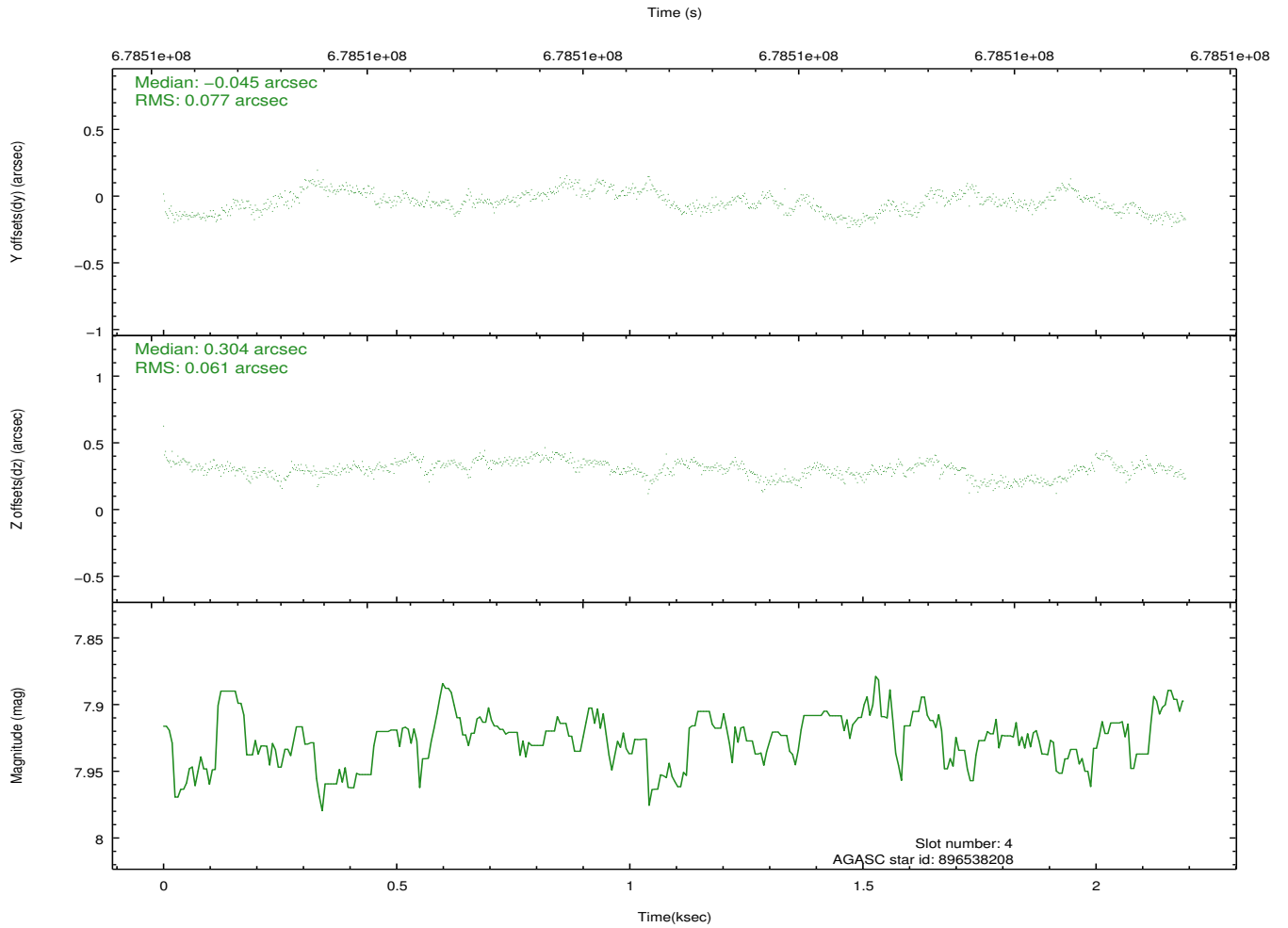
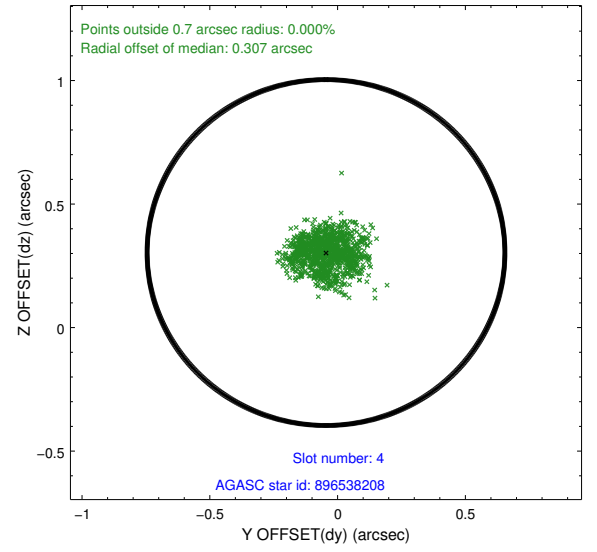
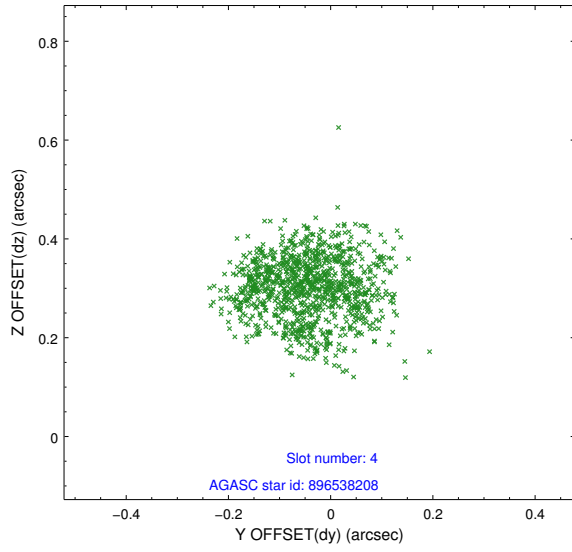
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.22	535	1.000	-0.106	-0.081	0.013	0.019	0.000000	0.000000	926.26	-842
1	FID		ACIS-I-4	7.20	535	1.000	0.658	0.130	0.011	0.019	0.000000	0.000000	2148.51	1056
2	FID		ACIS-I-5	7.22	535	1.000	-0.653	0.022	0.011	0.017	0.000000	0.000000	-1818.67	1056
3	GUIDE	used	896536400	8.54	1070	1.000	0.087	-0.068	0.156	0.248	267.359146	-29.438655	1116.05	-983
4	GUIDE	used	896538208	7.92	1069	1.000	-0.045	0.304	0.108	0.161	267.176969	-28.671626	-1617.96	-294
5	GUIDE	used	896540528	8.28	1069	1.000	0.249	-0.185	0.152	0.239	267.368305	-29.314773	726.27	-762
6	GUIDE	used	896541576	8.17	1070	1.000	0.115	0.294	0.134	0.208	267.051055	-28.762912	-1495.59	-795
7	GUIDE	used	896543712	8.21	1068	1.000	-0.381	-0.337	0.087	0.145	267.764551	-28.659720	-845.21	1391

## 2.4 Star Slots

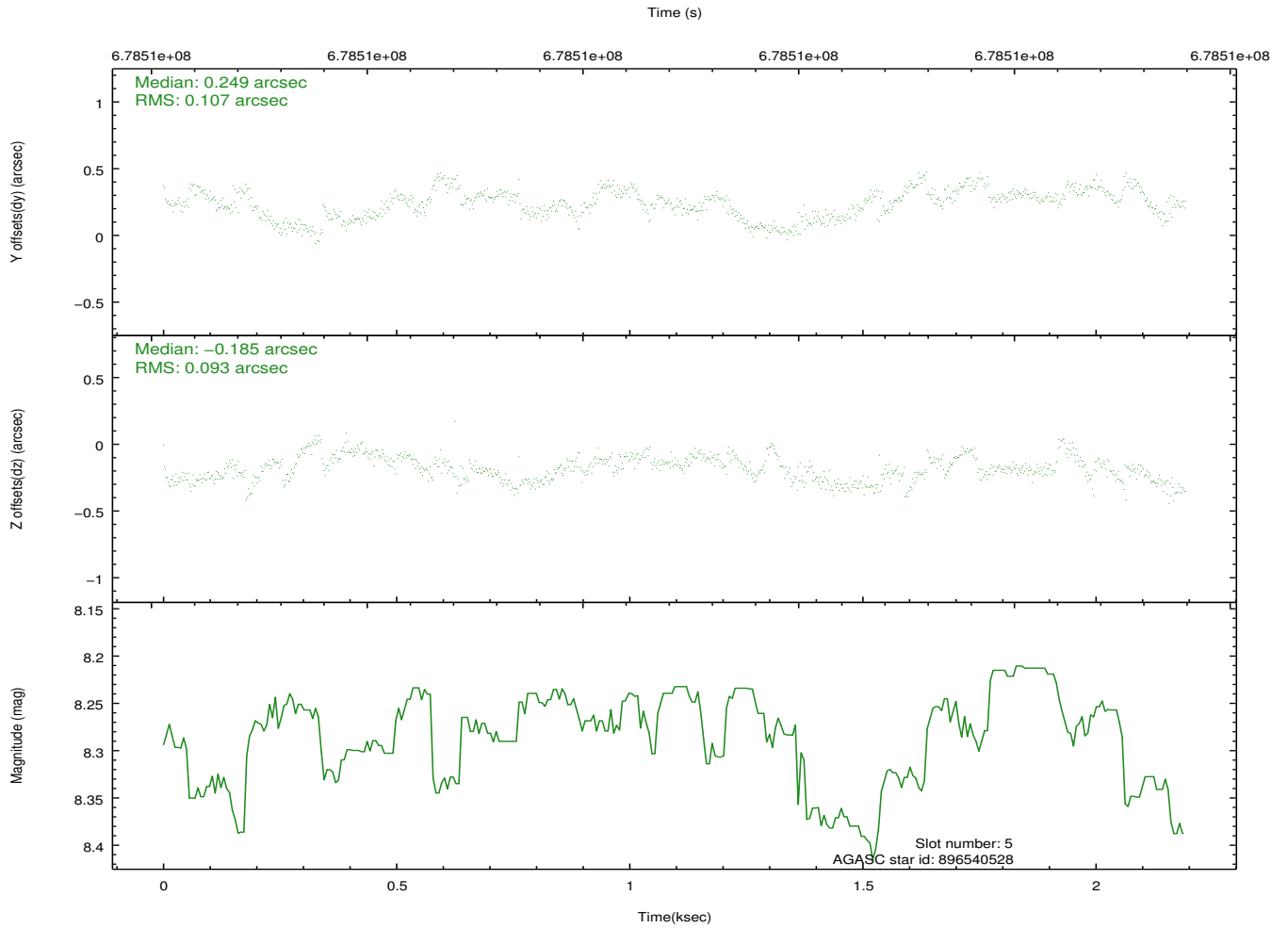
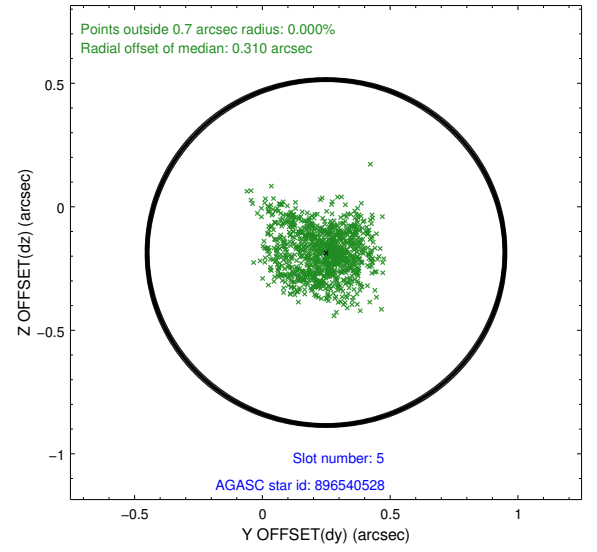
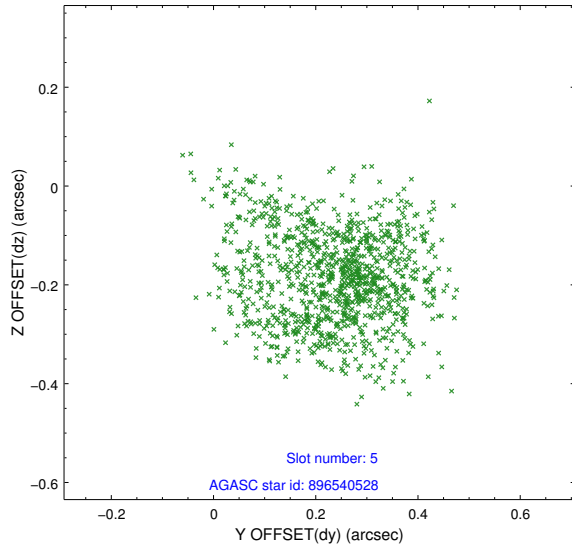
### 2.4.1 Slot 3



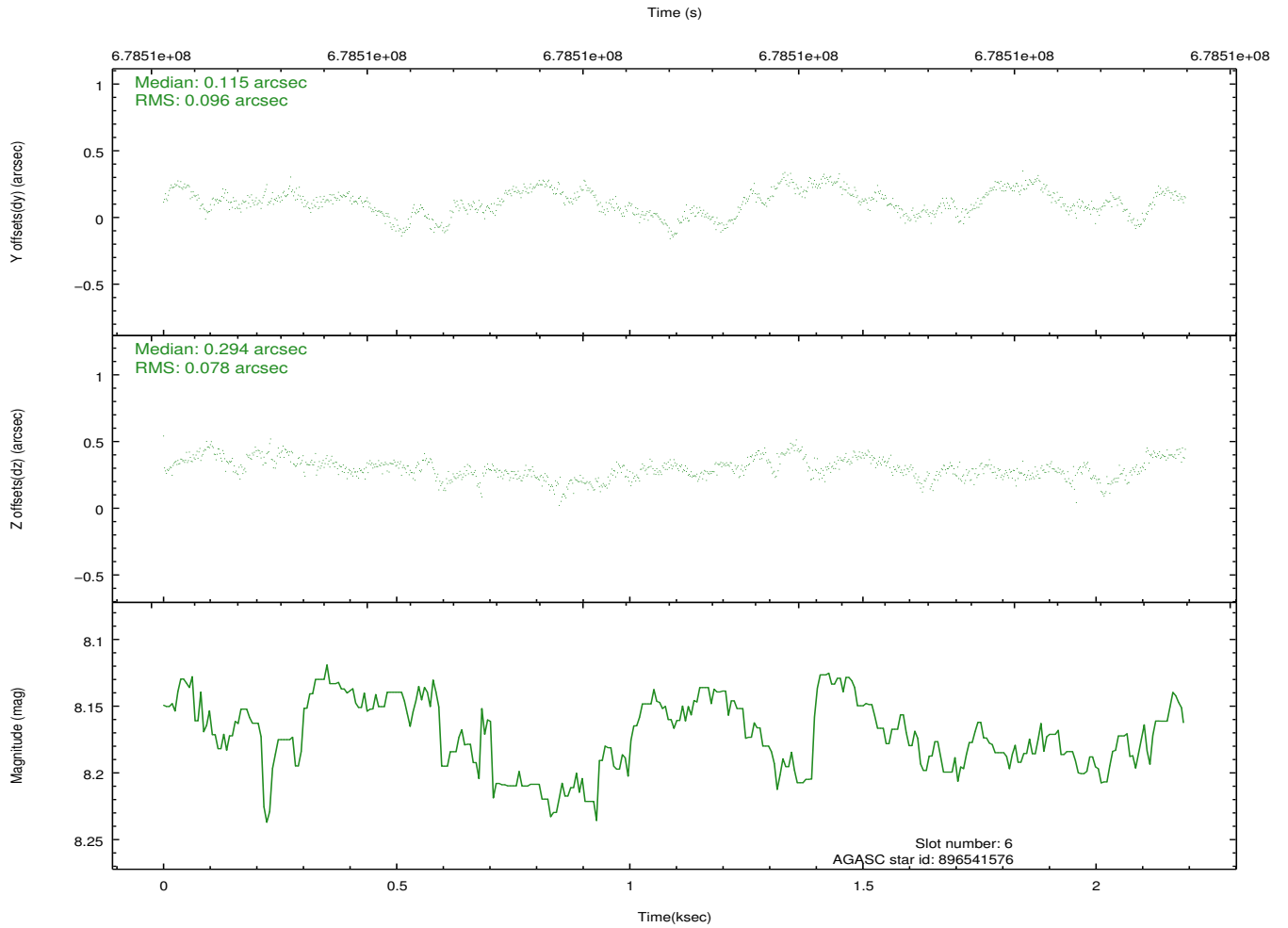
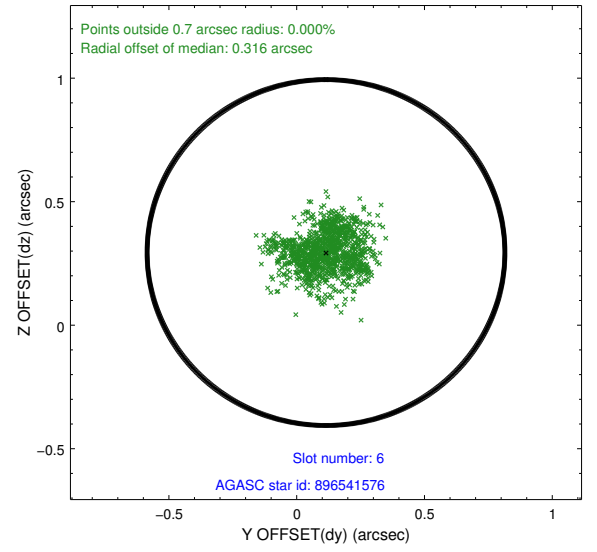
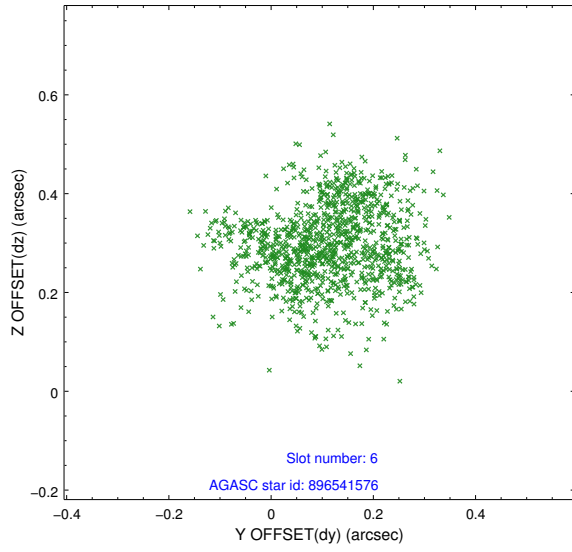
## 2.4.2 Slot 4



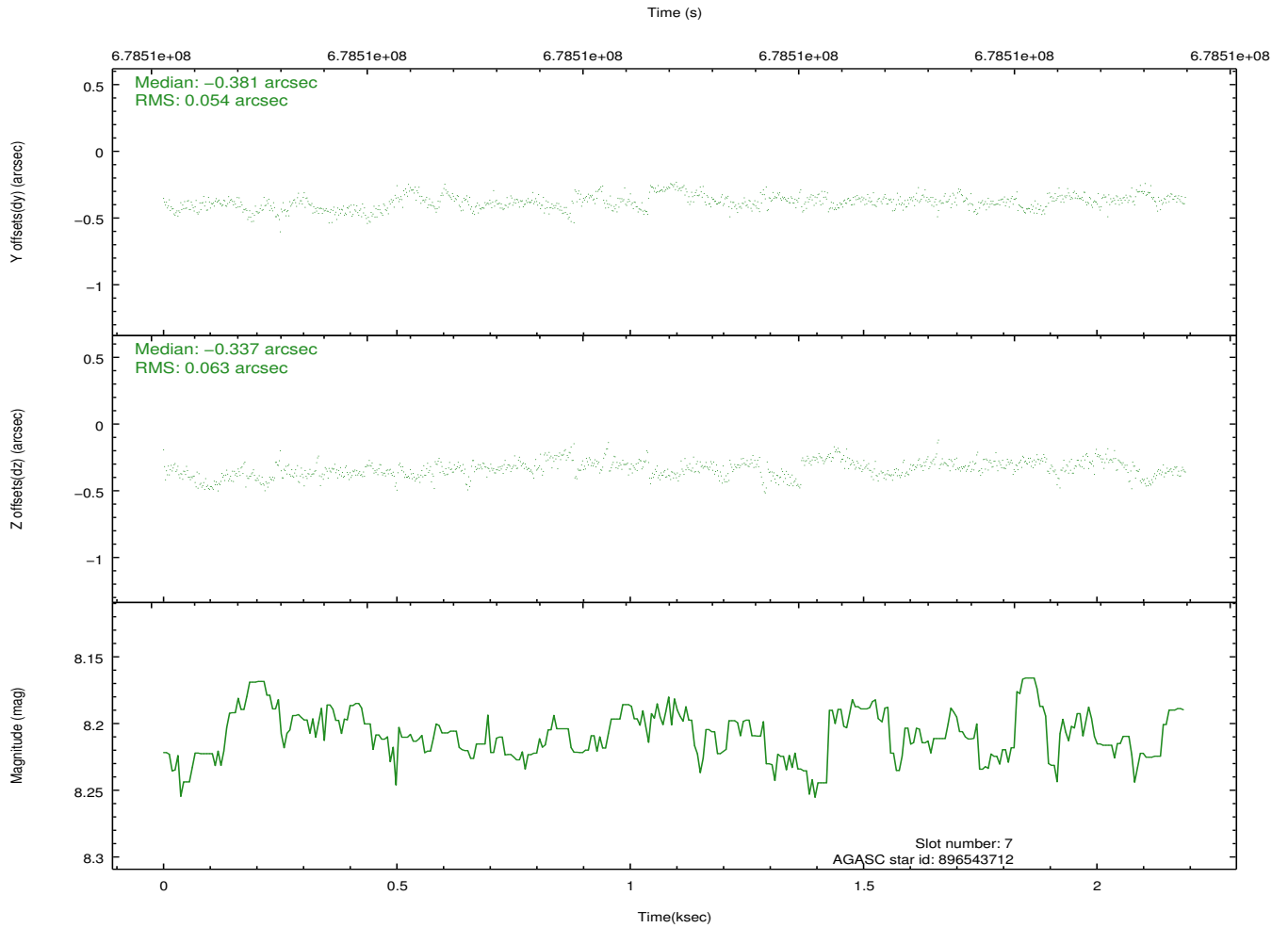
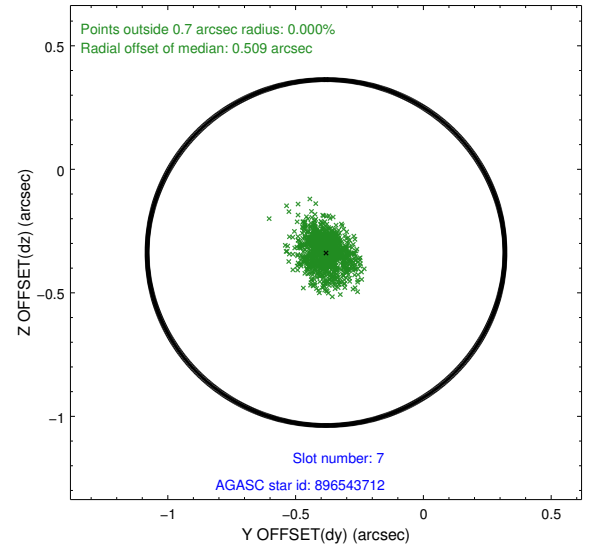
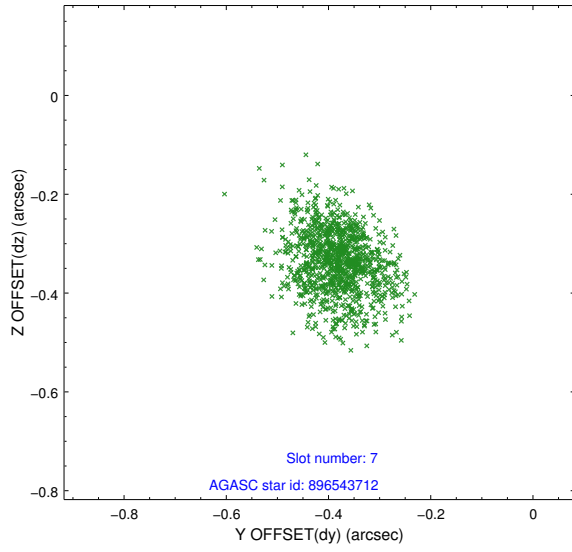
### 2.4.3 Slot 5



## 2.4.4 Slot 6

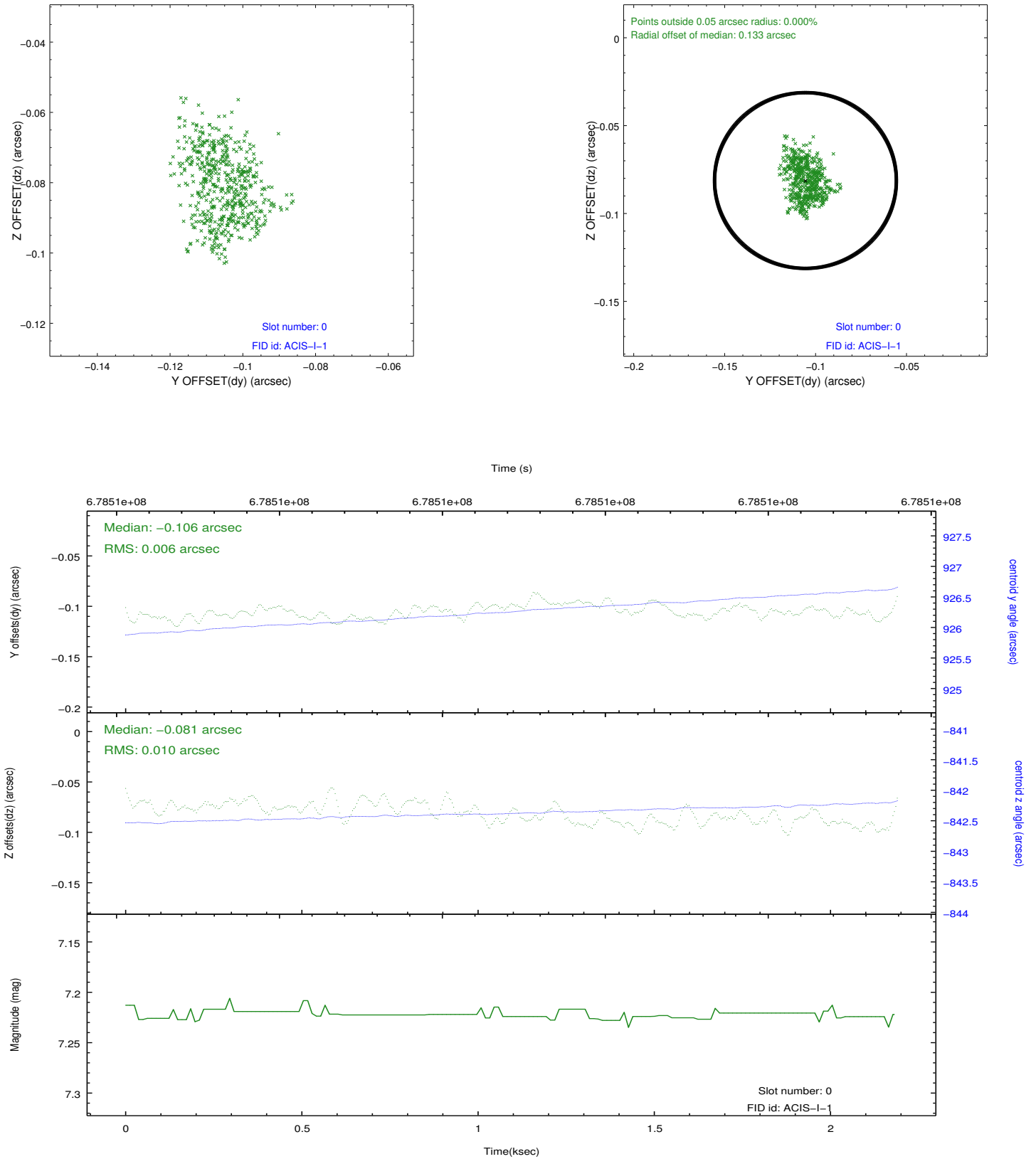


## 2.4.5 Slot 7

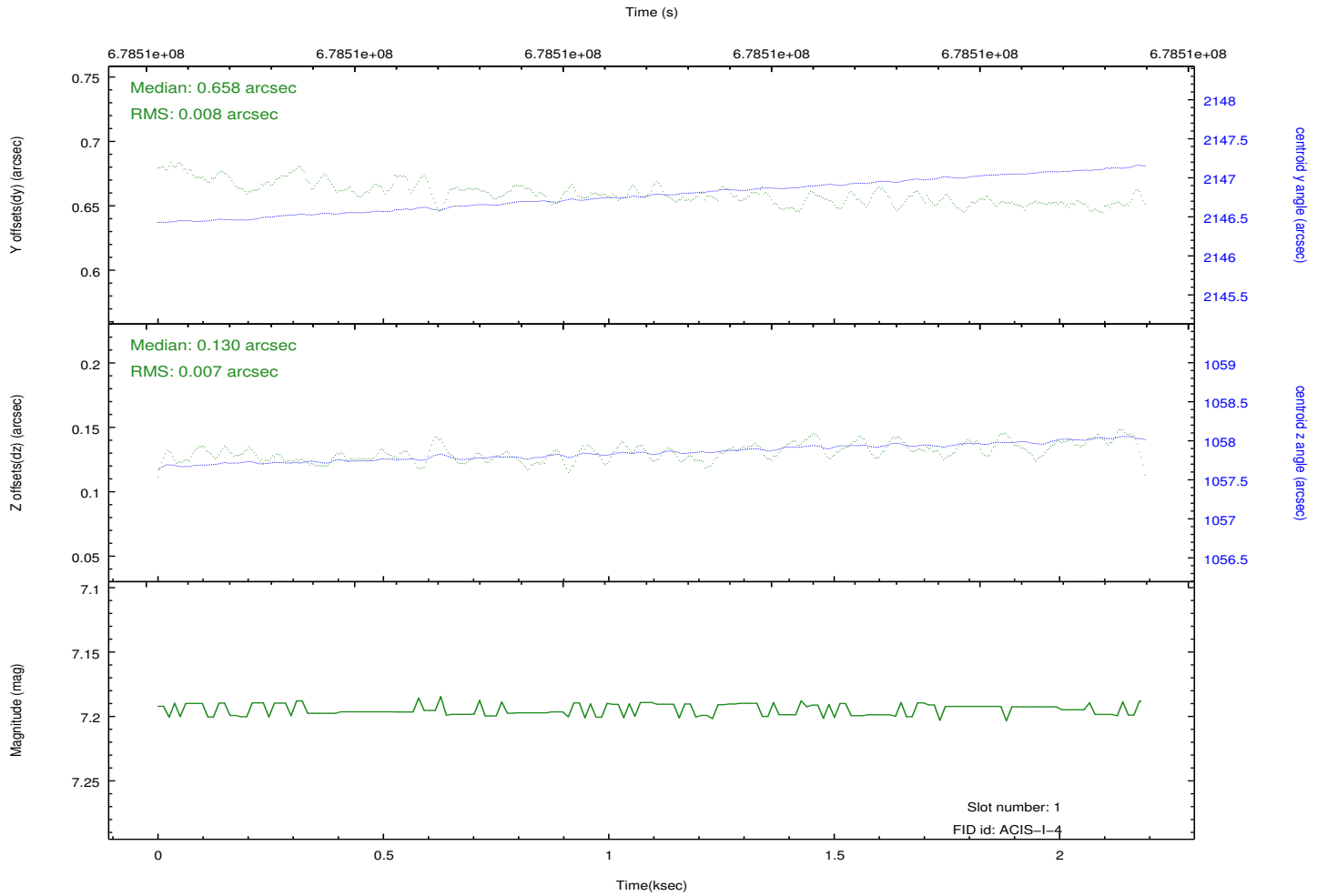
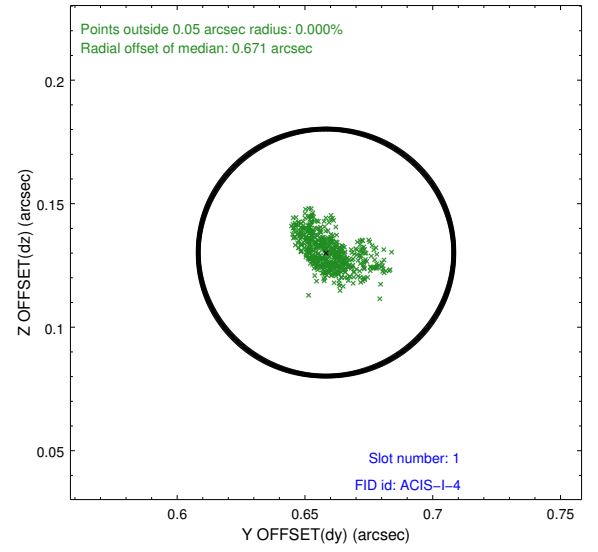
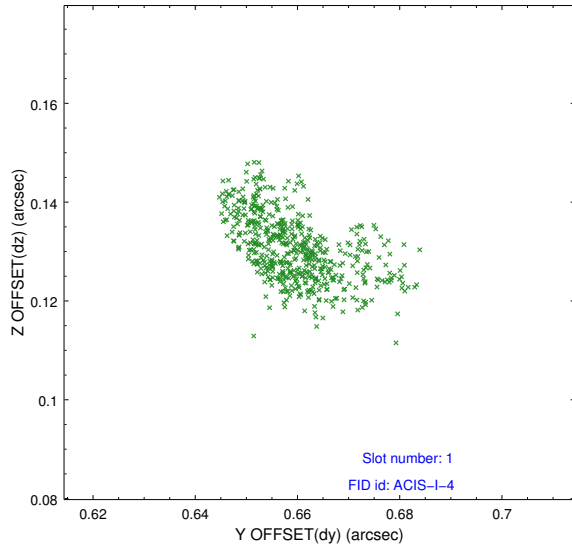


## 2.5 FID Slots

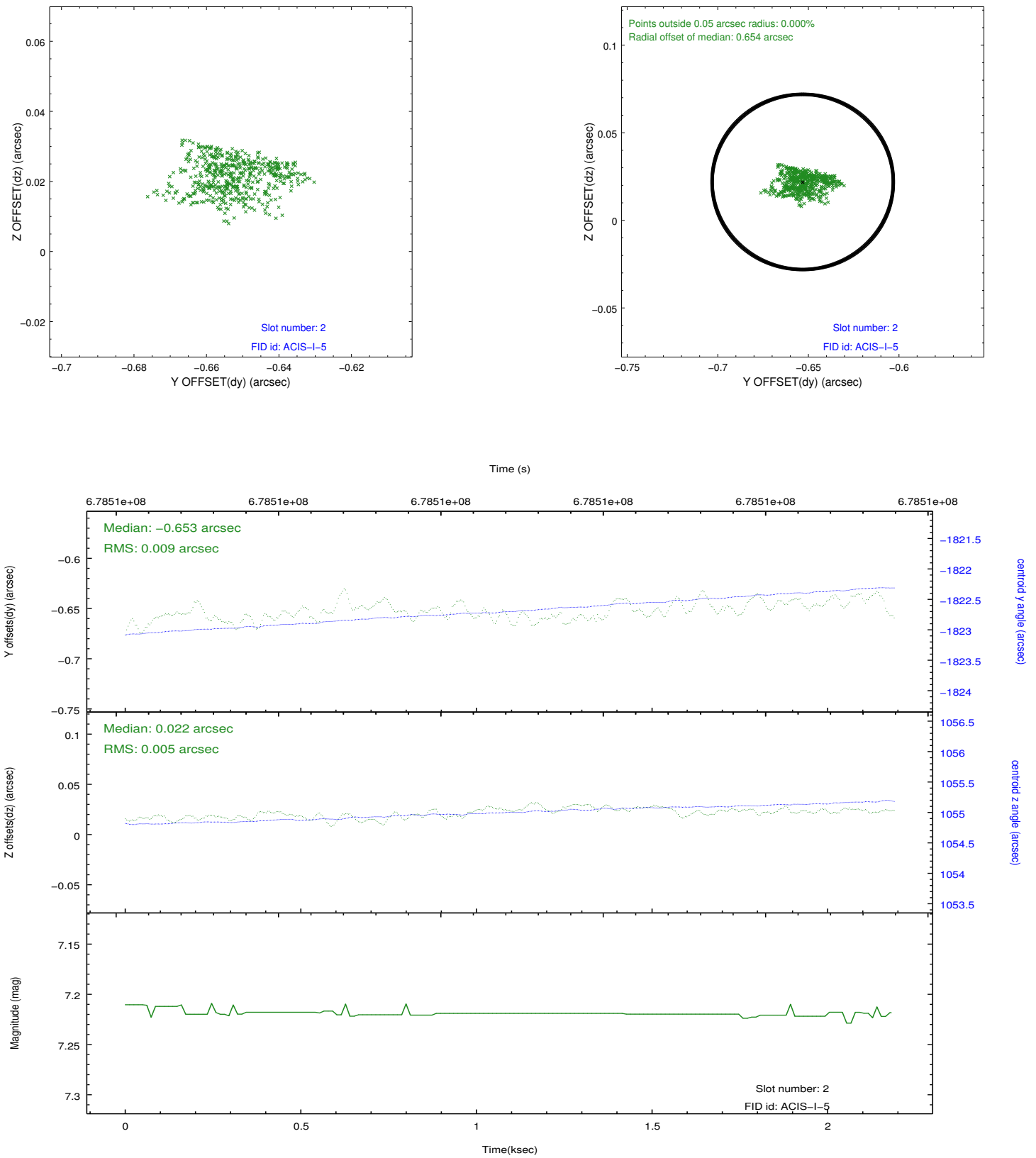
### 2.5.1 Slot 0



## 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)	2019.07.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.908442237854

### A.2 Comments