

# V&V Reference Report

## L2 ASCDS Version : 8.4.3

Observation 12877 - L2 Version 2  
Chandra X-Ray Center

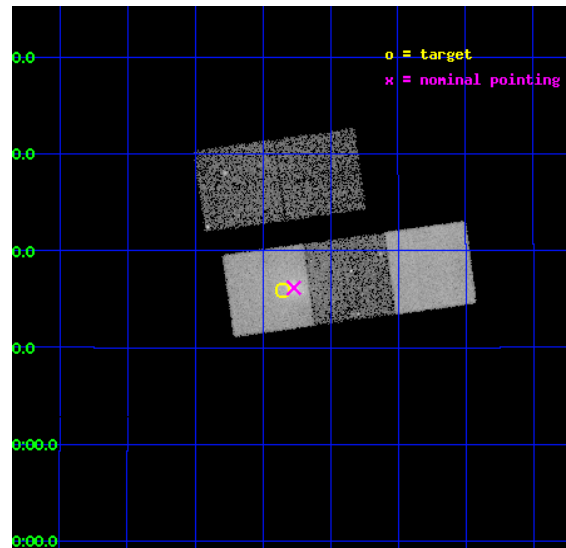
L2 Processing Date : Feb 7 2012

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# 1 Front

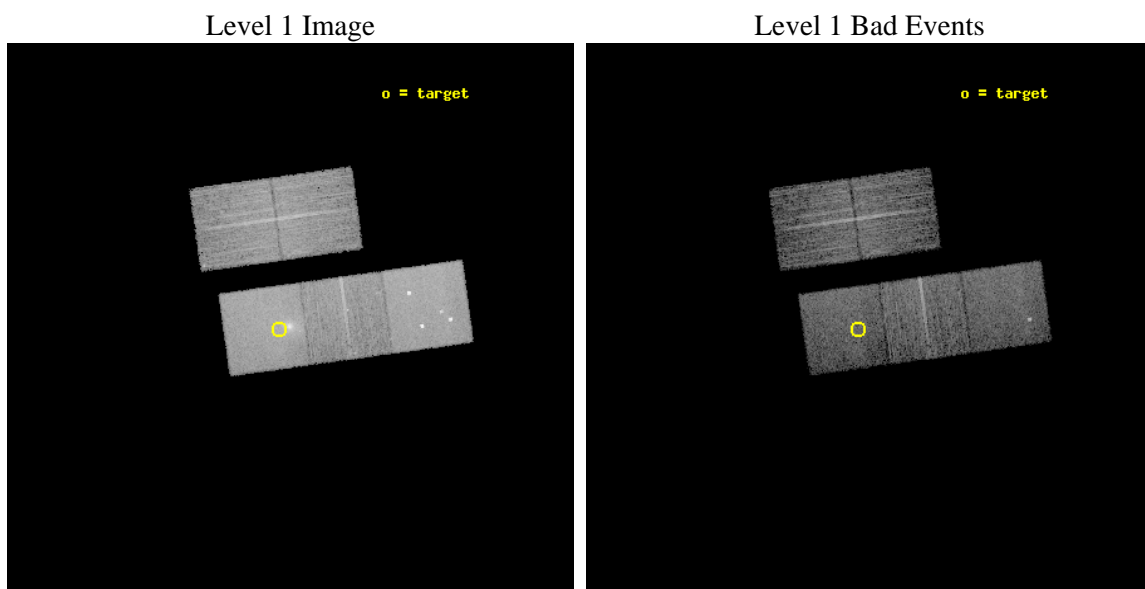
seq_num	801016	Sequence number
obs_id	12877	Observation id
title	Investigating AGN feedback in cool cores detected in Halpha	Propos
observer	Dr Myriam Gitti	Principal investigator
object	Abell 1668	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	195.964167	Observer's specified target RA [deg]
dec_targ	19.265306	Observer's specified target Dec [deg]
ra_nom	195.9426244203	Nominal RA [deg]
dec_nom	19.269856250001	Nominal Dec [deg]
roll_nom	172.09036835537	Nominal Roll [deg]
revision	2	Processing version of data
ontime	10109.100077748	Sum of GTIs [s]
livetime	9977.0172430213	Livetime [s]
ontime2	10109.100077748	Sum of GTIs [s]
ontime3	10109.100077748	Sum of GTIs [s]
ontime5	10109.100077748	Sum of GTIs [s]
ontime6	10105.959057391	Sum of GTIs [s]
ontime7	10109.100077748	Sum of GTIs [s]
l2events	115586	Number of level 2 events



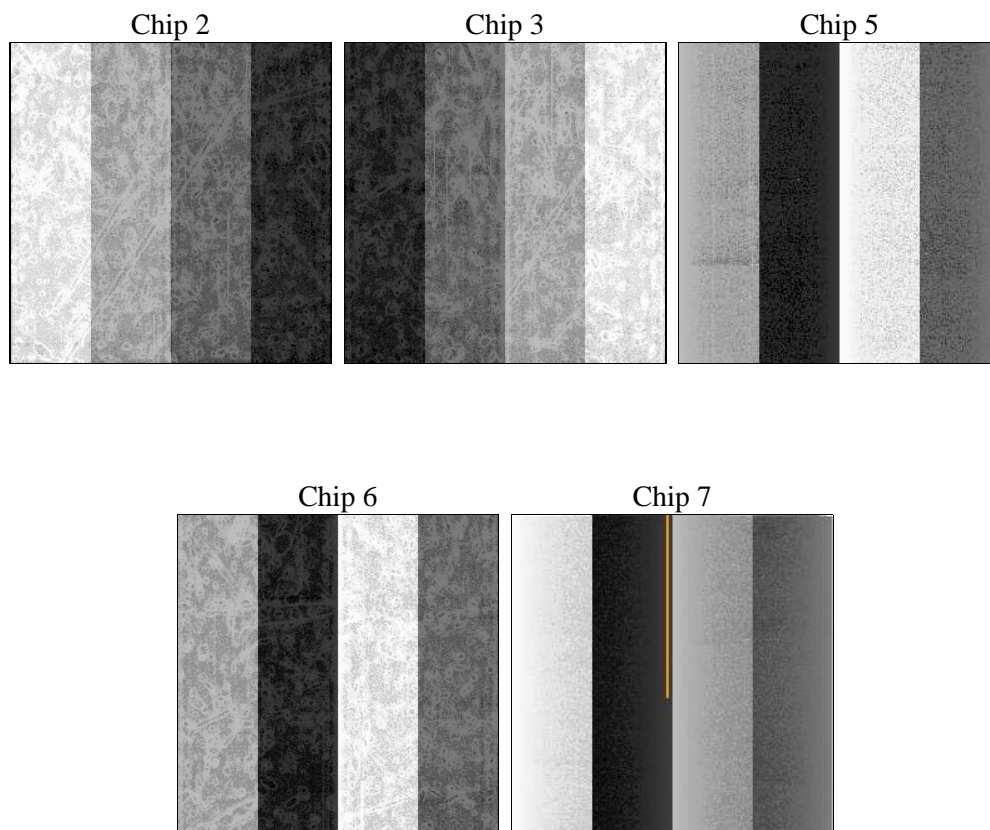
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	10067.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	10109.100077748	Sum of GTIs [s]
caldbver	4.4.7	&#160	ontime2	10109.100077748	Sum of GTIs [s]
date	2012-02-07T13:41:46	Date and time of file creation	ontime3	10109.100077748	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	10109.100077748	Sum of GTIs [s]
			ontime6	10105.959057391	Sum of GTIs [s]
			ontime7	10109.100077748	Sum of GTIs [s]
			l1events	387299	Number of level 1 events

### 2.1.4 Events

	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	61397	60731	104750	65243	95178
rejected events	54467	53607	50881	55925	44966
rejected %	88%	88%	48%	85%	47%

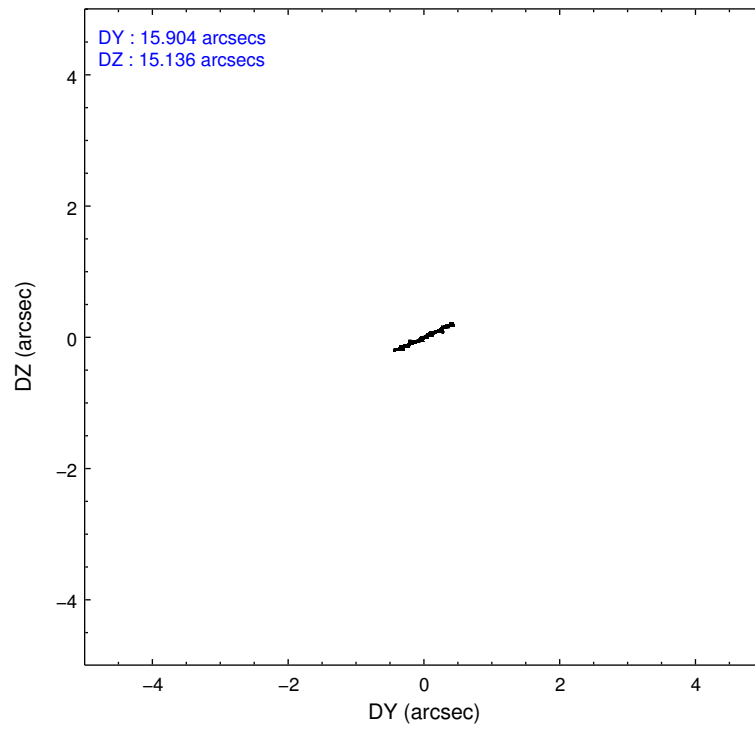
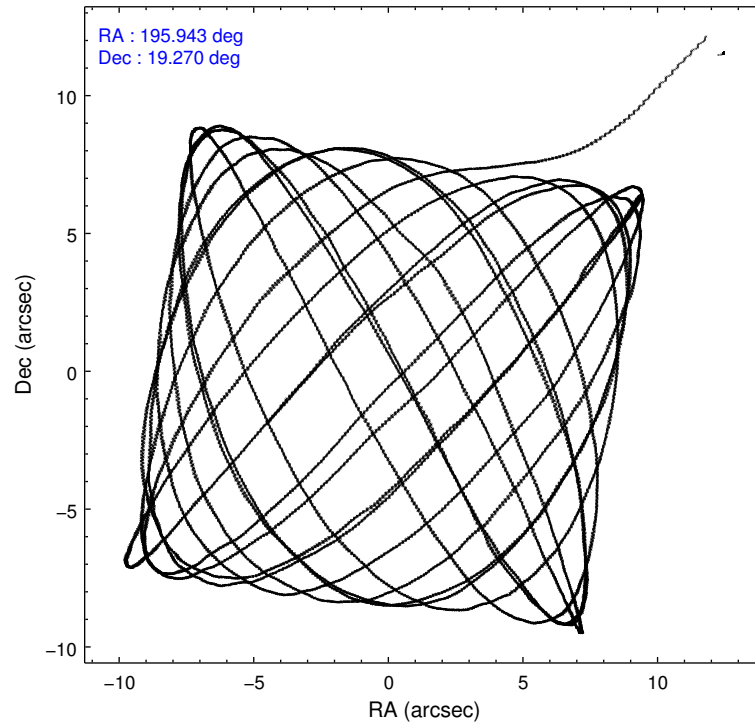
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	2496	2689	8974	4141	7622
	4%	4%	8%	6%	8%
grade 1 events	39	26	244	36	104
	0%	0%	0%	0%	0%
grade 2 events	1631	1594	15456	1841	11107
	2%	2%	14%	2%	11%
grade 3 events	705	748	1907	906	4758
	1%	1%	1%	1%	4%
grade 4 events	796	709	1780	798	4696
	1%	1%	1%	1%	4%
grade 5 events	2581	2910	7770	3035	8513
	4%	4%	7%	4%	8%
grade 6 events	1303	1386	25768	1633	22059
	2%	2%	24%	2%	23%
grade 7 events	51846	50669	42851	52853	36319
	84%	83%	40%	81%	38%

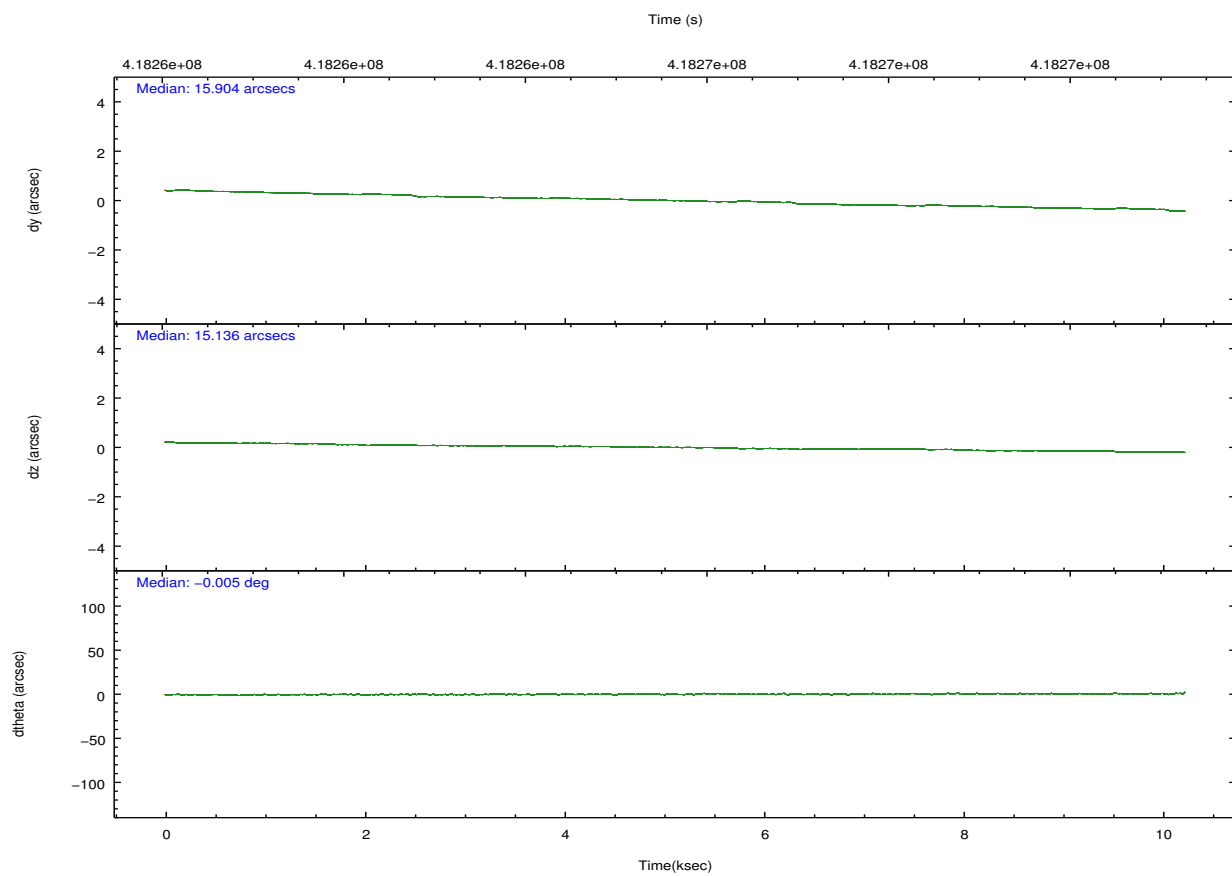
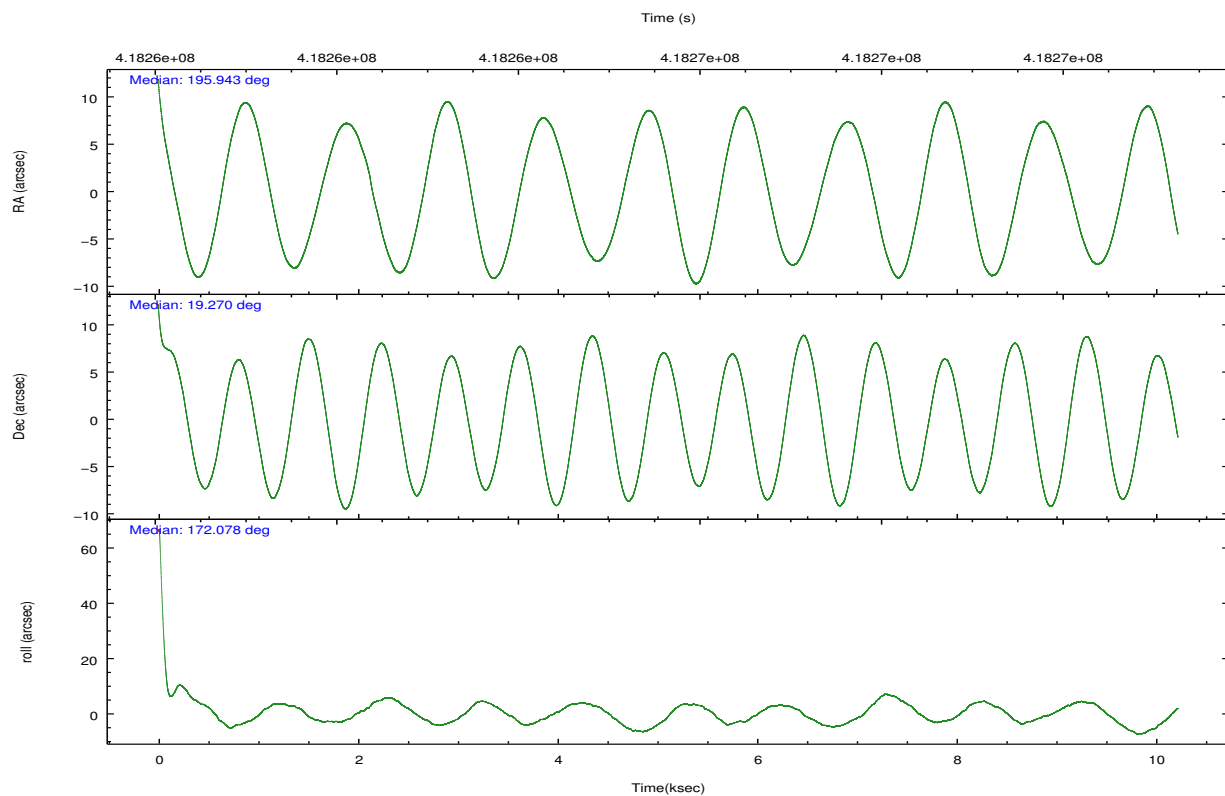


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23567	ACIS-23567	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	195.969298	195.9426244203023	Subarray requested	NONE	NONE
[deg] Pointing Dec	19.280446	19.2698562500013	Alternating exposures requested	N	N
[deg] Pointing Roll	171.924841	172.0903683553731	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	418260689.184000	418259127.60076			
Observation start date	2011-04-03T23:30:23	2011-04-03T23:05:27			
[s] Observation end time (MET)	418270756.184000	418271480.3889			
Observation end date	2011-04-04T02:18:10	2011-04-04T02:31:20			
Read mode	TIMED	TIMED			

## 2.3 Aspect



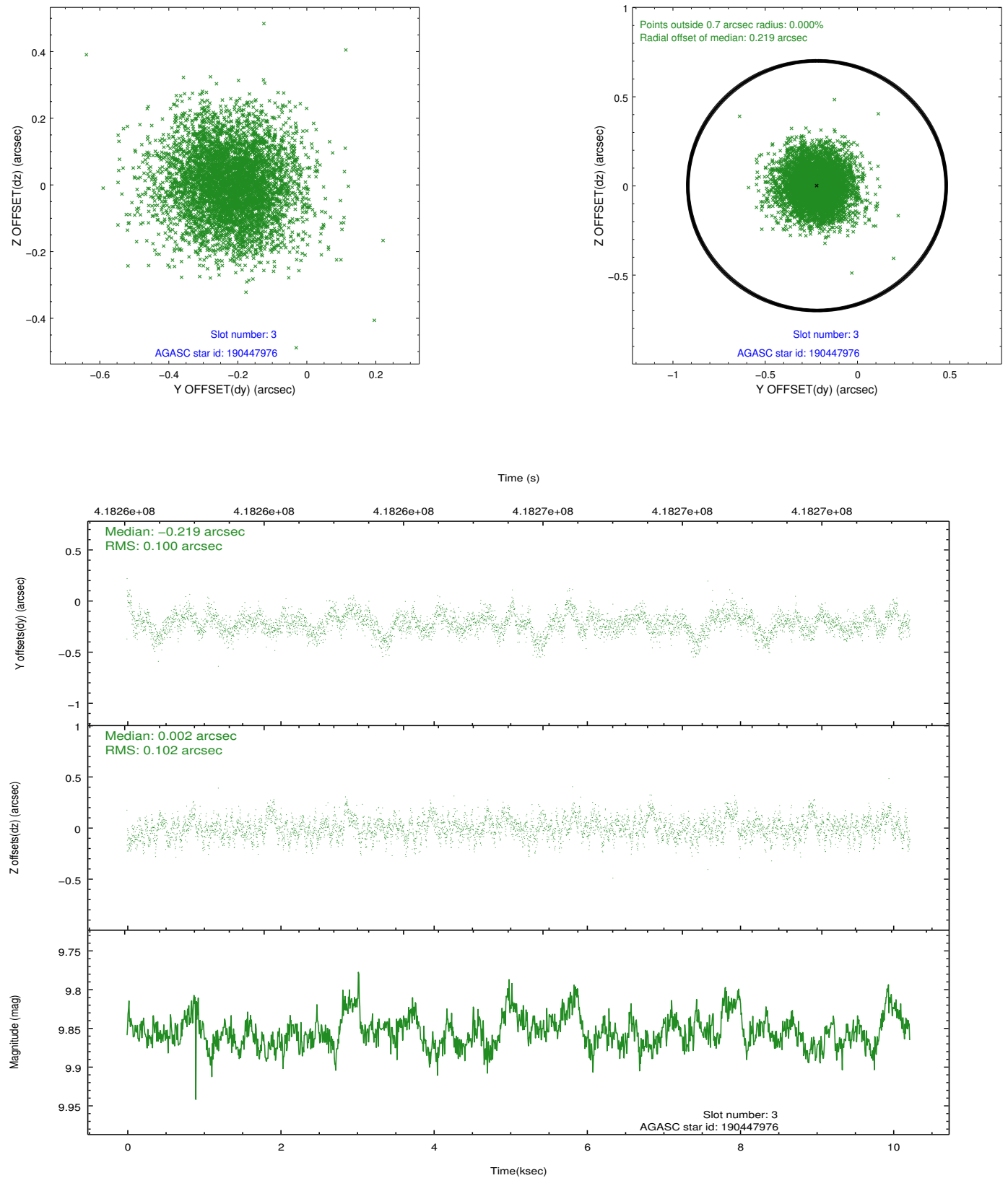


### Slot Statistics

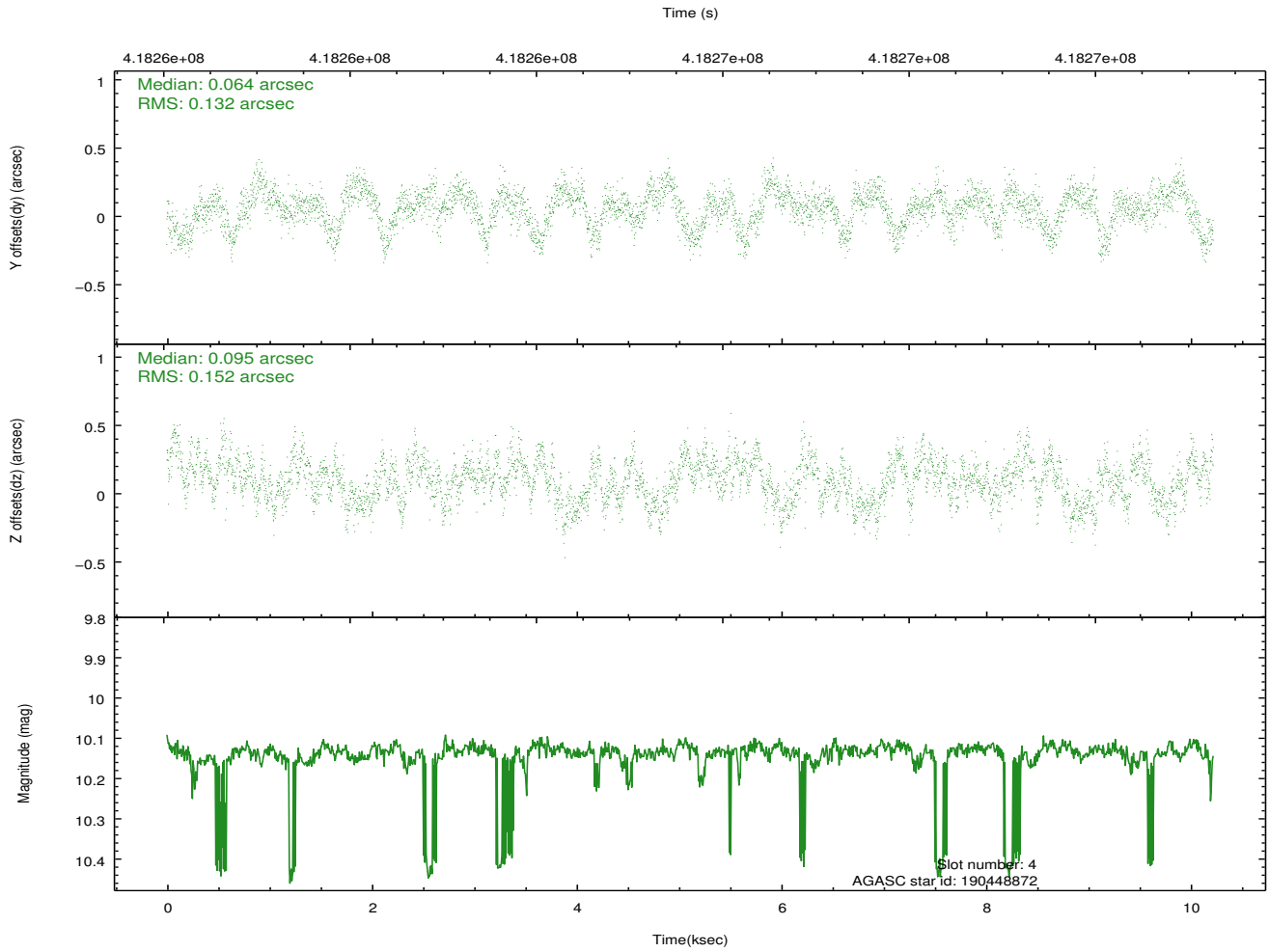
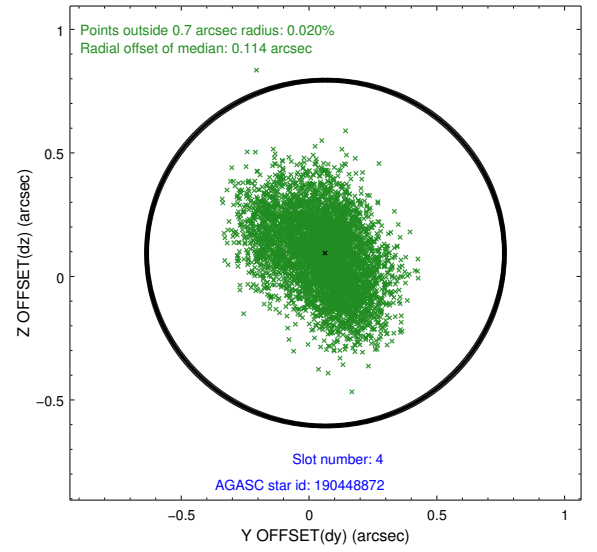
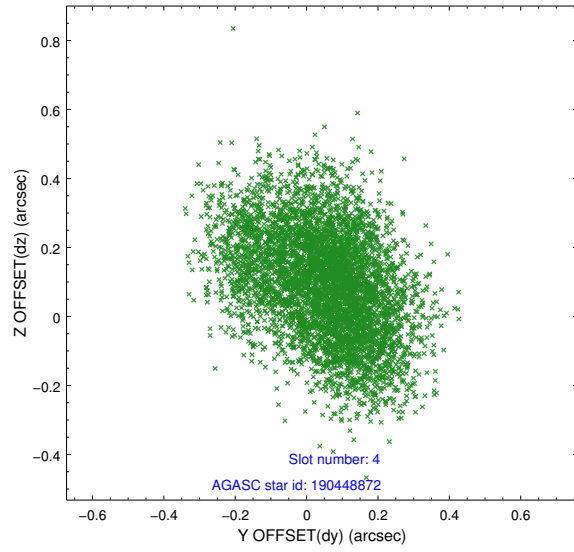
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.95	2494	-0.108	-0.029	0.007	0.012	0.000000	0.000000	-768.99	-1736.50
1	FID	ACIS-S-4	7.04	2494	0.208	0.060	0.006	0.012	0.000000	0.000000	2144.35	171.56
2	FID	ACIS-S-5	7.07	2494	-0.131	-0.022	0.007	0.011	0.000000	0.000000	-1821.21	165.70
3	GUIDE	190447976	9.86	4984	-0.219	0.002	0.152	0.247	195.758053	19.927216	1036.52	-2204.30
4	GUIDE	190448872	10.14	4938	0.064	0.095	0.217	0.344	196.138601	19.620058	-395.72	-1291.25
5	GUIDE	190449432	10.12	4960	0.266	0.037	0.157	0.262	196.000725	19.438253	-25.12	-577.11
6	GUIDE	190453872	9.28	4985	0.029	-0.172	0.109	0.177	196.357004	18.580833	-1662.79	2307.04
7	GUIDE	190454296	9.43	4982	-0.074	0.031	0.197	0.389	196.225324	18.938188	-1036.20	1097.83

## 2.4 Star Slots

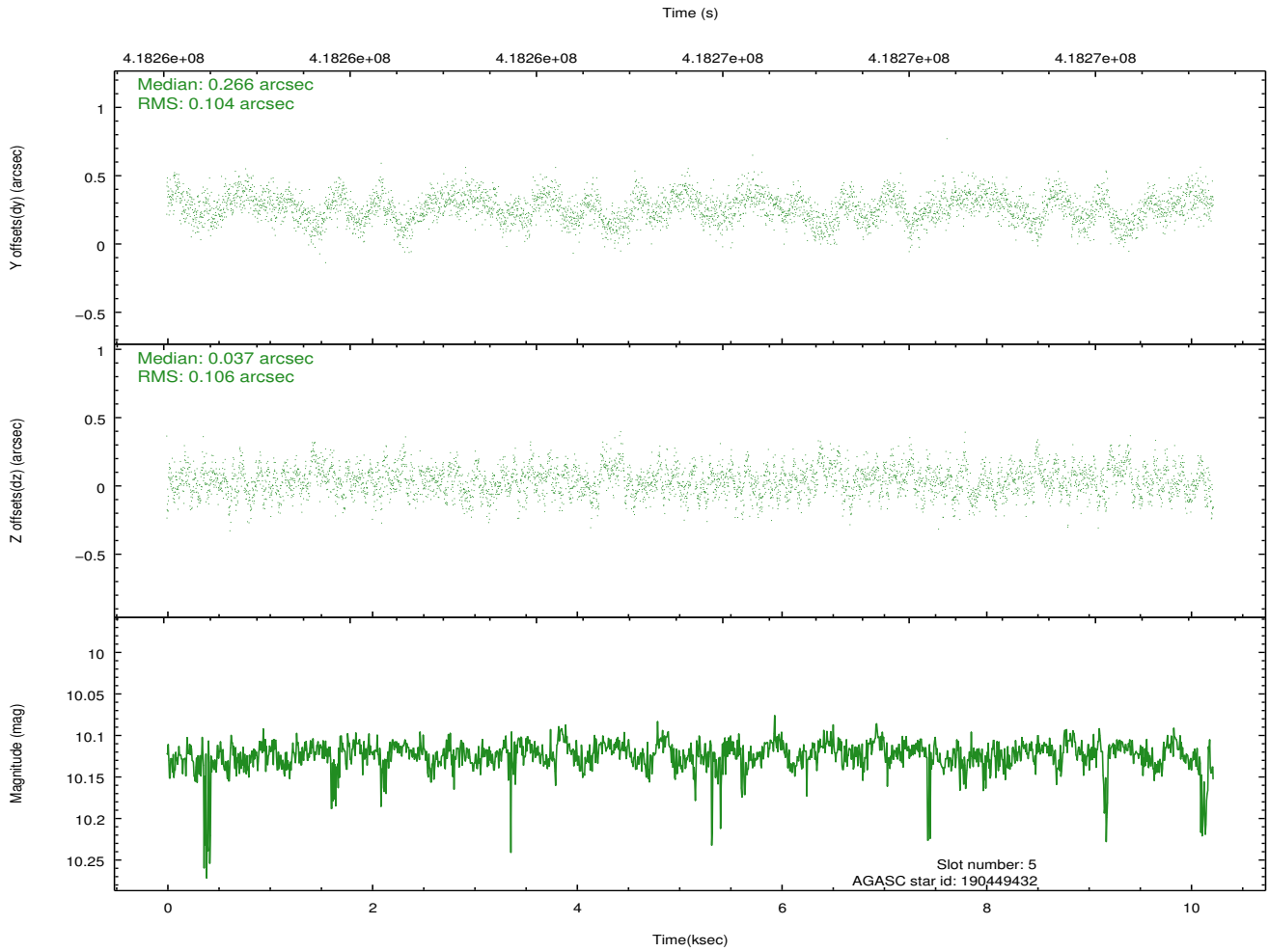
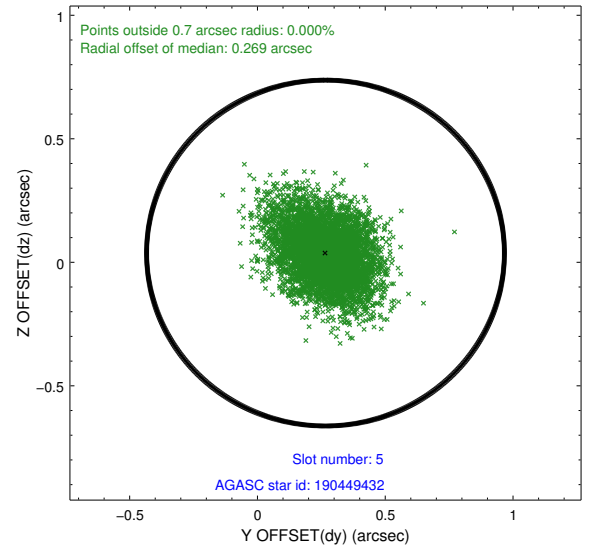
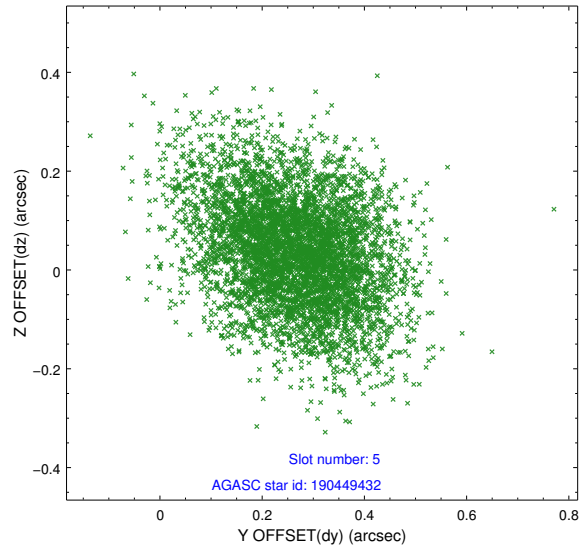
### 2.4.1 Slot 3



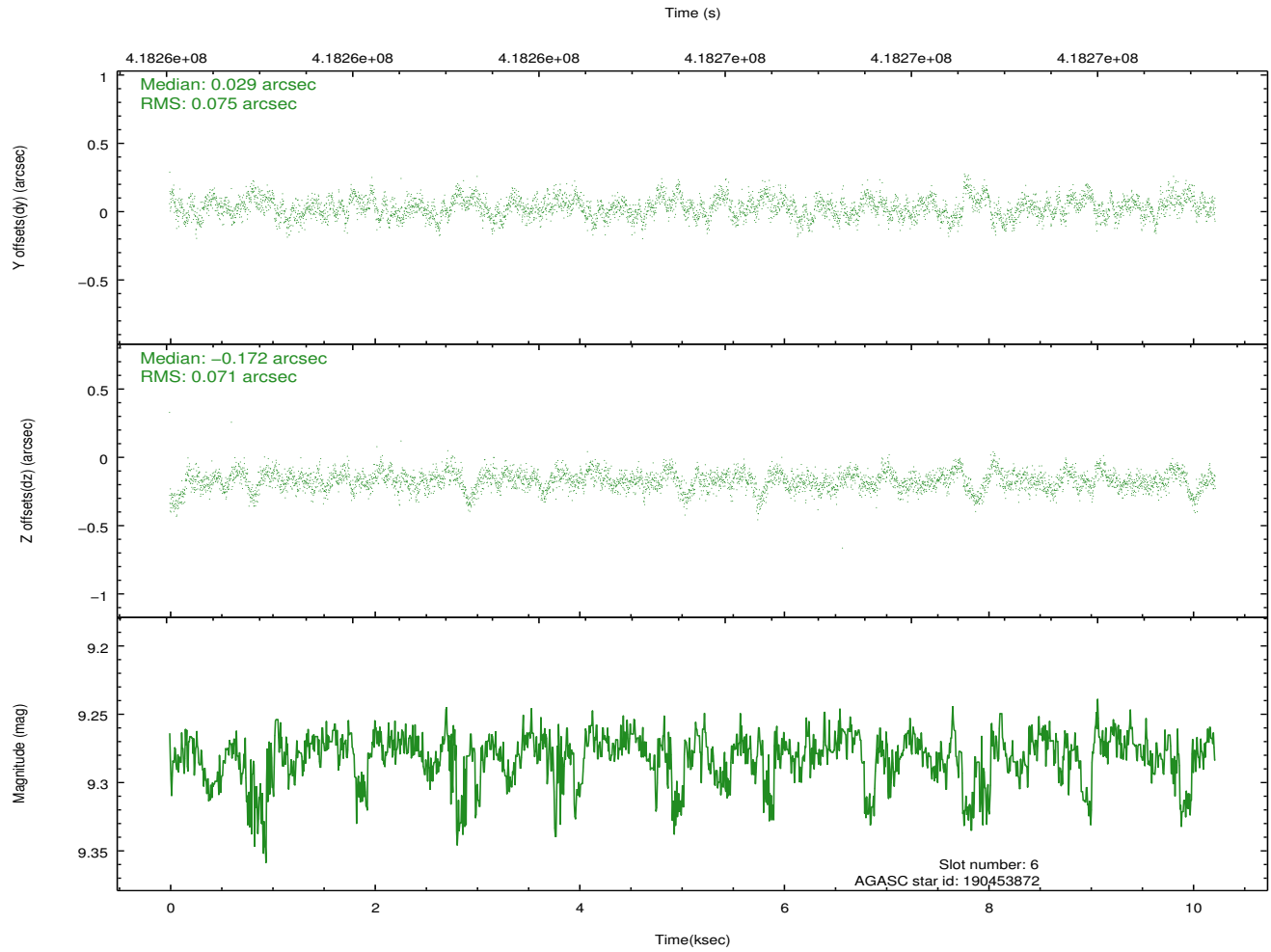
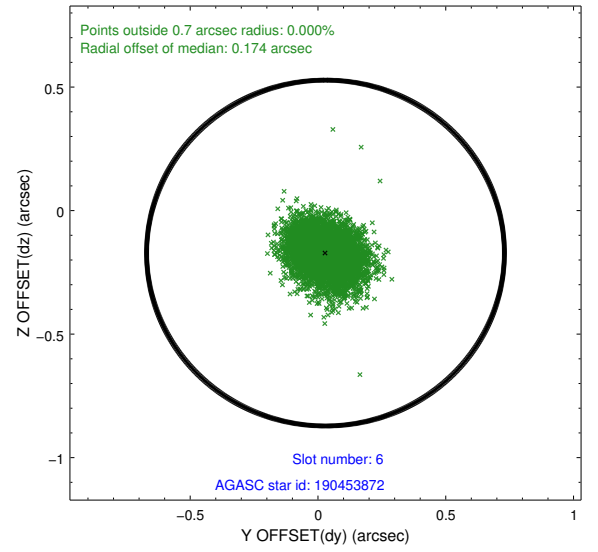
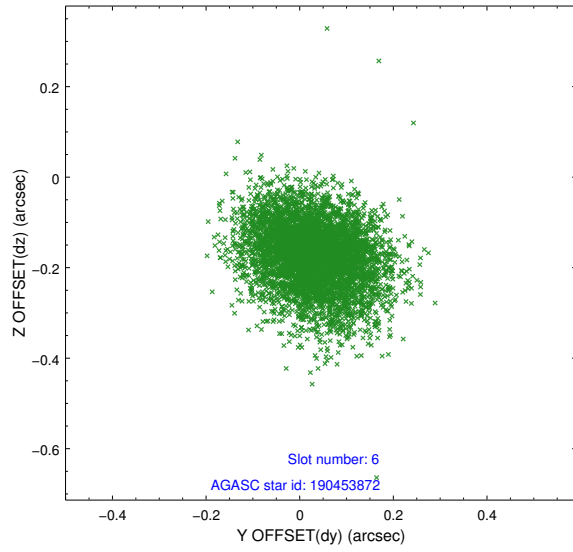
## 2.4.2 Slot 4



### 2.4.3 Slot 5

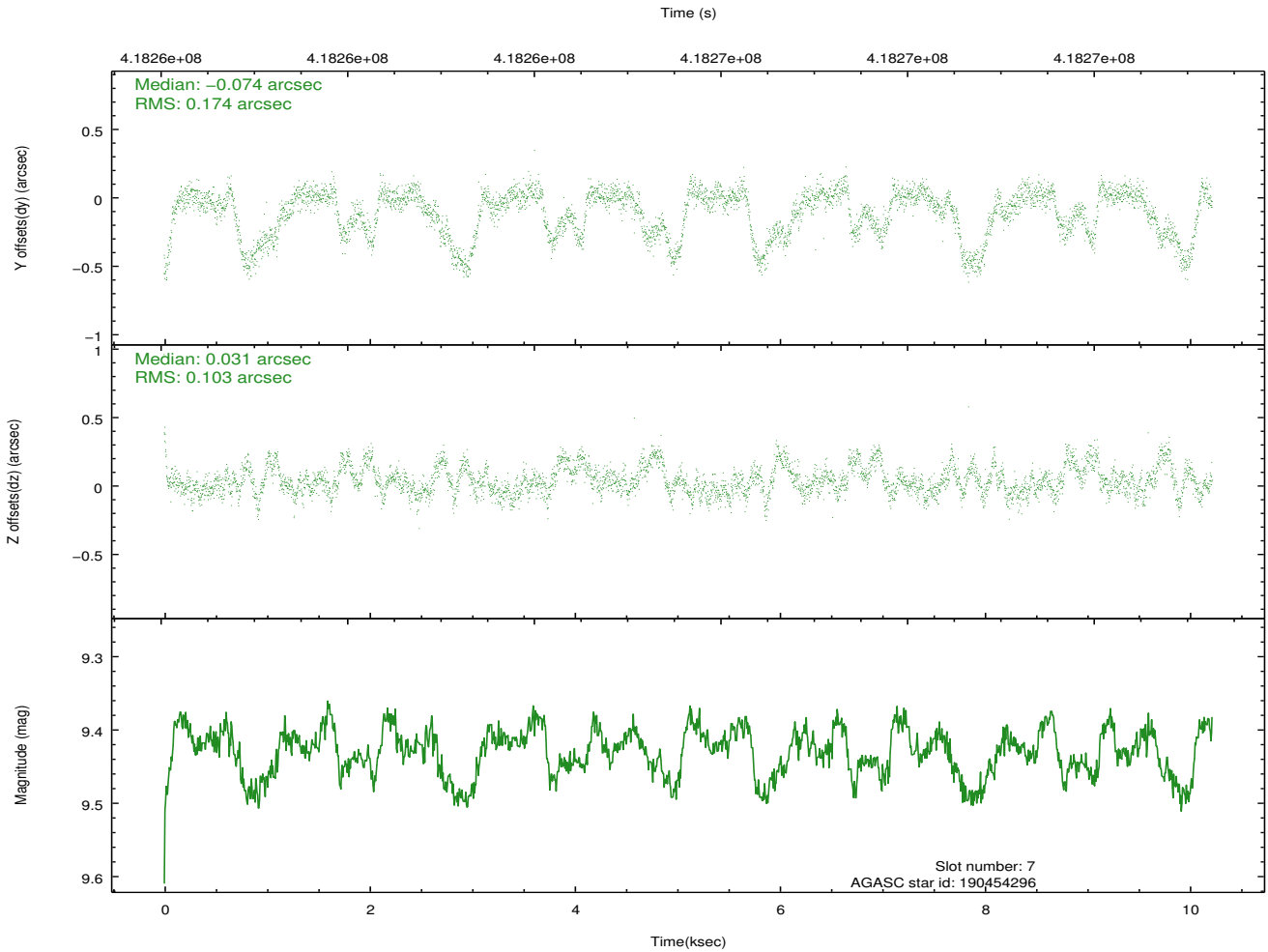
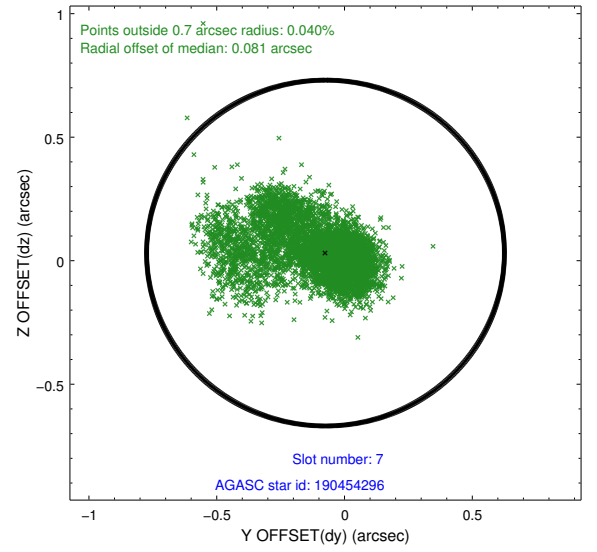
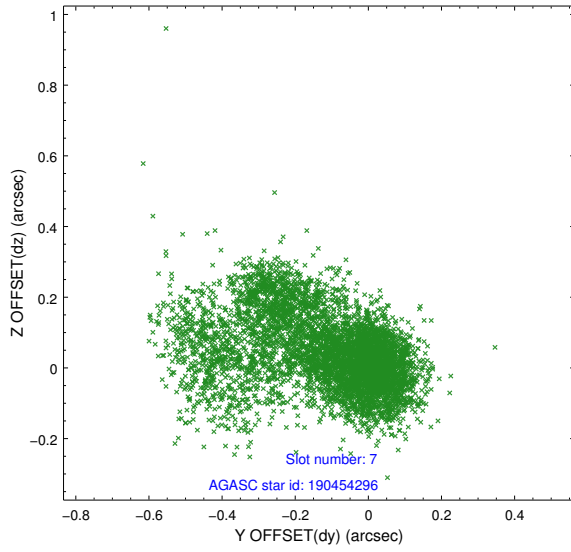


## 2.4.4 Slot 6



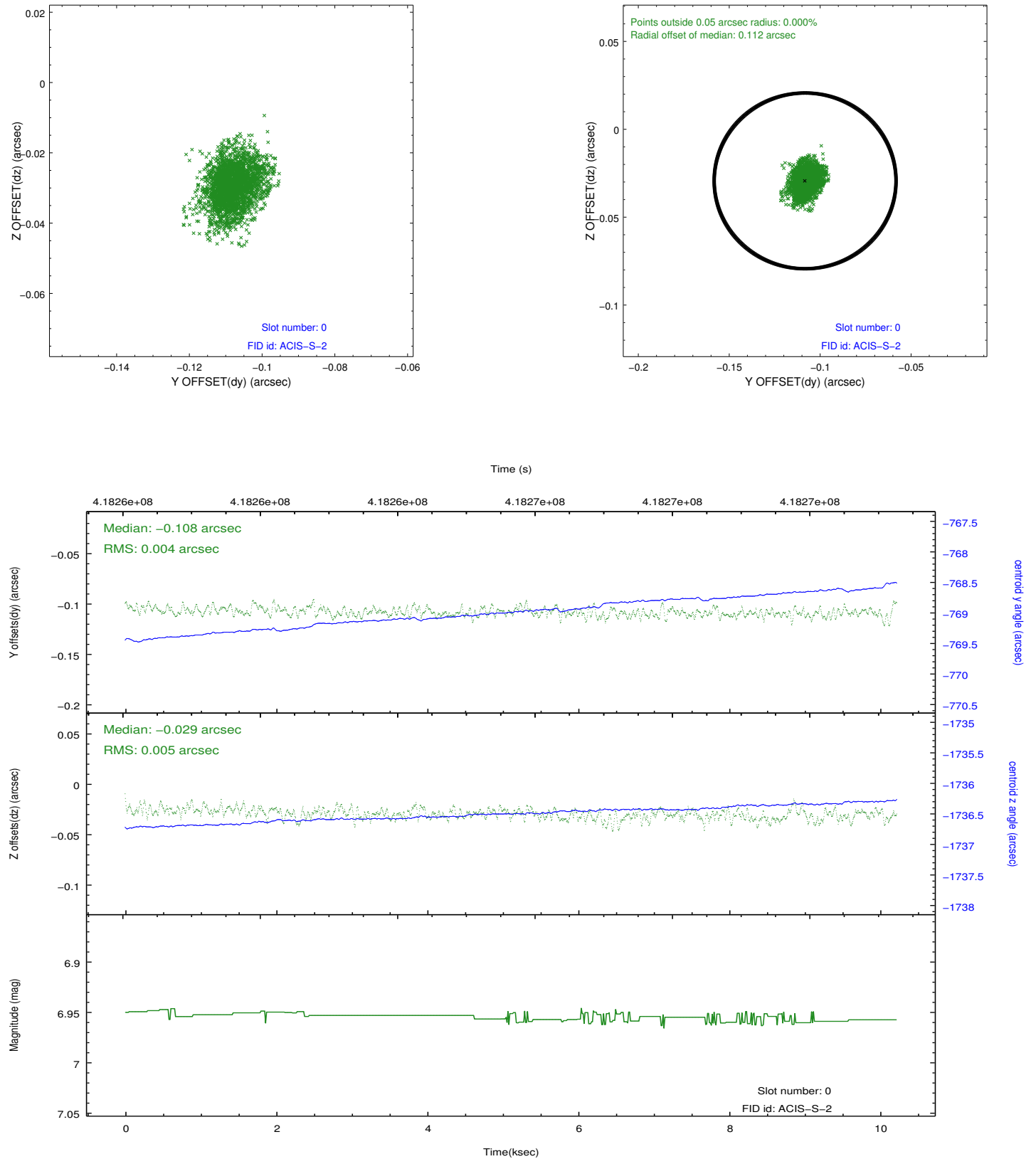


## 2.4.5 Slot 7

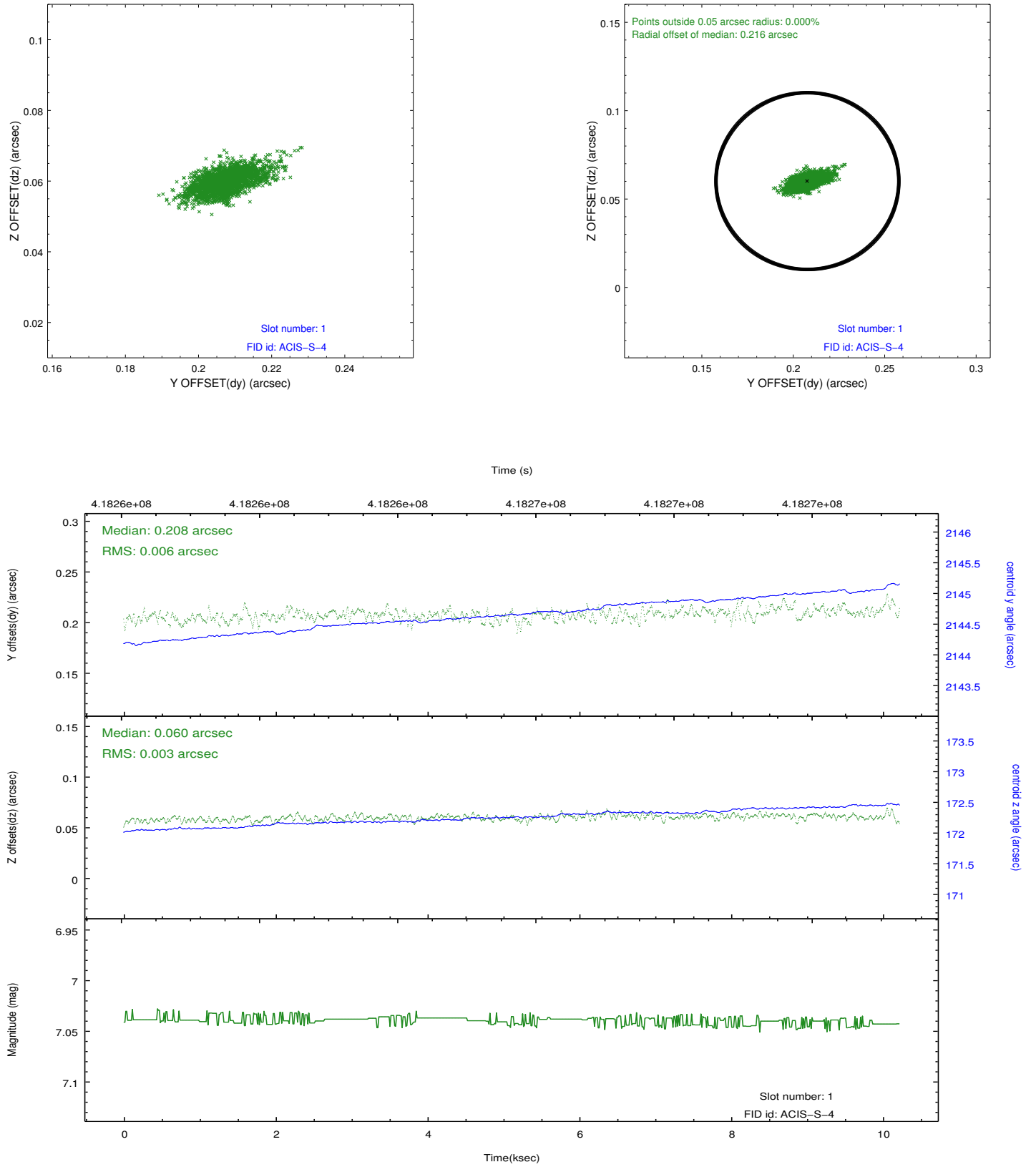


## 2.5 FID Slots

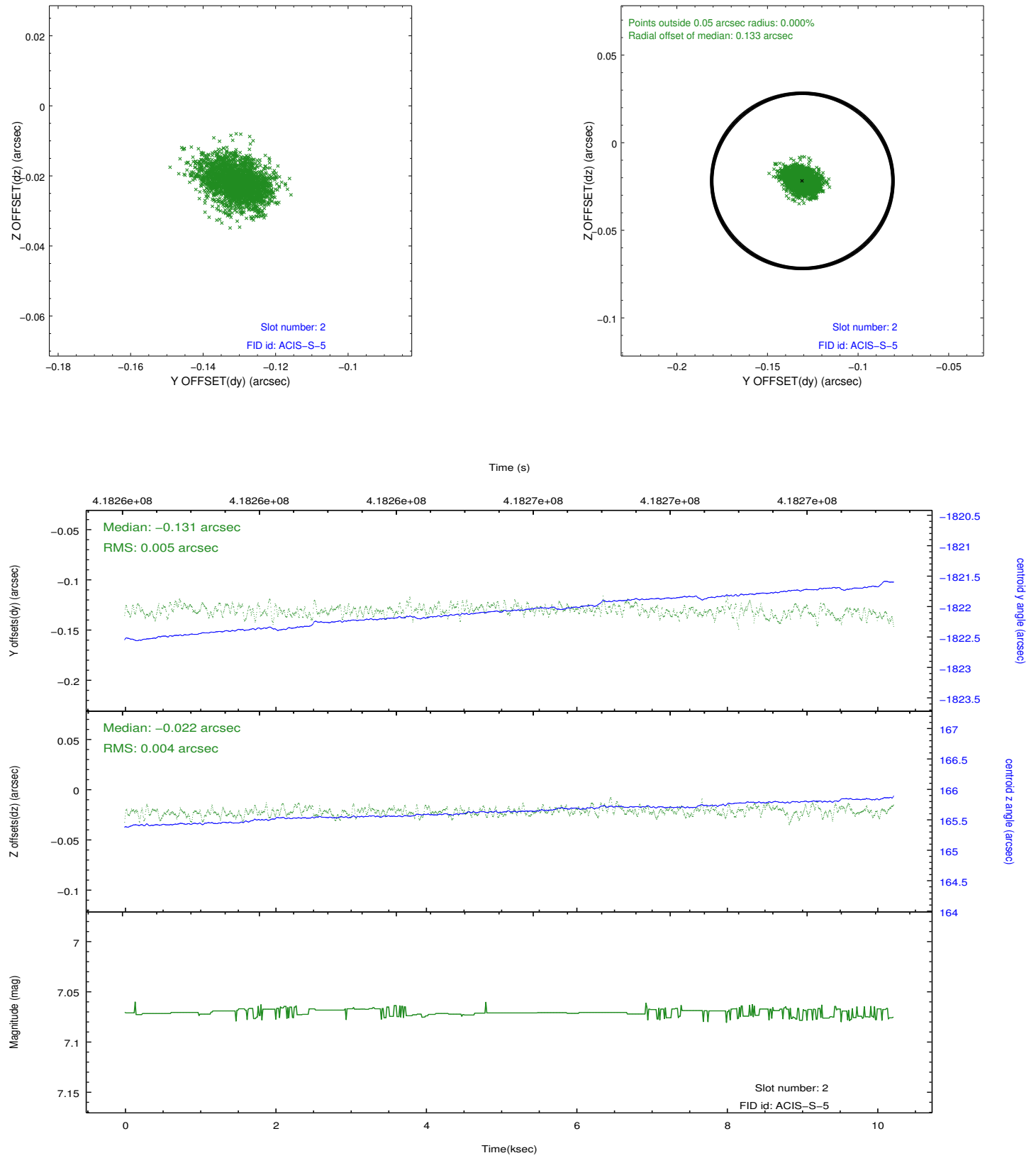
### 2.5.1 Slot 0



## 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)	2012.02.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.109100077748

## A.2 Comments

Joint proposal: NRAO

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The data for this observation have been processed using the 'EDSER' sub-pixel event-repositioning algorithm of Li et al. (2004, ApJ, 610, 1204). Small-scale features should become sharper for sources near the aim point. The improvement will be less noticeable for off-axis sources where the size of the point-spread function is comparable to or larger than the size of an ACIS pixel. To take full advantage of the improvement, images should be binned on spatial scales smaller than the size of an ACIS pixel. Note that, at present, the point-spread function has not been calibrated for data to which the EDSER algorithm has been applied. If dither was disabled for the observation, then the algorithm can introduce artificial aliasing effects on spatial scales smaller than a pixel. If you would prefer to use no sub-pixel adjustment or to apply a coordinate randomization, then use `acis_process_events` to reprocess the data with the parameter `pix_adj=NONE` or `RANDOMIZE`, respectively.