

# V&V Reference Report

## L2 ASCDS Version : 8.5

Observation 6114 - L2 Version 3  
Chandra X-Ray Center

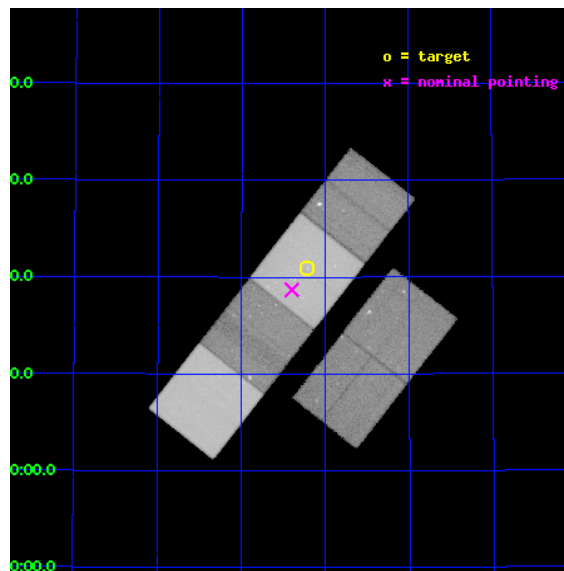
L2 Processing Date : Dec 8 2012

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# 1 Front

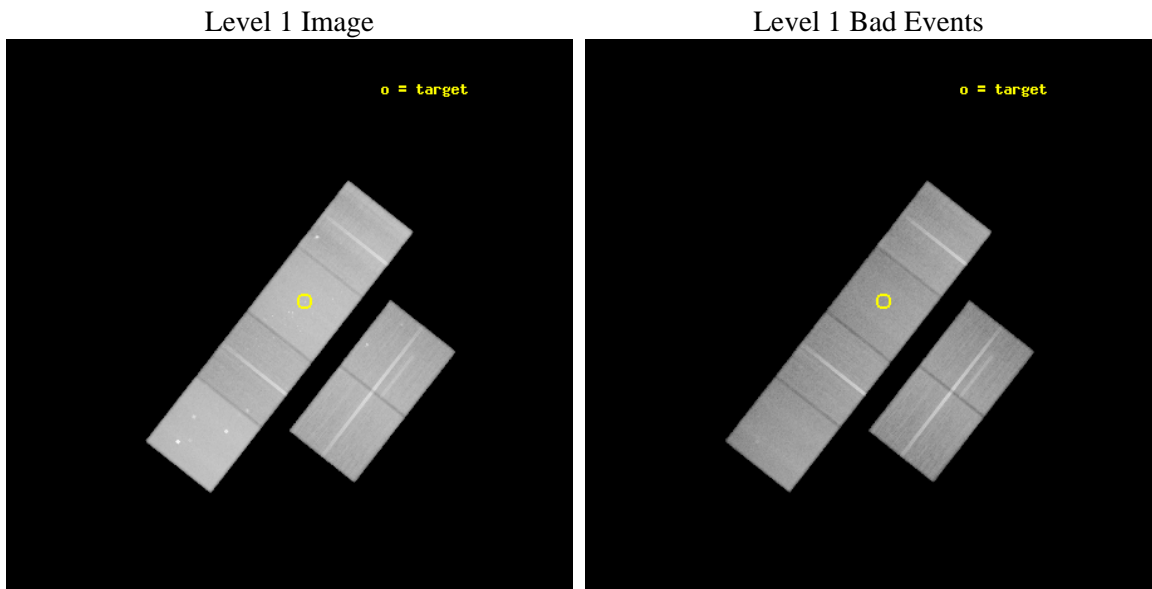
seq_num	600390	Sequence number
obs_id	6114	Observation id
title	An Ultra-Deep Study of M101	Proposal title
observer	Dr. K.D. Kuntz	Principal investigator
object	M101	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	210.80375	Observer's specified target RA [deg]
dec_targ	54.348778	Observer's specified target Dec [deg]
ra_nom	210.84972459702	Nominal RA [deg]
dec_nom	54.311731113039	Nominal Dec [deg]
roll_nom	308.1192832976	Nominal Roll [deg]
revision	3	Processing version of data
ontime	67052.799750209	Sum of GTIs [s]
livetime	66203.736825423	Livetime [s]
ontime2	66122.642189831	Sum of GTIs [s]
ontime3	66424.052116096	Sum of GTIs [s]
ontime5	67052.799750209	Sum of GTIs [s]
ontime6	66650.919765741	Sum of GTIs [s]
ontime7	67052.799750209	Sum of GTIs [s]
ontime8	66702.775300145	Sum of GTIs [s]
l2events	1043329	Number of level 2 events



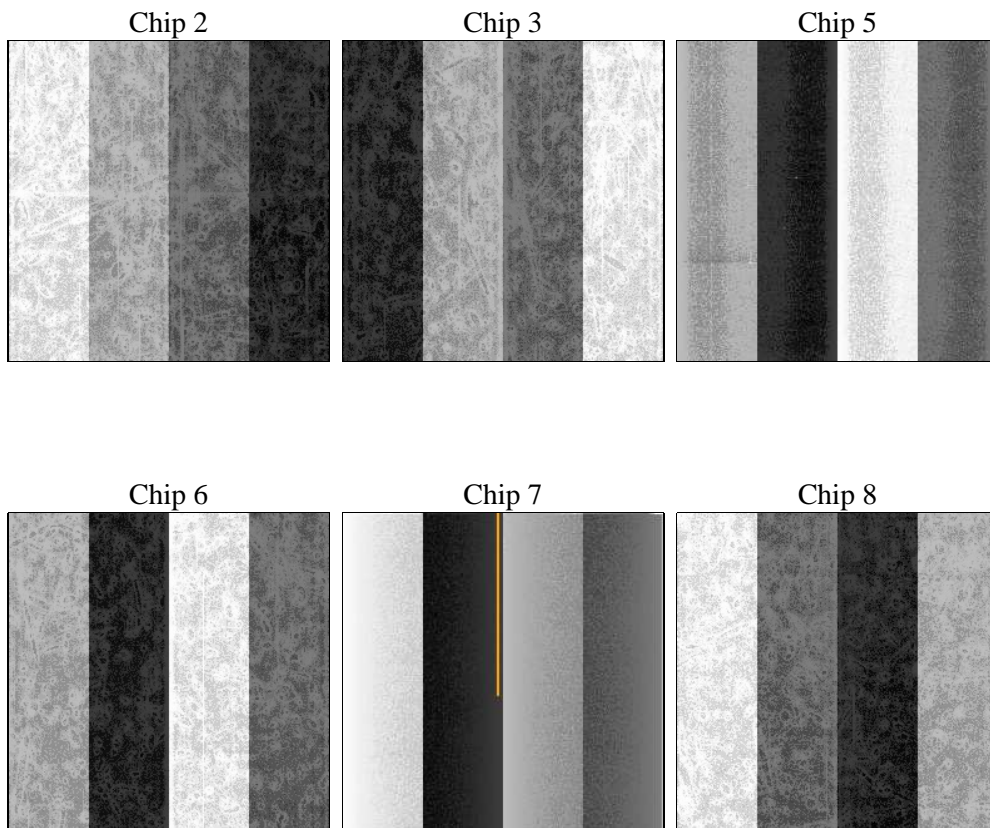
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	67007.971000	[s] Scheduled observation exposure time
ascdsver	8.5	Processing system revision	ontime	67052.799750209	Sum of GTIs [s]
caldbver	4.5.4	&#160	ontime2	66122.642189831	Sum of GTIs [s]
date	2012-12-08T11:53:29	Date and time of file creation	ontime3	66424.052116096	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	67052.799750209	Sum of GTIs [s]
			ontime6	66650.919765741	Sum of GTIs [s]
			ontime7	67052.799750209	Sum of GTIs [s]
			ontime8	66702.775300145	Sum of GTIs [s]
			l1events	3890884	Number of level 1 events

### 2.1.4 Events

	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	541227	517031	837437	539545	776298	679346	grade 0 events	39721	39648	48268	41597	38355	63311
rejected events	464483	440584	419822	456393	407443	515560		7%	7%	5%	7%	4%	9%
rejected %	85%	85%	50%	84%	52%	75%	grade 1 events	443	403	1200	328	649	562
								0%	0%	0%	0%	0%	0%
							grade 2 events	13895	13078	121871	15328	71434	33744
								2%	2%	14%	2%	9%	4%
							grade 3 events	6195	6335	18335	6661	31675	14782
								1%	1%	2%	1%	4%	2%
							grade 4 events	6229	6458	17787	6311	31402	14140
								1%	1%	2%	1%	4%	2%
							grade 5 events	20528	22751	58758	23739	67595	31259
								3%	4%	7%	4%	8%	4%
							grade 6 events	10711	10934	211412	13265	196050	37838
								1%	2%	25%	2%	25%	5%
							grade 7 events	443505	417424	359806	432316	339138	483710
								81%	80%	42%	80%	43%	71%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	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	210.806153	210.8497245970159	Subarray requested	NONE	NONE
[deg] Pointing Dec	54.321537	54.31173111303902	Alternating exposures requested	N	N
[deg] Pointing Roll	307.998039	308.119283297595	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	210796835.184000	210795829.08291			
Observation start date	2004-09-05T18:39:31	2004-09-05T18:23:49			
[s] Observation end time (MET)	210863843.184000	210864059.23595			
Observation end date	2004-09-06T13:16:19	2004-09-06T13:20:59			
Read mode	TIMED	TIMED			

## 2.3 Aspect



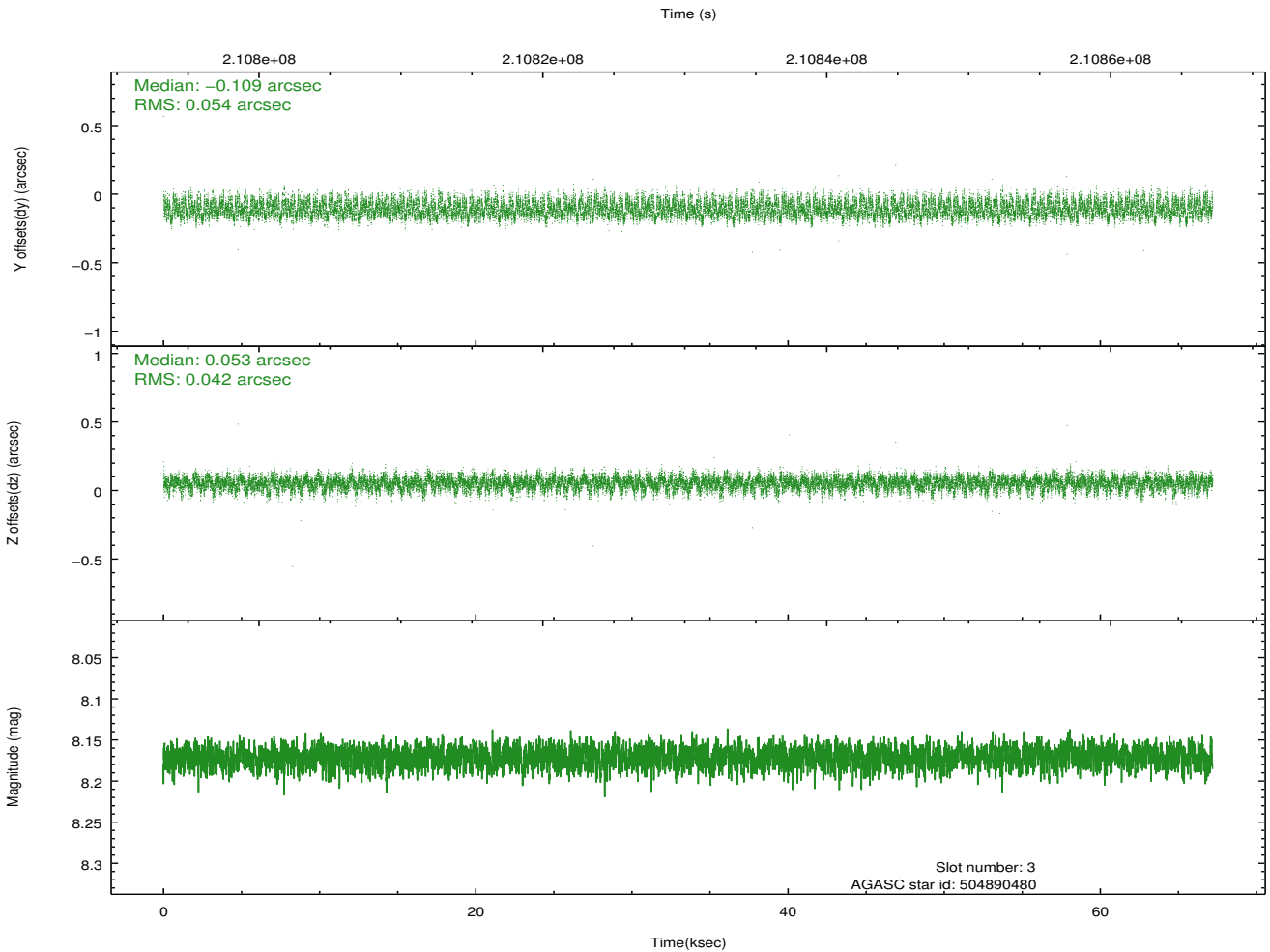
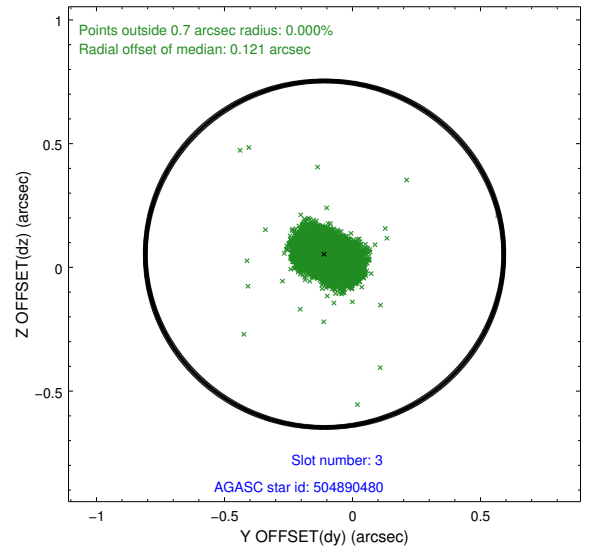
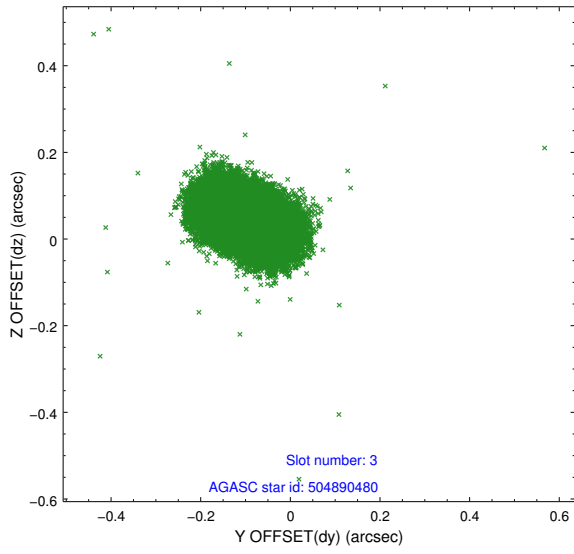
### Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	16389	-0.014	-0.021	0.010	0.033	0.000000	0.000000	-760.56	-1733.11
1	FID	ACIS-S-4	7.20	16390	0.072	0.013	0.016	0.033	0.000000	0.000000	2152.83	175.48
2	FID	ACIS-S-5	7.23	16388	-0.088	0.018	0.013	0.020	0.000000	0.000000	-1813.55	169.07
3	GUIDE	504890480	8.17	32766	-0.109	0.053	0.073	0.117	210.132463	53.768436	681.78	-2351.36
4	GUIDE	504891480	8.07	32773	-0.040	-0.077	0.056	0.092	210.708012	54.666096	-1103.21	602.83
5	GUIDE	504894408	9.28	32752	0.047	0.100	0.093	0.150	211.942794	54.047749	2240.51	1299.01
6	GUIDE	504894856	8.98	32691	0.012	-0.054	0.087	0.142	209.819510	54.132689	-756.30	-2049.23
7	GUIDE	505292416	9.31	32756	0.092	-0.023	0.090	0.147	210.920759	55.040479	-1894.54	1779.89

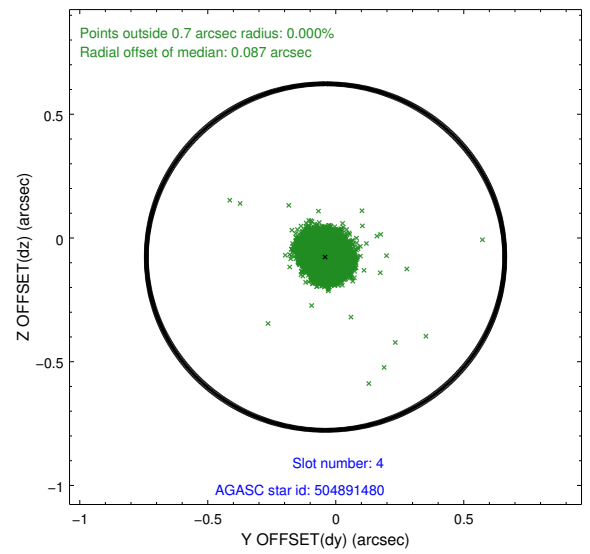
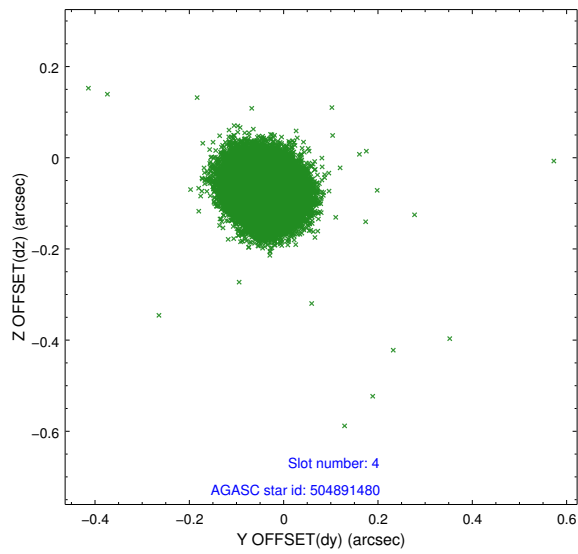
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## 2.4 Star Slots

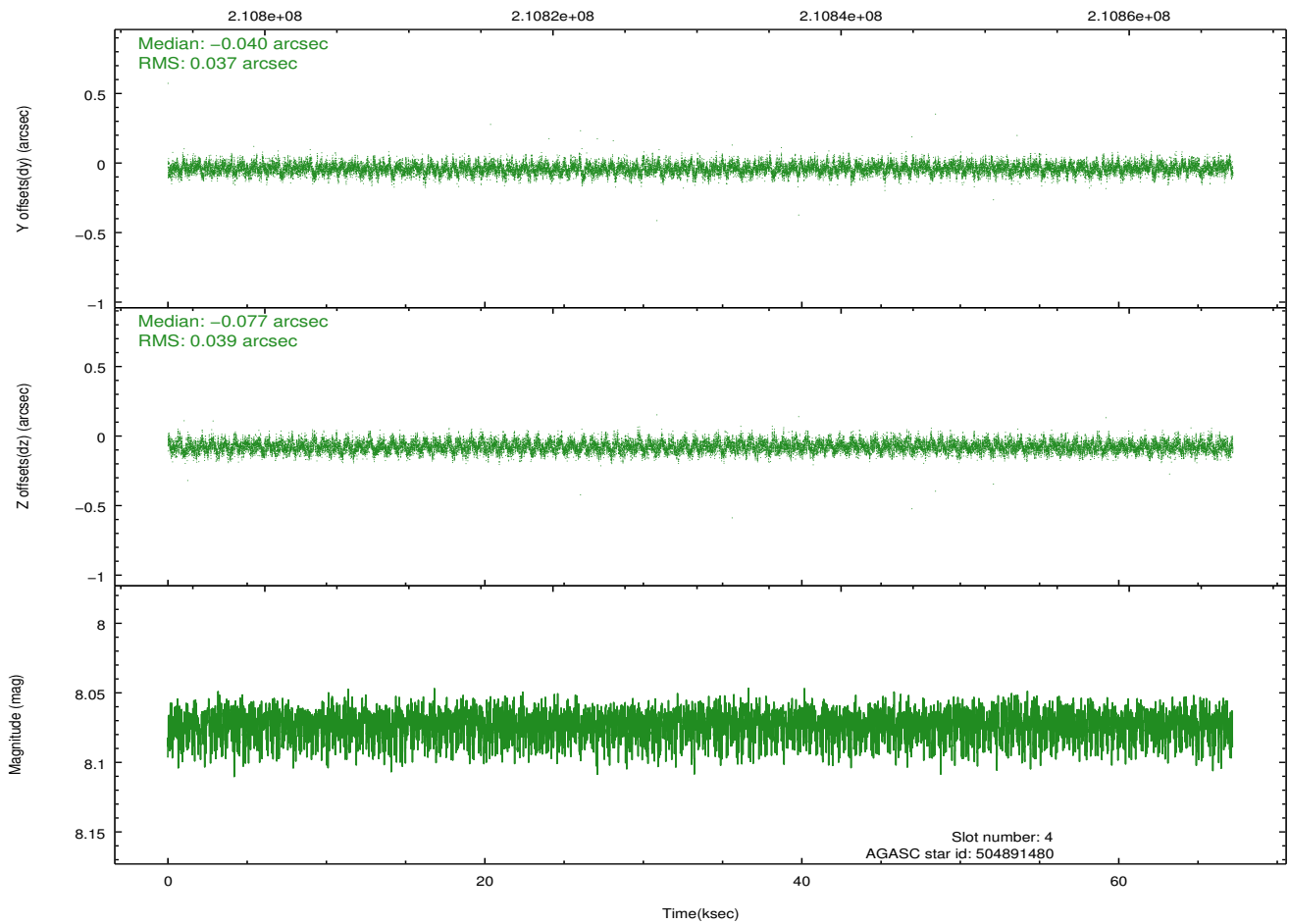
### 2.4.1 Slot 3



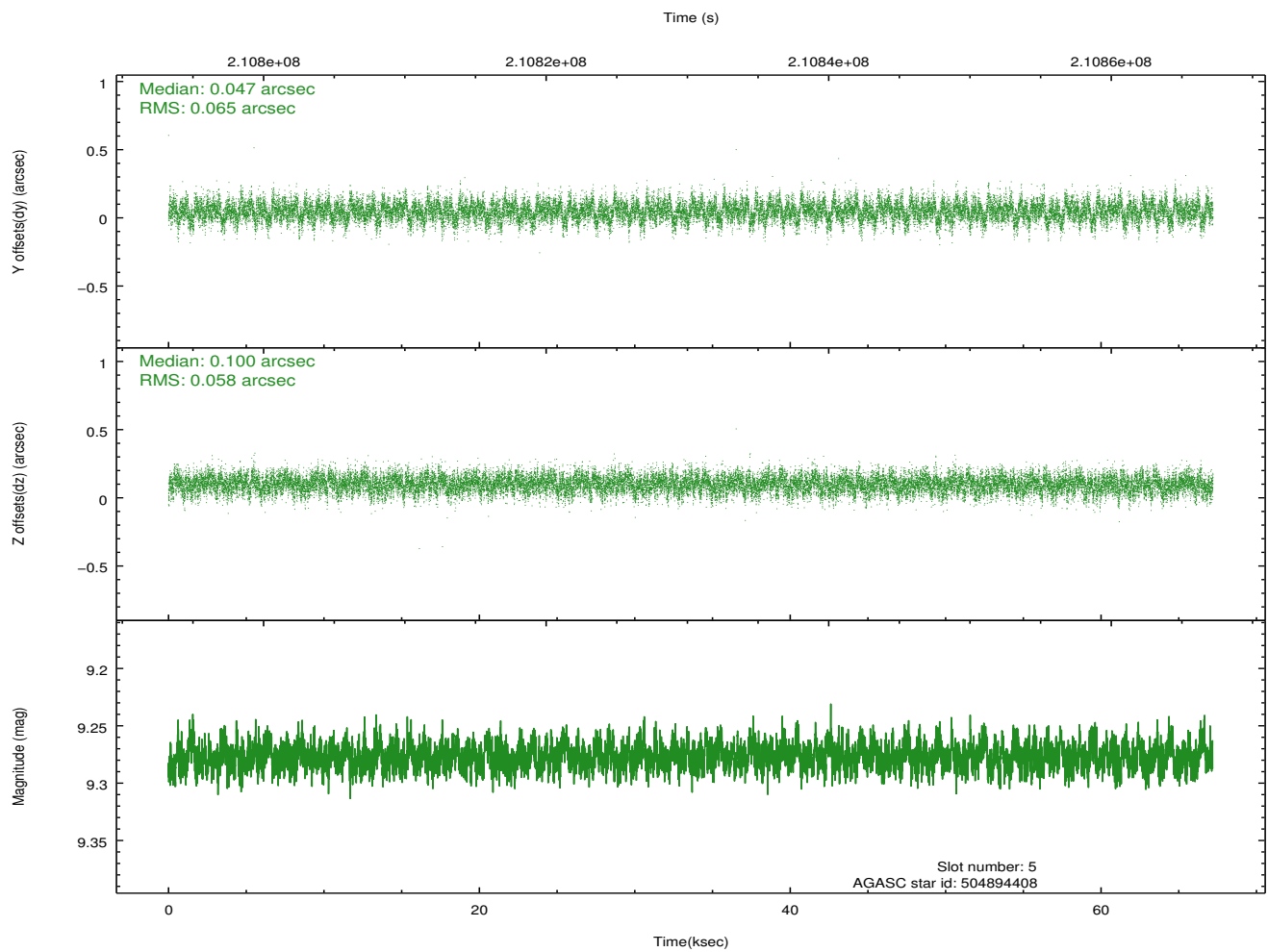
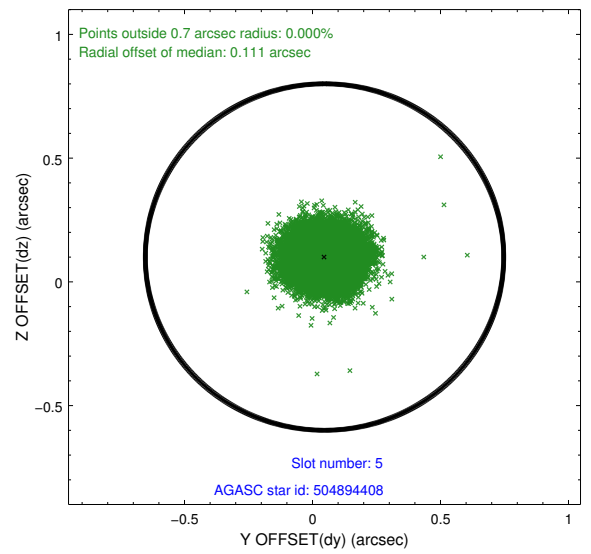
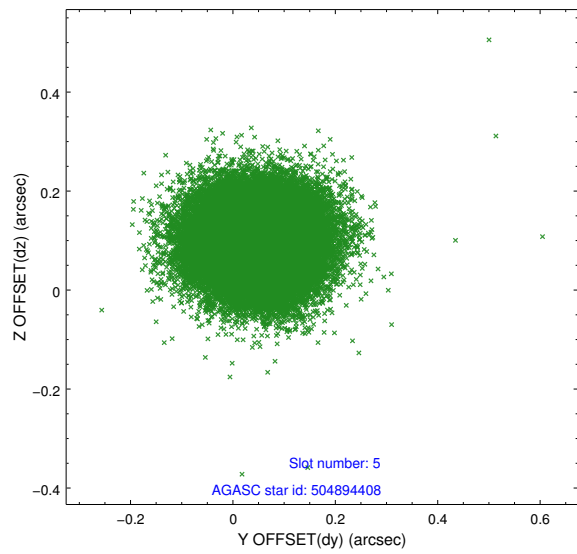
## 2.4.2 Slot 4



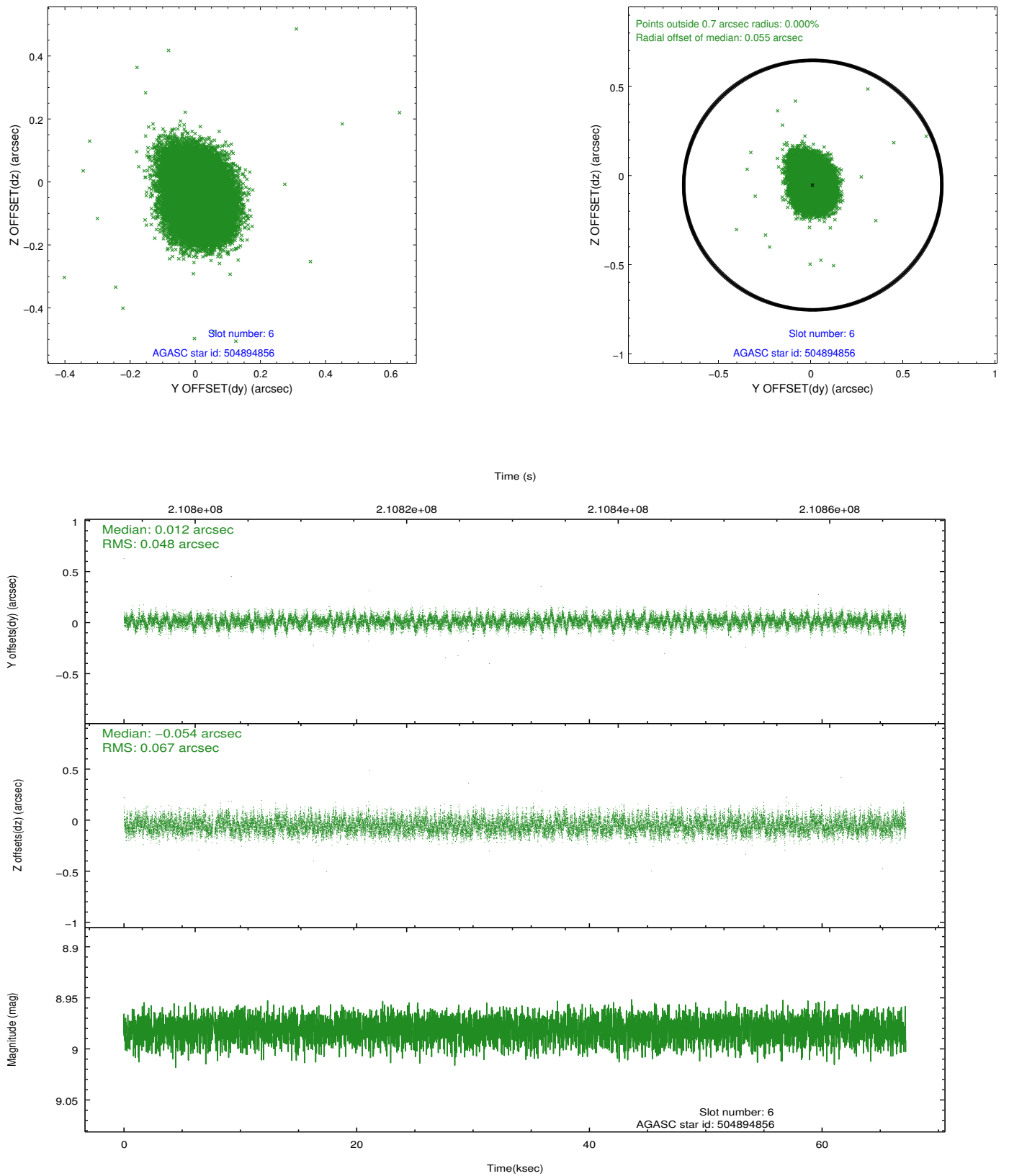
Time (s)



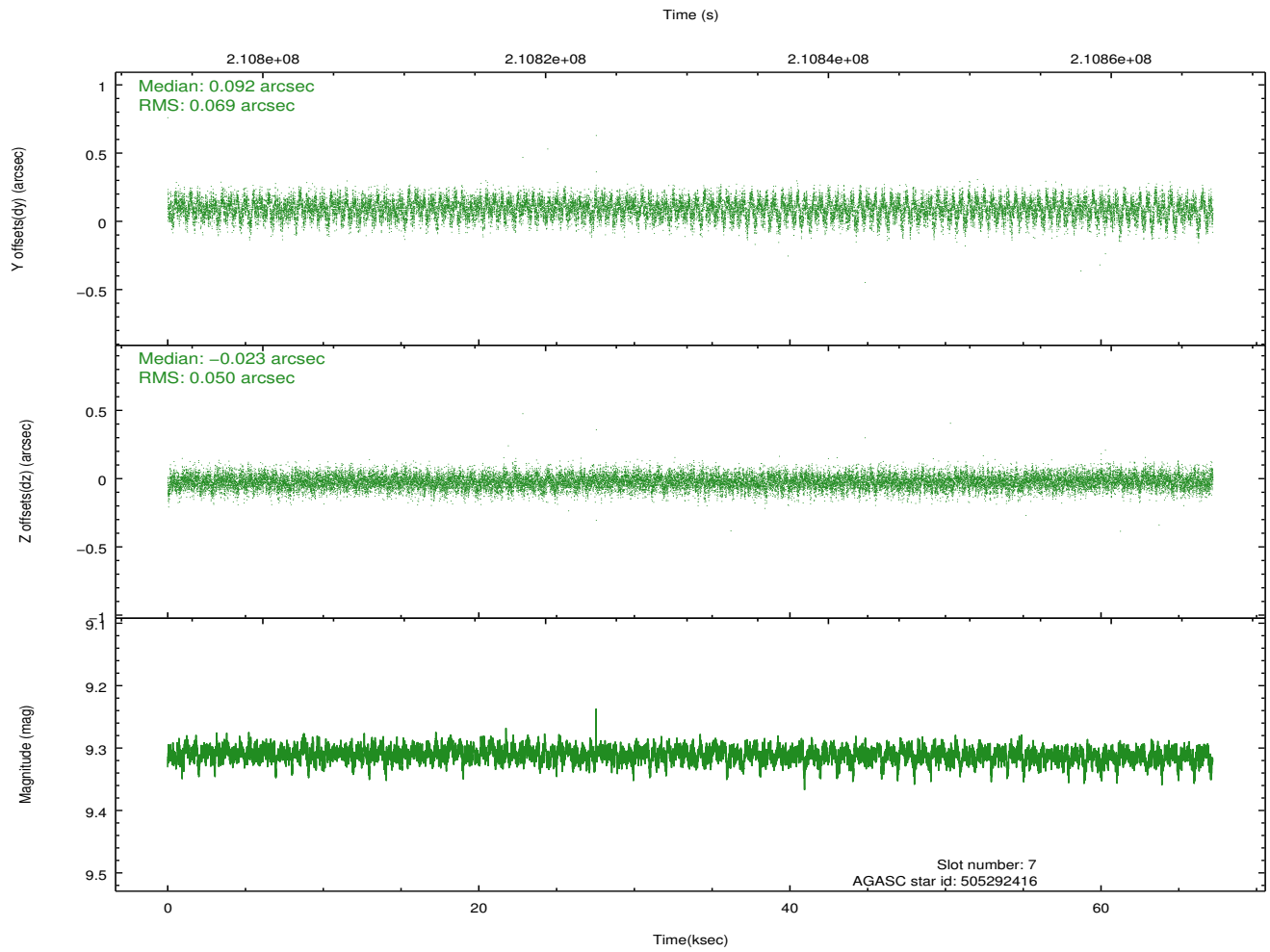
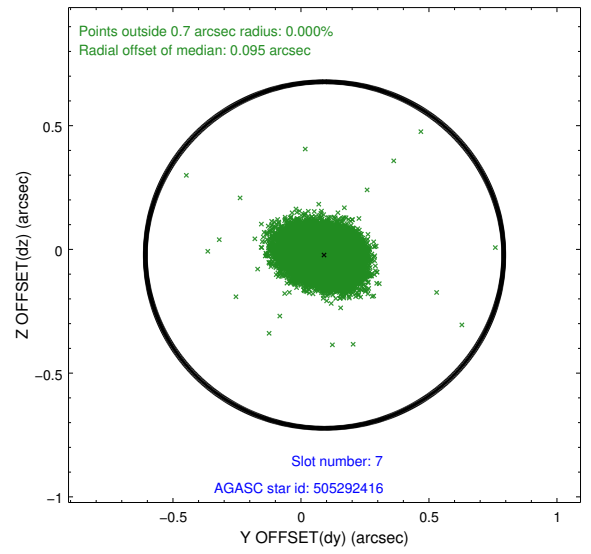
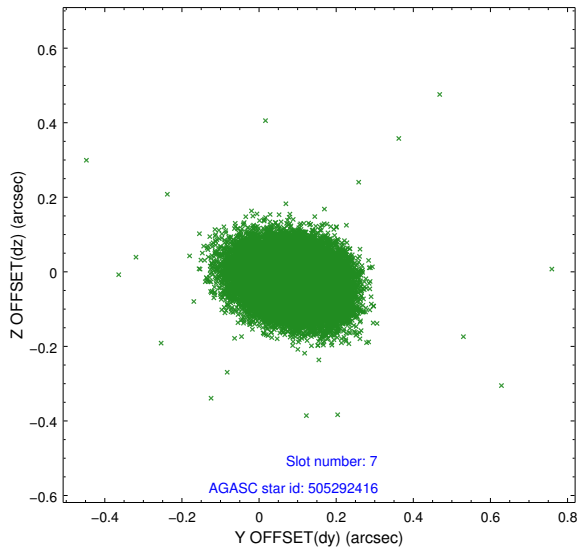
### 2.4.3 Slot 5



## 2.4.4 Slot 6

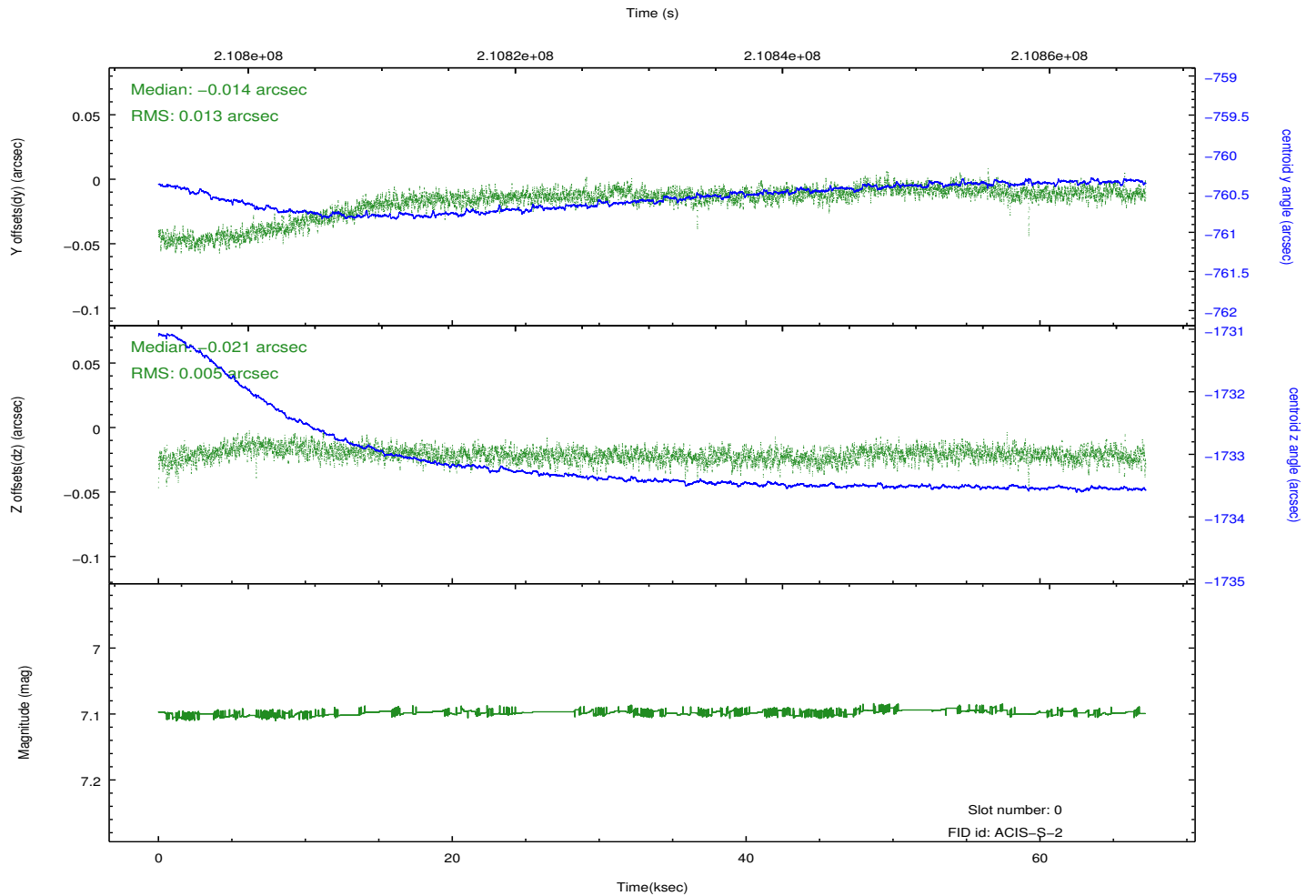
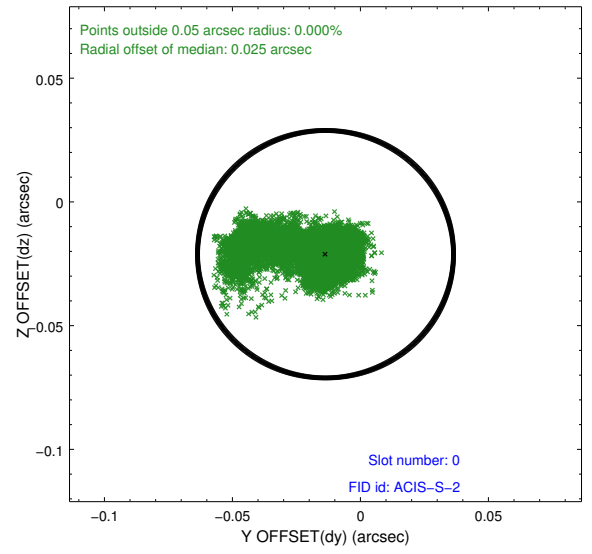
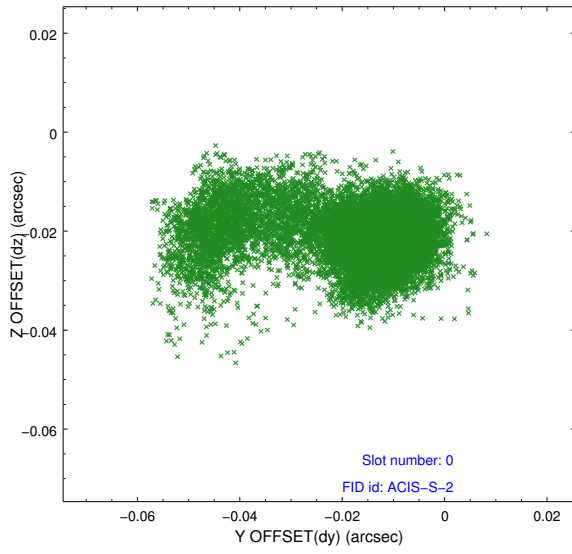


## 2.4.5 Slot 7

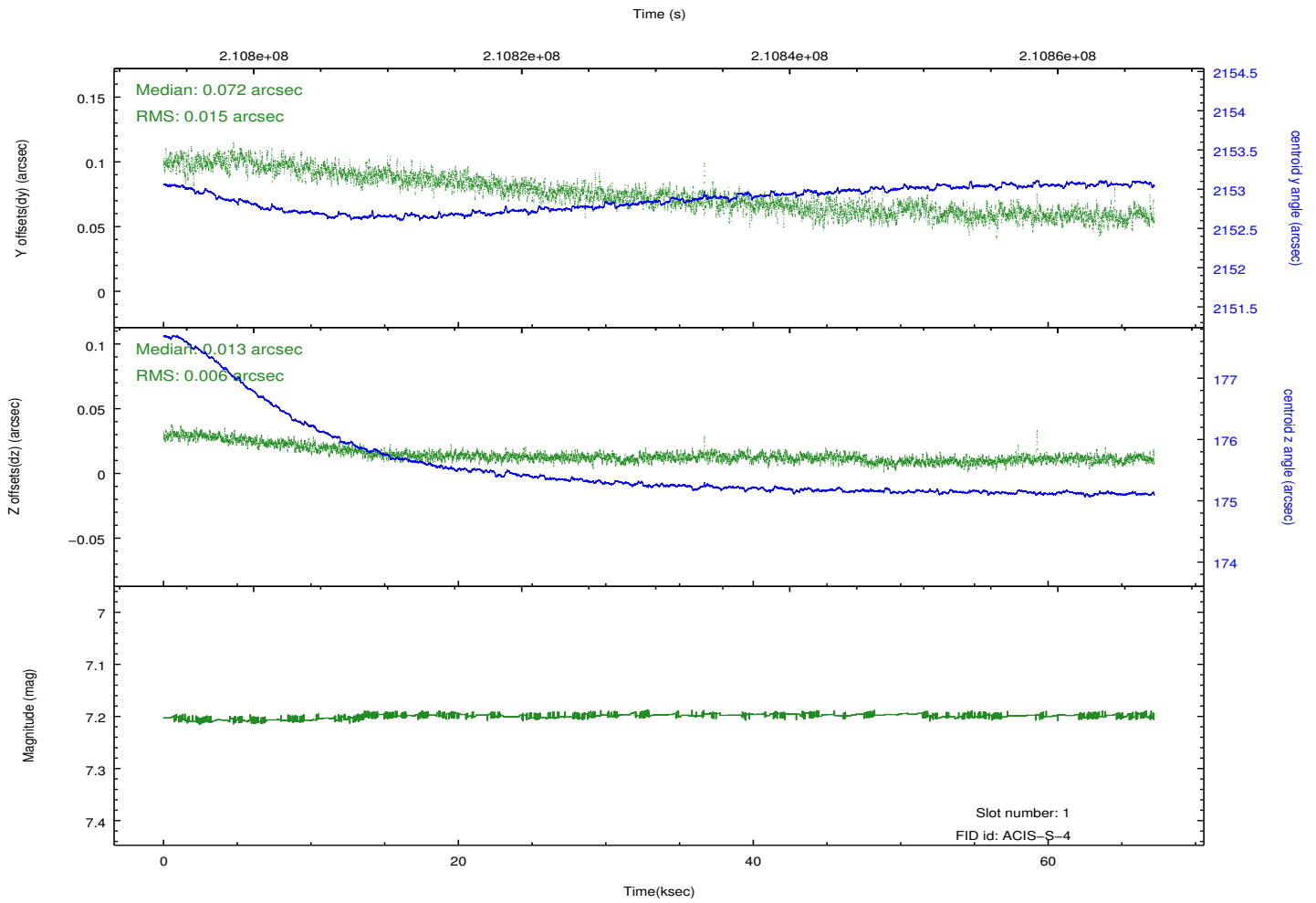
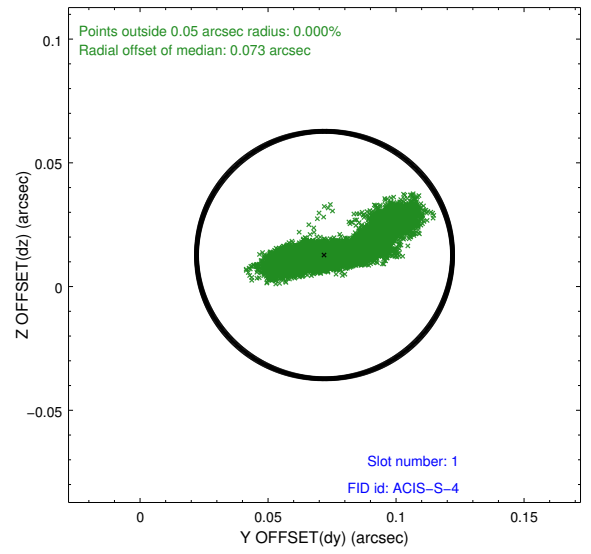
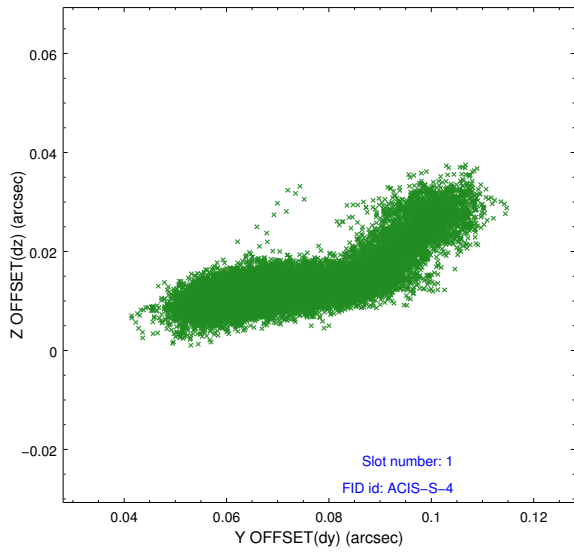


## 2.5 FID Slots

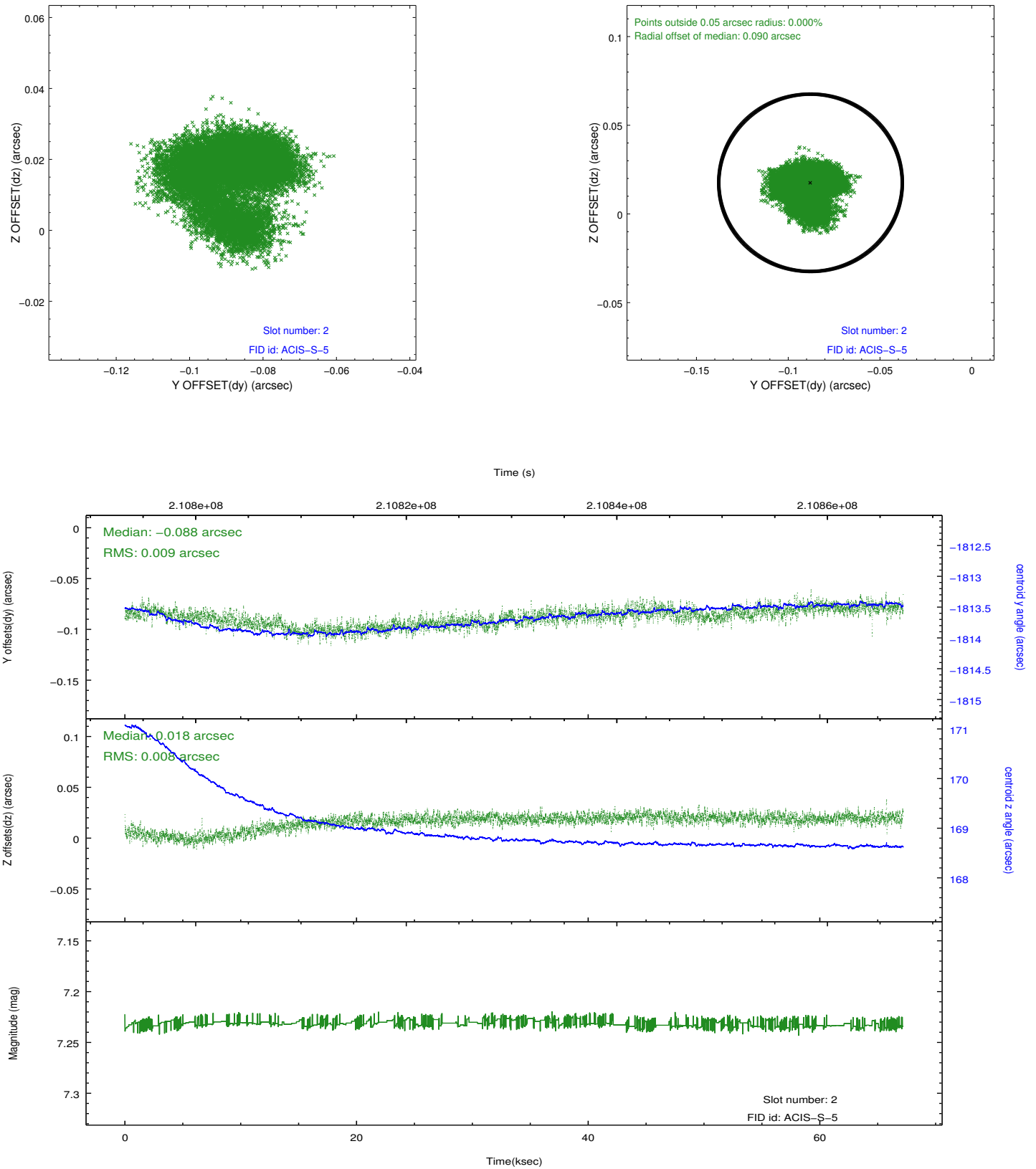
### 2.5.1 Slot 0



## 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)	2012.12.27
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	67.052

## A.2 Comments