

# V&V Reference Report

## L2 ASCDS Version : 10.1.1

Observation 7063 - L2 Version 4  
Chandra X-Ray Center

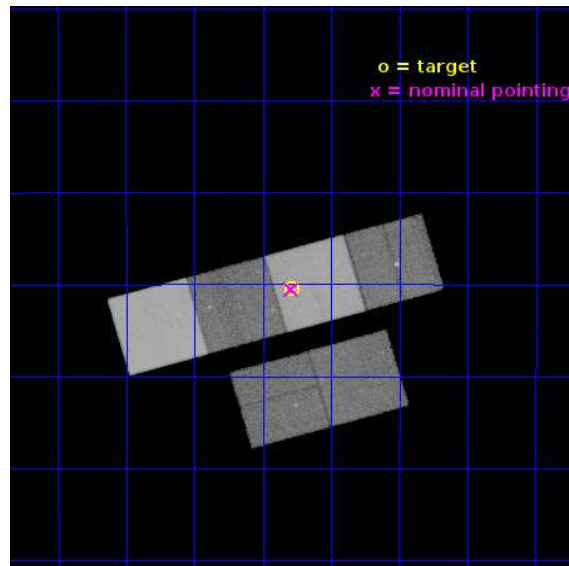
L2 Processing Date : Dec 3 2013

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# 1 Front

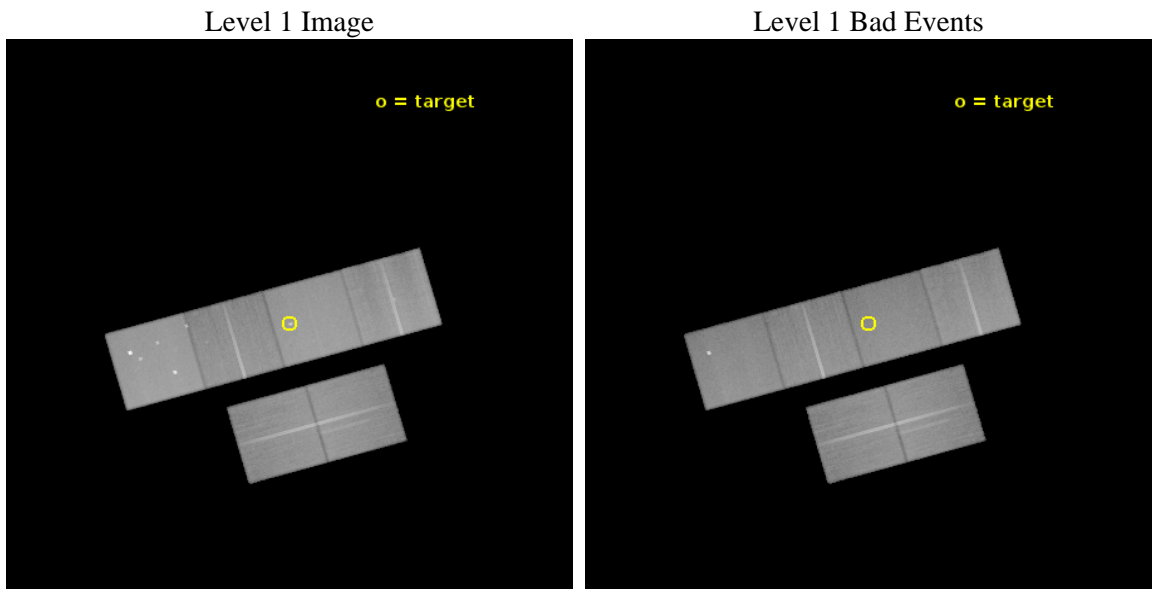
seq_num	600501	Sequence number
obs_id	7063	Observation id
title	Feedback in VV 114: The Nearest Lyman Break Galaxy Analog	Proposal
observer	Dr. Tim Heckman	Principal investigator
object	VV 114	Source name
dtycycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	16.946667	Observer's specified target RA [deg]
dec_targ	-17.506944	Observer's specified target Dec [deg]
ra_nom	16.947446975582	Nominal RA [deg]
dec_nom	-17.508891797672	Nominal Dec [deg]
roll_nom	344.11217674573	Nominal Roll [deg]
revision	4	Processing version of data
ontime	60108.799776077	Sum of GTIs [s]
livetime	59347.665960139	Livetime [s]
ontime2	60105.558765888	Sum of GTIs [s]
ontime3	60102.317864895	Sum of GTIs [s]
ontime5	60108.799776077	Sum of GTIs [s]
ontime6	60108.799776077	Sum of GTIs [s]
ontime7	60108.799776077	Sum of GTIs [s]
ontime8	60102.317934513	Sum of GTIs [s]
l2events	771270	Number of level 2 events



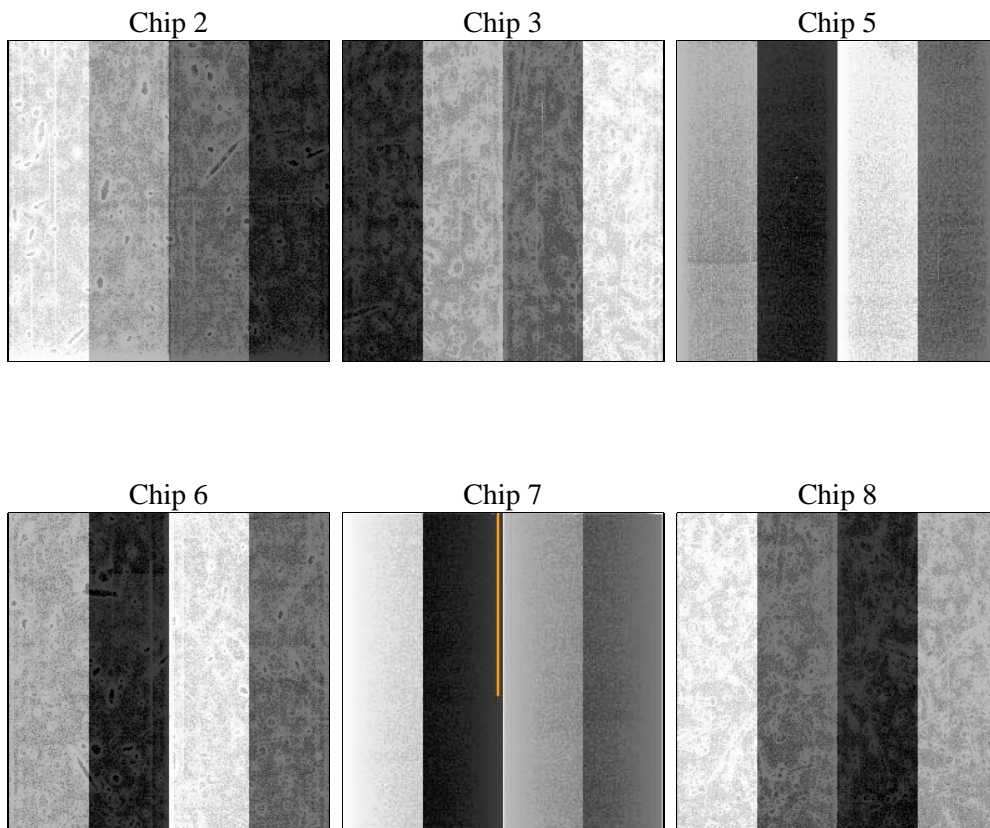
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	60000.000000	[s] Scheduled observation exposure time
ascdsver	10.1.1	Processing system revision	ontime	60108.799776077	Sum of GTIs [s]
caldbver	4.5.9	&#160	ontime2	60105.558765888	Sum of GTIs [s]
date	2013-12-03T16:55:24	Date and time of file creation	ontime3	60102.317864895	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	60108.799776077	Sum of GTIs [s]
			ontime6	60108.799776077	Sum of GTIs [s]
			ontime7	60108.799776077	Sum of GTIs [s]
			ontime8	60102.317934513	Sum of GTIs [s]
			l1events	3531170	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	499078	507470	756455	487689	655035	625443	grade 0 events	23991	23406	50697	21811	24645	41589
rejected events	443744	452798	398704	431875	383958	496672		4%	4%	6%	4%	3%	6%
rejected %	88%	89%	52%	88%	58%	79%	grade 1 events	288	281	1026	238	643	457
								0%	0%	0%	0%	0%	0%
							grade 2 events	11738	10775	102502	11932	53952	28085
								2%	2%	13%	2%	8%	4%
							grade 3 events	5158	5331	17585	5348	23604	13648
								1%	1%	2%	1%	3%	2%
							grade 4 events	5133	5344	13173	5288	23076	12771
								1%	1%	1%	1%	3%	2%
							grade 5 events	18252	21366	57799	22371	61931	28991
								3%	4%	7%	4%	9%	4%
							grade 6 events	9318	9826	173846	11442	145824	32686
								1%	1%	22%	2%	22%	5%
							grade 7 events	425200	431141	339827	409259	321360	467216
								85%	84%	44%	83%	49%	74%

## 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	16.919845	16.9474469755822	Subarray requested	NONE	NONE
[deg] Pointing Dec	-17.515889	-17.50889179767172	Alternating exposures requested	N	N
[deg] Pointing Roll	343.947248	344.1121767457294	[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)	246157998.184000	246156759.36221			
Observation start date	2005-10-20T01:12:14	2005-10-20T00:52:39			
[s] Observation end time (MET)	246217998.184000	246219602.11511			
Observation end date	2005-10-20T17:52:14	2005-10-20T18:20:02			
Read mode	TIMED	TIMED			

## 2.3 Aspect

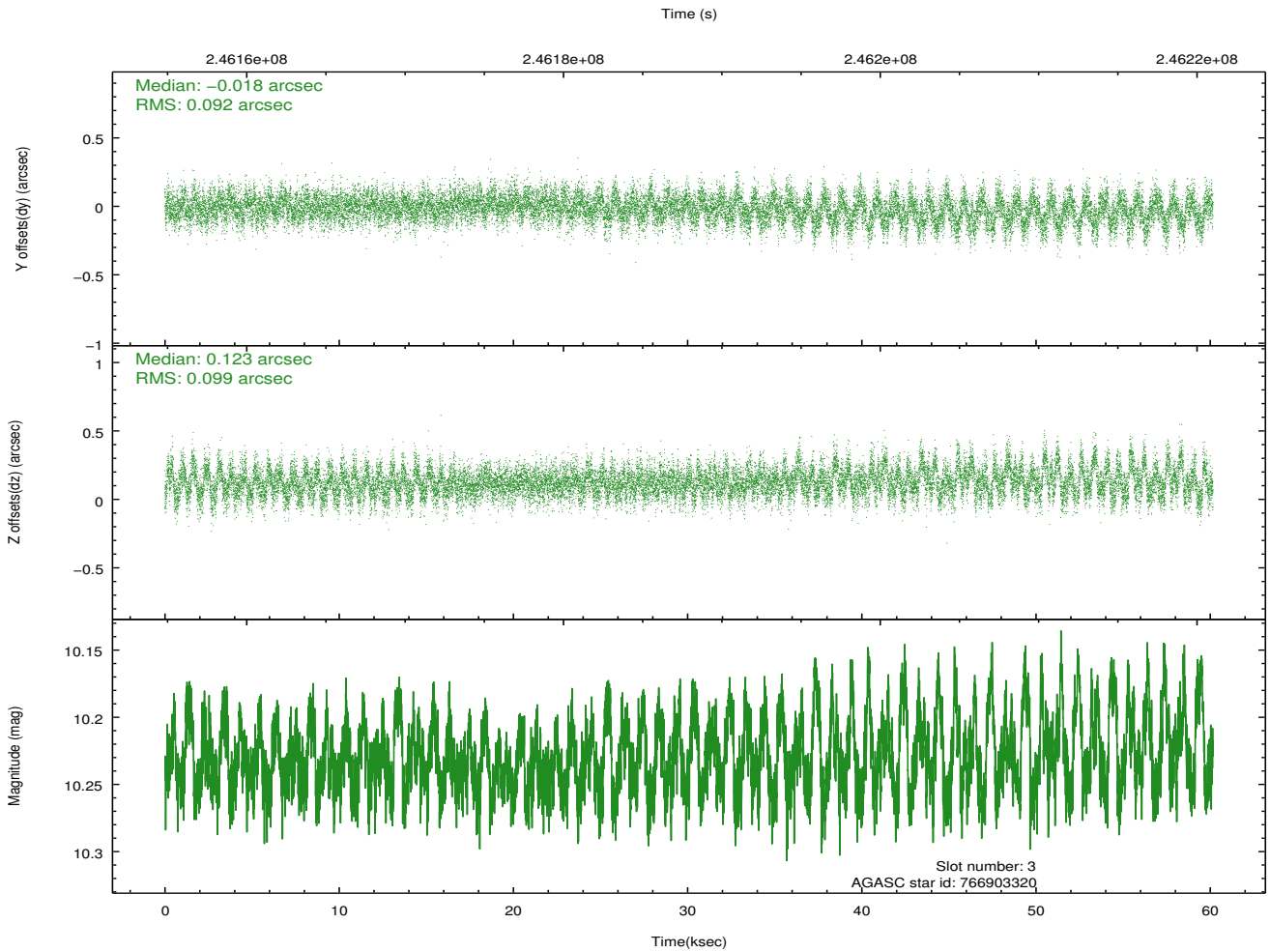
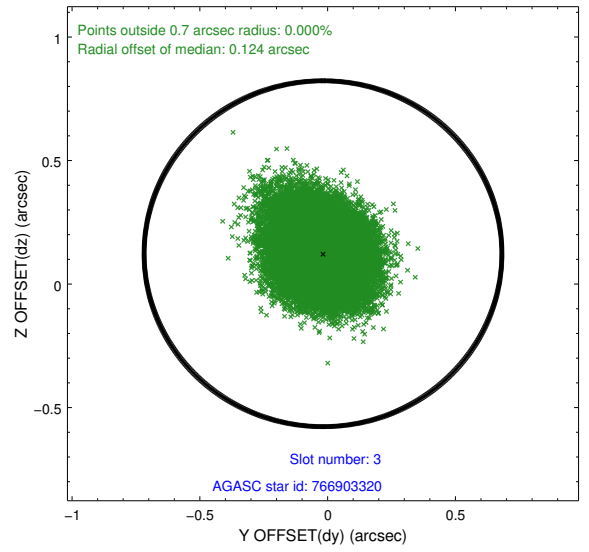
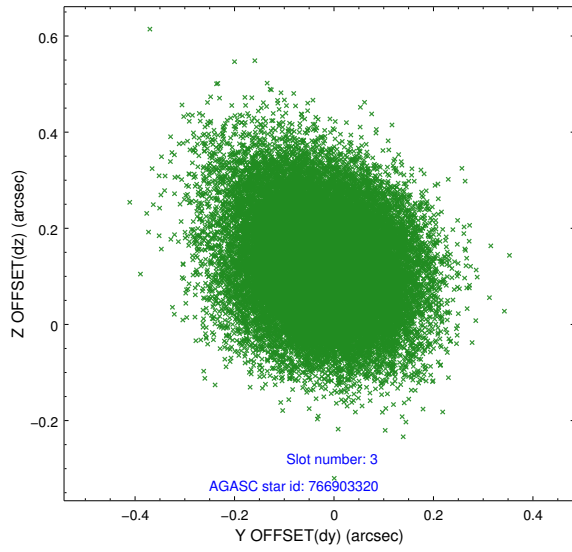


### Slot Statistics

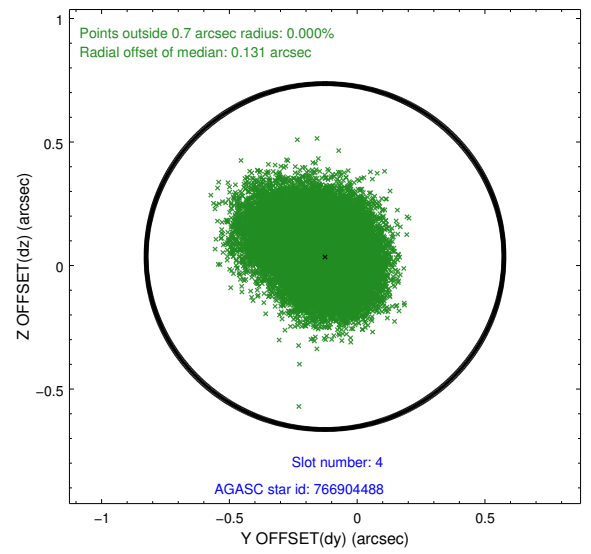
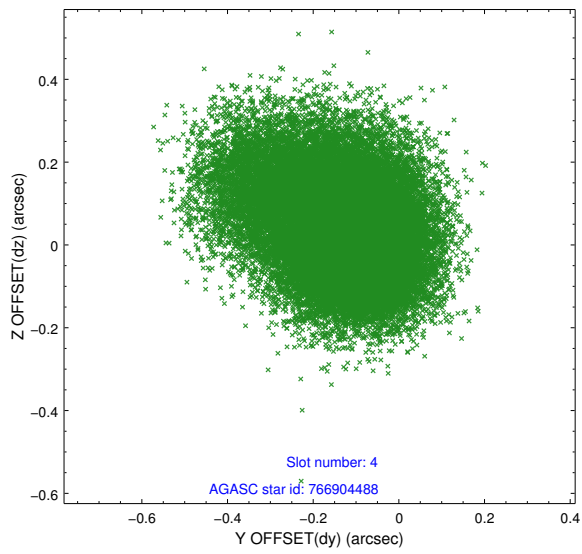
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	14675	-0.059	-0.035	0.011	0.034	0.000000	0.000000	-759.81	-1731.64
1	FID	ACIS-S-4	7.21	14673	0.111	0.038	0.010	0.033	0.000000	0.000000	2153.61	177.02
2	FID	ACIS-S-5	7.24	14675	-0.083	0.007	0.010	0.019	0.000000	0.000000	-1812.77	170.53
3	GUIDE	766903320	10.23	29135	-0.018	0.123	0.142	0.236	17.321044	-18.099211	1901.16	-1639.37
4	GUIDE	766904488	10.04	29302	-0.126	0.036	0.168	0.286	16.160756	-17.948057	-2066.16	-2218.87
5	GUIDE	766907464	10.05	29307	0.169	0.074	0.146	0.230	16.984267	-17.646745	343.04	-391.64
6	GUIDE	766909000	9.87	29311	0.169	-0.057	0.212	0.337	17.451605	-17.541999	1781.55	412.12
7	GUIDE	766909368	7.38	29347	-0.186	-0.179	0.071	0.115	17.162083	-17.063645	351.36	1794.64

## 2.4 Star Slots

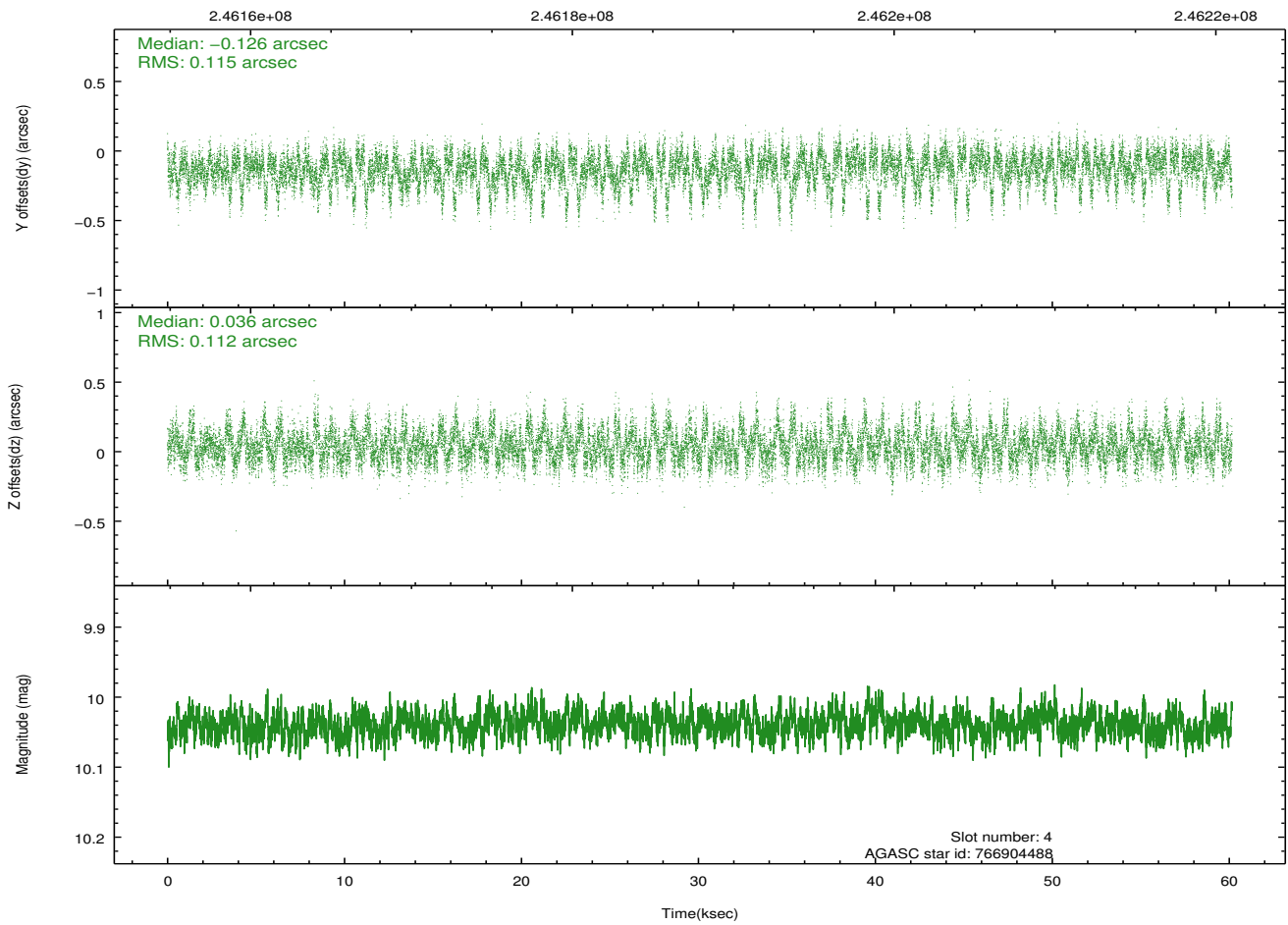
### 2.4.1 Slot 3



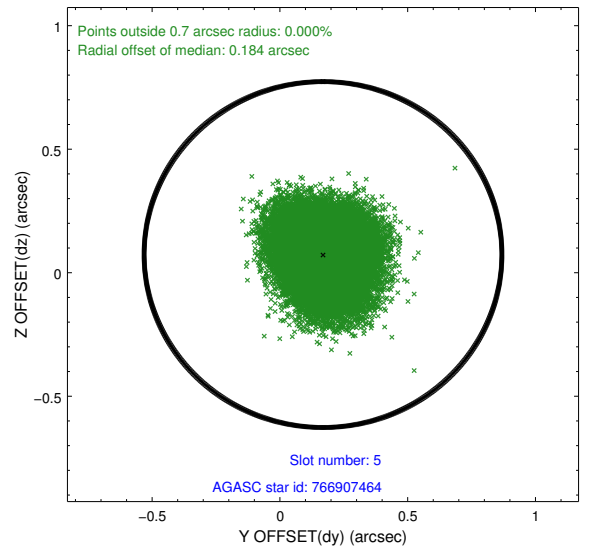
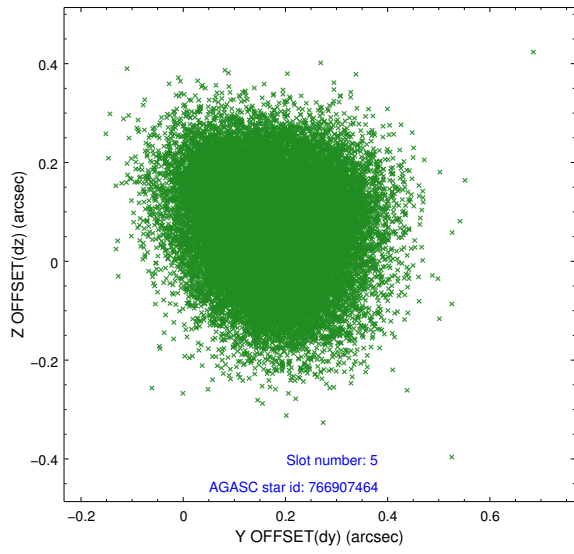
## 2.4.2 Slot 4



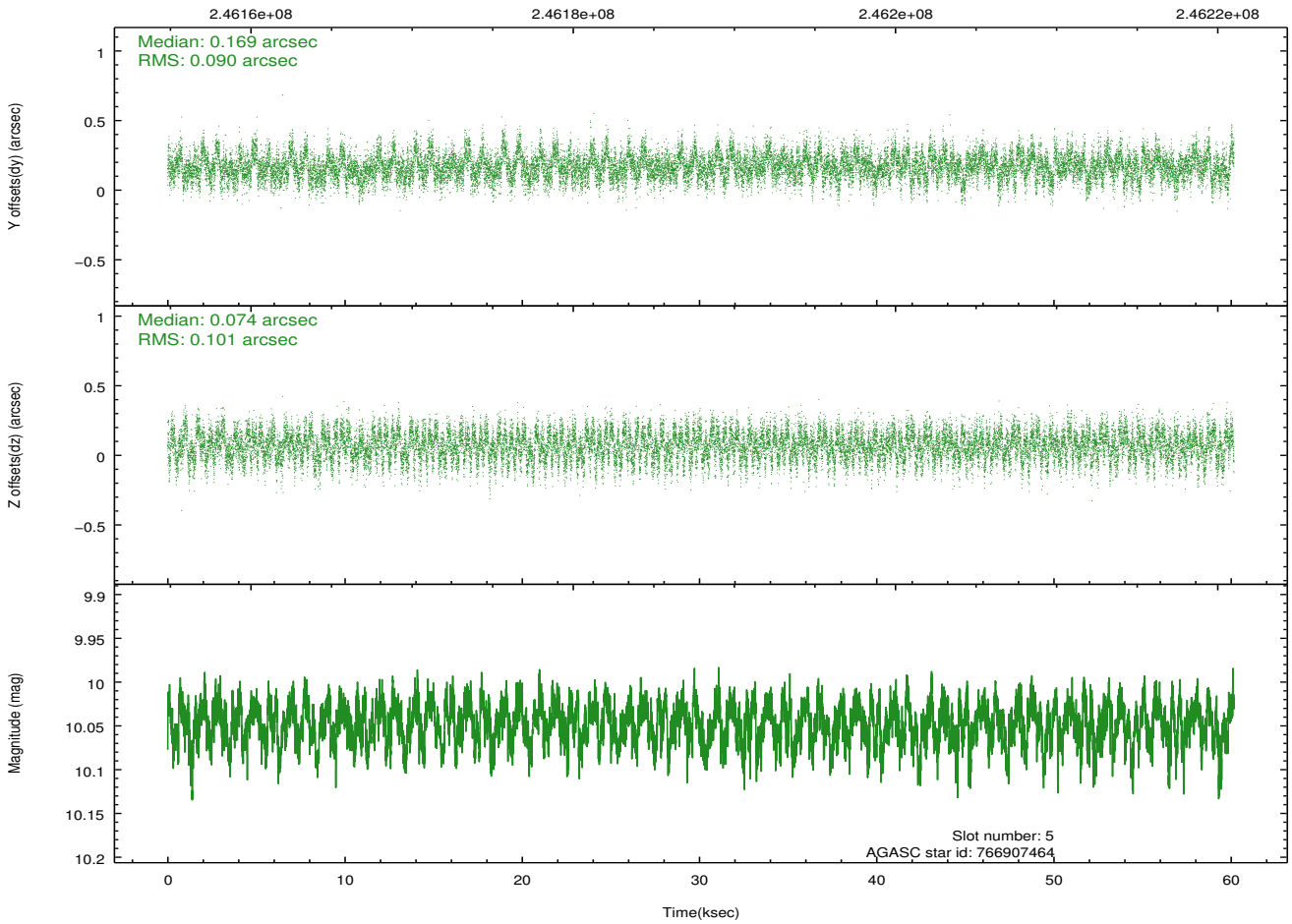
Time (s)



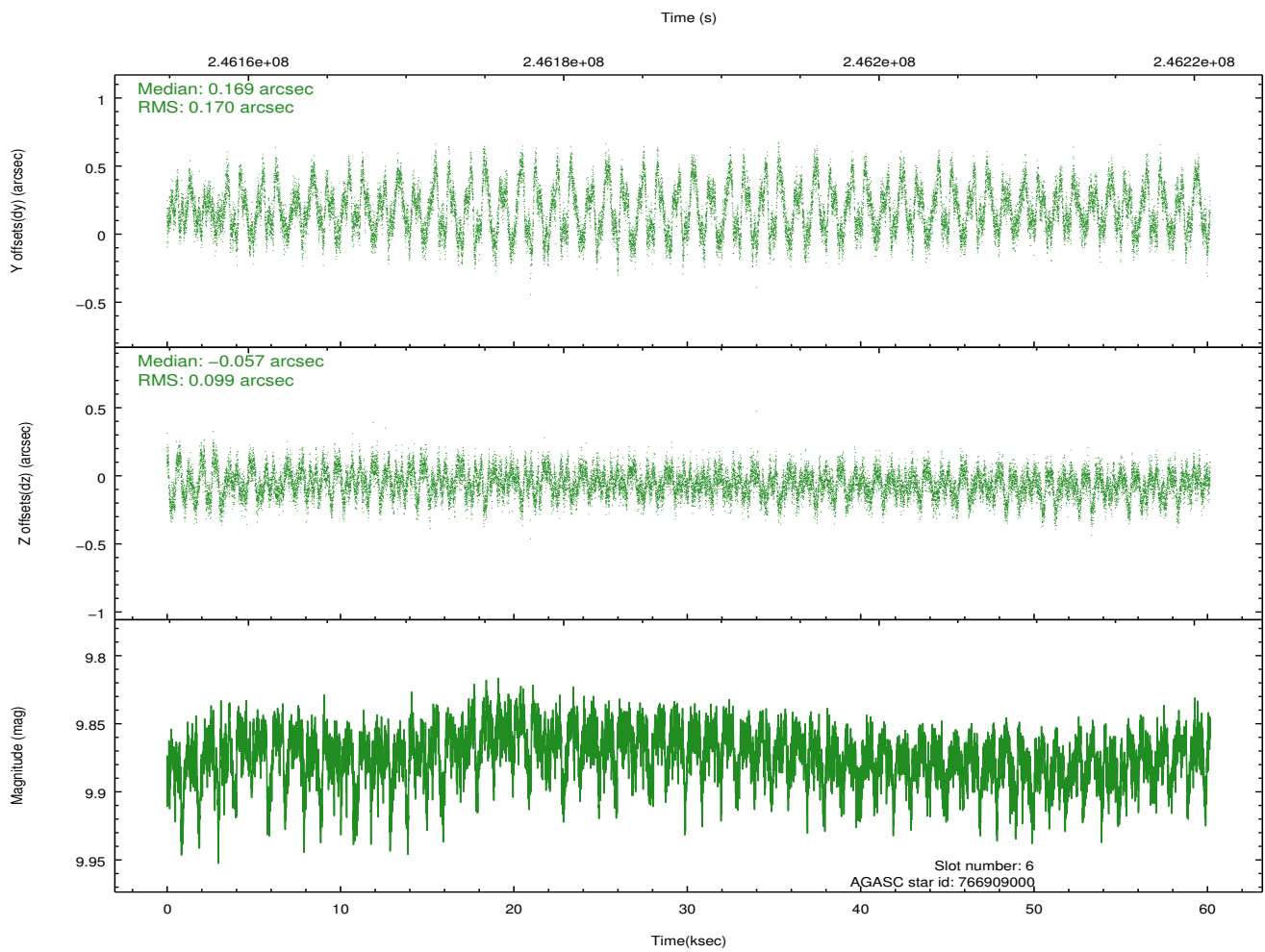
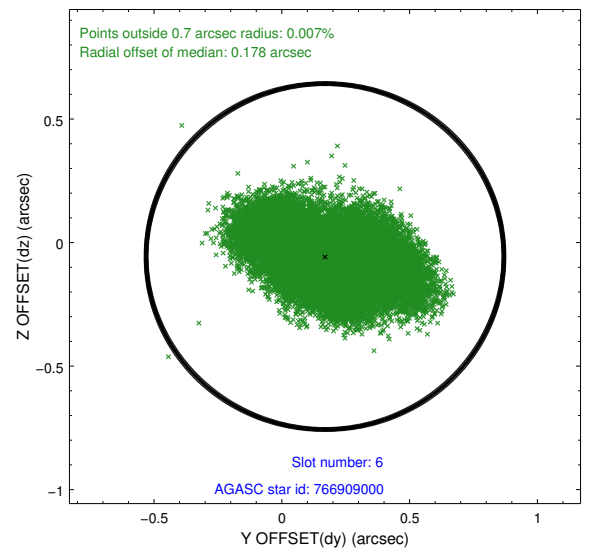
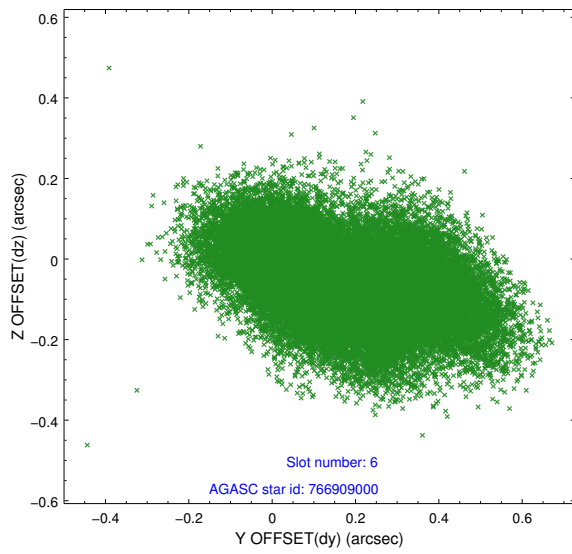
### 2.4.3 Slot 5



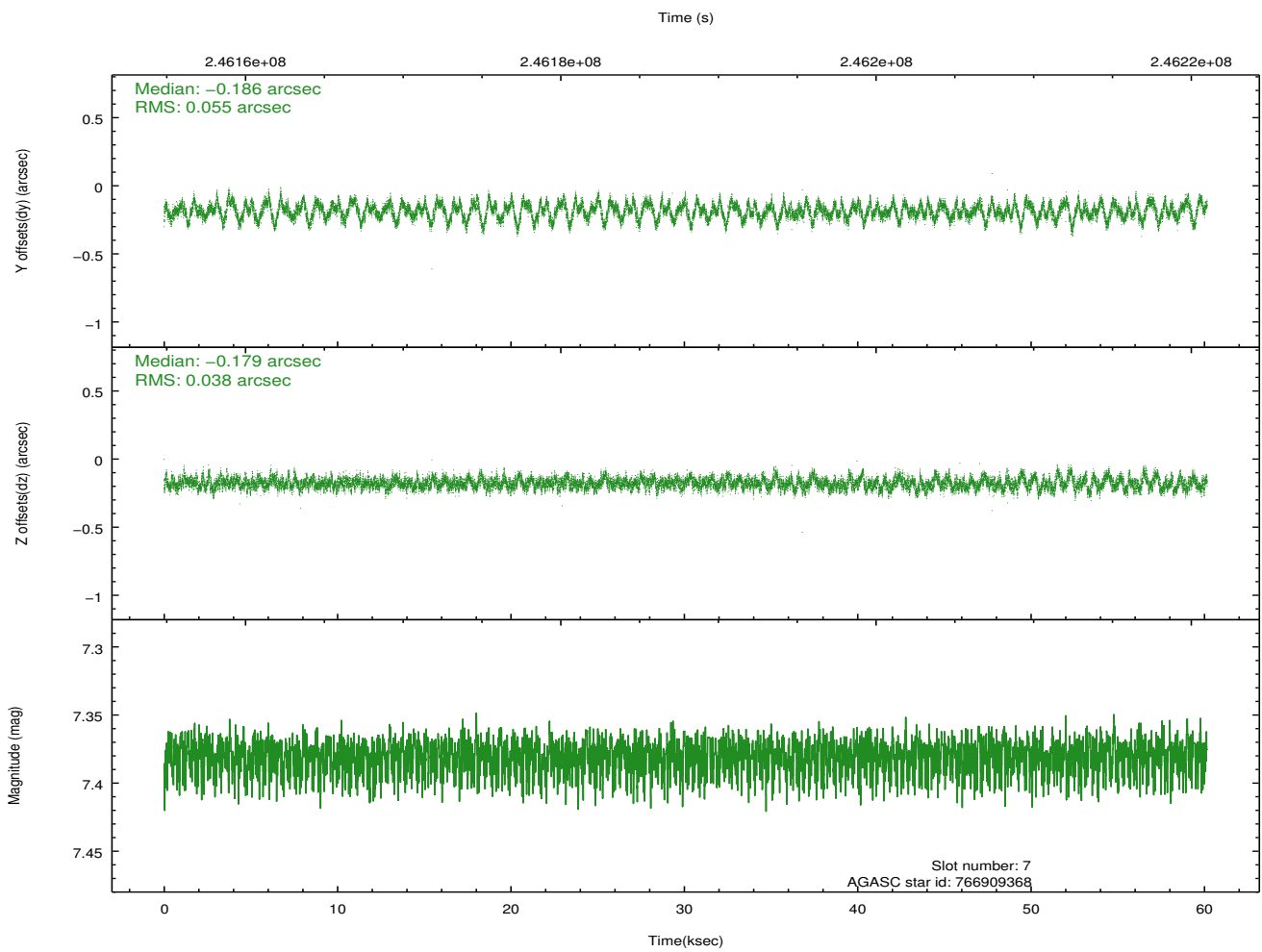
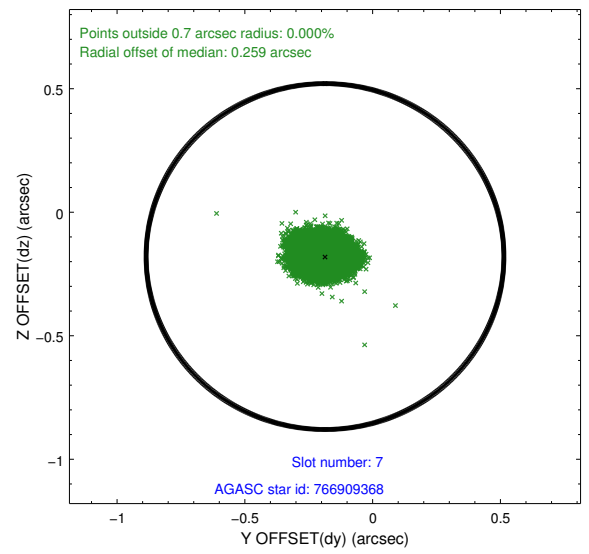
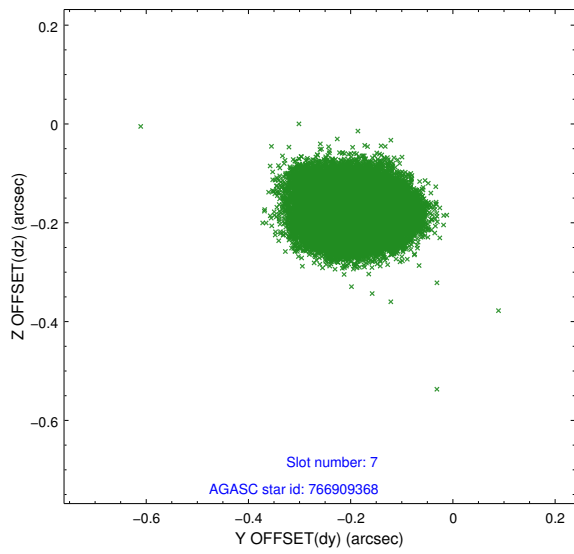
Time (s)



## 2.4.4 Slot 6

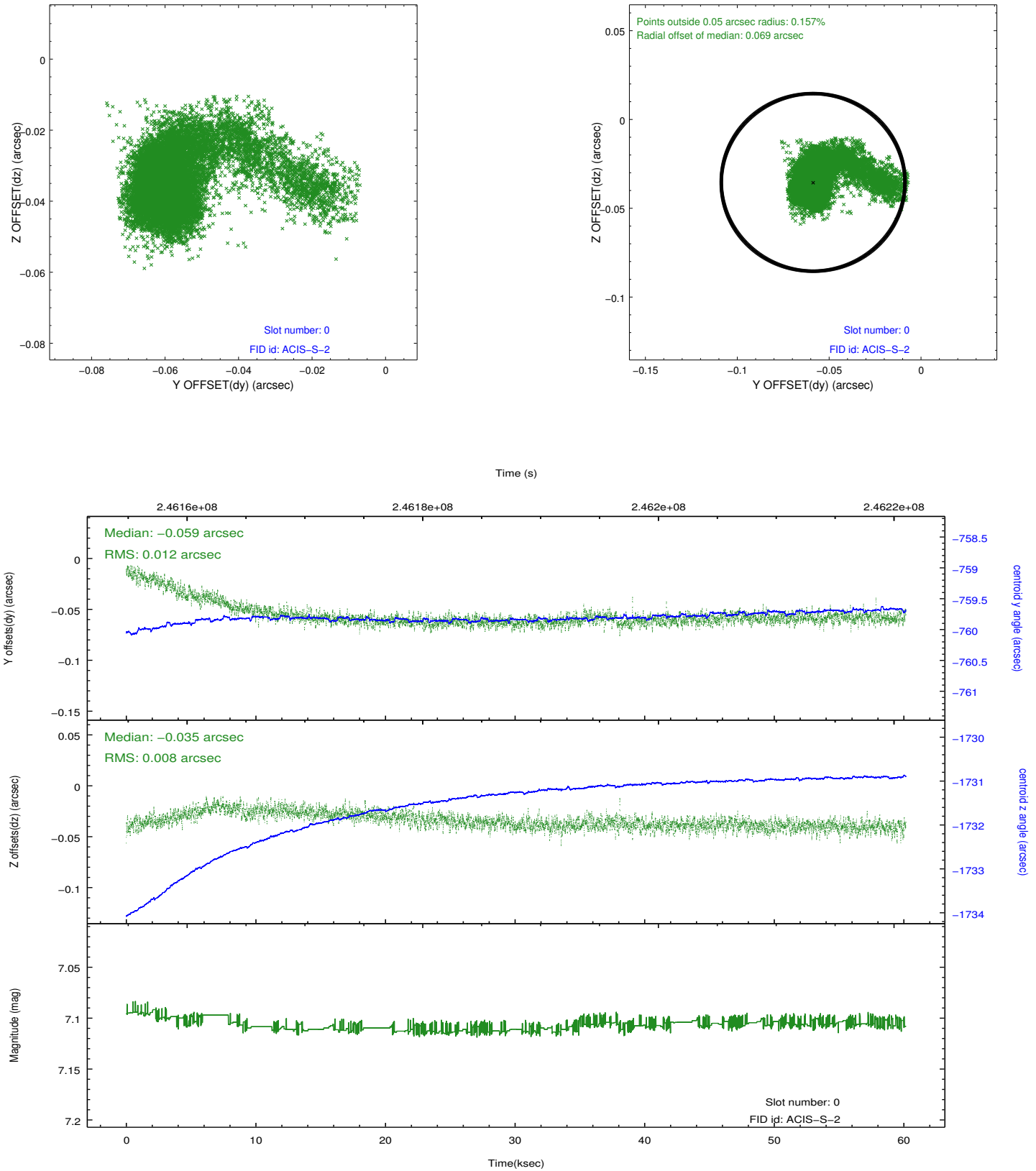


## 2.4.5 Slot 7

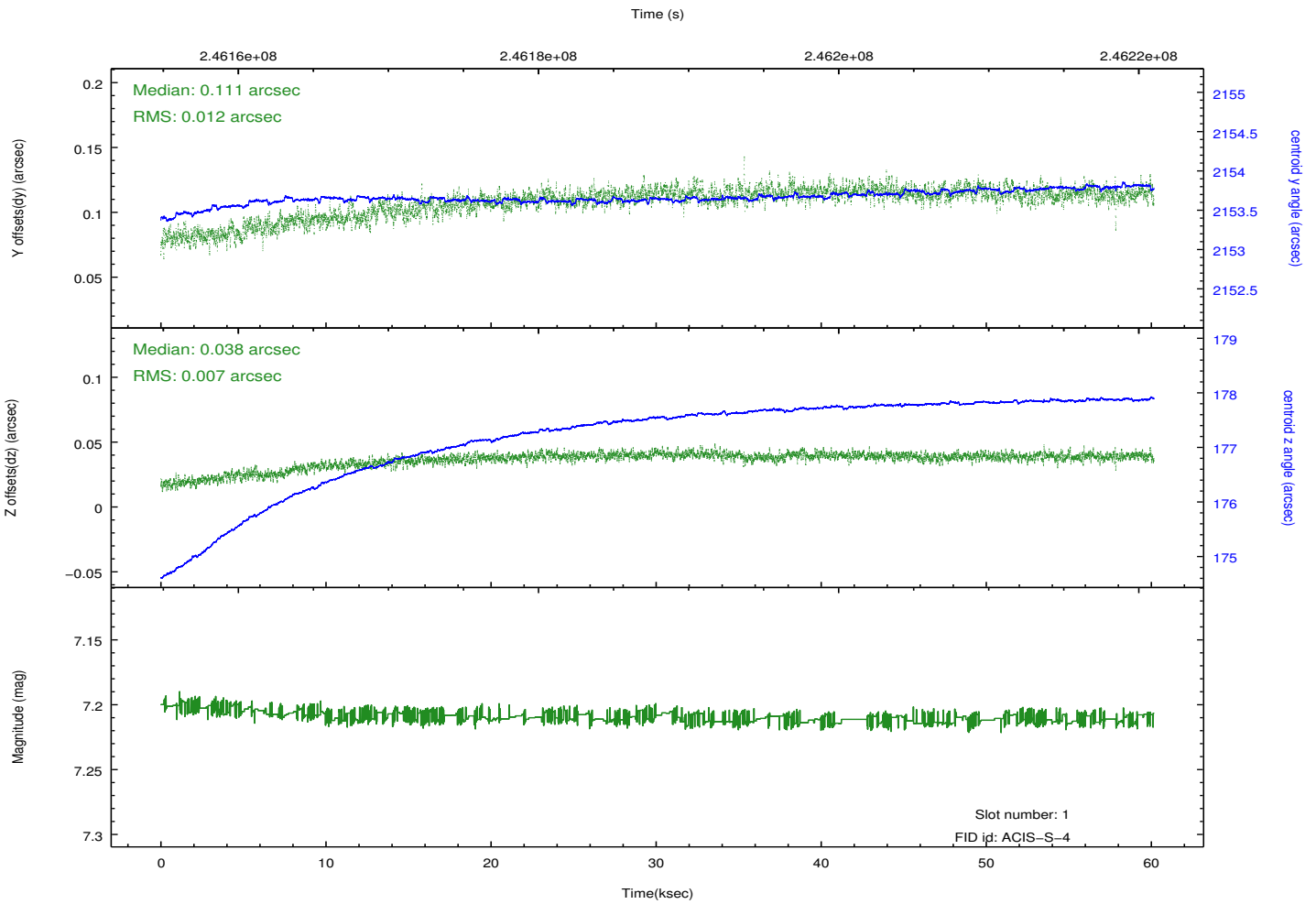
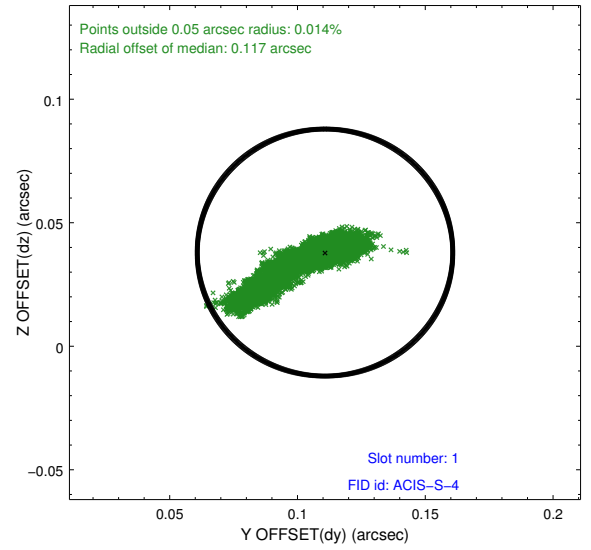
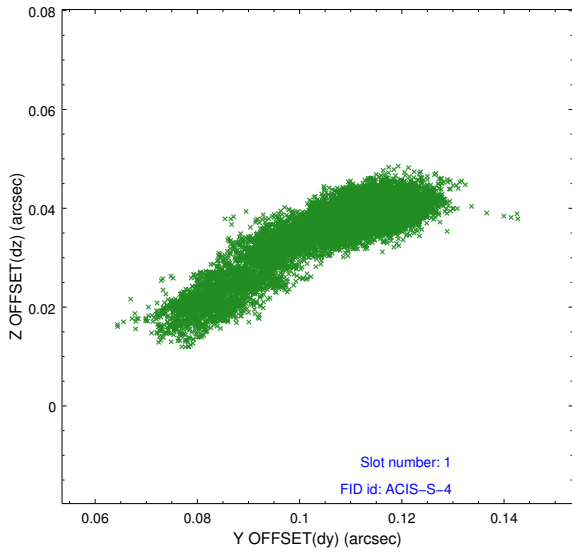


## 2.5 FID Slots

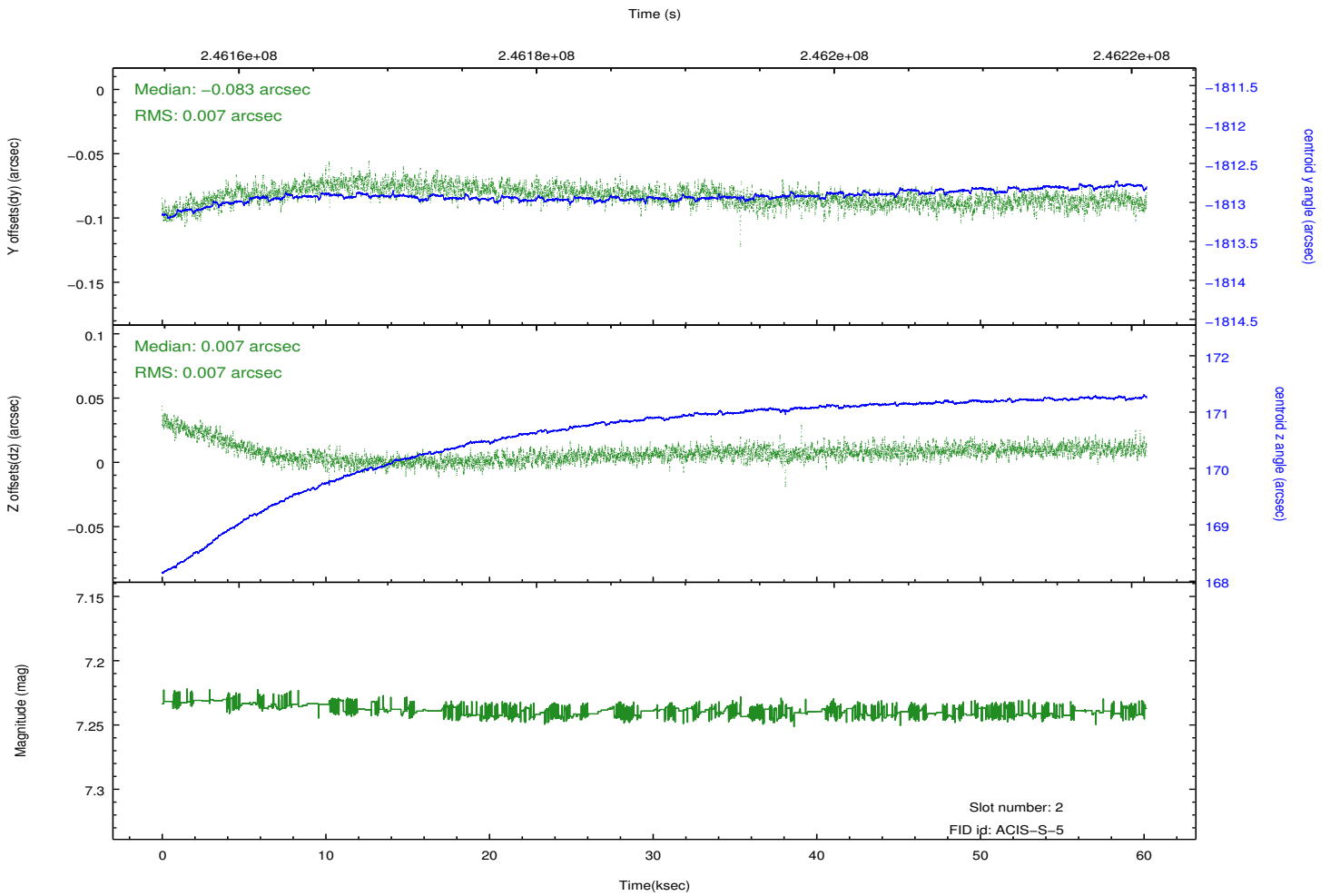
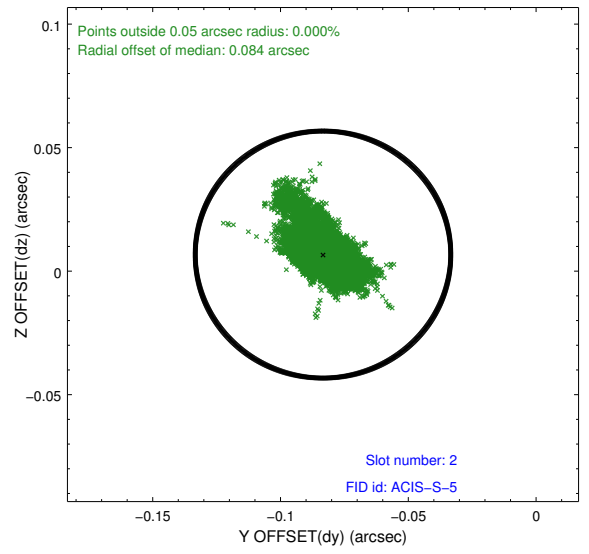
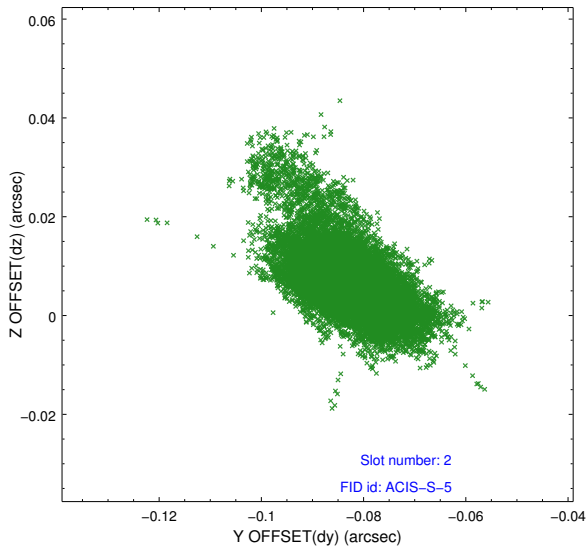
### 2.5.1 Slot 0



## 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)	2013.12.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	60.10879

## A.2 Comments

The bias maps for ACIS-I3 and ACIS-S4 appear to be adversely affected by a light leak. Although the aimpoint is on ACIS-S3, there do appear to be sources on ACIS-I3 and ACIS-S4. These two bias files have been replaced in this processing. The bias files for CCDs 3 (ACIS-I3) and 8 (ACIS-S4) used in this processing were created by using a bias file from another observation taken nearby in time and temperature (obsid 5574), then scaling each node of the these donor bias files to the overclocking value appropriate for each node of the replaced bias for this observation. The procedure is documented at [http://space.mit.edu/ASC/docs/bias\\_repair\\_5.5.pdf](http://space.mit.edu/ASC/docs/bias_repair_5.5.pdf).