

# V&V Reference Report

## L2 ASCDS Version : 8.5.1.1

Observation 7173 - L2 Version 4  
Chandra X-Ray Center

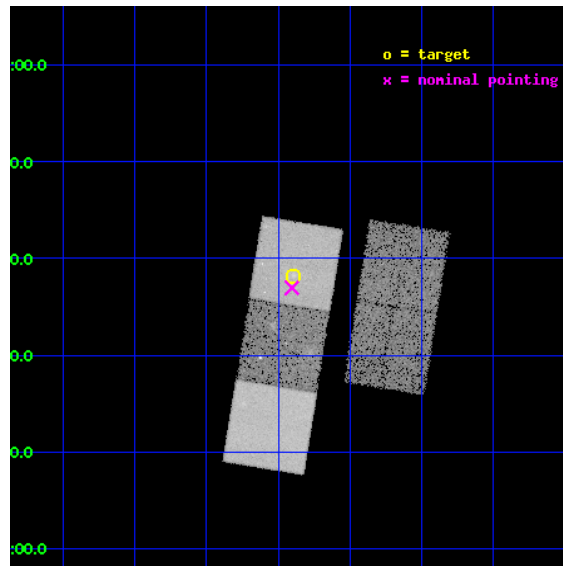
L2 Processing Date : Mar 7 2013

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# 1 Front

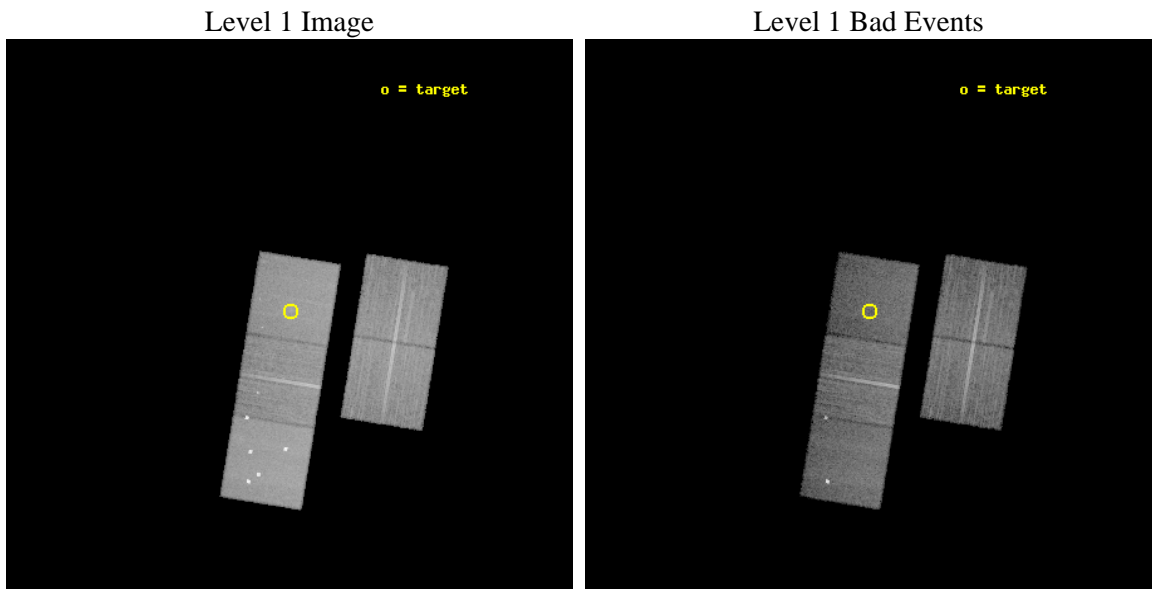
seq_num	800465	Sequence number
obs_id	7173	Observation id
title	Cluster Strong Lensing at High Redshift	Proposal title
observer	Professor Michael Gladders	Principal investigator
object	RCS2319.9+0038	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	349.974583	Observer's specified target RA [deg]
dec_targ	0.636556	Observer's specified target Dec [deg]
ra_nom	349.97620256175	Nominal RA [deg]
dec_nom	0.61584757027813	Nominal Dec [deg]
roll_nom	279.2049430717	Nominal Roll [deg]
revision	4	Processing version of data
ontime	21176.099959254	Sum of GTIs [s]
livetime	20899.418623669	Livetime [s]
ontime2	21176.099959254	Sum of GTIs [s]
ontime3	21169.818008751	Sum of GTIs [s]
ontime5	21176.099959254	Sum of GTIs [s]
ontime6	21172.958979011	Sum of GTIs [s]
ontime7	21176.099959254	Sum of GTIs [s]
l2events	179842	Number of level 2 events



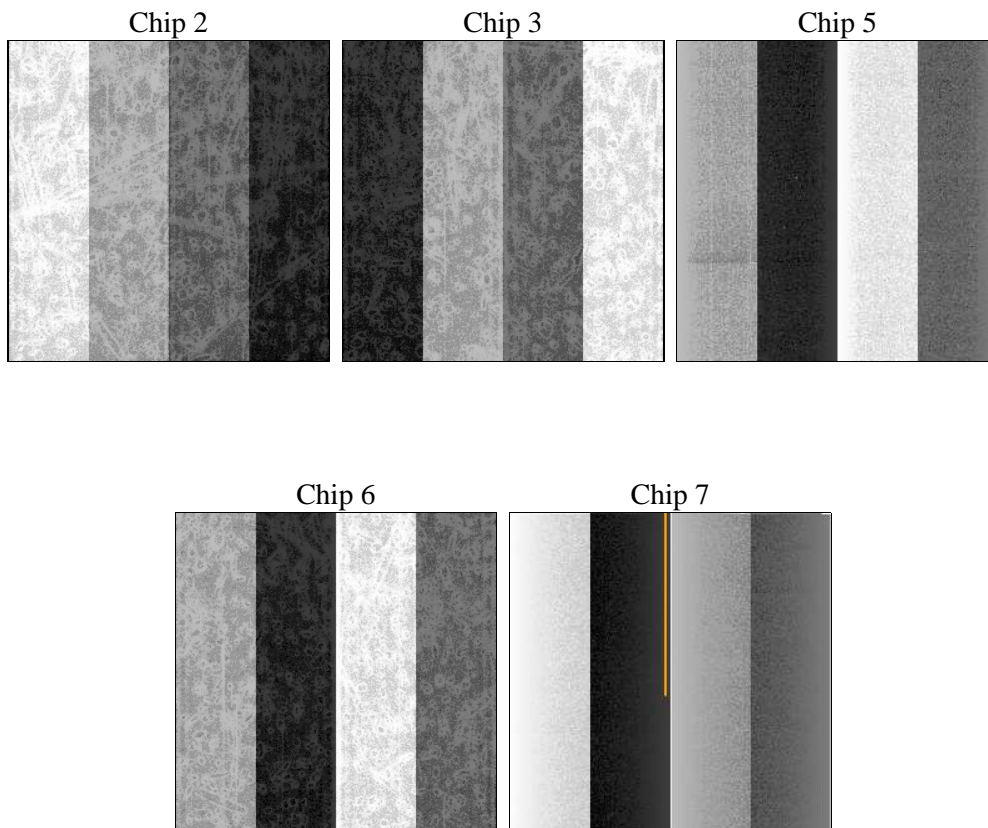
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	21000.000000	[s] Scheduled observation exposure time
ascdsver	8.5.1.1	Processing system revision	ontime	21176.099959254	Sum of GTIs [s]
caldbver	4.5.6	&#160	ontime2	21176.099959254	Sum of GTIs [s]
date	2013-03-07T23:07:18	Date and time of file creation	ontime3	21169.818008751	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	21176.099959254	Sum of GTIs [s]
			ontime6	21172.958979011	Sum of GTIs [s]
			ontime7	21176.099959254	Sum of GTIs [s]
			l1events	732661	Number of level 1 events

### 2.1.4 Events

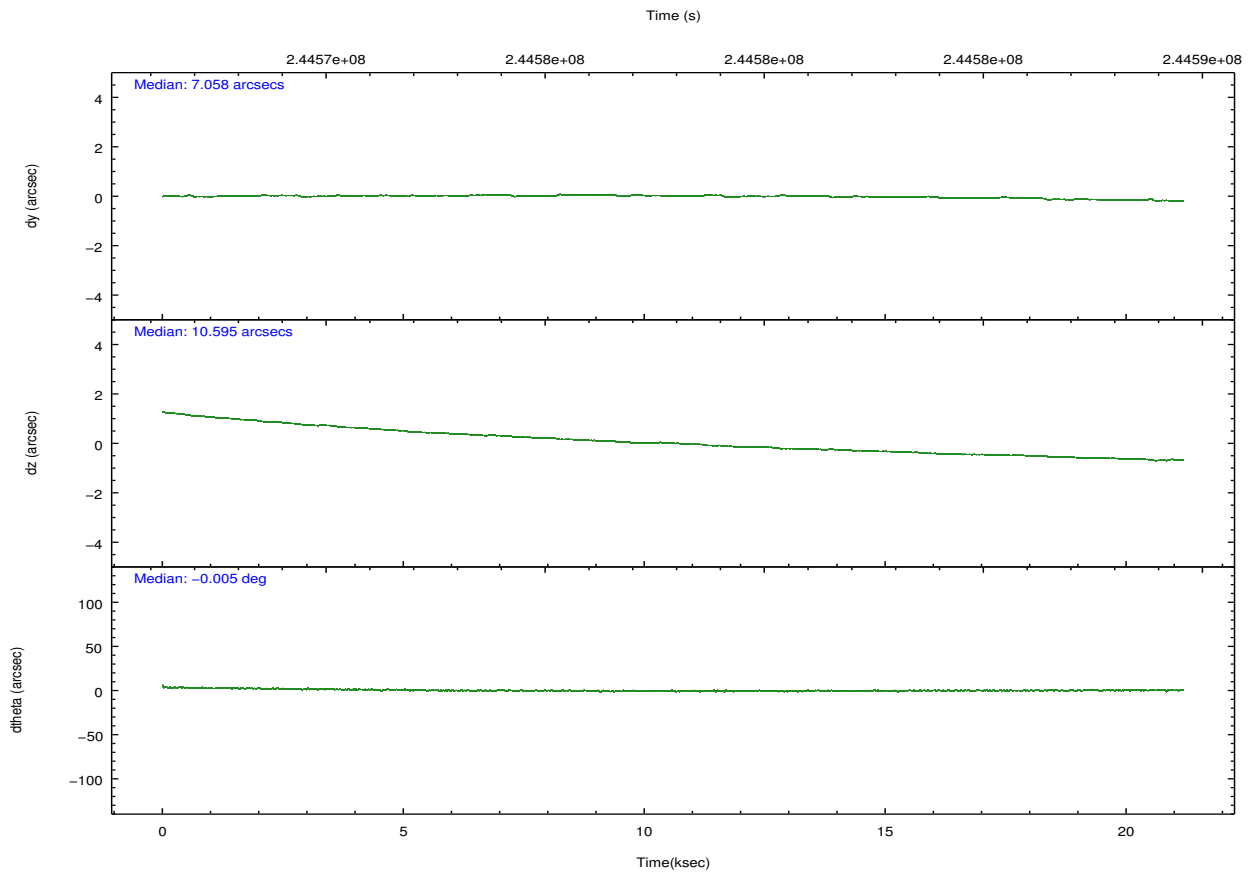
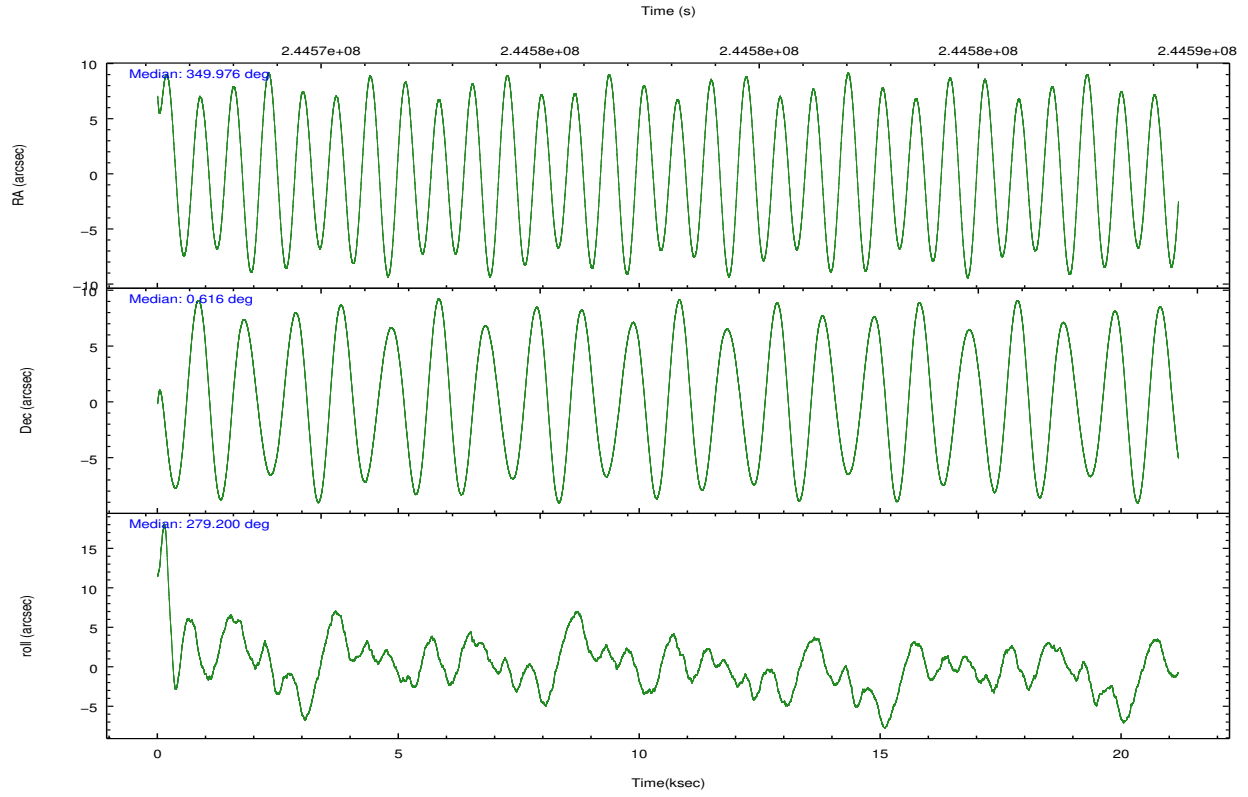
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	132704	124391	199403	129829	146334
rejected events	120296	112619	96007	115134	80082
rejected %	90%	90%	48%	88%	54%

	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	4353	4067	20932	5548	5996
	3%	3%	10%	4%	4%
grade 1 events	74	57	435	54	113
	0%	0%	0%	0%	0%
grade 2 events	3113	2653	27359	3117	13457
	2%	2%	13%	2%	9%
grade 3 events	1356	1408	4739	1606	6316
	1%	1%	2%	1%	4%
grade 4 events	1396	1382	4660	1570	6371
	1%	1%	2%	1%	4%
grade 5 events	4120	5144	16222	5341	15353
	3%	4%	8%	4%	10%
grade 6 events	2271	2346	46296	2945	34494
	1%	1%	23%	2%	23%
grade 7 events	116021	107334	78760	109648	64234
	87%	86%	39%	84%	43%

## 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	349.958697	349.9762025617512	Subarray requested	NONE	NONE
[deg] Pointing Dec	0.636726	0.6158475702781274	Alternating exposures requested	N	N
[deg] Pointing Roll	279.048505	279.2049430716975	[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	-190.145094680475			
[mm] SIM translation stage offset	0	0.01257209746719923			
[s] Observation start time (MET)	244567519.184000	244566458.46399			
Observation start date	2005-10-01T15:24:15	2005-10-01T15:07:38			
[s] Observation end time (MET)	244588519.184000	244589745.95257			
Observation end date	2005-10-01T21:14:15	2005-10-01T21:35:45			
Read mode	TIMED	TIMED			

## 2.3 Aspect

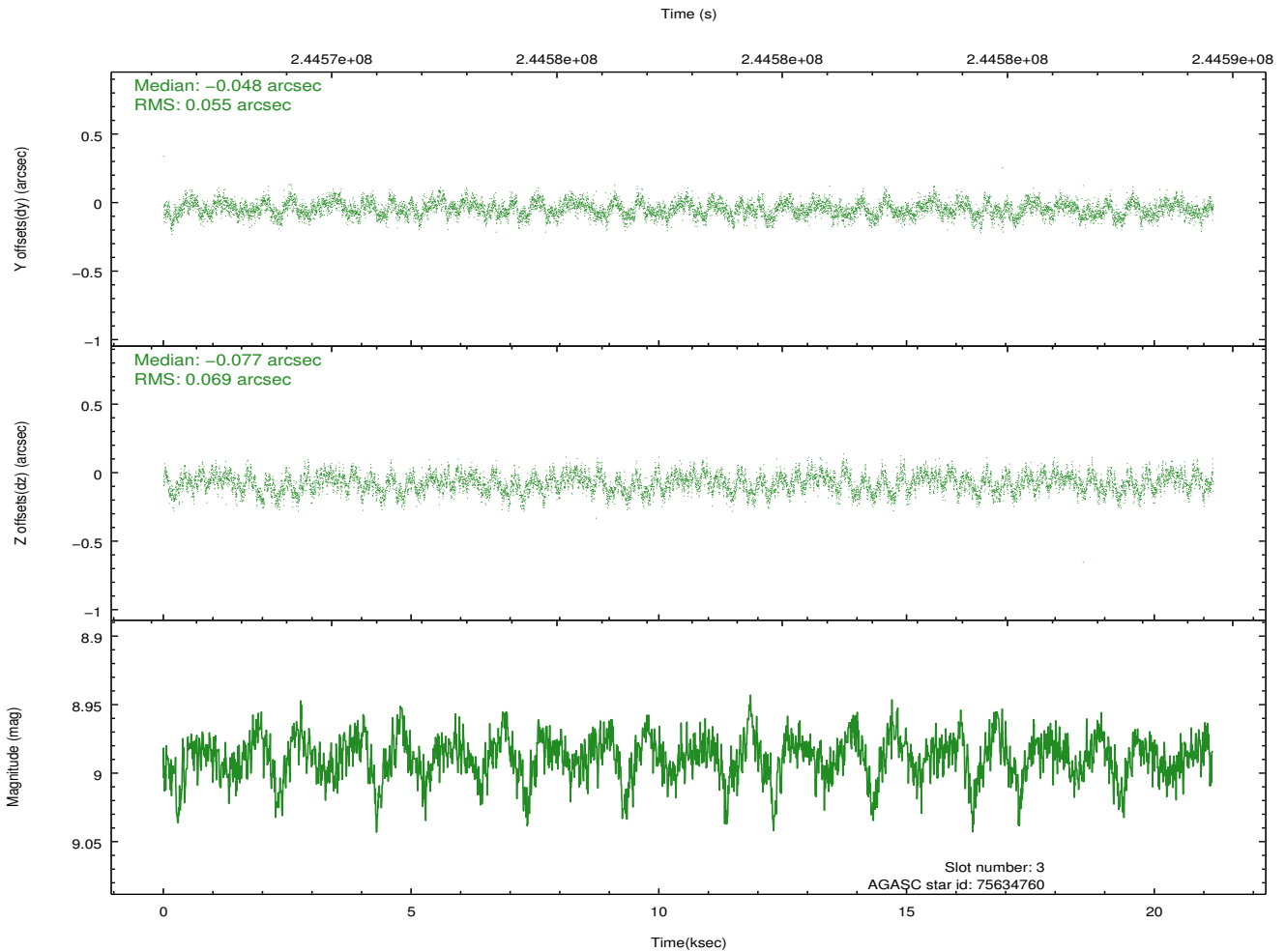
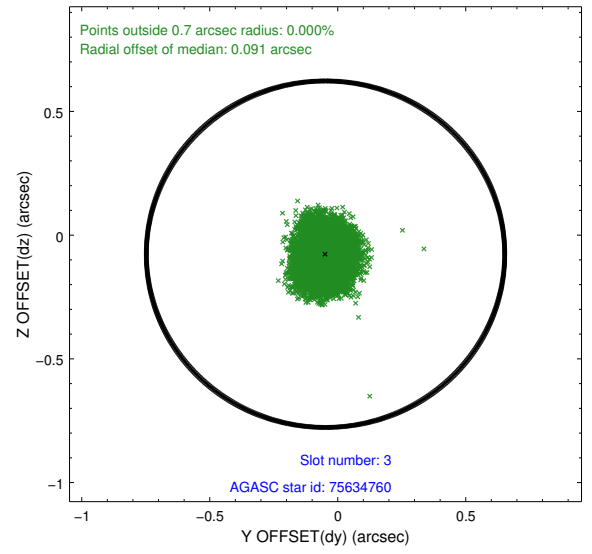
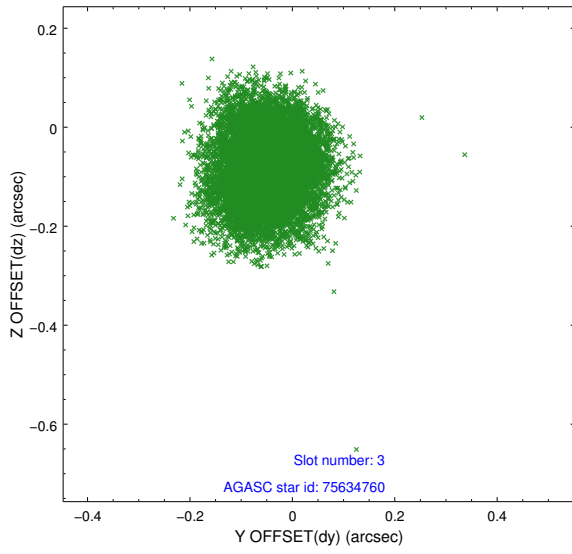


### Slot Statistics

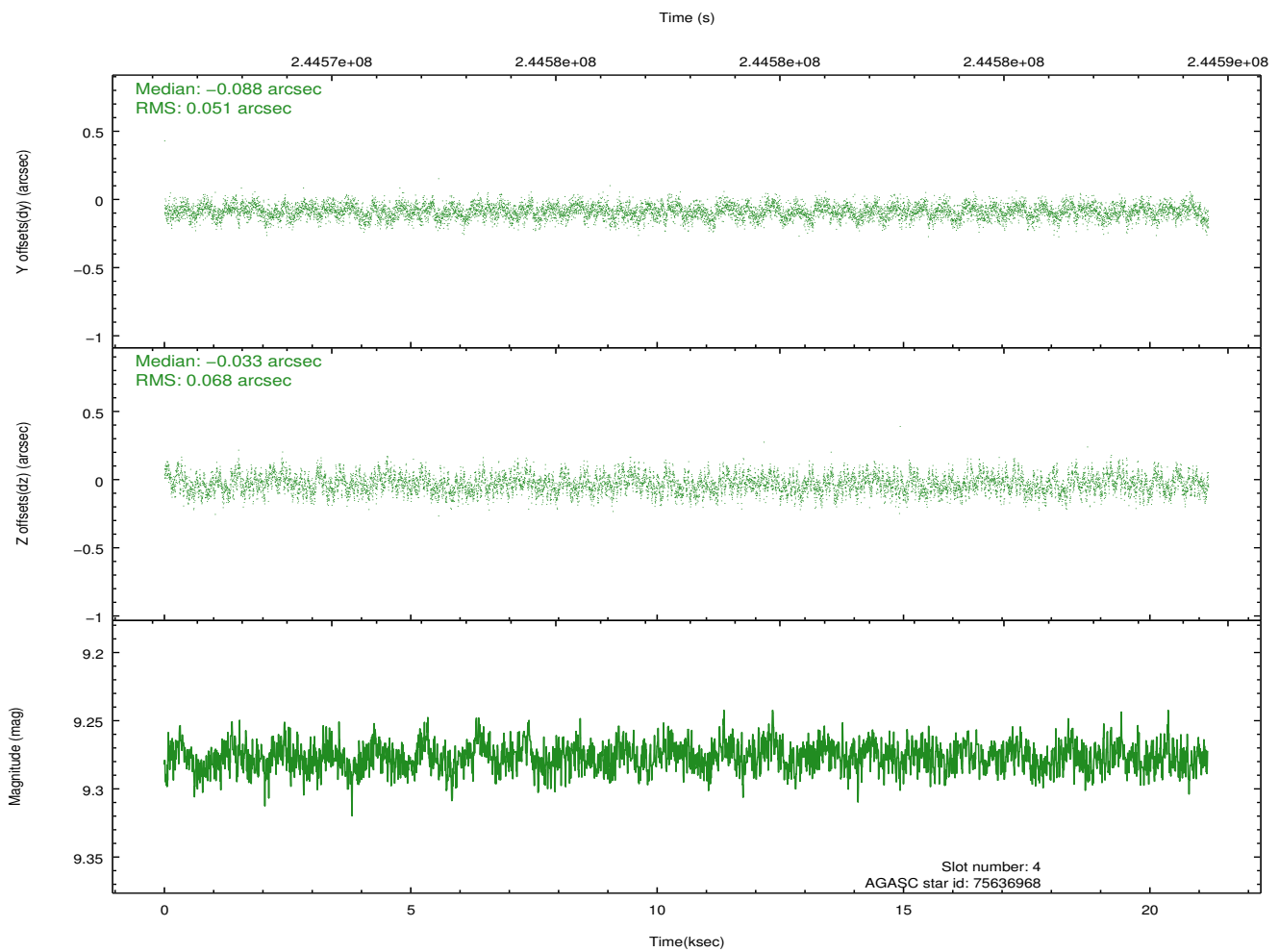
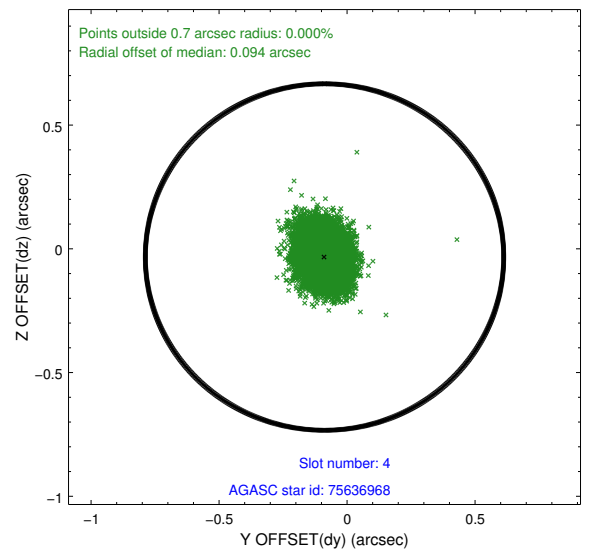
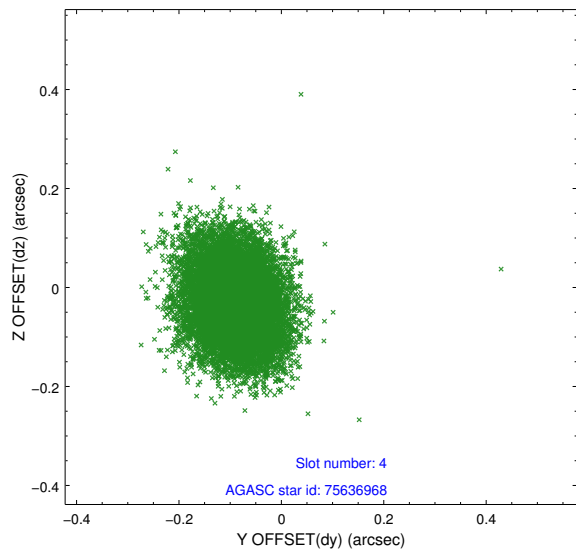
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	5167	-0.058	-0.028	0.011	0.022	0.000000	0.000000	-759.81	-1731.87
1	FID	ACIS-S-4	7.21	5167	0.100	0.035	0.009	0.020	0.000000	0.000000	2153.51	176.56
2	FID	ACIS-S-5	7.23	5167	-0.074	0.002	0.007	0.012	0.000000	0.000000	-1812.49	170.31
3	GUIDE	75634760	8.99	10329	-0.048	-0.077	0.095	0.148	349.528153	0.494791	261.25	-1610.85
4	GUIDE	75636968	9.28	10325	-0.088	-0.033	0.091	0.145	349.584767	0.524969	185.97	-1392.52
5	GUIDE	75765576	10.02	10316	0.036	0.037	0.127	0.209	350.147829	0.719056	-185.30	719.02
6	GUIDE	75769624	9.40	10331	0.018	0.114	0.099	0.162	350.180830	0.159527	1822.60	520.10
7	GUIDE	687220280	9.39	10328	0.084	-0.044	0.101	0.163	349.573474	-0.035729	2173.40	-1749.98

## 2.4 Star Slots

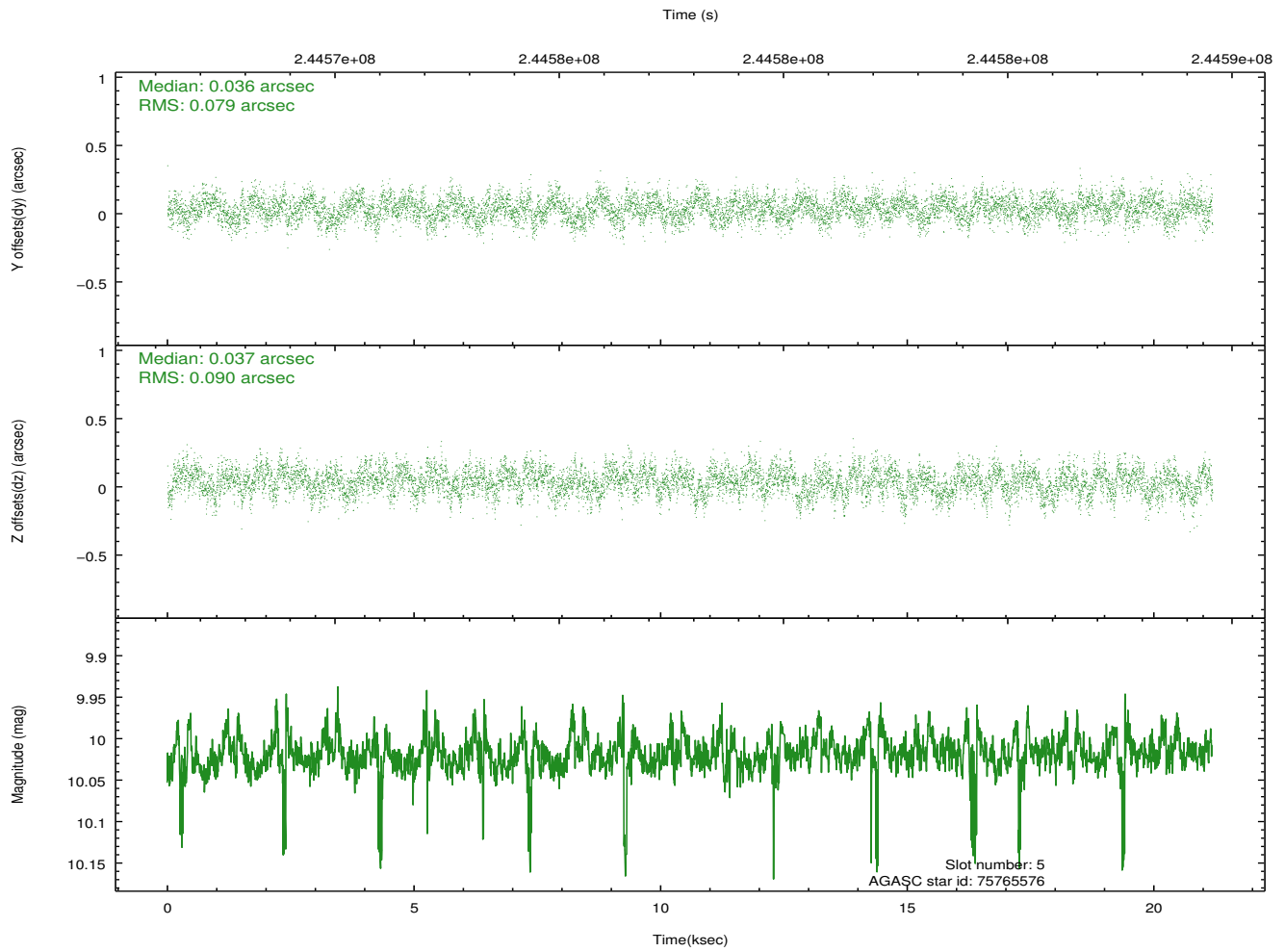
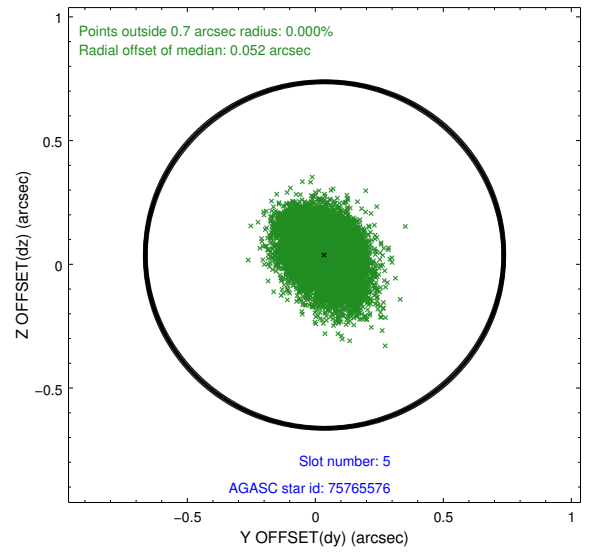
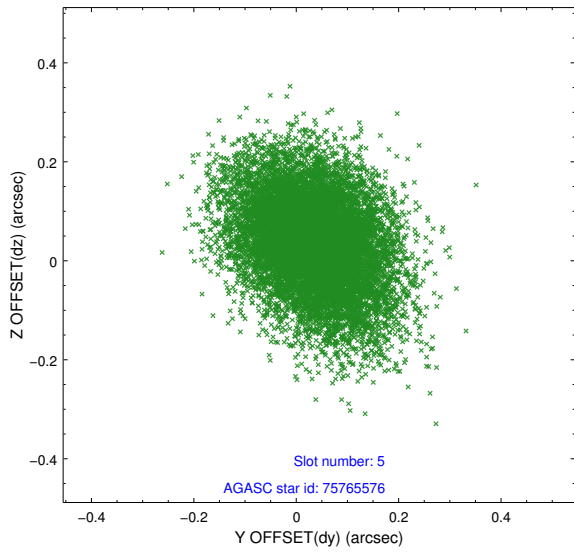
### 2.4.1 Slot 3



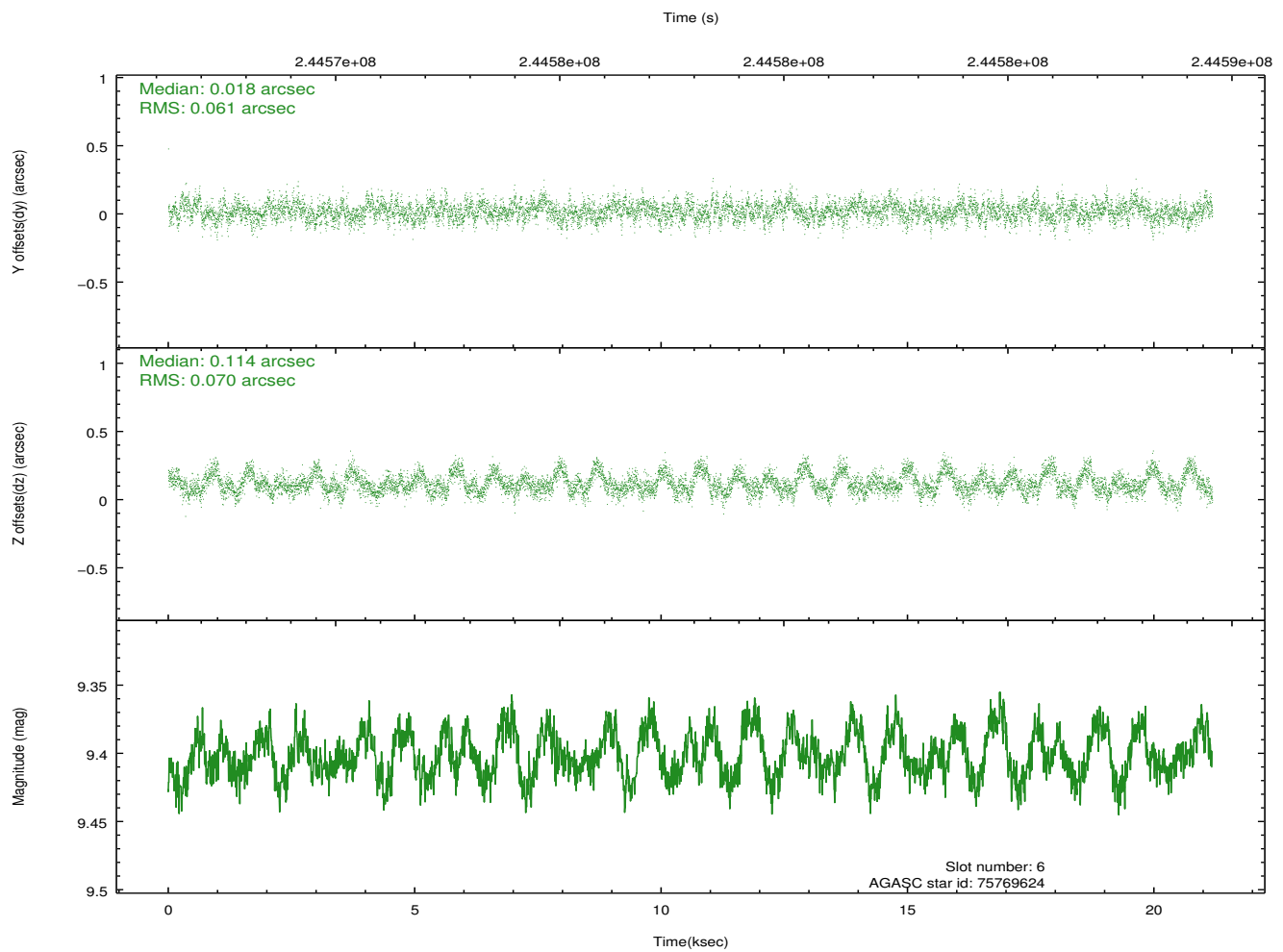
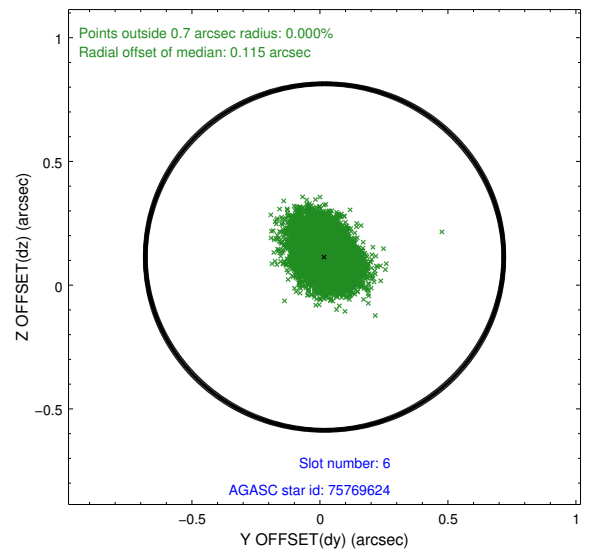
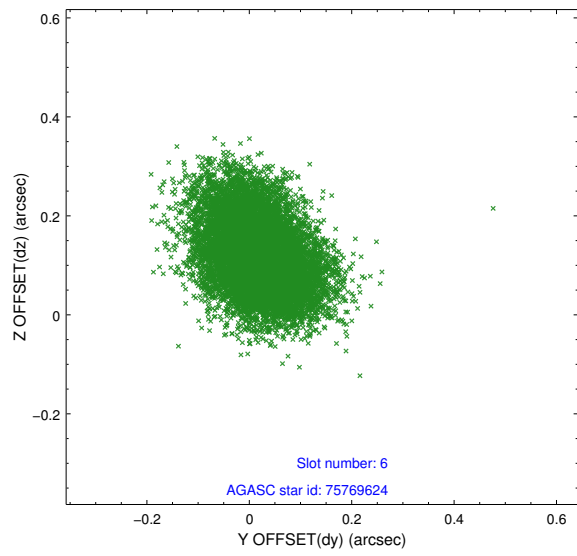
## 2.4.2 Slot 4



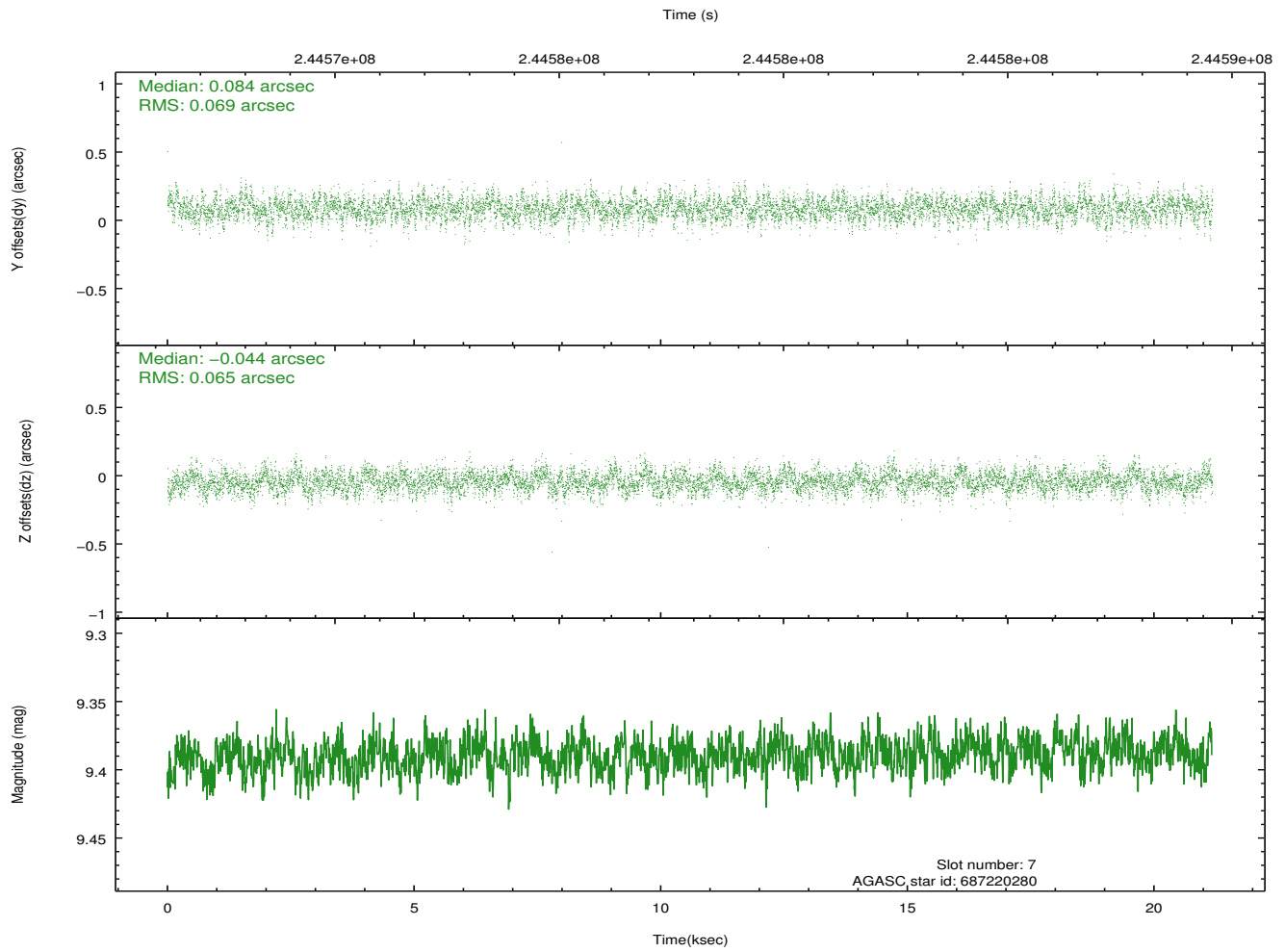
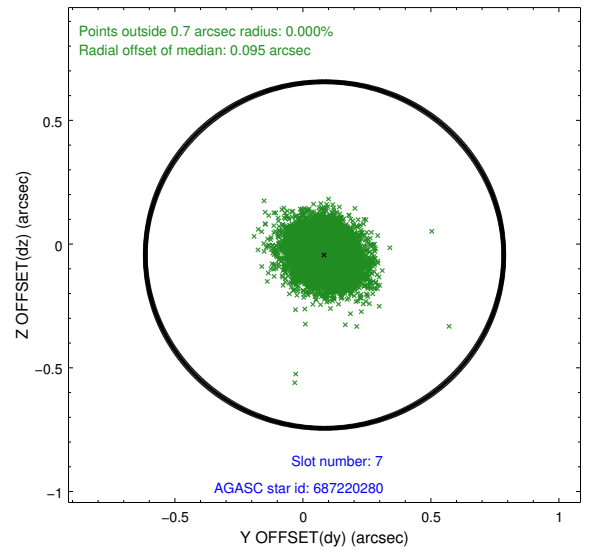
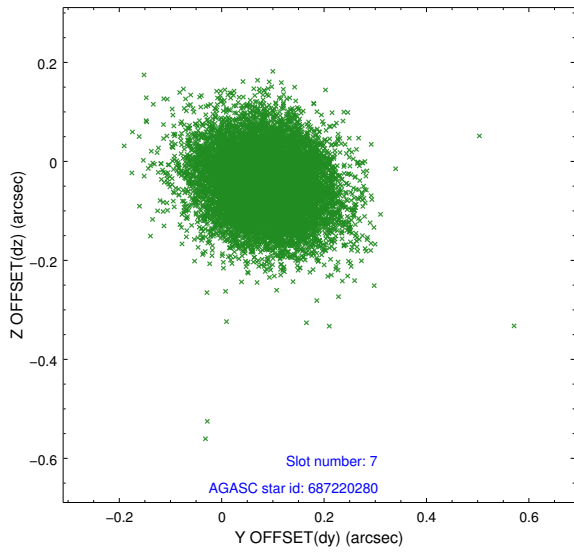
### 2.4.3 Slot 5



## 2.4.4 Slot 6

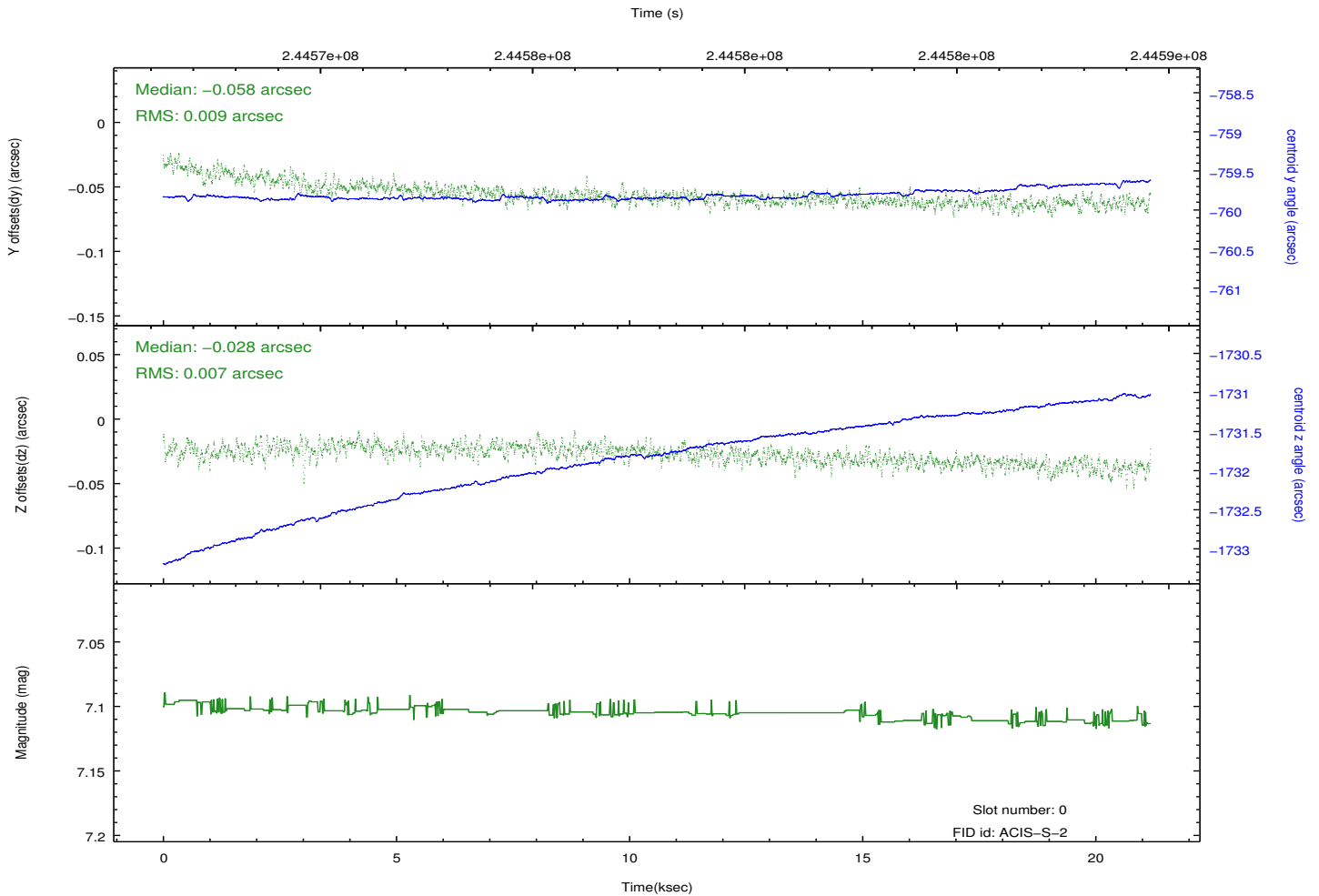
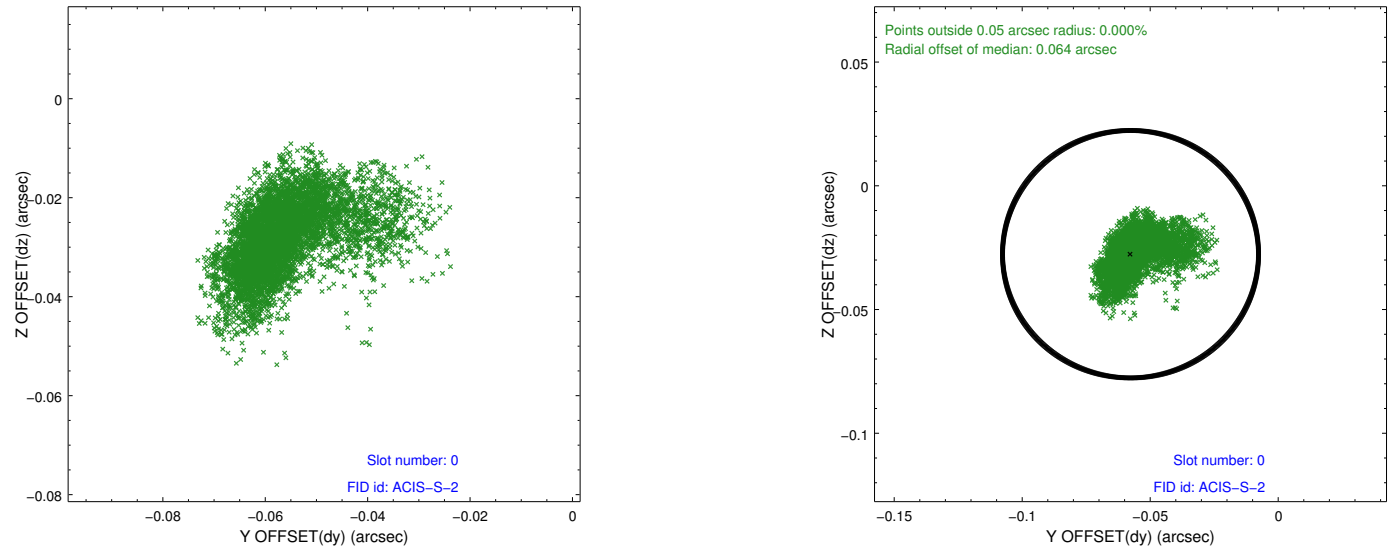


## 2.4.5 Slot 7

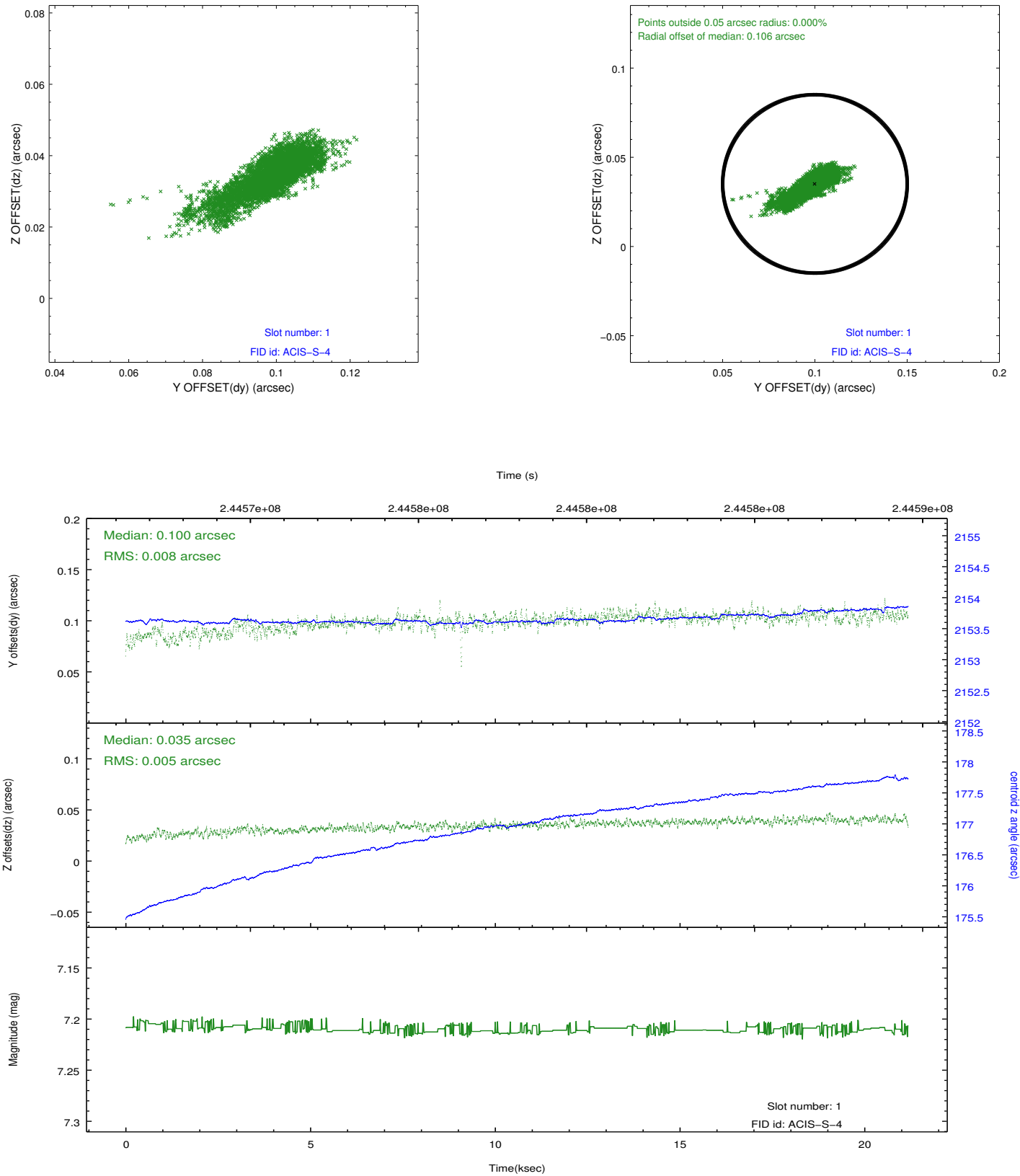


## 2.5 FID Slots

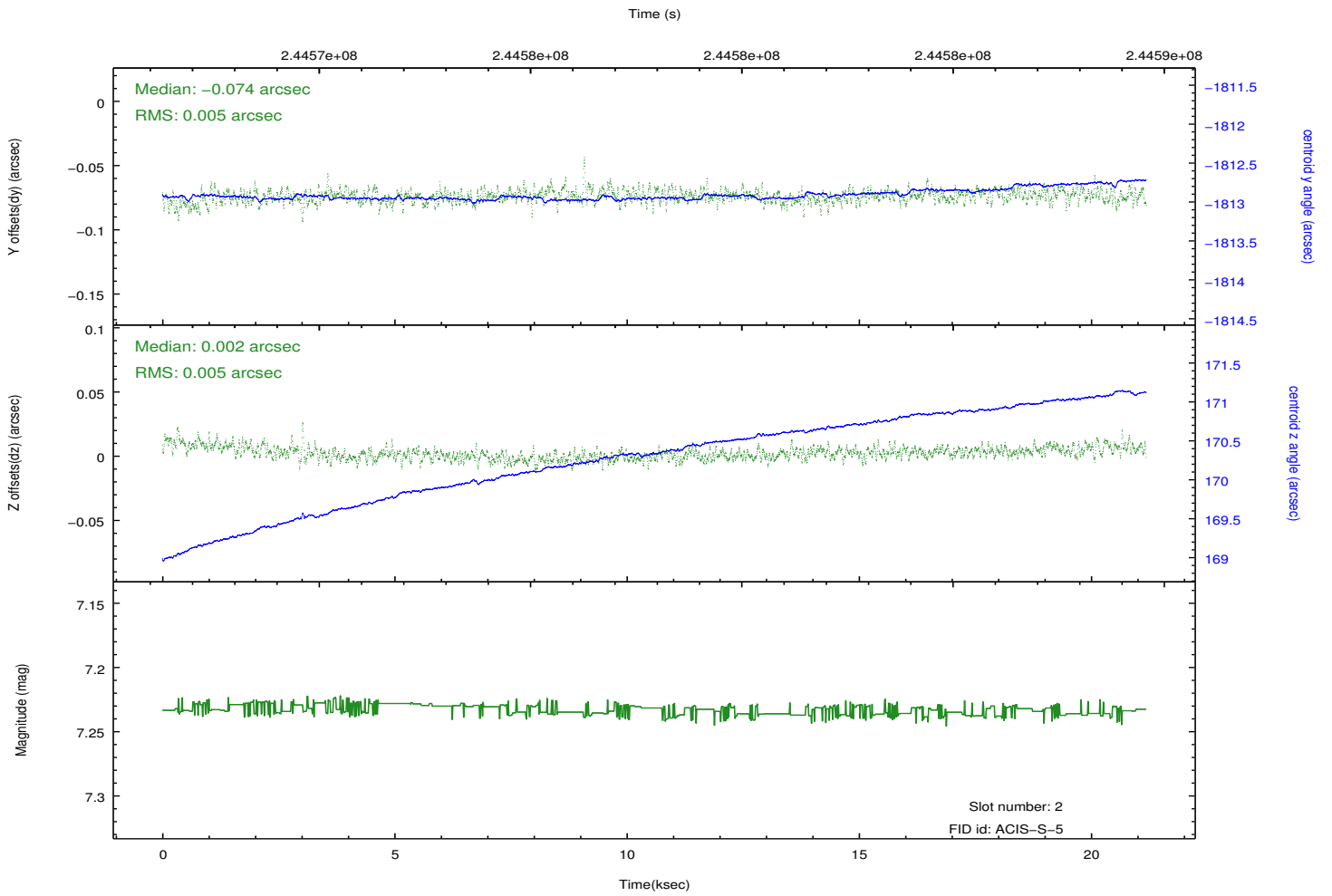
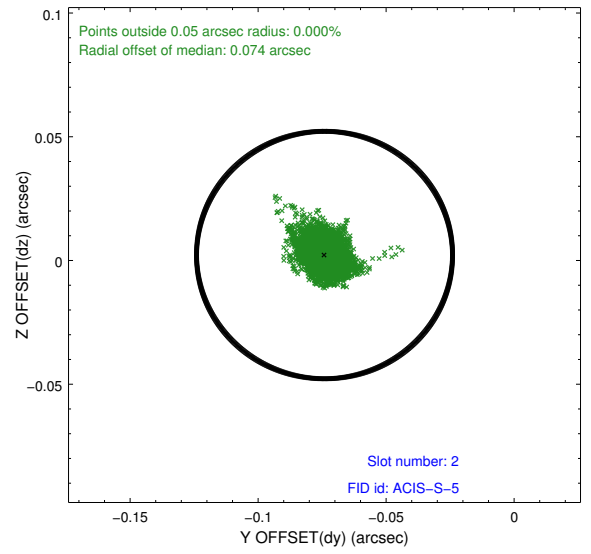
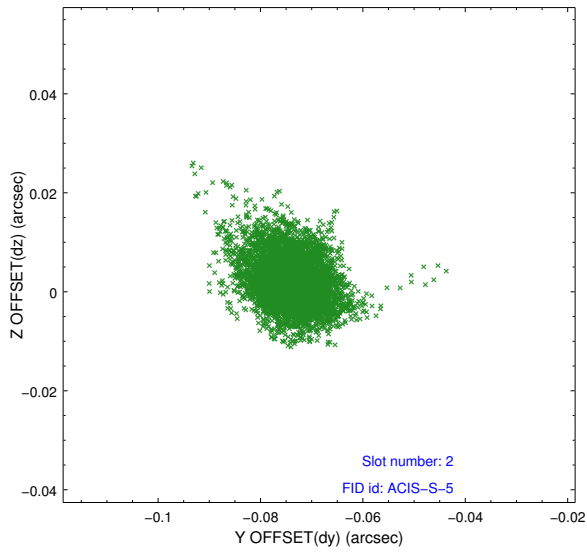
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



# A Summary

## A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2013.03.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	21.17609

## A.2 Comments

As a consequence of the DEA-A shutdown anomaly on Sep 15th (DOY258), the reported value of the ACIS FP temperature was ~1.3 degrees warmer than the actual temperature. The value for FP temperature reported in the headers of the Level 2 event file and the Mission Timeline files are incorrect by this amount for this processing. However, the temperature is corrected in the processing in order to obtain the correct temperature for the CTI correction. So the calibrated data are correct. If using the FP temp values in the headers of data files (some CIAO tools require this information), investigators should subtract 1.3 degrees from the reported temperature to determine the true temperature.