

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 1720 - L2 Version 4  
Chandra X-Ray Center

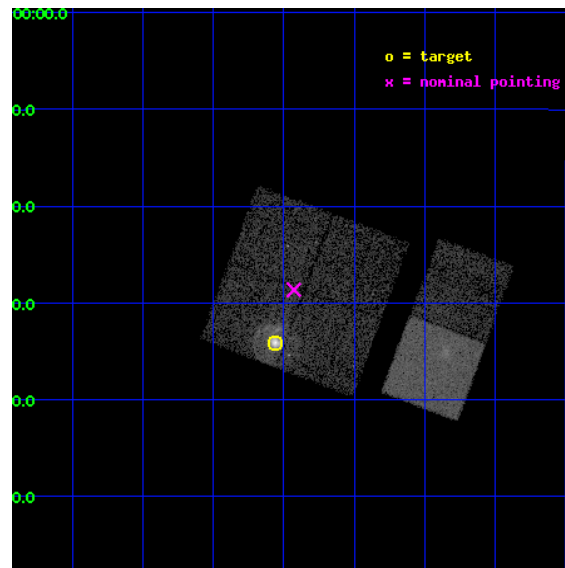
L2 Processing Date : Aug 28 2012

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# 1 Front

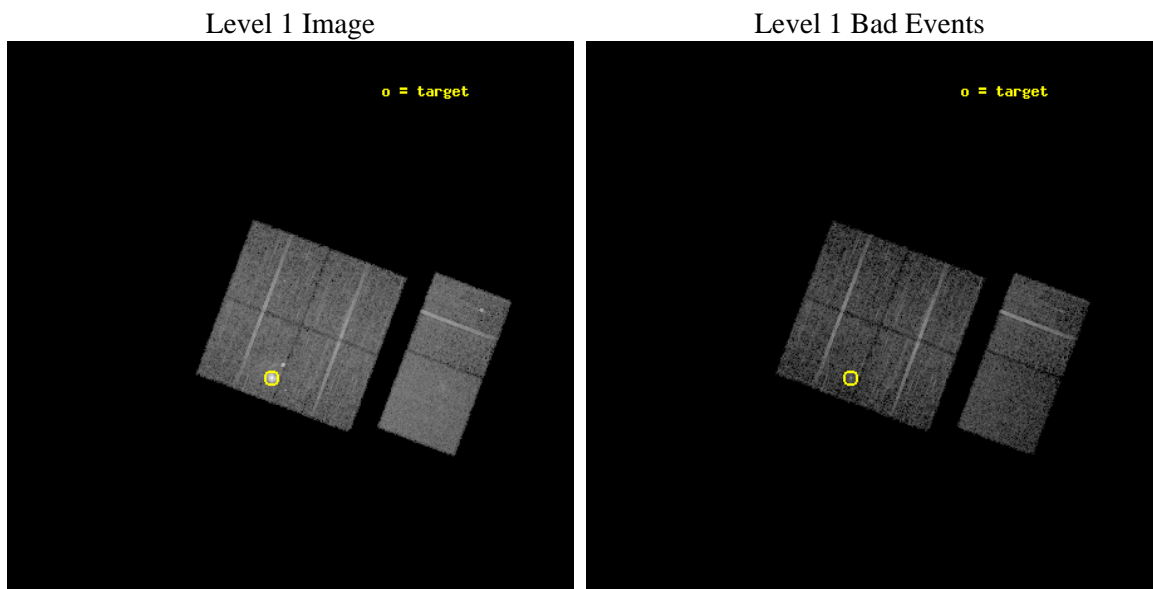
seq_num	590173	Sequence number
obs_id	1720	Observation id
title	HRC RESPONSE TO CONTINUUM SOURCE.	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	G21.5-0.9 [Chip I1, T=120, Offsets=-5,0,-1]	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	278.389583	Observer's specified target RA [deg]
dec_targ	-10.568528	Observer's specified target Dec [deg]
ra_nom	278.3571761144	Nominal RA [deg]
dec_nom	-10.477613782279	Nominal Dec [deg]
roll_nom	110.62596141646	Nominal Roll [deg]
revision	4	Processing version of data
ontime	7632.000007093	Sum of GTIs [s]
livetime	7535.3590275645	Livetime [s]
ontime0	7632.000007093	Sum of GTIs [s]
ontime1	7632.000007093	Sum of GTIs [s]
ontime2	7632.000007093	Sum of GTIs [s]
ontime3	7632.000007093	Sum of GTIs [s]
ontime6	7632.000007093	Sum of GTIs [s]
ontime7	7628.7590368539	Sum of GTIs [s]
l2events	72942	Number of level 2 events



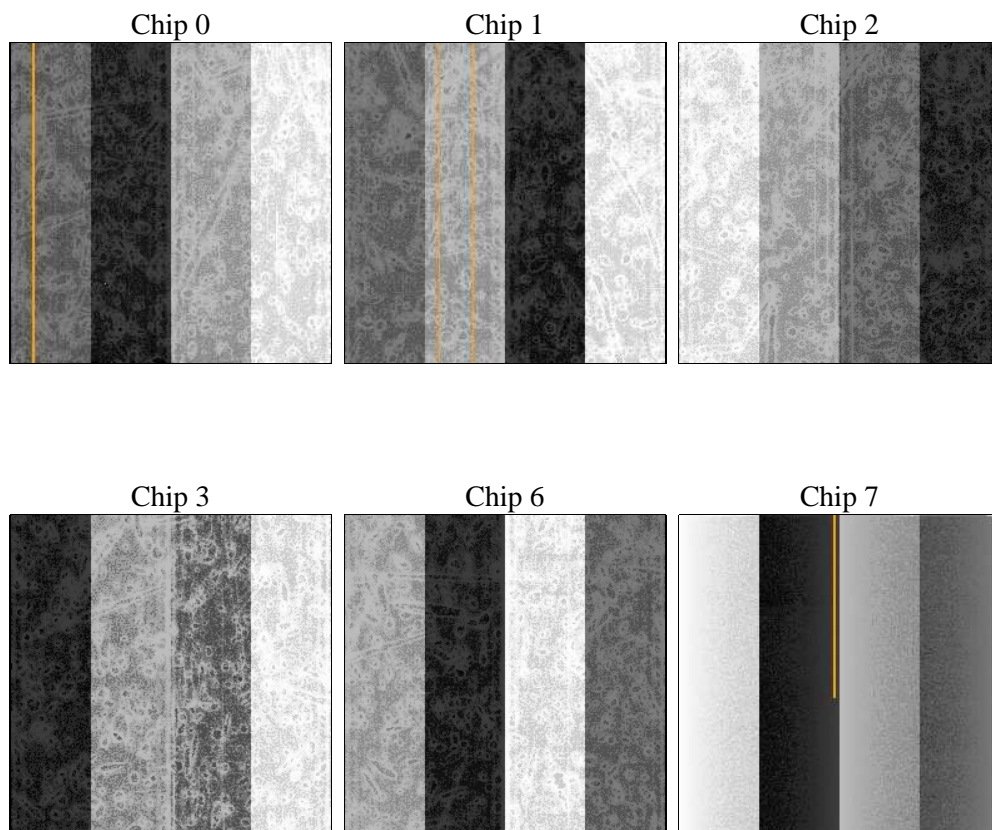
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	8000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	7632.000007093	Sum of GTIs [s]
caldsver	4.5.1.1	&#160	ontime0	7632.000007093	Sum of GTIs [s]
date	2012-08-28T04:37:33	Date and time of file creation	ontime1	7632.000007093	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	7632.000007093	Sum of GTIs [s]
			ontime3	7632.000007093	Sum of GTIs [s]
			ontime6	7632.000007093	Sum of GTIs [s]
			ontime7	7628.7590368539	Sum of GTIs [s]
			l1events	323422	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	45212	69788	48619	49344	52130	58329	grade 0 events	3337	20303	2688	3488	3303	2615
rejected events	38302	39924	42758	42471	45422	32805		7%	29%	5%	7%	6%	4%
rejected %	84%	57%	87%	86%	87%	56%	grade 1 events	34	144	17	25	26	64
								0%	0%	0%	0%	0%	0%
							grade 2 events	1346	4034	1155	1286	1253	5034
								2%	5%	2%	2%	2%	8%
							grade 3 events	617	1567	500	576	584	2333
								1%	2%	1%	1%	1%	3%
							grade 4 events	588	1580	528	504	503	2266
								1%	2%	1%	1%	0%	3%
							grade 5 events	1475	1780	1531	1594	1889	5454
								3%	2%	3%	3%	3%	9%
							grade 6 events	1025	2411	994	1029	1069	13293
								2%	3%	2%	2%	2%	22%
							grade 7 events	36790	37969	41206	40842	43503	27270
								81%	54%	84%	82%	83%	46%

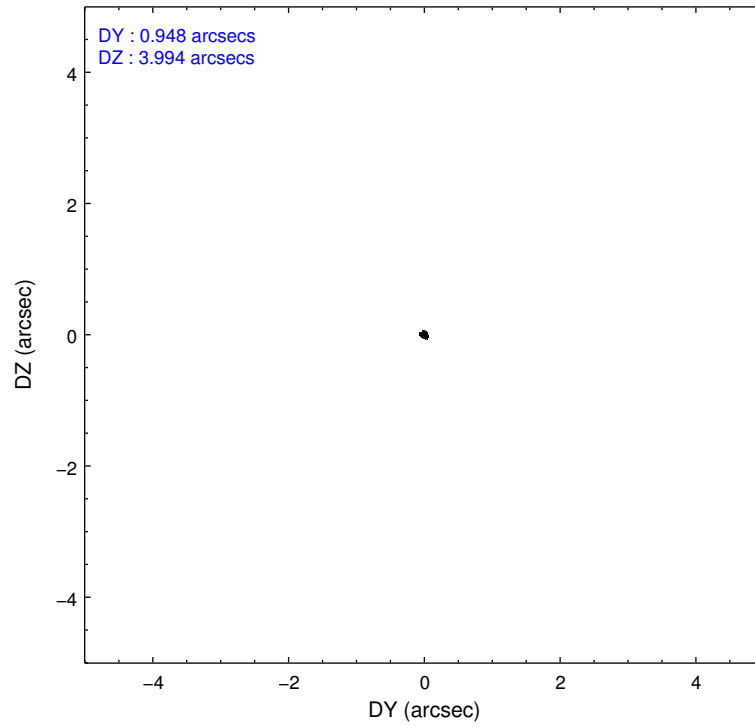
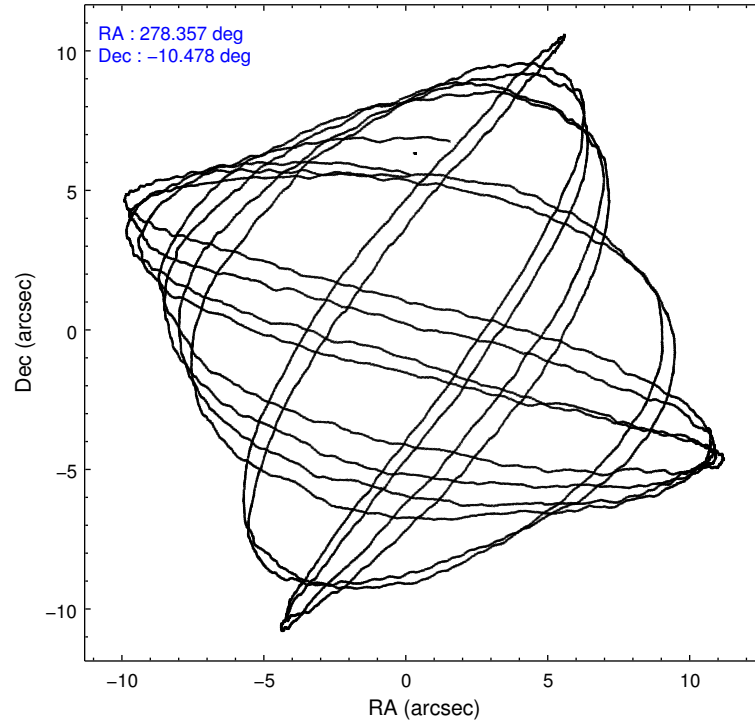


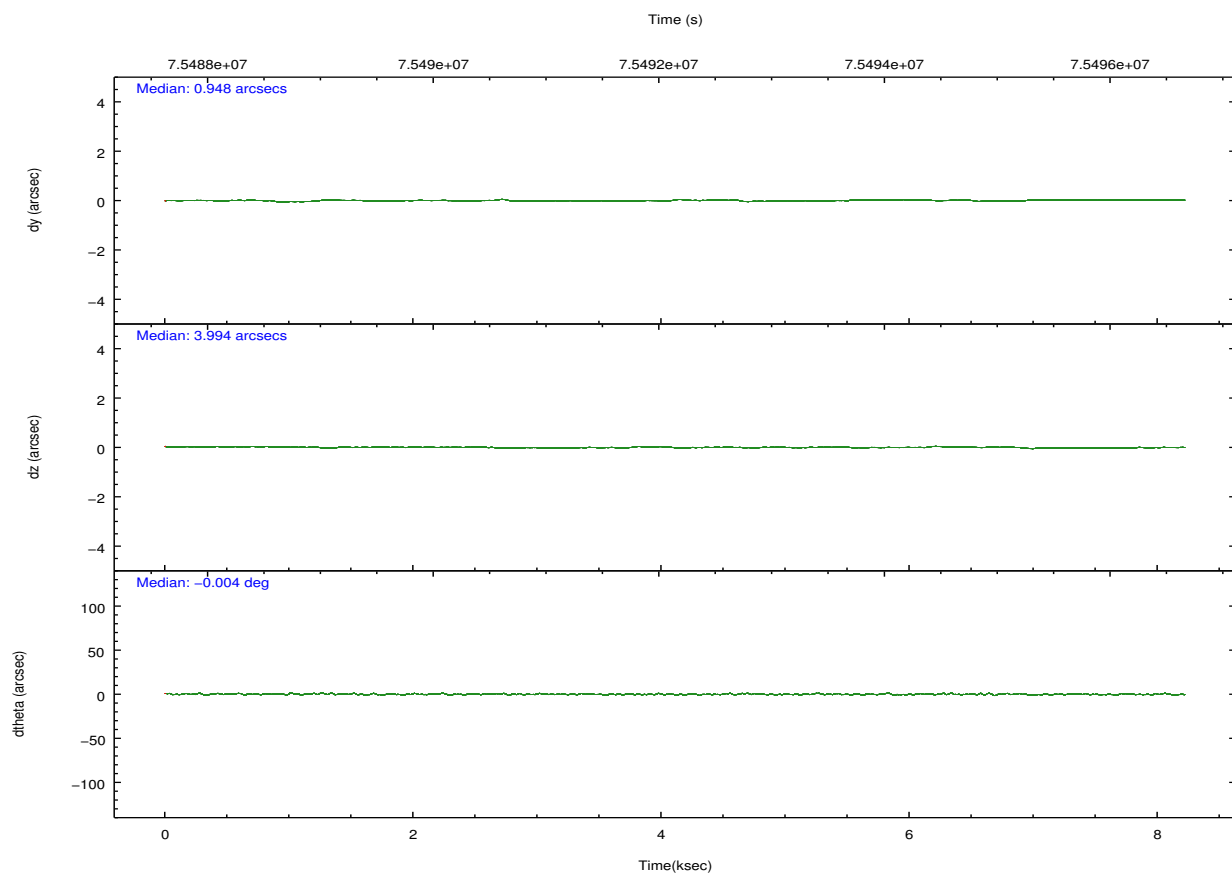
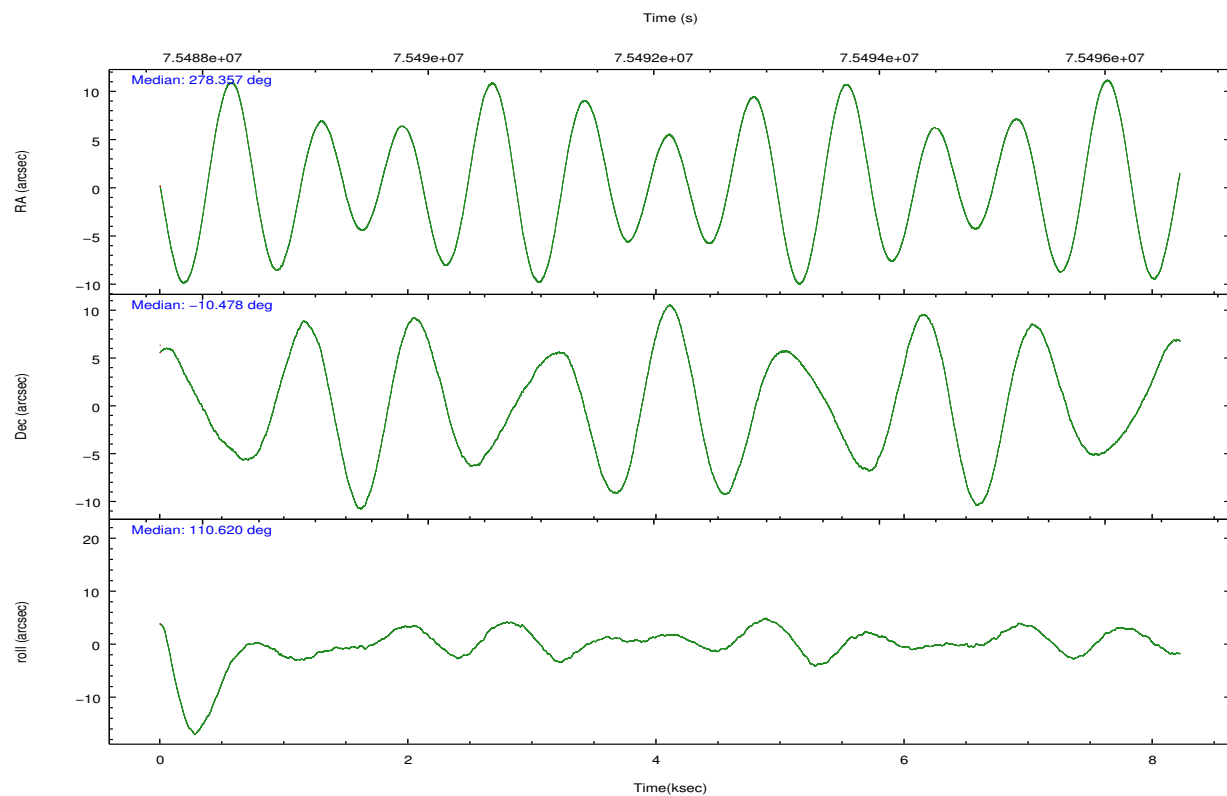
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-012367	ACIS-012367
Grating	NONE	NONE
Data mode	FAINT	FAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	278.378843	278.3571761143977
[deg] Pointing Dec	-10.495275	-10.47761378227871
[deg] Pointing Roll	110.421204	110.625961416459
[mm] SIM focus pos	-0.782348	-0.7809083437167272
[mm] SIM defocus	0	0.001439871863259334
[mm] SIM translation stage pos	-238.277263	-238.2741181829365
[mm] SIM translation stage offset	4.6848	4.681665180006831
[s] Observation start time (MET)	75488255.184000	75487859.292887
Observation start date	2000-05-23T16:56:31	2000-05-23T16:50:59
[s] Observation end time (MET)	75496255.184000	75496389.8557
Observation end date	2000-05-23T19:09:51	2000-05-23T19:13:09
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



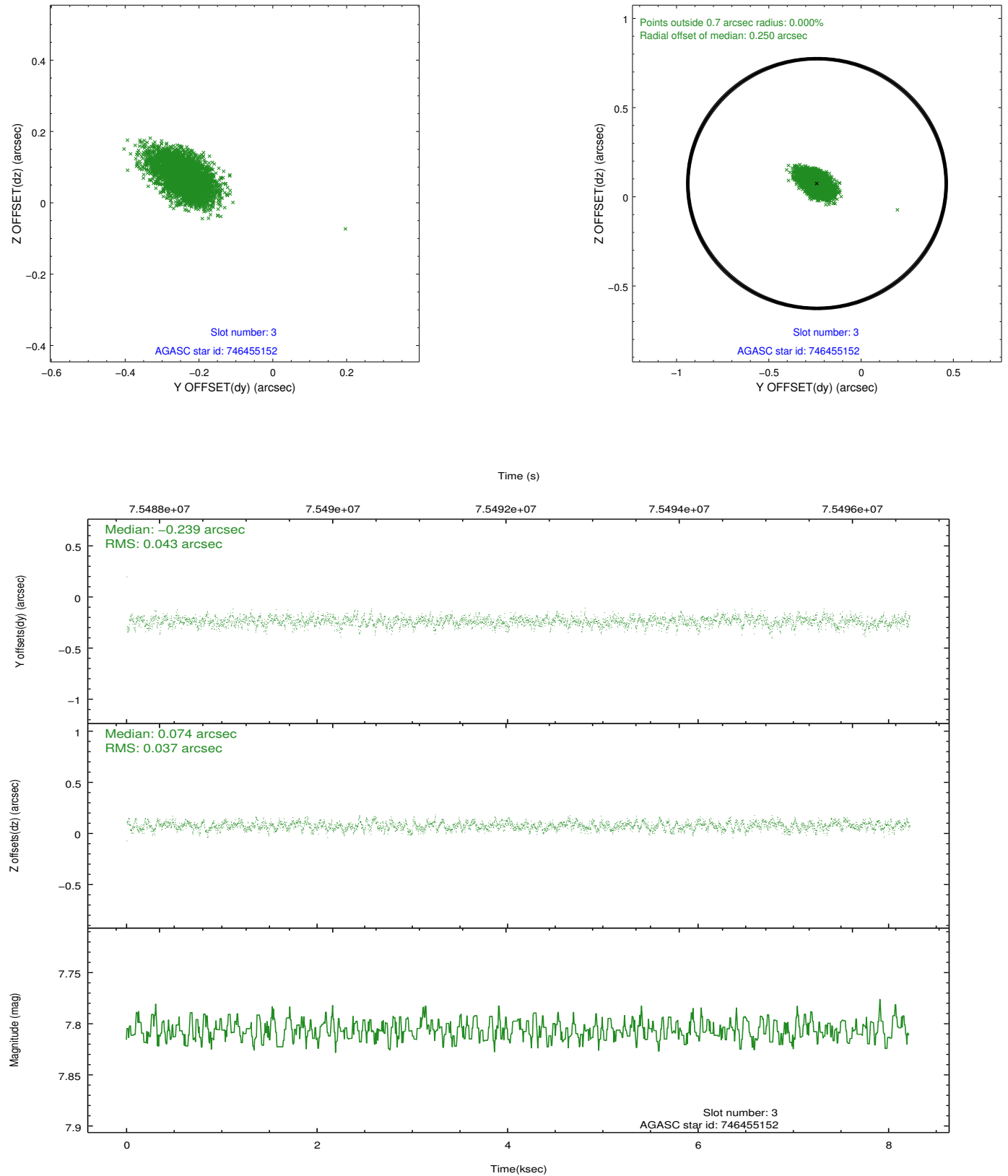


### Slot Statistics

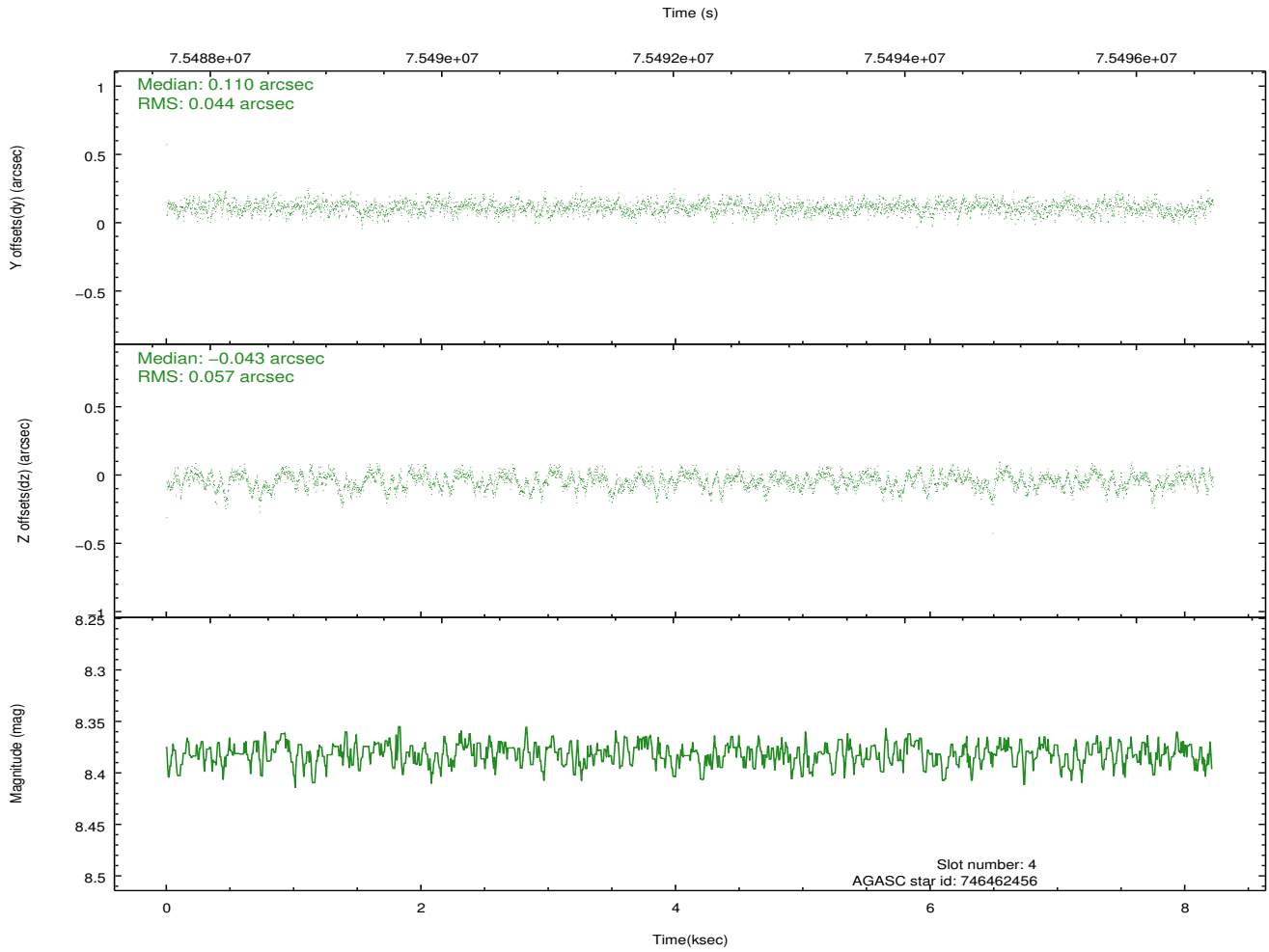
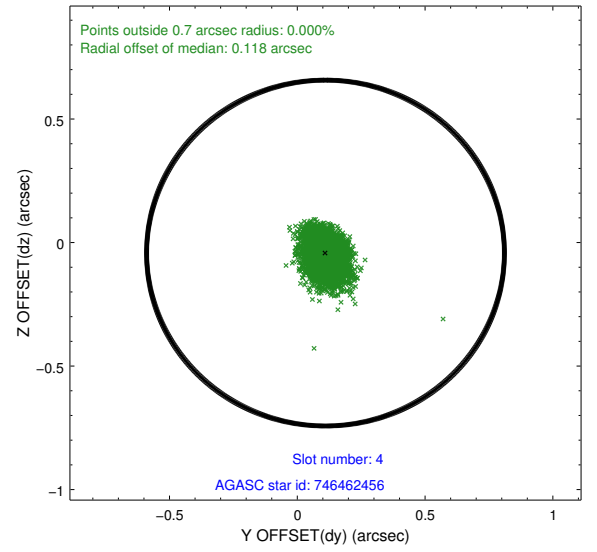
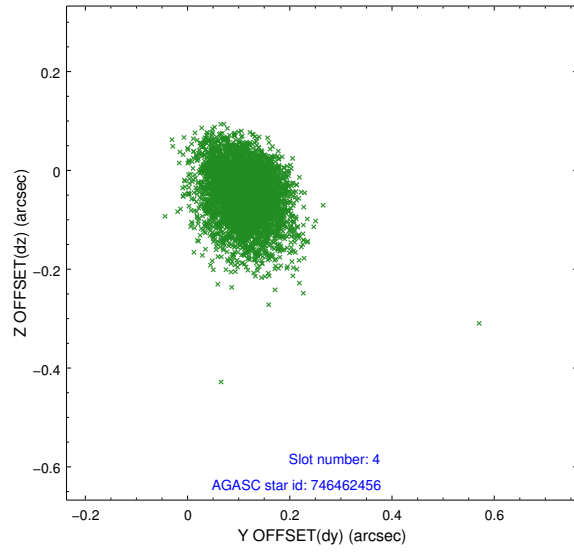
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.16	2005	-0.060	-0.080	0.009	0.015	0.000000	0.000000	-754.97	-738.13
1	FID	ACIS-I-4	7.19	2005	-0.052	0.061	0.006	0.010	0.000000	0.000000	2158.75	1168.03
2	FID	ACIS-I-5	7.24	2006	0.011	0.088	0.009	0.015	0.000000	0.000000	-1808.16	1167.13
3	GUIDE	746455152	7.81	4010	-0.239	0.074	0.059	0.099	278.447893	-9.976732	1663.88	-881.14
4	GUIDE	746462456	8.38	4009	0.110	-0.043	0.076	0.124	278.652171	-10.530173	-455.09	-863.53
5	GUIDE	746455112	8.94	4007	0.058	0.088	0.075	0.127	278.266531	-10.703234	-563.14	632.76
6	GUIDE	746460328	9.81	3998	-0.124	0.086	0.105	0.169	278.603974	-9.898096	1735.81	-1498.46
7	GUIDE	746995400	9.56	4008	0.195	-0.204	0.117	0.192	278.078957	-11.289885	-2311.52	1989.16

## 2.4 Star Slots

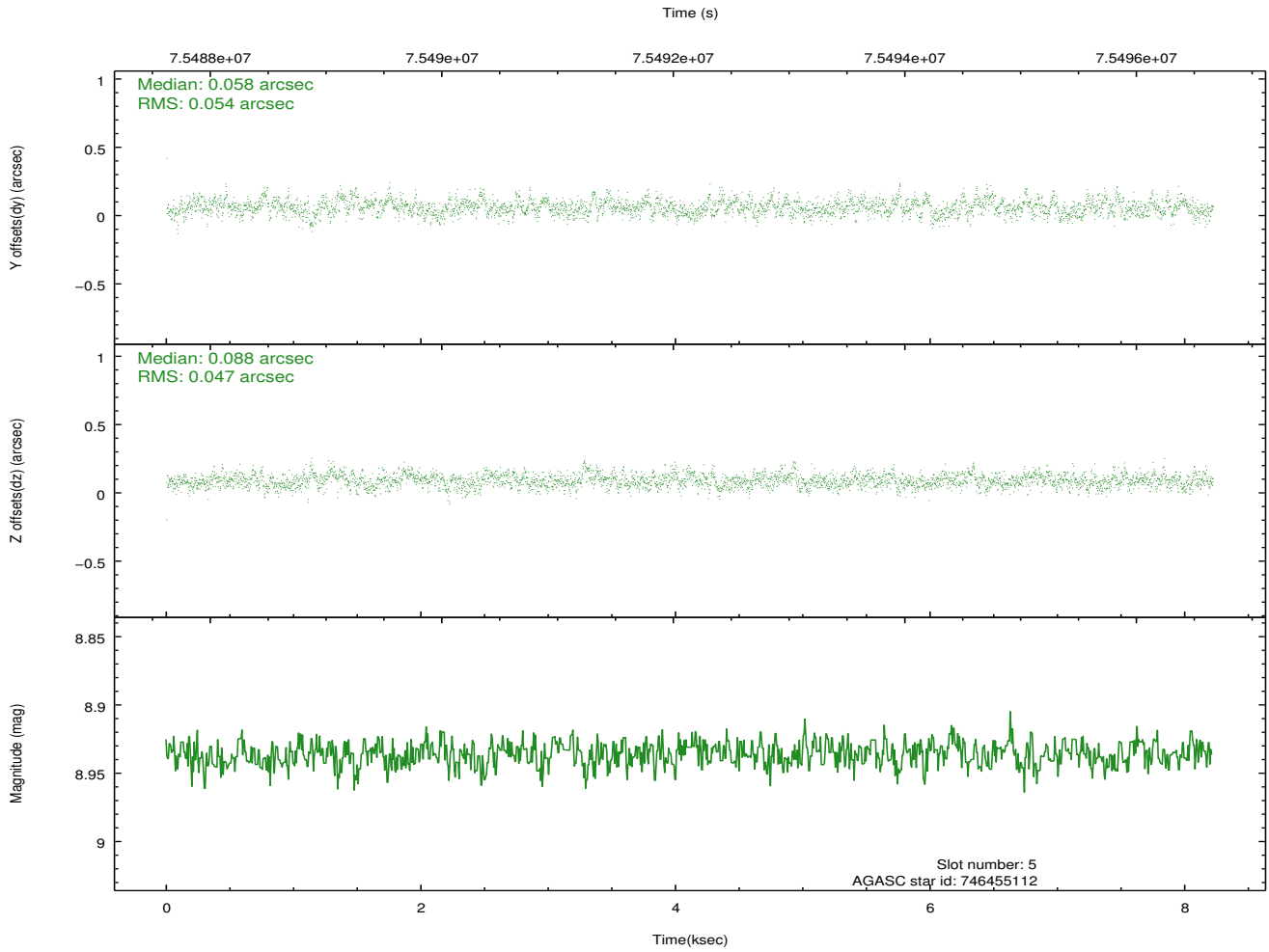
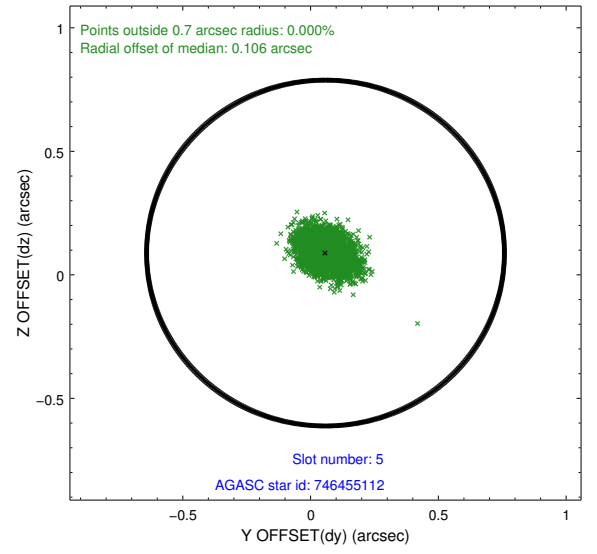
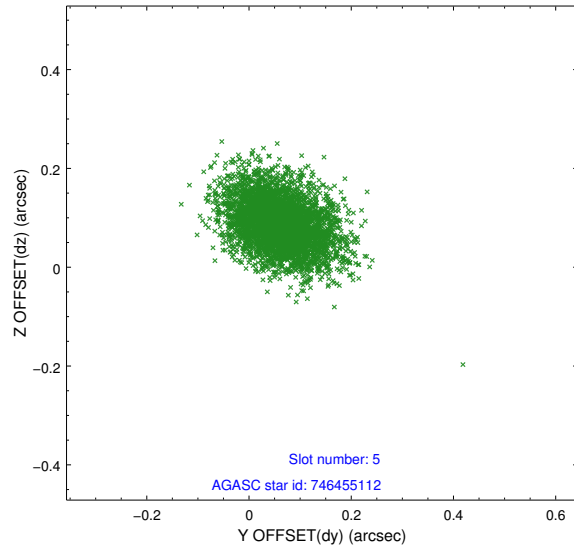
### 2.4.1 Slot 3



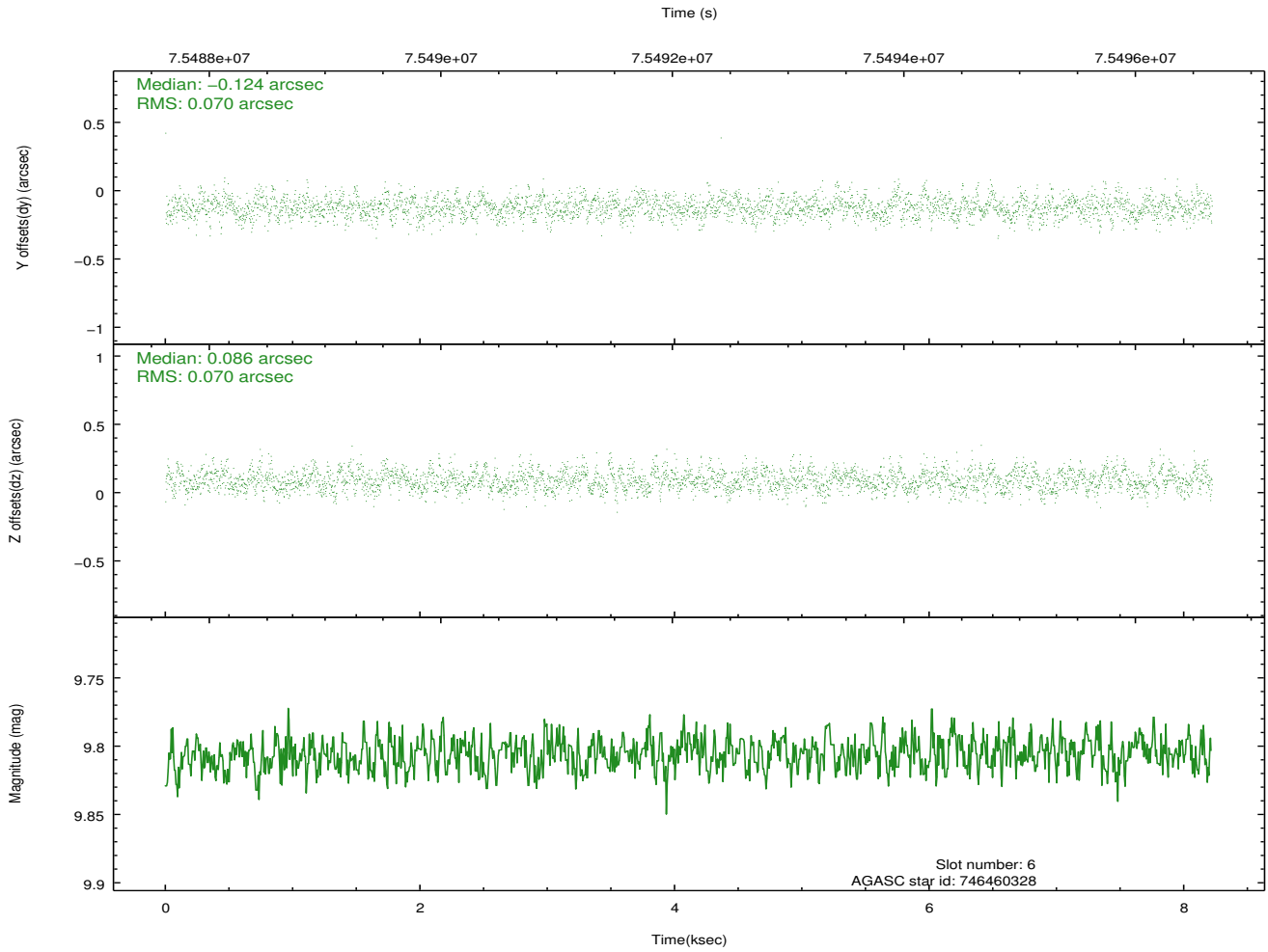
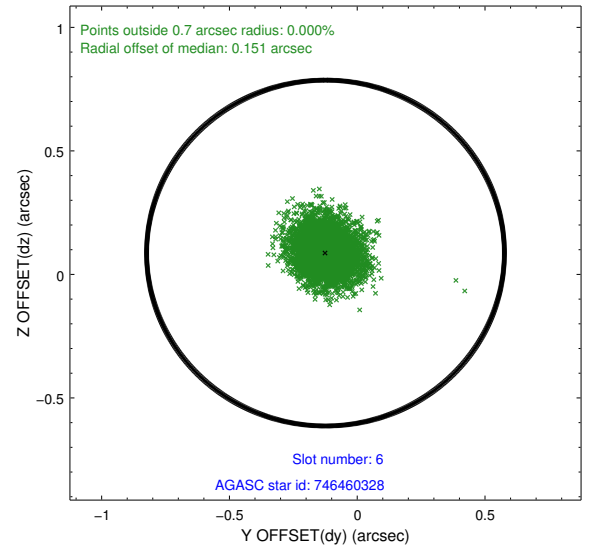
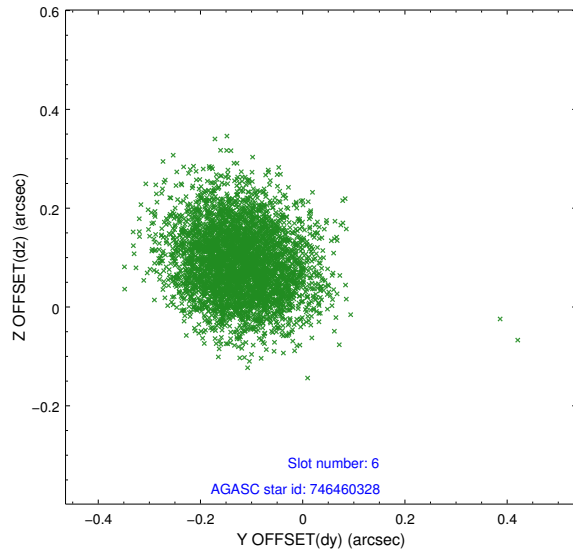
## 2.4.2 Slot 4



### 2.4.3 Slot 5

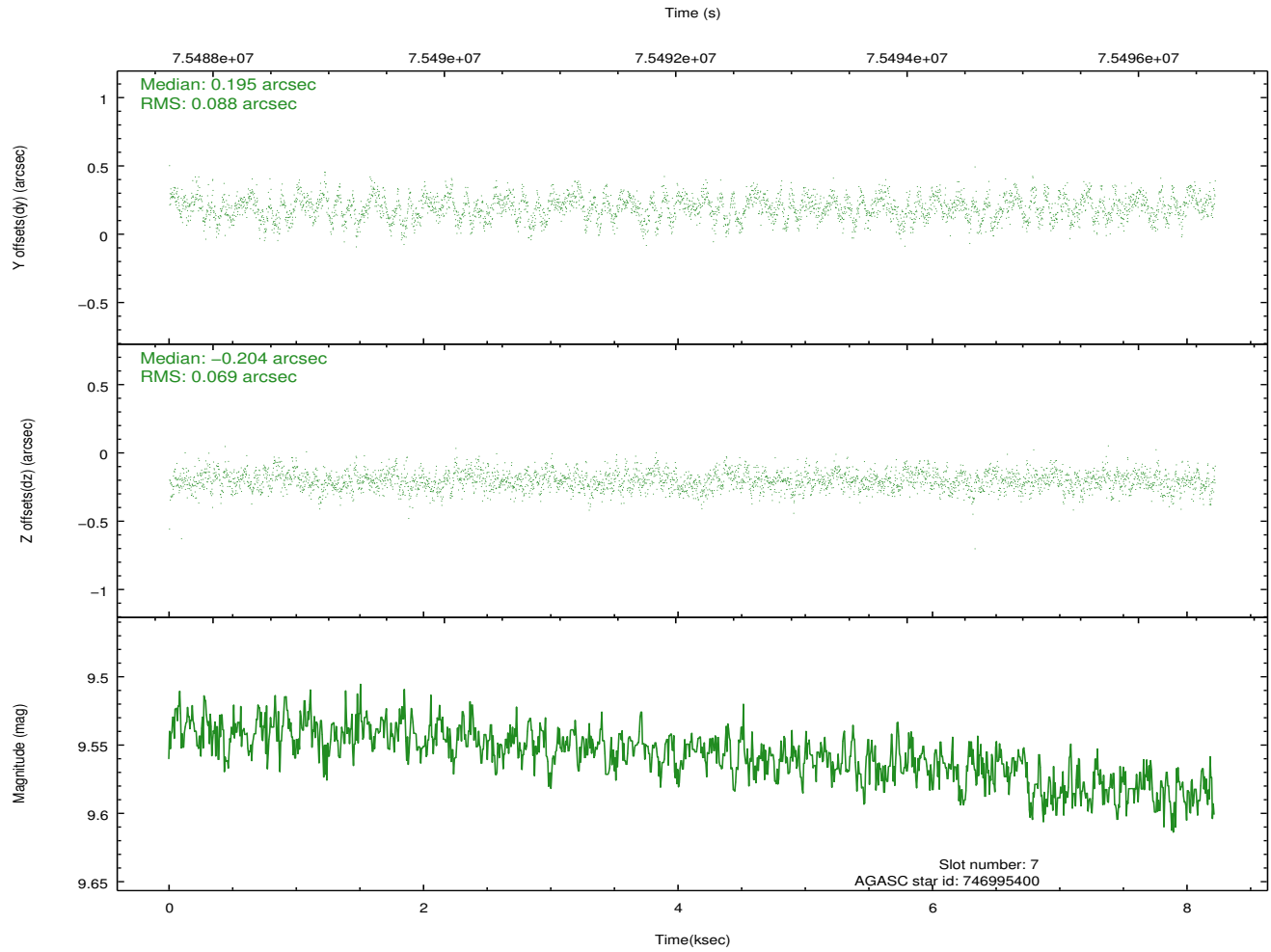
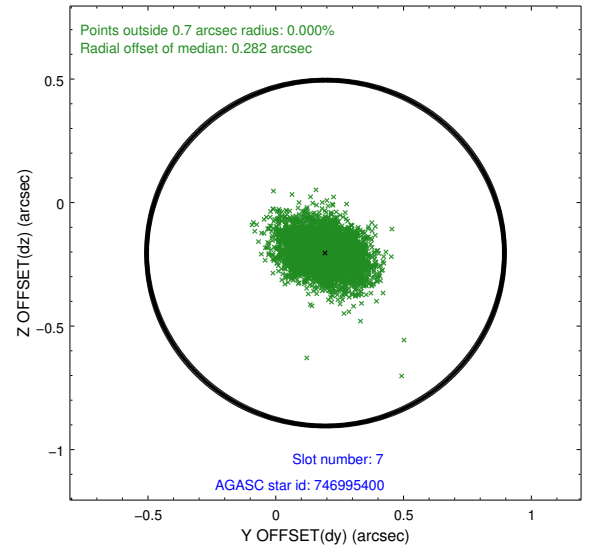
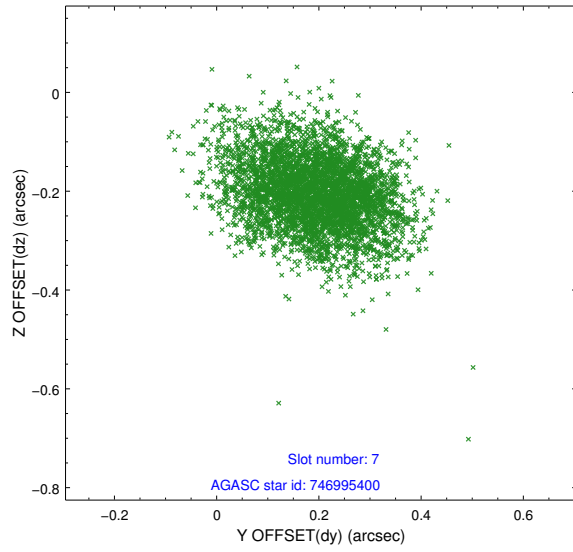


## 2.4.4 Slot 6



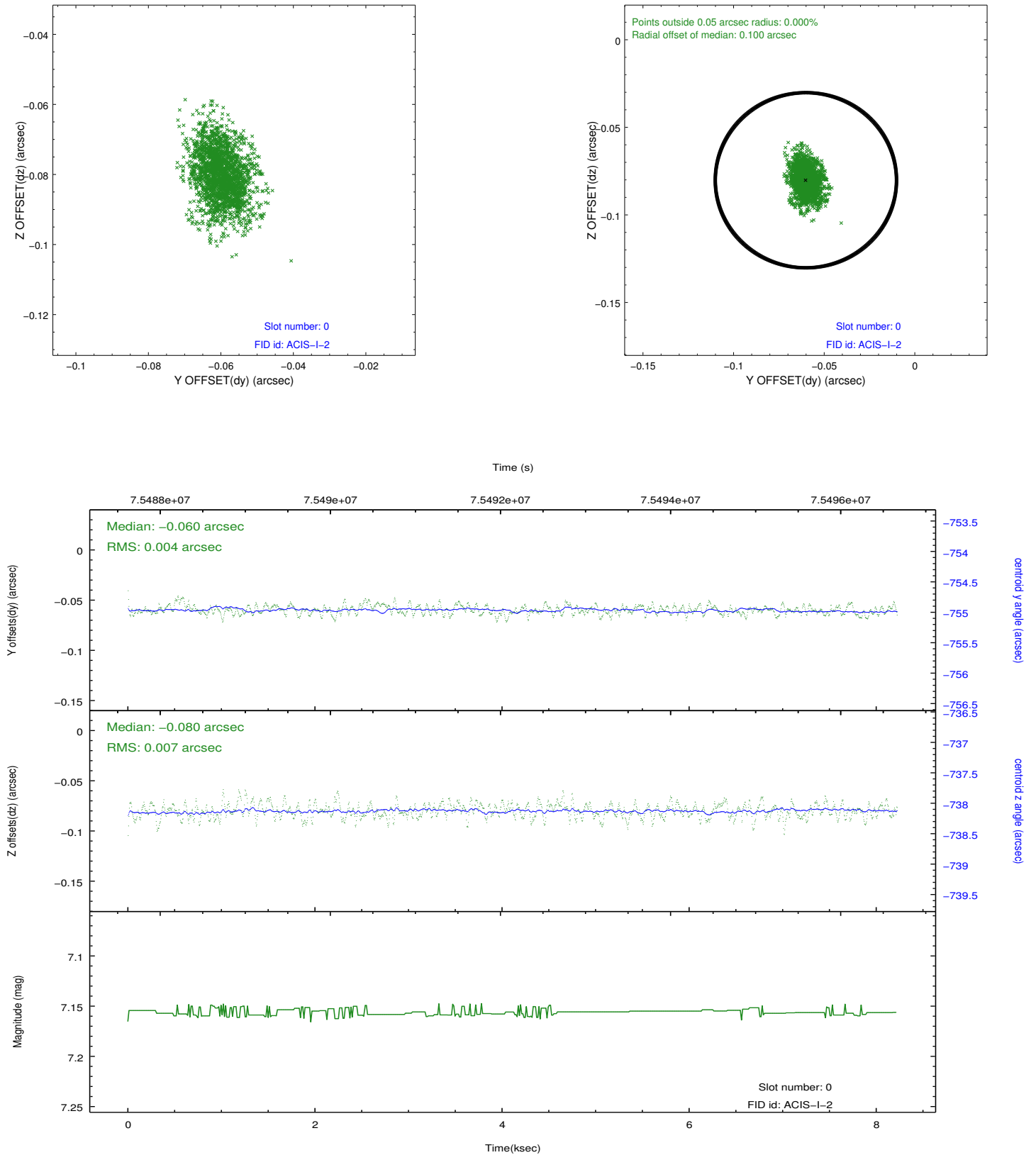


## 2.4.5 Slot 7

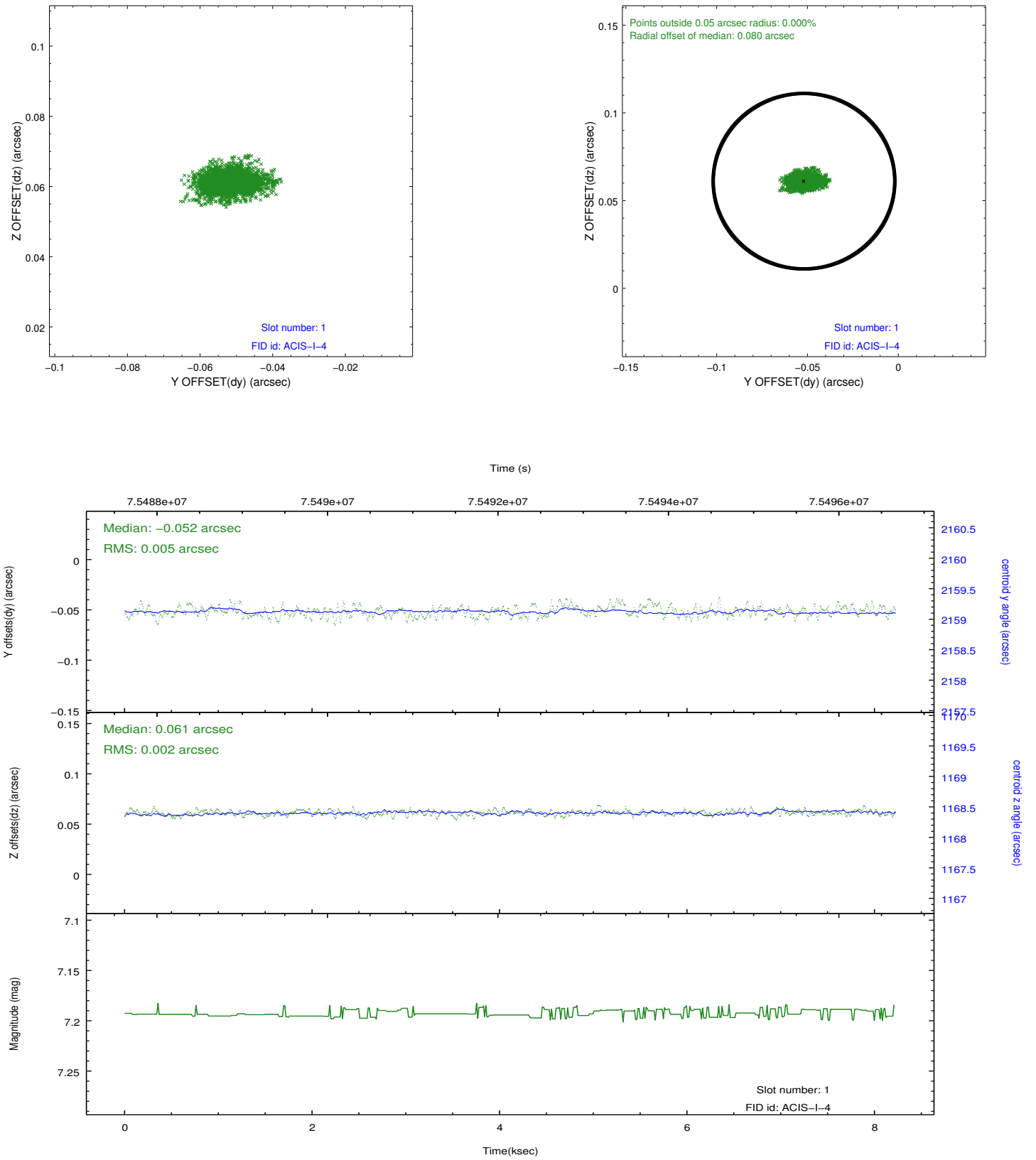


## 2.5 FID Slots

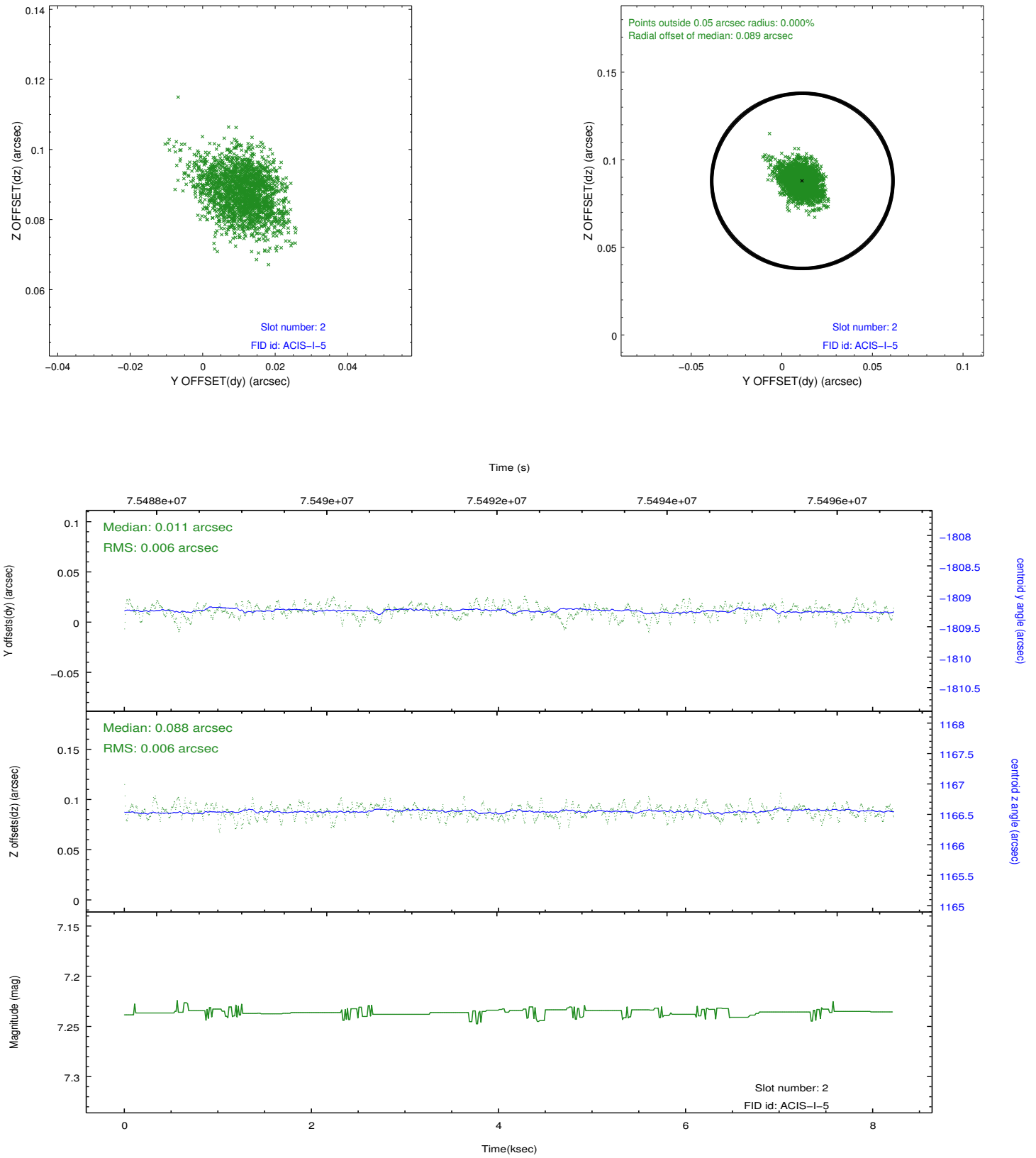
### 2.5.1 Slot 0



## 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)	2012.08.30
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	7.641

### A.2 Comments

Charge time for this ObsId remains at previous value of 7.641 ks although with the current processing the charge time would have been 7.632 ksec.