

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 4155 - L2 Version 3  
Chandra X-Ray Center

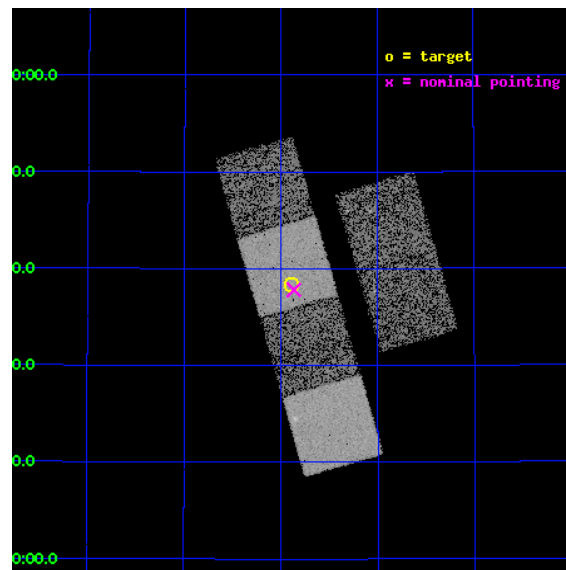
L2 Processing Date : Nov 1 2012

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# 1 Front

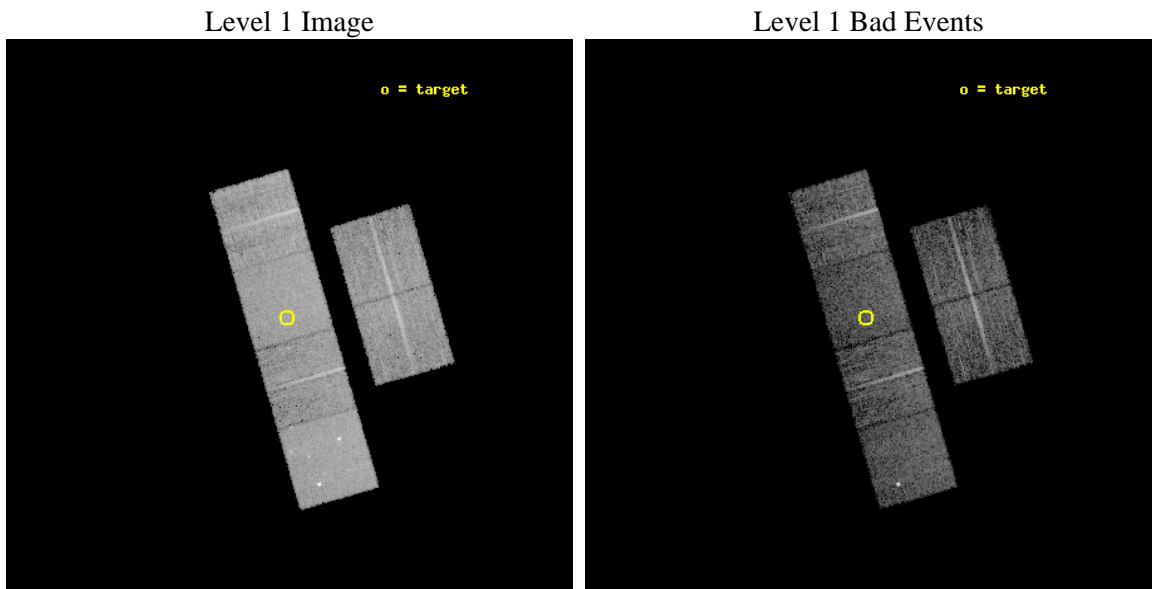
seq_num	700834	Sequence number
obs_id	4155	Observation id
title	X-RAY TRACE OF THE EARLY RISE OF THE QUASAR POPULATION	Proposal ti
observer	Dr. Takamitsu Miyaji	Principal investigator
object	PC 1447+4750	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	222.222917	Observer's specified target RA [deg]
dec_targ	47.639028	Observer's specified target Dec [deg]
ra_nom	222.2165010876	Nominal RA [deg]
dec_nom	47.630359564382	Nominal Dec [deg]
roll_nom	253.84230632802	Nominal Roll [deg]
revision	3	Processing version of data
ontime	7014.3999738693	Sum of GTIs [s]
livetime	6925.5794178356	Livetime [s]
ontime2	7014.3999738693	Sum of GTIs [s]
ontime3	7014.3999738693	Sum of GTIs [s]
ontime5	7014.3999738693	Sum of GTIs [s]
ontime6	7014.3999738693	Sum of GTIs [s]
ontime7	7014.3999738693	Sum of GTIs [s]
ontime8	7014.3999738693	Sum of GTIs [s]
l2events	69693	Number of level 2 events



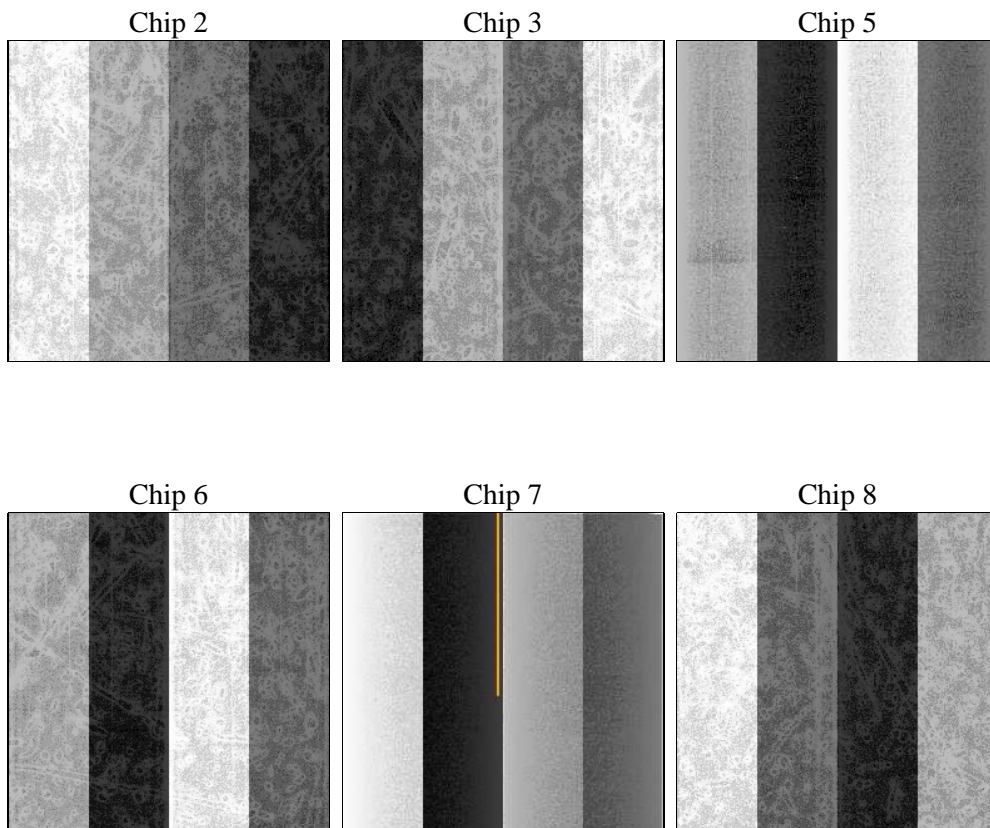
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	7053.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	7014.3999738693	Sum of GTIs [s]
caldsver	4.5.2	&#160	ontime2	7014.3999738693	Sum of GTIs [s]
date	2012-11-01T10:35:54	Date and time of file creation	ontime3	7014.3999738693	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	7014.3999738693	Sum of GTIs [s]
			ontime6	7014.3999738693	Sum of GTIs [s]
			ontime7	7014.3999738693	Sum of GTIs [s]
			ontime8	7014.3999738693	Sum of GTIs [s]
			l1events	311089	Number of level 1 events

### 2.1.4 Events

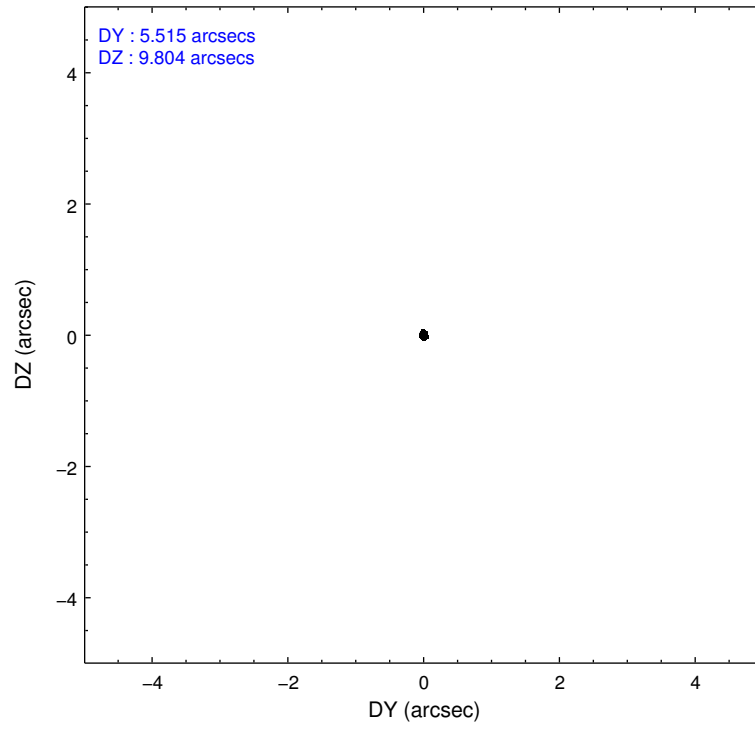
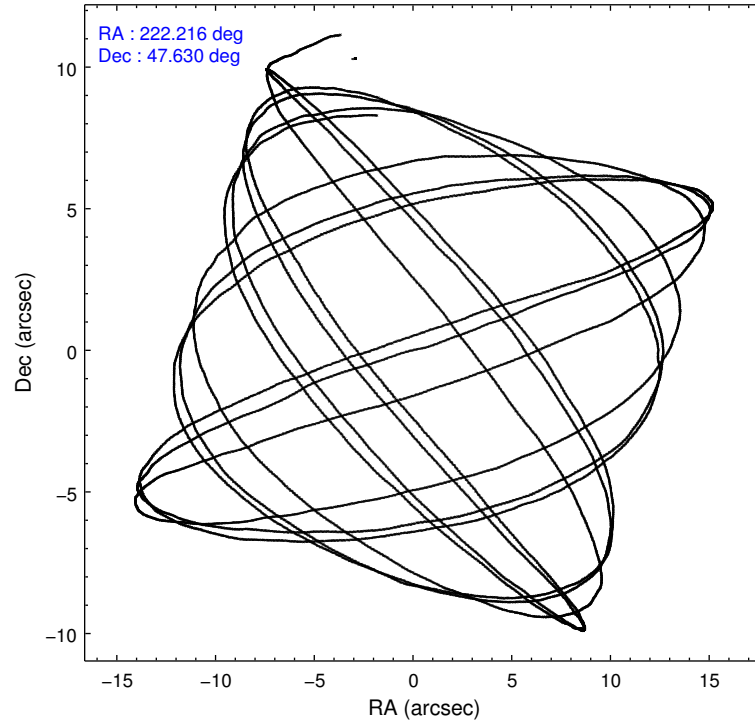
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	43921	42827	64861	43938	57317	58225	grade 0 events	2401	2307	4038	2379	2145	4676
rejected events	38542	37490	35076	38286	33458	43748		5%	5%	6%	5%	3%	8%
rejected %	87%	87%	54%	87%	58%	75%	grade 1 events	18	32	1028	20	71	32
								0%	0%	1%	0%	0%	0%
							grade 2 events	1070	1046	8429	1100	4727	2715
								2%	2%	12%	2%	8%	4%
							grade 3 events	507	492	1207	548	2082	1835
								1%	1%	1%	1%	3%	3%
							grade 4 events	509	532	1148	531	2086	1729
								1%	1%	1%	1%	3%	2%
							grade 5 events	1659	1930	4762	1998	5425	2642
								3%	4%	7%	4%	9%	4%
							grade 6 events	892	966	15003	1100	12832	3529
								2%	2%	23%	2%	22%	6%
							grade 7 events	36865	35522	29246	36262	27949	41067
								83%	82%	45%	82%	48%	70%

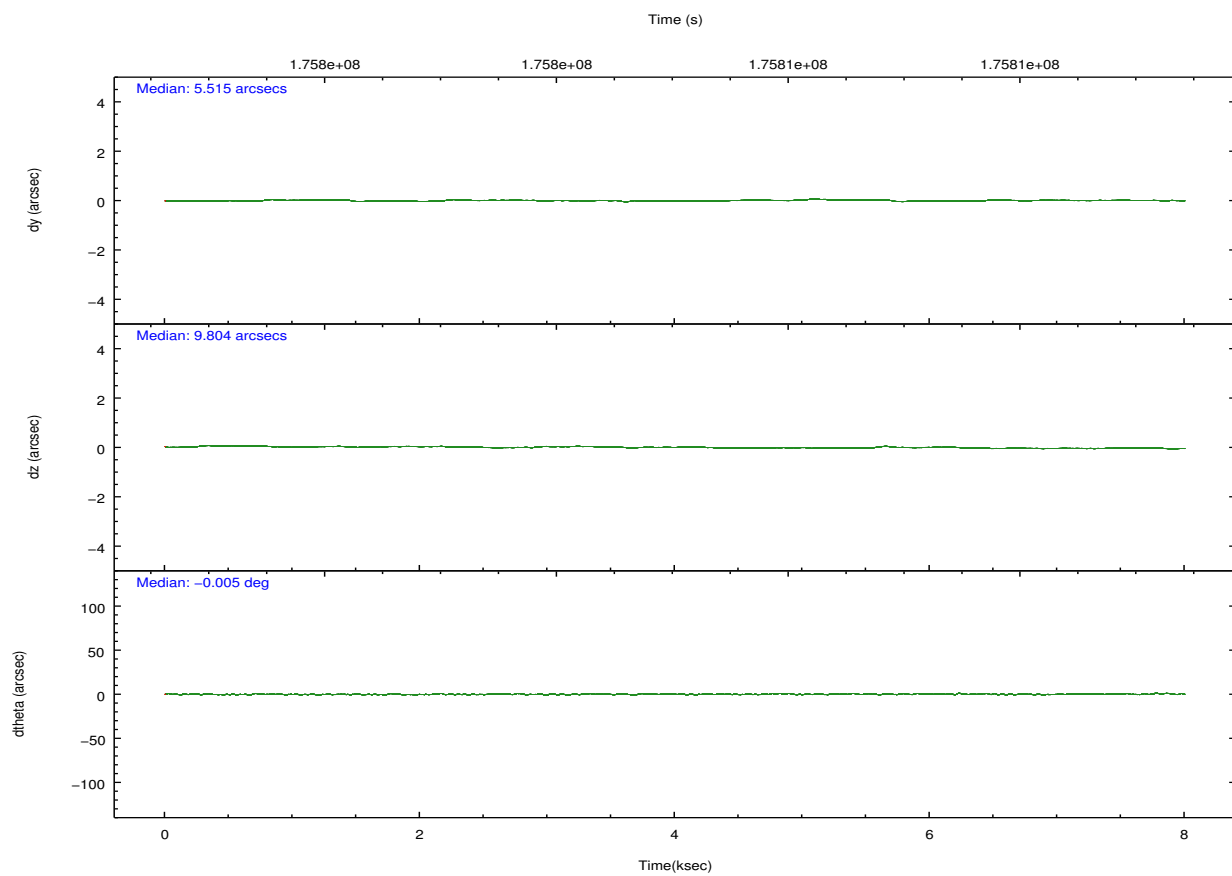
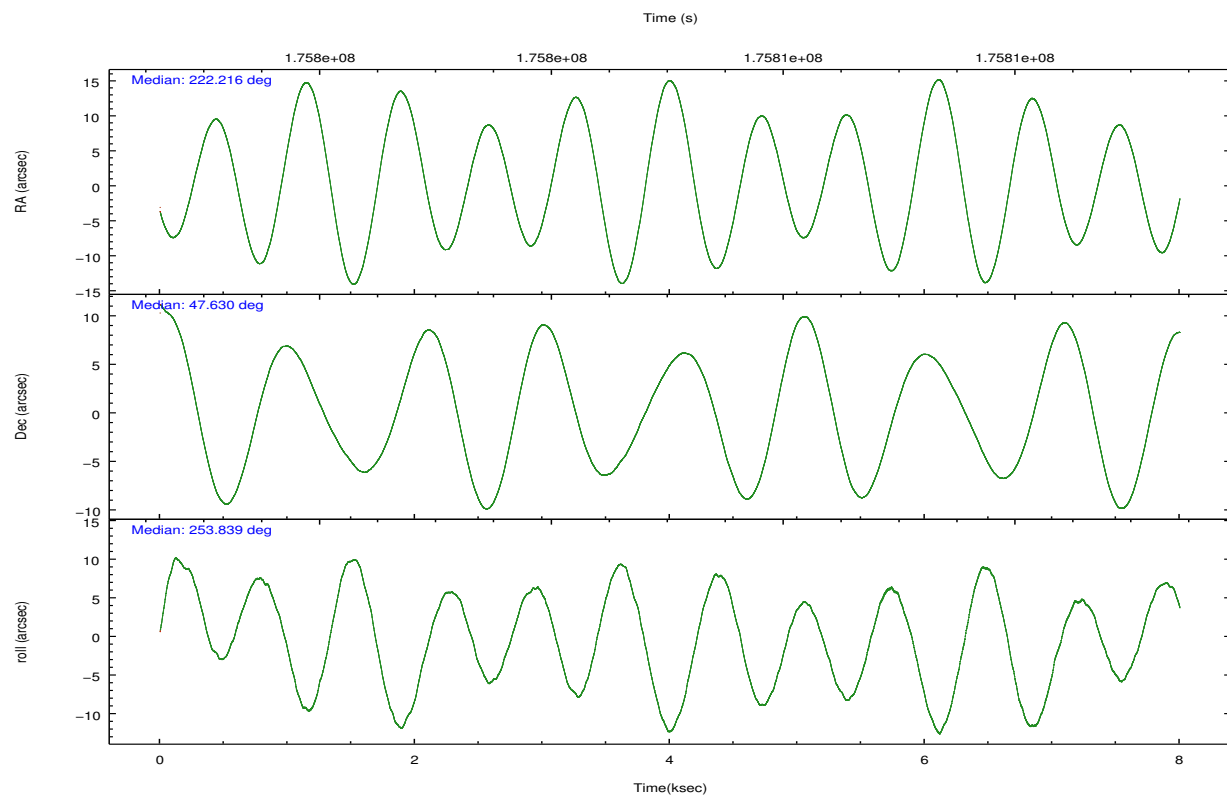


## 2.2 Compared Parameters

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	222.206361	222.2165010876033	Subarray requested	NONE	NONE
[deg] Pointing Dec	47.656712	47.63035956438218	Alternating exposures requested	N	N
[deg] Pointing Roll	253.693182	253.8423063280165	[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	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	175801977.184000	175800636.81644			
Observation start date	2003-07-28T17:51:53	2003-07-28T17:30:36			
[s] Observation end time (MET)	175809030.184000	175809693.71683			
Observation end date	2003-07-28T19:49:26	2003-07-28T20:01:33			
Read mode	TIMED	TIMED			

## 2.3 Aspect



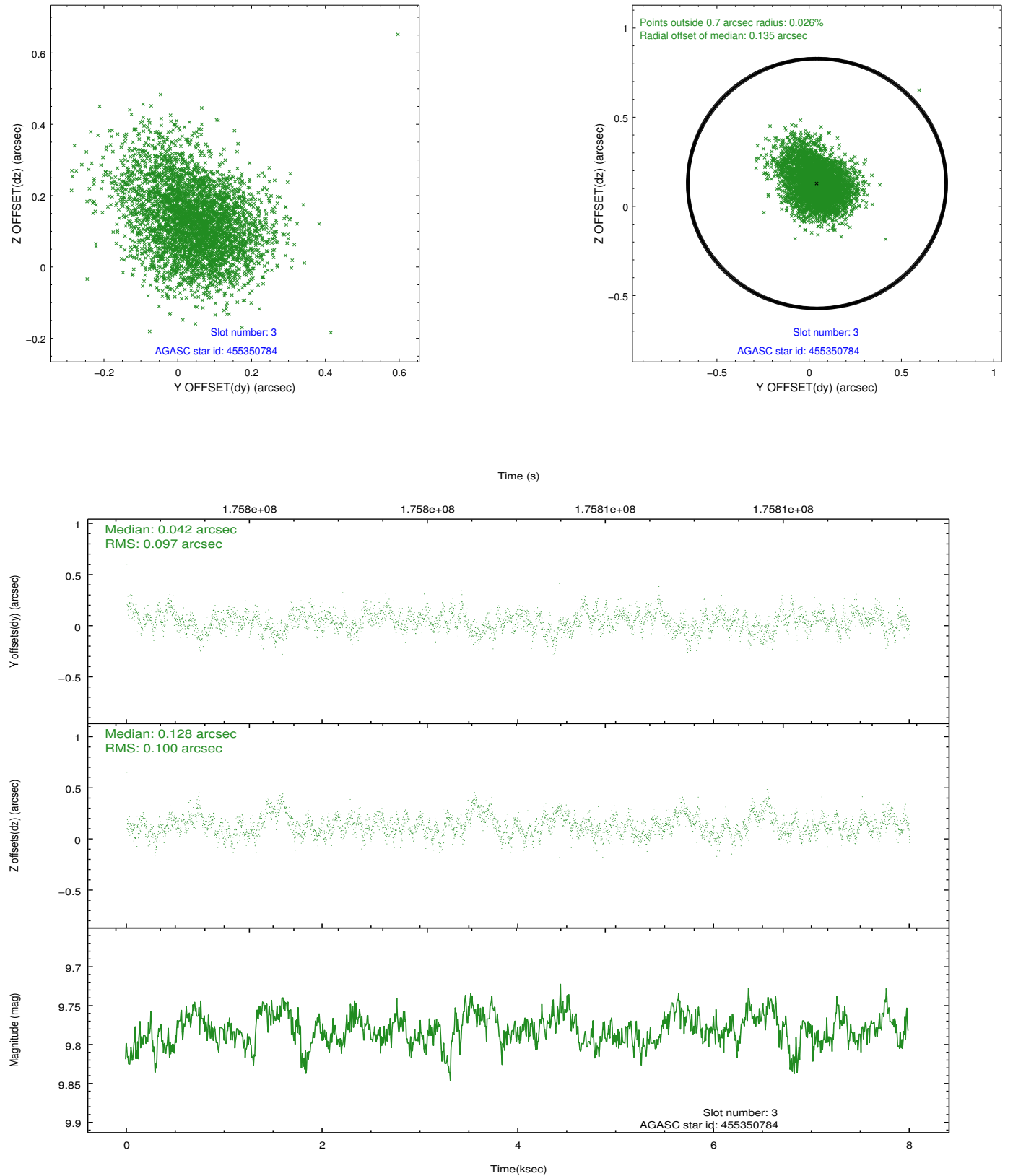


### Slot Statistics

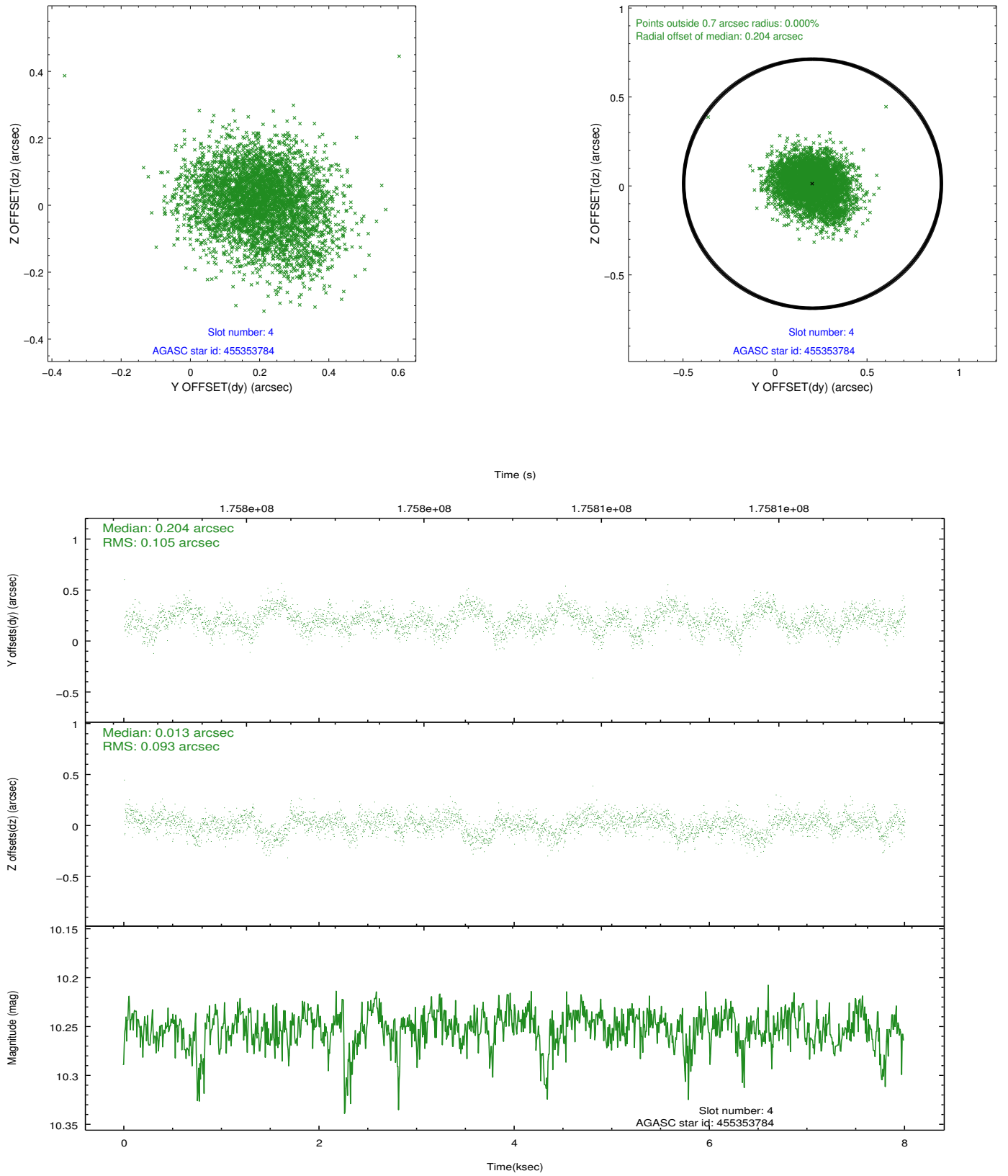
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	1952	-0.064	-0.036	0.006	0.010	0.000000	0.000000	-758.27	-1731.04
1	FID	ACIS-S-4	7.20	1952	0.097	0.041	0.005	0.010	0.000000	0.000000	2154.83	176.83
2	FID	ACIS-S-5	7.23	1952	-0.064	0.004	0.006	0.010	0.000000	0.000000	-1810.23	171.22
3	GUIDE	455350784	9.78	3901	0.042	0.128	0.146	0.244	222.434192	46.961811	2243.29	1239.94
4	GUIDE	455353784	10.25	3903	0.204	0.013	0.150	0.243	222.345867	47.064437	1951.10	927.71
5	GUIDE	455744568	9.55	3904	-0.104	-0.002	0.131	0.209	221.270222	47.865898	-100.17	-2384.69
6	GUIDE	455745760	9.27	3902	-0.085	0.020	0.085	0.135	223.068967	47.803274	-1103.15	1850.12
7	GUIDE	455747520	7.98	3903	-0.055	-0.158	0.097	0.148	221.848032	47.909366	-632.11	-1085.35

## 2.4 Star Slots

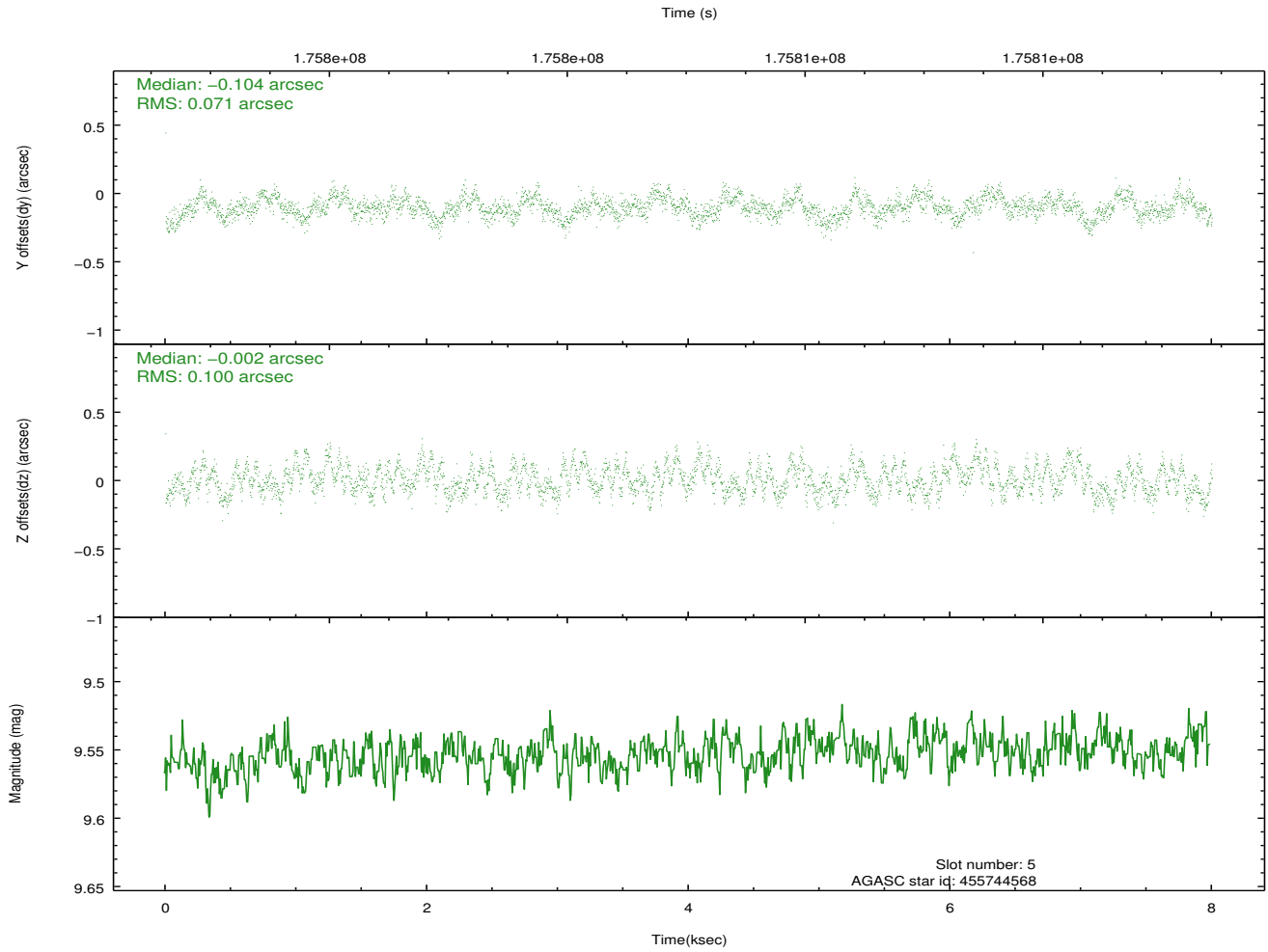
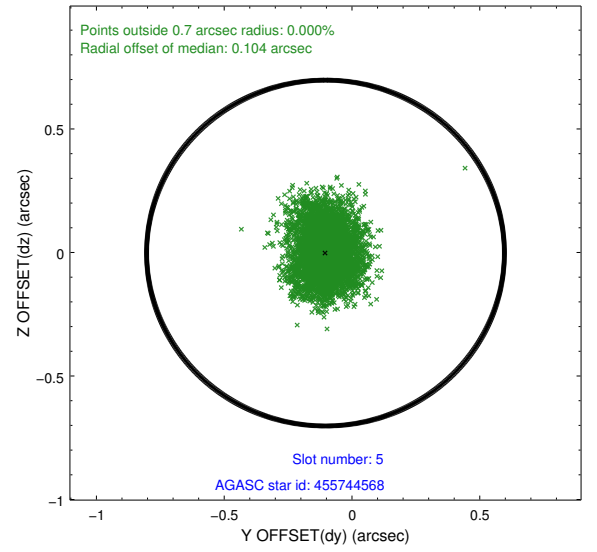
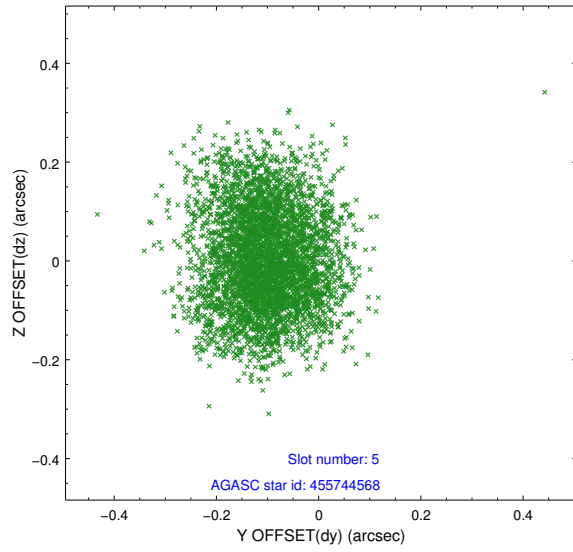
### 2.4.1 Slot 3



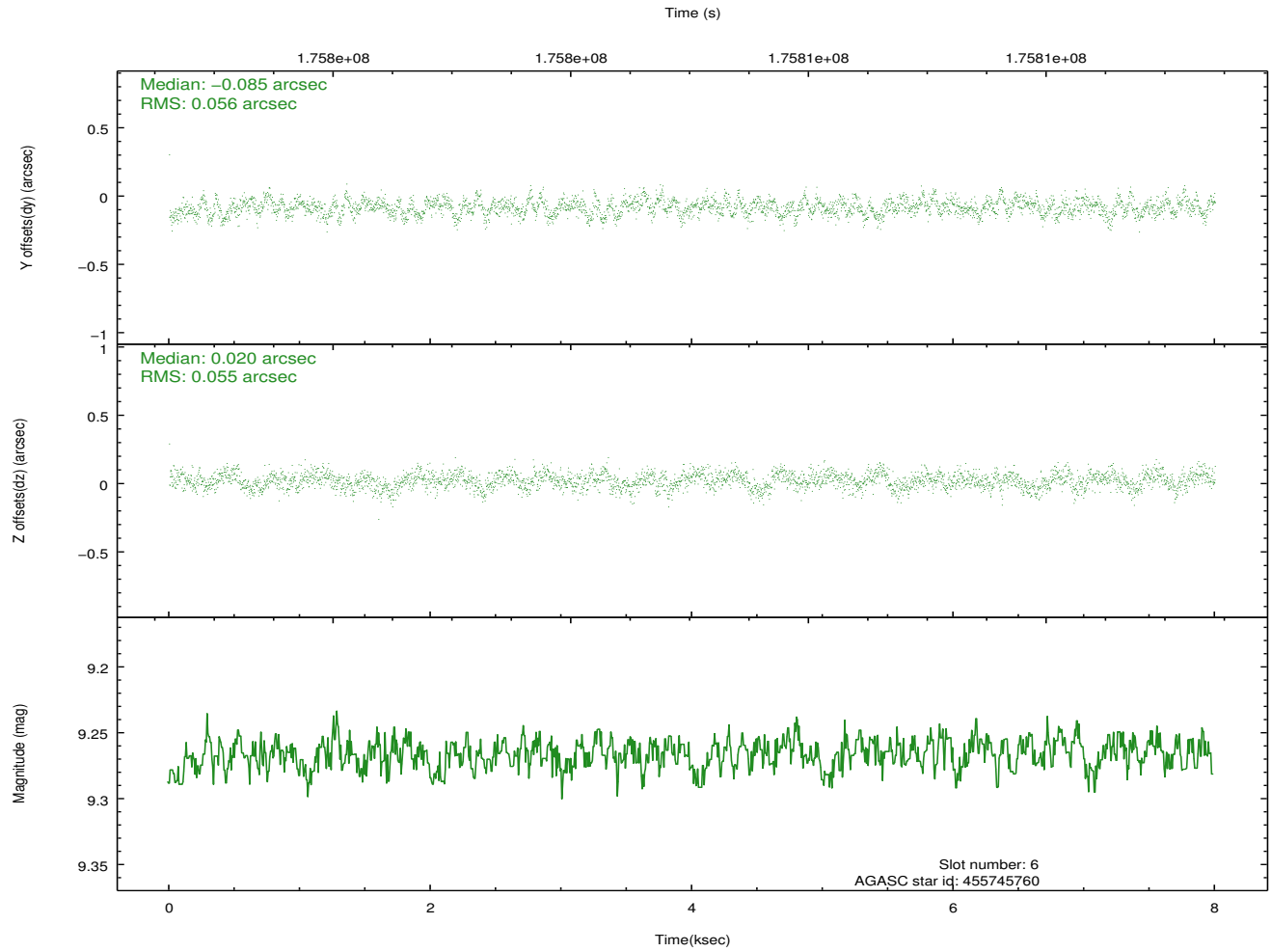
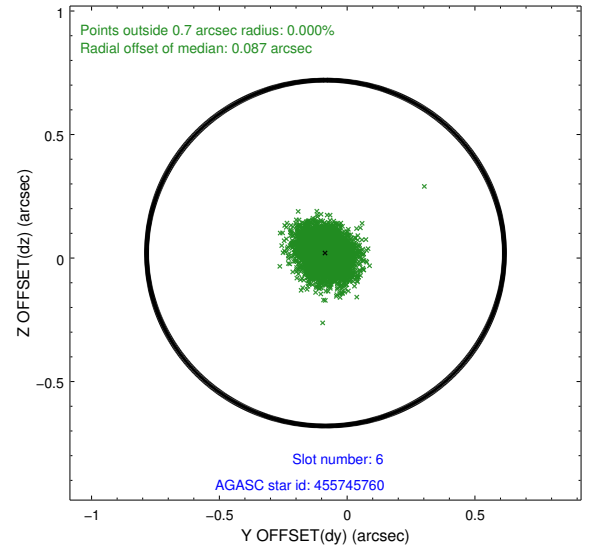
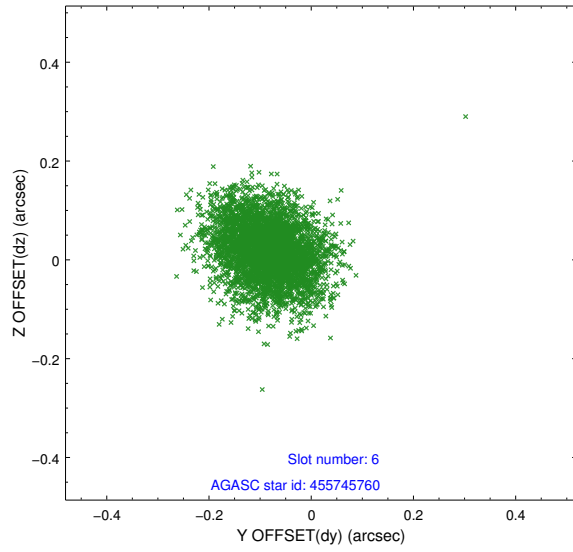
## 2.4.2 Slot 4



### 2.4.3 Slot 5

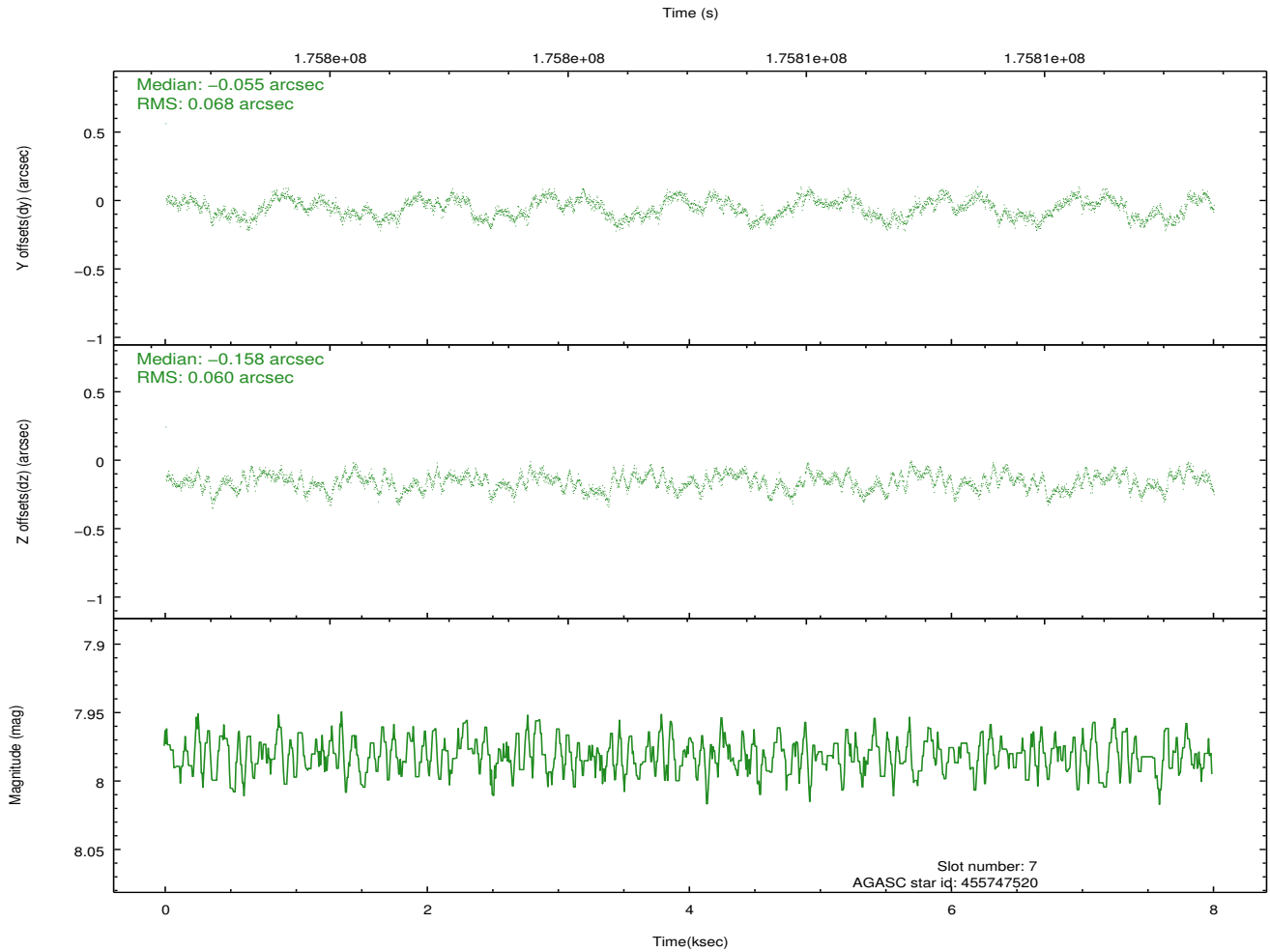
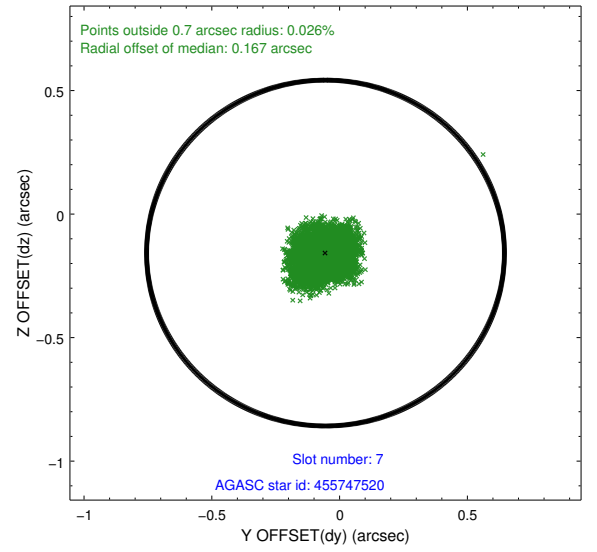
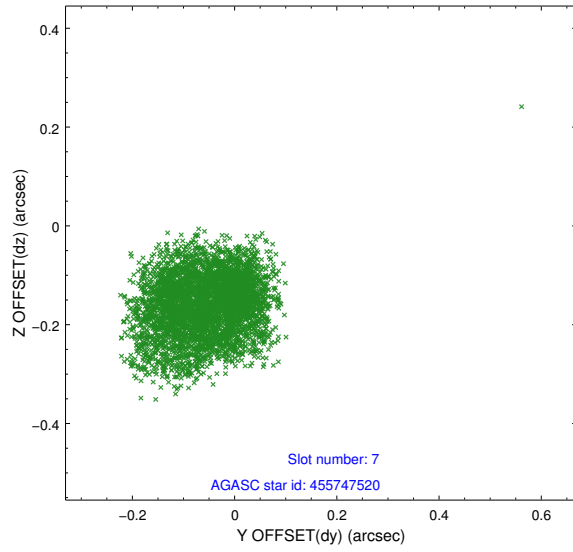


## 2.4.4 Slot 6



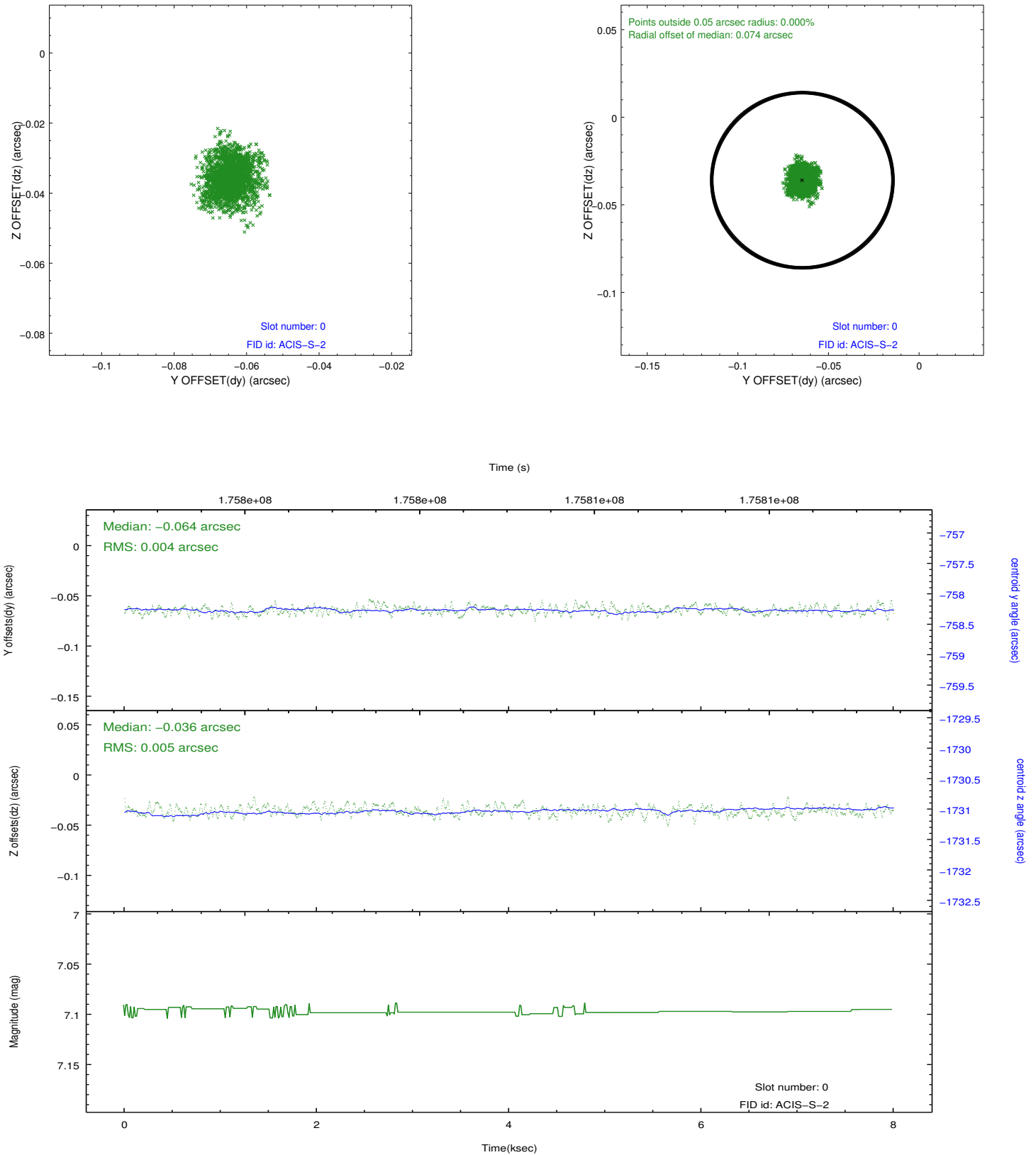


## 2.4.5 Slot 7

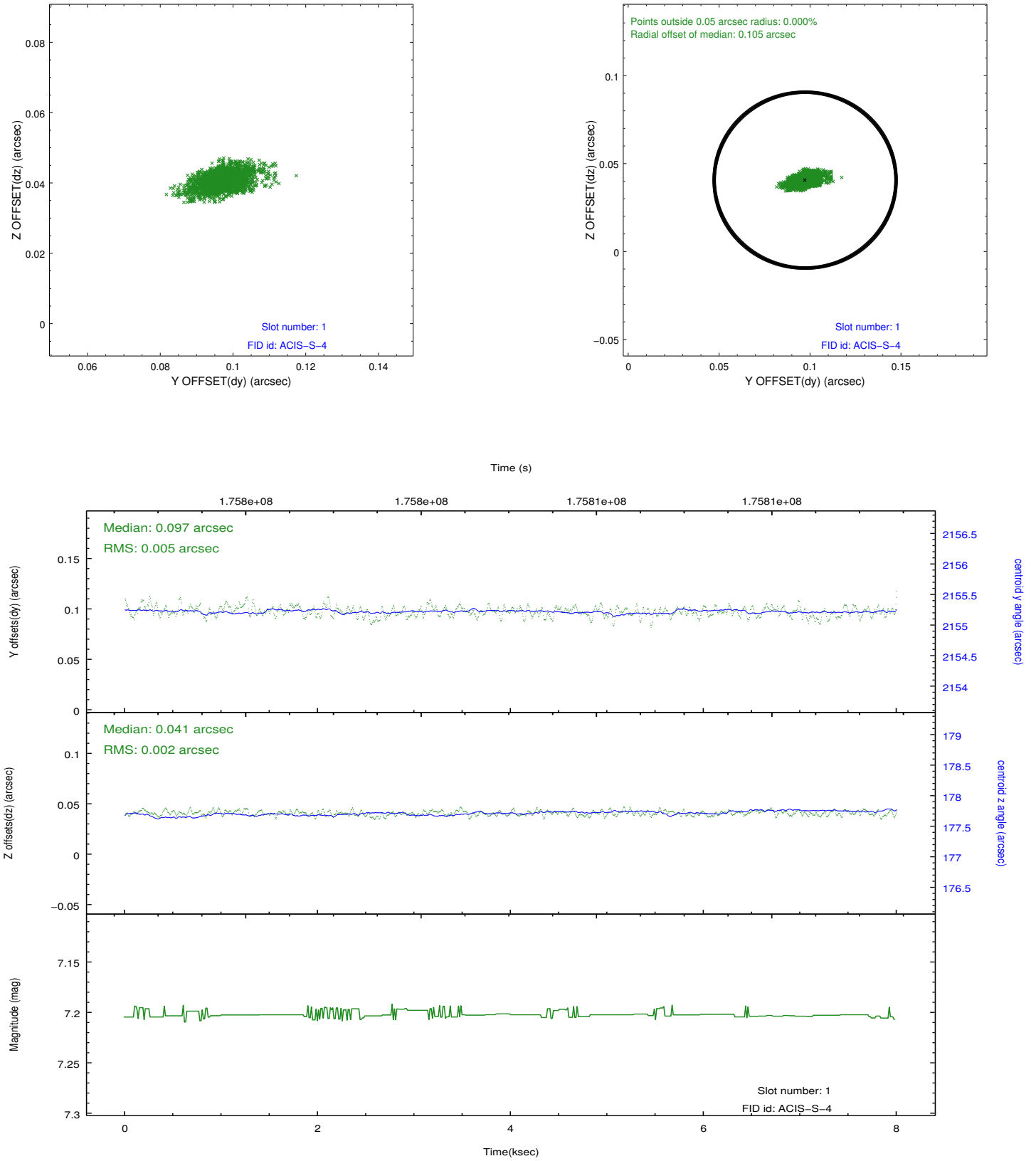


## 2.5 FID Slots

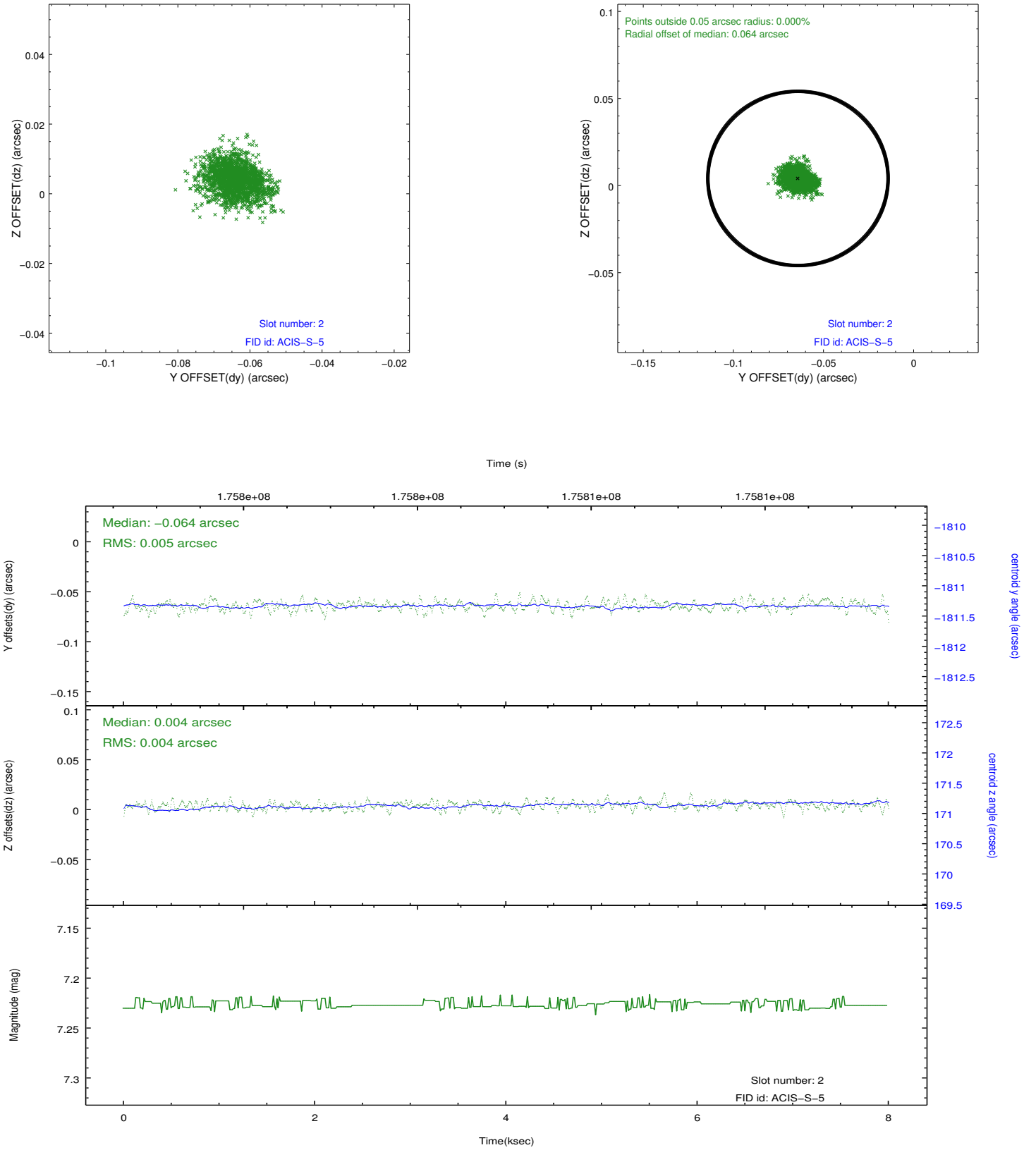
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2012.11.16
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	7.018

### A.2 Comments