

# V&V Reference Report

## L2 ASCDS Version : 8.4.3.1

Observation 7144 - L2 Version 2  
Chandra X-Ray Center

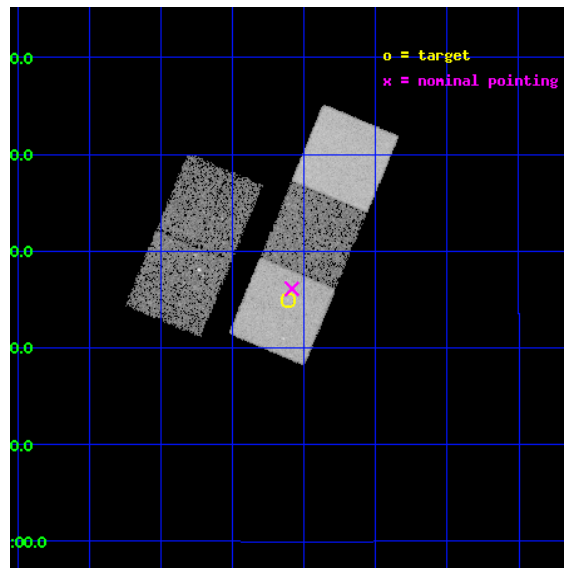
L2 Processing Date : Apr 4 2012

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# 1 Front

seq_num	600582	Sequence number
obs_id	7144	Observation id
title	The evolving ULX populations of early-type galaxies	Proposal title
observer	Dr Philip Humphrey	Principal investigator
object	NGC 474	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	20.027917	Observer's specified target RA [deg]
dec_targ	3.415278	Observer's specified target Dec [deg]
ra_nom	20.021541890457	Nominal RA [deg]
dec_nom	3.4350769183461	Nominal Dec [deg]
roll_nom	112.61749531085	Nominal Roll [deg]
revision	2	Processing version of data
ontime	15134.200116396	Sum of GTIs [s]
livetime	14936.460650239	Livetime [s]
ontime2	15134.200116396	Sum of GTIs [s]
ontime3	15134.200116396	Sum of GTIs [s]
ontime5	15134.200116396	Sum of GTIs [s]
ontime6	15127.918175757	Sum of GTIs [s]
ontime7	15134.200116396	Sum of GTIs [s]
l2events	156531	Number of level 2 events

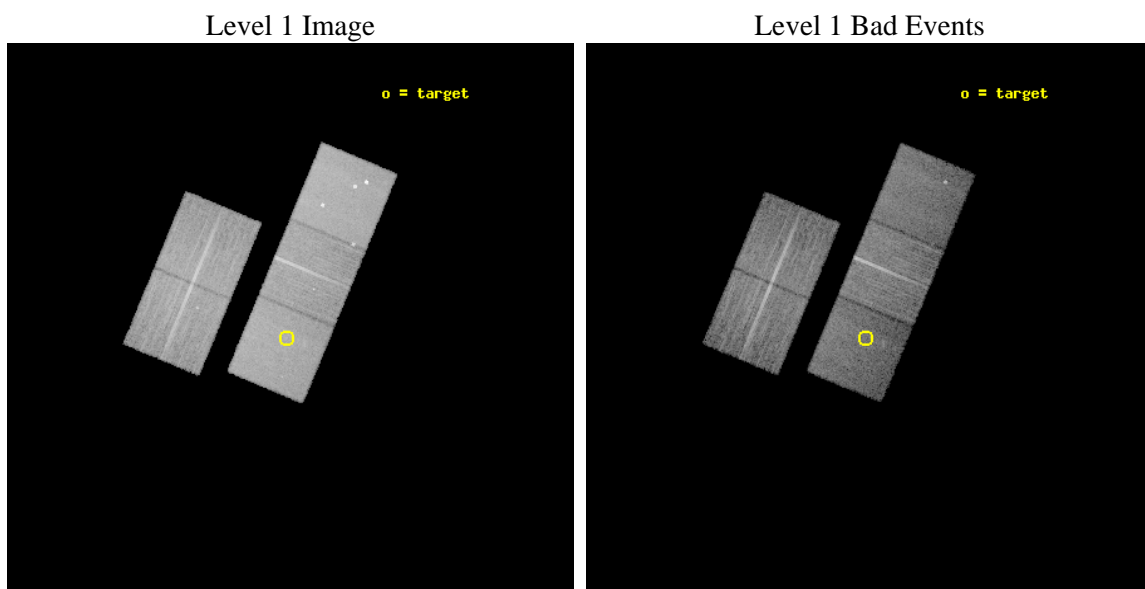




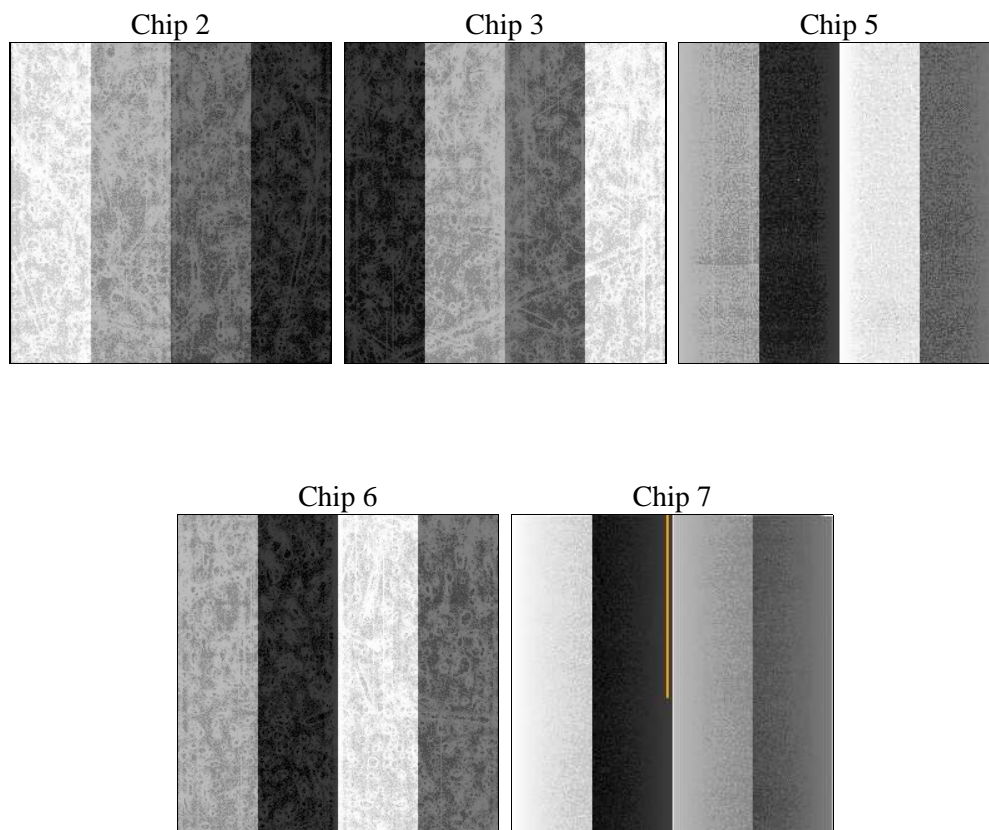
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	15000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3.1	Processing system revision	ontime	15134.200116396	Sum of GTIs [s]
caldsver	4.4.9	&#160	ontime2	15134.200116396	Sum of GTIs [s]
date	2012-04-04T20:20:04	Date and time of file creation	ontime3	15134.200116396	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	15134.200116396	Sum of GTIs [s]
			ontime6	15127.918175757	Sum of GTIs [s]
			ontime7	15134.200116396	Sum of GTIs [s]
			l1events	636900	Number of level 1 events

### 2.1.4 Events

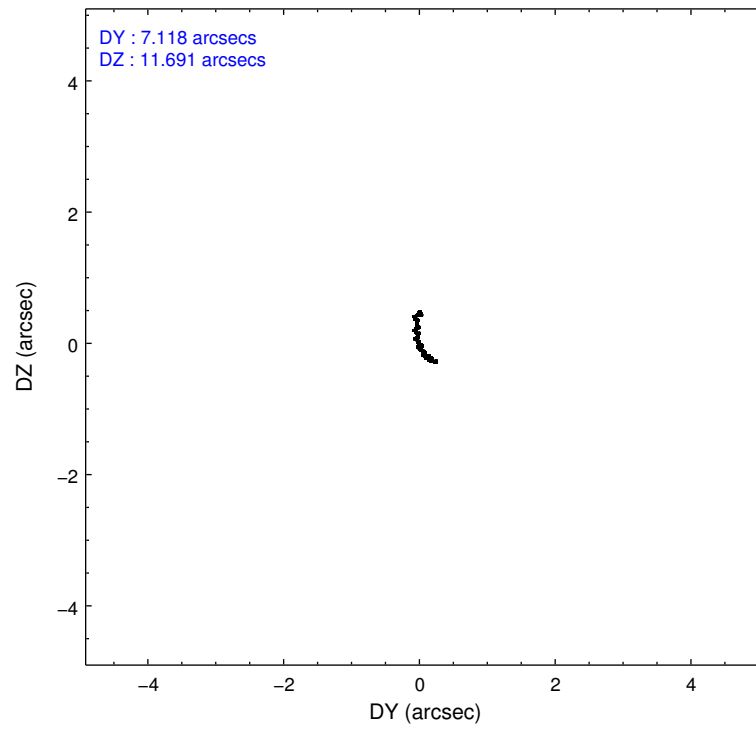
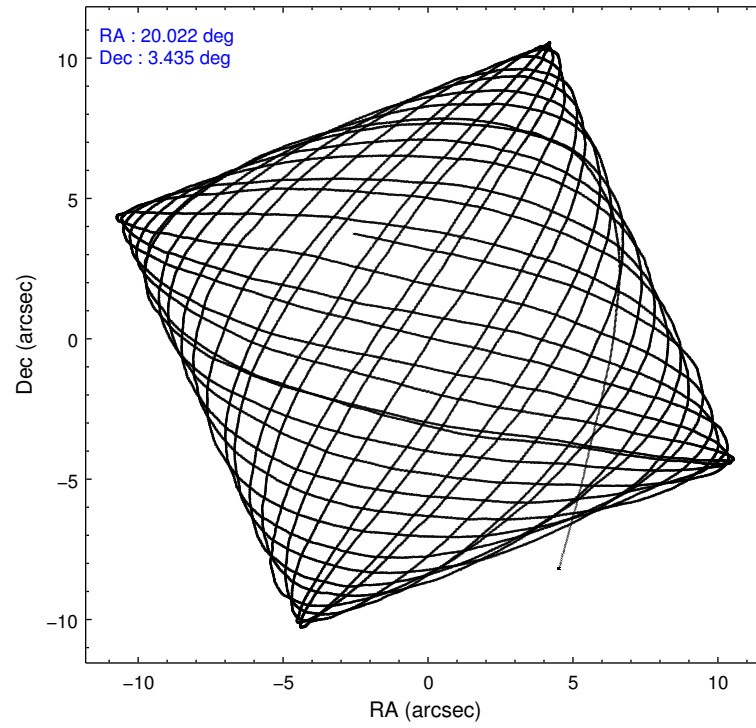
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	117154	114985	160697	116907	127157
rejected events	106284	104159	80039	105050	69651
rejected %	90%	90%	49%	89%	54%

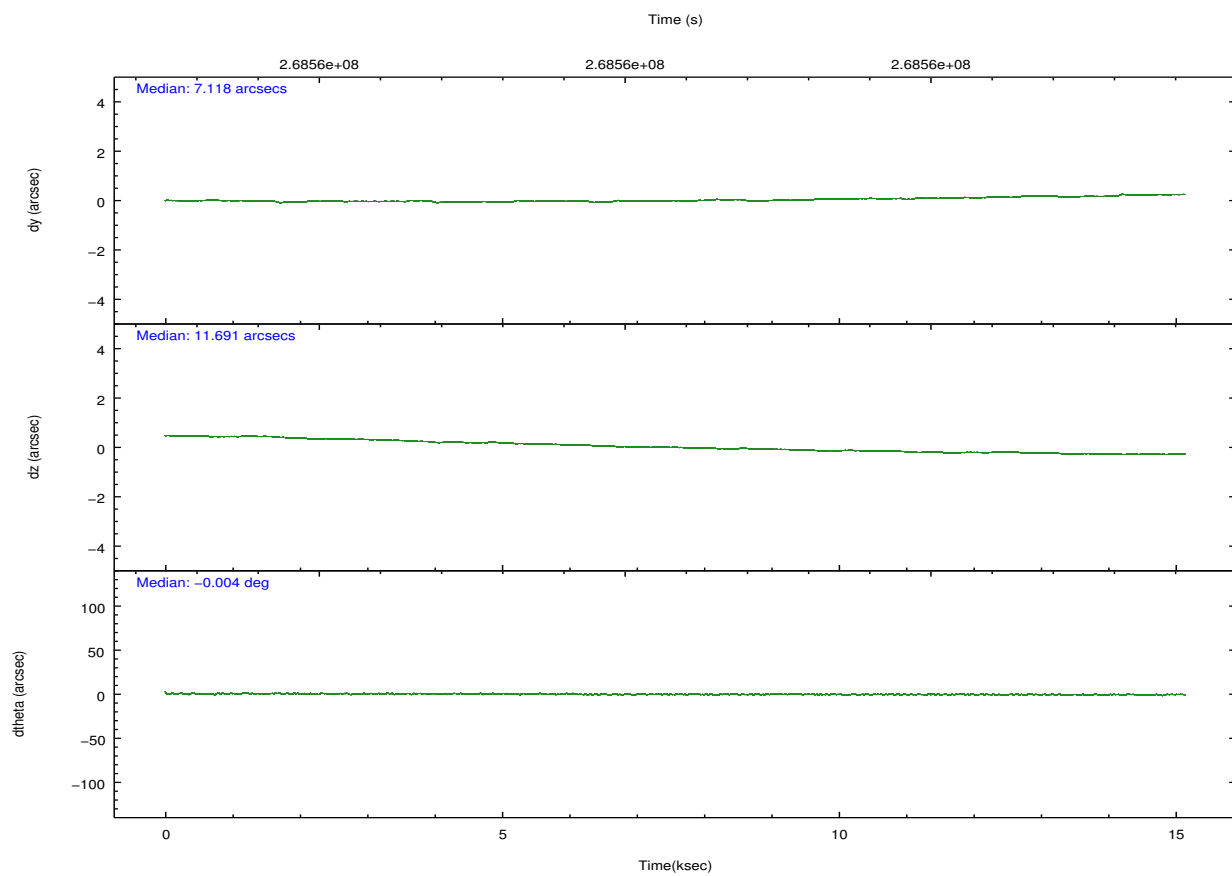
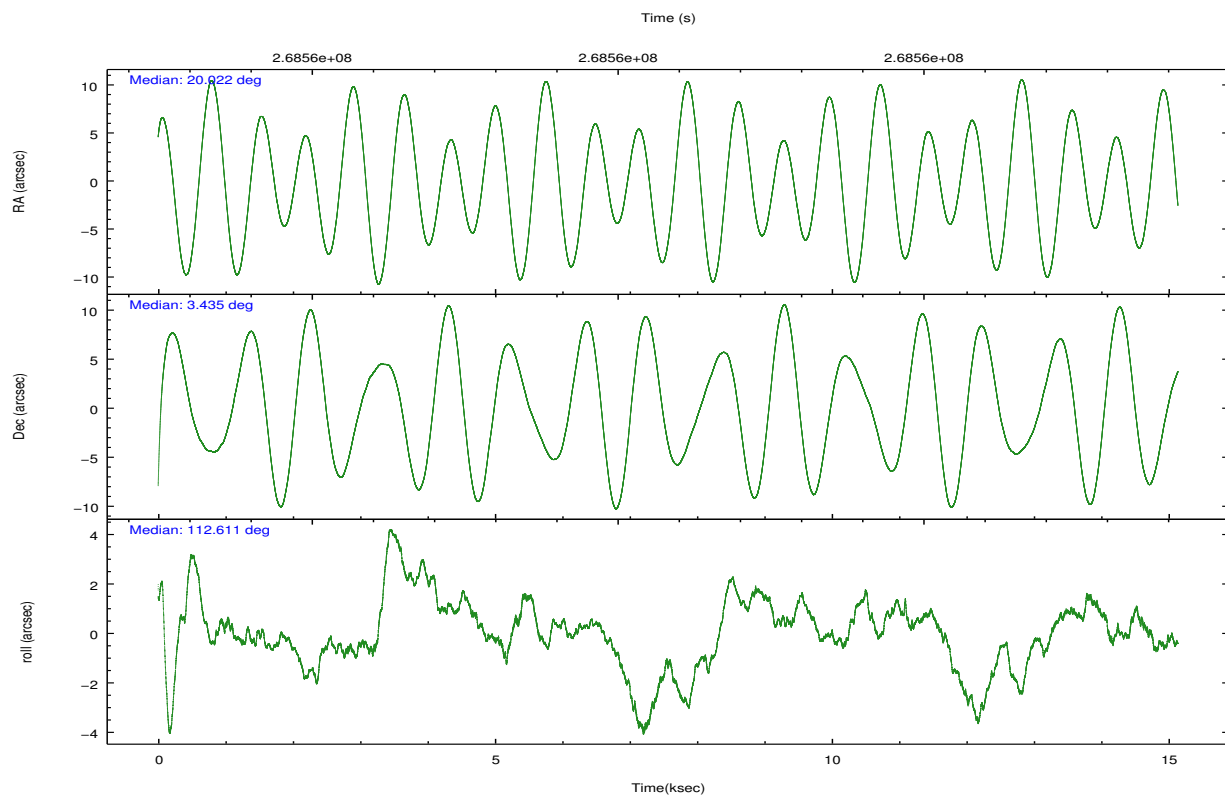
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	3852	4083	9962	4114	5151
	3%	3%	6%	3%	4%
grade 1 events	63	65	377	46	120
	0%	0%	0%	0%	0%
grade 2 events	2667	2291	23843	2668	11539
	2%	1%	14%	2%	9%
grade 3 events	1158	1176	3260	1325	5498
	0%	1%	2%	1%	4%
grade 4 events	1245	1125	3195	1285	5307
	1%	0%	1%	1%	4%
grade 5 events	3561	4517	12598	4603	13497
	3%	3%	7%	3%	10%
grade 6 events	1975	2172	40589	2496	30139
	1%	1%	25%	2%	23%
grade 7 events	102633	99556	66873	100370	55906
	87%	86%	41%	85%	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	20.043424	20.02154189045676	Subarray requested	NONE	NONE
[deg] Pointing Dec	3.418826	3.43507691834611	Alternating exposures requested	N	N
[deg] Pointing Roll	112.459564	112.6174953108501	[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	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	268553378.184000	268552382.07778			
Observation start date	2006-07-06T06:08:33	2006-07-06T05:53:02			
[s] Observation end time (MET)	268568378.184000	268569117.25356			
Observation end date	2006-07-06T10:18:33	2006-07-06T10:31:57			
Read mode	TIMED	TIMED			

## 2.3 Aspect



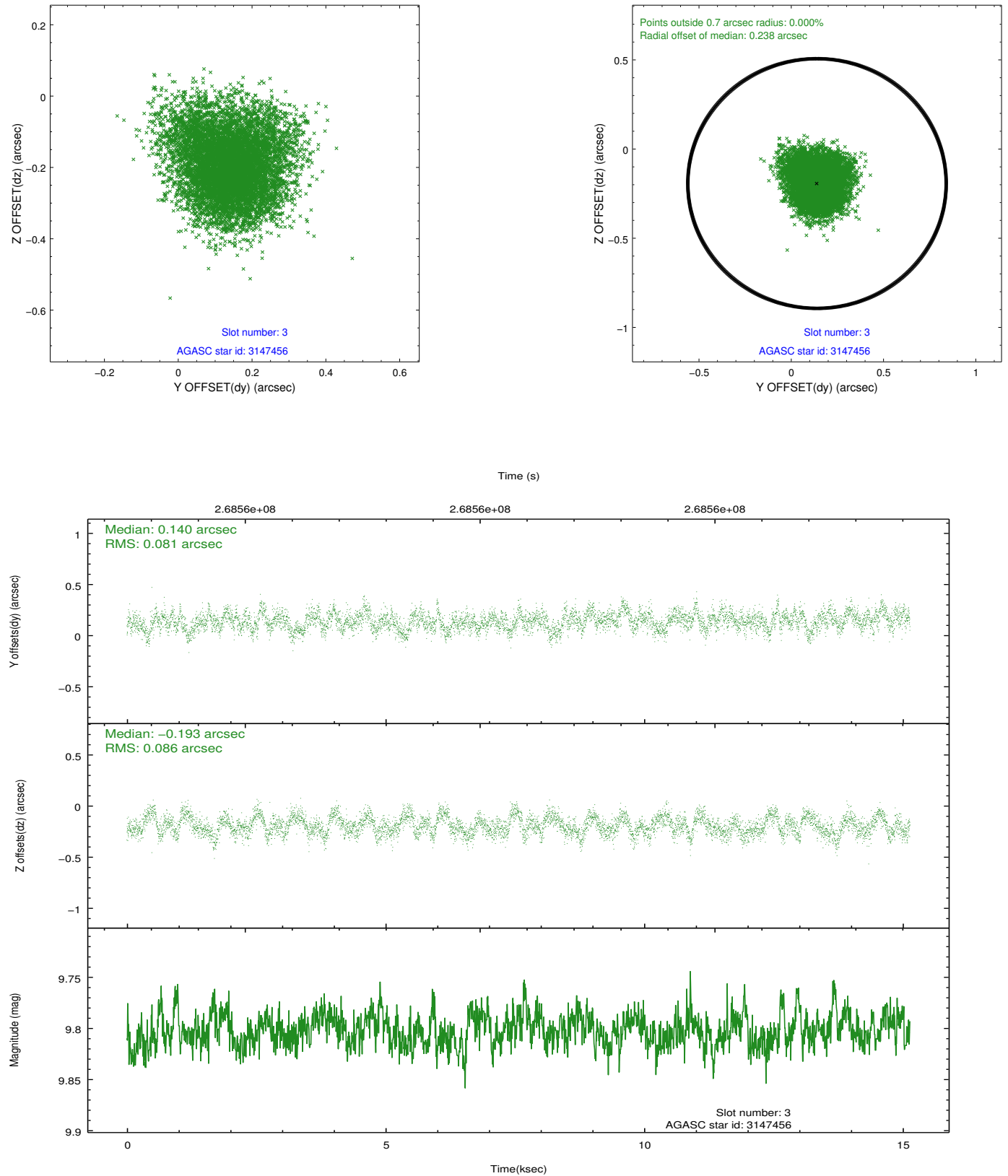


### Slot Statistics

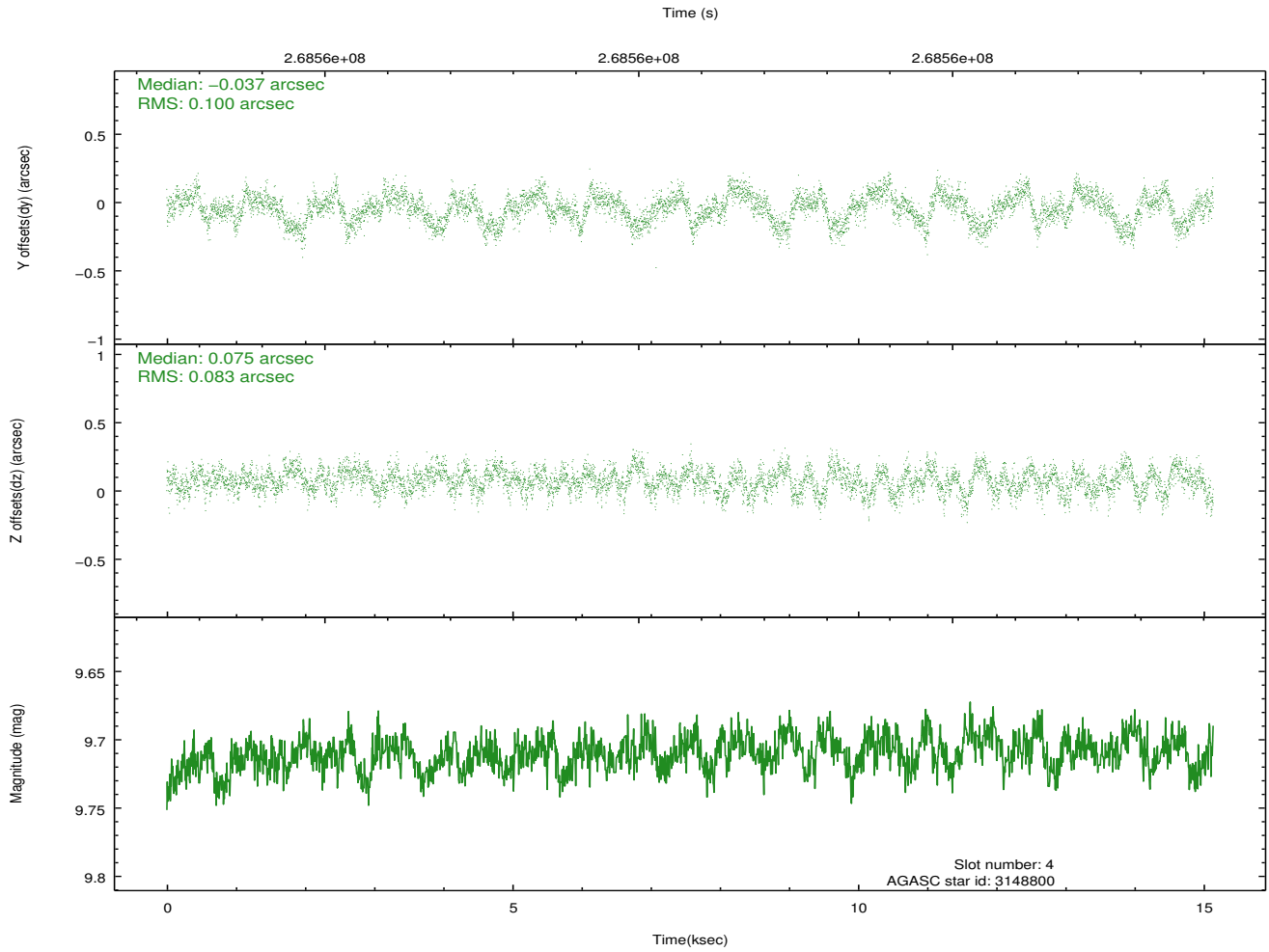
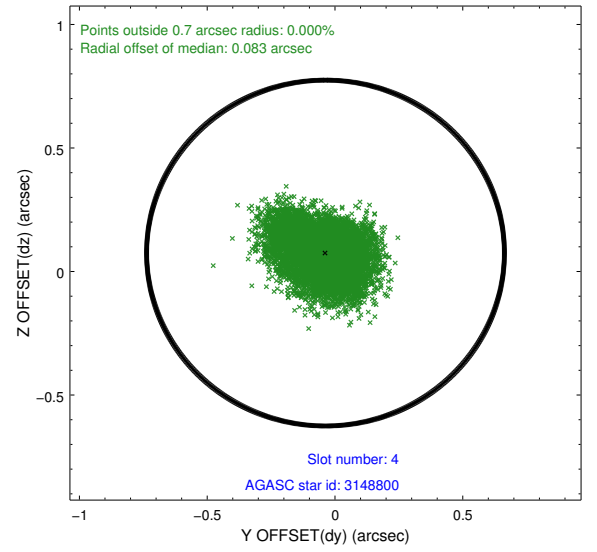
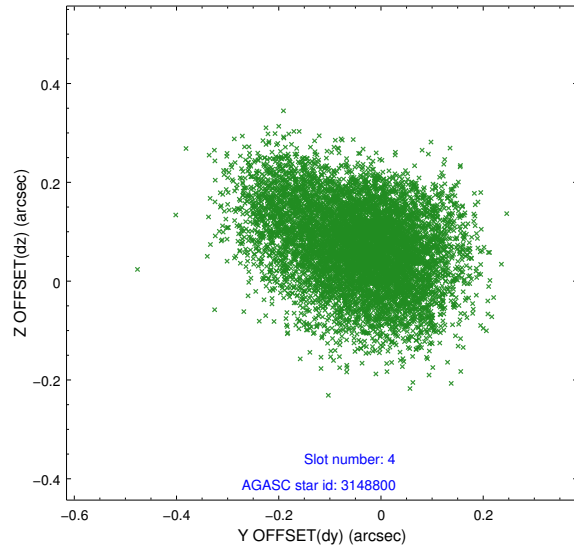
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	3693	-0.057	-0.042	0.011	0.018	0.000000	0.000000	-759.96	-1733.02
1	FID	ACIS-S-4	7.21	3693	0.070	0.017	0.010	0.015	0.000000	0.000000	2153.30	175.23
2	FID	ACIS-S-6	7.34	3692	-0.041	0.032	0.008	0.013	0.000000	0.000000	402.41	812.97
3	GUIDE	3147456	9.80	7377	0.140	-0.193	0.128	0.201	20.200872	2.909765	-1909.42	176.94
4	GUIDE	3148800	9.71	7380	-0.037	0.075	0.140	0.225	20.319611	3.284674	-825.33	-732.65
5	GUIDE	3150624	8.91	7359	-0.263	0.111	0.103	0.171	20.408334	4.257468	2290.00	-2363.68
6	GUIDE	3154272	8.69	7384	0.020	0.202	0.116	0.172	20.578009	3.513105	-419.92	-1904.71
7	GUIDE	3155768	9.72	7378	0.144	-0.194	0.106	0.175	20.050650	3.065747	-1184.26	461.40

## 2.4 Star Slots

### 2.4.1 Slot 3

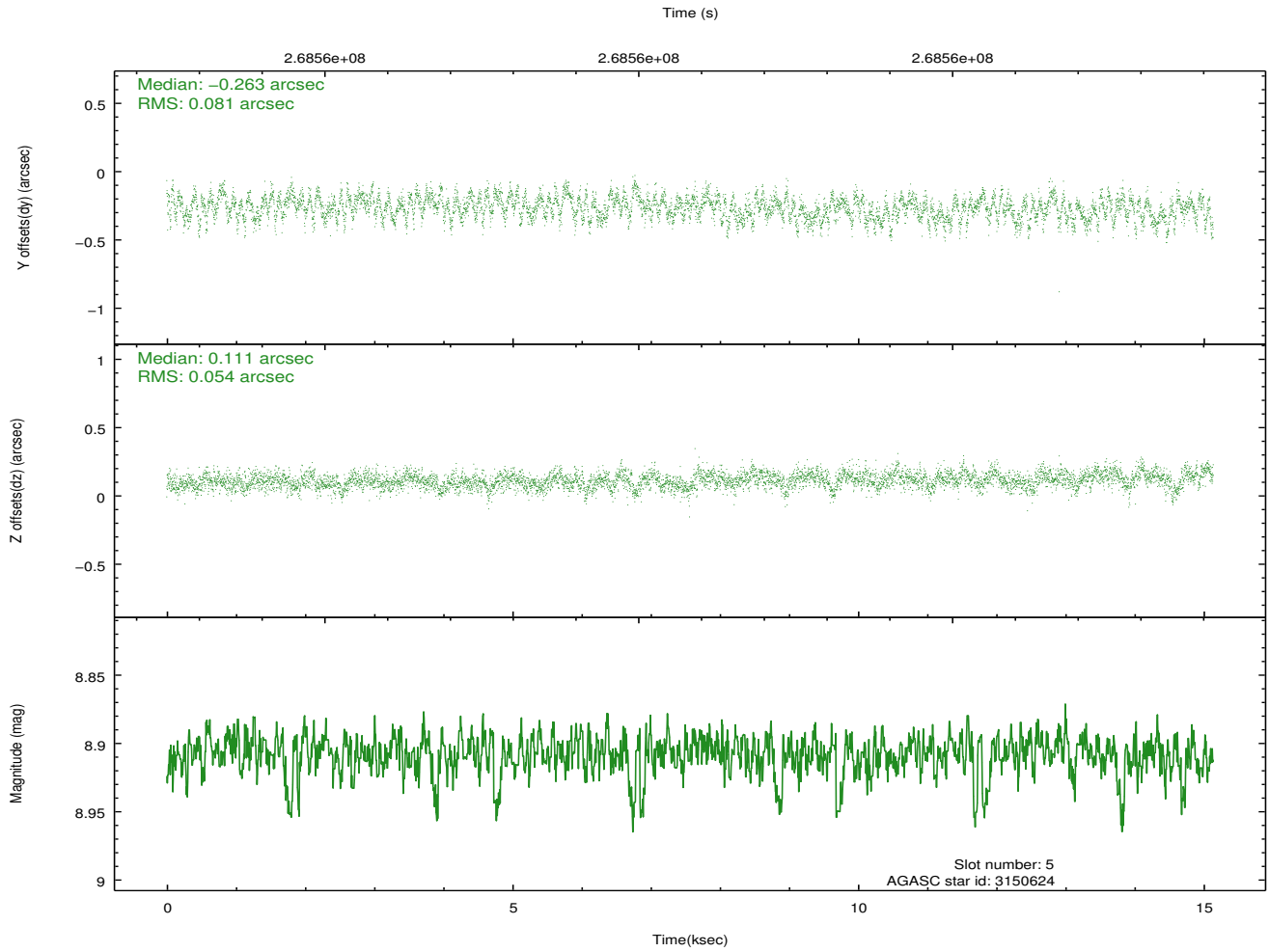
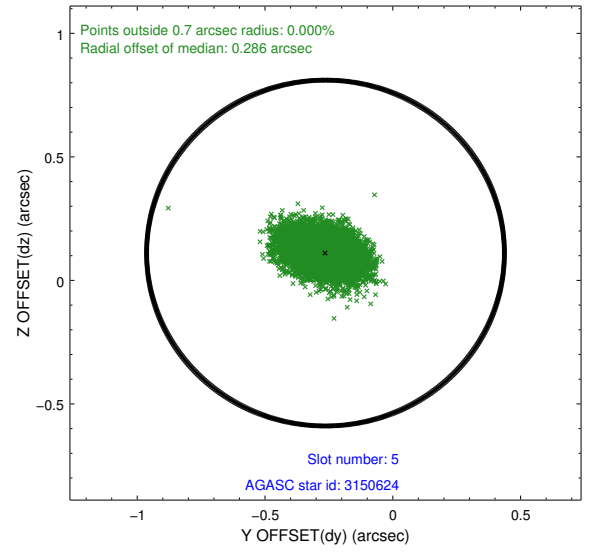
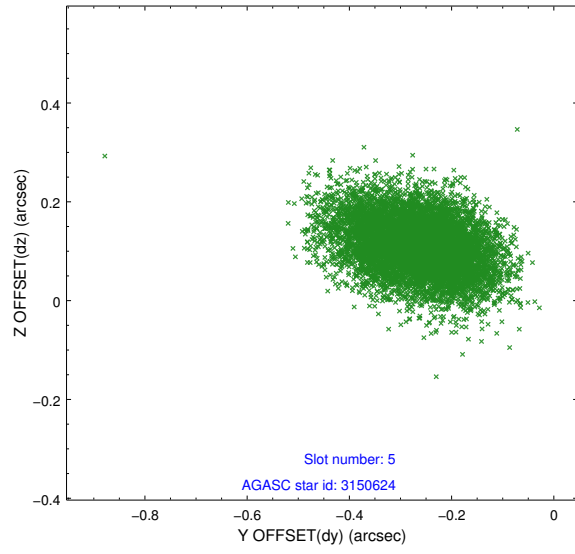


## 2.4.2 Slot 4

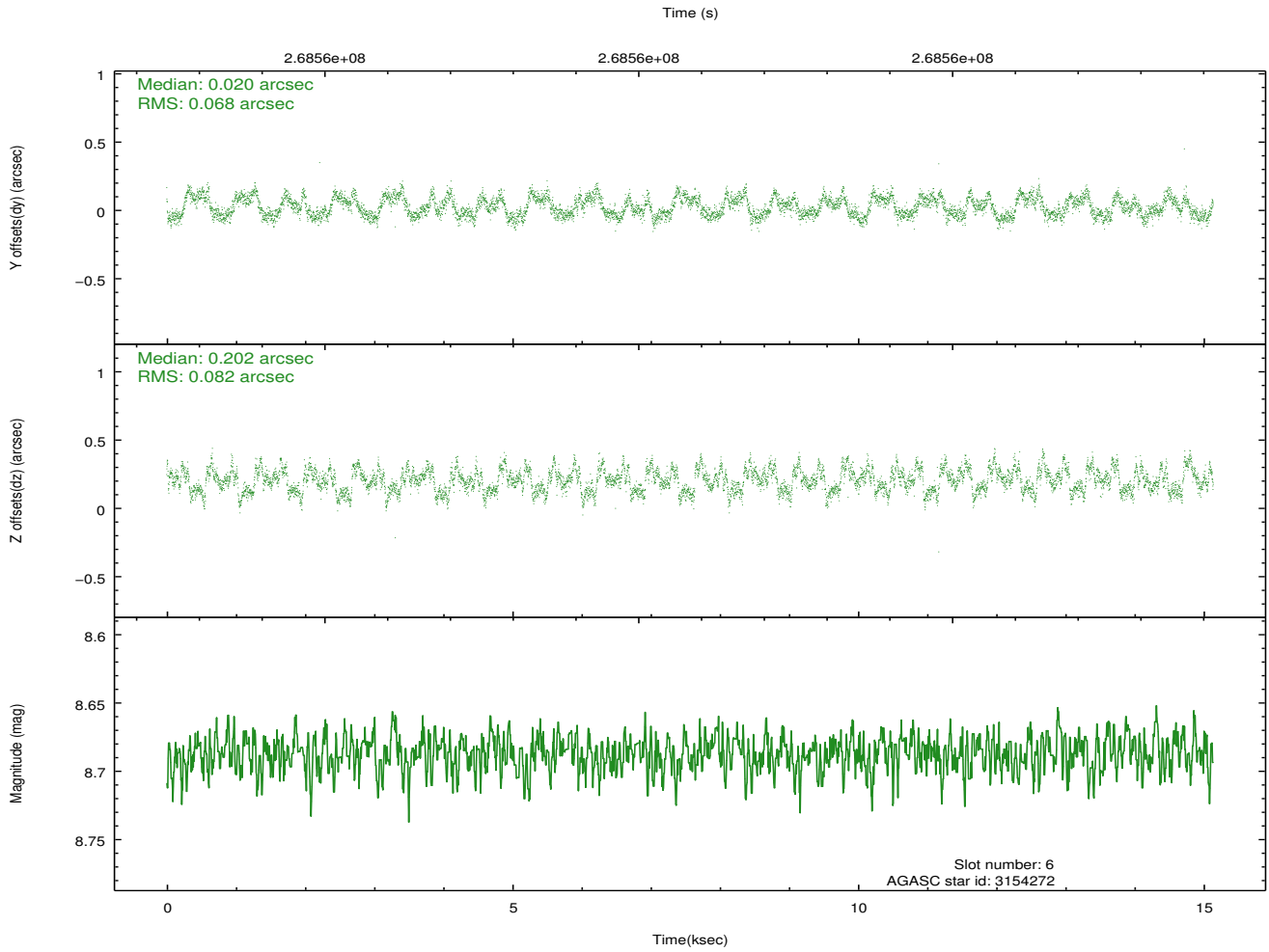
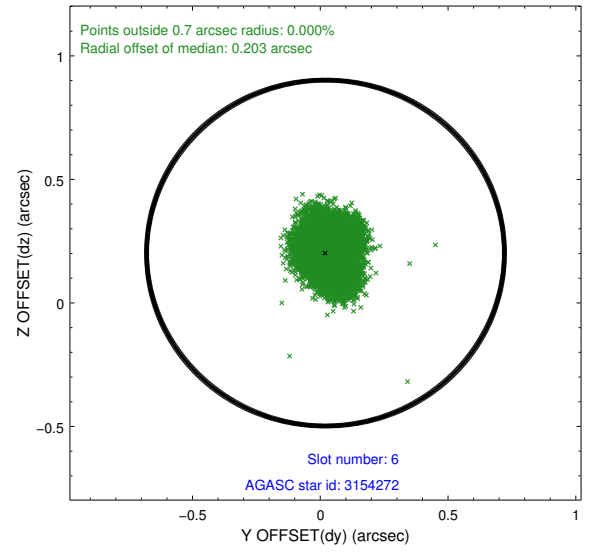
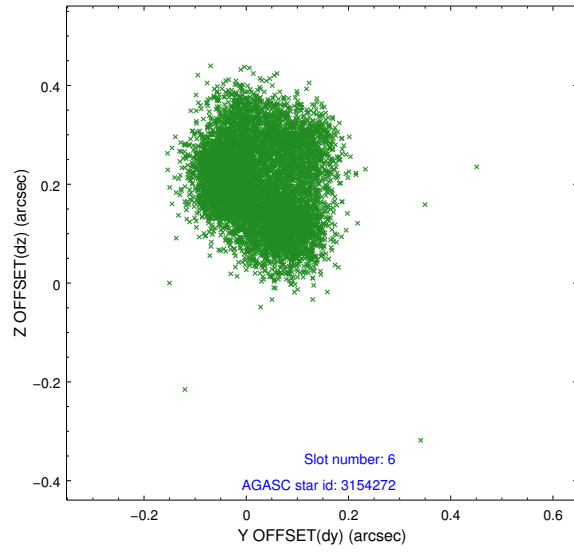




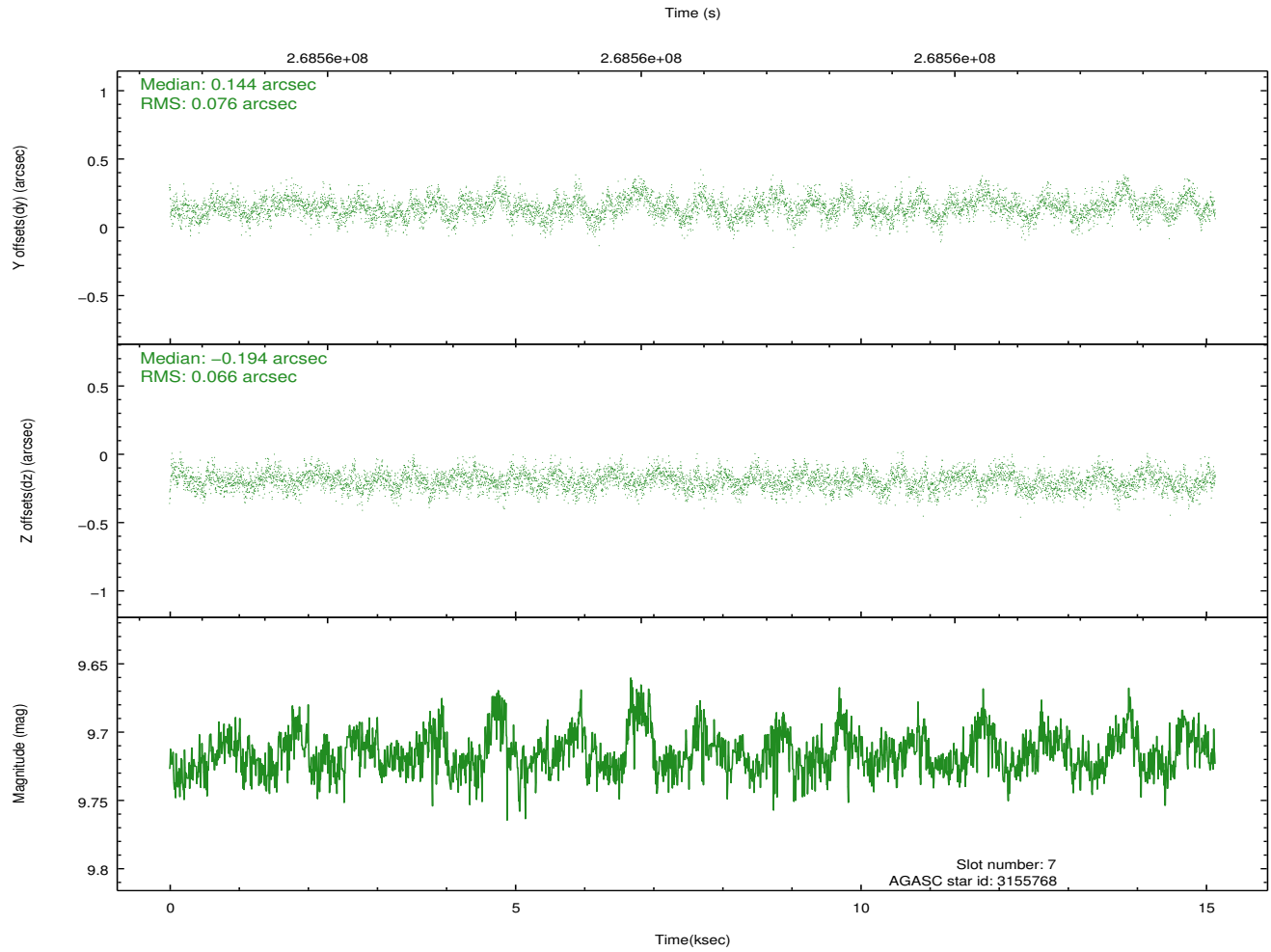
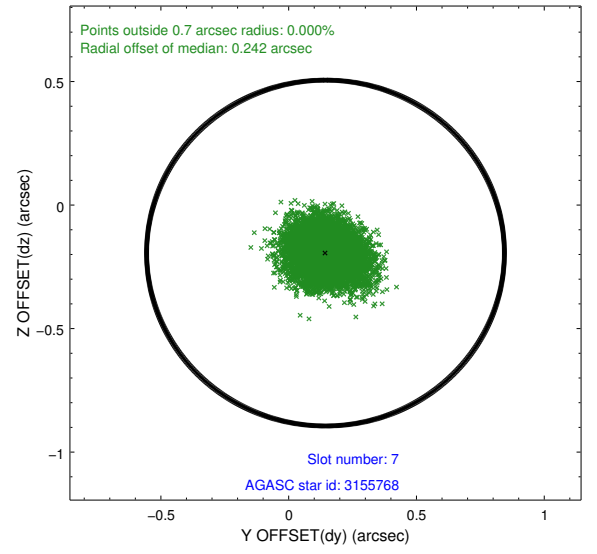
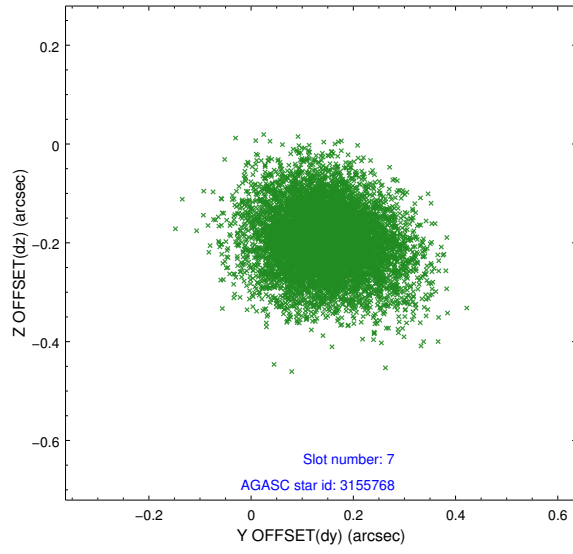
### 2.4.3 Slot 5



## 2.4.4 Slot 6

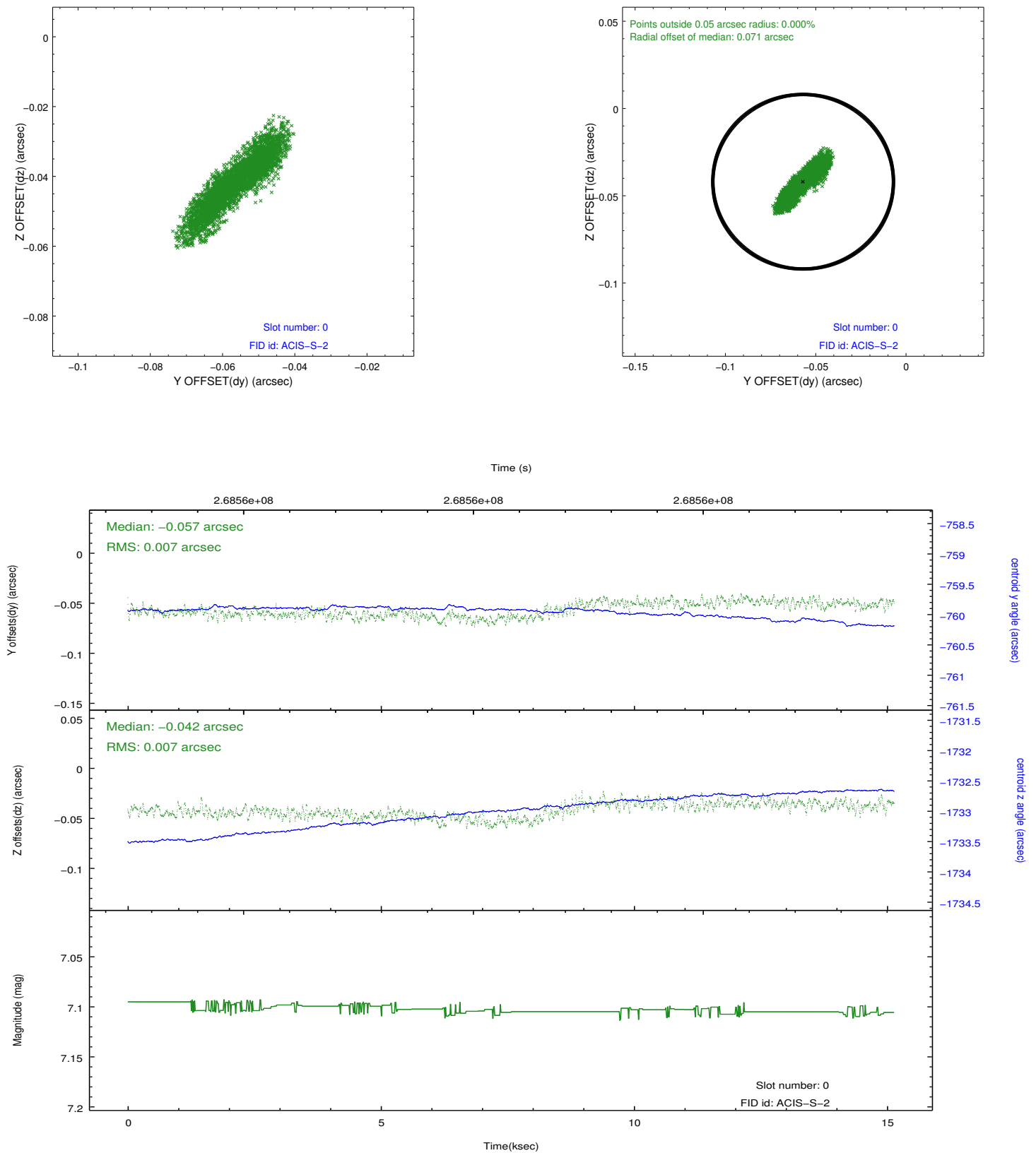


## 2.4.5 Slot 7

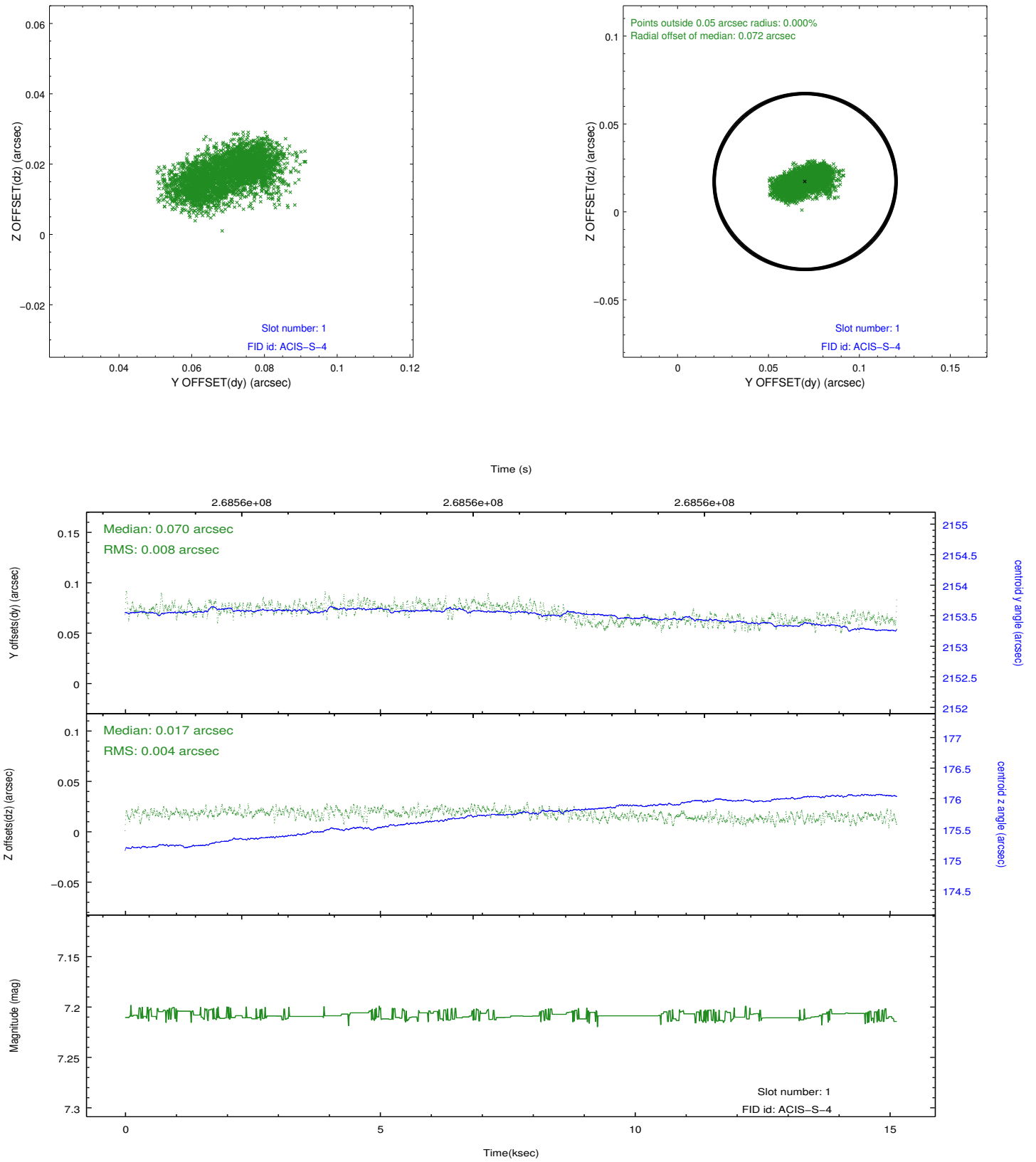


## 2.5 FID Slots

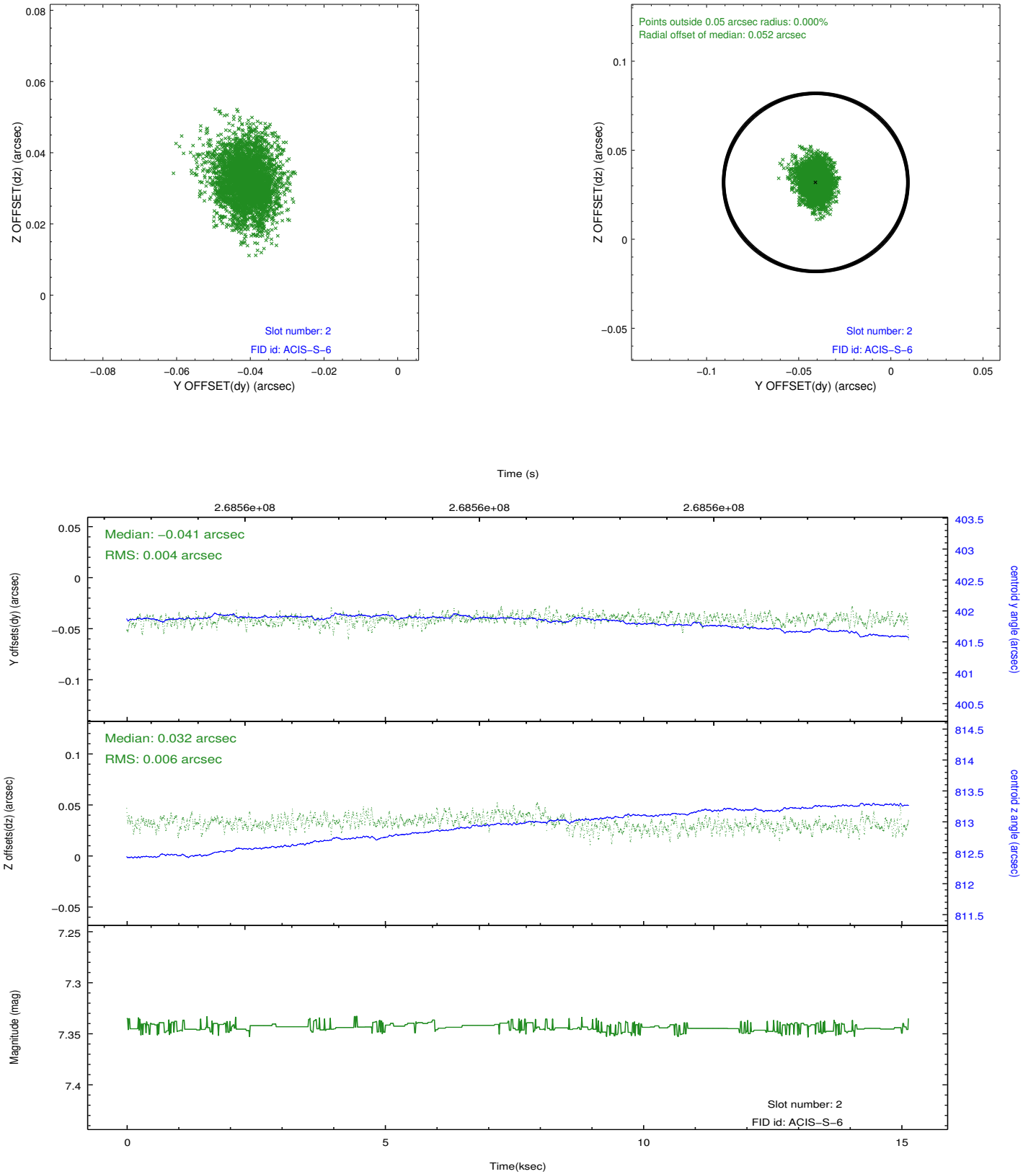
### 2.5.1 Slot 0



## 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)	2012.04.05
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	15.1342001

### A.2 Comments