

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 2844 - L2 Version 3  
Chandra X-Ray Center

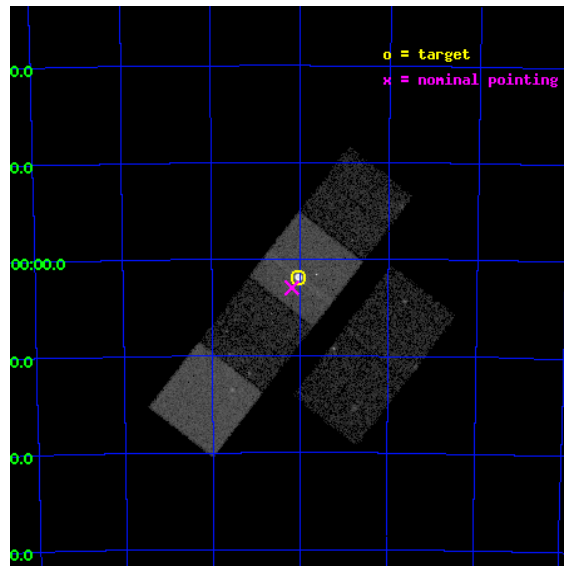
L2 Processing Date : Sep 28 2012

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# 1 Front

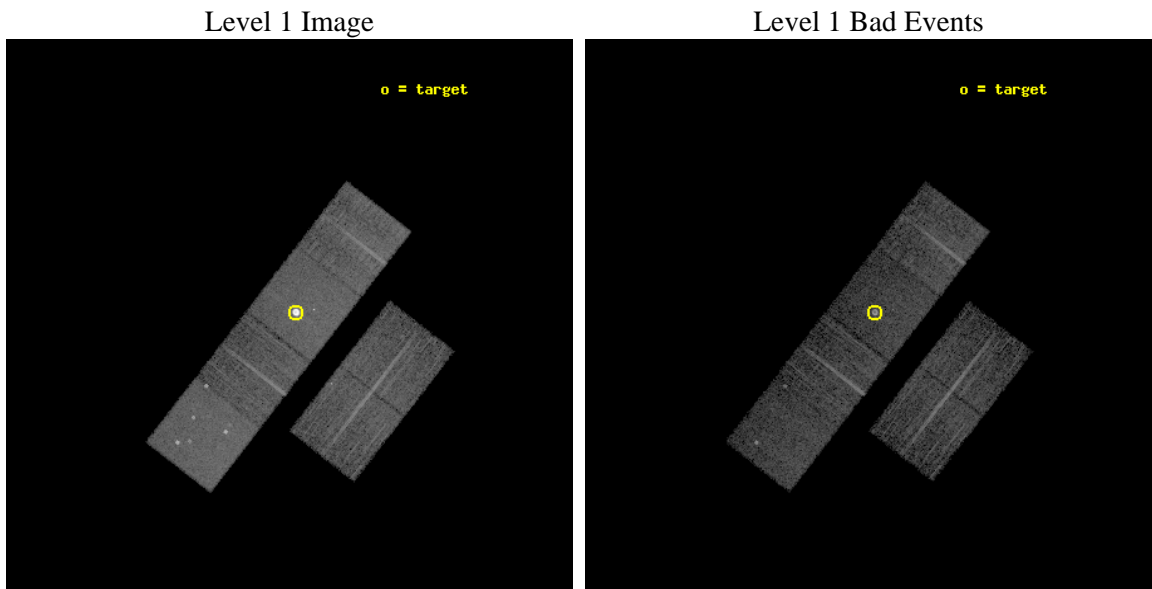
seq_num	590233	Sequence number
obs_id	2844	Observation id
title	AO3A ACIS-S CALIBRATION OBSERVATIONS OF E0102-72	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	E0102-72.3 [Chip S3, T=120, Offsets=-1.0.0]	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	16.01	Observer's specified target RA [deg]
dec_targ	-72.032028	Observer's specified target Dec [deg]
ra_nom	16.046668422536	Nominal RA [deg]
dec_nom	-72.049500930169	Nominal Dec [deg]
roll_nom	307.86717574364	Nominal Roll [deg]
revision	3	Processing version of data
ontime	7552.0000070184	Sum of GTIs [s]
livetime	7456.3720356611	Livetime [s]
ontime2	7552.0000070184	Sum of GTIs [s]
ontime3	7552.0000070184	Sum of GTIs [s]
ontime5	7552.0000070184	Sum of GTIs [s]
ontime6	7552.0000070184	Sum of GTIs [s]
ontime7	7552.0000070184	Sum of GTIs [s]
ontime8	7548.7590467632	Sum of GTIs [s]
l2events	138361	Number of level 2 events



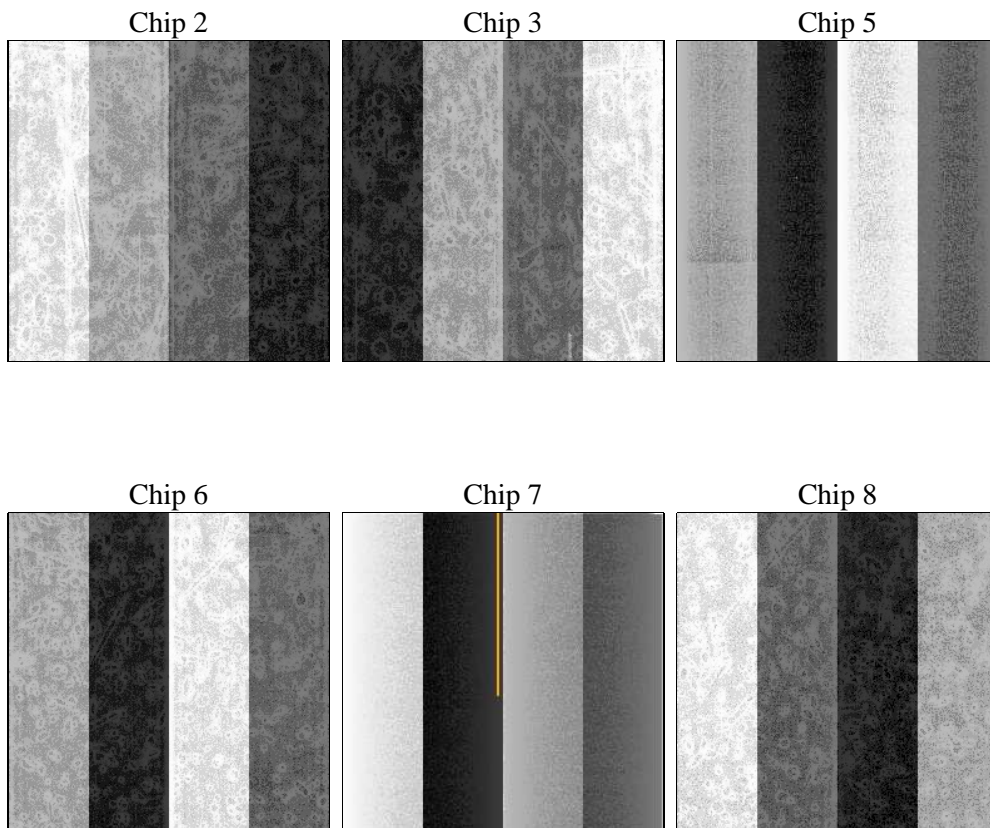
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	7800.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	7552.0000070184	Sum of GTIs [s]
caldbver	4.5.2	&#160	ontime2	7552.0000070184	Sum of GTIs [s]
date	2012-09-28T06:39:45	Date and time of file creation	ontime3	7552.0000070184	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	7552.0000070184	Sum of GTIs [s]
			ontime6	7552.0000070184	Sum of GTIs [s]
			ontime7	7552.0000070184	Sum of GTIs [s]
			ontime8	7548.7590467632	Sum of GTIs [s]
			l1events	408220	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	49615	47133	73042	49280	125059	64091	grade 0 events	2831	2537	5507	3143	25035	4106
rejected events	43473	41440	37671	42614	38351	51161		5%	5%	7%	6%	20%	6%
rejected %	87%	87%	51%	86%	30%	79%	grade 1 events	15	24	205	24	527	36
								0%	0%	0%	0%	0%	0%
							grade 2 events	1300	1110	10157	1262	21329	2833
								2%	2%	13%	2%	17%	4%
							grade 3 events	512	534	1493	552	9411	1342
								1%	1%	2%	1%	7%	2%
							grade 4 events	516	538	1354	572	9471	1262
								1%	1%	1%	1%	7%	1%
							grade 5 events	1700	1843	5623	2139	7094	2560
								3%	3%	7%	4%	5%	3%
							grade 6 events	987	976	16893	1144	21531	3394
								1%	2%	23%	2%	17%	5%
							grade 7 events	41754	39571	31810	40444	30661	48558
								84%	83%	43%	82%	24%	75%

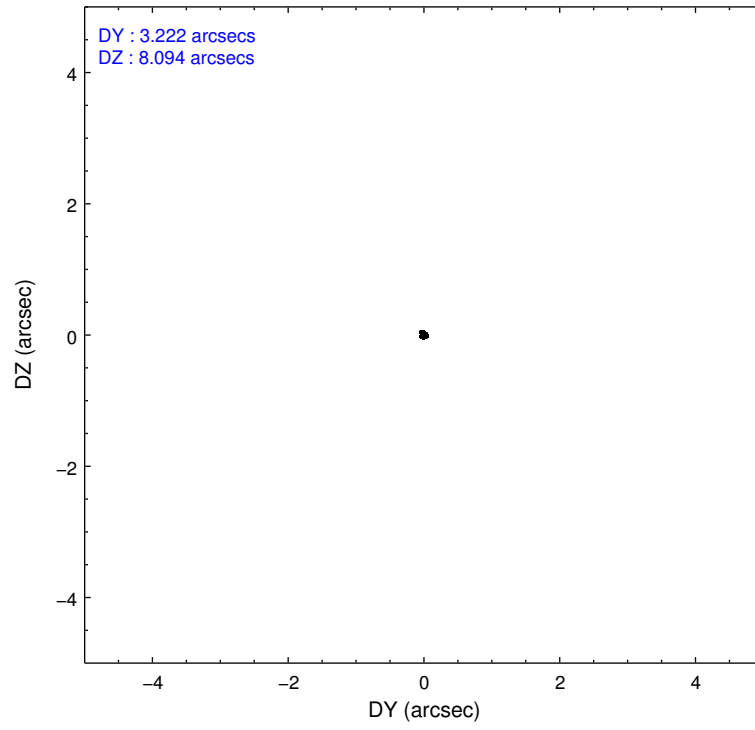
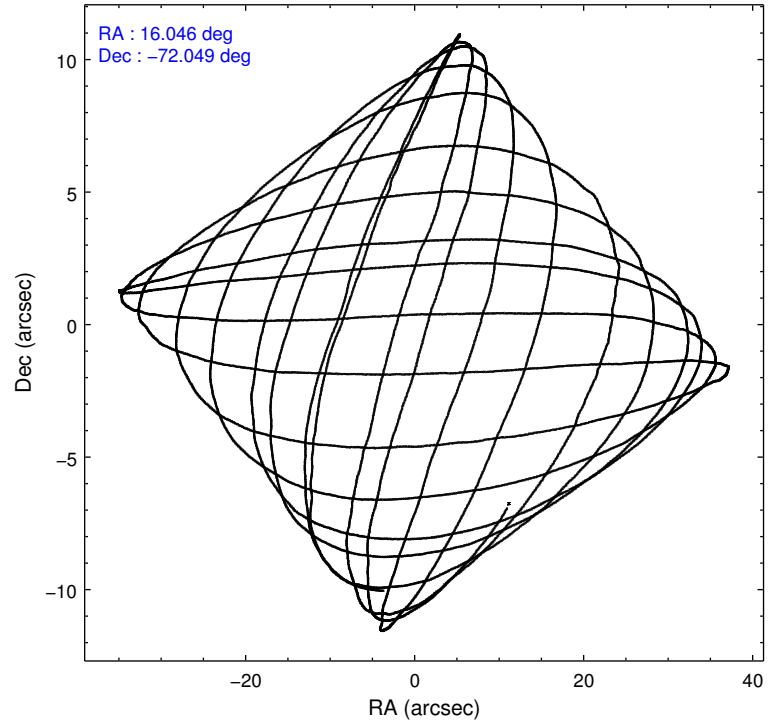


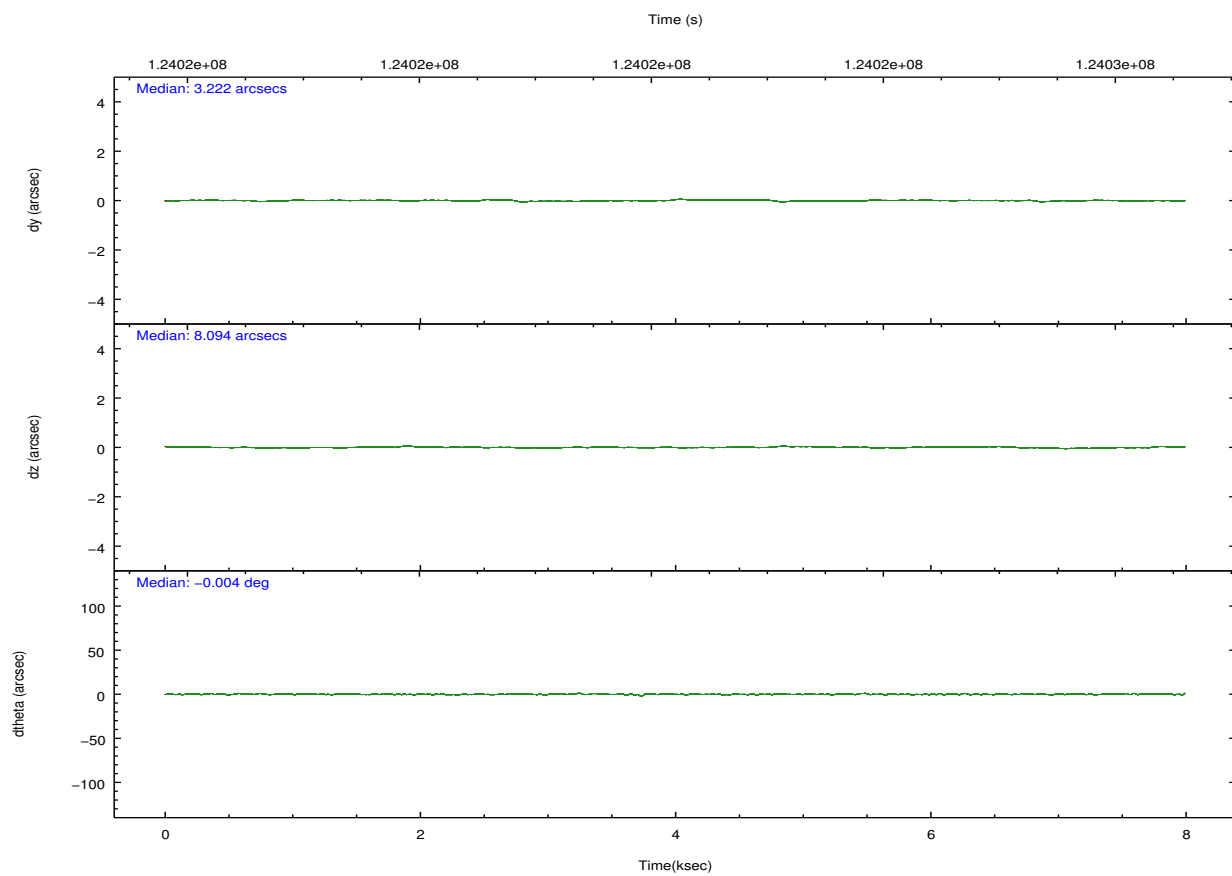
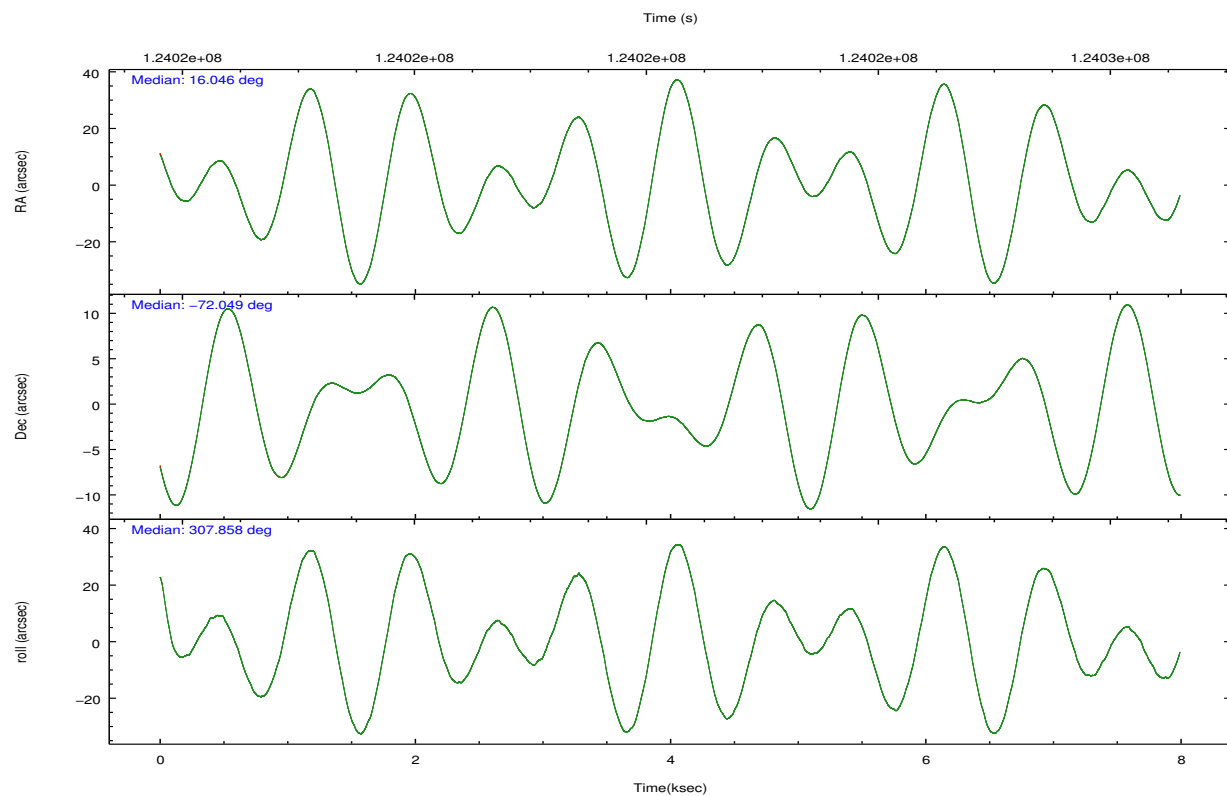
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-235678	ACIS-235678
Grating	NONE	NONE
Data mode	FAINT	FAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	15.964519	16.0466684225357
[deg] Pointing Dec	-72.039483	-72.04950093016862
[deg] Pointing Roll	307.632389	307.8671757436428
[s] Window start time (MET)	123552064.184000	123552064.184000
[s] Window stop time (MET)	126144064.184000	126144064.184000
[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)	124018399.184000	124018023.14818
Observation start date	2001-12-06T09:32:15	2001-12-06T09:27:03
[s] Observation end time (MET)	124026199.184000	124026332.82351
Observation end date	2001-12-06T11:42:15	2001-12-06T11:45:32
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



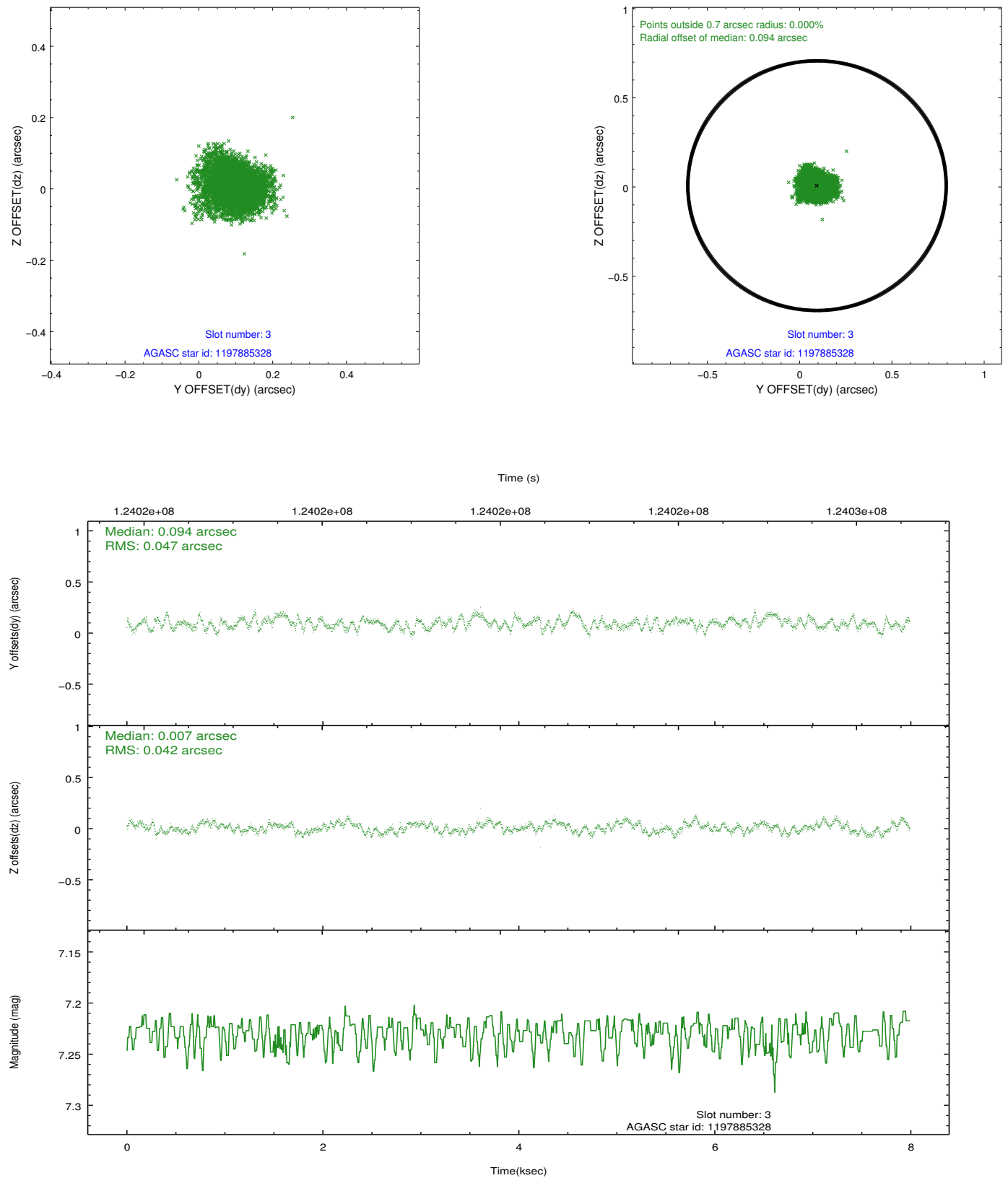


### Slot Statistics

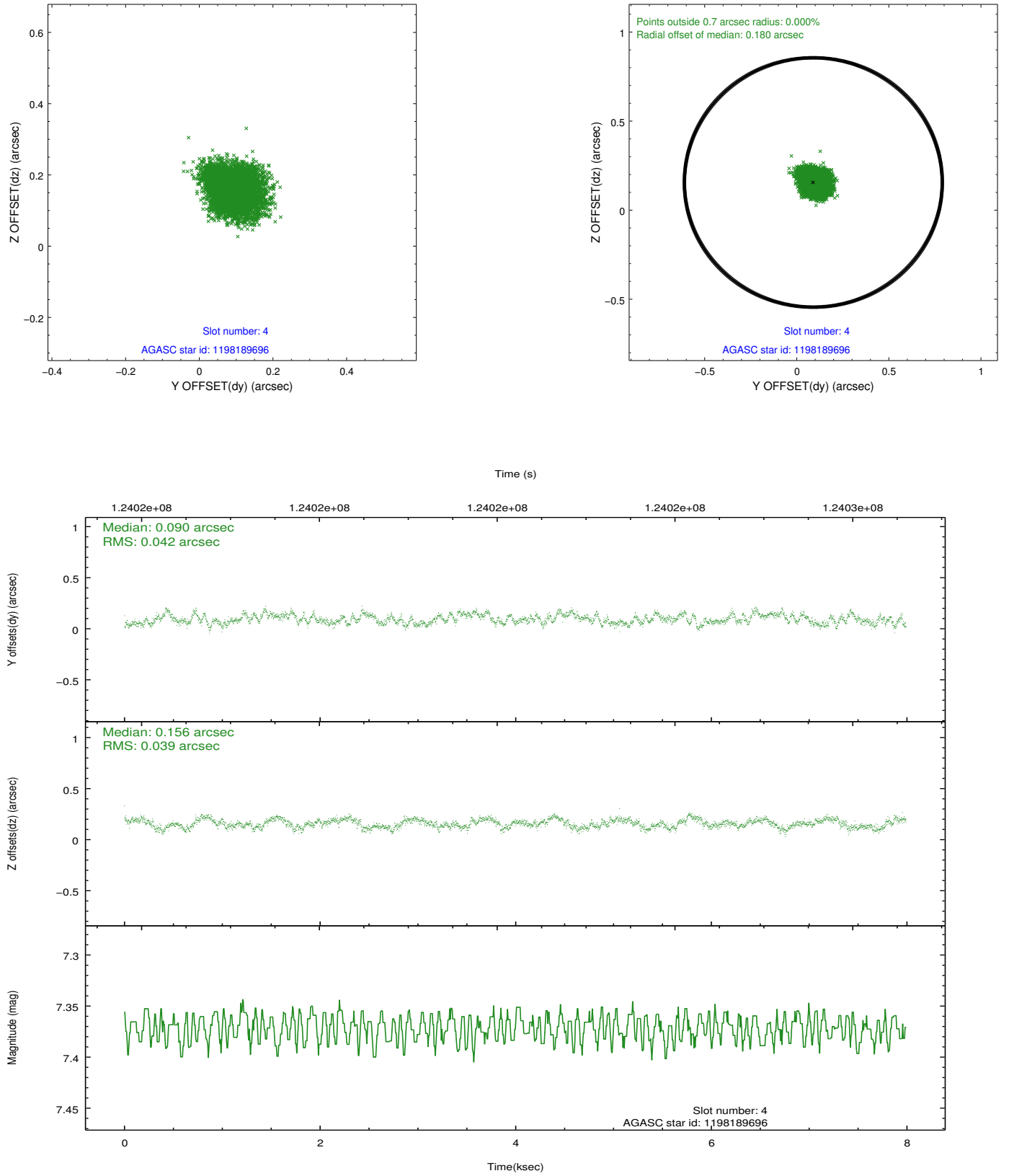
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	1949	-0.002	-0.005	0.007	0.011	0.000000	0.000000	-755.88	-1729.24
1	FID	ACIS-S-4	7.20	1949	-0.031	0.002	0.006	0.011	0.000000	0.000000	2157.06	178.51
2	FID	ACIS-S-5	7.24	1949	0.002	0.011	0.007	0.012	0.000000	0.000000	-1807.80	173.02
3	GUIDE	1197885328	7.23	3897	0.094	0.007	0.068	0.106	16.283090	-71.733943	-650.62	956.68
4	GUIDE	1198189696	7.37	3898	0.090	0.156	0.063	0.096	15.223750	-72.697522	1396.19	-2076.14
5	GUIDE	1197884536	8.50	3896	0.072	0.120	0.084	0.131	17.160729	-71.835289	248.51	1504.29
6	GUIDE	1197878768	9.63	3897	0.097	0.007	0.117	0.183	16.656786	-71.304581	-1603.85	2246.39
7	BAD	1197749416	10.27	3713	-0.357	-0.305	0.166	0.270	13.610513	-71.871242	-2048.60	-1747.79

## 2.4 Star Slots

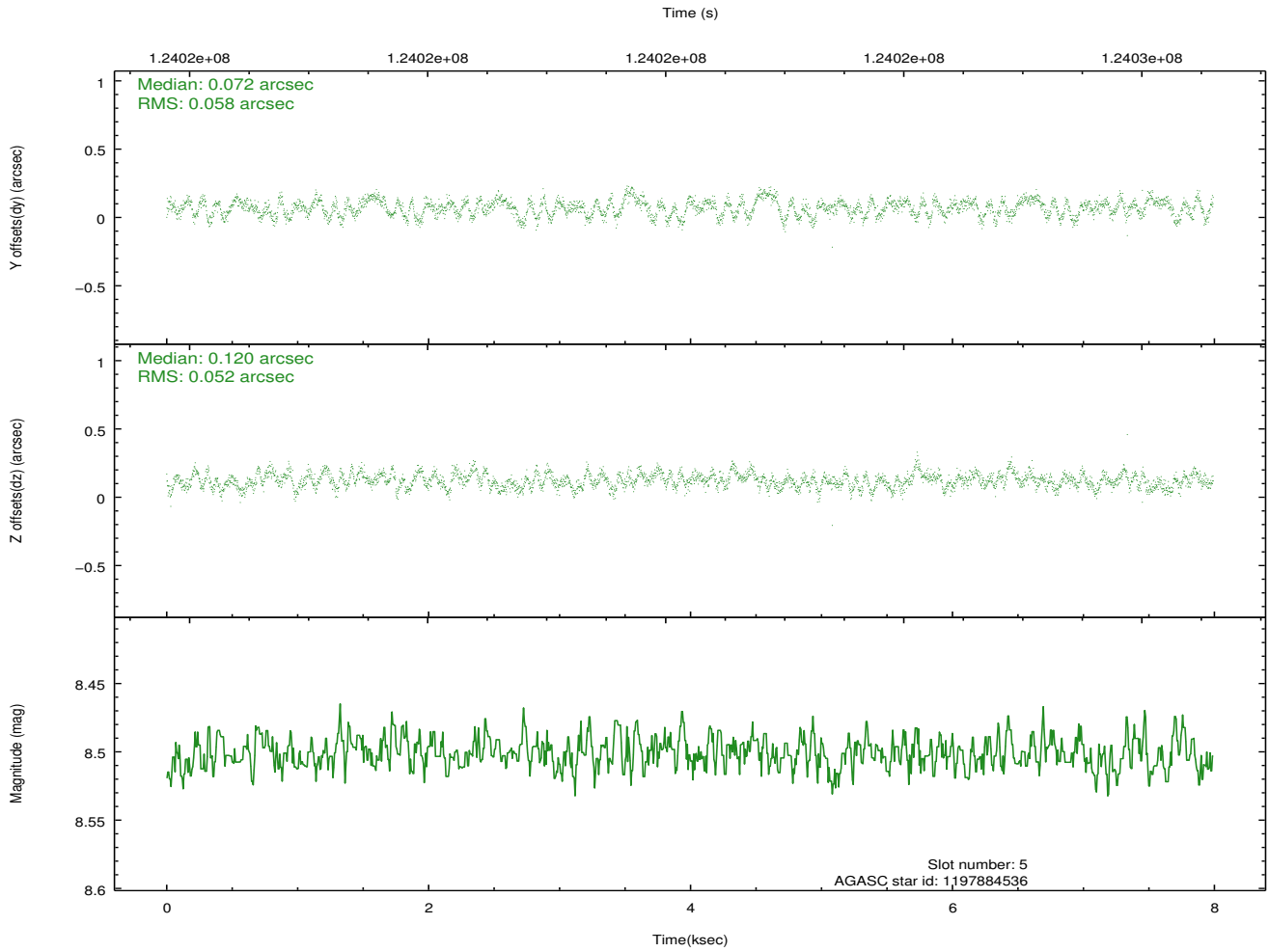
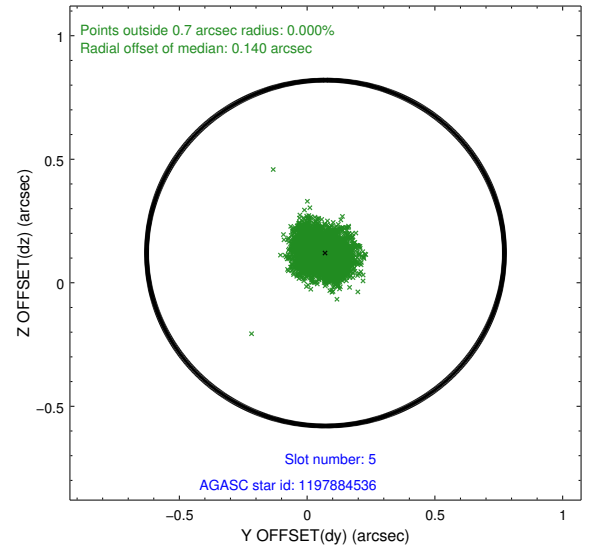
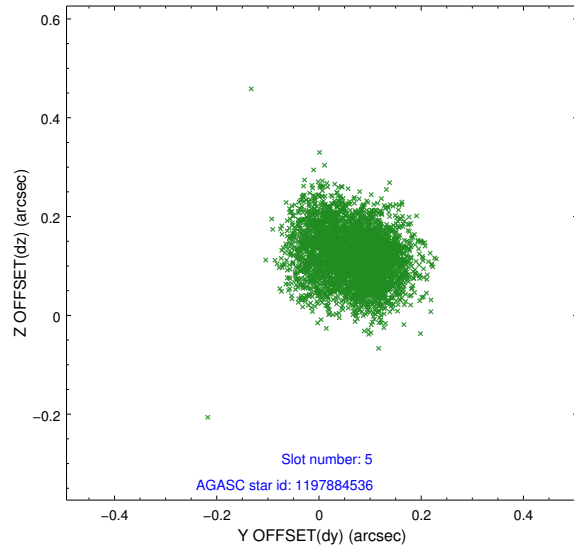
### 2.4.1 Slot 3



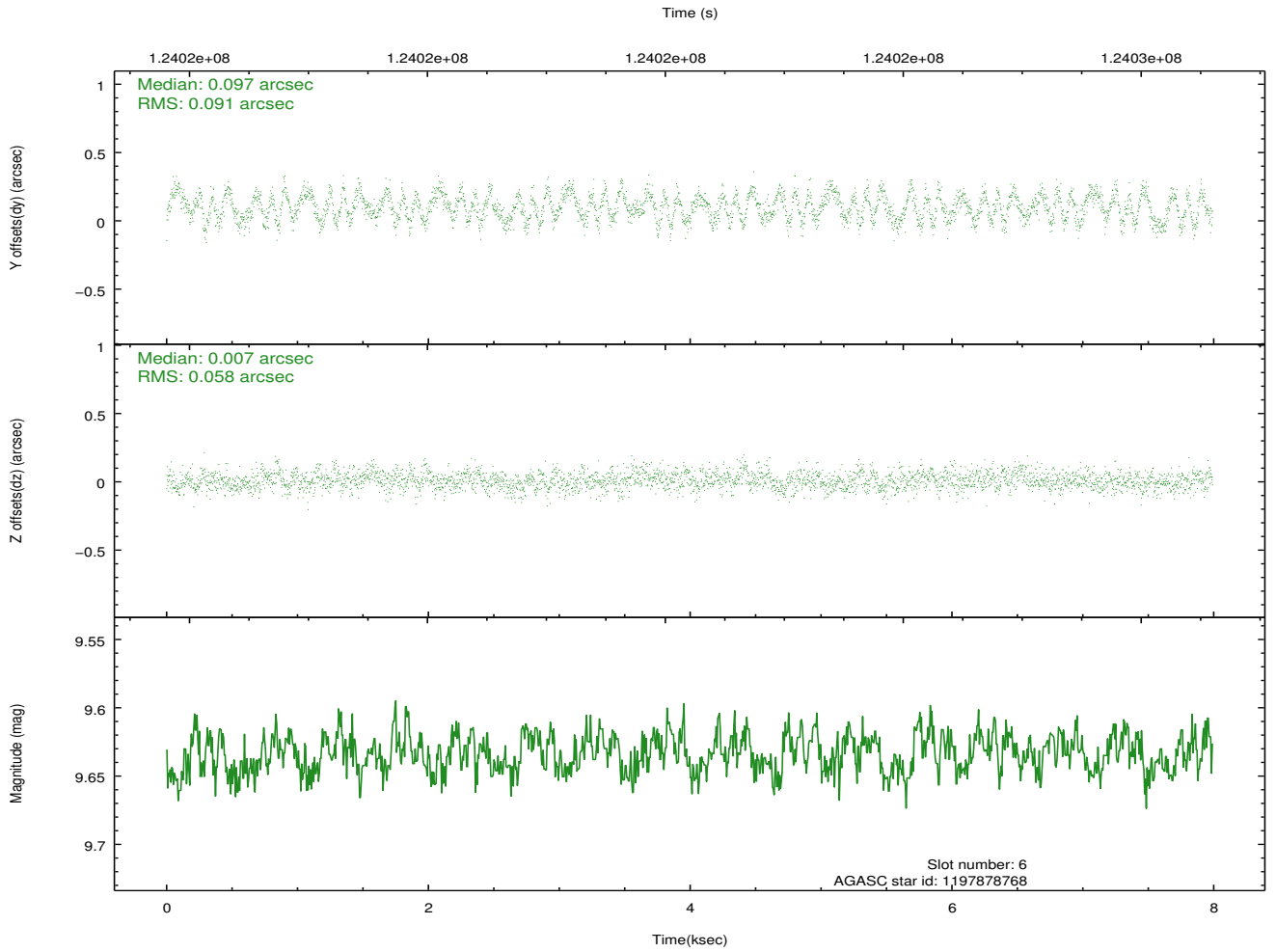
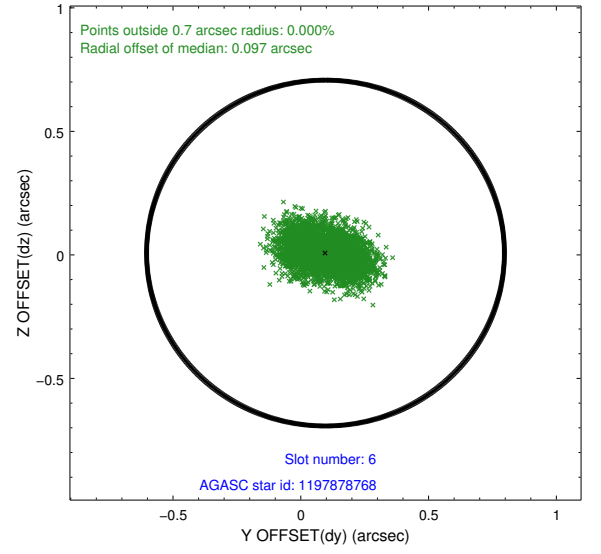
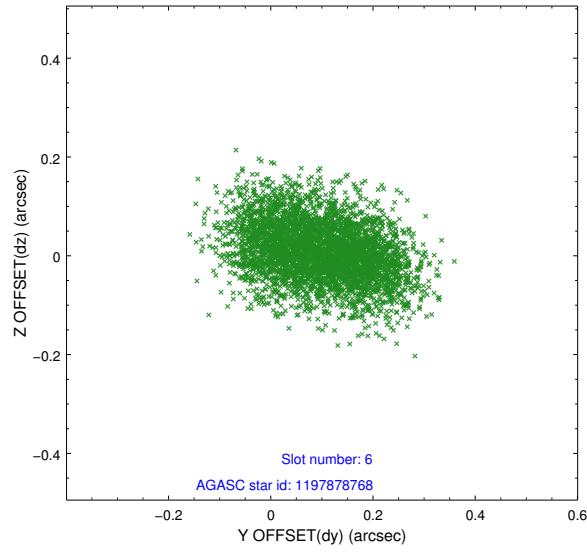
## 2.4.2 Slot 4



### 2.4.3 Slot 5

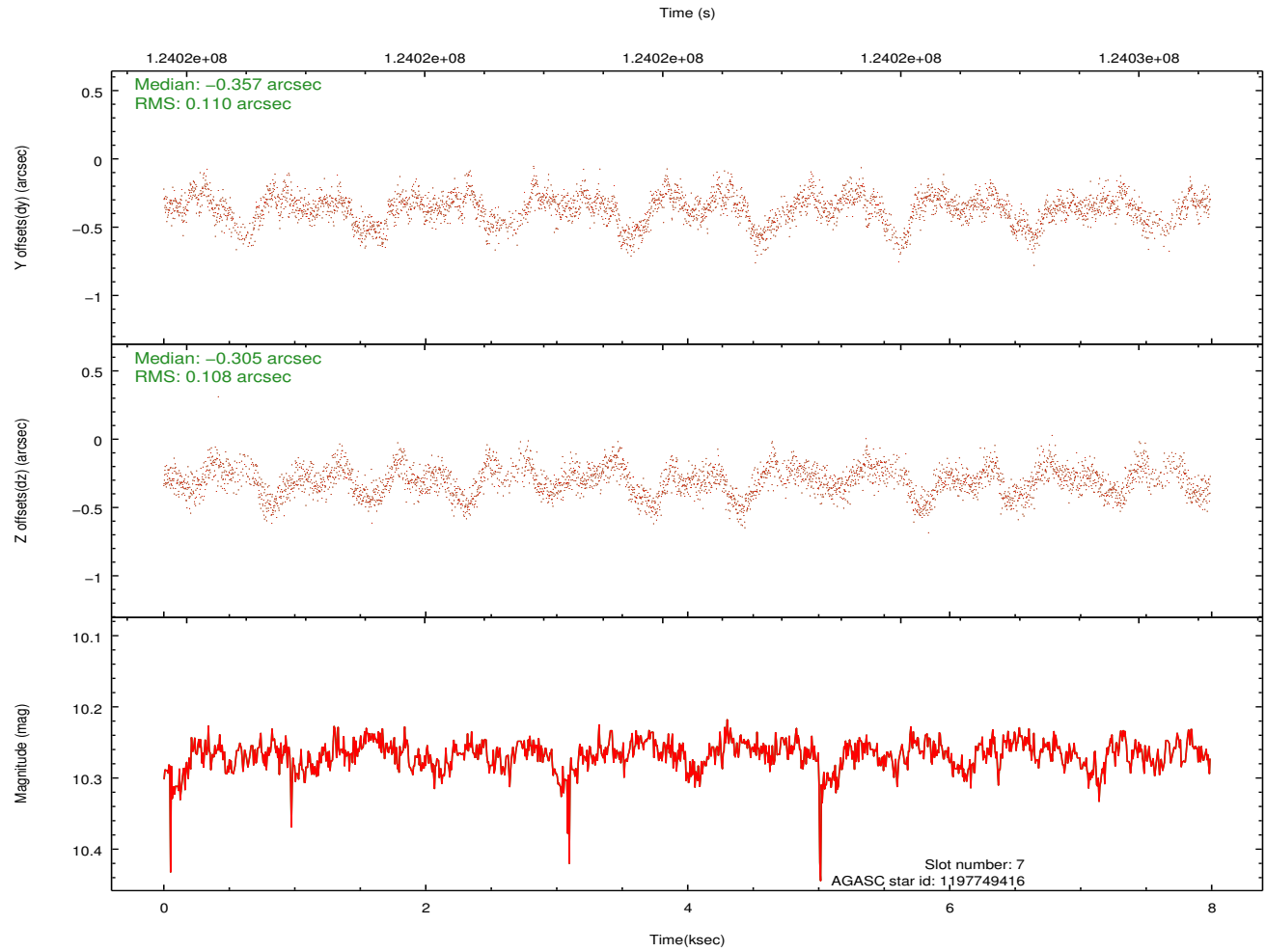
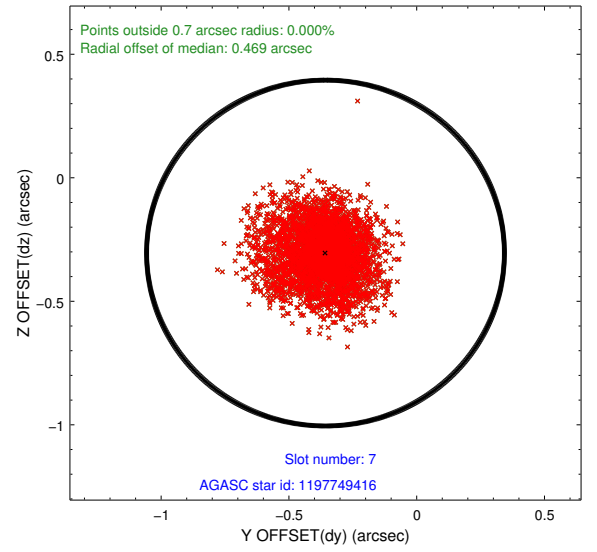
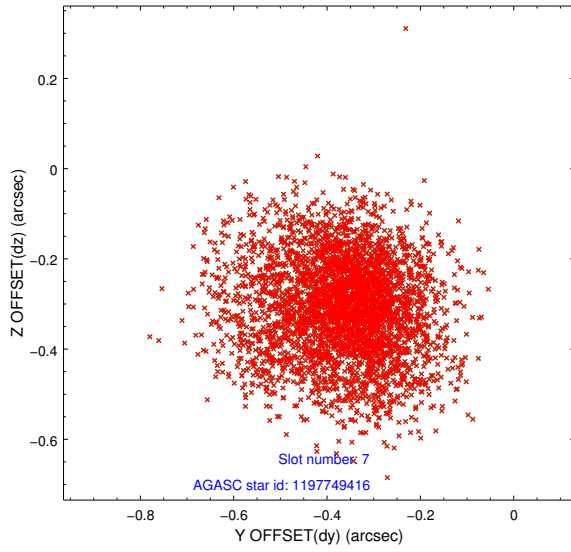


## 2.4.4 Slot 6



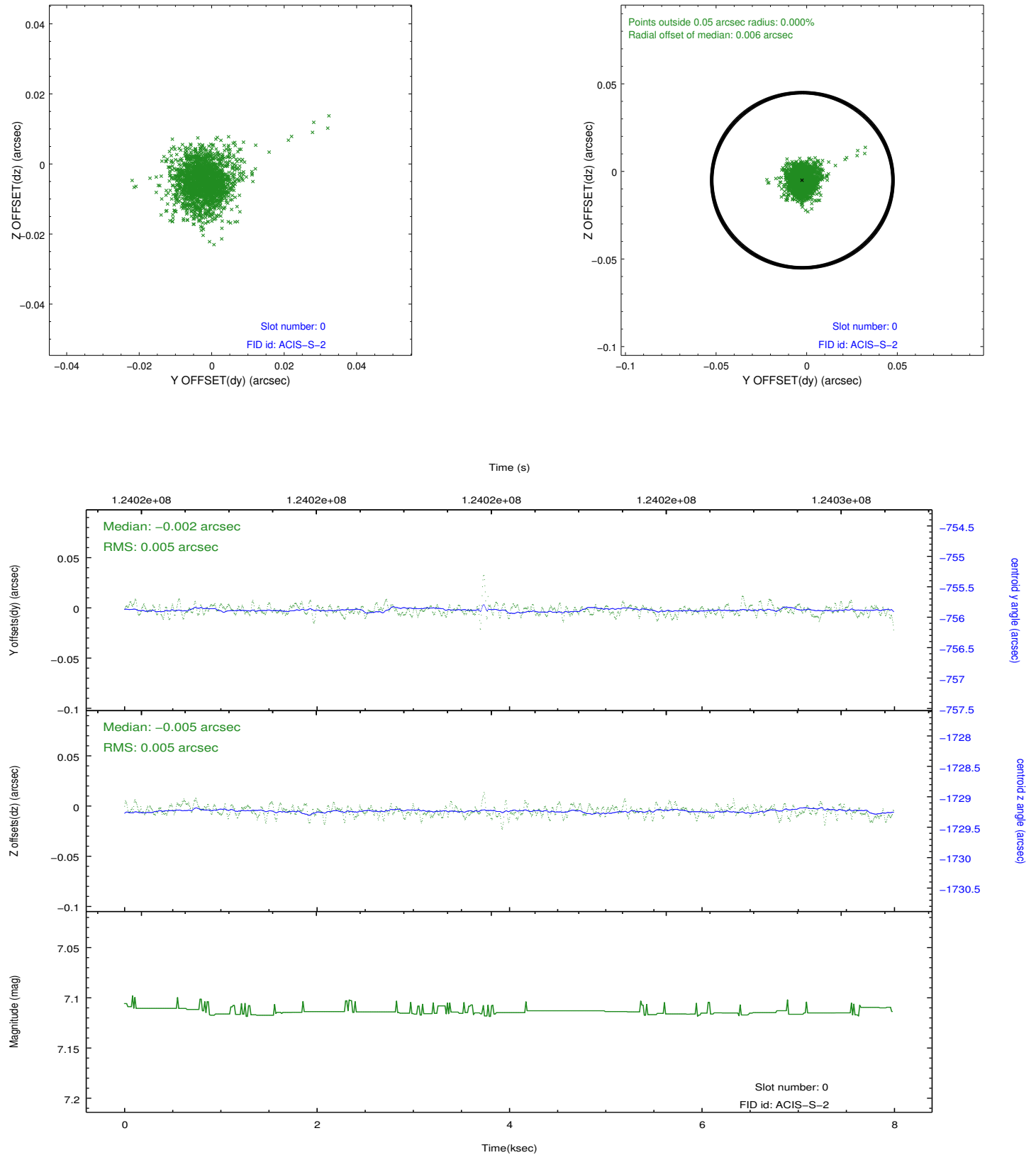


### 2.4.5 Slot 7

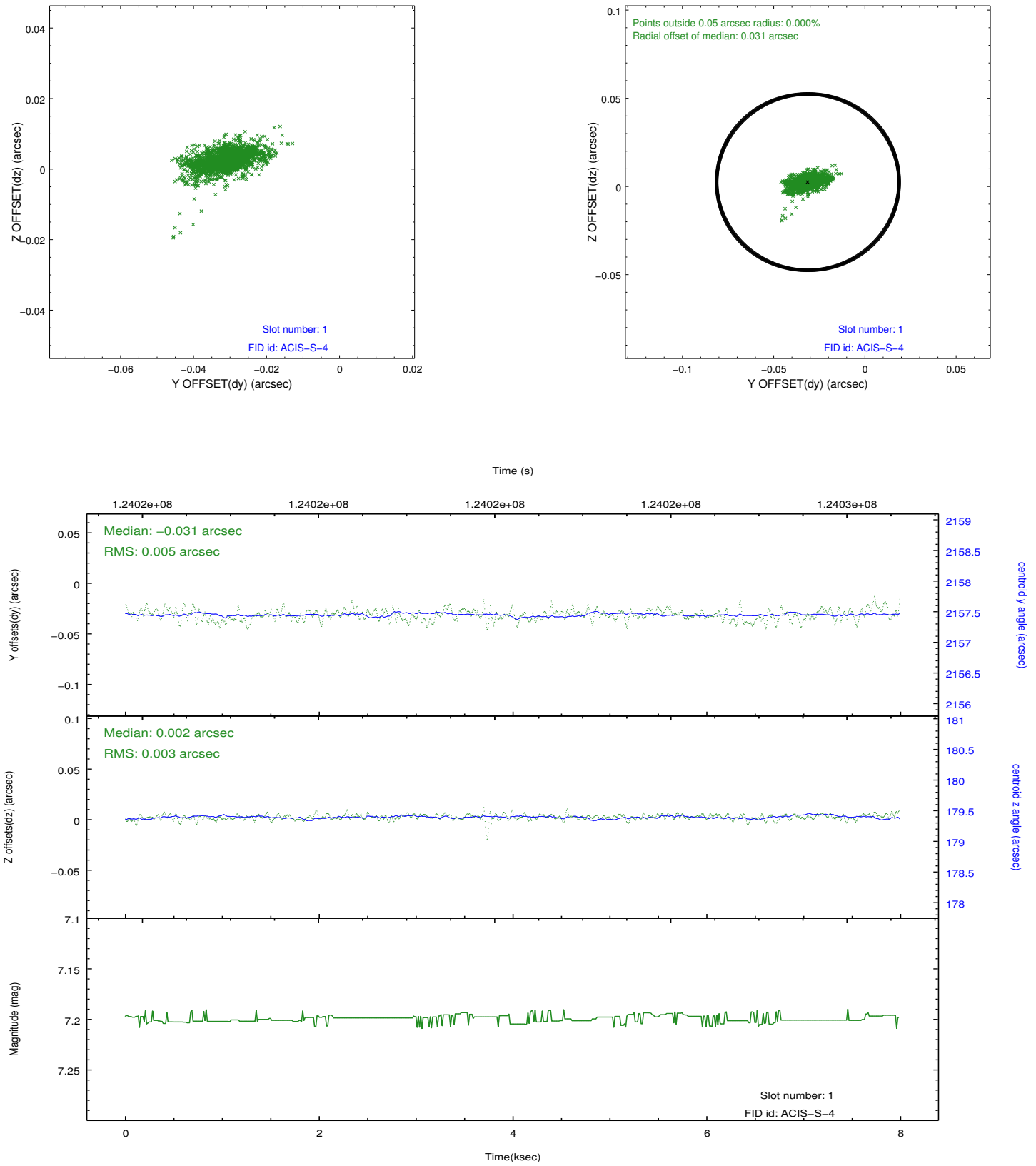


## 2.5 FID Slots

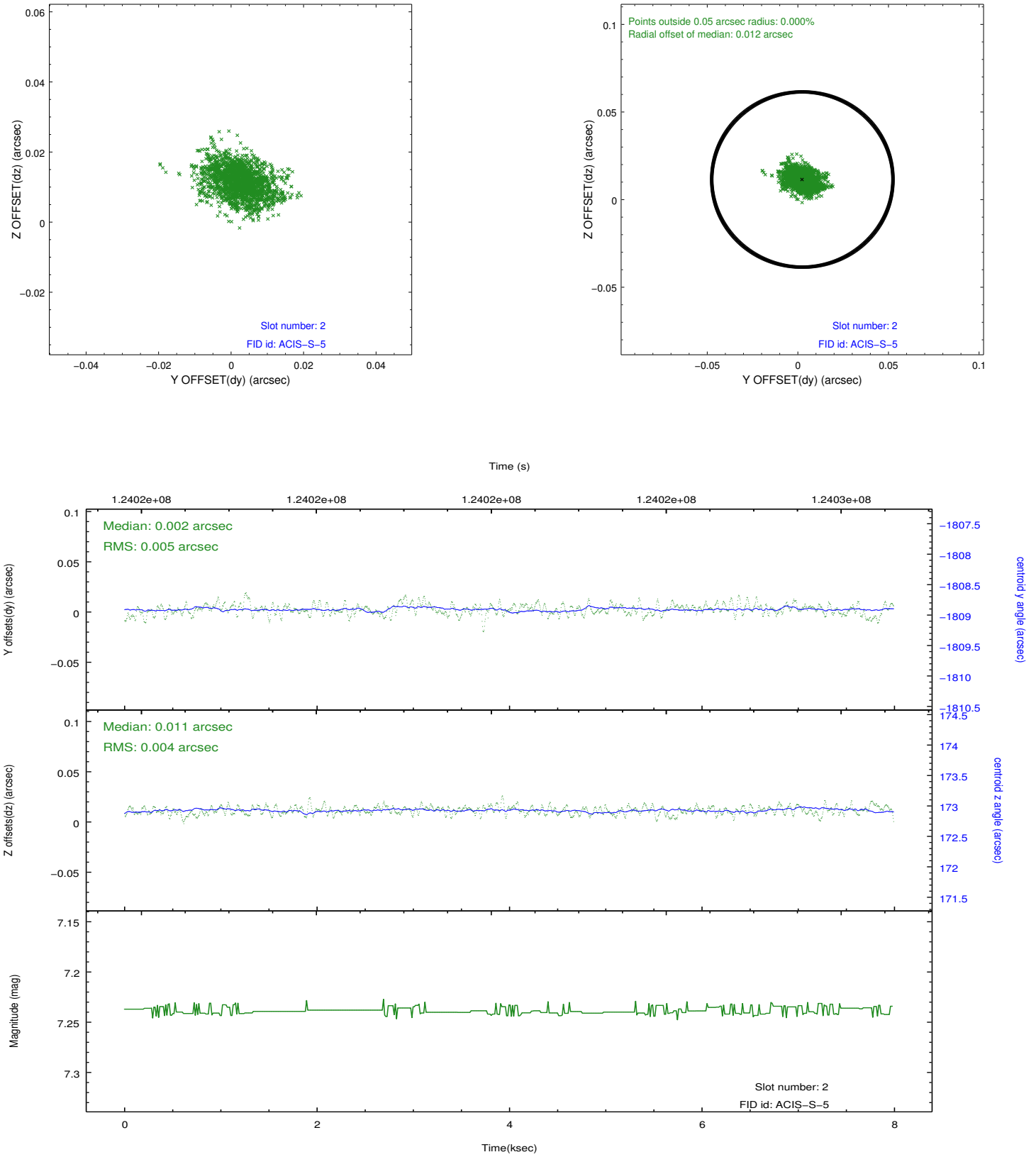
### 2.5.1 Slot 0



## 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)	2012.10.25
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	7.555

### A.2 Comments

Window preference met.