

# V&V Reference Report

## L2 ASCDS Version : 8.4.3

Observation 13633 - L2 Version 1  
Chandra X-Ray Center

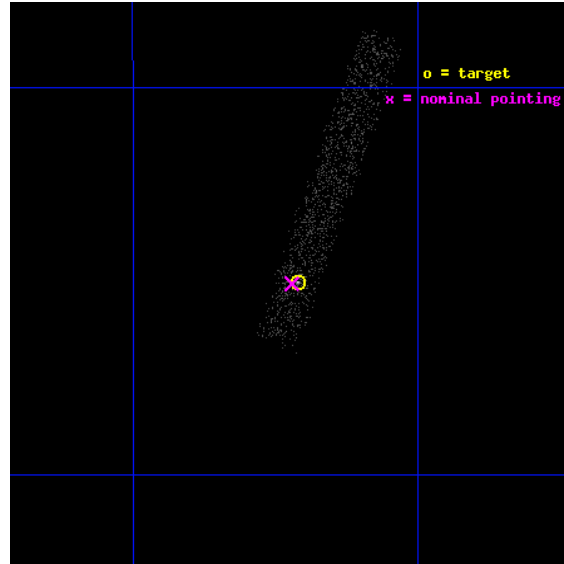
L2 Processing Date : Feb 10 2012

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# 1 Front

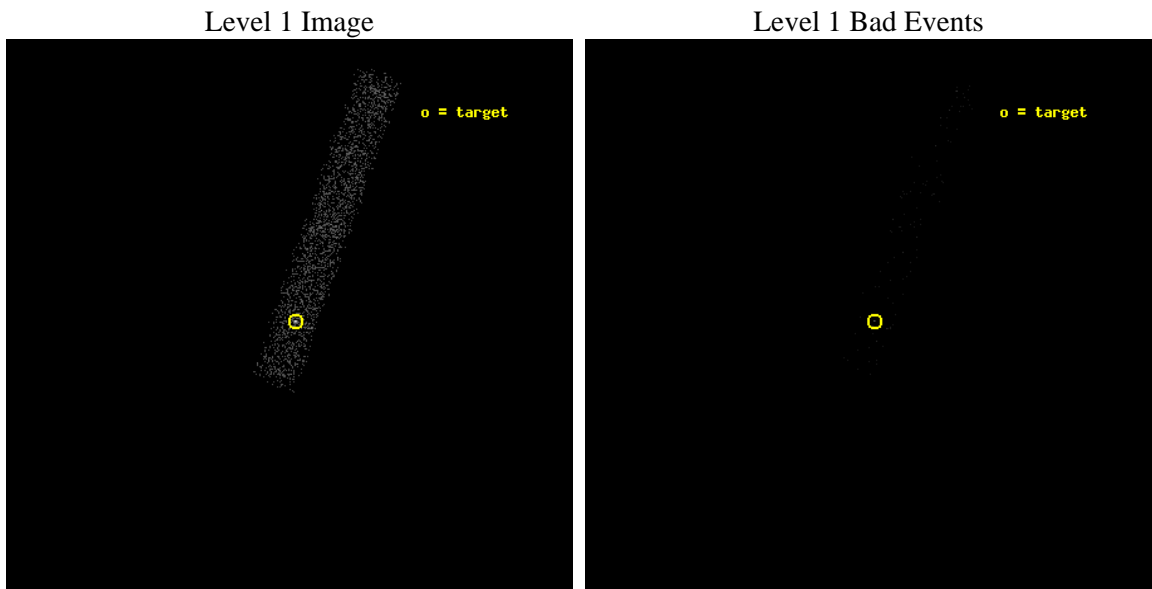
seq_num	200787	Sequence number
obs_id	13633	Observation id
title	A Search for X-ray Emission from Colliding Magnetospheres in Young Eccentric Stellar Binaries	Proposal title
observer	Dr. Konstantin Getman	Principal investigator
object	Parenago523_P1	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	82.6775	Observer's specified target RA [deg]
dec_targ	-4.583861	Observer's specified target Dec [deg]
ra_nom	82.68042893242	Nominal RA [deg]
dec_nom	-4.5846132568105	Nominal Dec [deg]
roll_nom	289.29851604395	Nominal Roll [deg]
revision	1	Processing version of data
ontime	3069.0521699786	Sum of GTIs [s]
livetime	2783.4683203144	Livetime [s]
ontime7	3069.0521699786	Sum of GTIs [s]
l2events	2192	Number of level 2 events



## 2 OBI

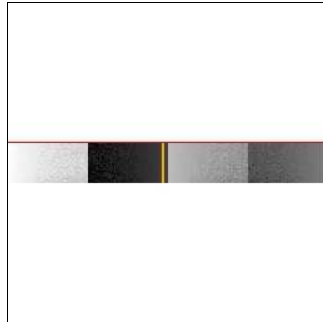
### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias

Chip 7



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	3000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	3069.0521699786	Sum of GTIs [s]
caldsver	4.4.7	&#160	ontime7	3069.0521699786	Sum of GTIs [s]
date	2012-02-10T07:29:46	Date and time of file creation	l1events	3532	Number of level 1 events
revision	1	Processing version of data			

### 2.1.4 Events

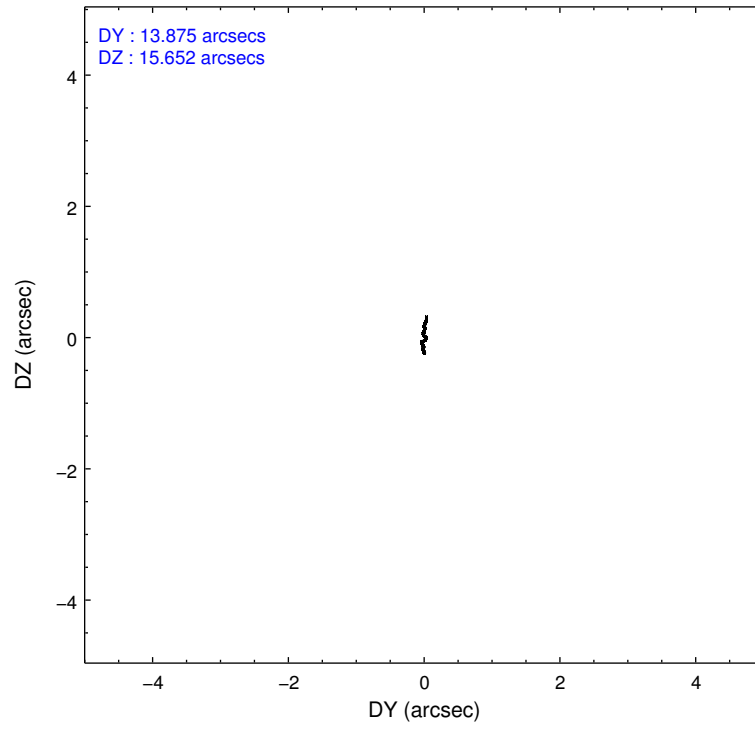
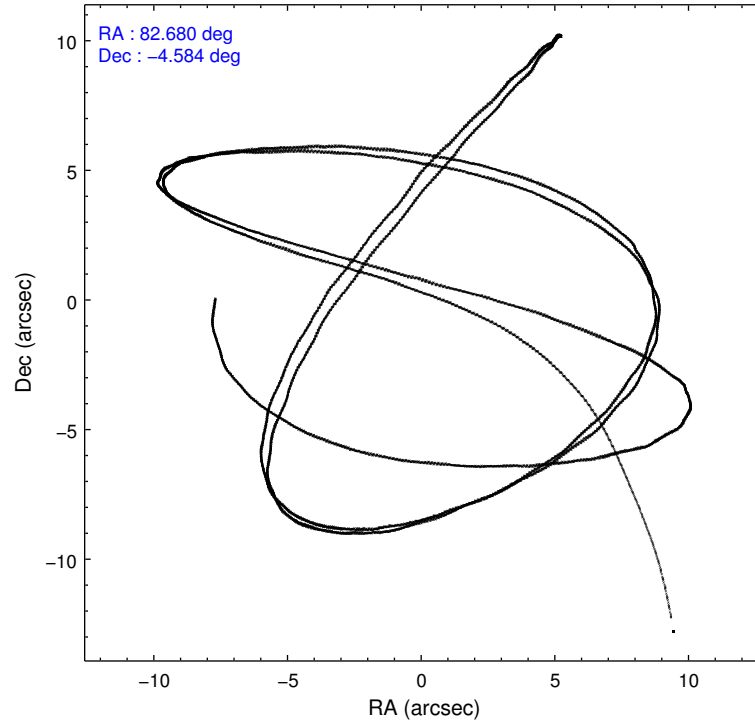
	<b>ccd 7</b>
level 1 events	3532
rejected events	1250
rejected %	35%

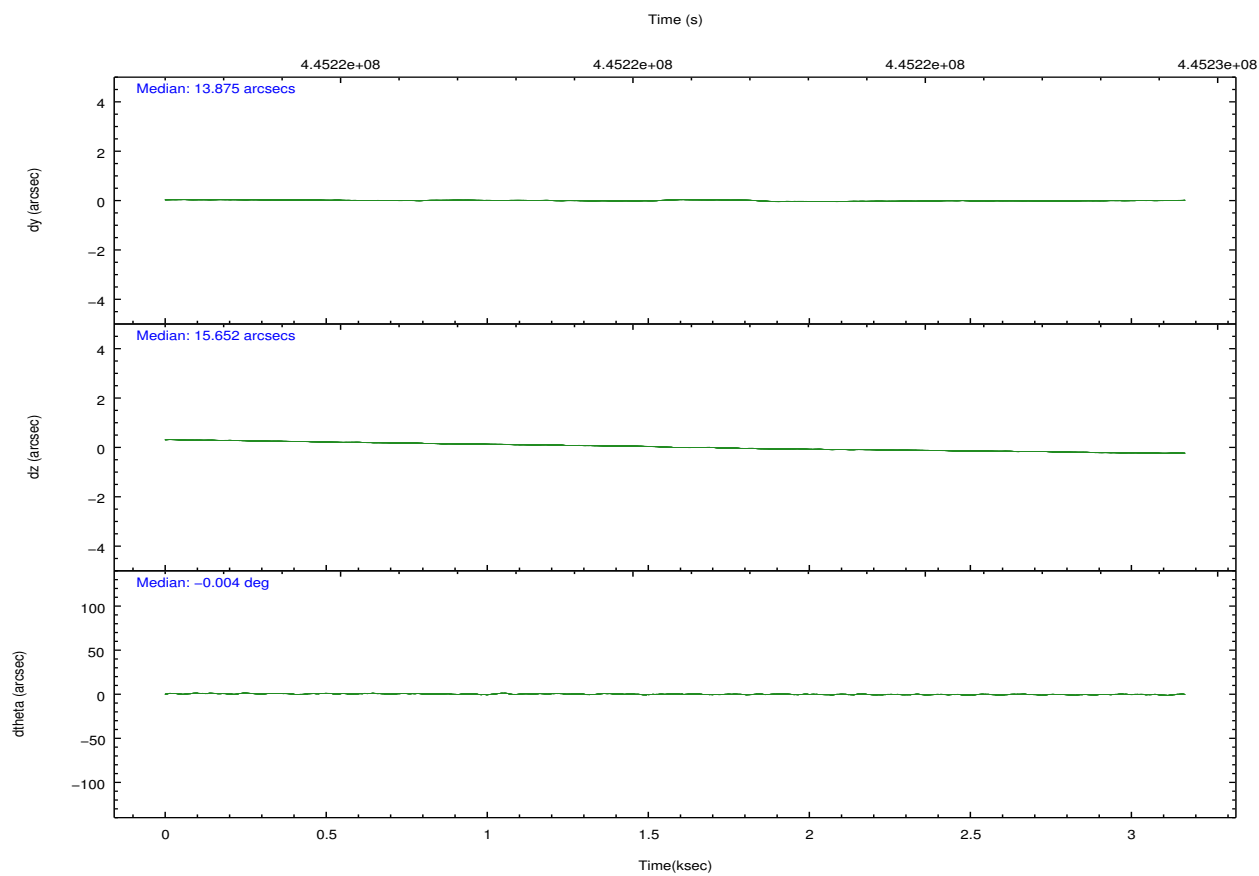
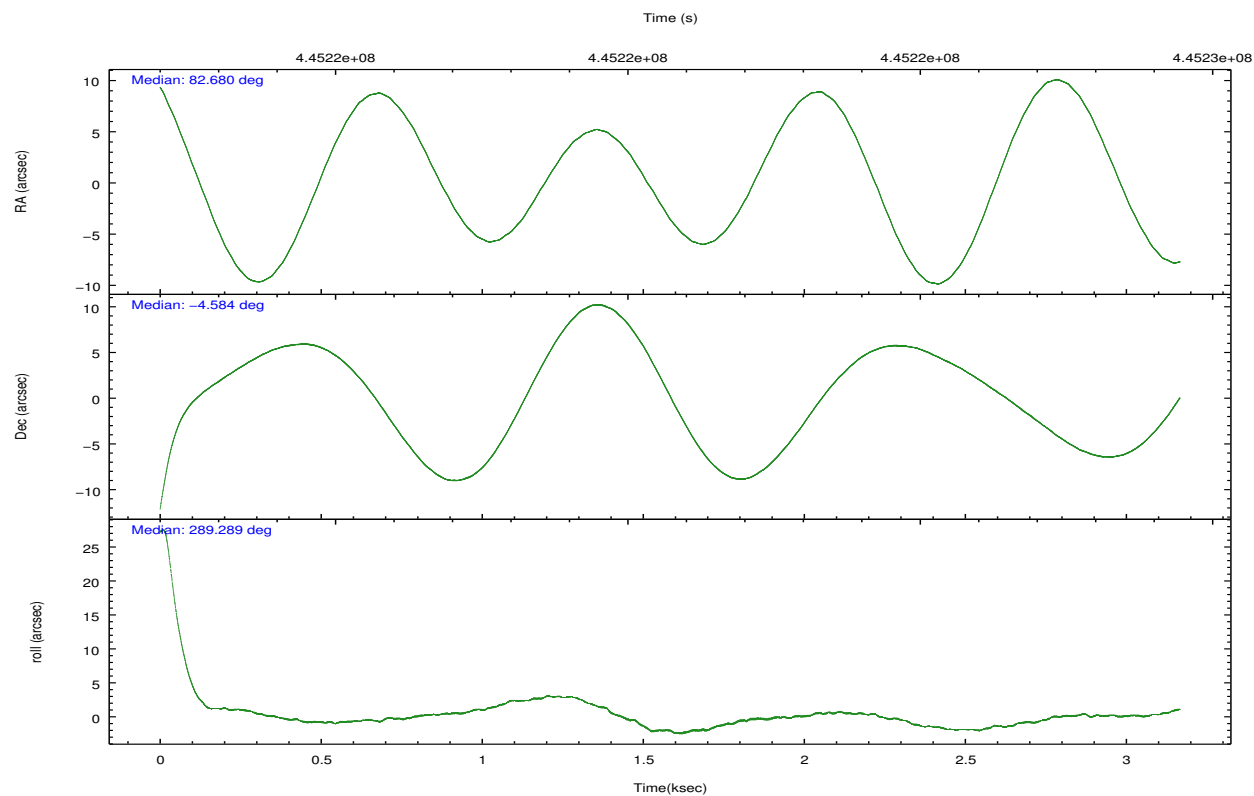
	<b>ccd 7</b>
grade 0 events	412
	11%
grade 1 events	5
	0%
grade 2 events	493
	13%
grade 3 events	303
	8%
grade 4 events	276
	7%
grade 5 events	292
	8%
grade 6 events	801
	22%
grade 7 events	950
	26%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-7	ACIS-7	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	82.659421	82.6804289324198	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	-4.567004	-4.584613256810518	Subarray start row	449	449
[deg] Pointing Roll	289.140119	289.298516043948	Subarray row count	128	128
[mm] SIM focus pos	-0.684267	-0.6828225247311905	Alternating exposures requested	N	N
[mm] SIM defocus	0	0.001444936568705701	[s] Primary exposure time	0.000000	0.4
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
Phase constraints	Y	Y			
[d] Phase period	40.573800	40.573800			
[d] Phase epoch (MJD)	55602.135800	55602.135800			
Phase start	0.990000	0.990000			
Phase end	1.000000	1.000000			
Phase start error	0.005000	0.005000			
Phase end error	0.005000	0.005000			
[s] Observation start time (MET)	445222727.184000	445221002.61613			
Observation start date	2012-02-10T00:57:41	2012-02-10T00:30:02			
[s] Observation end time (MET)	445225727.184000	445227052.16645			
Observation end date	2012-02-10T01:47:41	2012-02-10T02:10:52			
Read mode	TIMED	TIMED			

## 2.3 Aspect





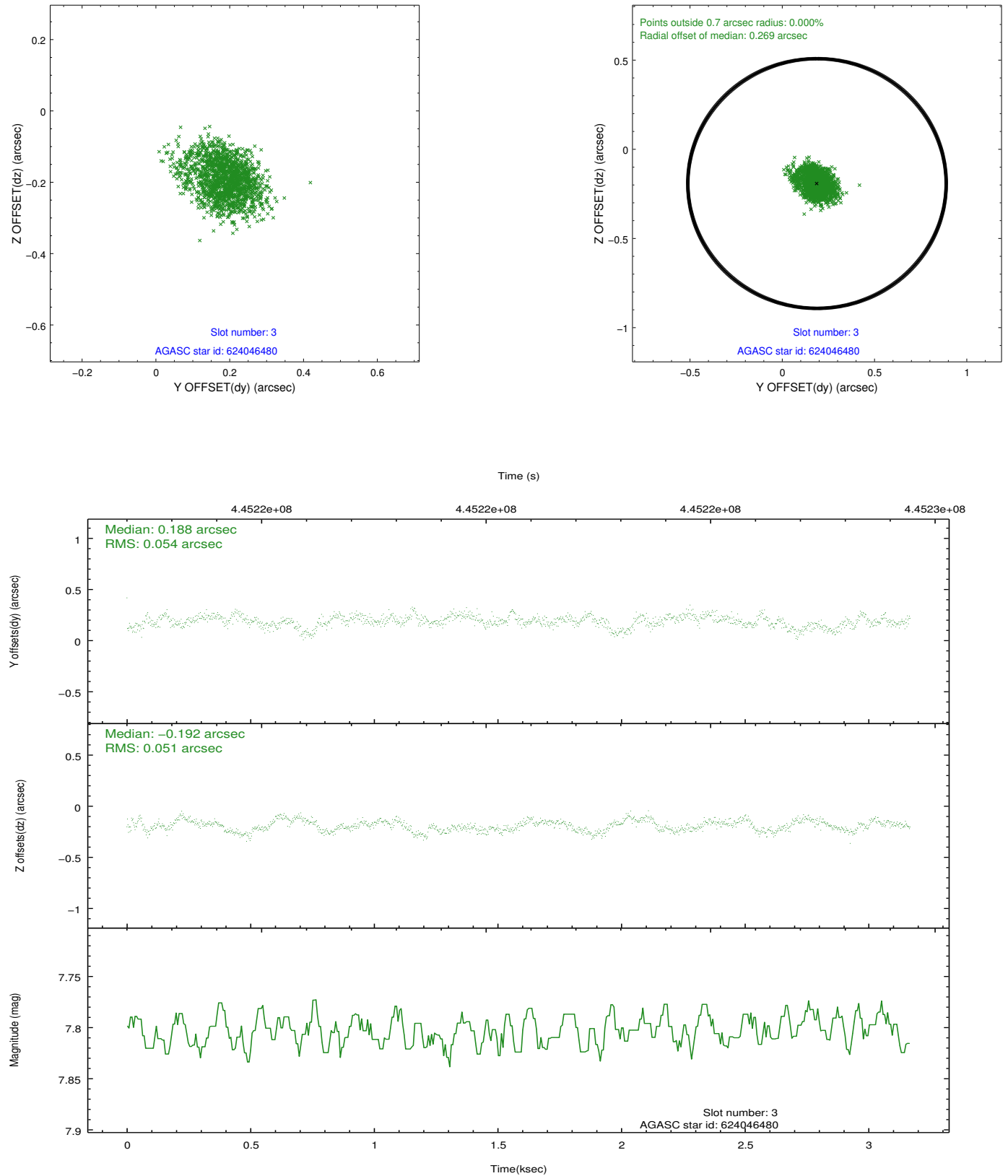
### Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.90	773	-0.072	0.001	0.006	0.011	0.000000	0.000000	-766.89	-1737.02
1	FID	ACIS-S-4	6.99	773	0.220	0.035	0.005	0.009	0.000000	0.000000	2145.76	169.41
2	FID	ACIS-S-5	7.02	773	-0.179	-0.027	0.006	0.011	0.000000	0.000000	-1817.26	165.31
3	GUIDE	624046480	7.80	1546	0.188	-0.192	0.079	0.126	82.138440	-4.697024	-169.43	-1919.39
4	GUIDE	625739824	8.55	1546	-0.006	-0.028	0.070	0.115	83.062265	-4.320705	-363.37	1655.88
5	GUIDE	625745120	8.04	1545	0.012	0.061	0.085	0.135	83.237850	-4.566478	679.23	1963.01
6	GUIDE	624037456	8.99	1534	0.086	-0.083	0.107	0.198	81.836743	-4.279478	-1943.71	-2450.06
7	GUIDE	624034448	8.31	1544	-0.280	0.241	0.068	0.108	82.155578	-4.175293	-1926.00	-1248.12

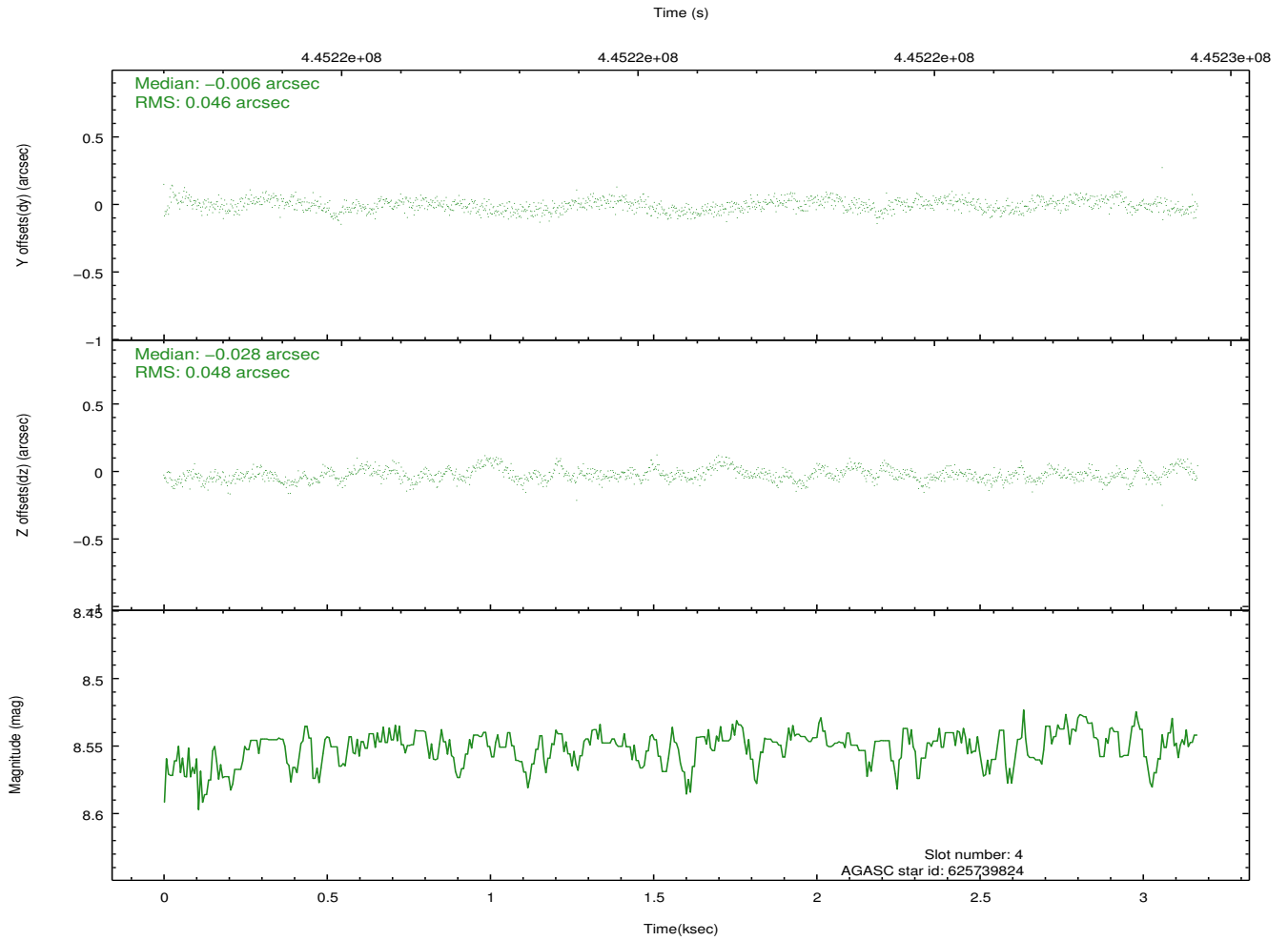
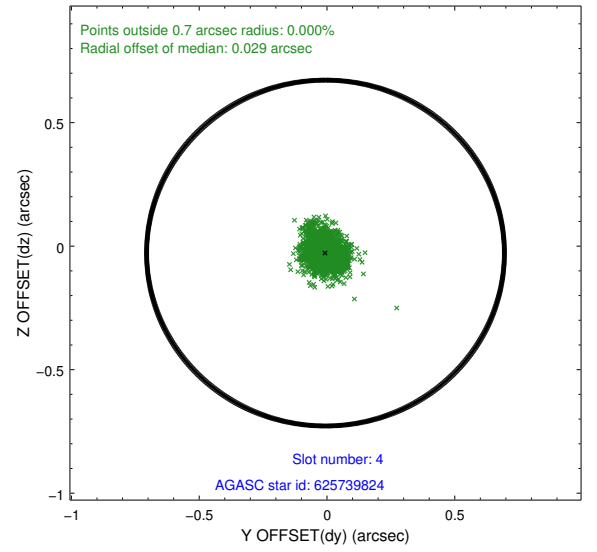
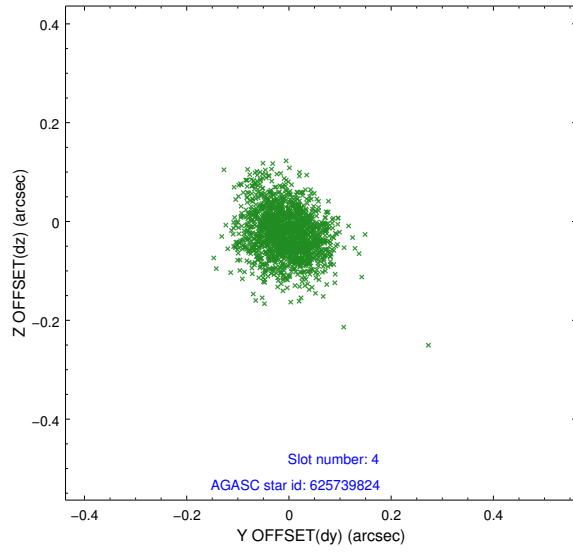


## 2.4 Star Slots

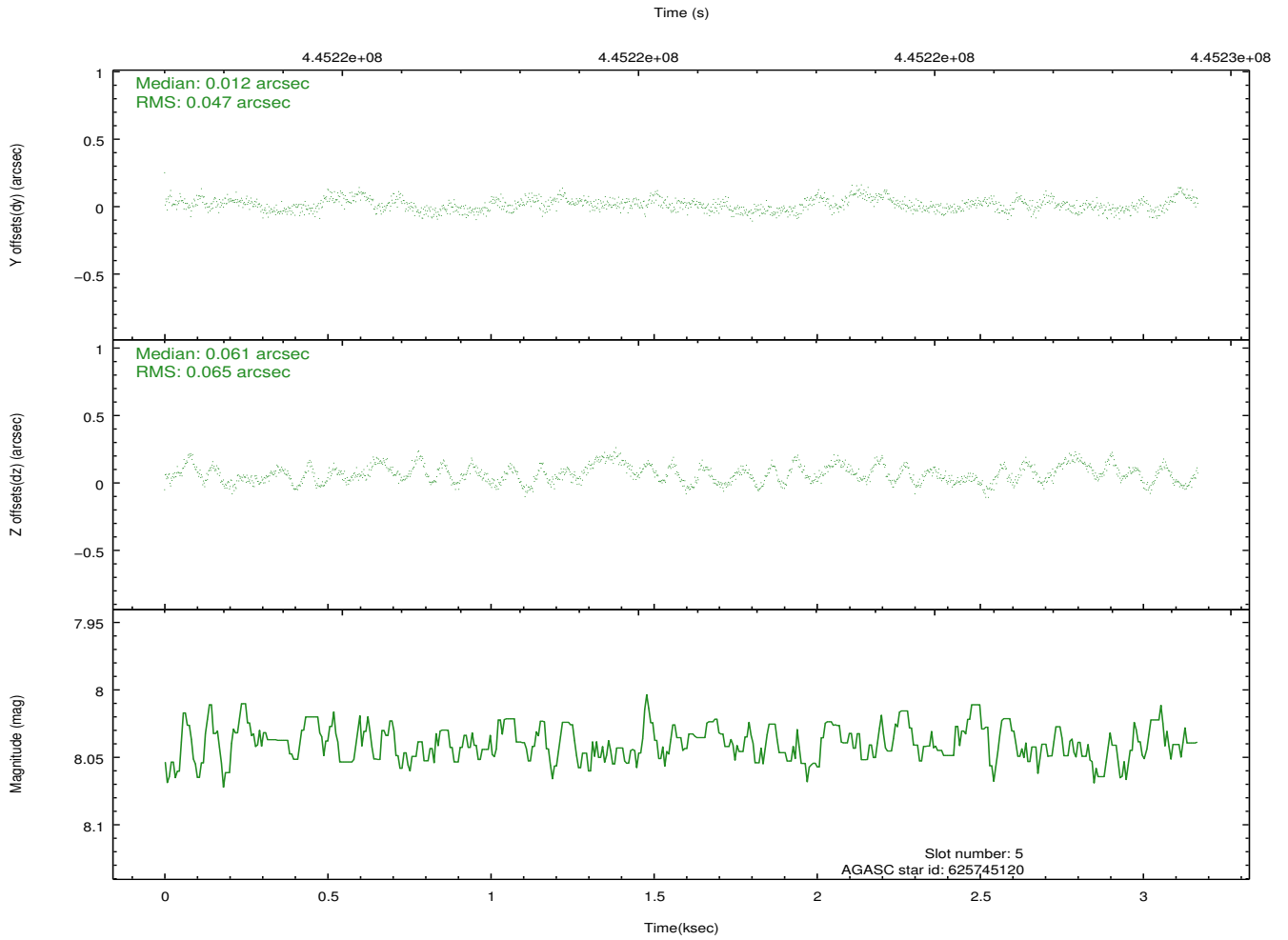
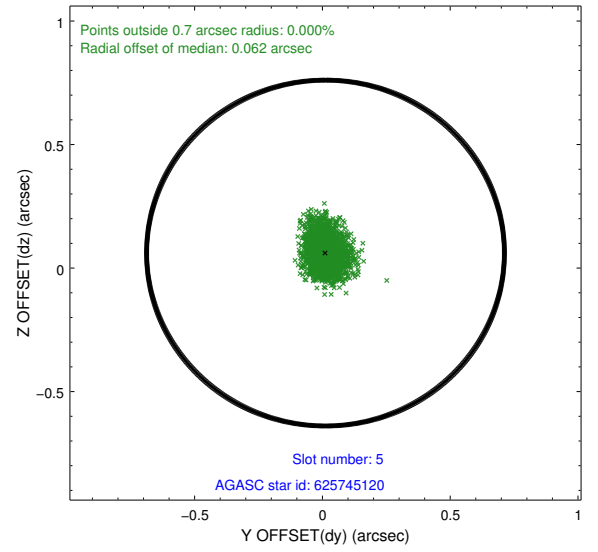
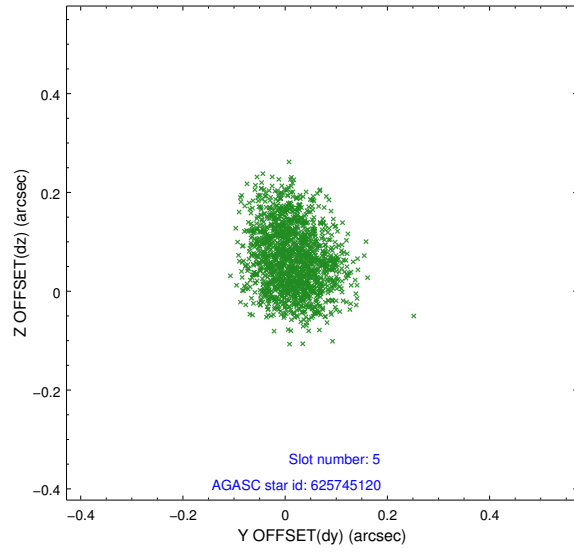
### 2.4.1 Slot 3



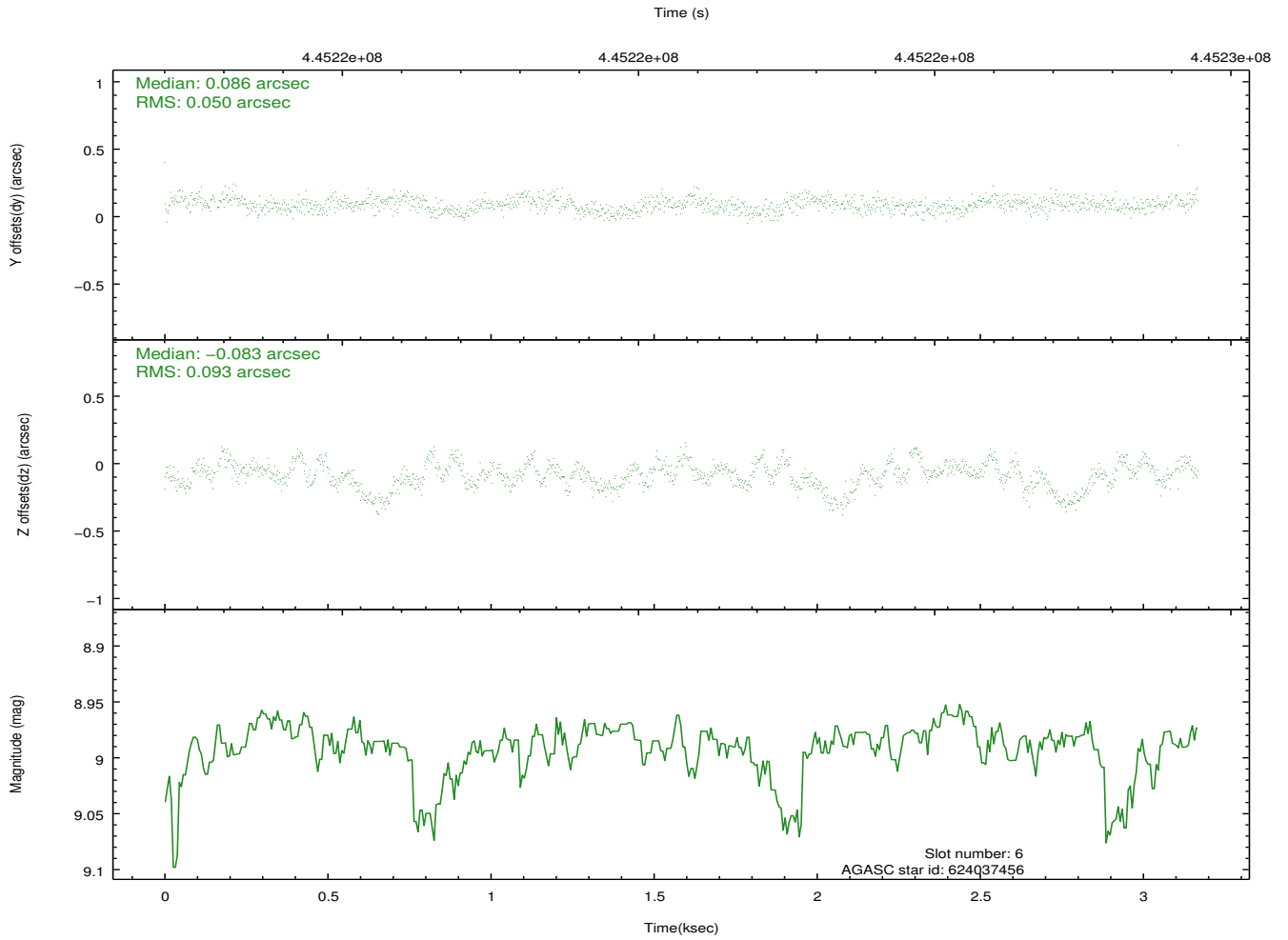
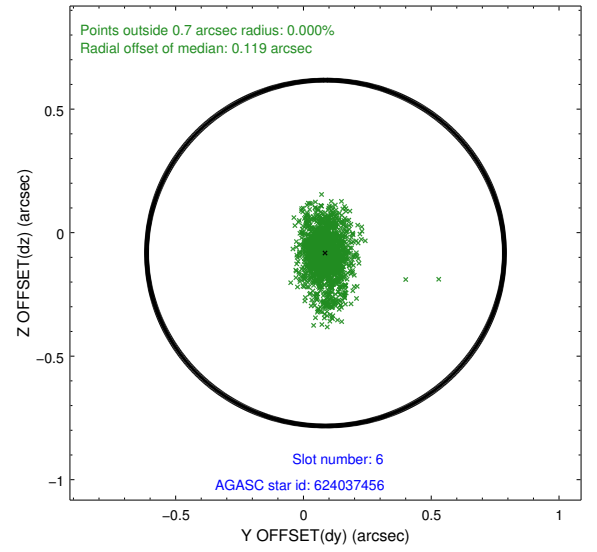
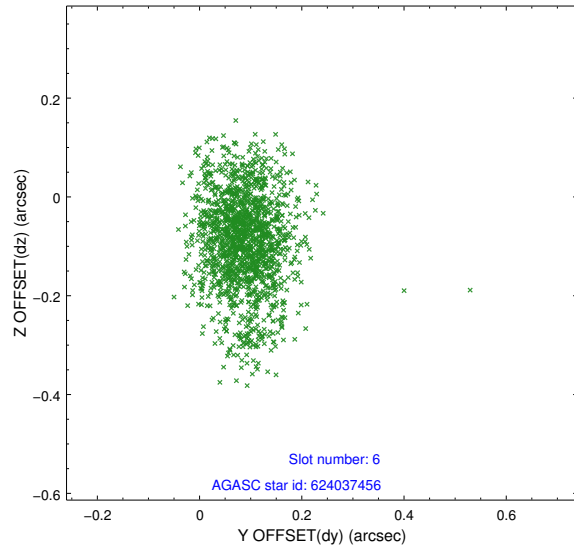
## 2.4.2 Slot 4



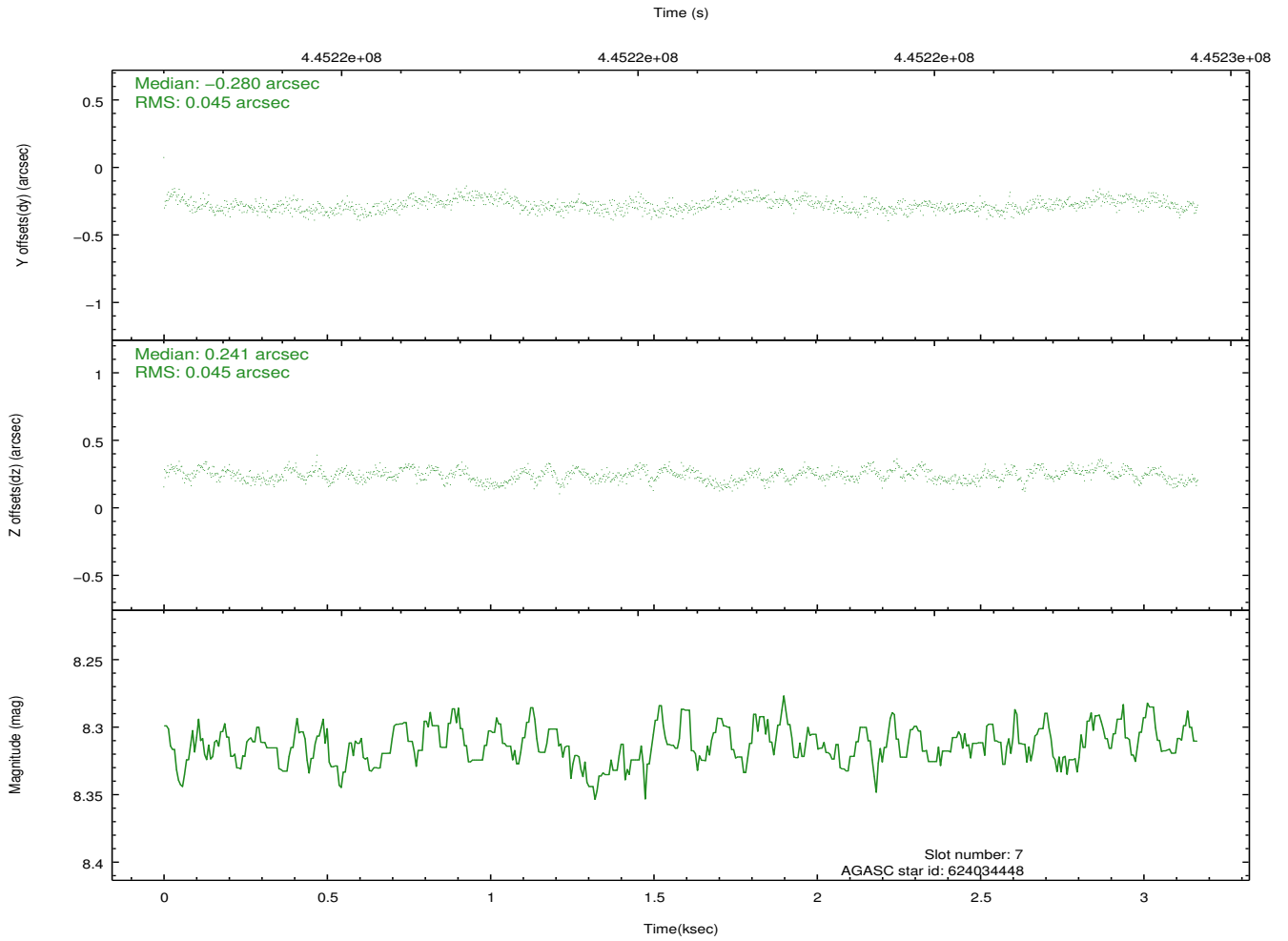
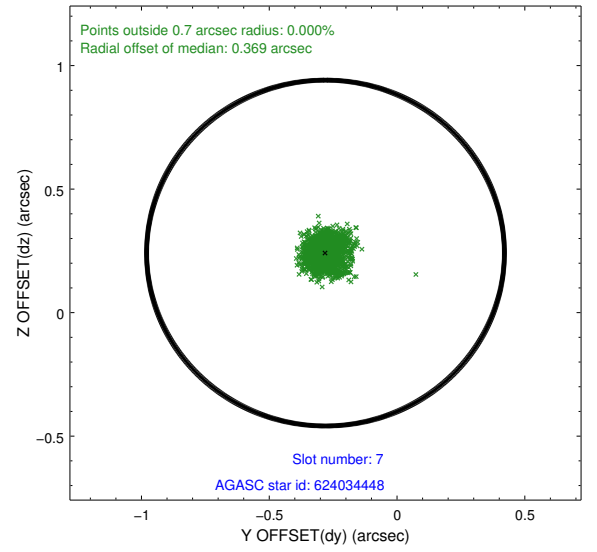
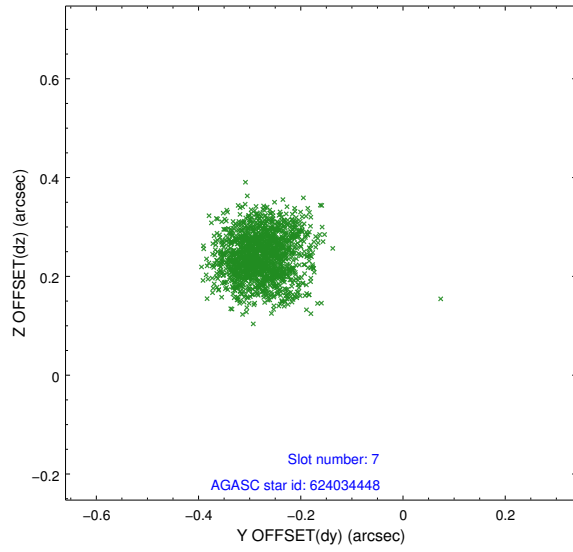
### 2.4.3 Slot 5



## 2.4.4 Slot 6

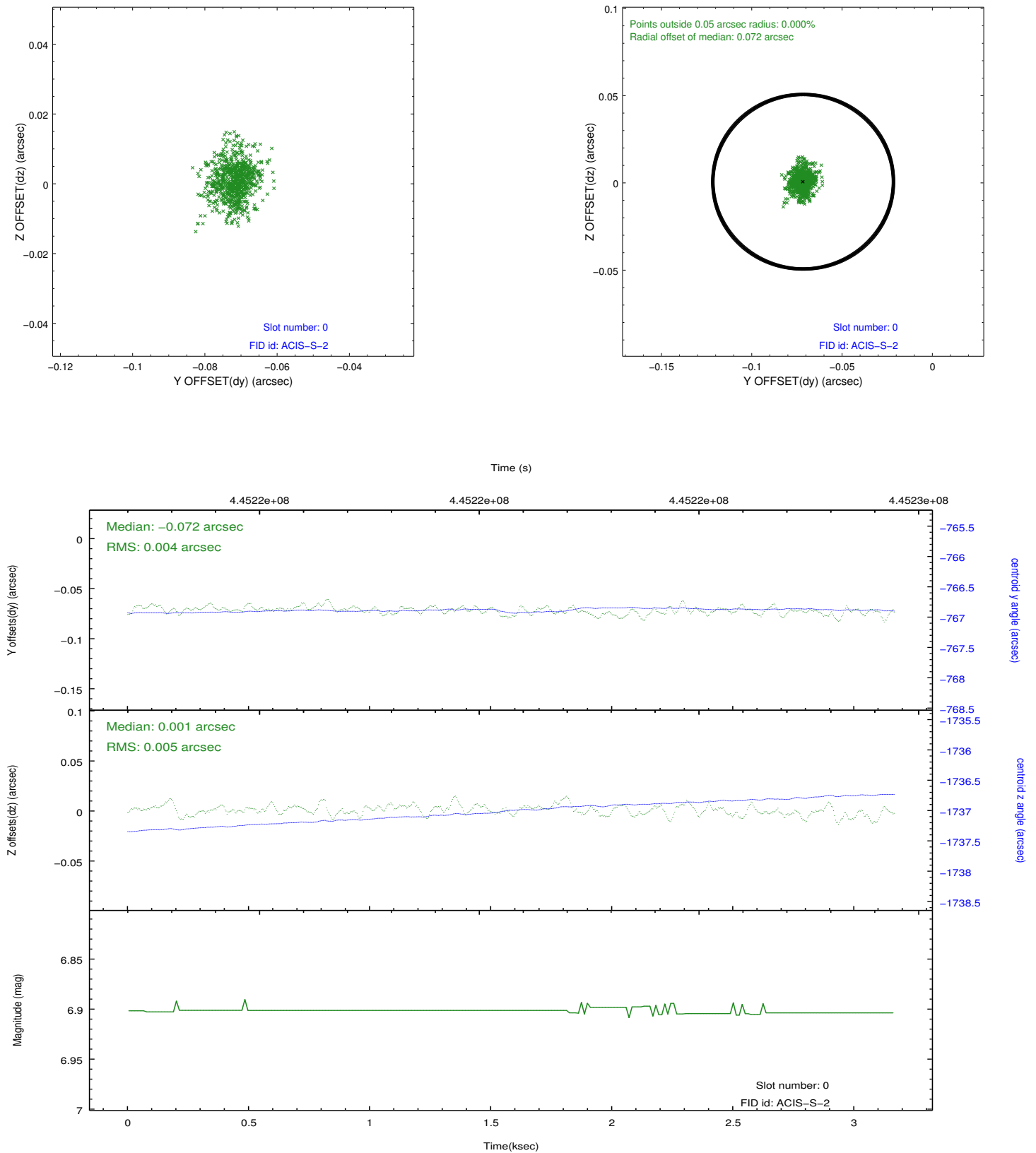


## 2.4.5 Slot 7

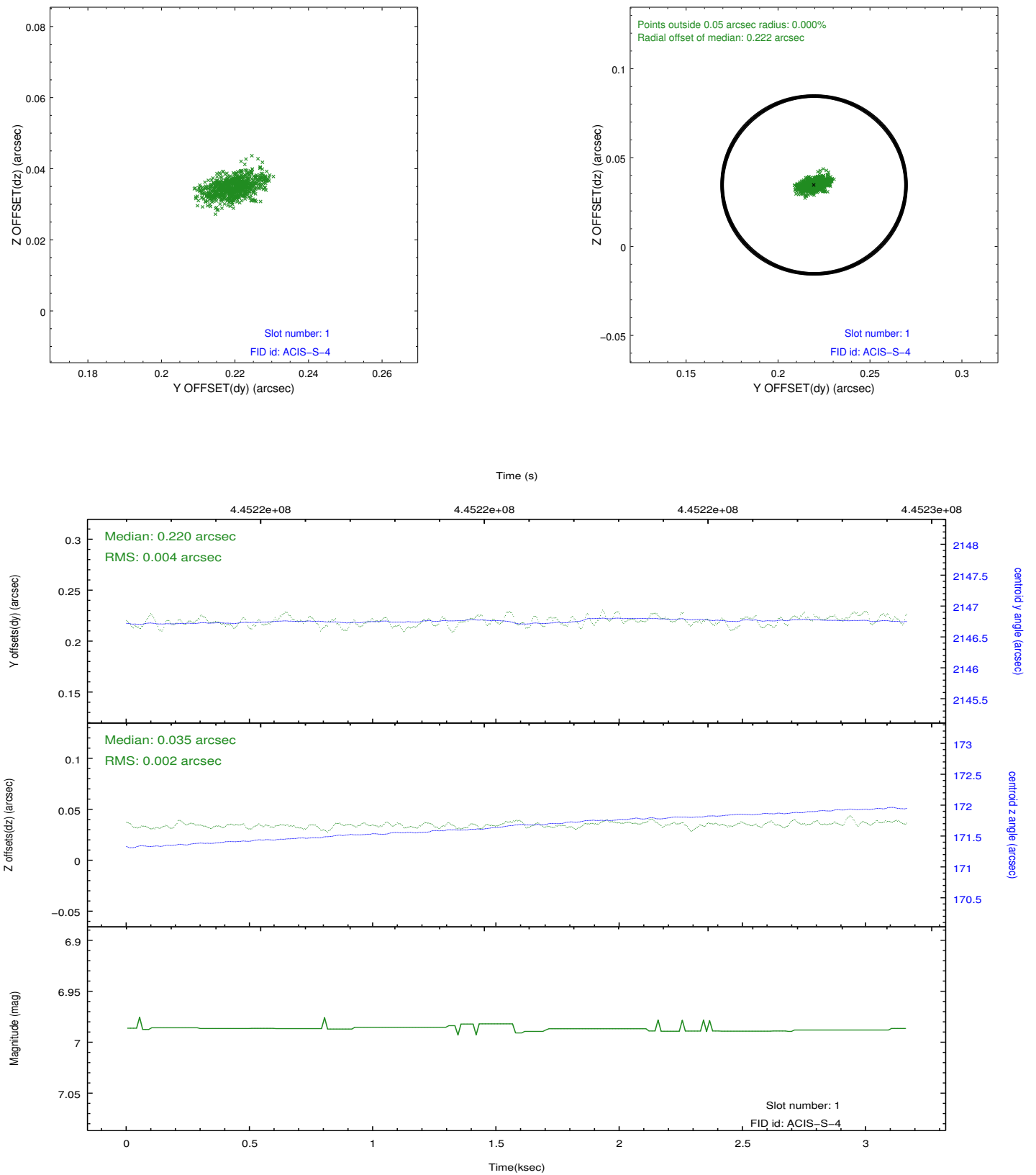


## 2.5 FID Slots

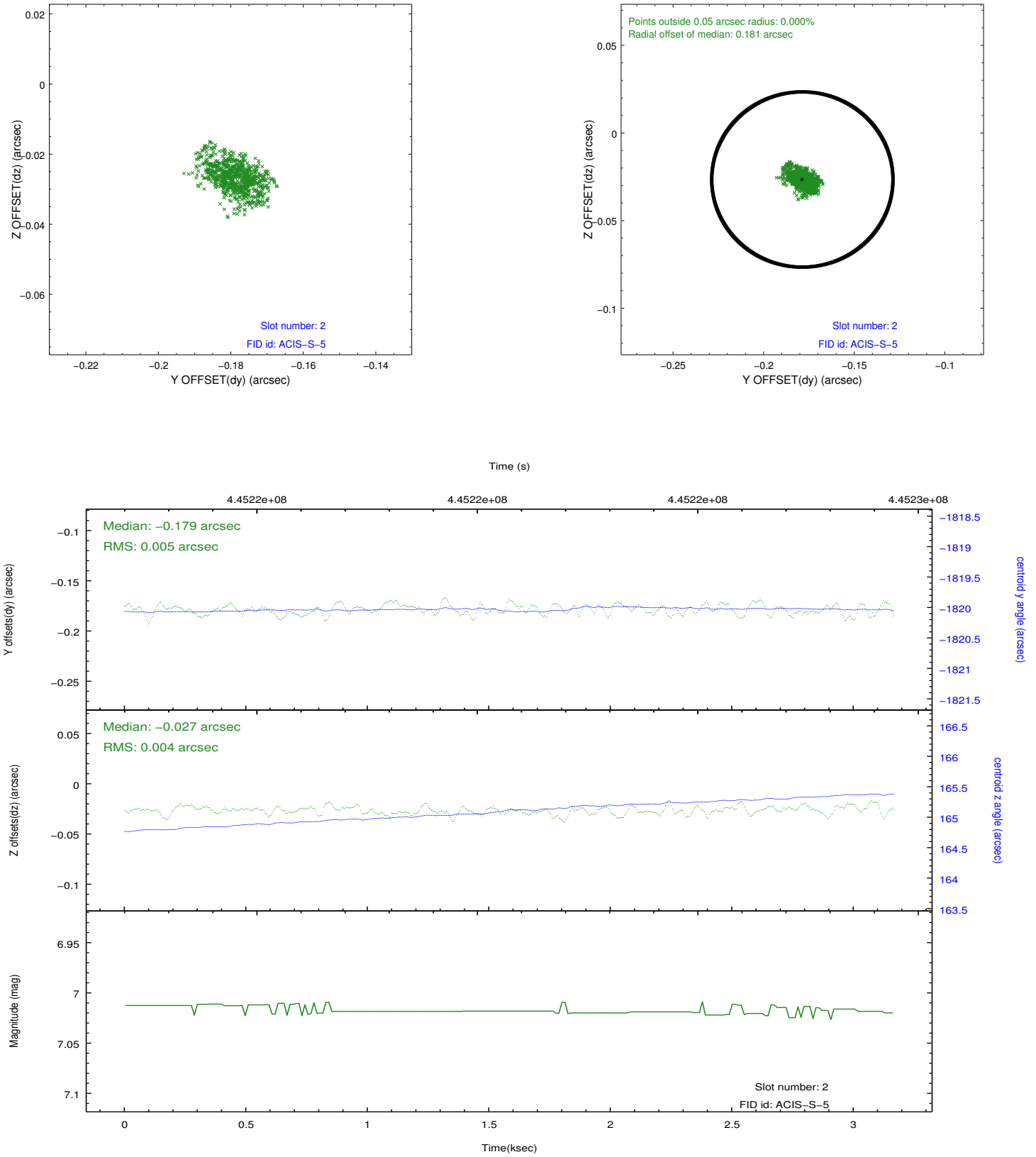
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2





# A Summary

## A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.02.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	3.0690521699786

## A.2 Comments

The data for this observation have been processed using the 'EDSER' sub-pixel event-repositioning algorithm of Li et al. (2004, ApJ, 610, 1204). Small-scale features should become sharper for sources near the aim point. The improvement will be less noticeable for off-axis sources where the size of the point-spread function is comparable to or larger than the size of an ACIS pixel. To take full advantage of the improvement, images should be binned on spatial scales smaller than the size of an ACIS pixel. Note that, at present, the point-spread function has not been calibrated for data to which the EDSER algorithm has been applied. If dither was disabled for the observation, then the algorithm can introduce artificial aliasing effects on spatial scales smaller than a pixel. If you would prefer to use no sub-pixel adjustment or to apply a coordinate randomization, then use `acis_process_events` to reprocess the data with the parameter `pix_adj=NONE` or `RANDOMIZE`, respectively.