

# V&V Reference Report

## L2 ASCDS Version : 8.1.2

Observation 1062 - L2 Version 3

Chandra X-Ray Center

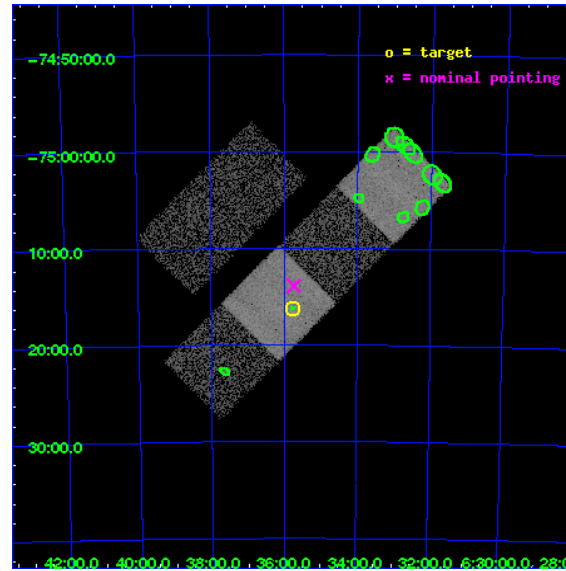
L2 Processing Date : Dec 14 2009

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# 1 Front

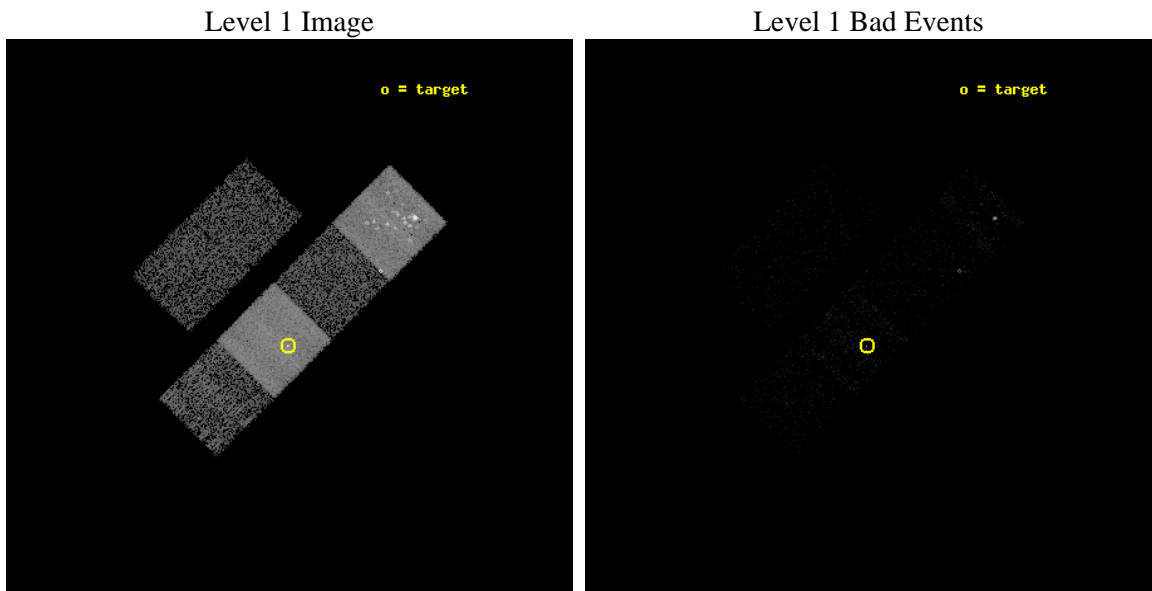
seq_num	780012	Sequence number
obs_id	1062	Observation id
title	&#160	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	PKS0637-752	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	98.94	Observer's specified target RA
dec_targ	-75.27	Observer's specified target Dec
ra_nom	98.933246357545	Nominal RA
dec_nom	-75.231668195593	Nominal Dec
roll_nom	134.84013700463	Nominal Roll
revision	3	Processing version of data
ontime	1759.1066310704	Sum of GTIs [s]
livetime	1736.8317637009	Livetime [s]
ontime2	1759.0245510712	Sum of GTIs [s]
ontime3	1758.9835110679	Sum of GTIs [s]
ontime5	1759.0655910671	Sum of GTIs [s]
ontime6	1758.9014310688	Sum of GTIs [s]
ontime7	1759.1066310704	Sum of GTIs [s]
ontime8	1758.9424710721	Sum of GTIs [s]
l2events	70028	Number of level 2 events



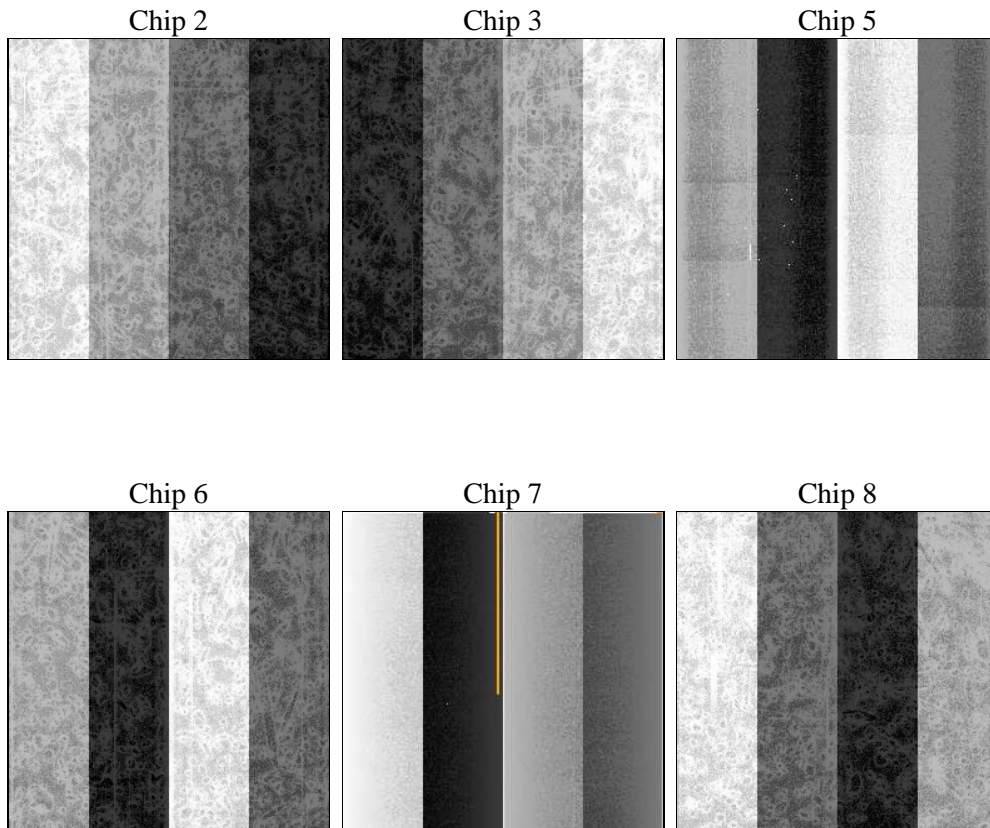
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	2000.000000	Scheduled observation exposure time
ascdsver	8.1.2	ASCDS version number	ontime	1759.1066310704	Sum of GTIs [s]
caldsver	4.1.4	&#160	ontime2	1759.0245510712	Sum of GTIs [s]
date	2009-12-14T07:42:52	Date and time of file creation	ontime3	1758.9835110679	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	1759.0655910671	Sum of GTIs [s]
			ontime6	1758.9014310688	Sum of GTIs [s]
			ontime7	1759.1066310704	Sum of GTIs [s]
			ontime8	1758.9424710721	Sum of GTIs [s]
			l1events	89585	Number of level 1 events

### 2.1.4 Events

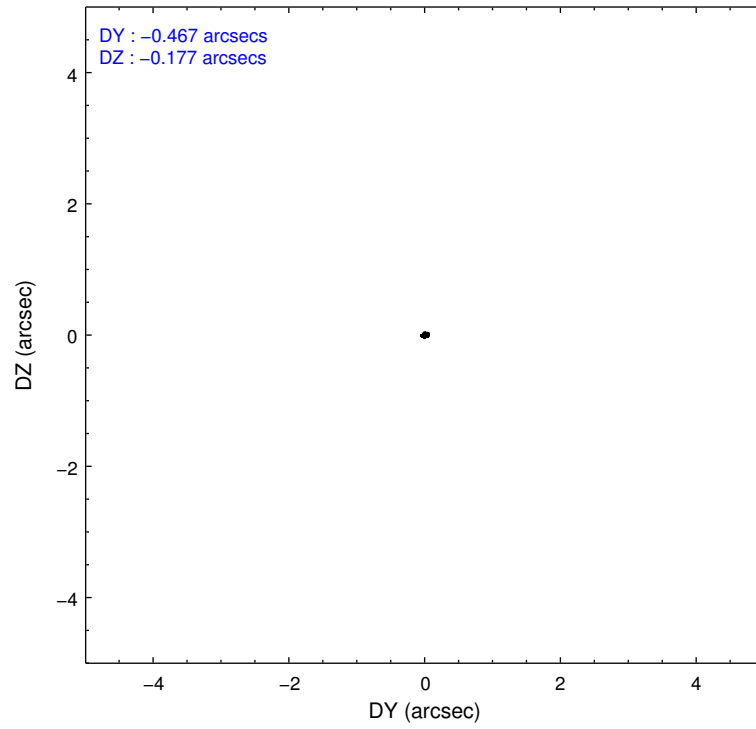
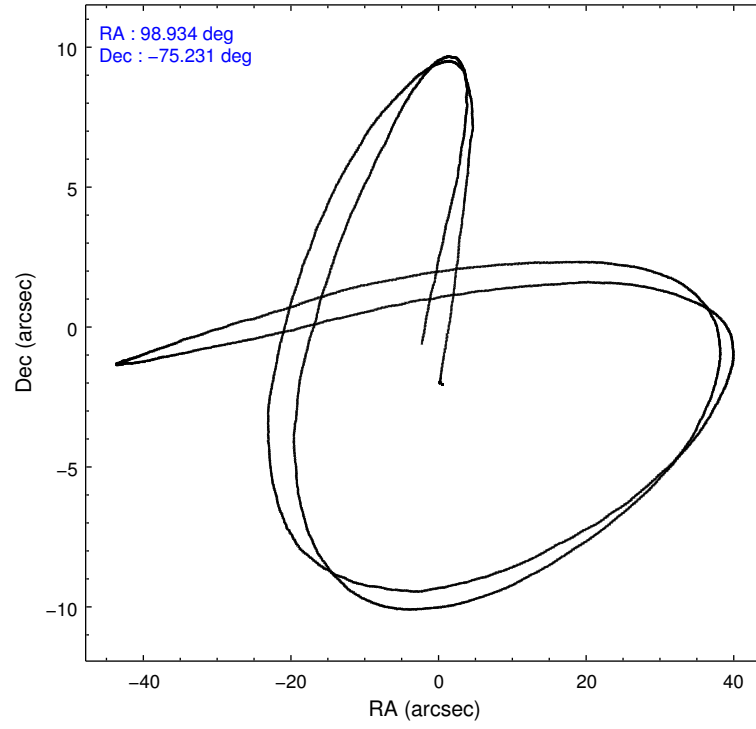
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	4519	4626	36342	5453	31978	6667
rejected events	1159	1159	1977	1286	2430	1355
rejected %	25%	25%	5%	23%	7%	20%

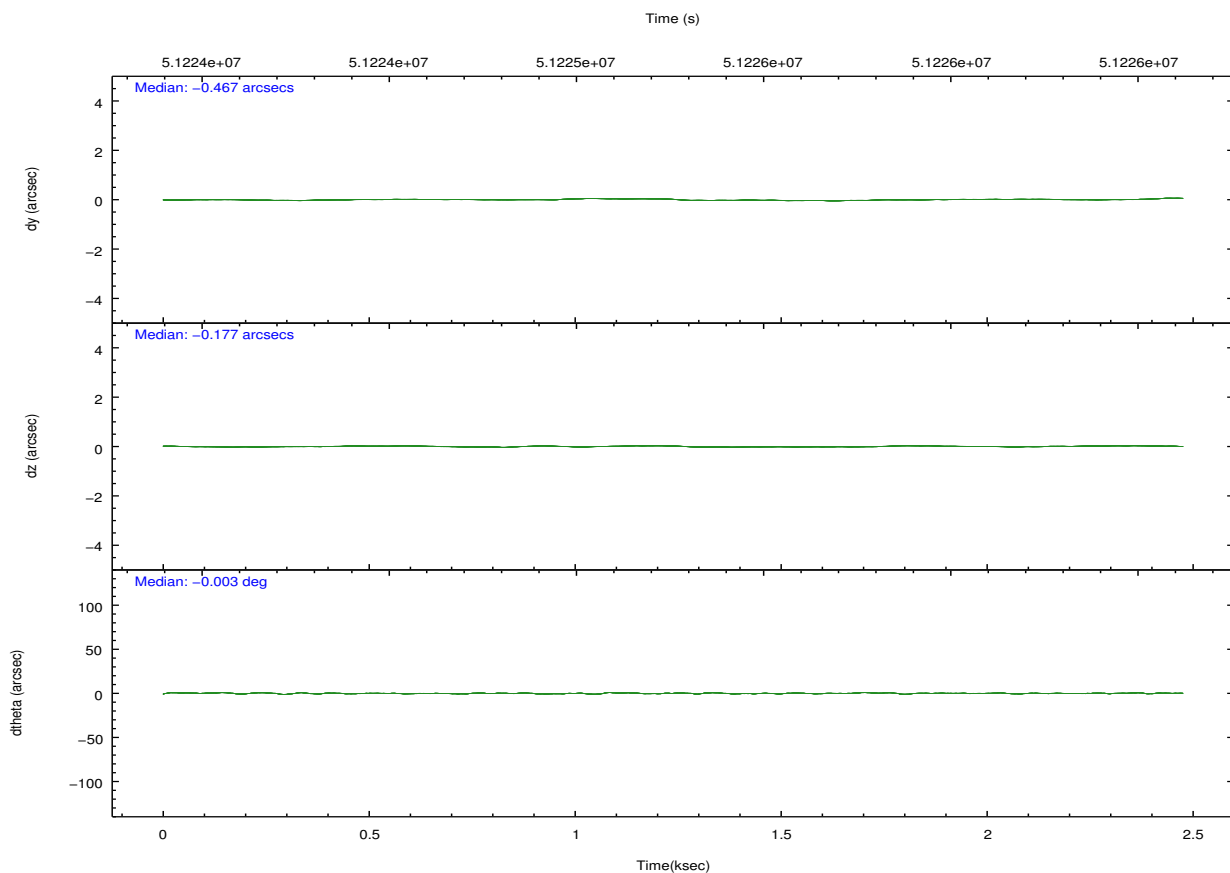
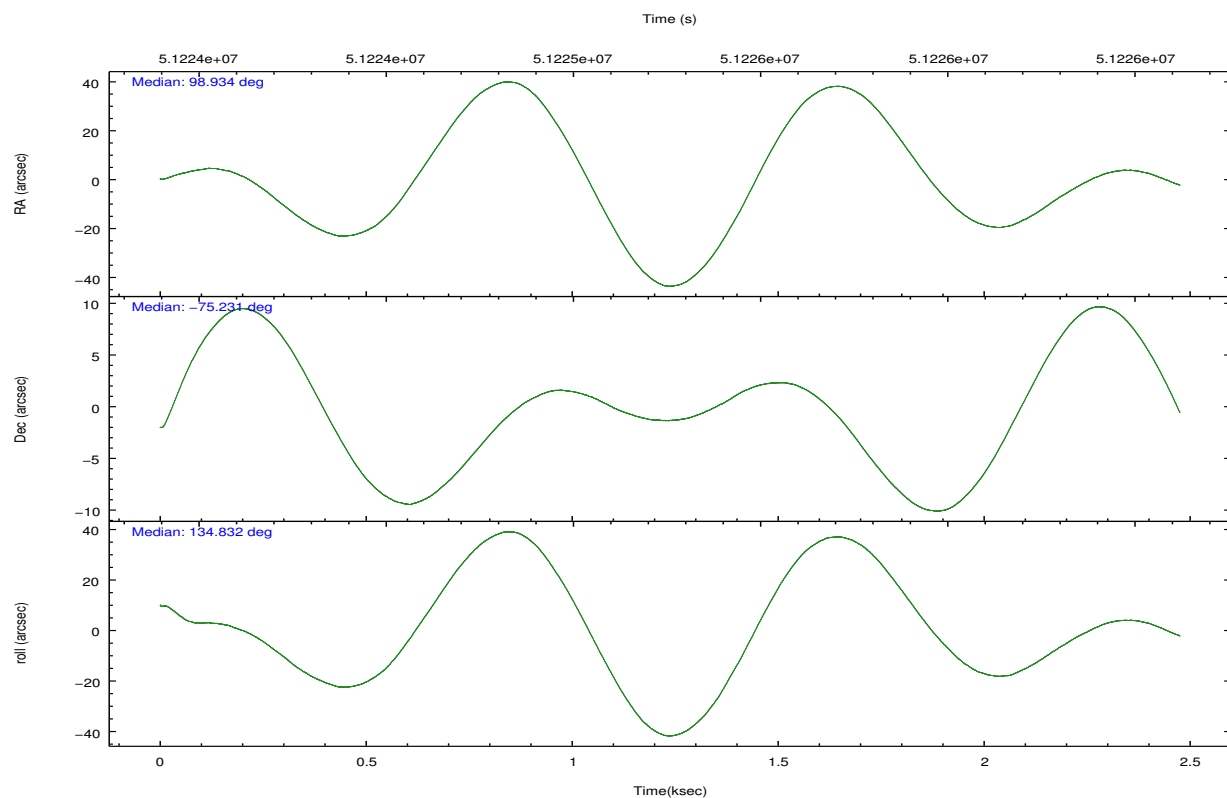
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	1041	1054	7325	1498	2196	1669
	23%	22%	20%	27%	6%	25%
grade 1 events	6	12	69	9	32	19
	0%	0%	0%	0%	0%	0%
grade 2 events	683	737	5051	784	3795	1142
	15%	15%	13%	14%	11%	17%
grade 3 events	282	311	2237	346	2147	469
	6%	6%	6%	6%	6%	7%
grade 4 events	276	259	1825	281	1803	385
	6%	5%	5%	5%	5%	5%
grade 5 events	1142	1144	1718	1269	2373	1326
	25%	24%	4%	23%	7%	19%
grade 6 events	1089	1109	17968	1266	19630	1657
	24%	23%	49%	23%	61%	24%
grade 7 events	0	0	149	0	2	0
	0%	0%	0%	0%	0%	0%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-235678	ACIS-235678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Observation mode	POINTING	POINTING	Number of optional ACIS chips dropped	0	0
Pointing RA	99.037776	98.93324635754468	On-chip summing requested	N	N
Pointing Dec	-75.239702	-75.23166819559316	Subarray requested	NONE	NONE
Pointing Roll	134.784590	134.8401370046271	Alternating exposures requested	N	N
SIM focus pos (mm)	-1.180069	-1.346558362777969	Primary exposure time	0.000000	3.2
SIM defocus (mm)	-0.495802	-0.6622909014780725			
SIM translation stage pos (mm)	-190.132523	-190.1325231039672			
SIM translation stage offset (mm)	0	5.209593894051068e-07			
Observation start time	51224507.184000	51223843.669263			
Observation start date	1999-08-16T21:00:43	1999-08-16T20:50:43			
Observation end time	51226507.184000	51226623.469361			
Observation end date	1999-08-16T21:34:03	1999-08-16T21:37:03			
Read mode	TIMED	TIMED			

## 2.3 Aspect





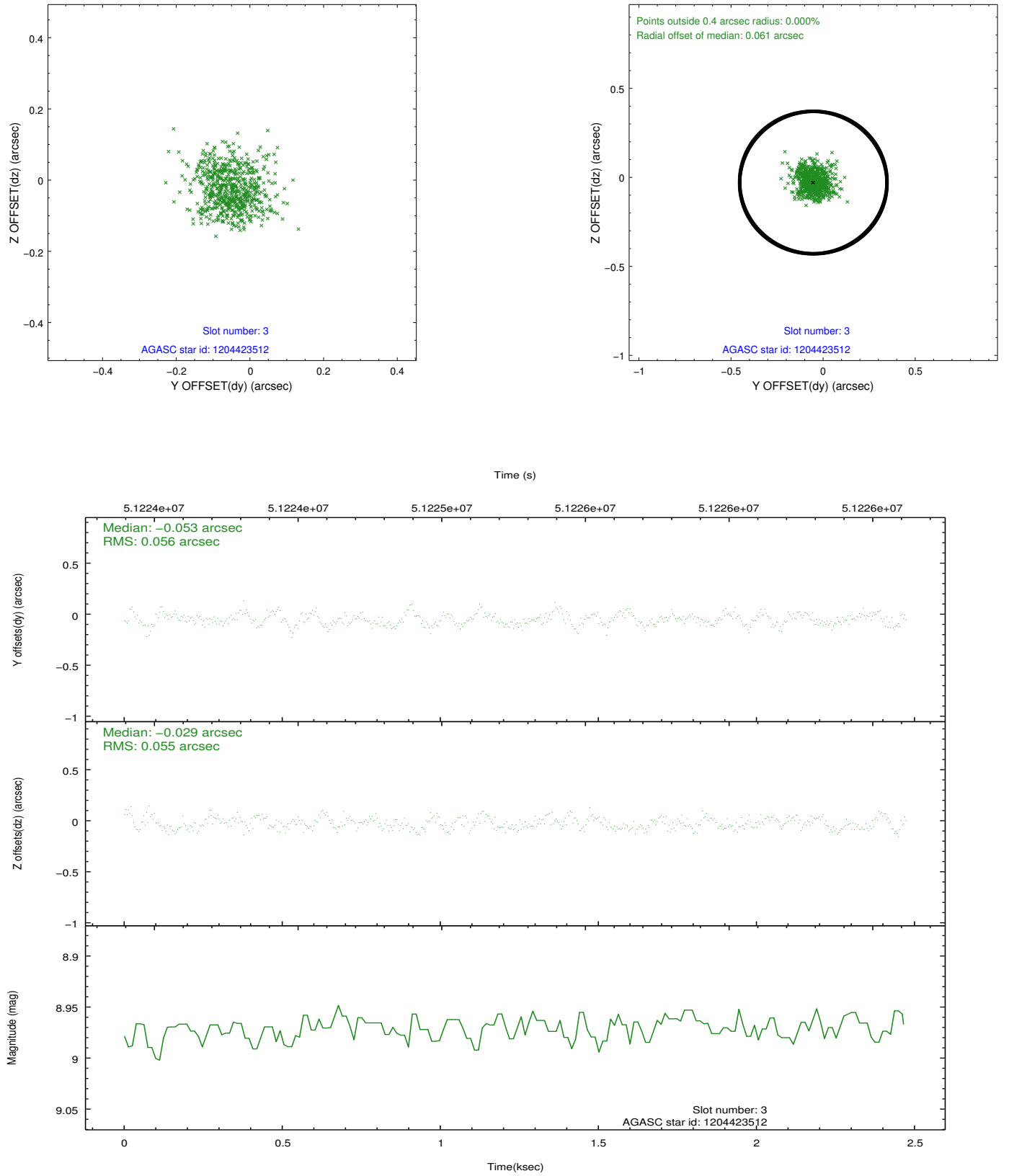
Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.12	605	-0.023	-0.031	0.007	0.011	0.000000	0.000000	-752.09	-1720.85
1	FID	ACIS-S-4	7.22	604	0.152	0.020	0.006	0.010	0.000000	0.000000	2160.04	184.81
2	FID	ACIS-S-5	7.25	604	-0.161	0.021	0.006	0.011	0.000000	0.000000	-1801.58	181.55
3	GUIDE	1204423512	8.97	604	-0.053	-0.029	0.084	0.134	100.368786	-74.674048	541.95	-2321.69
4	GUIDE	1229330120	9.08	605	-0.068	0.068	0.082	0.140	98.874898	-75.821050	-1385.32	1574.00
5	GUIDE	1229331616	9.91	604	0.017	0.022	0.108	0.168	96.182998	-75.347362	1507.05	2166.07
6	GUIDE	1229333040	9.78	603	0.015	-0.015	0.121	0.182	99.562583	-75.788185	-1728.84	1068.11
7	GUIDE	1204425200	9.79	603	0.103	-0.051	0.152	0.253	100.052994	-74.556368	1050.66	-2414.38

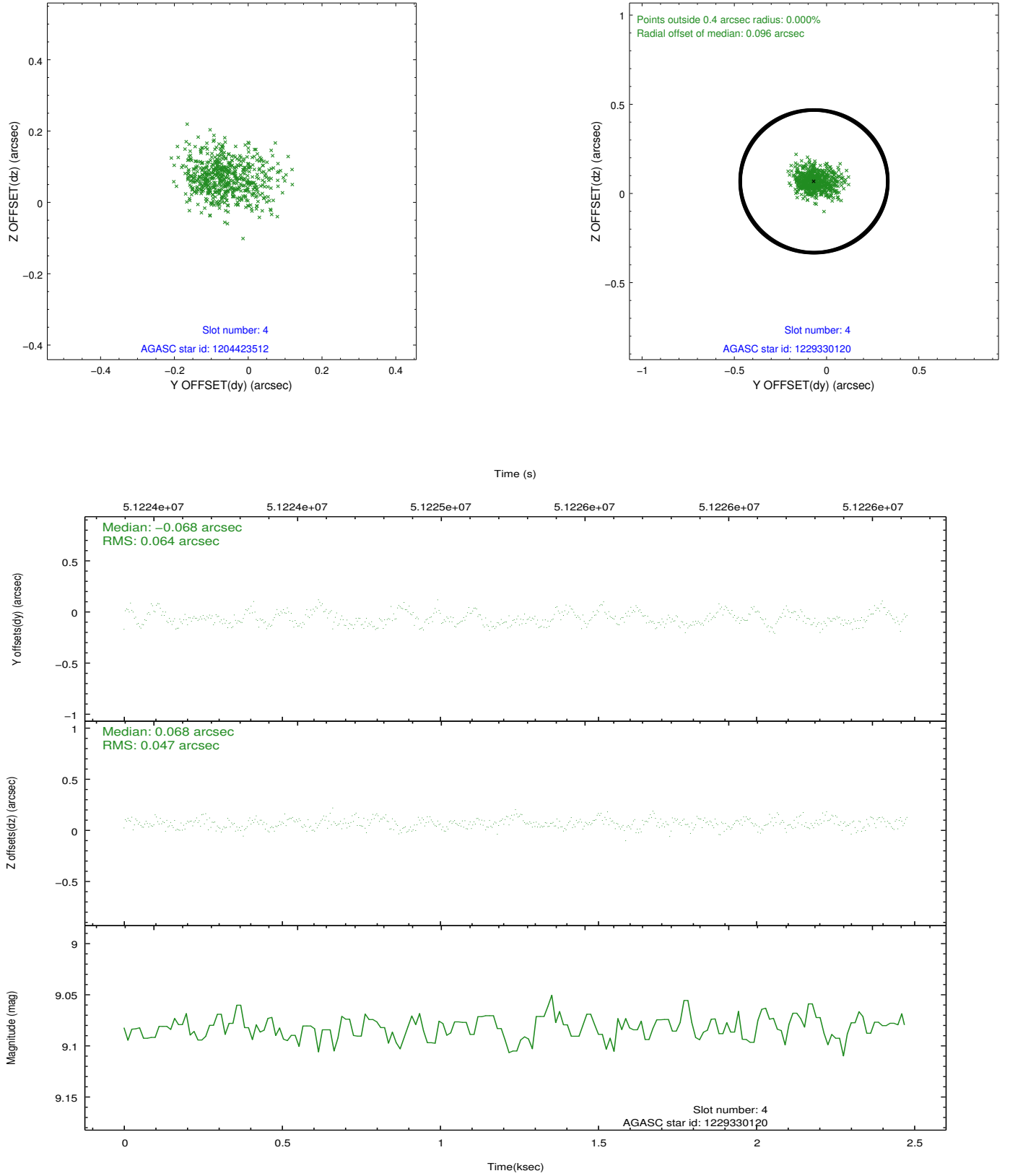


## 2.4 Star Slots

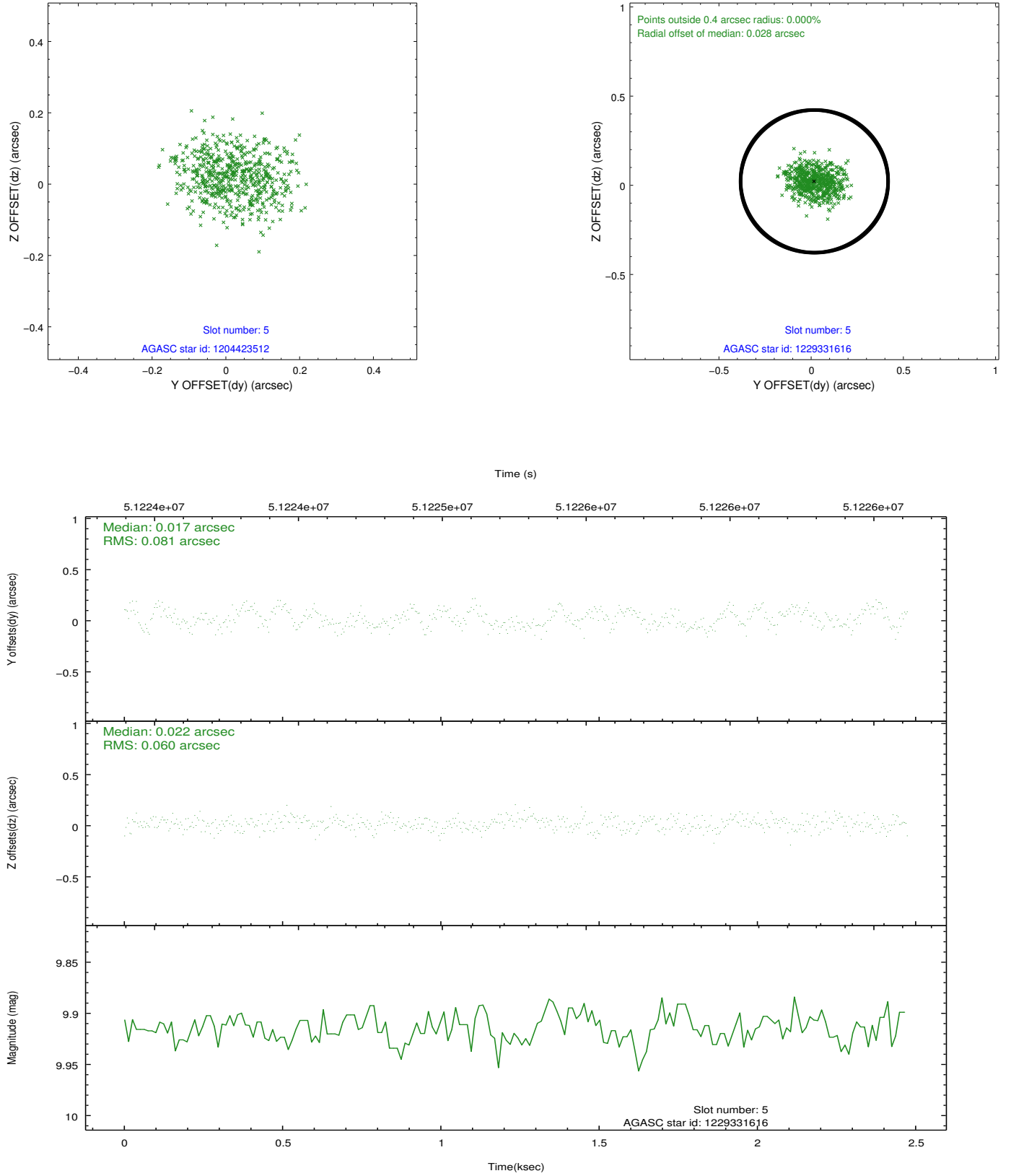
### 2.4.1 Slot 3



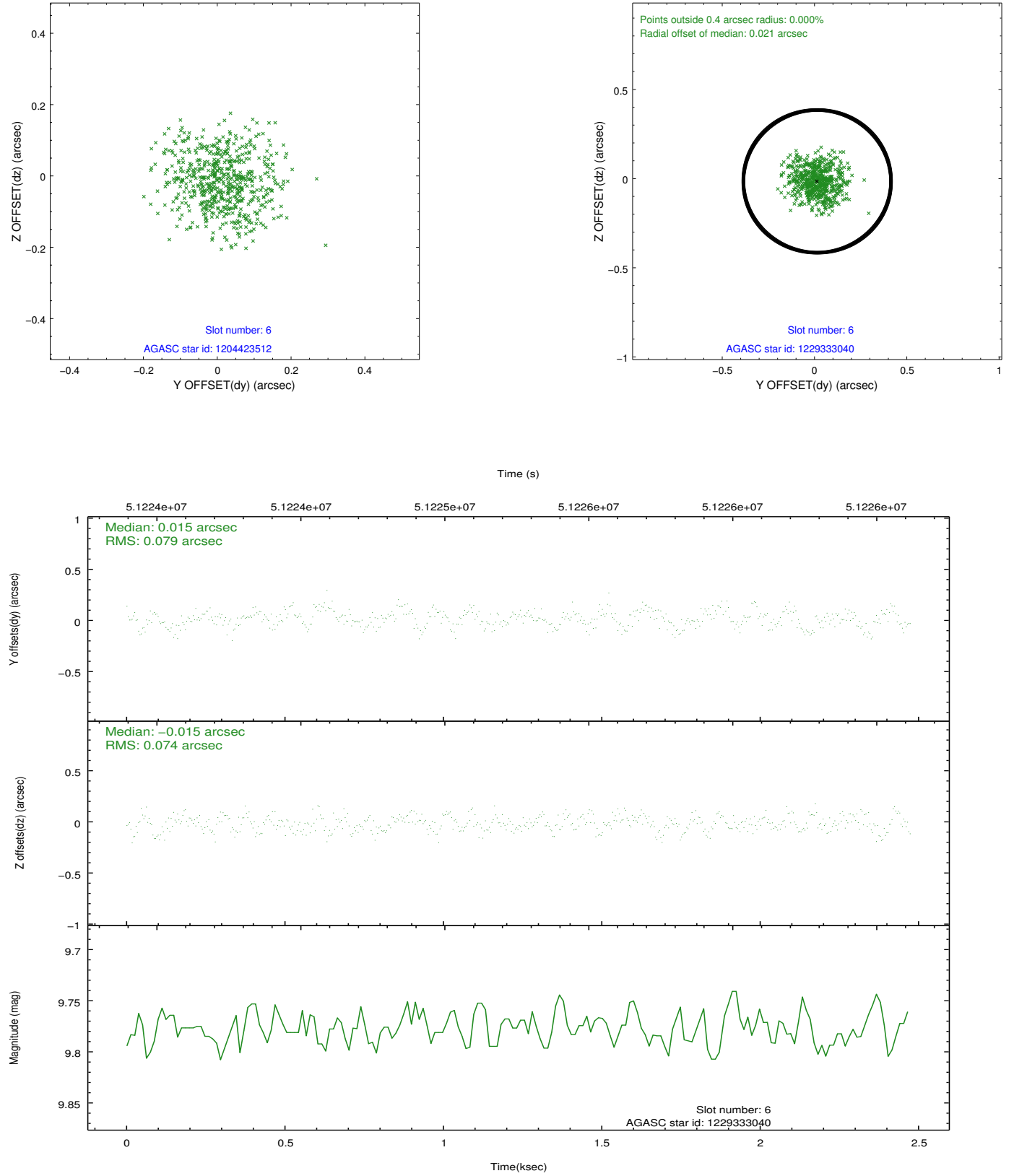
## 2.4.2 Slot 4



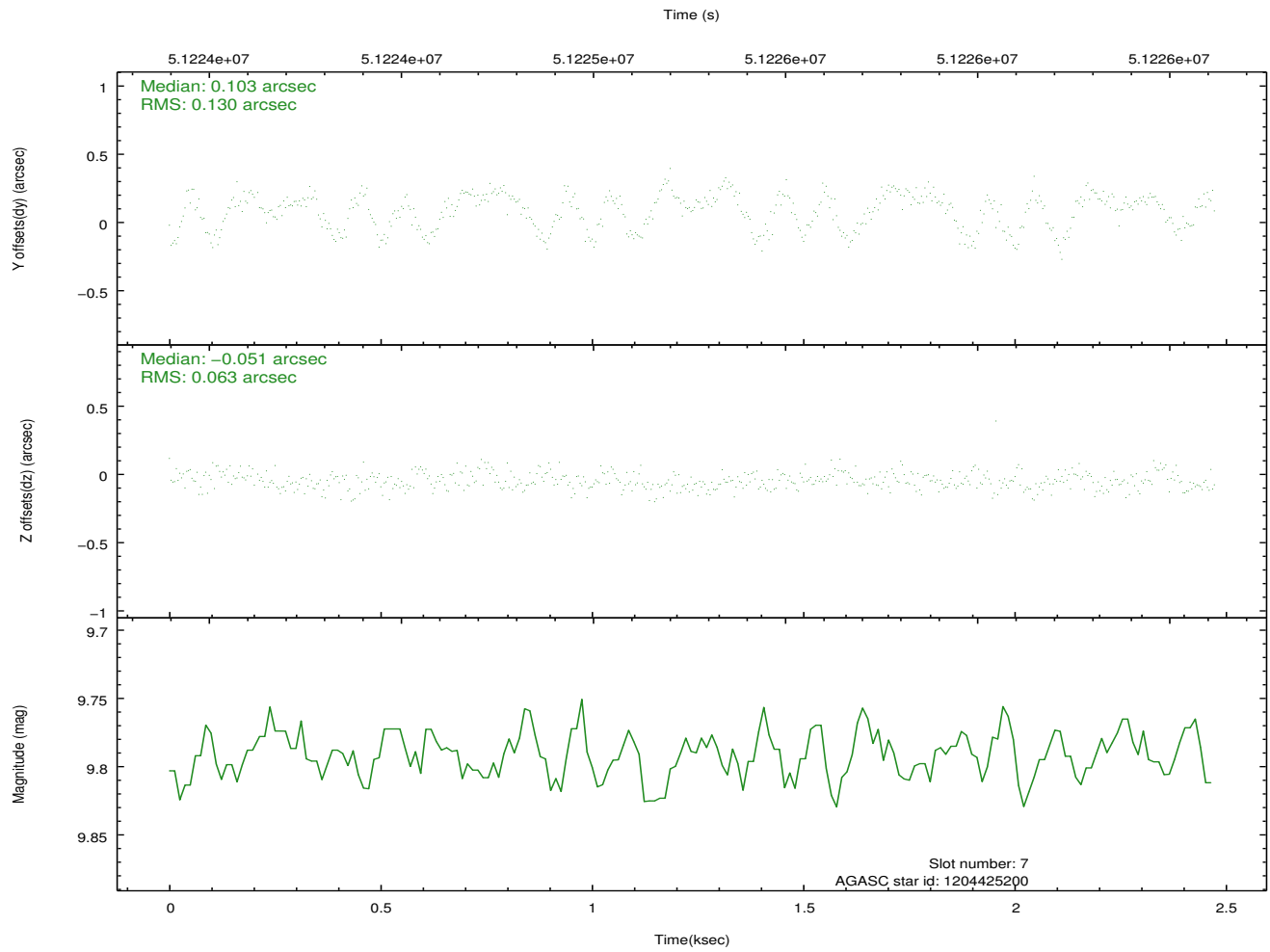
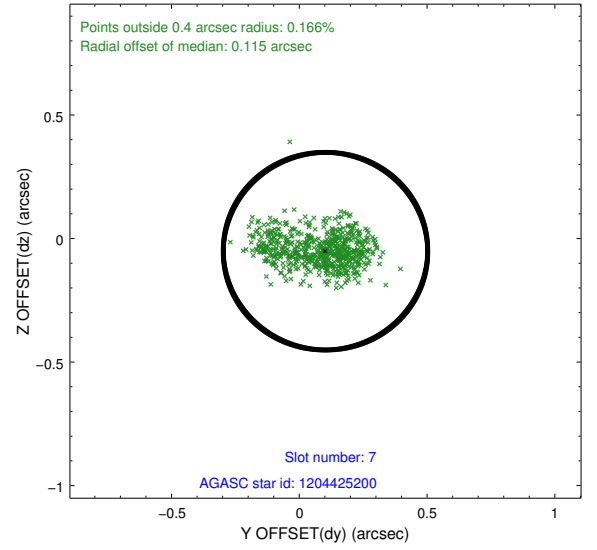
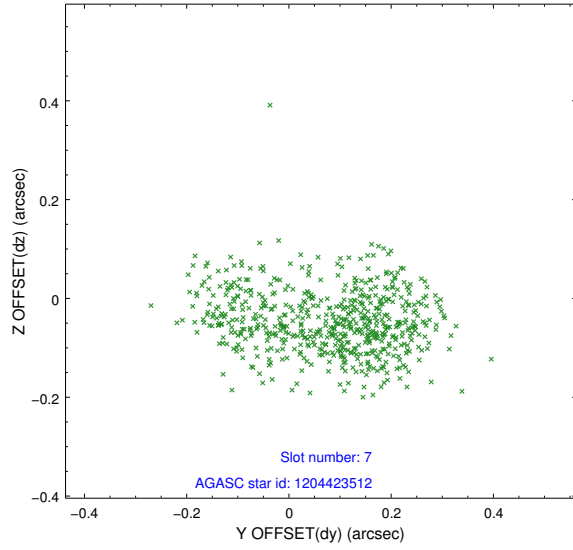
### 2.4.3 Slot 5



## 2.4.4 Slot 6

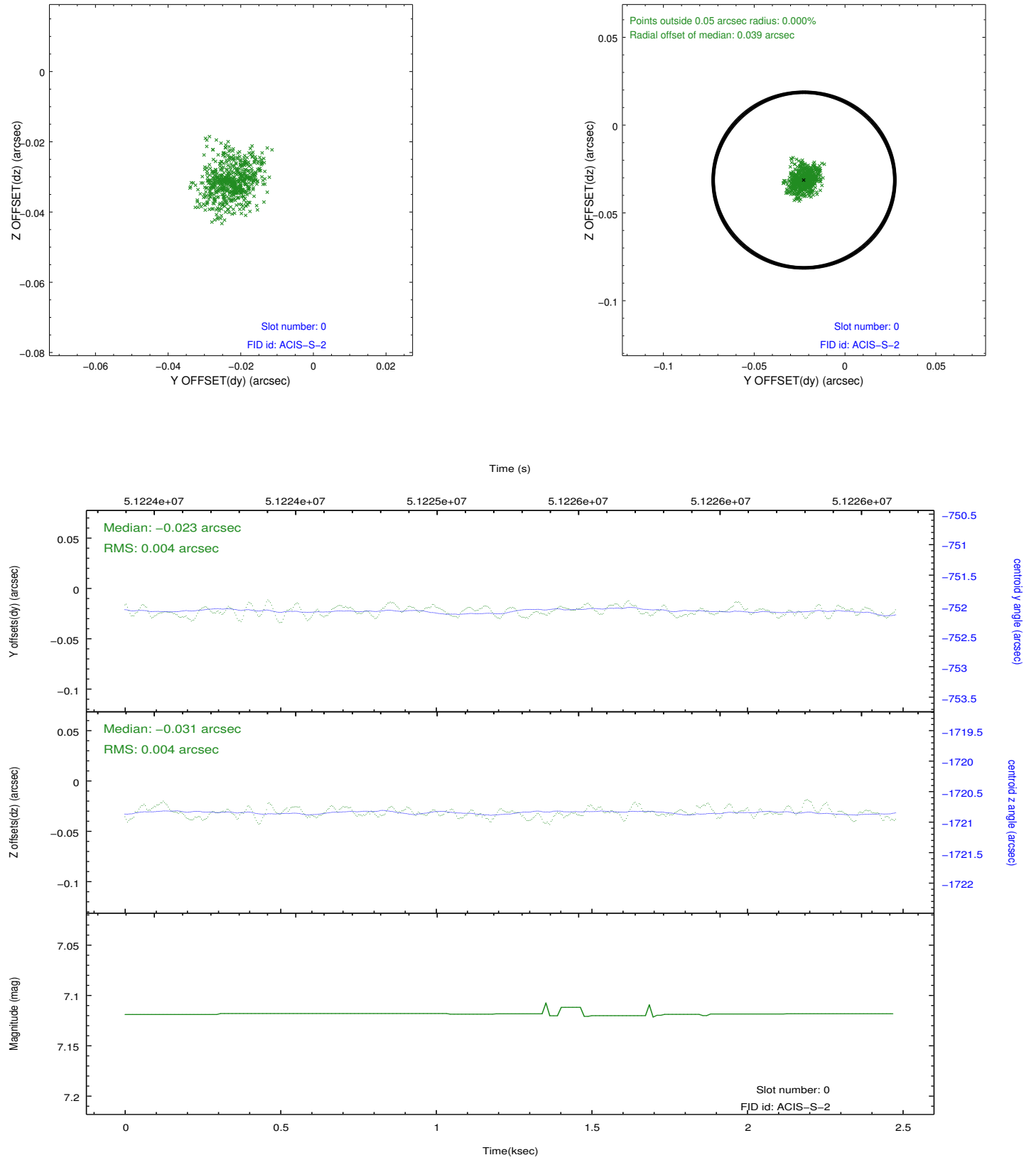


## 2.4.5 Slot 7

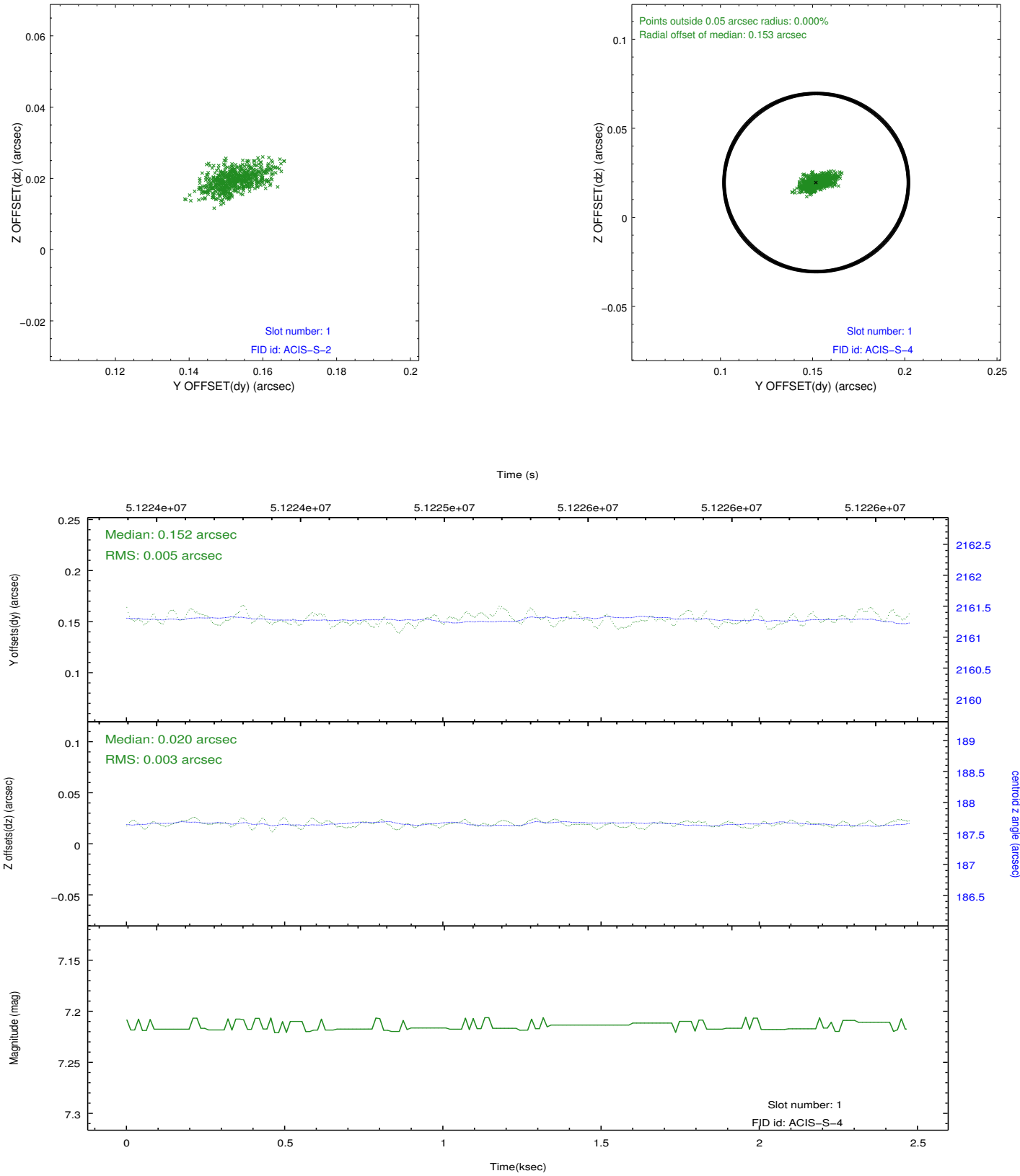


## 2.5 FID Slots

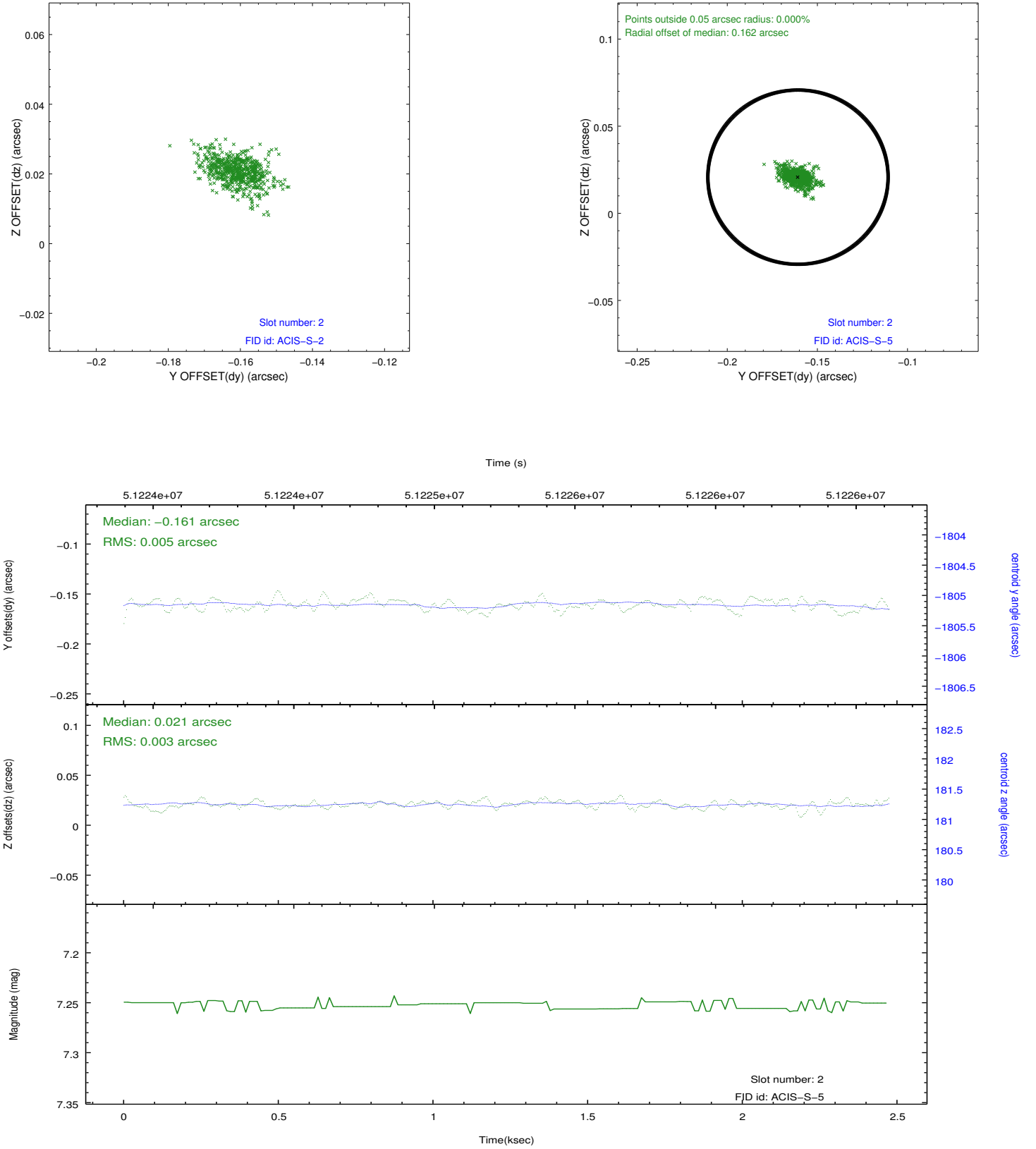
### 2.5.1 Slot 0



## 2.5.2 Slot 1

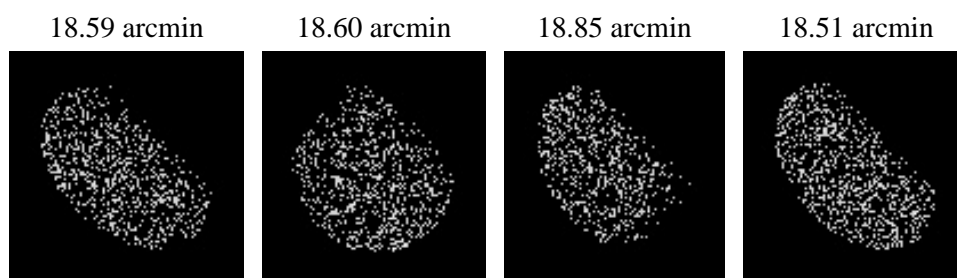


### 2.5.3 Slot 2





### 3 Point Sources



# A Summary

## A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2010.05.19
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.76

## A.2 Comments

ACIS-S Crude Optical Axis Determination Yoff = 1.4, Zoff =-1.4.

Target  
off-axis.

===

High radiation environment contributes to elevated count rate.

===

The focal plane temperature is approximately -100 C during this observation. This reprocessing of the data applies no CTI correction because none is available for this temperature at present.

The ACIS CTI correction has not been calibrated at this temperature, because it was early in the mission, and ACIS had not yet been lowered to the standard -119.7 C. Both front and back illuminated chips are affected. However a T\_GAIN correction has been applied to the BI chips (ACIS-5 and ACIS-7) data included here.

The ACIS spectral response calibration is less accurate at these warmer temperatures than it is at -119.7 C. Users whose science objectives depend on the most accurate spectral response (ie: fitting line-rich spectra) may notice an effect. Users whose science objectives do not depend on the most accurate spectral response should not notice an effect.