

V&V Reference Report

L2 ASCDS Version : 8.1.2

Observation 62552 - L2 Version 4

Chandra X-Ray Center

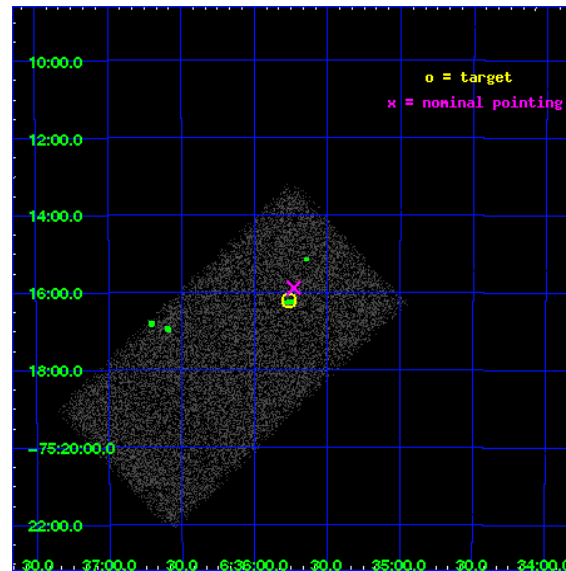
L2 Processing Date : Dec 14 2009

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
3	Point Sources	17
A	Summary	18
A.1	Status	18
A.2	Comments	18

1 Front

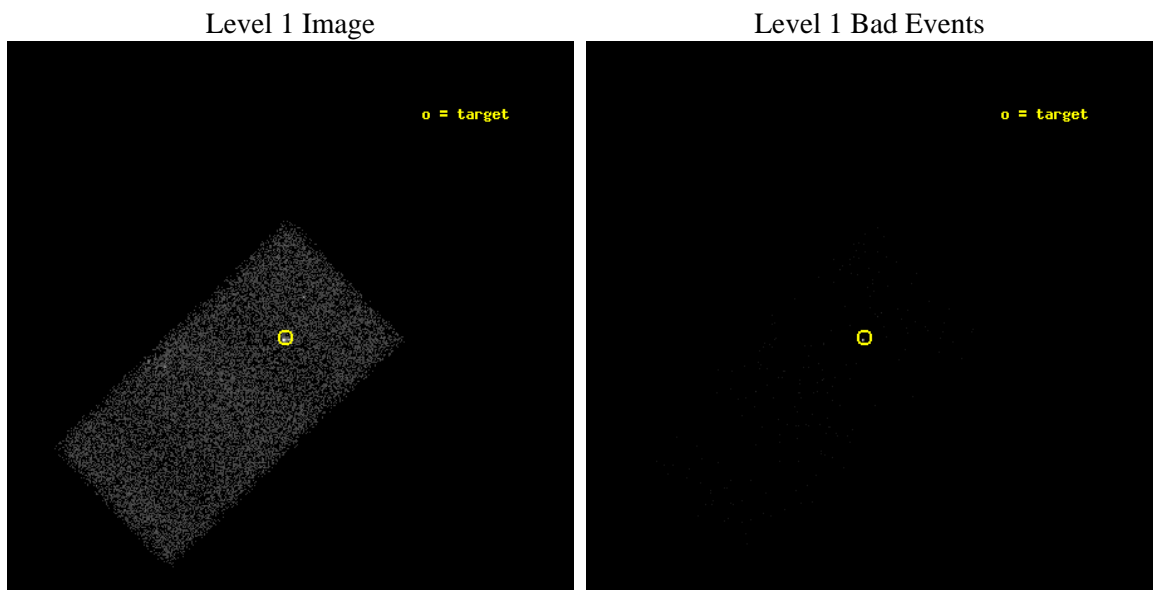
seq_num	780213	Sequence number
obs_id	62552	Observation id
title	ACIS Focus Test	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	PKS0637-752	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	98.94	Observer's specified target RA
dec_targ	-75.27	Observer's specified target Dec
ra_nom	98.932623793193	Nominal RA
dec_nom	-75.264781738104	Nominal Dec
roll_nom	136.05510218493	Nominal Roll
revision	4	Processing version of data
ontime	5212.2438225523	Sum of GTIs [s]
livetime	5073.4346505142	Livetime [s]
ontime7	5212.2438225523	Sum of GTIs [s]
l2events	22398	Number of level 2 events



2 OBI

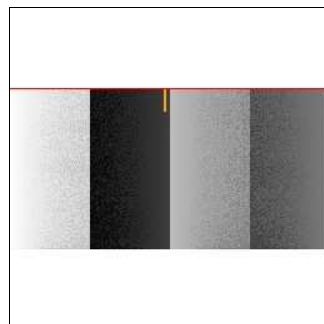
2.1 OBI

2.1.1 Images



2.1.2 Bias

Chip 7



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	5000.000000	Scheduled observation exposure time
ascdsver	8.1.2	ASCDS version number	ontime	5212.2438225523	Sum of GTIs [s]
caldbver	4.1.4	 	ontime7	5212.2438225523	Sum of GTIs [s]
date	2009-12-14T05:48:45	Date and time of file creation	l1events	27023	Number of level 1 events
revision	4	Processing version of data			

2.1.4 Events

	ccd 7
level 1 events	27023
rejected events	3923
rejected %	14%

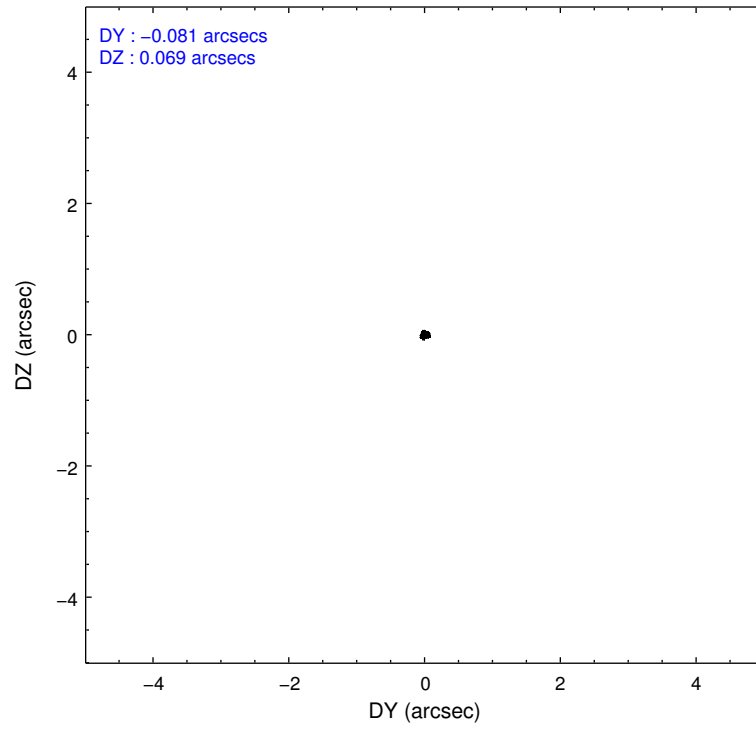
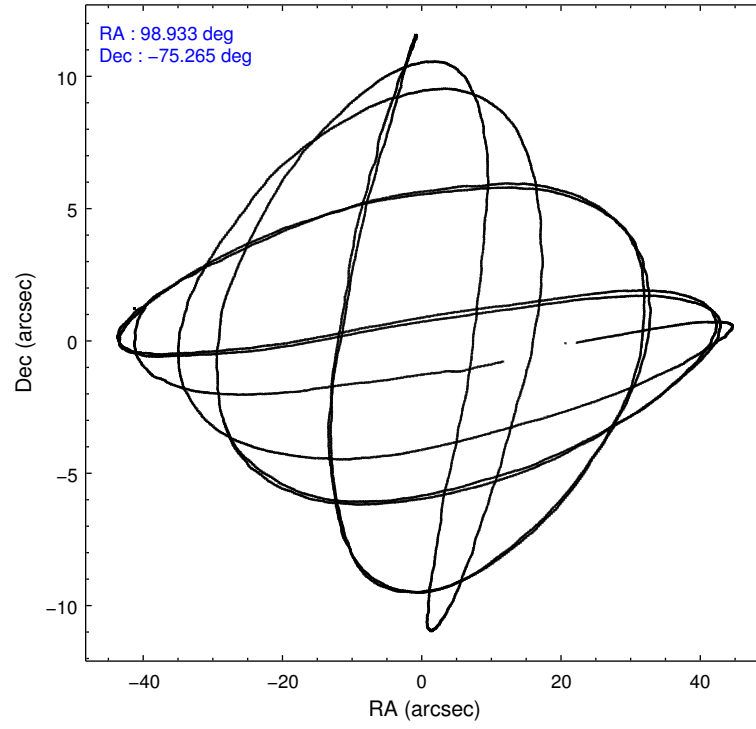
	ccd 7
grade 0 events	1613
	5%
grade 1 events	74
	0%
grade 2 events	2950
	10%
grade 3 events	2108
	7%
grade 4 events	1757
	6%
grade 5 events	3831
	14%
grade 6 events	14690
	54%
grade 7 events	0
	0%

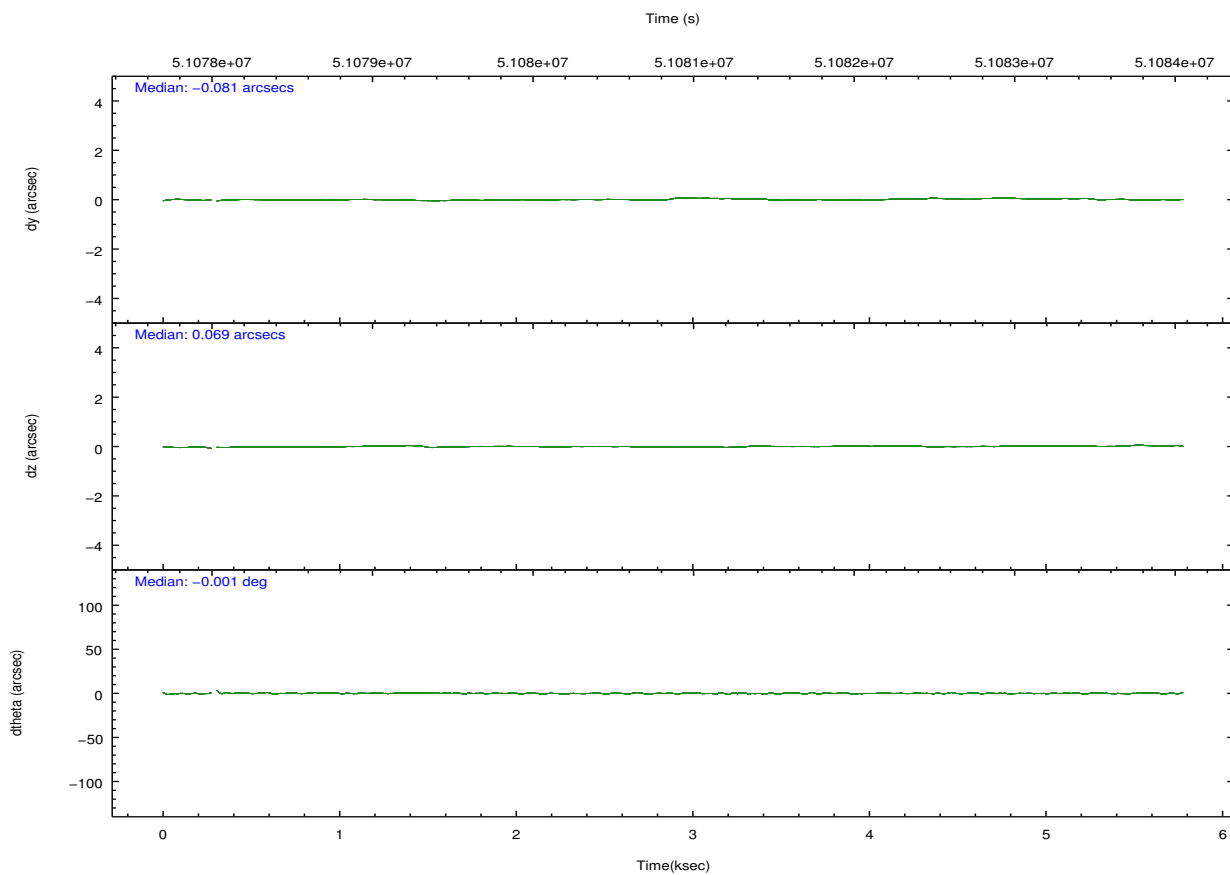
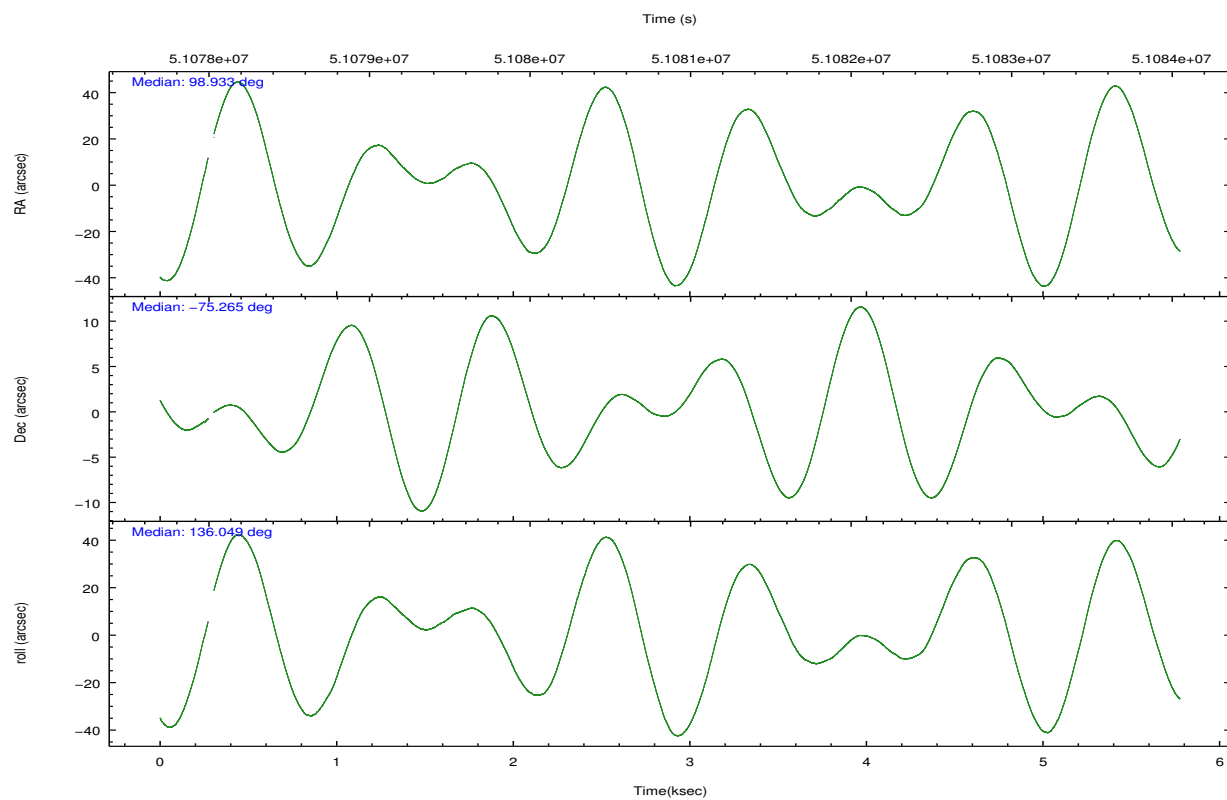
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-7	ACIS-7
Grating	NONE	NONE
Data mode	FAINT	FAINT
Observation mode	POINTING	POINTING
Pointing RA	98.939980	98.93262379319255
Pointing Dec	-75.270010	-75.2647817381044
Pointing Roll	136.279009	136.0551021849298
SIM focus pos (mm)	-2.184267	-1.217968332818548
SIM defocus (mm)	-1.5	-0.5337008715186518
SIM translation stage pos (mm)	-190.132523	-190.1325231039672
SIM translation stage offset (mm)	0	5.209593894051068e-07
Observation start time	51080067.184000	51077983.08912
Observation start date	1999-08-15T04:53:23	1999-08-15T04:19:43
Observation end time	51085067.184000	51083759.989323
Observation end date	1999-08-15T06:16:43	1999-08-15T05:55:59
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	6	6
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	CUSTOM	1/2
Subarray start row	256	256
Subarray row count	512	512
Alternating exposures requested	N	N
Primary exposure time	0.000000	1.5

2.3 Aspect



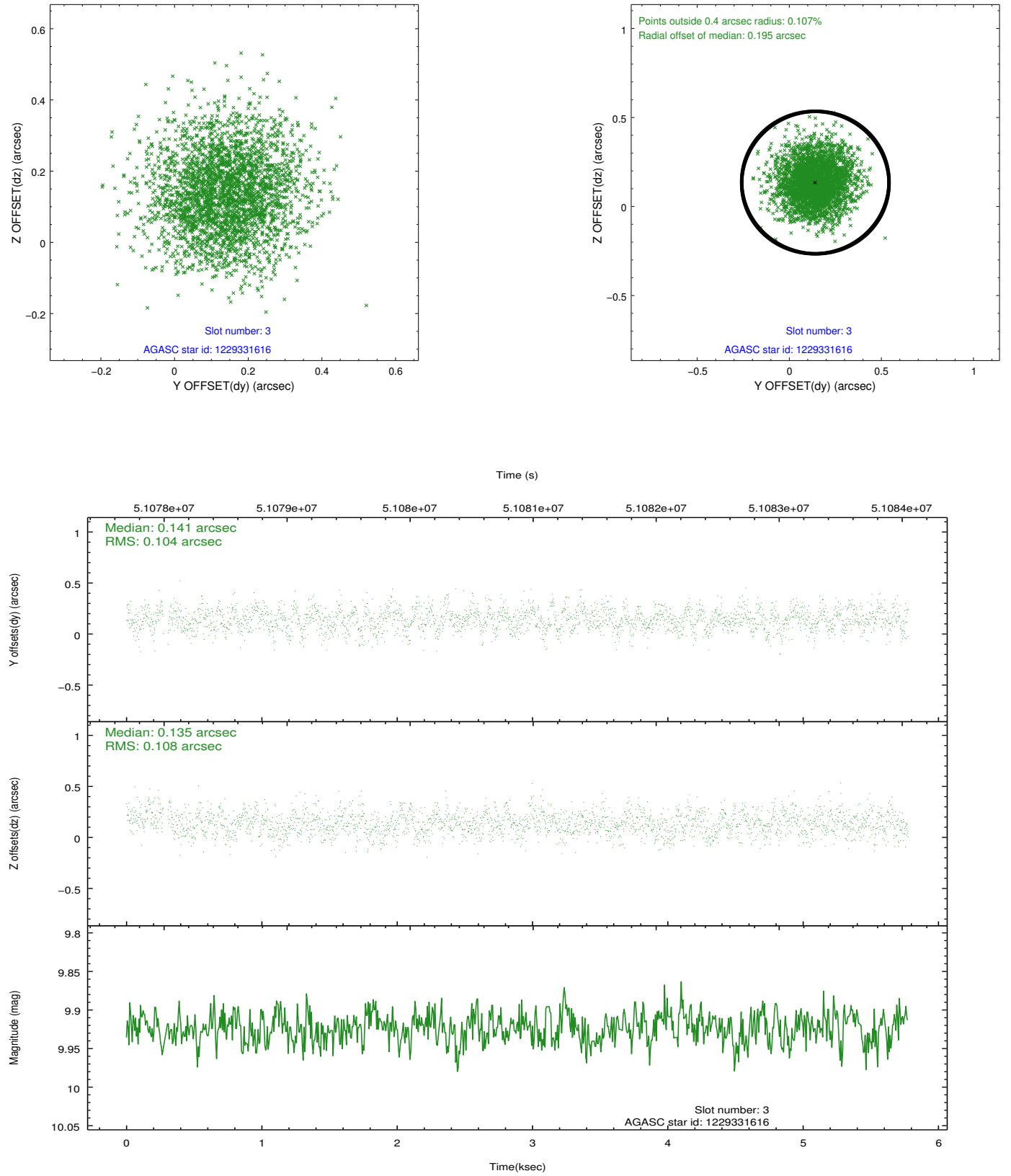


Slot Statistics

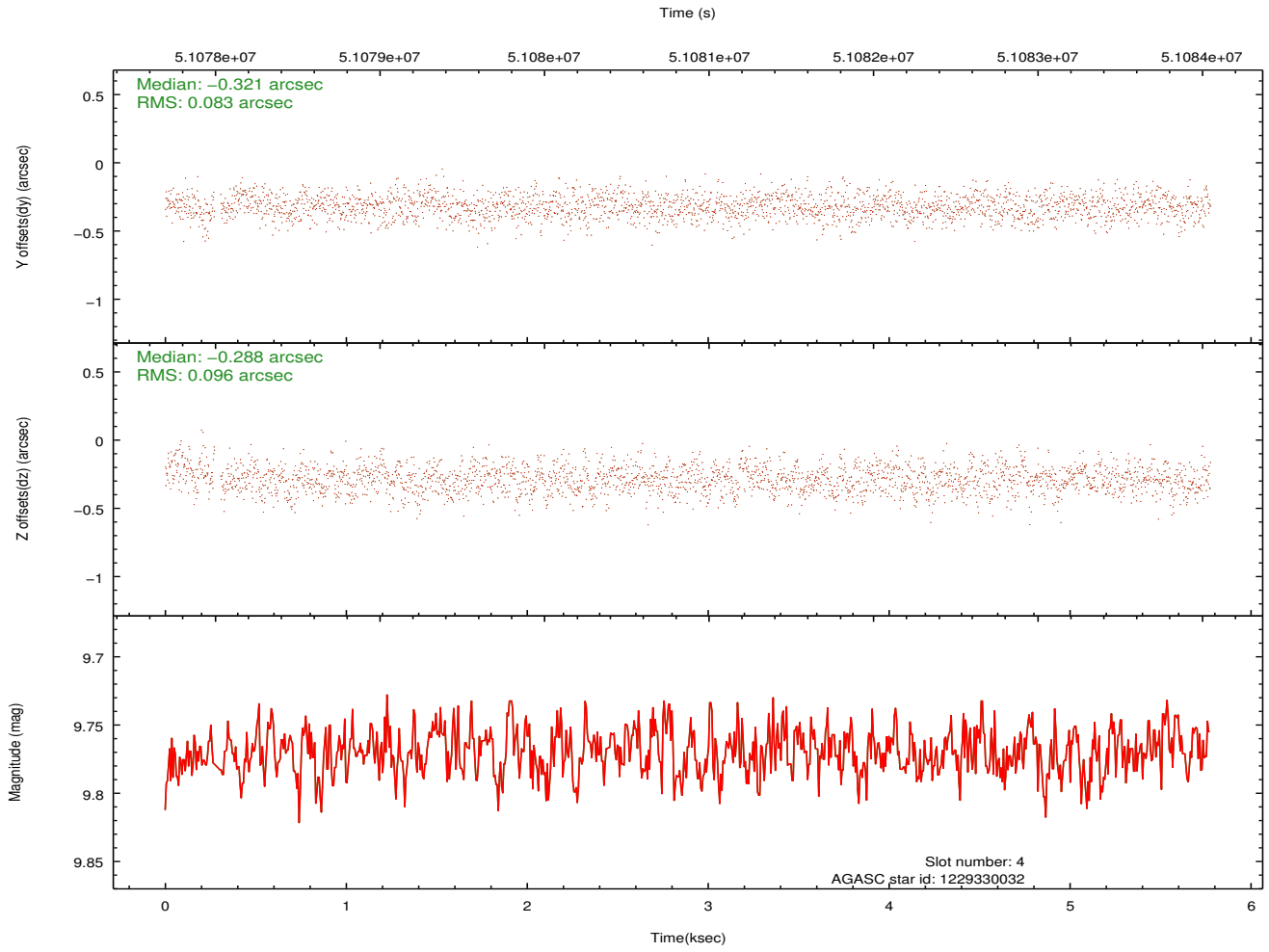
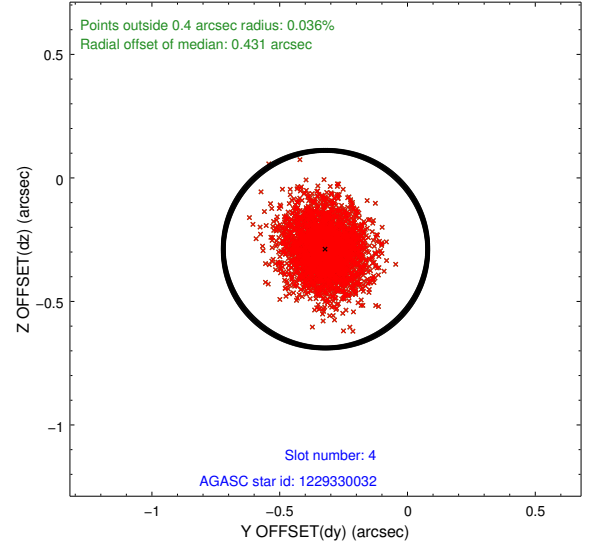
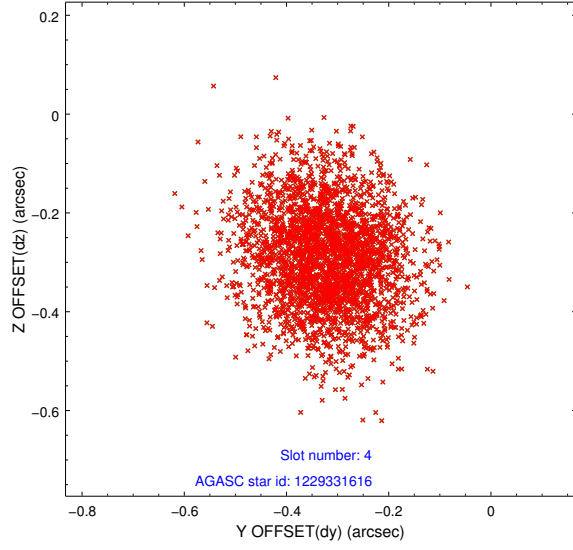
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.14	2802	0.008	0.003	0.005	0.011	0.000000	0.000000	-752.55	-1721.16
1	FID	ACIS-S-3	7.12	2802	-0.073	0.121	0.005	0.012	0.000000	0.000000	60.29	-1850.75
2	FID	ACIS-S-4	7.22	2802	-0.025	0.051	0.004	0.013	0.000000	0.000000	2160.86	186.74
3	GUIDE	1229331616	9.92	2798	0.141	0.135	0.160	0.258	96.182998	-75.347362	1637.42	2046.15
4	BAD	1229330032	9.77	2801	-0.321	-0.288	0.136	0.217	98.721356	-75.139571	541.63	-138.08
5	GUIDE	1204423736	8.76	2801	0.227	0.105	0.078	0.128	99.272017	-74.796122	1031.36	-1385.13
6	BAD	1229457576	9.38	2799	-0.278	-0.087	0.131	0.215	100.335360	-75.489746	-1394.62	-239.99
7	GUIDE	1229457032	9.21	2800	0.226	0.147	0.111	0.178	100.958417	-75.581890	-2032.72	-373.00

2.4 Star Slots

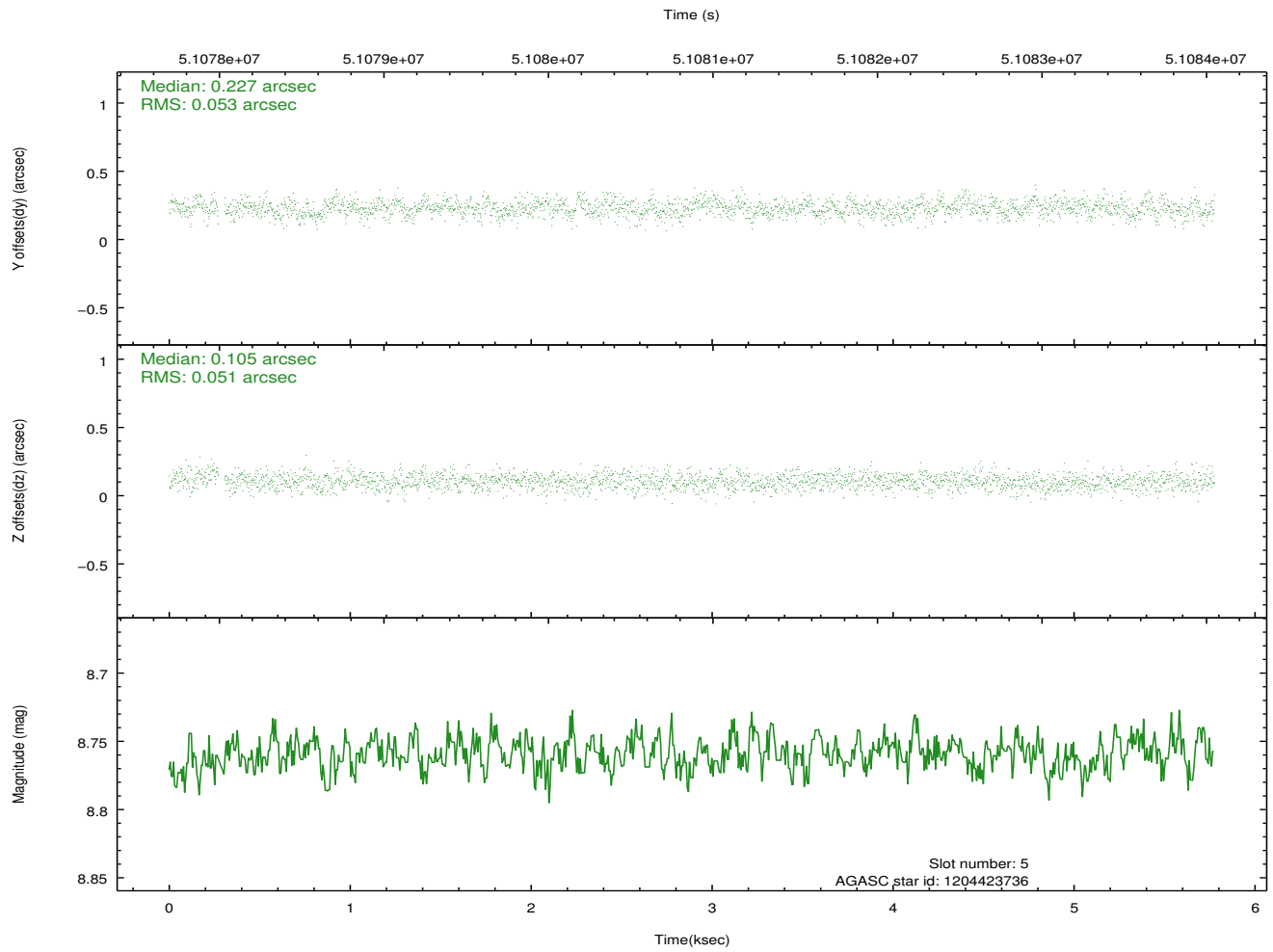
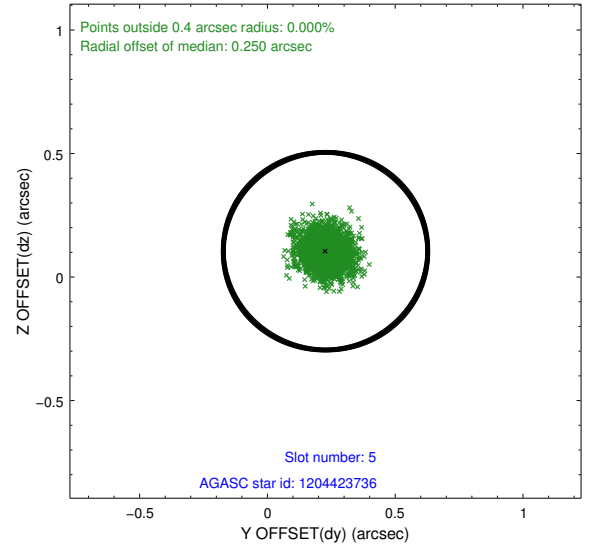
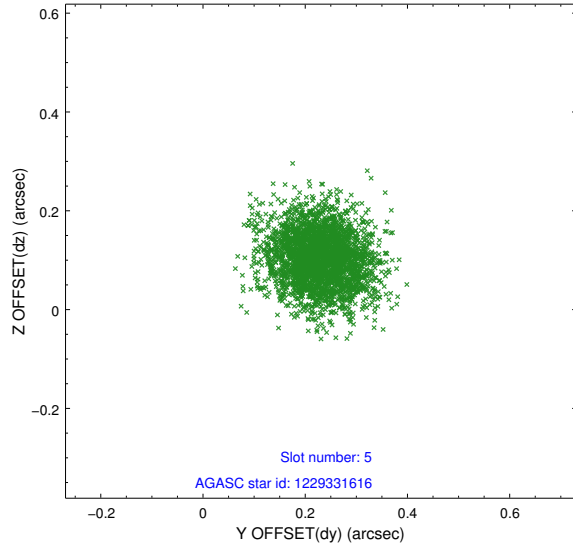
2.4.1 Slot 3



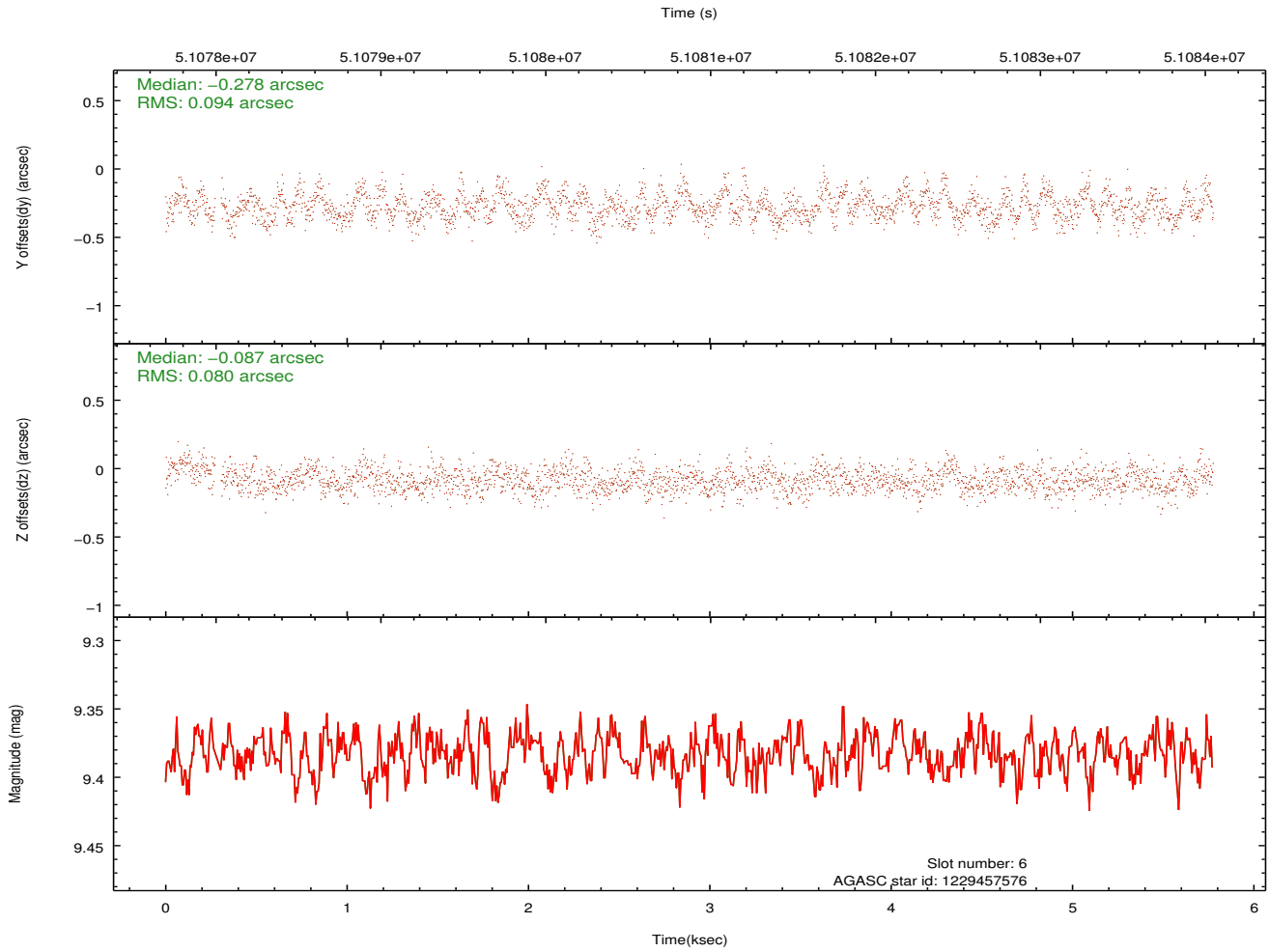
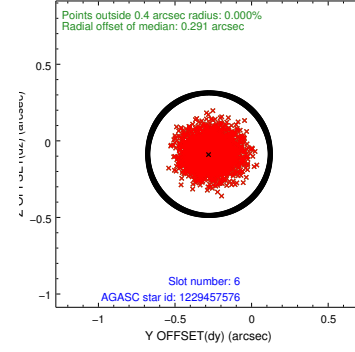
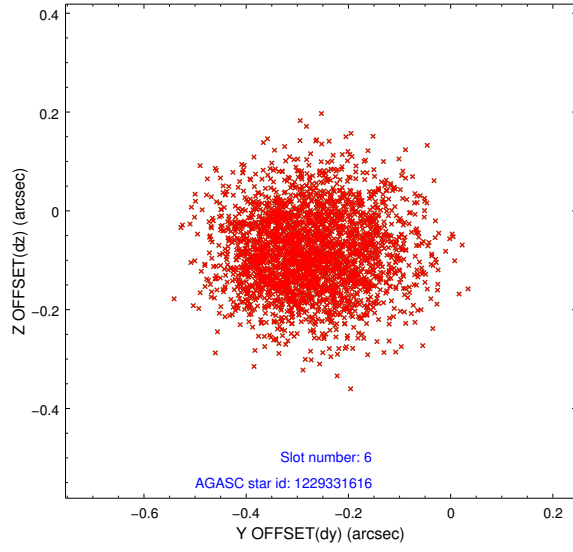
2.4.2 Slot 4



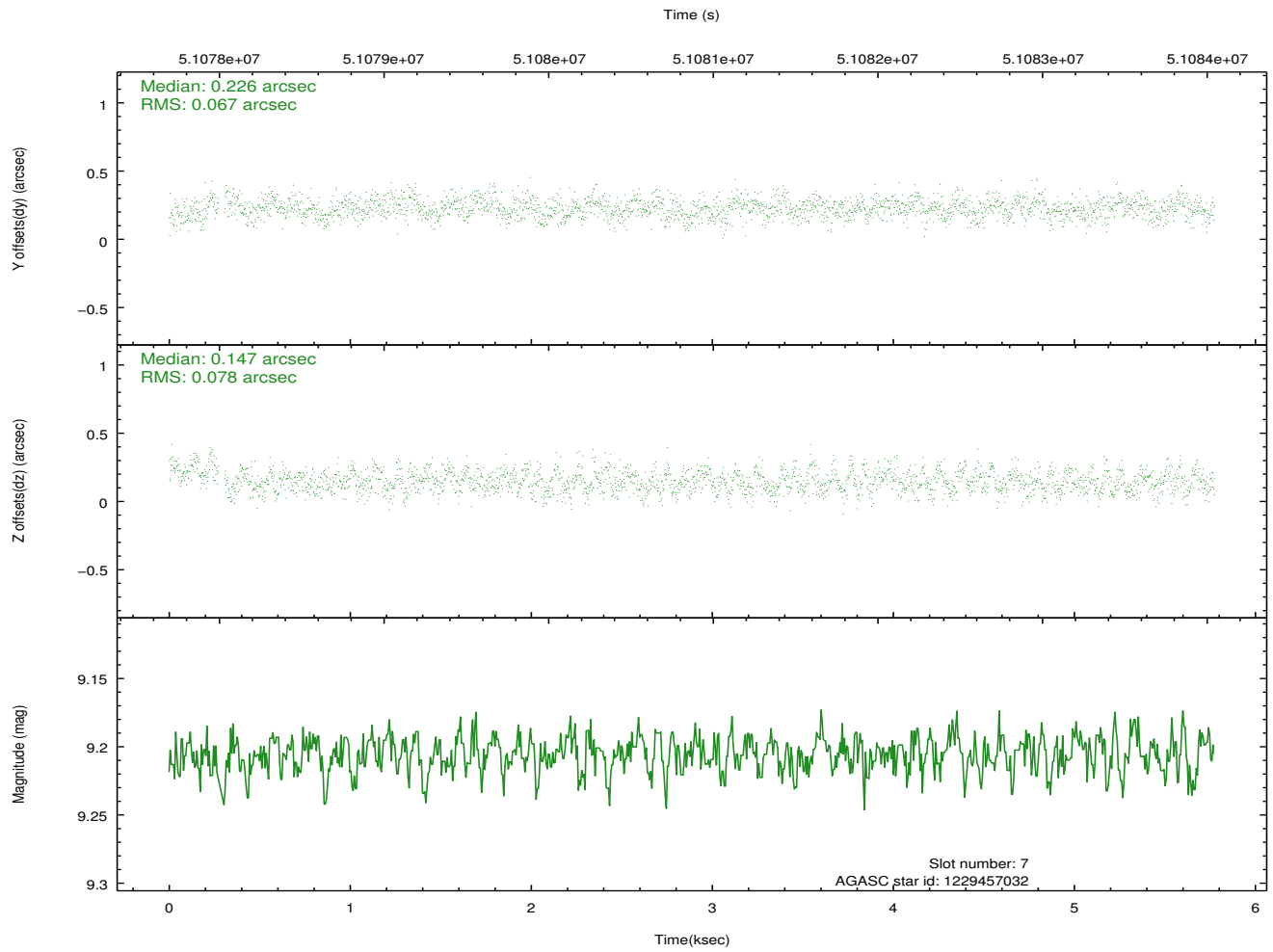
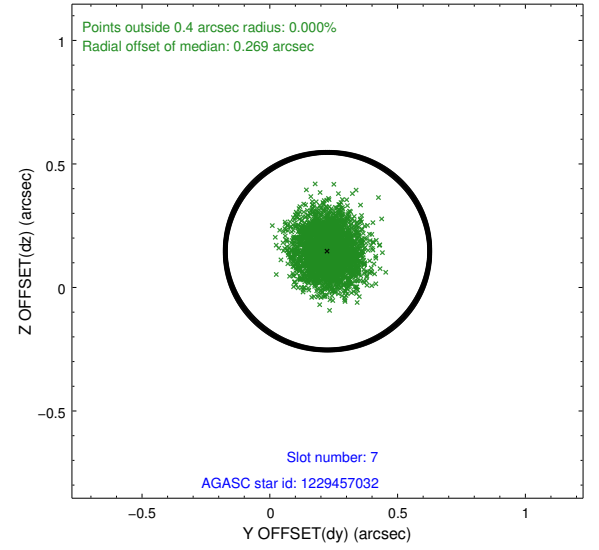
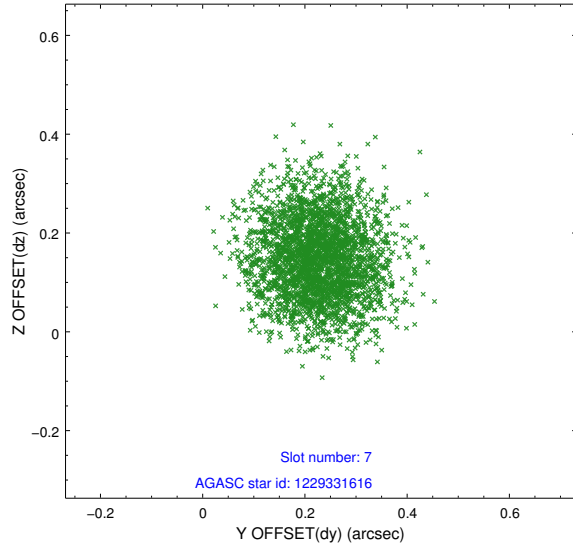
2.4.3 Slot 5



2.4.4 Slot 6

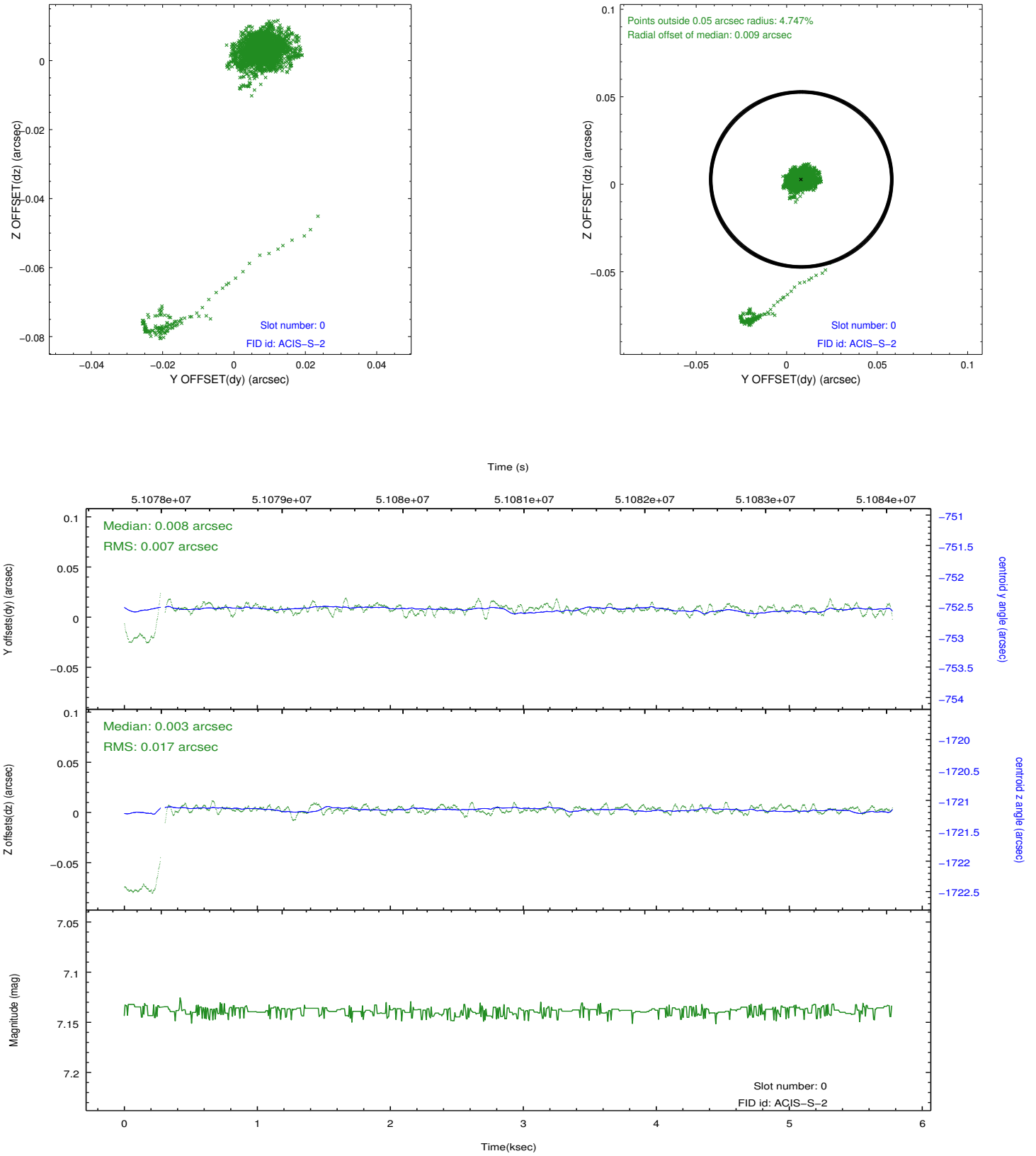


2.4.5 Slot 7

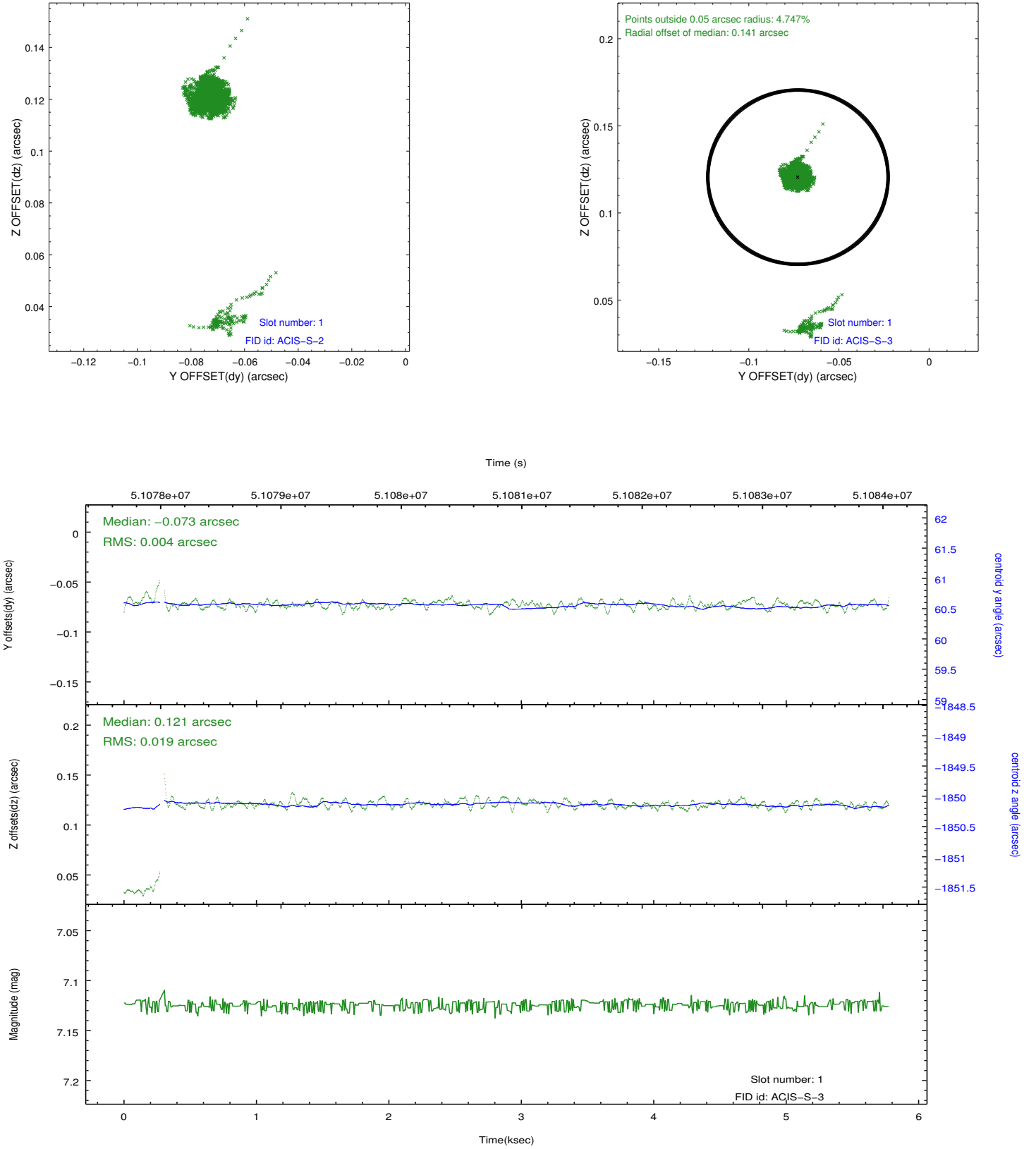


2.5 FID Slots

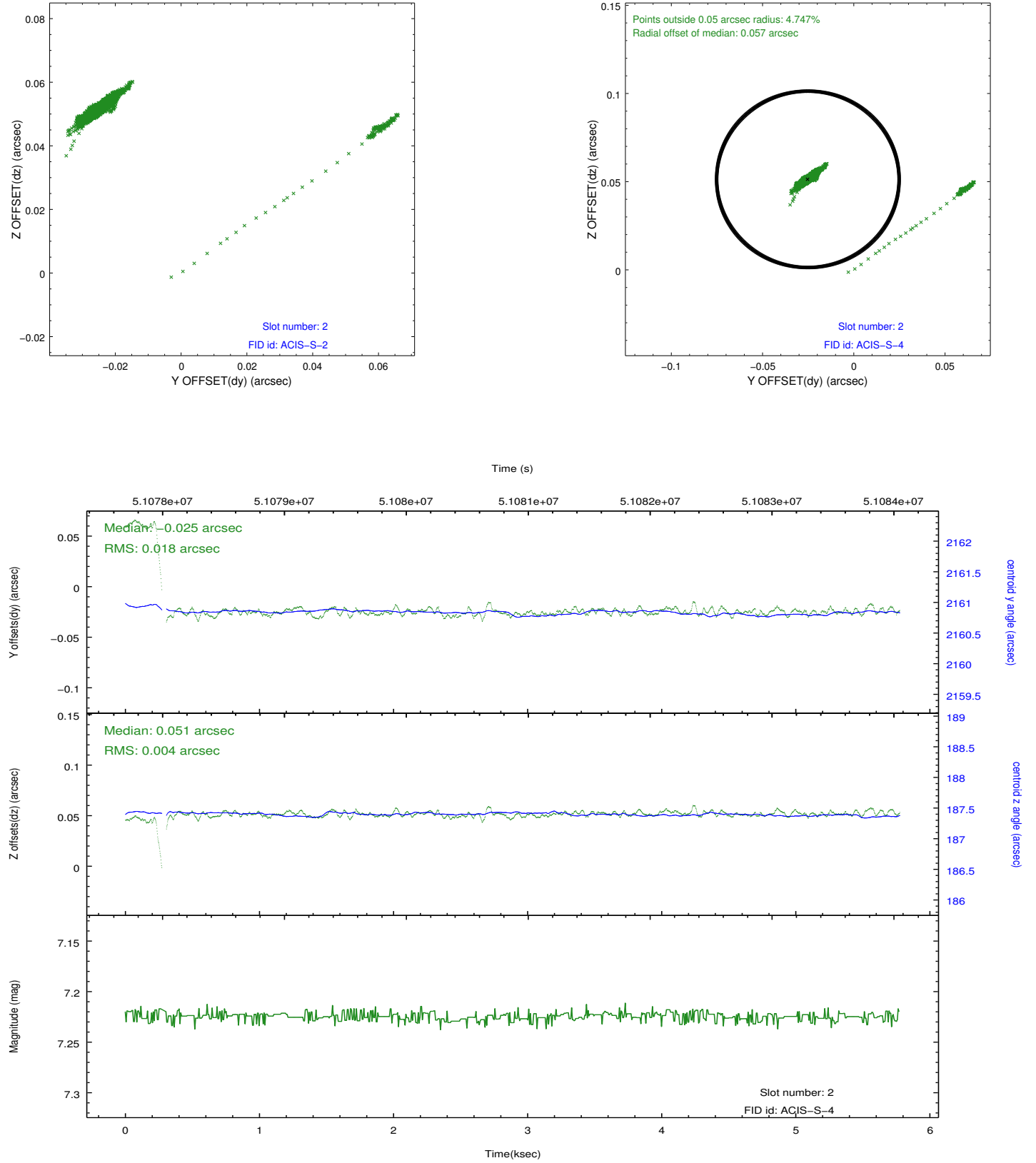
2.5.1 Slot 0



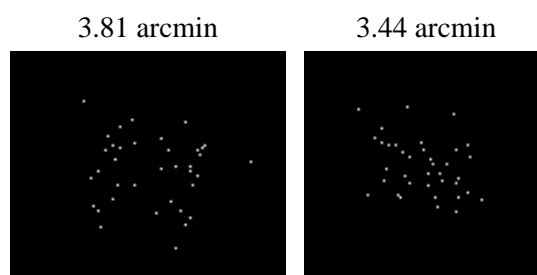
2.5.2 Slot 1



2.5.3 Slot 2



3 Point Sources



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2010.08.16
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.212

A.2 Comments

ACIS focus test and plate scale measurement. Move SIM to -1.5 mm from nominal focus.

===

Slots 4 and 6 were removed from the aspect solution due to poor data quality. The aspect solution is not expected to be degraded by removing these guide stars from the solution.

==

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.