

V&V Reference Report

L2 ASCDS Version : 8.1.1

Observation 347 - L2 Version 4

Chandra X-Ray Center

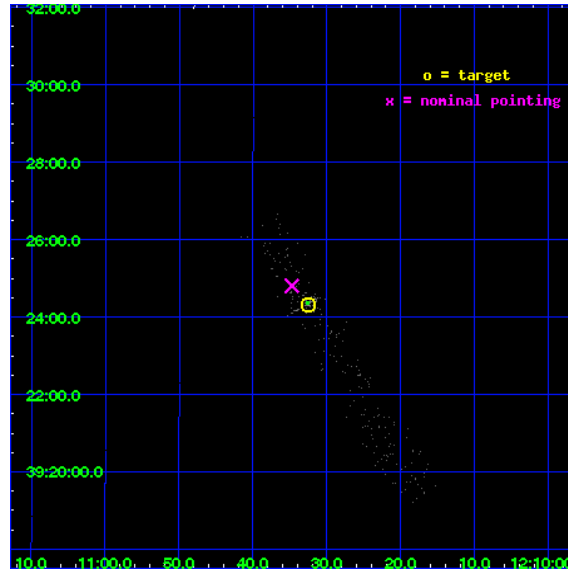
L2 Processing Date : Nov 25 2009

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1 Front

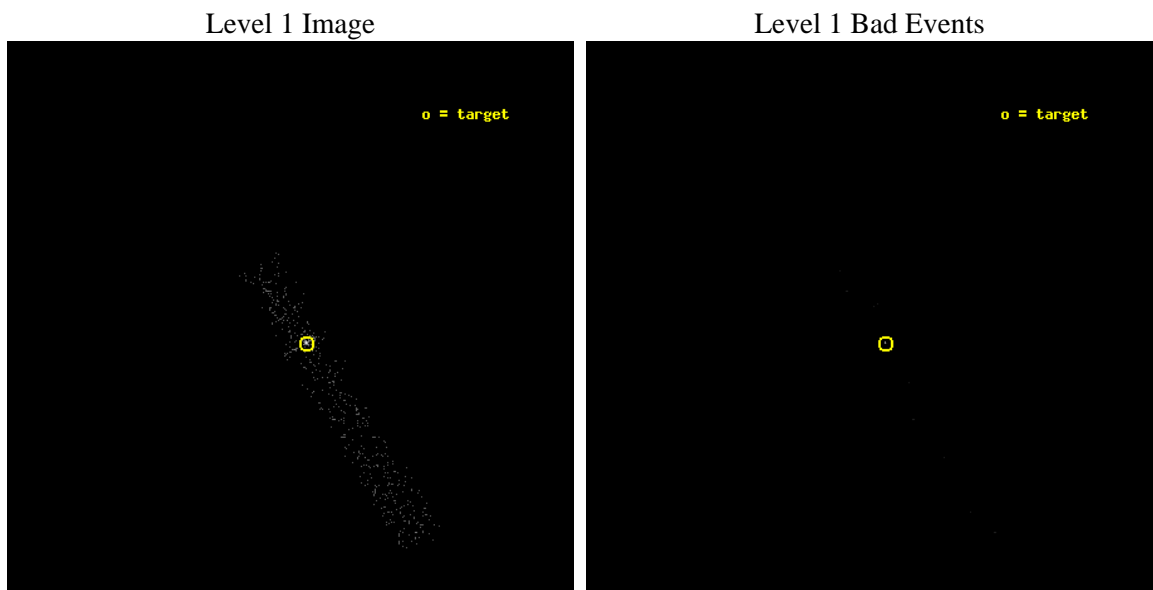
seq_num	700019	Sequence number
obs_id	347	Observation id
title	STUDIES OF RADIO JETS AND THE NARROW LINE REGIONS	Proposal title
observer	Professor Andrew Wilson	Principal investigator
object	NGC 4151	Source name
dtcycle	0	
cycle	P	events are from which exps? P[rimary] S[econdar
ra_targ	182.635833	Observer's specified target RA
dec_targ	39.405667	Observer's specified target Dec
ra_nom	182.64480073613	Nominal RA
dec_nom	39.413457498705	Nominal Dec
roll_nom	59.086747988333	Nominal Roll
revision	4	Processing version of data
ontime	805.3987165615	Sum of GTIs [s]
livetime	141.29802044939	Livetime [s]
ontime7	805.3987165615	Sum of GTIs [s]
l2events	800	Number of level 2 events



2 OBI Primary

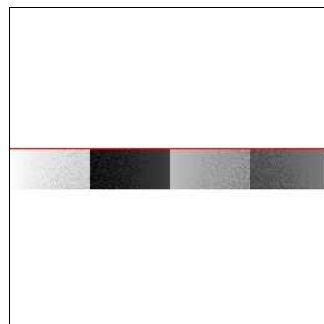
2.1 OBI

2.1.1 Images



2.1.2 Bias

Chip 7



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	2200.000000	Scheduled observation exposure time
ascdsver	8.1.1	ASCDS version number	ontime	805.3987165615	Sum of GTIs [s]
caldbver	4.1.4	 	ontime7	805.3987165615	Sum of GTIs [s]
date	2009-11-25T08:59:30	Date and time of file creation	l1events	1169	Number of level 1 events
revision	4	Processing version of data			

2.1.4 Events

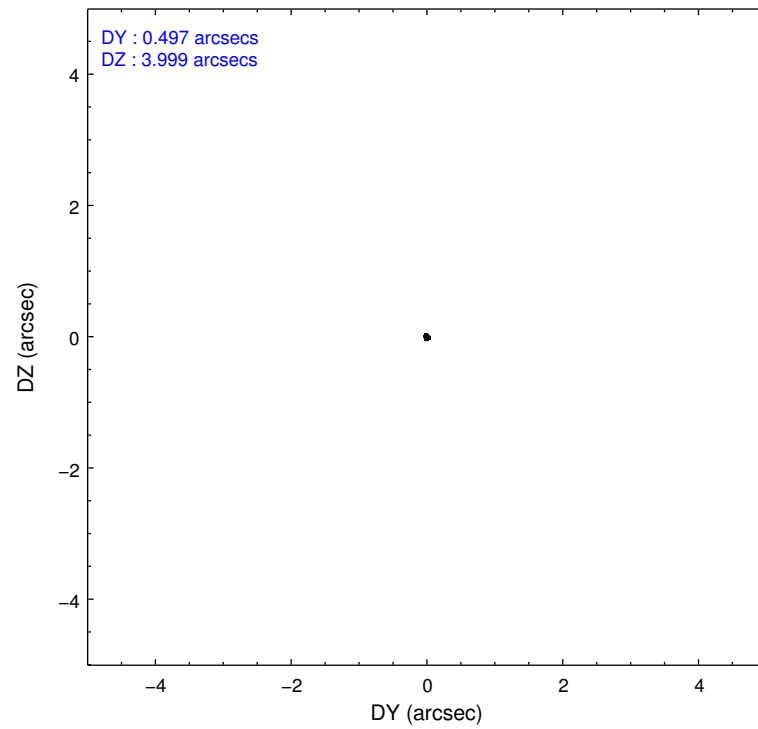
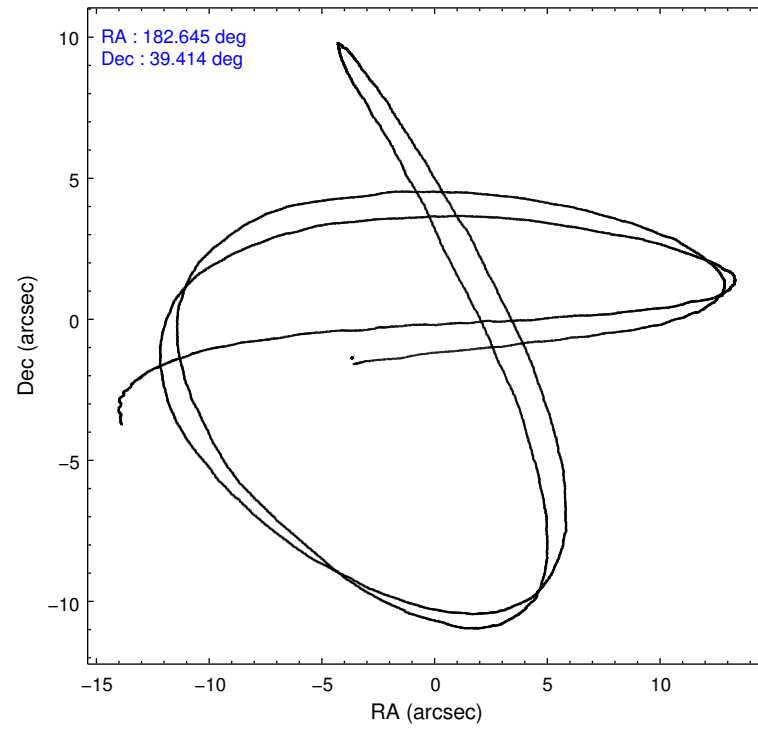
	ccd 7
level 1 events	1169
rejected events	356
rejected %	30%

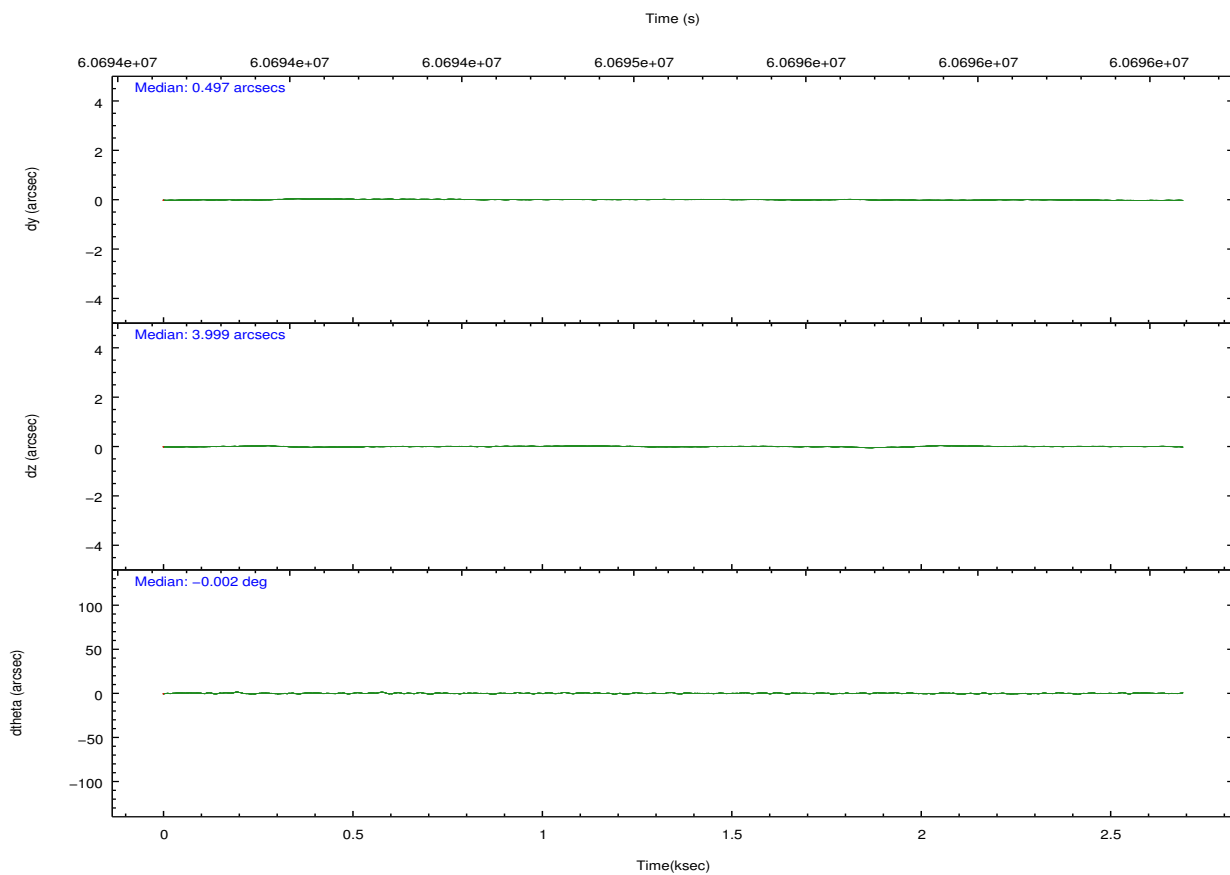
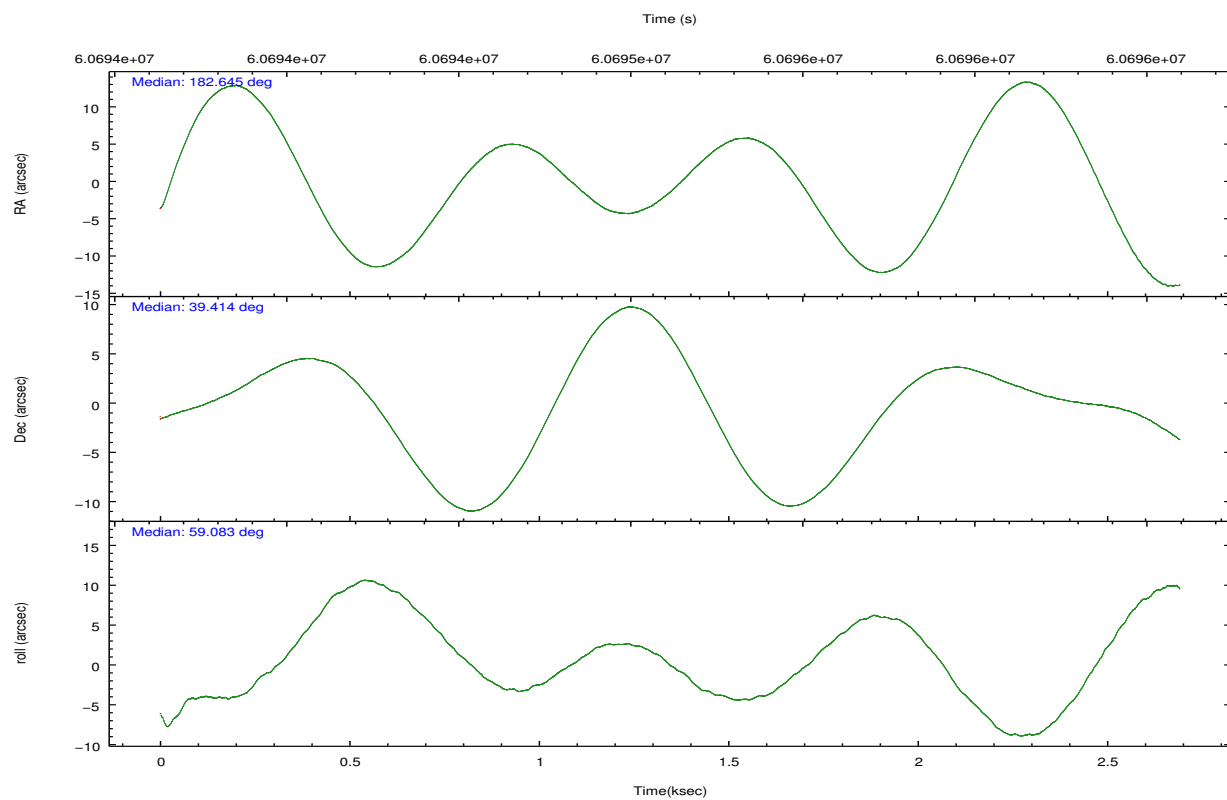
	ccd 7
grade 0 events	170
	14%
grade 1 events	4
	0%
grade 2 events	171
	14%
grade 3 events	110
	9%
grade 4 events	70
	5%
grade 5 events	50
	4%
grade 6 events	292
	24%
grade 7 events	302
	25%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
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
Pointing RA	182.644002	182.6448007361298	Subarray requested	CUSTOM	1/8
Pointing Dec	39.385785	39.41345749870481	Subarray start row	447	447
Pointing Roll	58.930653	59.08674798833256	Subarray row count	128	128
SIM focus pos (mm)	-0.684267	-0.6828225247311905	Alternating exposures requested	Y	Y
SIM defocus (mm)	0	0.001444936568705701	Primary exposure time	0.100000	0.1
SIM translation stage pos (mm)	-190.132523	-190.1400660498719	Secondary exposure time	0.400000	0.4
SIM translation stage offset (mm)	0	0.00754346686406393	Duty cycle	2	2
Observation start time	60694258.184000	60693368.474248			
Observation start date	1999-12-04T11:29:54	1999-12-04T11:16:08			
Observation end time	60696458.184000	60697681.674404			
Observation end date	1999-12-04T12:06:34	1999-12-04T12:28:01			
Read mode	TIMED	TIMED			

2.3 Aspect



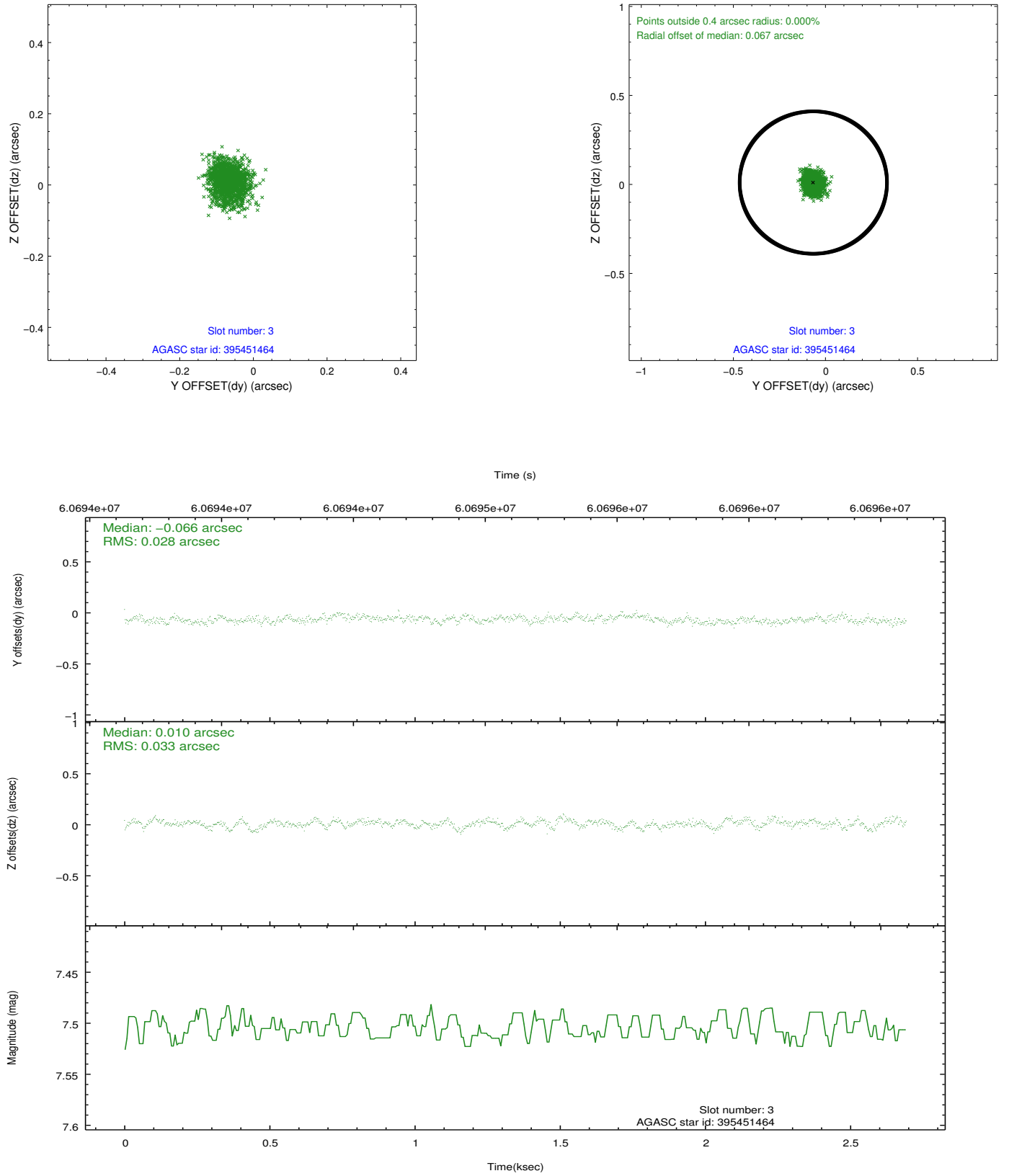


Slot Statistics

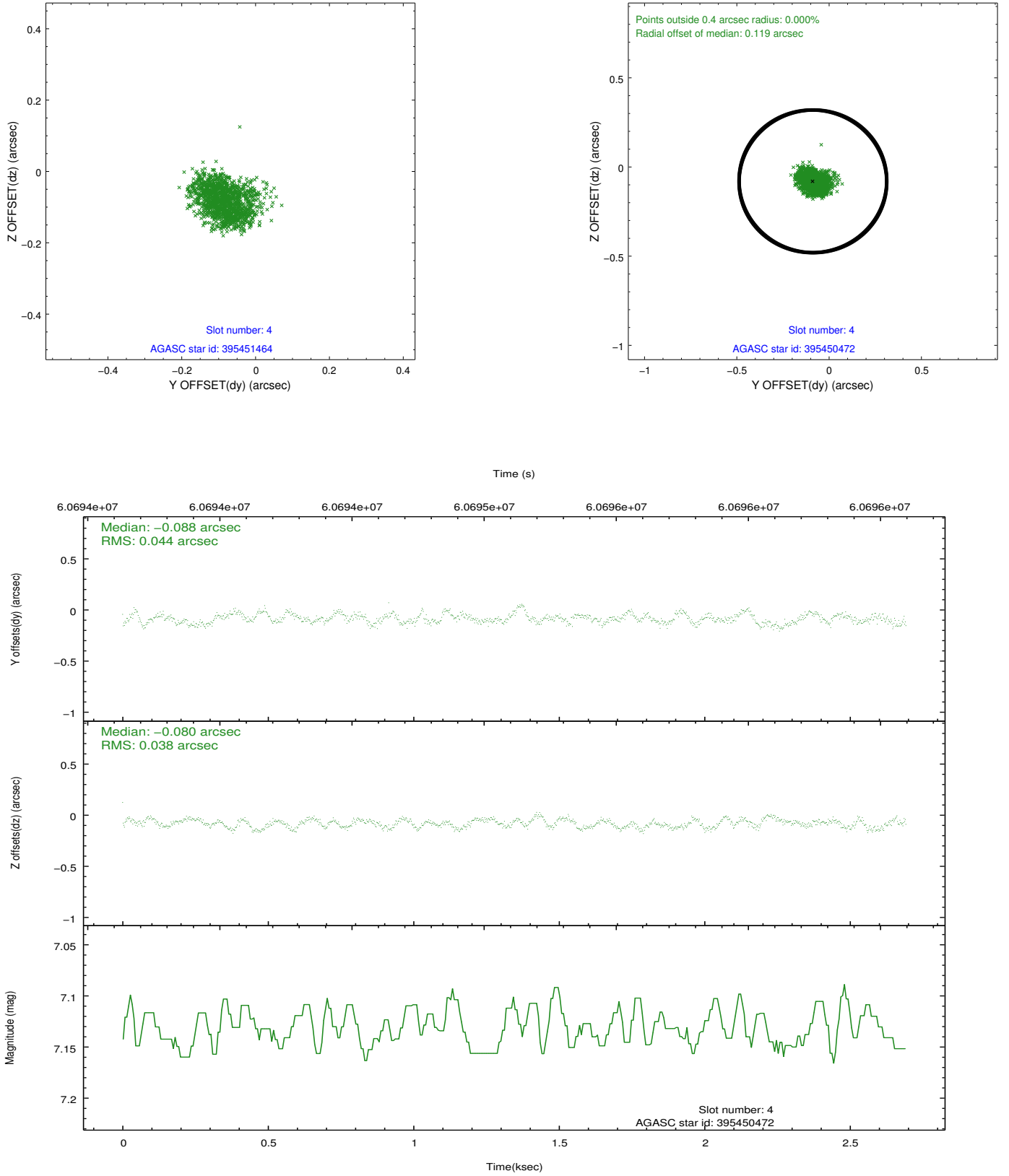
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	1314	-0.007	-0.019	0.008	0.014	0.000000	0.000000	-753.13	-1725.08
1	FID	ACIS-S-4	7.21	1314	0.034	0.009	0.009	0.016	0.000000	0.000000	2159.74	182.20
2	FID	ACIS-S-5	7.24	1314	-0.058	0.019	0.008	0.014	0.000000	0.000000	-1804.52	177.27
3	GUIDE	395451464	7.50	1313	-0.066	0.010	0.046	0.075	182.473792	39.433512	-97.31	494.83
4	GUIDE	395450472	7.13	1314	-0.088	-0.080	0.063	0.096	182.697135	39.891512	1634.49	814.85
5	GUIDE	395458176	8.22	1314	0.077	0.132	0.068	0.104	182.790485	39.130199	-575.88	-823.80
6	GUIDE	395460552	8.96	1313	-0.099	0.135	0.061	0.099	183.182835	39.403608	831.33	-1248.32
7	GUIDE	395459952	9.41	1313	0.174	-0.194	0.095	0.145	181.854255	39.210518	-1668.91	1565.53

2.4 Star Slots

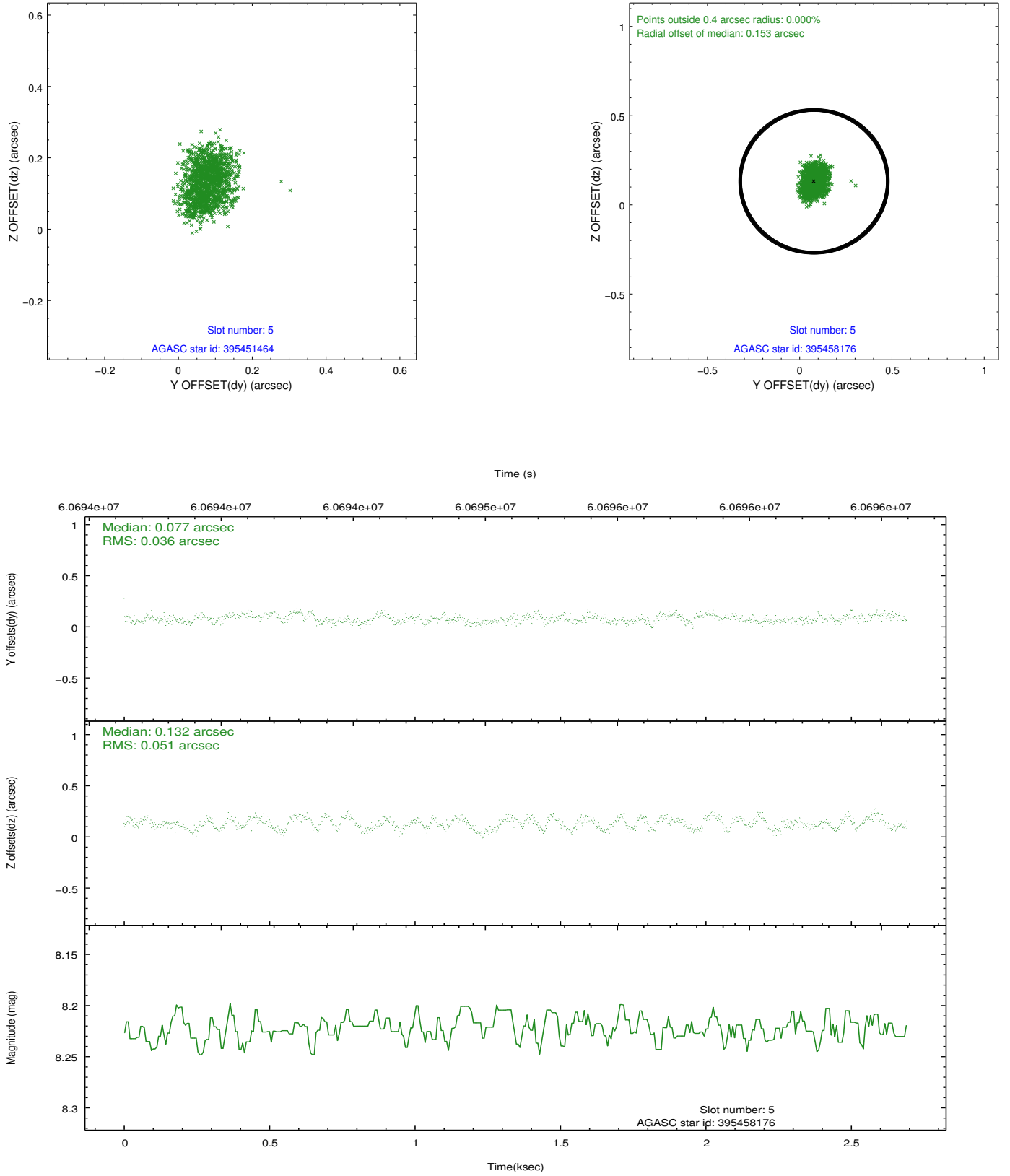
2.4.1 Slot 3



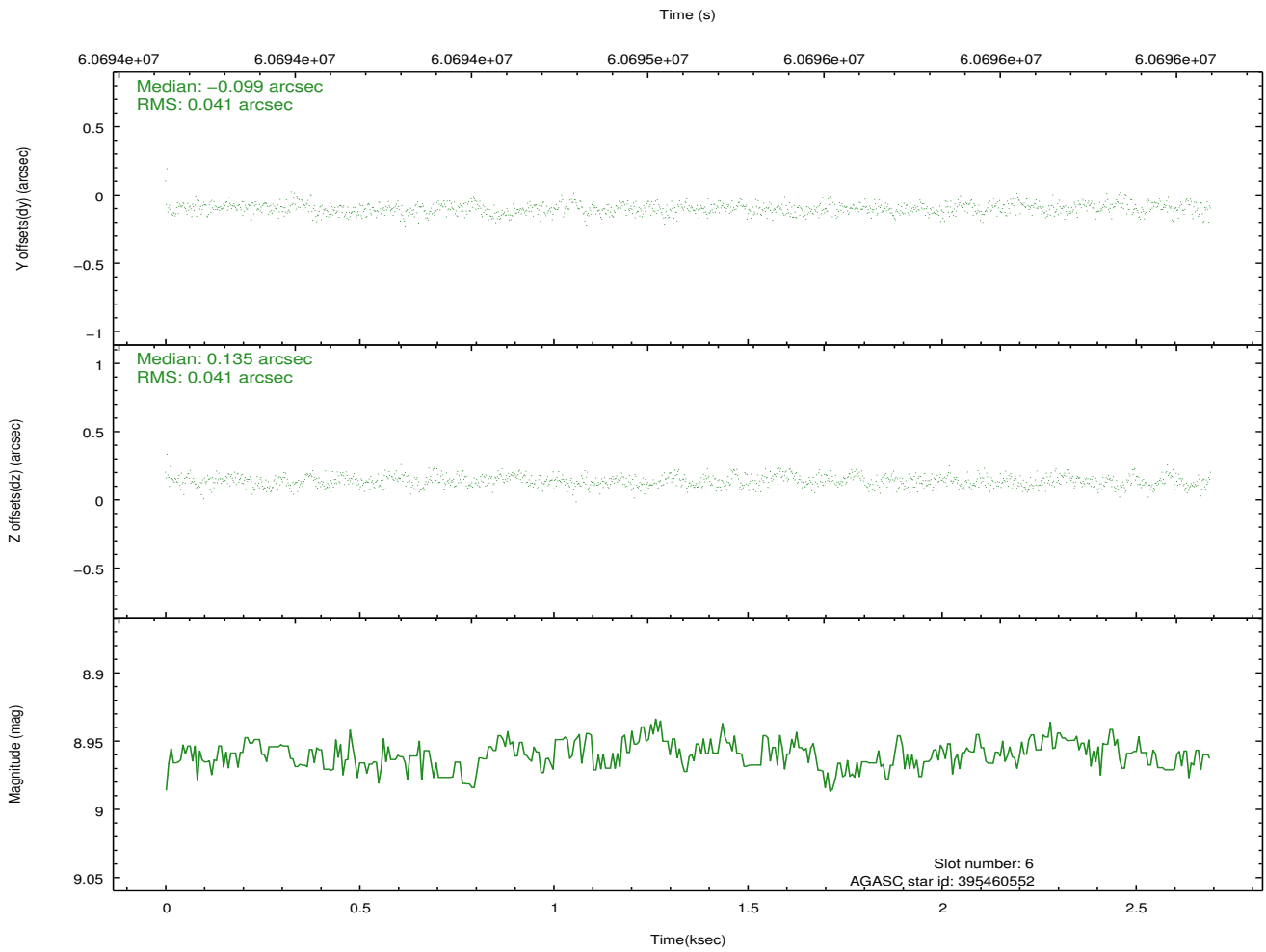
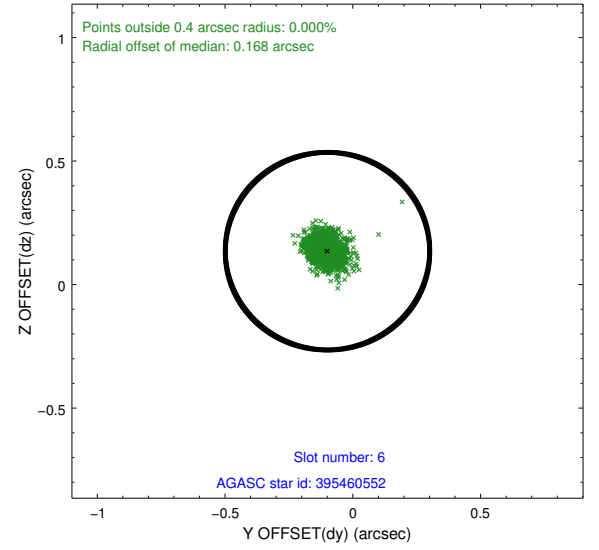
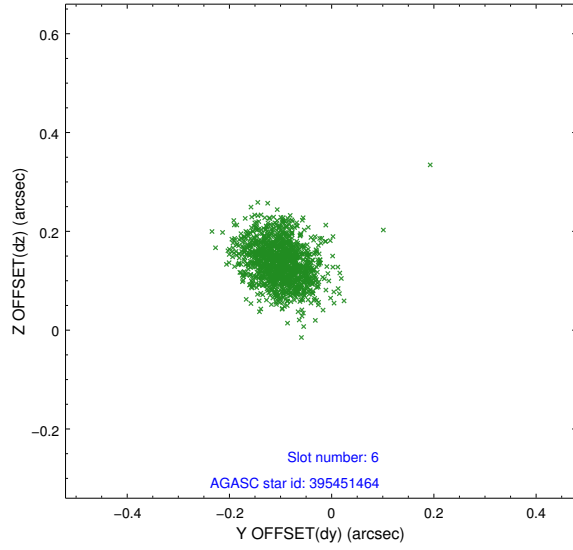
2.4.2 Slot 4



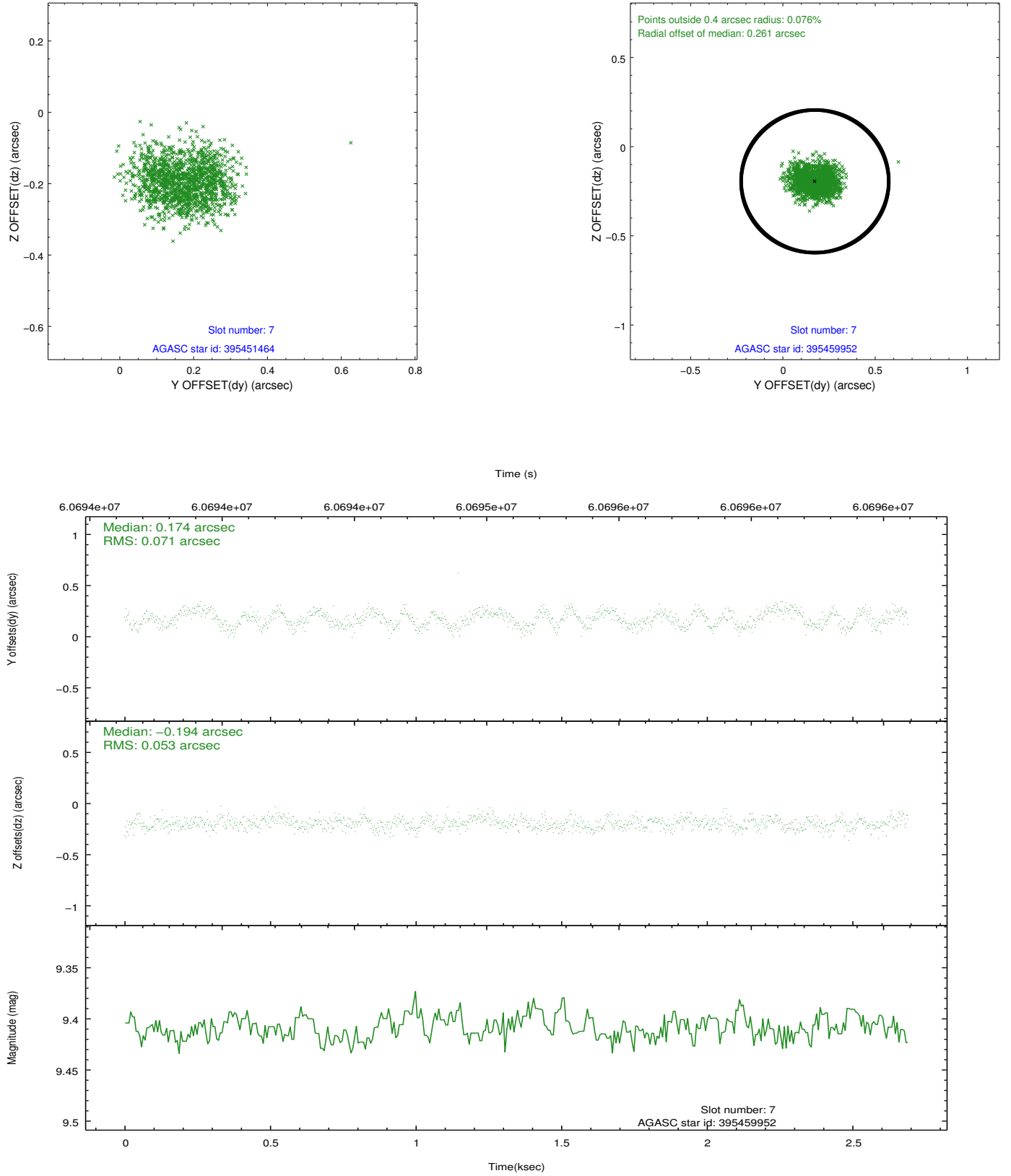
2.4.3 Slot 5



2.4.4 Slot 6

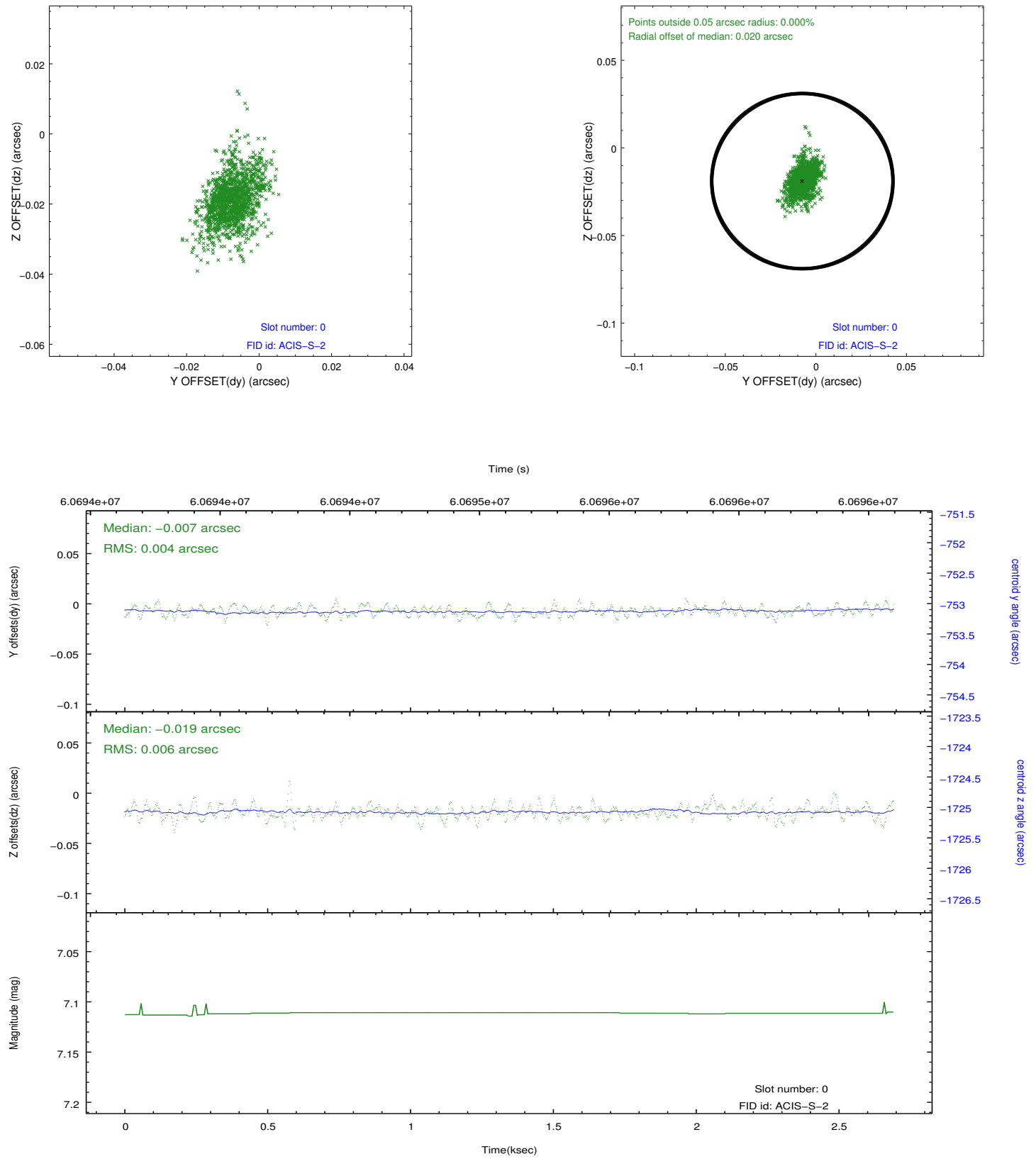


2.4.5 Slot 7

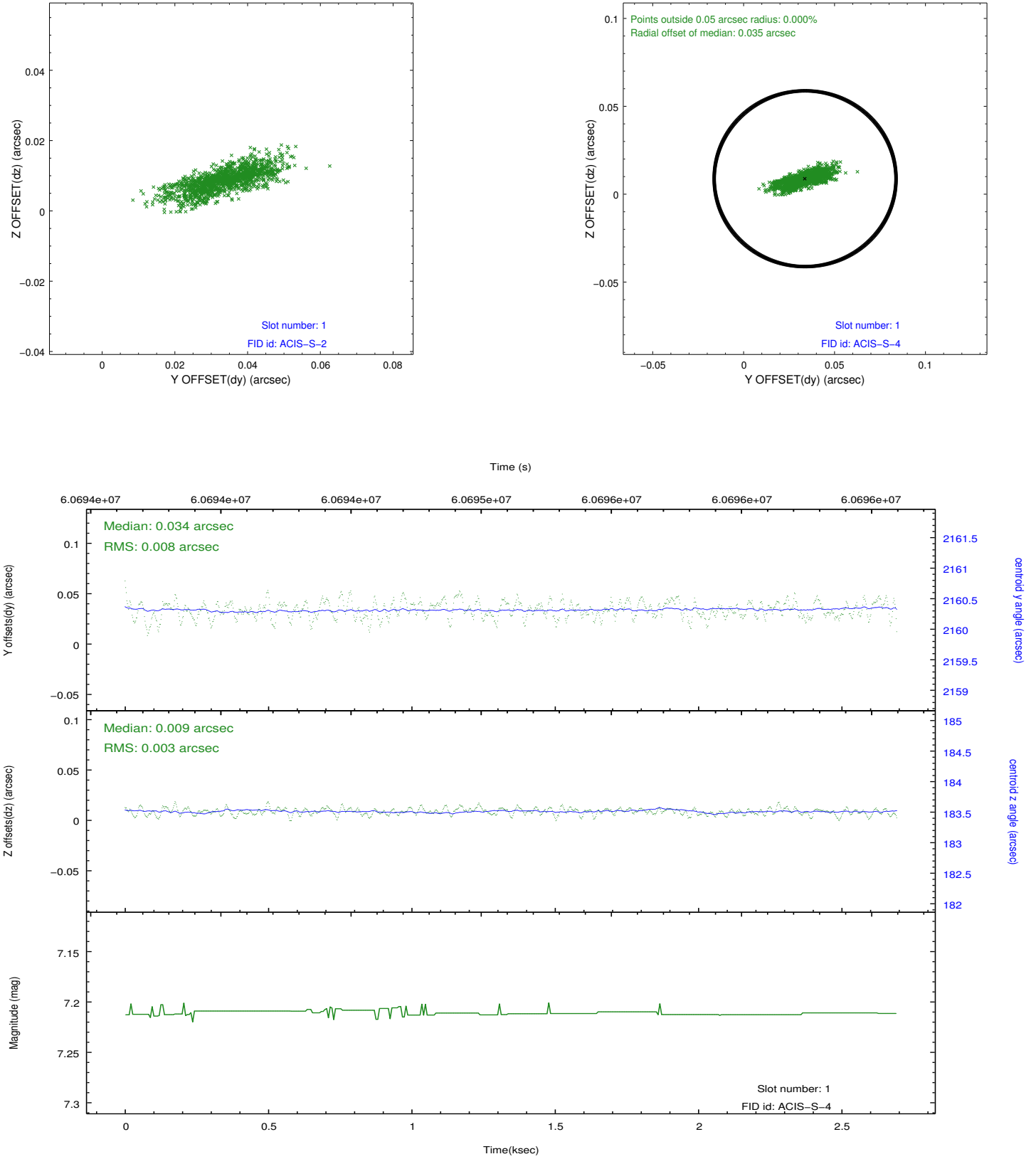


2.5 FID Slots

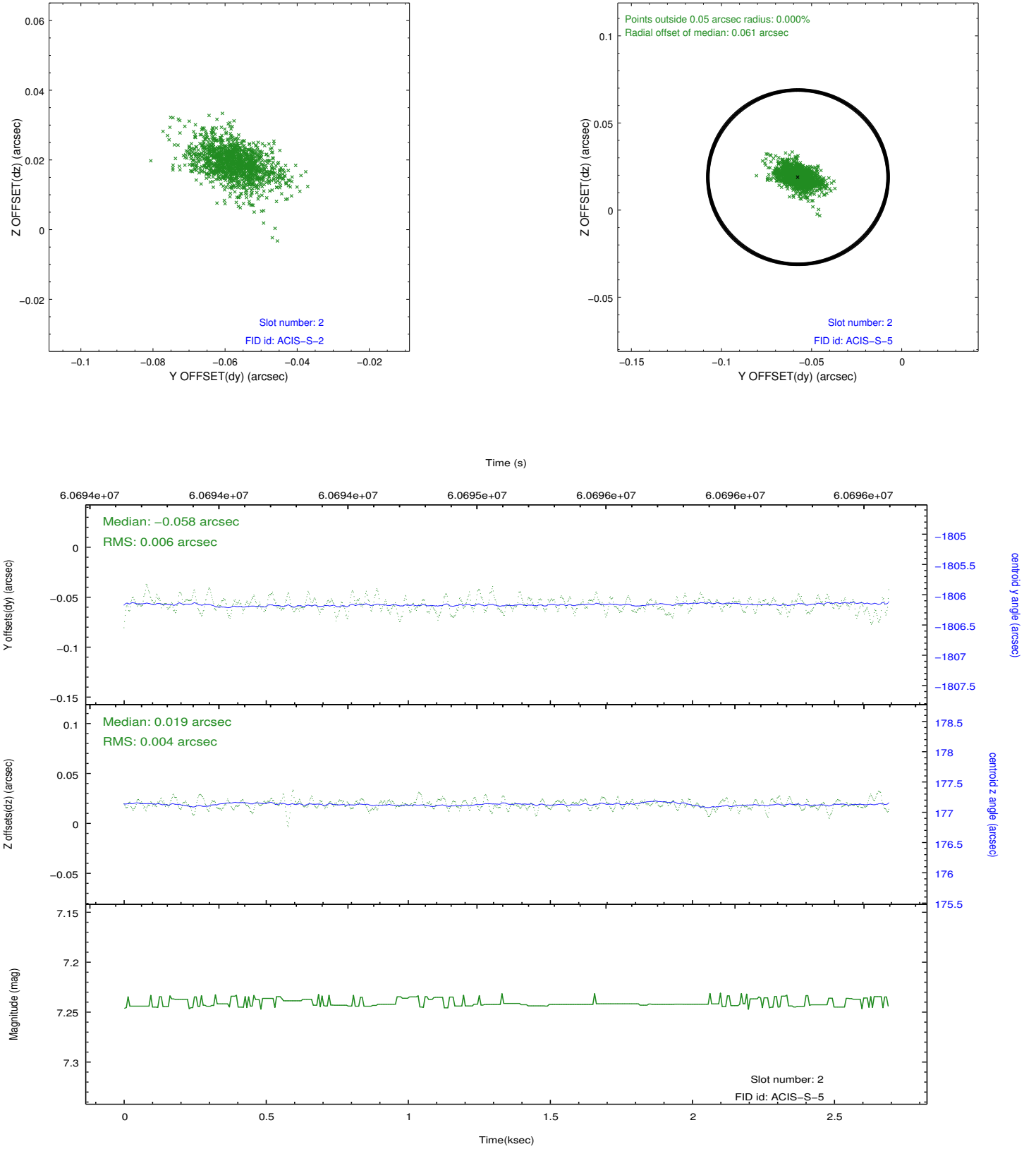
2.5.1 Slot 0



2.5.2 Slot 1



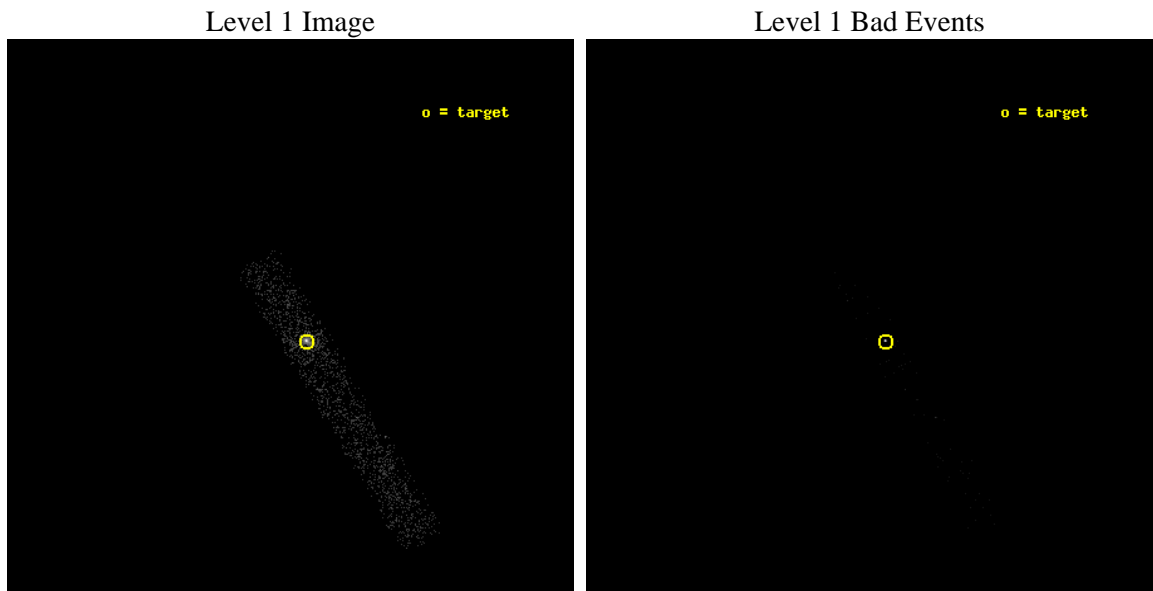
2.5.3 Slot 2



3 OBI Secondary

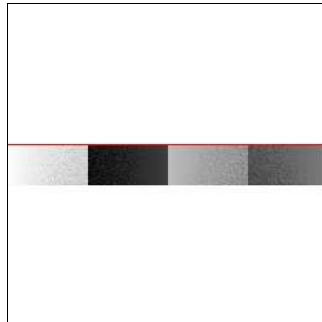
3.1 OBI

3.1.1 Images



3.1.2 Bias

Chip 7



3.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	2200.000000	Scheduled observation exposure time
ascdsver	8.1.1	ASCDS version number	ontime	1247.2894803062	Sum of GTIs [s]
caldbver	4.1.4	 	ontime7	1247.2894803062	Sum of GTIs [s]
date	2009-11-25T09:01:17	Date and time of file creation	l1events	5047	Number of level 1 events
revision	4	Processing version of data			

3.1.4 Events

	ccd 7
level 1 events	5047
rejected events	1793
rejected %	35%

	ccd 7
grade 0 events	540
	10%
grade 1 events	28
	0%
grade 2 events	676
	13%
grade 3 events	352
	6%
grade 4 events	256
	5%
grade 5 events	305
	6%
grade 6 events	1431
	28%
grade 7 events	1459
	28%

4 Point Sources

A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2010.02.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	2.053

A.2 Comments

The focal plane temperature is approximately -110 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.