

V&V Reference Report

L2 ASCDS Version : 8.1.1

Observation 1422 - L2 Version 4

Chandra X-Ray Center

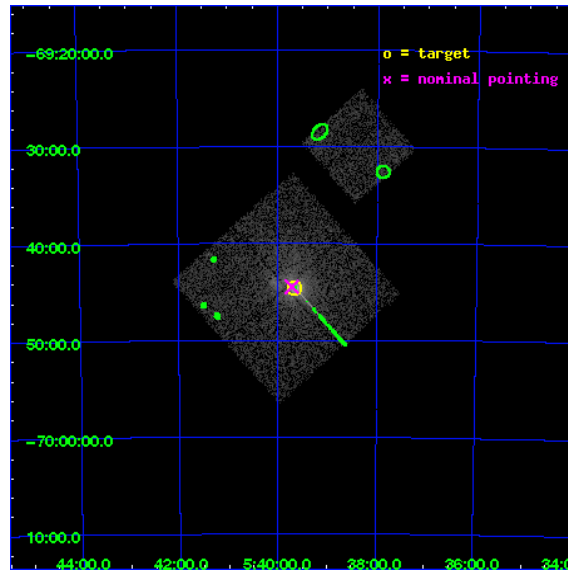
L2 Processing Date : Nov 20 2009

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

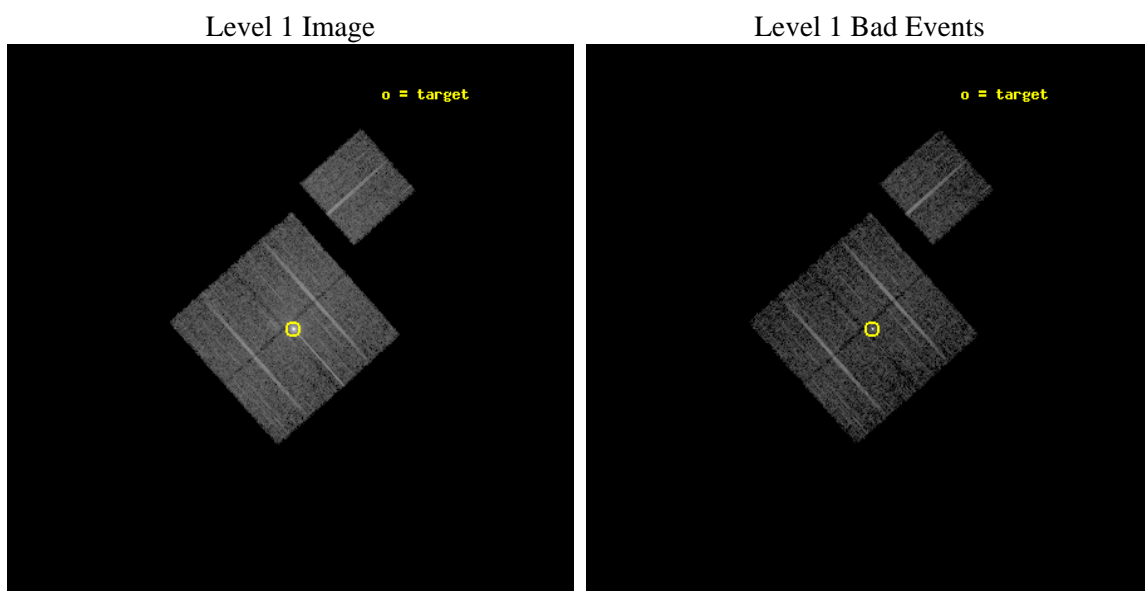
seq_num	480372	Sequence number
obs_id	1422	Observation id
title	Measure of PSF wings	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	LMC X-1	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	84.914583	Observer's specified target RA
dec_targ	-69.743611	Observer's specified target Dec
ra_nom	84.928633912683	Nominal RA
dec_nom	-69.741311093998	Nominal Dec
roll_nom	48.283246464774	Nominal Roll
revision	4	Processing version of data
ontime	4175.2257581502	Sum of GTIs [s]
livetime	4122.3565355814	Livetime [s]
ontime0	4175.3899181485	Sum of GTIs [s]
ontime1	4175.3488781452	Sum of GTIs [s]
ontime2	4175.3078381494	Sum of GTIs [s]
ontime3	4175.2257581502	Sum of GTIs [s]
ontime6	4175.2667981461	Sum of GTIs [s]
l2events	41765	Number of level 2 events



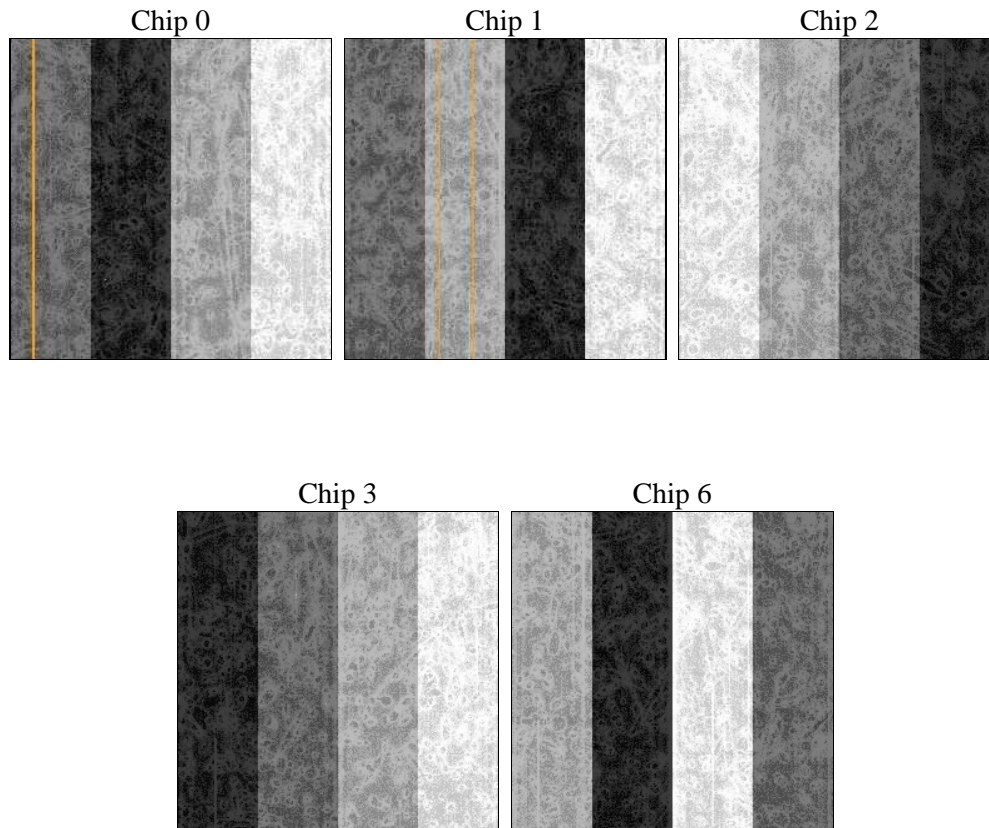
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5000.000000	Scheduled observation exposure time
ascdsver	8.1.1	ASCDS version number	ontime	4175.2257581502	Sum of GTIs [s]
caldsver	4.1.4	 	ontime0	4175.3899181485	Sum of GTIs [s]
date	2009-11-20T19:28:38	Date and time of file creation	ontime1	4175.3488781452	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	4175.3078381494	Sum of GTIs [s]
			ontime3	4175.2257581502	Sum of GTIs [s]
			ontime6	4175.2667981461	Sum of GTIs [s]
			l1events	211087	Number of level 1 events

2.1.4 Events

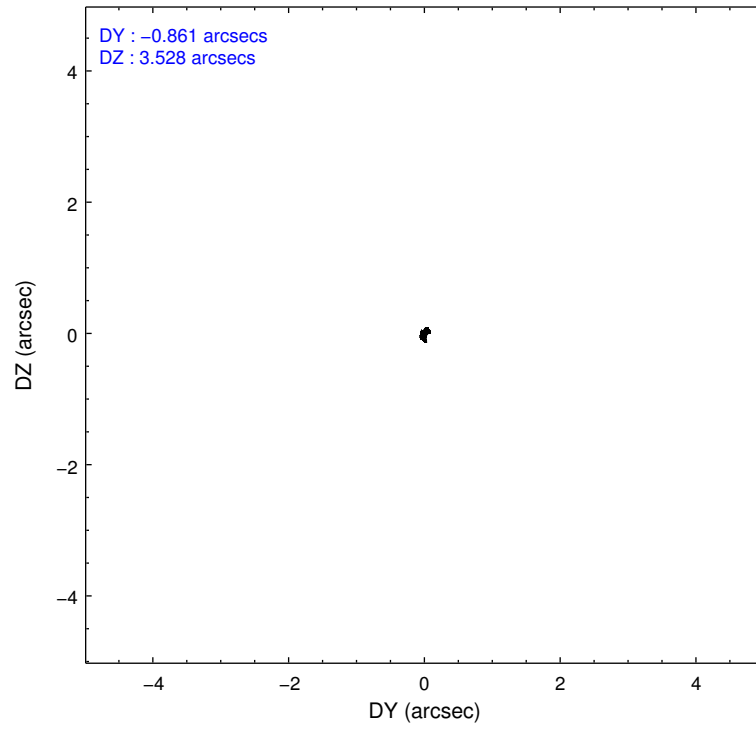
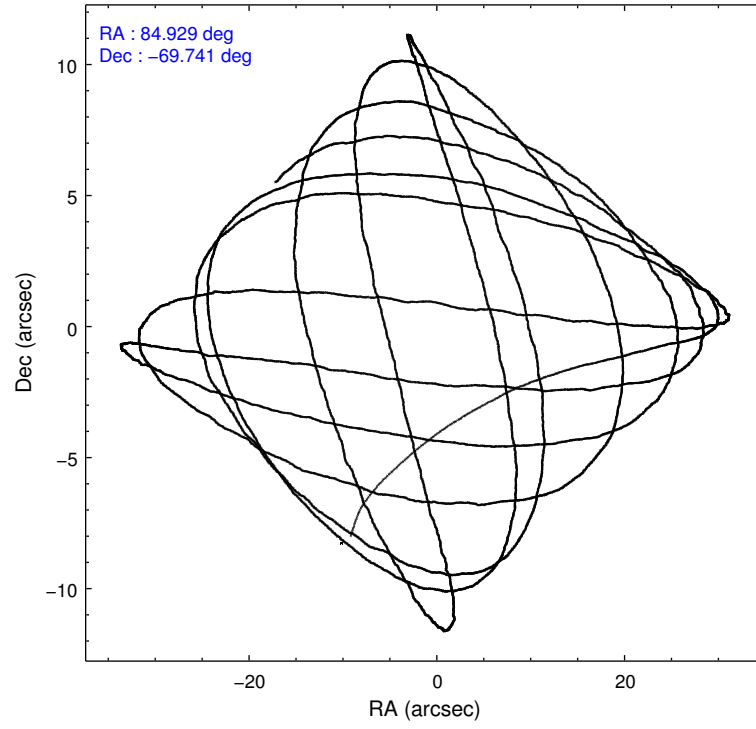
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	37304	36935	41606	55990	39252
rejected events	31173	31451	35186	35011	34648
rejected %	83%	85%	84%	62%	88%

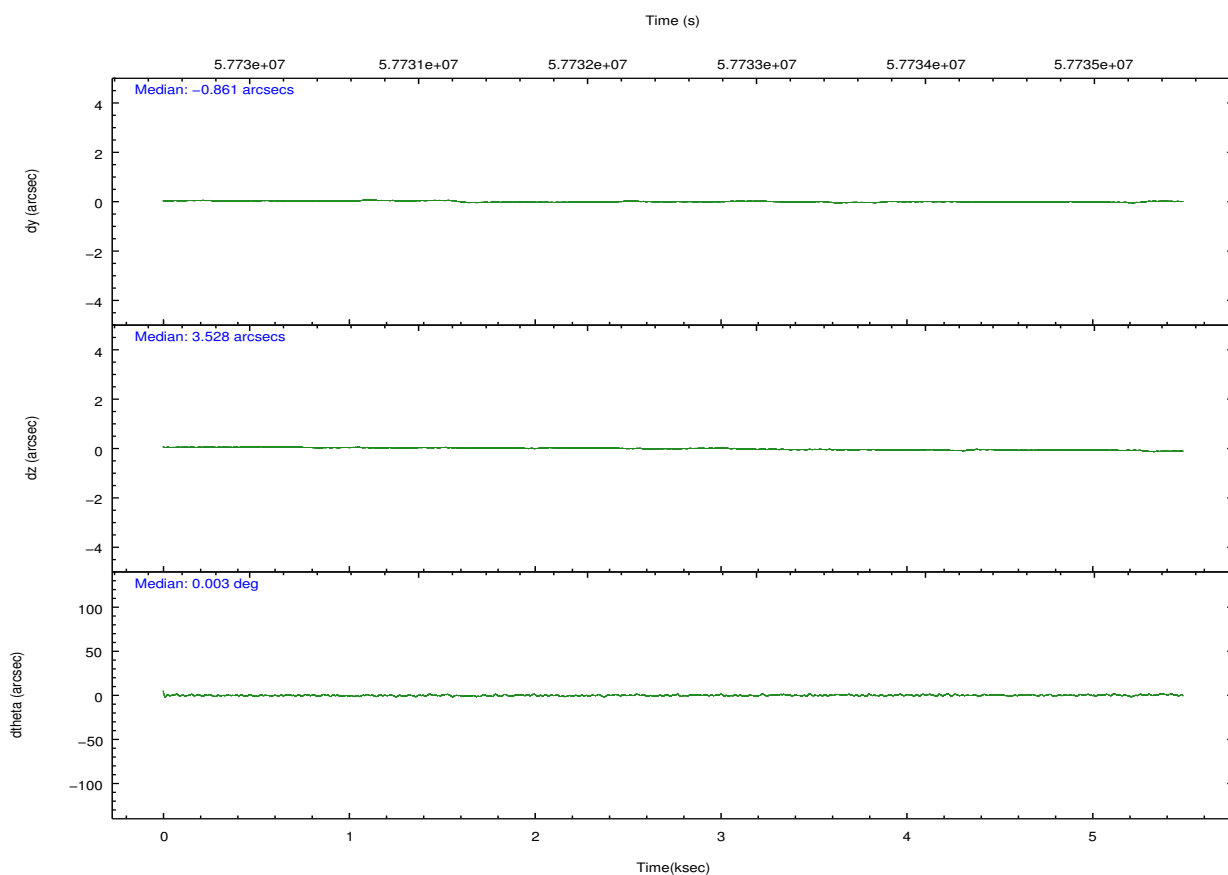
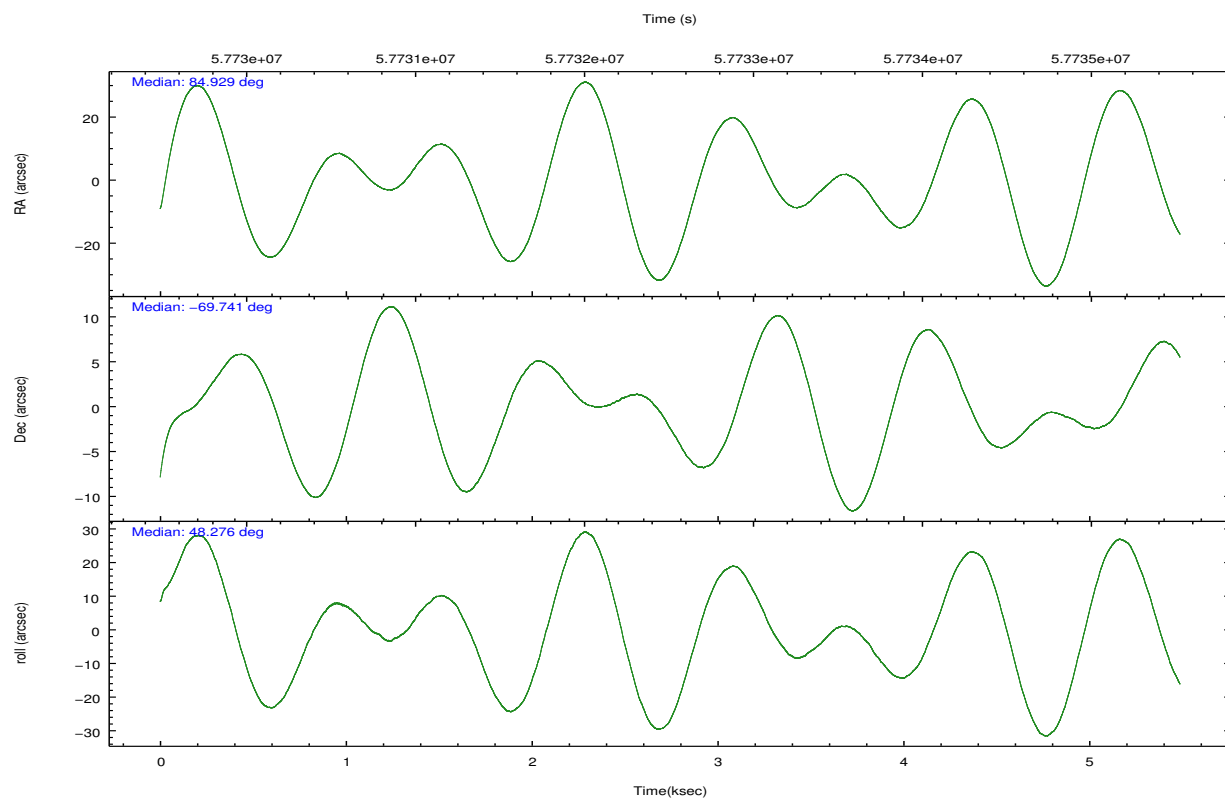
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	2707	1889	2618	7822	1514
	7%	5%	6%	13%	3%
grade 1 events	18	11	8	212	8
	0%	0%	0%	0%	0%
grade 2 events	1924	1966	2383	10303	1577
	5%	5%	5%	18%	4%
grade 3 events	341	319	264	503	245
	0%	0%	0%	0%	0%
grade 4 events	285	309	275	478	230
	0%	0%	0%	0%	0%
grade 5 events	769	774	688	1181	716
	2%	2%	1%	2%	1%
grade 6 events	880	1011	890	1915	1049
	2%	2%	2%	3%	2%
grade 7 events	30380	30656	34480	33576	33913
	81%	82%	82%	59%	86%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-01236	ACIS-01236	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
Pointing RA	84.910919	84.92863391268327	Subarray requested	NONE	NONE
Pointing Dec	-69.768471	-69.74131109399841	Alternating exposures requested	N	N
Pointing Roll	48.057906	48.283246464774	Primary exposure time	0.000000	3.2
SIM focus pos (mm)	-0.782348	-0.7809083437167272			
SIM defocus (mm)	0	0.001439871863259334			
SIM translation stage pos (mm)	-233.592463	-233.5874344608287			
SIM translation stage offset (mm)	0	-0.005018542100998502			
Observation start time	57730250.184000	57728913.079648			
Observation start date	1999-10-31T04:09:46	1999-10-31T03:48:33			
Observation end time	57735250.184000	57736041.954905			
Observation end date	1999-10-31T05:33:06	1999-10-31T05:47:21			
Read mode	TIMED	TIMED			

2.3 Aspect



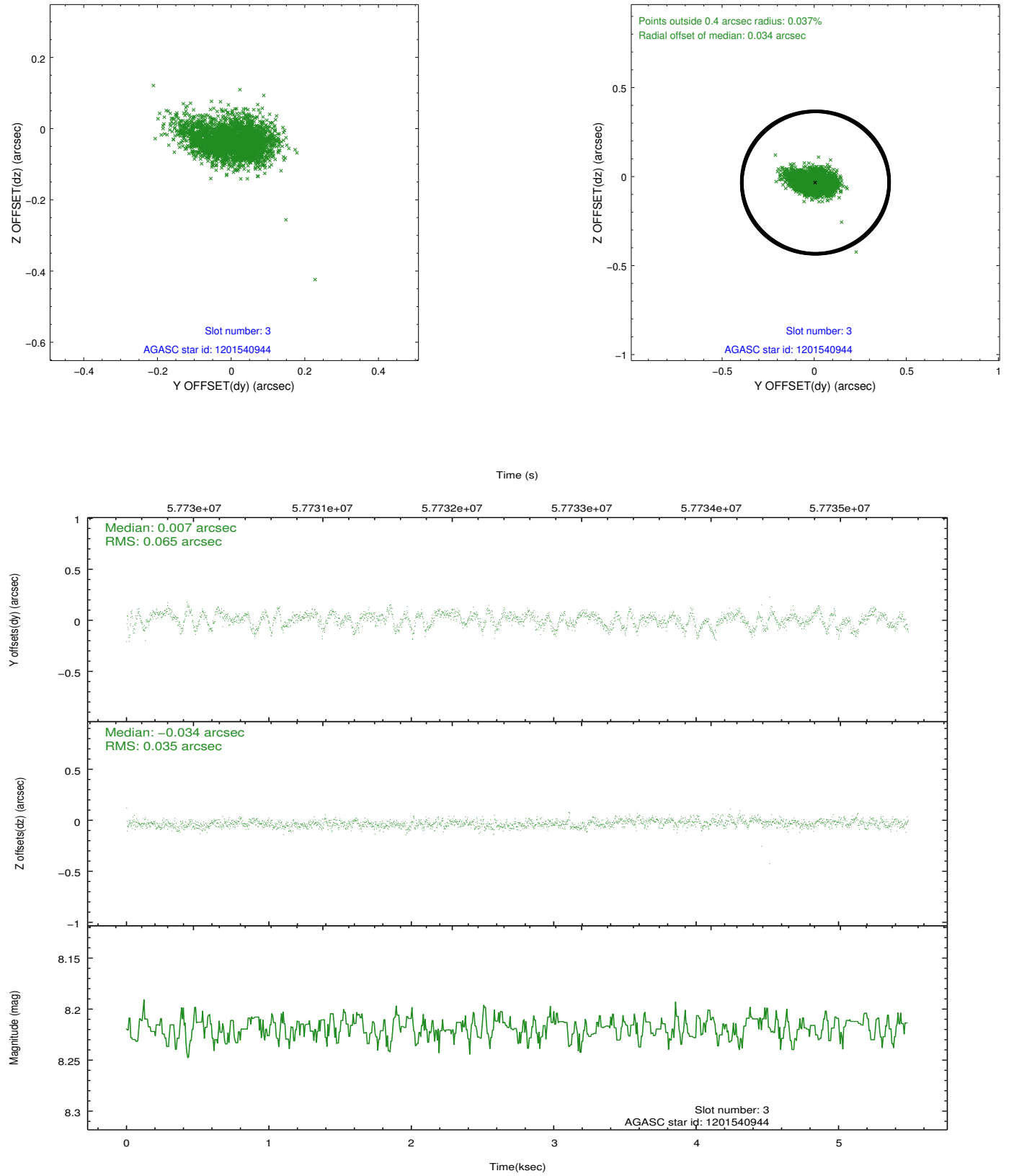


Slot Statistics

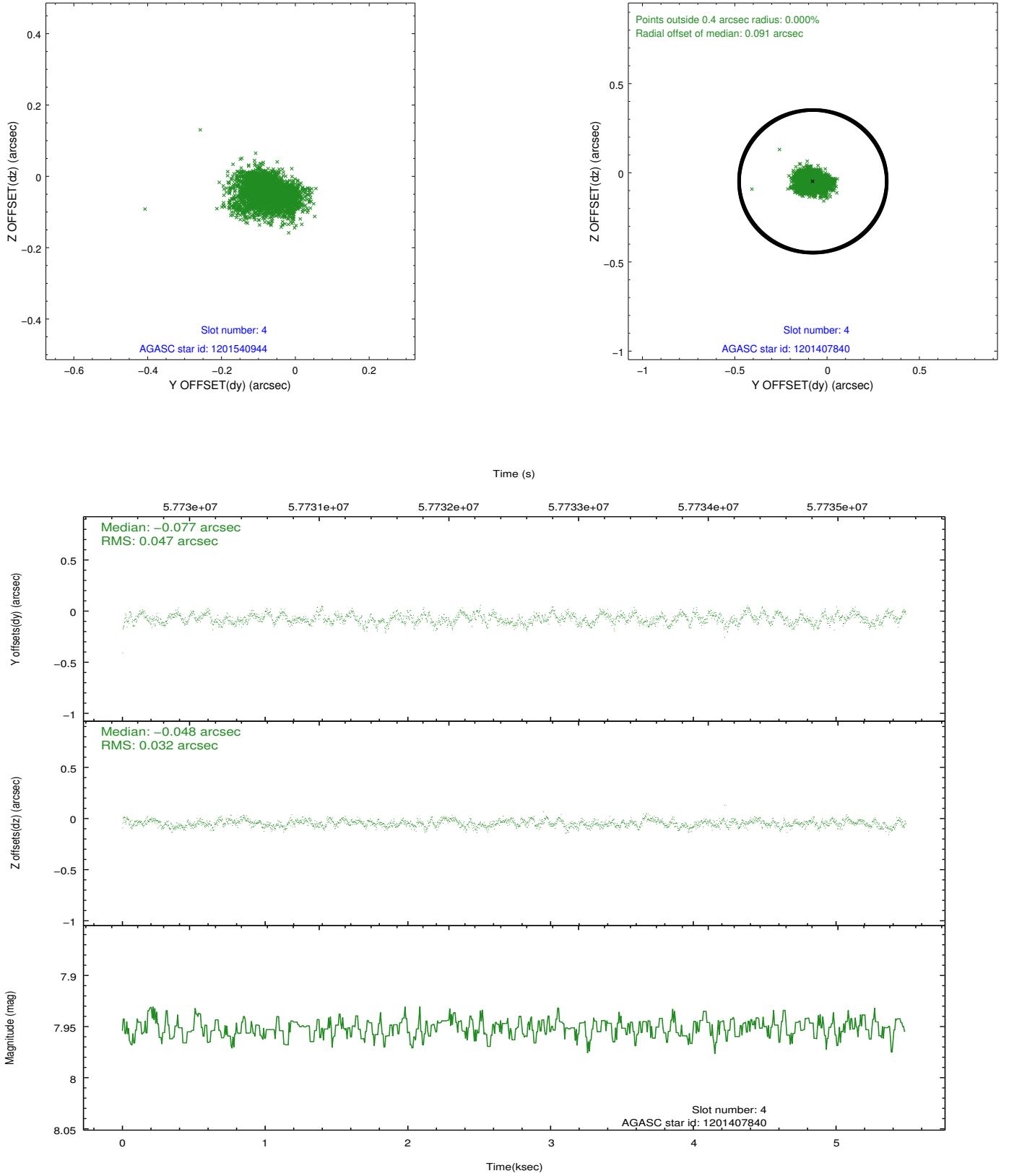
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.20	2678	-0.030	0.084	0.009	0.015	0.000000	0.000000	-753.53	-833.02
1	FID	ACIS-I-4	7.25	2678	0.110	0.004	0.006	0.011	0.000000	0.000000	2160.64	1072.56
2	FID	ACIS-I-5	7.23	2678	-0.181	-0.018	0.009	0.014	0.000000	0.000000	-1806.72	1071.30
3	GUIDE	1201540944	8.22	2678	0.007	-0.034	0.075	0.129	87.496877	-69.685010	2331.92	-2247.39
4	GUIDE	1201407840	7.95	2678	-0.077	-0.048	0.060	0.097	83.696303	-70.172201	-2083.22	121.38
5	GUIDE	1201410616	9.36	2677	-0.056	0.022	0.143	0.237	82.516808	-69.784406	-2078.02	2137.93
6	GUIDE	1201406992	9.27	2676	0.054	0.071	0.082	0.135	83.682859	-69.471866	-255.12	1857.88
7	GUIDE	1201540376	9.26	2674	0.055	-0.017	0.098	0.161	87.370568	-69.787305	1947.68	-2359.95

2.4 Star Slots

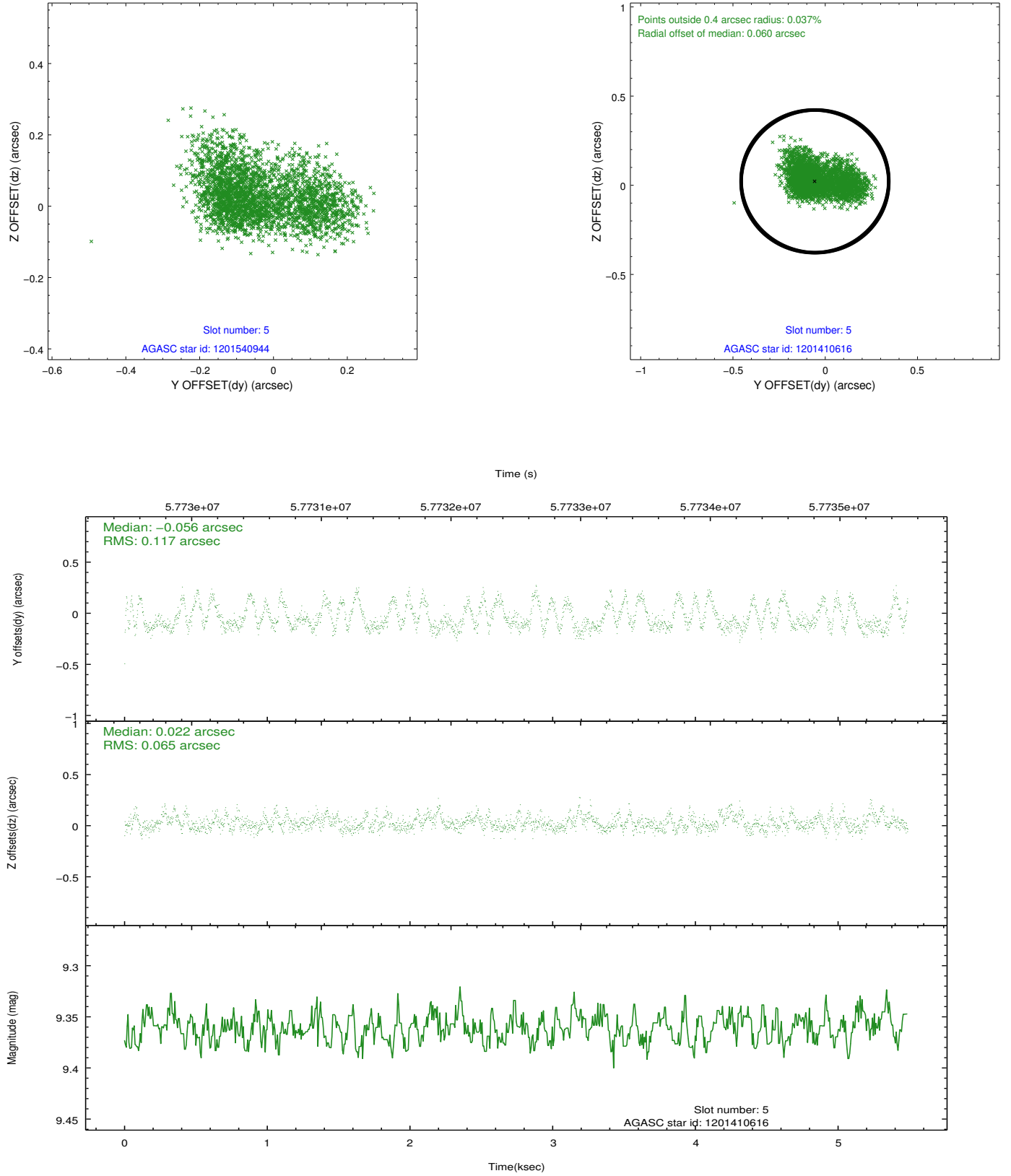
2.4.1 Slot 3



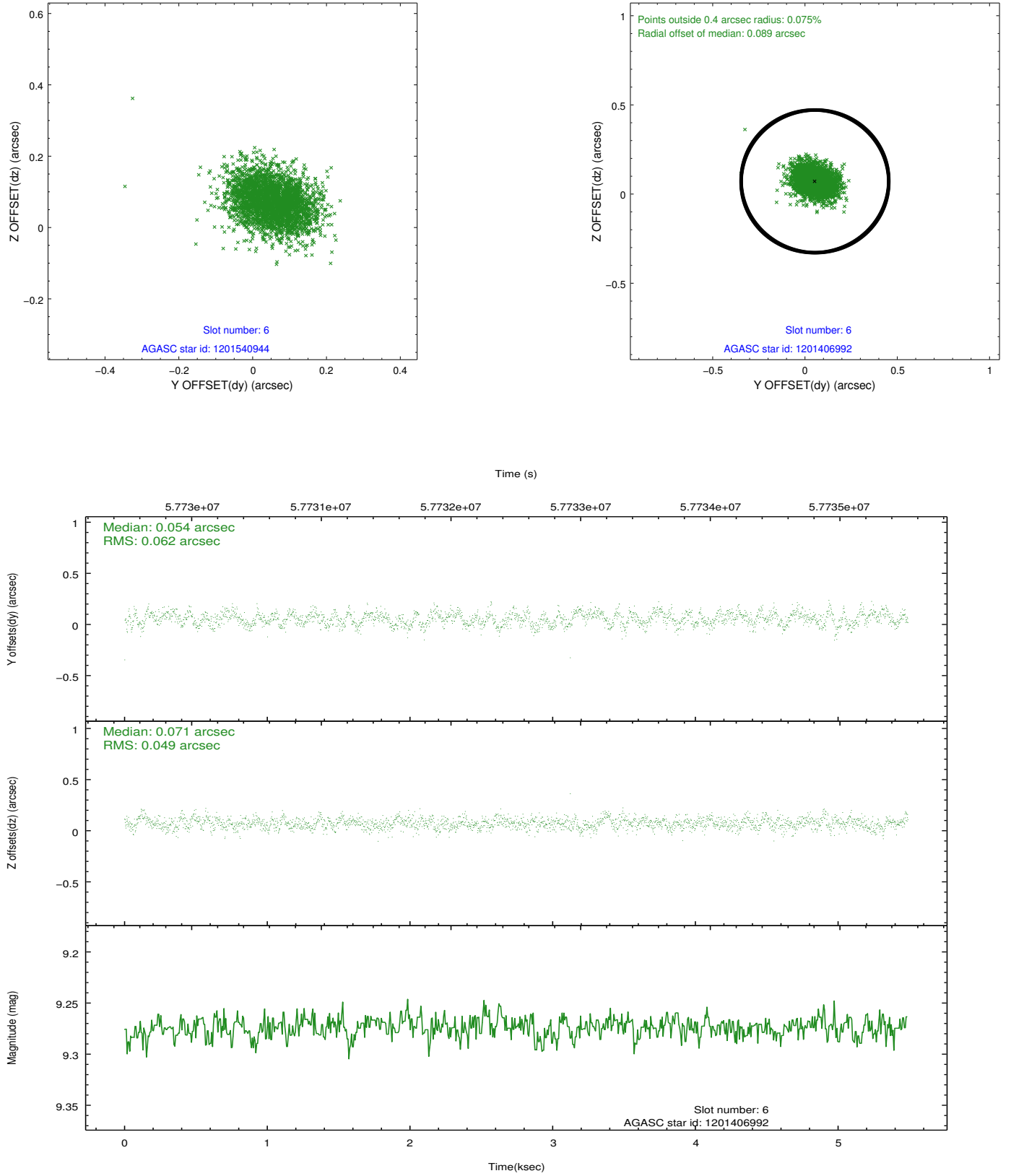
2.4.2 Slot 4



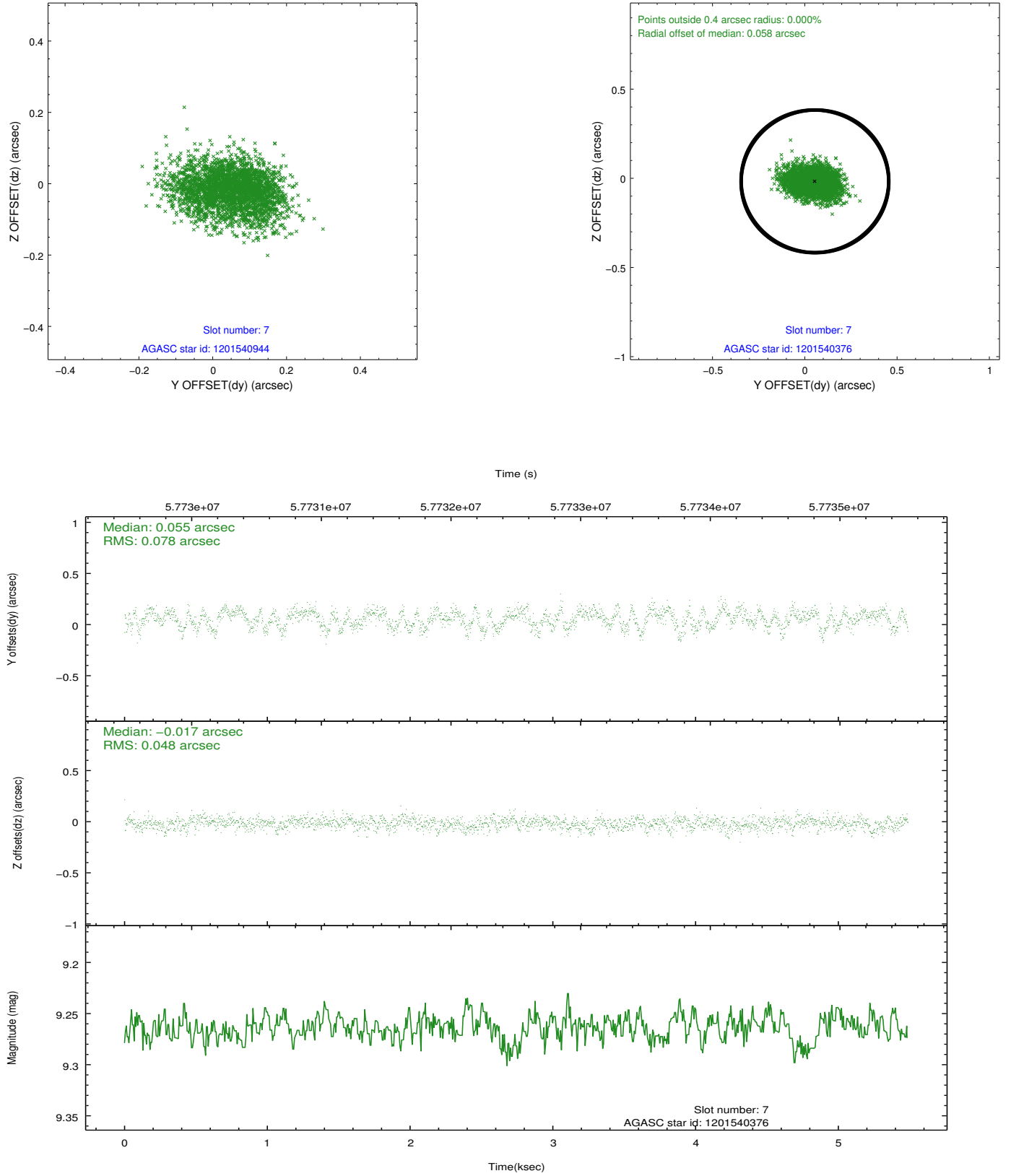
2.4.3 Slot 5



2.4.4 Slot 6

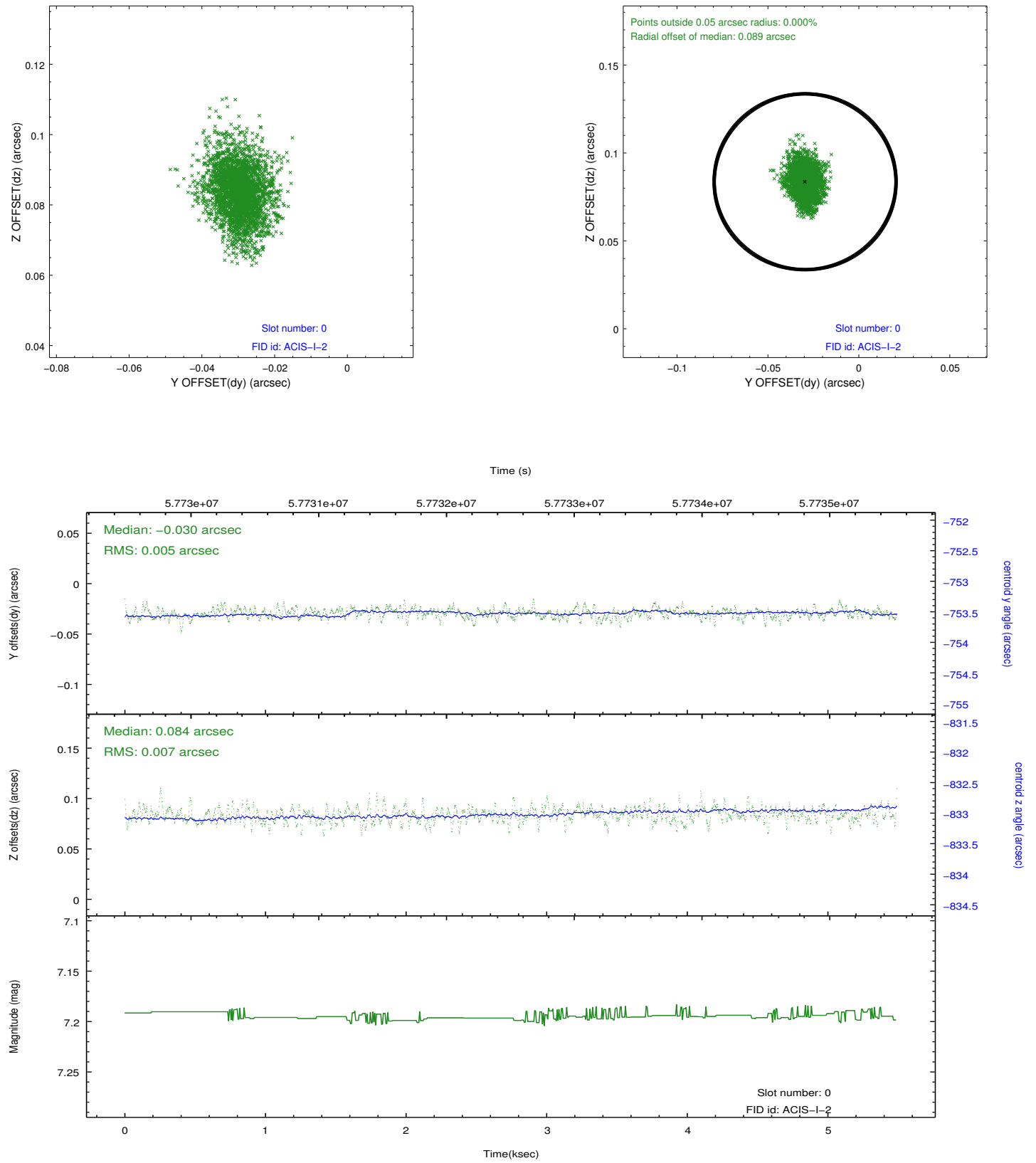


2.4.5 Slot 7

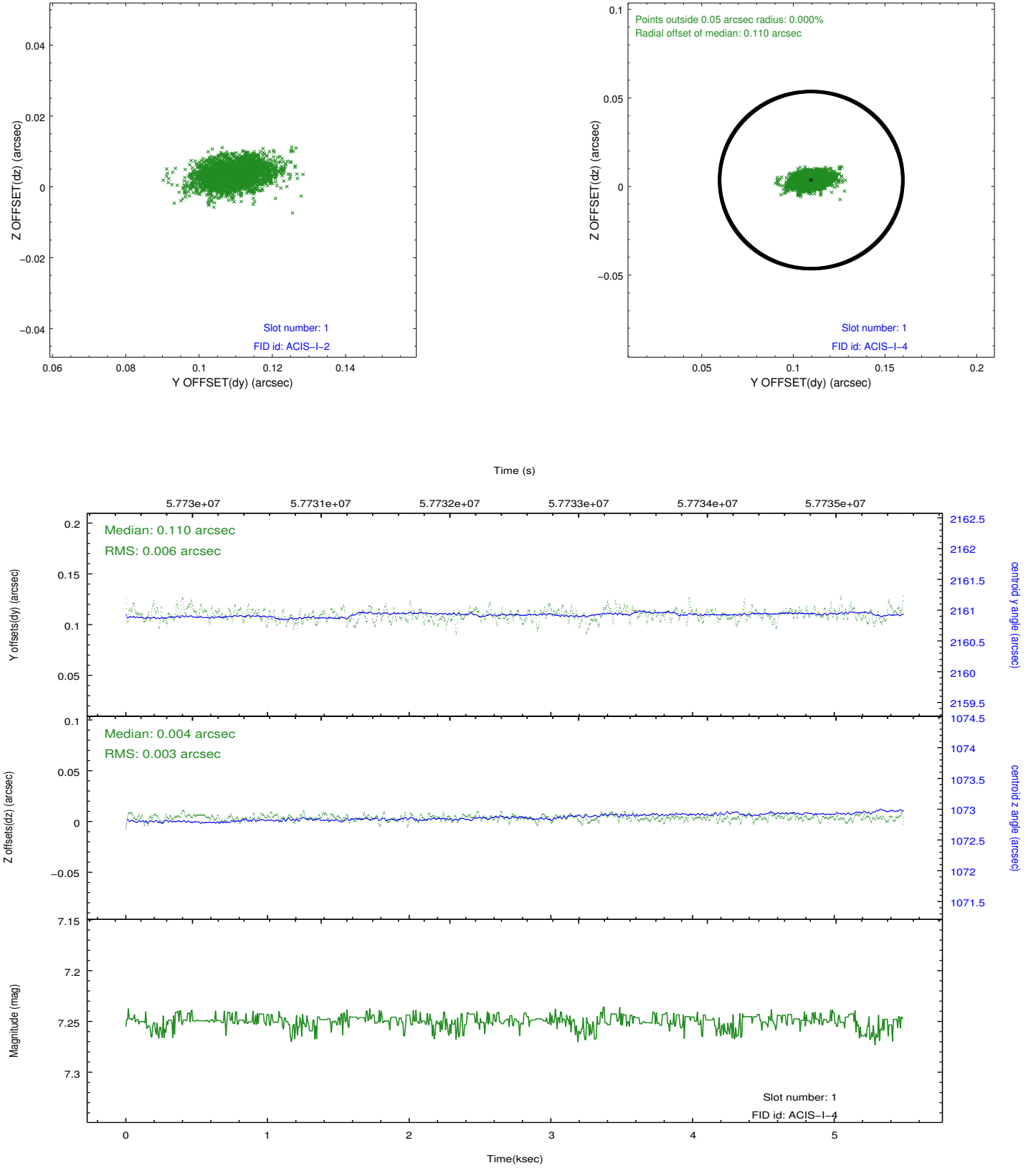


2.5 FID Slots

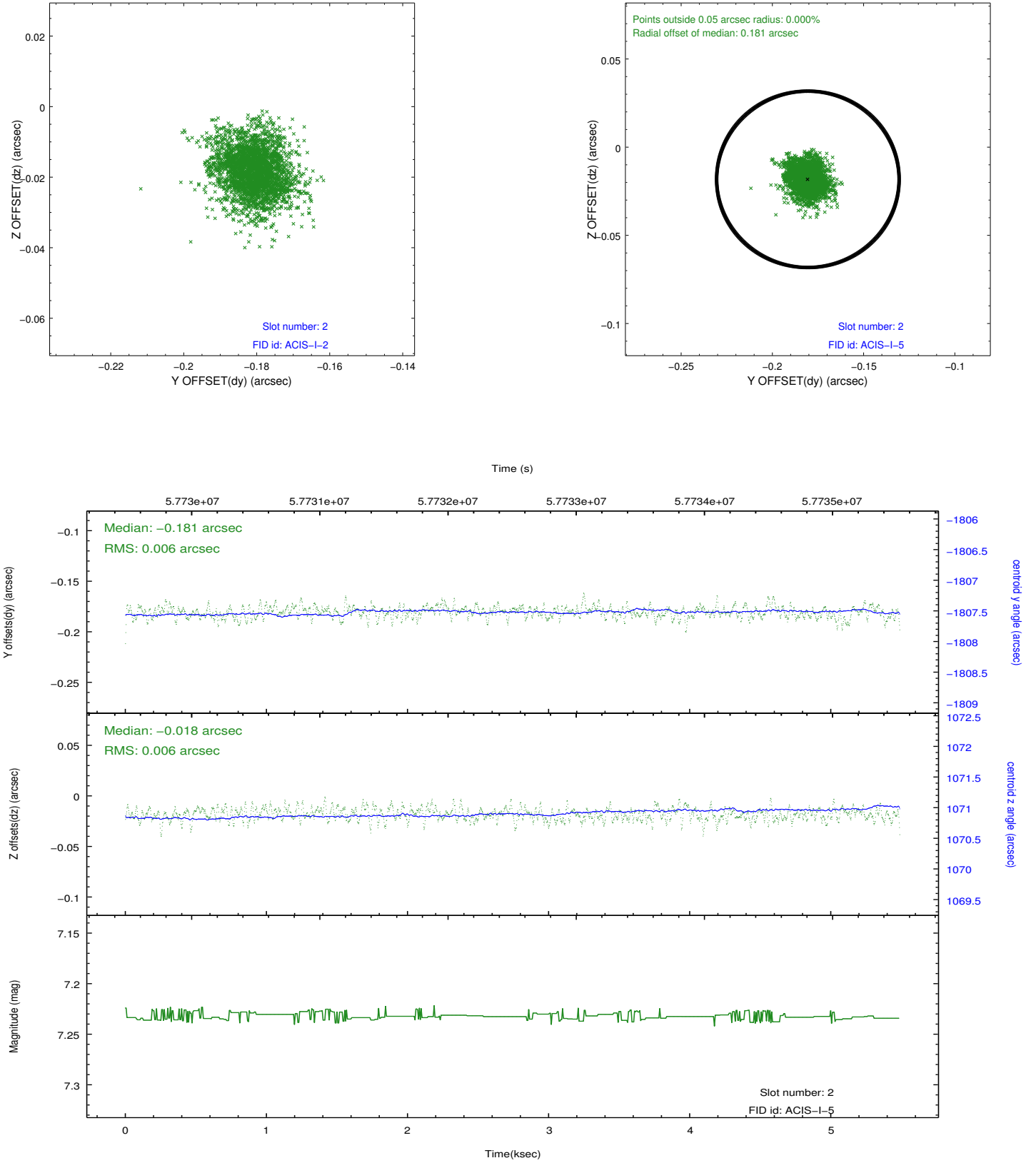
2.5.1 Slot 0



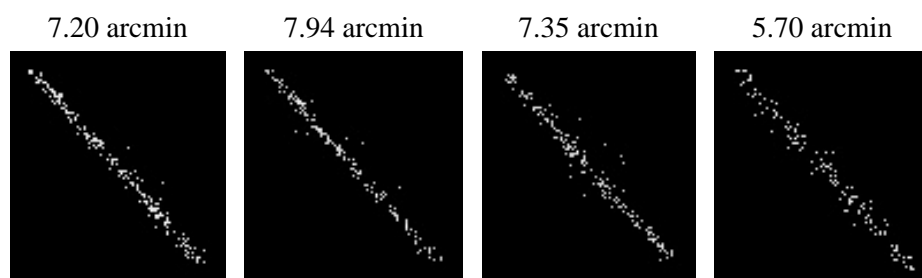
2.5.2 Slot 1



2.5.3 Slot 2



3 Point Sources



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2010.03.30
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.172

A.2 Comments

PSF measurement.

===

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.