

V&V Reference Report

L2 ASCDS Version : 8.1.2

Observation 1095 - L2 Version 5

Chandra X-Ray Center

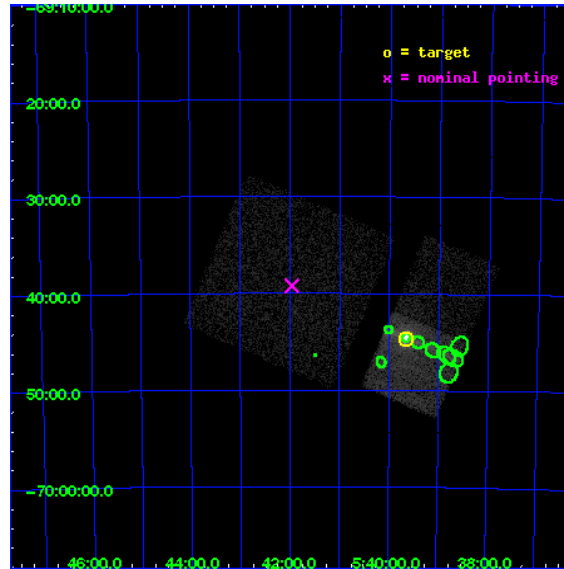
L2 Processing Date : Dec 17 2009

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
2.5	FID Slots	12
2.5.1	Slot 0	12
2.5.2	Slot 1	13
2.5.3	Slot 2	14
3	Point Sources	15
A	Summary	16
A.1	Status	16
A.2	Comments	16

1 Front

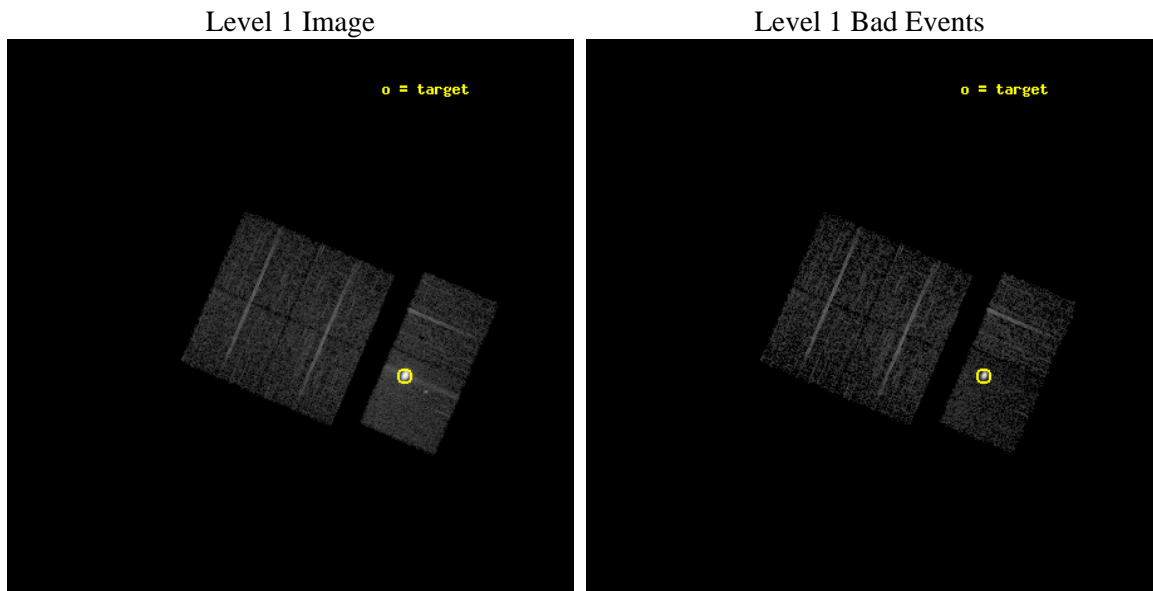
seq_num	480045	Sequence number
obs_id	1095	Observation id
title	 	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	LMC X-1	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	84.914583	Observer's specified target RA
dec_targ	-69.743611	Observer's specified target Dec
ra_nom	85.49027709332	Nominal RA
dec_nom	-69.653765028481	Nominal Dec
roll_nom	113.27389887429	Nominal Roll
revision	5	Processing version of data
ontime	2355.094001621	Sum of GTIs [s]
livetime	2325.2723833051	Livetime [s]
ontime0	2355.0529915392	Sum of GTIs [s]
ontime1	2355.0119515434	Sum of GTIs [s]
ontime2	2354.9709115401	Sum of GTIs [s]
ontime3	2354.9298715442	Sum of GTIs [s]
ontime6	2354.8888315409	Sum of GTIs [s]
ontime7	2355.094001621	Sum of GTIs [s]
l2events	117659	Number of level 2 events



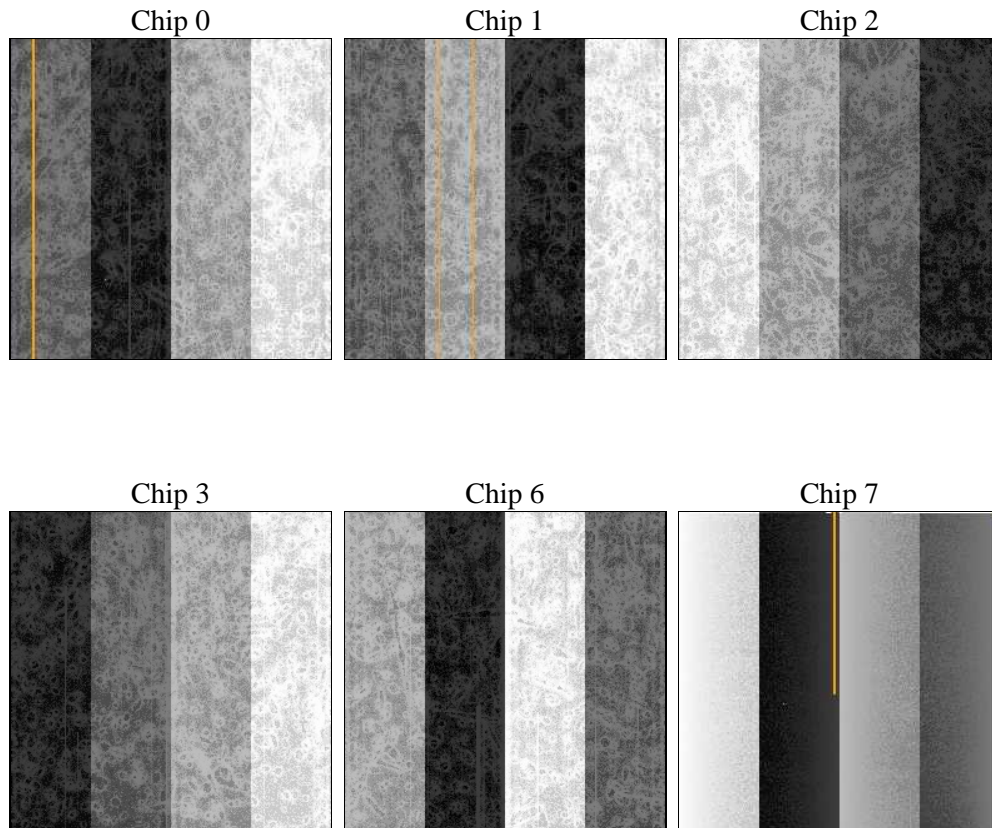
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	2000.000000	Scheduled observation exposure time
ascdsver	8.1.2	ASCDS version number	ontime	2355.094001621	Sum of GTIs [s]
caldbver	4.1.4	 	ontime0	2355.0529915392	Sum of GTIs [s]
date	2009-12-17T09:24:57	Date and time of file creation	ontime1	2355.0119515434	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	2354.9709115401	Sum of GTIs [s]
			ontime3	2354.9298715442	Sum of GTIs [s]
			ontime6	2354.8888315409	Sum of GTIs [s]
			ontime7	2355.094001621	Sum of GTIs [s]
			l1events	260532	Number of level 1 events

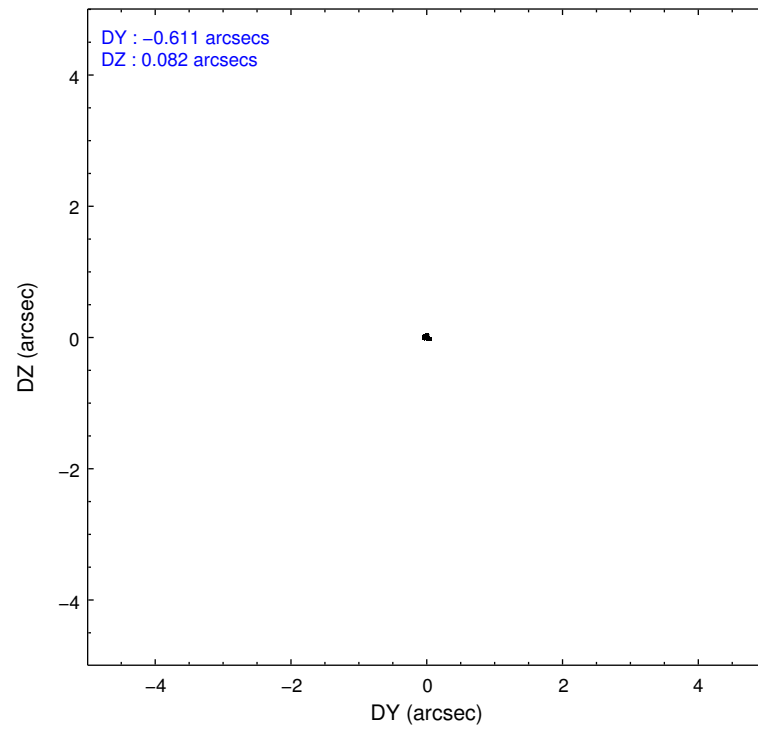
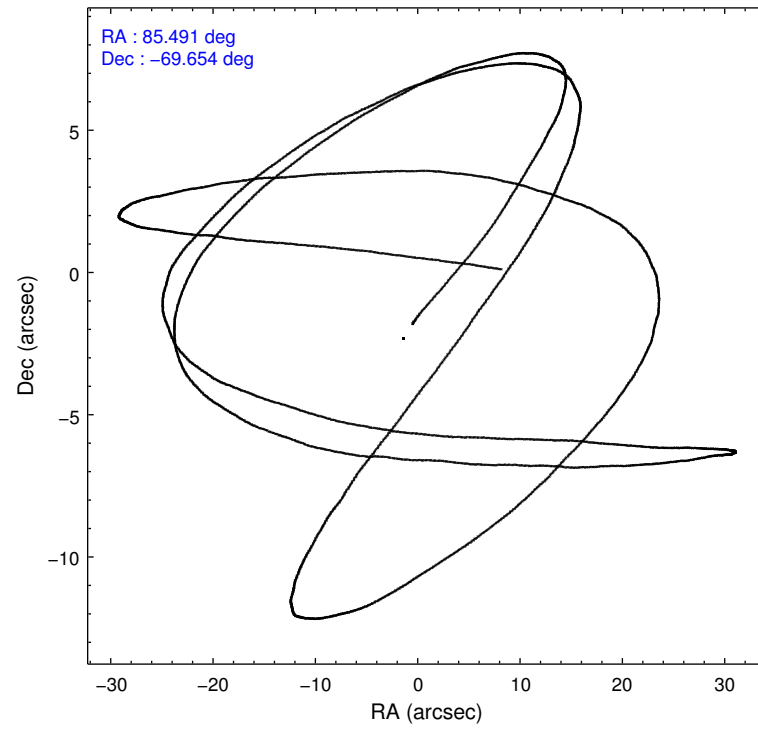
2.1.4 Events

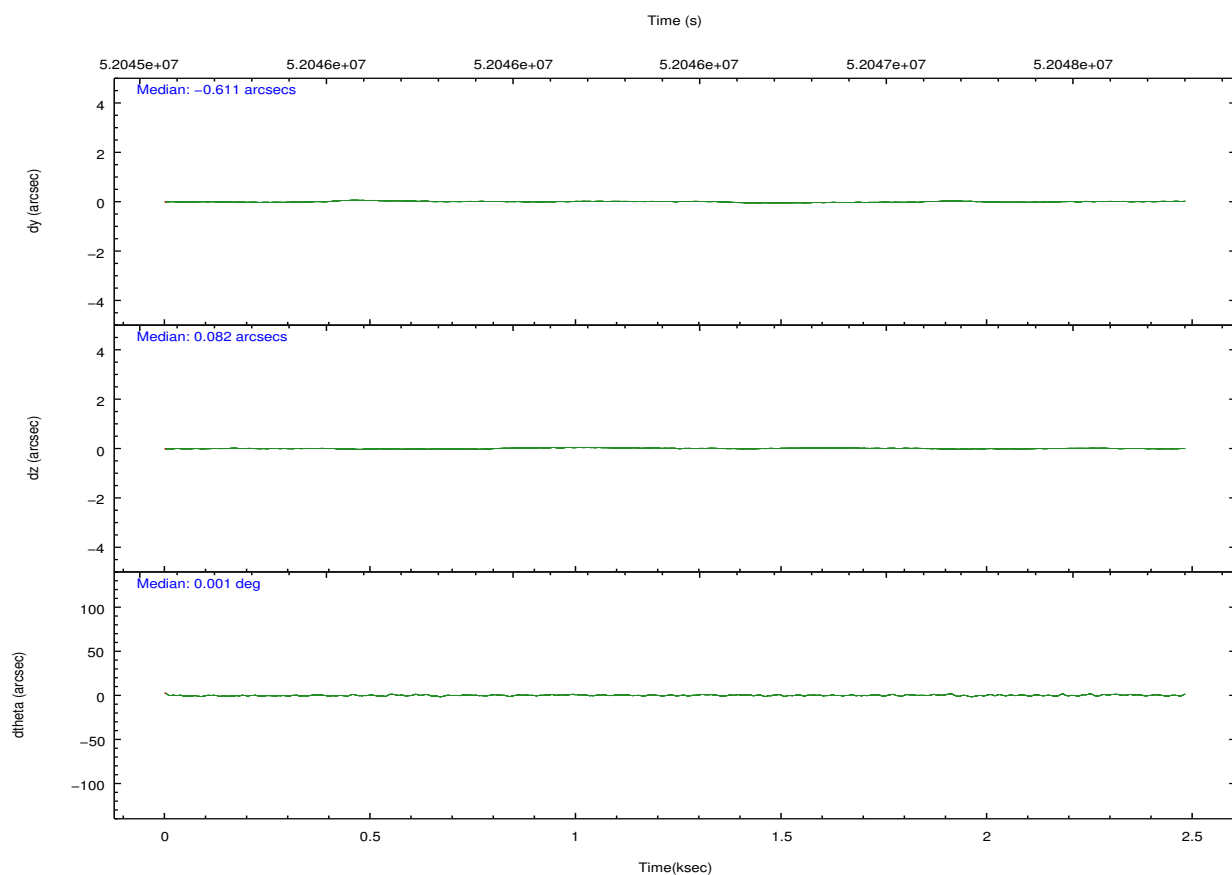
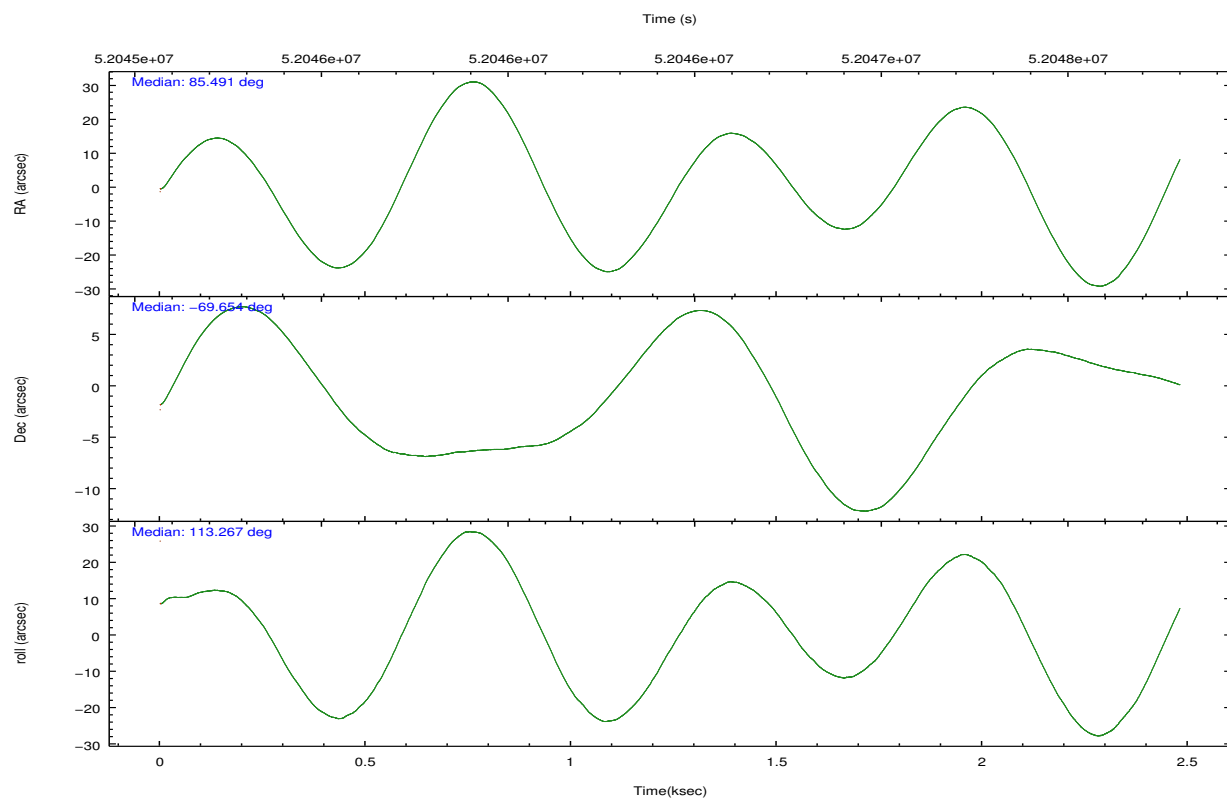
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	21793	21992	23610	23557	23204	146376	grade 0 events	1507	1764	1450	1763	1450	18147
rejected events	18919	18682	20798	20379	20177	39661		6%	8%	6%	7%	6%	12%
rejected %	86%	84%	88%	86%	86%	27%	grade 1 events	9	12	9	15	7	1959
								0%	0%	0%	0%	0%	1%
							grade 2 events	547	592	538	581	676	23073
								2%	2%	2%	2%	2%	15%
							grade 3 events	230	257	239	211	222	14420
								1%	1%	1%	0%	0%	9%
							grade 4 events	208	257	186	212	210	12446
								0%	1%	0%	0%	0%	8%
							grade 5 events	521	568	511	579	616	8223
								2%	2%	2%	2%	2%	5%
							grade 6 events	388	443	403	413	472	38772
								1%	2%	1%	1%	2%	26%
							grade 7 events	18383	18099	20274	19783	19551	29336
								84%	82%	85%	83%	84%	20%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-012367	ACIS-012367	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	85.553648	85.49027709331997	Subarray requested	NONE	NONE
Pointing Dec	-69.671305	-69.65376502848065	Alternating exposures requested	N	N
Pointing Roll	113.124621	113.2738988742875	Primary exposure time	0.000000	3.2
SIM focus pos (mm)	-0.782348	-0.7362356599963374			
SIM defocus (mm)	0	0.04611255558364913			
SIM translation stage pos (mm)	-233.592463	-233.5874344608287			
SIM translation stage offset (mm)	0	-0.005018542100998502			
Observation start time	52045675.184000	52045009.069853			
Observation start date	1999-08-26T09:06:51	1999-08-26T08:56:49			
Observation end time	52047675.184000	52047808.857453			
Observation end date	1999-08-26T09:40:11	1999-08-26T09:43:28			
Read mode	TIMED	TIMED			

2.3 Aspect



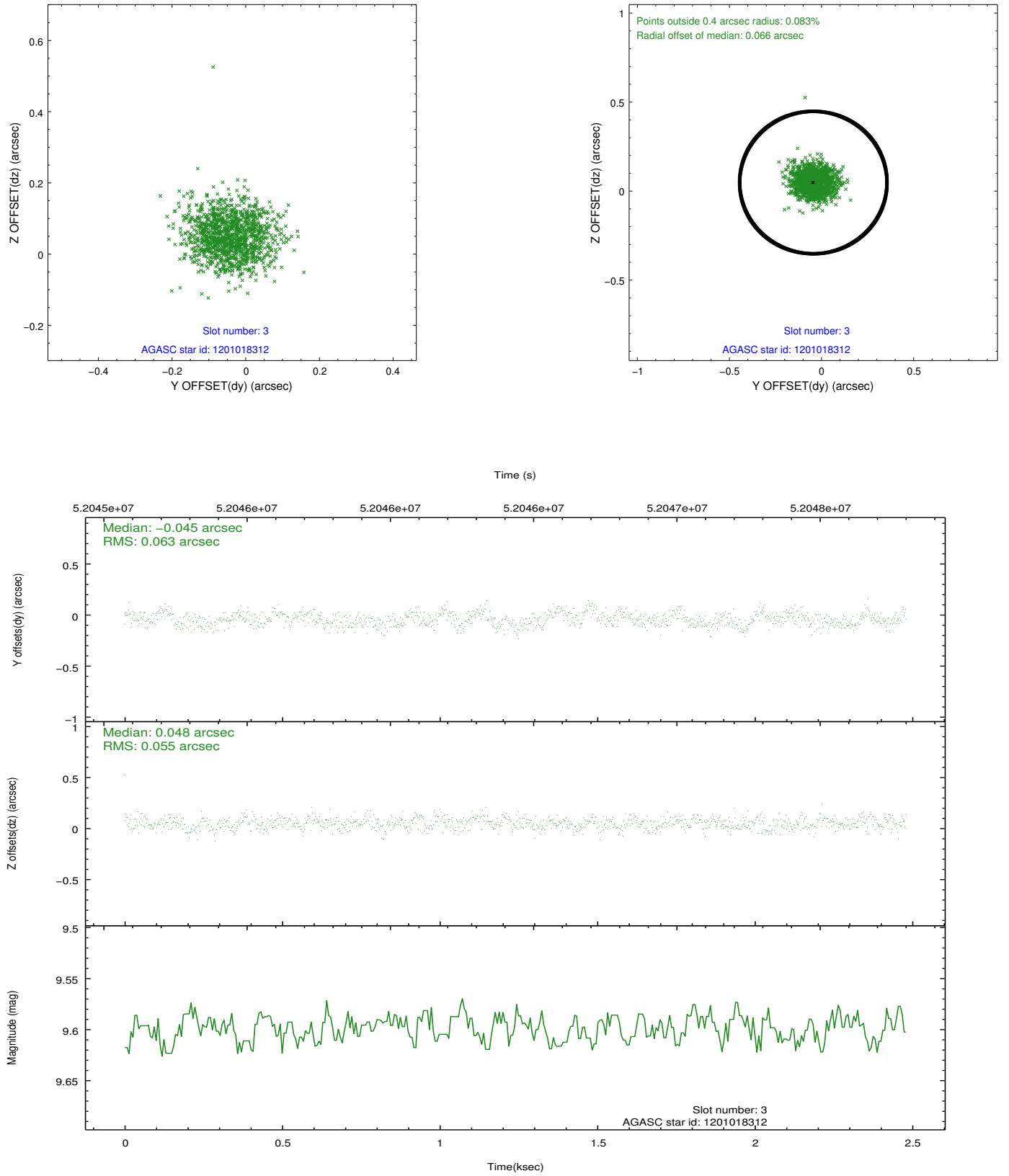


Slot Statistics

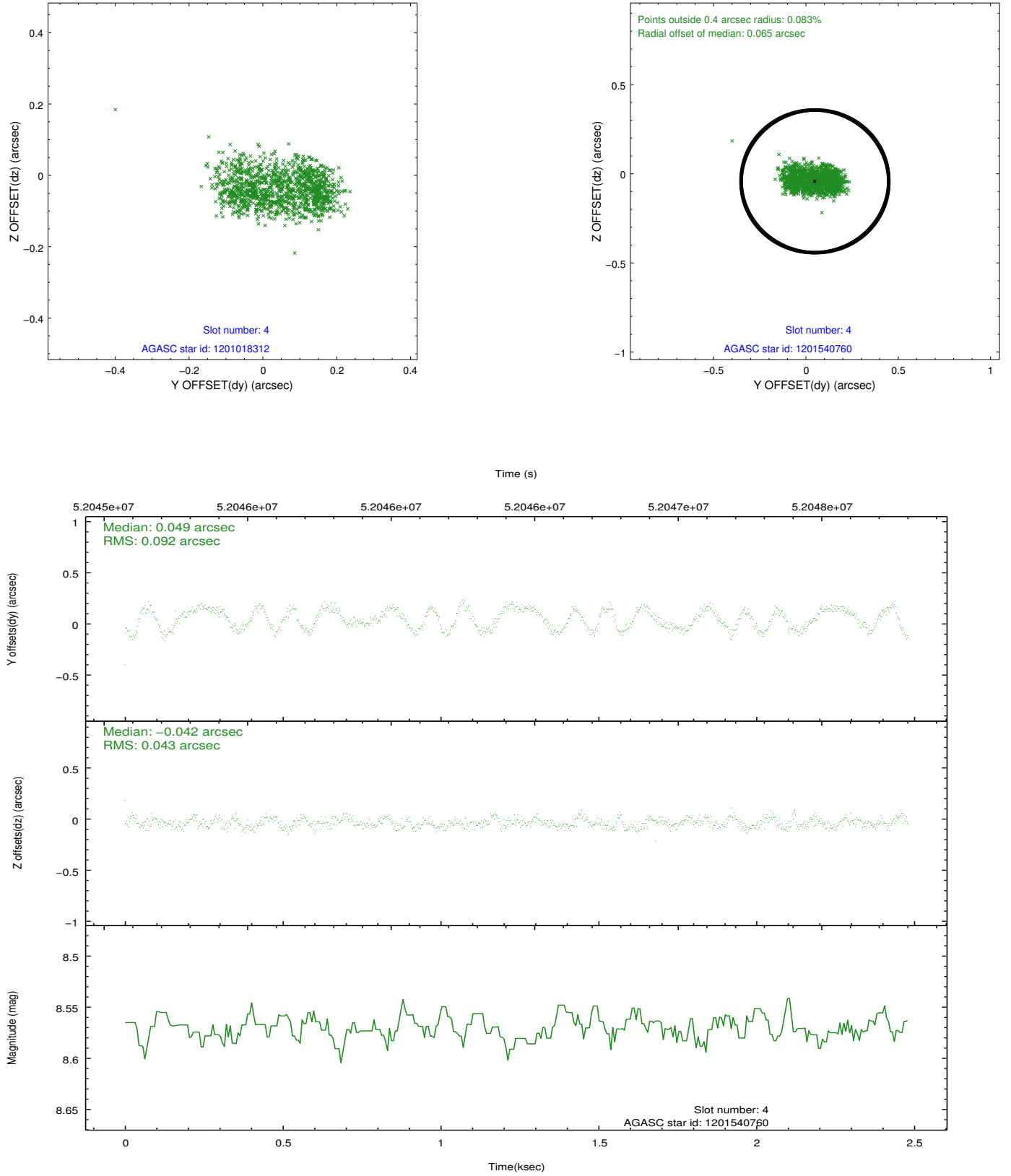
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.20	1211	-0.040	0.054	0.008	0.013	0.000000	0.000000	-753.75	-829.56
1	FID	ACIS-I-4	7.24	1211	0.138	0.016	0.006	0.010	0.000000	0.000000	2160.05	1075.82
2	FID	ACIS-I-5	7.23	1211	-0.199	-0.002	0.007	0.012	0.000000	0.000000	-1806.06	1075.26
3	GUIDE	1201018312	9.60	1211	-0.045	0.048	0.087	0.141	86.298231	-69.115627	1458.75	-1661.73
4	GUIDE	1201540760	8.57	1211	0.049	-0.042	0.111	0.161	84.403691	-70.419249	-1943.11	2337.08
5	GUIDE	1201542232	9.69	1210	-0.002	-0.011	0.121	0.190	84.533398	-70.465667	-2159.61	2258.44
6	UNUSED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
7	UNUSED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00

2.4 Star Slots

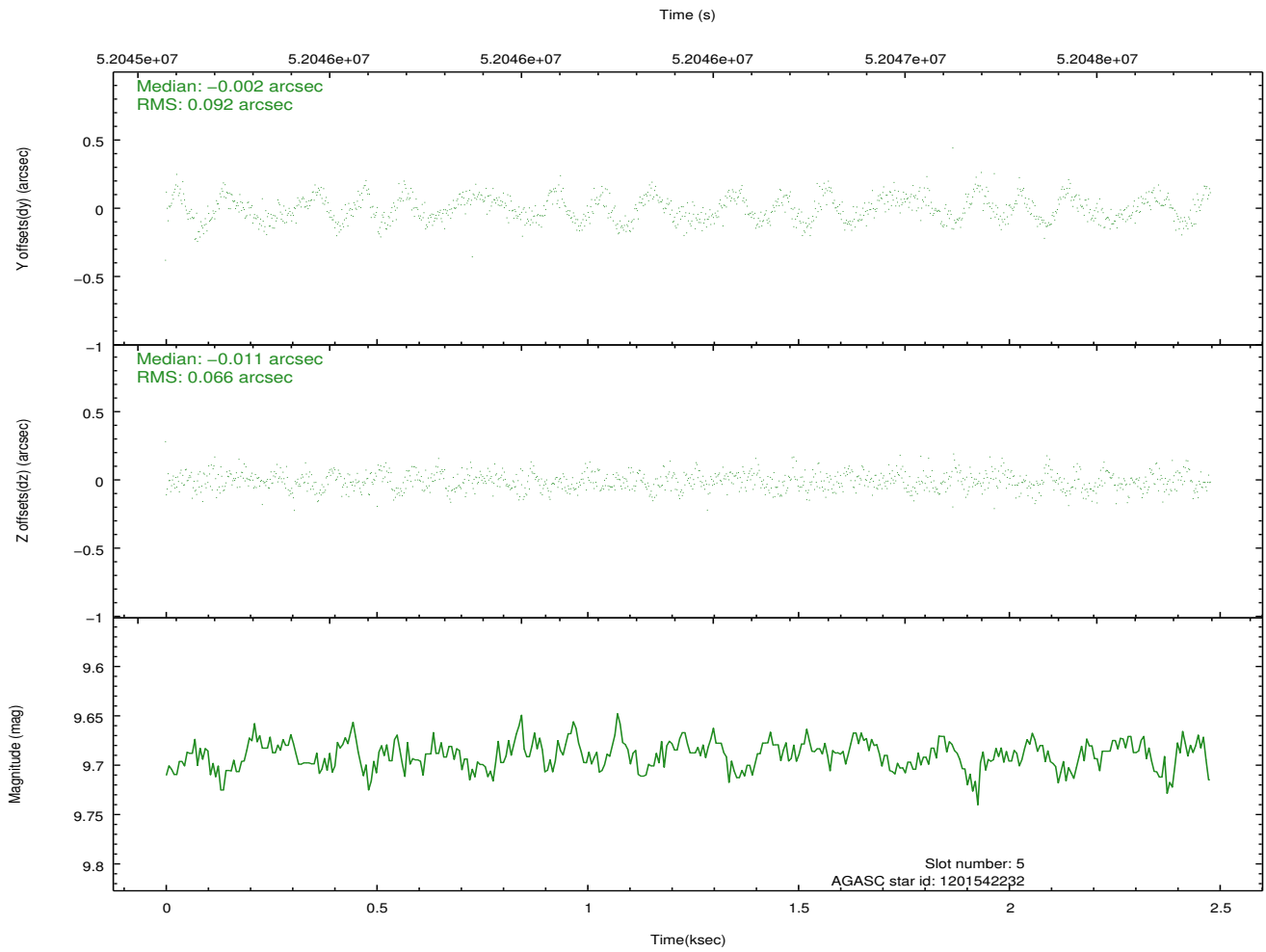
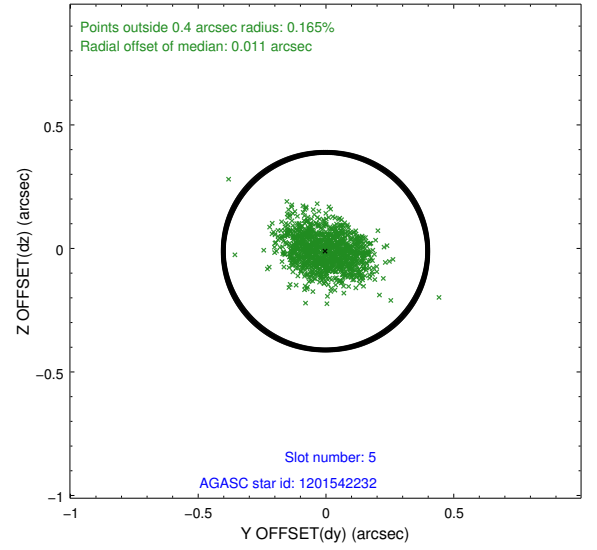
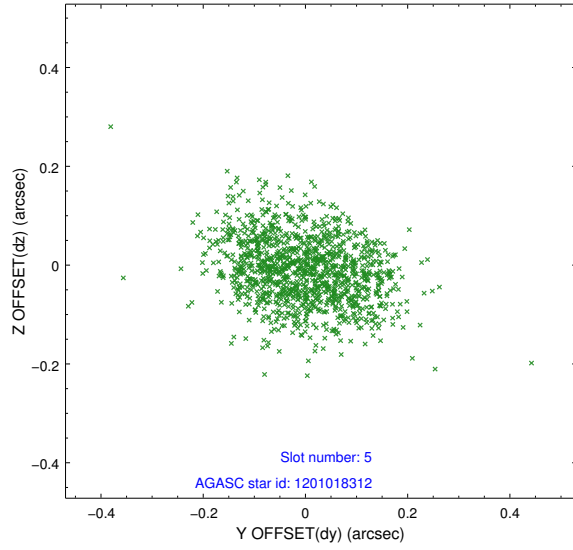
2.4.1 Slot 3



2.4.2 Slot 4

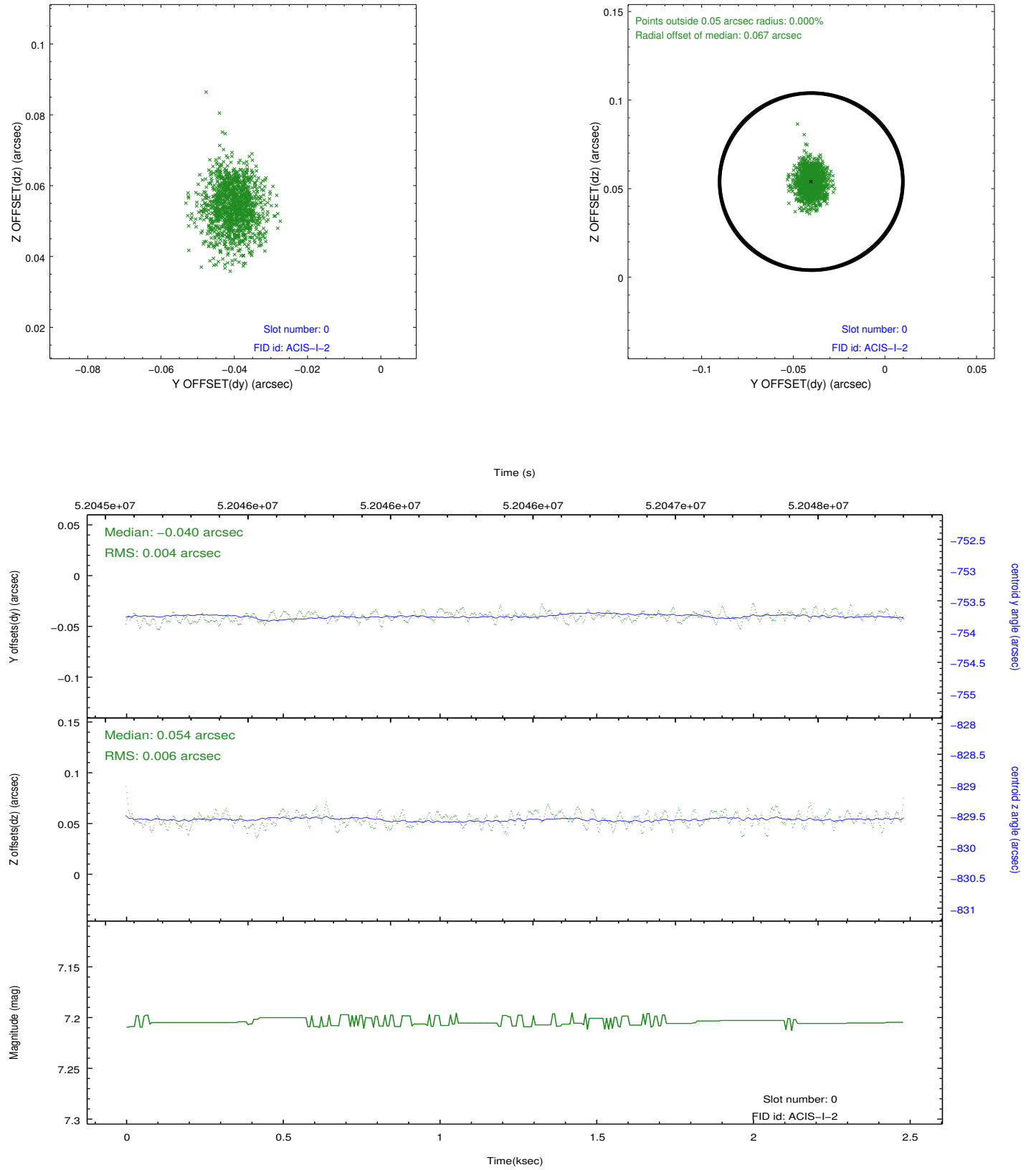


2.4.3 Slot 5

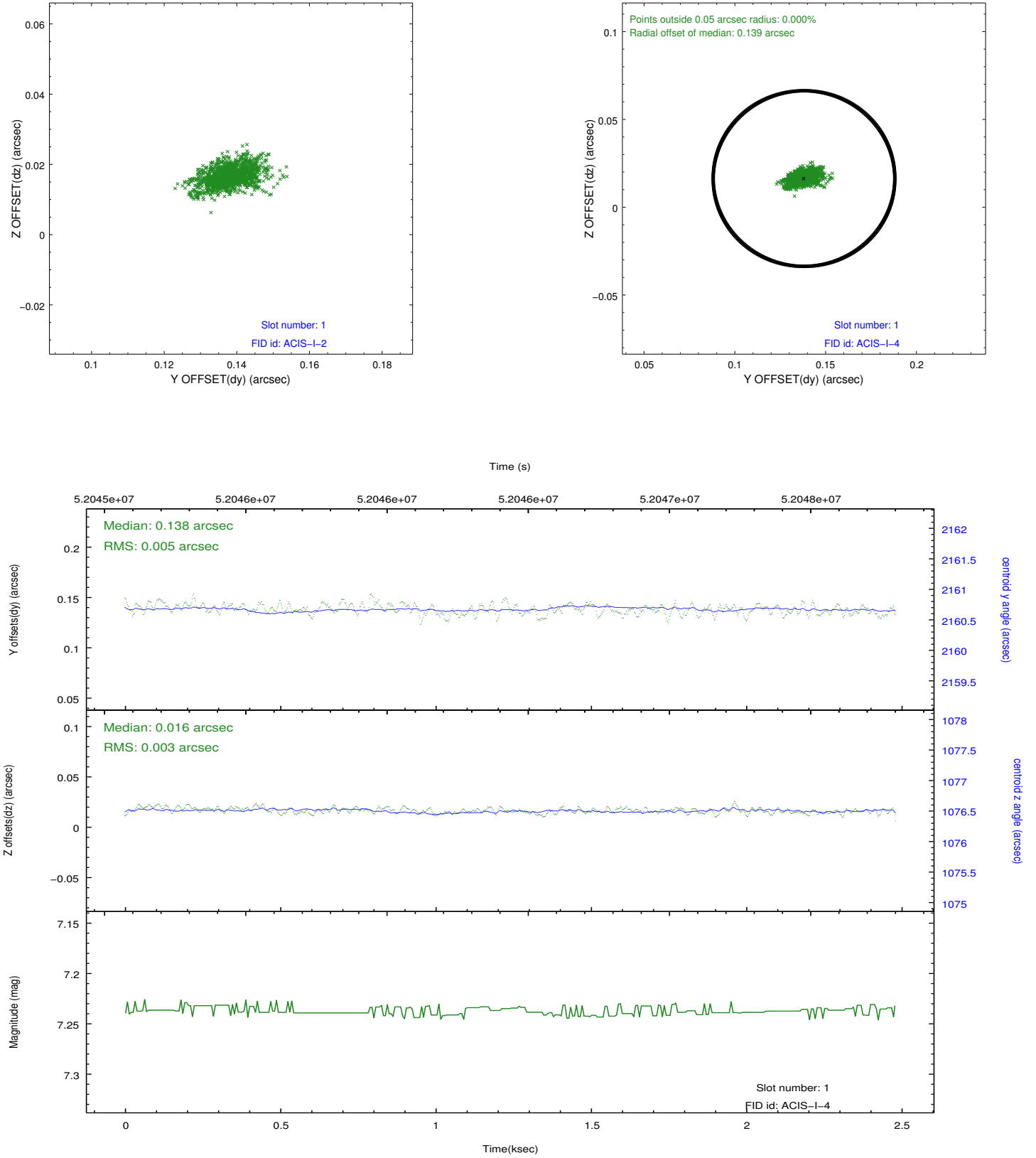


2.5 FID Slots

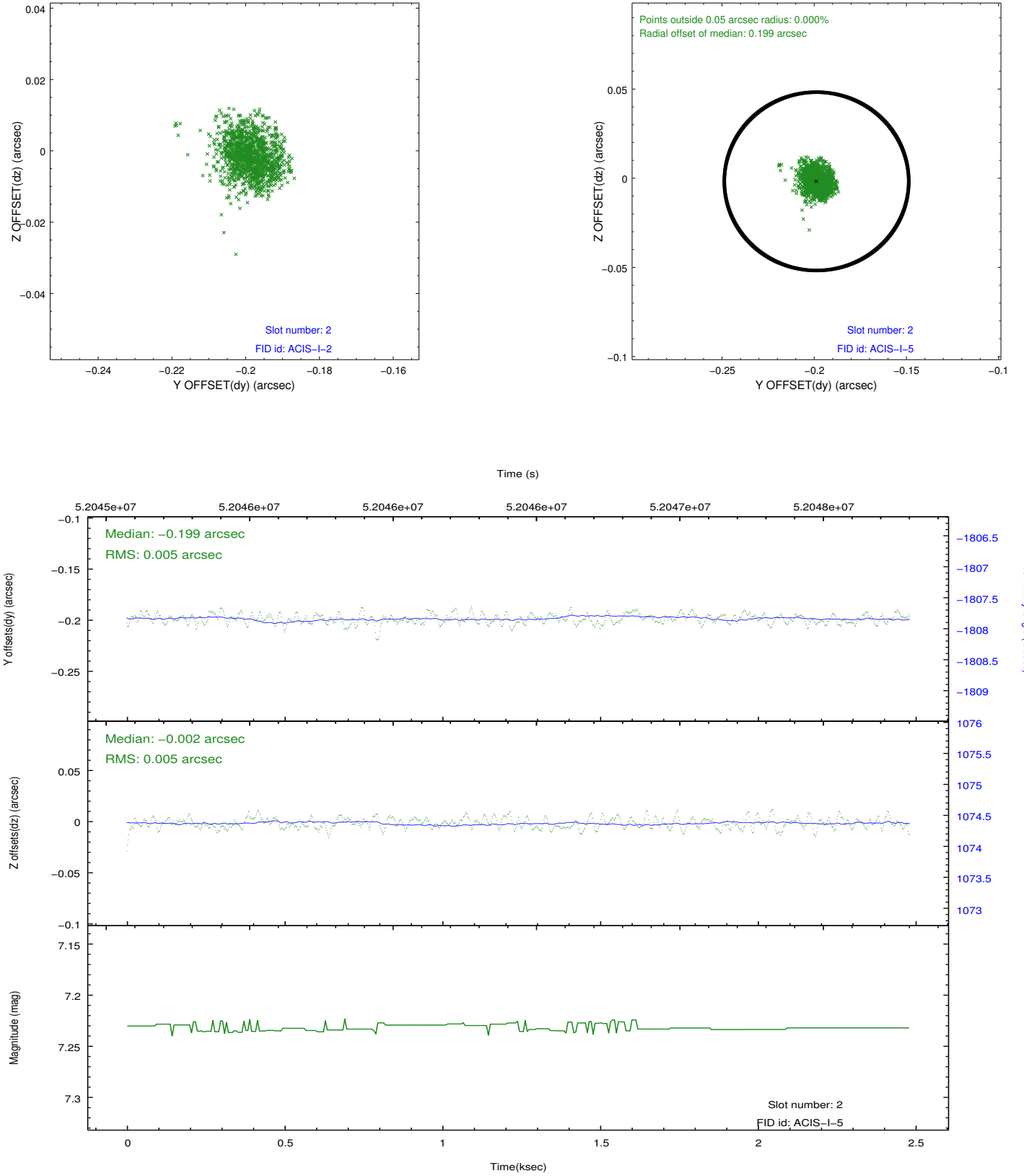
2.5.1 Slot 0



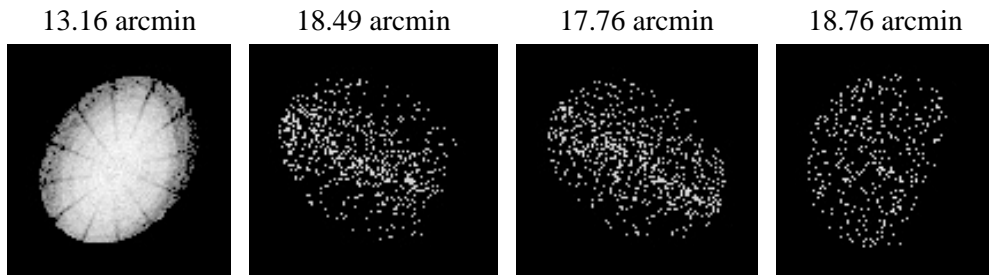
2.5.2 Slot 1



2.5.3 Slot 2



3 Point Sources



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2010.07.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	2.355

A.2 Comments

Target very off-axis on S3.

===

Only 3 of 5 guide stars were acquired for this observation.

===

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.