

V&V Reference Report

L2 ASCDS Version : 8.1.2

Observation 1077 - L2 Version 3
Chandra X-Ray Center

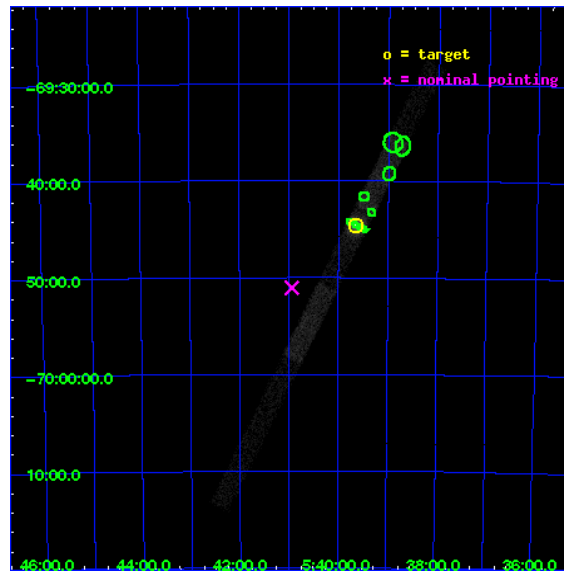
L2 Processing Date : Dec 16 2009

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1 Front

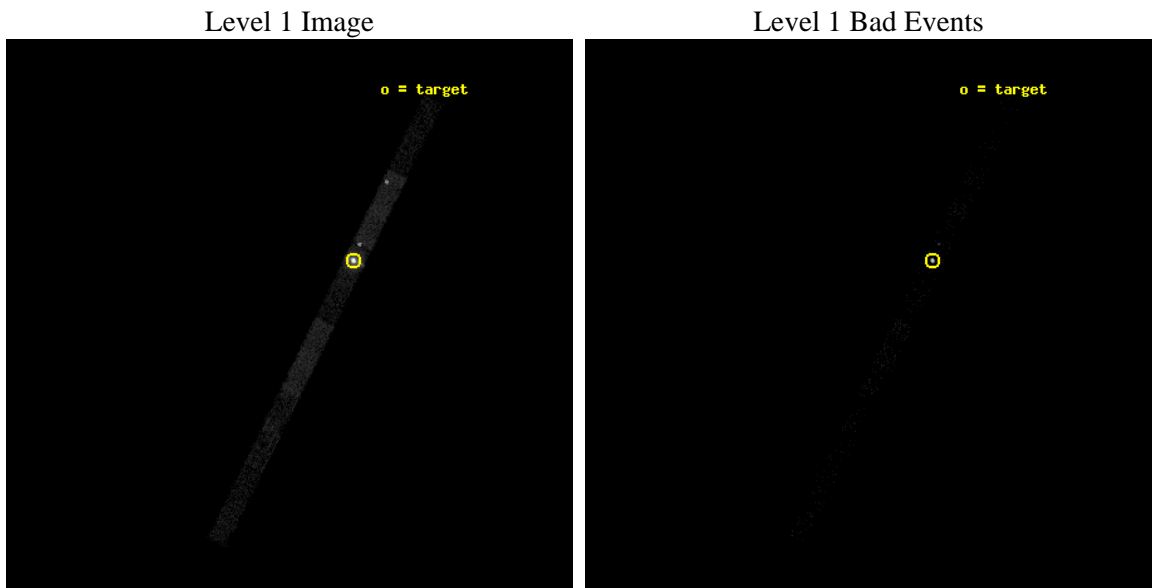
seq_num	480027	Sequence number
obs_id	1077	Observation id
title	 	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	LMC X-1	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	84.914583	Observer's specified target RA
dec_targ	-69.743611	Observer's specified target Dec
ra_nom	85.234476747209	Nominal RA
dec_nom	-69.850950660279	Nominal Dec
roll_nom	116.32821590028	Nominal Roll
revision	3	Processing version of data
ontime	1972.2716888115	Sum of GTIs [s]
livetime	1901.3346225309	Livetime [s]
ontime4	1972.3000026643	Sum of GTIs [s]
ontime5	1972.3000026643	Sum of GTIs [s]
ontime6	1972.2716888115	Sum of GTIs [s]
ontime7	1972.3000026643	Sum of GTIs [s]
ontime8	1972.3000026643	Sum of GTIs [s]
ontime9	1972.3000026643	Sum of GTIs [s]
l2events	93068	Number of level 2 events



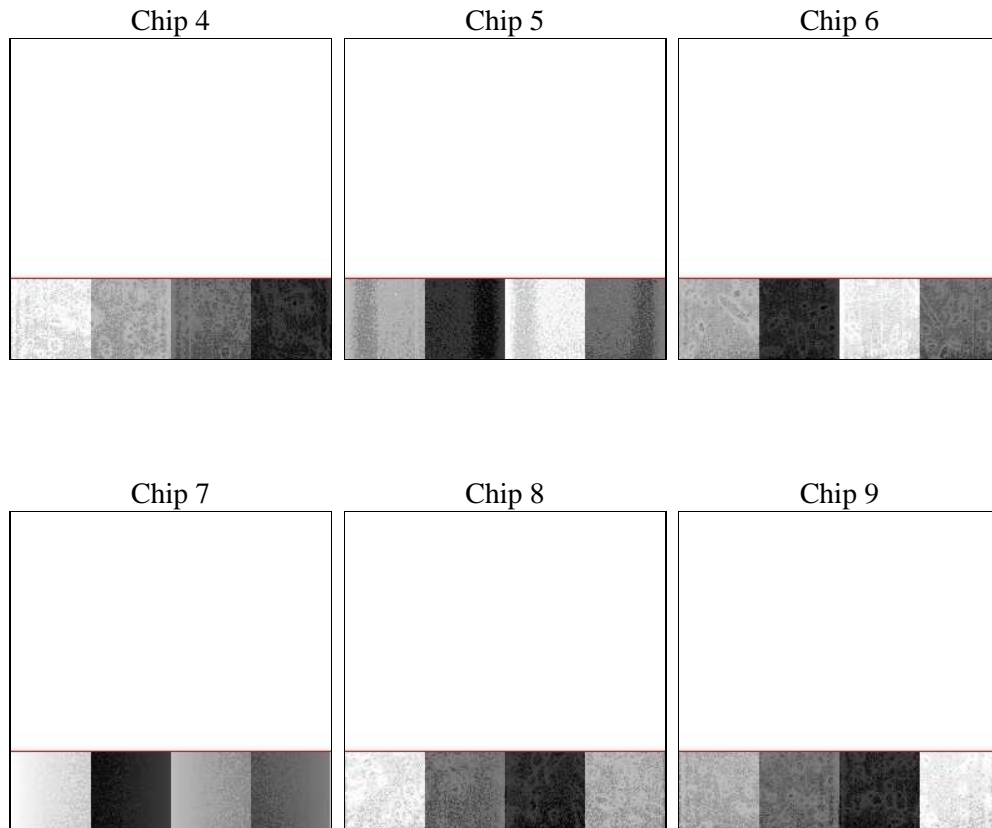
2 OBI

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	1972.2716888115	Sum of GTIs [s]
caldbver	4.1.4	 	ontime4	1972.3000026643	Sum of GTIs [s]
date	2009-12-16T07:49:48	Date and time of file creation	ontime5	1972.3000026643	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	1972.2716888115	Sum of GTIs [s]
			ontime7	1972.3000026643	Sum of GTIs [s]
			ontime8	1972.3000026643	Sum of GTIs [s]
			ontime9	1972.3000026643	Sum of GTIs [s]
			l1events	110425	Number of level 1 events

2.1.4 Events

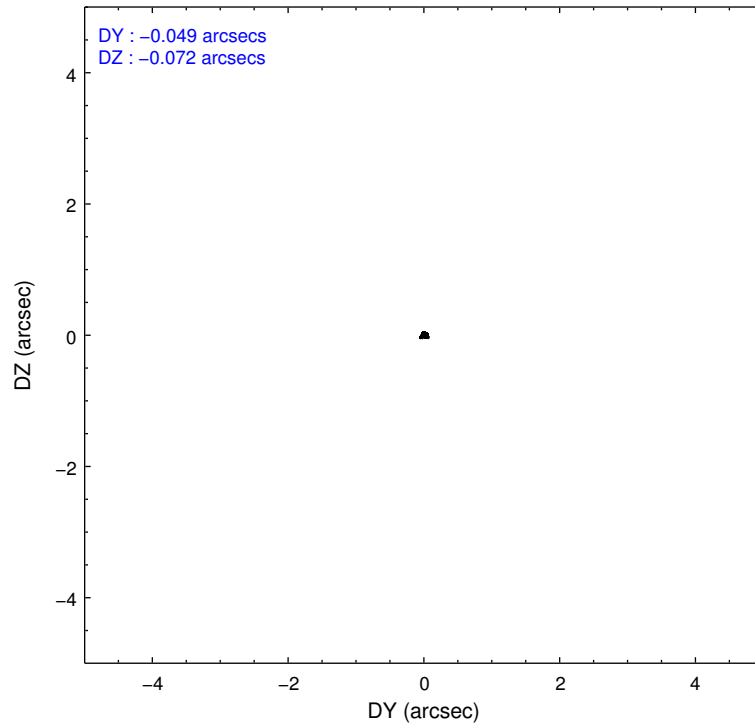
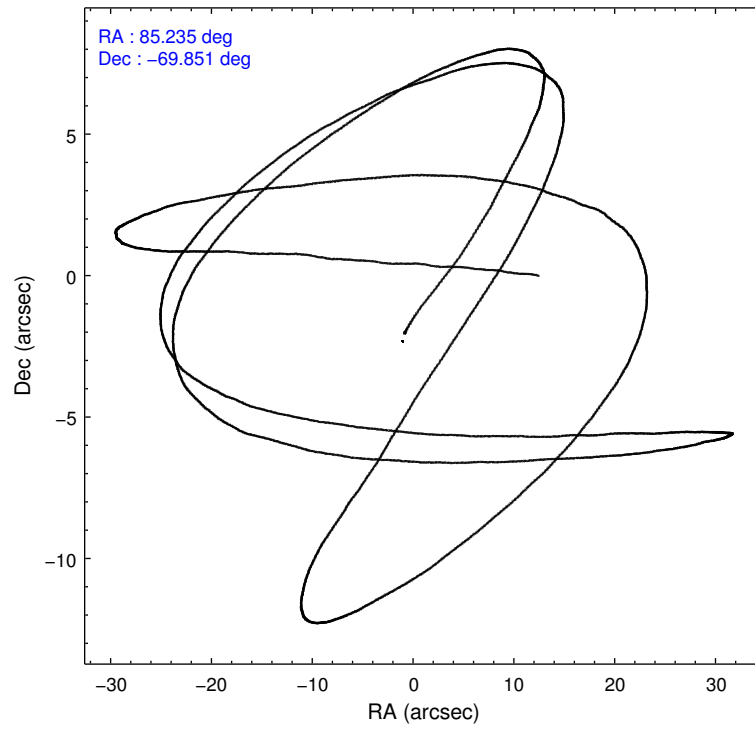
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	1136	7281	94877	3960	1882	1289
rejected events	249	455	11494	615	350	319
rejected %	21%	6%	12%	15%	18%	24%

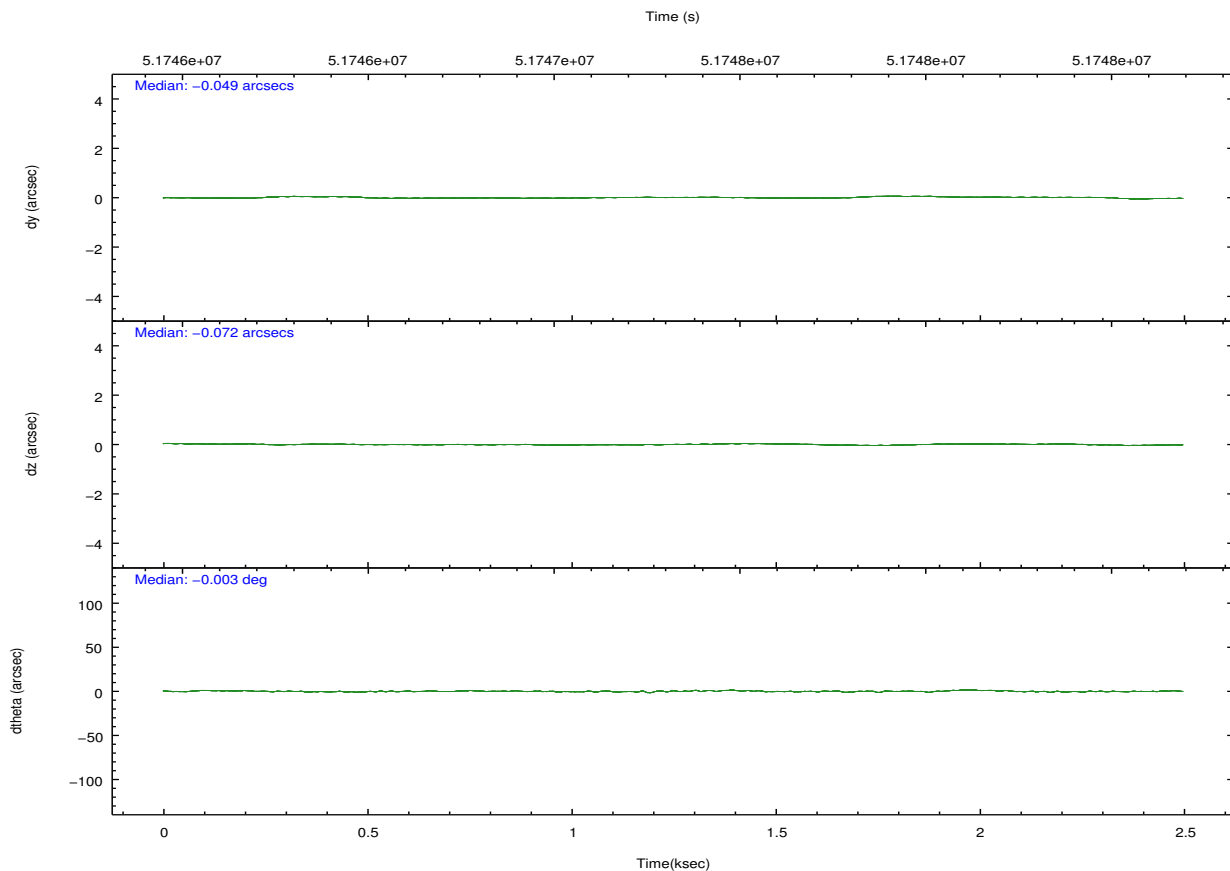
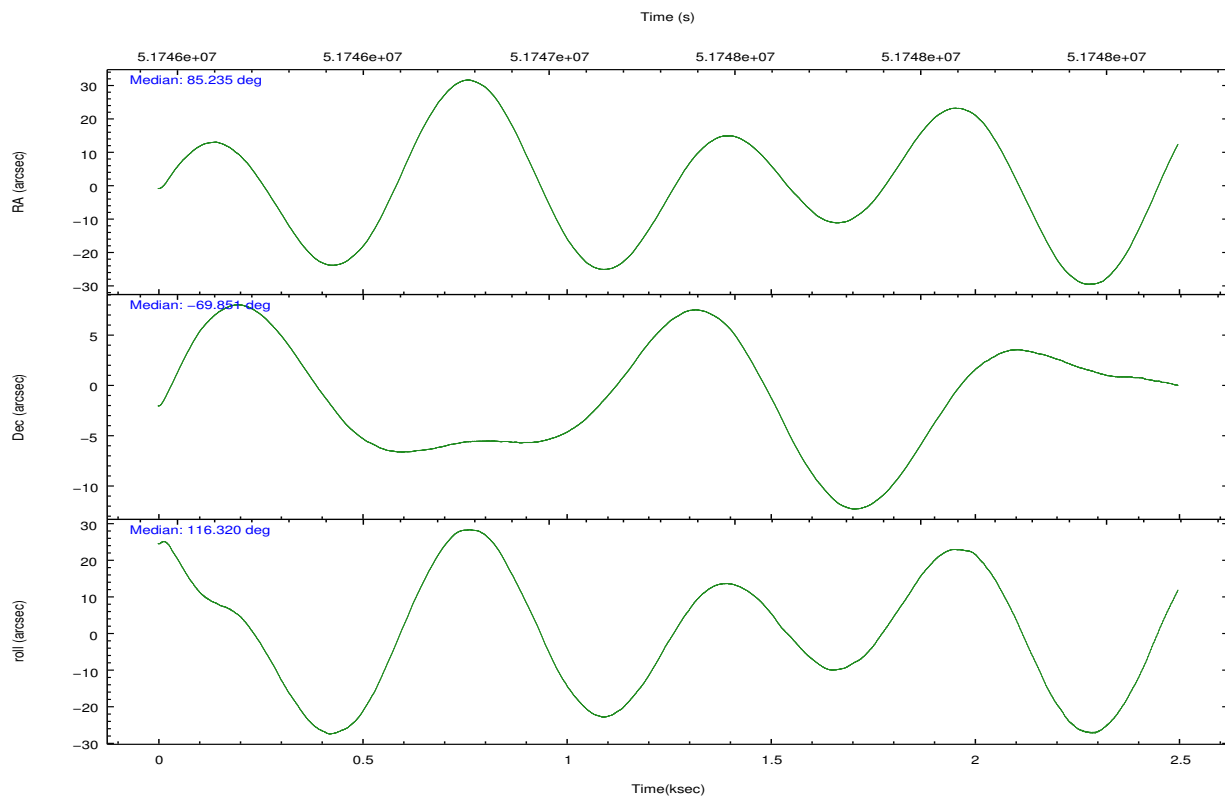
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	257	2008	57773	190	400	268
	22%	27%	60%	4%	21%	20%
grade 1 events	0	14	7253	8	5	1
	0%	0%	7%	0%	0%	0%
grade 2 events	191	465	12252	408	340	191
	16%	6%	12%	10%	18%	14%
grade 3 events	90	865	4674	298	150	116
	7%	11%	4%	7%	7%	8%
grade 4 events	89	980	4469	255	154	108
	7%	13%	4%	6%	8%	8%
grade 5 events	249	438	4199	607	345	317
	21%	6%	4%	15%	18%	24%
grade 6 events	260	2511	4257	2194	488	288
	22%	34%	4%	55%	25%	22%
grade 7 events	0	0	0	0	0	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-456789	ACIS-456789	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	85.300904	85.23447674720903	Subarray requested	NONE	1/4
Pointing Dec	-69.866911	-69.85095066027883	Subarray start row	0	1
Pointing Roll	116.233935	116.3282159002761	Subarray row count	1024	256
SIM focus pos (mm)	-0.684267	-0.865731118321573	Alternating exposures requested	N	N
SIM defocus (mm)	0	-0.1814636570216768	Primary exposure time	0.000000	1.1
SIM translation stage pos (mm)	-190.132523	-190.1199515274594			
SIM translation stage offset (mm)	0	-0.012571055548392			
Observation start time	51746569.184000	51745895.609092			
Observation start date	1999-08-22T22:01:45	1999-08-22T21:51:35			
Observation end time	51748569.184000	51748695.909192			
Observation end date	1999-08-22T22:35:05	1999-08-22T22:38:15			
Read mode	TIMED	TIMED			

2.3 Aspect



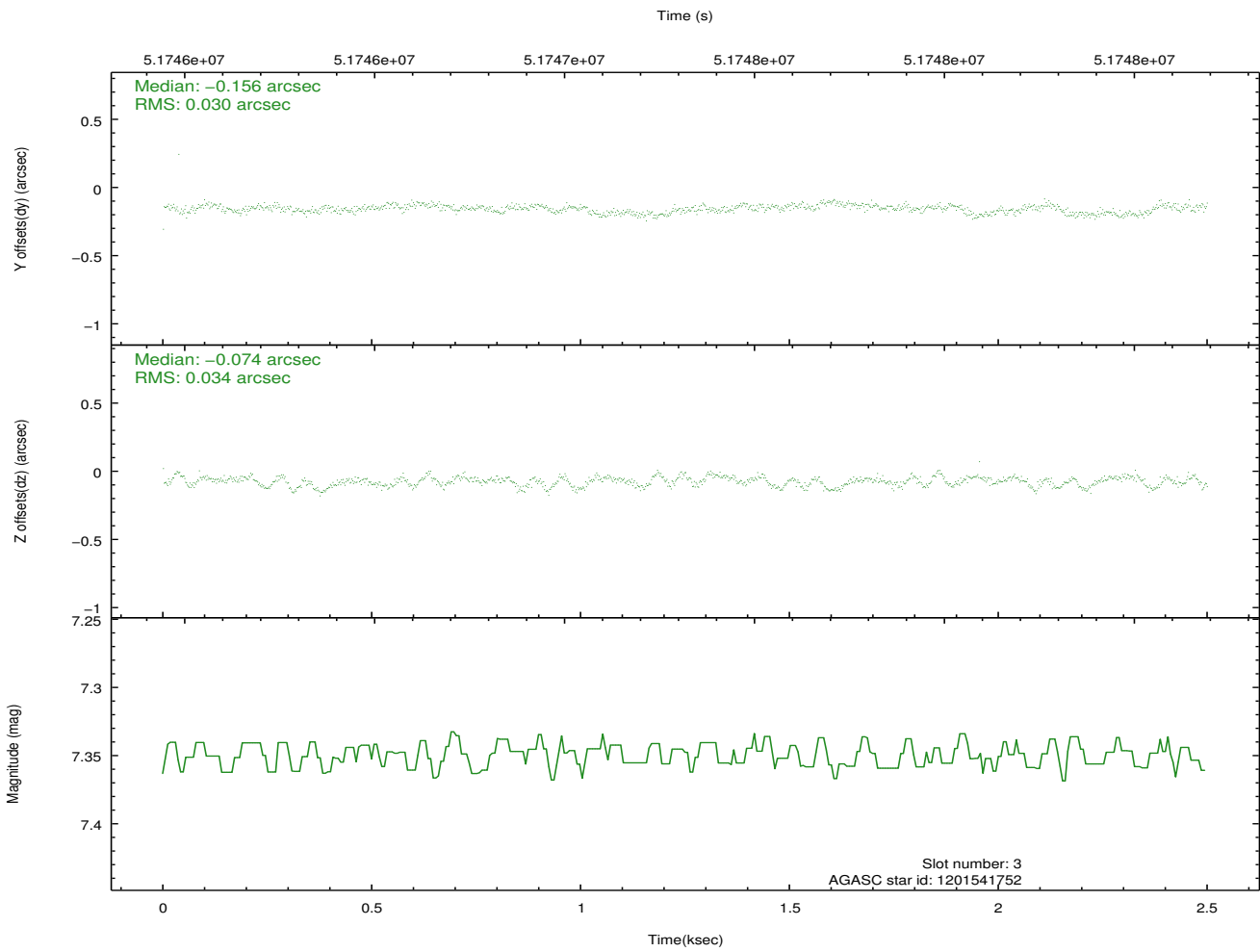
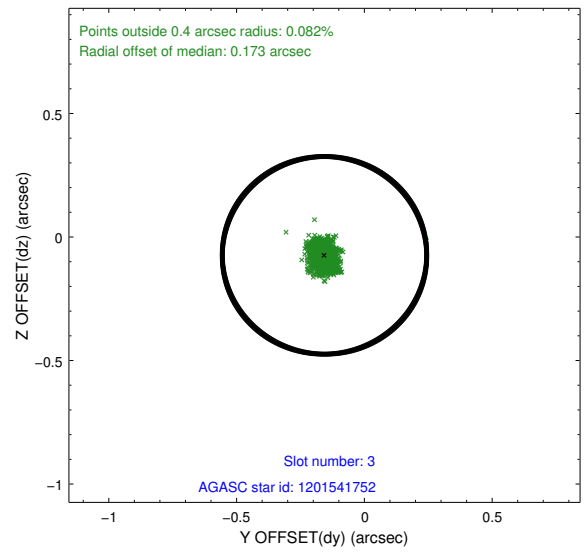
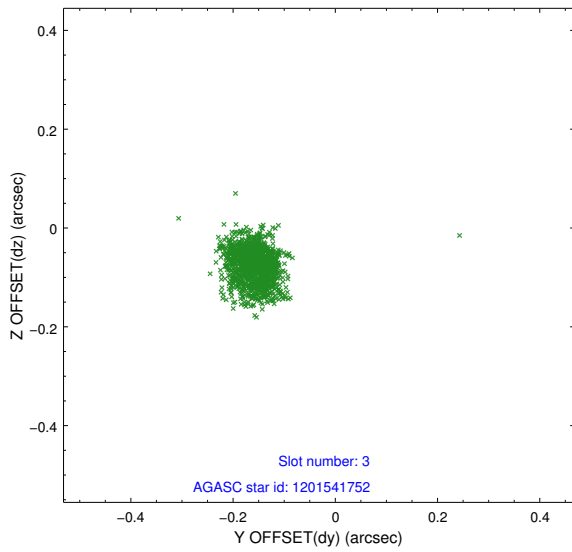


Slot Statistics

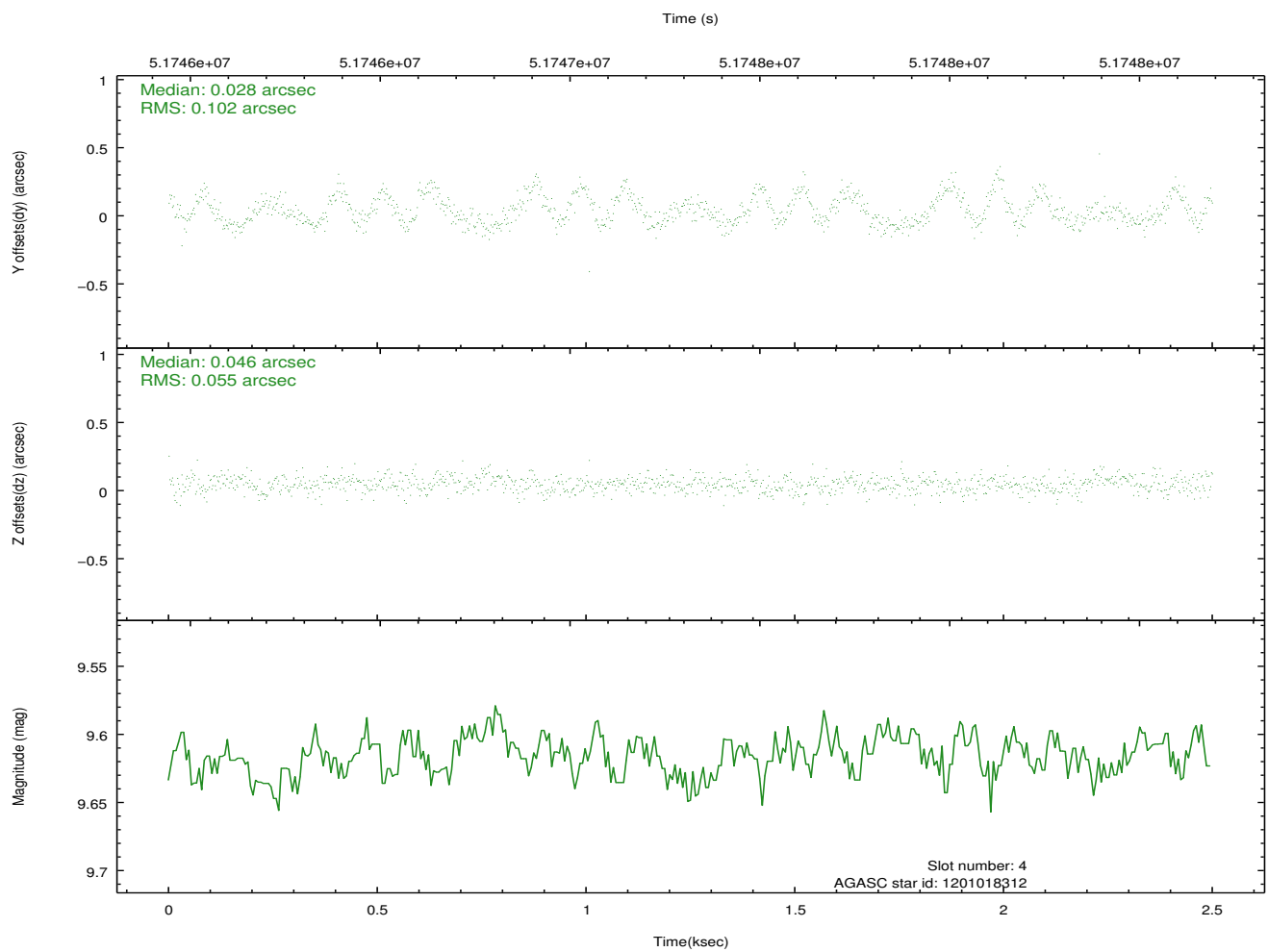
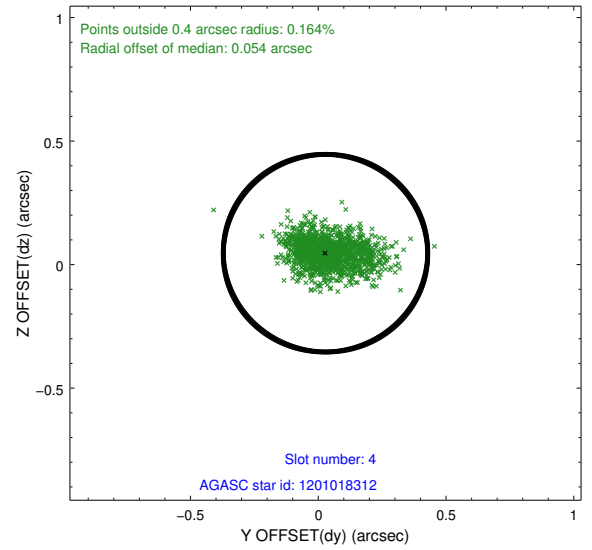
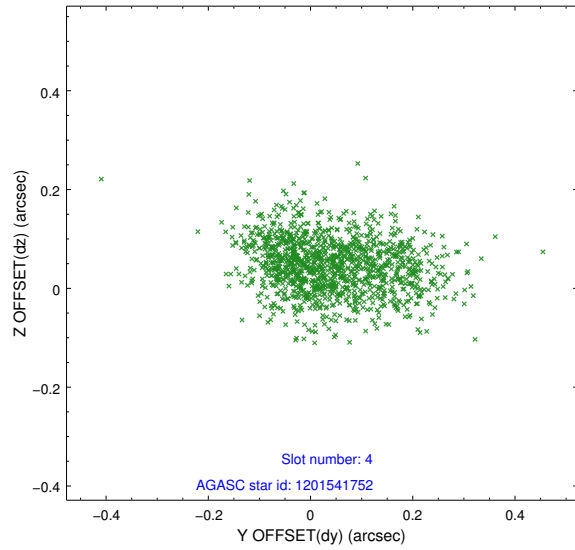
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-3	7.35	1220	-0.037	0.037	0.008	0.013	0.000000	0.000000	60.60	-1850.31
1	FID	ACIS-S-4	7.22	1220	0.142	0.004	0.007	0.013	0.000000	0.000000	2160.99	185.76
2	FID	ACIS-S-5	7.25	1219	-0.132	-0.030	0.007	0.012	0.000000	0.000000	-1803.88	180.99
3	GUIDE	1201541752	7.35	1219	-0.156	-0.074	0.047	0.077	85.373891	-70.033762	-579.46	185.56
4	GUIDE	1201018312	9.62	1219	0.028	0.046	0.120	0.204	86.298231	-69.115627	1850.17	-2337.88
5	GUIDE	1201540760	8.55	1219	0.092	0.012	0.072	0.117	84.403691	-70.419249	-1311.77	1852.02
6	GUIDE	1201542232	9.68	1218	0.035	0.019	0.109	0.166	84.533398	-70.465667	-1532.49	1786.10
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

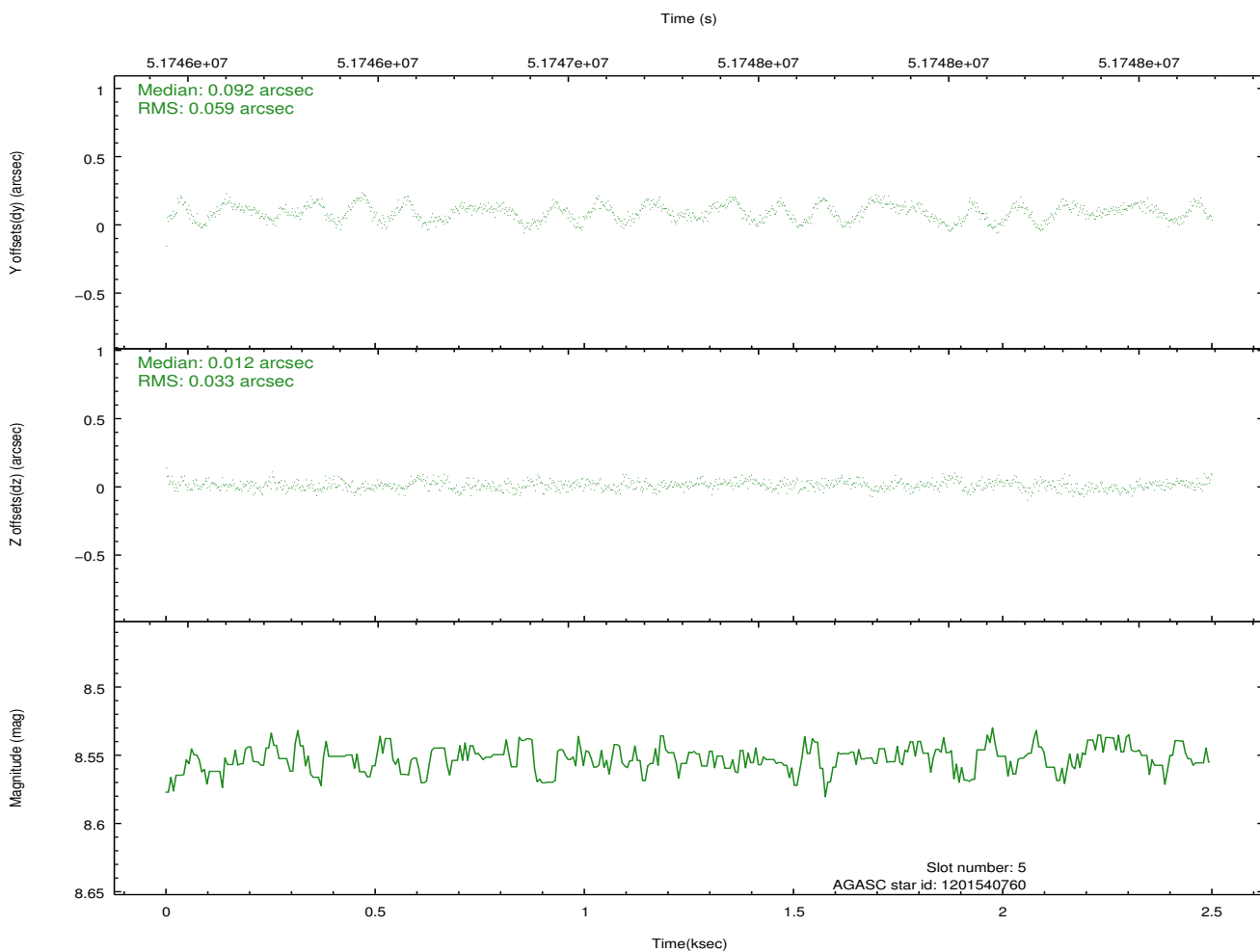
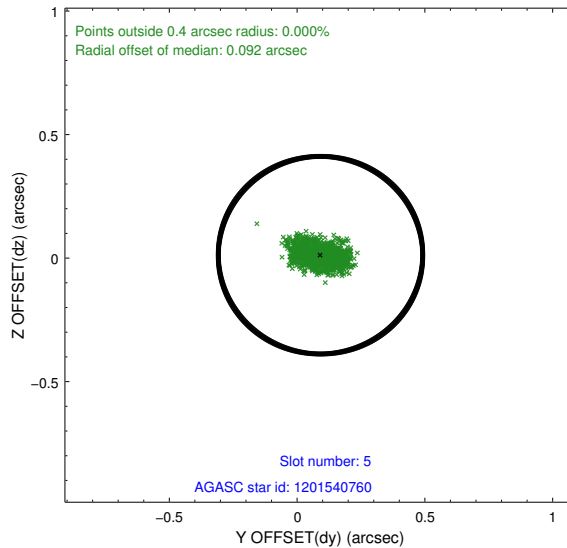
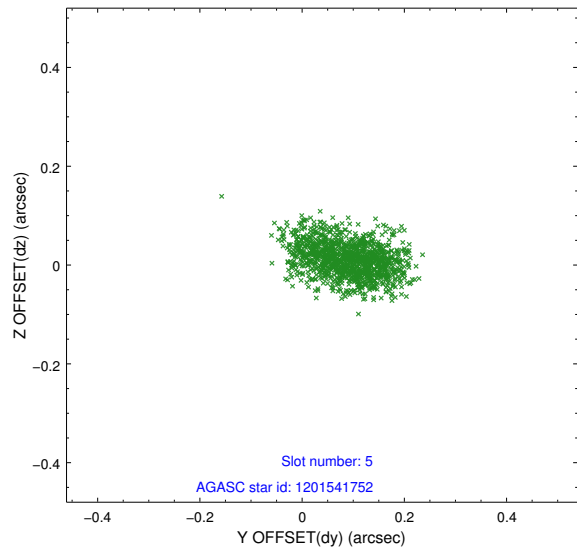
2.4.1 Slot 3



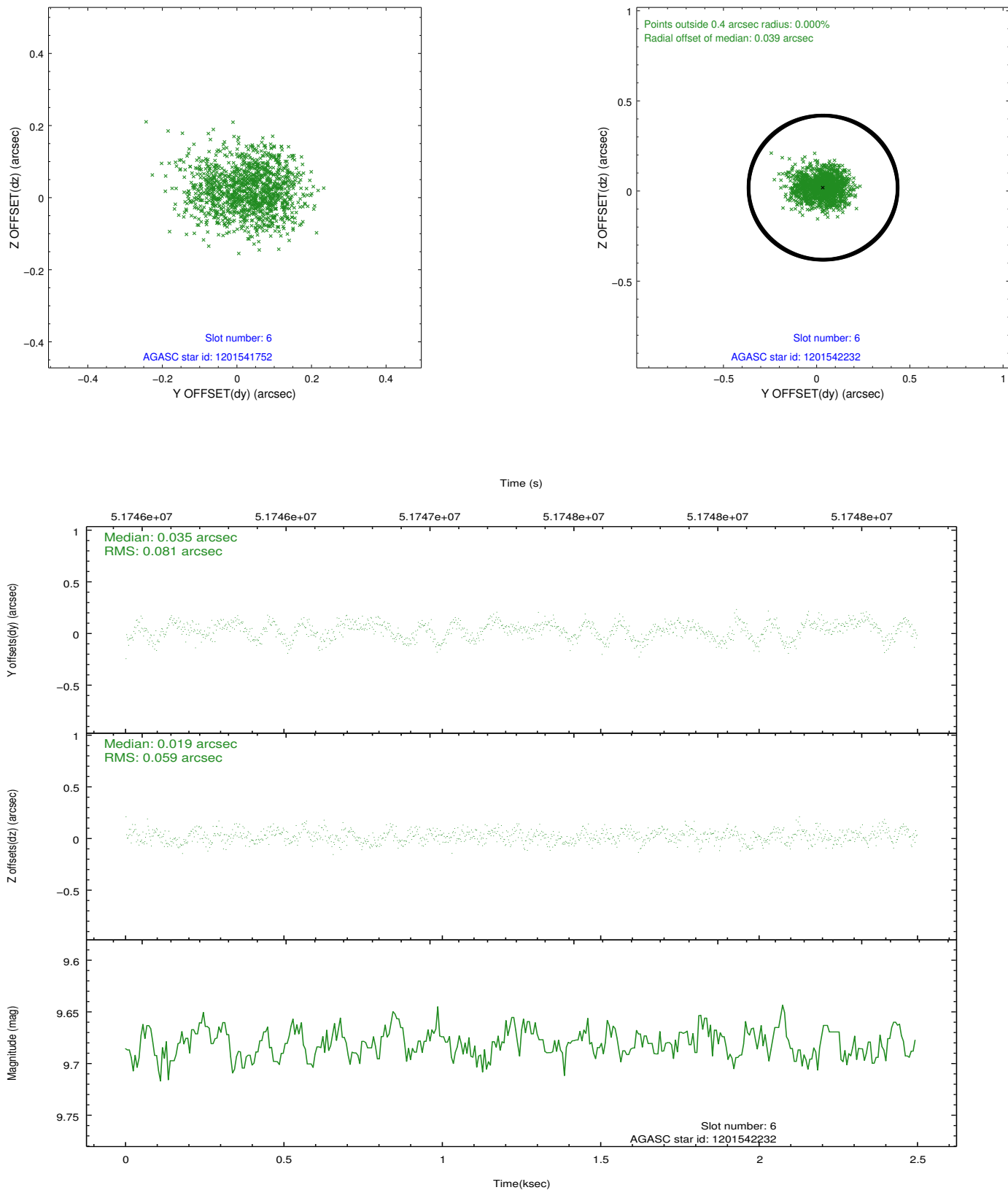
2.4.2 Slot 4



2.4.3 Slot 5

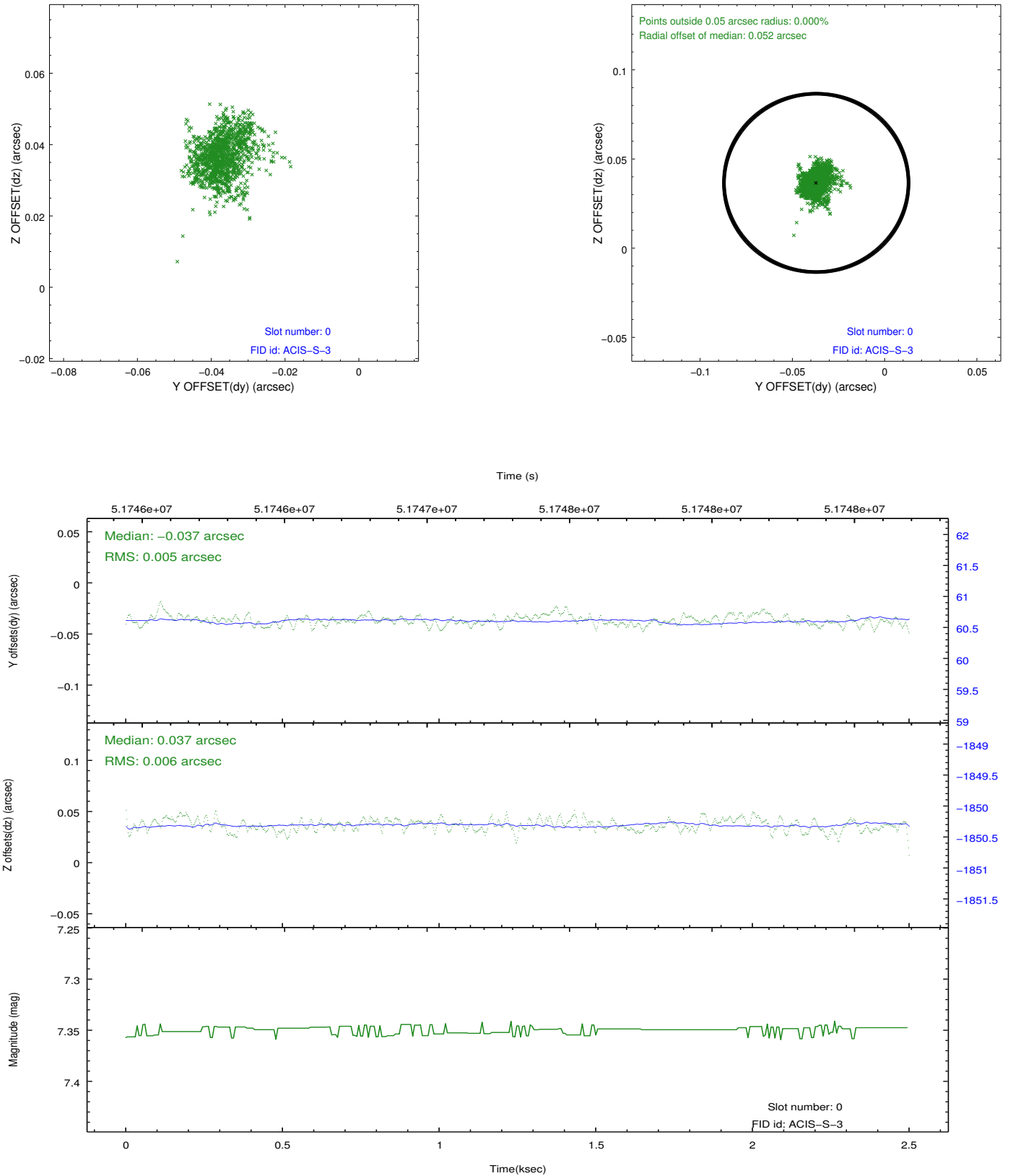


2.4.4 Slot 6

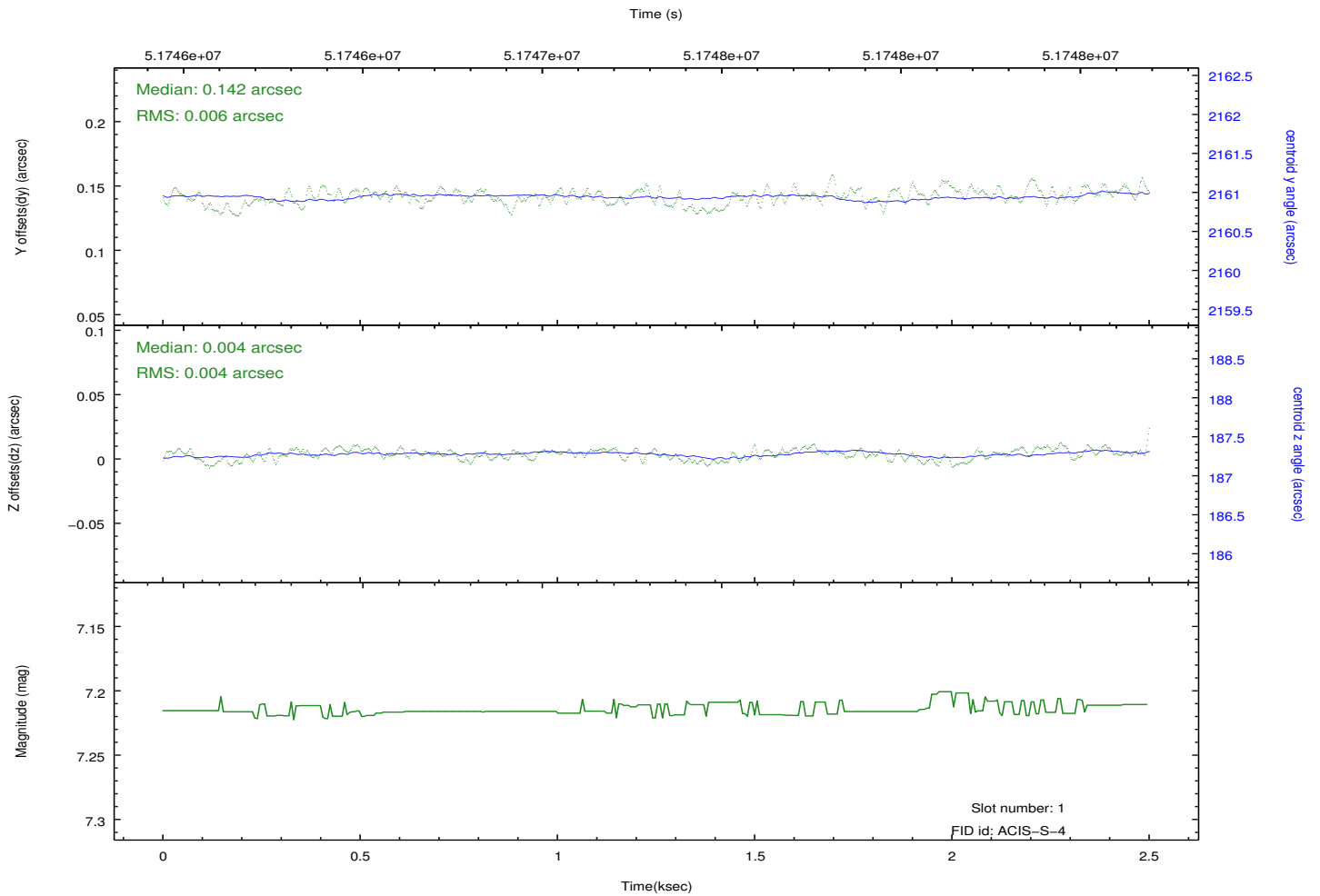
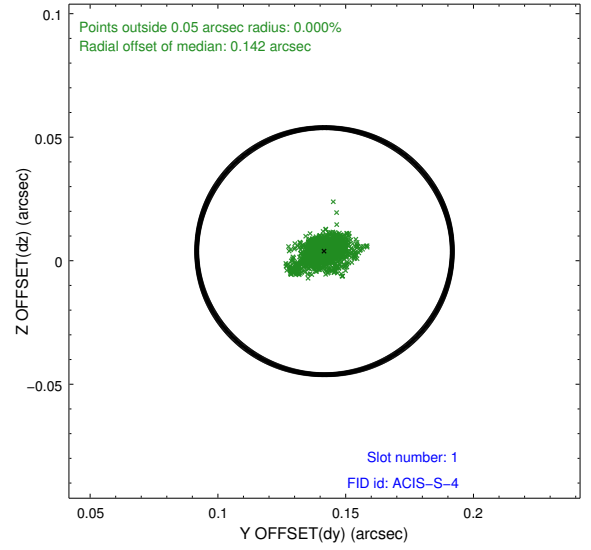
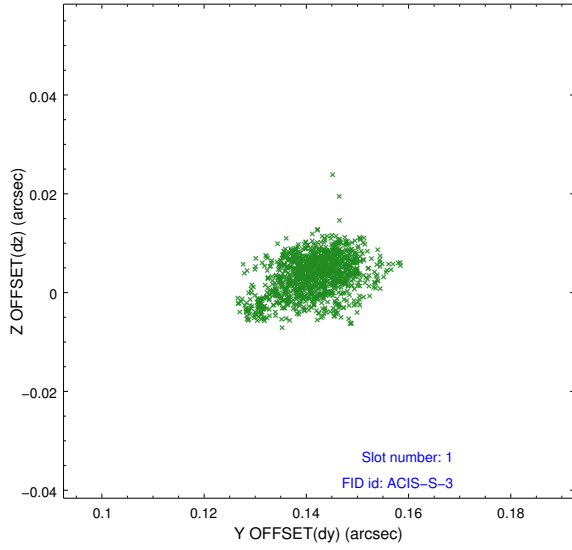


2.5 FID Slots

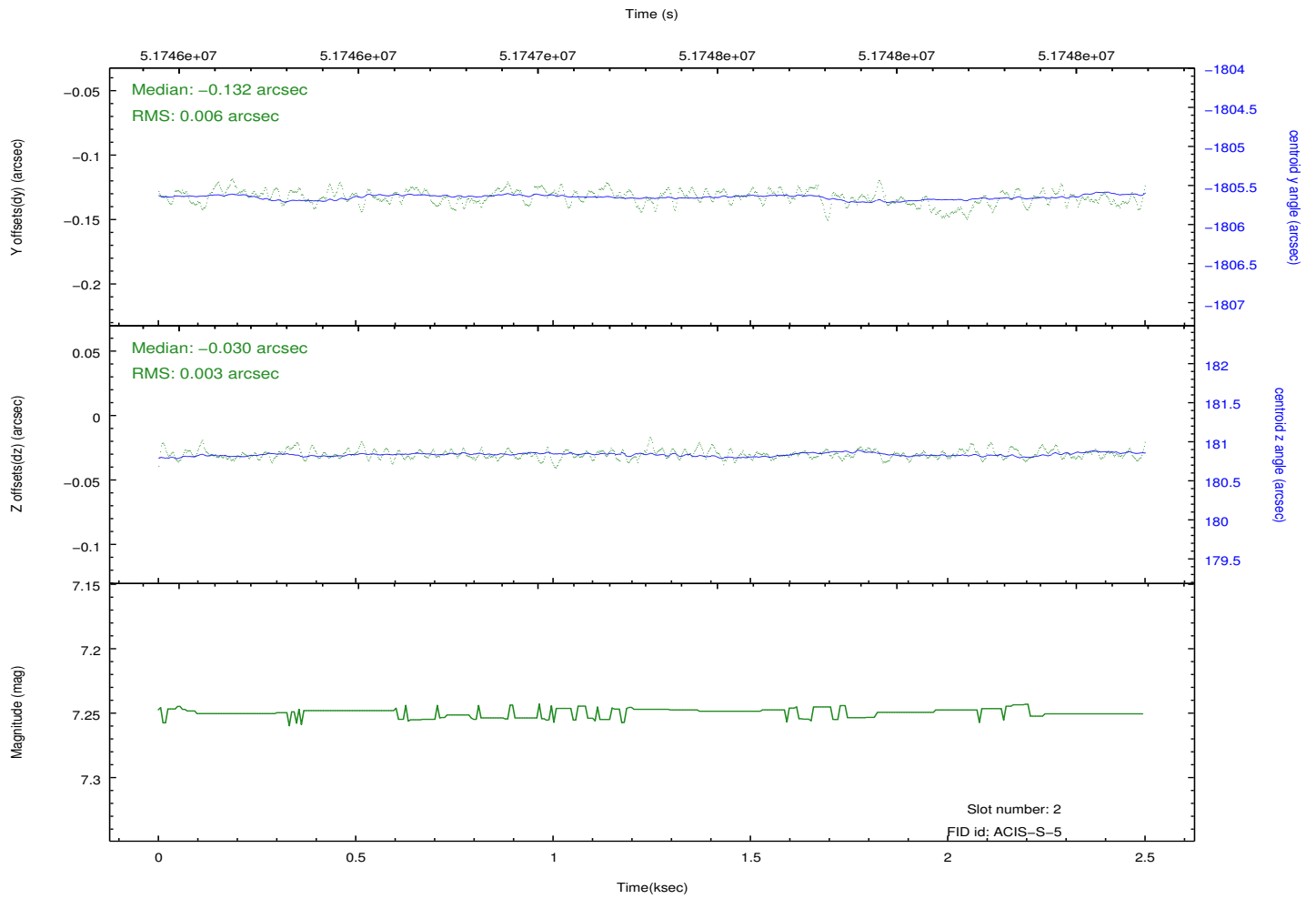
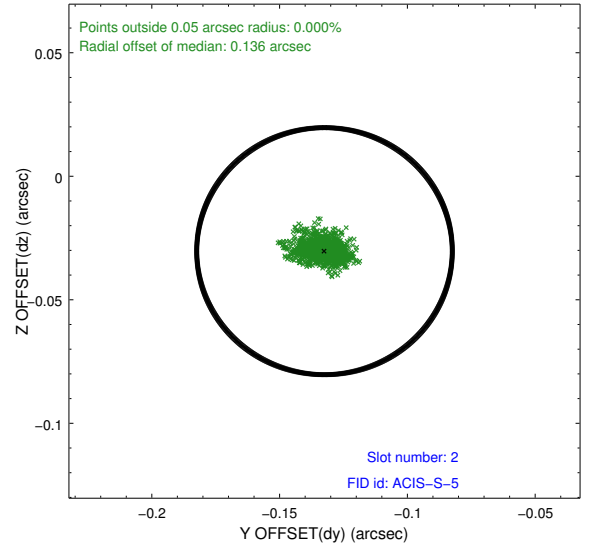
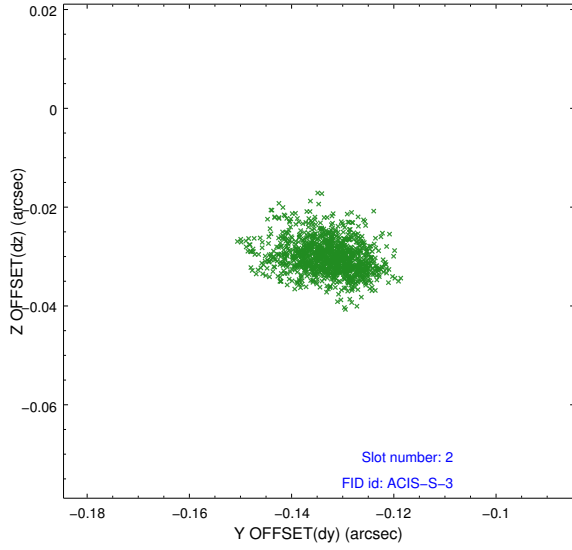
2.5.1 Slot 0



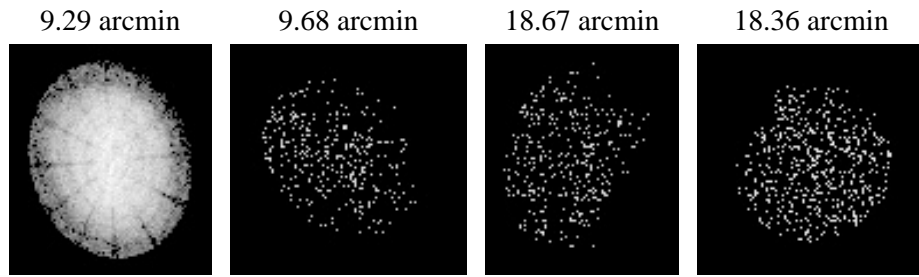
2.5.2 Slot 1



2.5.3 Slot 2



3 Point Sources



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2010.07.27
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.973

A.2 Comments

Target is very off-axis on S2. Subarray was used but not documented in OCAT.

Aim point is off the 1/4 subarray, but target is on.

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Slot 7 was not utilized in this observation.

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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.

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