

V&V Reference Report

L2 ASCDS Version : 8.1.2

Observation 1089 - L2 Version 3

Chandra X-Ray Center

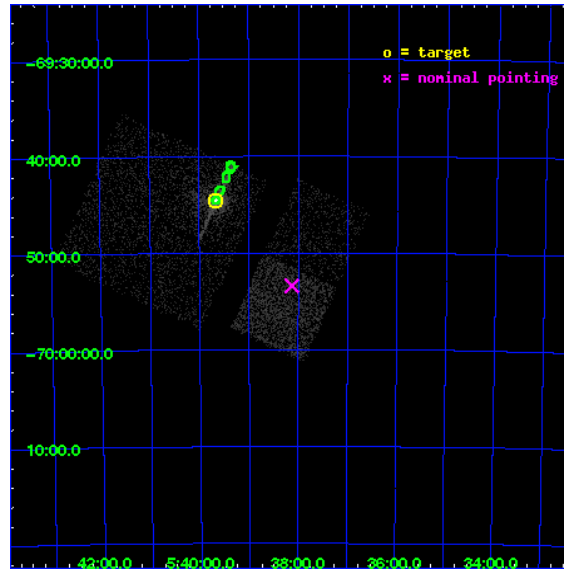
L2 Processing Date : Dec 17 2009

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

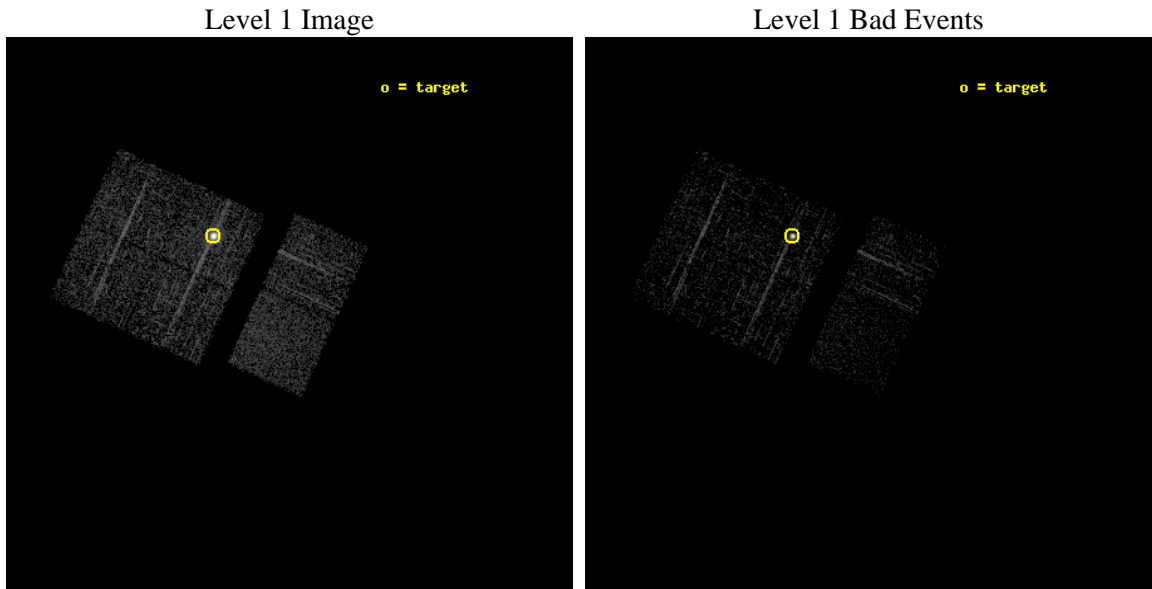
seq_num	480039	Sequence number
obs_id	1089	Observation id
title	 	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	LMC X-1	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	84.914583	Observer's specified target RA
dec_targ	-69.743611	Observer's specified target Dec
ra_nom	84.532155444235	Nominal RA
dec_nom	-69.88992051669	Nominal Dec
roll_nom	114.58902925918	Nominal Roll
revision	3	Processing version of data
ontime	755.20000070333	Sum of GTIs [s]
livetime	745.63720356758	Livetime [s]
ontime0	755.20000070333	Sum of GTIs [s]
ontime1	755.20000070333	Sum of GTIs [s]
ontime2	755.20000070333	Sum of GTIs [s]
ontime3	755.20000070333	Sum of GTIs [s]
ontime6	755.20000070333	Sum of GTIs [s]
ontime7	755.20000070333	Sum of GTIs [s]
l2events	31898	Number of level 2 events



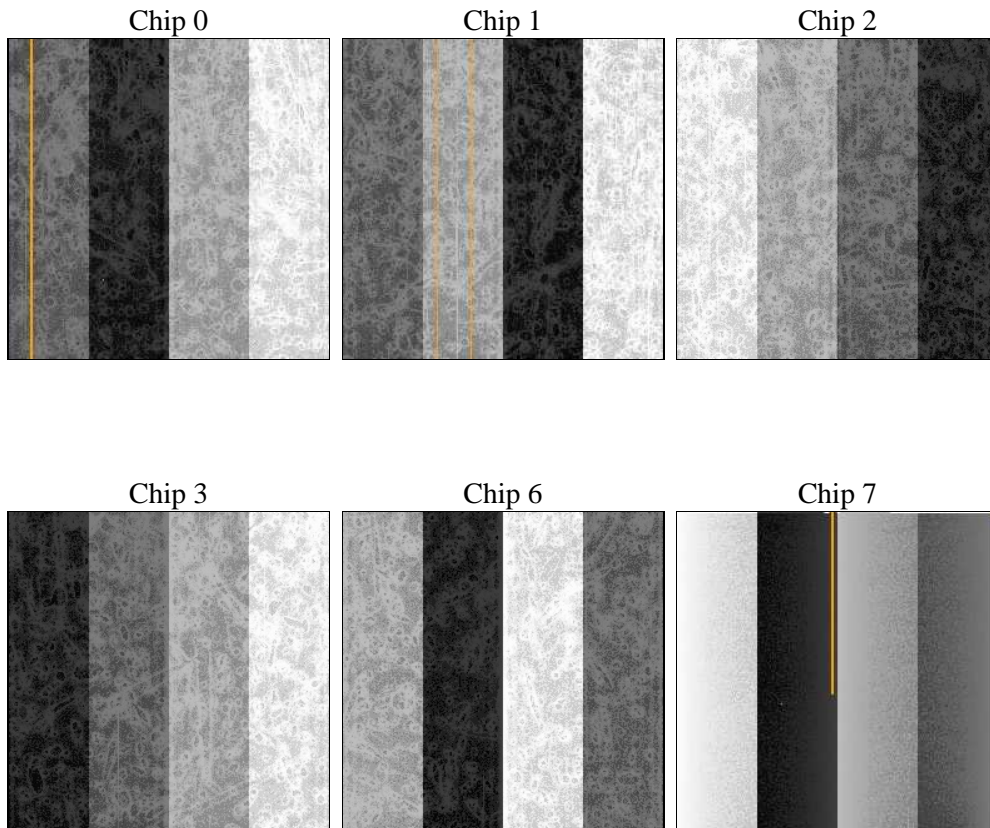
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	1000.000000	Scheduled observation exposure time
ascdsver	8.1.2	ASCDS version number	ontime	755.20000070333	Sum of GTIs [s]
caldsver	4.1.4	 	ontime0	755.20000070333	Sum of GTIs [s]
date	2009-12-17T06:17:01	Date and time of file creation	ontime1	755.20000070333	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	755.20000070333	Sum of GTIs [s]
			ontime3	755.20000070333	Sum of GTIs [s]
			ontime6	755.20000070333	Sum of GTIs [s]
			ontime7	755.20000070333	Sum of GTIs [s]
			l1events	76207	Number of level 1 events

2.1.4 Events

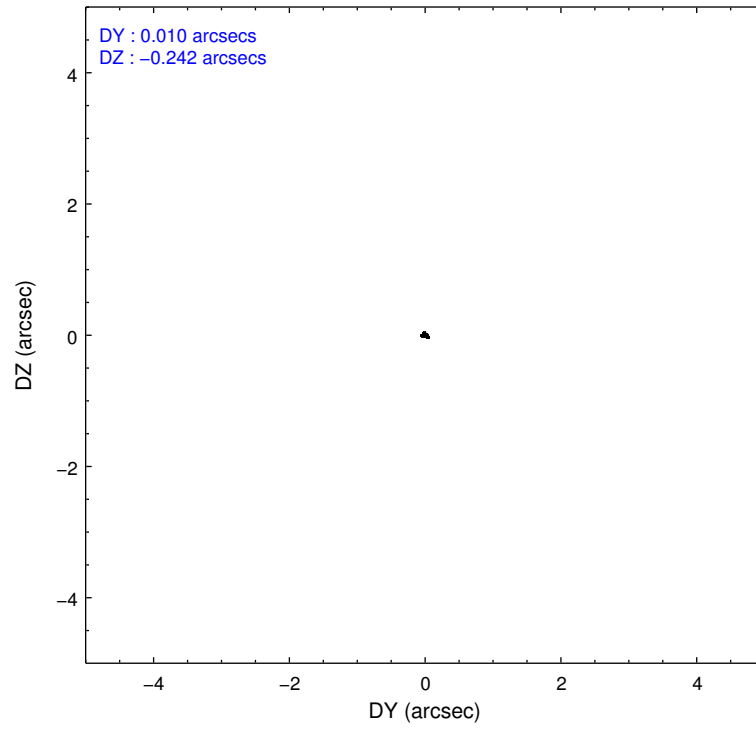
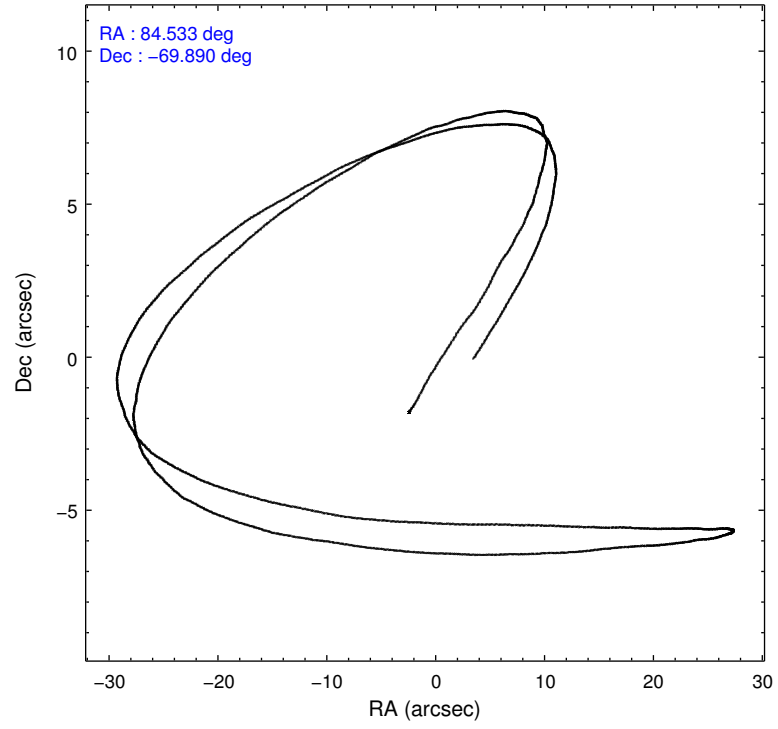
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	7385	6695	39844	7574	7072	7637
rejected events	6430	5812	12693	6722	6279	4453
rejected %	87%	86%	31%	88%	88%	58%

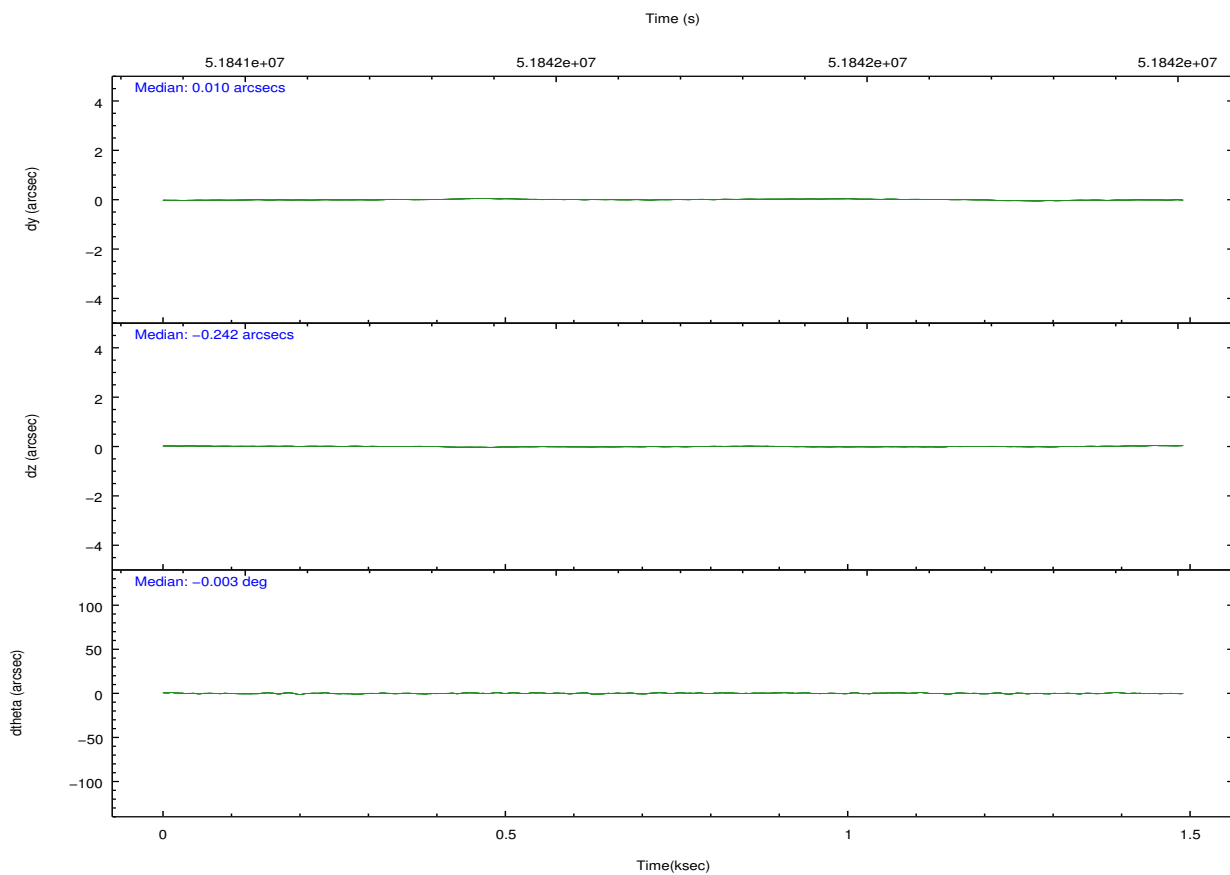
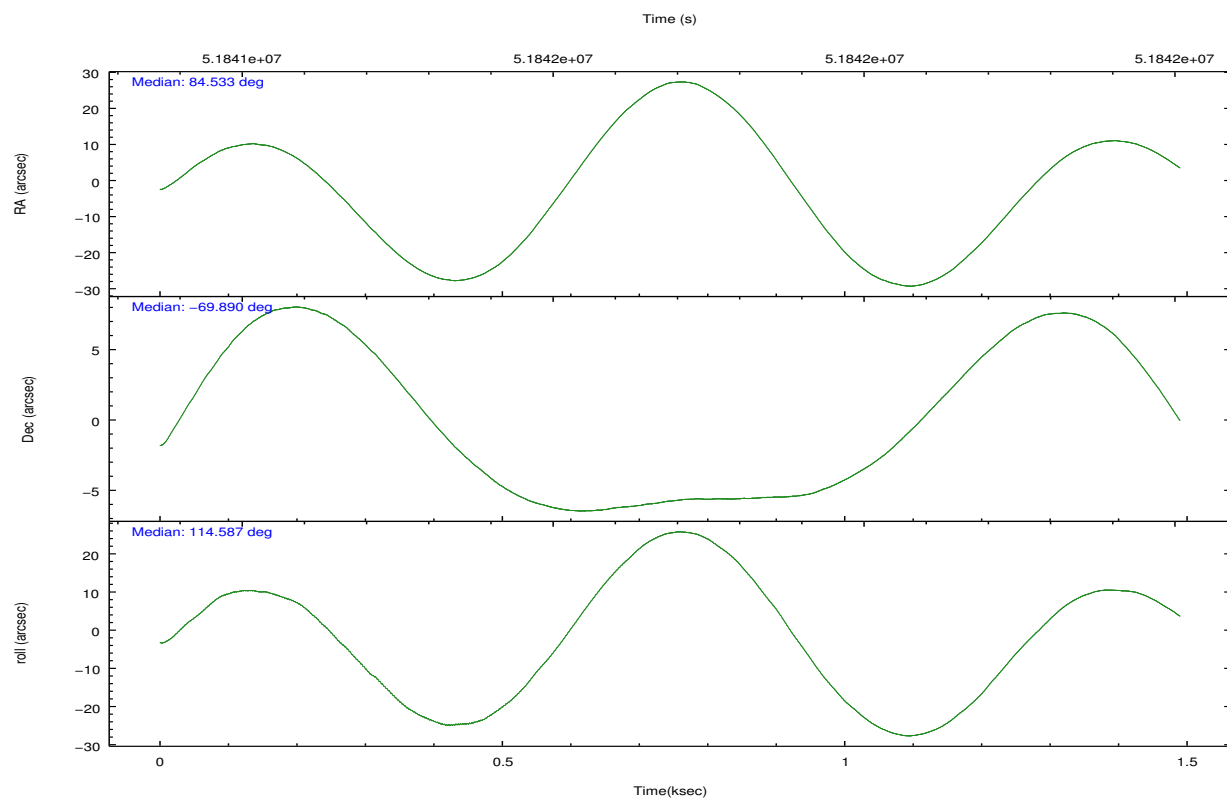
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	501	408	18399	437	346	215
	6%	6%	46%	5%	4%	2%
grade 1 events	7	6	2671	3	3	4
	0%	0%	6%	0%	0%	0%
grade 2 events	162	168	4444	170	188	545
	2%	2%	11%	2%	2%	7%
grade 3 events	73	87	1521	70	68	329
	0%	1%	3%	0%	0%	4%
grade 4 events	85	70	1526	59	40	251
	1%	1%	3%	0%	0%	3%
grade 5 events	176	184	1771	183	194	507
	2%	2%	4%	2%	2%	6%
grade 6 events	143	162	1506	125	156	1870
	1%	2%	3%	1%	2%	24%
grade 7 events	6238	5610	8006	6527	6077	3916
	84%	83%	20%	86%	85%	51%

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	84.596820	84.53215544423509	Subarray requested	NONE	NONE
Pointing Dec	-69.906835	-69.88992051669037	Alternating exposures requested	N	N
Pointing Roll	114.493122	114.5890292591772	Primary exposure time	0.000000	3.2
SIM focus pos (mm)	-0.684267	-0.865731118321573			
SIM defocus (mm)	0	-0.1814636570216768			
SIM translation stage pos (mm)	-190.132523	-190.1199515274594			
SIM translation stage offset (mm)	0	-0.012571055548392			
Observation start time	51841435.184000	51840761.925005			
Observation start date	1999-08-24T00:22:51	1999-08-24T00:12:41			
Observation end time	51842435.184000	51842707.887575			
Observation end date	1999-08-24T00:39:31	1999-08-24T00:45:07			
Read mode	TIMED	TIMED			

2.3 Aspect



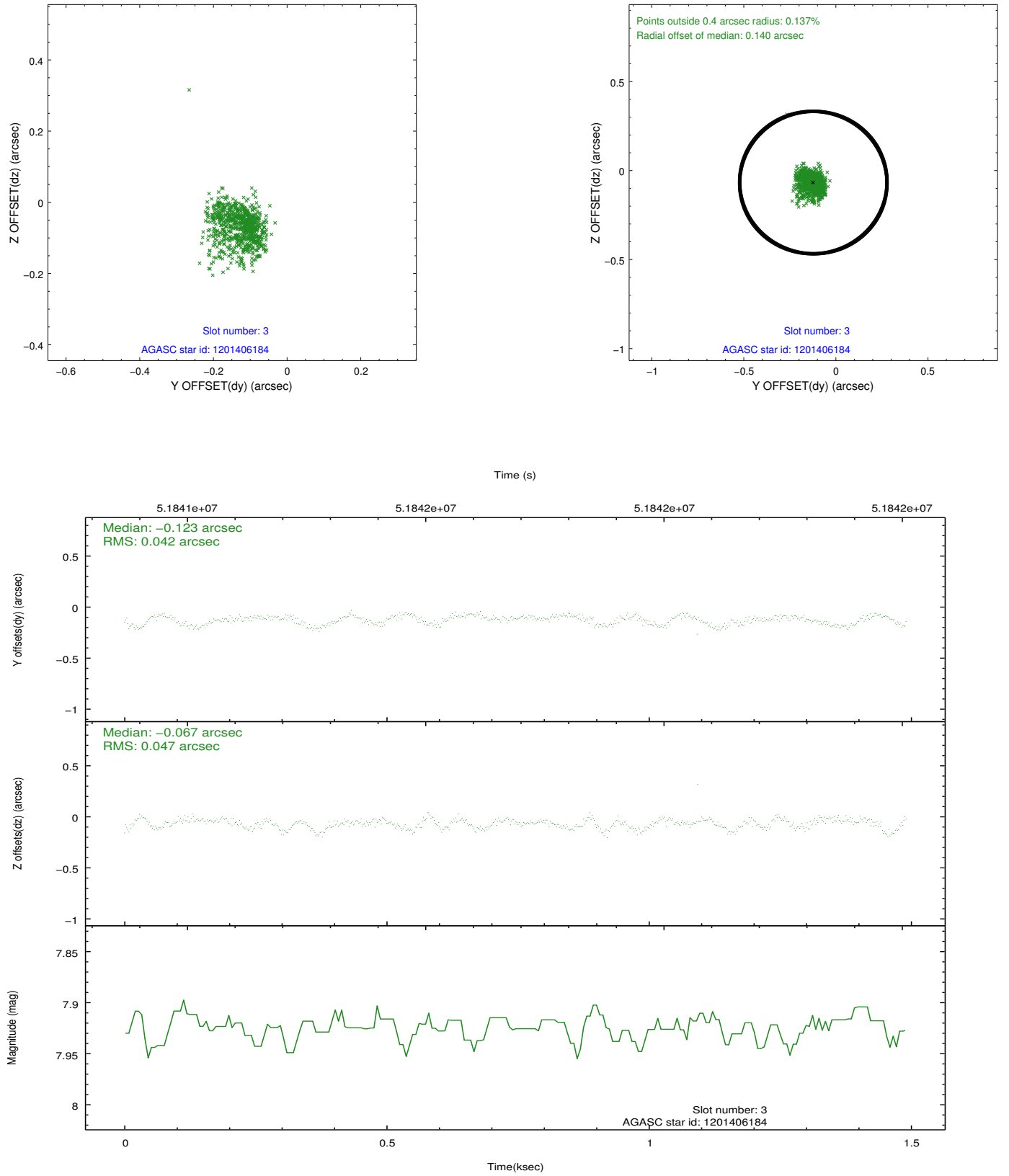


Slot Statistics

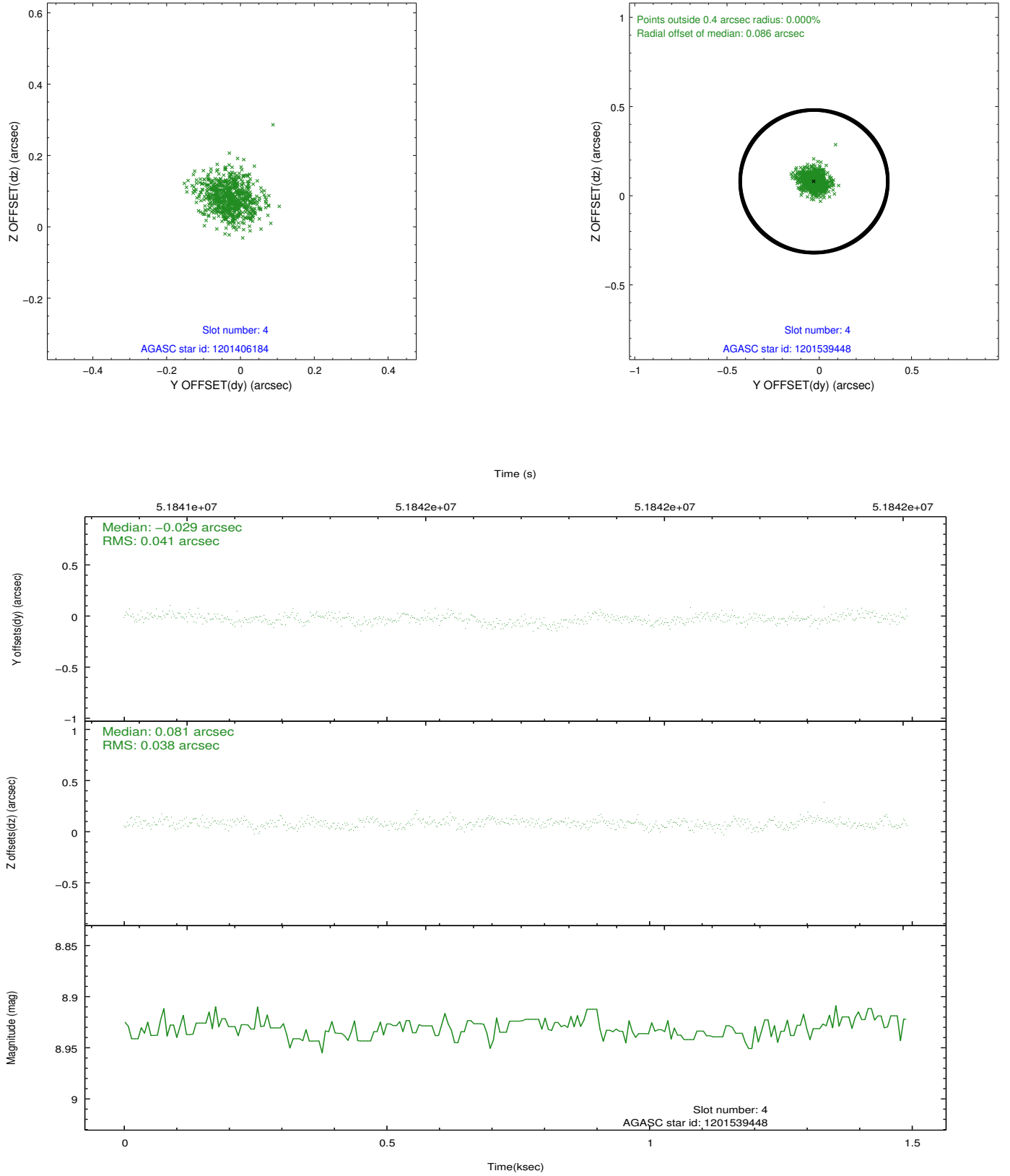
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.12	728	-0.030	-0.027	0.006	0.010	0.000000	0.000000	-752.62	-1721.12
1	FID	ACIS-S-4	7.22	728	0.138	0.022	0.006	0.011	0.000000	0.000000	2159.85	185.12
2	FID	ACIS-S-5	7.25	728	-0.139	0.014	0.006	0.012	0.000000	0.000000	-1802.75	181.30
3	GUIDE	1201406184	7.92	728	-0.123	-0.067	0.066	0.105	82.503234	-69.975517	803.08	2469.25
4	GUIDE	1201539448	8.93	728	-0.029	0.081	0.059	0.096	85.635707	-70.382152	-2087.54	-425.12
5	GUIDE	1201406992	9.27	726	0.159	-0.009	0.077	0.126	83.682859	-69.471866	1891.56	404.12
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

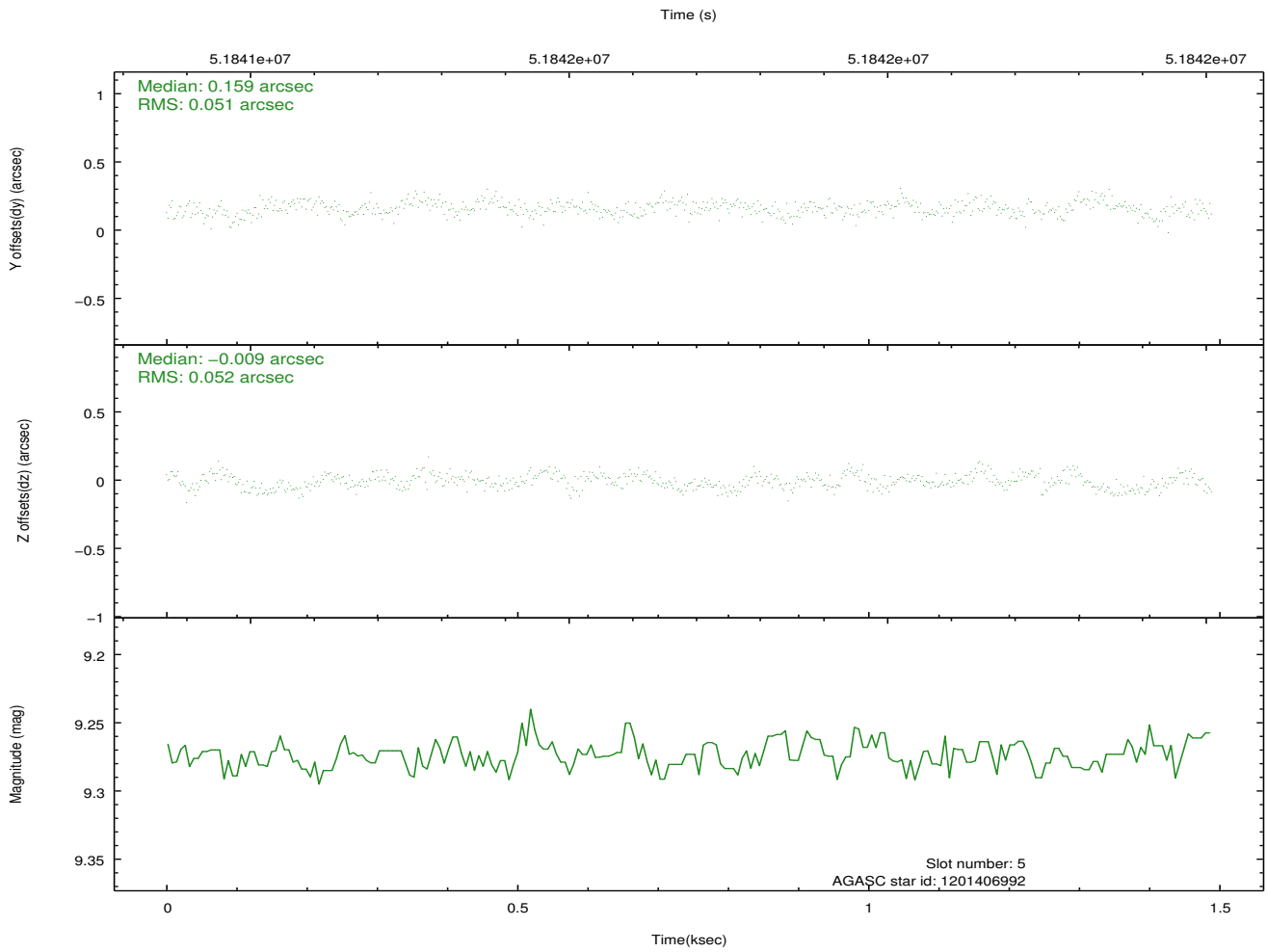
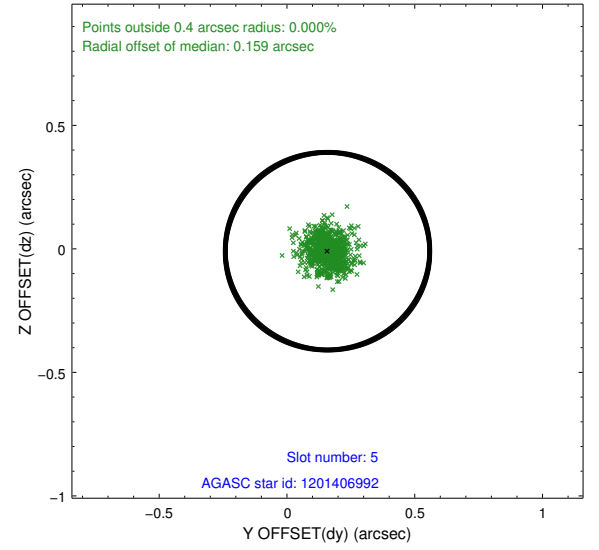
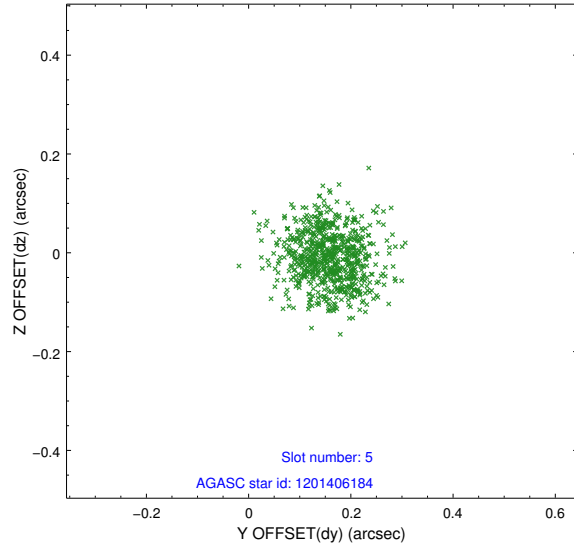
2.4.1 Slot 3



2.4.2 Slot 4

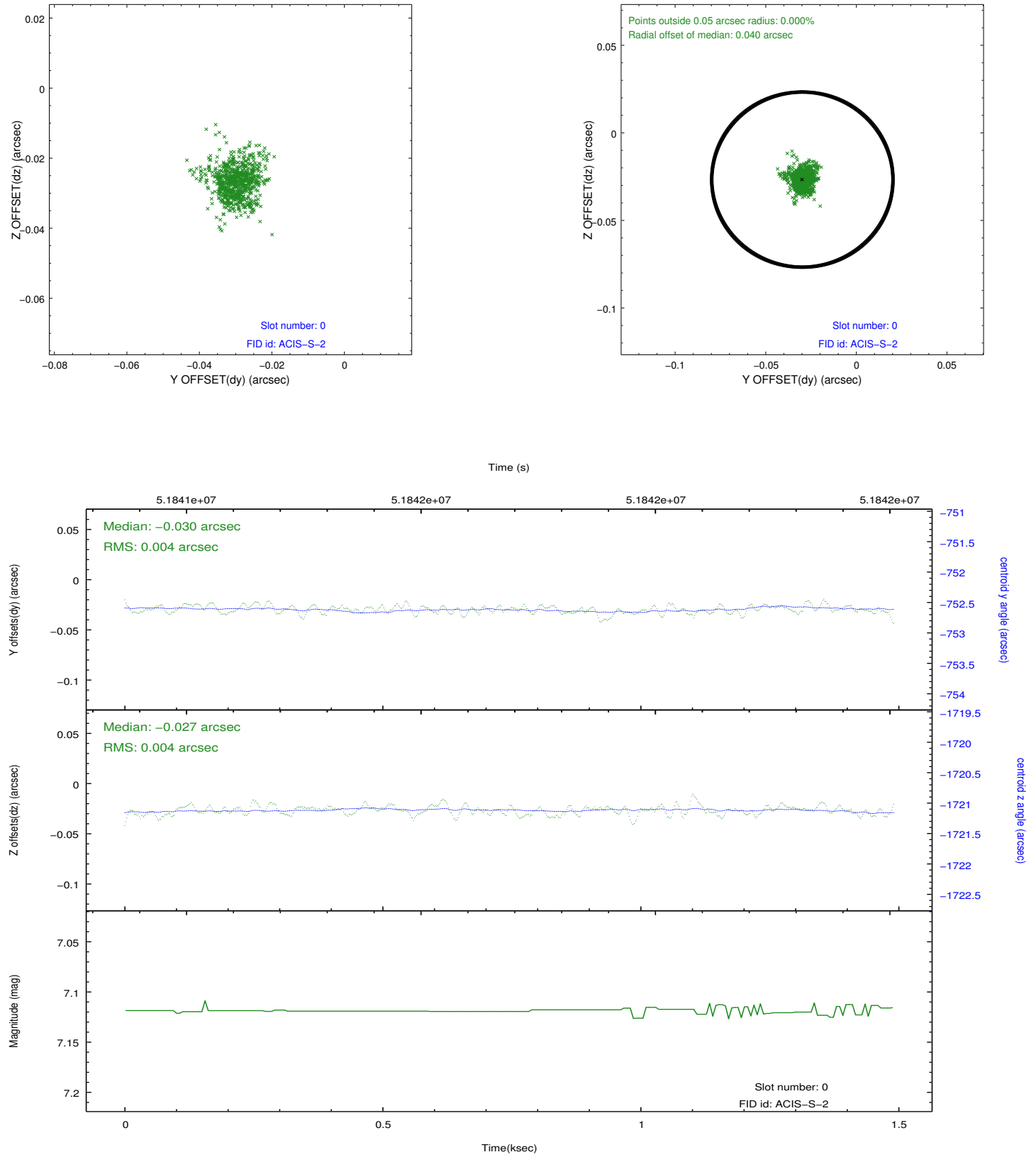


2.4.3 Slot 5

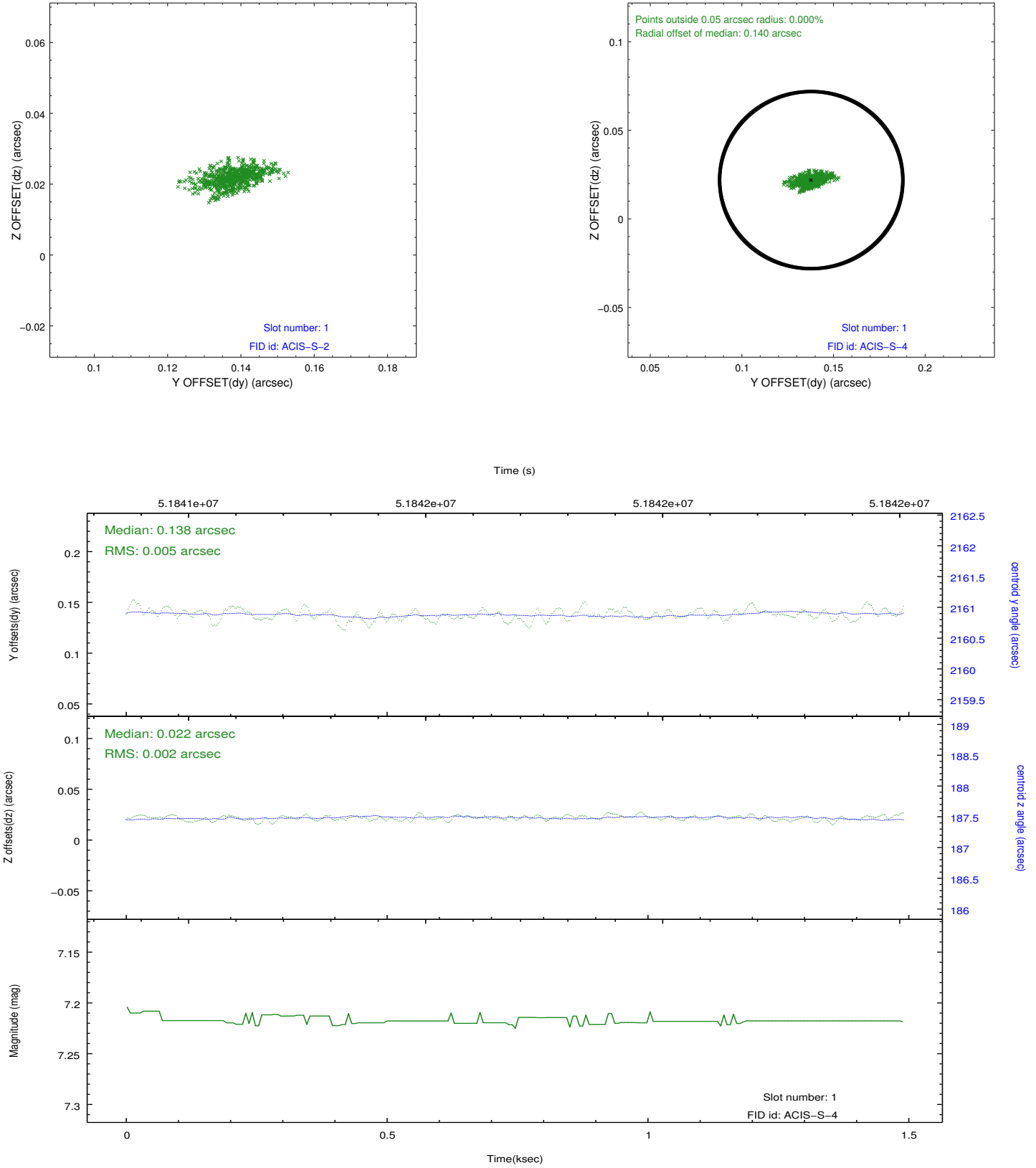


2.5 FID Slots

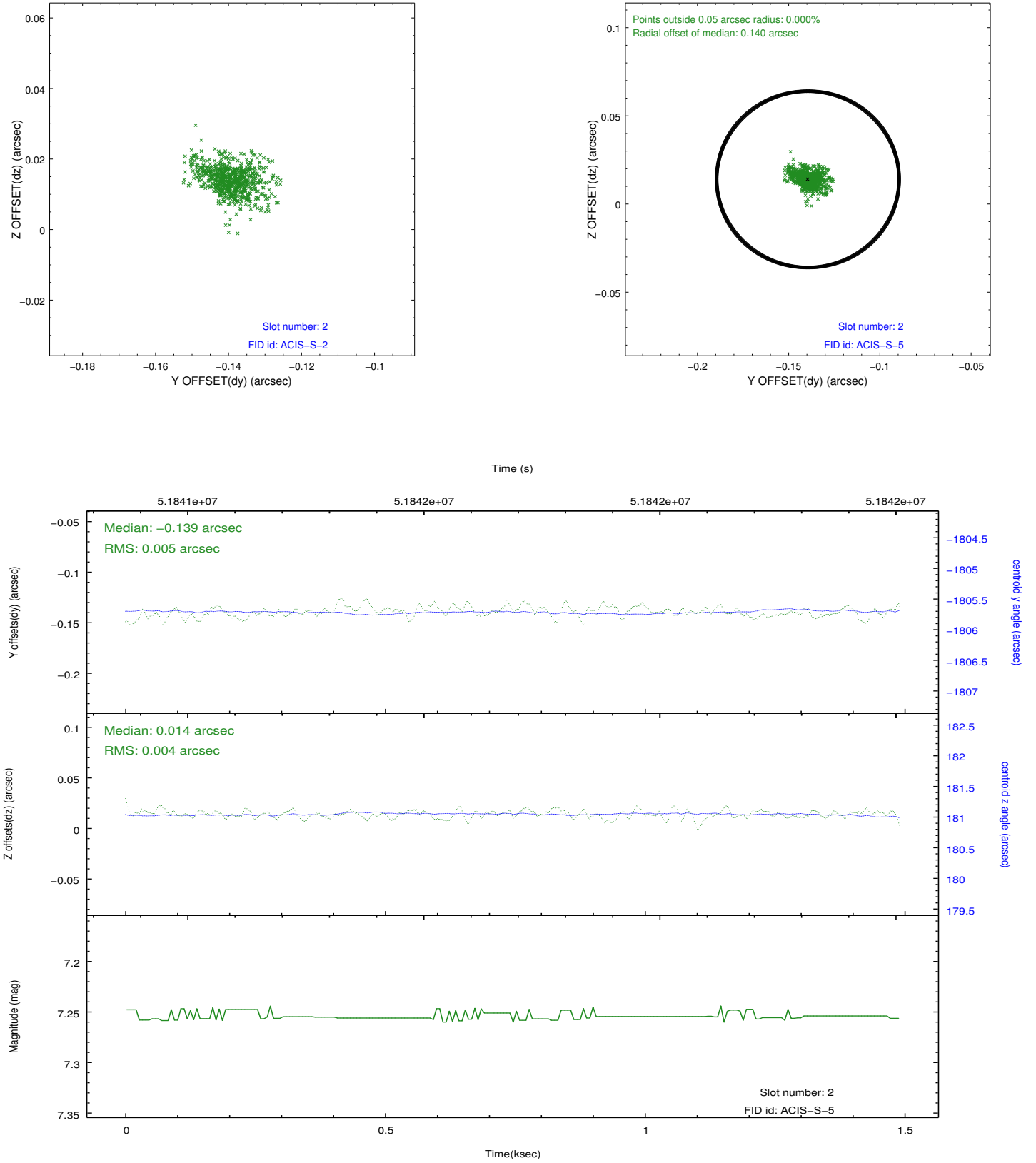
2.5.1 Slot 0



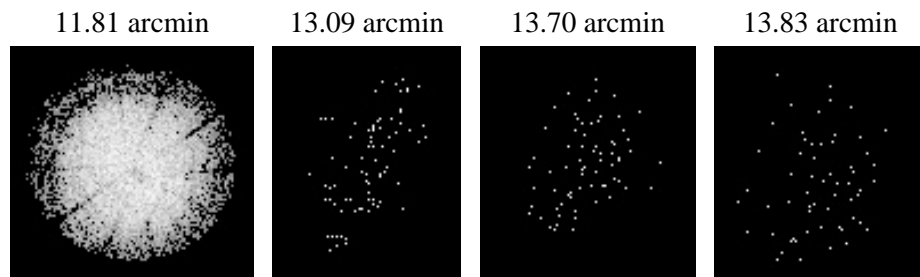
2.5.2 Slot 1



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	0.758

A.2 Comments

Target is very off-axis on I2.

===

Charge time for this ObsId remains at previous value of 0.758 ksec, although with the current processing the charge time would have been 0.755 ksec.

==

Guide stars in slots 6 and 7 were not acquired for this observation.

==

During this observation, software was uploaded to enlarge the search boxes for the fid lights. The software did not affect 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.