

V&V Reference Report

L2 ASCDS Version : 8.1.2

Observation 1228 - L2 Version 3

Chandra X-Ray Center

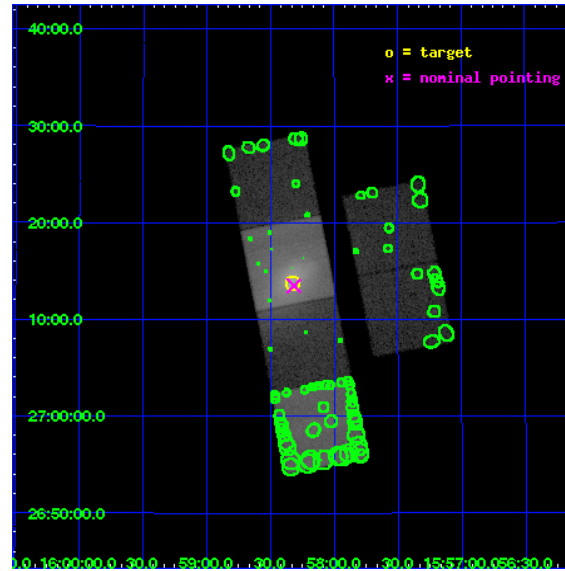
L2 Processing Date : Dec 16 2009

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1 Front

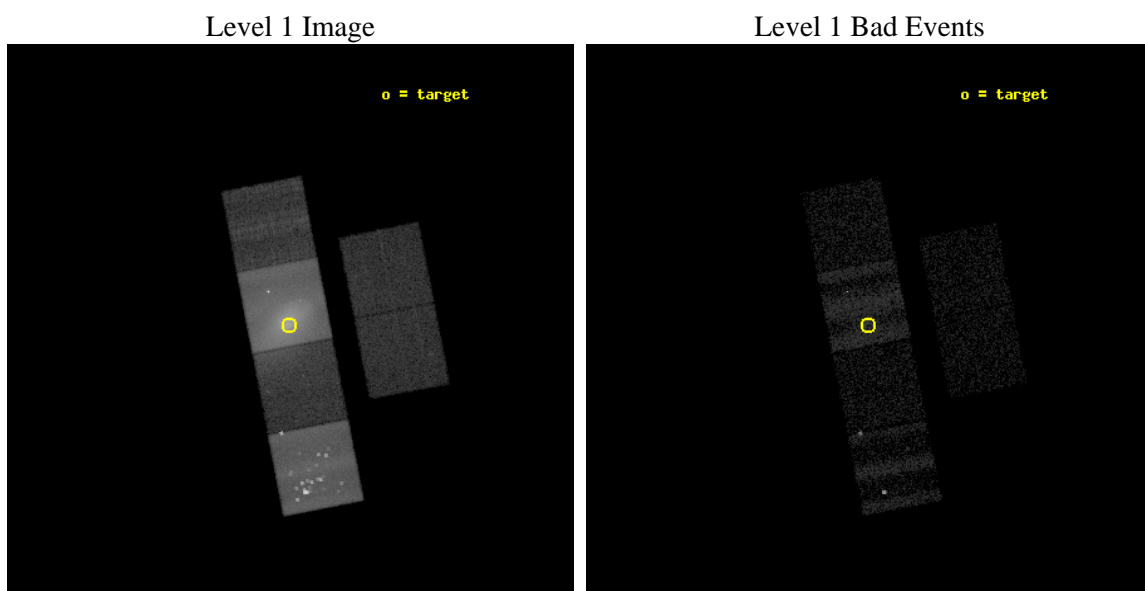
seq_num	880178	Sequence number
obs_id	1228	Observation id
title	 	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	A2142	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	239.5825	Observer's specified target RA
dec_targ	27.229167	Observer's specified target Dec
ra_nom	239.57901355646	Nominal RA
dec_nom	27.224867407681	Nominal Dec
roll_nom	258.98650706568	Nominal Roll
revision	3	Processing version of data
ontime	12256.000011414	Sum of GTIs [s]
livetime	12100.807159593	Livetime [s]
ontime2	12256.000011414	Sum of GTIs [s]
ontime3	12256.000011414	Sum of GTIs [s]
ontime5	12256.000011414	Sum of GTIs [s]
ontime6	12252.759031281	Sum of GTIs [s]
ontime7	12256.000011414	Sum of GTIs [s]
ontime8	12256.000011414	Sum of GTIs [s]
l2events	545793	Number of level 2 events



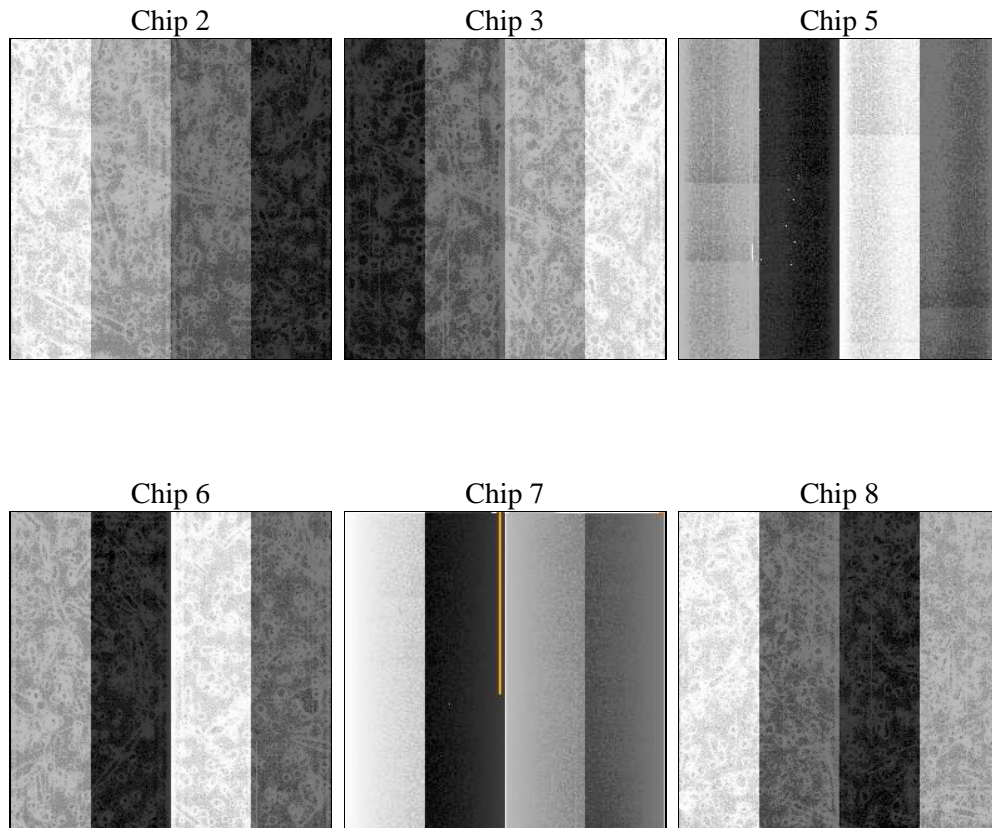
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	12500.000000	Scheduled observation exposure time
ascdsver	8.1.2	ASCDS version number	ontime	12256.000011414	Sum of GTIs [s]
caldsver	4.1.4	 	ontime2	12256.000011414	Sum of GTIs [s]
date	2009-12-16T05:48:20	Date and time of file creation	ontime3	12256.000011414	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	12256.000011414	Sum of GTIs [s]
			ontime6	12252.759031281	Sum of GTIs [s]
			ontime7	12256.000011414	Sum of GTIs [s]
			ontime8	12256.000011414	Sum of GTIs [s]
			l1events	671132	Number of level 1 events

2.1.4 Events

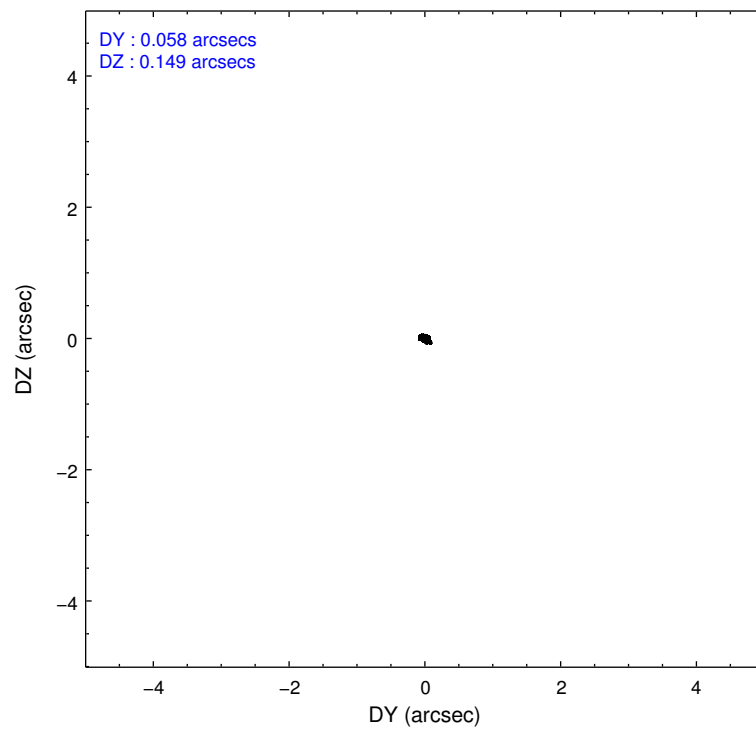
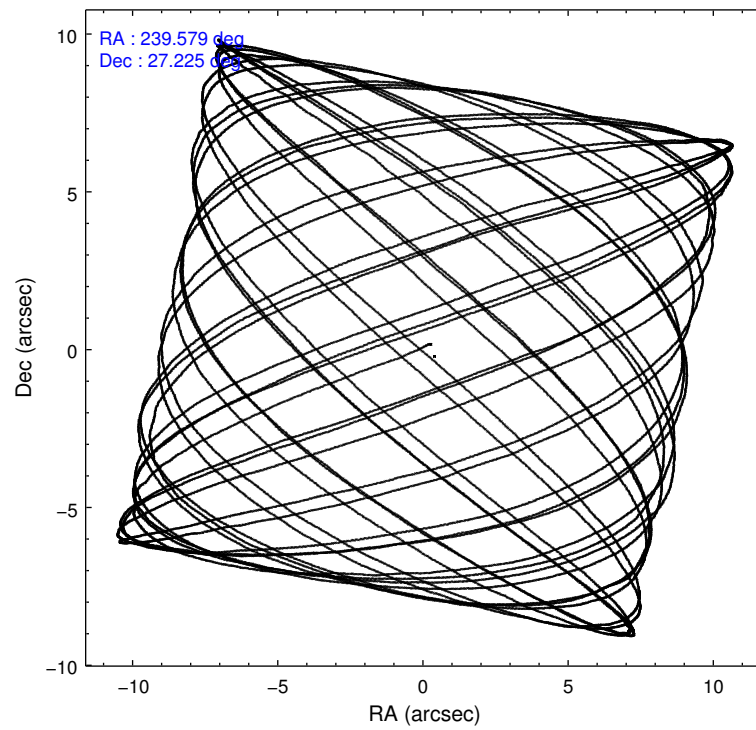
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	29874	30463	194951	47270	323858	44716
rejected events	6918	7228	12189	7782	17675	8366
rejected %	23%	23%	6%	16%	5%	18%

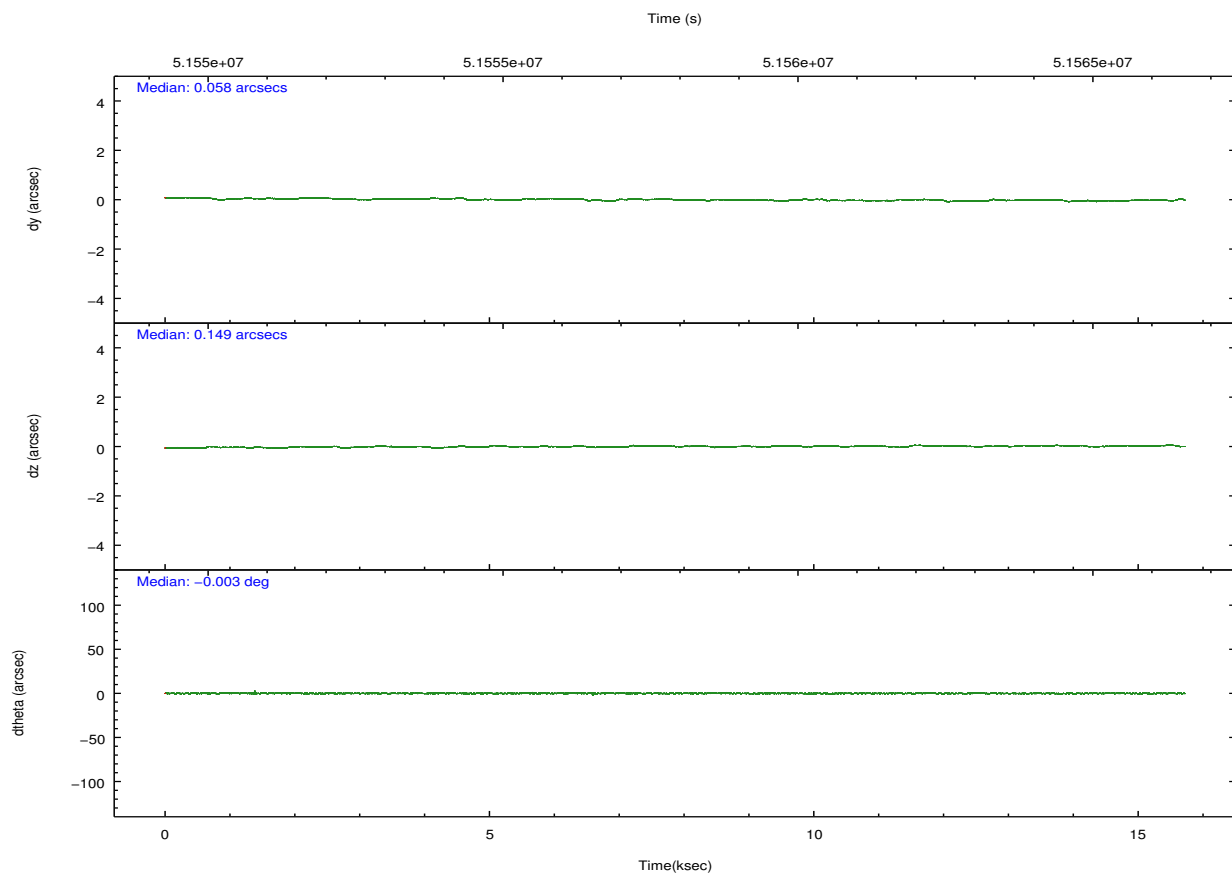
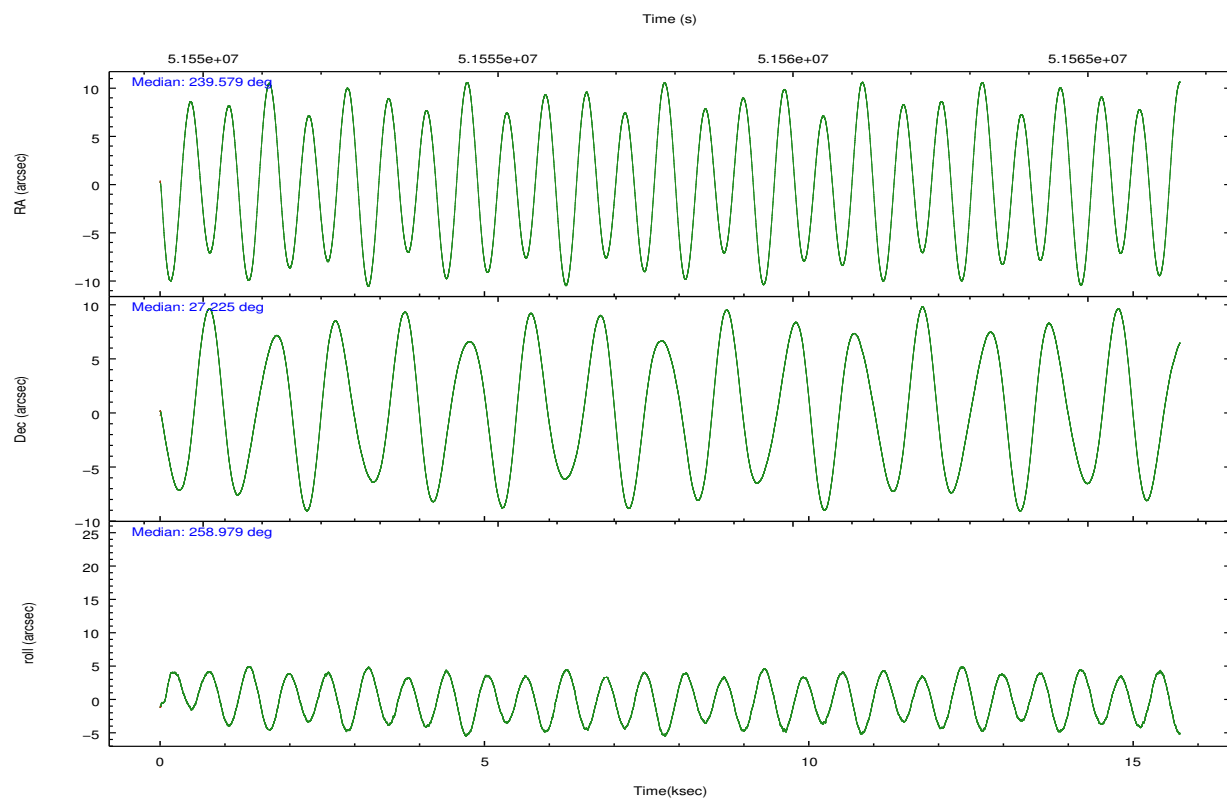
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	7664	8055	41433	19595	54064	12576
	25%	26%	21%	41%	16%	28%
grade 1 events	57	48	421	95	581	83
	0%	0%	0%	0%	0%	0%
grade 2 events	4611	4696	28368	6921	56531	8185
	15%	15%	14%	14%	17%	18%
grade 3 events	1858	1743	10196	2256	32320	2799
	6%	5%	5%	4%	9%	6%
grade 4 events	1653	1762	9244	2176	28690	2496
	5%	5%	4%	4%	8%	5%
grade 5 events	6856	7173	10303	7682	17009	8265
	22%	23%	5%	16%	5%	18%
grade 6 events	7175	6986	93562	8545	134638	10312
	24%	22%	47%	18%	41%	23%
grade 7 events	0	0	1424	0	25	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-235678	ACIS-235678	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	239.569418	239.579013556457	Subarray requested	NONE	NONE
Pointing Dec	27.251172	27.22486740768132	Alternating exposures requested	N	N
Pointing Roll	258.834270	258.98650706568	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	51550559.184000	51549885.877036			
Observation start date	1999-08-20T15:34:55	1999-08-20T15:24:45			
Observation end time	51563059.184000	51565777.990108			
Observation end date	1999-08-20T19:03:15	1999-08-20T19:49:37			
Read mode	TIMED	TIMED			

2.3 Aspect



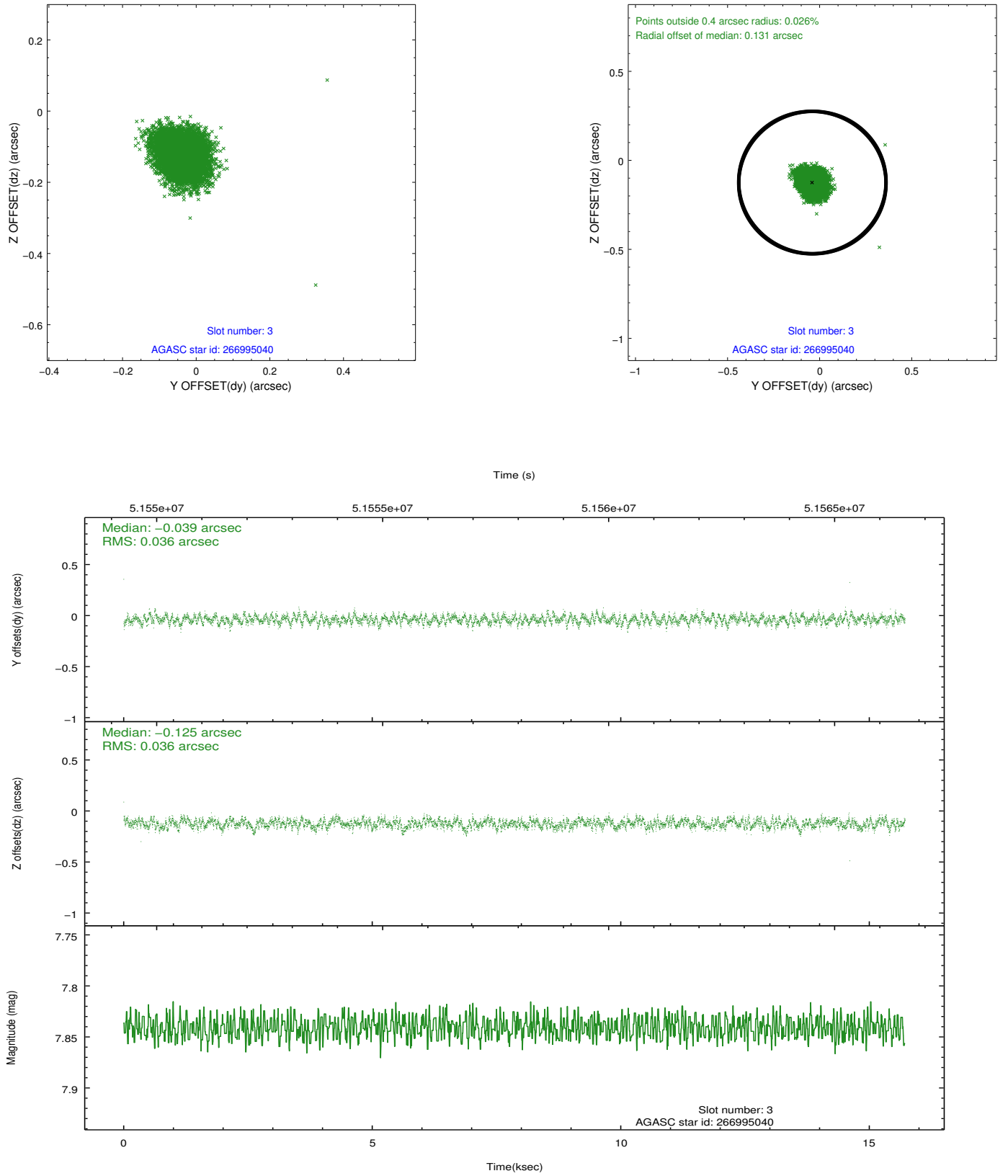


Slot Statistics

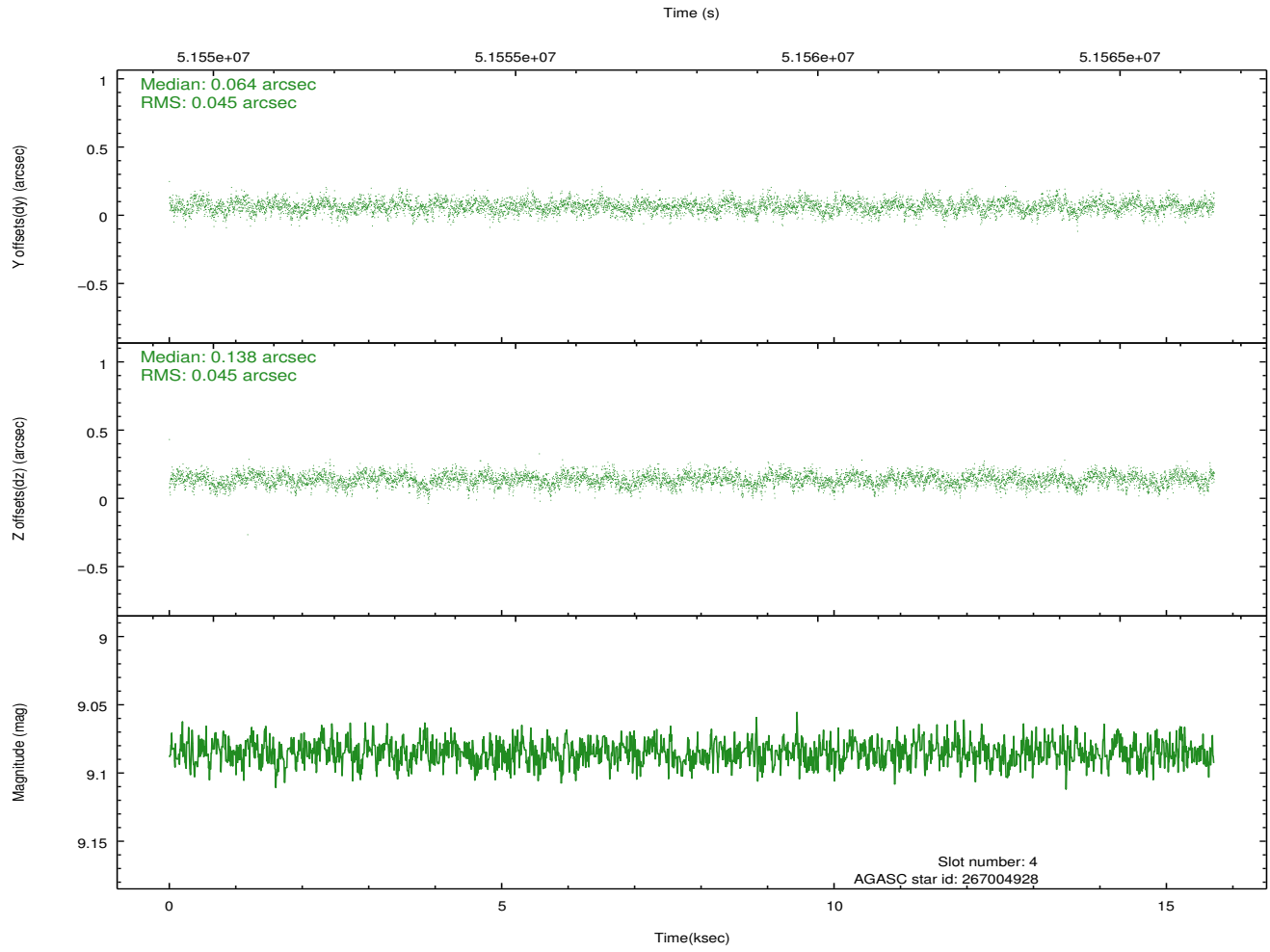
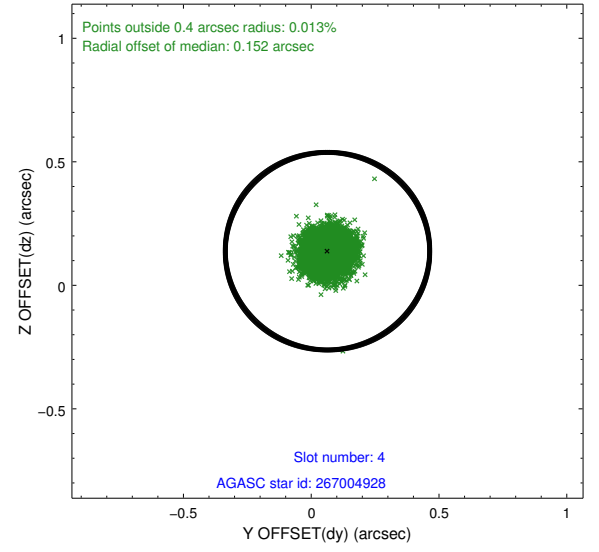
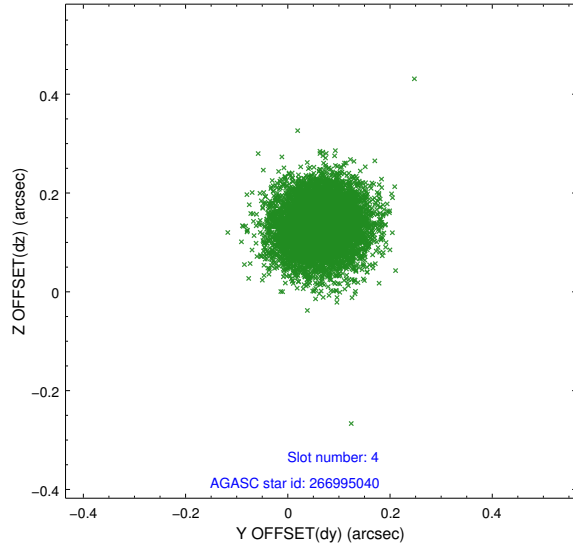
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.12	7669	-0.033	-0.021	0.006	0.011	0.000000	0.000000	-752.67	-1721.51
1	FID	ACIS-S-4	7.22	7669	0.139	0.022	0.005	0.010	0.000000	0.000000	2160.73	186.86
2	FID	ACIS-S-5	7.25	7669	-0.137	0.008	0.006	0.011	0.000000	0.000000	-1805.48	180.66
3	GUIDE	266995040	7.84	7668	-0.039	-0.125	0.054	0.087	239.014769	27.051479	1046.33	-1606.17
4	GUIDE	267004928	9.08	7661	0.064	0.138	0.067	0.109	239.711277	26.663193	1988.50	857.82
5	GUIDE	267006816	9.97	7658	-0.024	-0.014	0.094	0.155	239.280899	27.325938	-85.71	-957.51
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

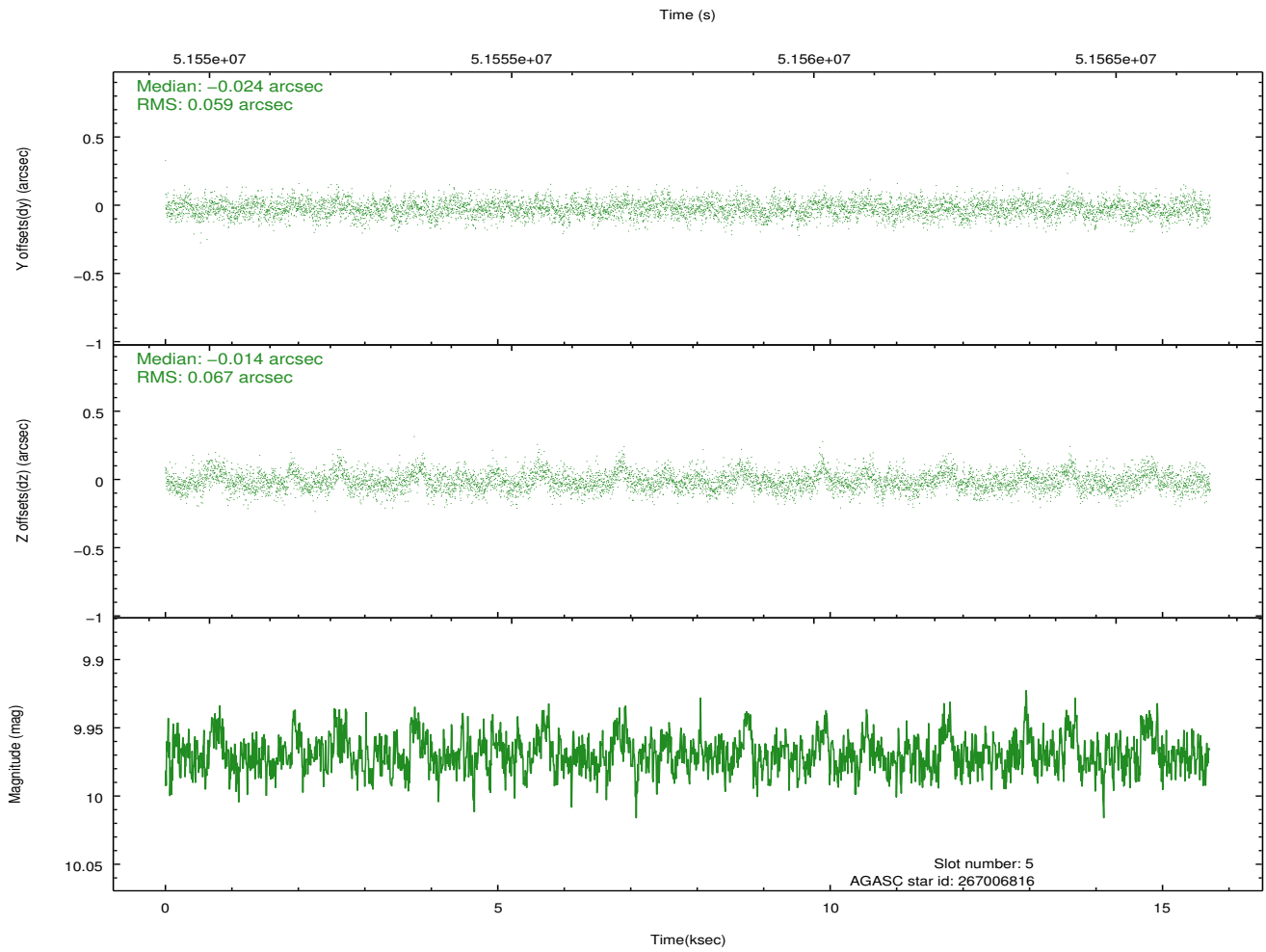
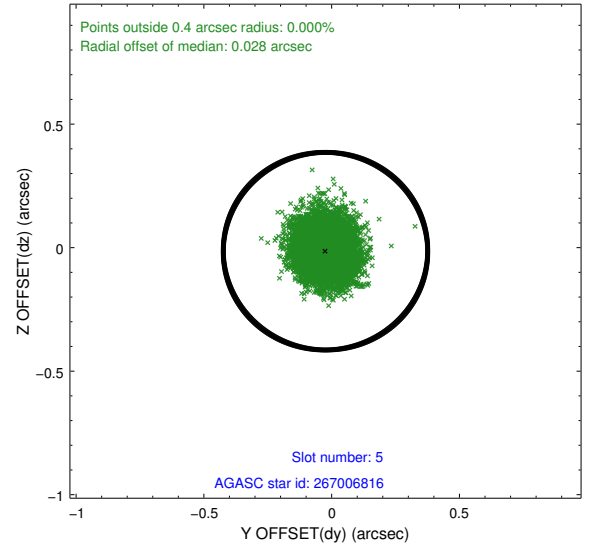
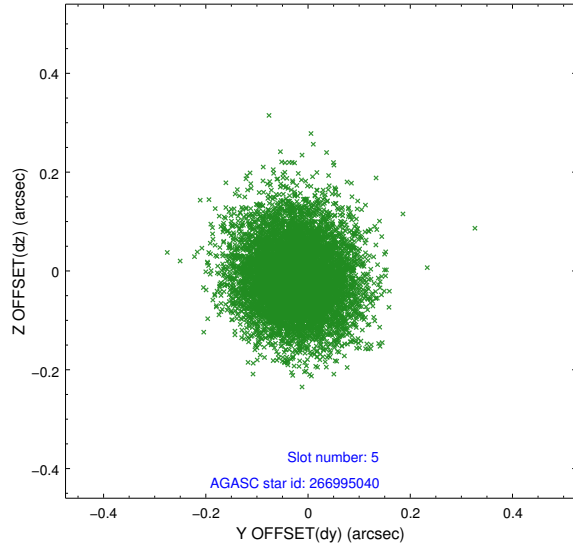
2.4.1 Slot 3



2.4.2 Slot 4

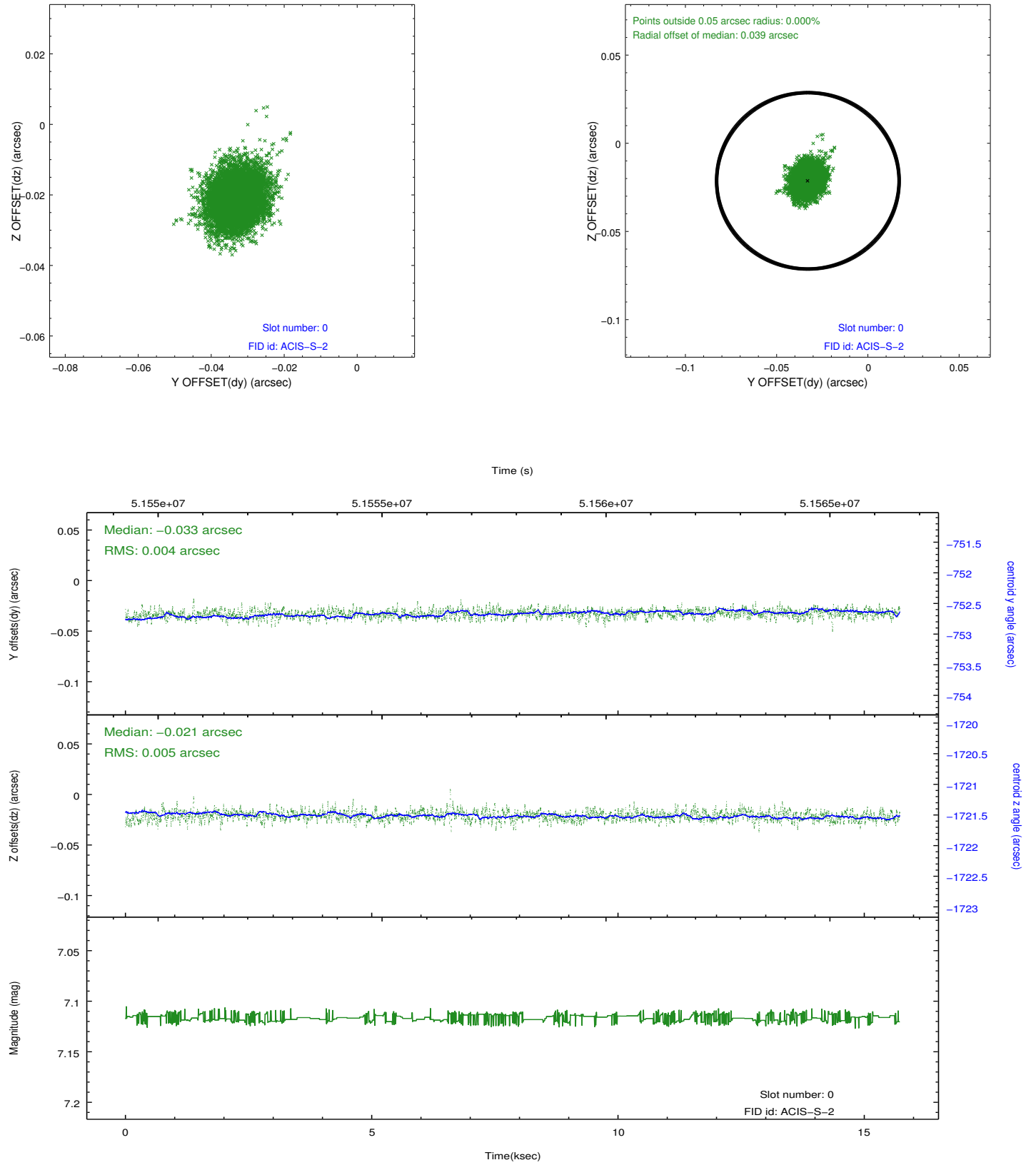


2.4.3 Slot 5

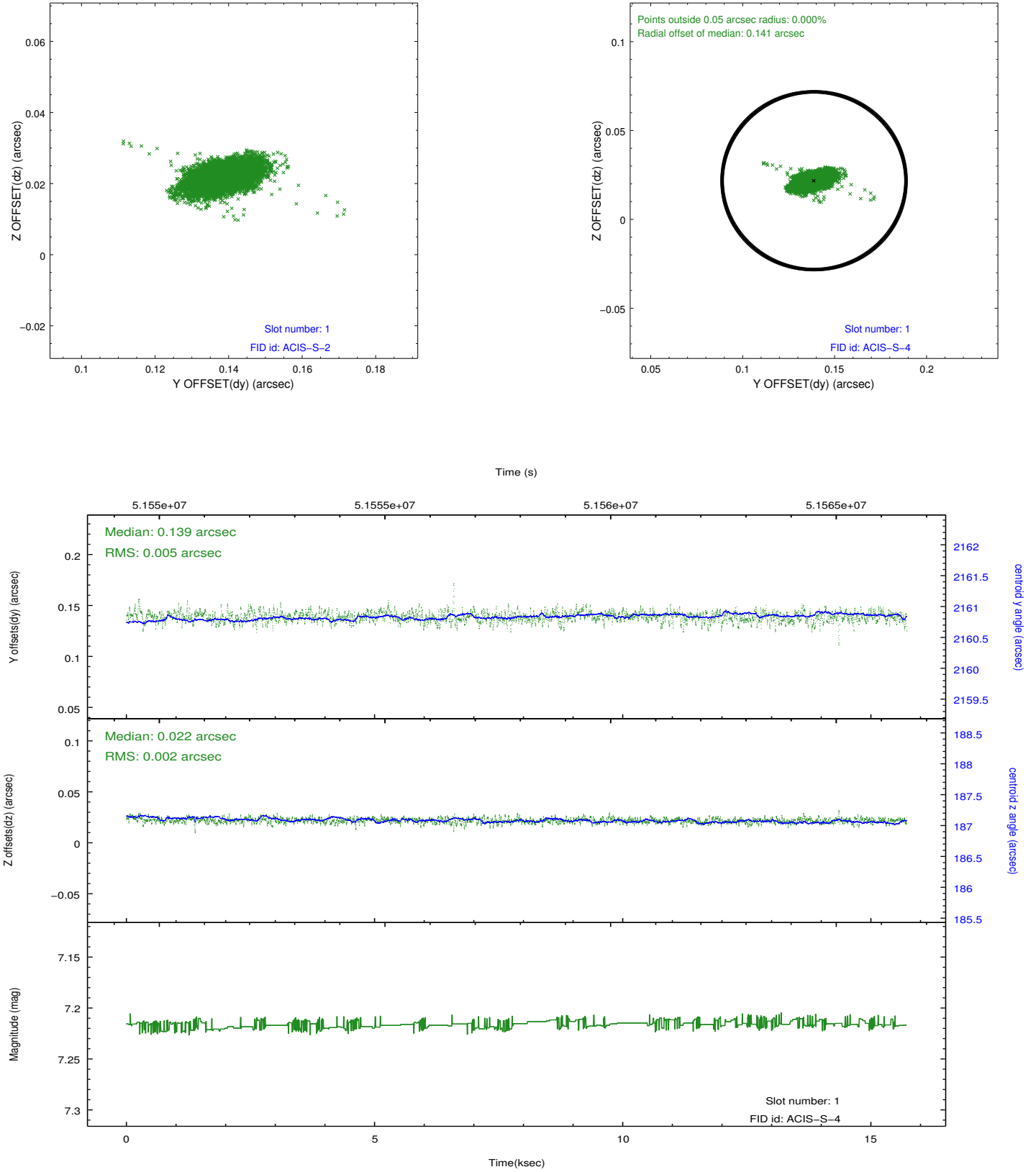


2.5 FID Slots

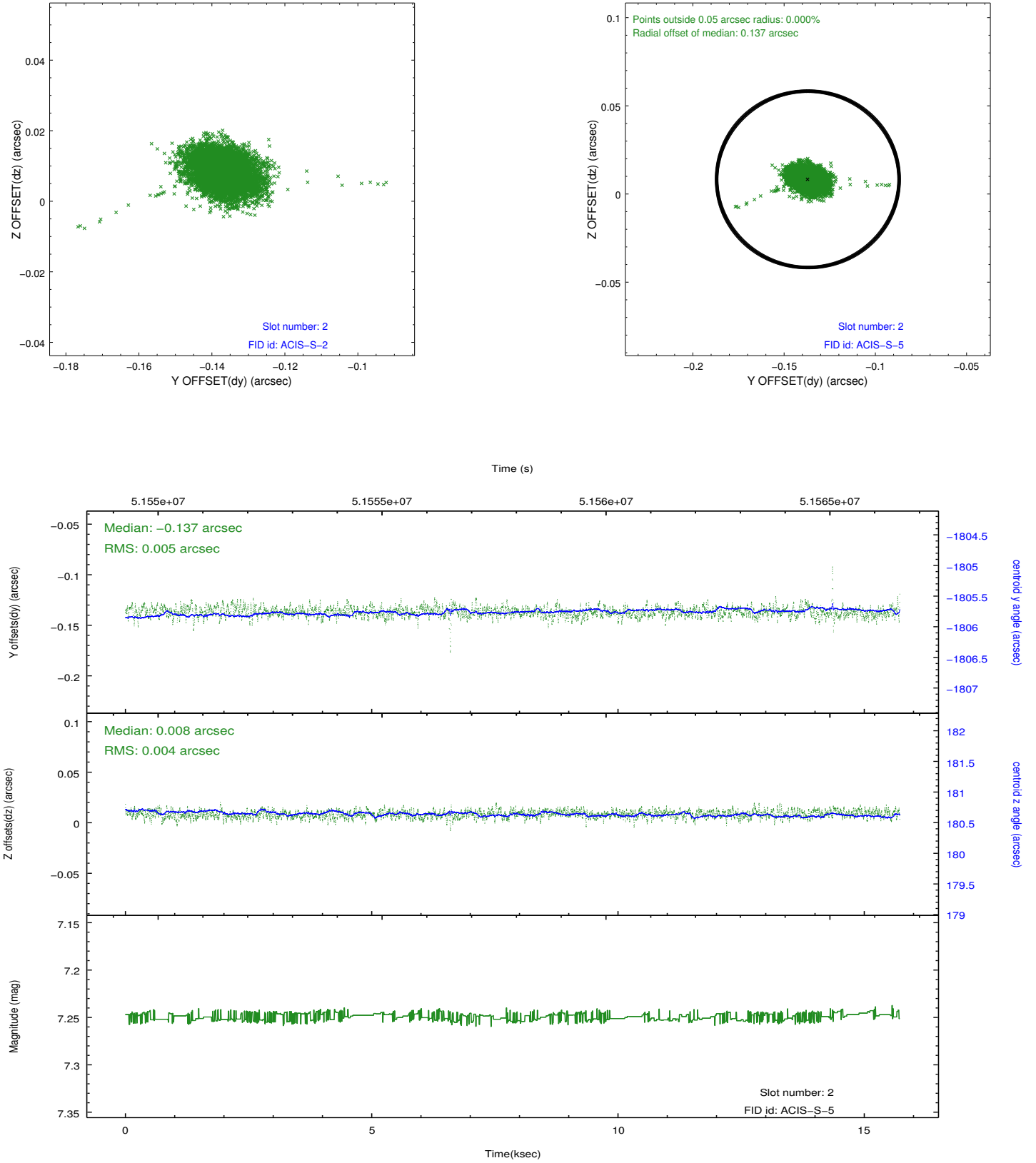
2.5.1 Slot 0



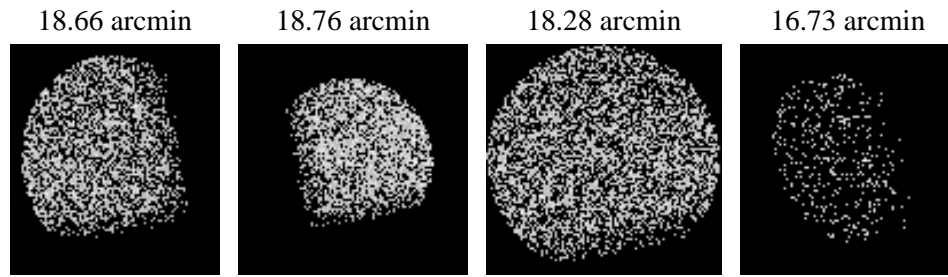
2.5.2 Slot 1



2.5.3 Slot 2



3 Point Sources



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2010.07.30
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	12.259

A.2 Comments

Slots 6 and 7 were not utilized in this observation.

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A high radiation environment between 2 and 4.5 ksec into the observation

caused an enhanced count rate during this period.

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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.