

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 4697 - L2 Version 4
Chandra X-Ray Center

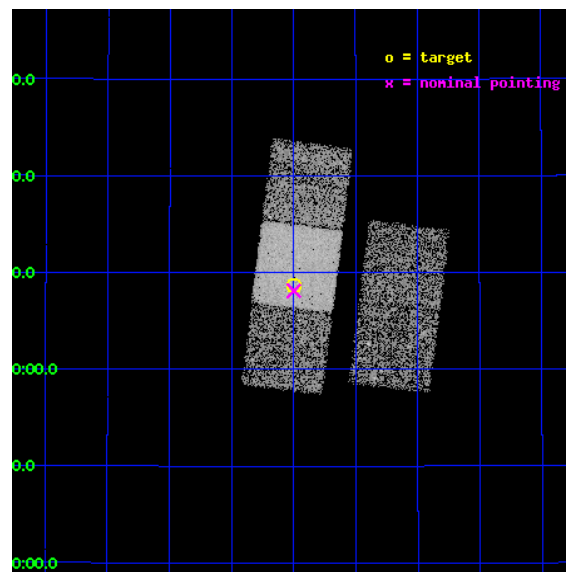
L2 Processing Date : Mar 20 2013

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1 Front

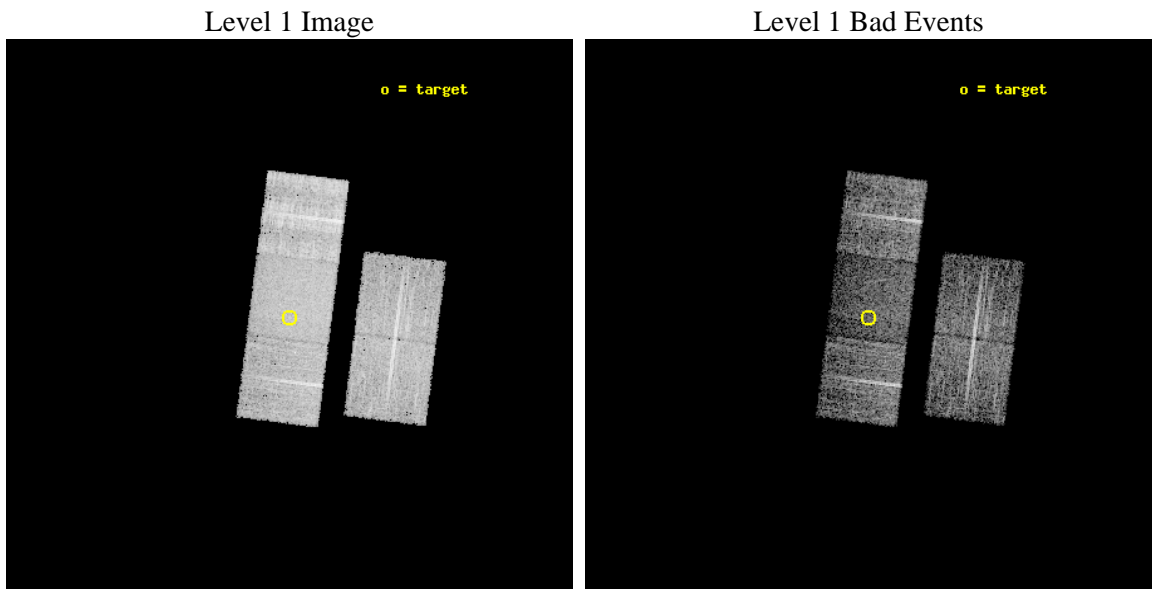
seq_num	600352	Sequence number
obs_id	4697	Observation id
title	Physics of Accretion Flows in Ultra-low Luminosity AGNs: A Mini Survey of a Distance-Limited Sample of Inactive Galaxies	Proposal tit
observer	Dr. Yuichi Terashima	Principal investigator
object	NGC 7457	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	345.25	Observer's specified target RA [deg]
dec_targ	30.145	Observer's specified target Dec [deg]
ra_nom	345.24950855802	Nominal RA [deg]
dec_nom	30.135346519548	Nominal Dec [deg]
roll_nom	277.29164090393	Nominal Roll [deg]
revision	4	Processing version of data
ontime	9106.8760251701	Sum of GTIs [s]
livetime	8987.8879855166	Livetime [s]
ontime2	9103.570894897	Sum of GTIs [s]
ontime3	9106.7939451635	Sum of GTIs [s]
ontime6	9100.5530446768	Sum of GTIs [s]
ontime7	9106.8760251701	Sum of GTIs [s]
ontime8	9106.7529051602	Sum of GTIs [s]
l2events	43162	Number of level 2 events



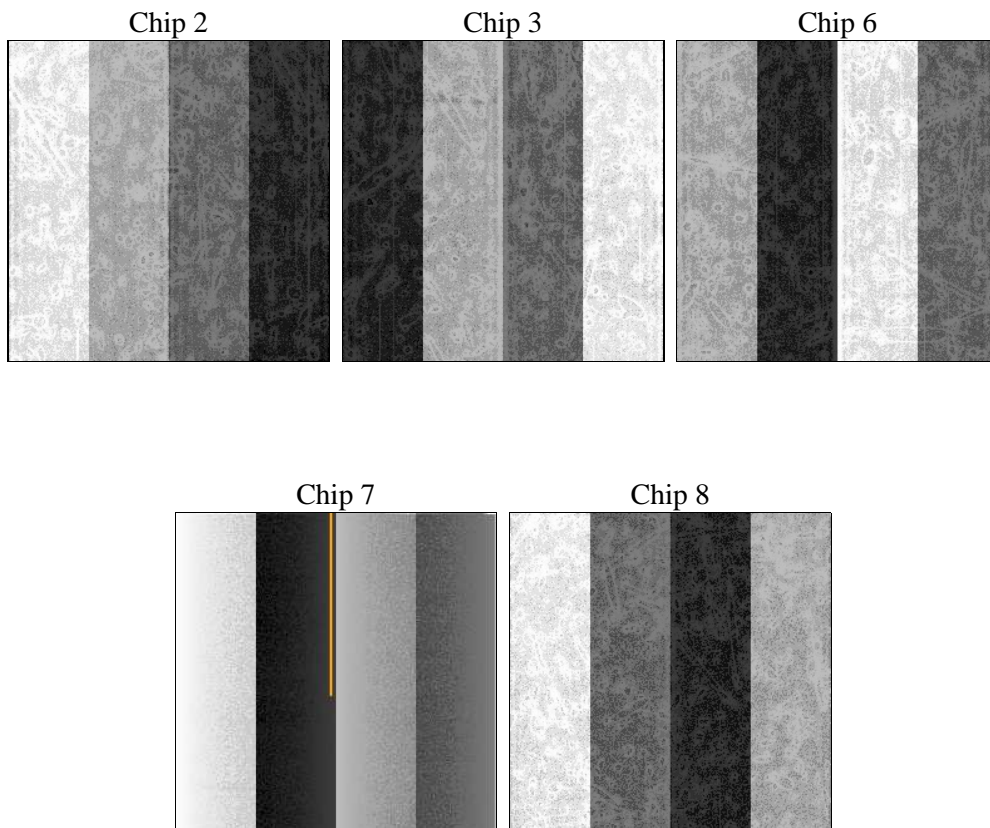
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	9000.000000	[s] Scheduled observation exposure time
ascdsver	8.5.1.1	Processing system revision	ontime	9106.8760251701	Sum of GTIs [s]
caldsver	4.5.6	 	ontime2	9103.570894897	Sum of GTIs [s]
date	2013-03-20T14:51:12	Date and time of file creation	ontime3	9106.7939451635	Sum of GTIs [s]
revision	4	Processing version of data	ontime6	9100.5530446768	Sum of GTIs [s]
			ontime7	9106.8760251701	Sum of GTIs [s]
			ontime8	9106.7529051602	Sum of GTIs [s]
			l1events	229739	Number of level 1 events

2.1.4 Events

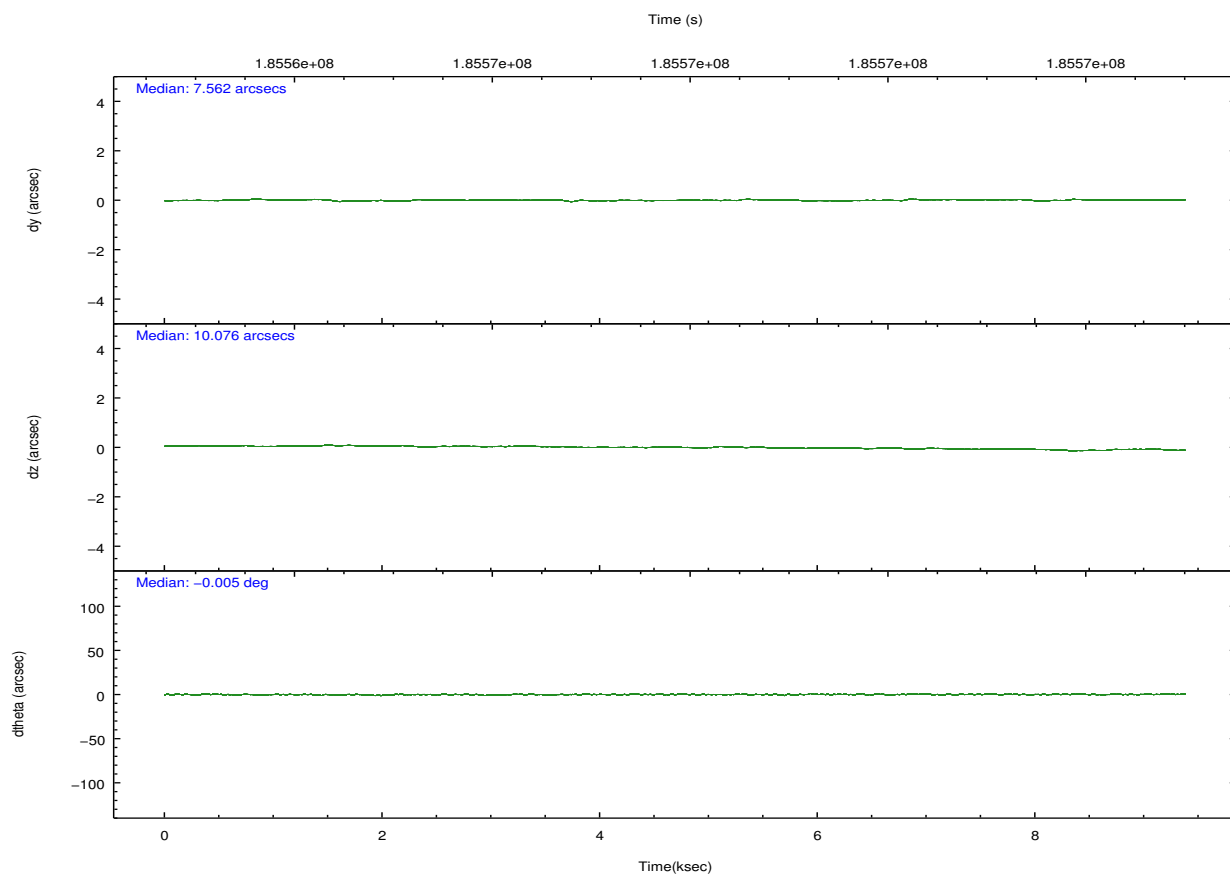
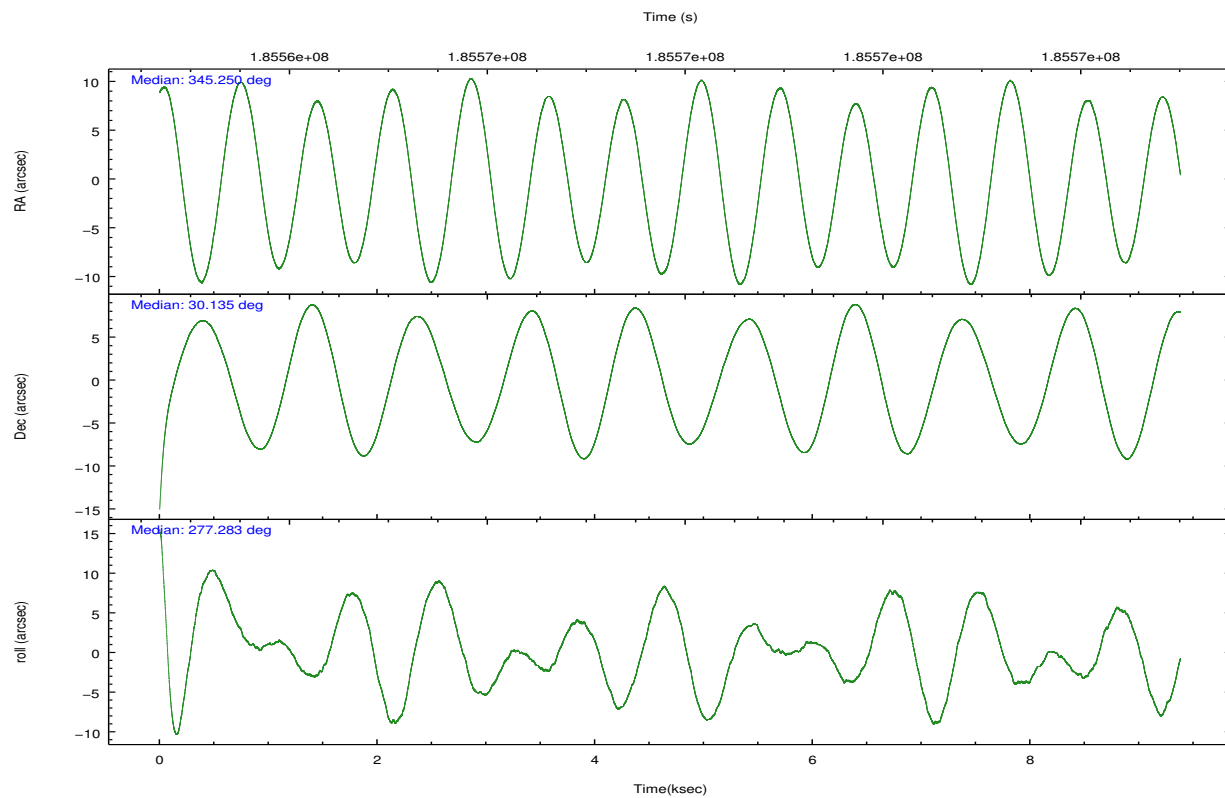
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	41085	37127	40912	48325	62290
rejected events	35706	32467	35202	23910	40102
rejected %	86%	87%	86%	49%	64%

	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	2413	1848	2526	2520	7600
	5%	4%	6%	5%	12%
grade 1 events	25	16	19	37	50
	0%	0%	0%	0%	0%
grade 2 events	1100	903	1116	4885	3779
	2%	2%	2%	10%	6%
grade 3 events	494	524	486	2249	3102
	1%	1%	1%	4%	4%
grade 4 events	563	491	501	2231	2815
	1%	1%	1%	4%	4%
grade 5 events	1304	1542	1616	4665	2421
	3%	4%	3%	9%	3%
grade 6 events	816	898	1088	12538	4895
	1%	2%	2%	25%	7%
grade 7 events	34370	30905	33560	19200	37628
	83%	83%	82%	39%	60%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23678	ACIS-23678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	345.230027	345.2495085580203	Subarray requested	NONE	NONE
[deg] Pointing Dec	30.156781	30.13534651954775	Alternating exposures requested	N	N
[deg] Pointing Roll	277.144759	277.2916409039286	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	185563537.184000	185562475.86062			
Observation start date	2003-11-18T17:24:33	2003-11-18T17:07:55			
[s] Observation end time (MET)	185572537.184000	185573267.06109			
Observation end date	2003-11-18T19:54:33	2003-11-18T20:07:47			
Read mode	TIMED	TIMED			

2.3 Aspect

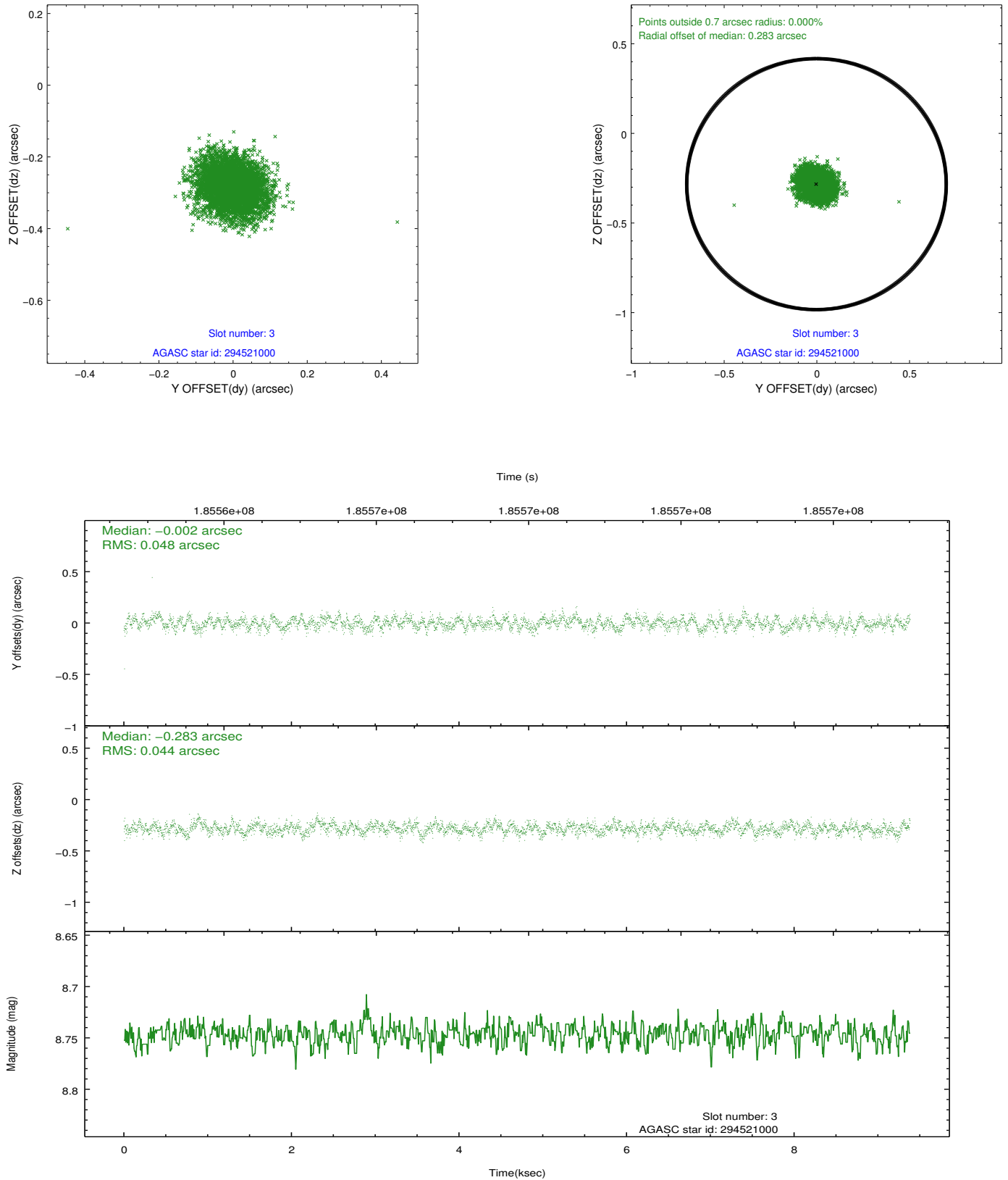


Slot Statistics

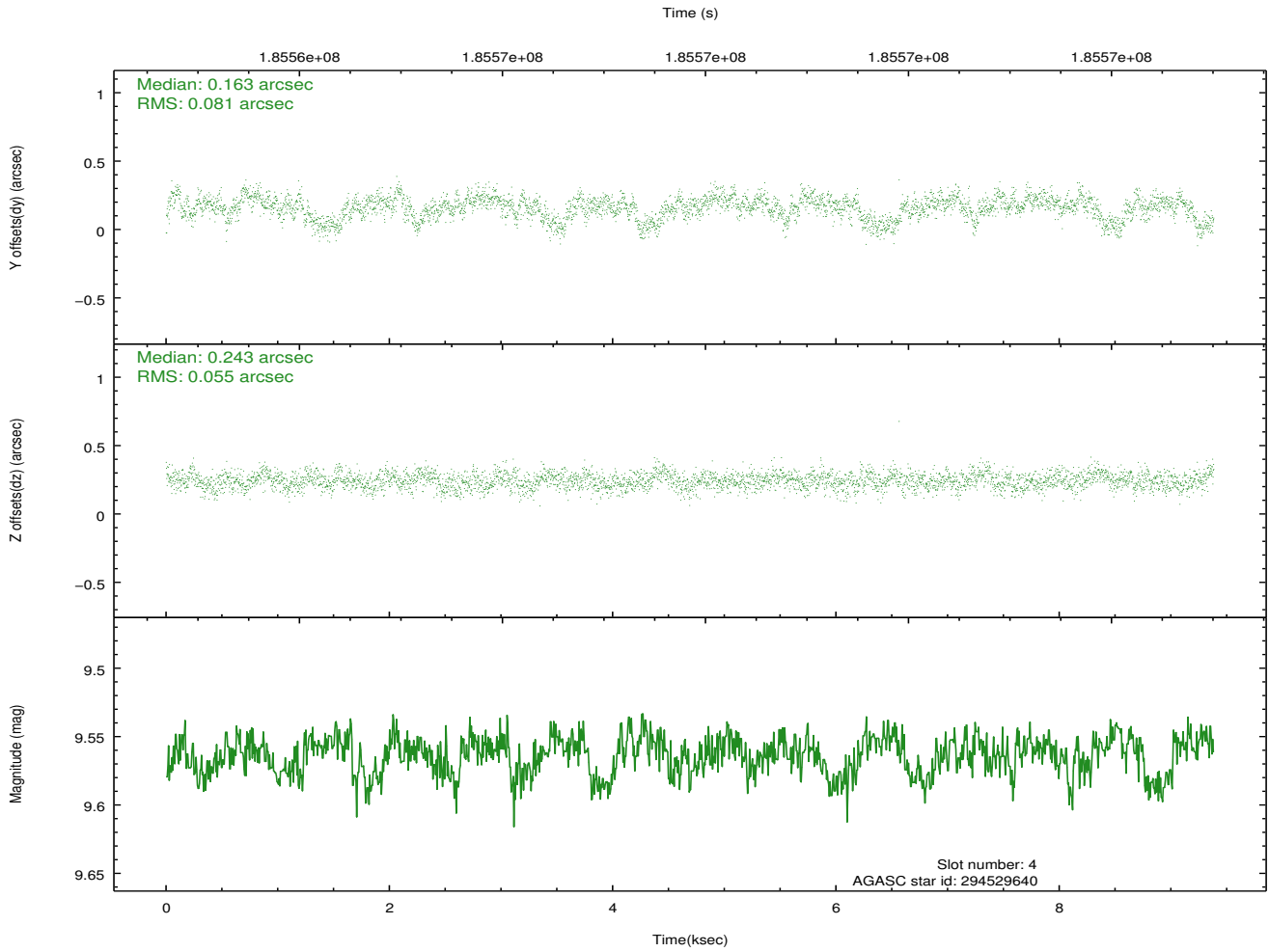
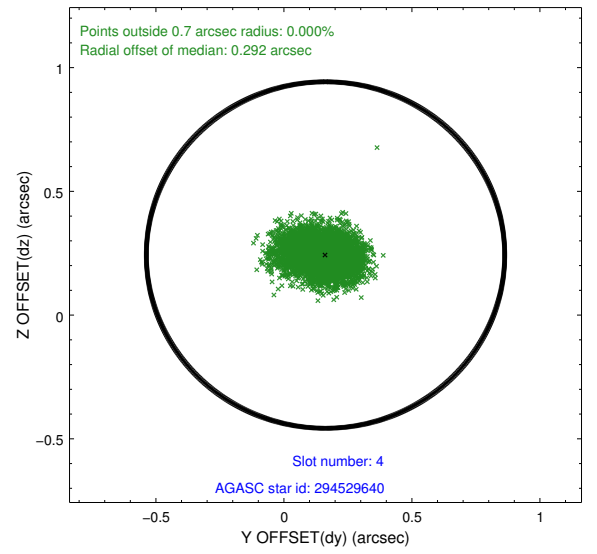
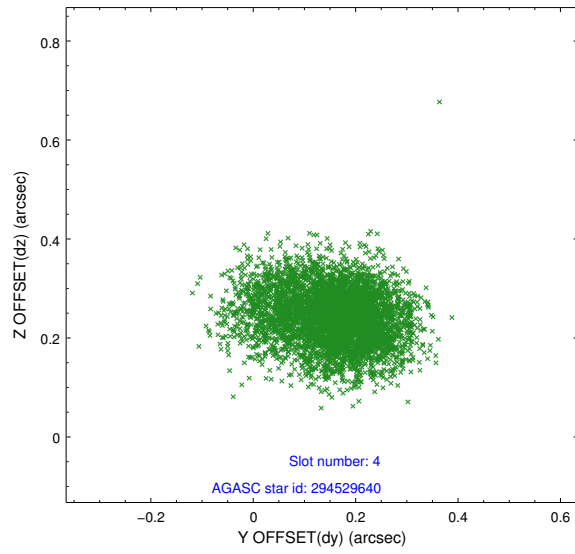
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	2289	-0.042	-0.015	0.007	0.011	0.000000	0.000000	-760.33	-1731.35
1	FID	ACIS-S-4	7.20	2289	0.078	0.024	0.005	0.010	0.000000	0.000000	2152.76	176.64
2	FID	ACIS-S-5	7.23	2289	-0.066	-0.001	0.007	0.012	0.000000	0.000000	-1812.50	170.86
3	GUIDE	294521000	8.75	4576	-0.002	-0.283	0.069	0.112	345.644032	29.805065	1414.92	1125.88
4	GUIDE	294529640	9.56	4576	0.163	0.243	0.102	0.171	345.830766	29.734623	1737.10	1675.60
5	GUIDE	360449216	8.49	4578	0.020	-0.022	0.074	0.118	344.607331	30.221870	-477.75	-1892.08
6	GUIDE	360456096	9.15	4578	-0.044	-0.002	0.081	0.135	344.537529	30.365373	-1018.82	-2040.76
7	GUIDE	360453376	9.82	4573	-0.130	0.073	0.144	0.235	345.974076	30.377796	-510.08	2392.23

2.4 Star Slots

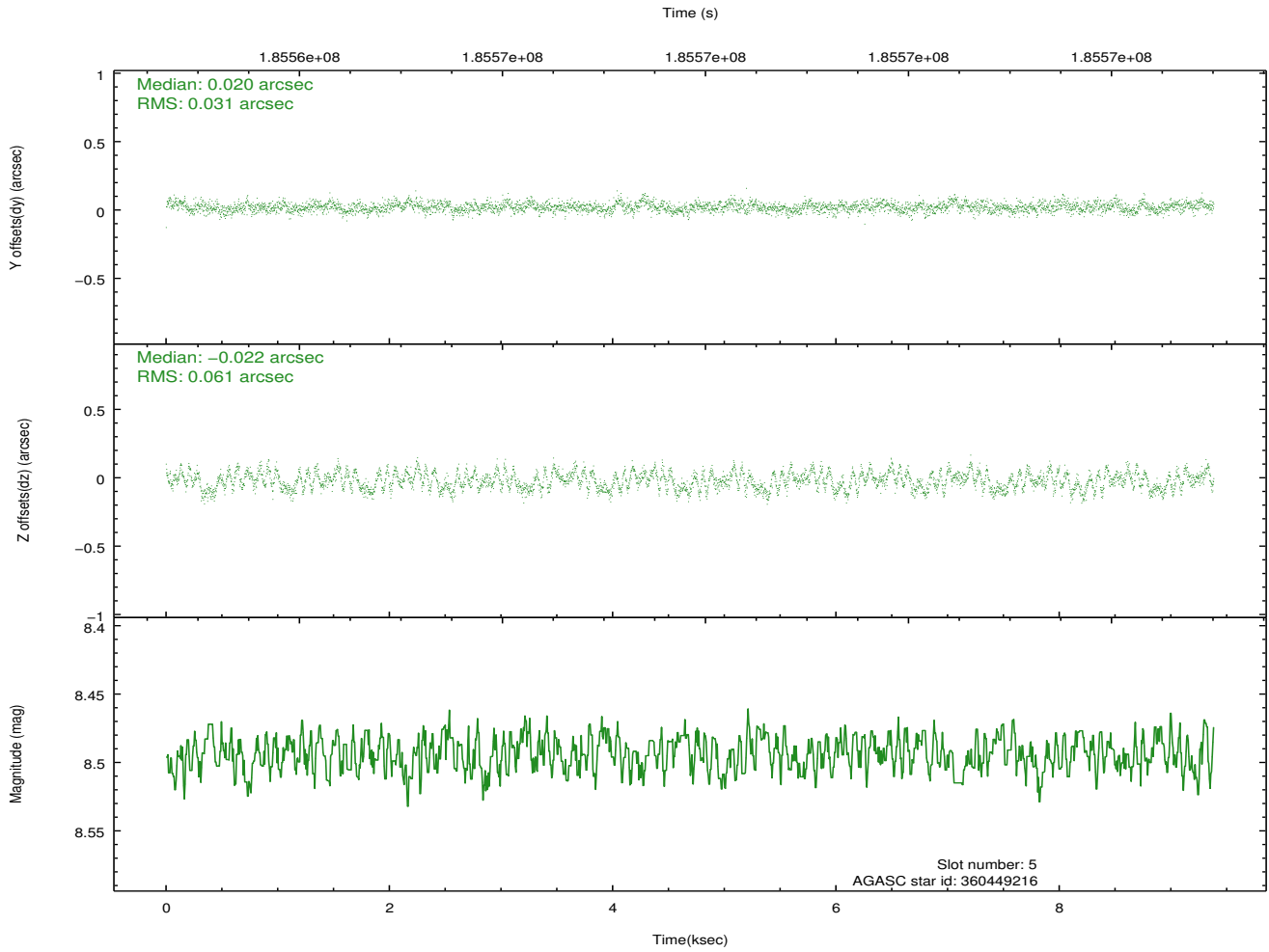
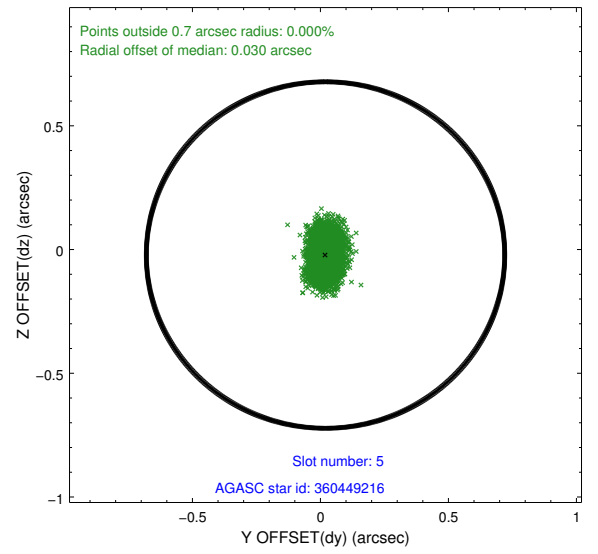
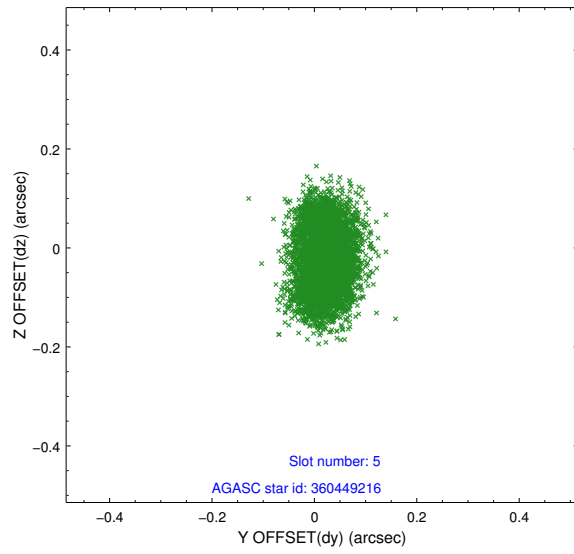
2.4.1 Slot 3



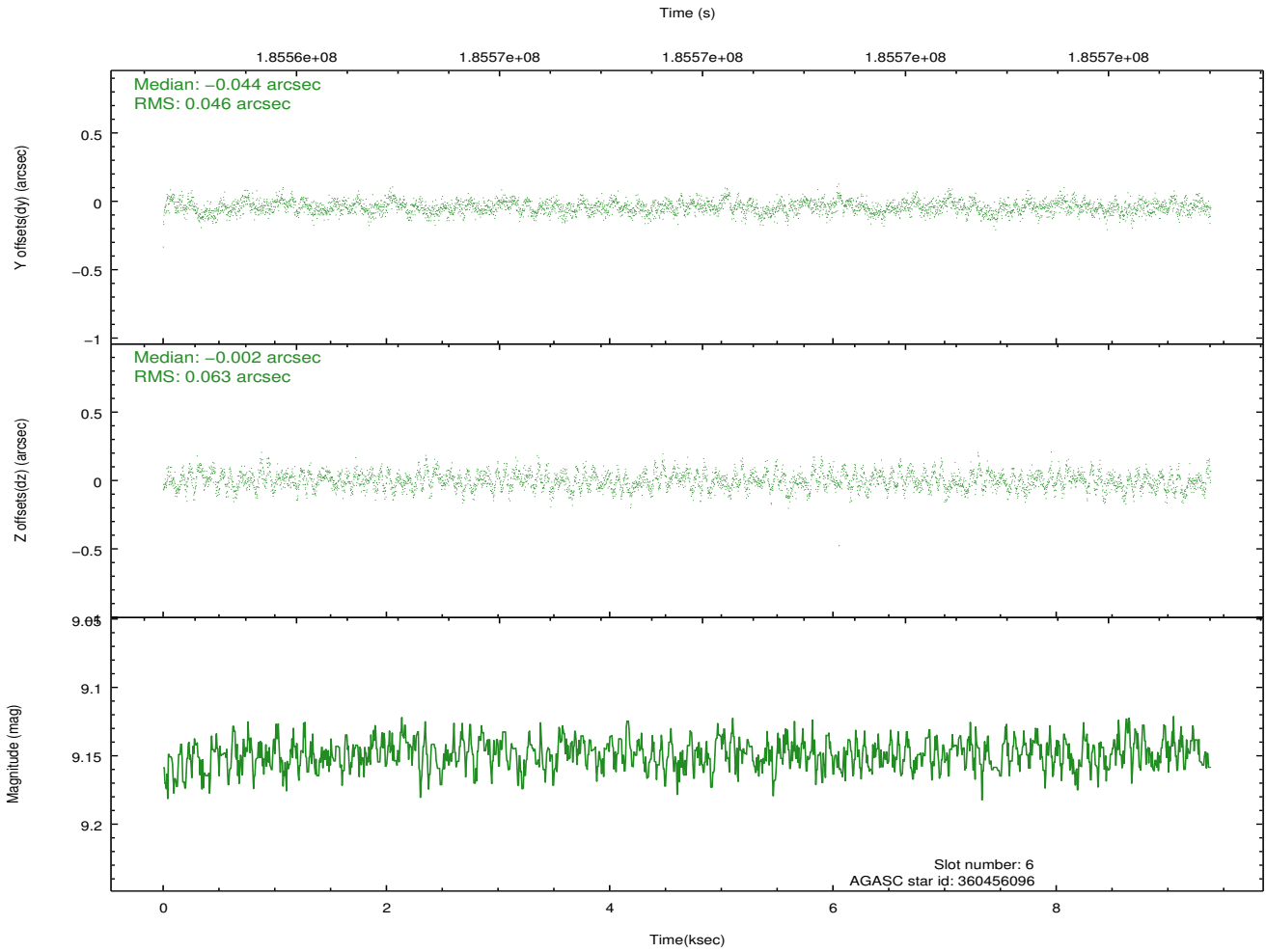
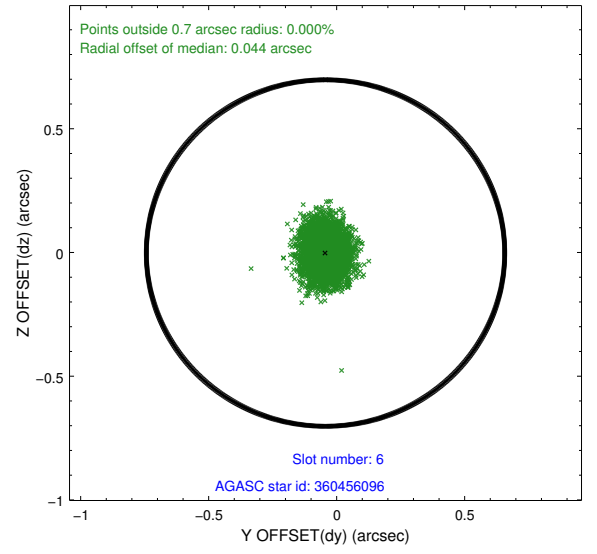
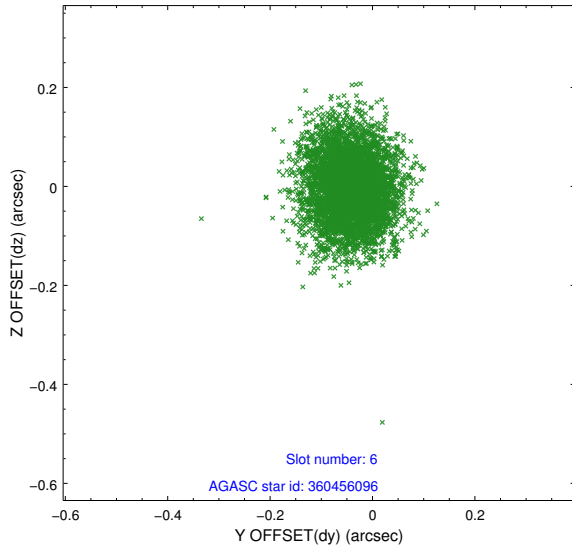
2.4.2 Slot 4



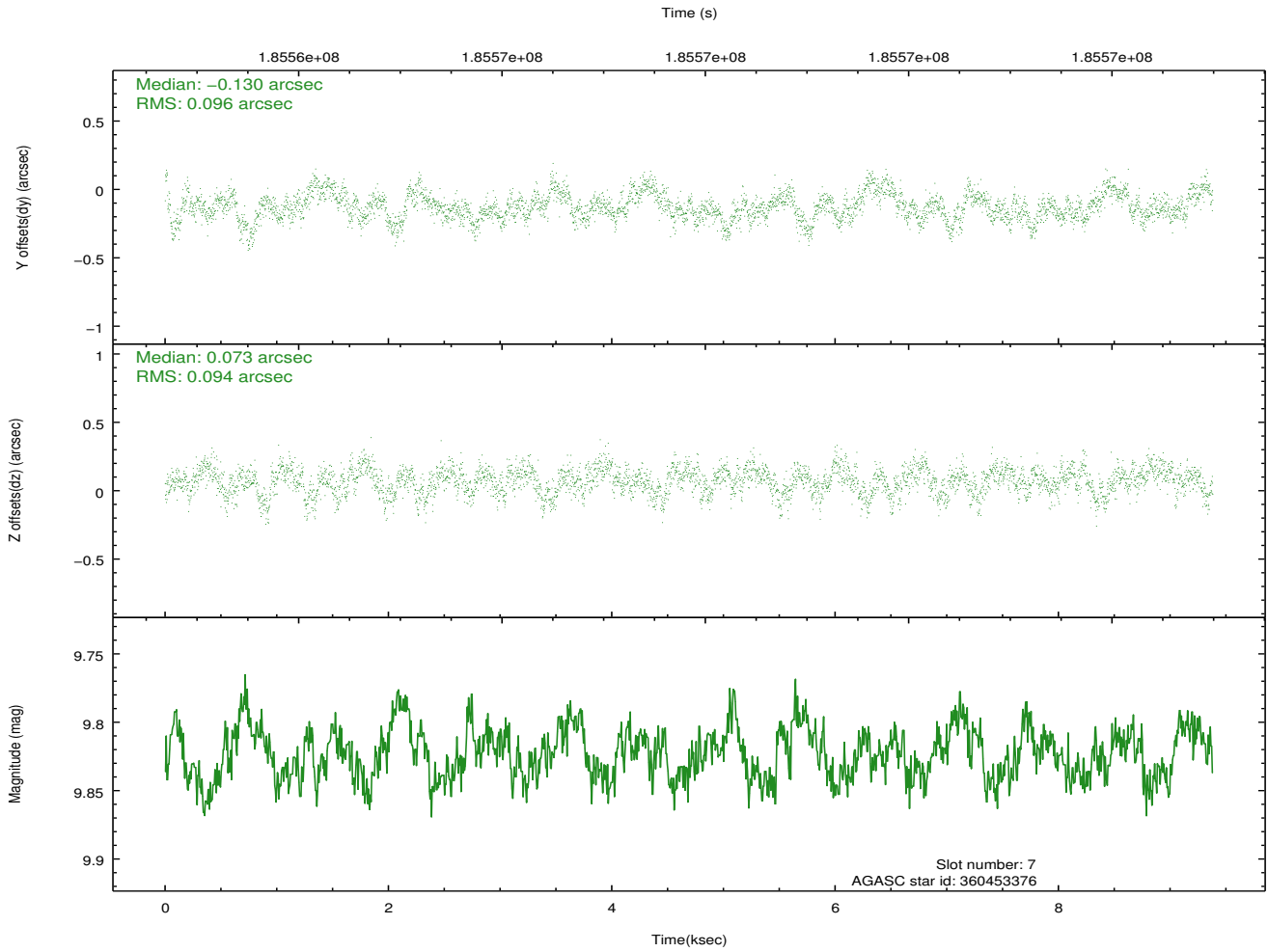
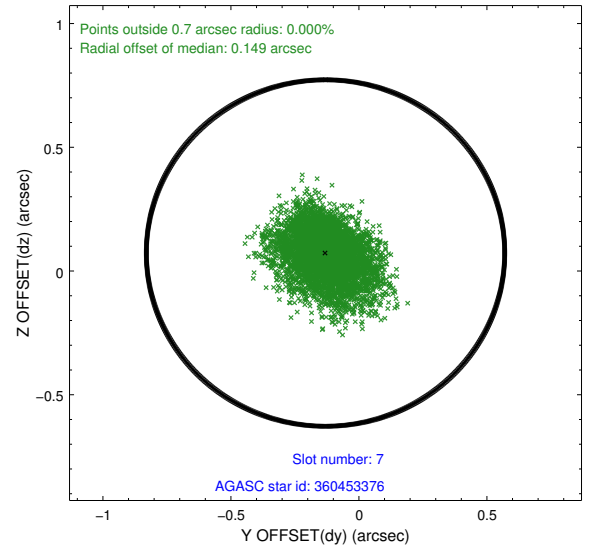
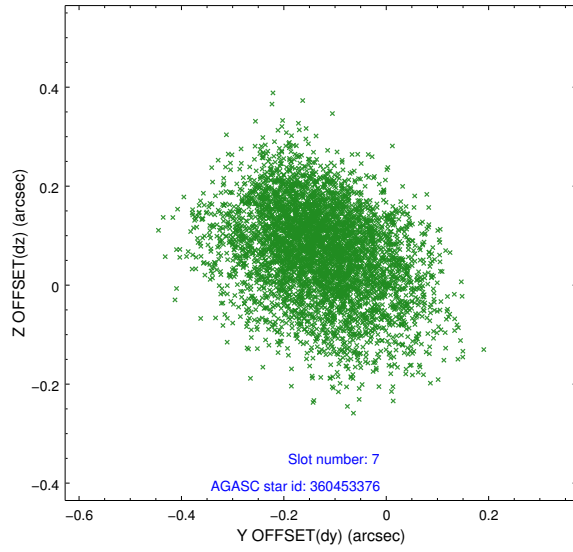
2.4.3 Slot 5



2.4.4 Slot 6

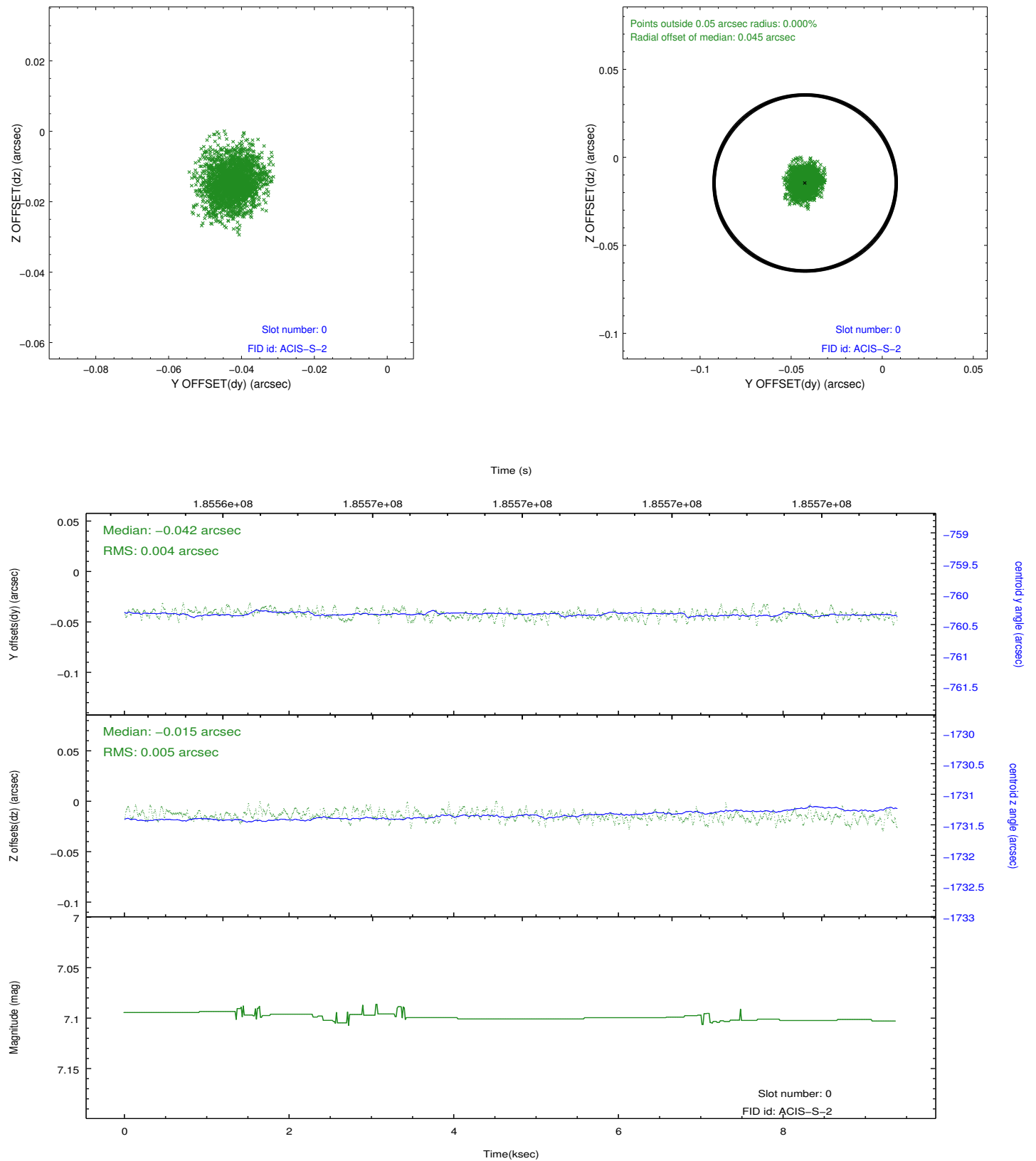


2.4.5 Slot 7

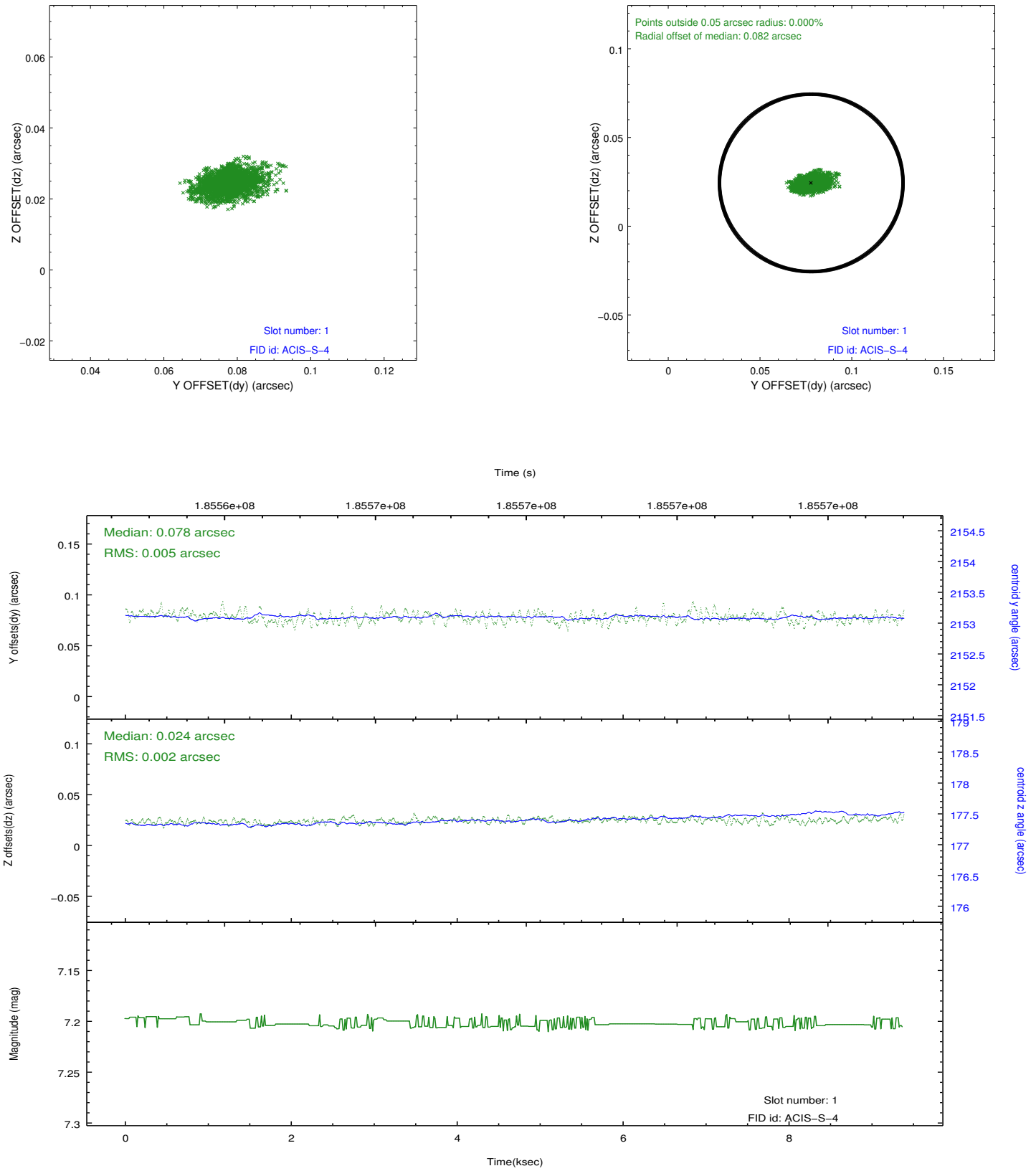


2.5 FID Slots

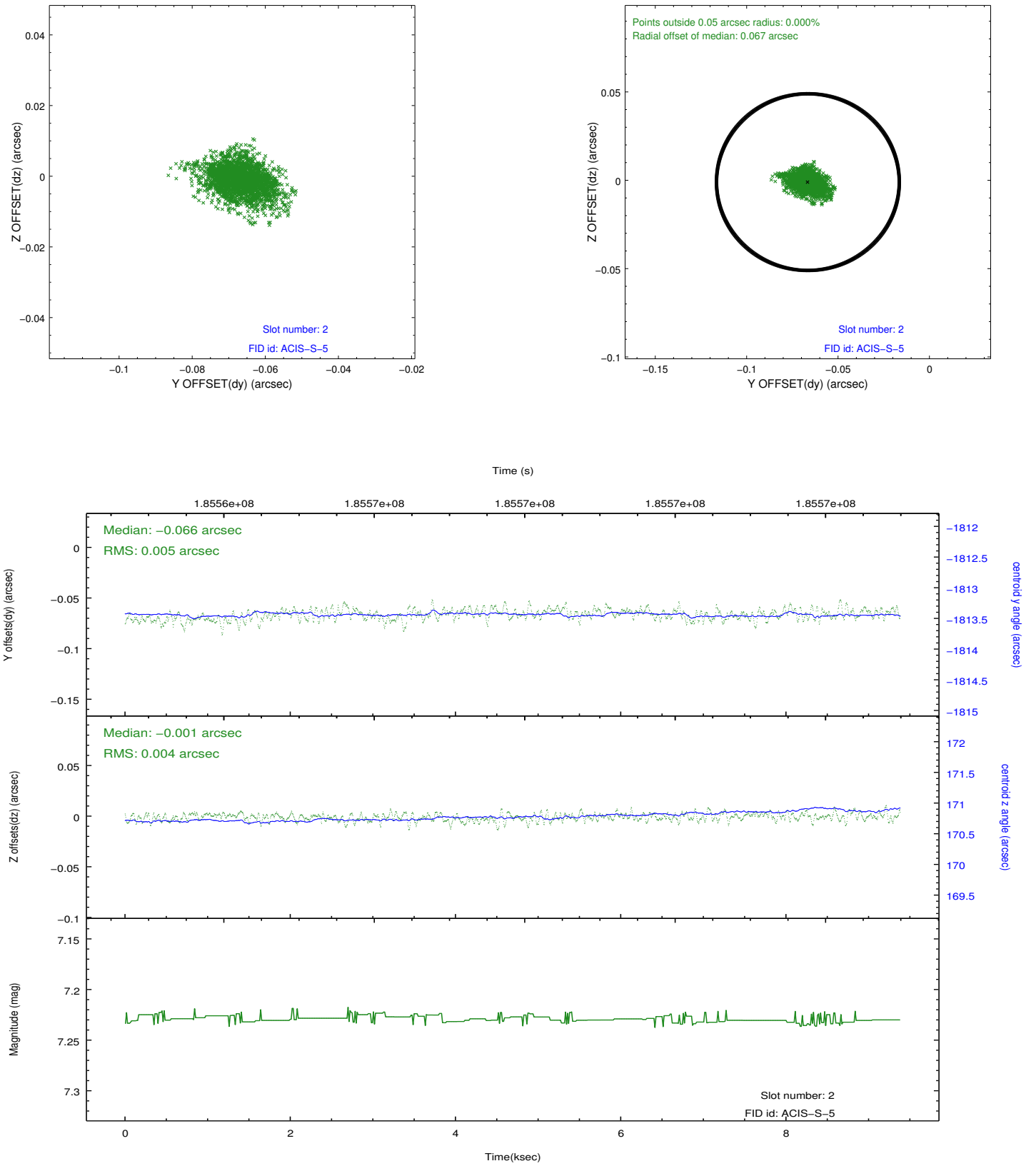
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2013.03.22
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.107

A.2 Comments

A spatial region of the original bias map for CCD = 2 suffered from anomalously high data values. Pixels in the event data that were bias-corrected by one of the original affected bias pixels may have an apparent energy shift. While the change in energy is expected to be small (~ 20 eV), it depends on many parameters that have not yet been fully explored for this bias anomaly. The bias map for CCD = 2 has been reconstructed for this processing to remove this anomaly using scaled data from a comparable bias map from another observation. The pixels affected by the anomaly are bounded by sky coords:
(345.00145,30.01303), (345.00878,30.01388), (345.00553,30.03551), (344.99789,30.03669)