

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 14679 - L2 Version 2
Chandra X-Ray Center

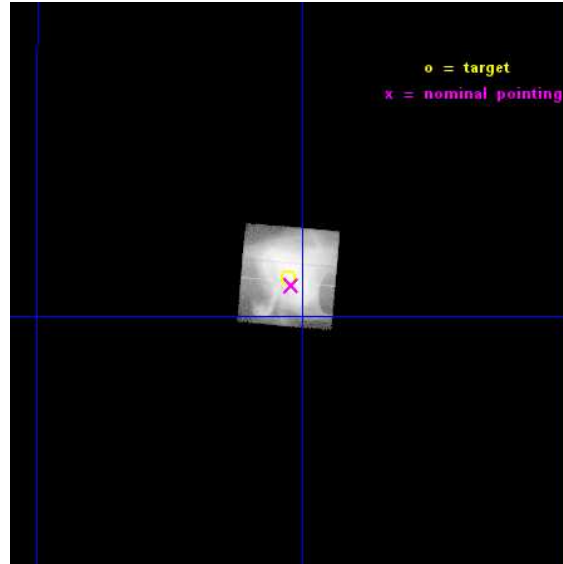
L2 Processing Date : Nov 30 2014

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1 Front

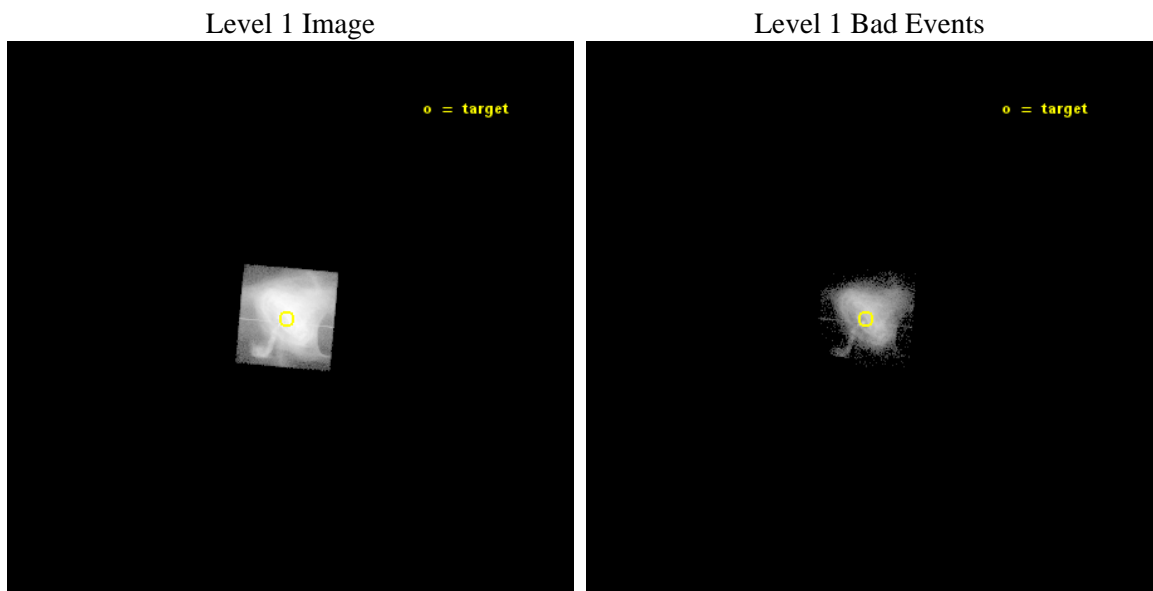
seq_num	501813	Sequence number
obs_id	14679	Observation id
title	Joint Chandra and HST Monitoring and Studies of the Crab Nebula	Pr
observer	Dr. Martin Weisskopf	Principal investigator
object	Crab	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	83.631667	Observer's specified target RA [deg]
dec_targ	22.015667	Observer's specified target Dec [deg]
ra_nom	83.630211821504	Nominal RA [deg]
dec_nom	22.012760190455	Nominal Dec [deg]
roll_nom	275.12231726198	Nominal Roll [deg]
revision	2	Processing version of data
ontime	3464.3638193607	Sum of GTIs [s]
livetime	601.18068569063	Livetime [s]
ontime7	3464.3638193607	Sum of GTIs [s]
l2events	1701154	Number of level 2 events



2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Parameters

obi_num	0	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	3464.3638193607	Sum of GTIs [s]
caldsver	4.6.4	 	ontime7	3464.3638193607	Sum of GTIs [s]
date	2014-12-01T01:57:58	Date and time of file creation	l1events	1892056	Number of level 1 events
revision	2	Processing version of data			

2.1.3 Events

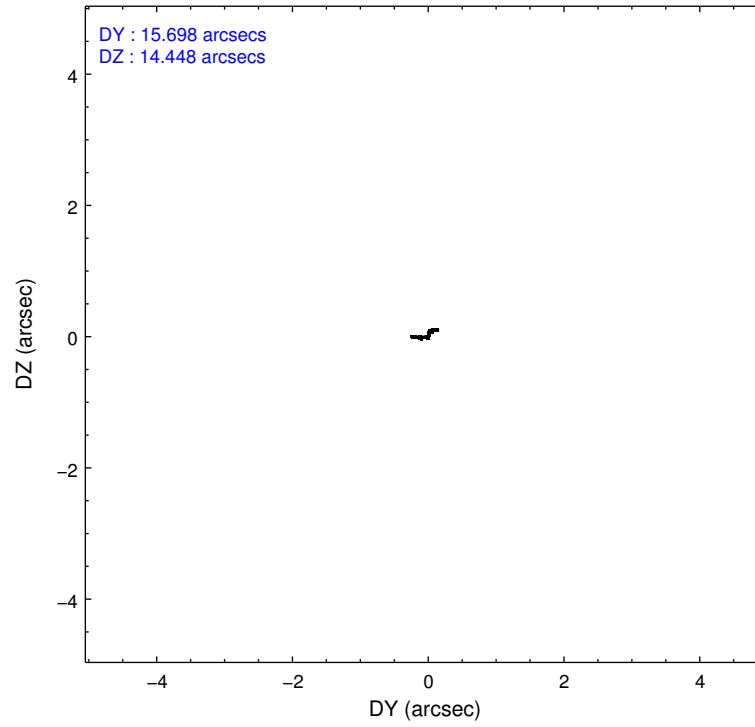
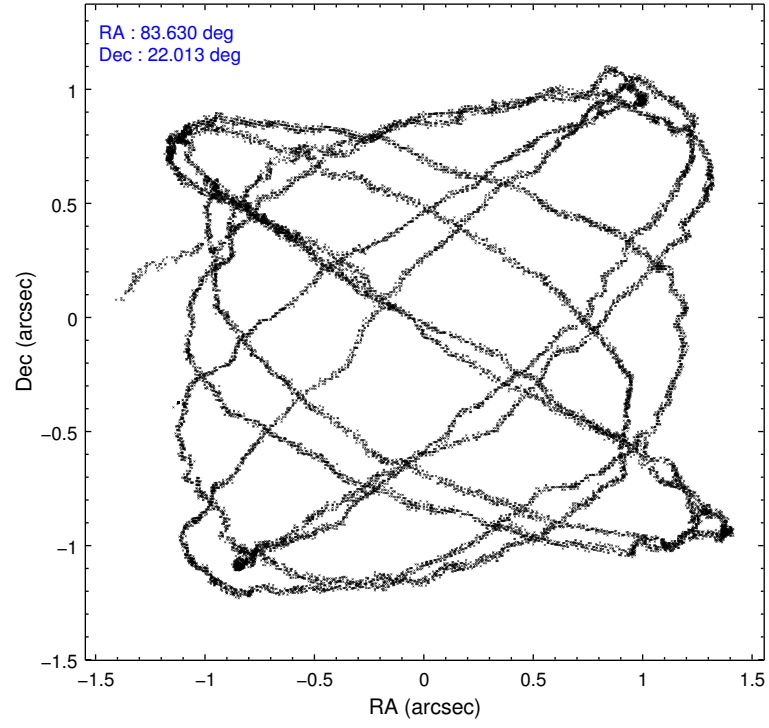
	ccd 7
level 1 events	1892056
rejected events	166013
rejected %	8%

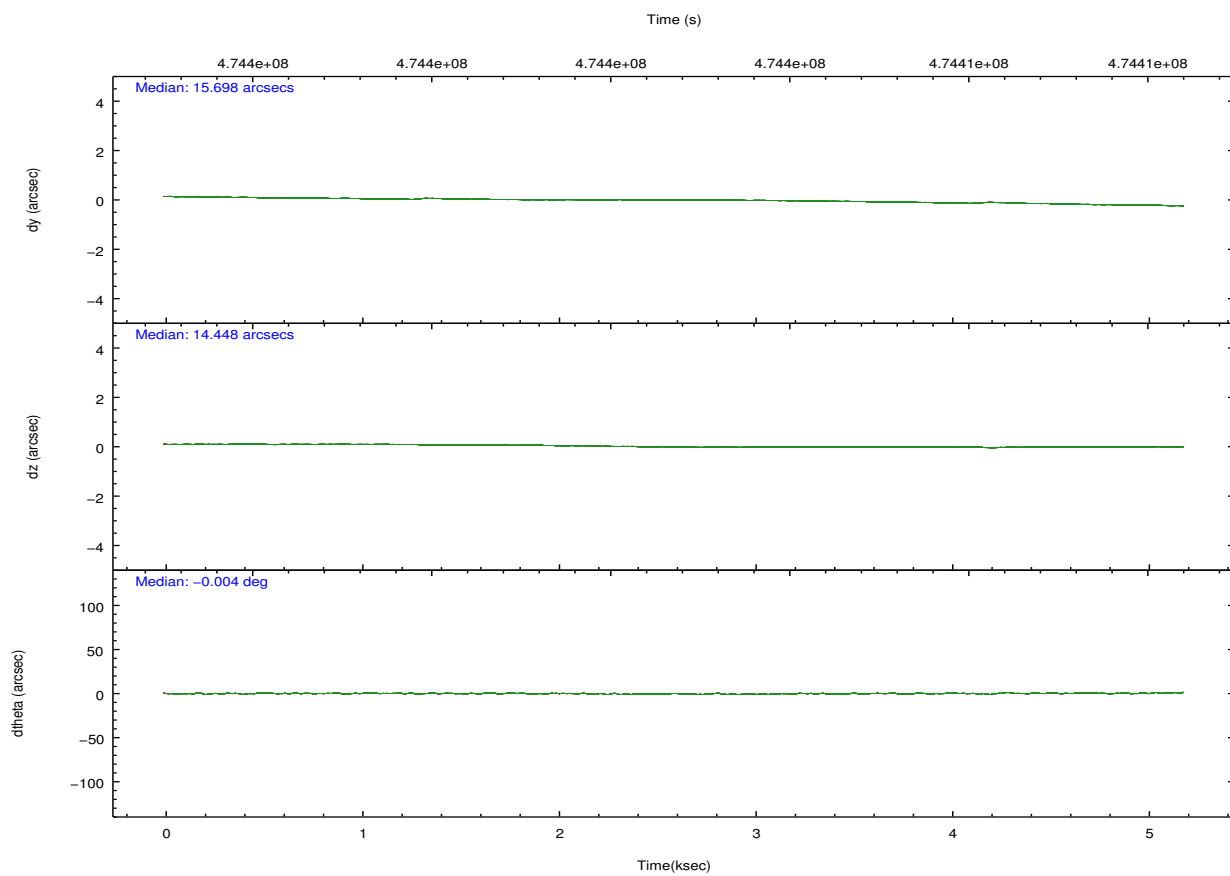
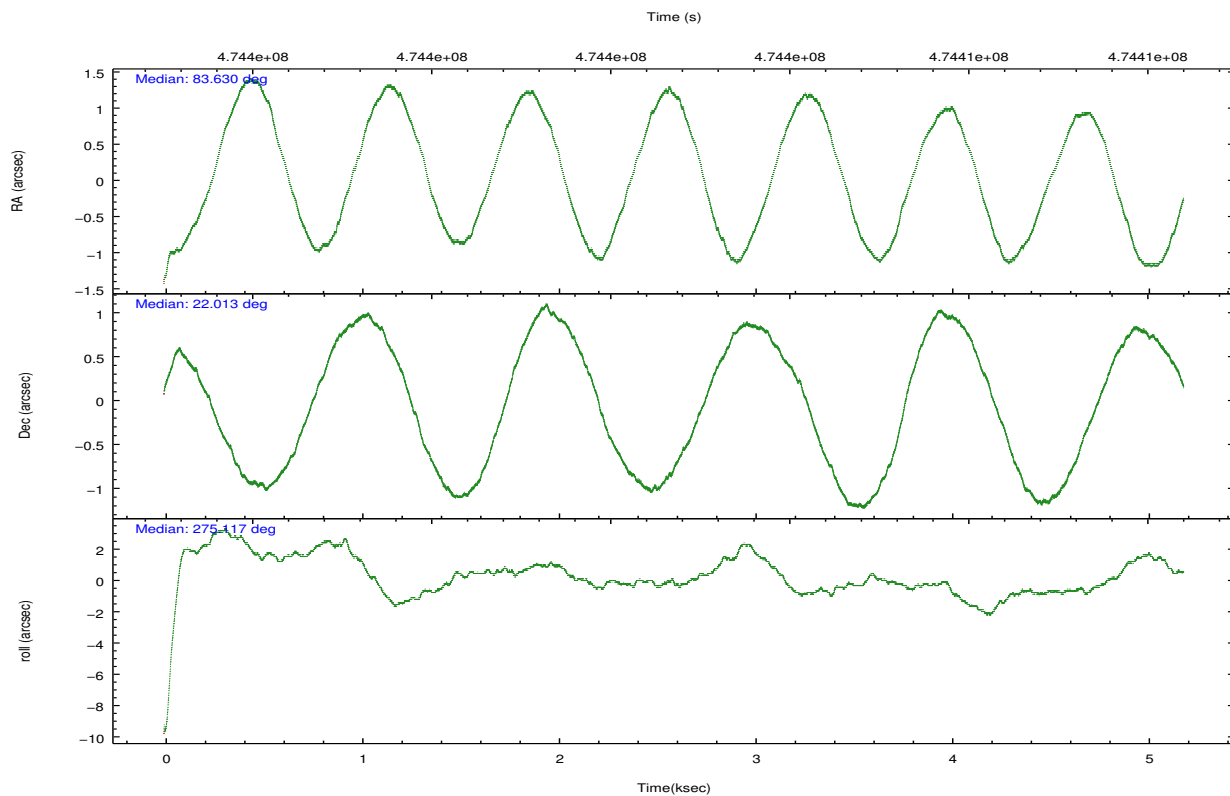
	ccd 7
grade 0 events	400853
	21%
grade 1 events	21808
	1%
grade 2 events	474454
	25%
grade 3 events	194263
	10%
grade 4 events	190397
	10%
grade 5 events	61537
	3%
grade 6 events	467190
	24%
grade 7 events	81554
	4%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-7	ACIS-7	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	GRADED	GRADED	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	83.612897	83.63021182150364	Subarray requested	CUSTOM	CUSTOM
[deg] Pointing Dec	22.034896	22.01276019045468	Subarray start row	255	255
[deg] Pointing Roll	274.972179	275.1223172619801	Subarray row count	300	300
[s] Window start time (MET)	473904067.184000	473904067.184000	Alternating exposures requested	N	N
[s] Window stop time (MET)	474768067.184000	474768067.184000	[s] Primary exposure time	0.000000	0.2
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-188.156523	-188.1512426463379			
[mm] SIM translation stage offset	-1.976	-1.981279936669893			
[s] Observation start time (MET)	474401936.184000	474401340.18353			
Observation start date	2013-01-12T18:17:49	2013-01-12T18:09:00			
[s] Observation end time (MET)	474406936.184000	474407916.58388			
Observation end date	2013-01-12T19:41:09	2013-01-12T19:58:36			
Read mode	TIMED	TIMED			

2.3 Aspect



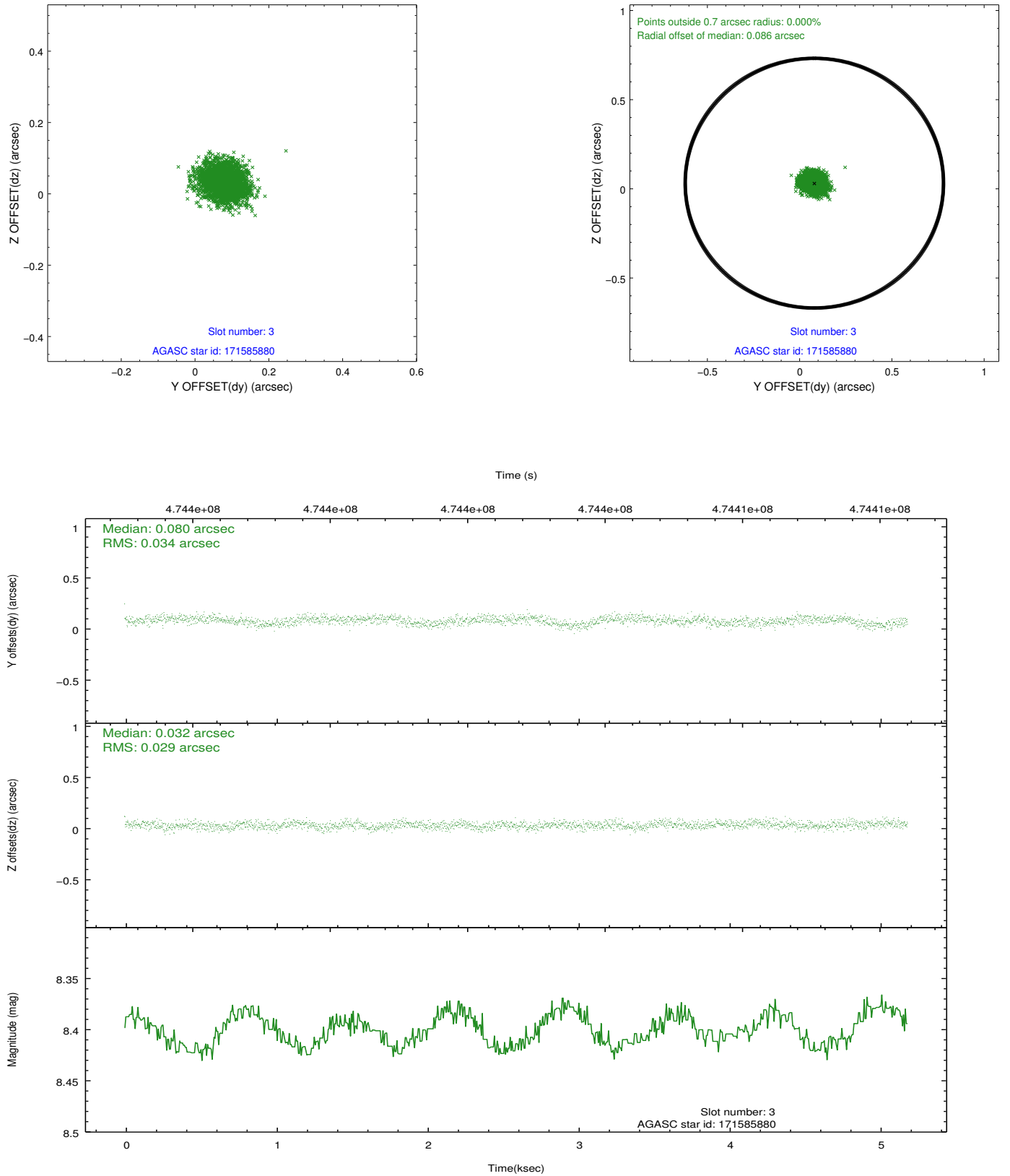


Slot Statistics

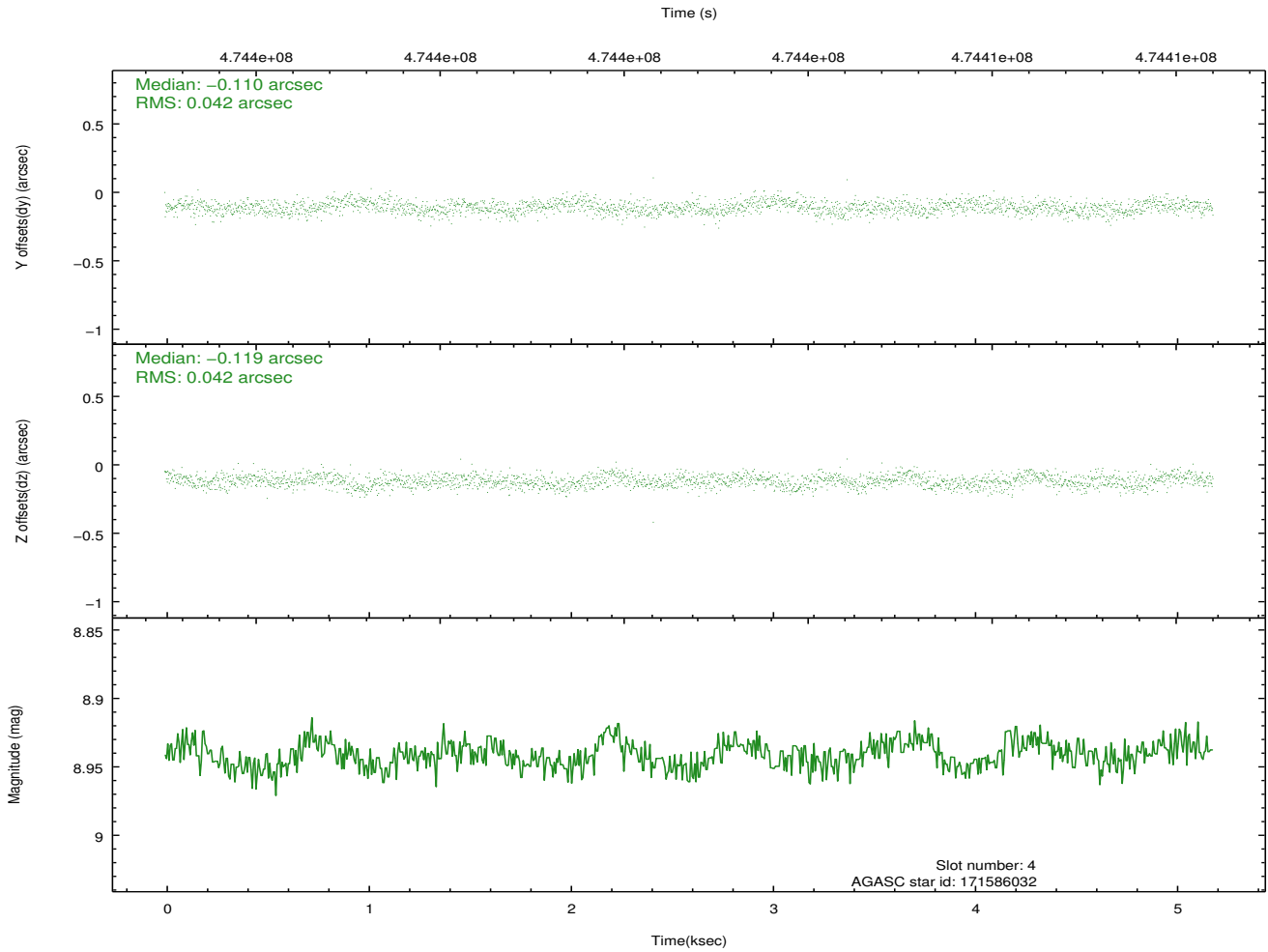
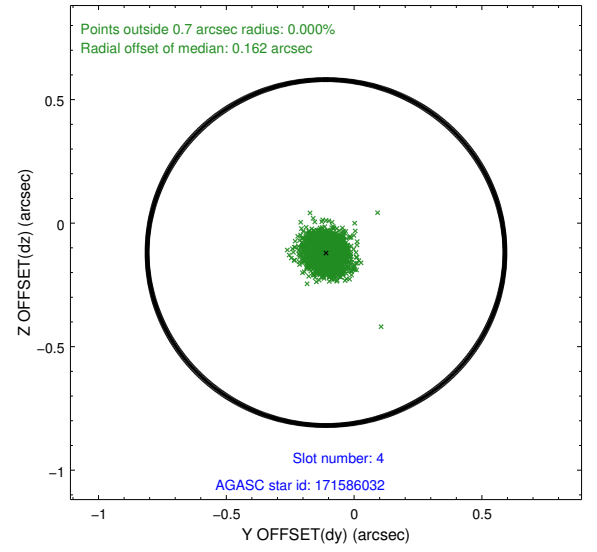
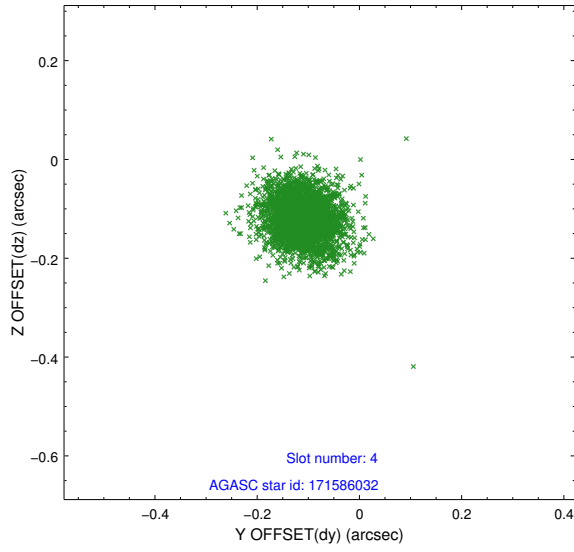
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.98	1266	-0.170	-0.040	0.007	0.011	0.000000	0.000000	-768.70	-1776.84
1	FID		ACIS-S-4	7.08	1266	0.258	0.092	0.006	0.010	0.000000	0.000000	2144.48	130.52
2	FID		ACIS-S-5	7.11	1265	-0.119	-0.044	0.007	0.011	0.000000	0.000000	-1819.99	125.39
3	GUIDE	used	171585880	8.40	2529	0.080	0.032	0.047	0.076	83.676260	22.176319	-488.40	254.83
4	GUIDE	used	171586032	8.94	2531	-0.110	-0.119	0.063	0.102	83.950197	22.083225	-76.97	1136.41
5	GUIDE	used	171597832	9.23	2527	0.082	-0.044	0.074	0.125	83.183230	21.366702	2270.35	-1642.57
6	GUIDE	used	171721904	9.25	2528	0.119	0.159	0.080	0.129	84.272676	22.116922	-106.92	2217.93
7	GUIDE	used	243941560	8.28	2530	-0.169	-0.026	0.049	0.083	83.733264	22.568598	-1879.14	565.95

2.4 Star Slots

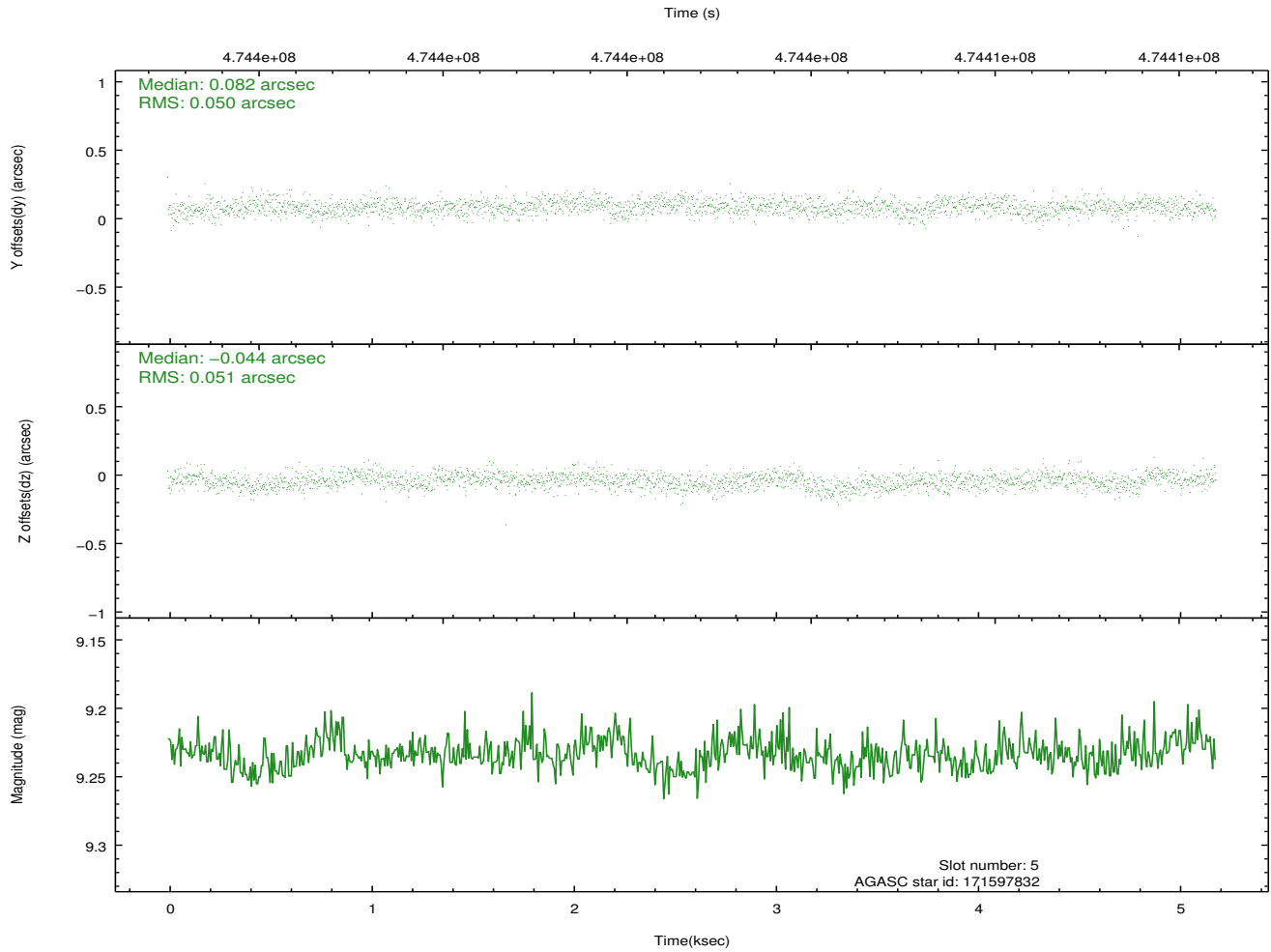
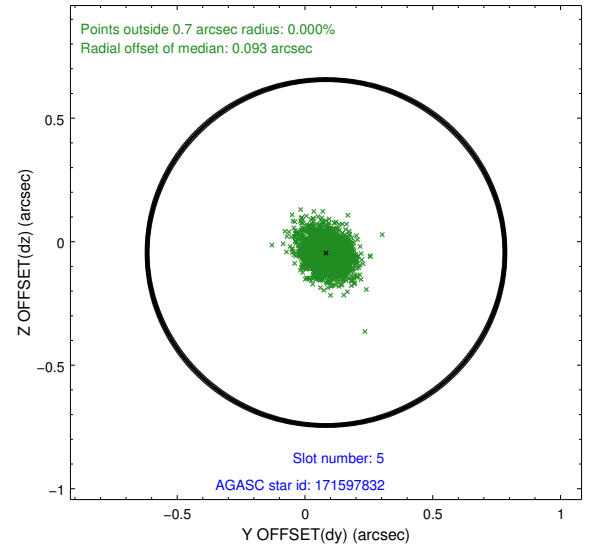
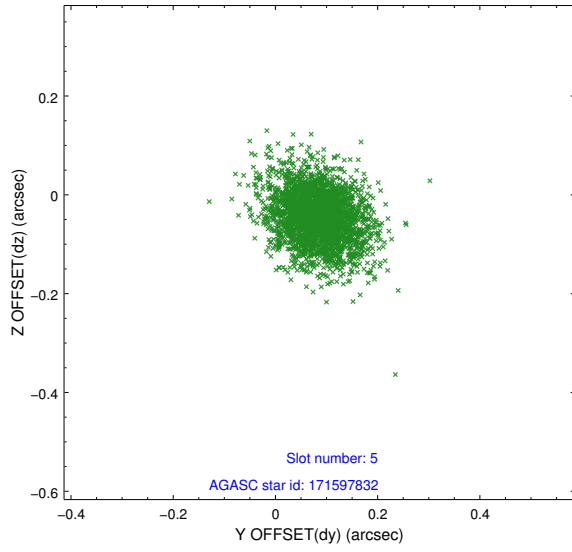
2.4.1 Slot 3



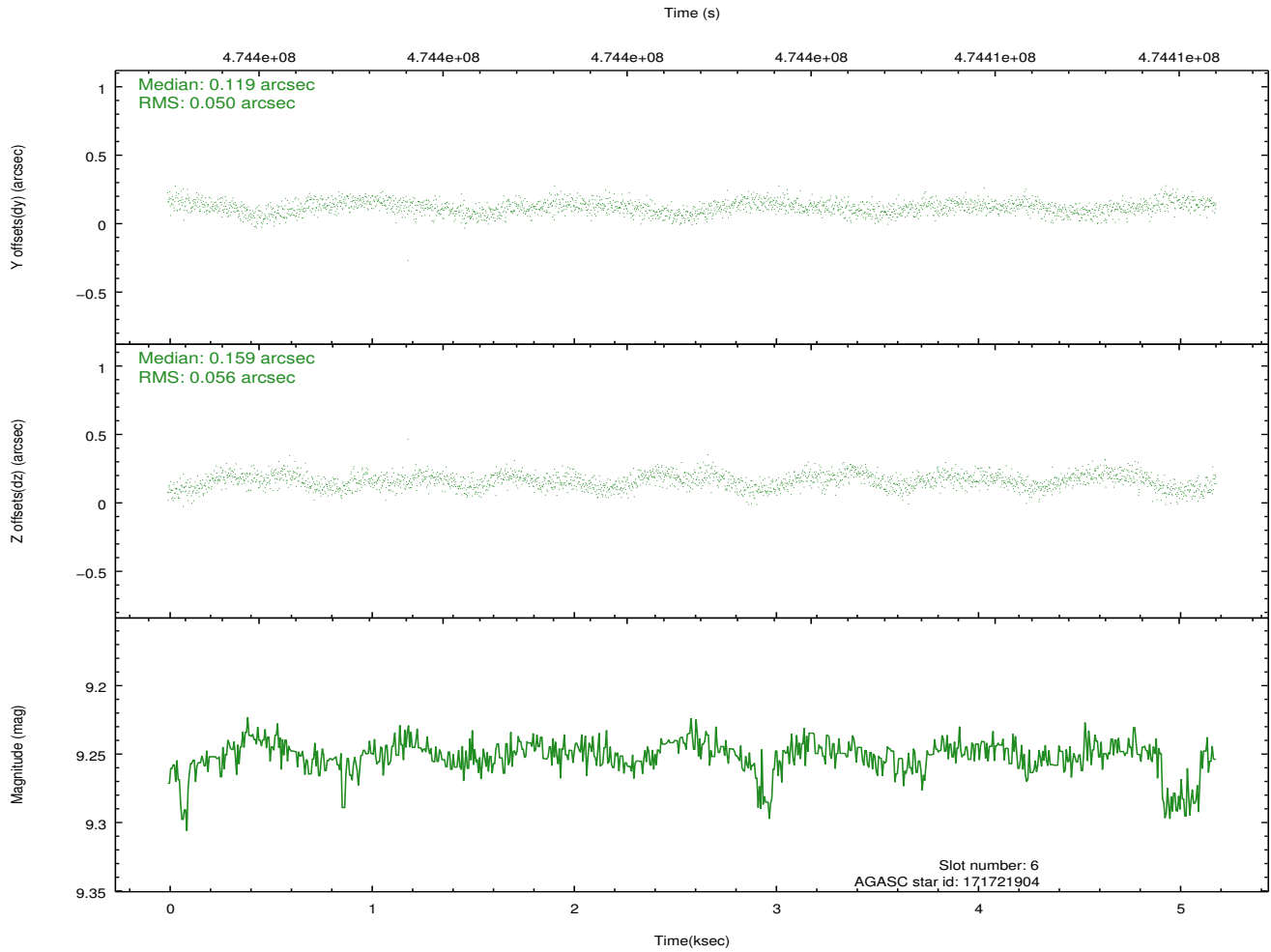
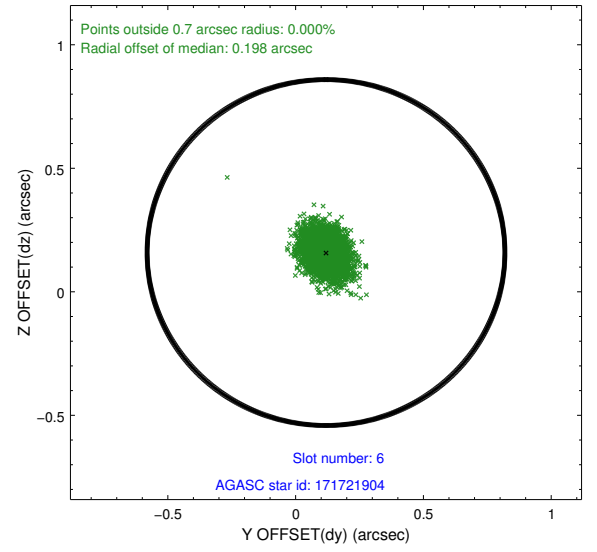
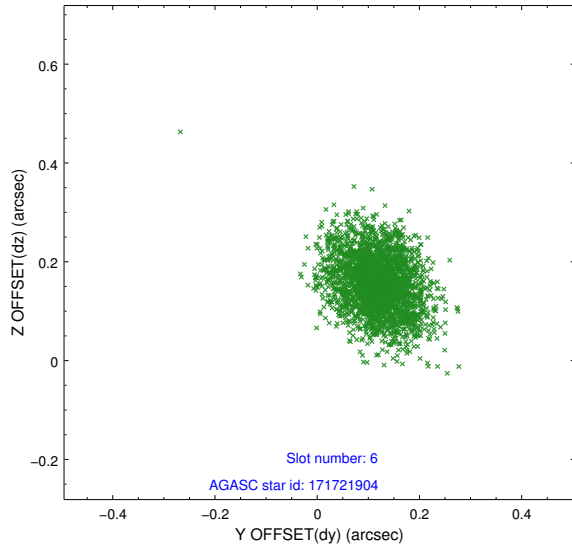
2.4.2 Slot 4



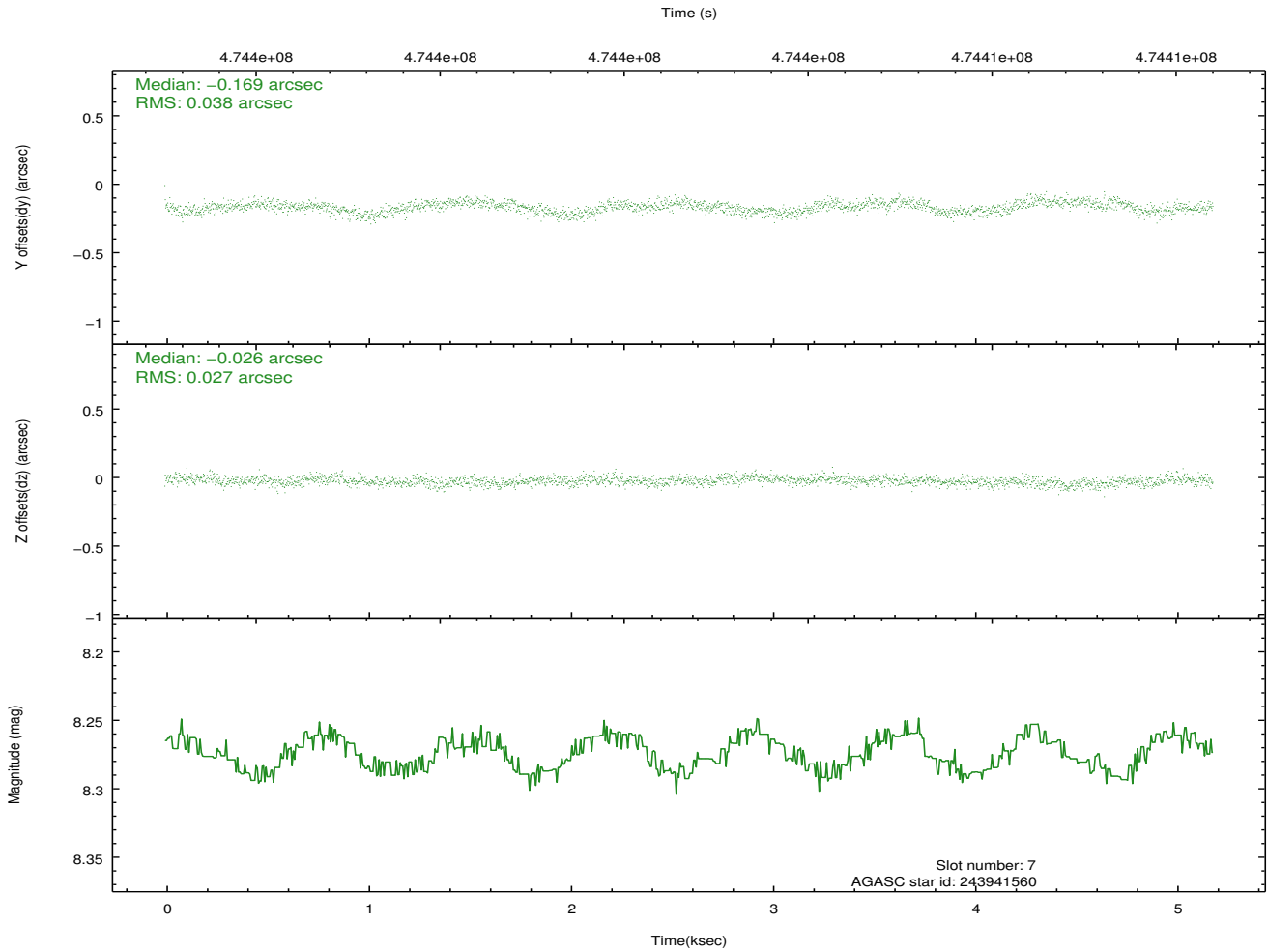
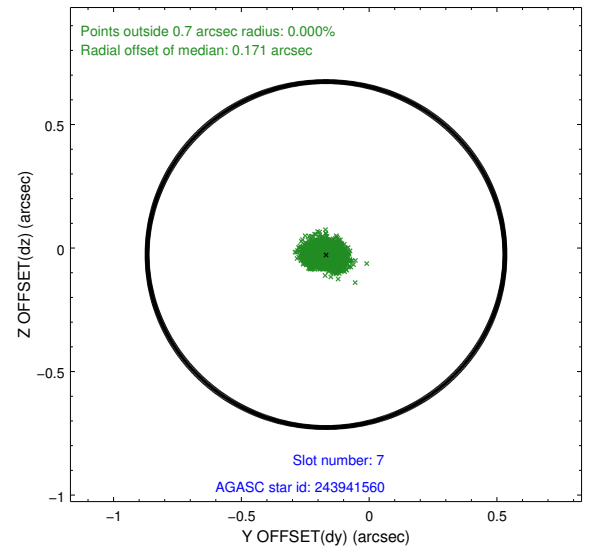
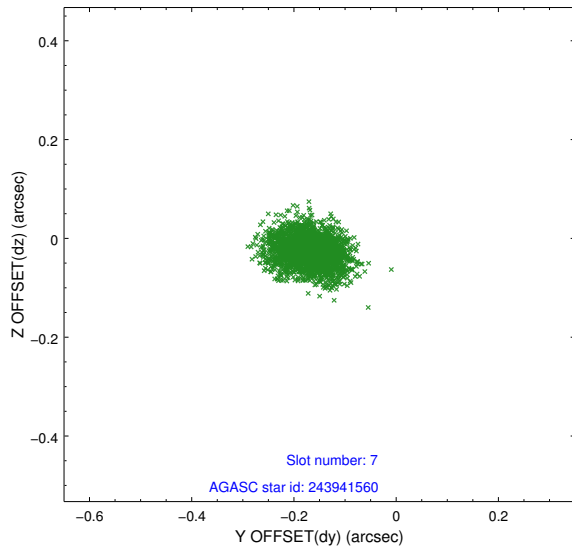
2.4.3 Slot 5



2.4.4 Slot 6

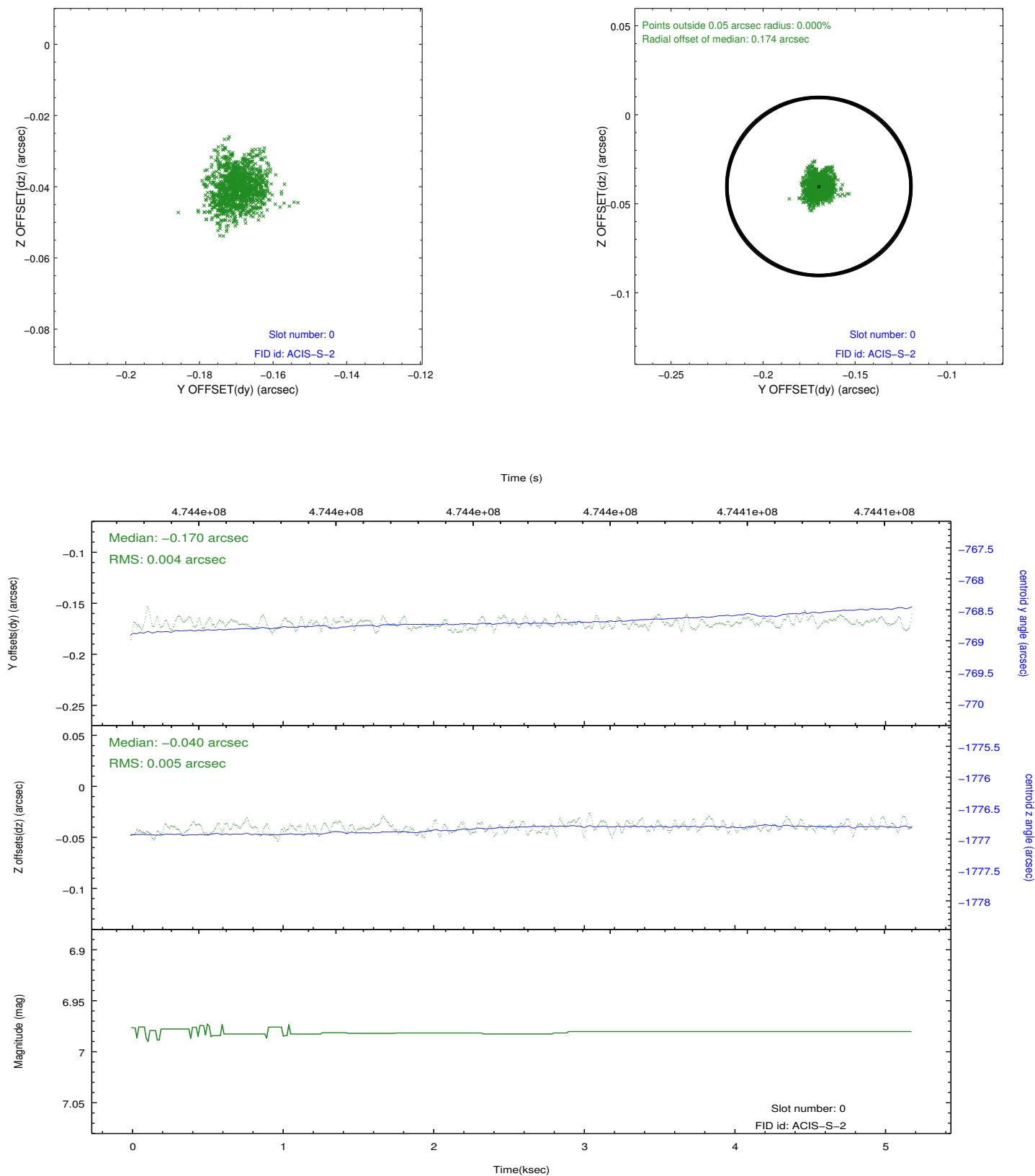


2.4.5 Slot 7

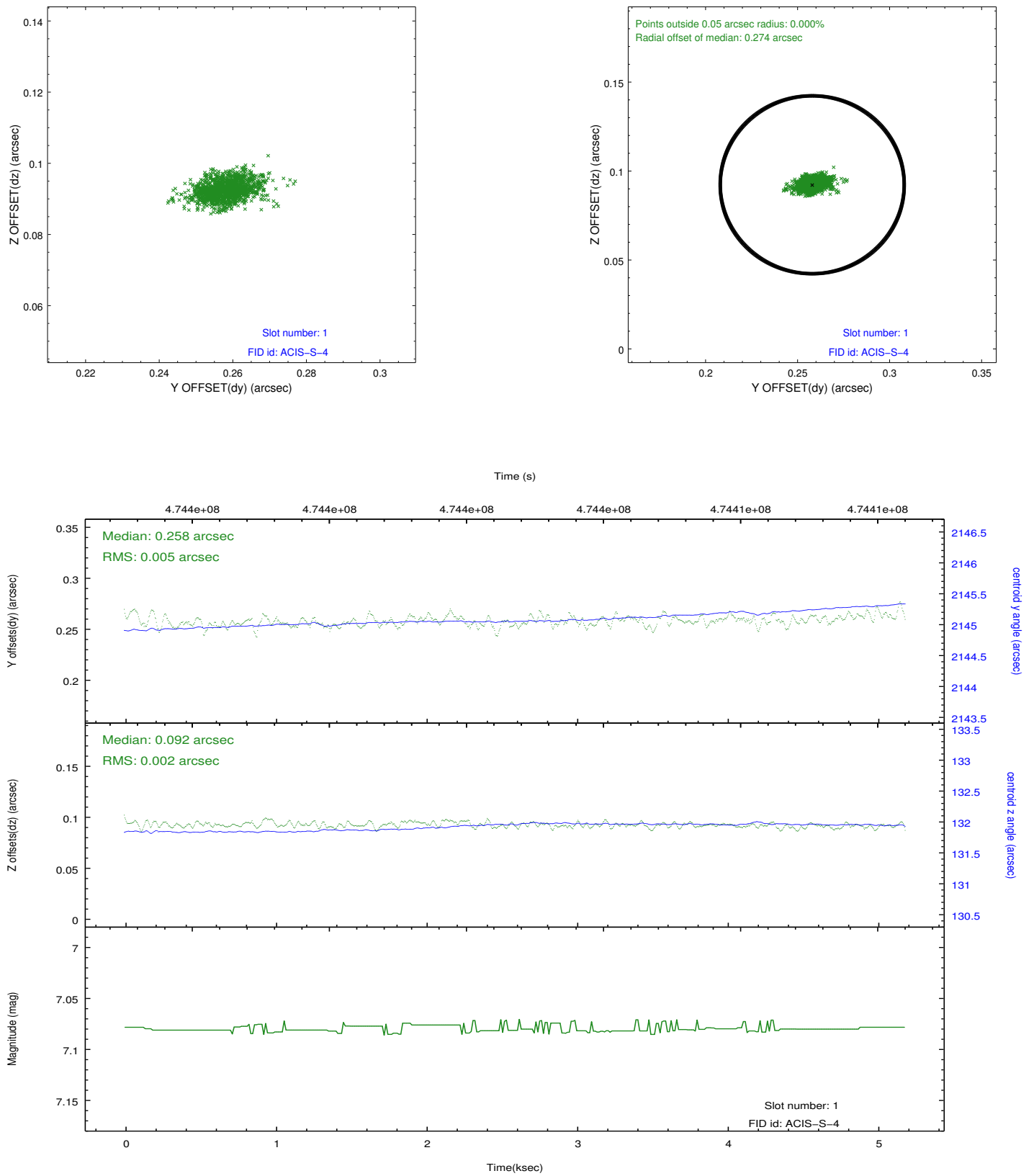


2.5 FID Slots

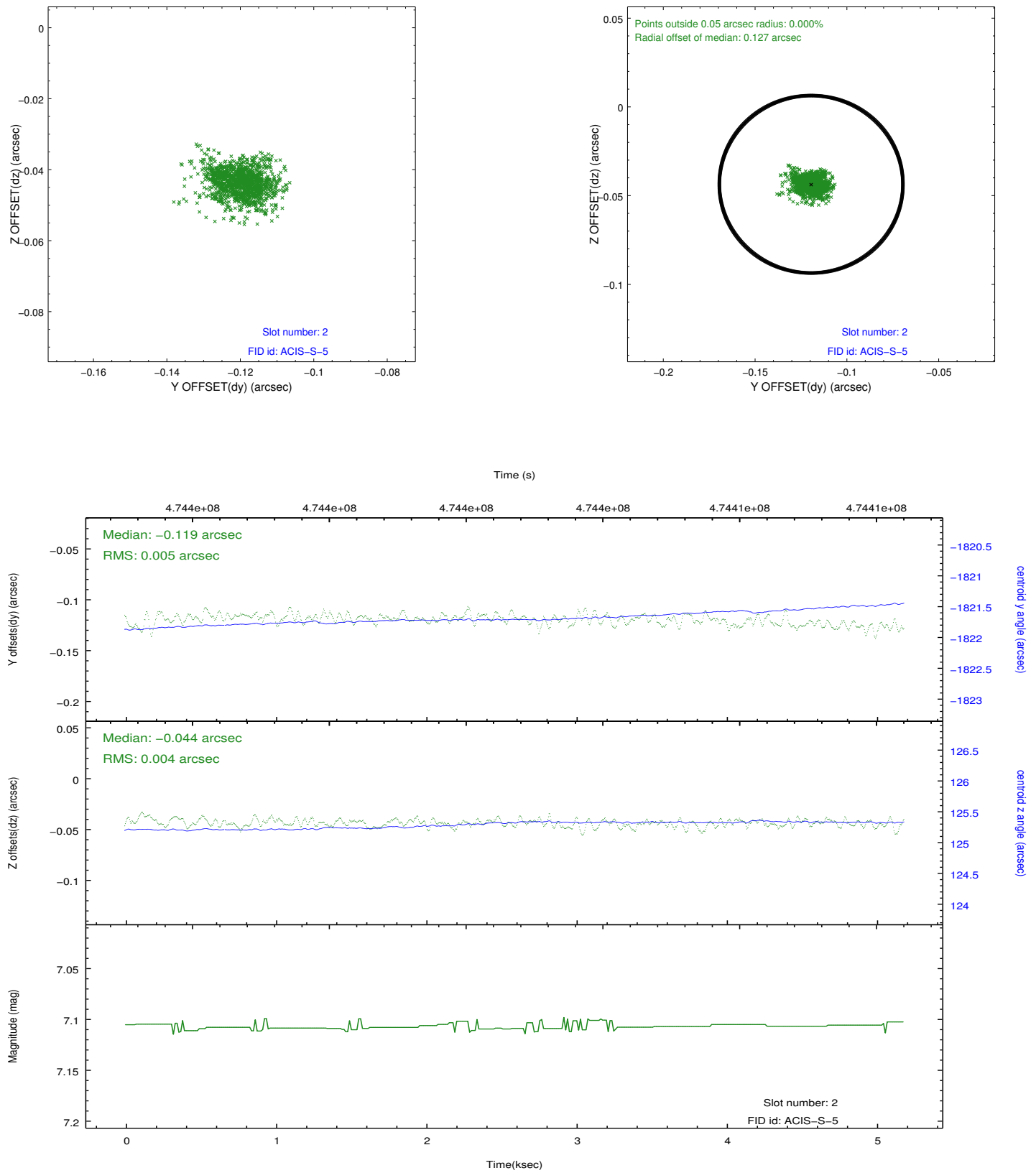
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2014.12.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5

A.2 Comments

Joint proposal with HST.

Window preference met.

Charge time is set to the scheduled time for this observation, although the ontime is significantly less due to telemetry saturation.

These data have been reprocessed with new aspect alignment calibration files that correct small mean offsets (up to 0.4 arcsecs) and improve overall astrometric accuracy. The new calibration was determined using data from the time period being reprocessed and was performed using cross-correlation of X-ray sources with radio and optical counterparts.