

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 769 - L2 Version 5
Chandra X-Ray Center

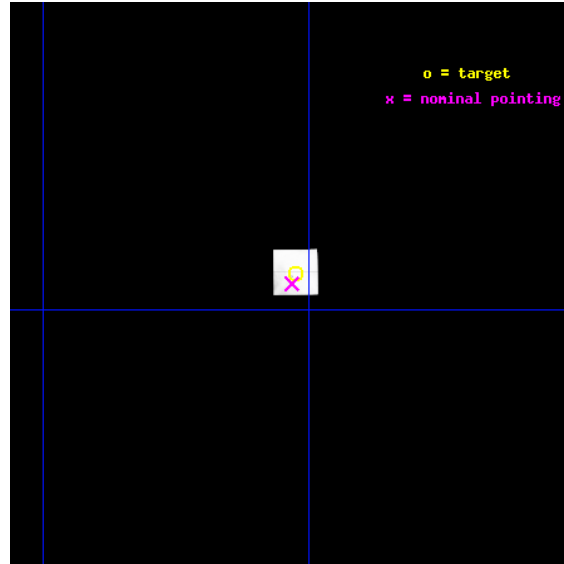
L2 Processing Date : Aug 24 2012

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1 Front

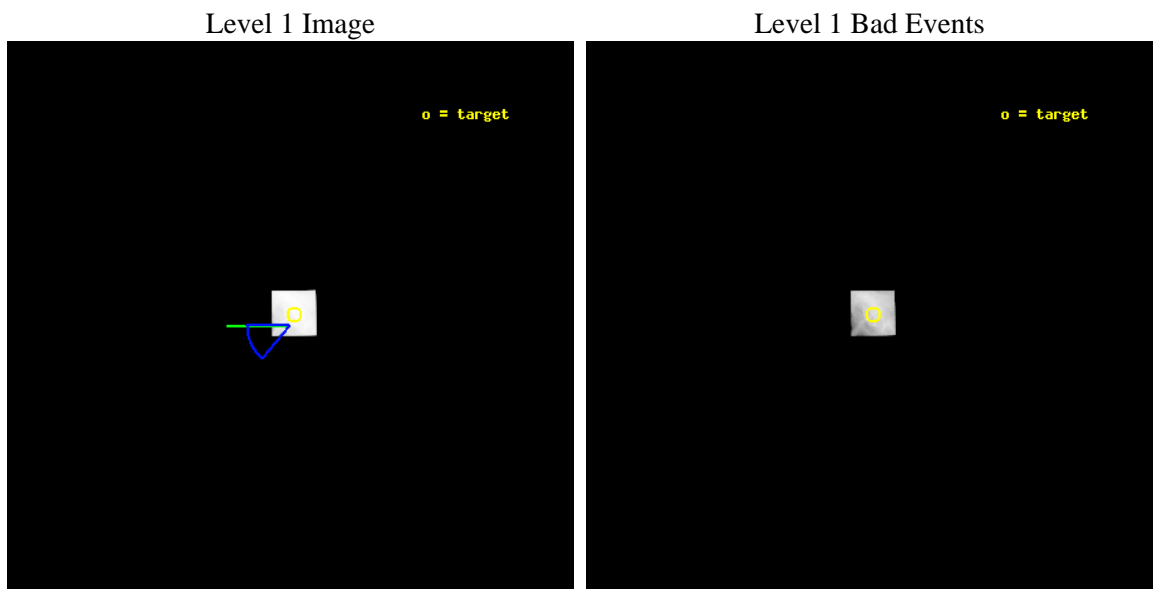
seq_num	500065	Sequence number
obs_id	769	Observation id
title	ACIS/HST OBSERVATIONS OF RELATIVISTIC WISPS IN THE CRAB NEBULA	Pro
observer	PROF. JEFF HESTER	Principal investigator
object	CRAB NEBULA	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	83.631542	Observer's specified target RA [deg]
dec_targ	22.015664	Observer's specified target Dec [deg]
ra_nom	83.633185244895	Nominal RA [deg]
dec_nom	22.011239136844	Nominal Dec [deg]
roll_nom	269.15601279307	Nominal Roll [deg]
revision	5	Processing version of data
ontime	1904.2629891634	Sum of GTIs [s]
livetime	1759.817193889	Livetime [s]
ontime7	1904.2629891634	Sum of GTIs [s]
l2events	2274205	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	8000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	1904.2629891634	Sum of GTIs [s]
caldsver	4.5.1.1	 	ontime7	1904.2629891634	Sum of GTIs [s]
date	2012-08-24T04:51:13	Date and time of file creation	l1events	3270264	Number of level 1 events
revision	5	Processing version of data			

2.1.3 Events

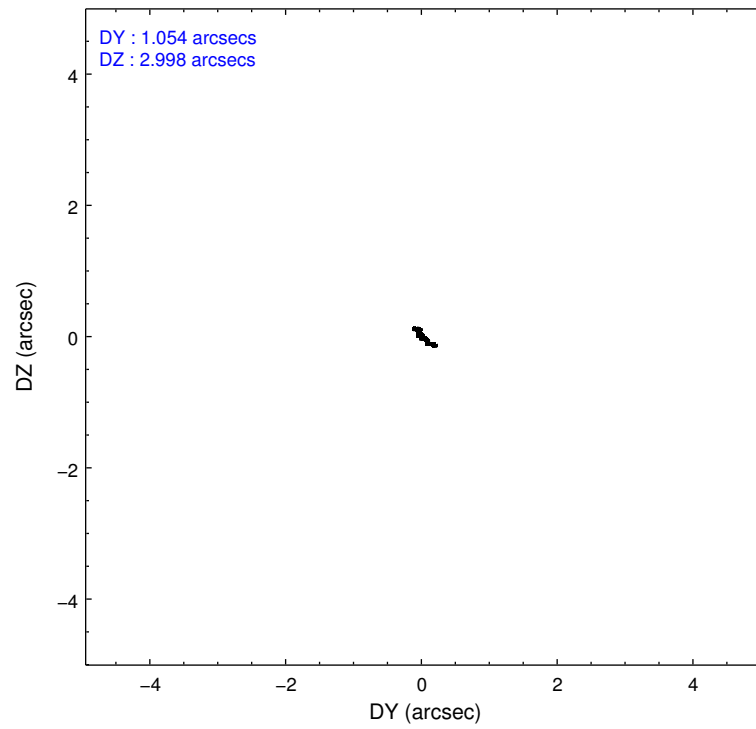
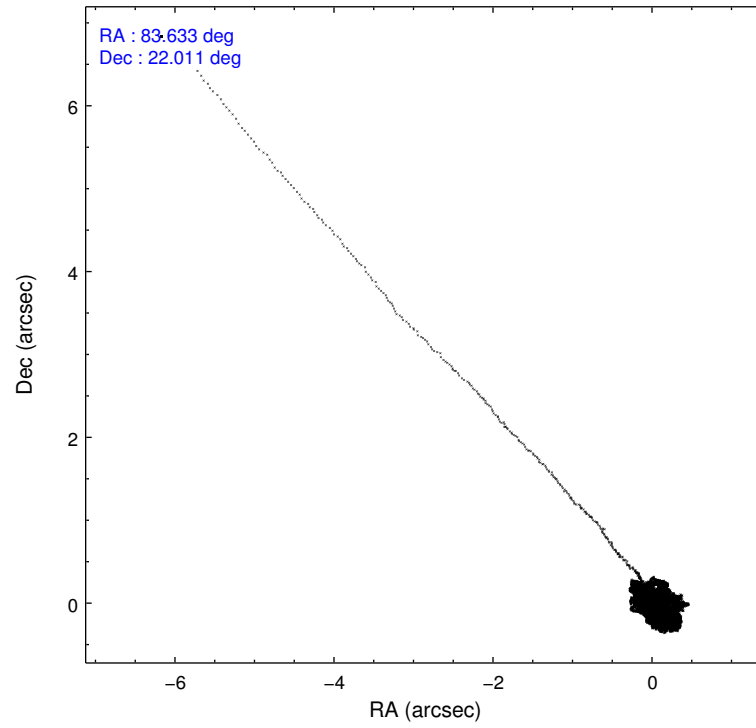
	ccd 7
level 1 events	3270264
rejected events	962843
rejected %	29%

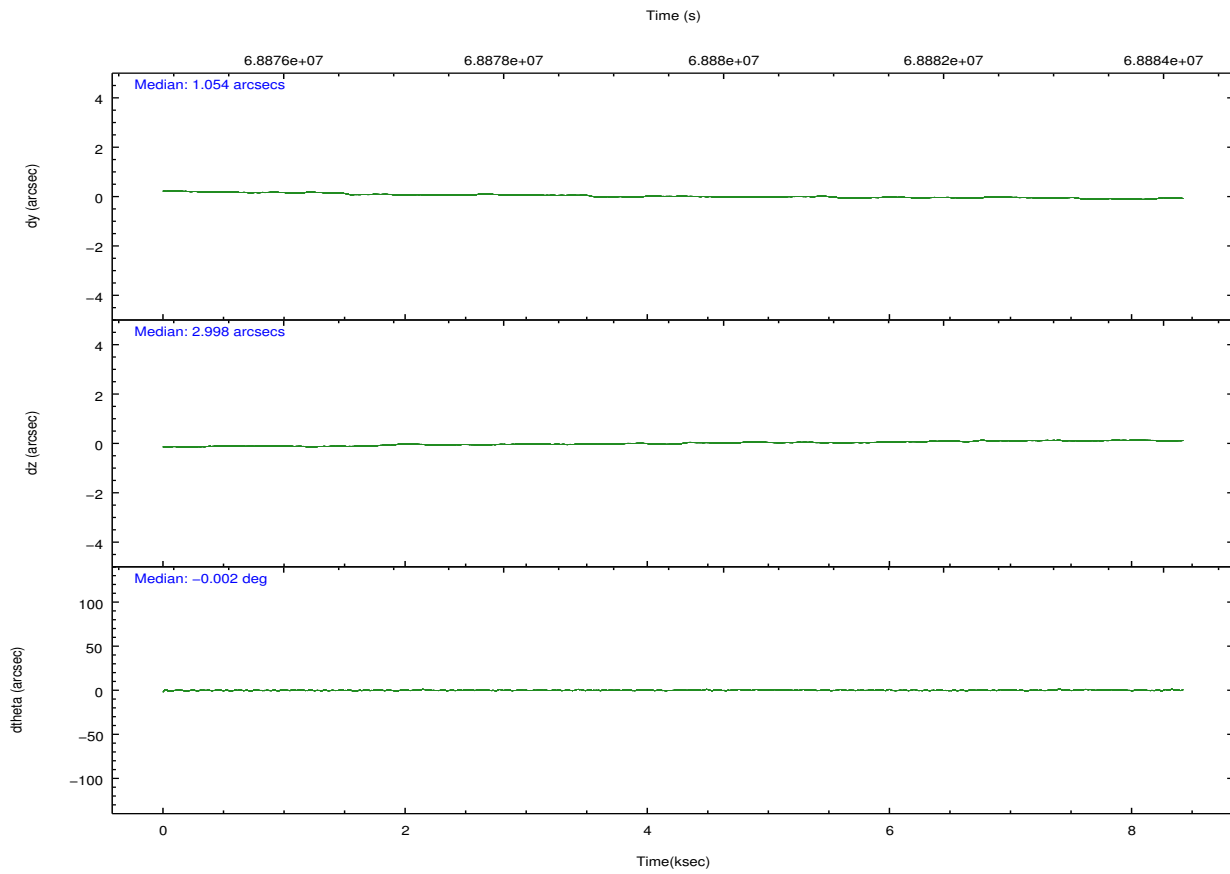
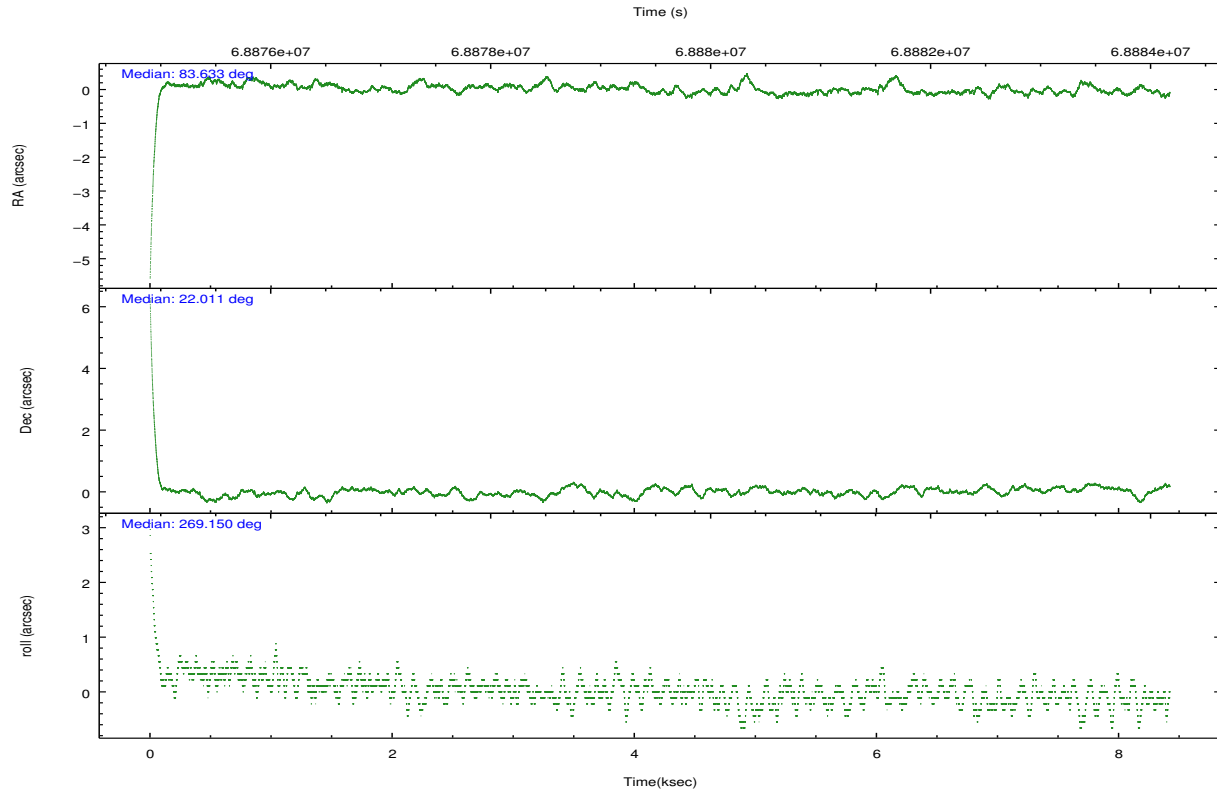
	ccd 7
grade 0 events	384634
	11%
grade 1 events	90525
	2%
grade 2 events	579704
	17%
grade 3 events	256240
	7%
grade 4 events	249969
	7%
grade 5 events	266307
	8%
grade 6 events	837522
	25%
grade 7 events	605363
	18%

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	83.618709	83.63318524489488	Subarray requested	CUSTOM	CUSTOM
[deg] Pointing Dec	22.035209	22.01123913684416	Subarray start row	11	11
[deg] Pointing Roll	269.004811	269.1560127930732	Subarray row count	140	140
[deg] Roll angle	245.000000	245.000000	Alternating exposures requested	N	N
[deg] Roll tolerance	25.000000	25.000000	[s] Primary exposure time	0.000000	0.5
Roll constraint allows 180D rotation	N	N			
[s] Window start time (MET)	68688064.184000	68688064.184000			
[s] Window stop time (MET)	68947264.184000	68947264.184000			
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-179.132523	-179.1399366055469			
[mm] SIM translation stage offset	-11	-10.99258597746092			
[s] Observation start time (MET)	68875753.184000	68874290.500496			
Observation start date	2000-03-08T04:08:09	2000-03-08T03:44:50			
[s] Observation end time (MET)	68883753.184000	68884250.93836001			
Observation end date	2000-03-08T06:21:29	2000-03-08T06:30:50			
Read mode	TIMED	TIMED			

2.3 Aspect



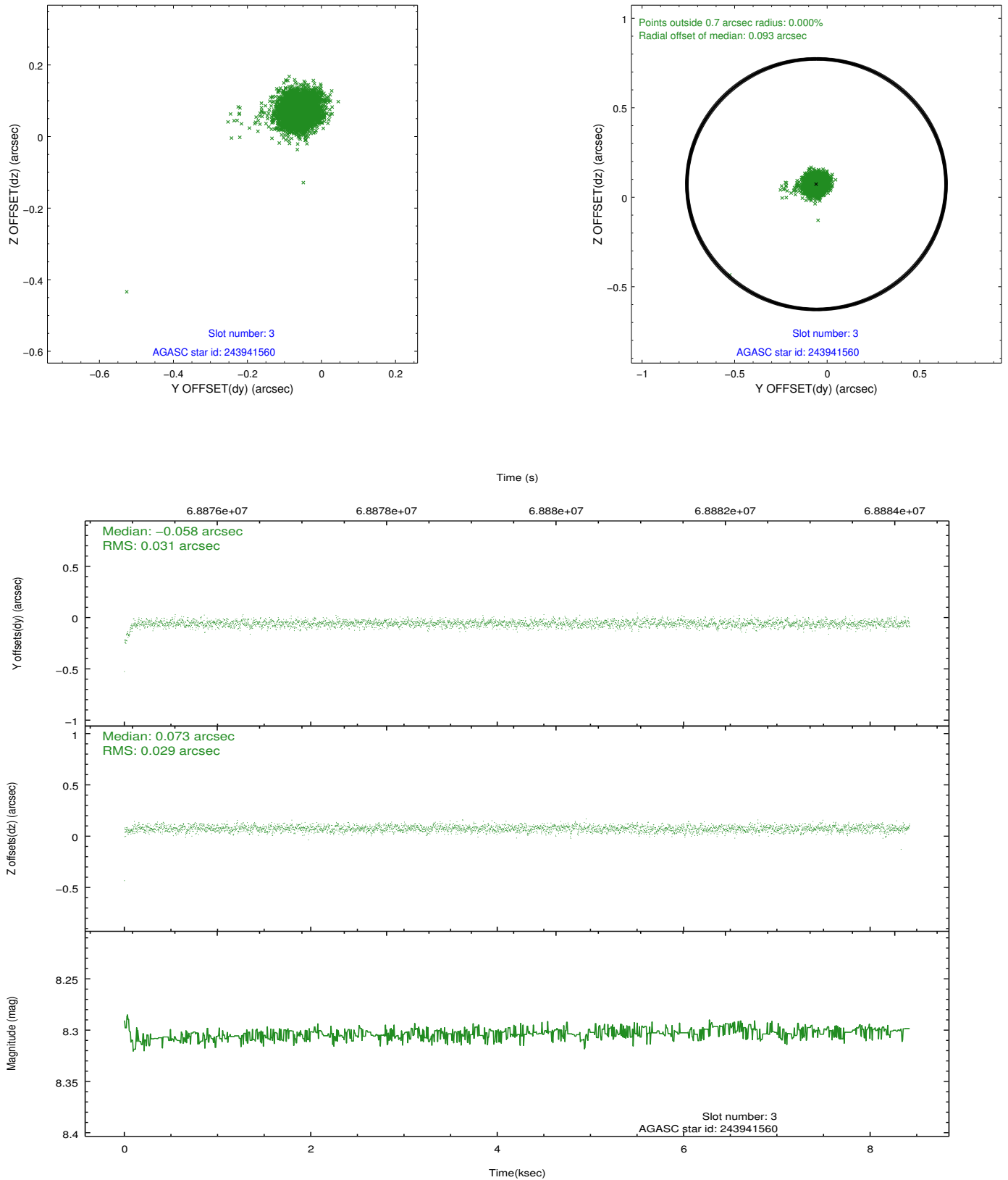


Slot Statistics

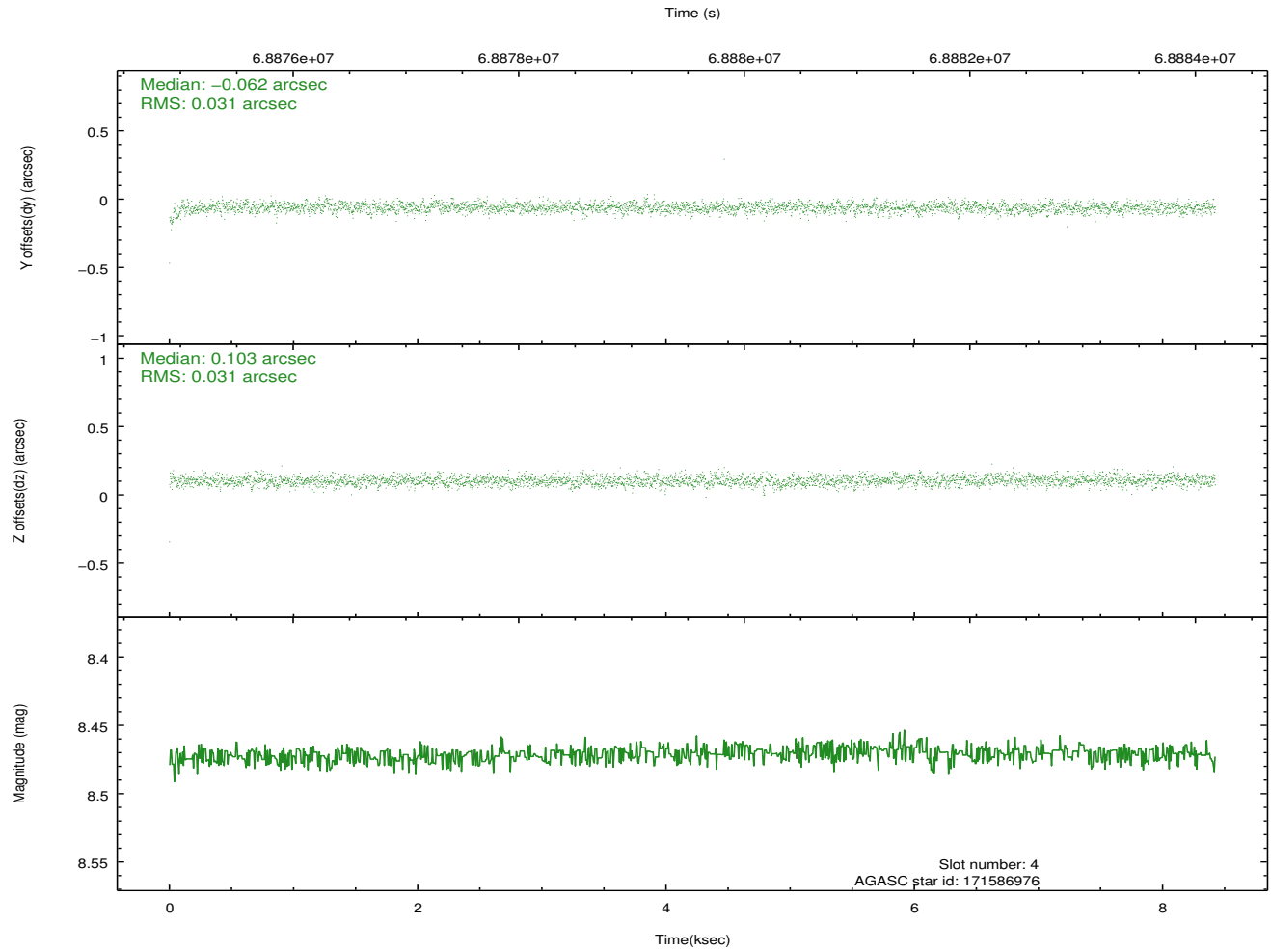
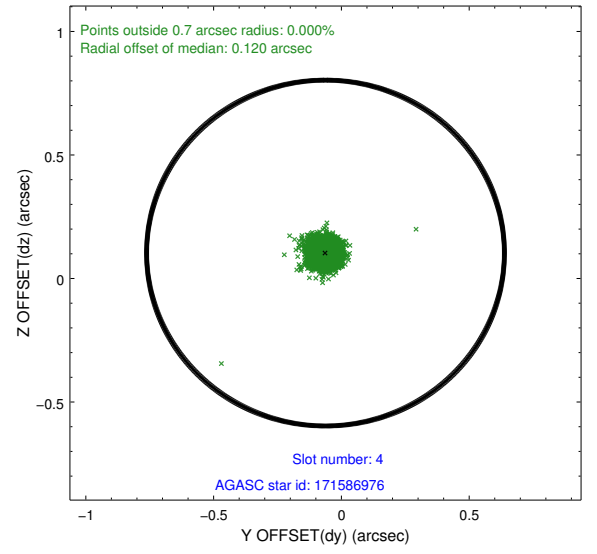
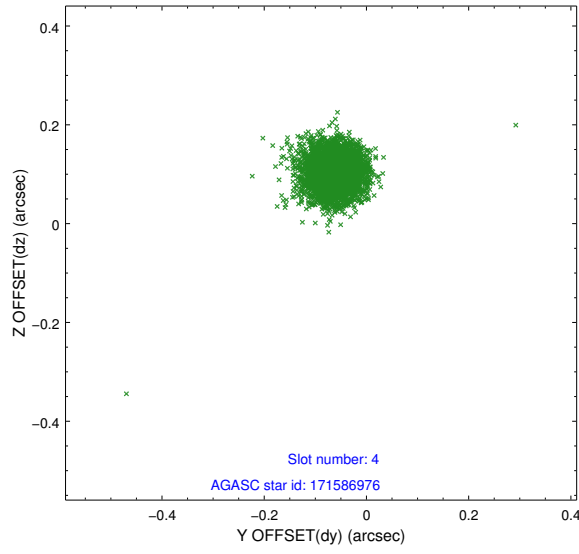
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-3	7.35	2055	-0.082	-0.168	0.007	0.012	0.000000	0.000000	60.20	-2079.59
1	FID	ACIS-S-4	7.18	2055	0.088	0.123	0.006	0.010	0.000000	0.000000	2160.60	-42.69
2	FID	ACIS-S-5	7.23	2055	-0.035	0.054	0.006	0.011	0.000000	0.000000	-1804.89	-48.16
3	GUIDE	243941560	8.30	4110	-0.058	0.073	0.042	0.070	83.733264	22.568598	-1926.63	346.91
4	GUIDE	171586976	8.47	4110	-0.062	0.103	0.045	0.073	83.857953	22.438065	-1465.00	770.43
5	GUIDE	171597832	9.17	4107	0.181	-0.126	0.066	0.110	83.183230	21.366702	2429.70	-1418.13
6	GUIDE	171721904	9.20	4107	-0.156	0.126	0.059	0.097	84.272676	22.116922	-336.36	2174.89
7	GUIDE	171598712	9.39	4107	0.097	-0.177	0.066	0.107	82.978369	21.681417	1306.62	-2119.69

2.4 Star Slots

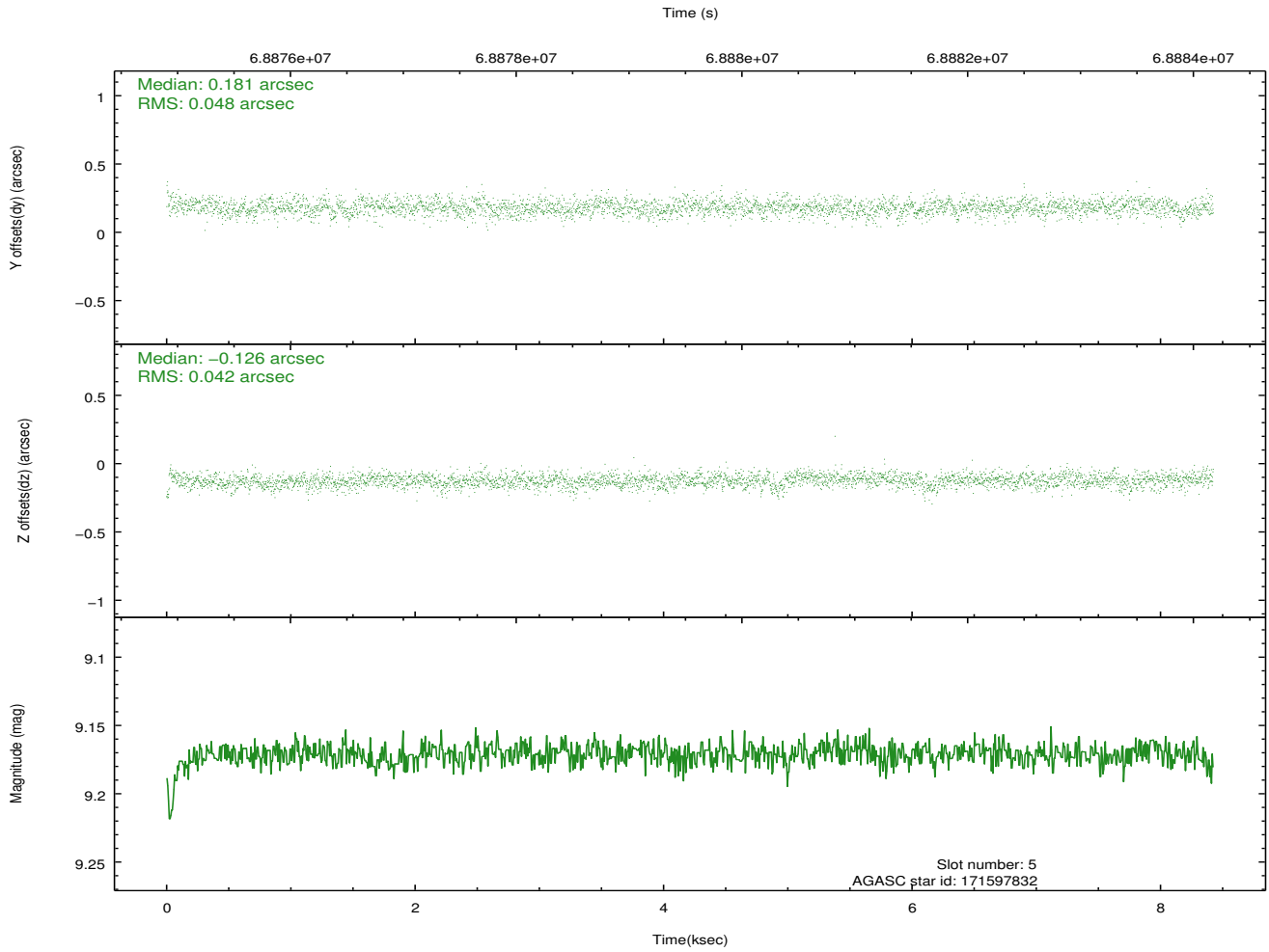
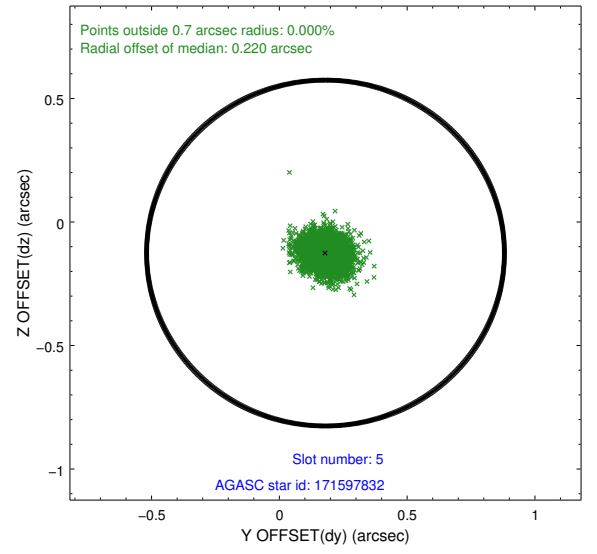
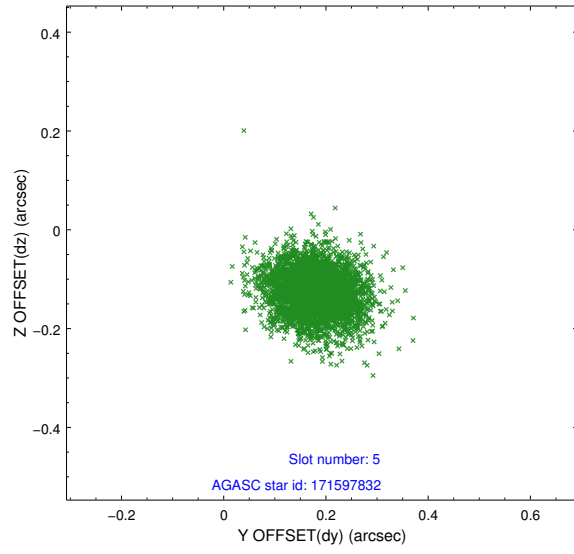
2.4.1 Slot 3



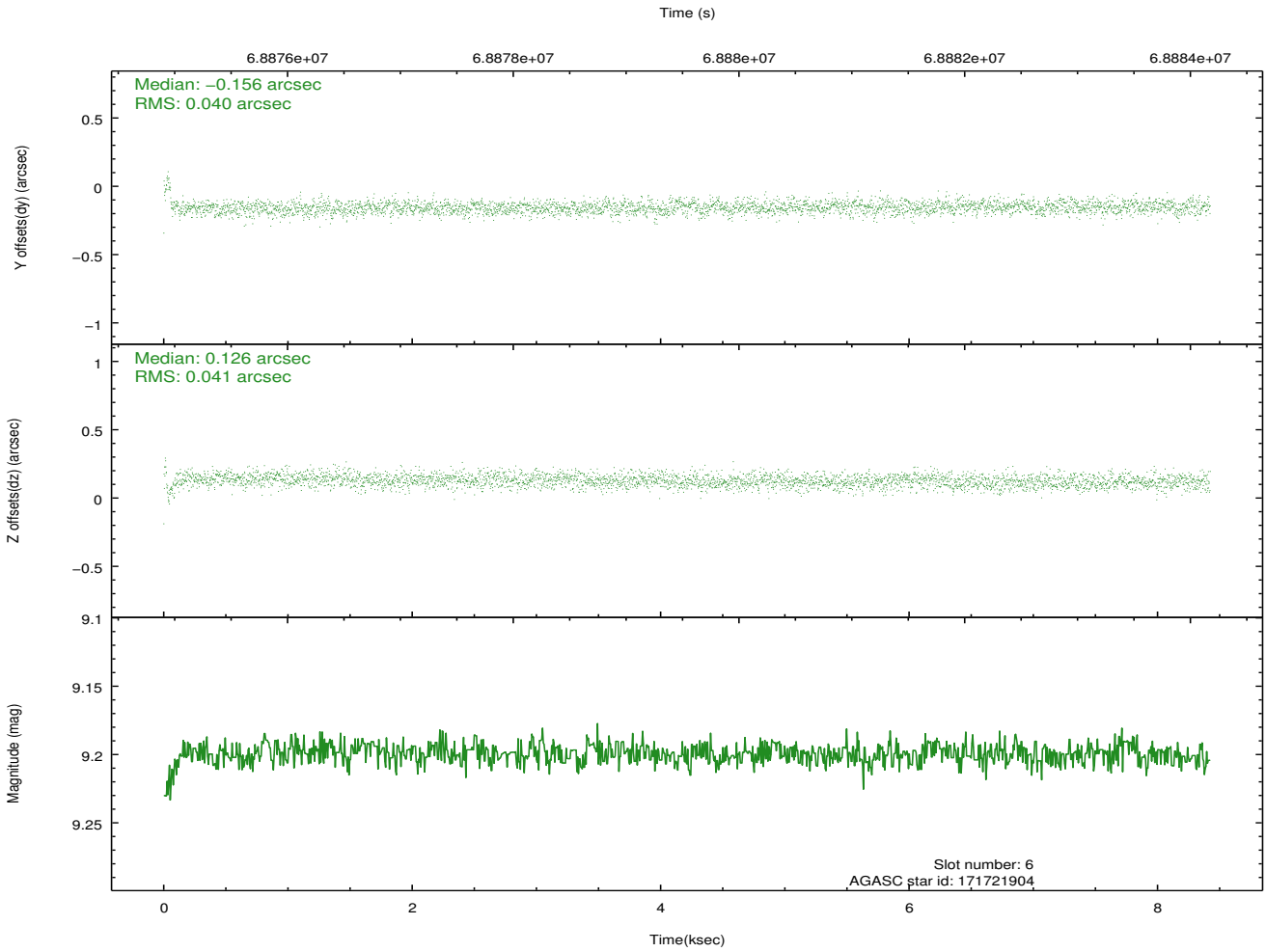
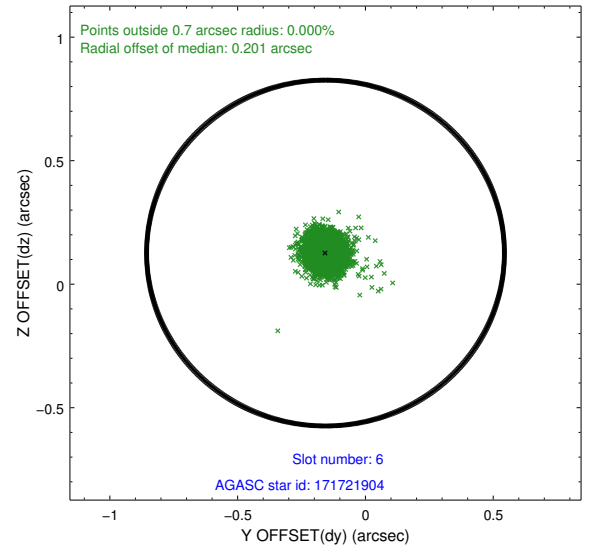
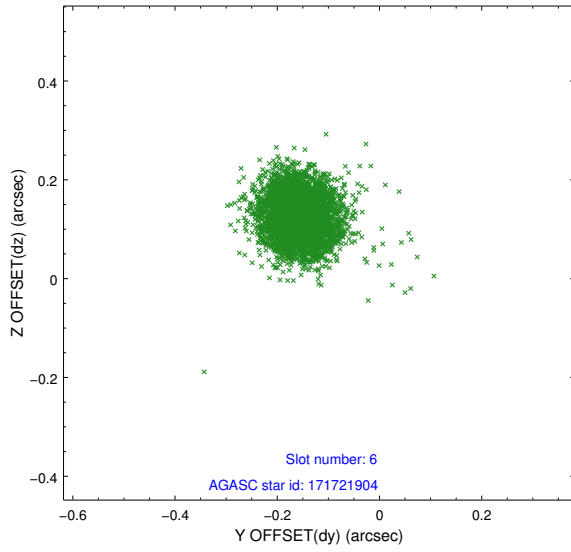
2.4.2 Slot 4



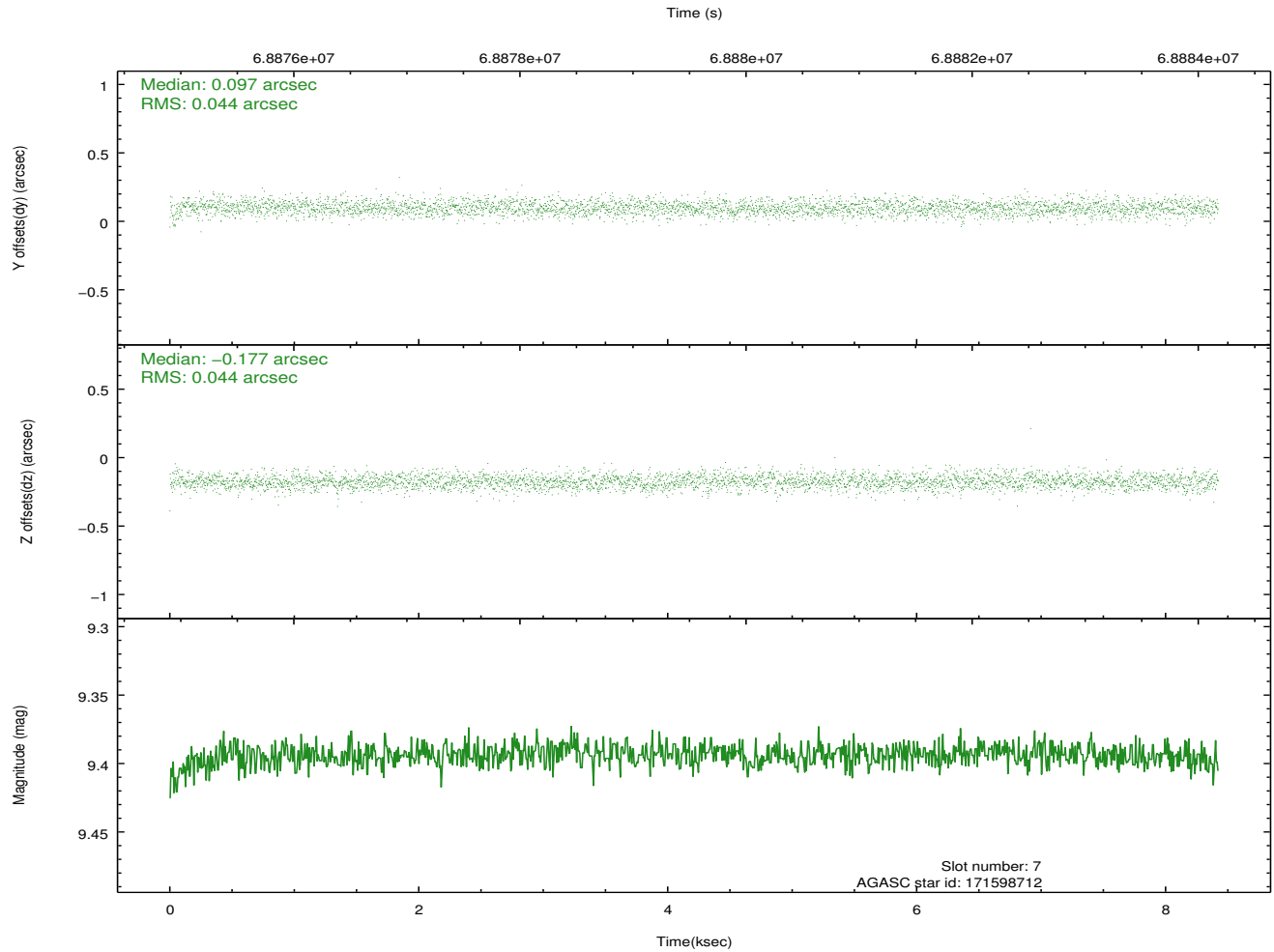
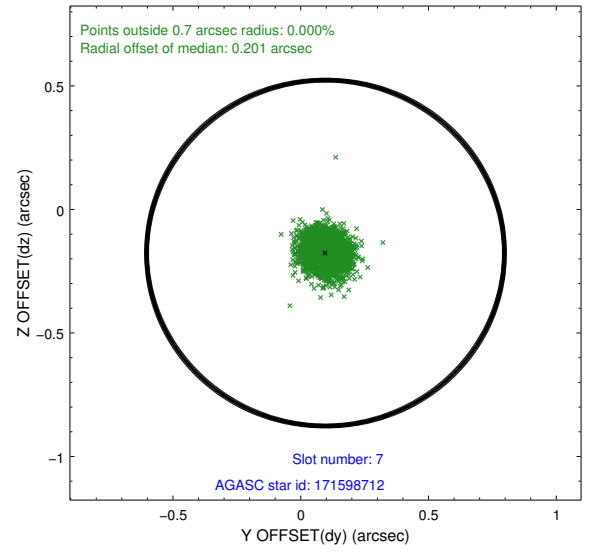
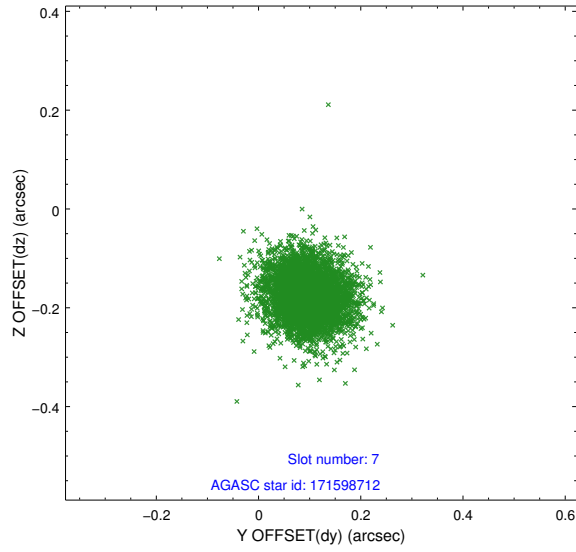
2.4.3 Slot 5



2.4.4 Slot 6

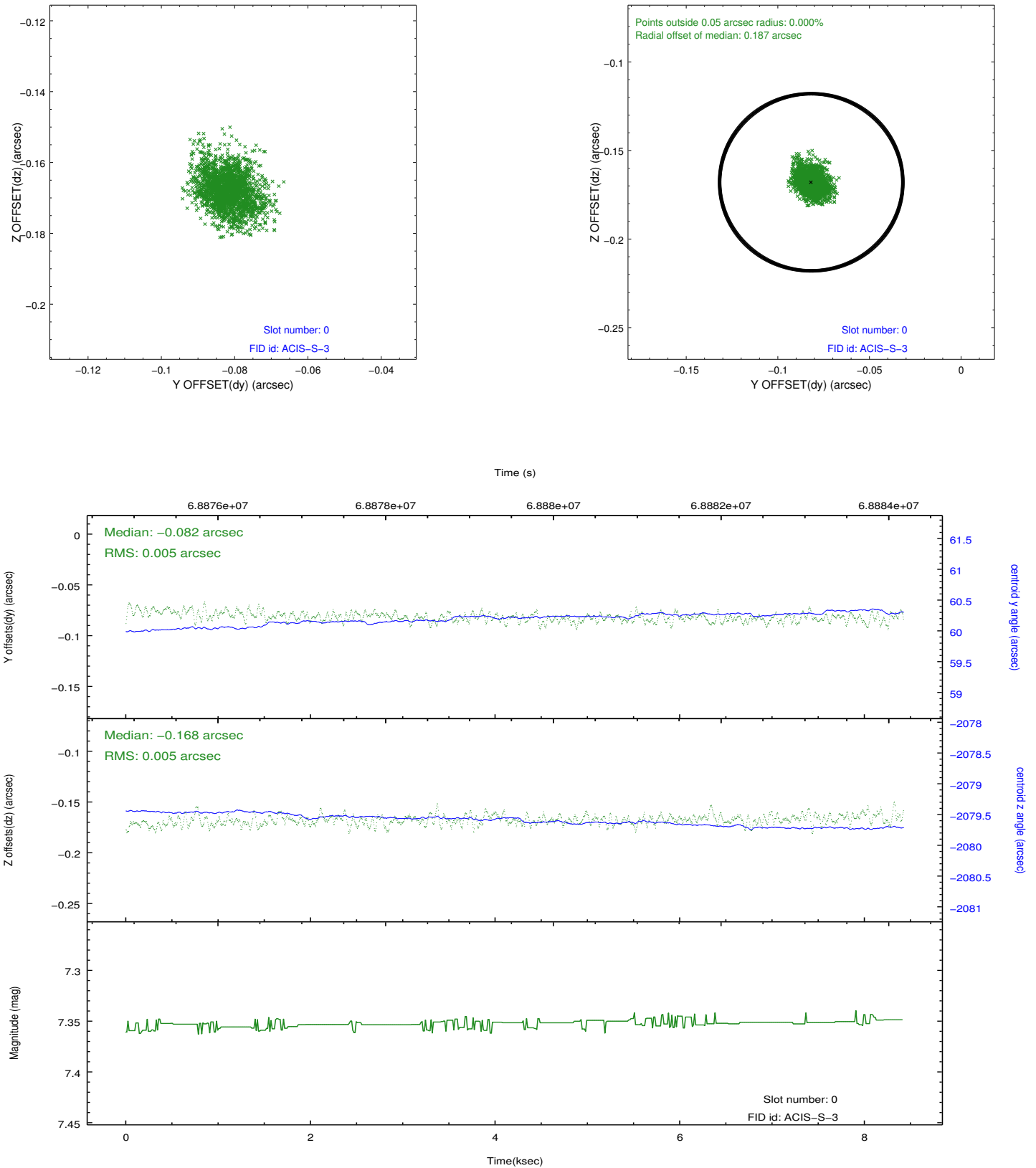


2.4.5 Slot 7

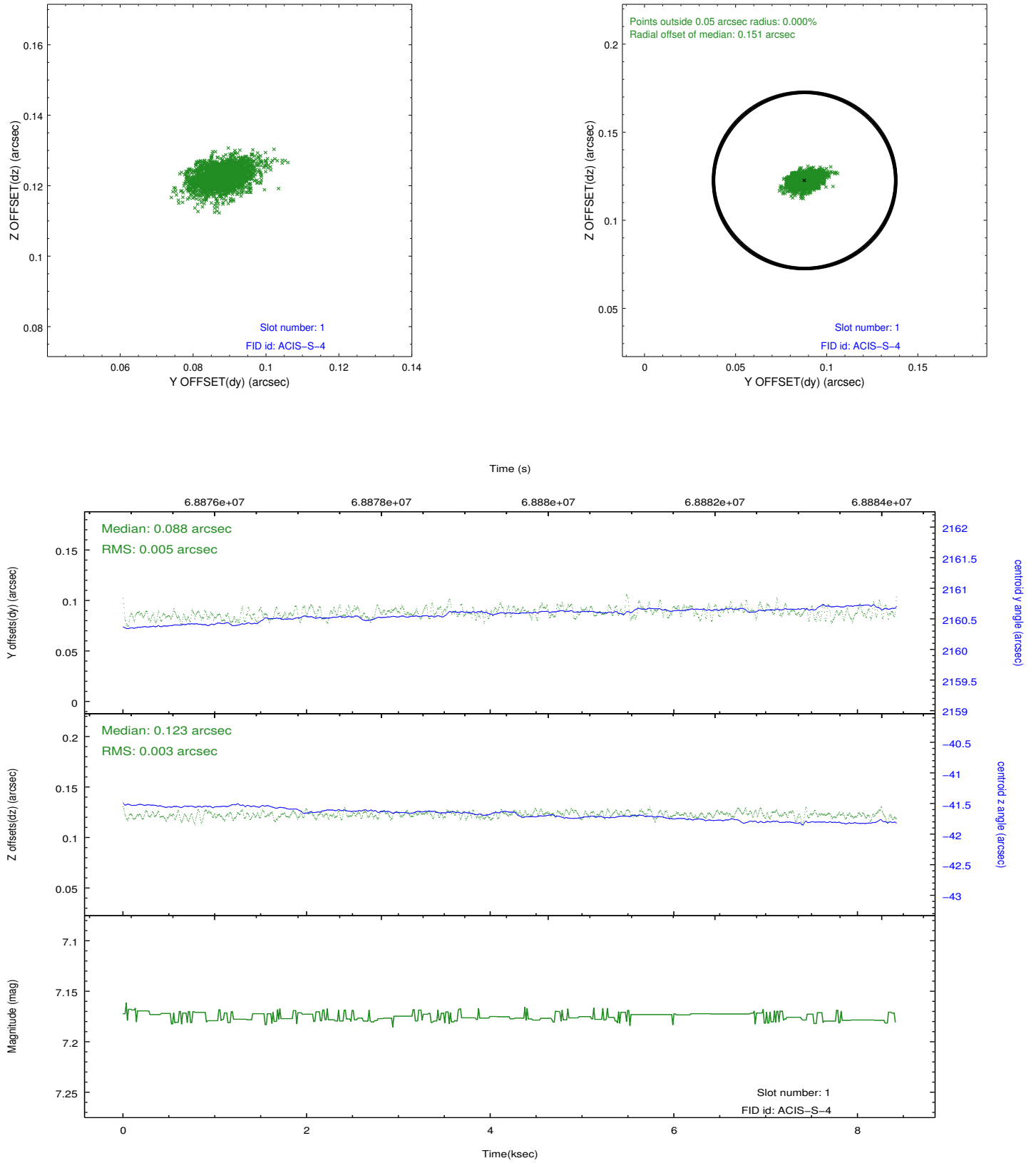


2.5 FID Slots

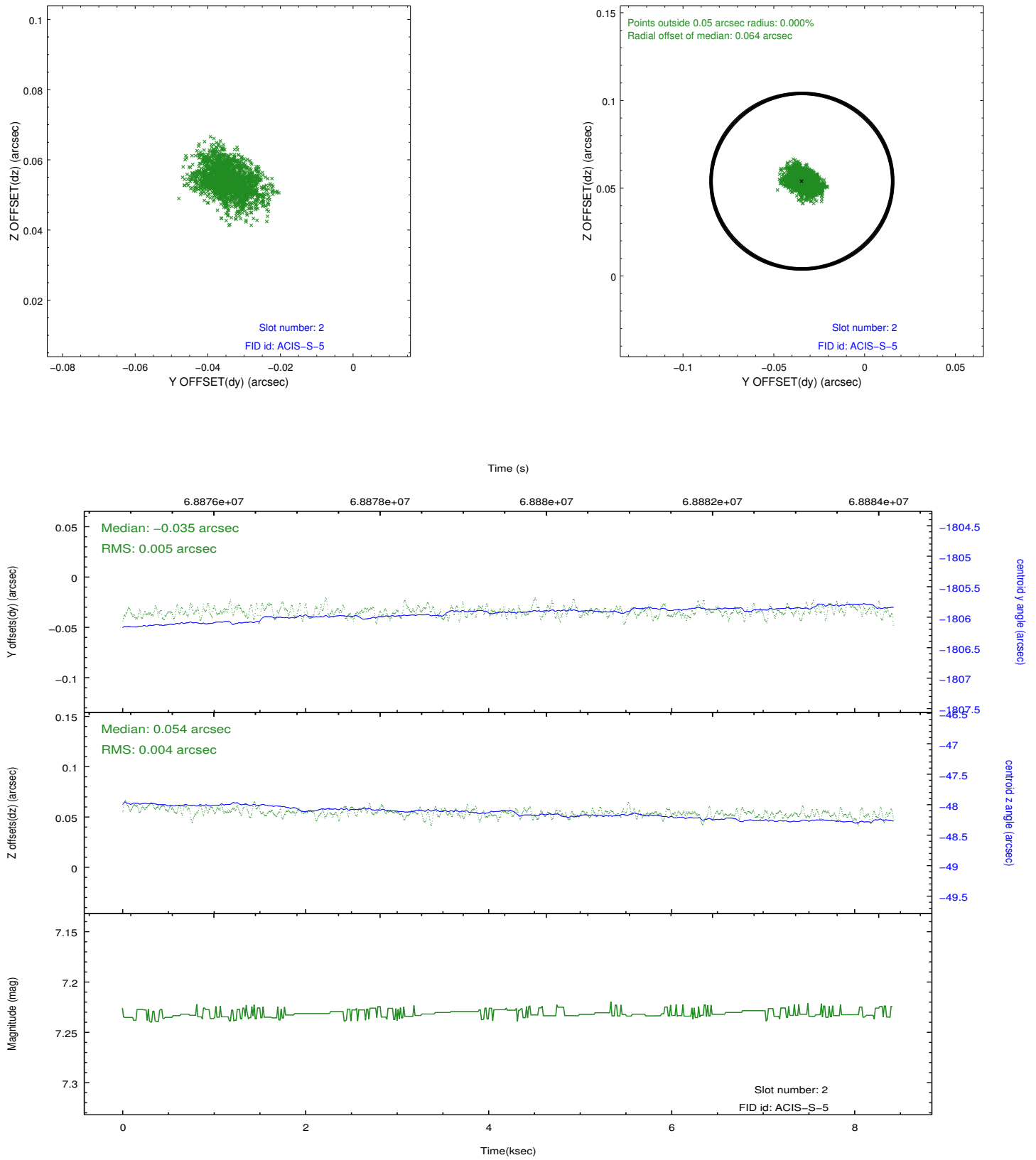
2.5.1 Slot 0



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)	2012.08.27
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	2.361

A.2 Comments

Coordinated with HST. Roll constraint satisfied. Window constraint met. Dither was turned off for this observation. Bad columns in L2 around node boundary clearly seen due to no dither. This is not a problem with the data. Charge time for this ObsId remains at original value of 2.361 ksec, although with the current processing the charge time would have been 1.904 ksec. Events are piled up. The charge time is based on CCD_ID=7 (S3), which had many dropped frames due to telemetry saturation.