

V&V Reference Report

L2 ASCDS Version : 10.4.2.1

Observation 16259 - L2 Version 1
Chandra X-Ray Center

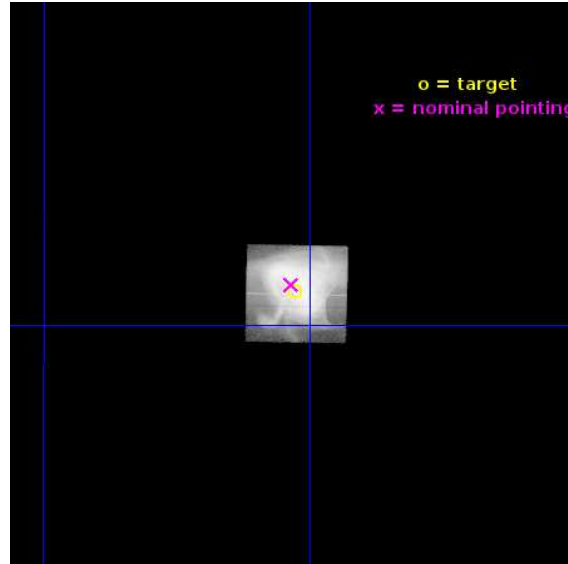
L2 Processing Date : Nov 6 2015

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1 Front

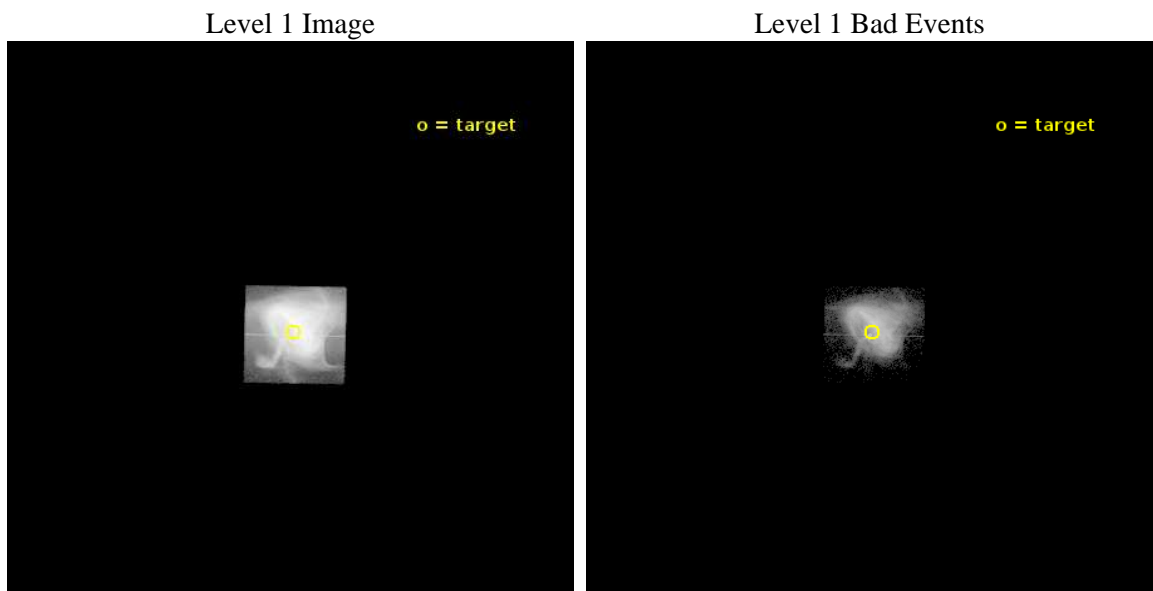
seq_num	502253	Sequence number
obs_id	16259	Observation id
title	Joint Chandra and HST Monitoring and Studies of the Crab Nebula	Pr
observer	Dr. Martin Weisskopf	Principal investigator
object	Crab	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	83.631667	Observer's specified target RA [deg]
dec_targ	22.015667	Observer's specified target Dec [deg]
ra_nom	83.633289763481	Nominal RA [deg]
dec_nom	22.018575633761	Nominal Dec [deg]
roll_nom	91.140219919908	Nominal Roll [deg]
revision	1	Processing version of data
ontime	8774.7025737762	Sum of GTIs [s]
livetime	1439.0420122304	Livetime [s]
ontime7	8774.7025737762	Sum of GTIs [s]
l2events	3571533	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	10132.127000	[s] Scheduled observation exposure time
ascdsver	10.4.2.1	Processing system revision	ontime	8774.7025737762	Sum of GTIs [s]
caldsver	4.6.10a	 	ontime7	8774.7025737762	Sum of GTIs [s]
date	2015-11-06T21:03:25	Date and time of file creation	l1events	3946521	Number of level 1 events
revision	1	Processing version of data			

2.1.3 Events

	ccd 7
level 1 events	3946521
rejected events	349758
rejected %	8%

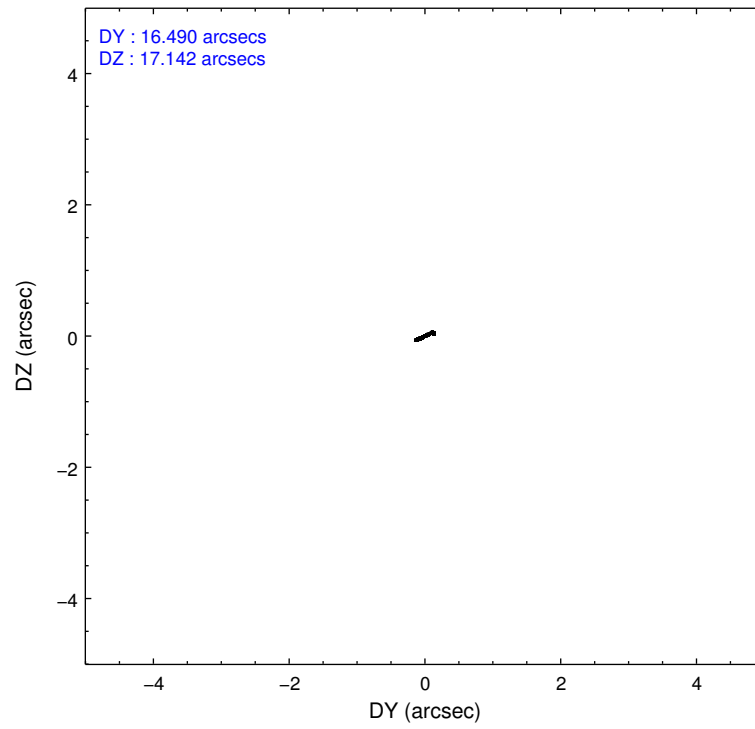
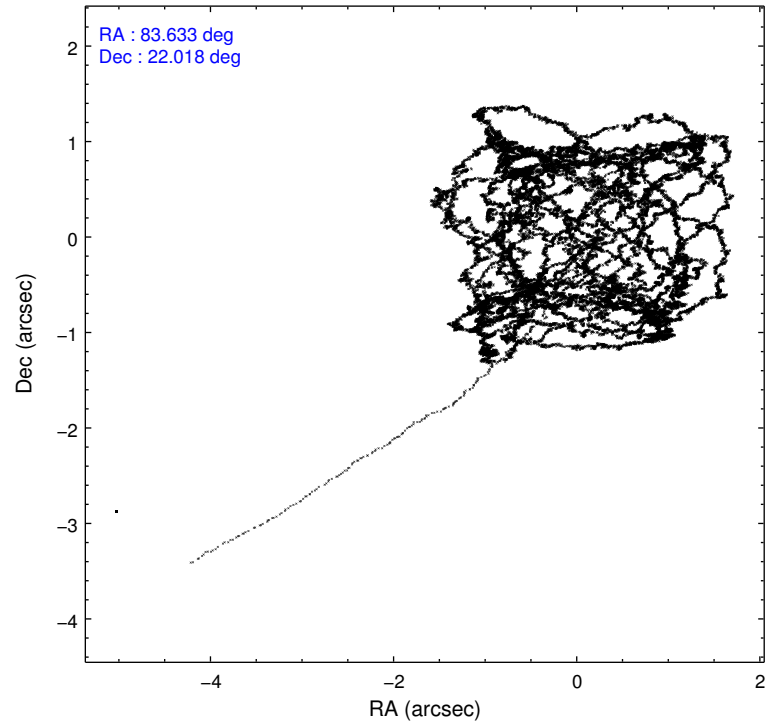
	ccd 7
grade 0 events	751837
	19%
grade 1 events	34392
	0%
grade 2 events	1069570
	27%
grade 3 events	363031
	9%
grade 4 events	360993
	9%
grade 5 events	118825
	3%
grade 6 events	1051879
	26%
grade 7 events	195994
	4%

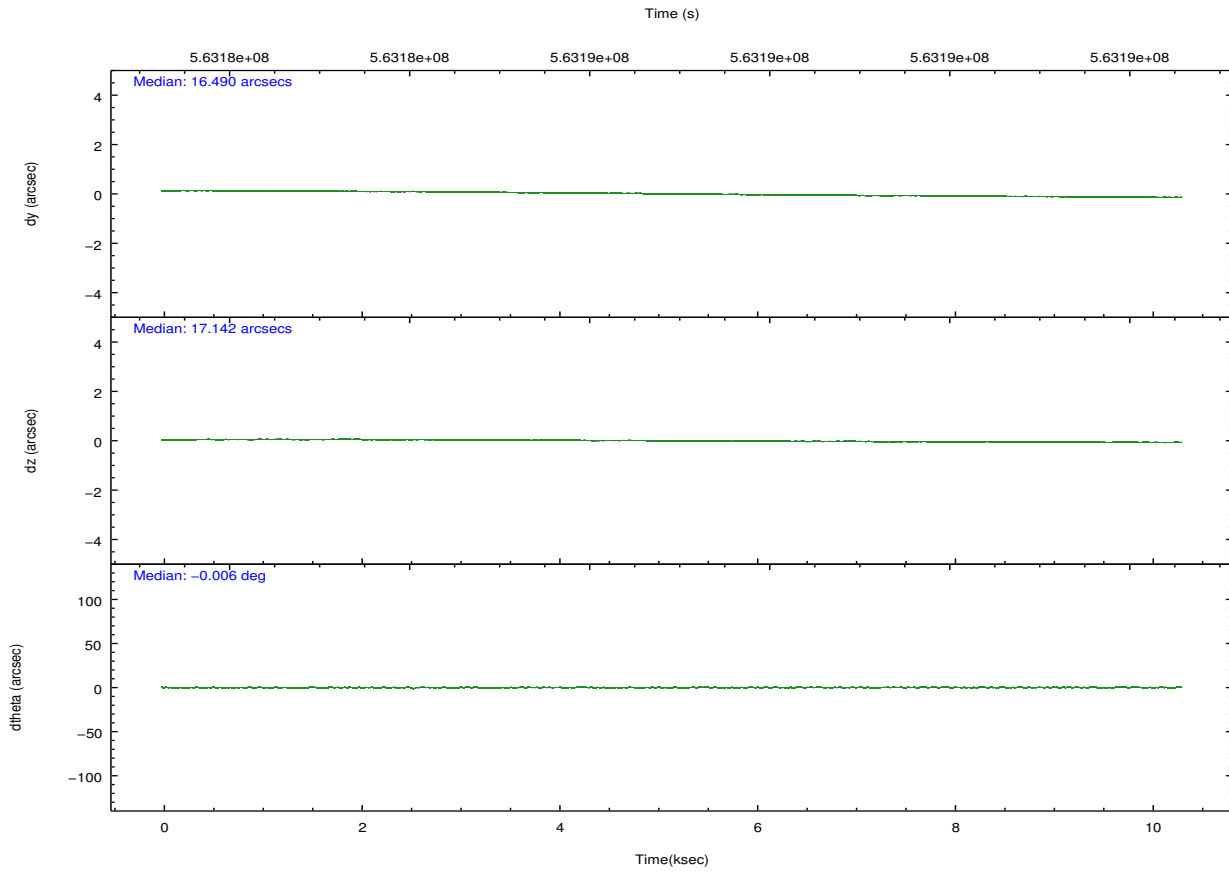
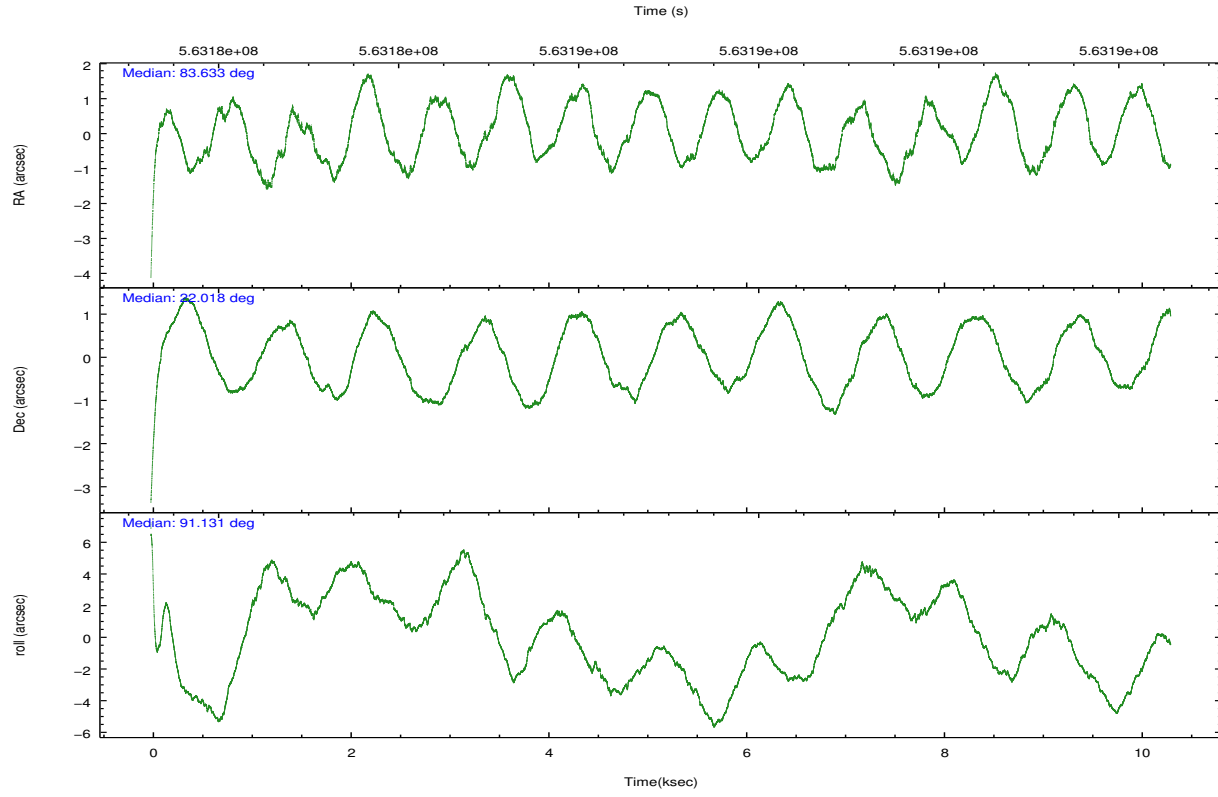
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-7	ACIS-7
Grating	NONE	NONE
Data mode	GRADED	GRADED
Observation mode	POINTING	POINTING
[deg] Pointing RA	83.648943	83.63328976348139
[deg] Pointing Dec	21.995274	22.01857563376135
[deg] Pointing Roll	90.977718	91.14021991990829
[s] Window start time (MET)	562204868.184000	562204868.184000
[s] Window stop time (MET)	563932868.184000	563932868.184000
[mm] SIM focus pos	-0.684267	-0.6828225247311905
[mm] SIM defocus	0	0.001444936568705701
[mm] SIM translation stage pos	-194.552523	-194.545146458205
[mm] SIM translation stage offset	4.42	4.412623875197198
[s] Observation start time (MET)	563181915.184000	563180902.9296
Observation start date	2015-11-06T07:24:07	2015-11-06T07:08:22
[s] Observation end time (MET)	563192048.184000	563192267.10524
Observation end date	2015-11-06T10:13:00	2015-11-06T10:17:47
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	CUSTOM	CUSTOM
Subarray start row	505	505
Subarray row count	320	320
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	0.2

2.3 Aspect



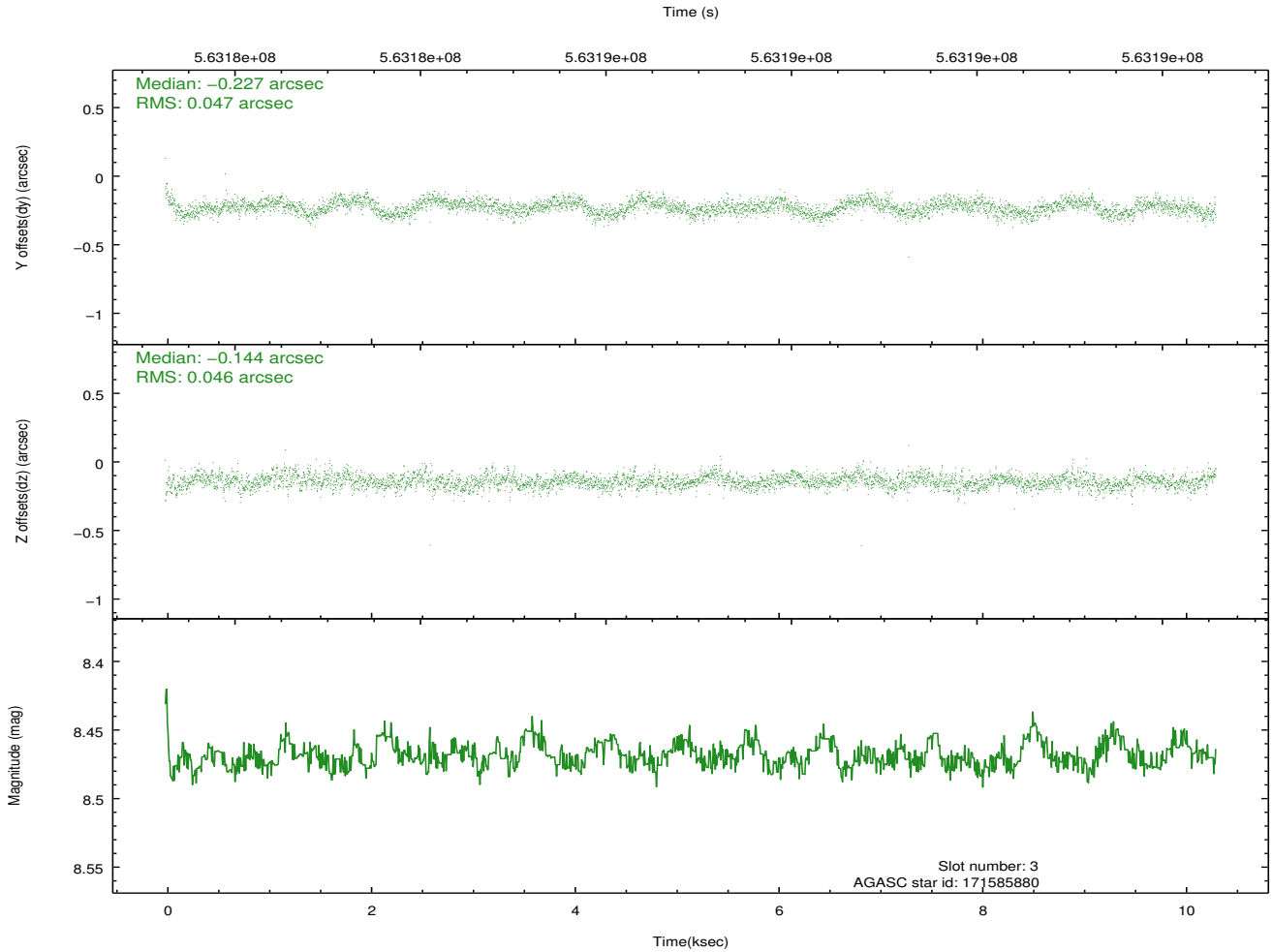
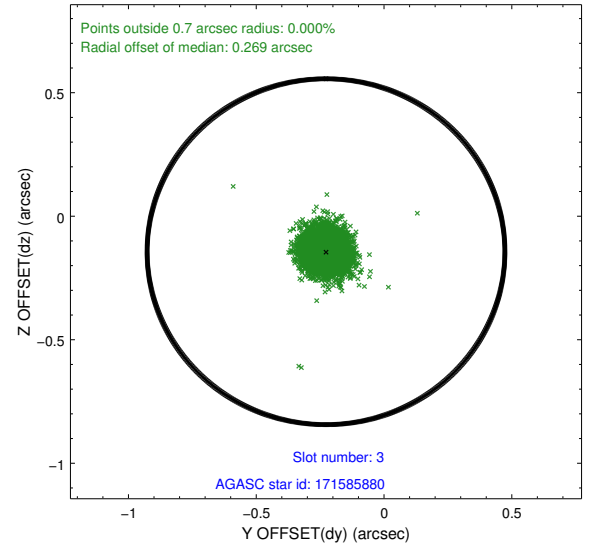
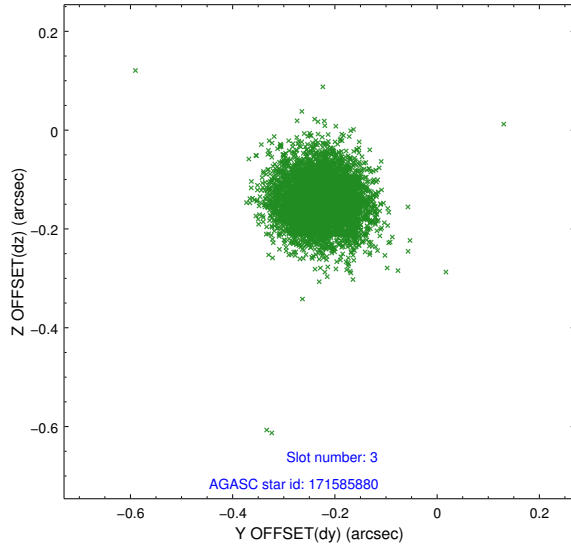


Slot Statistics

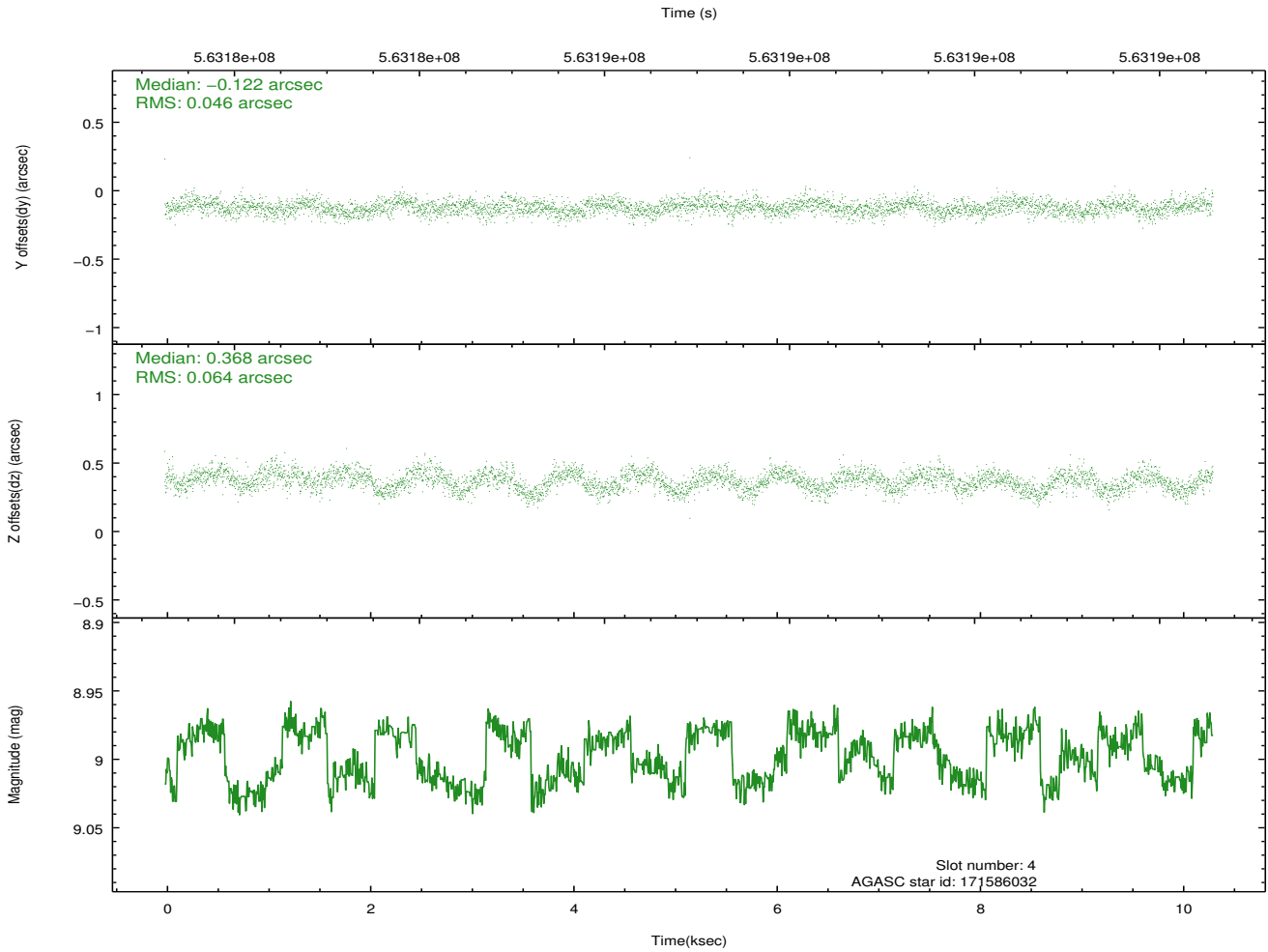
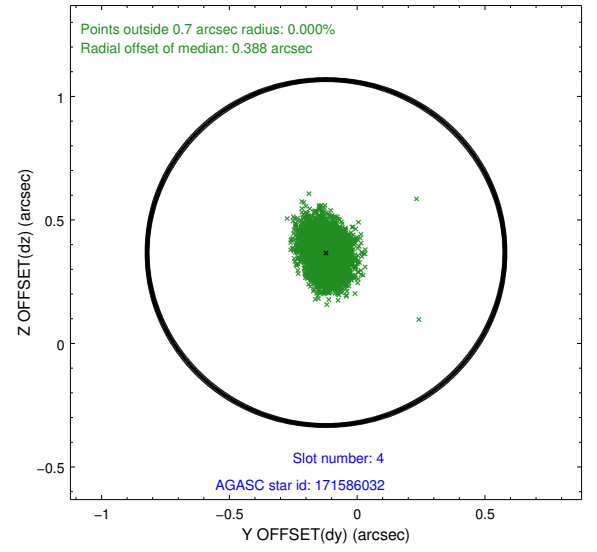
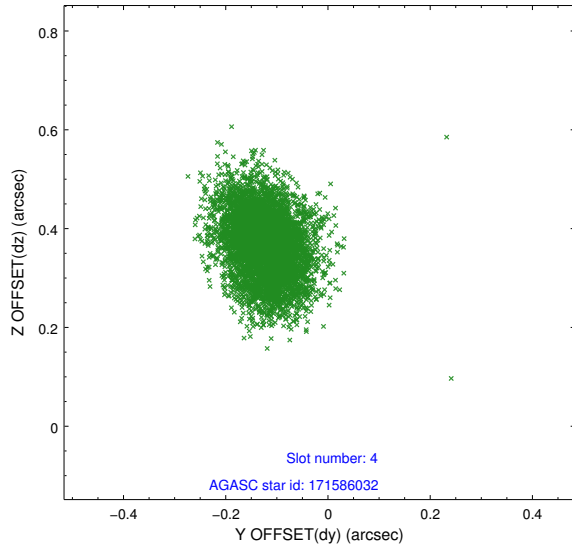
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.16	2516	-0.187	0.015	0.008	0.012	0.000000	0.000000	-769.92	-1647.78
1	FID		ACIS-S-4	7.25	2516	0.371	0.086	0.006	0.010	0.000000	0.000000	2143.63	260.37
2	FID		ACIS-S-5	7.25	2516	-0.216	-0.092	0.007	0.012	0.000000	0.000000	-1822.19	254.33
3	GUIDE	used	171585880	8.47	5028	-0.227	-0.144	0.069	0.111	83.676260	22.176319	650.36	-102.17
4	GUIDE	used	171586032	9.00	5030	-0.122	0.368	0.085	0.137	83.950197	22.083225	301.05	-1009.79
5	GUIDE	used	171597832	9.17	5030	0.217	-0.301	0.103	0.165	83.183230	21.366702	-2233.12	1598.93
6	GUIDE	used	171721904	9.15	5027	-0.126	0.110	0.094	0.152	84.272676	22.116922	406.87	-2086.92
7	GUIDE	used	243941560	8.37	5030	0.263	-0.033	0.073	0.119	83.733264	22.568598	2059.54	-315.36

2.4 Star Slots

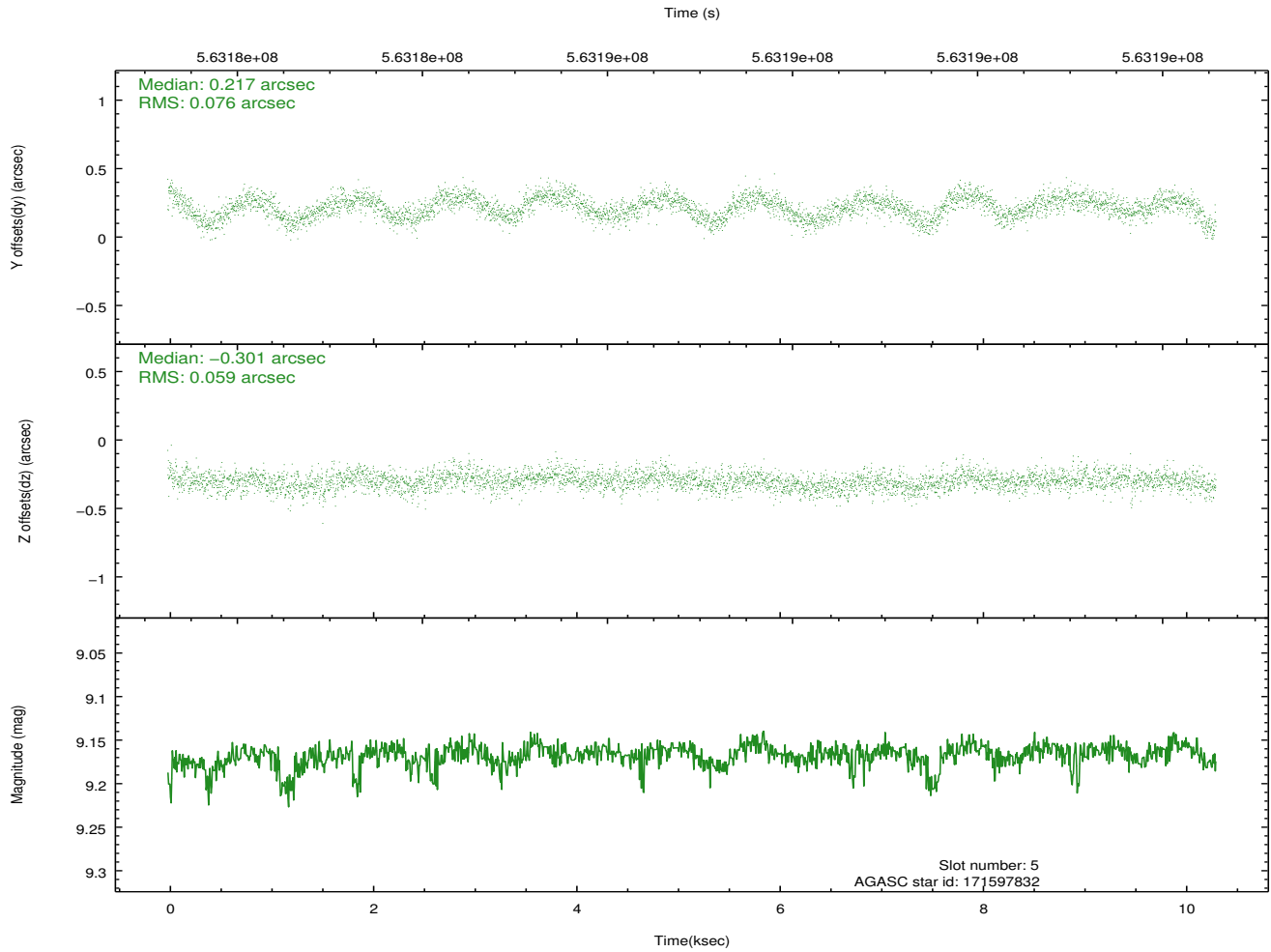
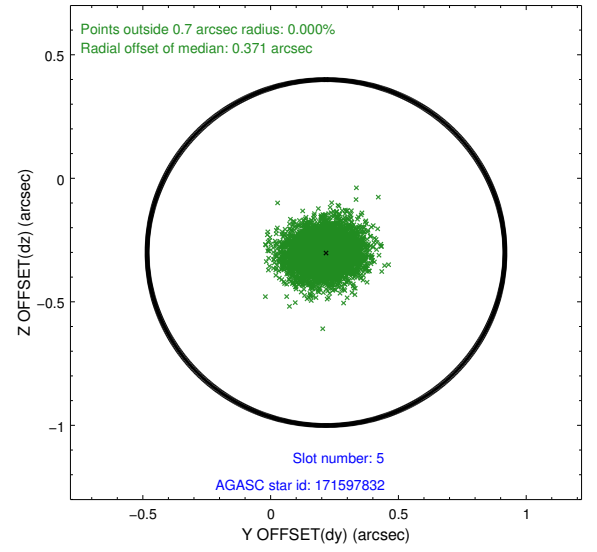
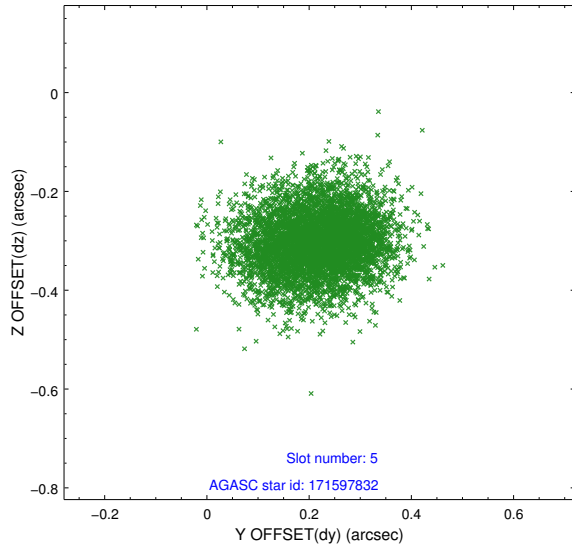
2.4.1 Slot 3



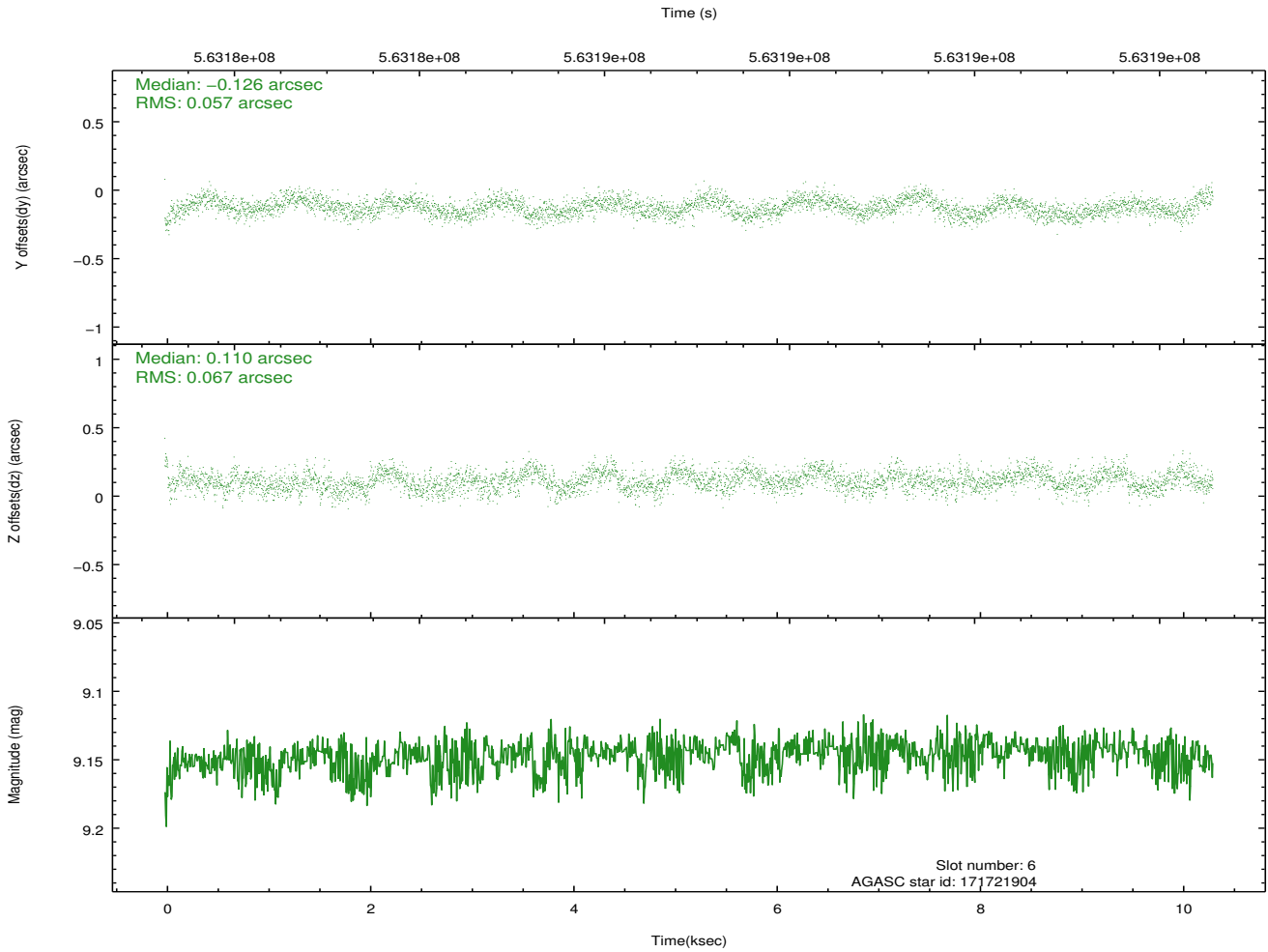
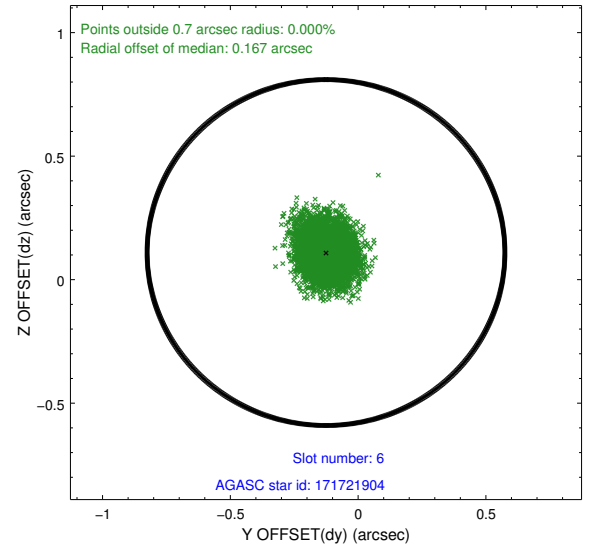
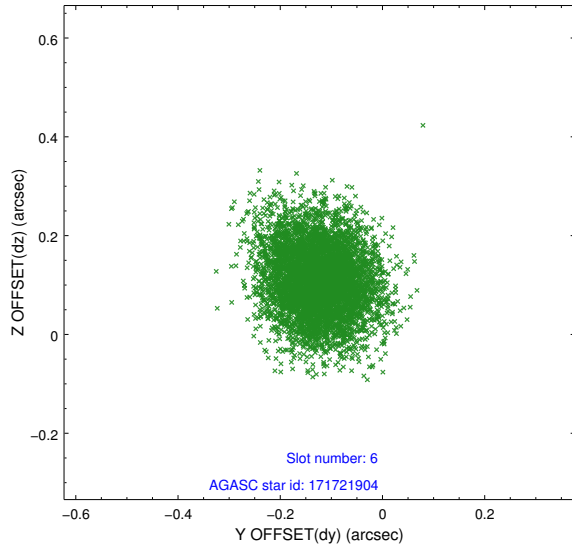
2.4.2 Slot 4



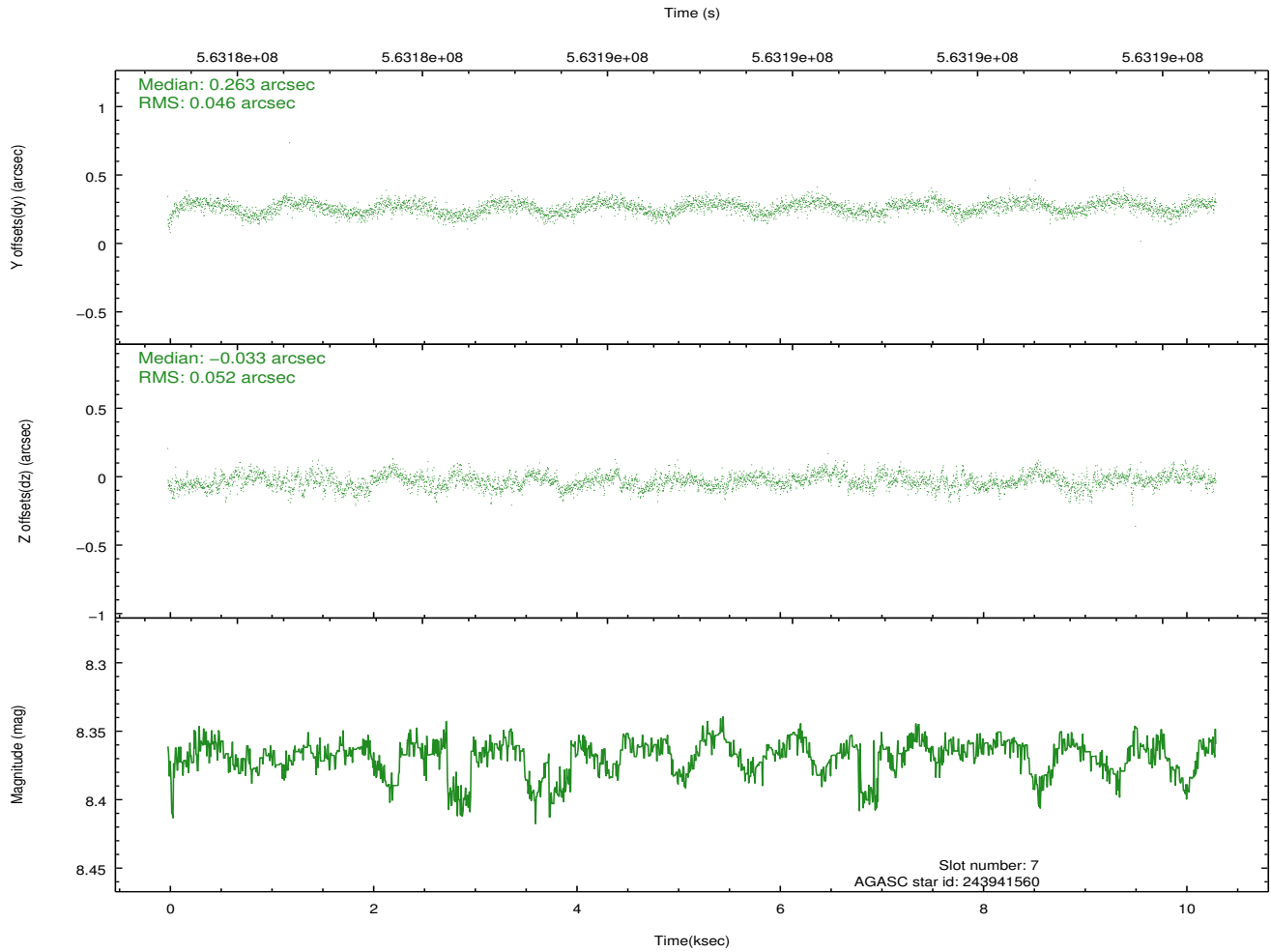
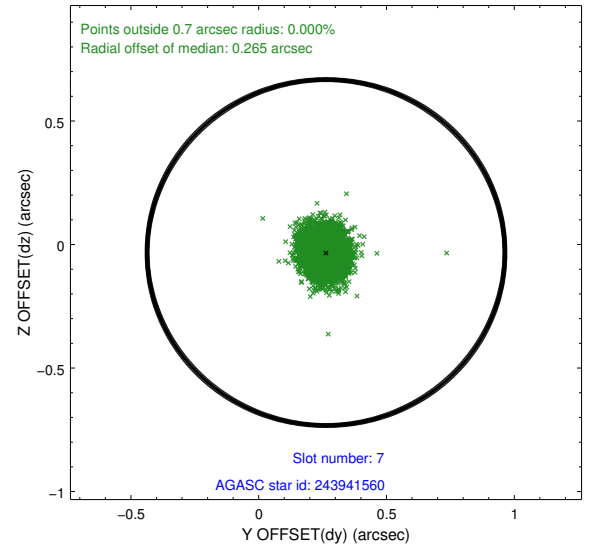
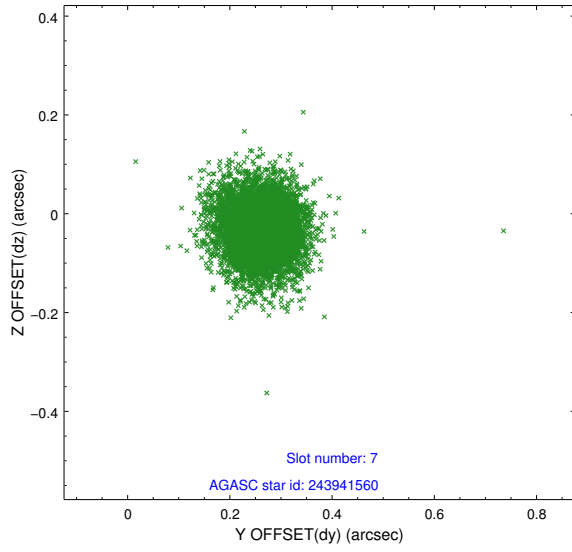
2.4.3 Slot 5



2.4.4 Slot 6

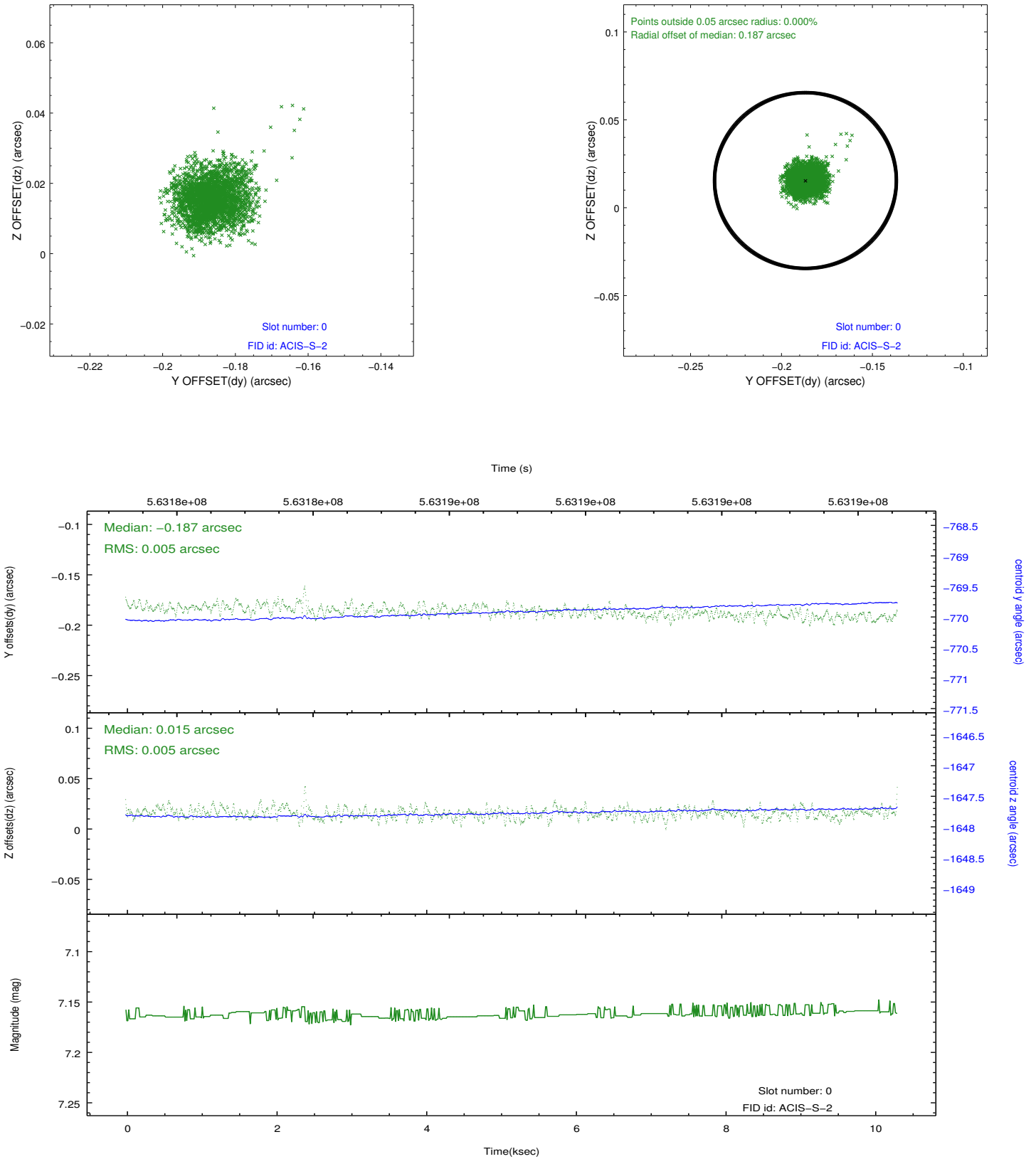


2.4.5 Slot 7

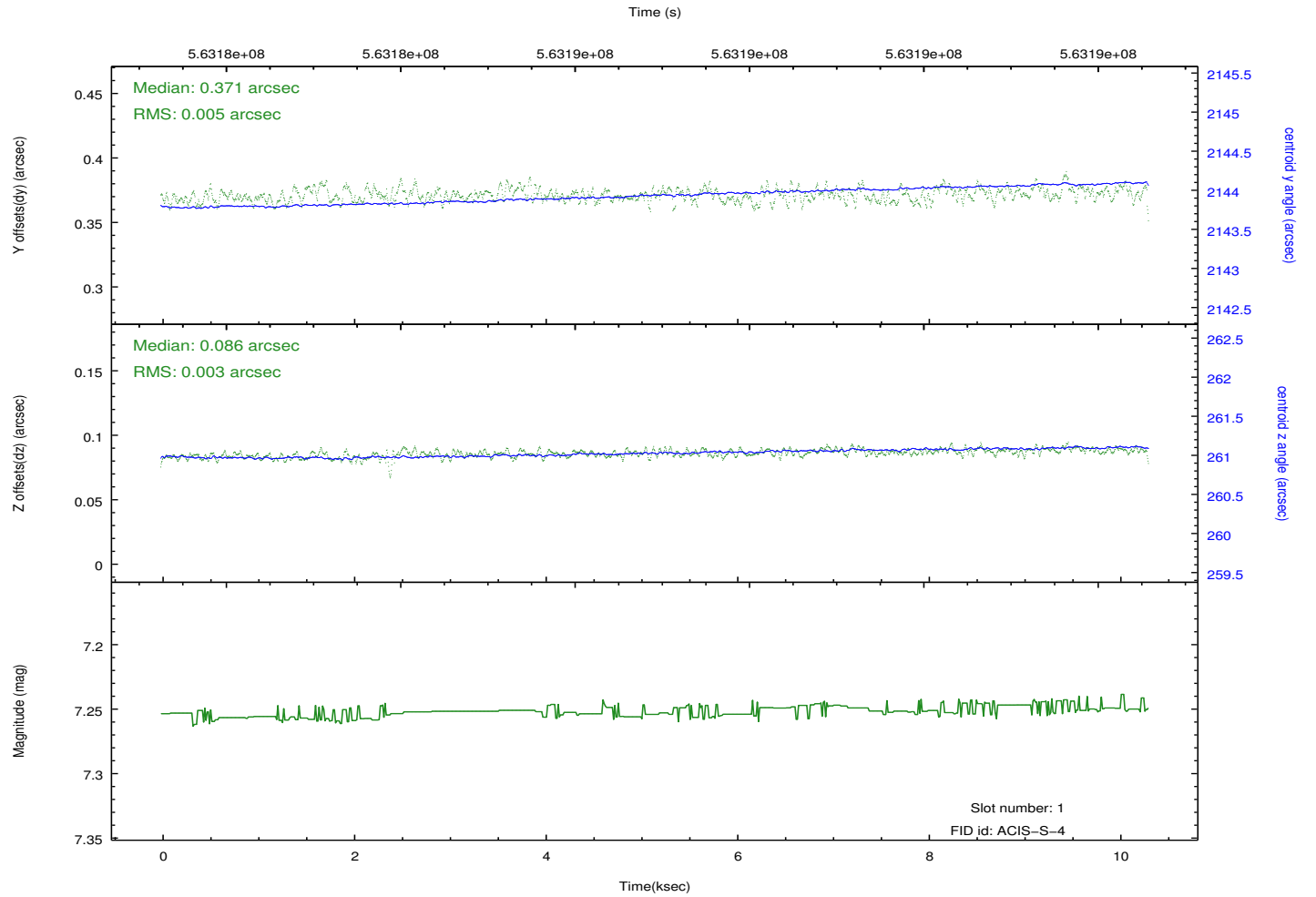
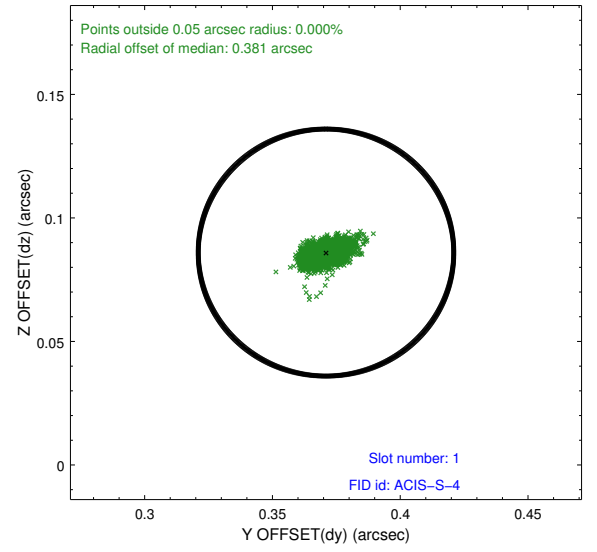
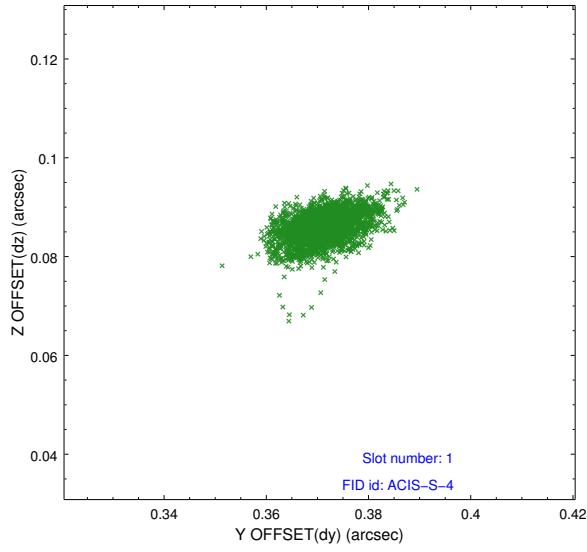


2.5 FID Slots

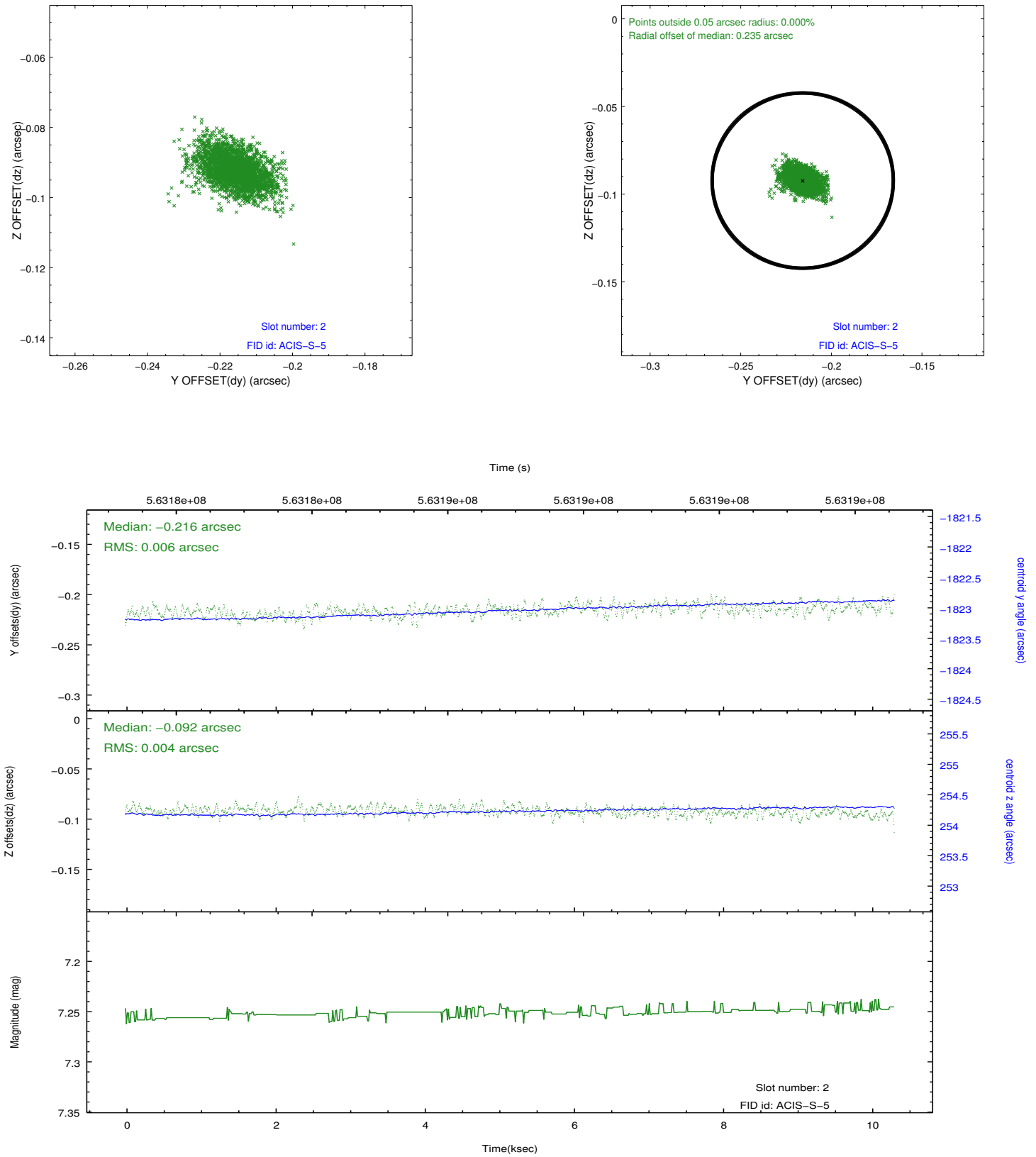
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2015.11.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10

A.2 Comments

The high count rate resulted in telemetry saturation and a large number of dropped exposures. The ONTIME value reflects the lost exposure time.

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Charge time for this ObsId remains at scheduled time of 10.00 ksec, although with consideration of telemetry saturation the charge time would have been 8.7747 ksec.

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Non-standard dither used: 1 arcsec x 1 arcsec.