

V&V Reference Report

L2 ASCDS Version : 10.5

Observation 16365 - L2 Version 1
Chandra X-Ray Center

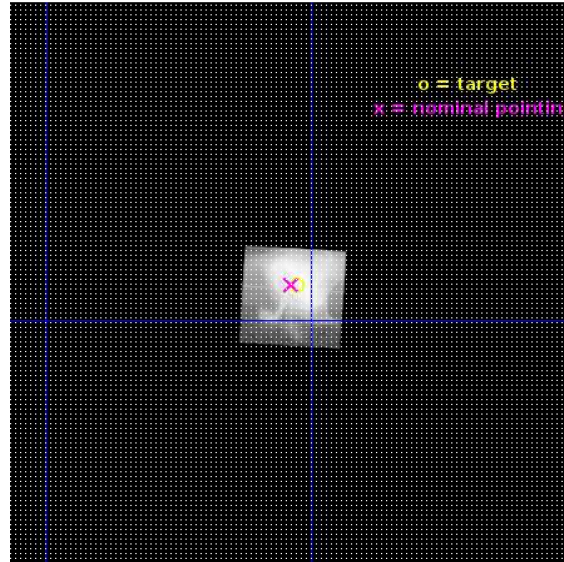
L2 Processing Date : Aug 15 2016

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Parameters	4
2.1.3	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
A	Summary	17
A.1	Status	17
A.2	Comments	17

1 Front

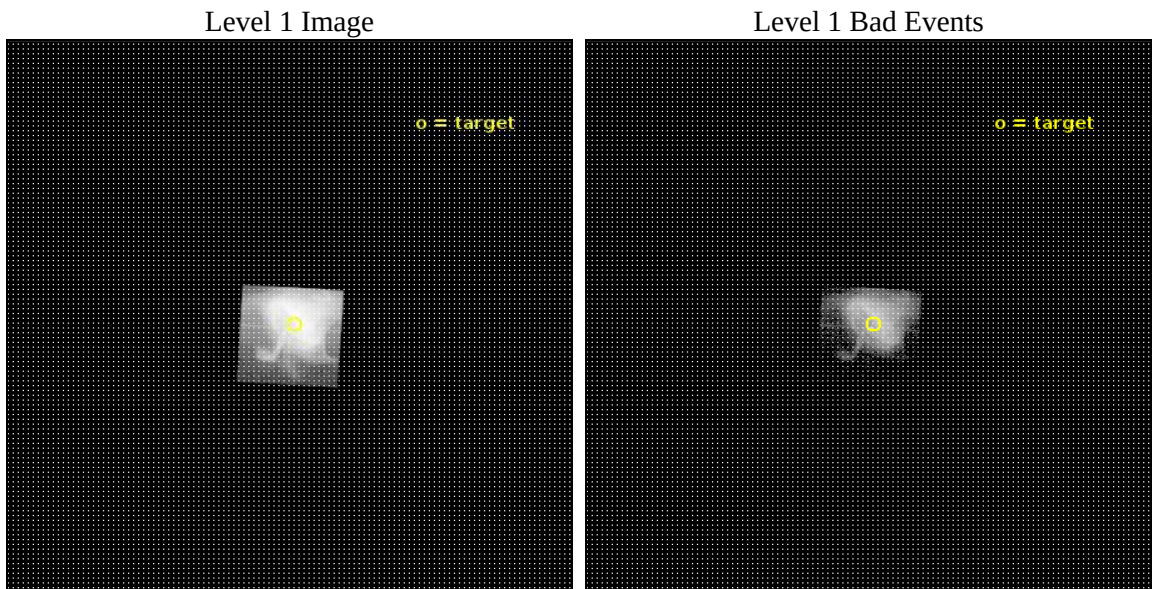
seq_num	502263	Sequence number
obs_id	16365	Observation id
title	Joint Chandra and HST Monitoring and Studies of the Crab Nebula	Pr
observer	Dr. Martin Weisskopf	Principal investigator
object	Crab	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	83.631667	Observer's specified target RA [deg]
dec_targ	22.015667	Observer's specified target Dec [deg]
ra_nom	83.63434017455	Nominal RA [deg]
dec_nom	22.016143895146	Nominal Dec [deg]
roll_nom	93.461343884329	Nominal Roll [deg]
revision	1	Processing version of data
ontime	9243.3391273022	Sum of GTIs [s]
livetime	1514.4077474445	Livetime [s]
ontime7	9243.3391273022	Sum of GTIs [s]
l2events	3516116	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	10000.000000	[s] Scheduled observation exposure time
ascdsver	10.5	Processing system revision	ontime	9243.3391273022	Sum of GTIs [s]
caldsver	4.7.2	 	ontime7	9243.3391273022	Sum of GTIs [s]
date	2016-08-15T12:08:21	Date and time of file creation	l1events	3888711	Number of level 1 events
revision	1	Processing version of data			

2.1.3 Events

	ccd 7
level 1 events	3888711
rejected events	361782
rejected %	9%

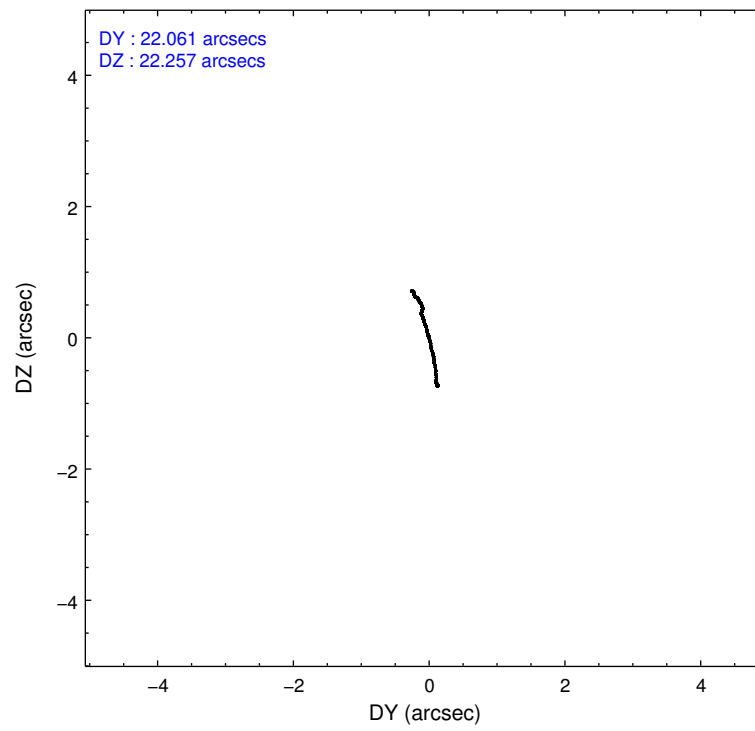
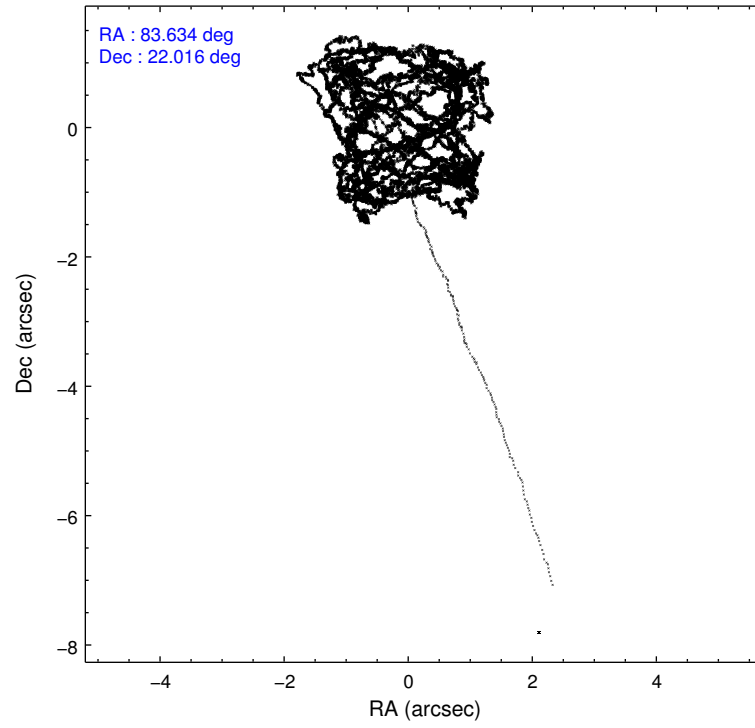
	ccd 7
grade 0 events	689278
	17%
grade 1 events	31115
	0%
grade 2 events	1076777
	27%
grade 3 events	338298
	8%
grade 4 events	338656
	8%
grade 5 events	116419
	2%
grade 6 events	1084397
	27%
grade 7 events	213771
	5%

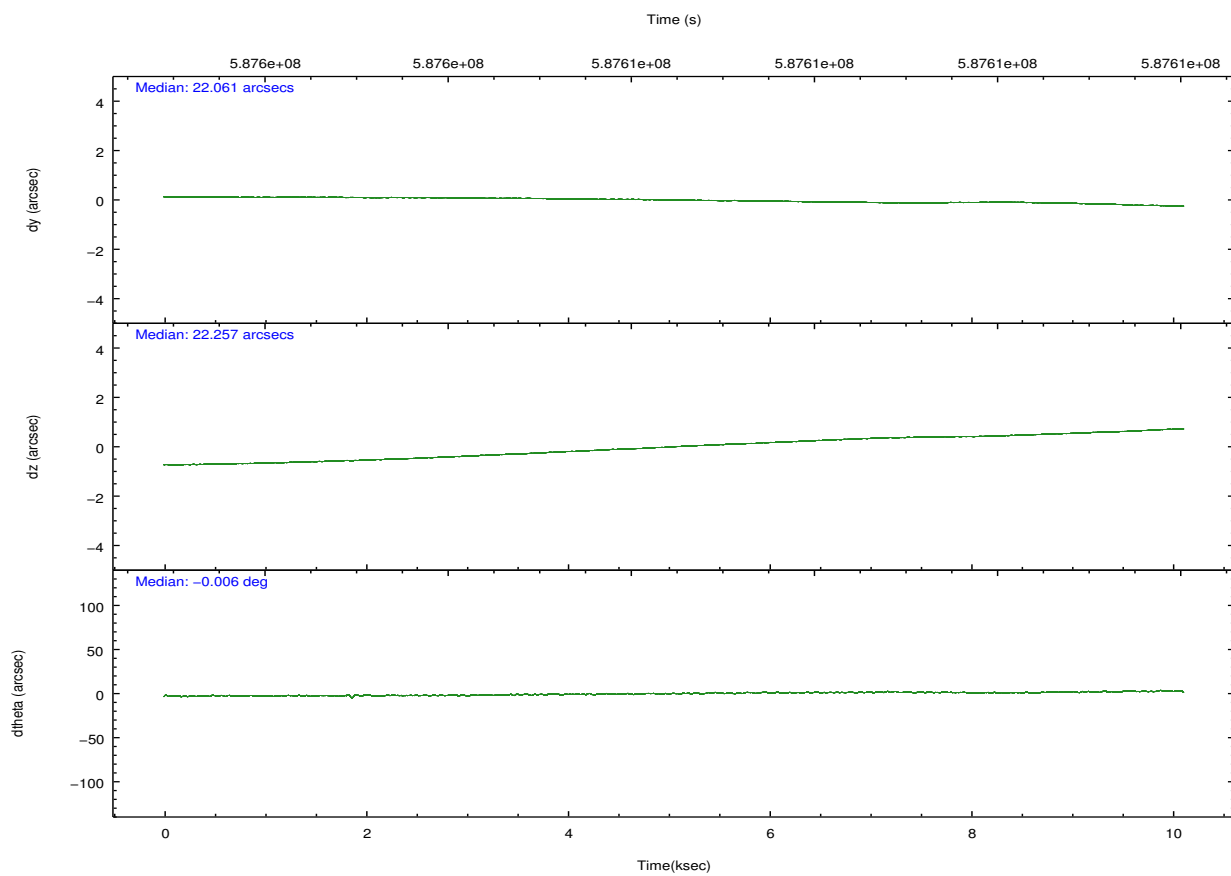
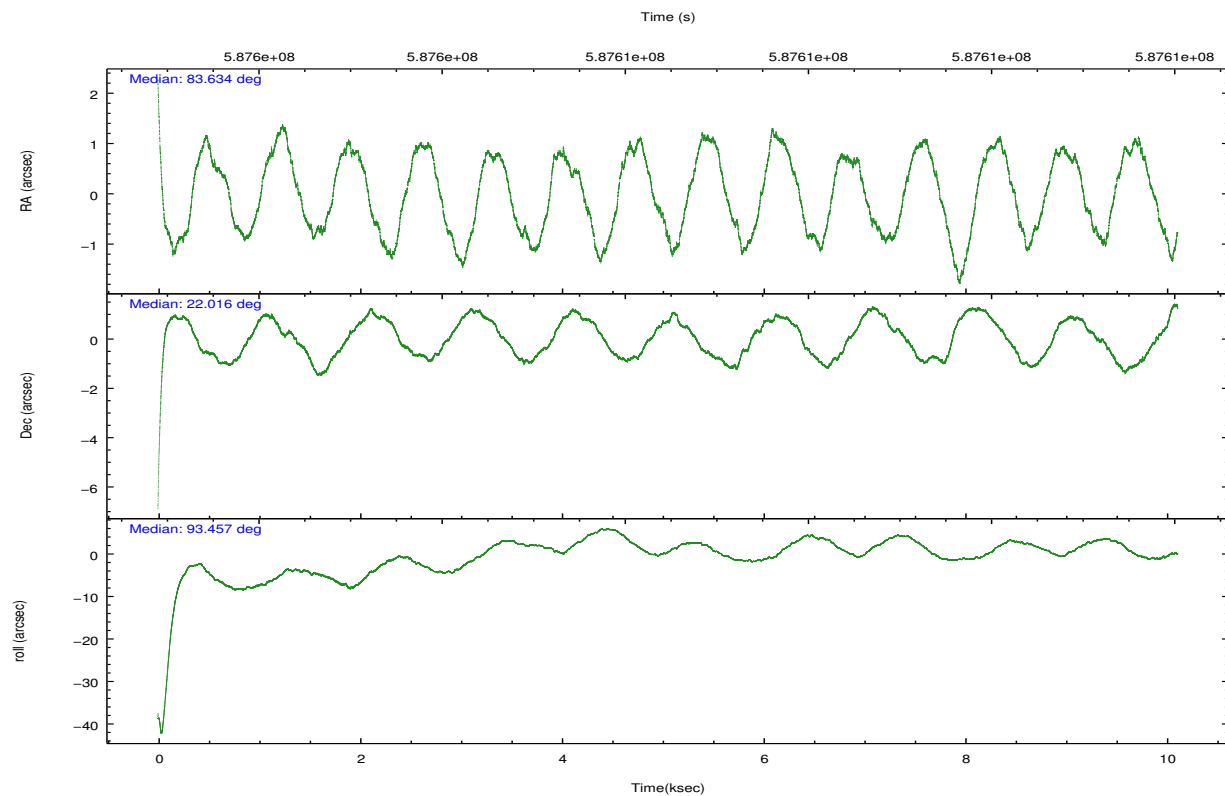
2.2 Compared Parameters

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	83.650989	83.63434017454964
[deg] Pointing Dec	21.993453	22.01614389514587
[deg] Pointing Roll	93.298512	93.4613438843287
[s] Window start time (MET)	586742468.184000	586742468.184000
[s] Window stop time (MET)	588470468.184000	588470468.184000
[mm] SIM focus pos	-0.684267	-0.6828225247311905
[mm] SIM defocus	0	0.001444936568705701
[mm] SIM translation stage pos	-195.272523	-195.2692692650543
[mm] SIM translation stage offset	5.14	5.136746682046464
[s] Observation start time (MET)	587601508.184000	587600310.53309
Observation start date	2016-08-14T22:37:20	2016-08-14T22:18:30
[s] Observation end time (MET)	587611508.184000	587612338.3962801
Observation end date	2016-08-15T01:24:00	2016-08-15T01:38:58
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	535	535
Subarray row count	320	320
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	0.2

2.3 Aspect



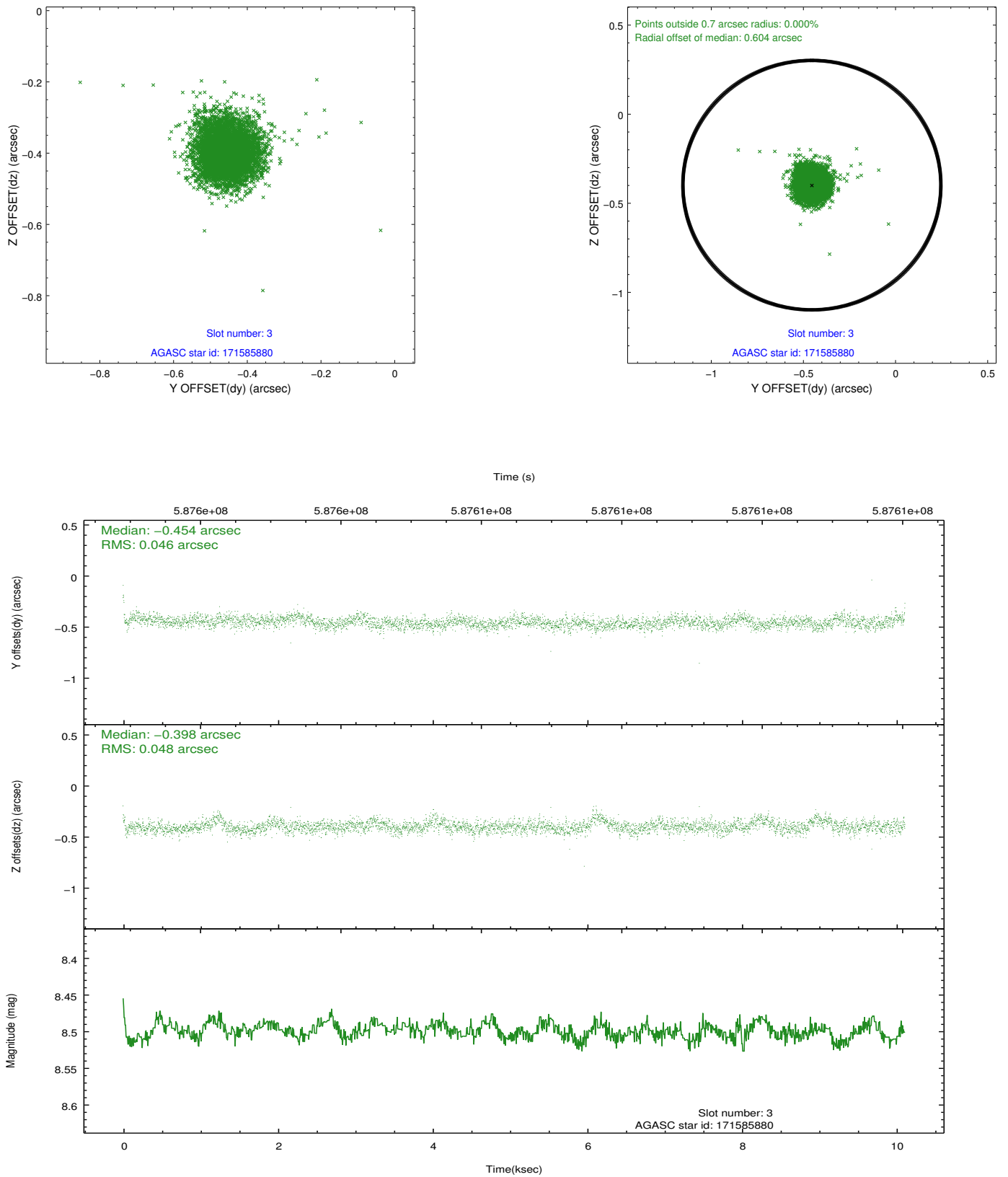


Slot Statistics

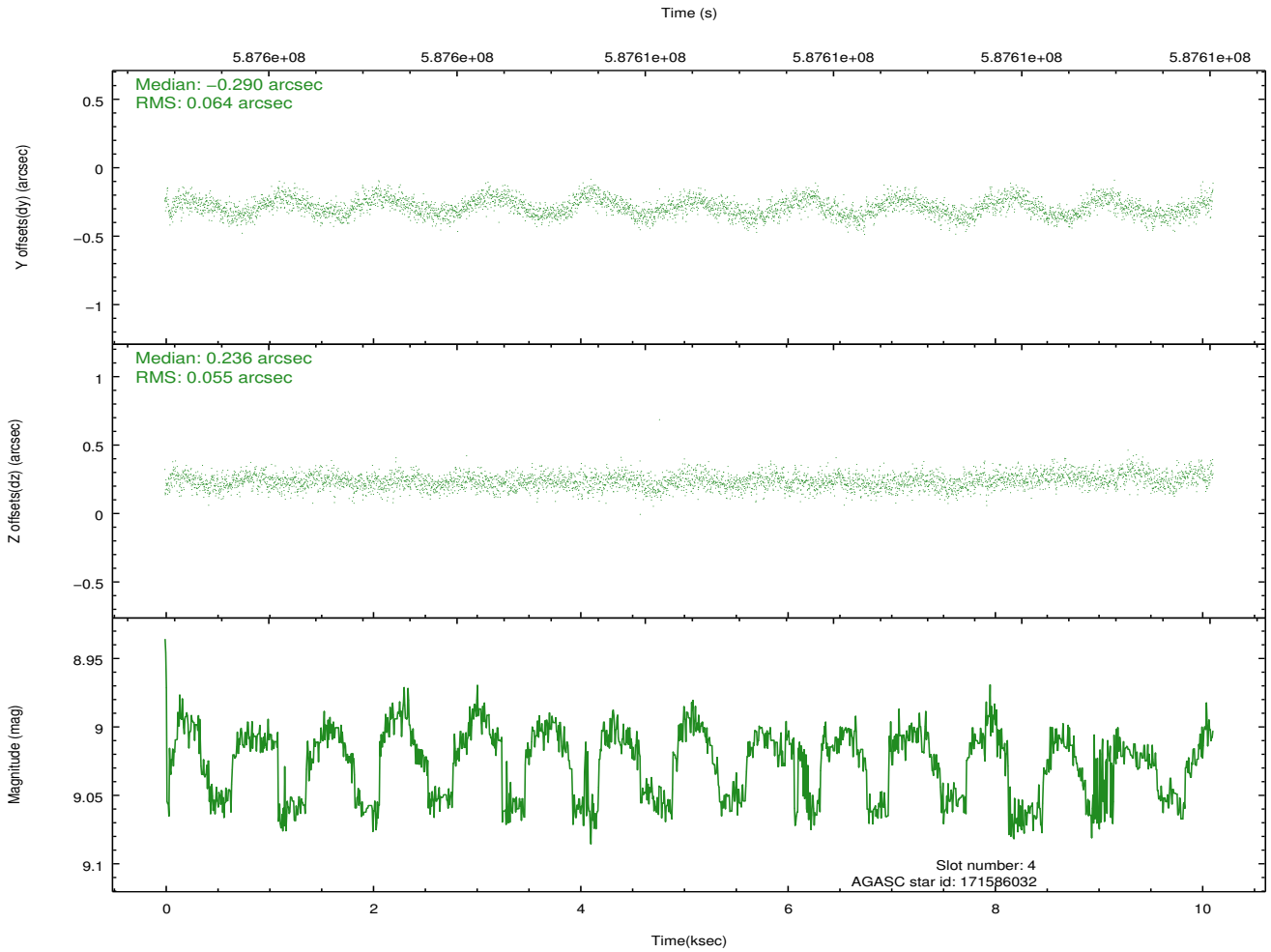
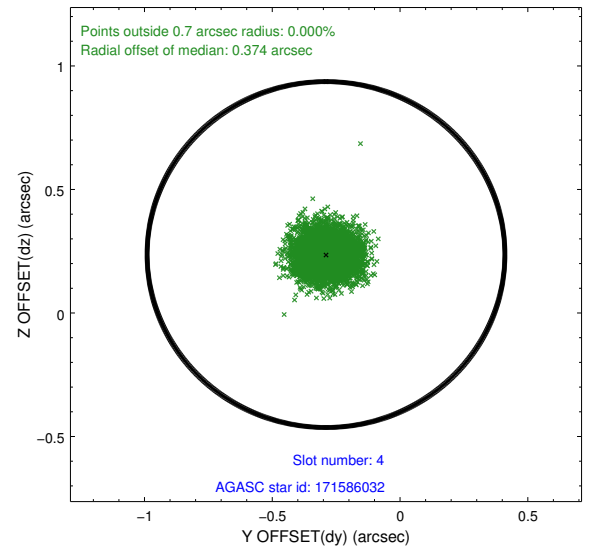
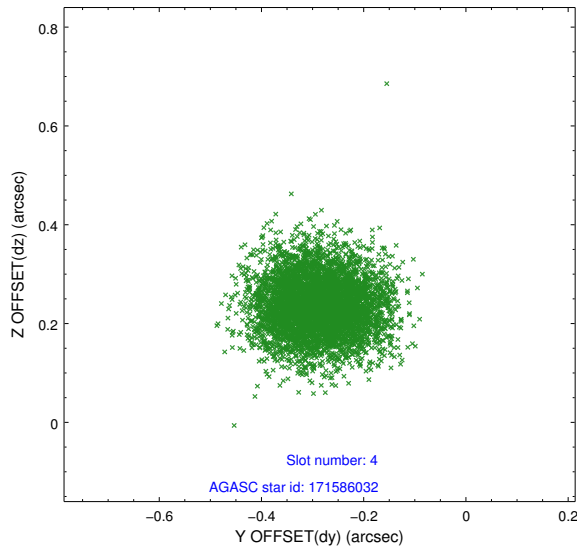
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.15	2467	-0.212	0.014	0.013	0.019	0.000000	0.000000	-775.68	-1638.08
1	FID		ACIS-S-4	7.26	2467	0.541	0.099	0.015	0.024	0.000000	0.000000	2138.04	270.11
2	FID		ACIS-S-5	7.26	2467	-0.360	-0.104	0.011	0.017	0.000000	0.000000	-1828.07	264.02
3	GUIDE	used	171585880	8.50	4931	-0.454	-0.398	0.068	0.113	83.676260	22.176319	652.27	-122.08
4	GUIDE	used	171586032	9.02	4929	-0.290	0.236	0.090	0.145	83.950197	22.083225	266.44	-1014.64
5	GUIDE	used	171597832	9.24	4932	0.178	-0.315	0.107	0.183	83.183230	21.366702	-2159.59	1694.94
6	GUIDE	used	171721904	9.16	4924	0.545	1.122	0.143	0.241	84.272676	22.116922	329.27	-2094.02
7	GUIDE	used	243941560	8.34	4933	0.027	-0.650	0.075	0.120	83.733264	22.568598	2051.61	-392.64

2.4 Star Slots

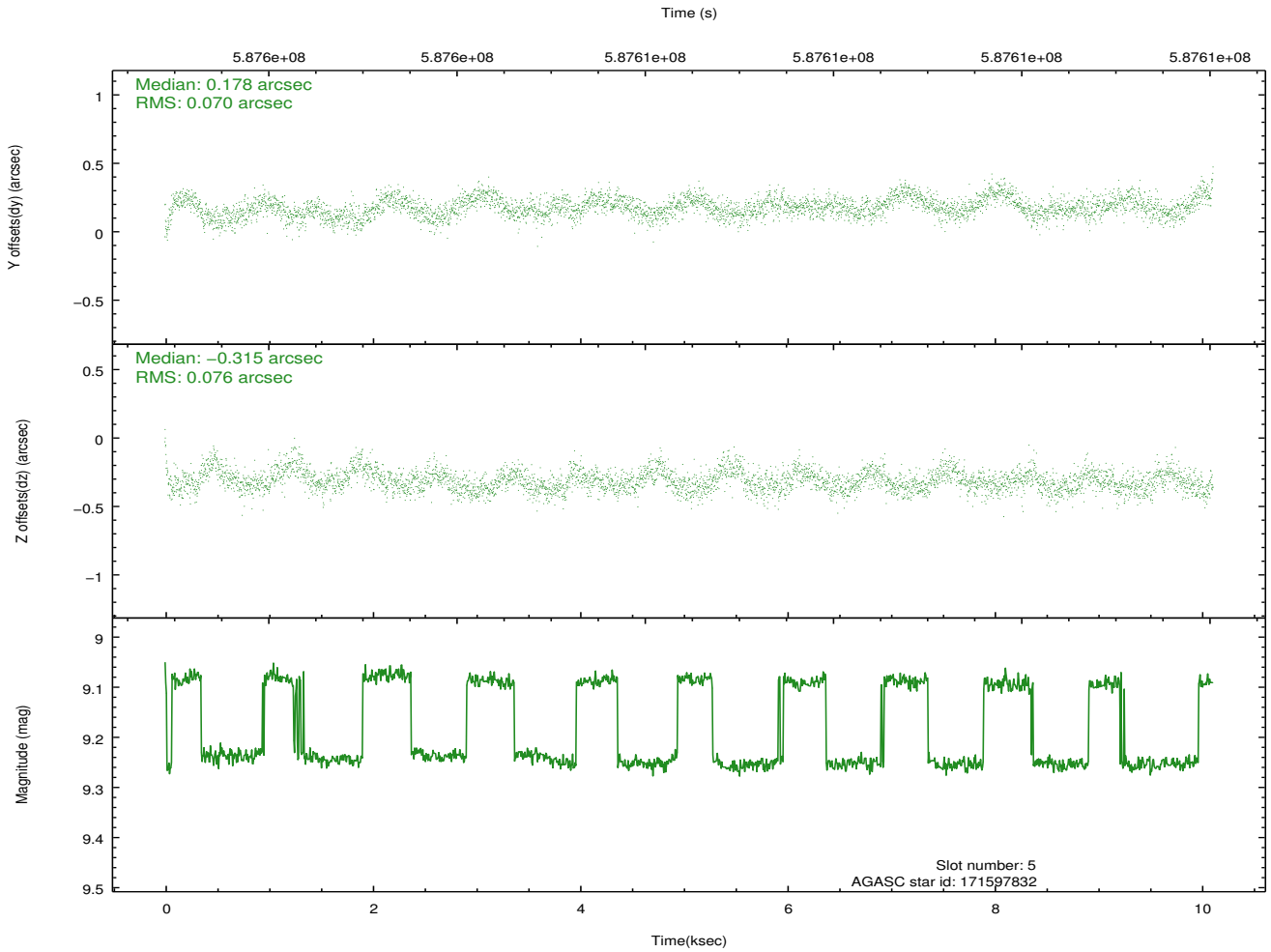
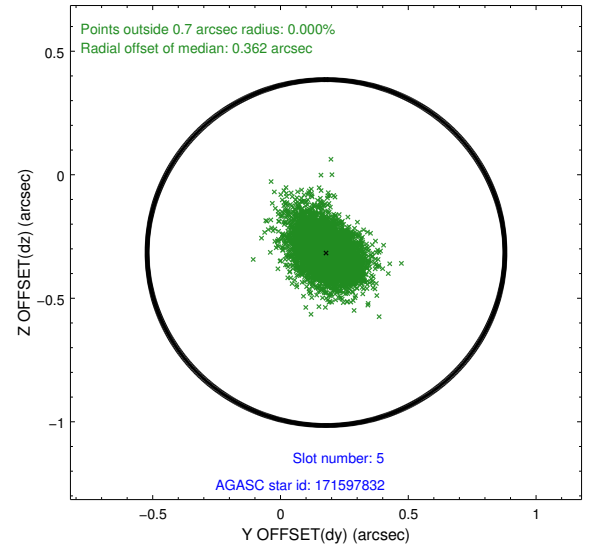
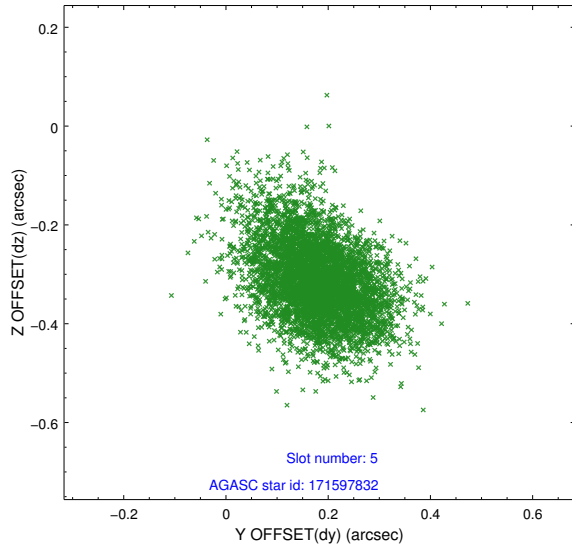
2.4.1 Slot 3



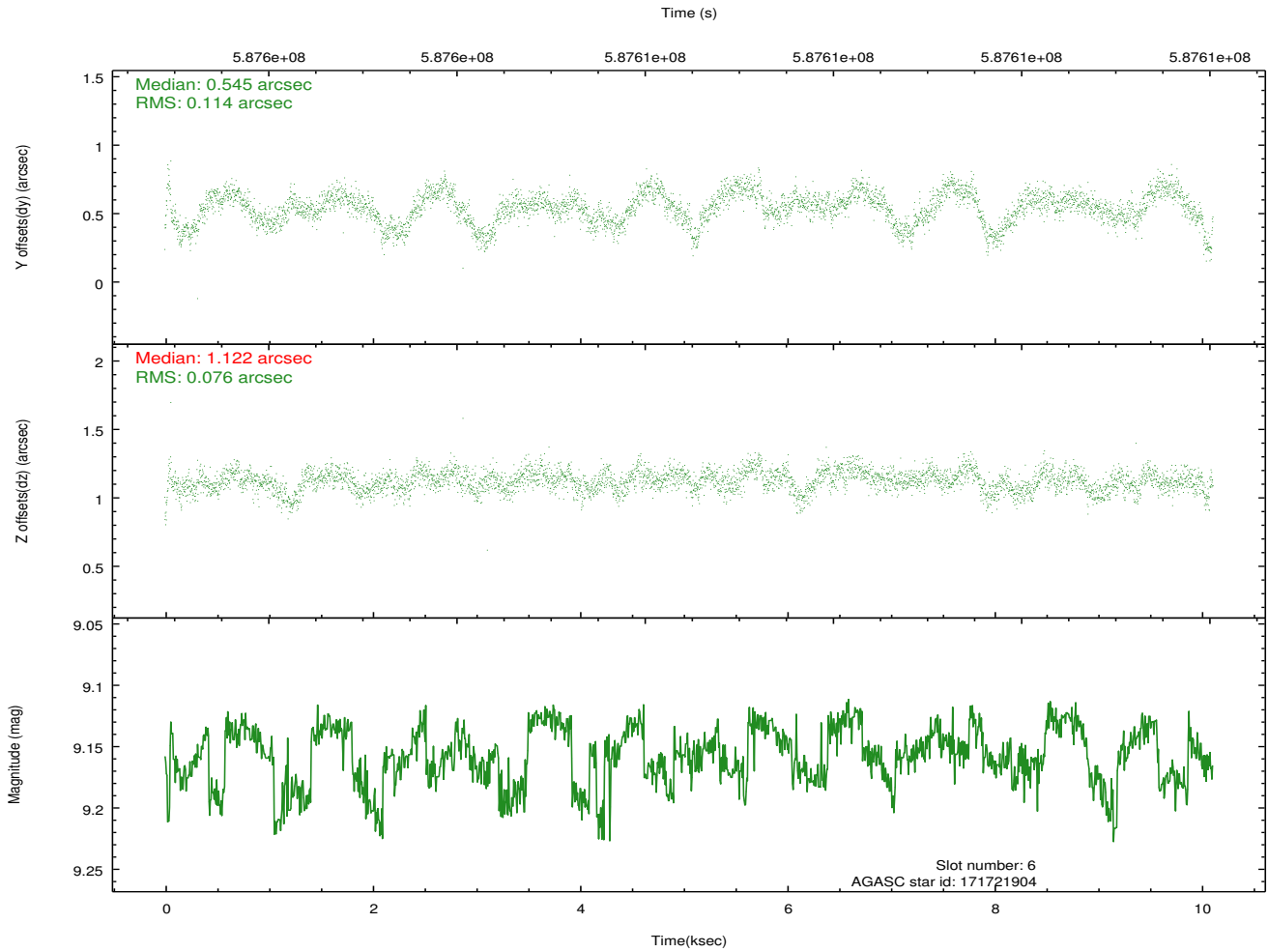
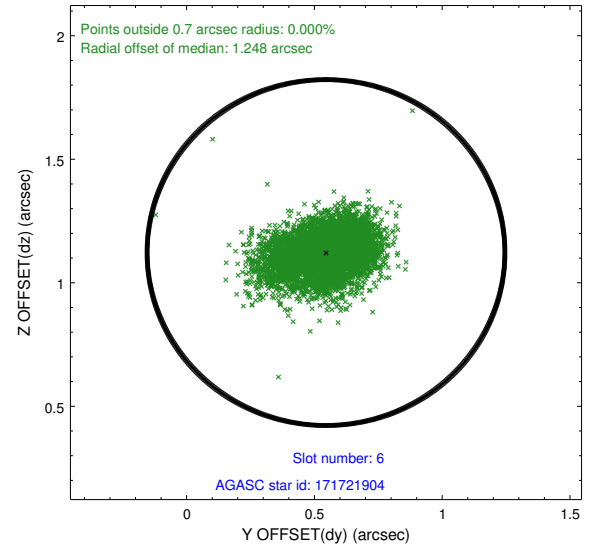
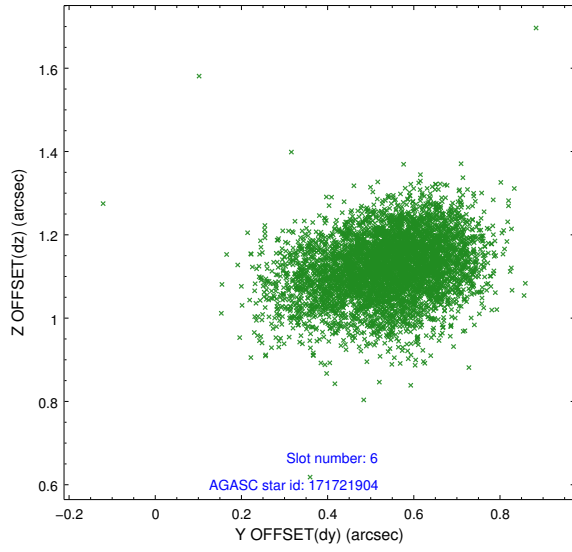
2.4.2 Slot 4



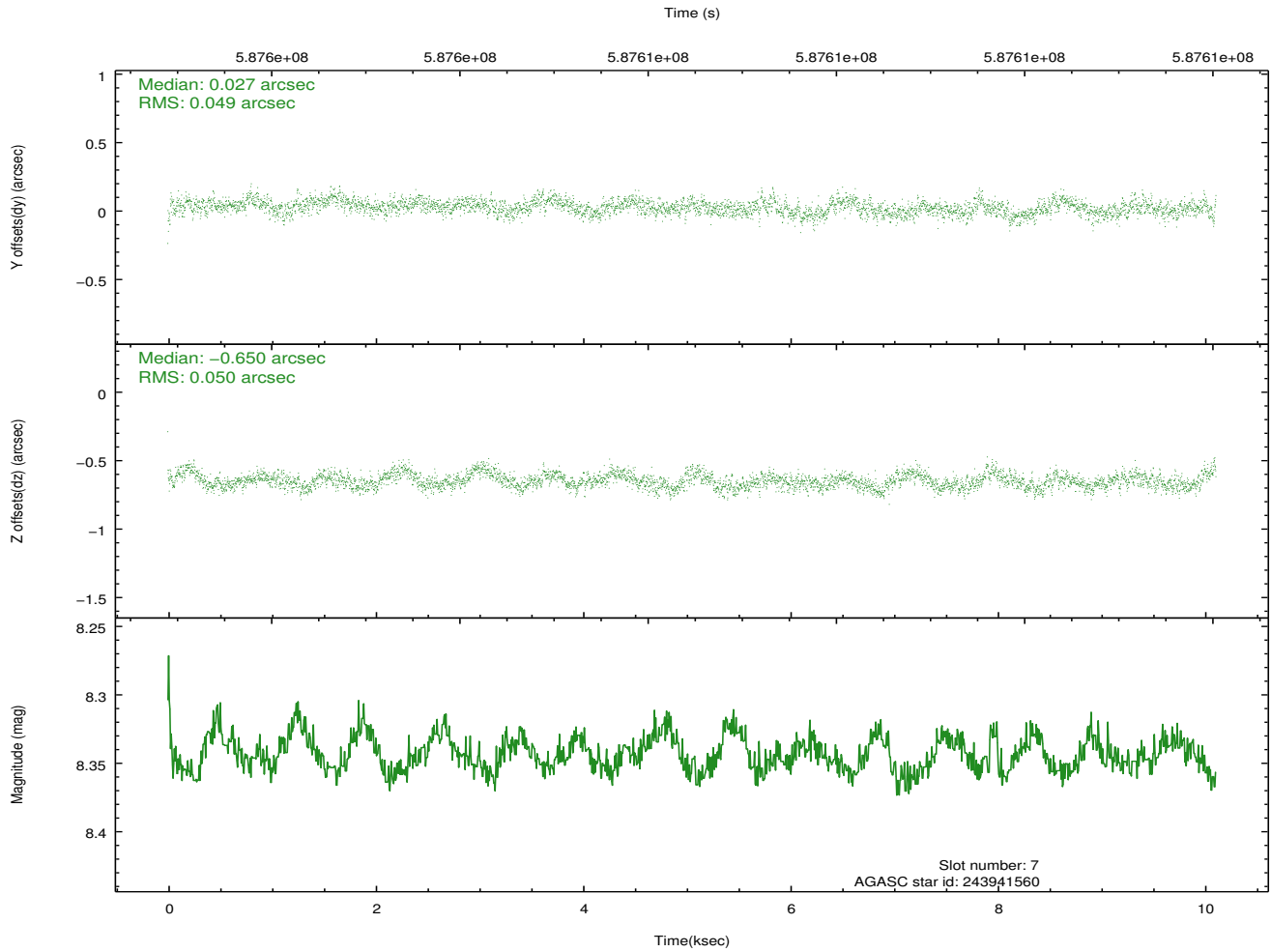
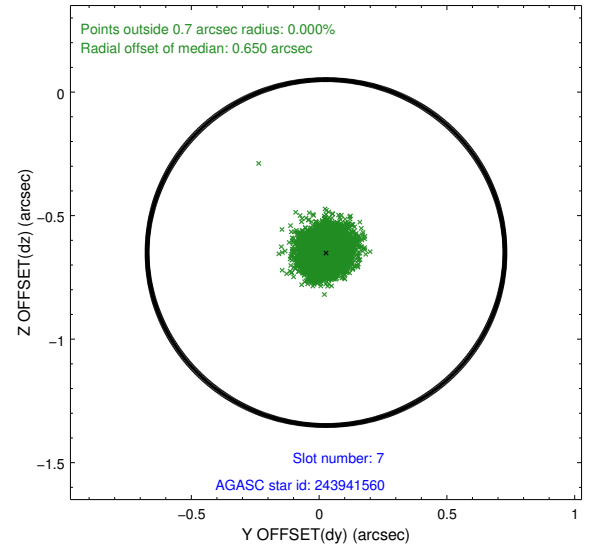
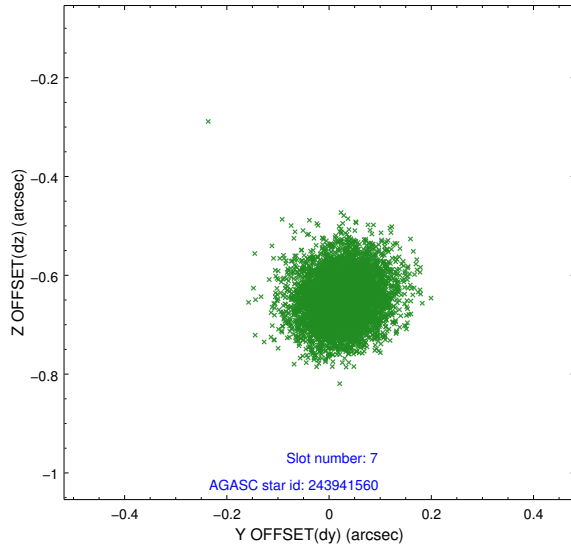
2.4.3 Slot 5



2.4.4 Slot 6

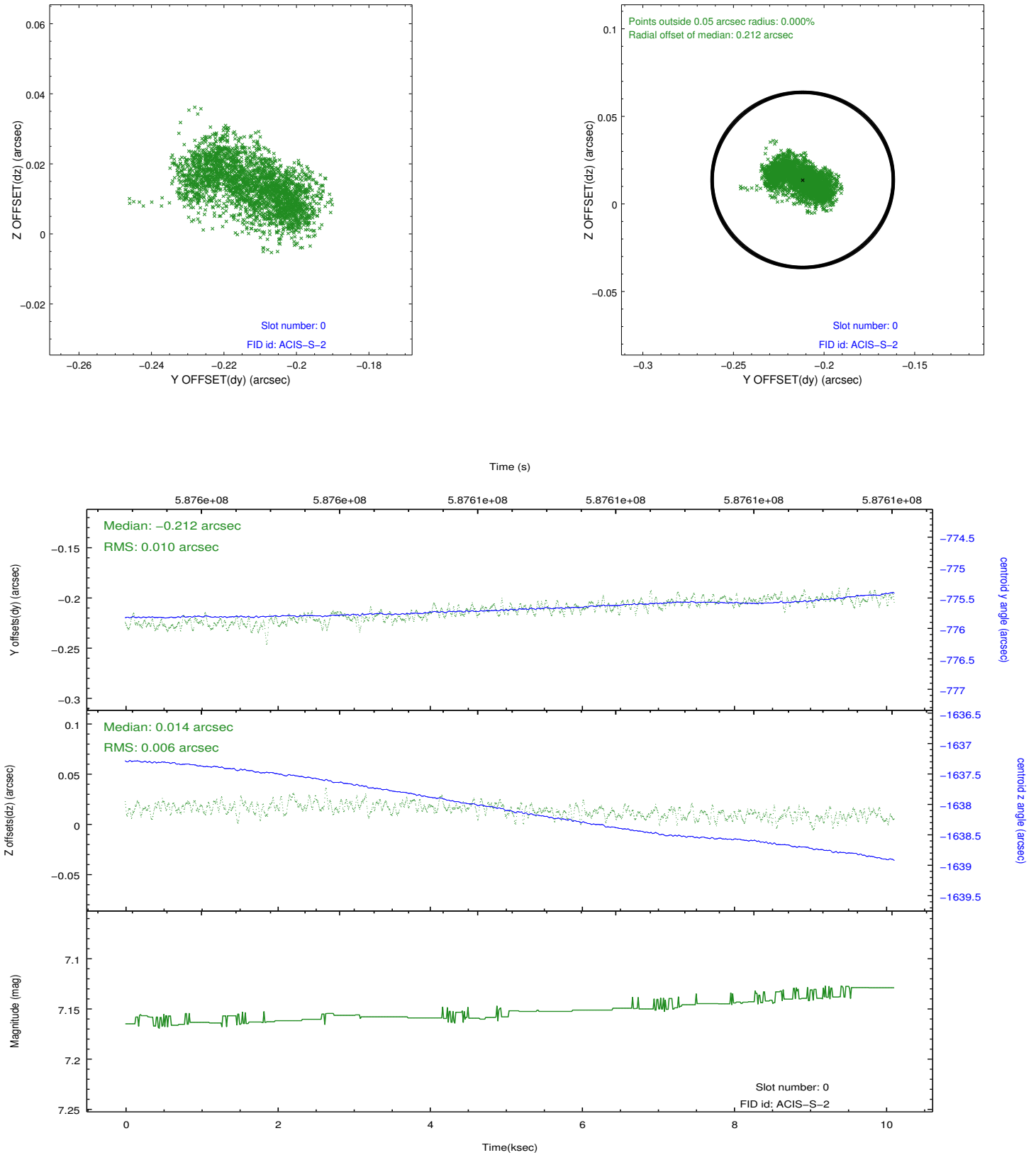


2.4.5 Slot 7

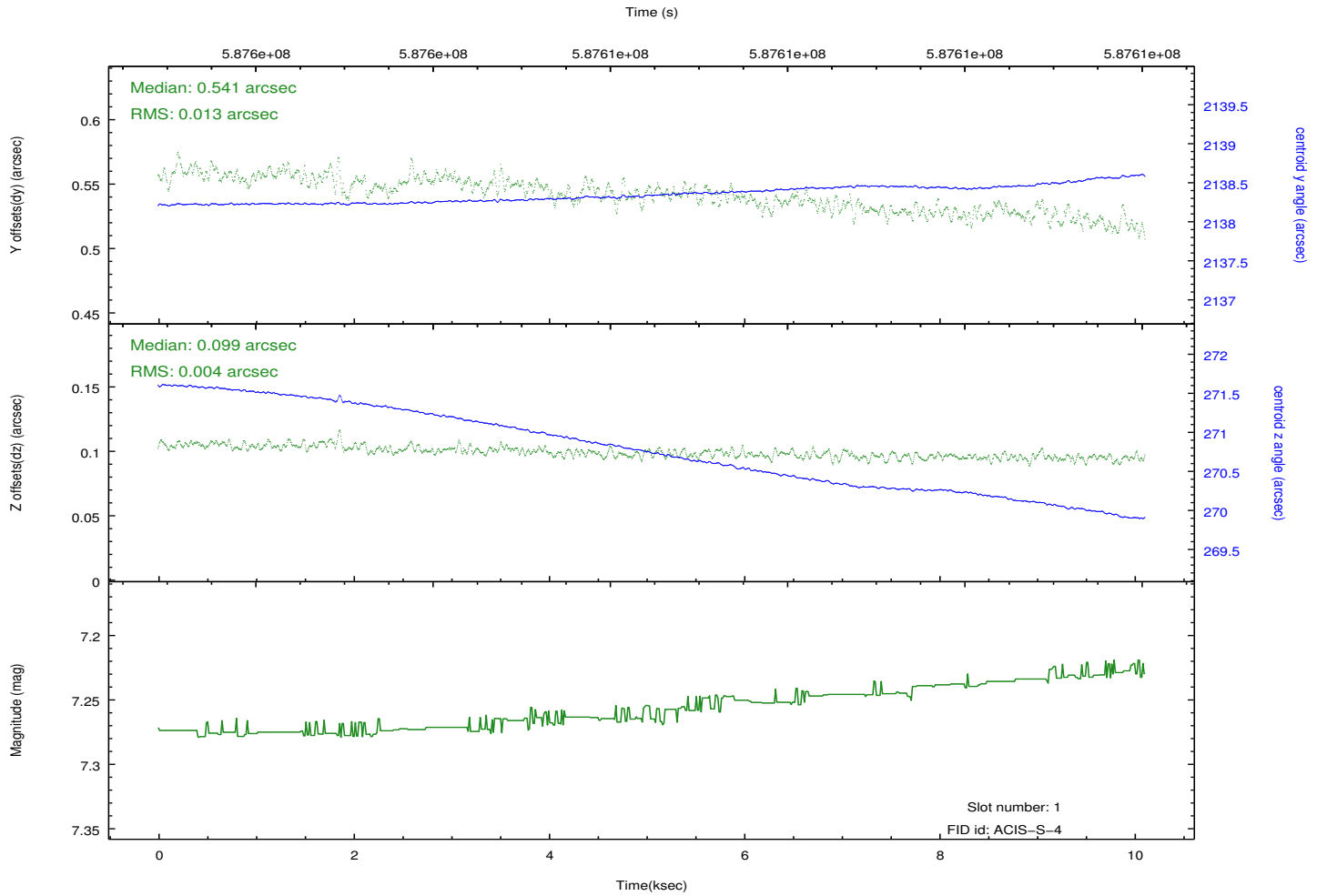
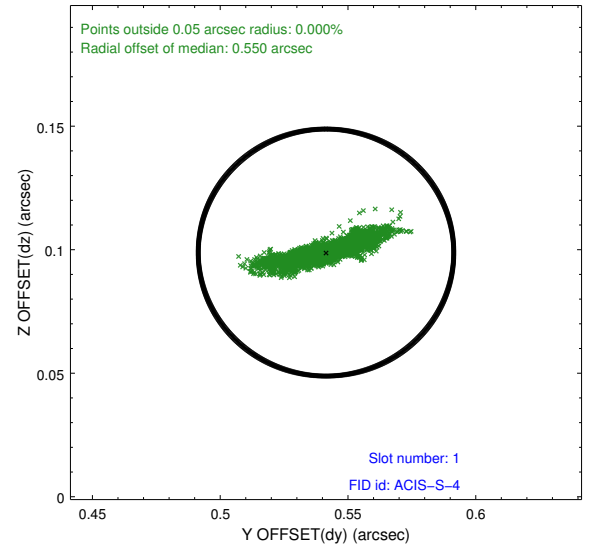
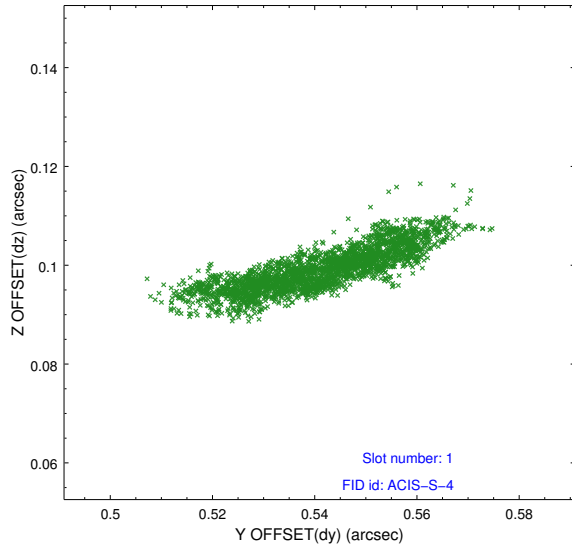


2.5 FID Slots

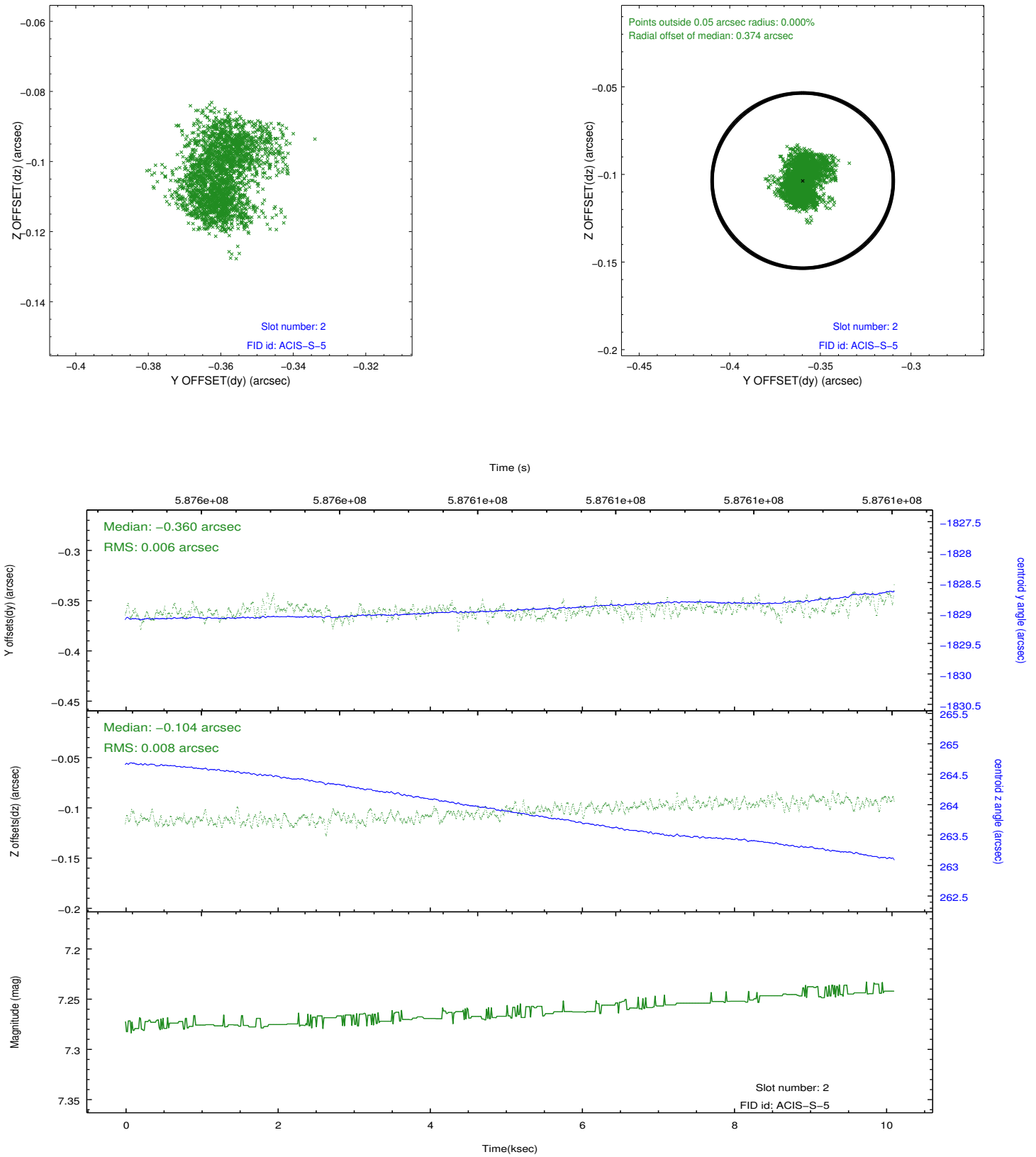
2.5.1 Slot 0



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)	2016.08.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10

A.2 Comments

Joint Proposal: HST. Window constraint met.

=====

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

=====

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 9.243 ksec