

V&V Reference Report

L2 ASCDS Version : 10.8

Observation 22146 - L2 Version 2
Chandra X-Ray Center

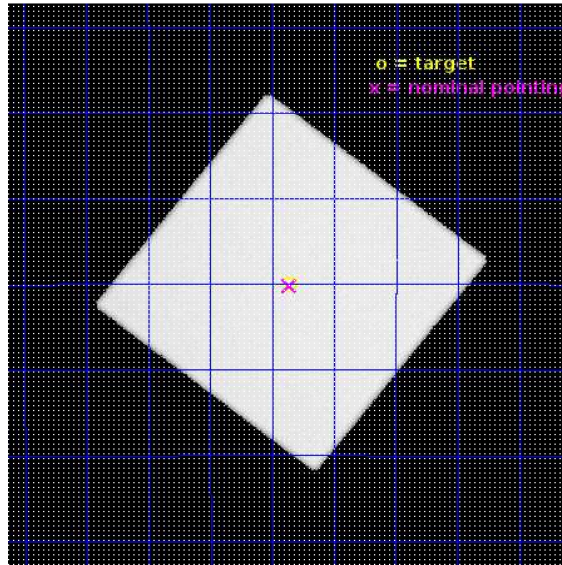
L2 Processing Date : Jul 16 2019

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1 Front

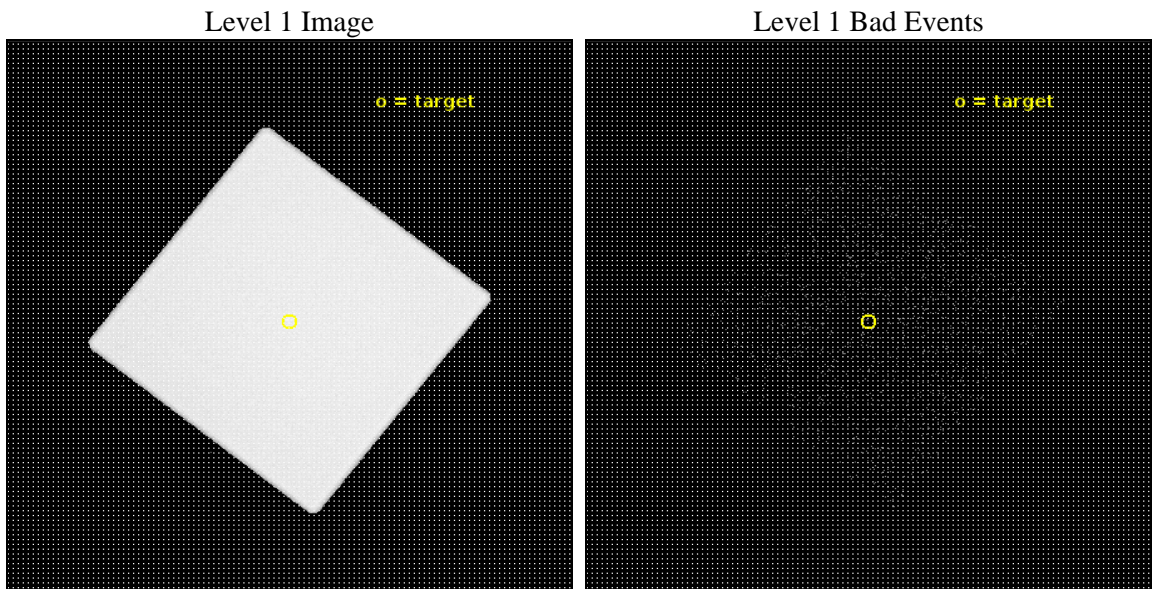
seq_num	100176	Sequence number
obs_id	22146	Observation id
title	Is X-ray Aurora Produced by Magnetic Unloading?	Proposal title
observer	William Dunn	Principal investigator
object	Jupiter	Source name
ra_targ	254.337801	Observer's specified target RA [deg]
dec_targ	-22.166811	Observer's specified target Dec [deg]
ra_nom	254.34011446554	Nominal RA [deg]
dec_nom	-22.169764609734	Nominal Dec [deg]
roll_nom	263.08473556323	Nominal Roll [deg]
revision	2	Processing version of data
ontime	25074.832755923	[s]
liveltime	24456.391156519	Ontime multiplied by DTCOR
l2events	2930954	Number of level 2 events



2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Parameters

obi_num	1	Obi number	sched_exp_time	25000.000000	[s] Scheduled observation exposure time
ascdsver	10.8	Processing system revision	ontime	25074.832755923	[s]
caldbver	4.8.3.1	 	l1events	4050286	Number of level 1 events
date	2019-07-16T19:14:08	Date and time of file creation			
revision	2	Processing version of data			

2.1.3 Events

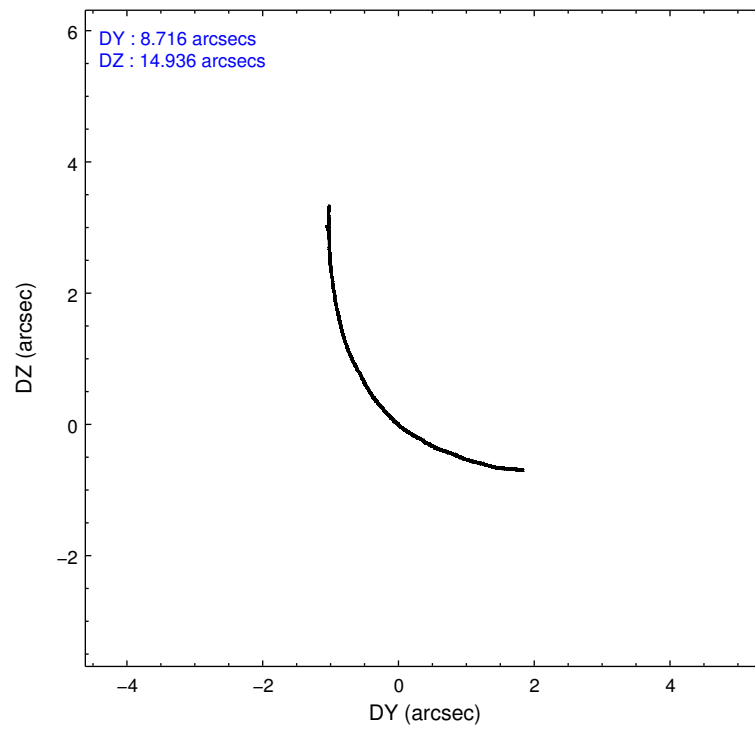
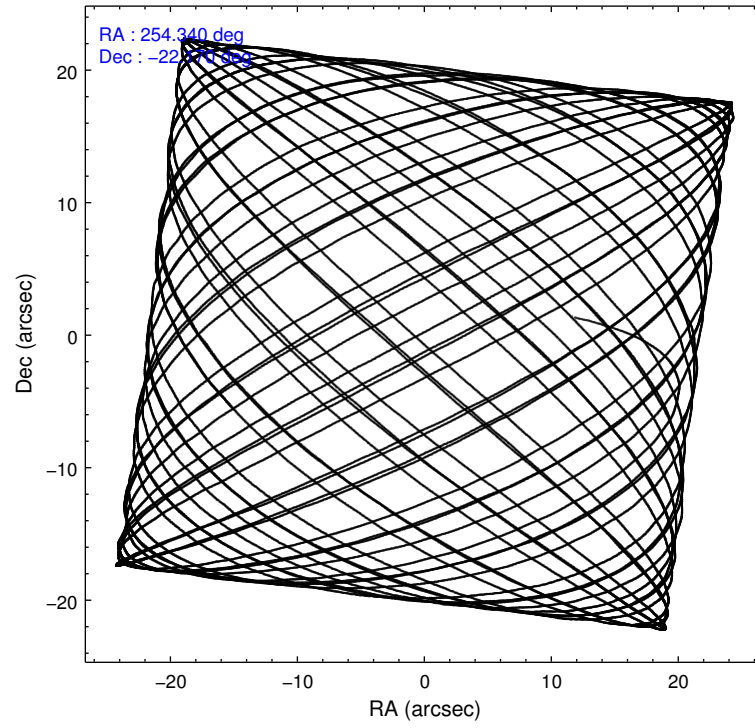
Level 1 Events

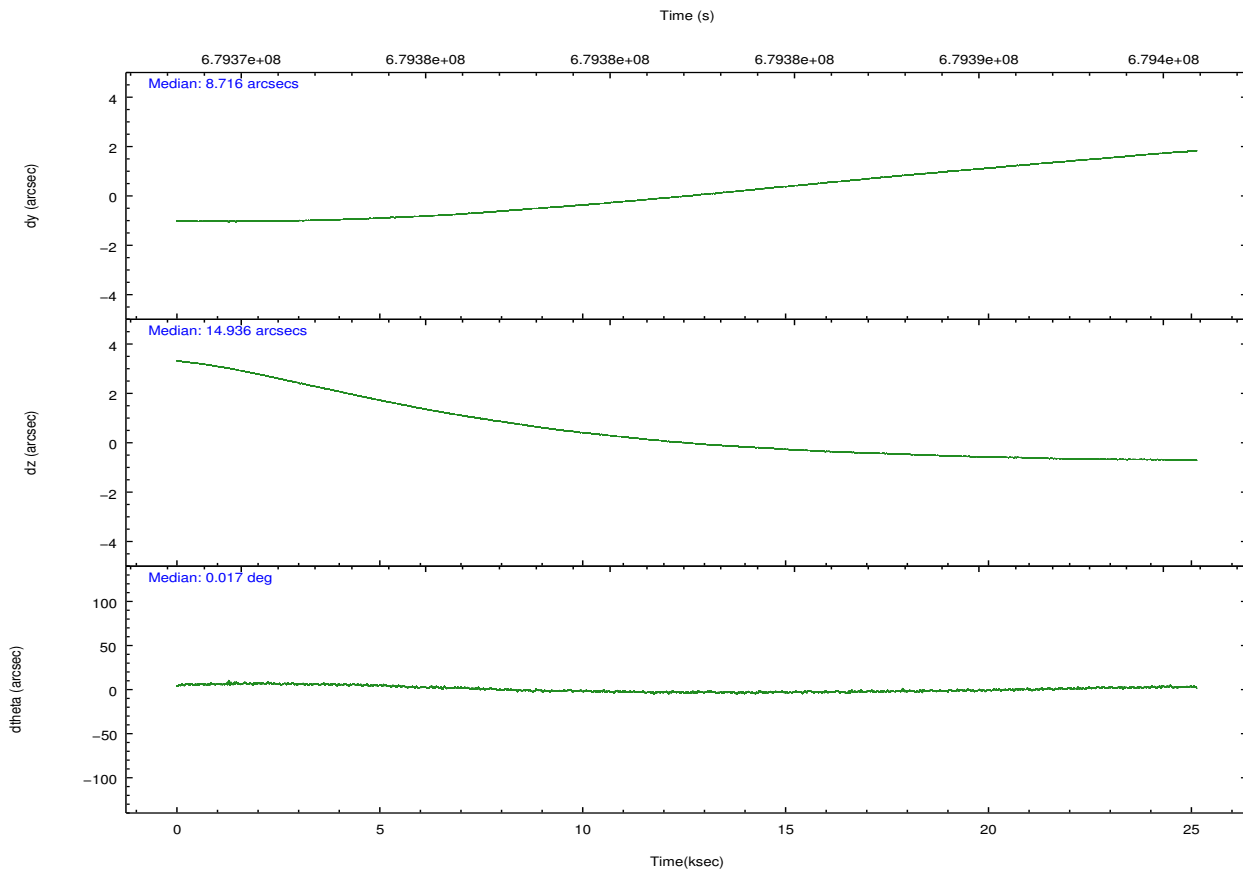
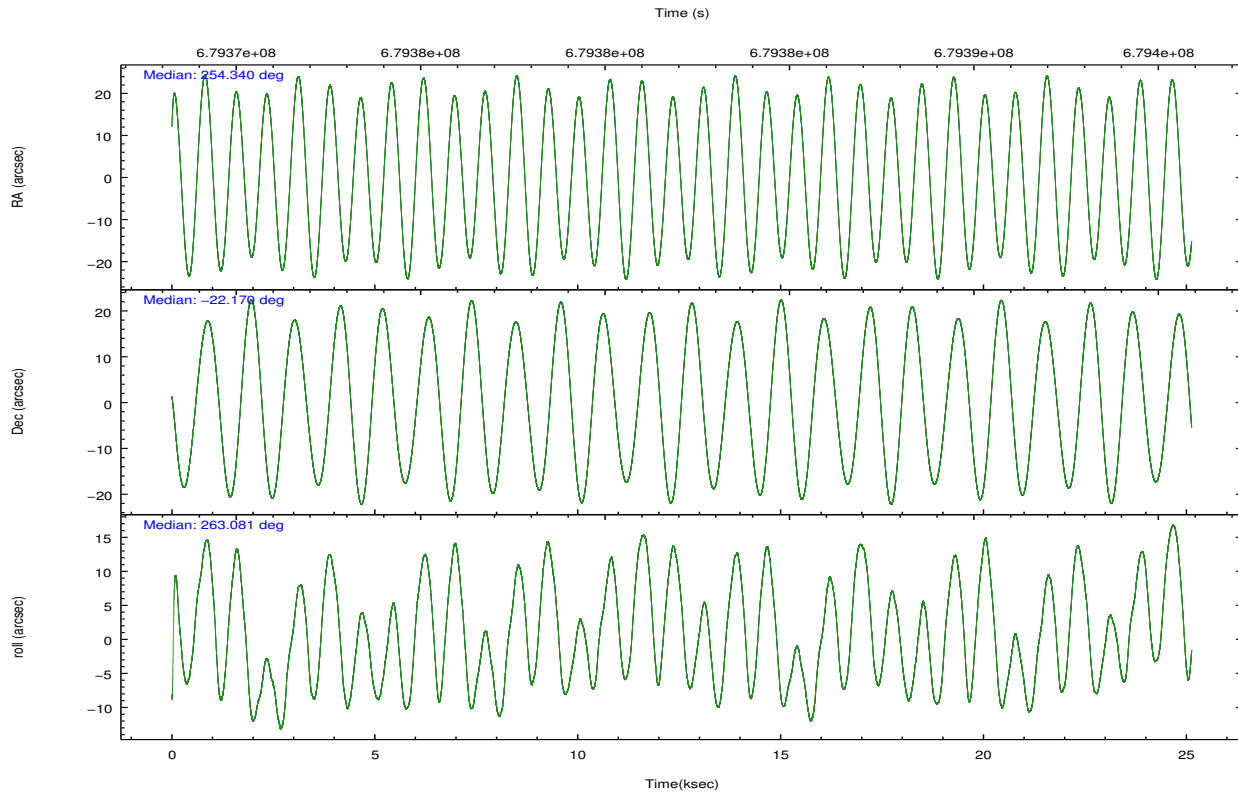
	segment 0
level 1 events	4050286
rejected events	175926
rejected %	4%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	HRC	HRC	Obspar format version number	7	7
Detector	HRC-I	HRC-I	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	OBSERVING	OBSERVING			
Observation mode	POINTING	POINTING			
[deg] Pointing RA	254.327957	254.3401144655435			
[deg] Pointing Dec	-22.144884	-22.16976460973417			
[deg] Pointing Roll	263.175646	263.0847355632254			
[s] Window start time (MET)	679368669.184000	679368669.184000			
[s] Window stop time (MET)	679394769.184000	679394769.184000			
[mm] SIM focus pos	-1.040293	-1.038866356238299			
[mm] SIM defocus	0	0.001426264420575141			
[mm] SIM translation stage pos	126.985494	126.9829799899862			
[mm] SIM translation stage offset	0	0.002508901615314585			
[s] Observation start time (MET)	679369640.184000	679368451.72311			
Observation start date	2019-07-13T01:46:11	2019-07-13T01:27:31			
[s] Observation end time (MET)	679394640.184000	679395054.5747			
Observation end date	2019-07-13T08:42:51	2019-07-13T08:50:54			

2.3 Aspect



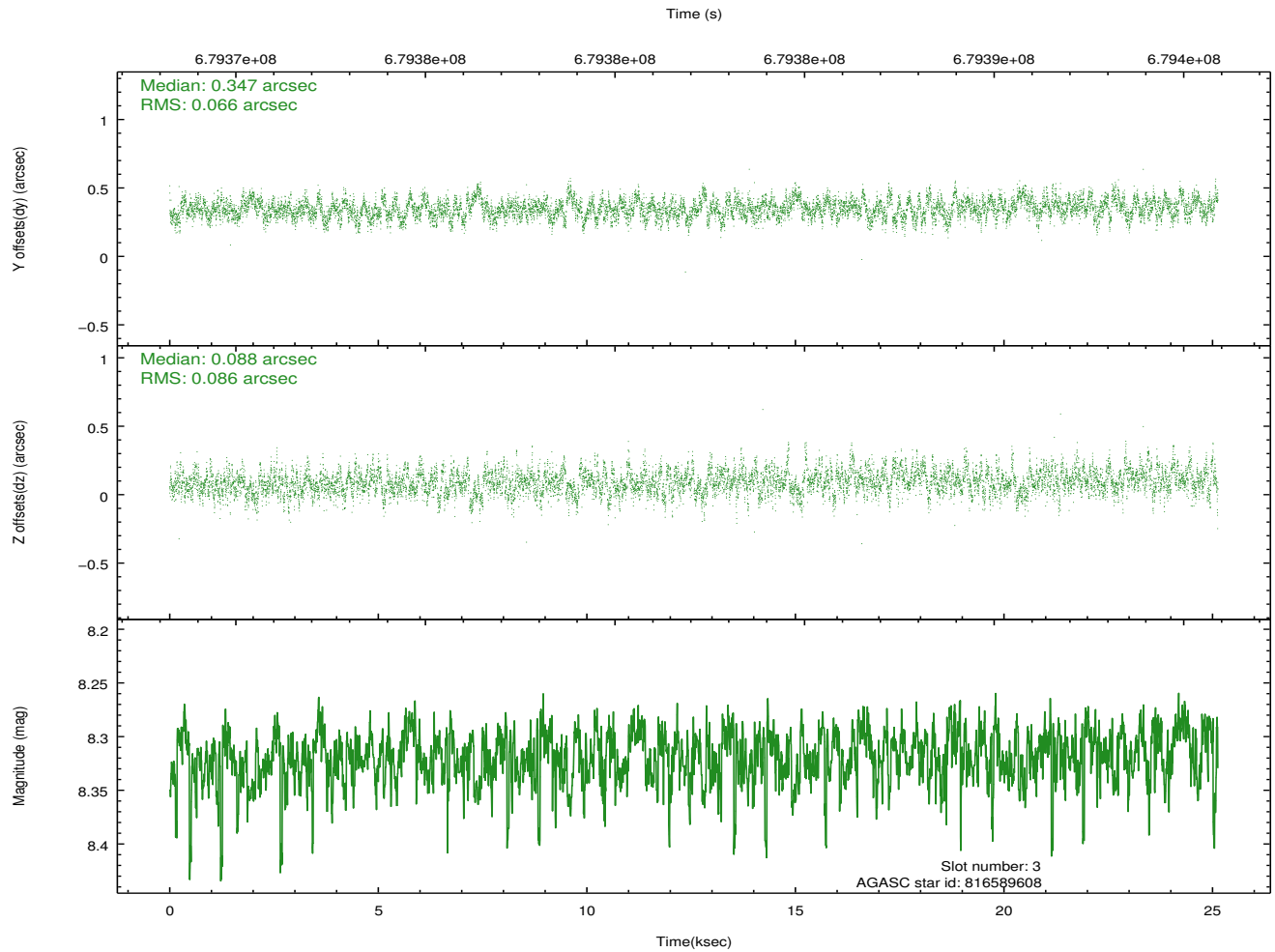
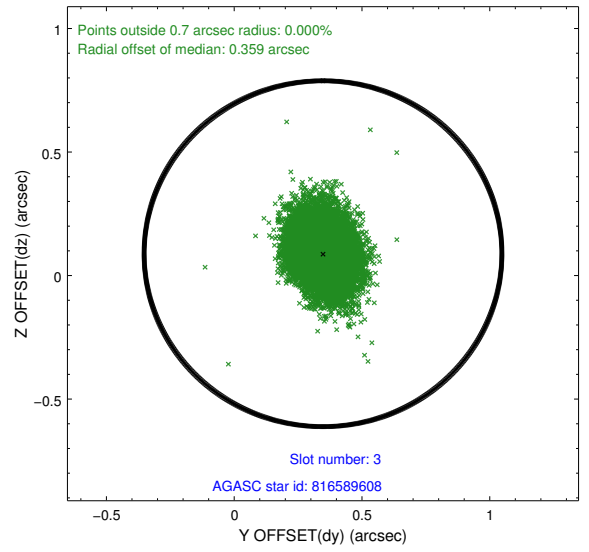
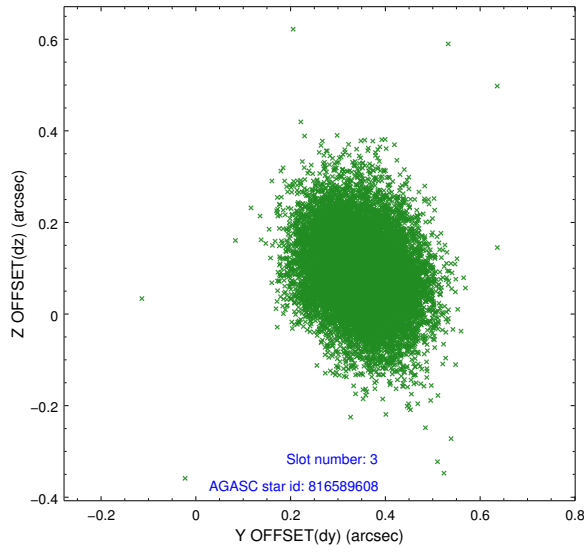


Slot Statistics

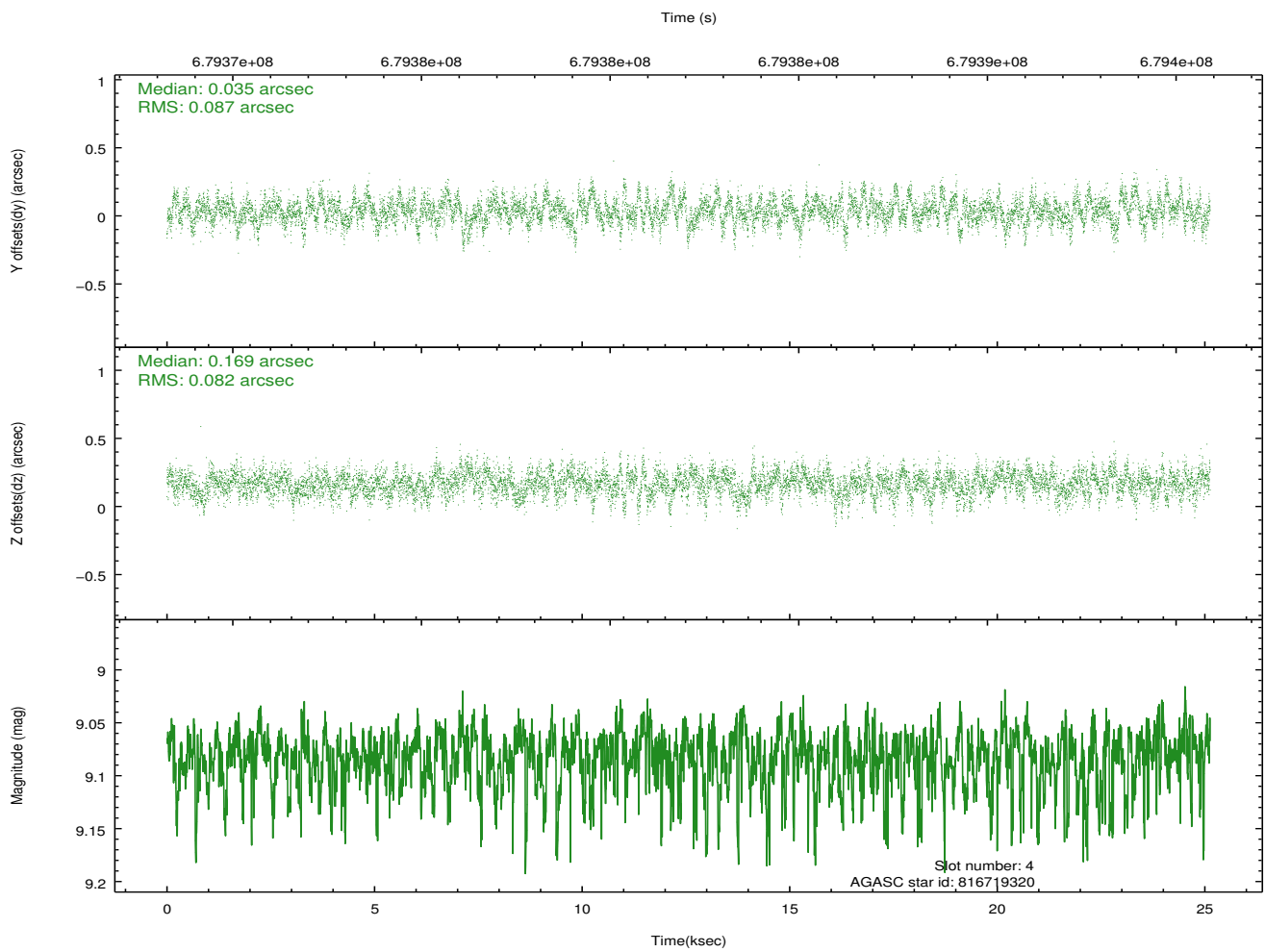
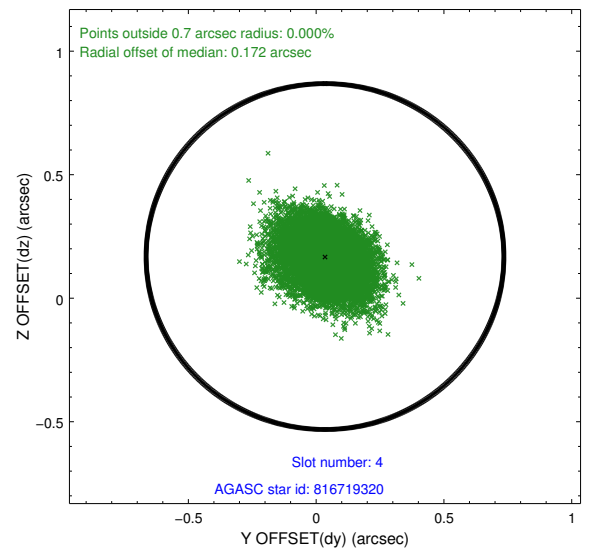
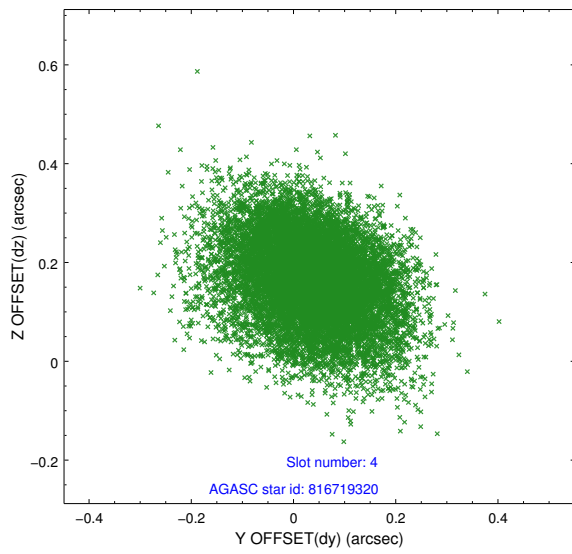
slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_x
0	FID		HRC-I-1	7.09	6130	1.000	-0.198	-0.297	0.021	0.054	0.000000	0.000000	-764.86	-1303
1	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0
2	FID		HRC-I-4	7.10	6130	1.000	0.272	0.235	0.021	0.054	0.000000	0.000000	1278.60	998
3	GUIDE	used	816589608	8.32	12255	1.000	0.347	0.088	0.115	0.188	253.659974	-21.879606	-677.32	-2328
4	GUIDE	used	816719320	9.08	12249	1.000	0.035	0.169	0.126	0.211	254.507879	-21.620199	-1944.59	373
5	GUIDE	used	816723288	7.82	12257	1.000	-0.024	0.263	0.090	0.149	254.188785	-21.796597	-1189.33	-610
6	GUIDE	used	816725024	8.40	12253	1.000	-0.179	-0.080	0.084	0.144	254.689455	-21.769583	-1483.45	1039
7	GUIDE	used	892603544	8.92	12248	1.000	-0.190	-0.439	0.128	0.207	254.823740	-22.668918	1679.73	1859

2.4 Star Slots

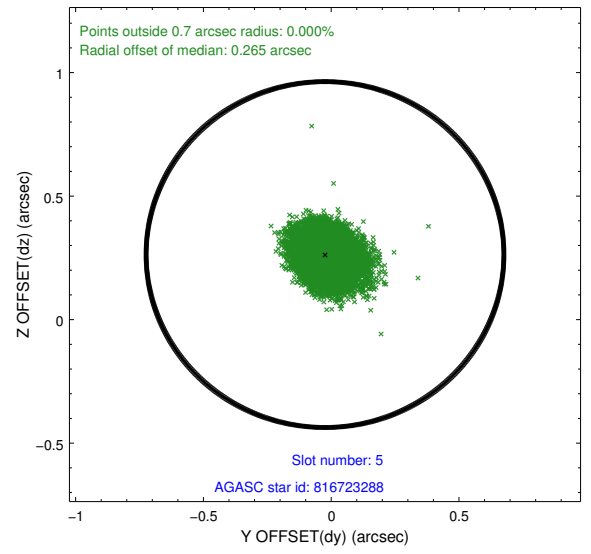
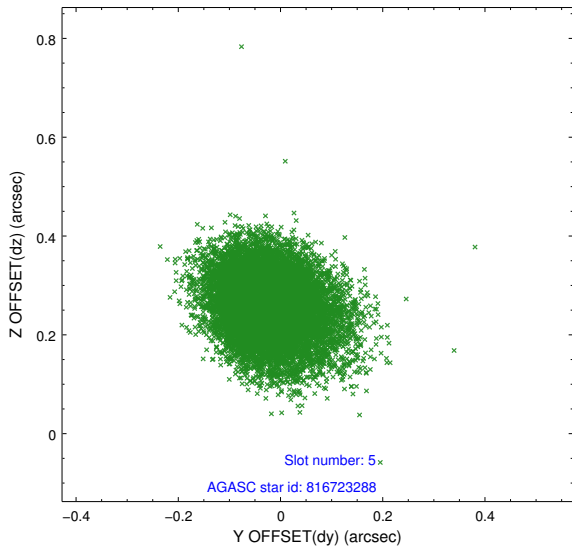
2.4.1 Slot 3



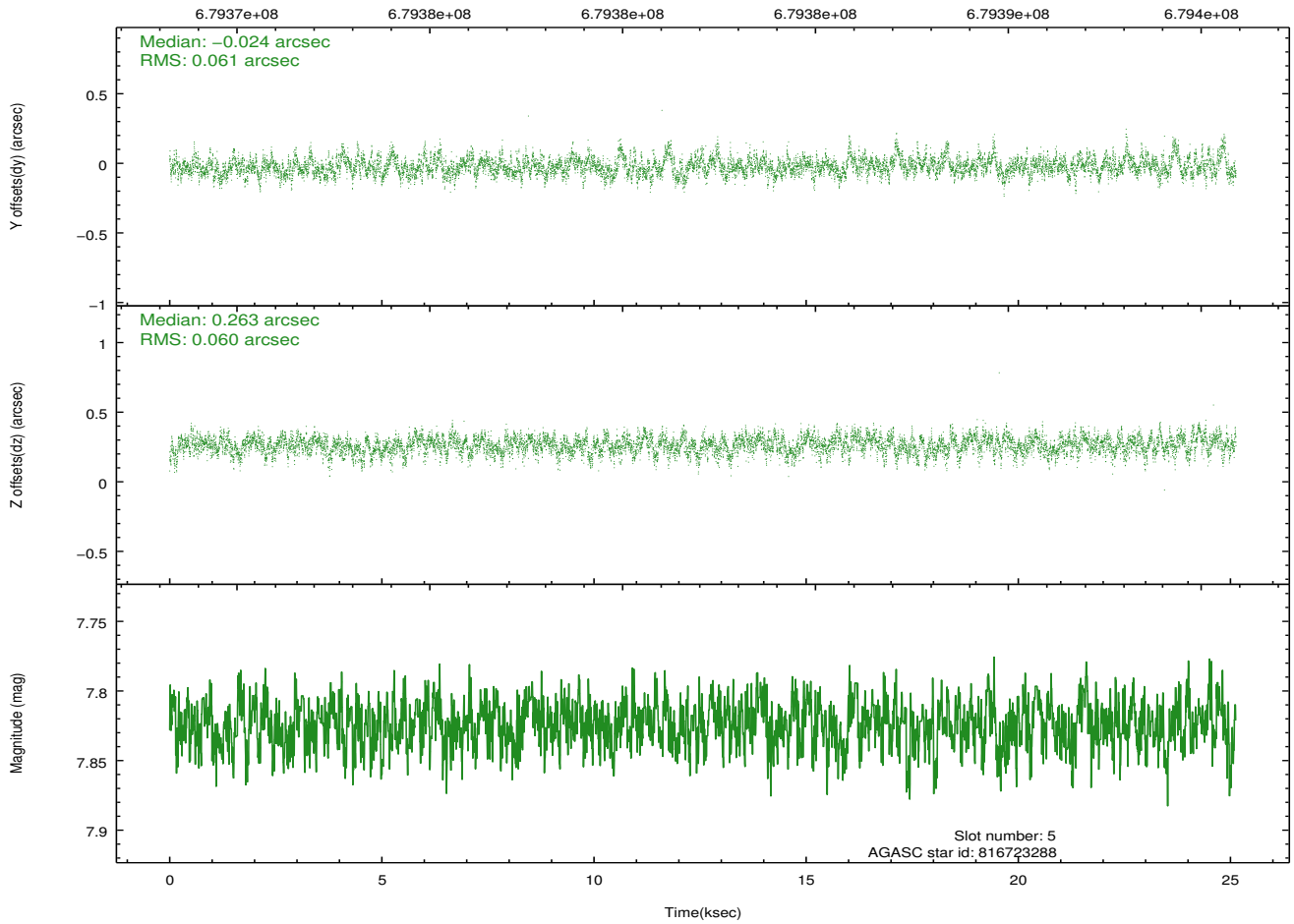
2.4.2 Slot 4



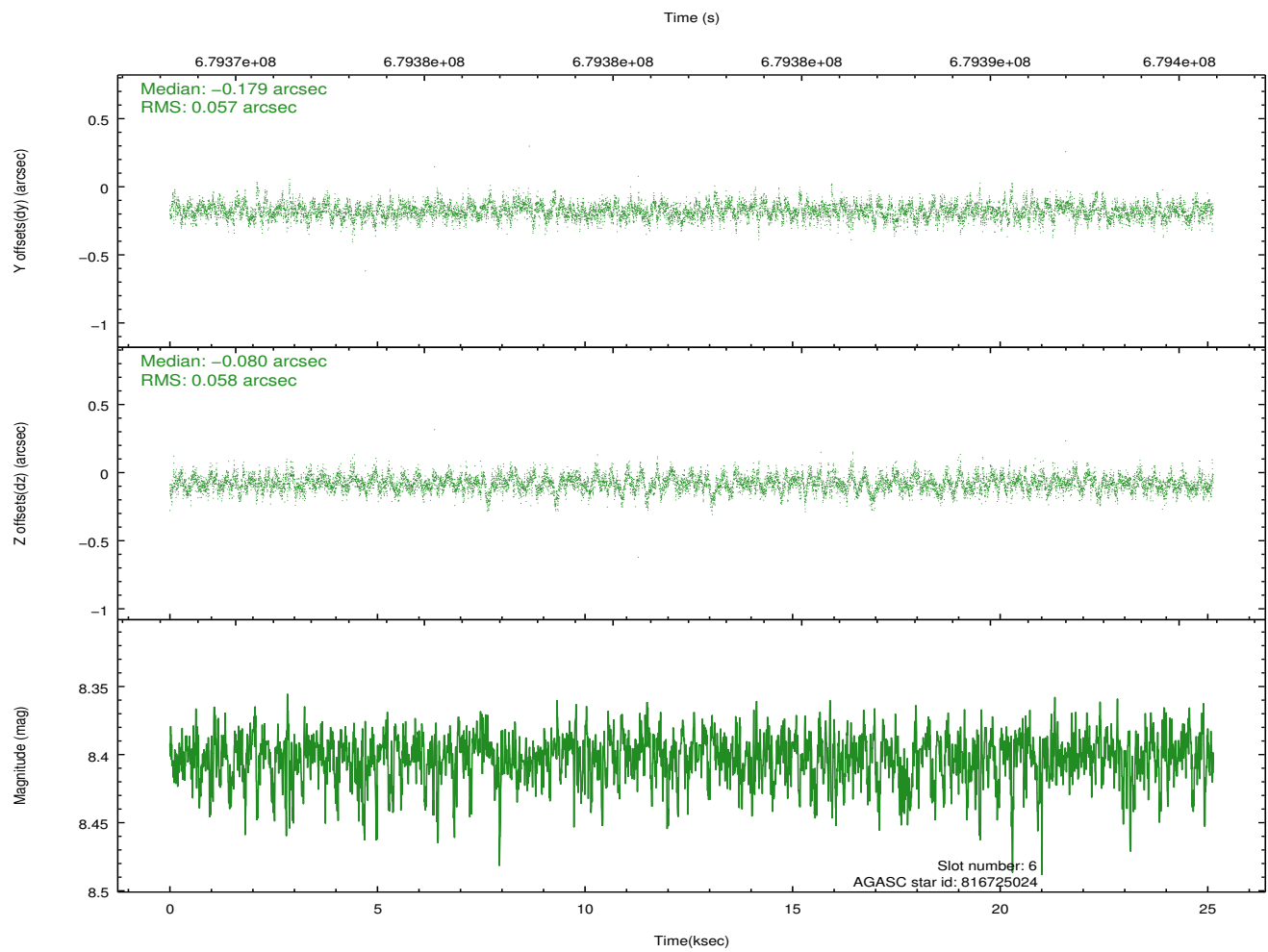
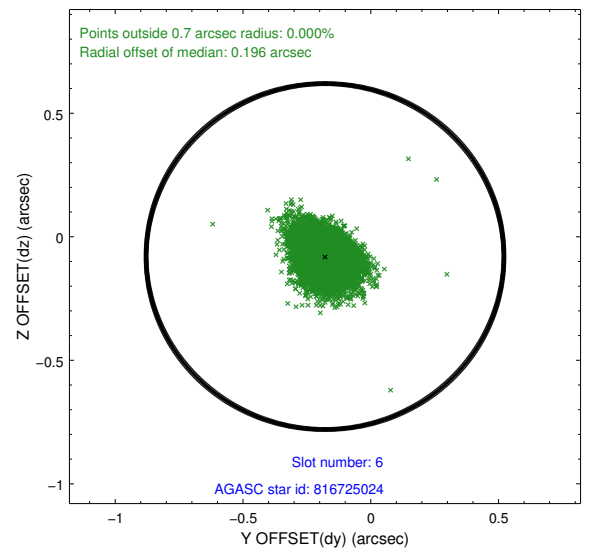
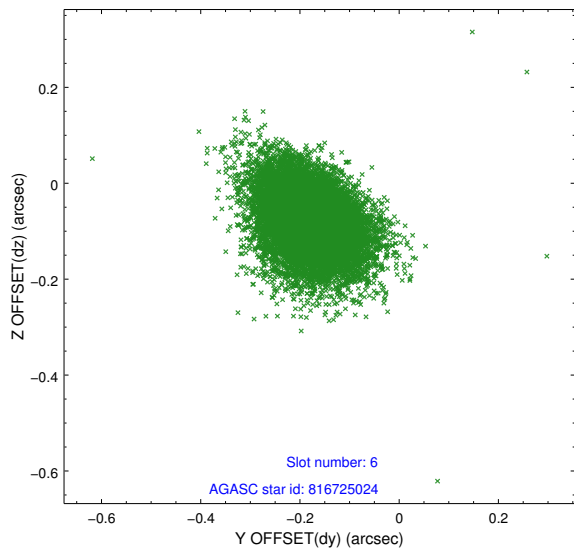
2.4.3 Slot 5



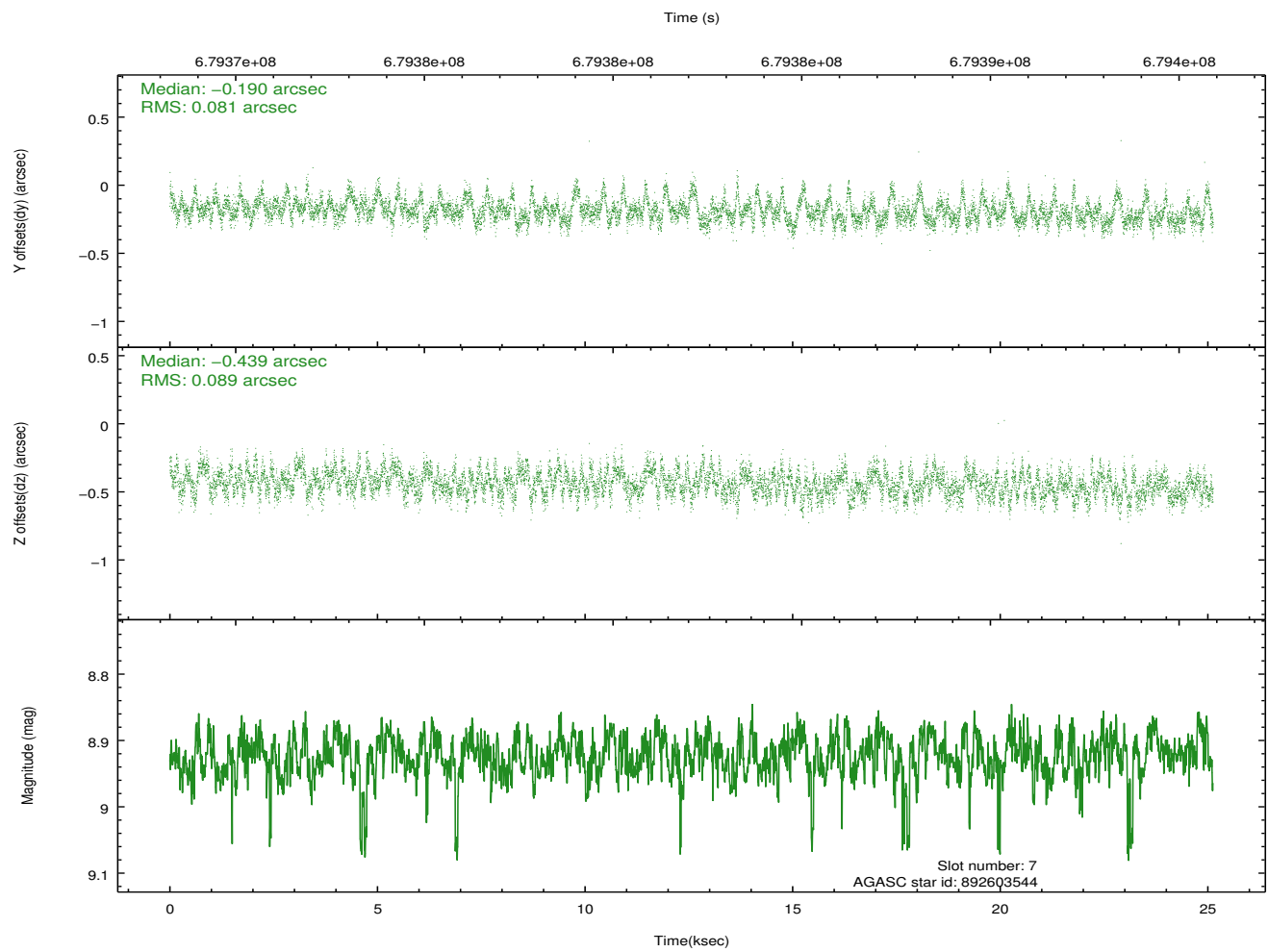
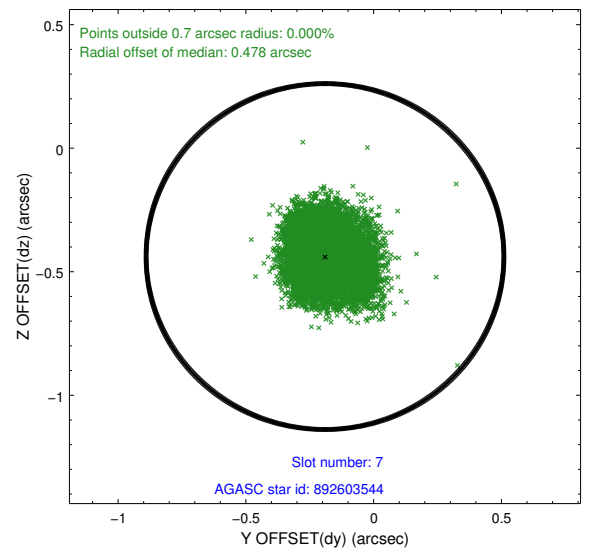
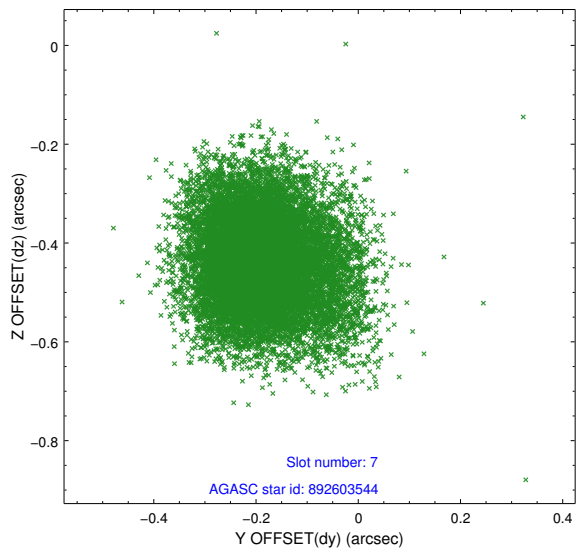
Time (s)



2.4.4 Slot 6

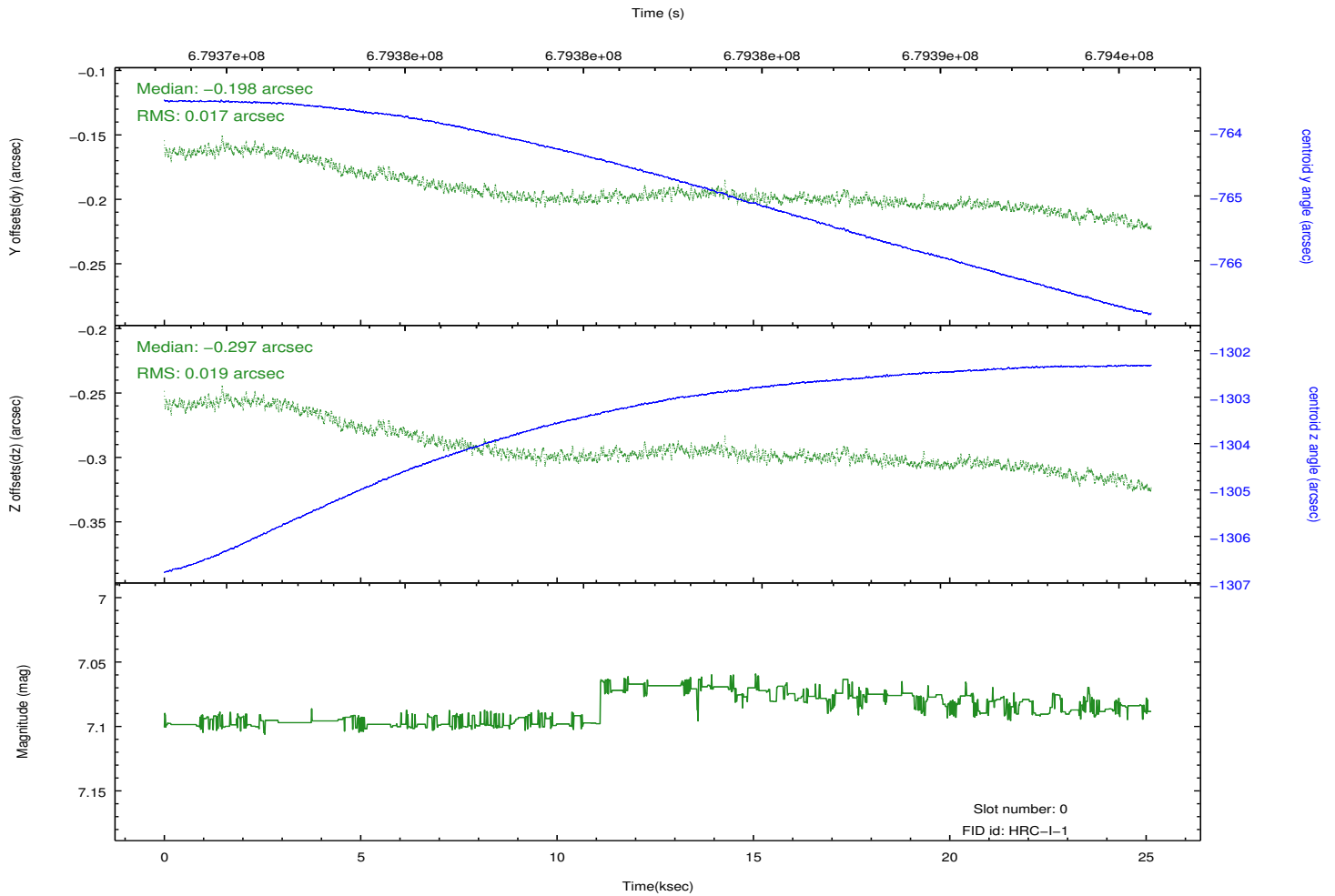
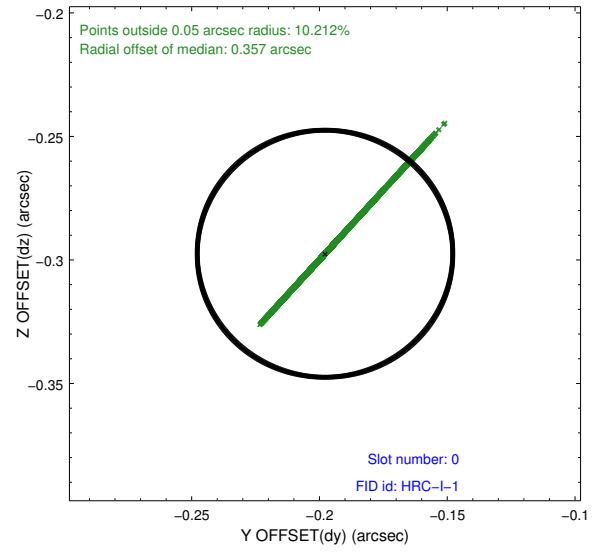
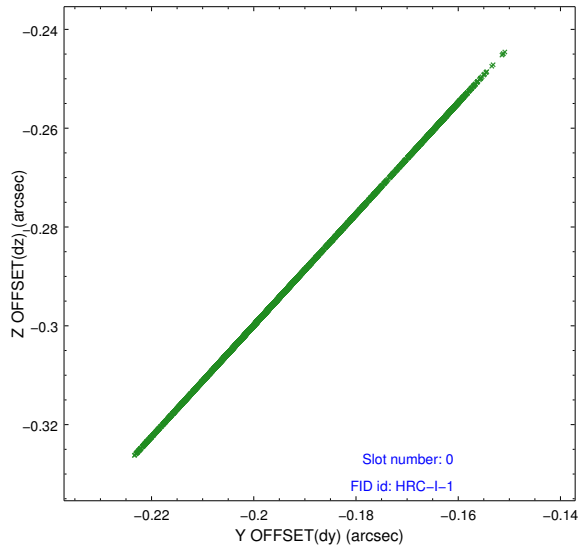


2.4.5 Slot 7

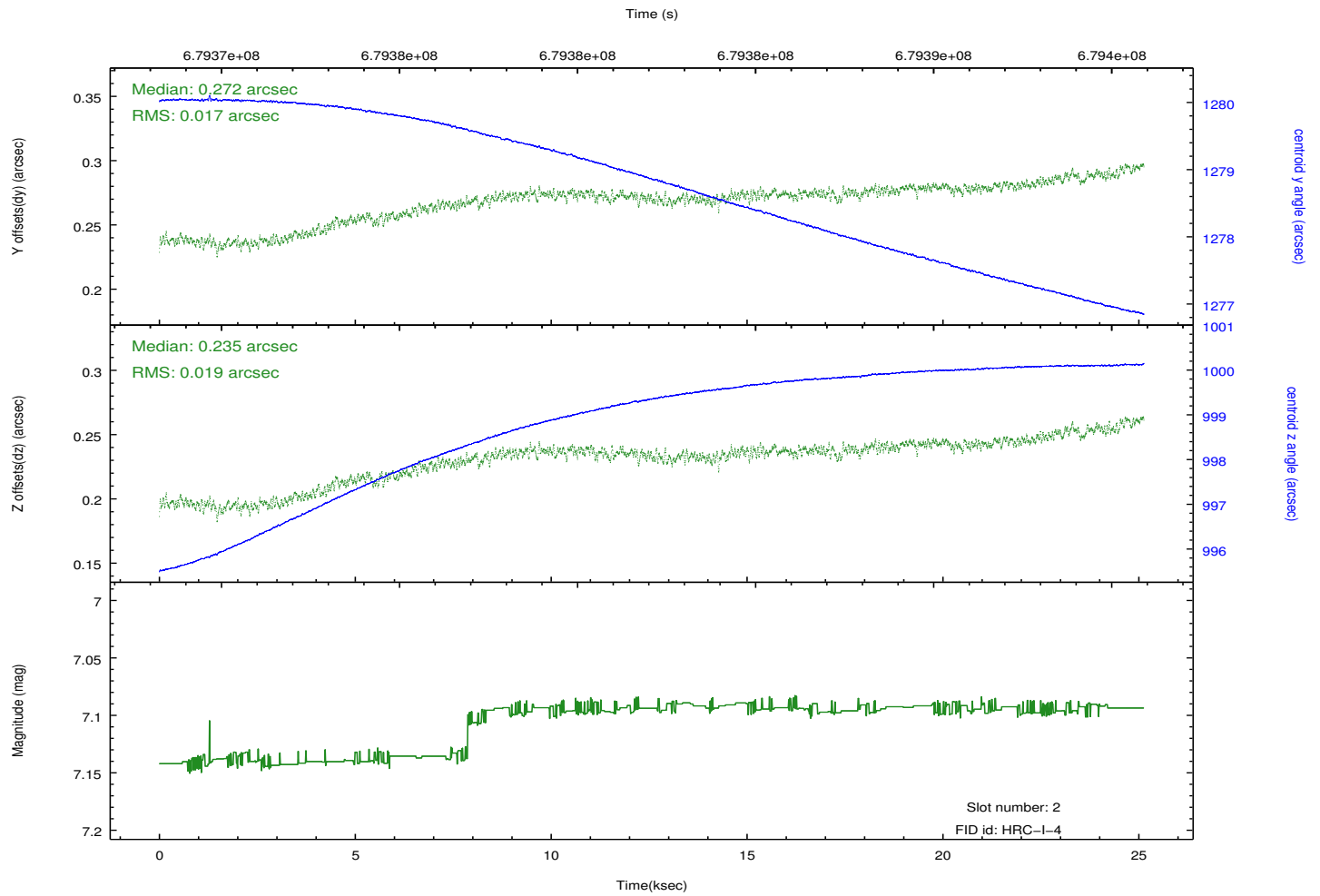
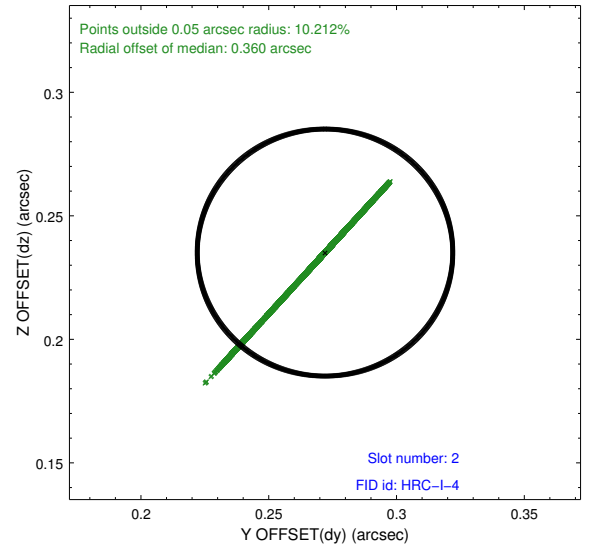
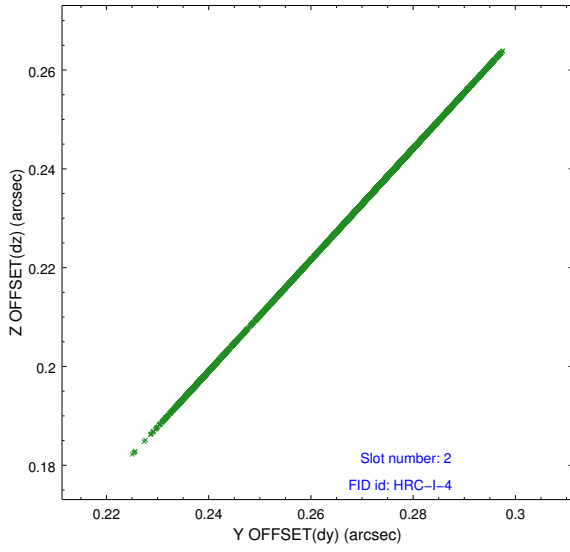


2.5 FID Slots

2.5.1 Slot 0



2.5.2 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2019.07.16
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	25.074832755923

A.2 Comments

Joint proposal with XMM.

==

This is an observation of a moving target. Users will need to run `sso_freeze` or similar software to position the events in the reference frame of the target.

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The fid light in slot 1 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this slot from the solution.

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Due to corruption of the secondary science data during this observation, some instrument parameters have bogus values. The data in this observation have been inspected by the HRC team. PLEASE NOTE: All the event data in this observation are good. The short gaps in the GTI intervals can be eliminated (i.e., use the first START and last STOP). THE DTF values during this observation can be estimated by dropping all the low values and averaging the remaining values near 1.0.