

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 6031 - L2 Version 4
Chandra X-Ray Center

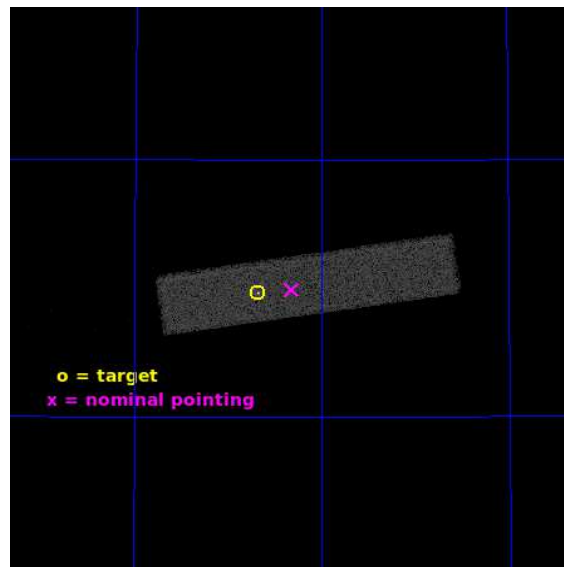
L2 Processing Date : Oct 6 2020

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1 Front

seq_num	290523	Sequence number
obs_id	6031	Observation id
title	AO6A Calibration Observations to Monitor the Spatial Variations in the HRC-S Gain	Proposal title
observer	CXC Calibration	Principal investigator
object	ArLac	Source name
ra_targ	332.17	Observer's specified target RA [deg]
dec_targ	45.742306	Observer's specified target Dec [deg]
ra_nom	332.0790603262	Nominal RA [deg]
dec_nom	45.747846616755	Nominal Dec [deg]
roll_nom	351.42045138211	Nominal Roll [deg]
revision	4	Processing version of data
ontime	1153.1250521839	[s]
livetime	1146.2530264968	Ontime multiplied by DTCOR
l2events	47155	Number of level 2 events

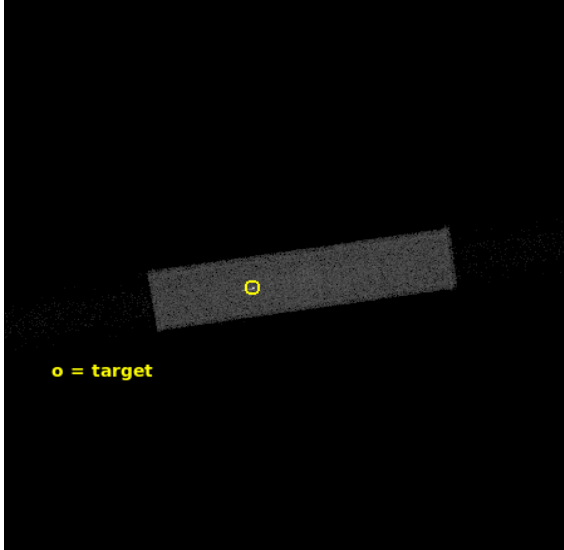


2 OBI

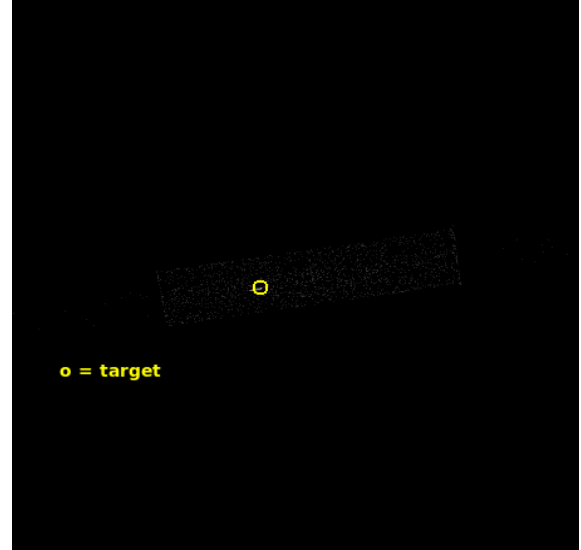
2.1 OBI

2.1.1 Images

Level 1 Image



Level 1 Bad Events



2.1.2 Parameters

obi_num	0	Obi number	sched_exp_time	1000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	1153.1250521839	[s]
caldbver	4.9.2	 	l1events	77972	Number of level 1 events
date	2020-10-06T16:06:41	Date and time of file creation			
revision	4	Processing version of data			

2.1.3 Events

Level 1 Events

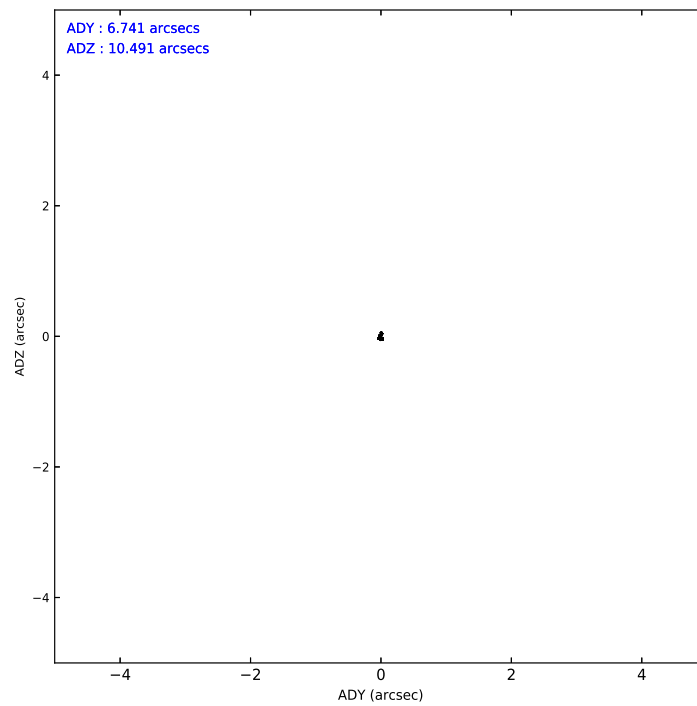
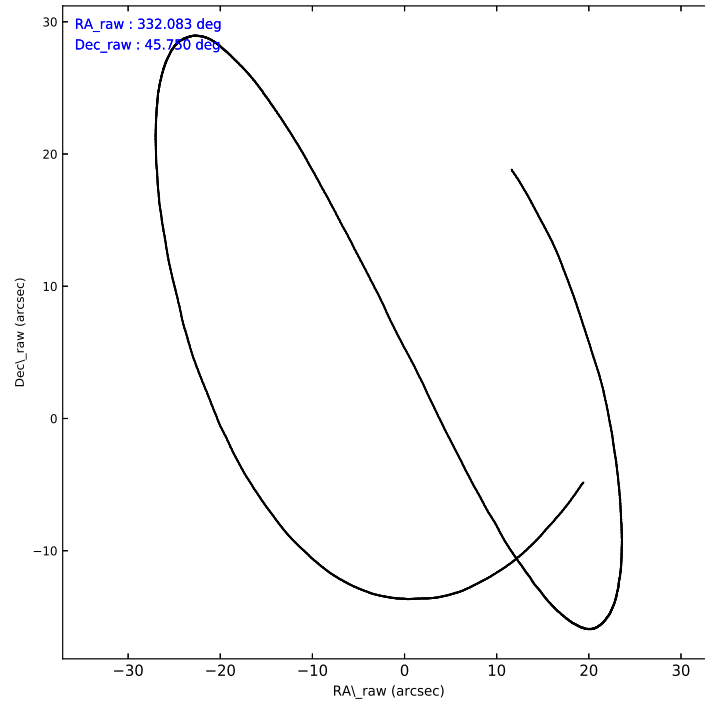
	segment 1	segment 2	segment 3
level 1 events	626	76706	640
rejected events	626	17637	626
rejected %	100%	22%	97%

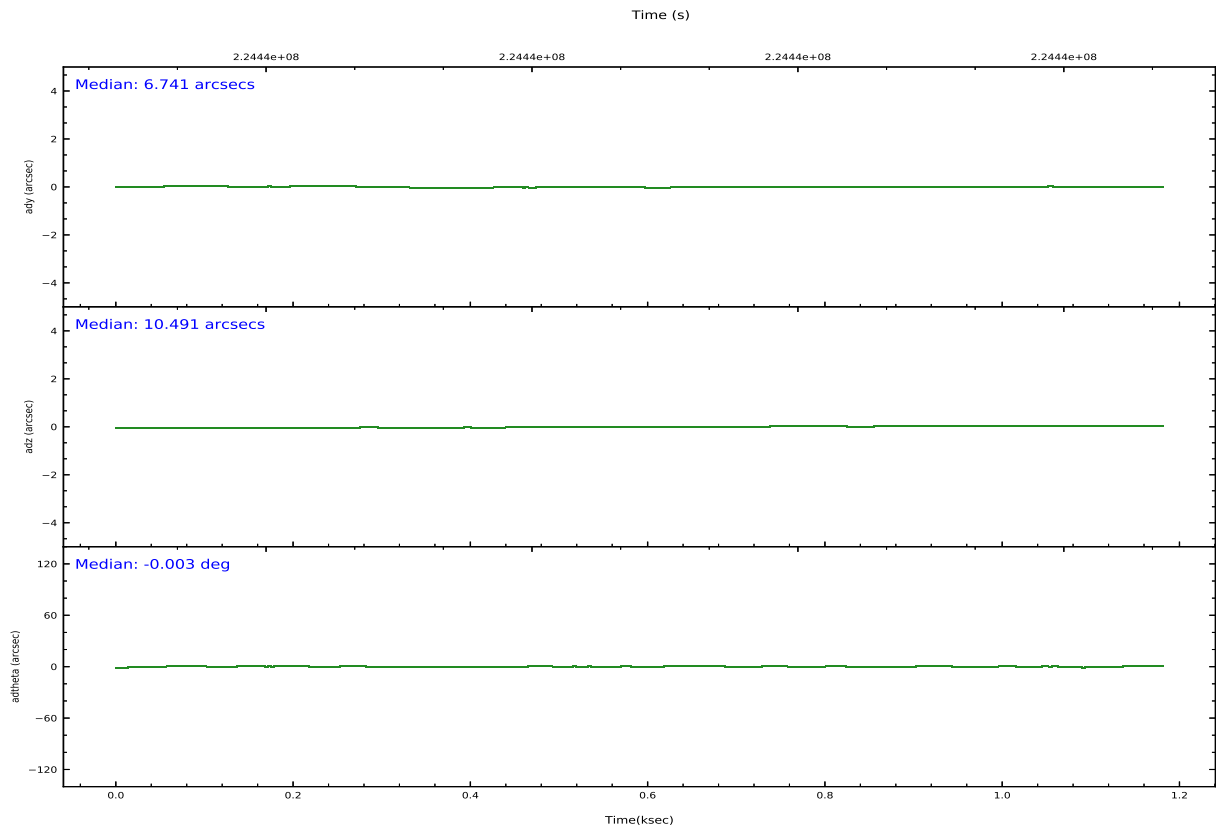
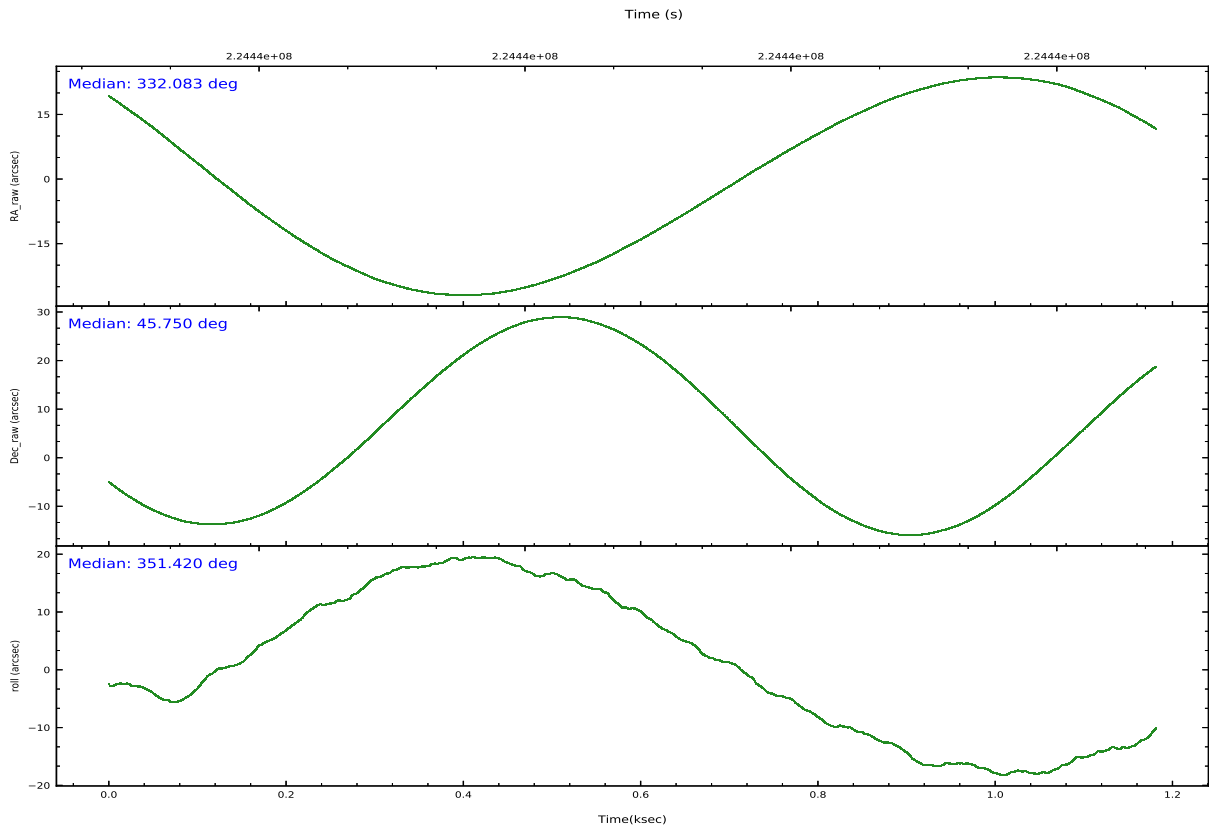
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	HRC	HRC
Detector	HRC-S	HRC-S
Grating	NONE	NONE
Data mode	OBSERVING	OBSERVING
Observation mode	POINTING	POINTING
[deg] Pointing RA	332.044797	332.0790603262
[deg] Pointing Dec	45.739772	45.747846616755
[deg] Pointing Roll	351.383541	351.42045138211
[mm] SIM focus pos	-1.429586	-1.428180813131781
[mm] SIM defocus	0.1037507710433287	0.1051558262725154
[mm] SIM translation stage pos	250.455976	250.466033080201
[mm] SIM translation stage offset	0	-0.01005468664627074
[s] Observation start time (MET)	224437313.184000	224436937.13305
Observation start date	2005-02-10T15:40:49	2005-02-10T15:35:37
[s] Observation end time (MET)	224438313.184000	224438446.95812
Observation end date	2005-02-10T15:57:29	2005-02-10T16:00:46

Parameter	Planned	Actual
Obspar version number	8	8
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED

2.3 Aspect





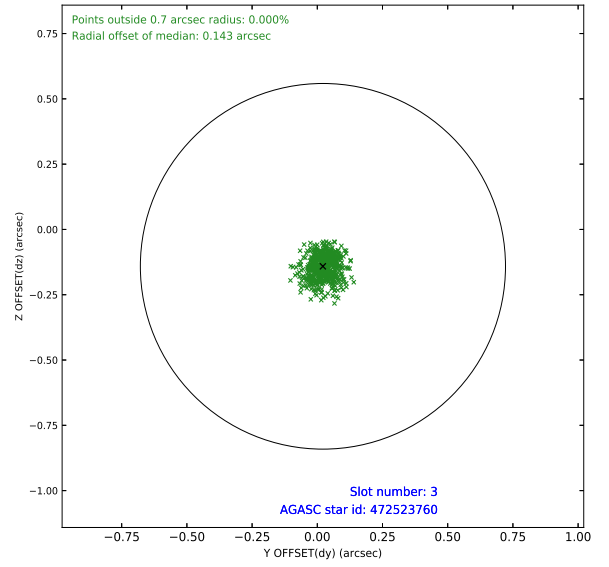
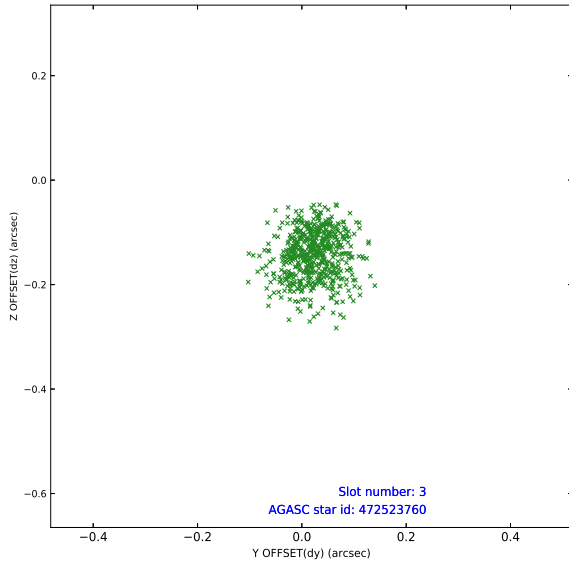
Slot Statistics

pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		HRC-S-1	7.03	289	1.000	0.092	-0.197	0.008	0.012	0.000000	0.000000	-1160.92	-459
1	FID		HRC-S-2	7.02	289	1.000	0.208	-0.117	0.005	0.008	0.000000	0.000000	1234.86	-453
2	FID		HRC-S-3	7.04	289	1.000	0.090	0.012	0.008	0.012	0.000000	0.000000	-1159.36	568
3	GUIDE	used	472523760	8.24	578	1.000	0.022	-0.141	0.065	0.106	331.645363	45.403260	-817.94	-1343
4	GUIDE	used	472536328	8.14	578	1.000	-0.014	-0.011	0.063	0.096	331.496671	46.454831	-1733.22	2347
5	GUIDE	used	472665256	9.01	577	1.000	0.021	0.091	0.080	0.127	332.808125	46.195041	1629.68	1922
6	GUIDE	used	472537064	8.95	578	1.000	0.002	0.166	0.090	0.144	331.323423	46.483499	-2168.87	2394
7	GUIDE	used	472527720	6.99	577	1.000	-0.026	-0.105	0.052	0.084	331.460205	45.112509	-1135.39	-2442

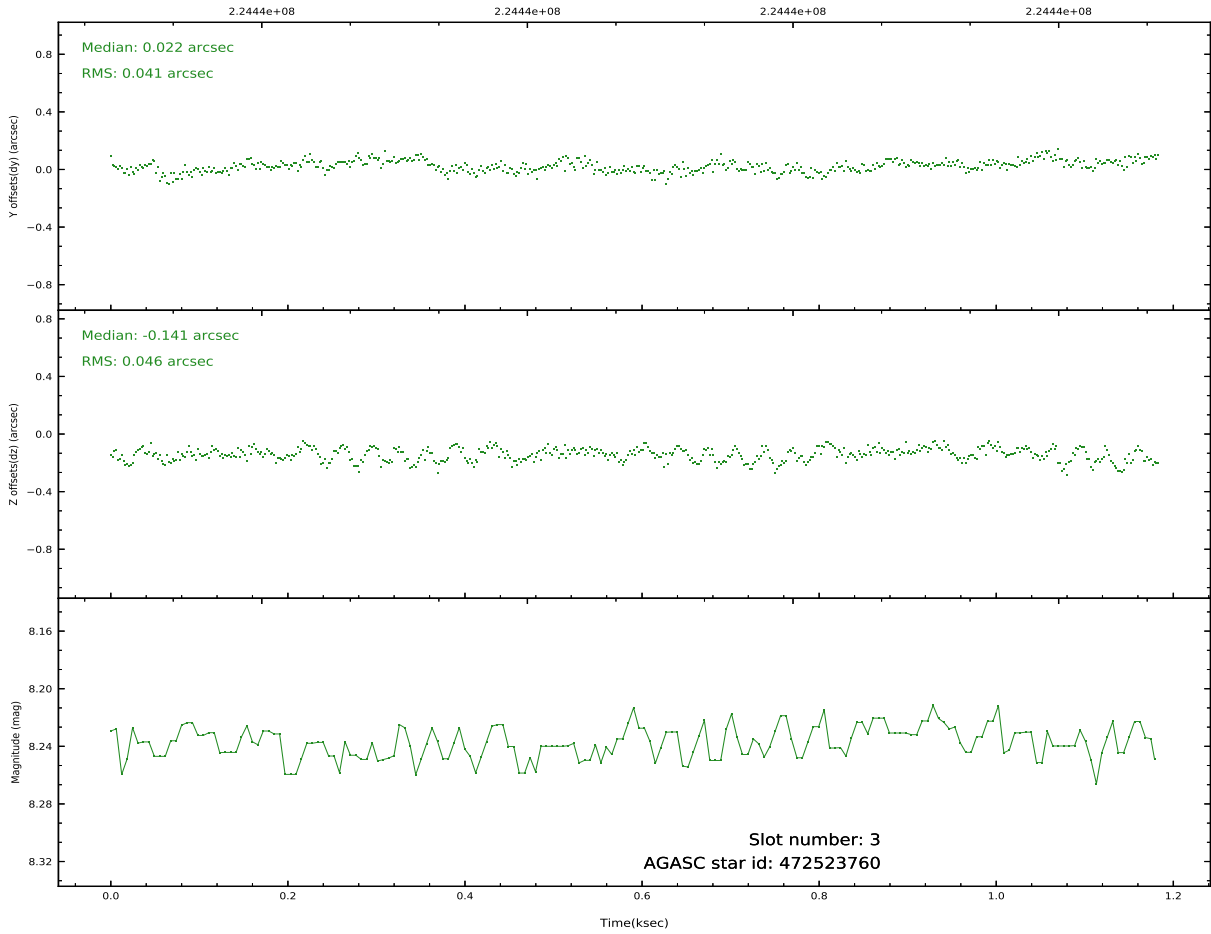
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2.4 Star Slots

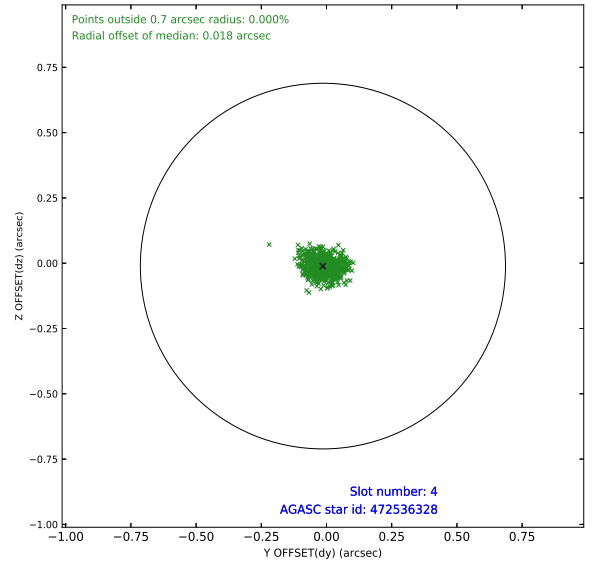
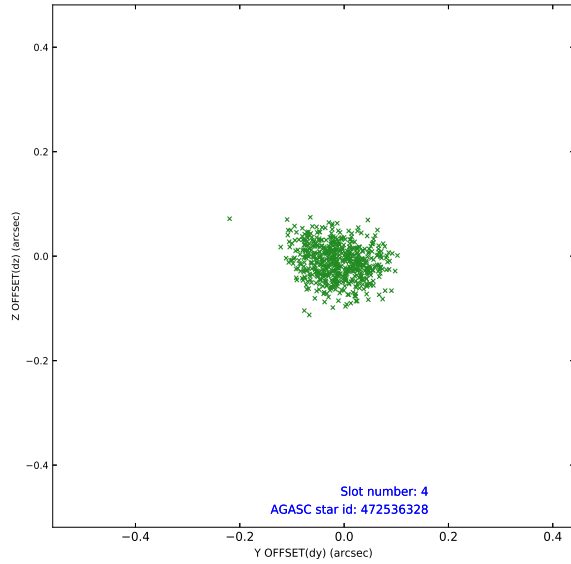
2.4.1 Slot 3



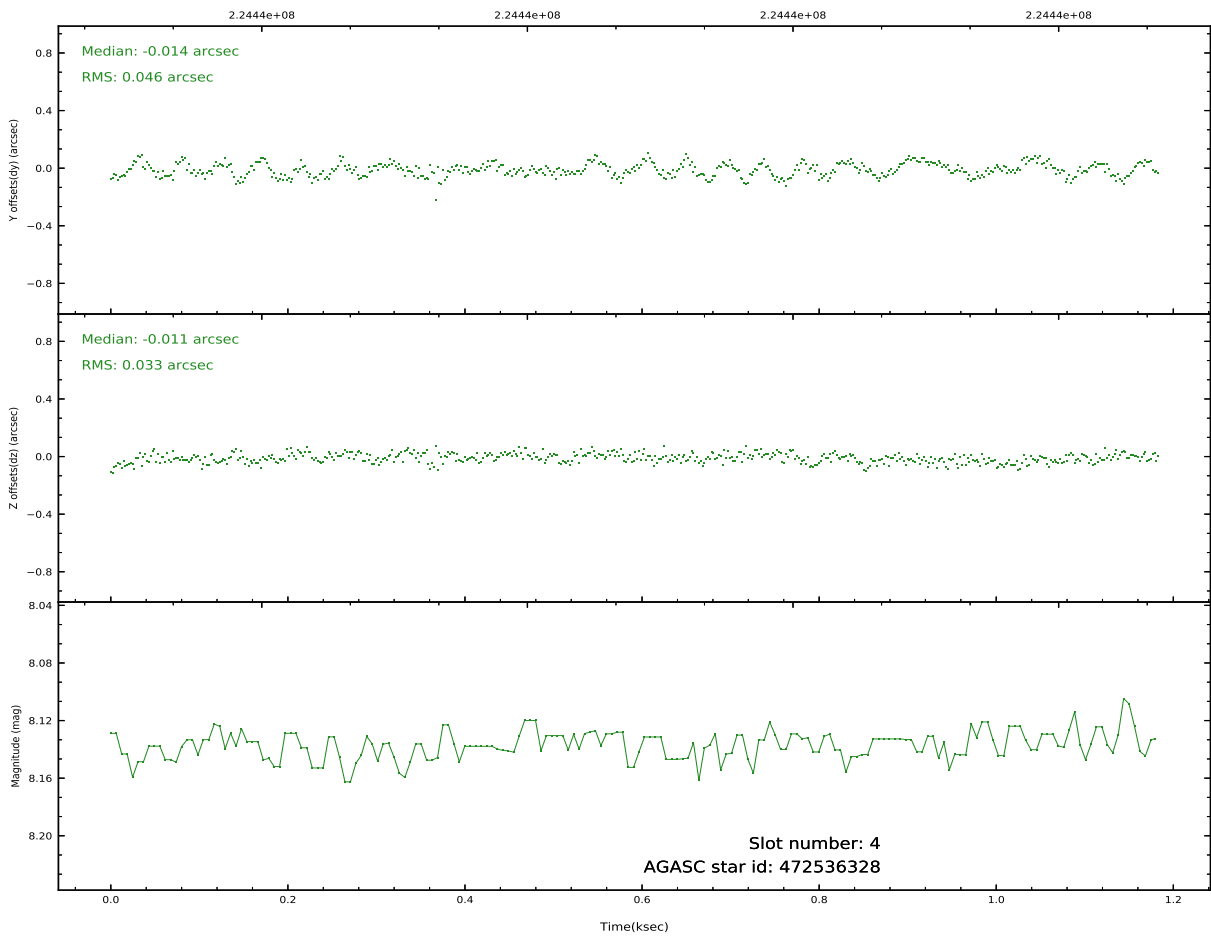
Time (s)



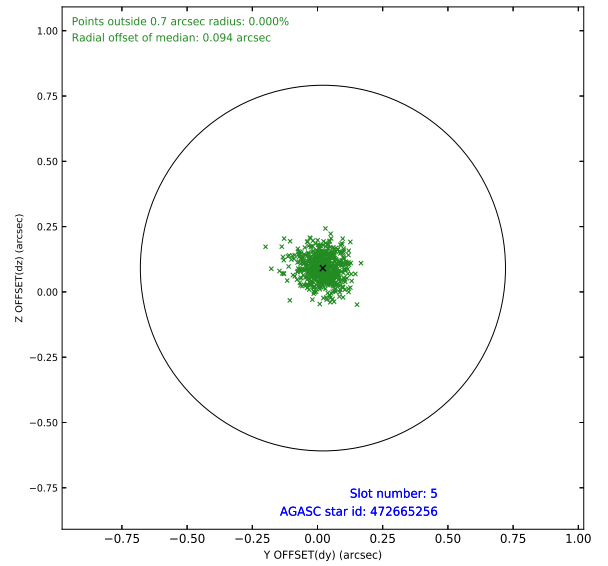
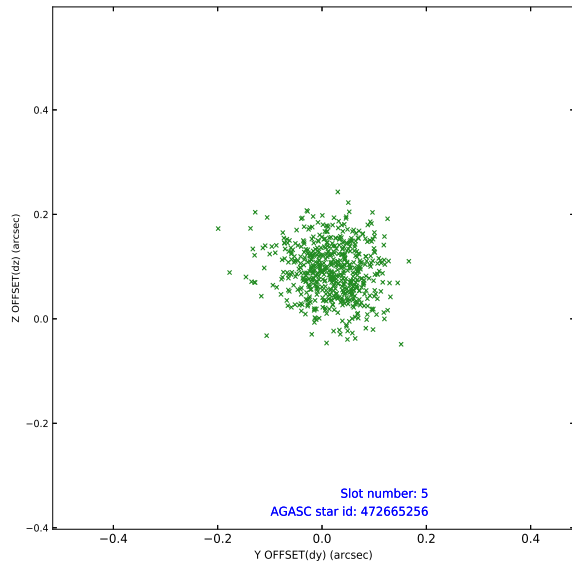
2.4.2 Slot 4



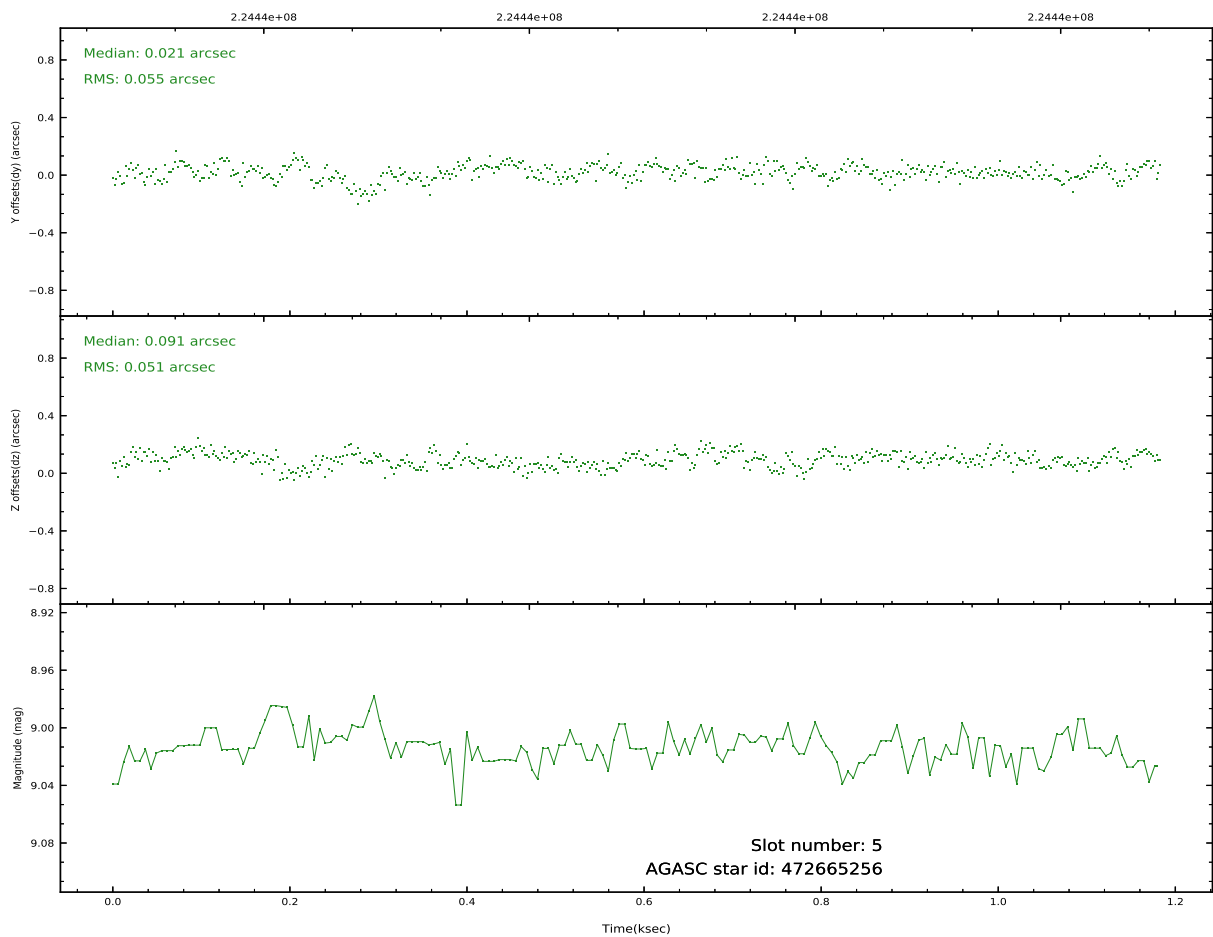
Time (s)



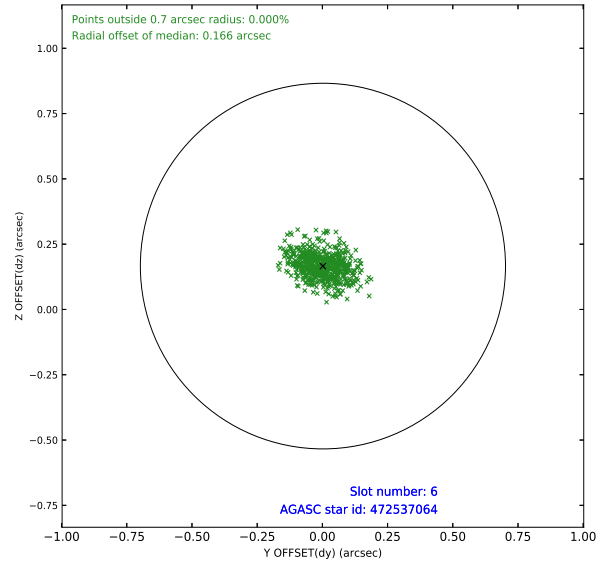
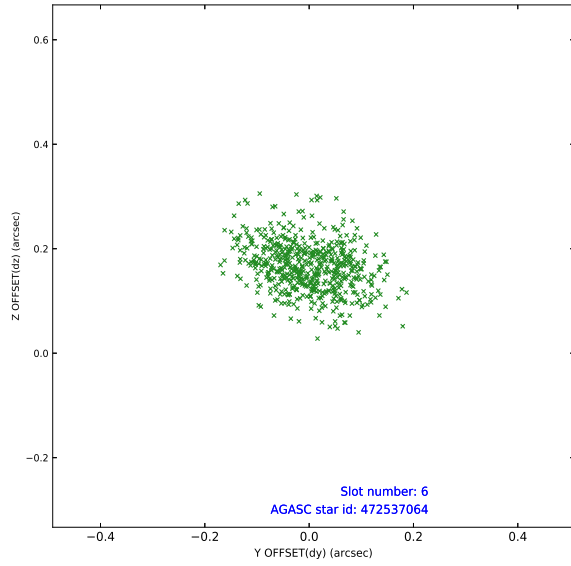
2.4.3 Slot 5



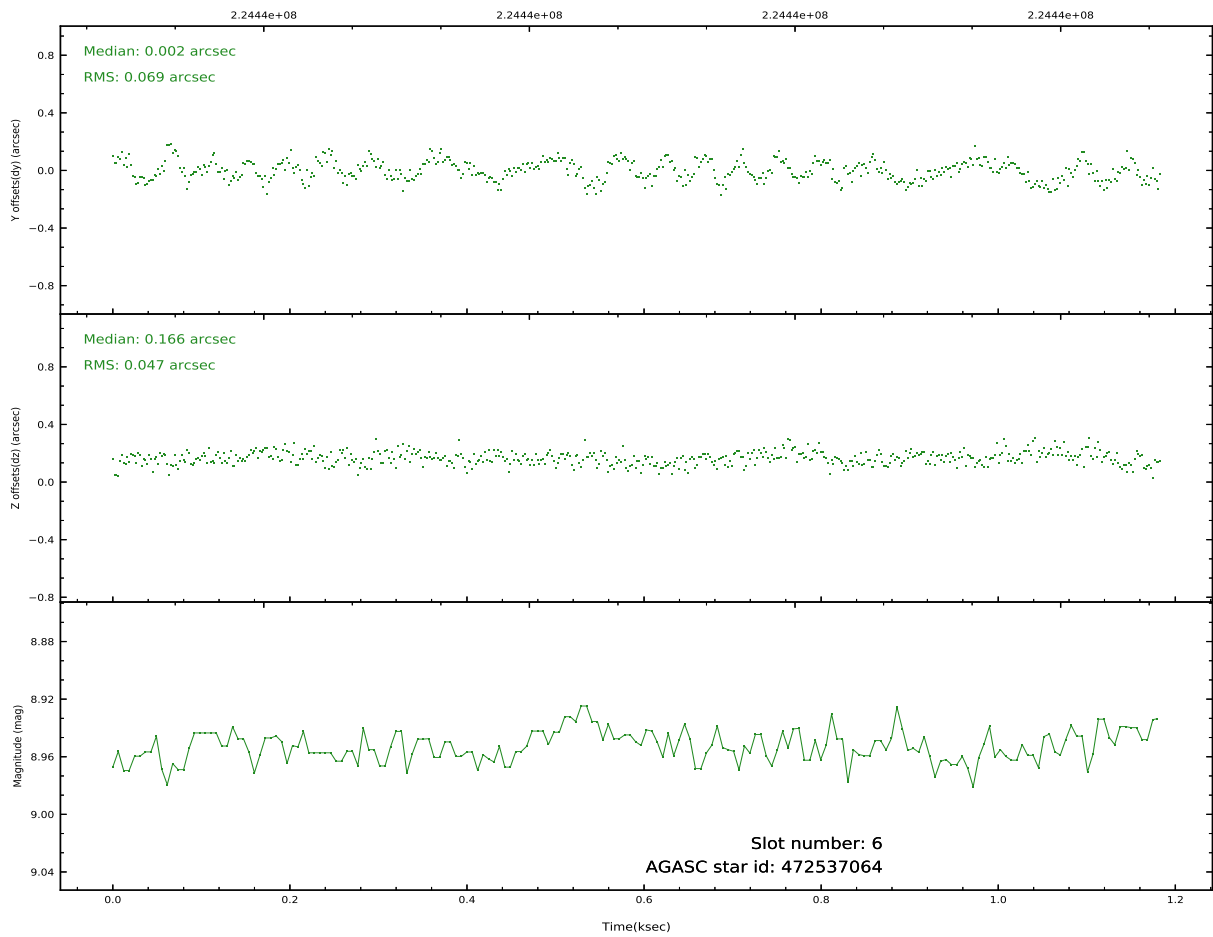
Time (s)



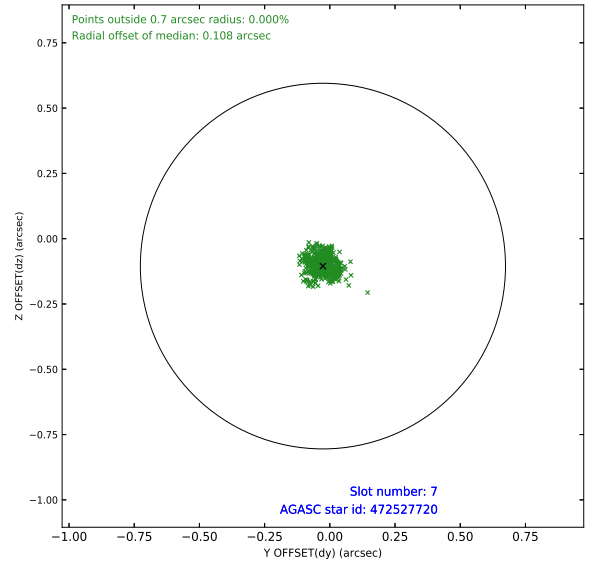
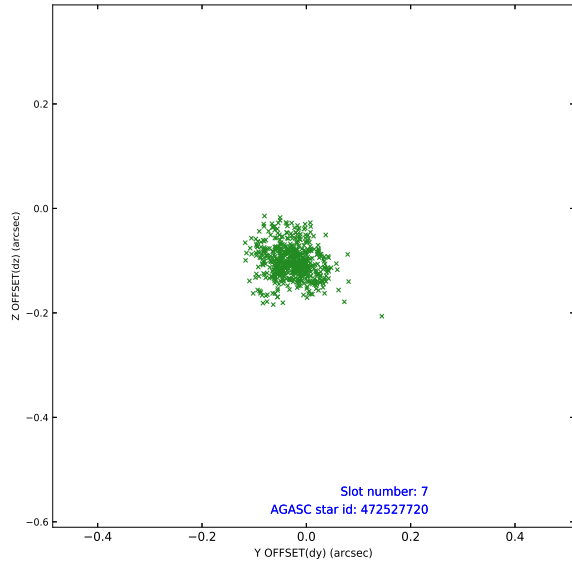
2.4.4 Slot 6



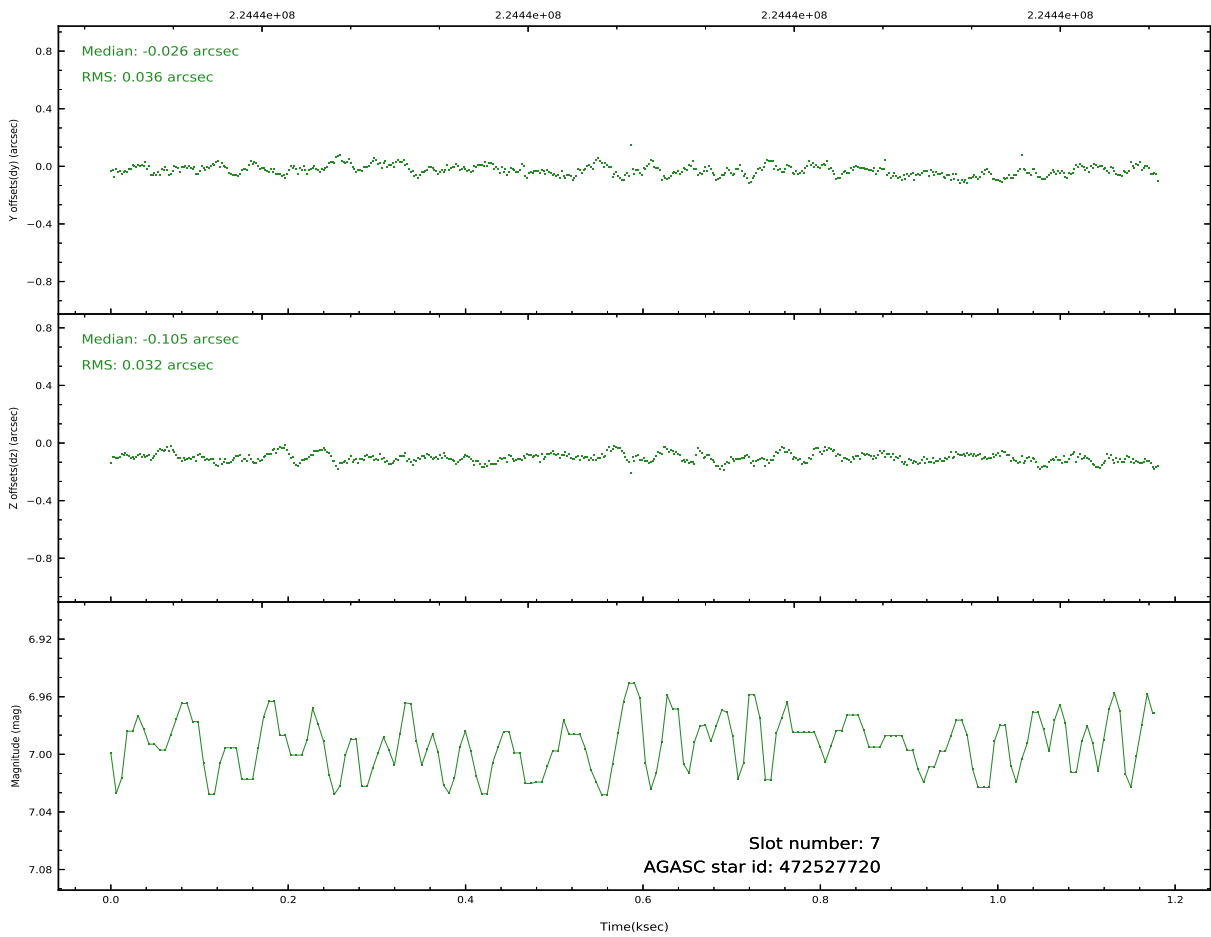
Time (s)



2.4.5 Slot 7

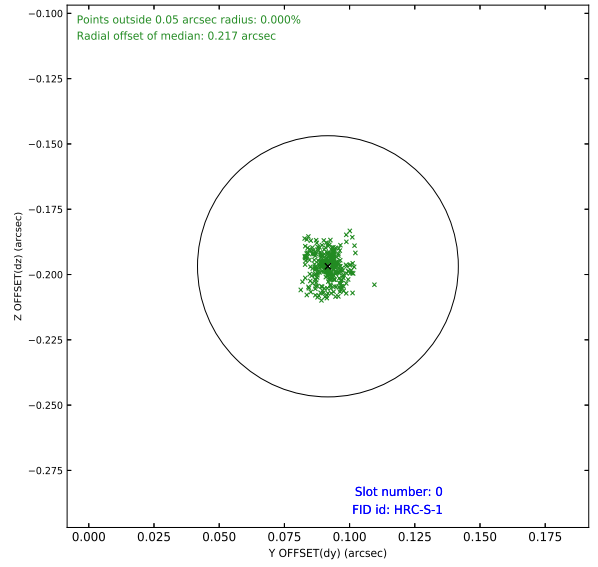
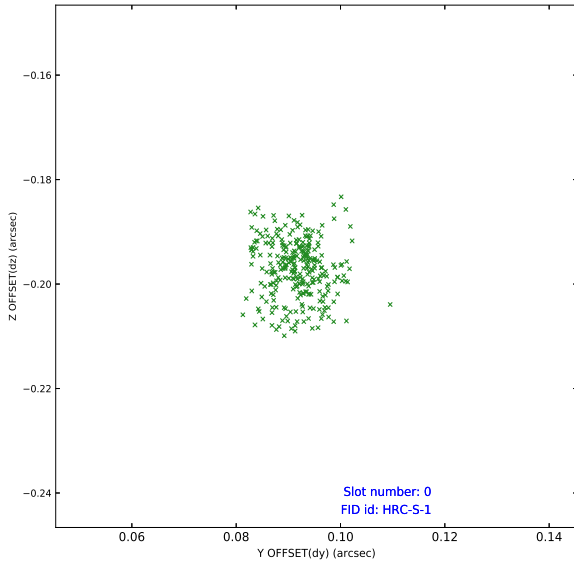


Time (s)

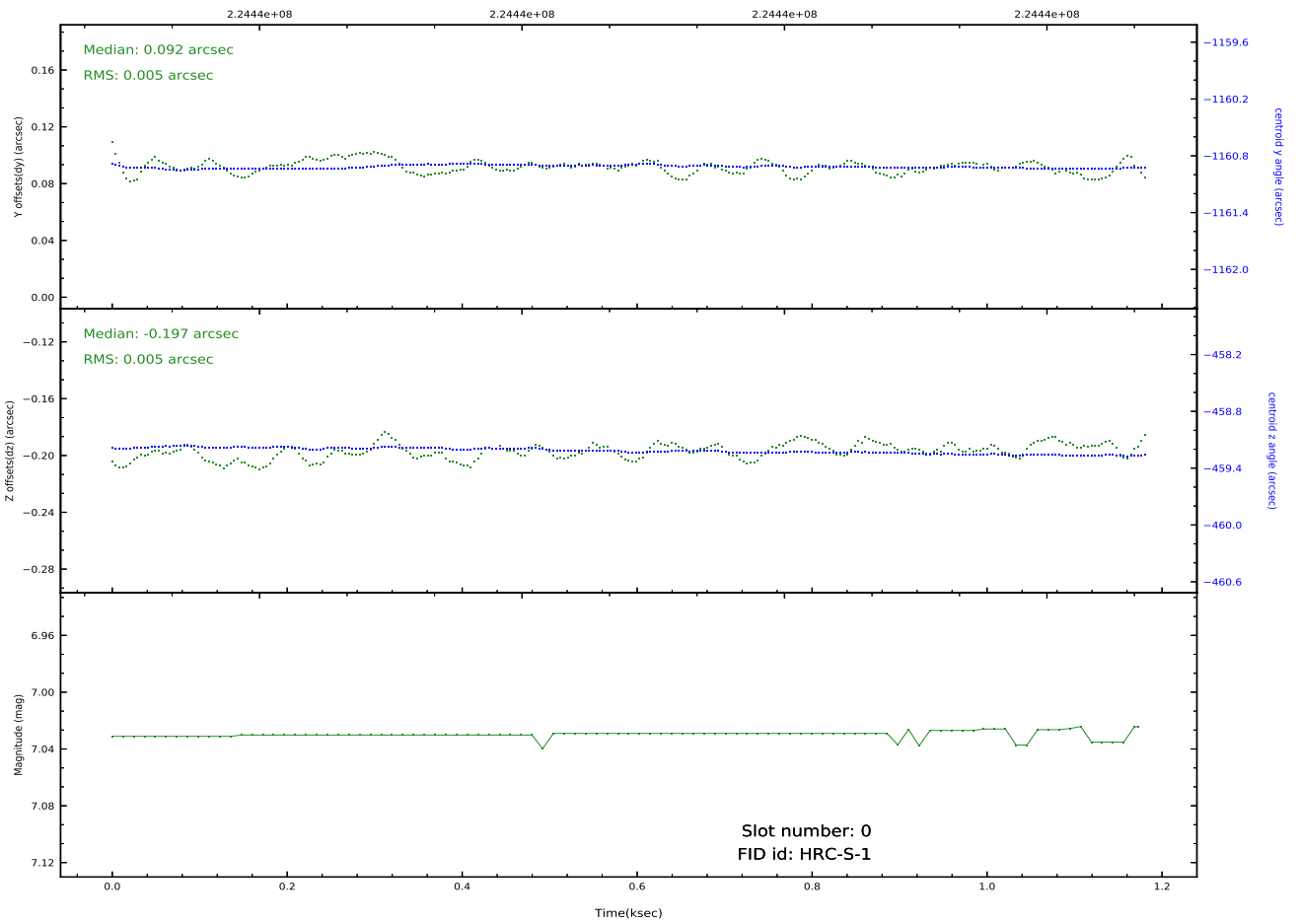


2.5 FID Slots

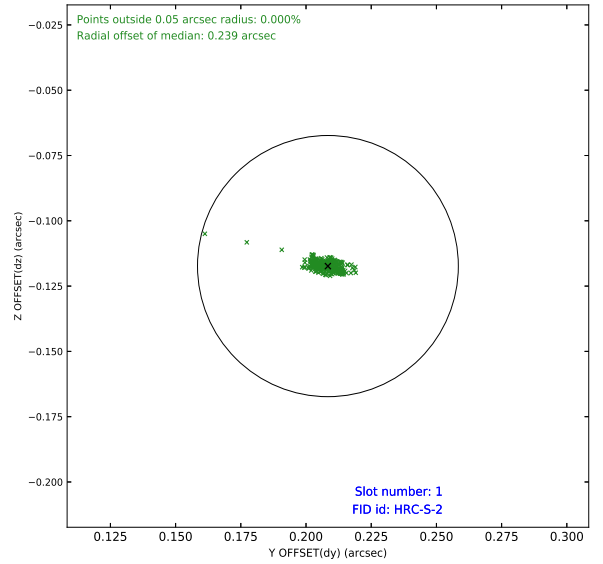
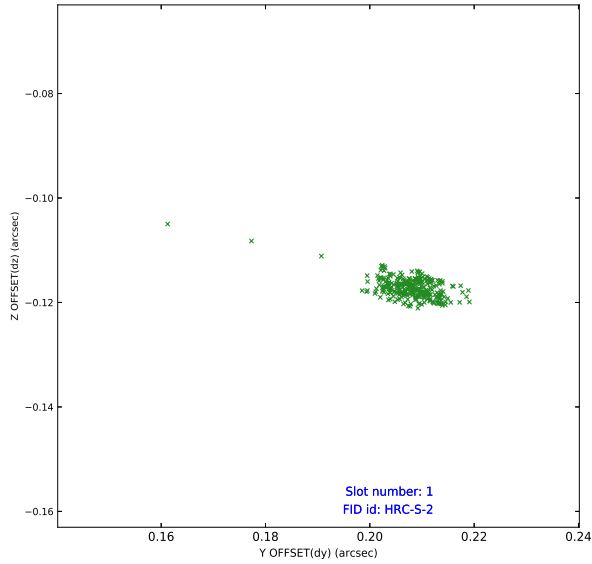
2.5.1 Slot 0



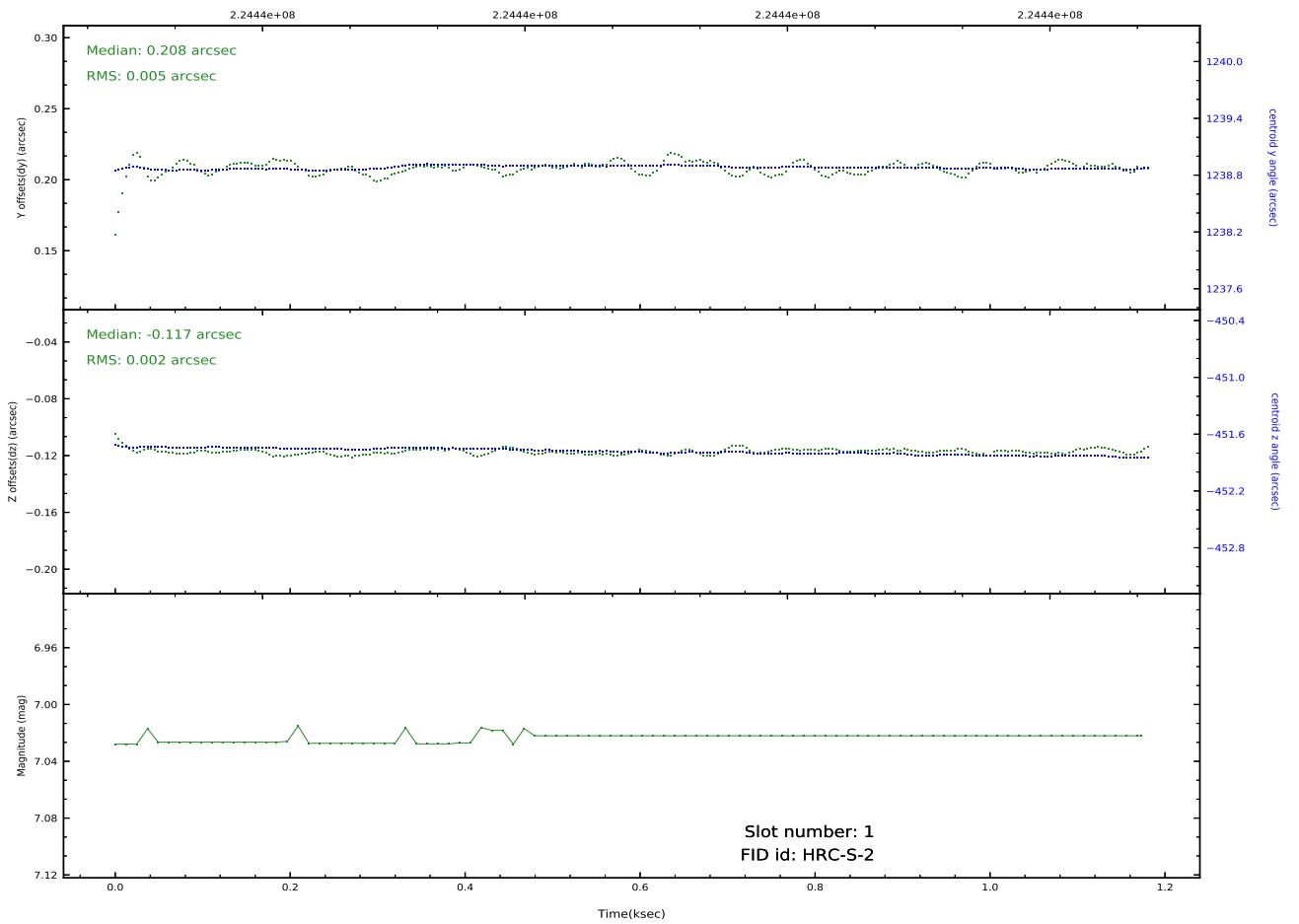
Time (s)



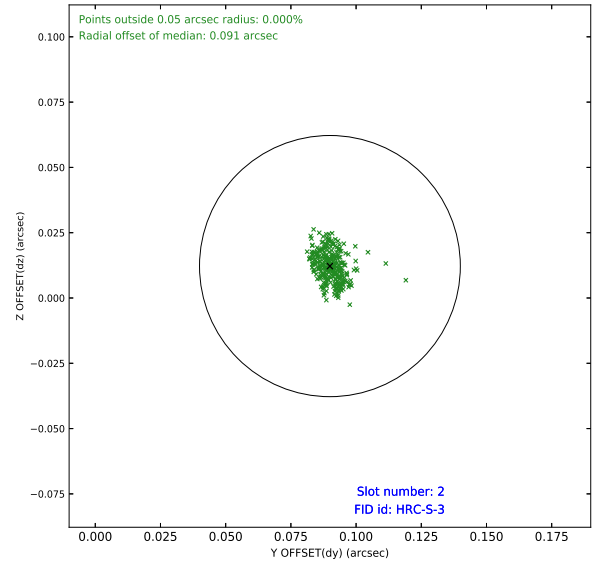
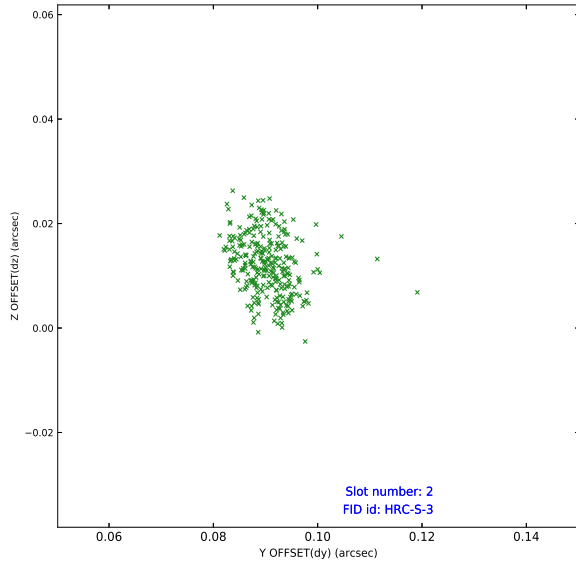
2.5.2 Slot 1



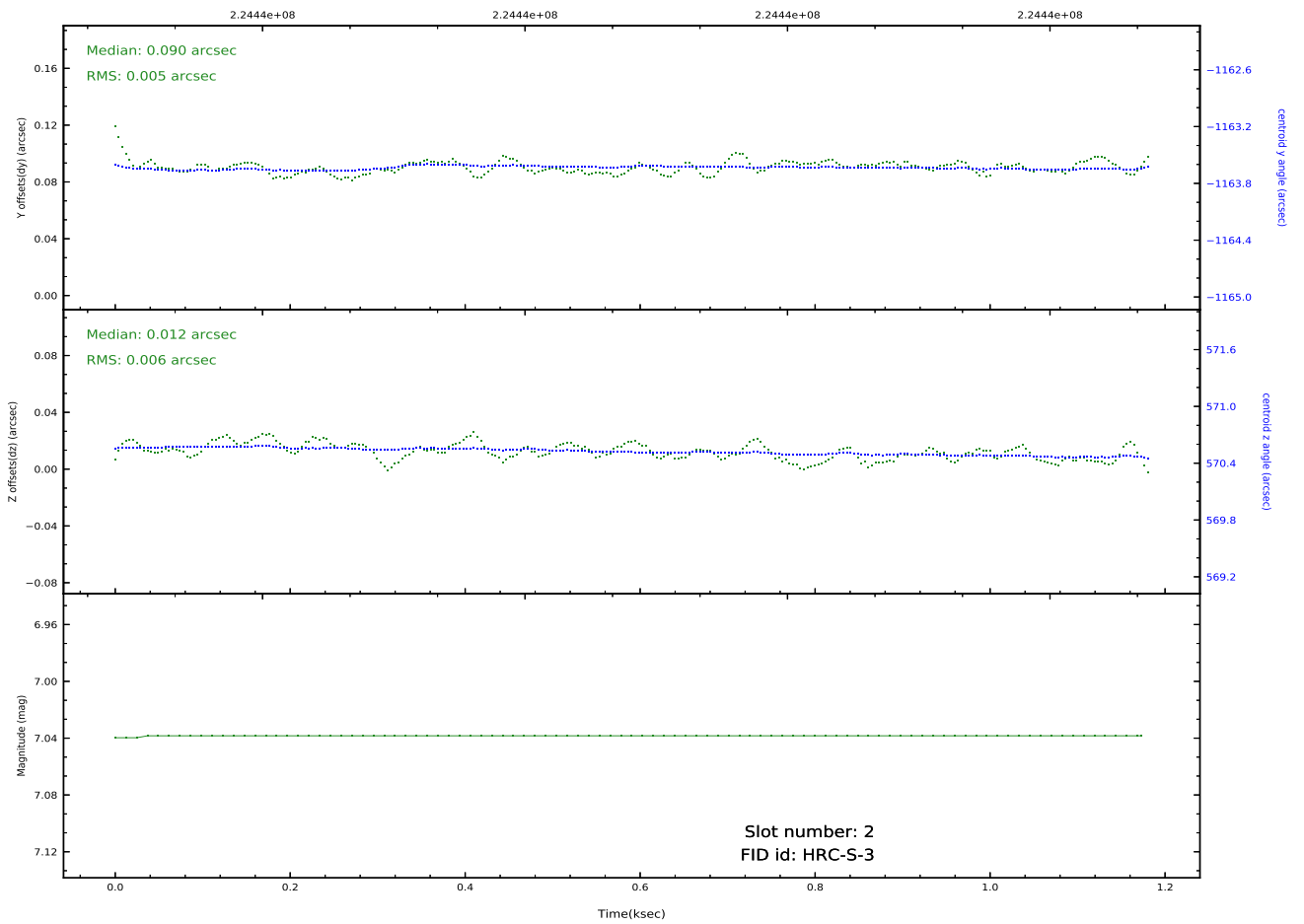
Time (s)



2.5.3 Slot 2



Time (s)



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2020.10.07
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.153381

A.2 Comments

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.