

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 7195 - L2 Version 4
Chandra X-Ray Center

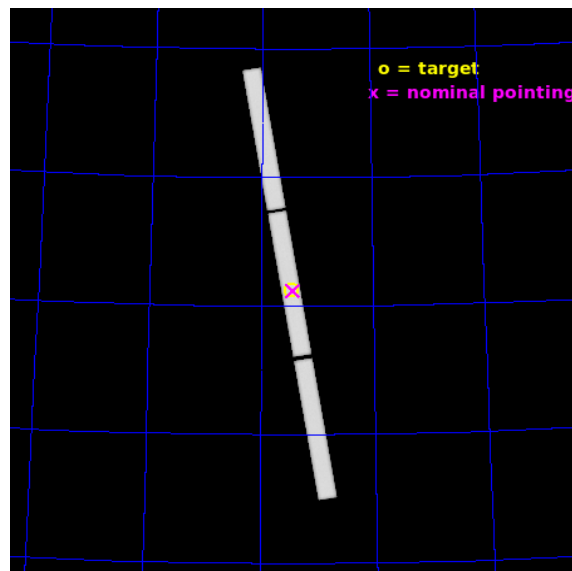
L2 Processing Date : Oct 11 2020

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1 Front

seq_num	200330	Sequence number
obs_id	7195	Observation id
title	The location and spatial structure of the X-ray emitting plasma in the magnetically confined environment of beta Cep	Proposal title
observer	Dr Coralie Neiner	Principal investigator
object	beta Cep	Source name
ra_targ	322.165	Observer's specified target RA [deg]
dec_targ	70.560717	Observer's specified target Dec [deg]
ra_nom	322.1547896231	Nominal RA [deg]
dec_nom	70.559190158906	Nominal Dec [deg]
roll_nom	260.27379508014	Nominal Roll [deg]
revision	4	Processing version of data
ontime	27148.407502294	[s]
liveltime	26920.811290766	Ontime multiplied by DTCOR
l2events	1747586	Number of level 2 events

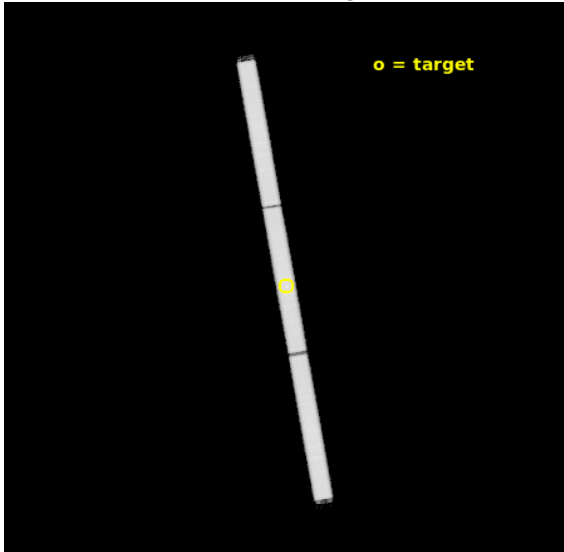


2 OBI

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	26576.063000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	27148.407502294	[s]
caldbver	4.9.2	 	l1events	2416162	Number of level 1 events
date	2020-10-11T13:38:14	Date and time of file creation	tgmethod	TGDETECT	Method used to create src1a file
revision	4	Processing version of data	zo_pos	(32678.47, 32810.64)	src1a sky pixel position

2.1.3 Events

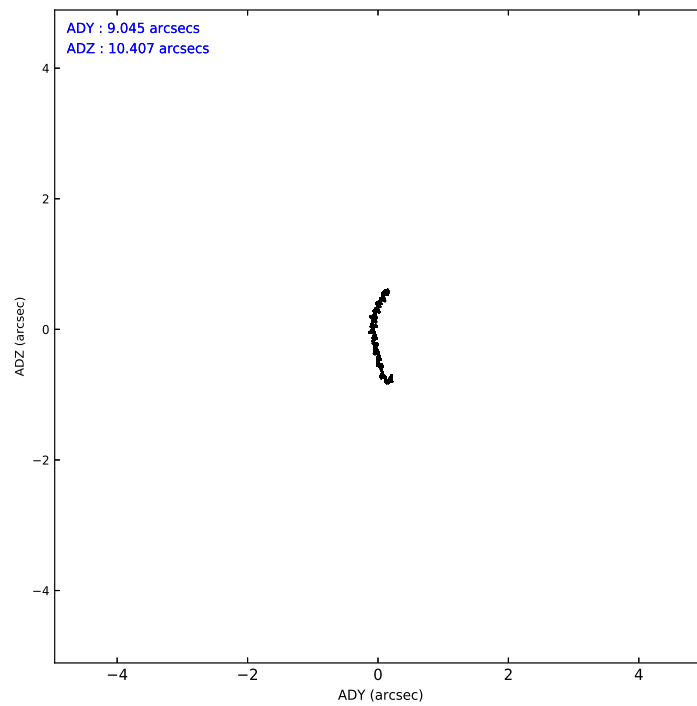
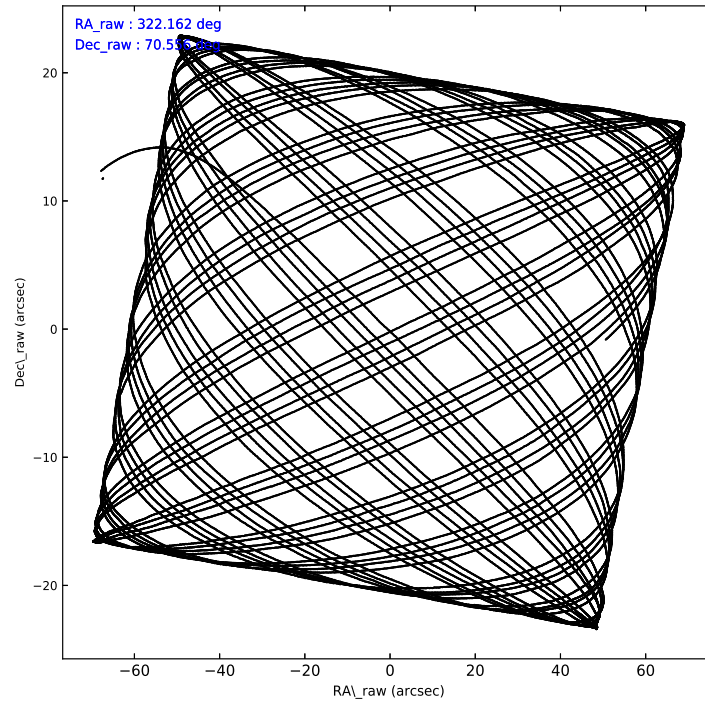
Level 1 Events

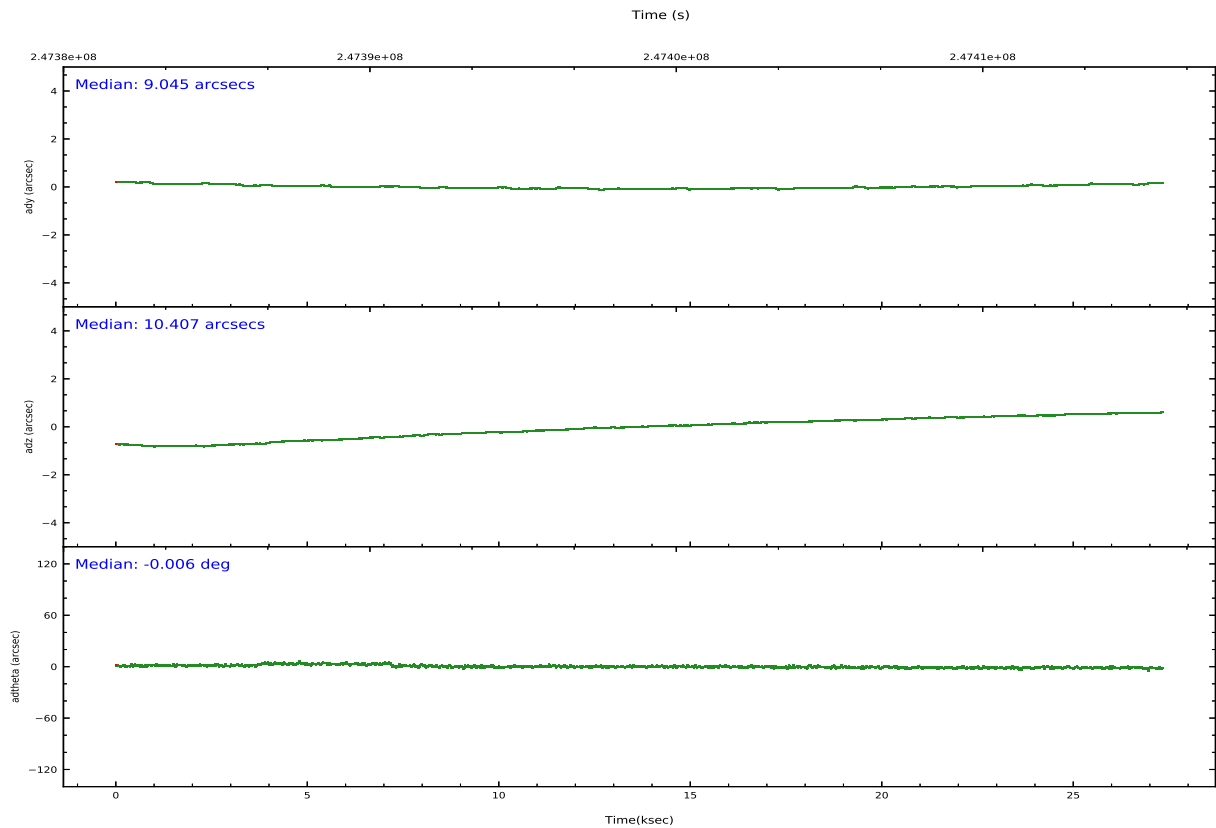
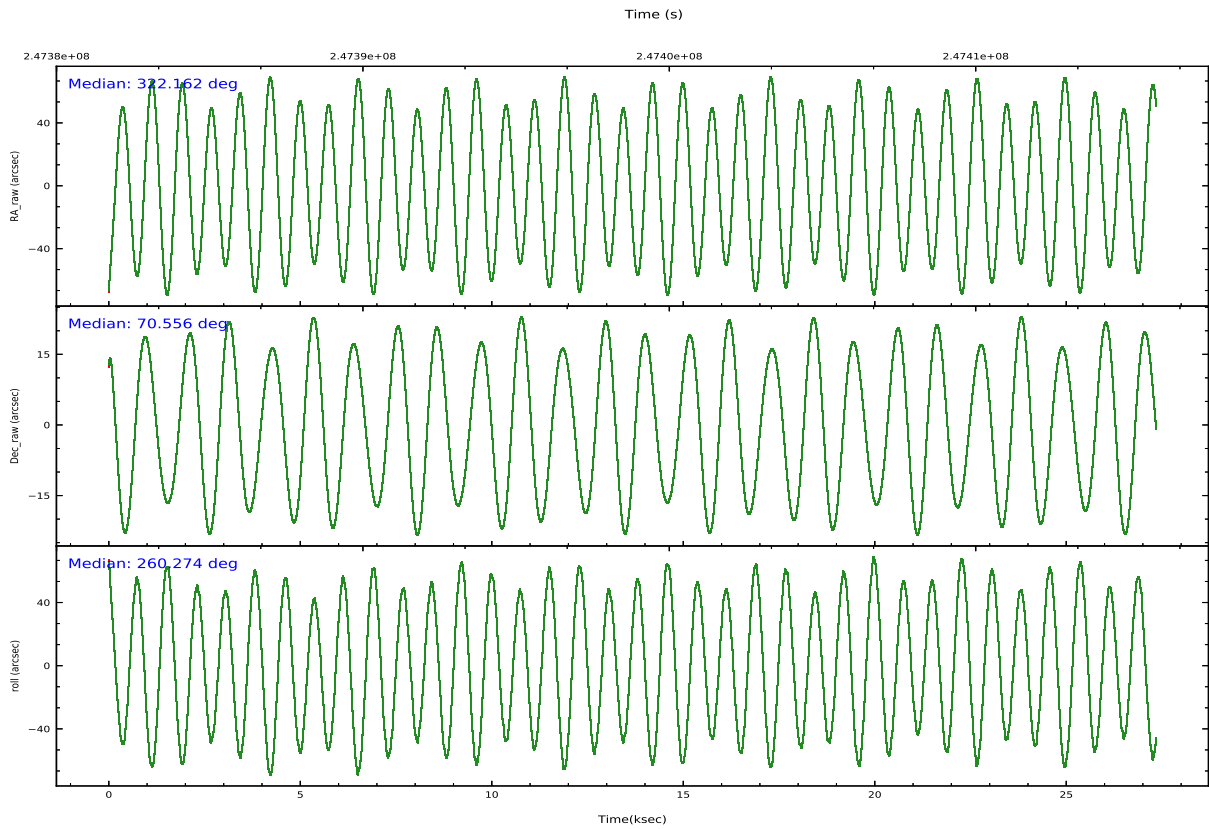
	segment 1	segment 2	segment 3
level 1 events	813823	793779	808560
rejected events	22020	21746	22237
rejected %	2%	2%	2%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	HRC	HRC	Obspar version number	8	8
Detector	HRC-S	HRC-S	Obspar file type	PREDICTED	ACTUAL
Grating	LETG	LETG	Obspar update status	NONE	UPDATED
Data mode	OBSERVING	OBSERVING			
Observation mode	POINTING	POINTING			
[deg] Pointing RA	322.128446	322.1547896231			
[deg] Pointing Dec	70.582433	70.55919015890601			
[deg] Pointing Roll	260.234471	260.27379508014			
[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			
Phase constraints	Y	Y			
[d] Phase period	12.000750	12.000750			
[d] Phase epoch (MJD)	53962.310000	53962.310000			
Phase start	0.966245	0.966245			
Phase end	0.033755	0.033755			
Phase start error	0.020000	0.020000			
Phase end error	0.020000	0.020000			
[s] Observation start time (MET)	247385535.184000	247384588.98131			
Observation start date	2005-11-03T06:11:11	2005-11-03T05:56:28			
[s] Observation end time (MET)	247412111.184000	247412712.4201			
Observation end date	2005-11-03T13:34:07	2005-11-03T13:45:12			

2.3 Aspect





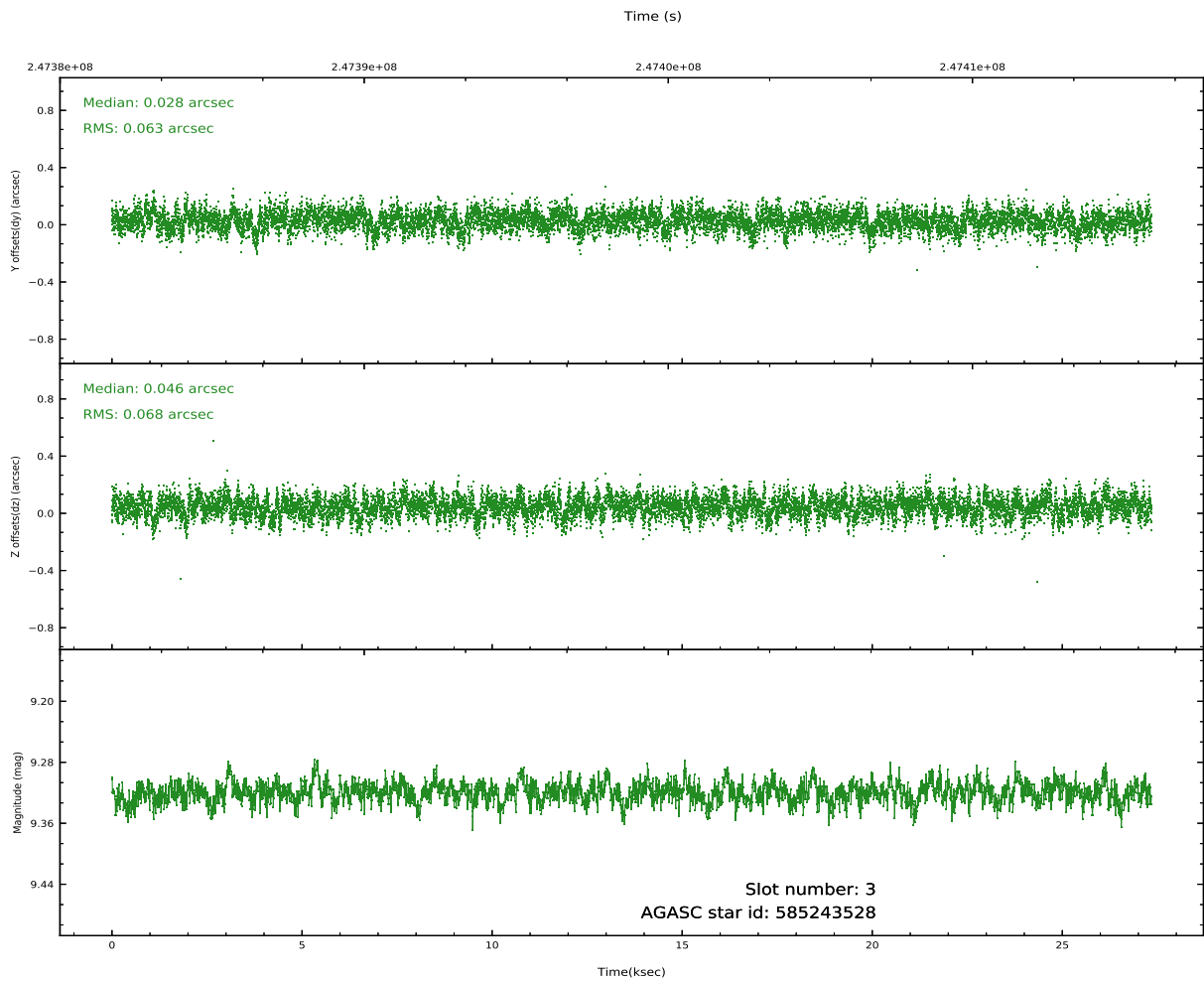
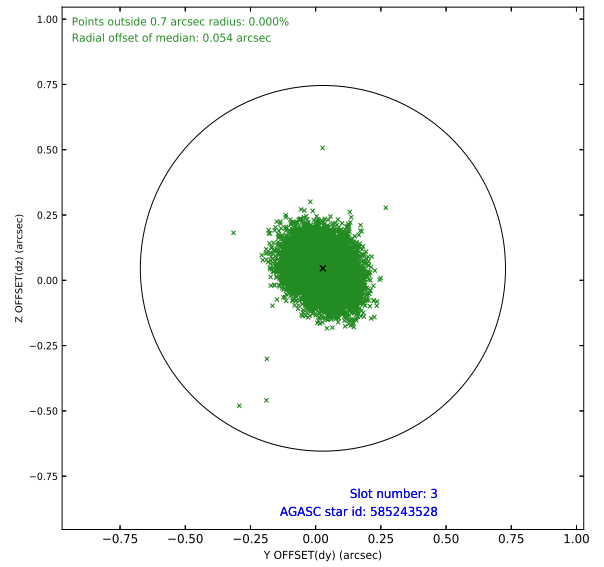
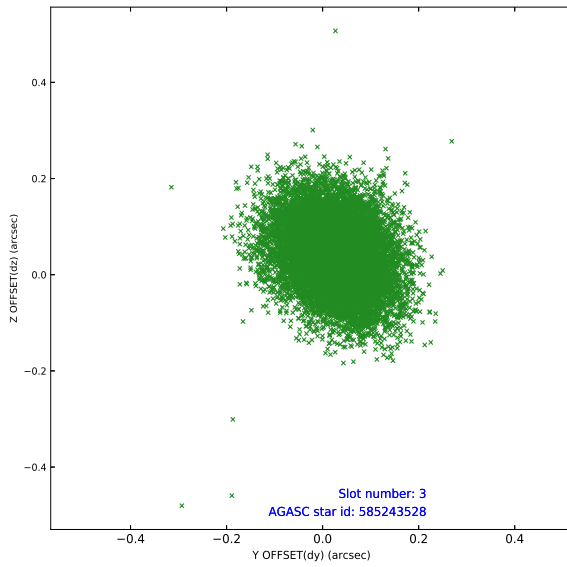
Slot Statistics

slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_x
0	FID		HRC-S-1	7.02	6670	1.000	0.061	-0.144	0.006	0.011	0.000000	0.000000	-1163.31	-459
1	FID		HRC-S-2	7.02	6670	1.000	0.110	-0.166	0.021	0.047	0.000000	0.000000	1236.25	-451
2	FID		HRC-S-4	6.99	6671	1.000	0.232	0.007	0.020	0.045	0.000000	0.000000	1235.26	573
3	GUIDE	used	585243528	9.32	13328	1.000	0.028	0.046	0.098	0.161	323.001841	70.190189	1204.05	1288
4	GUIDE	used	585244656	7.43	13339	1.000	-0.079	-0.051	0.073	0.114	322.746463	70.823219	-981.59	572
5	GUIDE	used	585245544	7.37	13340	1.000	-0.055	-0.095	0.063	0.101	321.319997	70.477535	530.72	-895
6	GUIDE	used	585249712	9.18	13329	1.000	0.087	0.050	0.100	0.165	322.943679	70.596904	-222.65	950
7	GUIDE	used	585244168	9.02	13335	1.000	0.015	0.050	0.075	0.122	323.050612	69.955180	2024.13	1503

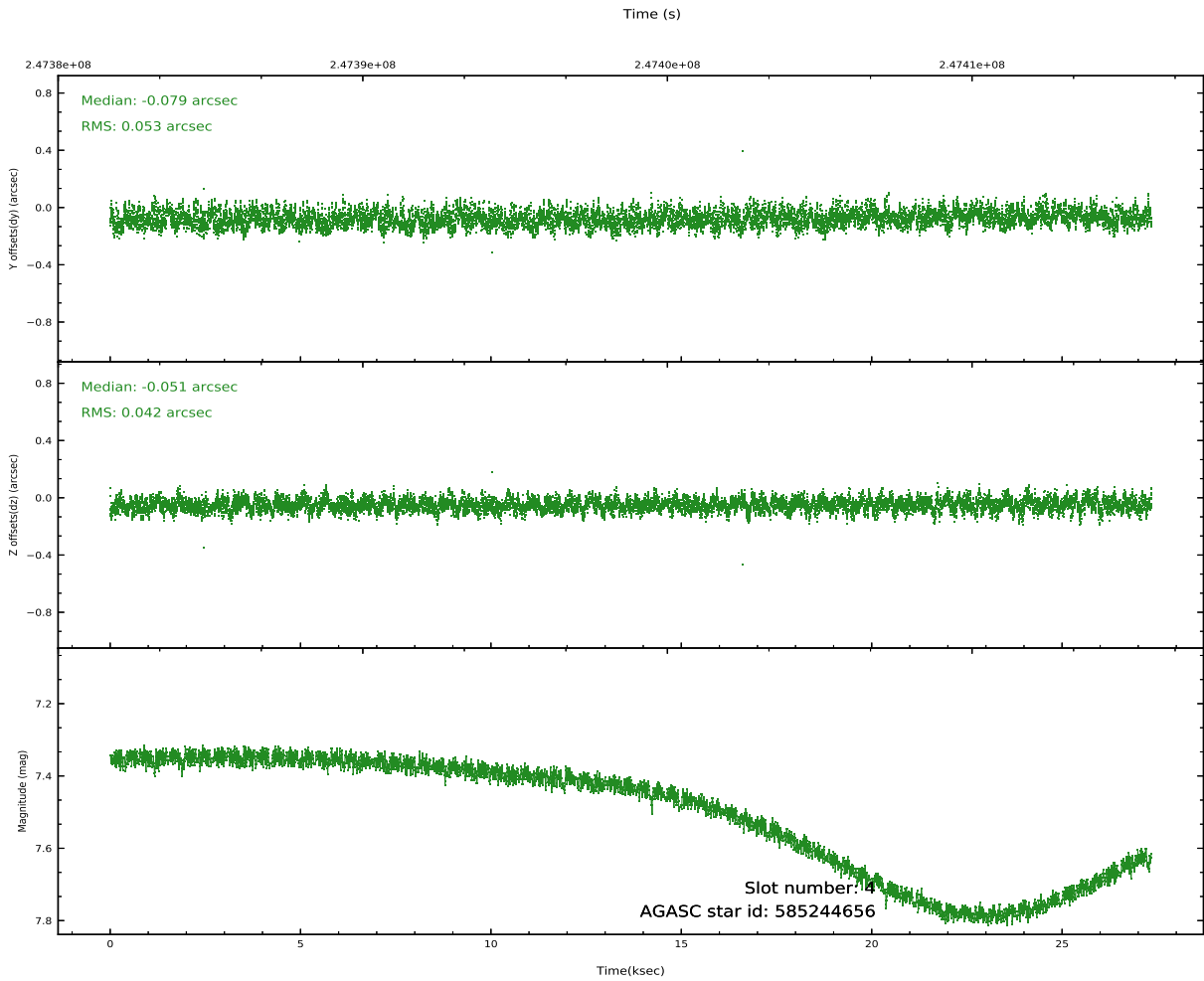
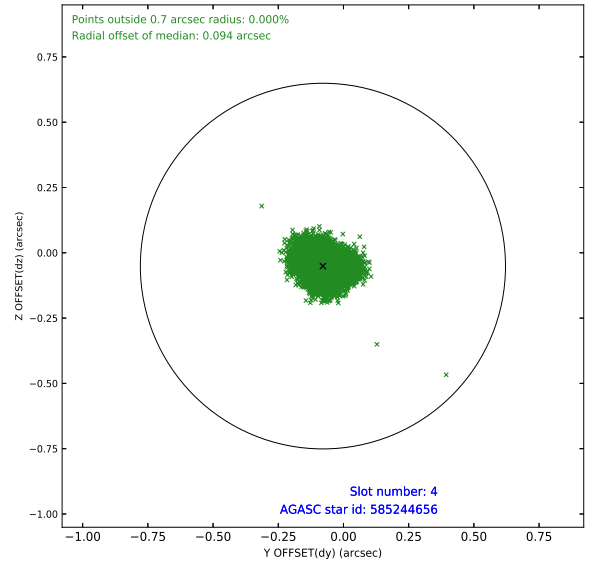
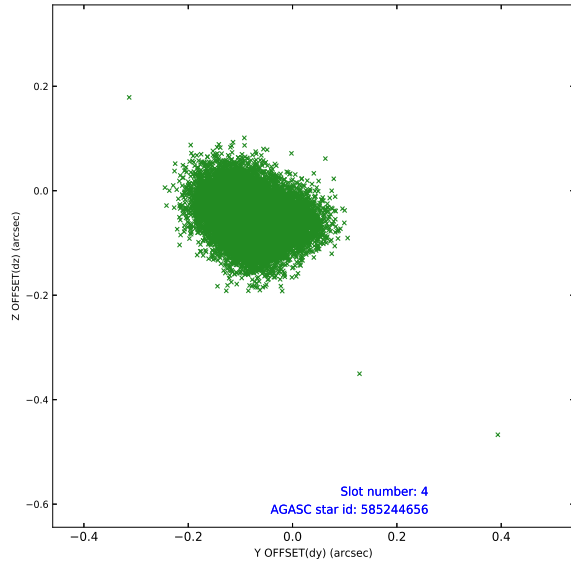
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2.4 Star Slots

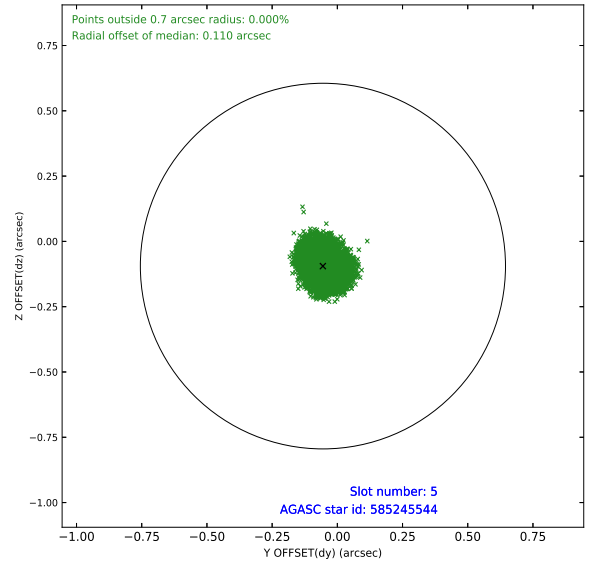
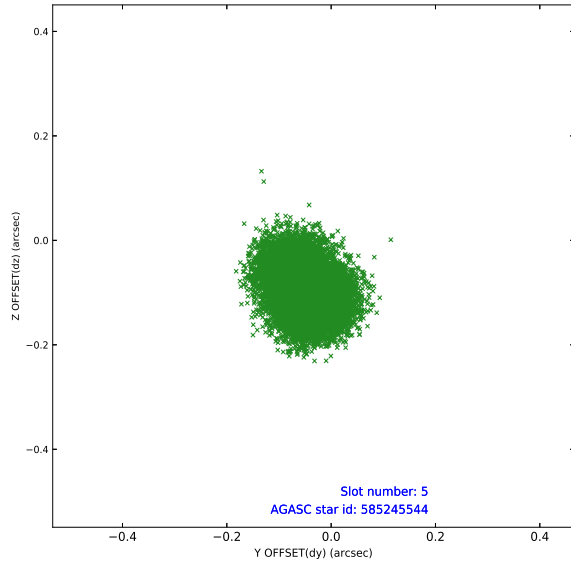
2.4.1 Slot 3



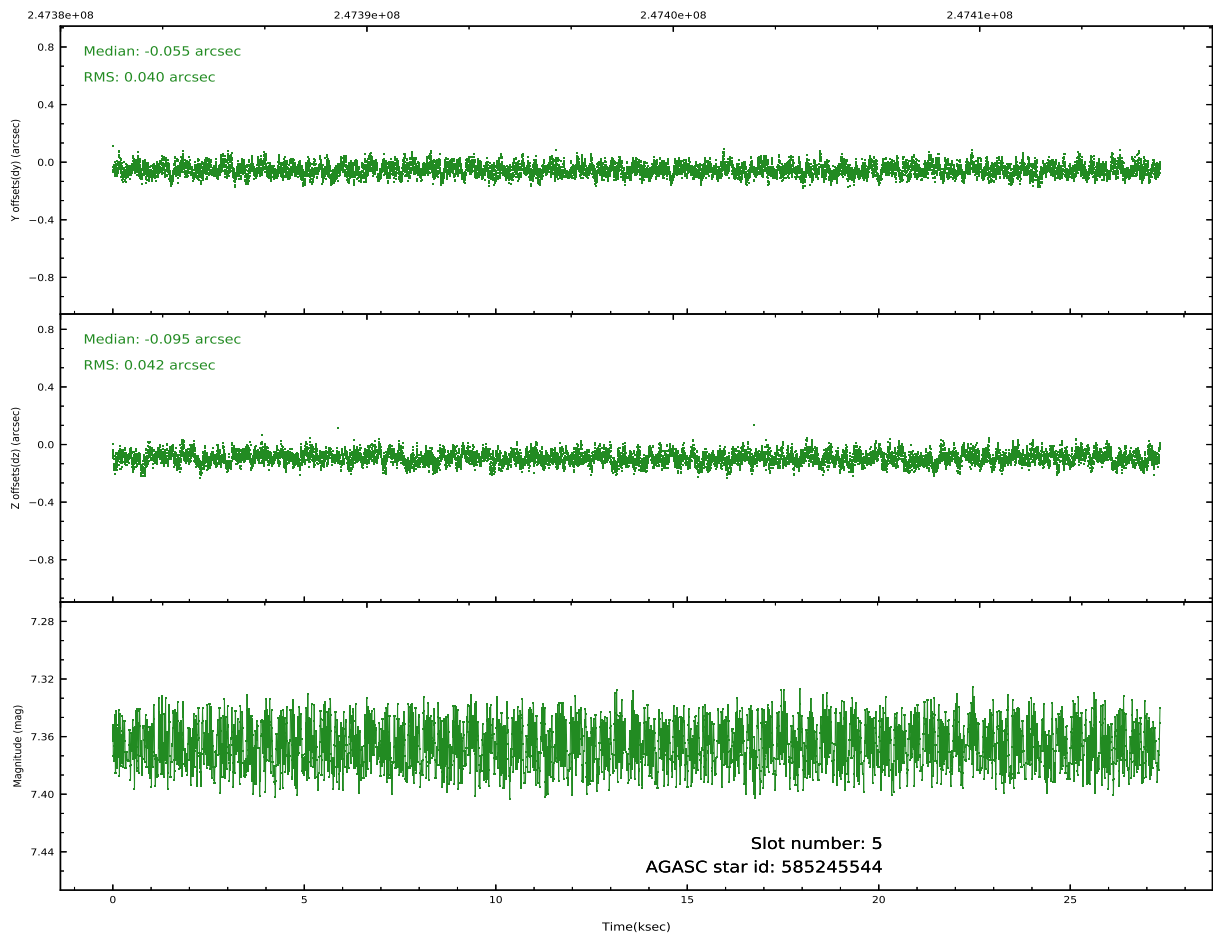
2.4.2 Slot 4



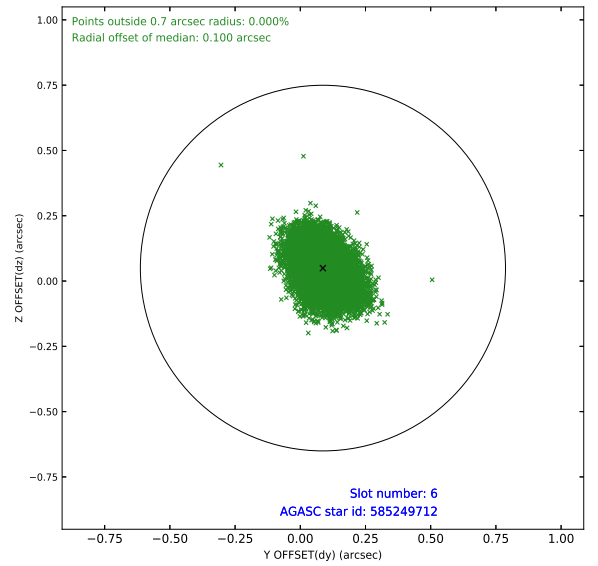
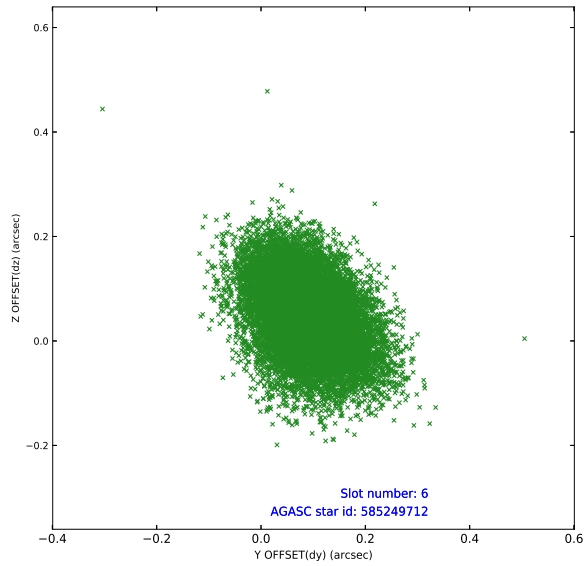
2.4.3 Slot 5



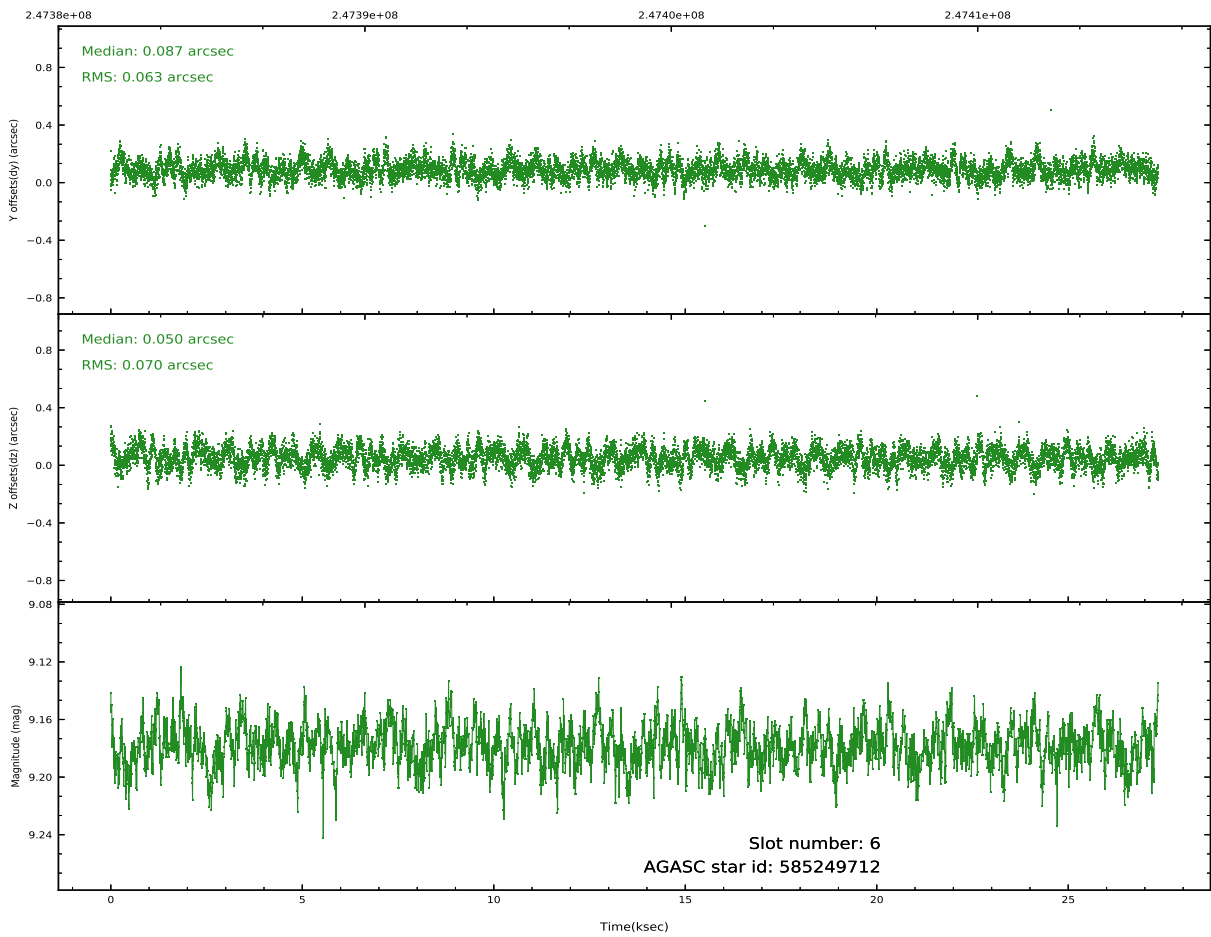
Time (s)



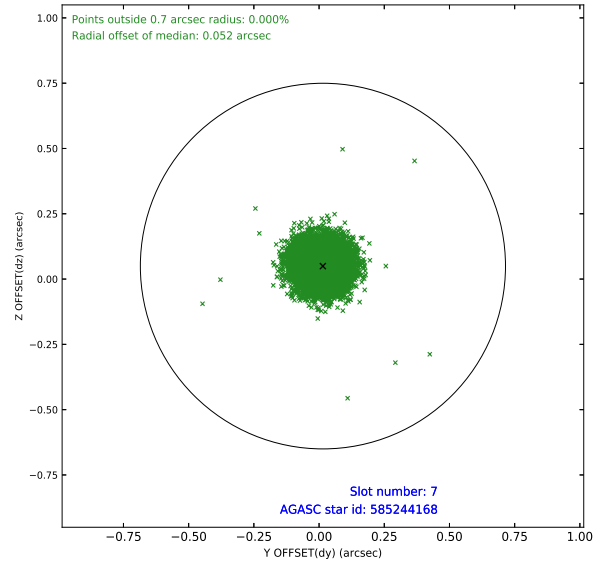
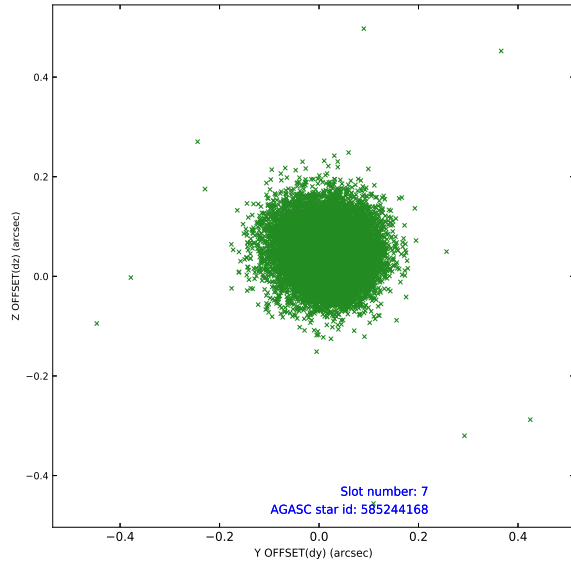
2.4.4 Slot 6



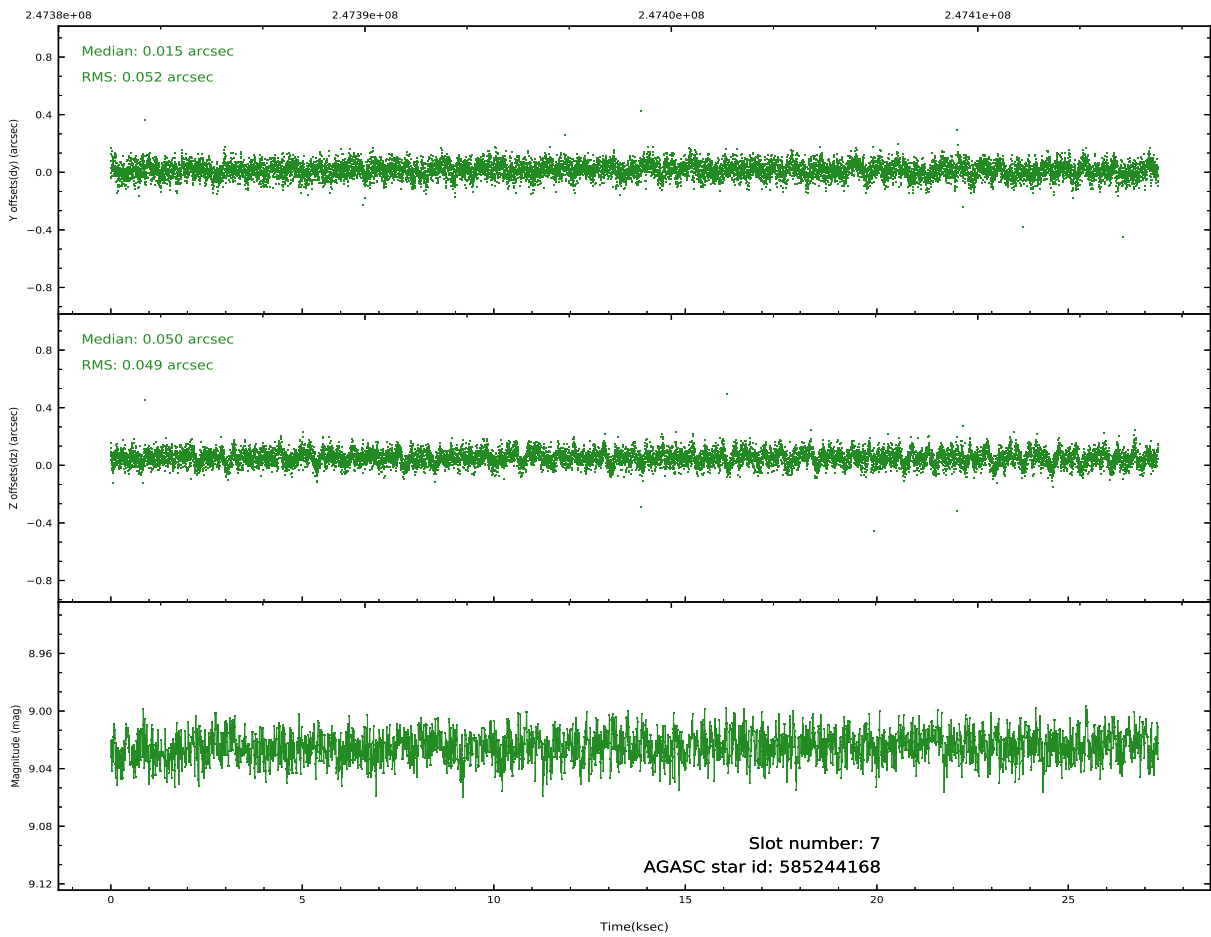
Time (s)



2.4.5 Slot 7

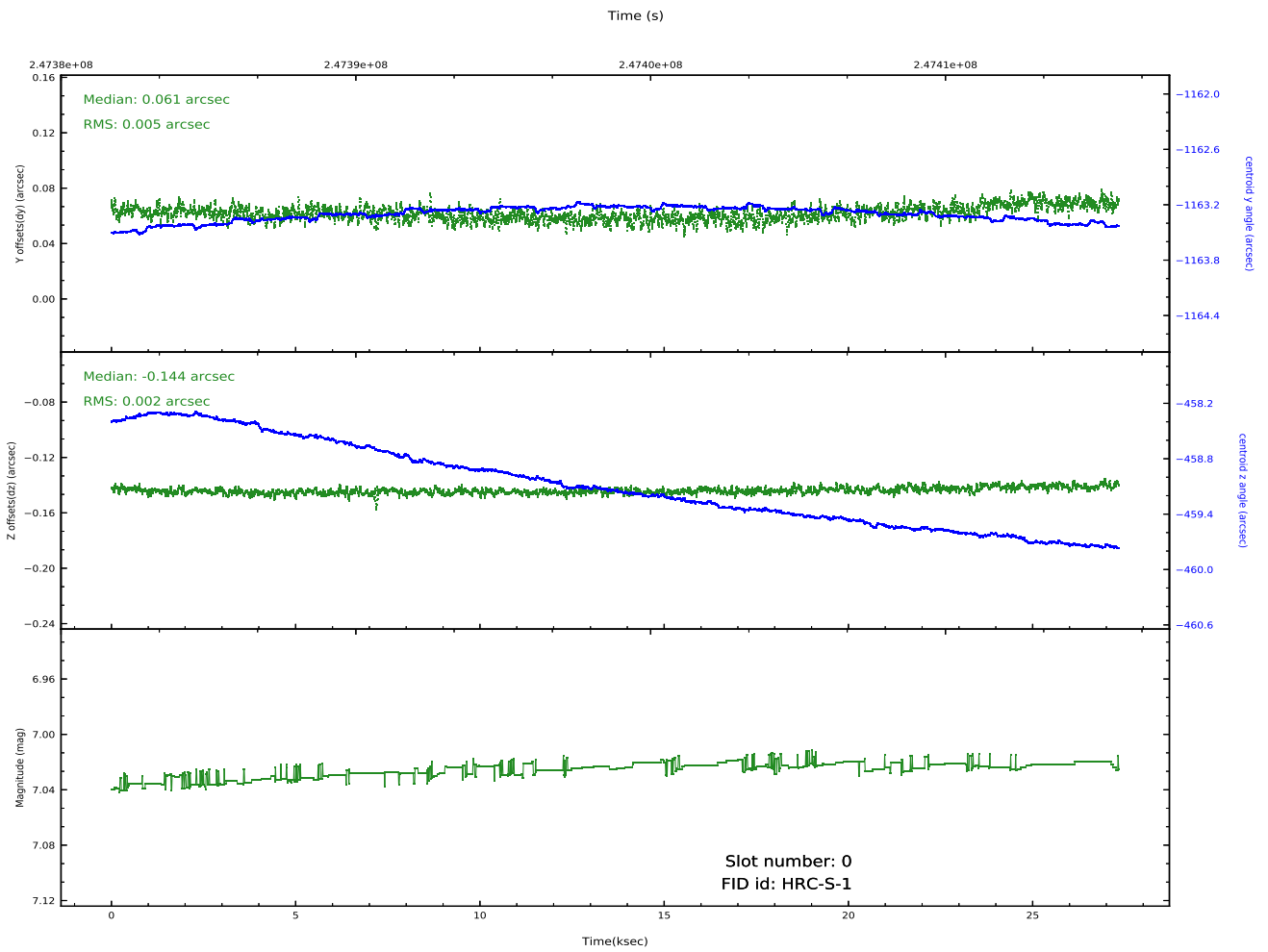
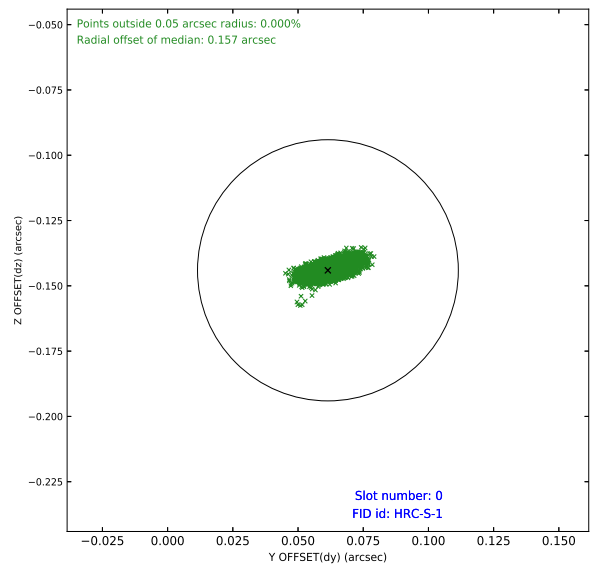
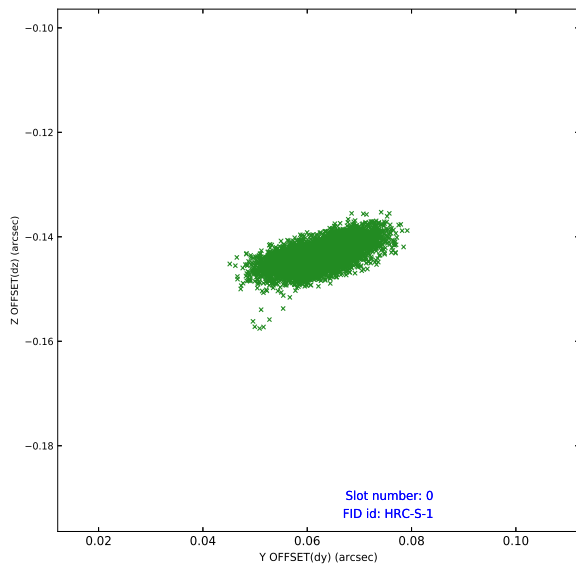


Time (s)

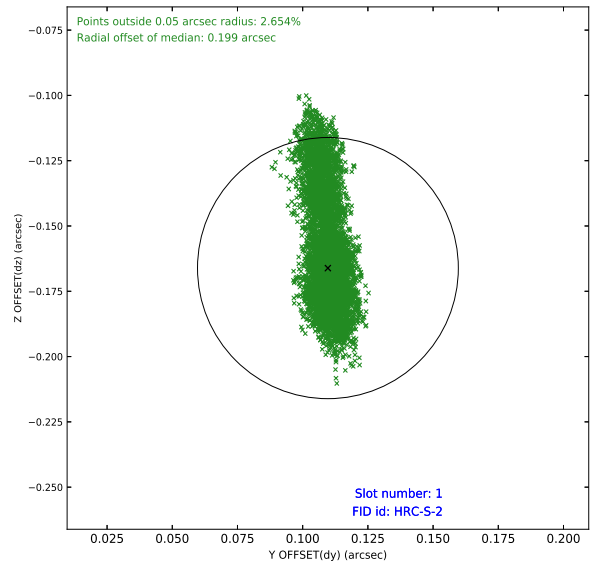
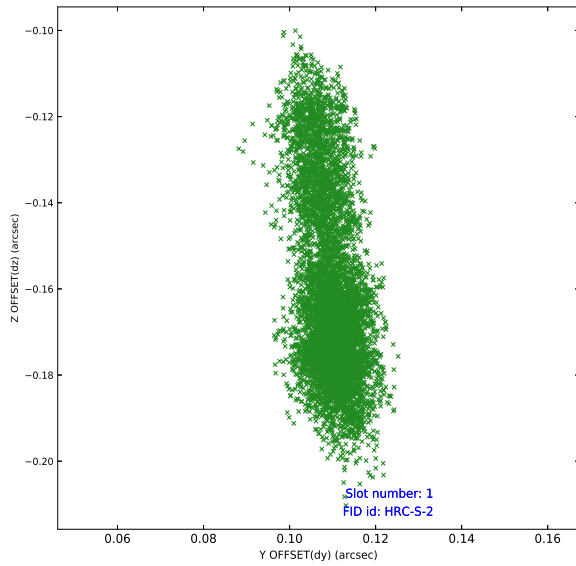


2.5 FID Slots

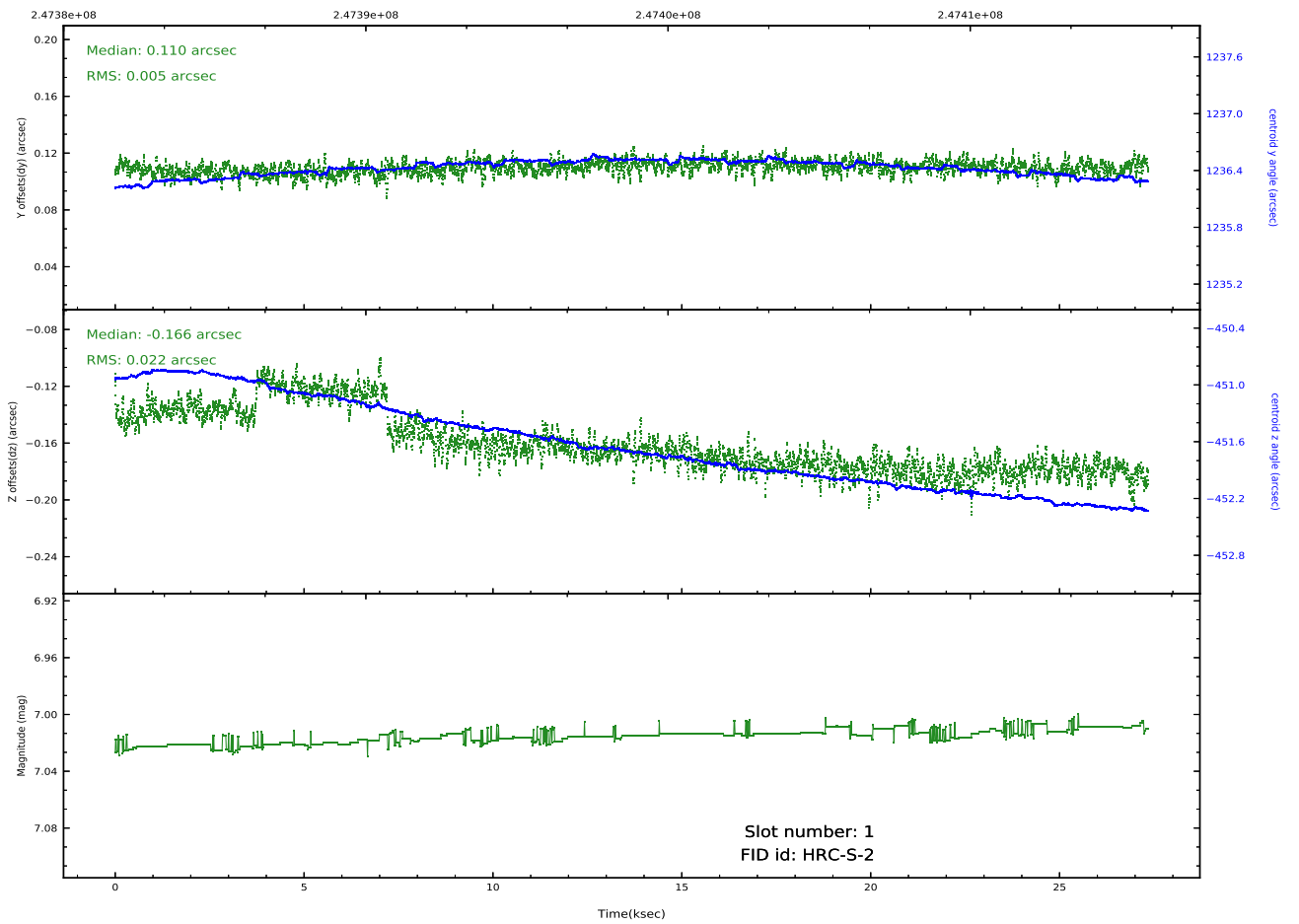
2.5.1 Slot 0



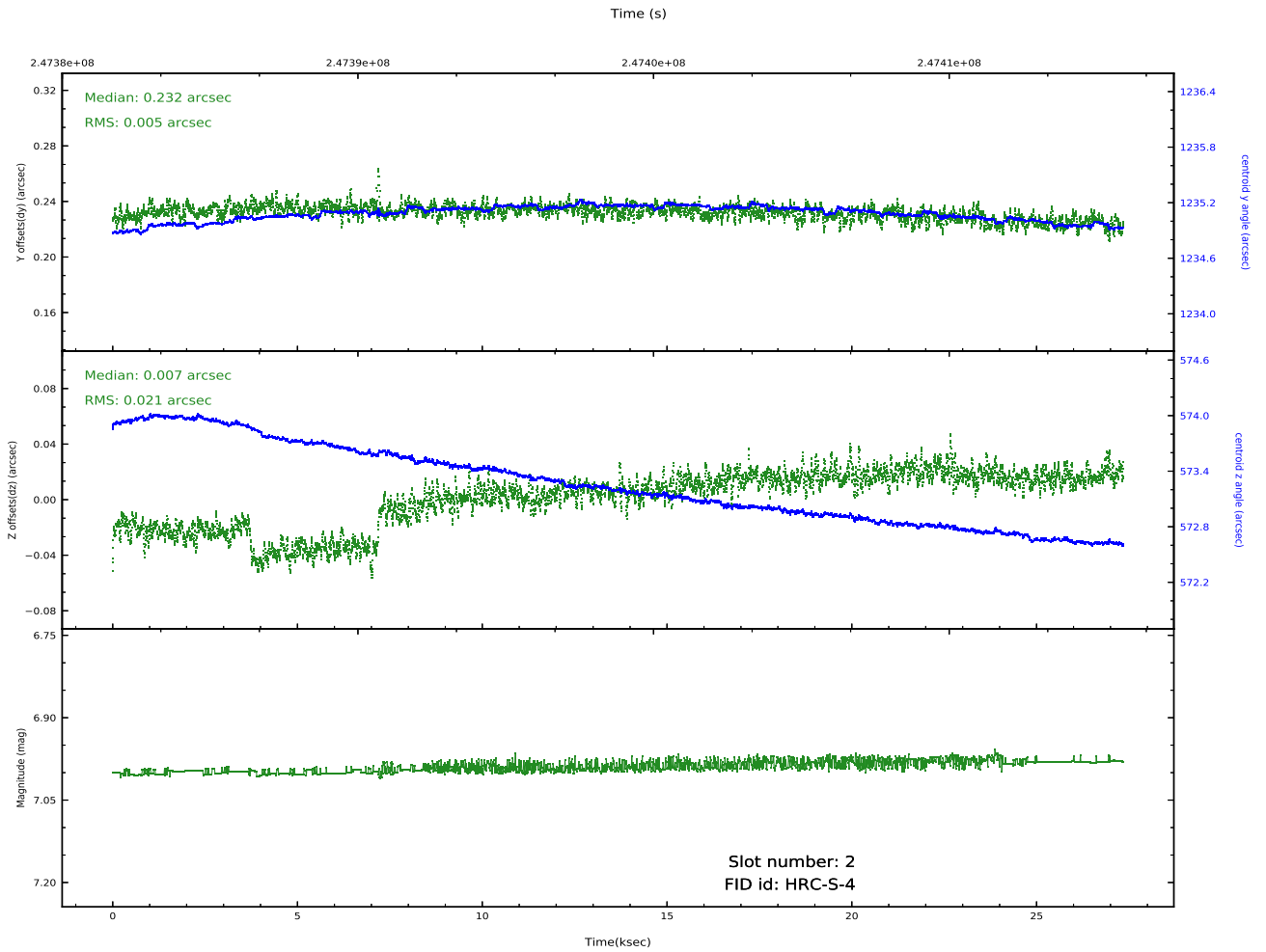
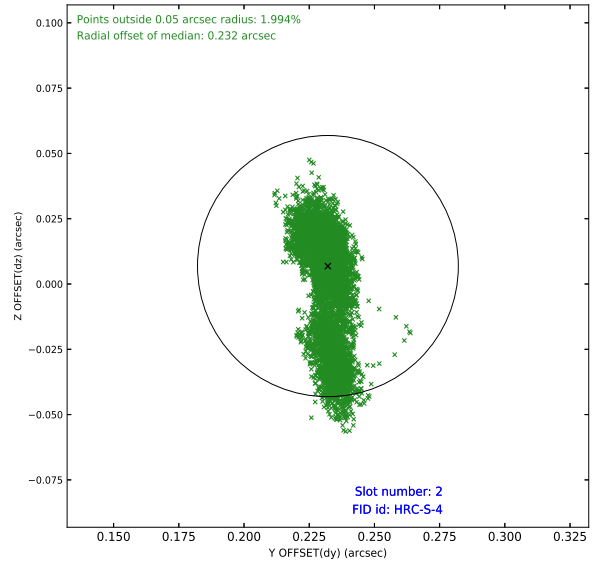
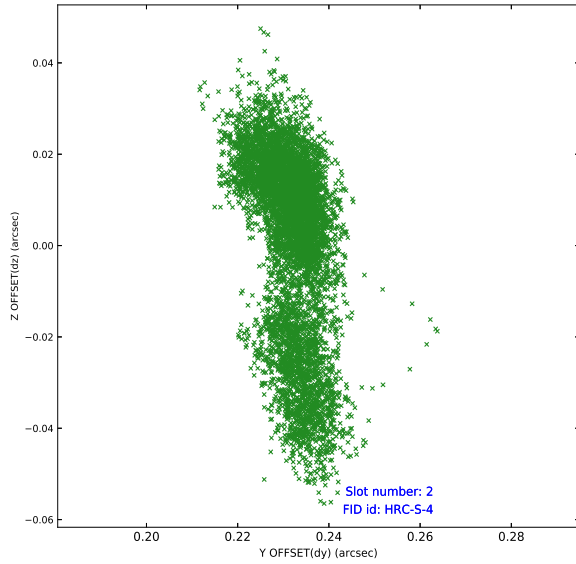
2.5.2 Slot 1



Time (s)

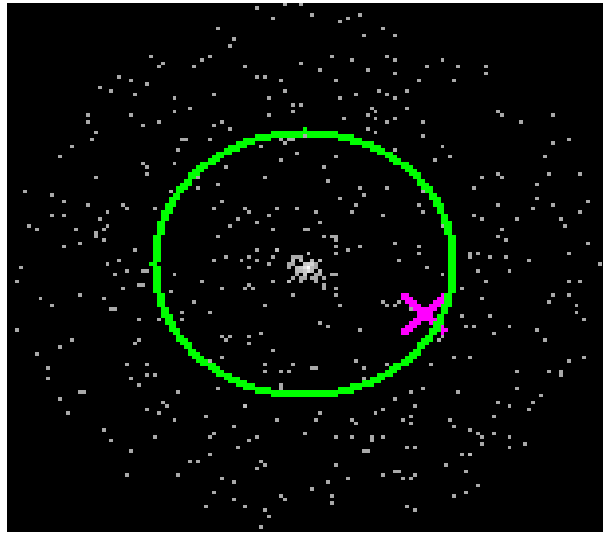


2.5.3 Slot 2

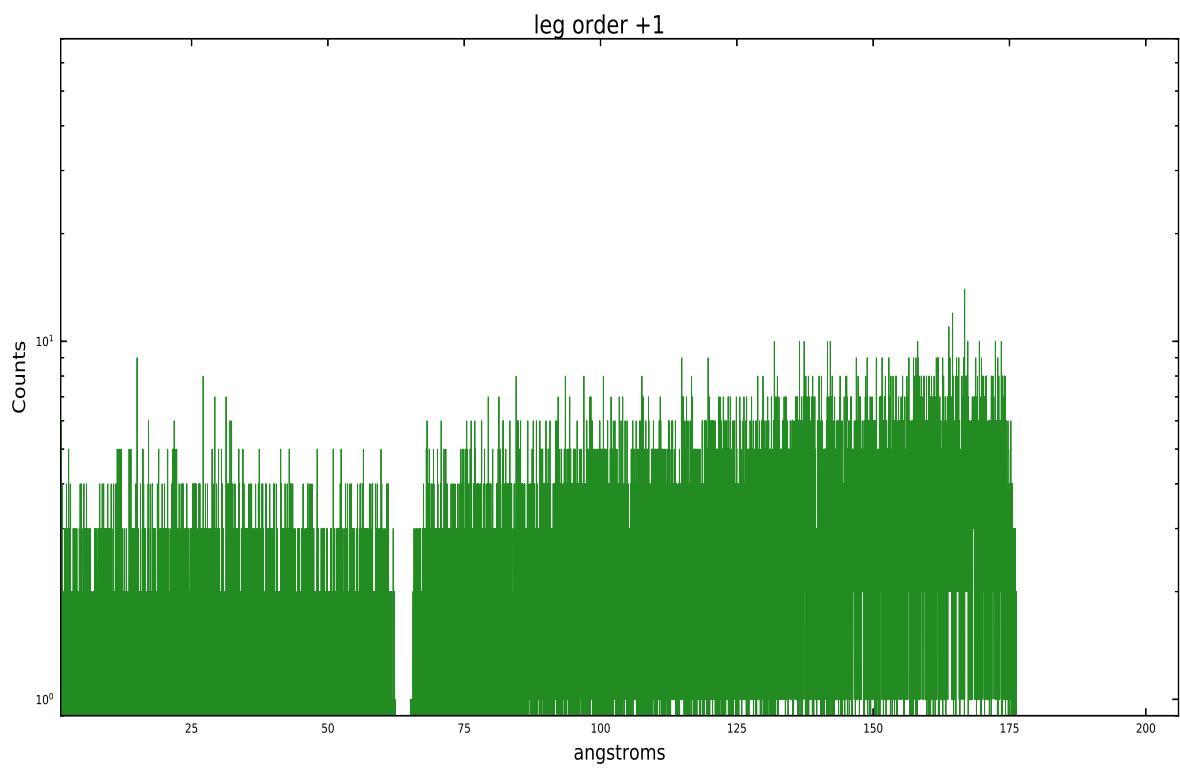
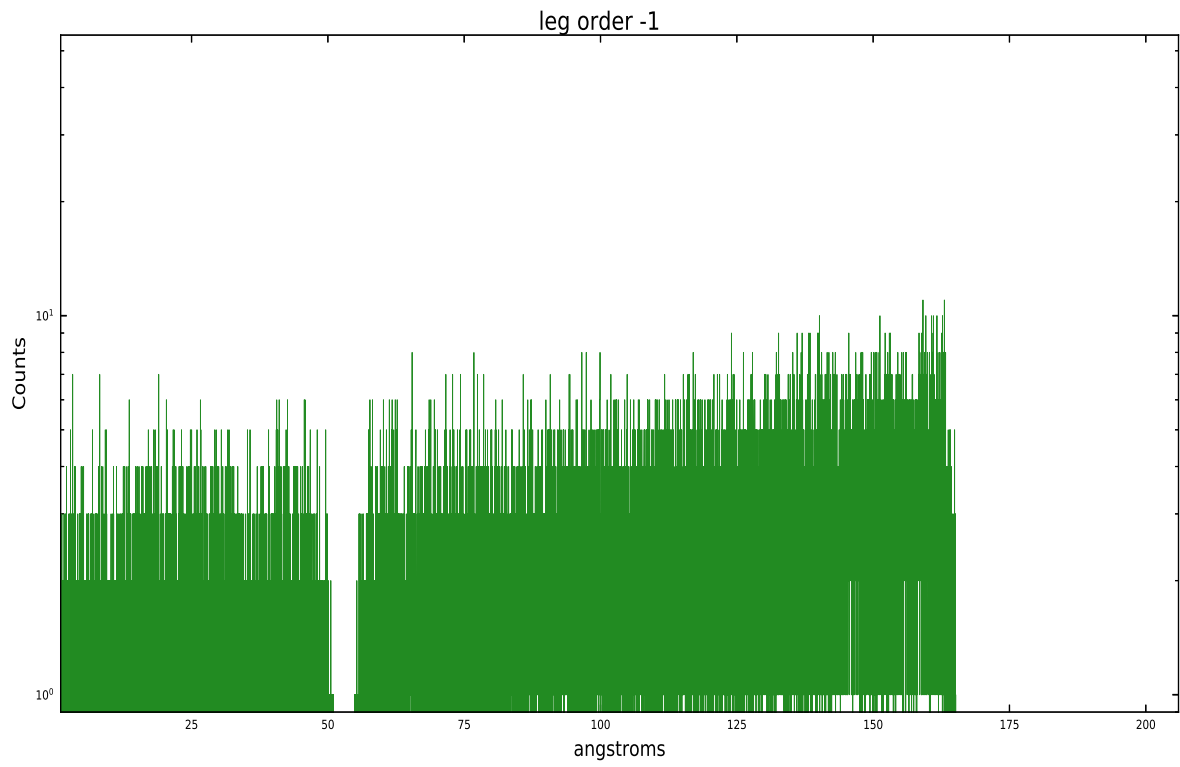


3 Gratings

3.1 LETG Arm



LETG Zero Order



A Summary

A.1 Status

V&V Scientist	David Principe
V&V Date (YYYY-MM-DD)	2020.10.26
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	27.1484

A.2 Comments

Phase constraint not fully met; some of the observation is in the phase constraint, but not all. Scheduling of the observation was very difficult because of the bad pitch of the target. This was the best we could do. There are several short time intervals of high count rate, presumably due to radiation.