

V&V Reference Report

L2 ASCDS Version : 10.8.1

Observation 23137 - L2 Version 1
Chandra X-Ray Center

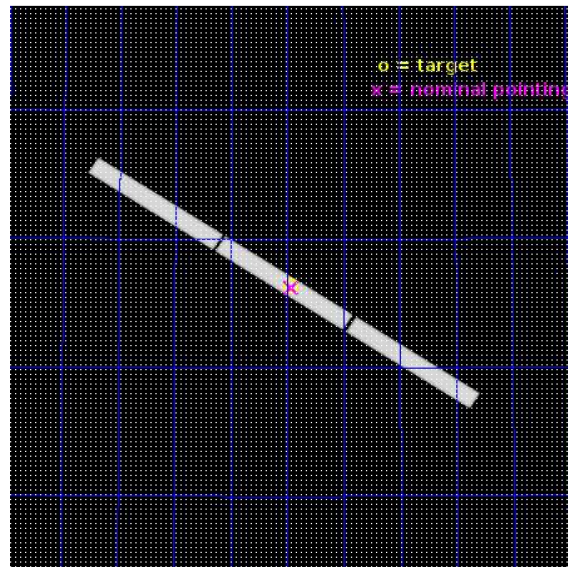
L2 Processing Date : Jan 30 2020

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
3	Gratings	17
3.1	LETG Arm	17
A	Summary	19
A.1	Status	19
A.2	Comments	19

1 Front

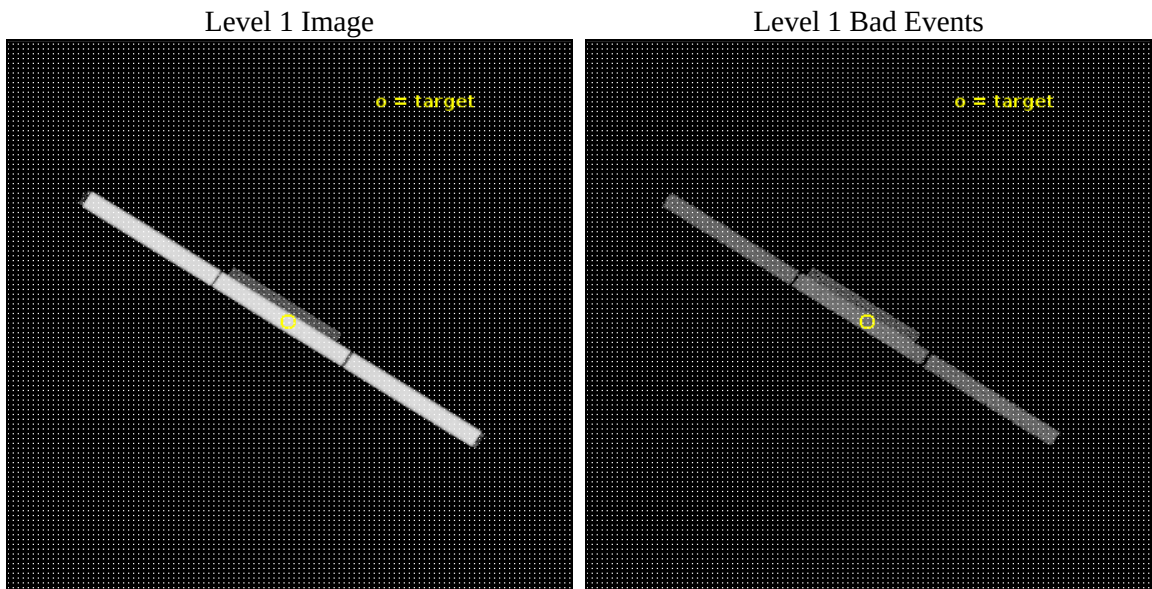
seq_num	201342	Sequence number
obs_id	23137	Observation id
title	Stellar activity with TESS and Chandra	Proposal title
observer	Hans Guenther	Principal investigator
object	2RXS J080855.3+324908	Source name
ra_targ	122.235001	Observer's specified target RA [deg]
dec_targ	32.819801	Observer's specified target Dec [deg]
ra_nom	122.23142053056	Nominal RA [deg]
dec_nom	32.810971389032	Nominal Dec [deg]
roll_nom	212.62836045904	Nominal Roll [deg]
revision	1	Processing version of data
ontime	29695.020547628	[s]
livetime	29293.740882269	Ontime multiplied by DTCOR
l2events	2756529	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	30000.000000	[s] Scheduled observation exposure time
ascdsver	10.8.1	Processing system revision	ontime	29695.020547628	[s]
caldbver	4.8.4.2	 	l1events	3455648	Number of level 1 events
date	2020-01-30T22:11:34	Date and time of file creation	tgmethod	TGDETECT	Method used to create src1a file
revision	1	Processing version of data	zo_pos	(32694.12, 32989.18)	src1a sky pixel position

2.1.3 Events

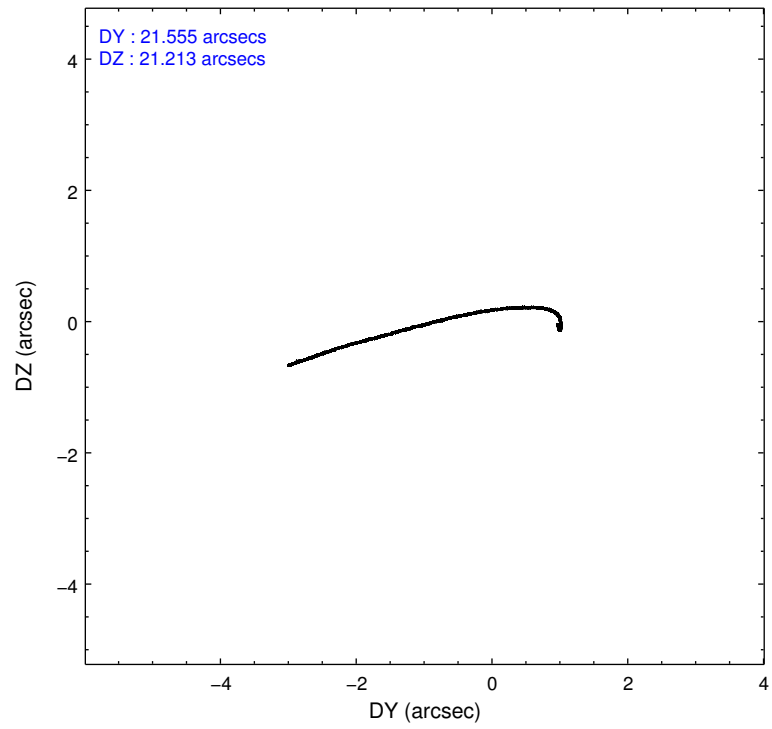
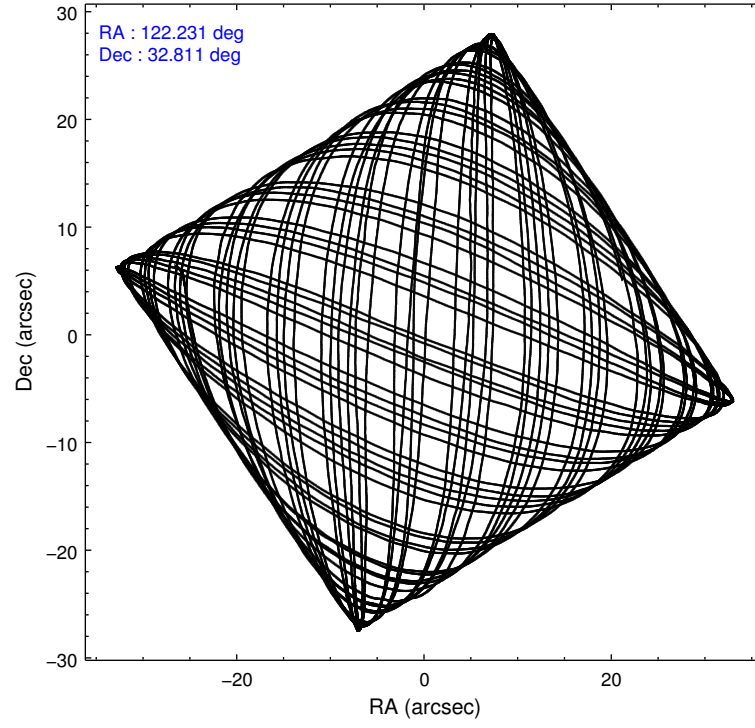
Level 1 Events

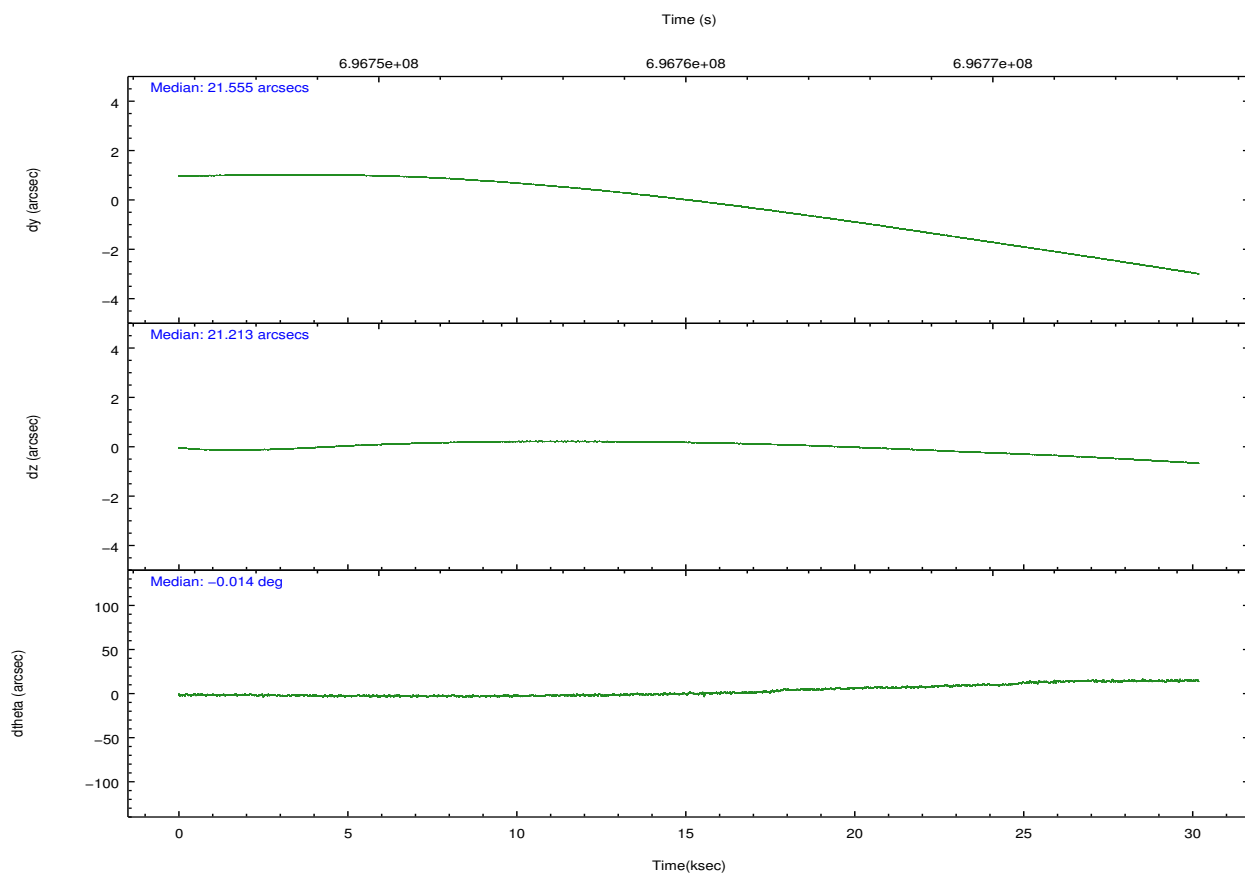
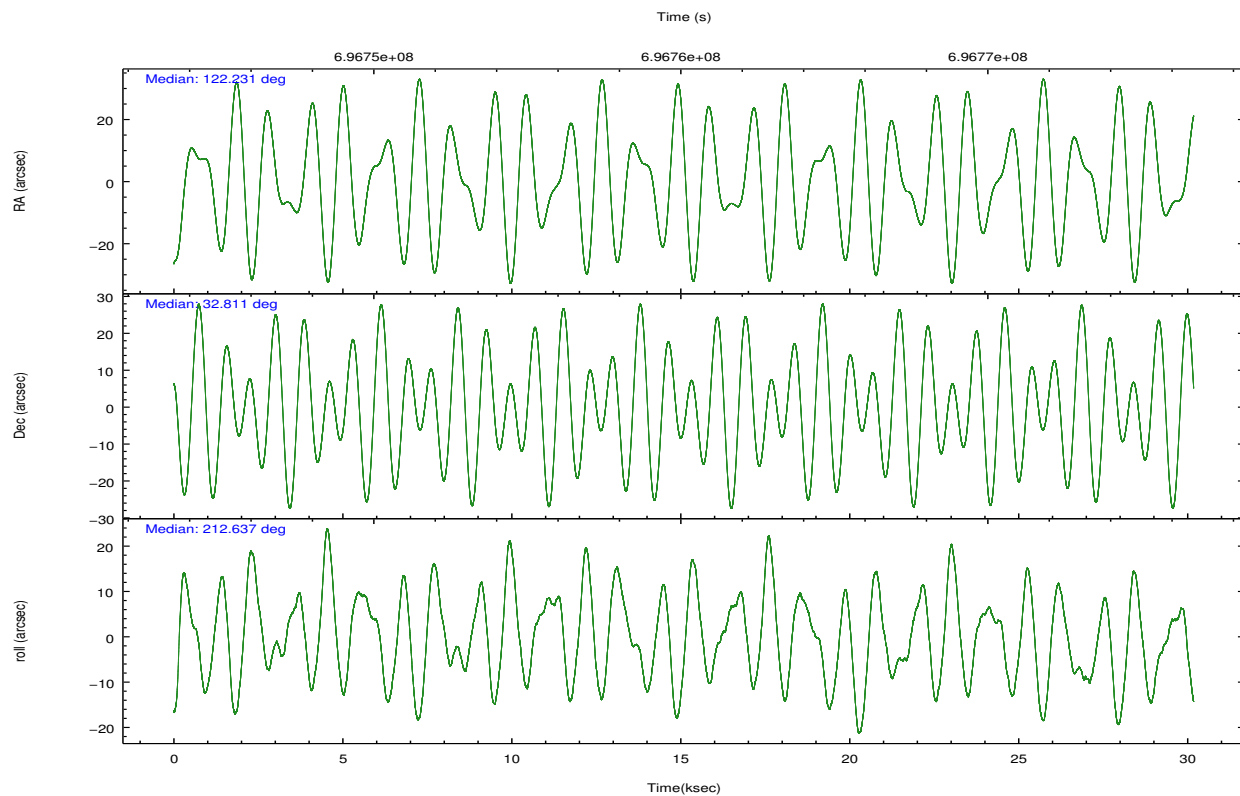
	segment 1	segment 2	segment 3
level 1 events	1148493	1164637	1142518
rejected events	25936	39772	25958
rejected %	2%	3%	2%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	HRC	HRC	Obspar format version number	7	7
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	122.245744	122.2314205305587			
[deg] Pointing Dec	32.837217	32.8109713890322			
[deg] Pointing Roll	212.553262	212.6283604590415			
[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)	696745176.184000	696744488.00801			
Observation start date	2020-01-30T04:18:27	2020-01-30T04:08:08			
[s] Observation end time (MET)	696775176.184000	696776265.57243			
Observation end date	2020-01-30T12:38:27	2020-01-30T12:57:45			

2.3 Aspect



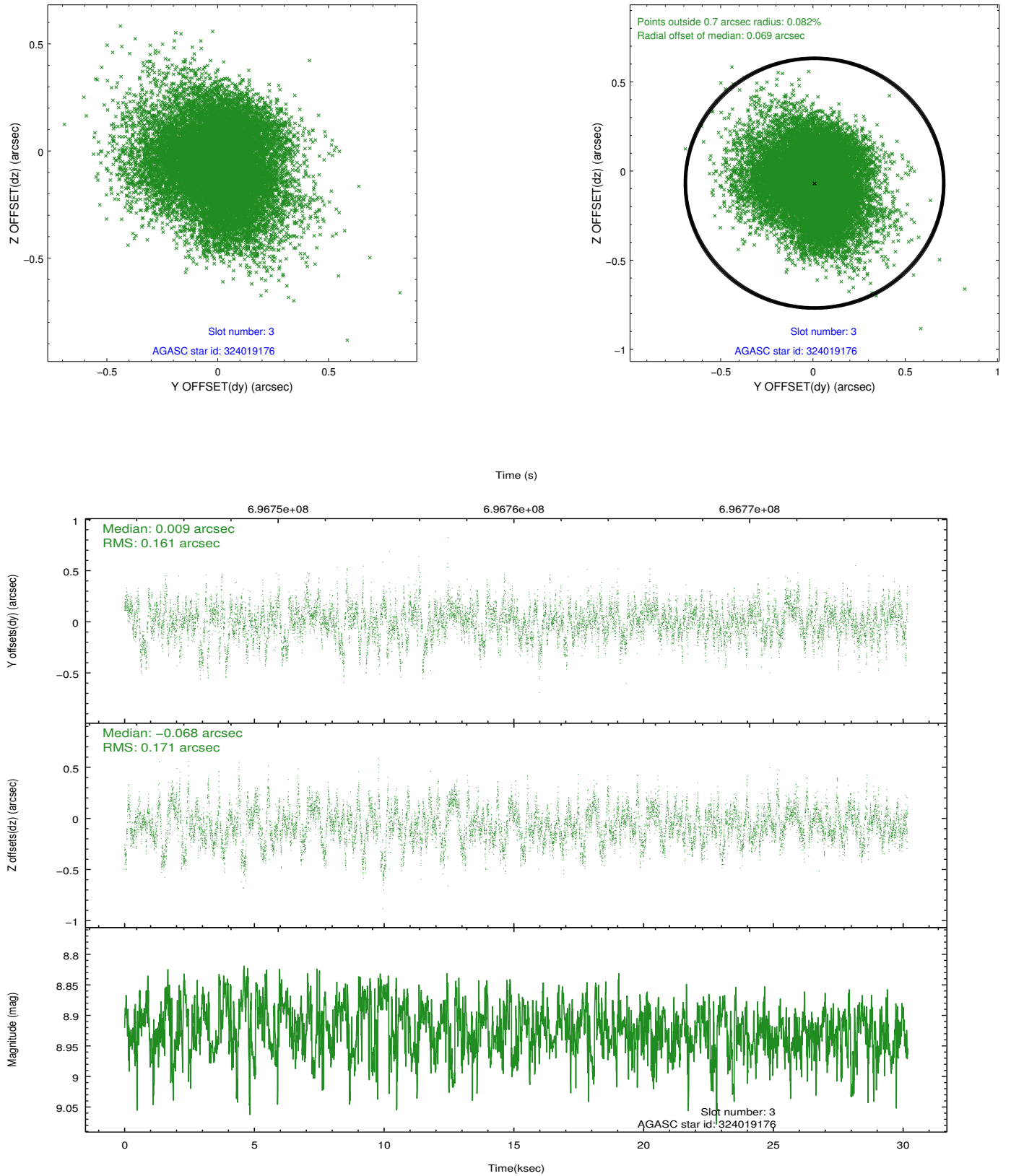


Slot Statistics

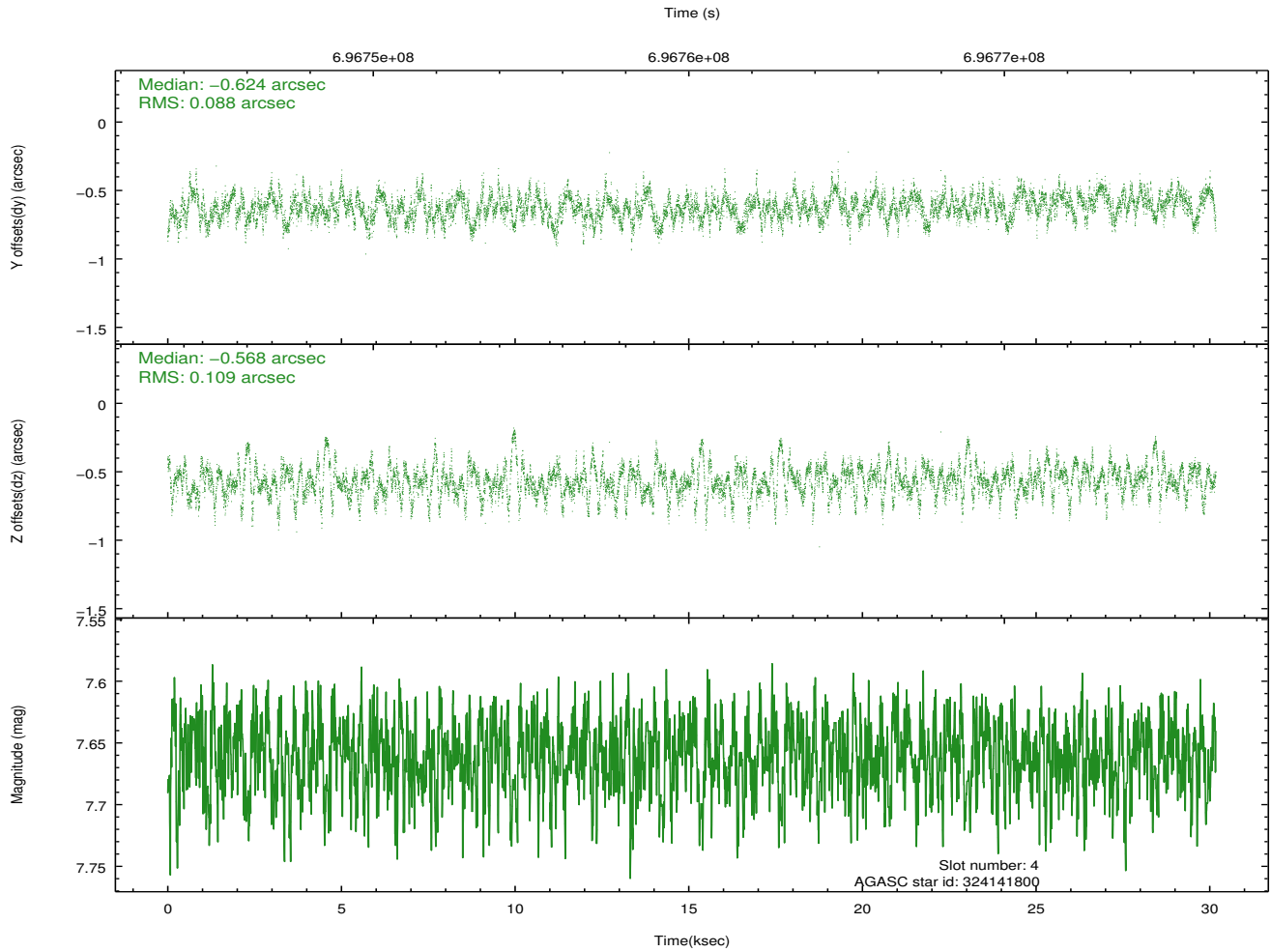
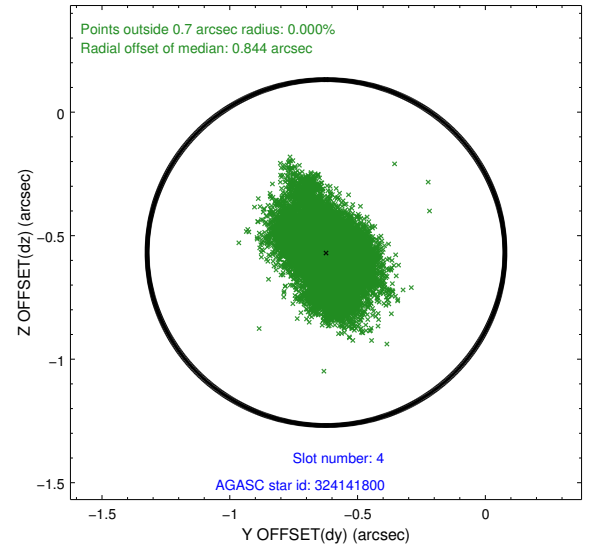
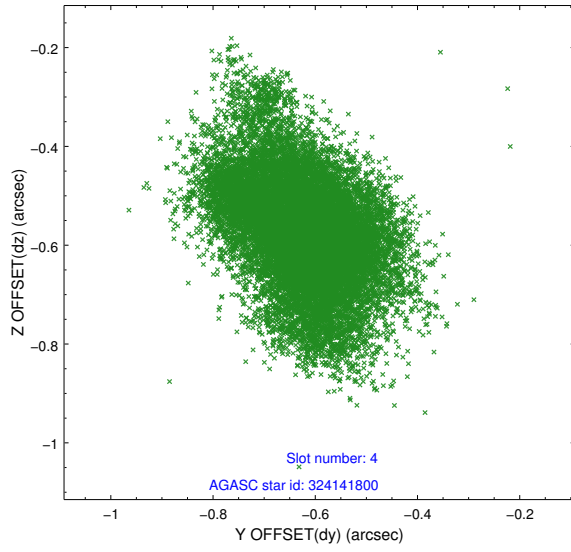
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		HRC-S-1	7.11	7360	1.000	-0.219	-0.203	0.032	0.089	0.000000	0.000000	-1175.96	-470
1	FID		HRC-S-2	7.06	7359	1.000	0.570	-0.137	0.052	0.098	0.000000	0.000000	1224.31	-462
2	FID		HRC-S-3	7.08	7359	1.000	0.043	0.038	0.028	0.069	0.000000	0.000000	-1178.43	559
3	GUIDE	used	324019176	8.92	14702	1.000	0.009	-0.068	0.250	0.406	121.473294	32.704529	2225.06	-862
4	GUIDE	used	324141800	7.66	14718	1.000	-0.624	-0.568	0.147	0.251	121.765206	32.414912	2047.11	493
5	GUIDE	used	324143200	8.38	14709	1.000	0.168	0.122	0.154	0.263	121.825723	33.247178	270.68	-1924
6	GUIDE	used	324145968	8.81	14698	1.000	0.275	0.314	0.209	0.364	121.749465	33.299802	360.84	-2208
7	GUIDE	used	324146312	7.42	14719	1.000	0.197	0.199	0.129	0.214	122.426532	33.378487	-1506.06	-1348

2.4 Star Slots

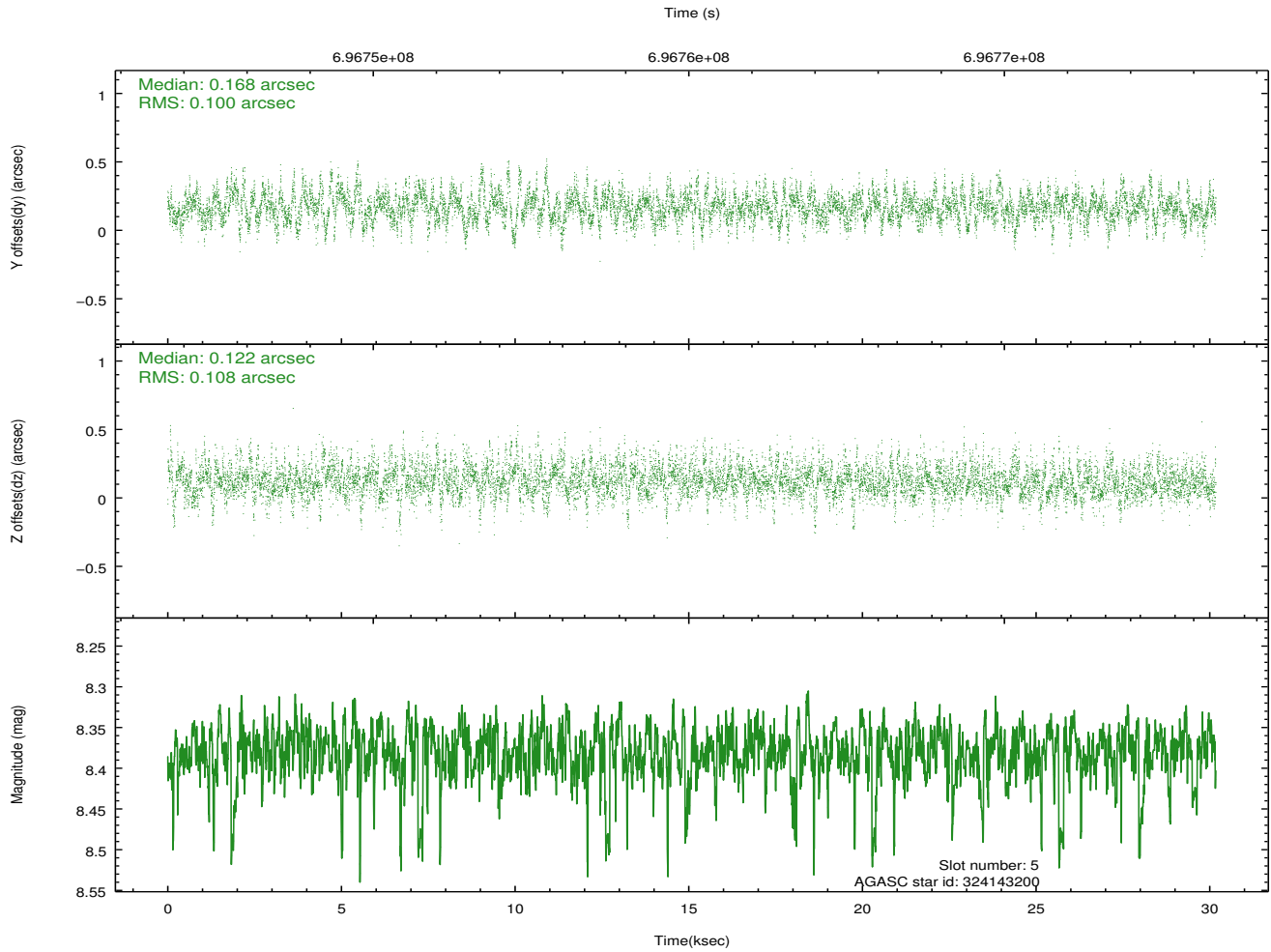
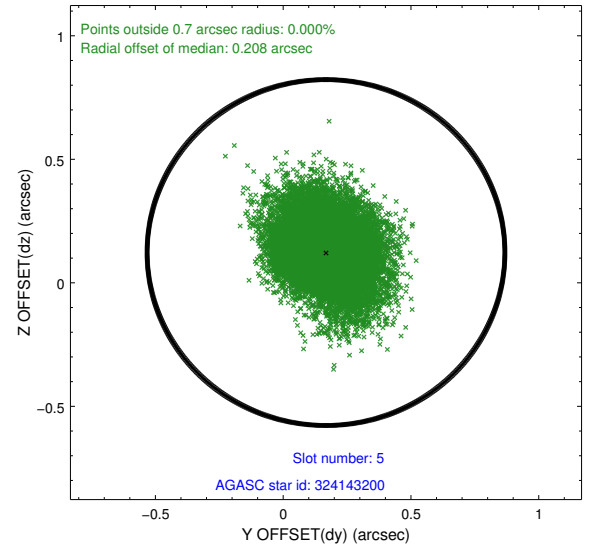
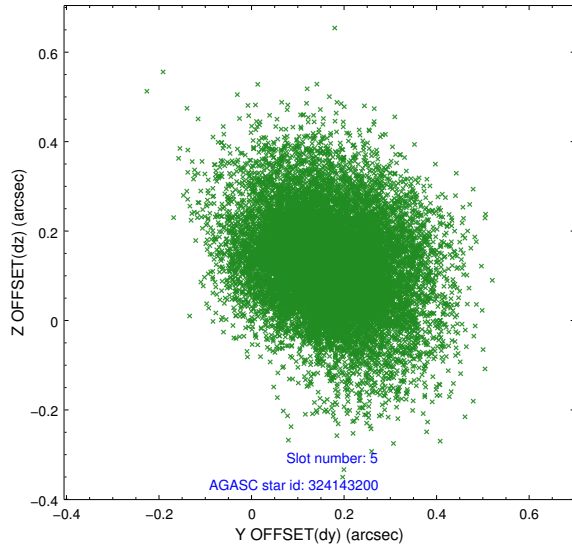
2.4.1 Slot 3



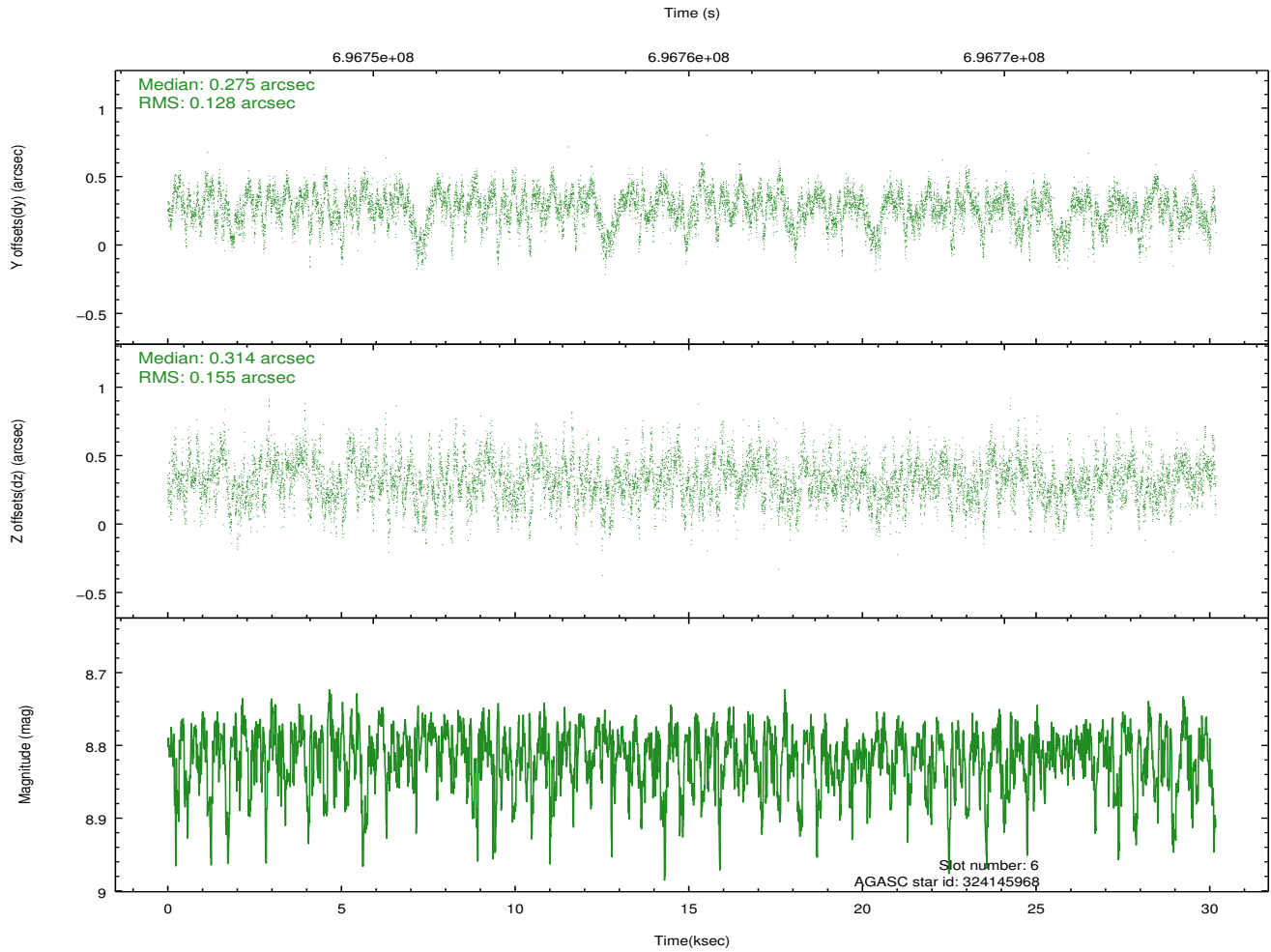
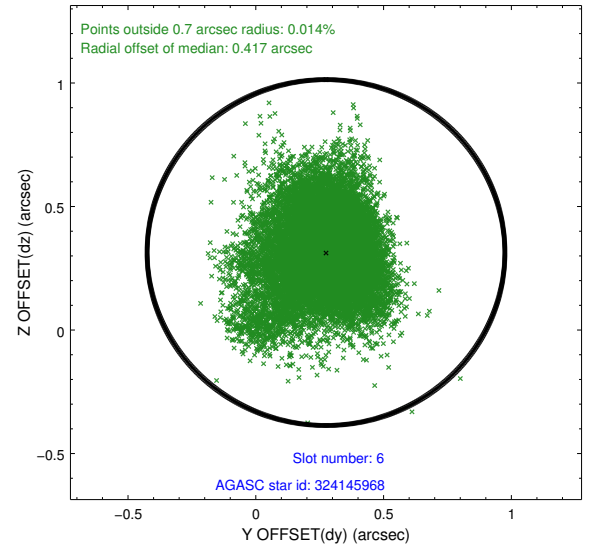
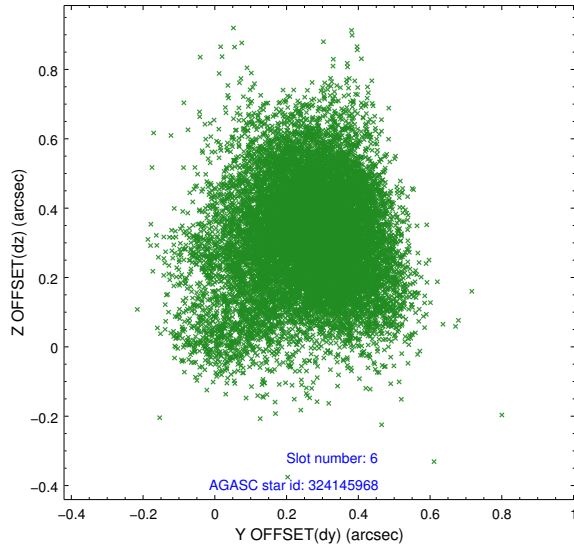
2.4.2 Slot 4



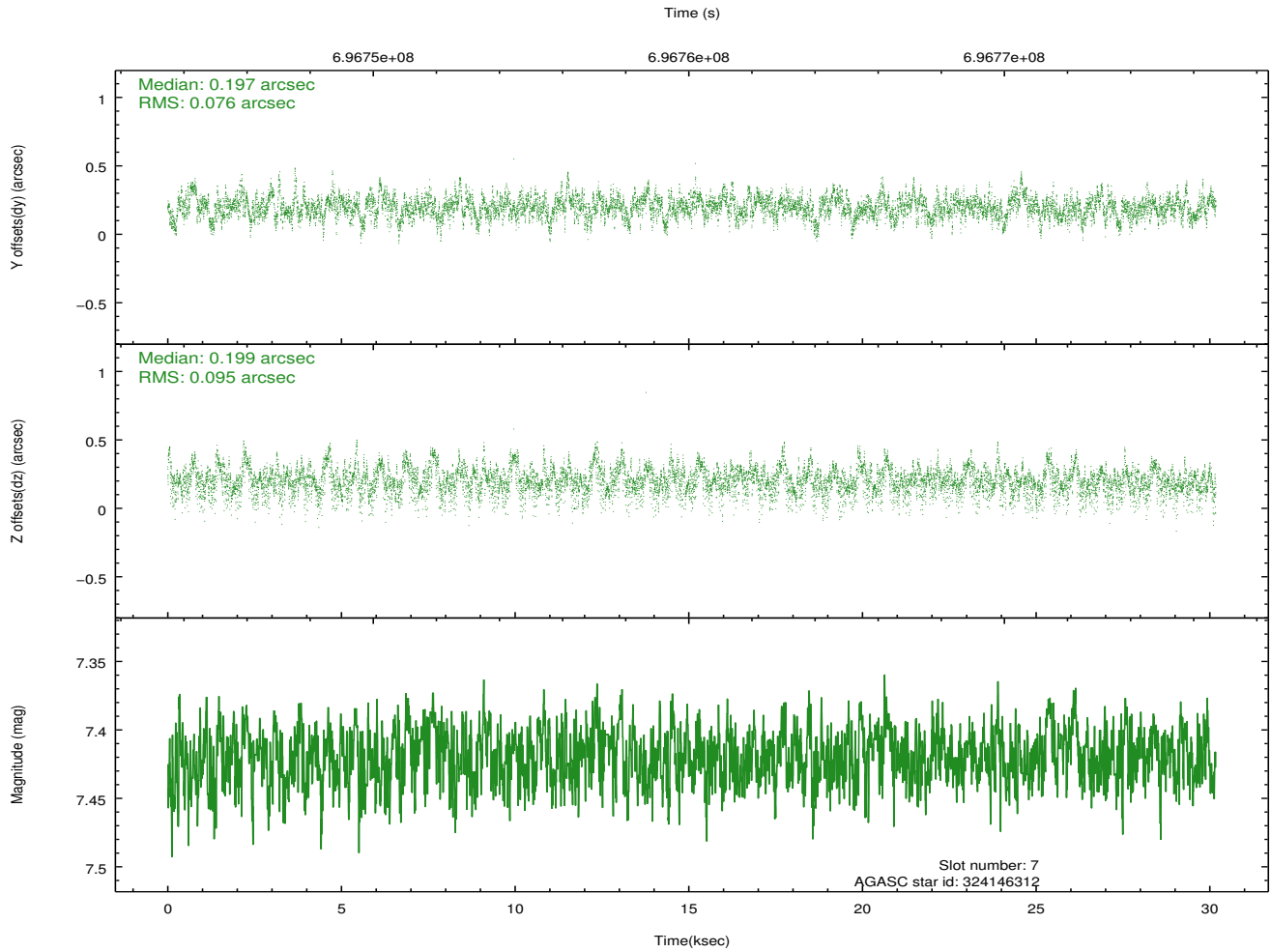
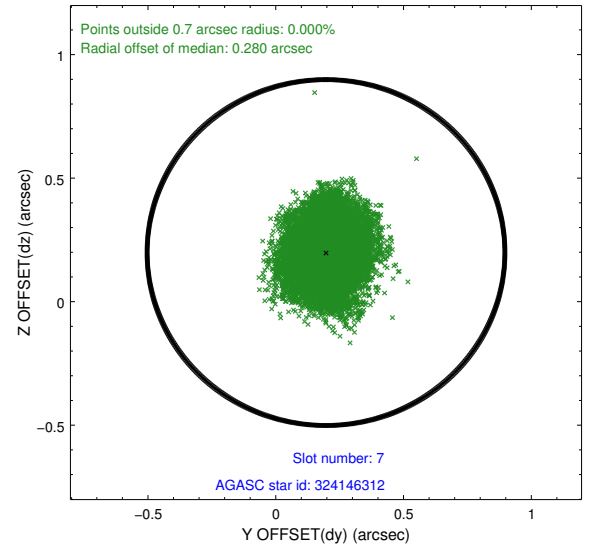
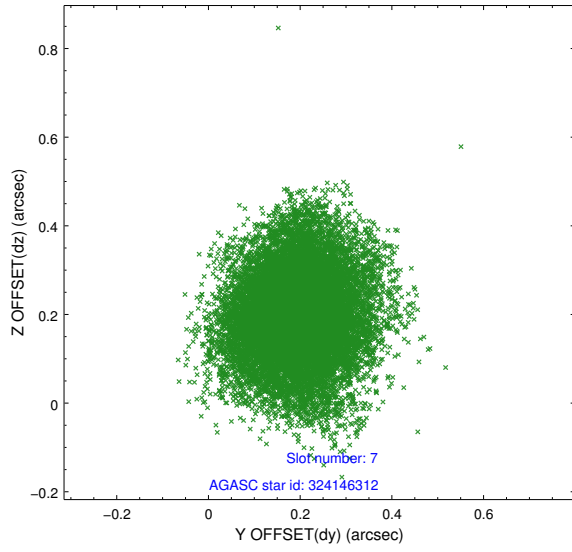
2.4.3 Slot 5



2.4.4 Slot 6

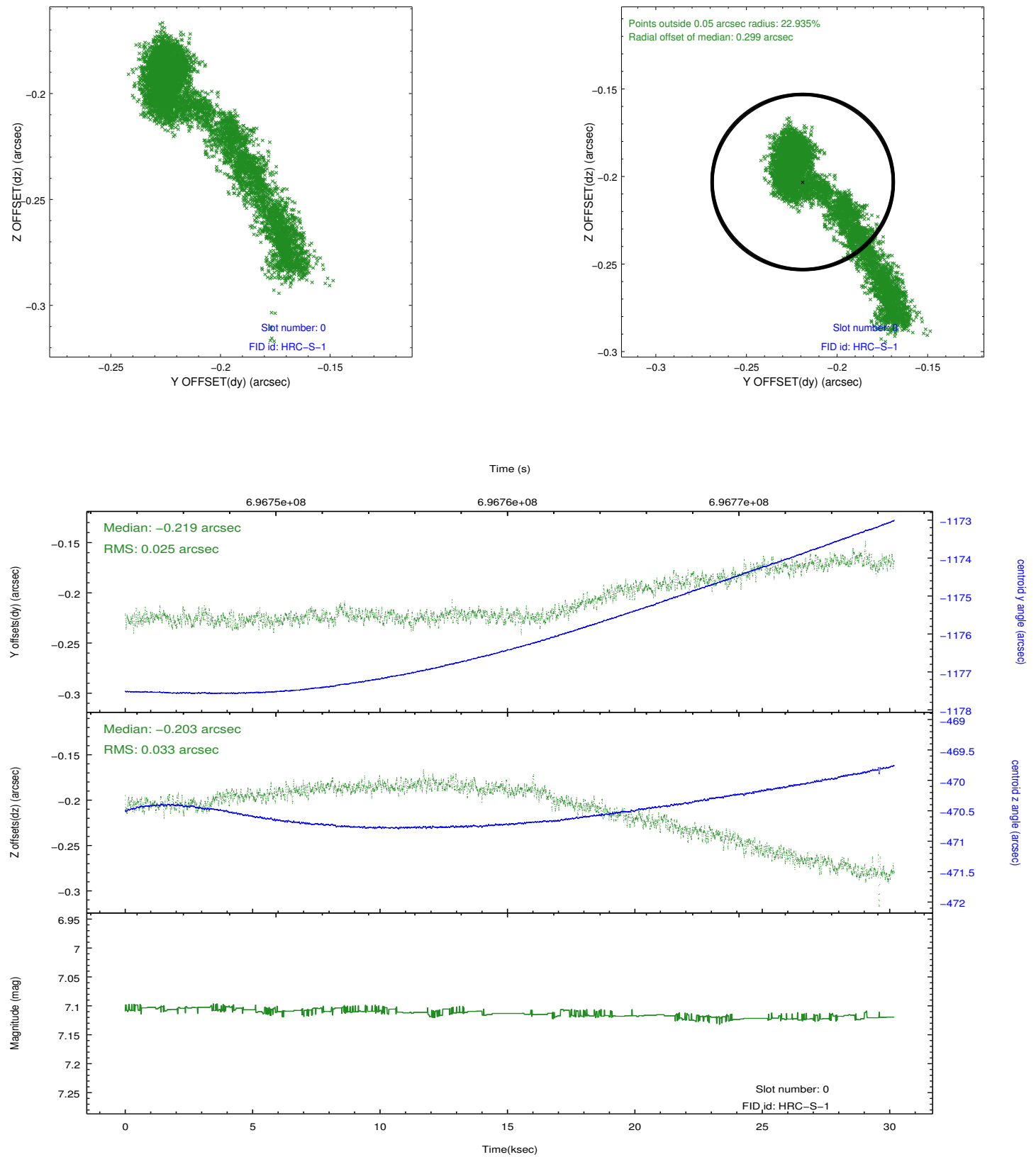


2.4.5 Slot 7

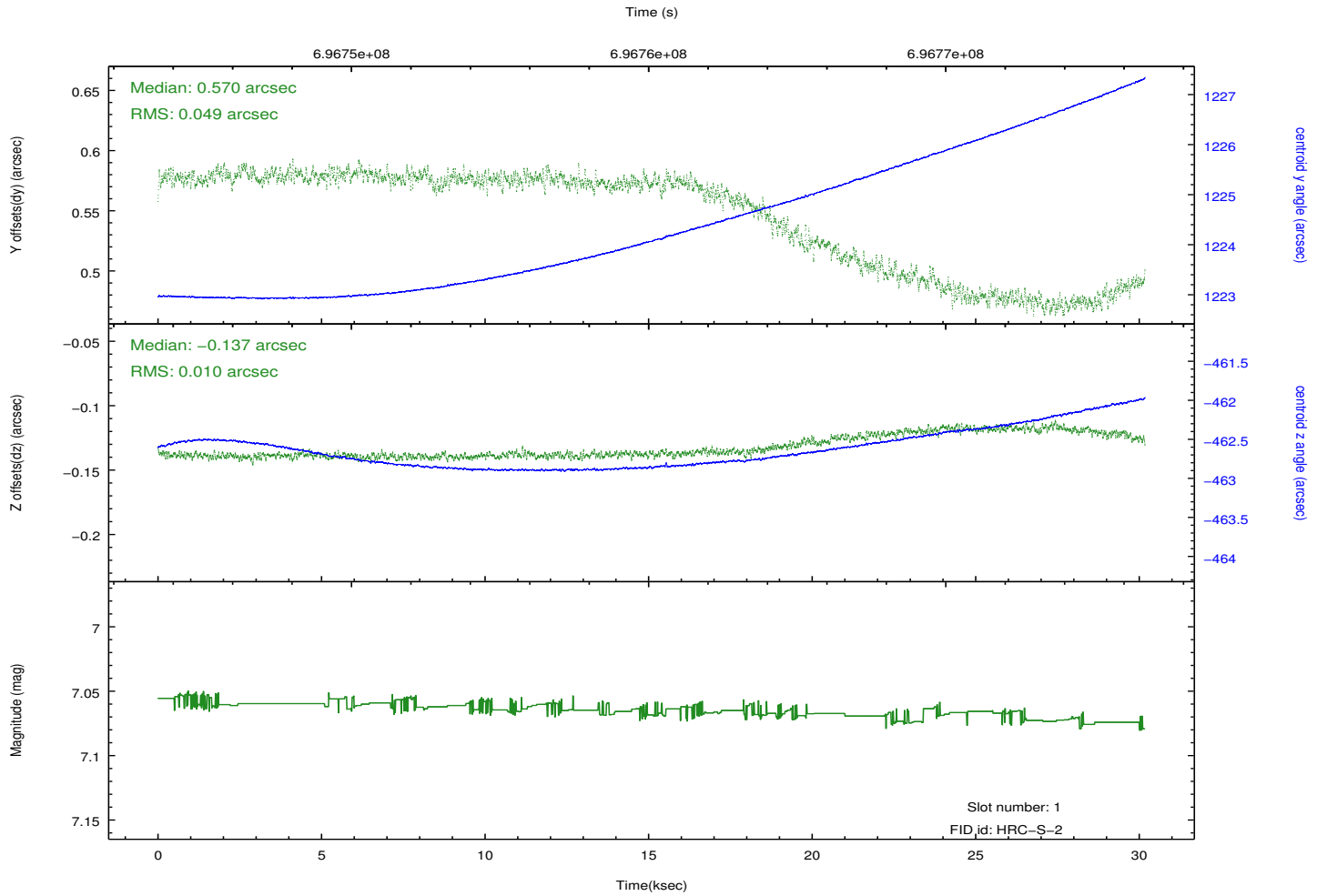
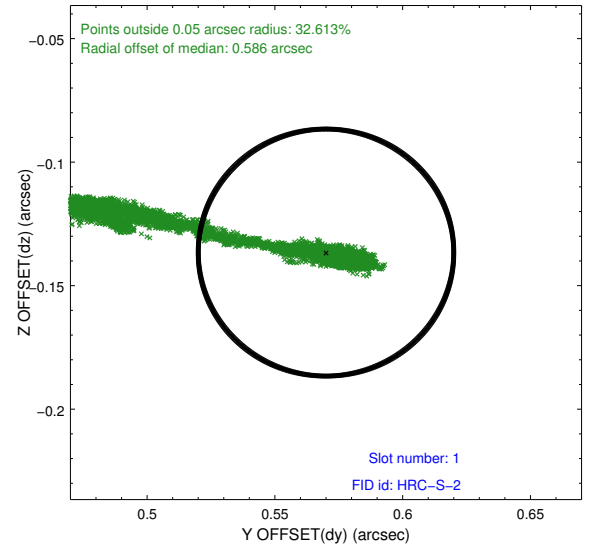
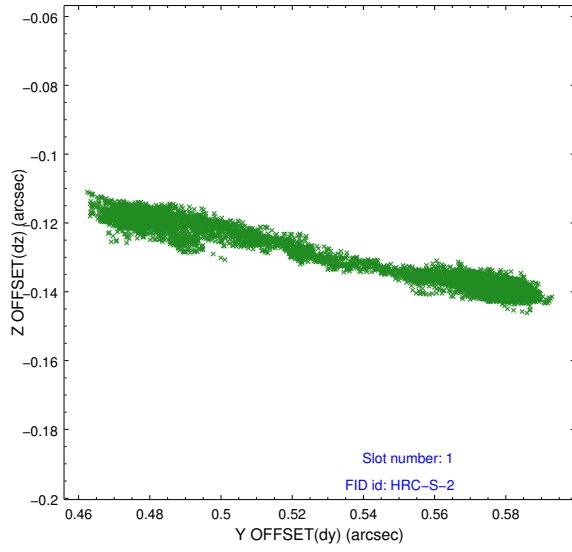


2.5 FID Slots

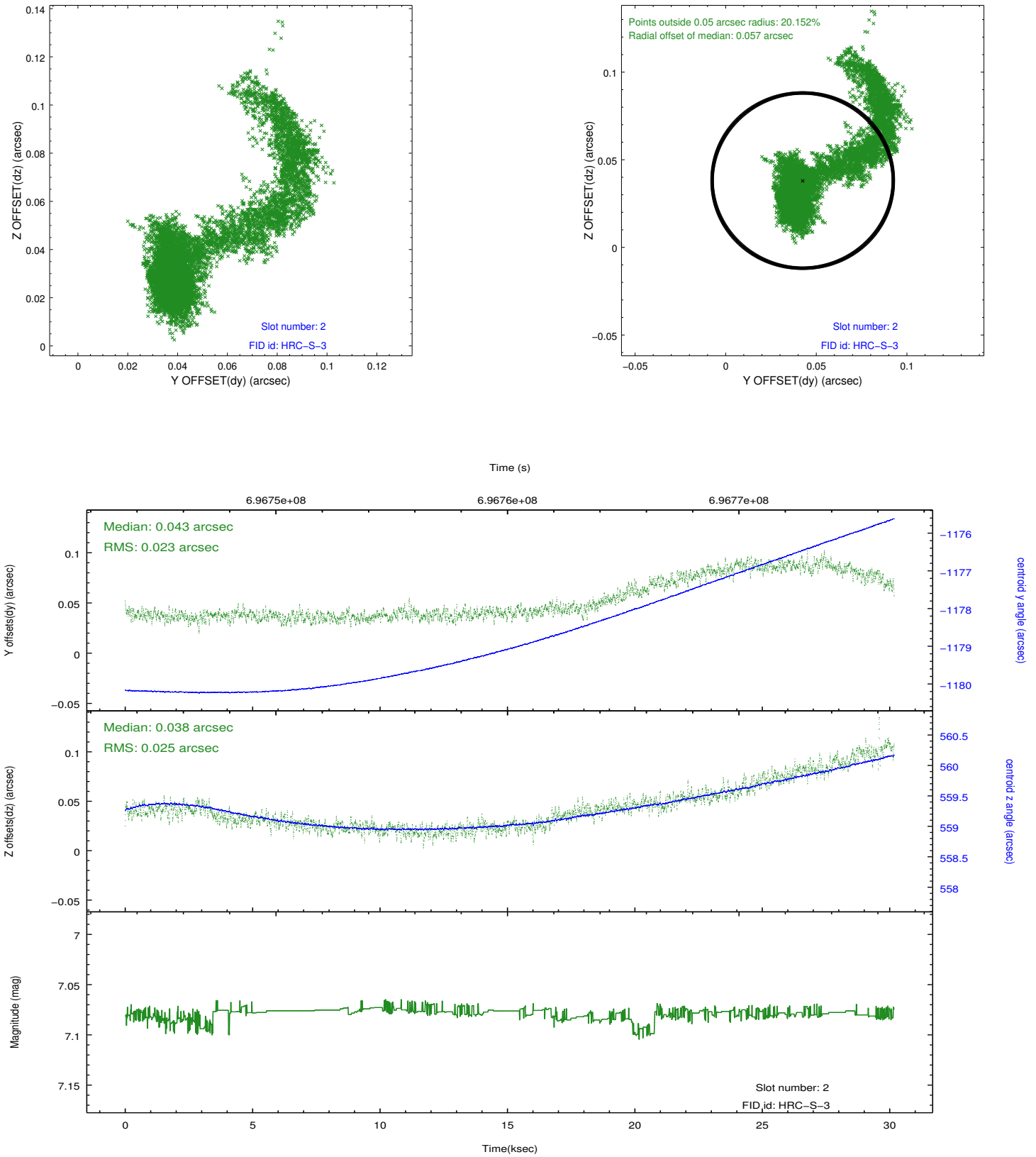
2.5.1 Slot 0



2.5.2 Slot 1

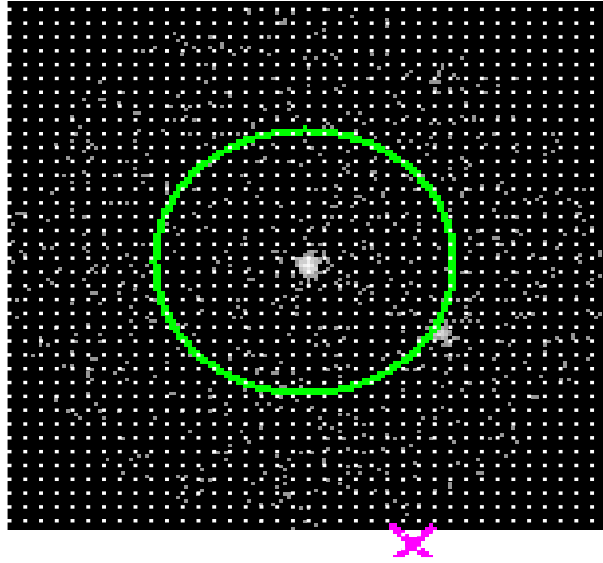


2.5.3 Slot 2

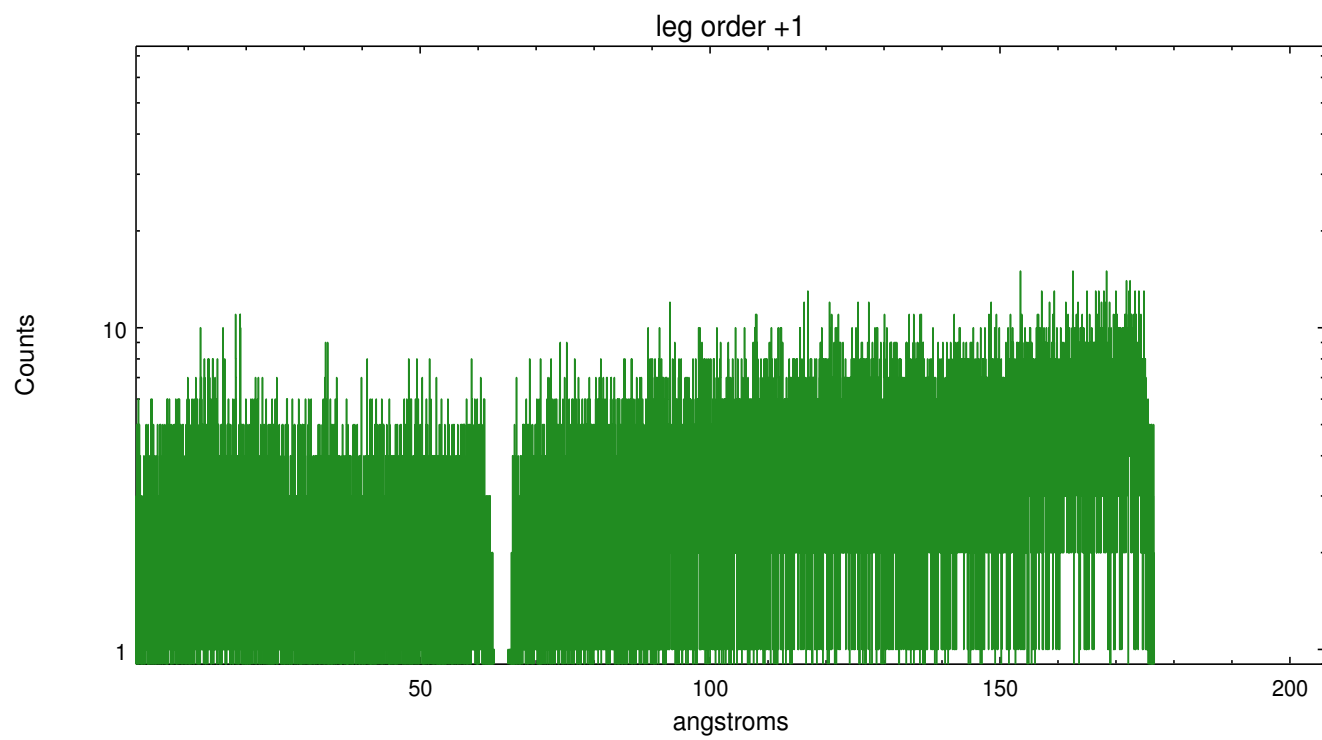
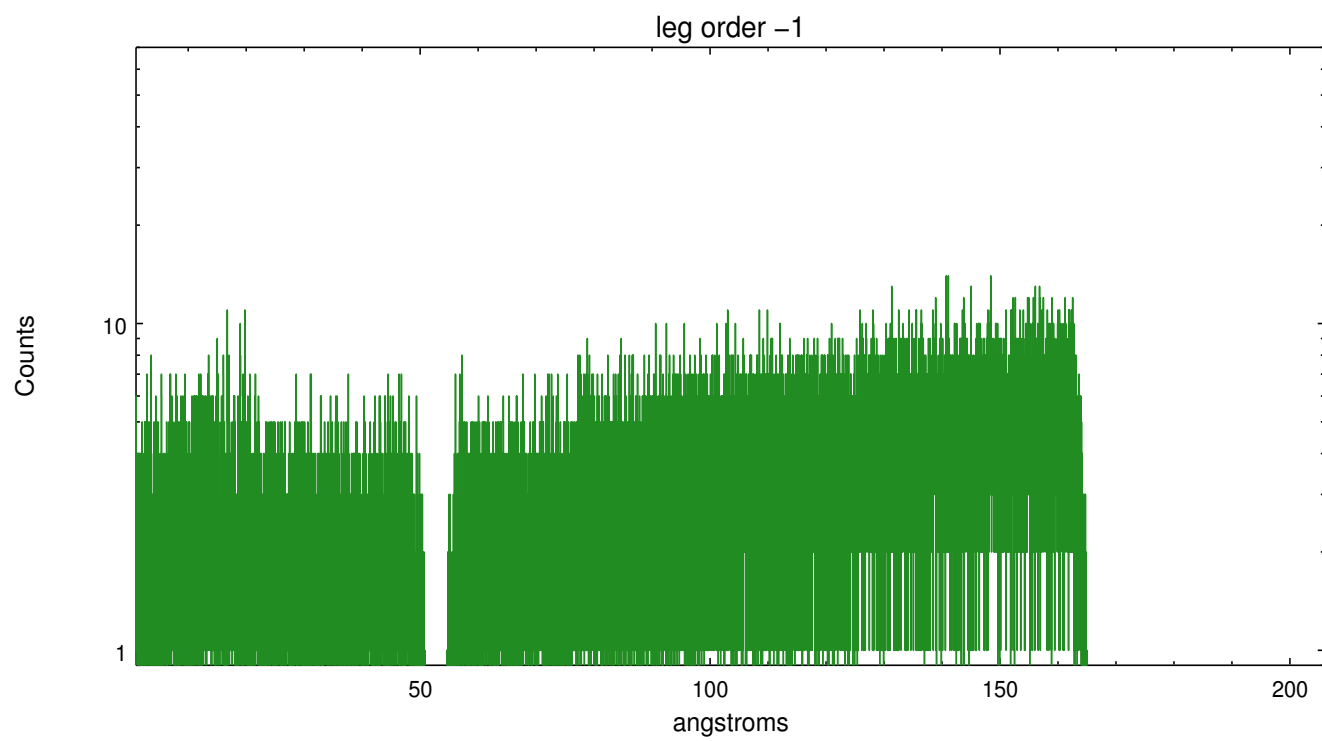


3 Gratings

3.1 LETG Arm



LETG Zero Order



A Summary

A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2020.01.31
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	29.695020547628

A.2 Comments

HRC secondary science corruption:

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.