

V&V Reference Report

L2 ASCDS Version : 10.6.4

Observation 20708 - L2 Version 1
Chandra X-Ray Center

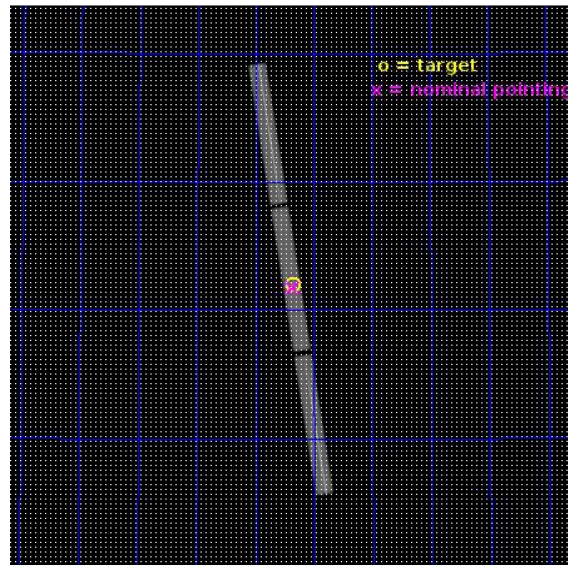
L2 Processing Date : Jul 29 2018

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1 Front

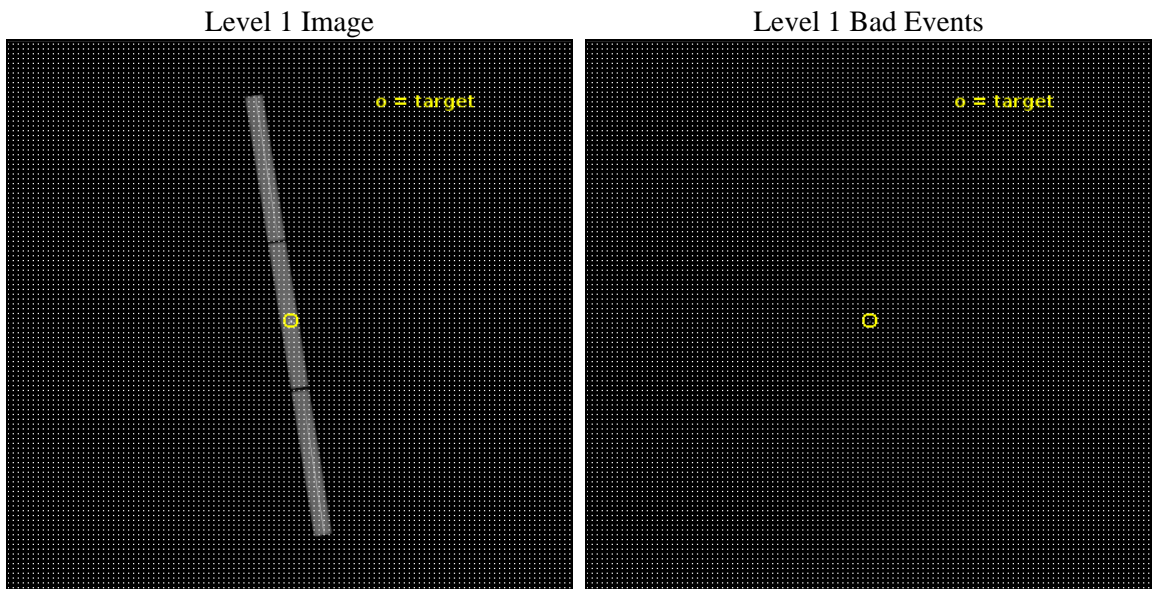
seq_num	291419	Sequence number
obs_id	20708	Observation id
title	AO-19 LETG/HRC-S Calibration Observations of HZ43	Proposal title
observer	CXC Calibration	Principal investigator
object	HZ43	Source name
ra_targ	199.090417	Observer's specified target RA [deg]
dec_targ	29.098306	Observer's specified target Dec [deg]
ra_nom	199.09614731775	Nominal RA [deg]
dec_nom	29.08865525085	Nominal Dec [deg]
roll_nom	261.32049730771	Nominal Roll [deg]
revision	1	Processing version of data
ontime	20175.332446218	[s]
livetime	19929.71358126	Ontime multiplied by DTCOR
l2events	2442109	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	20000.000000	[s] Scheduled observation exposure time
ascdsver	10.6.4	Processing system revision	ontime	20175.332446218	[s]
caldsver	4.7.8	 	l1events	2956620	Number of level 1 events
date	2018-07-29T04:15:08	Date and time of file creation	tgmethod	TGDETECT	Method used to create src1a file
revision	1	Processing version of data	zo_pos	(32915.62, 33028.65)	src1a sky pixel position

2.1.3 Events

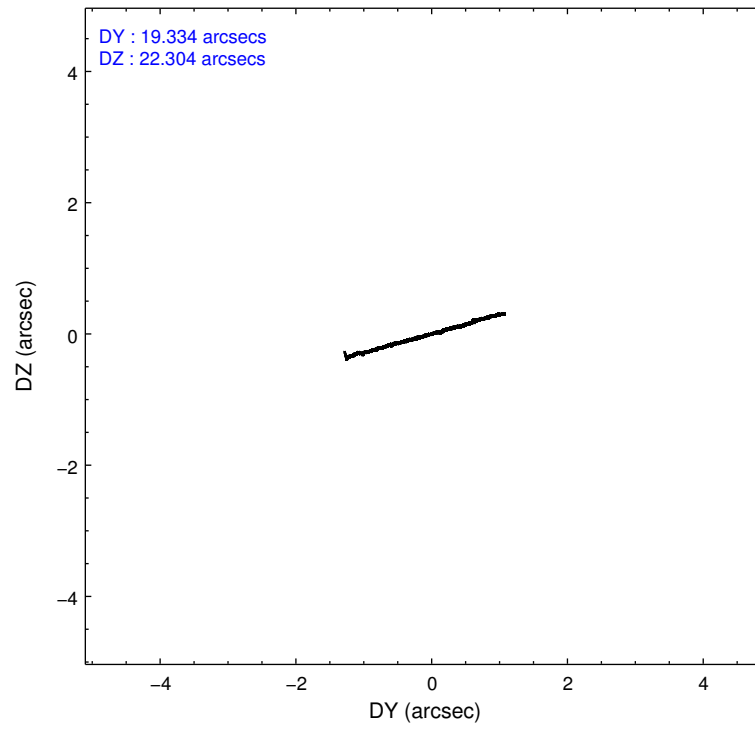
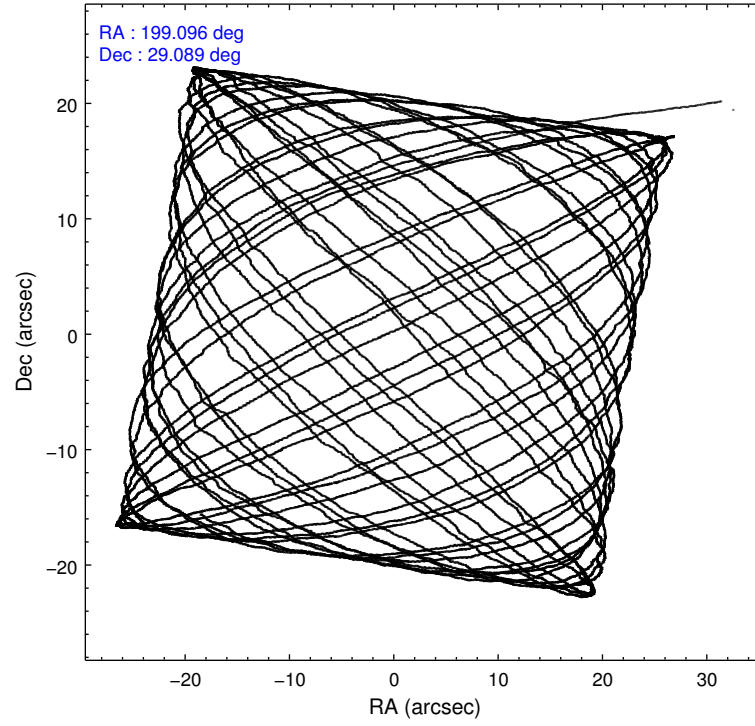
Level 1 Events

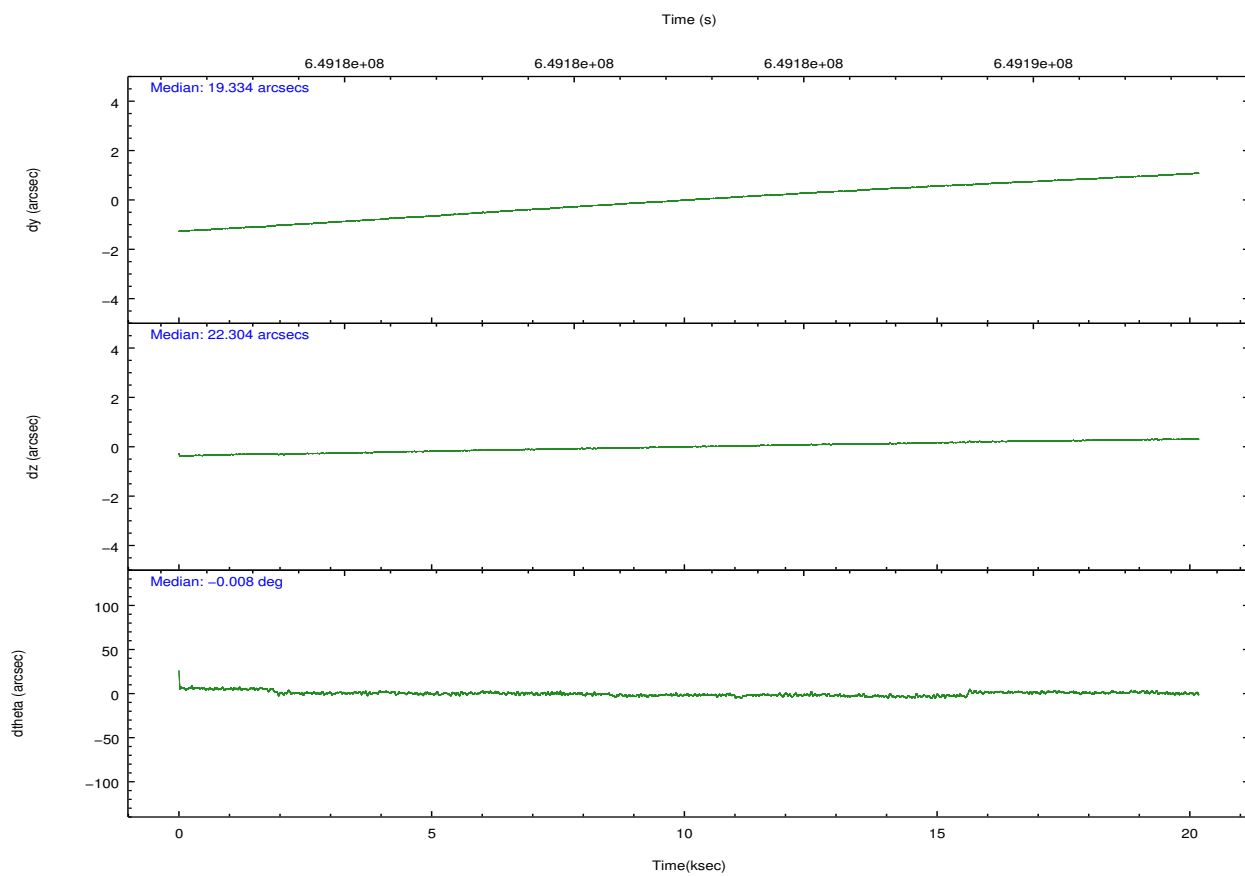
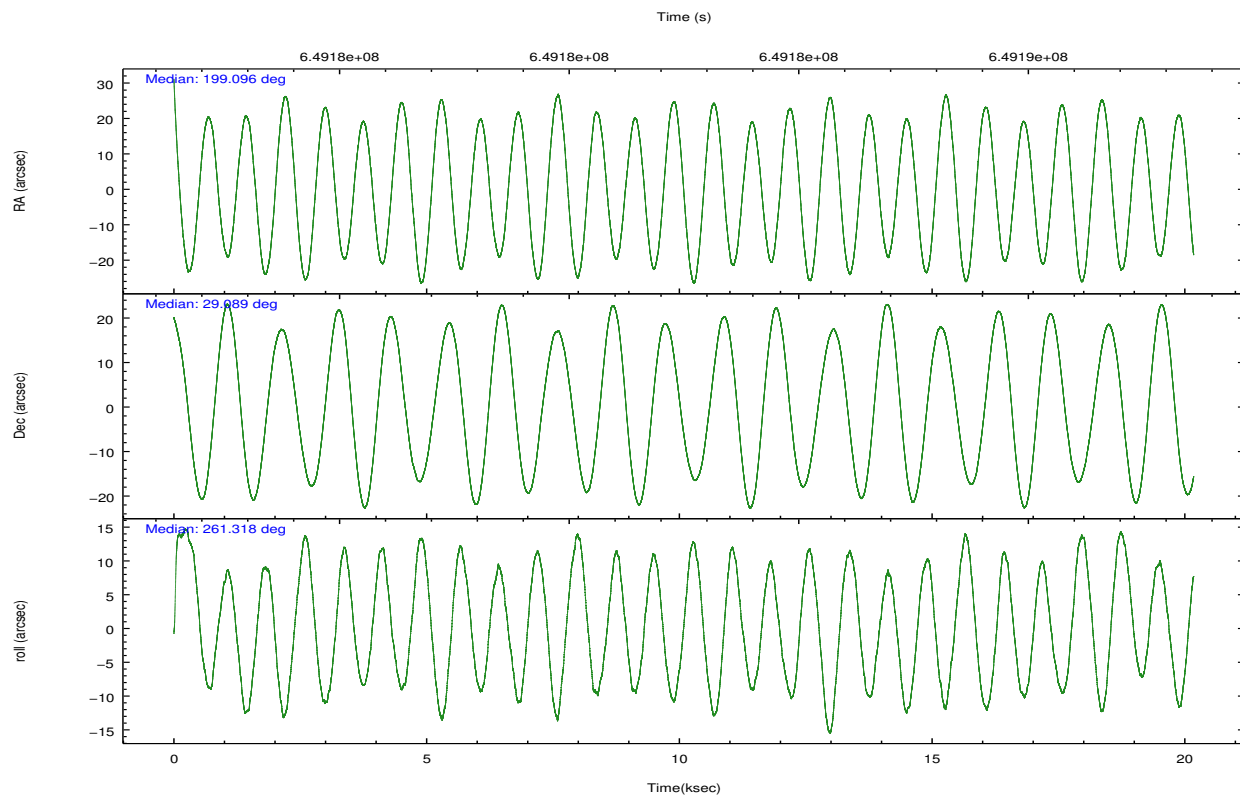
	segment 1	segment 2	segment 3
level 1 events	1015049	920829	1020742
rejected events	24229	23765	24224
rejected %	2%	2%	2%

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	199.082655	199.0961473177475			
[deg] Pointing Dec	29.115037	29.08865525085018			
[deg] Pointing Roll	261.259728	261.3204973077149			
[s] Window start time (MET)	646790469.184000	646790469.184000			
[s] Window stop time (MET)	649382469.184000	649382469.184000			
[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)	649172571.184000	649171685.90337			
Observation start date	2018-07-28T13:41:42	2018-07-28T13:28:05			
[s] Observation end time (MET)	649192571.184000	649193110.96714			
Observation end date	2018-07-28T19:15:02	2018-07-28T19:25:10			

2.3 Aspect



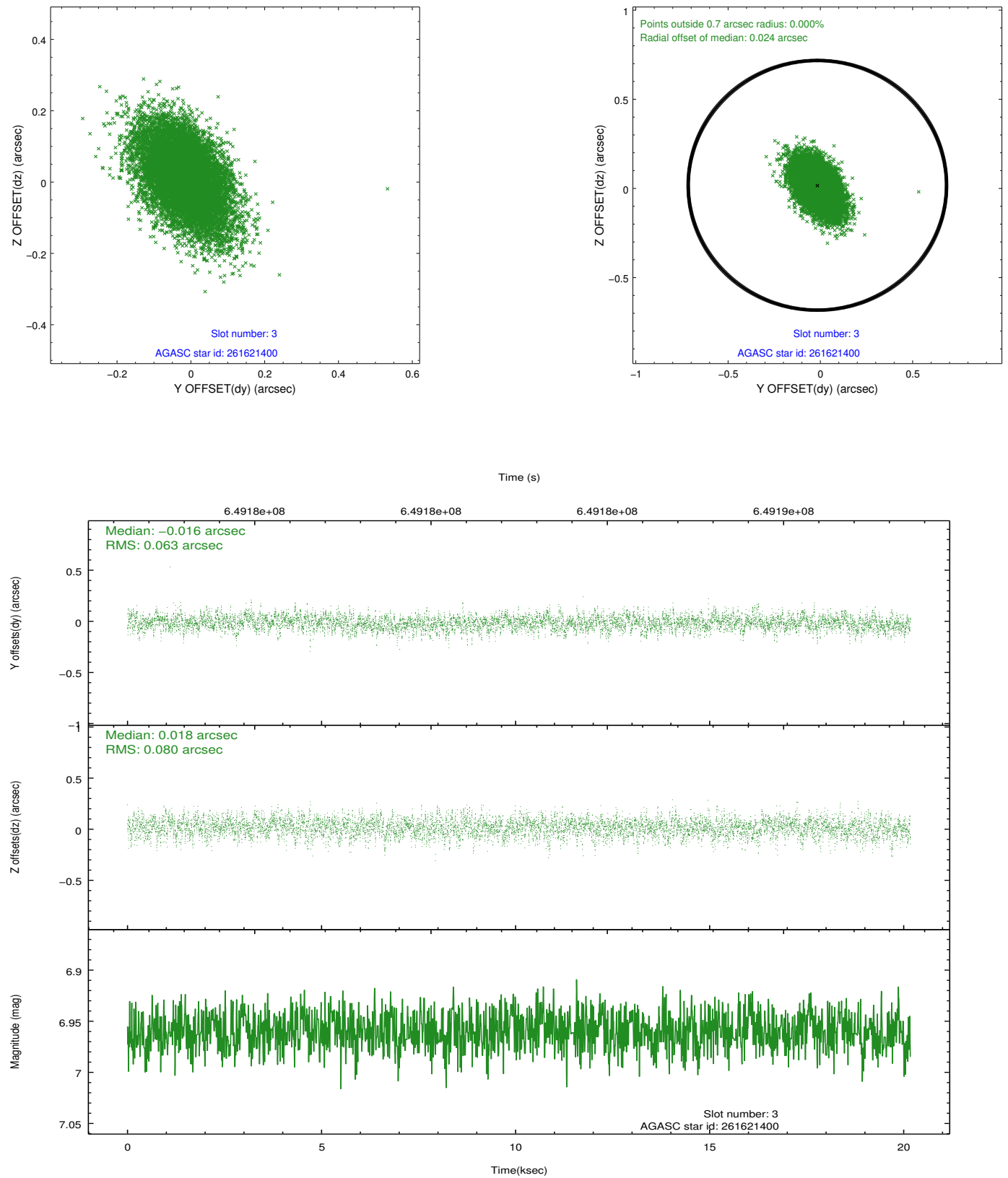


Slot Statistics

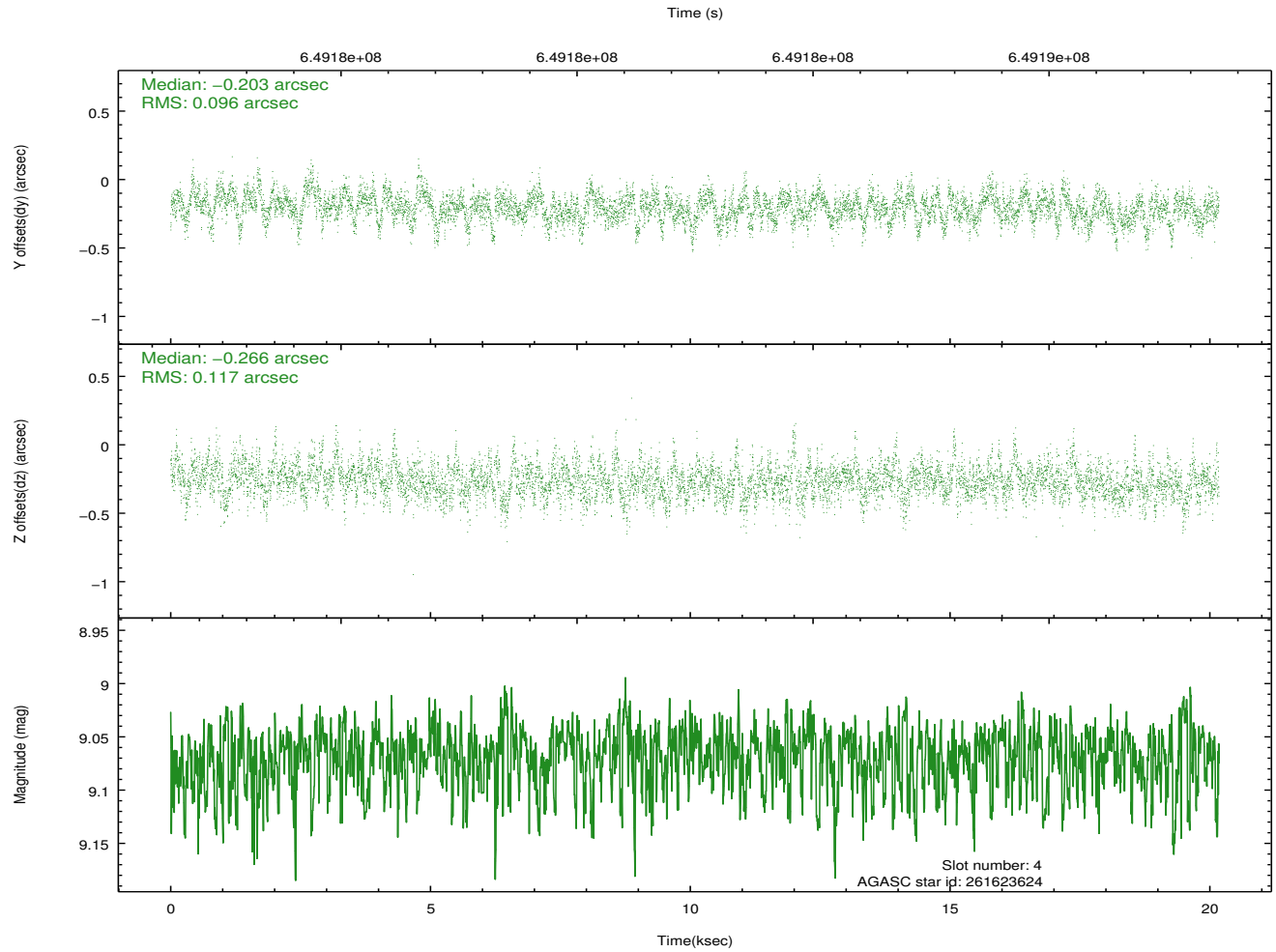
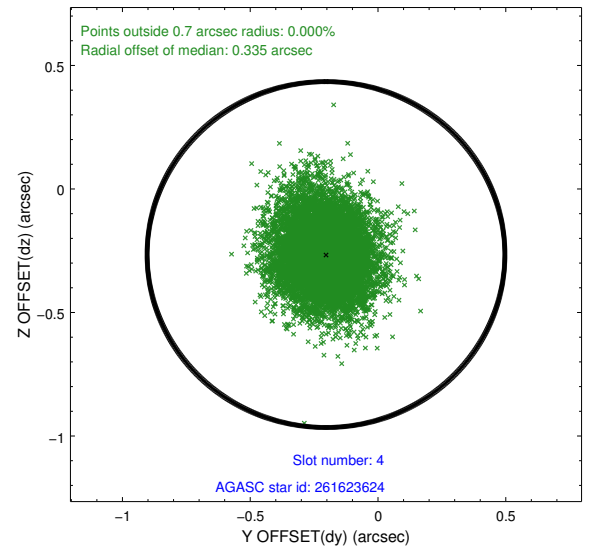
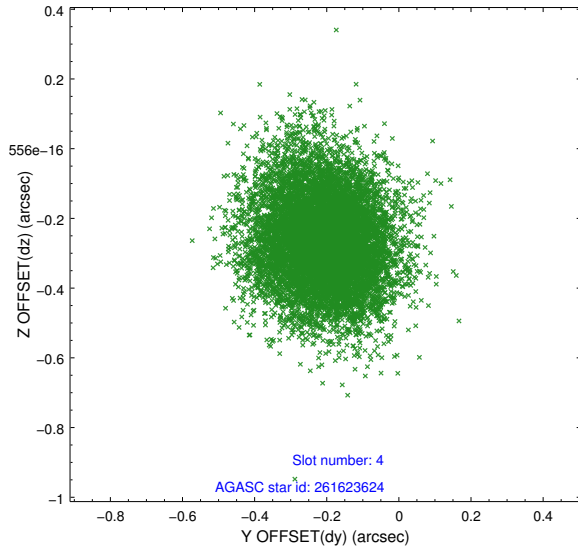
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		HRC-S-1	7.08	4921	1.000	-0.126	-0.231	0.010	0.017	0.000000	0.000000	-1173.95	-471
1	FID		HRC-S-3	7.06	4920	1.000	0.041	-0.075	0.015	0.033	0.000000	0.000000	-1176.83	558
2	FID		HRC-S-4	7.03	4918	1.000	0.472	0.010	0.010	0.021	0.000000	0.000000	1224.58	561
3	GUIDE	used	261621400	6.96	9841	1.000	-0.016	0.018	0.105	0.183	198.901600	28.741982	1414.02	-361
4	GUIDE	used	261623624	9.07	9829	1.000	-0.203	-0.266	0.159	0.266	199.611555	28.454113	2093.93	2014
5	GUIDE	used	261629720	8.08	9839	1.000	-0.191	-0.199	0.120	0.199	199.236176	29.044452	177.70	515
6	GUIDE	used	261626352	8.55	9838	1.000	0.289	0.289	0.133	0.219	198.417097	29.781420	-2061.49	-2423
7	GUIDE	used	261624080	7.05	9842	1.000	0.122	0.159	0.131	0.213	198.424651	29.817768	-2193.39	-2417

2.4 Star Slots

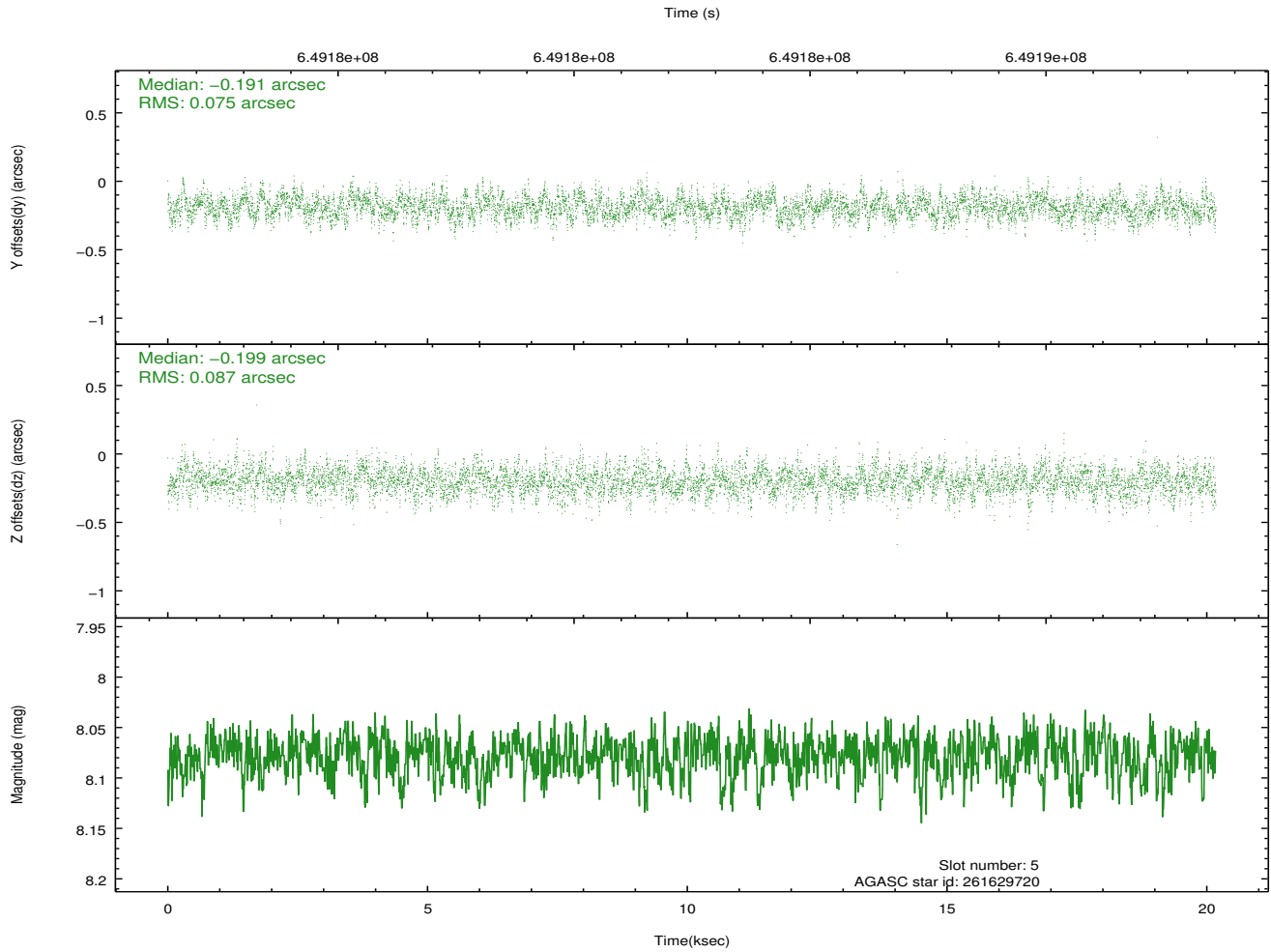
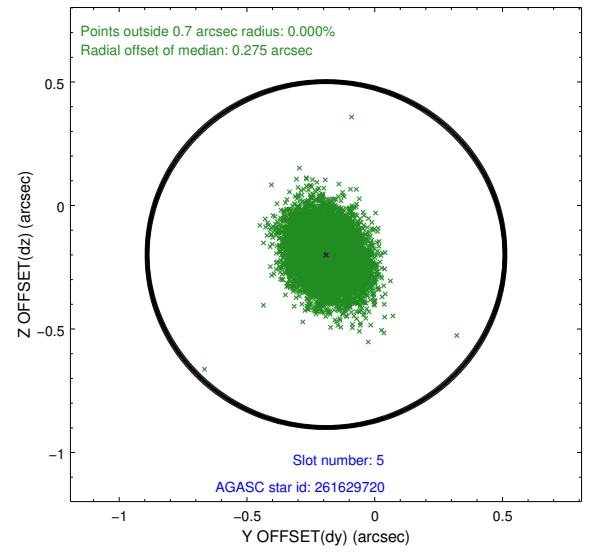
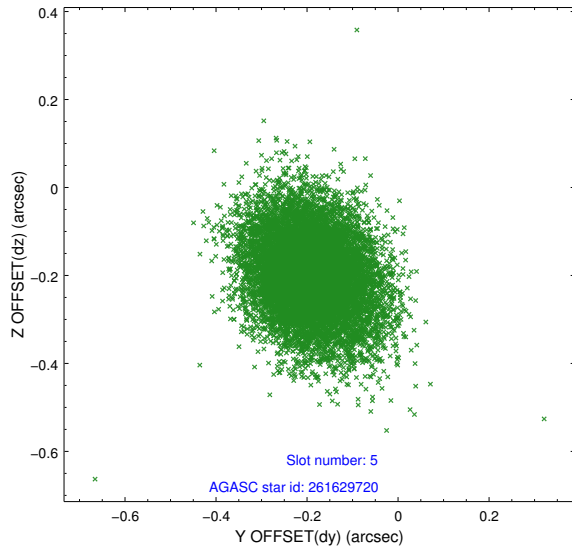
2.4.1 Slot 3



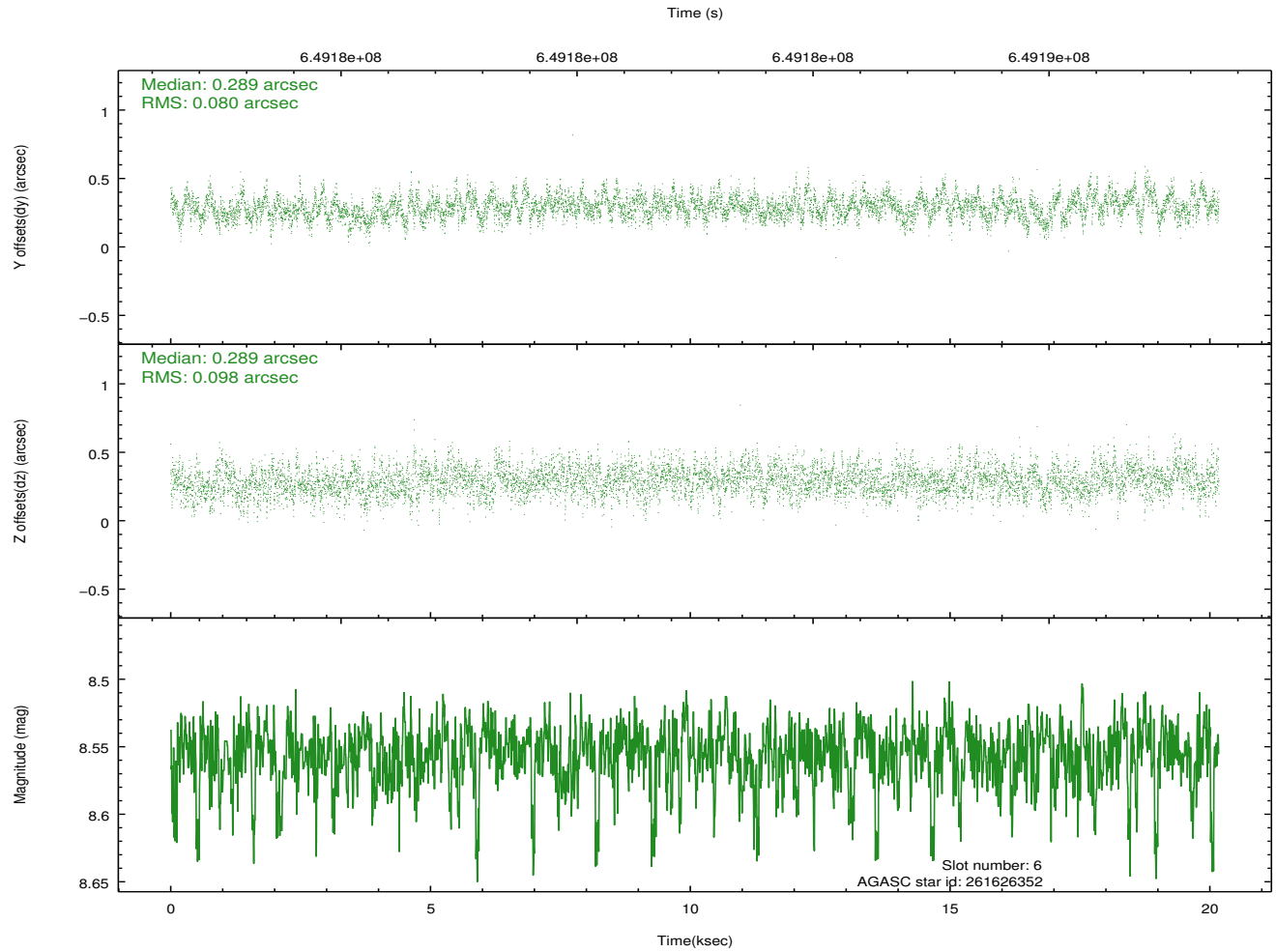
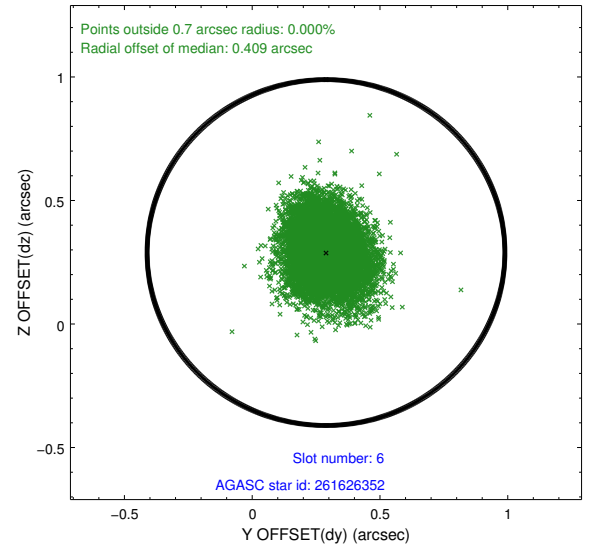
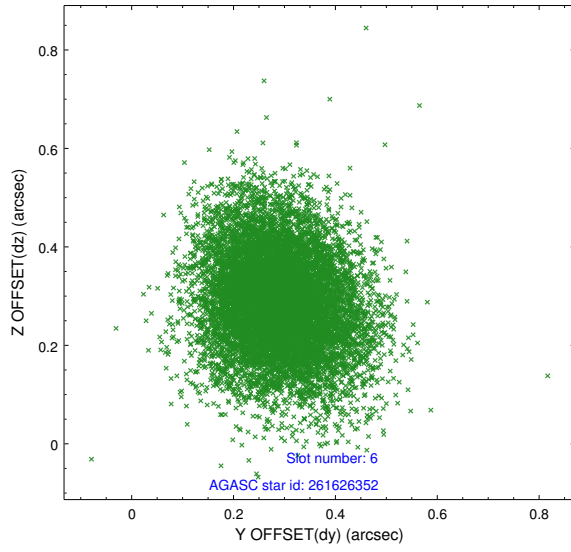
2.4.2 Slot 4



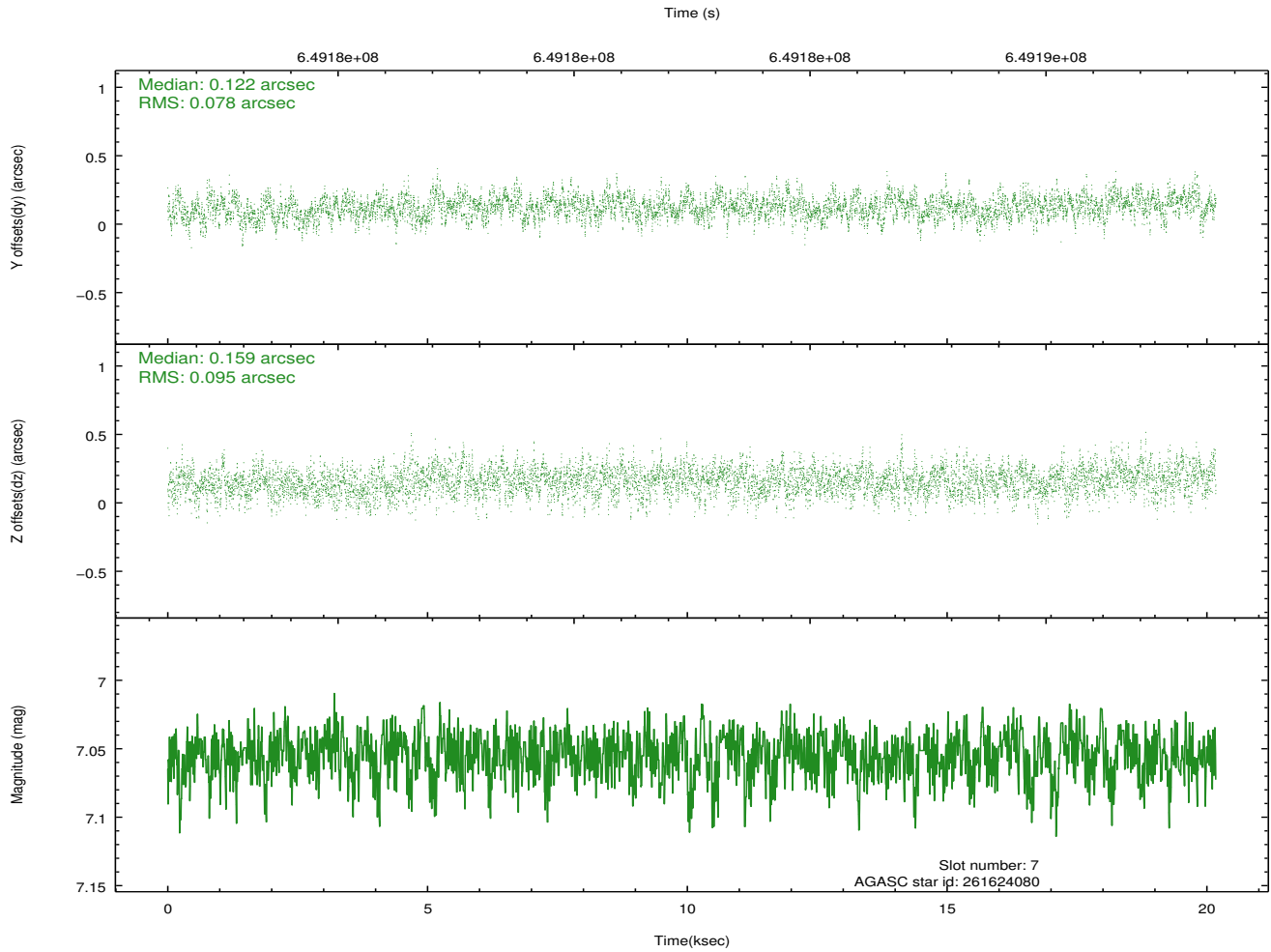
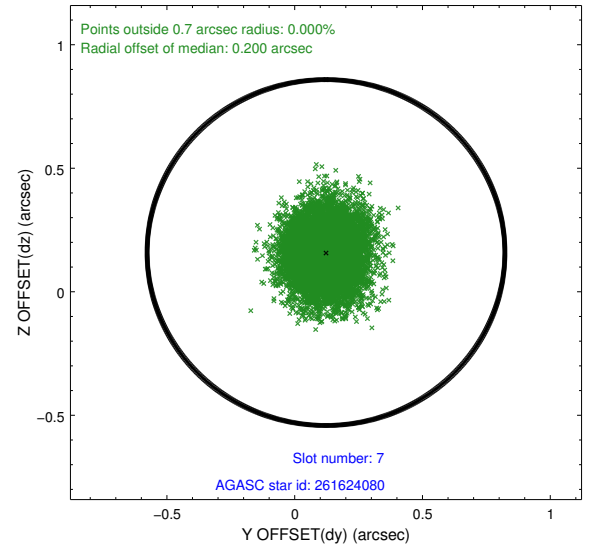
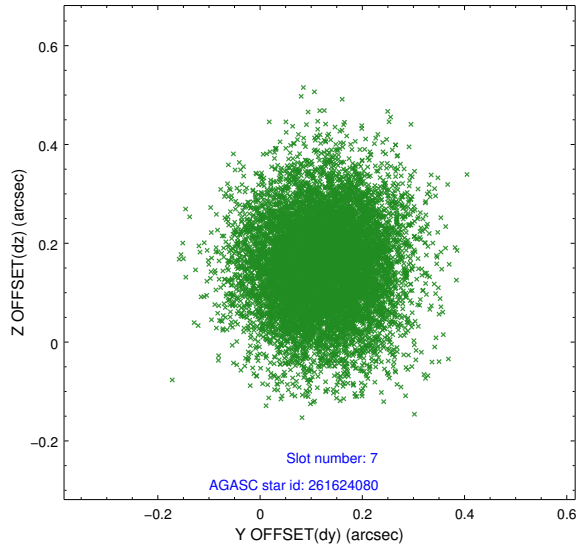
2.4.3 Slot 5



2.4.4 Slot 6

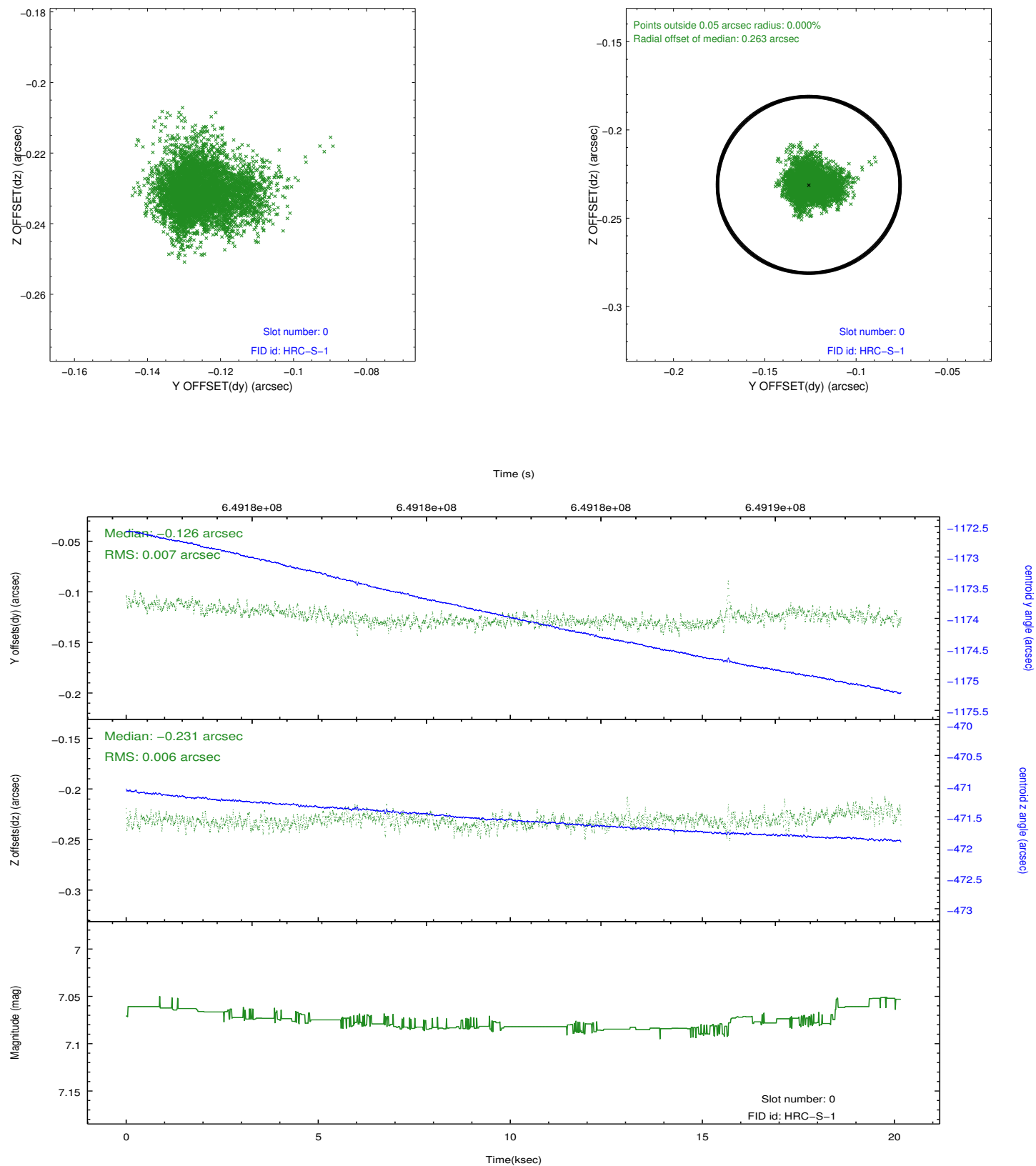


2.4.5 Slot 7

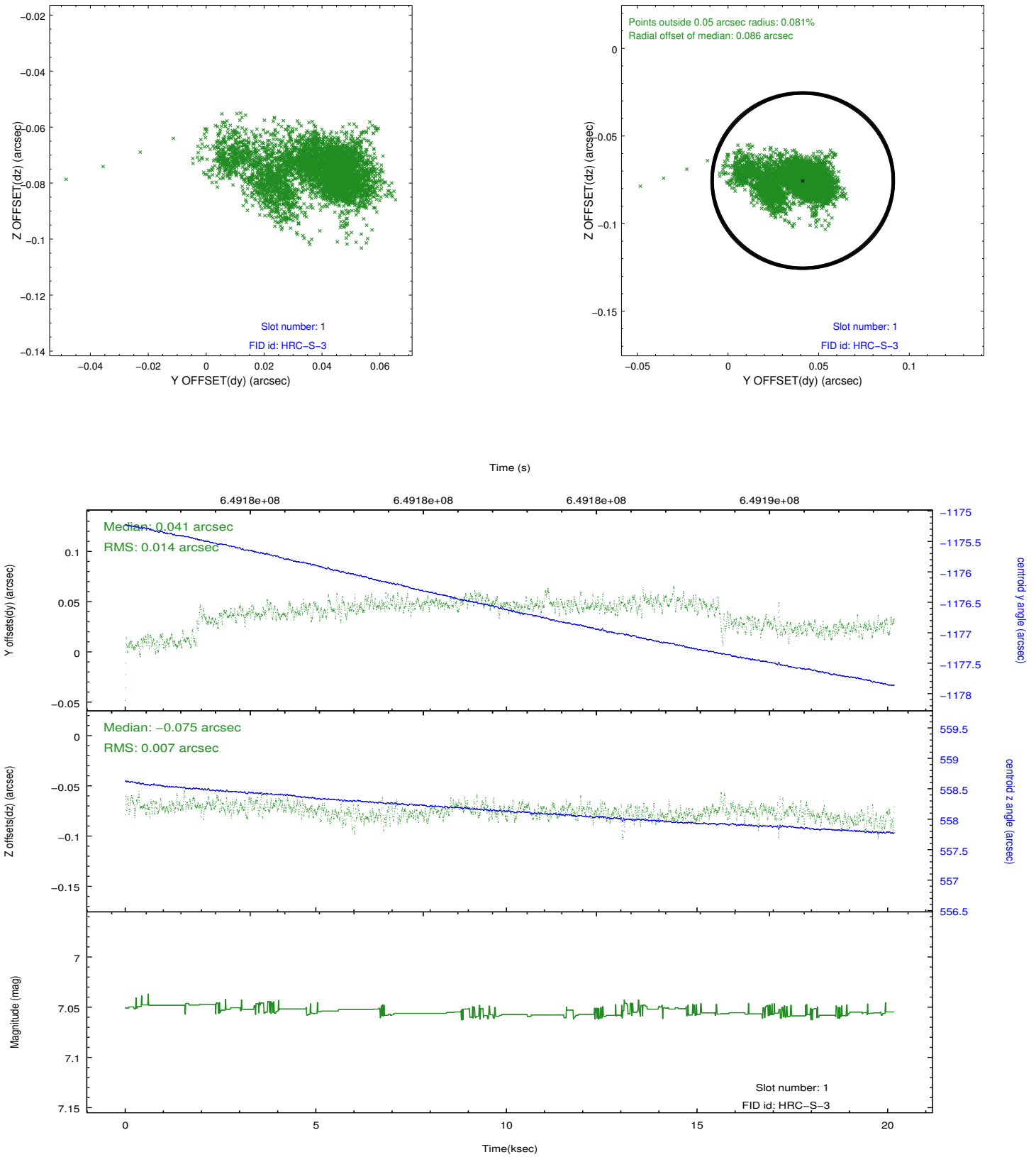


2.5 FID Slots

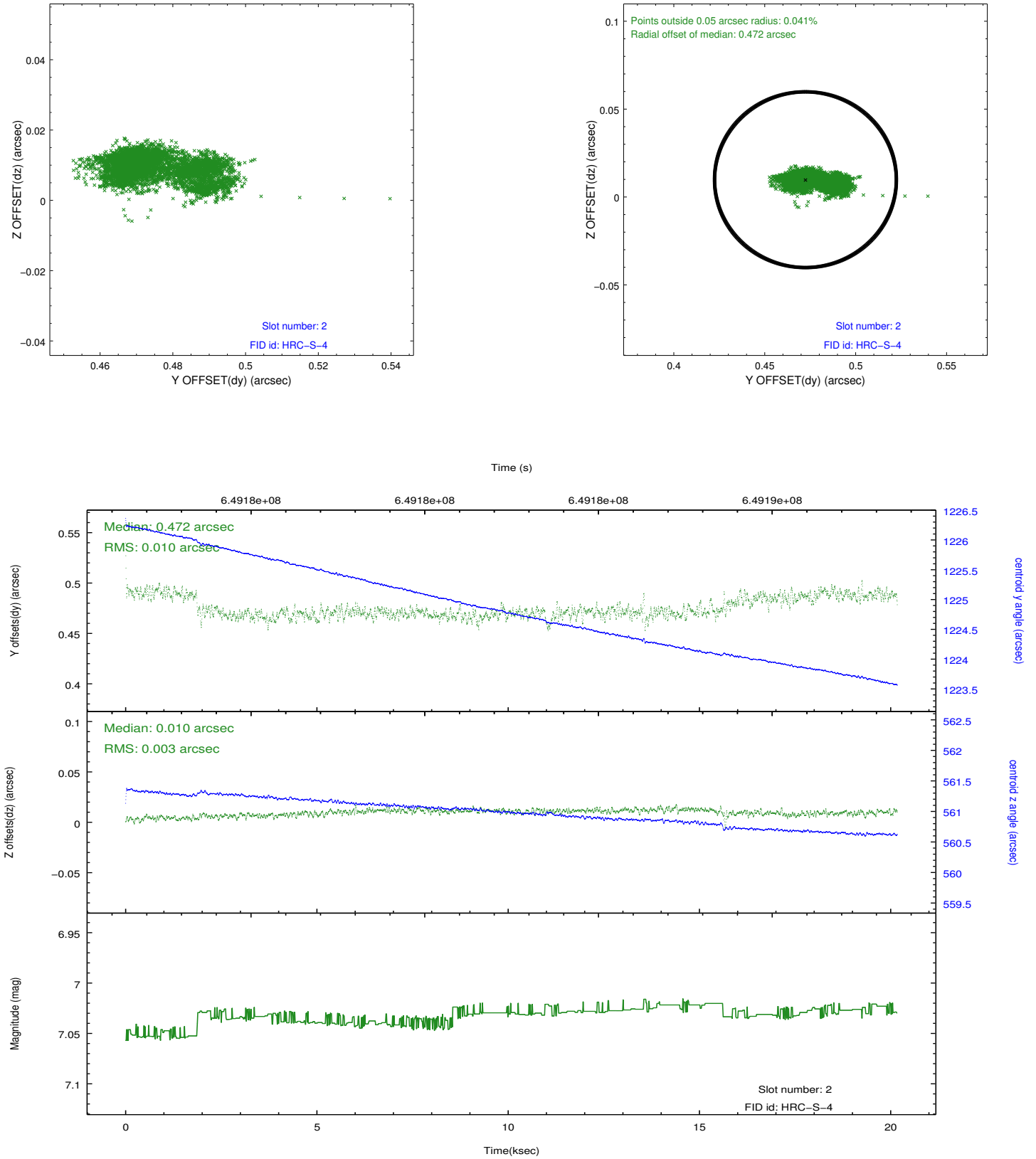
2.5.1 Slot 0



2.5.2 Slot 1

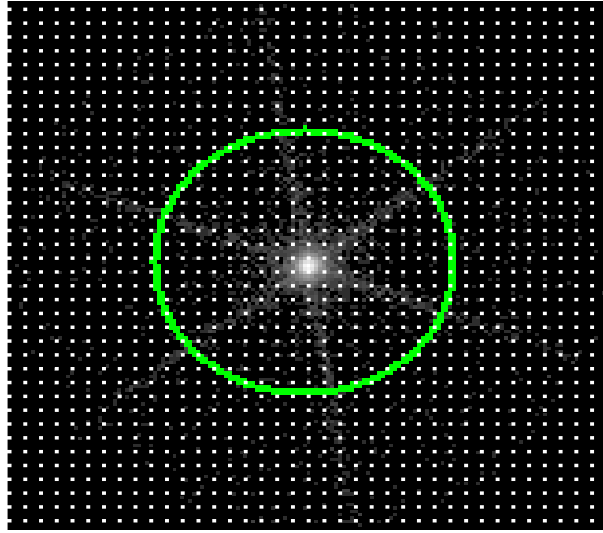


2.5.3 Slot 2

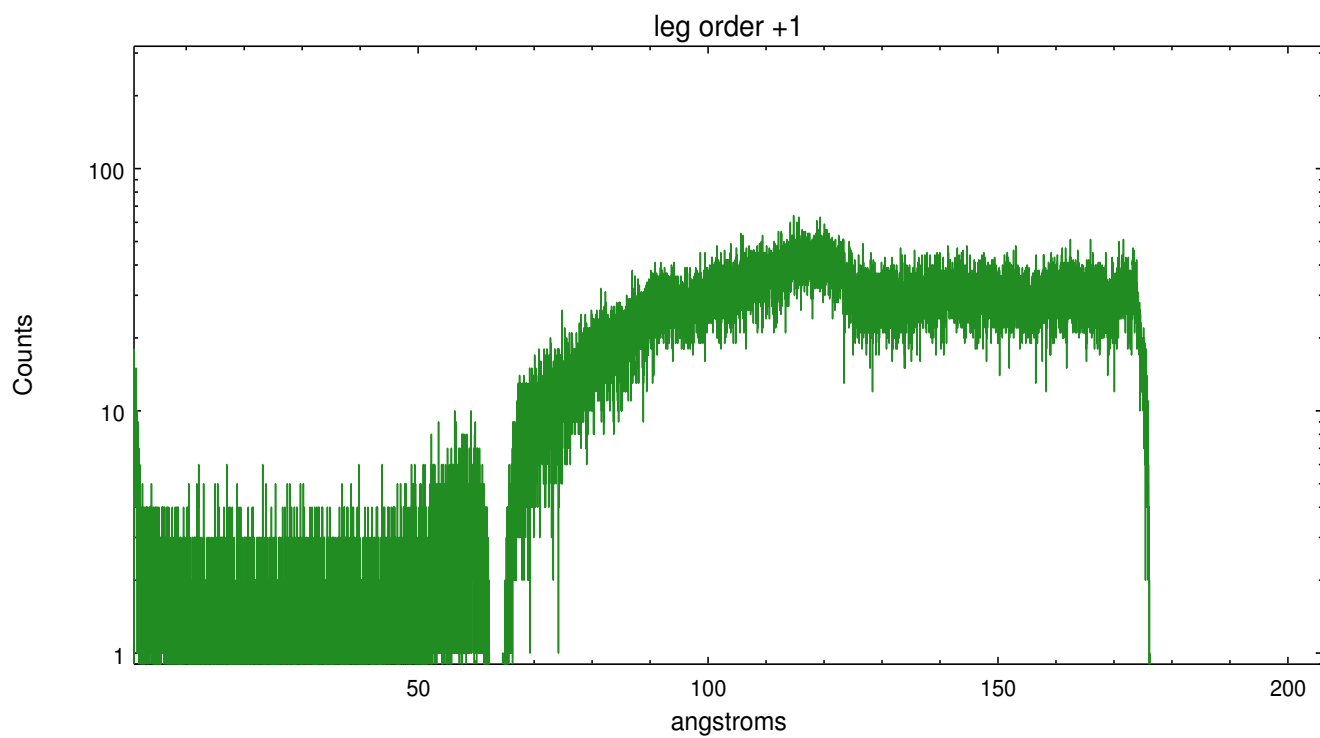
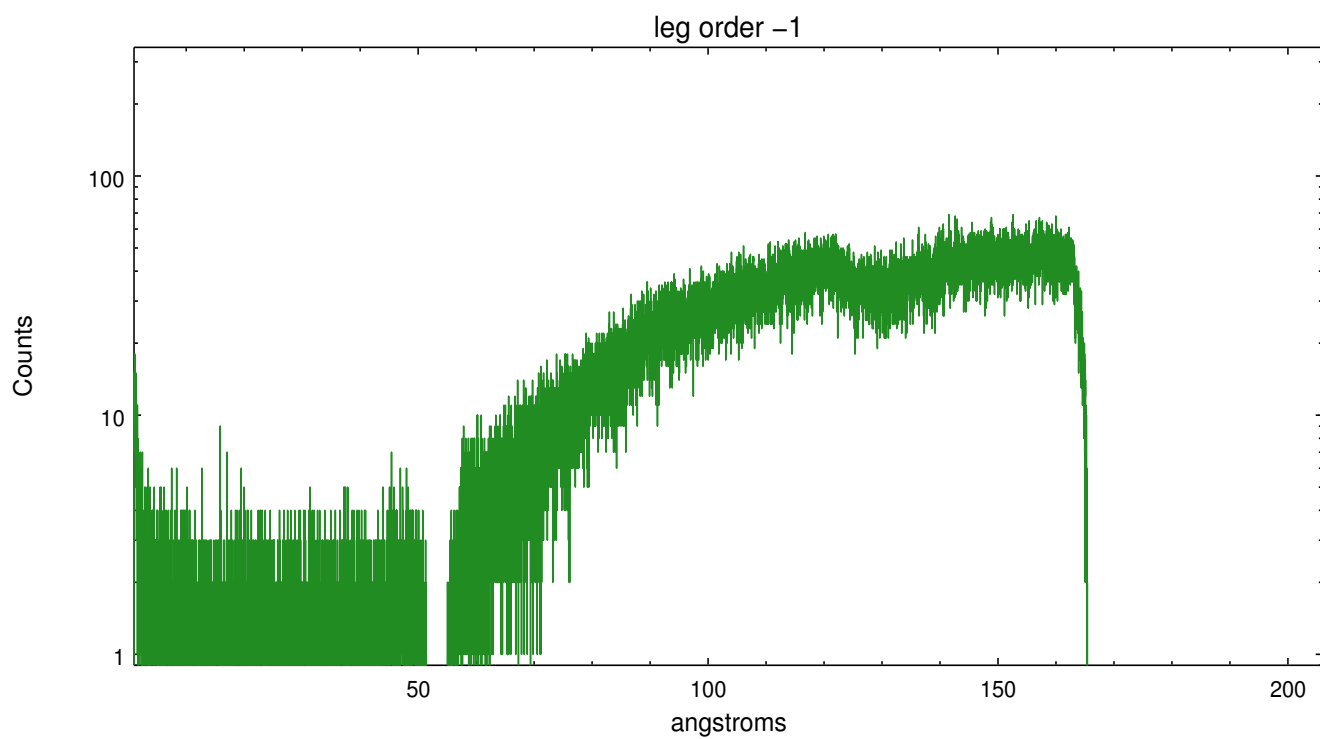


3 Gratings

3.1 LETG Arm



LETG Zero Order



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2018.07.30
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.175332446218

A.2 Comments