

V&V Reference Report

L2 ASCDS Version : 10.7.1

Observation 21785 - L2 Version 1
Chandra X-Ray Center

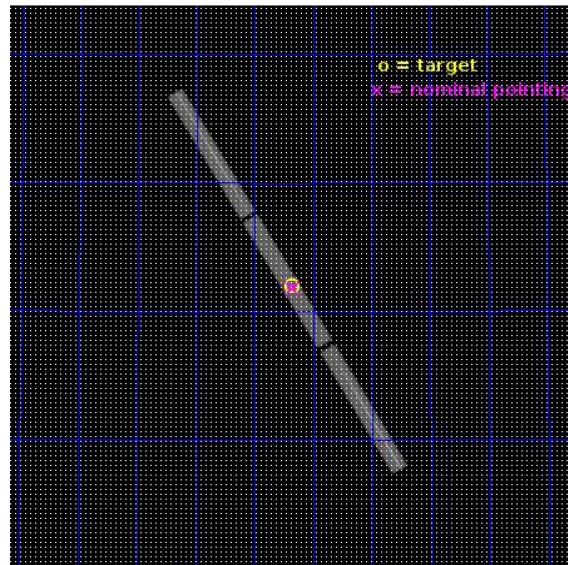
L2 Processing Date : May 27 2019

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

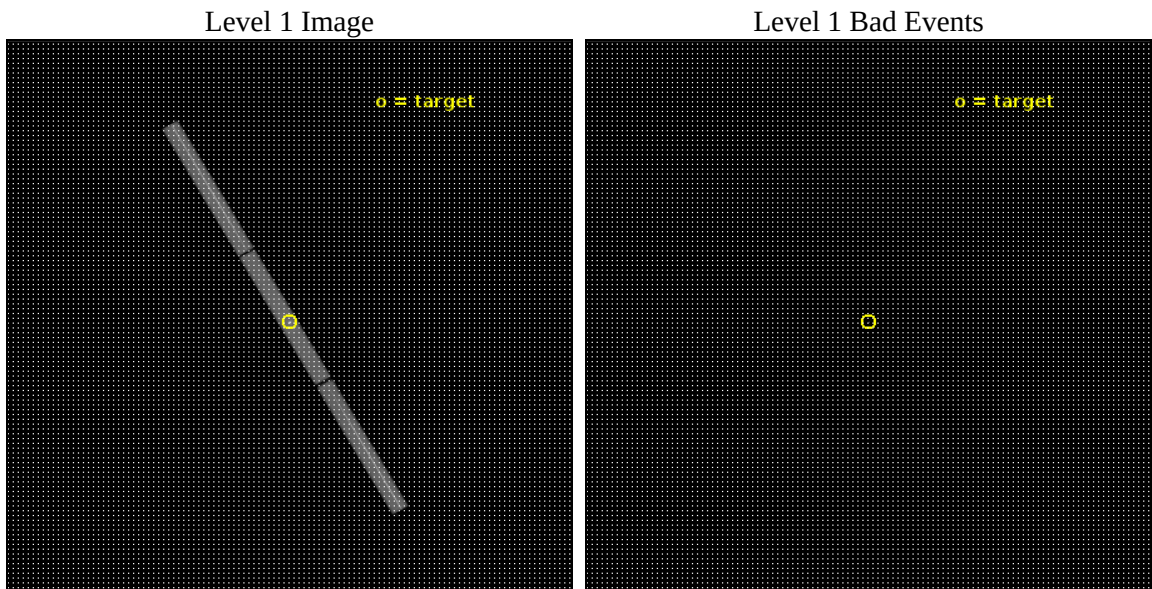
seq_num	291471	Sequence number
obs_id	21785	Observation id
title	AO-20 LETG/HRC-S Calibration Observations of HZ43	Proposal title
observer	CXC Calibration	Principal investigator
object	HZ43	Source name
ra_targ	199.090417	Observer's specified target RA [deg]
dec_targ	29.098306	Observer's specified target Dec [deg]
ra_nom	199.09224397749	Nominal RA [deg]
dec_nom	29.092358636962	Nominal Dec [deg]
roll_nom	240.06647047637	Nominal Roll [deg]
revision	1	Processing version of data
ontime	20160.982458472	[s]
livetime	19914.073734607	Ontime multiplied by DTCOR
l2events	2464158	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	10.7.1	Processing system revision	ontime	20160.982458472	[s]
caldbver	4.8.3	 	l1events	3056691	Number of level 1 events
date	2019-05-27T05:17:26	Date and time of file creation	tgmethod	TGDETECT	Method used to create src1a file
revision	1	Processing version of data	zo_pos	(32823.56, 32922.08)	src1a sky pixel position

2.1.3 Events

Level 1 Events

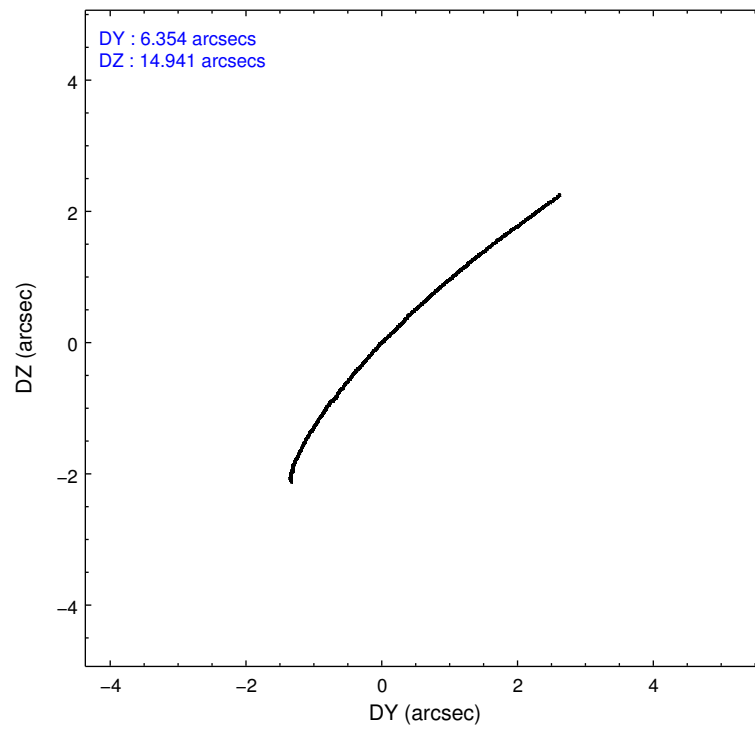
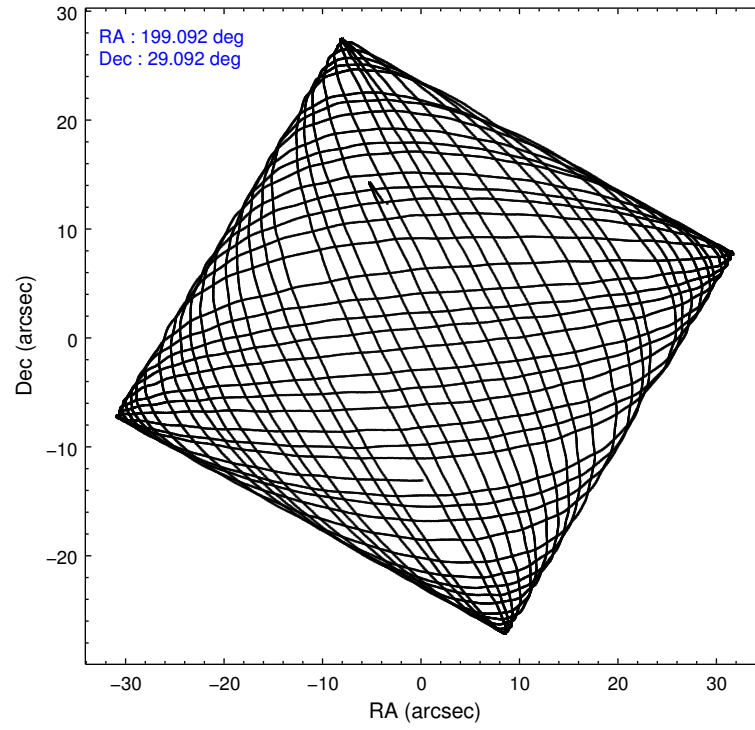
	segment 1	segment 2	segment 3
level 1 events	1048306	956321	1052064
rejected events	52135	52801	52066
rejected %	4%	5%	4%

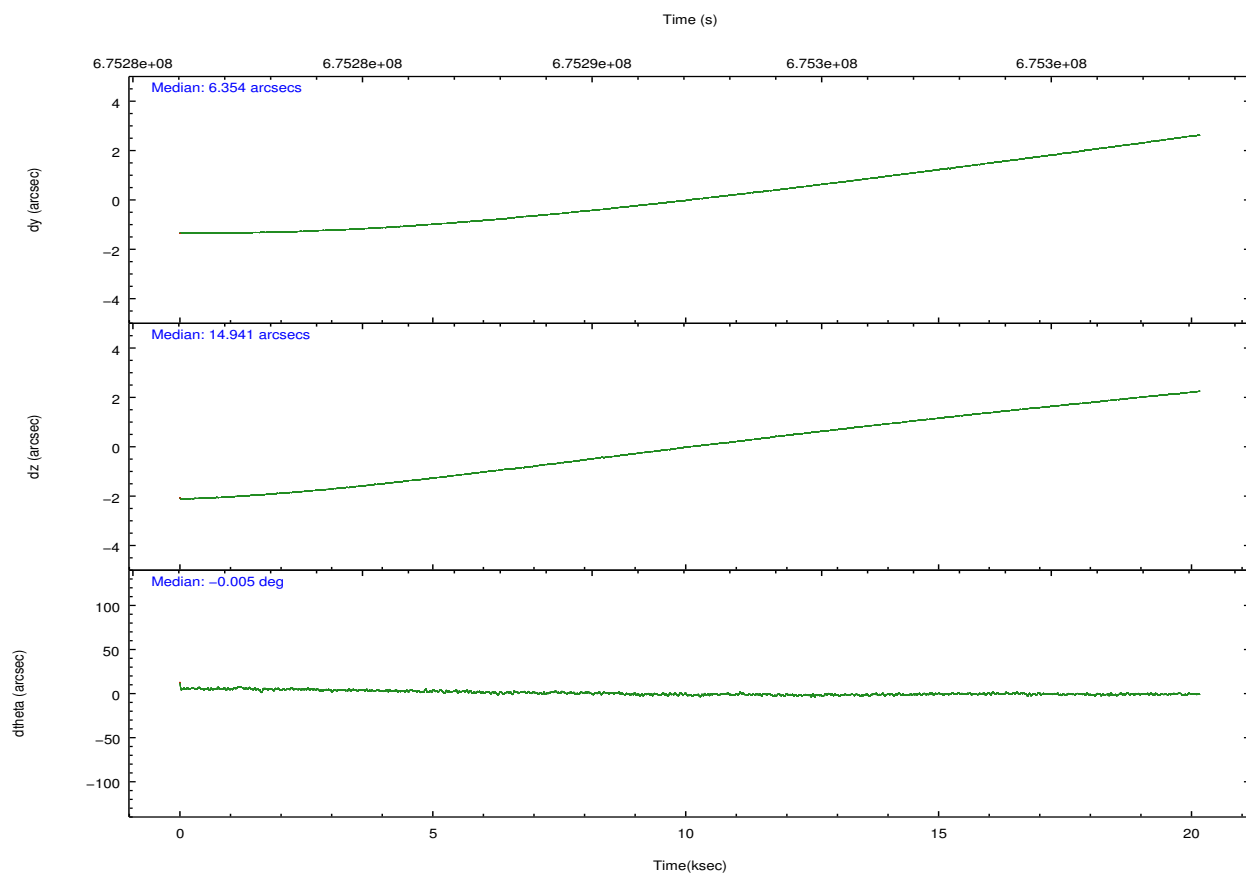
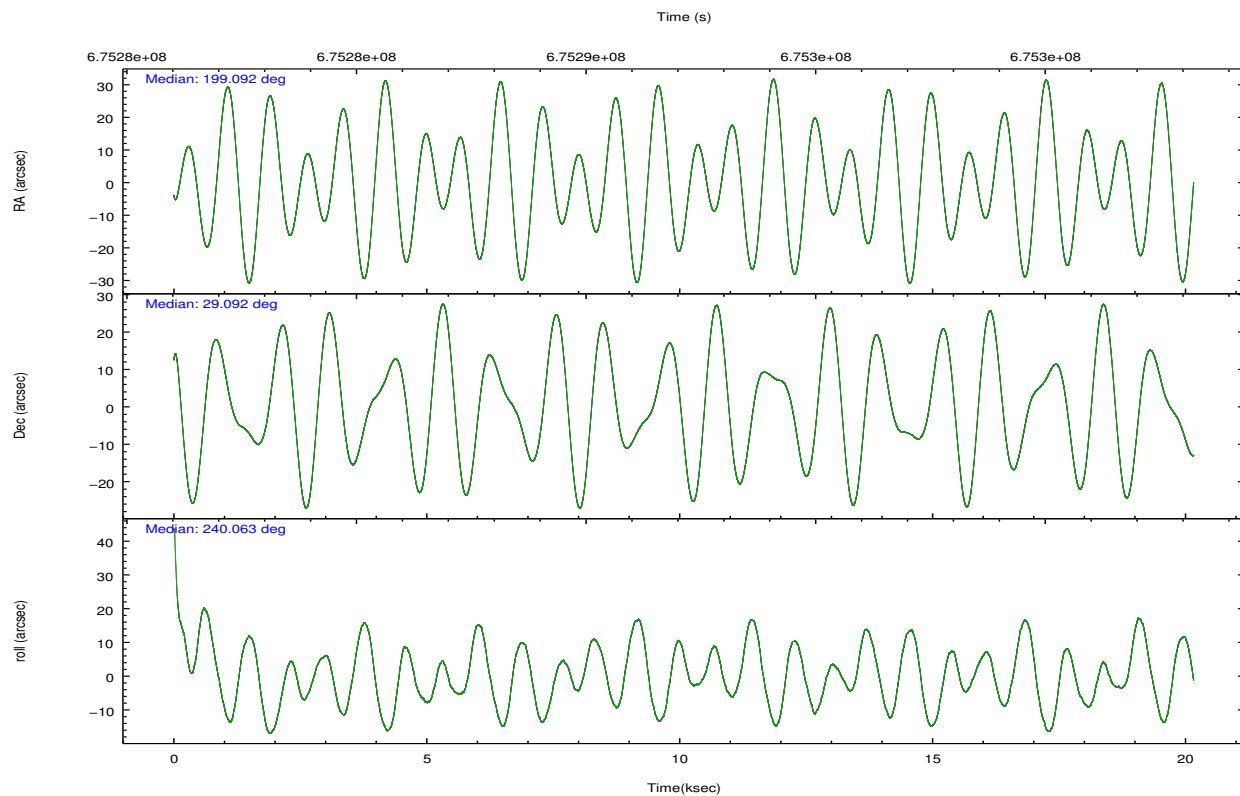
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	HRC	HRC
Detector	HRC-S	HRC-S
Grating	LETG	LETG
Data mode	OBSERVING	OBSERVING
Observation mode	POINTING	POINTING
[deg] Pointing RA	199.090663	199.0922439774869
[deg] Pointing Dec	29.121251	29.09235863696221
[deg] Pointing Roll	239.999880	240.0664704763686
[s] Window start time (MET)	673056069.184000	673056069.184000
[s] Window stop time (MET)	678240069.184000	678240069.184000
[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)	675282204.184000	675280727.90282
Observation start date	2019-05-26T18:22:15	2019-05-26T17:58:47
[s] Observation end time (MET)	675302204.184000	675302590.6416301
Observation end date	2019-05-26T23:55:35	2019-05-27T00:03:10

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED

2.3 Aspect



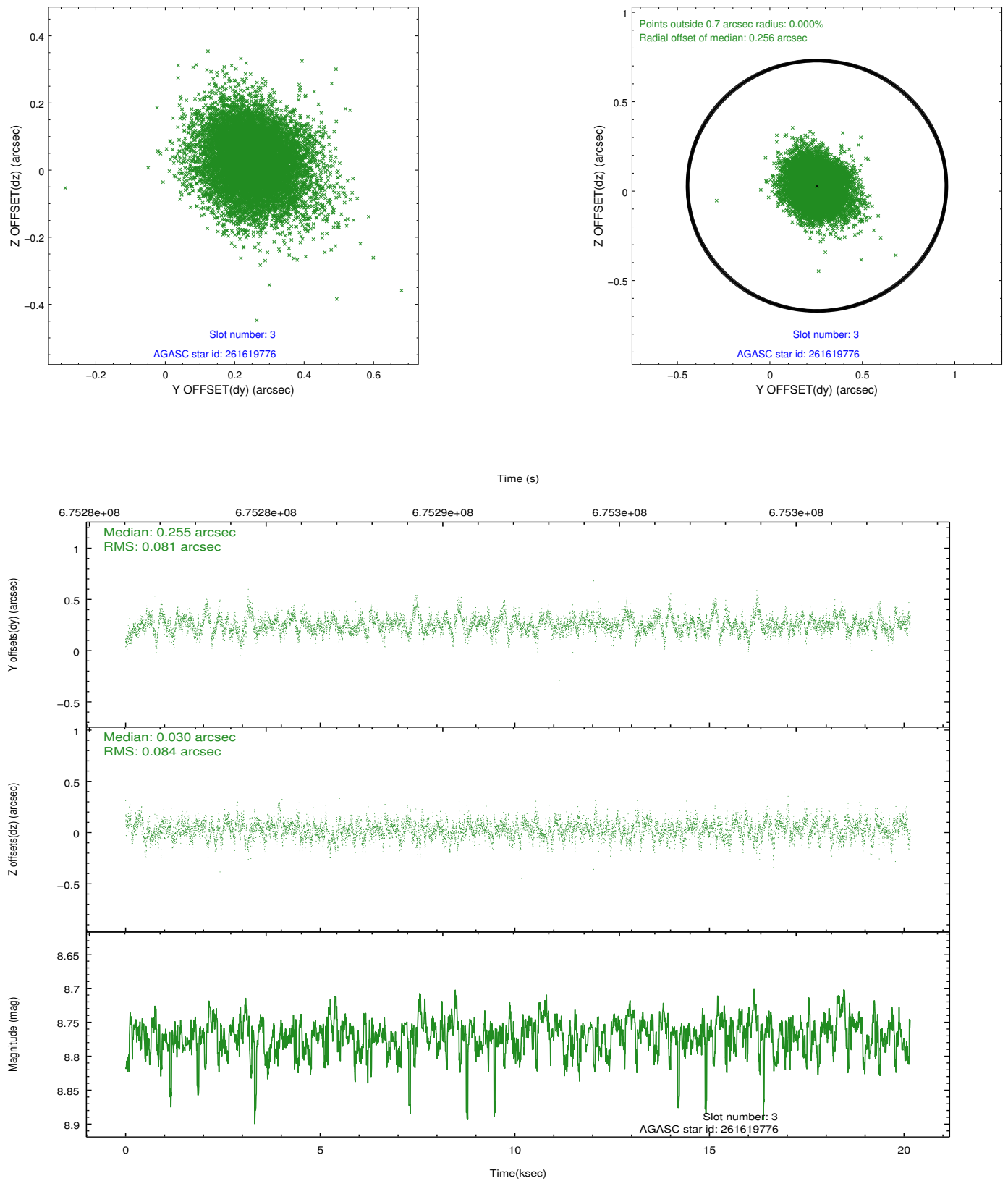


Slot Statistics

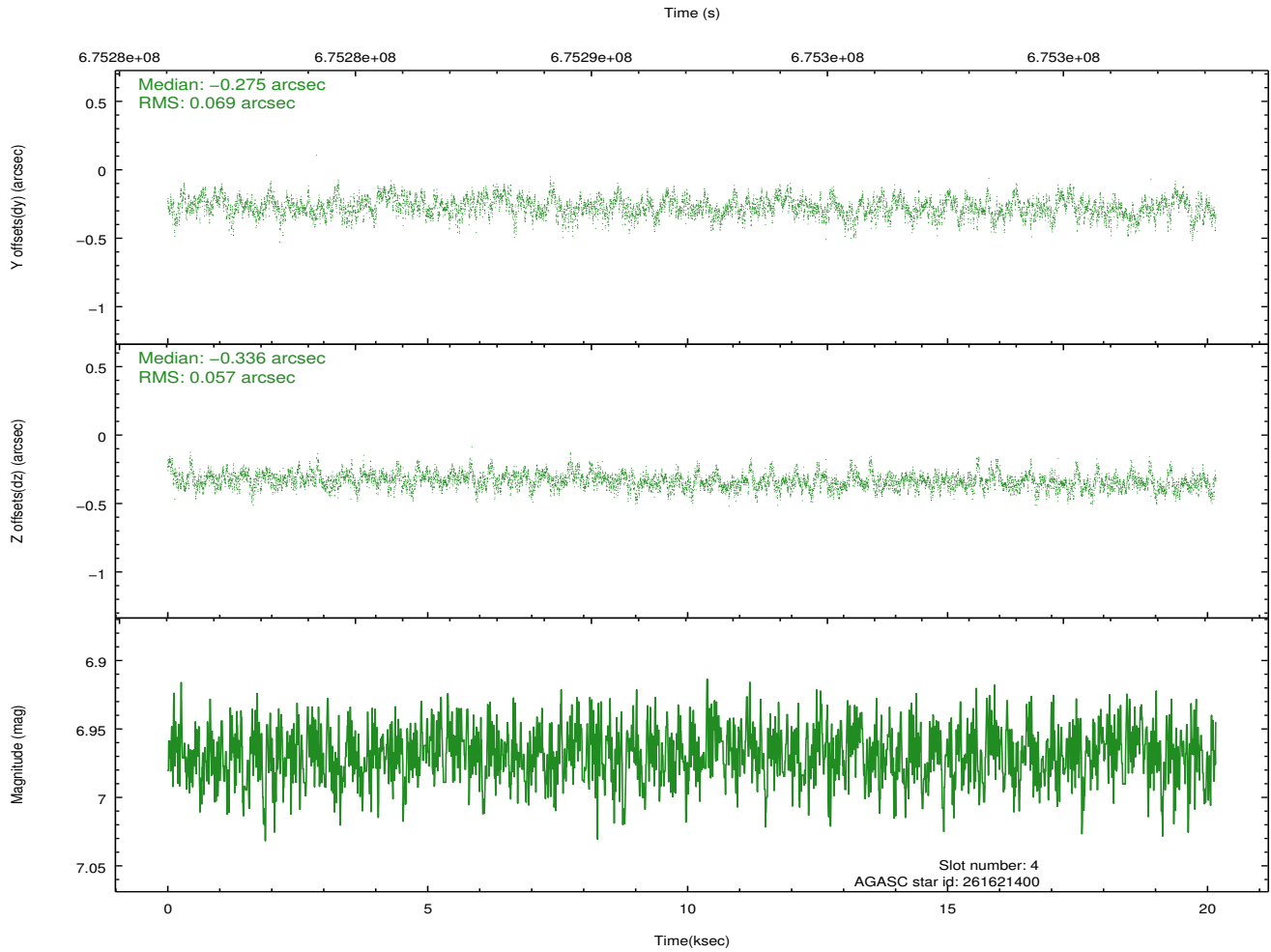
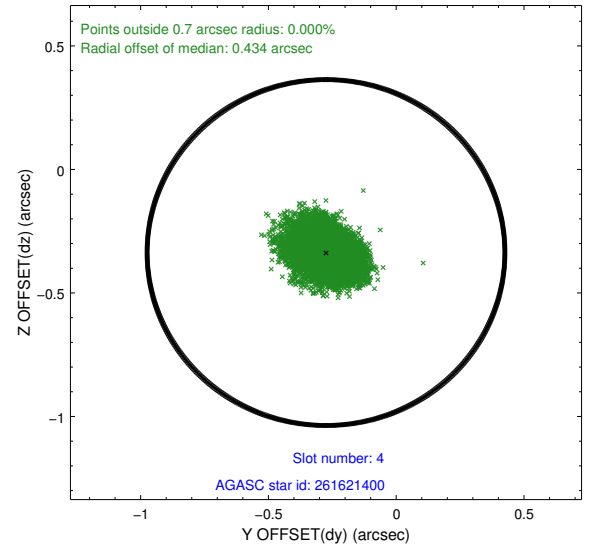
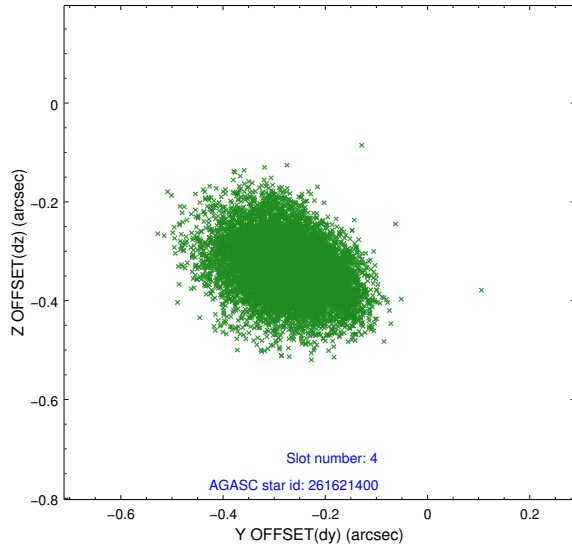
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		HRC-S-1	7.04	4918	1.000	-0.235	-0.214	0.016	0.021	0.000000	0.000000	-1161.02	-463
1	FID		HRC-S-2	7.01	4918	1.000	0.236	-0.070	0.031	0.054	0.000000	0.000000	1238.90	-456
2	FID		HRC-S-4	7.03	4918	1.000	0.395	-0.015	0.041	0.059	0.000000	0.000000	1238.10	568
3	GUIDE	used	261619776	8.77	9829	1.000	0.255	0.030	0.122	0.204	198.654383	29.401174	-190.07	-1688
4	GUIDE	used	261621400	6.97	9834	1.000	-0.275	-0.336	0.094	0.156	198.901600	28.741982	1480.52	164
5	GUIDE	used	261623040	9.07	9825	1.000	0.094	0.215	0.154	0.245	198.792686	29.757643	-1518.63	-1952
6	GUIDE	used	261626376	9.67	9817	1.000	0.158	0.162	0.238	0.368	198.947288	29.347445	-480.10	-797
7	GUIDE	used	261629720	8.08	9831	1.000	-0.224	-0.066	0.118	0.193	199.236176	29.044452	10.24	534

2.4 Star Slots

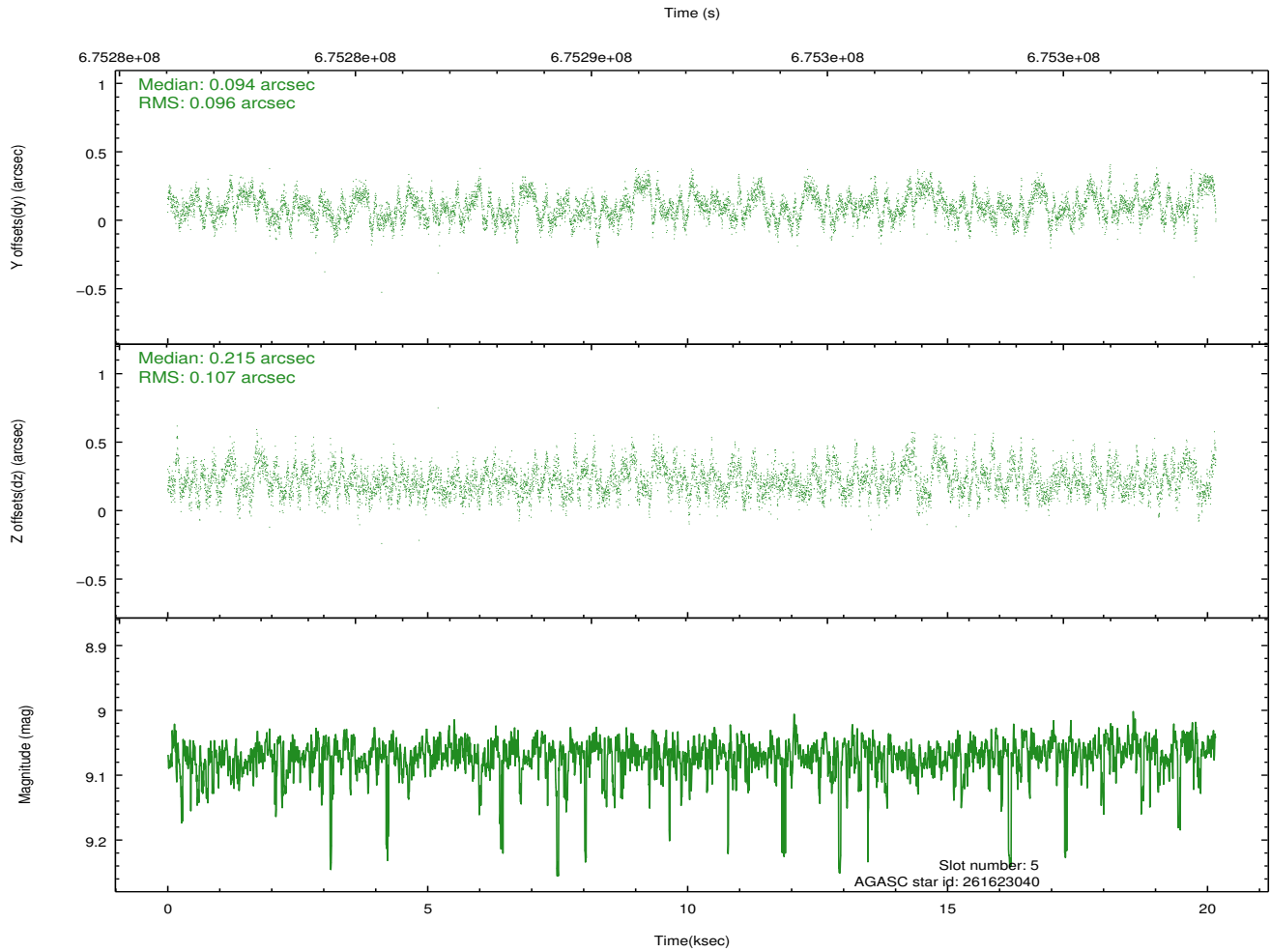
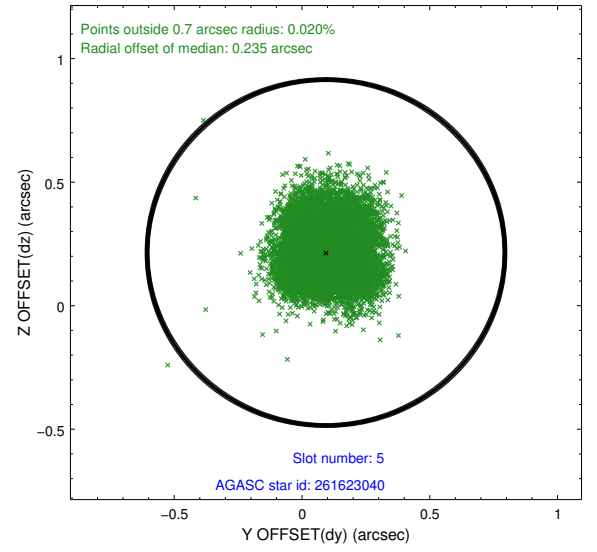
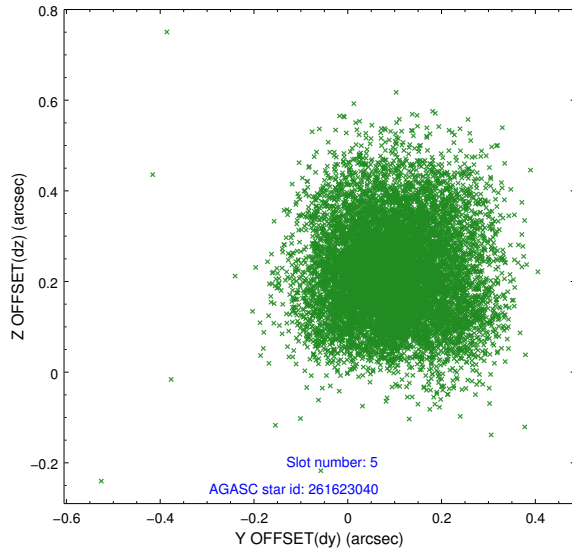
2.4.1 Slot 3



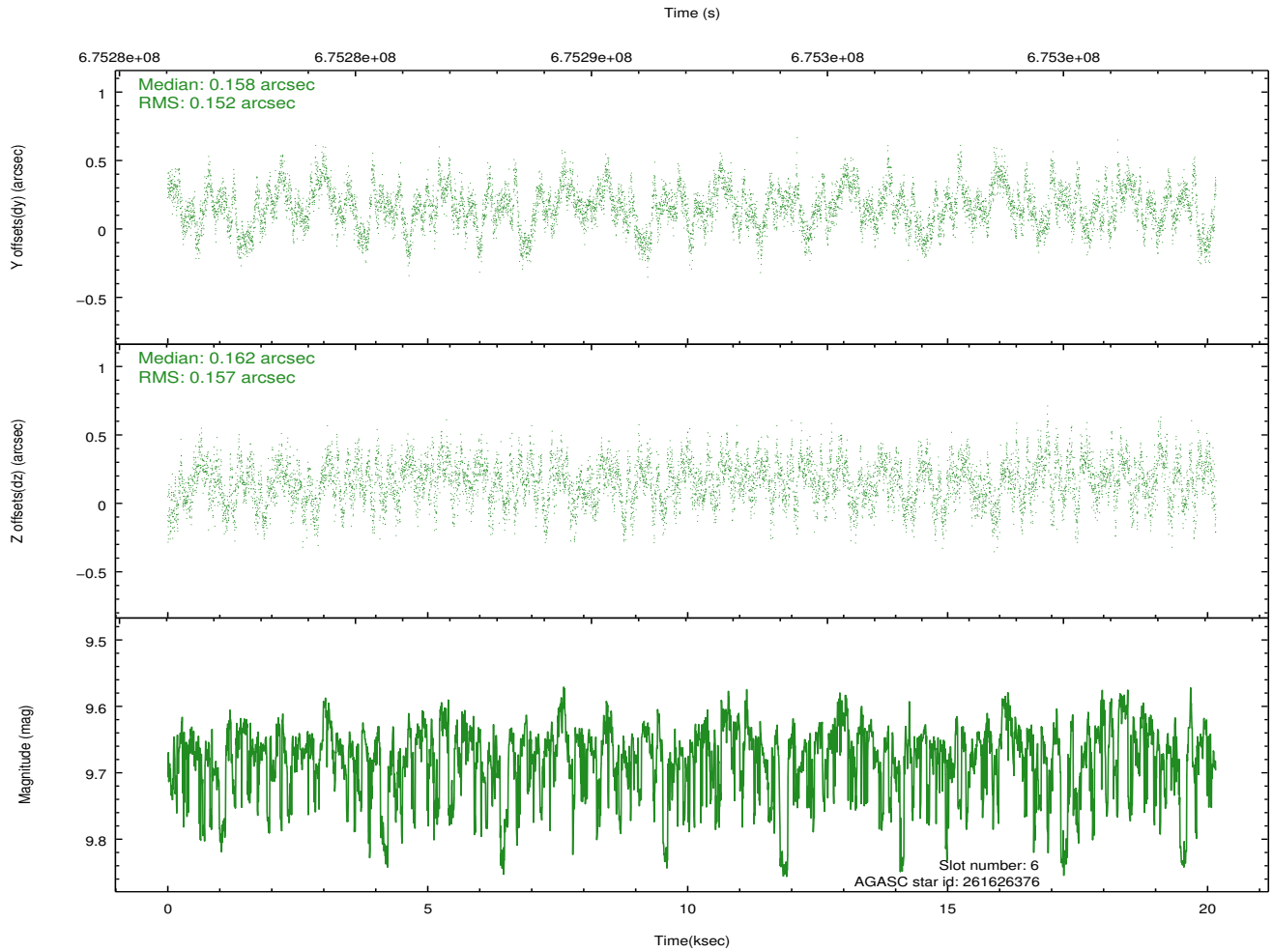
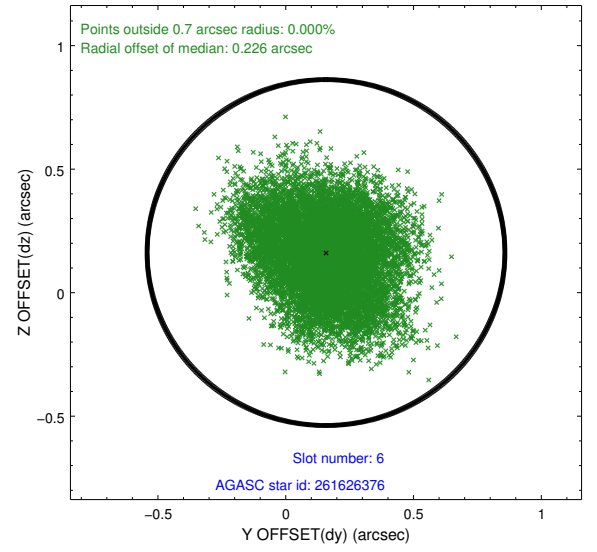
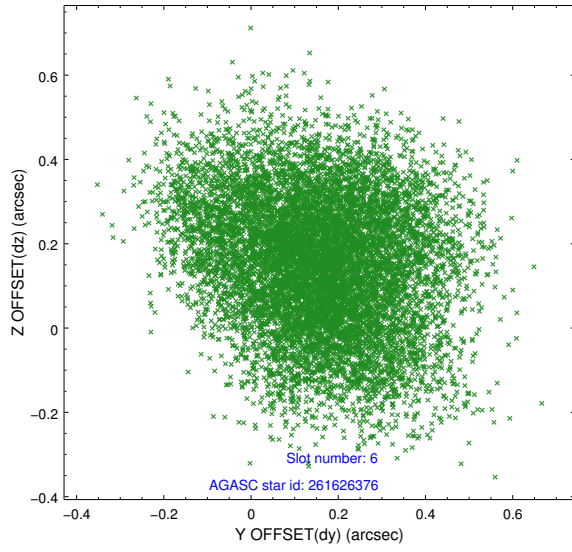
2.4.2 Slot 4



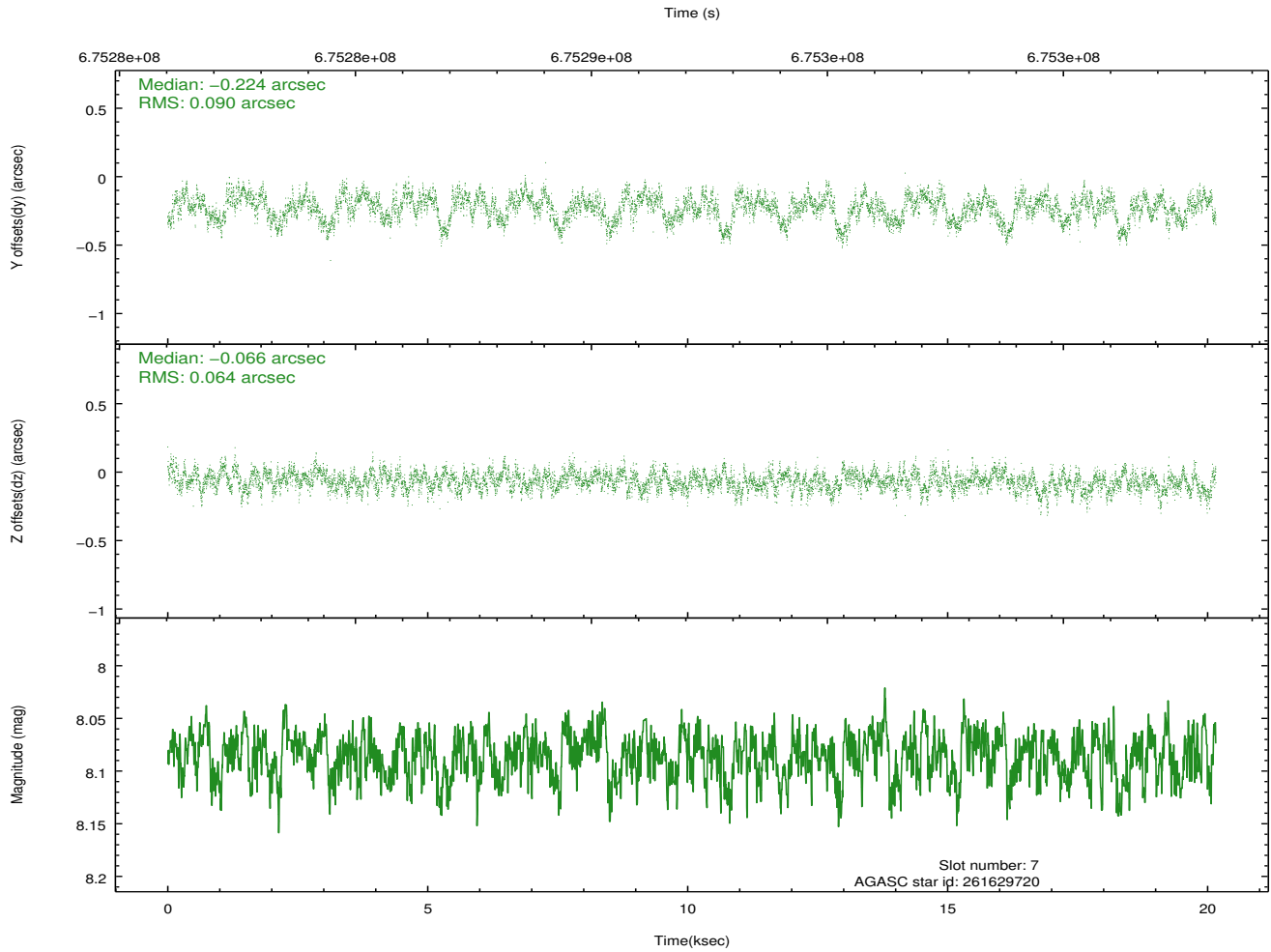
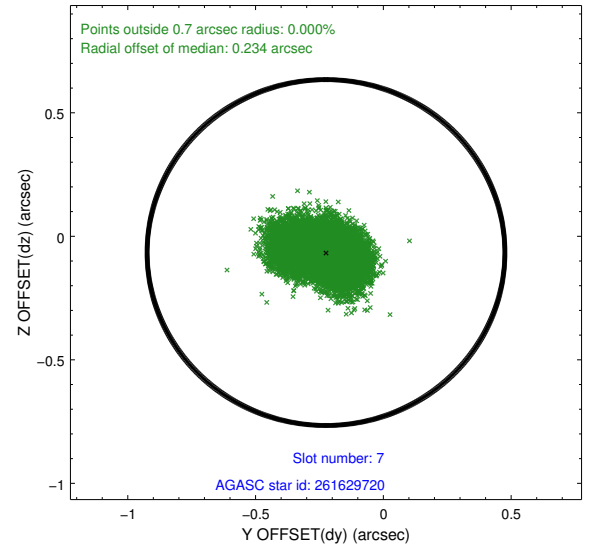
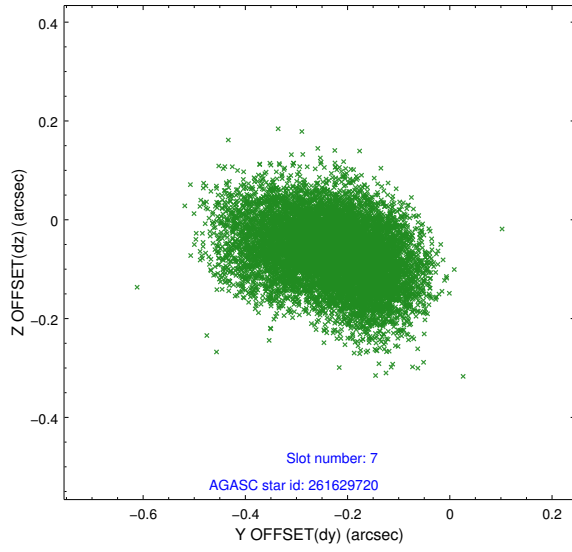
2.4.3 Slot 5



2.4.4 Slot 6

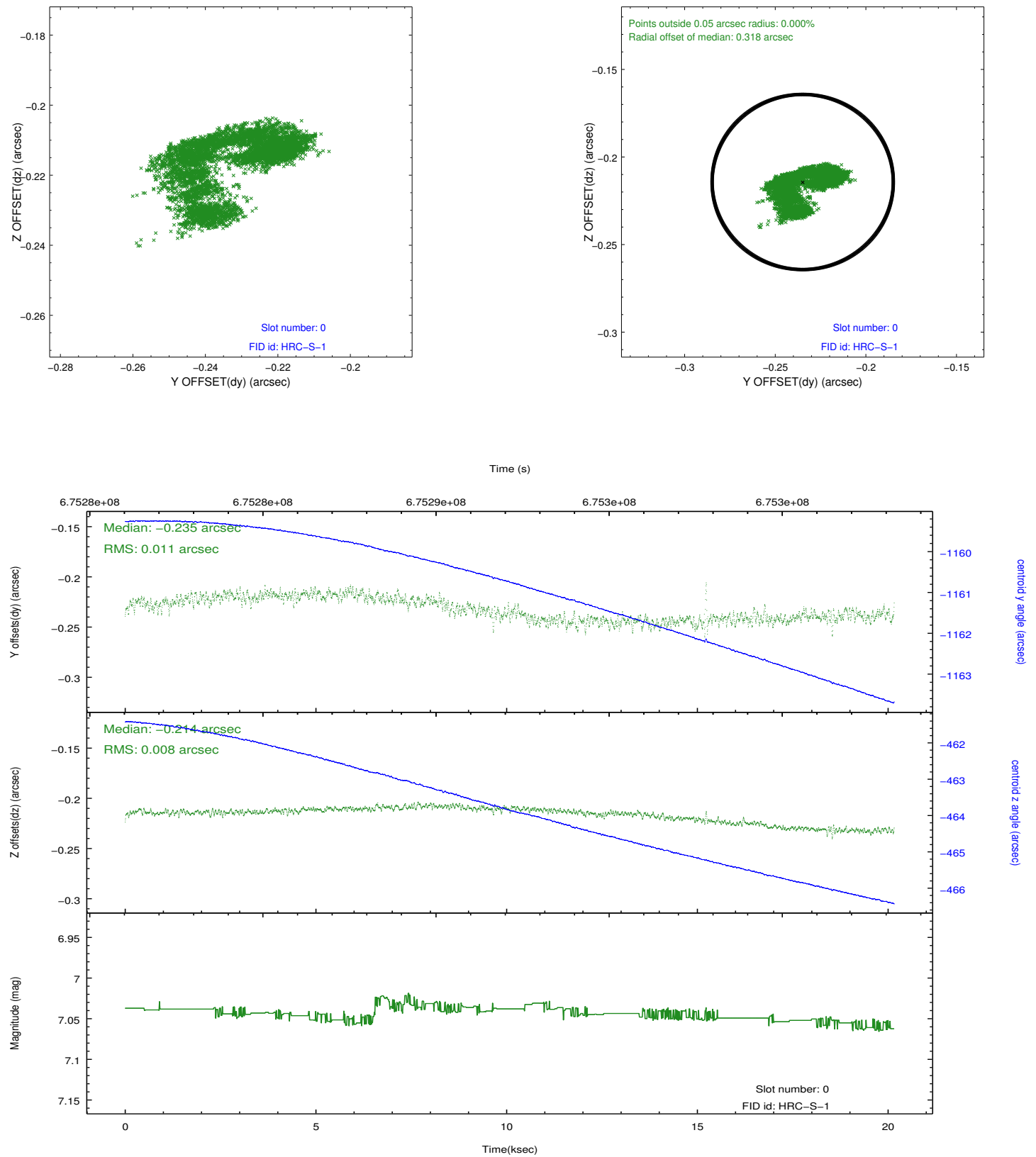


2.4.5 Slot 7

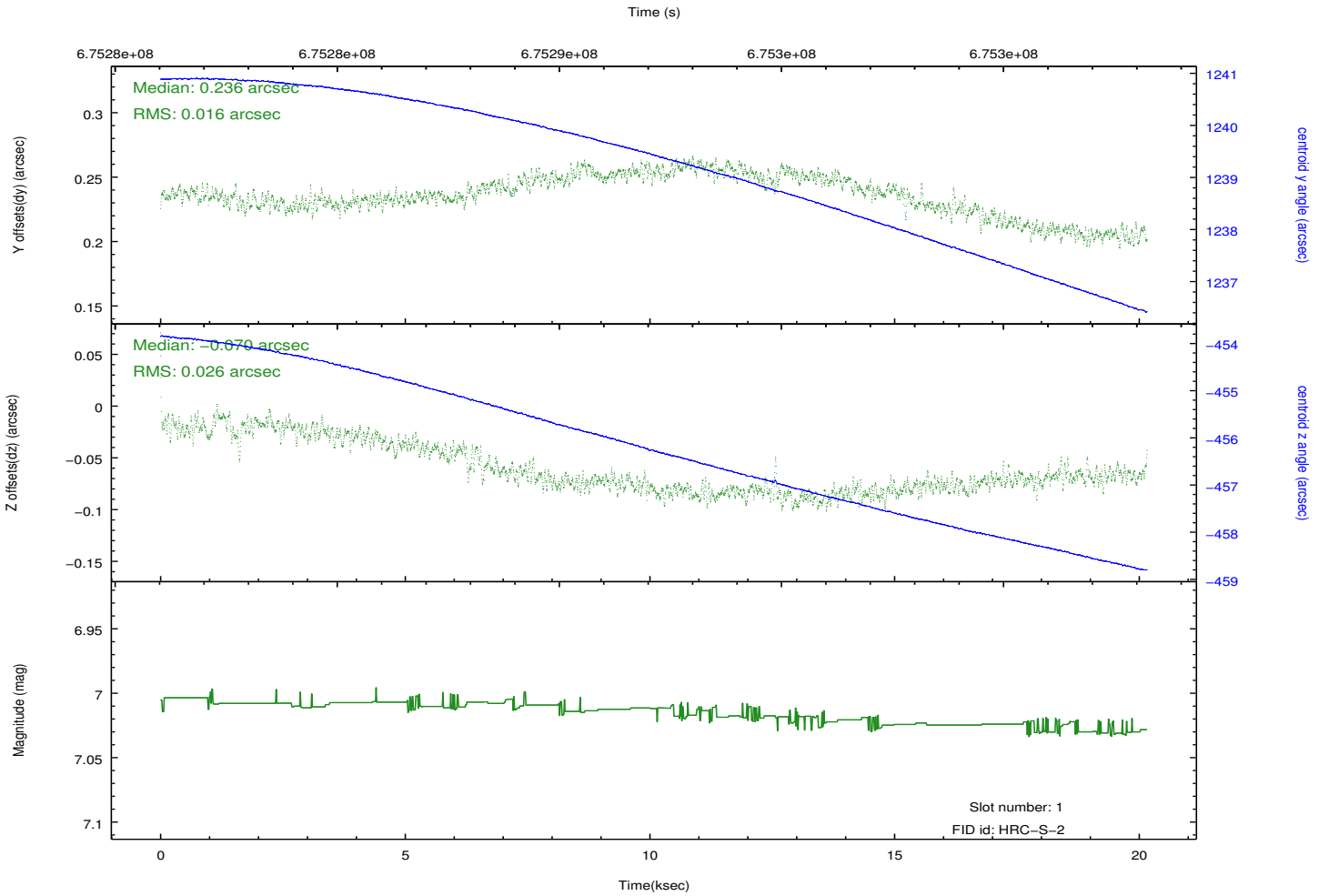
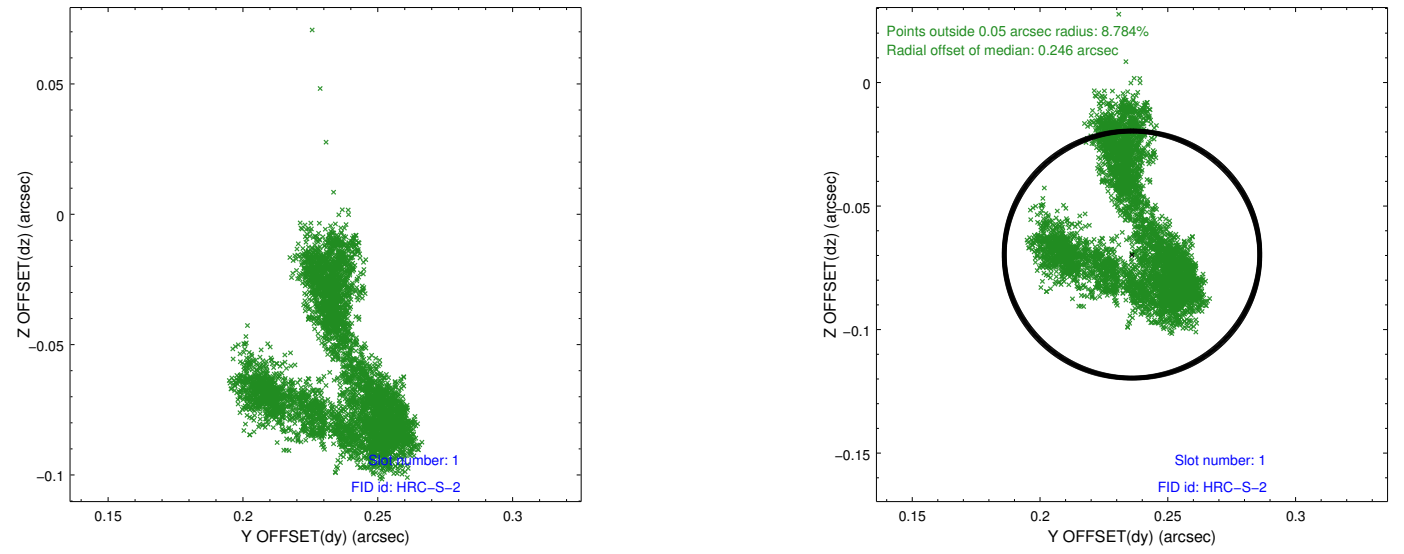


2.5 FID Slots

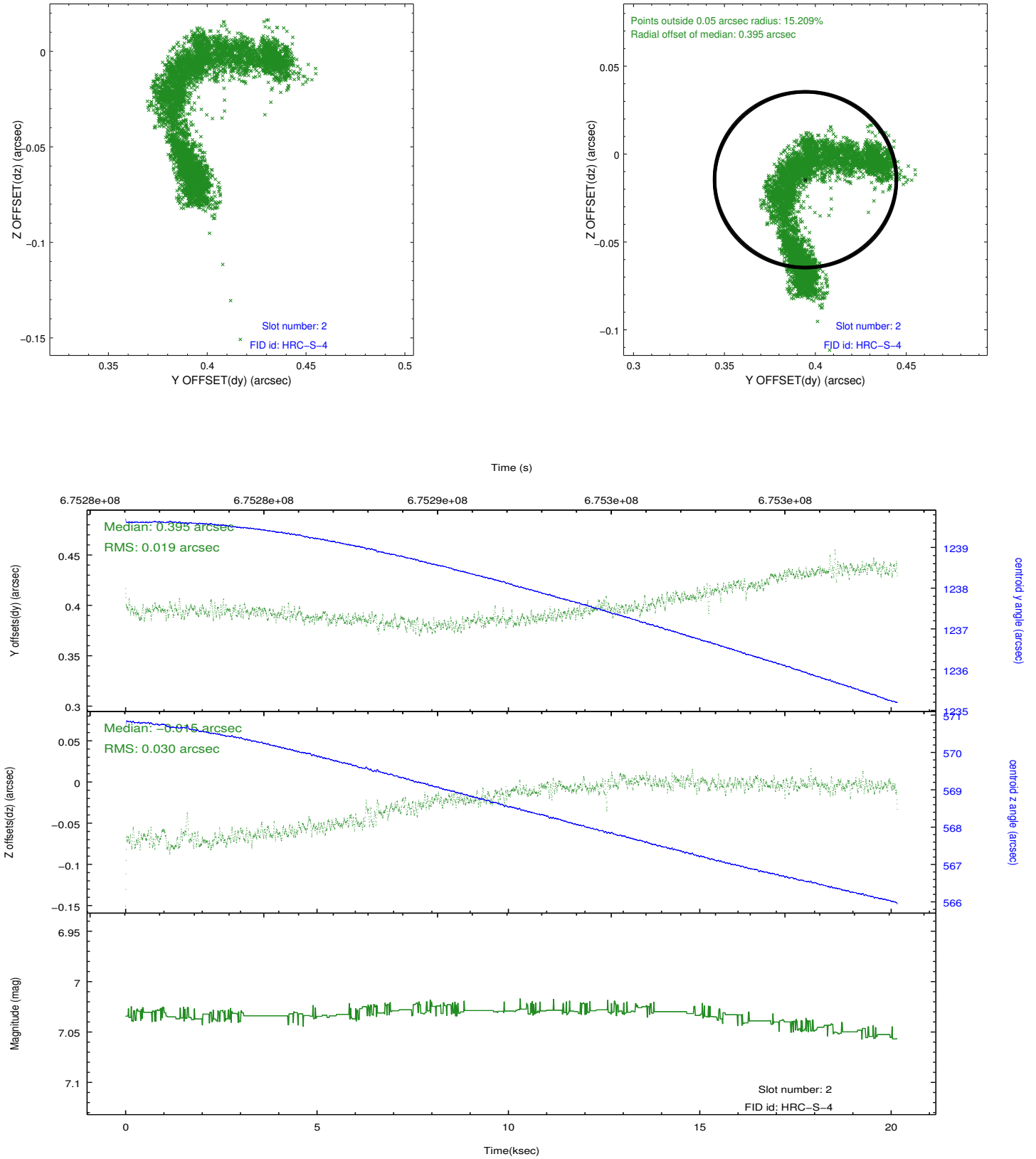
2.5.1 Slot 0



2.5.2 Slot 1

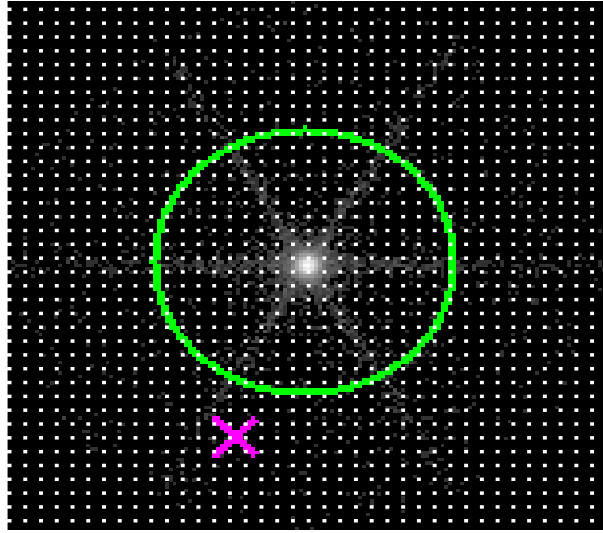


2.5.3 Slot 2

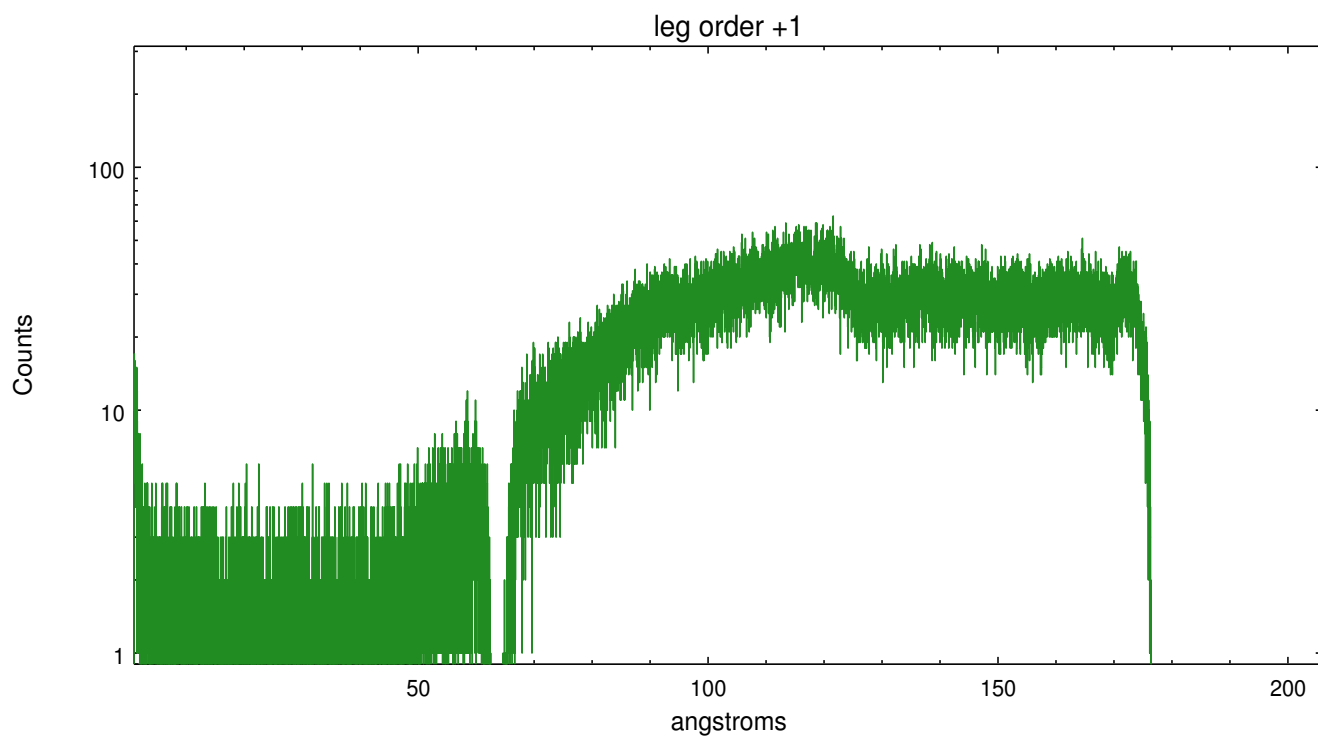
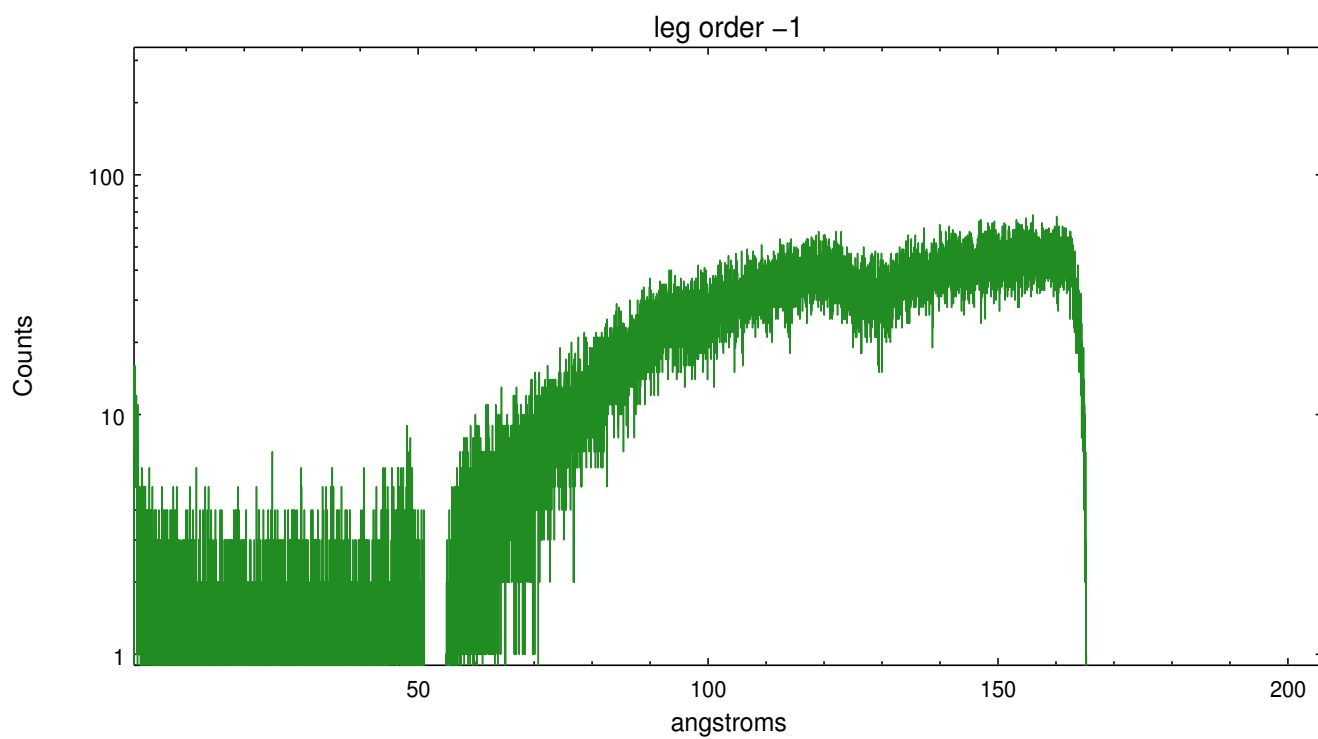


3 Gratings

3.1 LETG Arm



LETG Zero Order



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2019.05.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.160982458472

A.2 Comments