

V&V Reference Report

L2 ASCDS Version : 10.6.4

Observation 21670 - L2 Version 1
Chandra X-Ray Center

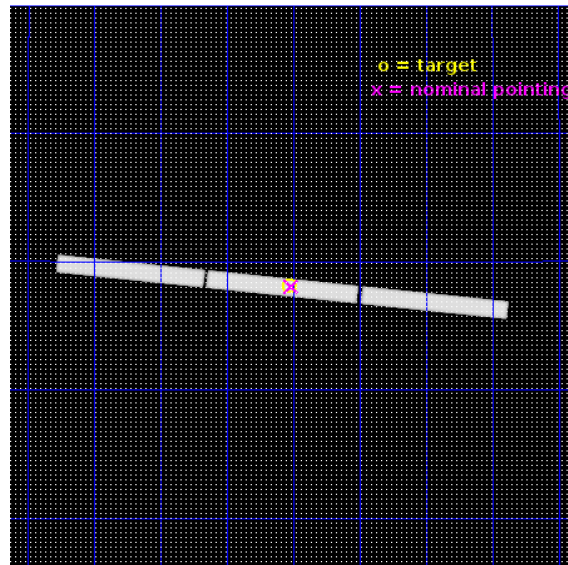
L2 Processing Date : Aug 19 2018

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1 Front

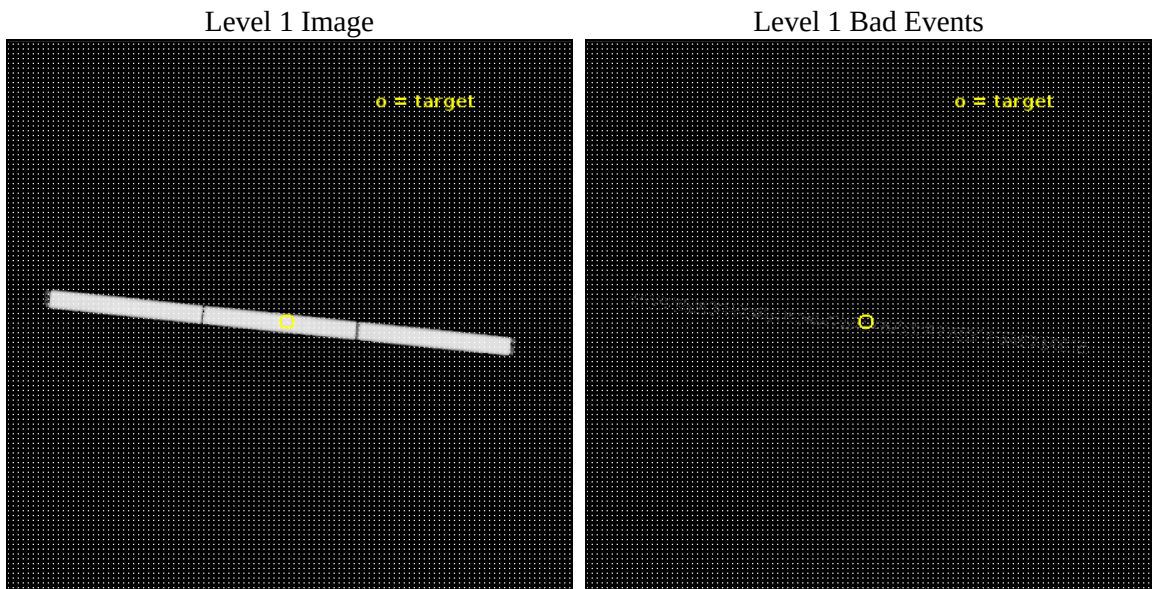
seq_num	503042	Sequence number
obs_id	21670	Observation id
title	The Cyclotron Absorption Line in the Isolated Neutron Star RX J2143.0+0654	Proposal title
observer	Dr. Peter Predehl	Principal investigator
object	RX J2143.0+0654	Source name
ra_targ	325.765833	Observer's specified target RA [deg]
dec_targ	6.905583	Observer's specified target Dec [deg]
ra_nom	325.75694698808	Nominal RA [deg]
dec_nom	6.8978382279178	Nominal Dec [deg]
roll_nom	186.06839047895	Nominal Roll [deg]
revision	1	Processing version of data
ontime	20179.43244791	[s]
livetime	19981.183626243	Ontime multiplied by DTCOR
l2events	1790195	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	20179.43244791	[s]
caldbver	4.7.8	 	l1events	2310578	Number of level 1 events
date	2018-08-19T15:33:06	Date and time of file creation	tgmethod	TGDETECT	Method used to create src1a file
revision	1	Processing version of data	zo_pos	(32570.34, 32964.84)	src1a sky pixel position

2.1.3 Events

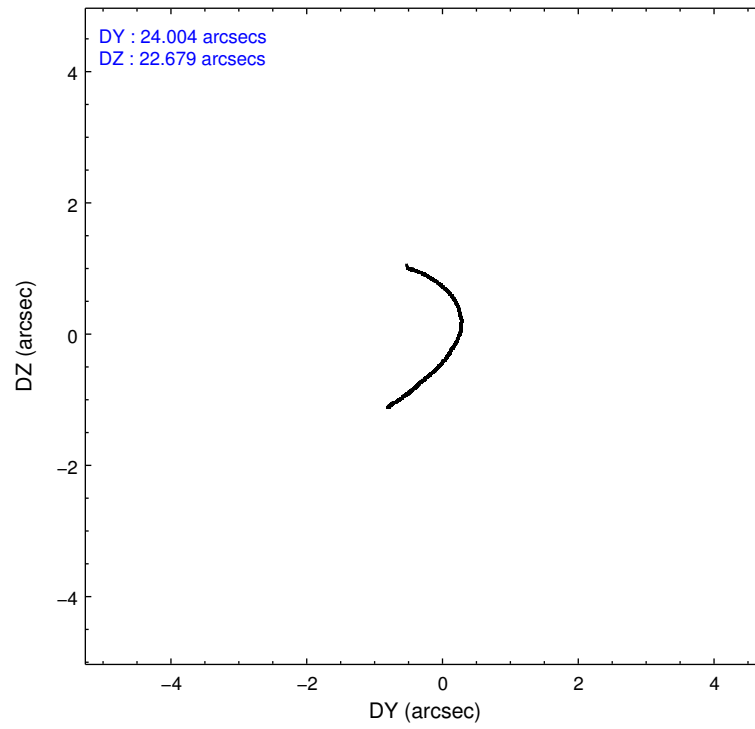
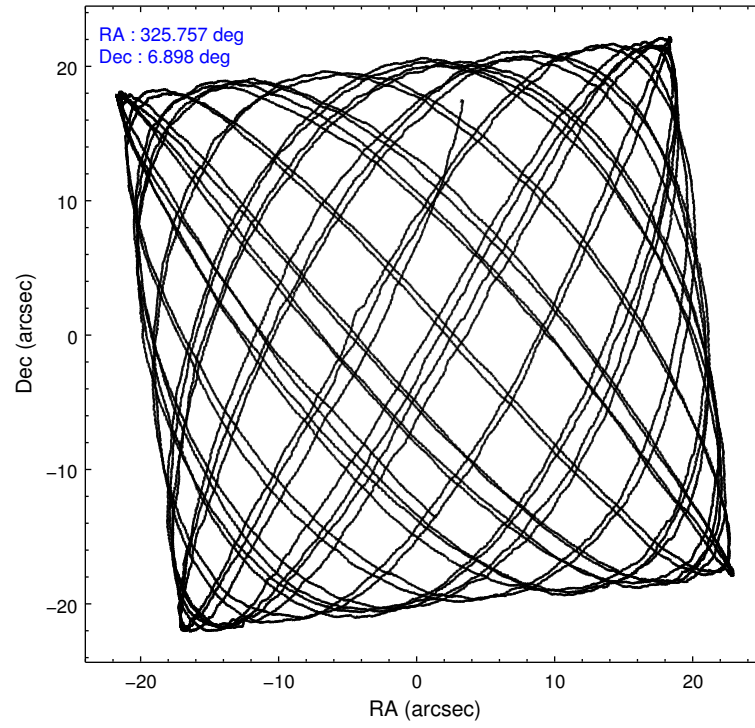
Level 1 Events

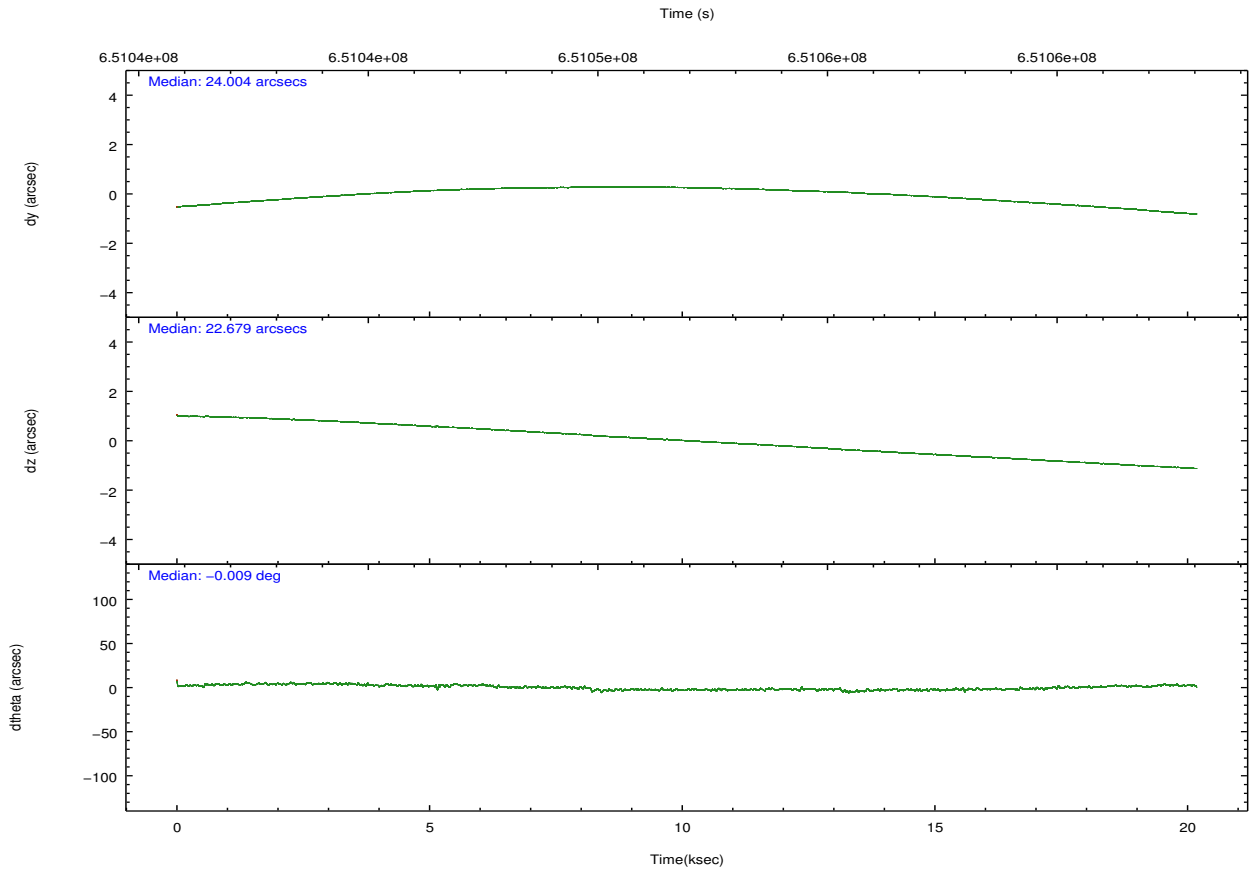
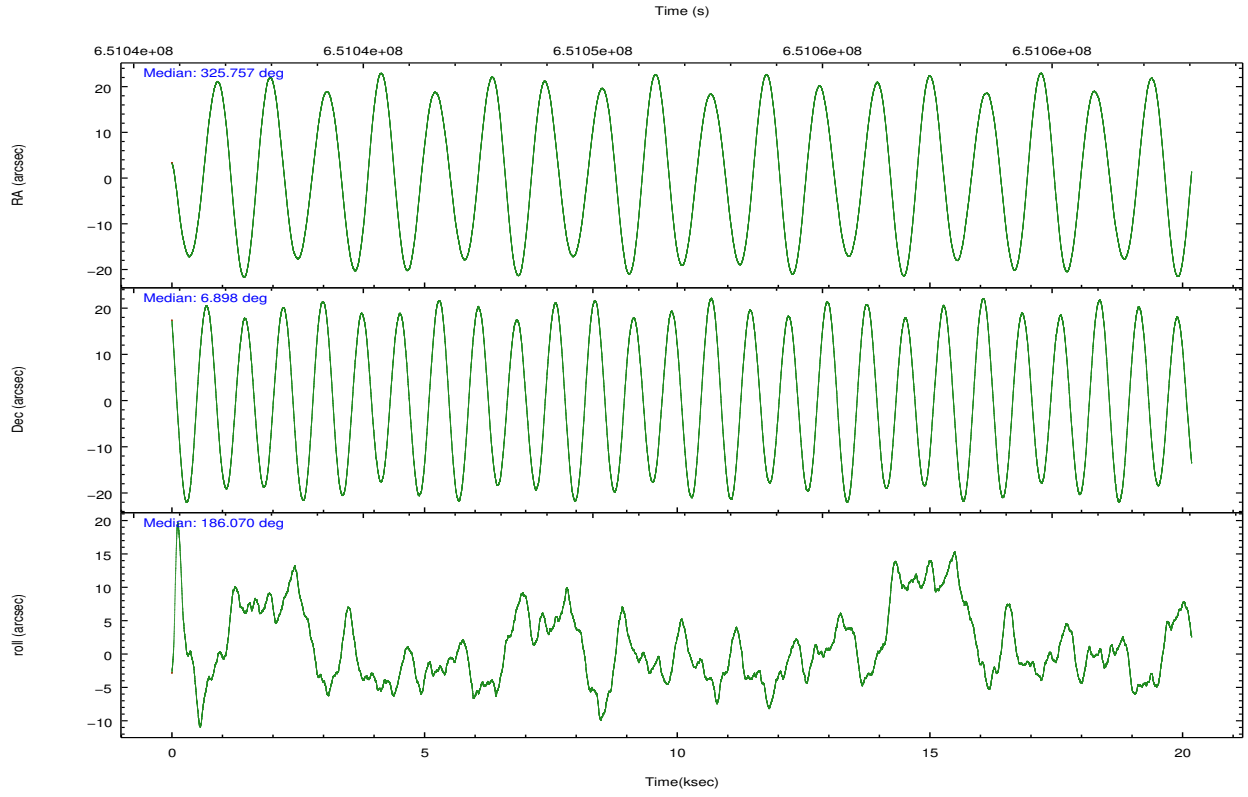
	segment 1	segment 2	segment 3
level 1 events	770361	772665	767552
rejected events	35361	35453	35593
rejected %	4%	4%	4%

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	325.779696	325.7569469880819			
[deg] Pointing Dec	6.915956	6.897838227917799			
[deg] Pointing Roll	185.998333	186.0683904789452			
[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)	651042012.184000	651040884.72677			
Observation start date	2018-08-19T04:59:03	2018-08-19T04:41:24			
[s] Observation end time (MET)	651062012.184000	651062617.29056			
Observation end date	2018-08-19T10:32:23	2018-08-19T10:43:37			

2.3 Aspect



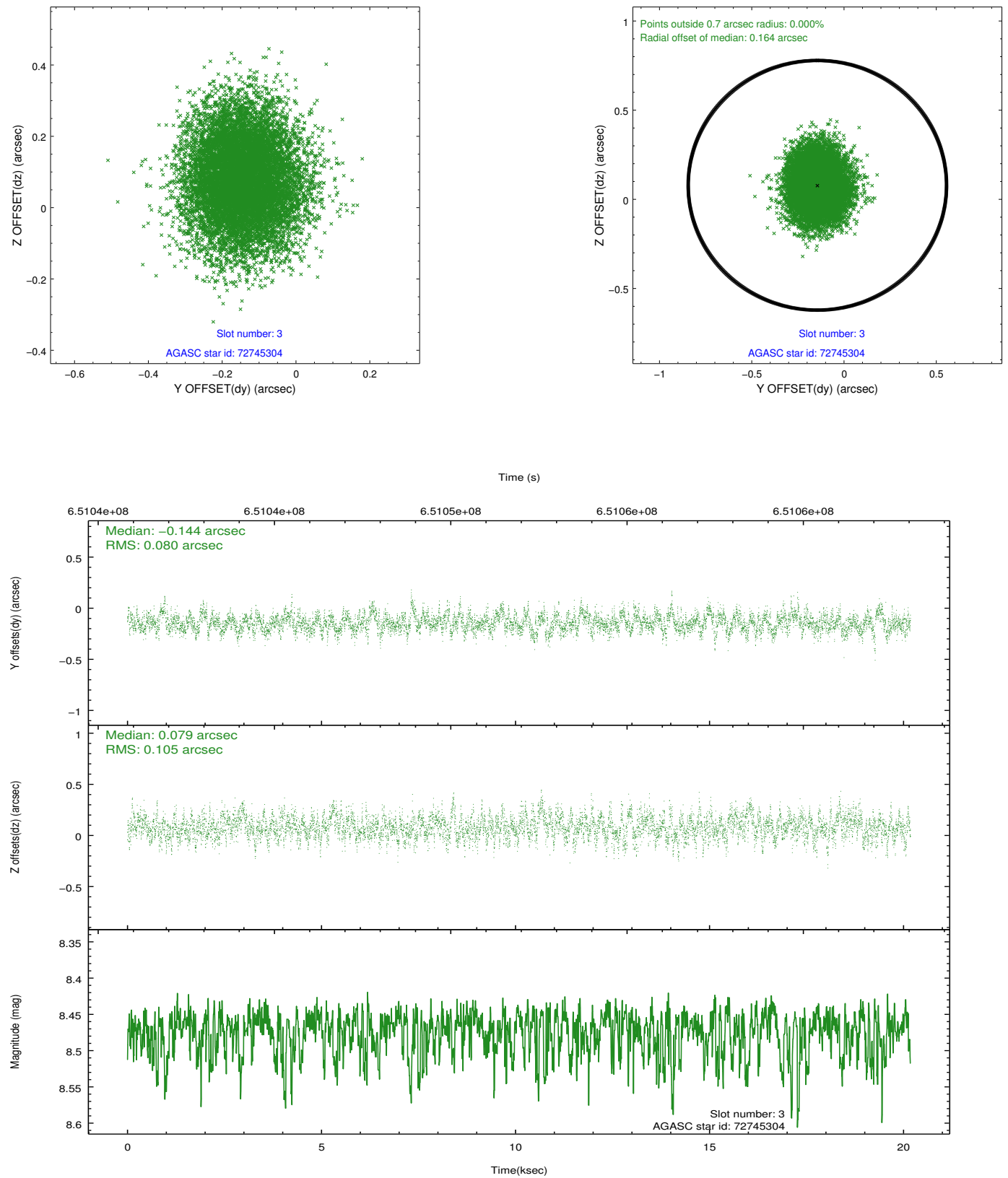


Slot Statistics

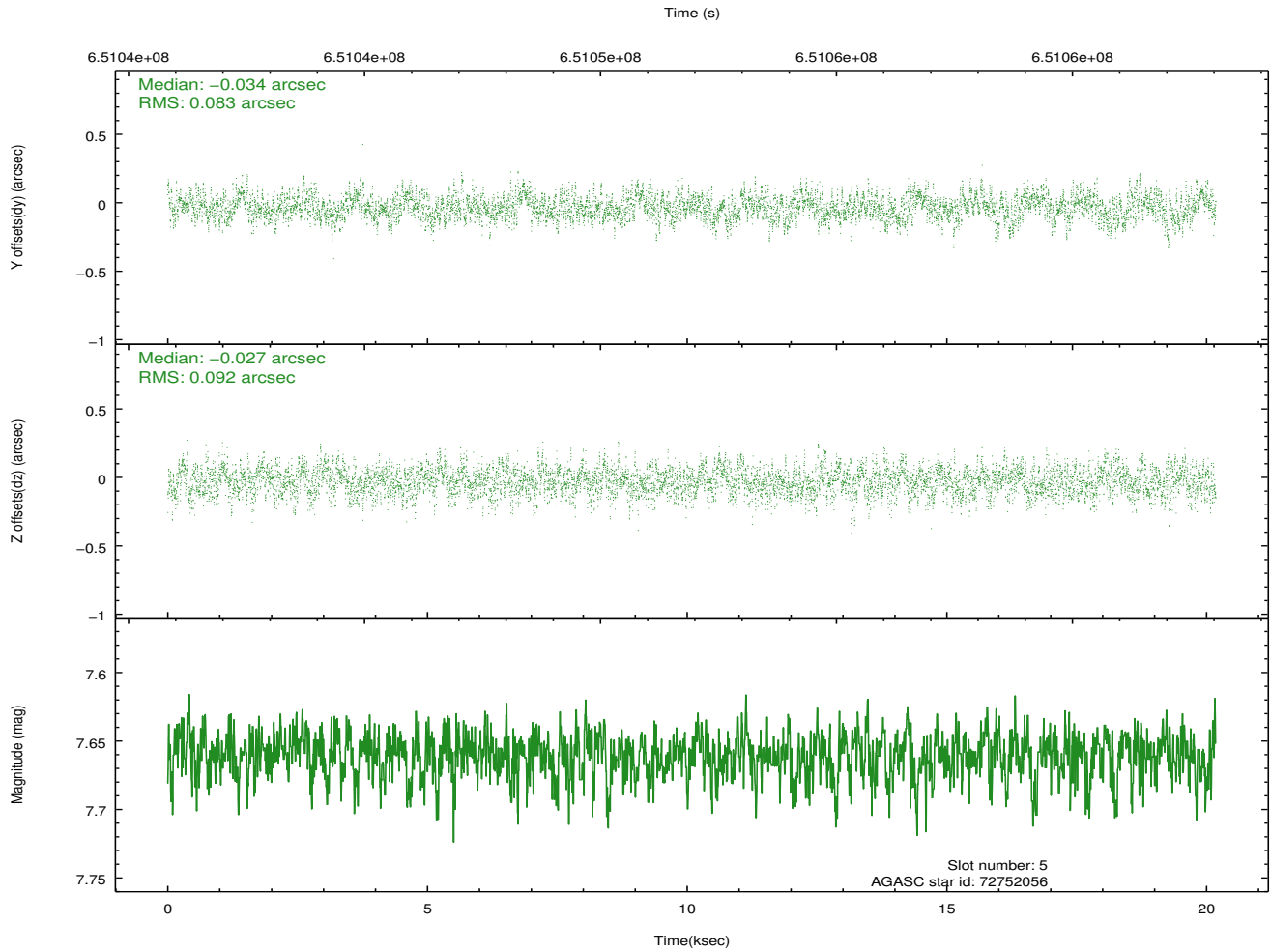
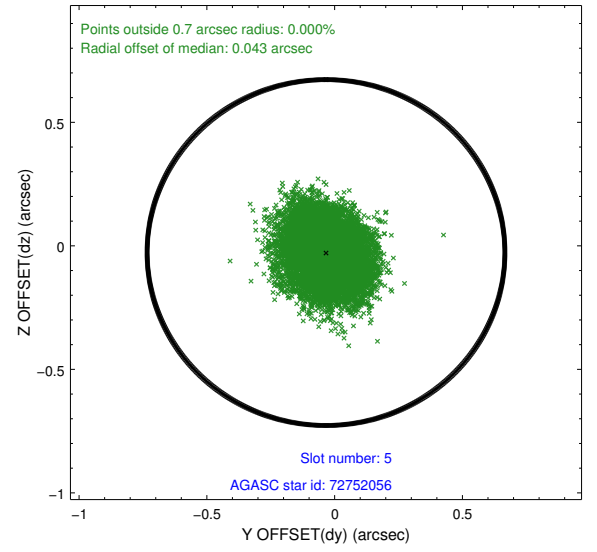
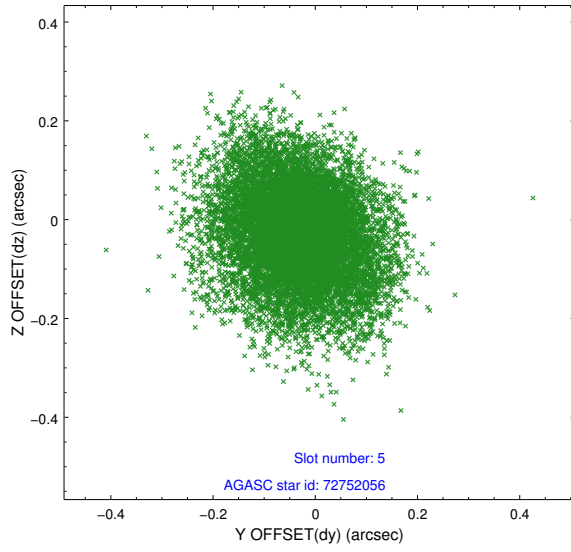
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		HRC-S-2	7.06	4923	1.000	0.166	-0.142	0.016	0.024	0.000000	0.000000	1221.26	-464
1	FID		HRC-S-3	7.07	4921	1.000	-0.217	-0.085	0.010	0.020	0.000000	0.000000	-1181.38	557
2	FID		HRC-S-4	7.05	4922	1.000	0.460	-0.068	0.020	0.034	0.000000	0.000000	1219.79	560
3	GUIDE	used	72745304	8.47	9844	1.000	-0.144	0.079	0.140	0.229	326.201878	7.208807	-1609.74	-891
4	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0
5	GUIDE	used	72752056	7.66	9844	1.000	-0.034	-0.027	0.133	0.214	326.033014	7.158258	-990.82	-773
6	GUIDE	used	72750696	9.28	9825	1.000	0.065	0.005	0.193	0.326	325.476837	7.372250	902.77	-1746
7	GUIDE	used	72746904	8.60	9841	1.000	0.109	-0.054	0.137	0.224	326.009073	7.152951	-903.39	-763

2.4 Star Slots

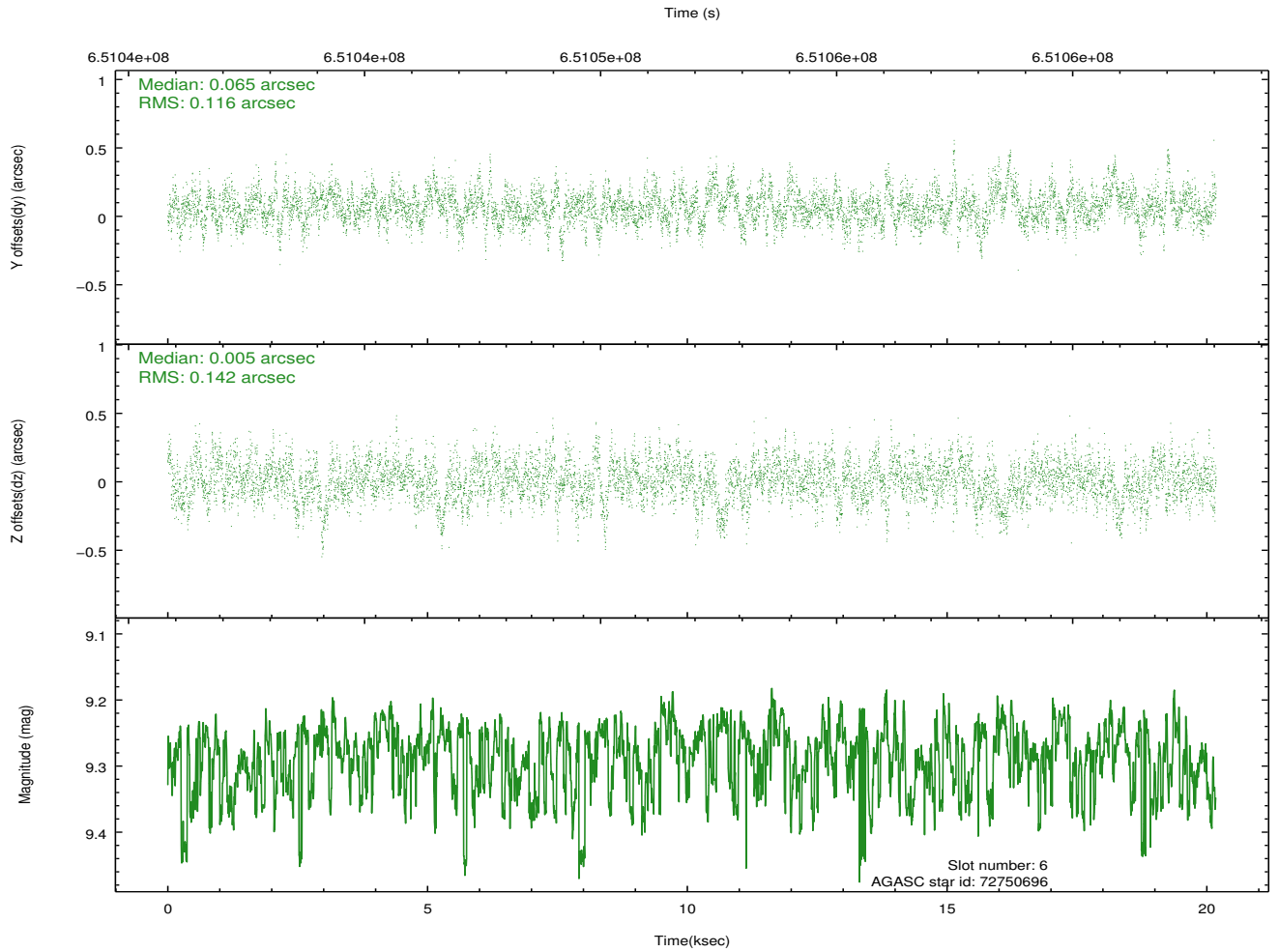
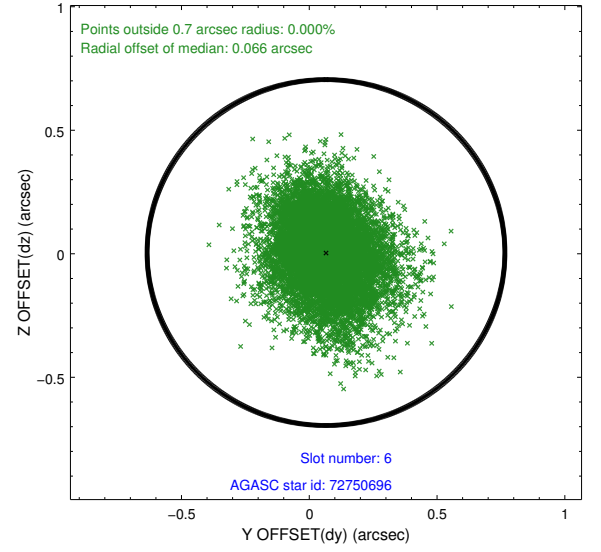
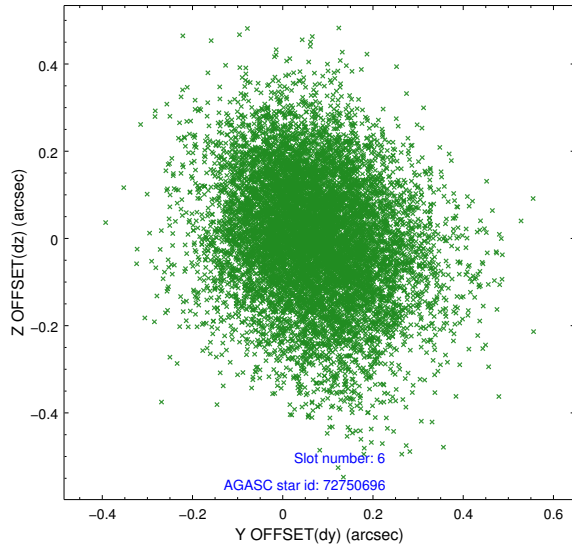
2.4.1 Slot 3



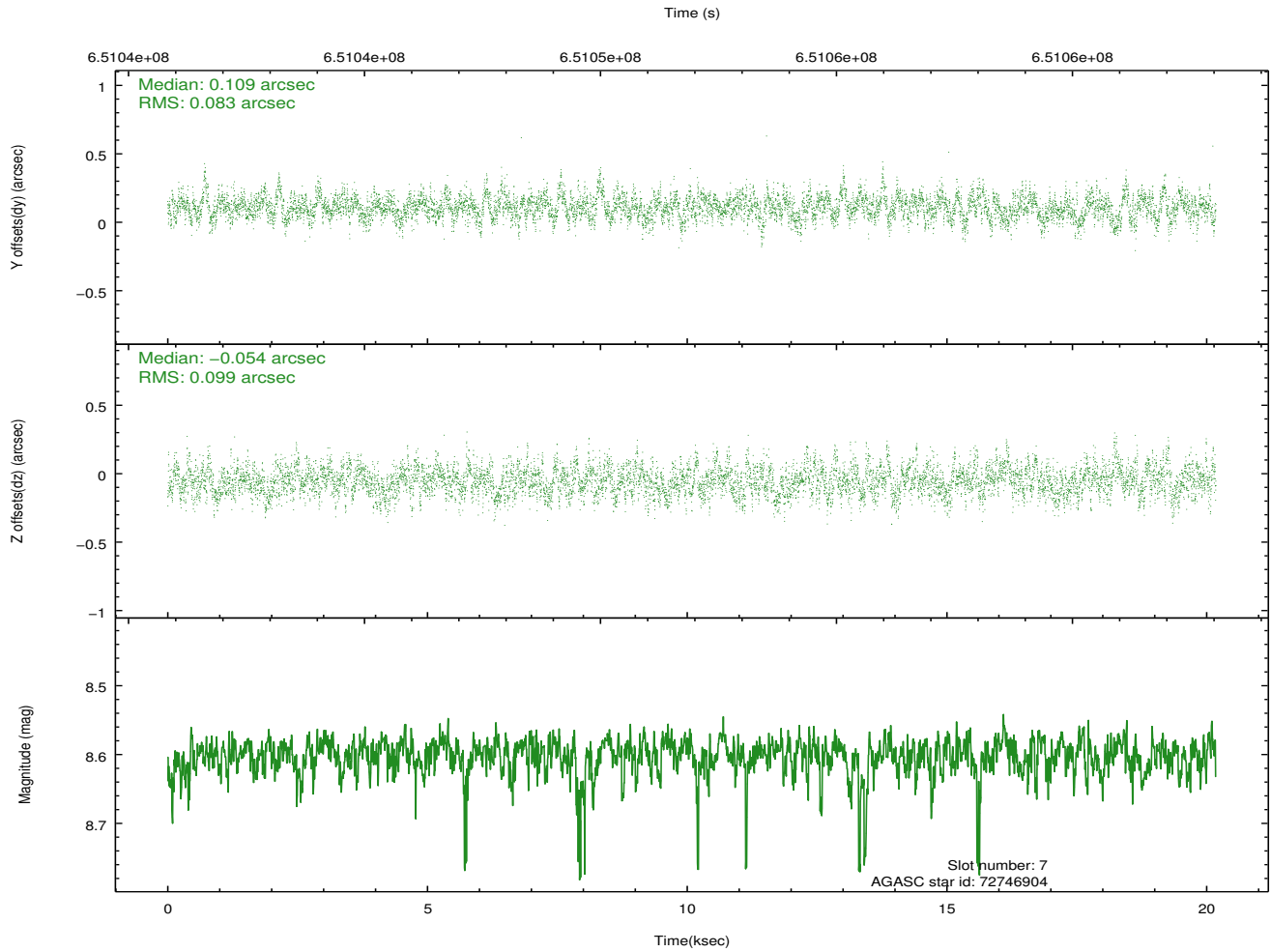
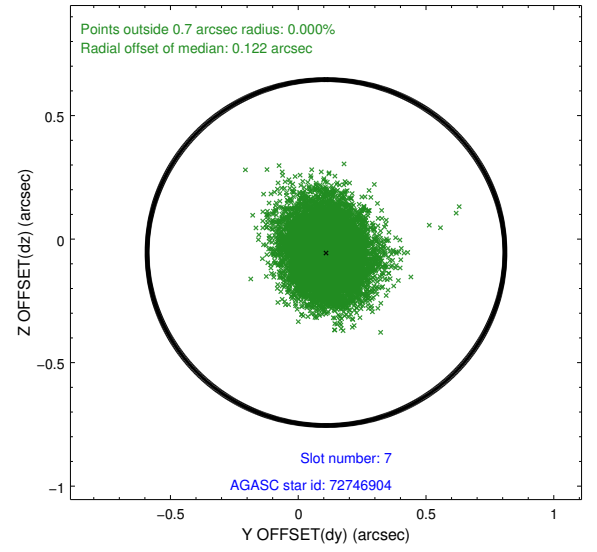
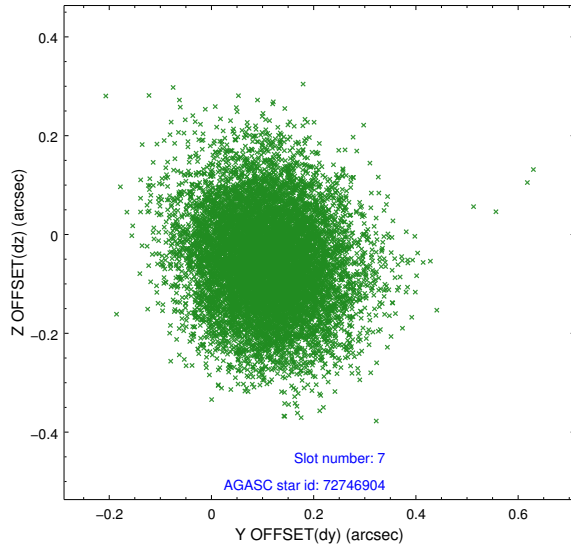
2.4.2 Slot 5



2.4.3 Slot 6

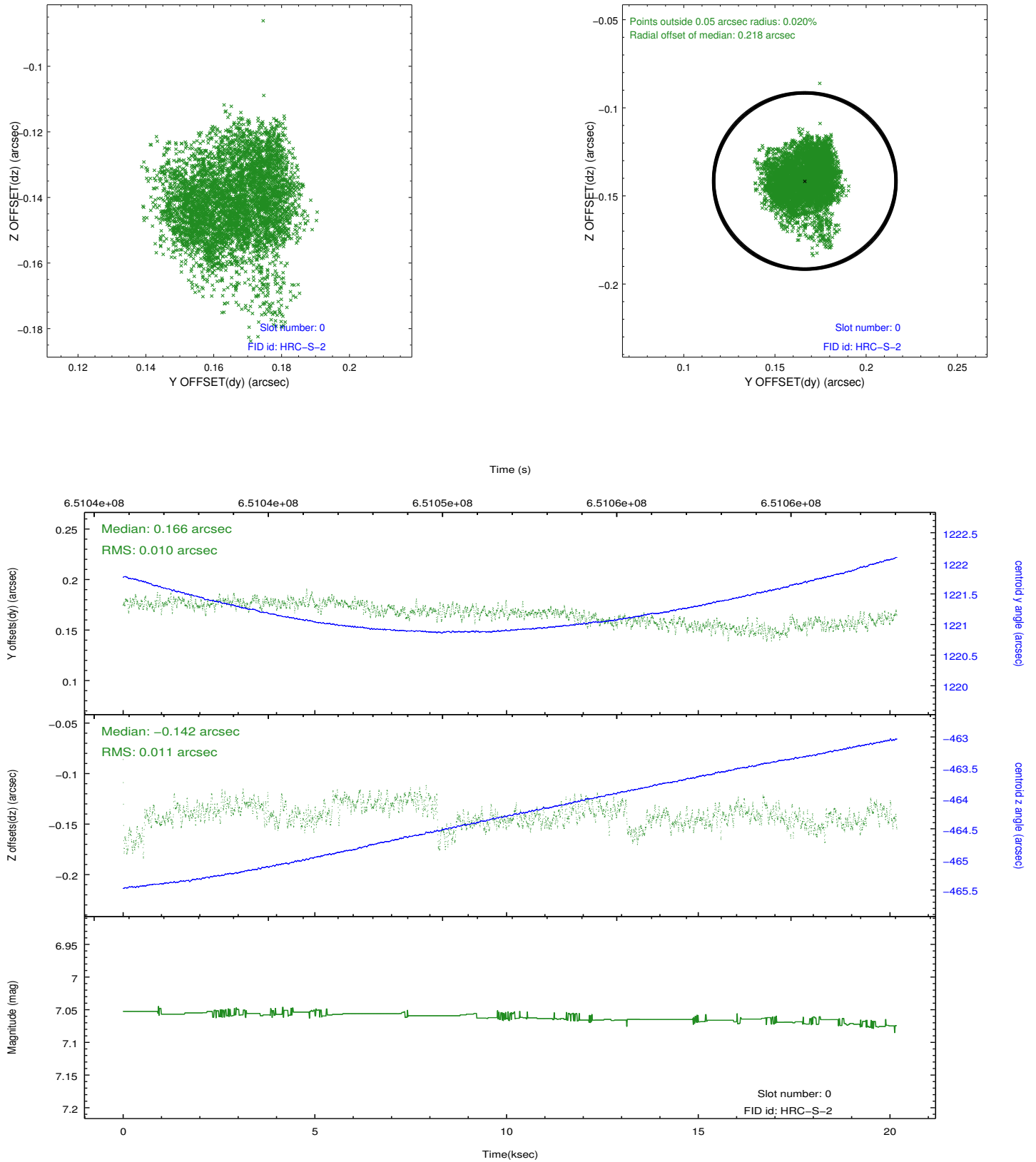


2.4.4 Slot 7

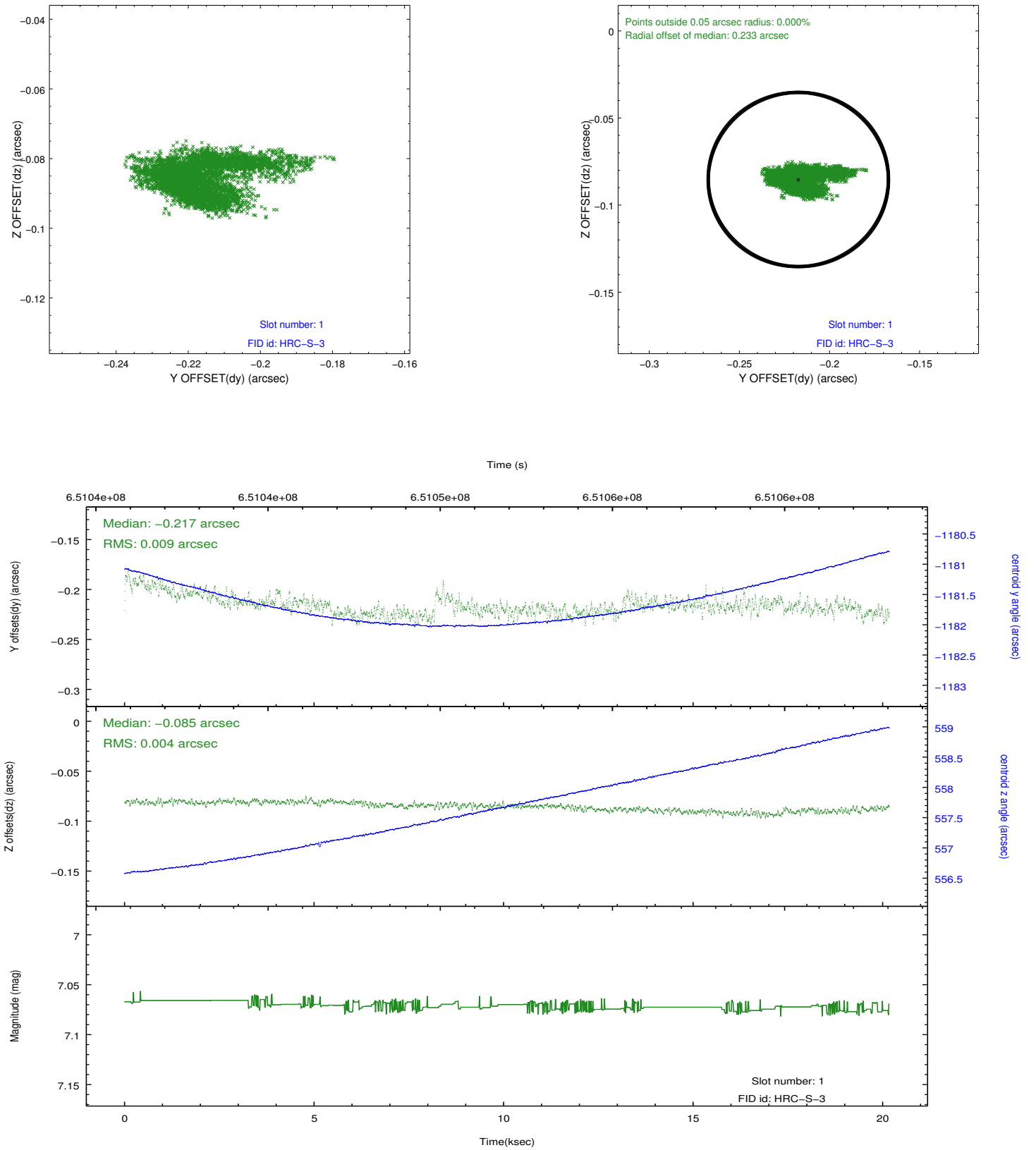


2.5 FID Slots

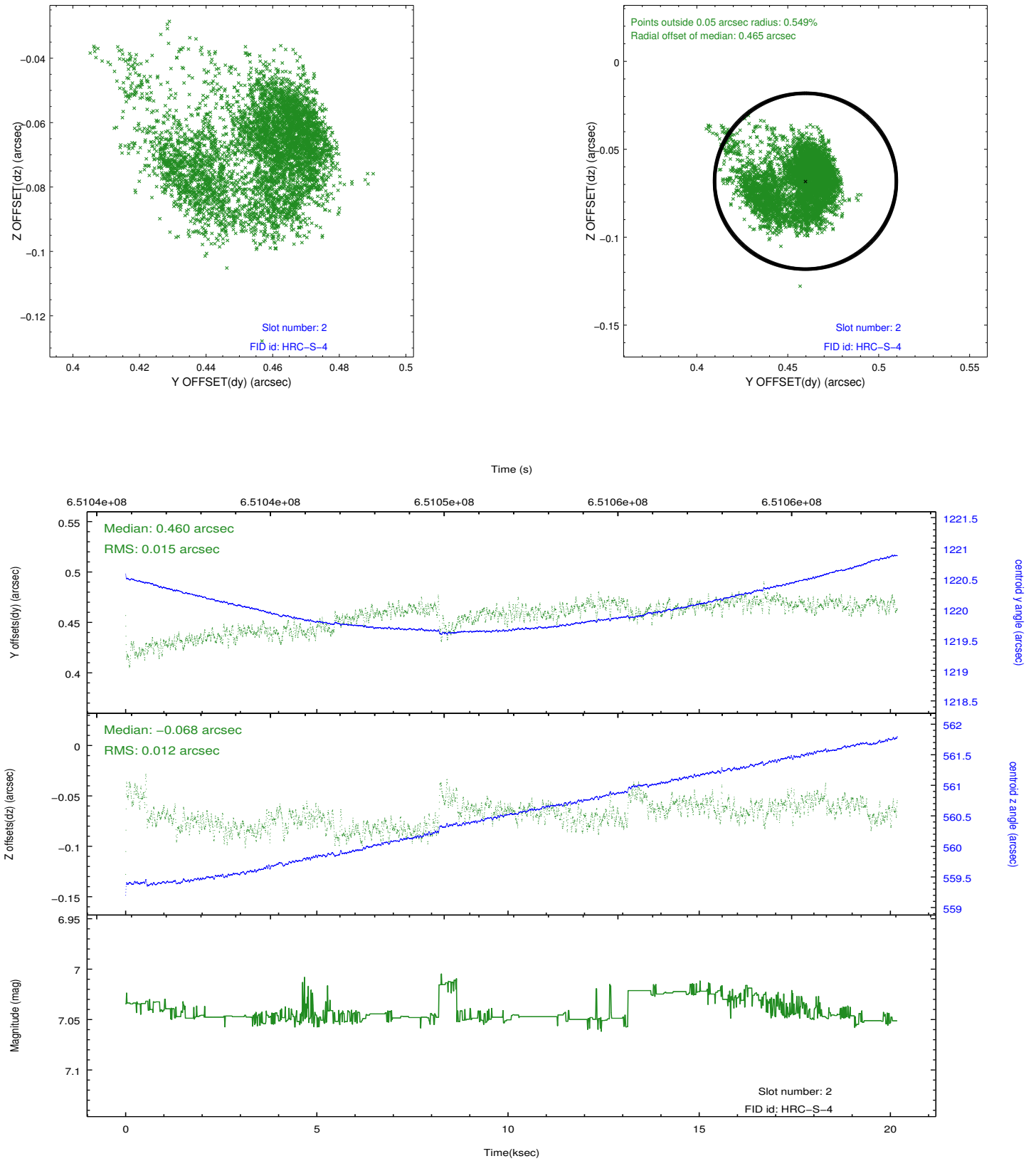
2.5.1 Slot 0



2.5.2 Slot 1

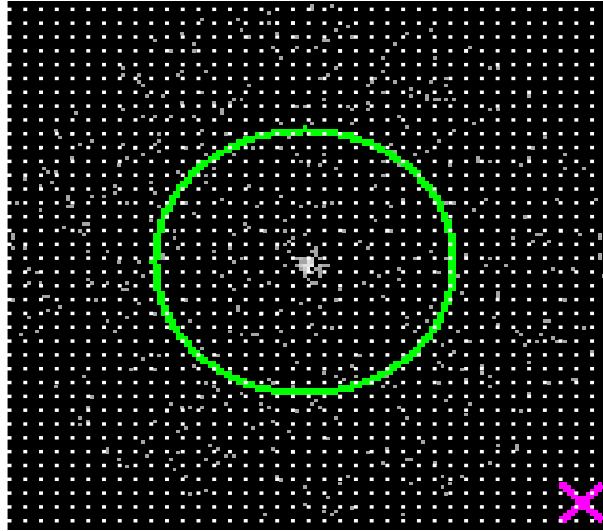


2.5.3 Slot 2

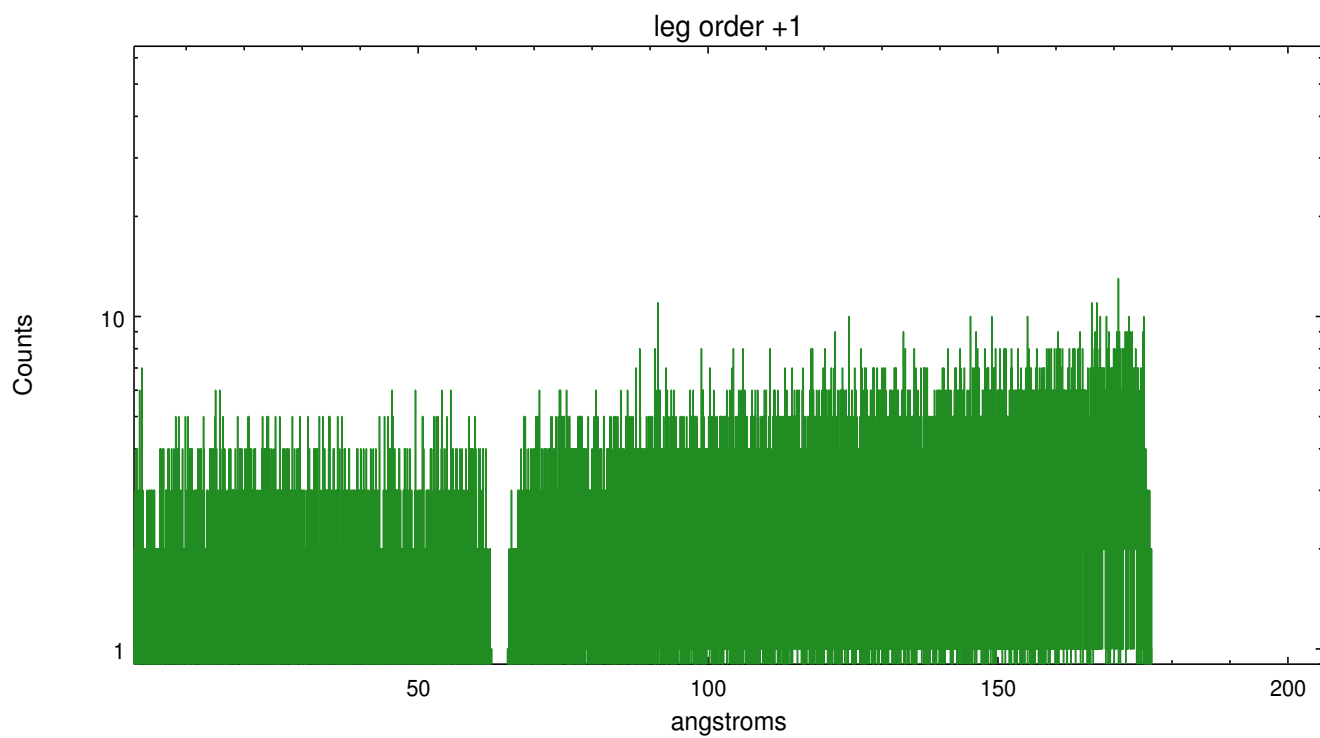
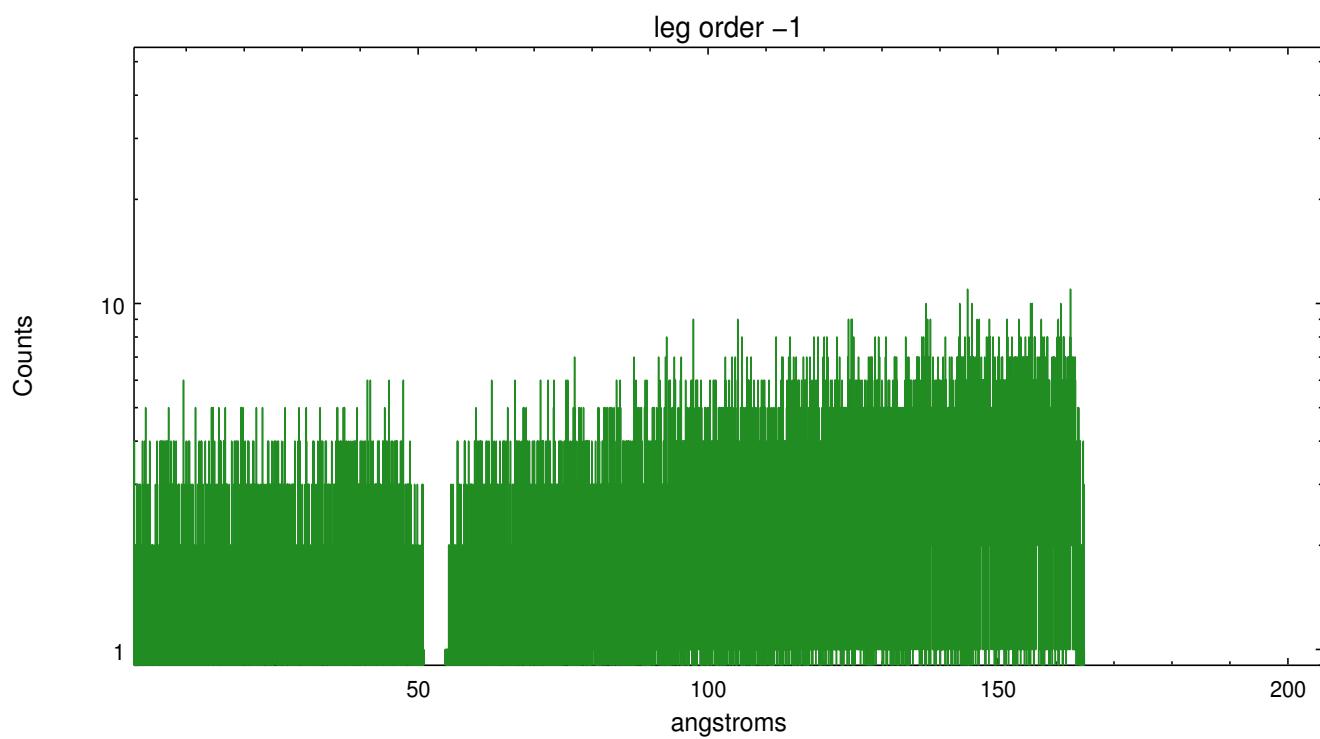


3 Gratings

3.1 LETG Arm



LETG Zero Order



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2018.08.20
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.17943244791

A.2 Comments

The guide star in slot 4 was removed automatically by the software from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this guide star from the solution.