

V&V Reference Report

L2 ASCDS Version : 10.0.1

Observation 16314 - L2 Version 2
Chandra X-Ray Center

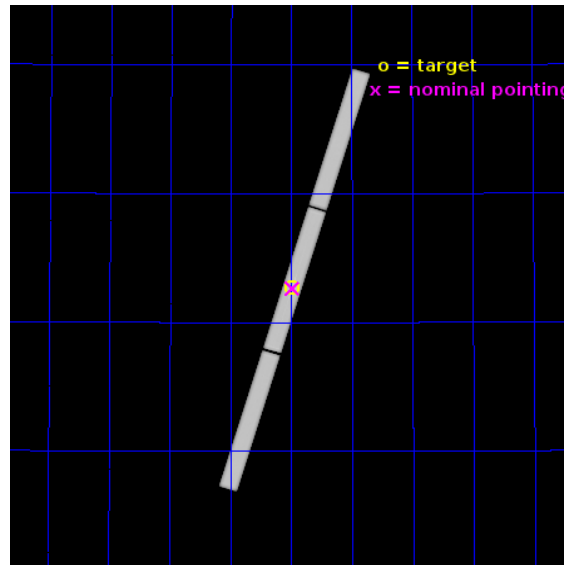
L2 Processing Date : Sep 23 2013

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 4	9
2.4.2	Slot 5	10
2.4.3	Slot 6	11
2.4.4	Slot 7	12
2.5	FID Slots	13
2.5.1	Slot 0	13
2.5.2	Slot 1	14
2.5.3	Slot 2	15
3	Gratings	16
3.1	LETG Arm	16
A	Summary	18
A.1	Status	18
A.2	Comments	18

1 Front

seq_num	703023	Sequence number
obs_id	16314	Observation id
title	High-resolution X-ray spectroscopy of an AGN outflow	Proposal titl
observer	Dr. Jelle Kaastra	Principal investigator
object	NGC 5548	Source name
ra_targ	214.497917	Observer's specified target RA [deg]
dec_targ	25.136778	Observer's specified target Dec [deg]
ra_nom	214.49938704828	Nominal RA [deg]
dec_nom	25.132210779668	Nominal Dec [deg]
roll_nom	287.02796086899	Nominal Roll [deg]
revision	2	Processing version of data
ontime	122759.13171989	[s]
livetime	121962.96222792	Ontime multiplied by DTCOR
l2events	6484669	Number of level 2 events

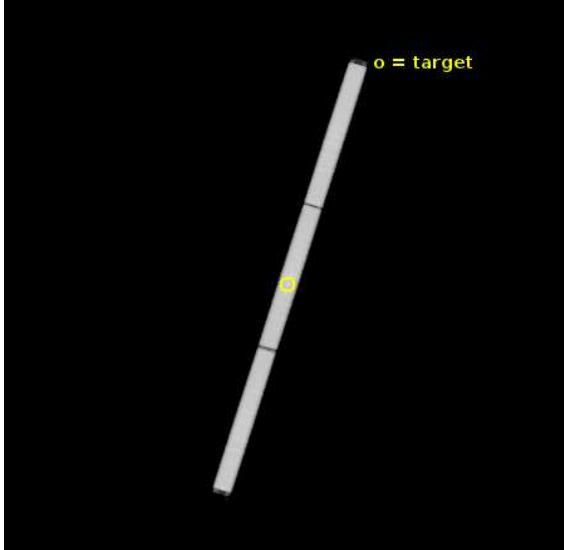


2 OBI

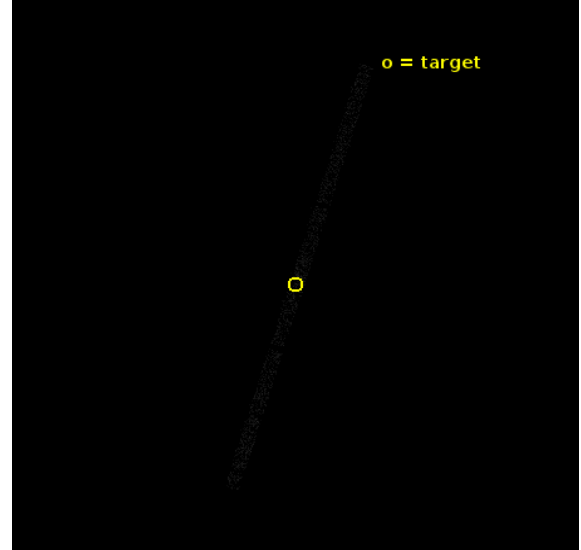
2.1 OBI

2.1.1 Images

Level 1 Image



Level 1 Bad Events



2.1.2 Parameters

obi_num	0	Obi number	sched_exp_time	122607.000000	[s] Scheduled observation exposure time
ascdsver	10.0.1	Processing system revision	ontime	122759.13171989	[s]
caldbver	4.5.8	 	l1events	8799257	Number of level 1 events
date	2013-09-23T20:28:45	Date and time of file creation			
revision	2	Processing version of data			

2.1.3 Events

Level 1 Events

	segment 1	segment 2	segment 3
level 1 events	2941670	2910955	2946632
rejected events	23930	23669	23963
rejected %	0%	0%	0%

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	214.475136	214.4993870482799			
[deg] Pointing Dec	25.150700	25.13221077966774			
[deg] Pointing Roll	286.970938	287.0279608689887			
[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)	495189457.184000	495188339.26095			
Observation start date	2013-09-10T08:36:30	2013-09-10T08:18:59			
[s] Observation end time (MET)	495312064.184000	495313385.6803			
Observation end date	2013-09-11T18:39:57	2013-09-11T19:03:05			

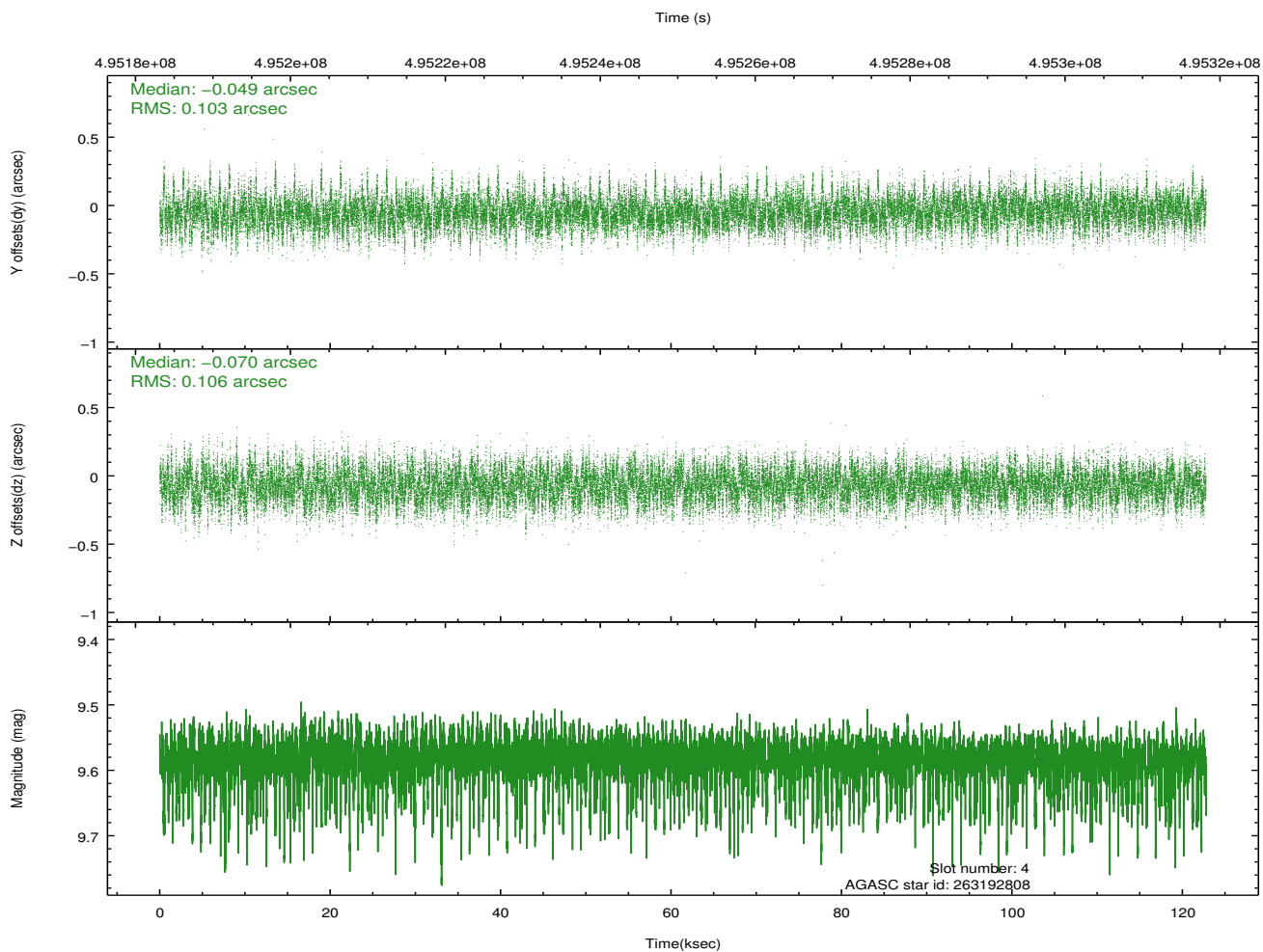
2.3 Aspect

Slot Statistics

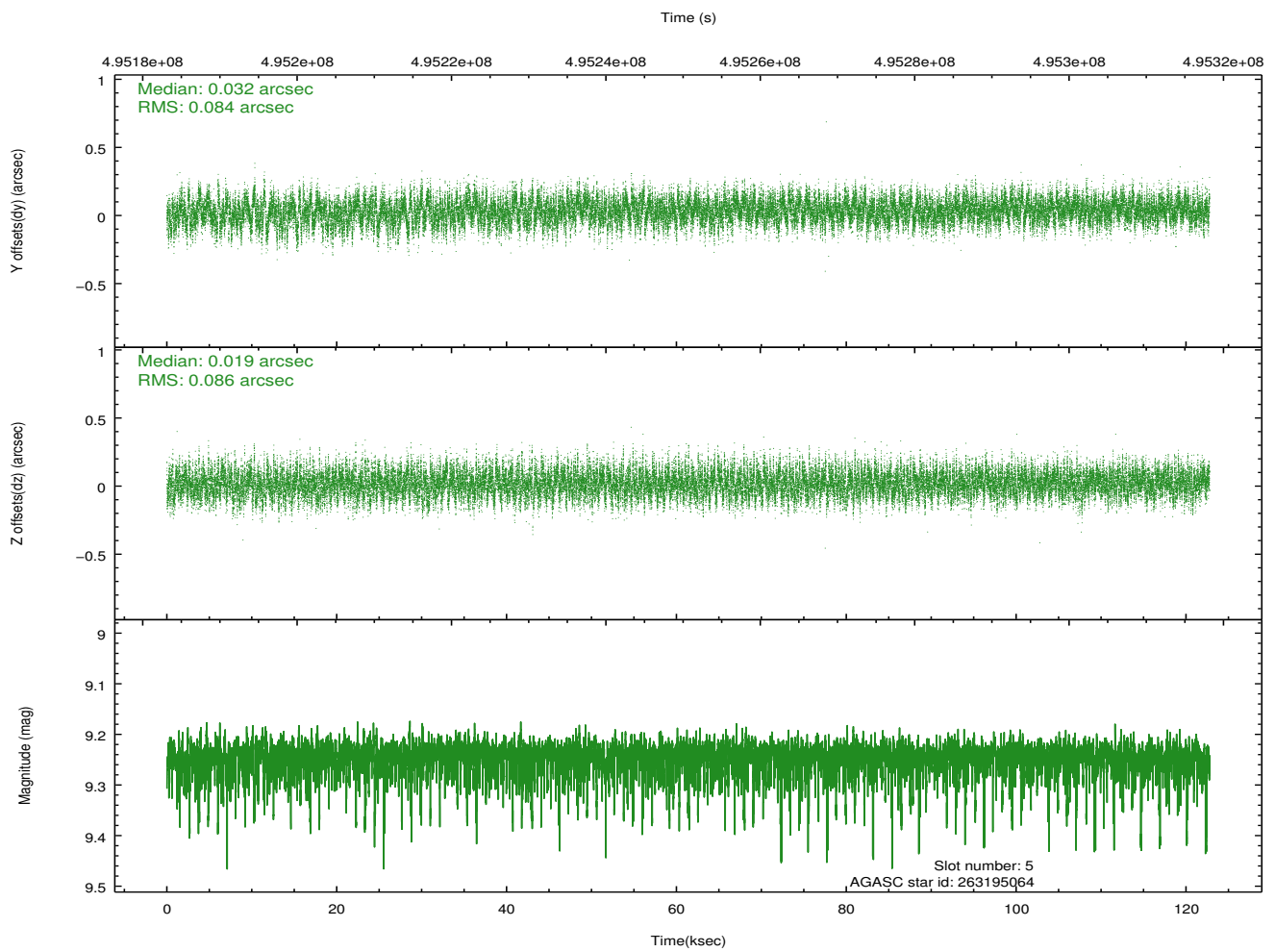
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	HRC-S-1	6.96	29780	0.026	-0.128	0.031	0.049	0.000000	0.000000	-1172.91	-466.47
1	FID	HRC-S-2	6.94	29782	0.273	-0.117	0.026	0.056	0.000000	0.000000	1226.97	-459.07
2	FID	HRC-S-3	6.98	29781	0.091	-0.059	0.030	0.050	0.000000	0.000000	-1175.54	563.13
3	OMITTED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
4	GUIDE	263192808	9.58	59089	-0.049	-0.070	0.158	0.255	215.197131	24.910235	1510.43	2004.43
5	GUIDE	263195064	9.24	59245	0.032	0.019	0.129	0.206	215.129983	24.745063	2016.77	1623.13
6	GUIDE	263464688	9.19	59480	0.042	0.073	0.132	0.220	214.654702	25.305283	-361.67	721.57
7	GUIDE	263595296	9.79	59003	-0.031	-0.019	0.197	0.324	214.929889	25.645337	-1274.38	1932.38

2.4 Star Slots

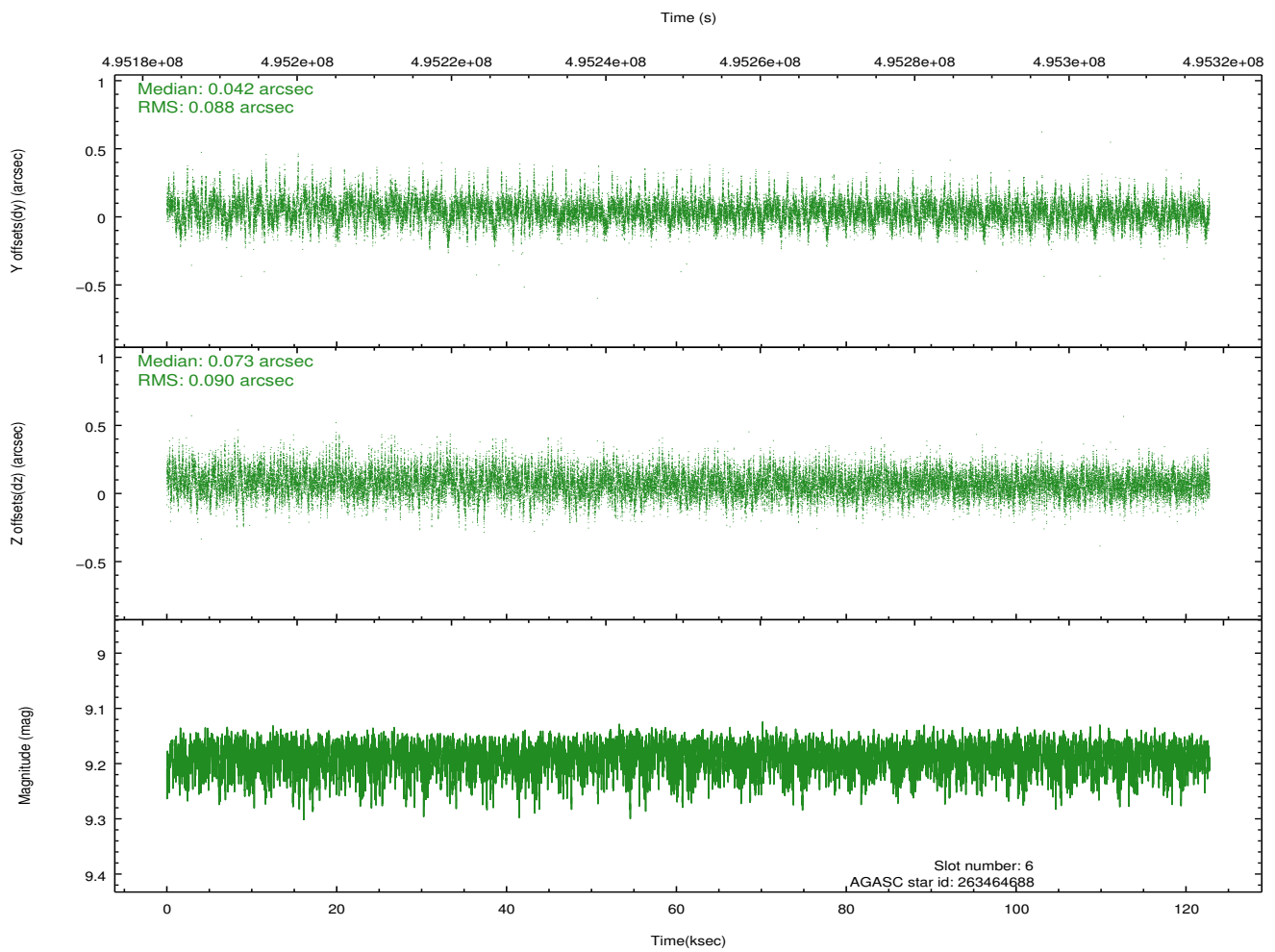
2.4.1 Slot 4



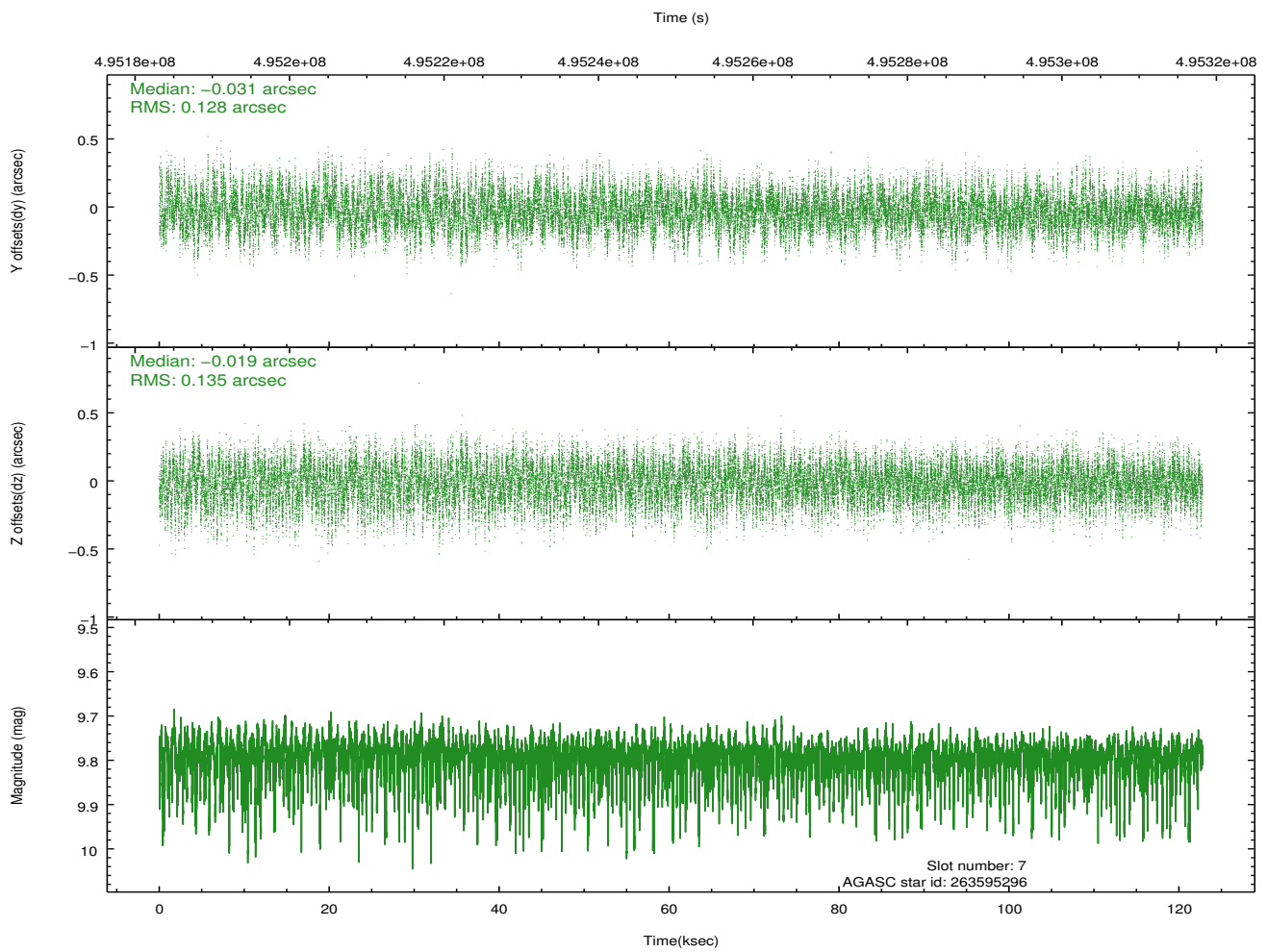
2.4.2 Slot 5



2.4.3 Slot 6

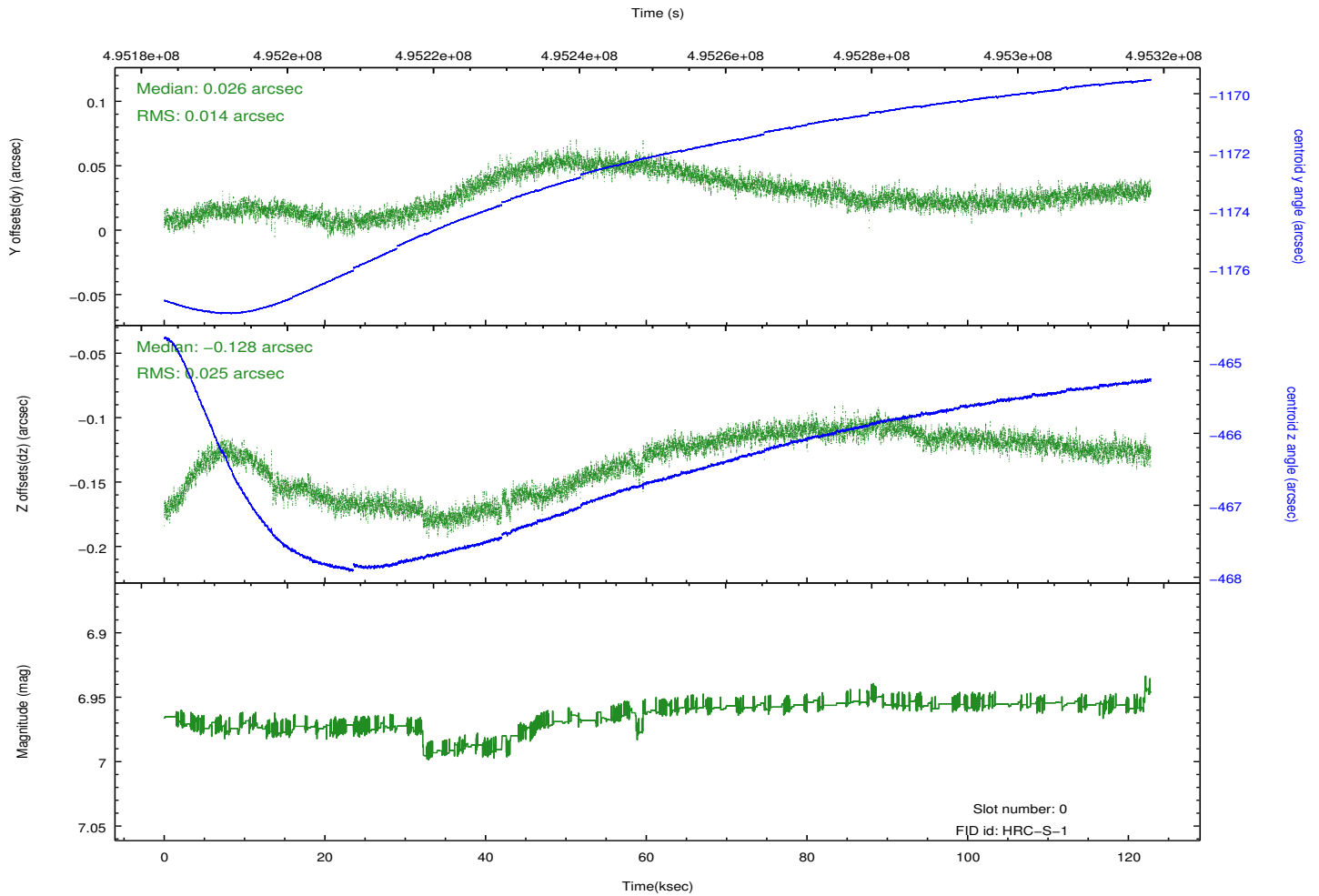
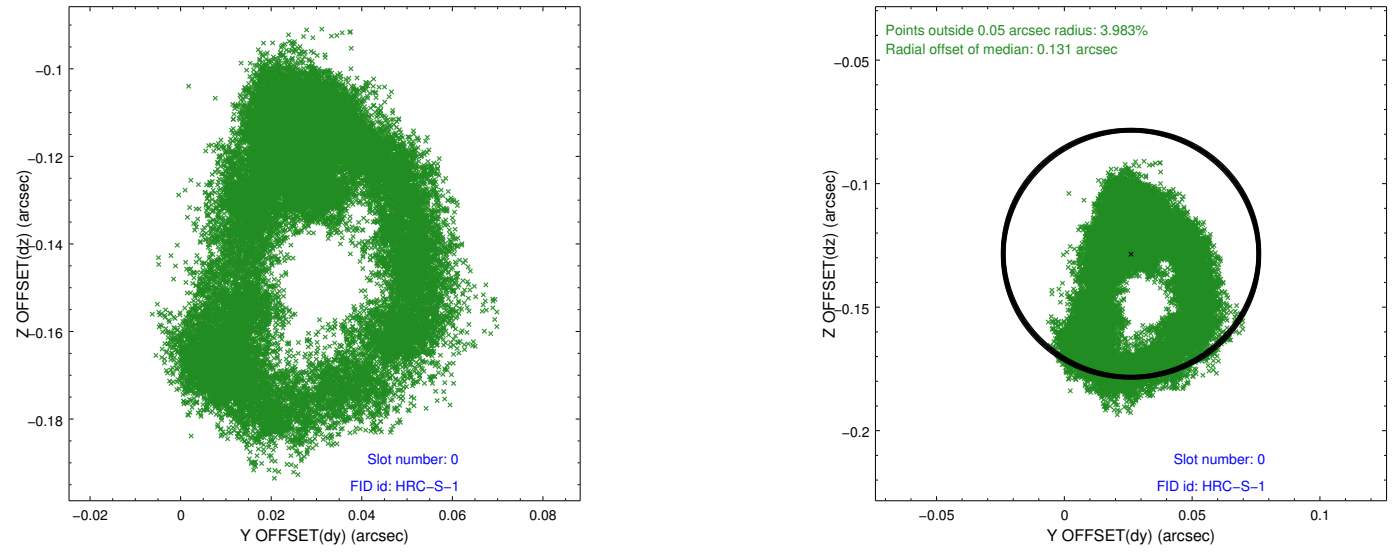


2.4.4 Slot 7

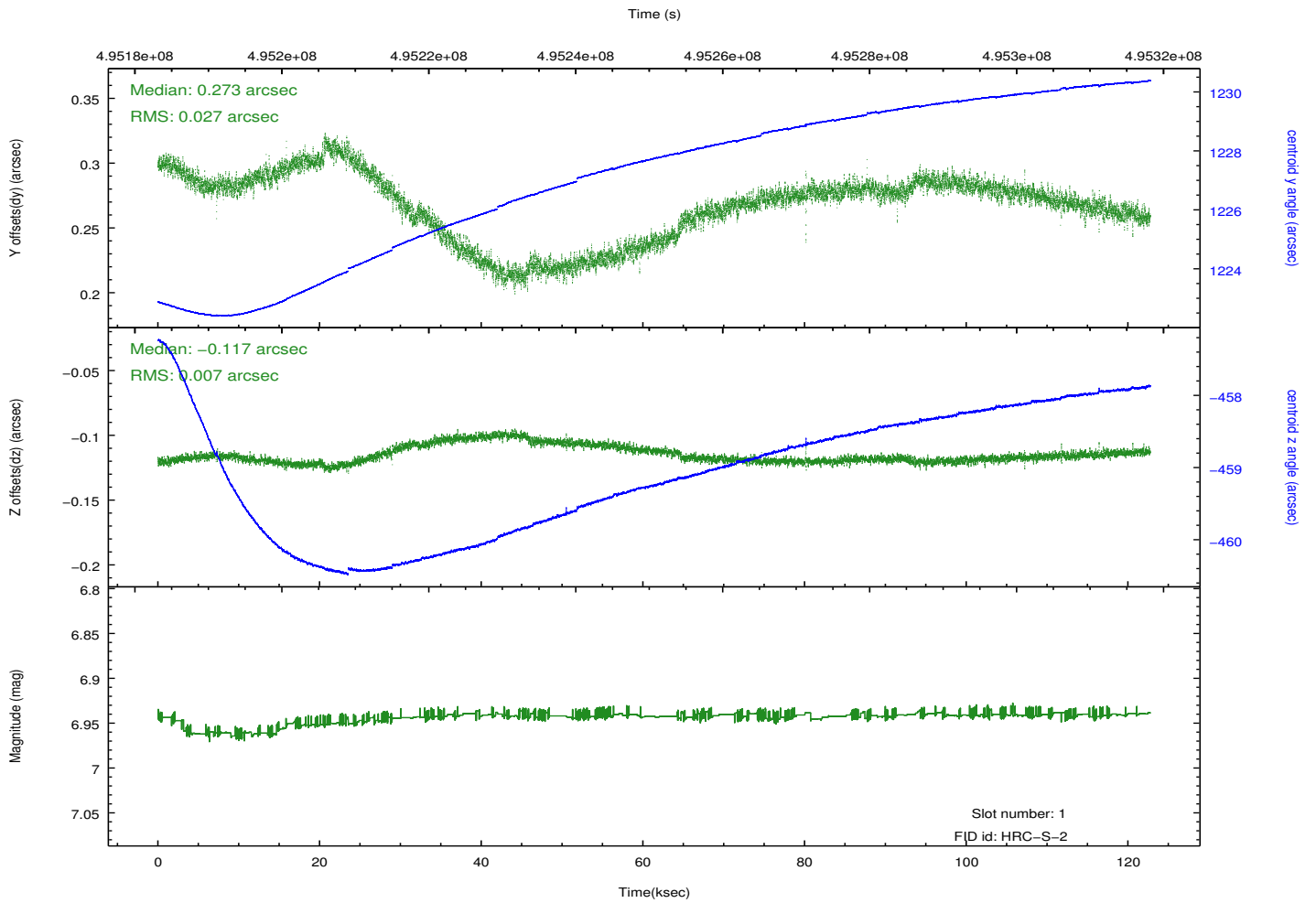
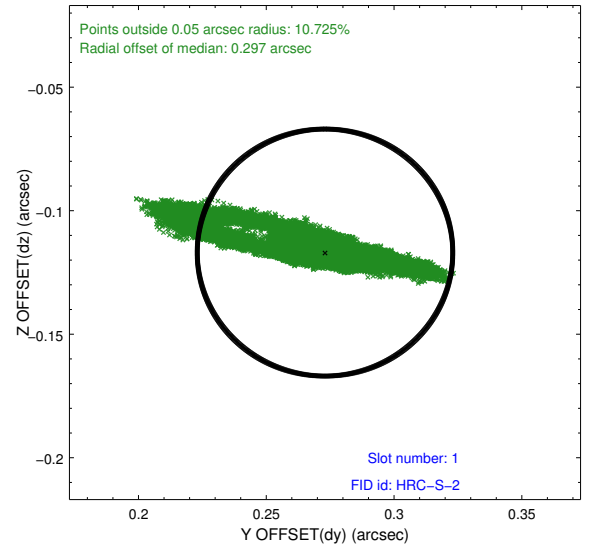
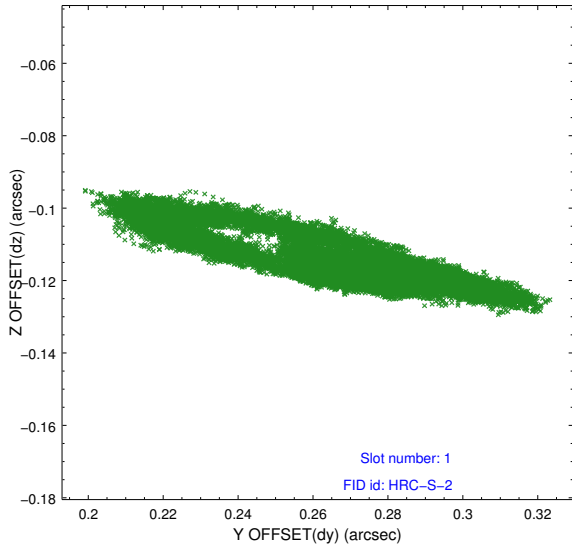


2.5 FID Slots

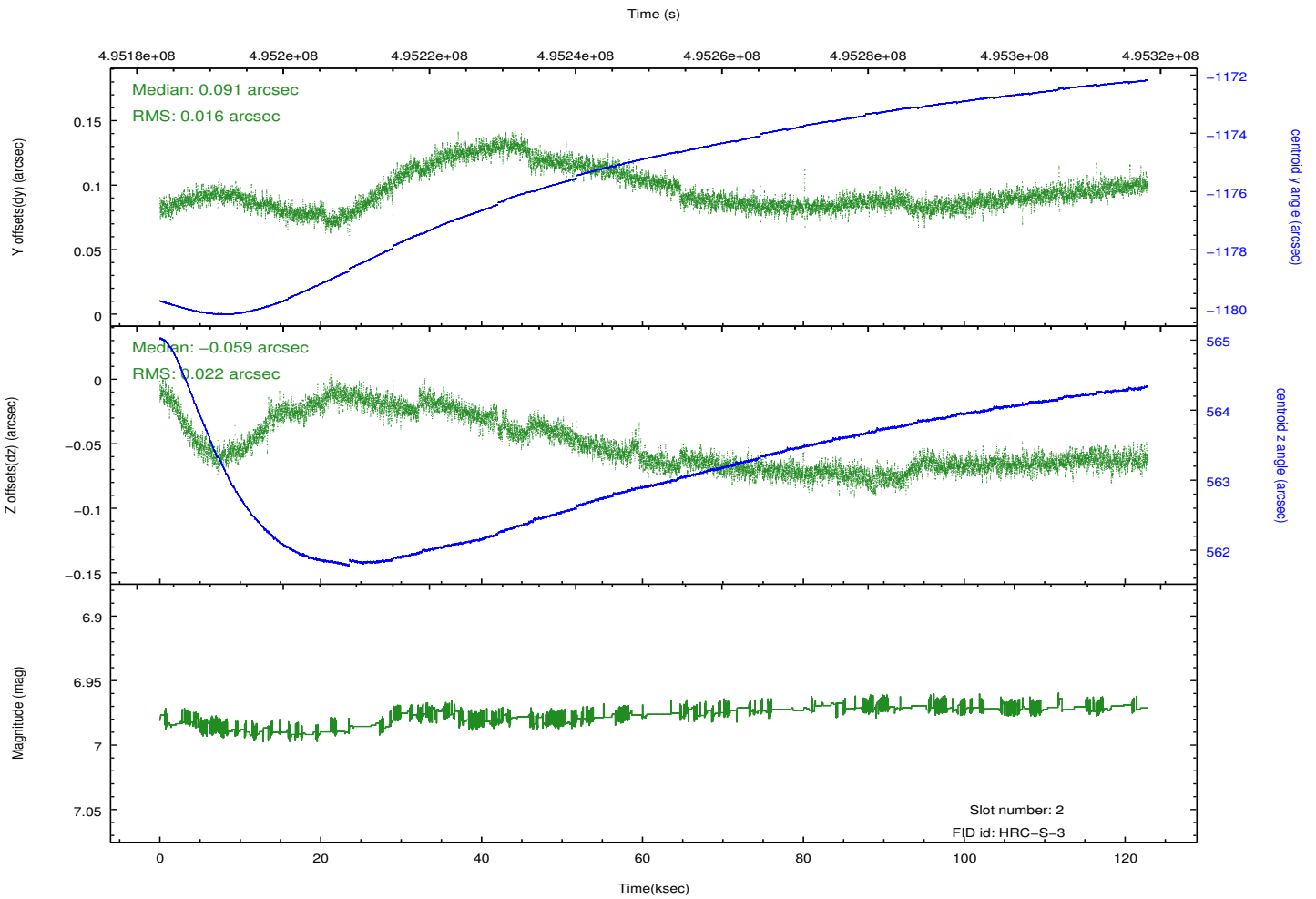
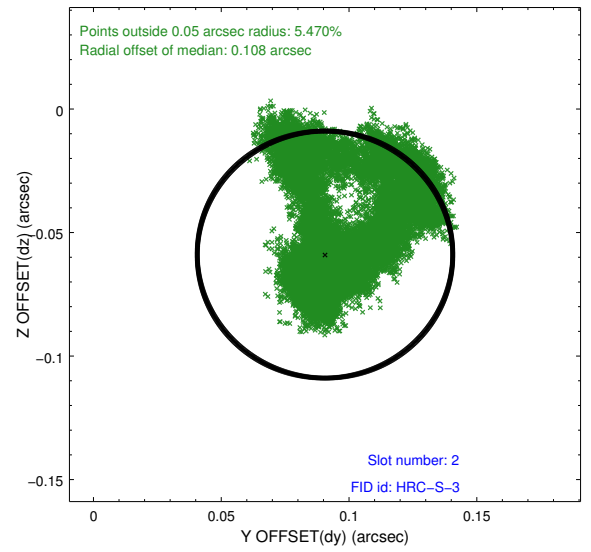
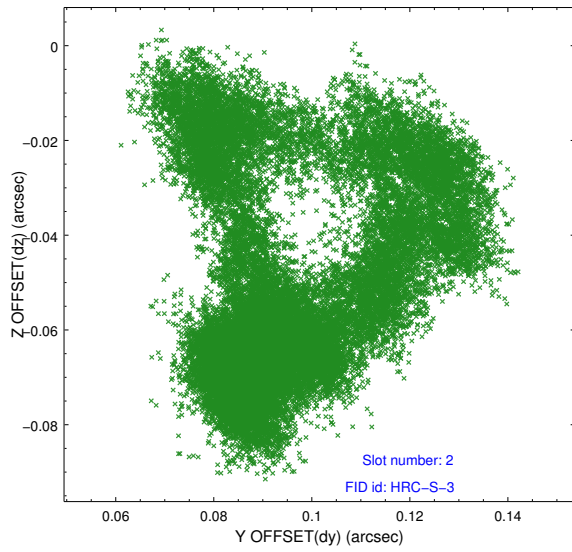
2.5.1 Slot 0



2.5.2 Slot 1

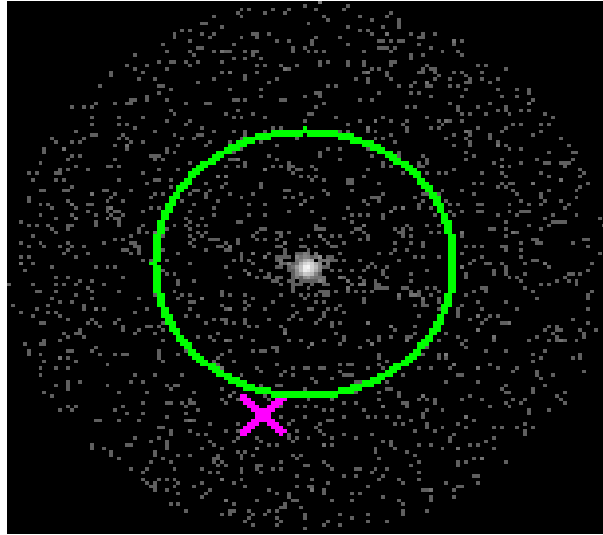


2.5.3 Slot 2

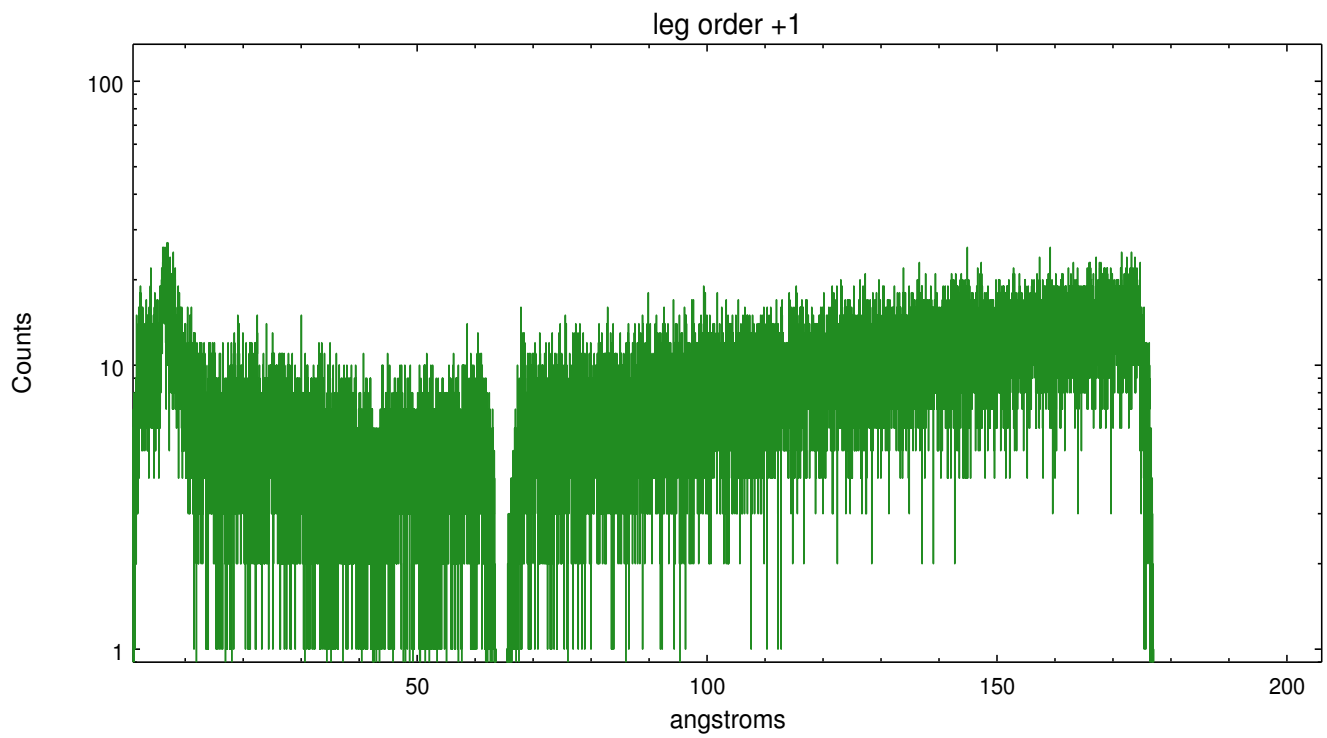
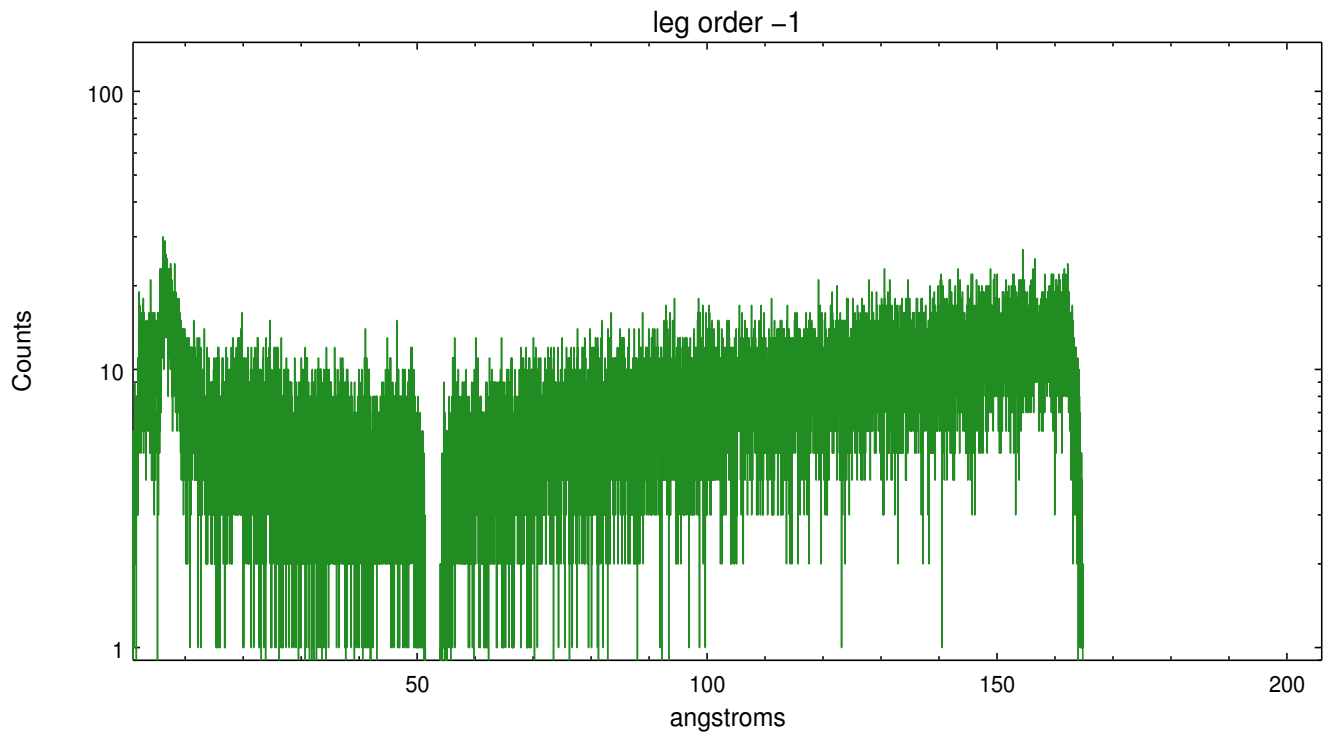


3 Gratings

3.1 LETG Arm



LETG Zero Order



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2013.09.25
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	122.75913171989

A.2 Comments

The guide star in slot 3 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this guide star from the solution.