

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 5316 - L2 Version 5
Chandra X-Ray Center

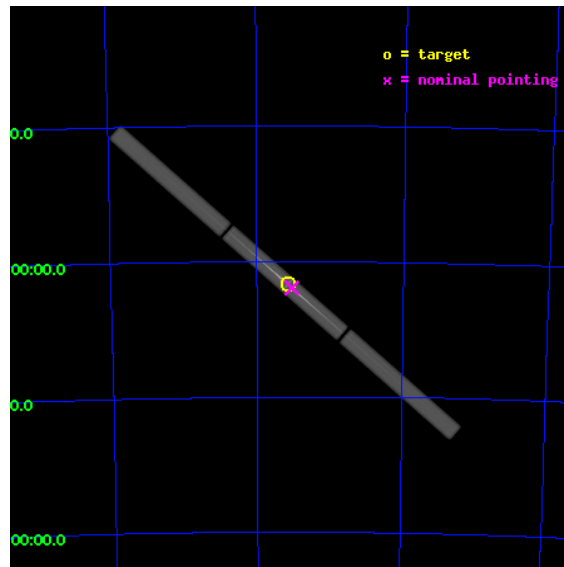
L2 Processing Date : Nov 30 2012

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

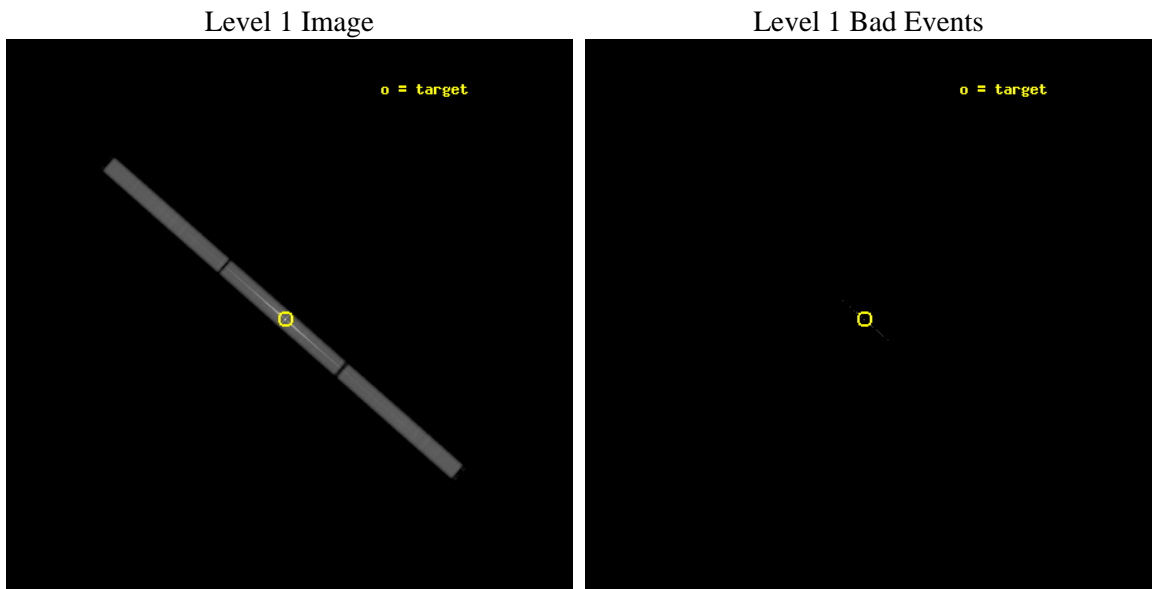
seq_num	400357	Sequence number
obs_id	5316	Observation id
title	High Resolution Spectroscopy of LMC X-3: Probing Local Hot X-ray Absorbing Gas	Proposal title
observer	Dr. Taotao Fang	Principal investigator
object	LMC X-3	Source name
ra_targ	84.734583	Observer's specified target RA [deg]
dec_targ	-64.084167	Observer's specified target Dec [deg]
ra_nom	84.700433564914	Nominal RA [deg]
dec_nom	-64.096956800076	Nominal Dec [deg]
roll_nom	221.05657869658	Nominal Roll [deg]
revision	5	Processing version of data
ontime	41714.683089375	[s]
livetime	41389.188470796	Ontime multiplied by DTCOR
l2events	2907868	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	41860.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	41714.683089375	[s]
caldbver	4.5.2	 	l1events	3746164	Number of level 1 events
date	2012-11-30T18:43:36	Date and time of file creation			
revision	5	Processing version of data			

2.1.3 Events

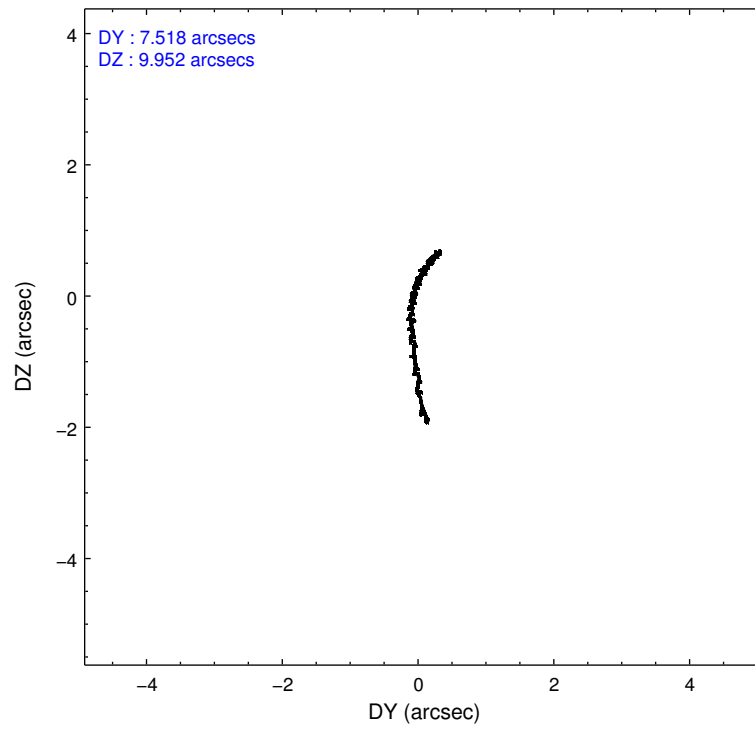
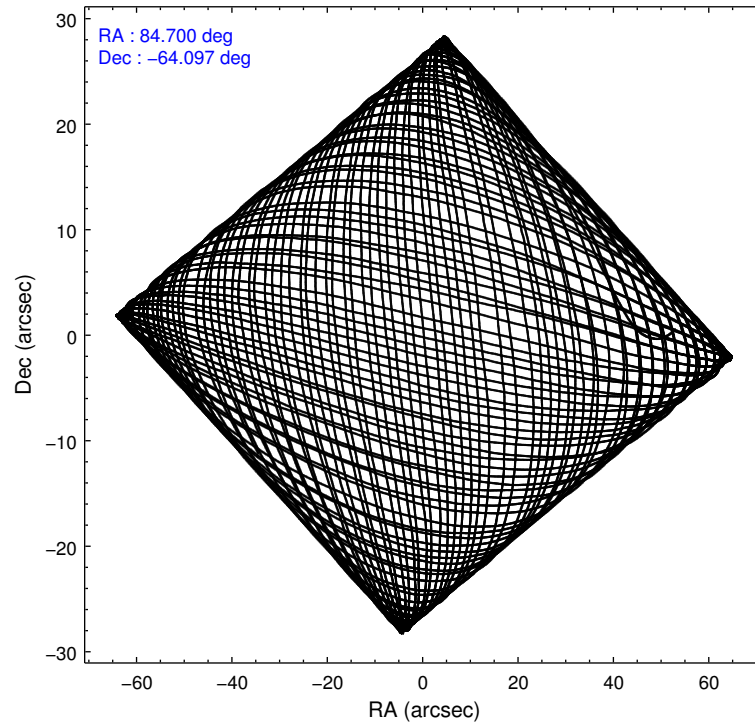
Level 1 Events

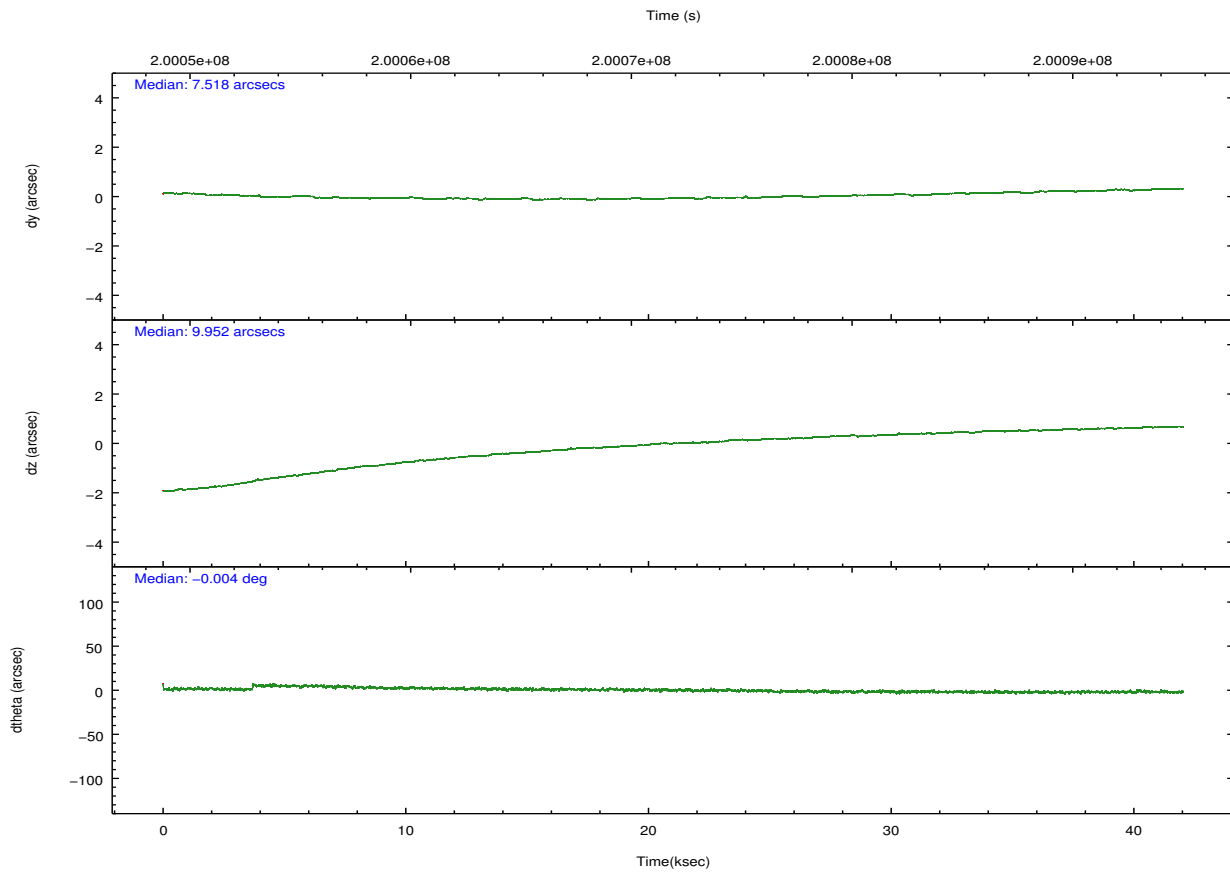
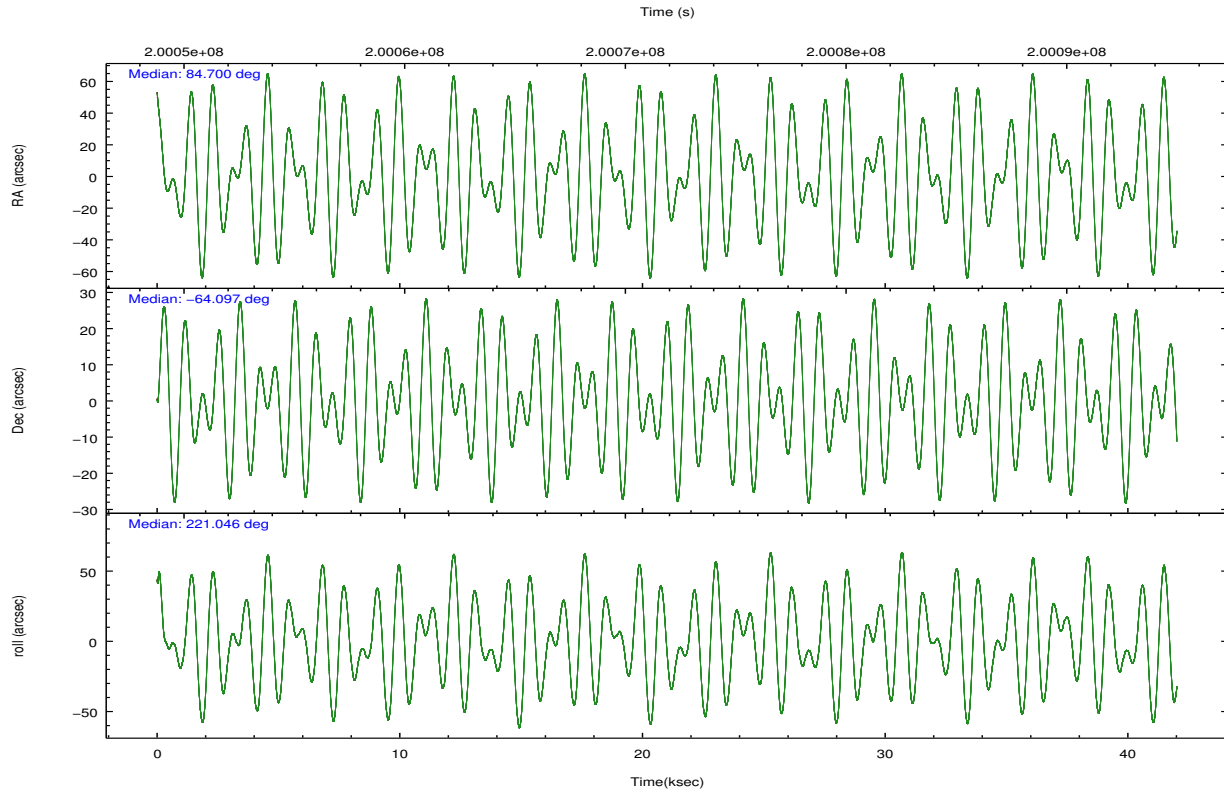
	segment 1	segment 2	segment 3
level 1 events	1032778	1680578	1032808
rejected events	2069	10651	2135
rejected %	0%	0%	0%

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	84.718546	84.70043356491421			
[deg] Pointing Dec	-64.069491	-64.09695680007634			
[deg] Pointing Roll	221.005544	221.0565786965801			
[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)	200051042.184000	200049983.31893			
Observation start date	2004-05-04T09:42:58	2004-05-04T09:26:23			
[s] Observation end time (MET)	200092902.184000	200093771.83336			
Observation end date	2004-05-04T21:20:38	2004-05-04T21:36:11			

2.3 Aspect



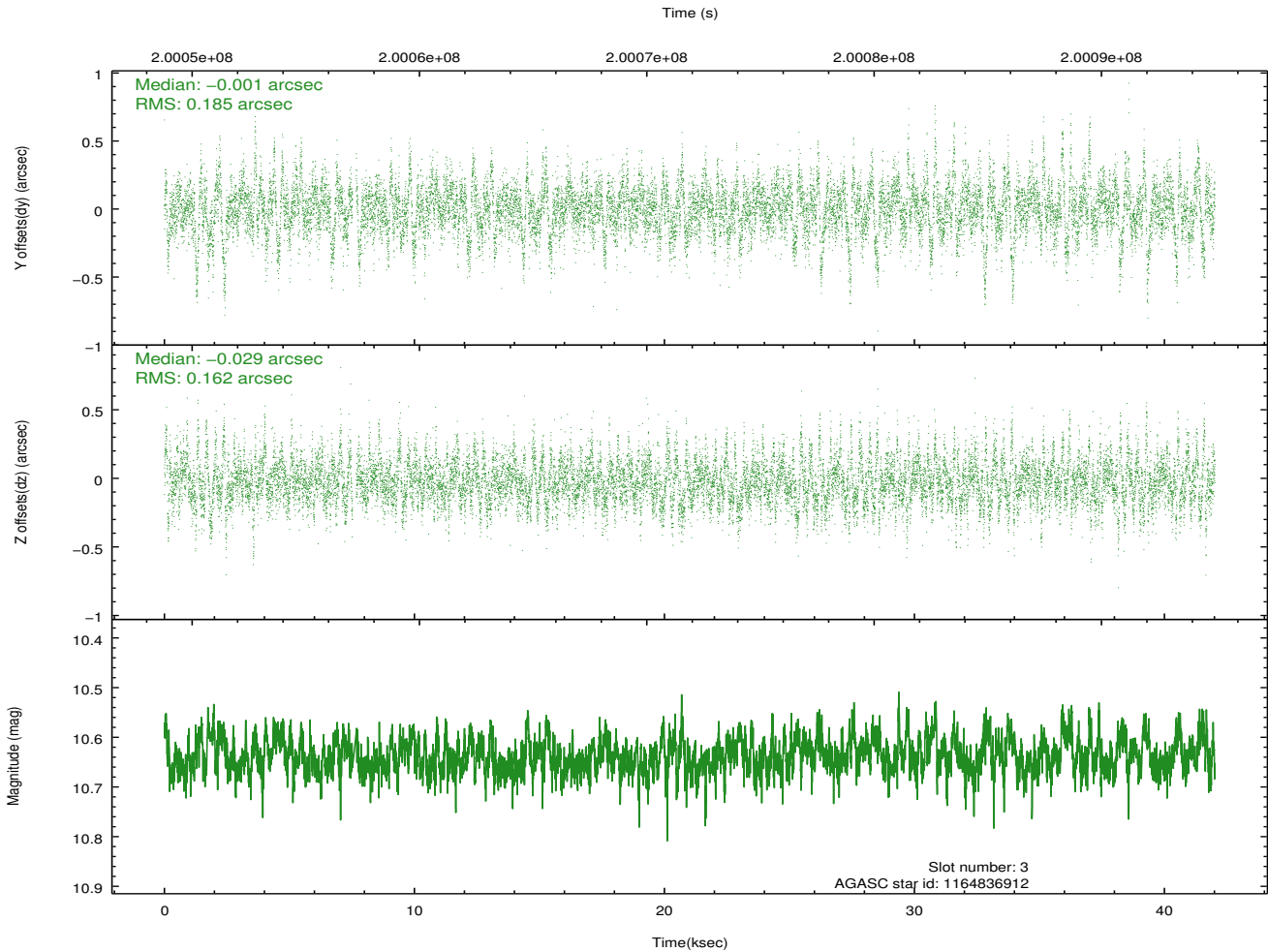
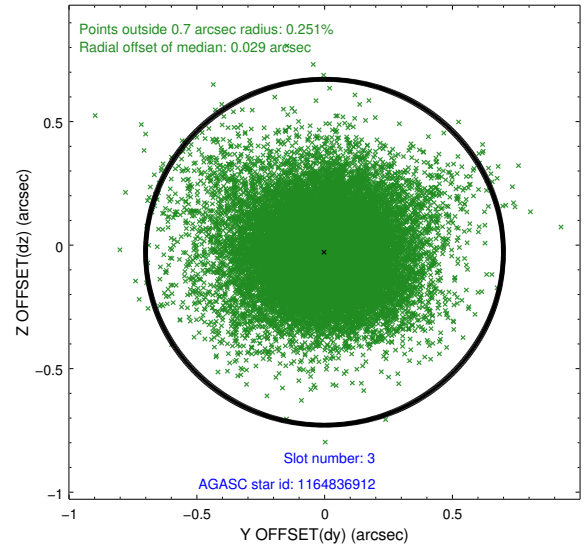
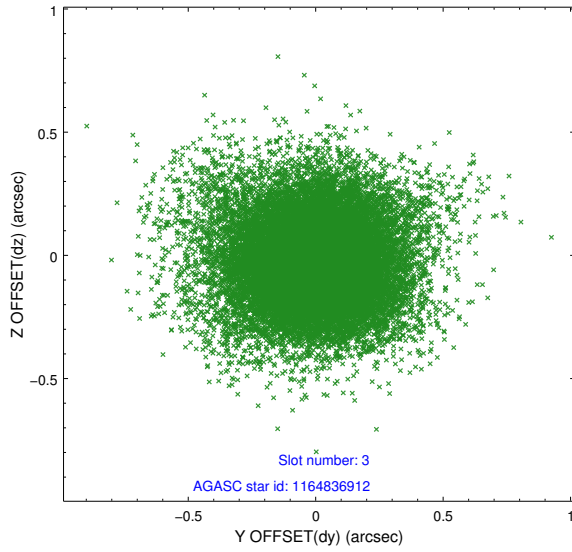


Slot Statistics

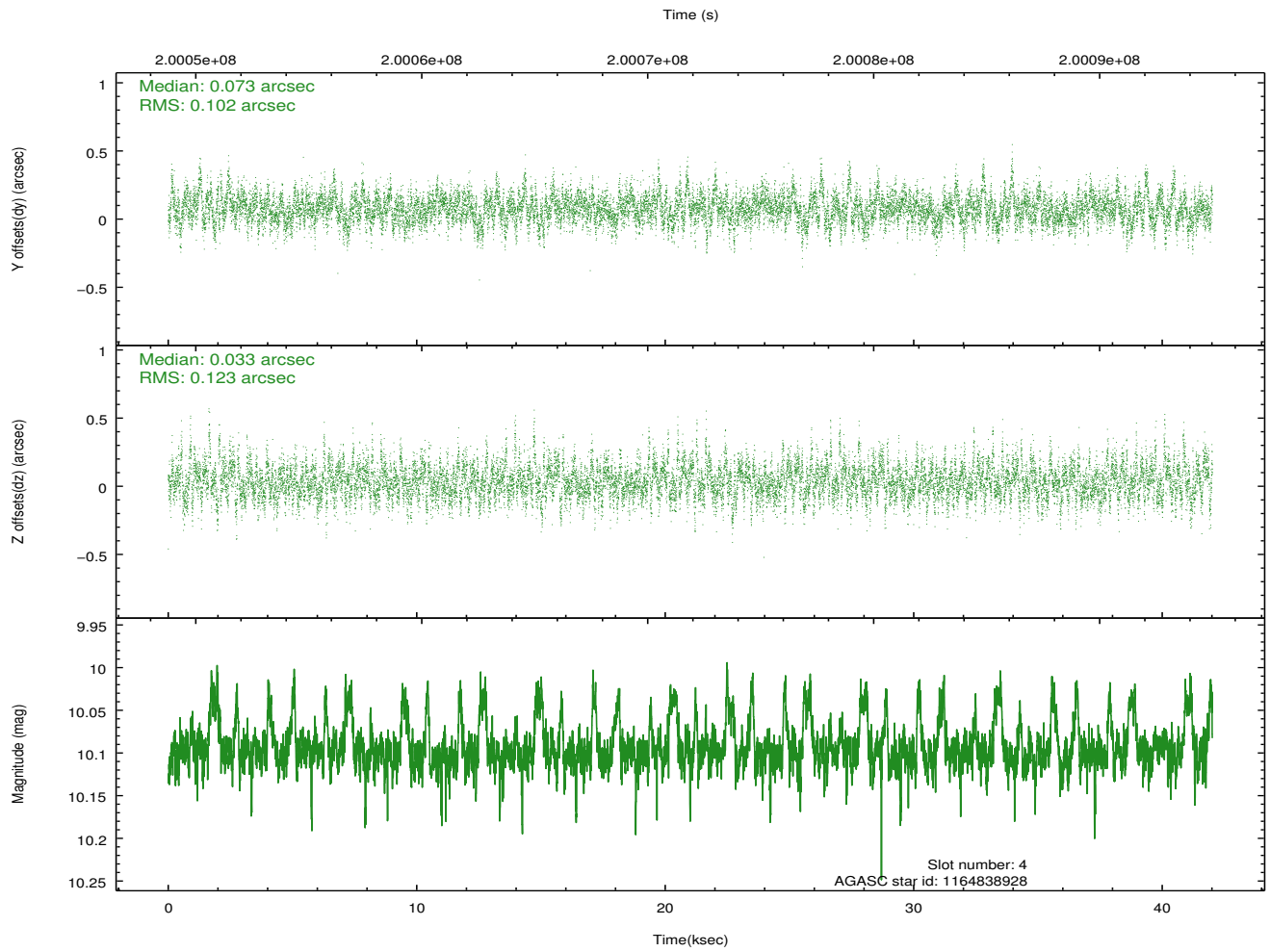
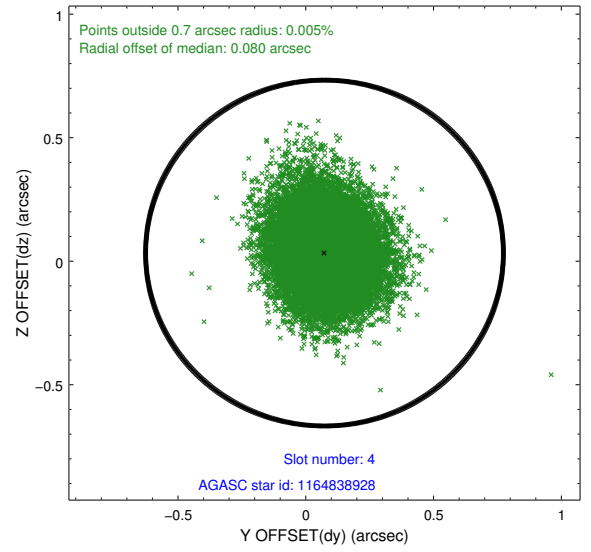
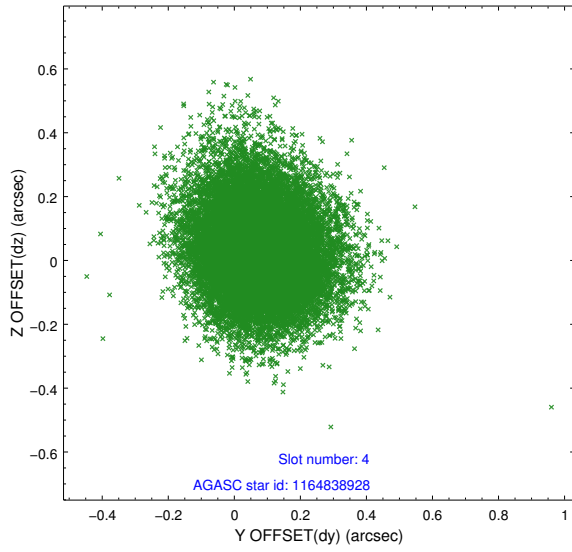
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	HRC-S-1	6.98	10249	0.099	-0.129	0.005	0.009	0.000000	0.000000	-1161.74	-458.39
1	FID	HRC-S-2	6.98	10249	0.106	-0.128	0.023	0.051	0.000000	0.000000	1237.84	-451.04
2	FID	HRC-S-4	6.95	10249	0.197	-0.047	0.024	0.048	0.000000	0.000000	1236.73	573.76
3	GUIDE	1164836912	10.64	20338	-0.001	-0.029	0.250	0.452	84.021163	-64.549238	1951.44	600.54
4	GUIDE	1164838928	10.10	20480	0.073	0.033	0.167	0.280	84.147245	-63.840751	147.25	-1213.13
5	GUIDE	1164841384	10.49	20458	-0.096	0.085	0.190	0.340	83.492551	-63.902402	1082.95	-1713.18
6	GUIDE	1166544016	9.68	20472	0.016	-0.173	0.150	0.247	86.089673	-64.349585	-935.68	2179.97
7	GUIDE	1166548256	8.77	20491	0.009	0.076	0.093	0.159	85.738698	-64.074093	-1192.27	1075.87

2.4 Star Slots

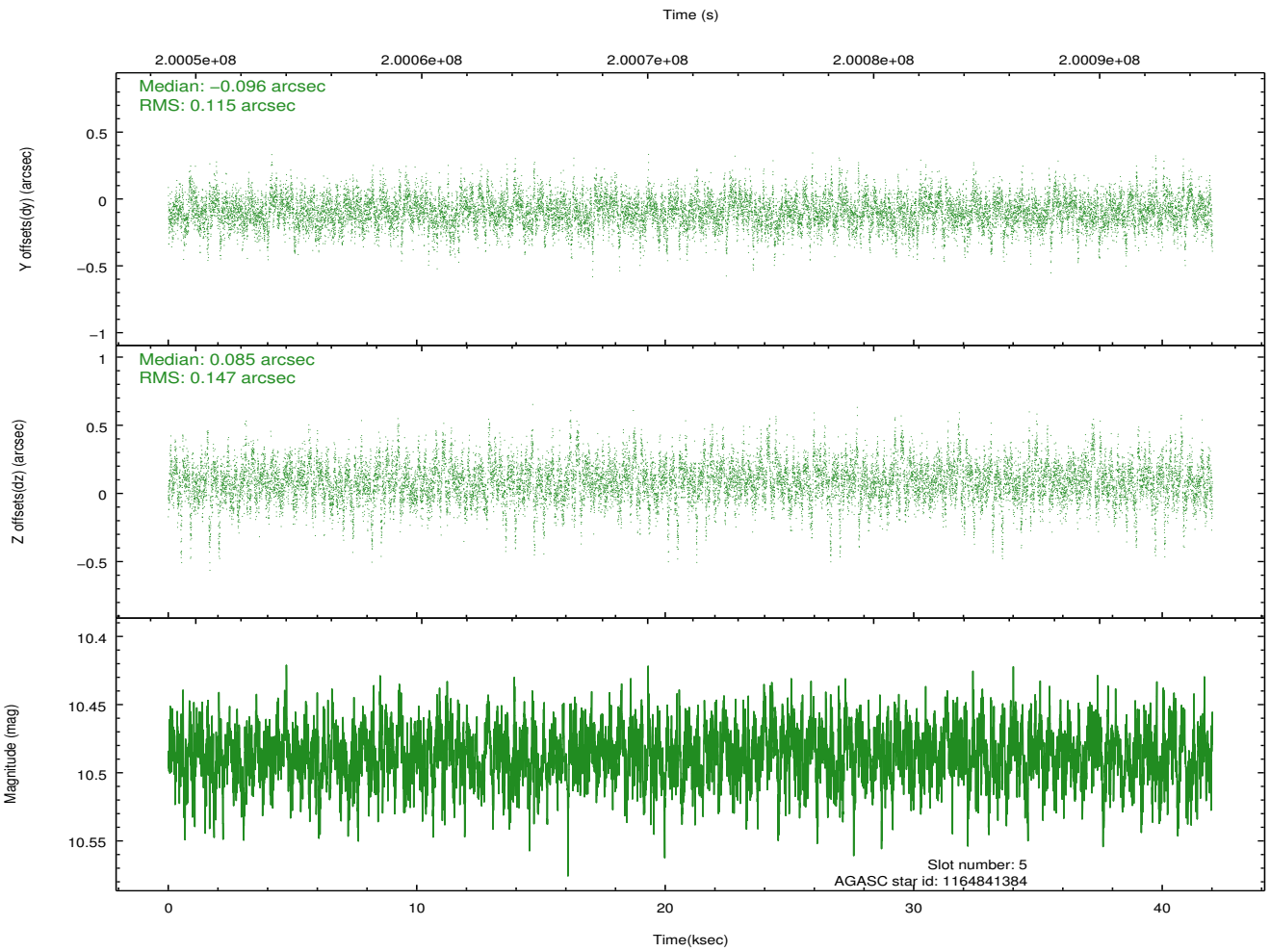
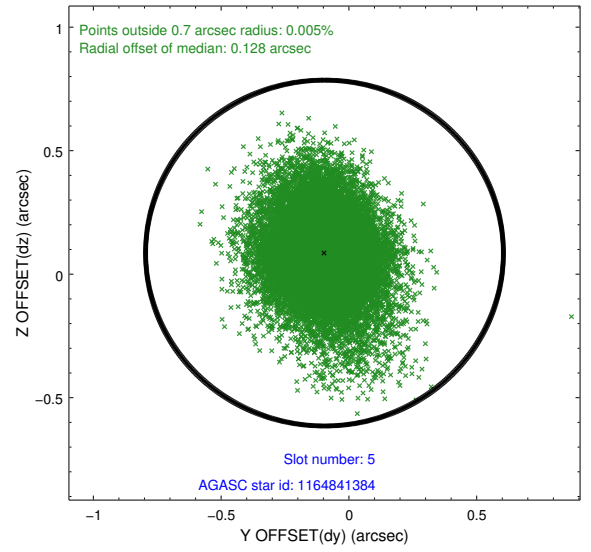
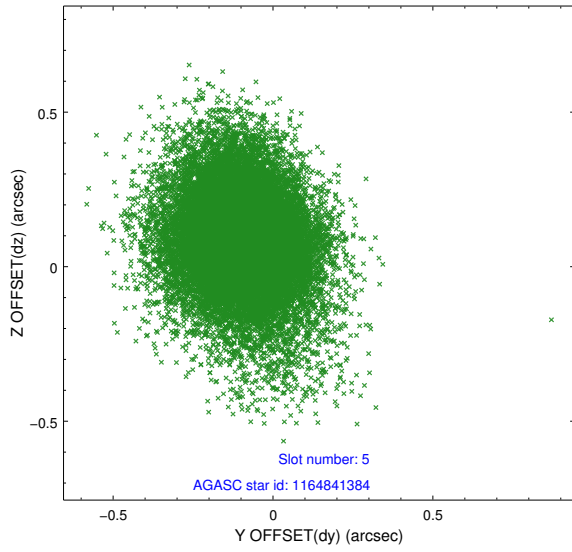
2.4.1 Slot 3



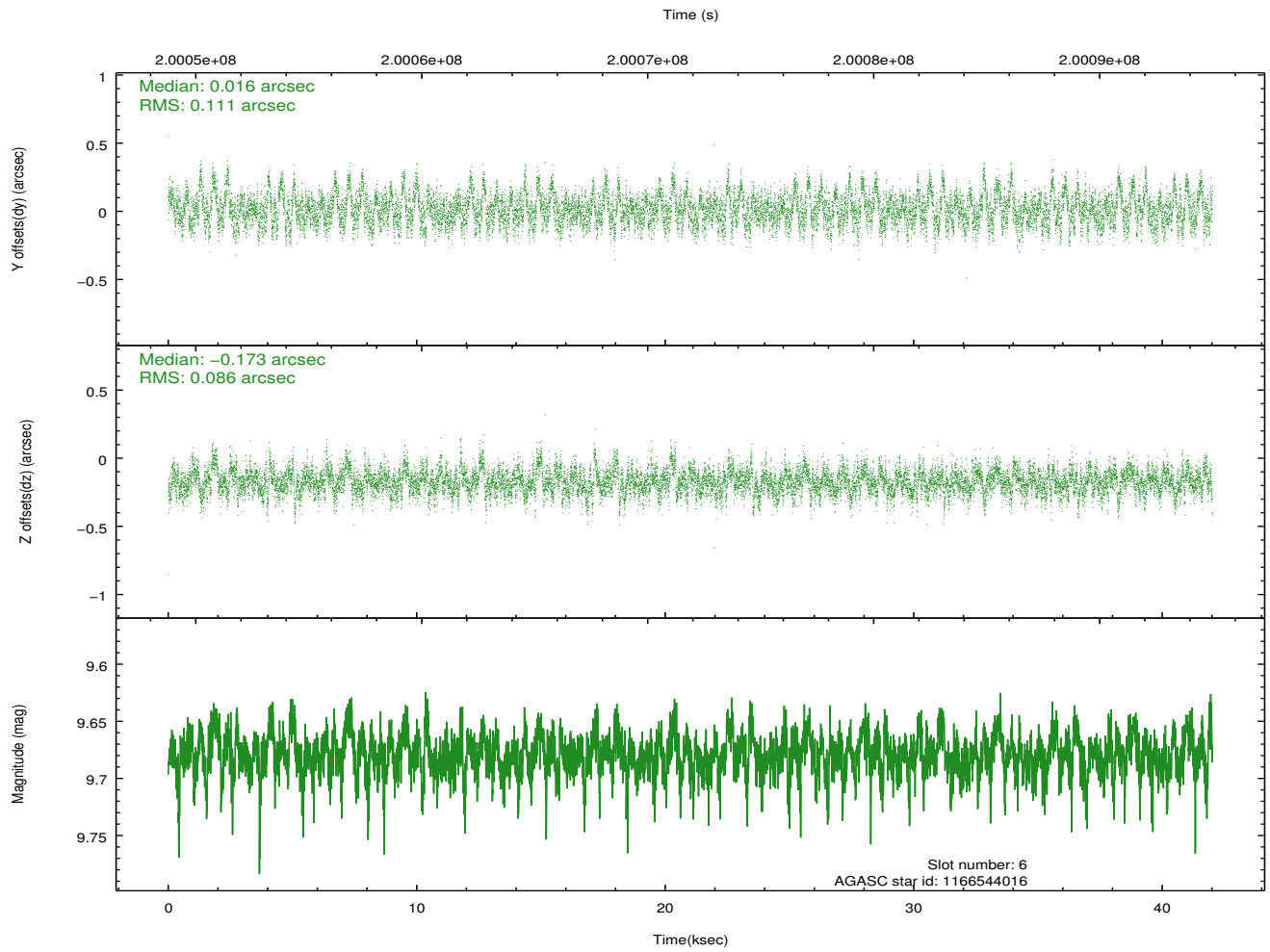
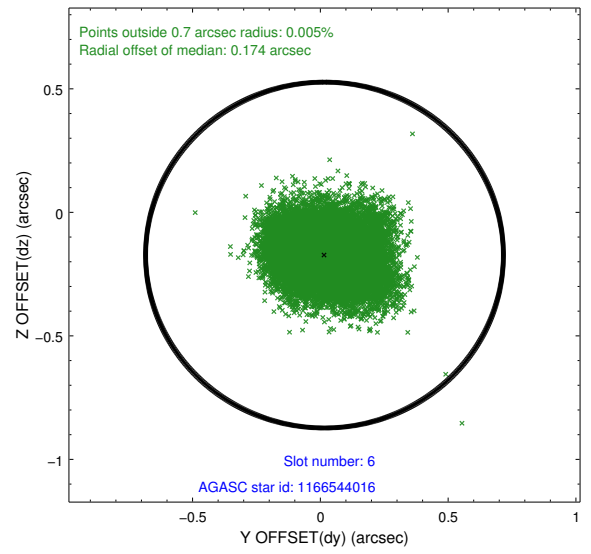
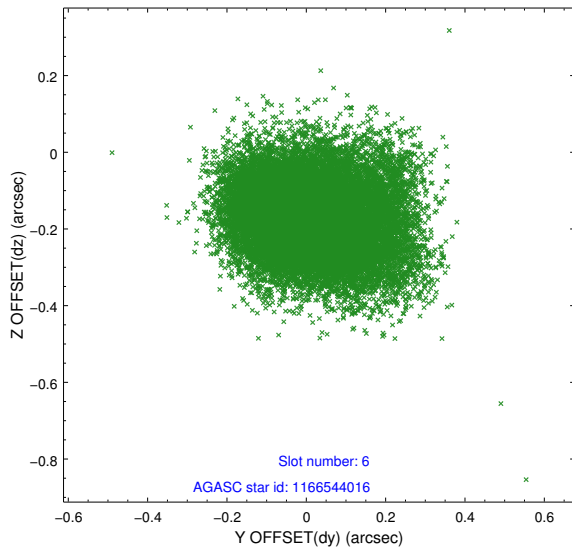
2.4.2 Slot 4



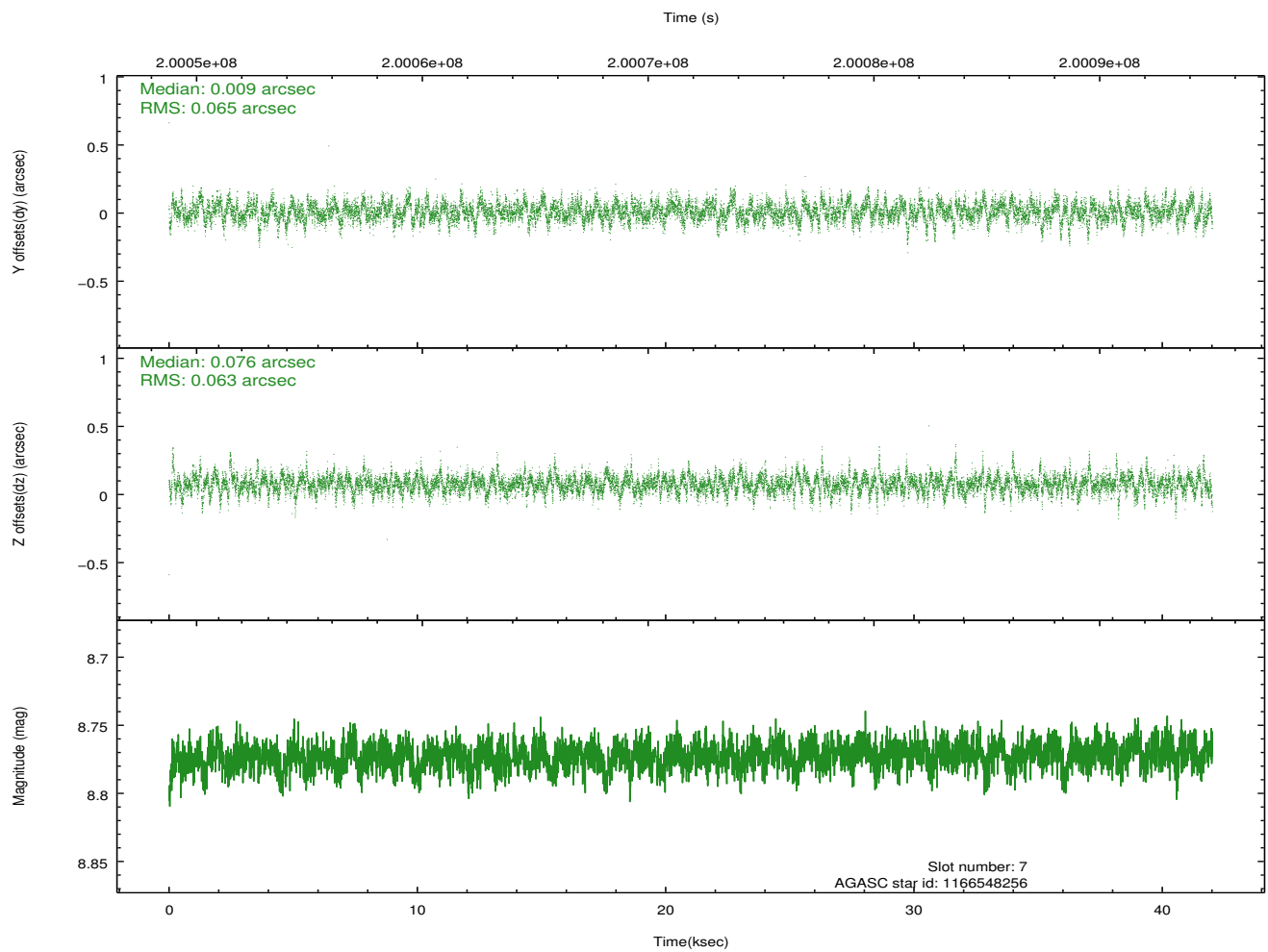
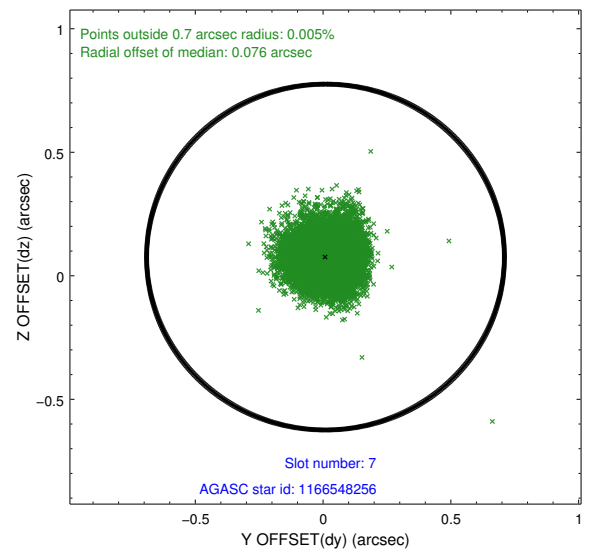
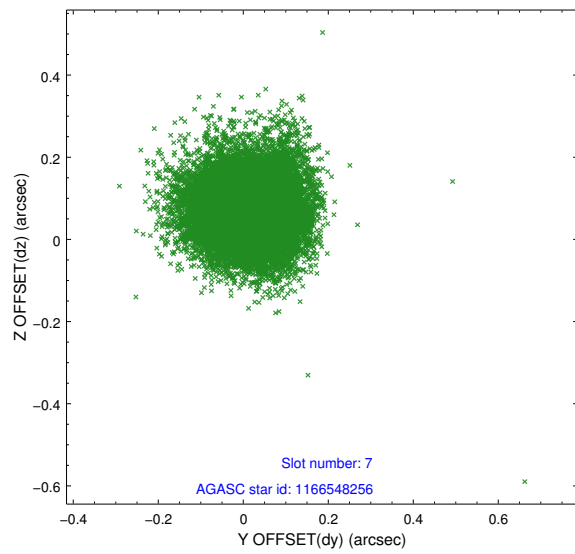
2.4.3 Slot 5



2.4.4 Slot 6

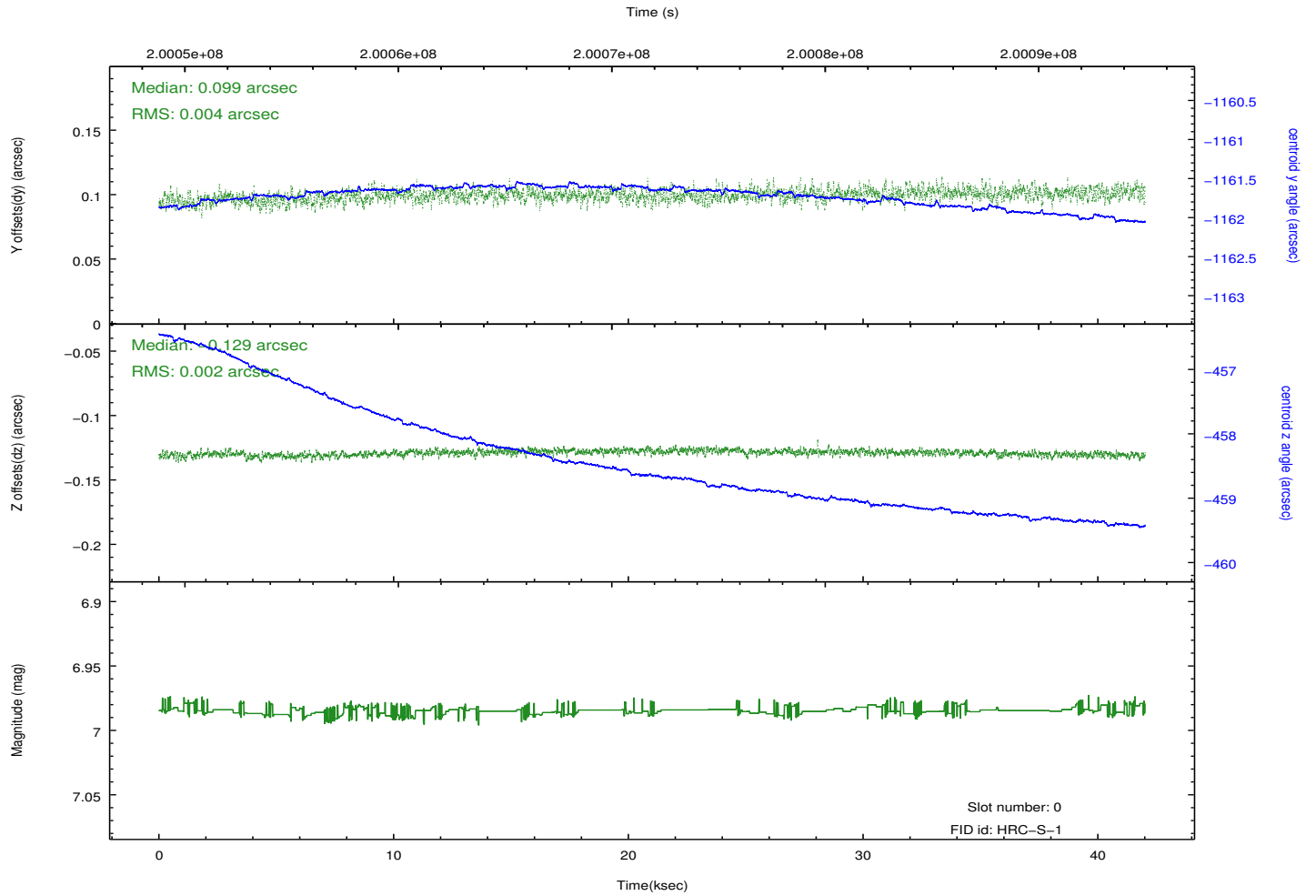
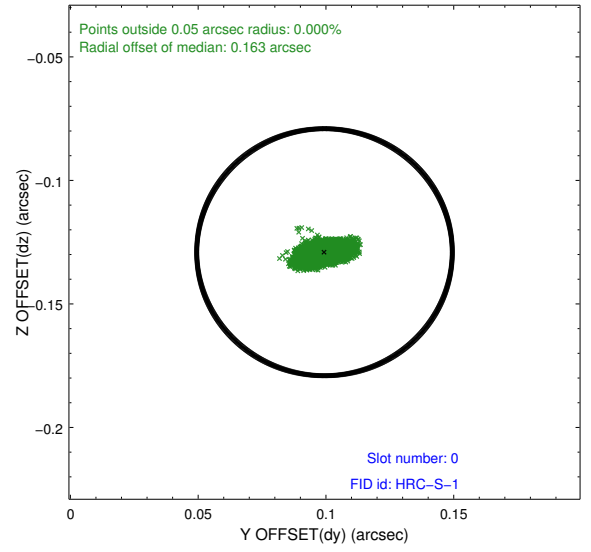
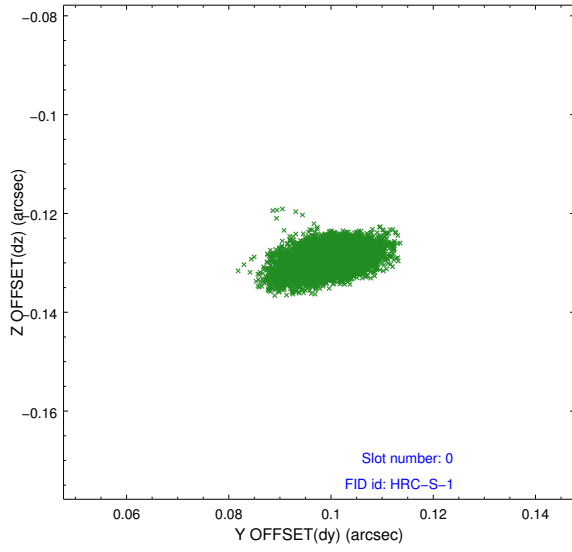


2.4.5 Slot 7

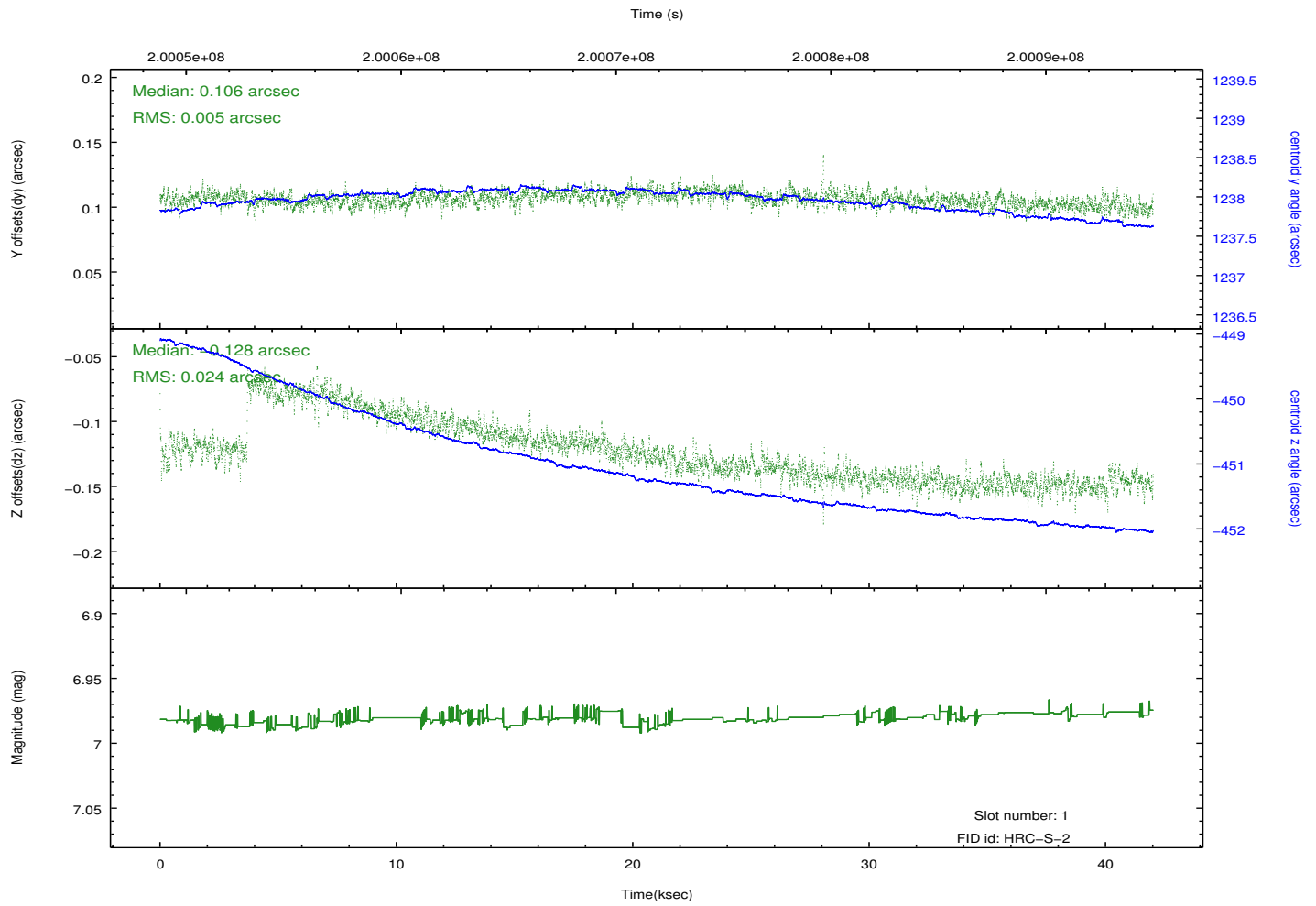
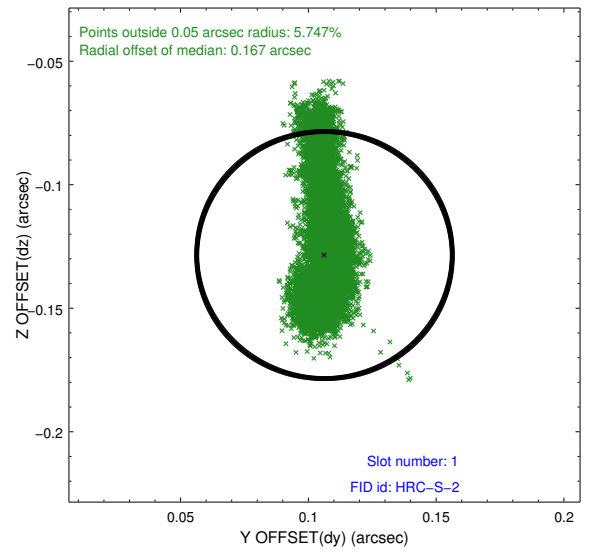
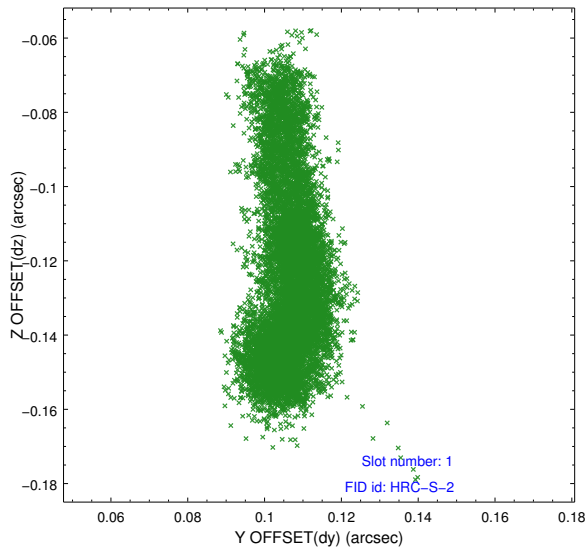


2.5 FID Slots

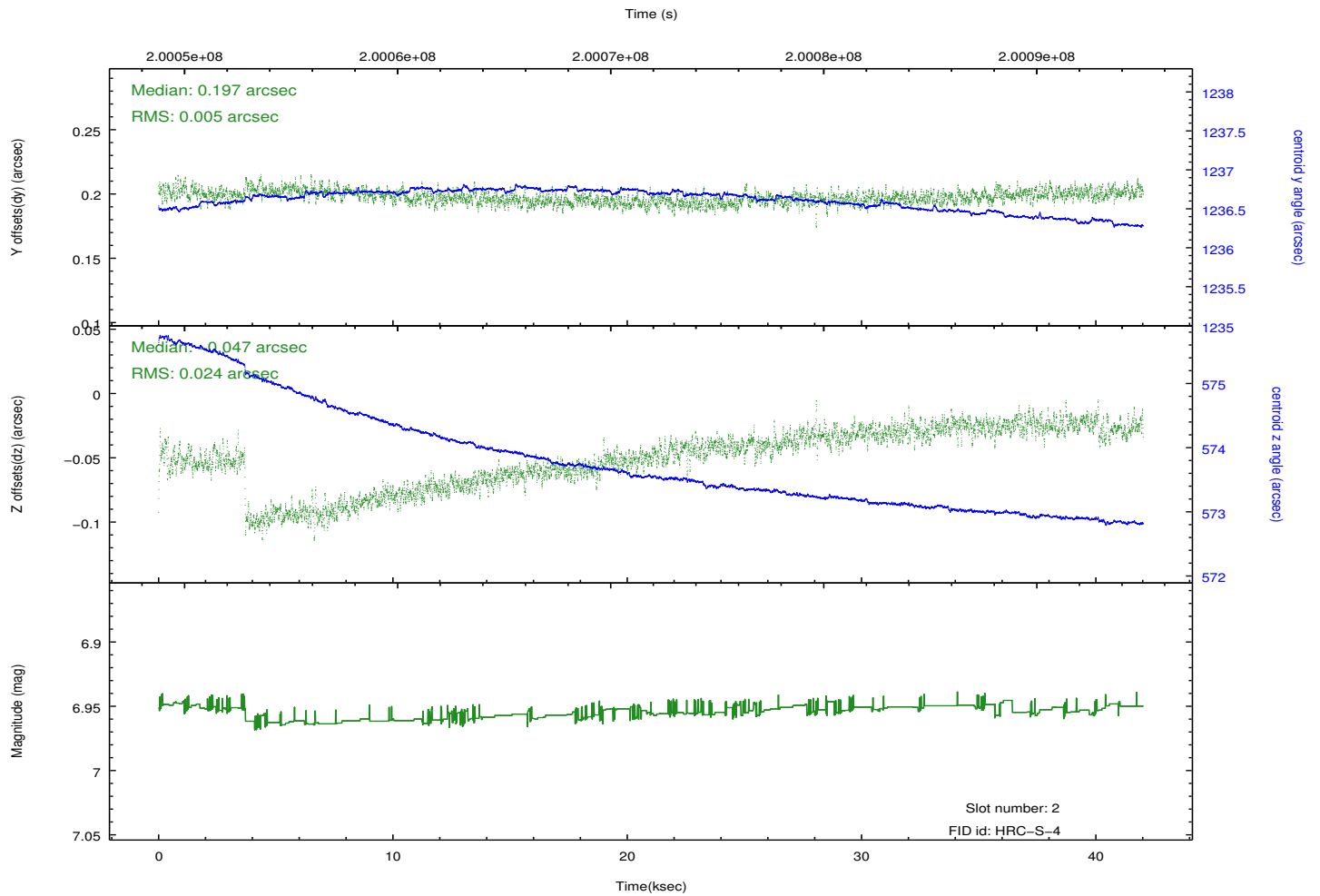
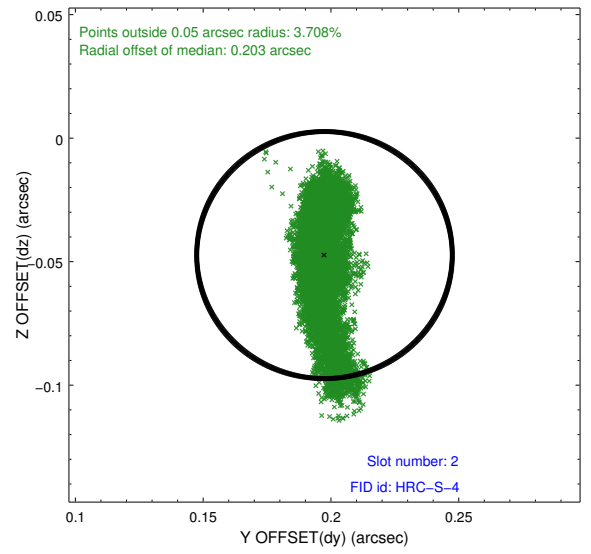
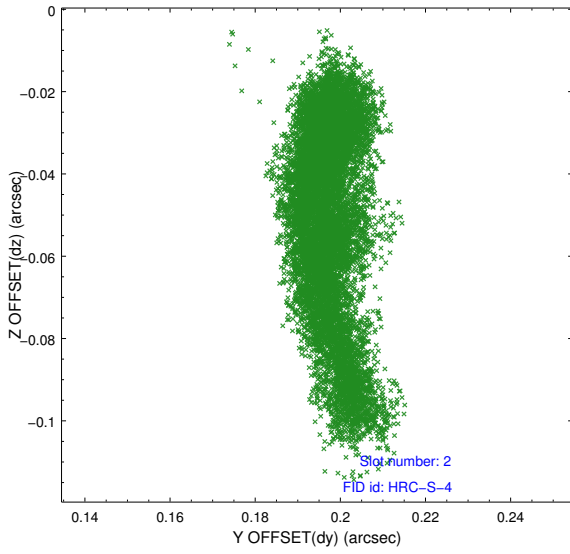
2.5.1 Slot 0



2.5.2 Slot 1

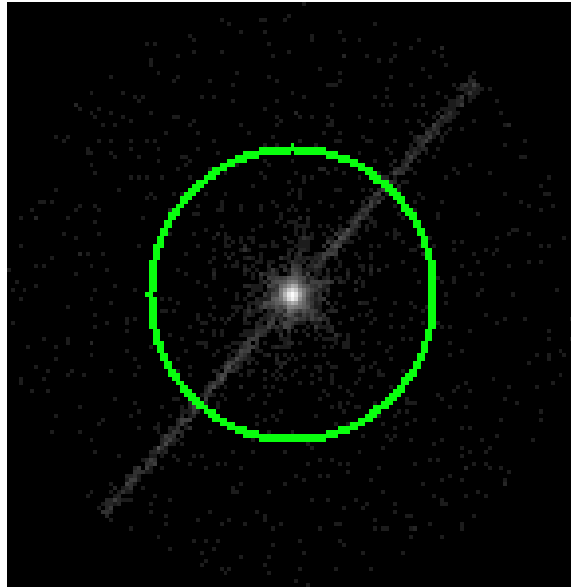


2.5.3 Slot 2

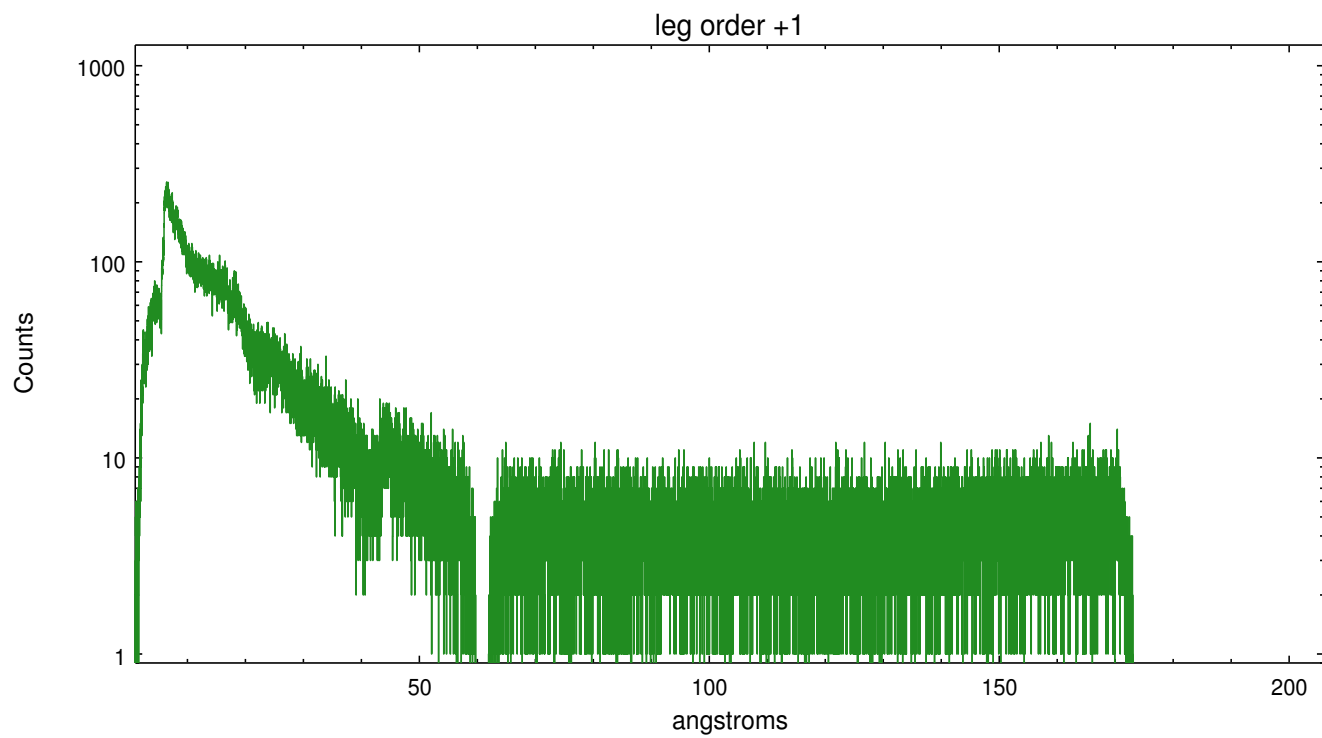
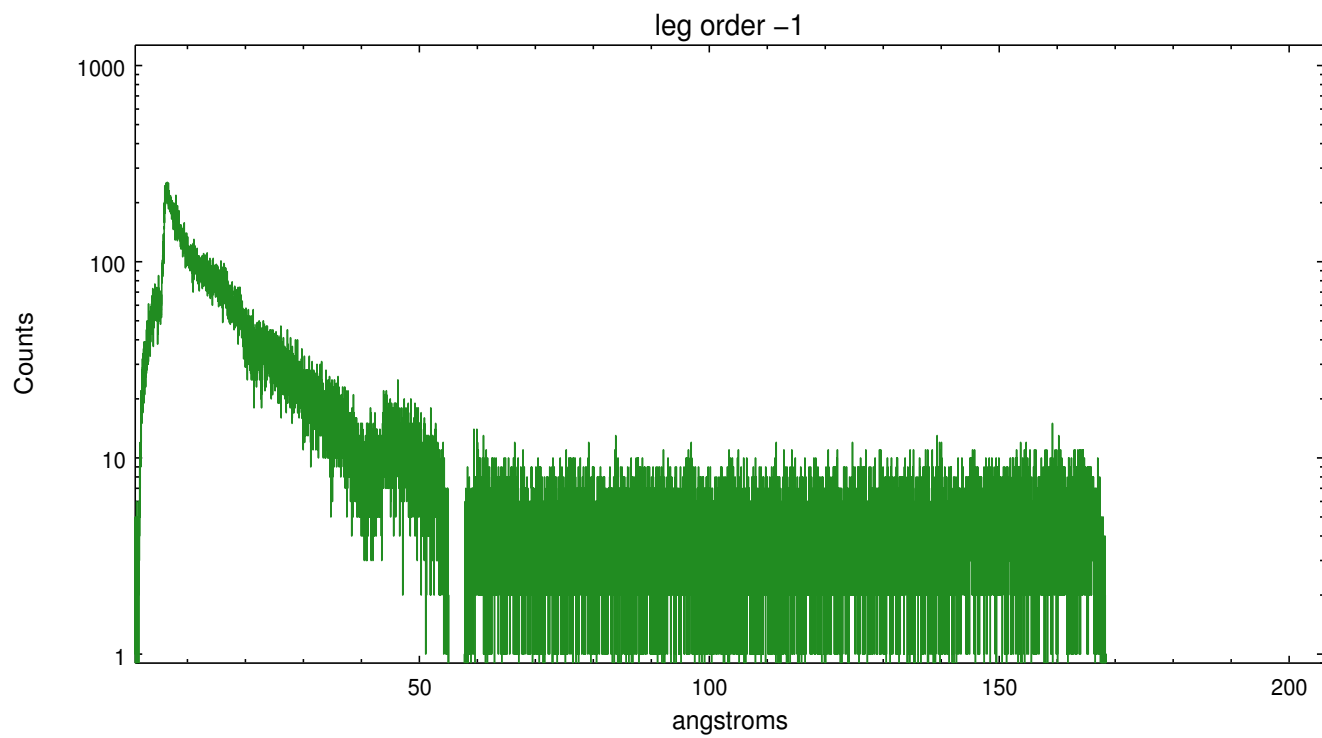


3 Gratings

3.1 LETG Arm



LETG Zero Order



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2013.01.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	41.714

A.2 Comments

Zeroth order PSF is asymmetrical. Due to the expected source brightness the zeroth order was given a Y-offset and a SIM-Z-offset in order to avoid a large added dose to the nominal target point. The asymmetric PSF can be attributed to an HRC instrumental effect, primarily the degap calibration at this position. This is a followup observation to obsid 4575. There are more details in the V&V report for obsid 4575.