

V&V Reference Report

L2 ASCDS Version : 10.1

Observation 16246 - L2 Version 2
Chandra X-Ray Center

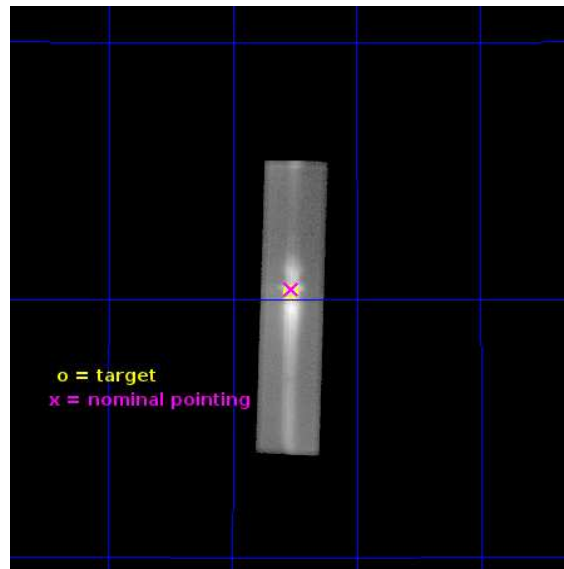
L2 Processing Date : Oct 23 2013

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1 Front

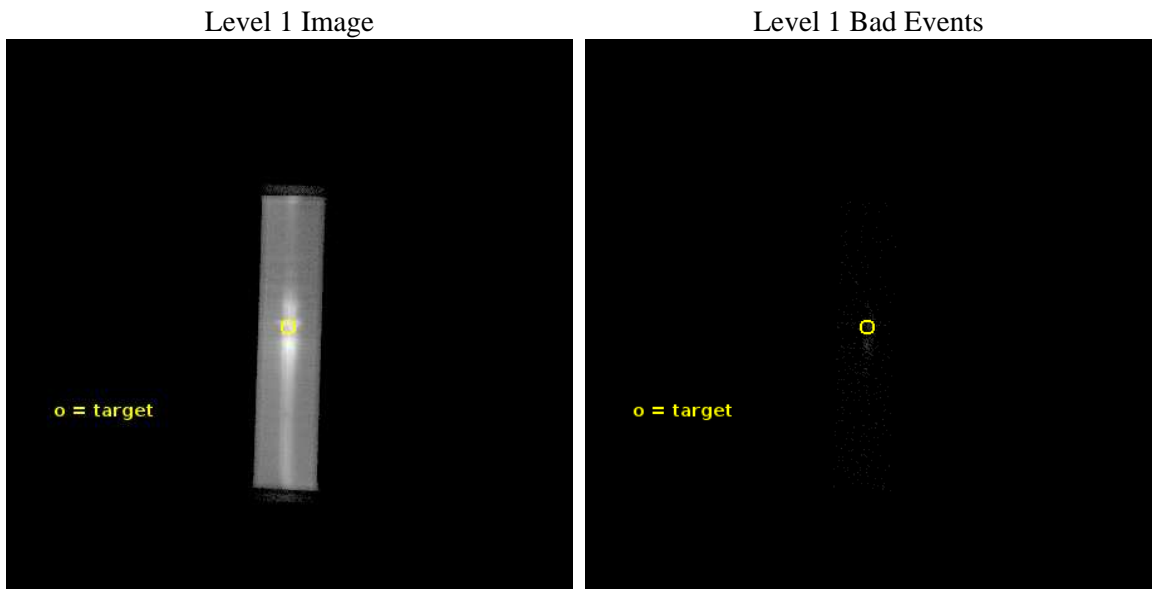
seq_num	502246	Sequence number
obs_id	16246	Observation id
title	Pre-Planned Target of Opportunity (ToO) Observations of the Crab Nebula upon the Occurrence of the Next Gamma-Ray Flare	Proposal titl
observer	Dr. Martin Weisskopf	Principal investigator
object	Crab	Source name
ra_targ	83.631667	Observer's specified target RA [deg]
dec_targ	22.015667	Observer's specified target Dec [deg]
ra_nom	83.631621081556	Nominal RA [deg]
dec_nom	22.020446384762	Nominal Dec [deg]
roll_nom	91.632983466537	Nominal Roll [deg]
revision	2	Processing version of data
ontime	20126.132351279	[s]
livetime	20012.873149624	Ontime multiplied by DTCOR
l2events	1487861	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	10.1	Processing system revision	ontime	20126.132351279	[s]
caldsver	4.5.8	 	l1events	1695294	Number of level 1 events
date	2013-10-23T17:59:17	Date and time of file creation	tgmethod	TGDETECT	Method used to create src1a file
revision	2	Processing version of data	zo_pos	(32727.79, 32604.39)	src1a sky pixel position

2.1.3 Events

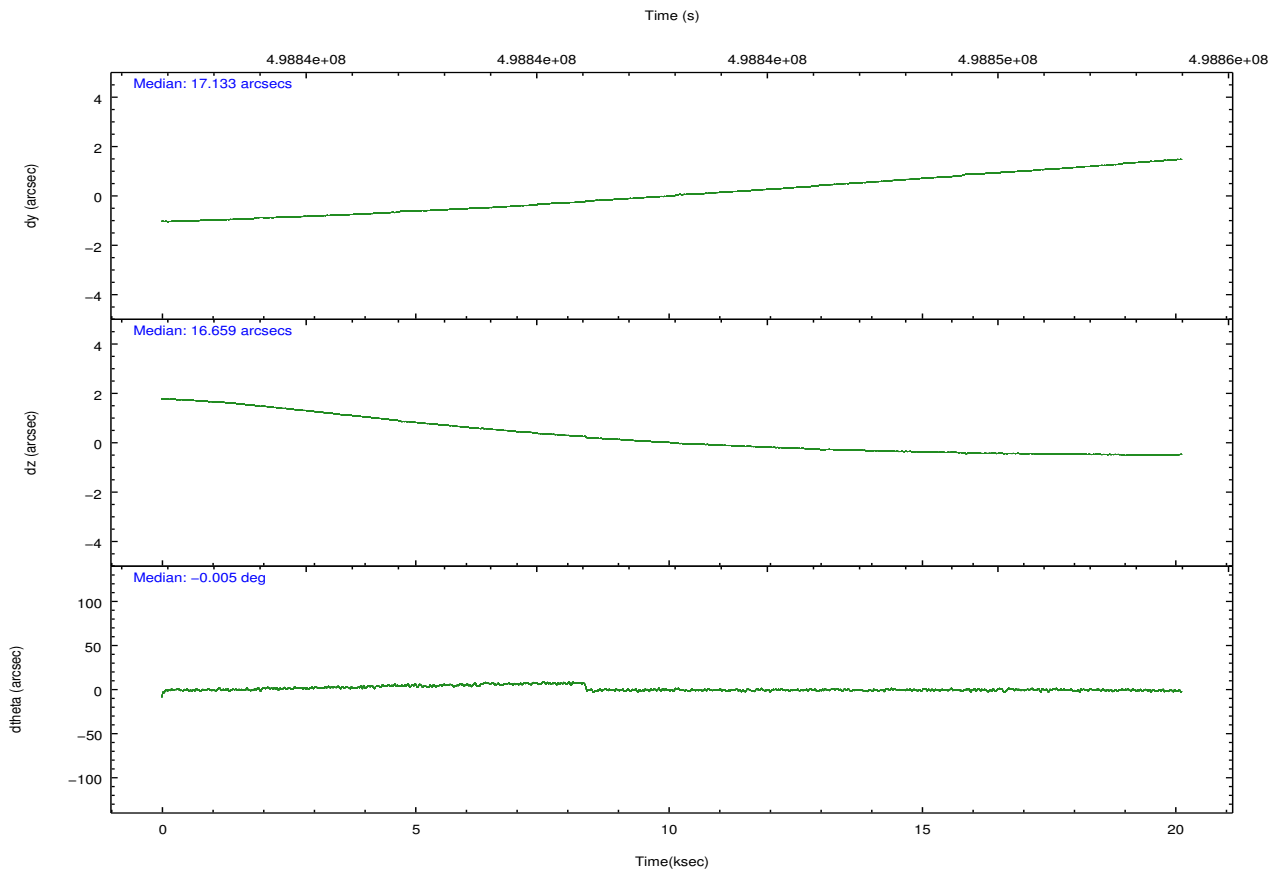
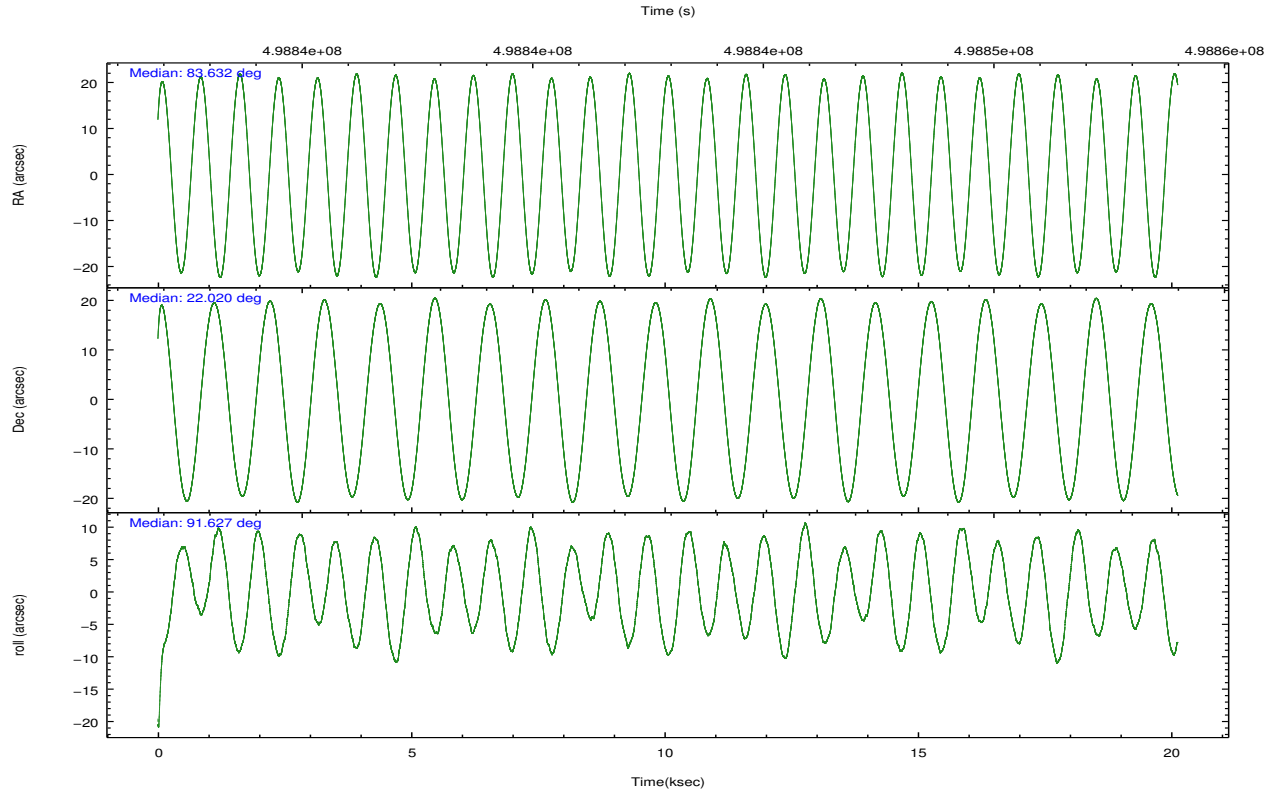
Level 1 Events

	segment 1	segment 2	segment 3
level 1 events	362	1694930	2
rejected events	18	41801	1
rejected %	4%	2%	50%

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	83.649125	83.63162108155596			
[deg] Pointing Dec	21.996768	22.02044638476181			
[deg] Pointing Roll	91.559102	91.63298346653694			
[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)	498832981.184000	498831721.94761			
Observation start date	2013-10-22T12:41:54	2013-10-22T12:22:01			
[s] Observation end time (MET)	498852981.184000	498853773.79882			
Observation end date	2013-10-22T18:15:14	2013-10-22T18:29:33			

2.3 Aspect

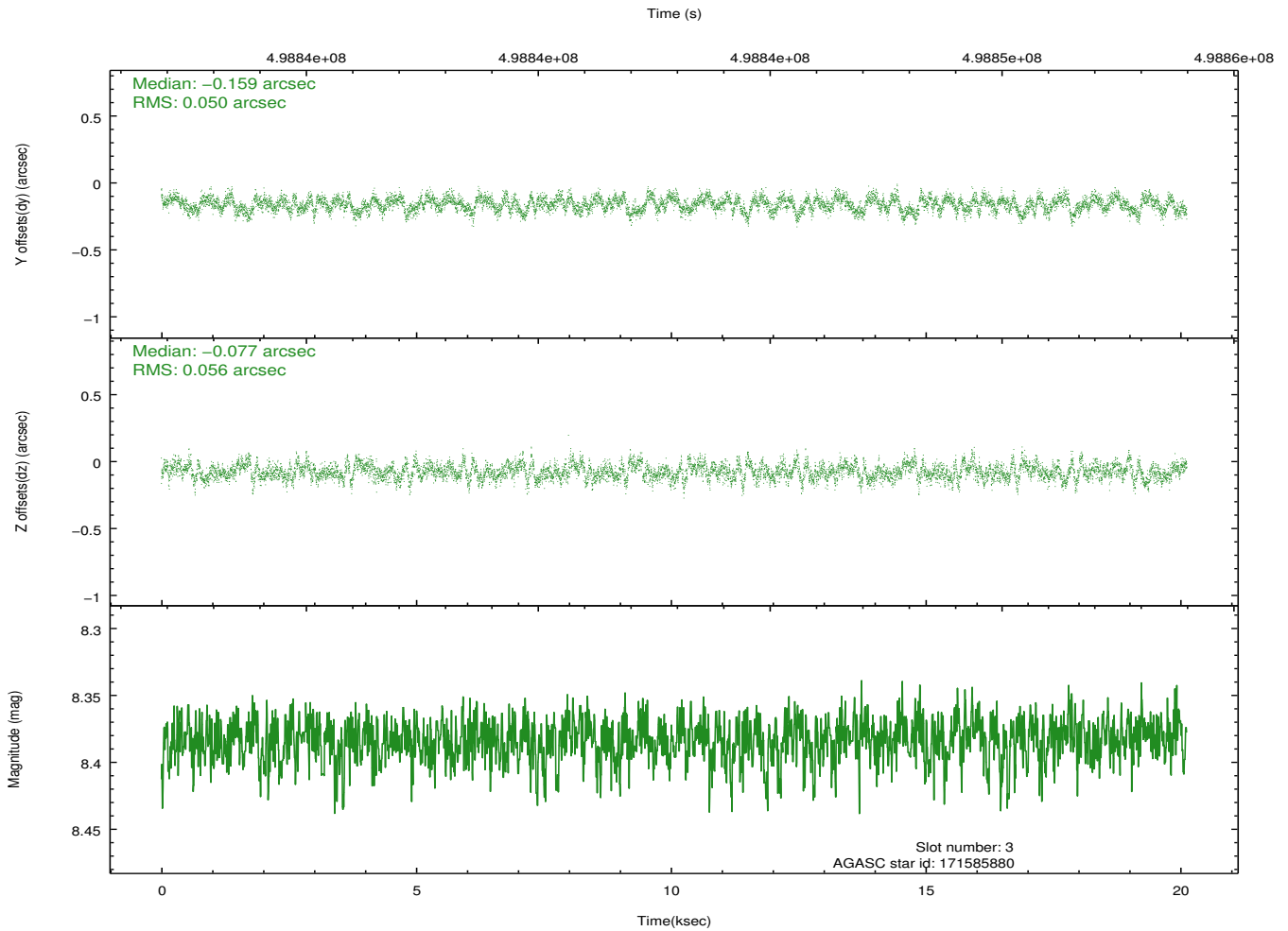
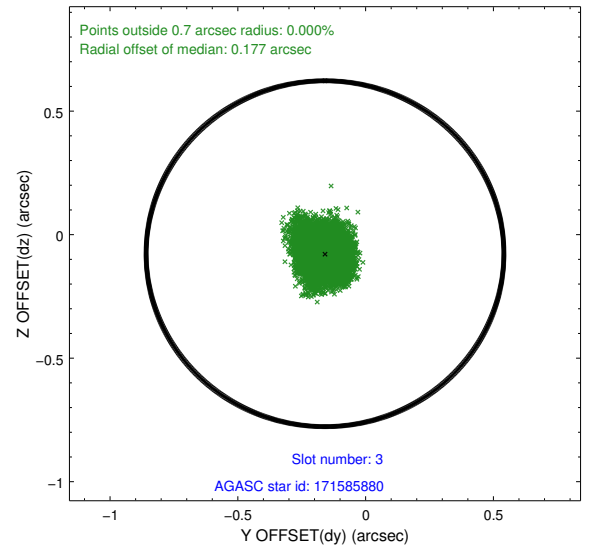
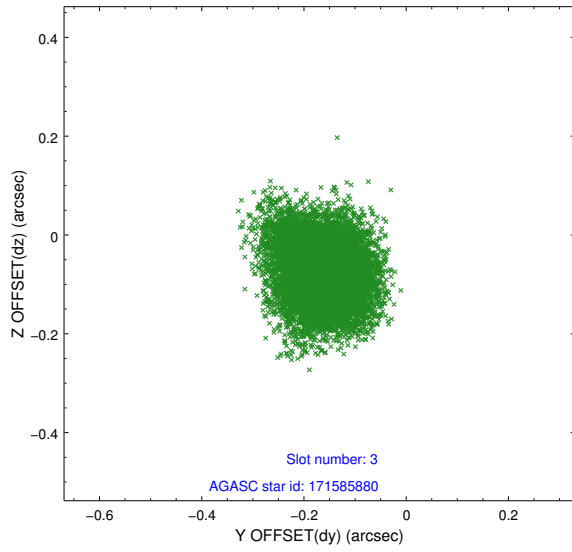


Slot Statistics

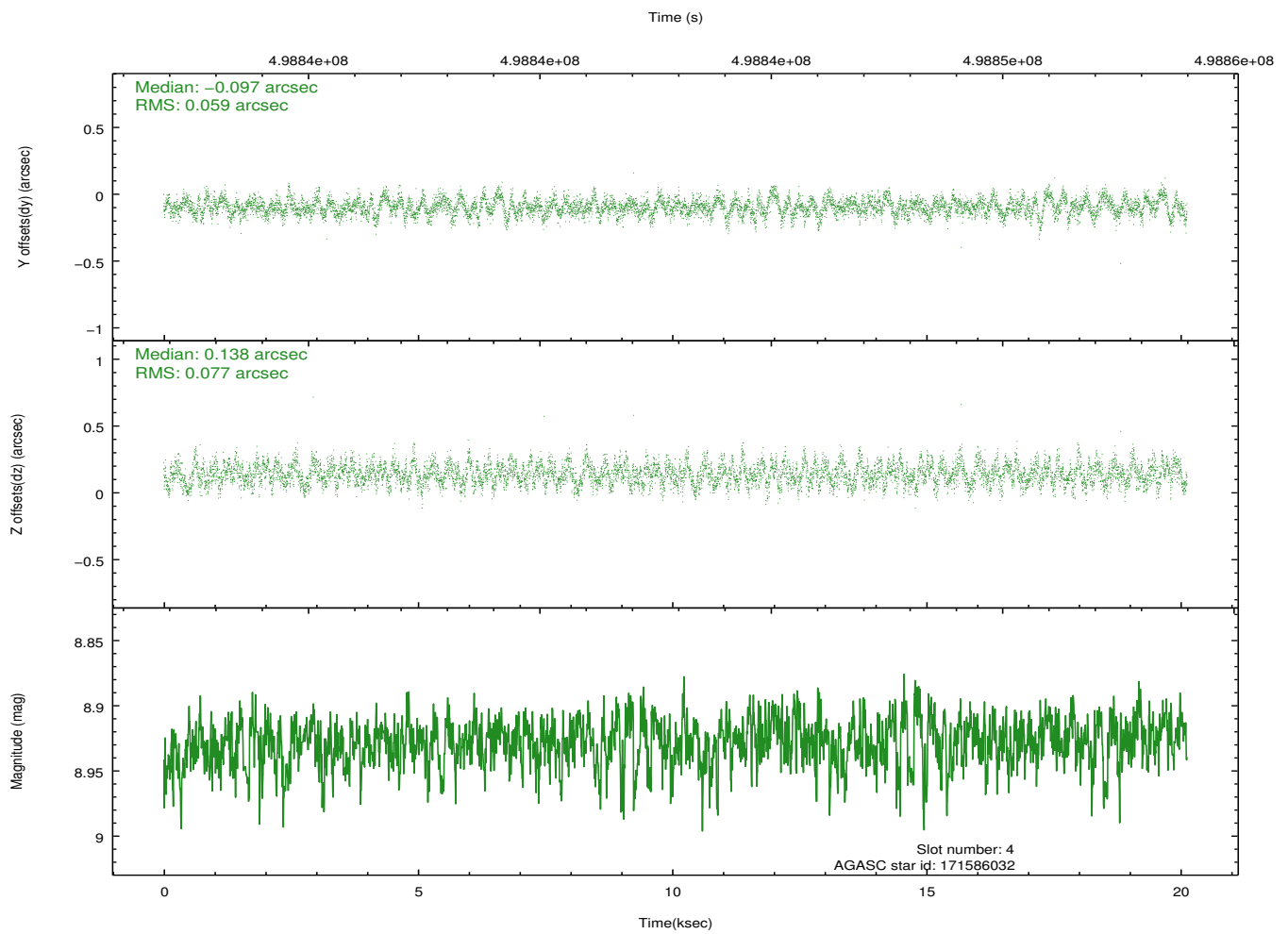
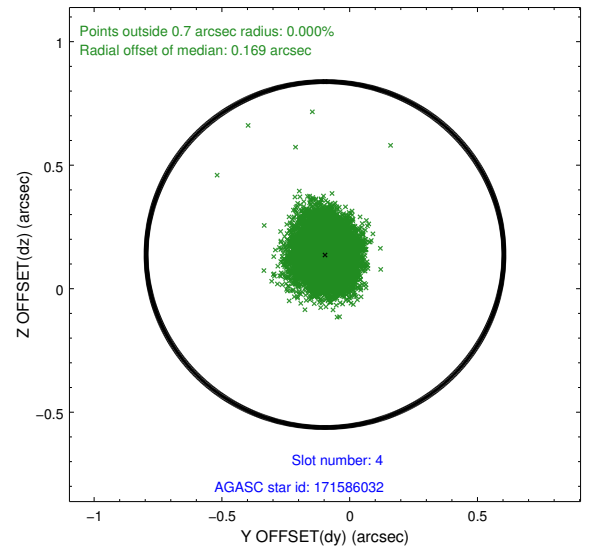
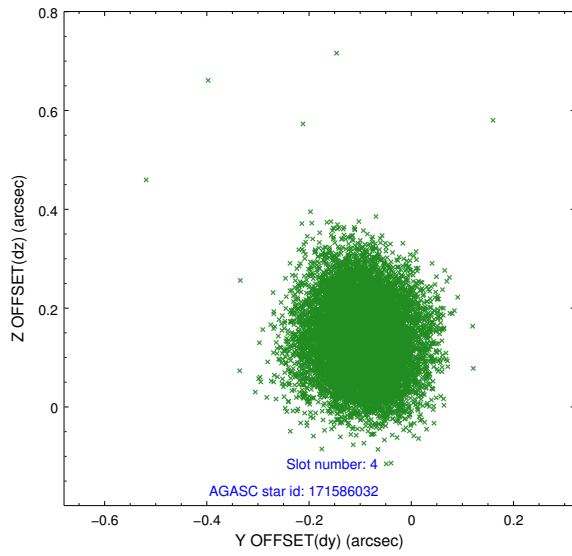
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	HRC-S-1	7.03	4909	-0.020	-0.147	0.012	0.018	0.000000	0.000000	-1171.76	-465.85
1	FID	HRC-S-2	7.01	4909	0.193	-0.134	0.041	0.063	0.000000	0.000000	1227.89	-458.52
2	FID	HRC-S-4	6.98	4908	0.239	-0.019	0.047	0.067	0.000000	0.000000	1227.00	566.30
3	GUIDE	171585880	8.38	9815	-0.159	-0.077	0.079	0.129	83.676260	22.176319	643.78	-107.72
4	GUIDE	171586032	8.93	9813	-0.097	0.138	0.105	0.163	83.950197	22.083225	285.10	-1012.00
5	GUIDE	171721904	9.18	9810	0.039	0.160	0.137	0.218	84.272676	22.116922	380.58	-2090.32
6	GUIDE	243941560	8.30	9818	-0.098	0.018	0.086	0.140	83.733264	22.568598	2050.28	-335.12
7	GUIDE	171597832	9.13	9812	0.323	-0.229	0.104	0.174	83.183230	21.366702	-2221.99	1622.92

2.4 Star Slots

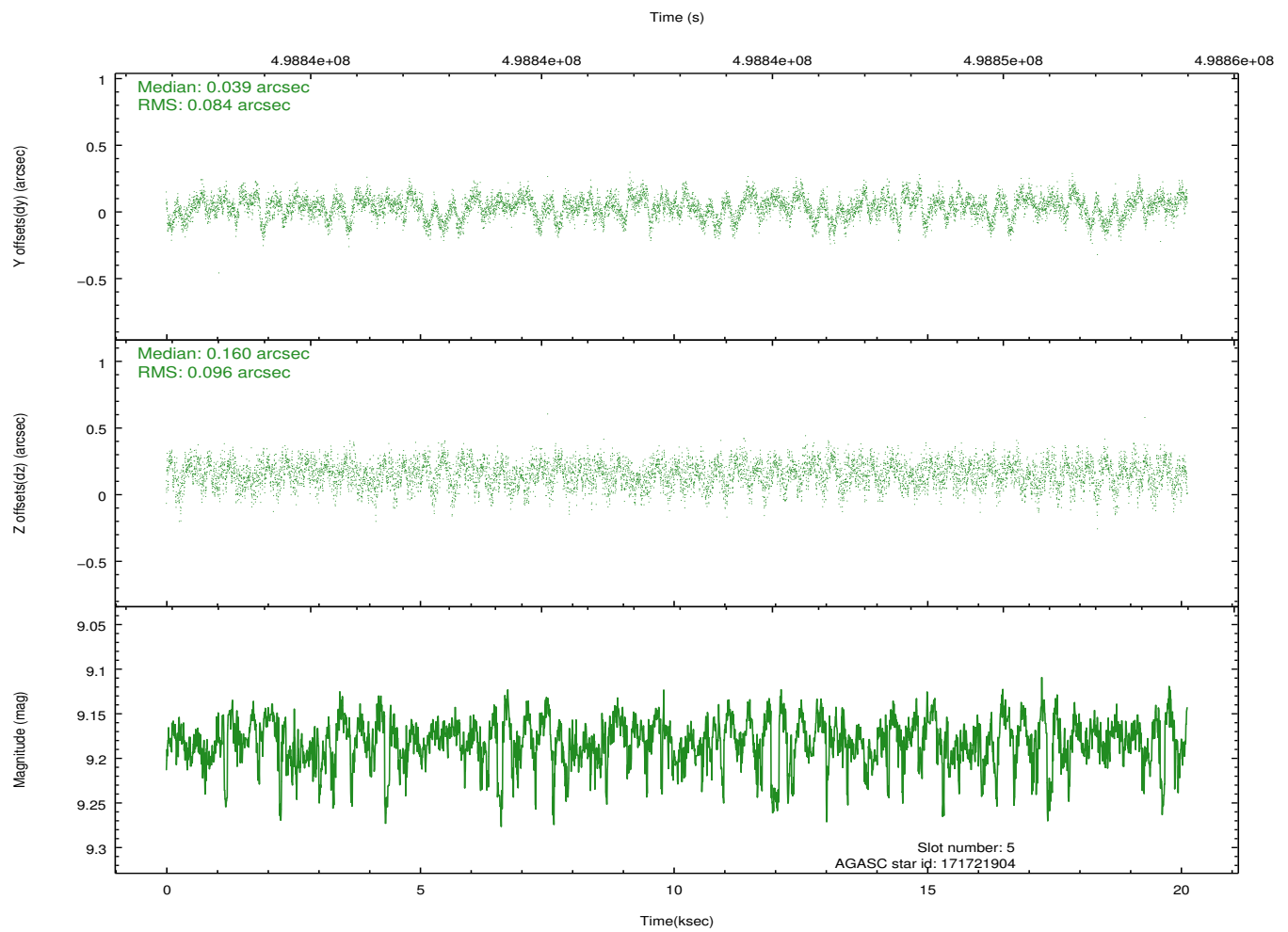
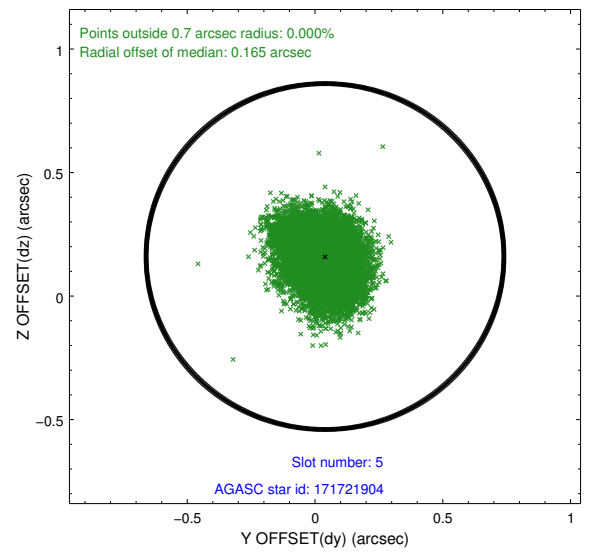
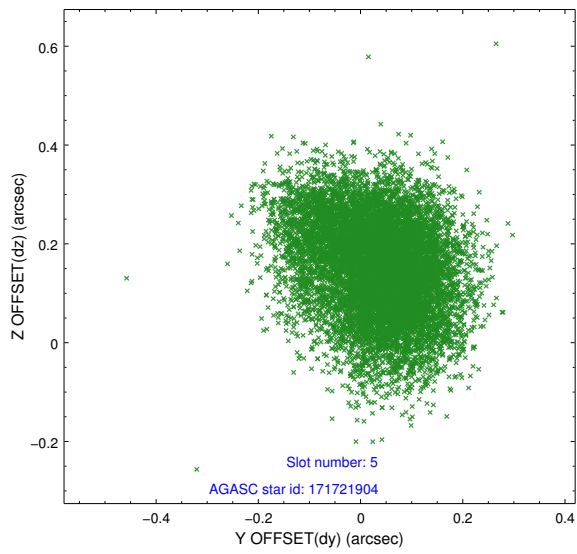
2.4.1 Slot 3



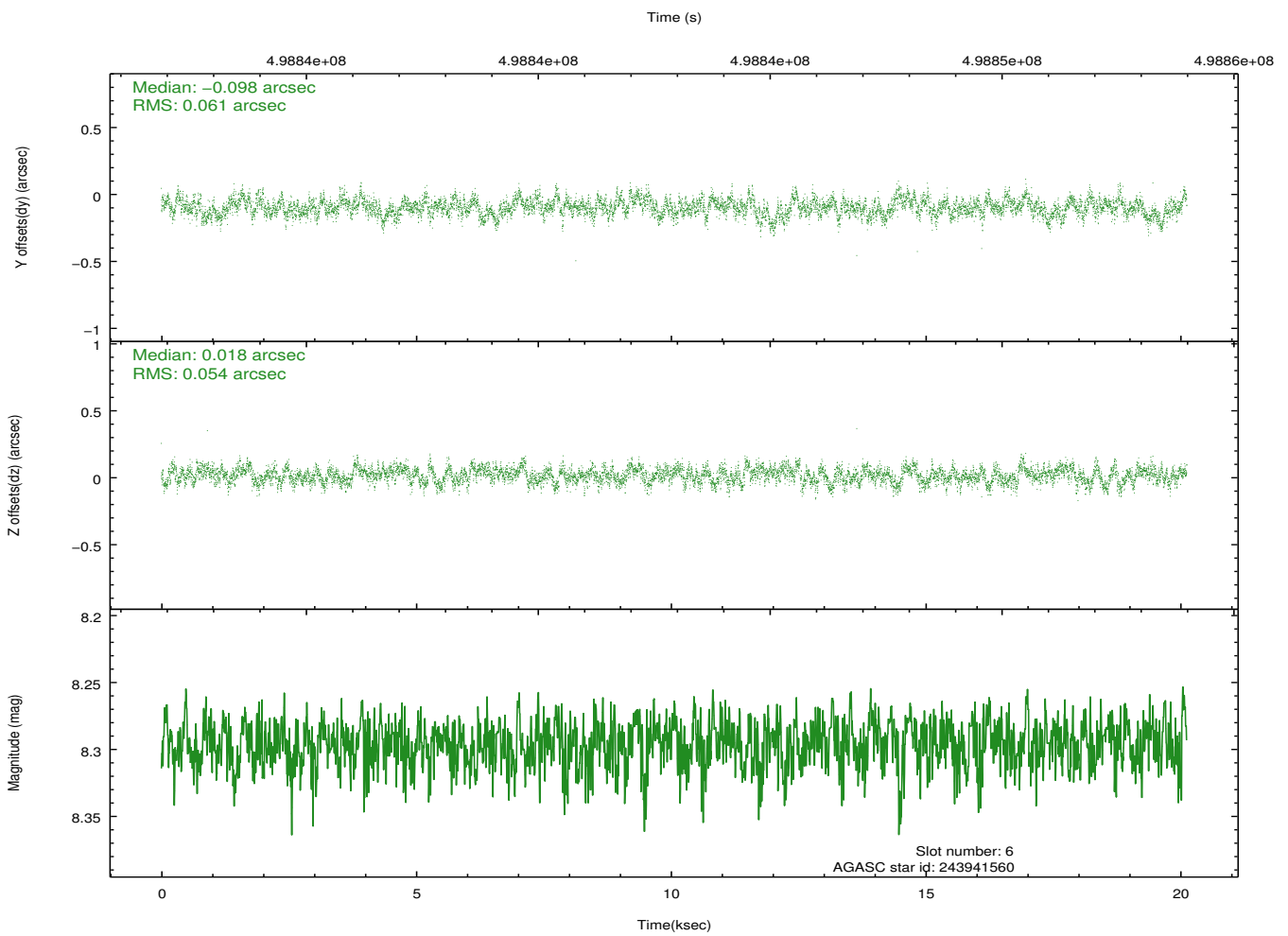
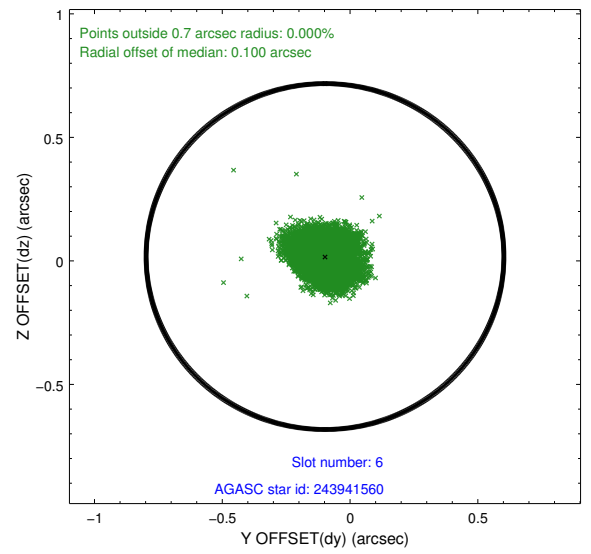
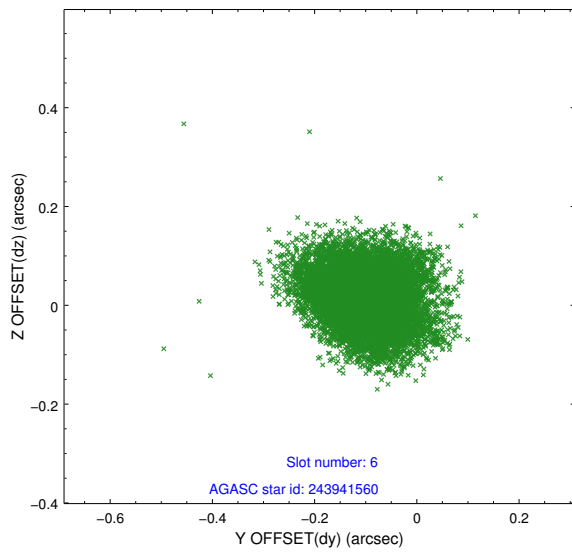
2.4.2 Slot 4



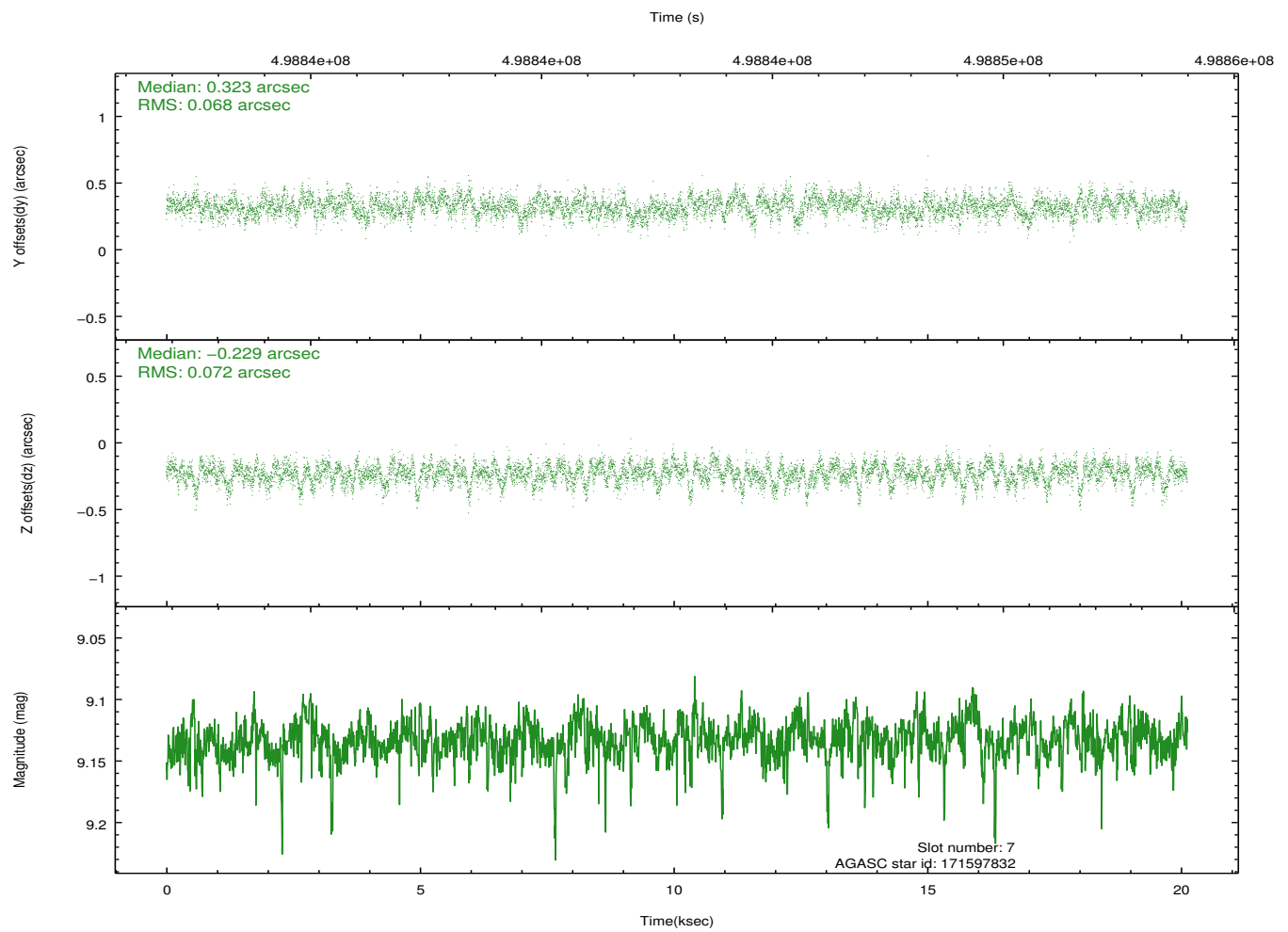
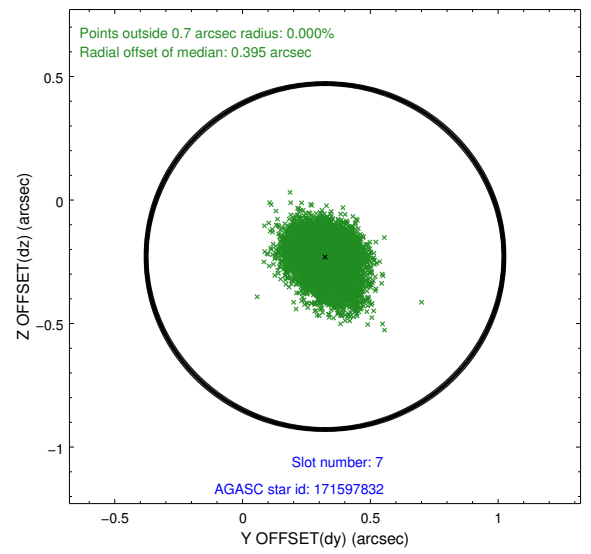
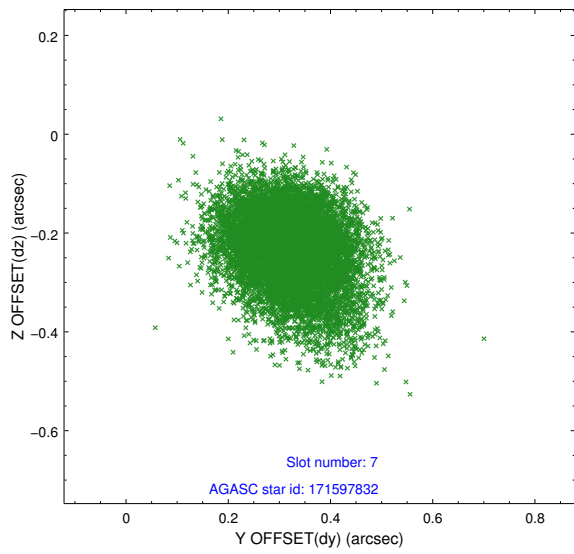
2.4.3 Slot 5



2.4.4 Slot 6

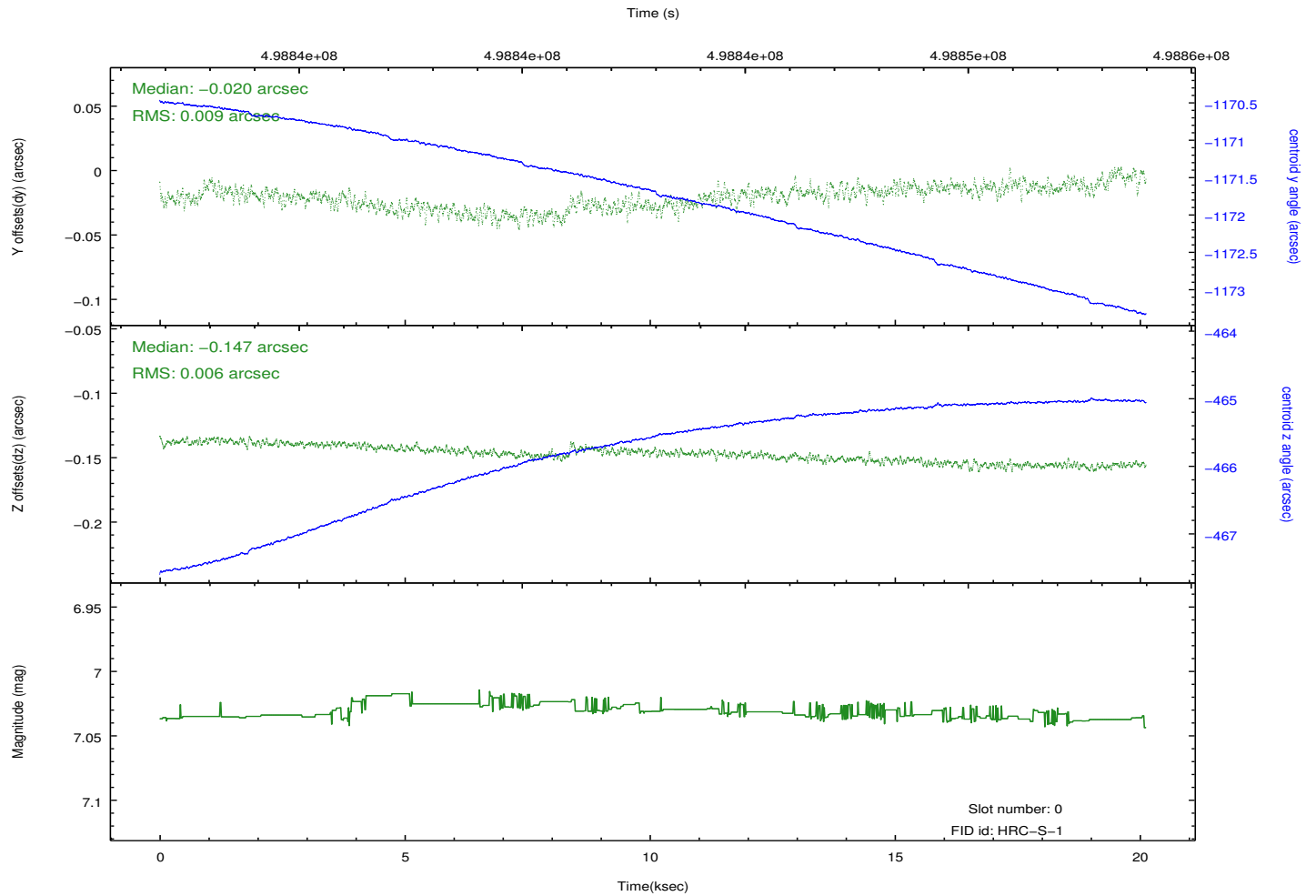
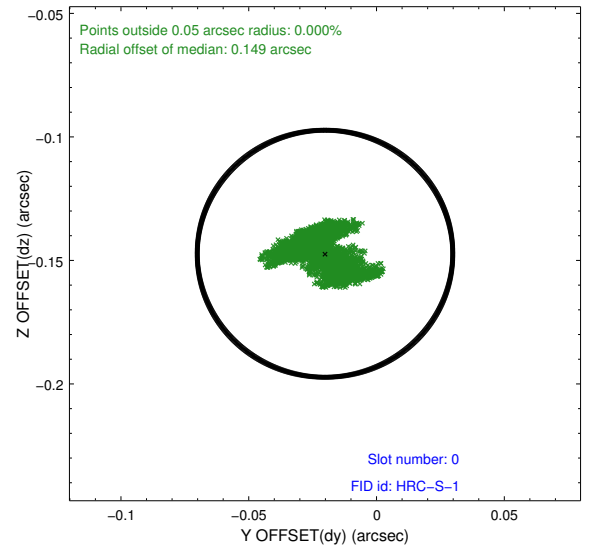
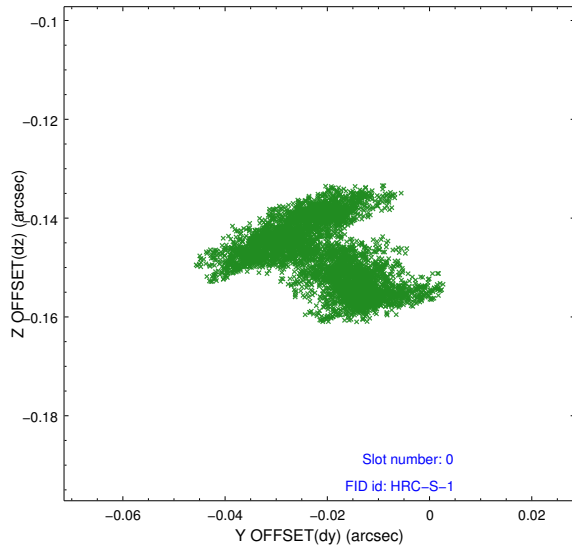


2.4.5 Slot 7

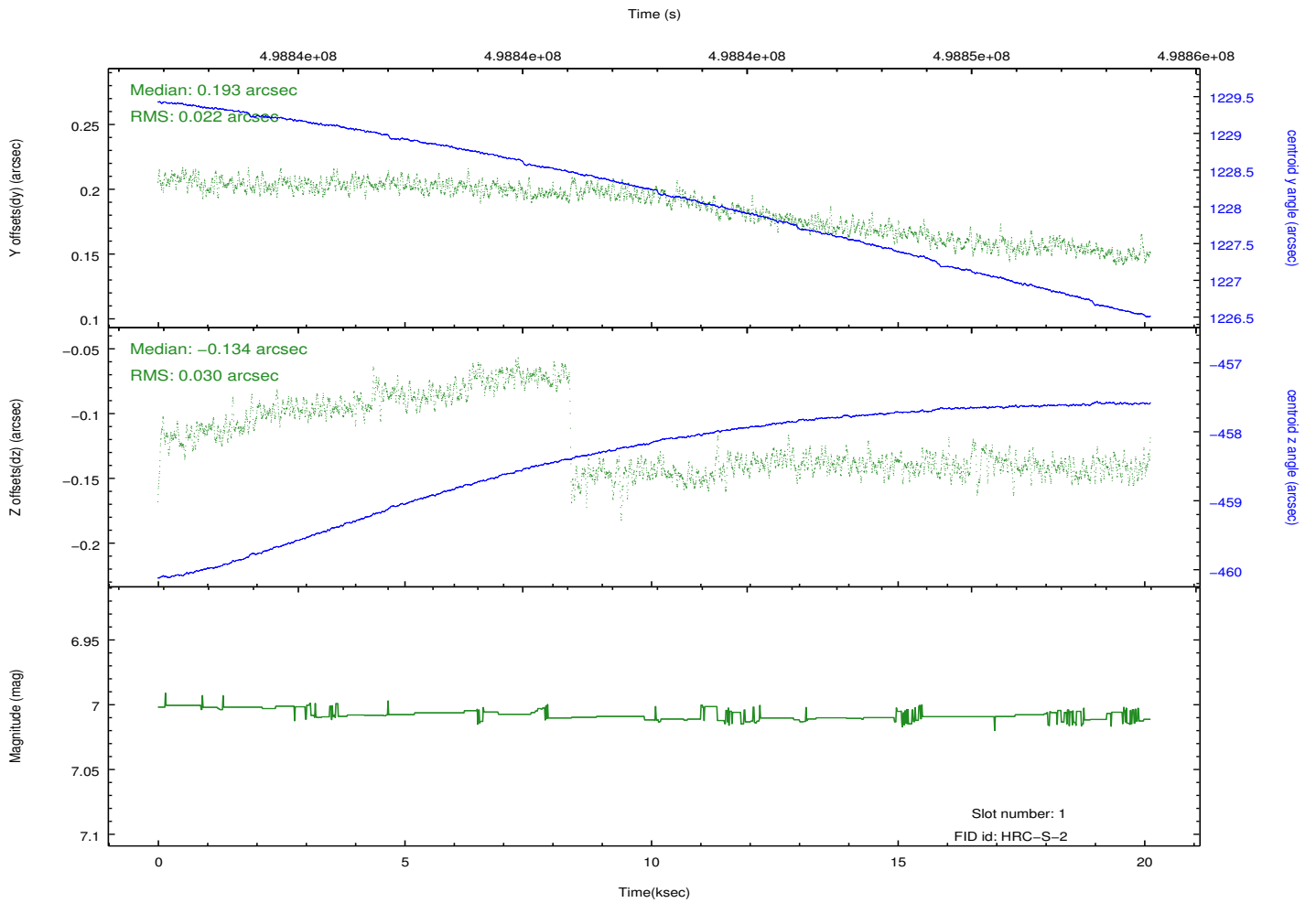
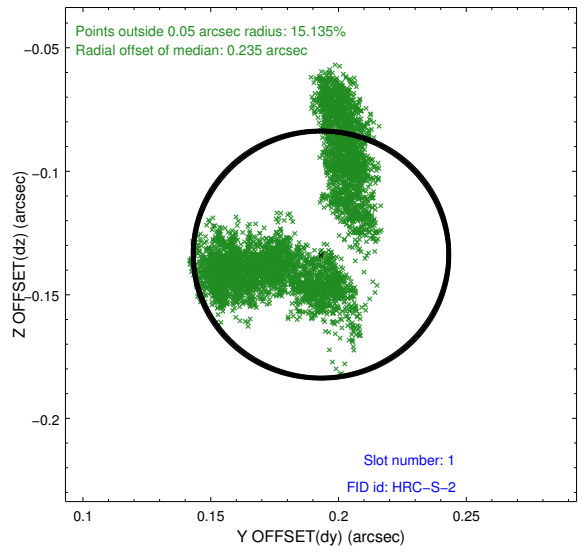
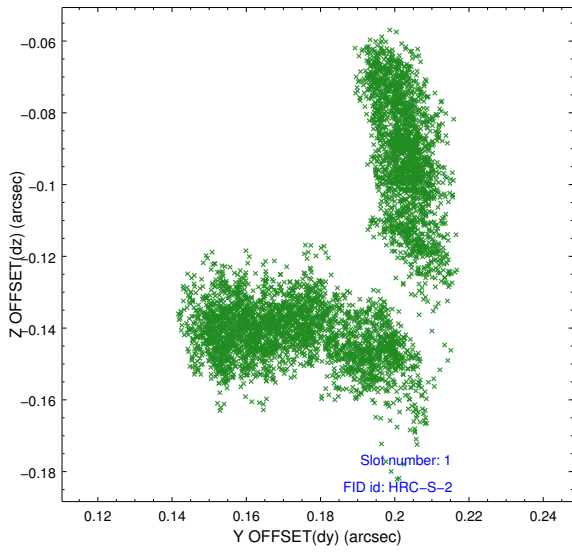


2.5 FID Slots

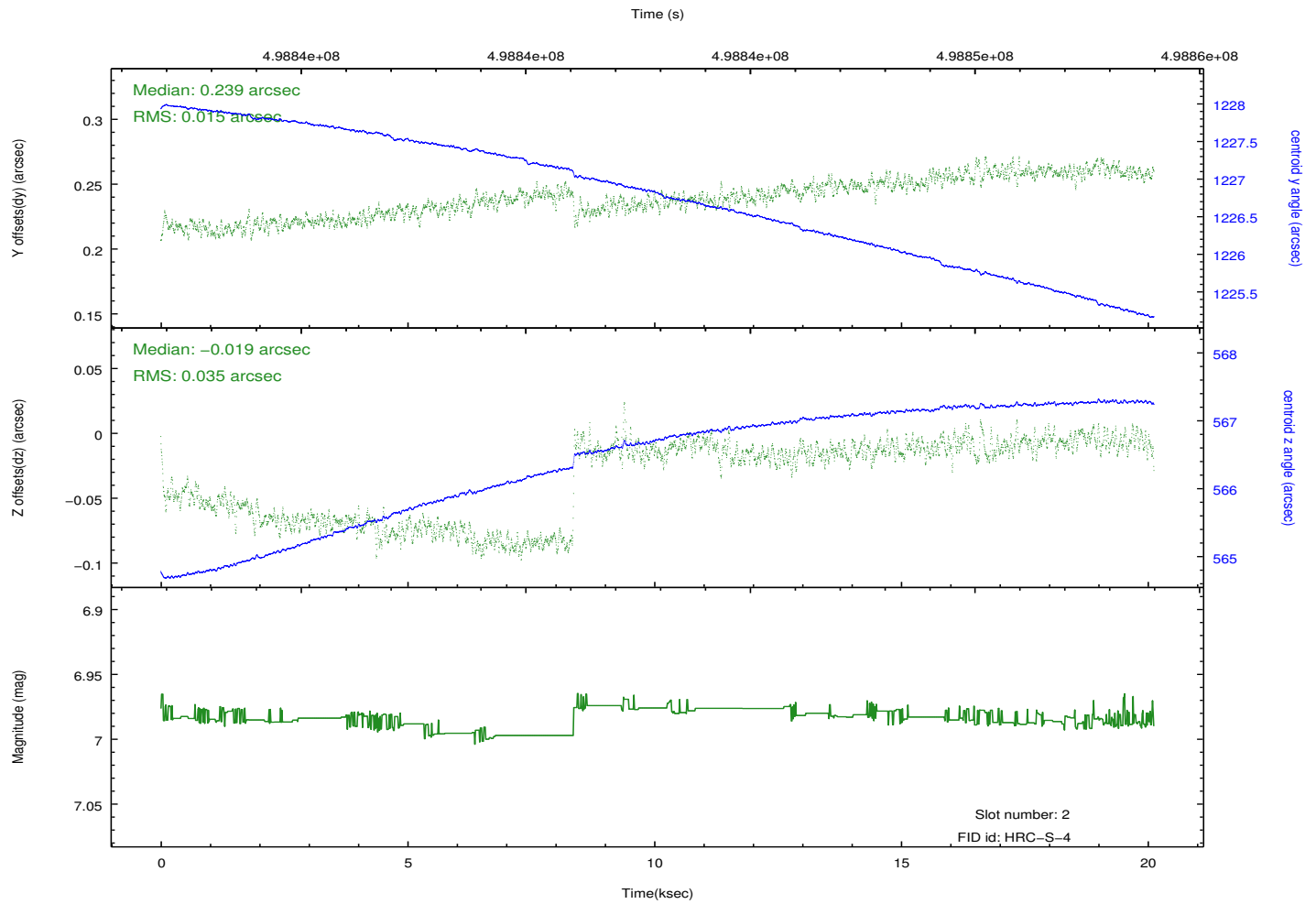
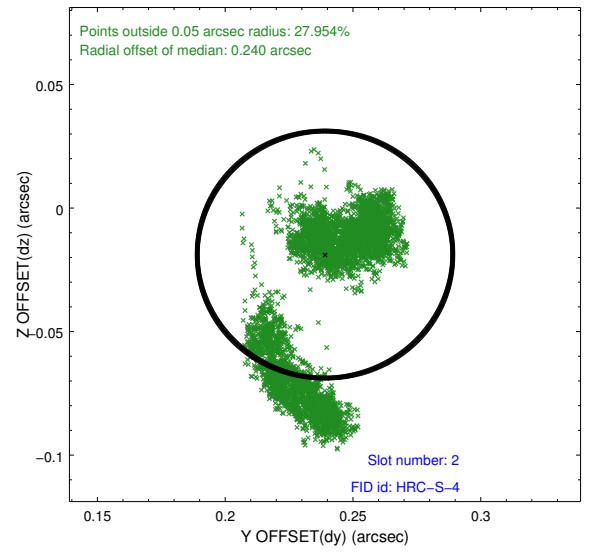
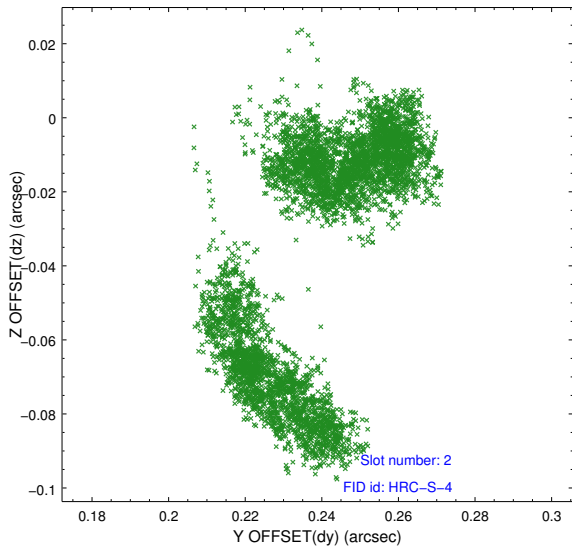
2.5.1 Slot 0



2.5.2 Slot 1

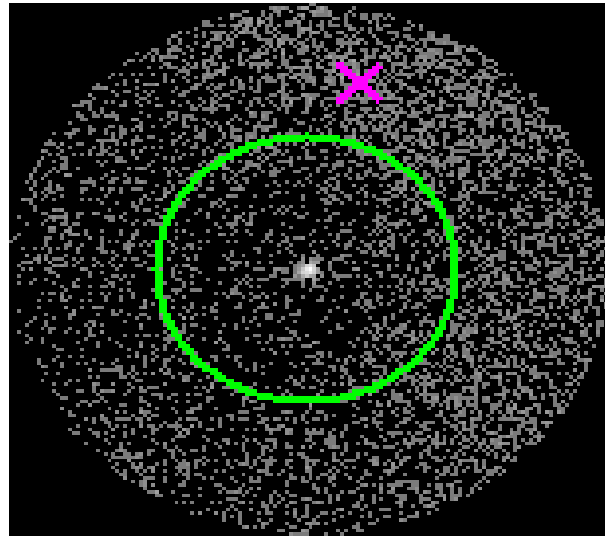


2.5.3 Slot 2

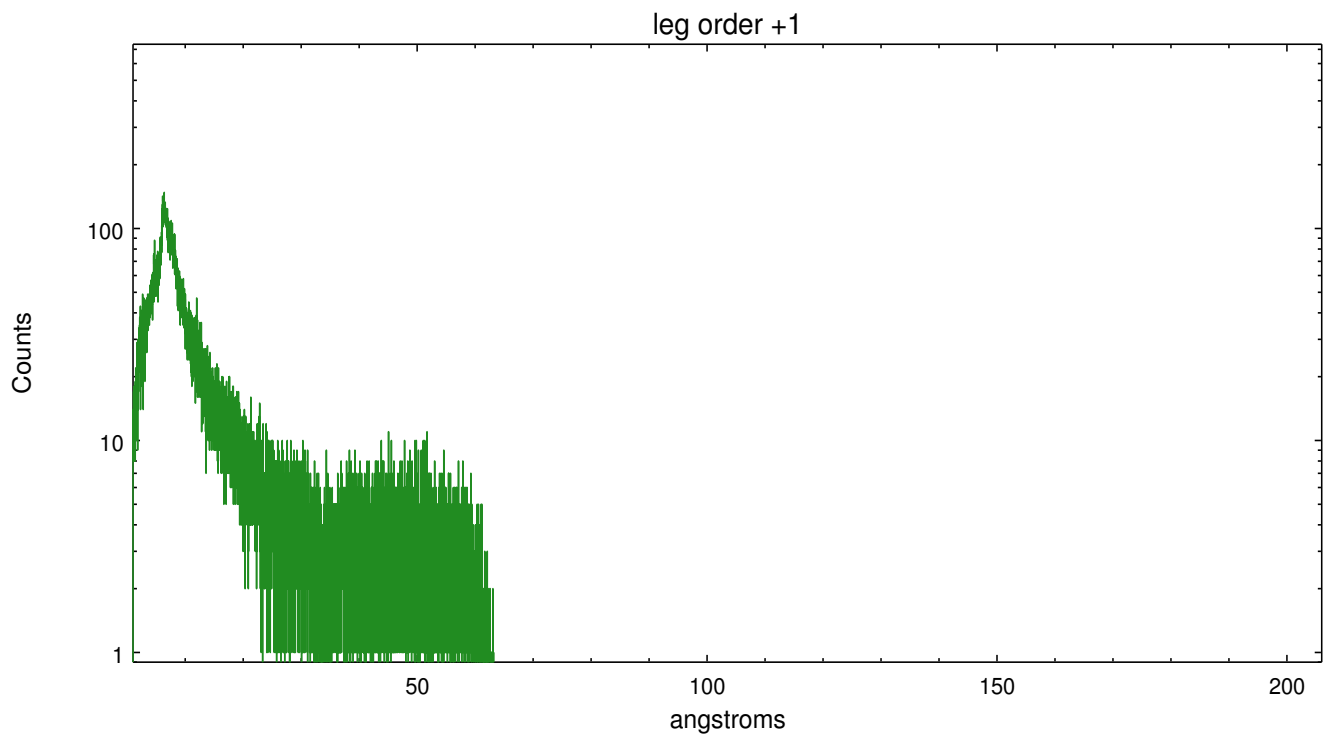
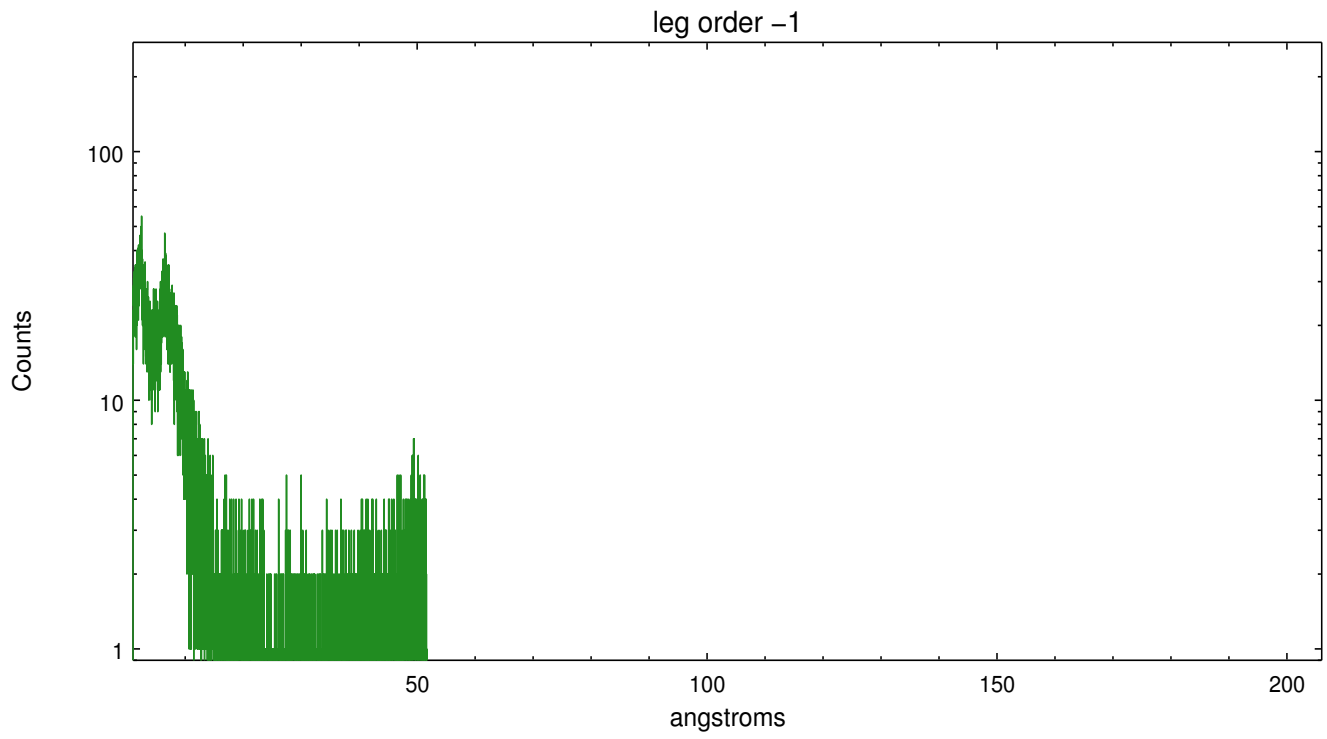


3 Gratings

3.1 LETG Arm



LETG Zero Order



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2013.10.25
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.126132351279

A.2 Comments

The MCP HV levels and the trigger threshold of the instrument were set to non-standard values and as such the instrument is no longer 'calibrated'. Use of the LETG grating with HRC for an extended source results in a degradation of the spectral resolution. There is no longer a unique mapping between position of an event on the focal plane and wavelength.