

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 14684 - L2 Version 2
Chandra X-Ray Center

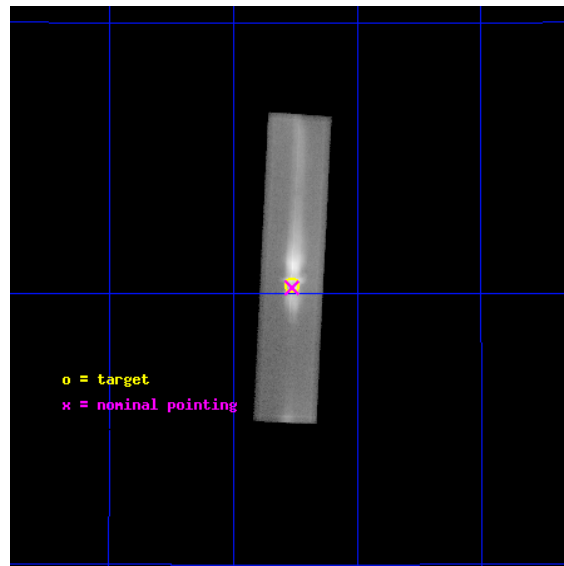
L2 Processing Date : Mar 7 2013

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1 Front

seq_num	501818	Sequence number
obs_id	14684	Observation id
title	Pre-planned Target of Opportunity Observations of the Crab Nebula upon the Occurrence of a Gamma-Ray Flare	Proposal title
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	83.631803414307	Nominal RA [deg]
dec_nom	22.010981998022	Nominal Dec [deg]
roll_nom	272.81037839847	Nominal Roll [deg]
revision	2	Processing version of data
ontime	19571.351059079	[s]
livetime	19485.209145373	Ontime multiplied by DTCOR
l2events	1092838	Number of level 2 events

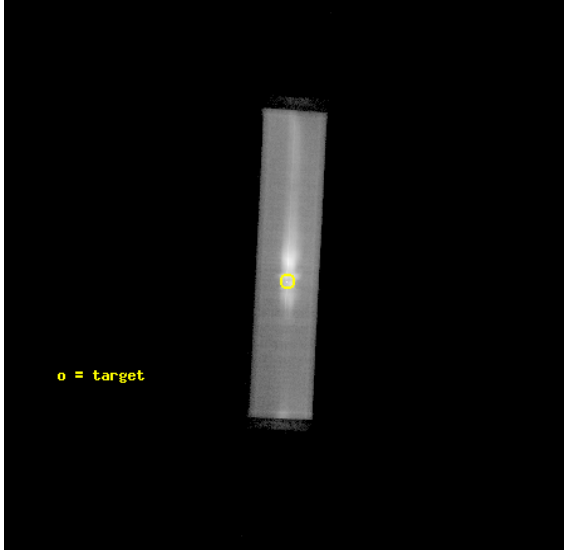


2 OBI

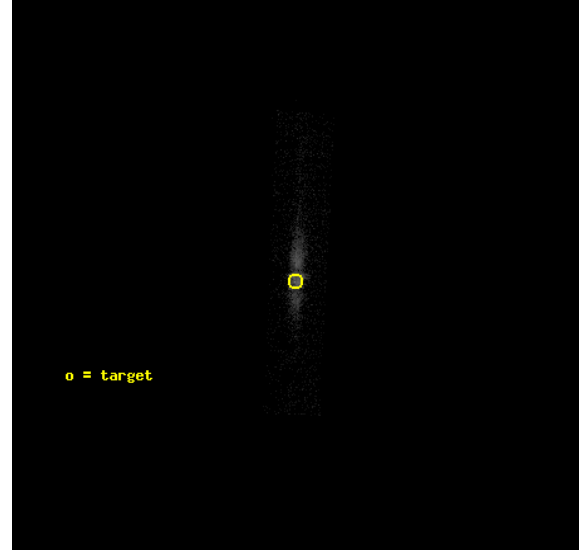
2.1 OBI

2.1.1 Images

Level 1 Image



Level 1 Bad Events



2.1.2 Parameters

obi_num	0	Obi number	sched_exp_time	20000.000000	[s] Scheduled observation exposure time
ascdsver	8.5.1.1	Processing system revision	ontime	19571.351059079	[s]
caldsver	4.5.6	 	l1events	1270527	Number of level 1 events
date	2013-03-07T19:27:52	Date and time of file creation			
revision	2	Processing version of data			

2.1.3 Events

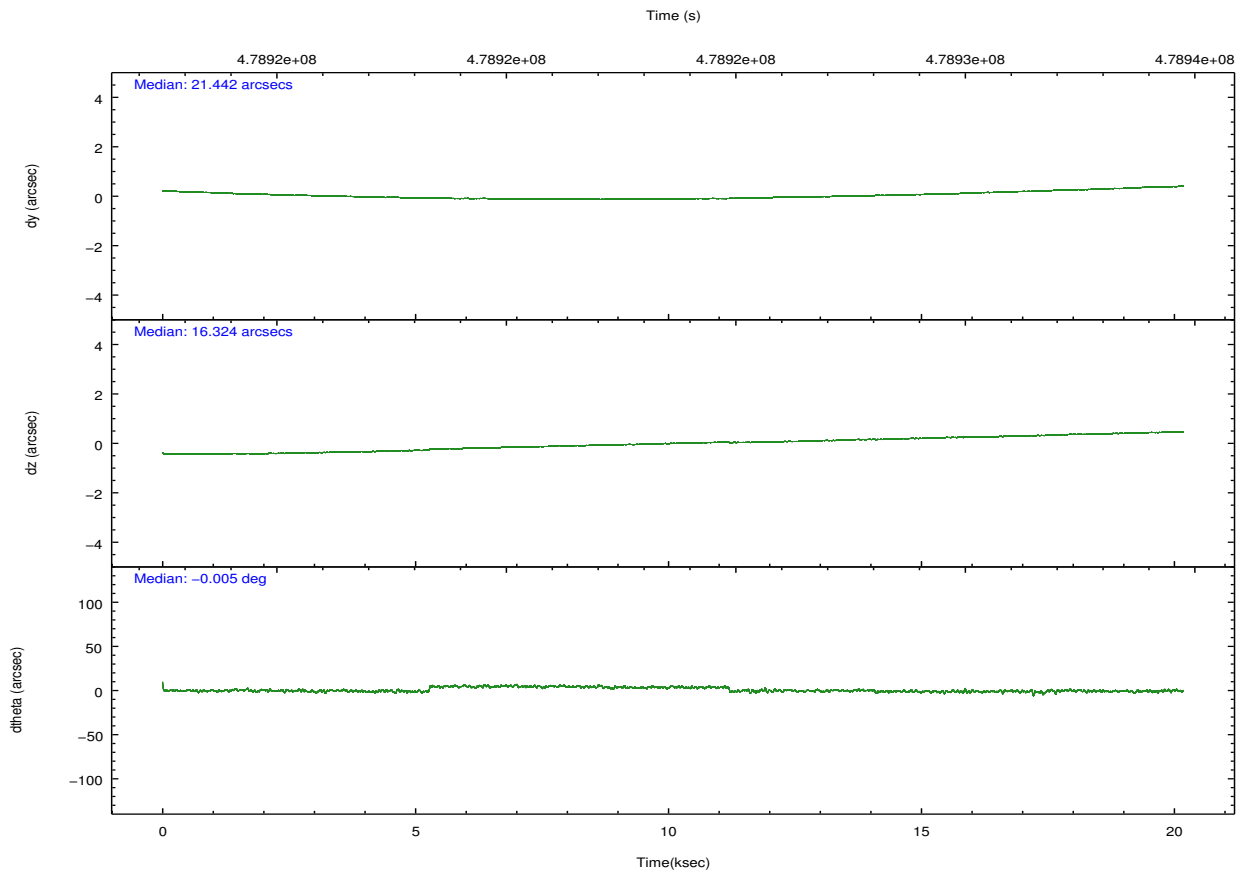
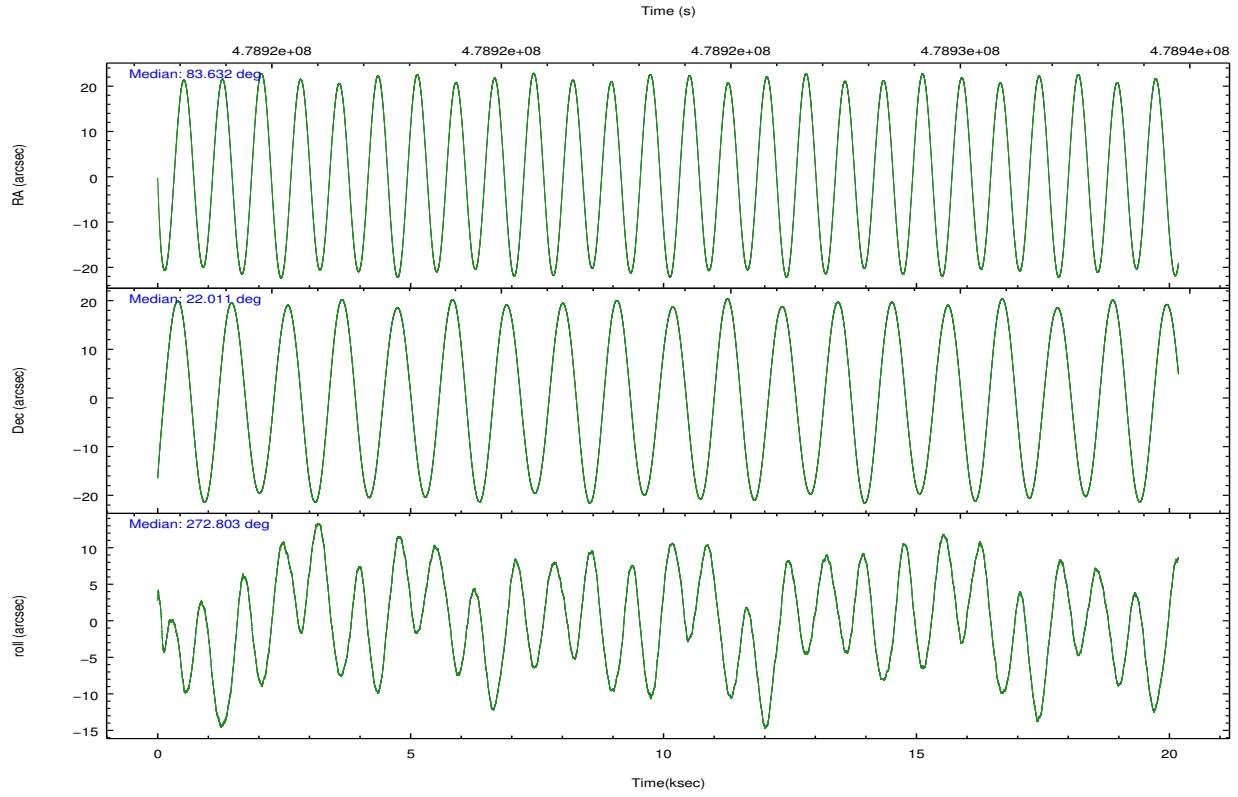
Level 1 Events

	segment 1	segment 2	segment 3
level 1 events	324	1270198	5
rejected events	6	12603	5
rejected %	1%	0%	100%

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	83.613786	83.63180341430717			
[deg] Pointing Dec	22.034227	22.01098199802248			
[deg] Pointing Roll	272.749799	272.8103783984749			
[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)	478913716.184000	478912768.25218			
Observation start date	2013-03-05T23:34:09	2013-03-05T23:19:28			
[s] Observation end time (MET)	478933716.184000	478935129.14089			
Observation end date	2013-03-06T05:07:29	2013-03-06T05:32:09			

2.3 Aspect

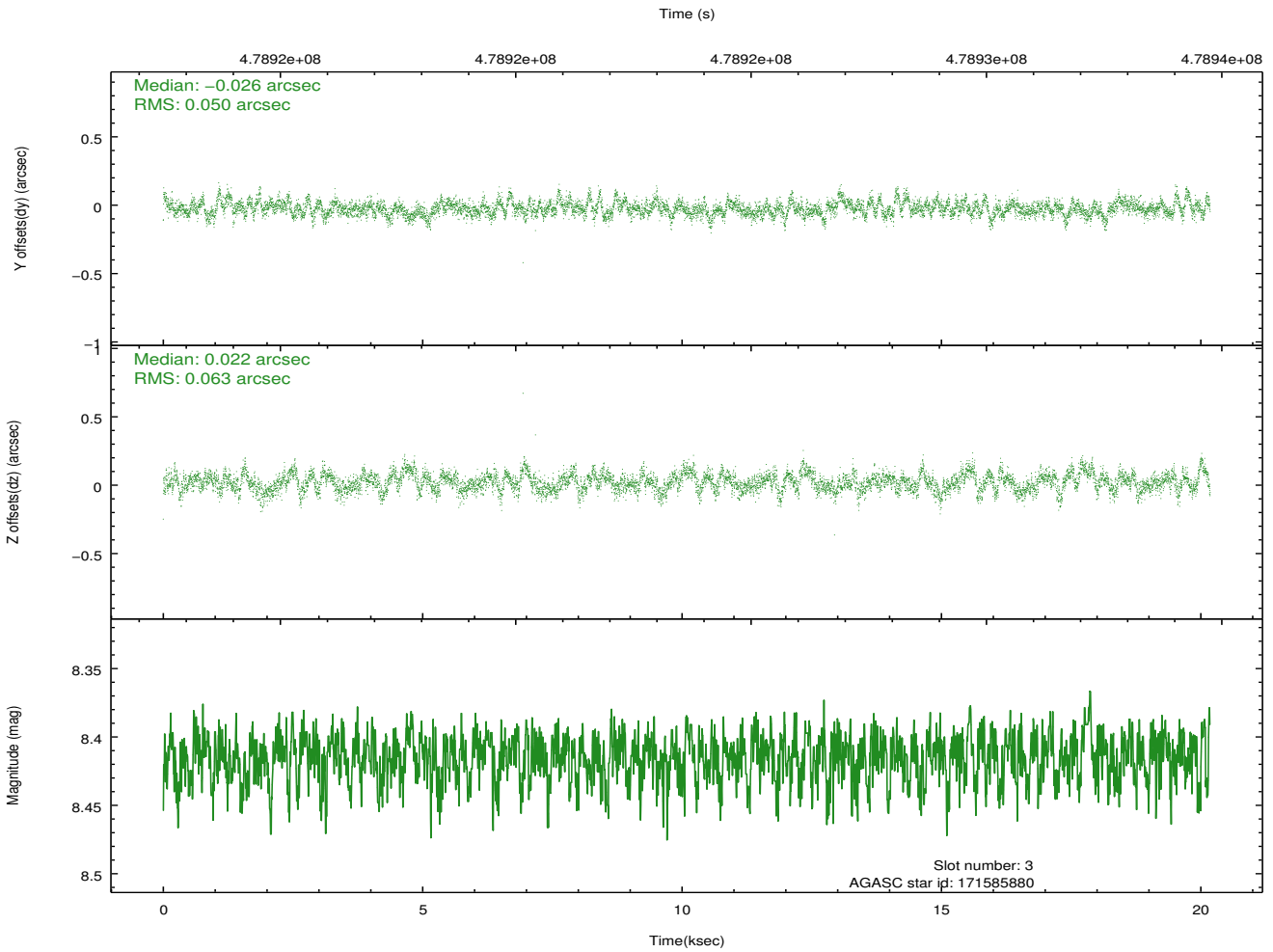
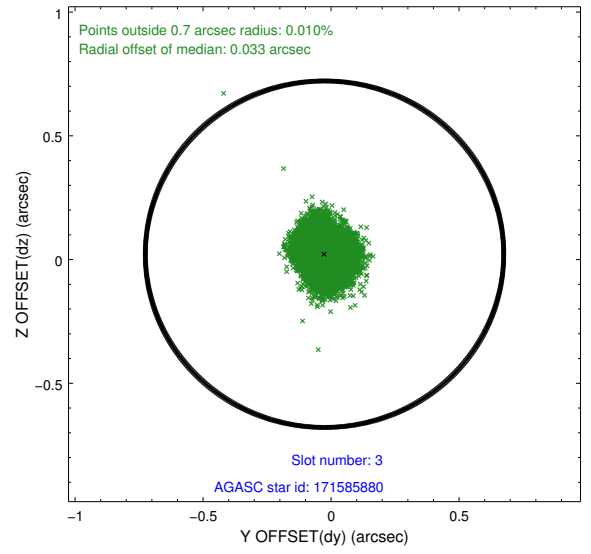
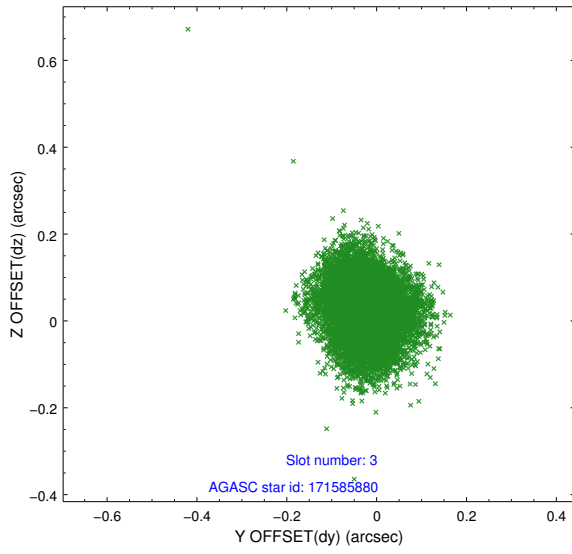


Slot Statistics

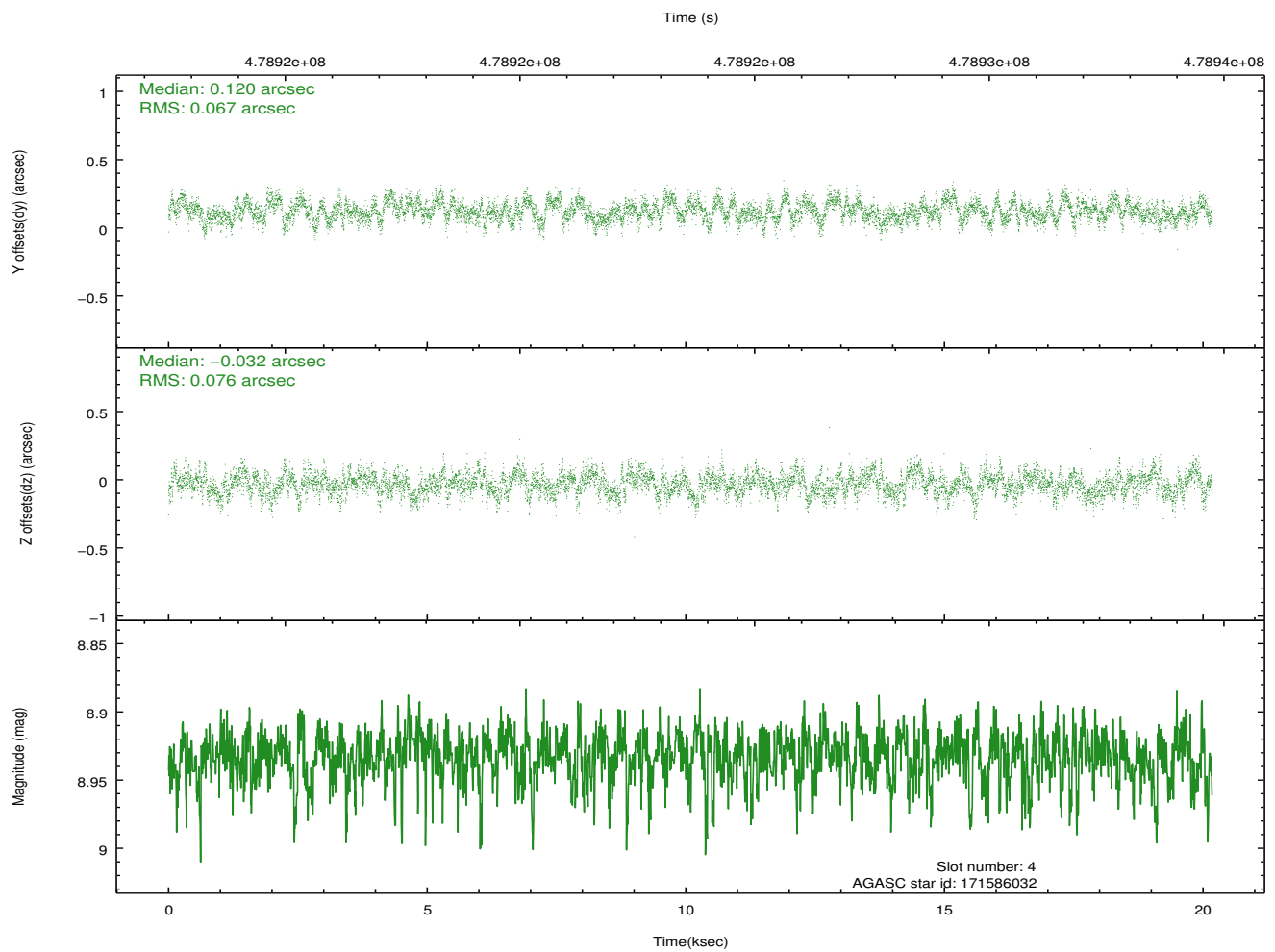
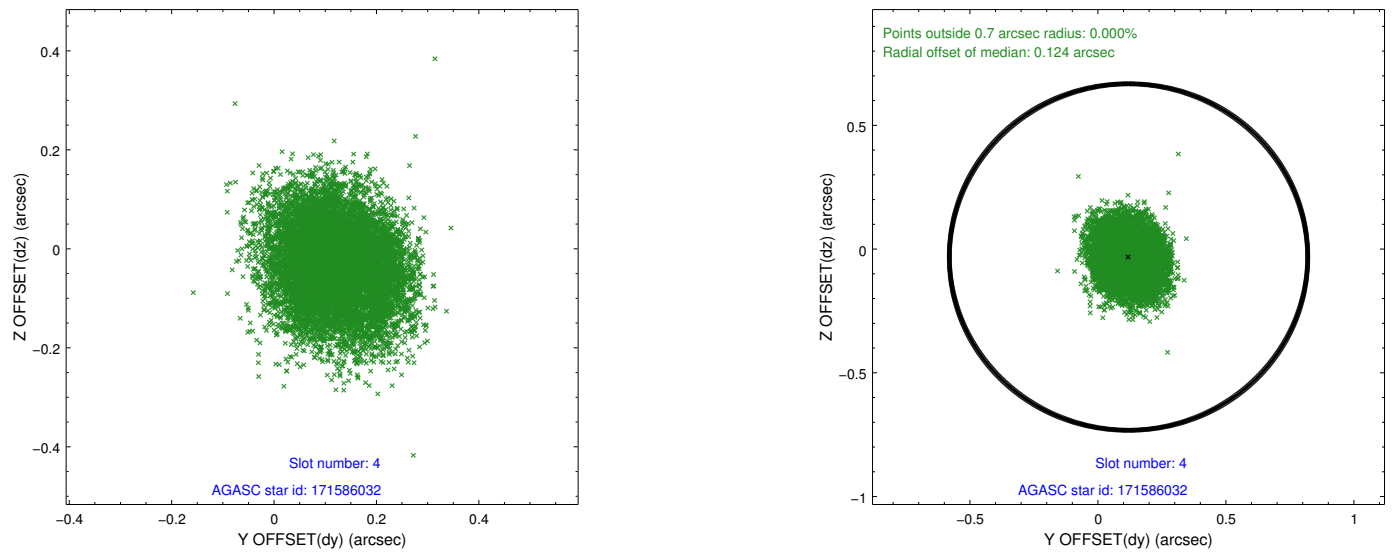
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	HRC-S-1	7.04	4921	-0.026	-0.206	0.021	0.030	0.000000	0.000000	-1176.16	-465.29
1	FID	HRC-S-3	7.05	4922	0.061	-0.056	0.021	0.030	0.000000	0.000000	-1179.05	564.29
2	FID	HRC-S-4	6.97	4922	0.351	-0.033	0.007	0.013	0.000000	0.000000	1222.22	567.13
3	GUIDE	171585880	8.41	9842	-0.026	0.022	0.086	0.138	83.676260	22.176319	-500.37	232.86
4	GUIDE	171586032	8.93	9824	0.120	-0.032	0.109	0.172	83.950197	22.083225	-122.99	1129.75
5	GUIDE	171721904	9.20	9820	-0.015	0.027	0.141	0.224	84.272676	22.116922	-196.30	2209.90
6	GUIDE	243941560	8.29	9841	-0.273	0.065	0.082	0.137	83.733264	22.568598	-1902.09	489.25
7	GUIDE	171597832	9.15	9818	0.188	-0.085	0.125	0.210	83.183230	21.366702	2329.97	-1556.51

2.4 Star Slots

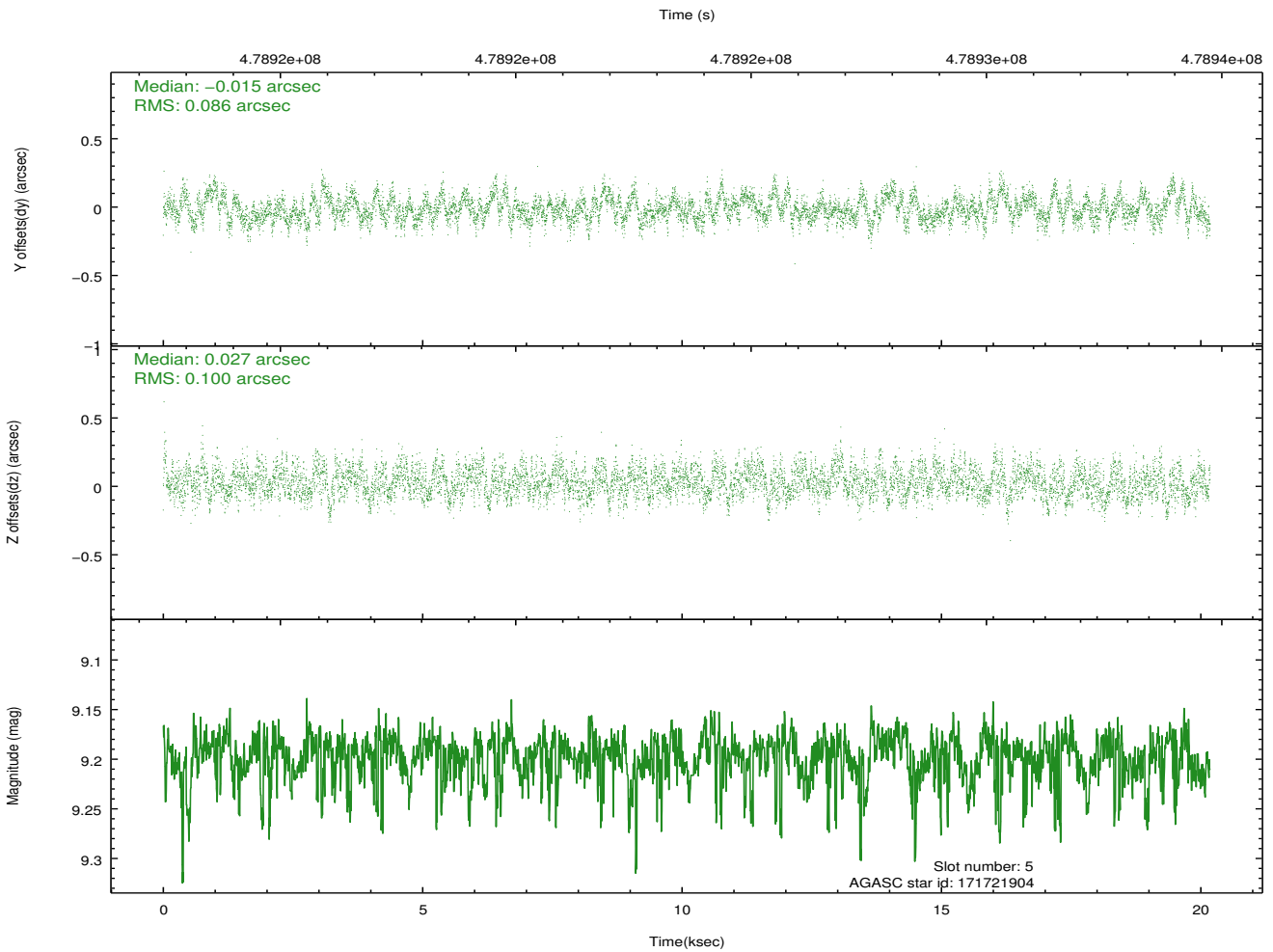
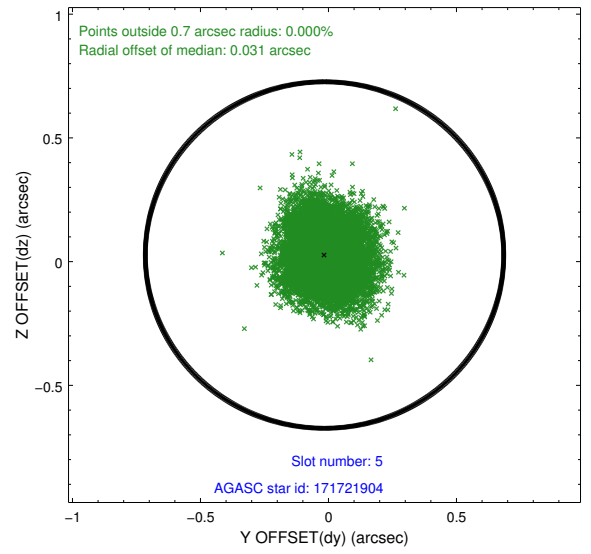
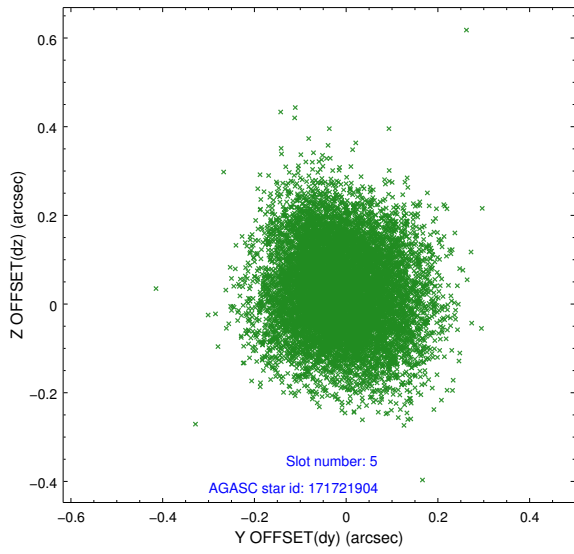
2.4.1 Slot 3



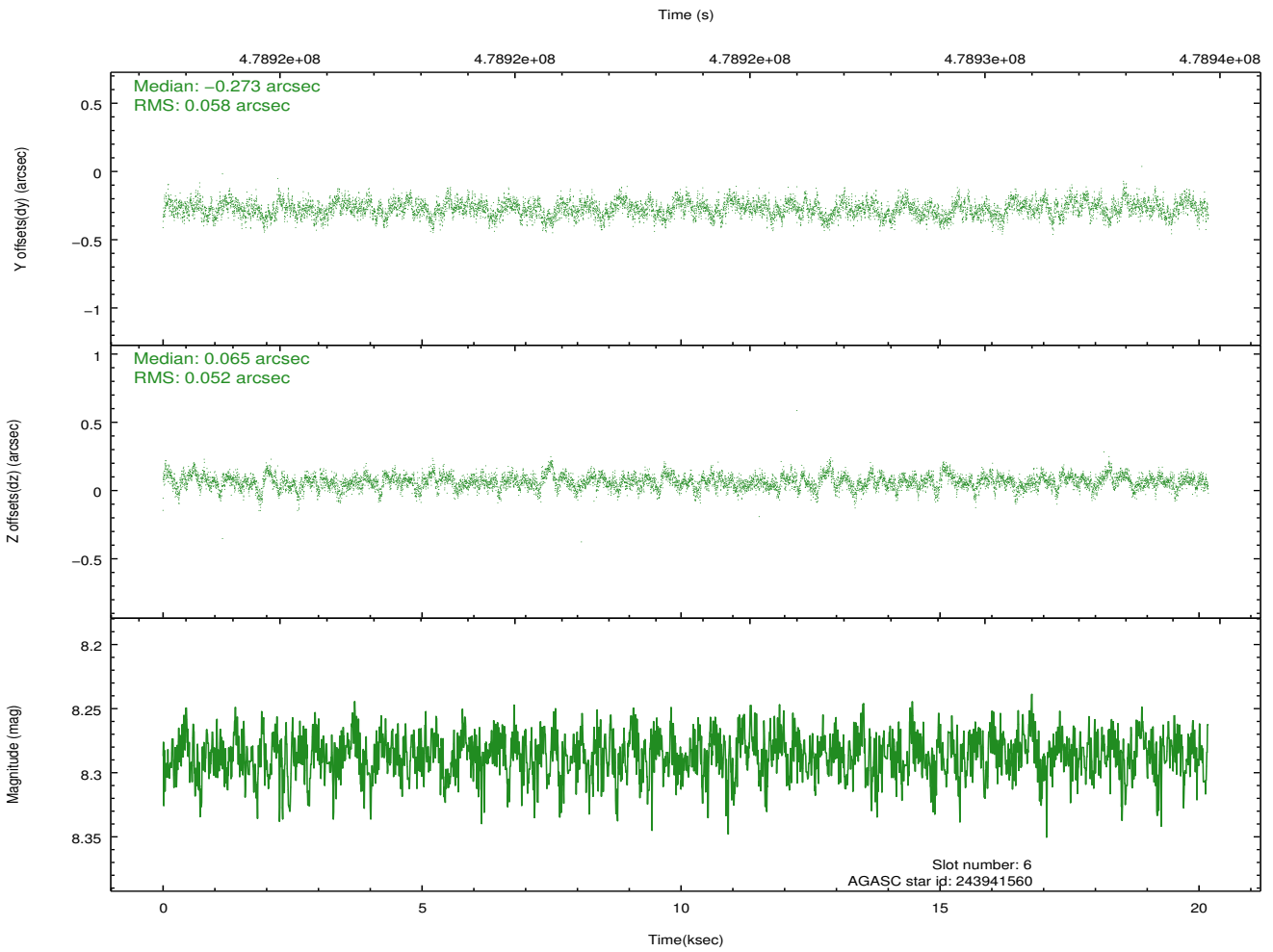
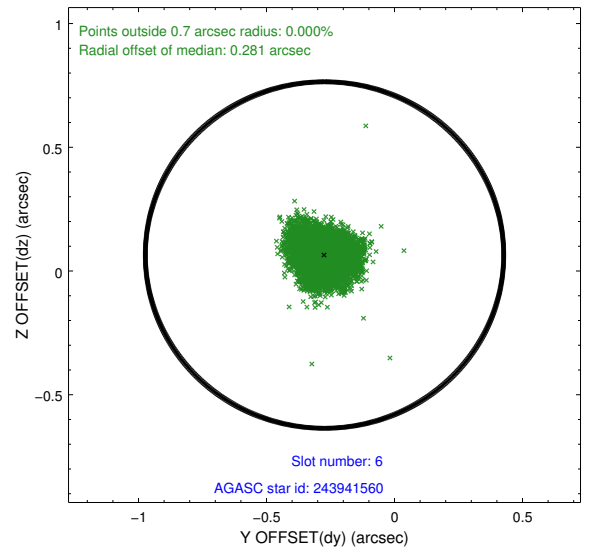
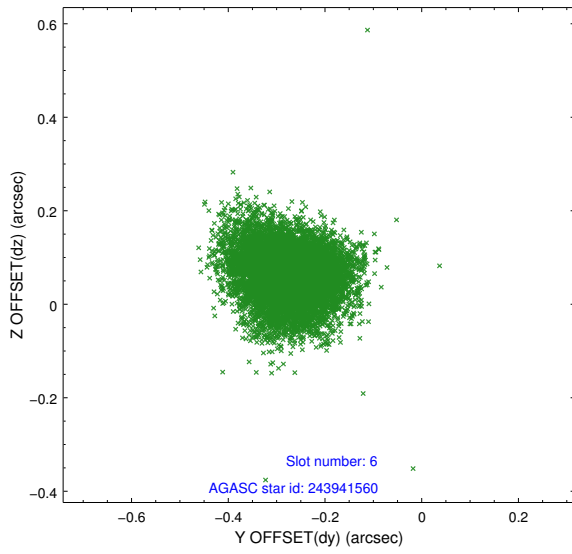
2.4.2 Slot 4



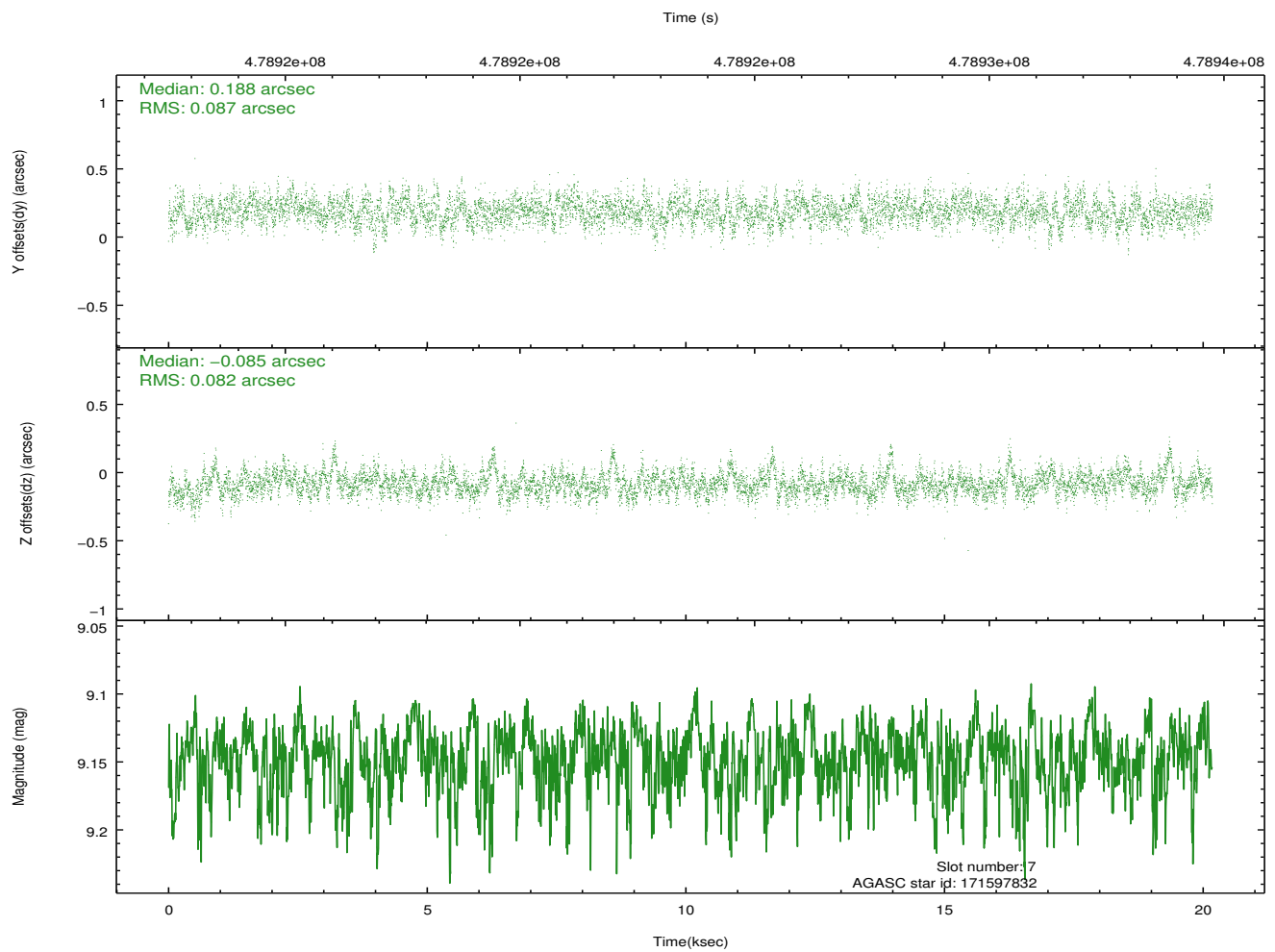
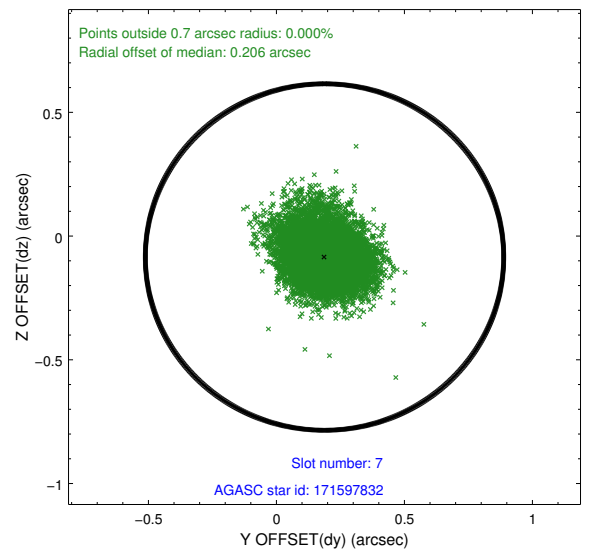
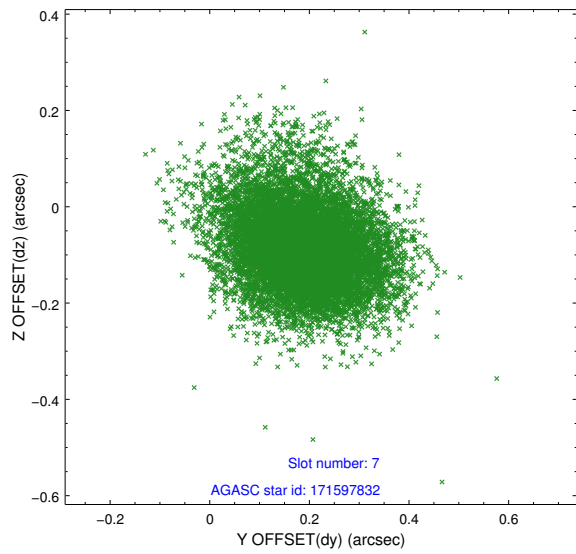
2.4.3 Slot 5



2.4.4 Slot 6

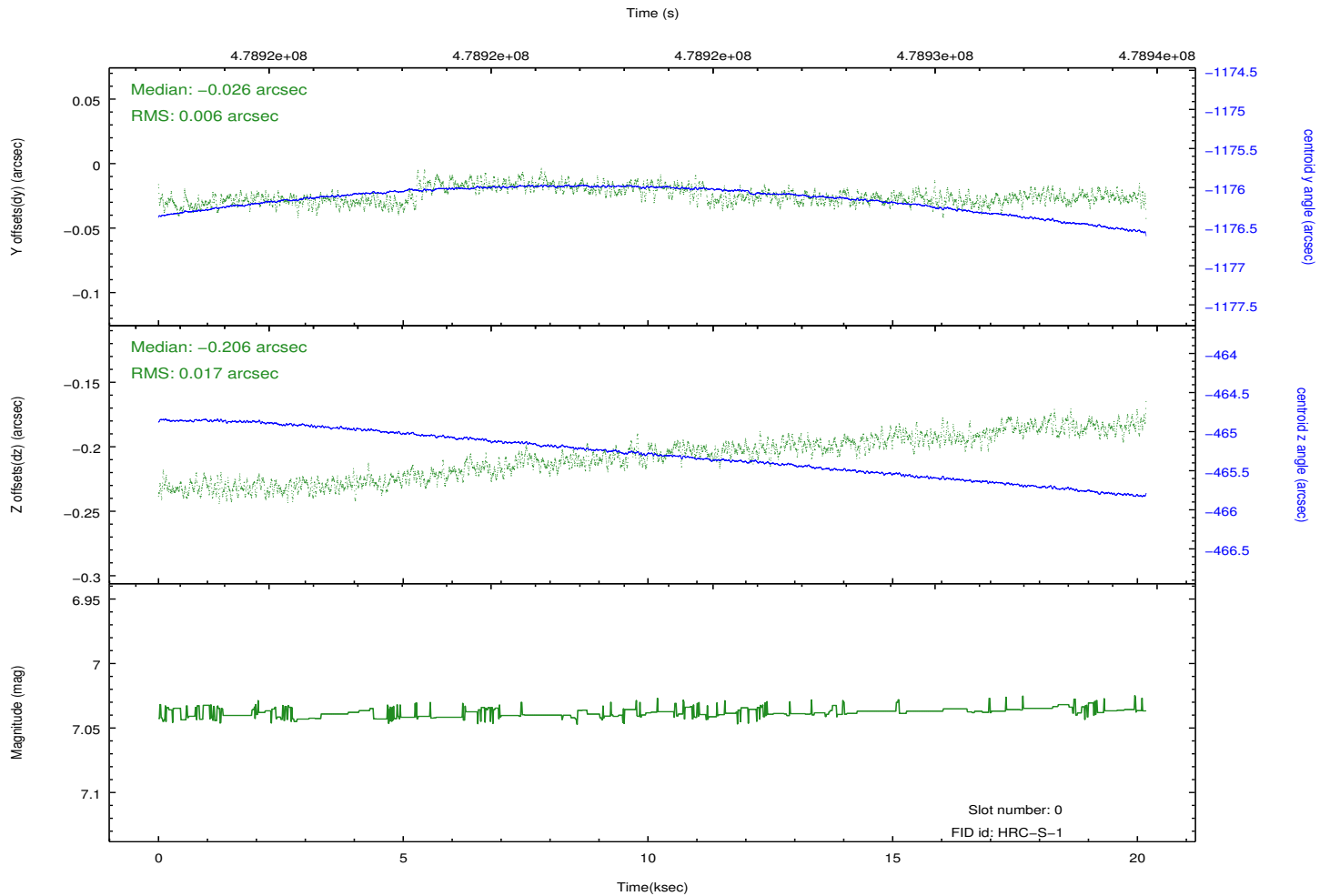
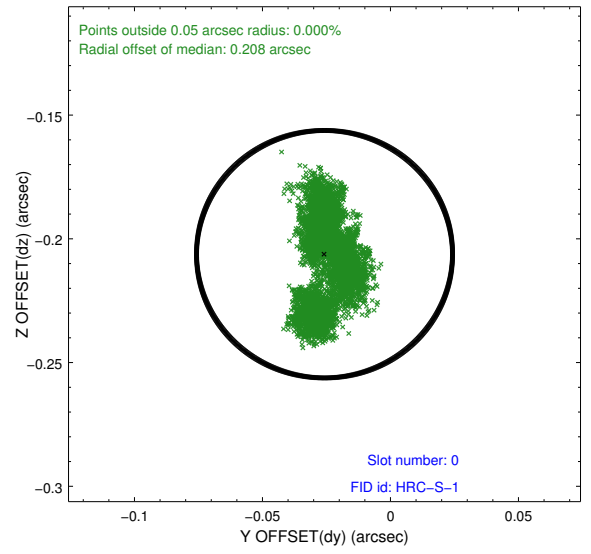
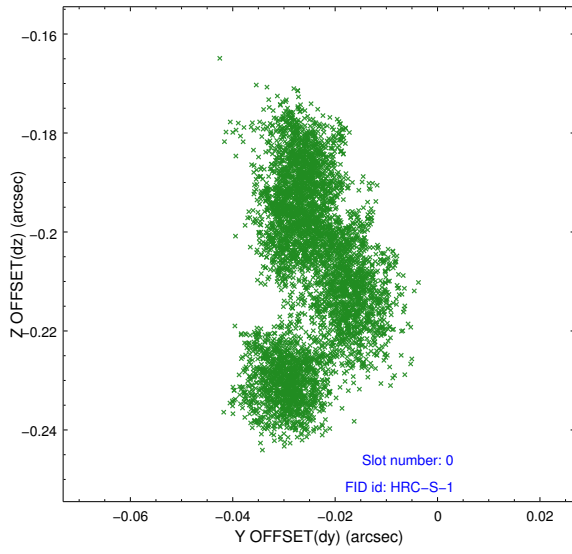


2.4.5 Slot 7

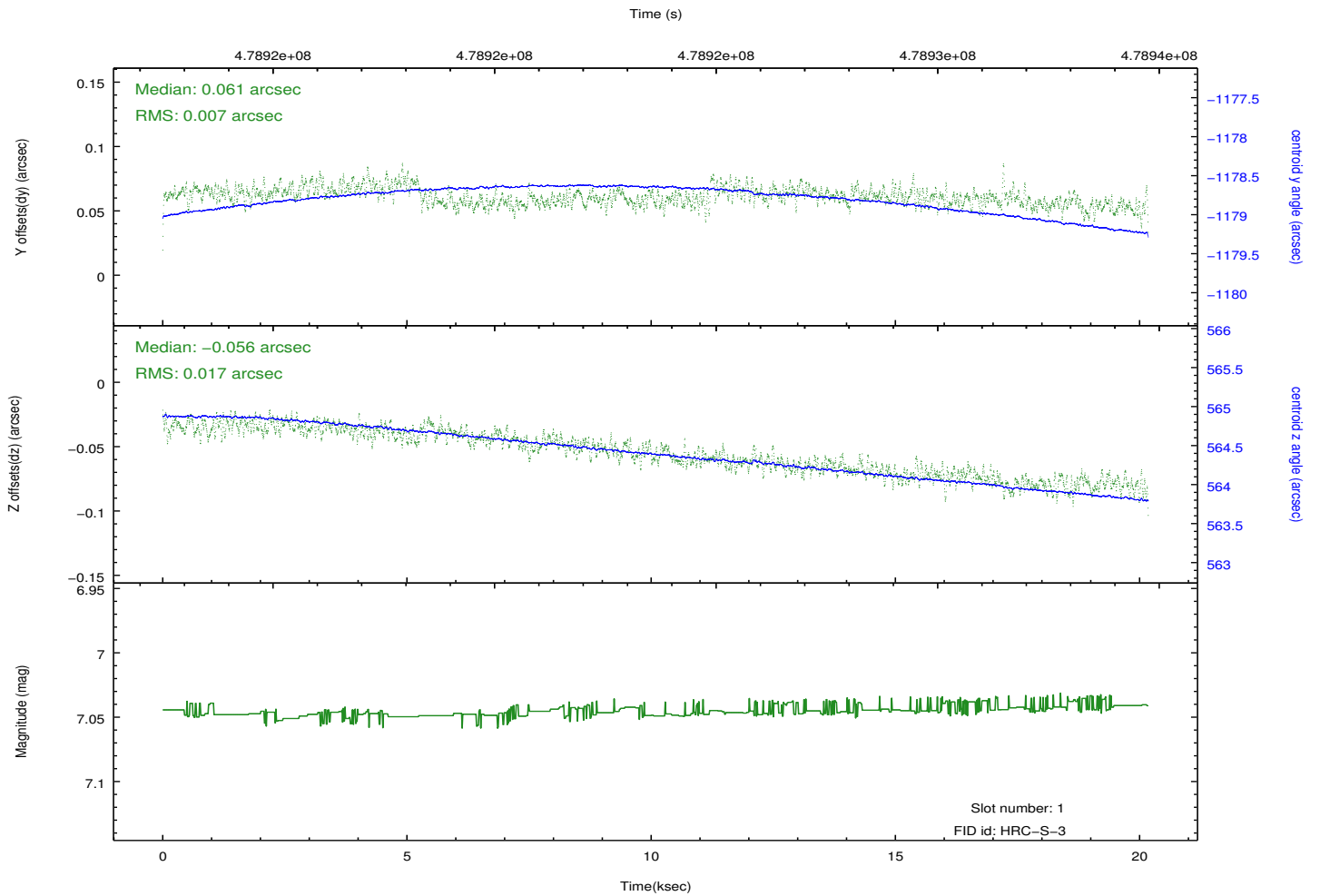
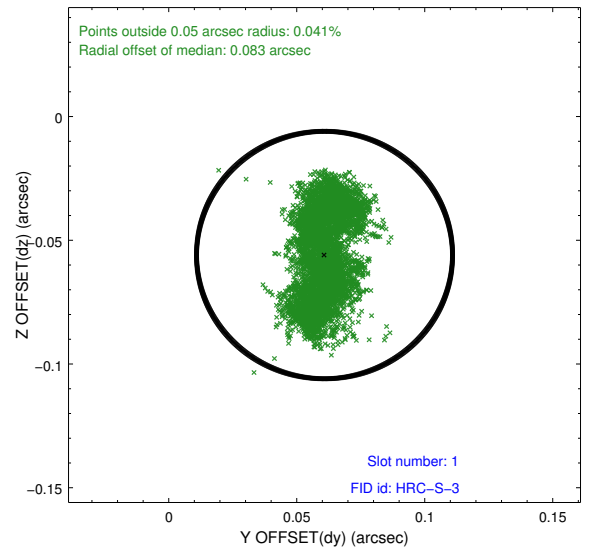
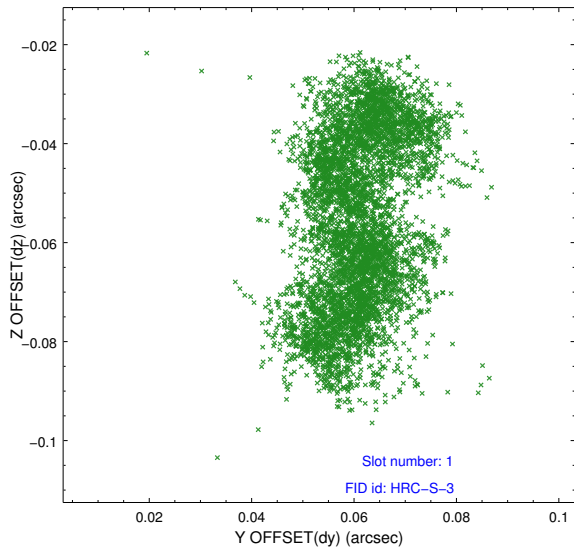


2.5 FID Slots

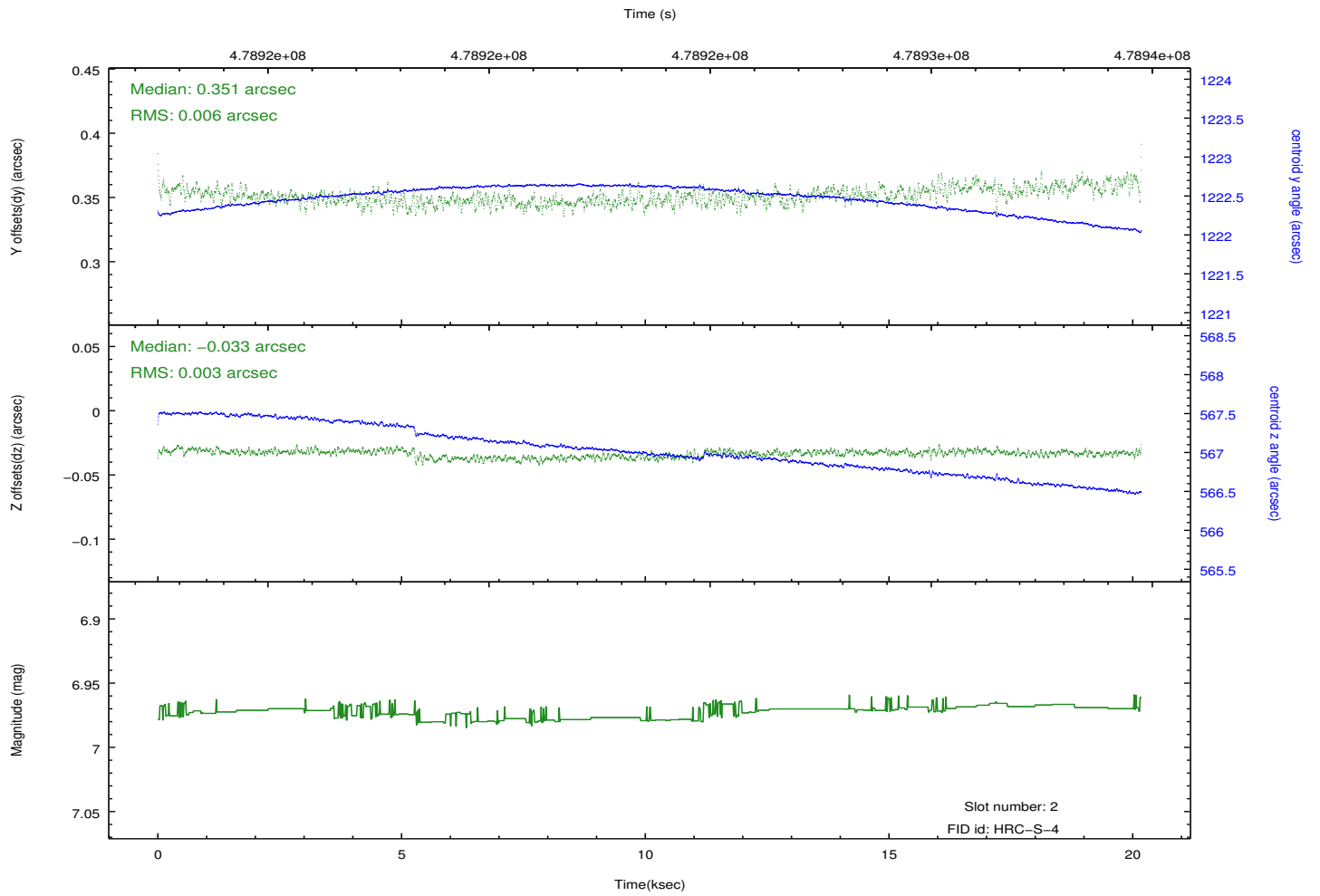
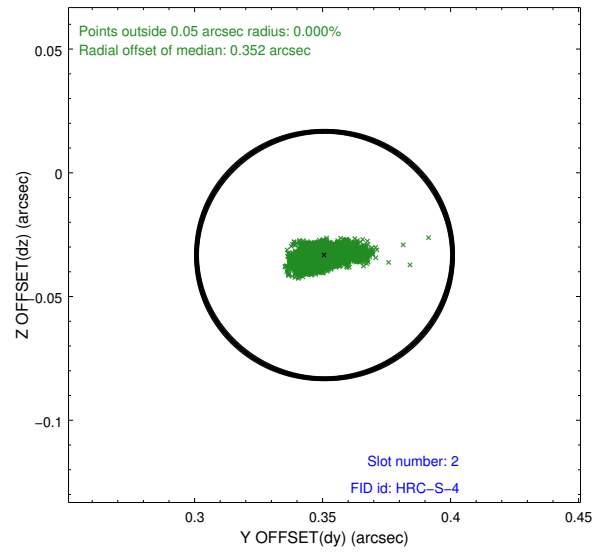
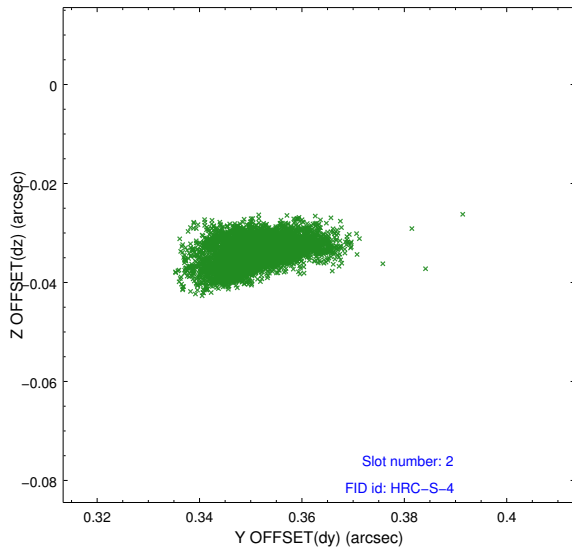
2.5.1 Slot 0



2.5.2 Slot 1

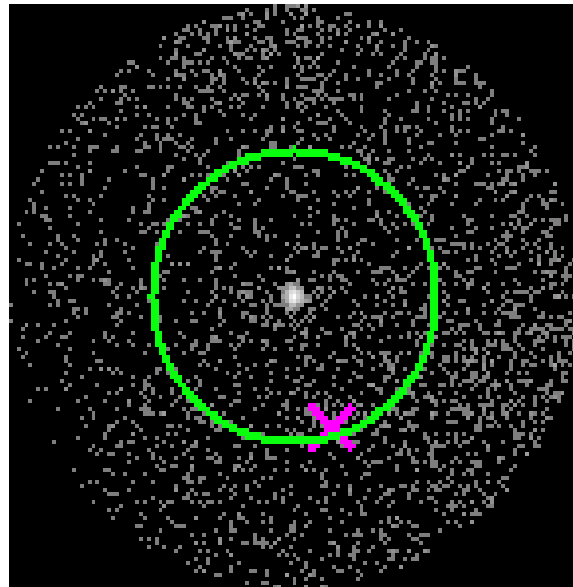


2.5.3 Slot 2

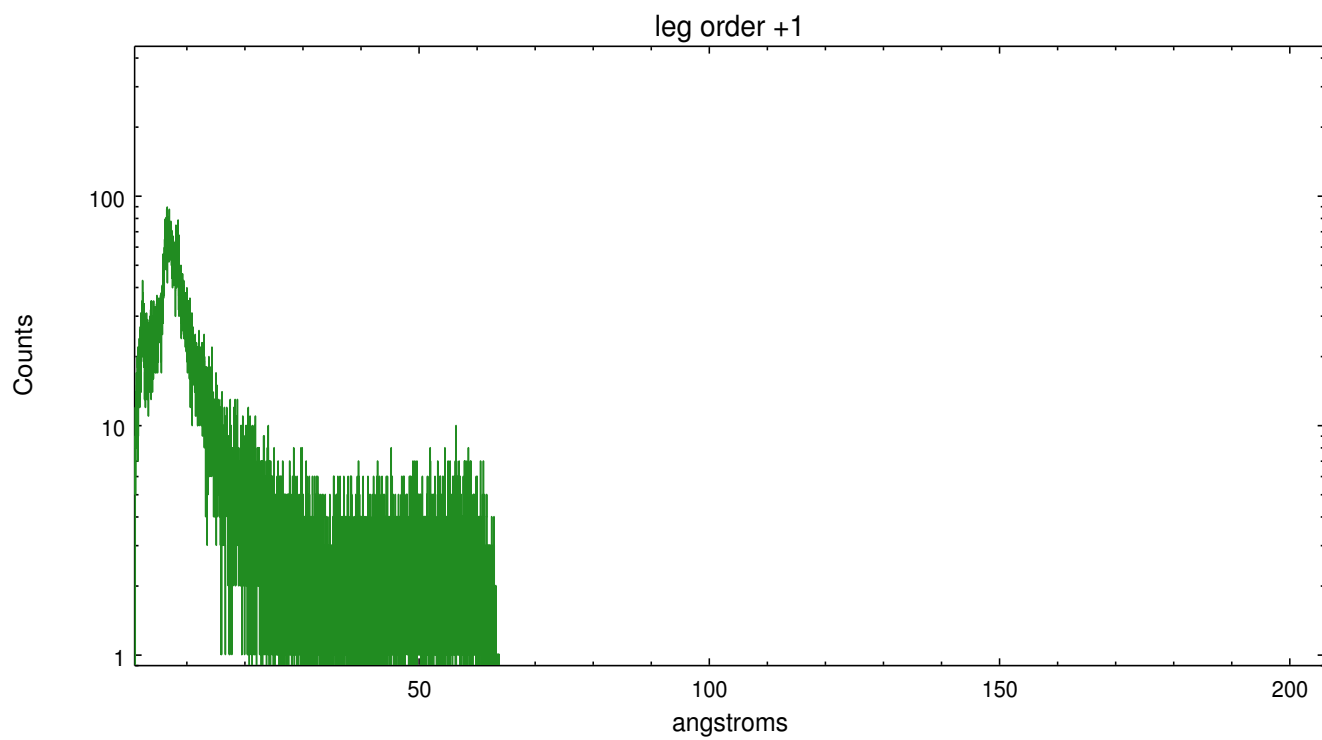
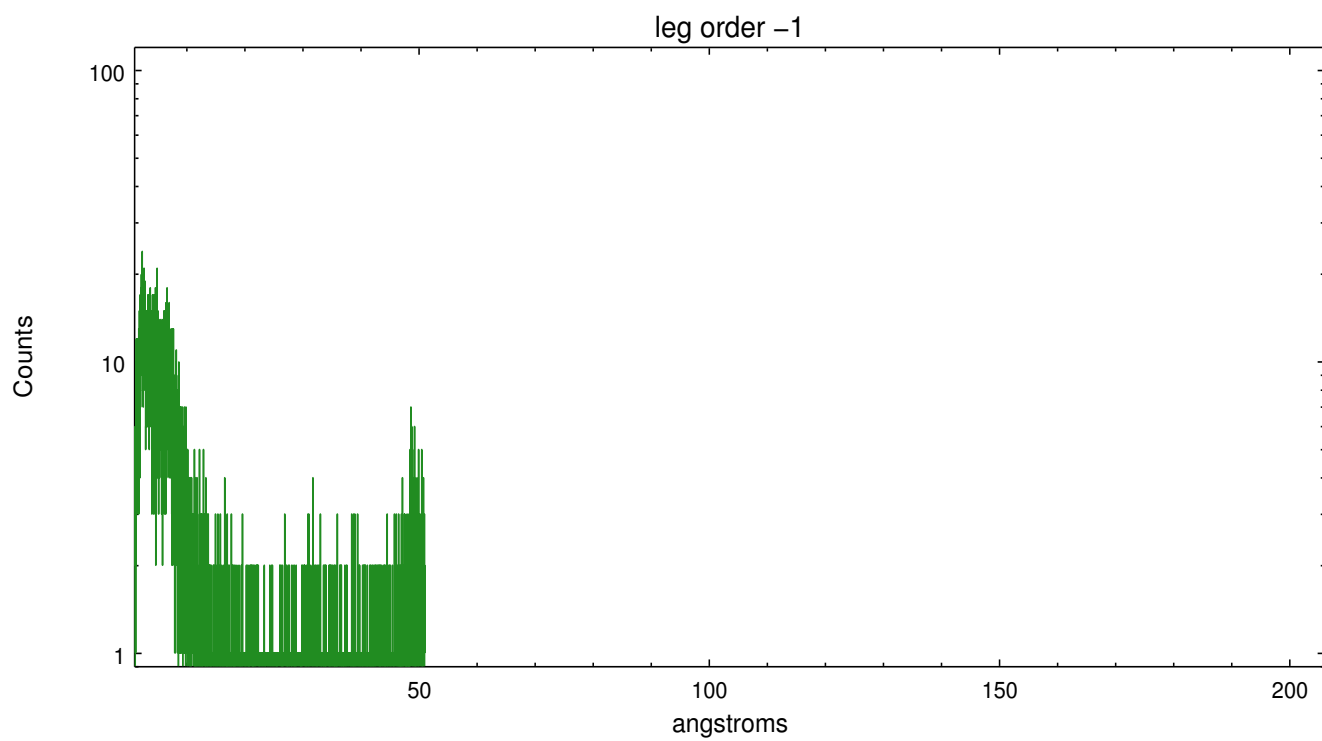


3 Gratings

3.1 LETG Arm



LETG Zero Order



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2013.03.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	19.571351059079

A.2 Comments

New charge time differs by more than 5% of existing charge time.

NEW CHARGE TIME = 19.571351 ks, 1 Obis

EXISTING CHARGE TIME = 17.394251 ks, 1 Obis.

===

This observation was taken at a lower than standard high voltage setting. The appropriate gain file must also be applied (gainfile = /data/CALDB/sdp/data/chandra/hrc/t_gmap/hracsD1999-07-22t_gmapN0002.fits)

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The GTI limits were also adjusted to allow the lower HV values.