

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 13121 - L2 Version 2
Chandra X-Ray Center

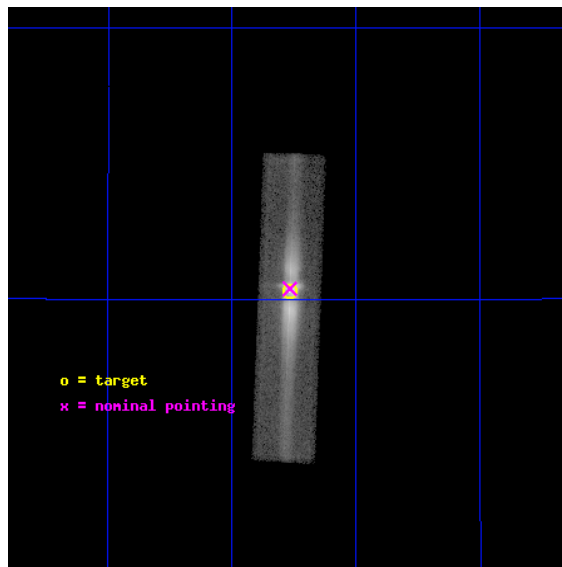
L2 Processing Date : Jul 4 2012

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1 Front

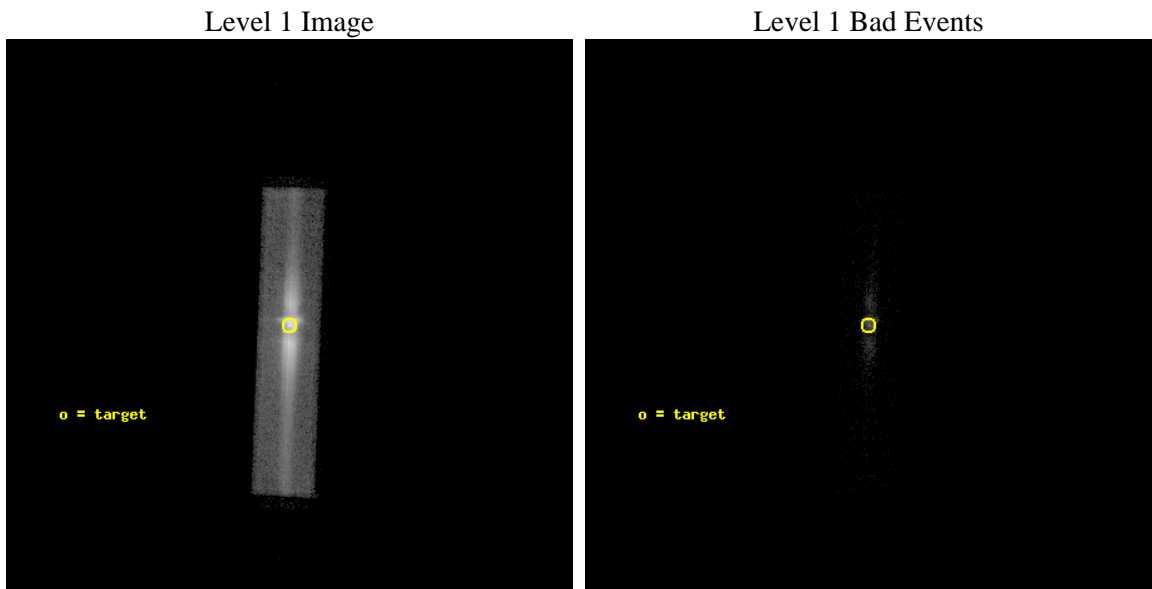
seq_num	590509	Sequence number
obs_id	13121	Observation id
title	Calibration path-finder second observation of the Crab Pulsar	Prop
observer	CXC Calibration	Principal investigator
object	PSRB0531+21	Source name
ra_targ	83.633333	Observer's specified target RA [deg]
dec_targ	22.014472	Observer's specified target Dec [deg]
ra_nom	83.632965474972	Nominal RA [deg]
dec_nom	22.019304865308	Nominal Dec [deg]
roll_nom	92.109592482375	Nominal Roll [deg]
revision	2	Processing version of data
ontime	2136.8688598275	[s]
livetime	1588.5010083611	Ontime multiplied by DTCOR
l2events	289190	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	2000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	2136.8688598275	[s]
caldsver	4.5.0	 	l1events	351727	Number of level 1 events
date	2012-07-04T15:19:58	Date and time of file creation			
revision	2	Processing version of data			

2.1.3 Events

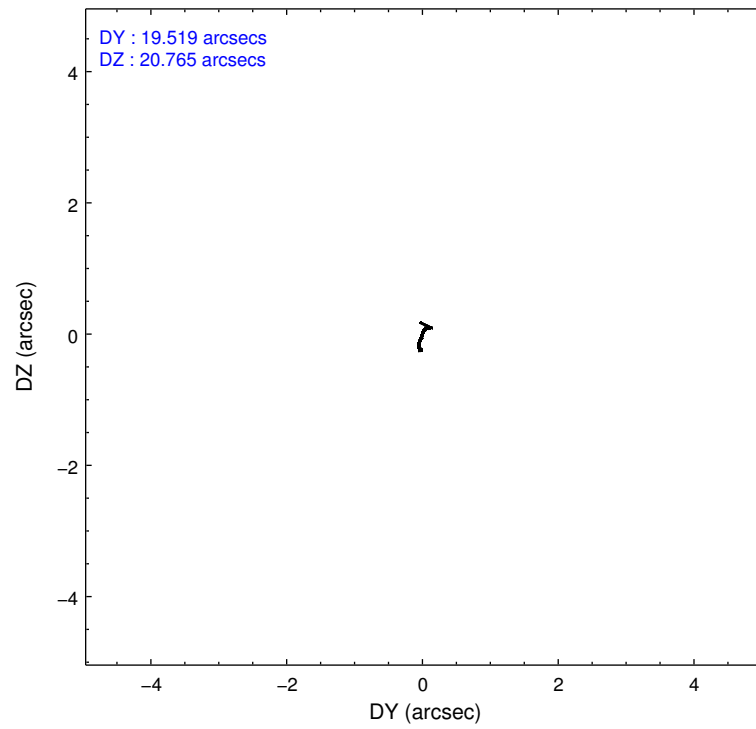
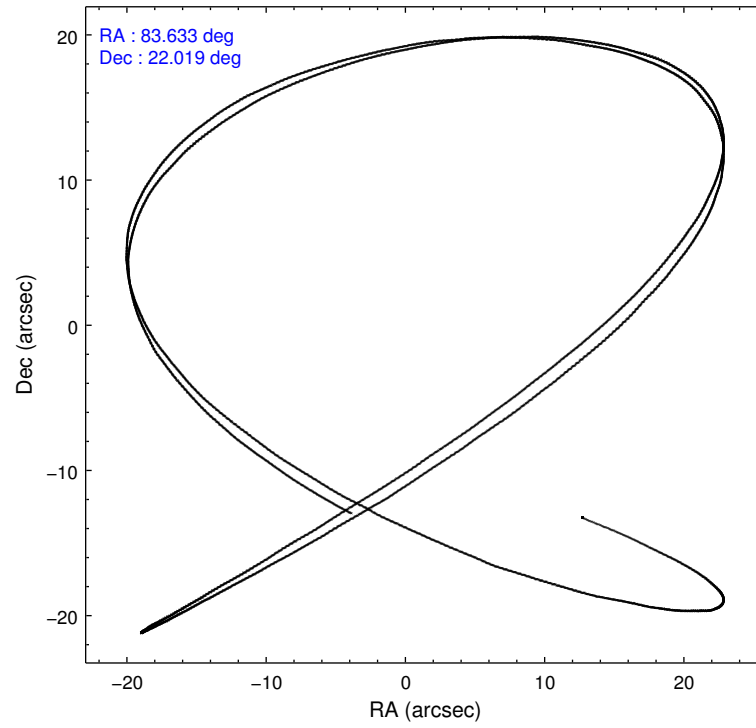
Level 1 Events

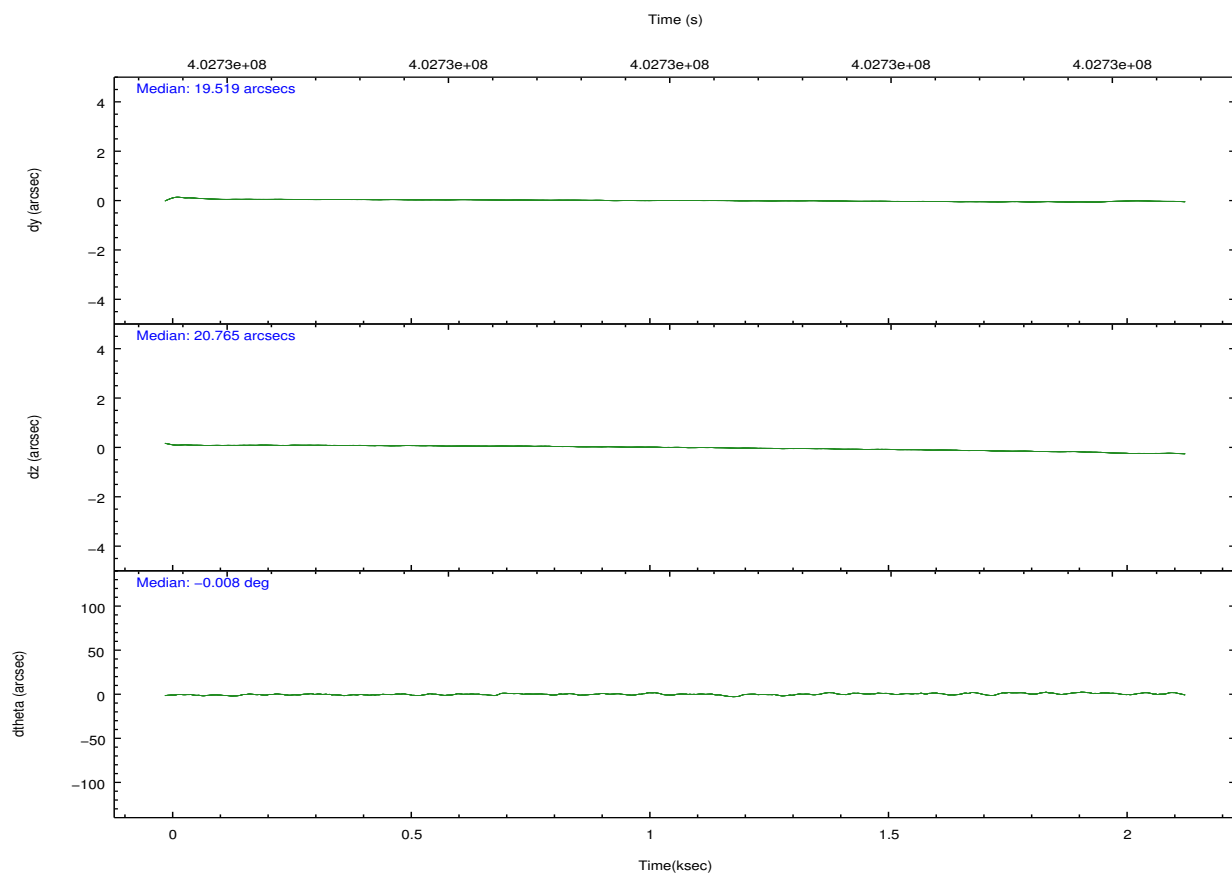
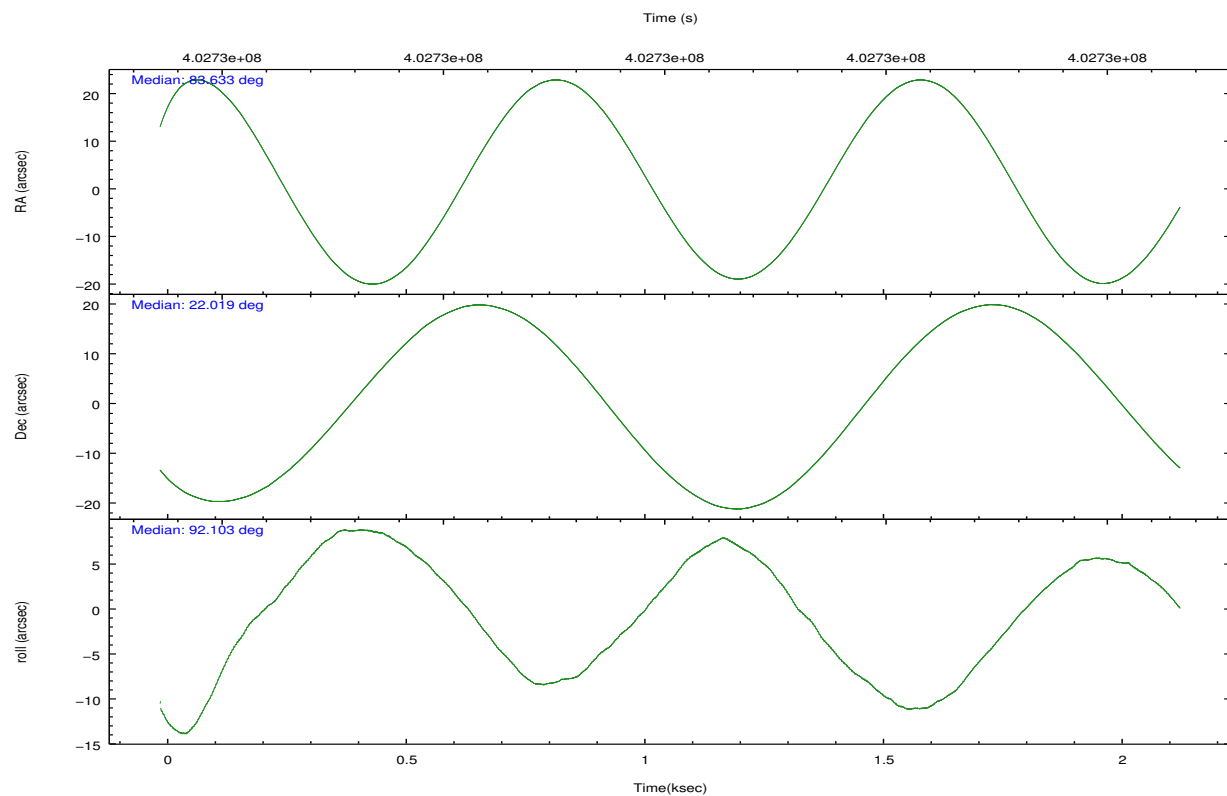
	segment 1	segment 2	segment 3
level 1 events	61	351665	1
rejected events	20	41265	1
rejected %	32%	11%	100%

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	83.650961	83.63296547497225			
[deg] Pointing Dec	21.995707	22.01930486530787			
[deg] Pointing Roll	92.035516	92.10959248237538			
[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)	402727577.184000	402726595.57363			
Observation start date	2010-10-06T04:45:11	2010-10-06T04:29:55			
[s] Observation end time (MET)	402729577.184000	402730340.92382			
Observation end date	2010-10-06T05:18:31	2010-10-06T05:32:20			

2.3 Aspect



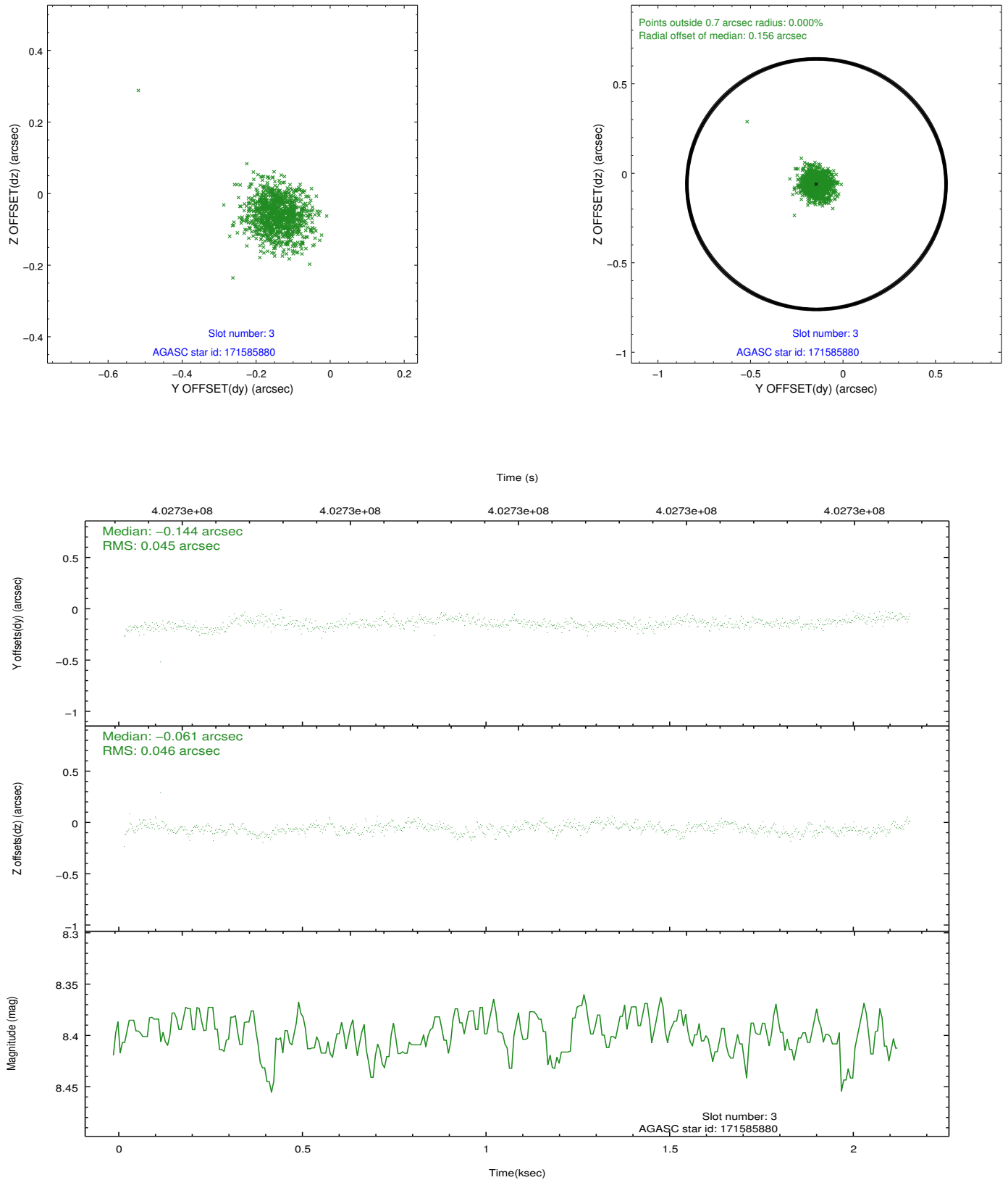


Slot Statistics

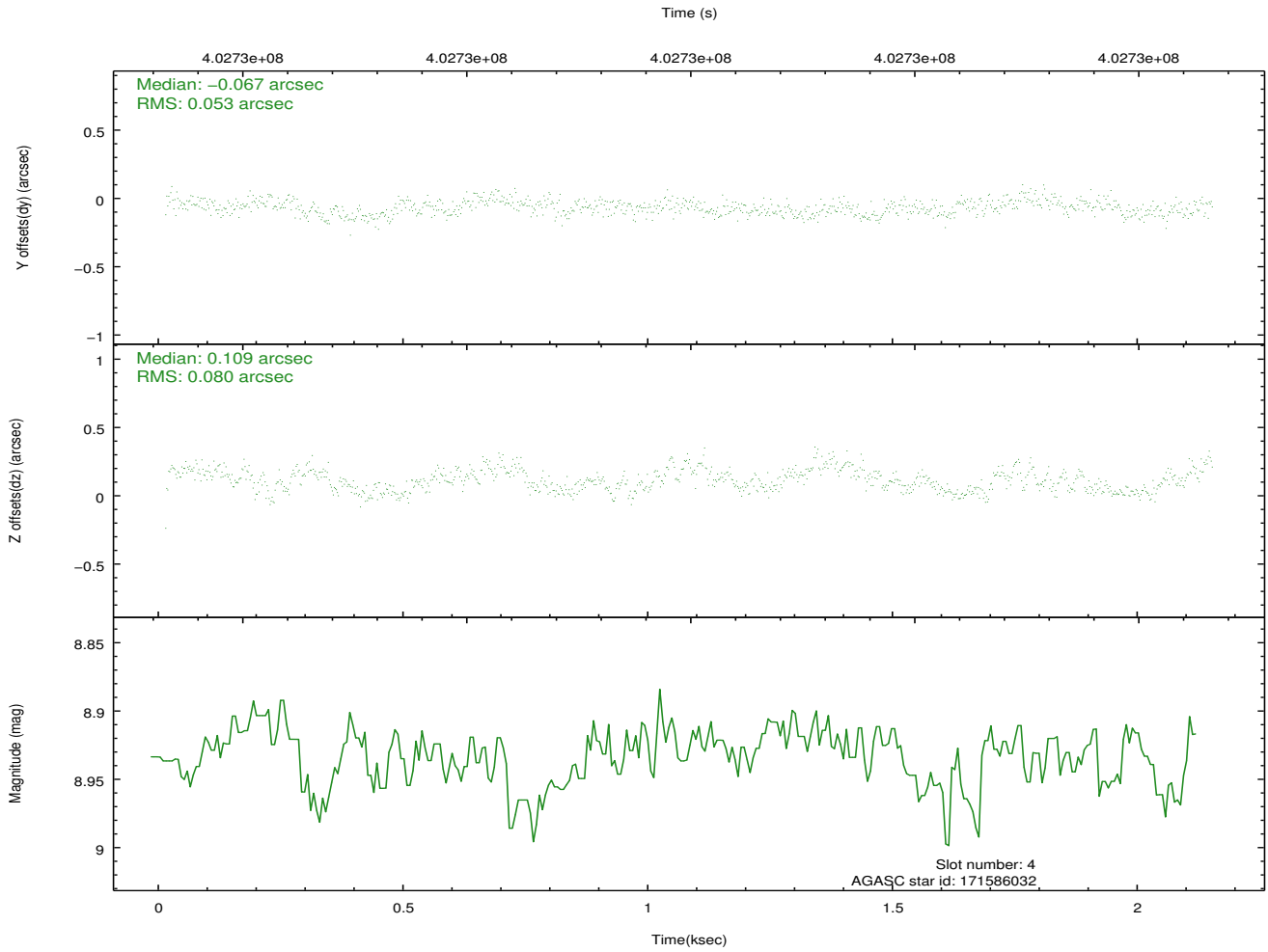
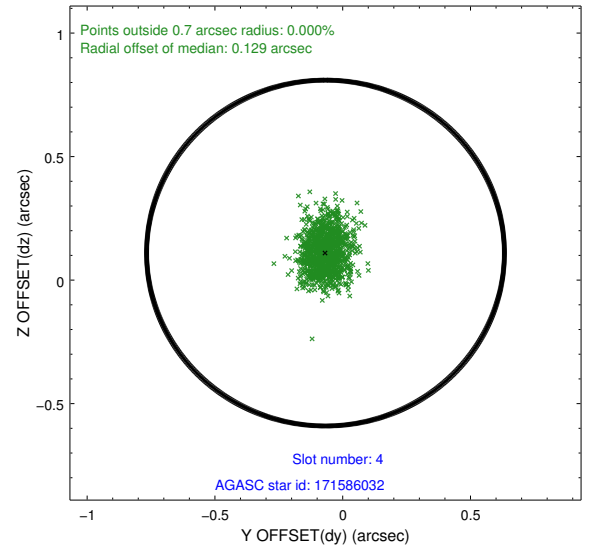
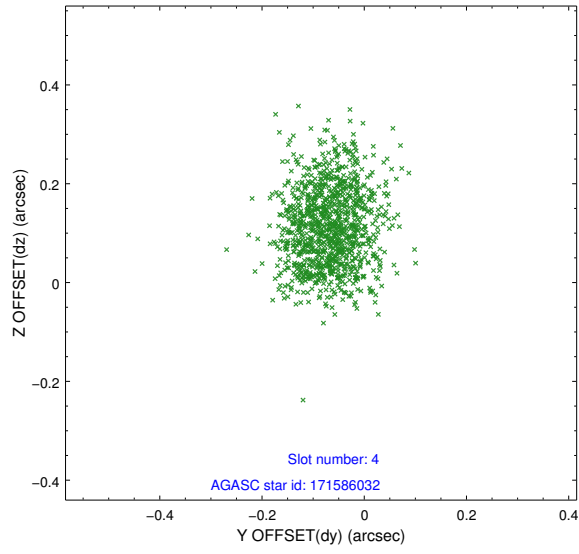
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	HRC-S-1	7.08	522	0.000	-0.233	0.009	0.016	0.000000	0.000000	-1174.07	-469.95
1	FID	HRC-S-3	7.06	522	0.119	-0.020	0.011	0.018	0.000000	0.000000	-1179.00	558.90
2	FID	HRC-S-4	7.00	522	0.268	-0.044	0.006	0.011	0.000000	0.000000	1222.11	563.60
3	GUIDE	171585880	8.40	1043	-0.144	-0.061	0.067	0.110	83.676260	22.176319	646.68	-107.99
4	GUIDE	171586032	8.93	1044	-0.067	0.109	0.101	0.164	83.950197	22.083225	281.06	-1009.38
5	GUIDE	171597832	9.15	1044	0.333	-0.245	0.110	0.187	83.183230	21.366702	-2204.56	1645.45
6	GUIDE	171721904	9.19	1044	-0.005	0.141	0.133	0.226	84.272676	22.116922	364.82	-2086.68
7	GUIDE	243941560	8.30	1042	-0.127	0.054	0.077	0.125	83.733264	22.568598	2051.52	-348.85

2.4 Star Slots

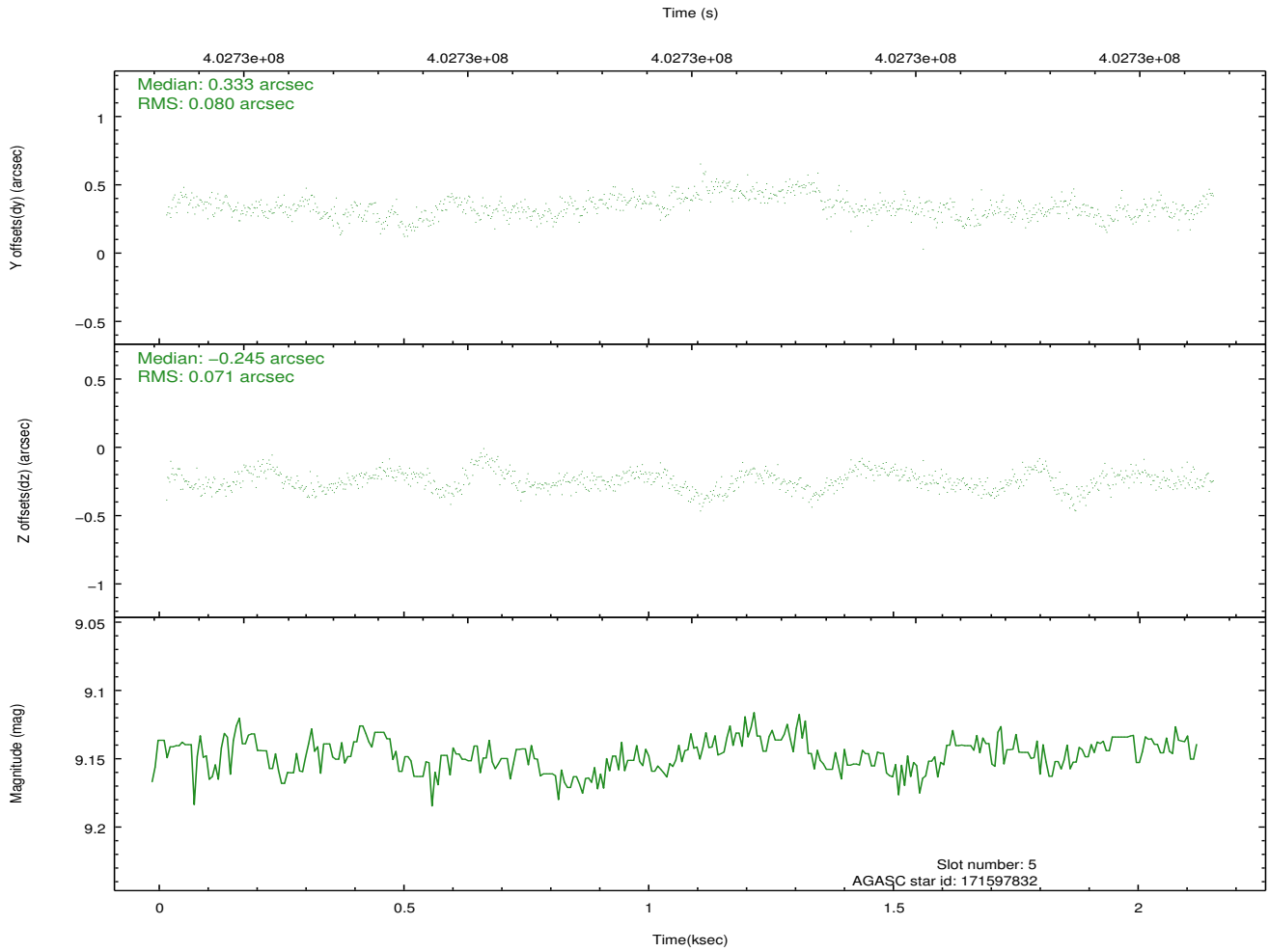
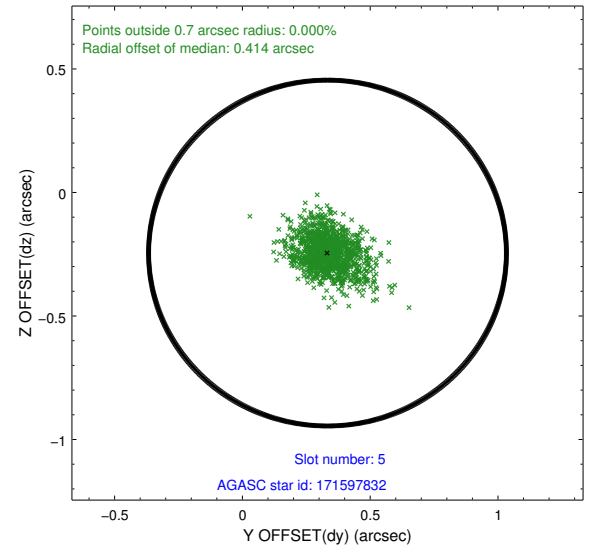
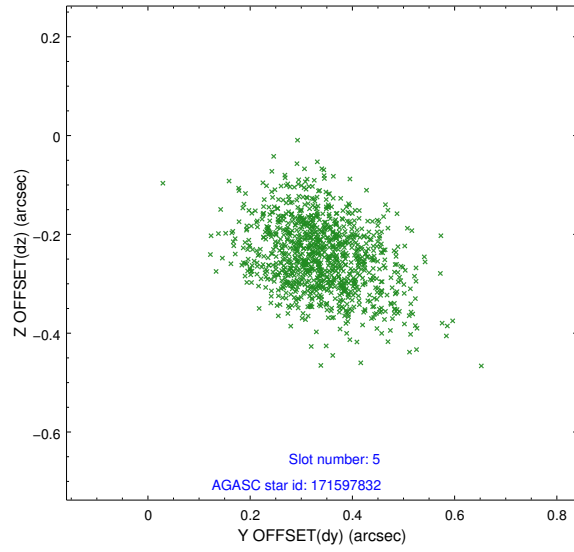
2.4.1 Slot 3



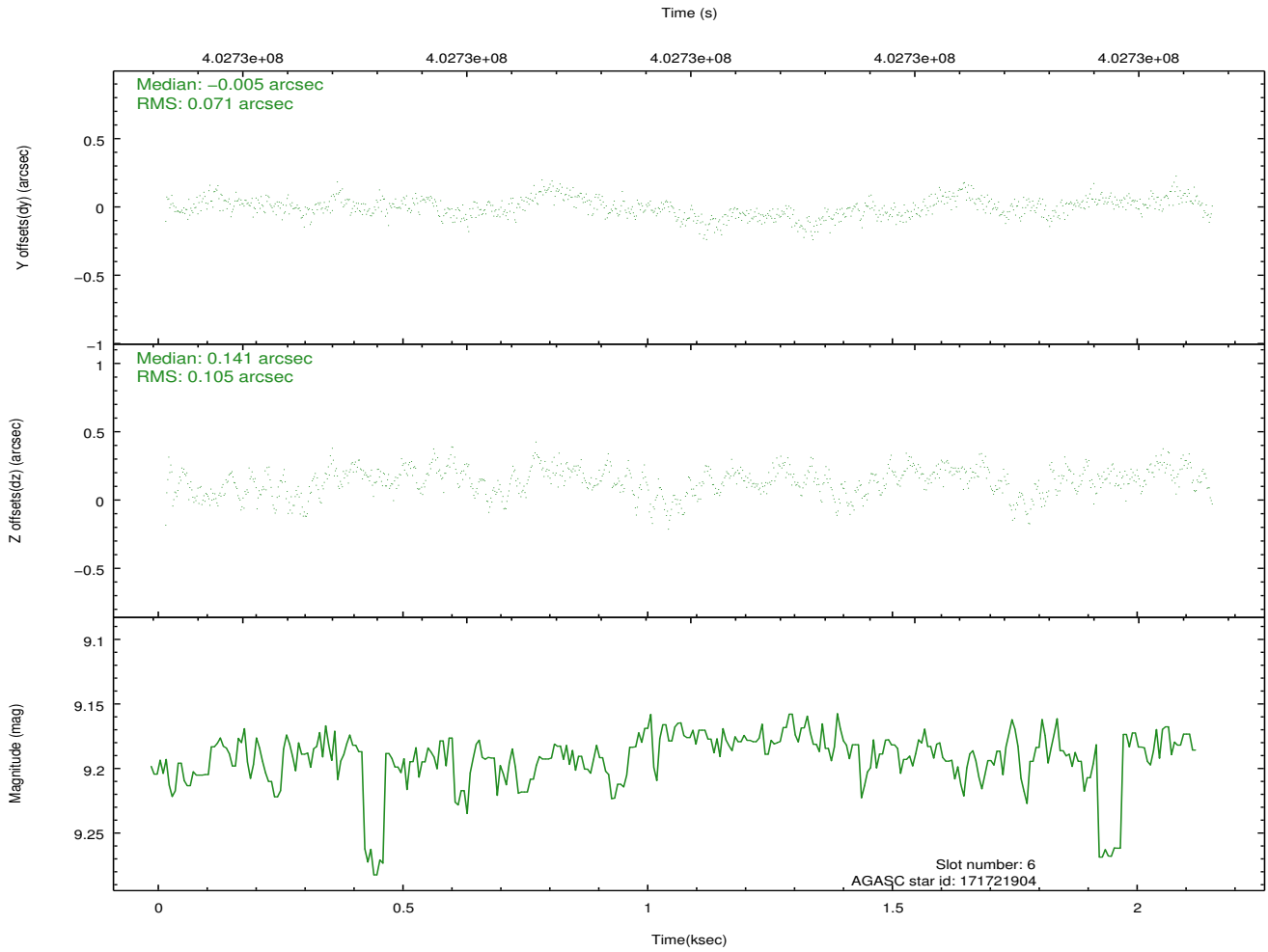
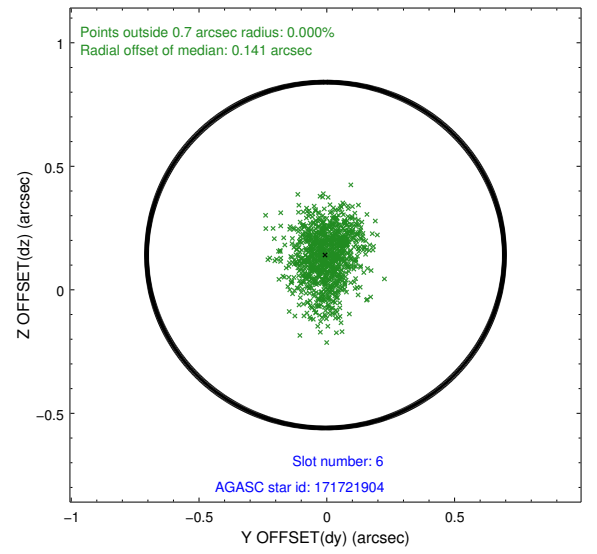
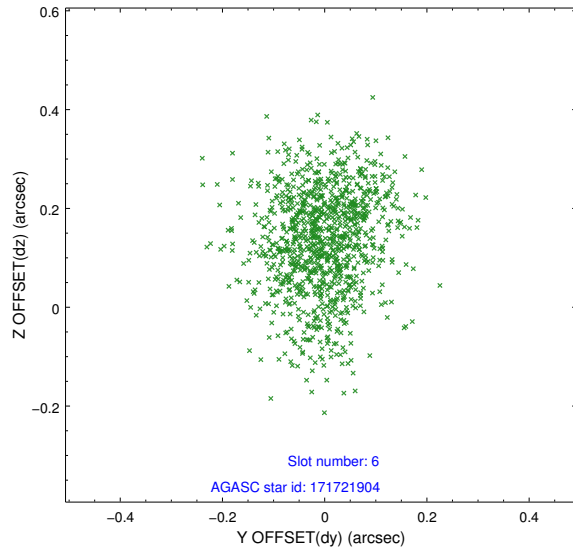
2.4.2 Slot 4



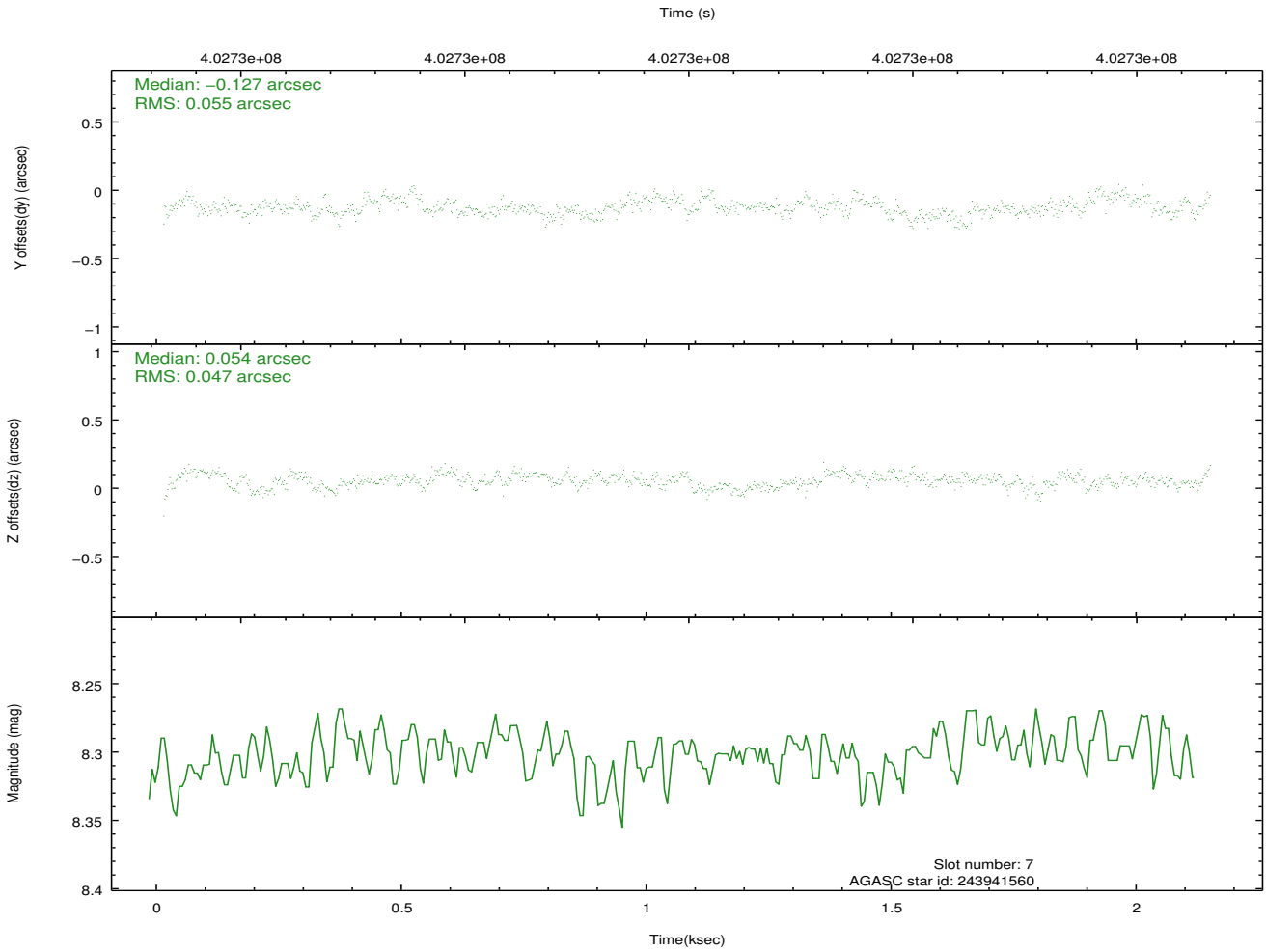
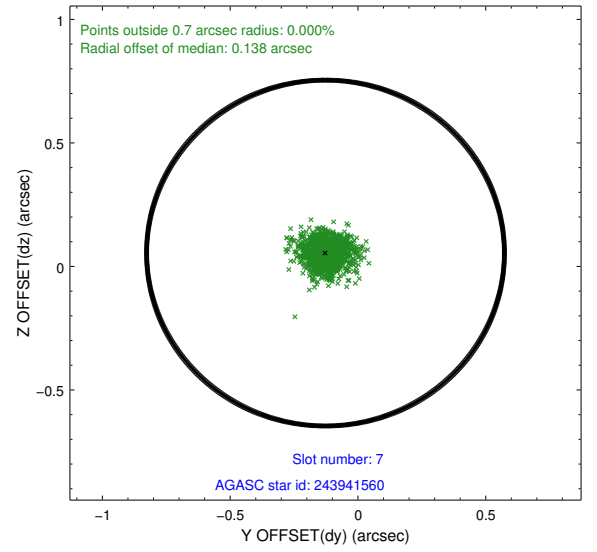
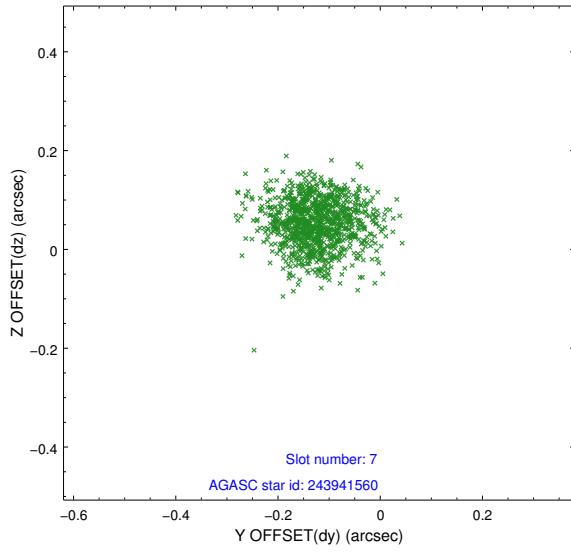
2.4.3 Slot 5



2.4.4 Slot 6

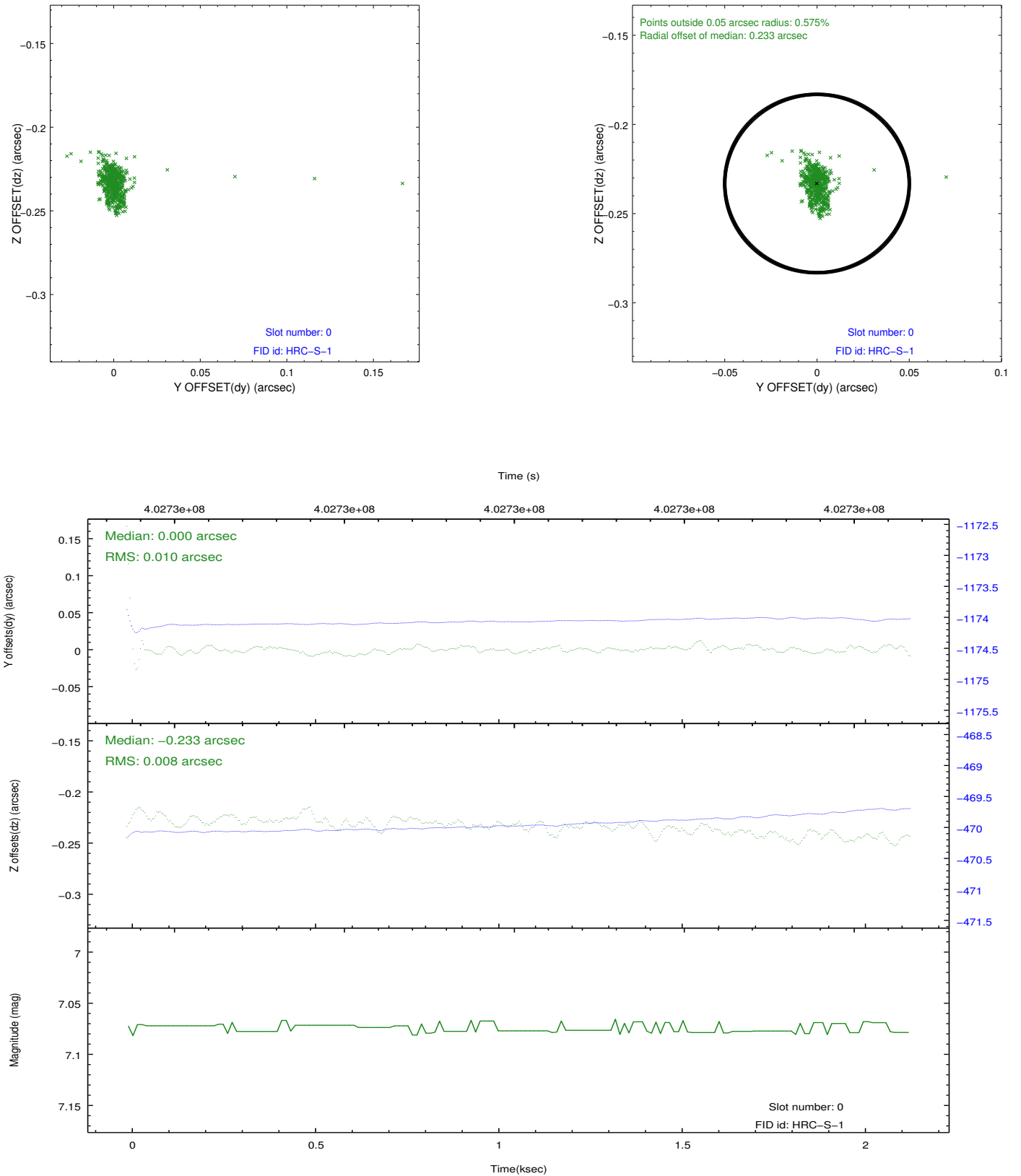


2.4.5 Slot 7

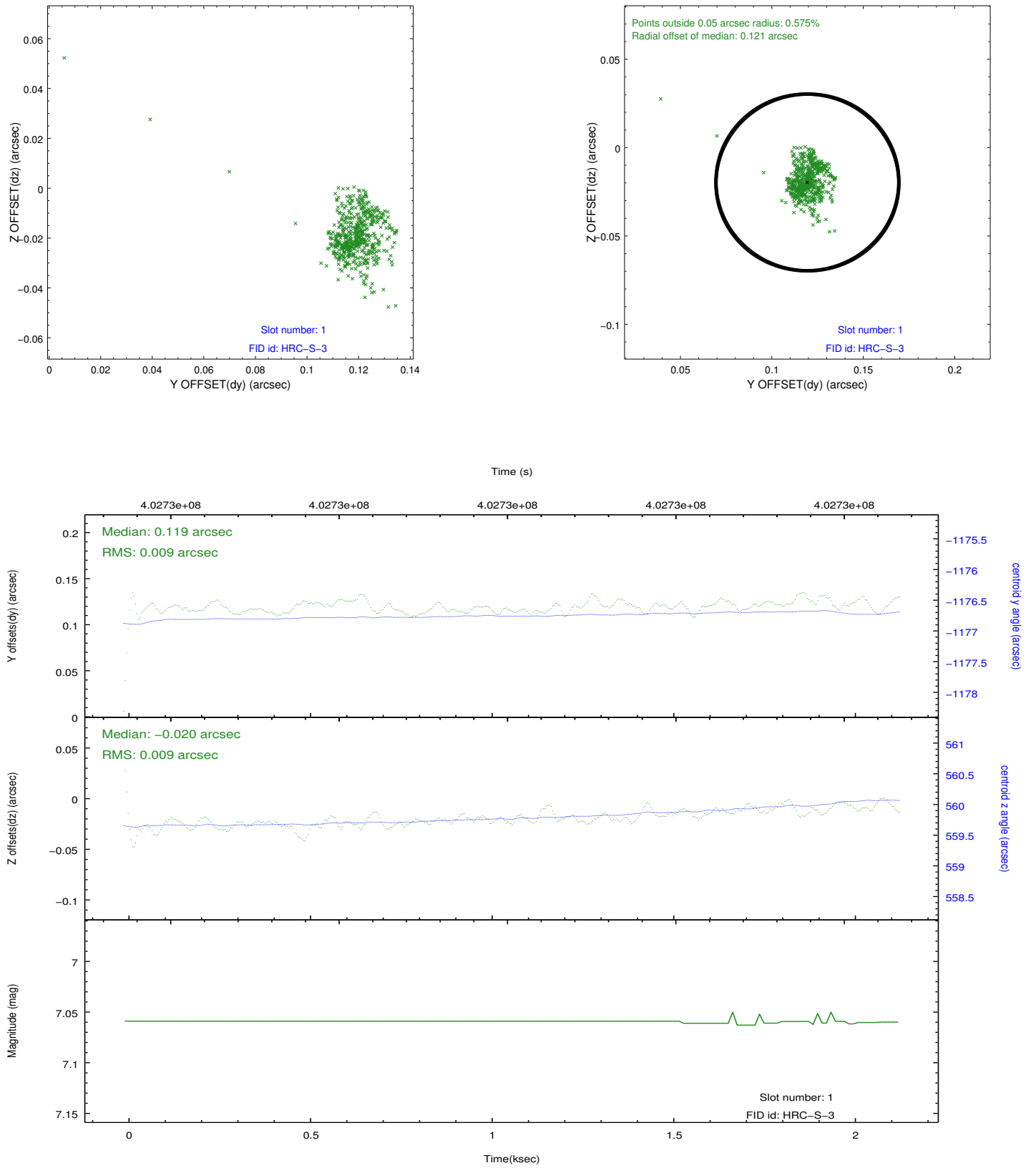


2.5 FID Slots

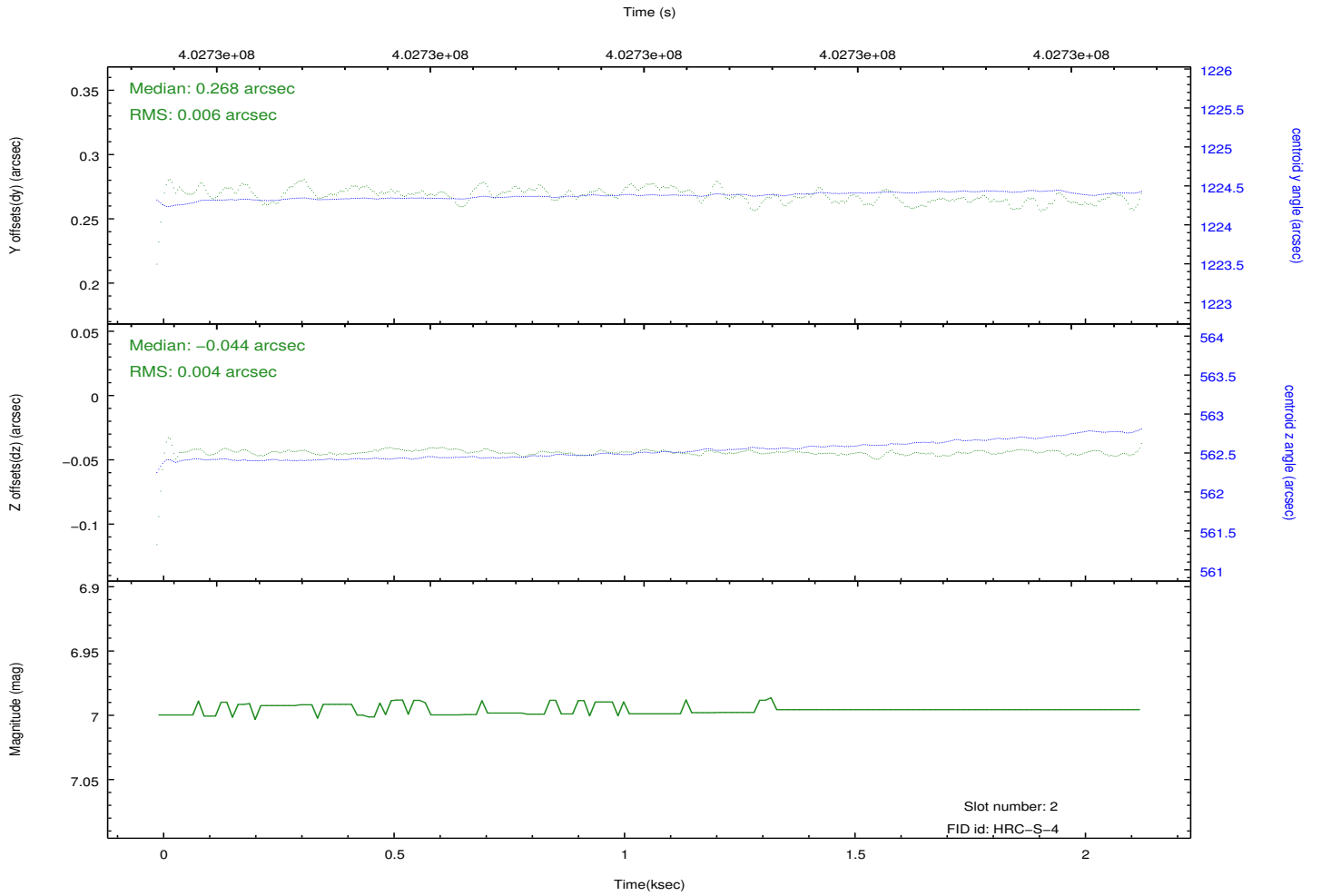
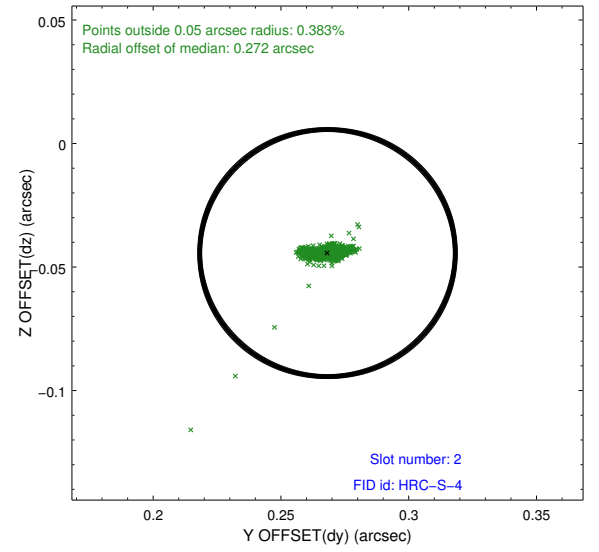
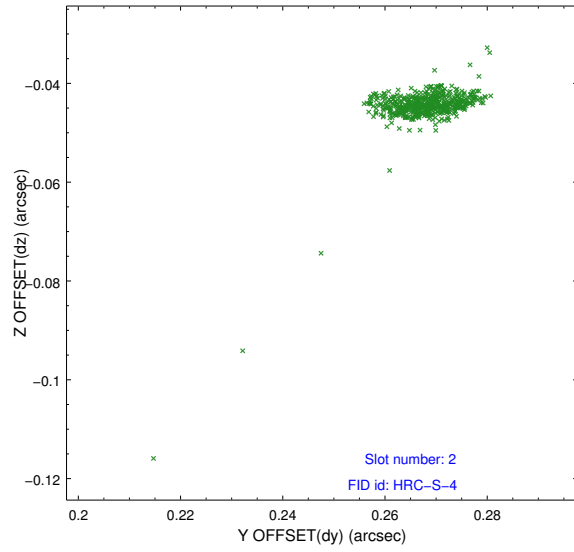
2.5.1 Slot 0



2.5.2 Slot 1

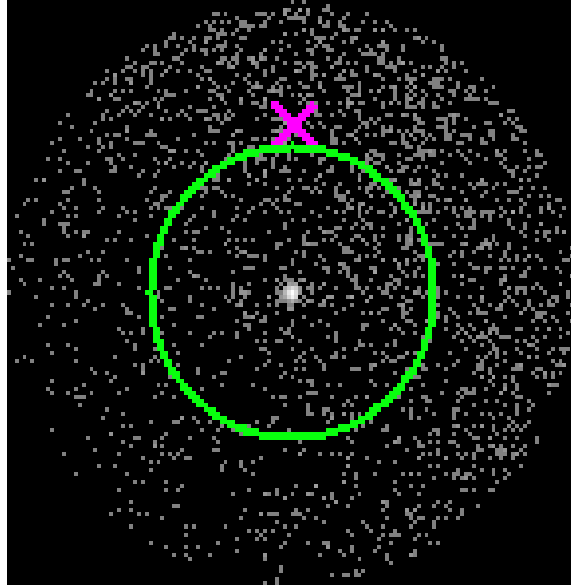


2.5.3 Slot 2

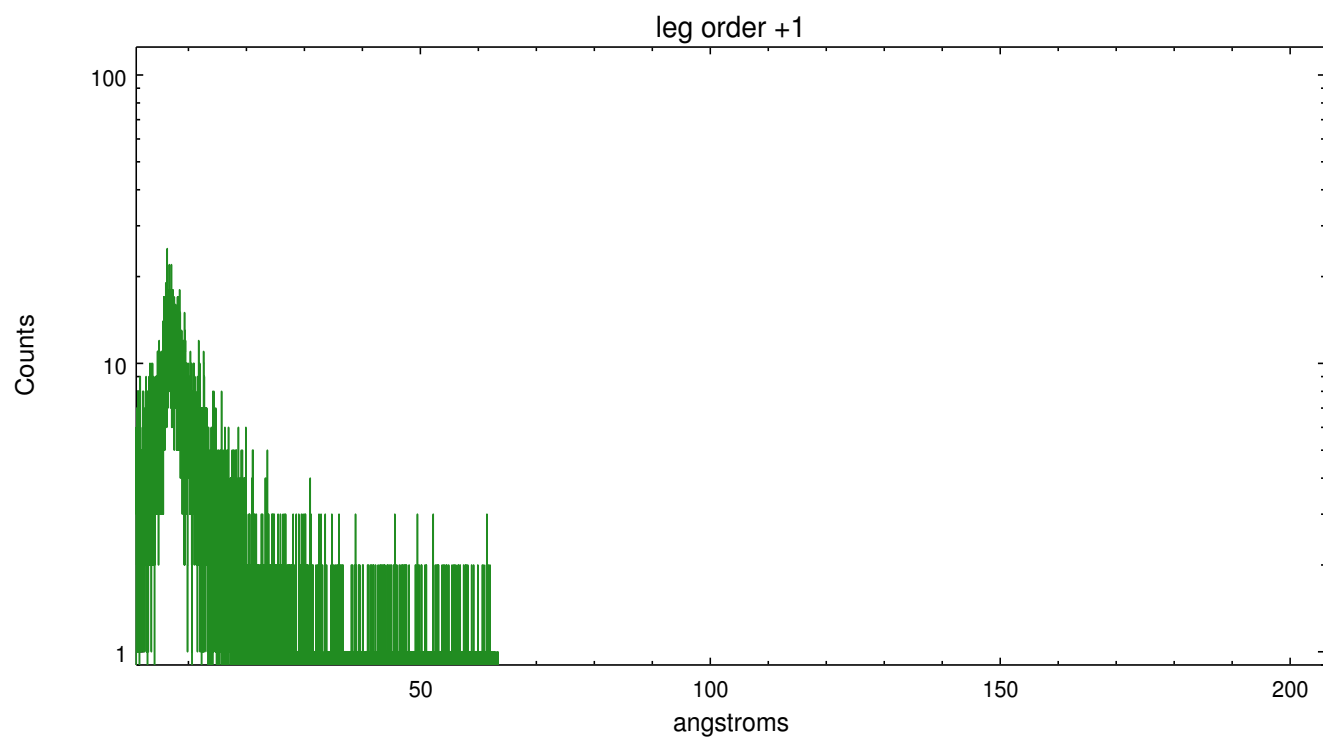
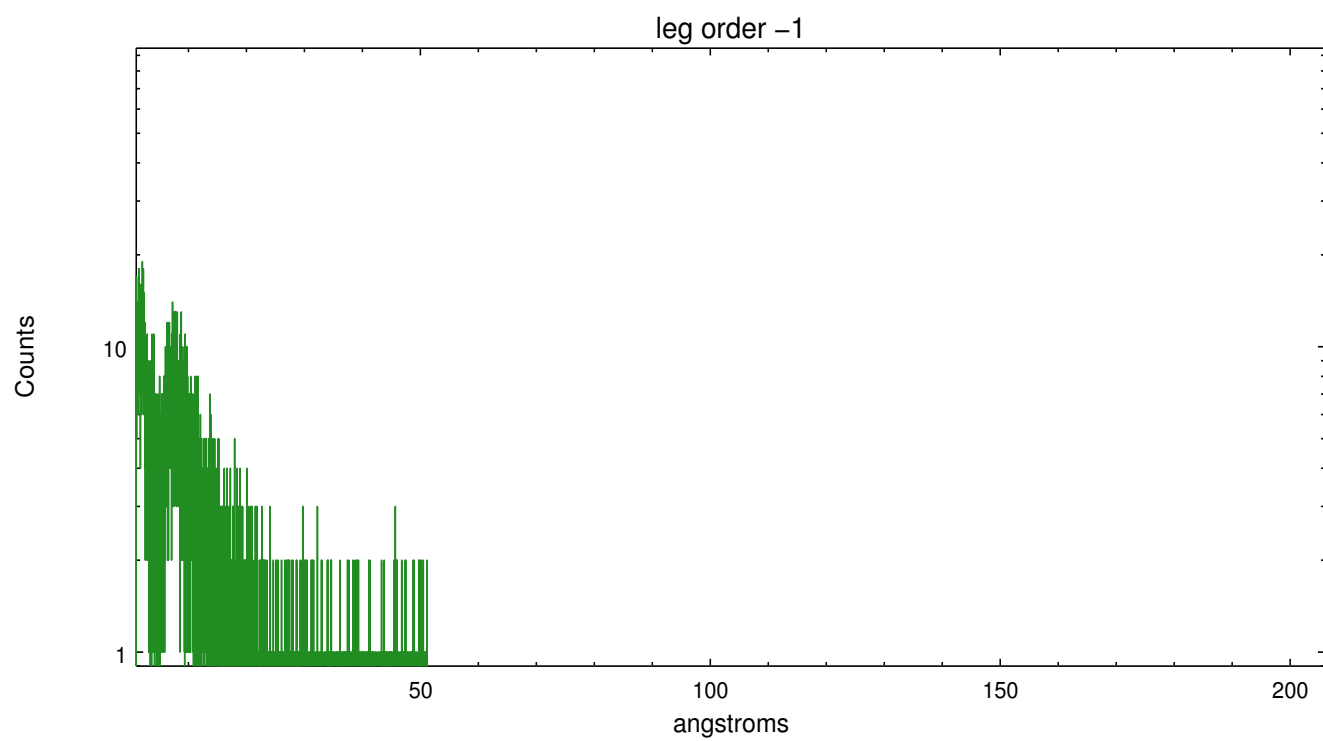


3 Gratings

3.1 LETG Arm



LETG Zero Order



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.07.19
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	2.1368688597679

A.2 Comments

This observation is a pathfinder for a future observation. During this observation the threshold values were changed frequently. Below is a table of the threshold values and the start and stop time for each, stepping down by 5 in the commanded level every 200s.===== trigger===
start === stop=== 65 === 402727575.813 === 402727777.399=== 60 ===
402727779.449 === 402727978.299=== 55 === 402727980.349 ===
402728177.149=== 50 === 402728179.199 === 402728378.049=== 45 ===
402728380.099 === 402728578.949=== 40 === 402728580.999 ===
402728777.799=== 35 === 402728779.849 === 402728978.699=== 30 ===
402728980.749 === 402729177.549=== 25 === 402729179.599 ===
402729378.449=== 20 === 402729380.499 === 402729575.813
===== Telemetry saturation affects the livetime during the second half
of the observation.