

V&V Reference Report

L2 ASCDS Version : 10.8

Observation 21263 - L2 Version 2
Chandra X-Ray Center

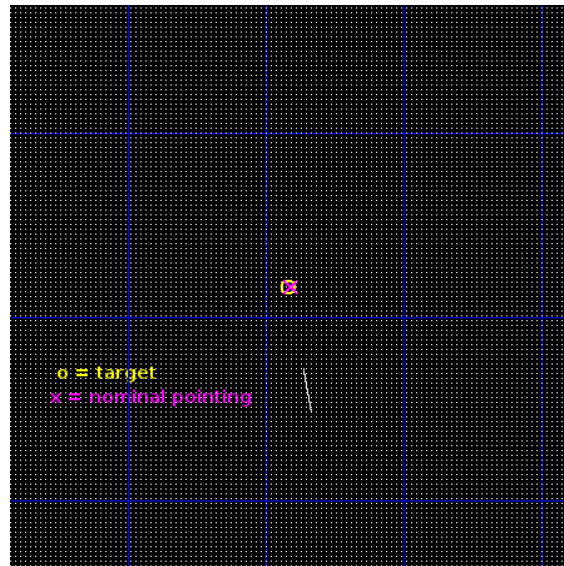
L2 Processing Date : Jun 21 2019

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1 Front

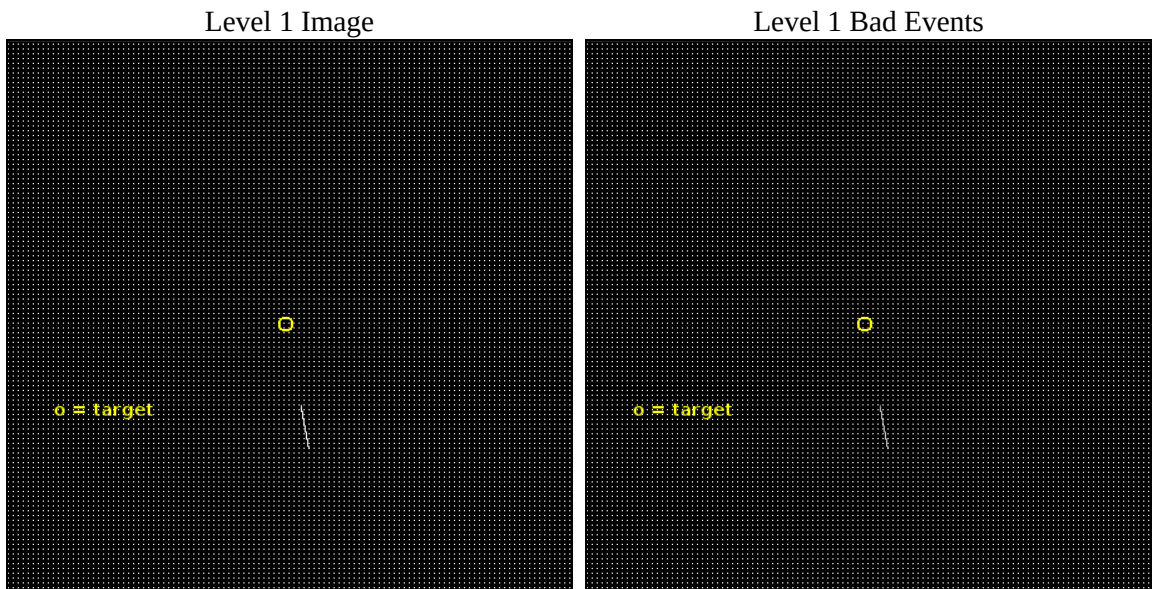
seq_num	402118	Sequence number
obs_id	21263	Observation id
title	Probing the disc-jet coupling in the neutron star binary Sco X-1	P
observer	Sara Motta	Principal investigator
object	Sco X-1	Source name
ra_targ	244.979583	Observer's specified target RA [deg]
dec_targ	-15.640278	Observer's specified target Dec [deg]
ra_nom	244.97671469384	Nominal RA [deg]
dec_nom	-15.639262861049	Nominal Dec [deg]
roll_nom	80.055855773844	Nominal Roll [deg]
revision	2	Processing version of data
ontime	30335.25	Sum of GTIs [s]
livetime	30216.752929688	Livetime [s]
ontime5	30335.25	Sum of GTIs [s]
ontime6	30335.25	Sum of GTIs [s]
ontime7	30335.25	Sum of GTIs [s]
ontime8	30335.25	Sum of GTIs [s]
l2events	590184	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	30210.000000	[s] Scheduled observation exposure time
ascdsver	10.8	Processing system revision	ontime	30335.25	Sum of GTIs [s]
caldsver	4.8.3	 	ontime5	30335.25	Sum of GTIs [s]
date	2019-06-20T19:58:31	Date and time of file creation	ontime6	30335.25	Sum of GTIs [s]
revision	2	Processing version of data	ontime7	30335.25	Sum of GTIs [s]
			ontime8	30335.25	Sum of GTIs [s]
			l1events	702471	Number of level 1 events
			tgmethod	DEADRECKONING	Method used to create src1a file
			zo_pos	(4077.28, 4088.99)	src1a skv pixel position

2.1.3 Events

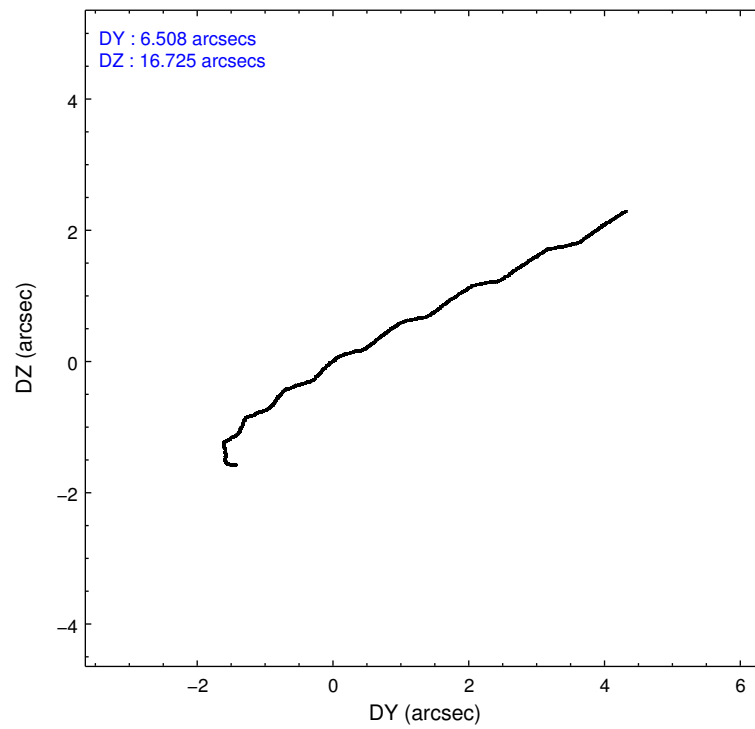
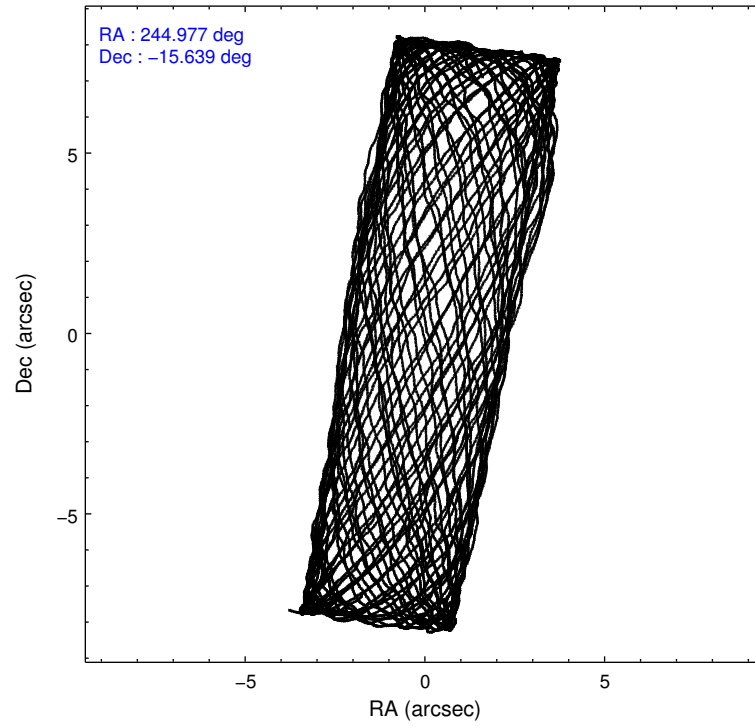
	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	0	0	702471	0
rejected events	0	0	109260	0
rejected %	0%	0%	15%	0%

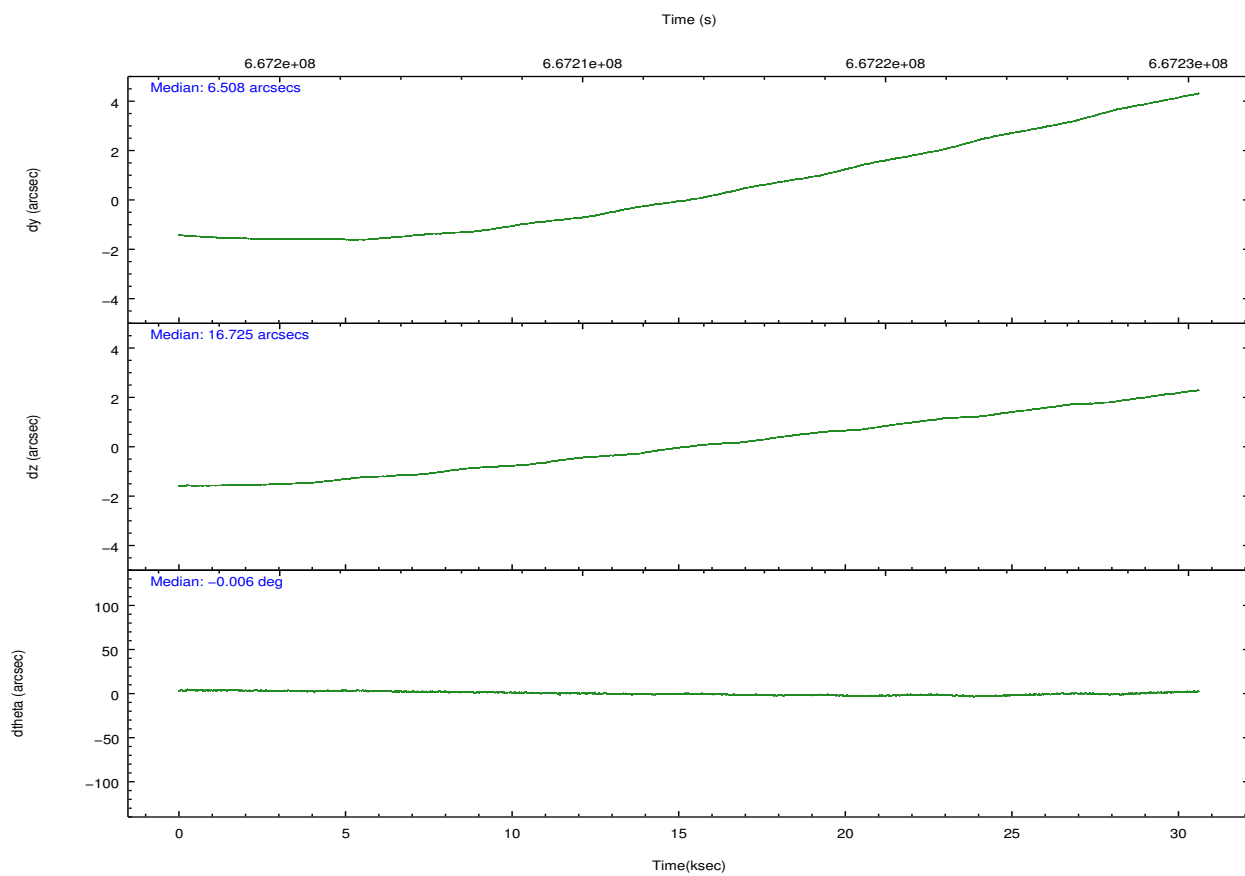
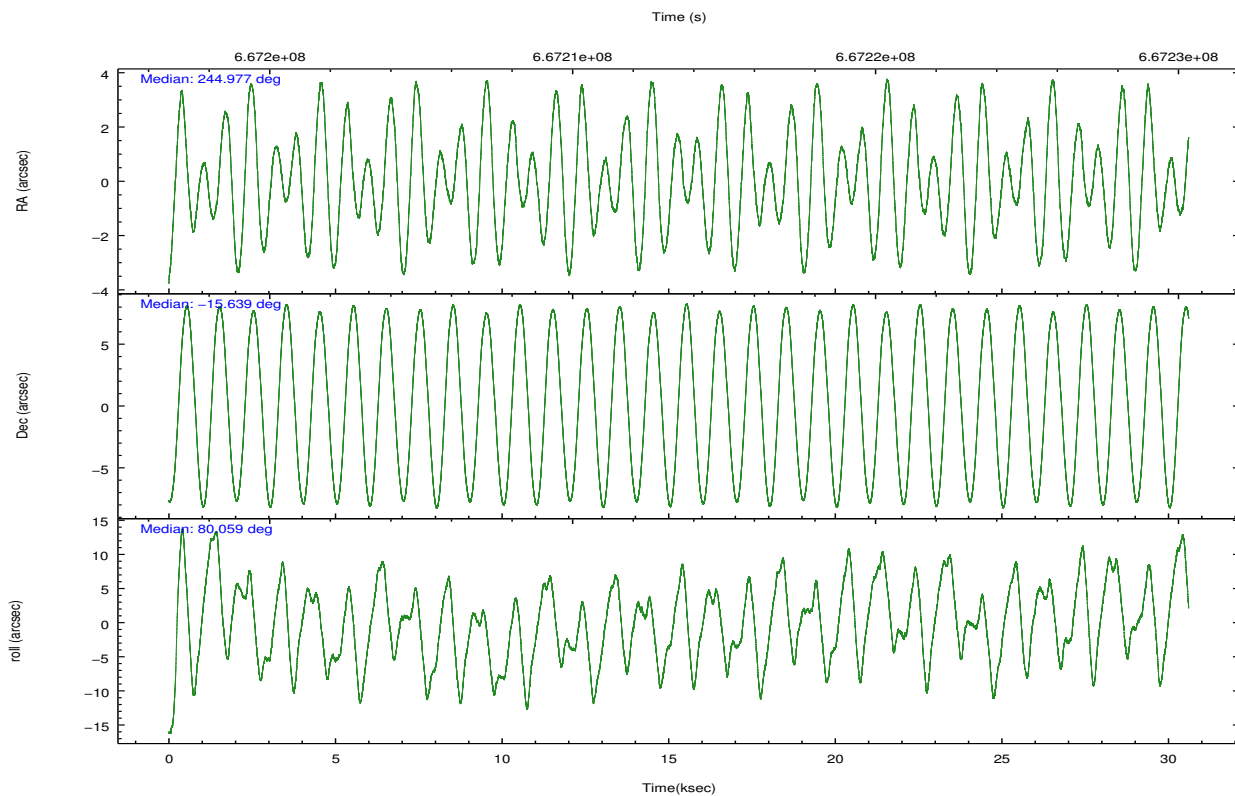
	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	0	0	83243	0
	0%	0%	11%	0%
grade 1 events	0	0	203	0
	0%	0%	0%	0%
grade 2 events	0	0	208998	0
	0%	0%	29%	0%
grade 3 events	0	0	43392	0
	0%	0%	6%	0%
grade 4 events	0	0	41007	0
	0%	0%	5%	0%
grade 5 events	0	0	10037	0
	0%	0%	1%	0%
grade 6 events	0	0	216618	0
	0%	0%	30%	0%
grade 7 events	0	0	98973	0
	0%	0%	14%	0%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-5678	ACIS-5678	Obspar file type	PREDICTED	ACTUAL
Grating	HETG	HETG	Obspar update status	NONE	UPDATED
Data mode	CC33_GRADED	CC33_GRADED	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	244.986843	244.9767146938353	Subarray requested	NONE	NONE
[deg] Pointing Dec	-15.664914	-15.63926286104915	Alternating exposures requested	N	N
[deg] Pointing Roll	79.901961	80.05585577384404	[s] Primary exposure time	0.000000	0
[s] Window start time (MET)	667094529.184000	667094529.184000			
[s] Window stop time (MET)	667461669.184000	667461669.184000			
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-175.932523	-175.939213226661			
[mm] SIM translation stage offset	-14.2	-14.19330935634682			
[s] Observation start time (MET)	667198583.184000	667198001.25653			
Observation start date	2019-02-22T04:55:14	2019-02-22T04:46:41			
[s] Observation end time (MET)	667228793.184000	667228927.04588			
Observation end date	2019-02-22T13:18:44	2019-02-22T13:22:07			
Read mode	CONTINUOUS	CONTINUOUS			

2.3 Aspect



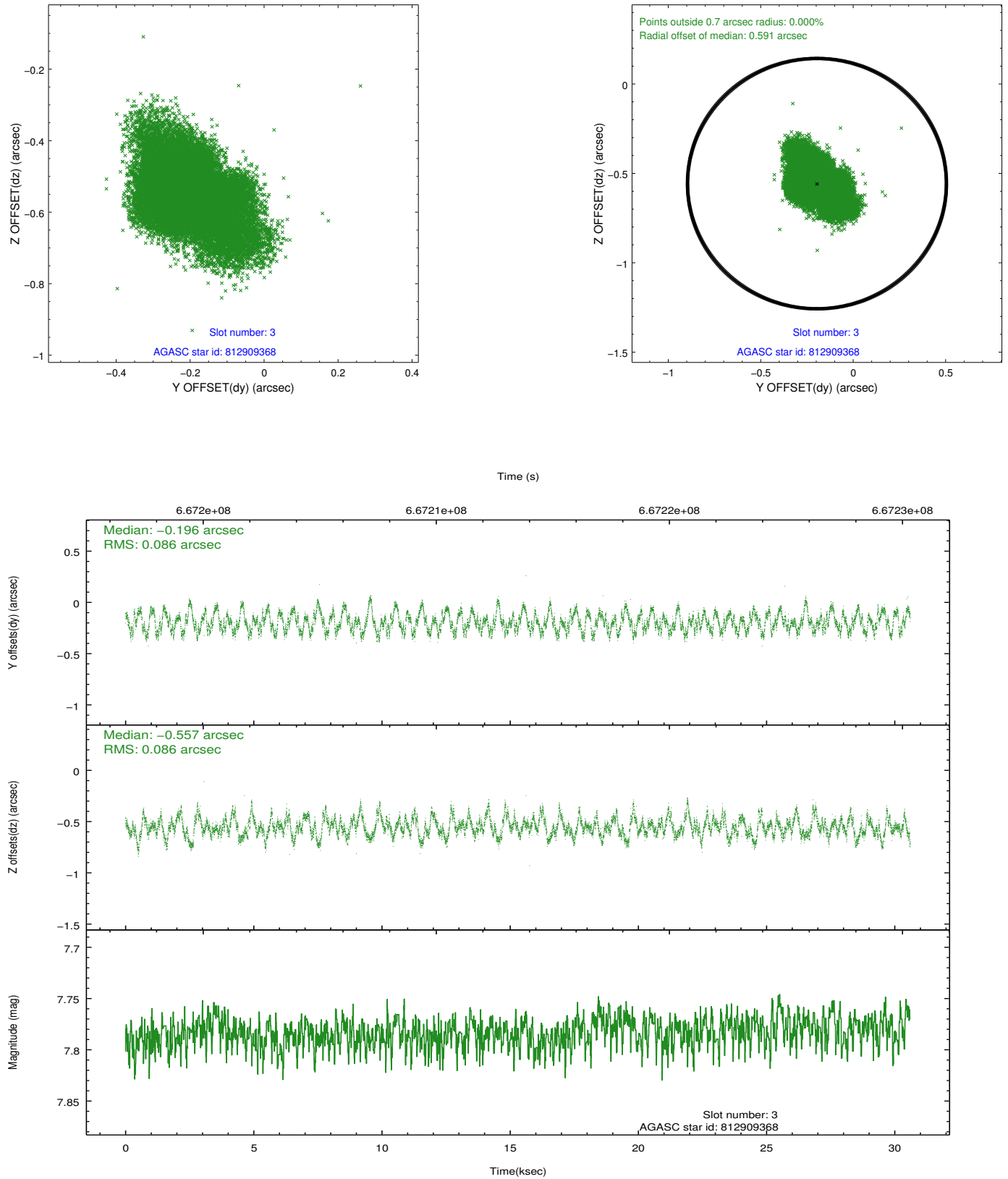


Slot Statistics

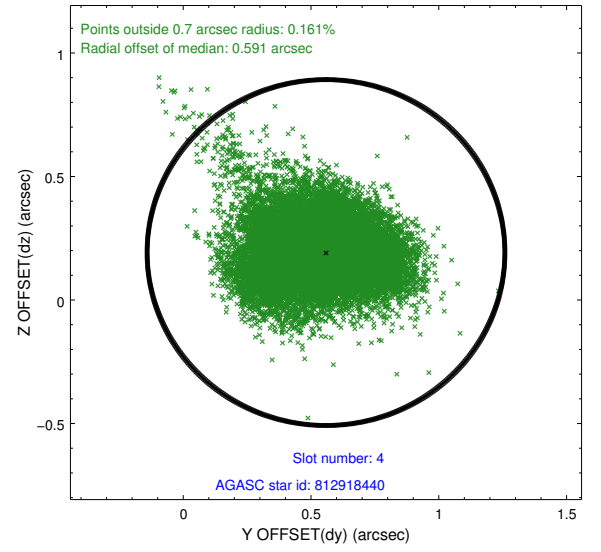
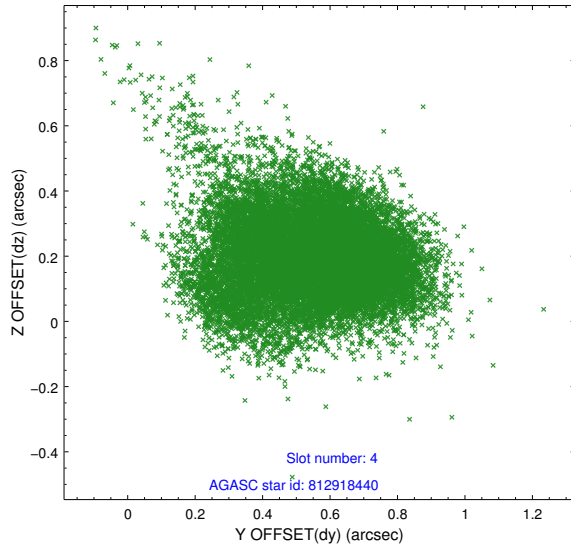
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	6.96	7465	1.000	-0.310	-0.538	0.046	0.069	0.000000	0.000000	-758.89	-2030
1	FID		ACIS-S-4	7.02	7465	1.000	0.606	0.299	0.054	0.067	0.000000	0.000000	2155.19	-121
2	FID		ACIS-S-5	7.11	7465	1.000	-0.333	0.254	0.025	0.053	0.000000	0.000000	-1811.75	-127
3	GUIDE	used	812909368	7.78	14928	1.000	-0.196	-0.557	0.129	0.212	244.337230	-15.327996	795.26	2431
4	GUIDE	used	812918440	9.59	14894	1.000	0.559	0.192	0.222	0.358	244.304408	-16.215909	-2369.89	1974
5	GUIDE	used	812920352	8.78	14856	1.000	-0.130	-0.015	0.214	0.305	244.854466	-15.546040	340.60	527
6	GUIDE	used	812911064	9.59	14888	1.000	-0.021	0.632	0.207	0.342	245.567349	-15.296144	1657.83	-1751
7	GUIDE	used	812914616	9.67	14901	1.000	-0.225	-0.273	0.178	0.292	244.358365	-15.447124	386.47	2283

2.4 Star Slots

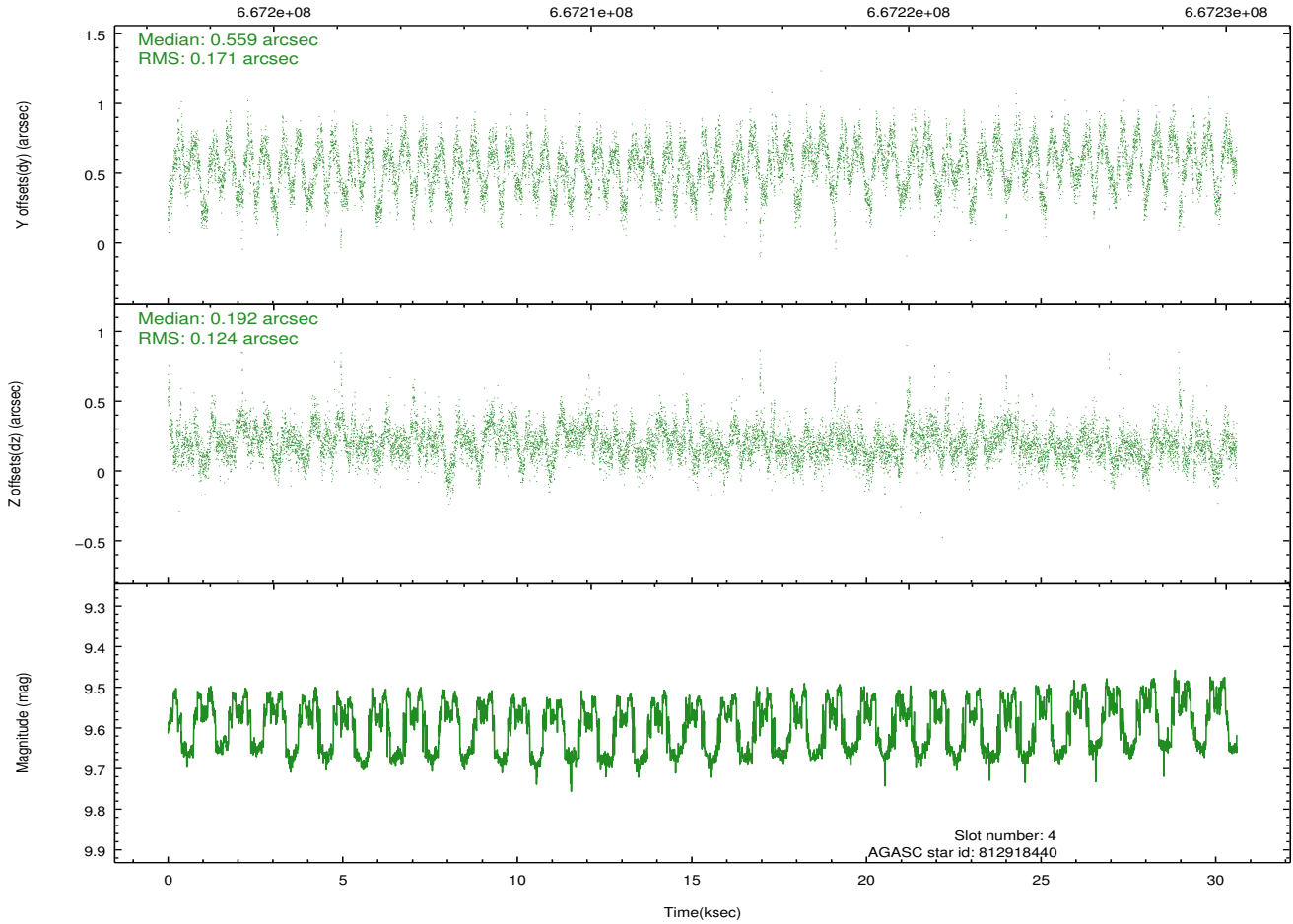
2.4.1 Slot 3



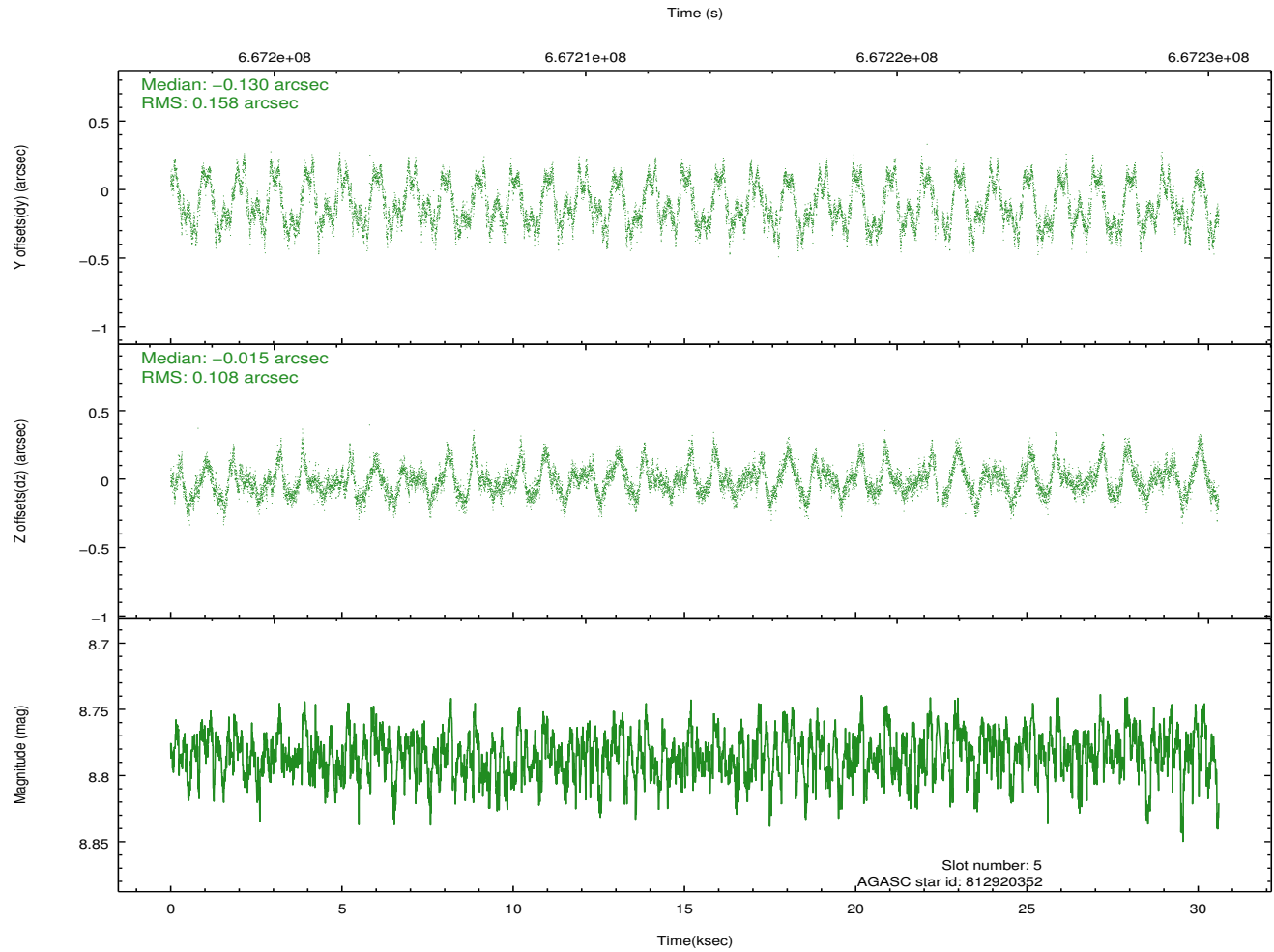
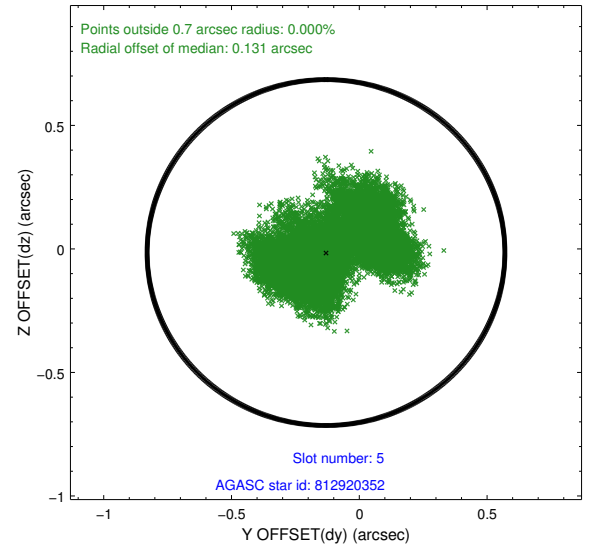
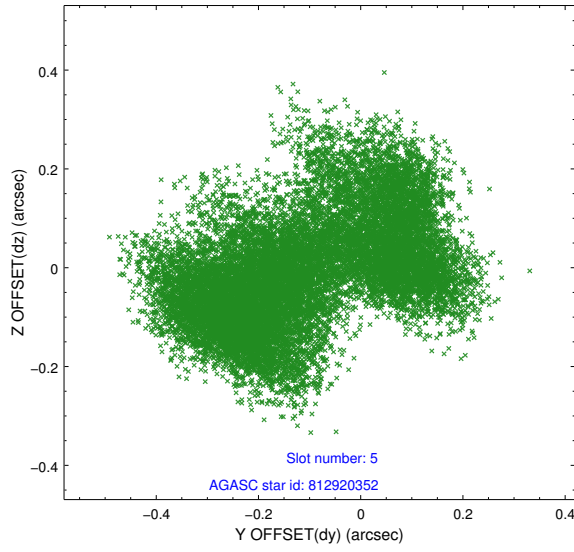
2.4.2 Slot 4



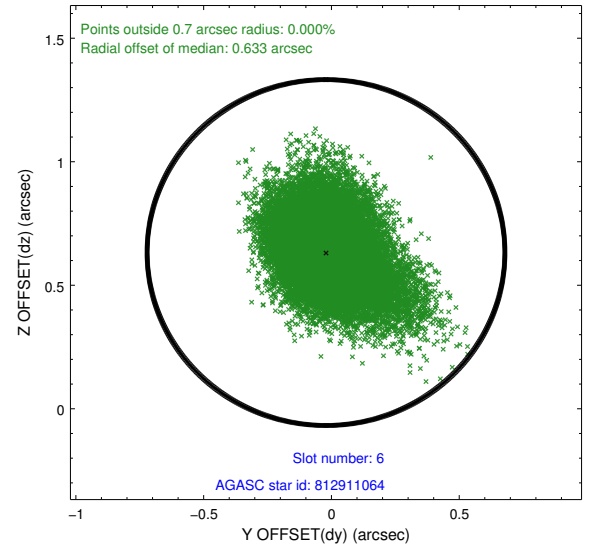
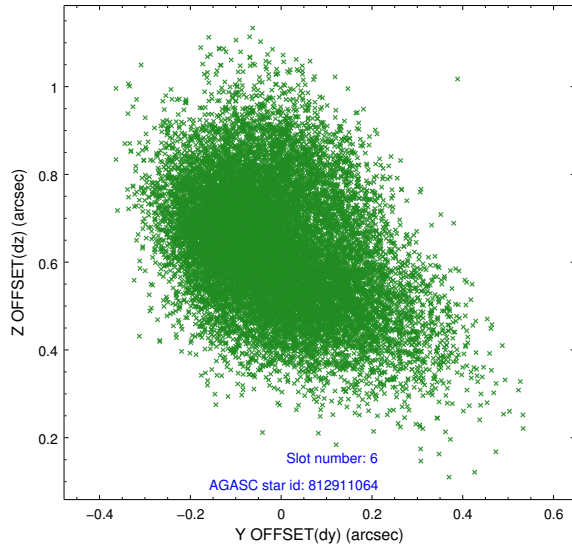
Time (s)



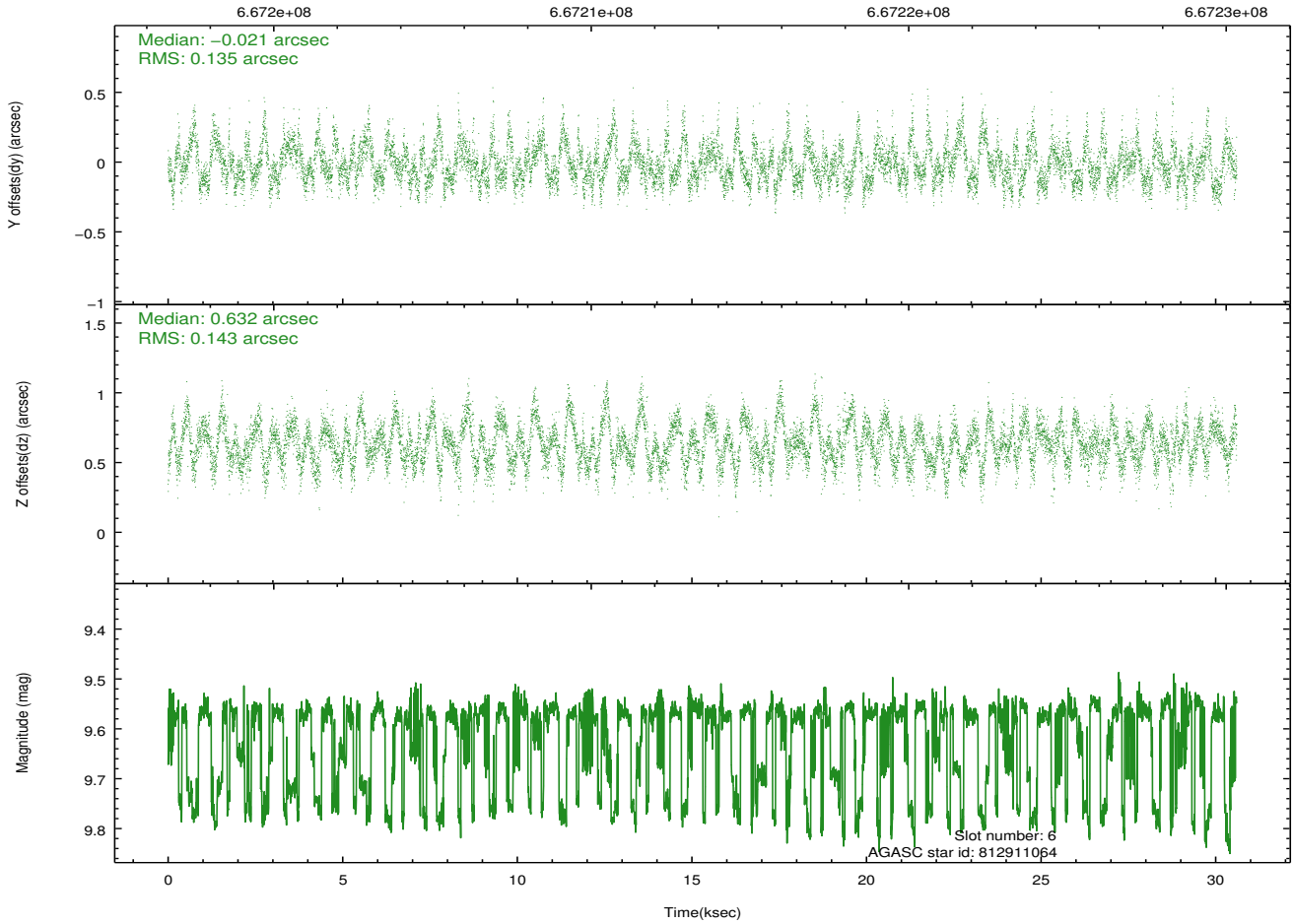
2.4.3 Slot 5



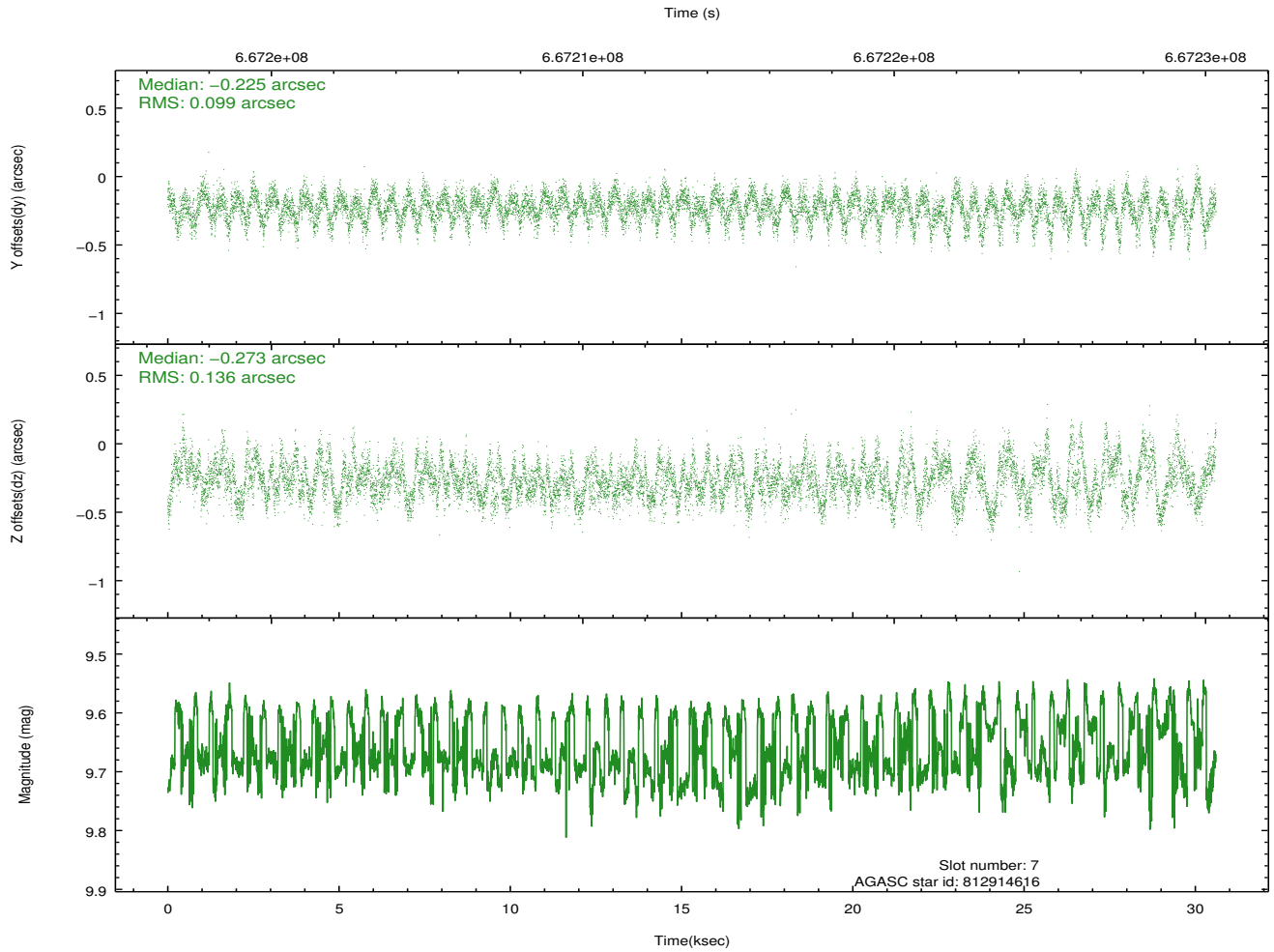
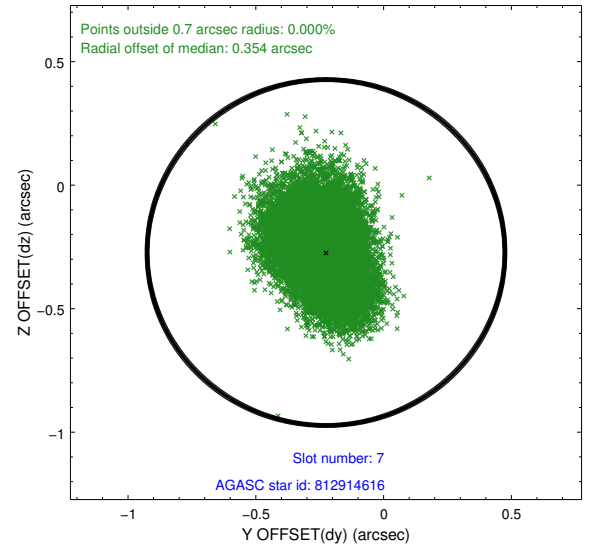
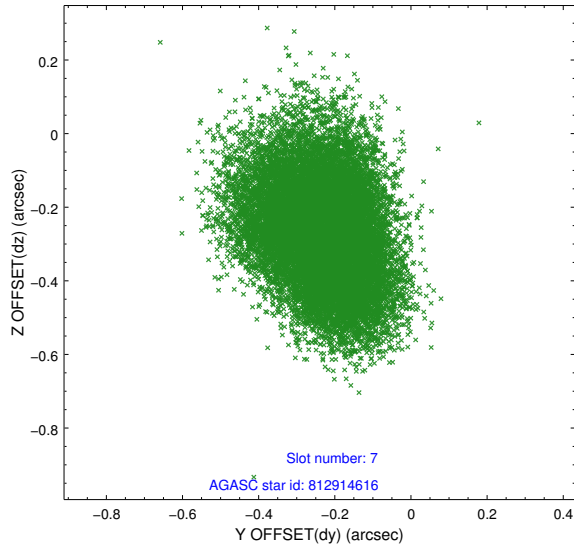
2.4.4 Slot 6



Time (s)

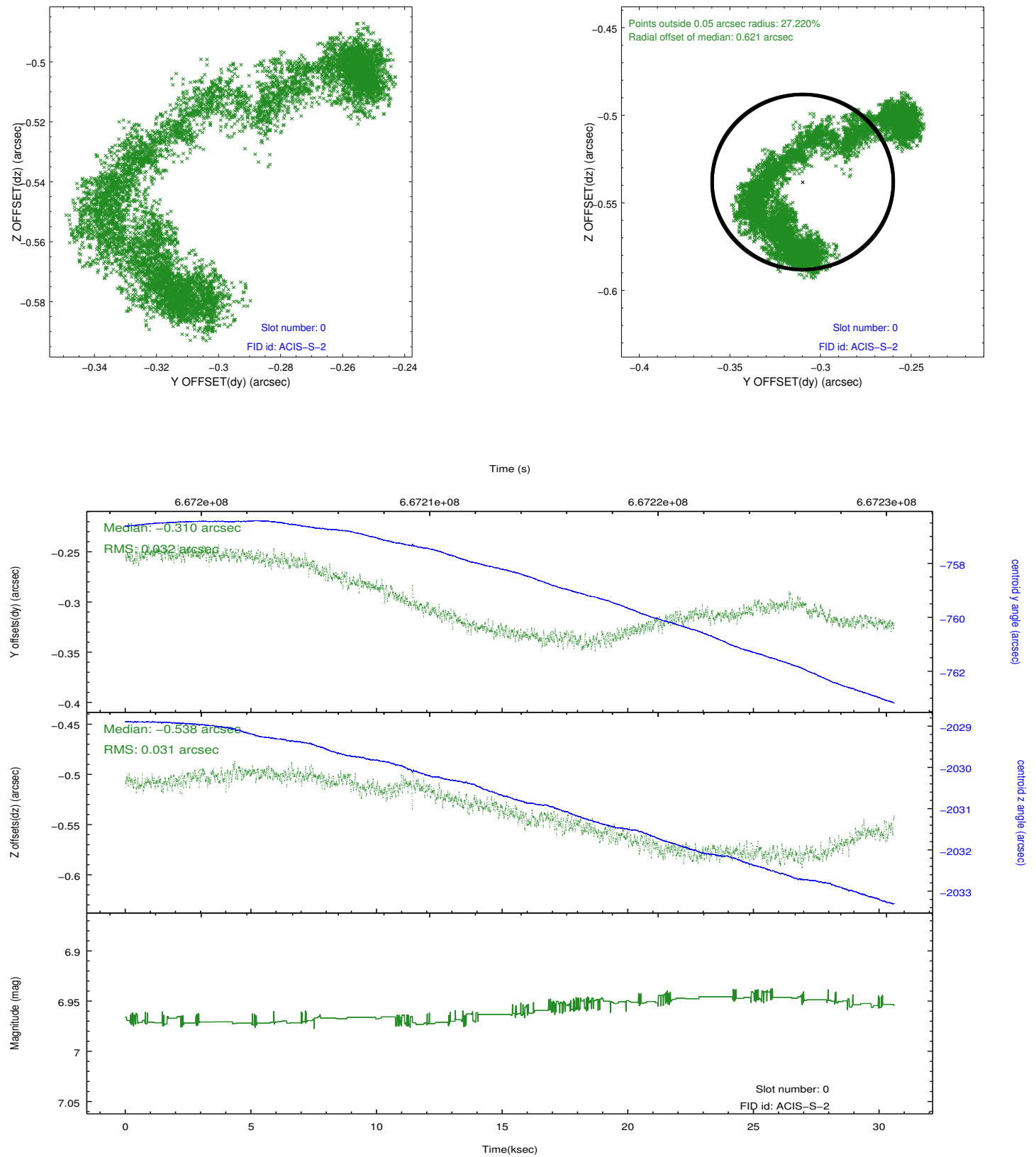


2.4.5 Slot 7

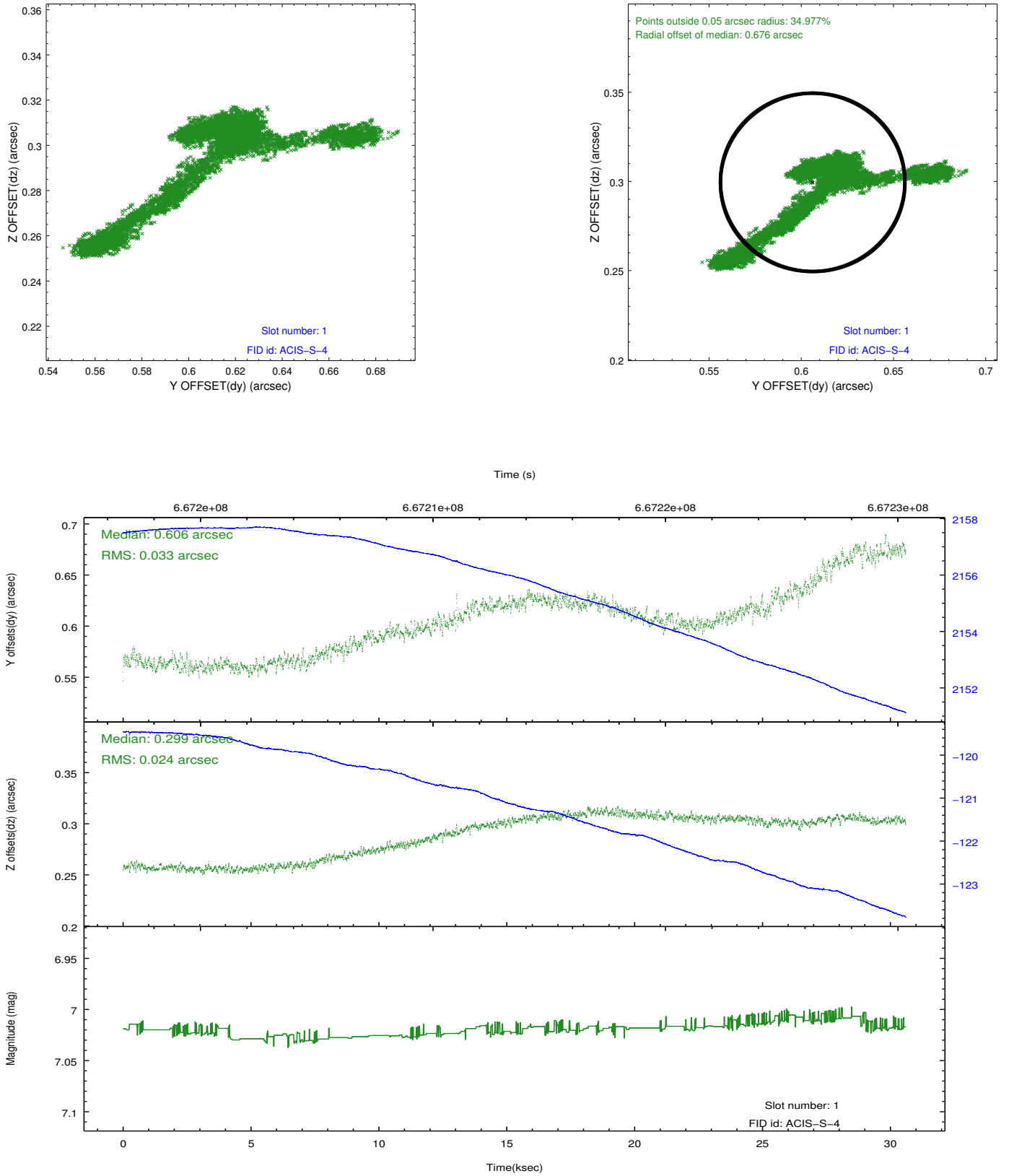


2.5 FID Slots

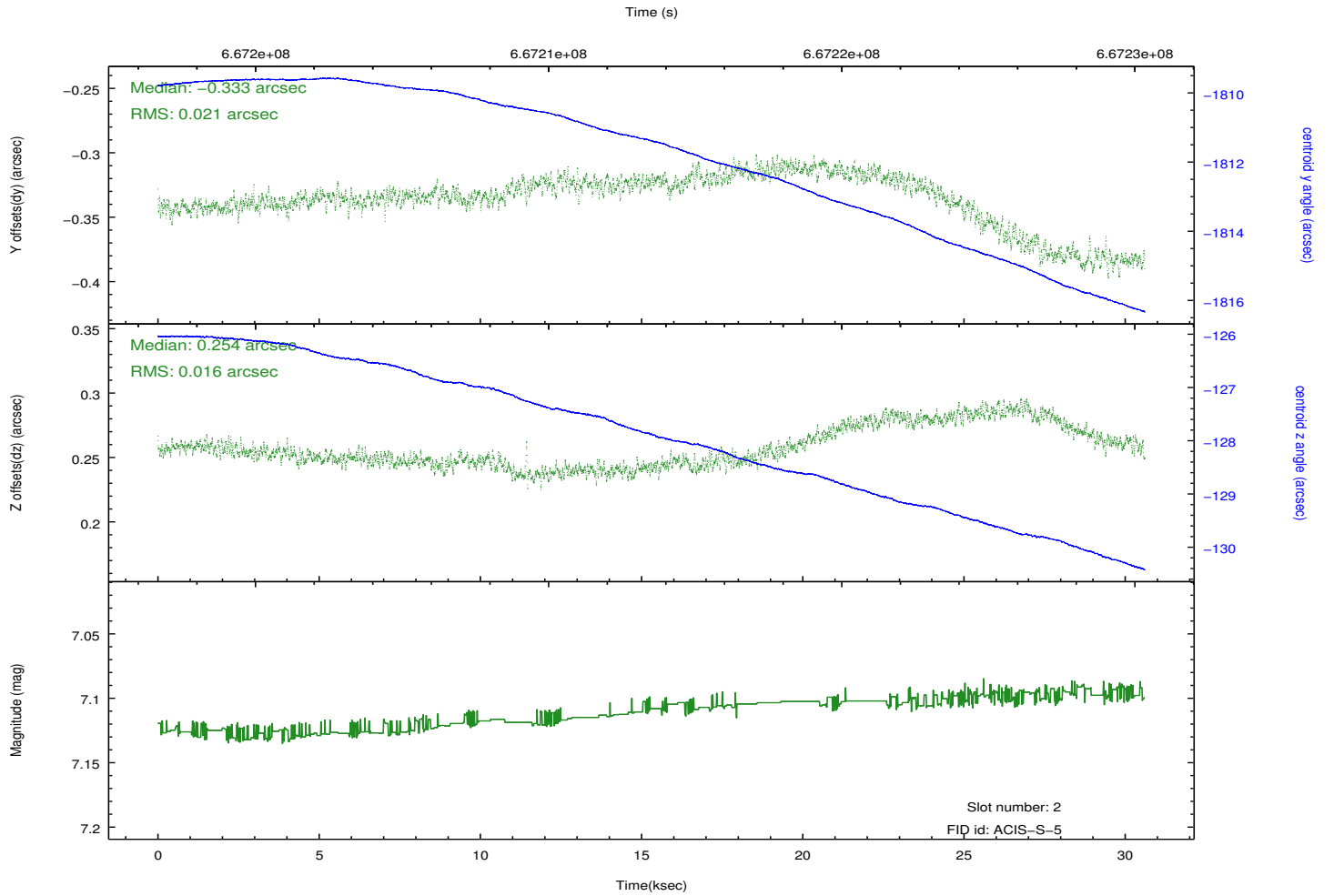
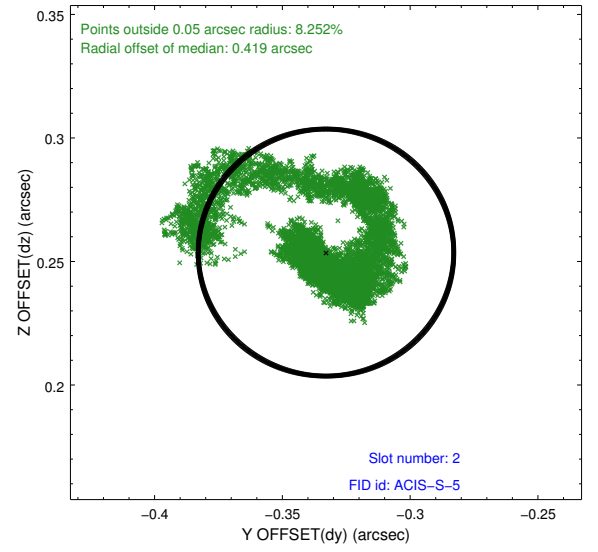
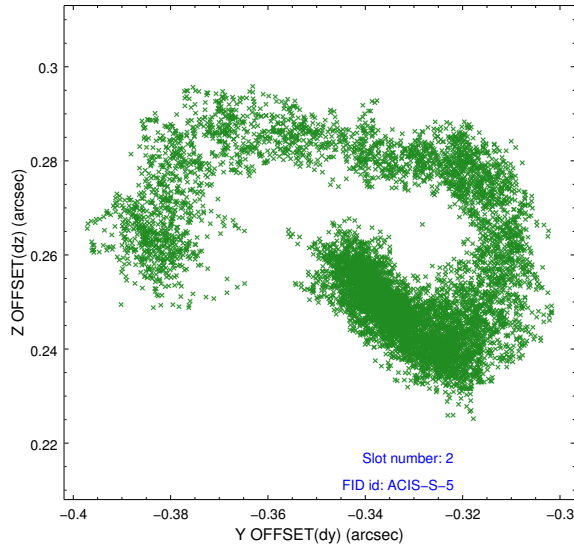
2.5.1 Slot 0



2.5.2 Slot 1

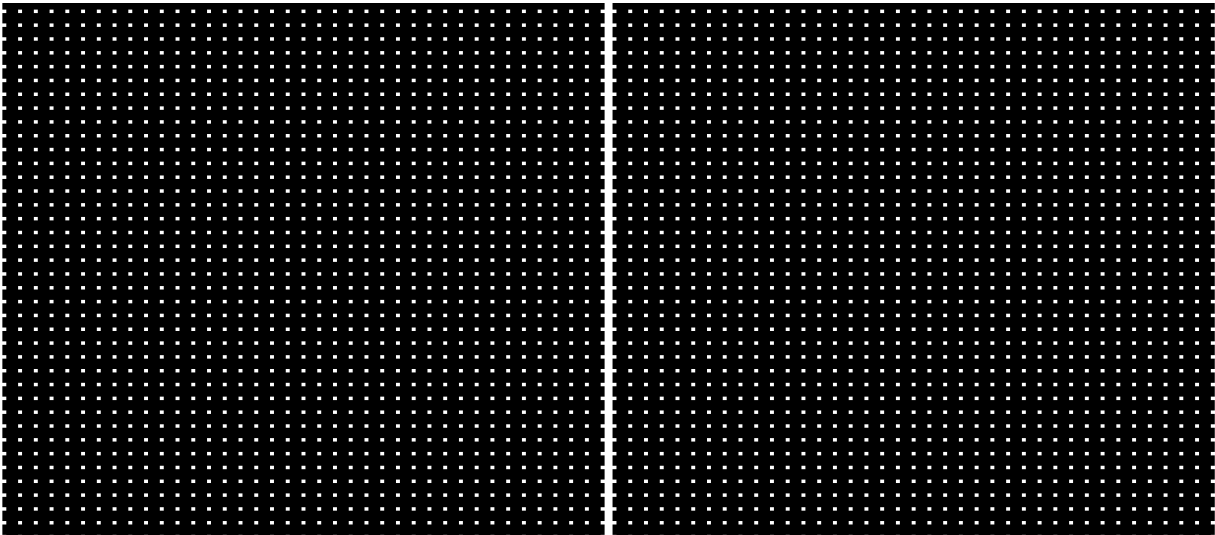


2.5.3 Slot 2



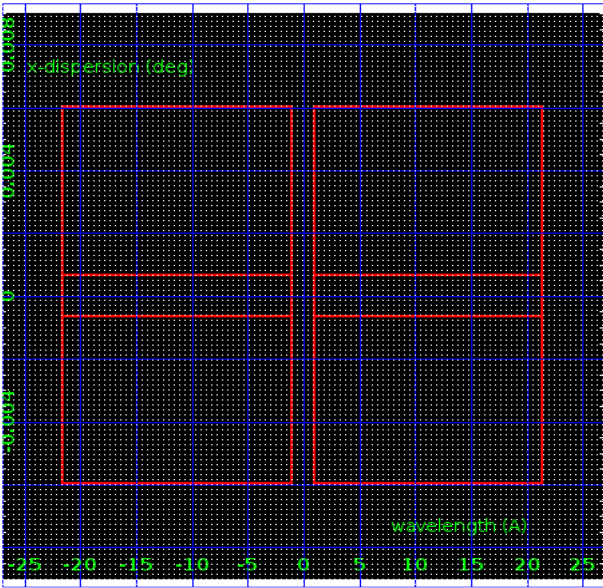
3 Gratings

3.1 HEG Arm

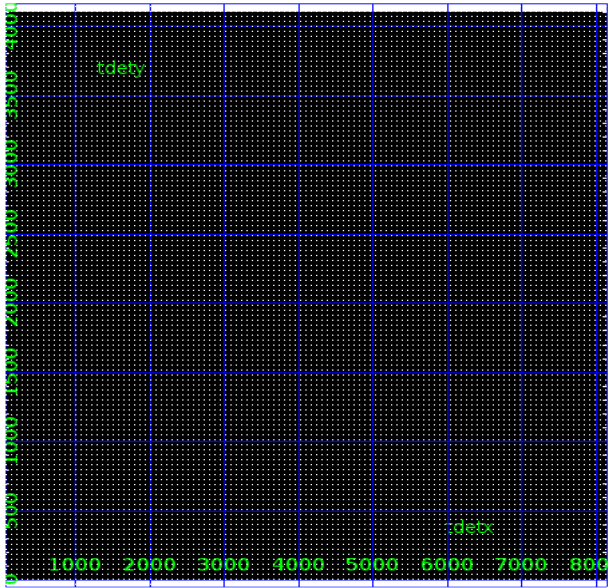


HEG Order Sort 123

HEG Order Sort ALL

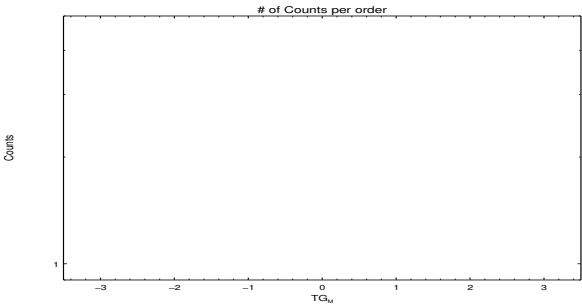


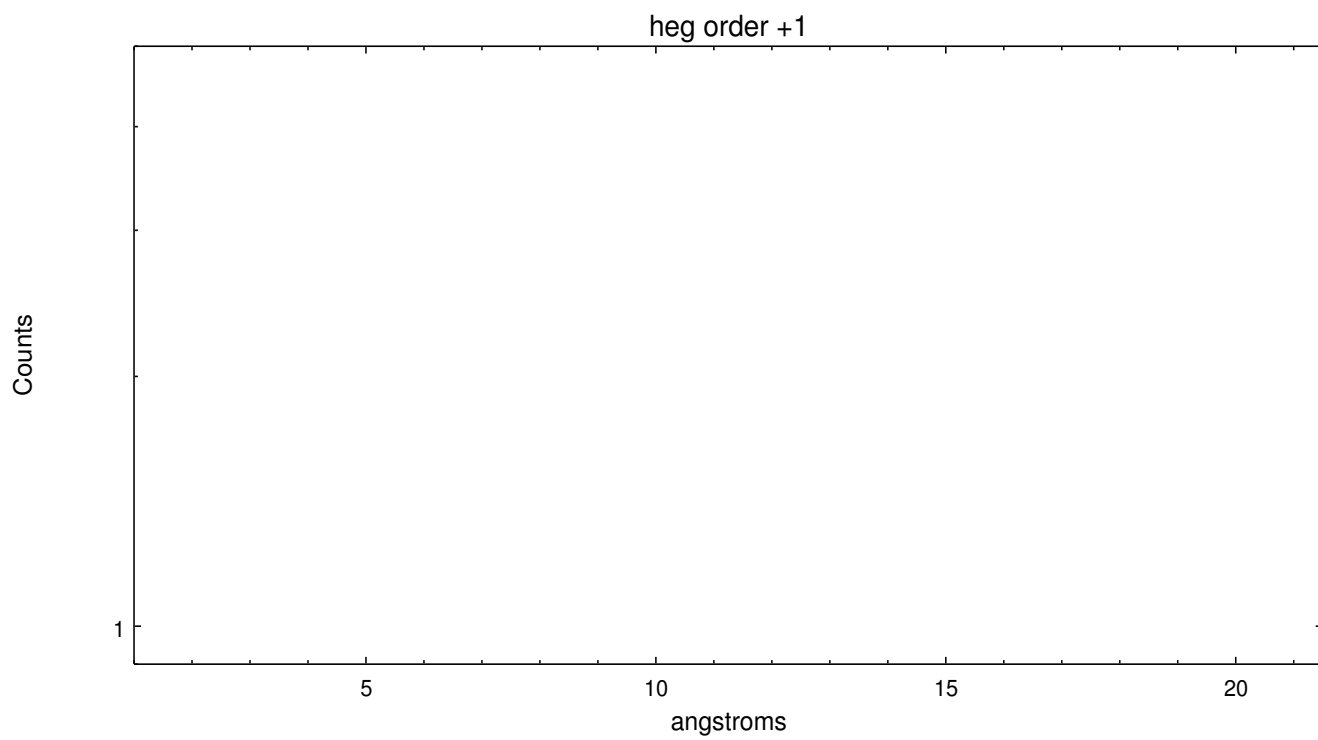
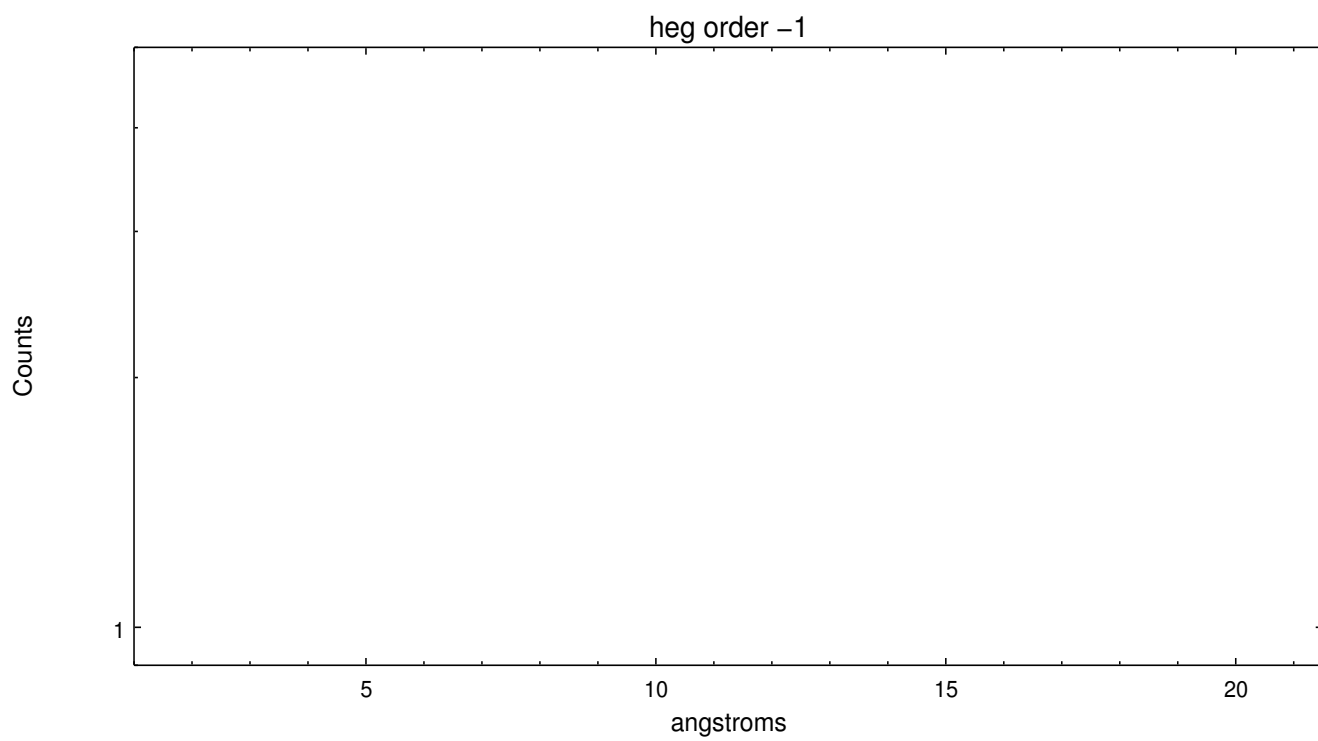
Spot Image HEG



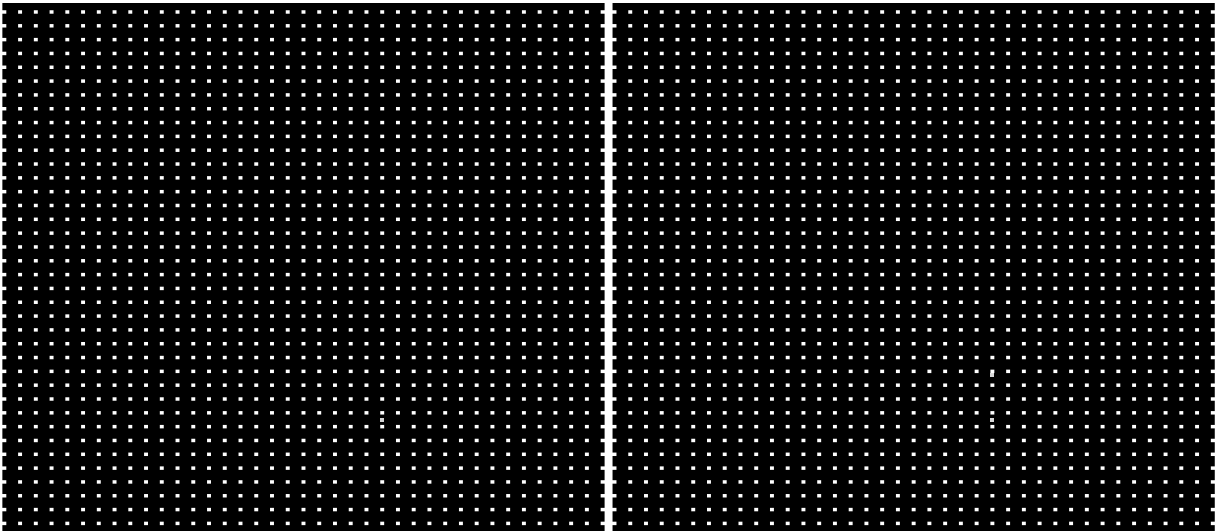
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	0	0	0	0	0	0	0



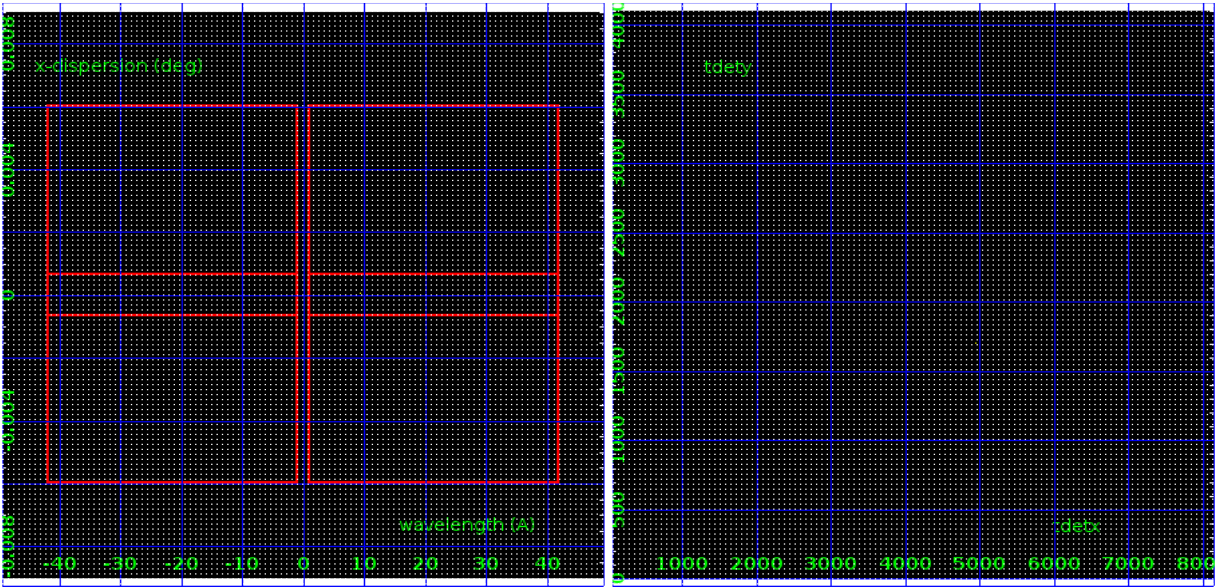


3.2 MEG Arm



MEG Order Sort 123

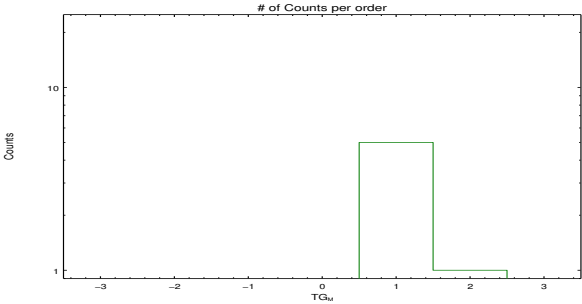
MEG Order Sort ALL

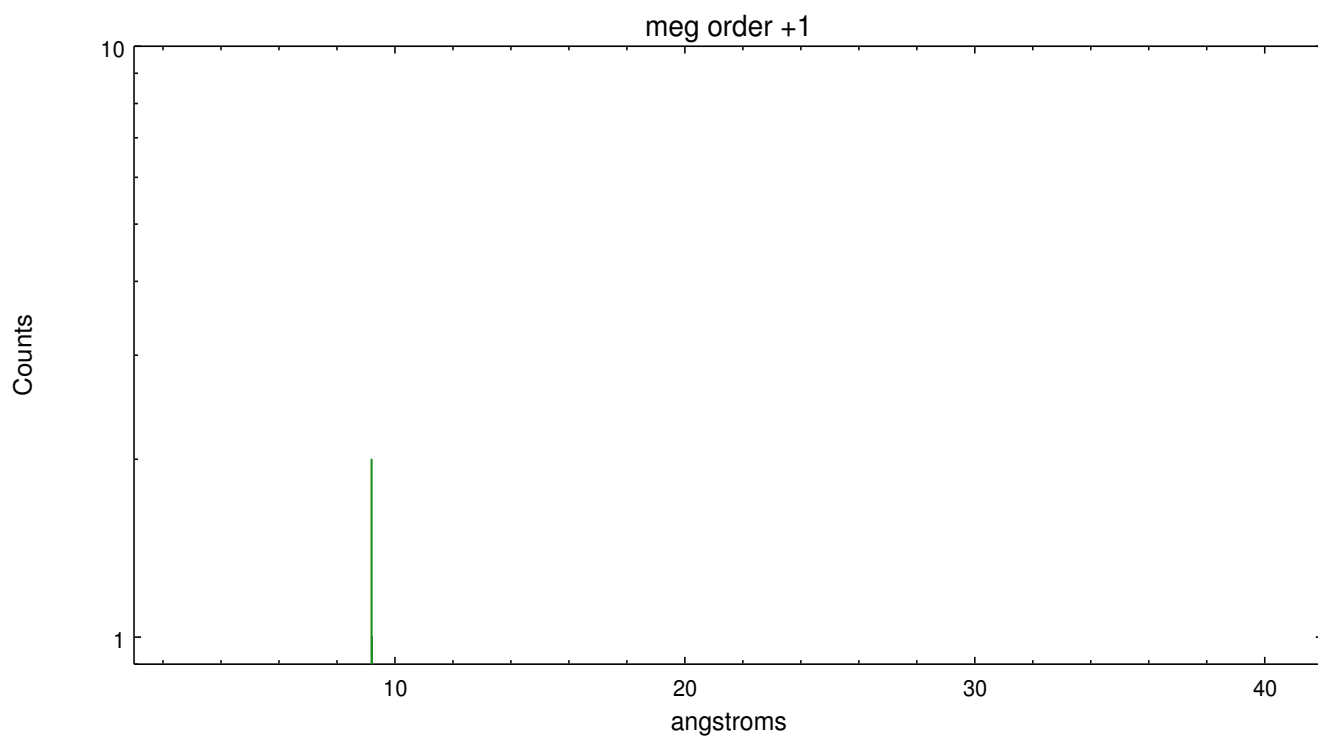
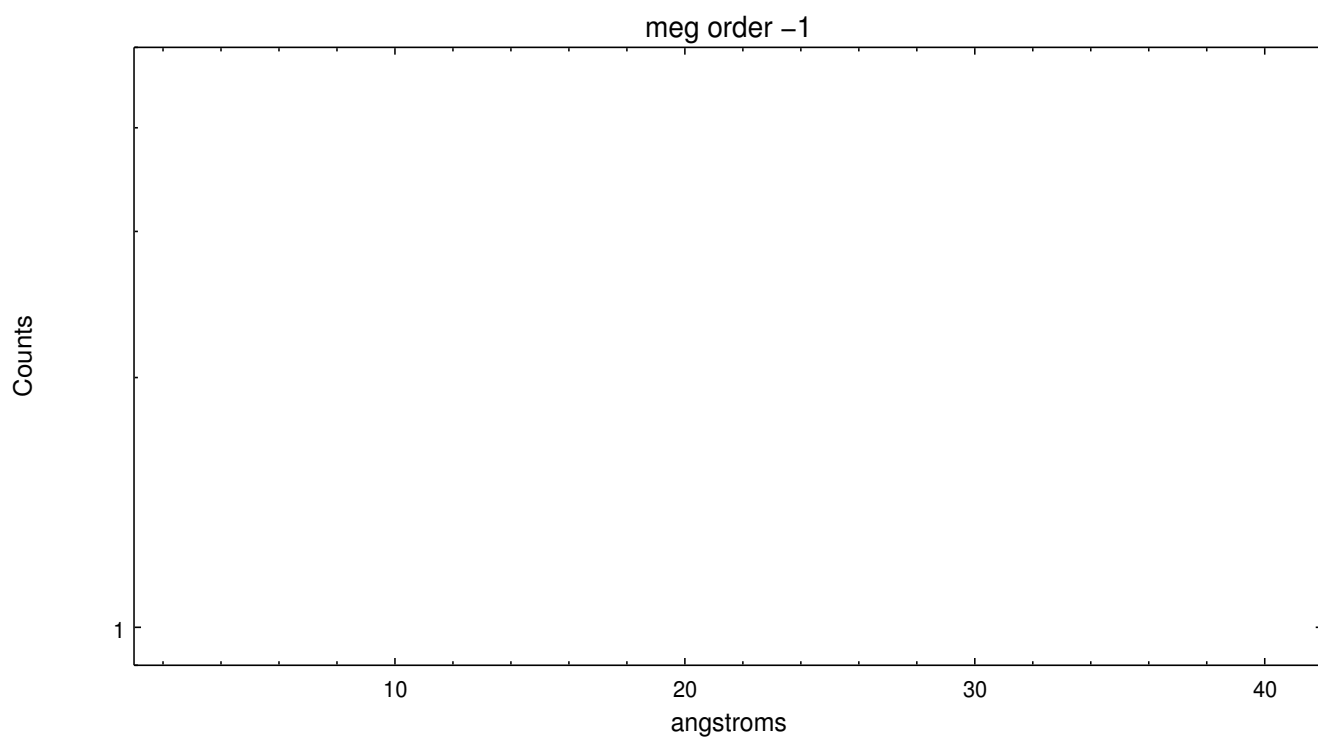


Spot Image MEG

Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	0	0	0	0	5	1	0





A Summary

A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2019.06.25
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.33525

A.2 Comments

This observation was done with the detector in the wrong science mode. Only events on S3 (CCD_ID = 7) were transmitted. Given the offset pointing (with the zeroth order off the array), no useful dispersed spectral events are present.