

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 13161 - L2 Version 2
Chandra X-Ray Center

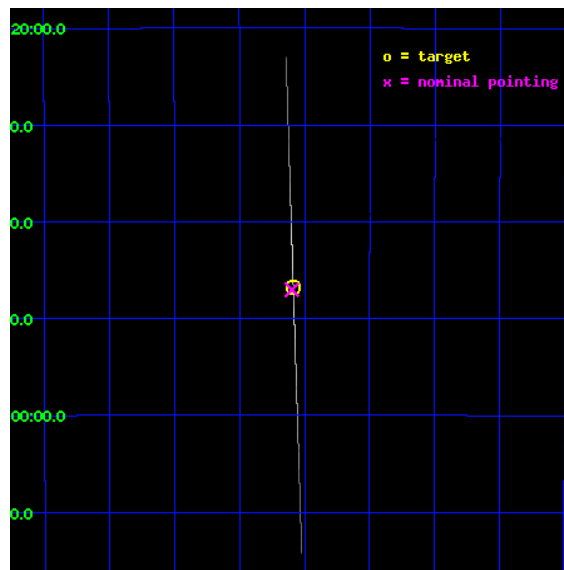
L2 Processing Date : Jul 6 2012

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1 Front

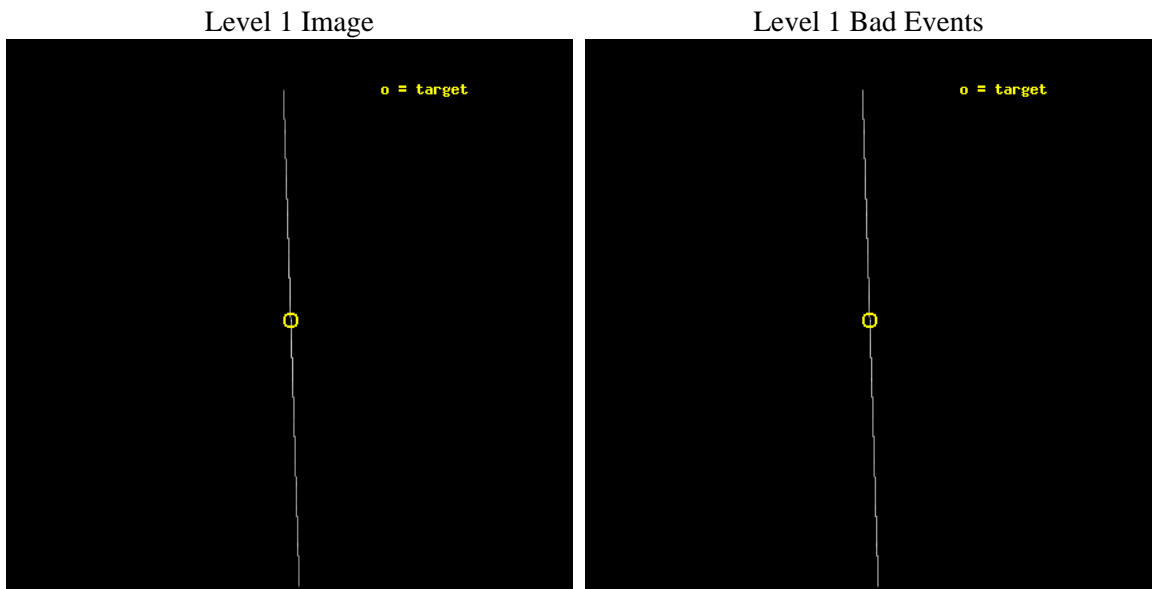
seq_num	401282	Sequence number
obs_id	13161	Observation id
title	High resolution spectroscopy of the 11 Hz eclipsing pulsar in Terzan 5	Proposal title
observer	Dr. Sudip Bhattacharyya	Principal investigator
object	EXO 1745-248	Source name
ra_targ	267.021667	Observer's specified target RA [deg]
dec_targ	-24.779833	Observer's specified target Dec [deg]
ra_nom	267.02431795239	Nominal RA [deg]
dec_nom	-24.784034108477	Nominal Dec [deg]
roll_nom	268.13224657262	Nominal Roll [deg]
revision	2	Processing version of data
ontime	30074.0	Sum of GTIs [s]
livetime	29956.5234375	Livetime [s]
ontime4	30074.0	Sum of GTIs [s]
ontime5	30074.0	Sum of GTIs [s]
ontime6	30074.0	Sum of GTIs [s]
ontime7	30074.0	Sum of GTIs [s]
ontime8	30074.0	Sum of GTIs [s]
ontime9	30074.0	Sum of GTIs [s]
l2events	3678708	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	30000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	30074.0	Sum of GTIs [s]
caldbver	4.5.0	 	ontime4	30074.0	Sum of GTIs [s]
date	2012-07-05T21:34:56	Date and time of file creation	ontime5	30074.0	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	30074.0	Sum of GTIs [s]
			ontime7	30074.0	Sum of GTIs [s]
			ontime8	30074.0	Sum of GTIs [s]
			ontime9	30074.0	Sum of GTIs [s]
			l1events	5959097	Number of level 1 events

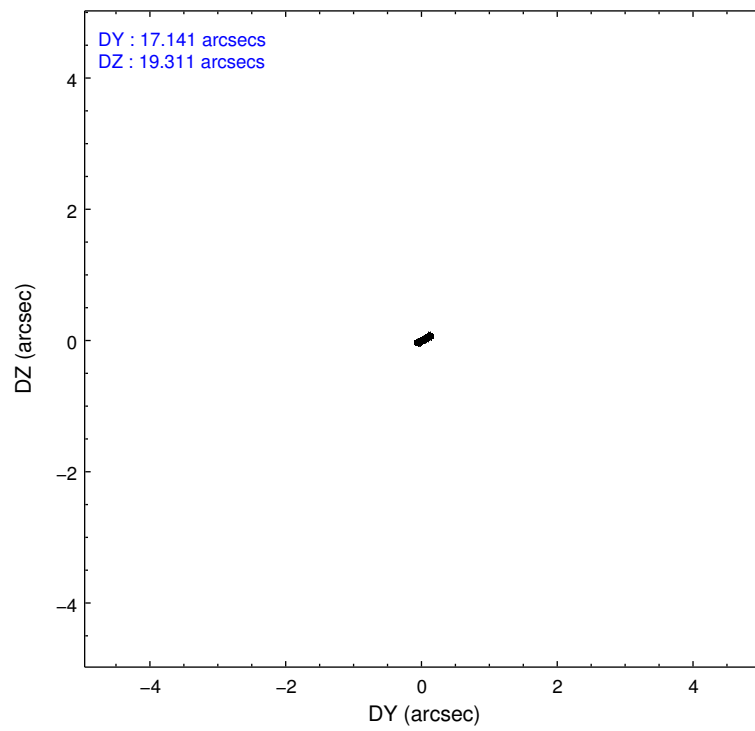
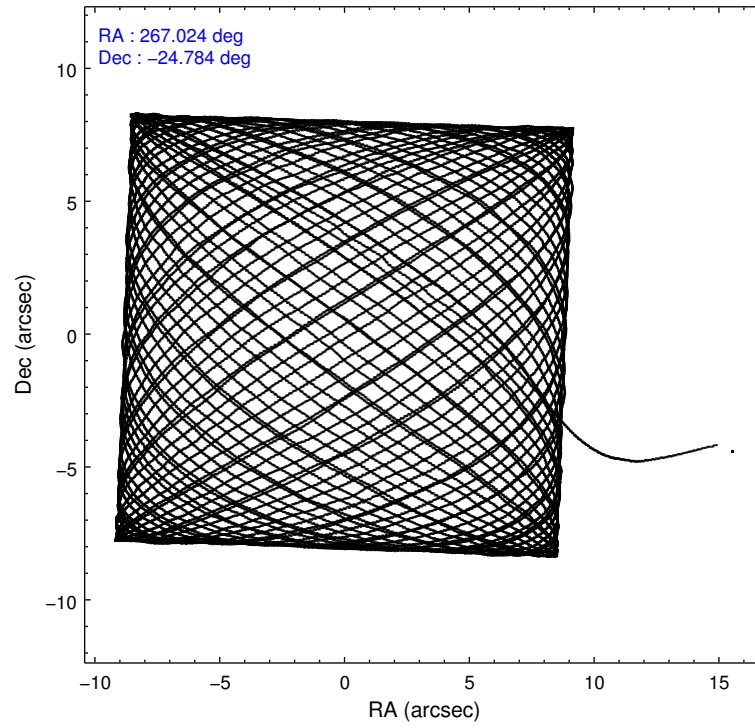
2.1.3 Events

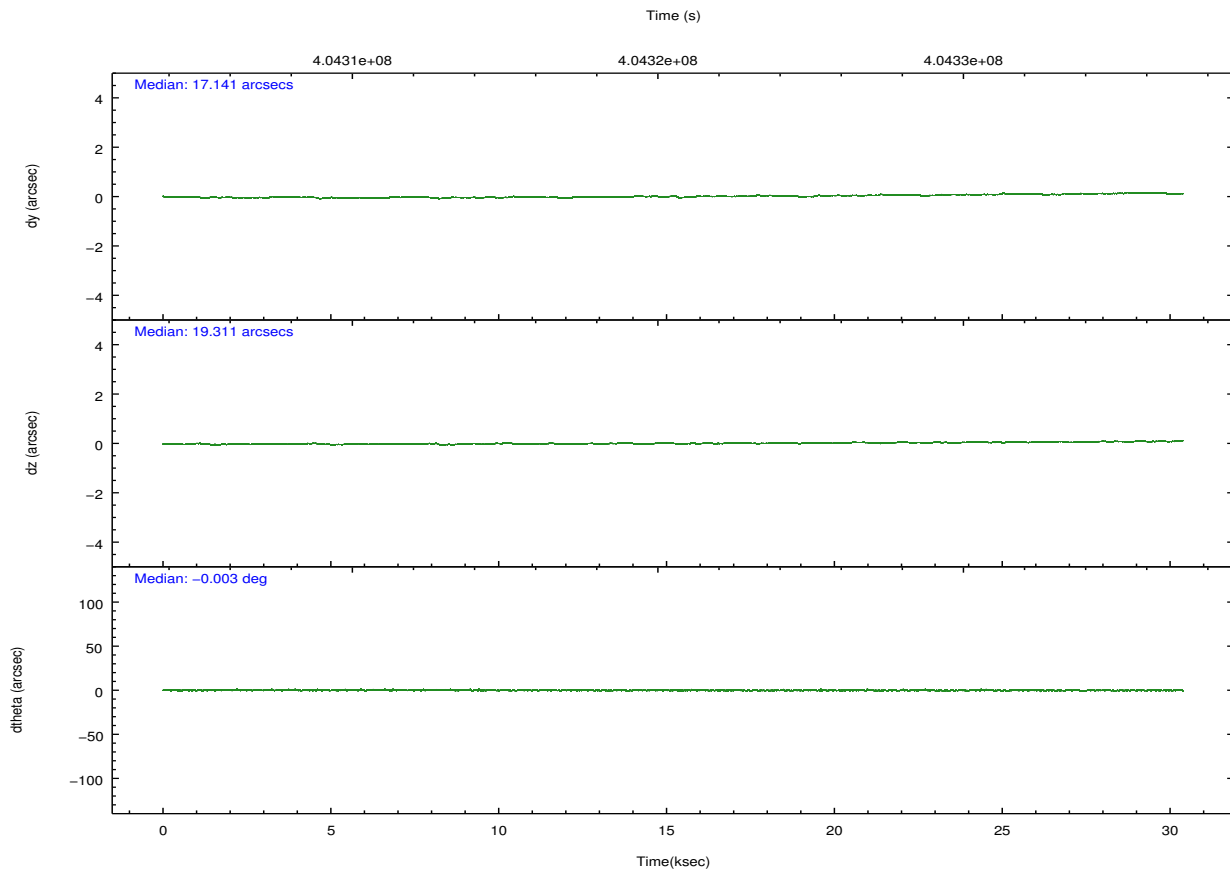
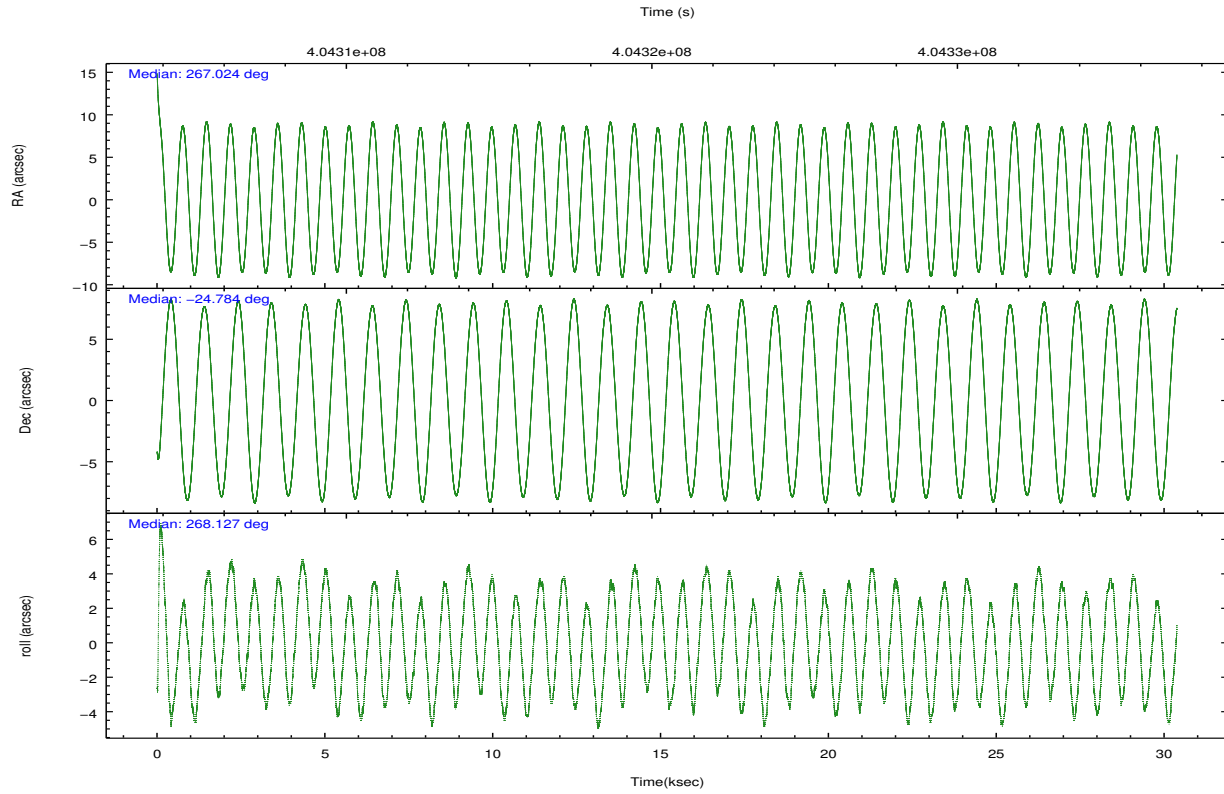
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	397298	458949	1750375	2113753	840769	397953	grade 0 events	7997	17657	29450	209639	96816	14926
rejected events	325193	178831	410224	385138	422286	303010		2%	3%	1%	9%	11%	3%
rejected %	81%	38%	23%	18%	50%	76%	grade 1 events	155	105	234	3559	493	167
								0%	0%	0%	0%	0%	0%
							grade 2 events	45865	139779	1137727	625774	250362	59111
								11%	30%	64%	29%	29%	14%
							grade 3 events	5417	7887	6242	110540	14645	5112
								1%	1%	0%	5%	1%	1%
							grade 4 events	5296	7508	5996	110050	14285	5592
								1%	1%	0%	5%	1%	1%
							grade 5 events	4895	13178	11113	41690	10198	6324
								1%	2%	0%	1%	1%	1%
							grade 6 events	7543	107310	160844	672785	42429	10209
								1%	23%	9%	31%	5%	2%
							grade 7 events	320130	165525	398769	339716	411541	296512
								80%	36%	22%	16%	48%	74%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-456789	ACIS-456789	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	267.009769	267.0243179523944	Subarray requested	NONE	NONE
[deg] Pointing Dec	-24.760105	-24.7840341084773	Alternating exposures requested	N	N
[deg] Pointing Roll	267.969531	268.1322465726205	[s] Primary exposure time	0.000000	0
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-186.132523	-186.1397904050899			
[mm] SIM translation stage offset	-4	-3.992732177917873			
[s] Observation start time (MET)	404305498.184000	404304169.05476			
Observation start date	2010-10-24T11:03:52	2010-10-24T10:42:49			
[s] Observation end time (MET)	404335498.184000	404335829.76889			
Observation end date	2010-10-24T19:23:52	2010-10-24T19:30:29			
Read mode	CONTINUOUS	CONTINUOUS			

2.3 Aspect



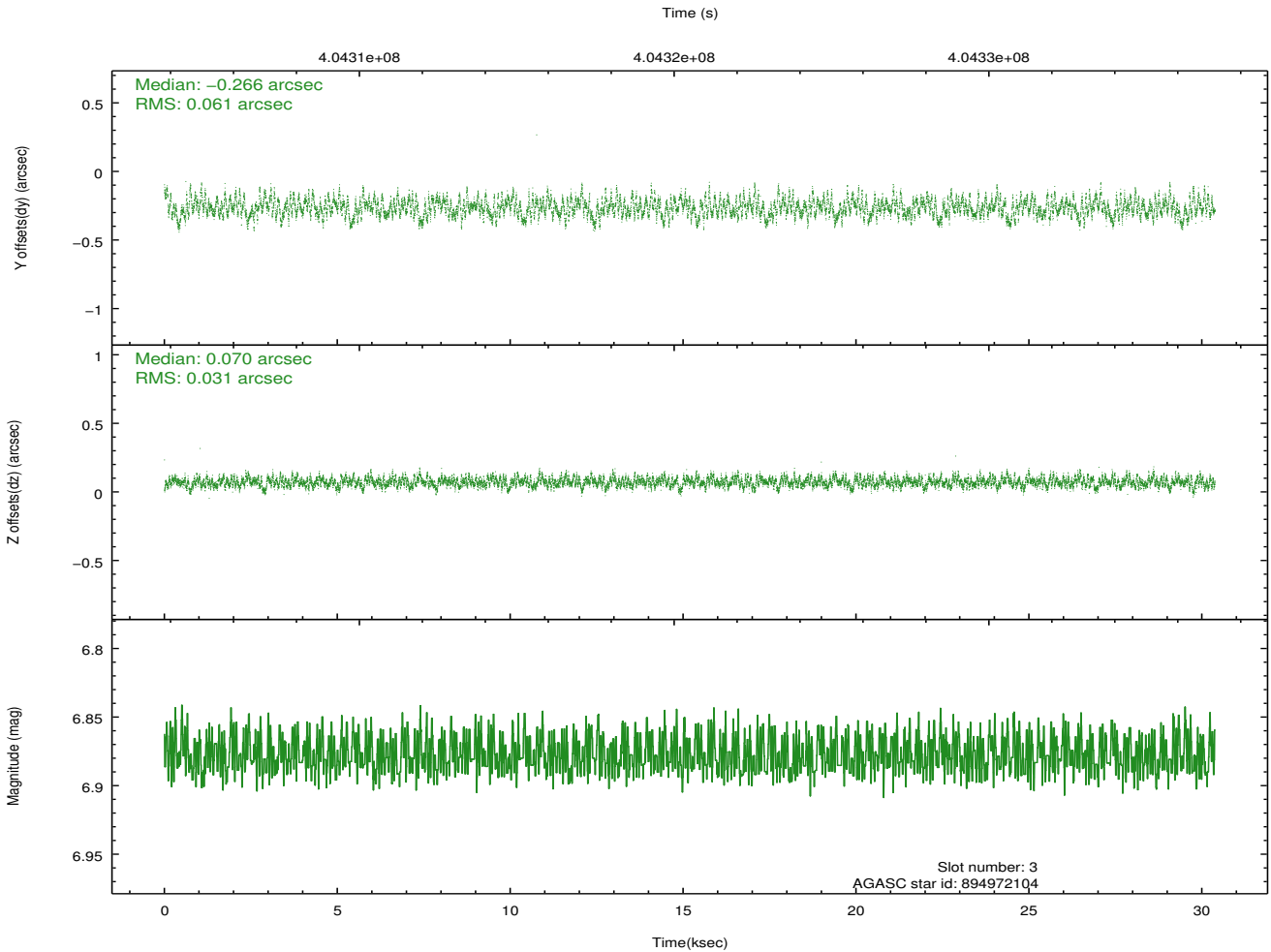
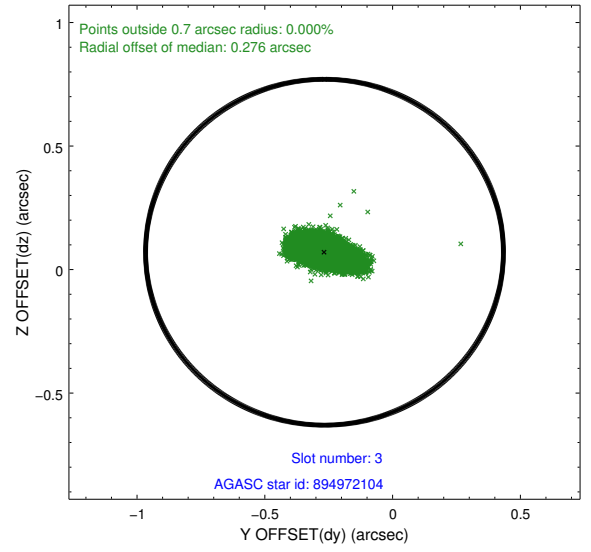
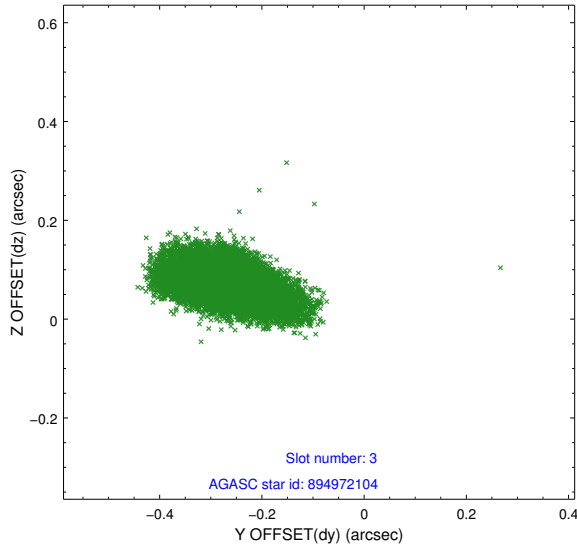


Slot Statistics

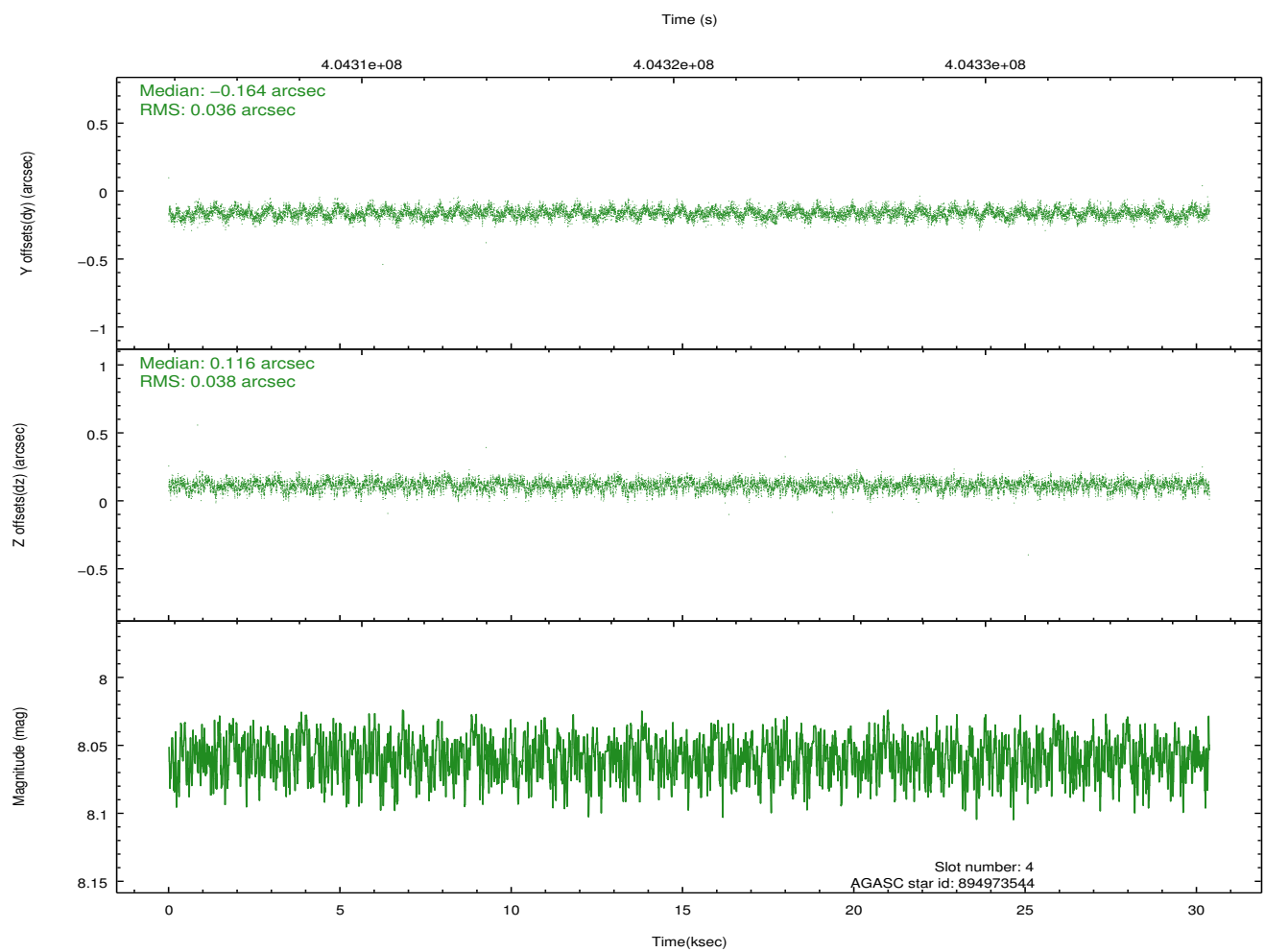
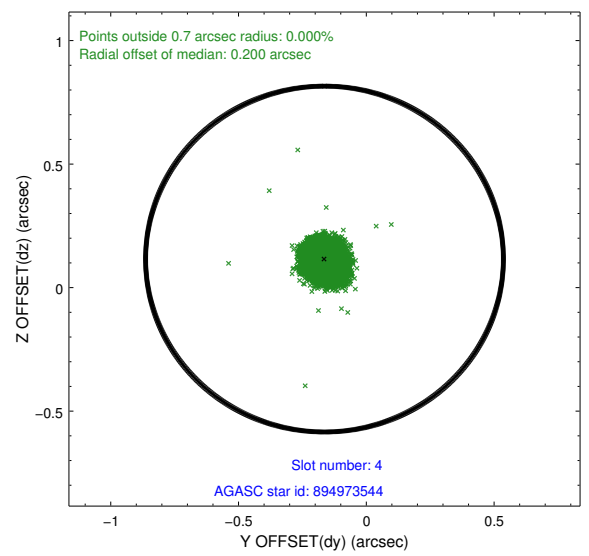
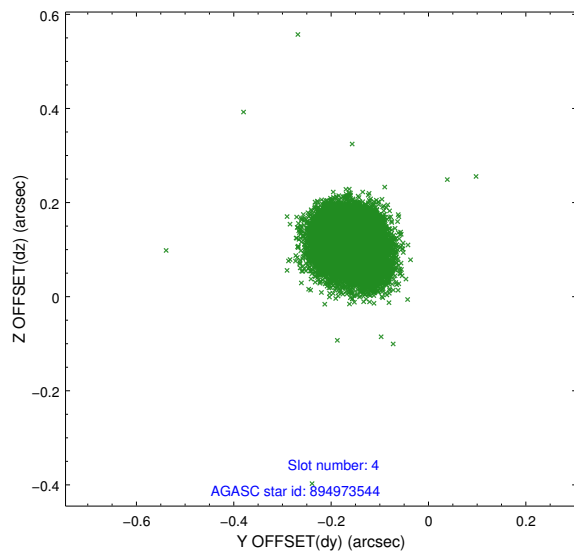
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.88	7410	-0.126	-0.093	0.006	0.010	0.000000	0.000000	-770.06	-1823.27
1	FID	ACIS-S-4	6.95	7410	0.128	0.063	0.006	0.010	0.000000	0.000000	2143.46	85.24
2	FID	ACIS-S-6	7.12	7409	-0.030	0.038	0.007	0.011	0.000000	0.000000	392.14	722.71
3	GUIDE	894972104	6.88	14819	-0.266	0.070	0.070	0.124	267.489380	-24.207054	-2042.53	1502.94
4	GUIDE	894973544	8.06	14811	-0.164	0.116	0.055	0.089	266.605572	-24.141151	-2177.53	-1405.91
5	GUIDE	895485920	8.66	14810	0.247	0.115	0.072	0.116	266.932426	-25.188840	1551.88	-196.76
6	GUIDE	895489704	8.80	14812	0.253	-0.264	0.091	0.154	266.328076	-25.361339	2248.91	-2139.09
7	GUIDE	895486672	9.02	14808	-0.069	-0.033	0.100	0.155	267.522168	-25.216127	1585.36	1726.07

2.4 Star Slots

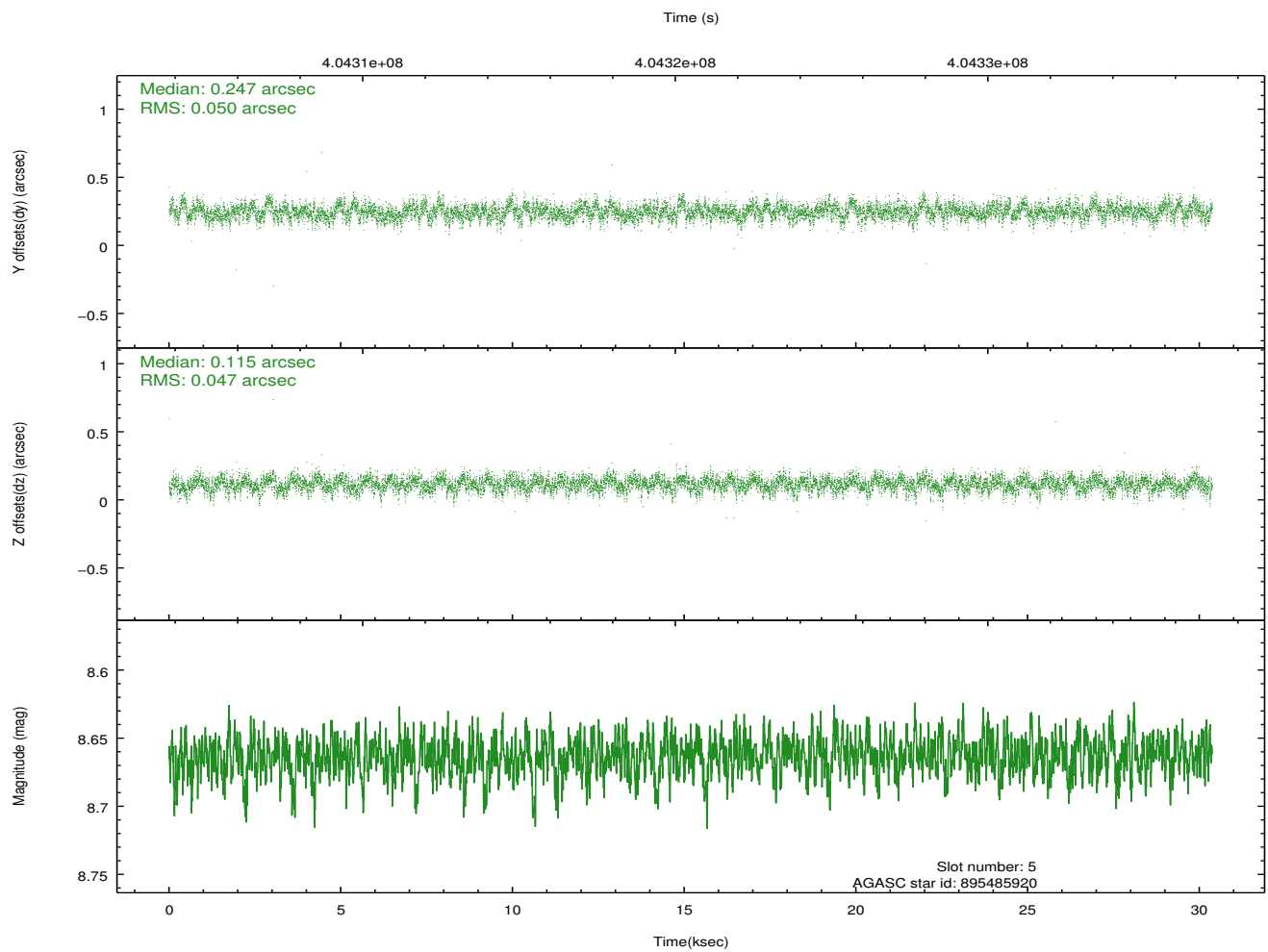
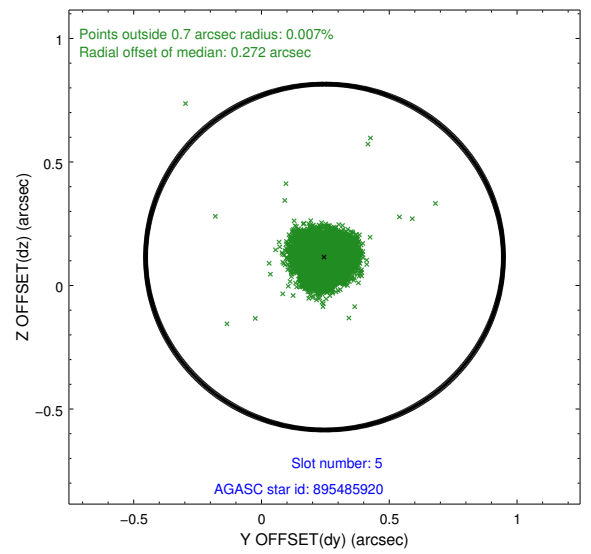
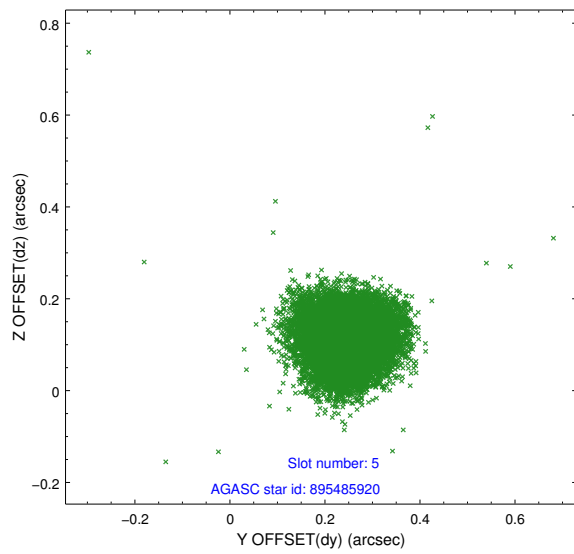
2.4.1 Slot 3



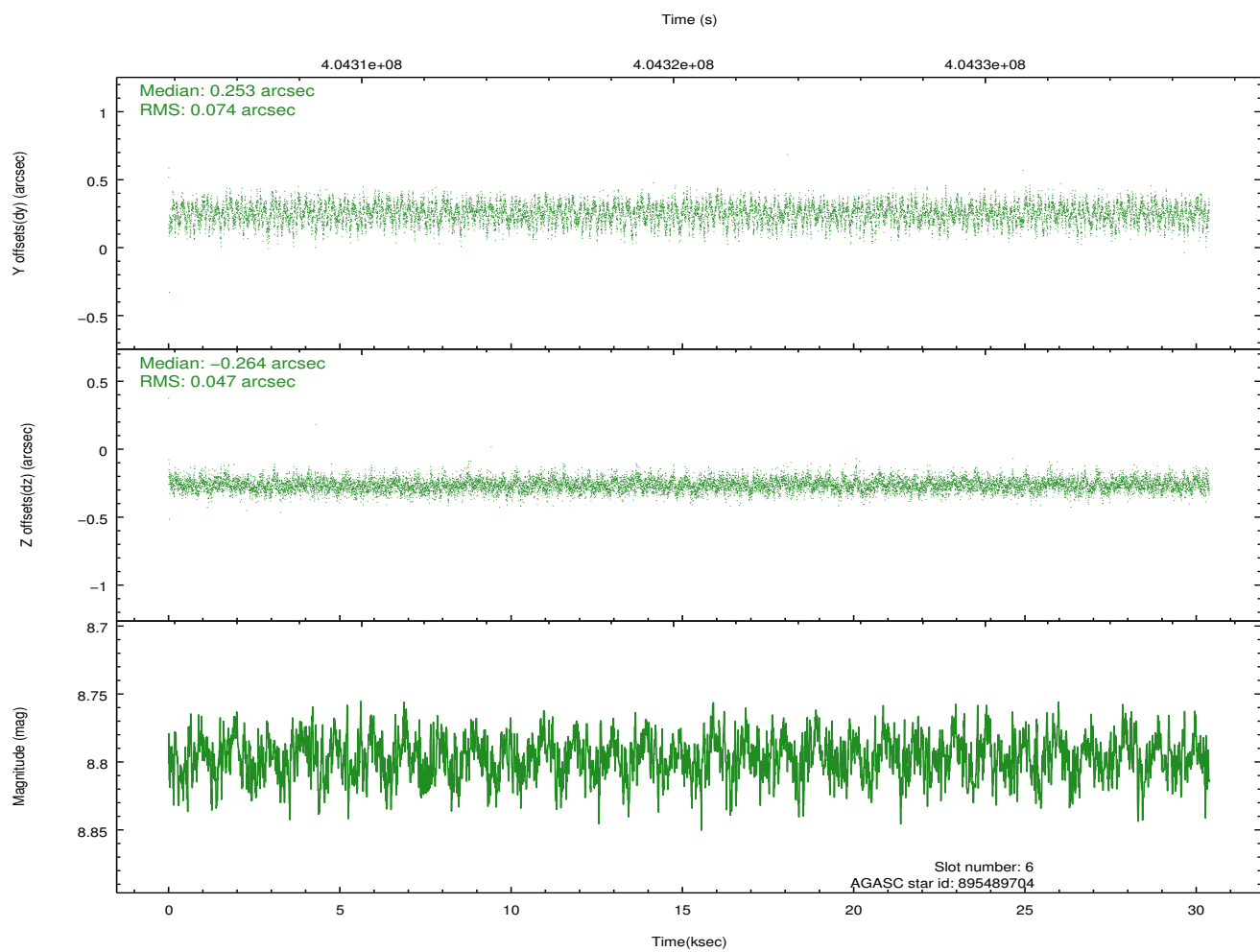
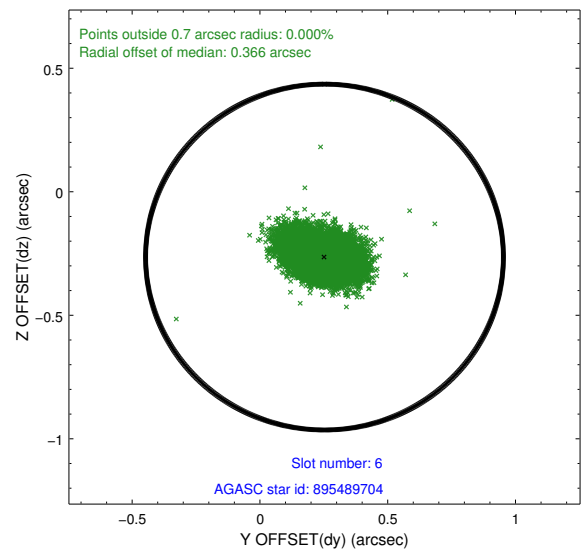
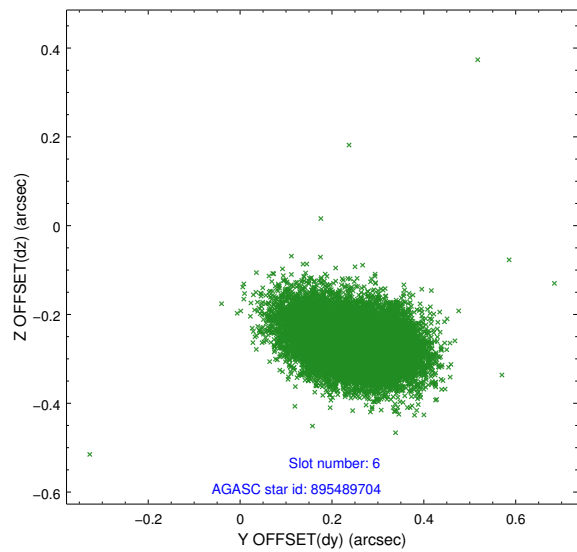
2.4.2 Slot 4



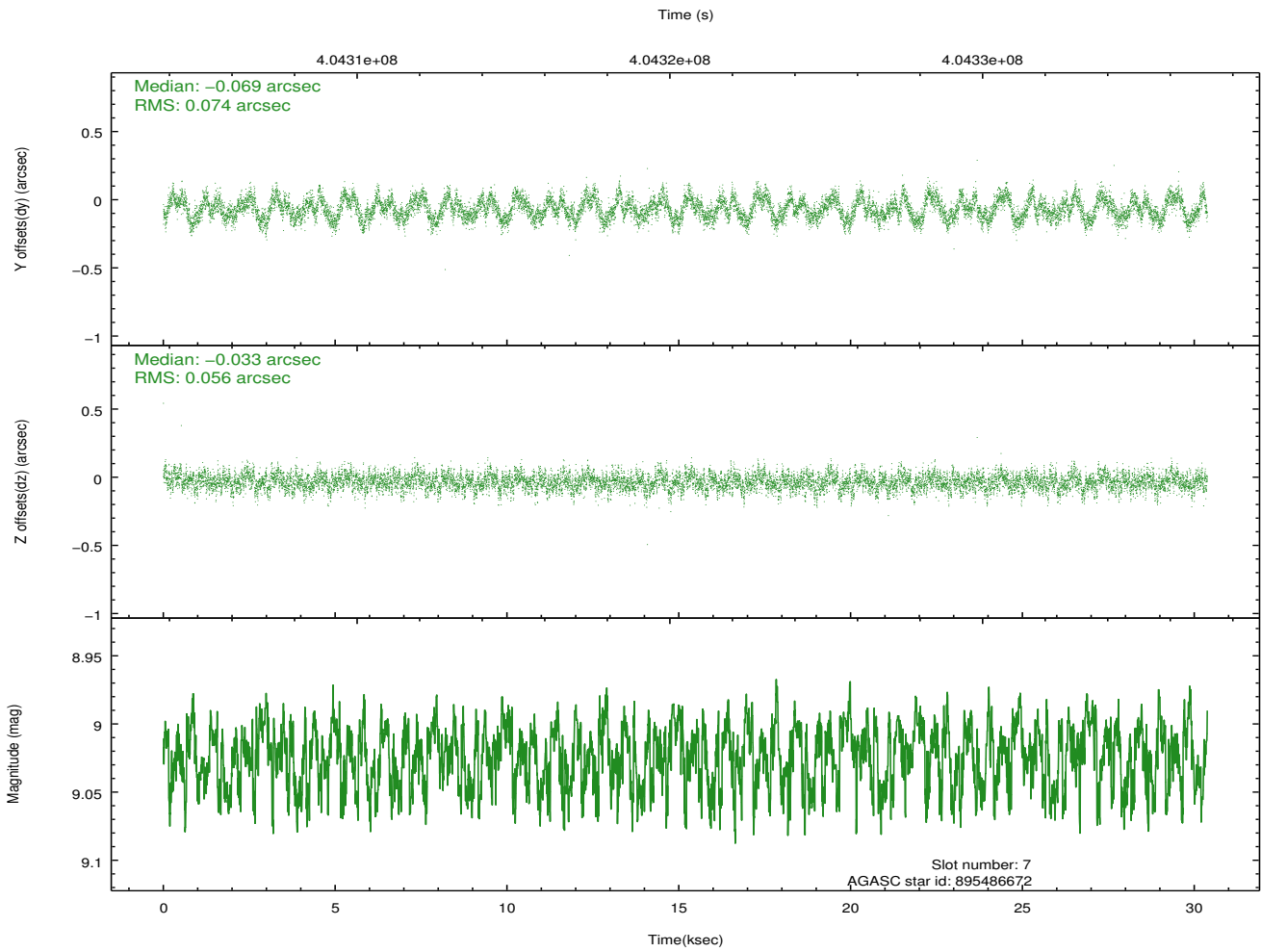
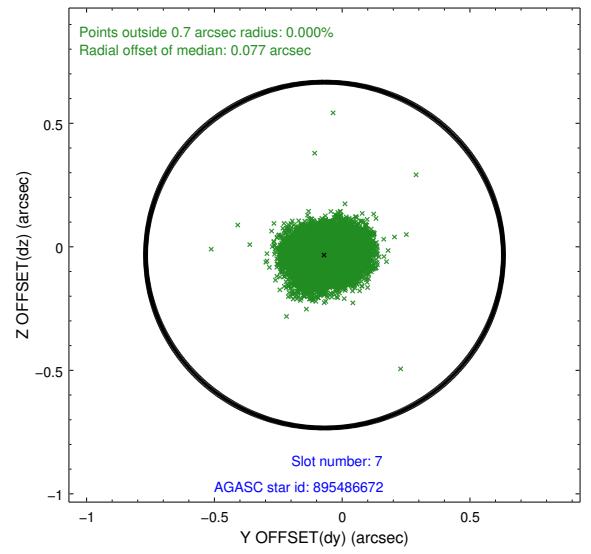
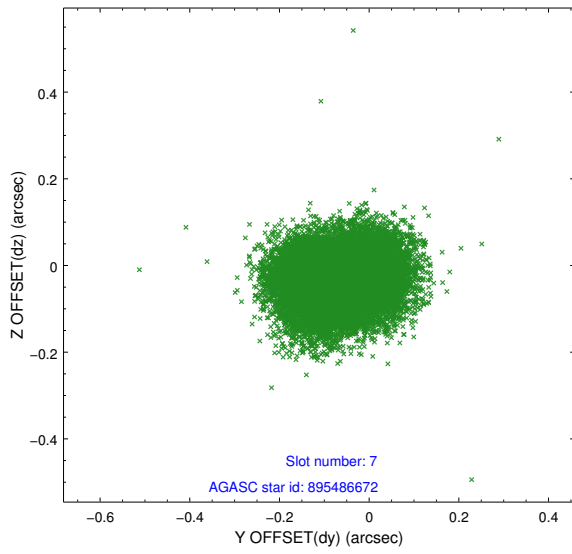
2.4.3 Slot 5



2.4.4 Slot 6

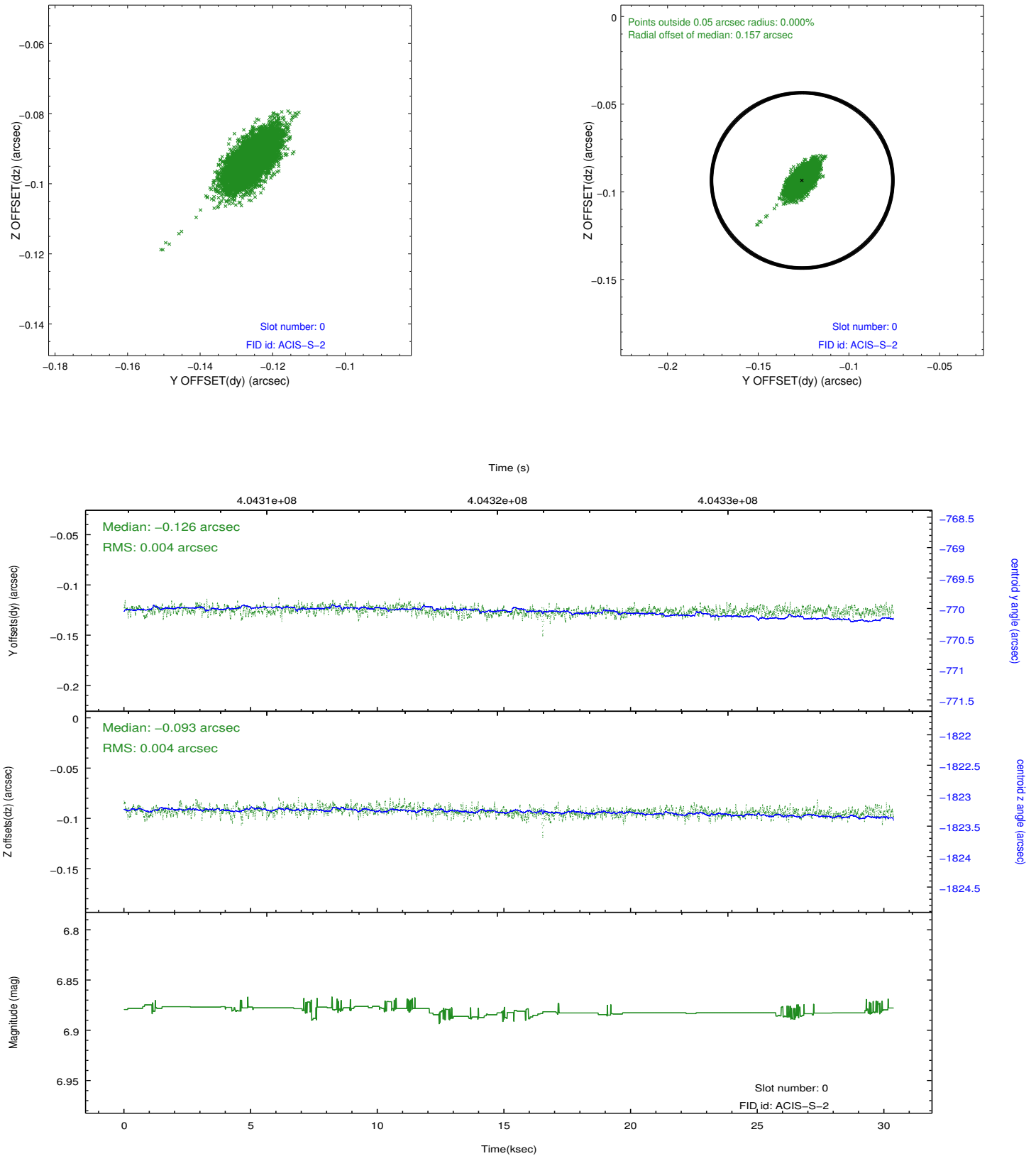


2.4.5 Slot 7

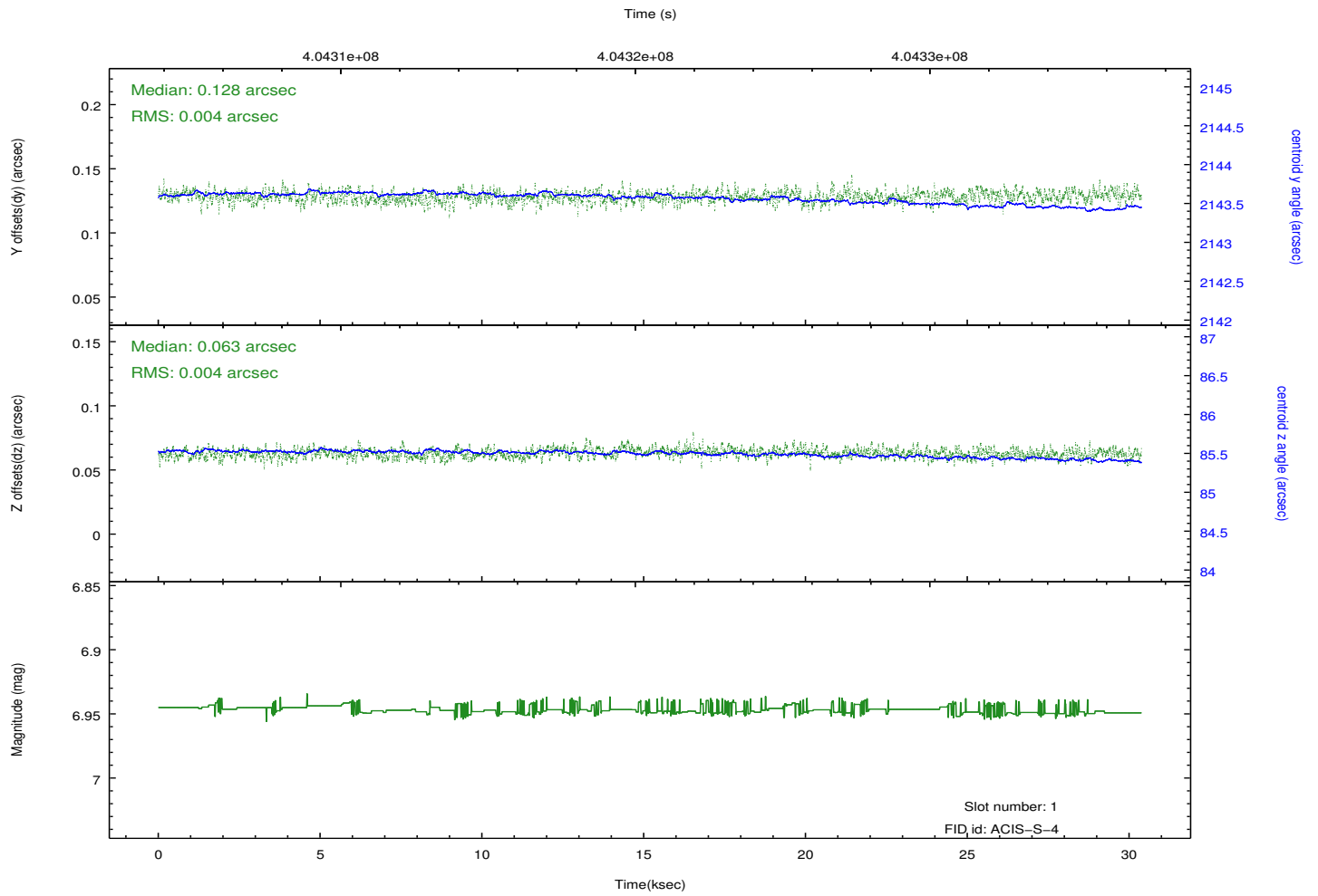
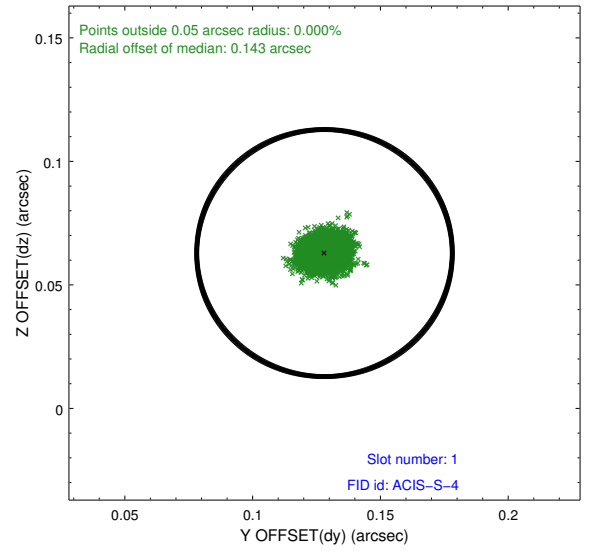
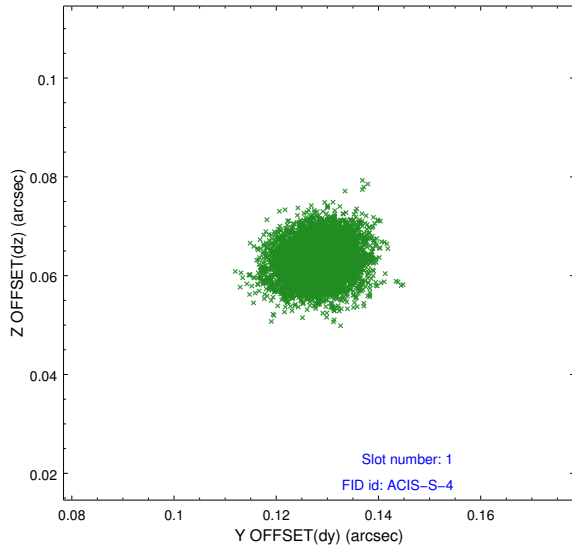


2.5 FID Slots

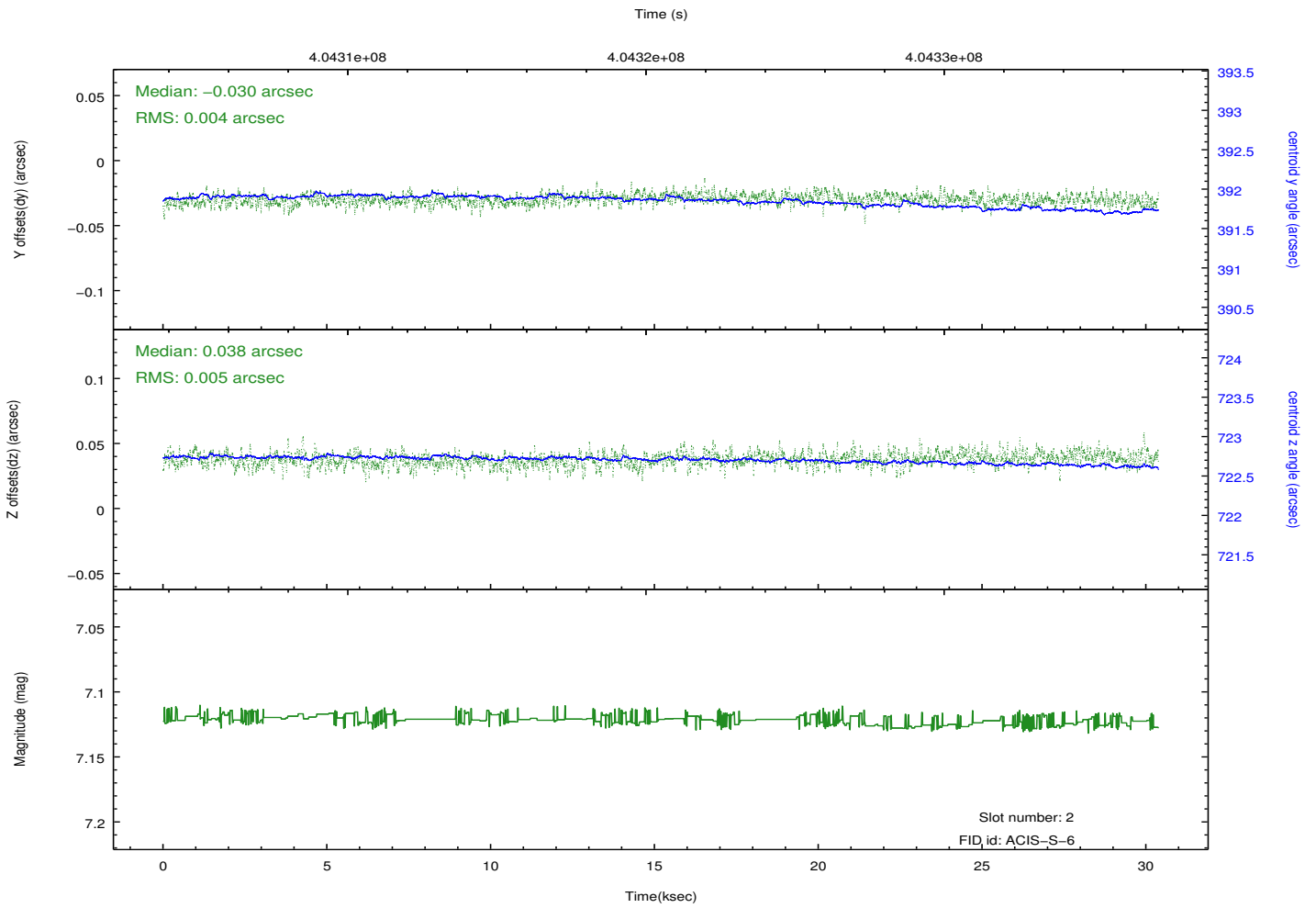
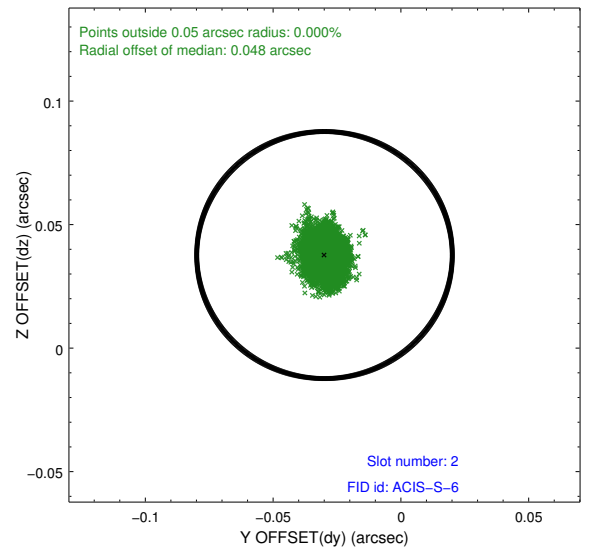
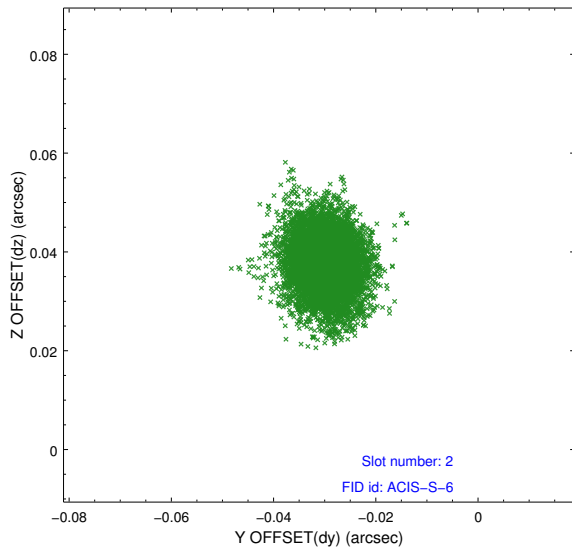
2.5.1 Slot 0



2.5.2 Slot 1

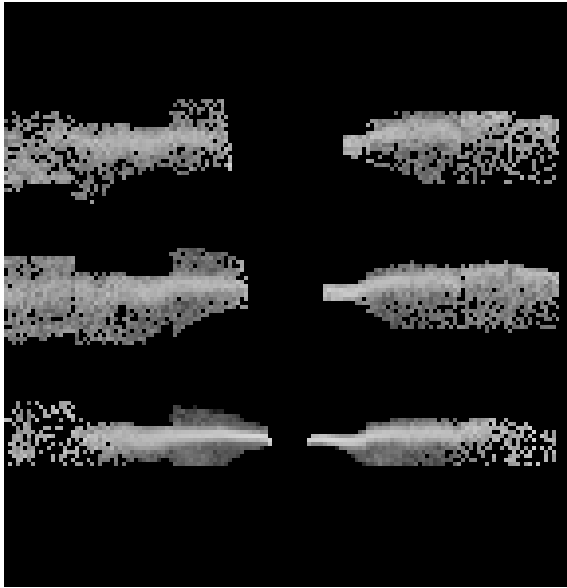


2.5.3 Slot 2

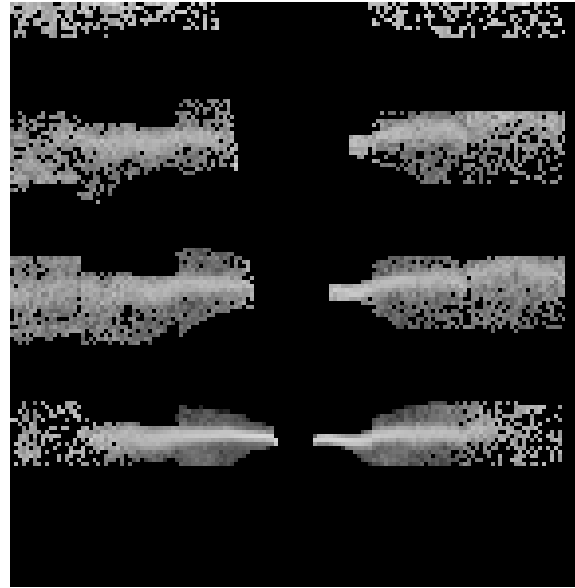


3 Gratings

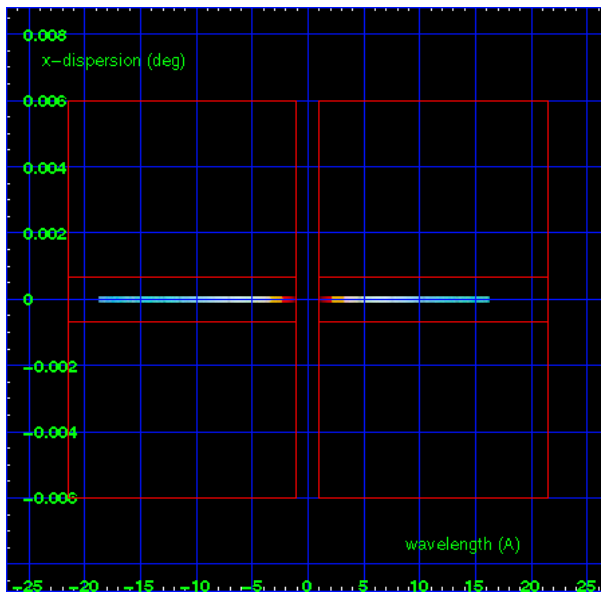
3.1 HEG Arm



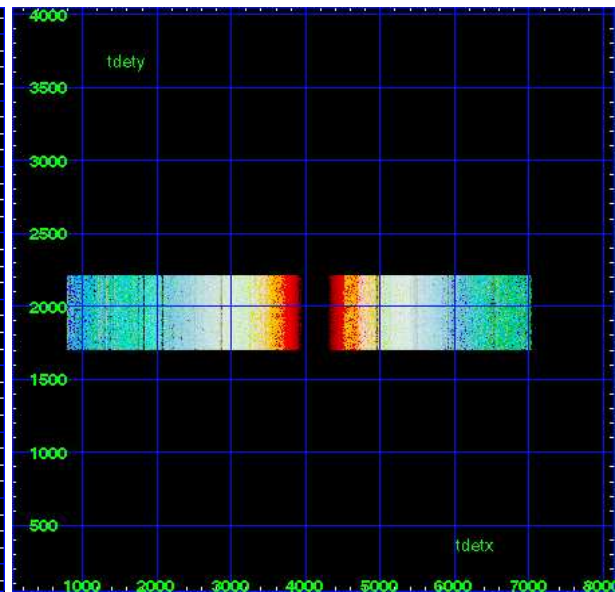
HEG Order Sort 123



HEG Order Sort ALL

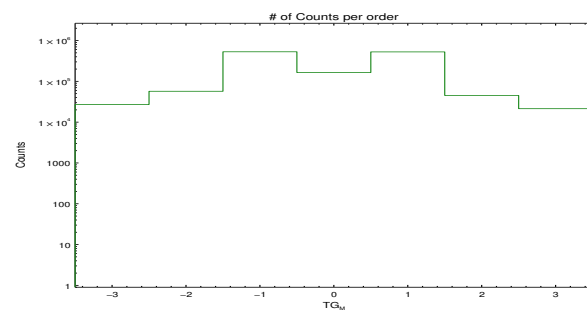


Spot Image HEG

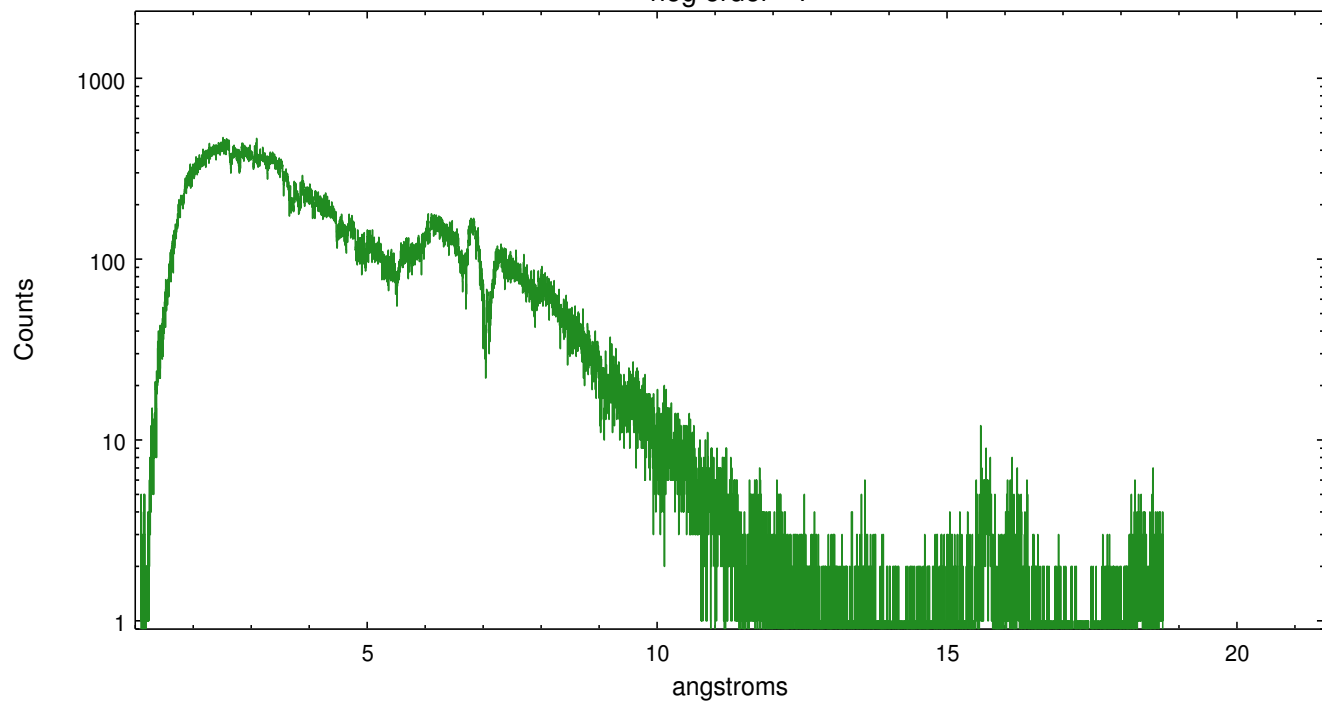


Full Detector HEG

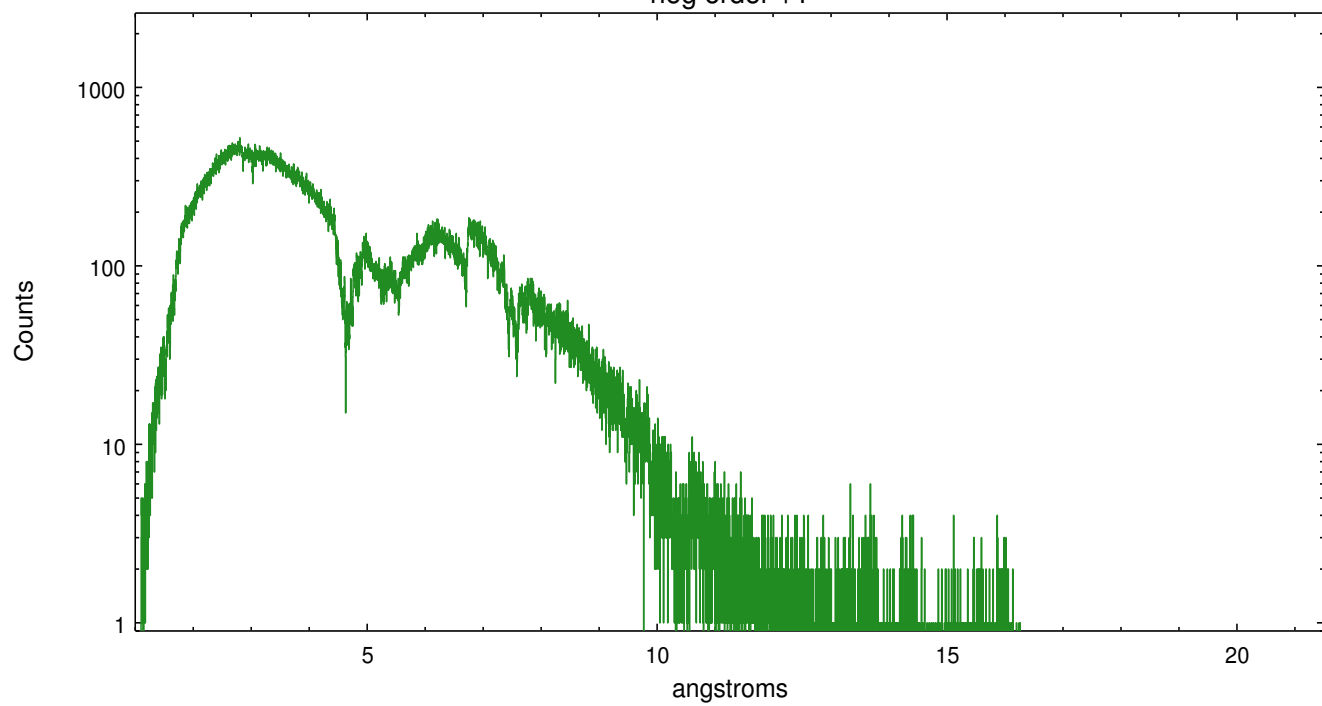
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	27056	57059	530671	164640	526930	45111	21402



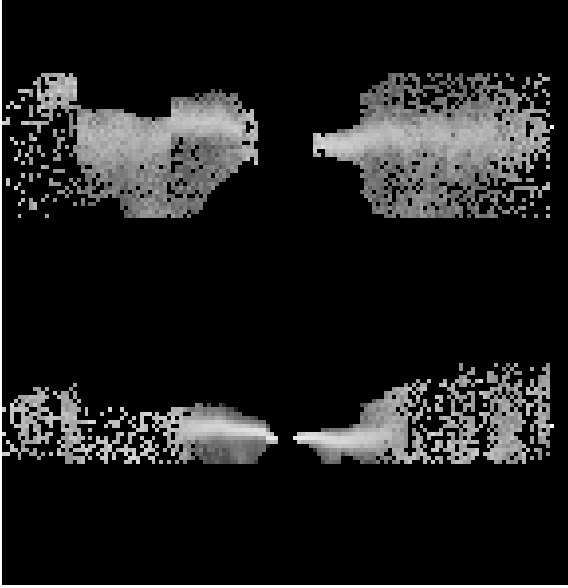
heg order -1



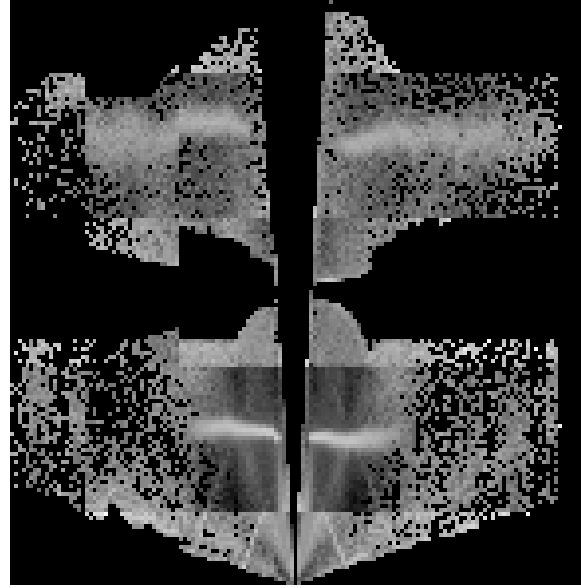
heg order +1



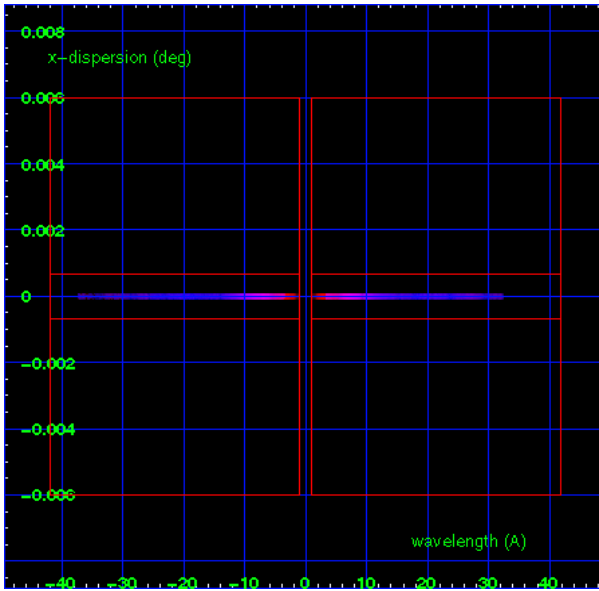
3.2 MEG Arm



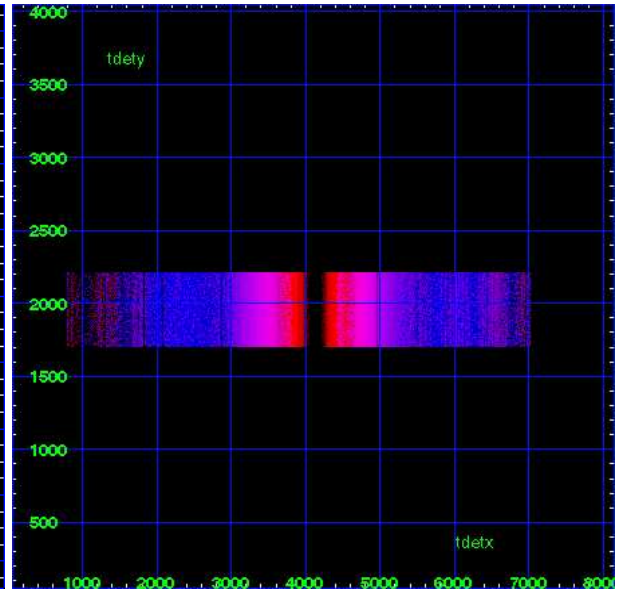
MEG Order Sort 123



MEG Order Sort ALL

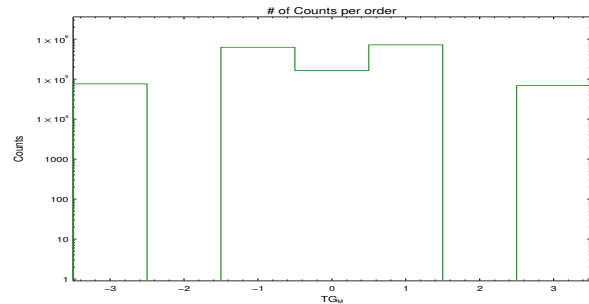


Spot Image MEG

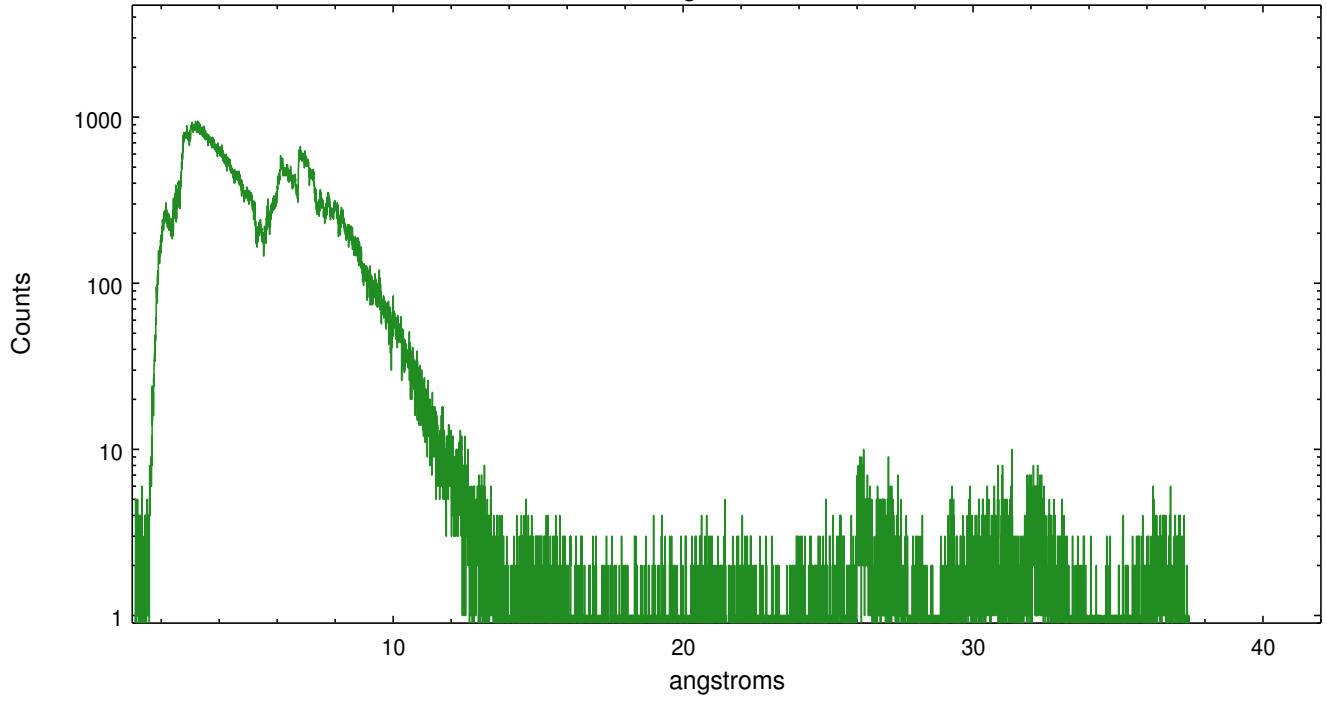


Full Detector MEG

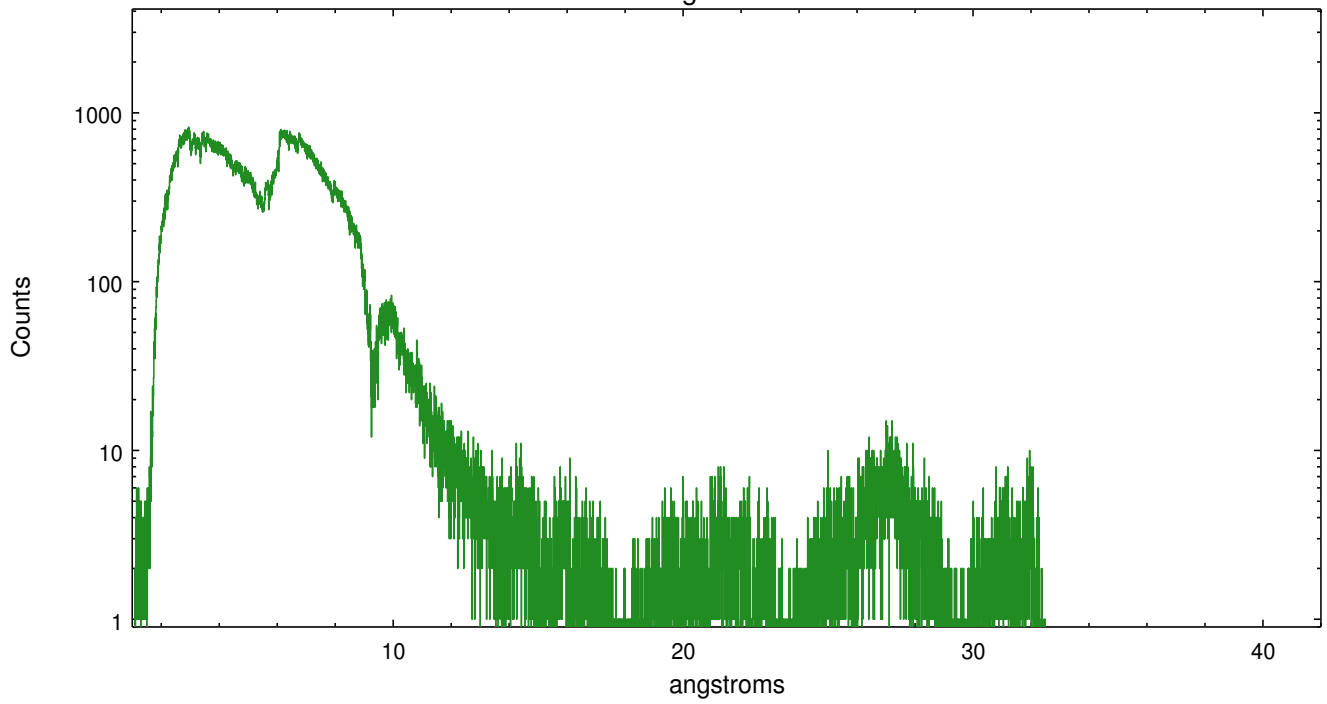
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	76250	0	626097	164640	720890	0	69197



meg order -1



meg order +1



A Summary

A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2012.07.19
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.074

A.2 Comments