

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 4564 - L2 Version 4
Chandra X-Ray Center

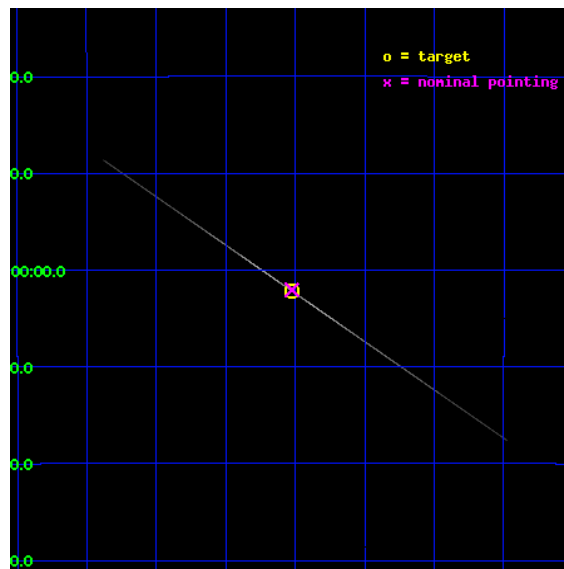
L2 Processing Date : Dec 4 2012

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1 Front

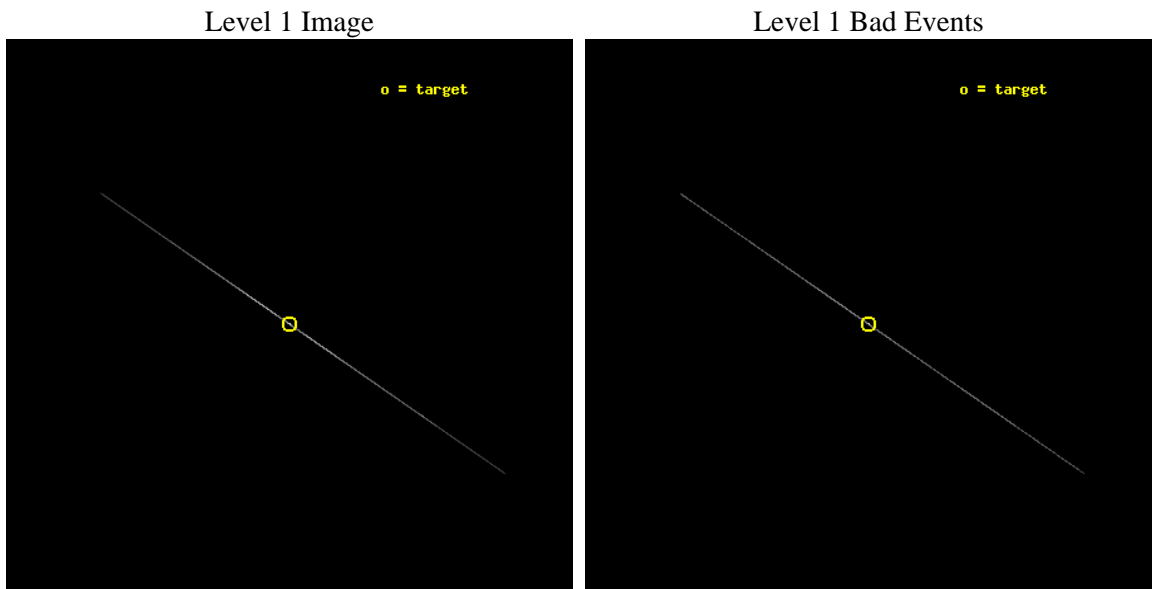
seq_num	400347	Sequence number
obs_id	4564	Observation id
title	High Resolution Spectroscopy of GX 17+2 with the Chandra/HETG	Prop
observer	Dr. Tiziana Di Salvo	Principal investigator
object	GX 17+2	Source name
ra_targ	274.005833	Observer's specified target RA [deg]
dec_targ	-14.036389	Observer's specified target Dec [deg]
ra_nom	274.00611793715	Nominal RA [deg]
dec_nom	-14.03420134011	Nominal Dec [deg]
roll_nom	214.40441836009	Nominal Roll [deg]
revision	4	Processing version of data
ontime	30178.540286511	Sum of GTIs [s]
livetime	30060.655363517	Livetime [s]
ontime4	30180.0	Sum of GTIs [s]
ontime5	30180.0	Sum of GTIs [s]
ontime6	30180.0	Sum of GTIs [s]
ontime7	30178.540286511	Sum of GTIs [s]
ontime8	30178.540306628	Sum of GTIs [s]
ontime9	30178.540286869	Sum of GTIs [s]
l2events	7592692	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	30178.540286511	Sum of GTIs [s]
caldbver	4.5.2	 	ontime4	30180.0	Sum of GTIs [s]
date	2012-12-03T20:14:43	Date and time of file creation	ontime5	30180.0	Sum of GTIs [s]
revision	4	Processing version of data	ontime6	30180.0	Sum of GTIs [s]
			ontime7	30178.540286511	Sum of GTIs [s]
			ontime8	30178.540306628	Sum of GTIs [s]
			ontime9	30178.540286869	Sum of GTIs [s]
			l1events	8433519	Number of level 1 events

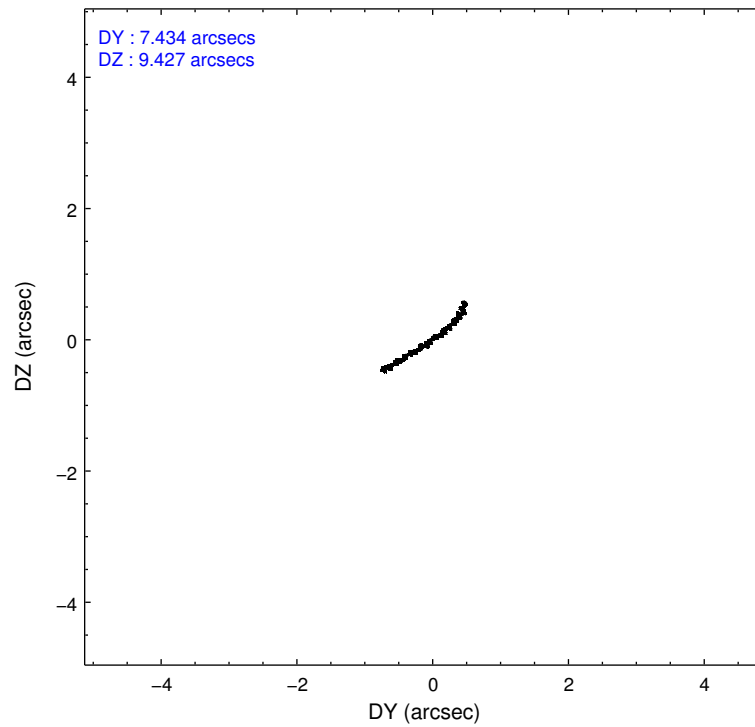
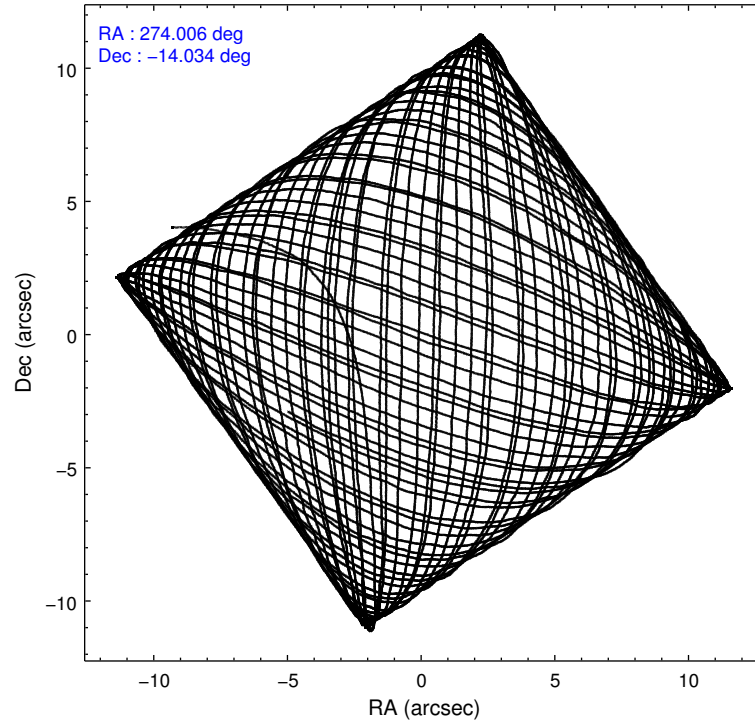
2.1.3 Events

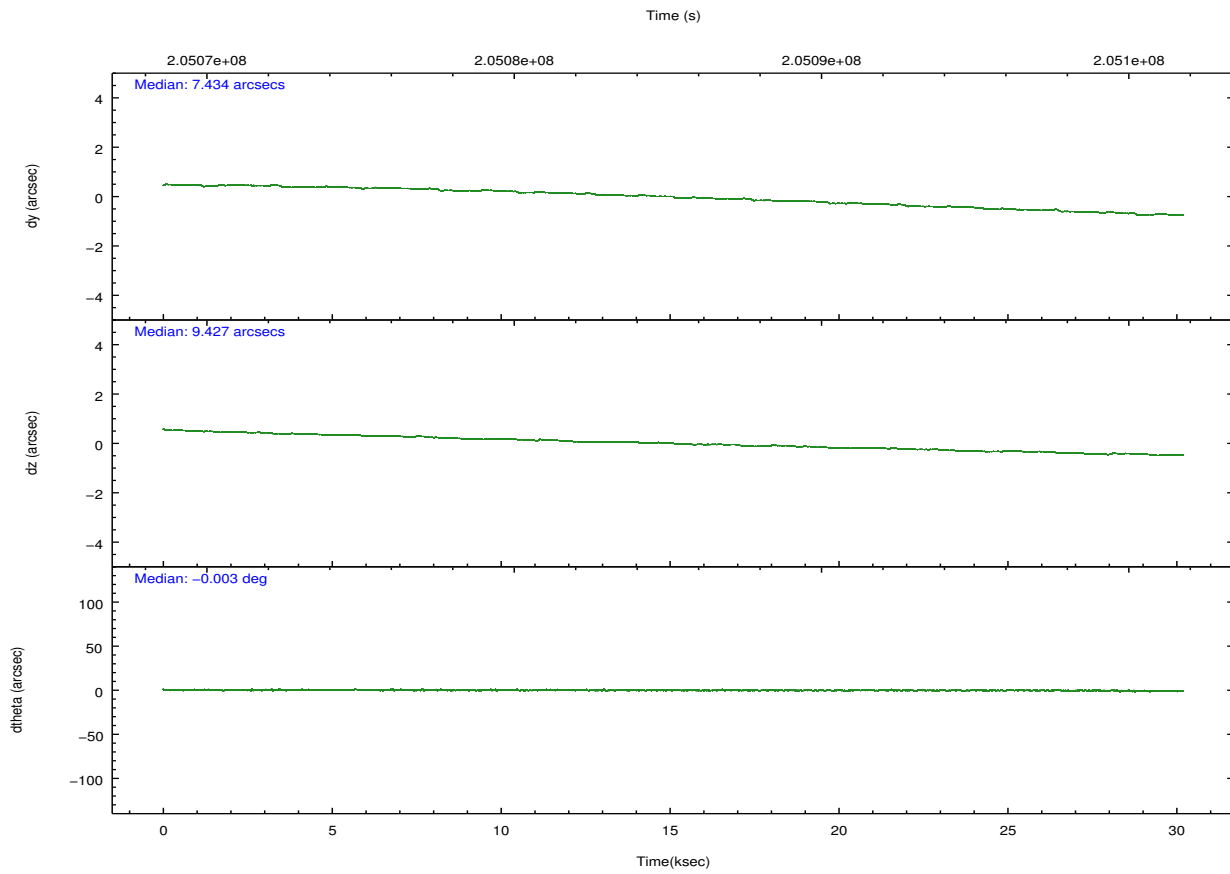
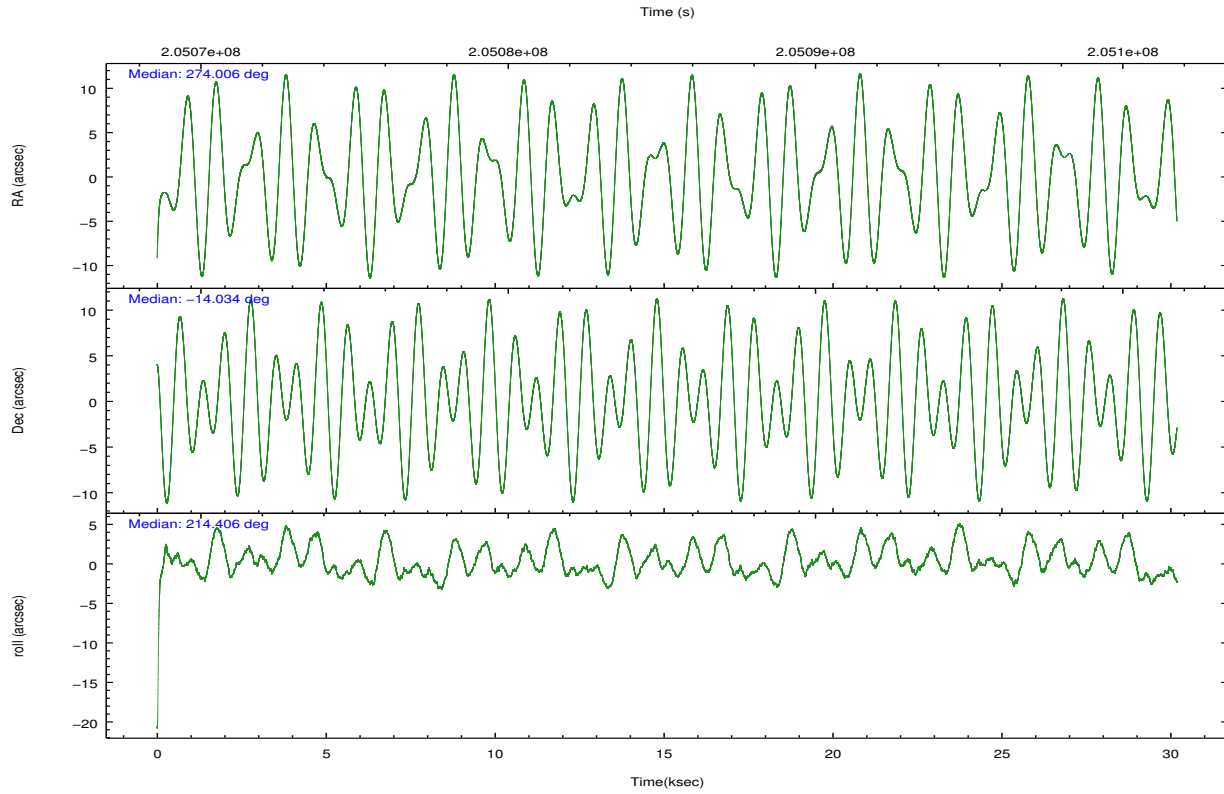
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	114354	489947	2151602	4942972	586332	148312	grade 0 events	13993	82907	60203	613956	178019	26070
rejected events	10358	30344	31176	346576	24532	12881		12%	16%	2%	12%	30%	17%
rejected %	9%	6%	1%	7%	4%	8%	grade 1 events	172	279	398	39543	632	227
								0%	0%	0%	0%	0%	0%
							grade 2 events	66234	185786	1791187	1377992	306598	81267
								57%	37%	83%	27%	52%	54%
							grade 3 events	5667	11713	8156	346626	16473	6037
								4%	2%	0%	7%	2%	4%
							grade 4 events	5831	11483	7932	347911	16602	6359
								5%	2%	0%	7%	2%	4%
							grade 5 events	8425	21670	19129	273048	15316	10357
								7%	4%	0%	5%	2%	6%
							grade 6 events	14032	176109	264597	1943896	52692	17995
								12%	35%	12%	39%	8%	12%
							grade 7 events	0	0	0	0	0	0
								0%	0%	0%	0%	0%	0%

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	274.017902	274.0061179371507	Subarray requested	NONE	NONE
[deg] Pointing Dec	-14.009458	-14.03420134011007	Alternating exposures requested	N	N
[deg] Pointing Roll	214.250655	214.4044183600926	[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	-186.1423047203915			
[mm] SIM translation stage offset	-4	-3.990217862616333			
[s] Observation start time (MET)	205070259.184000	205068980.0908			
Observation start date	2004-07-01T11:56:35	2004-07-01T11:36:20			
[s] Observation end time (MET)	205100259.184000	205100883.72971			
Observation end date	2004-07-01T20:16:35	2004-07-01T20:28:03			
Read mode	CONTINUOUS	CONTINUOUS			

2.3 Aspect





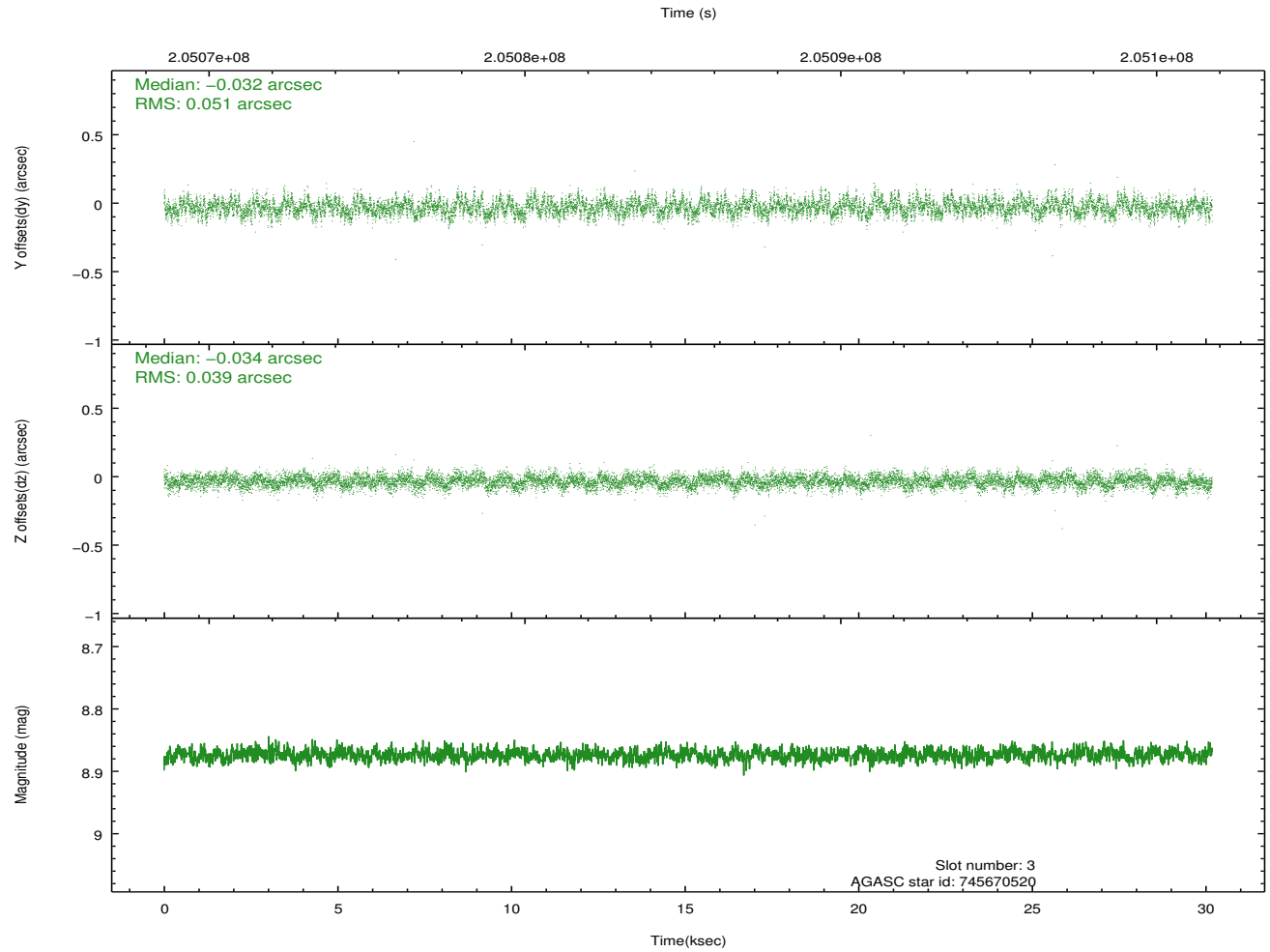
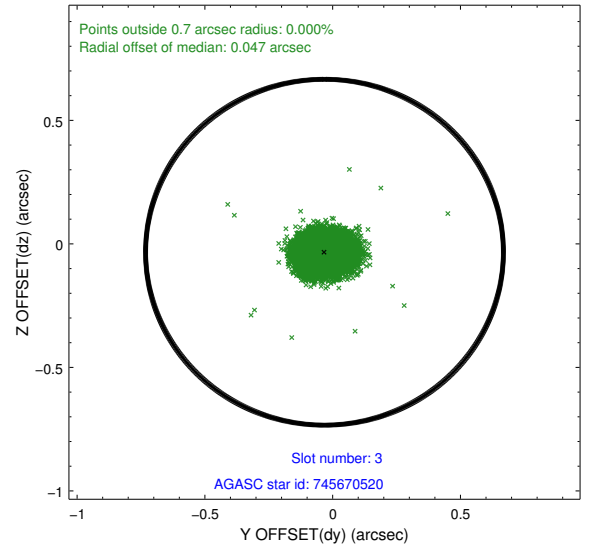
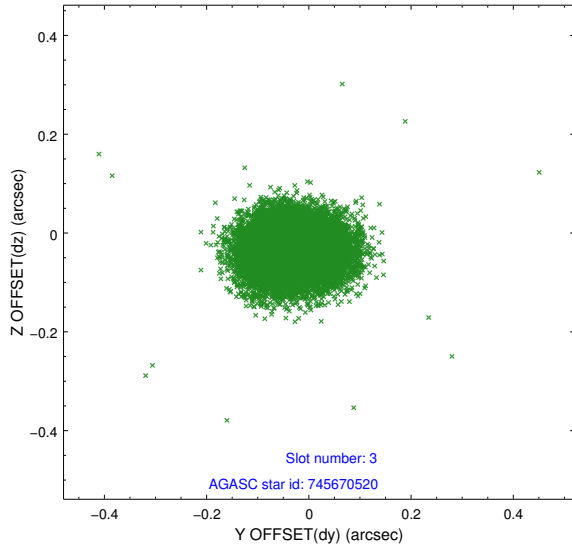
Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.09	7363	-0.051	-0.074	0.019	0.028	0.000000	0.000000	-759.94	-1813.05
1	FID	ACIS-S-4	7.18	7356	0.093	0.045	0.007	0.027	0.000000	0.000000	2153.48	95.43
2	FID	ACIS-S-5	7.23	7363	-0.073	0.038	0.020	0.030	0.000000	0.000000	-1812.69	89.22
3	GUIDE	745670520	8.87	14714	-0.032	-0.034	0.068	0.110	274.614741	-13.988466	-1764.55	1113.23
4	GUIDE	745675656	7.96	14723	-0.032	0.003	0.058	0.092	274.656383	-13.977352	-1907.31	1162.52
5	GUIDE	745675904	9.19	14657	0.035	0.011	0.101	0.157	274.379684	-14.452468	-144.52	2029.05
6	GUIDE	745676944	8.90	14709	0.017	0.046	0.089	0.139	274.121102	-14.245583	180.70	905.60
7	GUIDE	745680576	8.68	14711	0.016	-0.024	0.069	0.112	274.063292	-14.644899	1156.79	1979.94

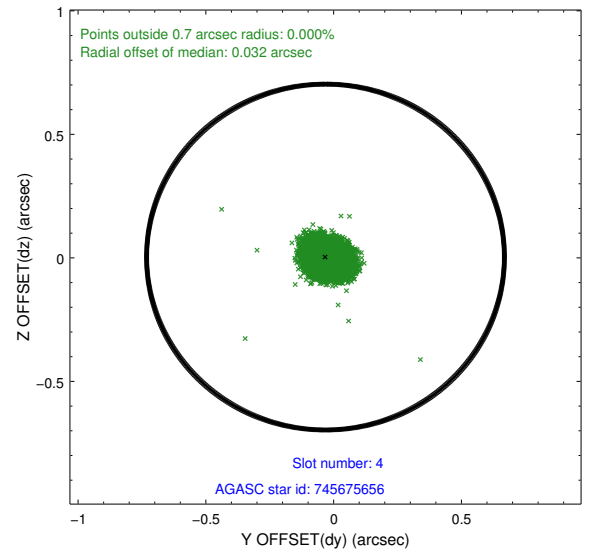
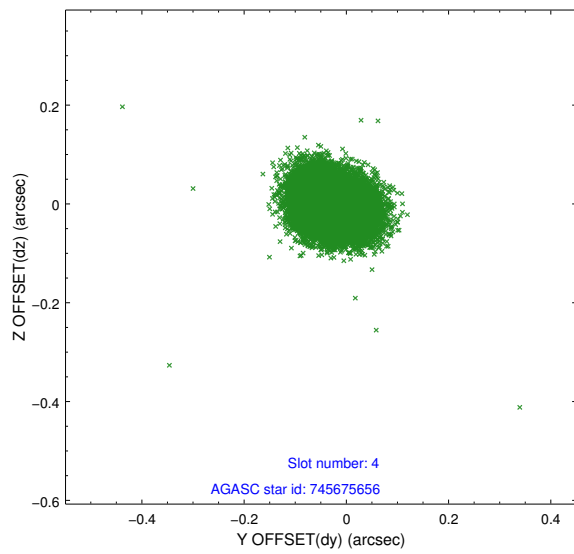
∞

2.4 Star Slots

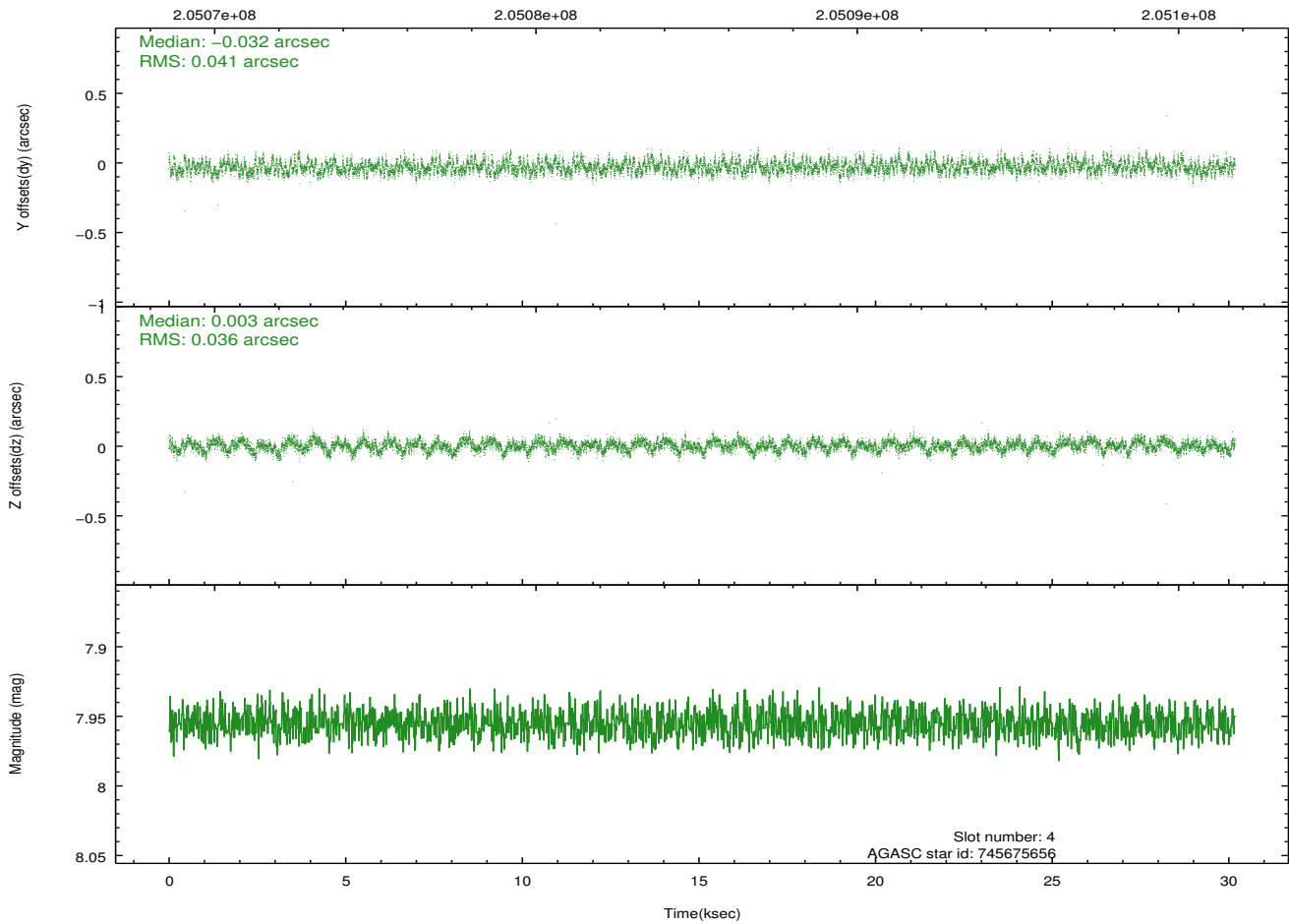
2.4.1 Slot 3



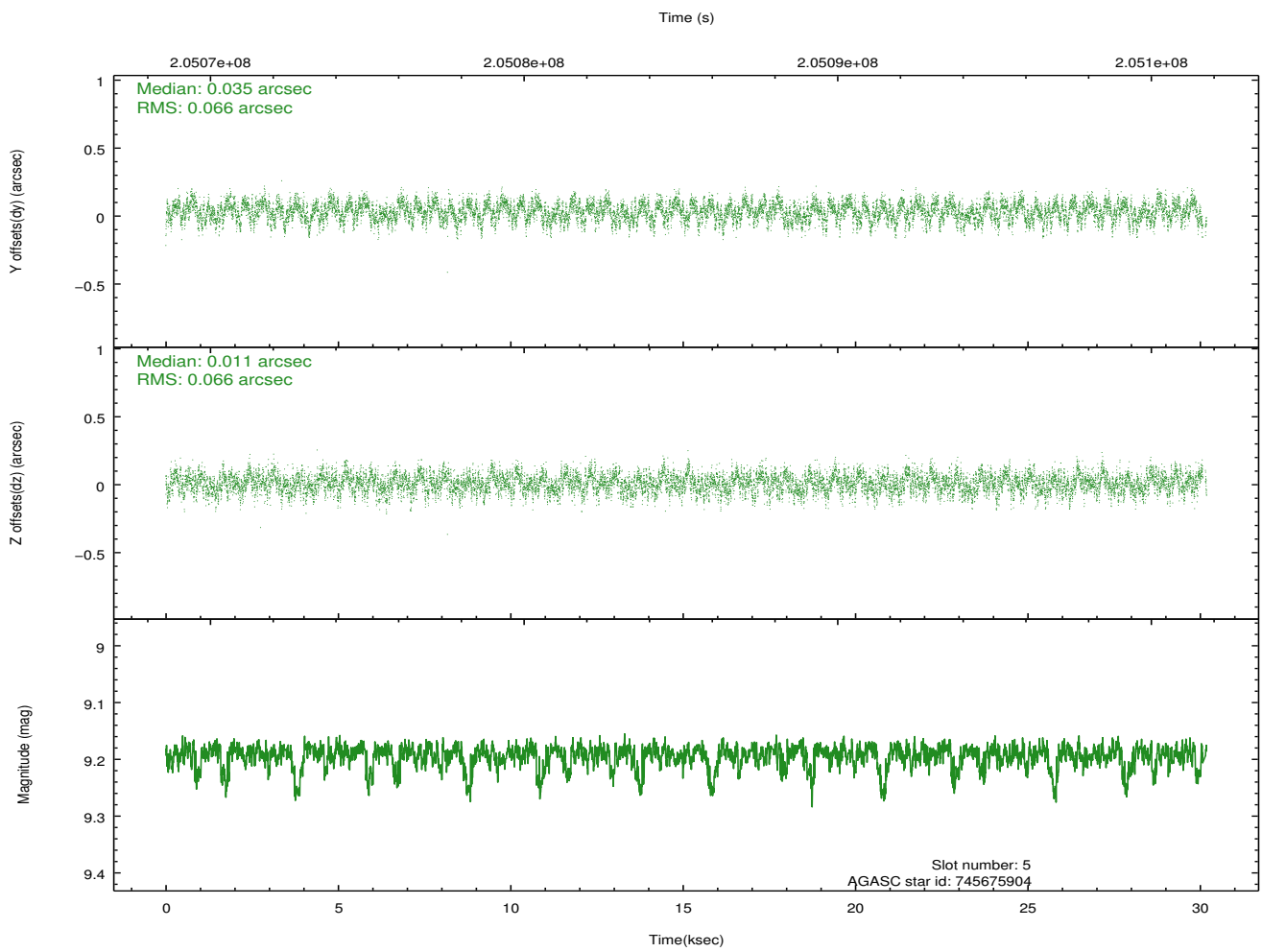
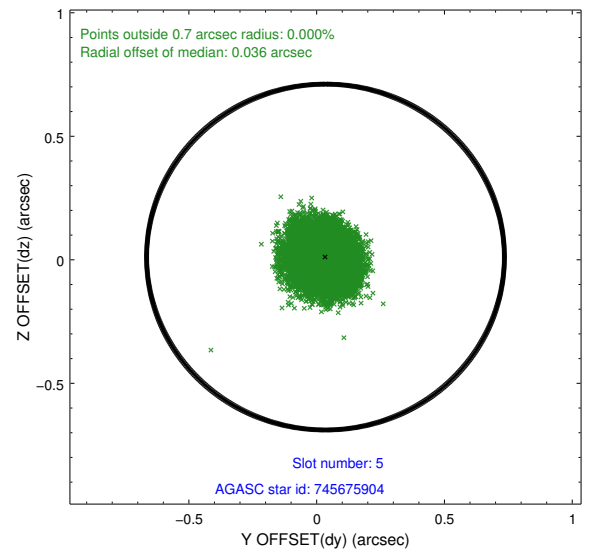
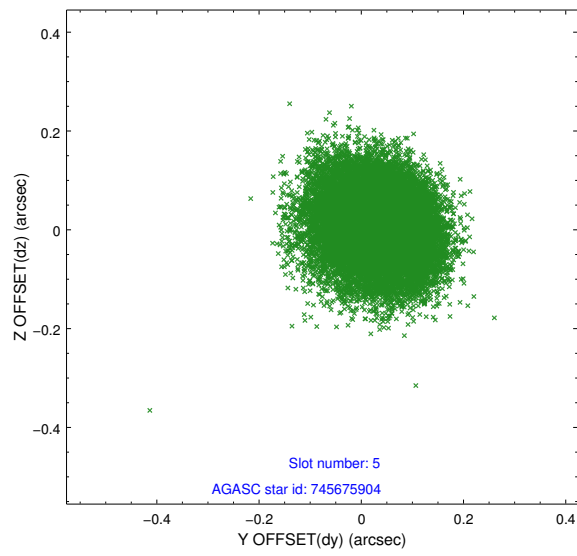
2.4.2 Slot 4



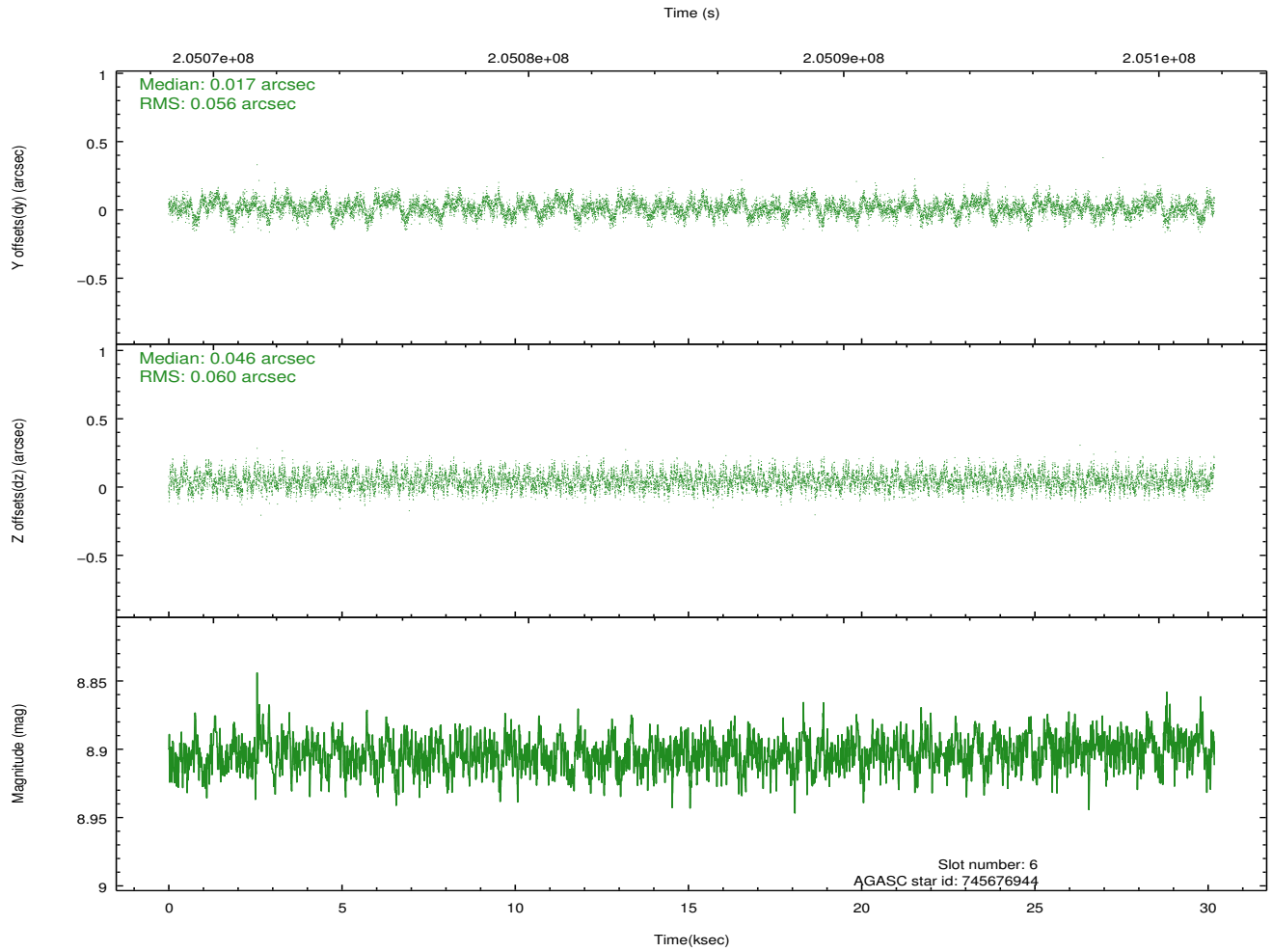
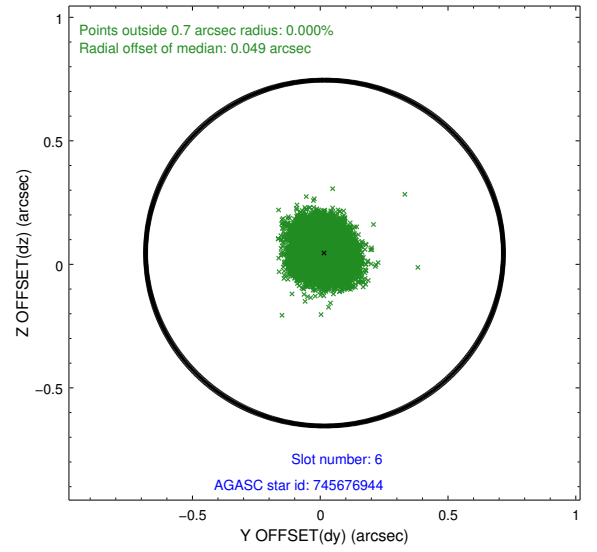
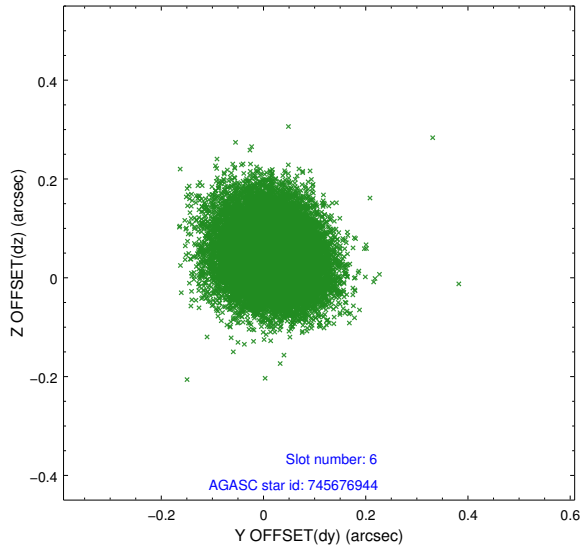
Time (s)



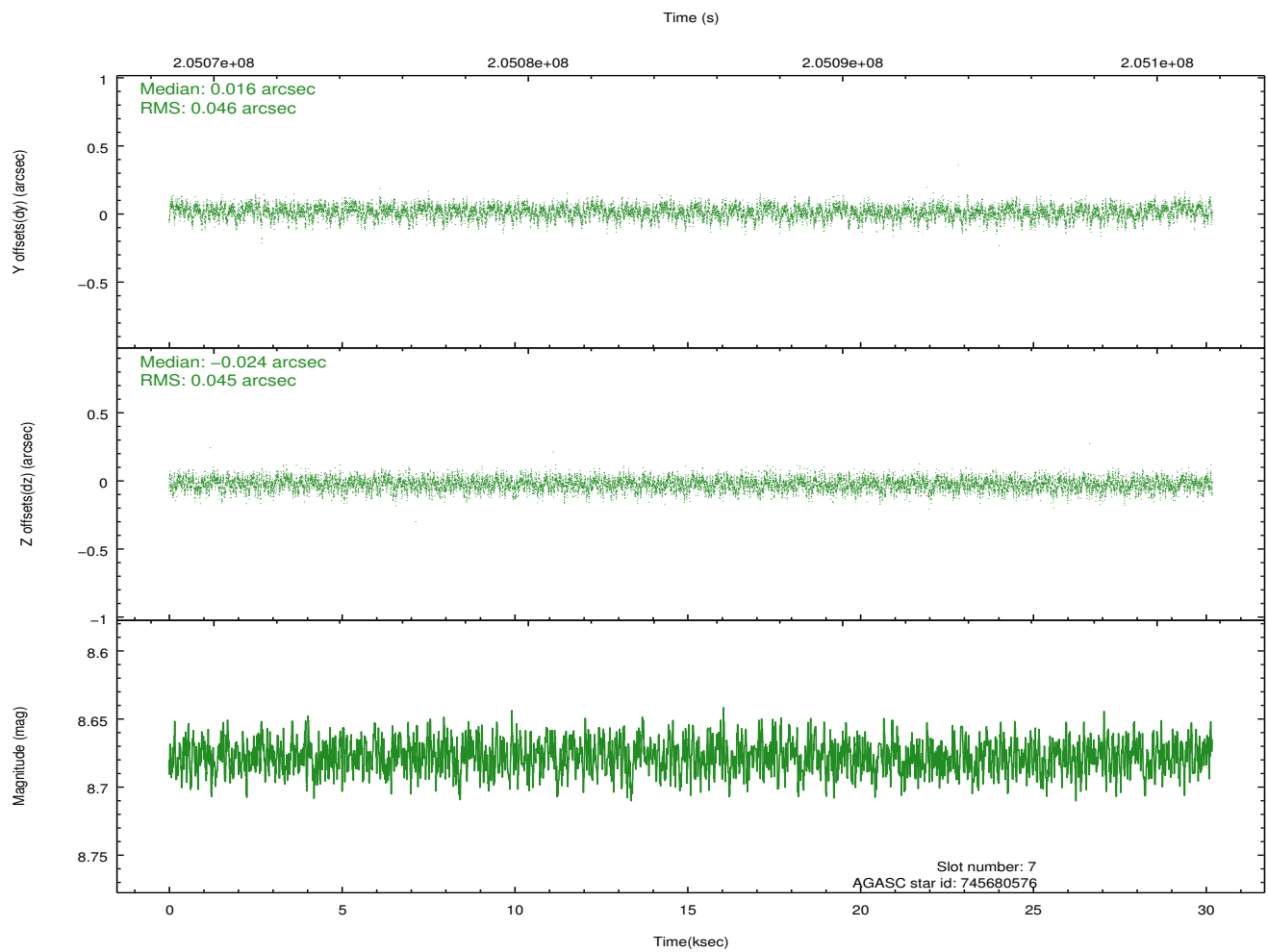
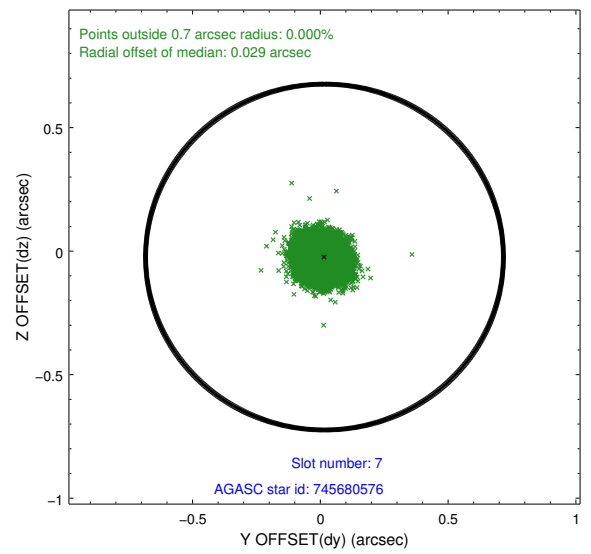
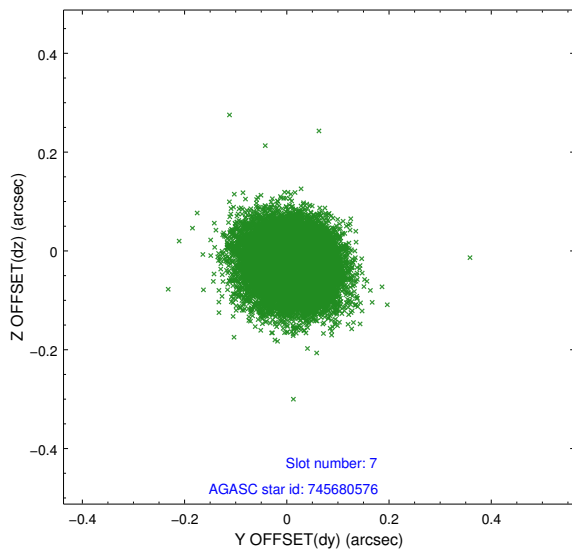
2.4.3 Slot 5



2.4.4 Slot 6

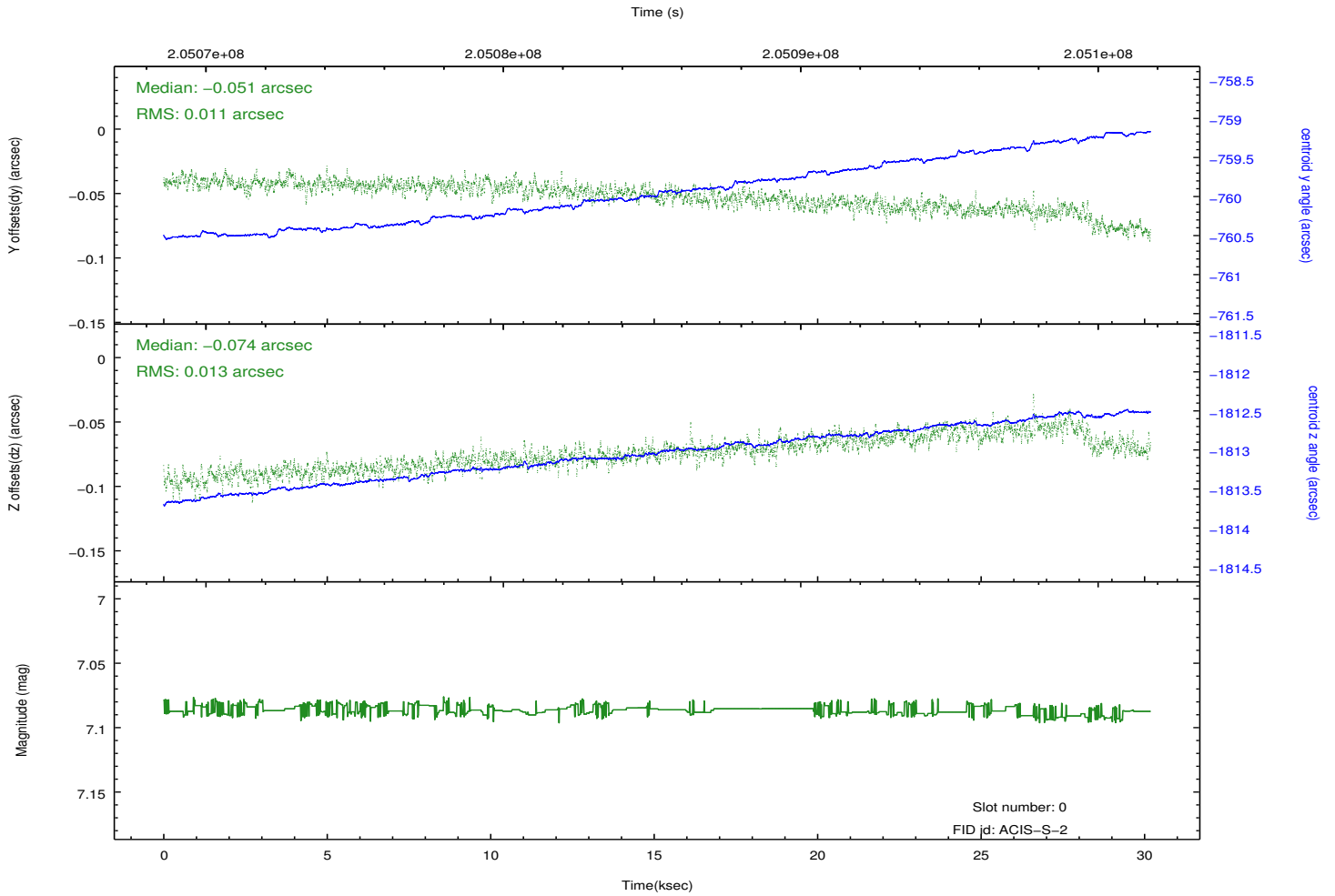
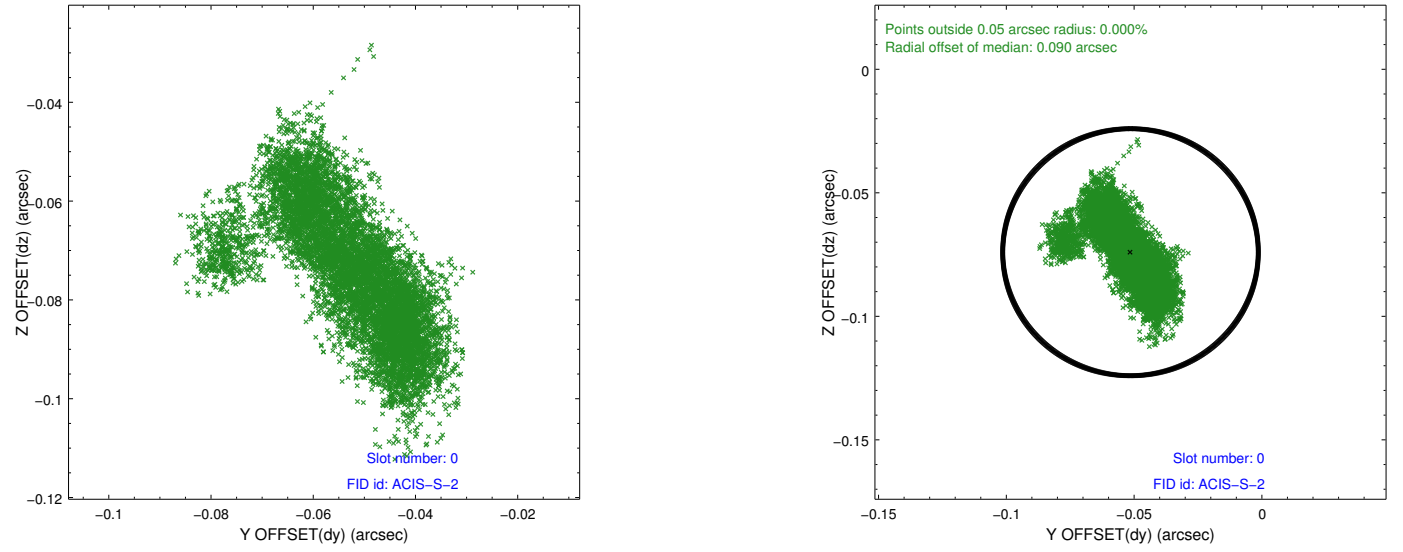


2.4.5 Slot 7

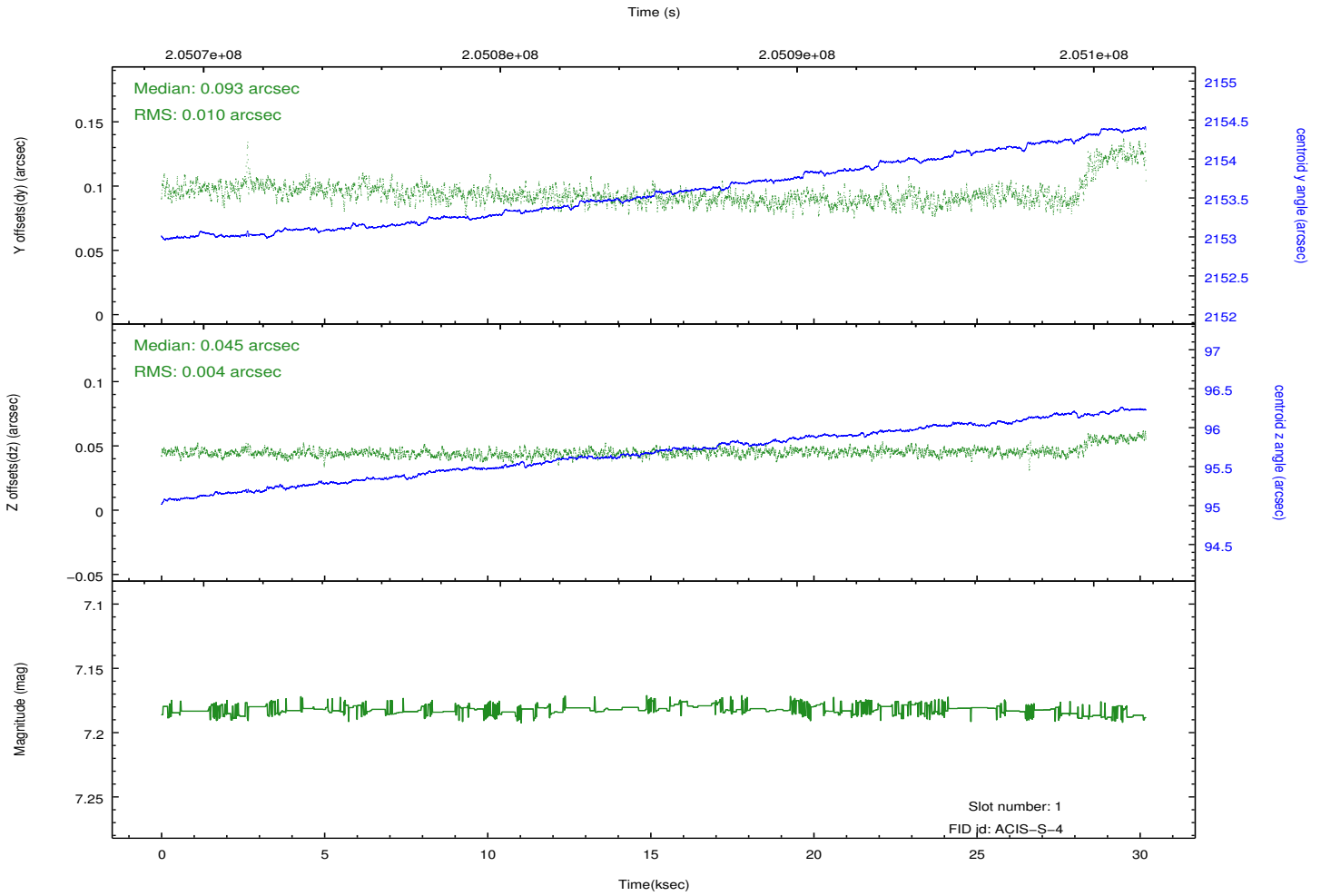
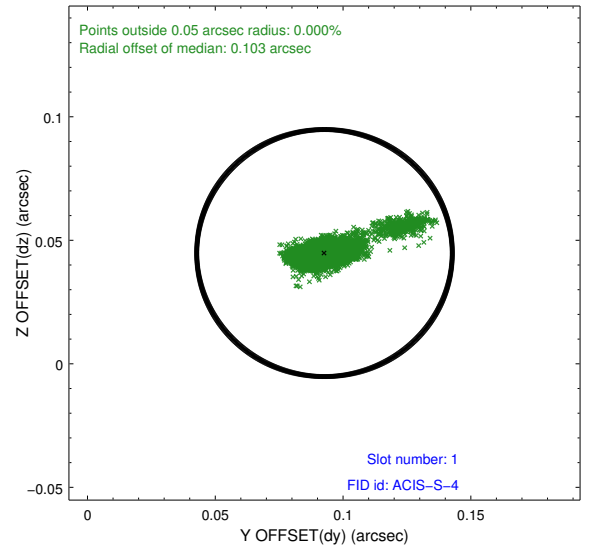
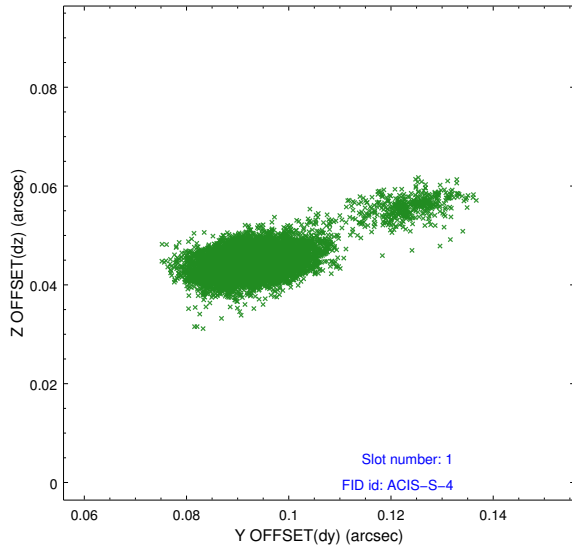


2.5 FID Slots

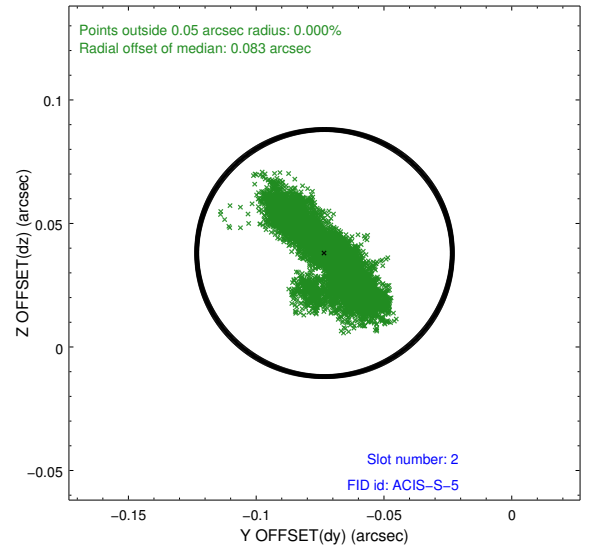
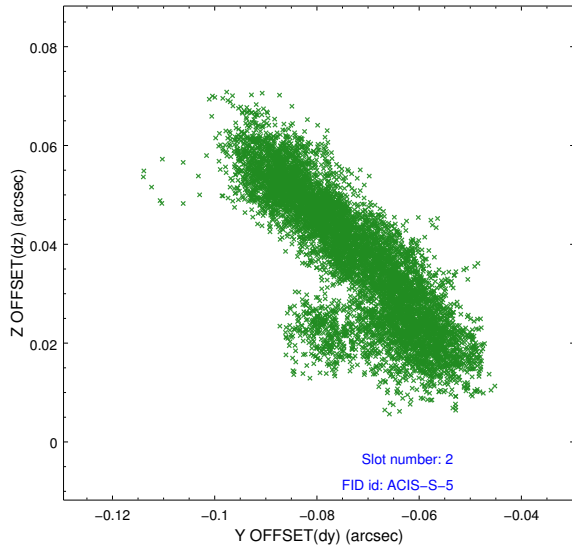
2.5.1 Slot 0



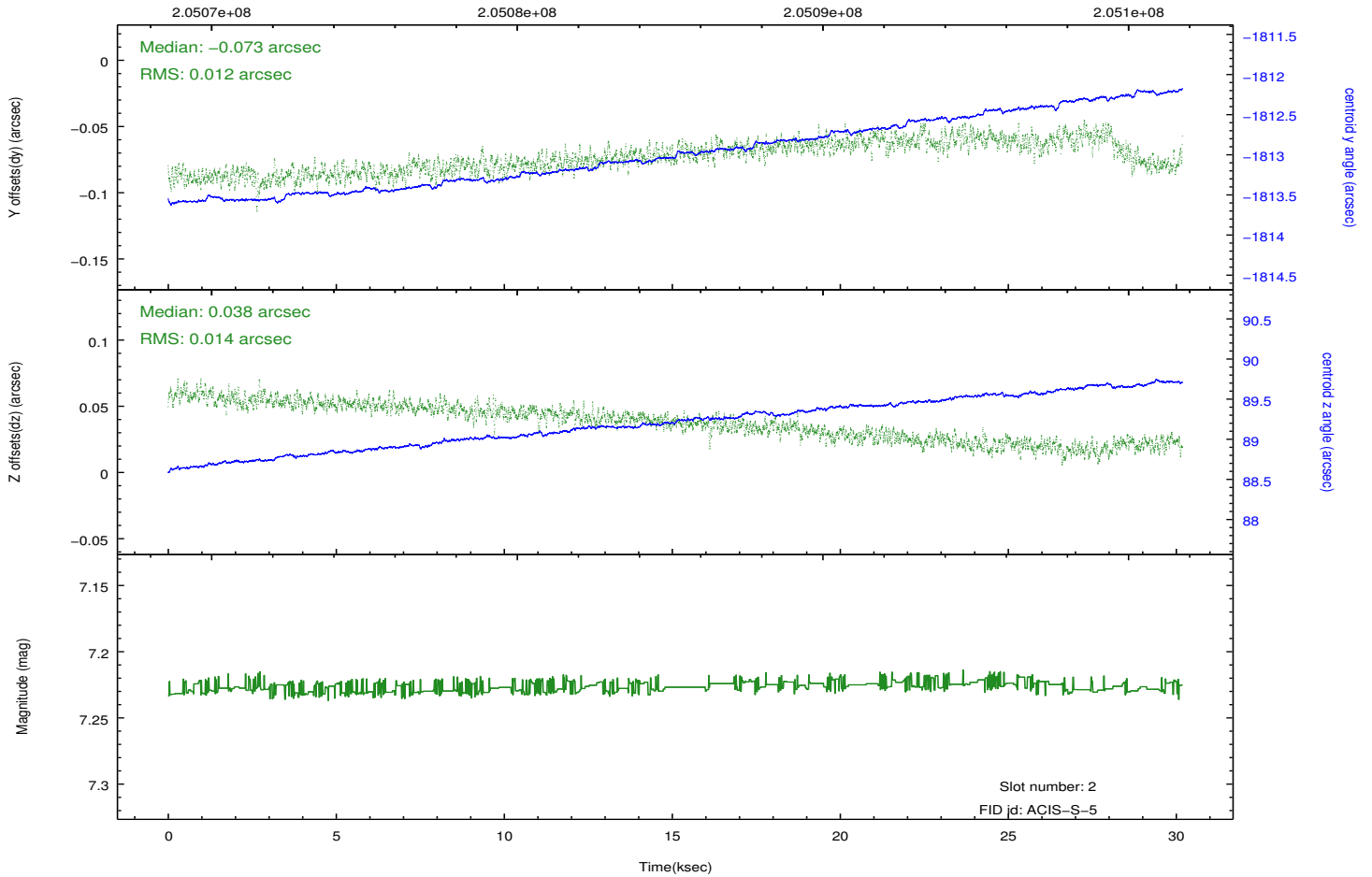
2.5.2 Slot 1



2.5.3 Slot 2

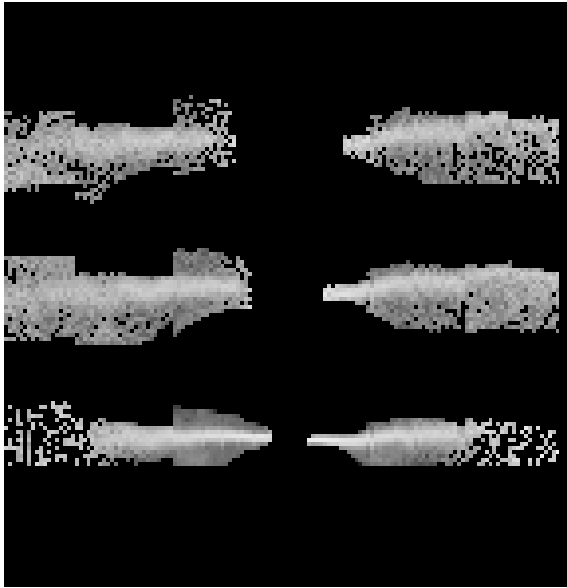


Time (s)

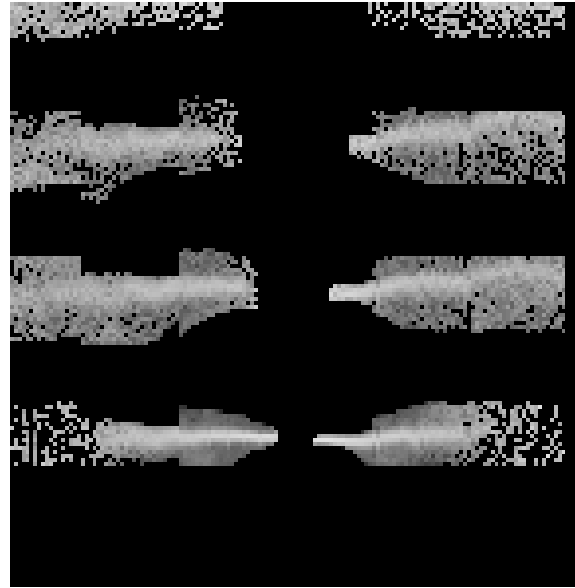


3 Gratings

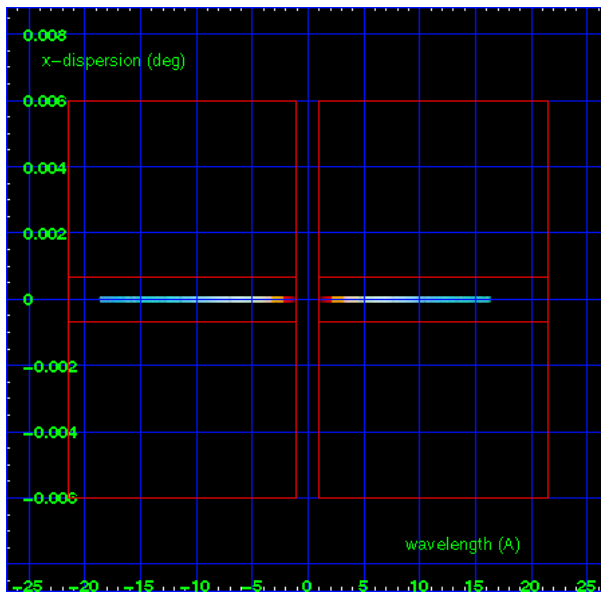
3.1 HEG Arm



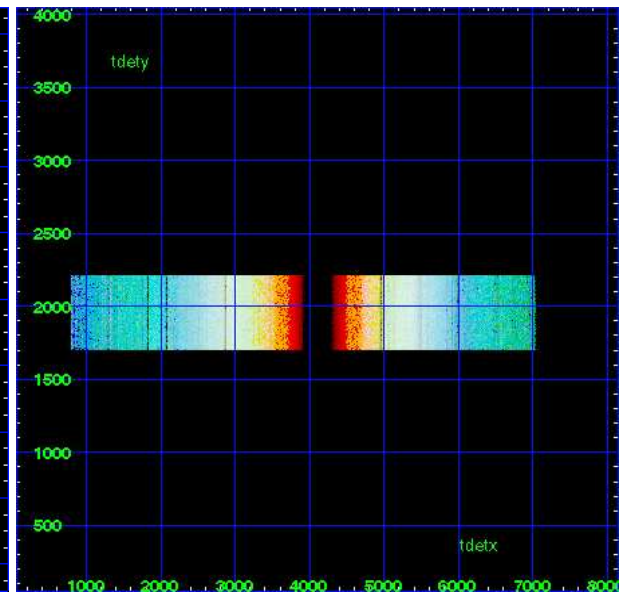
HEG Order Sort 123



HEG Order Sort ALL

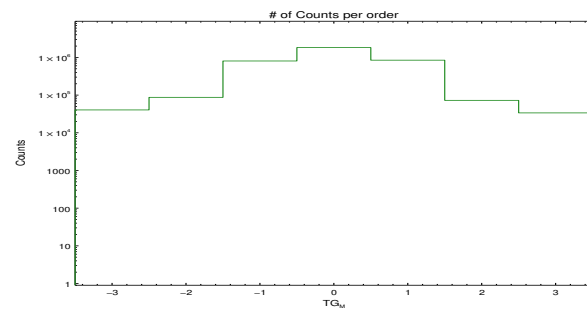


Spot Image HEG

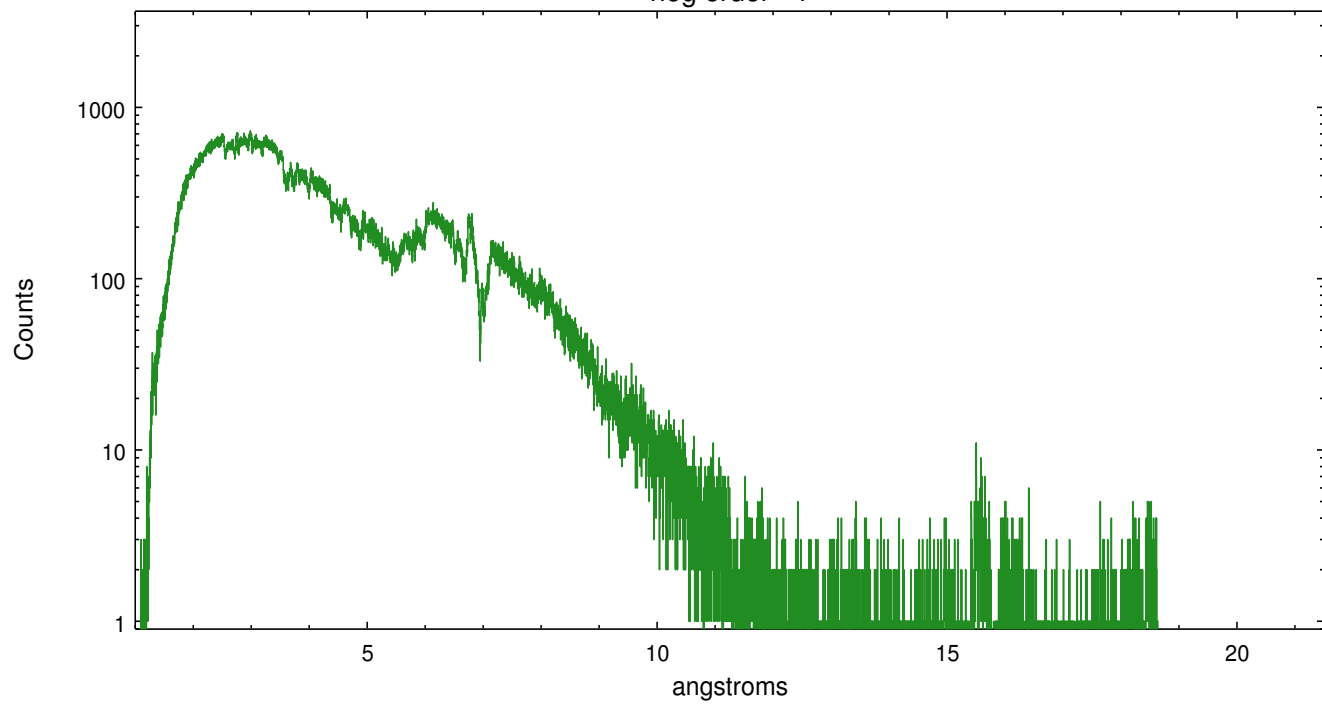


Full Detector HEG

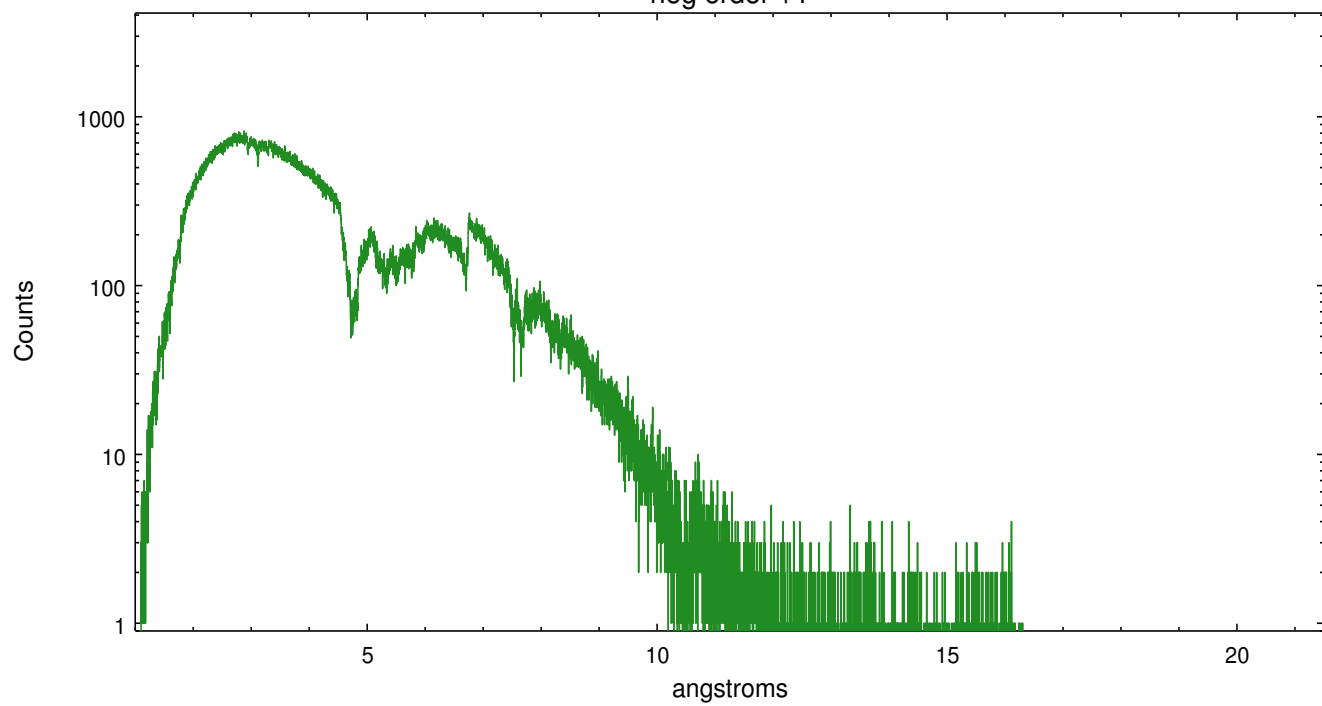
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Events	40436	87169	804639	1824331	844741	72547	33732



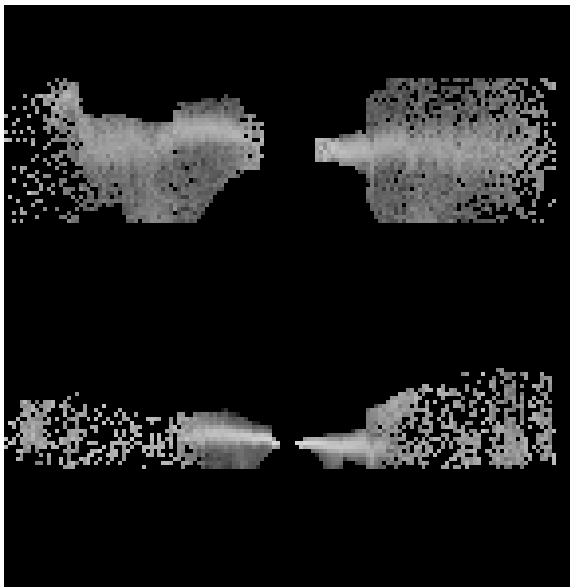
heg order -1



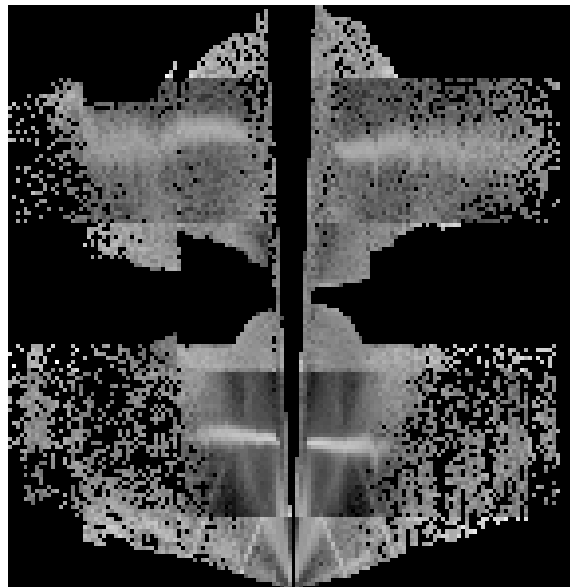
heg order +1



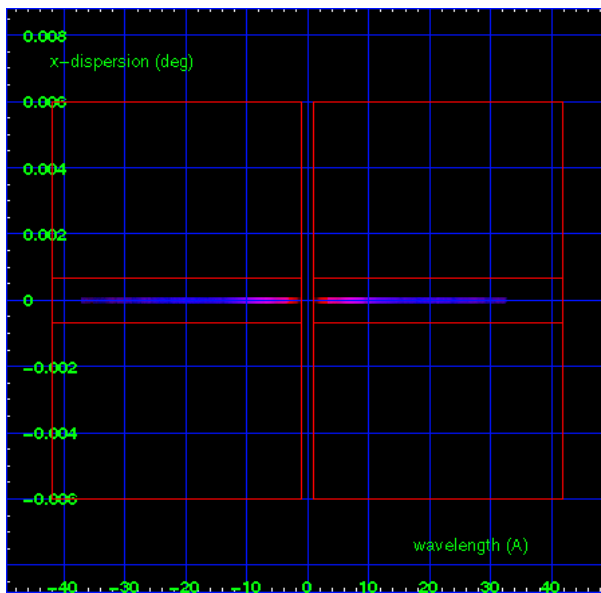
3.2 MEG Arm



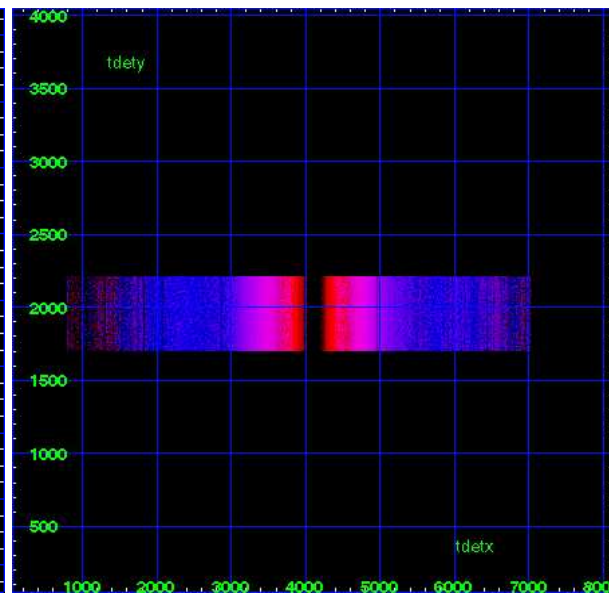
MEG Order Sort 123



MEG Order Sort ALL

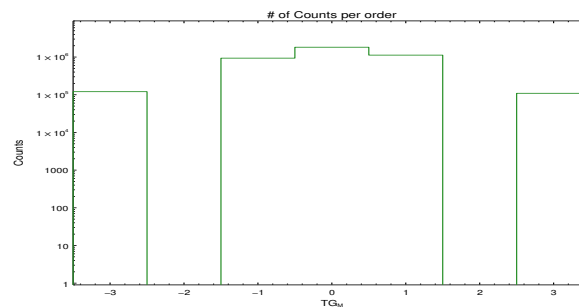


Spot Image MEG

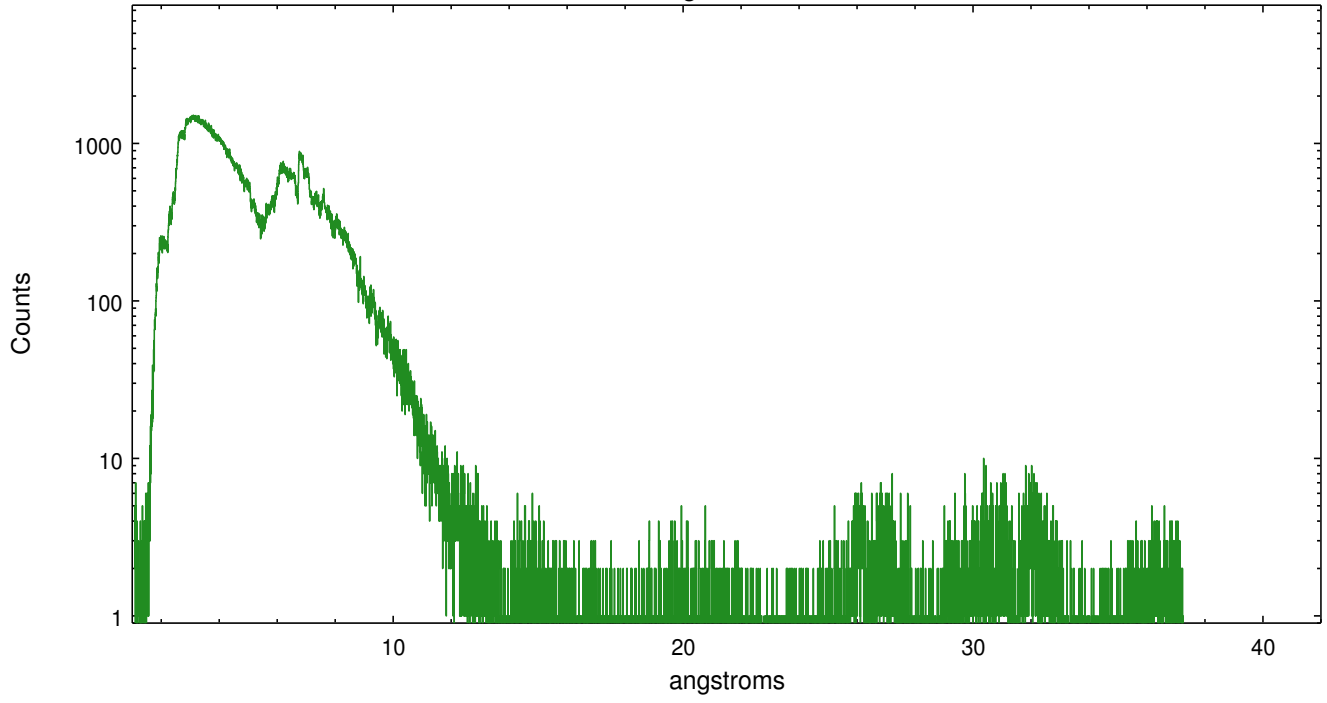


Full Detector MEG

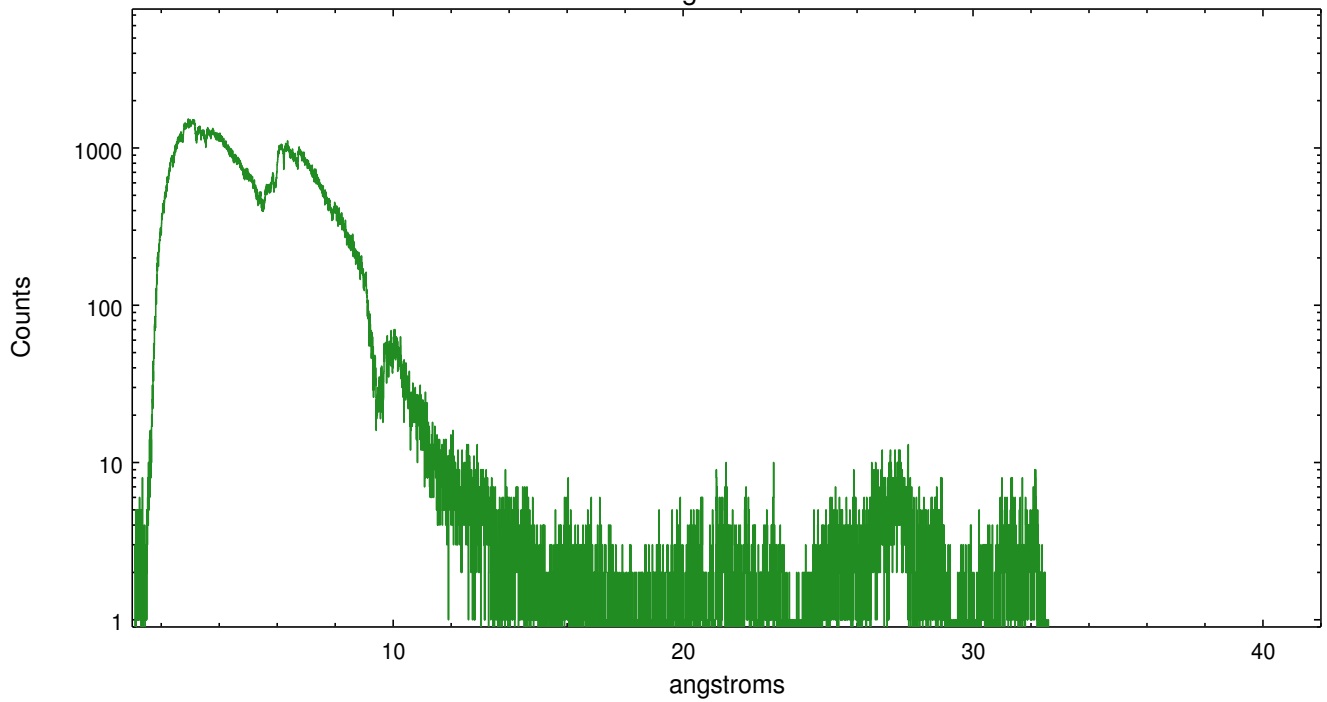
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	120698	0	935696	1824331	1125179	0	109222



meg order -1



meg order +1



A Summary

A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2013.01.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.181

A.2 Comments