

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 13513 - L2 Version 1
Chandra X-Ray Center

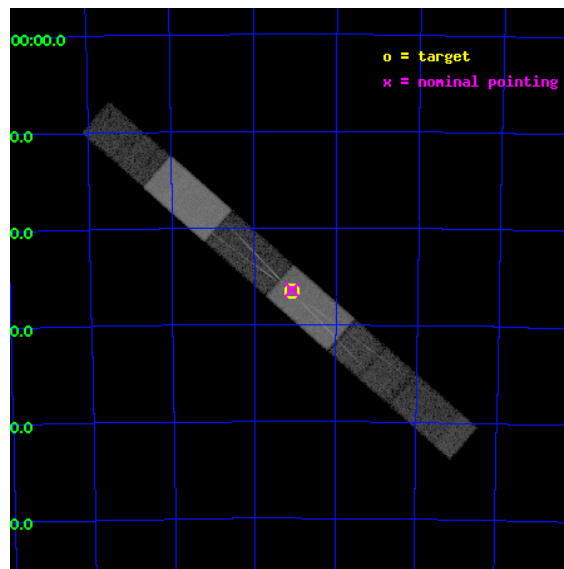
L2 Processing Date : Aug 31 2012

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1 Front

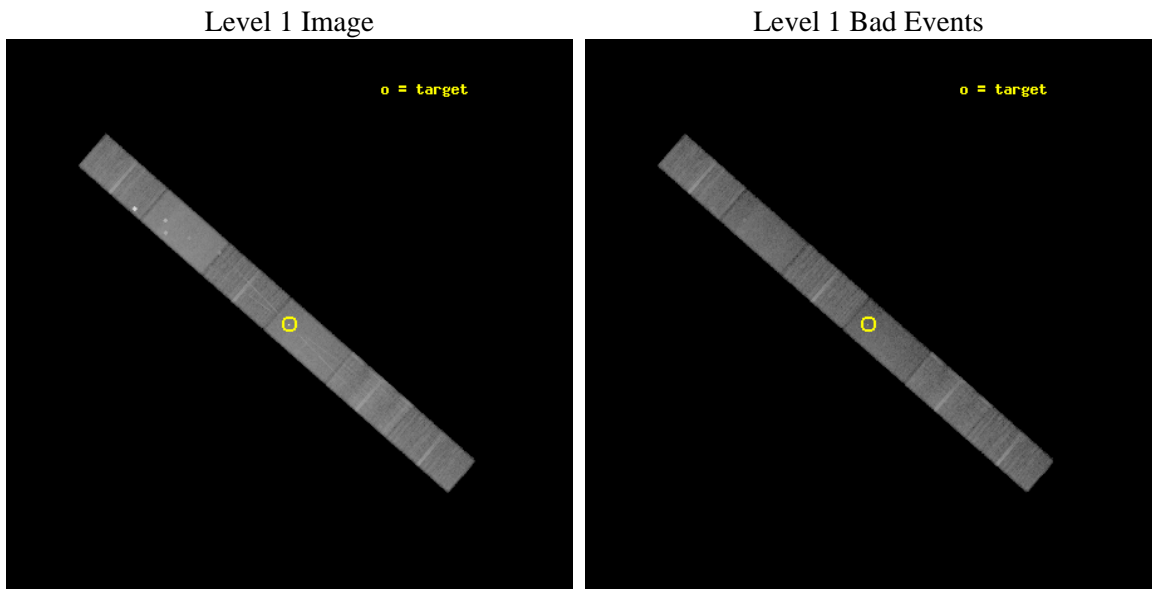
seq_num	401302	Sequence number
obs_id	13513	Observation id
title	The Wind and Warp of SMC X-1	Proposal title
observer	Prof Claude Canizares	Principal investigator
object	SMC X-1	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	19.271667	Observer's specified target RA [deg]
dec_targ	-73.442944	Observer's specified target Dec [deg]
ra_nom	19.270081211941	Nominal RA [deg]
dec_nom	-73.439936281765	Nominal Dec [deg]
roll_nom	41.155103157062	Nominal Roll [deg]
revision	1	Processing version of data
ontime	35050.437138438	Sum of GTIs [s]
livetime	34224.224104756	Livetime [s]
ontime4	35050.478178442	Sum of GTIs [s]
ontime5	35050.396098435	Sum of GTIs [s]
ontime6	35048.614018261	Sum of GTIs [s]
ontime7	35050.437138438	Sum of GTIs [s]
ontime8	35050.314018428	Sum of GTIs [s]
ontime9	35050.272978425	Sum of GTIs [s]
l2events	178719	Number of level 2 events



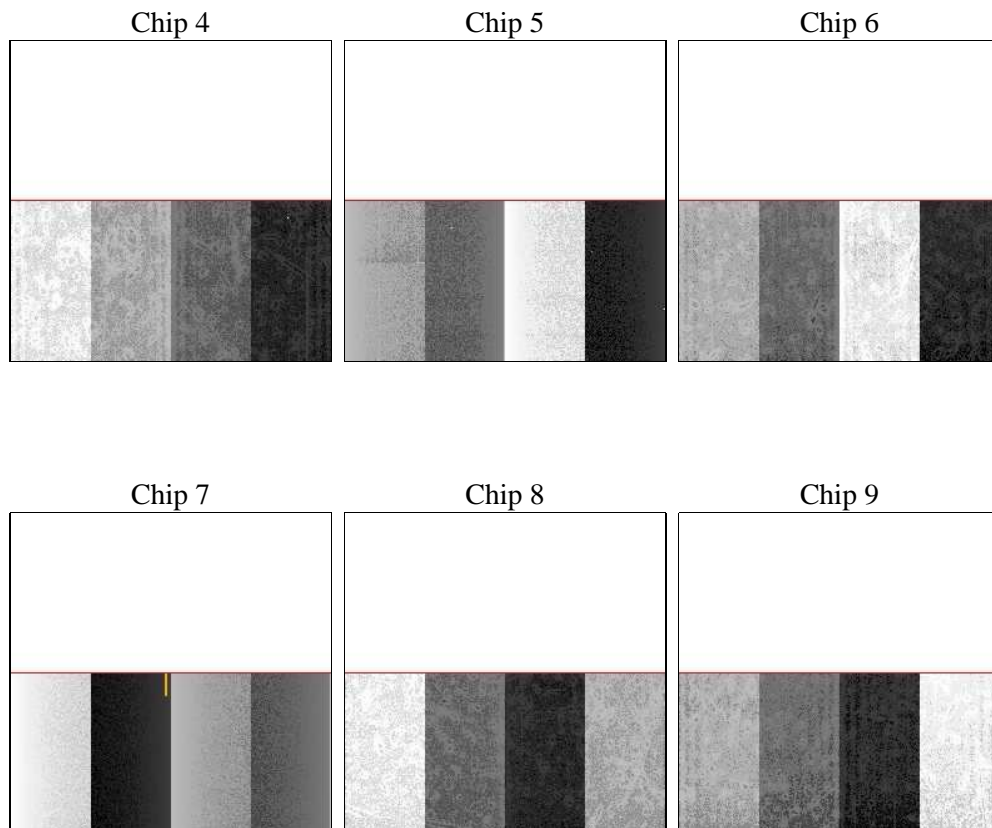
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	35000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	35050.437138438	Sum of GTIs [s]
caldsver	4.5.1.1	 	ontime4	35050.478178442	Sum of GTIs [s]
date	2012-08-31T07:40:50	Date and time of file creation	ontime5	35050.396098435	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	35048.614018261	Sum of GTIs [s]
			ontime7	35050.437138438	Sum of GTIs [s]
			ontime8	35050.314018428	Sum of GTIs [s]
			ontime9	35050.272978425	Sum of GTIs [s]
			l1events	732163	Number of level 1 events

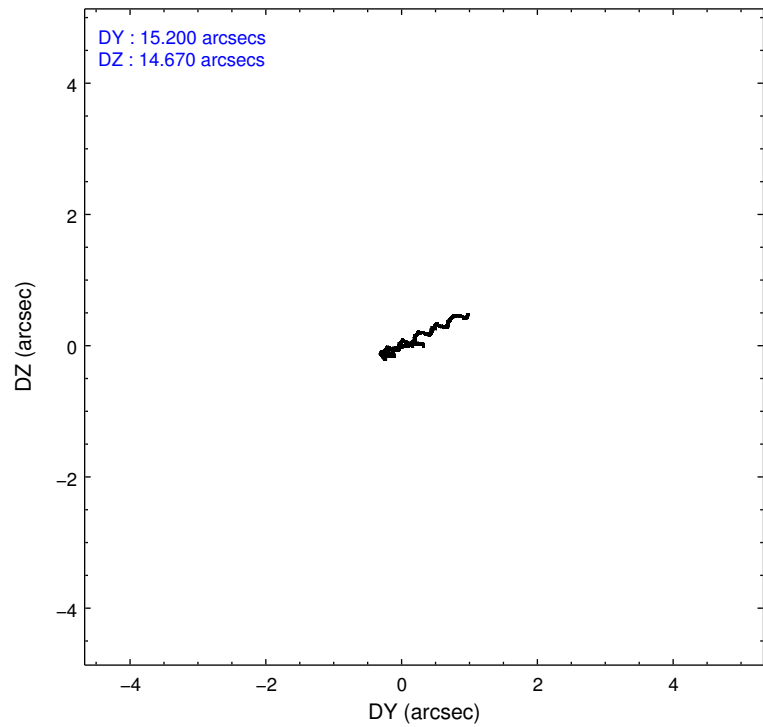
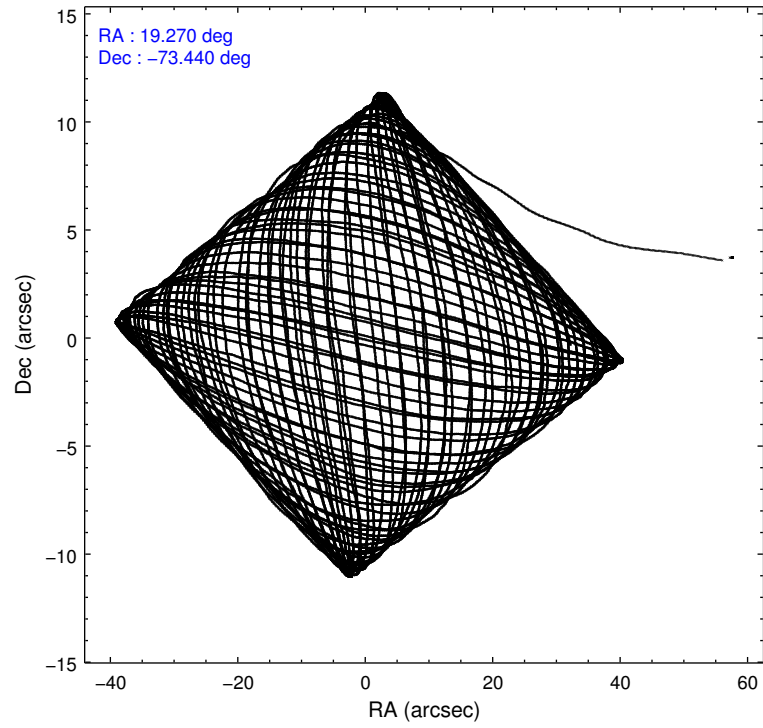
2.1.4 Events

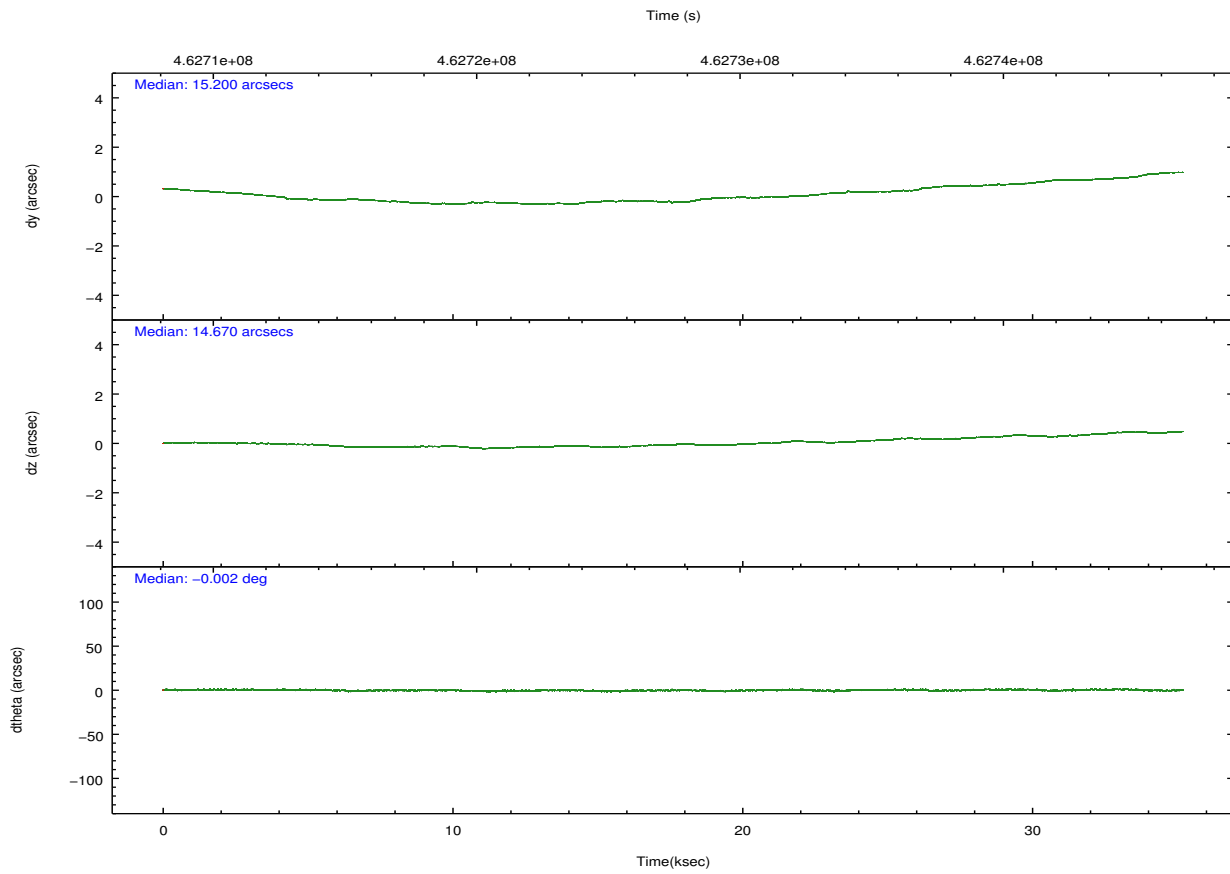
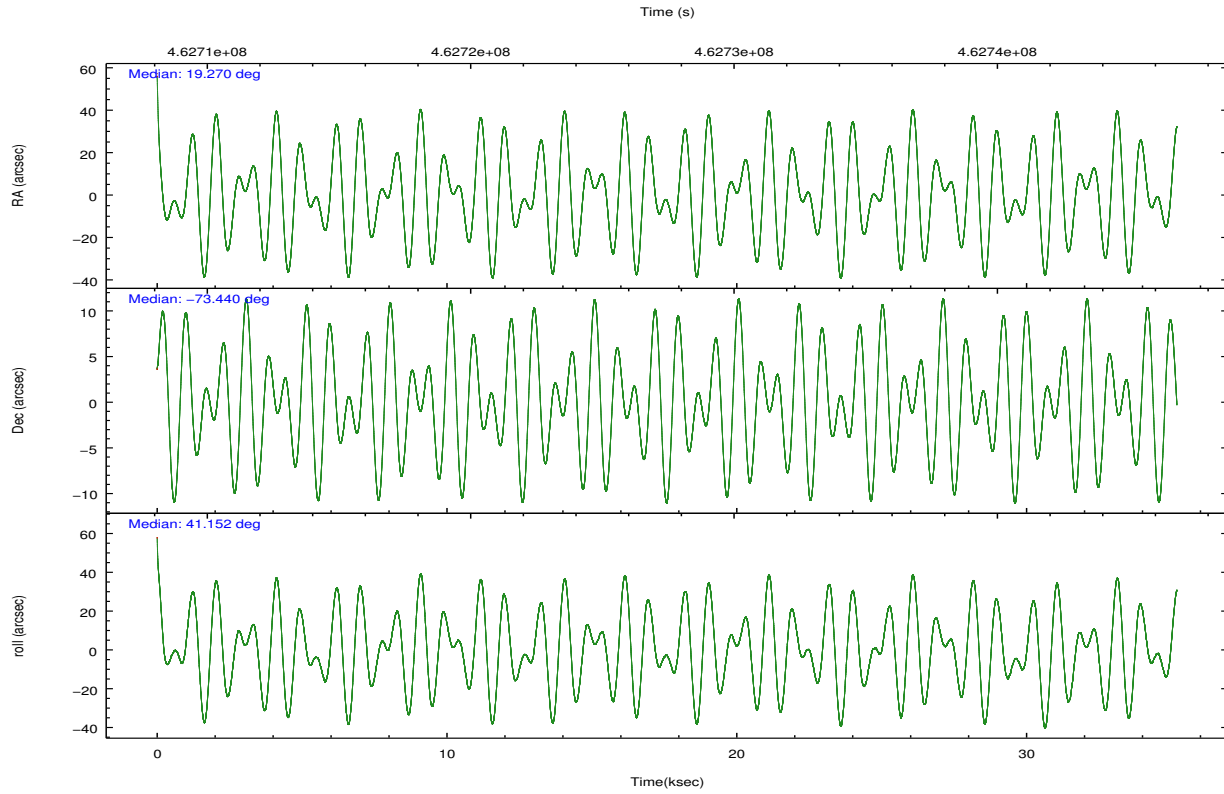
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	119548	155291	98032	132753	131901	94638	grade 0 events	15596	9584	5722	6641	9736	4279
rejected events	95723	78066	83656	68458	96234	82107		13%	6%	5%	5%	7%	4%
rejected %	80%	50%	85%	51%	72%	86%	grade 1 events	88	389	52	163	61	37
								0%	0%	0%	0%	0%	0%
							grade 2 events	3098	20816	2936	13529	8221	2695
								2%	13%	2%	10%	6%	2%
							grade 3 events	1438	4023	1561	6227	3859	1438
								1%	2%	1%	4%	2%	1%
							grade 4 events	1401	3878	1478	6100	3650	1423
								1%	2%	1%	4%	2%	1%
							grade 5 events	4487	12896	4551	12886	6580	4860
								3%	8%	4%	9%	4%	5%
							grade 6 events	2295	38927	2679	31799	10201	2697
								1%	25%	2%	23%	7%	2%
							grade 7 events	91145	64778	79053	55408	89593	77209
								76%	41%	80%	41%	67%	81%

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	FAINT	FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	19.240282	19.27008121194112	CCD I2 on	N	N
[deg] Pointing Dec	-73.465955	-73.43993628176516	CCD I3 on	N	N
[deg] Pointing Roll	40.969920	41.15510315706199	CCD S0 on	O1	Y
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-183.992523	-183.9875365069546	CCD S3 on	Y	Y
[mm] SIM translation stage offset	-6.14	-6.144986076053243	CCD S4 on	Y	Y
[s] Observation start time (MET)	462710044.184000	462709093.83021	CCD S5 on	Y	Y
Observation start date	2012-08-30T10:32:57	2012-08-30T10:18:13	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	462745044.184000	462745569.99466	On-chip summing requested	N	N
Observation end date	2012-08-30T20:16:17	2012-08-30T20:26:09	Subarray requested	CUSTOM	1/2
Read mode	TIMED	TIMED	Subarray start row	1	1
			Subarray row count	512	512
			Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	1.7

2.3 Aspect



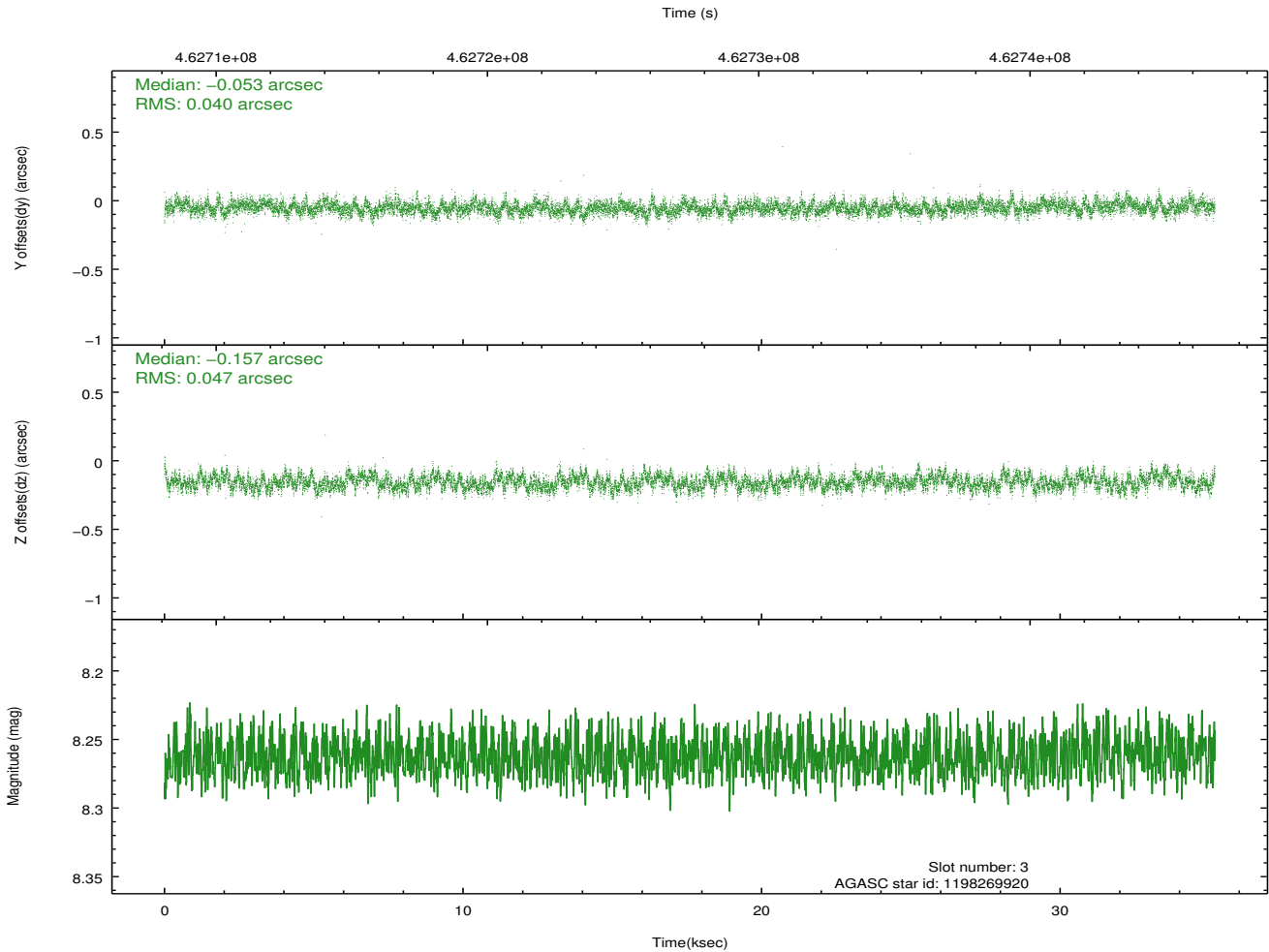
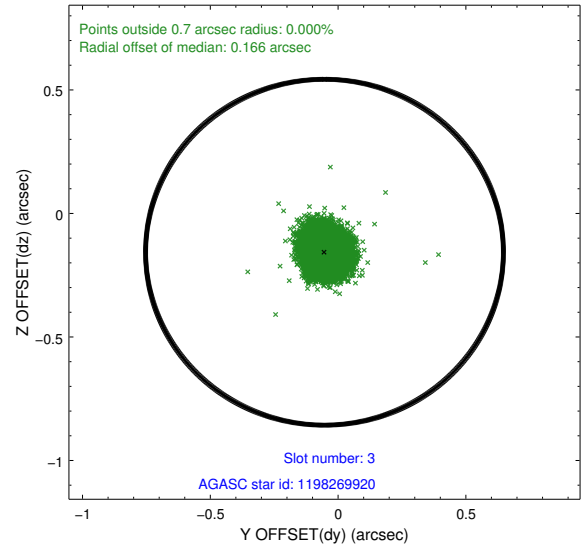
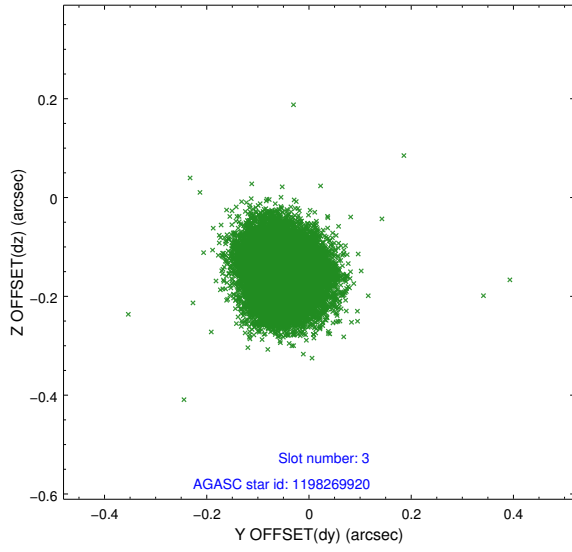


Slot Statistics

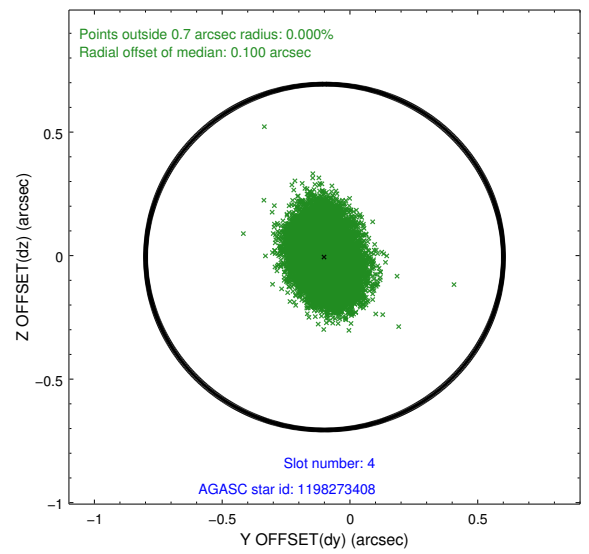
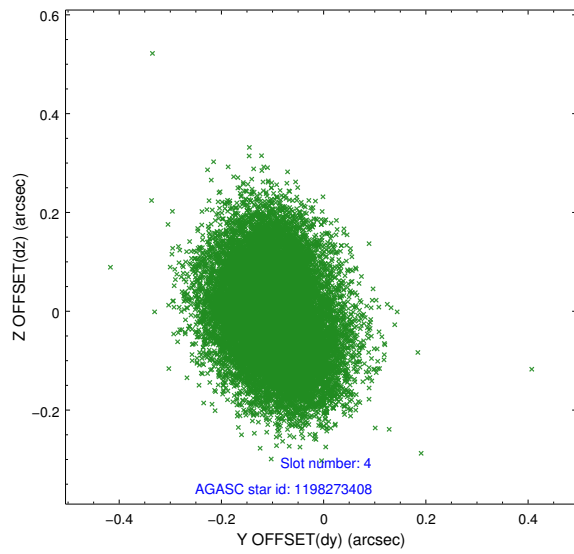
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.97	8583	-0.125	-0.146	0.012	0.021	0.000000	0.000000	-768.03	-1862.87
1	FID	ACIS-S-4	7.05	8583	0.295	0.100	0.007	0.012	0.000000	0.000000	2145.70	45.71
2	FID	ACIS-S-5	7.10	8583	-0.201	0.055	0.011	0.018	0.000000	0.000000	-1820.85	39.50
3	GUIDE	1198269920	8.26	17165	-0.053	-0.157	0.066	0.105	20.316466	-73.033728	1867.48	425.96
4	GUIDE	1198273408	9.30	17144	-0.100	-0.006	0.118	0.192	17.532323	-73.621495	-1691.98	695.22
5	GUIDE	1198276744	8.59	17155	0.218	0.034	0.078	0.123	19.489008	-74.153493	-1438.29	-2029.38
6	GUIDE	1198282824	7.30	17166	-0.147	0.118	0.074	0.119	18.044095	-73.907062	-1949.15	-425.83
7	GUIDE	1198272400	9.14	17153	0.076	0.000	0.115	0.189	20.411923	-73.620598	525.50	-1208.76

2.4 Star Slots

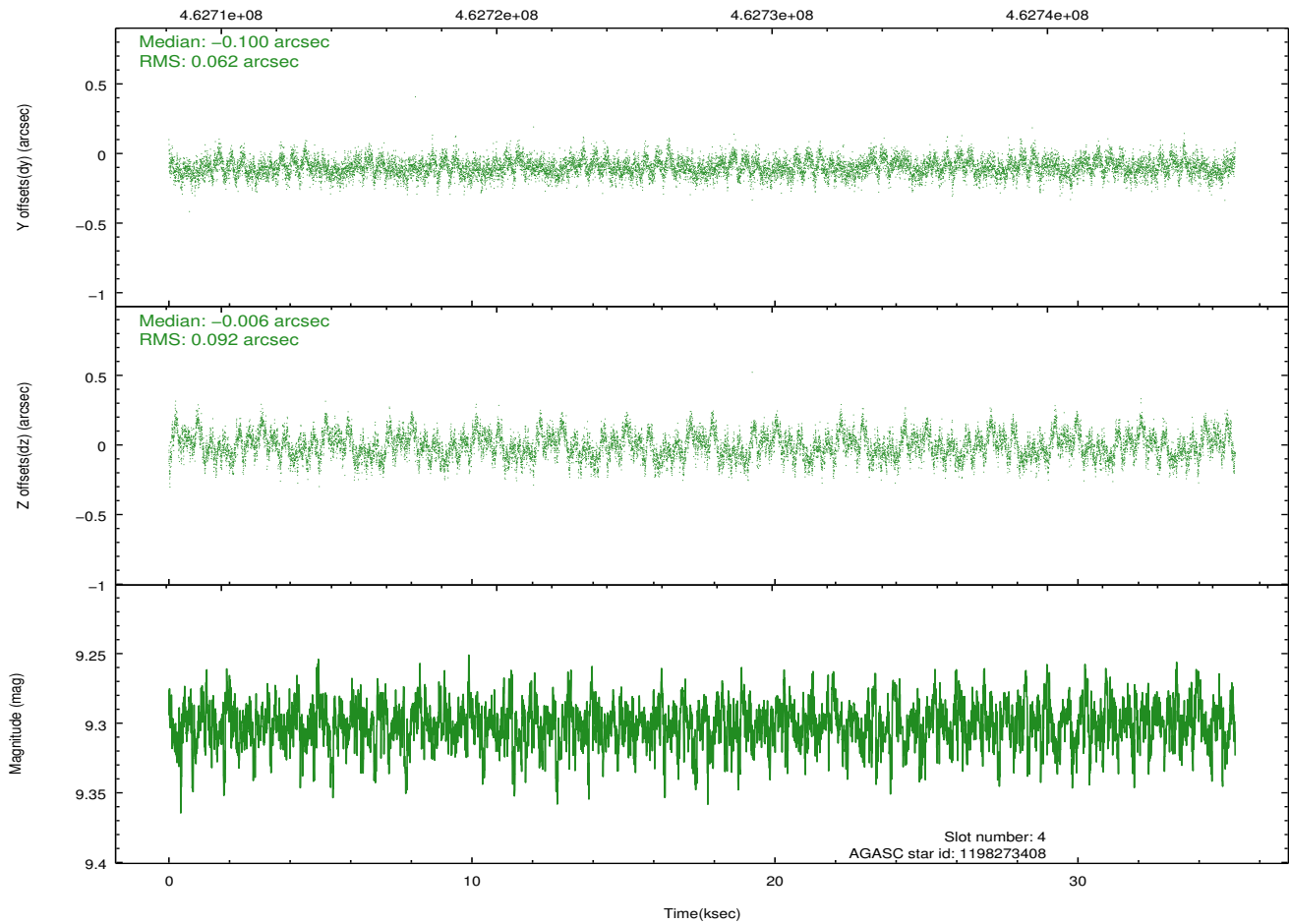
2.4.1 Slot 3



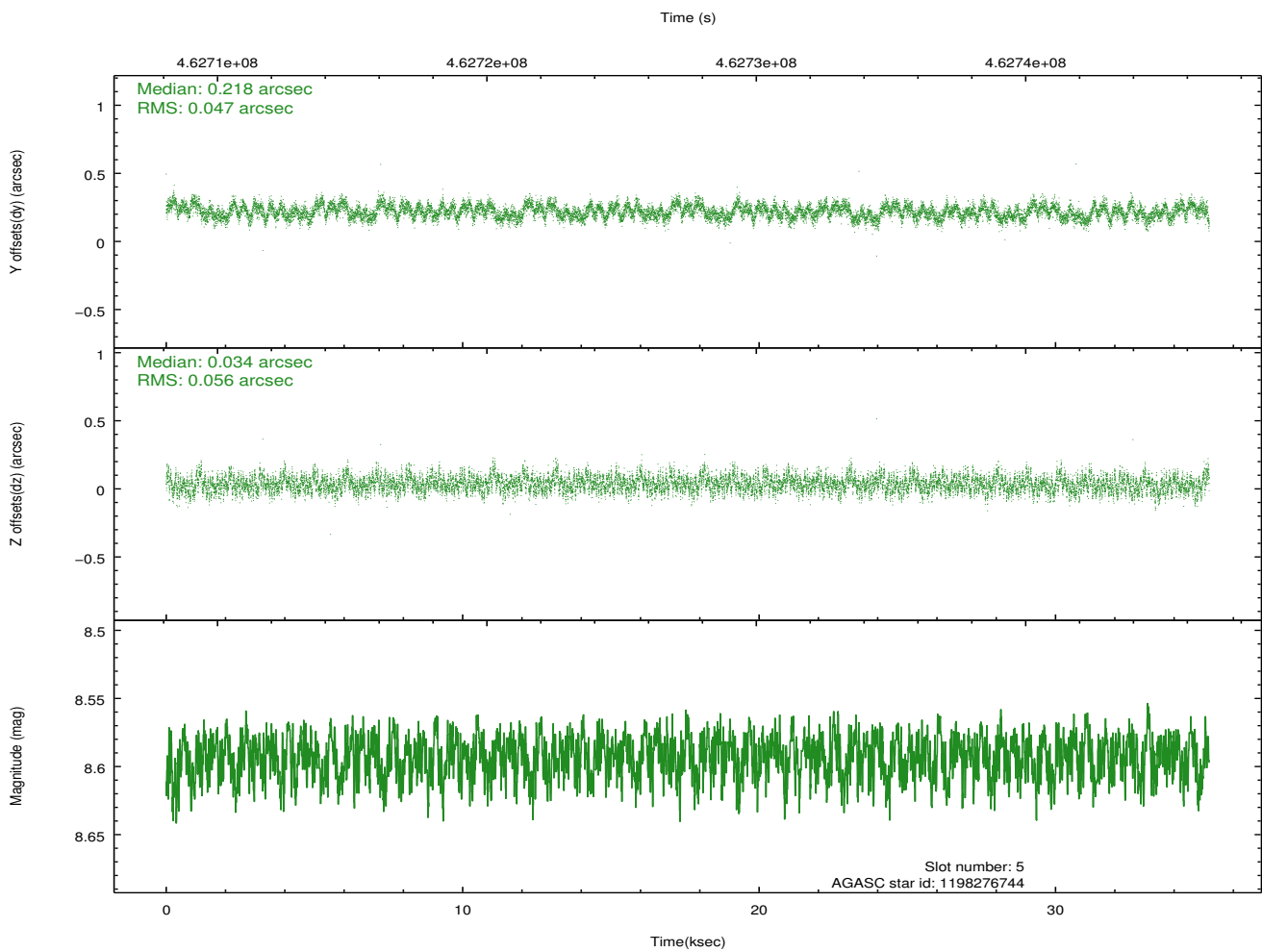
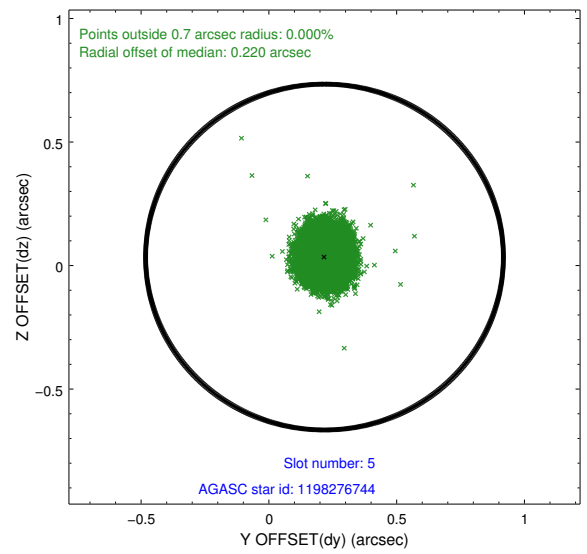
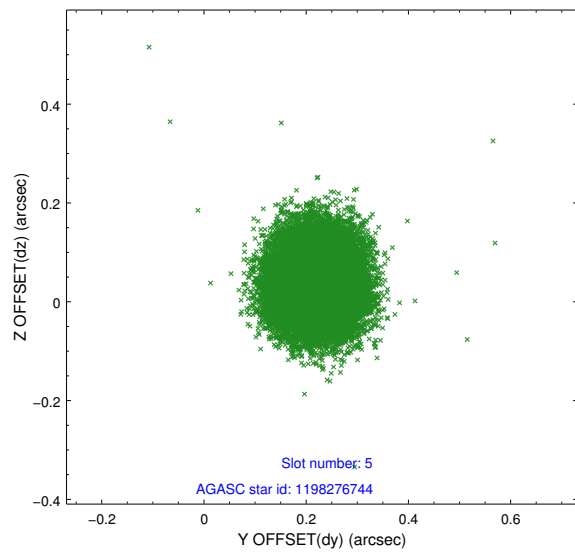
2.4.2 Slot 4



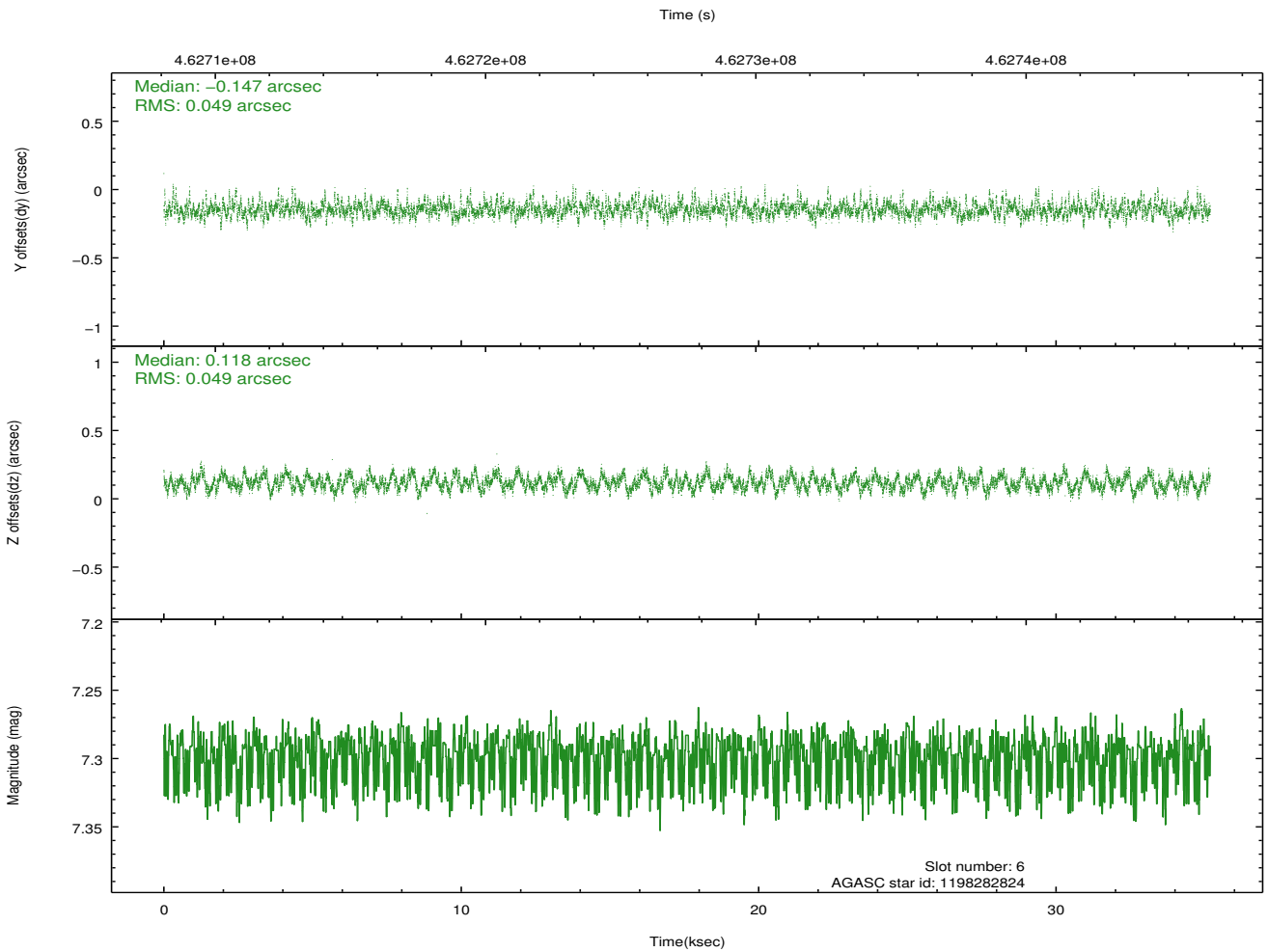
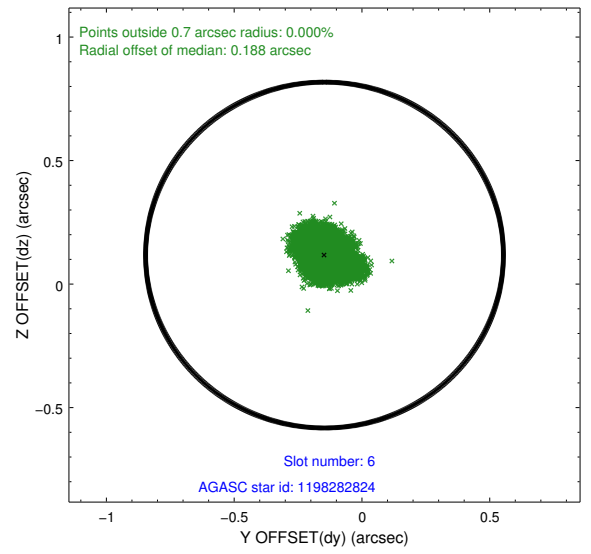
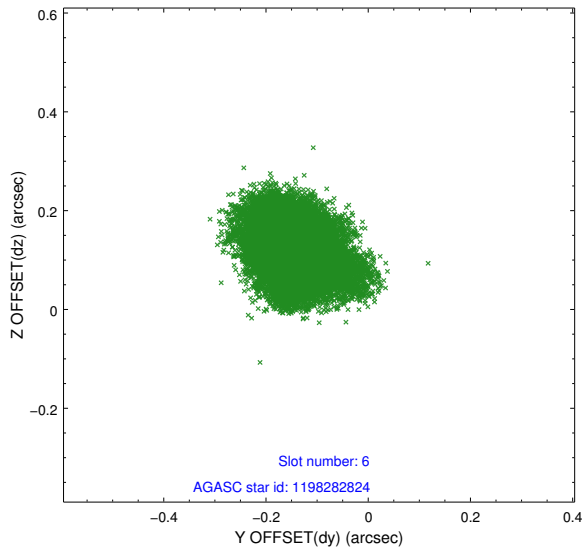
Time (s)



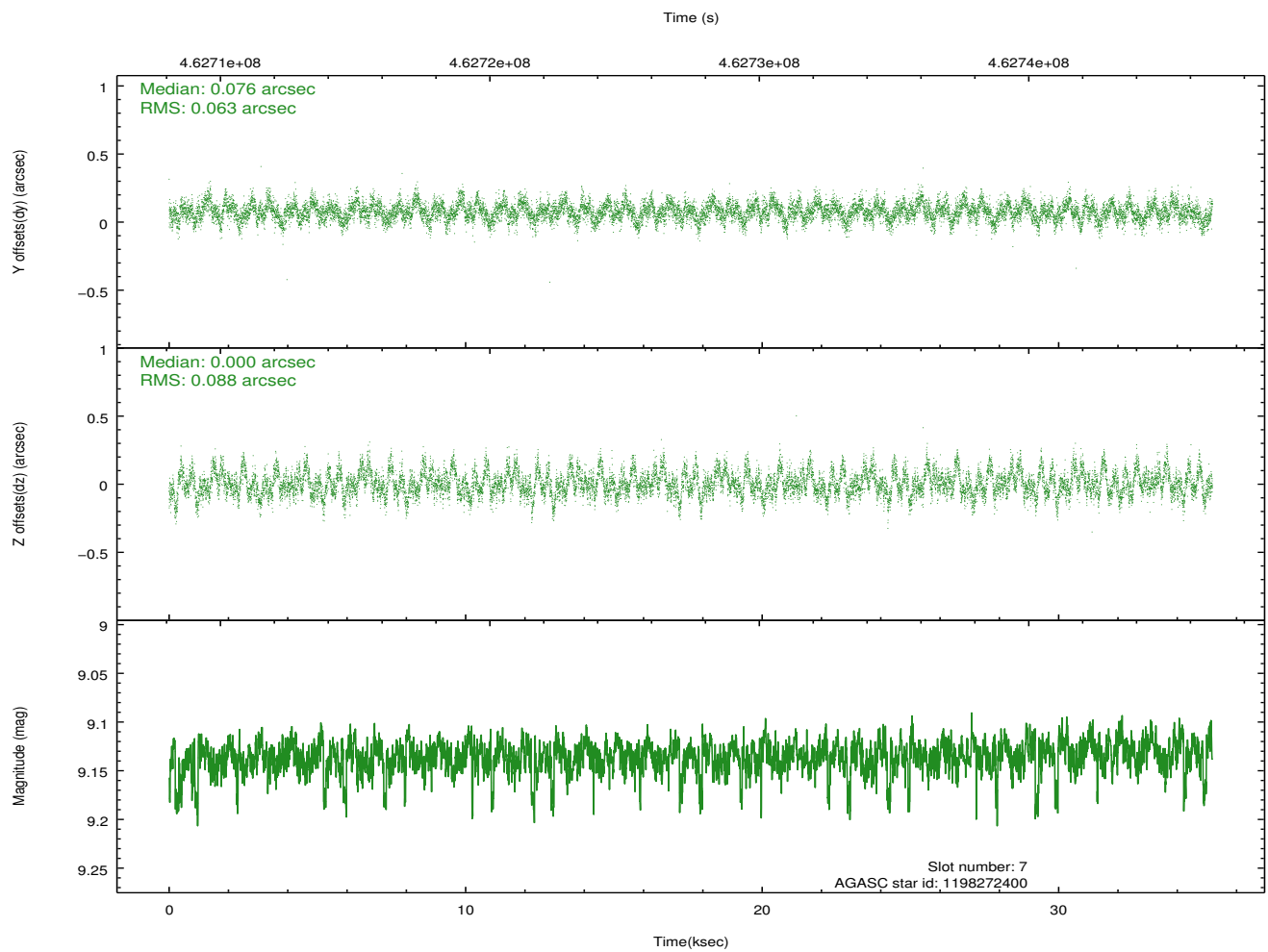
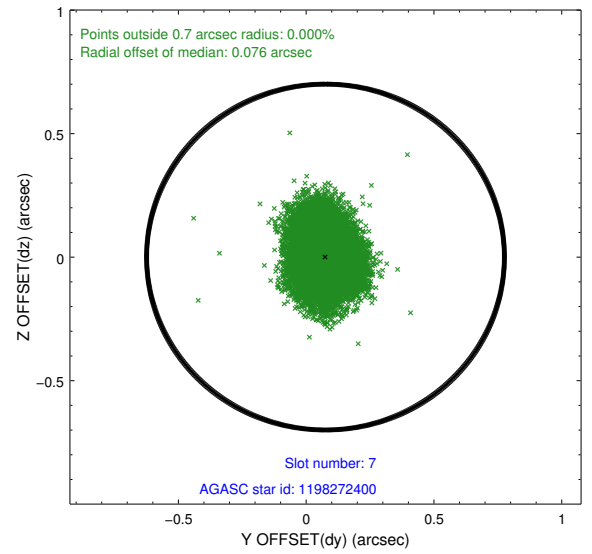
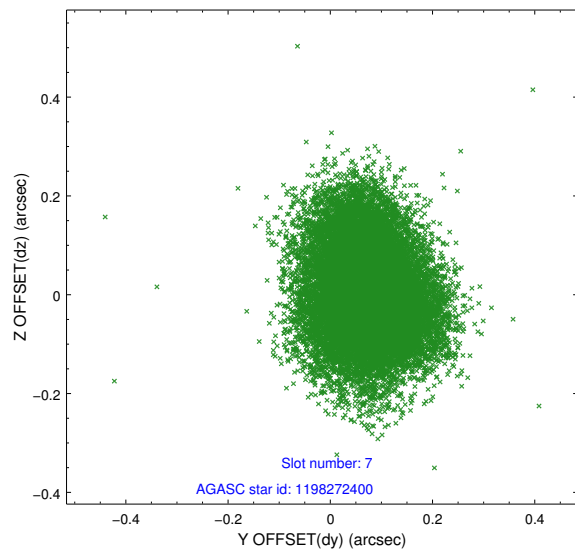
2.4.3 Slot 5



2.4.4 Slot 6

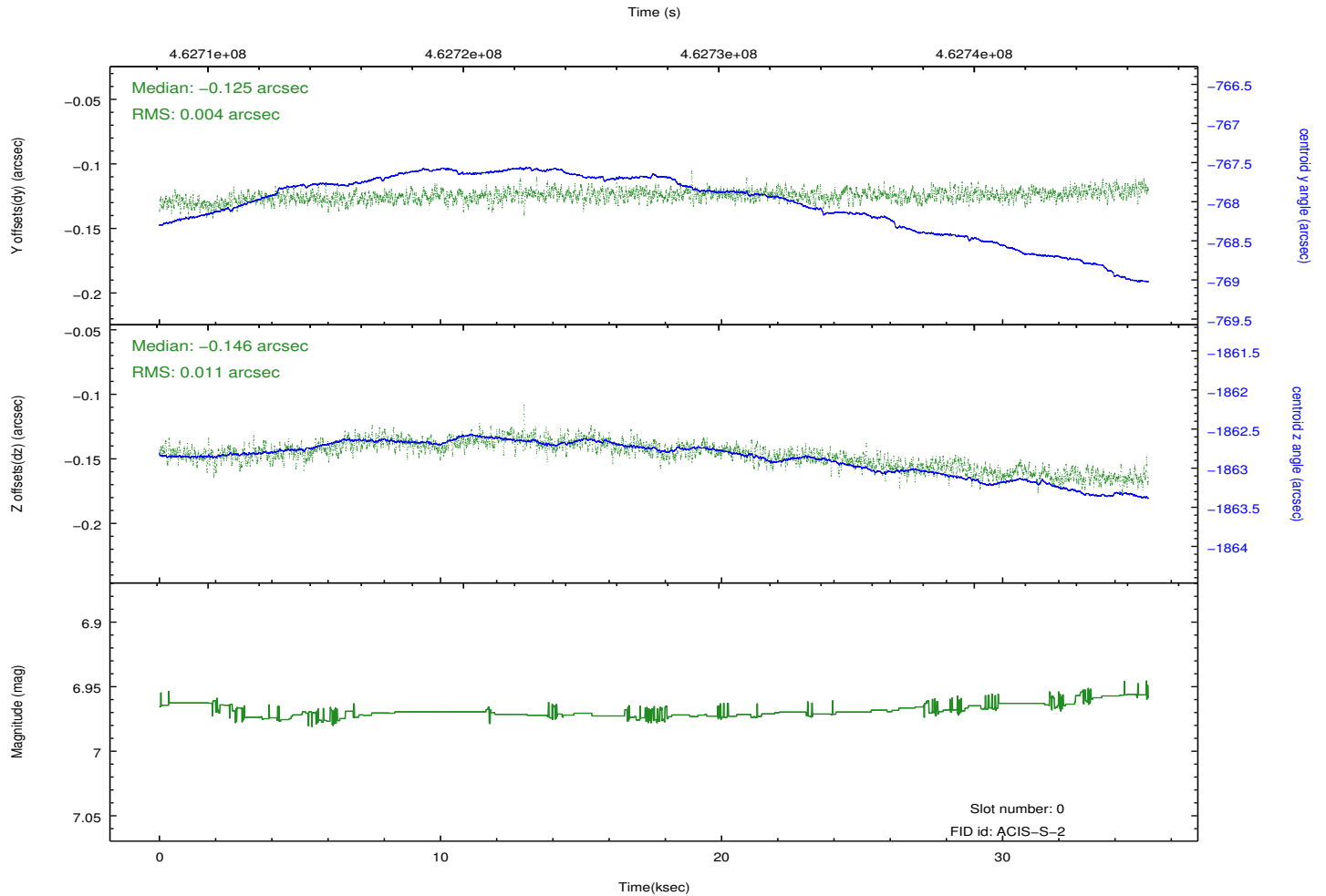
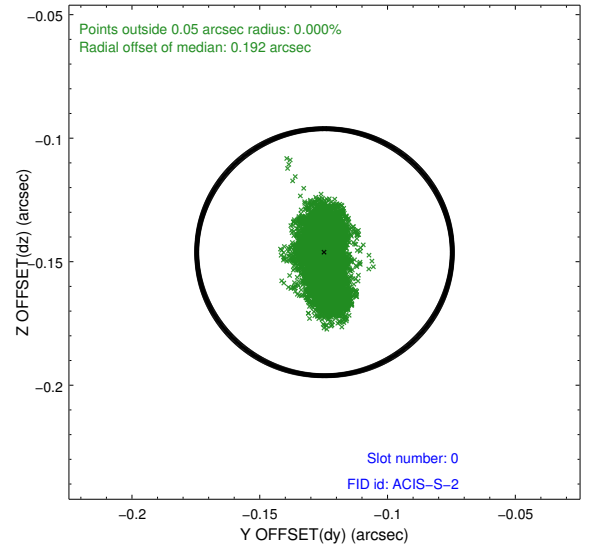
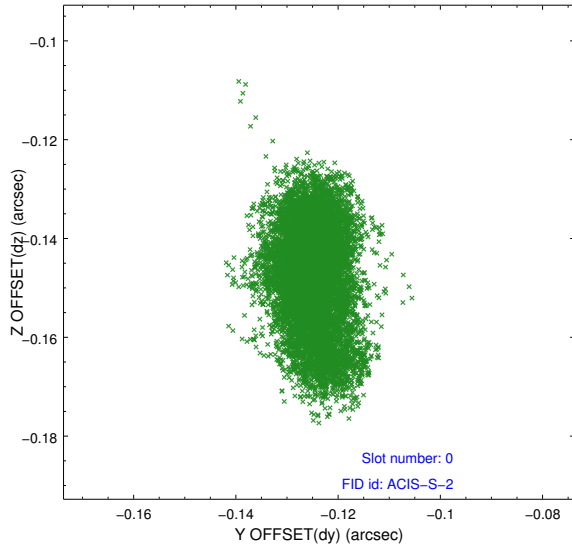


2.4.5 Slot 7

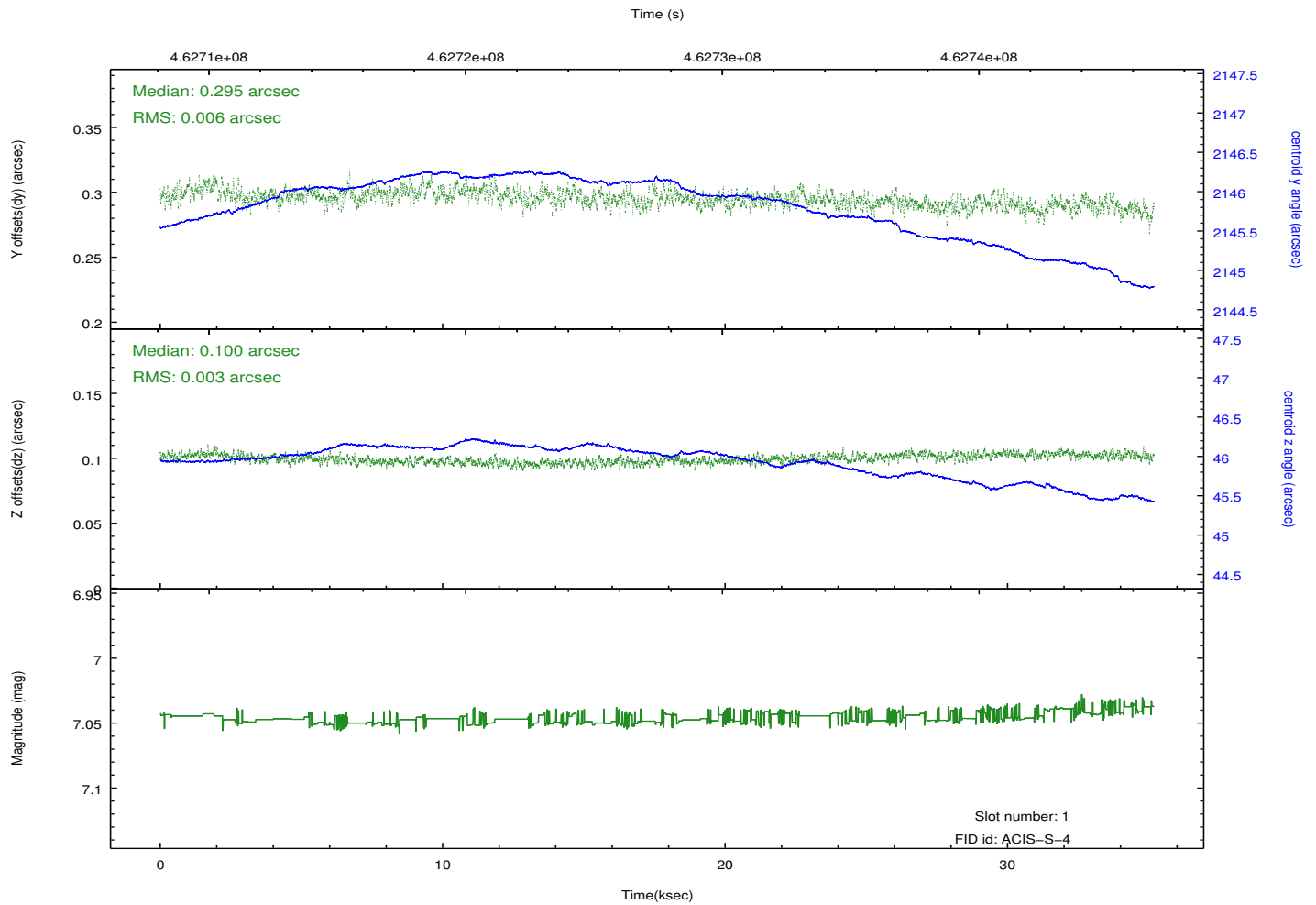
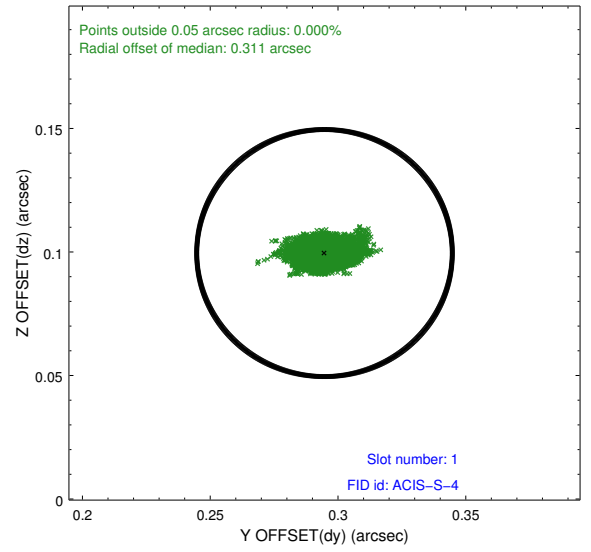
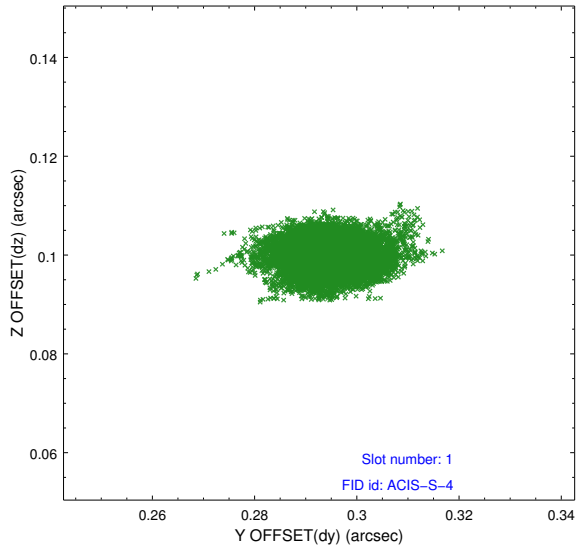


2.5 FID Slots

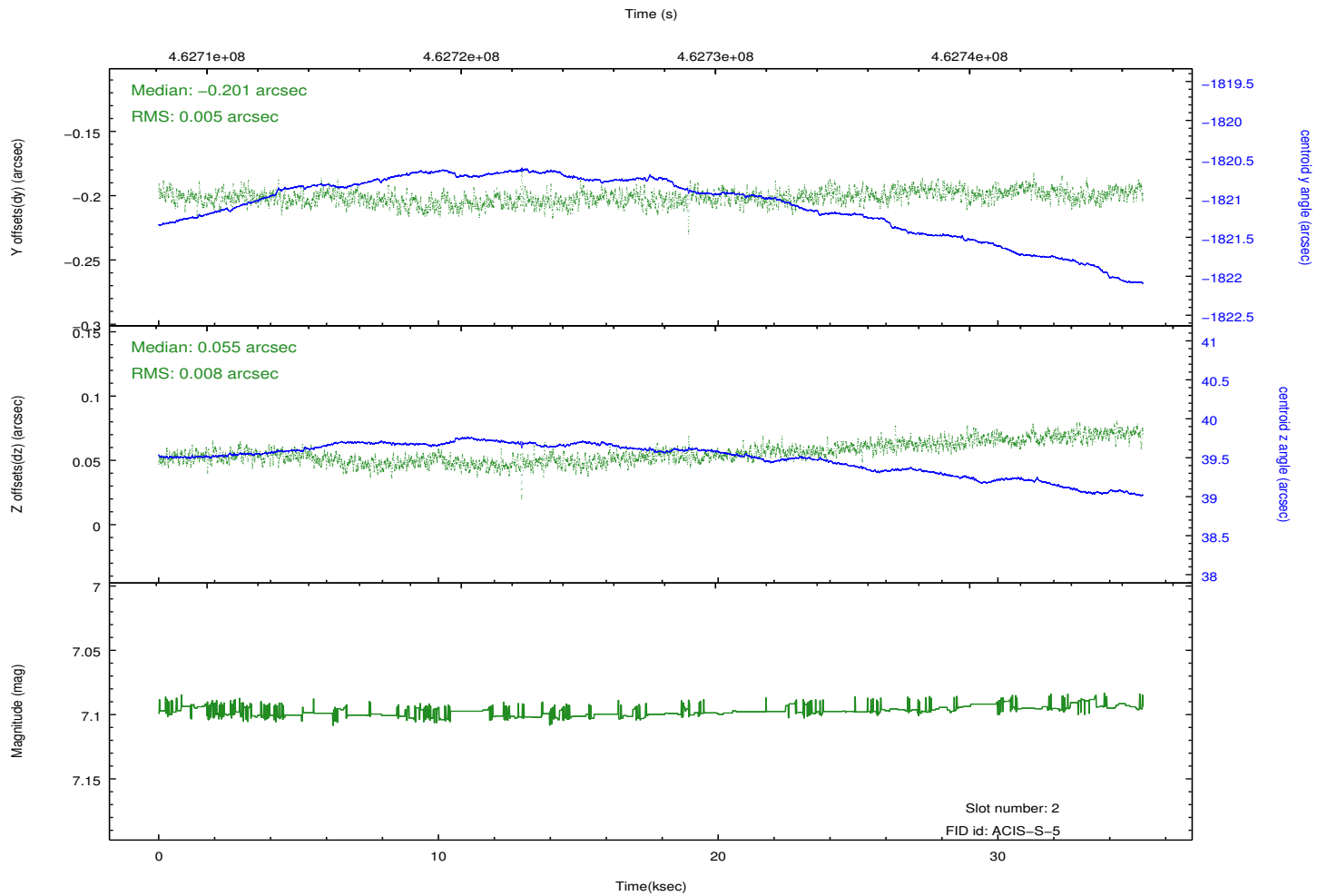
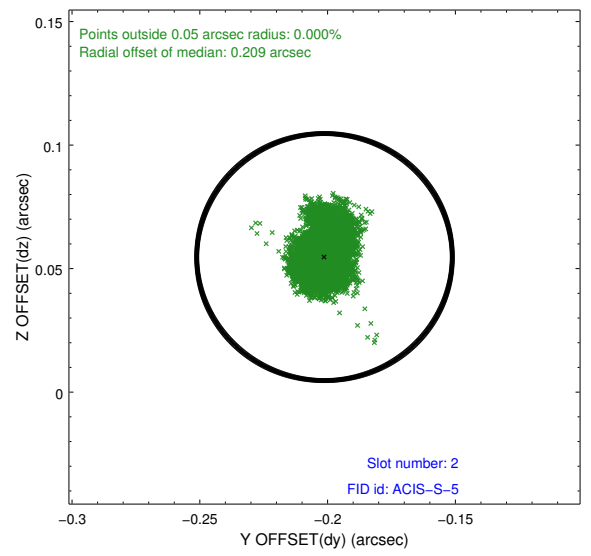
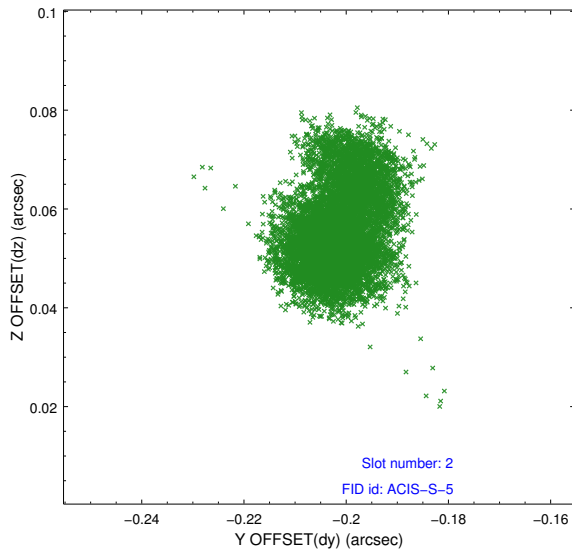
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

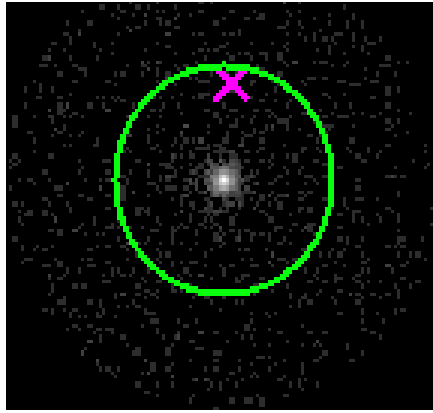


3 Gratings

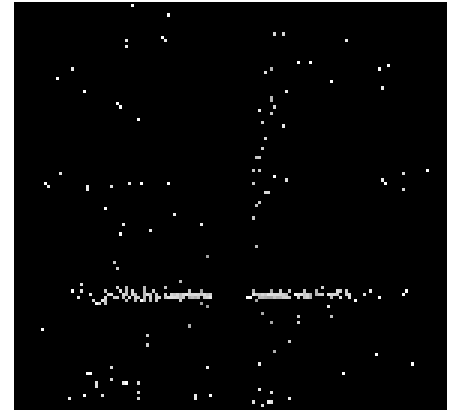
3.1 HEG Arm



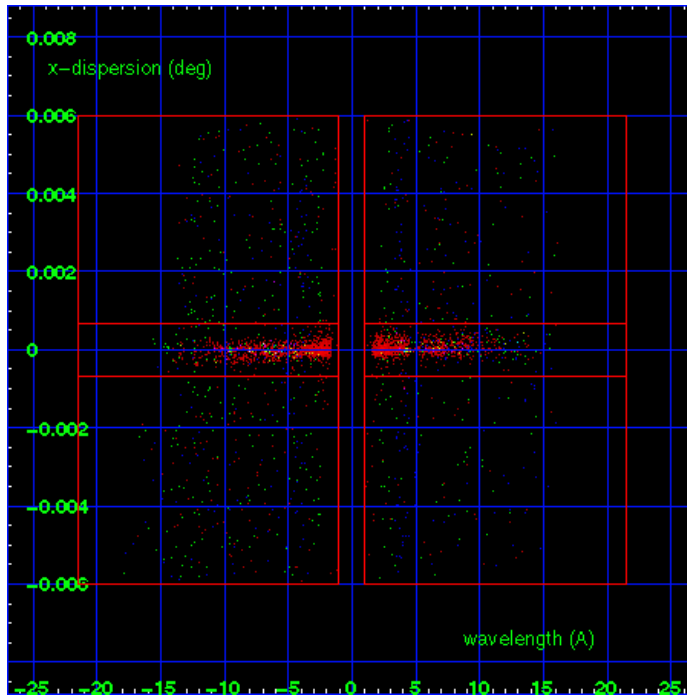
HEG Order Sort 123



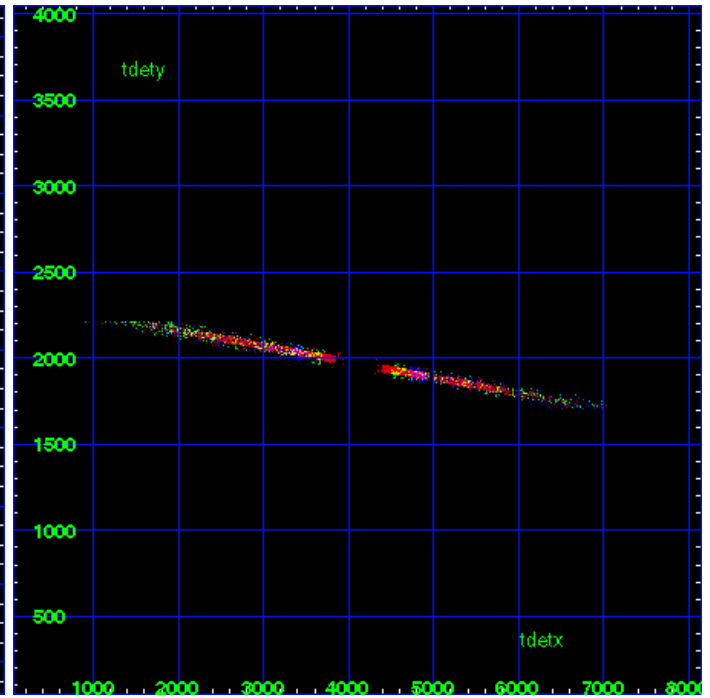
HEG Zero Order



HEG Order Sort ALL

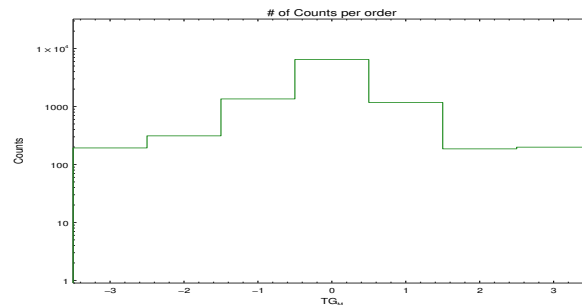


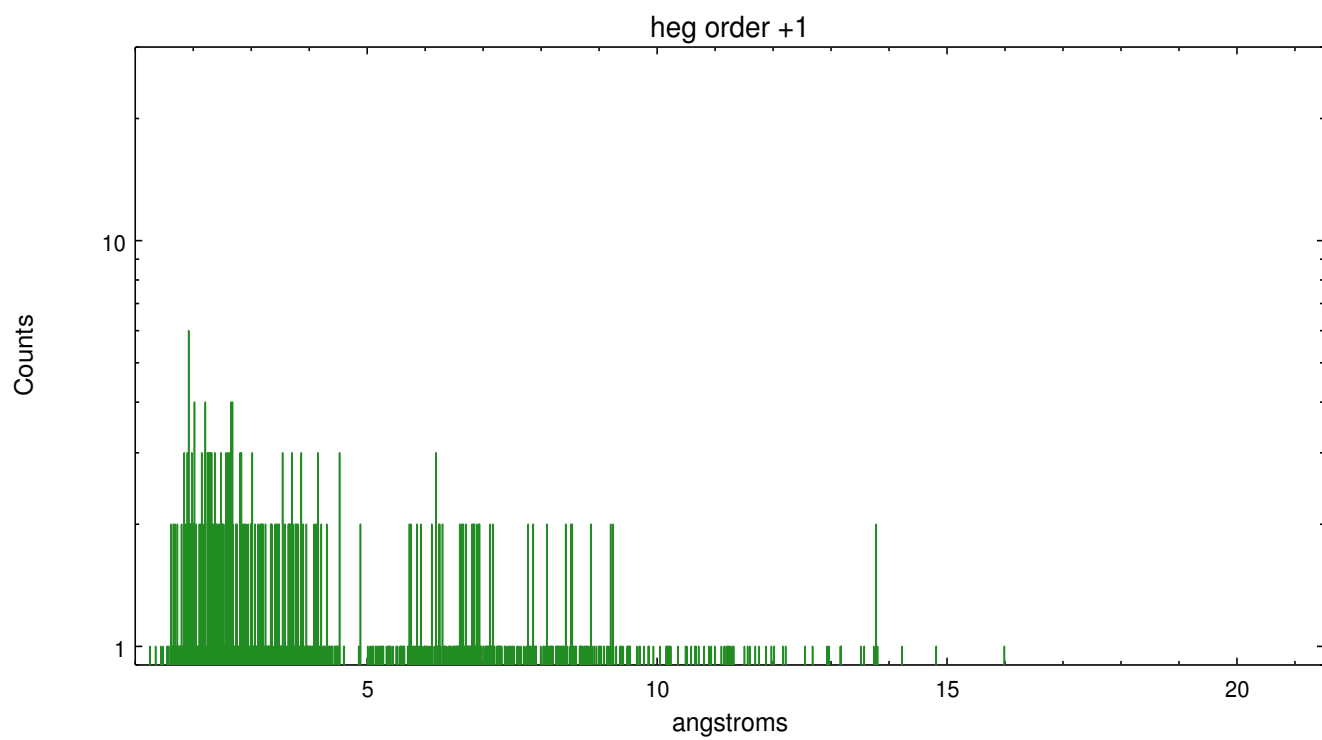
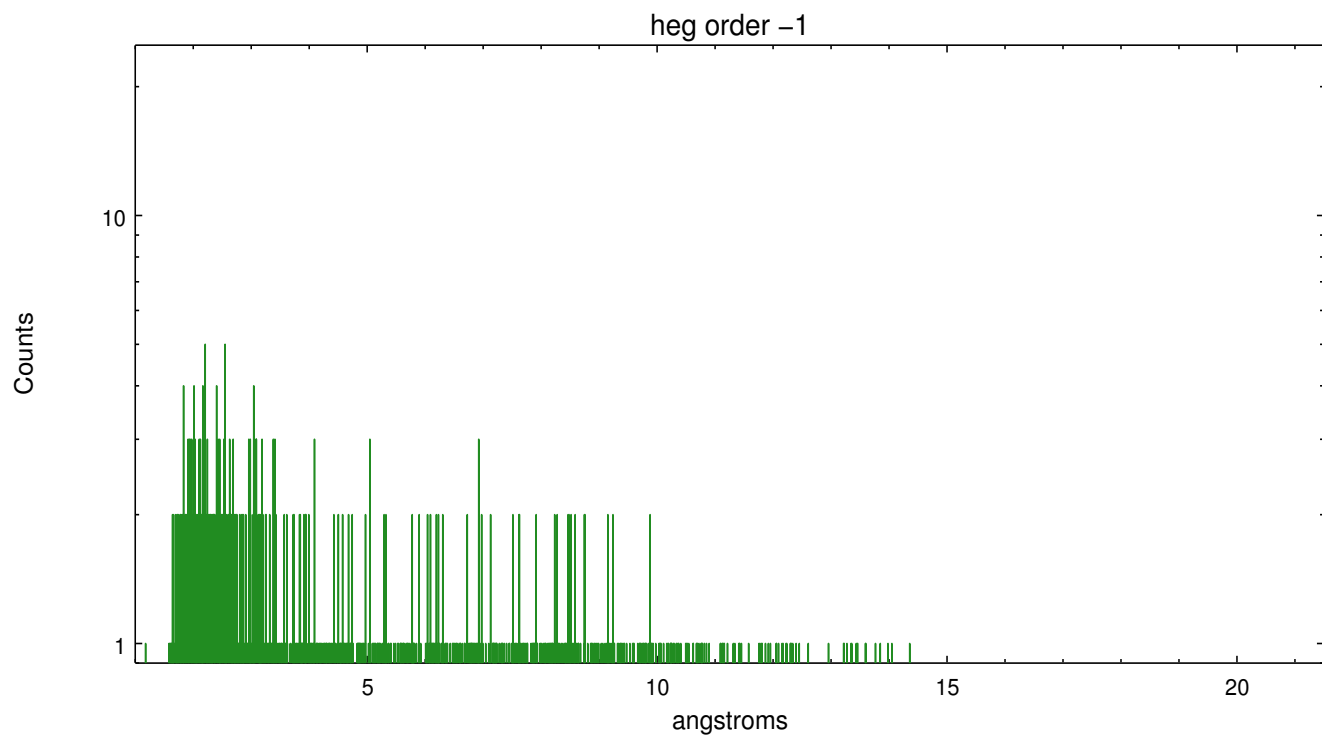
Spot Image HEG



Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	193	312	1353	6465	1174	186	199

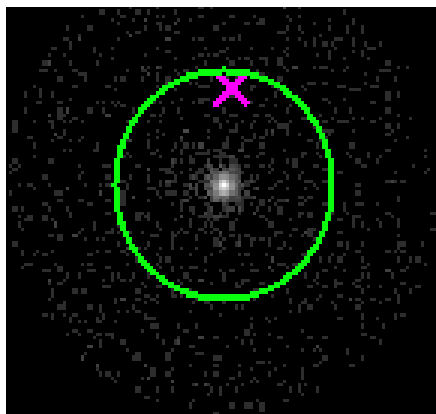




3.2 MEG Arm



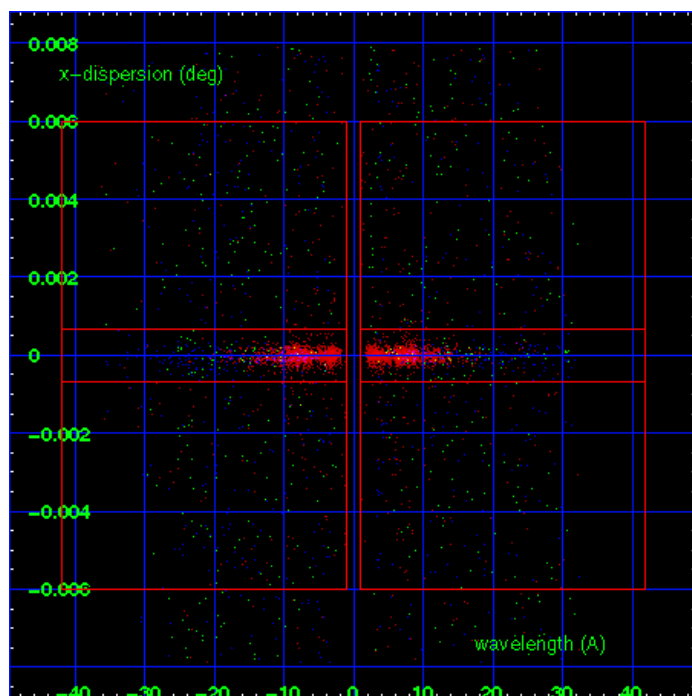
MEG Order Sort 123



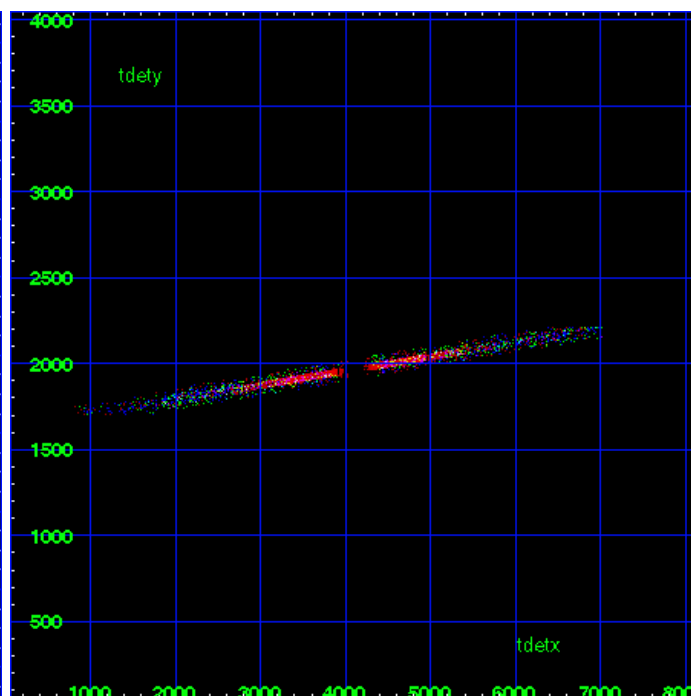
MEG Zero Order



MEG Order Sort ALL

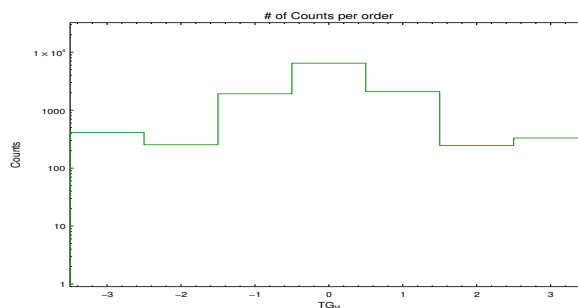


Spot Image MEG

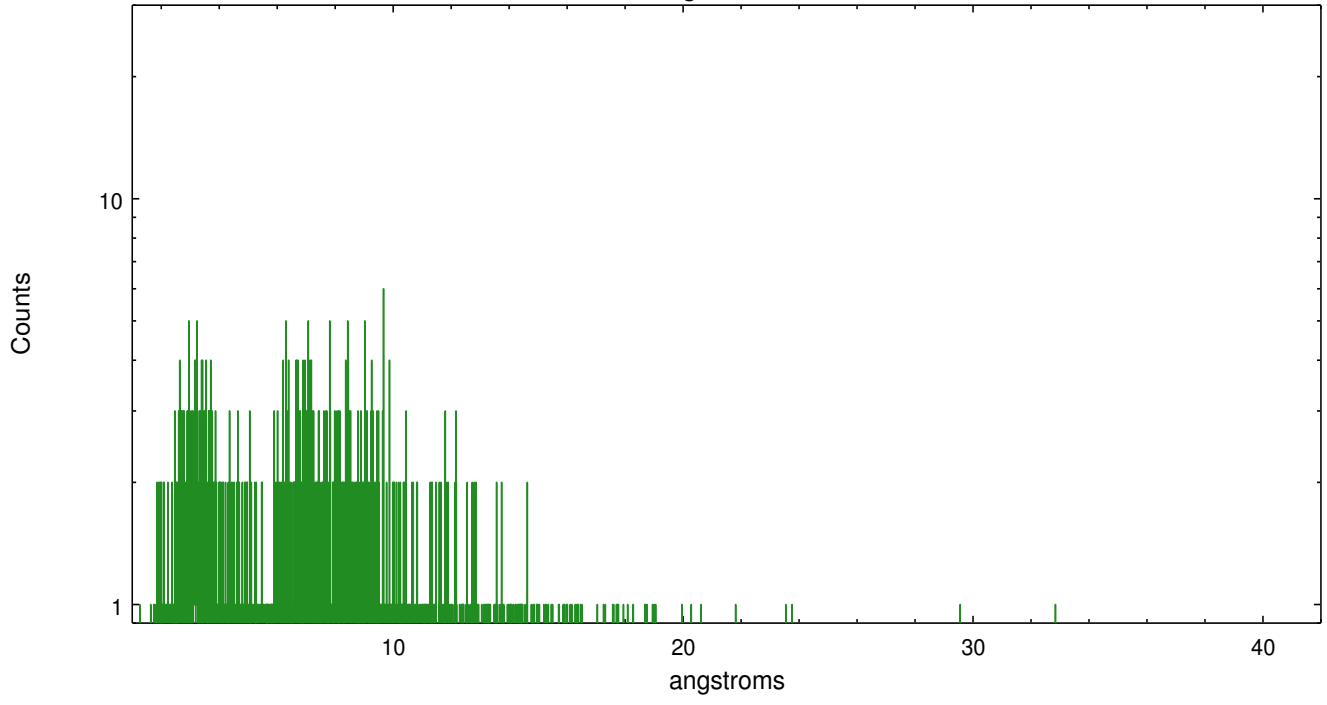


Full Detector MEG

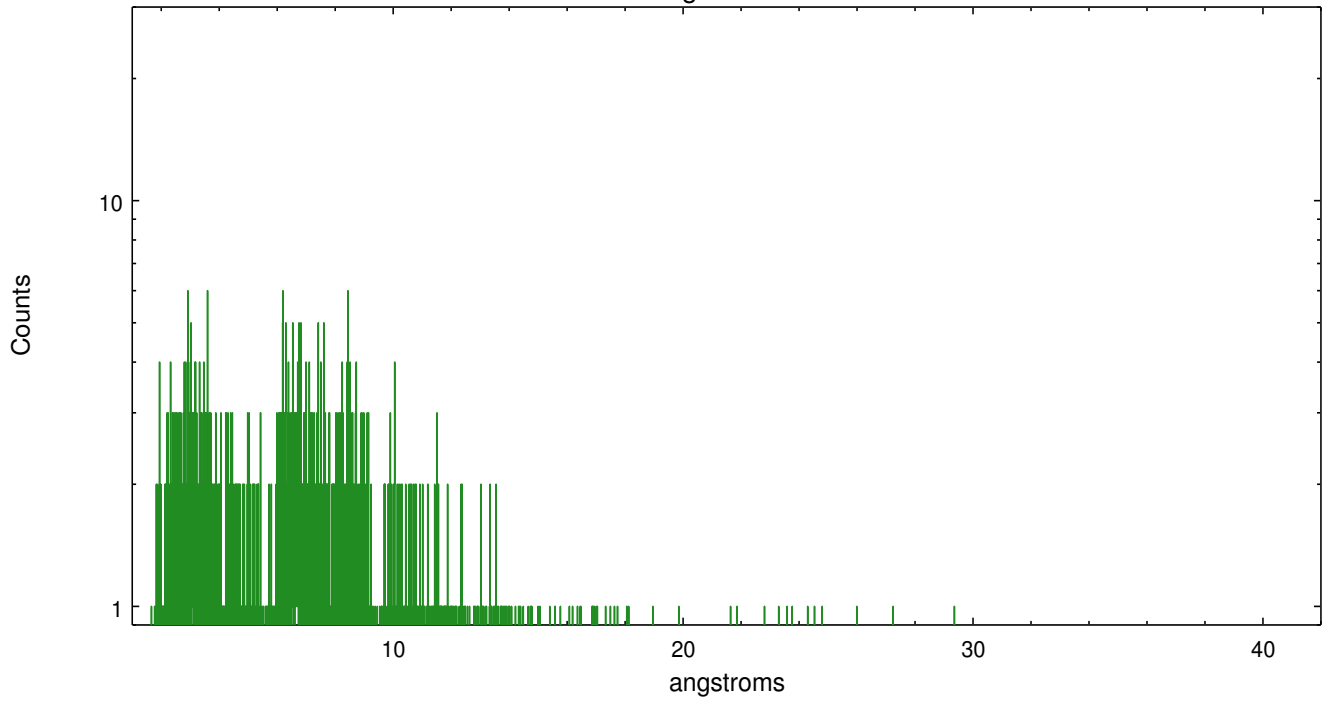
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	413	253	1918	6465	2088	246	331



meg order -1



meg order +1



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.08.31
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	35.050437138438

A.2 Comments