

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 15269 - L2 Version 1
Chandra X-Ray Center

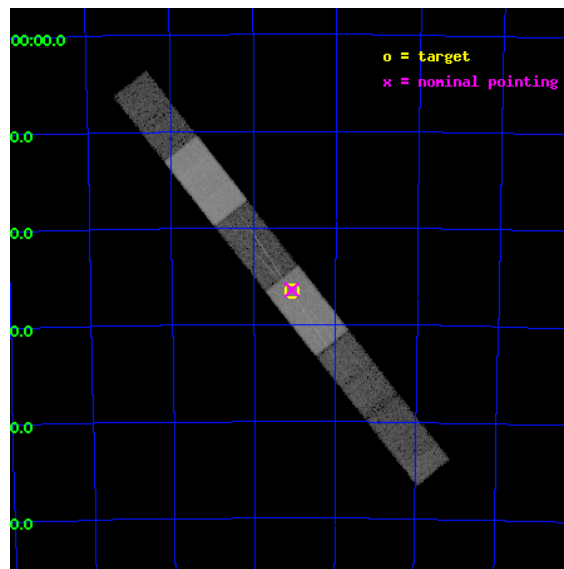
L2 Processing Date : Aug 24 2012

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1 Front

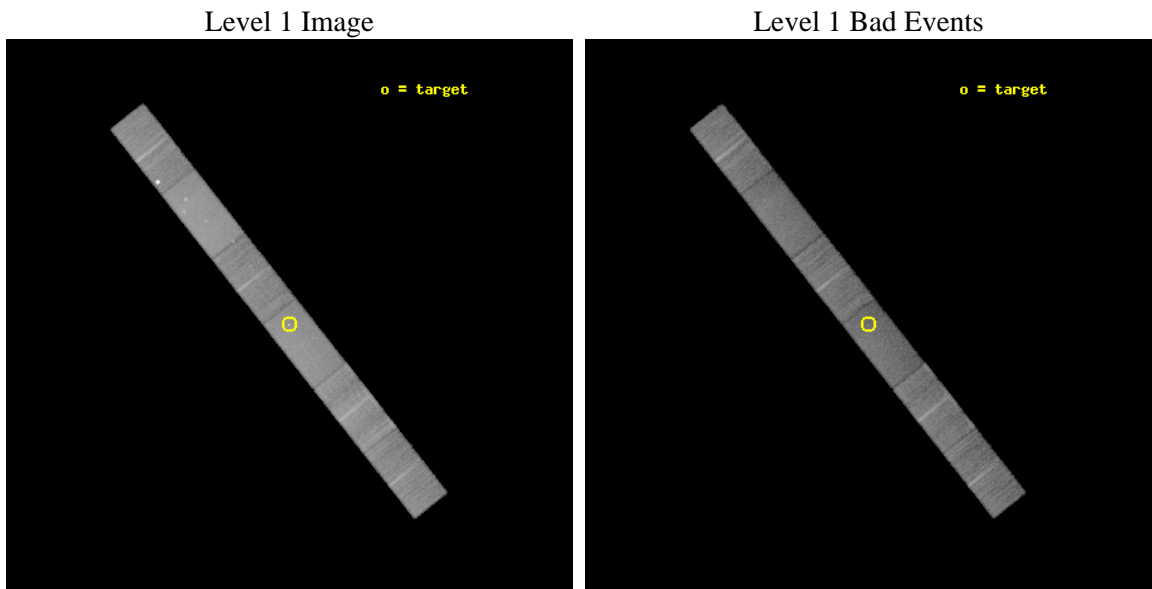
seq_num	401302	Sequence number
obs_id	15269	Observation id
title	The Wind and Warp of SMC X-1	Proposal title
observer	Prof Claude Canizares	Principal investigator
object	SMC X-1	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	19.271667	Observer's specified target RA [deg]
dec_targ	-73.442944	Observer's specified target Dec [deg]
ra_nom	19.268168719471	Nominal RA [deg]
dec_nom	-73.440081010651	Nominal Dec [deg]
roll_nom	51.653274921346	Nominal Roll [deg]
revision	1	Processing version of data
ontime	37049.799740255	Sum of GTIs [s]
livetime	36176.457495769	Livetime [s]
ontime4	37049.799740255	Sum of GTIs [s]
ontime5	37049.799740255	Sum of GTIs [s]
ontime6	37049.799740255	Sum of GTIs [s]
ontime7	37049.799740255	Sum of GTIs [s]
ontime8	37048.058700144	Sum of GTIs [s]
ontime9	37049.799740255	Sum of GTIs [s]
l2events	179202	Number of level 2 events



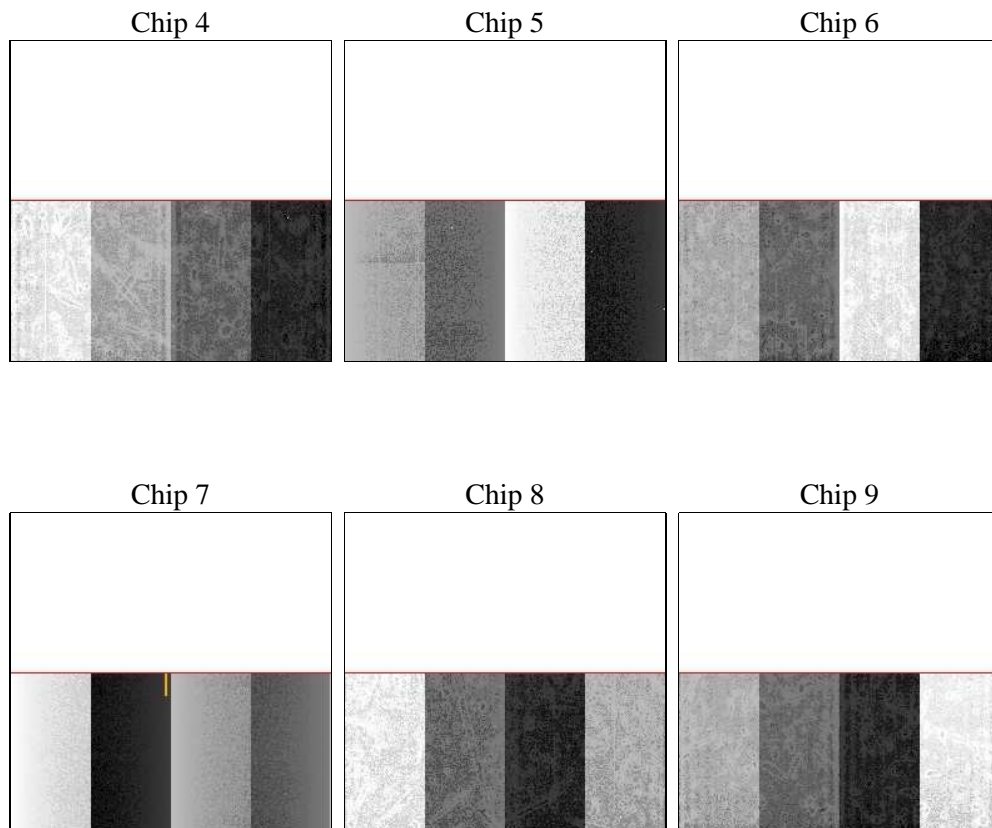
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	37000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	37049.799740255	Sum of GTIs [s]
caldbver	4.5.1.1	 	ontime4	37049.799740255	Sum of GTIs [s]
date	2012-08-24T05:24:47	Date and time of file creation	ontime5	37049.799740255	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	37049.799740255	Sum of GTIs [s]
			ontime7	37049.799740255	Sum of GTIs [s]
			ontime8	37048.058700144	Sum of GTIs [s]
			ontime9	37049.799740255	Sum of GTIs [s]
			l1events	758982	Number of level 1 events

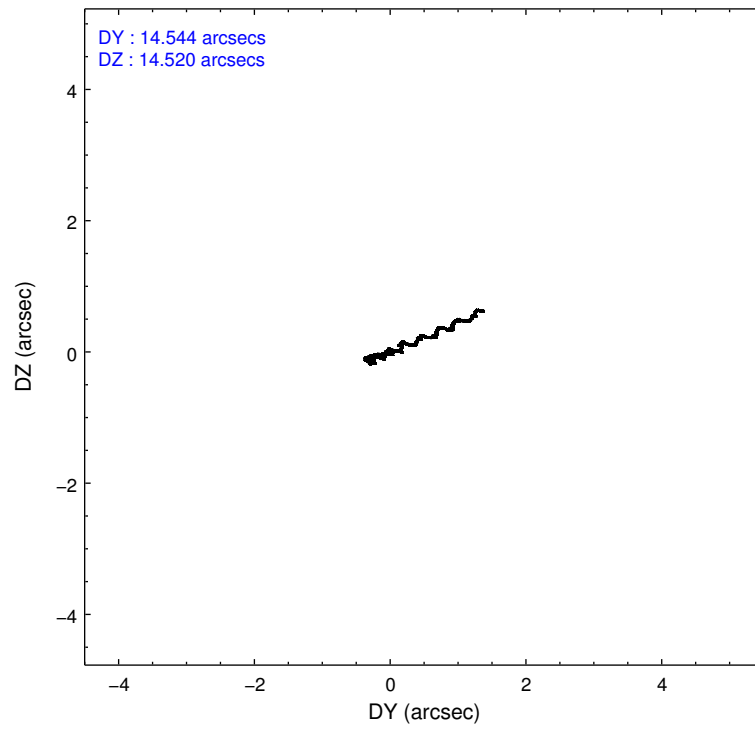
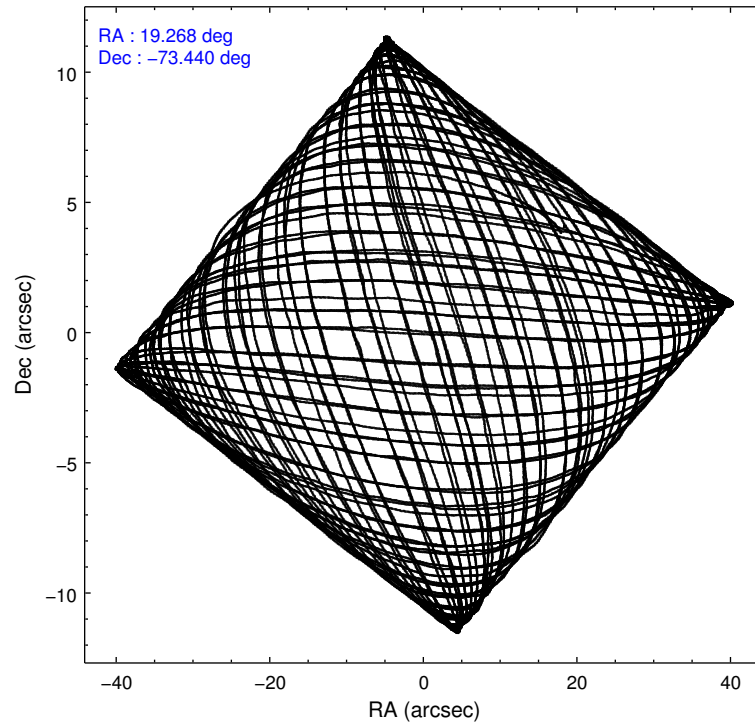
2.1.4 Events

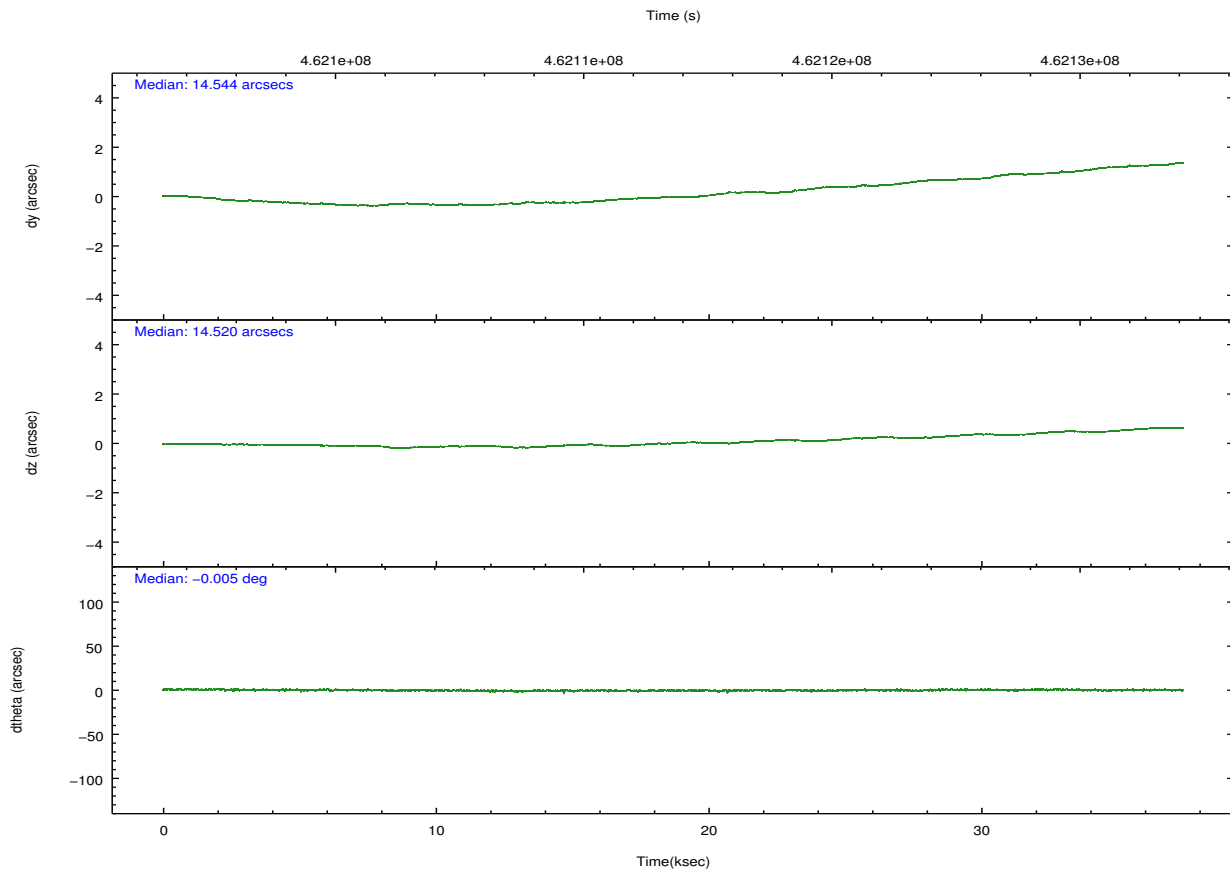
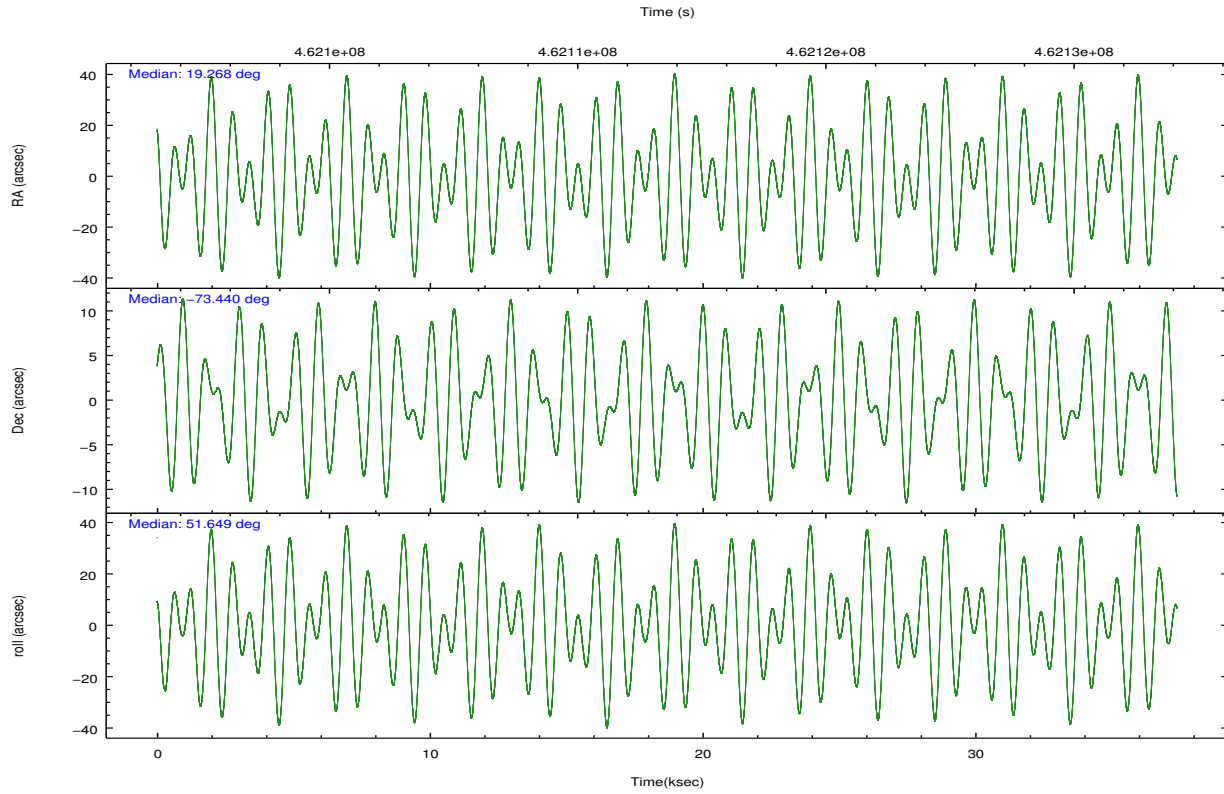
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	124096	160299	103320	132840	138057	100370	grade 0 events	16660	7560	4875	5952	10213	4325
rejected events	98882	81746	89762	71039	100799	87387		13%	4%	4%	4%	7%	4%
rejected %	79%	50%	86%	53%	73%	87%	grade 1 events	85	368	39	147	61	36
								0%	0%	0%	0%	0%	0%
							grade 2 events	3224	22013	2842	12763	8415	2832
								2%	13%	2%	9%	6%	2%
							grade 3 events	1492	3995	1492	5835	4317	1523
								1%	2%	1%	4%	3%	1%
							grade 4 events	1427	3904	1560	5776	4005	1560
								1%	2%	1%	4%	2%	1%
							grade 5 events	4693	13228	4745	13458	6825	5180
								3%	8%	4%	10%	4%	5%
							grade 6 events	2411	41084	2789	31483	10309	2743
								1%	25%	2%	23%	7%	2%
							grade 7 events	94104	68147	84978	57426	93912	82171
								75%	42%	82%	43%	68%	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	19.255545	19.26816871947093	CCD I2 on	N	N
[deg] Pointing Dec	-73.467182	-73.44008101065138	CCD I3 on	N	N
[deg] Pointing Roll	51.484541	51.65327492134565	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	-183.9900508222561	CCD S3 on	Y	Y
[mm] SIM translation stage offset	-6.14	-6.142471760751675	CCD S4 on	Y	Y
[s] Observation start time (MET)	462095282.184000	462094257.79731	CCD S5 on	Y	Y
Observation start date	2012-08-23T07:46:55	2012-08-23T07:30:57	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	462132282.184000	462132984.86188	On-chip summing requested	N	N
Observation end date	2012-08-23T18:03:35	2012-08-23T18:16:24	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



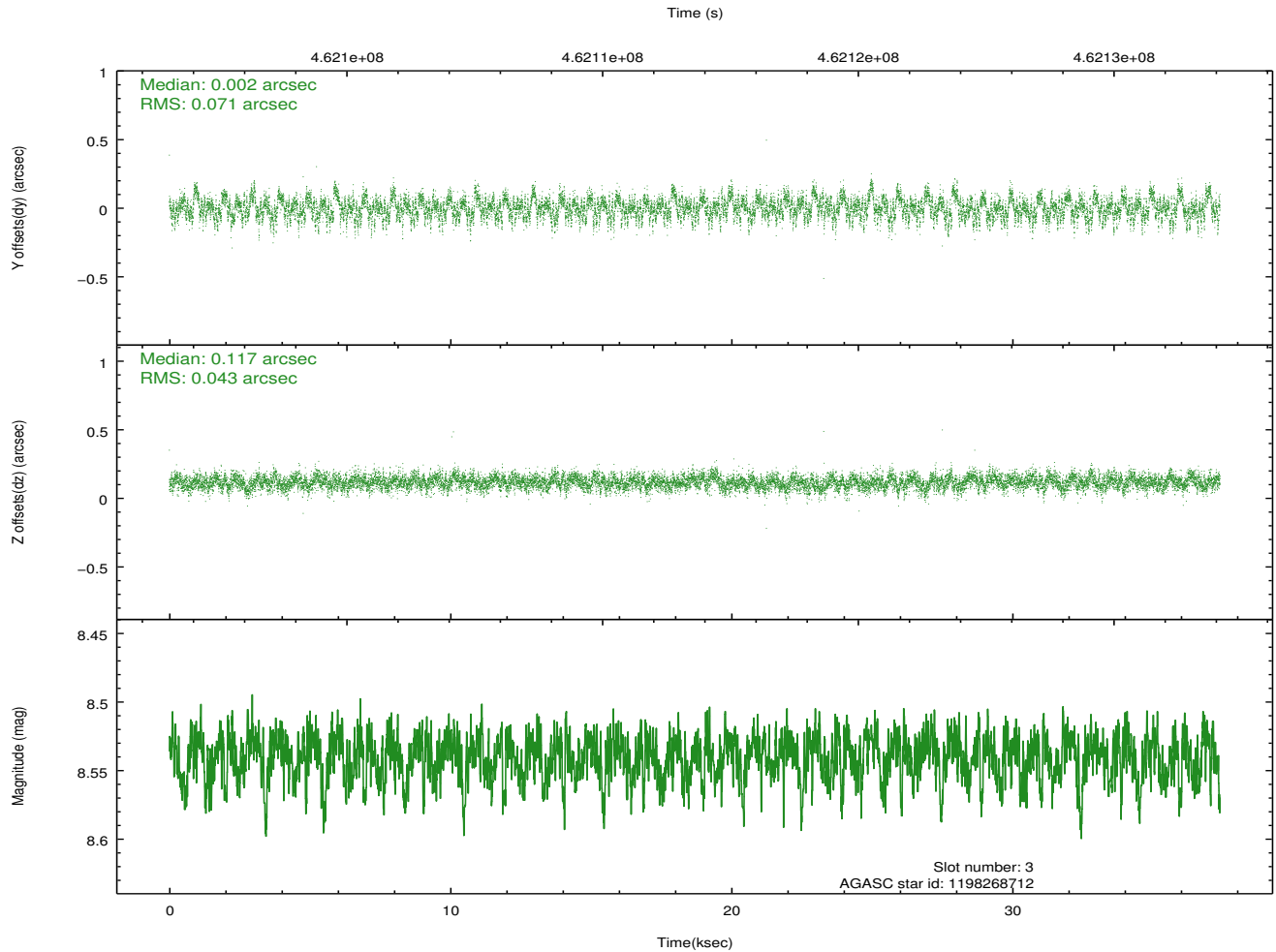
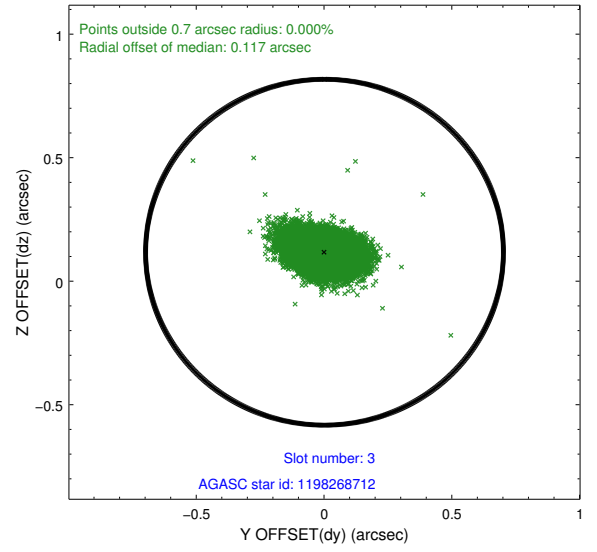
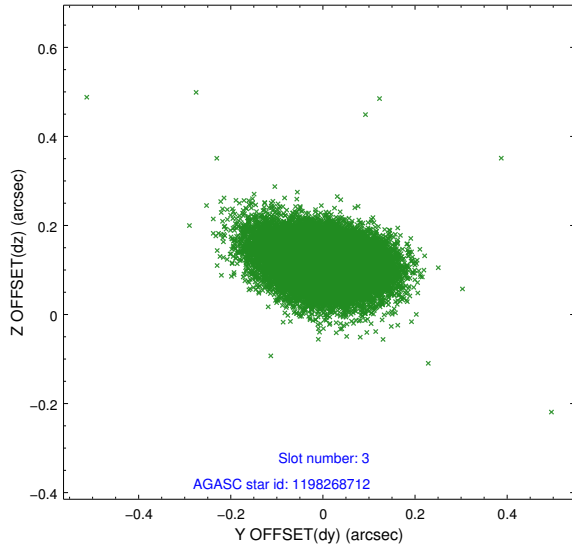


Slot Statistics

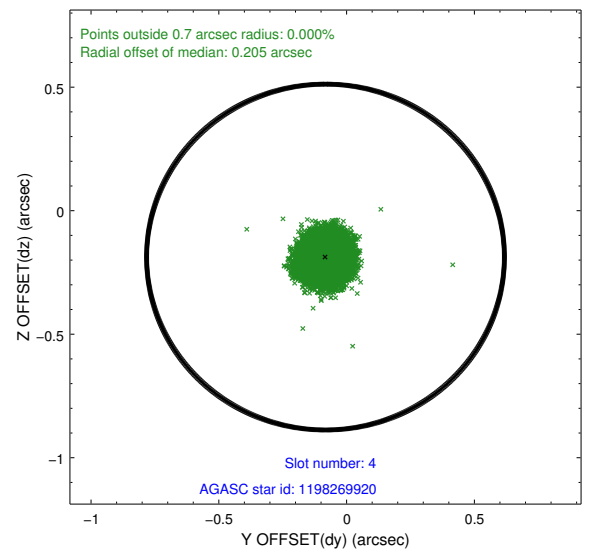
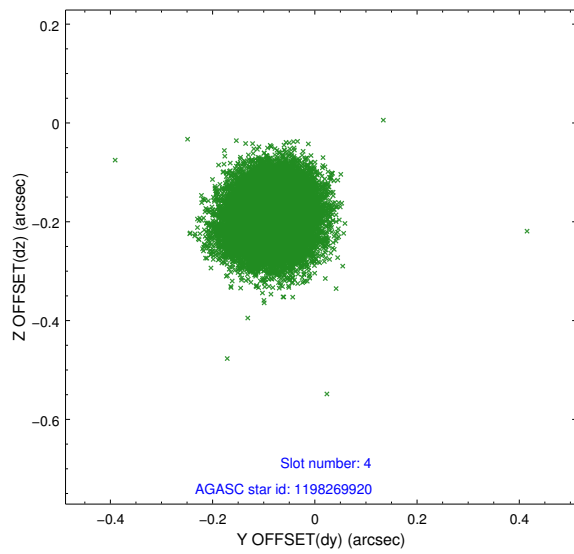
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.10	9119	0.136	0.125	0.017	0.053	0.000000	0.000000	928.88	-1858.09
1	FID	ACIS-S-2	7.01	9119	-0.227	-0.119	0.014	0.026	0.000000	0.000000	-767.37	-1862.93
2	FID	ACIS-S-6	7.28	9119	0.072	-0.005	0.012	0.027	0.000000	0.000000	394.48	683.05
3	GUIDE	1198268712	8.54	18231	0.002	0.117	0.086	0.148	21.961983	-73.269598	2253.76	-1790.23
4	GUIDE	1198269920	8.26	18234	-0.083	-0.188	0.069	0.109	20.316466	-73.033728	1907.82	93.47
5	GUIDE	1198272400	9.18	18209	0.015	-0.021	0.104	0.172	20.411923	-73.620598	290.49	-1269.21
6	GUIDE	1198273408	9.31	18229	-0.036	0.038	0.097	0.159	17.532323	-73.621495	-1543.16	1006.89
7	GUIDE	1198276744	8.60	18231	0.113	0.056	0.076	0.121	19.489008	-74.153493	-1790.20	-1718.25

2.4 Star Slots

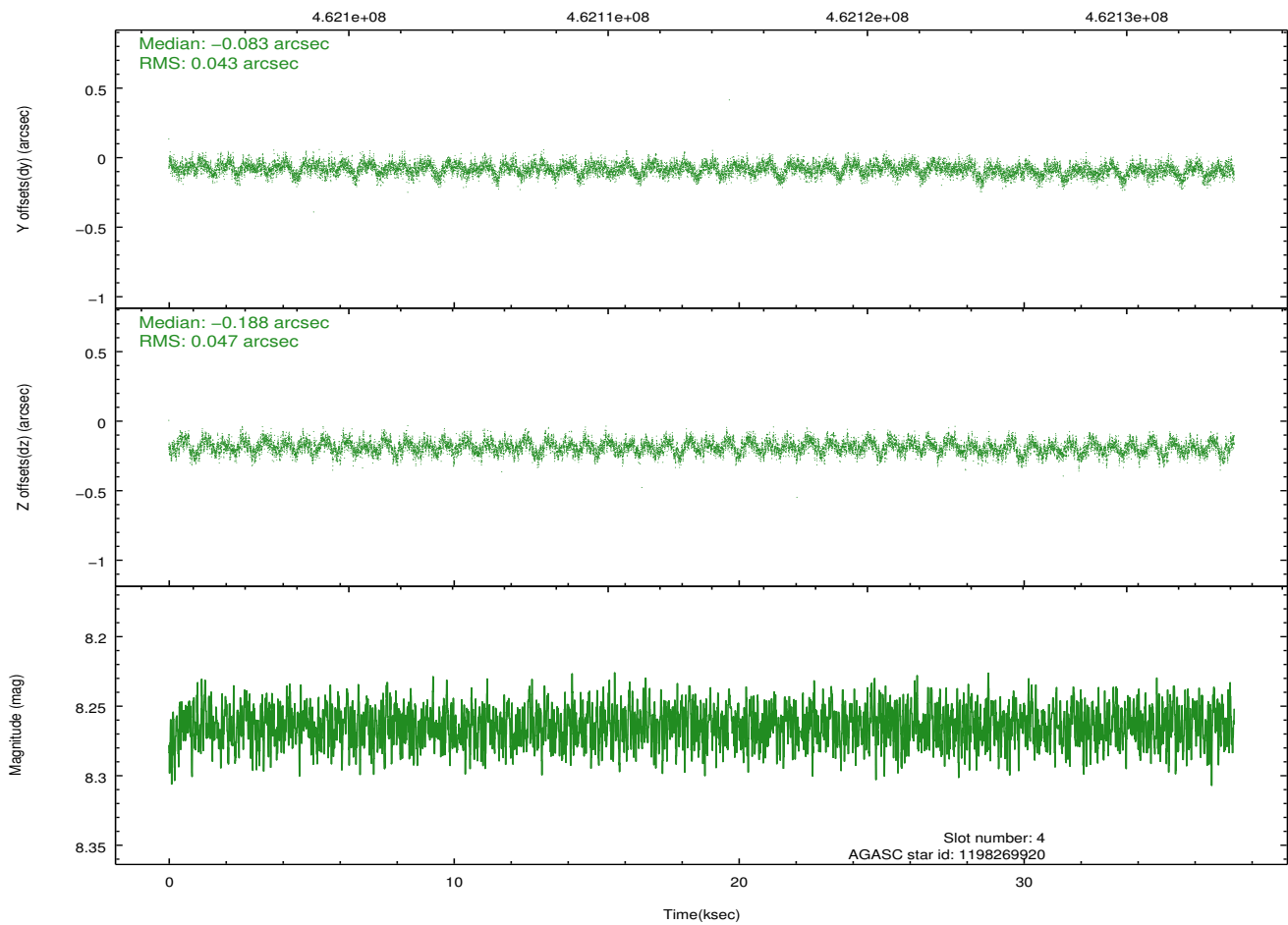
2.4.1 Slot 3



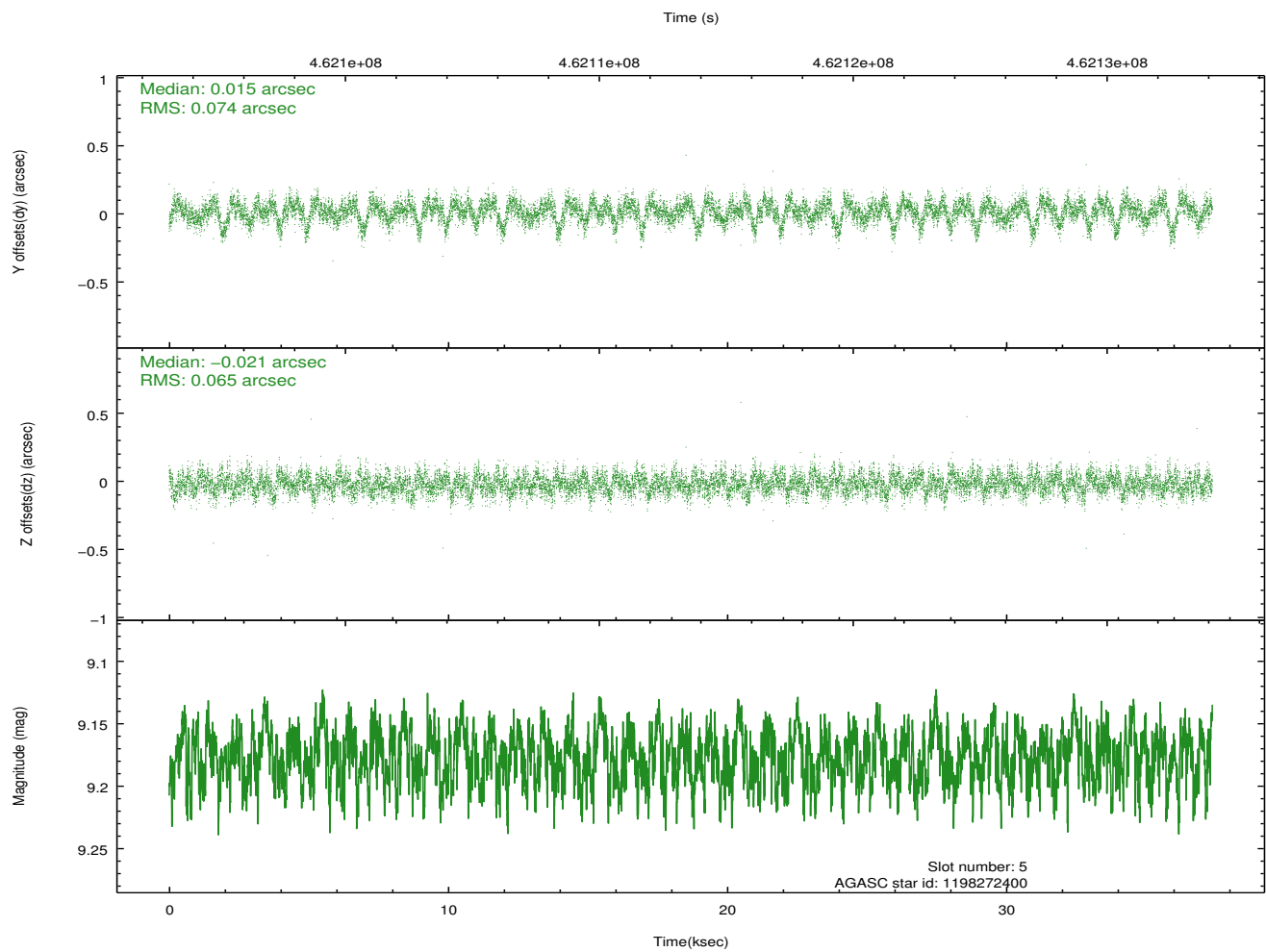
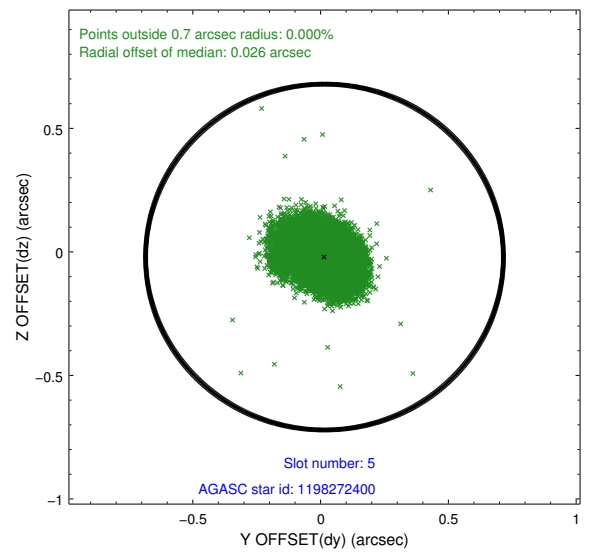
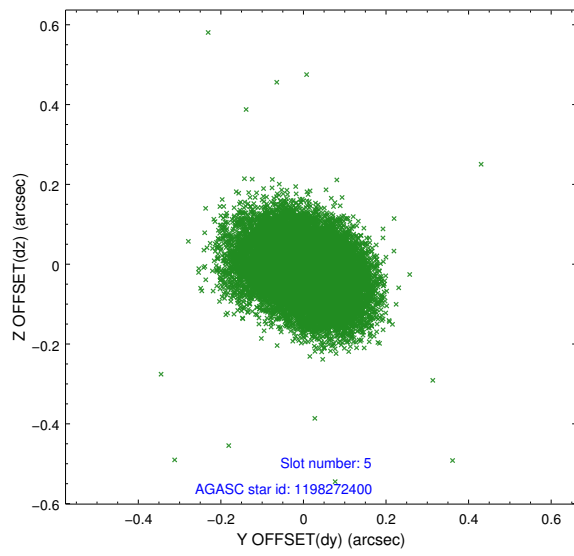
2.4.2 Slot 4



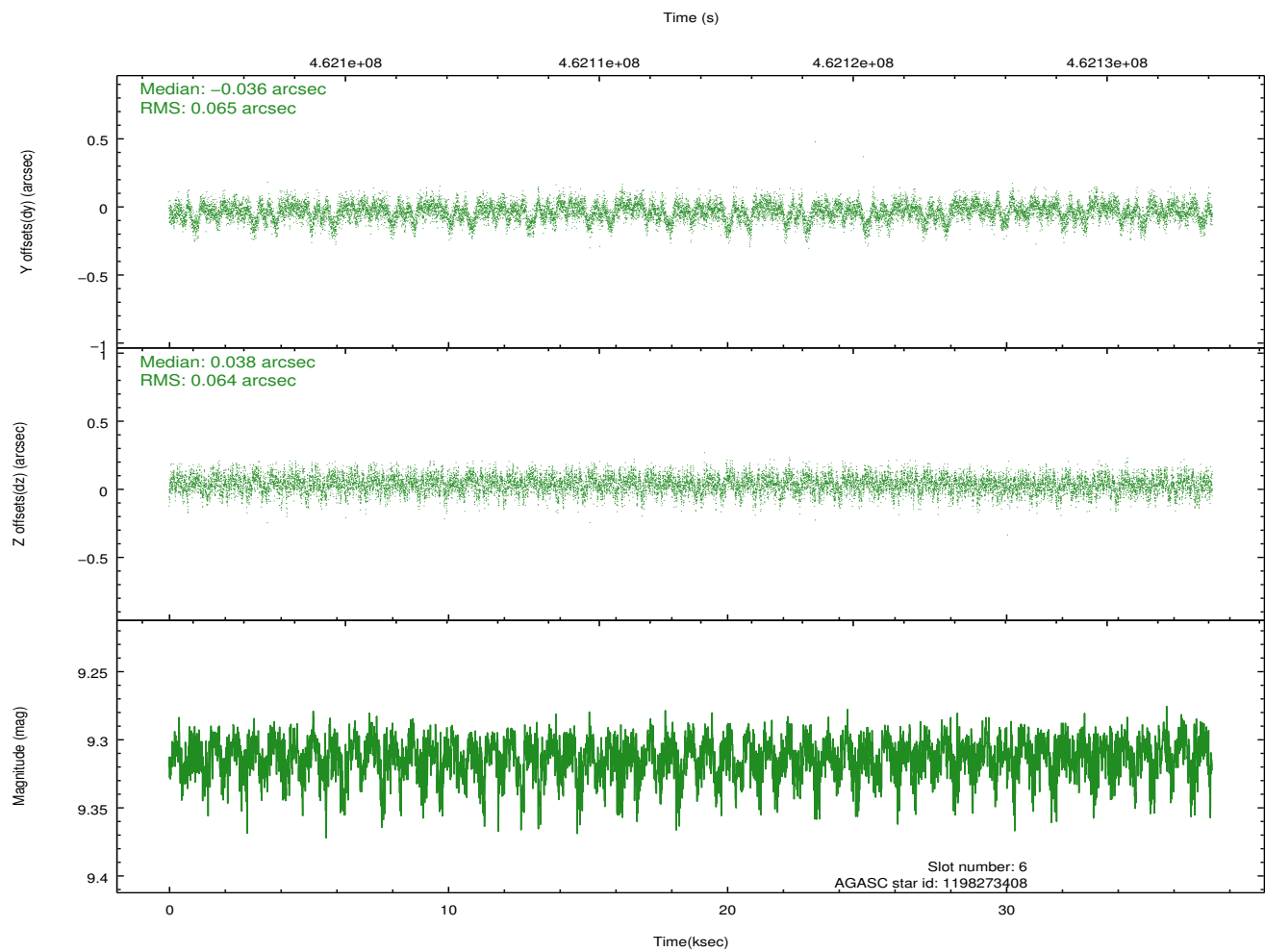
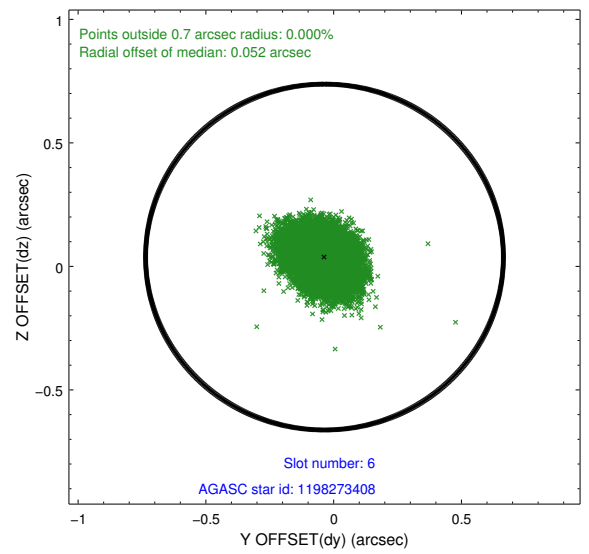
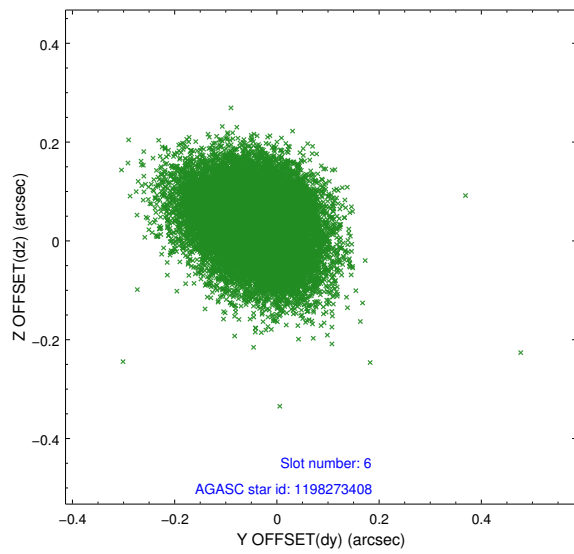
Time (s)



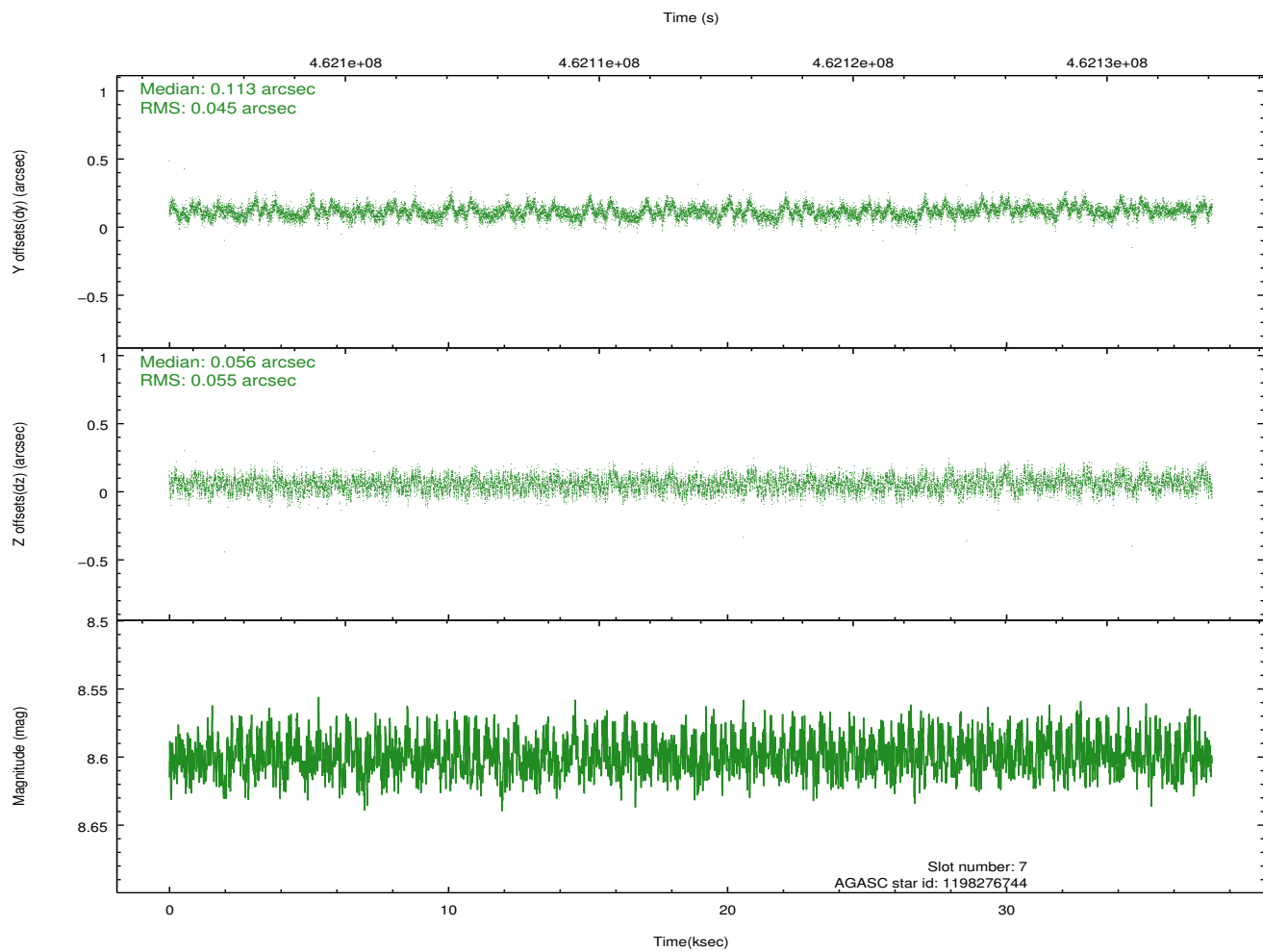
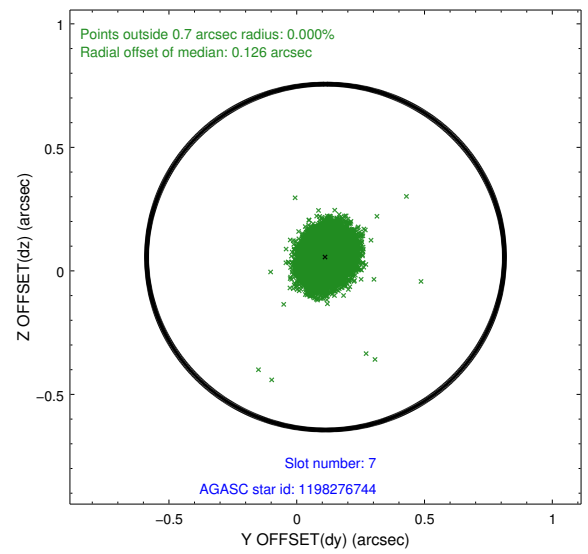
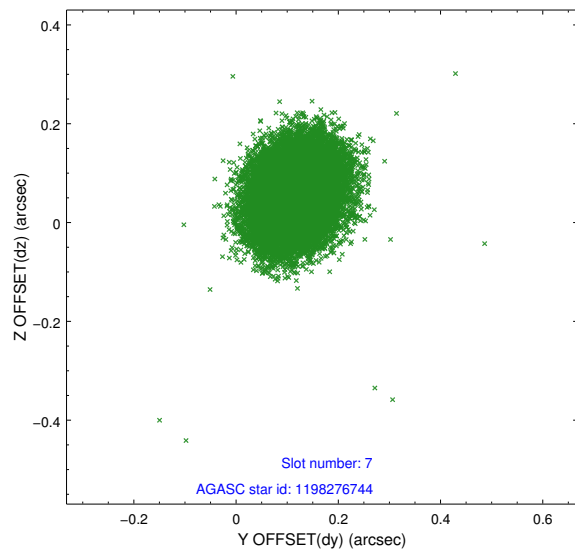
2.4.3 Slot 5



2.4.4 Slot 6

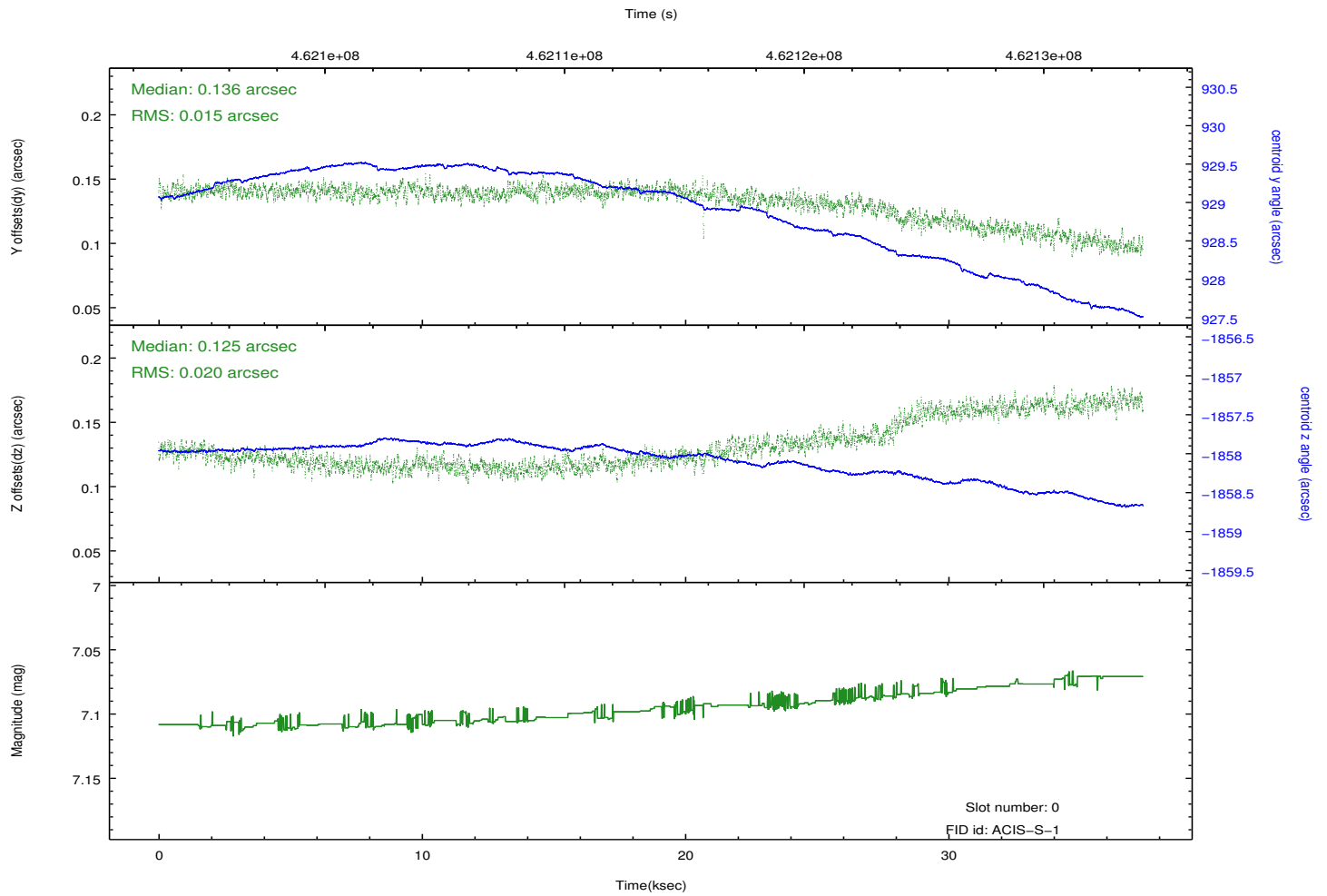
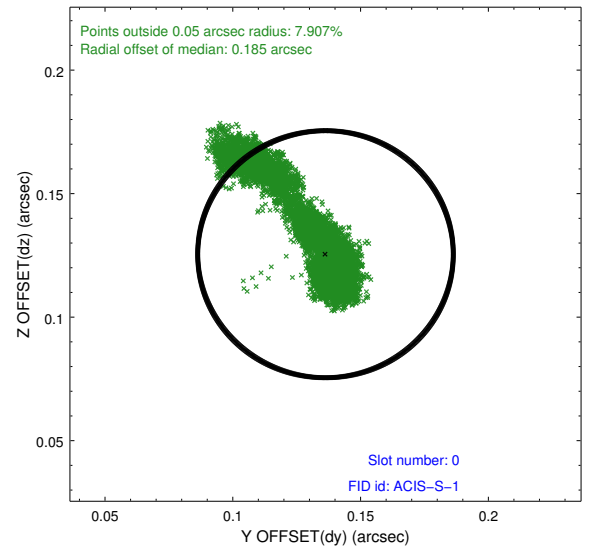
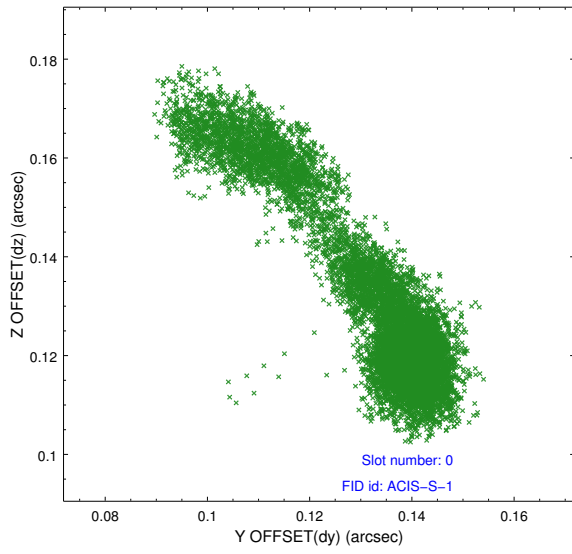


2.4.5 Slot 7

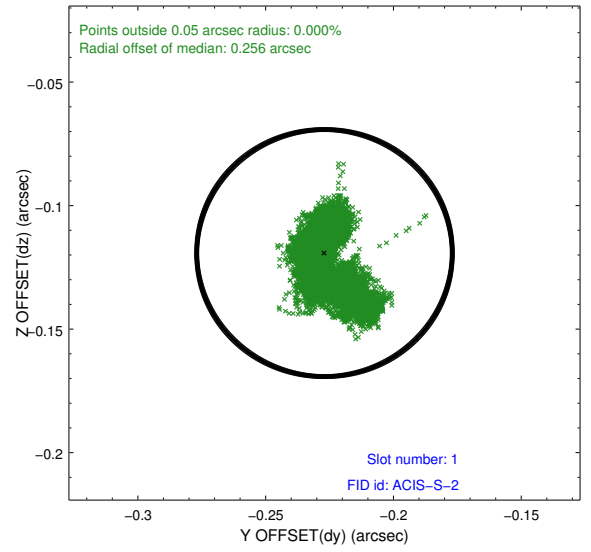
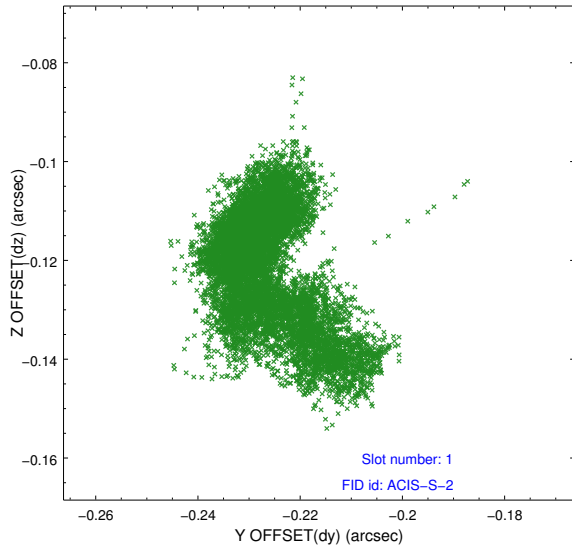


2.5 FID Slots

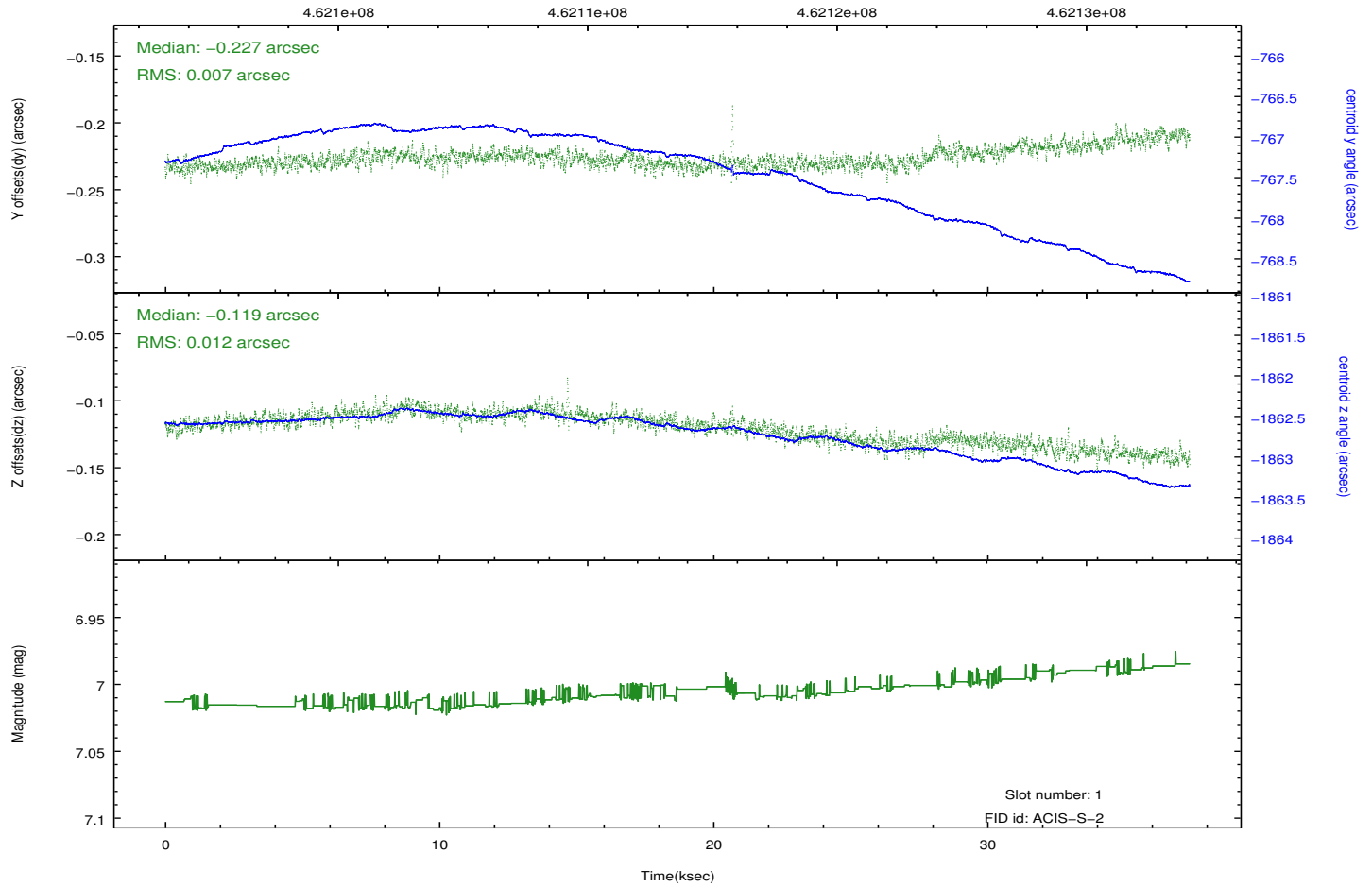
2.5.1 Slot 0



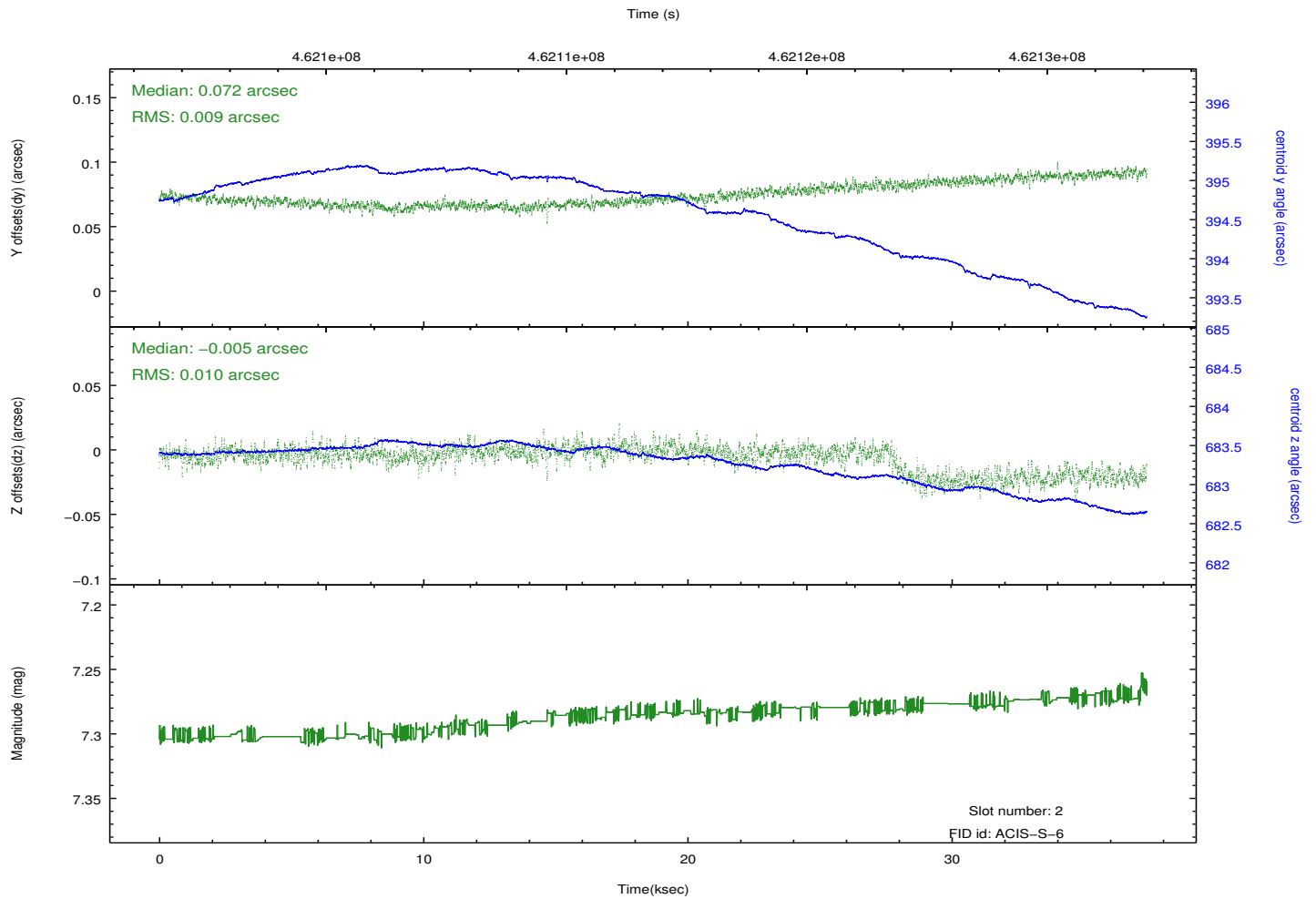
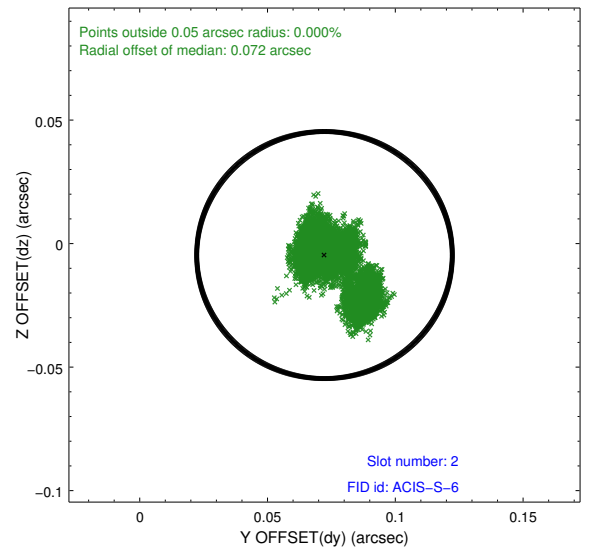
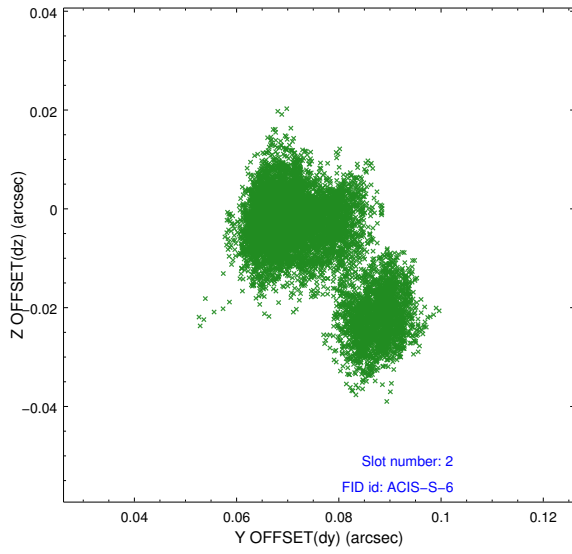
2.5.2 Slot 1



Time (s)



2.5.3 Slot 2

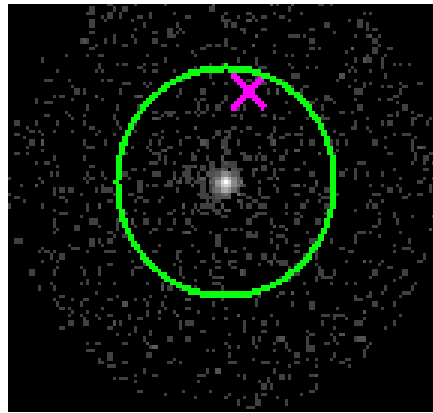


3 Gratings

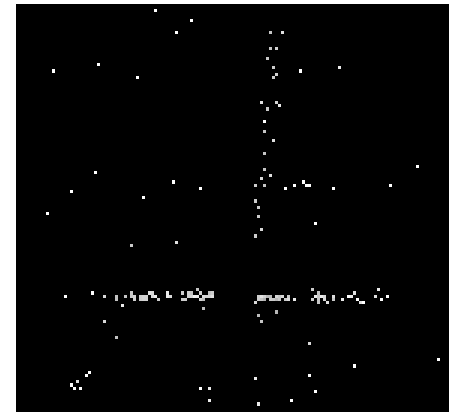
3.1 HEG Arm



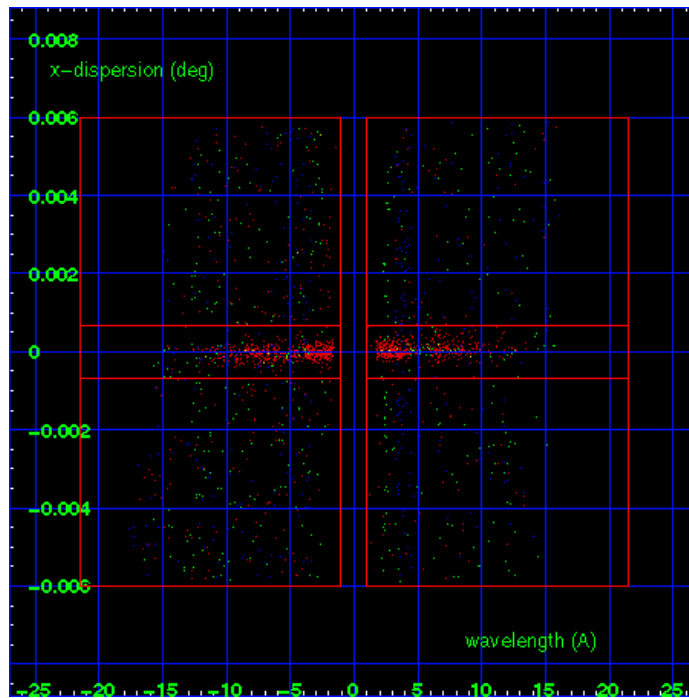
HEG Order Sort 123



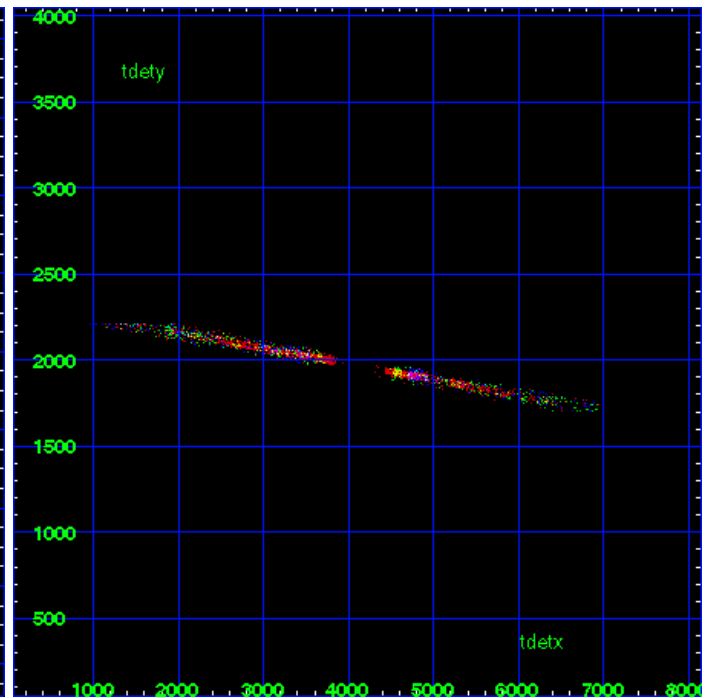
HEG Zero Order



HEG Order Sort ALL

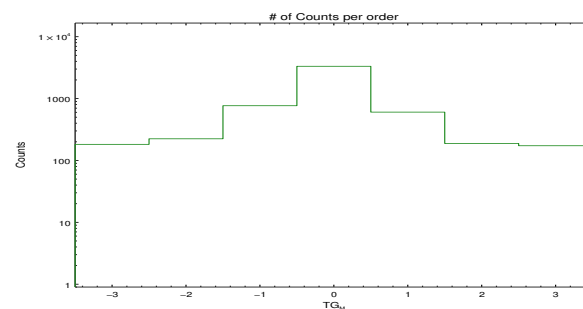


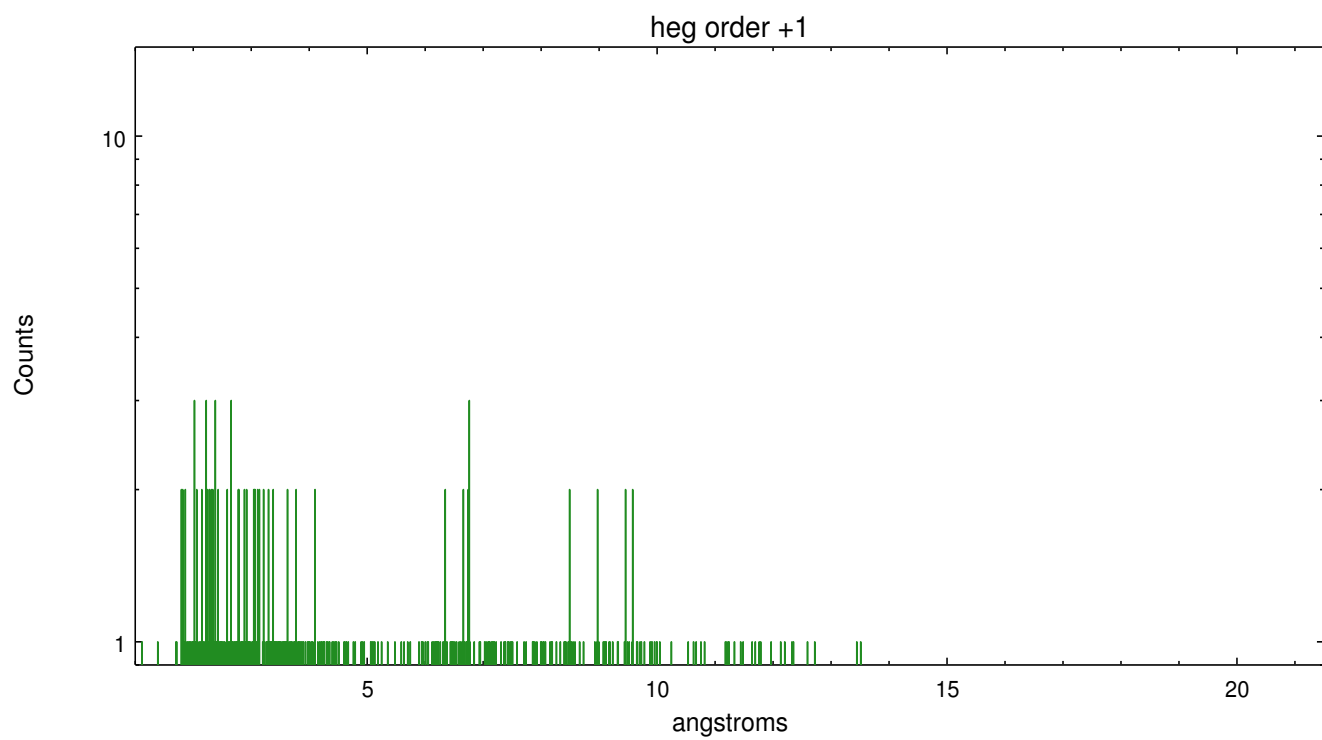
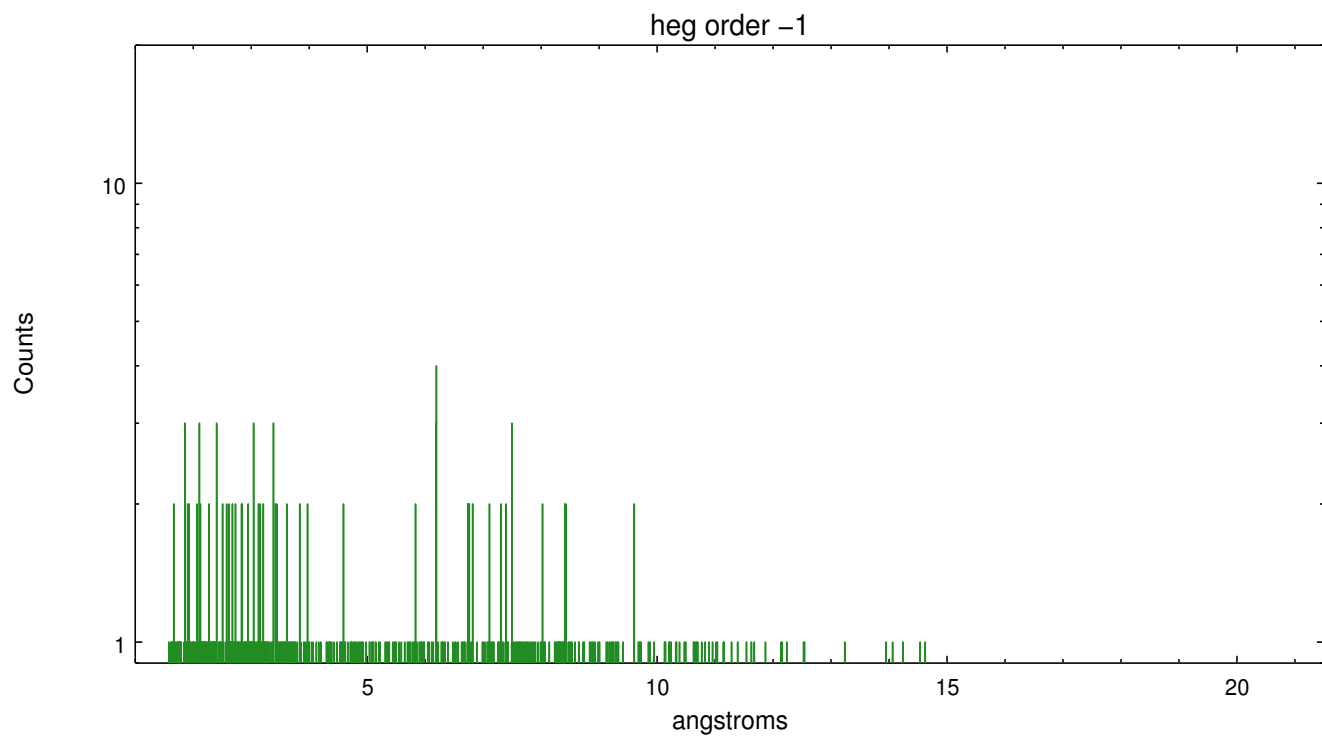
Spot Image HEG



Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	182	224	767	3324	604	188	173

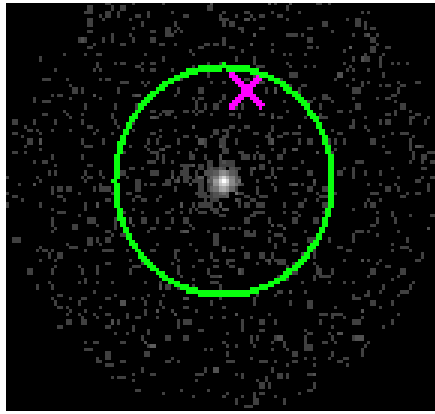




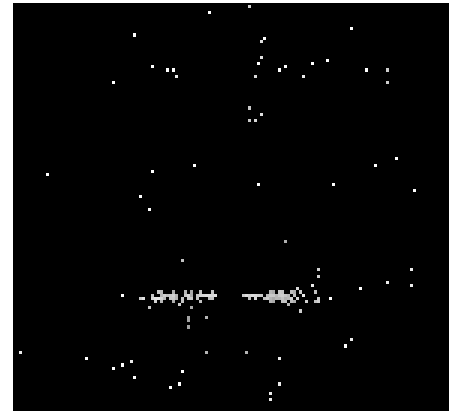
3.2 MEG Arm



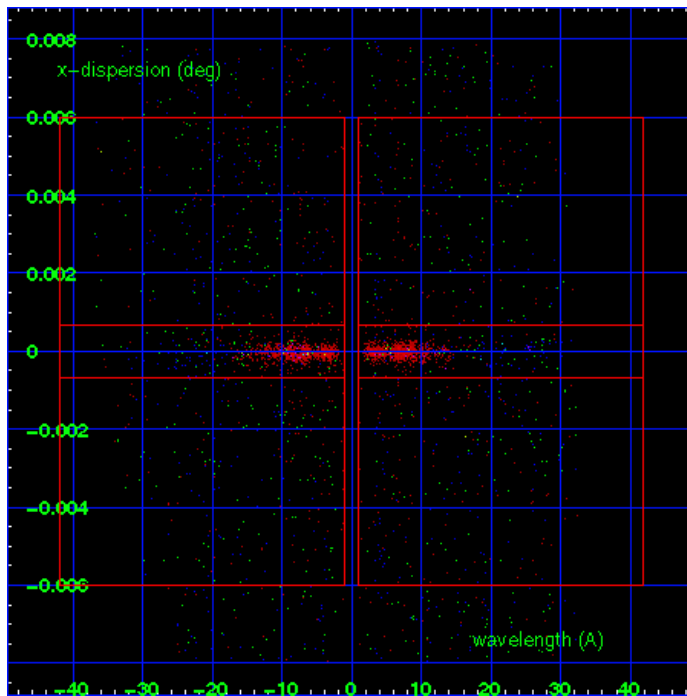
MEG Order Sort 123



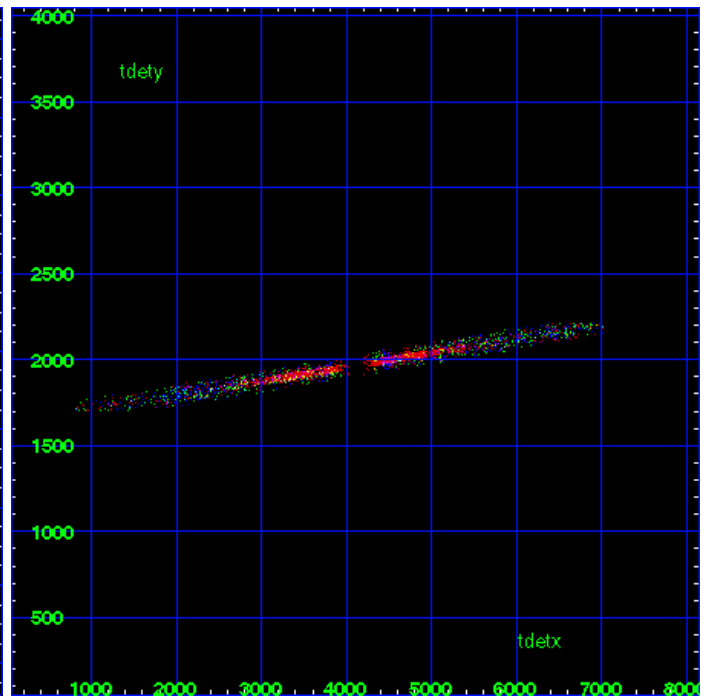
MEG Zero Order



MEG Order Sort ALL

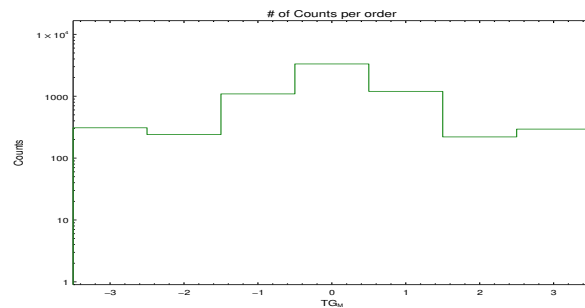


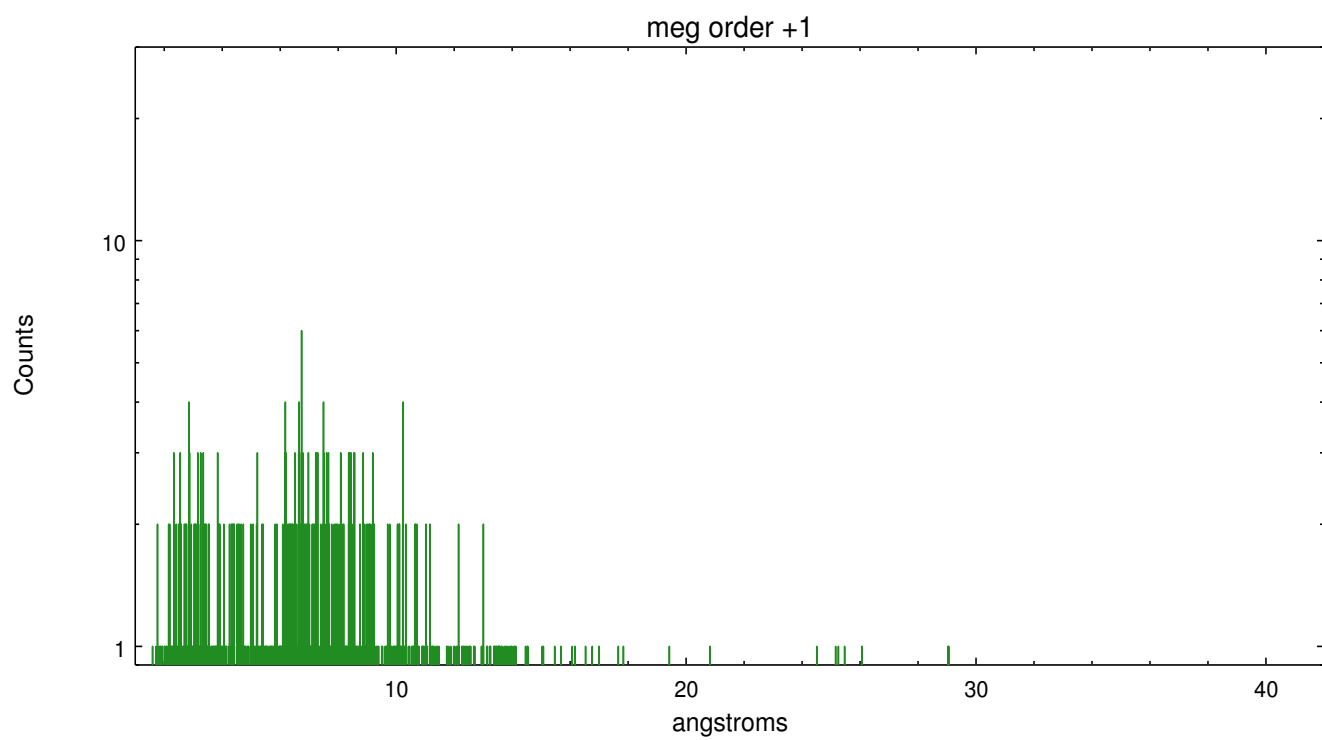
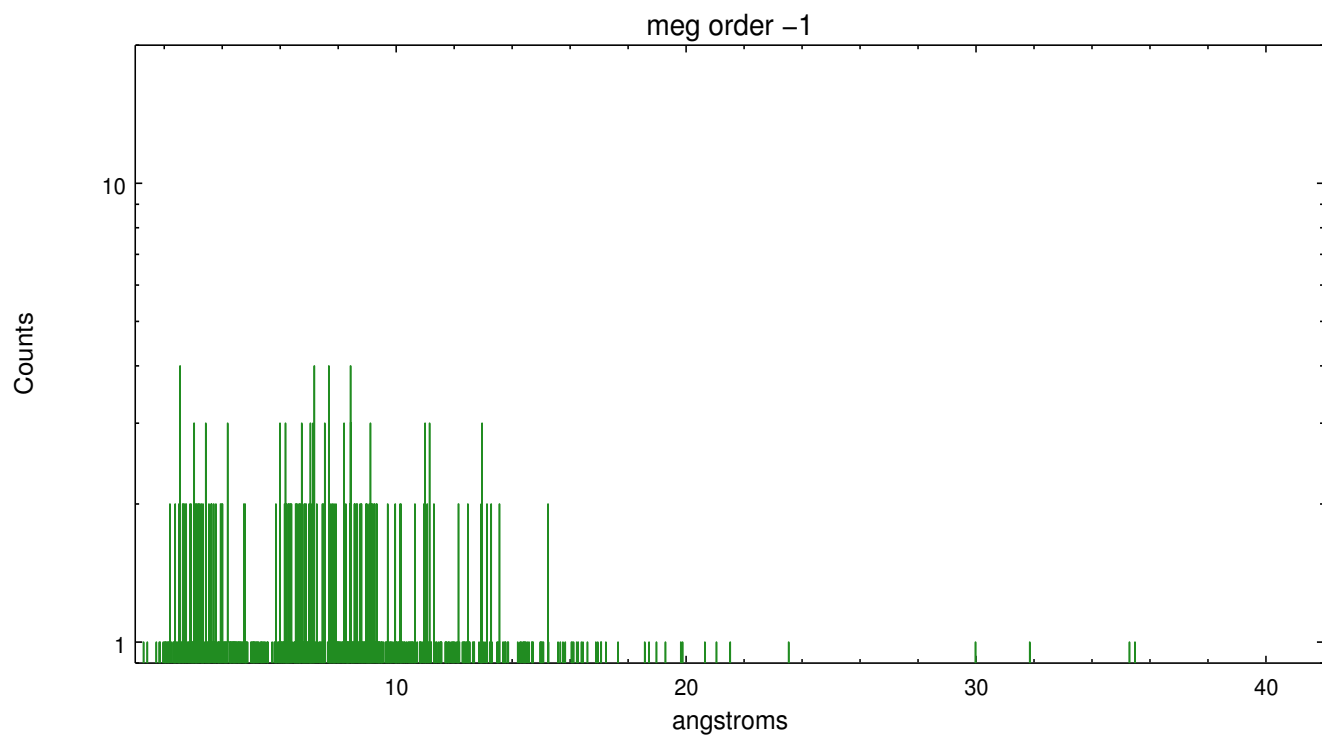
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	309	240	1090	3324	1197	220	294





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.08.24
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	37.049799740255

A.2 Comments