

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 10676 - L2 Version 2
Chandra X-Ray Center

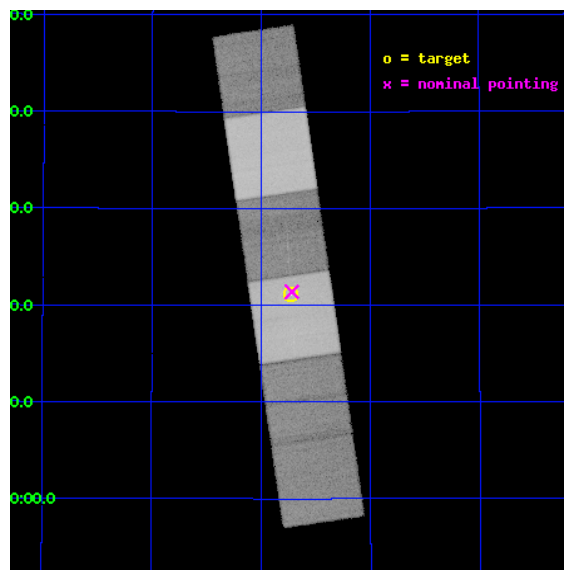
L2 Processing Date : Jun 3 2012

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1 Front

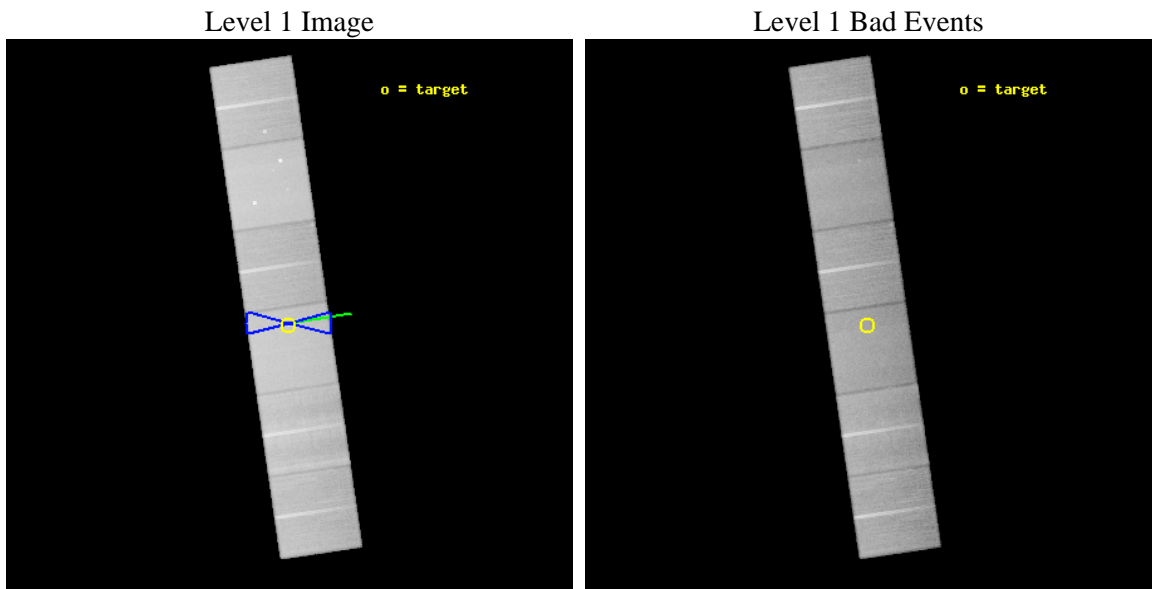
seq_num	200556	Sequence number
obs_id	10676	Observation id
title	Testing the Colliding Wind Paradigm: X-rays from the Wolf-Rayet Binary System WR 147	Proposal title
observer	Dr Svetozar ZHEKOV	Principal investigator
object	WR 147	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	309.182083	Observer's specified target RA [deg]
dec_targ	40.352028	Observer's specified target Dec [deg]
ra_nom	309.17956952966	Nominal RA [deg]
dec_nom	40.356467831349	Nominal Dec [deg]
roll_nom	81.658263822739	Nominal Roll [deg]
revision	2	Processing version of data
ontime	44451.199834466	Sum of GTIs [s]
livetime	43888.331976863	Livetime [s]
ontime4	44447.958834171	Sum of GTIs [s]
ontime5	44451.199834466	Sum of GTIs [s]
ontime6	44447.958864093	Sum of GTIs [s]
ontime7	44451.199834466	Sum of GTIs [s]
ontime8	44451.199834466	Sum of GTIs [s]
ontime9	44451.199834466	Sum of GTIs [s]
l2events	786130	Number of level 2 events



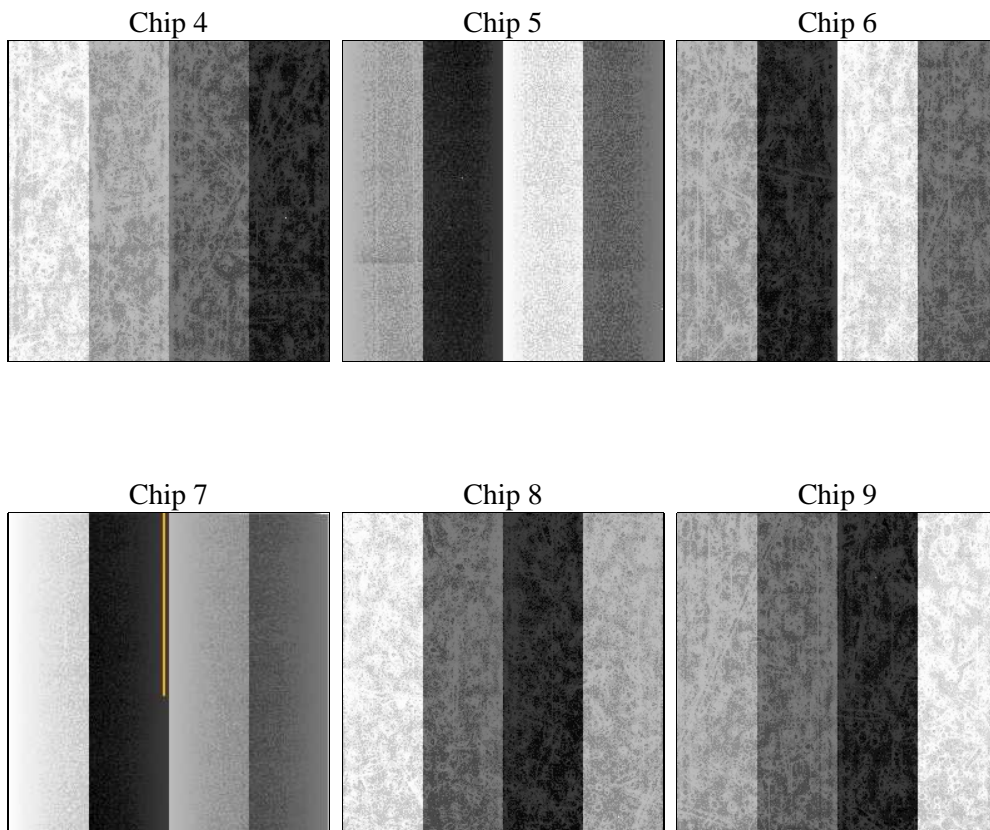
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	44503.857000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	44451.199834466	Sum of GTIs [s]
caldbver	4.4.9	 	ontime4	44447.958834171	Sum of GTIs [s]
date	2012-06-03T23:34:49	Date and time of file creation	ontime5	44451.199834466	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	44447.958864093	Sum of GTIs [s]
			ontime7	44451.199834466	Sum of GTIs [s]
			ontime8	44451.199834466	Sum of GTIs [s]
			ontime9	44451.199834466	Sum of GTIs [s]
			l1events	3431367	Number of level 1 events

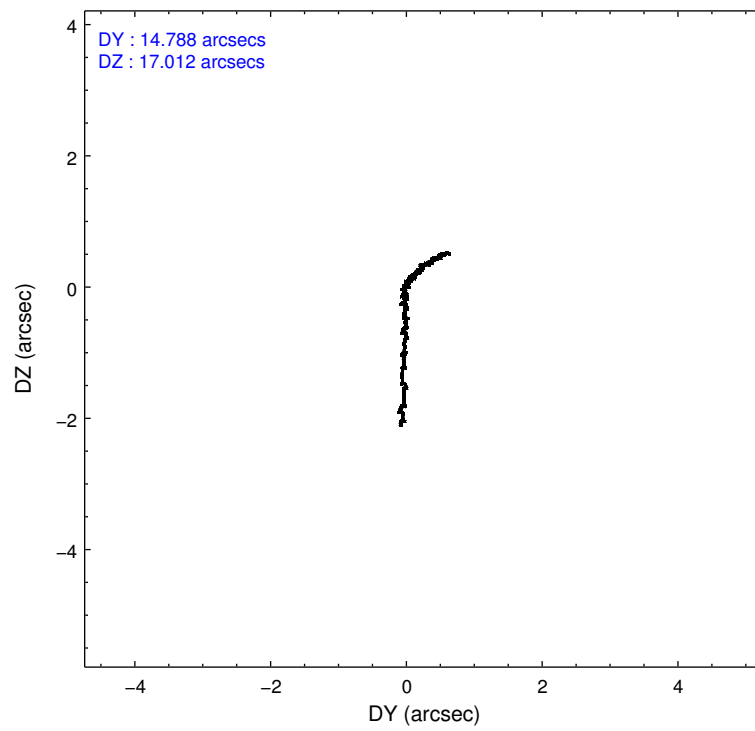
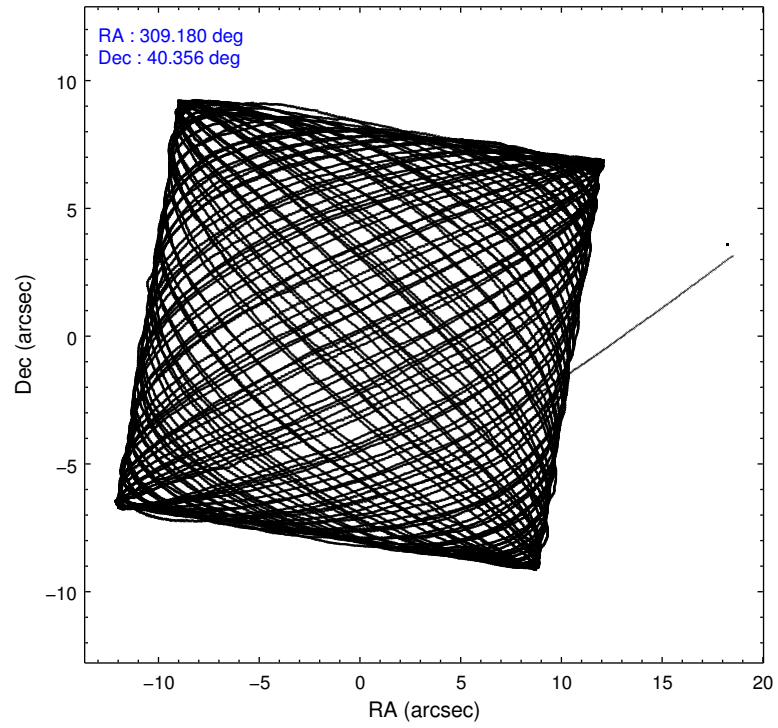
2.1.4 Events

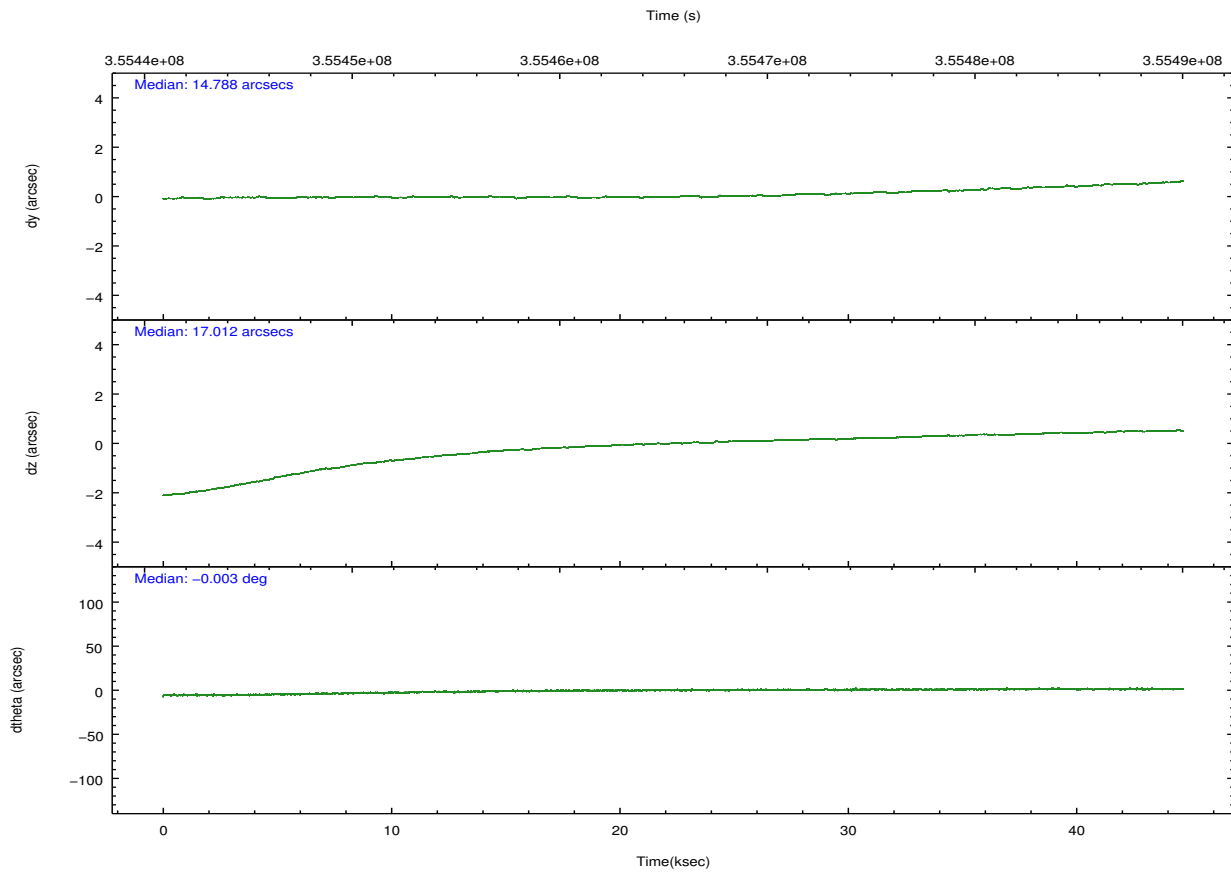
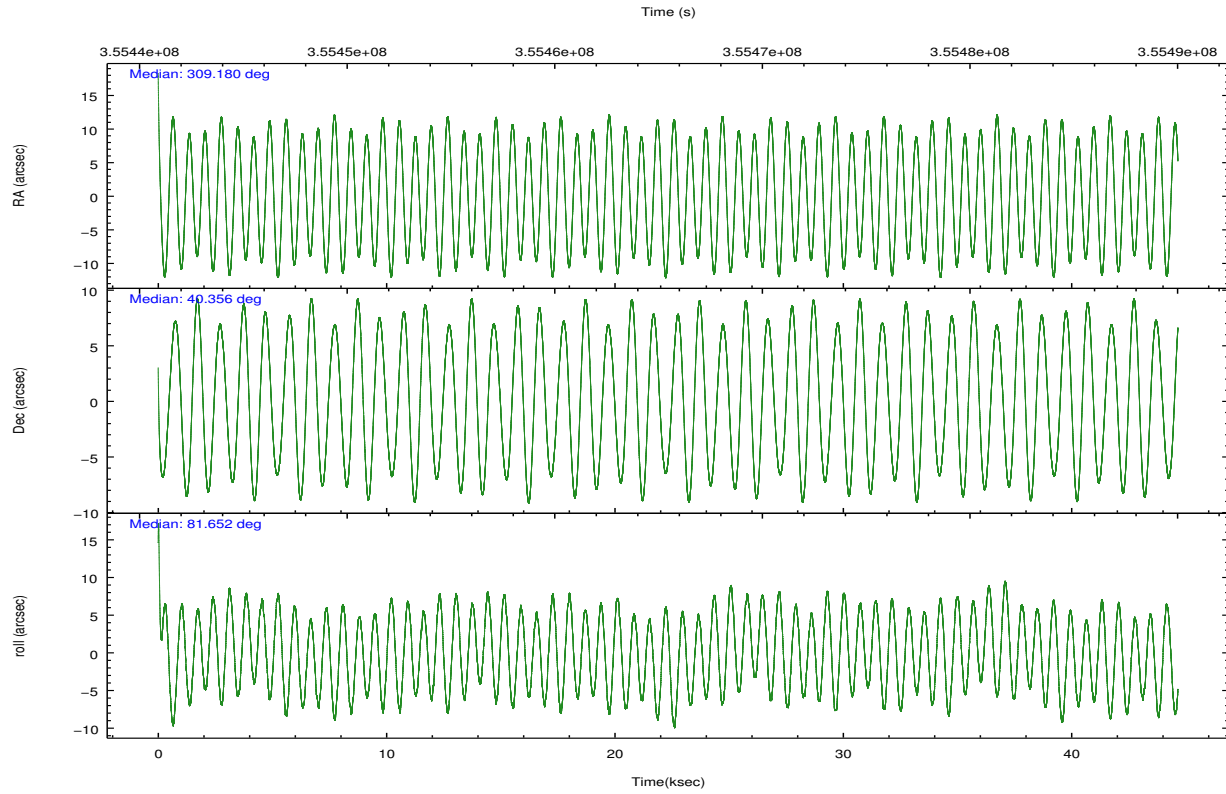
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	524153	723251	465491	651693	596172	470607	grade 0 events	28267	28073	21889	22506	42992	23580
rejected events	461933	390201	408747	379419	458274	412289		5%	3%	4%	3%	7%	5%
rejected %	88%	53%	87%	58%	76%	87%	grade 1 events	589	1415	260	673	473	324
								0%	0%	0%	0%	0%	0%
							grade 2 events	12789	102896	12722	55873	31737	12184
								2%	14%	2%	8%	5%	2%
							grade 3 events	5943	12045	5415	22490	14106	5622
								1%	1%	1%	3%	2%	1%
							grade 4 events	5723	11699	5144	22760	13209	5410
								1%	1%	1%	3%	2%	1%
							grade 5 events	21783	51943	22470	60537	30498	24025
								4%	7%	4%	9%	5%	5%
							grade 6 events	9511	178385	11579	148686	35891	11529
								1%	24%	2%	22%	6%	2%
							grade 7 events	439548	336795	386012	318168	427266	387933
								83%	46%	82%	48%	71%	82%

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	309.193258	309.1795695296639	CCD I2 on	N	N
[deg] Pointing Dec	40.331205	40.35646783134879	CCD I3 on	N	N
[deg] Pointing Roll	81.492775	81.65826382273917	CCD S0 on	O1	Y
[deg] Roll angle	90.000000	90.000000	CCD S1 on	Y	Y
[deg] Roll tolerance	15.000000	15.000000	CCD S2 on	Y	Y
Roll constraint allows 180D rotation	Y	Y	CCD S3 on	Y	Y
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S4 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S5 on	O2	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	Number of optional ACIS chips dropped	0	0
[mm] SIM translation stage offset	0	0.00754346686406393	On-chip summing requested	N	N
[s] Observation start time (MET)	355443285.184000	355442177.75871	Subarray requested	NONE	NONE
Observation start date	2009-04-06T22:13:39	2009-04-06T21:56:17	Alternating exposures requested	N	N
[s] Observation end time (MET)	355487789.184000	355488017.29849	[s] Primary exposure time	0.000000	3.2
Observation end date	2009-04-07T10:35:23	2009-04-07T10:40:17			
Read mode	TIMED	TIMED			

2.3 Aspect





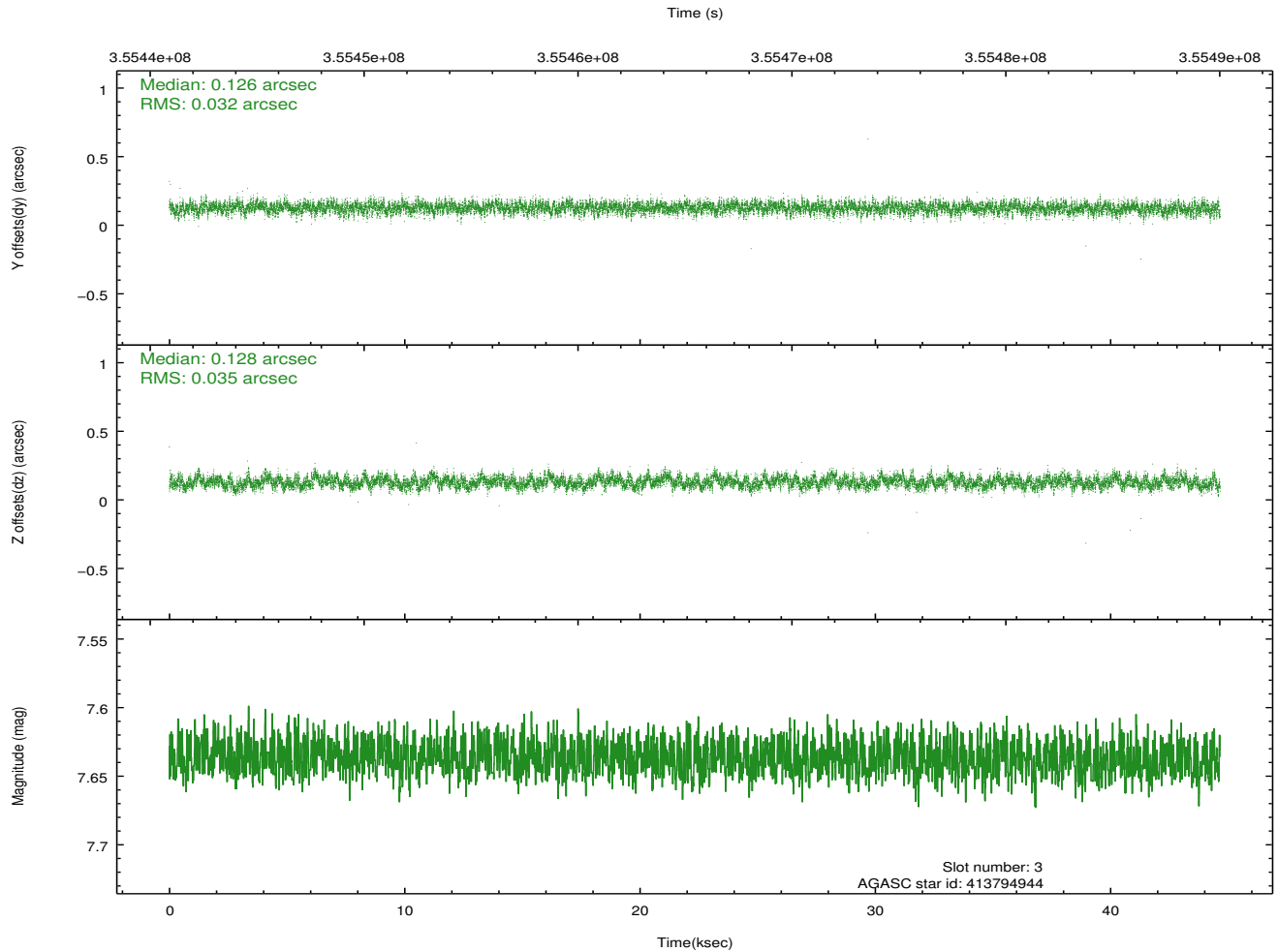
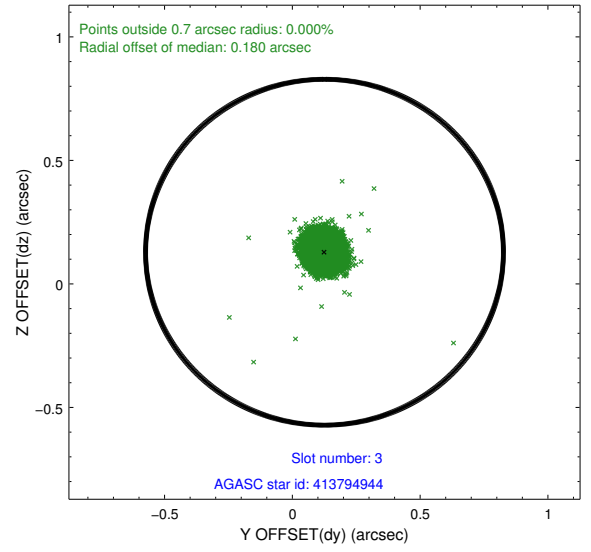
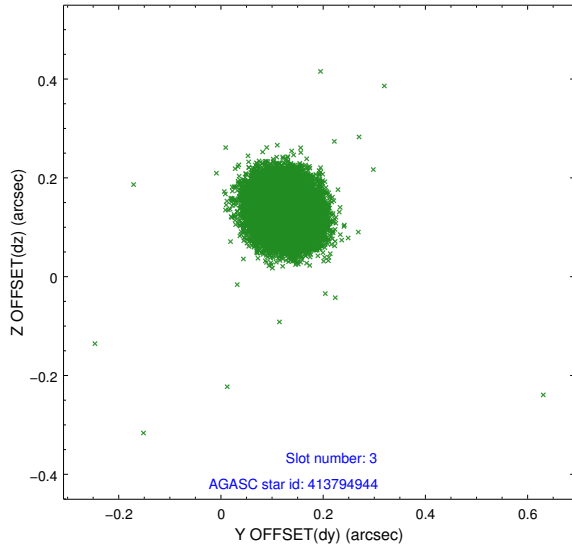
Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.93	10893	-0.068	-0.030	0.017	0.032	0.000000	0.000000	-767.95	-1738.21
1	FID	ACIS-S-4	7.01	10891	0.175	0.042	0.009	0.021	0.000000	0.000000	2145.60	170.31
2	FID	ACIS-S-5	7.05	10892	-0.137	-0.000	0.014	0.029	0.000000	0.000000	-1820.84	163.98
3	GUIDE	413794944	7.64	21778	0.126	0.128	0.050	0.080	309.554319	39.690543	-2130.81	-1329.85
4	GUIDE	413797136	7.91	21784	-0.087	0.142	0.060	0.097	309.356621	39.806092	-1802.39	-726.25
5	GUIDE	413799600	8.55	21779	0.020	-0.166	0.086	0.137	308.280373	39.866891	-2013.76	2249.25
6	GUIDE	413803744	8.83	21770	-0.088	-0.142	0.073	0.117	308.586342	40.704904	1091.05	1838.25
7	GUIDE	415503960	9.24	21756	0.030	0.032	0.102	0.172	310.022122	40.895650	2354.33	-1927.89

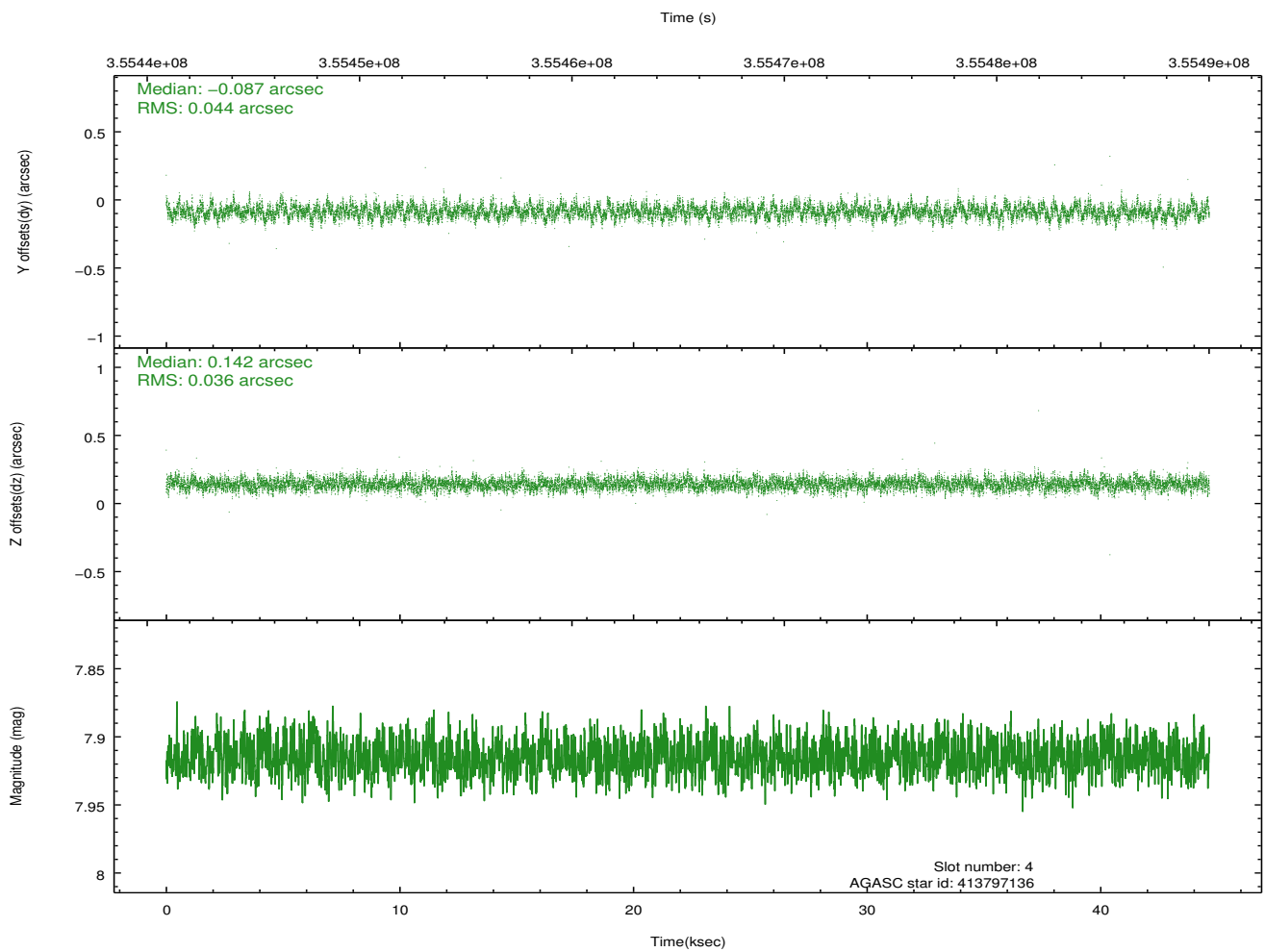
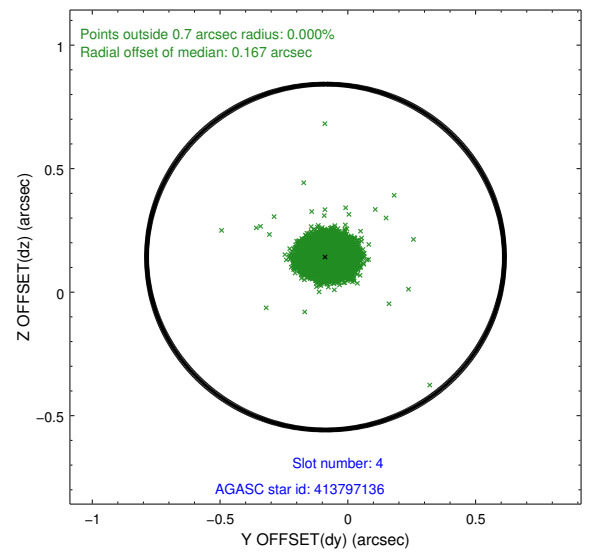
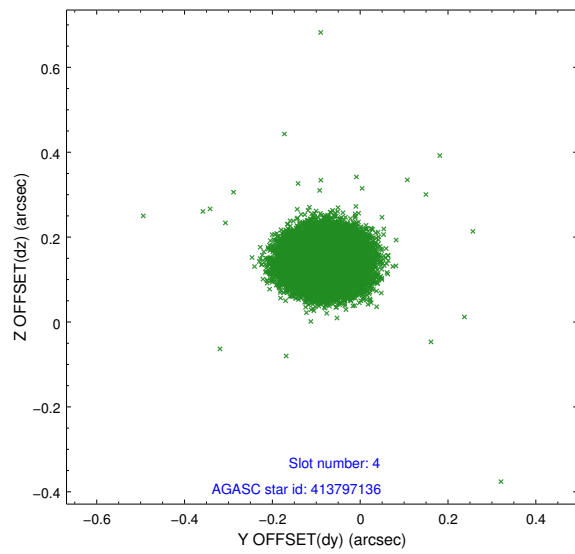
∞

2.4 Star Slots

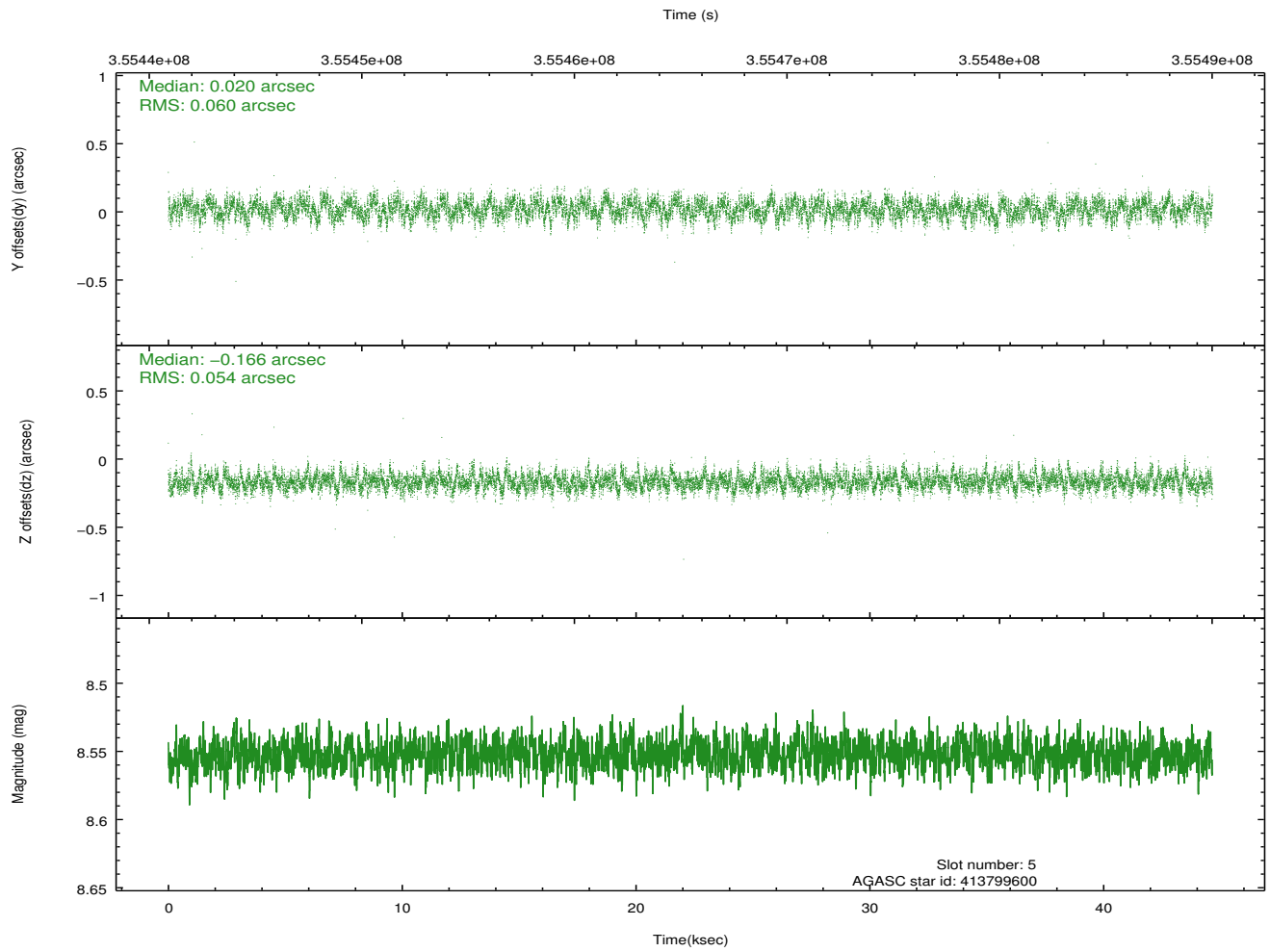
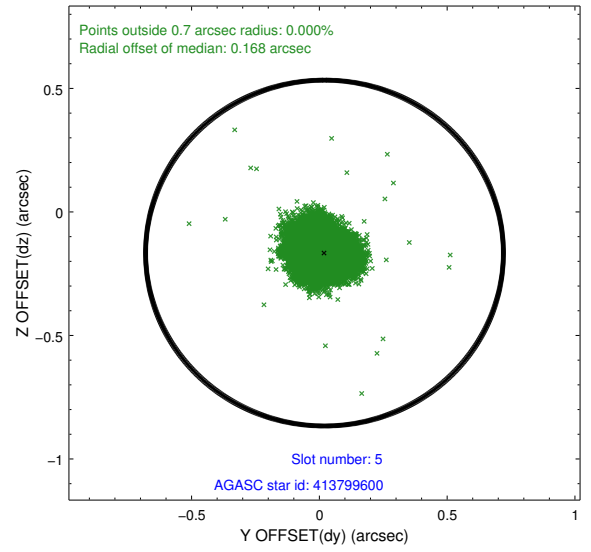
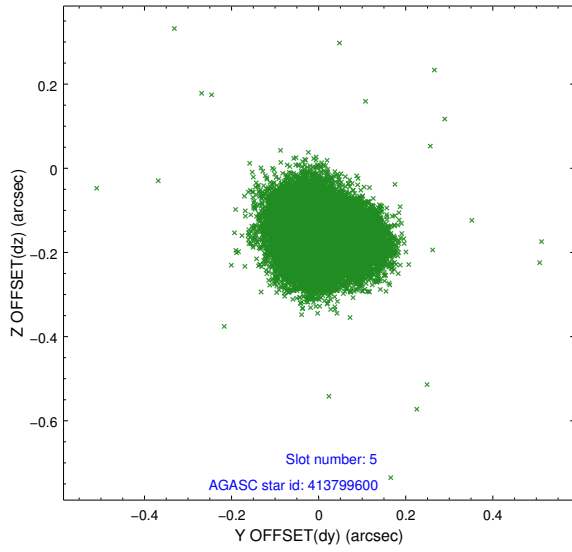
2.4.1 Slot 3



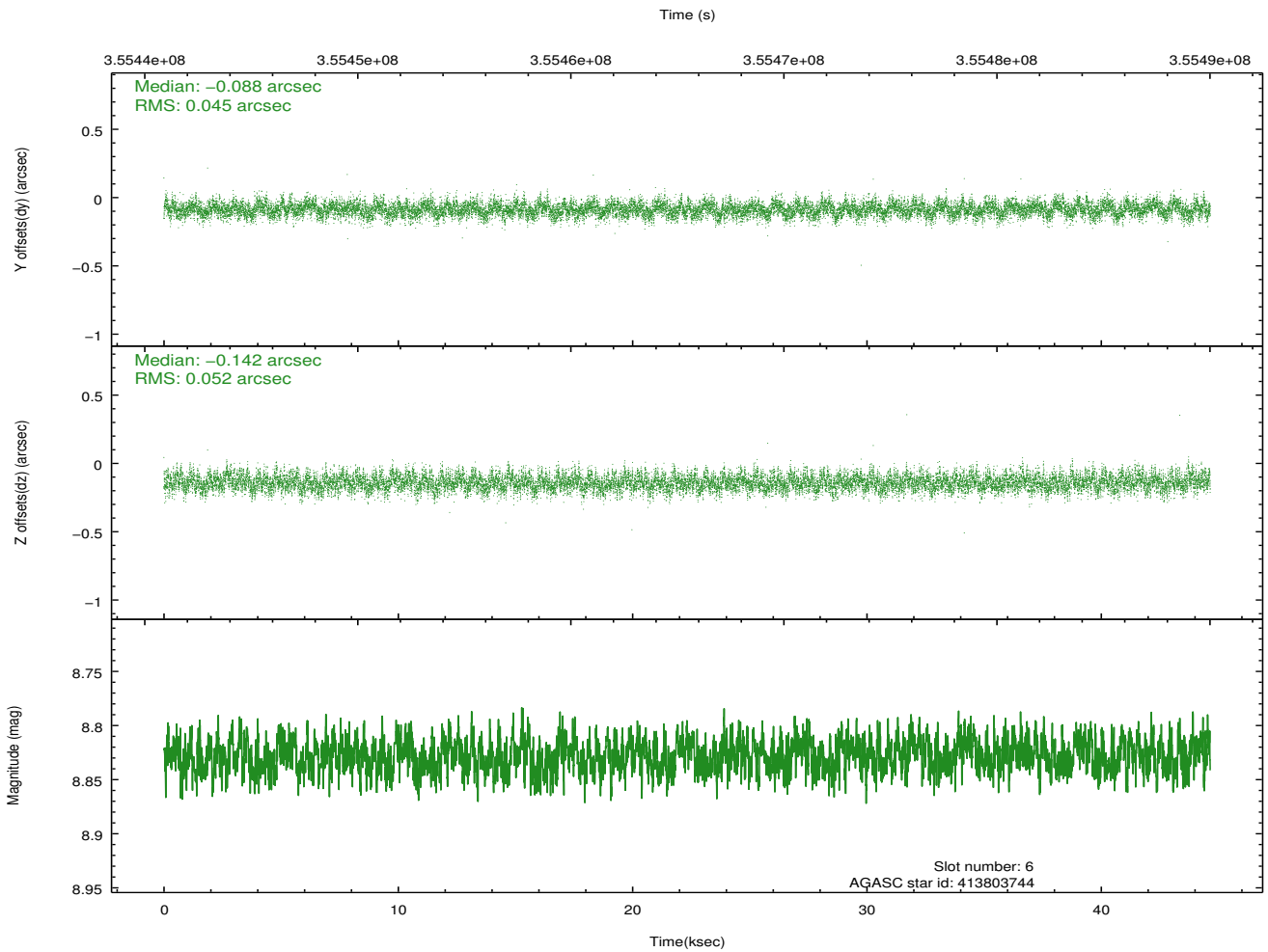
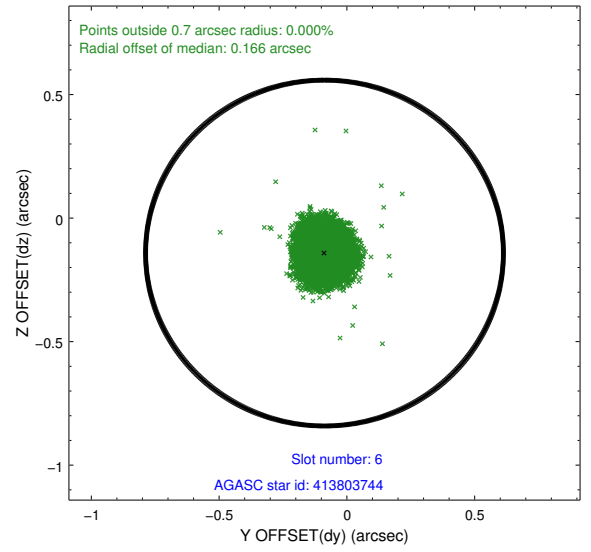
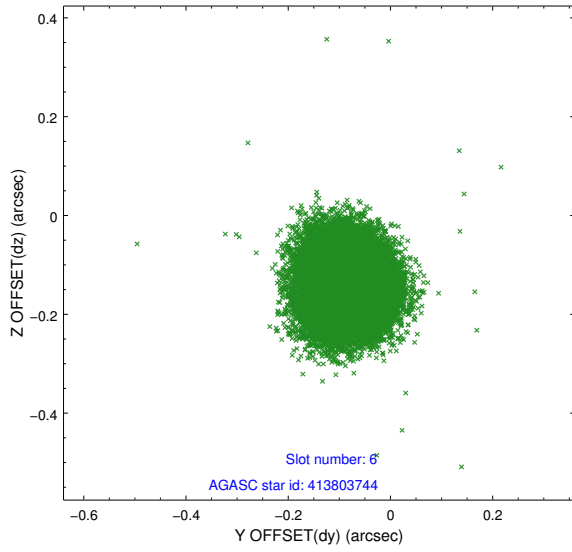
2.4.2 Slot 4



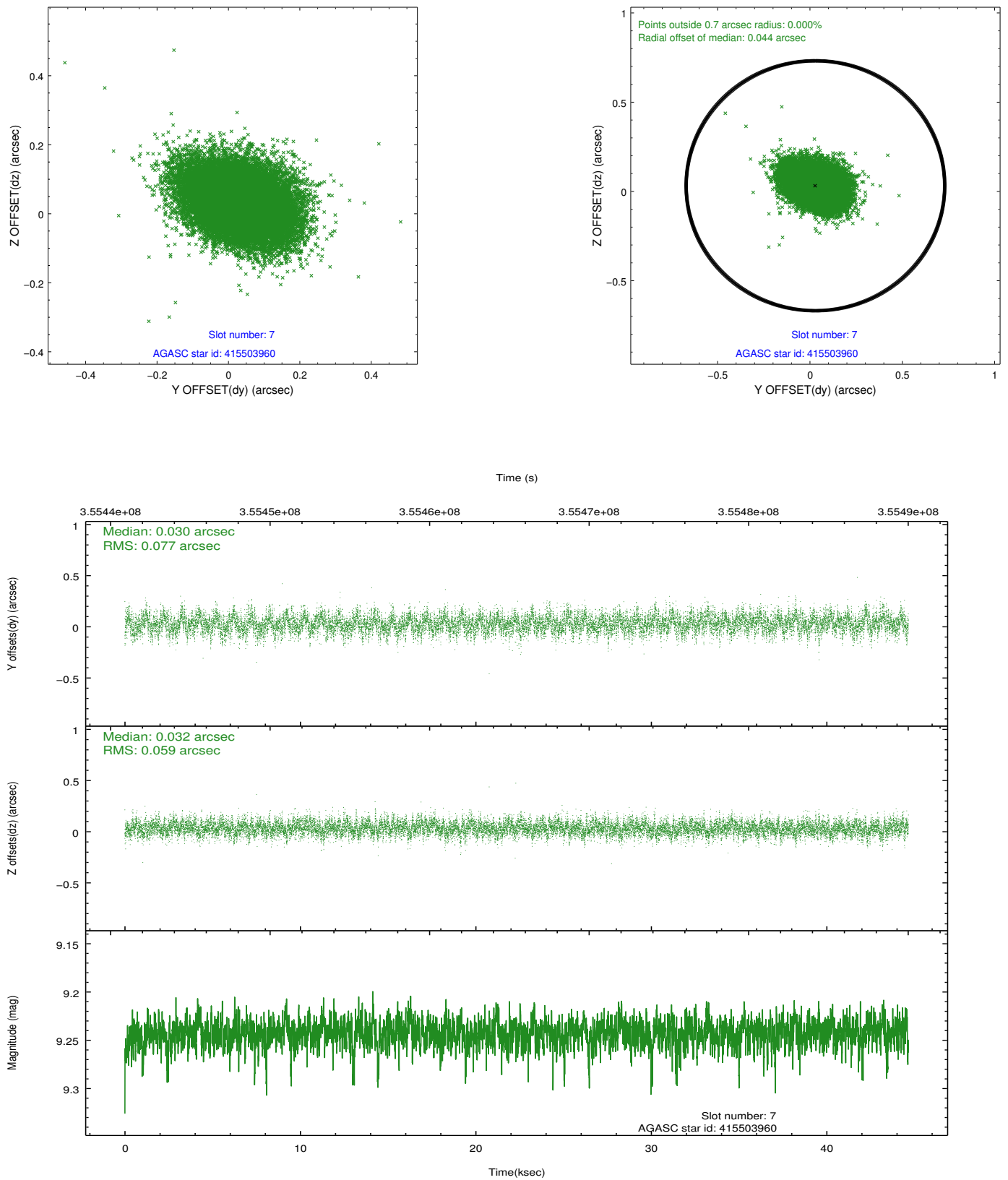
2.4.3 Slot 5



2.4.4 Slot 6

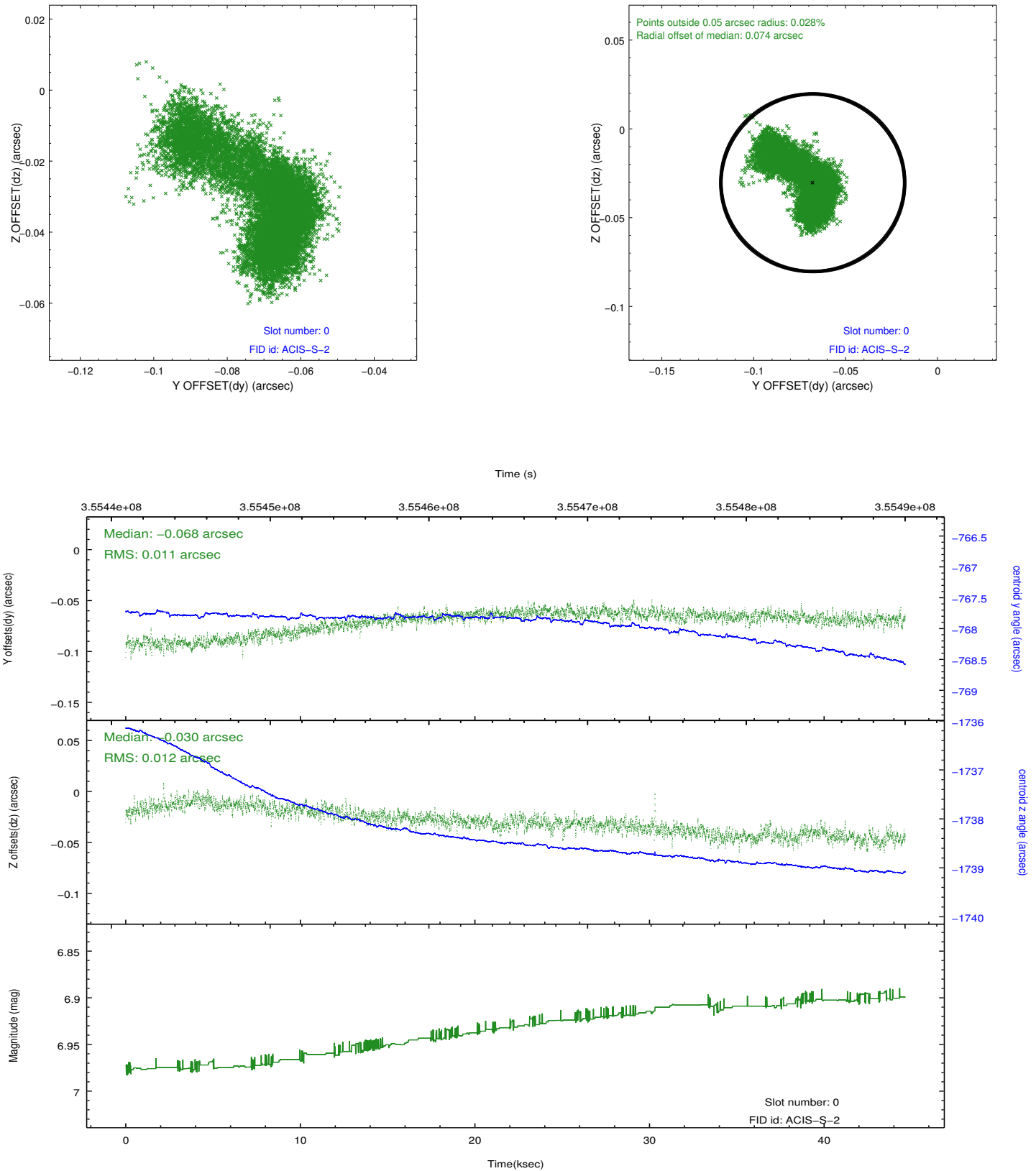


2.4.5 Slot 7

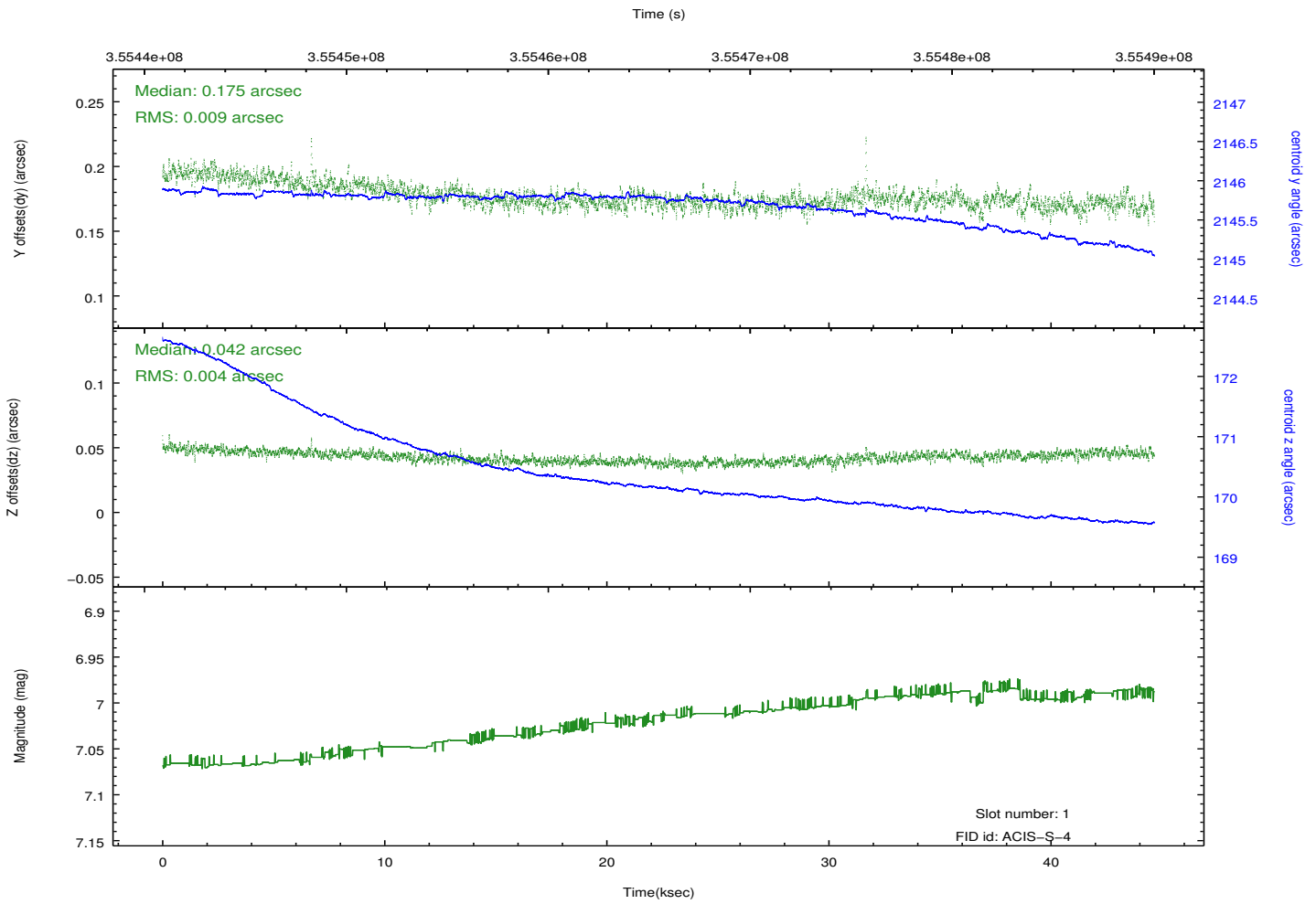
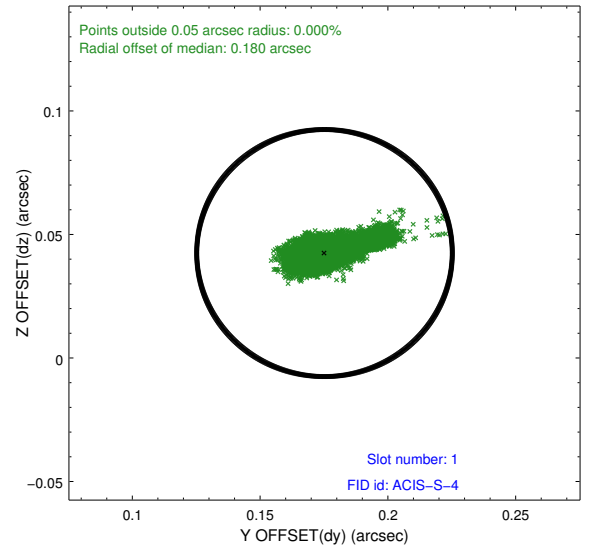
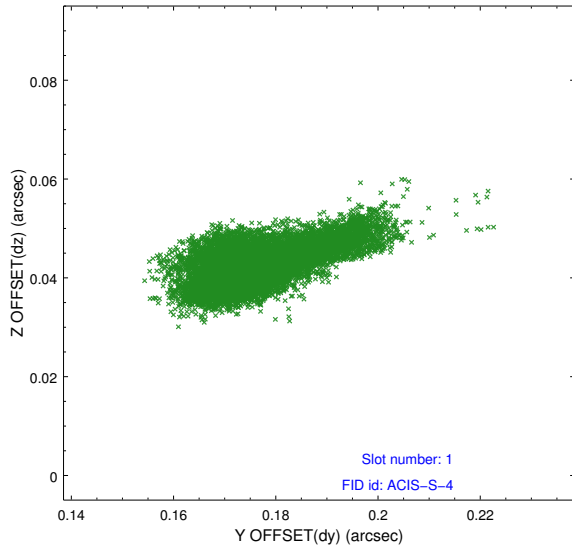


2.5 FID Slots

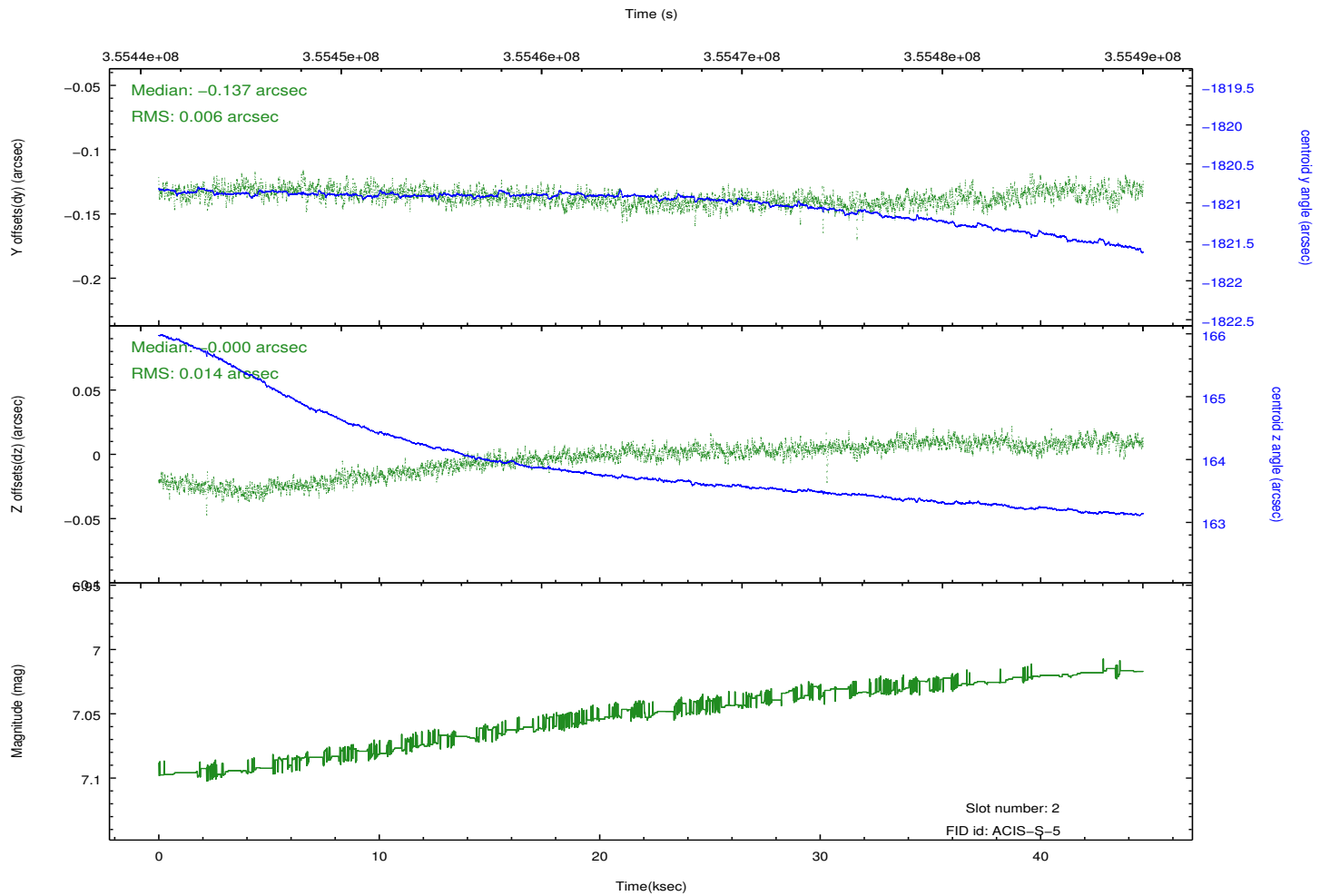
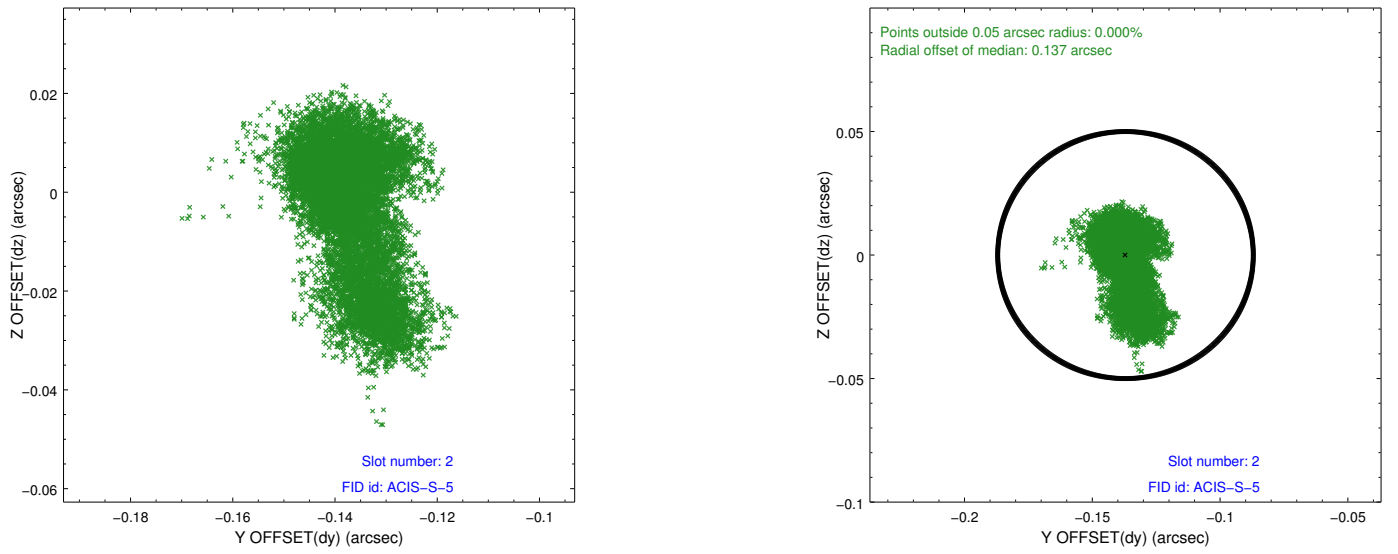
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

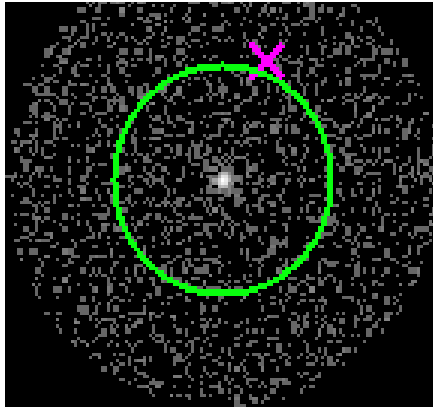


3 Gratings

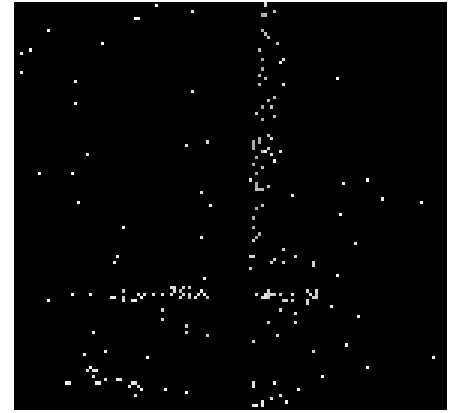
3.1 HEG Arm



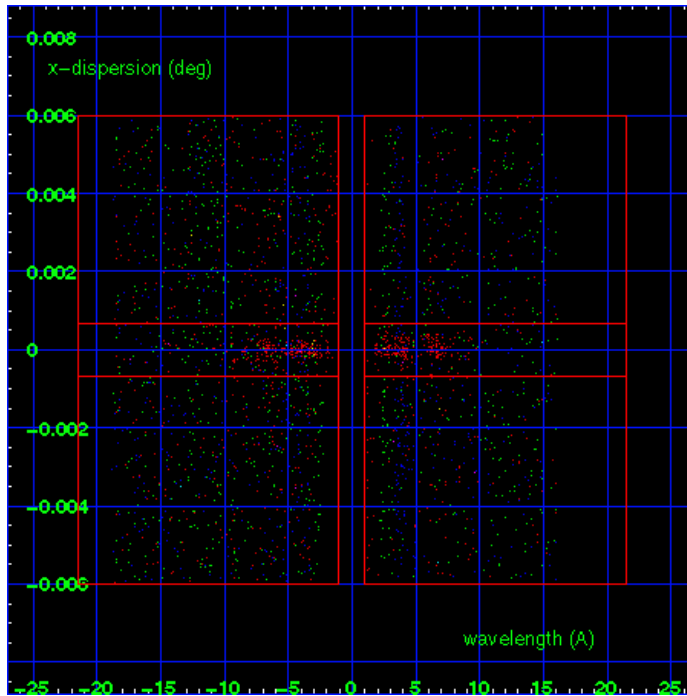
HEG Order Sort 123



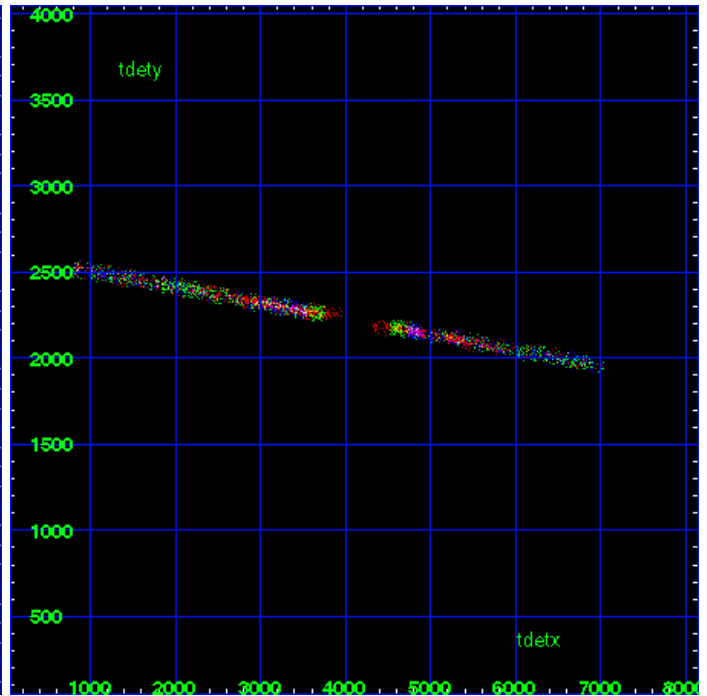
HEG Zero Order



HEG Order Sort ALL

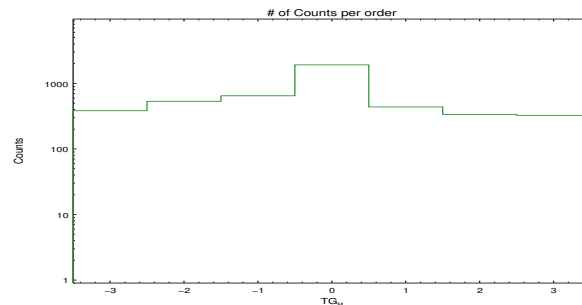


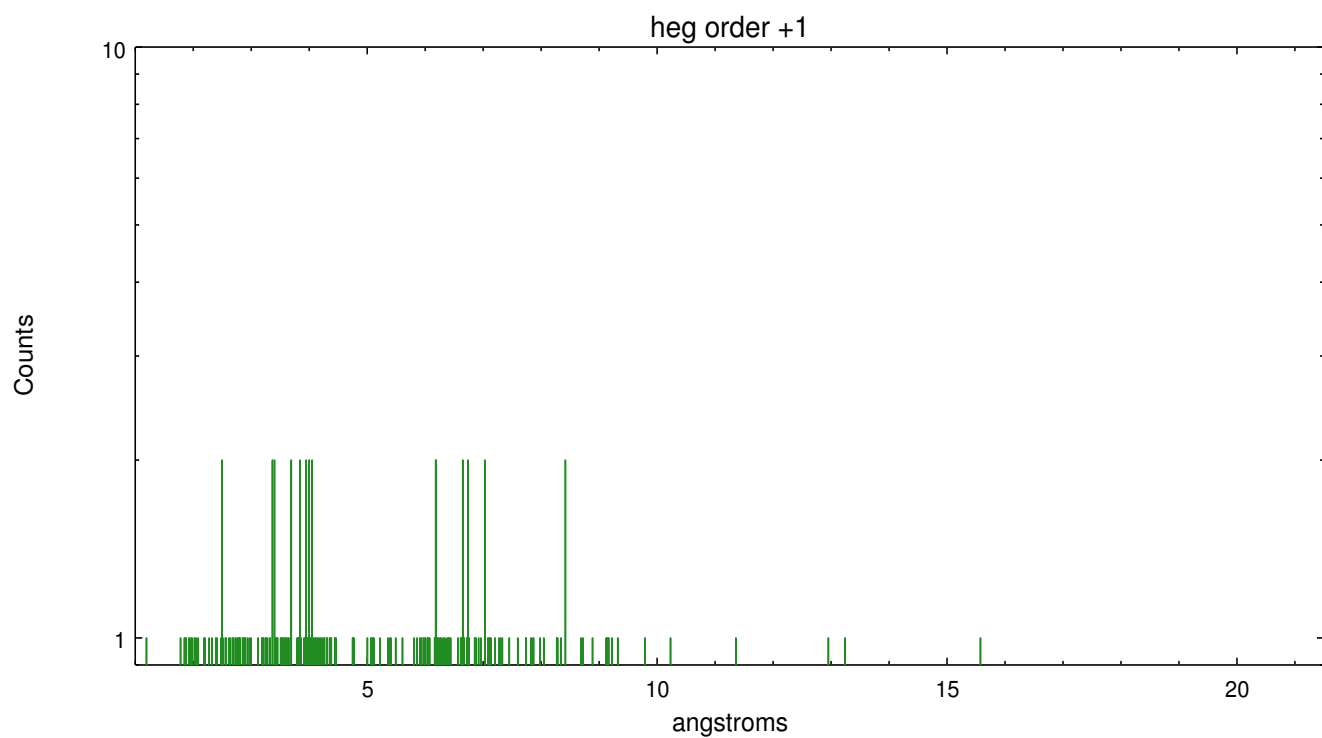
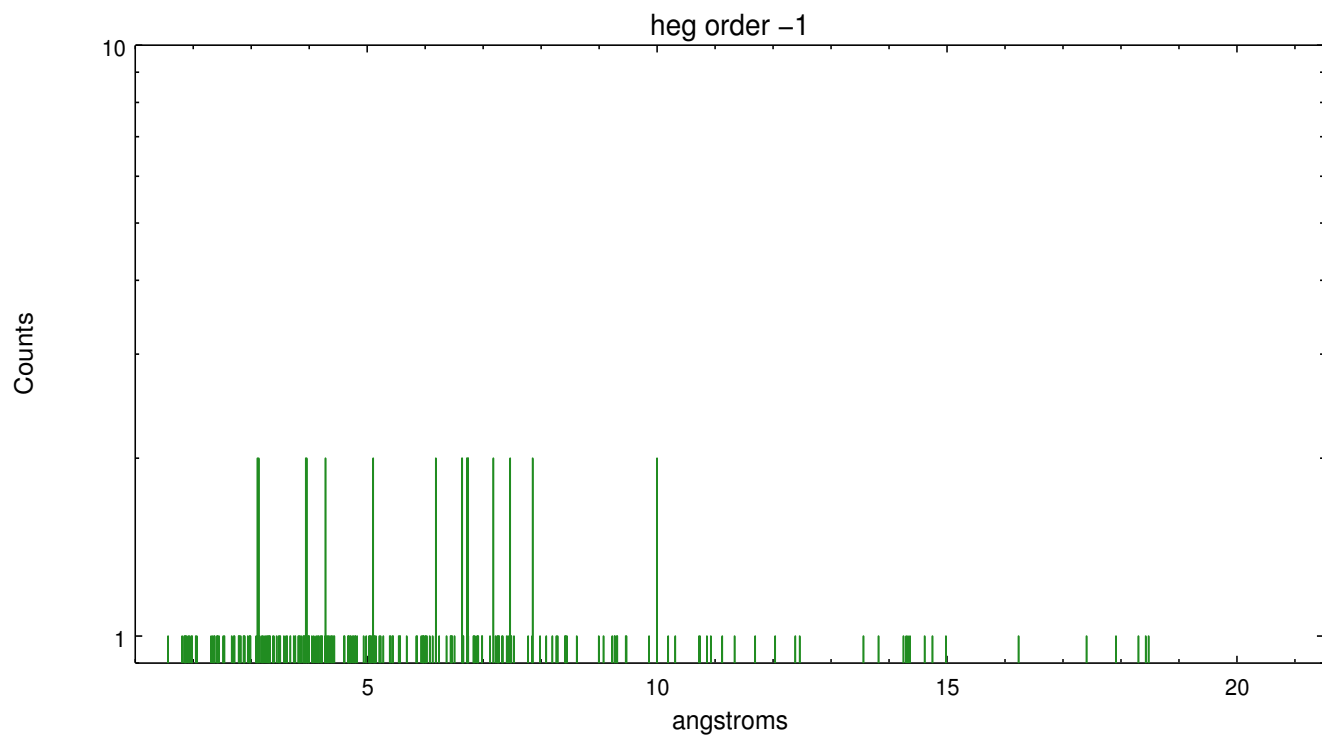
Spot Image HEG



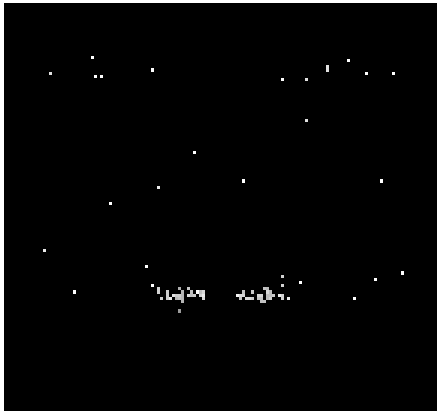
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	383	533	647	1918	438	337	326

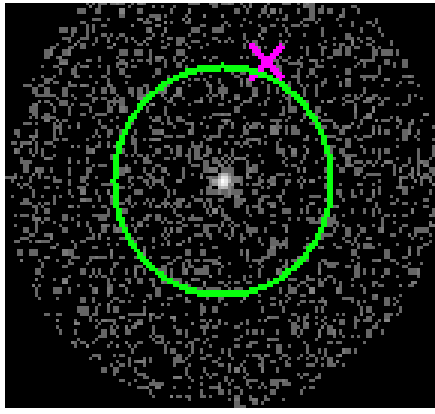




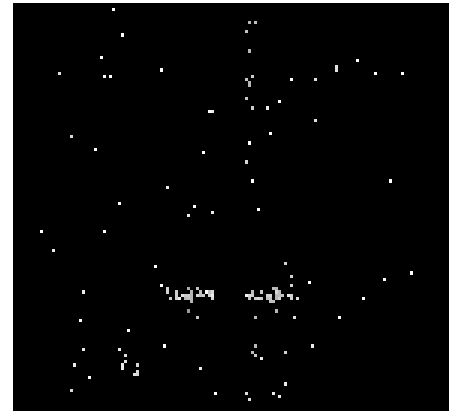
3.2 MEG Arm



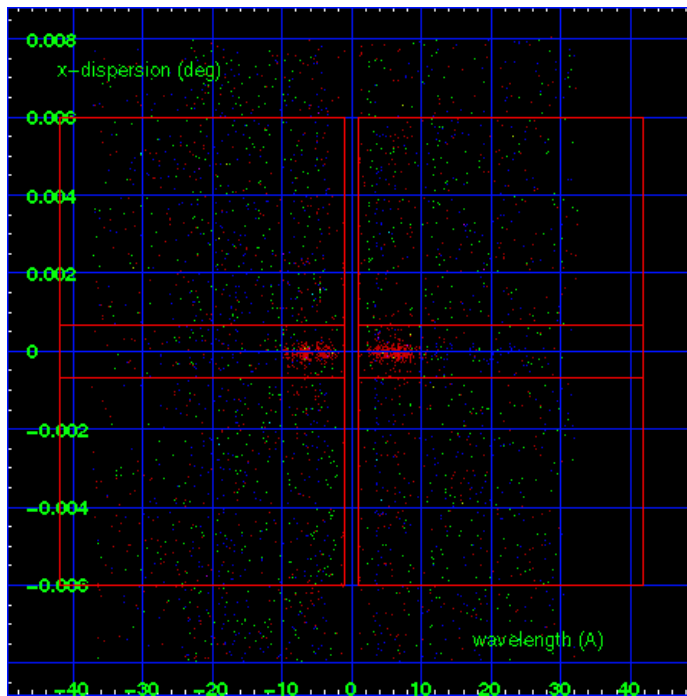
MEG Order Sort 123



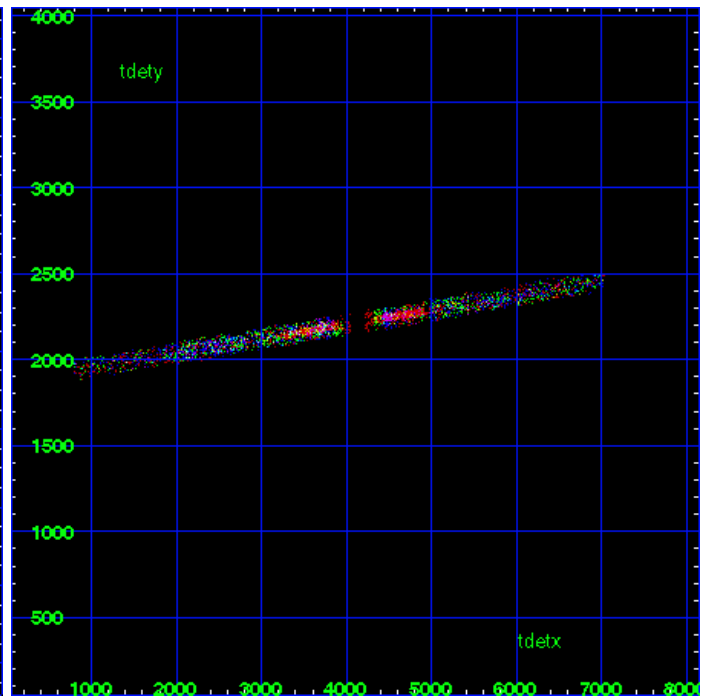
MEG Zero Order



MEG Order Sort ALL

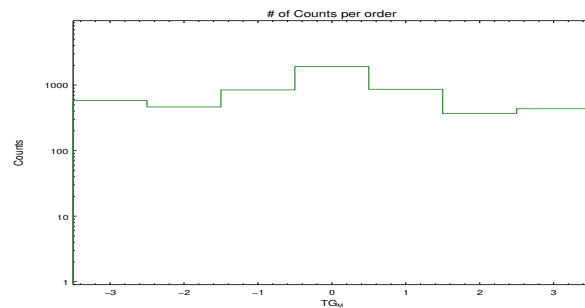


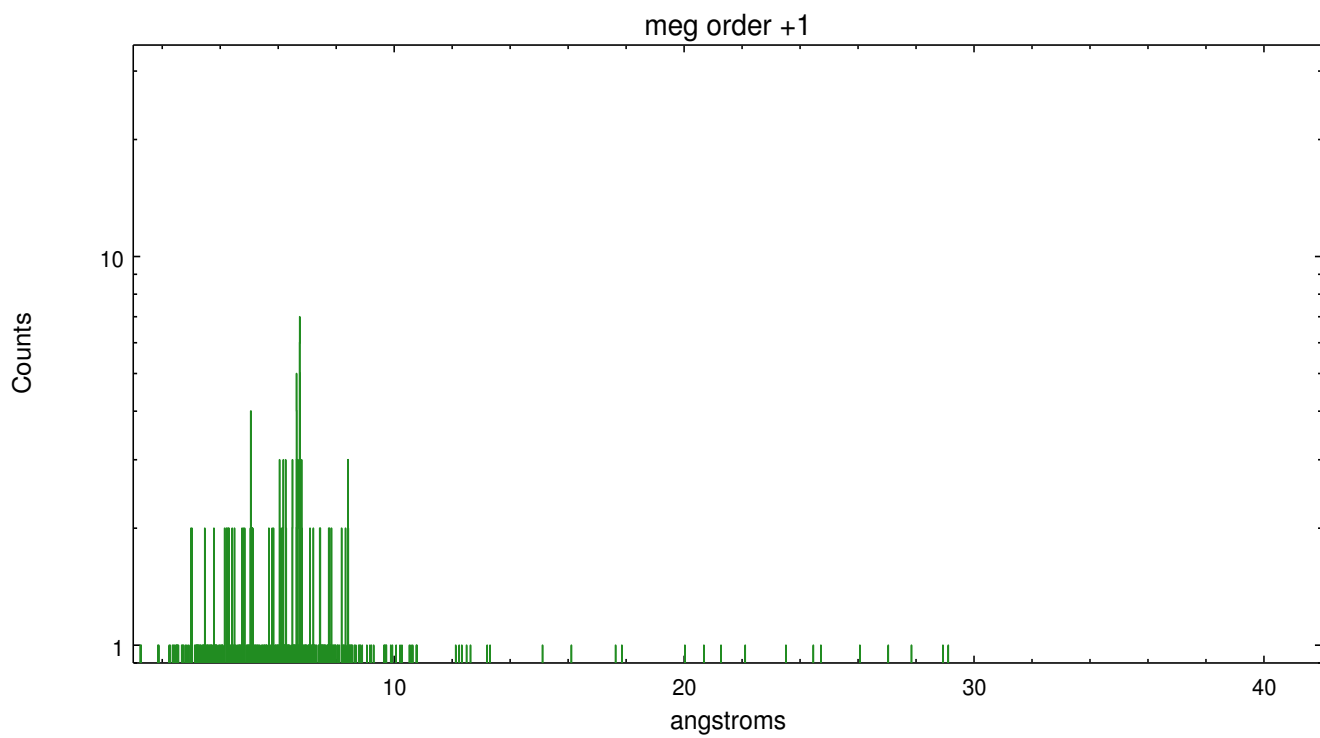
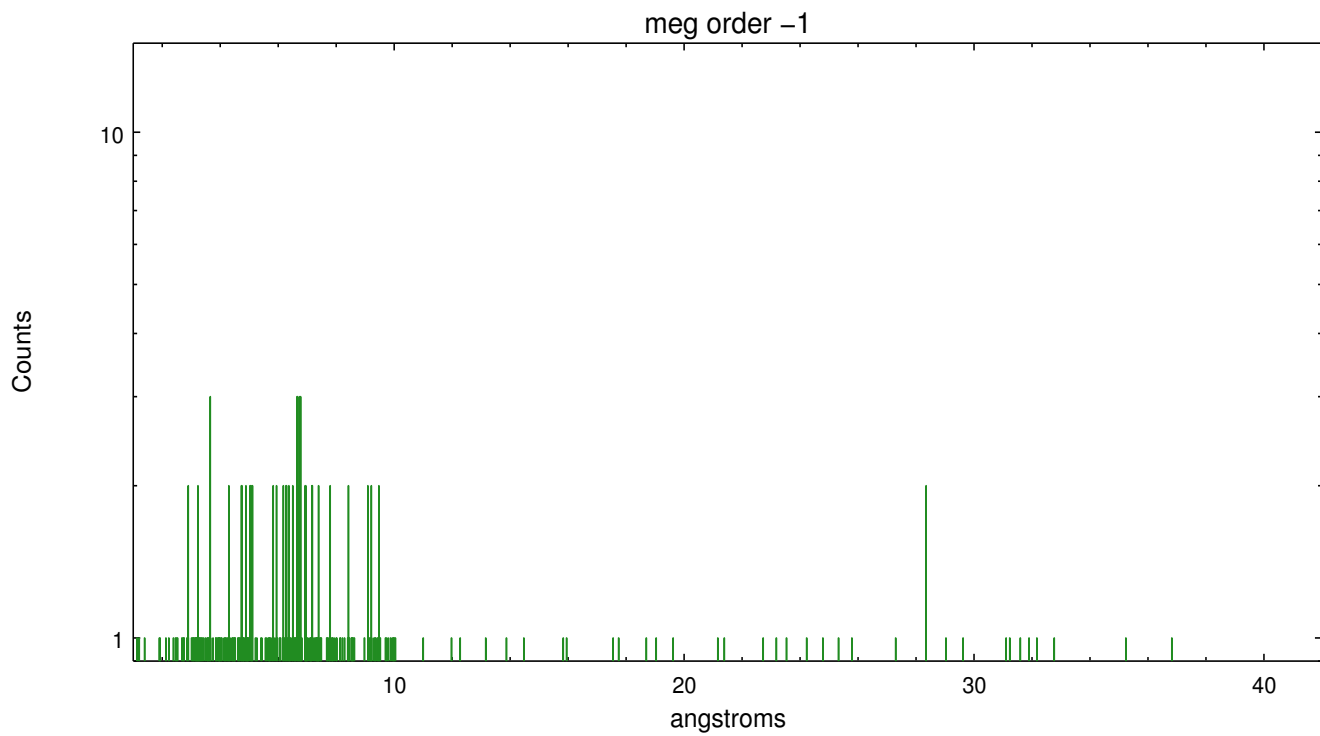
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	582	463	842	1918	861	366	435





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.06.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	44.4511998

A.2 Comments

Roll constraint met.