

V&V Reference Report

L2 ASCDS Version : 7.6.10

Observation 1894 - L2 Version 001
Chandra X-Ray Center

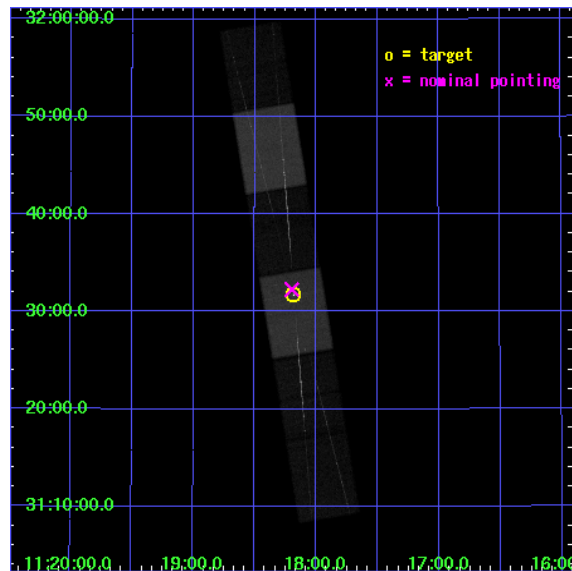
L2 Processing Date : Jun 22 2007

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1 Front

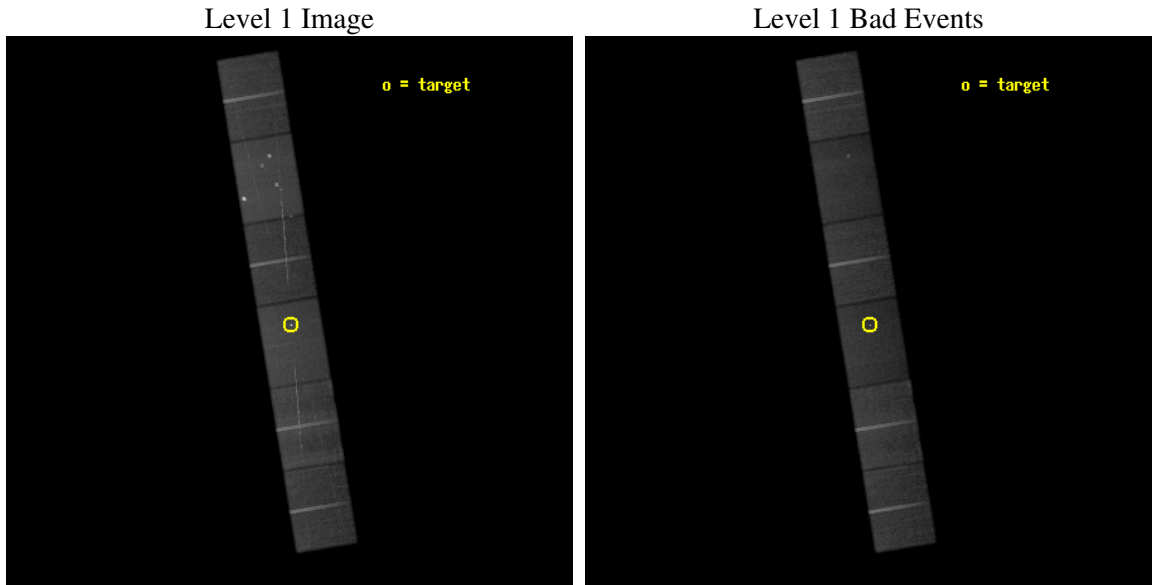
seq_num	200122
obs_id	1894
title	HIGH RESOLUTION SPATIALLY RESOLVED SPECTRA OF THE X-RAY BRIGHTEST INTERMEDIATE ACTIVITY SYSTEM XI UMA AB
observer	Dr. Jeremy Drake
object	XI UMA
dtcycle	0
cycle	P
ra_targ	169.545417
dec_targ	31.528889
ra_nom	169.54931171669
dec_nom	31.538159060981
roll_nom	80.654600002388
revision	2
ontime	72097.5
livetime	70933.062840411
ontime4	72094.959009841
ontime5	72097.5
ontime6	72097.5
ontime7	72097.5
ontime8	72094.959009856
ontime9	72092.41803962
l2events	547766



2 OBI

2.1 OBI

2.1.1 Images

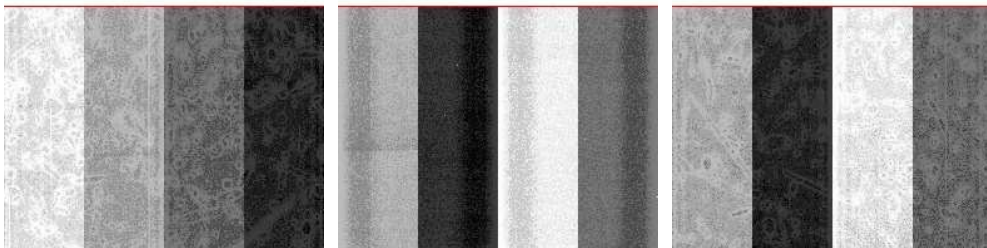


2.1.2 Bias

Chip 4

Chip 5

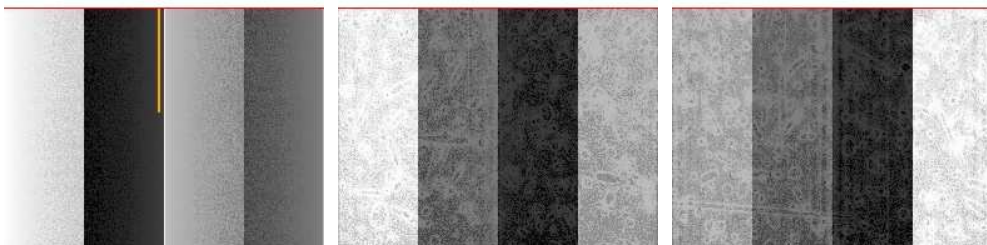
Chip 6



Chip 7

Chip 8

Chip 9



2.1.3 Parameters

obi_num	0
ascdsver	7.6.10
caldbver	3.4.0
date	2007-06-22T00:46:45
revision	2

sched_exp_time	72000.000000
ontime	72097.5
ontime4	72094.959009841
ontime5	72097.5
ontime6	72097.5
ontime7	72097.5
ontime8	72094.959009856
ontime9	72092.41803962
l1events	2530503

2.1.4 Events

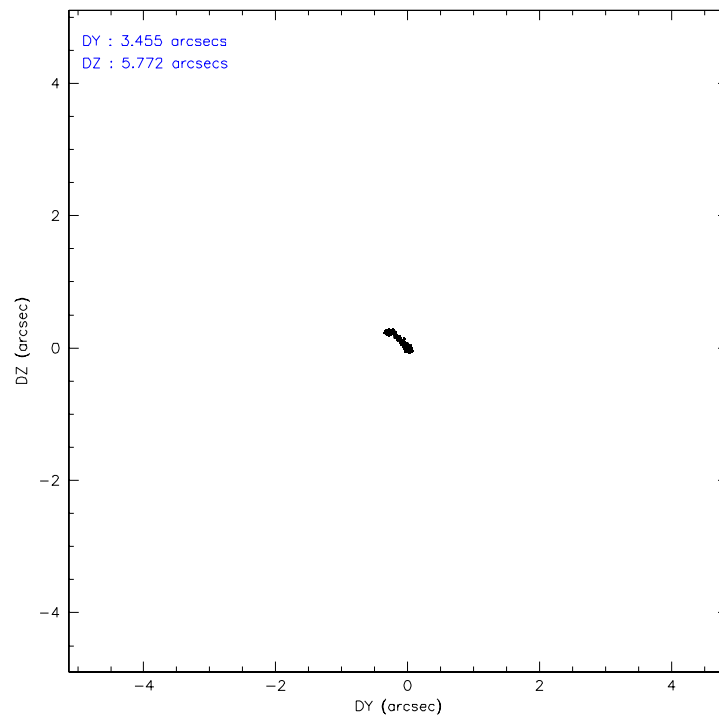
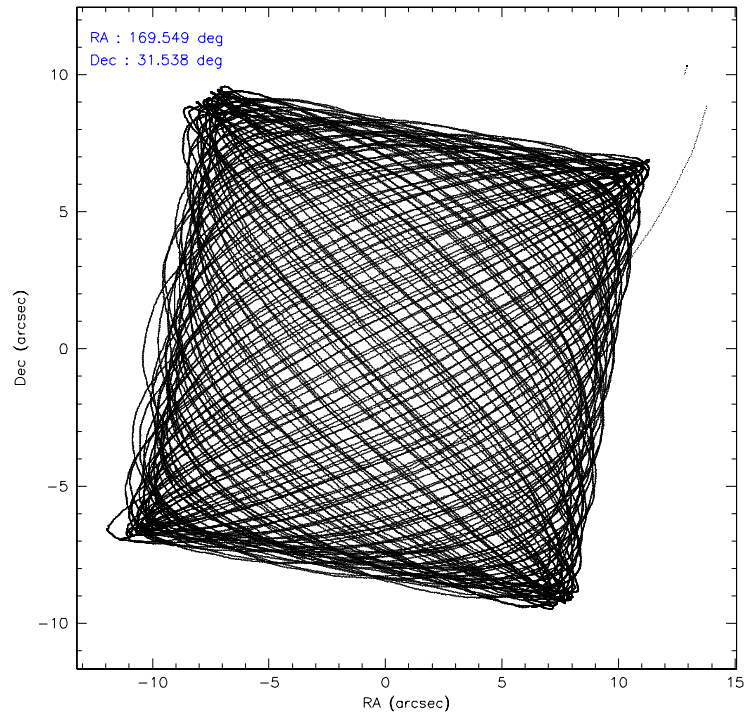
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	385303	516801	364143	468397	449800	346059
rejected events	344528	272906	314805	275542	354569	305081
rejected %	89%	52%	86%	58%	78%	88%

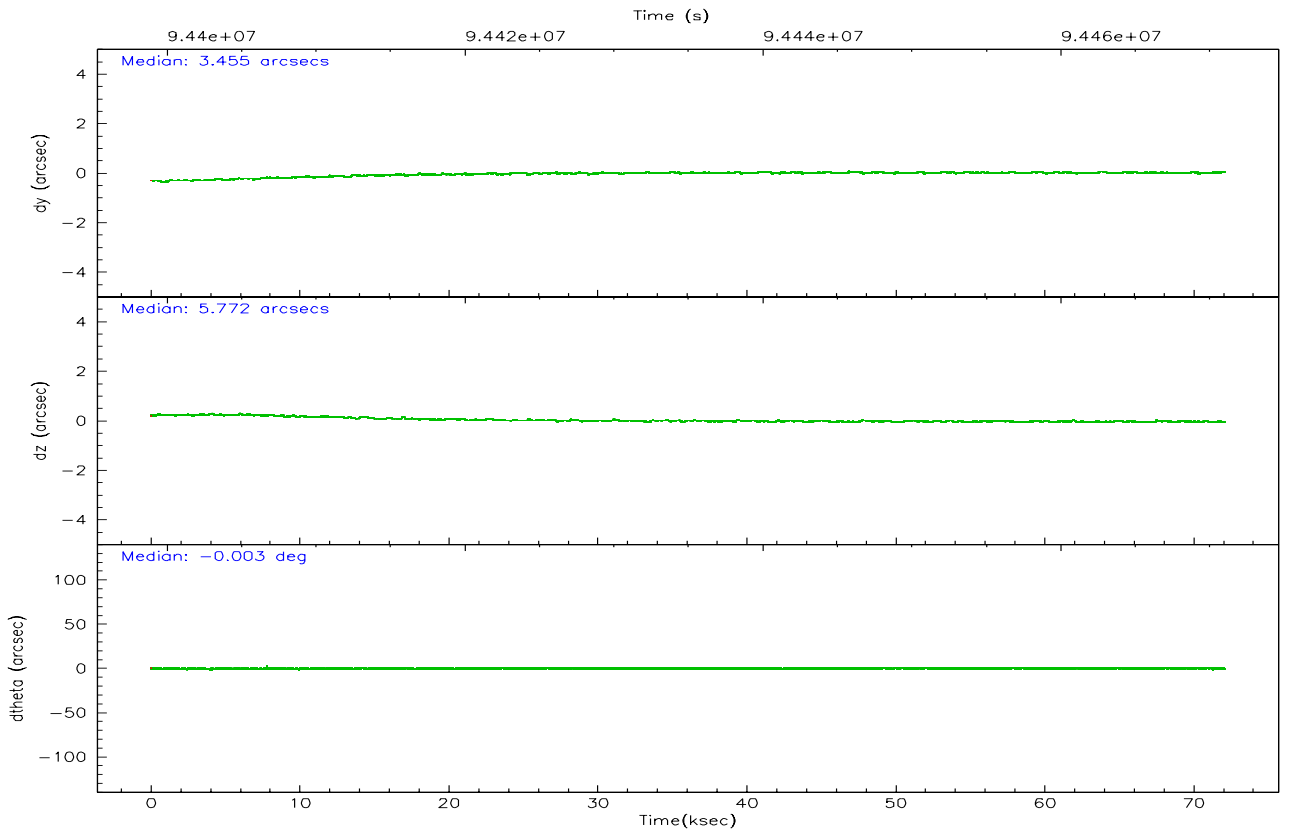
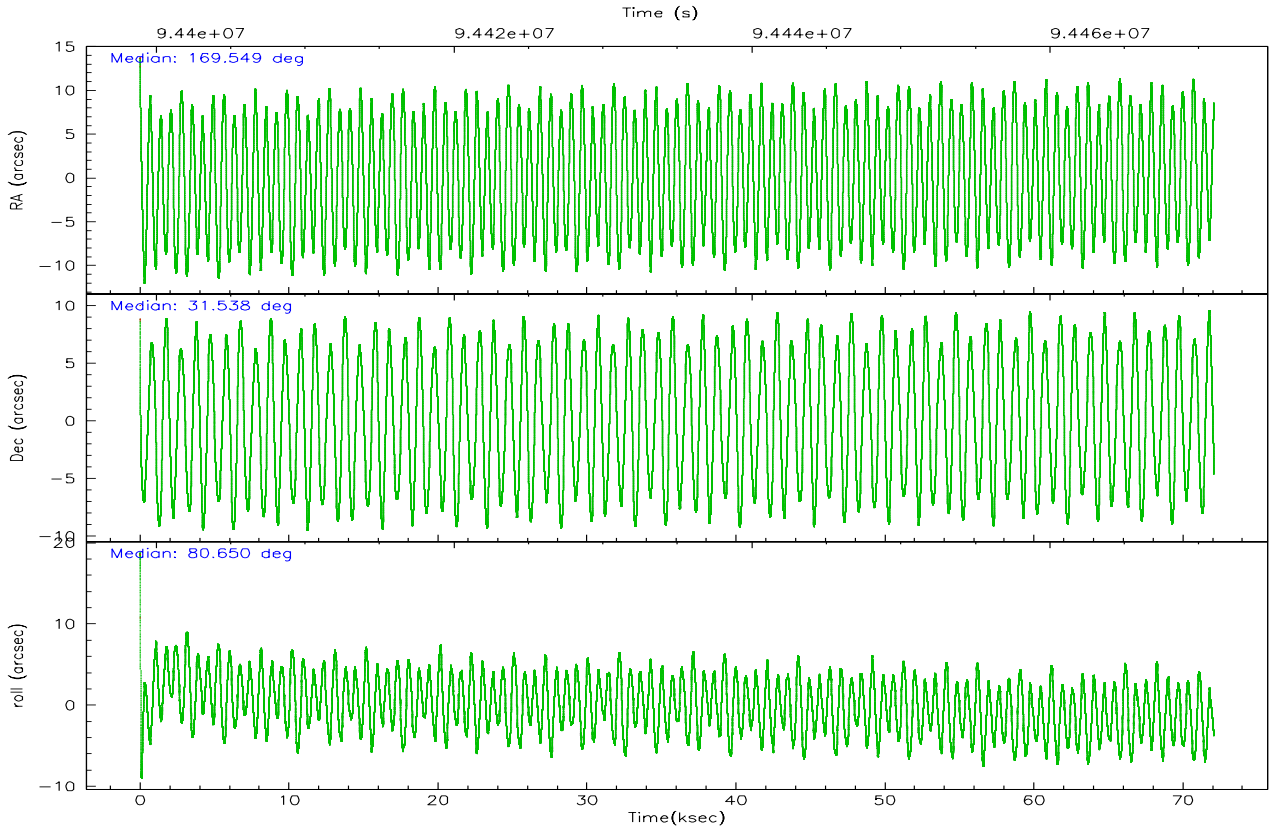
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	25196	57198	33817	28687	46457	26304
	6%	11%	9%	6%	10%	7%
grade 1 events	184	529	210	1026	262	149
	0%	0%	0%	0%	0%	0%
grade 2 events	11975	74354	11160	45639	21383	10662
	3%	14%	3%	9%	4%	3%
grade 3 events	4832	12578	5397	21370	10803	5158
	1%	2%	1%	4%	2%	1%
grade 4 events	4676	12514	5308	21174	10007	5037
	1%	2%	1%	4%	2%	1%
grade 5 events	11453	36466	13392	41657	17065	13709
	2%	7%	3%	8%	3%	3%
grade 6 events	8764	113143	9912	104925	23903	9837
	2%	21%	2%	22%	5%	2%
grade 7 events	318223	210019	284947	203919	319920	275203
	82%	40%	78%	43%	71%	79%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-456789	ACIS-456789	Obspar file type	PREDICTED	ACTUAL
Grating	HETG	HETG	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
Pointing RA	169.560862	169.5493117166933	Subarray requested	CUSTOM	CUSTOM
Pointing Dec	31.512653	31.53815906098069	Subarray start row	1	1
Pointing Roll	80.491925	80.65460000238815	Subarray row count	774	774
SIM focus pos (mm)	-0.684267	-0.6828225247311905	Alternating exposures requested	N	N
SIM defocus (mm)	0	0.001444936568705701	Primary exposure time	0.000000	2.5
SIM translation stage pos (mm)	-187.132523	-187.1228876879999			
SIM translation stage offset (mm)	-3	-3.009634895007935			
Observation start time	94399034.184000	94397677.56490301			
Observation start date	2000-12-28T13:56:10	2000-12-28T13:34:37			
Observation end time	94471034.184000	94472008.51774999			
Observation end date	2000-12-29T09:56:10	2000-12-29T10:13:28			
Read mode	TIMED	TIMED			

2.3 Aspect



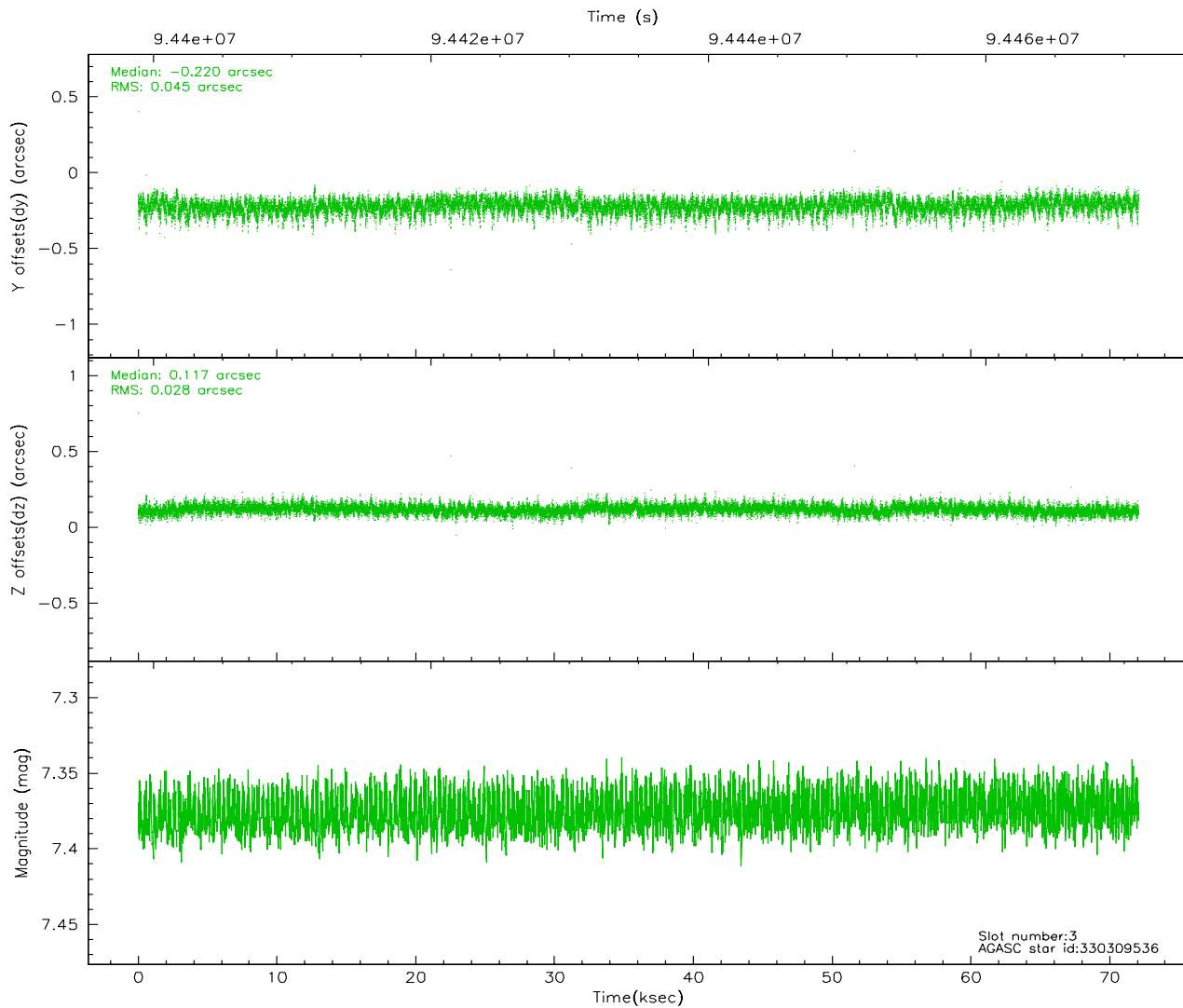
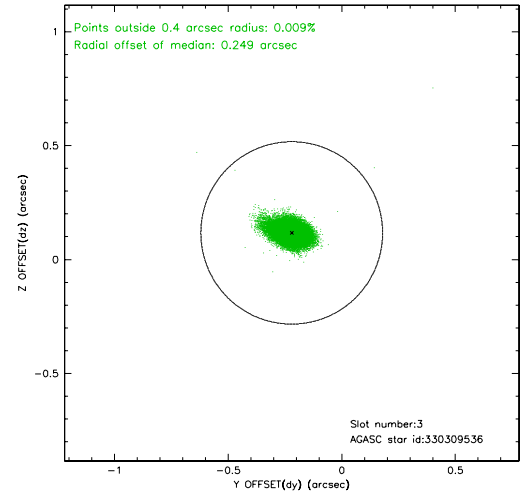
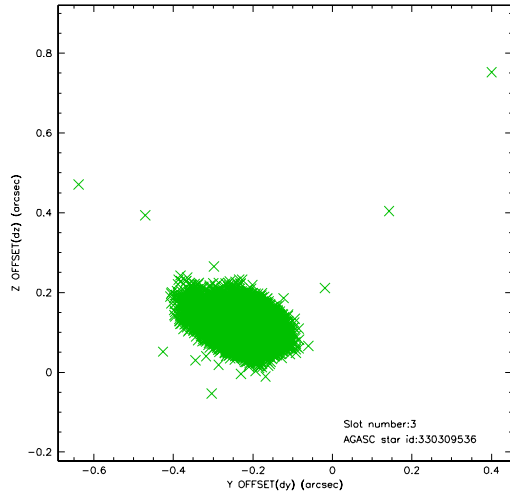


Slot Statistics

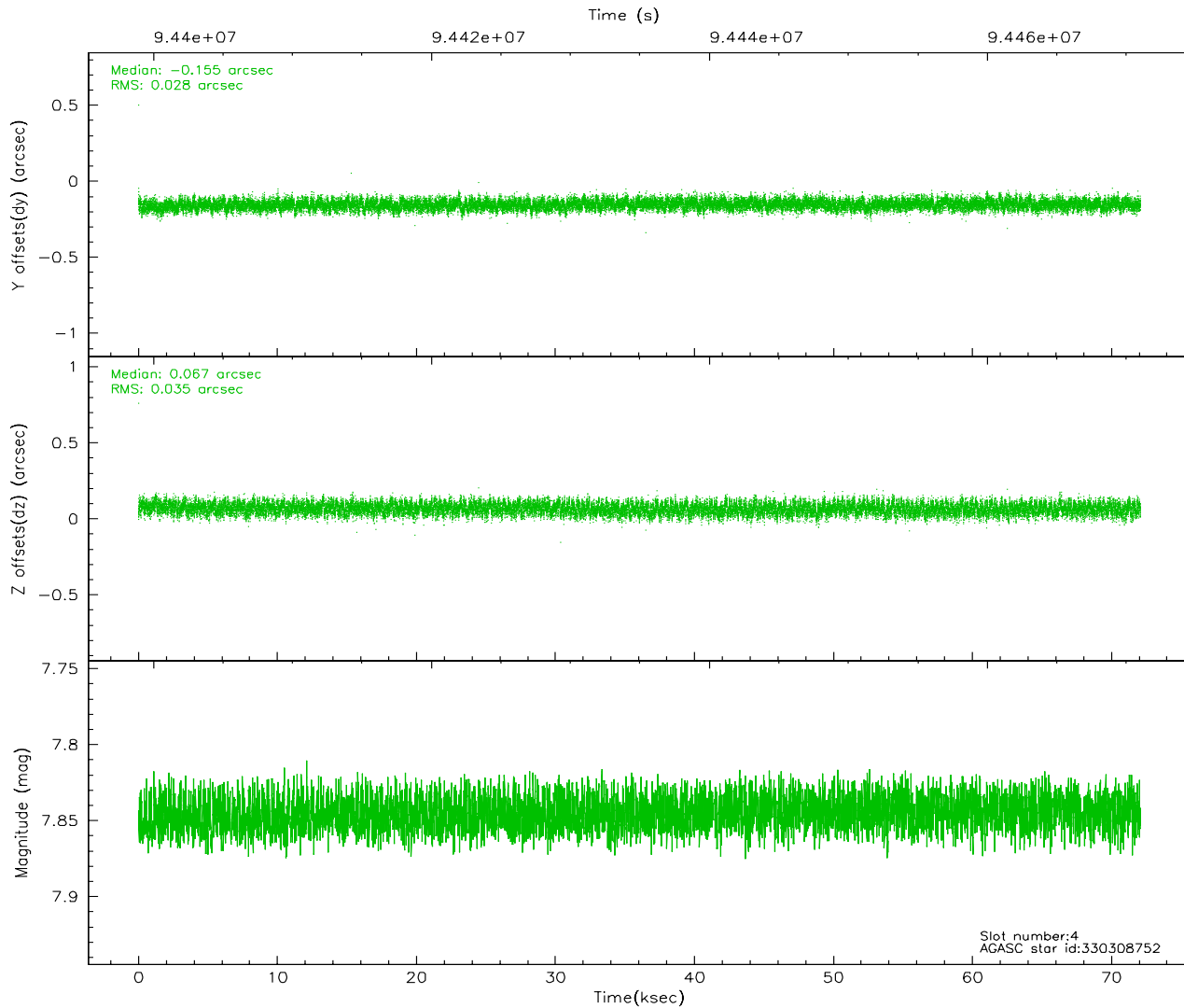
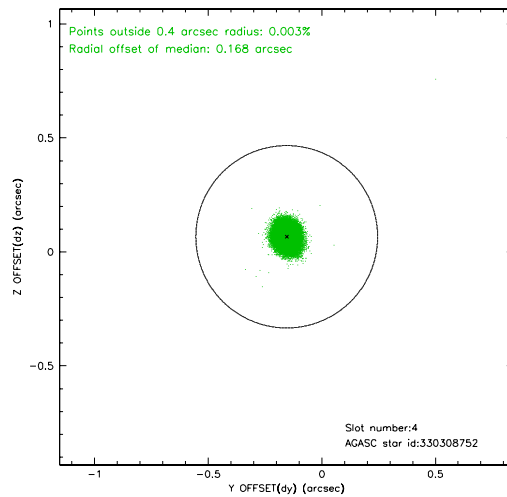
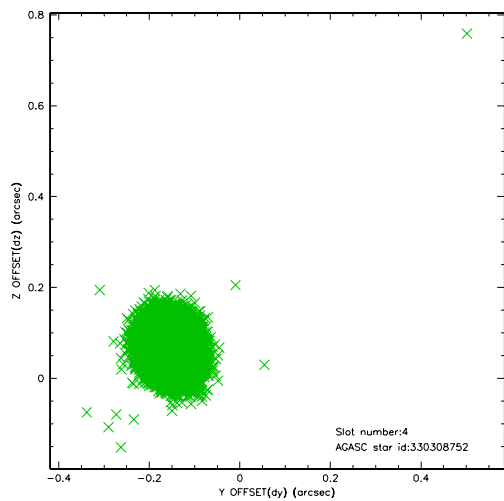
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	17584	-0.004	-0.028	0.006	0.011	0.000000	0.000000	-755.89	-1789.10
1	FID	ACIS-S-4	7.20	17580	-0.051	0.009	0.006	0.014	0.000000	0.000000	2157.39	119.44
2	FID	ACIS-S-5	7.24	17584	0.024	0.027	0.007	0.015	0.000000	0.000000	-1808.75	113.11
3	GUIDE	330309536	7.38	35171	-0.220	0.117	0.053	0.094	170.400760	32.043121	2317.49	-2210.84
4	GUIDE	330308752	7.84	35173	-0.155	0.067	0.048	0.075	170.184237	31.734585	1109.59	-1749.83
5	GUIDE	330304200	8.92	35164	-0.053	-0.223	0.074	0.119	169.062356	31.605013	79.60	1562.33
6	GUIDE	330322384	9.13	35159	0.289	-0.030	0.083	0.132	169.625357	30.861881	-2276.41	-584.10
7	GUIDE	330305624	9.50	35152	0.144	0.072	0.078	0.127	170.009762	30.914016	-1892.66	-1723.51

2.4 Star Slots

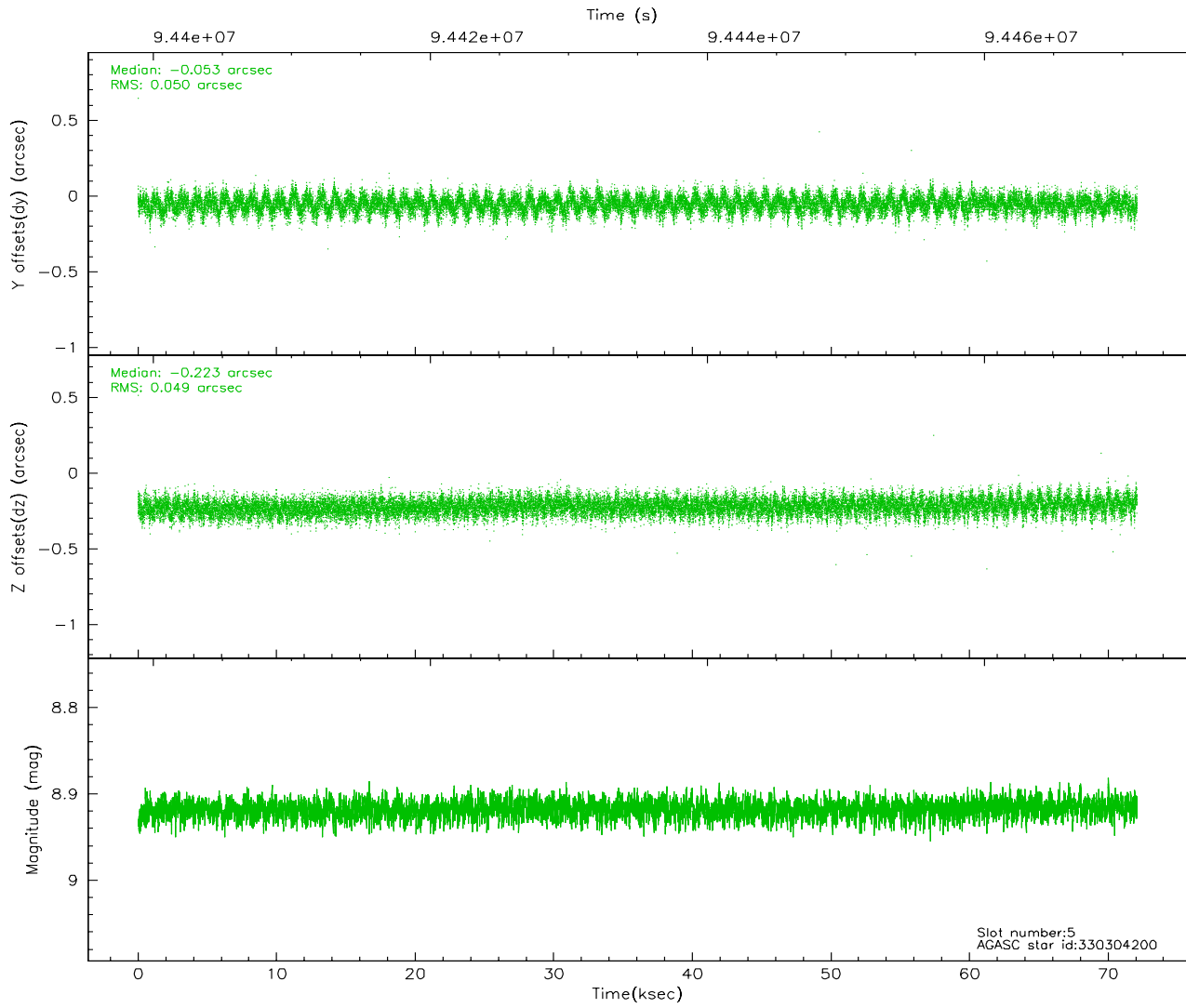
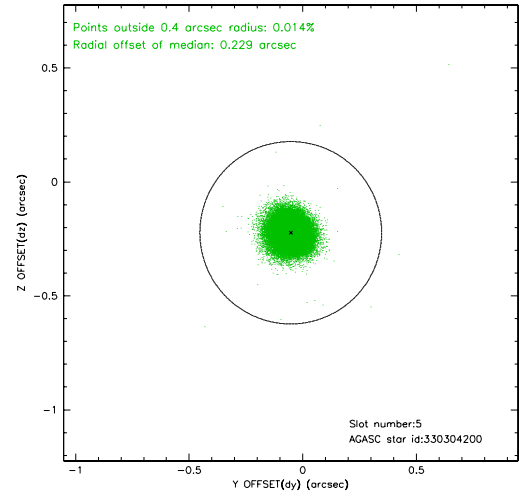
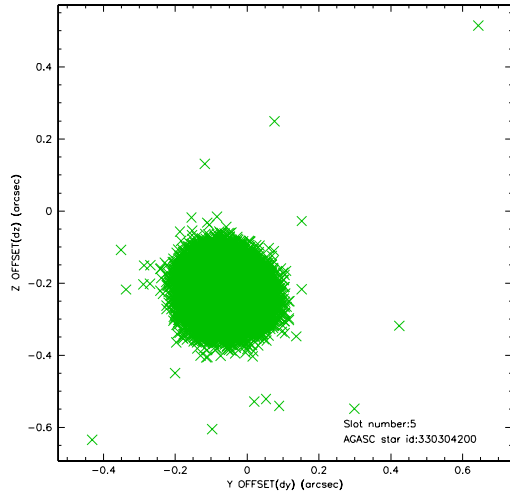
2.4.1 Slot 3



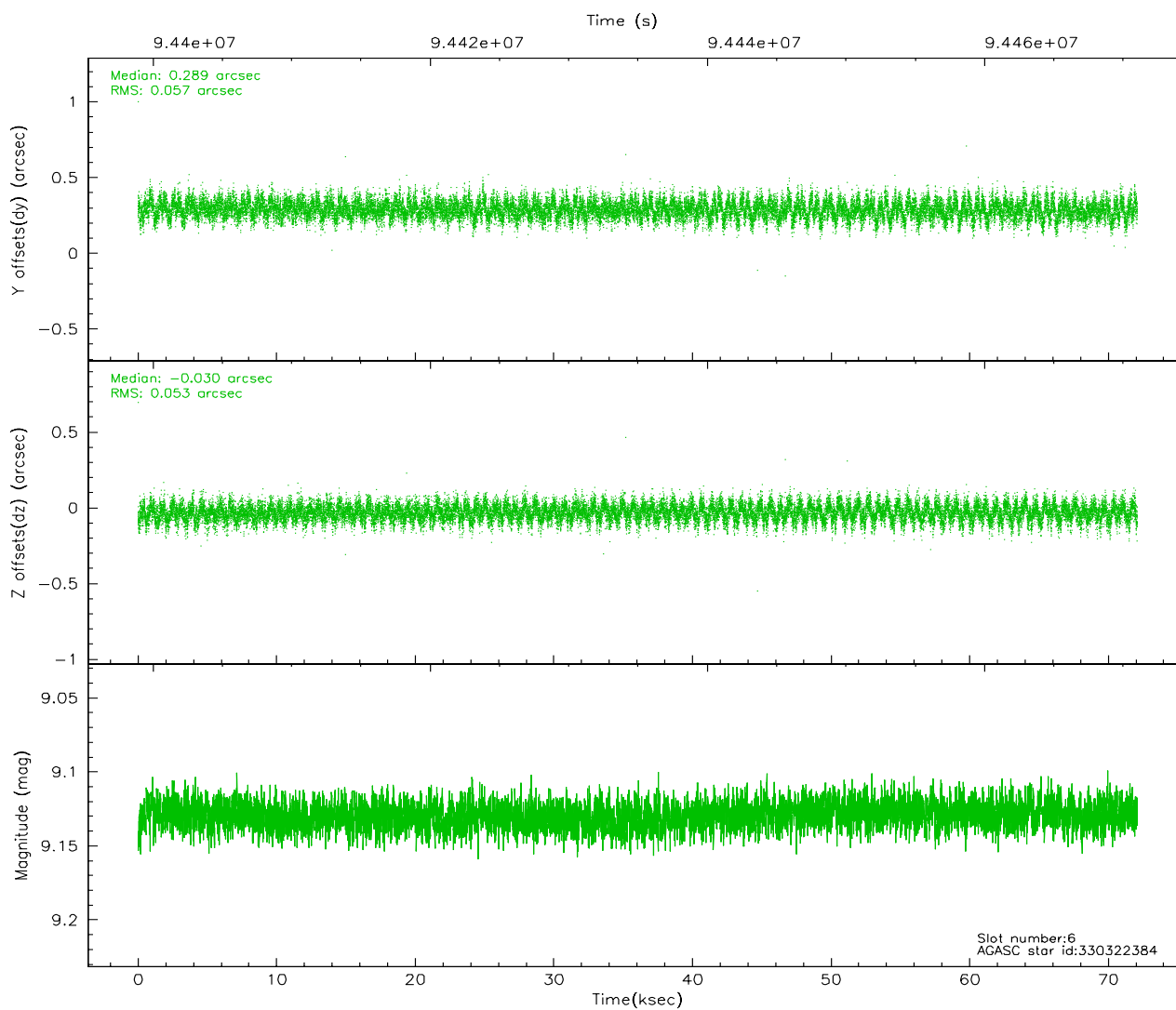
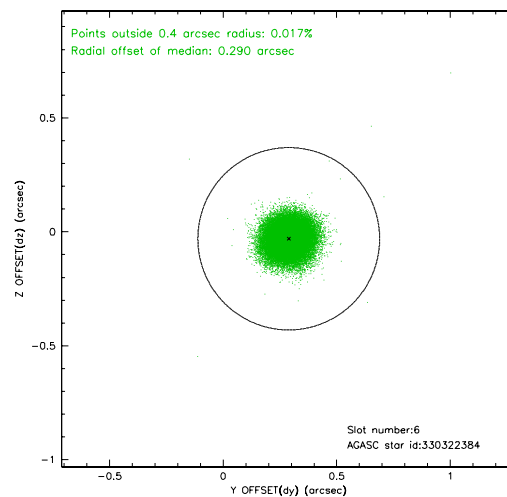
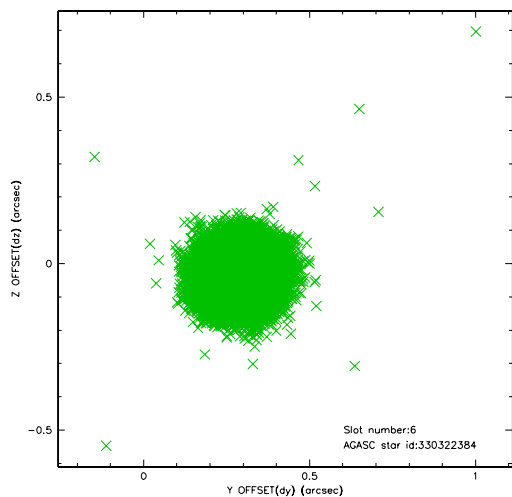
2.4.2 Slot 4



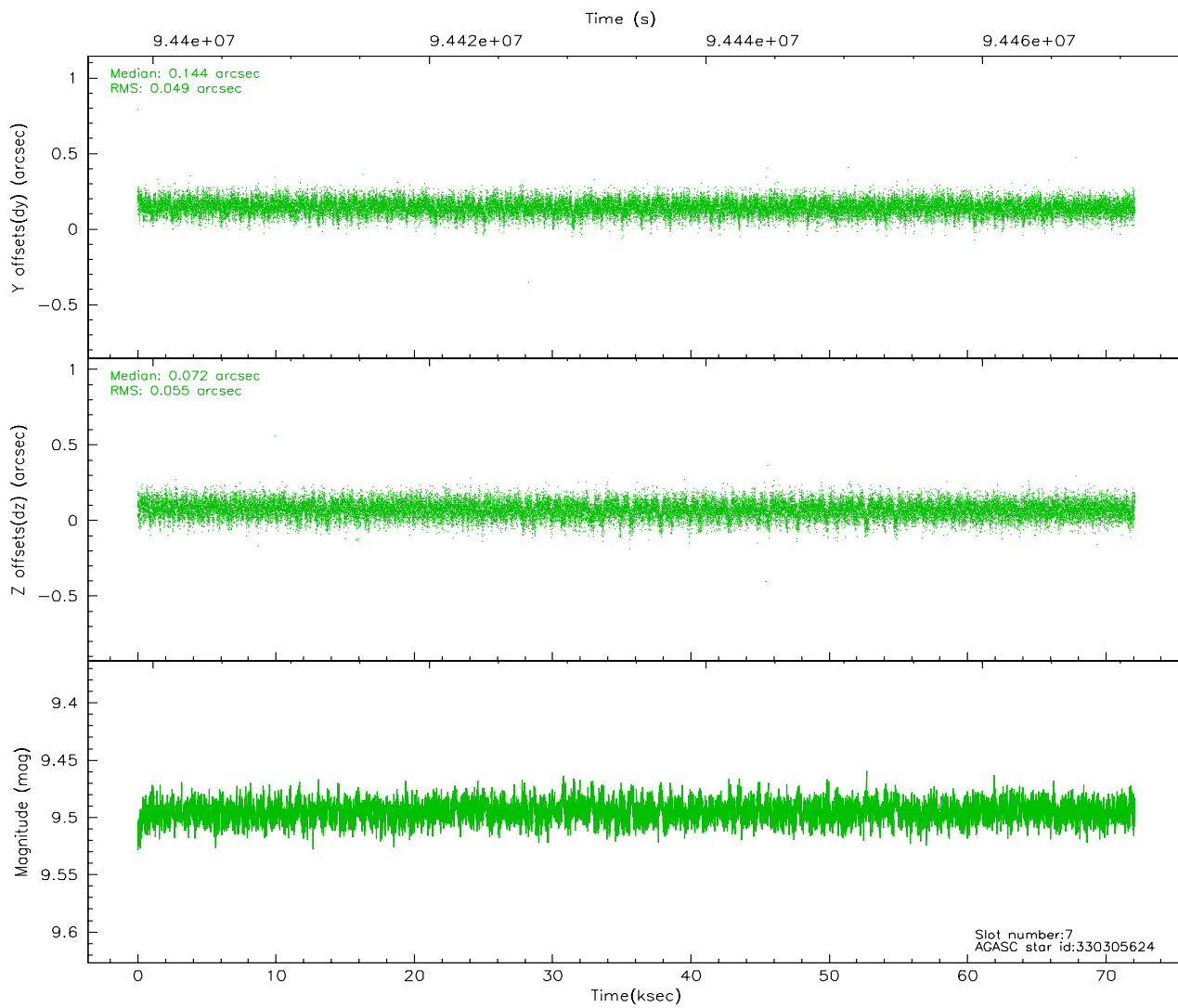
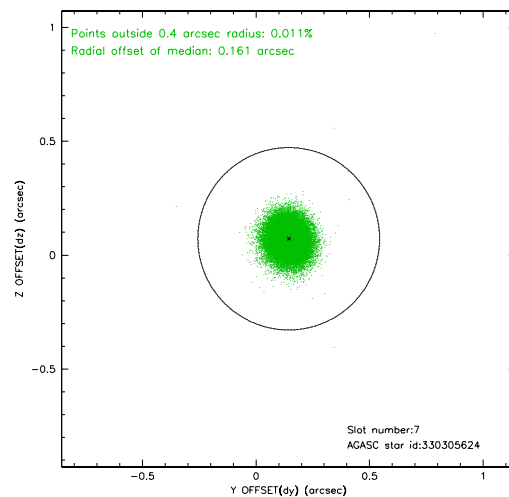
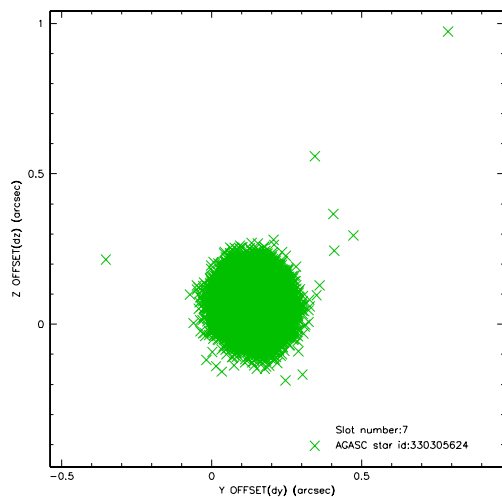
2.4.3 Slot 5



2.4.4 Slot 6

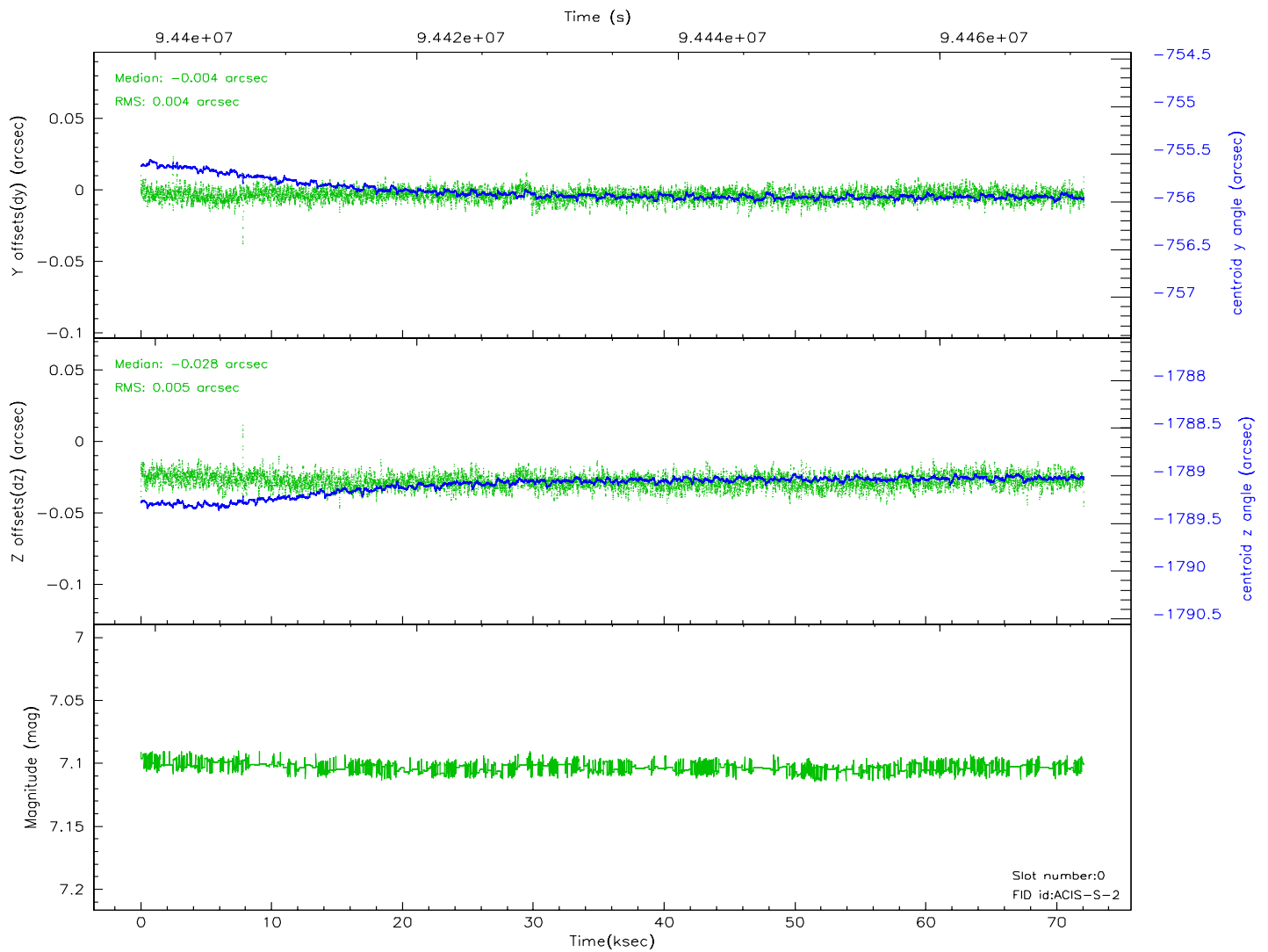
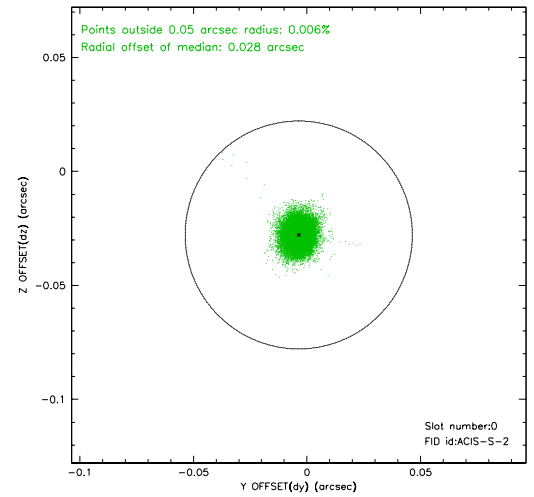
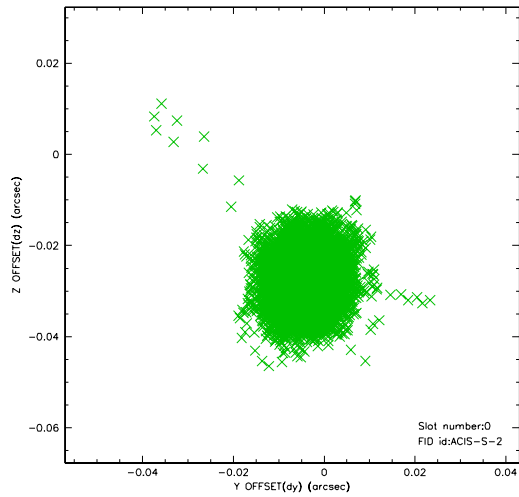


2.4.5 Slot 7

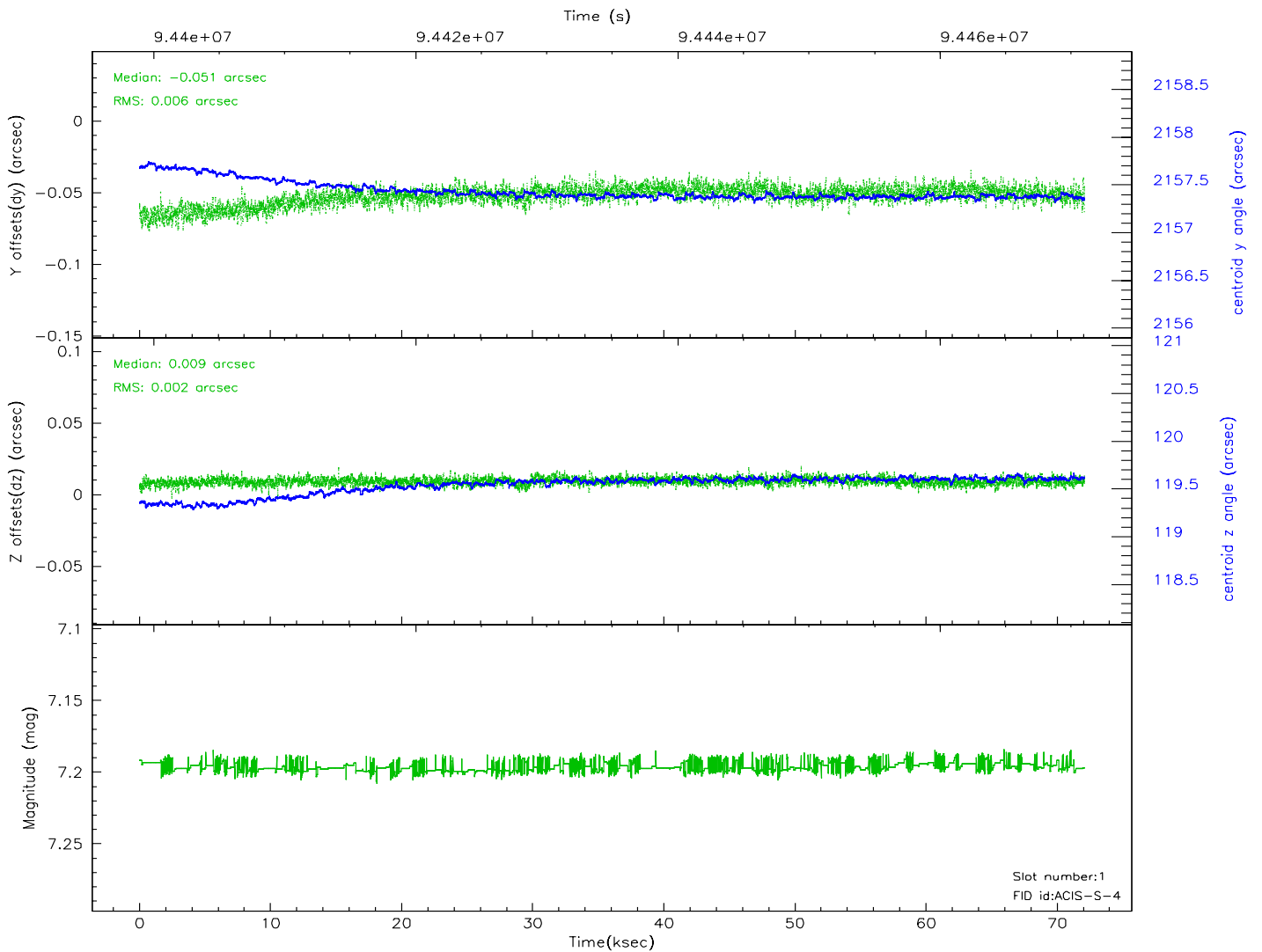
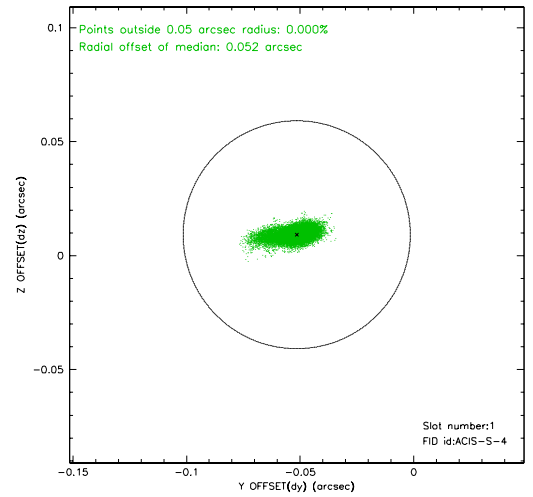
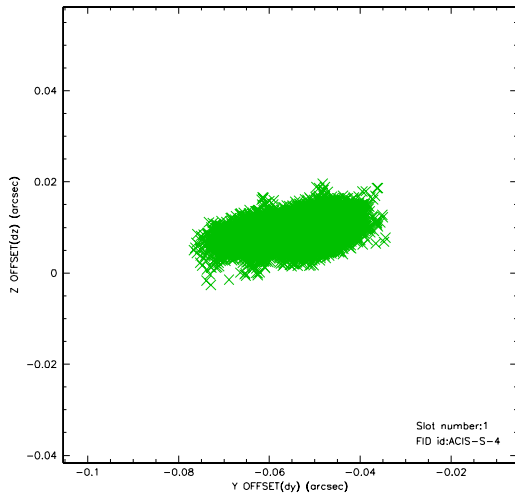


2.5 FID Slots

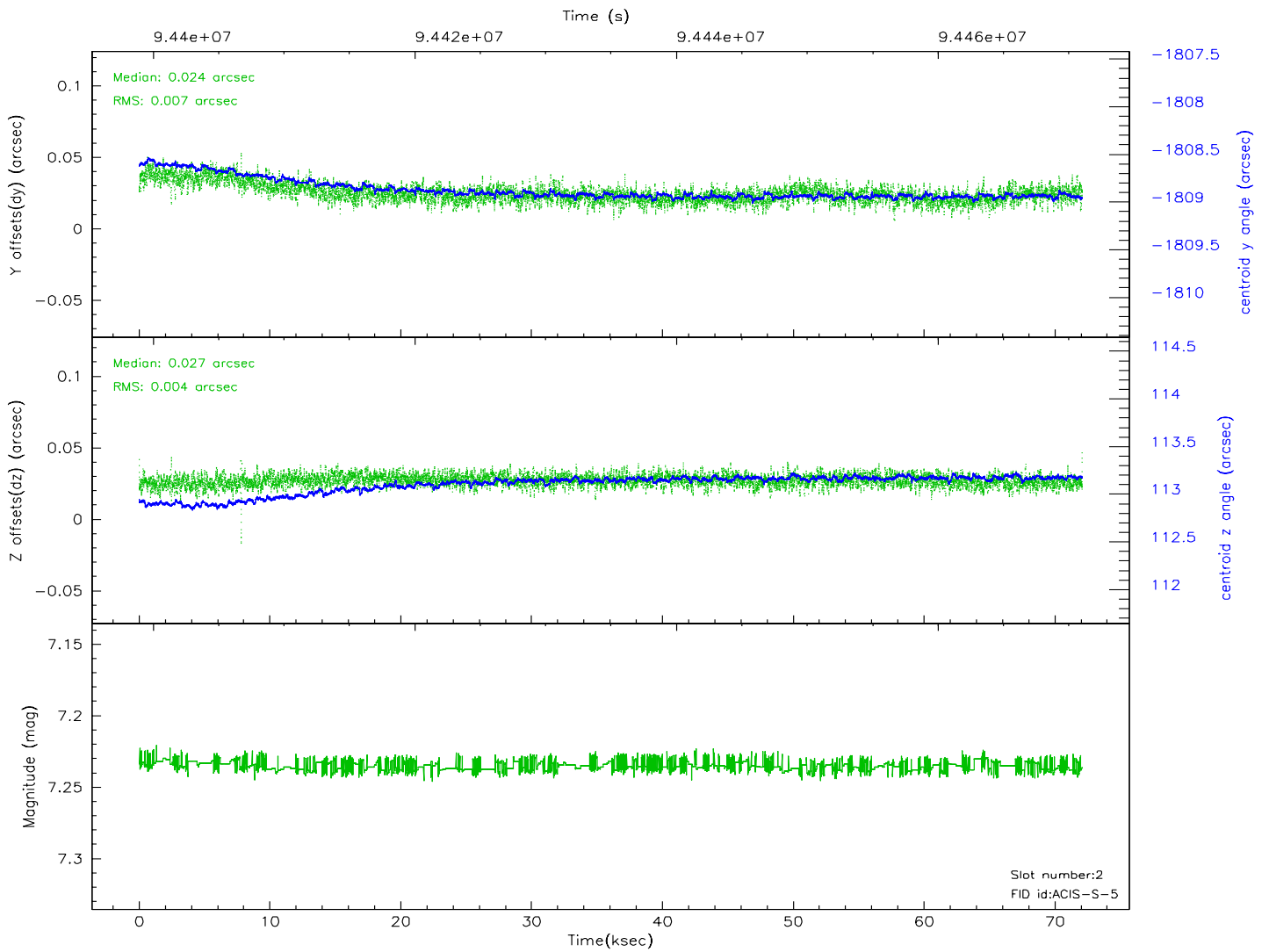
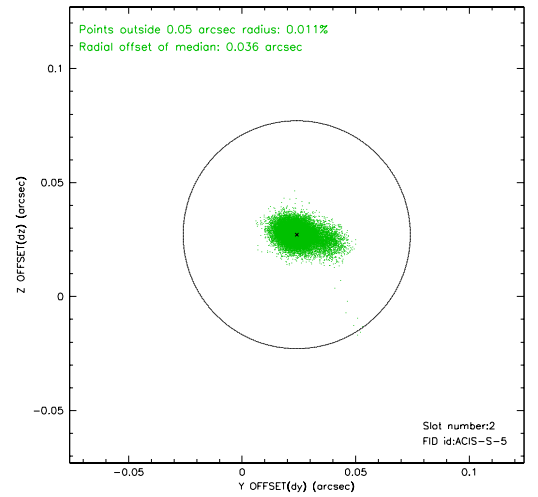
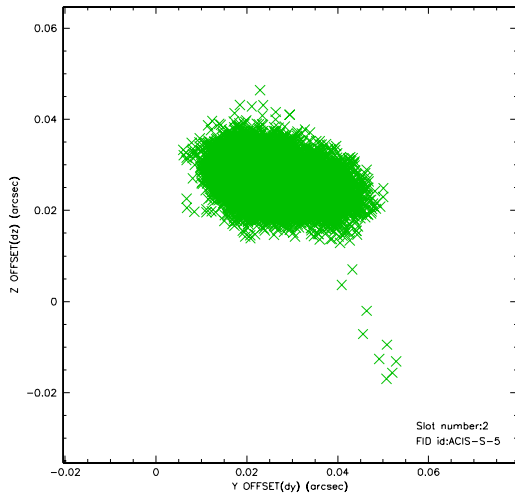
2.5.1 Slot 0



2.5.2 Slot 1

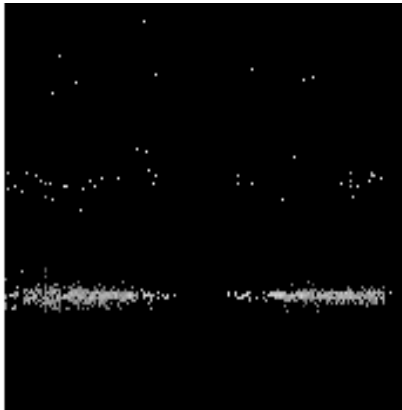


2.5.3 Slot 2

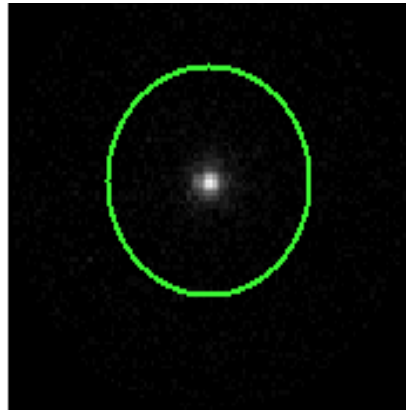


3 Gratings

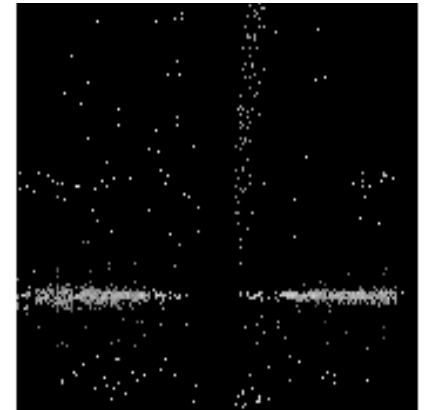
3.1 HEG Arm



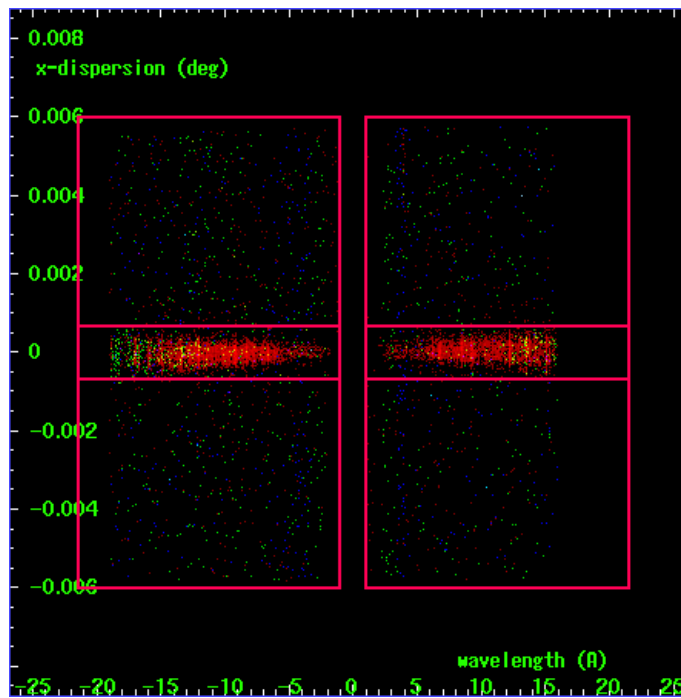
HEG Order Sort 123



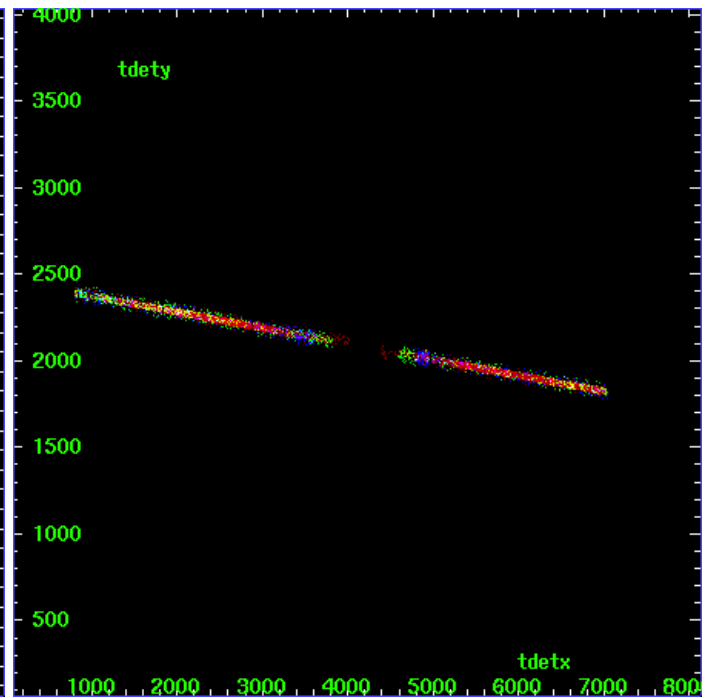
HEG Zero Order



HEG Order Sort ALL

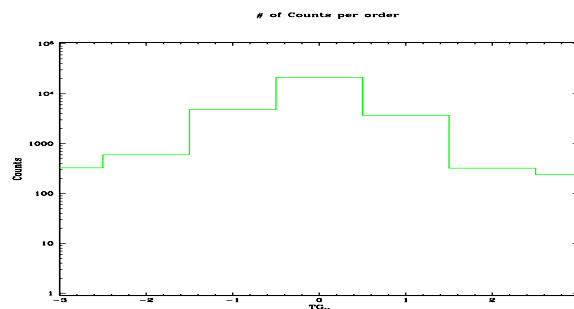


Spot Image HEG

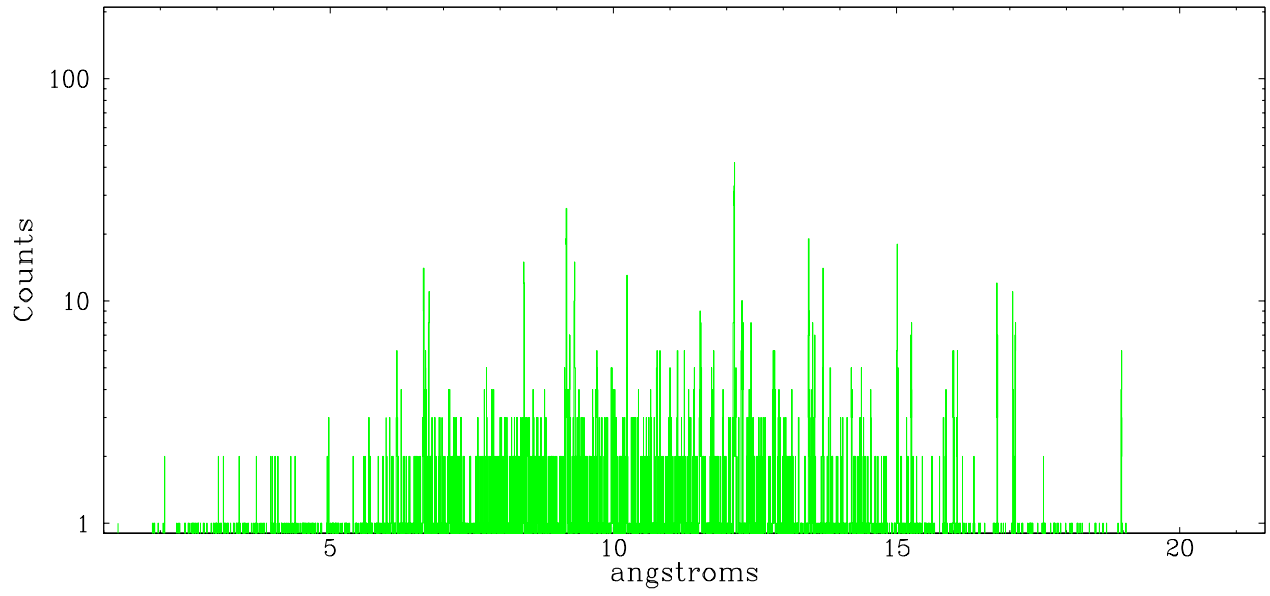


Full Detector HEG

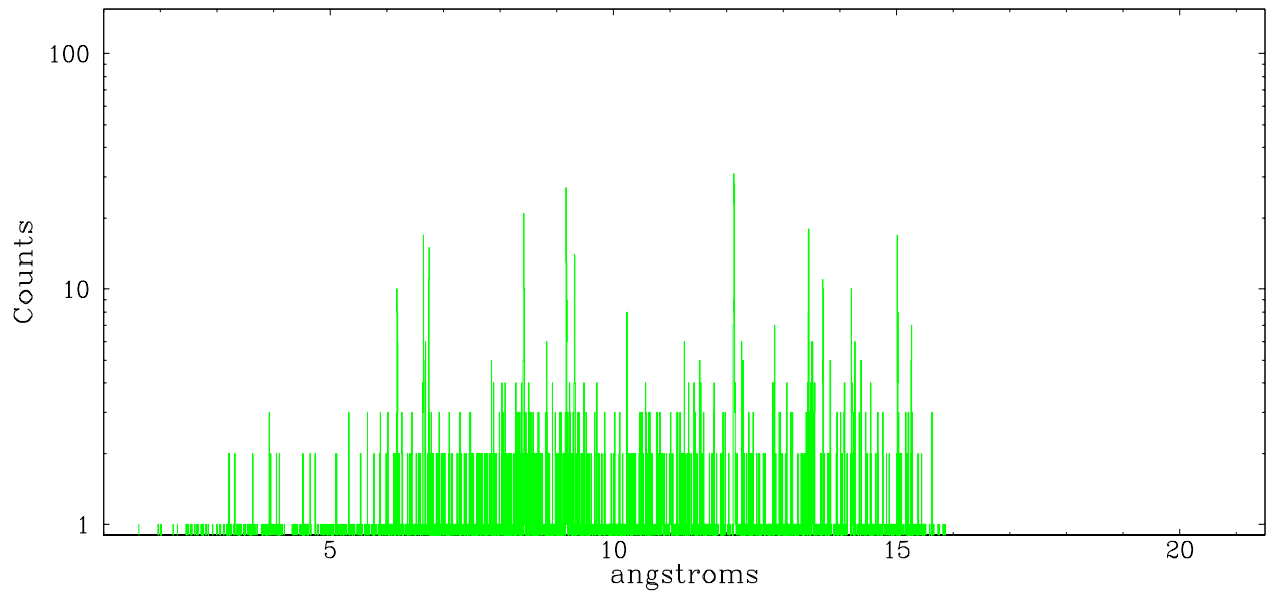
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	328	597	4819	21031	3666	321	238



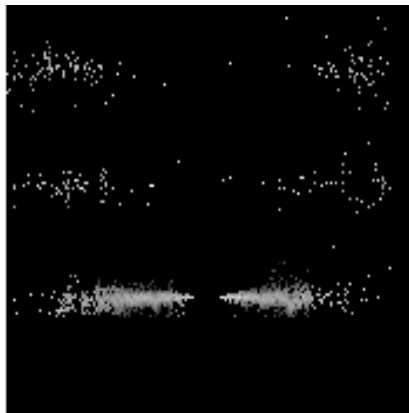
heg order -1



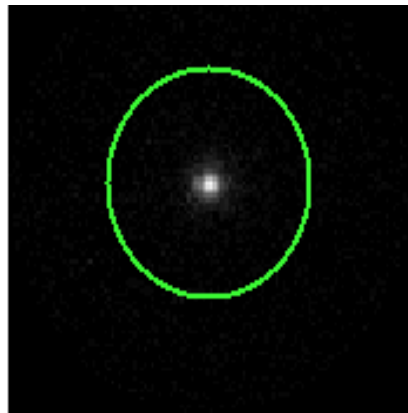
heg order +1



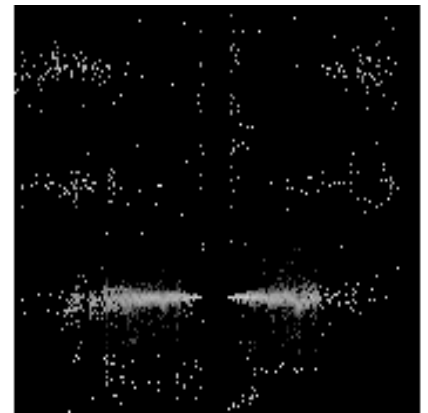
3.2 MEG Arm



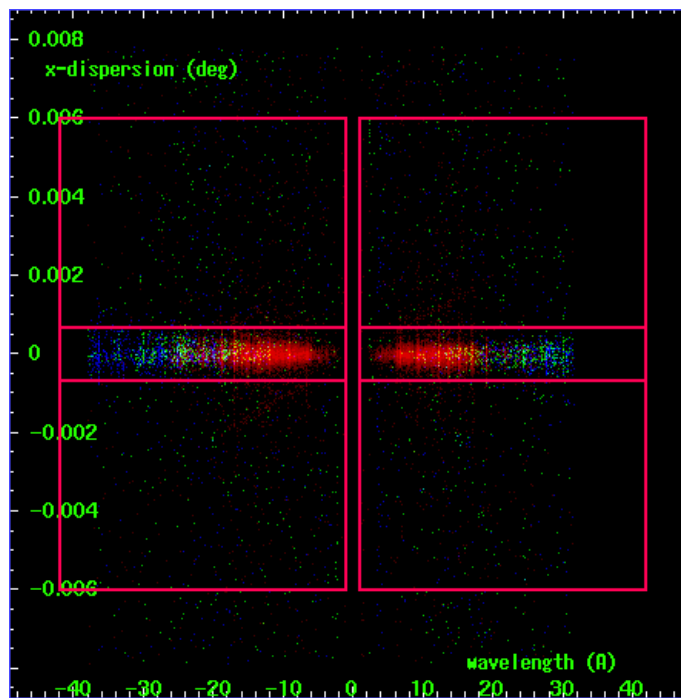
MEG Order Sort 123



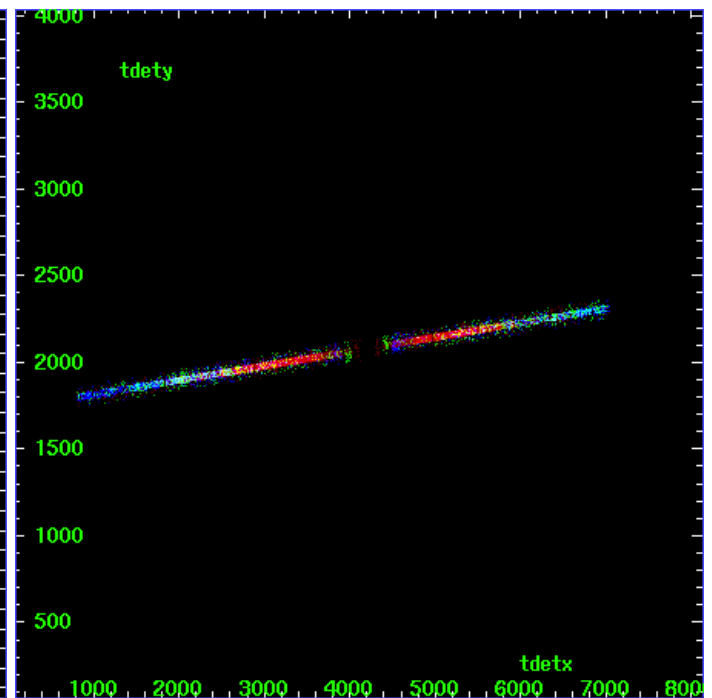
MEG Zero Order



MEG Order Sort ALL

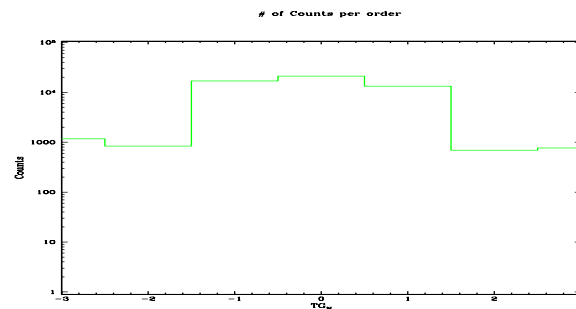


Spot Image MEG

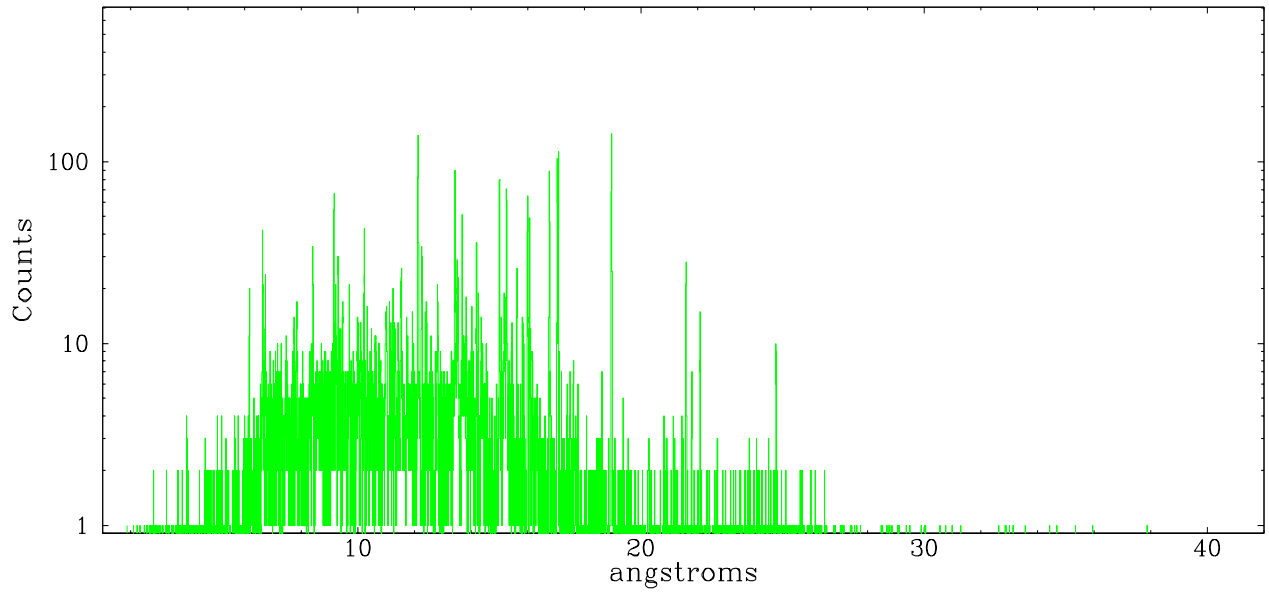


Full Detector MEG

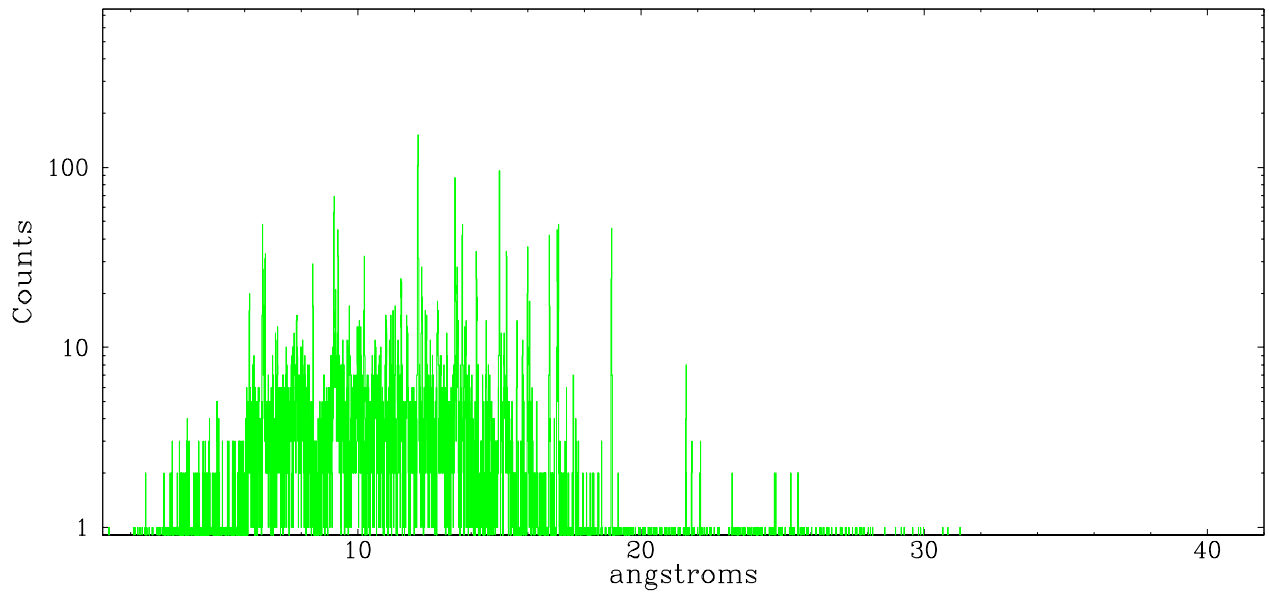
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	1167	833	16827	21031	13240	690	765



meg order -1



meg order +1



A Summary

A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2007.06.29
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	72.097

A.2 Comments

multiple source, separated by 2 arcsec, roughly perpendicular to dispersion.

multiple source spectral extraction will require custom processing.

Default

extraction region encloses about 5 arcsec in the cross-dispersion direction.