

V&V Reference Report

L2 ASCDS Version : 7.6.9

Observation 1597 - L2 Version 001
Chandra X-Ray Center

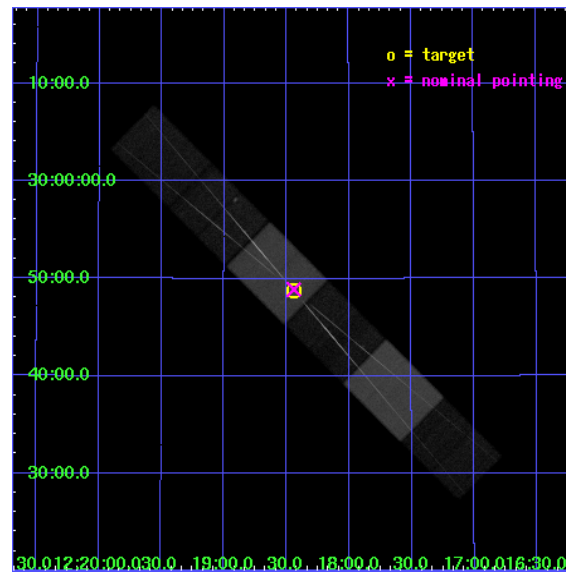
L2 Processing Date : Nov 30 2006

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1 Front

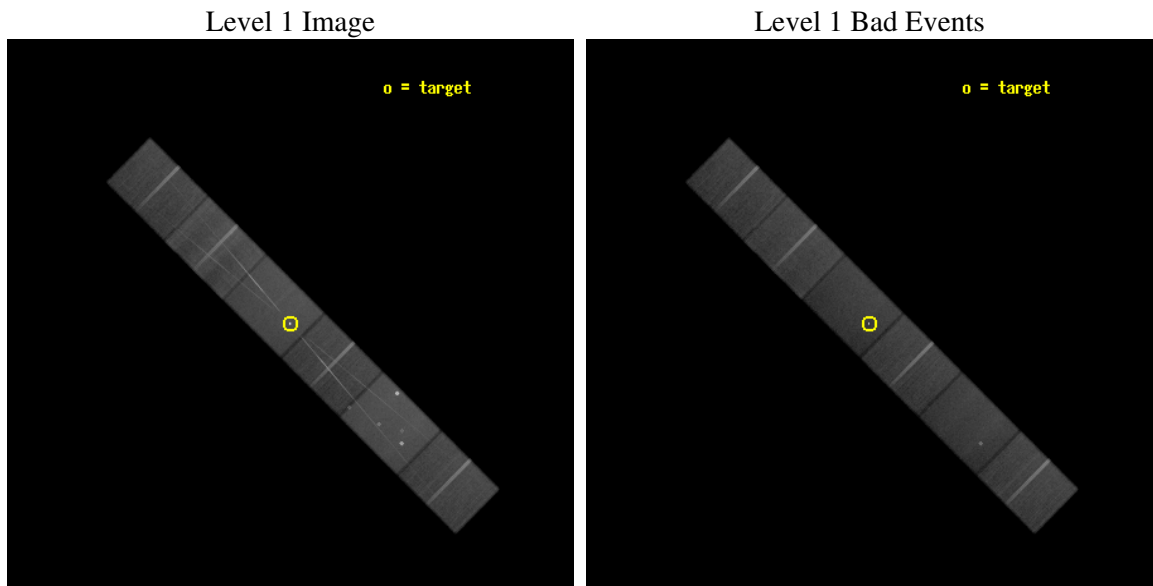
seq_num	700213
obs_id	1597
title	HETG OBSERVATIONS OF SEYFERT GALAXIES AND A QUASAR
observer	Prof. Claude Canizares
object	MKN 766
dtcycle	0
cycle	P
ra_targ	184.610417
dec_targ	29.812778
ra_nom	184.61014747361
dec_nom	29.814970236481
roll_nom	224.76538608921
revision	2
ontime	90540.0
livetime	89077.700469099
ontime4	90540.0
ontime5	90537.459009841
ontime6	90537.458989933
ontime7	90540.0
ontime8	90540.0
ontime9	90534.918019682
l2events	757571



2 OBI

2.1 OBI

2.1.1 Images

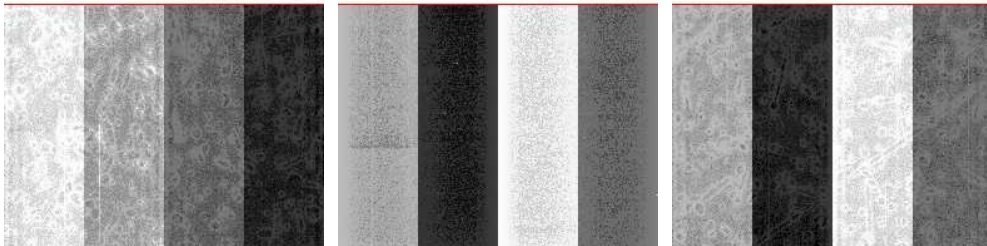


2.1.2 Bias

Chip 4

Chip 5

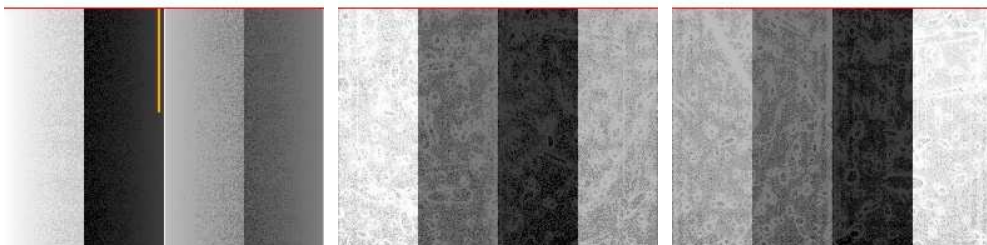
Chip 6



Chip 7

Chip 8

Chip 9



2.1.3 Parameters

obi_num	0
ascdsver	7.6.9
caldsver	3.2.4
date	2006-11-29T22:10:58
revision	2

sched_exp_time	90600.000000
ontime	90546.279485255
ontime4	90546.279465318
ontime5	90543.738495097
ontime6	90543.738455251
ontime7	90546.279485255
ontime8	90546.279465318
ontime9	90541.197485
l1events	3313022

2.1.4 Events

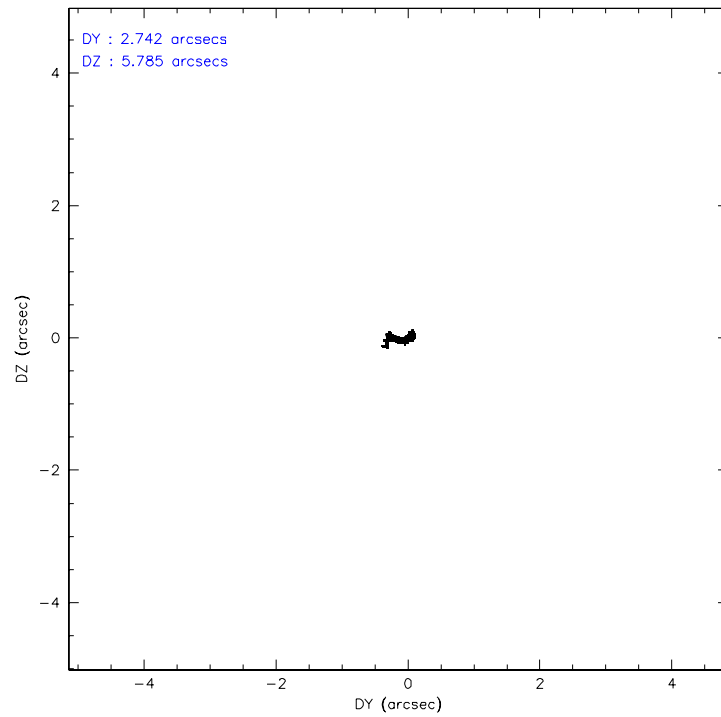
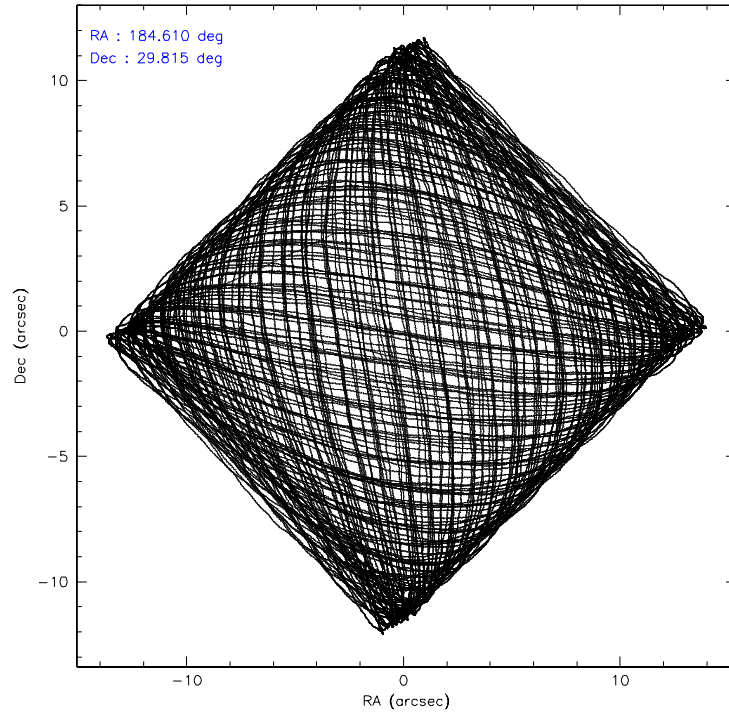
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	501304	658118	489630	617110	595969	450891
rejected events	445034	348362	408418	349009	457161	394490
rejected %	88%	52%	83%	56%	76%	87%

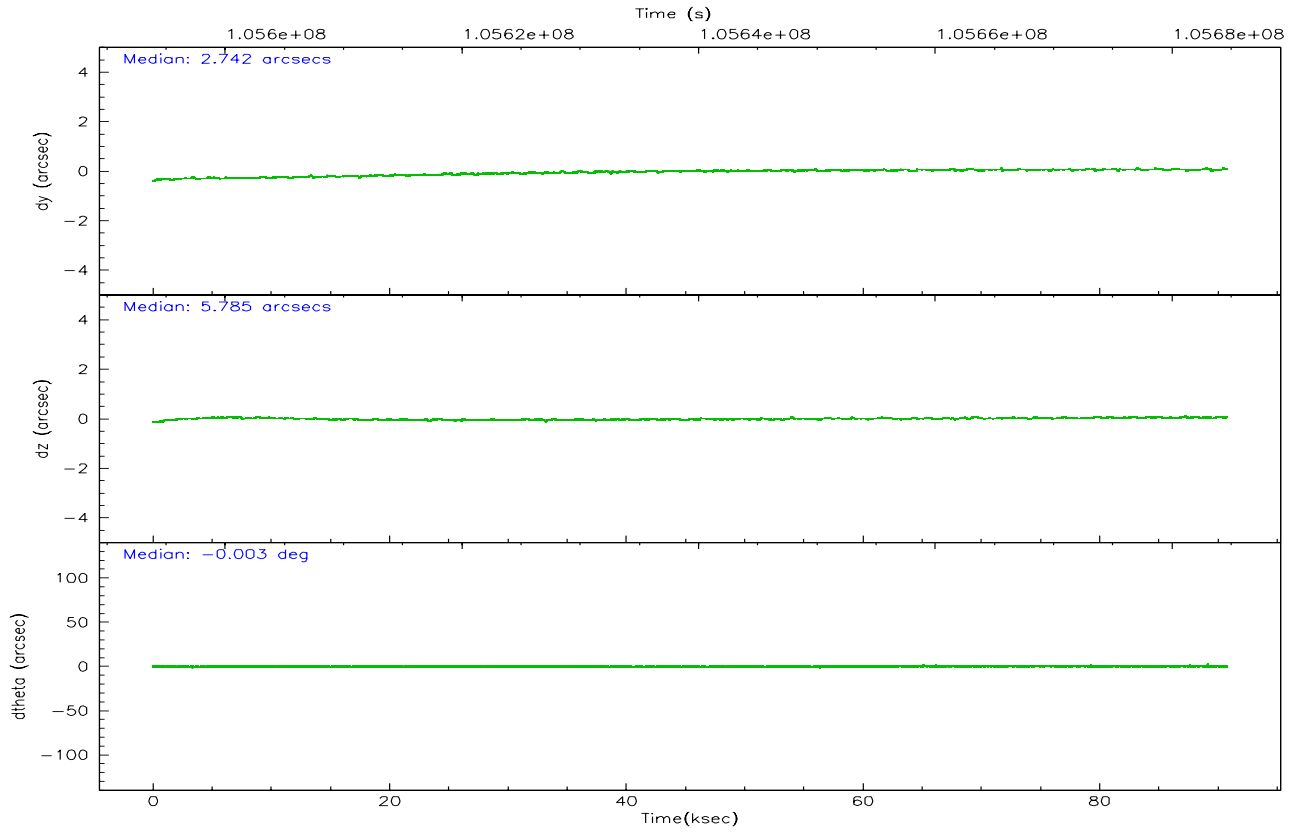
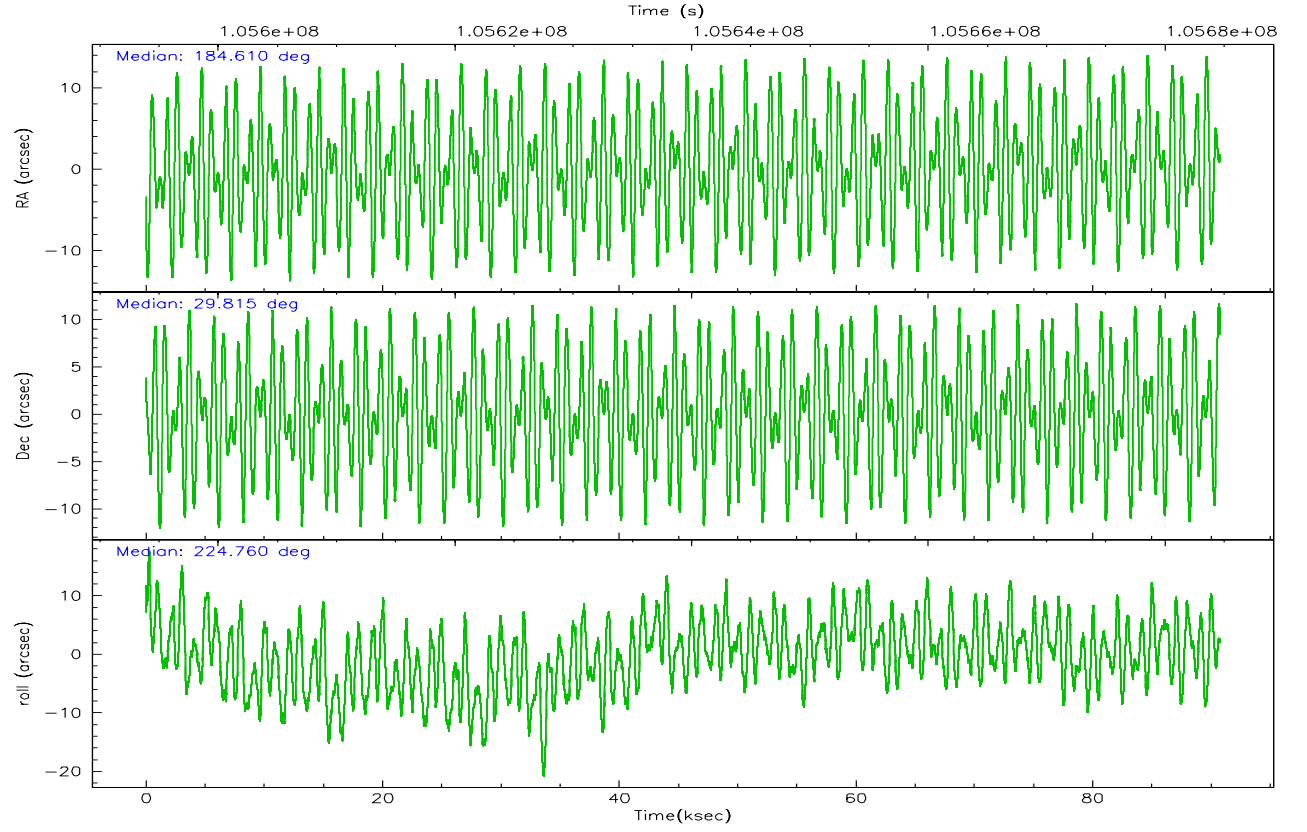
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	23716	45451	43661	22974	51260	24131
	4%	6%	8%	3%	8%	5%
grade 1 events	196	578	243	788	324	183
	0%	0%	0%	0%	0%	0%
grade 2 events	12925	93717	13526	64451	27130	10687
	2%	14%	2%	10%	4%	2%
grade 3 events	5416	8432	6606	18064	14523	5820
	1%	1%	1%	2%	2%	1%
grade 4 events	5185	7739	6583	17650	13365	5422
	1%	1%	1%	2%	2%	1%
grade 5 events	15593	31194	18326	43463	23430	18693
	3%	4%	3%	7%	3%	4%
grade 6 events	9030	154431	10839	144976	32570	10348
	1%	23%	2%	23%	5%	2%
grade 7 events	429243	316576	389846	304744	433367	375607
	85%	48%	79%	49%	72%	83%

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	184.618110	184.6101474736146	Subarray requested	CUSTOM	CUSTOM
Pointing Dec	29.841369	29.81497023648067	Subarray start row	1	1
Pointing Roll	224.604796	224.7653860892091	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	105594081.184000	105593110.8346			
Observation start date	2001-05-07T03:40:17	2001-05-07T03:25:10			
Observation end time	105684681.184000	105685450.52568			
Observation end date	2001-05-08T04:50:17	2001-05-08T05:04:10			
Read mode	TIMED	TIMED			

2.3 Aspect



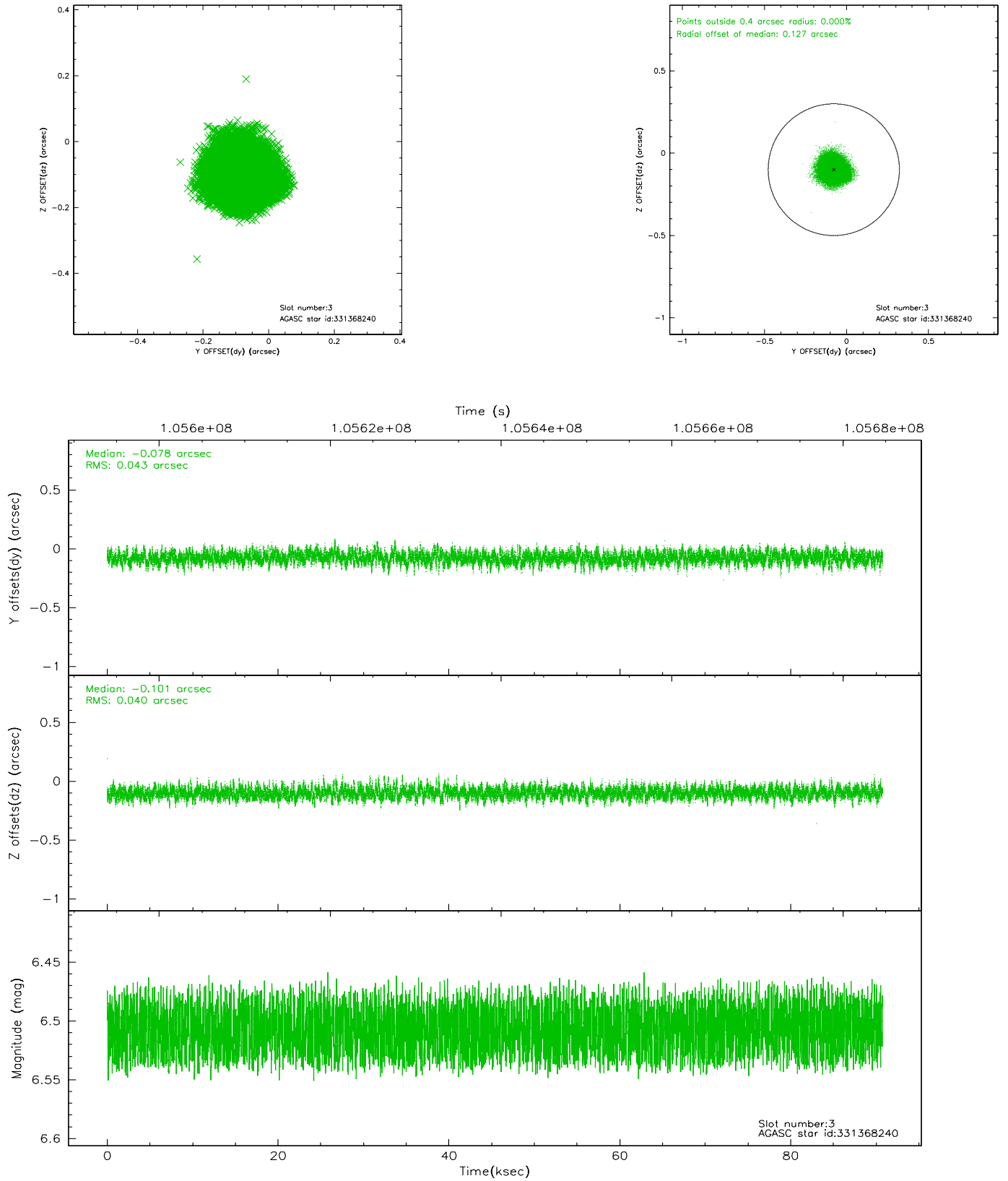


Slot Statistics

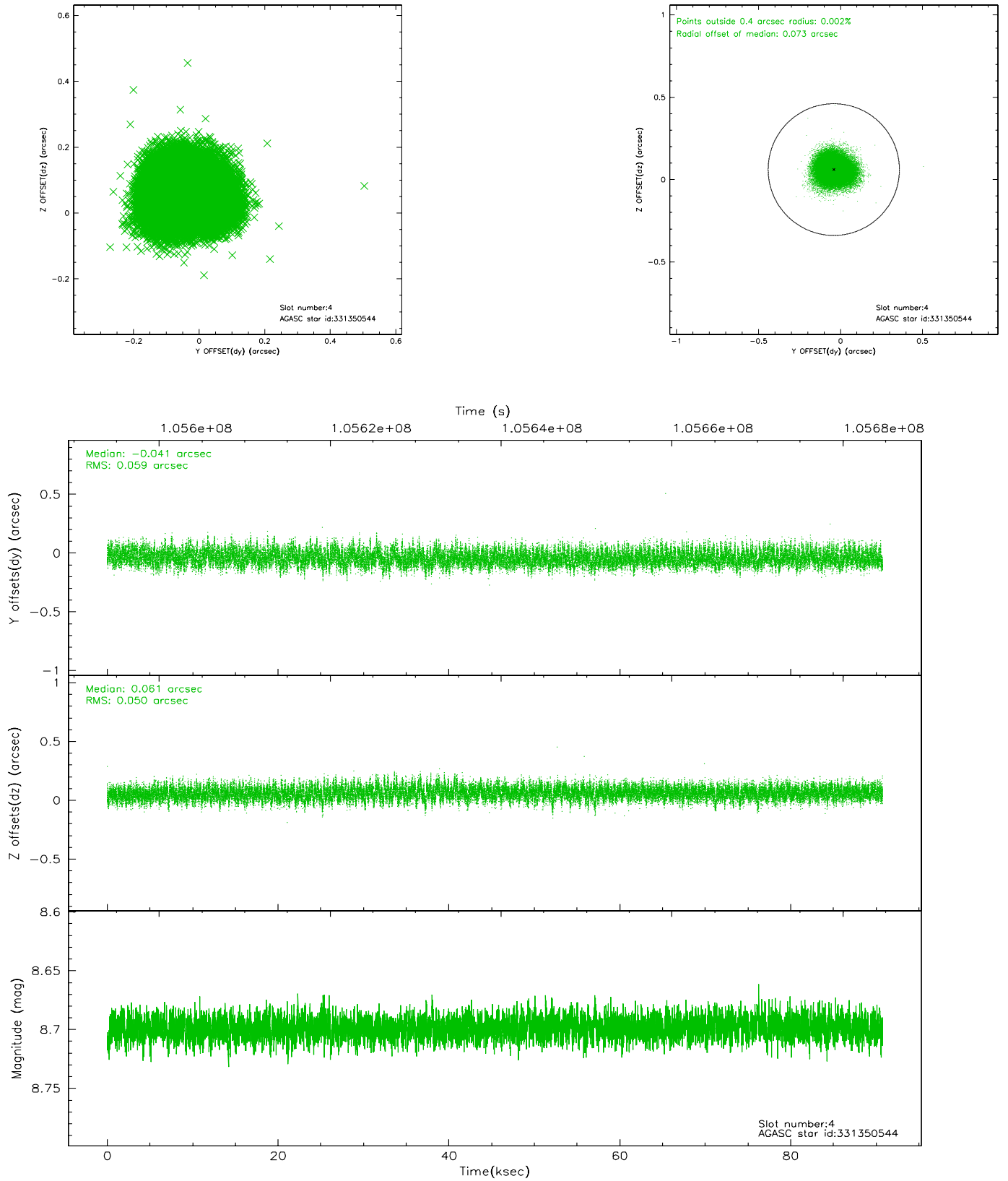
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	22143	-0.010	-0.033	0.011	0.019	0.000000	0.000000	-755.14	-1789.08
1	FID	ACIS-S-4	7.19	22139	-0.053	0.014	0.015	0.028	0.000000	0.000000	2158.14	119.49
2	FID	ACIS-S-5	7.23	22138	0.034	0.028	0.012	0.019	0.000000	0.000000	-1808.02	113.13
3	GUIDE	331368240	6.51	44275	-0.078	-0.101	0.063	0.100	184.631757	30.249046	-1061.30	-1014.47
4	GUIDE	331350544	8.70	44268	-0.041	0.061	0.083	0.132	184.879941	30.167953	-1407.03	-264.91
5	GUIDE	331352880	9.67	44190	-0.033	-0.073	0.111	0.182	184.726920	30.468207	-1825.53	-1369.33
6	GUIDE	260966192	10.11	44253	0.153	0.113	0.149	0.250	184.520973	29.027073	2275.59	1873.36
7	UNUSED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00

2.4 Star Slots

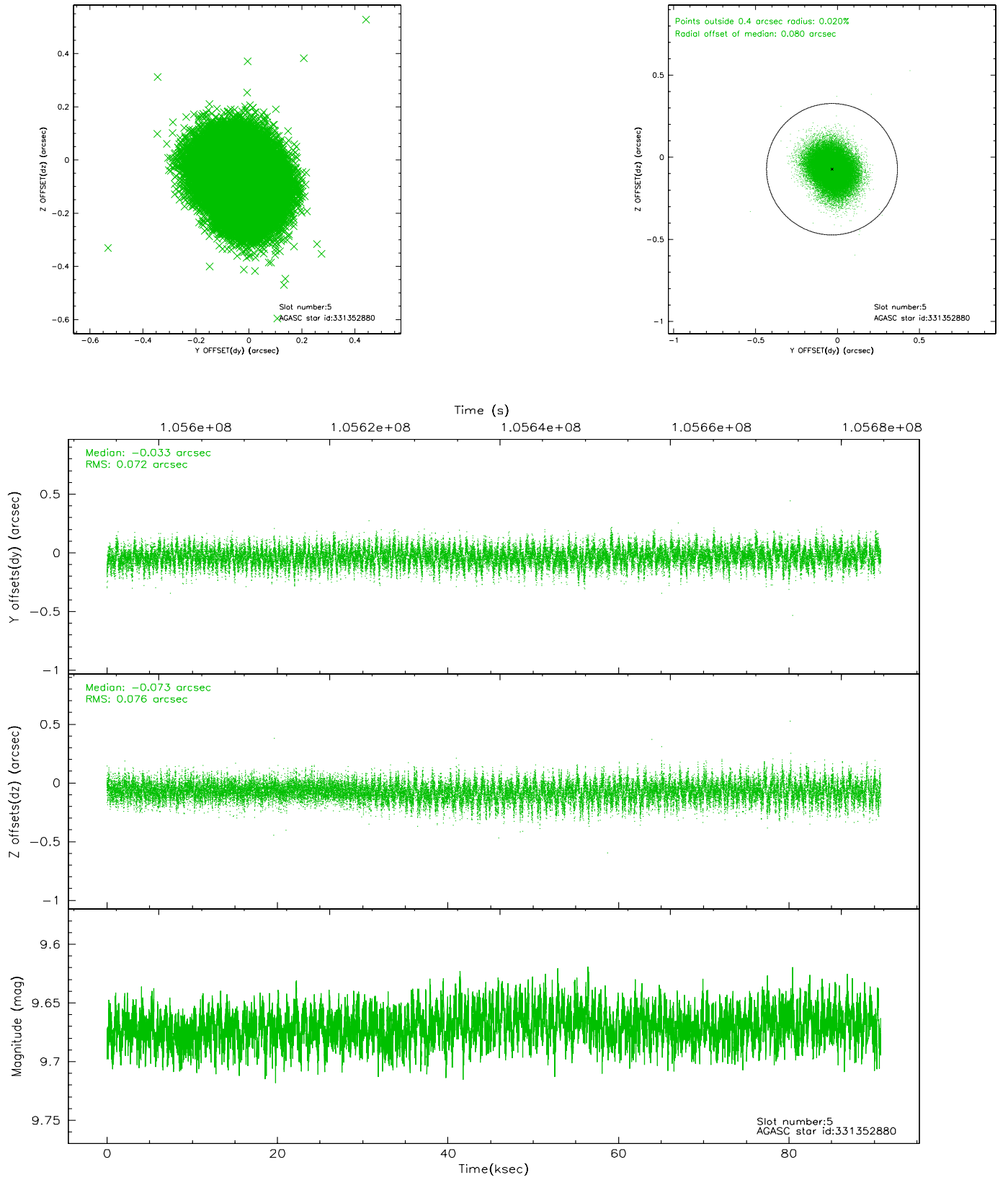
2.4.1 Slot 3



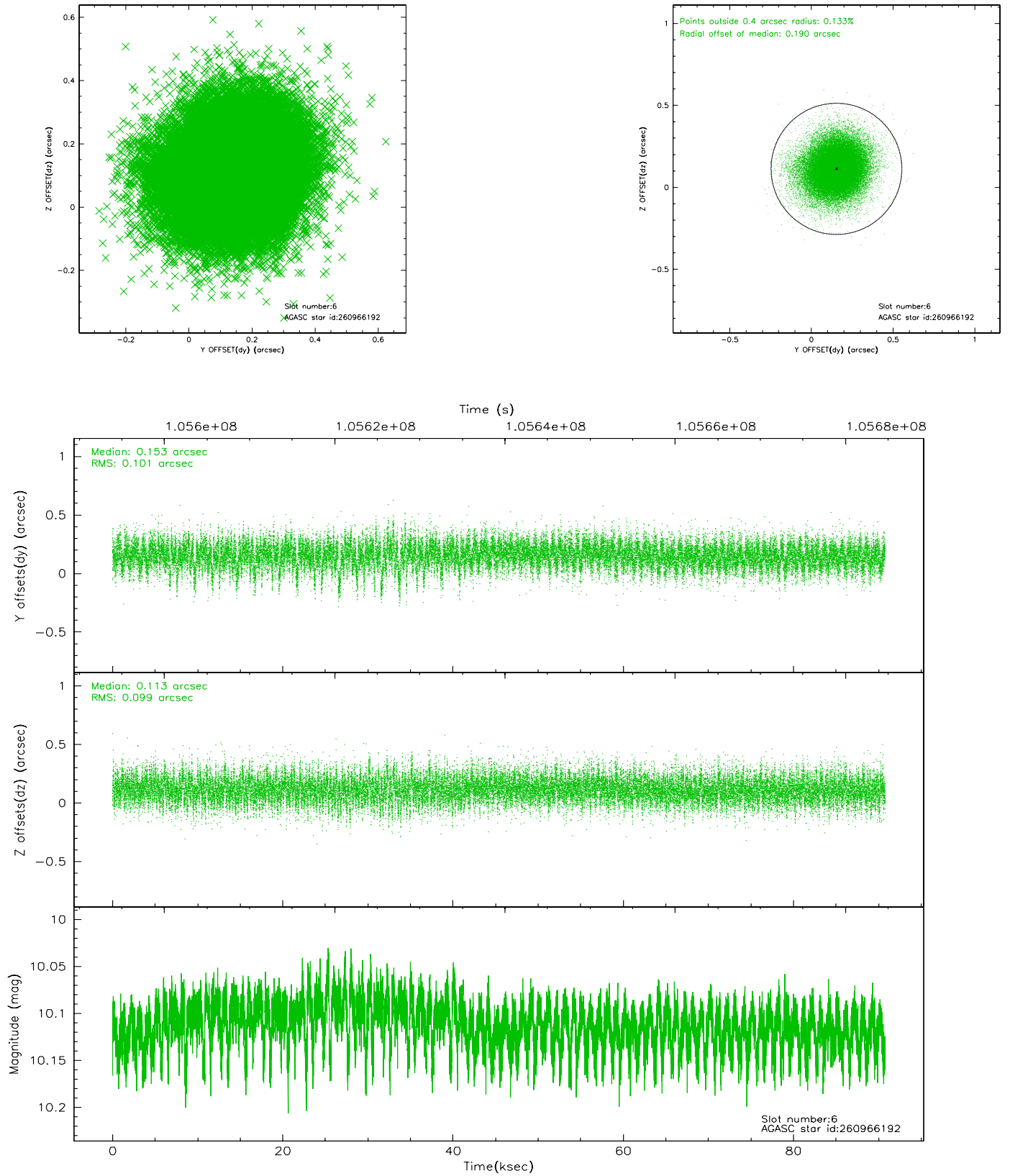
2.4.2 Slot 4



2.4.3 Slot 5

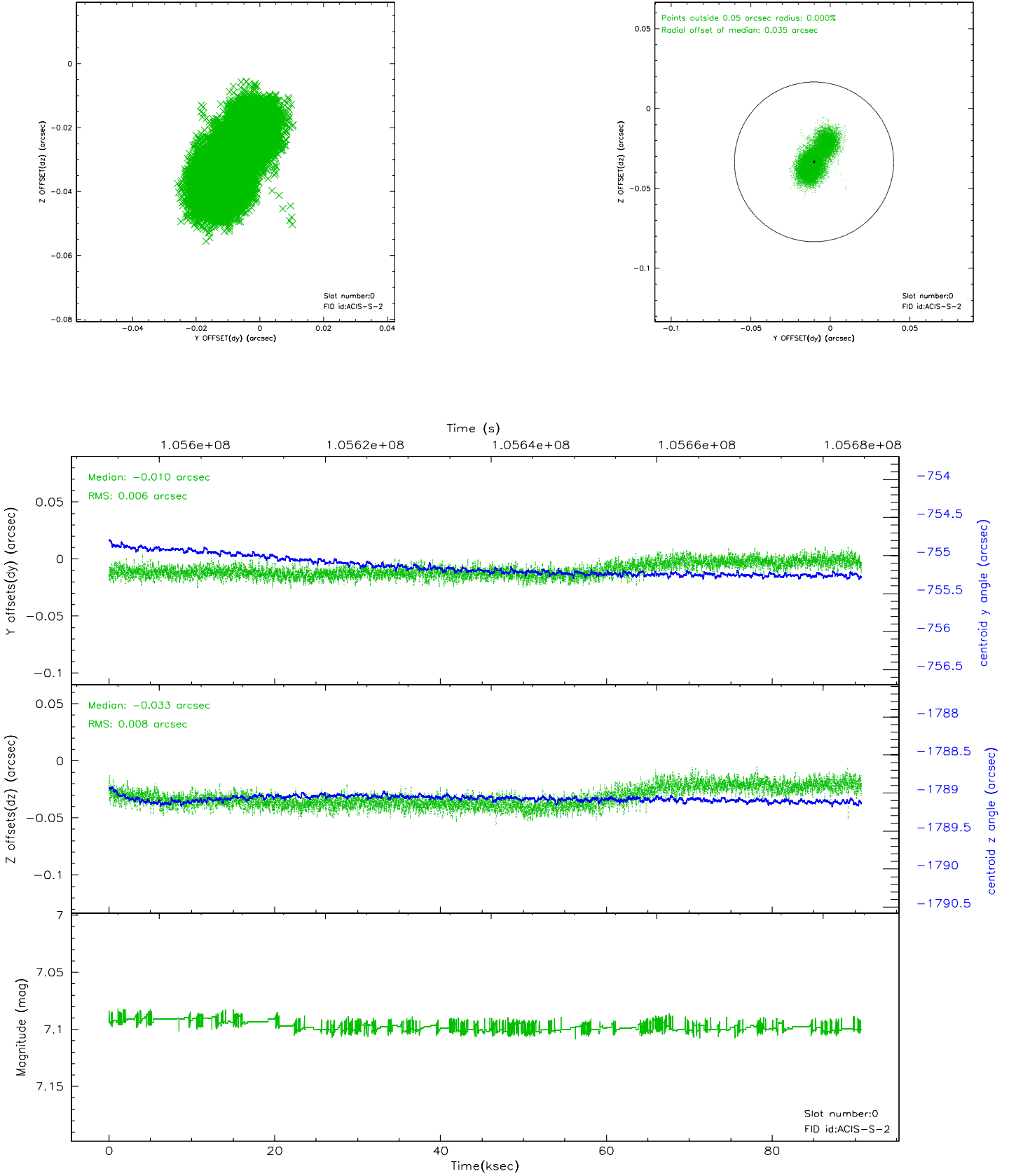


2.4.4 Slot 6

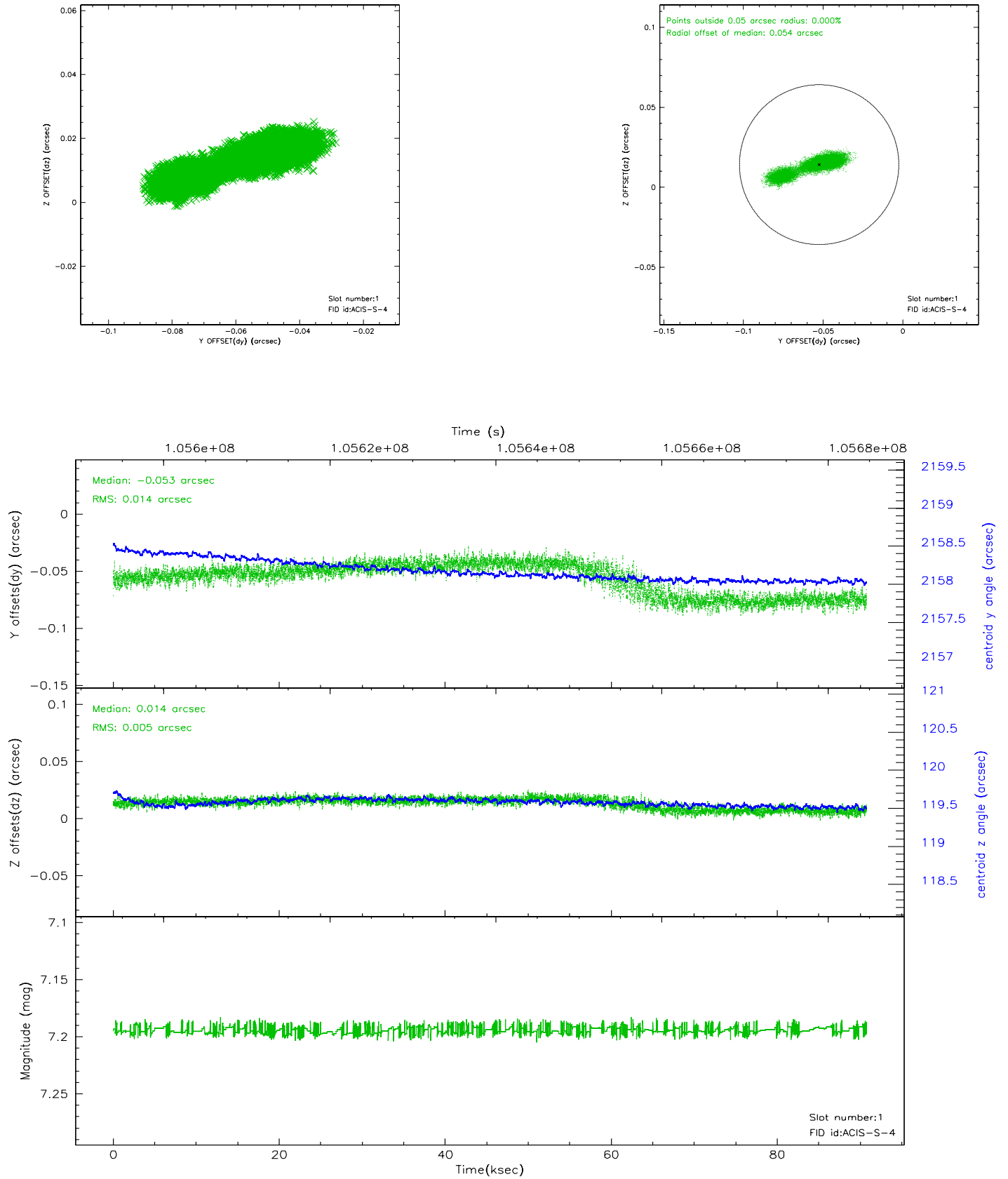


2.5 FID Slots

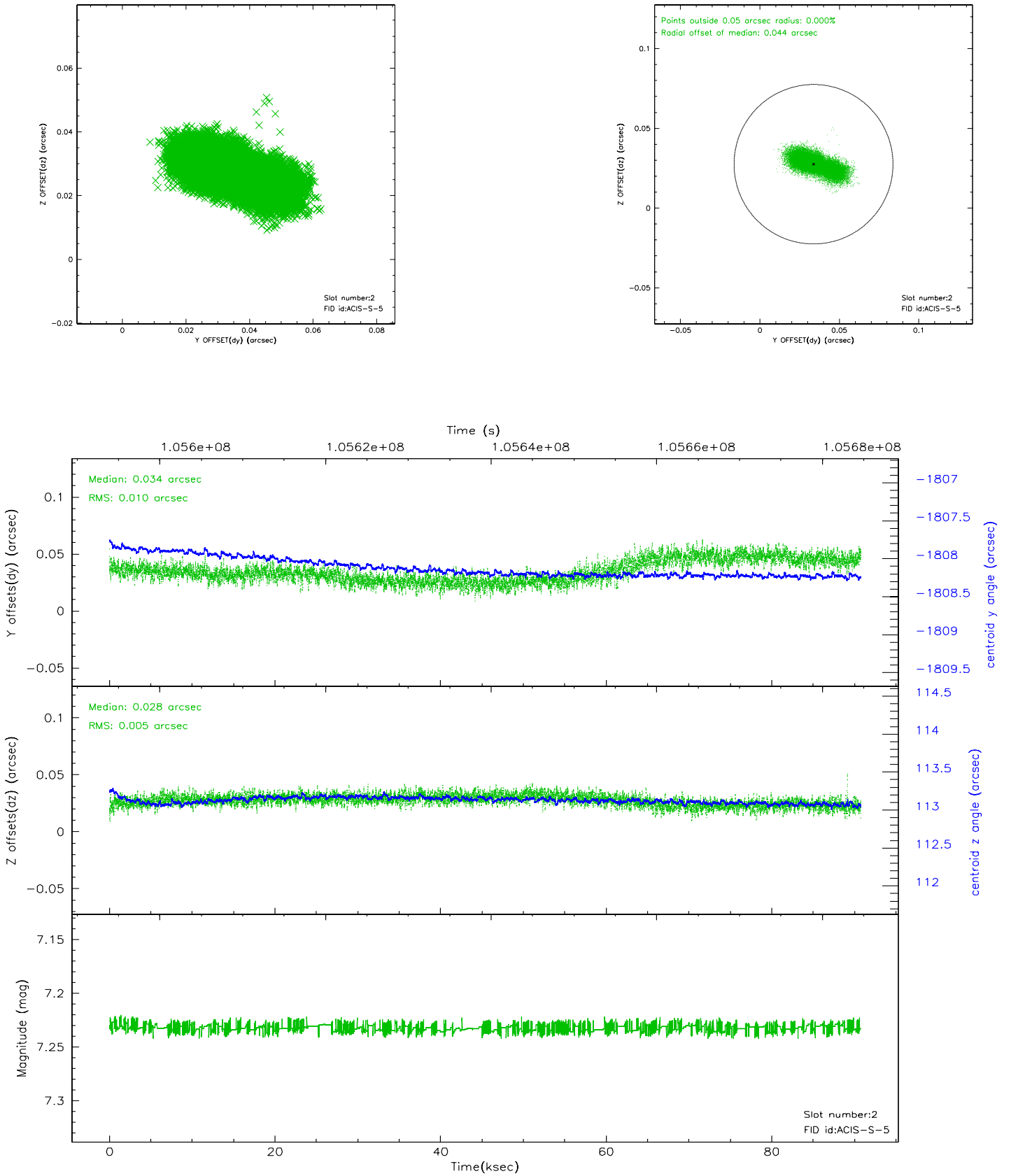
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

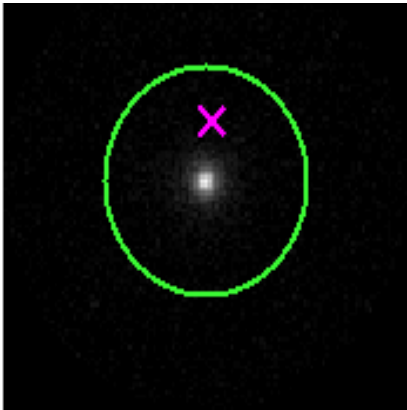


3 Gratings

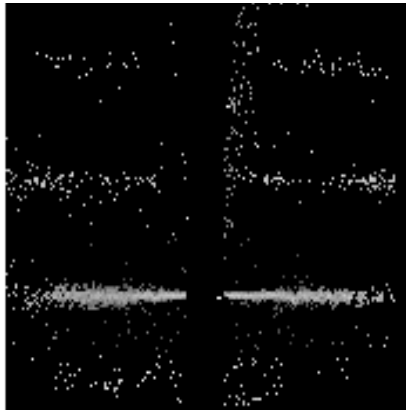
3.1 HEG Arm



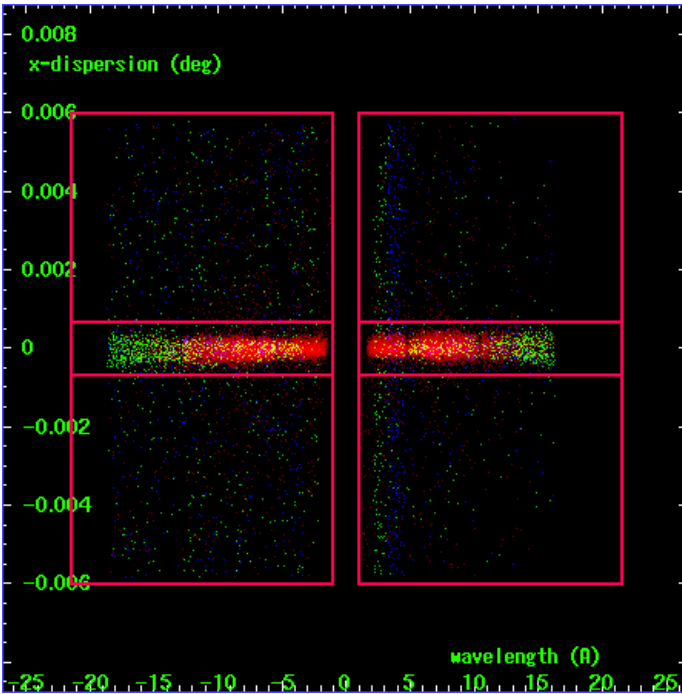
HEG Order Sort 123



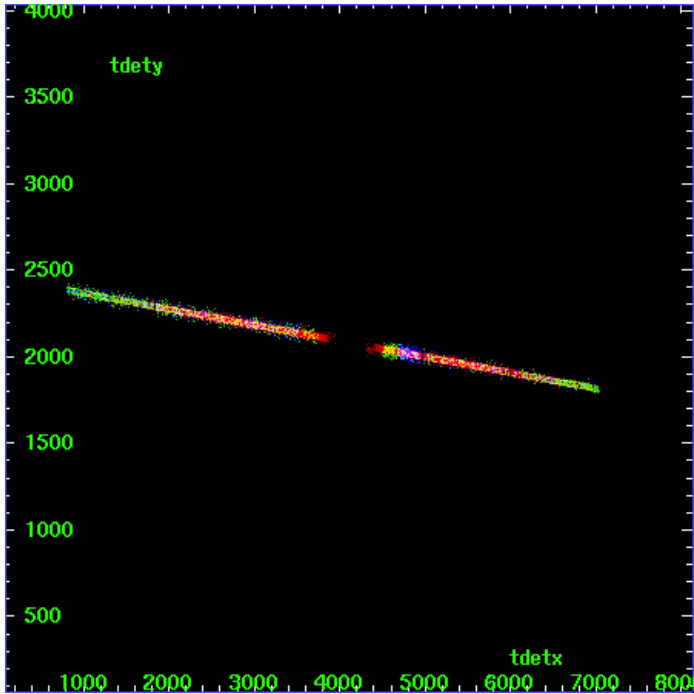
HEG Zero Order



HEG Order Sort ALL

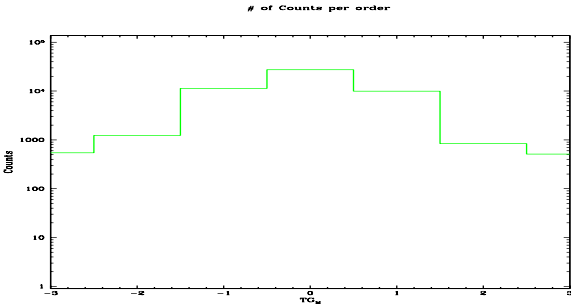


Spot Image HEG

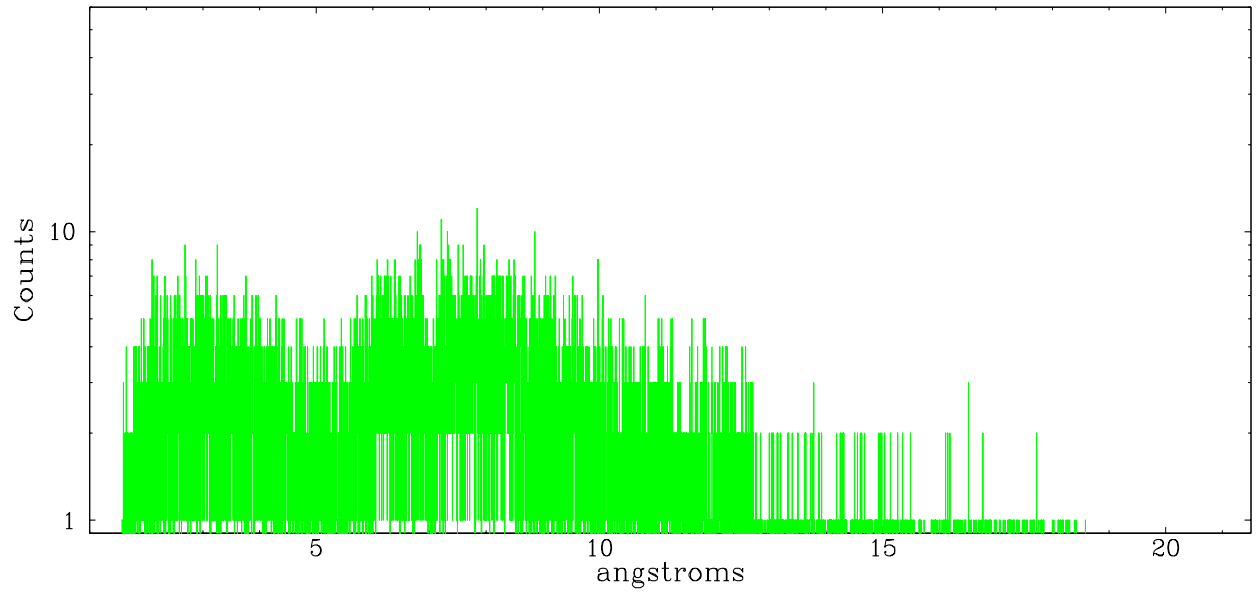


Full Detector HEG

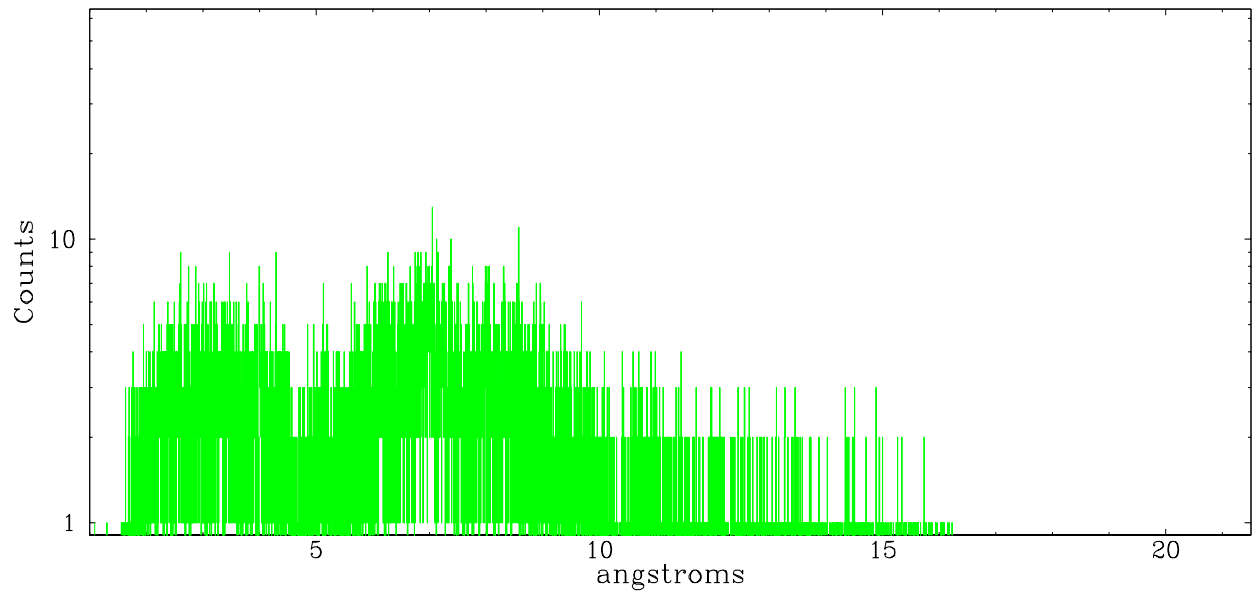
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	545	1237	11372	27269	9902	840	513



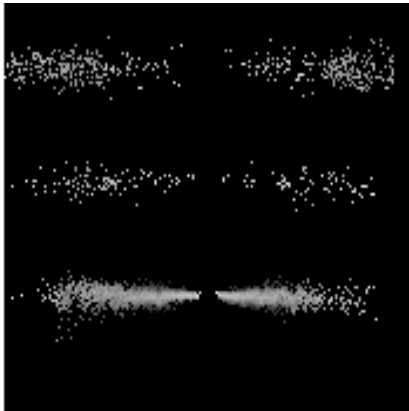
heg order -1



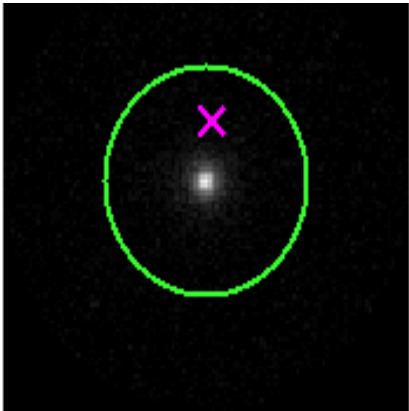
heg order +1



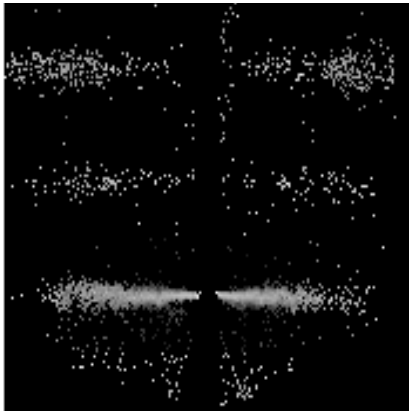
3.2 MEG Arm



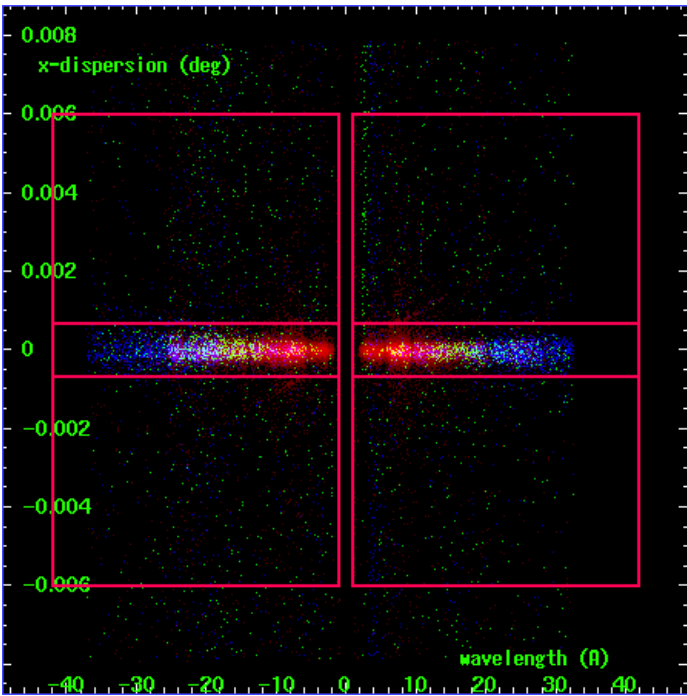
MEG Order Sort 123



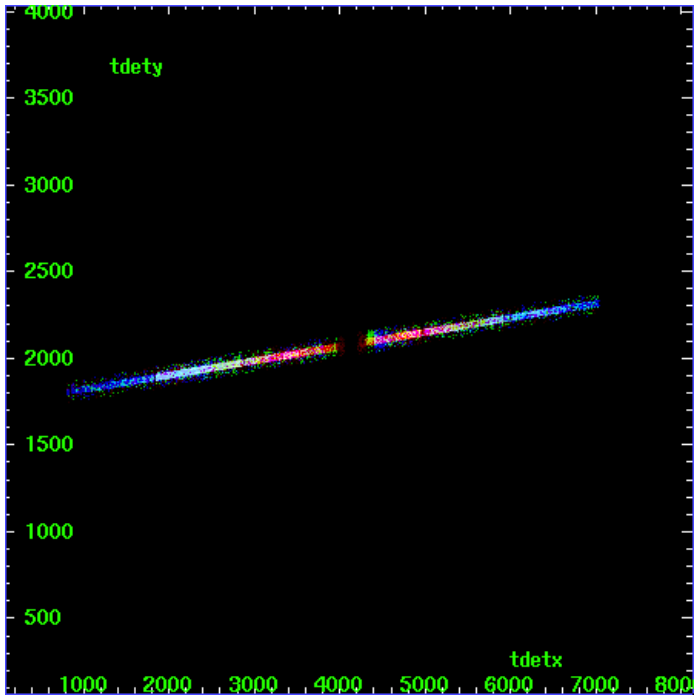
MEG Zero Order



MEG Order Sort ALL

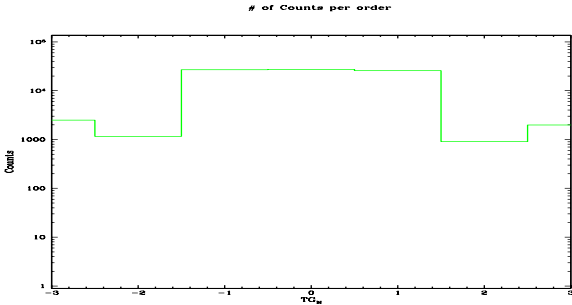


Spot Image MEG

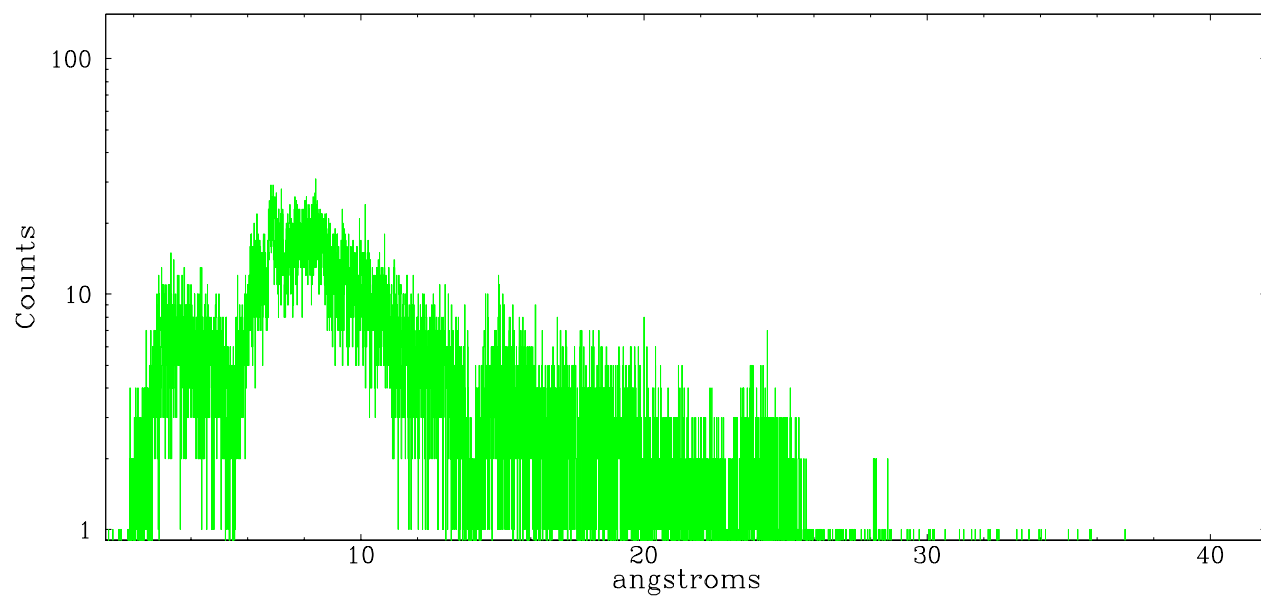


Full Detector MEG

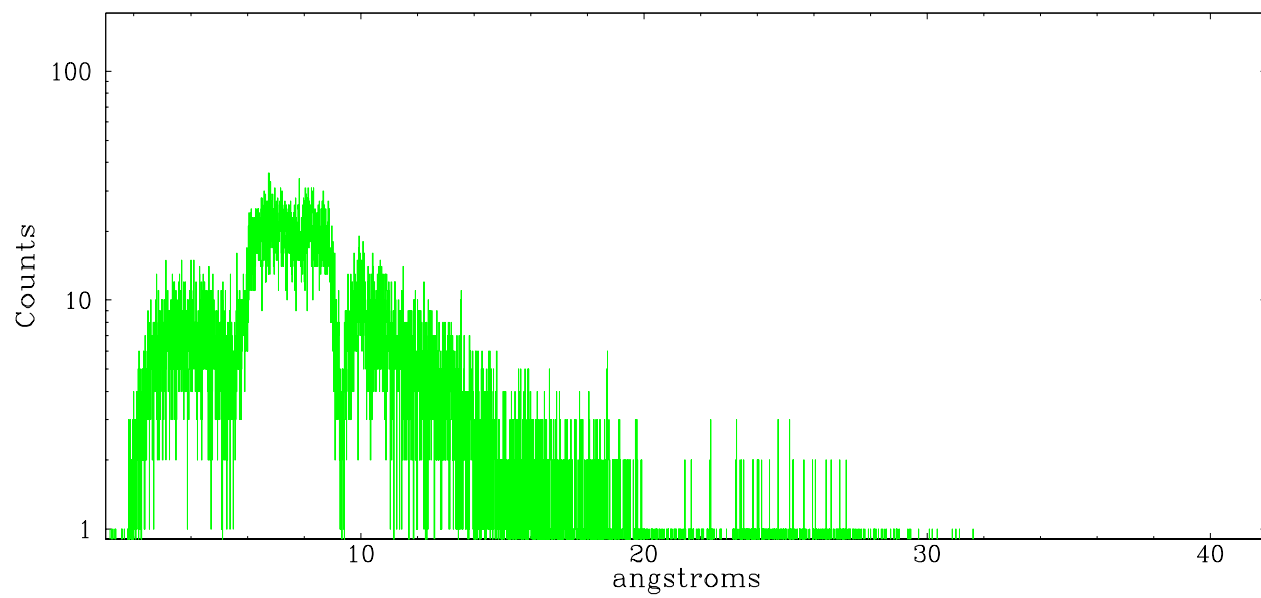
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	2494	1159	26805	27269	25742	910	1994



meg order -1



meg order +1



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2006.12.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	90.517

A.2 Comments

The guide star in slot 7 was removed from the aspect solution due to poor data quality. The aspect solution is not expected to be degraded by removing one guide star from the solution.