

V&V Reference Report

L2 ASCDS Version : 7.6.9

Observation 1018 - L2 Version 001
Chandra X-Ray Center

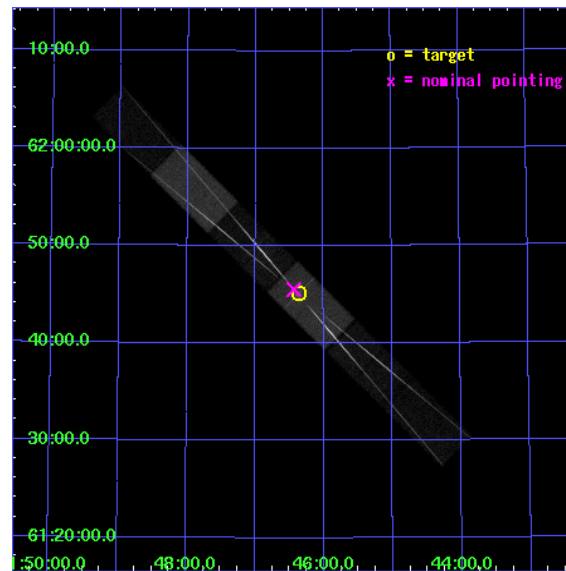
L2 Processing Date : Nov 22 2006

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1 Front

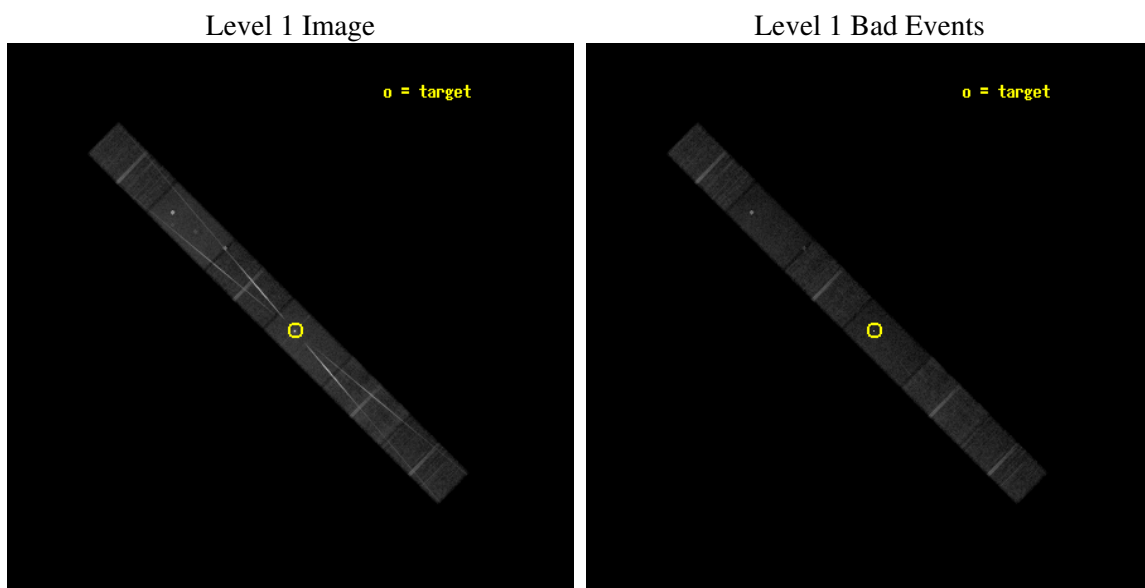
seq_num	400096
obs_id	1018
title	THE ANOMALOUS X-RAY PULSAR 4U 0142+61
observer	Prof. Claude Canizares
object	4U 0142+61
dtcycle	0
cycle	P
ra_targ	26.591667
dec_targ	61.753333
ra_nom	26.608758327447
dec_nom	61.758860119576
roll_nom	44.59029036375
revision	2
ontime	25365.517987654
livetime	24800.076249173
ontime4	25365.517957717
ontime5	25365.517987654
ontime6	25369.199957997
ontime7	25365.517987654
ontime8	25369.199957997
ontime9	25365.517987654
l2events	277908



2 OBI

2.1 OBI

2.1.1 Images

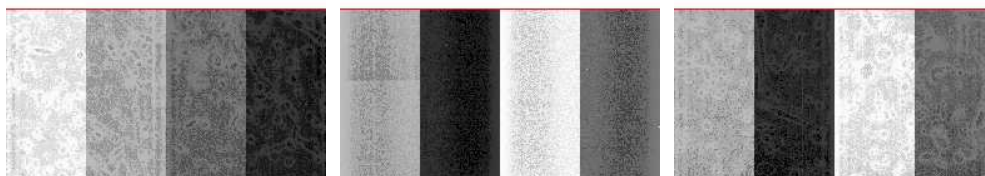


2.1.2 Bias

Chip 4

Chip 5

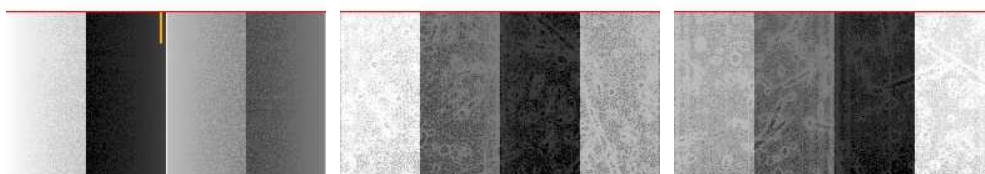
Chip 6



Chip 7

Chip 8

Chip 9



2.1.3 Parameters

obi_num	0
ascdsver	7.6.9
caldsver	3.2.4
date	2006-11-21T20:37:02
revision	2

sched_exp_time	25000.000000
ontime	25367.350586966
ontime4	25367.350557029
ontime5	25367.350586966
ontime6	25371.032557309
ontime7	25367.350586966
ontime8	25371.032557309
ontime9	25367.350586966
l1events	818725

2.1.4 Events

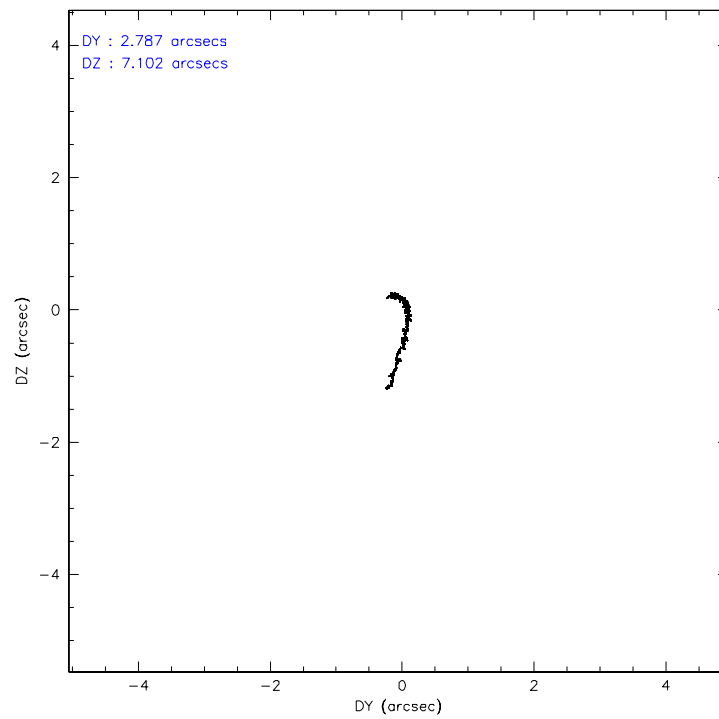
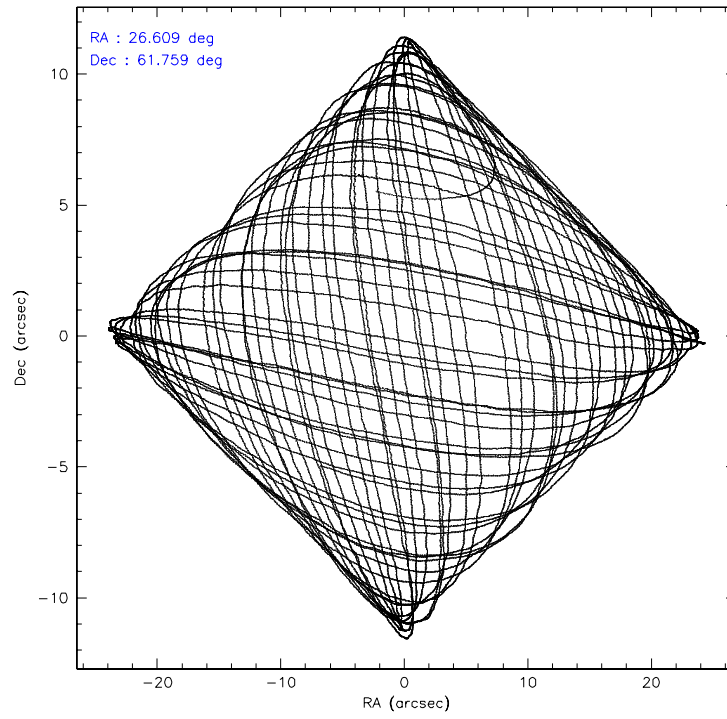
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	106554	143834	148286	168948	152577	98526
rejected events	92863	71585	84825	77136	96321	81966
rejected %	87%	49%	57%	45%	63%	83%

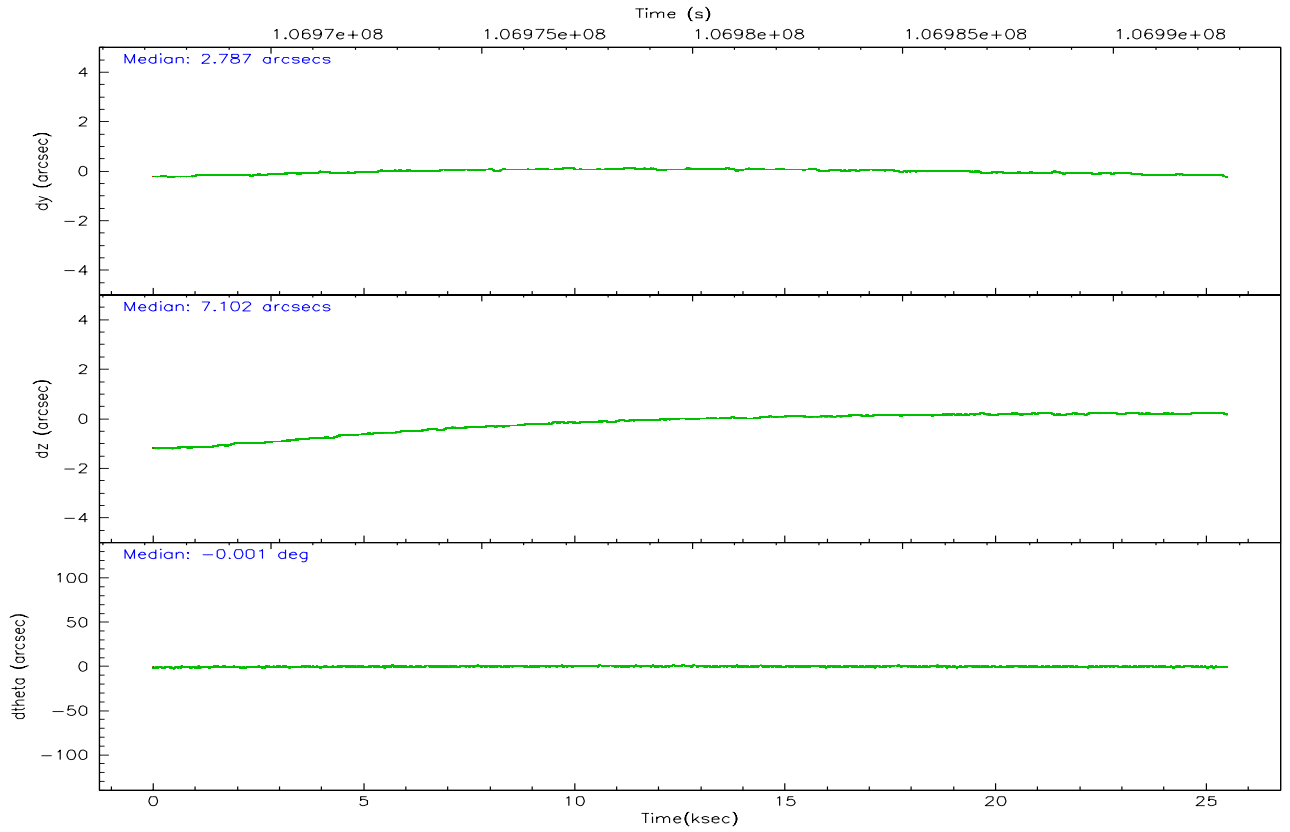
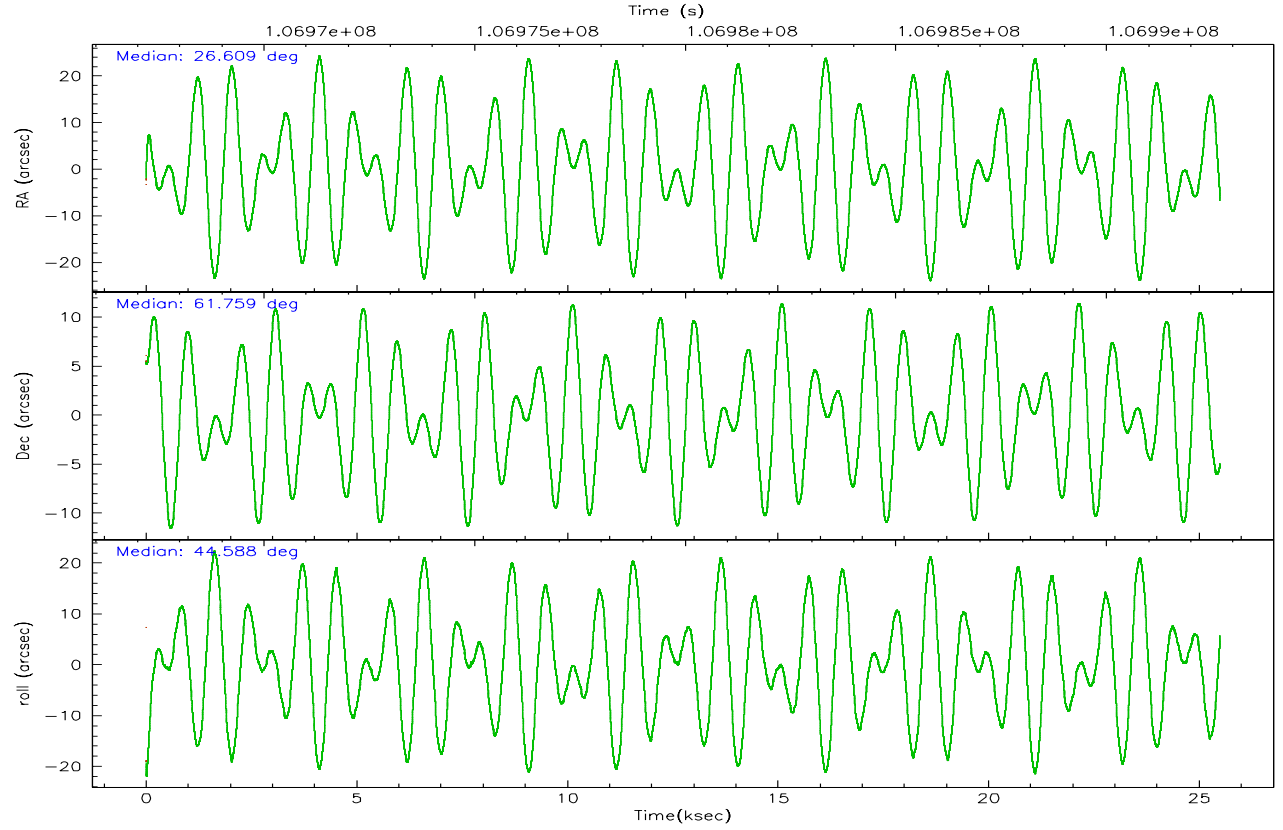
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	6385	8866	46449	12119	33667	8686
	5%	6%	31%	7%	22%	8%
grade 1 events	35	285	214	334	139	41
	0%	0%	0%	0%	0%	0%
grade 2 events	2776	24143	7826	22343	8203	2759
	2%	16%	5%	13%	5%	2%
grade 3 events	1357	3381	3043	8073	3813	1478
	1%	2%	2%	4%	2%	1%
grade 4 events	1305	3024	2983	7901	3570	1413
	1%	2%	2%	4%	2%	1%
grade 5 events	2931	8574	3621	10275	4563	3626
	2%	5%	2%	6%	2%	3%
grade 6 events	1869	32844	3165	41381	7005	2226
	1%	22%	2%	24%	4%	2%
grade 7 events	89896	62717	80985	66522	91617	78297
	84%	43%	54%	39%	60%	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	26.593995	26.60875832744715	Subarray requested	CUSTOM	CUSTOM
Pointing Dec	61.732455	61.75886011957609	Subarray start row	1	1
Pointing Roll	44.446677	44.59029036375046	Subarray row count	542	542
SIM focus pos (mm)	-0.684267	-0.6828225247311905	Alternating exposures requested	N	N
SIM defocus (mm)	0	0.001444936568705701	Primary exposure time	0.000000	1.8
SIM translation stage pos (mm)	-184.532523	-184.52811429679			
SIM translation stage offset (mm)	-5.6	-5.604408286217847			
Observation start time	106967697.184000	106966585.26296			
Observation start date	2001-05-23T01:13:53	2001-05-23T00:56:25			
Observation end time	106992697.184000	106993601.70151			
Observation end date	2001-05-23T08:10:33	2001-05-23T08:26:41			
Read mode	TIMED	TIMED			

2.3 Aspect



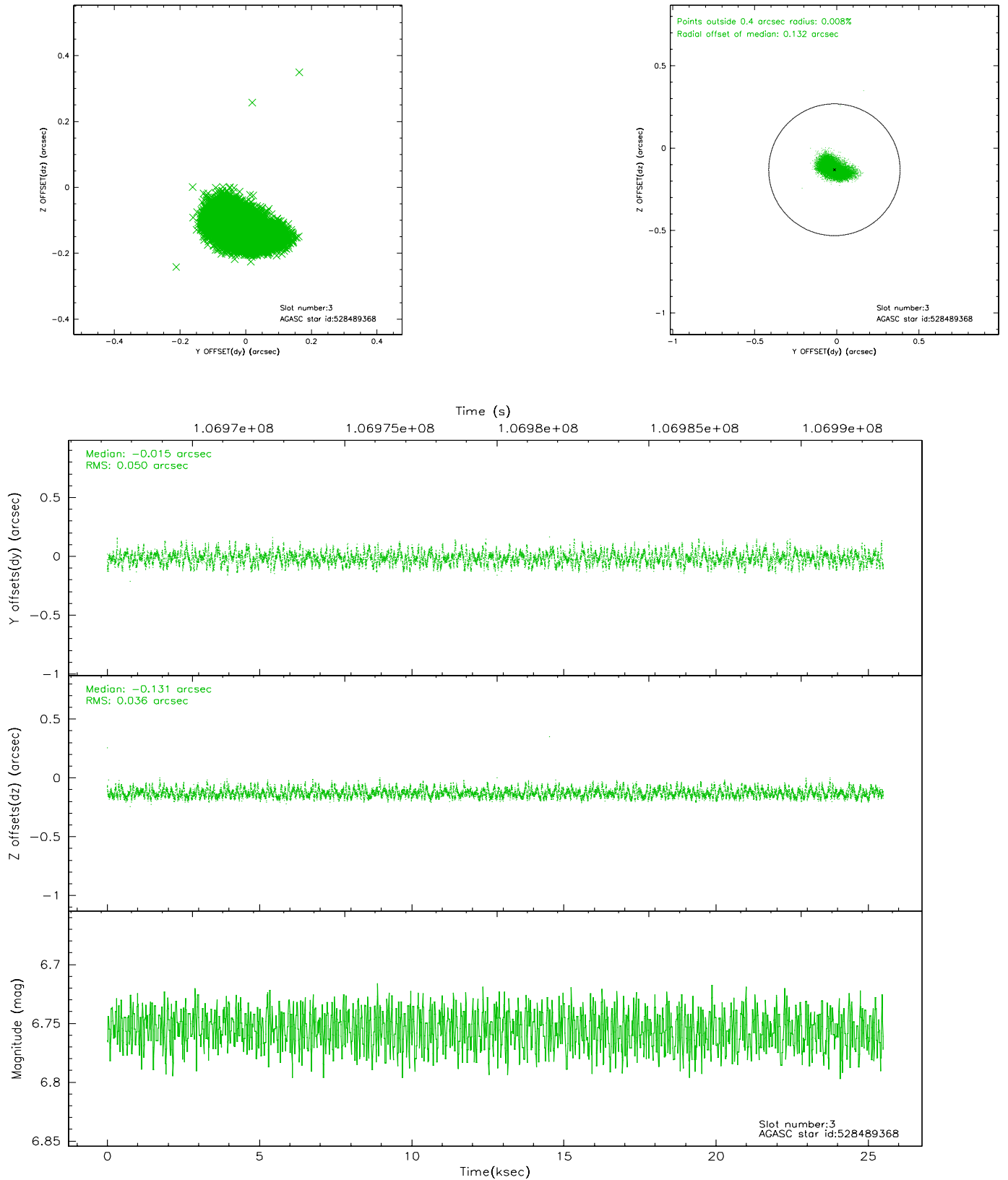


Slot Statistics

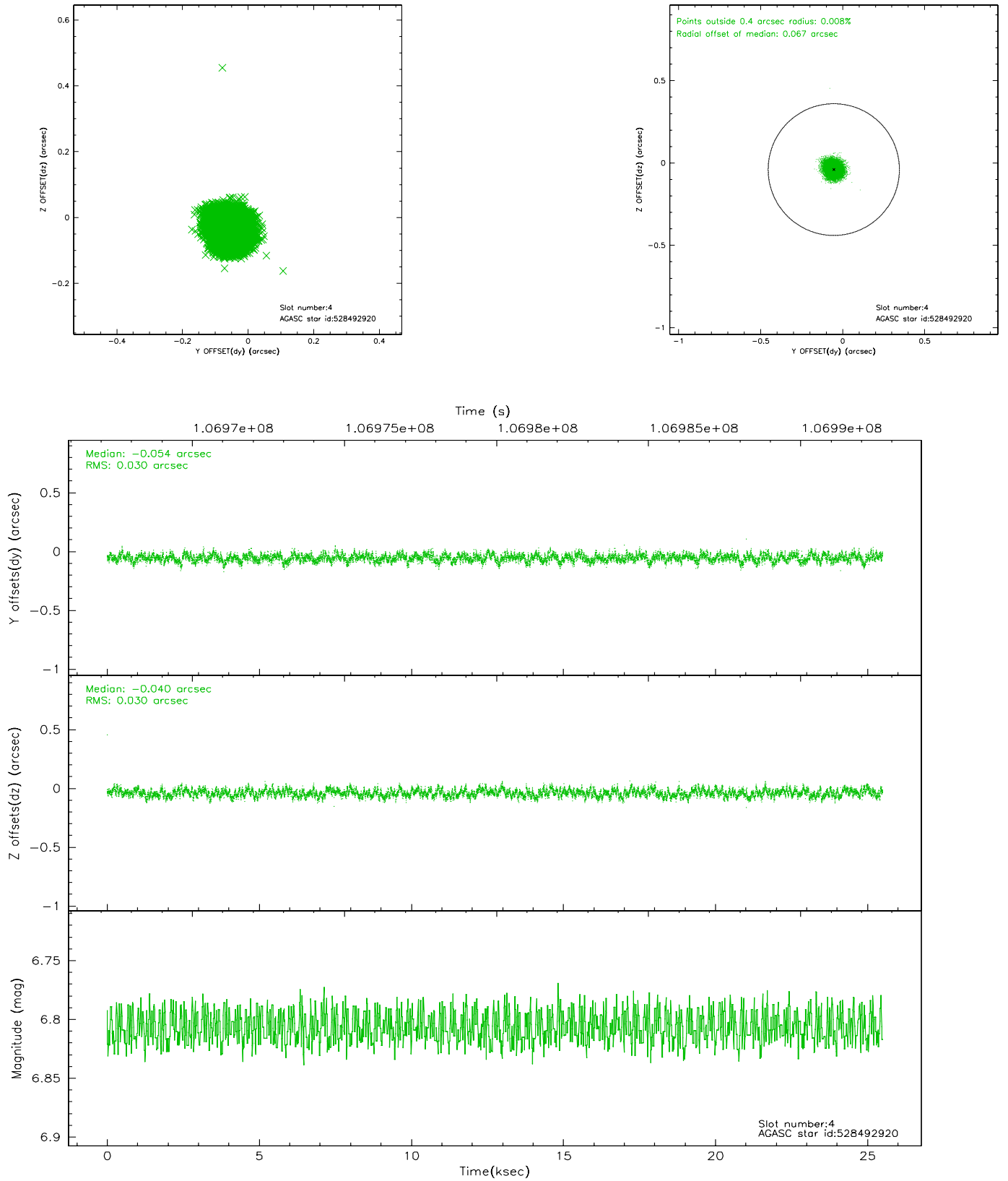
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-3	7.36	6219	-0.030	0.048	0.016	0.043	0.000000	0.000000	58.07	-1972.63
1	FID	ACIS-S-5	7.23	6218	0.055	-0.011	0.007	0.012	0.000000	0.000000	-1807.99	58.27
2	FID	ACIS-S-6	7.40	6219	-0.049	-0.027	0.014	0.038	0.000000	0.000000	406.46	702.21
3	GUIDE	528489368	6.75	12436	-0.015	-0.131	0.066	0.107	25.743005	61.421072	-1824.96	233.74
4	GUIDE	528492920	6.81	12437	-0.054	-0.040	0.045	0.072	26.048398	61.849802	-363.70	954.36
5	GUIDE	528494712	7.09	12434	-0.020	0.116	0.039	0.063	26.522817	60.993527	-1951.95	-1810.78
6	GUIDE	529024856	8.79	12436	-0.016	-0.051	0.062	0.097	26.625085	62.150671	1090.94	1039.21
7	GUIDE	529020200	9.46	12432	0.106	0.101	0.086	0.139	26.674470	62.603538	2290.87	2146.91

2.4 Star Slots

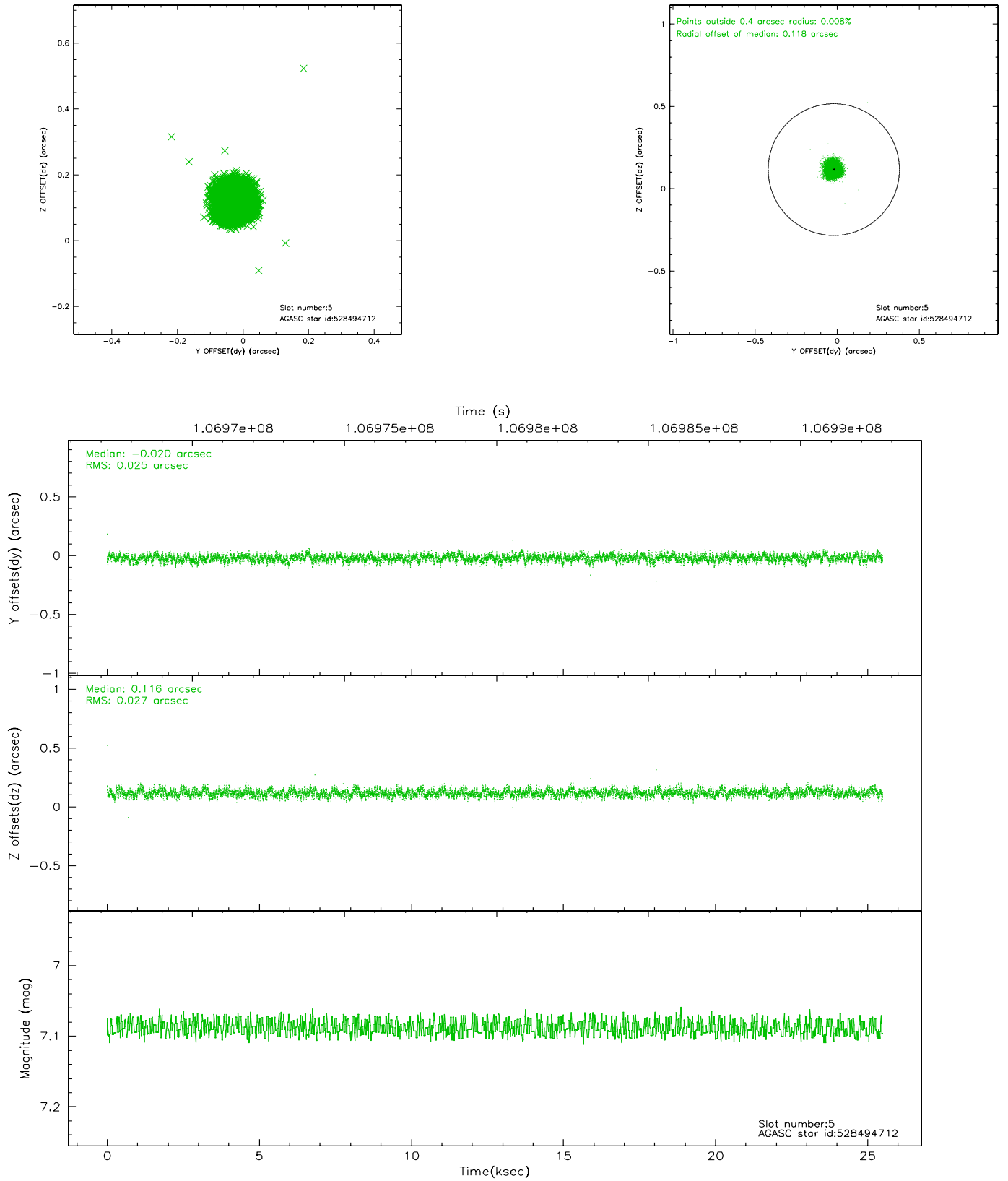
2.4.1 Slot 3



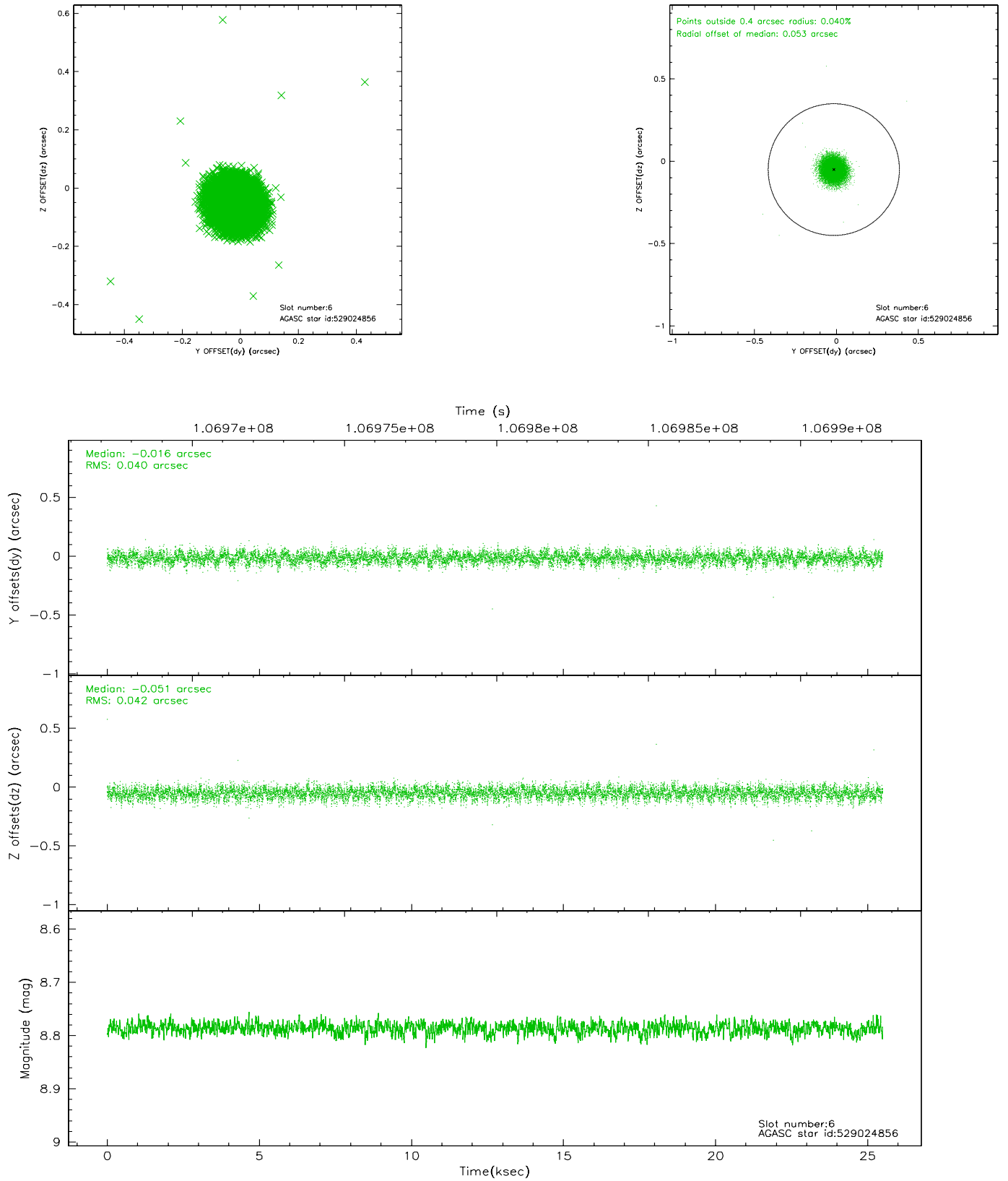
2.4.2 Slot 4



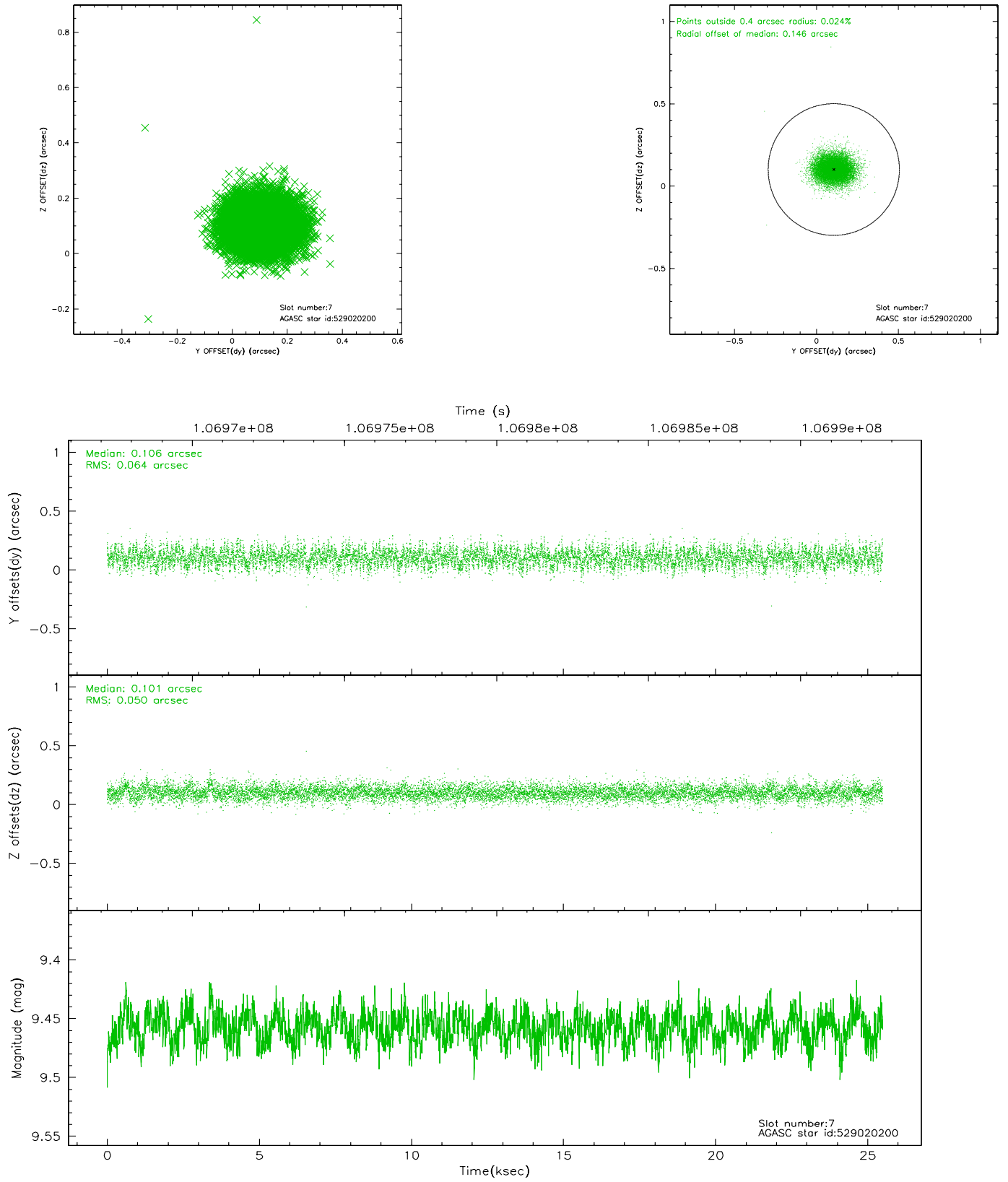
2.4.3 Slot 5



2.4.4 Slot 6

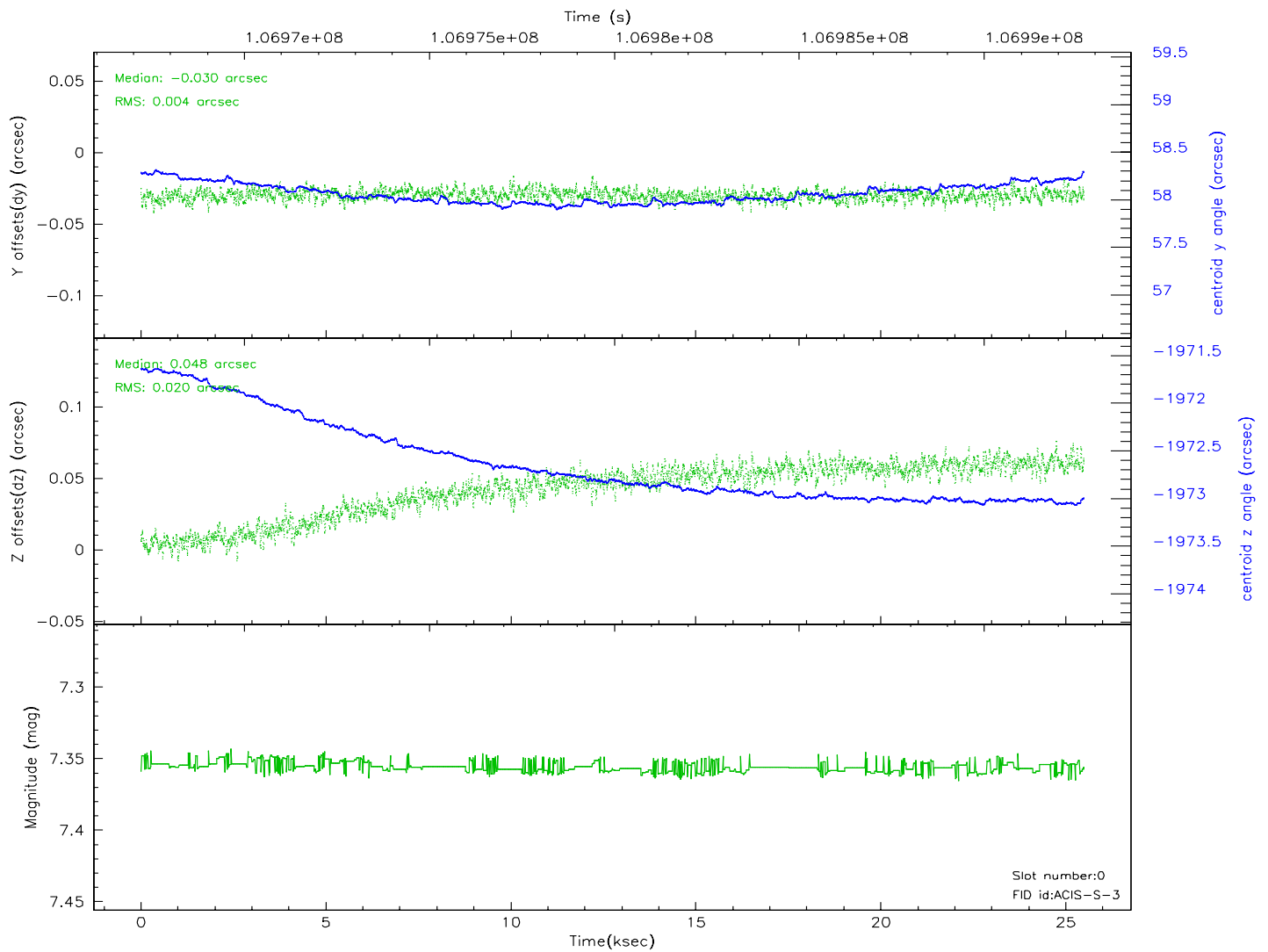
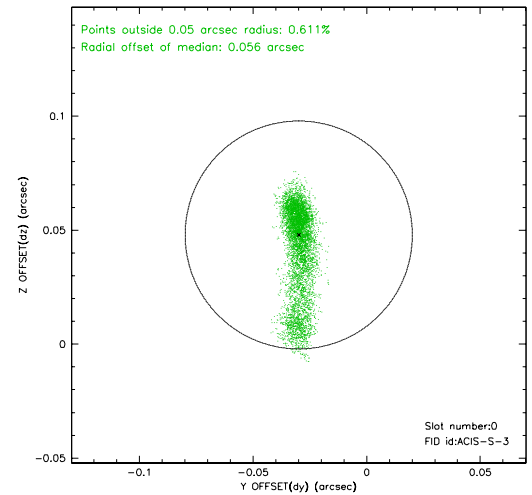
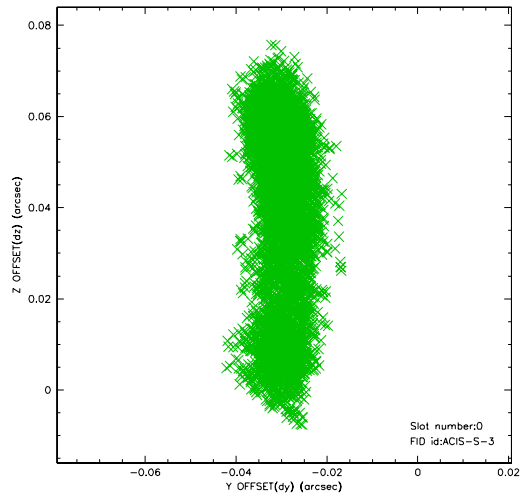


2.4.5 Slot 7

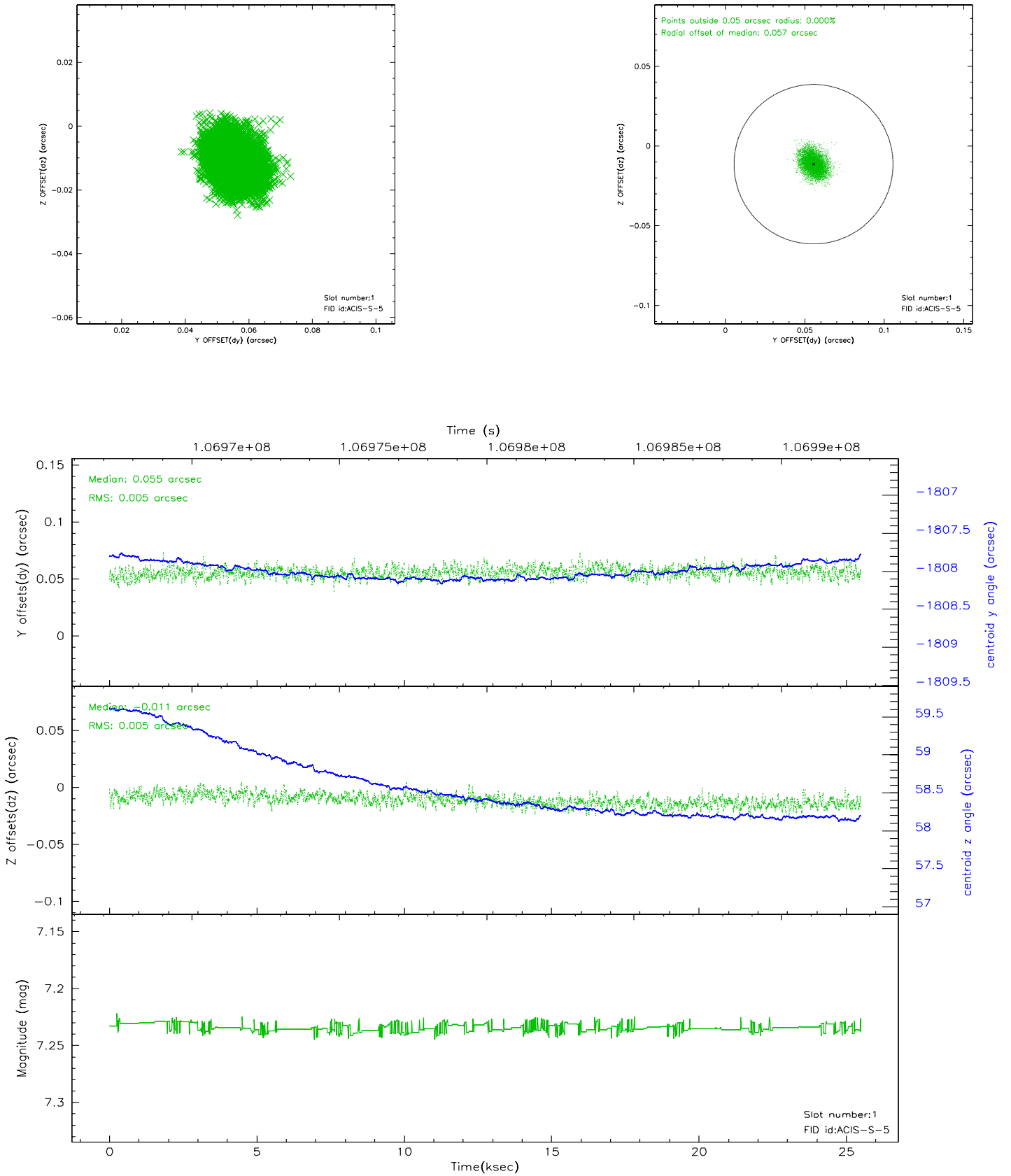


2.5 FID Slots

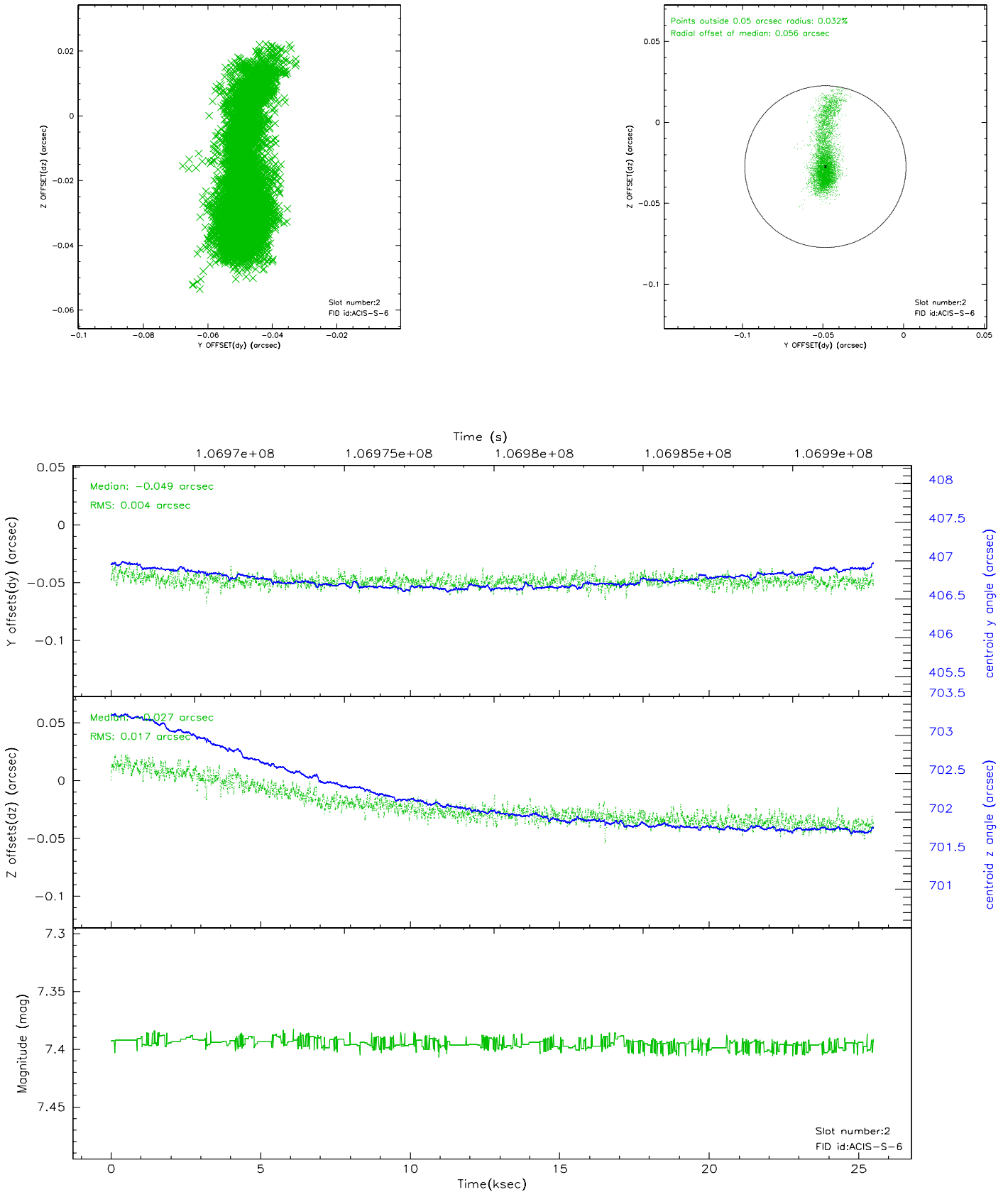
2.5.1 Slot 0



2.5.2 Slot 1

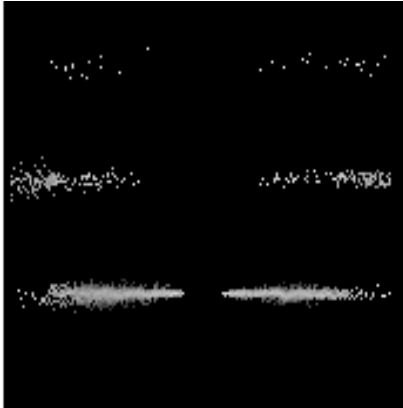


2.5.3 Slot 2

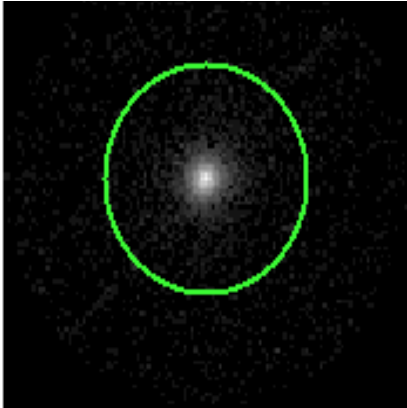


3 Gratings

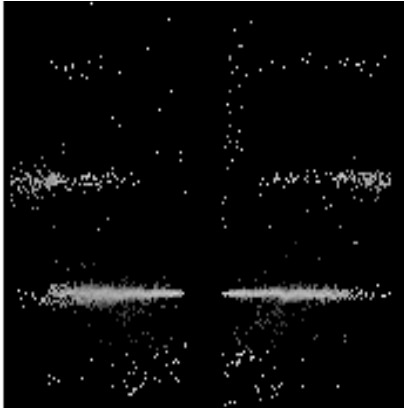
3.1 HEG Arm



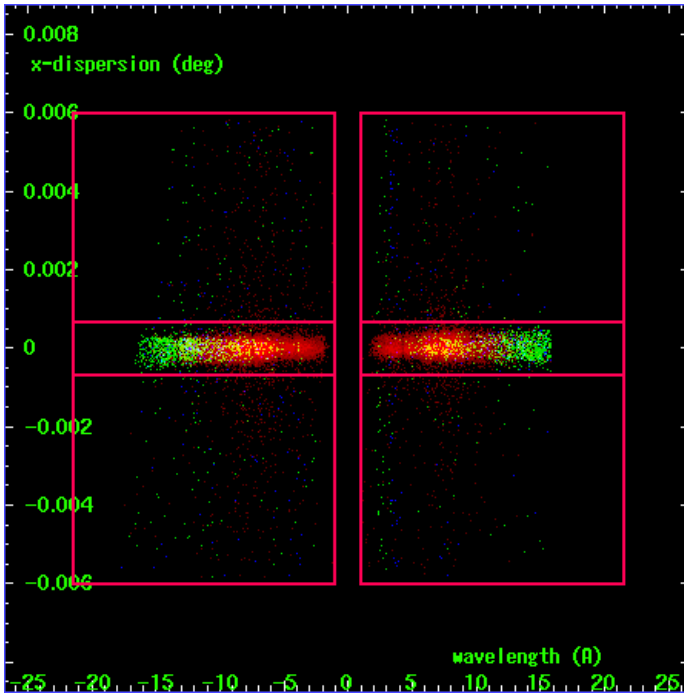
HEG Order Sort 123



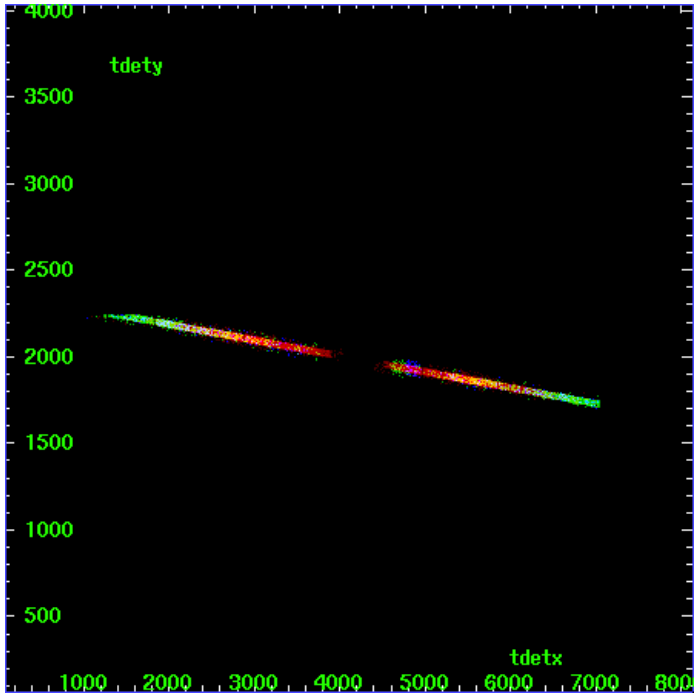
HEG Zero Order



HEG Order Sort ALL

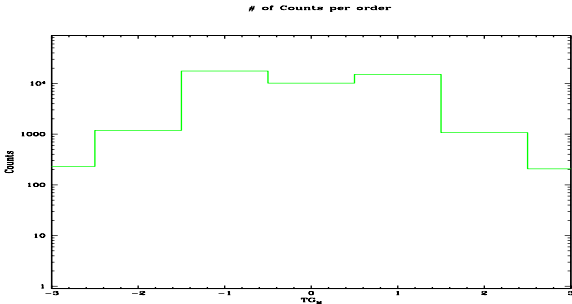


Spot Image HEG

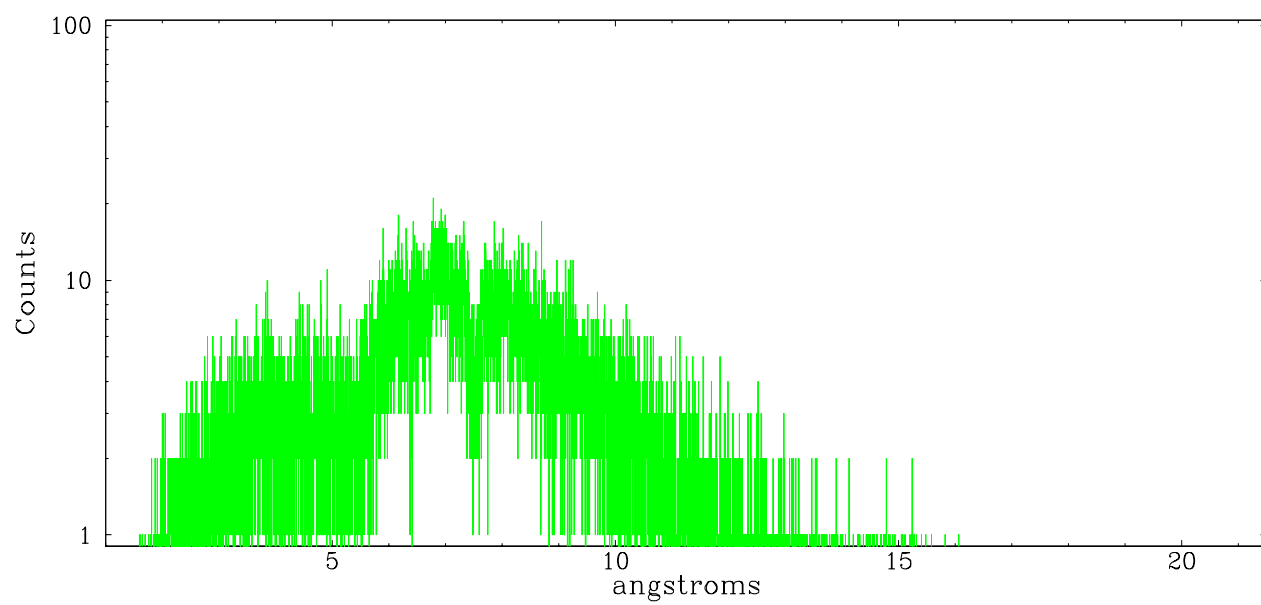


Full Detector HEG

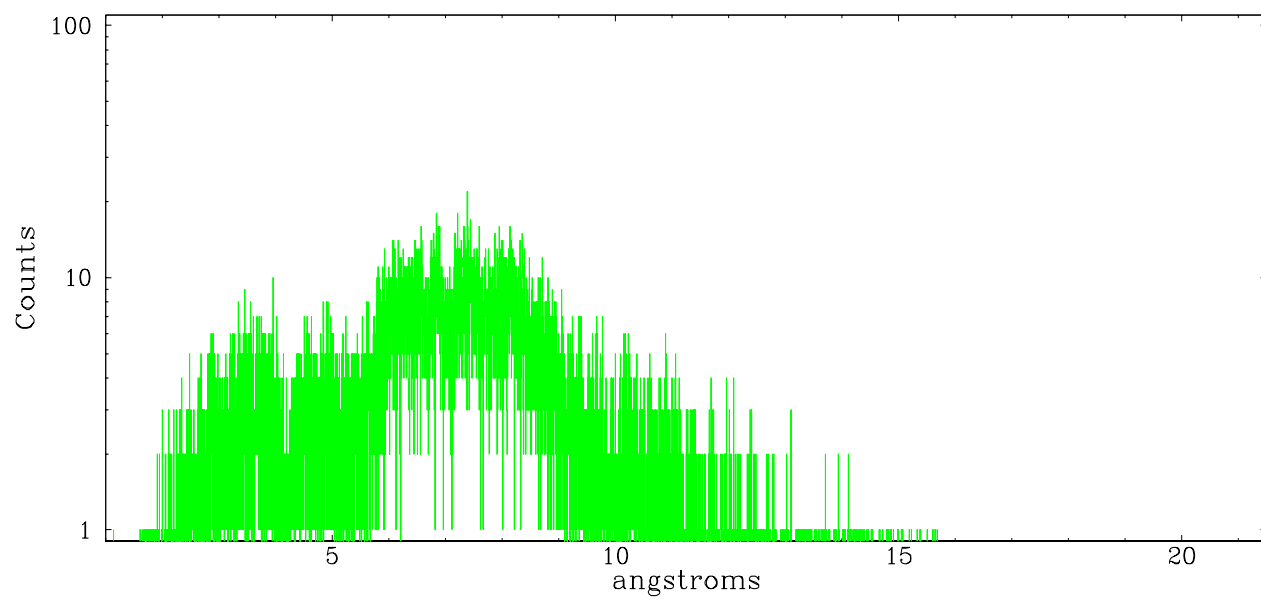
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	231	1181	17491	10128	15103	1070	207



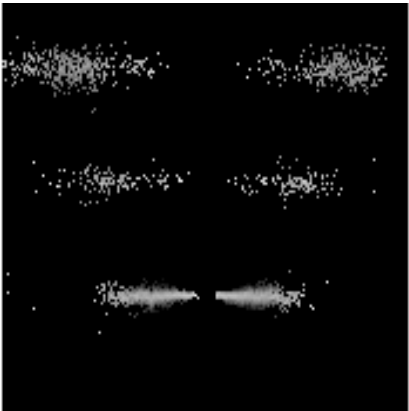
heg order -1



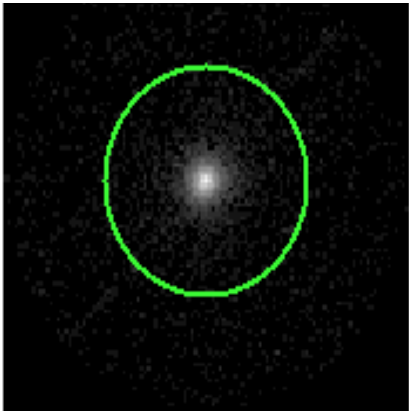
heg order +1



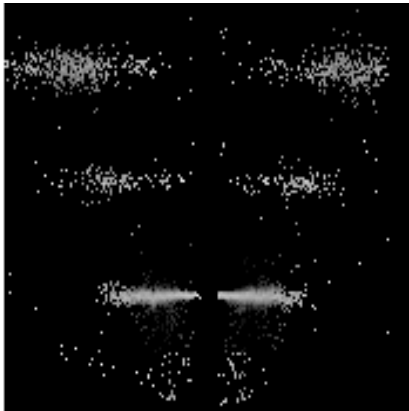
3.2 MEG Arm



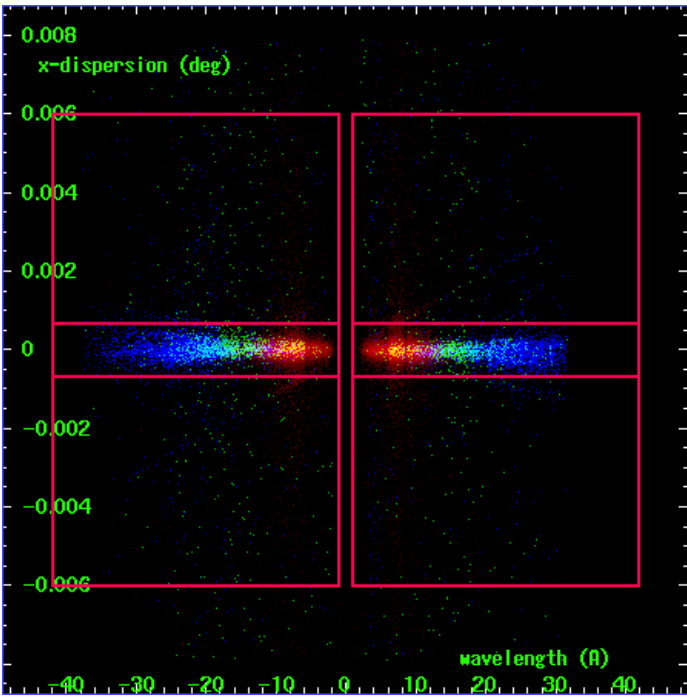
MEG Order Sort 123



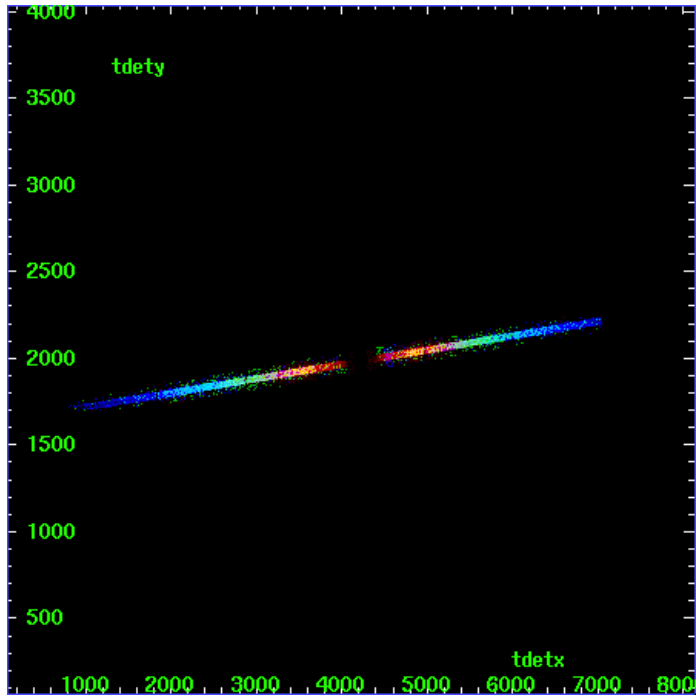
MEG Zero Order



MEG Order Sort ALL

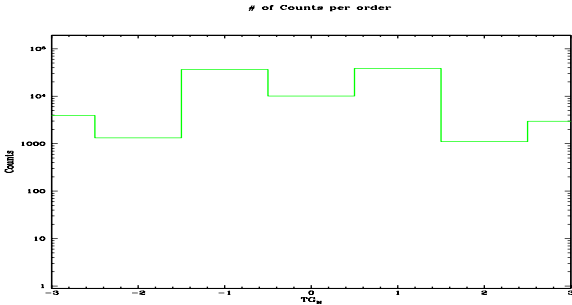


Spot Image MEG

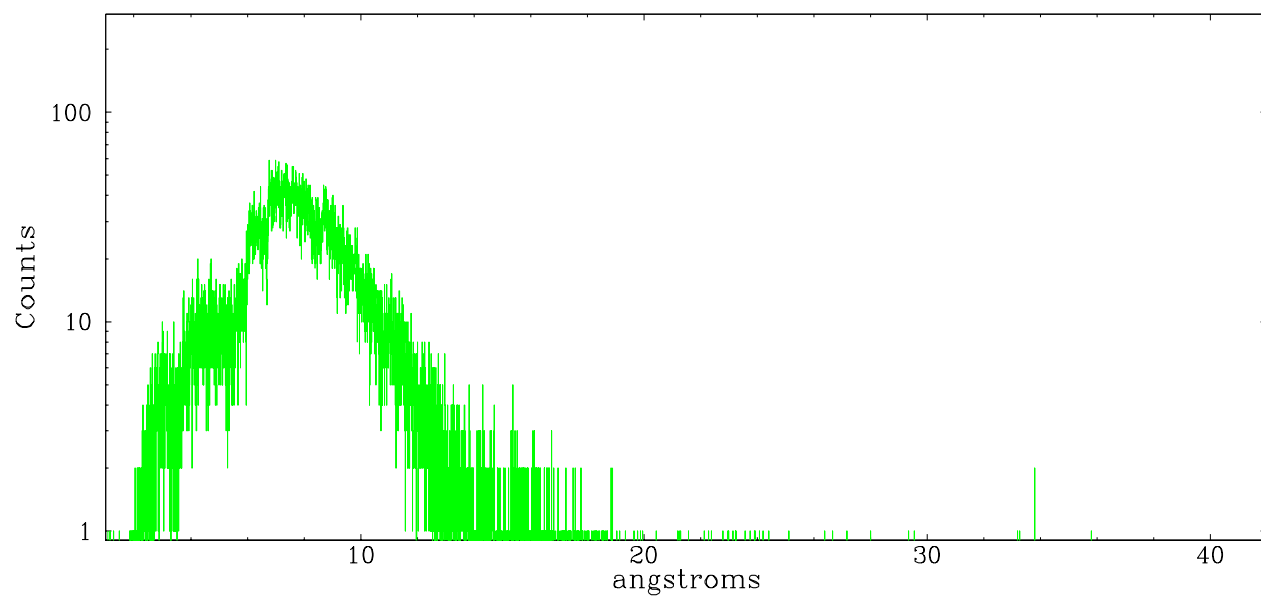


Full Detector MEG

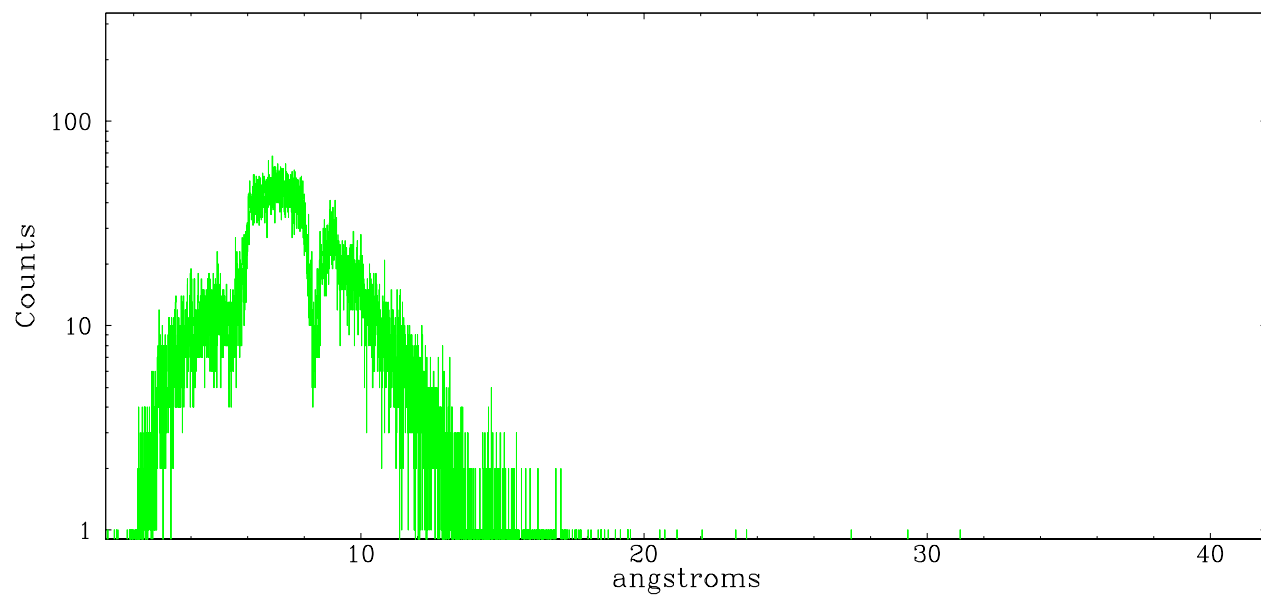
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	3947	1322	36343	10128	38444	1105	2962



meg order -1



meg order +1



A Summary

A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2006.11.22
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	25.362

A.2 Comments