

V&V Reference Report

L2 ASCDS Version : 7.6.9

Observation 1014 - L2 Version 001
Chandra X-Ray Center

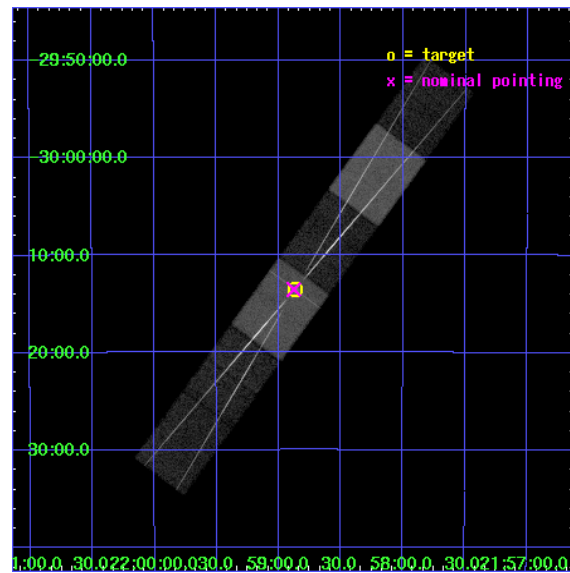
L2 Processing Date : Nov 15 2006

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1 Front

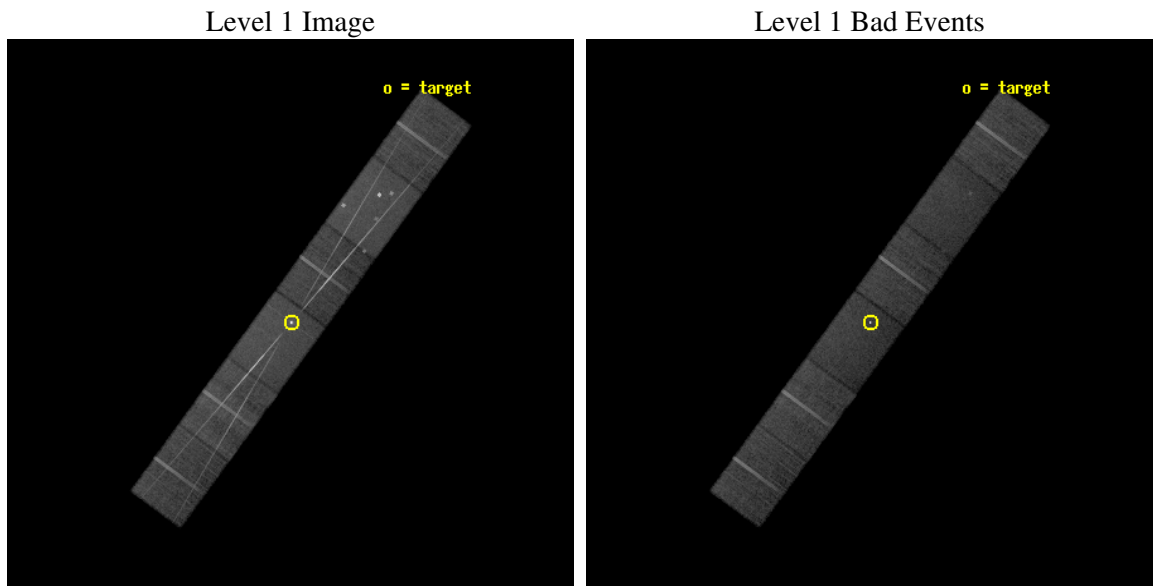
seq_num	390006
obs_id	1014
title	GRATINGS CALIBRATION OBSERVATIONS OF PKS2155-304
observer	Dr. CXC Calibration
object	PKS2155-304
dtcycle	0
cycle	P
ra_targ	329.716667
dec_targ	-30.225556
ra_nom	329.71924003703
dec_nom	-30.225665967553
roll_nom	126.22652676414
revision	2
ontime	27127.5
livetime	26689.367345654
ontime4	27127.5
ontime5	27127.5
ontime6	27127.5
ontime7	27127.5
ontime8	27127.5
ontime9	27127.5
l2events	313043



2 OBI

2.1 OBI

2.1.1 Images

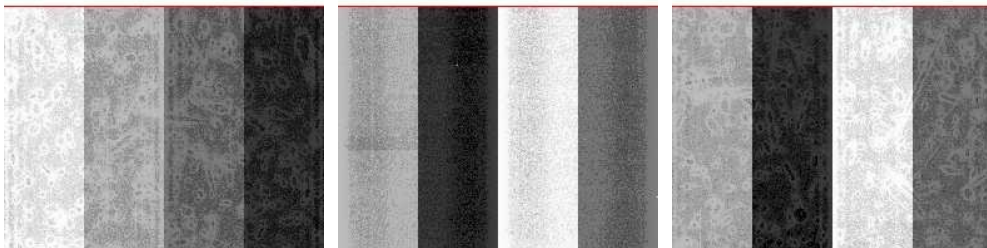


2.1.2 Bias

Chip 4

Chip 5

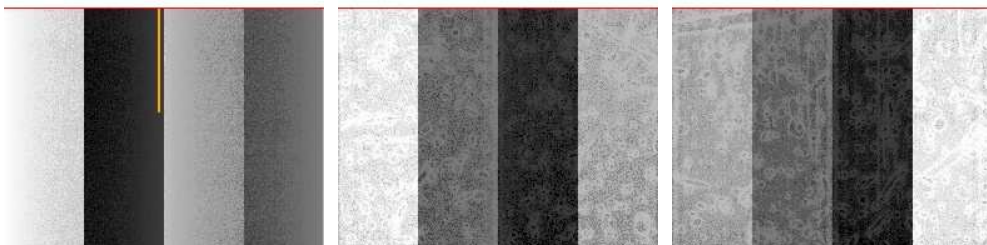
Chip 6



Chip 7

Chip 8

Chip 9



2.1.3 Parameters

obi_num	0
ascdsver	7.6.9
caldsver	3.2.4
date	2006-11-15T15:45:01
revision	2

sched_exp_time	27000.000000
ontime	27132.863051012
ontime4	27132.863051012
ontime5	27132.863051012
ontime6	27132.863051012
ontime7	27132.863051012
ontime8	27132.863051012
ontime9	27132.863051012
l1events	1071230

2.1.4 Events

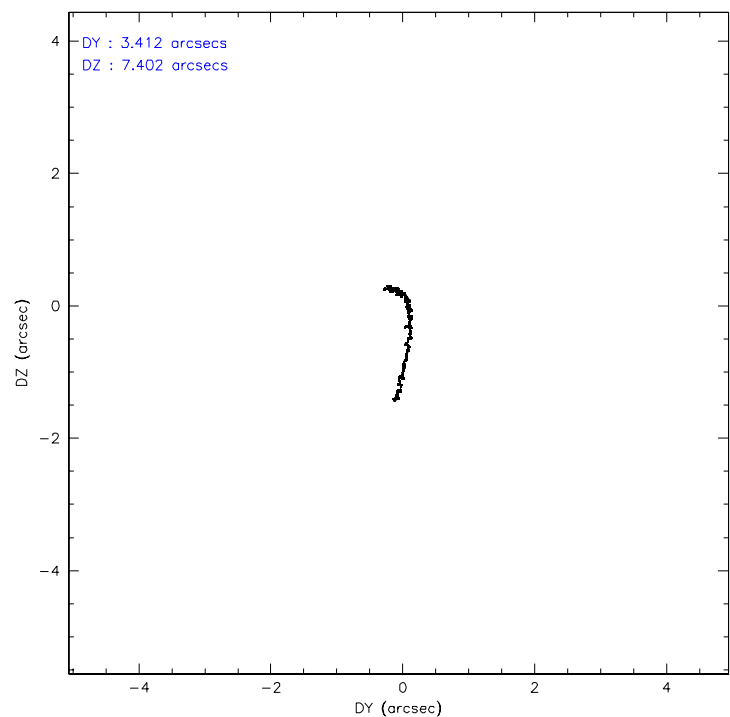
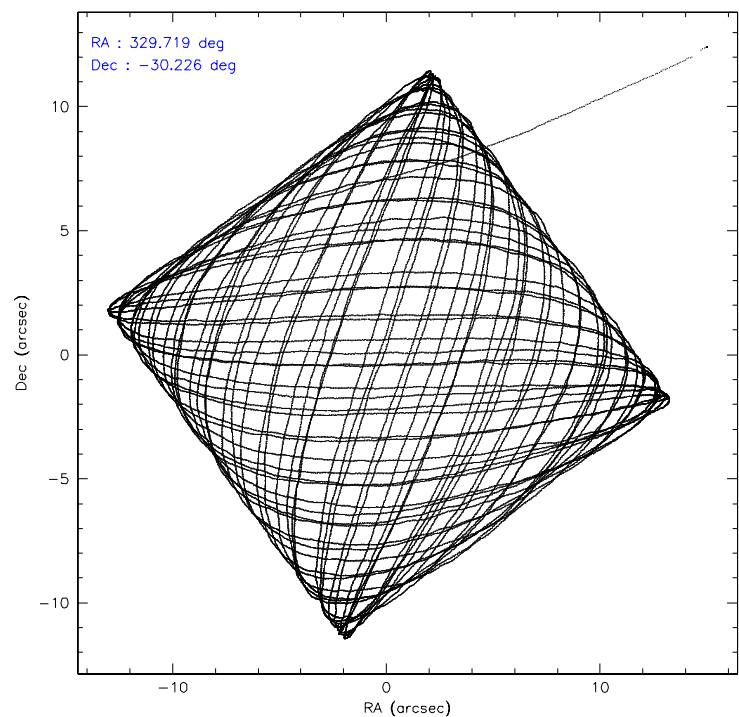
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	151210	211628	172519	207323	194286	134264
rejected events	131138	99803	118912	107782	133183	113121
rejected %	86%	47%	68%	51%	68%	84%

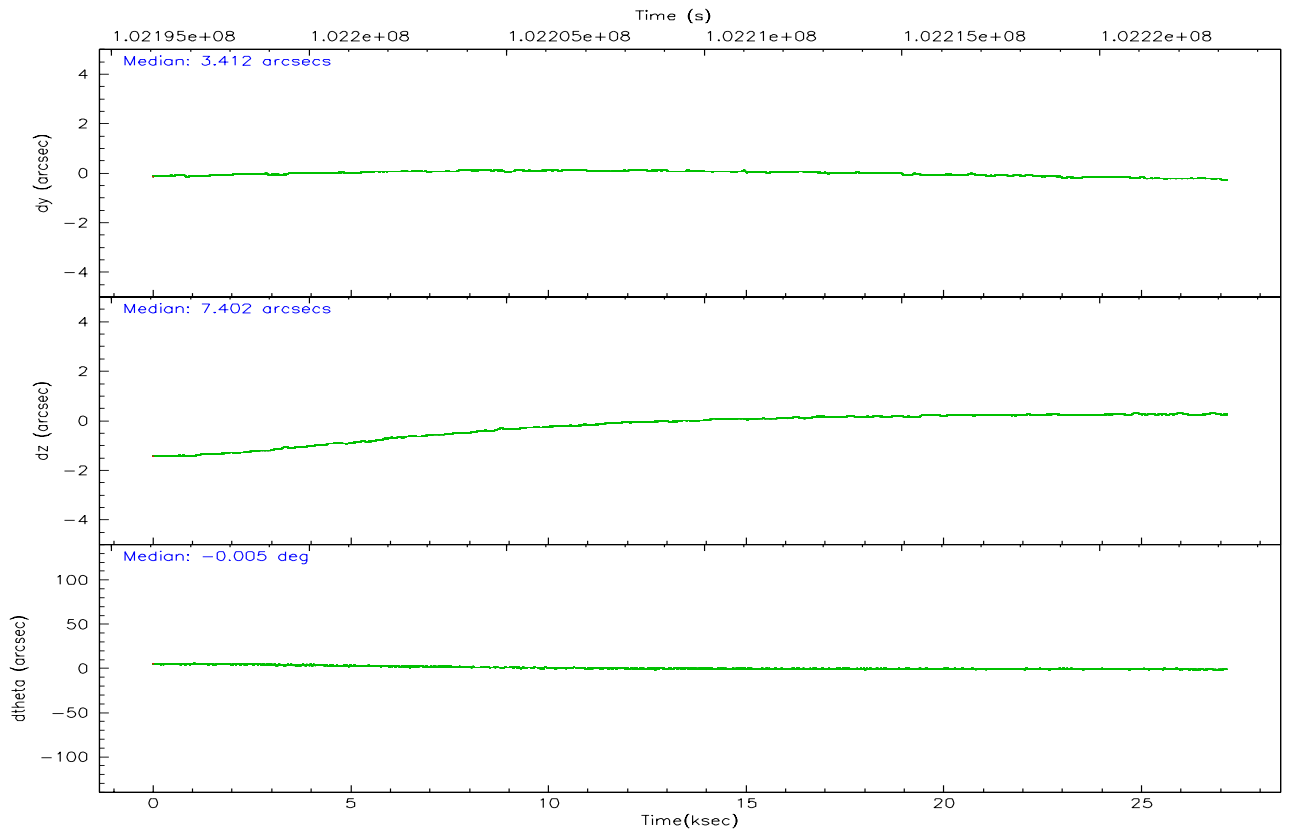
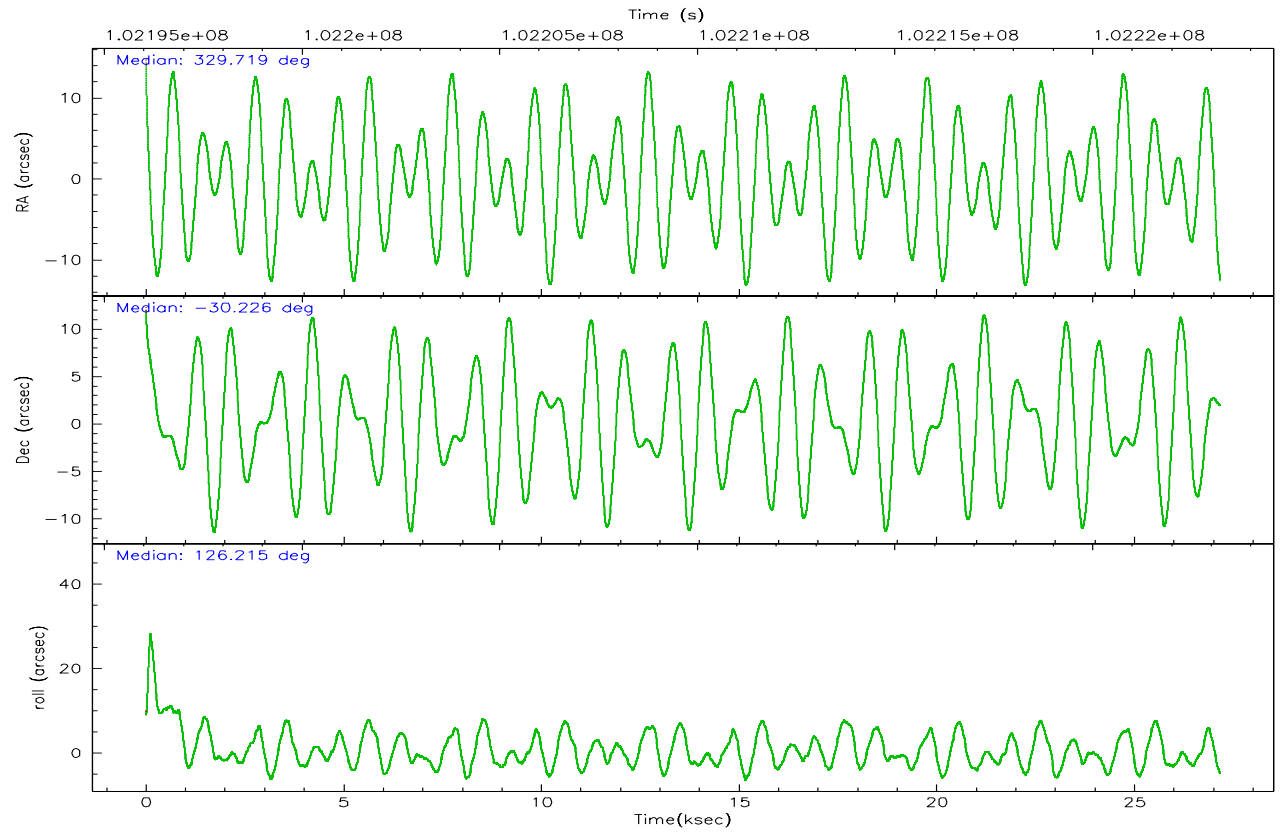
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	9976	26910	36901	12178	32369	11069
	6%	12%	21%	5%	16%	8%
grade 1 events	71	555	206	289	157	58
	0%	0%	0%	0%	0%	0%
grade 2 events	4078	30205	7075	24618	9417	3496
	2%	14%	4%	11%	4%	2%
grade 3 events	1623	4081	2867	7521	4987	1801
	1%	1%	1%	3%	2%	1%
grade 4 events	1572	3985	2861	7595	4791	1696
	1%	1%	1%	3%	2%	1%
grade 5 events	4544	9484	5328	12746	6656	5433
	3%	4%	3%	6%	3%	4%
grade 6 events	2827	46670	3911	47641	9543	3083
	1%	22%	2%	22%	4%	2%
grade 7 events	126519	89738	113370	94735	126366	107628
	83%	42%	65%	45%	65%	80%

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	329.748281	329.7192400370298	Subarray requested	CUSTOM	CUSTOM
Pointing Dec	-30.236449	-30.22566596755298	Subarray start row	1	1
Pointing Roll	126.084535	126.2265267641396	Subarray row count	774	774
Window start time	99792064.184000	99792064.184000	Alternating exposures requested	N	N
Window stop time	102124864.184000	102124864.184000	Primary exposure time	0.000000	2.5
SIM focus pos (mm)	-0.684267	-0.6828225247311905			
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-187.132523	-187.1228876879999			
SIM translation stage offset (mm)	-3	-3.009634895007935			
Observation start time	102196221.184000	102195234.67786			
Observation start date	2001-03-28T19:49:17	2001-03-28T19:33:54			
Observation end time	102223221.184000	102224082.79147			
Observation end date	2001-03-29T03:19:17	2001-03-29T03:34:42			
Read mode	TIMED	TIMED			

2.3 Aspect



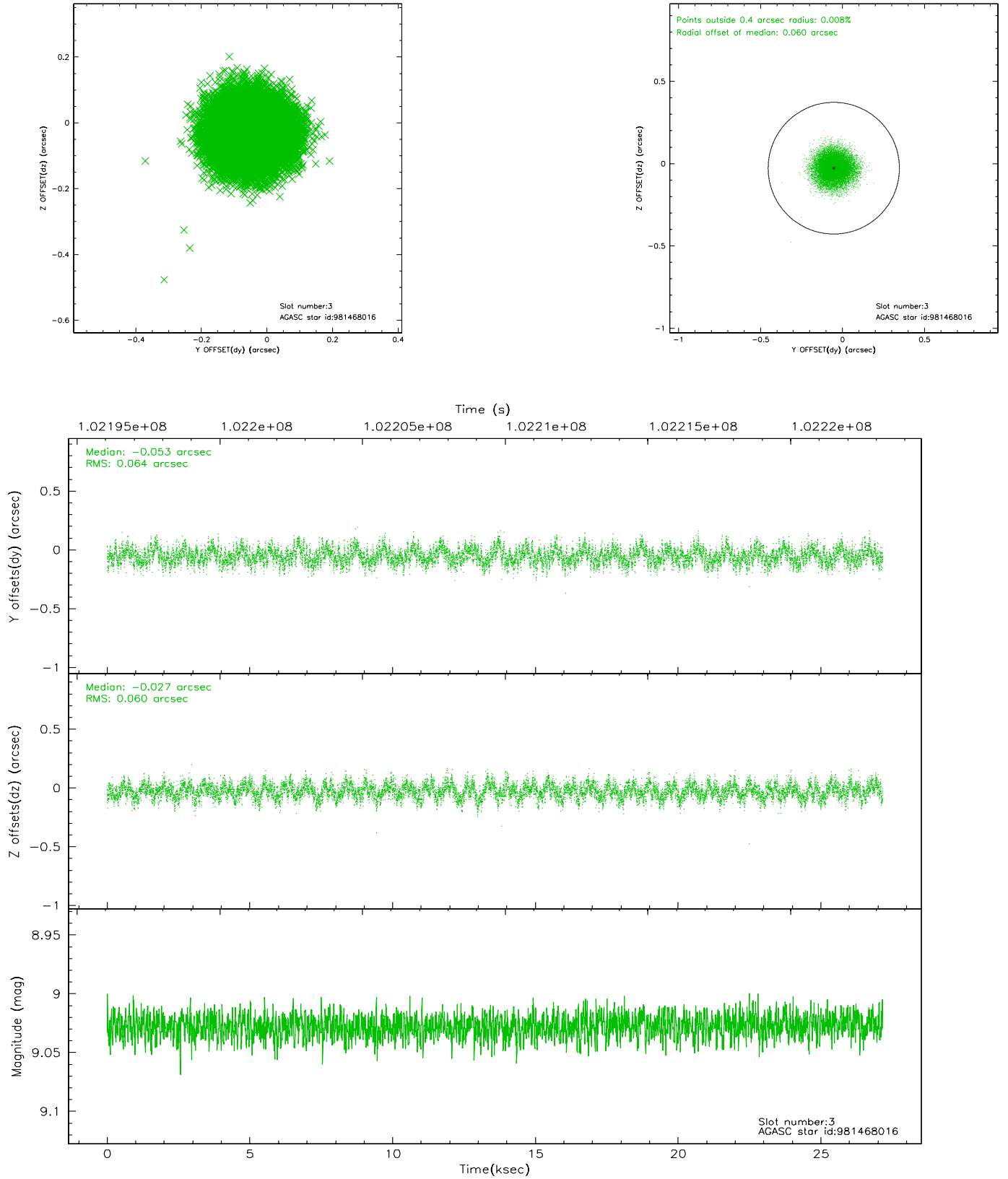


Slot Statistics

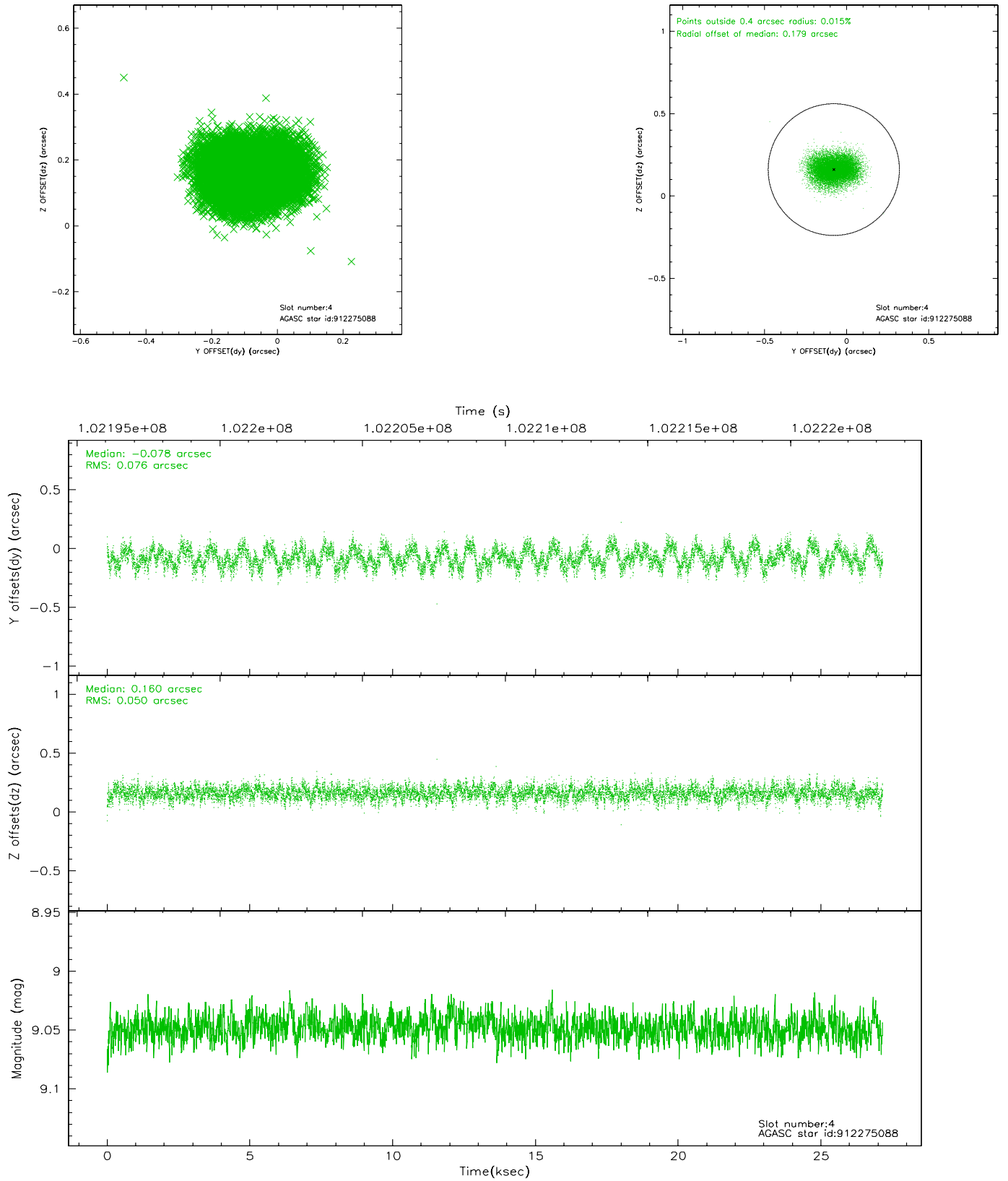
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	6626	-0.032	-0.009	0.017	0.034	0.000000	0.000000	-755.86	-1790.49
1	FID	ACIS-S-4	7.19	6625	-0.044	0.016	0.009	0.018	0.000000	0.000000	2157.35	117.93
2	FID	ACIS-S-5	7.23	6625	0.040	-0.002	0.018	0.032	0.000000	0.000000	-1808.52	111.67
3	GUIDE	981468016	9.03	13243	-0.053	-0.027	0.095	0.147	328.842457	-30.034984	2240.27	1861.15
4	GUIDE	912275088	9.05	13242	-0.078	0.160	0.098	0.155	329.619228	-29.738698	1686.62	-728.84
5	GUIDE	981478152	9.40	13245	0.020	-0.171	0.084	0.140	329.415589	-30.057192	1131.75	458.35
6	GUIDE	981468128	9.35	13246	0.175	0.152	0.095	0.151	329.756350	-30.158334	213.58	-185.92
7	GUIDE	981469488	9.57	13233	-0.054	-0.111	0.215	0.291	329.261199	-30.045155	1448.56	822.92

2.4 Star Slots

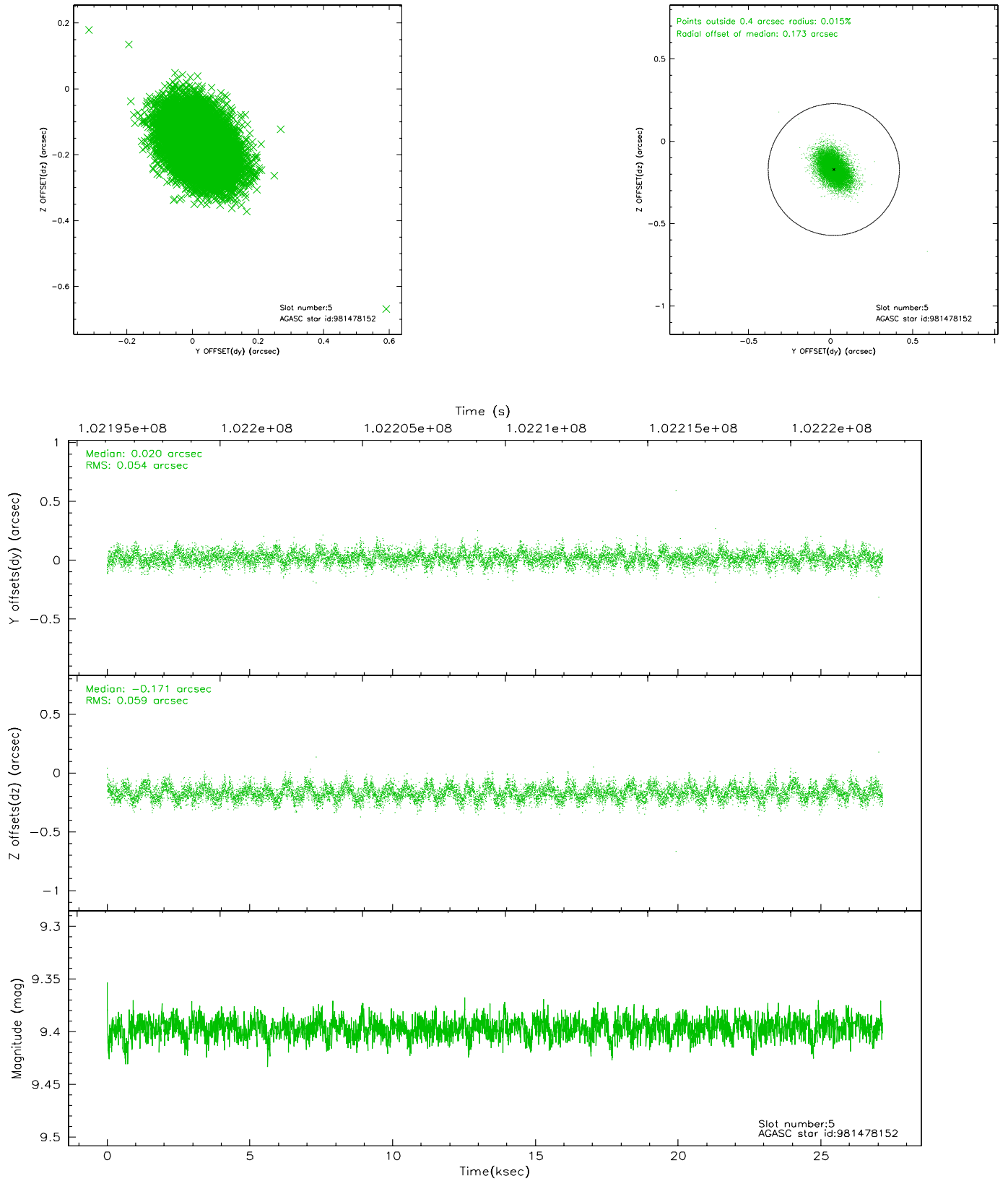
2.4.1 Slot 3



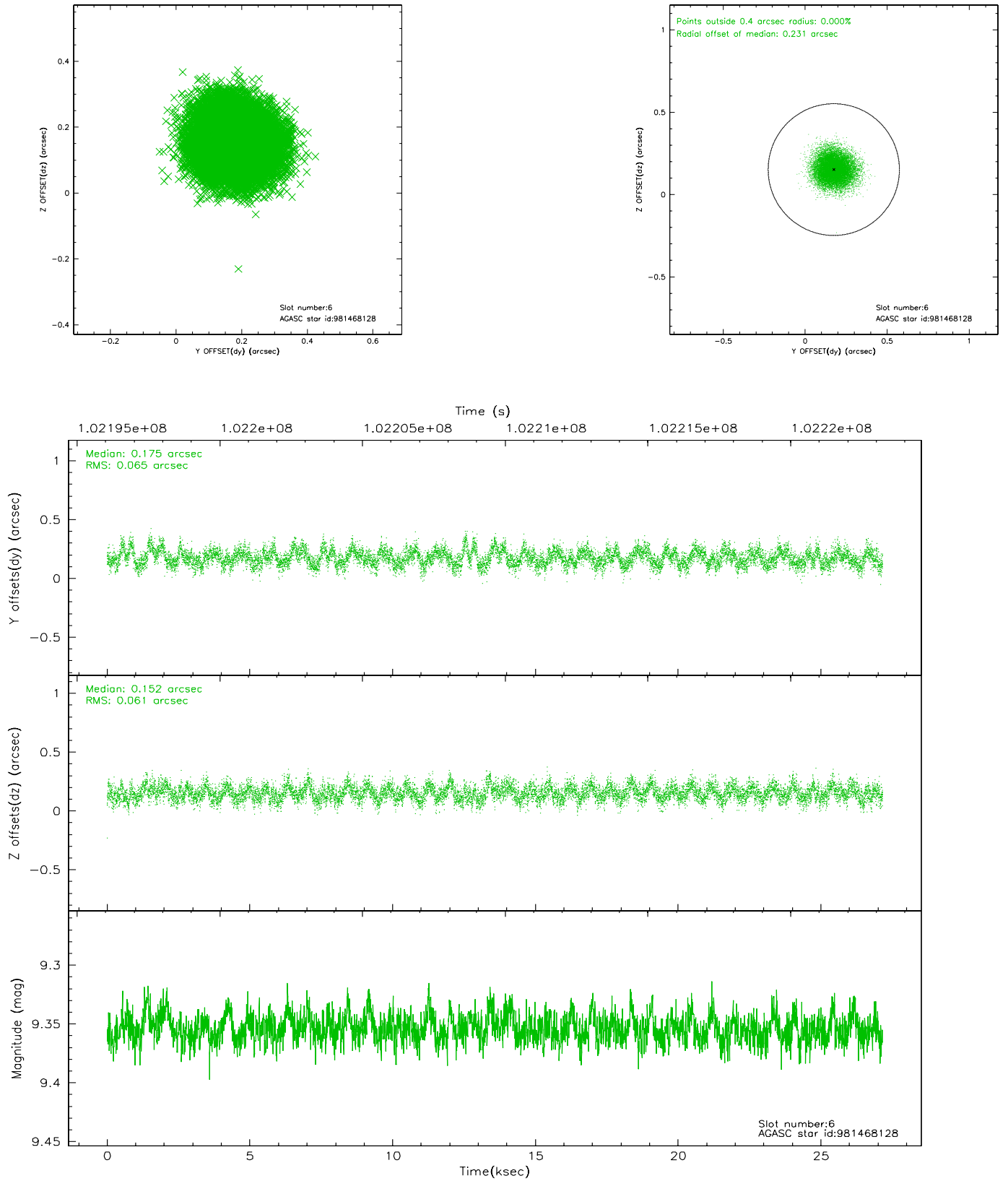
2.4.2 Slot 4



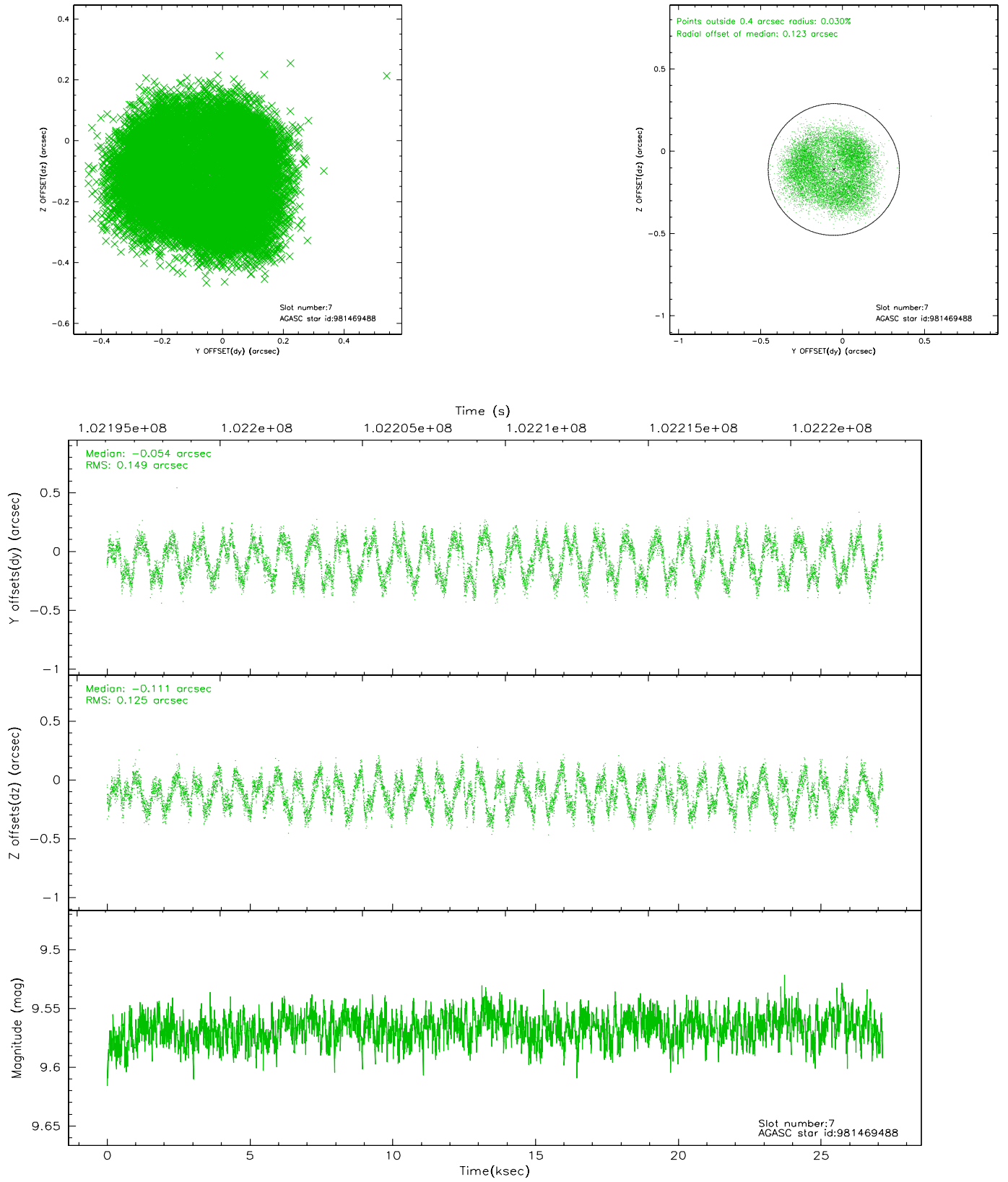
2.4.3 Slot 5



2.4.4 Slot 6

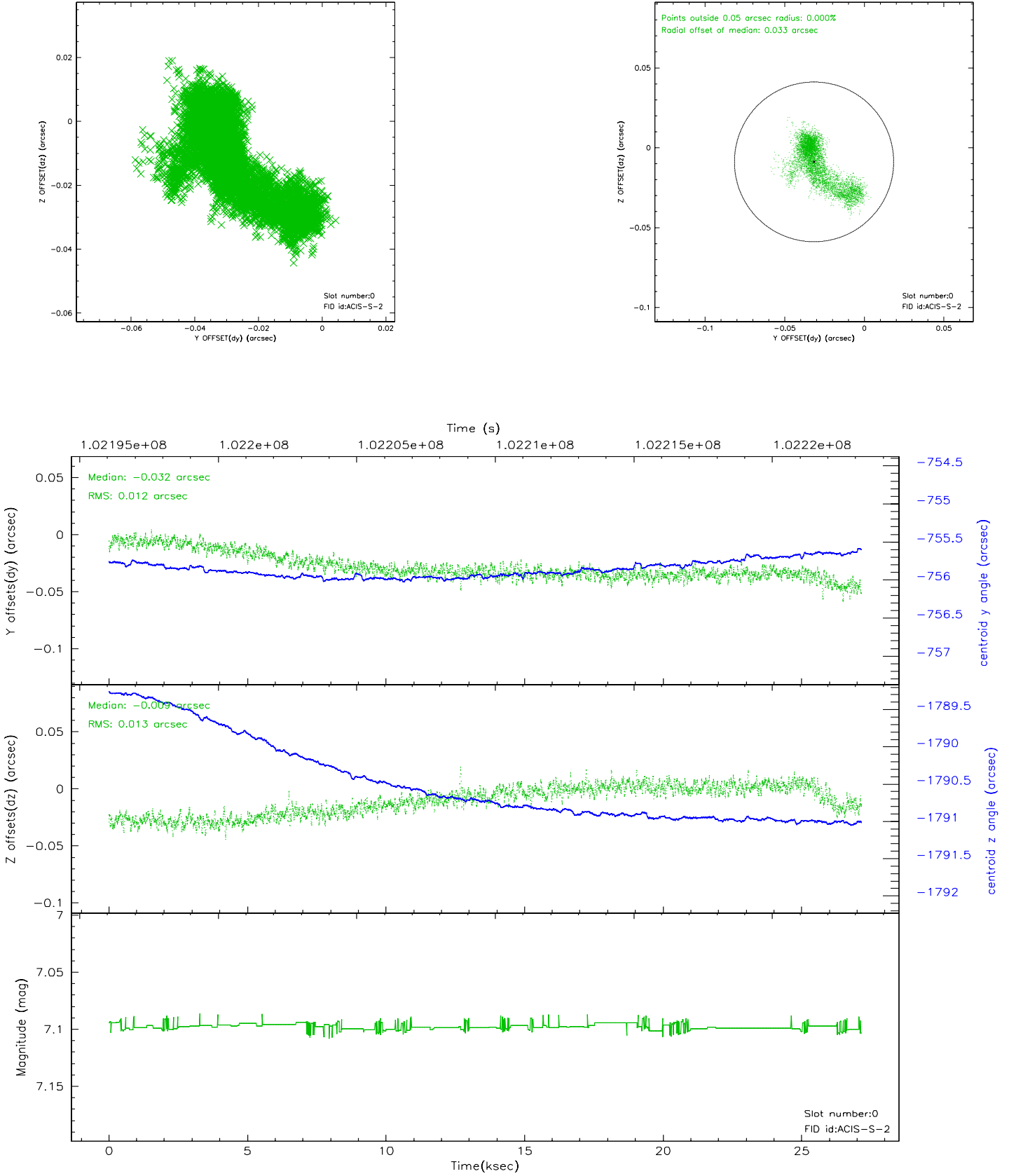


2.4.5 Slot 7

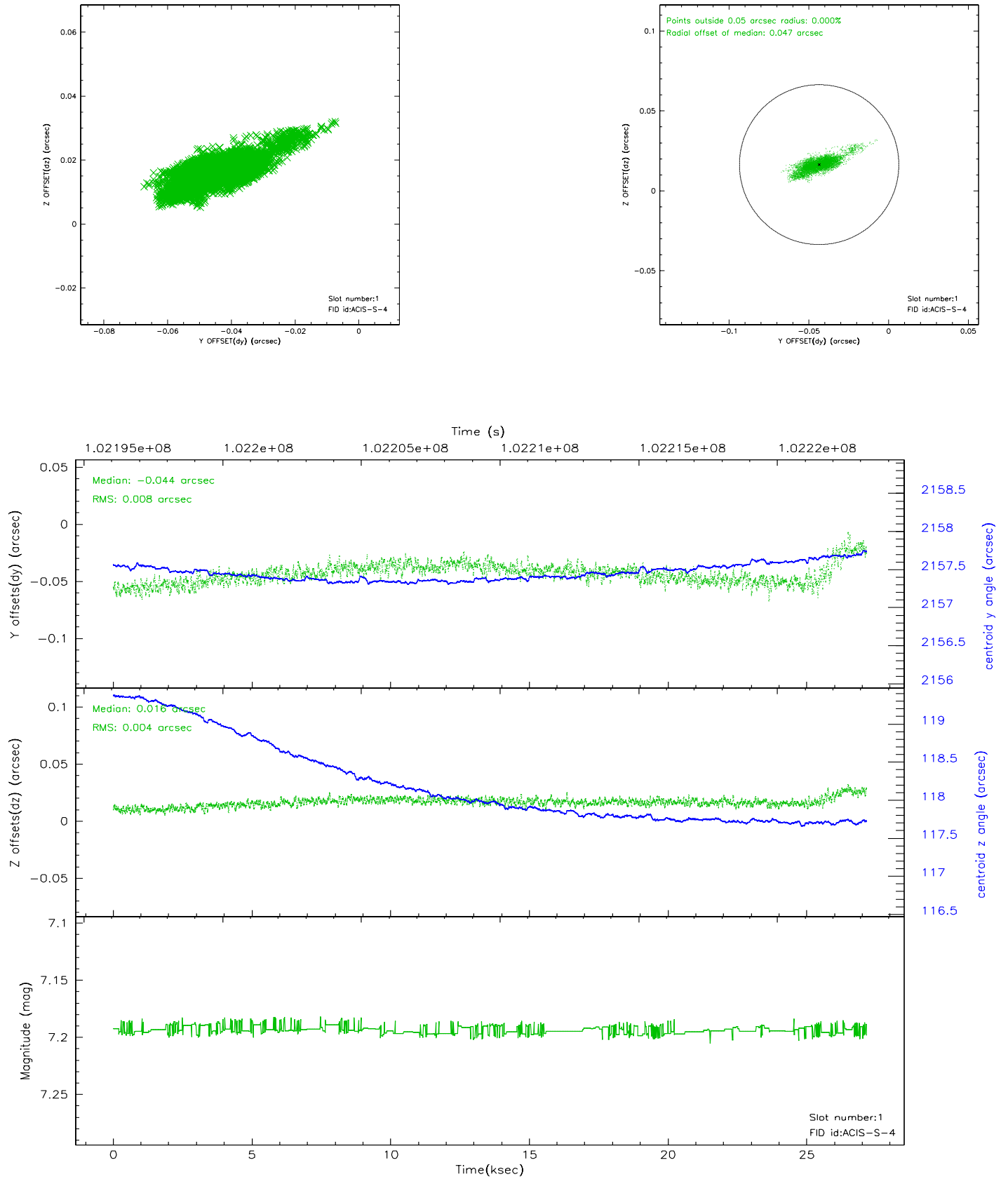


2.5 FID Slots

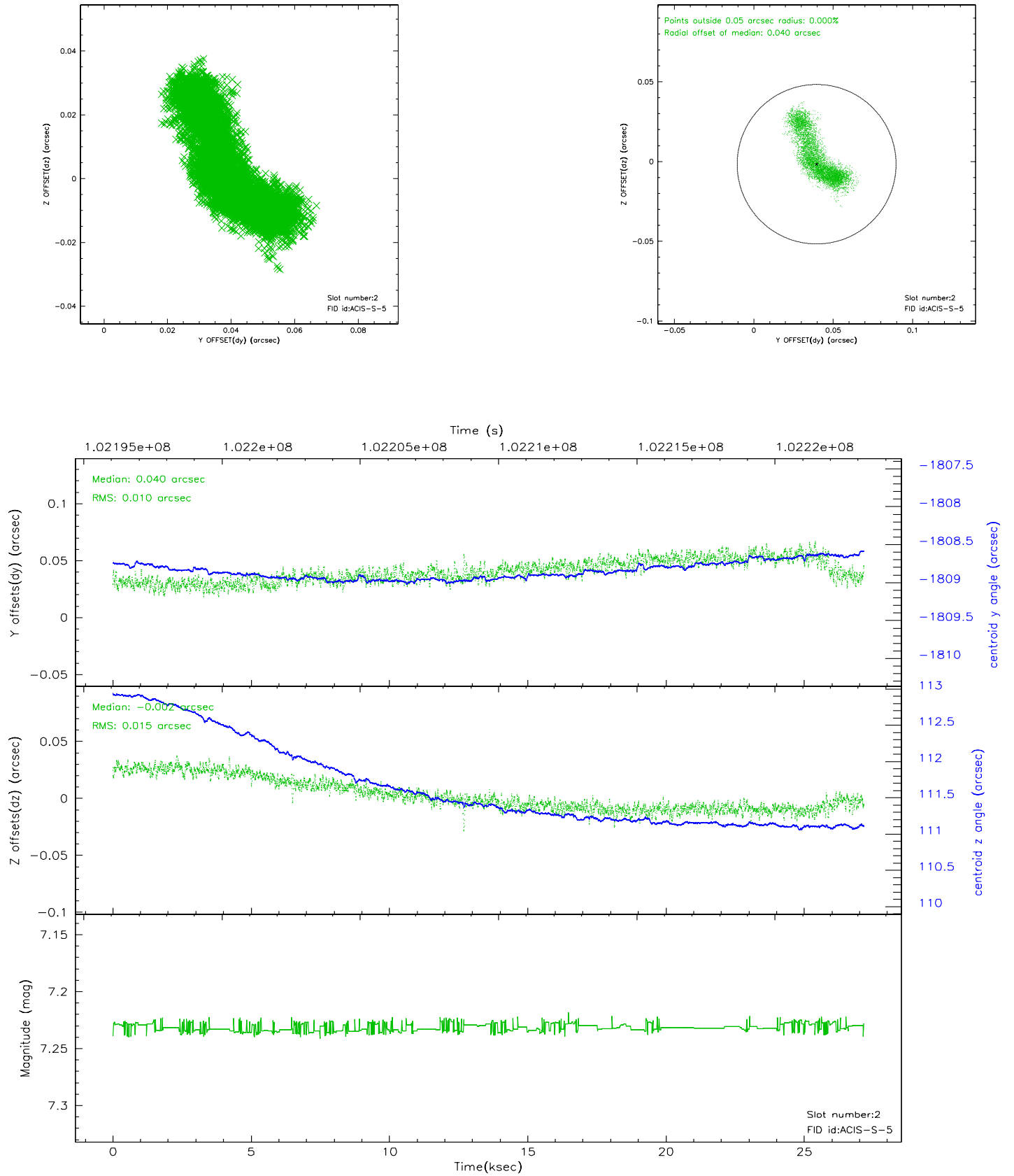
2.5.1 Slot 0



2.5.2 Slot 1

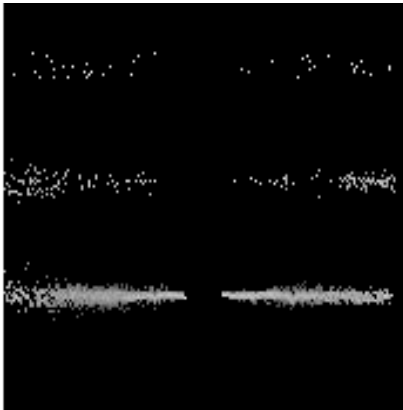


2.5.3 Slot 2

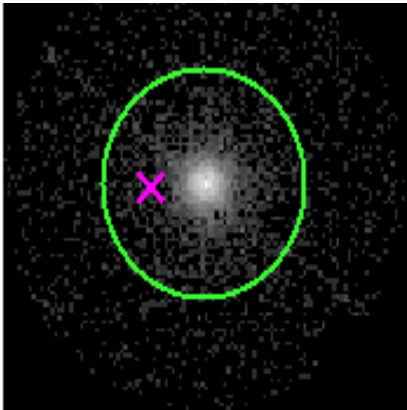


3 Gratings

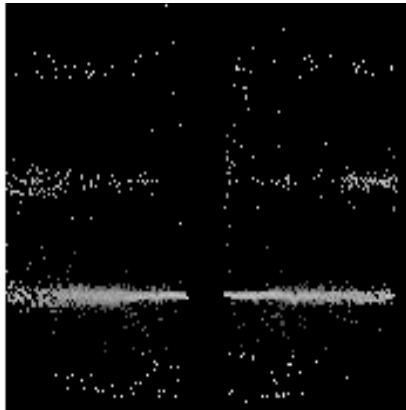
3.1 HEG Arm



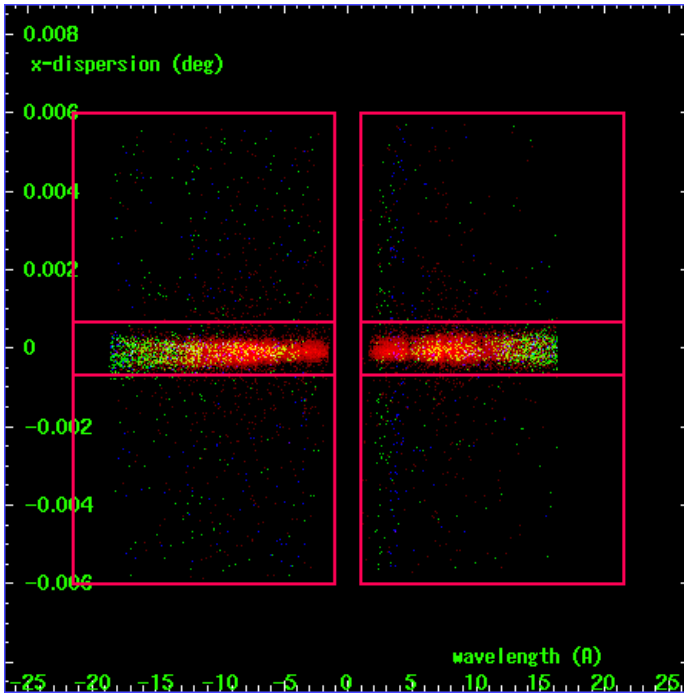
HEG Order Sort 123



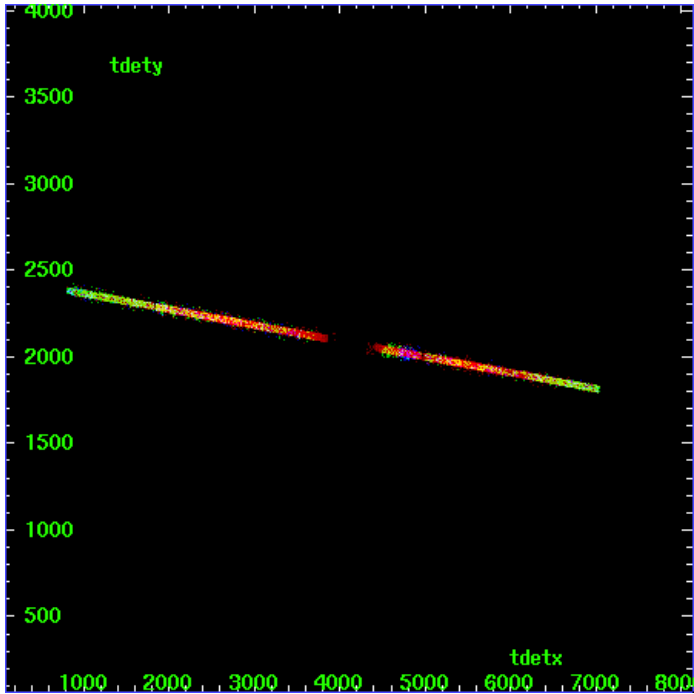
HEG Zero Order



HEG Order Sort ALL

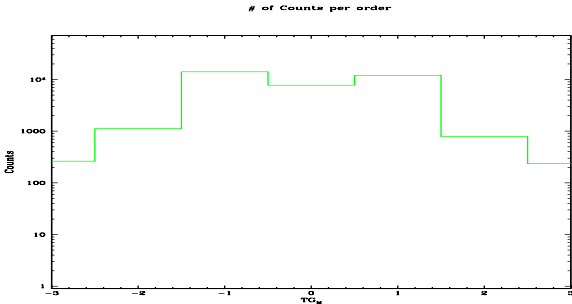


Spot Image HEG

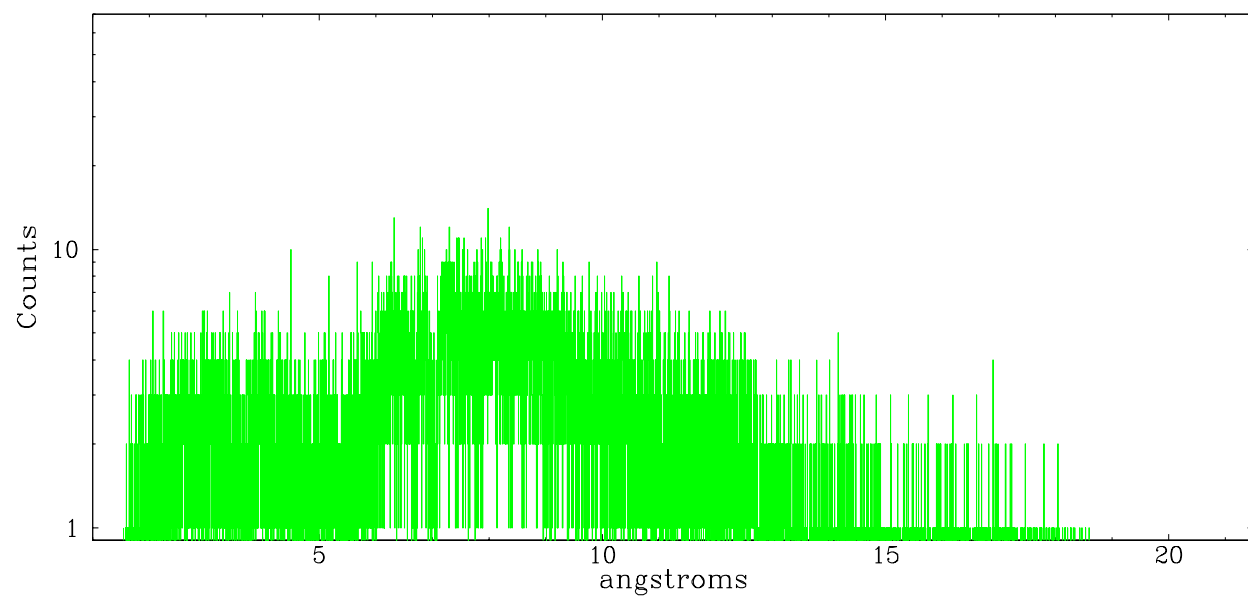


Full Detector HEG

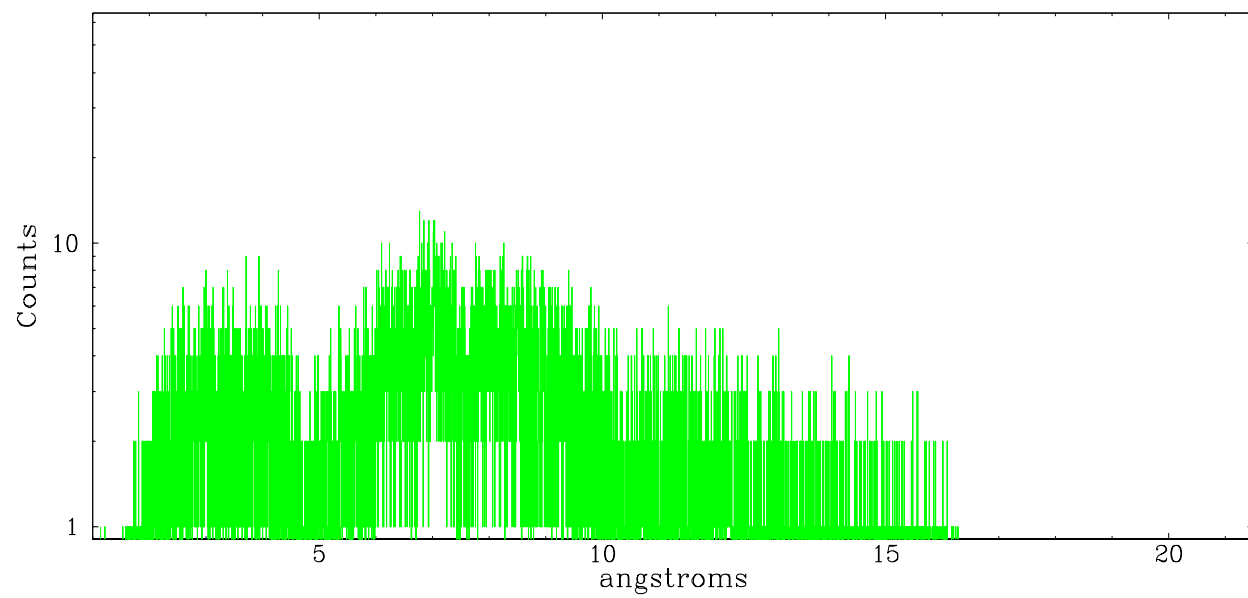
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	263	1124	14110	7769	12021	790	236



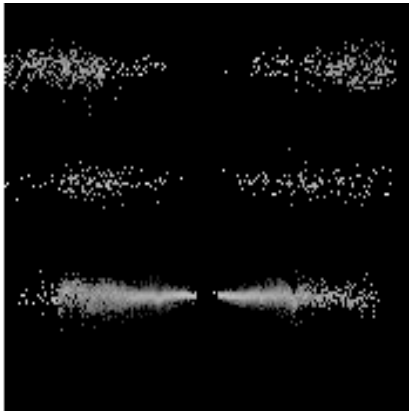
heg order -1



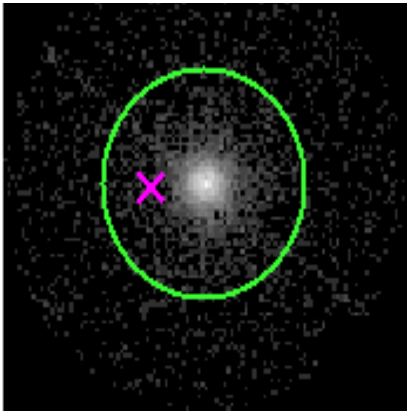
heg order +1



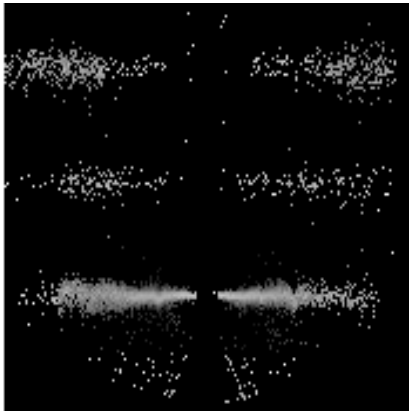
3.2 MEG Arm



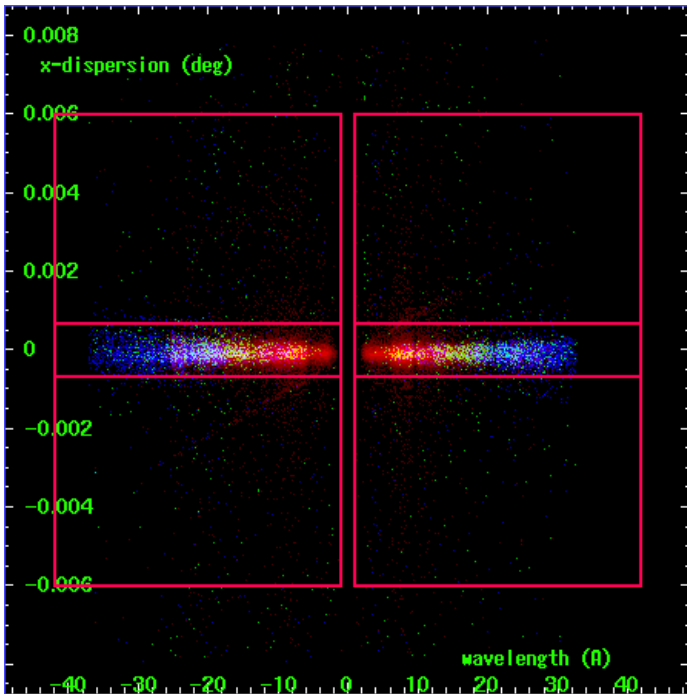
MEG Order Sort 123



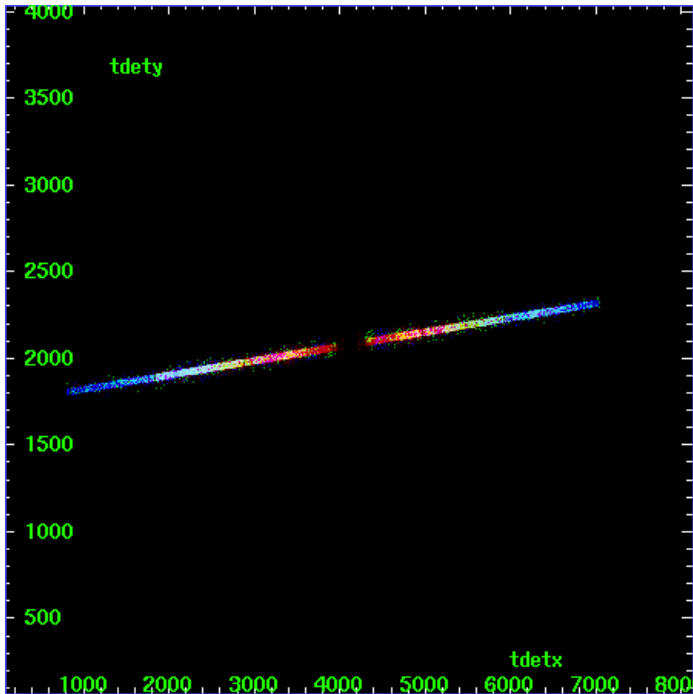
MEG Zero Order



MEG Order Sort ALL

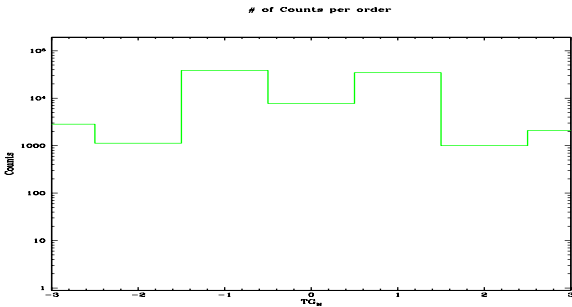


Spot Image MEG

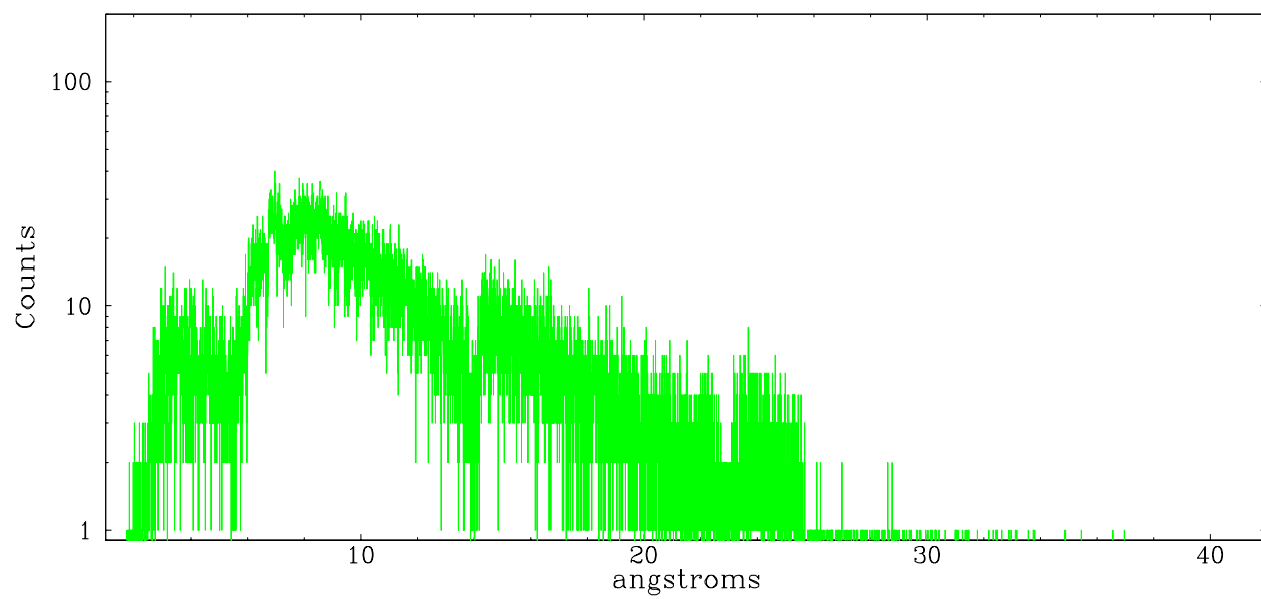


Full Detector MEG

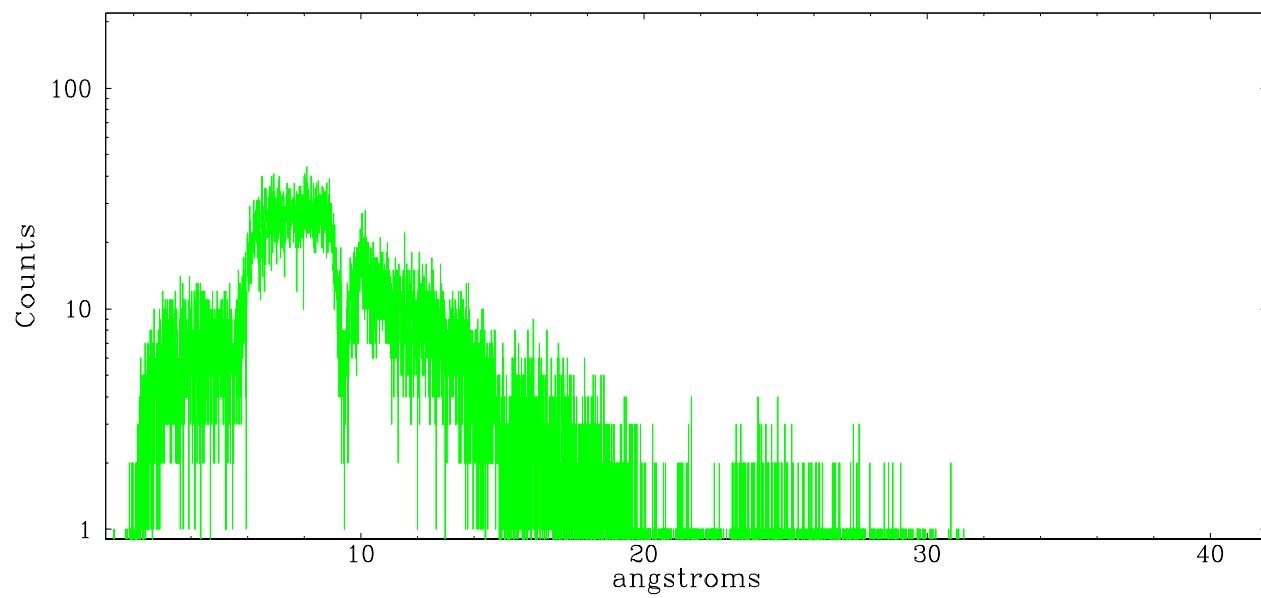
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	2828	1123	38414	7769	34671	1005	2091



meg order -1



meg order +1



A Summary

A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2006.11.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	27.13

A.2 Comments

Window constraint not met. Observation start time after end of window.