

V&V Reference Report

L2 ASCDS Version : 7.6.11.10

Observation 3567 - L2 Version 4
Chandra X-Ray Center

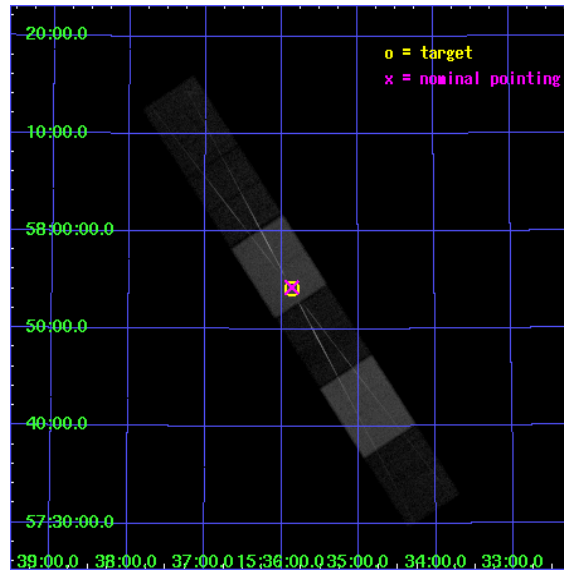
L2 Processing Date : Feb 5 2009

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1 Front

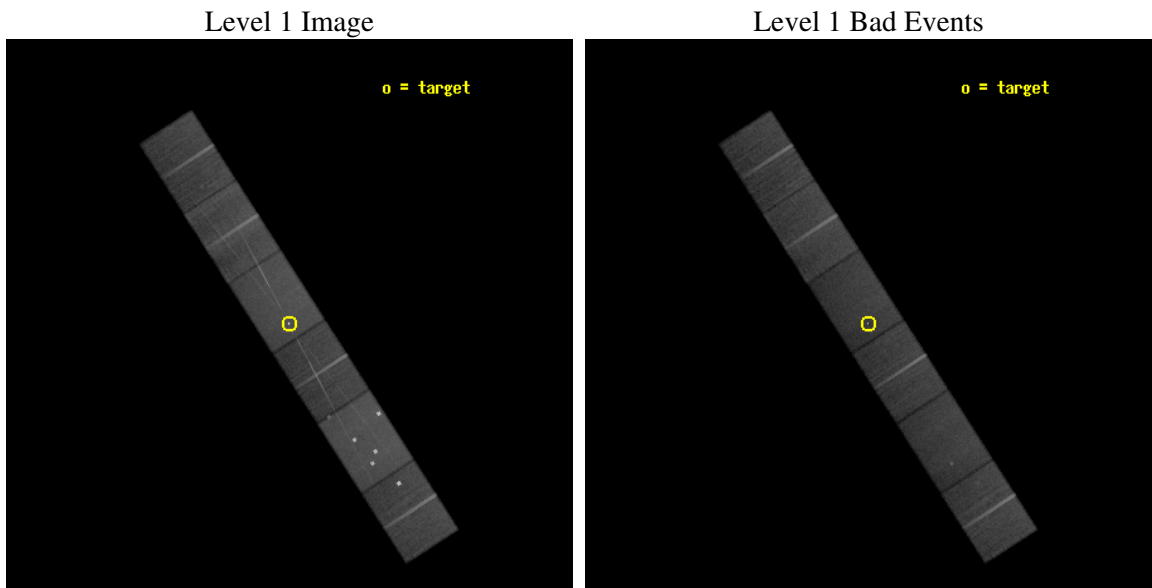
seq_num	700629
obs_id	3567
title	PROBING THE WARM ABSORBER/EMITTER IN THE SEYFERT 1 GALAXY MARKARIAN 290
observer	Prof. Claude Canizares
object	MARKARIAN 290
dtcycle	0
cycle	P
ra_targ	233.967917
dec_targ	57.9025
ra_nom	233.96680908176
dec_nom	57.904655258076
roll_nom	237.15756369898
revision	4
ontime	55092.459009826
livetime	54202.668011745
ontime4	55095.0
ontime5	55095.0
ontime6	55089.917989731
ontime7	55092.459009826
ontime8	55092.459009826
ontime9	55092.459009826
l2events	448291



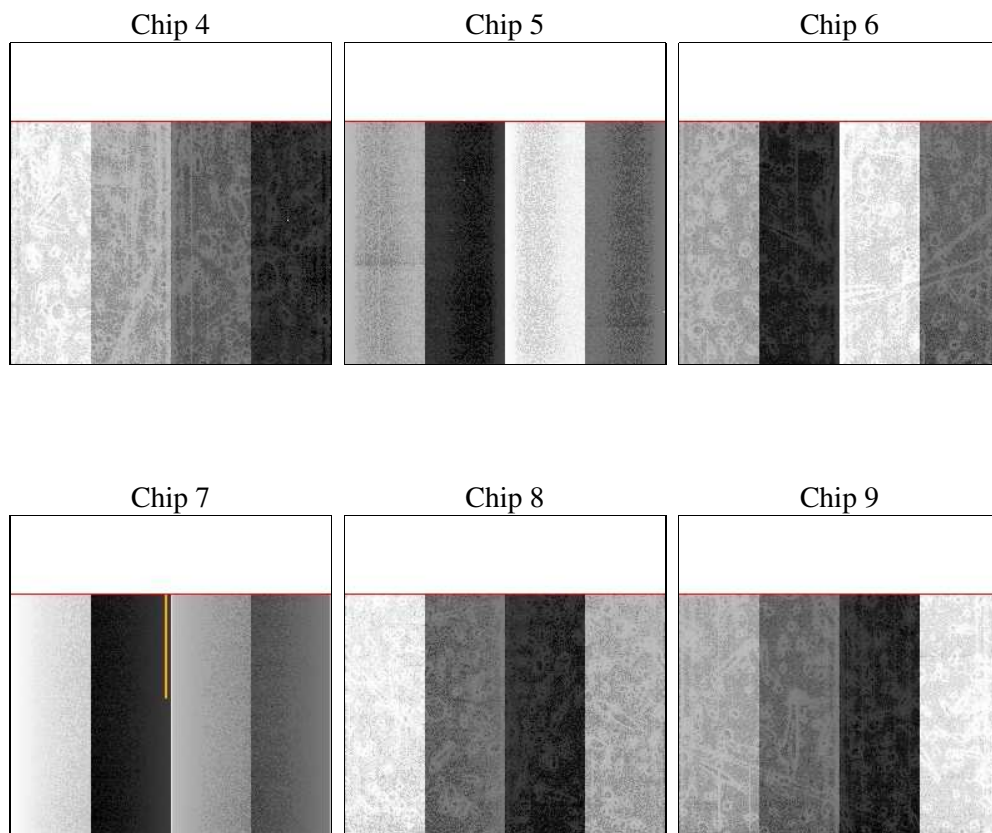
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0
ascdsver	7.6.11.10
caldsver	3.5.1
date	2009-02-05T18:51:03
revision	4

sched_exp_time	55000.000000
ontime	55092.459009826
ontime4	55095.0
ontime5	55095.0
ontime6	55089.917989731
ontime7	55092.459009826
ontime8	55092.459009826
ontime9	55092.459009826
l1events	1936797

2.1.4 Events

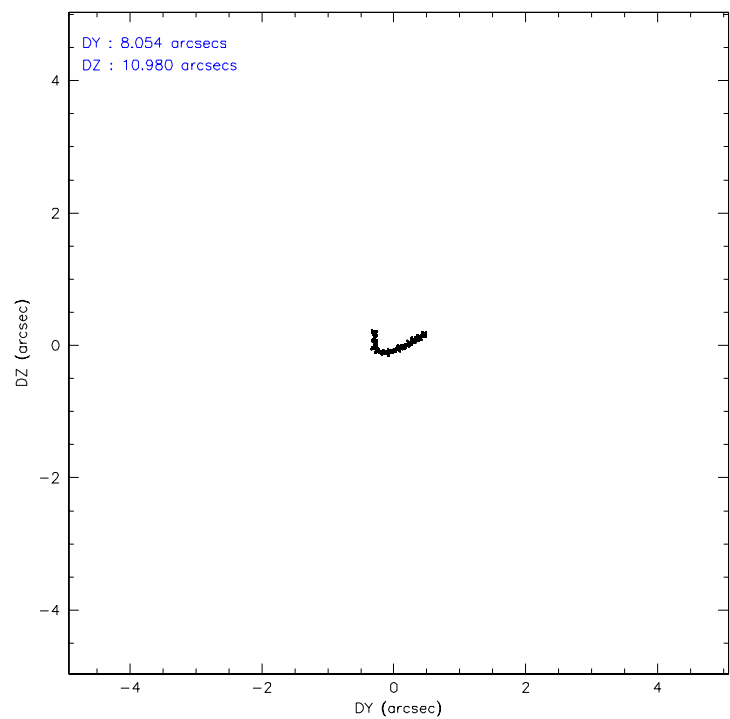
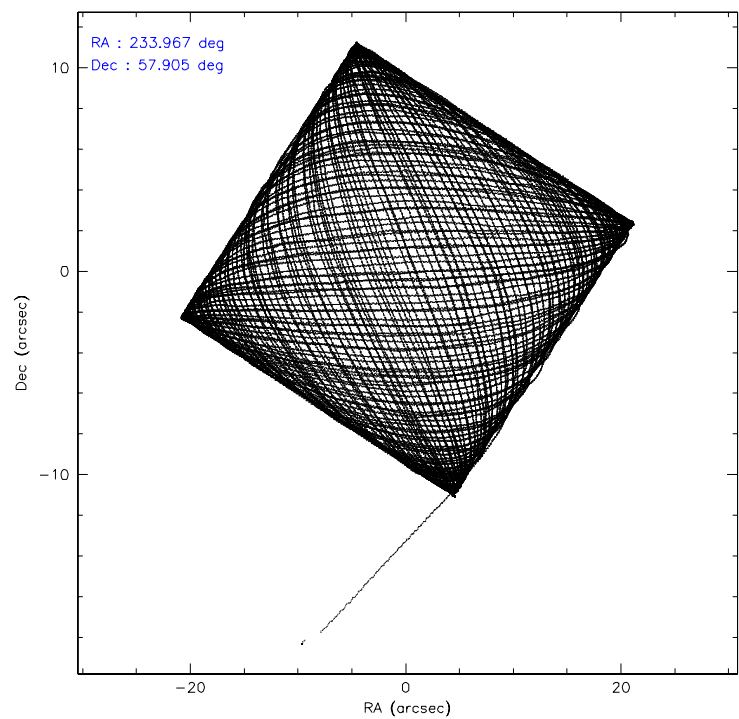
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	303276	422473	267878	362667	327187	253316
rejected events	249959	203366	226810	199977	255163	220531
rejected %	82%	48%	84%	55%	77%	87%

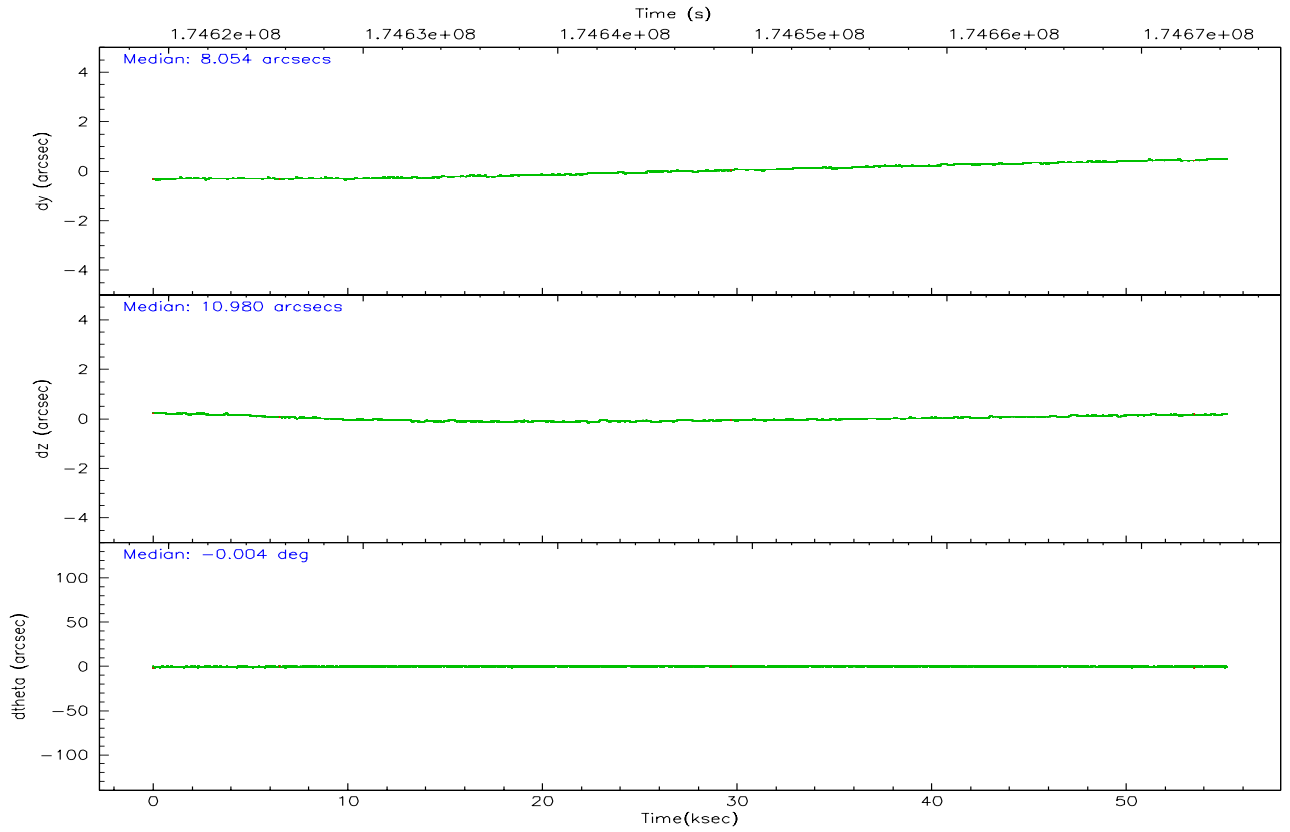
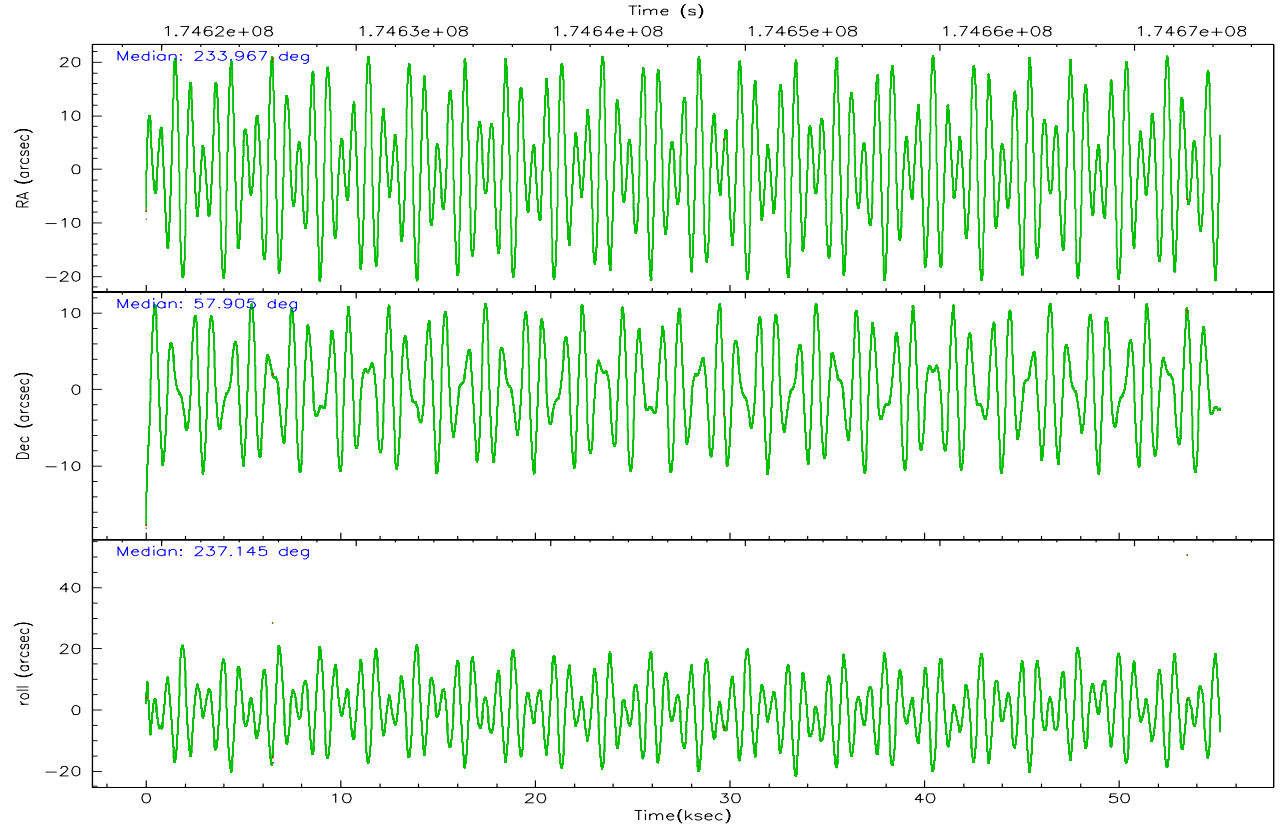
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	34796	61697	20396	17675	25032	14081
	11%	14%	7%	4%	7%	5%
grade 1 events	259	1166	118	505	171	127
	0%	0%	0%	0%	0%	0%
grade 2 events	6852	52964	7478	33273	14902	6050
	2%	12%	2%	9%	4%	2%
grade 3 events	3412	8443	3495	15140	7424	3573
	1%	1%	1%	4%	2%	1%
grade 4 events	3266	8081	3474	15011	7075	3235
	1%	1%	1%	4%	2%	1%
grade 5 events	10693	28455	11399	33441	14547	12111
	3%	6%	4%	9%	4%	4%
grade 6 events	5078	88281	6295	81870	17747	5918
	1%	20%	2%	22%	5%	2%
grade 7 events	238920	173386	215223	165752	240289	208221
	78%	41%	80%	45%	73%	82%

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	OVERRIDE	OVERRIDE
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
Pointing RA	233.9668090817606	233.9668090817606	Subarray requested	CUSTOM	CUSTOM
Pointing Dec	57.90465525807624	57.90465525807624	Subarray start row	1	1
Pointing Roll	237.1575636989845	237.1575636989845	Subarray row count	774	774
SIM focus pos (mm)	-0.68282252473119	-0.68282252473119	Alternating exposures requested	N	N
SIM defocus (mm)	0.001444942264670734	0.001444942264670734	Primary exposure time	2.5	2.5
SIM translation stage pos (mm)	-187.1254020033	-187.1254020033			
SIM translation stage offset (mm)	-3.007121100667206	-3.007121100667206			
Observation start time	174619191.5283	174619191.5283			
Observation start date	2003-07-15T01:21:57	2003-07-15T01:19:51			
Observation end time	174674382.65569	174674382.65569			
Observation end date	2003-07-15T16:38:37	2003-07-15T16:39:42			
Read mode	TIMED	TIMED			

2.3 Aspect



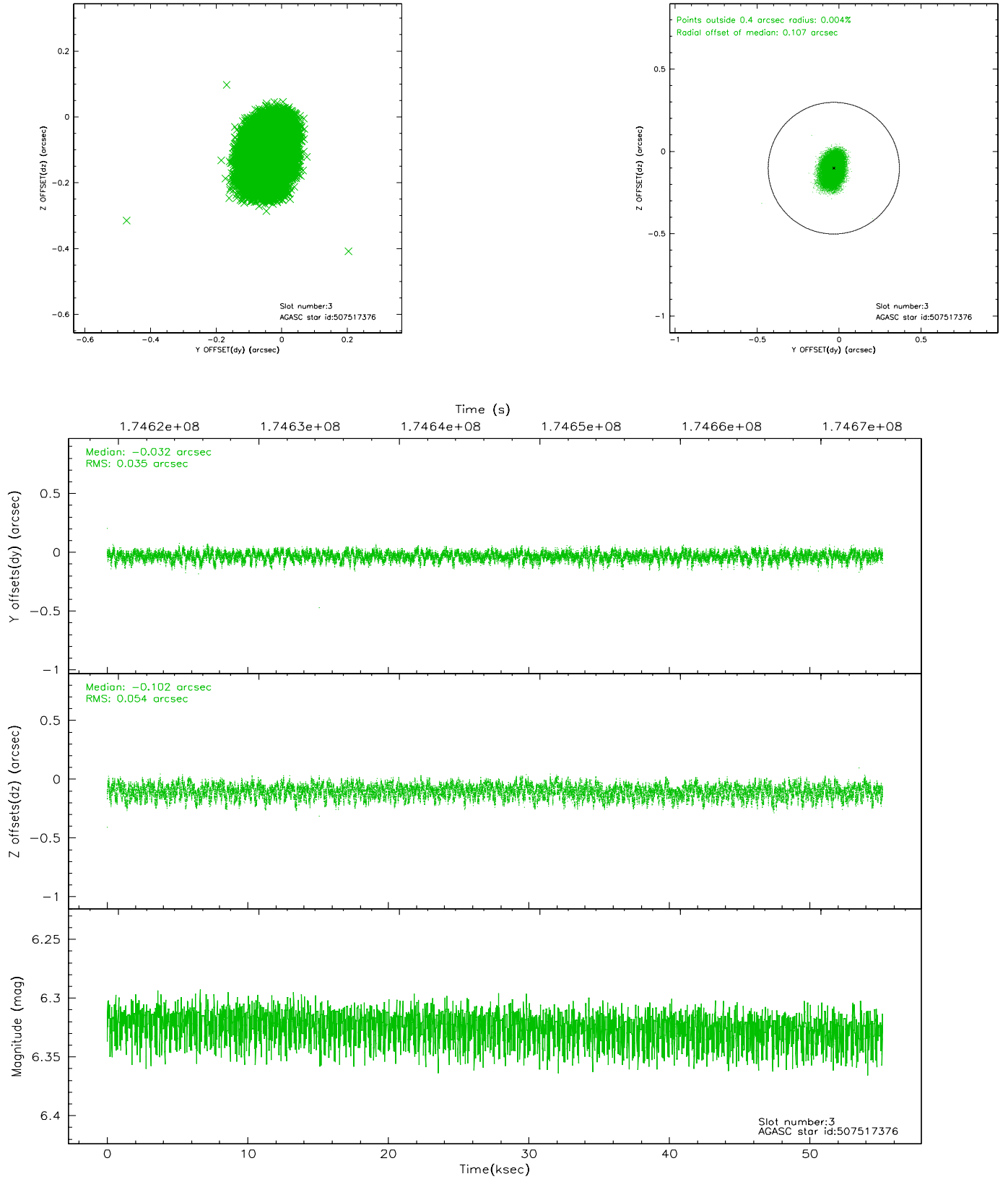


Slot Statistics

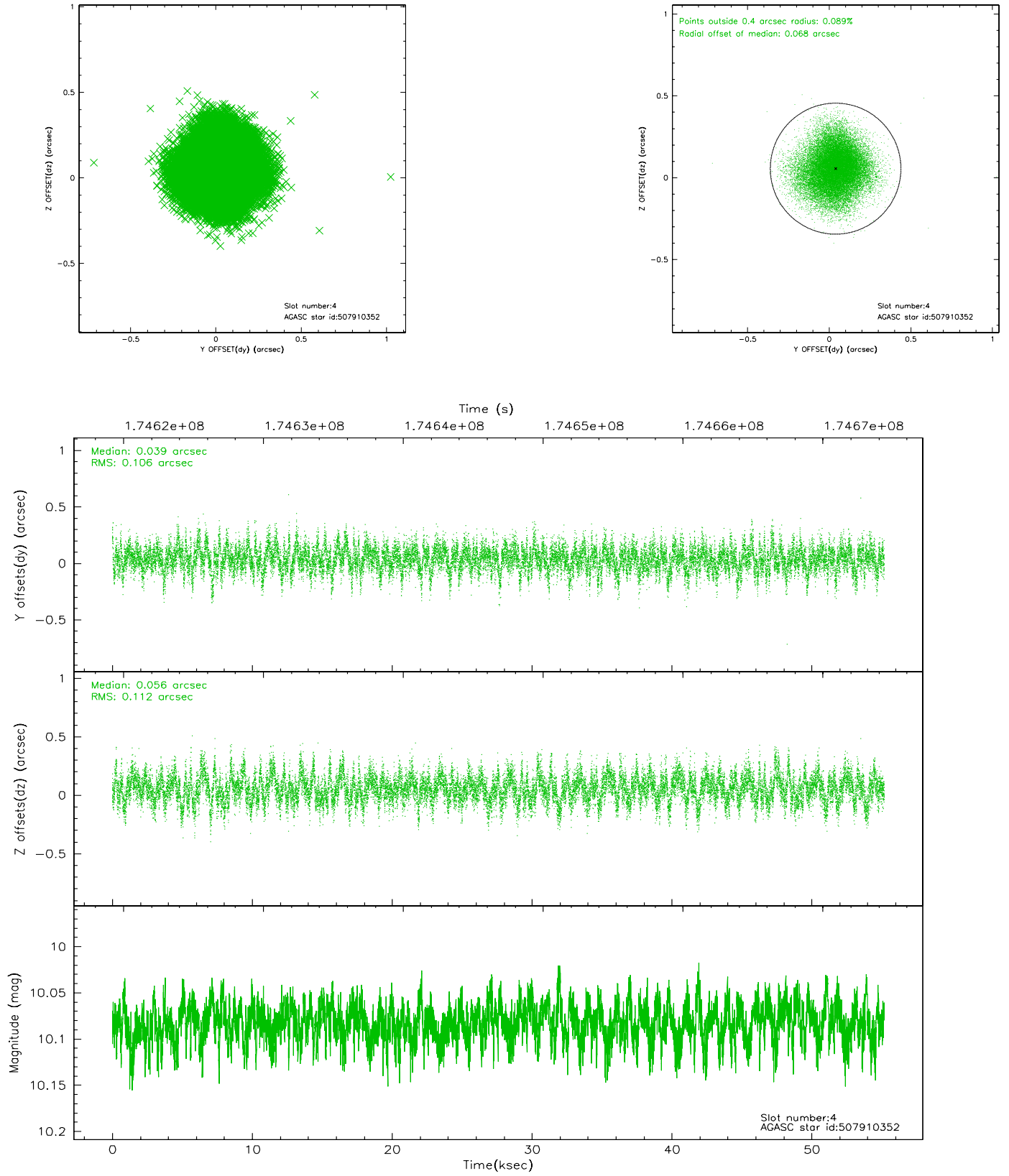
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.09	13461	-0.038	-0.084	0.009	0.014	0.000000	0.000000	-760.70	-1794.43
1	FID	ACIS-S-4	7.18	13460	0.087	0.041	0.009	0.016	0.000000	0.000000	2152.73	114.18
2	FID	ACIS-S-5	7.23	13459	-0.081	0.051	0.009	0.016	0.000000	0.000000	-1813.61	107.85
3	GUIDE	507517376	6.32	26920	-0.032	-0.102	0.068	0.112	234.727410	57.461777	612.00	2149.33
4	GUIDE	507910352	10.08	26895	0.039	0.056	0.165	0.265	232.620414	57.785943	1828.82	-1897.45
5	GUIDE	507910944	9.11	26917	-0.093	-0.008	0.083	0.130	233.075683	57.963052	825.69	-1497.36
6	GUIDE	507914840	9.61	26901	0.088	-0.029	0.093	0.151	234.138477	57.741300	397.48	647.04
7	GUIDE	507915904	7.82	26918	0.001	0.085	0.072	0.115	234.676266	57.520719	490.11	1949.71

2.4 Star Slots

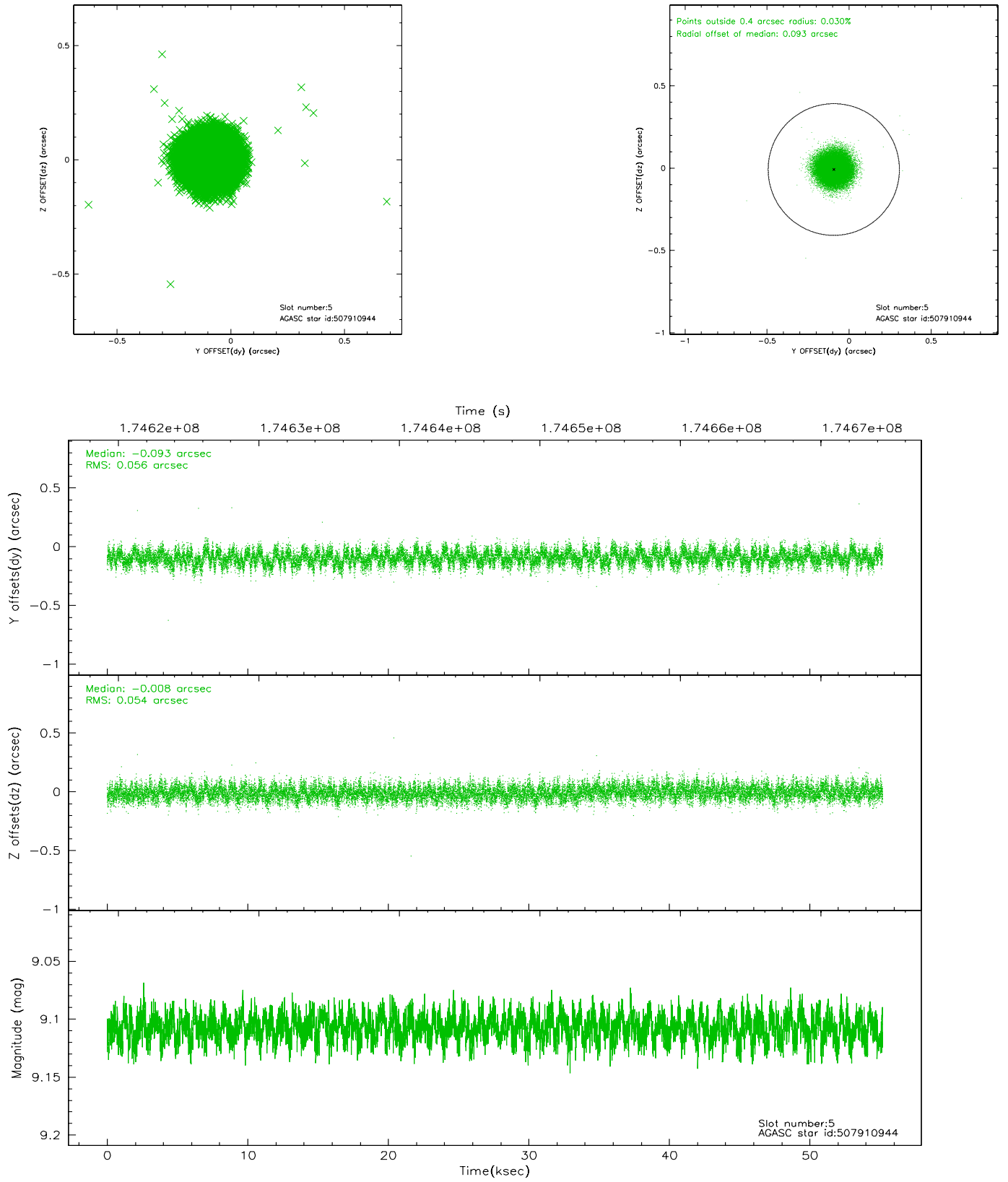
2.4.1 Slot 3



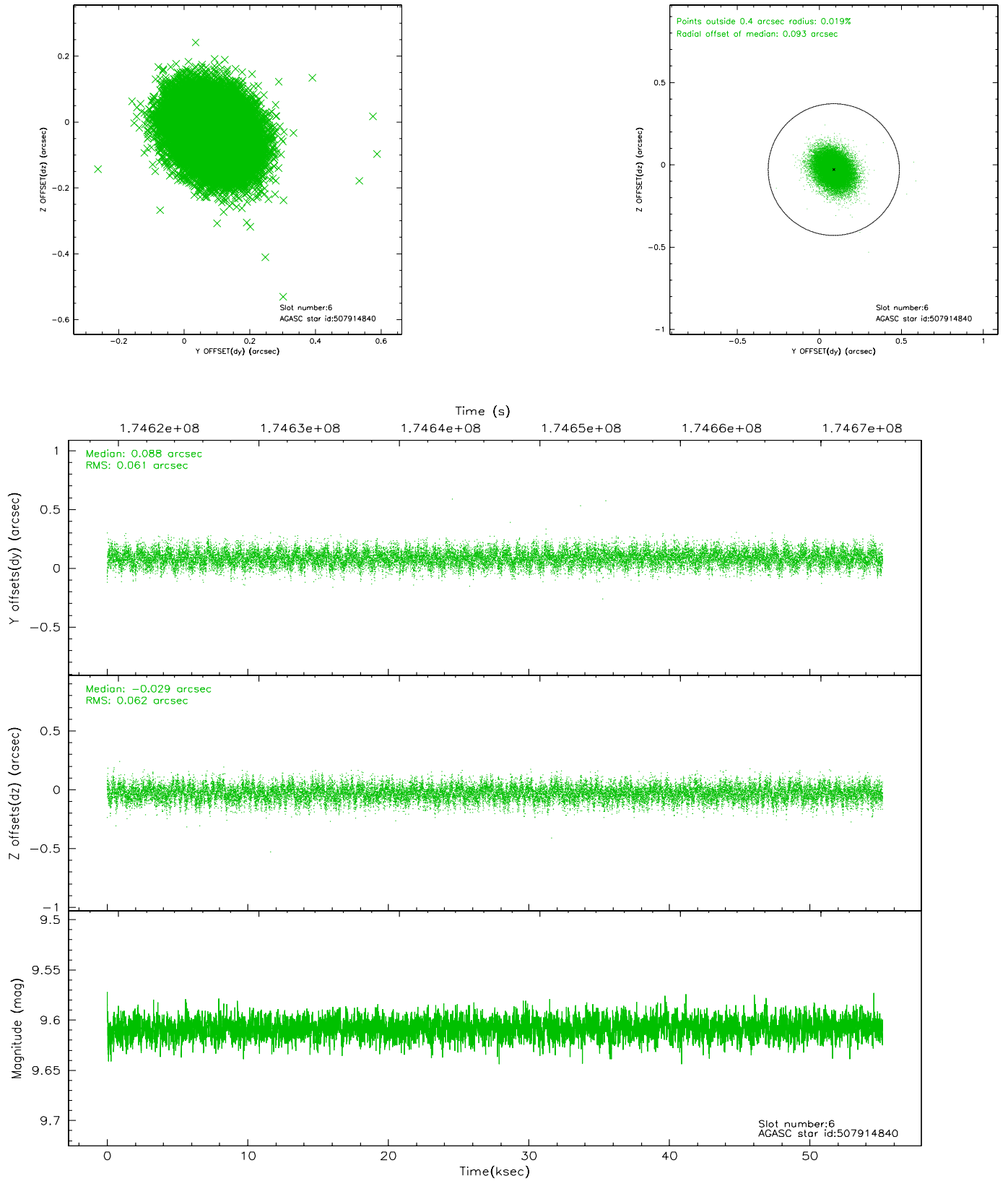
2.4.2 Slot 4



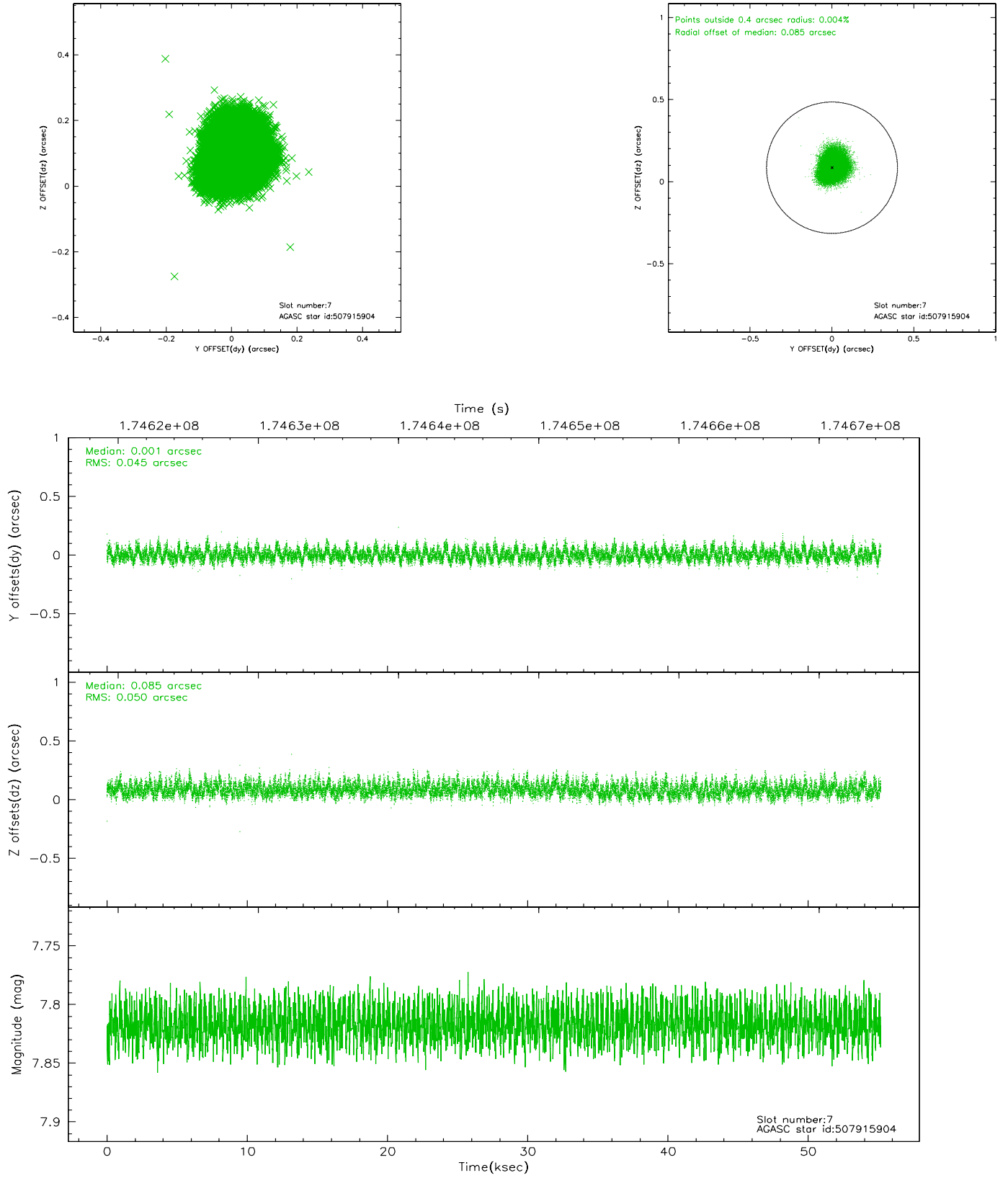
2.4.3 Slot 5



2.4.4 Slot 6

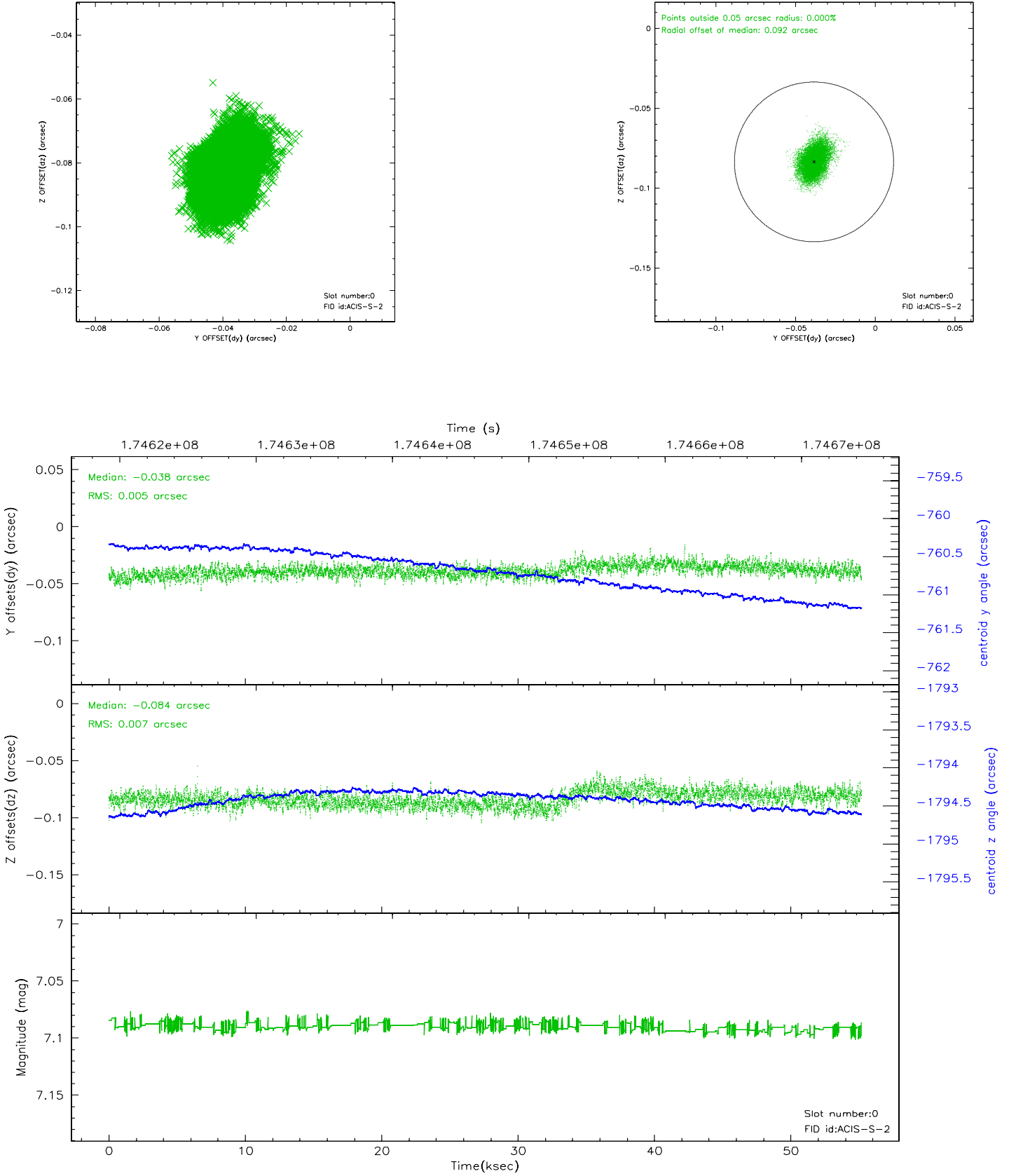


2.4.5 Slot 7

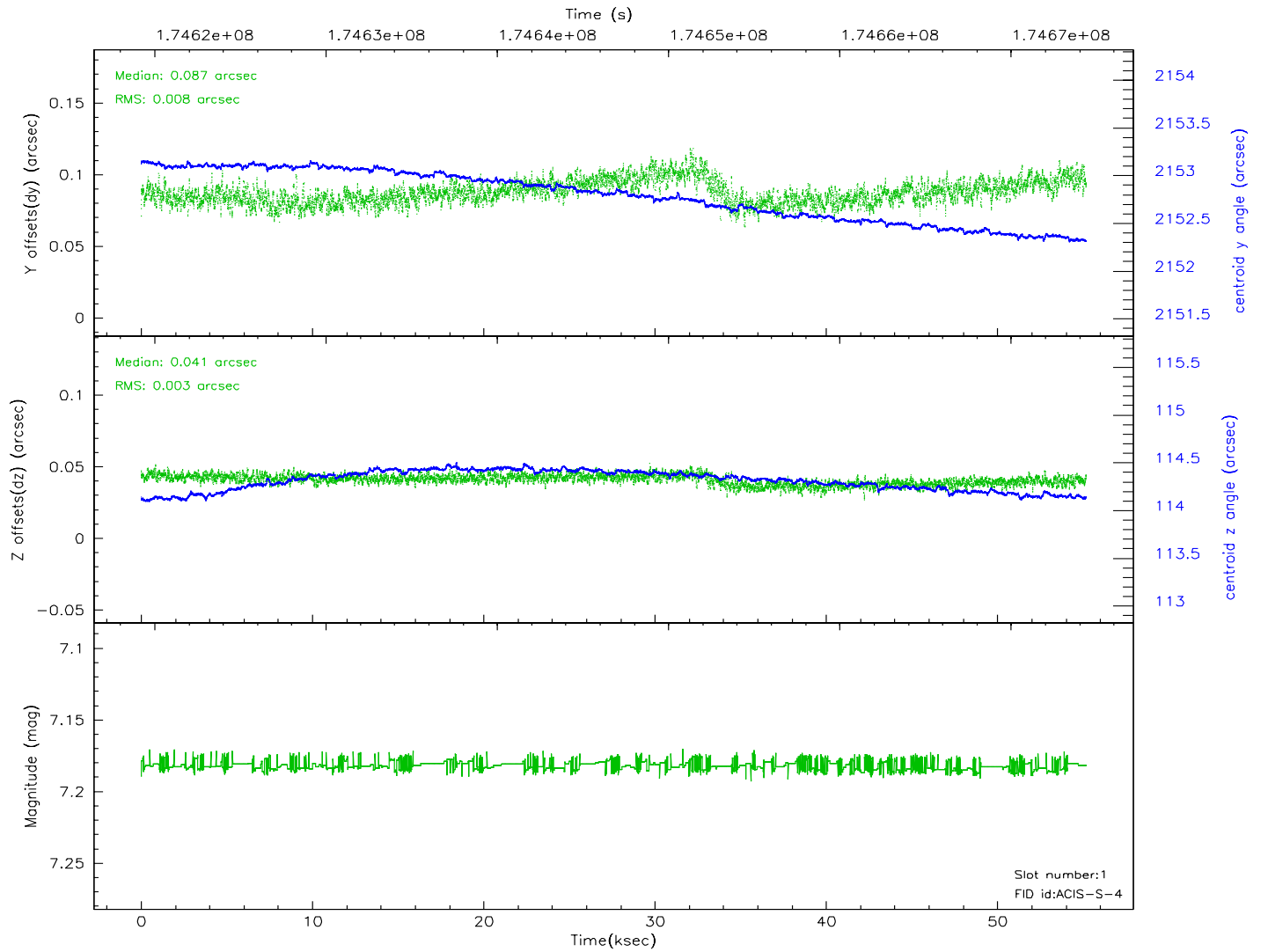
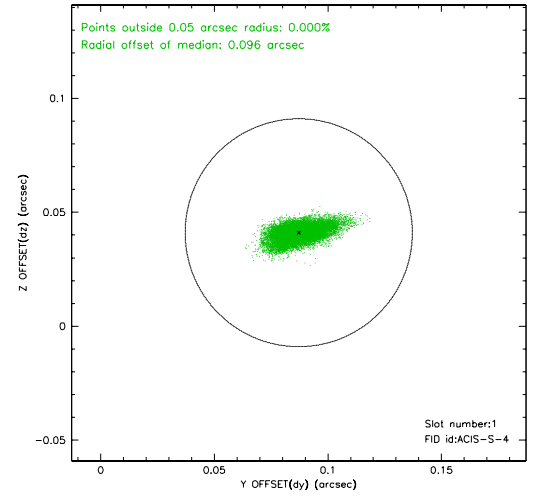
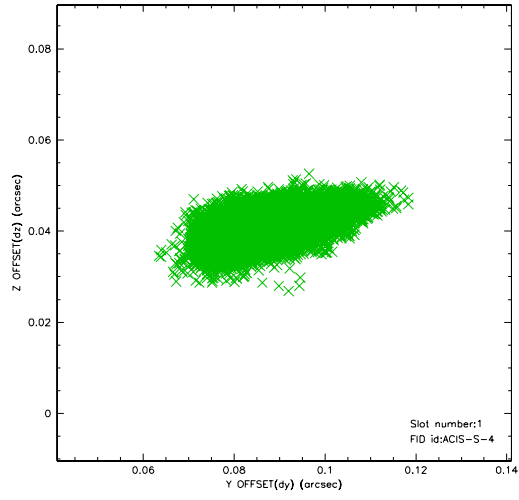


2.5 FID Slots

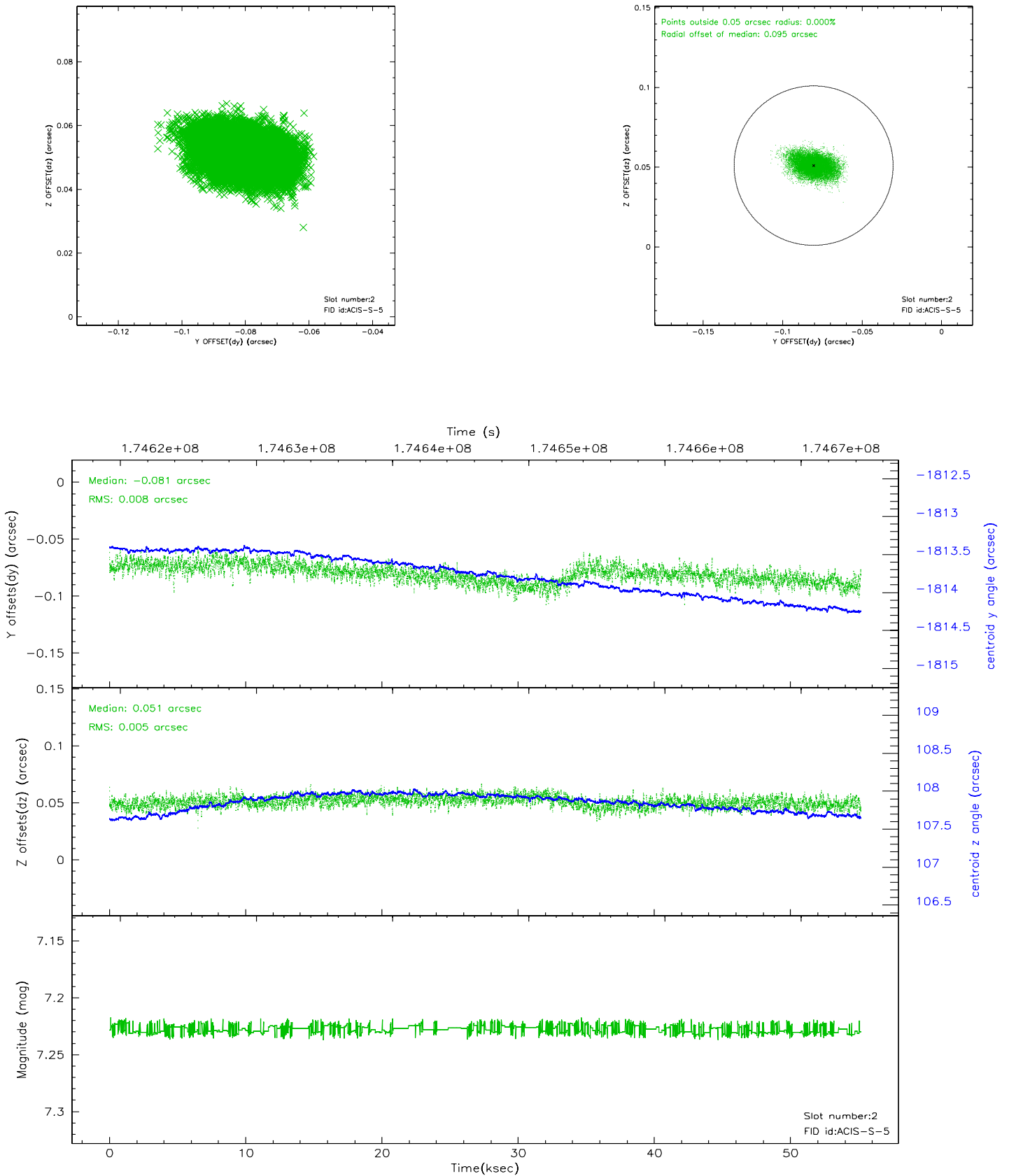
2.5.1 Slot 0



2.5.2 Slot 1

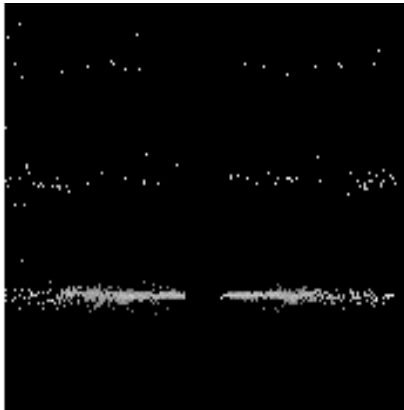


2.5.3 Slot 2

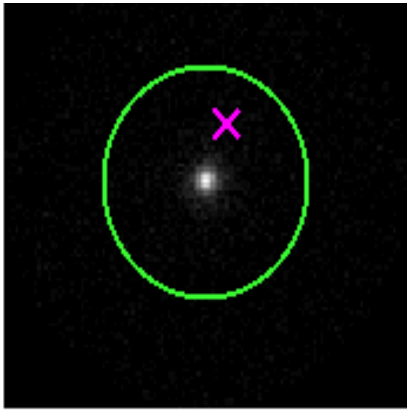


3 Gratings

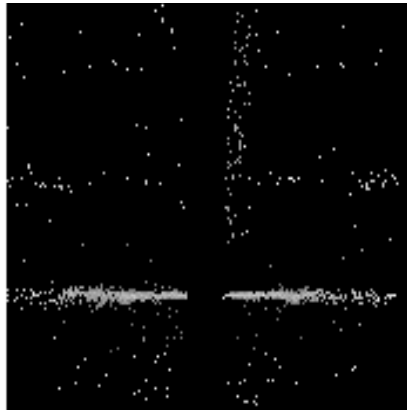
3.1 HEG Arm



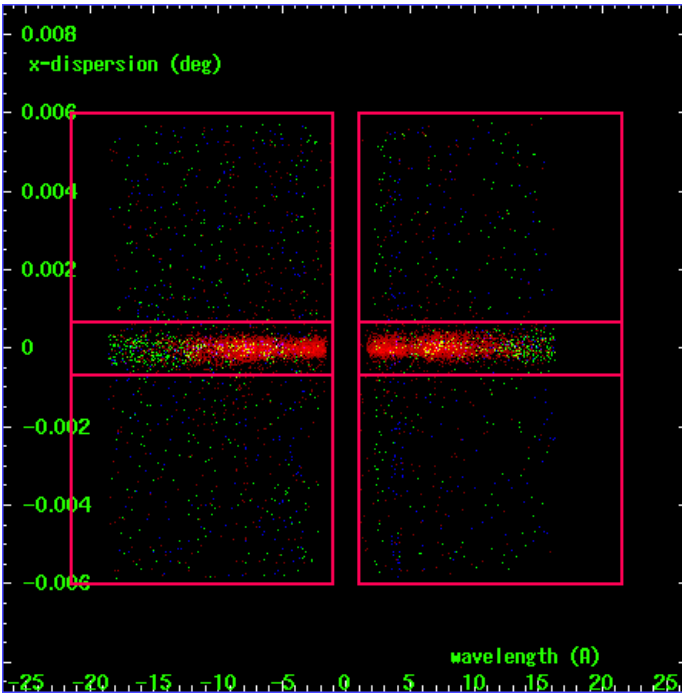
HEG Order Sort 123



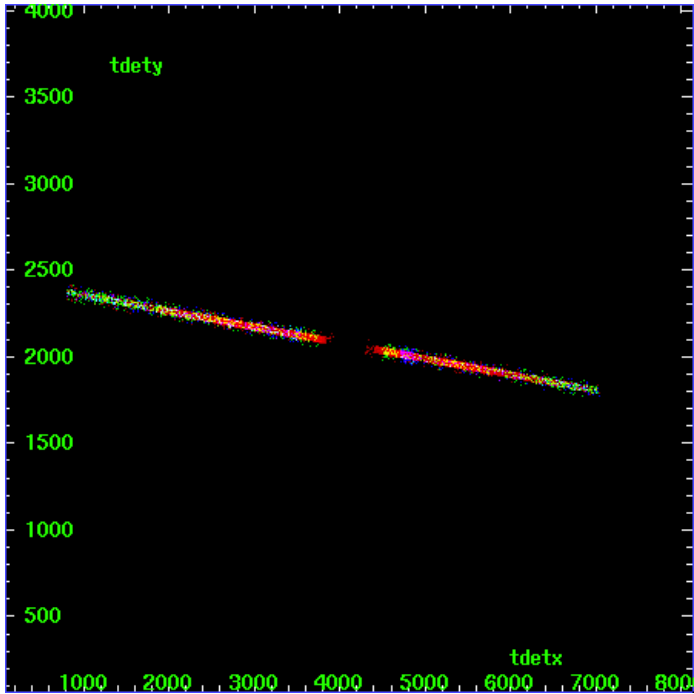
HEG Zero Order



HEG Order Sort ALL

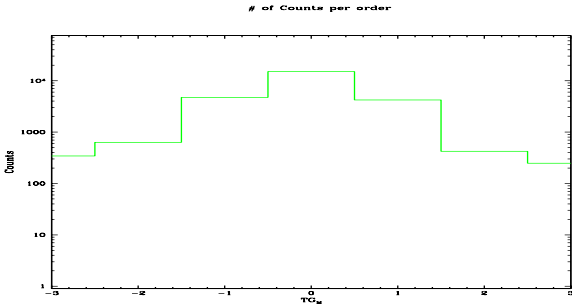


Spot Image HEG

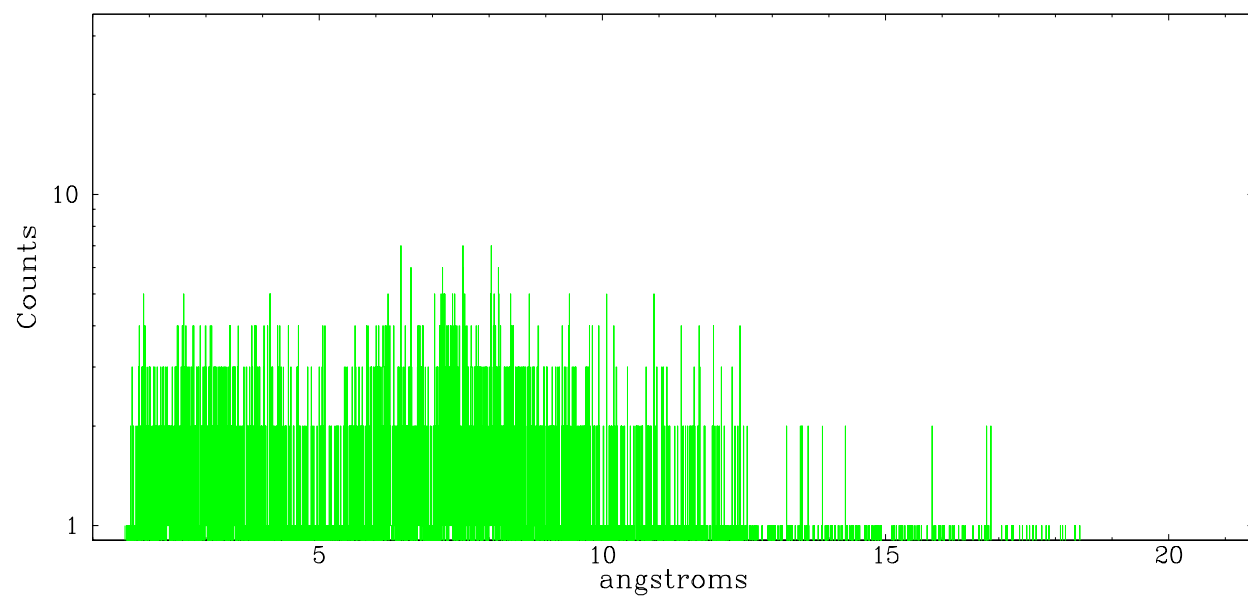


Full Detector HEG

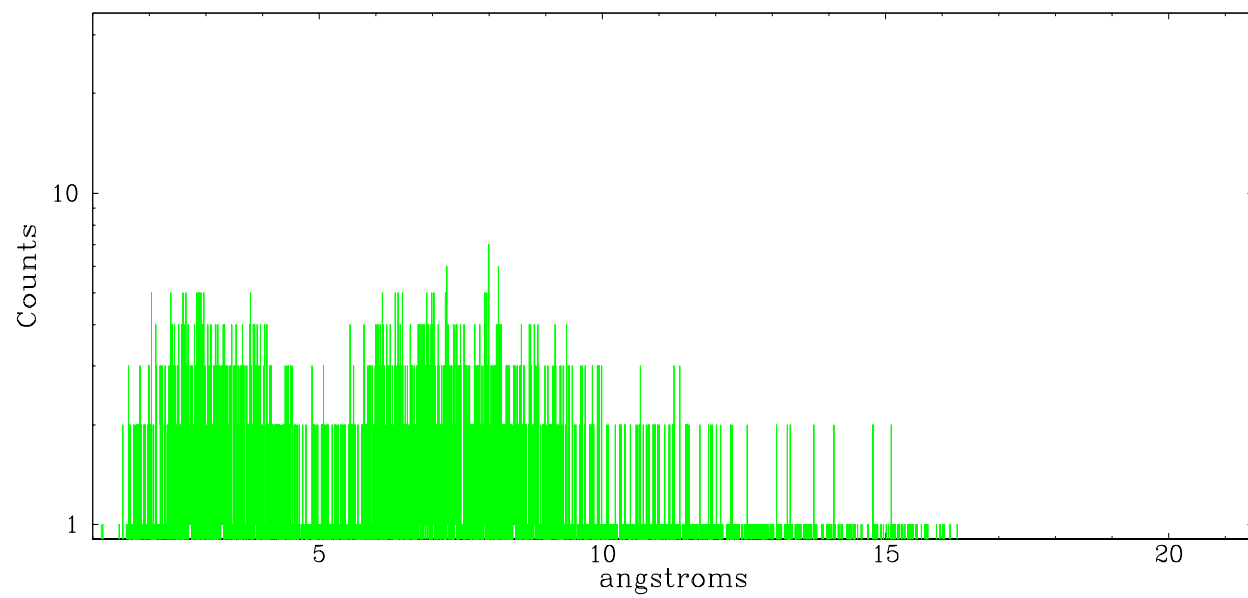
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	344	633	4726	15047	4236	424	248



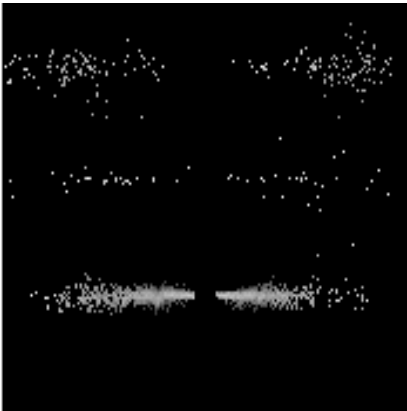
heg order -1



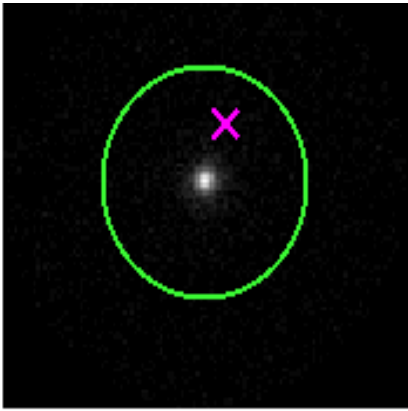
heg order +1



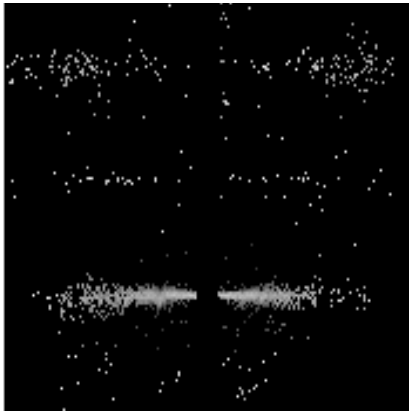
3.2 MEG Arm



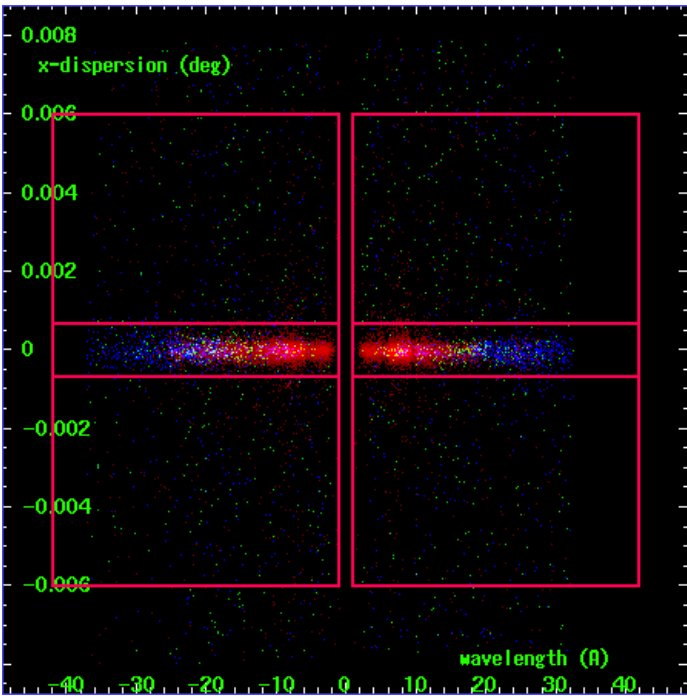
MEG Order Sort 123



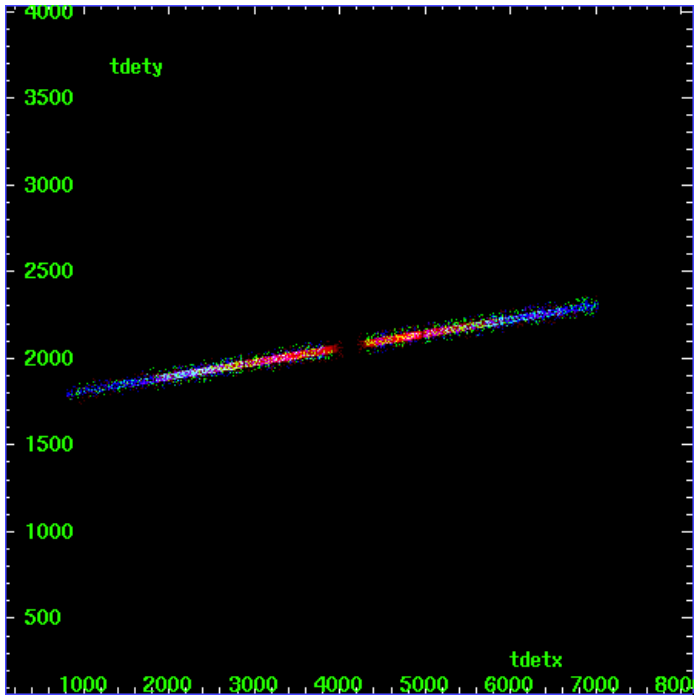
MEG Zero Order



MEG Order Sort ALL

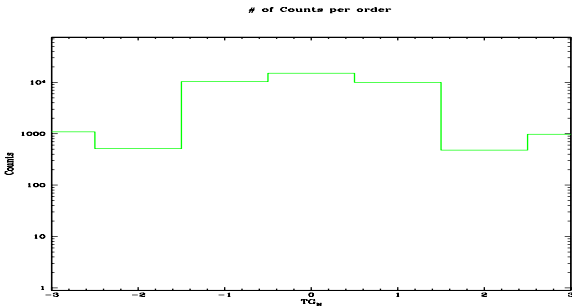


Spot Image MEG

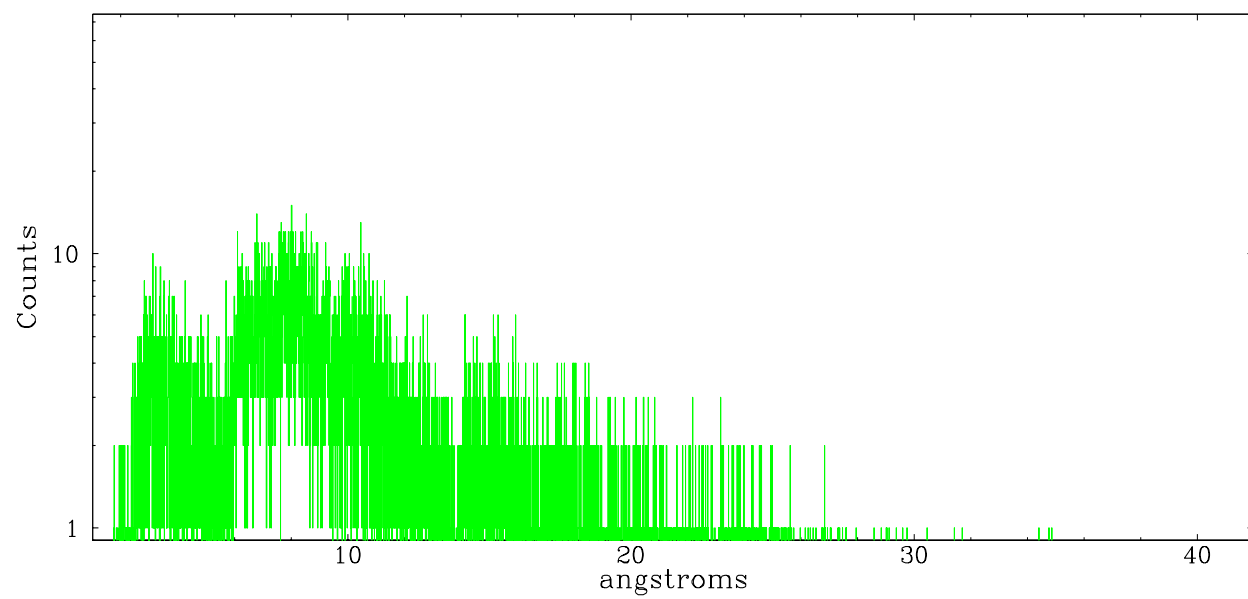


Full Detector MEG

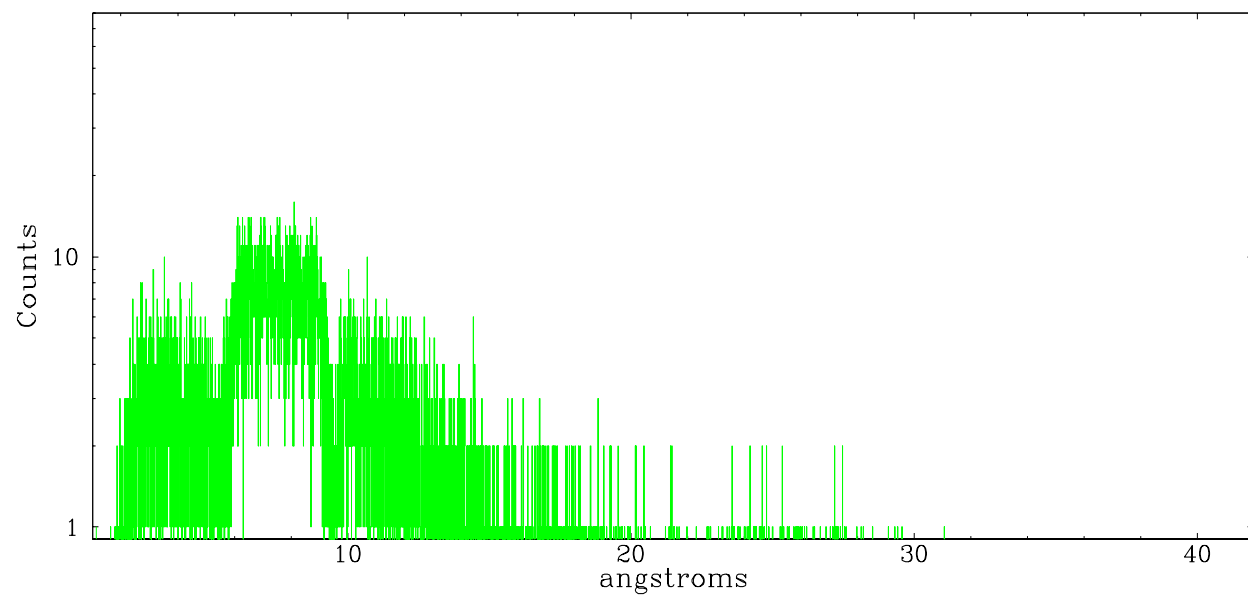
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	1084	512	10280	15047	9985	478	974



meg order -1



meg order +1



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2009.02.06
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	55.099

A.2 Comments

This obsid was reprocessed to correct minor errors in parameters used in processing. Some of these parameters cannot be determined automatically for this observation and were derived from spacecraft telemetry.