

V&V Reference Report

L2 ASCDS Version : 7.6.9

Observation 2977 - L2 Version 001
Chandra X-Ray Center

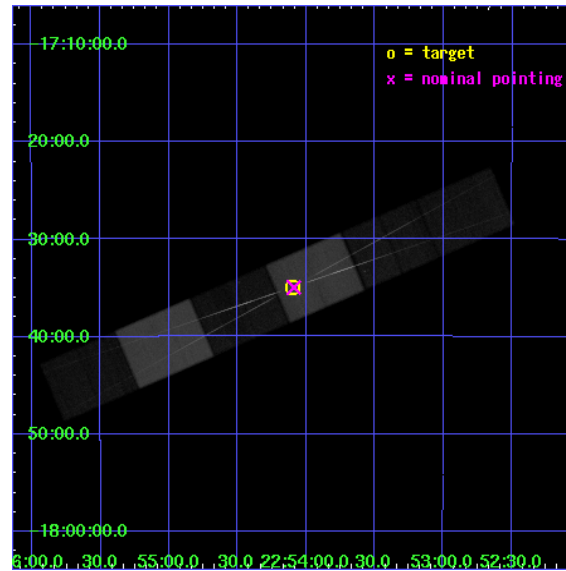
L2 Processing Date : Oct 6 2006

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1 Front

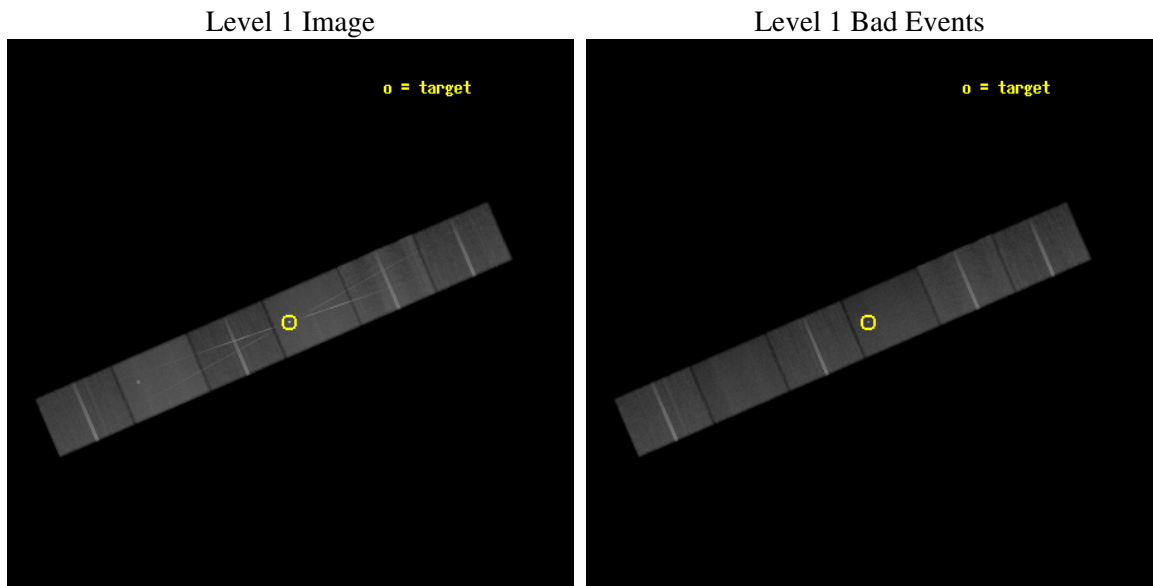
seq_num	700416
obs_id	2977
title	PROBING WARM ABSORPTION IN THE RADIO QUIET QSO MR2251-17.8
observer	Prof. Claude Canizares
object	MRC 2251-178
dtcycle	0
cycle	P
ra_targ	343.524583
dec_targ	-17.58175
ra_nom	343.52247345007
dec_nom	-17.582705698933
roll_nom	336.65652220917
revision	2
ontime	148662.5
livetime	146261.47168089
ontime4	148659.95899984
ontime5	148662.5
ontime6	148659.95900983
ontime7	148662.5
ontime8	148657.41797975
ontime9	148657.41797975
l2events	1154300



2 OBI

2.1 OBI

2.1.1 Images

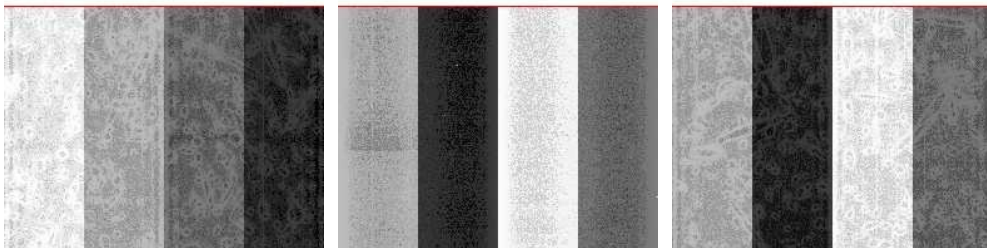


2.1.2 Bias

Chip 4

Chip 5

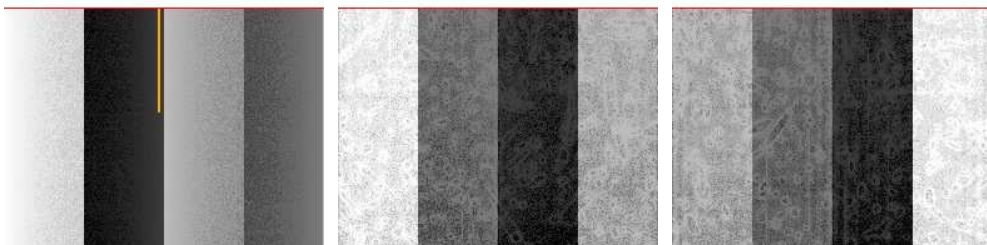
Chip 6



Chip 7

Chip 8

Chip 9



2.1.3 Parameters

obi_num	1
ascdsver	7.6.9
caldbver	3.2.3
date	2006-10-04T15:15:31
revision	2

sched_exp_time	148500.000000
ontime	148667.1135813
ontime4	148664.57258114
ontime5	148667.1135813
ontime6	148664.57259113
ontime7	148667.1135813
ontime8	148662.03156105
ontime9	148662.03156105
l1events	5032501

2.1.4 Events

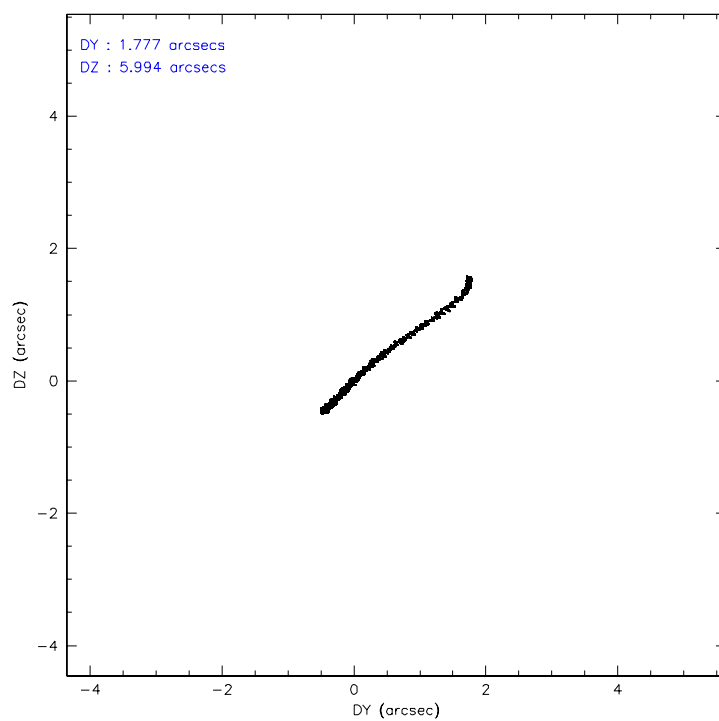
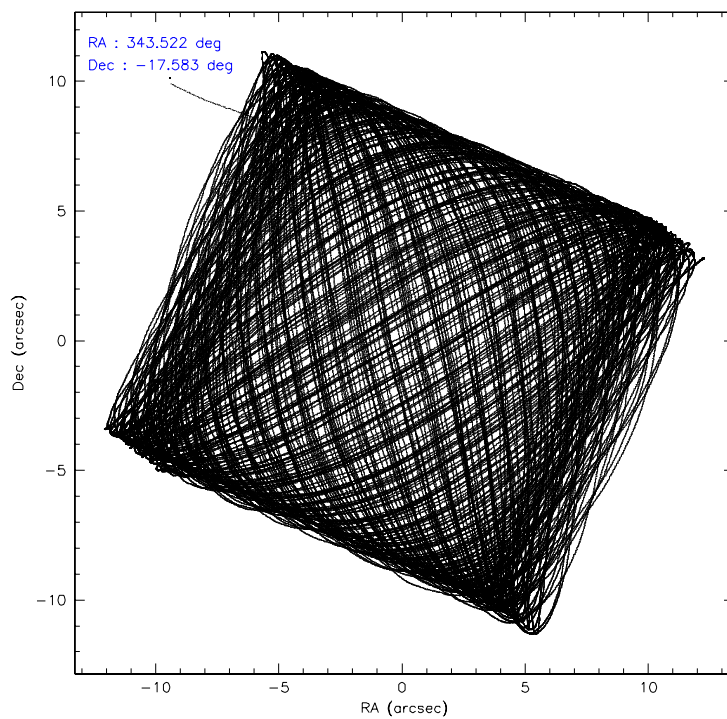
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	762758	977678	729441	971712	901037	689875
rejected events	675317	552734	617002	557467	704828	603763
rejected %	88%	56%	84%	57%	78%	87%

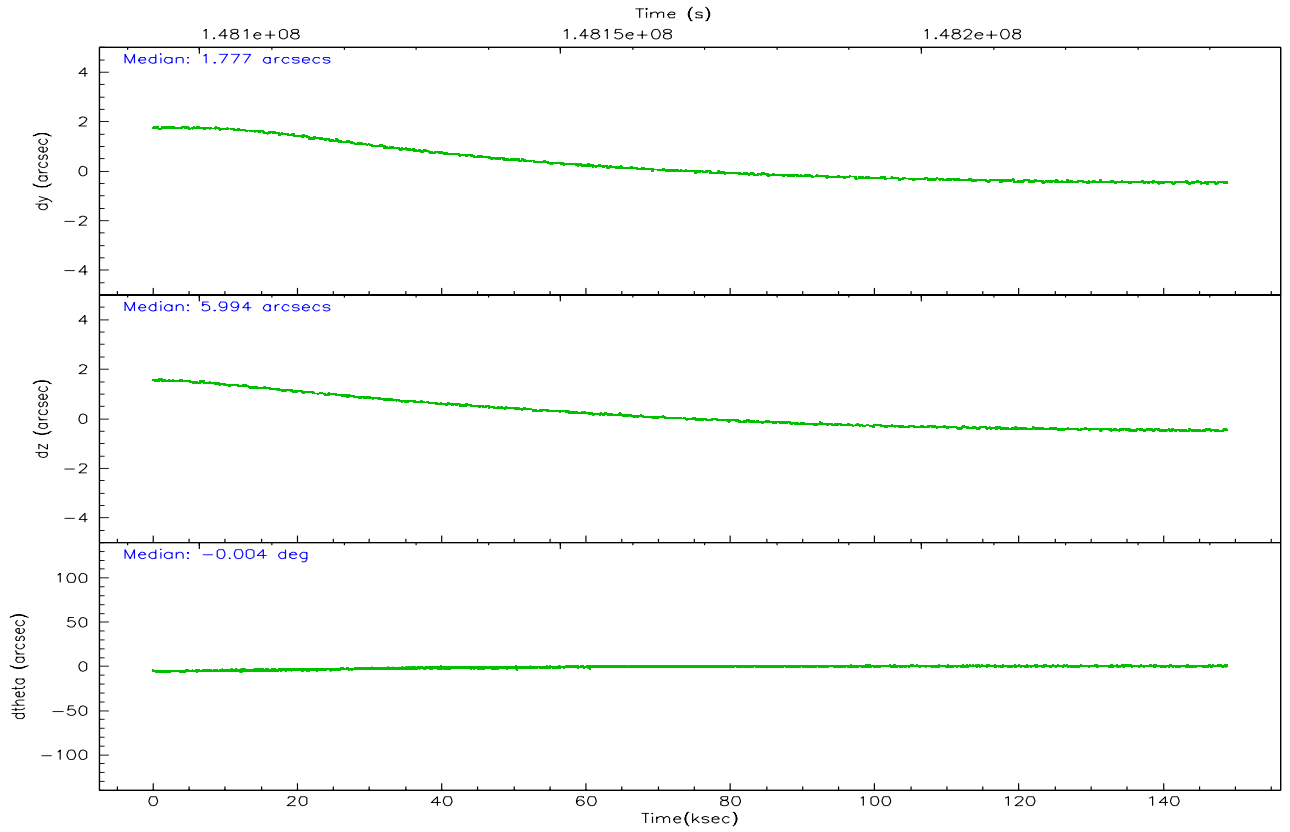
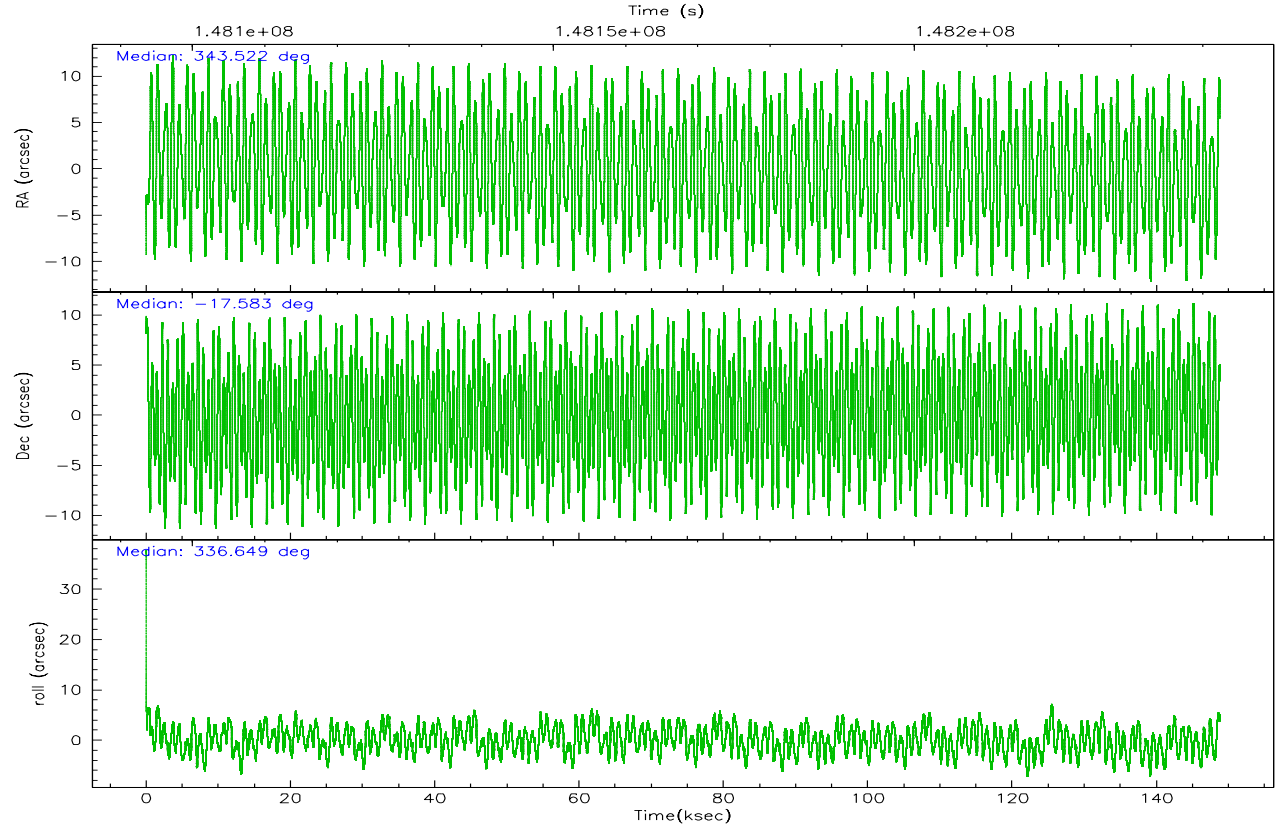
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	37838	20713	55587	32120	66642	36036
	4%	2%	7%	3%	7%	5%
grade 1 events	477	751	393	939	540	333
	0%	0%	0%	0%	0%	0%
grade 2 events	18034	130734	20161	101107	40280	16261
	2%	13%	2%	10%	4%	2%
grade 3 events	9206	14002	9860	26579	21508	9256
	1%	1%	1%	2%	2%	1%
grade 4 events	8904	11267	9704	26327	20051	8824
	1%	1%	1%	2%	2%	1%
grade 5 events	28102	49487	29886	67726	38538	31609
	3%	5%	4%	6%	4%	4%
grade 6 events	13463	248246	17132	228126	47731	15738
	1%	25%	2%	23%	5%	2%
grade 7 events	646734	502478	586718	488788	665747	571818
	84%	51%	80%	50%	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	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	343.494141	343.5224734500708	Subarray requested	CUSTOM	CUSTOM
Pointing Dec	-17.586216	-17.58270569893261	Subarray start row	1	1
Pointing Roll	336.491336	336.6565222091653	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	148093890.184000	148092830.52765			
Observation start date	2002-09-11T01:10:26	2002-09-11T00:53:50			
Observation end time	148242390.184000	148243874.53389			
Observation end date	2002-09-12T18:25:26	2002-09-12T18:51:14			
Read mode	TIMED	TIMED			

2.3 Aspect



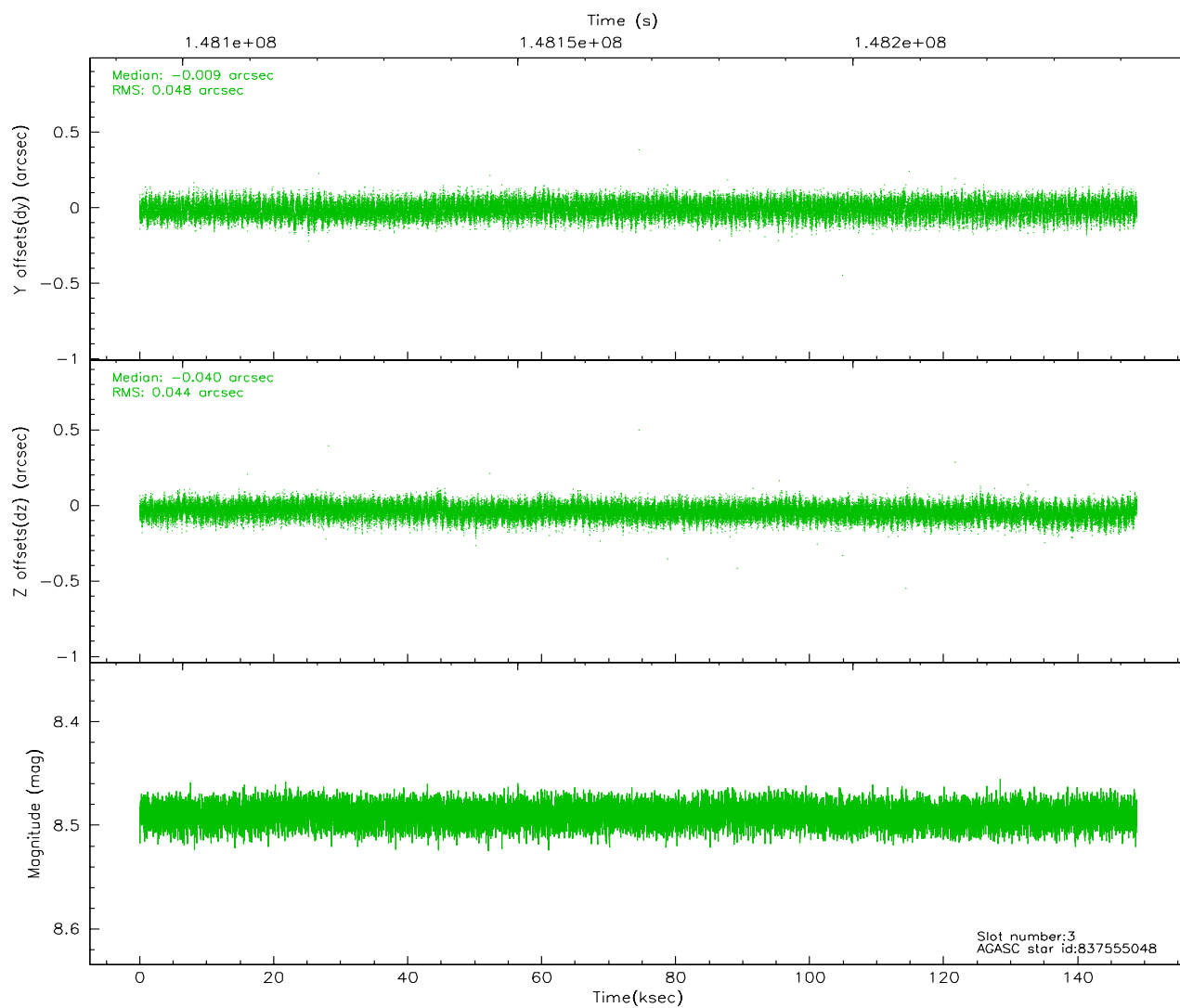
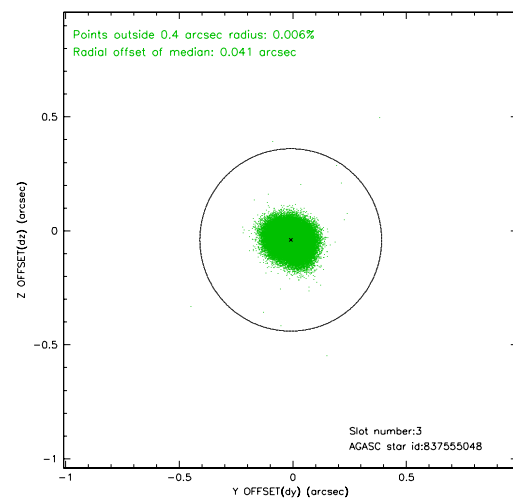
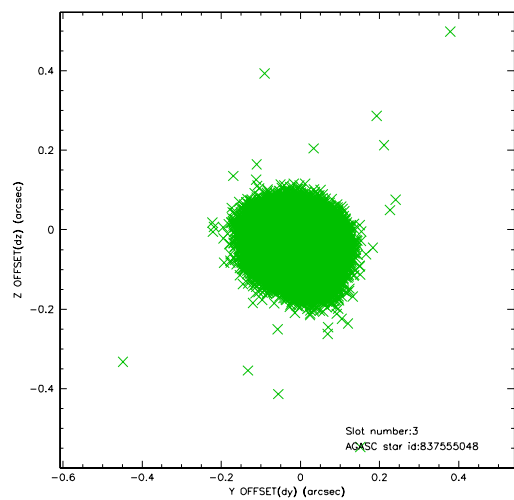


Slot Statistics

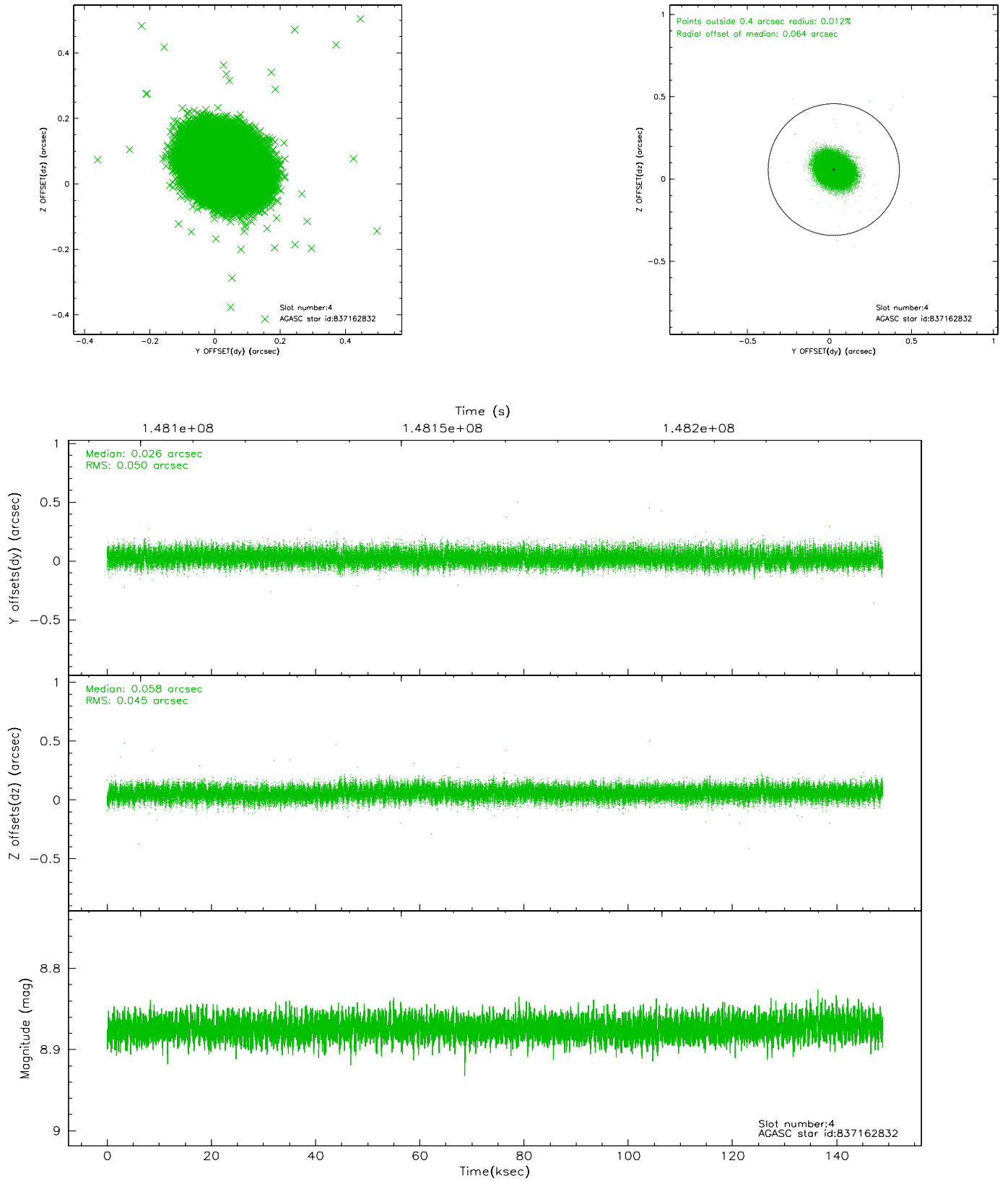
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	36305	-0.029	-0.040	0.012	0.030	0.000000	0.000000	-754.50	-1789.52
1	FID	ACIS-S-4	7.20	36303	-0.028	0.025	0.010	0.035	0.000000	0.000000	2158.83	119.13
2	FID	ACIS-S-5	7.23	36302	0.024	0.025	0.011	0.029	0.000000	0.000000	-1807.43	112.67
3	GUIDE	837555048	8.49	72595	-0.009	-0.040	0.070	0.111	343.494742	-18.059239	681.35	-1560.57
4	GUIDE	837162832	8.87	72590	0.026	0.058	0.071	0.116	343.313375	-17.165164	-1174.90	1141.72
5	GUIDE	837162040	9.11	72580	-0.076	0.088	0.087	0.138	343.811093	-17.243485	507.11	1565.60
6	GUIDE	837161472	9.62	72566	0.058	-0.085	0.155	0.260	343.568933	-17.032215	-559.82	1931.41
7	GUIDE	837551376	9.43	72573	0.003	-0.016	0.101	0.162	342.721102	-17.819815	-2091.82	-1833.14

2.4 Star Slots

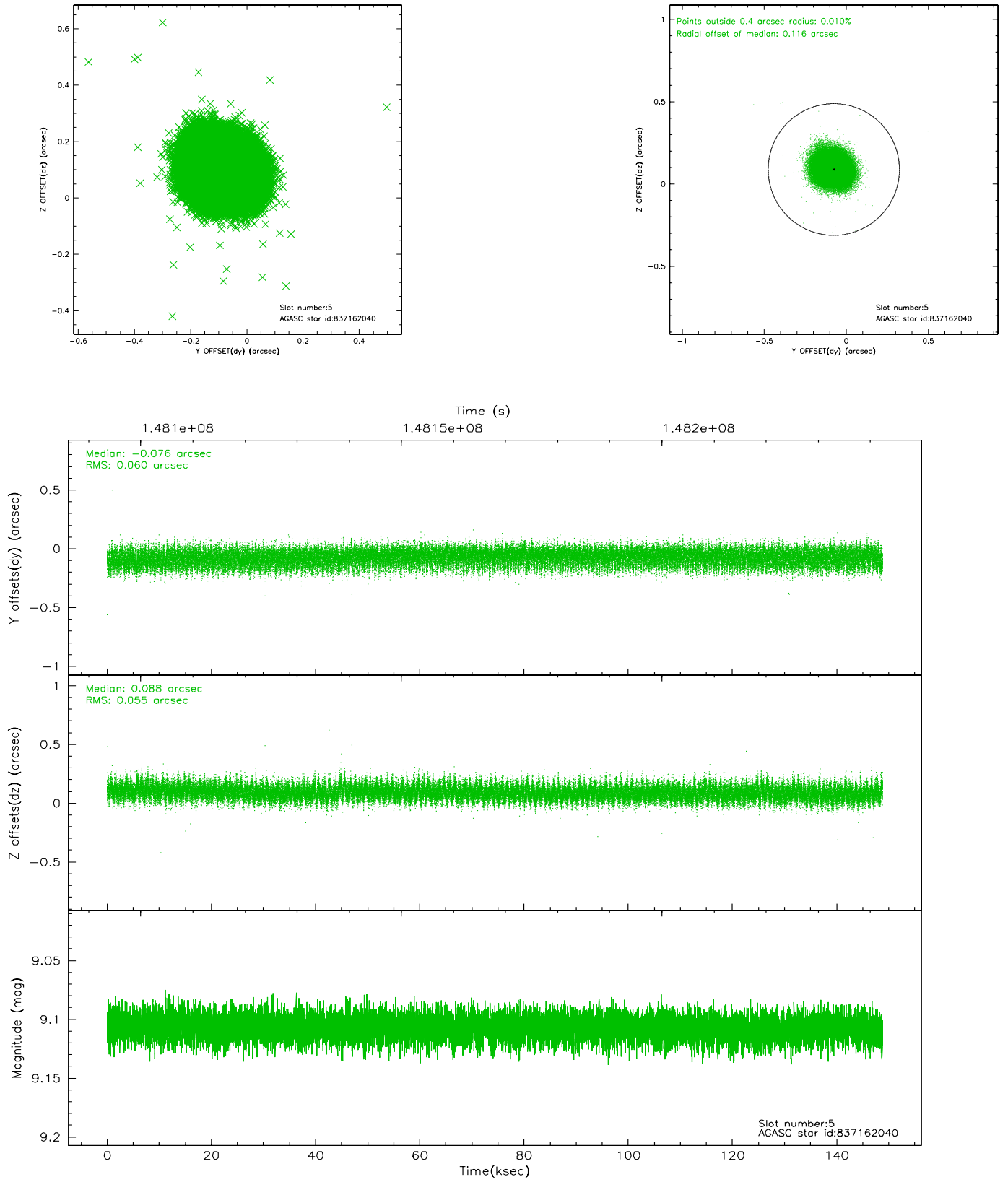
2.4.1 Slot 3



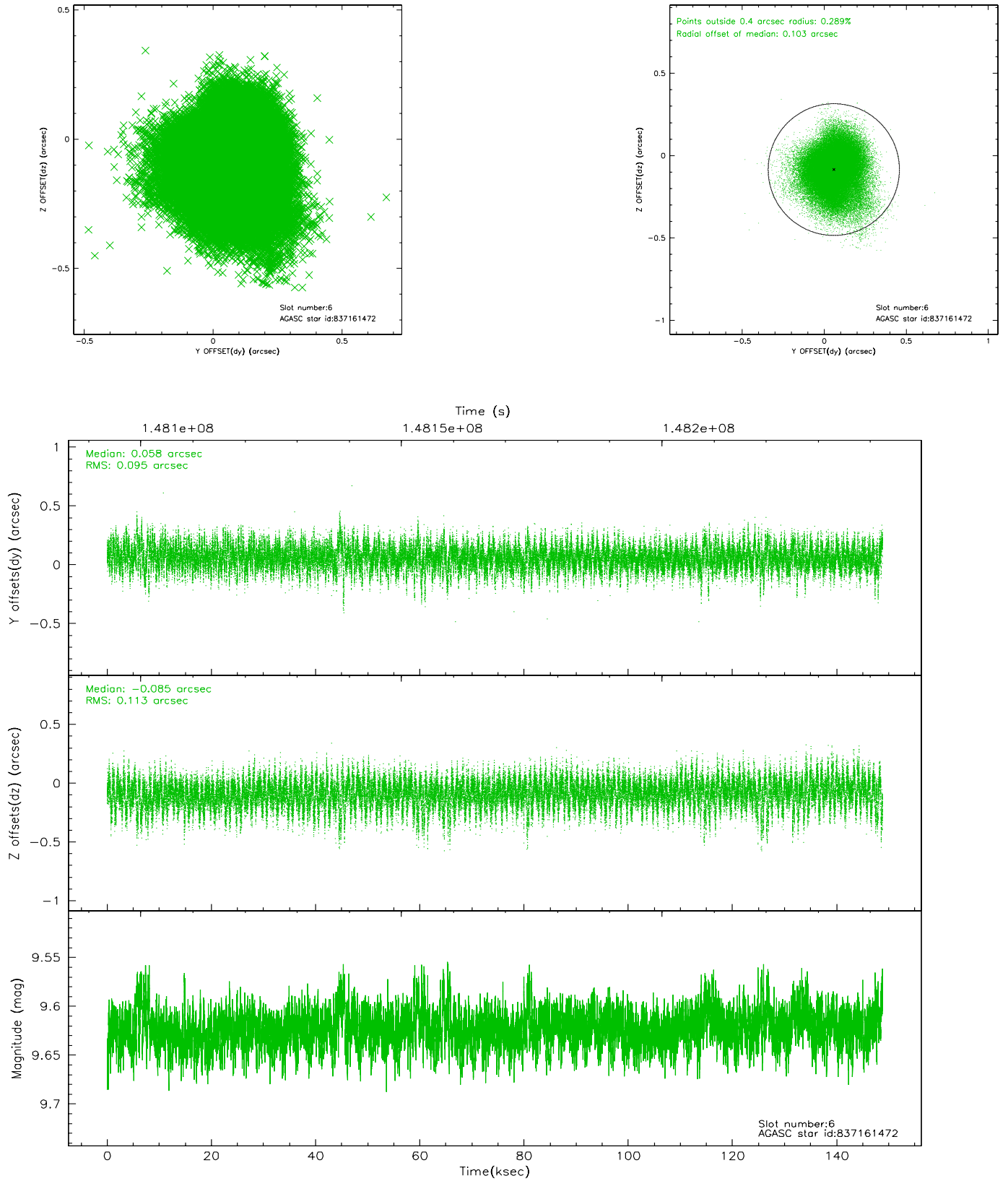
2.4.2 Slot 4



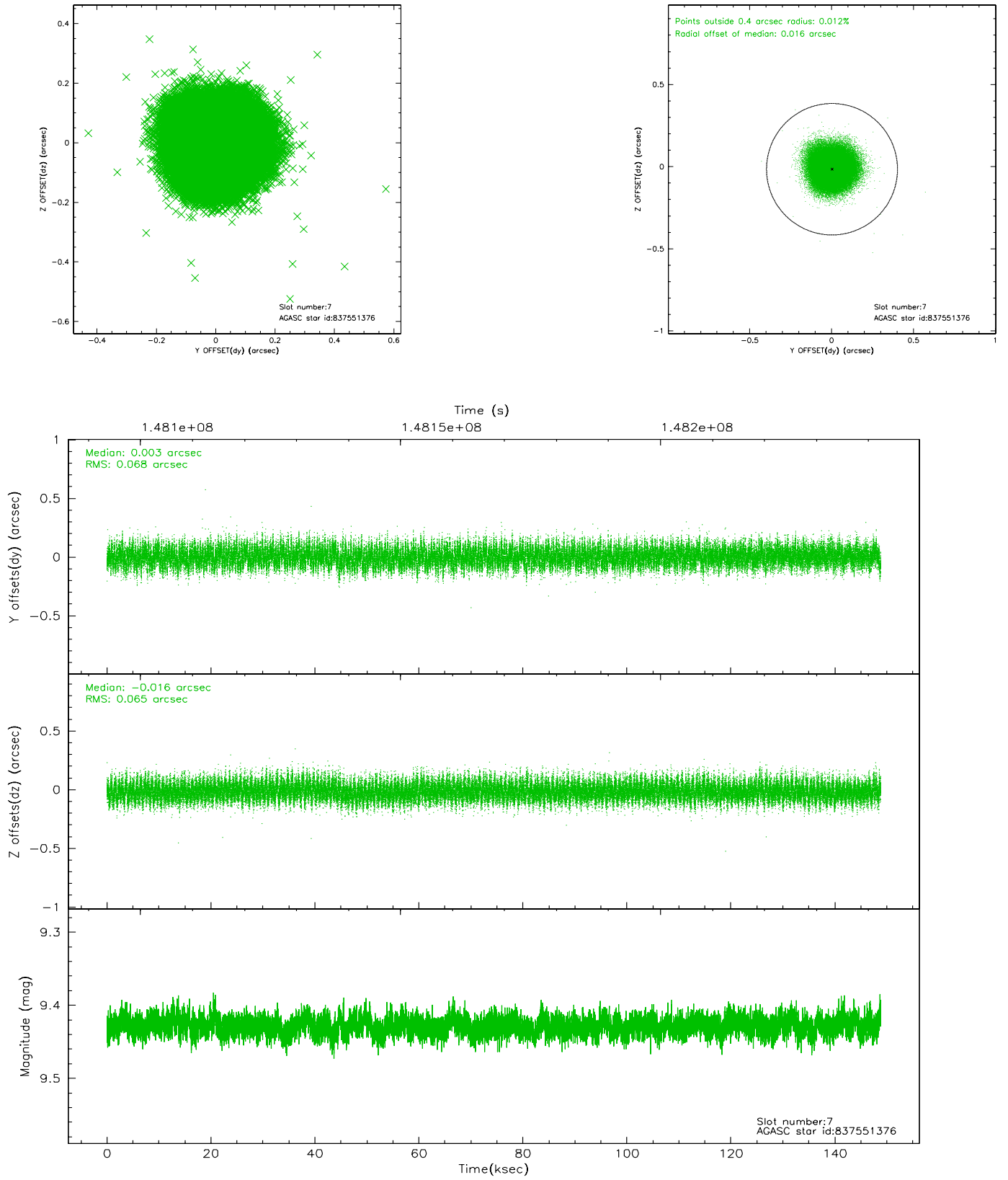
2.4.3 Slot 5



2.4.4 Slot 6

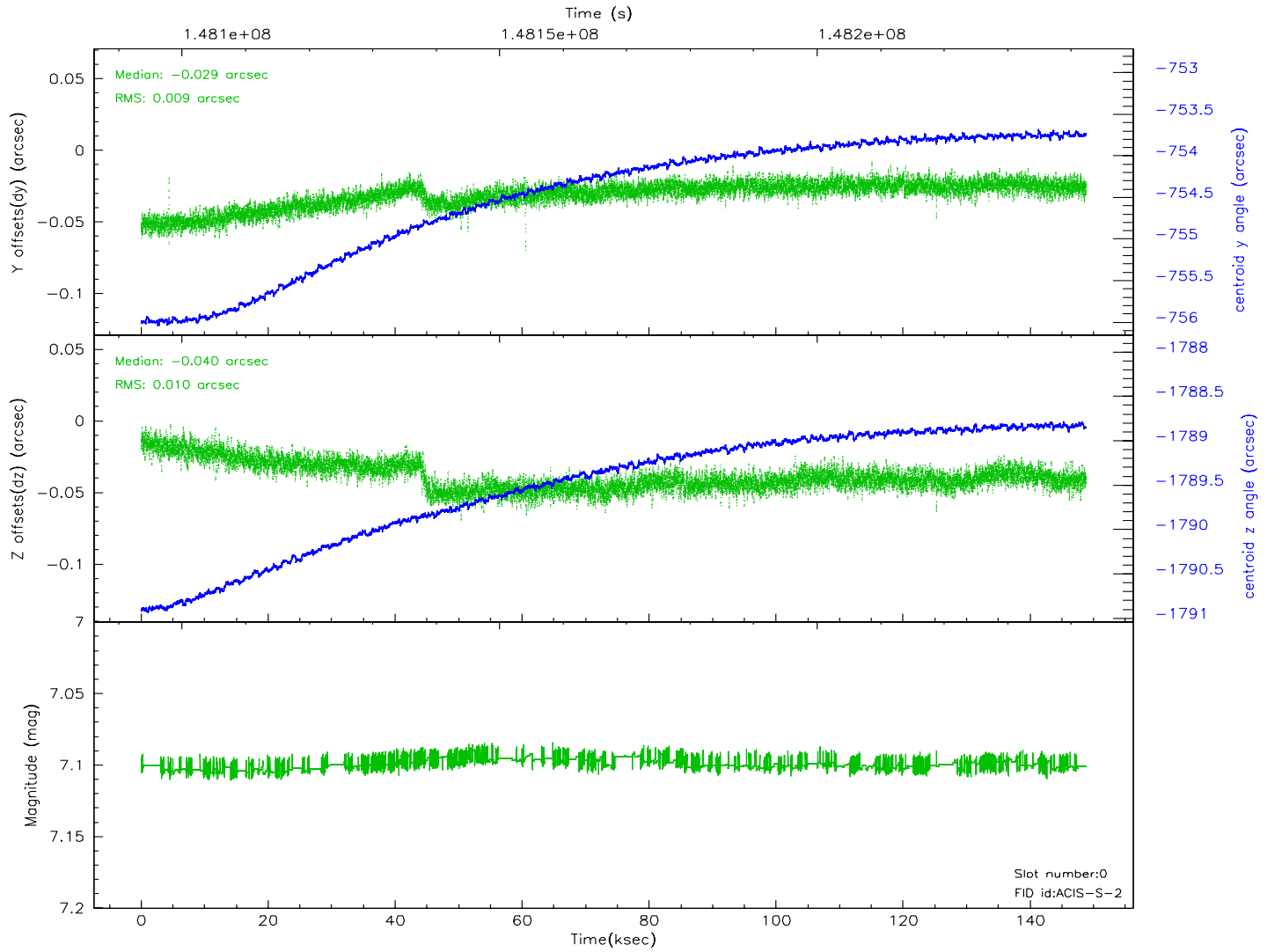
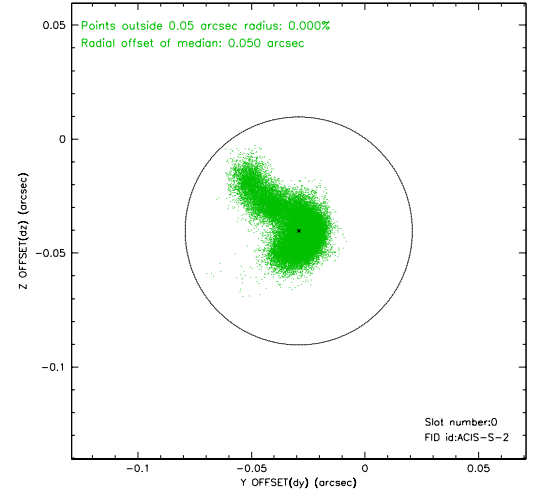
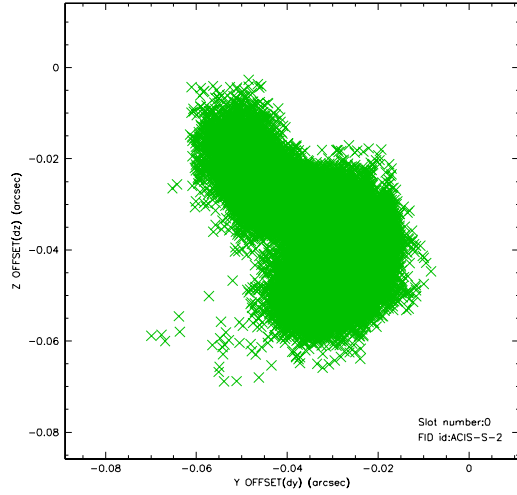


2.4.5 Slot 7

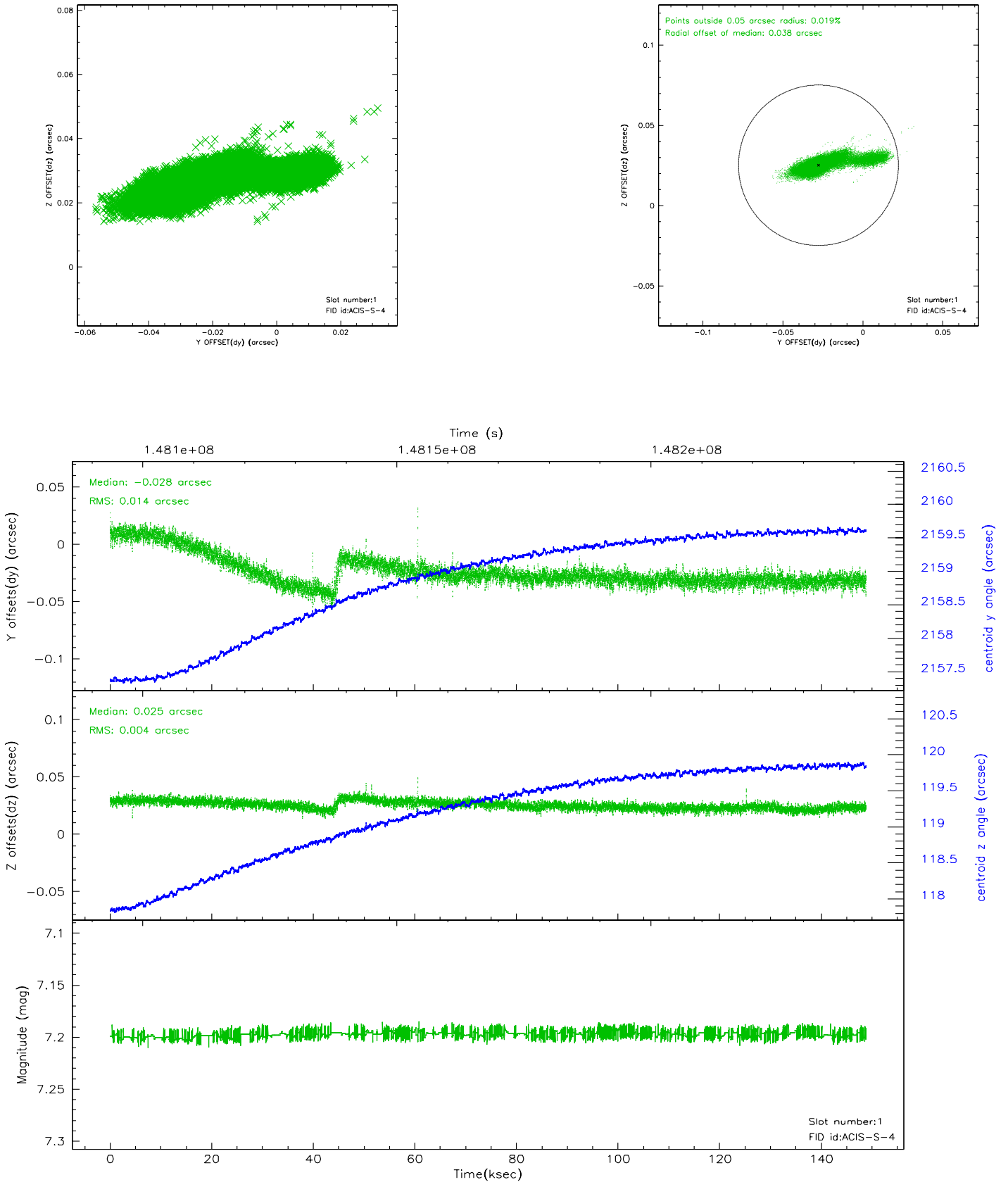


2.5 FID Slots

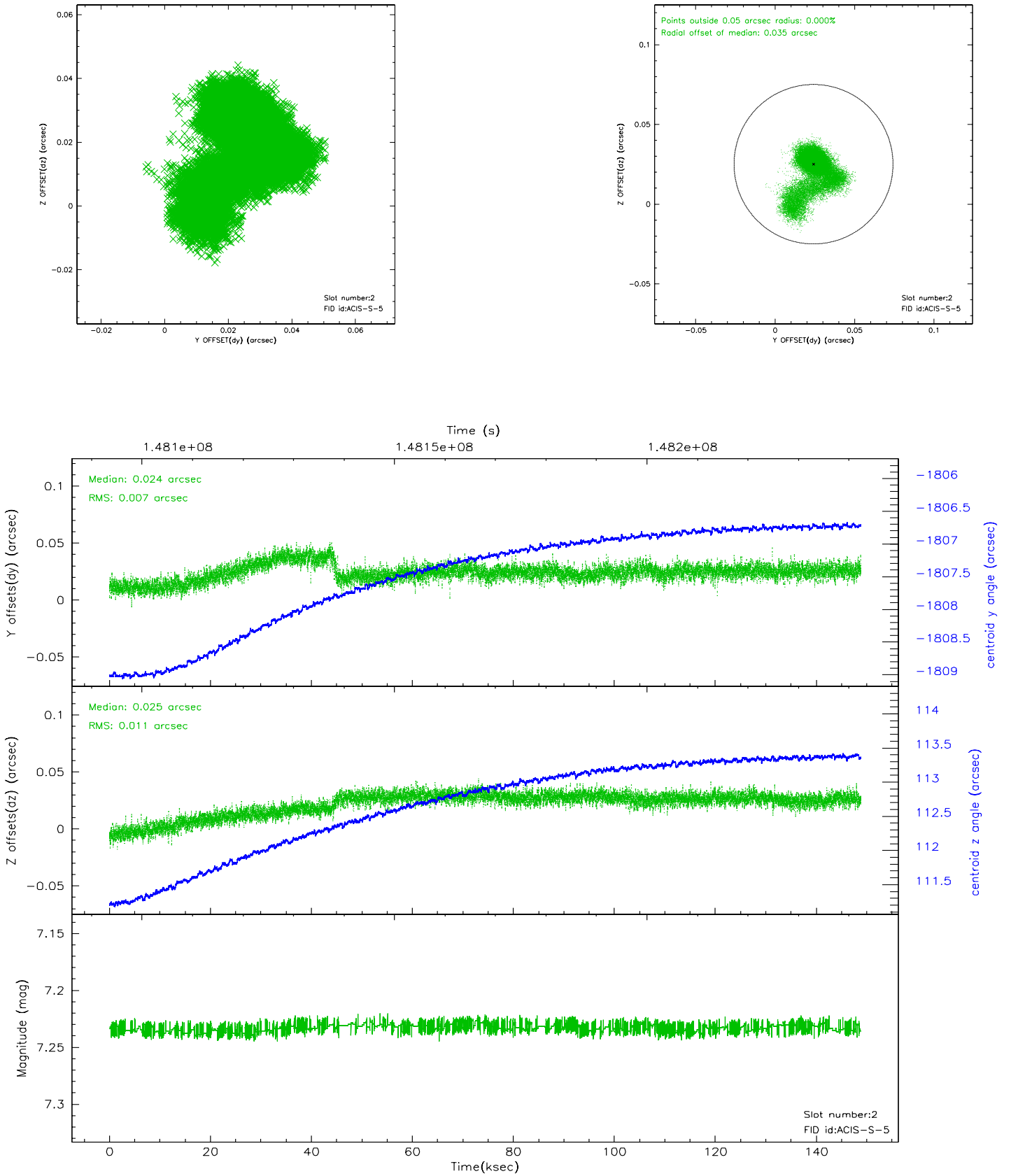
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

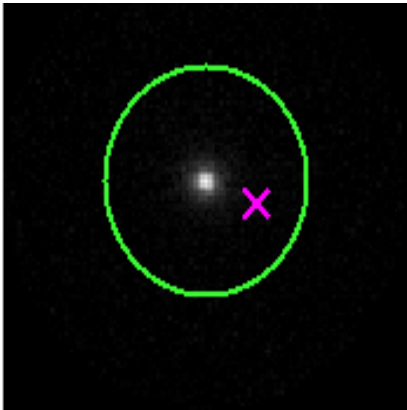


3 Gratings

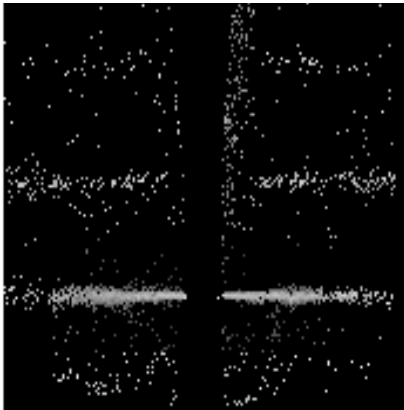
3.1 HEG Arm



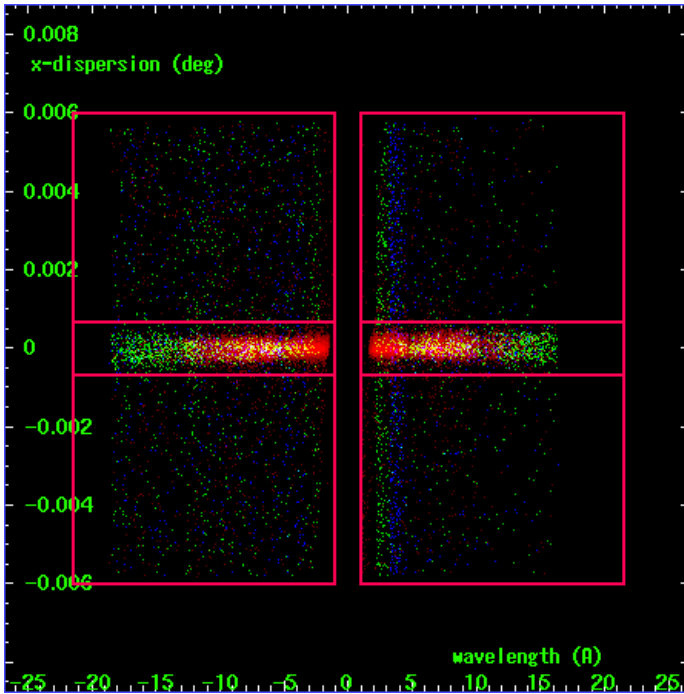
HEG Order Sort 123



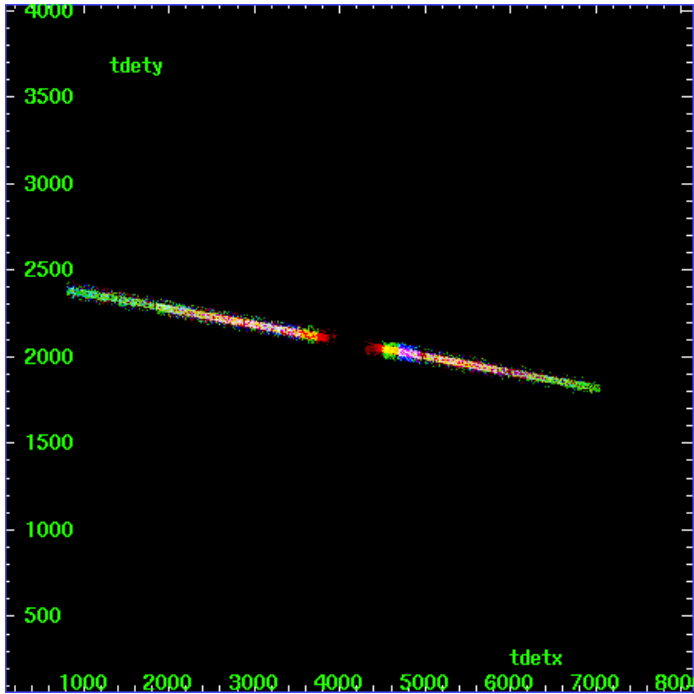
HEG Zero Order



HEG Order Sort ALL

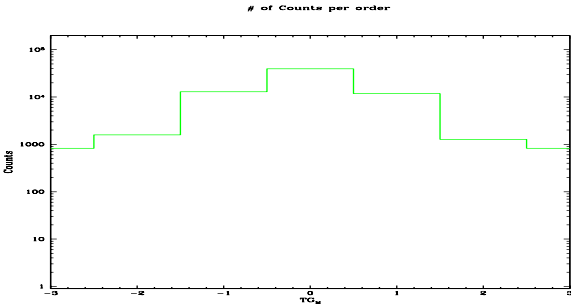


Spot Image HEG

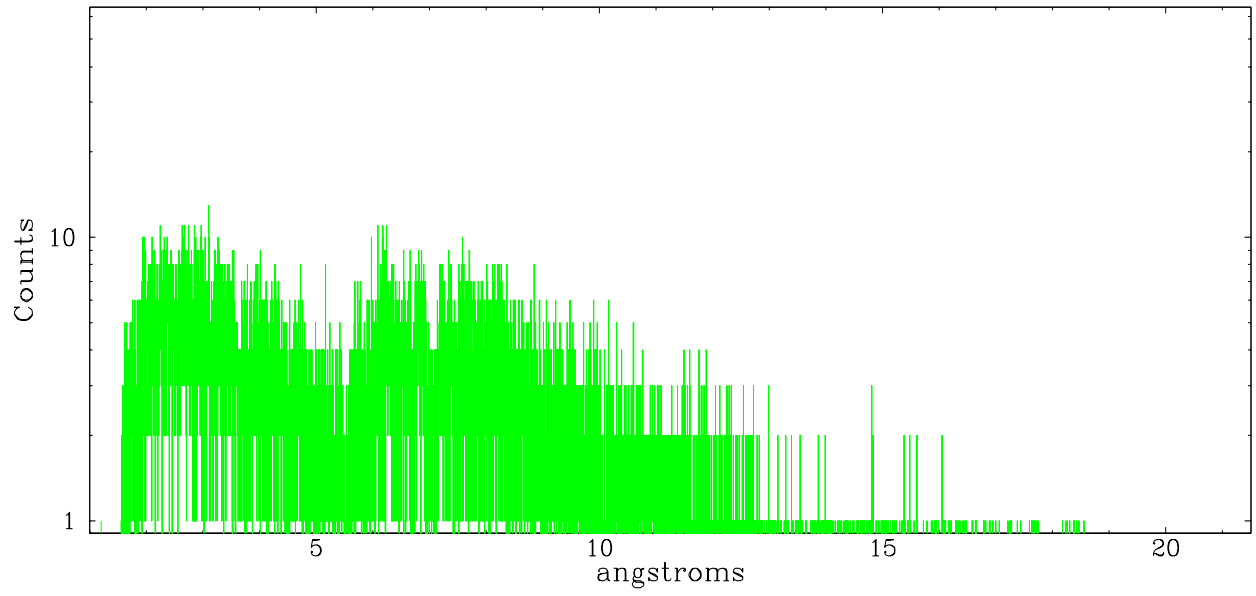


Full Detector HEG

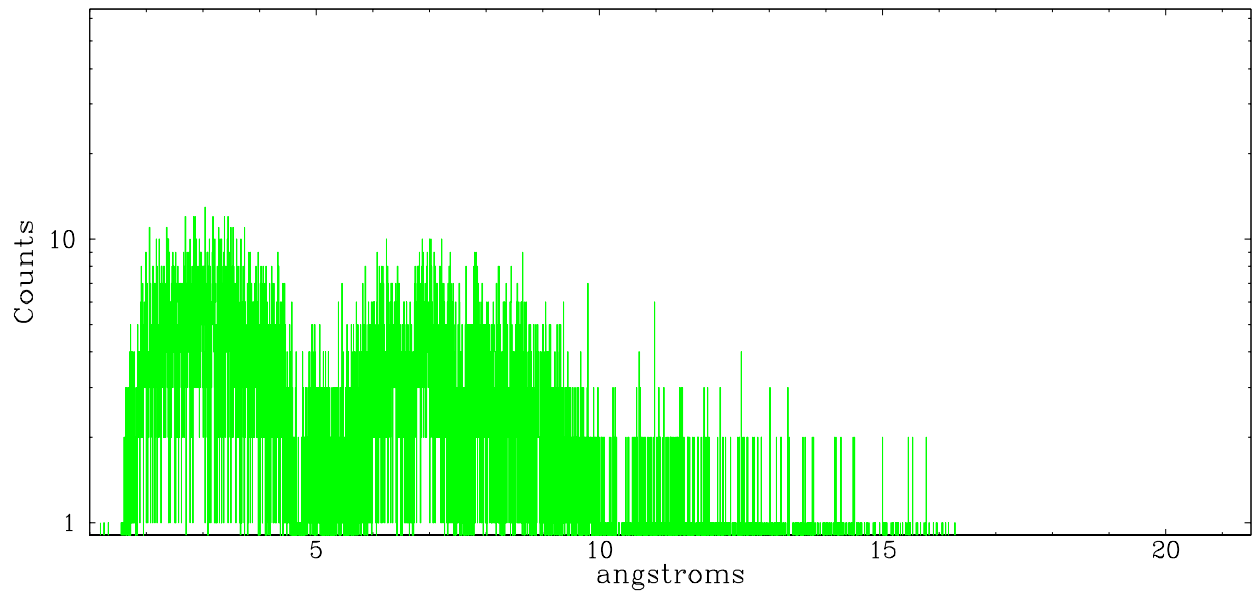
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	824	1585	12943	39381	11731	1280	821



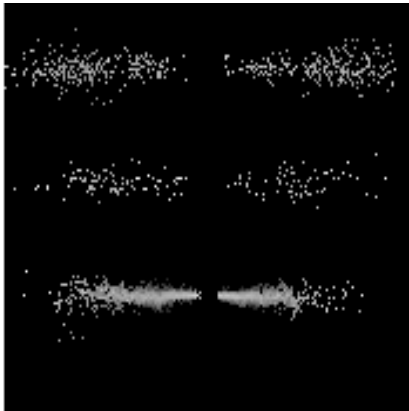
heg order -1



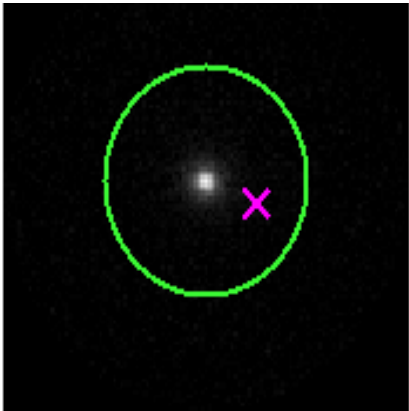
heg order +1



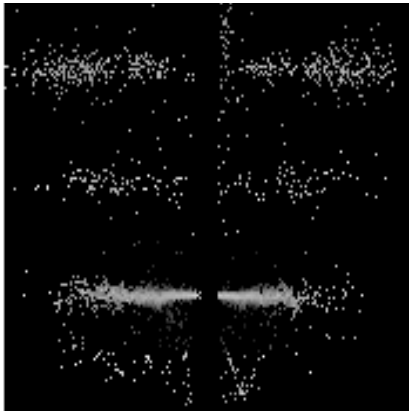
3.2 MEG Arm



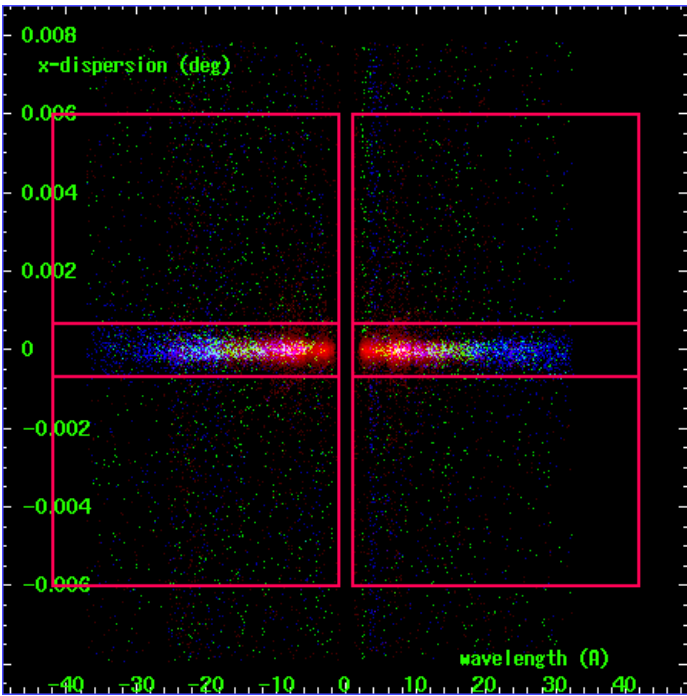
MEG Order Sort 123



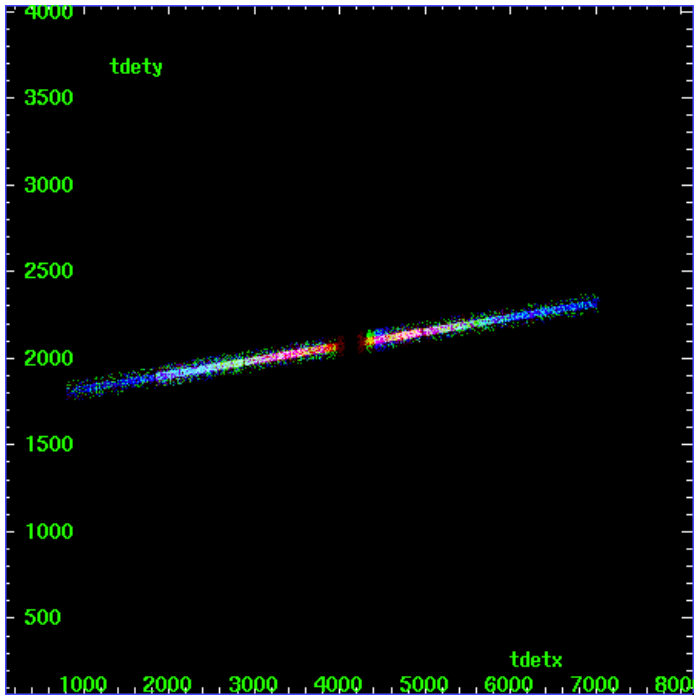
MEG Zero Order



MEG Order Sort ALL

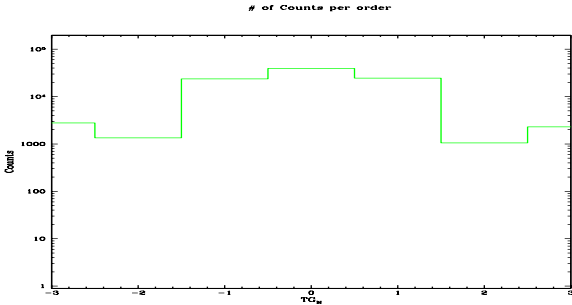


Spot Image MEG

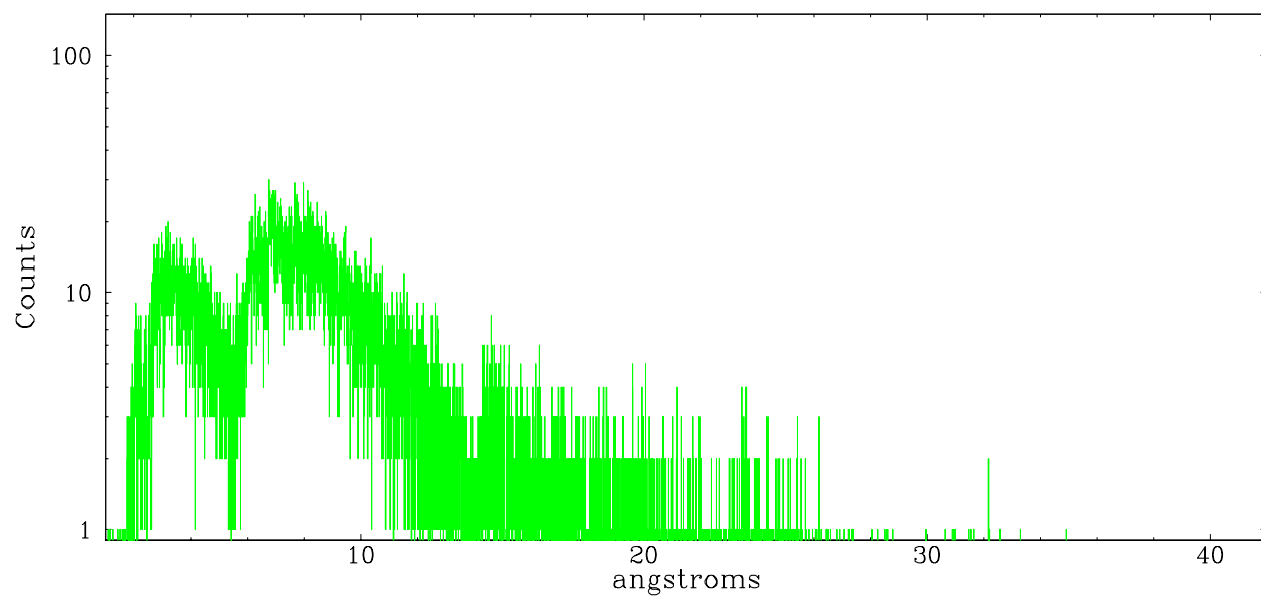


Full Detector MEG

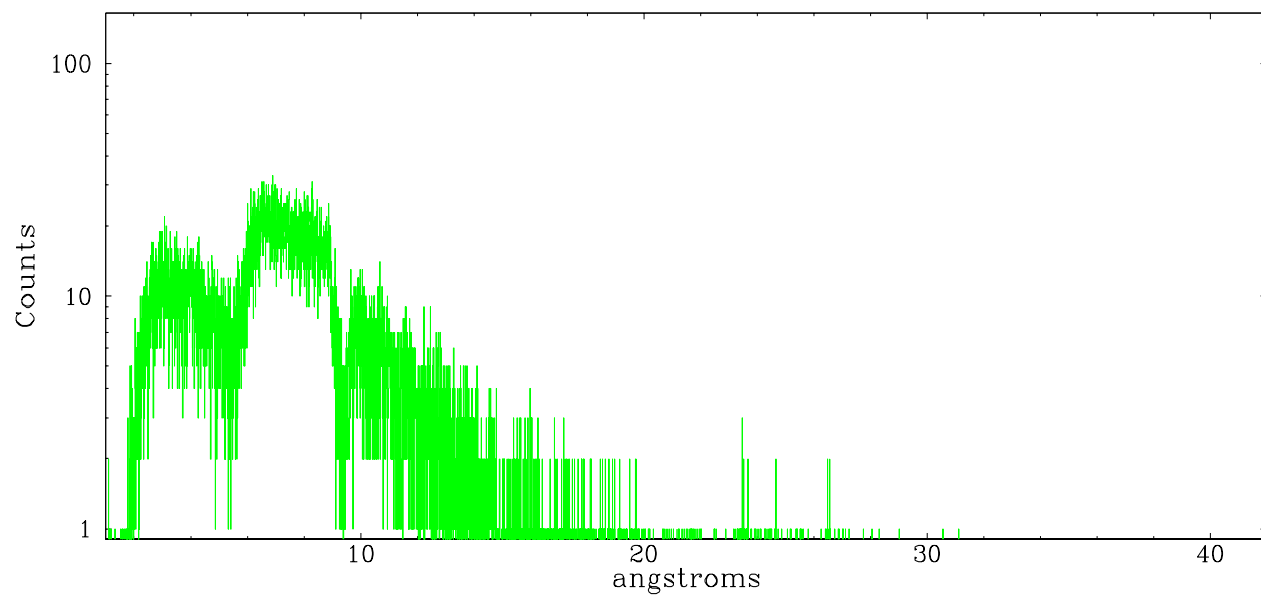
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	2783	1340	23663	39381	24478	1052	2294



meg order -1



meg order +1



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2006.10.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	148.665

A.2 Comments