

V&V Reference Report

L2 ASCDS Version : 7.6.8.1

Observation 2750 - L2 Version 001
Chandra X-Ray Center

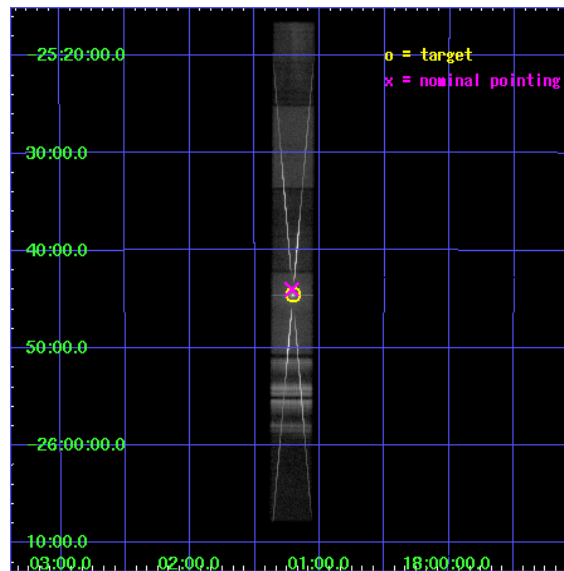
L2 Processing Date : Sep 8 2006

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
3	Gratings	17
3.1	HEG Arm	17
3.2	MEG Arm	19
A	Summary	21
A.1	Status	21
A.2	Comments	21

1 Front

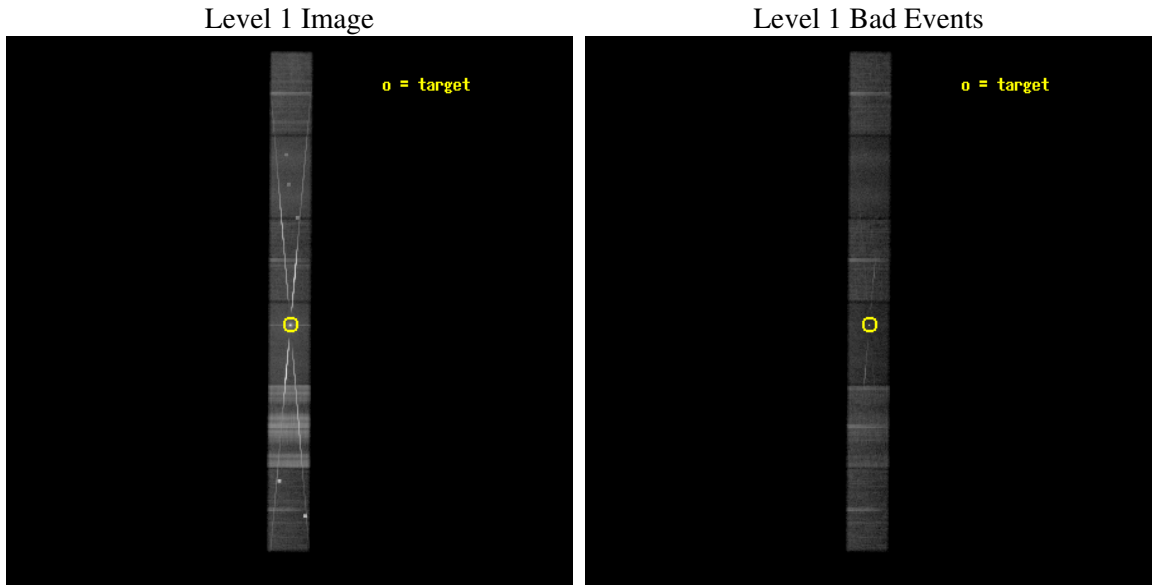
seq_num	400230
obs_id	2750
title	A SEARCH FO EMISSION LINES IN THE MICRO-QUASAR GRS 1758-258
observer	Dr. William Heindl
object	GRS 1758-258
dtcycle	0
cycle	P
ra_targ	270.301667
dec_targ	-25.743306
ra_nom	270.30349059568
dec_nom	-25.733746302404
roll_nom	90.362674790674
revision	2
ontime	27108.159007519
livetime	26469.162289656
ontime4	27108.159057349
ontime5	27108.159007519
ontime6	27108.159007519
ontime7	27108.159007519
ontime8	27108.159057349
ontime9	27108.159007519
l2events	792543



2 OBI

2.1 OBI

2.1.1 Images

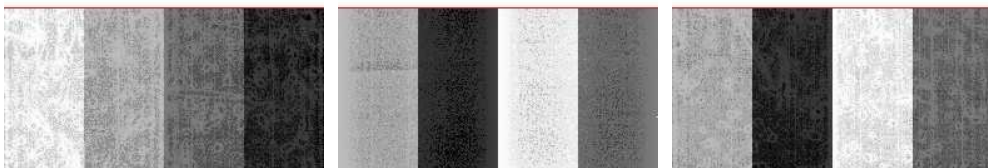


2.1.2 Bias

Chip 4

Chip 5

Chip 6



Chip 7

Chip 8

Chip 9



2.1.3 Parameters

obi_num	0
ascdsver	7.6.8.1
caldbver	3.2.3
date	2006-09-08T06:01:49
revision	2

sched_exp_time	27000.000000
ontime	28178.377301797
ontime4	28042.579520807
ontime5	28178.377301797
ontime6	28059.986581802
ontime7	28178.377301797
ontime8	28039.094151631
ontime9	28059.989851072
l1events	1761962

2.1.4 Events

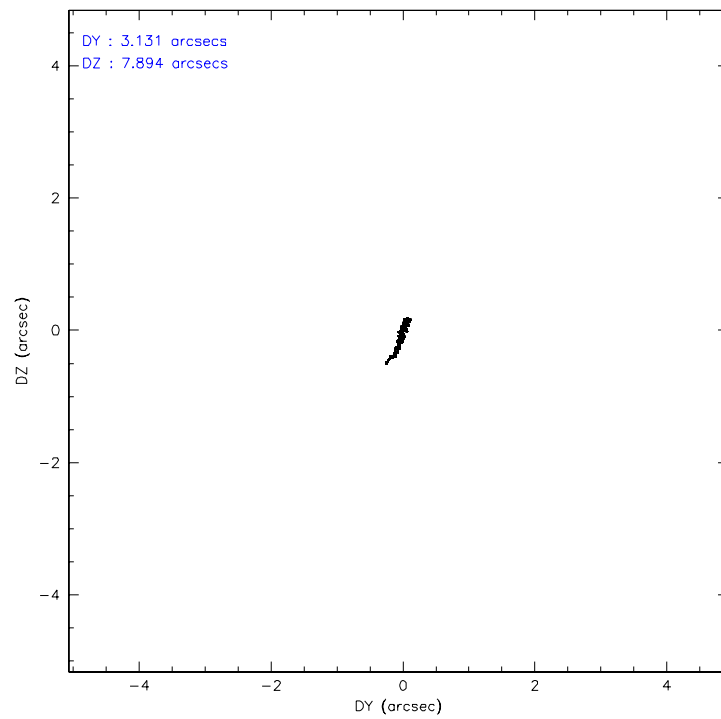
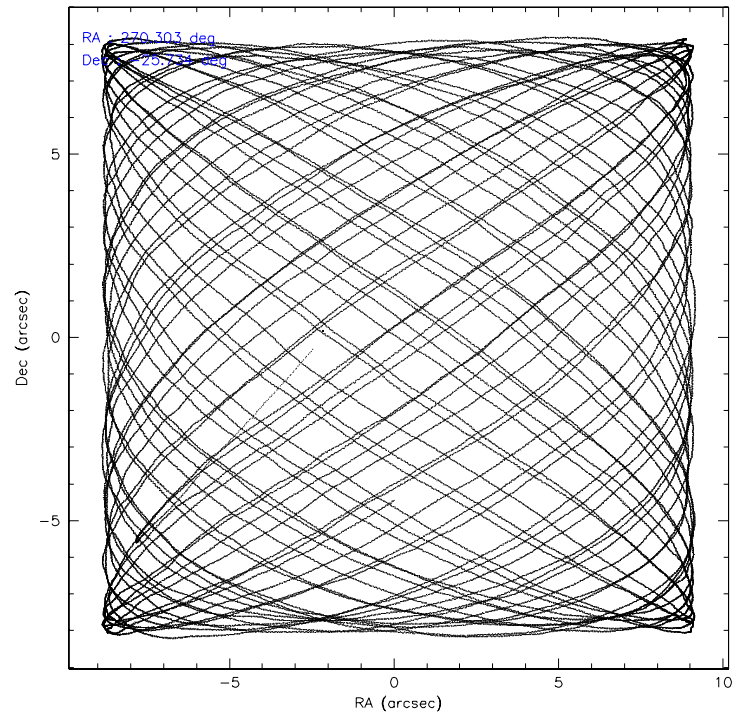
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	197155	209877	316877	336313	526861	174879
rejected events	128332	95248	121885	90665	174525	113174
rejected %	65%	45%	38%	26%	33%	64%

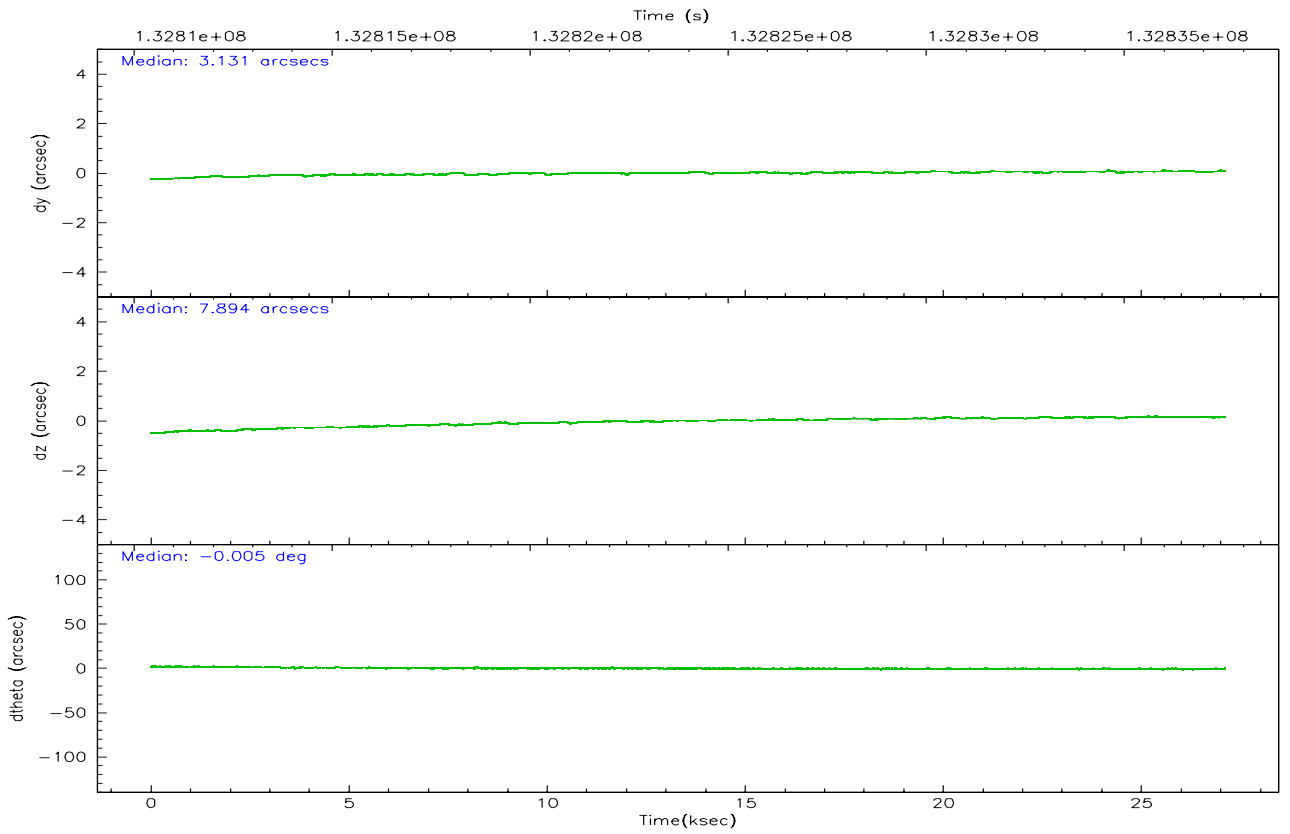
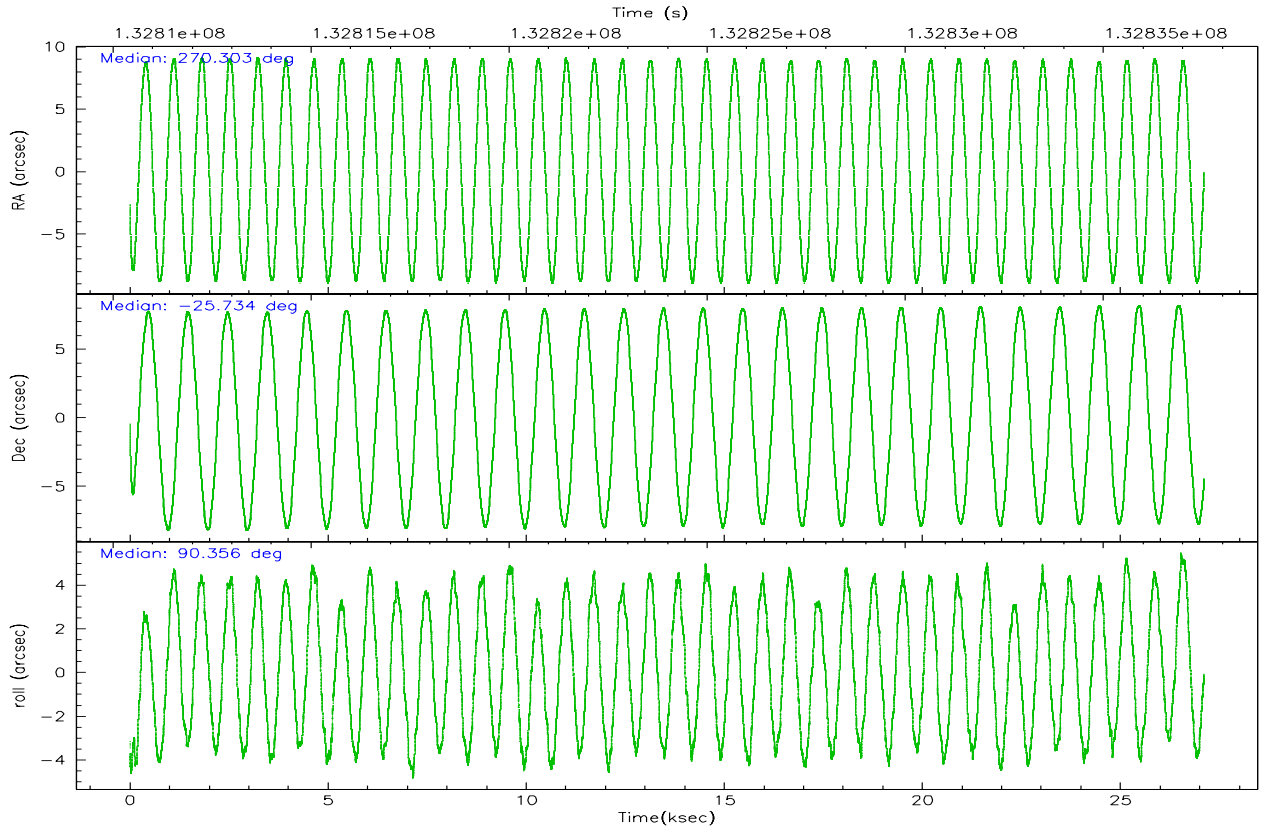
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	43834	21961	145312	41675	152691	47667
	22%	10%	45%	12%	28%	27%
grade 1 events	251	284	1068	624	993	135
	0%	0%	0%	0%	0%	0%
grade 2 events	14458	38103	26355	65945	38353	6923
	7%	18%	8%	19%	7%	3%
grade 3 events	3170	7584	8186	24976	66206	2230
	1%	3%	2%	7%	12%	1%
grade 4 events	3389	7243	8179	24474	57290	2066
	1%	3%	2%	7%	10%	1%
grade 5 events	3734	8721	4582	12741	8003	3993
	1%	4%	1%	3%	1%	2%
grade 6 events	5854	43853	9232	92490	53389	5095
	2%	20%	2%	27%	10%	2%
grade 7 events	122465	82128	113963	73388	149936	106770
	62%	39%	35%	21%	28%	61%

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	On-chip summing requested	N	N
Observation mode	POINTING	POINTING	Subarray requested	CUSTOM	1/2
Pointing RA	270.319113	270.3034905956832	Subarray start row	1	1
Pointing Dec	-25.757087	-25.7337463024038	Subarray row count	512	512
Pointing Roll	90.212838	90.36267479067423	Alternating exposures requested	N	N
SIM focus pos (mm)	-0.684267	-0.6828225247311905	Primary exposure time	0.000000	1.7
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-183.992523	-183.9875365069546			
SIM translation stage offset (mm)	-6.14	-6.144986076053243			
Observation start time	132810545.184000	132809196.86473			
Observation start date	2002-03-18T03:48:01	2002-03-18T03:26:36			
Observation end time	132837545.184000	132837895.32839			
Observation end date	2002-03-18T11:18:01	2002-03-18T11:24:55			
Read mode	TIMED	TIMED			

2.3 Aspect



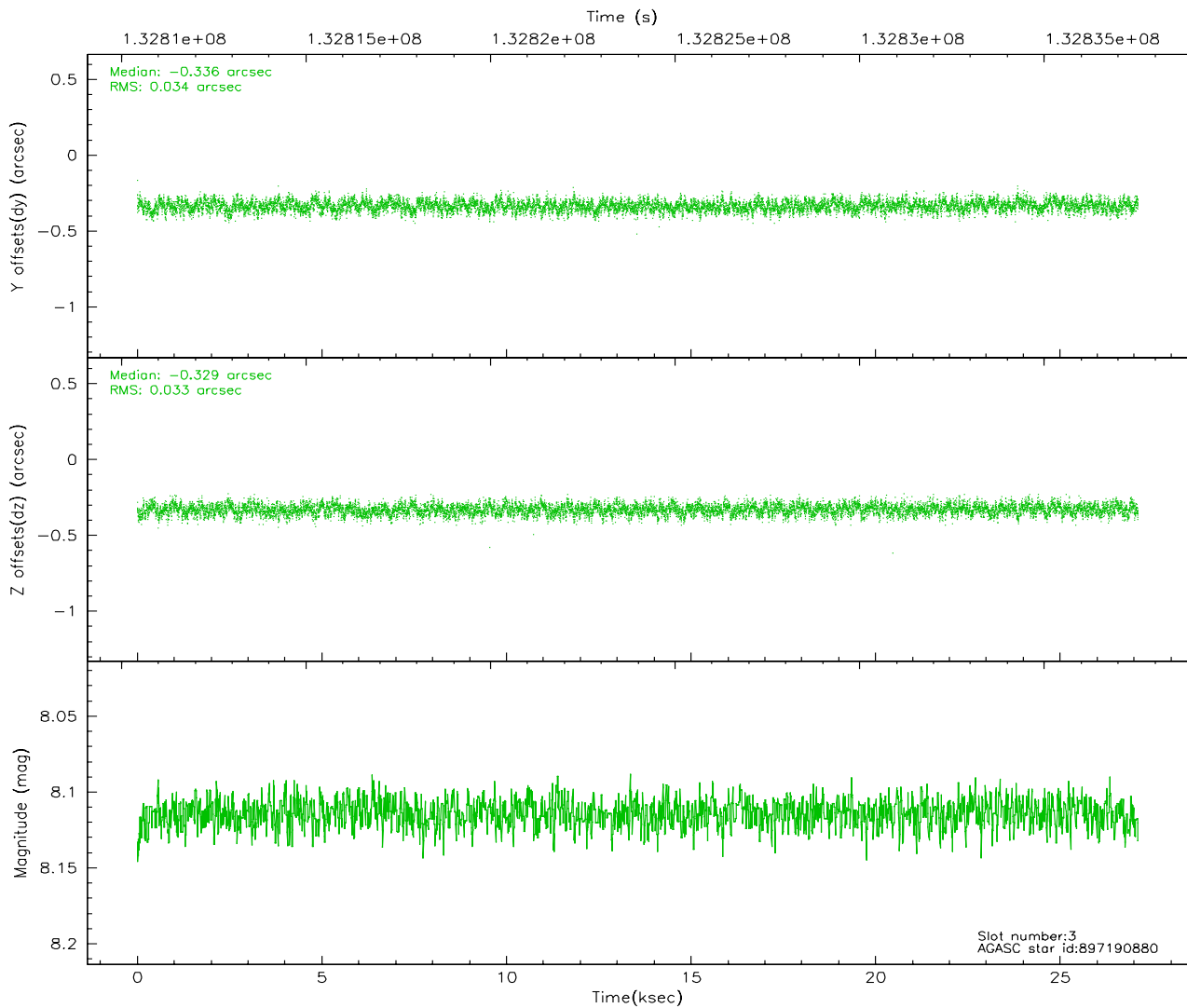
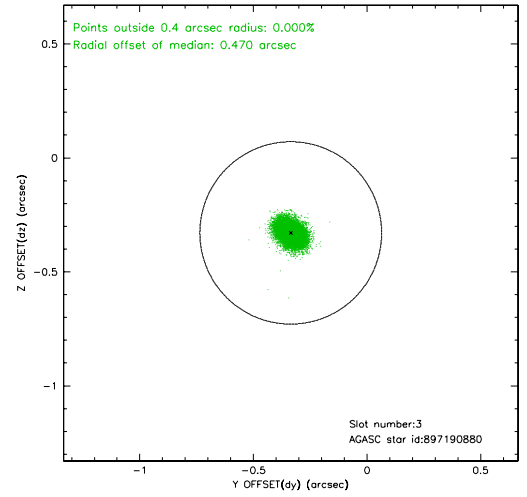
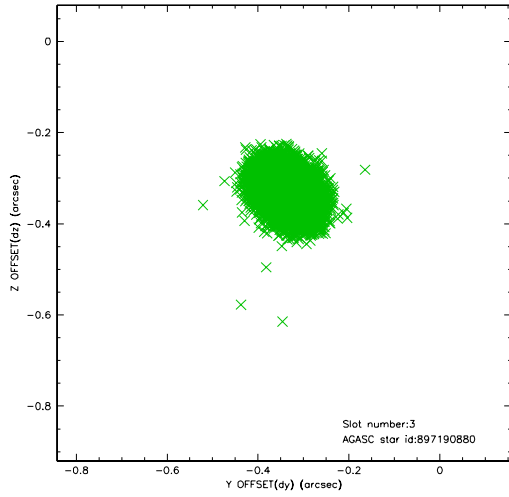


Slot Statistics

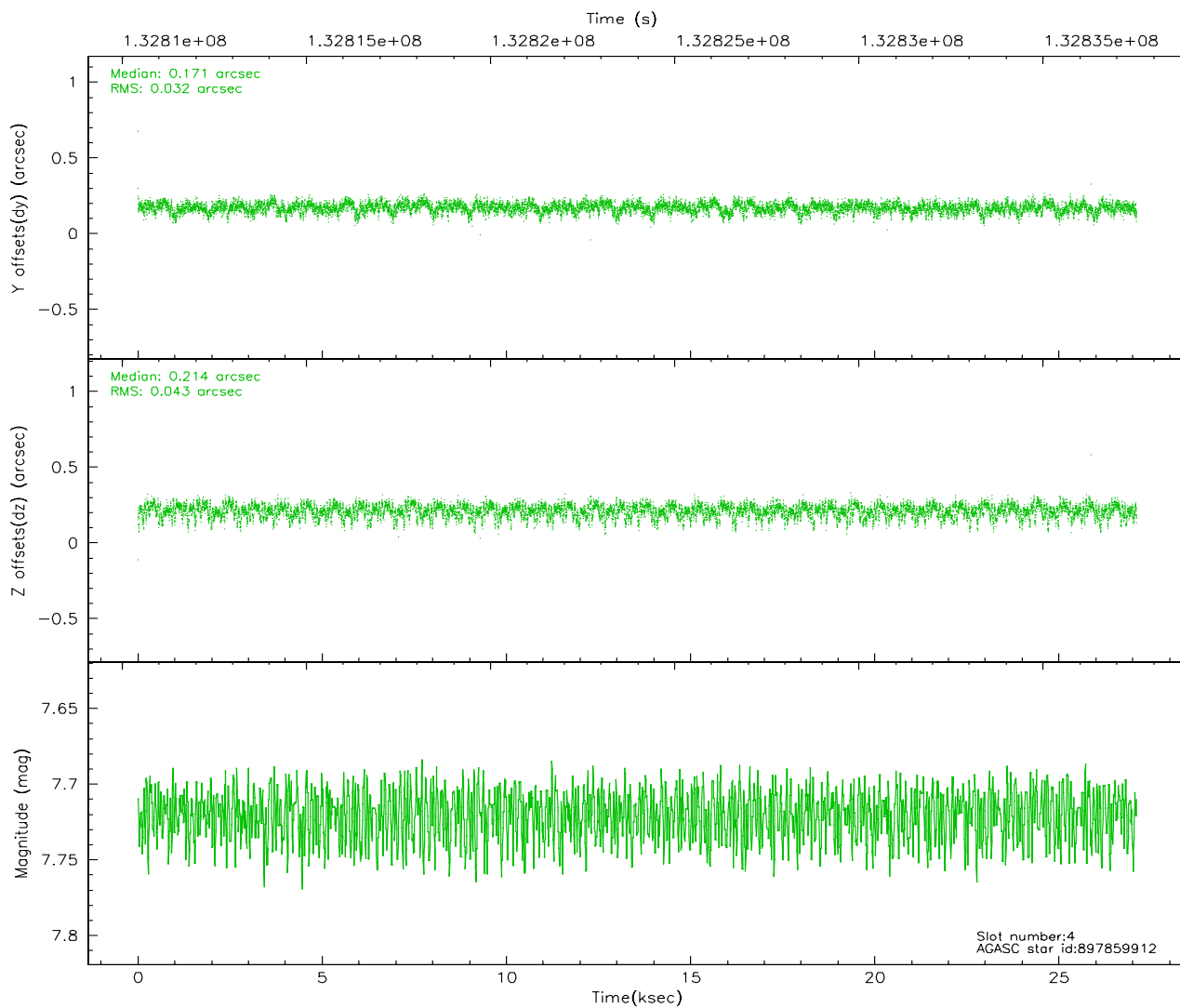
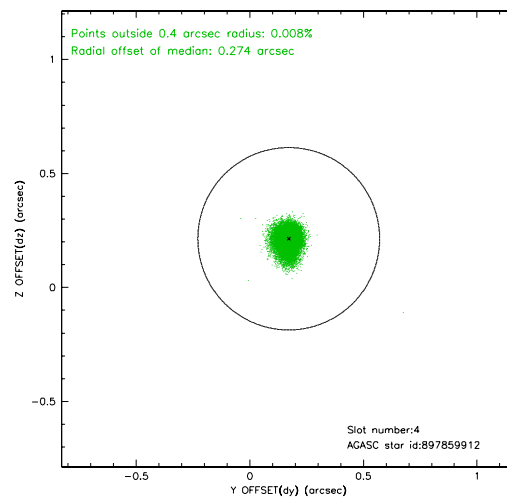
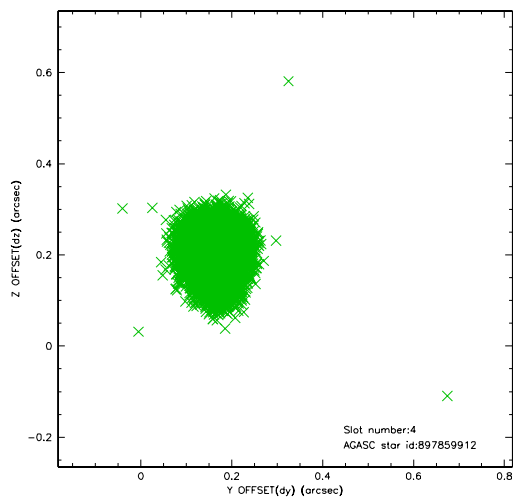
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.08	6612	-0.041	-0.025	0.009	0.015	0.000000	0.000000	-755.34	-1855.73
1	FID	ACIS-S-4	7.18	6611	-0.043	0.027	0.005	0.009	0.000000	0.000000	2157.86	52.73
2	FID	ACIS-S-5	7.23	6612	0.053	0.007	0.008	0.013	0.000000	0.000000	-1807.99	46.42
3	GUIDE	897190880	8.11	13219	-0.336	-0.329	0.050	0.081	269.584058	-25.142408	2215.22	2386.81
4	GUIDE	897859912	7.72	13225	0.171	0.214	0.056	0.094	270.849161	-26.319822	-2034.56	-1703.21
5	GUIDE	897326672	8.22	13222	0.122	-0.094	0.052	0.085	270.237029	-26.222744	-1674.90	270.43
6	GUIDE	897193352	8.39	13218	0.080	-0.167	0.074	0.119	269.817437	-25.818839	-218.98	1625.91
7	GUIDE	897322760	8.55	13221	-0.035	0.377	0.067	0.104	270.988015	-25.669699	301.57	-2171.36

2.4 Star Slots

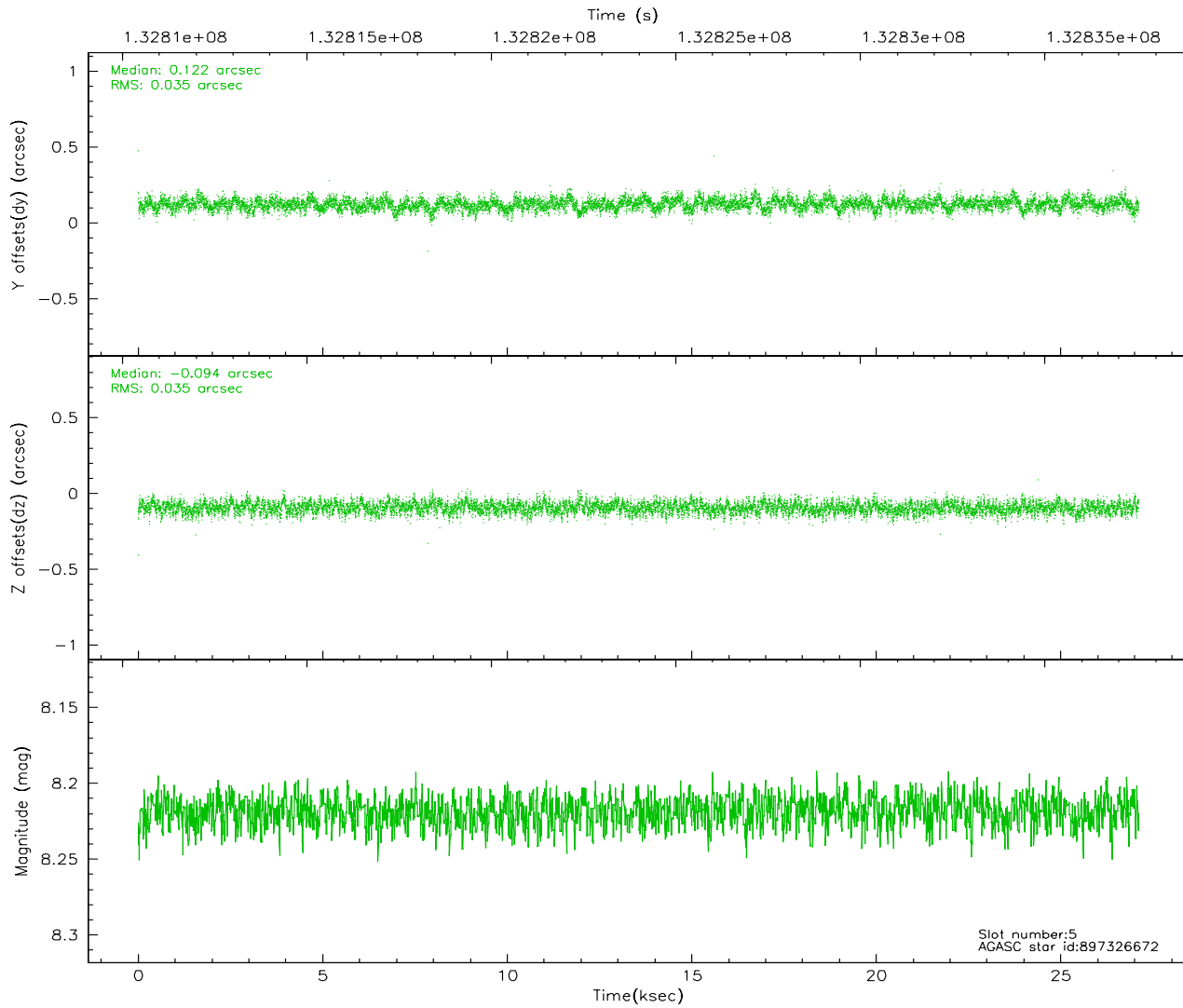
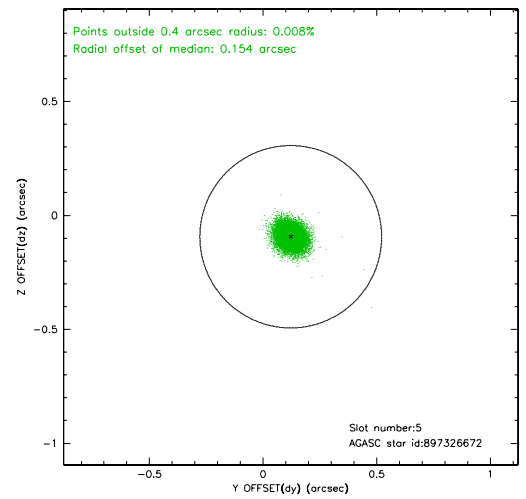
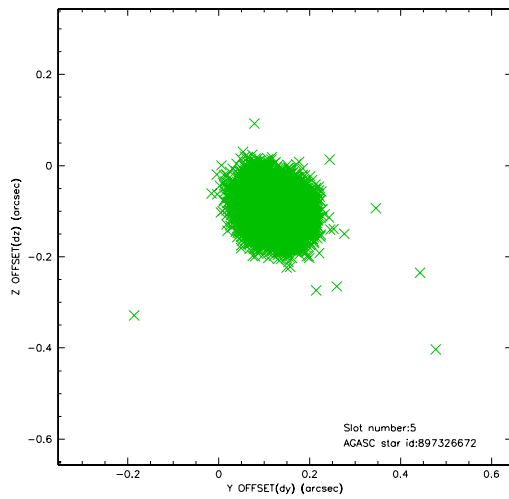
2.4.1 Slot 3



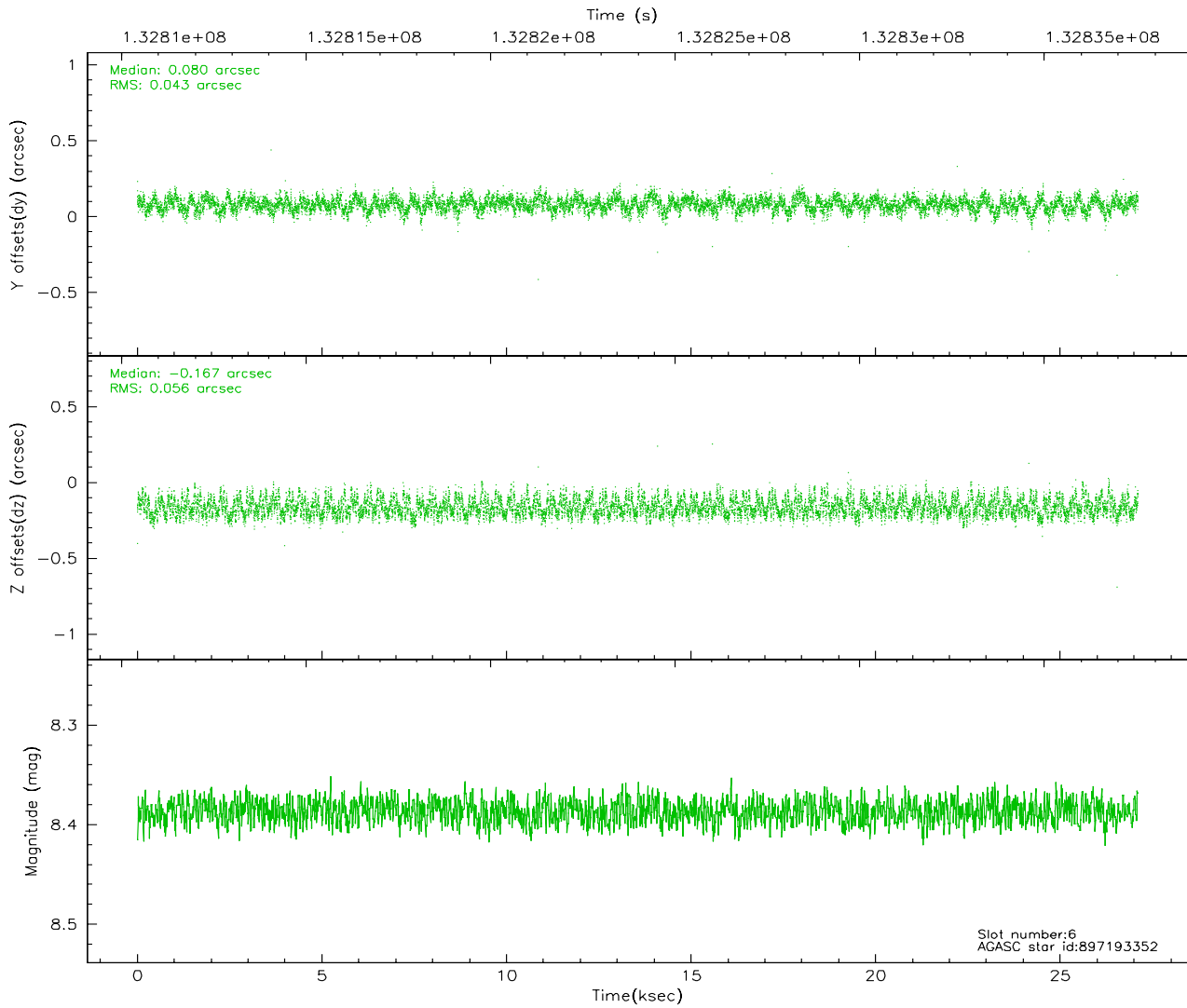
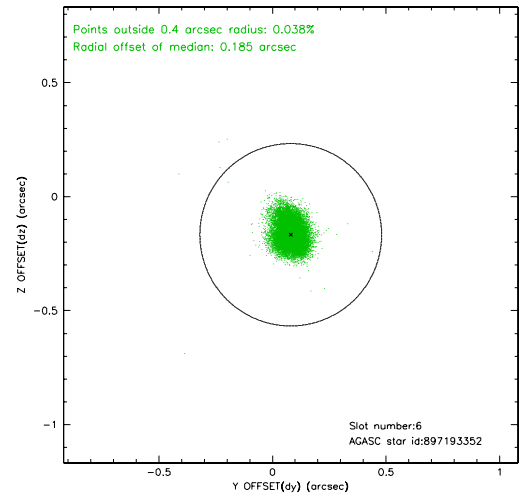
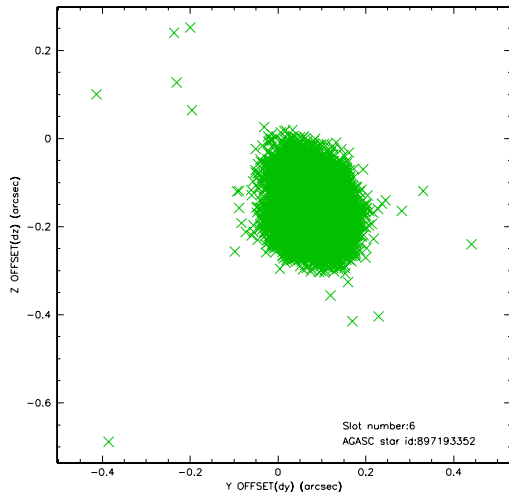
2.4.2 Slot 4



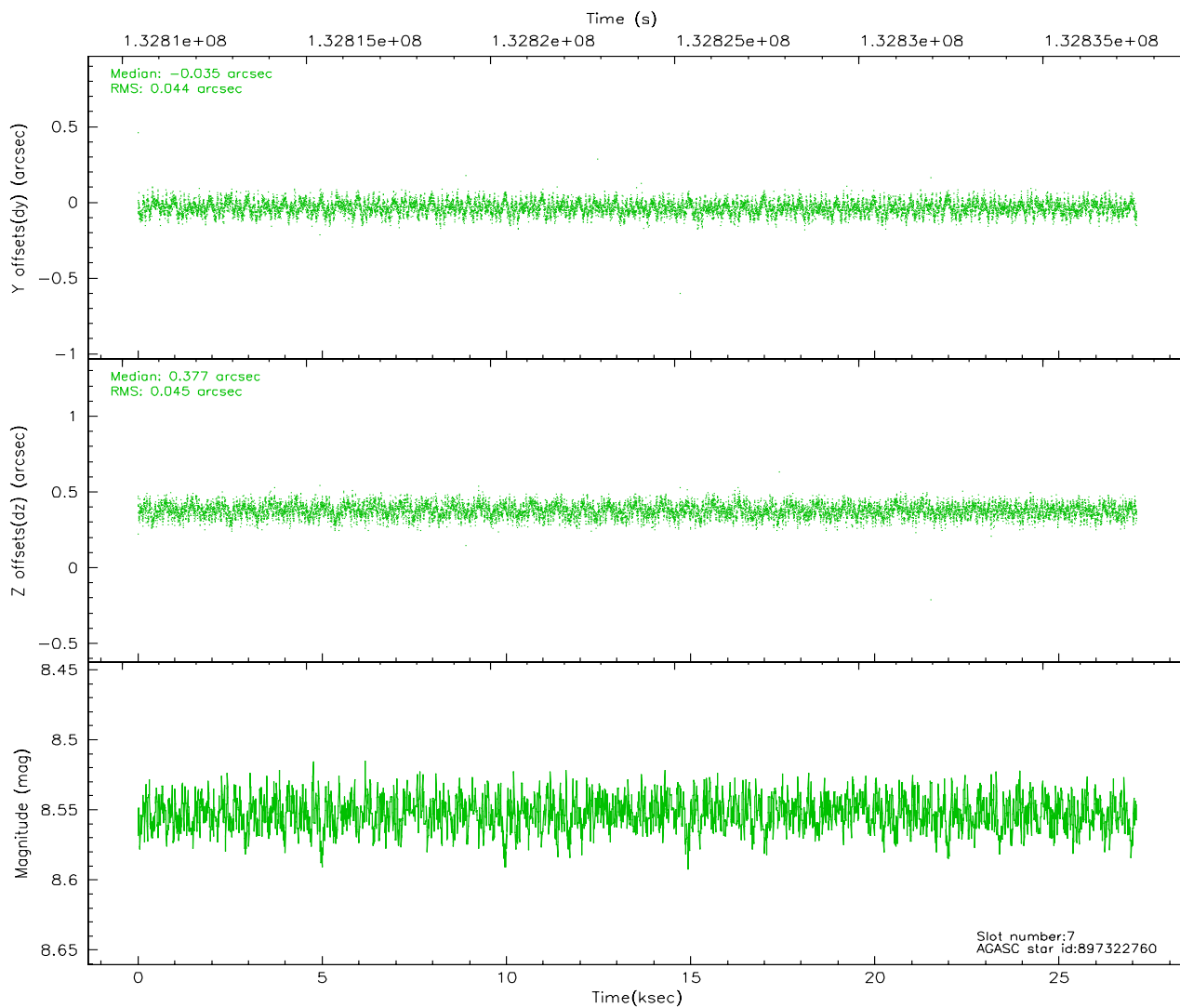
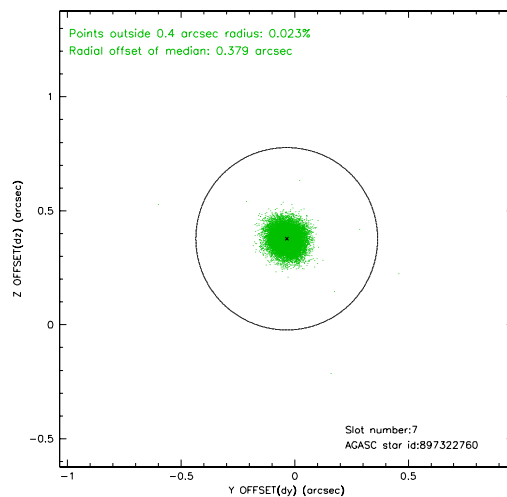
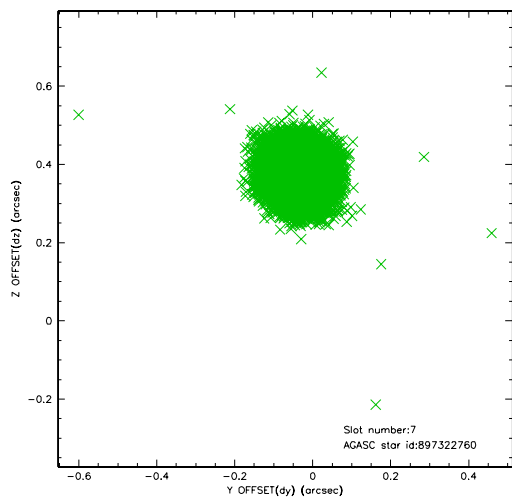
2.4.3 Slot 5



2.4.4 Slot 6

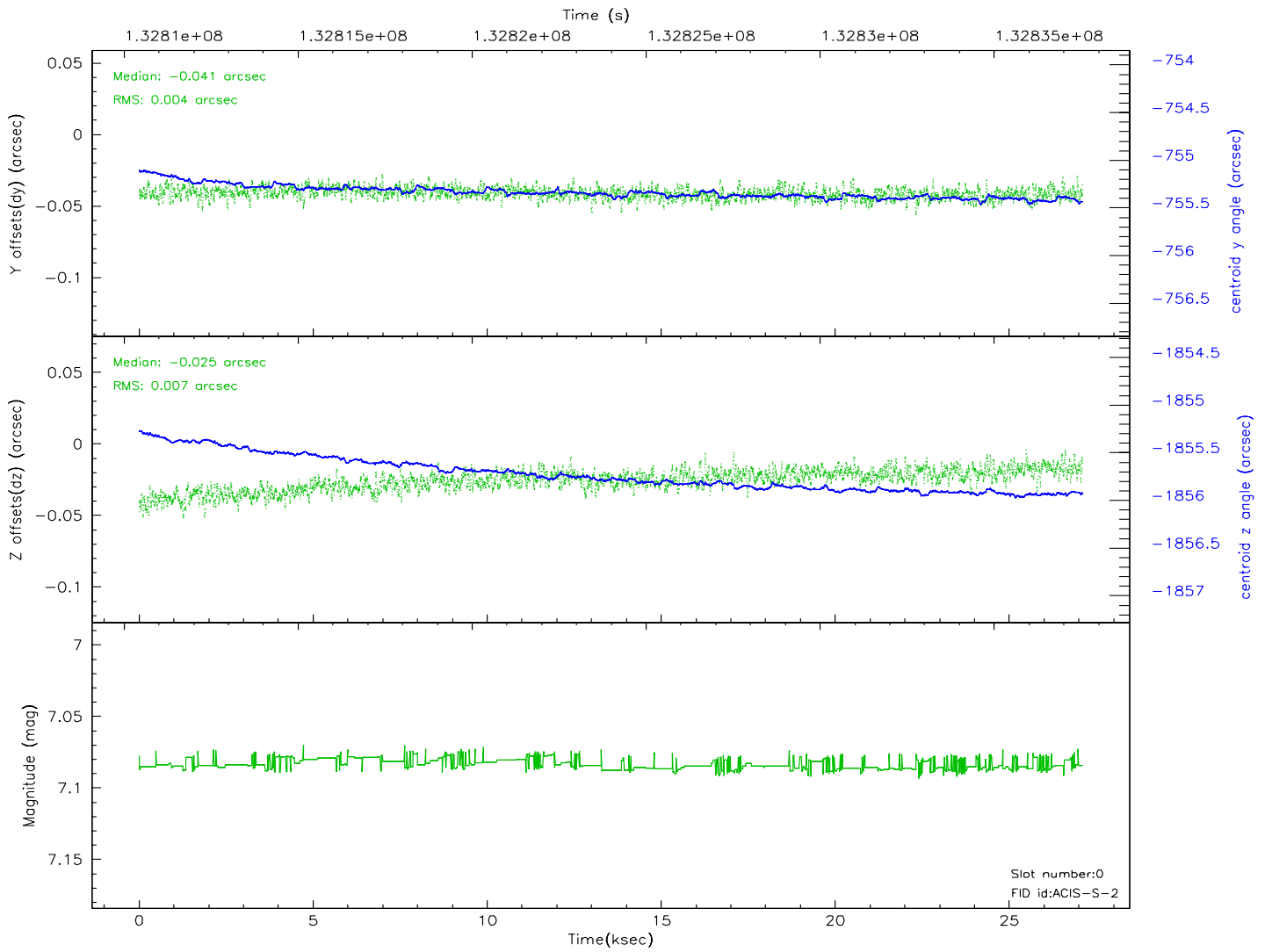
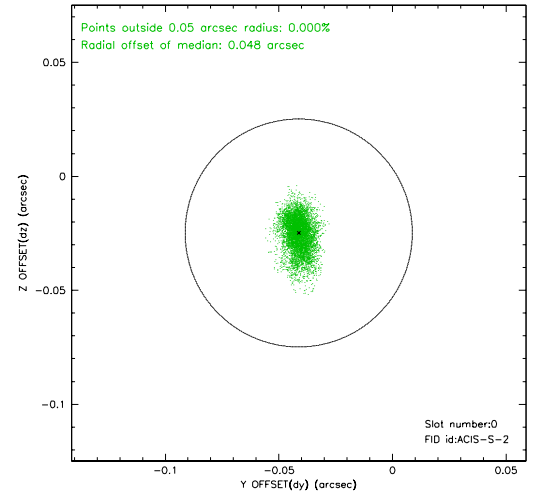
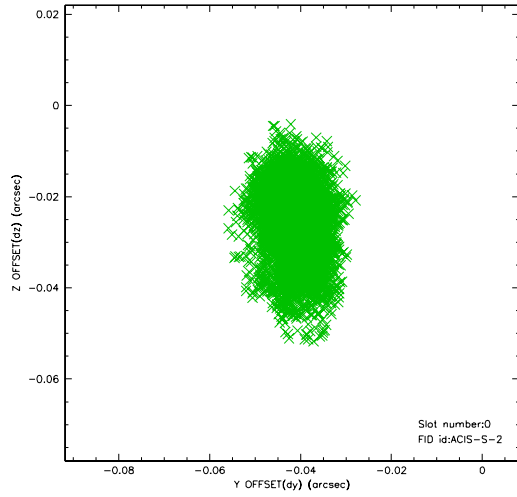


2.4.5 Slot 7

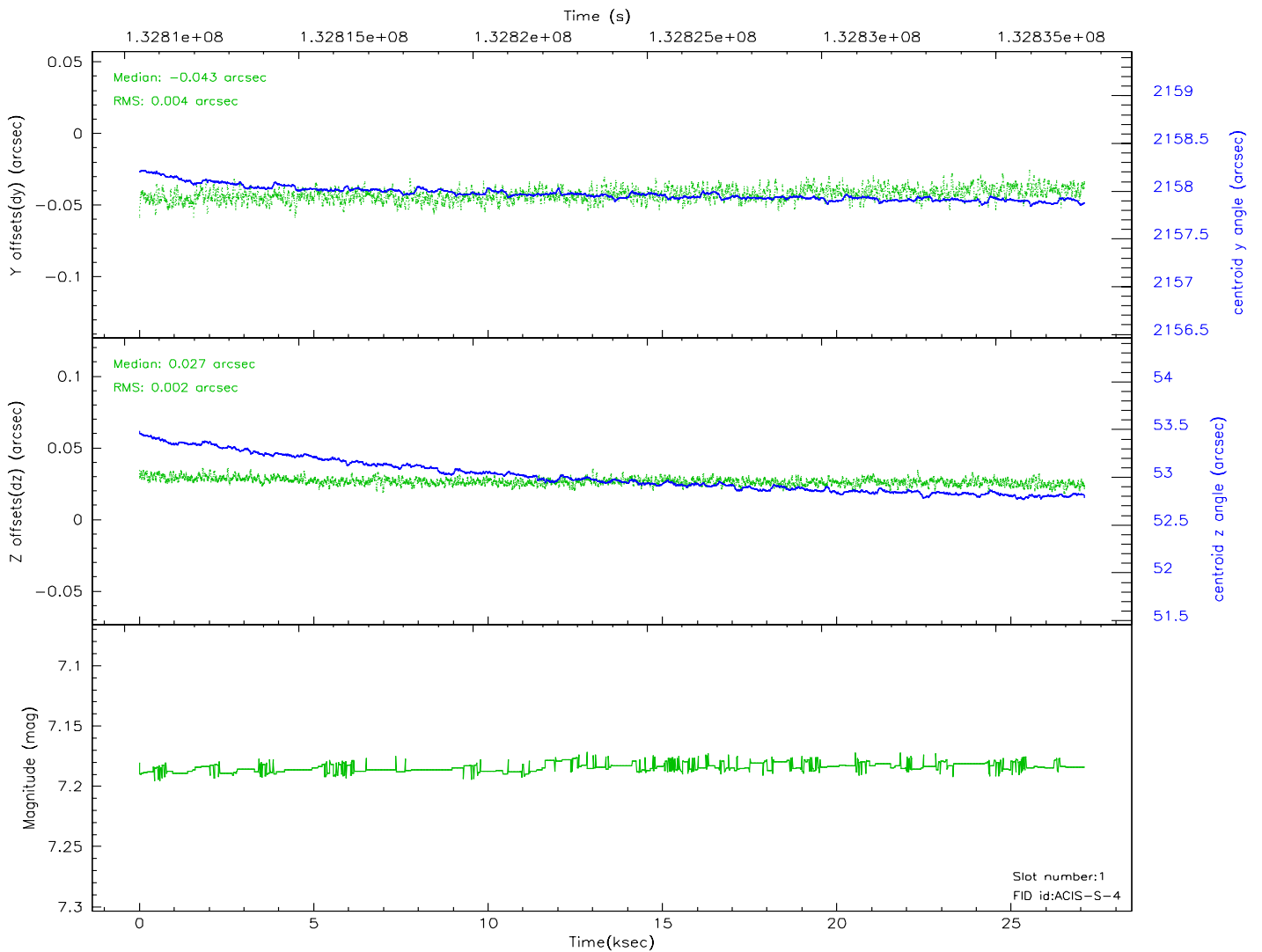
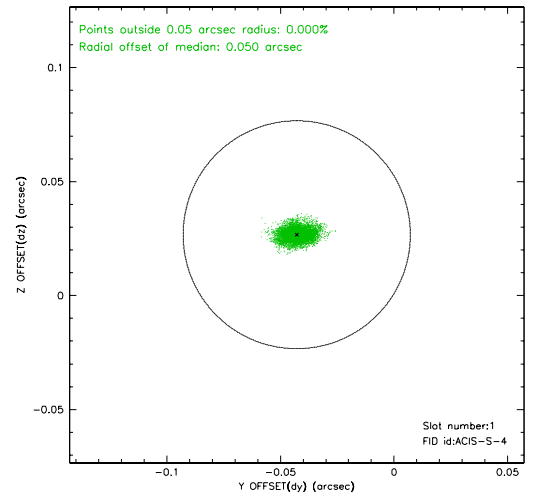
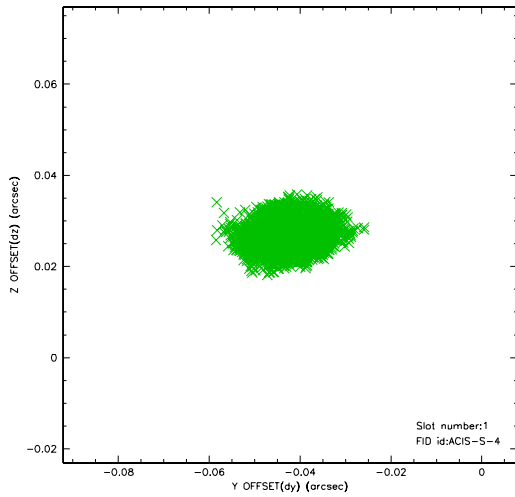


2.5 FID Slots

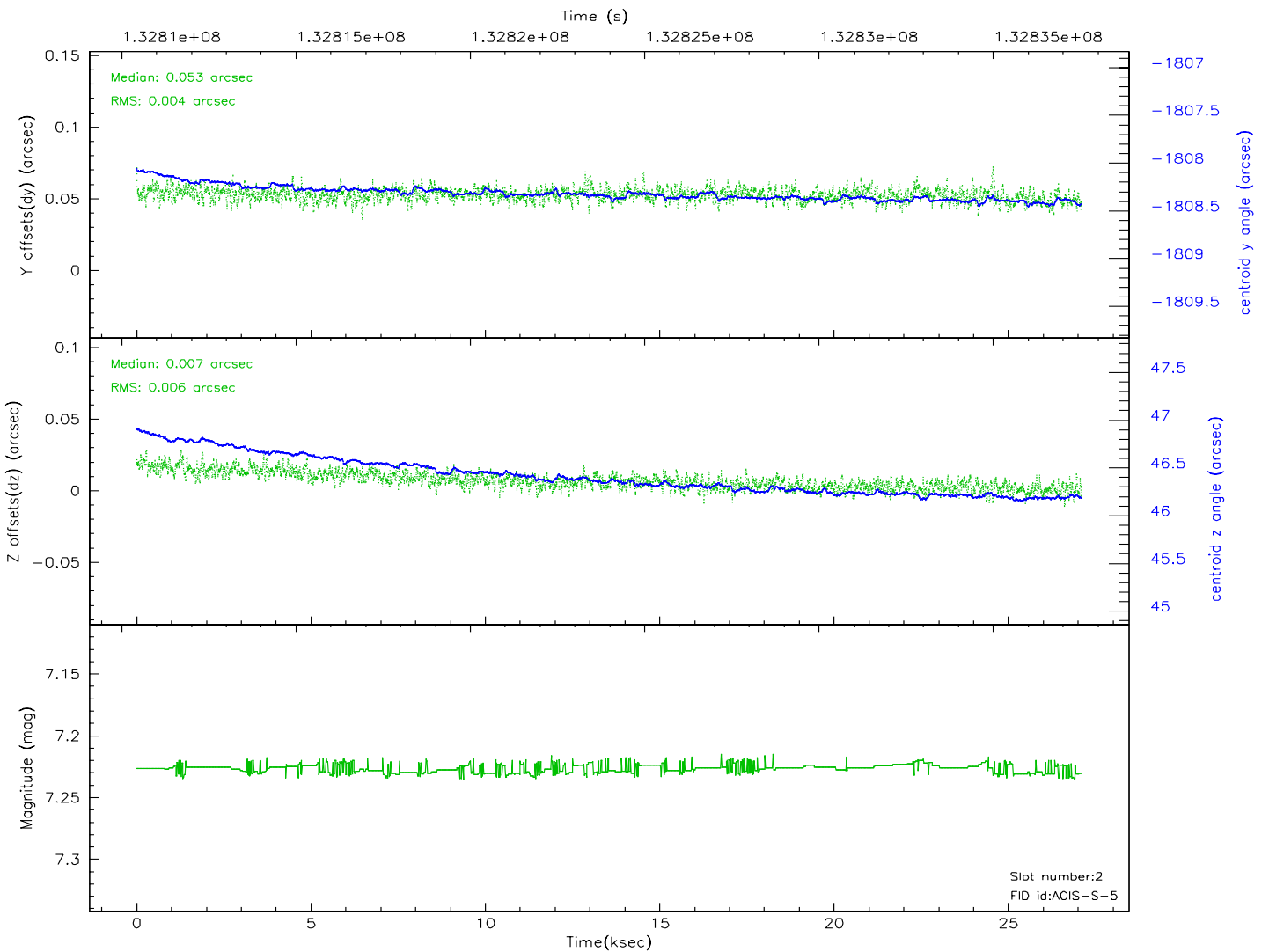
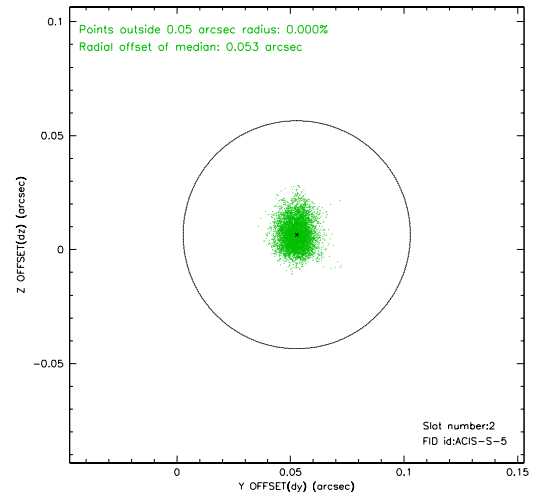
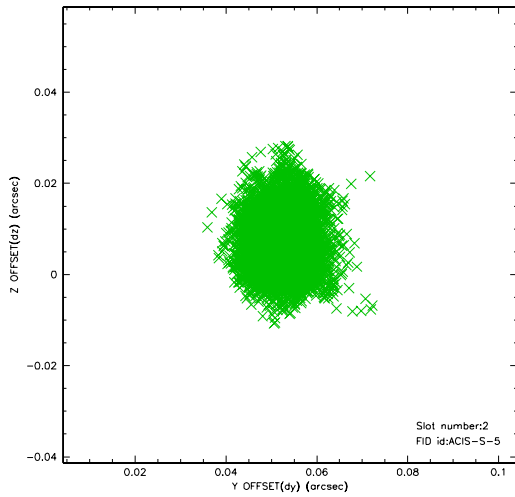
2.5.1 Slot 0



2.5.2 Slot 1

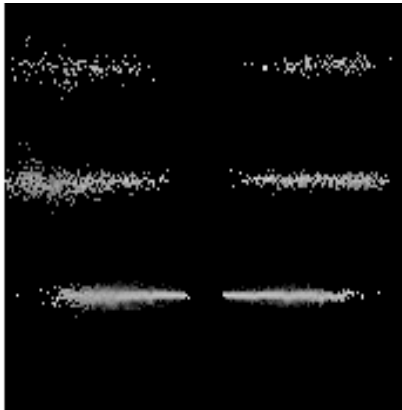


2.5.3 Slot 2

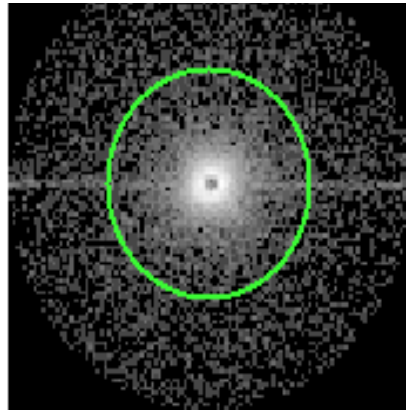


3 Gratings

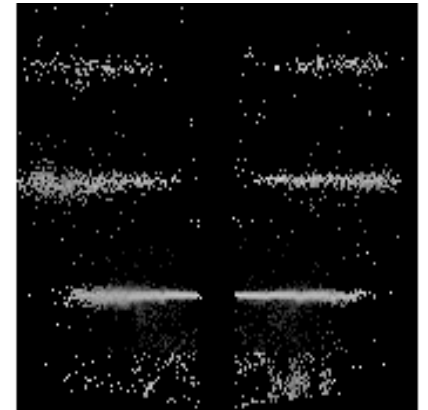
3.1 HEG Arm



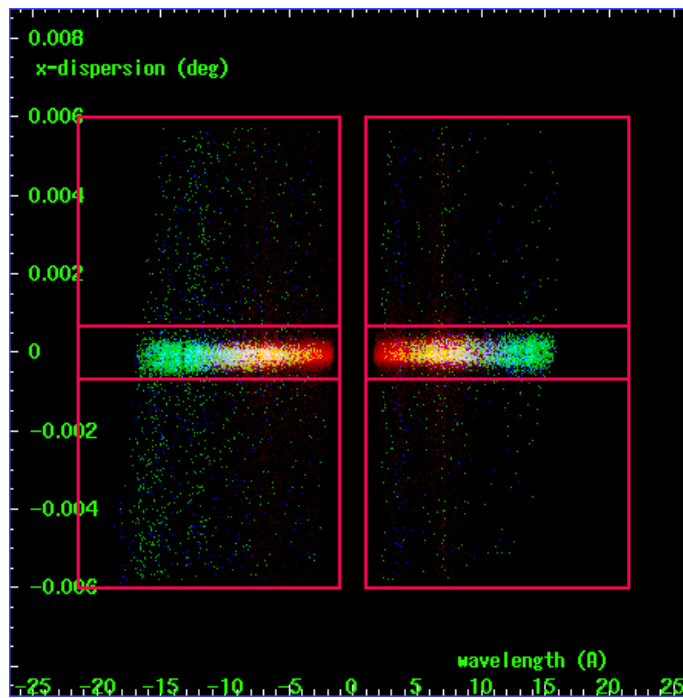
HEG Order Sort 123



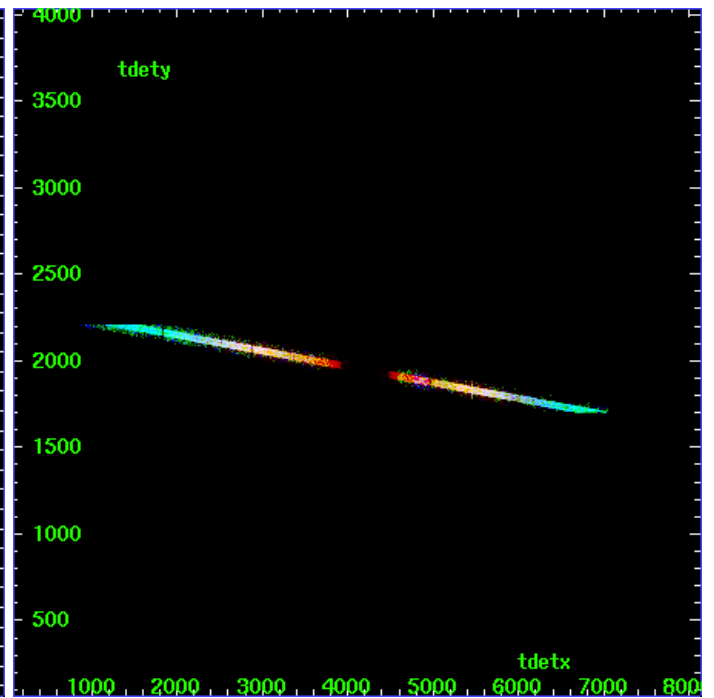
HEG Zero Order



HEG Order Sort ALL

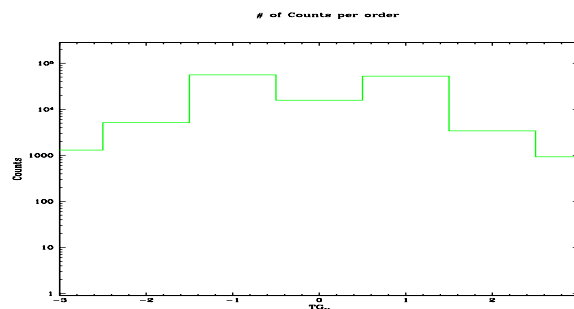


Spot Image HEG

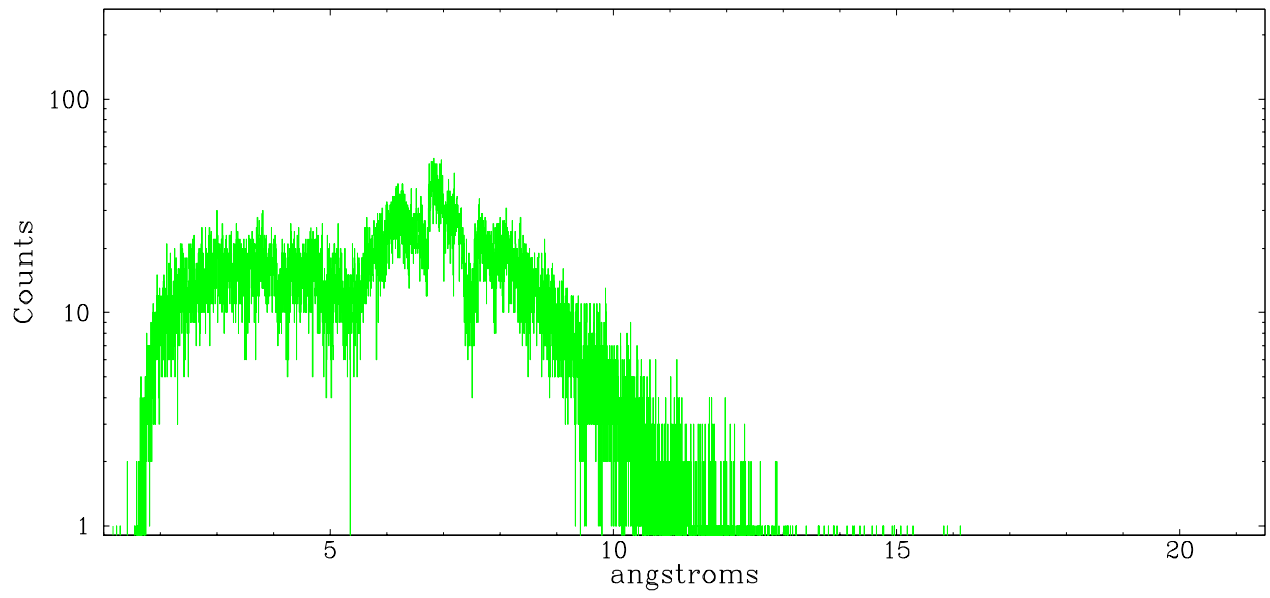


Full Detector HEG

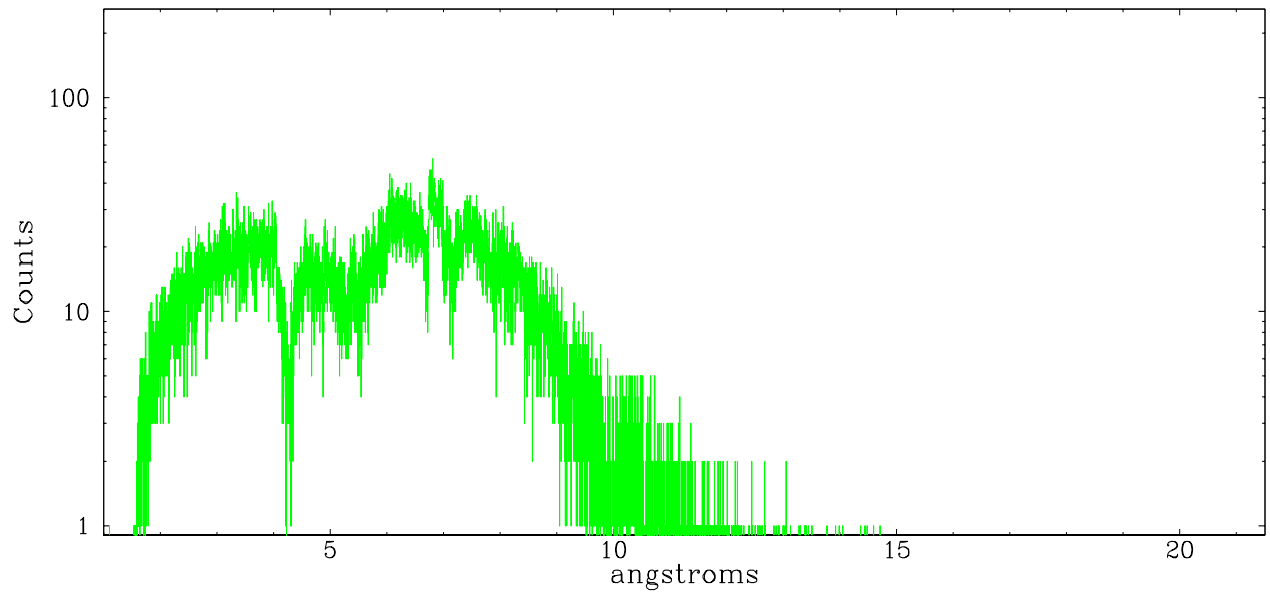
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	1307	5132	56173	15741	52655	3411	928



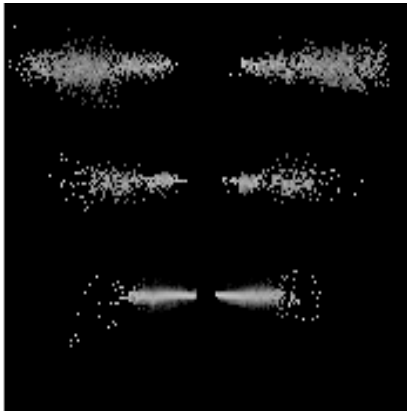
heg order -1



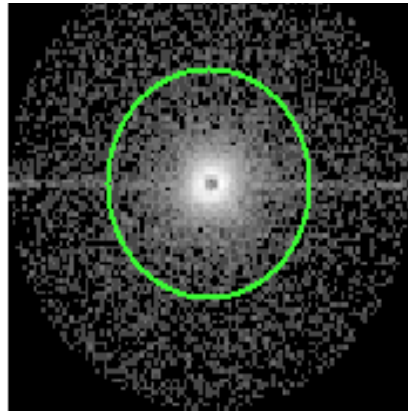
heg order +1



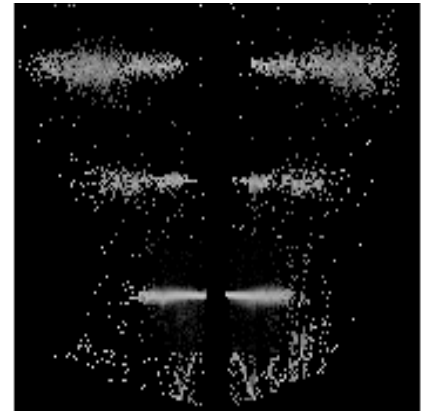
3.2 MEG Arm



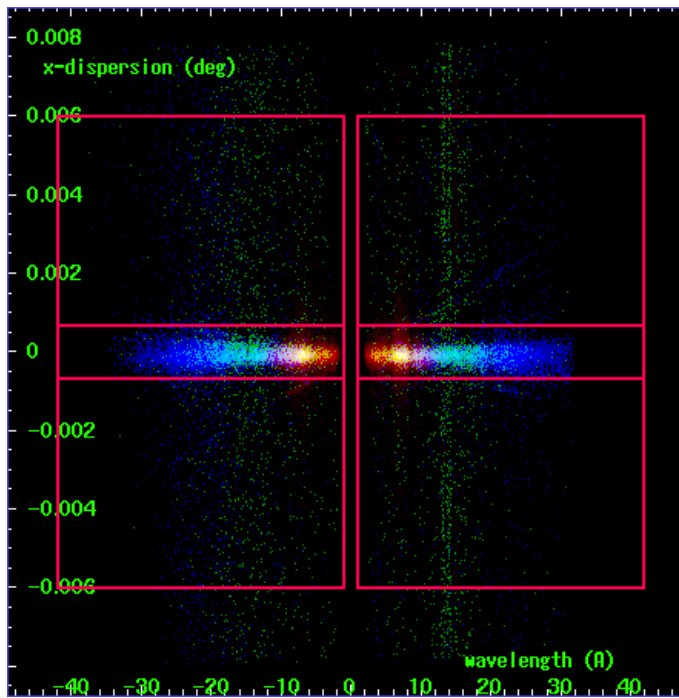
MEG Order Sort 123



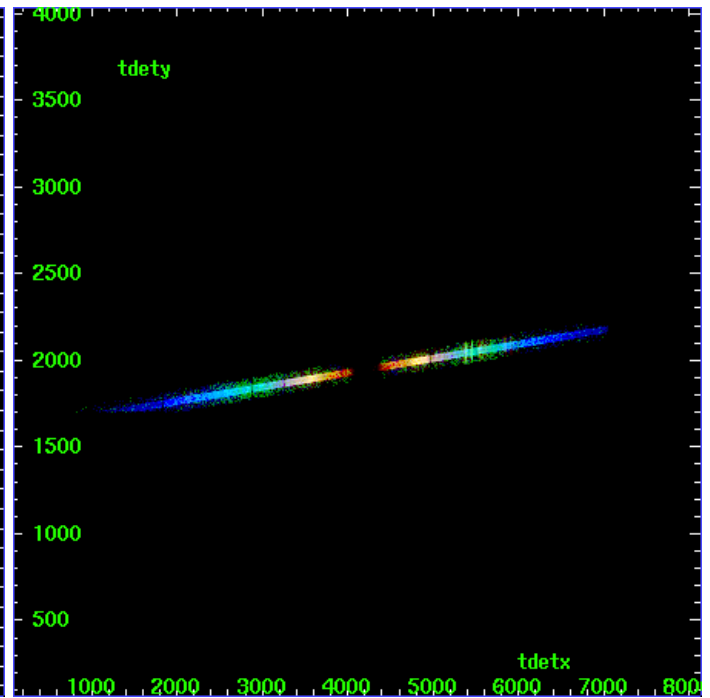
MEG Zero Order



MEG Order Sort ALL

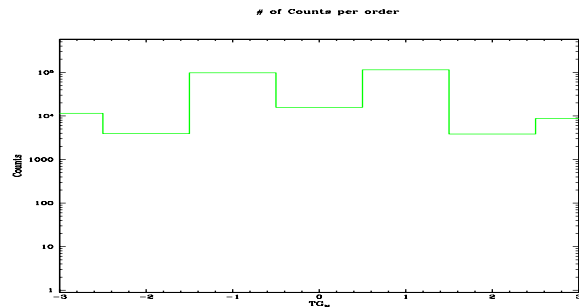


Spot Image MEG

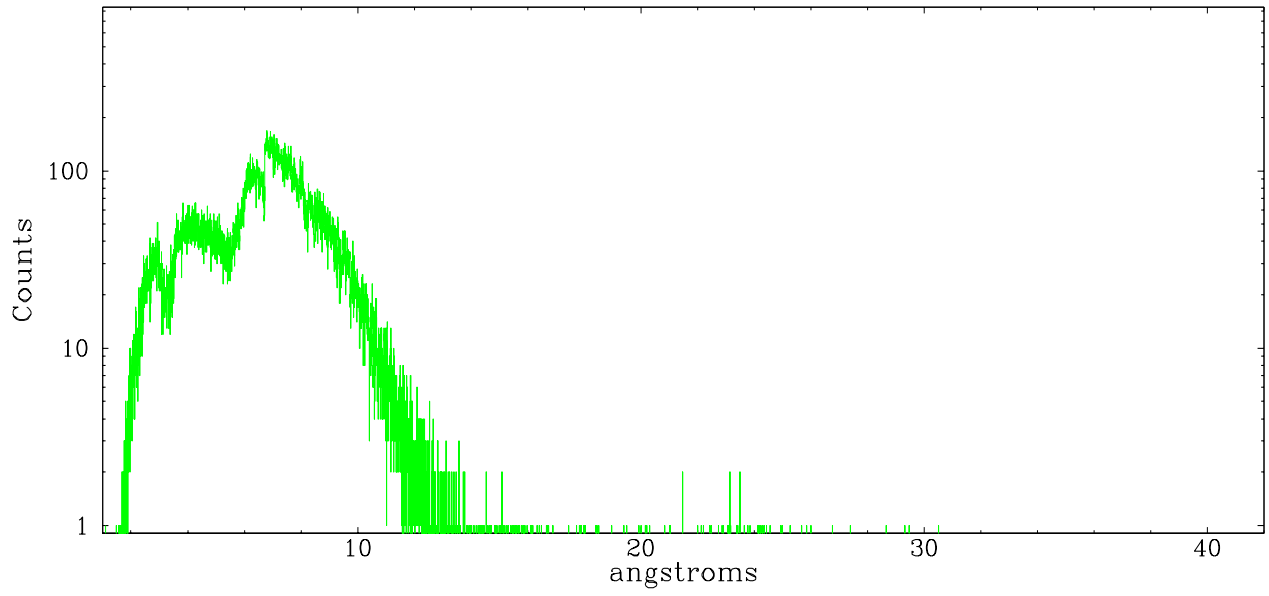


Full Detector MEG

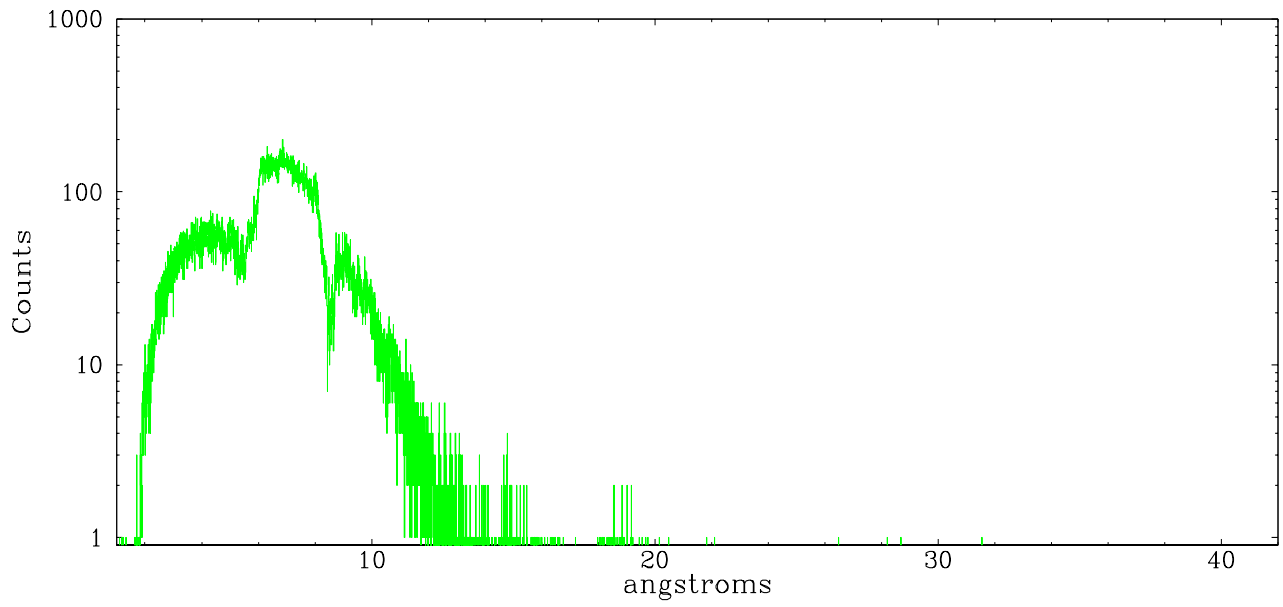
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	11515	3932	97667	15741	114797	3840	8727



meg order -1



meg order +1



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2006.09.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	27.108

A.2 Comments

Roll angle constraint met.

Zeroth order source is piled up. Chip S4 has an unusually large amount of streaks and column-to-column variations in Level 2.