

V&V Reference Report

L2 ASCDS Version : 7.6.7.1

Observation 5285 - L2 Version 001
Chandra X-Ray Center

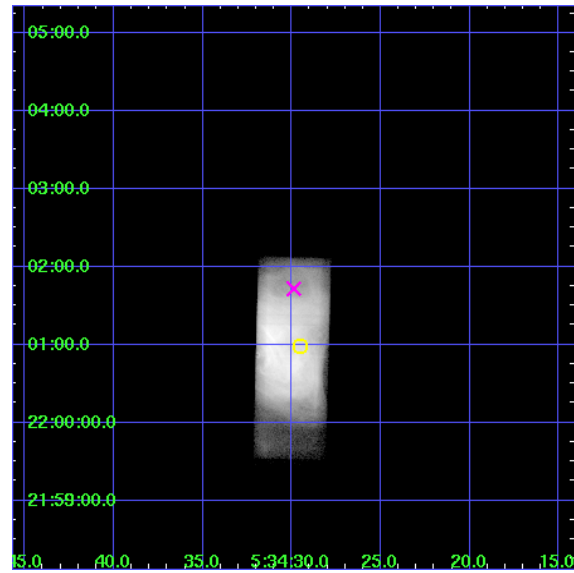
L2 Processing Date : Apr 13 2006

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Parameters	4
2.1.3	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

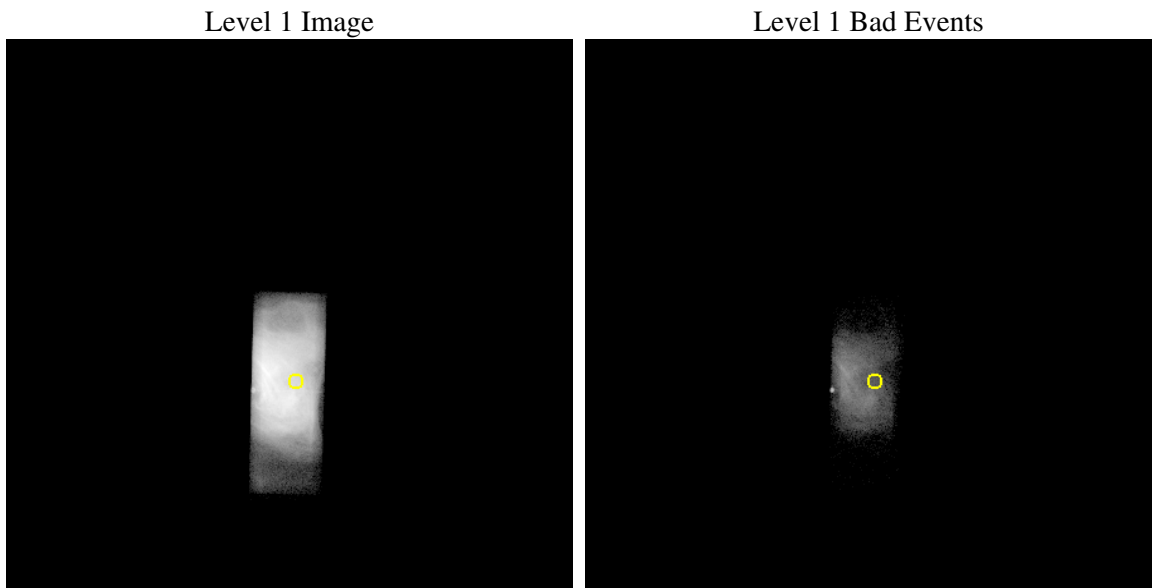
seq_num	500502
obs_id	5285
title	Spectroscopic Study of the Dynamic Shock in the Pulsar Wind of the Crab Nebula
observer	Dr Koji Mori
object	The Crab Nebula
dtcycle	0
cycle	P
ra_targ	83.623083
dec_targ	22.016472
ra_nom	83.624577919108
dec_nom	22.028822627078
roll_nom	91.462284105813
revision	2
ontime	10181.700404584
livetime	8956.4570765169
ontime7	10181.700404584
l2events	2388904



2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Parameters

obi_num	0
ascdsver	7.6.7.1
caldbver	3.2.1
date	2006-04-13T11:54:15
revision	2

sched_exp_time	10000.000000
ontime	10651.932137132
ontime7	10651.932137132
l1events	2526363

2.1.3 Events

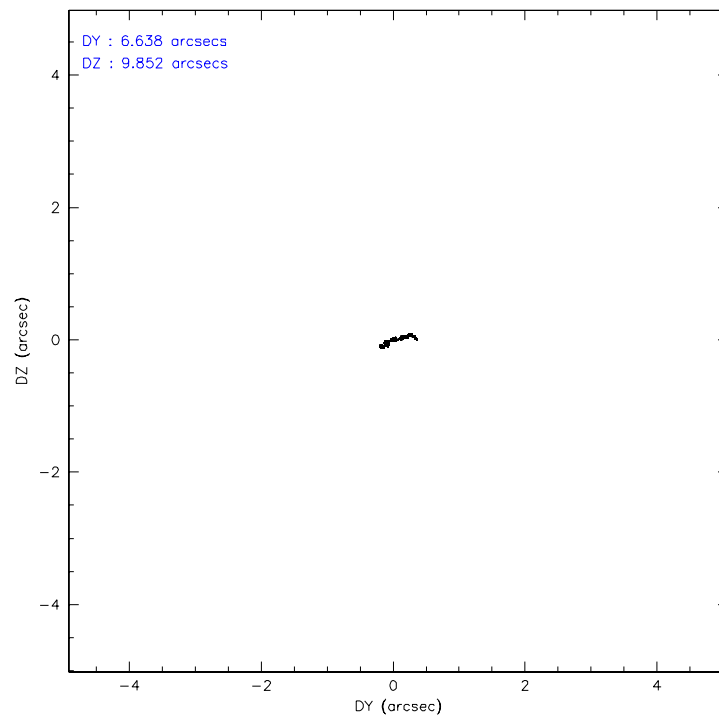
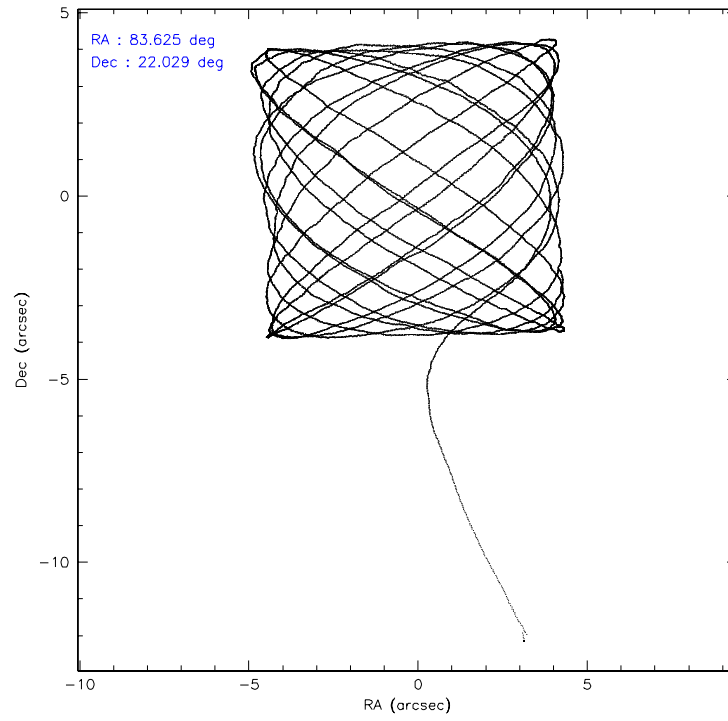
	ccd 7
level 1 events	2526363
rejected events	109956
rejected %	4%

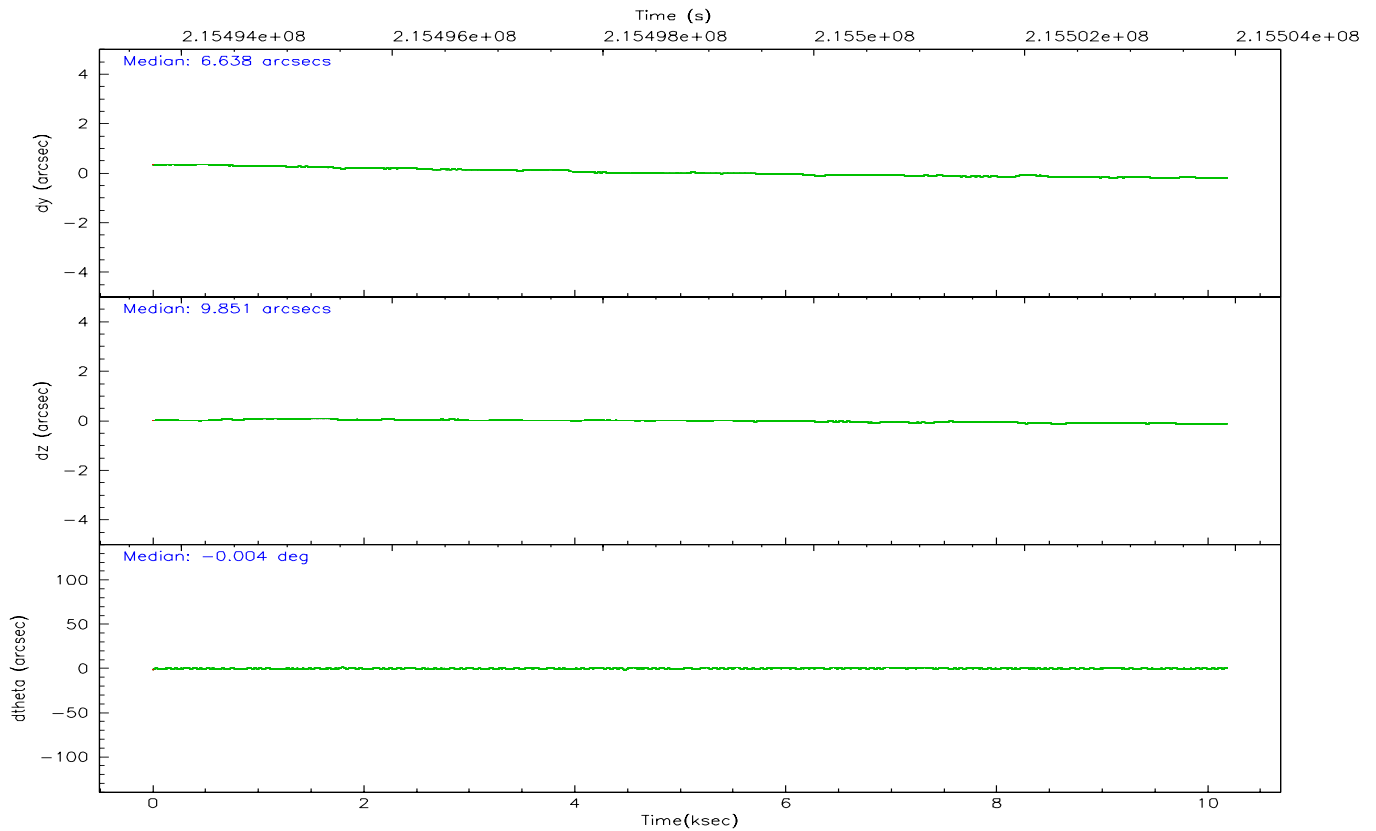
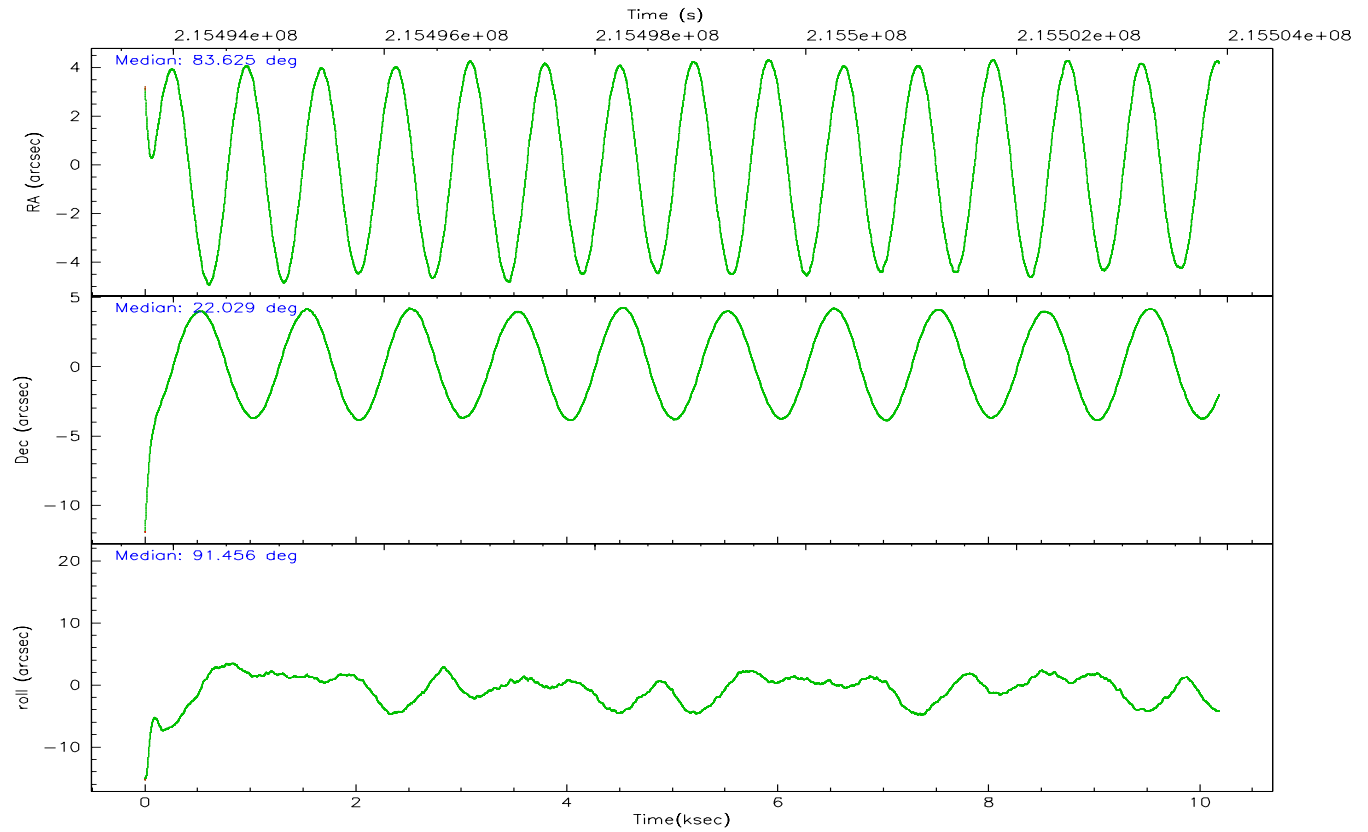
	ccd 7
grade 0 events	498290
	19%
grade 1 events	8297
	0%
grade 2 events	626757
	24%
grade 3 events	279864
	11%
grade 4 events	267190
	10%
grade 5 events	35474
	1%
grade 6 events	770630
	30%
grade 7 events	39861
	1%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-7	ACIS-7	Obspar file type	PREDICTED	ACTUAL
Grating	HETG	HETG	Obspar update status	NONE	UPDATED
Data mode	GRADED	GRADED	On-chip summing requested	N	N
Observation mode	POINTING	POINTING	Subarray requested	CUSTOM	CUSTOM
Pointing RA	83.640251	83.6245779191083	Subarray start row	127	127
Pointing Dec	22.005838	22.0288226270784	Subarray row count	101	101
Pointing Roll	91.299790	91.46228410581337	Alternating exposures requested	N	N
SIM focus pos (mm)	-0.684267	-0.6828225247311905	Primary exposure time	0.000000	0.3
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-182.132523	-182.1344861297048			
SIM translation stage offset (mm)	-8	-7.998036453302973			
Observation start time	215493912.184000	215493059.38039			
Observation start date	2004-10-30T03:24:08	2004-10-30T03:10:59			
Observation end time	215503912.184000	215505040.60593			
Observation end date	2004-10-30T06:10:48	2004-10-30T06:30:40			
Read mode	TIMED	TIMED			

2.3 Aspect



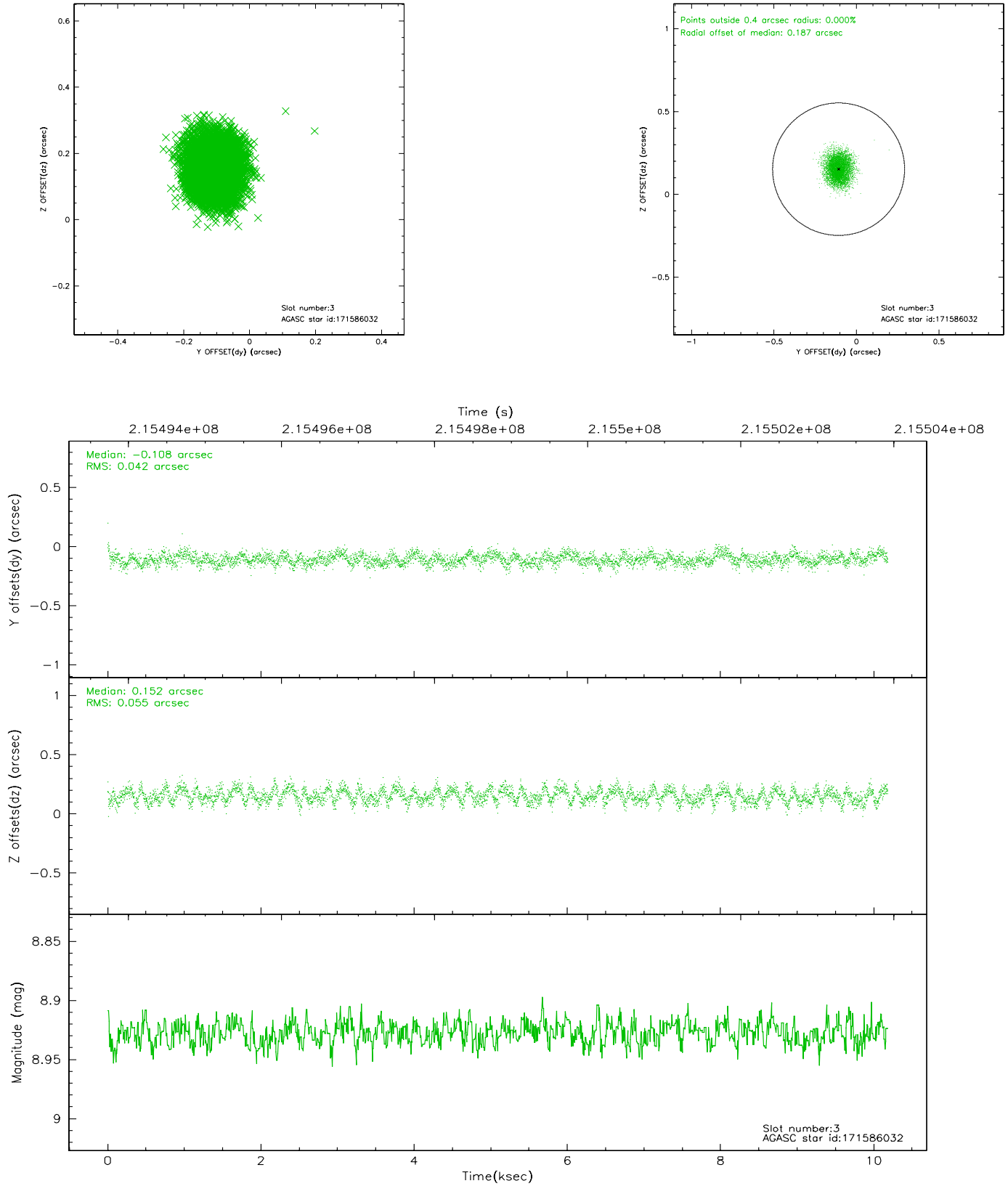


Slot Statistics

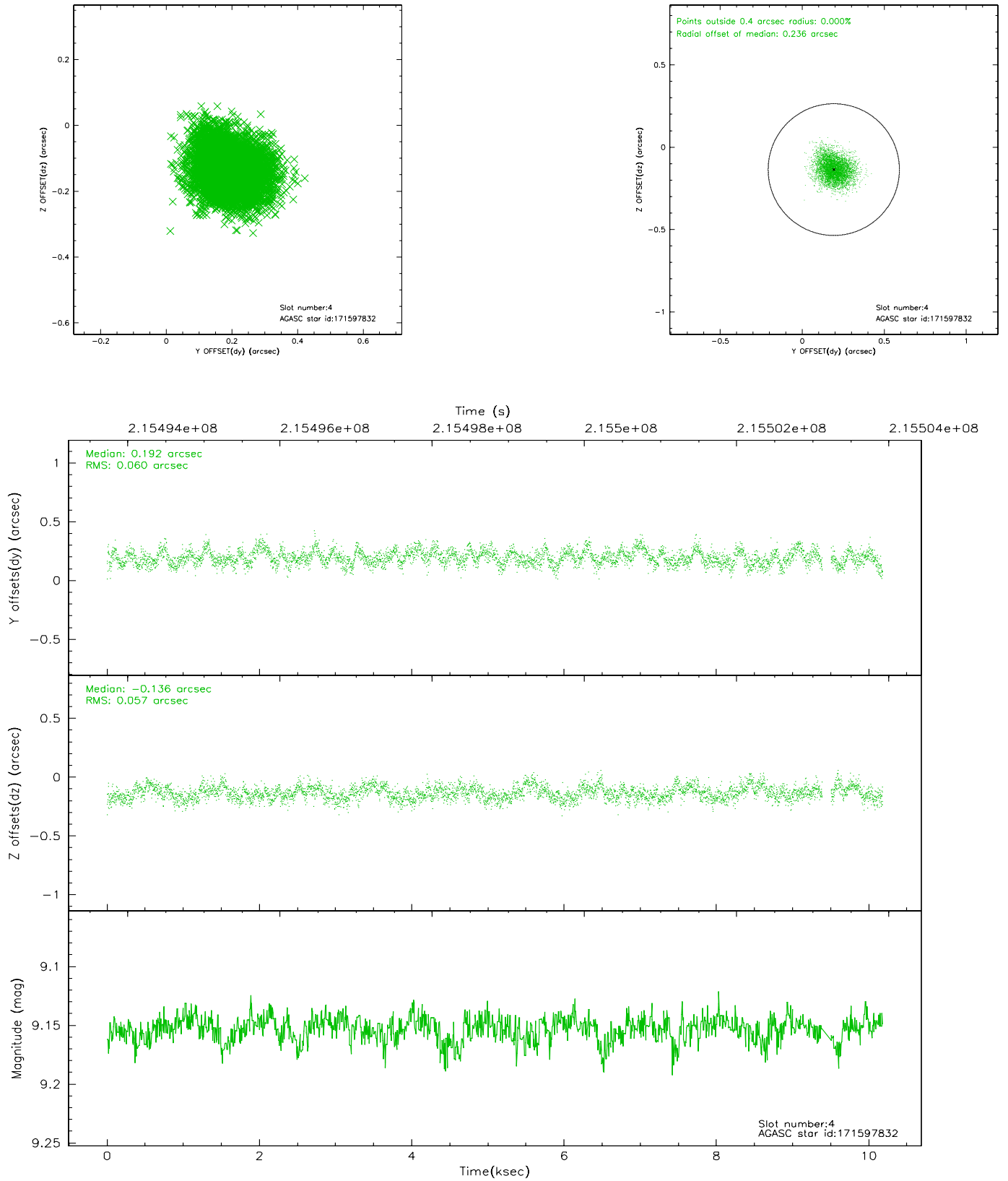
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.09	2484	-0.072	-0.069	0.009	0.024	0.000000	0.000000	-758.91	-1895.91
1	FID	ACIS-S-4	7.18	2484	0.090	0.053	0.009	0.038	0.000000	0.000000	2154.30	12.07
2	FID	ACIS-S-5	7.22	2483	-0.051	0.024	0.009	0.026	0.000000	0.000000	-1811.07	6.31
3	GUIDE	171586032	8.93	4964	-0.108	0.152	0.074	0.117	83.950197	22.083225	256.57	-1039.67
4	GUIDE	171597832	9.15	4908	0.192	-0.136	0.090	0.144	83.183230	21.366702	-2262.77	1583.56
5	GUIDE	171721904	9.21	4965	-0.078	0.152	0.089	0.148	84.272676	22.116922	356.48	-2117.15
6	GUIDE	243941560	8.32	4967	-0.114	0.080	0.055	0.091	83.733264	22.568598	2018.85	-354.98
7	GUIDE	171600224	9.67	4964	0.106	-0.251	0.111	0.174	82.941815	21.636094	-1271.77	2366.44

2.4 Star Slots

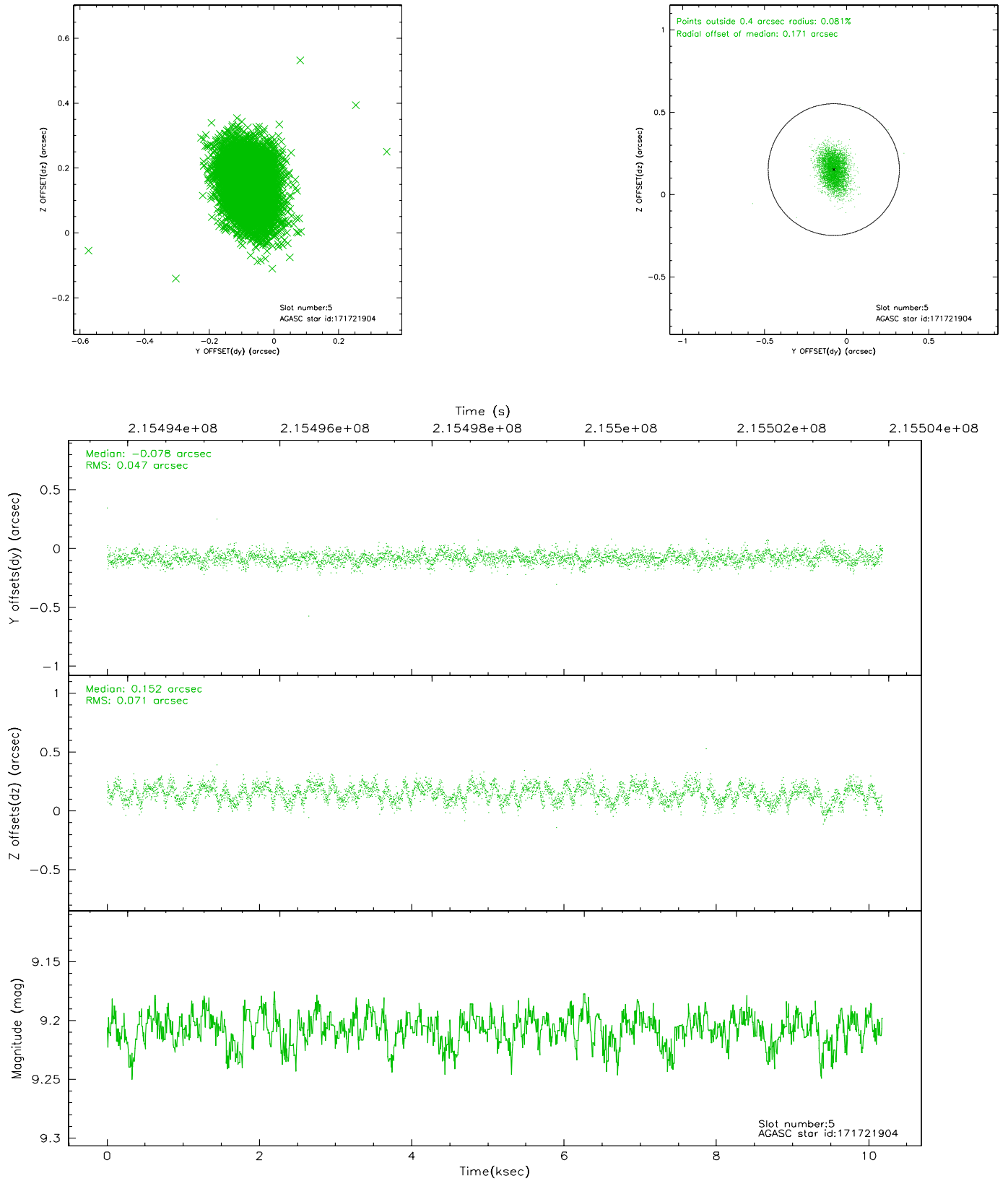
2.4.1 Slot 3



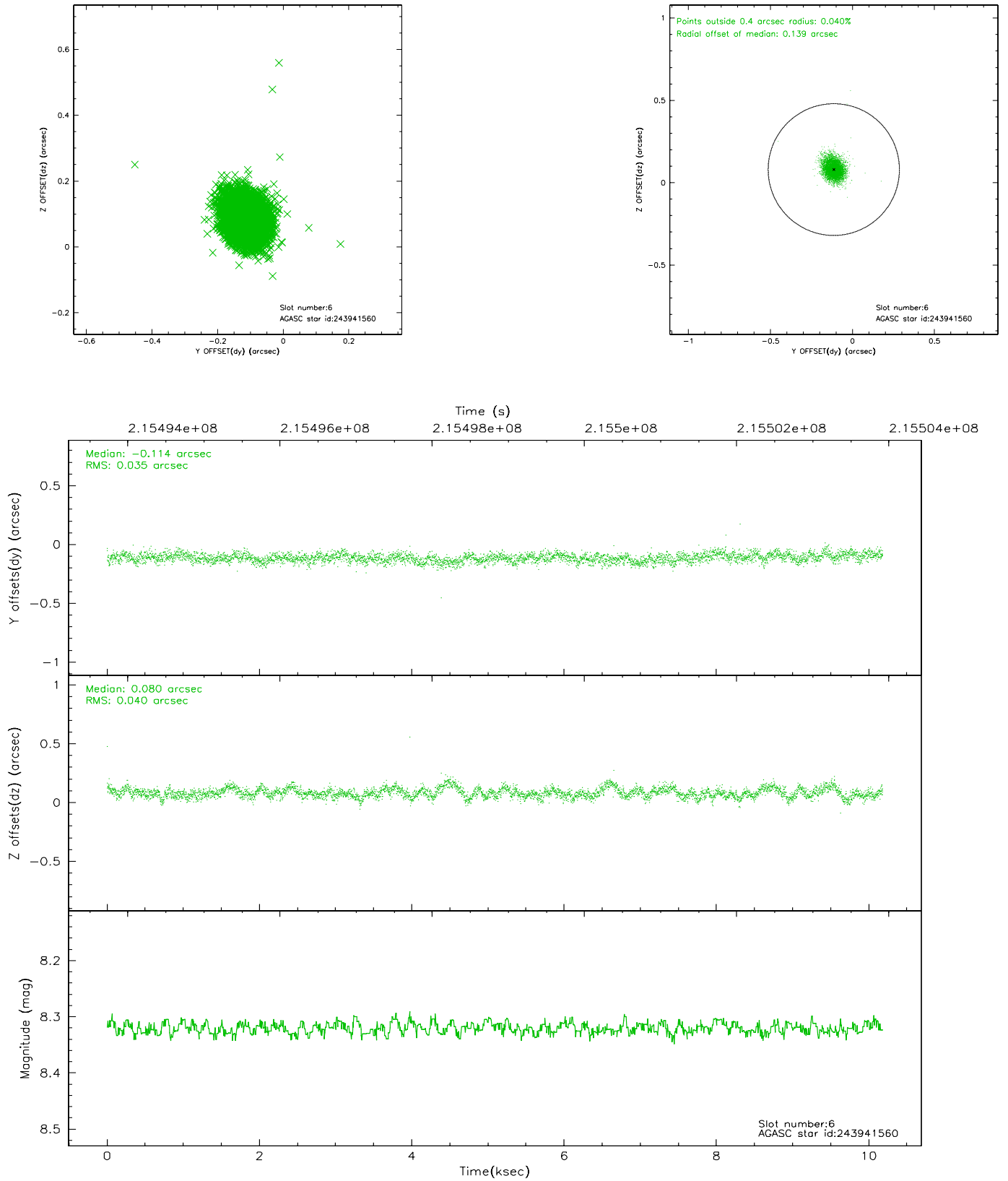
2.4.2 Slot 4



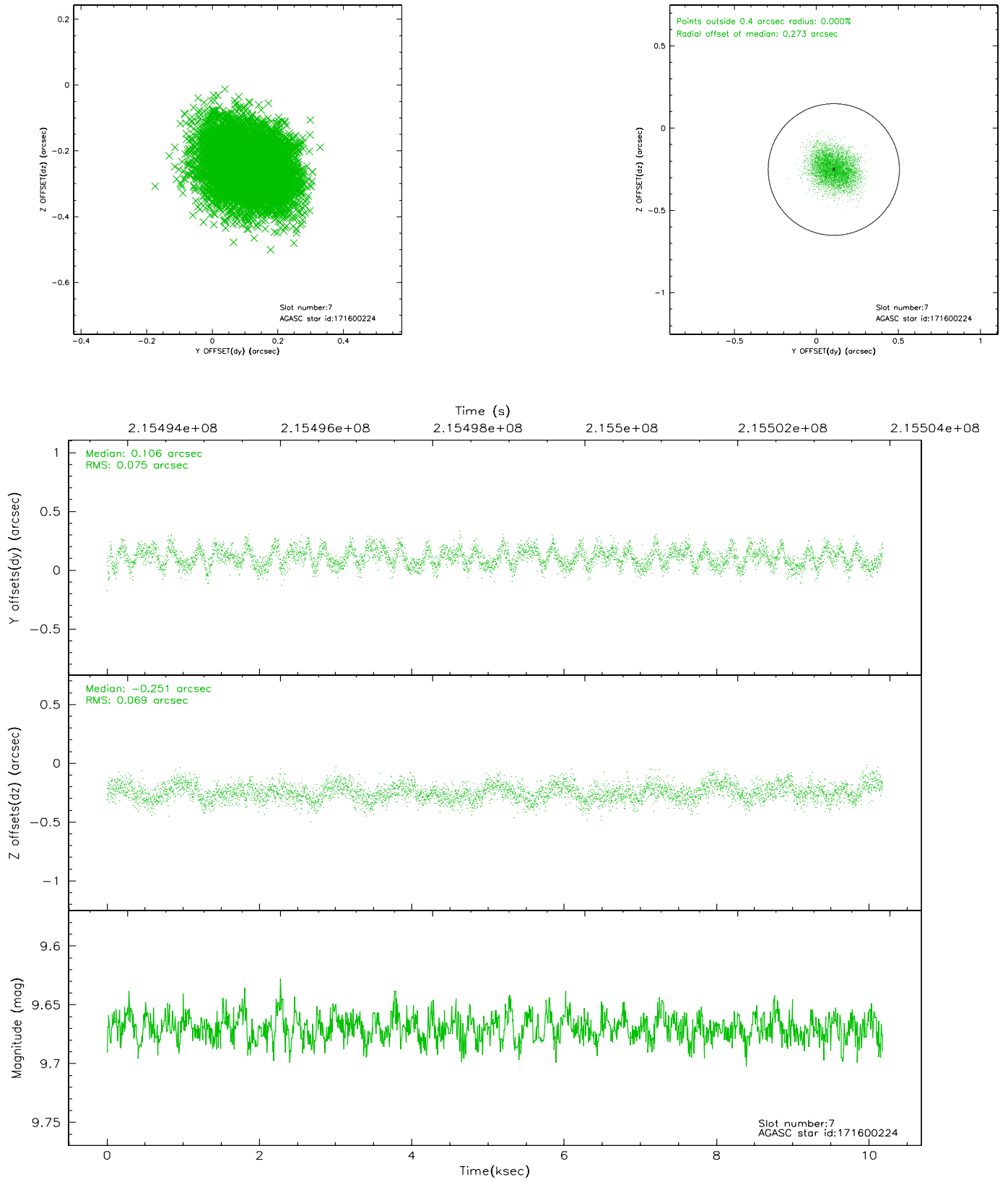
2.4.3 Slot 5



2.4.4 Slot 6

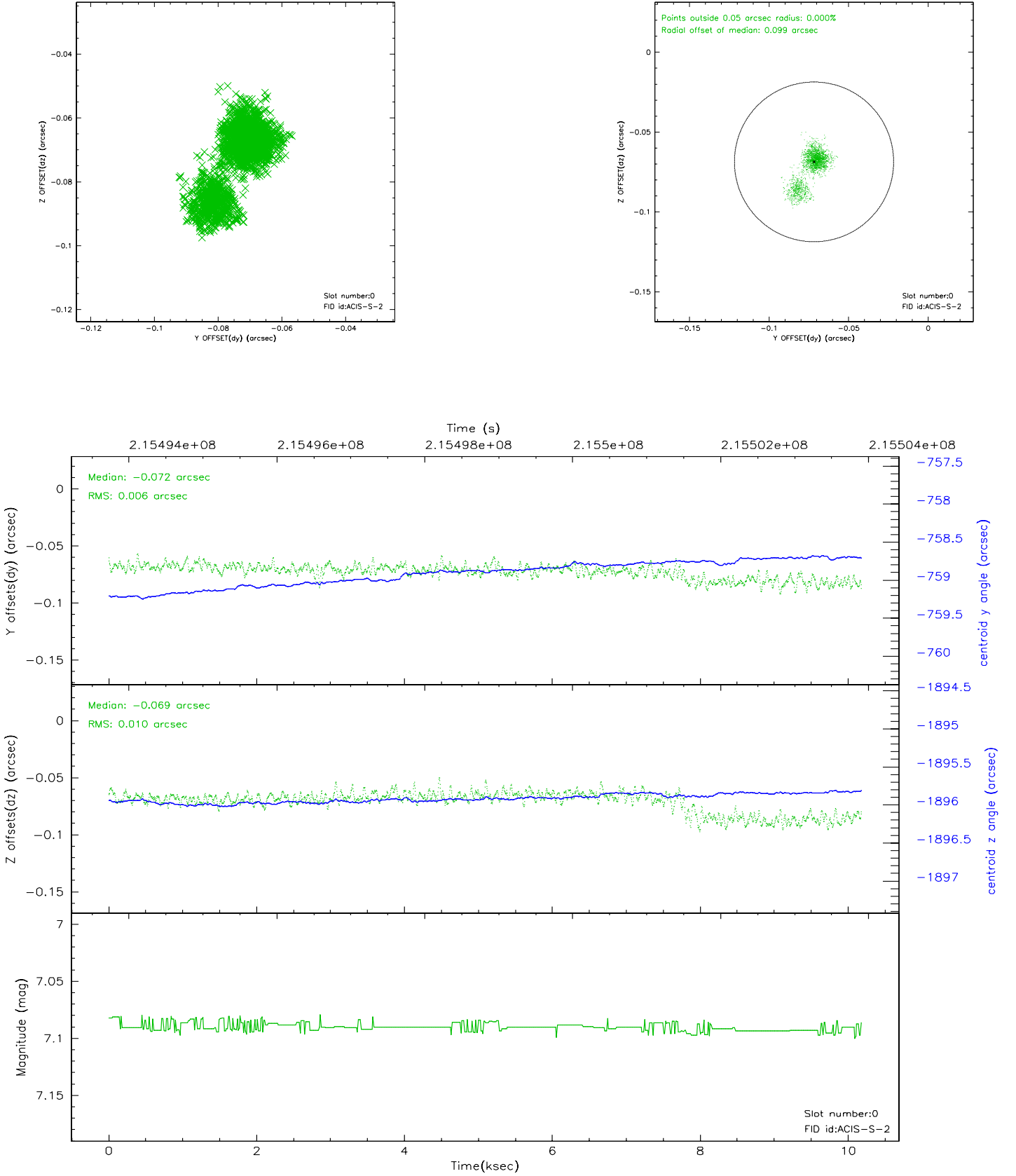


2.4.5 Slot 7

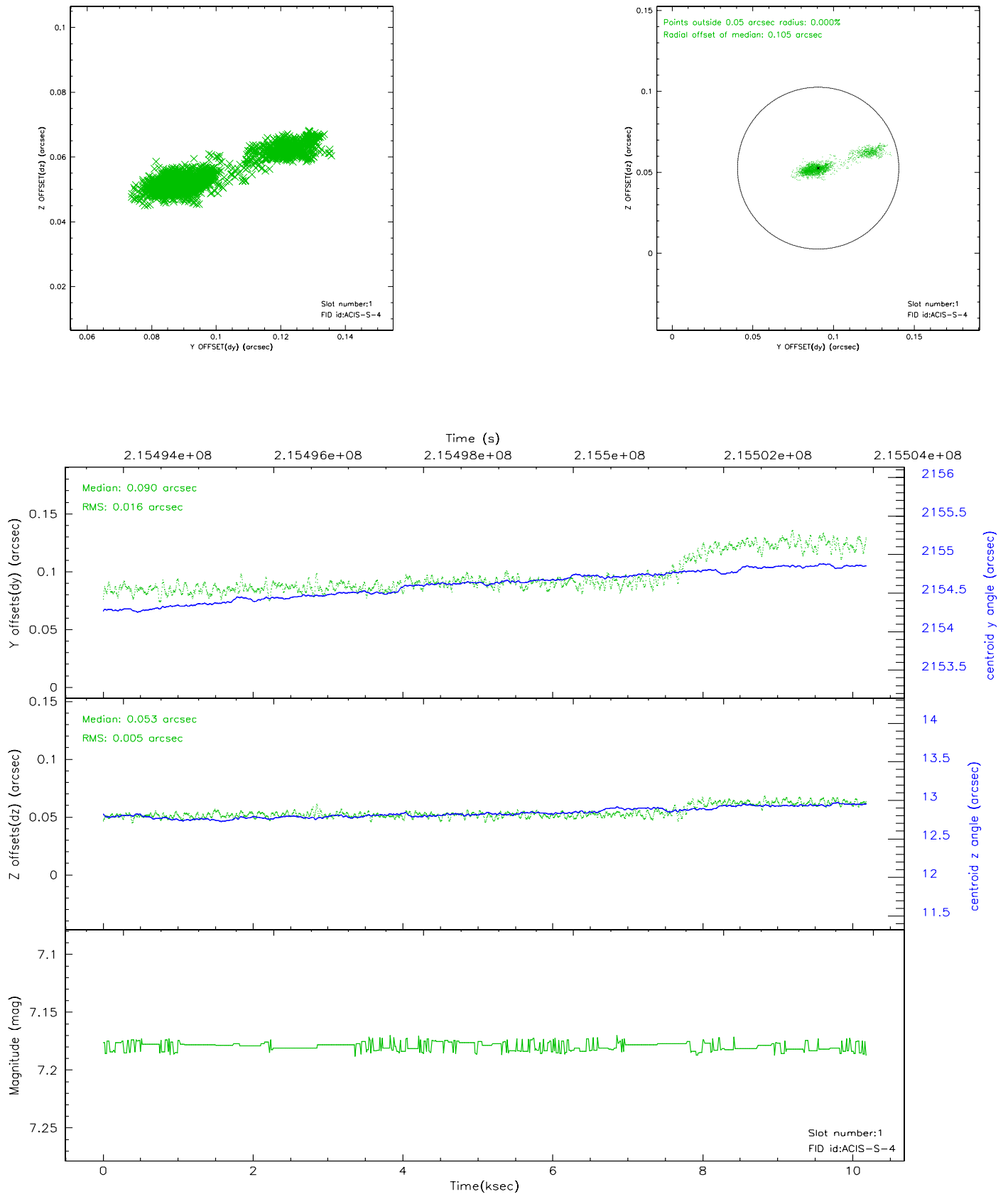


2.5 FID Slots

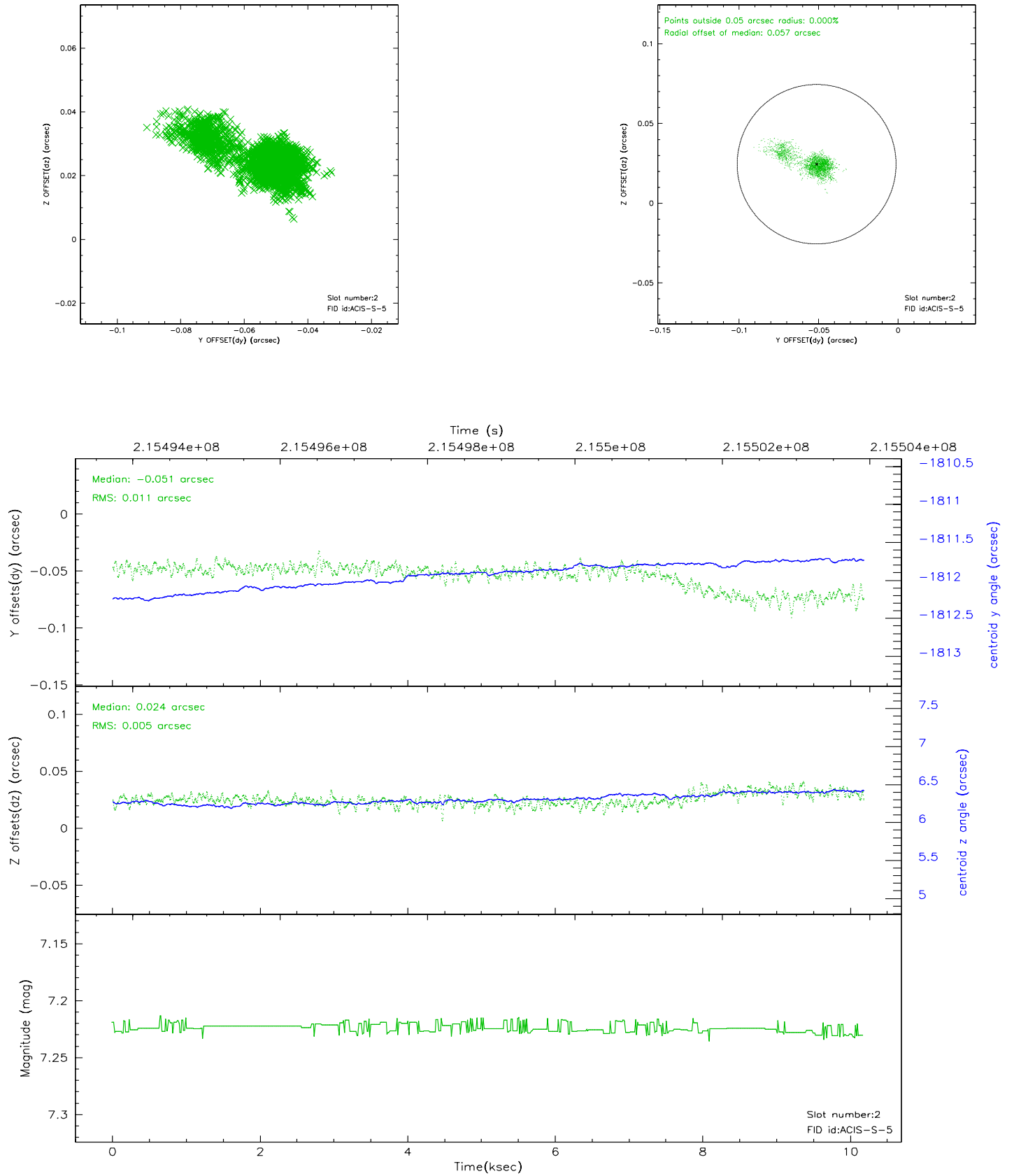
2.5.1 Slot 0



2.5.2 Slot 1

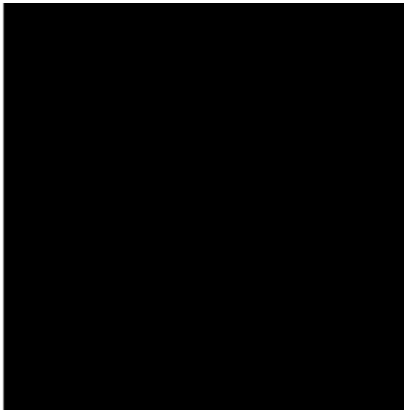


2.5.3 Slot 2

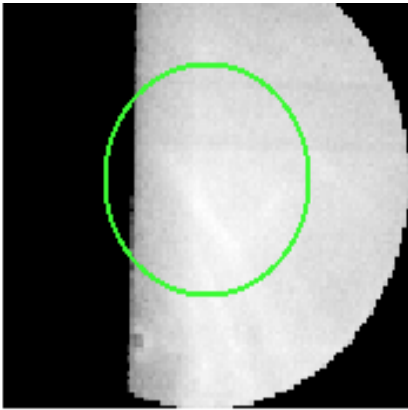


3 Gratings

3.1 HEG Arm



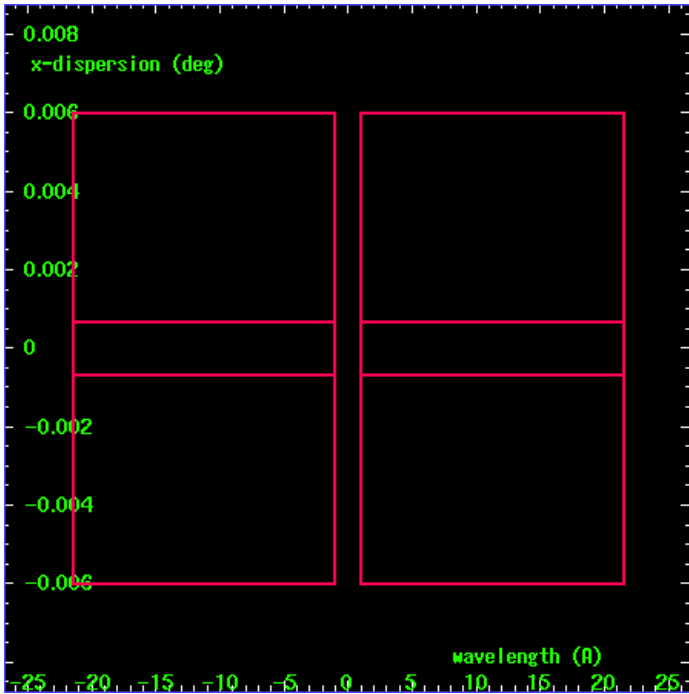
HEG Order Sort 123



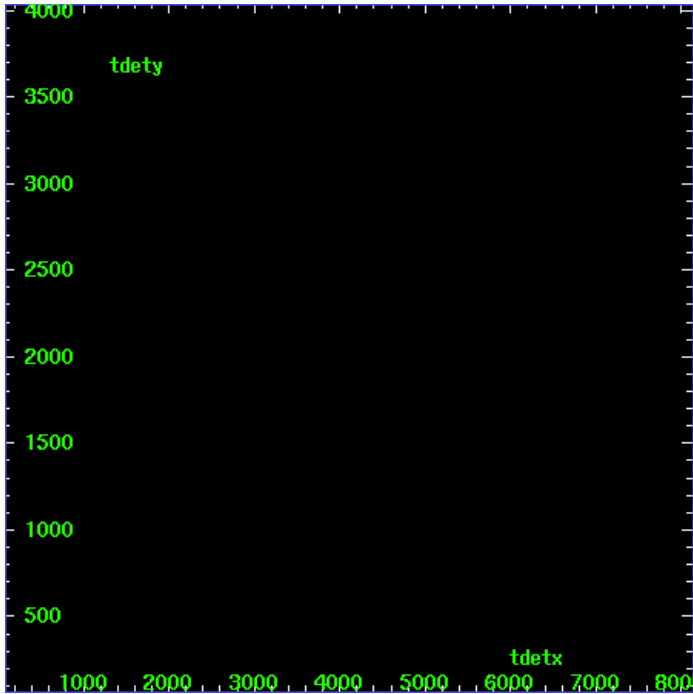
HEG Zero Order



HEG Order Sort ALL

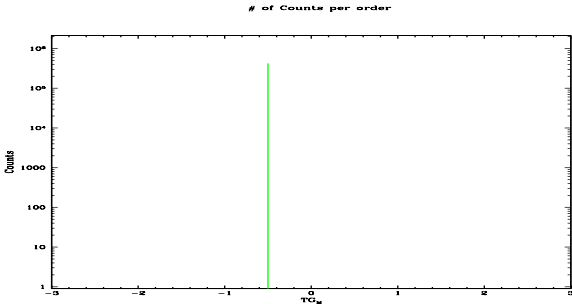


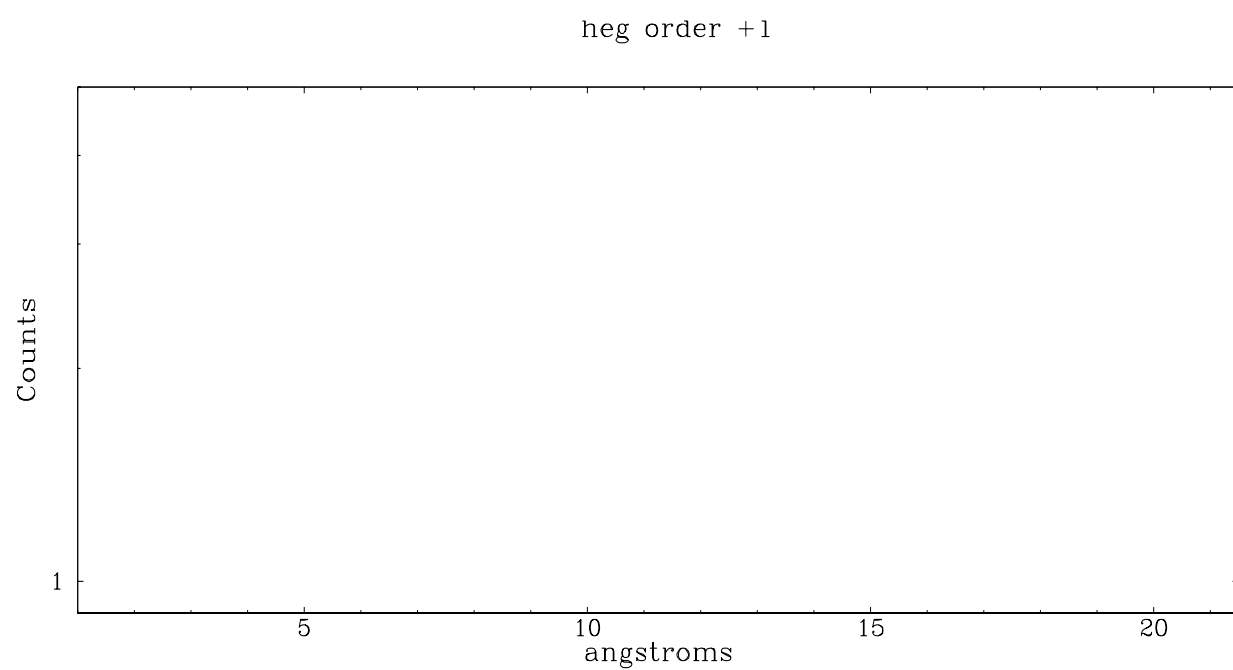
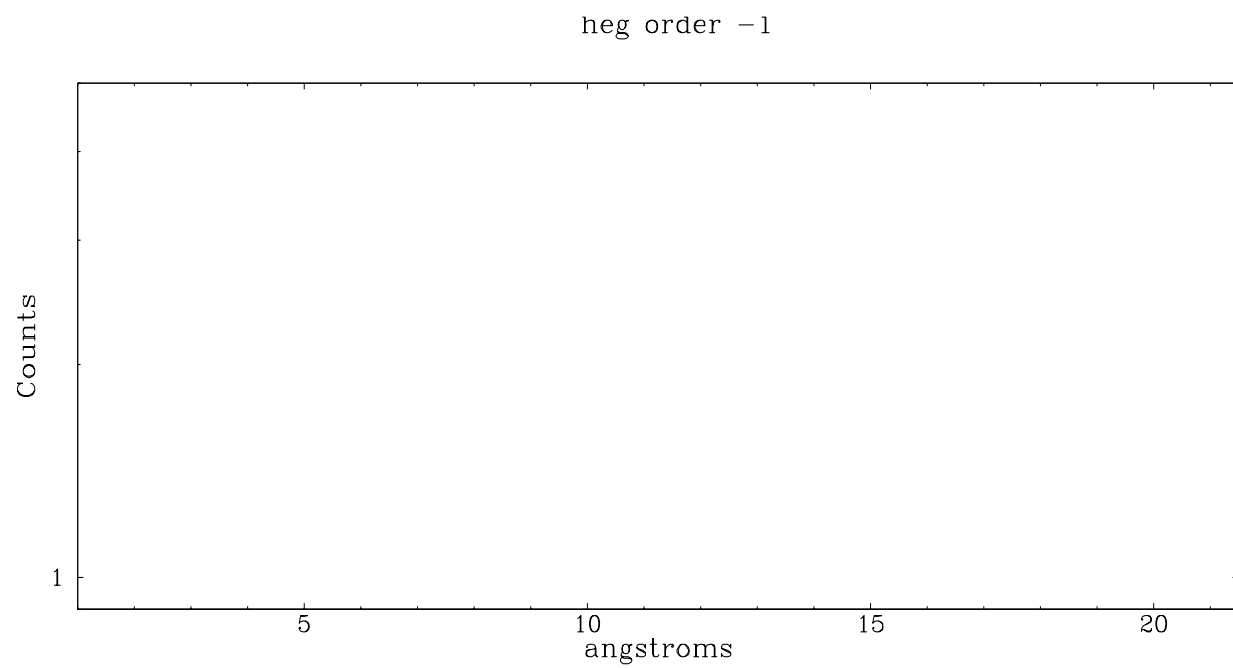
Spot Image HEG



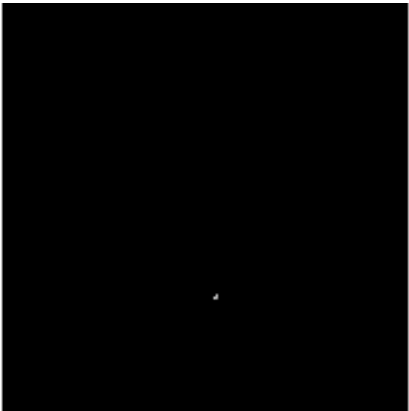
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	0	0	0	422252	0	0	0

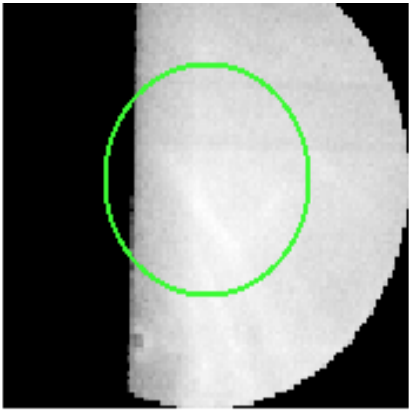




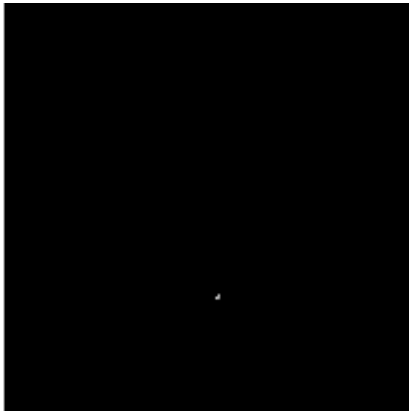
3.2 MEG Arm



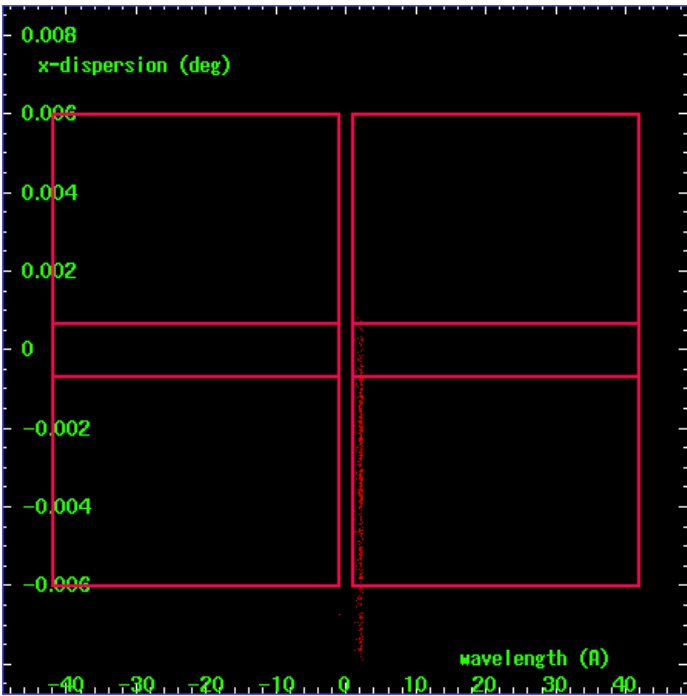
MEG Order Sort 123



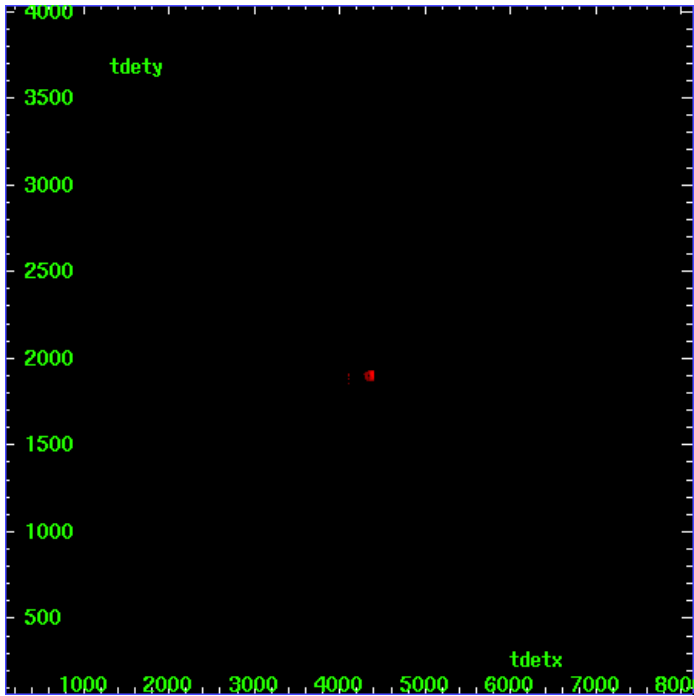
MEG Zero Order



MEG Order Sort ALL

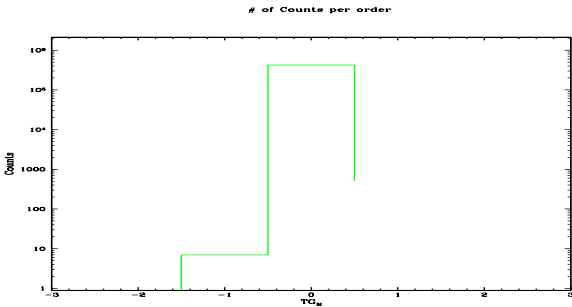


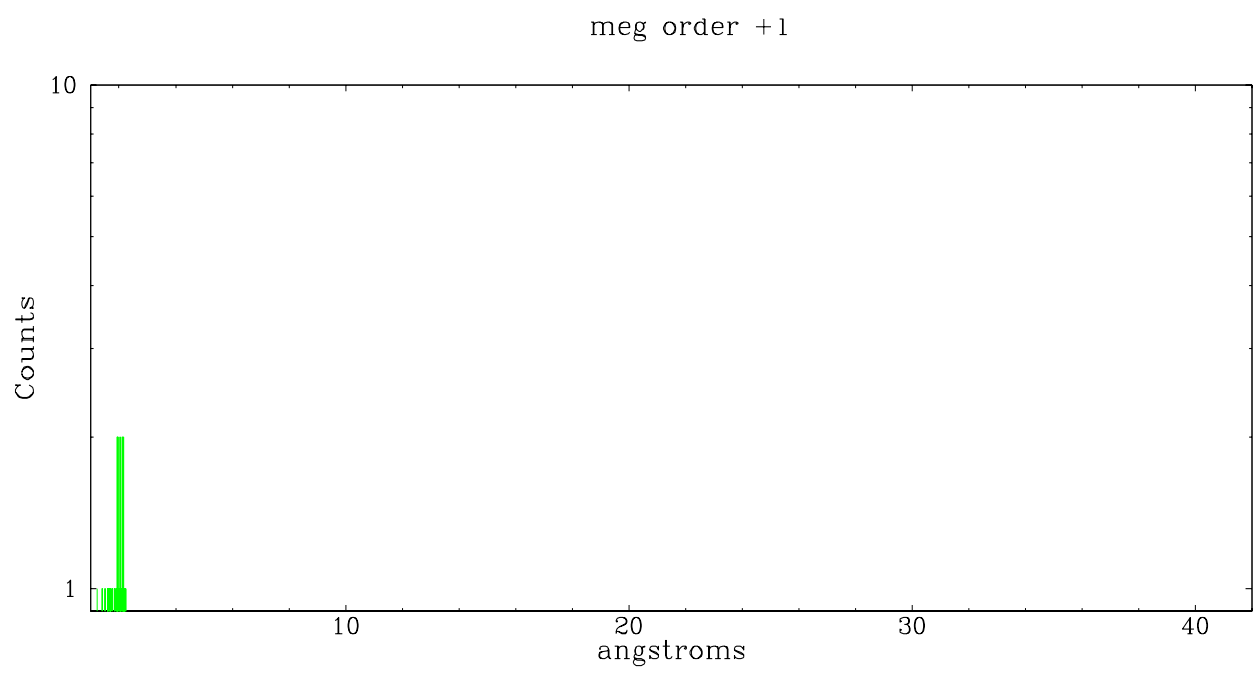
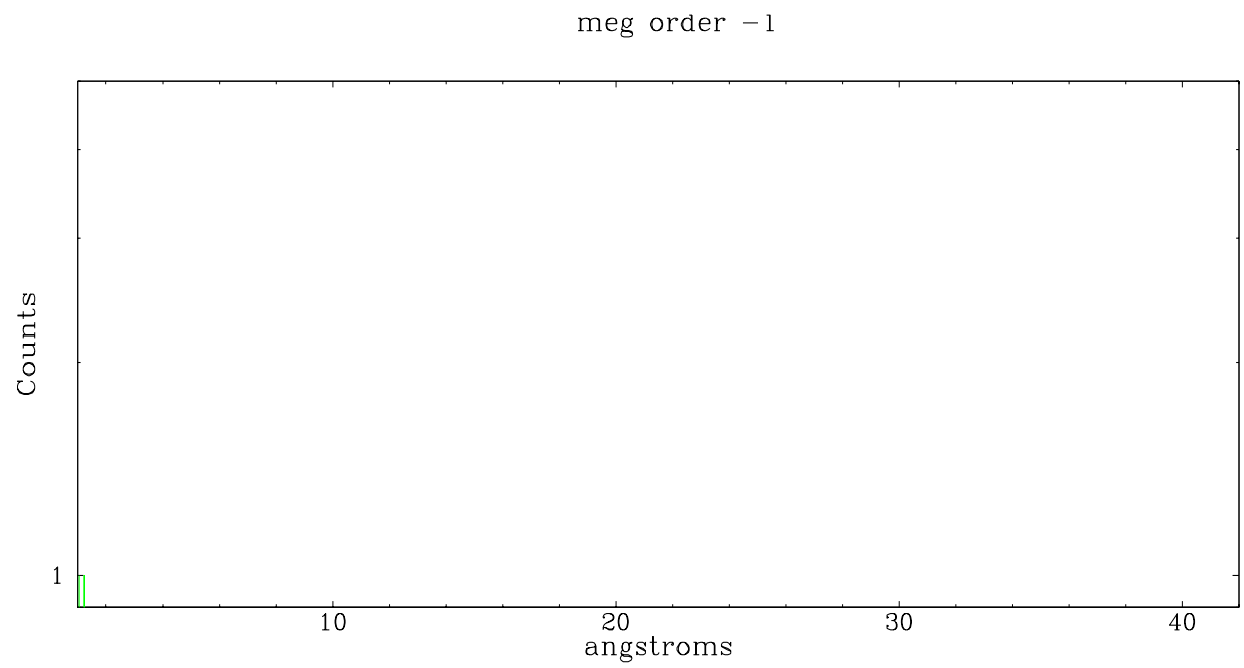
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	0	0	7	422252	518	0	0





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2006.04.13
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.181

A.2 Comments

Focal plane temperature above -118 degrees C for approximately the first half of the observation. Data taken at focal plane temperatures higher than -118 degrees are outside the calibration range. User may want to contact CXG calibration team for advise.