

V&V Reference Report

L2 ASCDS Version : 7.6.10

Observation 2410 - L2 Version 001
Chandra X-Ray Center

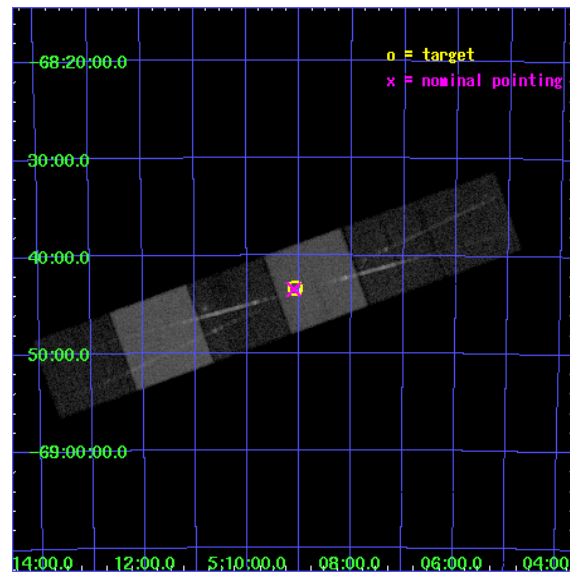
L2 Processing Date : Jun 22 2007

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1 Front

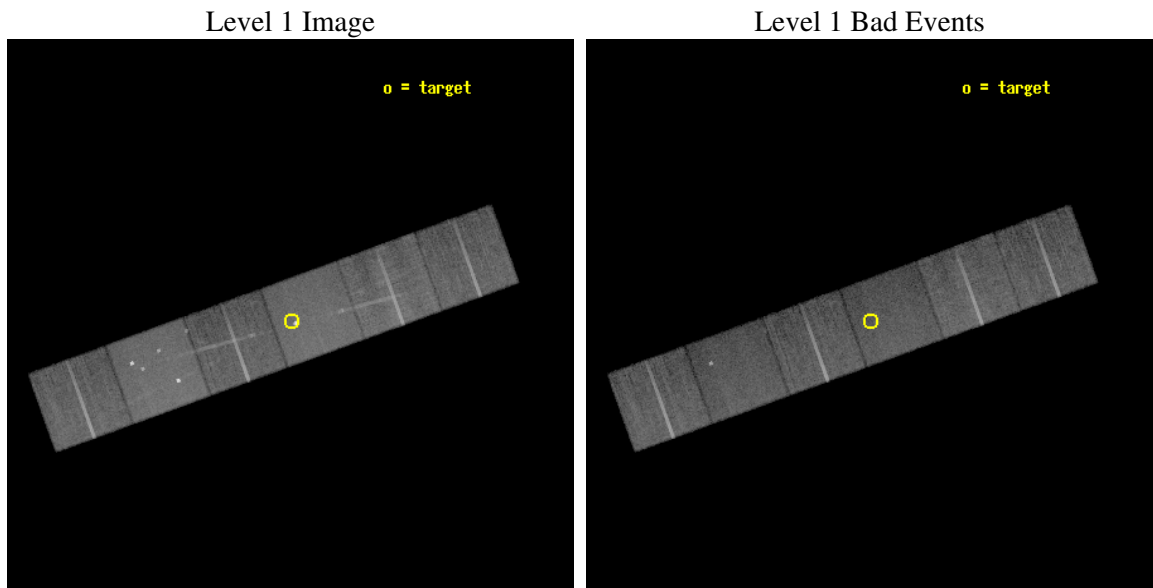
seq_num	500111
obs_id	2410
title	HIGH RESOLUTION SPECTRA OF YOUNG SUPERNOVA REMNANTS
observer	Prof. Claude Canizares
object	N103B
dtcycle	0
cycle	P
ra_targ	77.26625
dec_targ	-68.721944
ra_nom	77.275393079599
dec_nom	-68.725001902931
roll_nom	340.10470113724
revision	2
ontime	25756.800023988
livetime	25430.651913201
ontime4	25753.559063748
ontime5	25756.800023988
ontime6	25756.800023988
ontime7	25756.800023988
ontime8	25756.800023988
ontime9	25756.800023988
l2events	260508



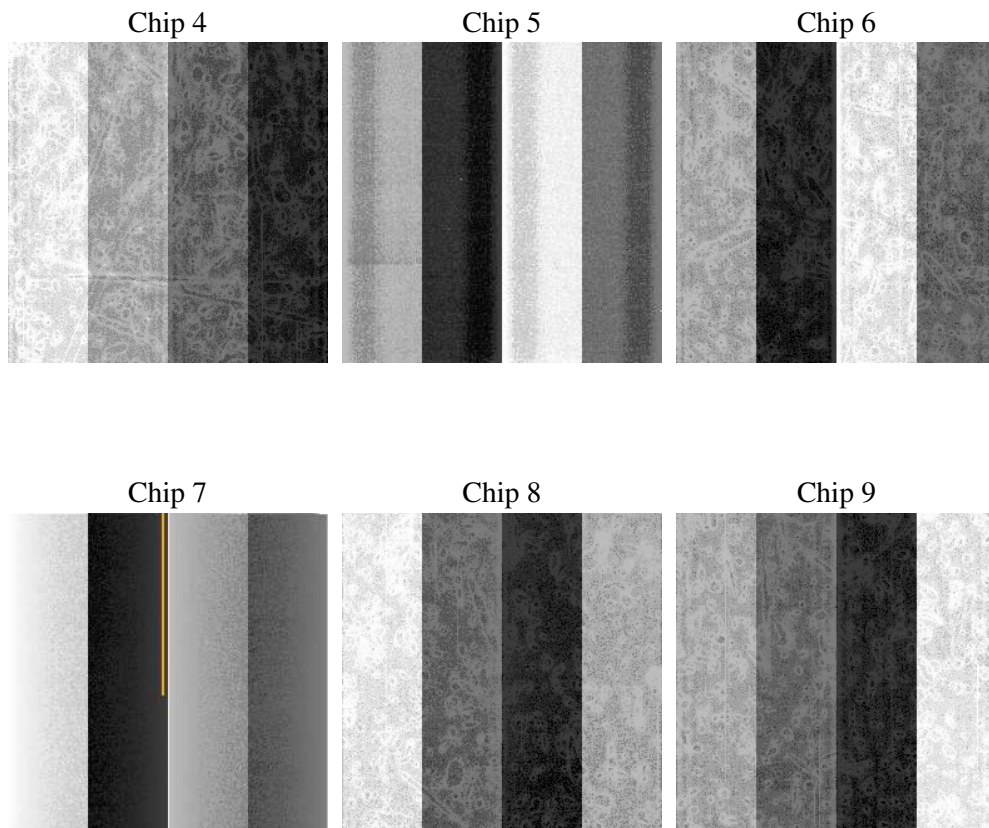
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0
ascdsver	7.6.10
caldsver	3.4.0
date	2007-06-22T05:29:07
revision	2

sched_exp_time	26000.000000
ontime	25756.800023988
ontime4	25753.559063748
ontime5	25756.800023988
ontime6	25756.800023988
ontime7	25756.800023988
ontime8	25756.800023988
ontime9	25756.800023988
l1events	1114859

2.1.4 Events

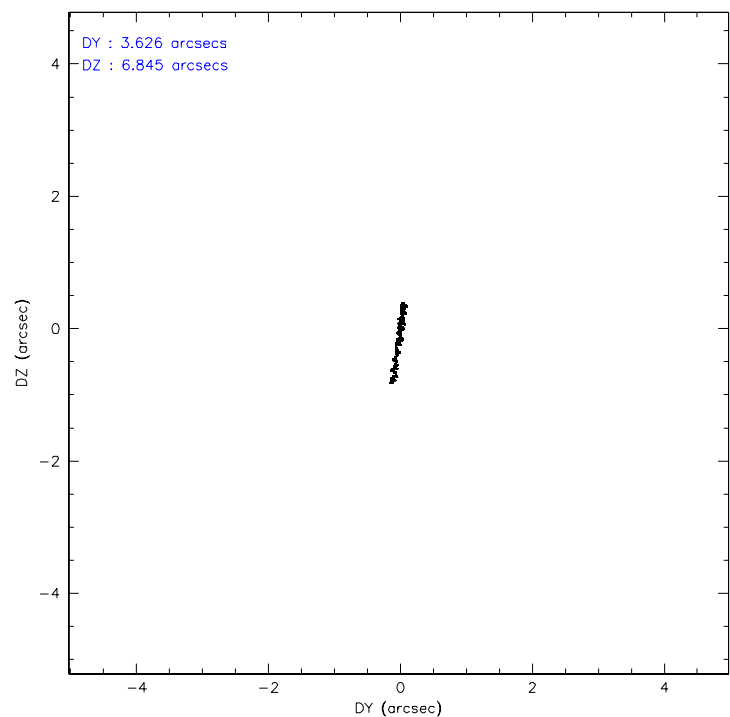
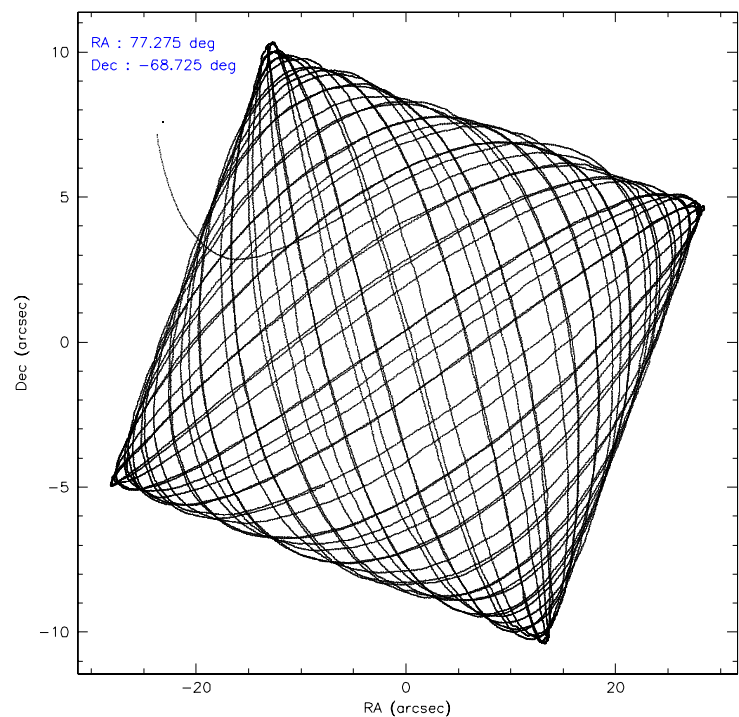
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	168889	223280	159333	210276	199581	153500
rejected events	149913	117004	134943	114685	157455	134972
rejected %	88%	52%	84%	54%	78%	87%

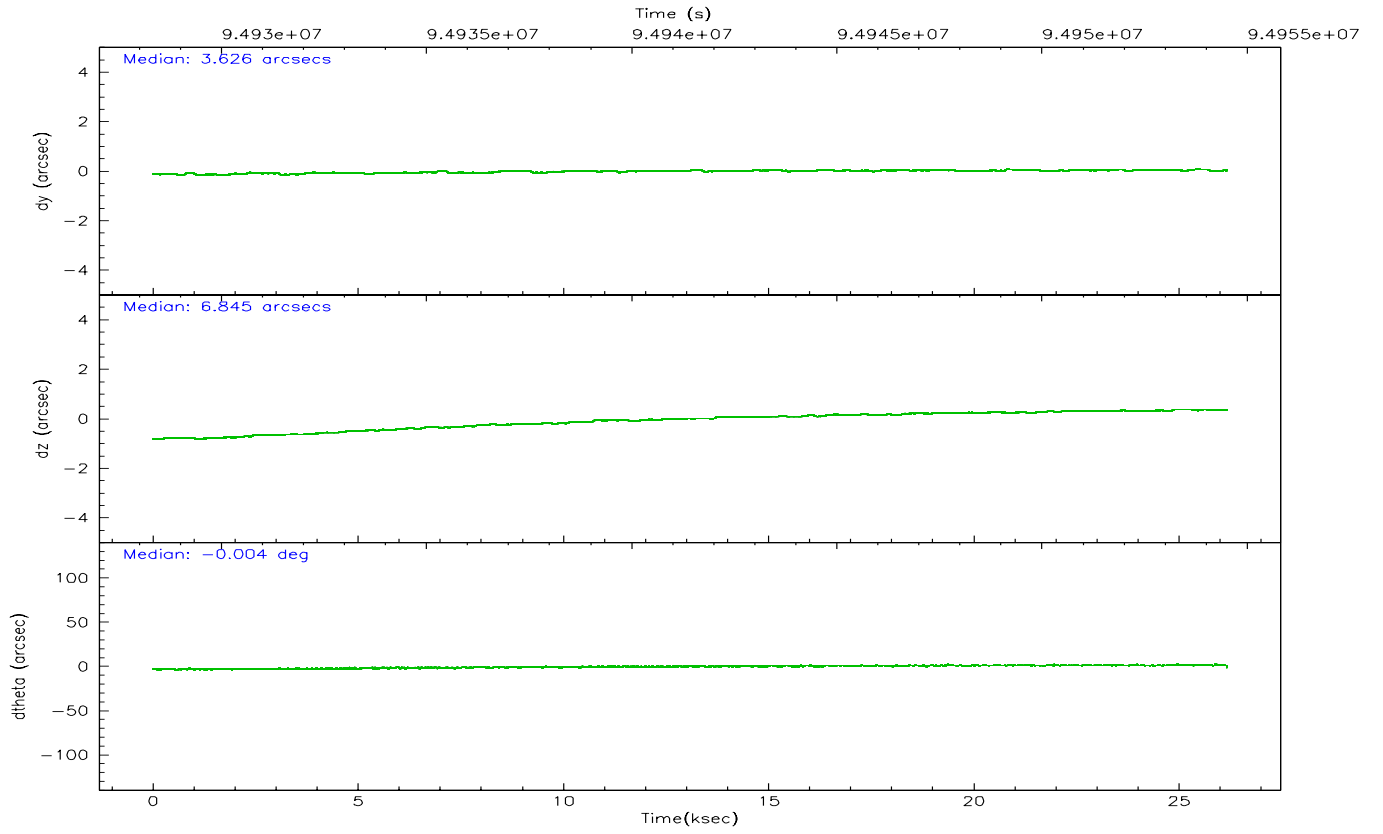
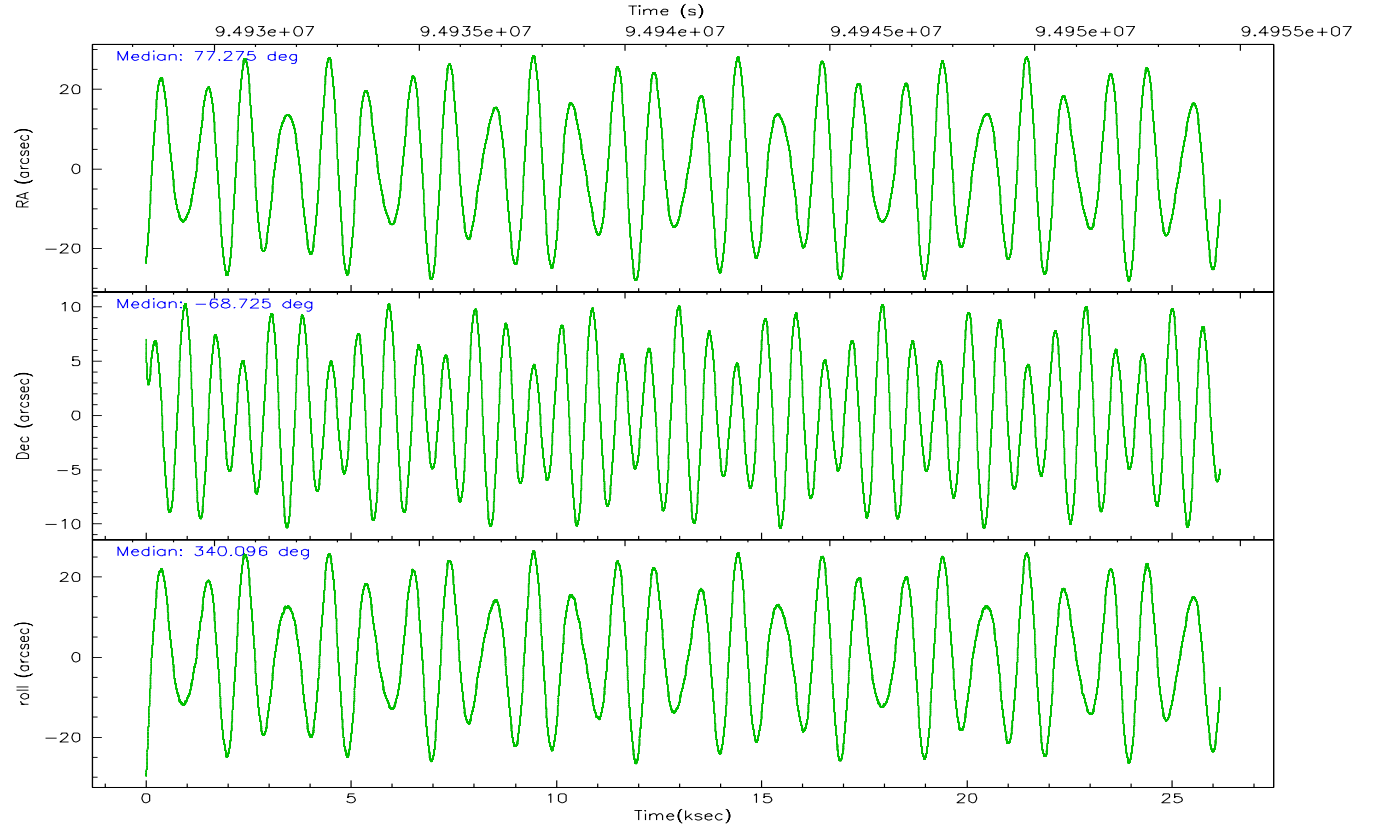
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	8044	16348	12955	12265	15988	7883
	4%	7%	8%	5%	8%	5%
grade 1 events	77	290	89	220	112	66
	0%	0%	0%	0%	0%	0%
grade 2 events	4354	31023	4168	19720	8351	3666
	2%	13%	2%	9%	4%	2%
grade 3 events	1710	4477	1927	9188	4054	1737
	1%	2%	1%	4%	2%	1%
grade 4 events	1676	4093	1895	9048	3891	1791
	0%	1%	1%	4%	1%	1%
grade 5 events	5490	16554	6294	18930	7935	6552
	3%	7%	3%	9%	3%	4%
grade 6 events	3197	50359	3448	45394	9848	3459
	1%	22%	2%	21%	4%	2%
grade 7 events	144341	100136	128557	95511	149402	128346
	85%	44%	80%	45%	74%	83%

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	77.201357	77.27539307959916	Subarray requested	NONE	NONE
Pointing Dec	-68.730022	-68.72500190293069	Alternating exposures requested	N	N
Pointing Roll	339.879085	340.1047011372355	Primary exposure time	0.000000	3.2
SIM focus pos (mm)	-0.684267	-0.6828225247311905			
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-190.132523	-190.1400660498719			
SIM translation stage offset (mm)	0	0.00754346686406393			
Observation start time	94928509.184000	94927569.785208			
Observation start date	2001-01-03T17:00:45	2001-01-03T16:46:09			
Observation end time	94954509.184000	94955323.711272			
Observation end date	2001-01-04T00:14:05	2001-01-04T00:28:43			
Read mode	TIMED	TIMED			

2.3 Aspect



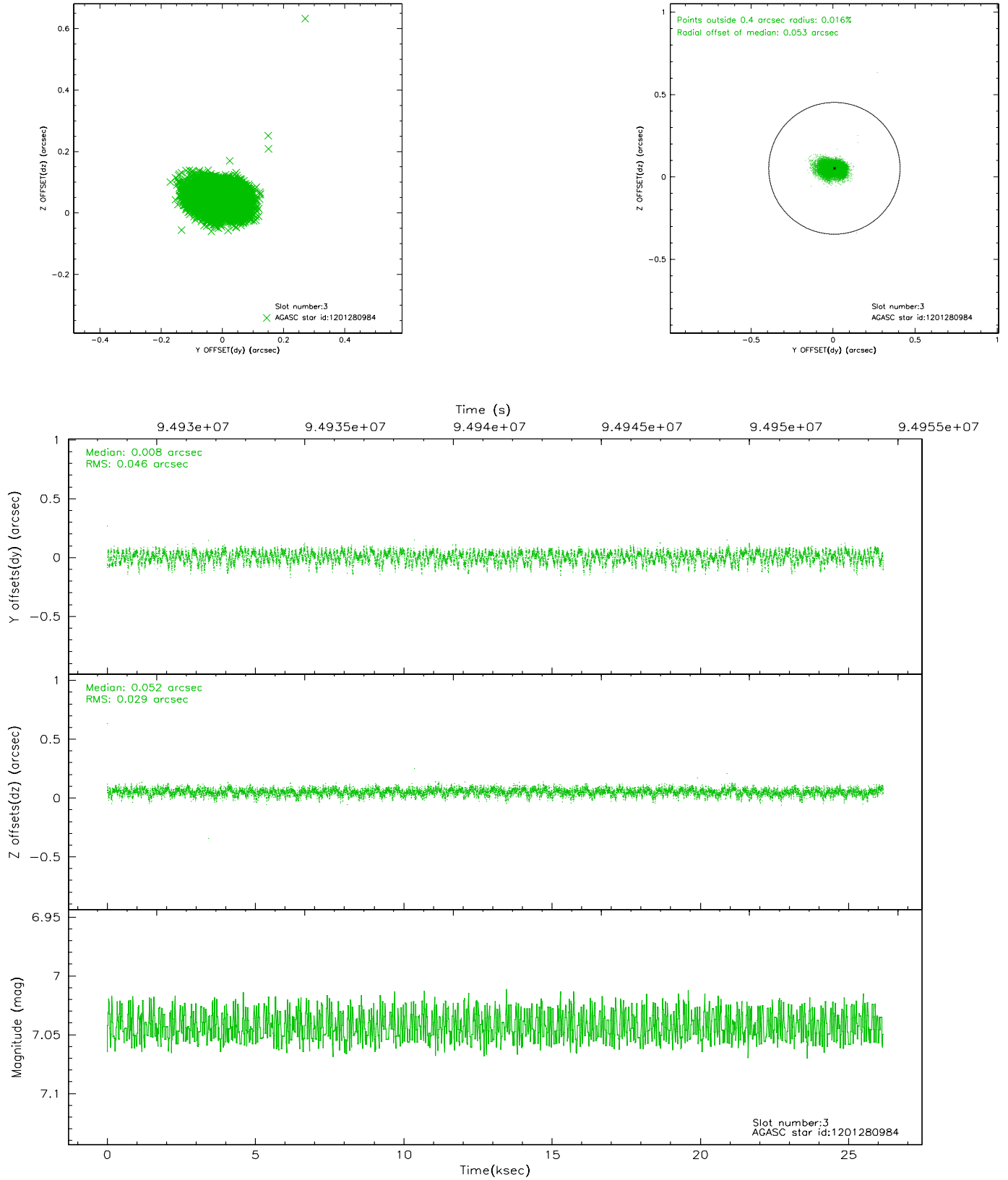


Slot Statistics

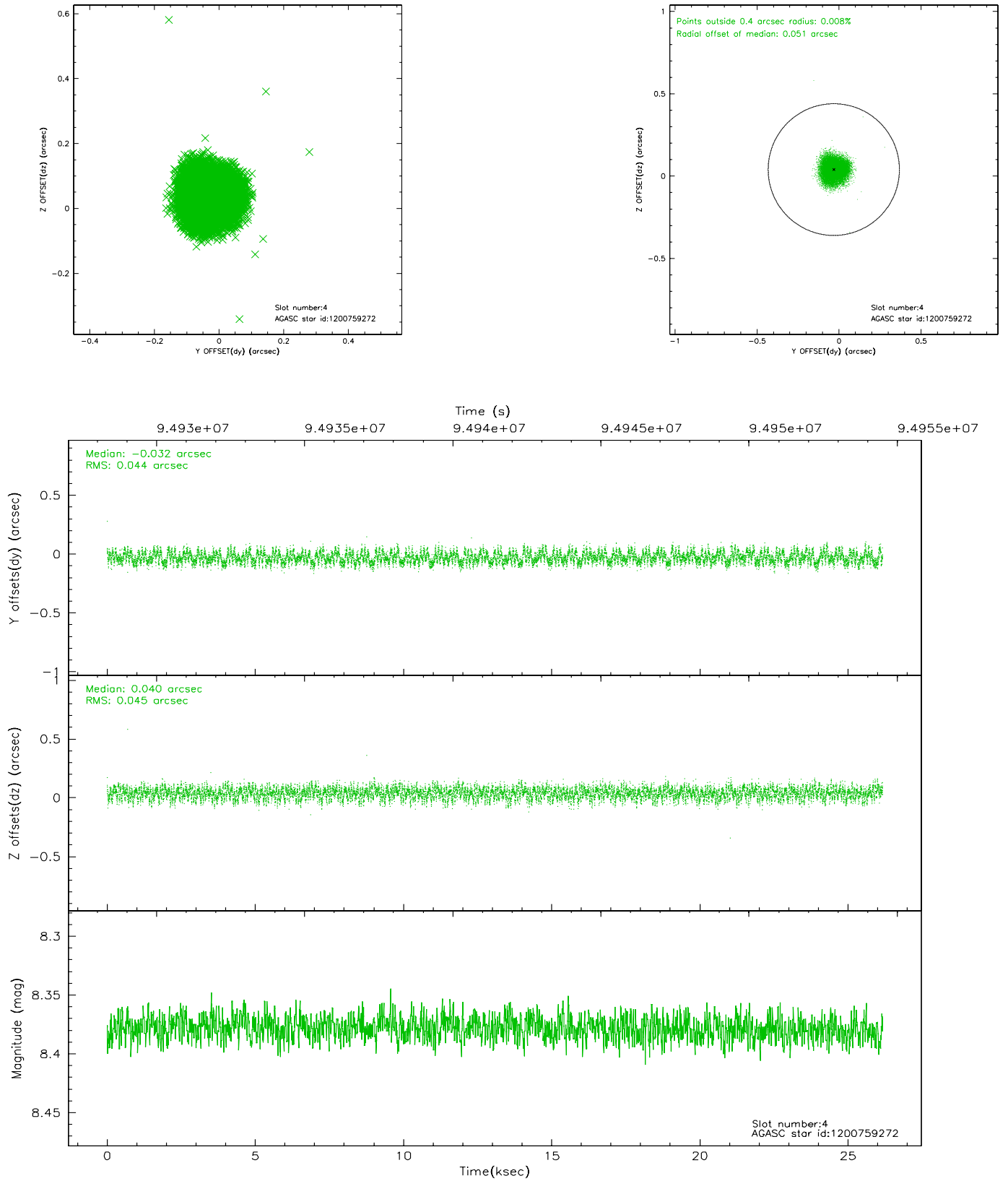
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.12	6382	-0.000	0.032	0.012	0.018	0.000000	0.000000	-756.28	-1727.88
1	FID	ACIS-S-4	7.20	6380	-0.047	-0.008	0.009	0.016	0.000000	0.000000	2156.91	180.45
2	FID	ACIS-S-5	7.24	6382	0.016	-0.015	0.009	0.014	0.000000	0.000000	-1808.96	174.24
3	GUIDE	1201280984	7.04	12764	0.008	0.052	0.057	0.094	77.867422	-69.546090	1799.30	-2474.18
4	GUIDE	1200759272	8.38	12766	-0.032	0.040	0.069	0.103	75.444915	-68.988718	-1796.85	-1685.05
5	GUIDE	1200758760	8.31	12765	0.068	-0.036	0.074	0.122	76.277764	-68.086435	-1959.50	1739.62
6	GUIDE	1200760024	8.47	12767	-0.023	0.010	0.053	0.087	77.625244	-69.320410	1237.78	-1811.61
7	GUIDE	1200757184	8.26	12763	-0.018	-0.064	0.068	0.111	76.495289	-68.416644	-1264.37	732.41

2.4 Star Slots

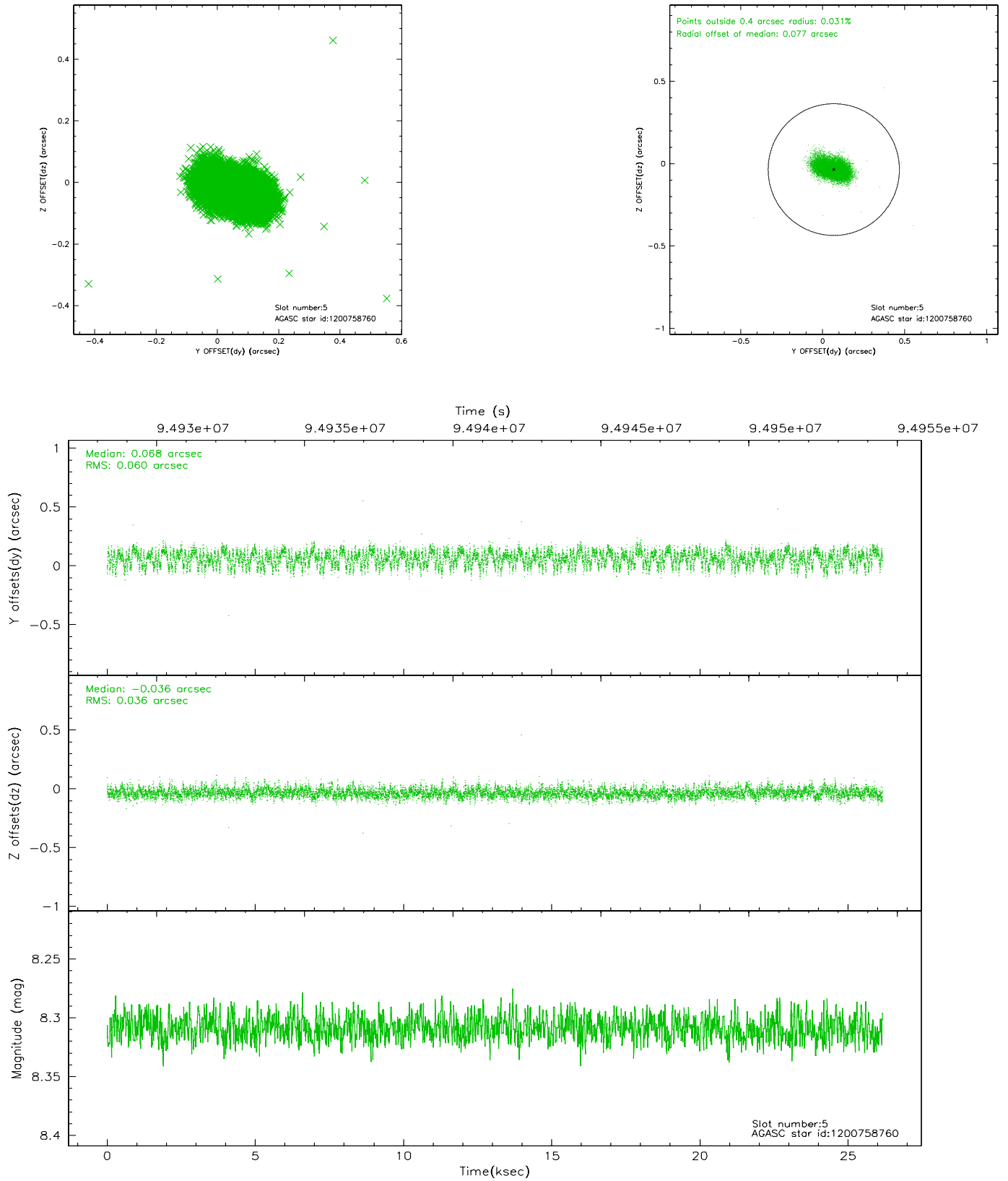
2.4.1 Slot 3



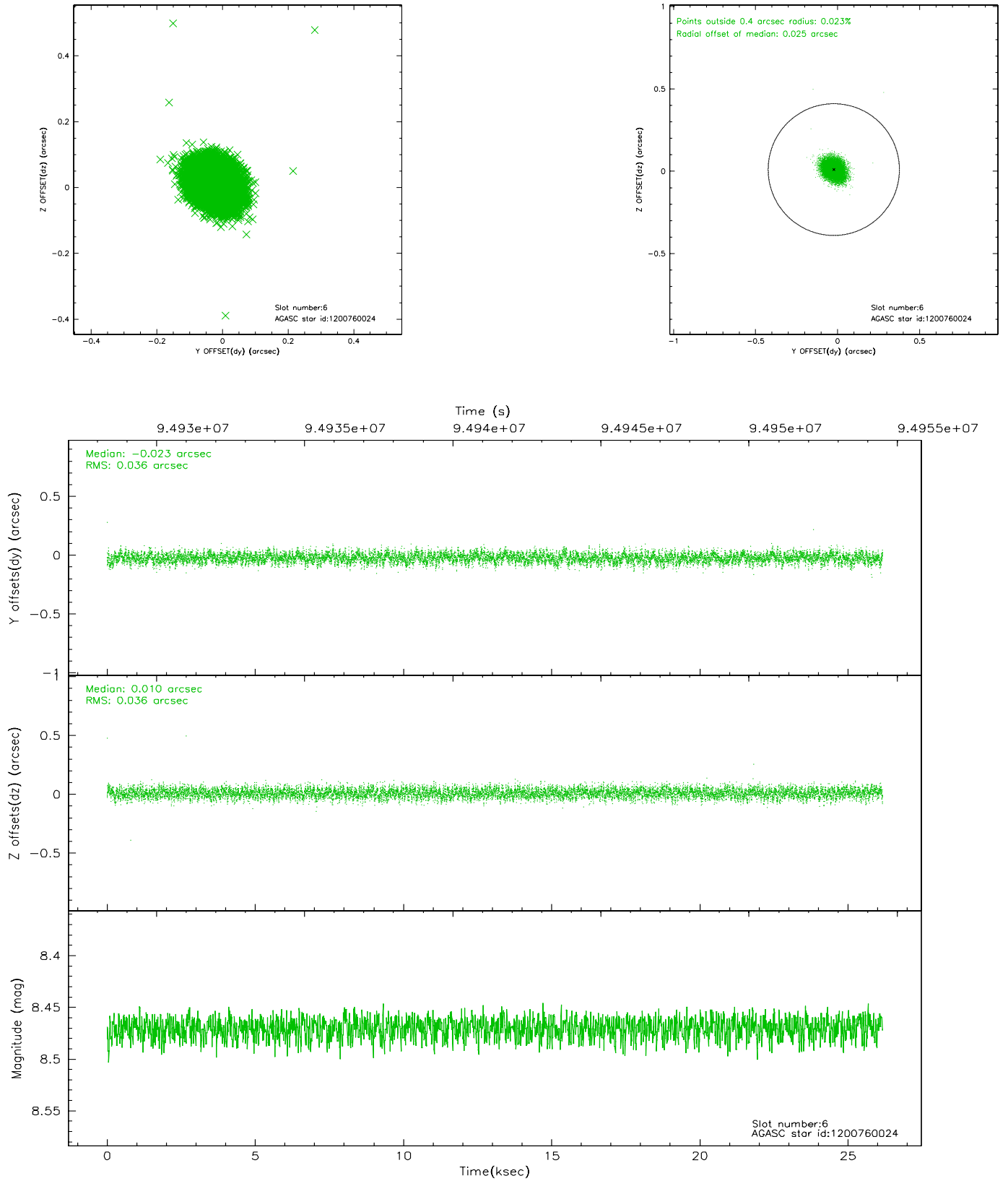
2.4.2 Slot 4



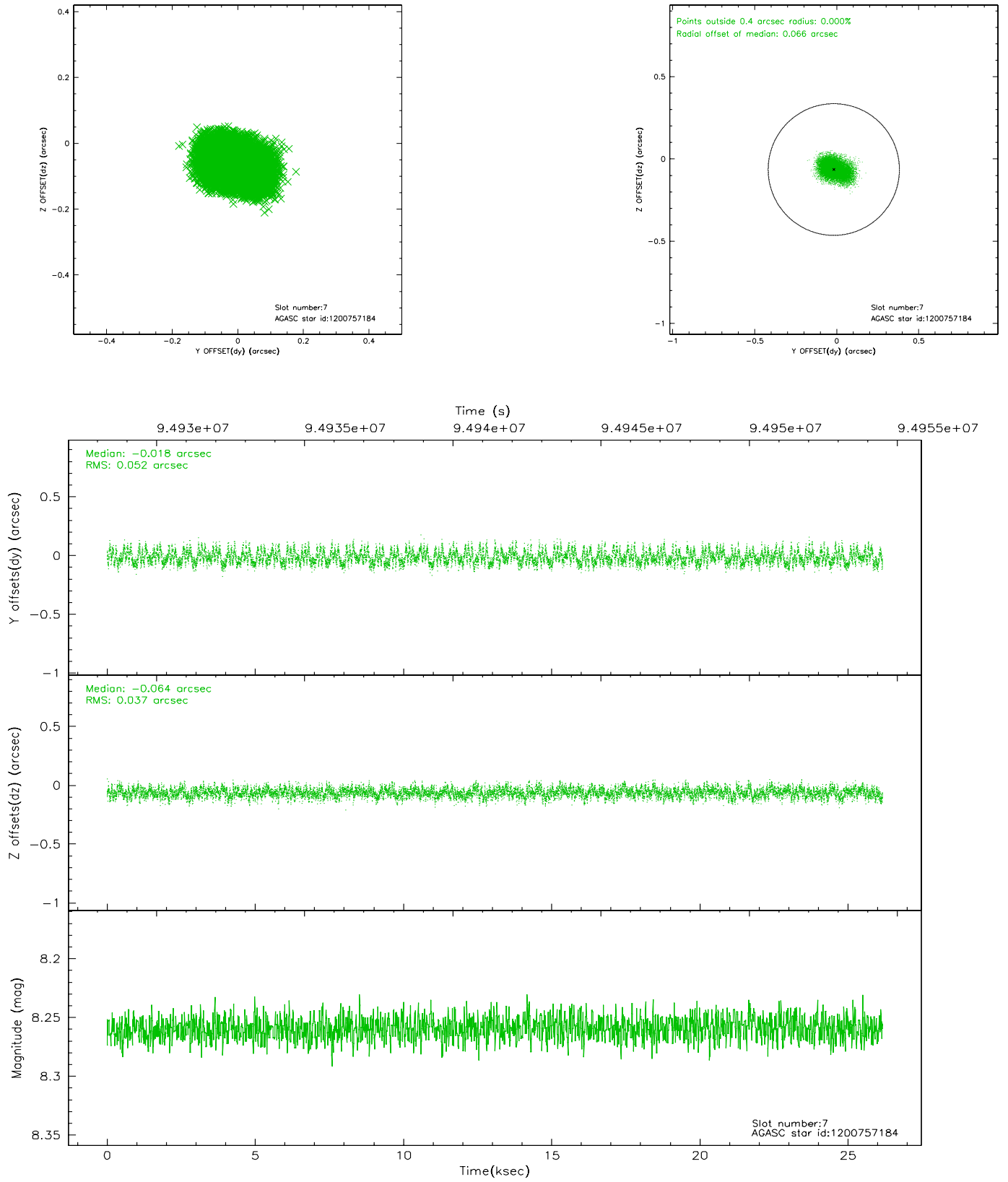
2.4.3 Slot 5



2.4.4 Slot 6

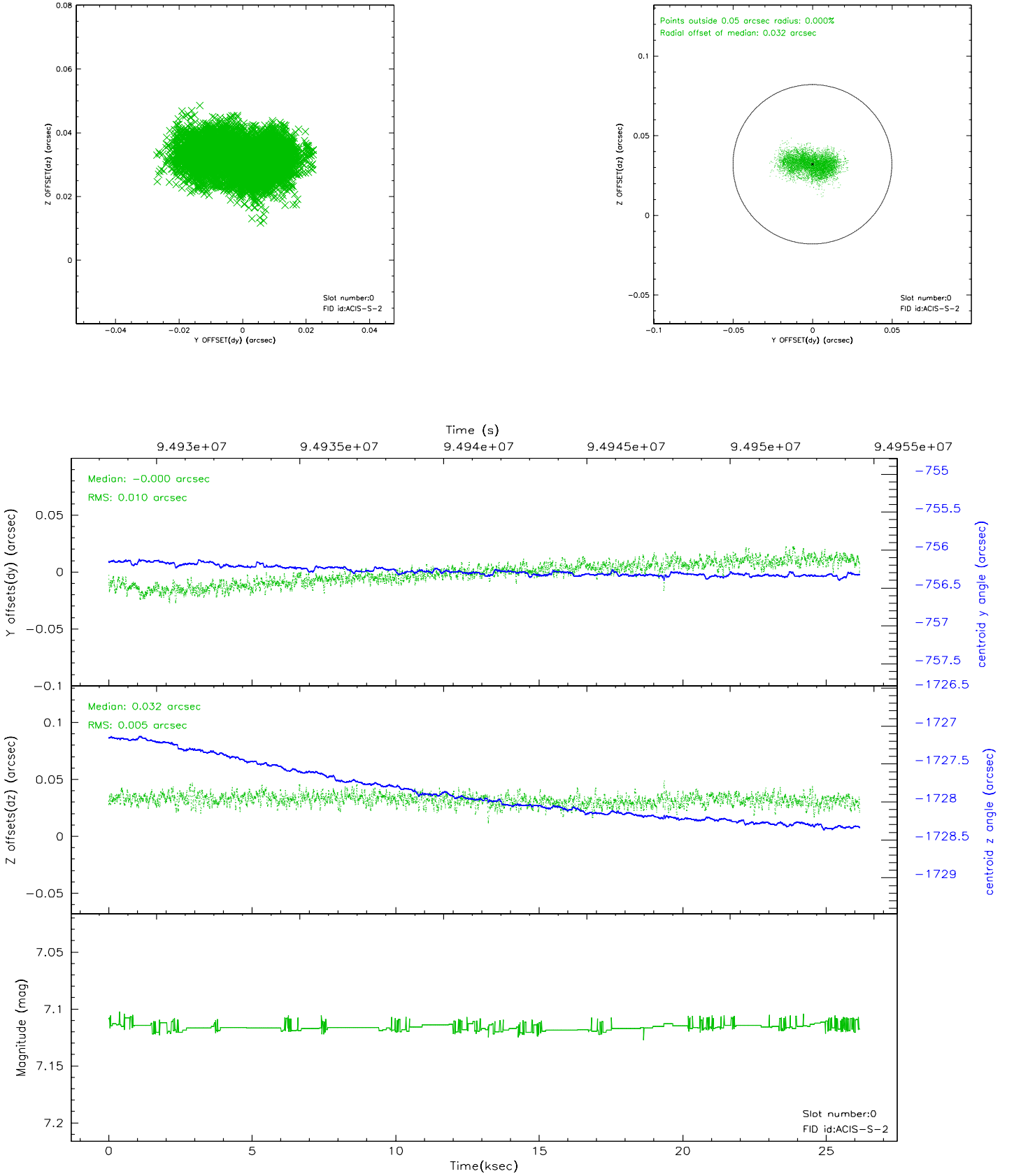


2.4.5 Slot 7

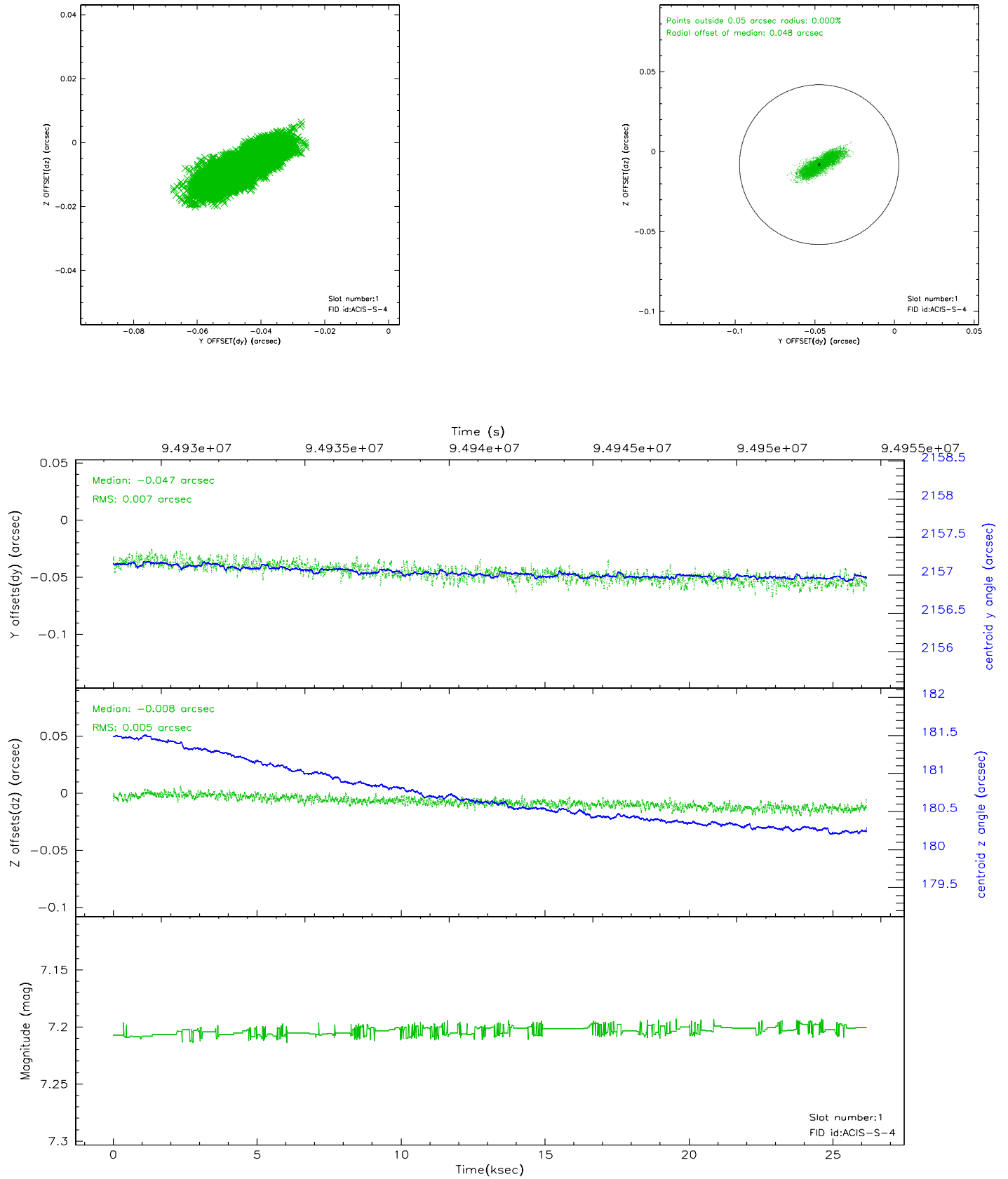


2.5 FID Slots

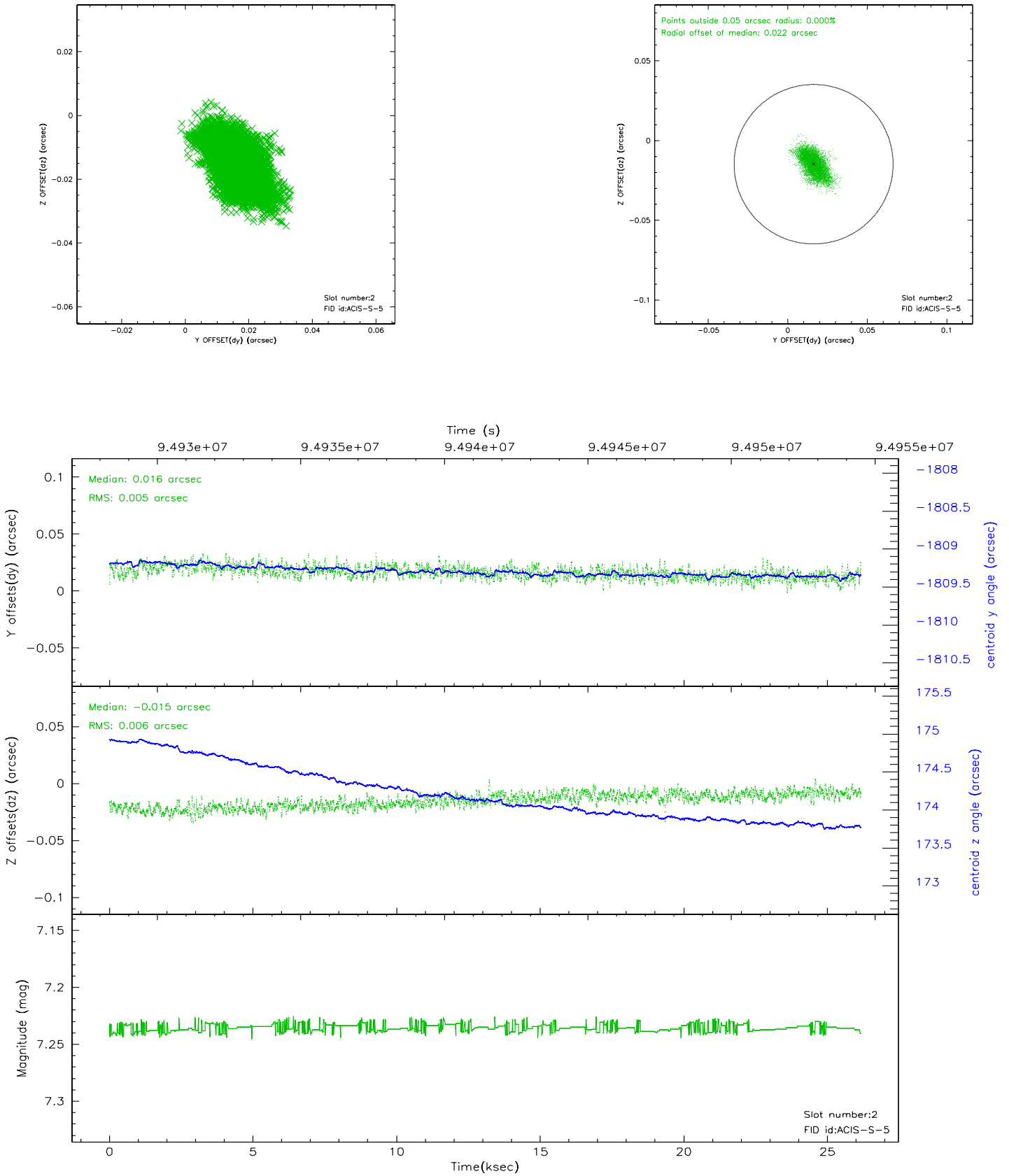
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

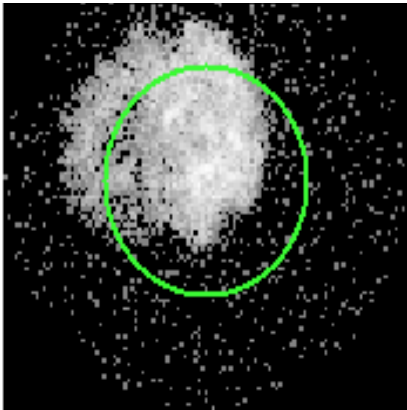


3 Gratings

3.1 HEG Arm



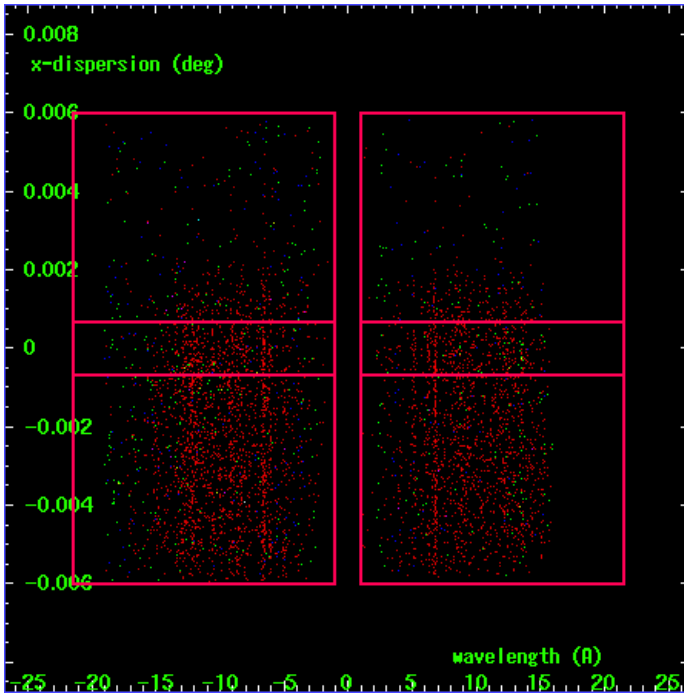
HEG Order Sort 123



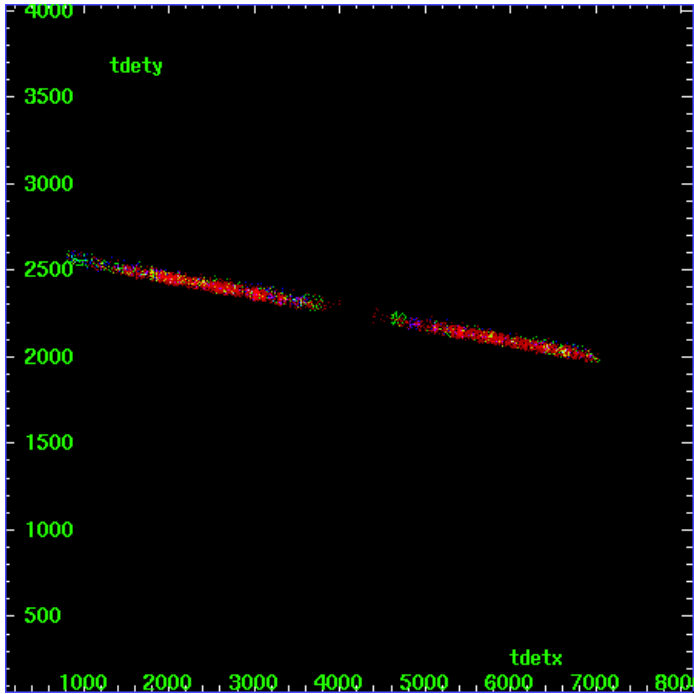
HEG Zero Order



HEG Order Sort ALL

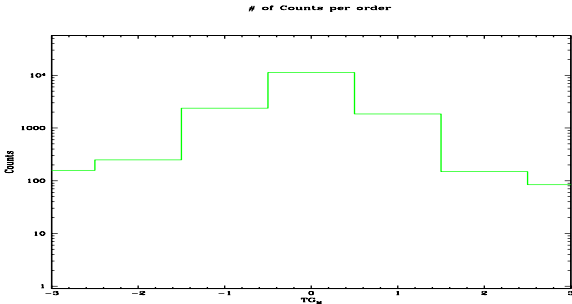


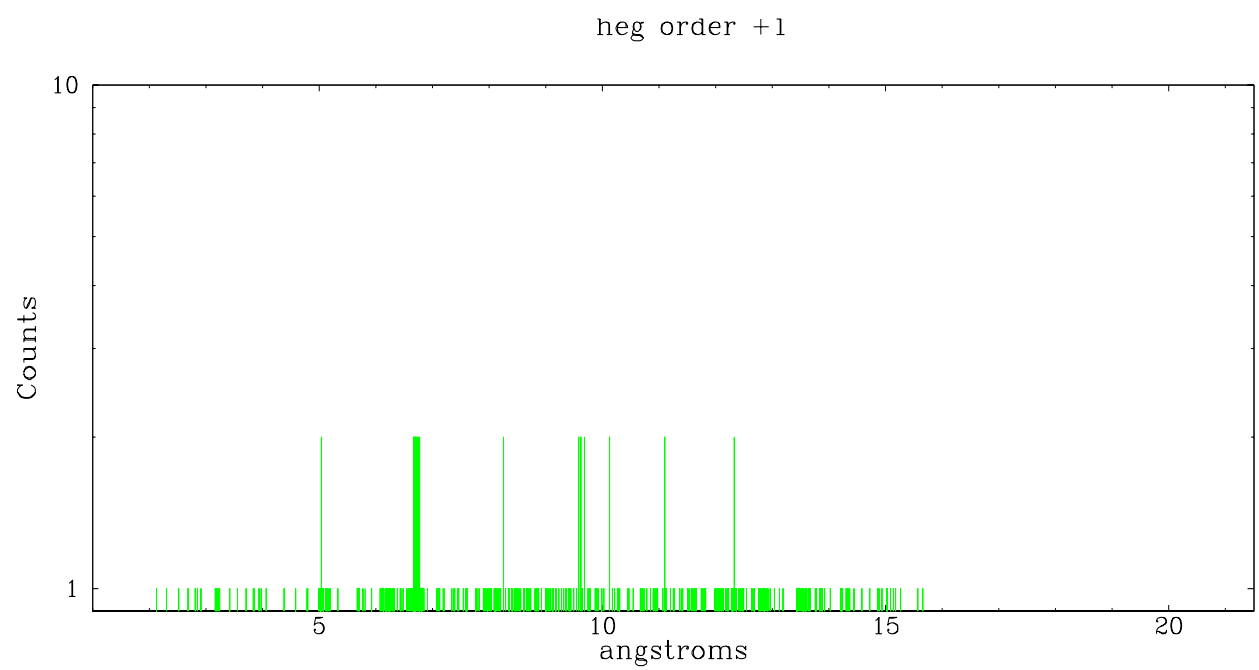
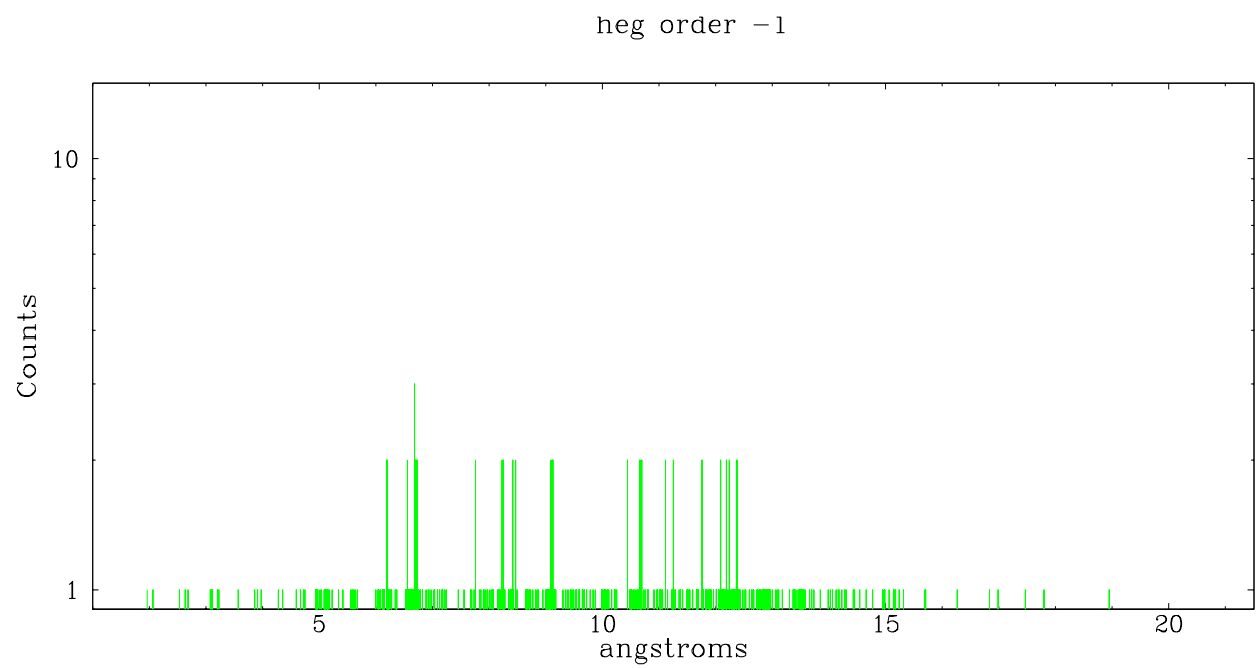
Spot Image HEG



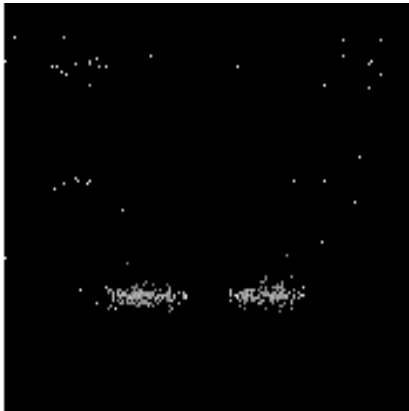
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	158	249	2373	11279	1841	149	84

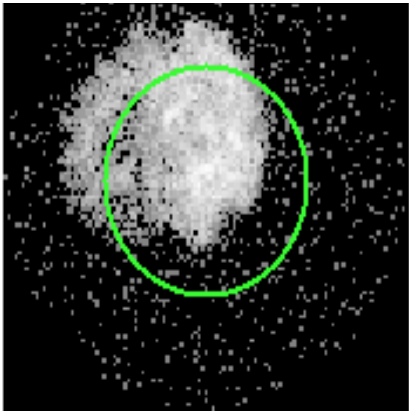




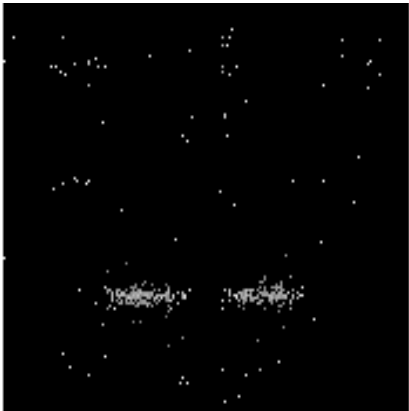
3.2 MEG Arm



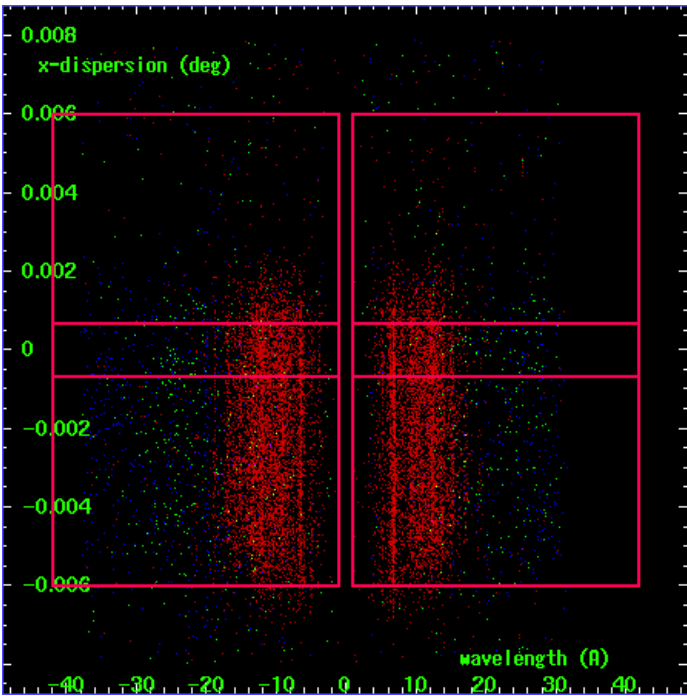
MEG Order Sort 123



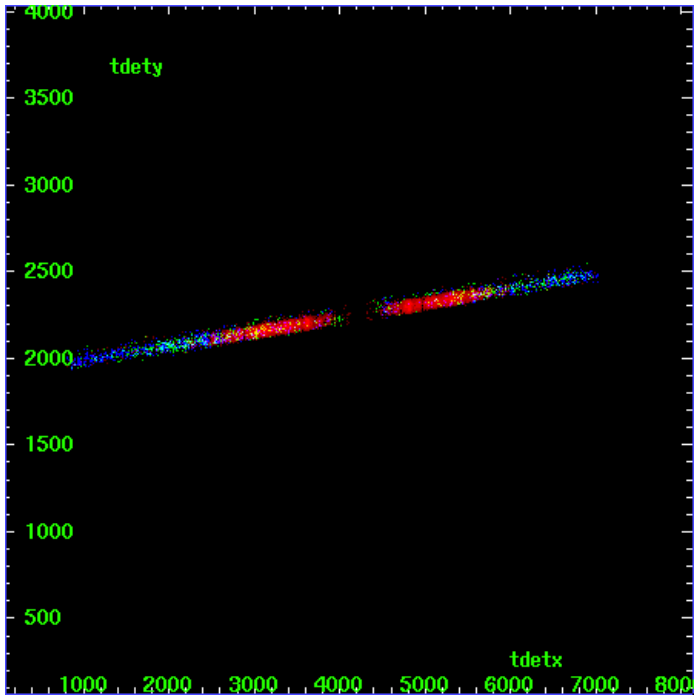
MEG Zero Order



MEG Order Sort ALL

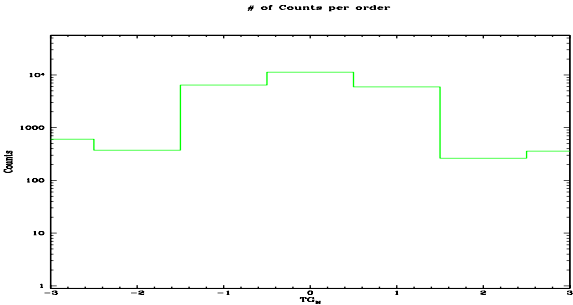


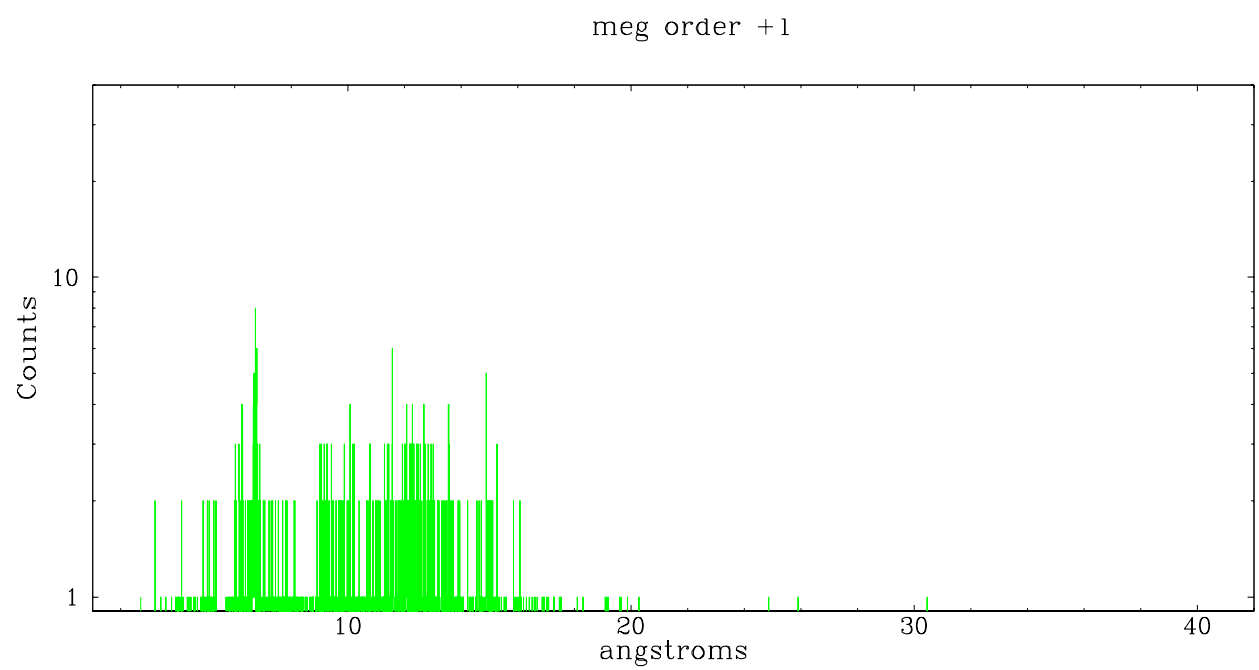
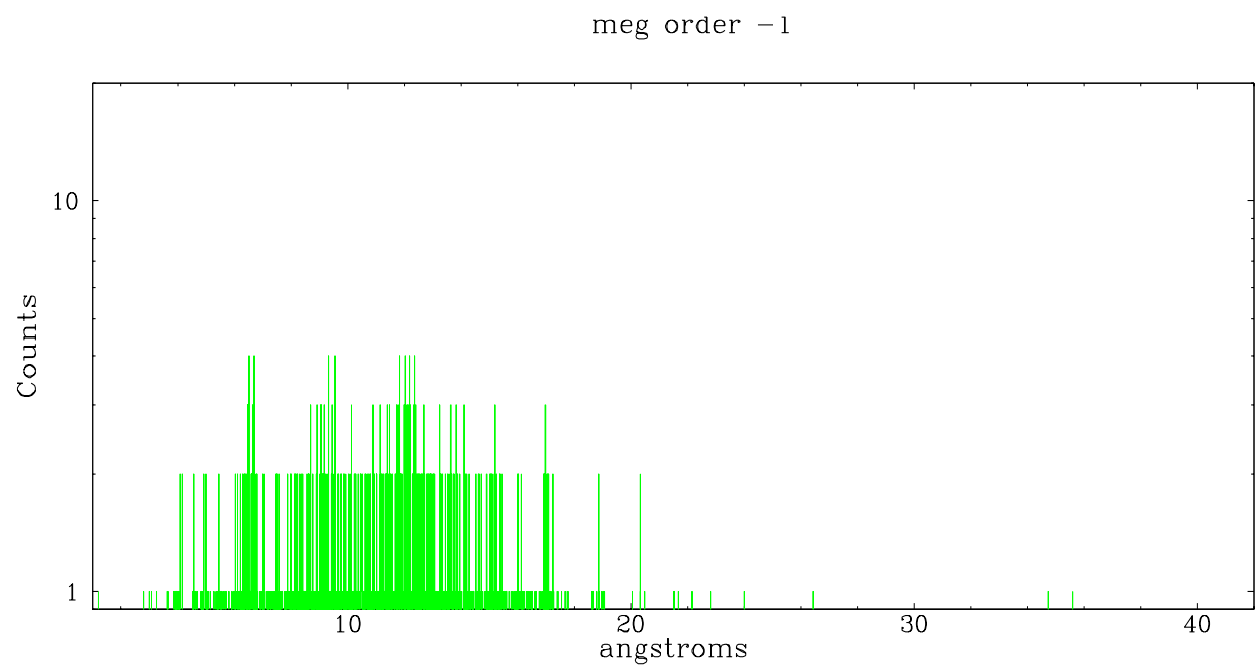
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	605	375	6438	11279	5902	263	359





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2007.06.29
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	25.76

A.2 Comments

WARNING: there are no standard ciao tools for analysis of grating spectra from extended sources. The shape of an emission 'line' will be the shape of the zero order spatial structure convolved with the instrumental LSF. Grating extractions can be used, but need to be combined with custom spatial-spectral analysis, since wavelength is multi-valued at any particular diffraction angle. WARNING::Zeroth order selected by pipeline tools is near a bright region SSW of the center of the supernova remnant. The zeroth order position is not exactly at the position of the brightest pixel. The user will need to select a region or source of interest, then use software tools such as CIAO to specify the coordinates of the zeroth order source of interest before running the tools to resolve the dispersed events.