

V&V Reference Report

L2 ASCDS Version : 7.6.7.2

Observation 4641 - L2 Version 001
Chandra X-Ray Center

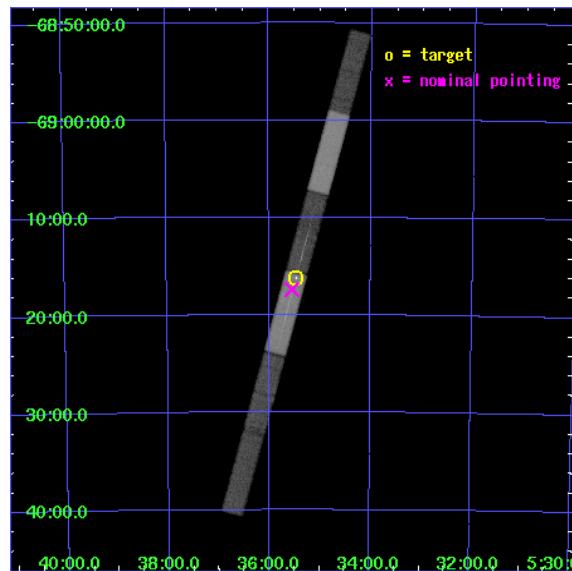
L2 Processing Date : May 23 2006

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1 Front

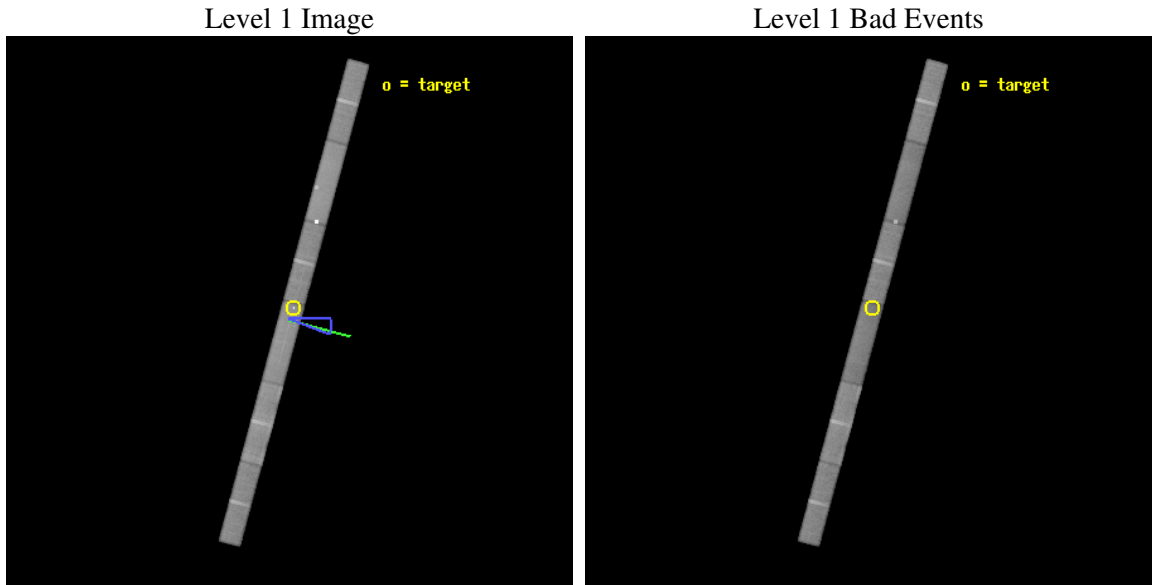
seq_num	500460
obs_id	4641
title	Spatially resolved grating spectrometry of the newborn supernova remnant SNR1987A
observer	Dr. Richard McCray
object	SNR1987A
dtcycle	0
cycle	P
ra_targ	83.866667
dec_targ	-69.26975
ra_nom	83.886600821994
dec_nom	-69.289597115789
roll_nom	105.17527210324
revision	2
ontime	75459.0
livetime	72484.246522708
ontime4	75459.0
ontime5	75459.0
ontime6	75457.958979905
ontime7	75459.0
ontime8	75459.0
ontime9	75459.0
l2events	248735



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	7.6.7.2
caldbver	3.2.2
date	2006-05-23T00:26:26
revision	2

sched_exp_time	75434.000000
ontime	76151.181182563
ontime4	76157.427392662
ontime5	76157.427372724
ontime6	76155.345322639
ontime7	76151.181182563
ontime8	76158.468412727
ontime9	76159.509482622
l1events	1197613

2.1.4 Events

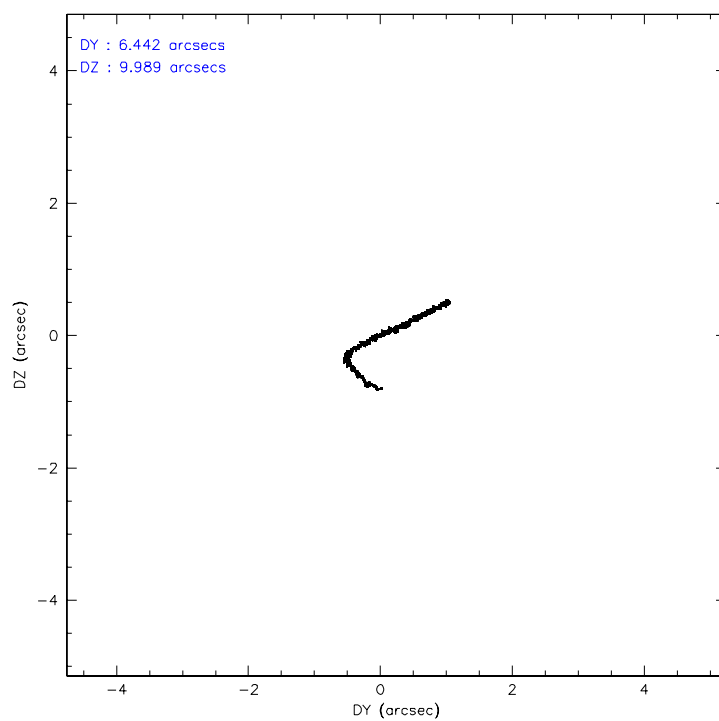
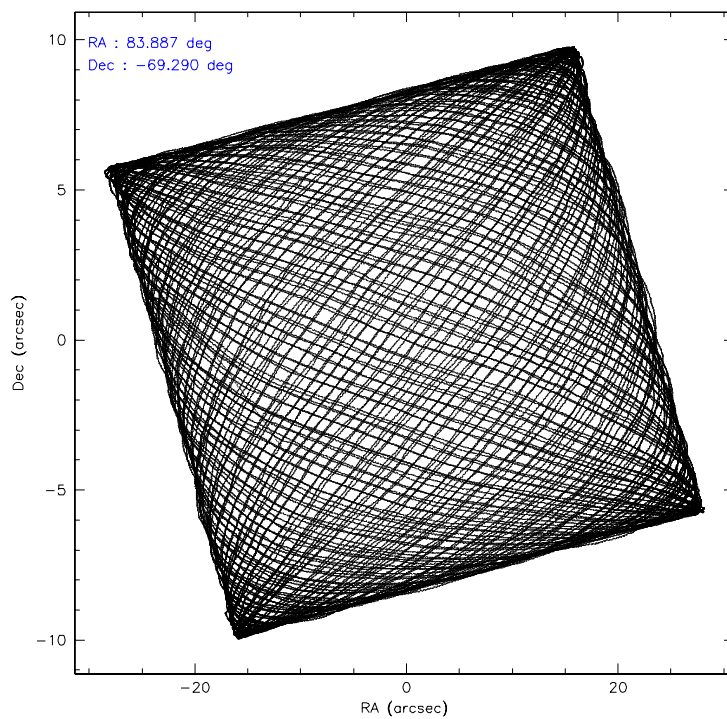
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	189372	244229	175402	204848	221392	162370
rejected events	168017	126221	153705	116512	177177	142091
rejected %	88%	51%	87%	56%	80%	87%

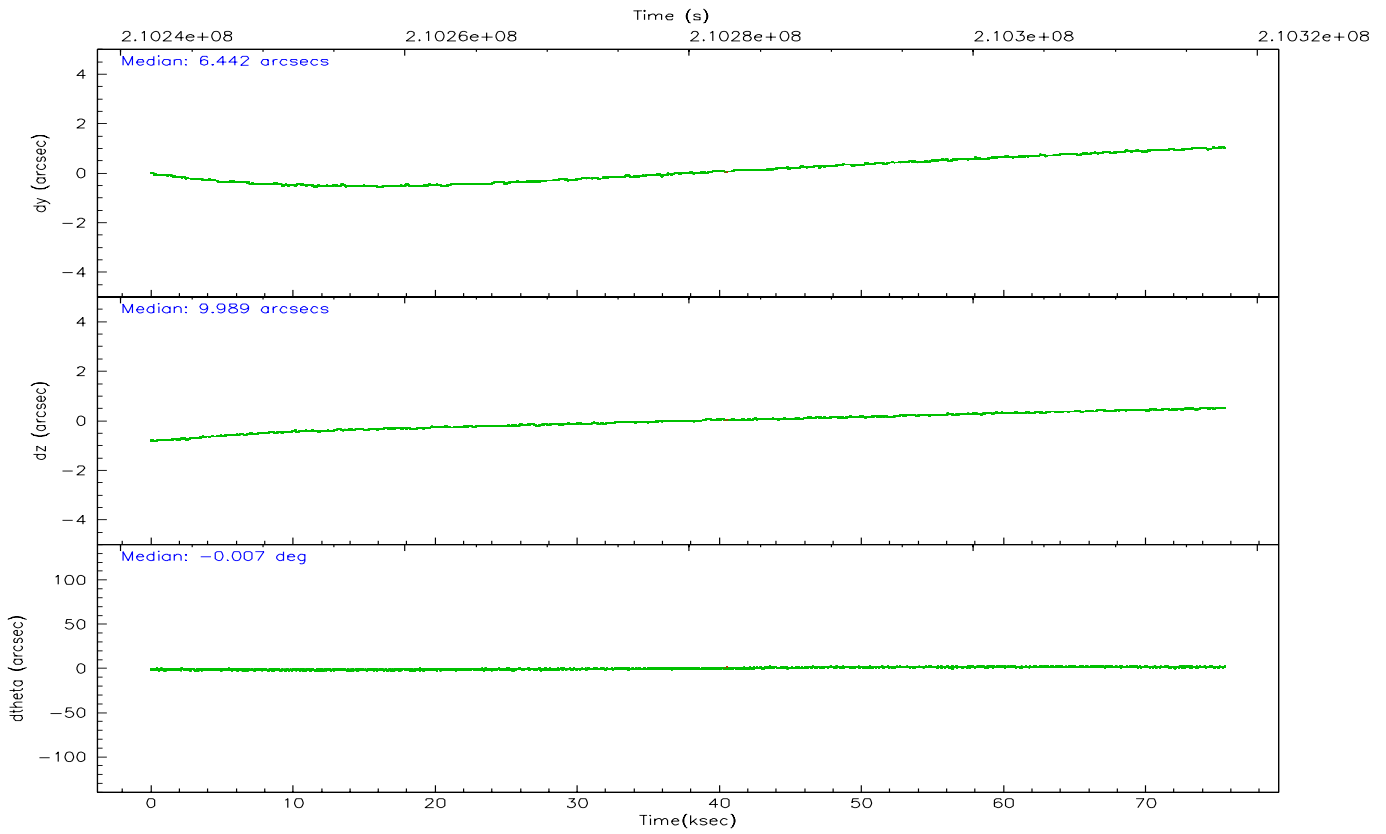
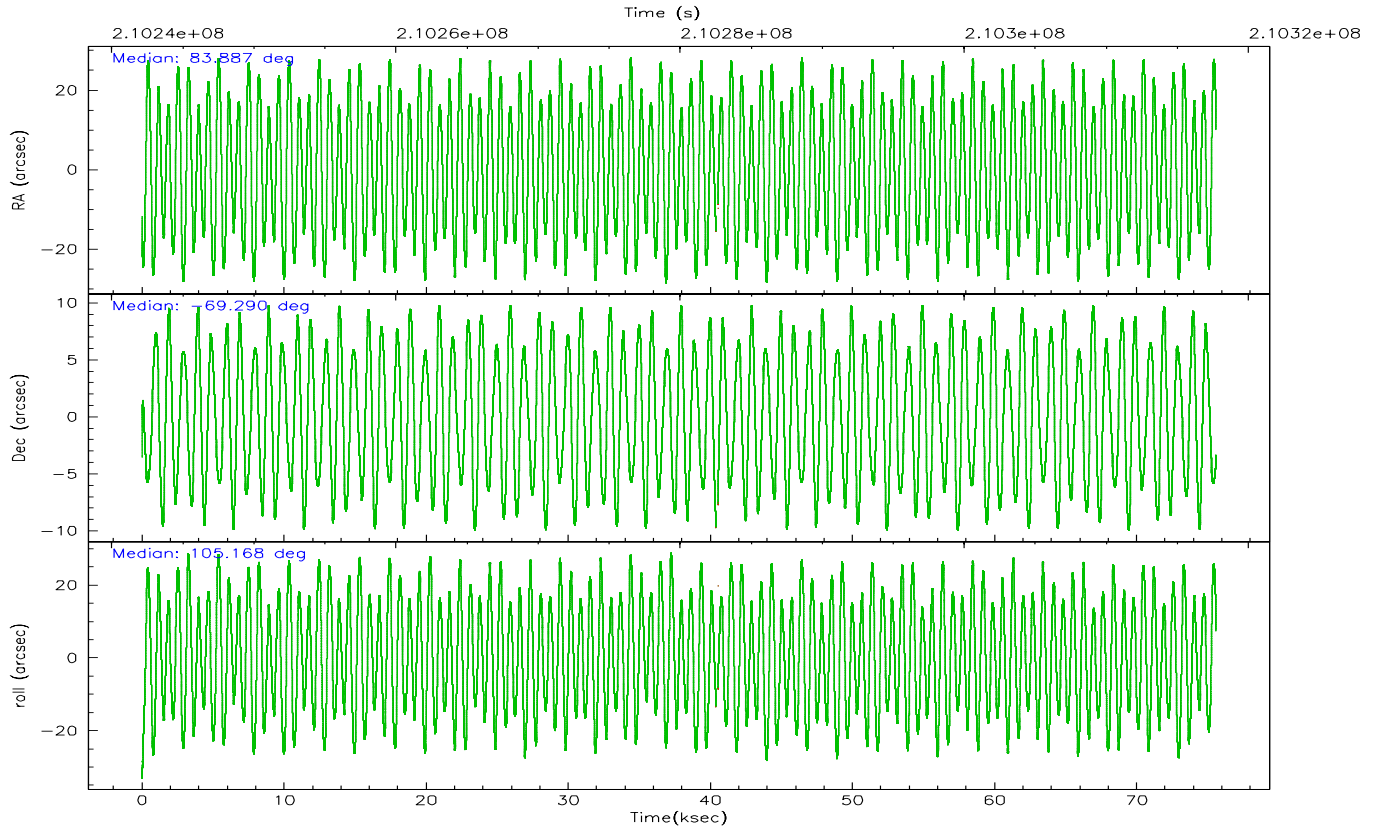
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	8392	18185	8780	8016	12691	7493
	4%	7%	5%	3%	5%	4%
grade 1 events	74	1677	45	183	82	48
	0%	0%	0%	0%	0%	0%
grade 2 events	4289	30503	3872	20220	8826	3626
	2%	12%	2%	9%	3%	2%
grade 3 events	2855	8424	2943	7831	5375	2864
	1%	3%	1%	3%	2%	1%
grade 4 events	2755	5666	2789	7673	5102	2814
	1%	2%	1%	3%	2%	1%
grade 5 events	5871	14810	6328	15715	8168	6455
	3%	6%	3%	7%	3%	3%
grade 6 events	3285	56443	3522	45377	12558	3656
	1%	23%	2%	22%	5%	2%
grade 7 events	161851	108521	147123	99833	168590	135414
	85%	44%	83%	48%	76%	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	LETG	LETG	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	On-chip summing requested	N	N
Observation mode	POINTING	POINTING	Subarray requested	CUSTOM	1/4
Pointing RA	83.941966	83.88660082199357	Subarray start row	49	49
Pointing Dec	-69.308481	-69.28959711578901	Subarray row count	256	256
Pointing Roll	105.070441	105.1752721032359	Alternating exposures requested	N	N
Roll angle	100.000000	100.000000	Primary exposure time	0.000000	1
Roll tolerance	10.000000	10.000000			
Roll constraint allows 180D rotation	N	N			
SIM focus pos (mm)	-0.684267	-0.6828225247311905			
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	210242294.184000	210241244.6082			
Observation start date	2004-08-30T08:37:10	2004-08-30T08:20:44			
Observation end time	210317728.184000	210318426.59914			
Observation end date	2004-08-31T05:34:24	2004-08-31T05:47:06			
Read mode	TIMED	TIMED			

2.3 Aspect



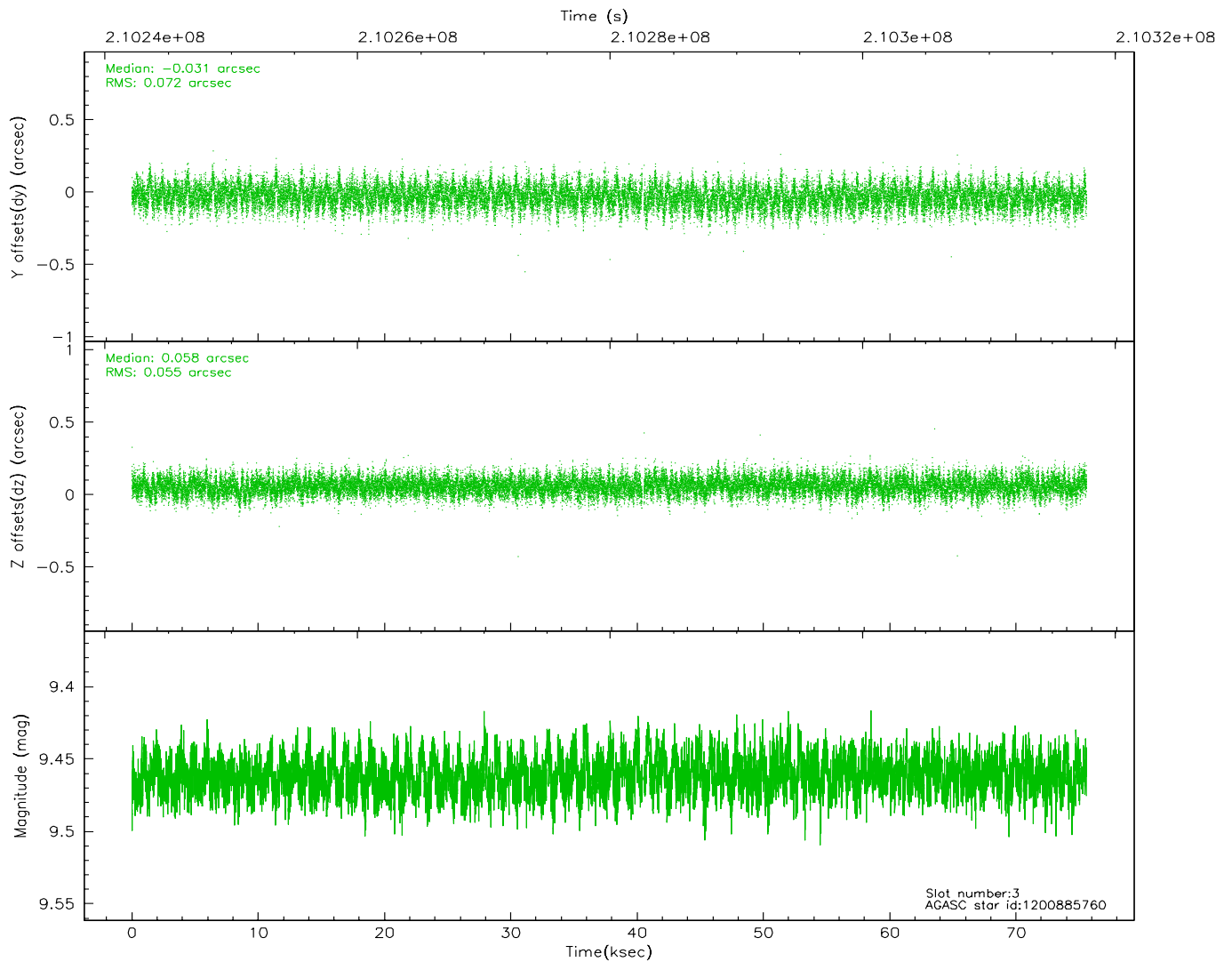
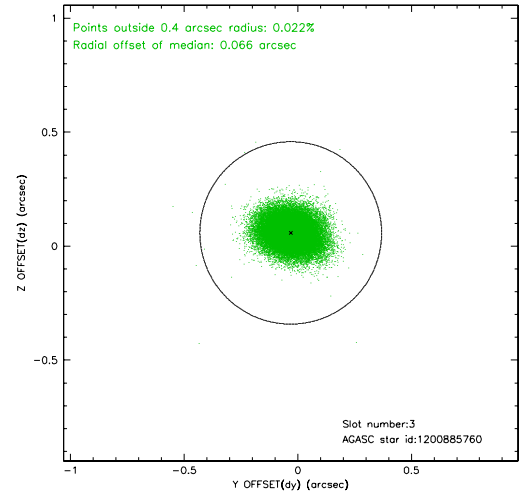
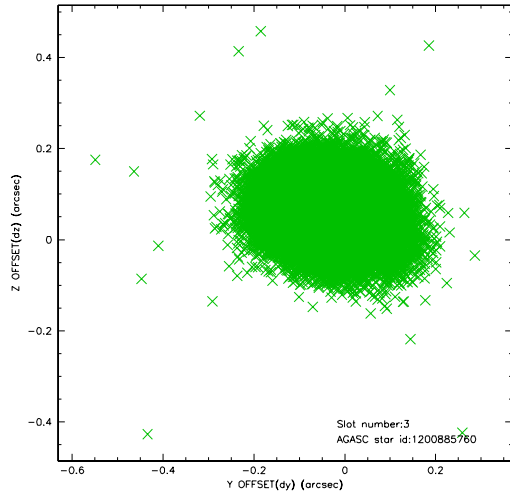


Slot Statistics

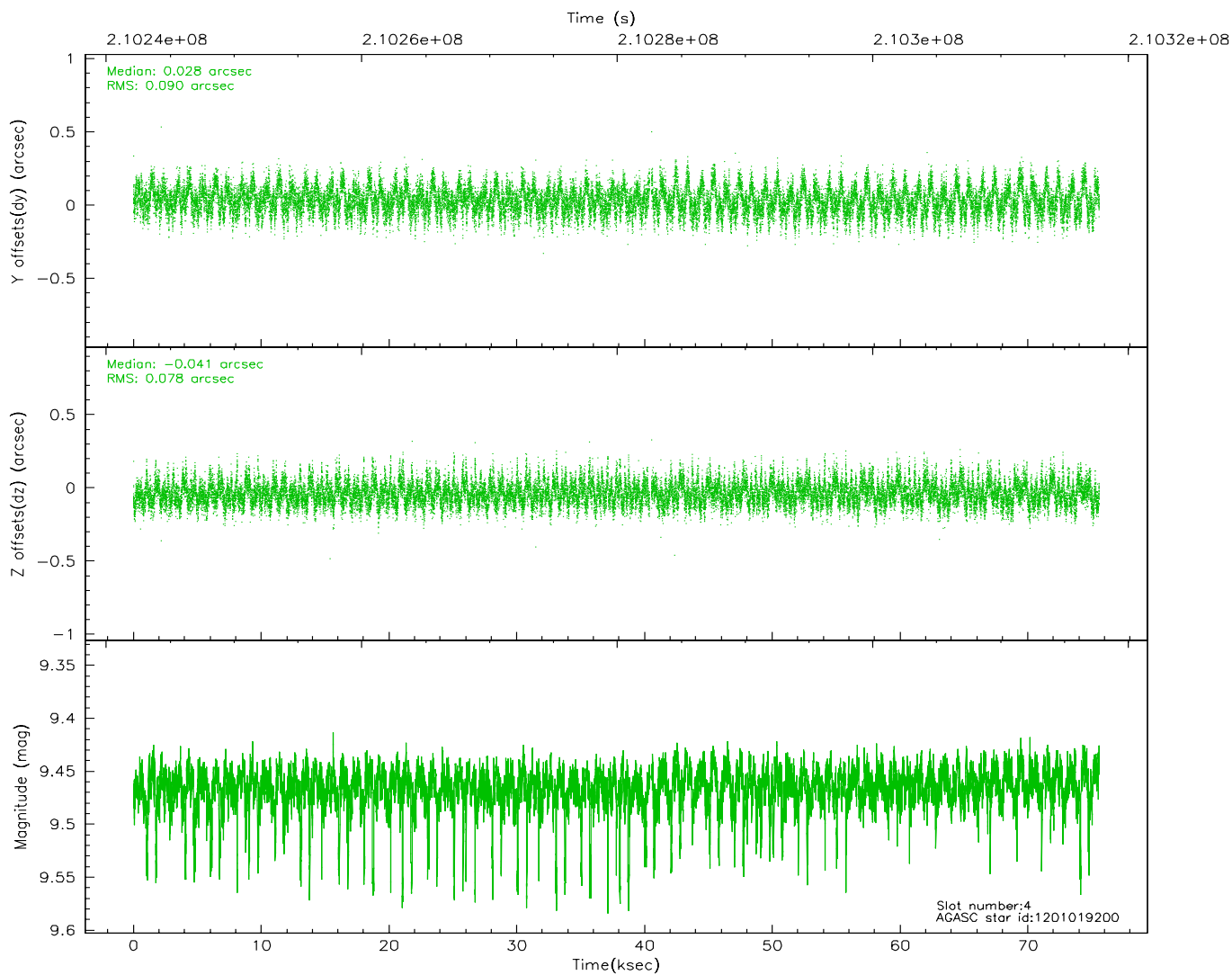
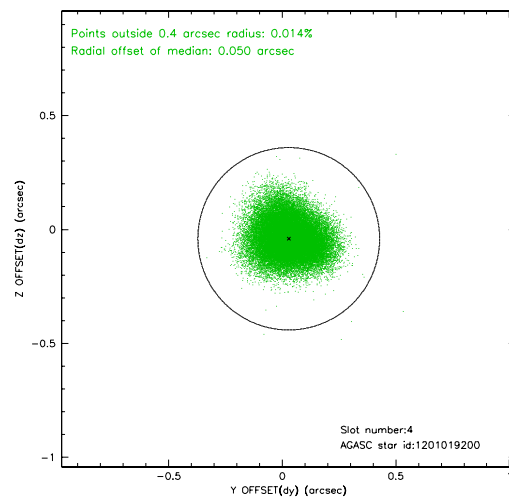
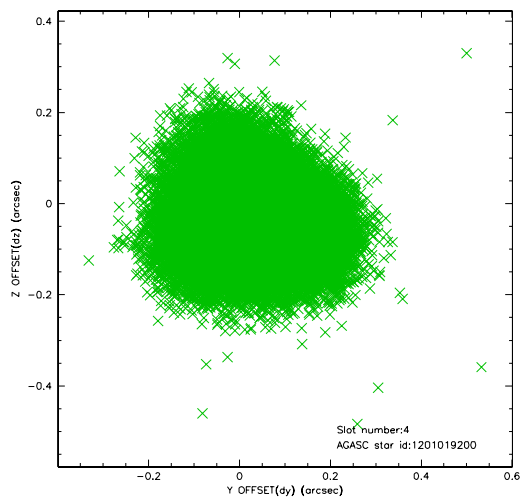
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.18	18406	0.057	0.068	0.027	0.036	0.000000	0.000000	937.44	-1891.50
1	FID	ACIS-S-2	7.09	18406	-0.100	-0.112	0.015	0.024	0.000000	0.000000	-758.64	-1896.23
2	FID	ACIS-S-5	7.22	18406	0.022	0.050	0.015	0.024	0.000000	0.000000	-1811.76	5.99
3	GUIDE	1200885760	9.46	36783	-0.031	0.058	0.096	0.157	83.723637	-68.777667	1918.92	-221.53
4	GUIDE	1201019200	9.46	36686	0.028	-0.041	0.128	0.203	84.213591	-68.777384	1753.89	-838.37
5	GUIDE	1201406184	7.93	36808	-0.055	-0.062	0.066	0.108	82.503234	-69.975517	-1877.84	2342.05
6	GUIDE	1201410616	9.34	36798	0.114	-0.173	0.123	0.198	82.516808	-69.784406	-1213.40	2162.54
7	GUIDE	1201017424	10.20	36704	-0.067	0.223	0.168	0.284	85.854985	-69.248506	-462.16	-2401.65

2.4 Star Slots

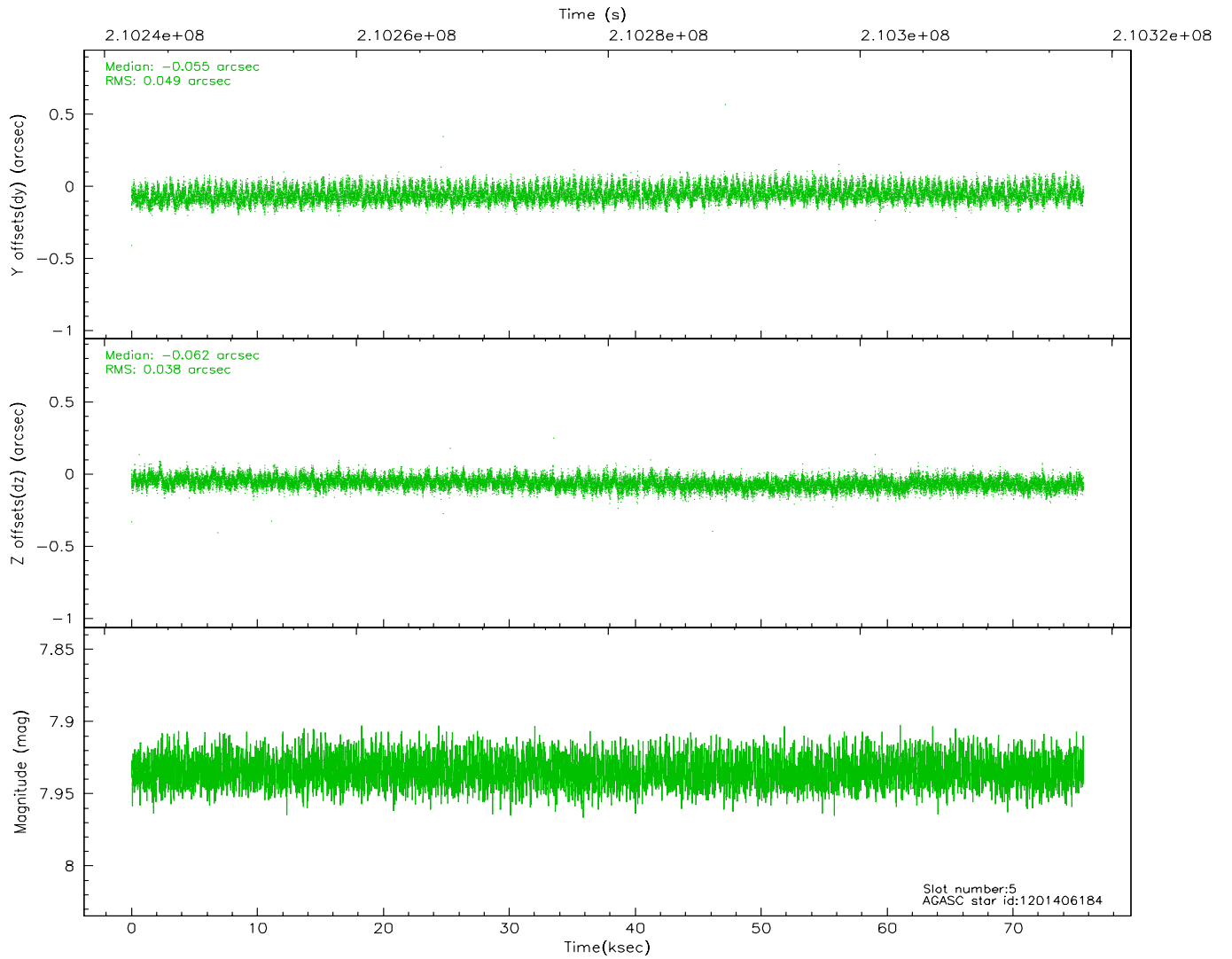
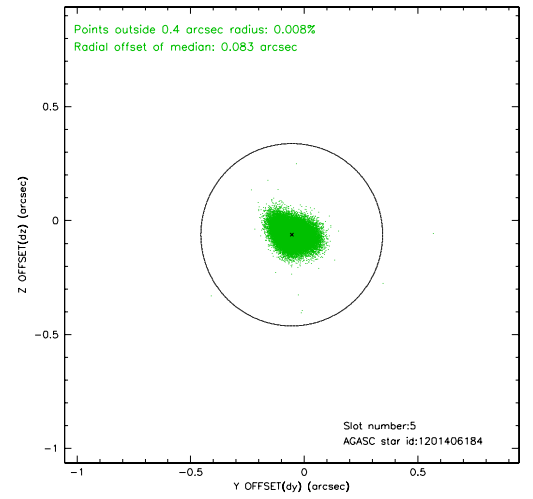
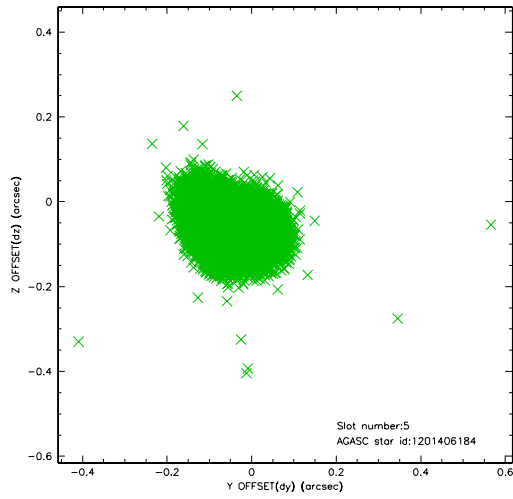
2.4.1 Slot 3



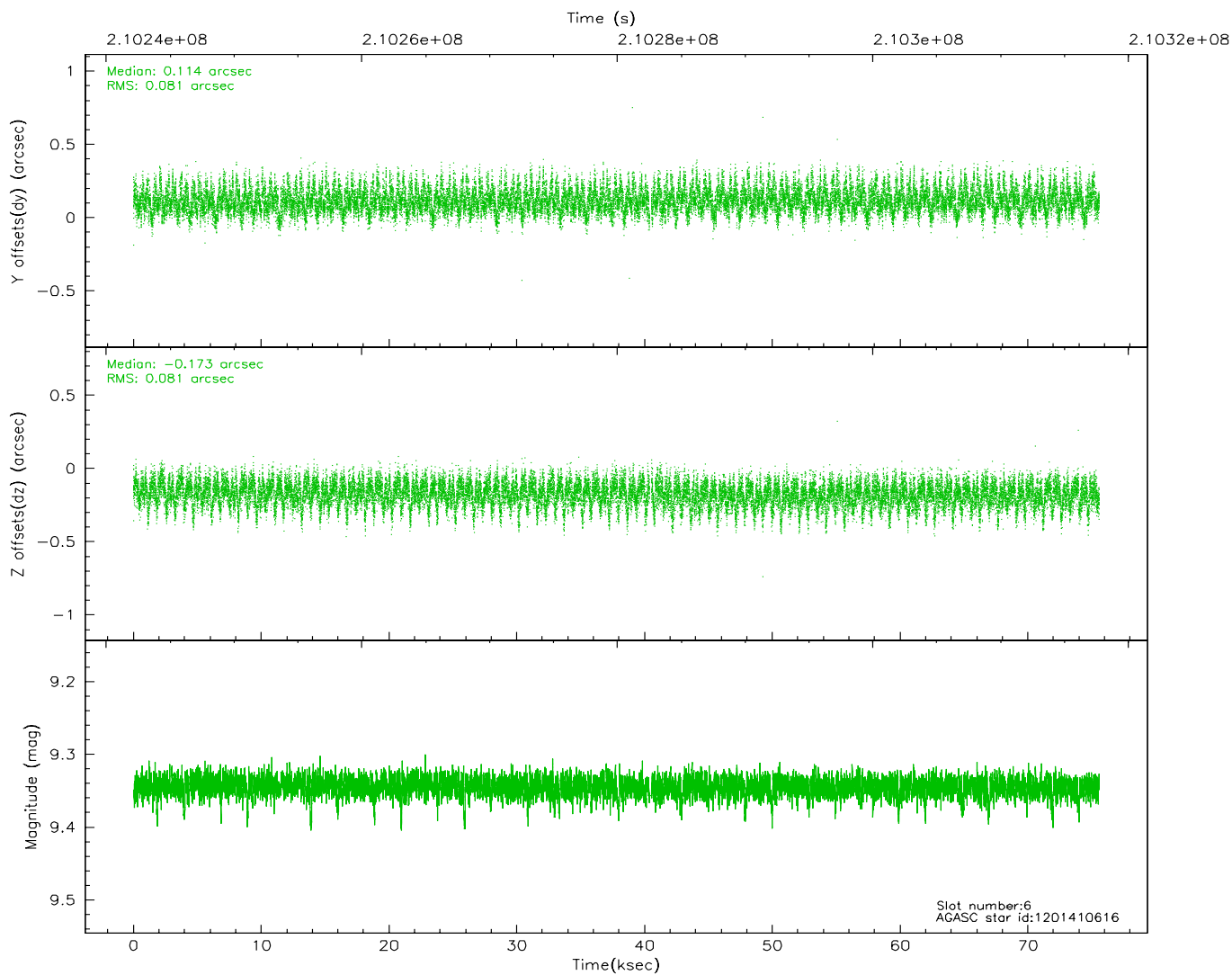
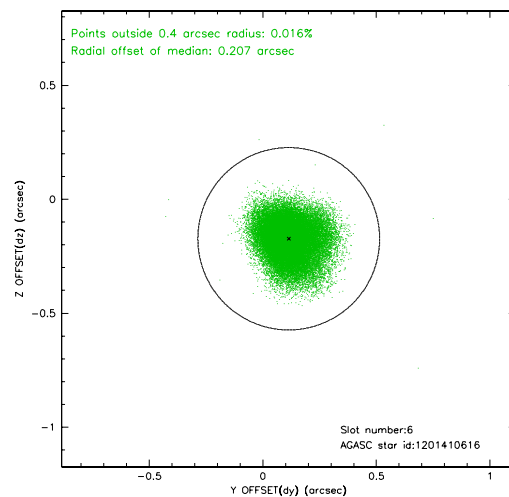
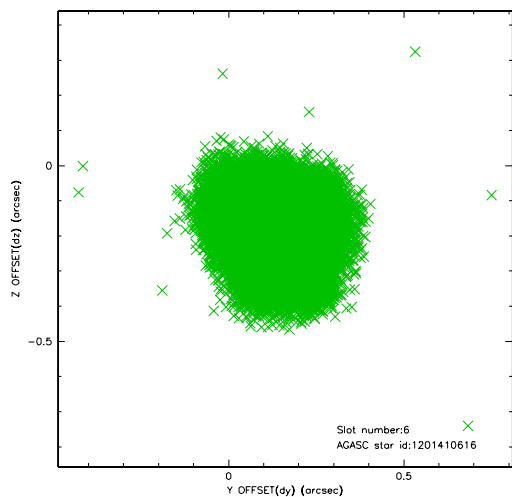
2.4.2 Slot 4



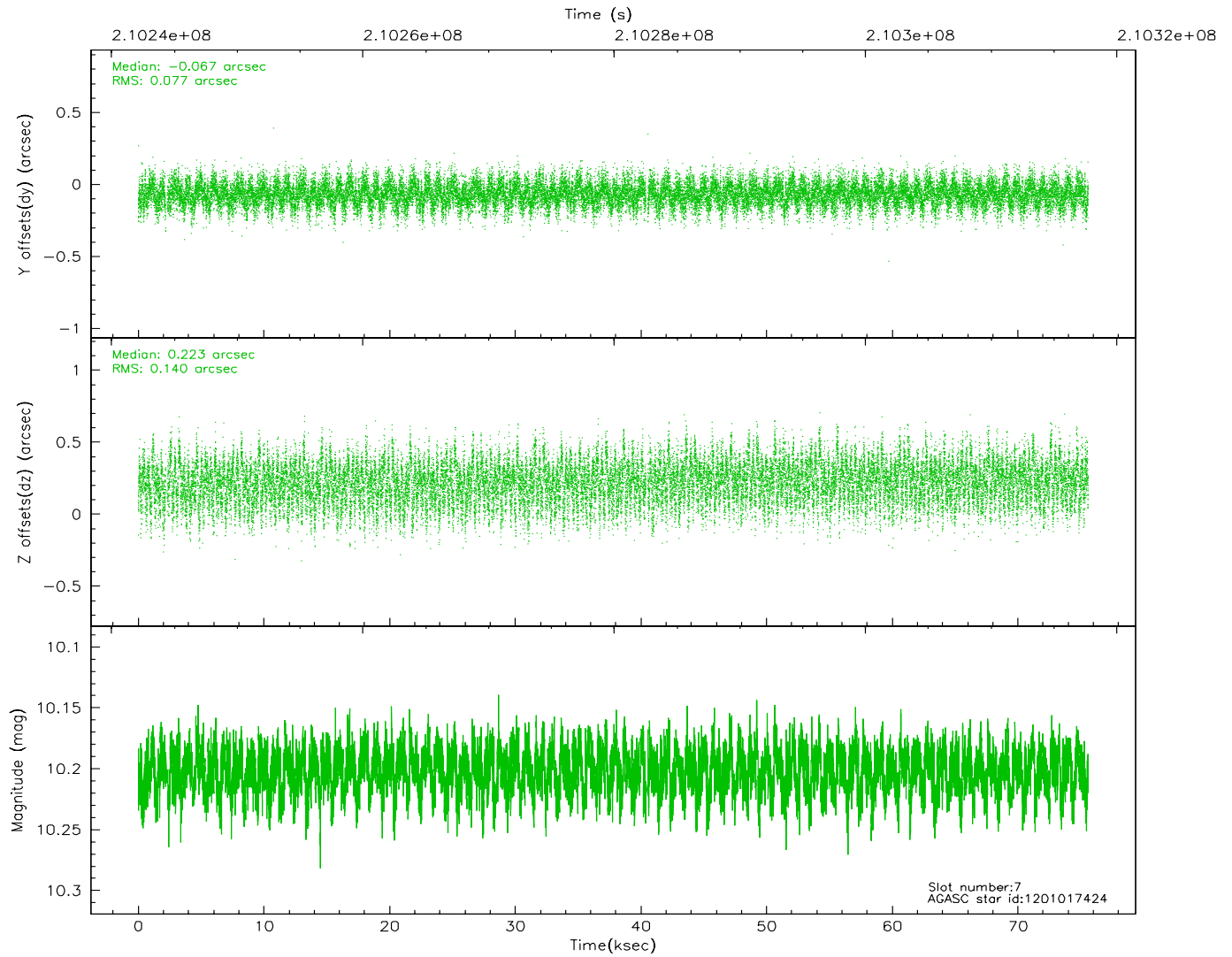
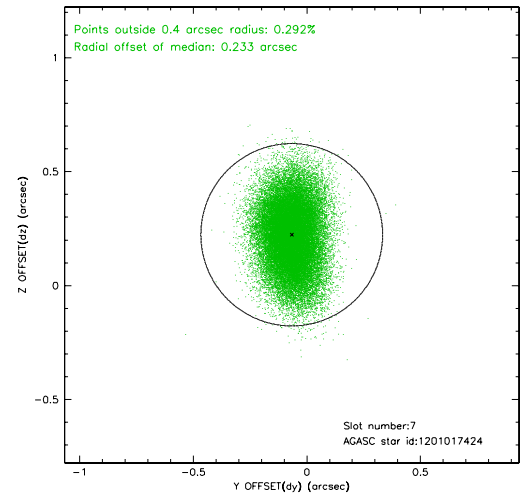
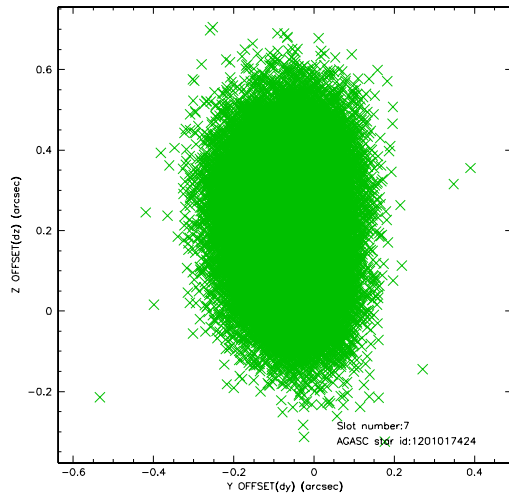
2.4.3 Slot 5



2.4.4 Slot 6

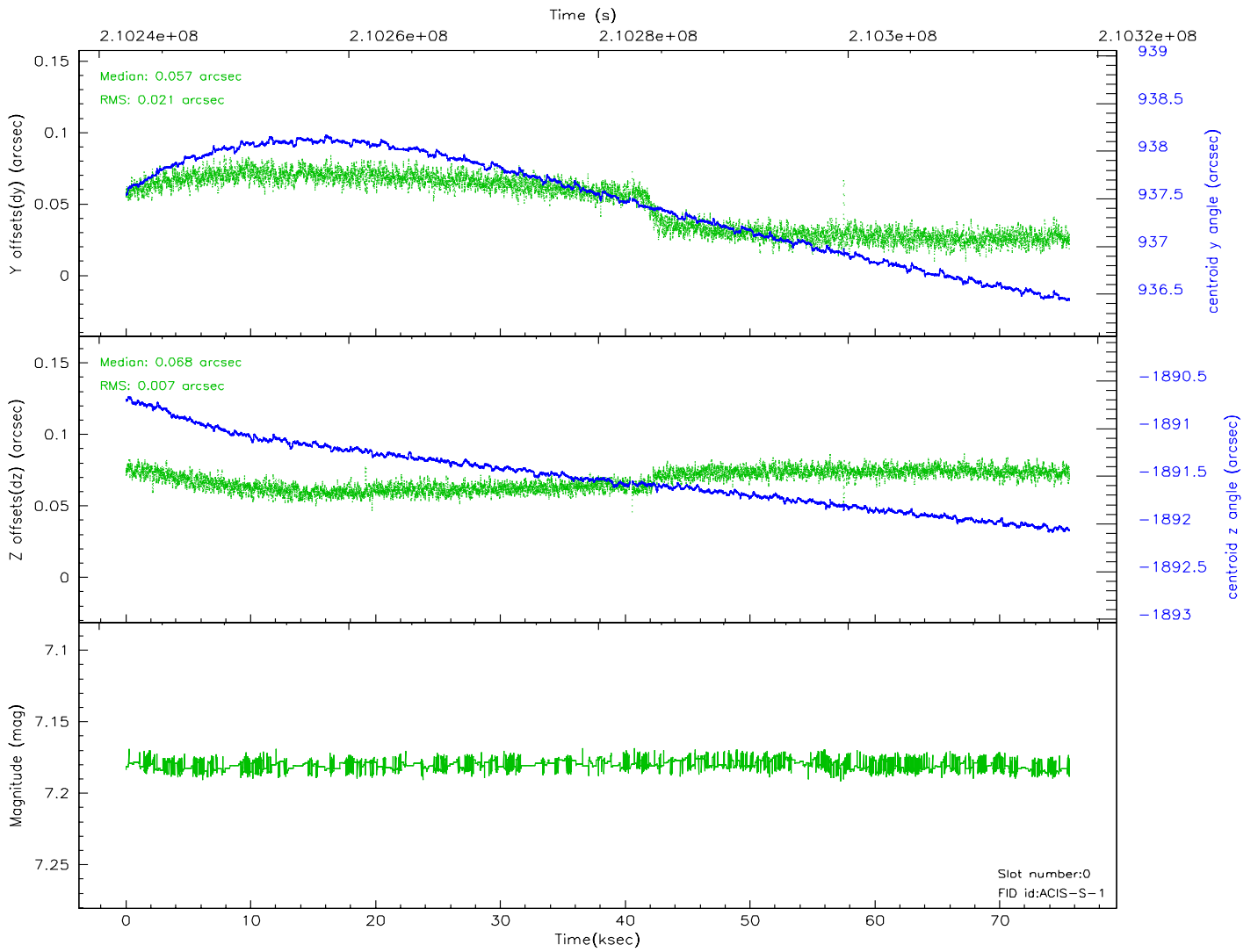
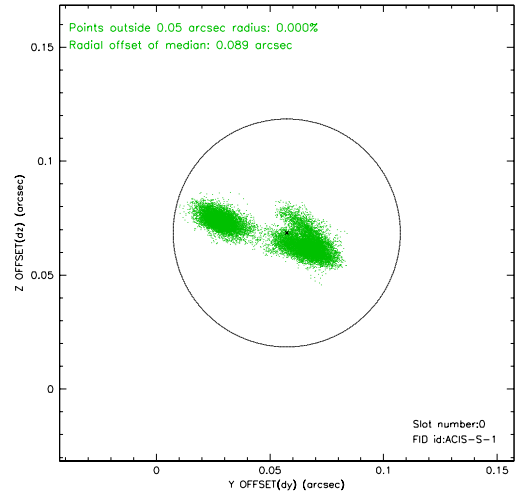
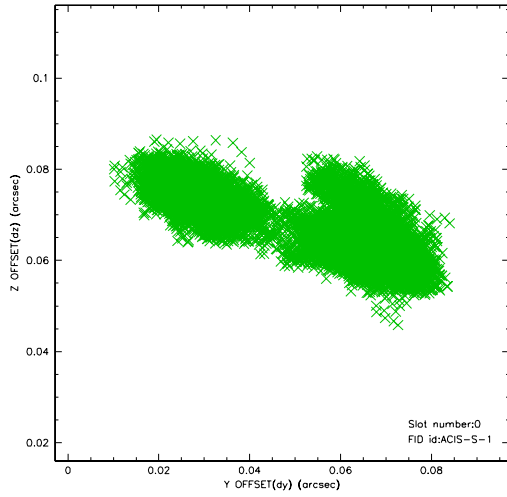


2.4.5 Slot 7

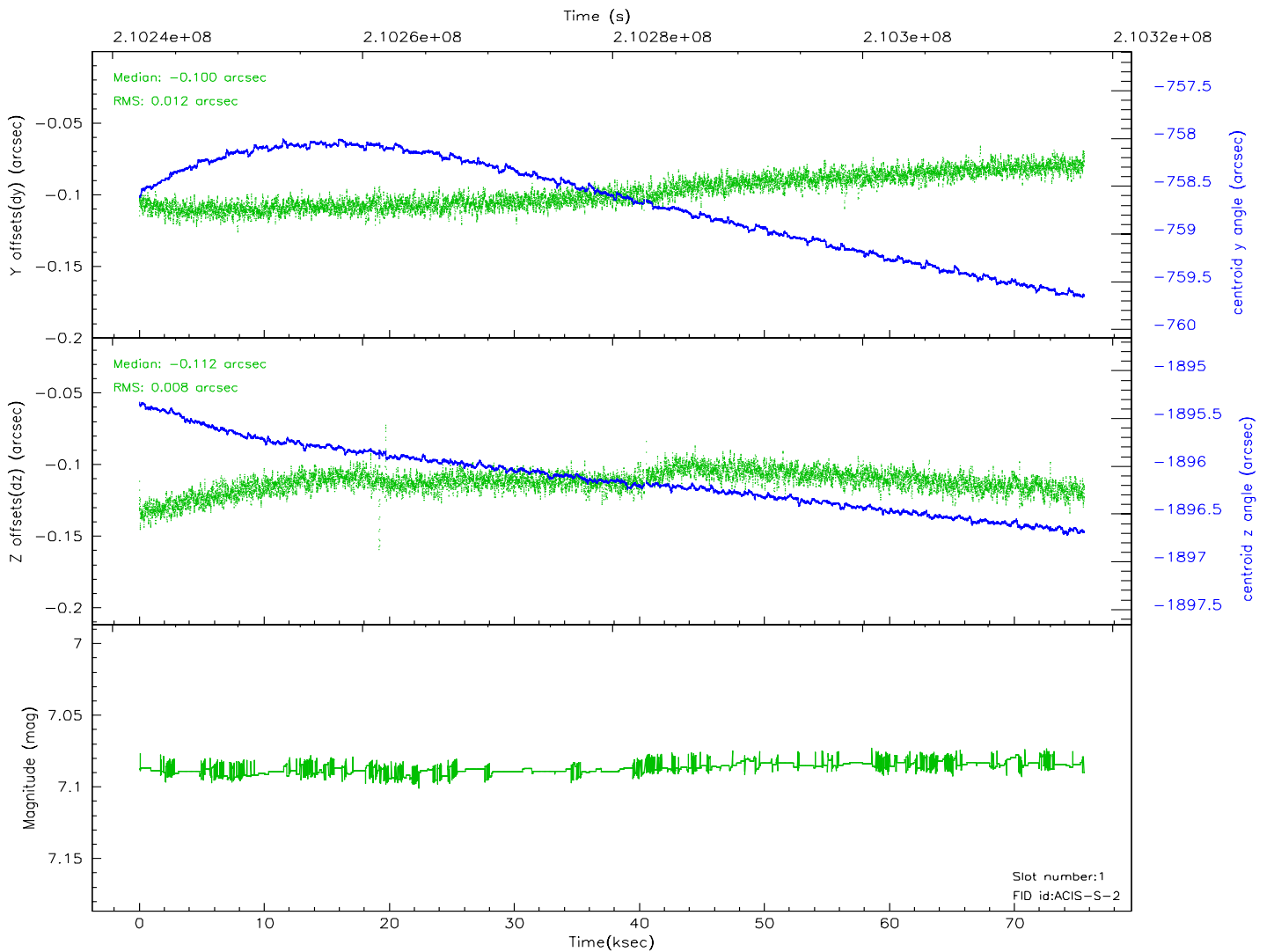
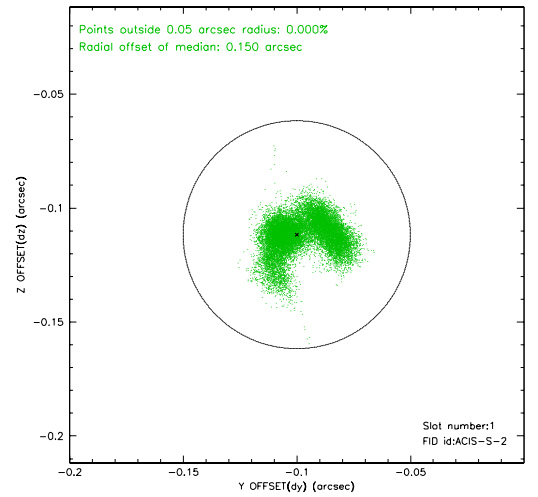
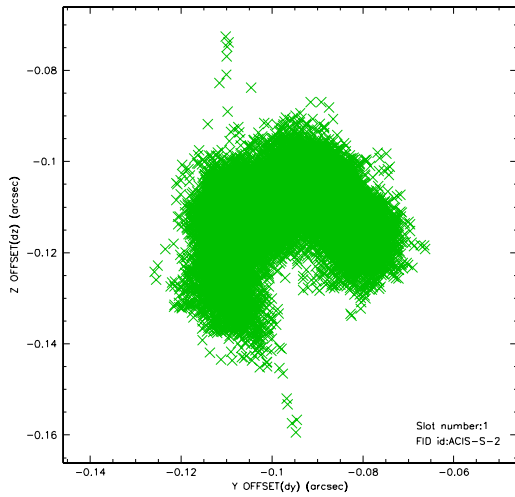


2.5 FID Slots

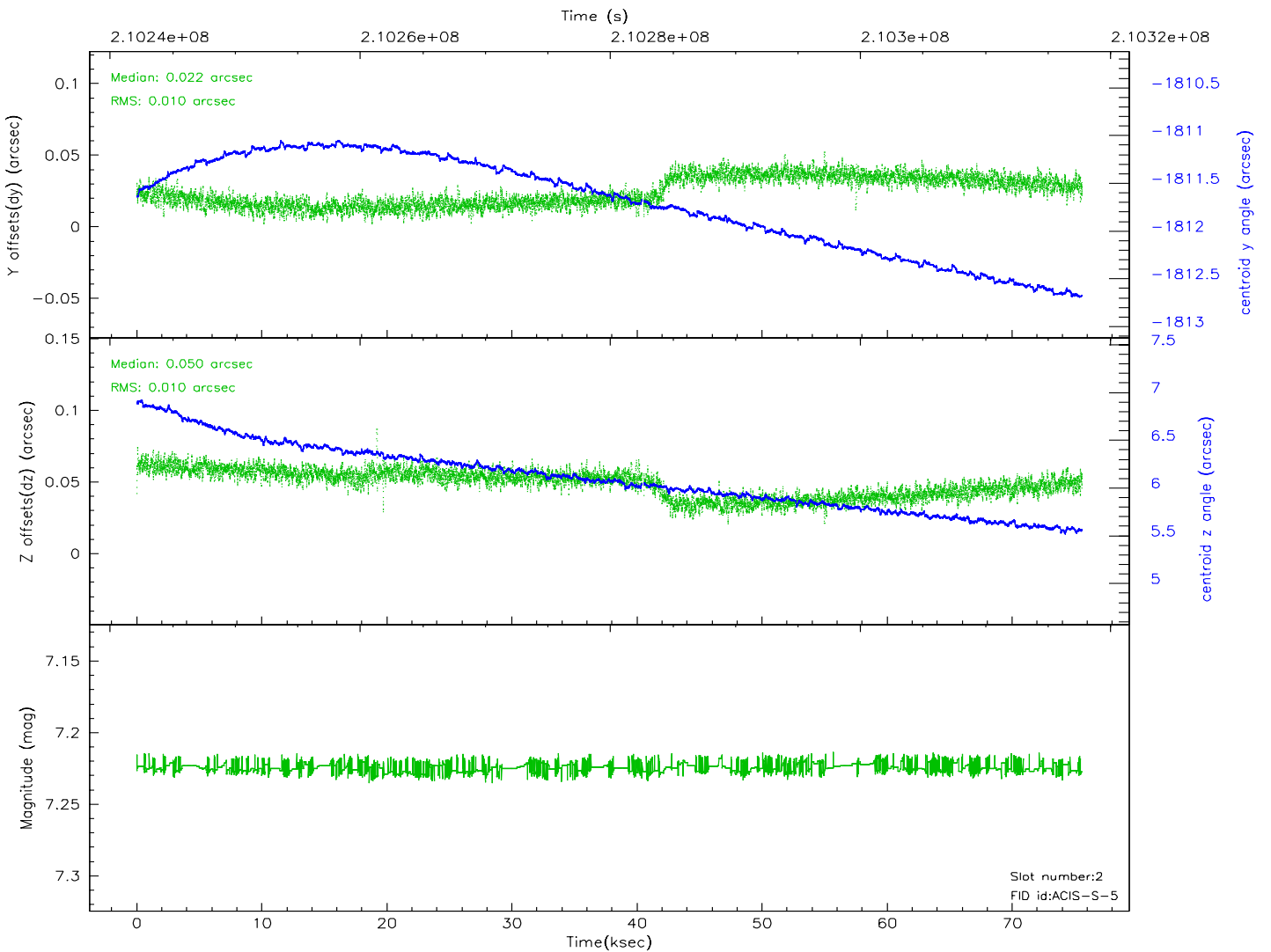
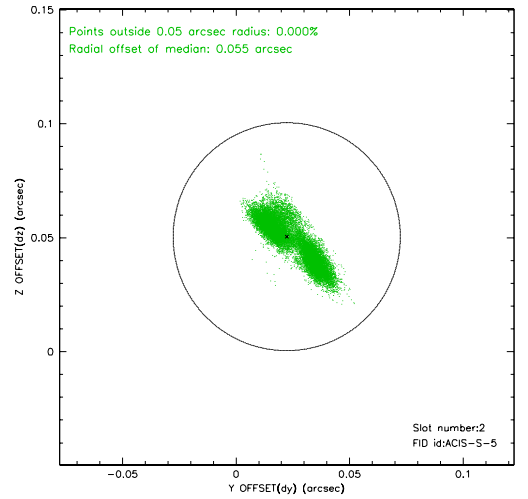
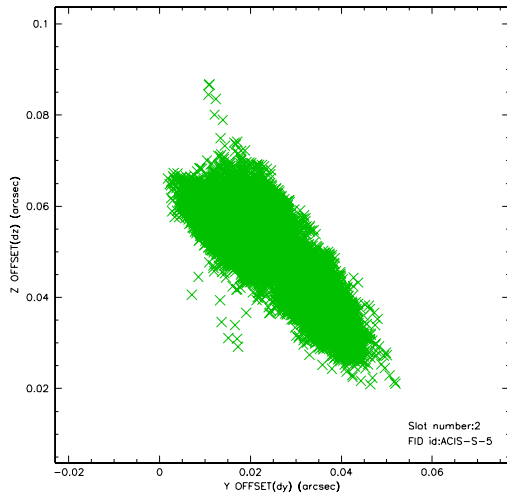
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

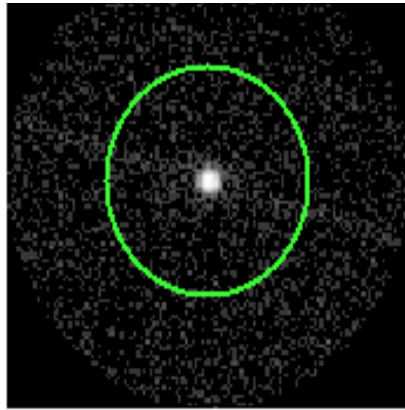


3 Gratings

3.1 LETG Arm



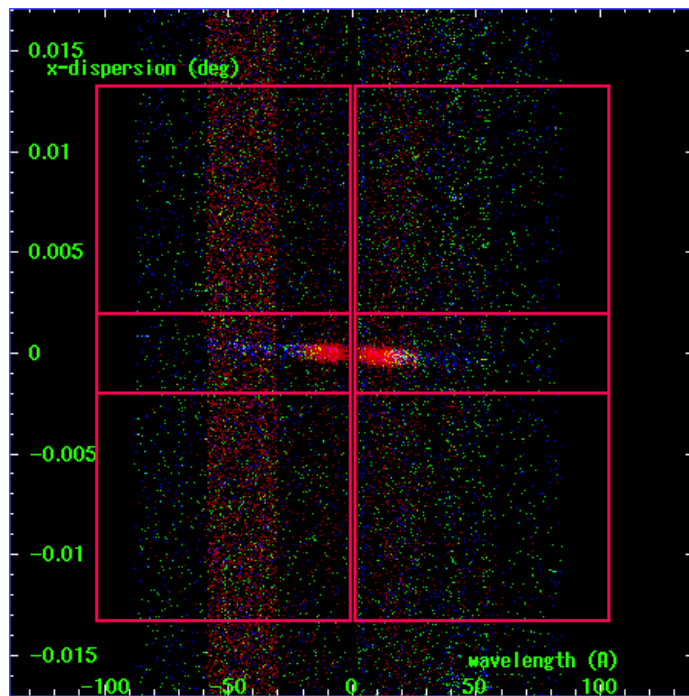
LETG Order Sort 123



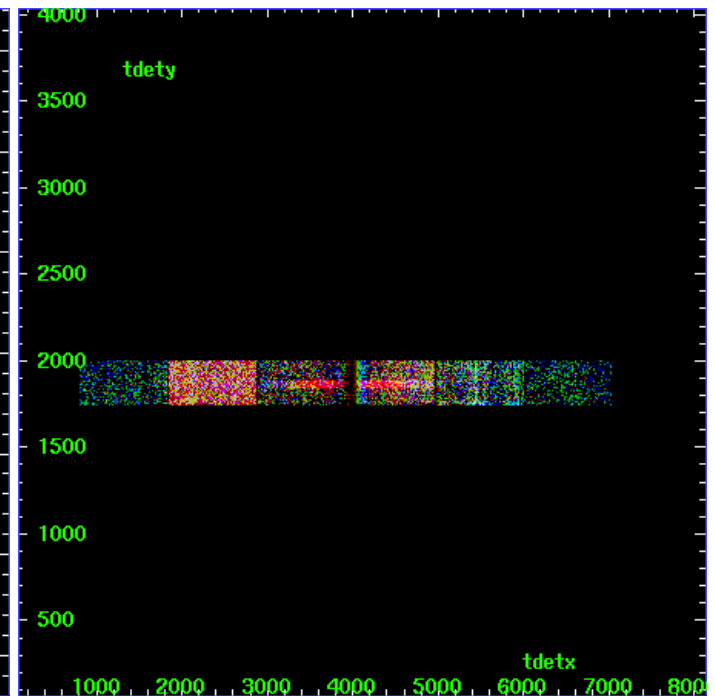
LETG Zero Order



LETG Order Sort ALL

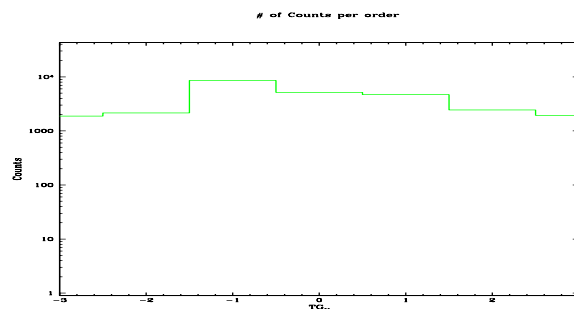


Spot Image LETG

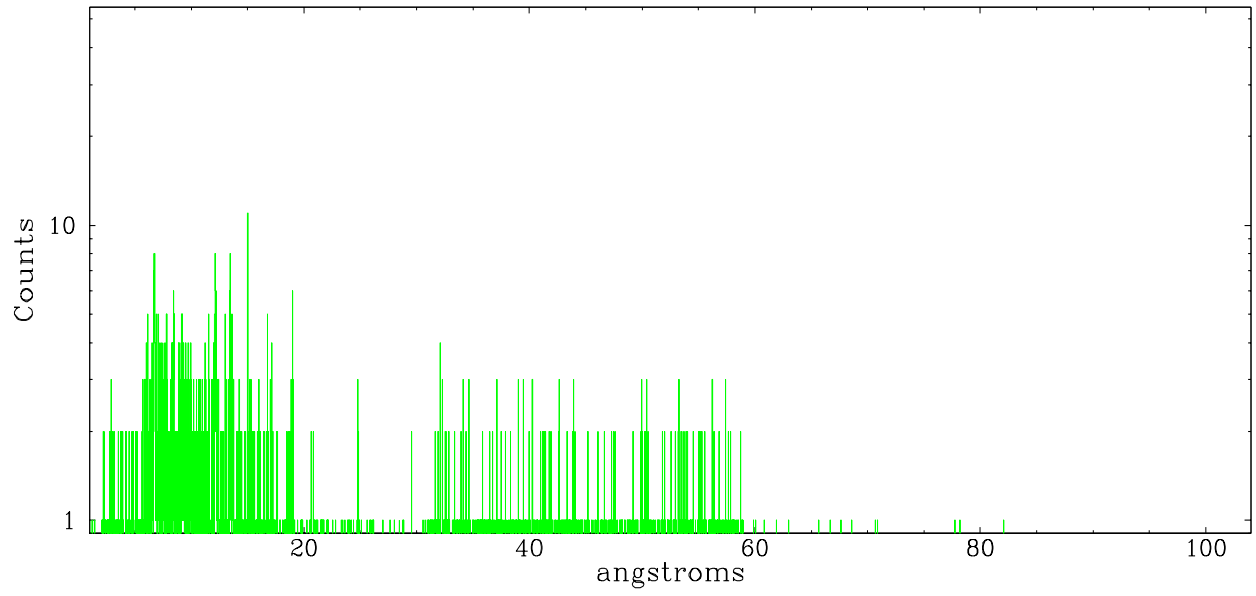


Full Detector LETG

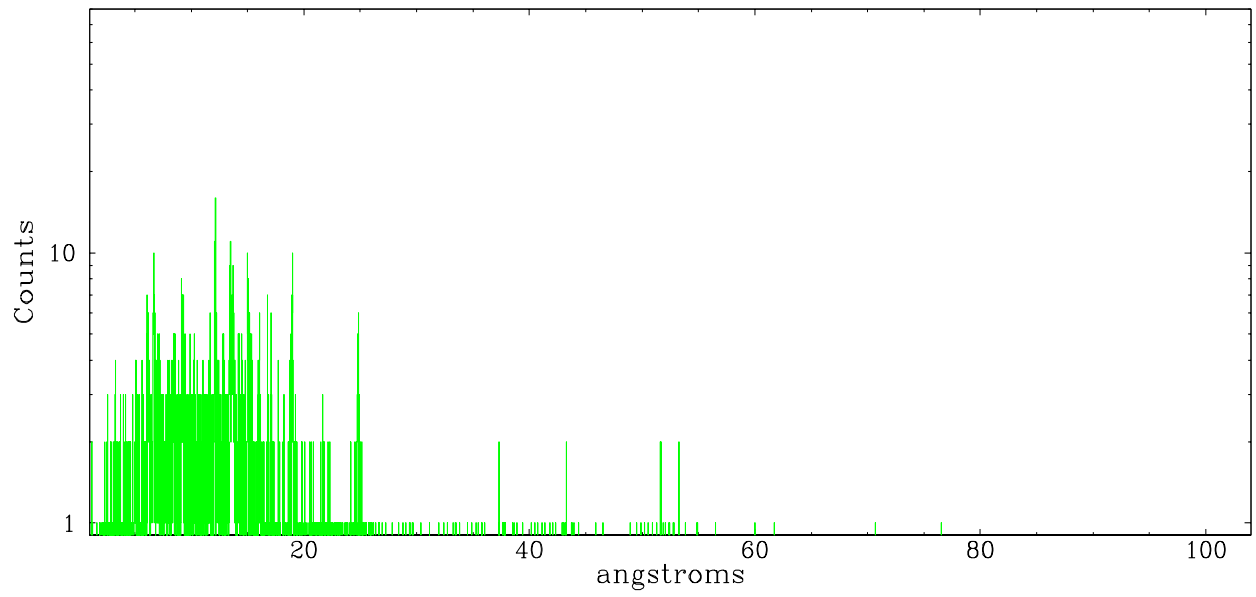
	order	order	order	order	order	order	order
	-3	-2	-1	0	1	2	3
Events	1876	2147	8577	5142	4684	2448	1939



leg order -1



leg order +1



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2006.05.23
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	75.459

A.2 Comments

Roll constraint satisfied.