

V&V Reference Report

L2 ASCDS Version : 7.6.9

Observation 2464 - L2 Version 002
Chandra X-Ray Center

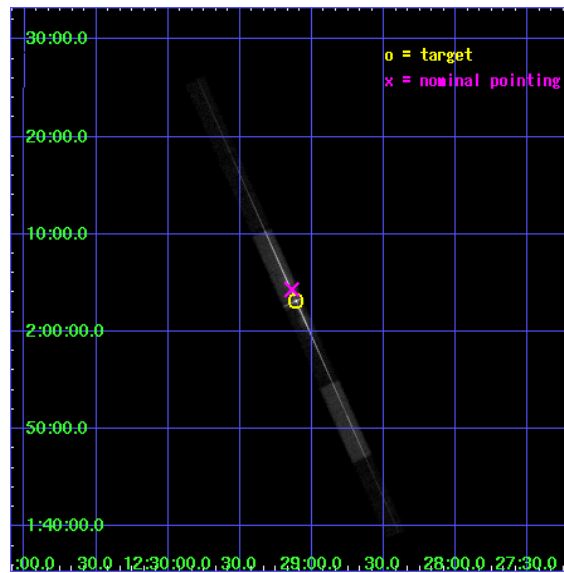
L2 Processing Date : Jan 10 2007

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1 Front

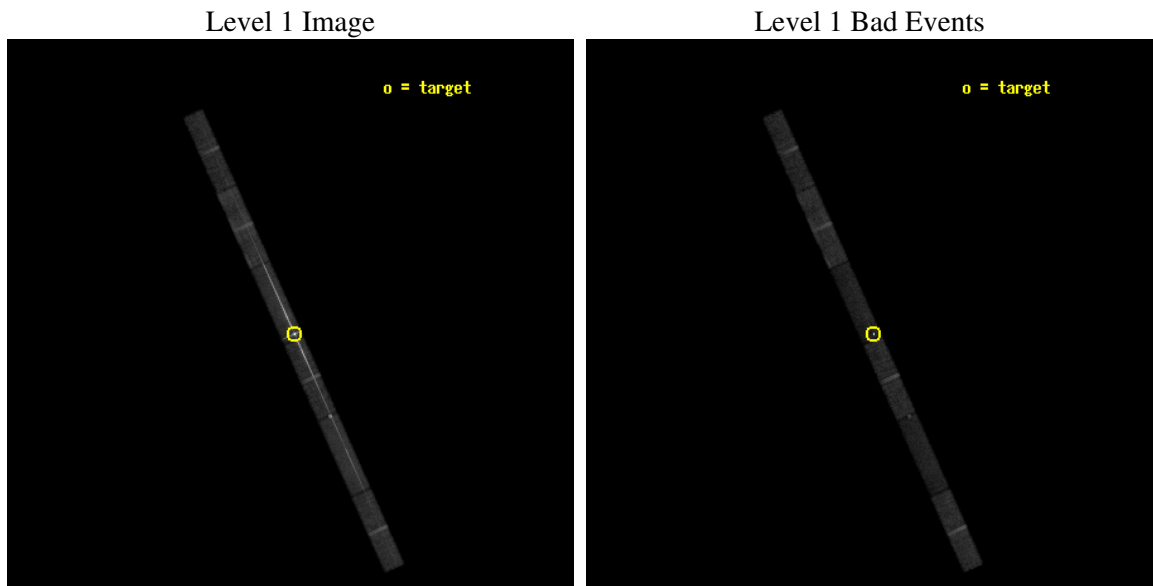
seq_num	790058
obs_id	2464
title	AO3 CALIBRATION OBSERVATIONS OF 3C273
observer	Dr. CXC Calibration
object	3C273
dtcycle	0
cycle	P
ra_targ	187.277917
dec_targ	2.052389
ra_nom	187.28498935118
dec_nom	2.0721077421753
roll_nom	245.74303287232
revision	4
ontime	30560.199834406
livedtime	29461.035386881
ontime4	30560.199834406
ontime5	30560.199834406
ontime6	30560.199834406
ontime7	30560.199834406
ontime8	30560.199834406
ontime9	30560.199834406
l2events	238508



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	7.6.9
caldbver	3.2.4
date	2006-12-08T05:17:37
revision	3

sched_exp_time	30000.000000
ontime	30560.199834406
ontime4	30560.199834406
ontime5	30560.199834406
ontime6	30560.199834406
ontime7	30560.199834406
ontime8	30560.199834406
ontime9	30560.199834406
l1events	574912

2.1.4 Events

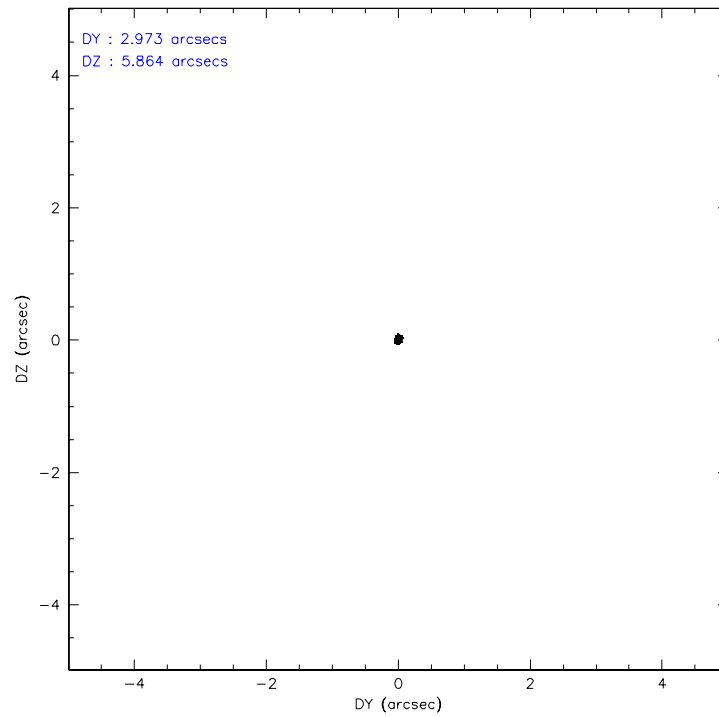
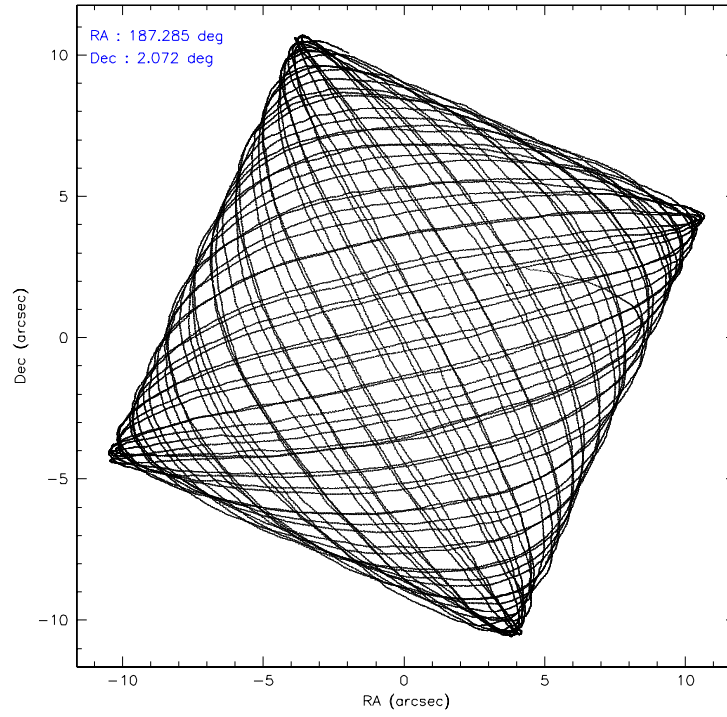
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	67808	81733	108206	178837	82160	56168
rejected events	59652	37536	53698	53639	63569	48398
rejected %	87%	45%	49%	29%	77%	86%

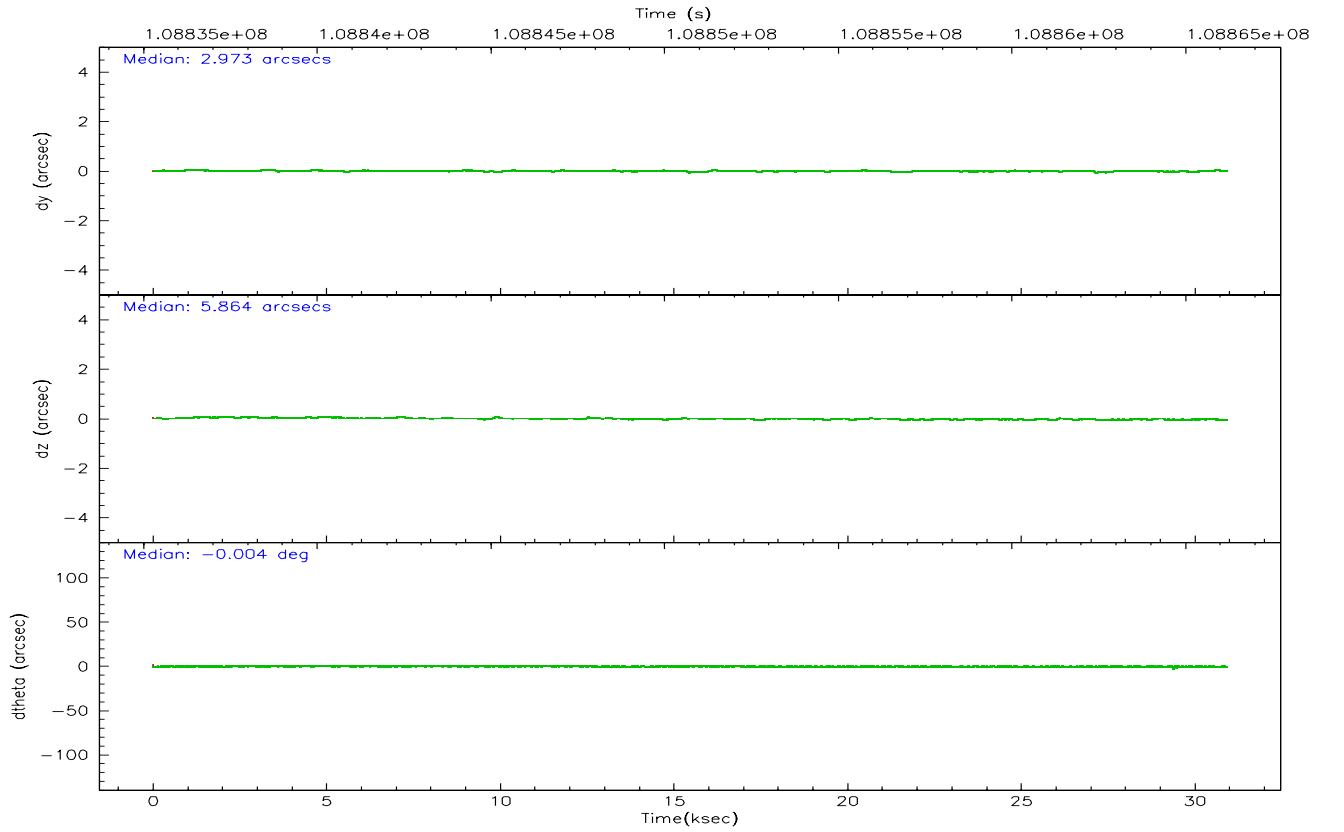
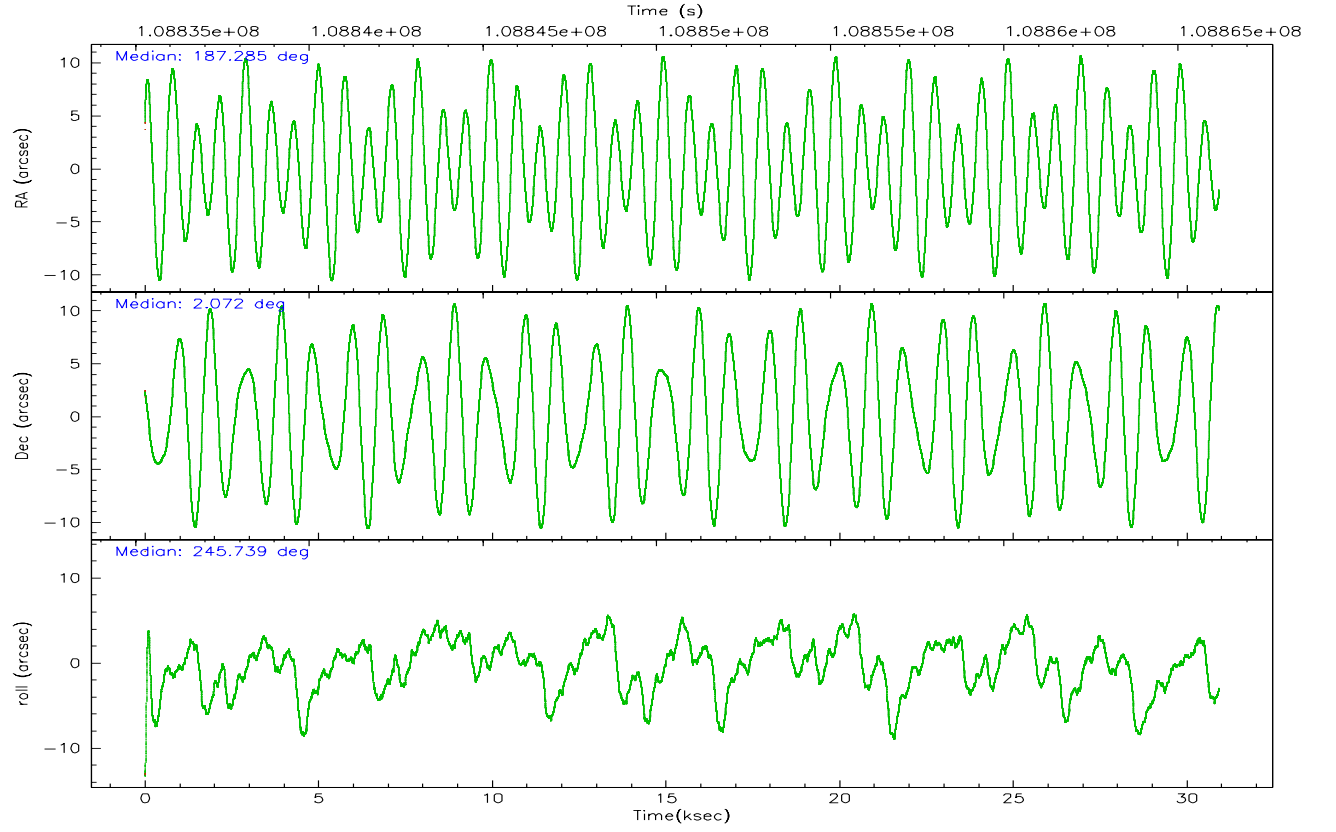
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	3704	10436	41068	26249	7462	3483
	5%	12%	37%	14%	9%	6%
grade 1 events	21	454	114	819	31	14
	0%	0%	0%	0%	0%	0%
grade 2 events	1458	11057	6037	30620	3102	1233
	2%	13%	5%	17%	3%	2%
grade 3 events	975	2464	2516	12810	1944	947
	1%	3%	2%	7%	2%	1%
grade 4 events	920	2466	2482	12591	1844	925
	1%	3%	2%	7%	2%	1%
grade 5 events	1677	4478	1885	8895	2391	1917
	2%	5%	1%	4%	2%	3%
grade 6 events	1100	17778	2407	42937	4239	1183
	1%	21%	2%	24%	5%	2%
grade 7 events	57953	32600	51697	43916	61147	46466
	85%	39%	47%	24%	74%	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	LETG	LETG	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	187.281976	187.2849893511816	Subarray requested	CUSTOM	1/4
Pointing Dec	2.099227	2.072107742175291	Subarray start row	1	1
Pointing Roll	245.586521	245.7430328723207	Subarray row count	256	256
Window start time	108792064.184000	108792064.184000	Alternating exposures requested	N	N
Window stop time	108936064.184000	108936064.184000	Primary exposure time	0.000000	1.1
SIM focus pos (mm)	-0.684267	-0.6828225247311905			
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-182.132523	-182.1370004450064			
SIM translation stage offset (mm)	-8	-7.995522138001405			
Observation start time	108836199.184000	108834869.74824			
Observation start date	2001-06-13T16:15:35	2001-06-13T15:54:29			
Observation end time	108866199.184000	108866414.12447			
Observation end date	2001-06-14T00:35:35	2001-06-14T00:40:14			
Read mode	TIMED	TIMED			

2.3 Aspect



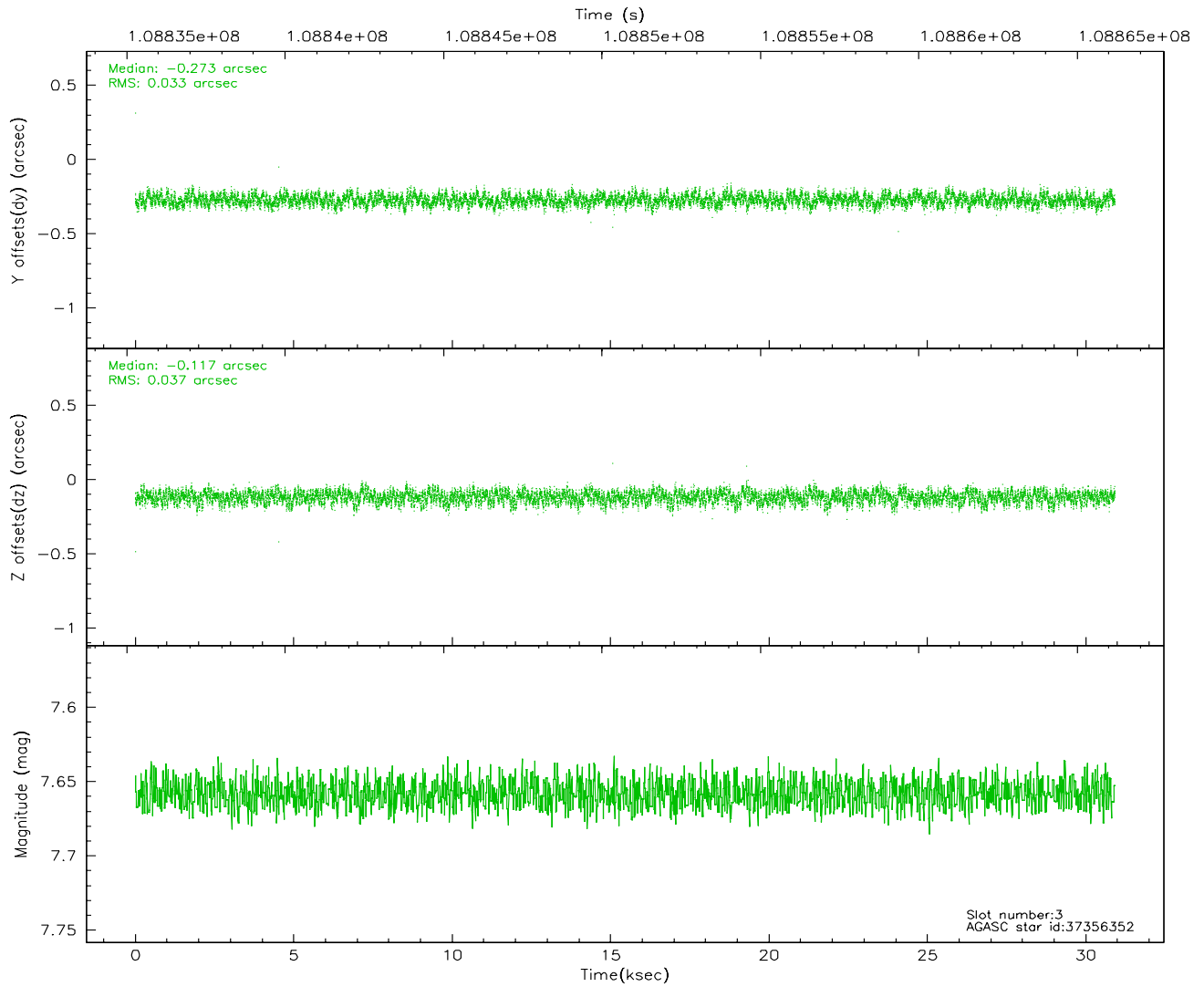
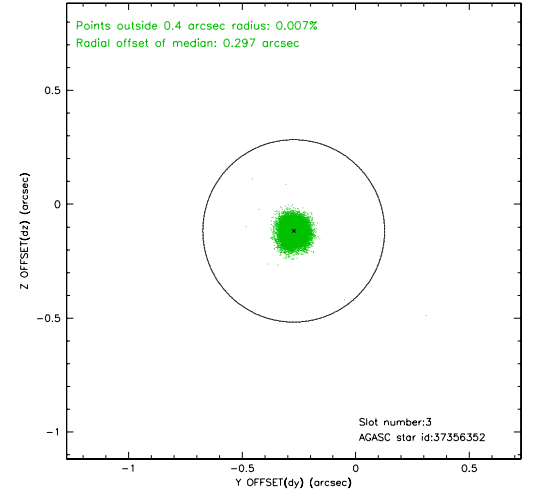
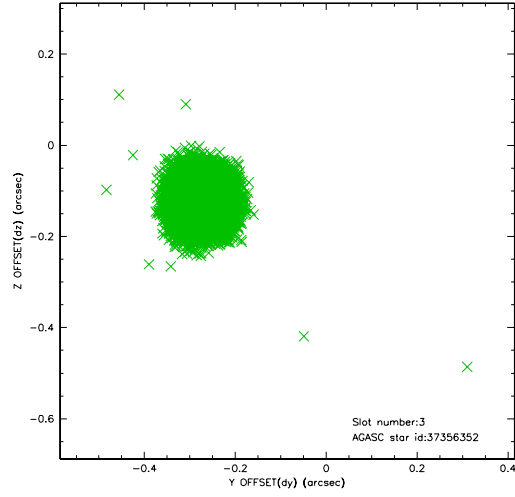


Slot Statistics

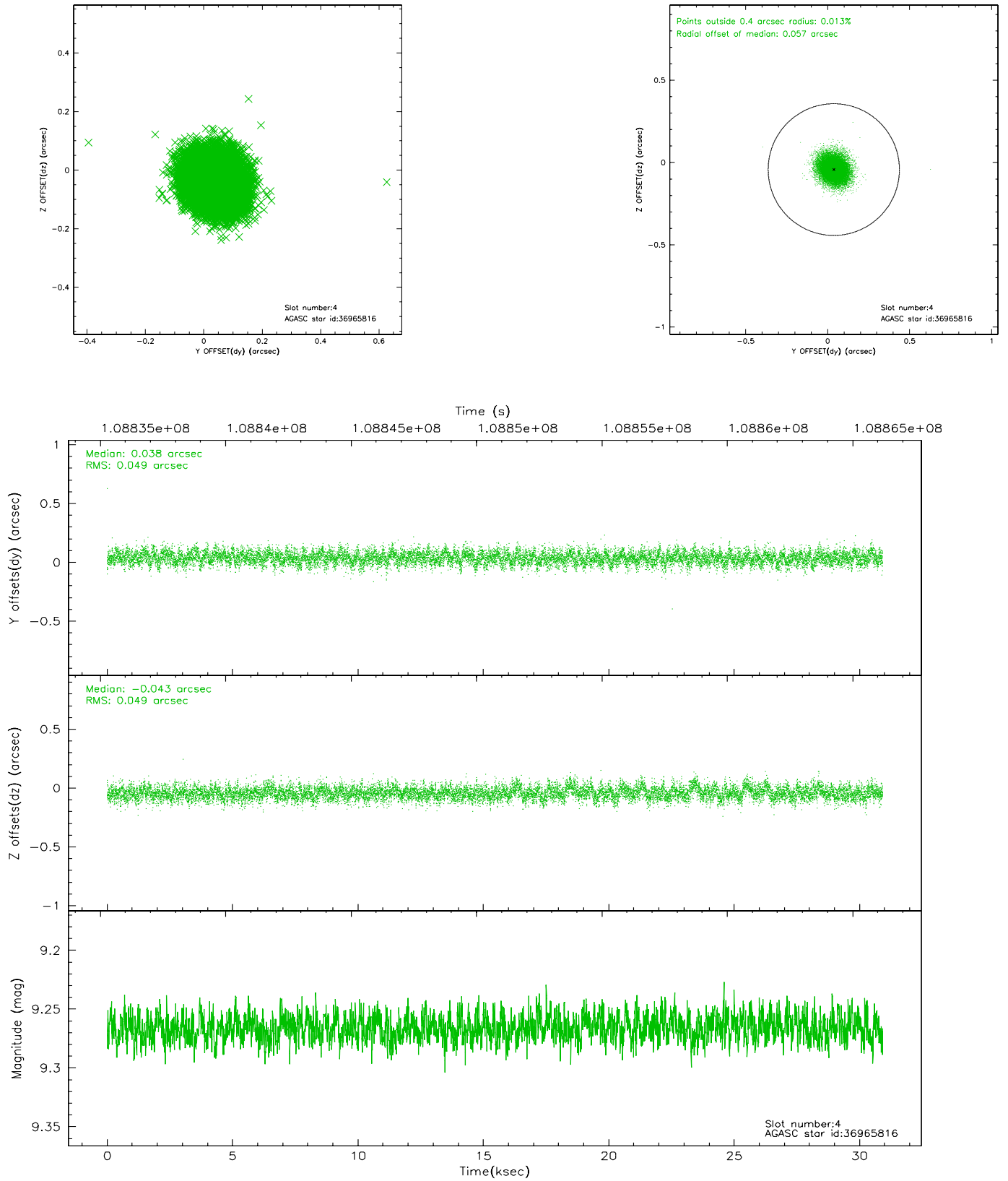
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	7543	-0.027	-0.047	0.007	0.011	0.000000	0.000000	-755.07	-1891.76
1	FID	ACIS-S-4	7.18	7544	-0.029	0.025	0.005	0.009	0.000000	0.000000	2158.18	16.68
2	FID	ACIS-S-5	7.23	7543	0.025	0.029	0.006	0.011	0.000000	0.000000	-1807.77	10.45
3	GUIDE	37356352	7.66	15081	-0.273	-0.117	0.053	0.083	187.433784	2.618460	-1928.02	-274.97
4	GUIDE	36965816	9.27	15082	0.038	-0.043	0.073	0.119	186.823353	1.771455	1756.35	-1014.30
5	GUIDE	36965296	9.09	15077	0.095	-0.063	0.064	0.106	186.926292	1.837429	1387.33	-775.22
6	GUIDE	37880408	10.08	15076	-0.150	0.050	0.118	0.193	187.758191	2.290324	-1334.83	1276.00
7	GUIDE	37883040	10.03	15025	0.290	0.178	0.122	0.199	187.575516	1.280402	2247.62	2181.67

2.4 Star Slots

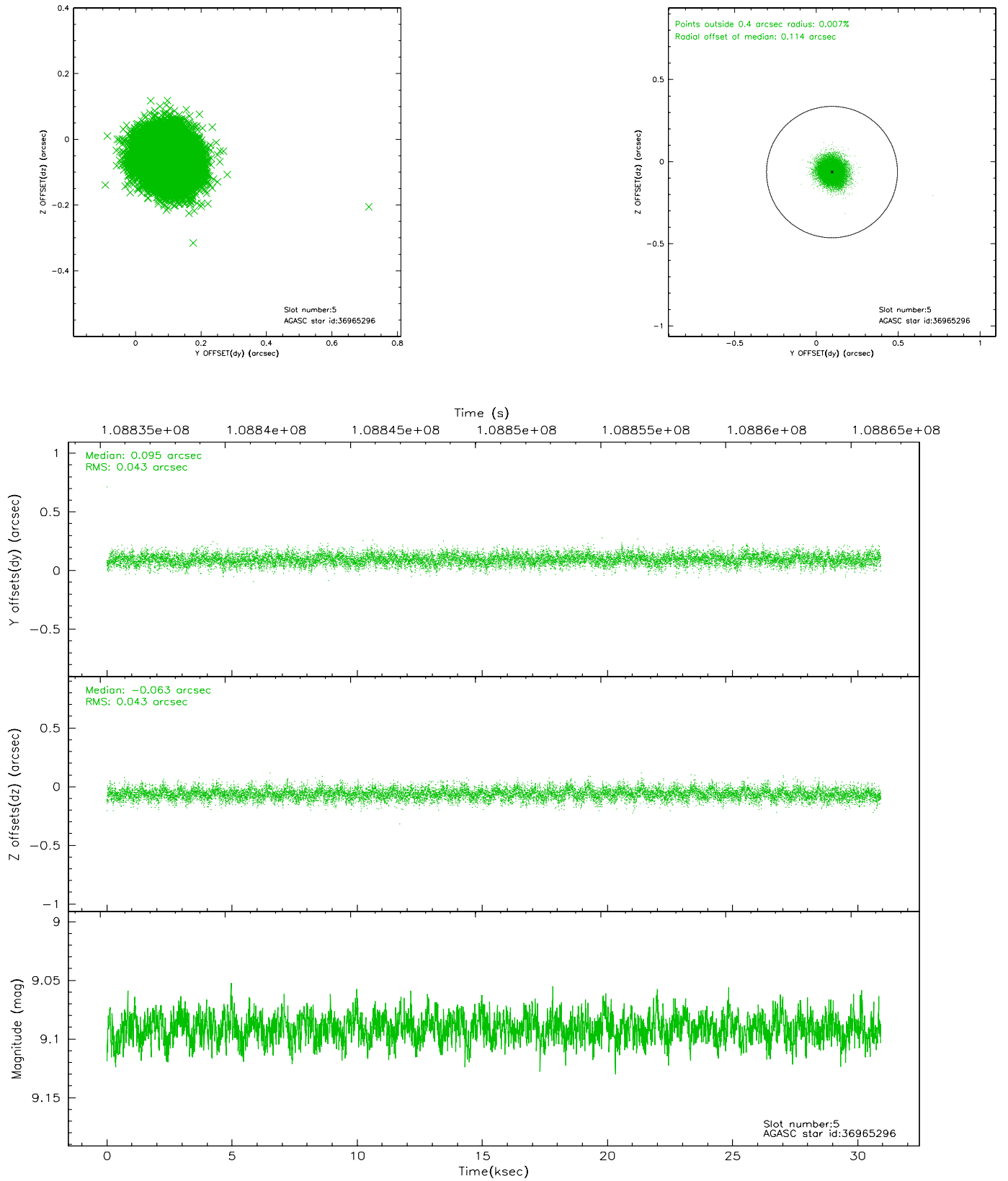
2.4.1 Slot 3



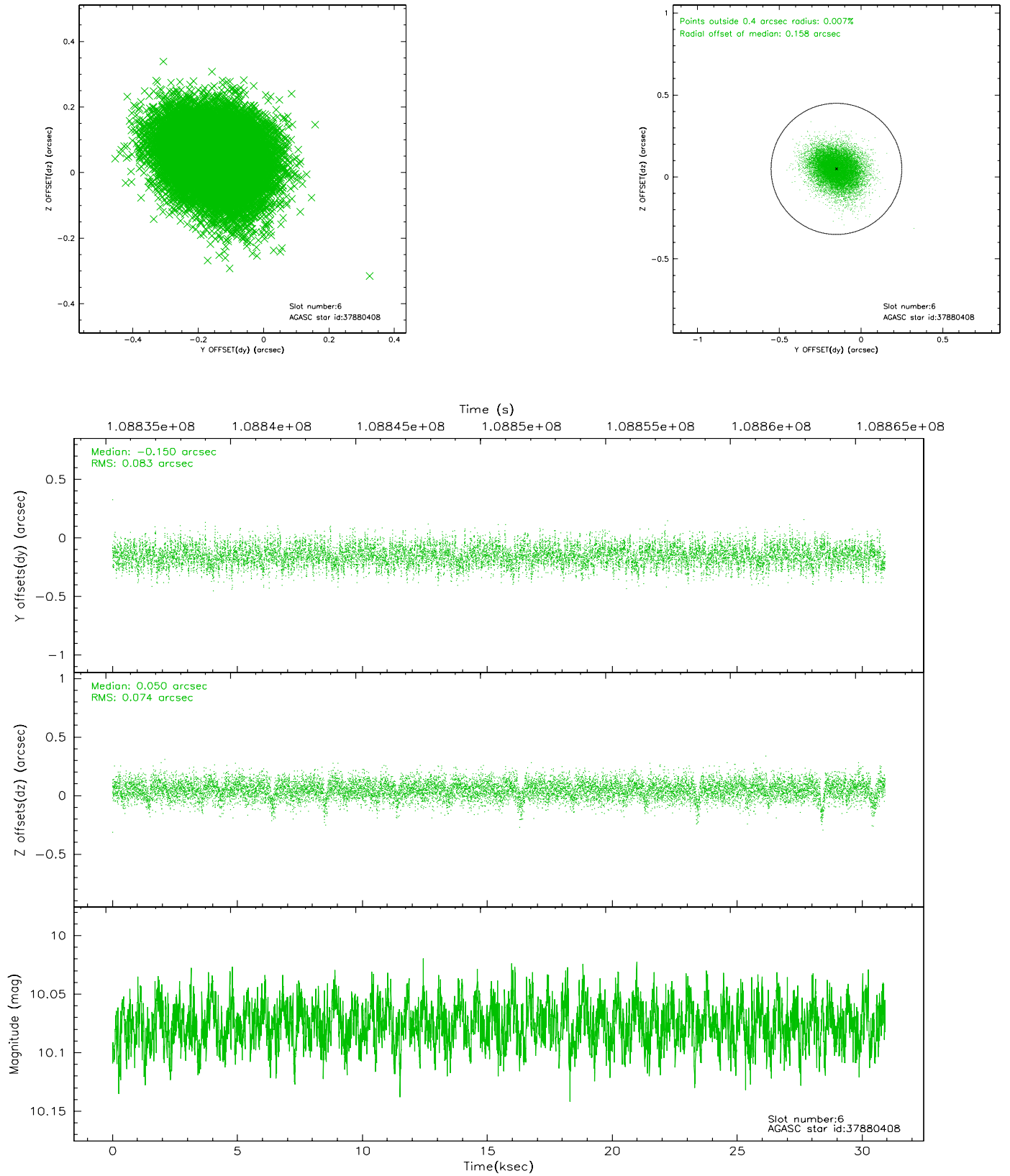
2.4.2 Slot 4



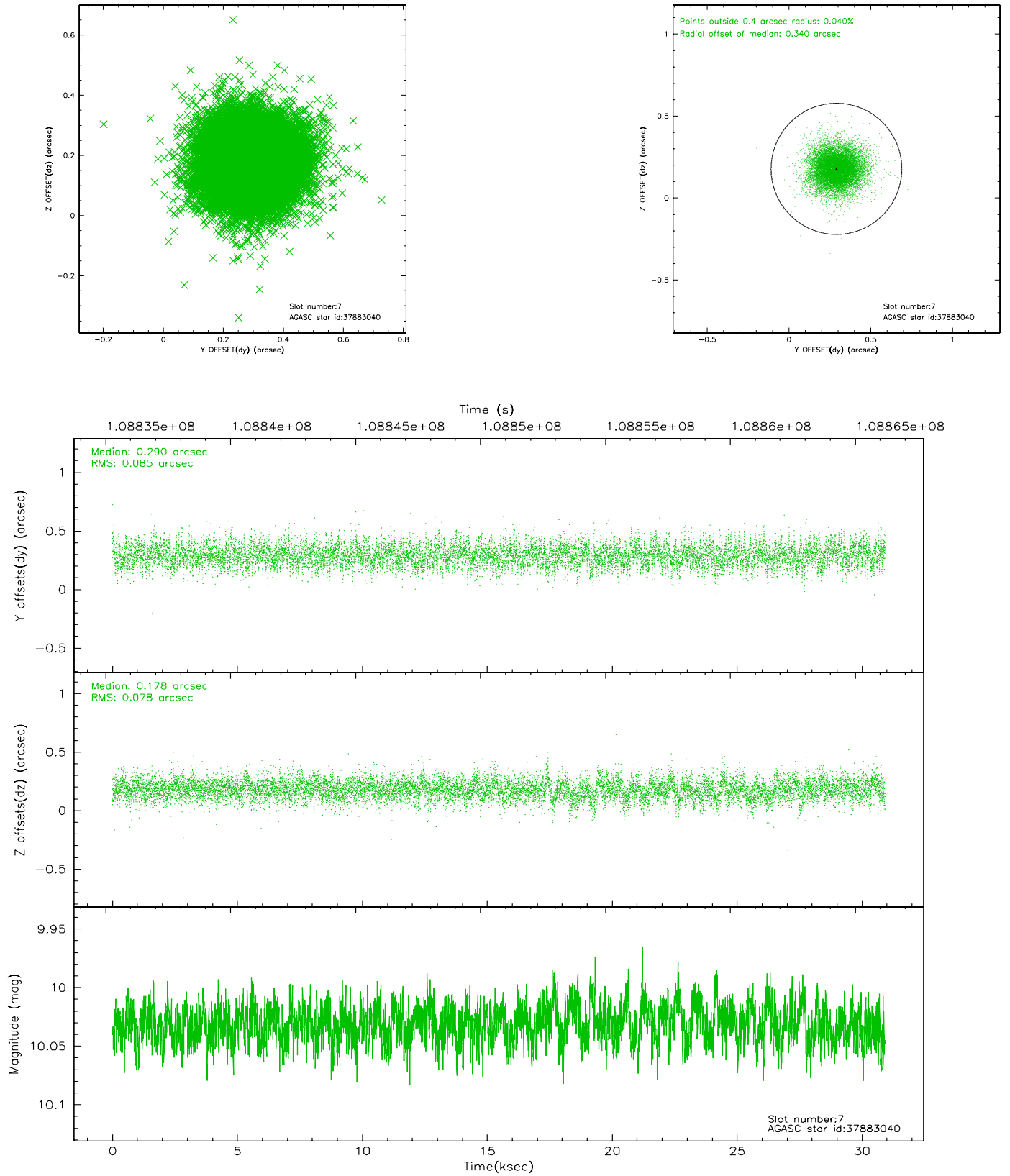
2.4.3 Slot 5



2.4.4 Slot 6

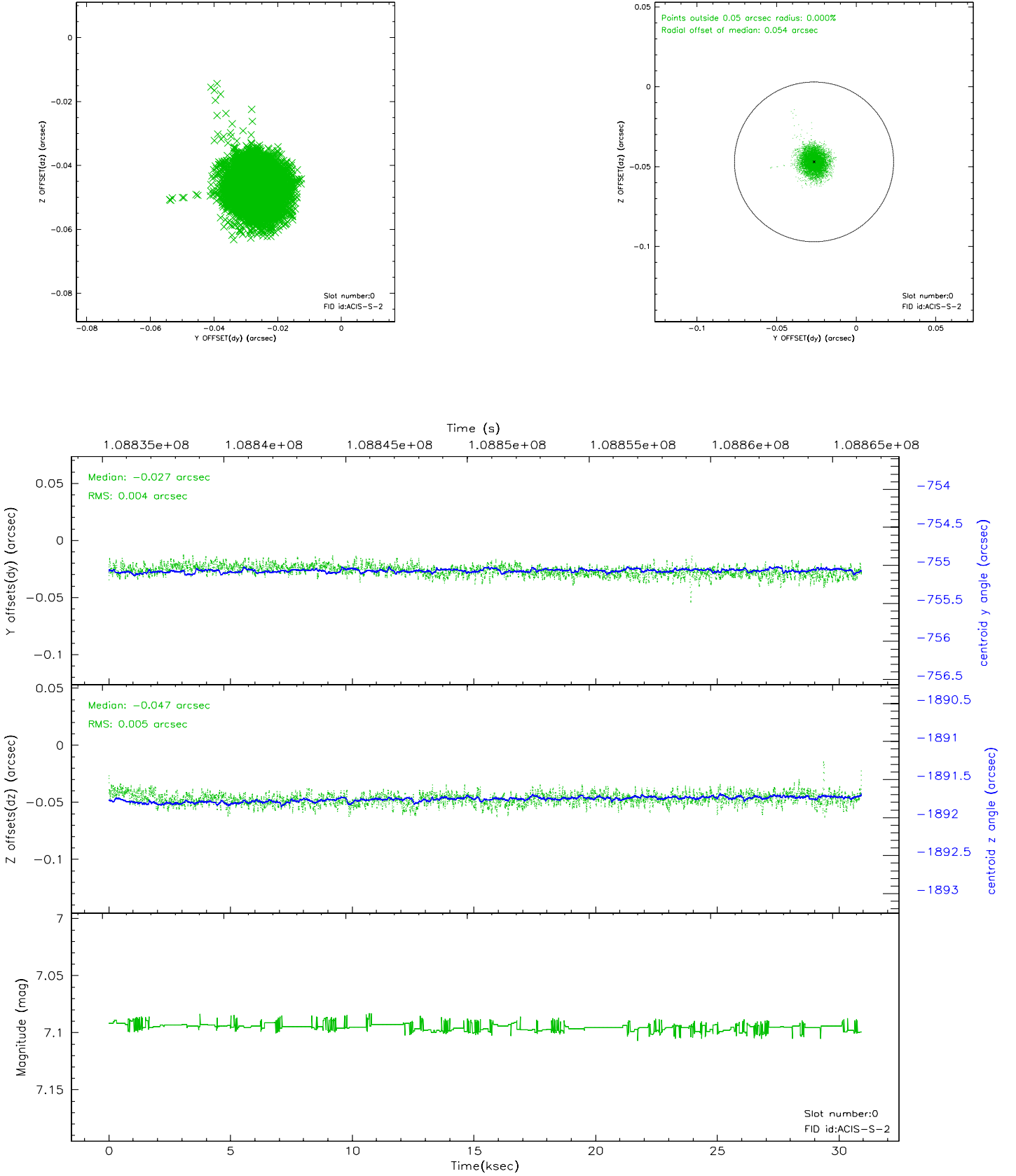


2.4.5 Slot 7

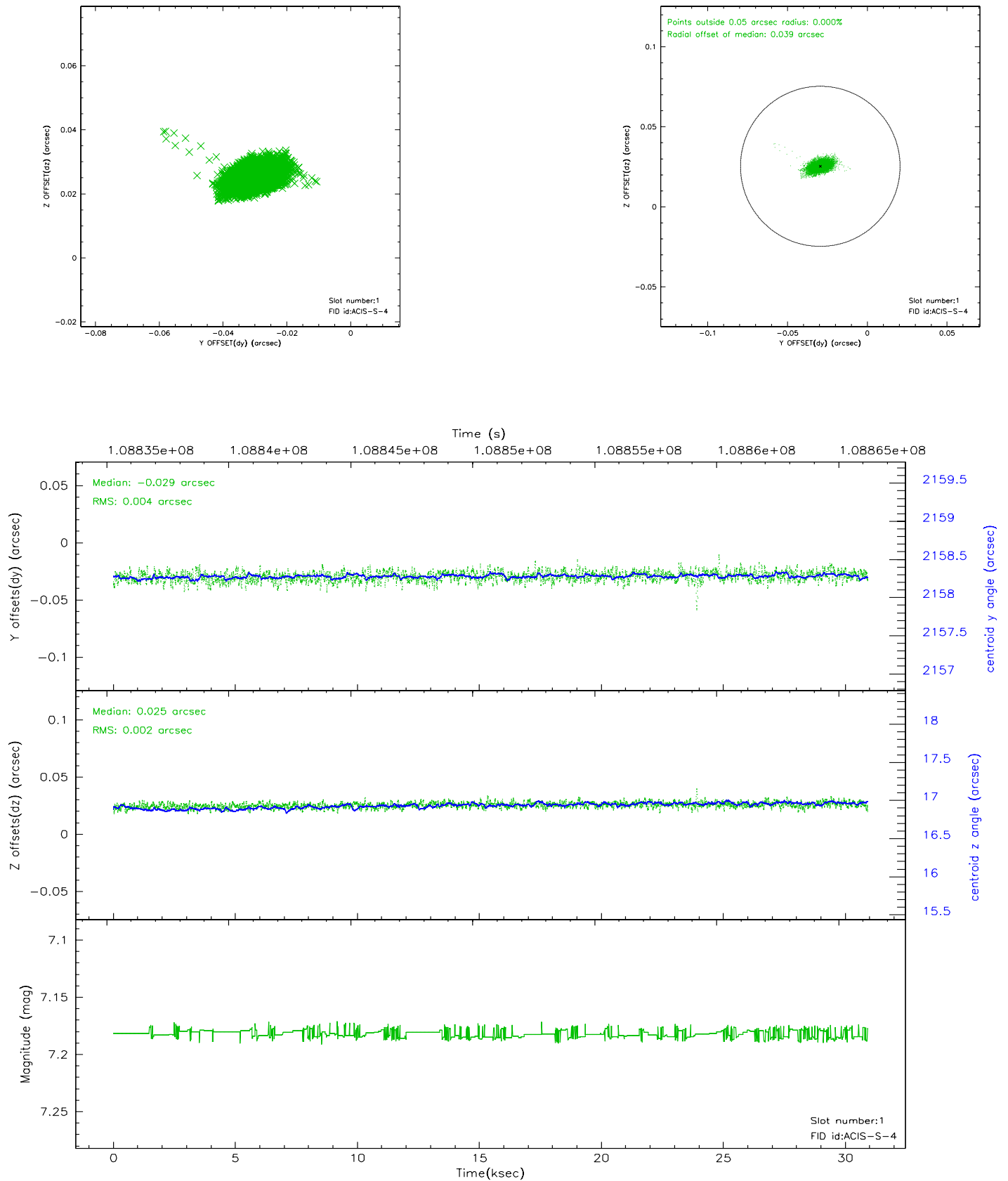


2.5 FID Slots

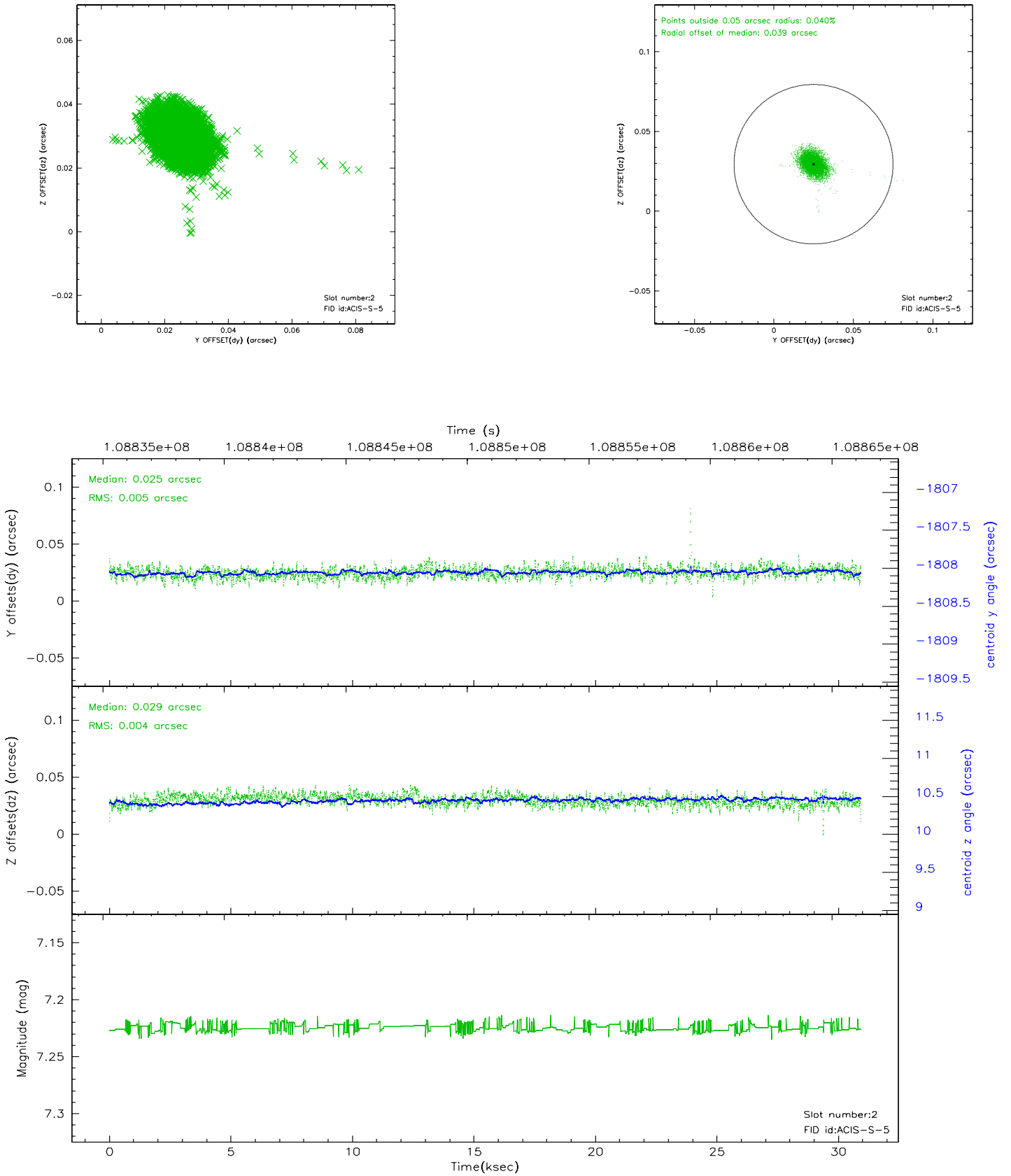
2.5.1 Slot 0



2.5.2 Slot 1

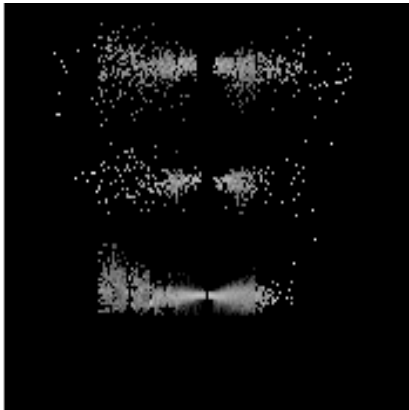


2.5.3 Slot 2

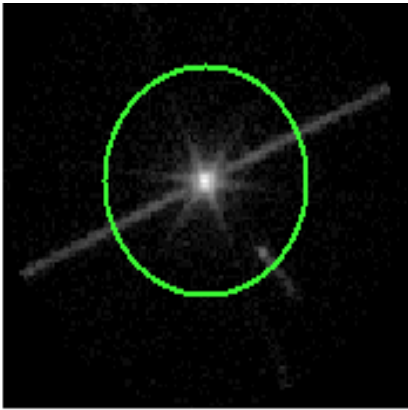


3 Gratings

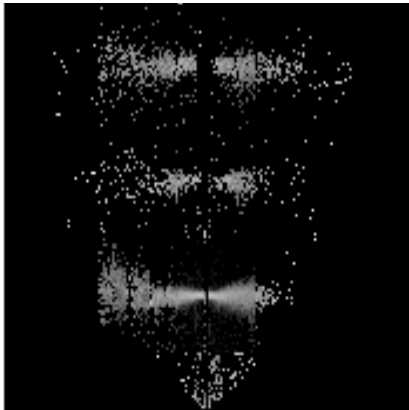
3.1 LETG Arm



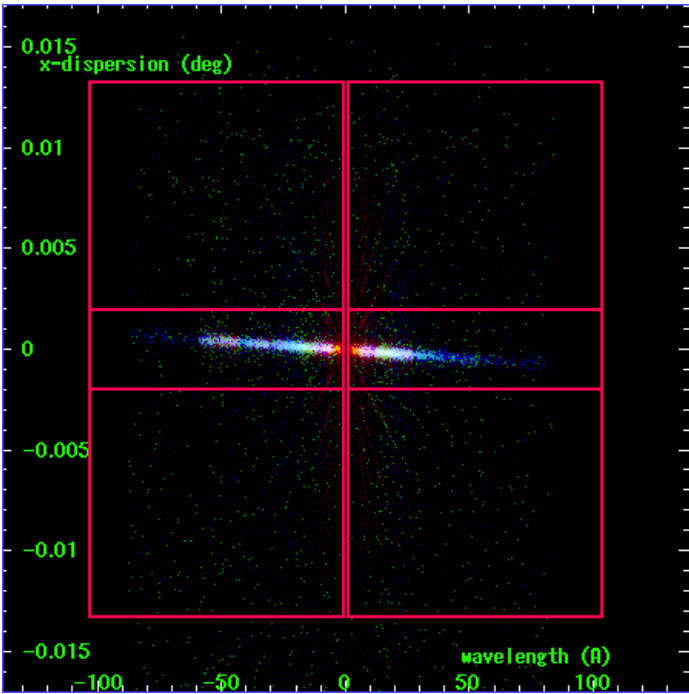
LETG Order Sort 123



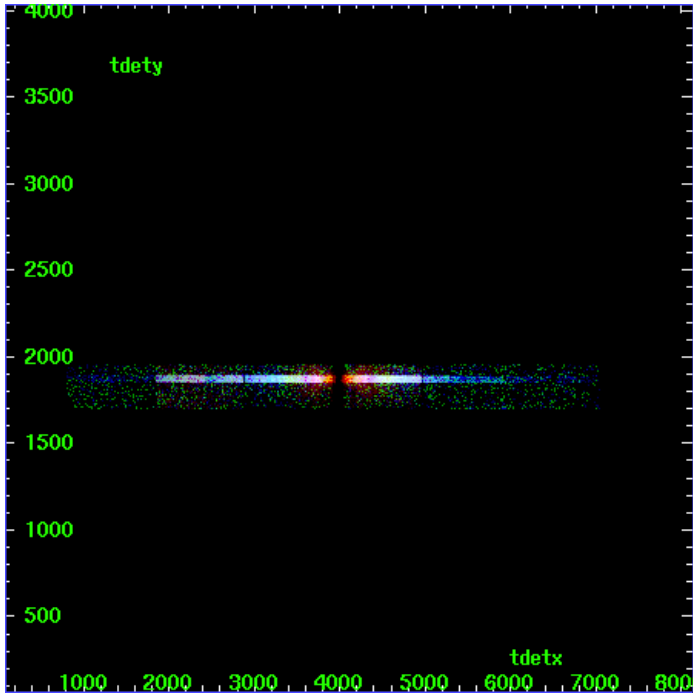
LETG Zero Order



LETG Order Sort ALL

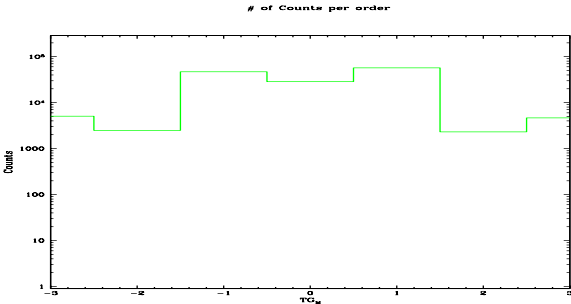


Spot Image LETG

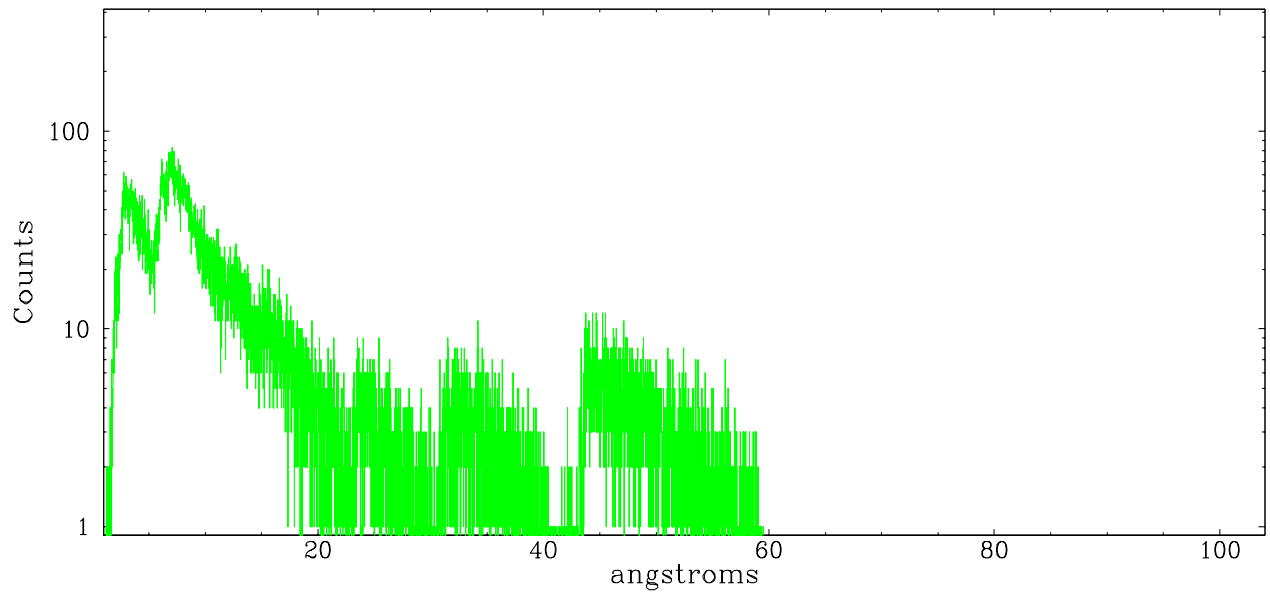


Full Detector LETG

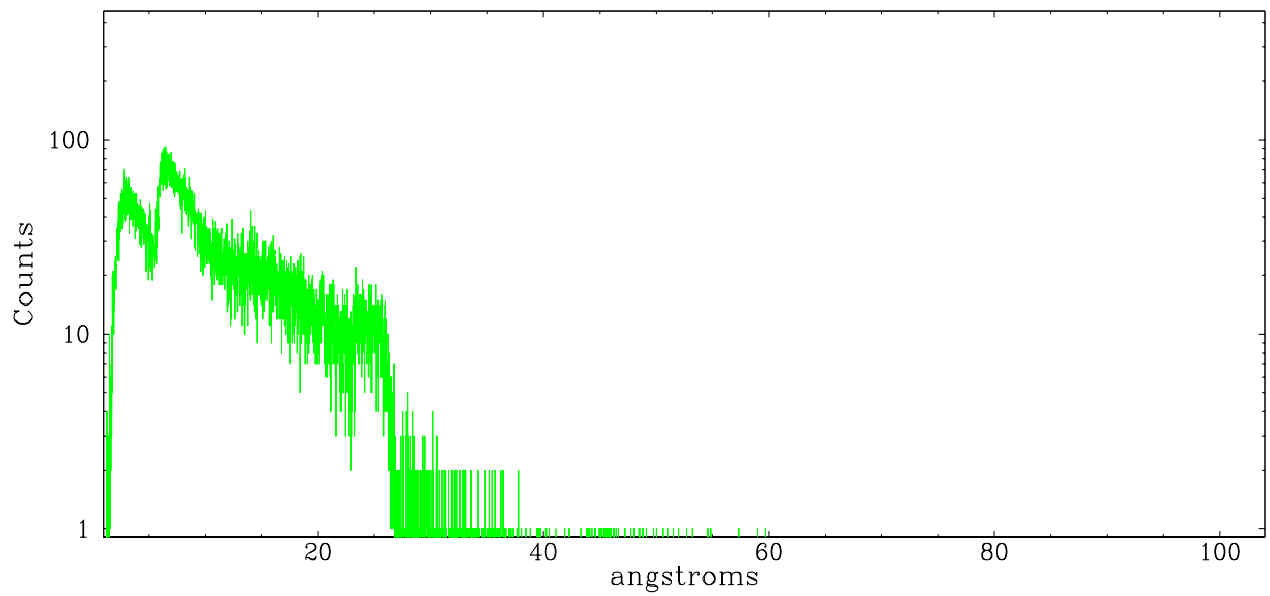
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	5037	2480	46940	28522	57144	2302	4647



leg order -1



leg order +1



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2007.01.17
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.56

A.2 Comments

Standard software processing technique using the tool tgdetect did not give an accurate position for the zeroth order for this observation. Zeroth order position for this observation has been determined using the known angle between the readout streak and the meg spectral arm. The newly determined zeroth order coordinates have been placed in the *src1a.fits file, replacing the coordinates determined by tgdetect. The zeroth order sky coordinates used in this processing are x=4148.22; y=3952.81; ra=12:29:06.700, dec=+02:03:08.89.