

V&V Reference Report

L2 ASCDS Version : 7.6.10

Observation 3416 - L2 Version 001
Chandra X-Ray Center

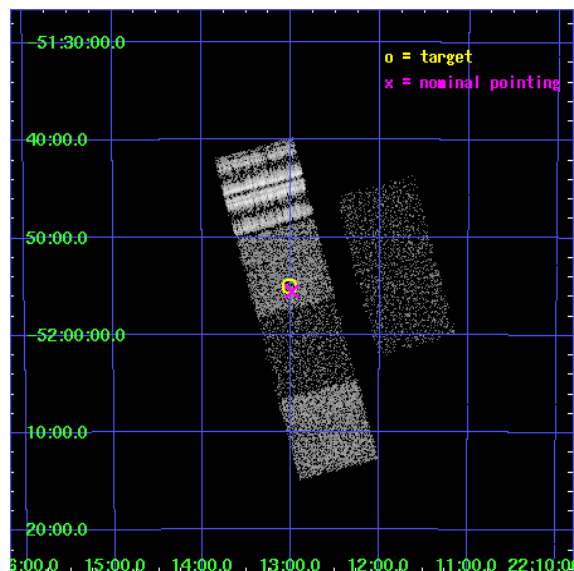
L2 Processing Date : Jan 16 2007

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1 Front

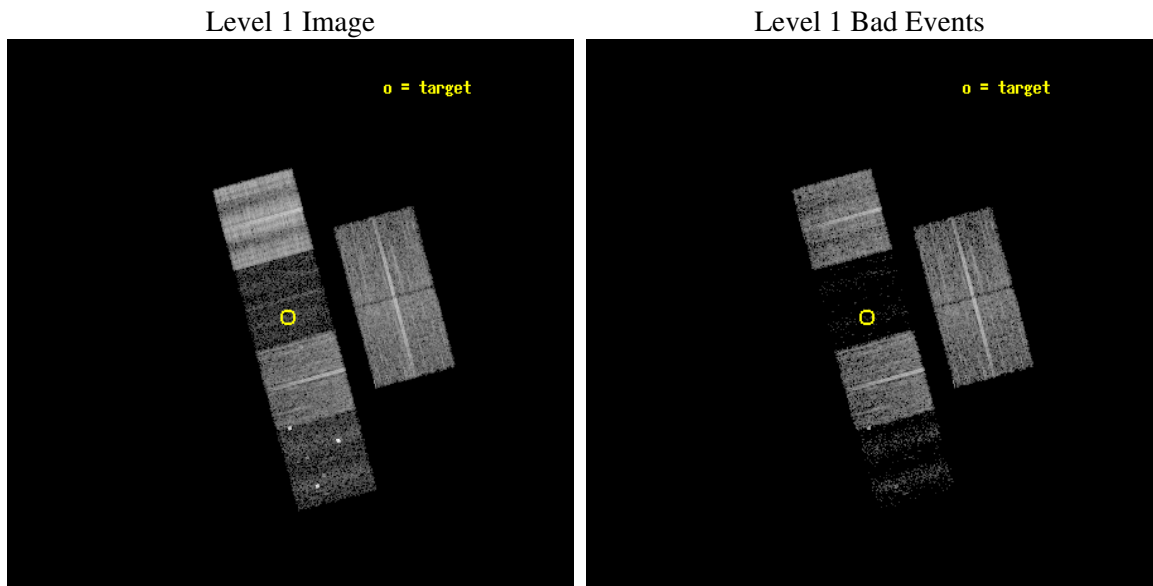
seq_num	100030
obs_id	3416
title	ACIS-S LOW ENERGY SPECTROSCOPY AND PHOTOMETRIC IMAGING OF CHARGE EXCHANGE X-RAY EMISSION FROM COMET C/LINEAR WM1 (2000)
observer	Dr. Carey Lisse
object	C/LINEAR WM1 (2000)
dtcycle	0
cycle	P
ra_targ	333.25379
dec_targ	-51.91754
ra_nom	333.24709480802
dec_nom	-51.926351681538
roll_nom	254.92231212114
revision	2
ontime	8508.8000079244
livetime	8401.0564588398
ontime2	8508.8000079244
ontime3	8508.8000079244
ontime5	8508.8000079244
ontime6	8508.8000079244
ontime7	8508.8000079244
ontime8	8502.3180675209
l2events	31333



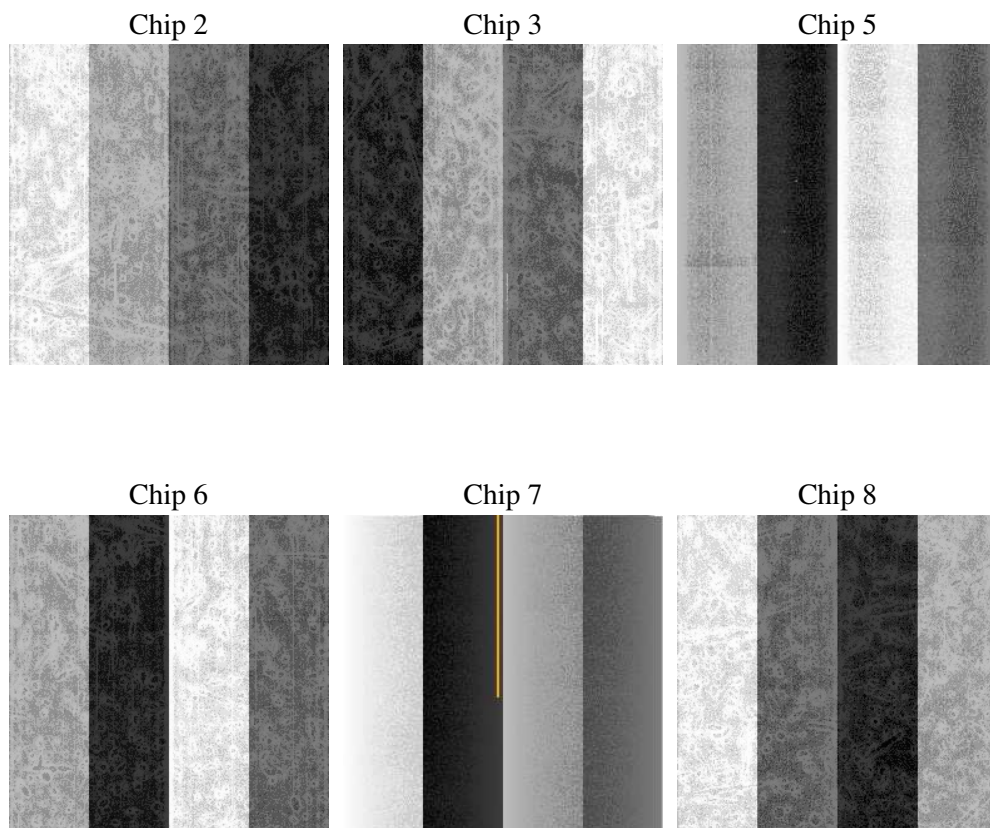
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1
ascdsver	7.6.10
caldbver	3.3.0
date	2007-01-17T02:46:59
revision	2

sched_exp_time	8750.000000
ontime	8508.8000079244
ontime2	8508.8000079244
ontime3	8508.8000079244
ontime5	8508.8000079244
ontime6	8508.8000079244
ontime7	8508.8000079244
ontime8	8502.3180675209
l1events	223016

2.1.4 Events

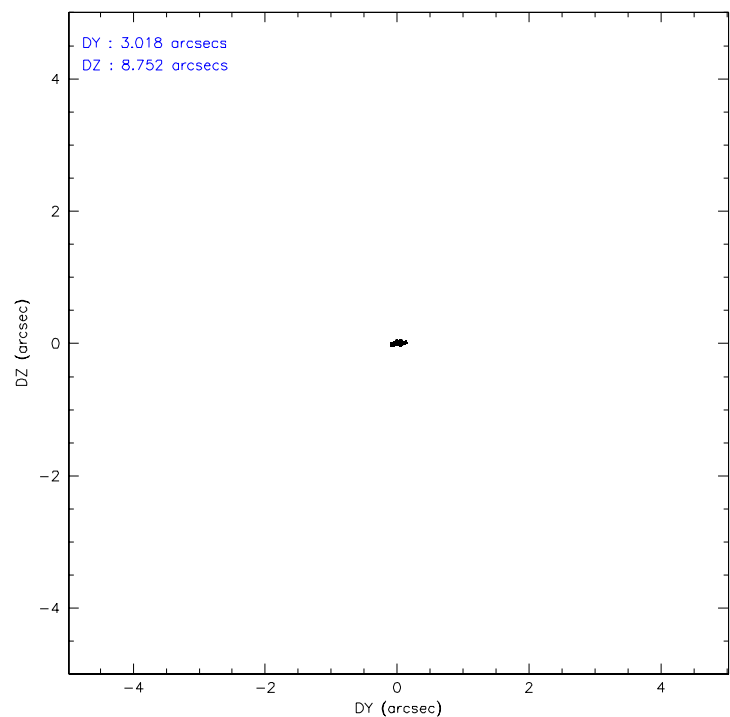
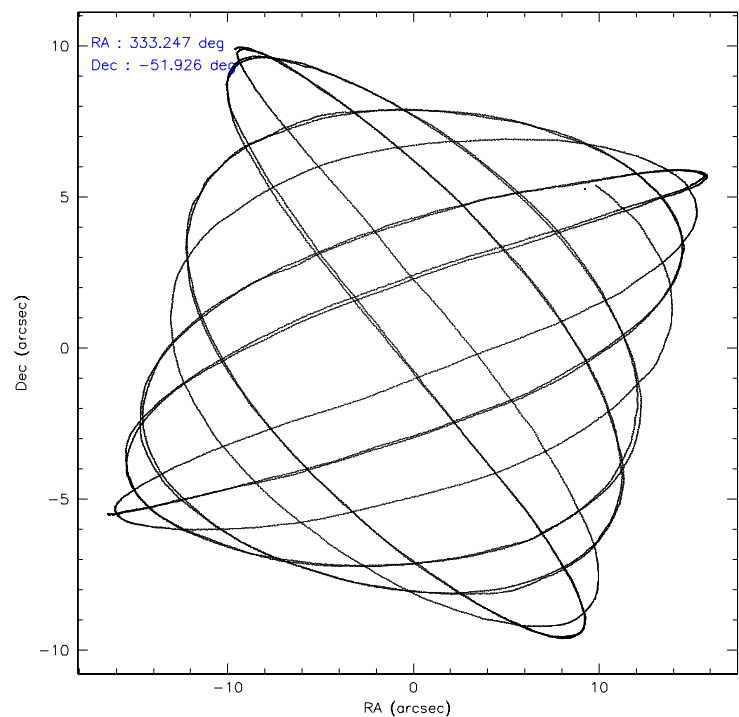
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	42463	38186	13558	37911	6822	84076
rejected events	39321	36815	3866	35274	1299	41107
rejected %	92%	96%	28%	93%	19%	48%

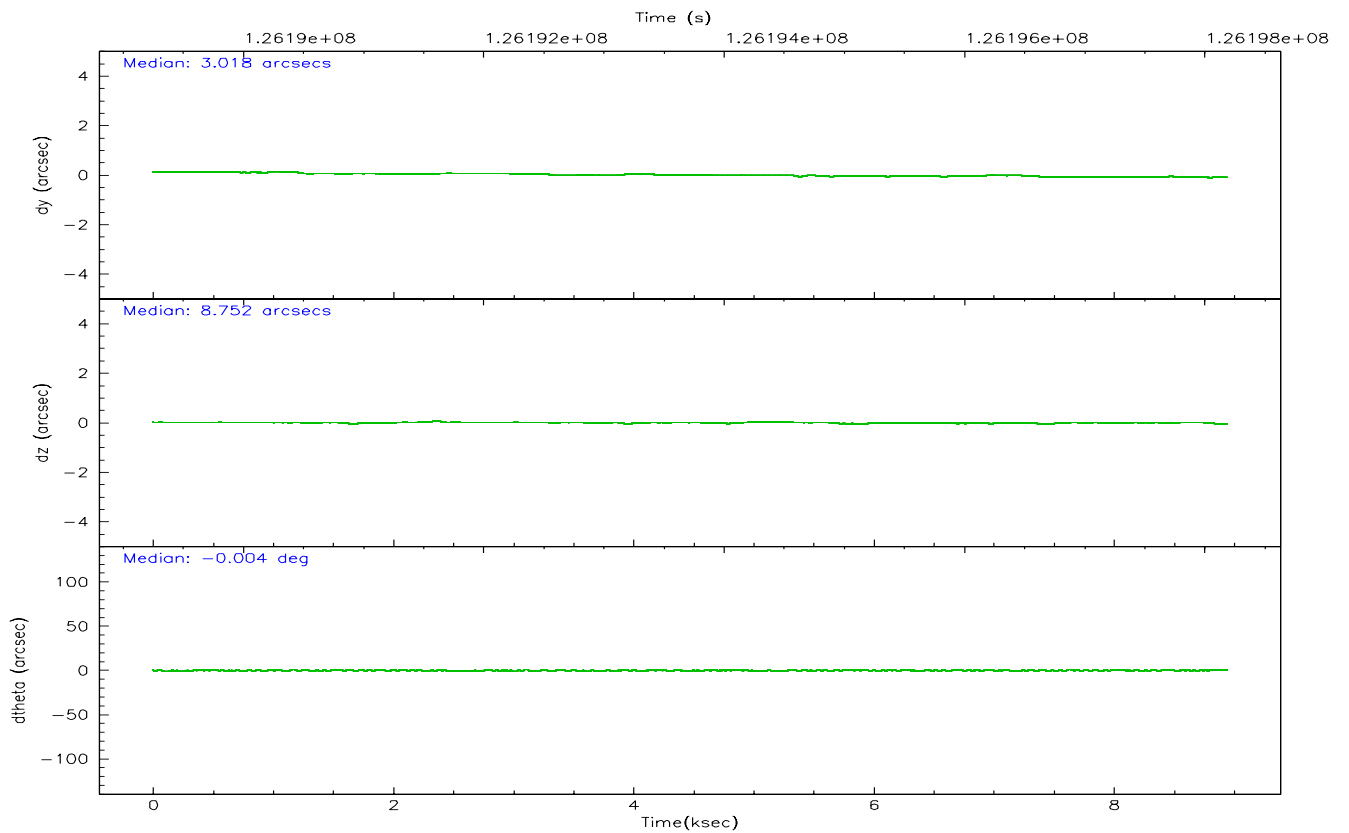
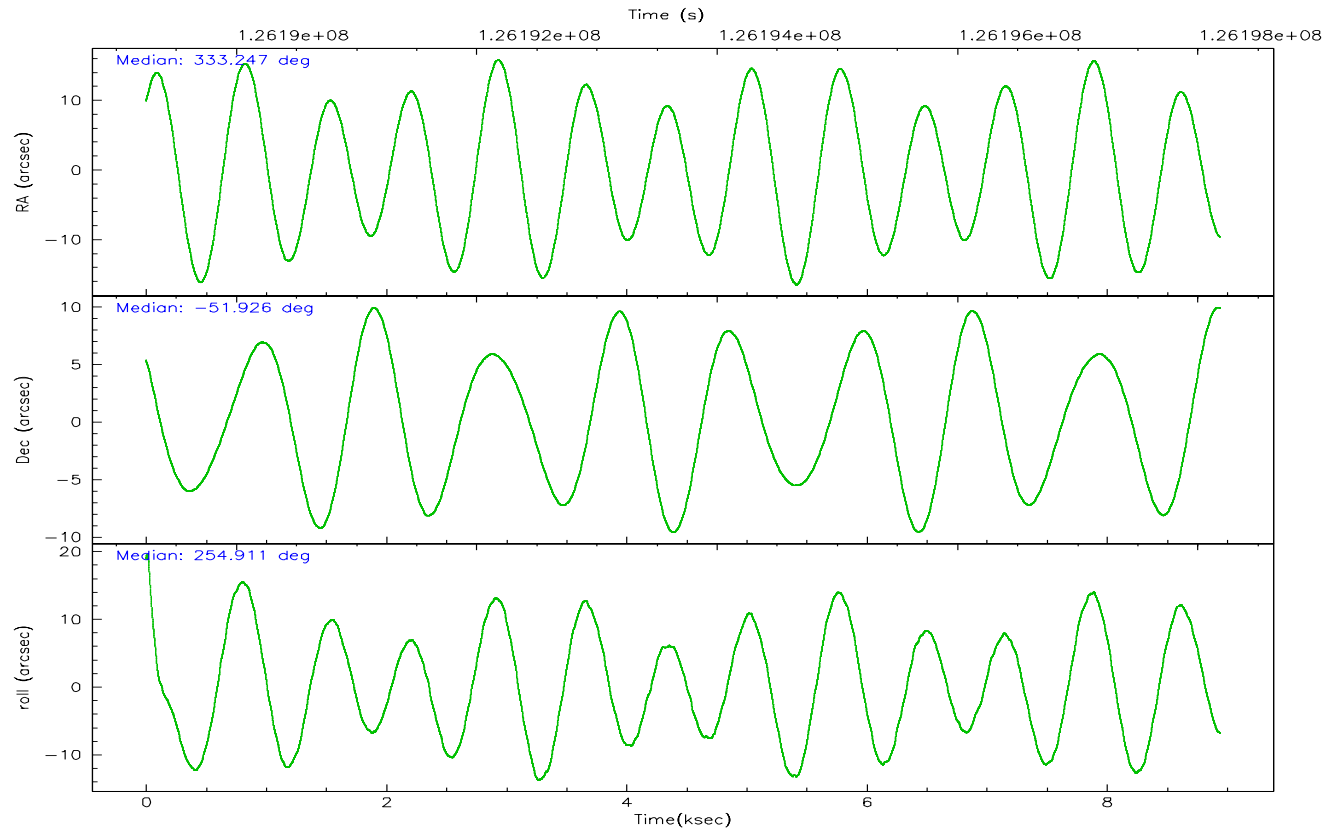
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	1529	624	4362	1481	1459	13057
	3%	1%	32%	3%	21%	15%
grade 1 events	19	9	225	21	25	116
	0%	0%	1%	0%	0%	0%
grade 2 events	892	251	2665	660	1879	5818
	2%	0%	19%	1%	27%	6%
grade 3 events	215	216	901	194	754	7785
	0%	0%	6%	0%	11%	9%
grade 4 events	328	167	883	199	774	6950
	0%	0%	6%	0%	11%	8%
grade 5 events	61	31	626	27	218	654
	0%	0%	4%	0%	3%	0%
grade 6 events	178	114	887	108	667	9383
	0%	0%	6%	0%	9%	11%
grade 7 events	39241	36774	3009	35221	1046	40313
	92%	96%	22%	92%	15%	47%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-235678	ACIS-235678	Obspar file type	PREDICTED	ACTUAL
Grating	LETG	LETG	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
Pointing RA	333.235173	333.247094808018	Subarray requested	NONE	NONE
Pointing Dec	-51.900072	-51.92635168153811	Alternating exposures requested	N	N
Pointing Roll	254.756302	254.9223121211434	Primary exposure time	0.000000	3.2
Window start time	126144064.184000	126144064.184000			
Window stop time	126230404.184000	126230404.184000			
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	126189437.184000	126189060.87268			
Observation start date	2001-12-31T12:36:13	2001-12-31T12:31:00			
Observation end time	126198187.184000	126199741.88561			
Observation end date	2001-12-31T15:02:03	2001-12-31T15:29:01			
Read mode	TIMED	TIMED			

2.3 Aspect



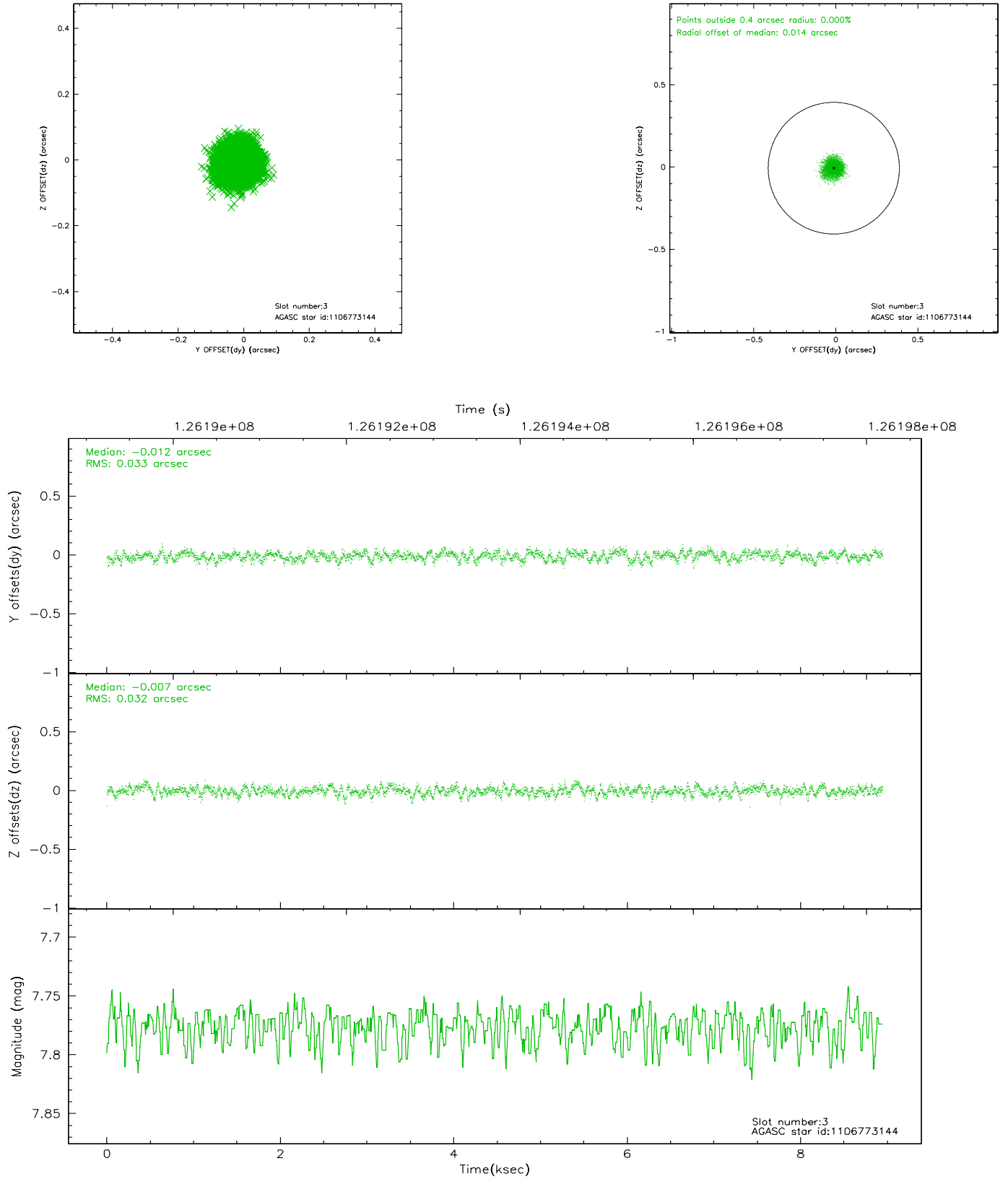


Slot Statistics

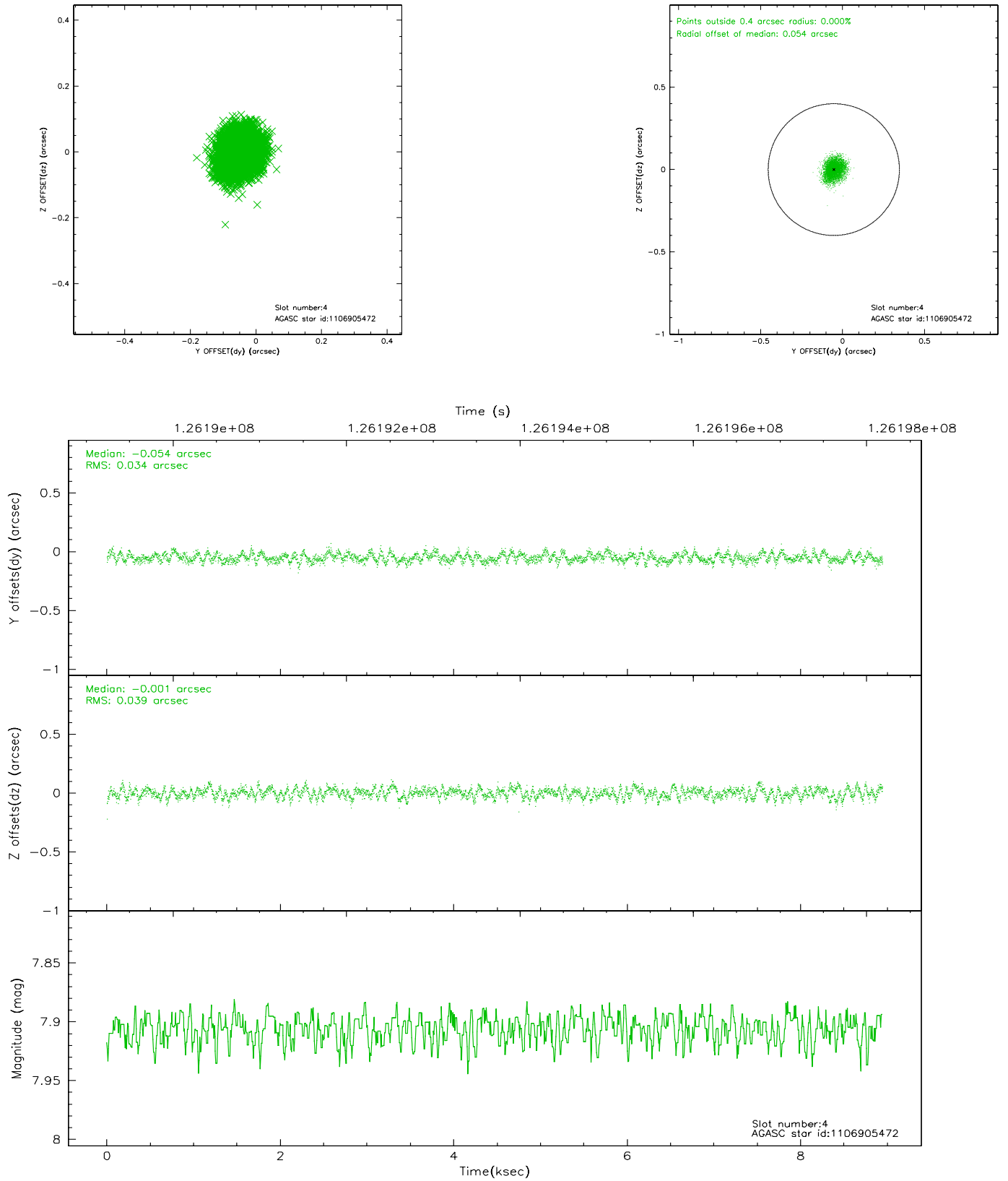
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	2182	-0.001	0.020	0.006	0.010	0.000000	0.000000	-755.66	-1729.95
1	FID	ACIS-S-4	7.20	2182	-0.080	-0.004	0.006	0.011	0.000000	0.000000	2157.25	177.89
2	FID	ACIS-S-5	7.24	2182	0.050	-0.006	0.007	0.012	0.000000	0.000000	-1807.67	172.24
3	GUIDE	1106773144	7.78	4364	-0.012	-0.007	0.049	0.078	333.747596	-52.196523	735.80	1371.79
4	GUIDE	1106905472	7.91	4363	-0.054	-0.001	0.055	0.087	333.959376	-52.158506	484.42	1789.32
5	GUIDE	1106774680	7.77	4363	0.056	-0.122	0.056	0.089	332.589342	-51.960089	591.63	-1323.84
6	GUIDE	1156324016	7.93	4363	0.111	0.133	0.046	0.075	333.825181	-52.701240	2449.13	2001.01
7	GUIDE	1106775976	8.78	4362	-0.104	-0.004	0.073	0.116	332.311048	-51.807893	233.96	-2068.83

2.4 Star Slots

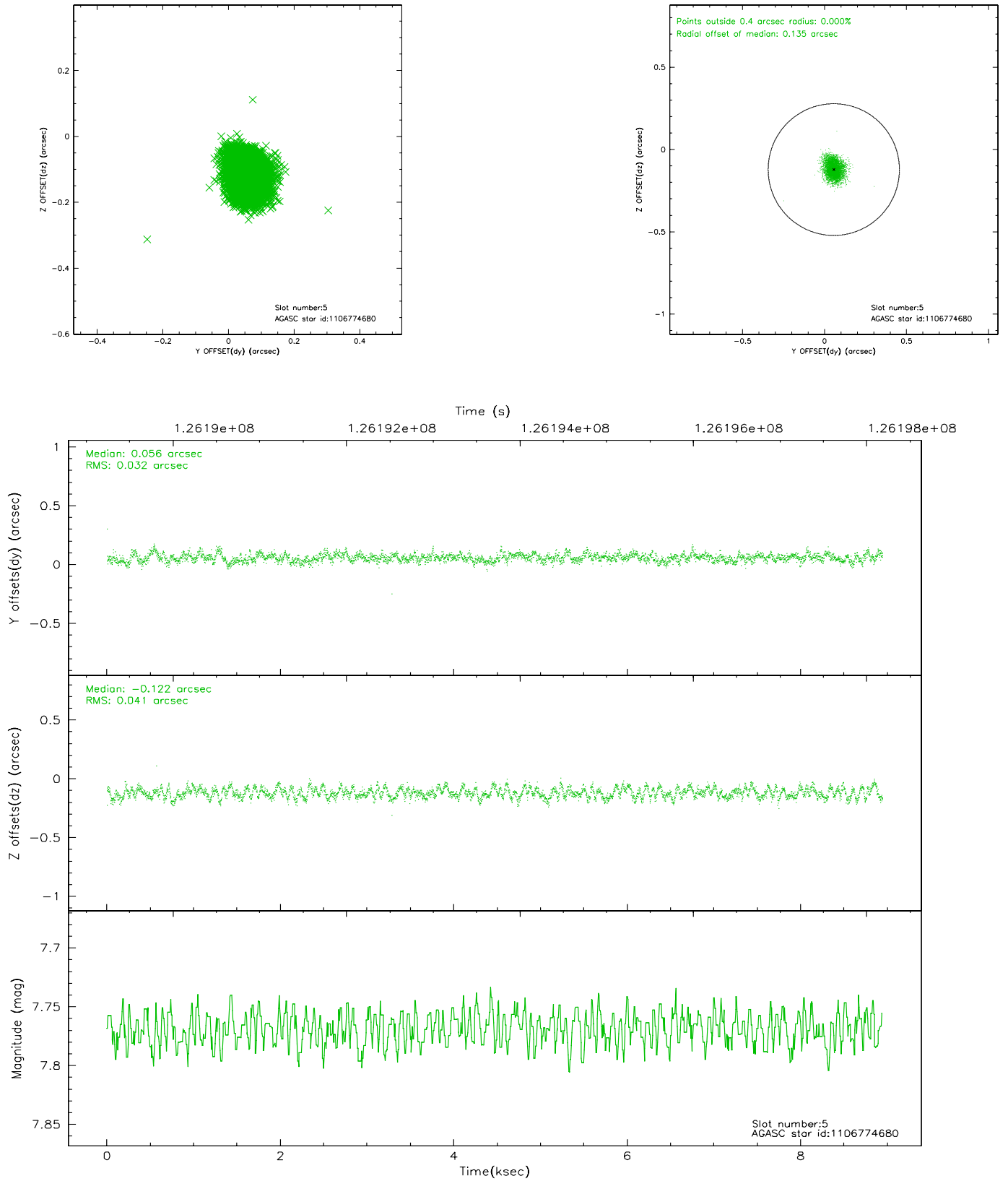
2.4.1 Slot 3



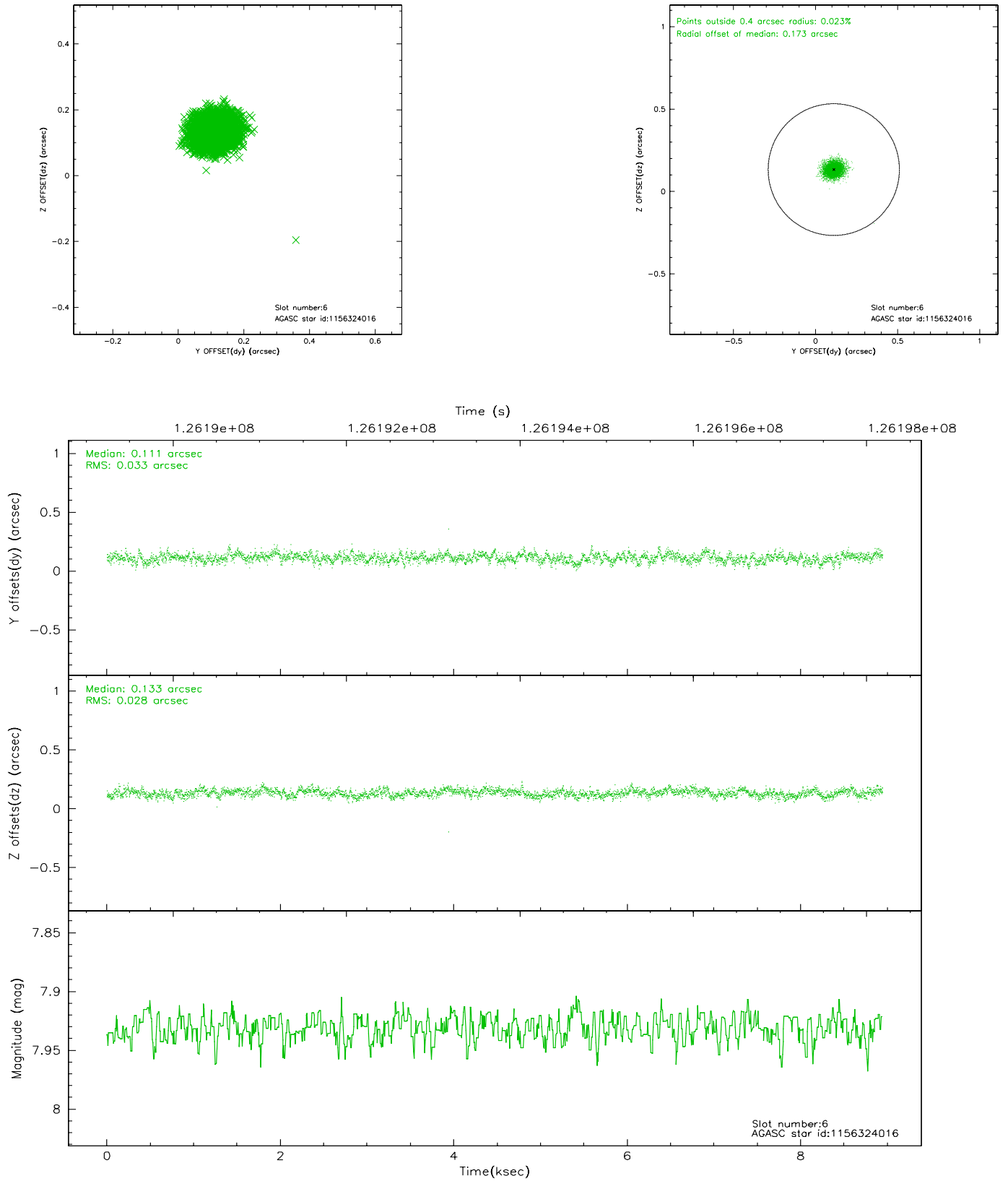
2.4.2 Slot 4



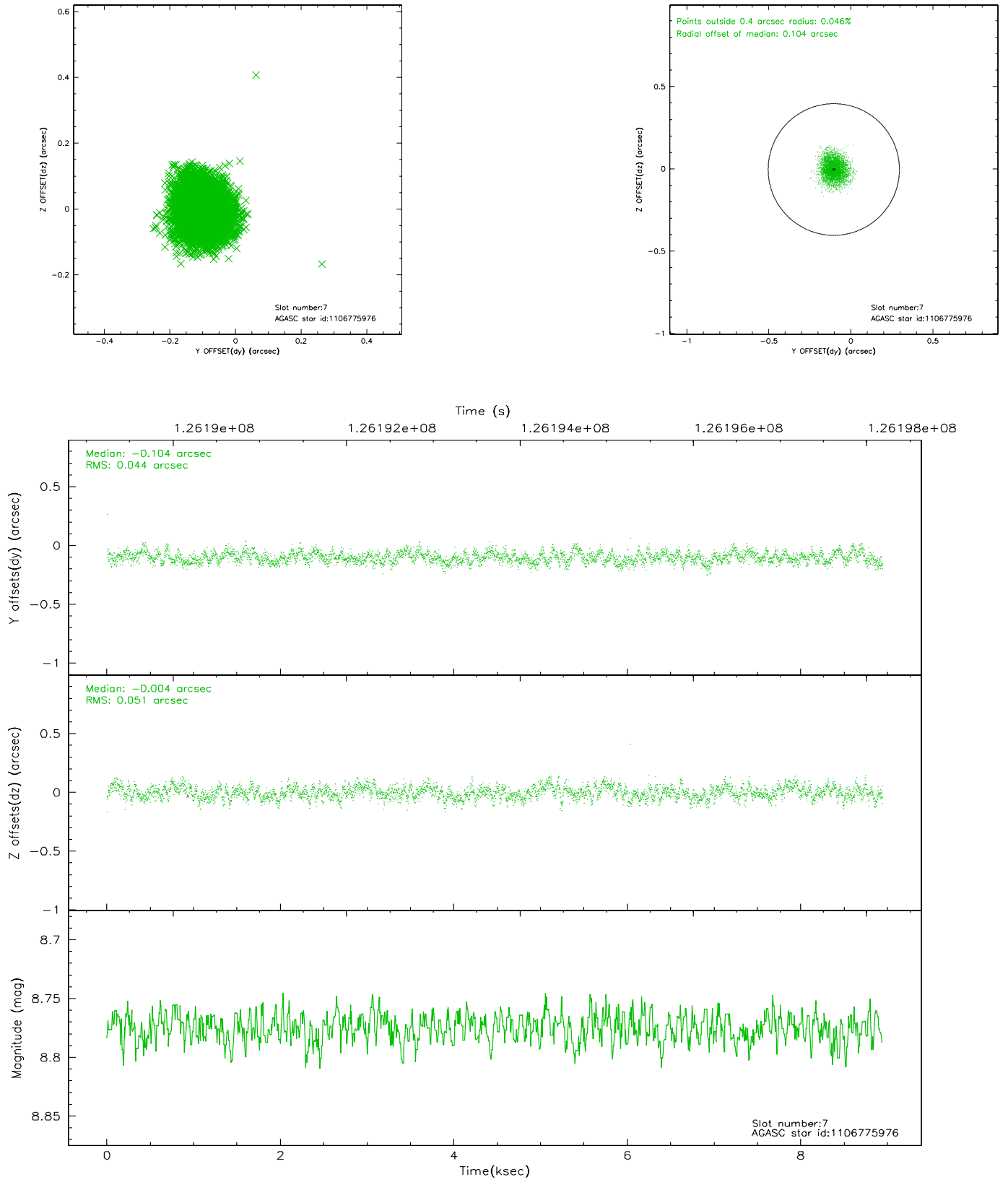
2.4.3 Slot 5



2.4.4 Slot 6

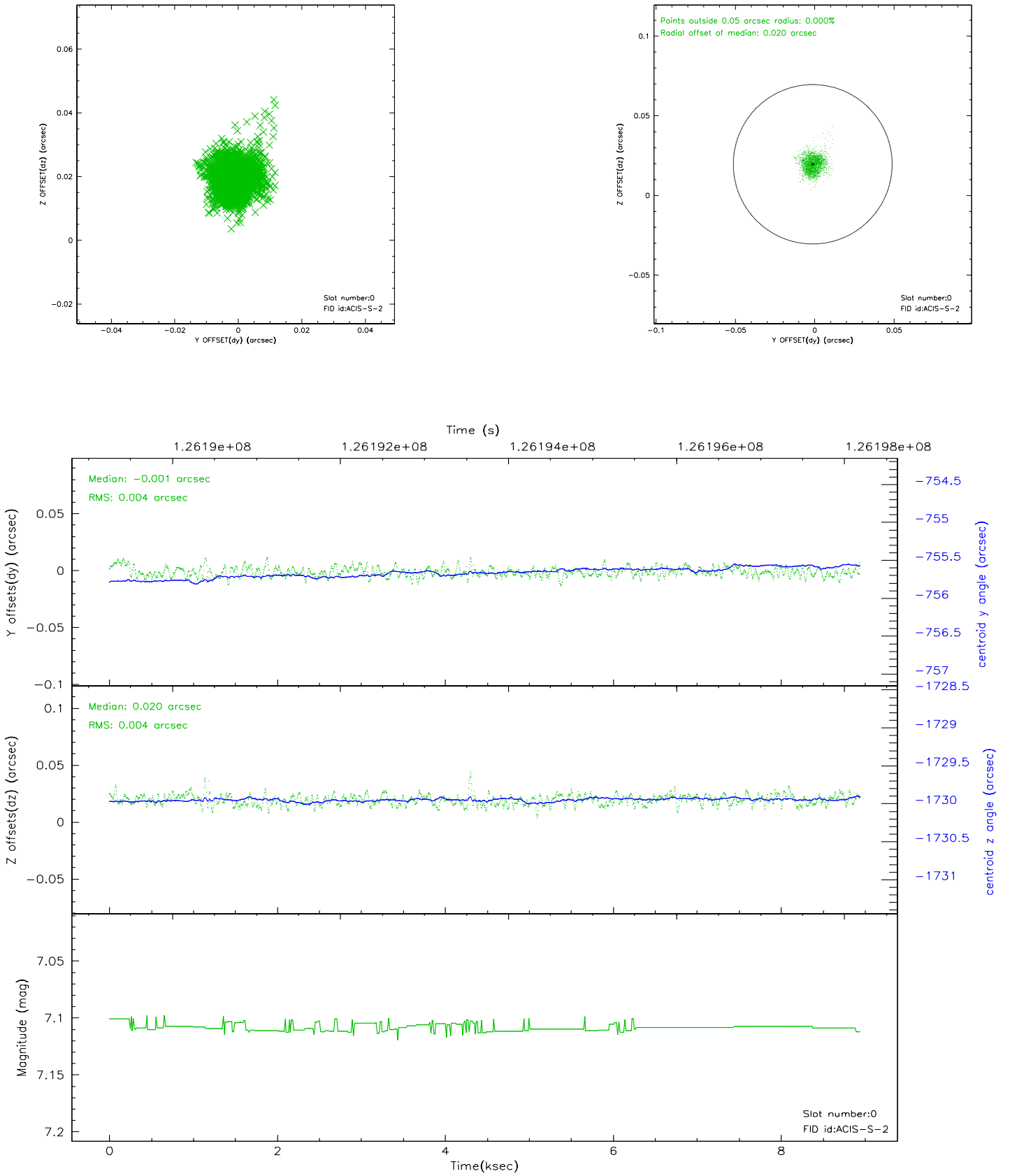


2.4.5 Slot 7

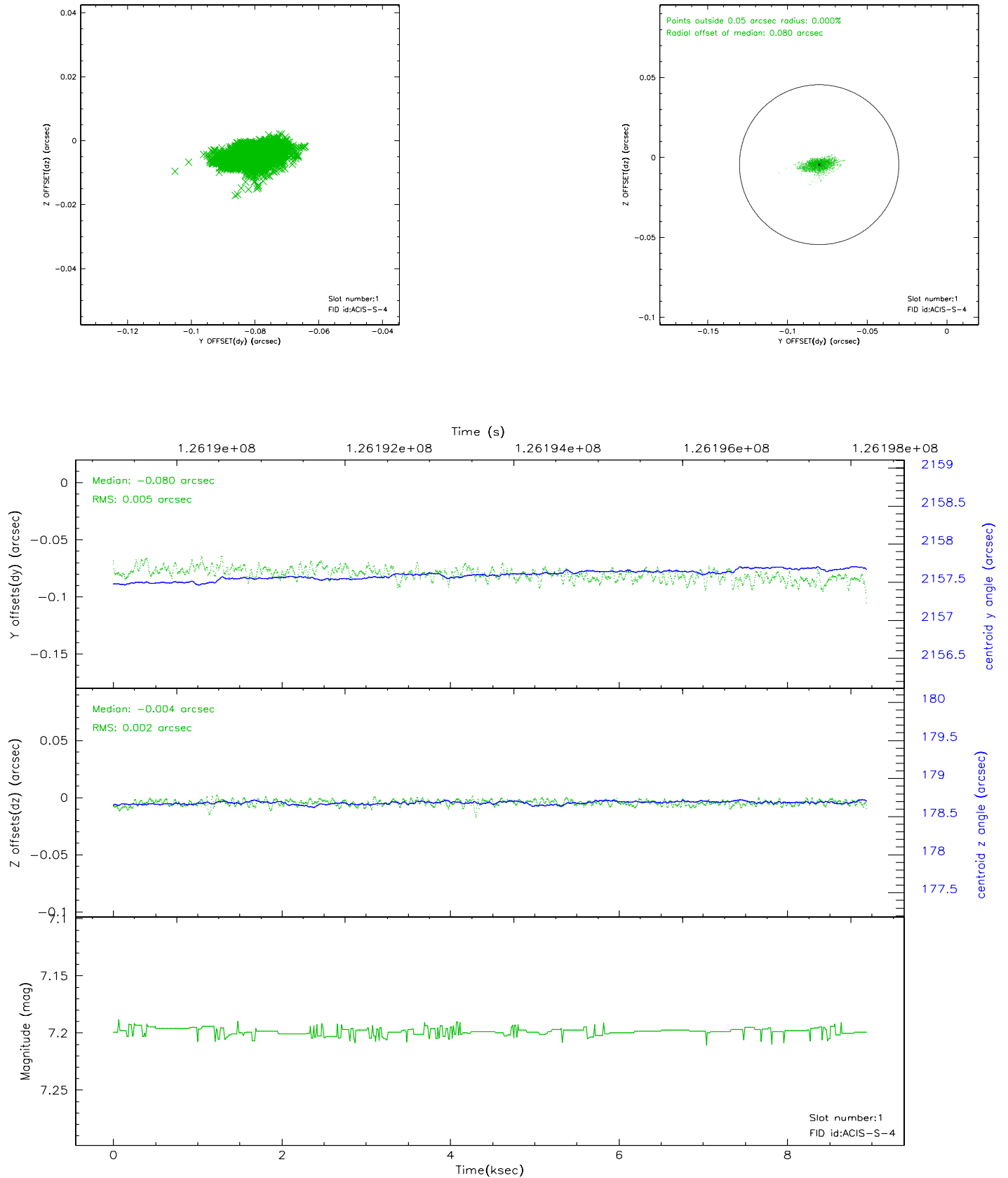


2.5 FID Slots

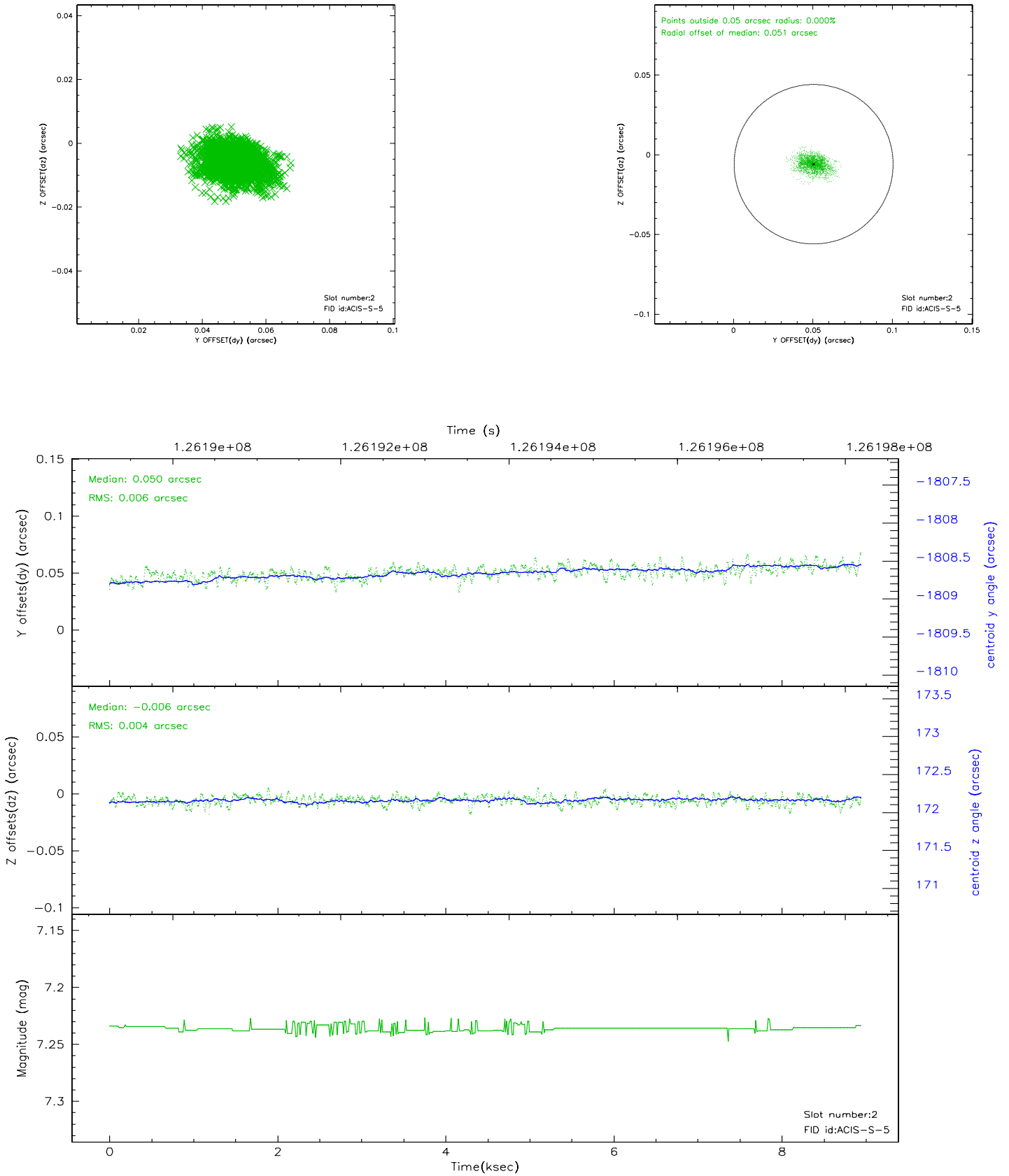
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

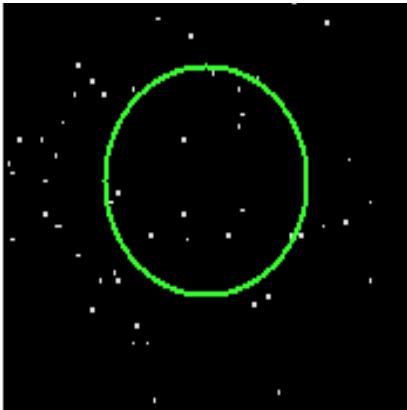


3 Gratings

3.1 LETG Arm



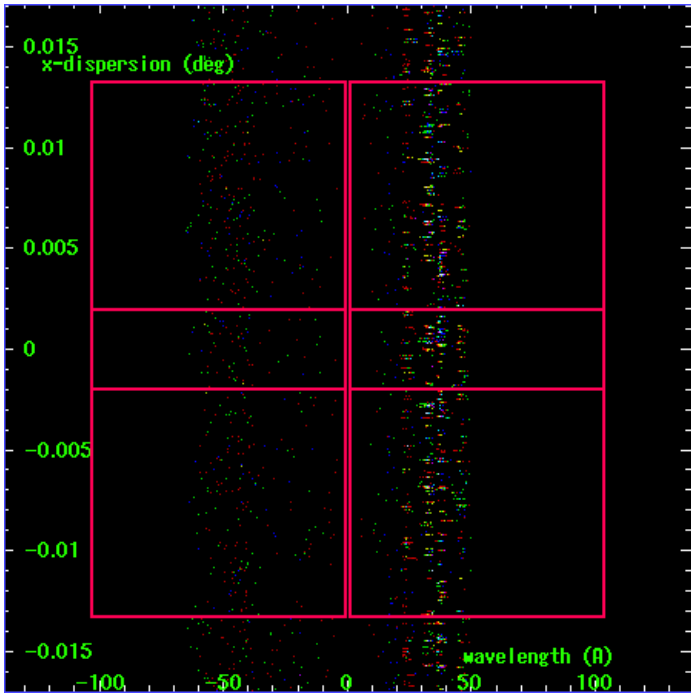
LETG Order Sort 123



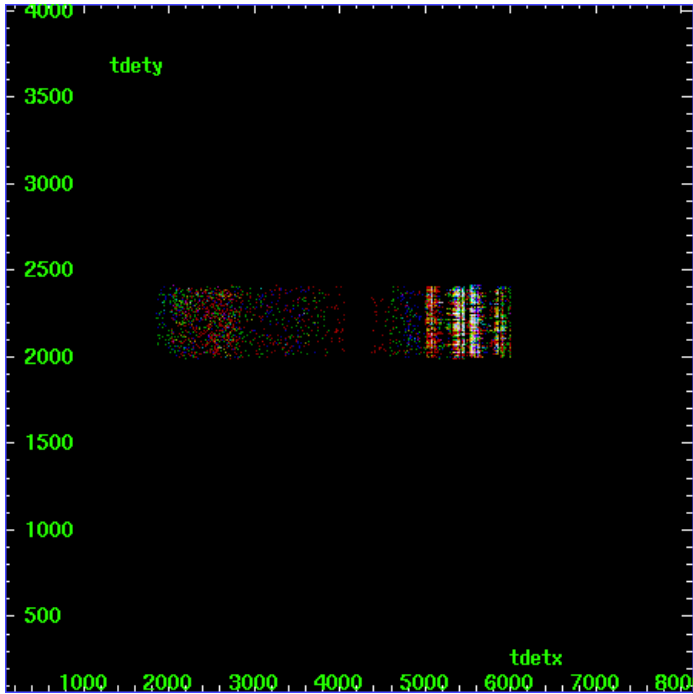
LETG Zero Order



LETG Order Sort ALL

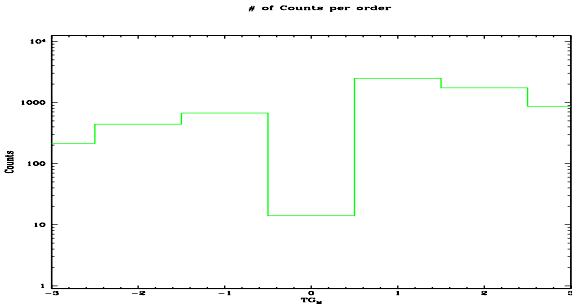


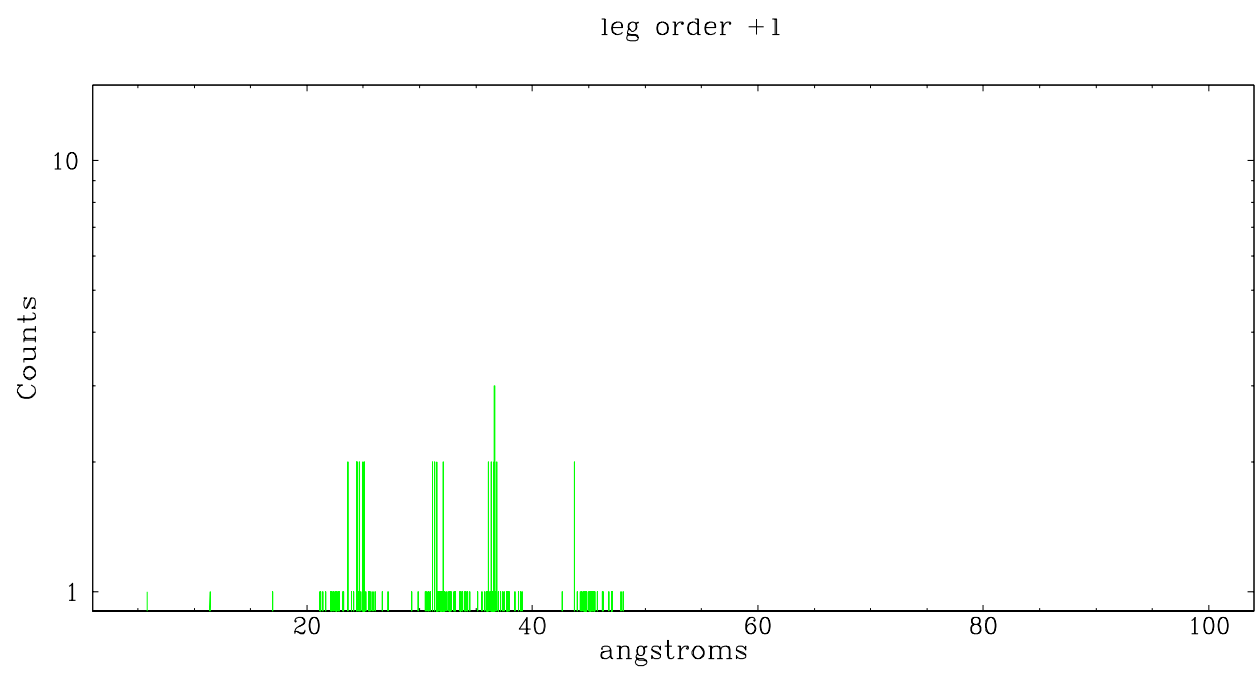
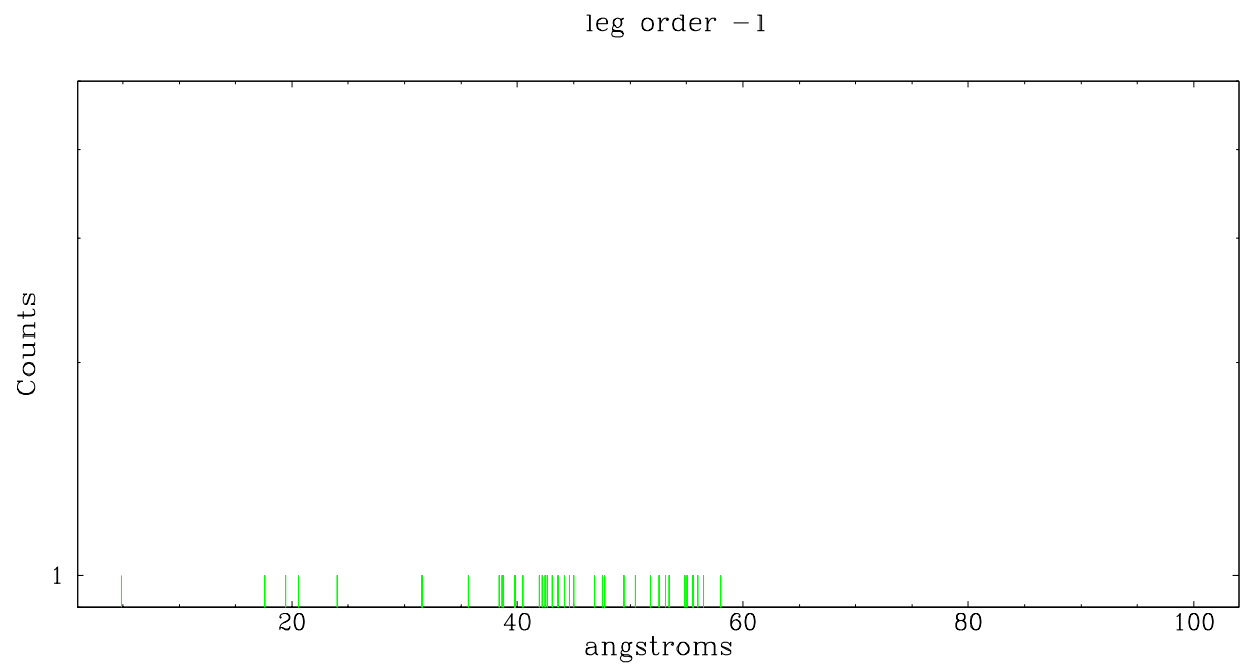
Spot Image LETG



Full Detector LETG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	214	441	673	14	2482	1739	869





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2007.01.31
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.512

A.2 Comments

Moving target. Energy filter allowed only events with energies 0.1 to 2.0 keV to be recorded. LETG grating used. Spectral extraction provided with this processing was done without benefit of SAO_freeze software, so the spectrum is meaningless. Streak on chip 8 is not fully removed with pipeline processing. Additional analysis procedures by the user may improve the uniformity of chip 8.