

V&V Reference Report

L2 ASCDS Version : 7.6.10

Observation 2520 - L2 Version 001
Chandra X-Ray Center

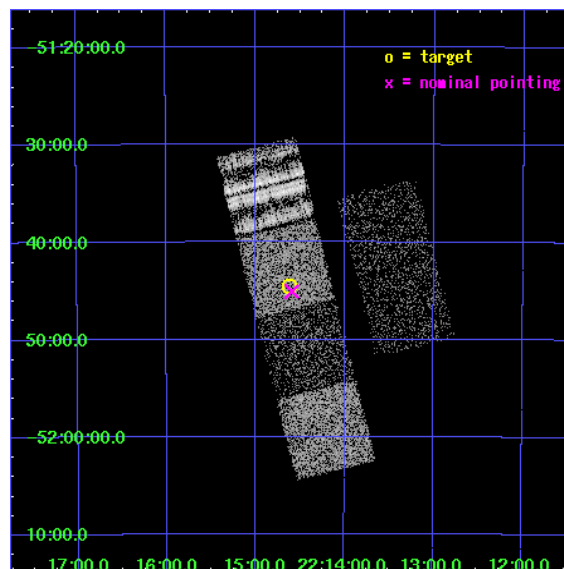
L2 Processing Date : Jan 16 2007

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1 Front

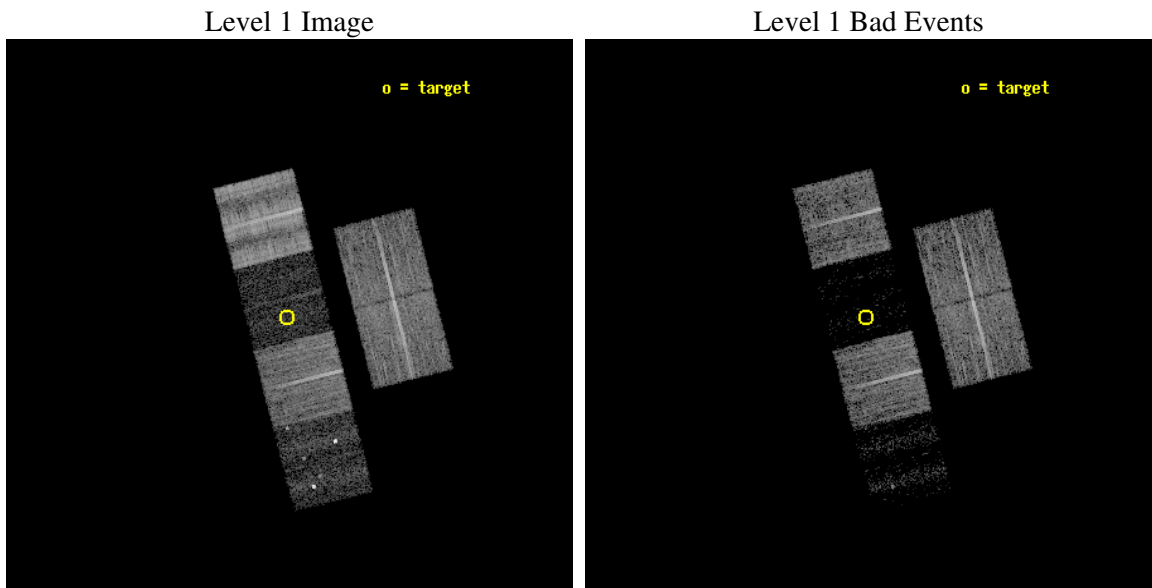
seq_num	100030
obs_id	2520
title	ACIS-S LOW ENERGY SPECTROSCOPY AND PHOTOMETRIC IMAGING OF CHARGE EXCHANGE X-RAY EMISSION FROM COMET C/LINEAR WM1 (2000)
observer	Dr. Carey Lisse
object	C/LINEAR WM1 (2000)
dtcycle	0
cycle	P
ra_targ	333.65424
dec_targ	-51.74252
ra_nom	333.6478453683
dec_nom	-51.751376075424
roll_nom	255.78980456525
revision	2
ontime	8806.4000082016
livetime	8694.8880687203
ontime2	8806.4000082016
ontime3	8806.4000082016
ontime5	8806.4000082016
ontime6	8806.4000082016
ontime7	8806.4000082016
ontime8	8806.4000082016
l2events	26622



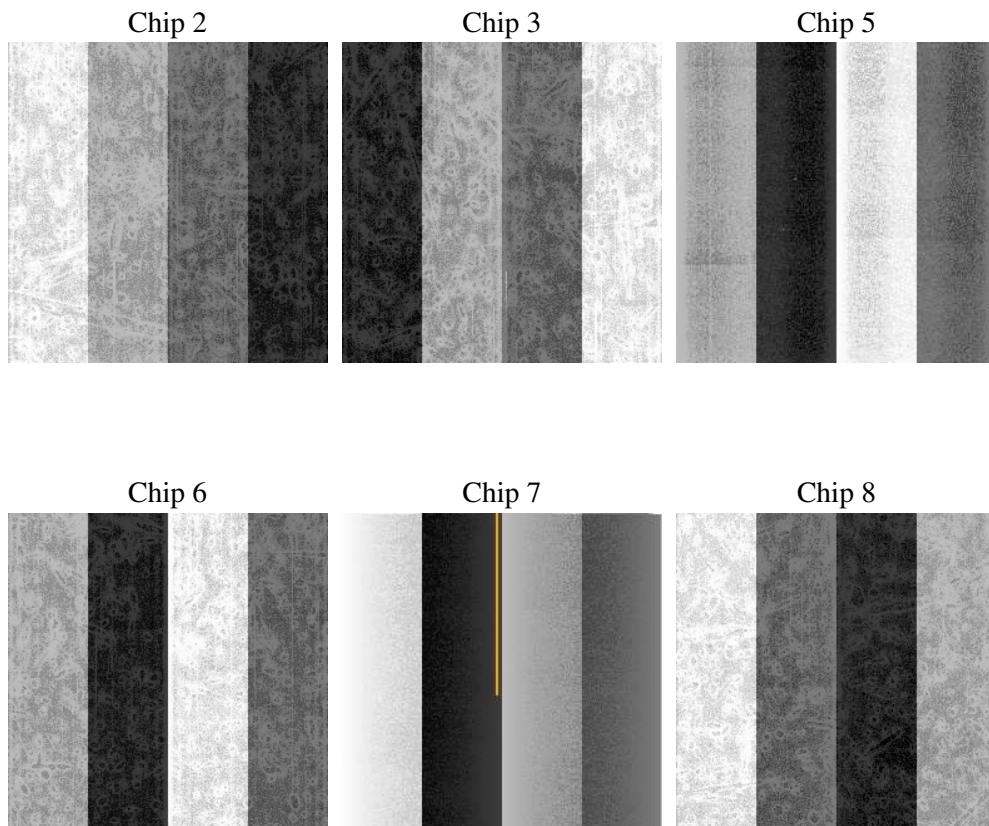
2 OBI

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	2007-01-17T02:27:08
revision	2

sched_exp_time	8750.000000
ontime	8806.4000082016
ontime2	8806.4000082016
ontime3	8806.4000082016
ontime5	8806.4000082016
ontime6	8806.4000082016
ontime7	8806.4000082016
ontime8	8806.4000082016
l1events	213171

2.1.4 Events

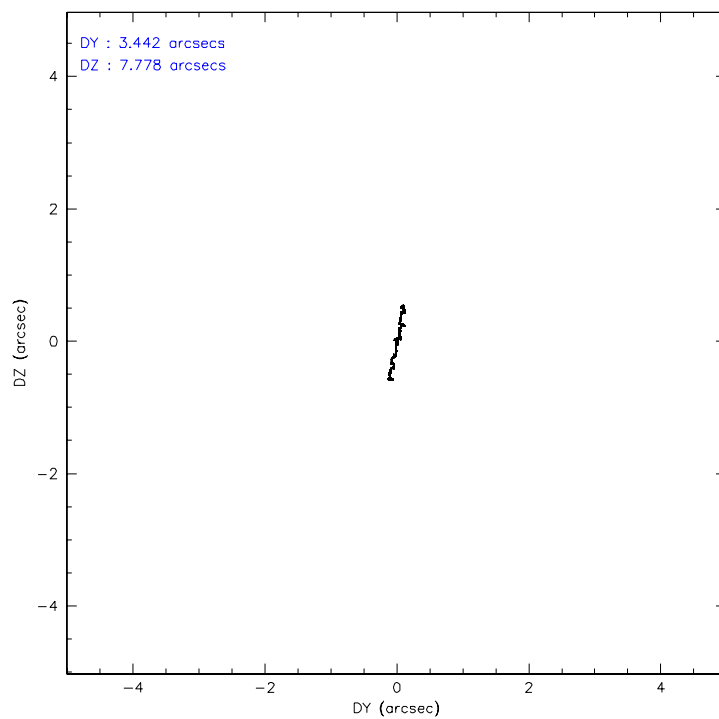
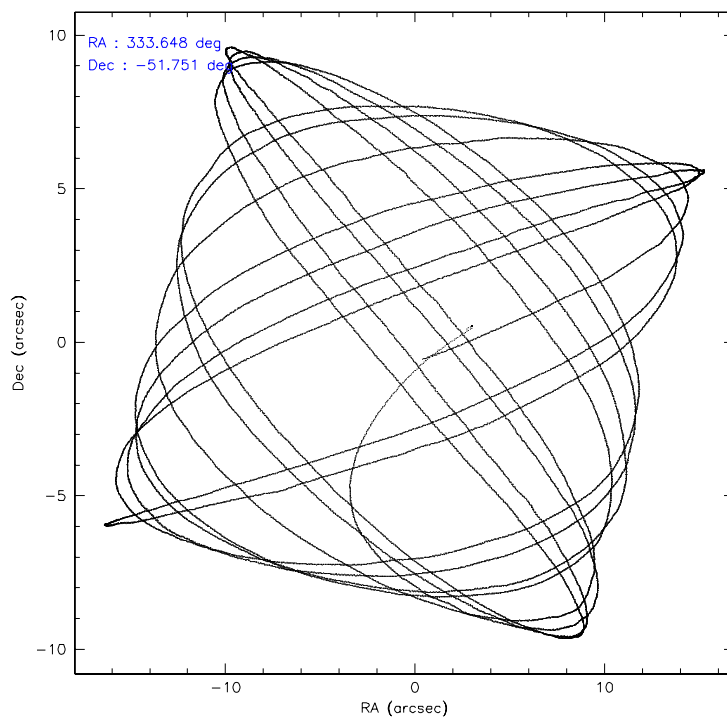
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	43371	37778	13312	40110	7193	71407
rejected events	40792	36455	3260	37563	1313	36205
rejected %	94%	96%	24%	93%	18%	50%

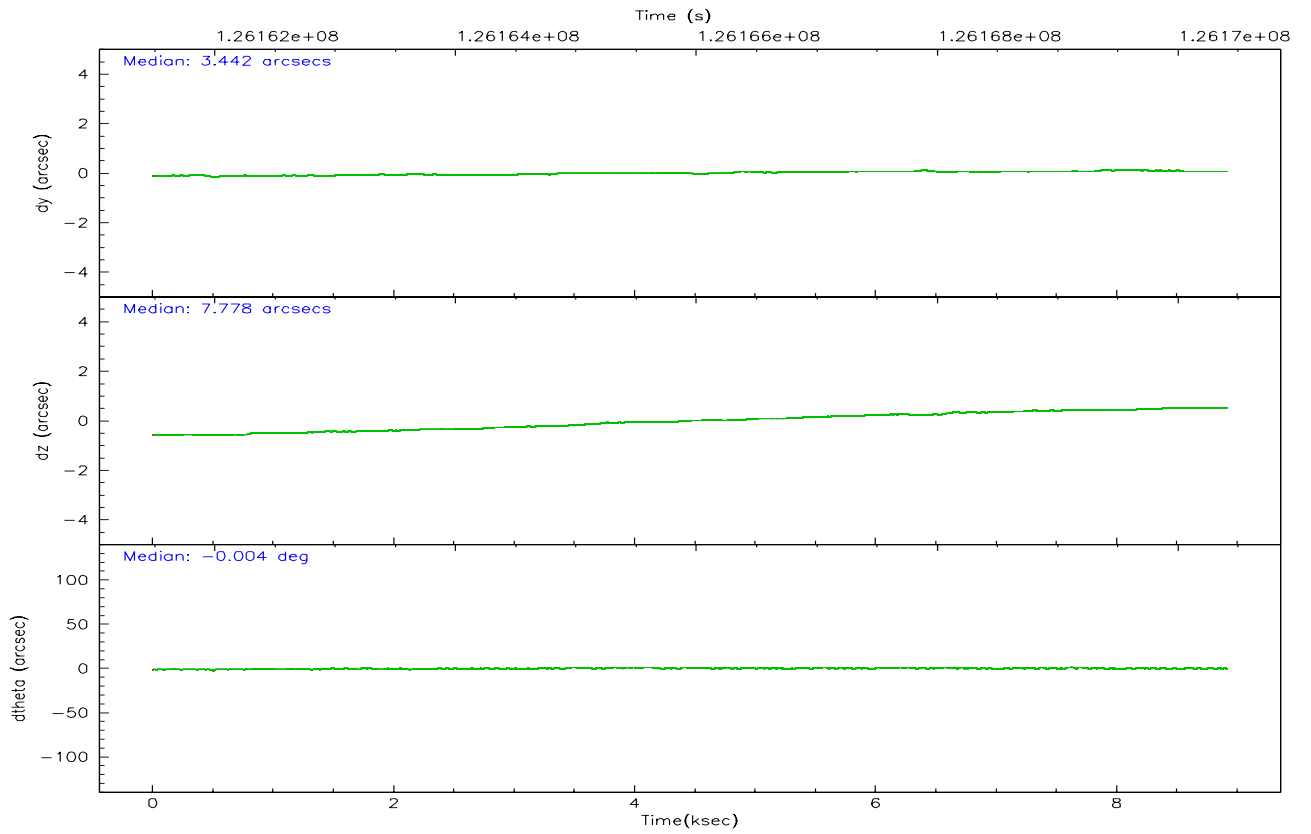
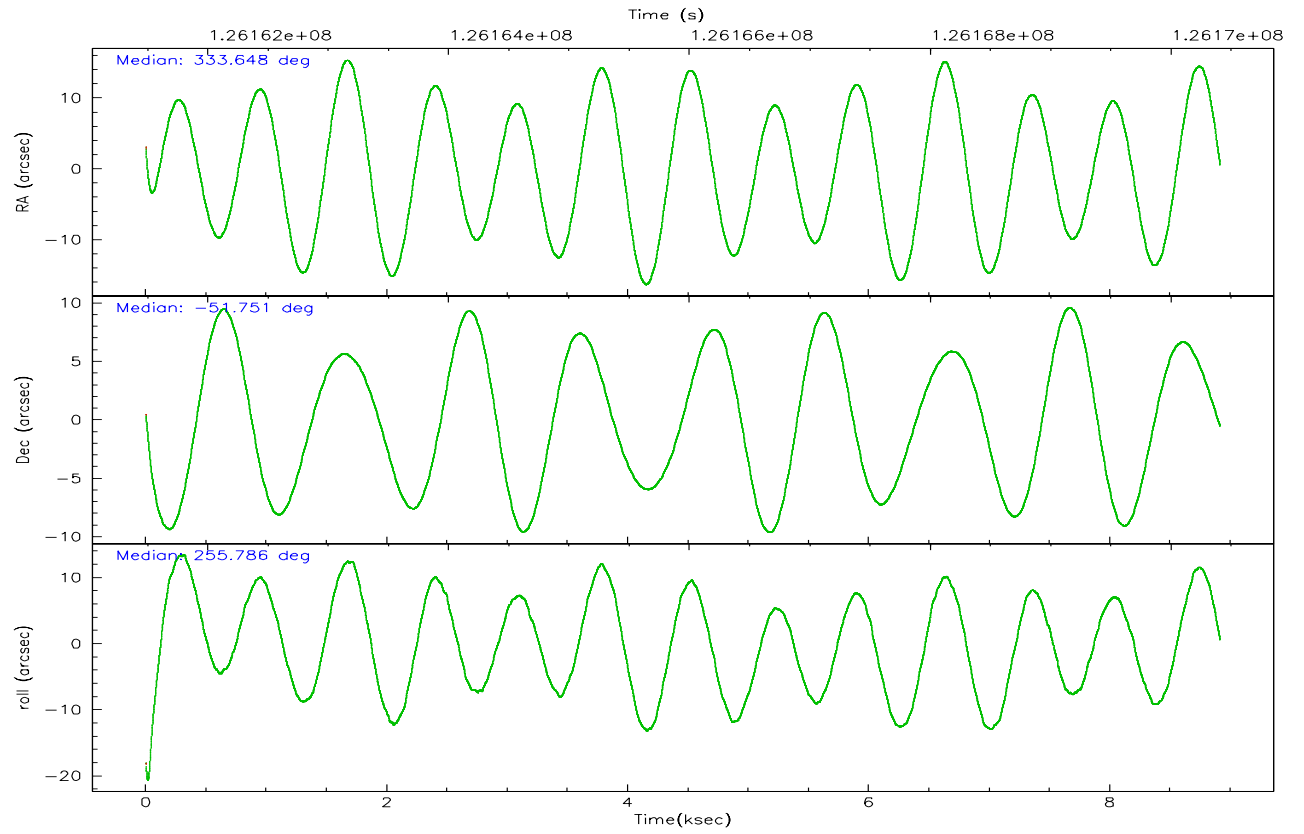
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	1245	605	4731	1486	1707	11394
	2%	1%	35%	3%	23%	15%
grade 1 events	19	11	155	16	33	108
	0%	0%	1%	0%	0%	0%
grade 2 events	651	170	2999	502	1792	4611
	1%	0%	22%	1%	24%	6%
grade 3 events	231	253	810	230	803	6548
	0%	0%	6%	0%	11%	9%
grade 4 events	289	189	821	234	801	5698
	0%	0%	6%	0%	11%	7%
grade 5 events	57	35	478	33	217	501
	0%	0%	3%	0%	3%	0%
grade 6 events	164	107	698	97	779	6952
	0%	0%	5%	0%	10%	9%
grade 7 events	40715	36408	2620	37512	1061	35595
	93%	96%	19%	93%	14%	49%

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	333.635285	333.6478453683039	Subarray requested	NONE	NONE
Pointing Dec	-51.725238	-51.75137607542365	Alternating exposures requested	N	N
Pointing Roll	255.623348	255.7898045652486	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	126161657.184000	126160515.64653			
Observation start date	2001-12-31T04:53:13	2001-12-31T04:35:15			
Observation end time	126170407.184000	126170540.65943			
Observation end date	2001-12-31T07:19:03	2001-12-31T07:22:20			
Read mode	TIMED	TIMED			

2.3 Aspect



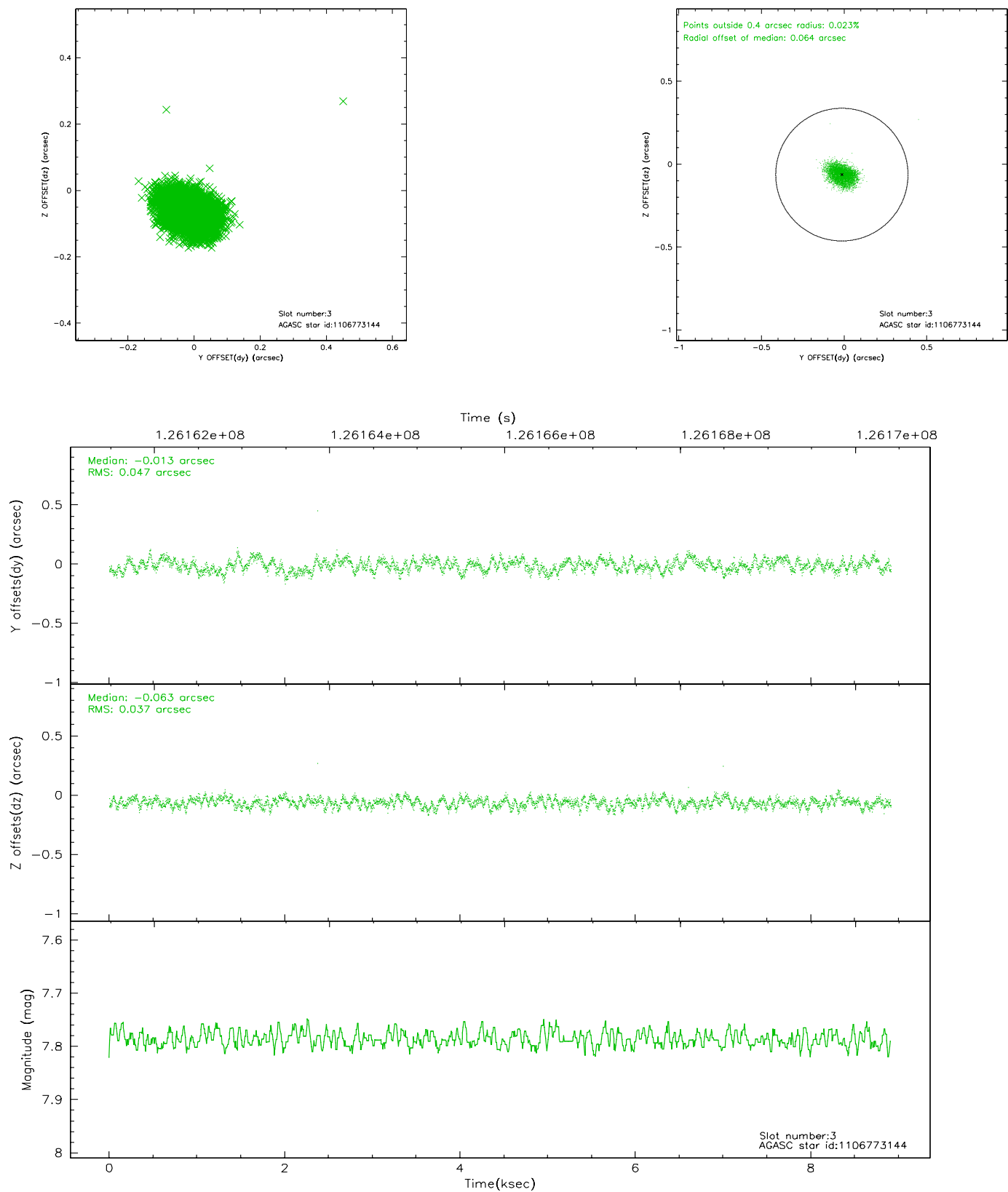


Slot Statistics

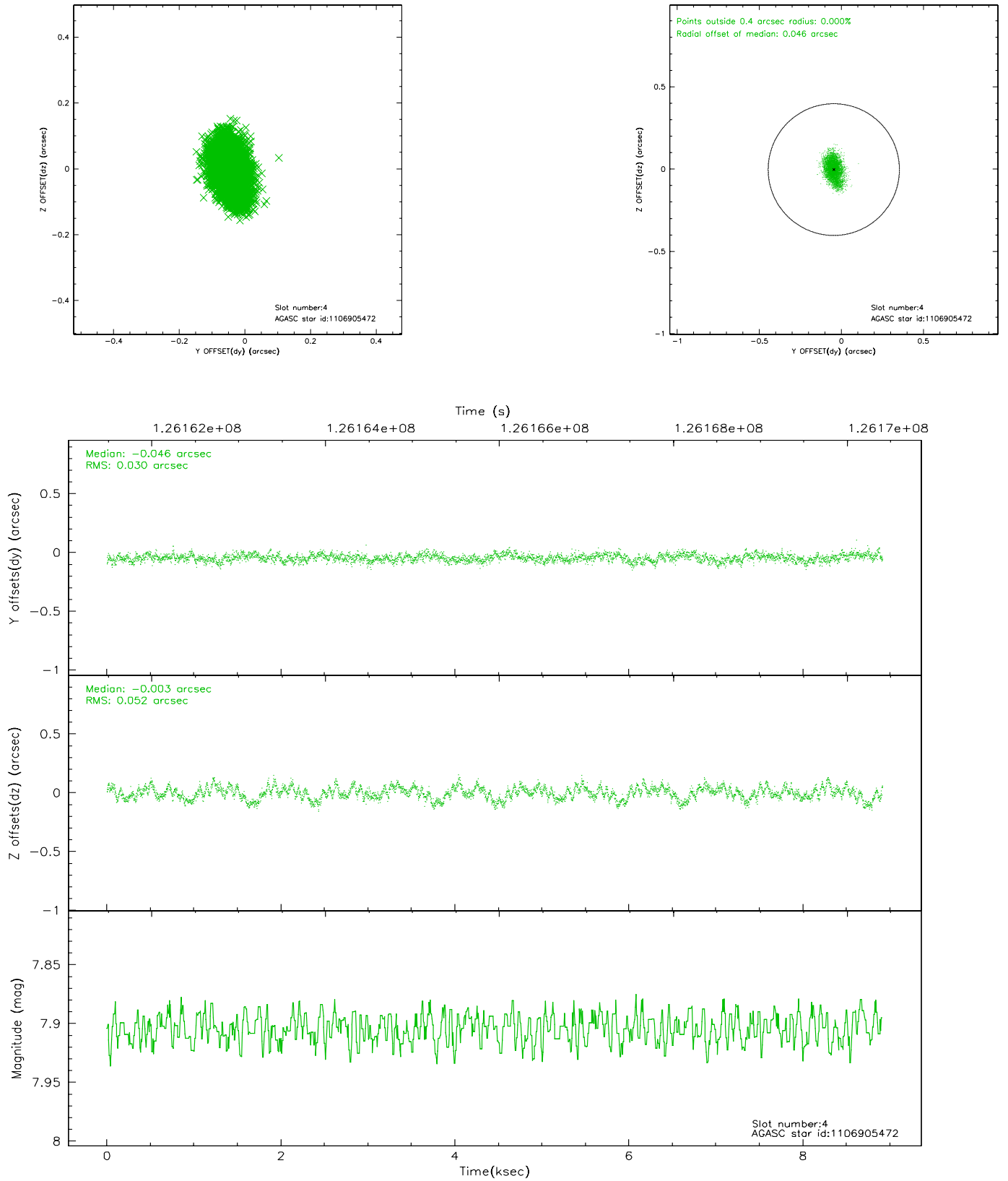
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.12	2174	0.007	0.017	0.008	0.014	0.000000	0.000000	-756.09	-1728.92
1	FID	ACIS-S-4	7.20	2174	-0.063	-0.008	0.005	0.010	0.000000	0.000000	2156.84	178.90
2	FID	ACIS-S-5	7.24	2175	0.024	-0.000	0.008	0.014	0.000000	0.000000	-1808.12	173.28
3	GUIDE	1106773144	7.79	4348	-0.013	-0.063	0.063	0.099	333.747596	-52.196523	1581.89	659.89
4	GUIDE	1106905472	7.90	4350	-0.046	-0.003	0.062	0.105	333.959376	-52.158506	1334.80	1079.75
5	GUIDE	1106774680	7.78	4350	-0.004	-0.018	0.055	0.086	332.589342	-51.960089	1411.61	-2034.26
6	GUIDE	1106907400	9.06	4348	-0.060	-0.043	0.066	0.106	334.001770	-51.303937	-1671.94	420.79
7	GUIDE	1106903912	9.50	4347	0.121	0.129	0.105	0.163	334.390785	-52.413614	1996.37	2223.28

2.4 Star Slots

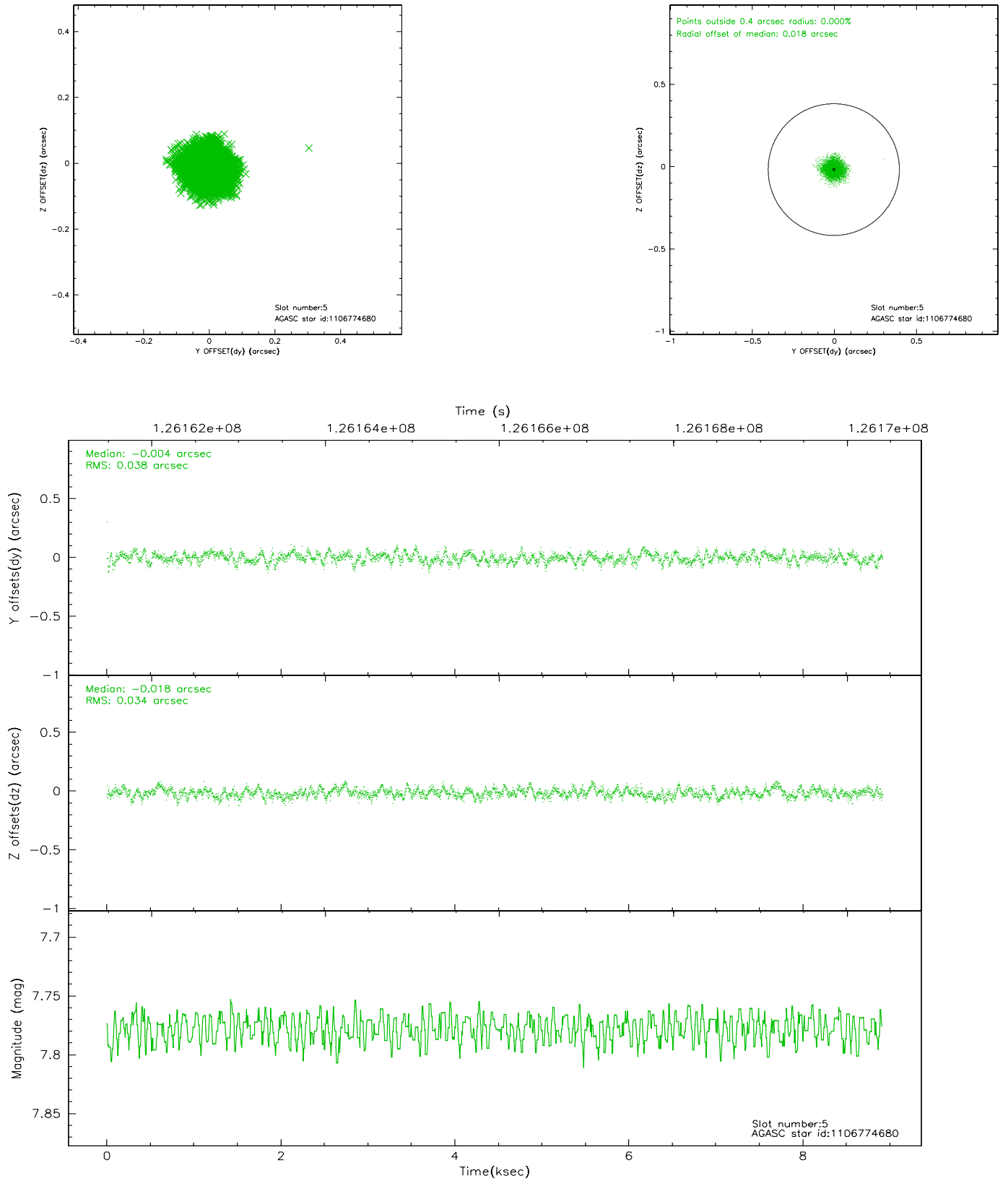
2.4.1 Slot 3



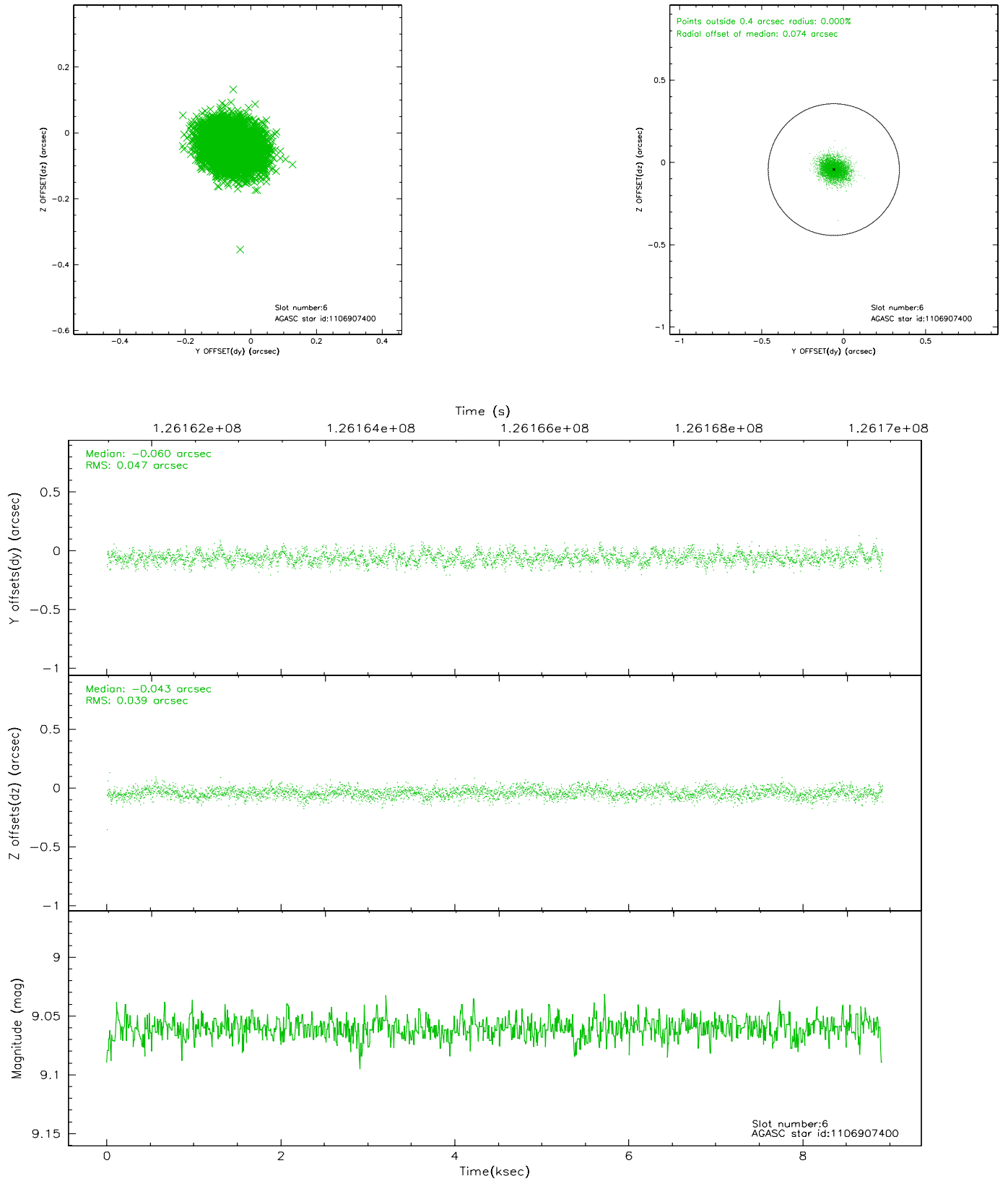
2.4.2 Slot 4



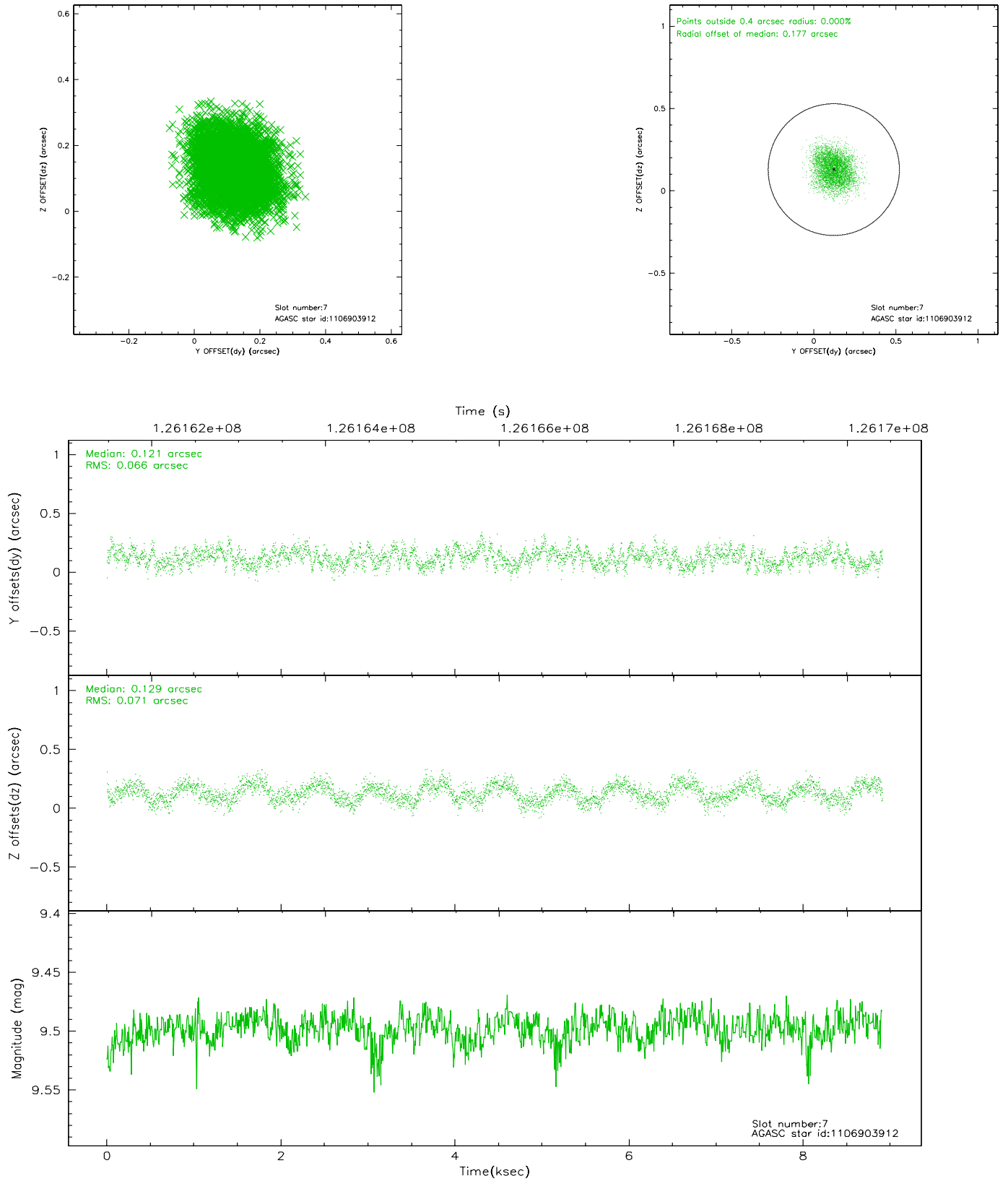
2.4.3 Slot 5



2.4.4 Slot 6

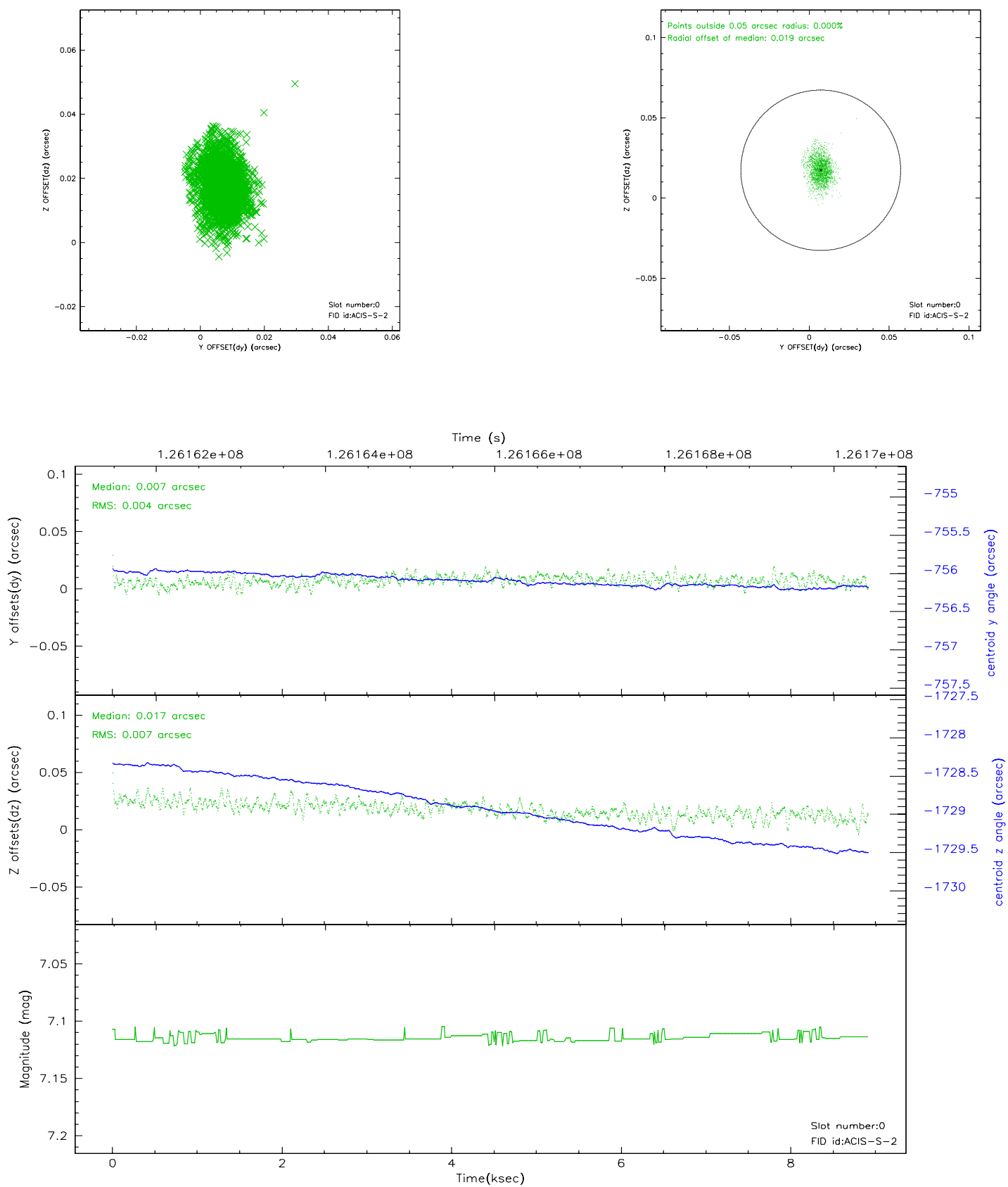


2.4.5 Slot 7

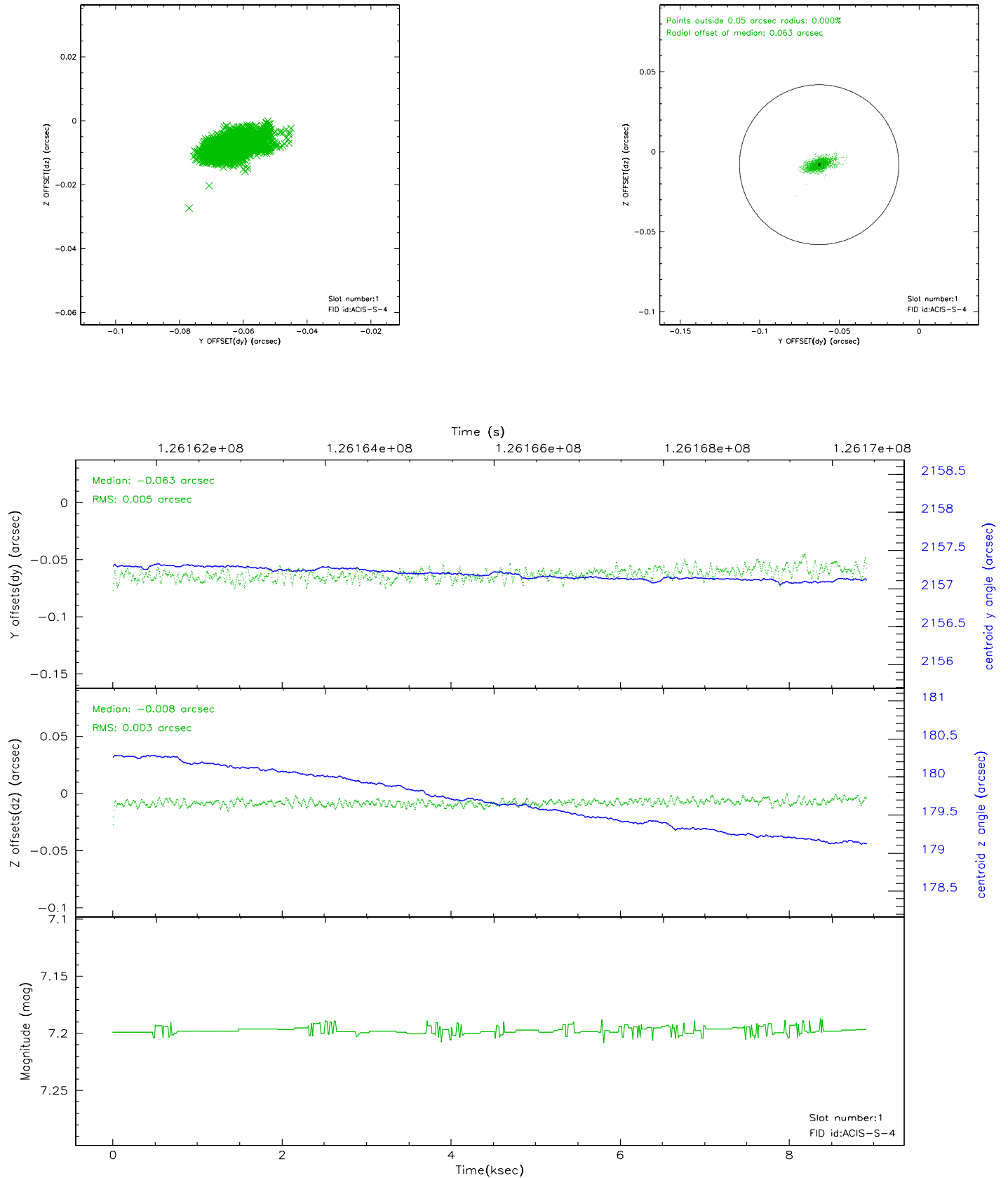


2.5 FID Slots

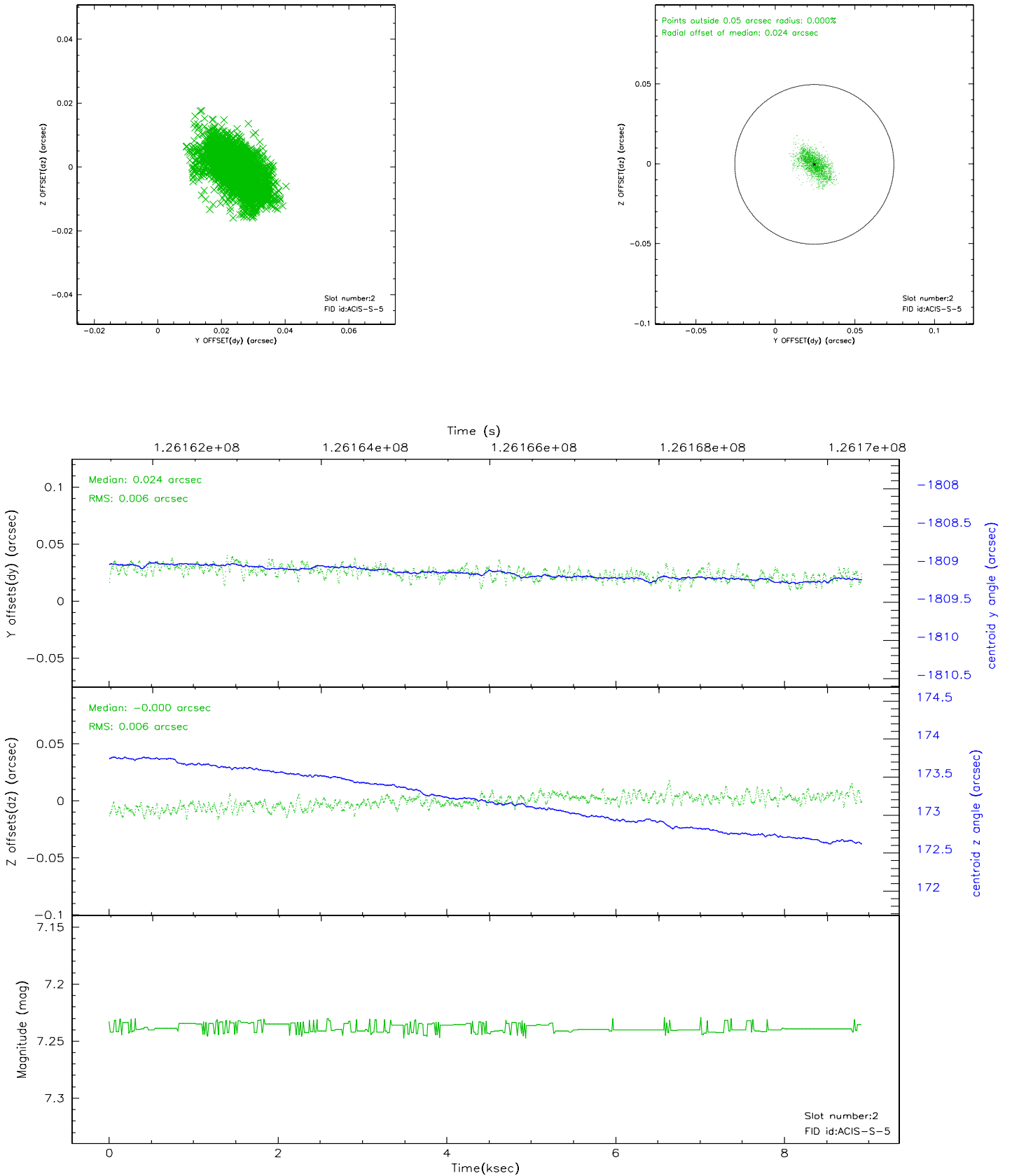
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

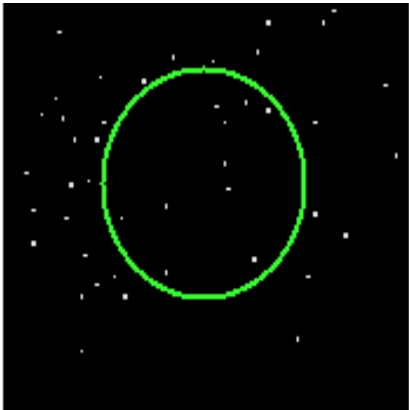


3 Gratings

3.1 LETG Arm



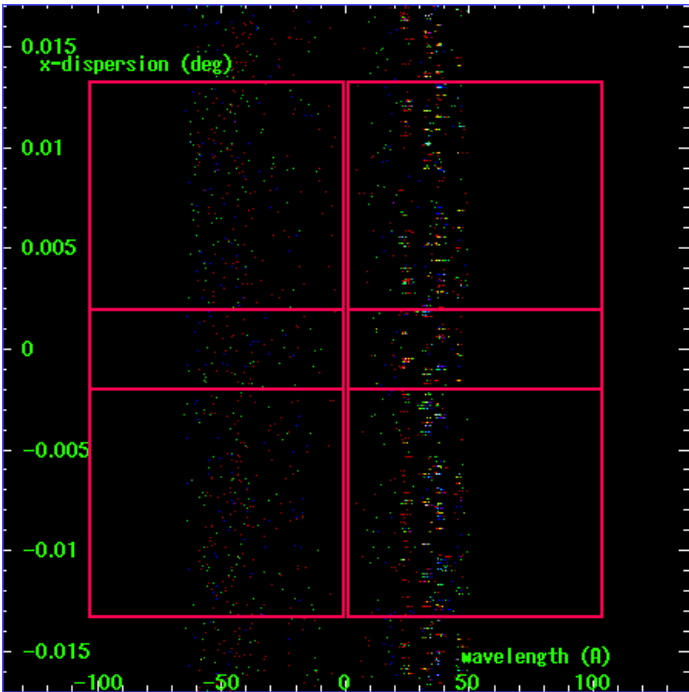
LETG Order Sort 123



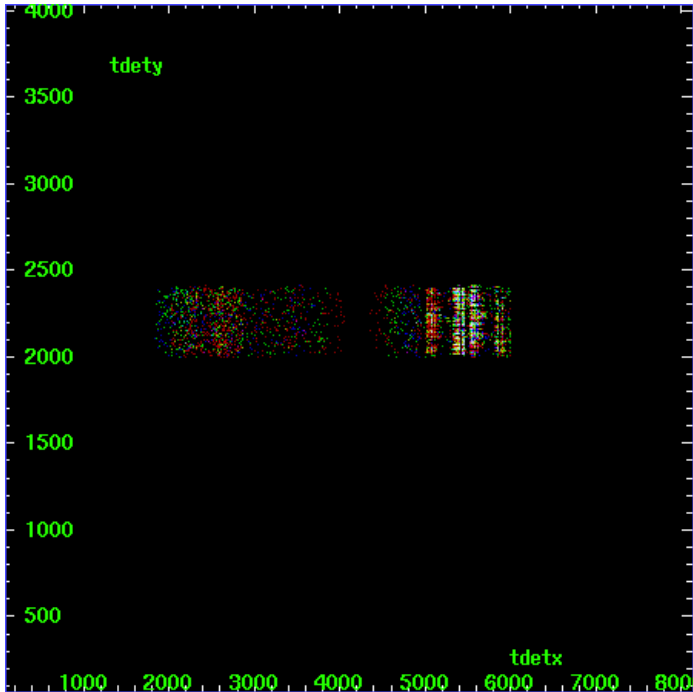
LETG Zero Order



LETG Order Sort ALL

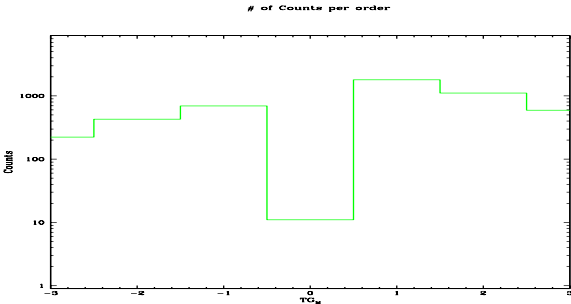


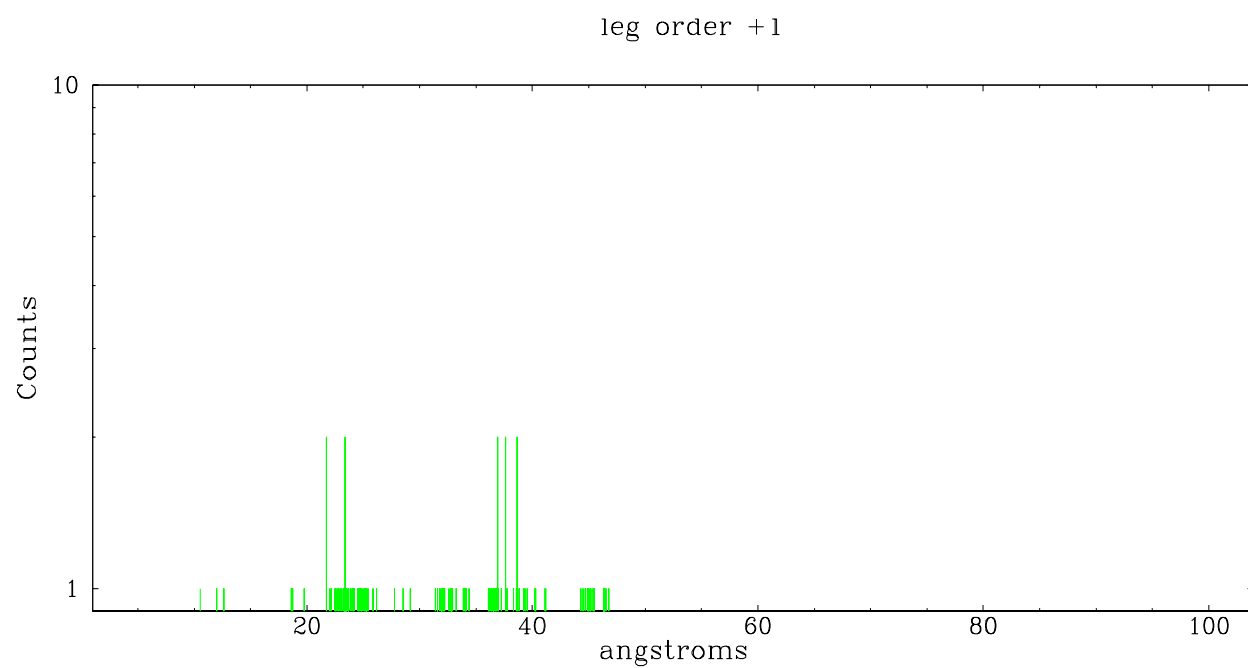
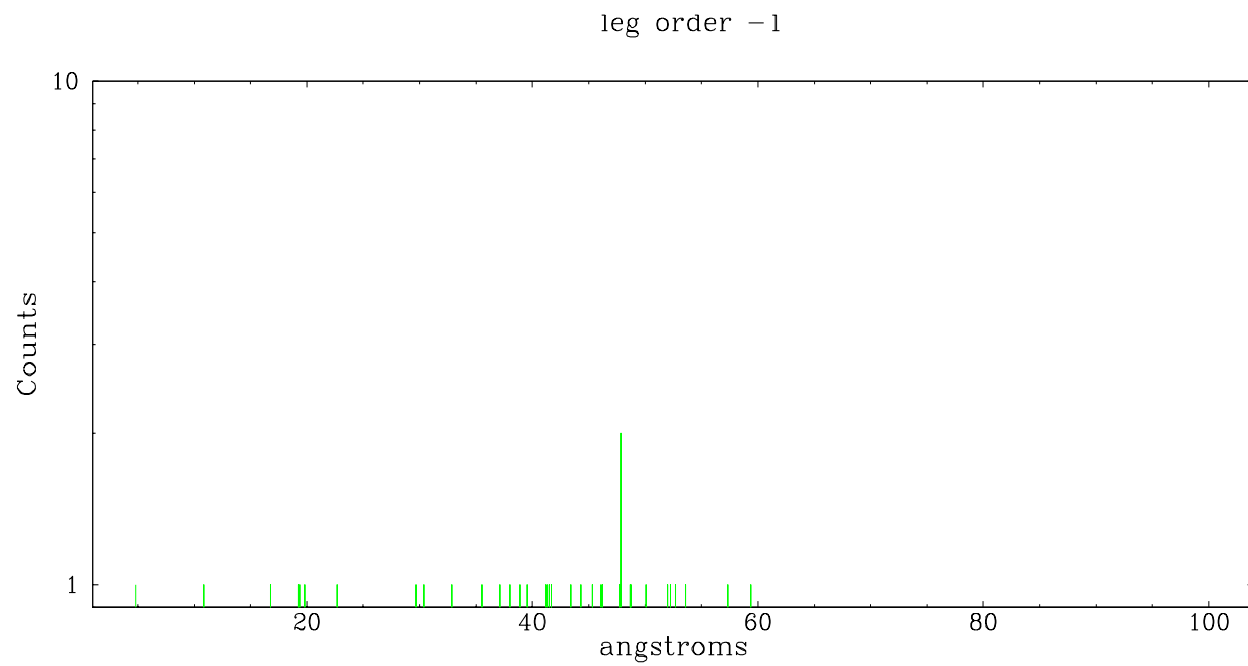
Spot Image LETG



Full Detector LETG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	223	429	695	11	1792	1110	594





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	8.809

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.