

V&V Reference Report

L2 ASCDS Version : 7.6.10

Observation 1790 - L2 Version 4
Chandra X-Ray Center

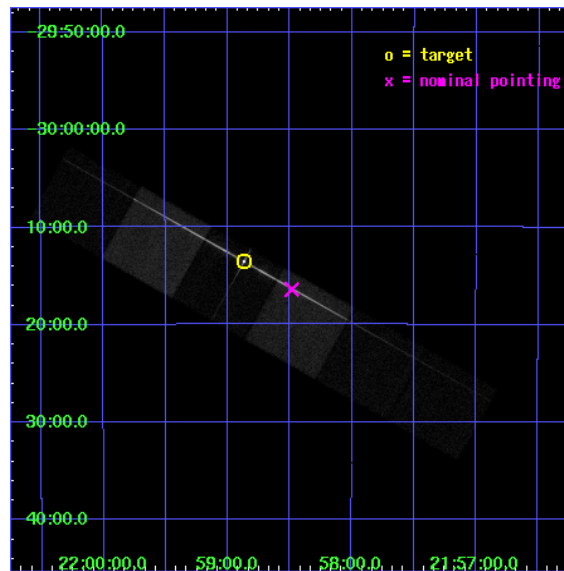
L2 Processing Date : Nov 21 2008

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1 Front

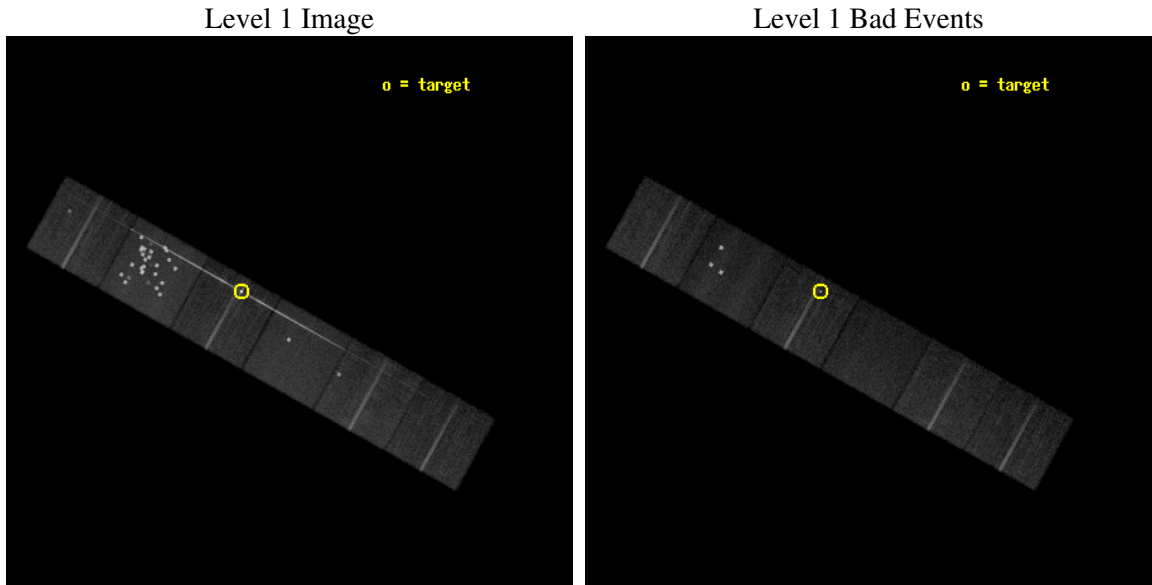
seq_num	390008
obs_id	1790
title	GRATINGS CALIBRATION OBSERVATIONS OF PKS2155-304
observer	Dr. CXC Calibration
object	PKS2155-304
dtcycle	0
cycle	P
ra_targ	329.716667
dec_targ	-30.225556
ra_nom	329.62079393781
dec_nom	-30.273558738753
roll_nom	29.173714578247
revision	4
ontime	21158.400019705
livetime	20890.479618597
ontime4	21155.159049466
ontime5	21158.400019705
ontime6	21158.400019705
ontime7	21158.400019705
ontime8	21158.400019705
ontime9	21158.375414103
l2events	271032



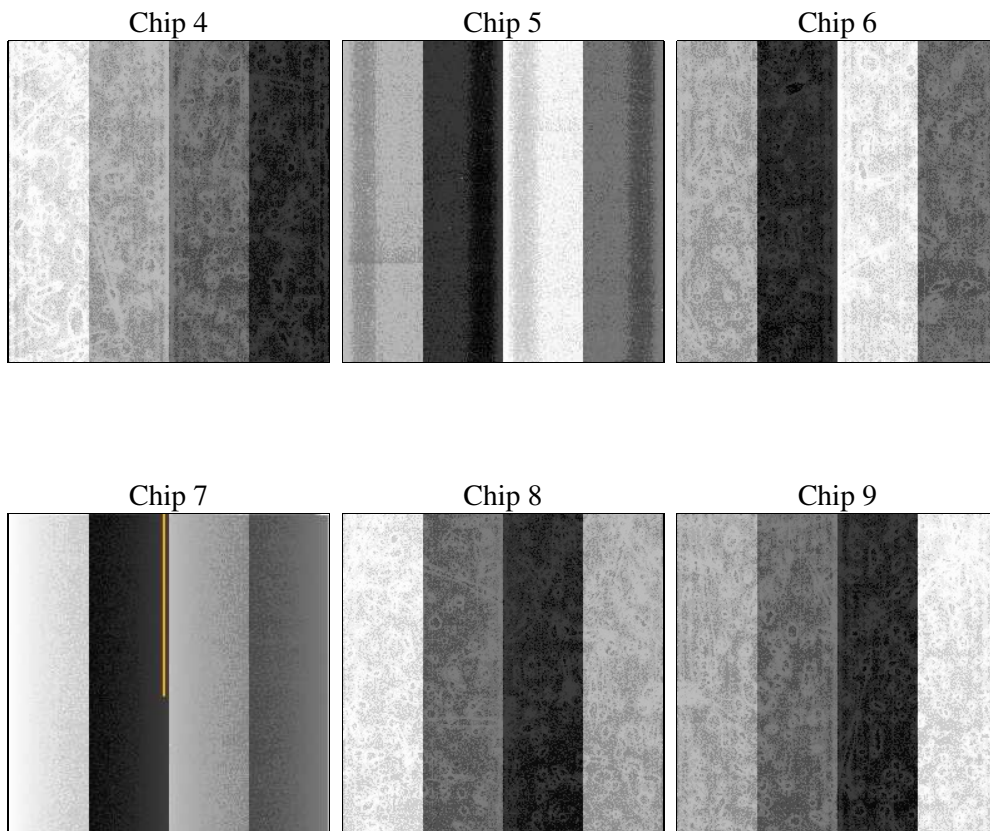
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0
ascdsver	7.6.11.9
caldbver	3.5.0.1
date	2008-11-21T19:09:51
revision	4

sched_exp_time	21400.000000
ontime	21158.400019705
ontime4	21155.159049466
ontime5	21158.400019705
ontime6	21158.400019705
ontime7	21158.400019705
ontime8	21158.400019705
ontime9	21158.375414103
l1events	1105304

2.1.4 Events

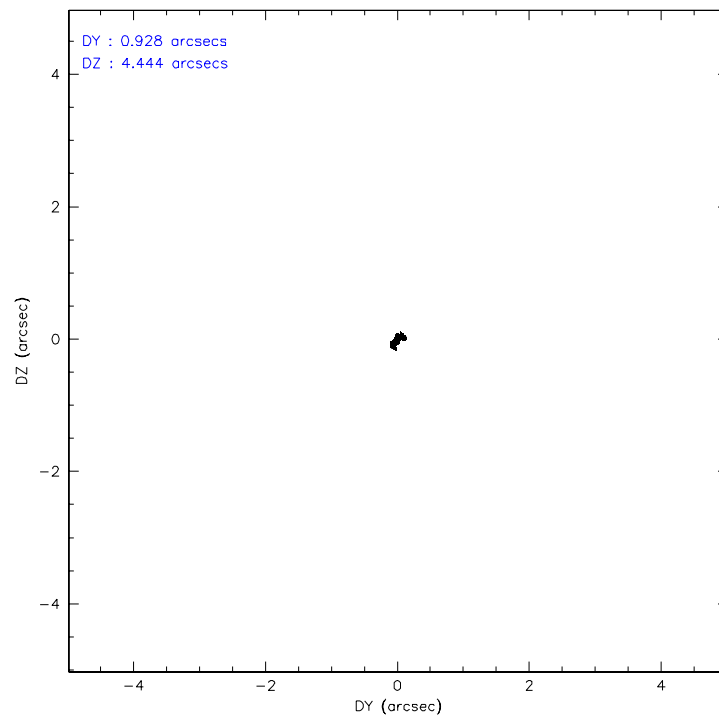
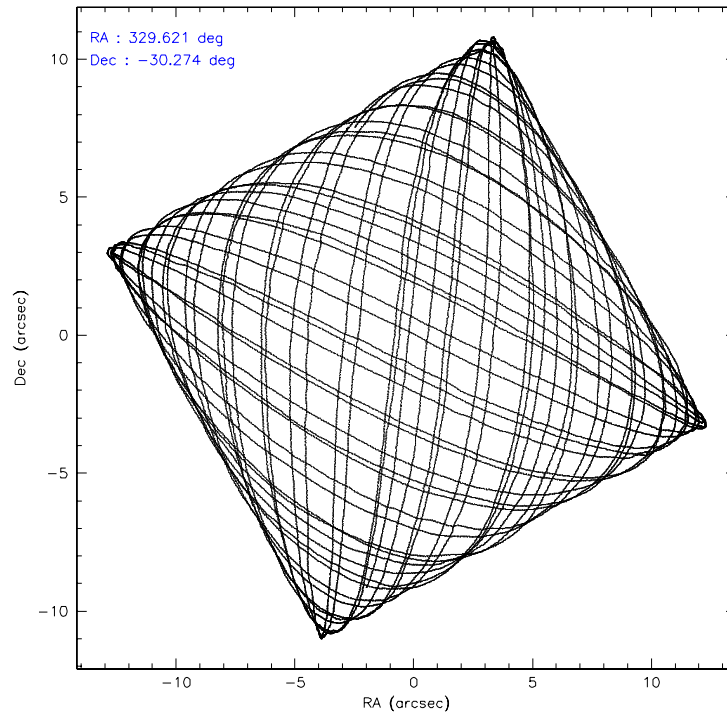
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	139574	332755	186333	171722	154503	120417
rejected events	123520	113304	112885	88452	122492	105617
rejected %	88%	34%	60%	51%	79%	87%

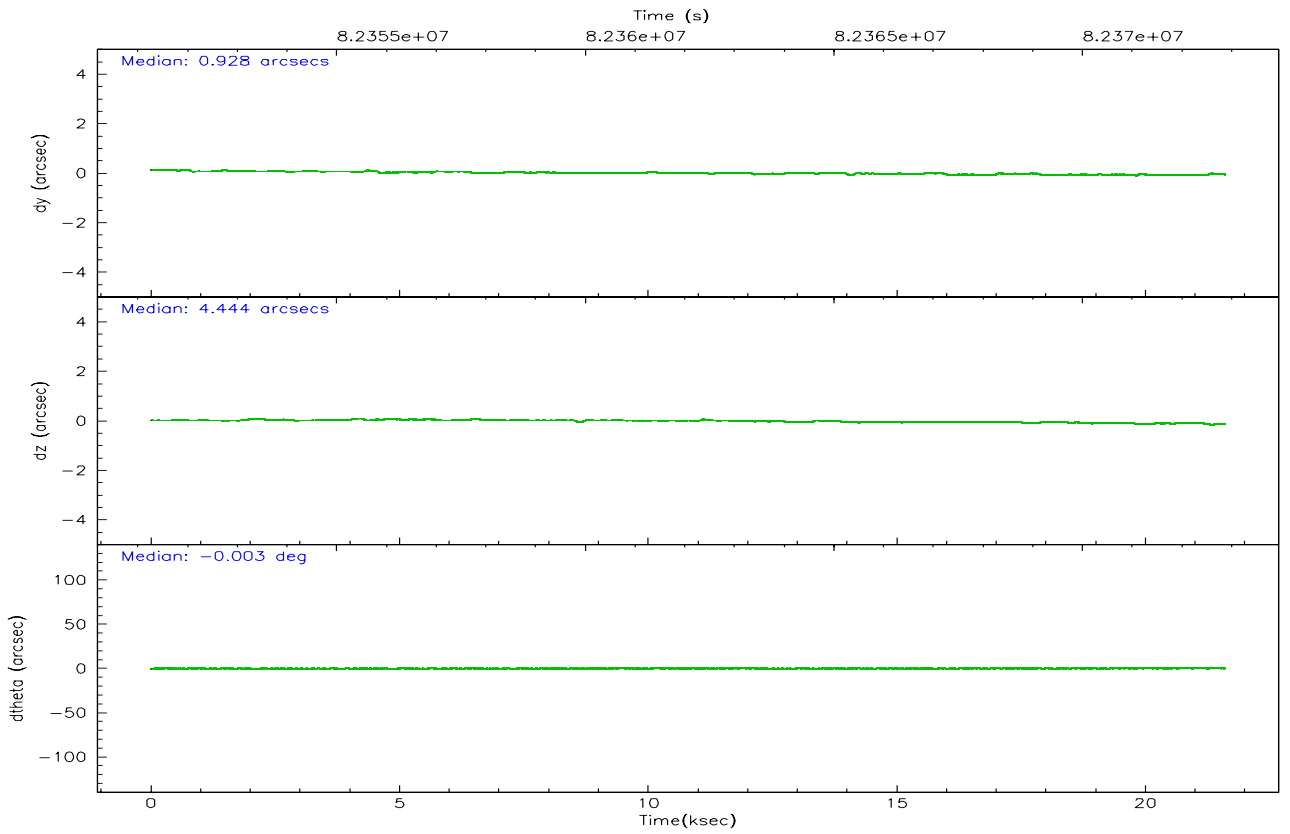
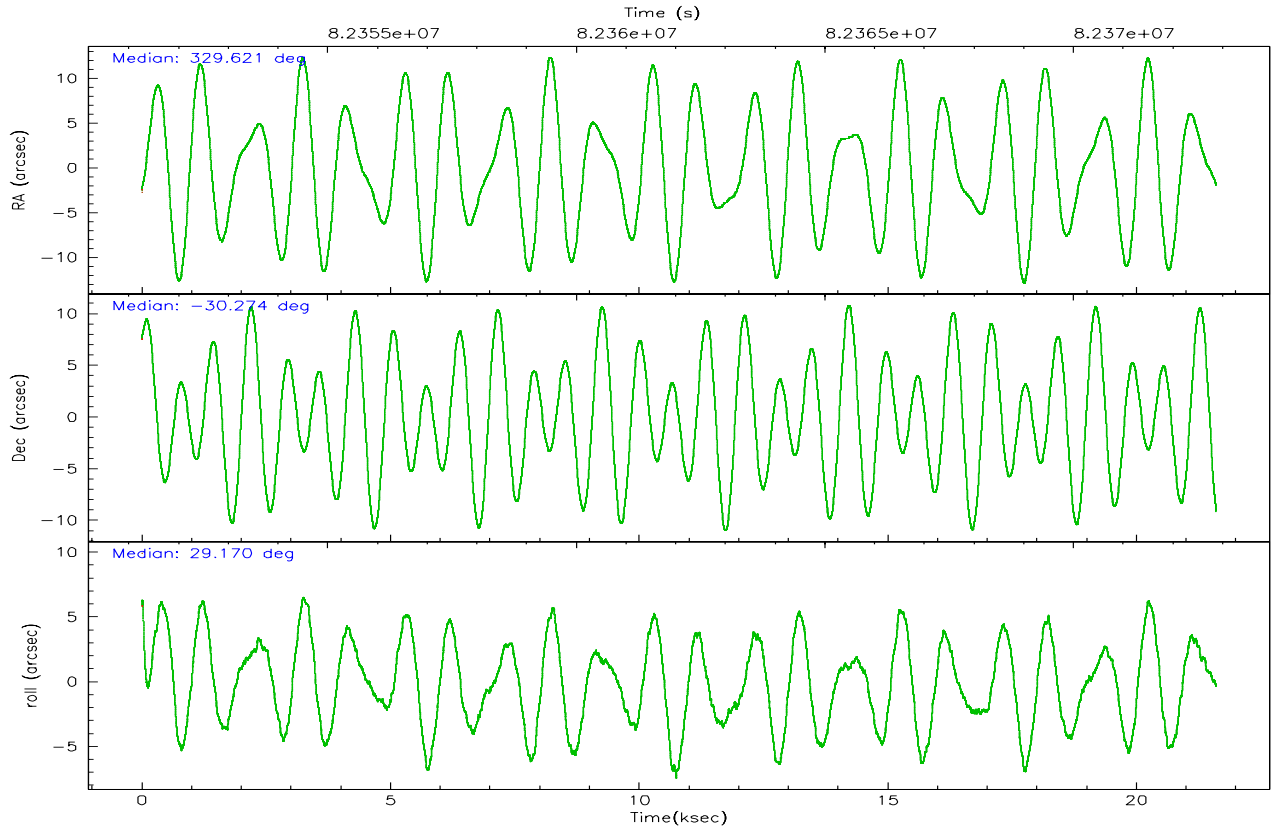
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	4214	133333	50789	18308	10678	3023
	3%	40%	27%	10%	6%	2%
grade 1 events	52	178	1356	102	77	28
	0%	0%	0%	0%	0%	0%
grade 2 events	6711	26150	12140	17226	9457	6229
	4%	7%	6%	10%	6%	5%
grade 3 events	760	6926	2587	6116	2312	778
	0%	2%	1%	3%	1%	0%
grade 4 events	729	3884	2628	5560	2212	798
	0%	1%	1%	3%	1%	0%
grade 5 events	2493	16566	3340	8818	3995	2989
	1%	4%	1%	5%	2%	2%
grade 6 events	3642	49186	5320	36076	7357	3974
	2%	14%	2%	21%	4%	3%
grade 7 events	120973	96532	108173	79516	118415	102598
	86%	29%	58%	46%	76%	85%

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	329.604669	329.6207939378098	Subarray requested	NONE	NONE
Pointing Dec	-30.297171	-30.27355873875306	Alternating exposures requested	N	N
Pointing Roll	29.008956	29.17371457824651	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)	-182.131972	-182.1344861297048			
SIM translation stage offset (mm)	-8.000551	-7.998036453302973			
Observation start time	82351470.184000	82351015.59652101			
Observation start date	2000-08-11T03:23:26	2000-08-11T03:16:55			
Observation end time	82372870.184000	82373109.47234701			
Observation end date	2000-08-11T09:20:06	2000-08-11T09:25:09			
Read mode	TIMED	TIMED			

2.3 Aspect



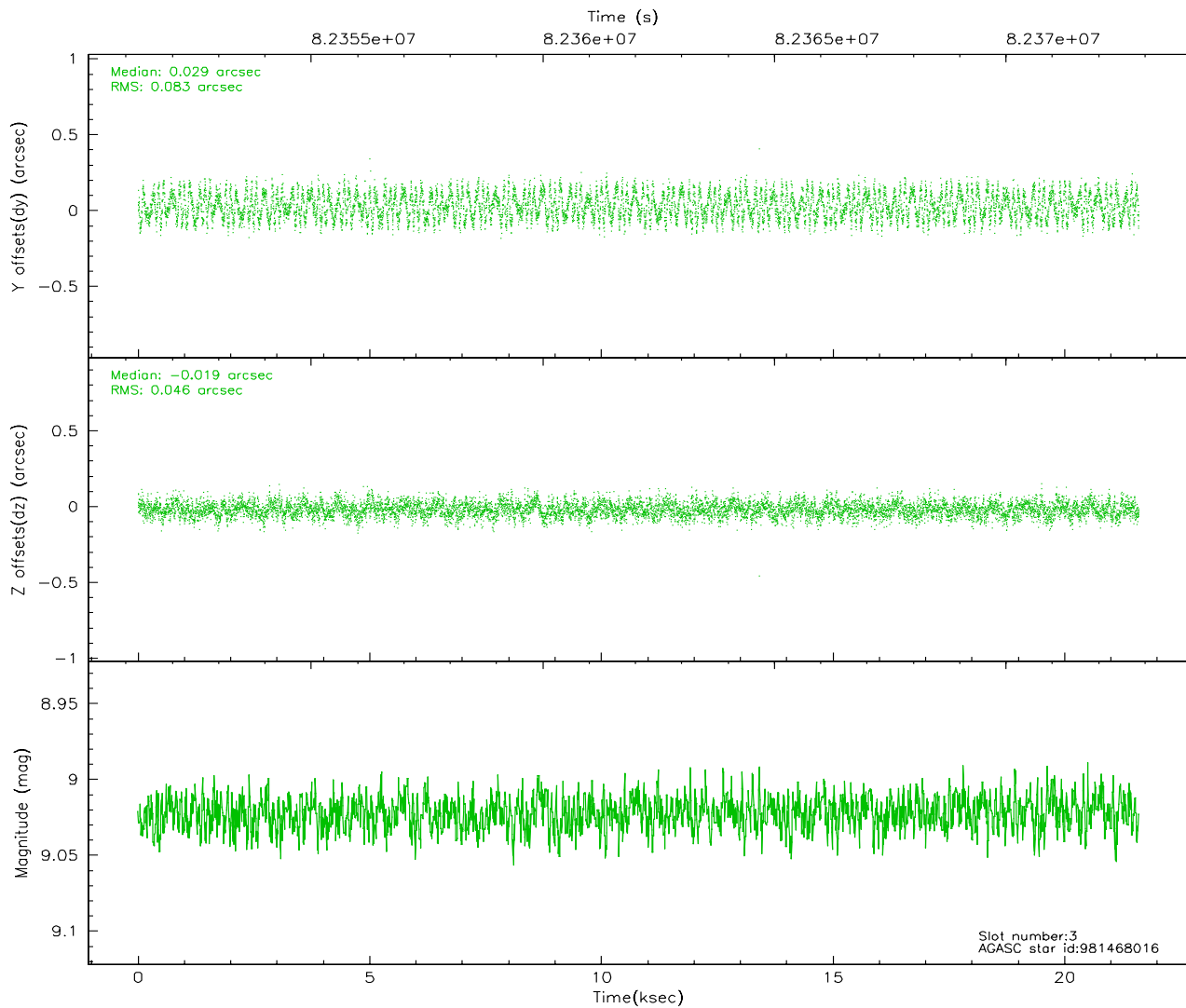
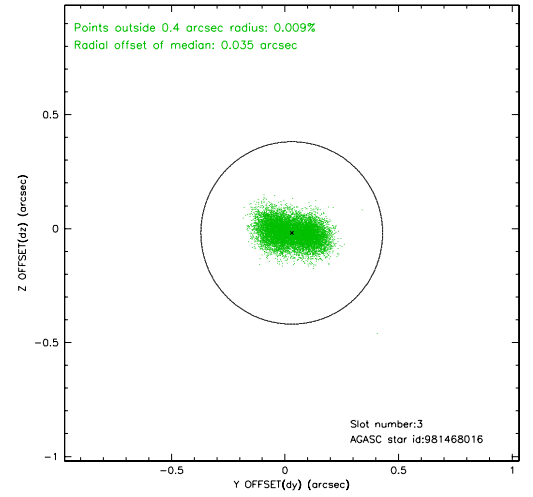
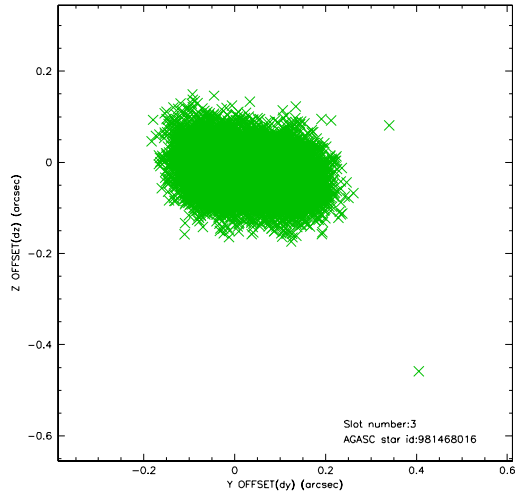


Slot Statistics

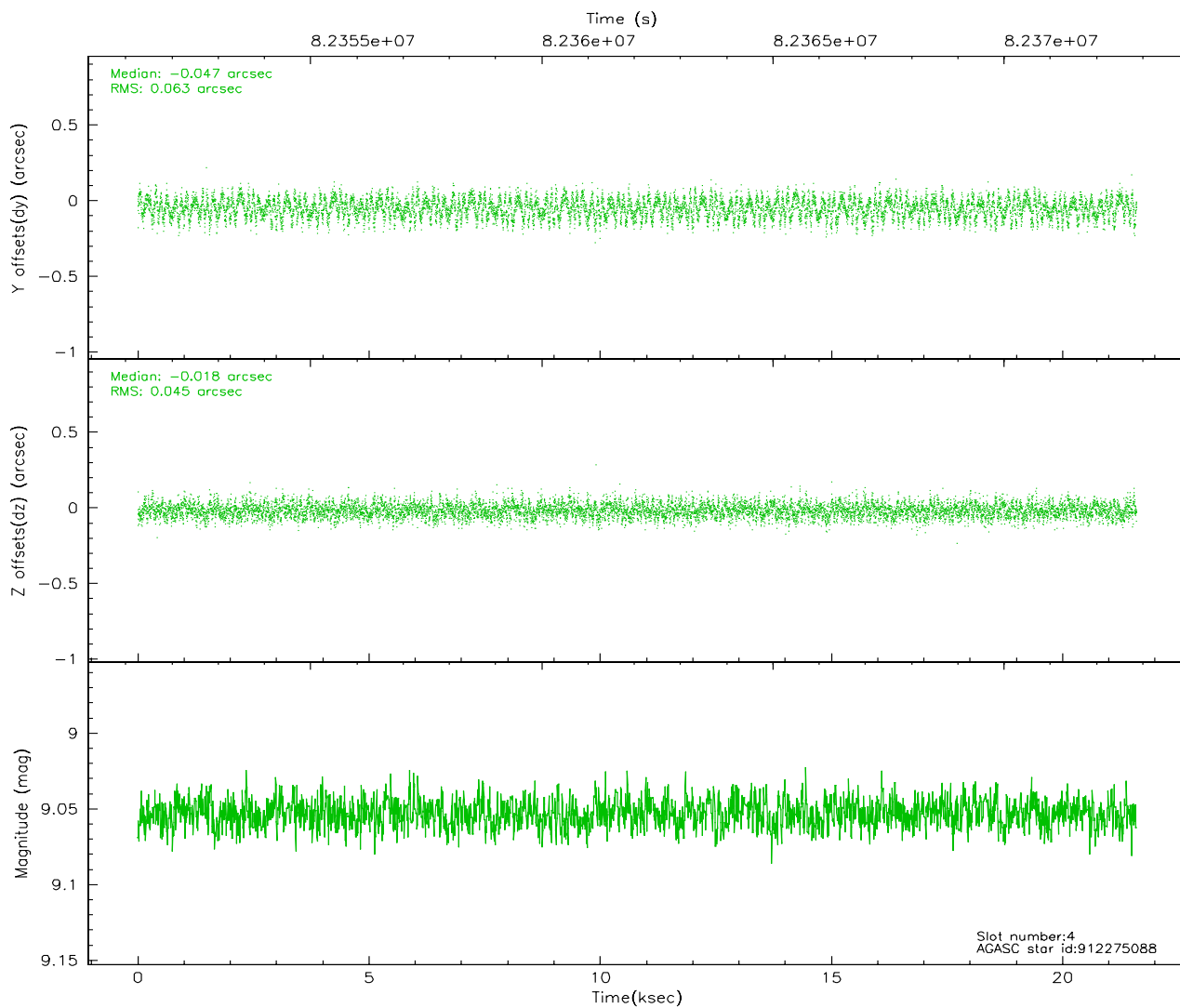
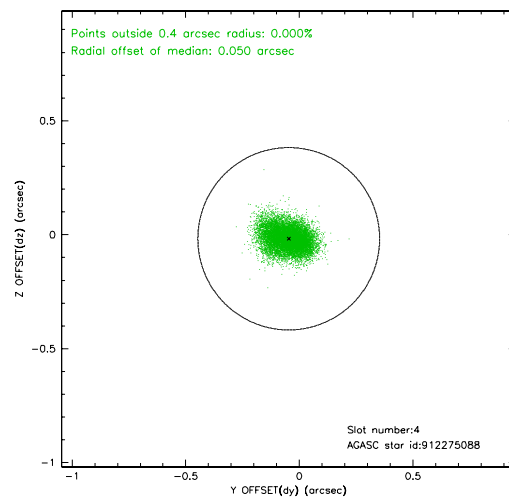
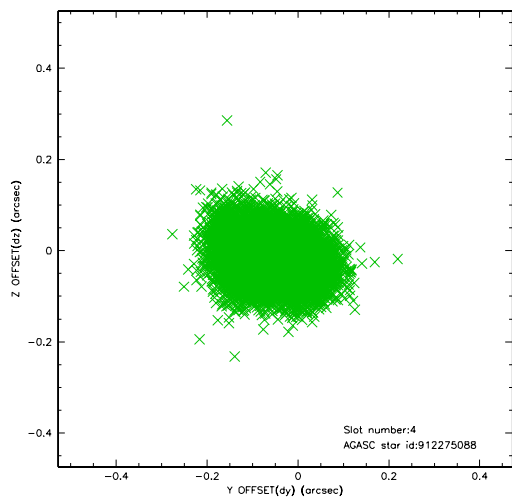
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	5268	-0.059	-0.075	0.007	0.012	0.000000	0.000000	-753.02	-1890.36
1	FID	ACIS-S-4	7.19	5268	0.061	0.048	0.005	0.008	0.000000	0.000000	2160.32	18.01
2	FID	ACIS-S-5	7.22	5269	-0.033	0.034	0.007	0.011	0.000000	0.000000	-1805.61	11.89
3	GUIDE	981468016	9.02	10535	0.029	-0.019	0.104	0.157	328.842457	-30.034984	-1623.65	1970.61
4	GUIDE	912275088	9.05	10536	-0.047	-0.018	0.083	0.134	329.619228	-29.738698	1014.58	1736.65
5	GUIDE	981478152	9.41	10533	0.020	0.042	0.078	0.126	329.415589	-30.057192	-96.38	1041.22
6	GUIDE	981468128	9.36	10537	0.018	-0.034	0.069	0.114	329.756350	-30.158334	655.23	208.16
7	GUIDE	981469488	9.60	10533	-0.023	0.029	0.087	0.144	329.261199	-30.045155	-496.83	1311.31

2.4 Star Slots

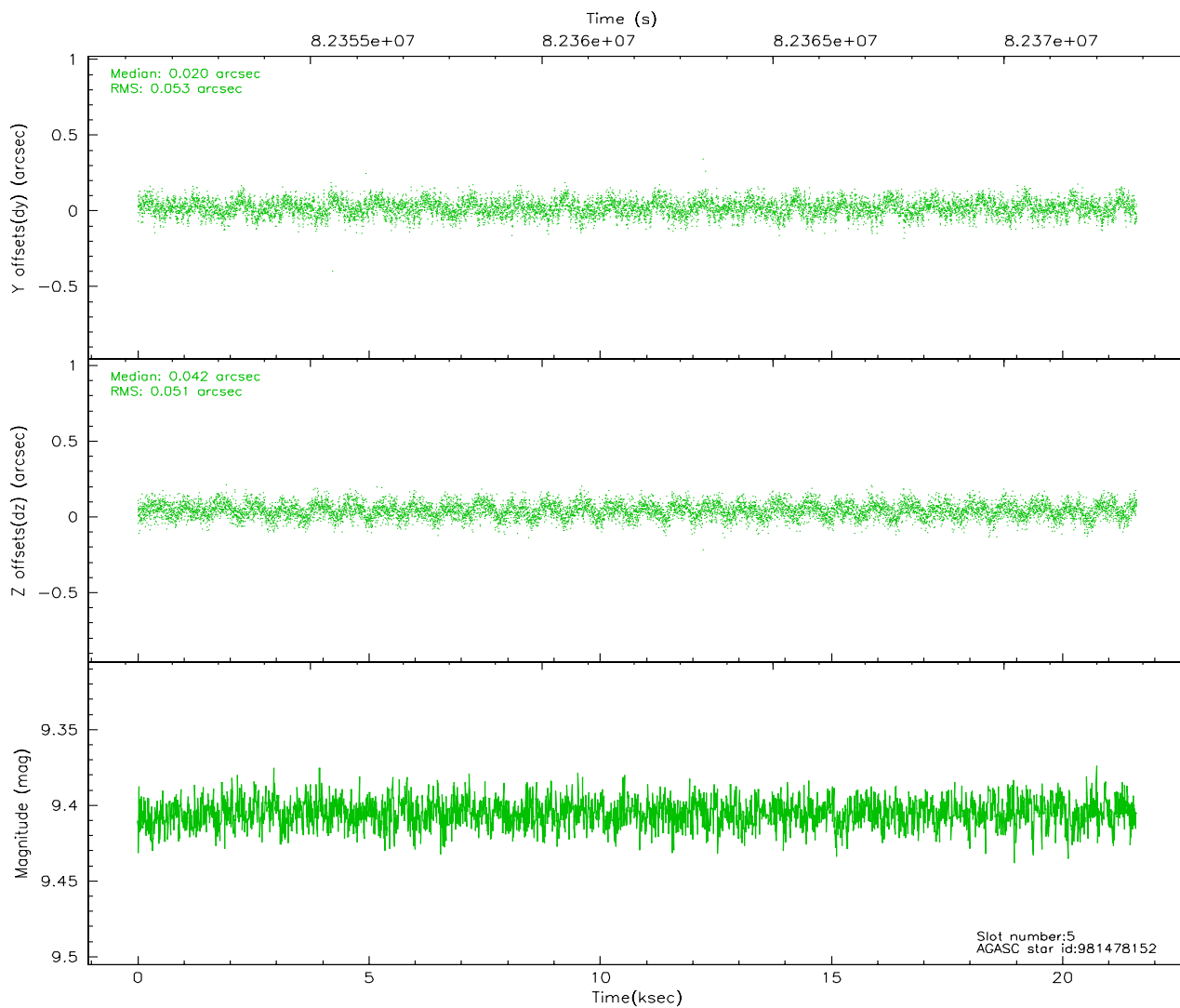
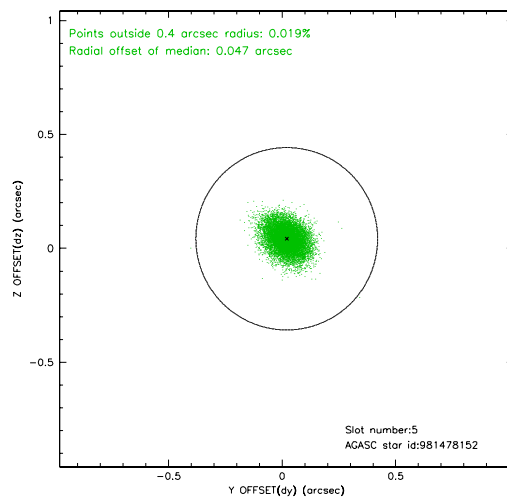
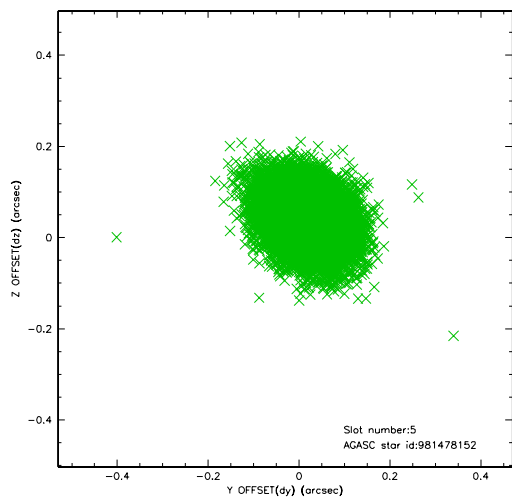
2.4.1 Slot 3



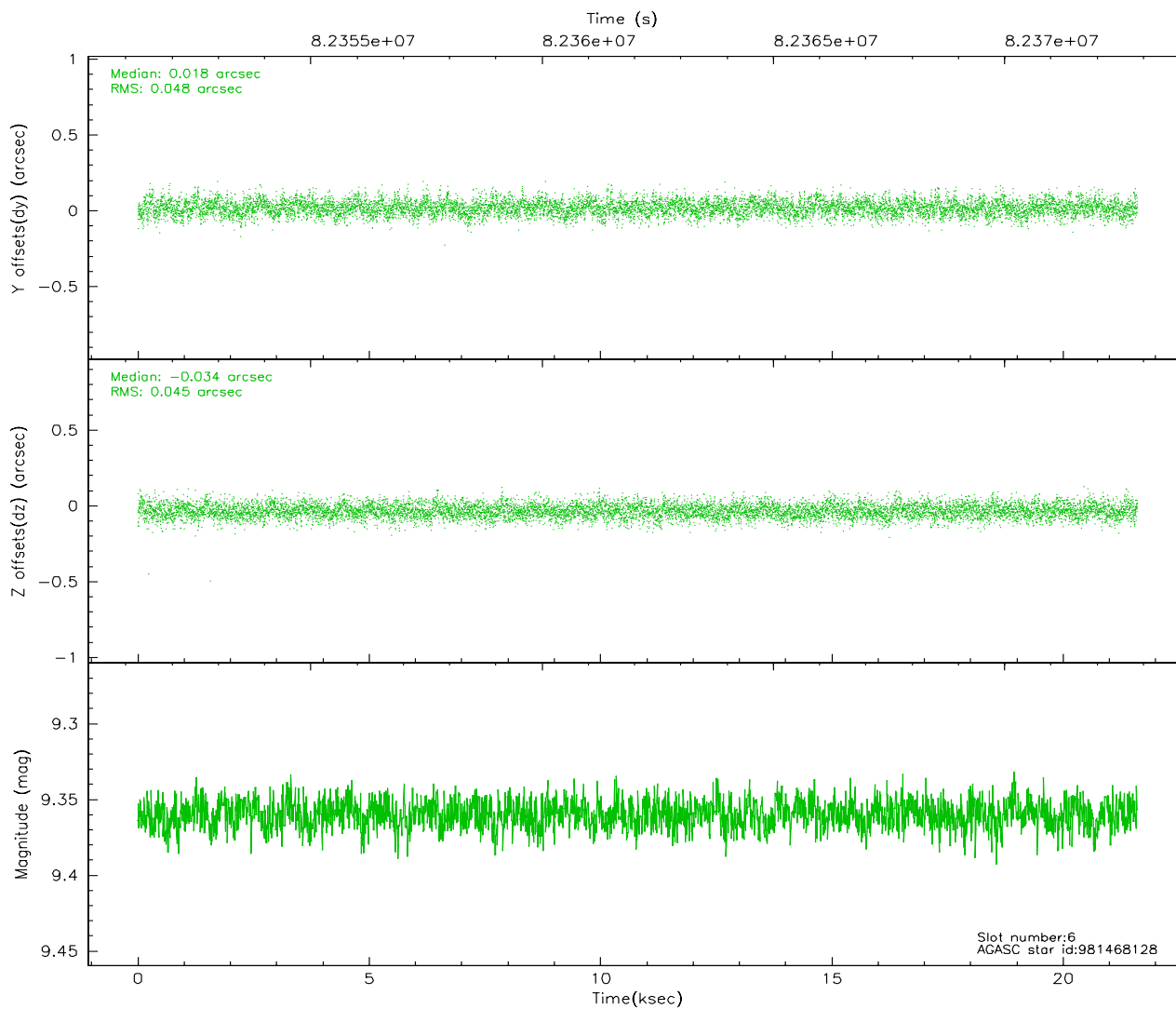
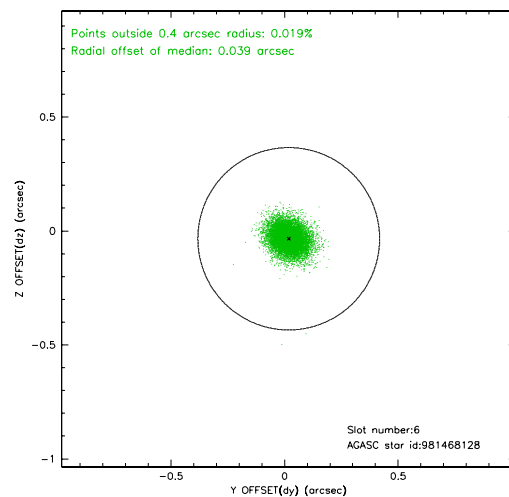
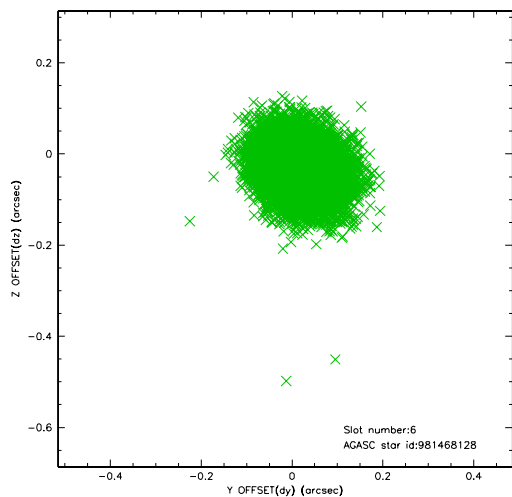
2.4.2 Slot 4



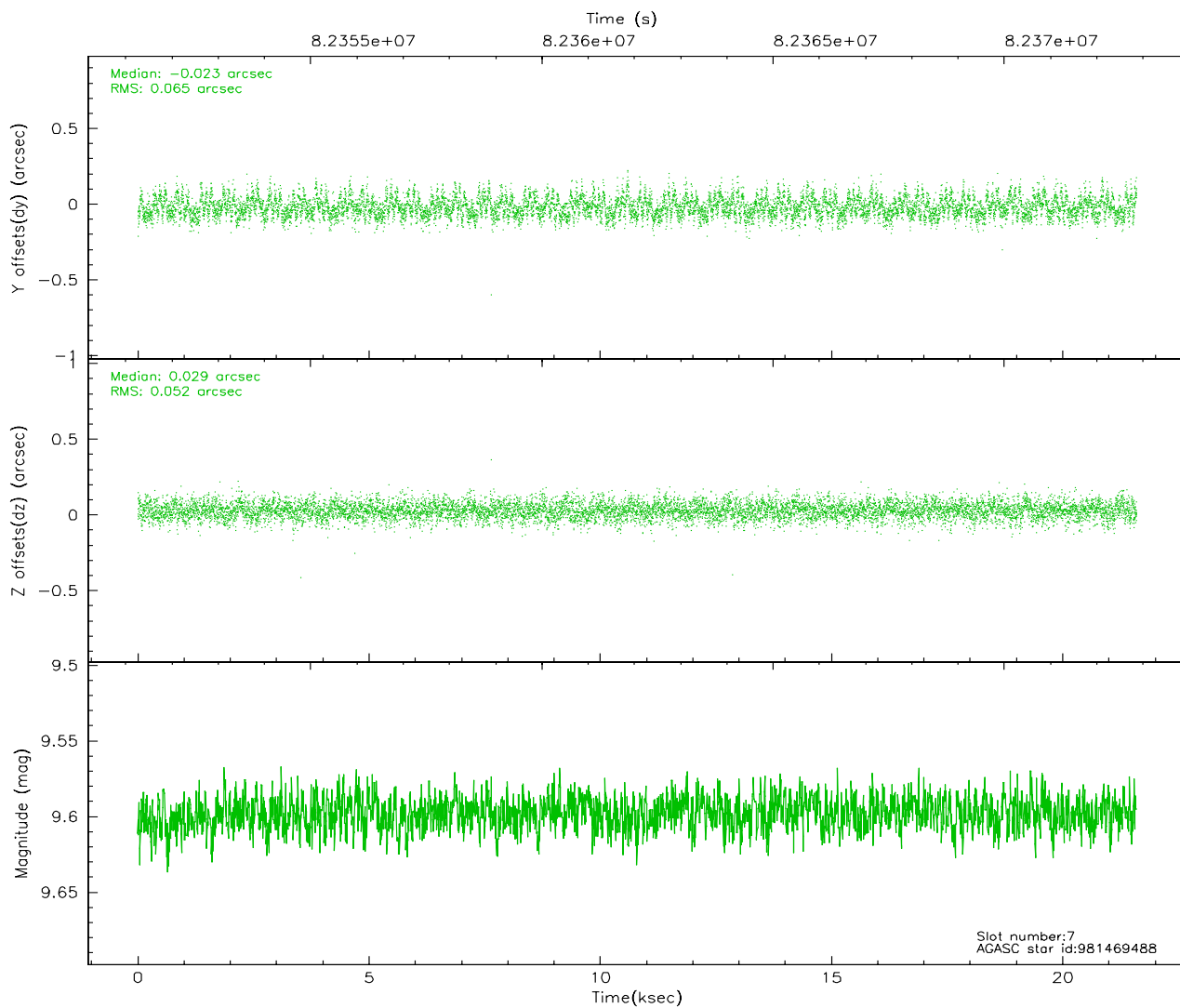
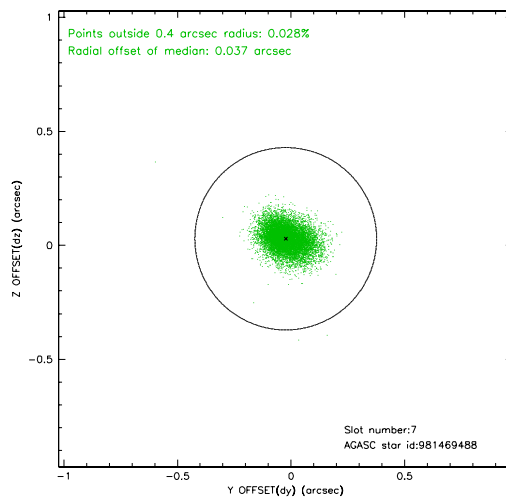
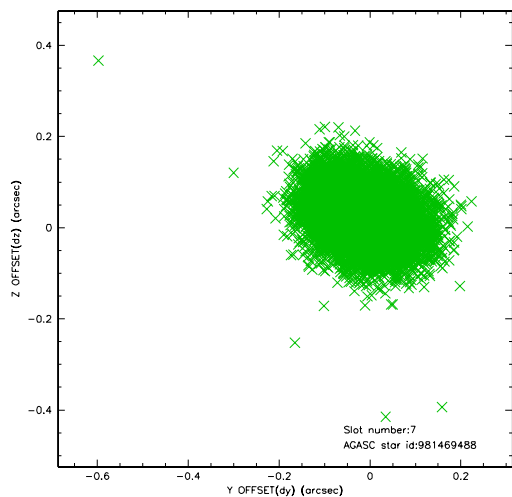
2.4.3 Slot 5



2.4.4 Slot 6

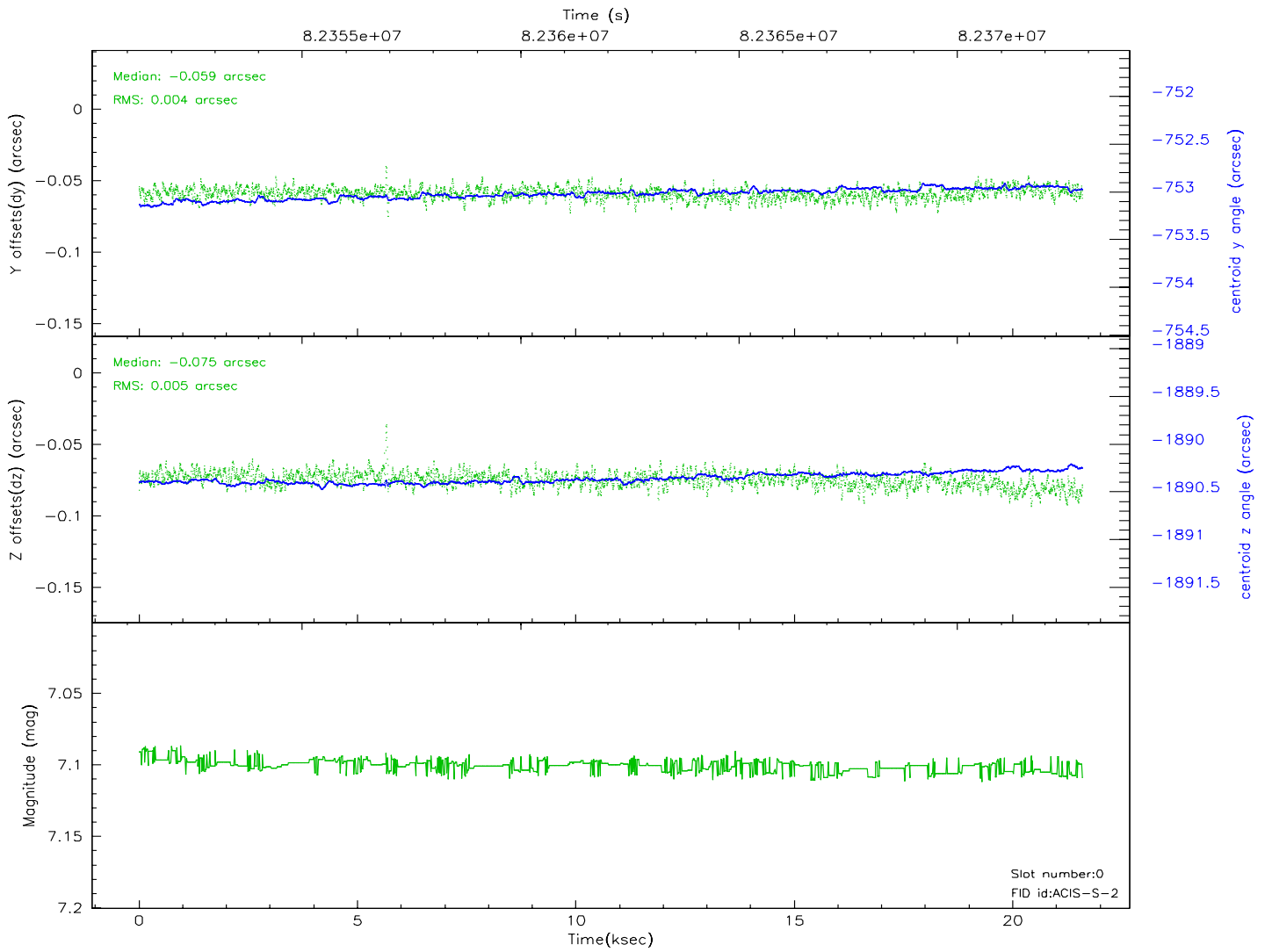
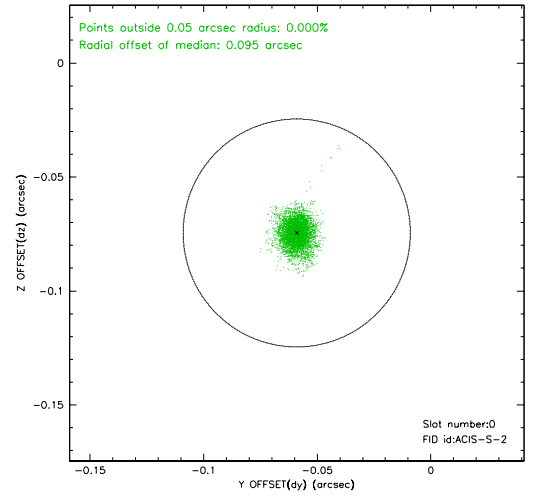
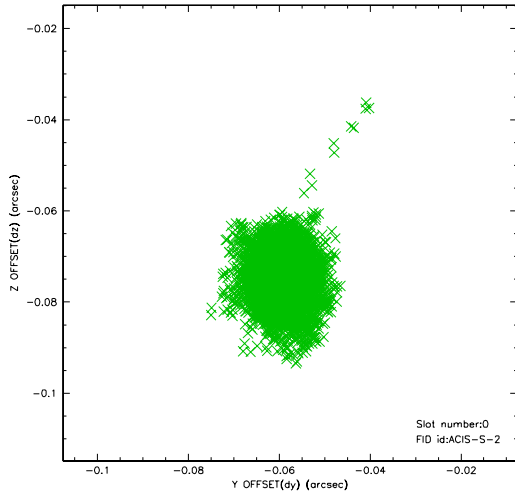


2.4.5 Slot 7

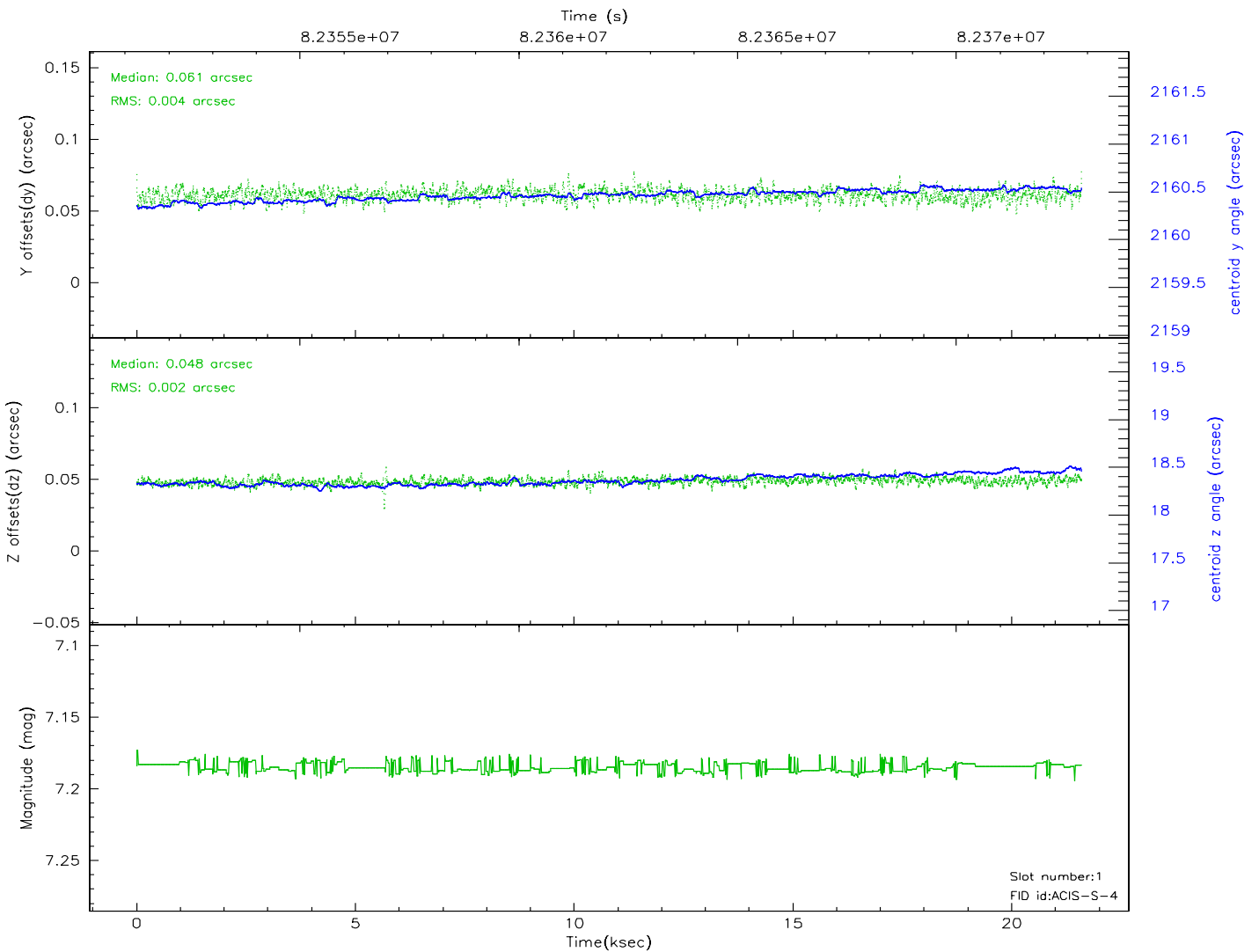
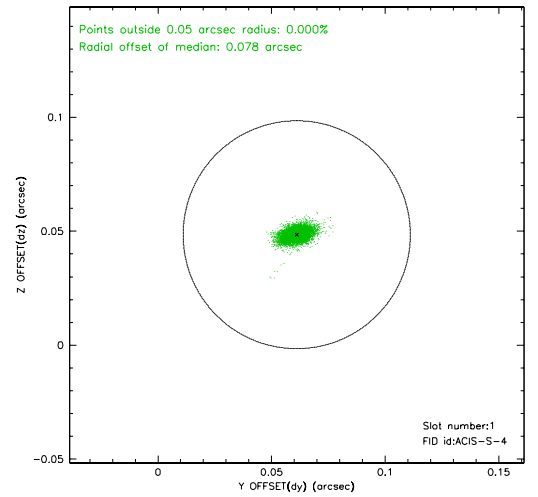
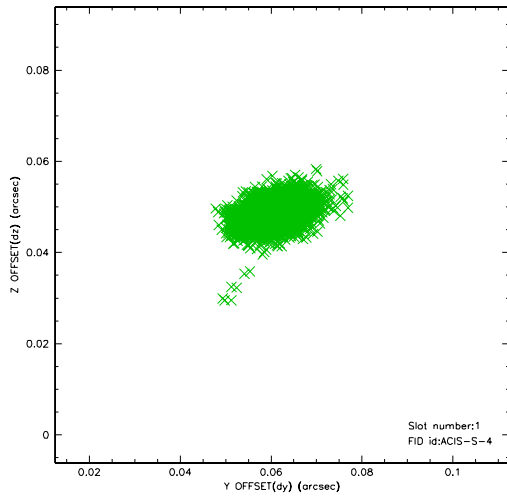


2.5 FID Slots

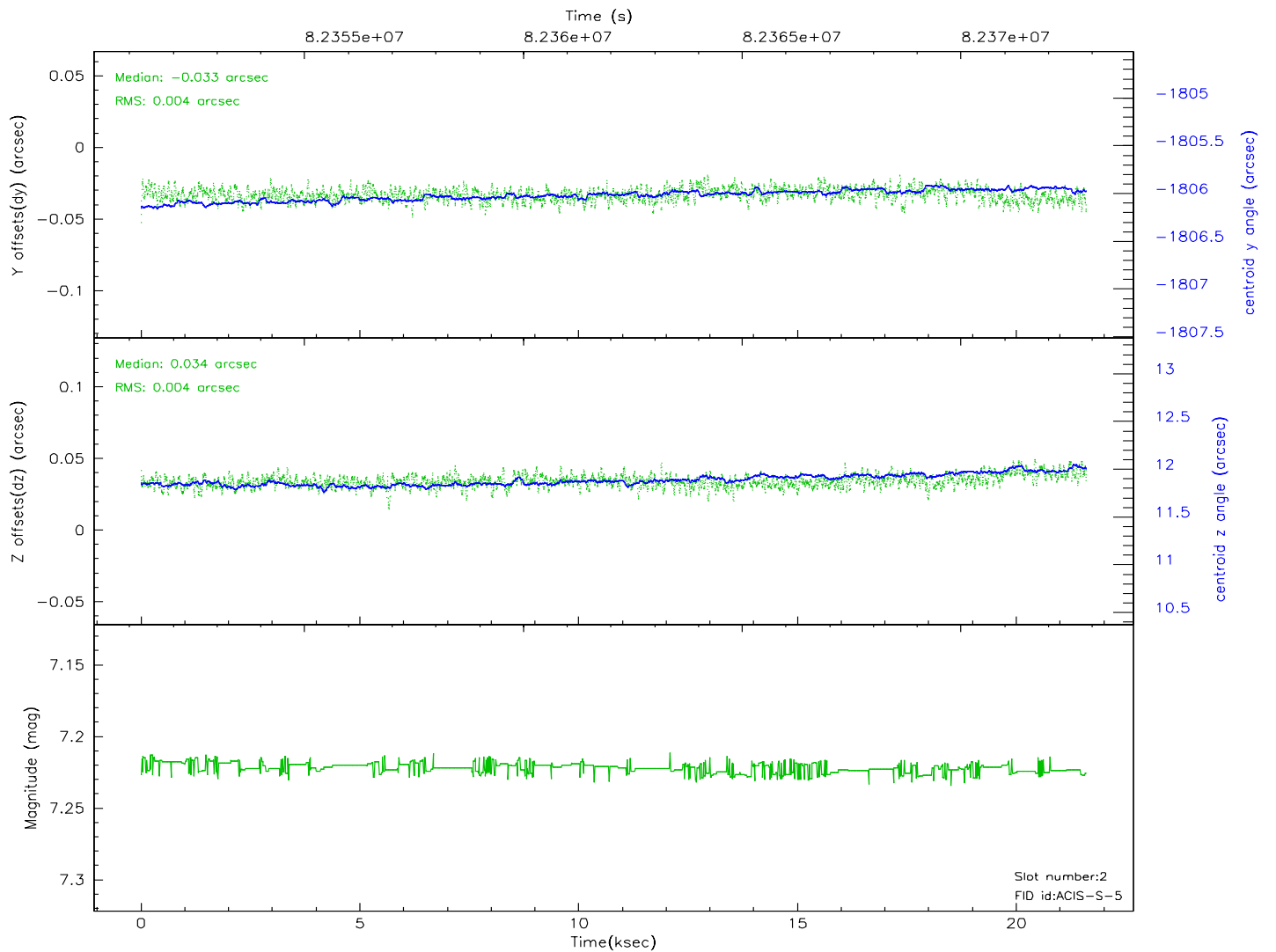
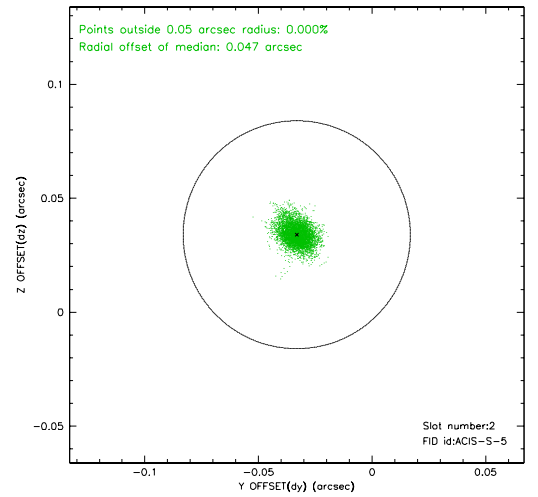
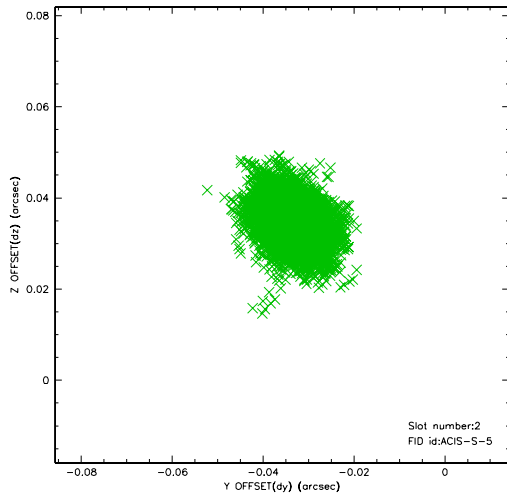
2.5.1 Slot 0



2.5.2 Slot 1

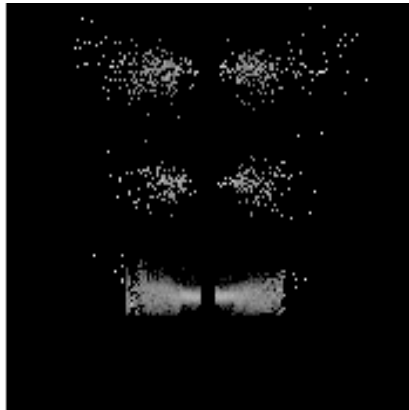


2.5.3 Slot 2

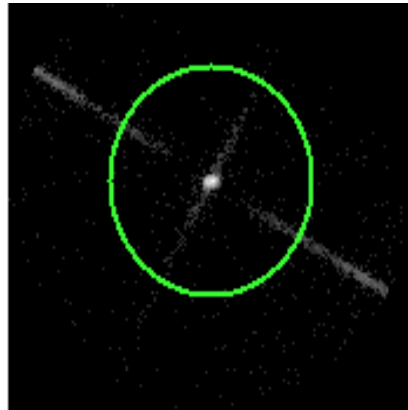


3 Gratings

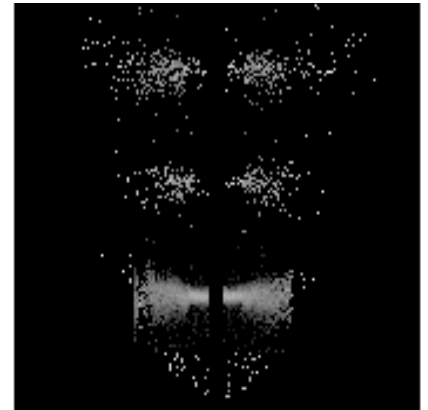
3.1 LETG Arm



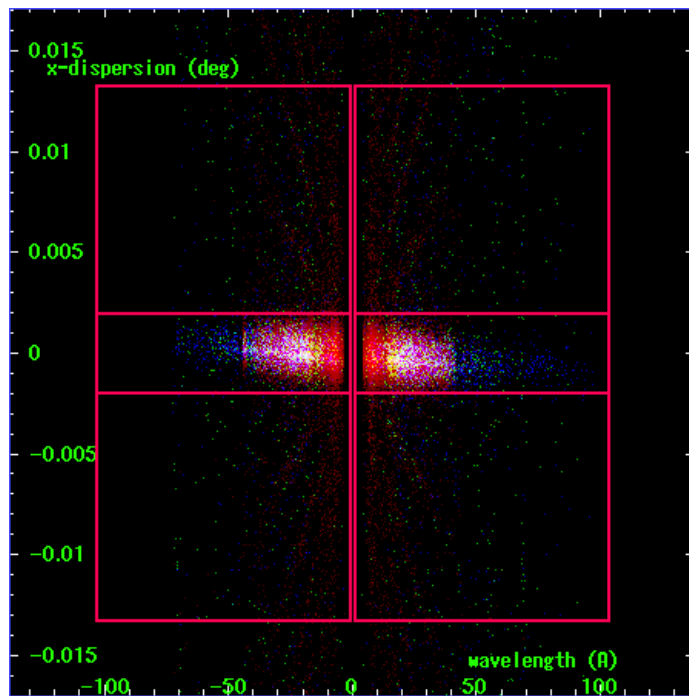
LETG Order Sort 123



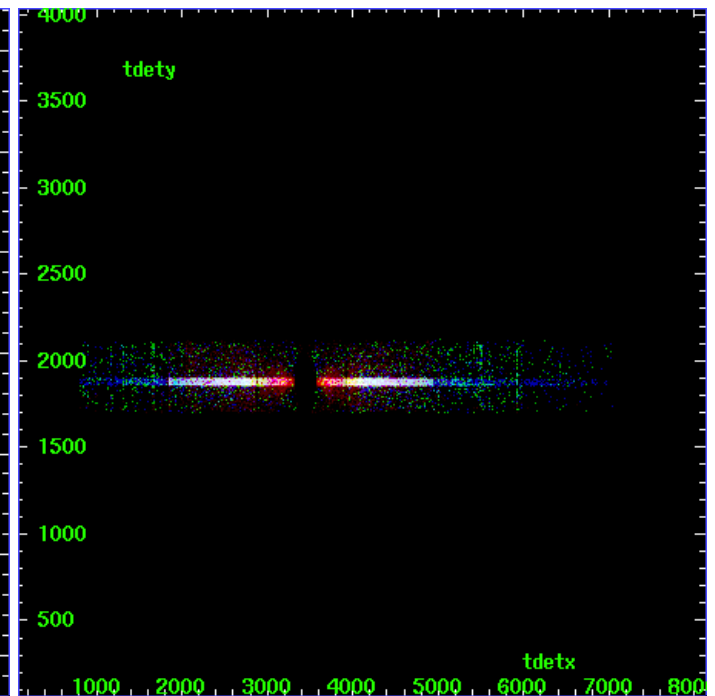
LETG Zero Order



LETG Order Sort ALL

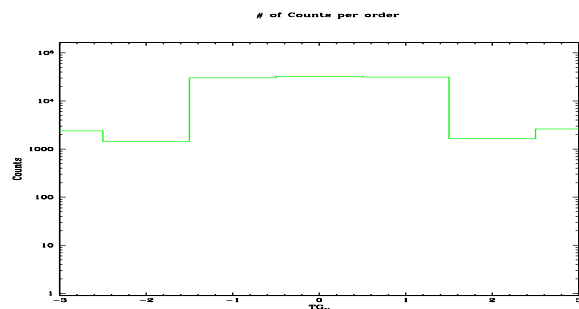


Spot Image LETG

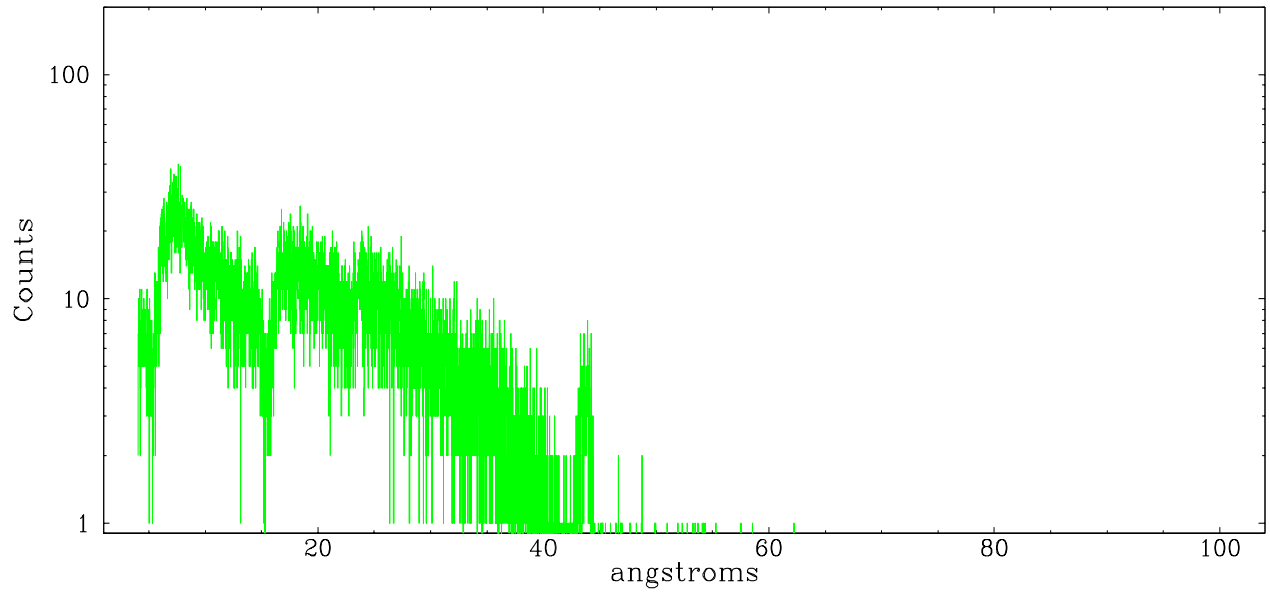


Full Detector LETG

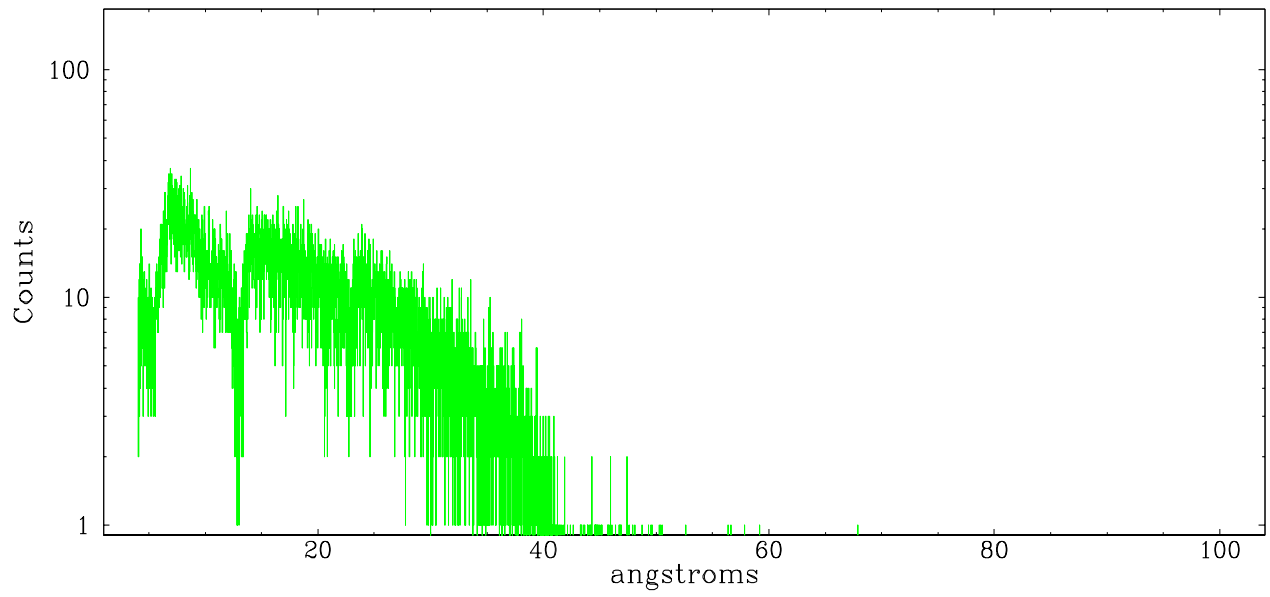
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	2390	1449	30201	32555	31444	1641	2614



leg order -1



leg order +1



A Summary

A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2008.11.24
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	21.158

A.2 Comments

This is an off-axis calibration observation. The PSF is significantly extended. The source position from `tgdetect` is the centroid of the zeroth order emission, and is not the brightest point. This may or may not be appropriate, depending on the desired analysis.