

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 2324 - L2 Version 4
Chandra X-Ray Center

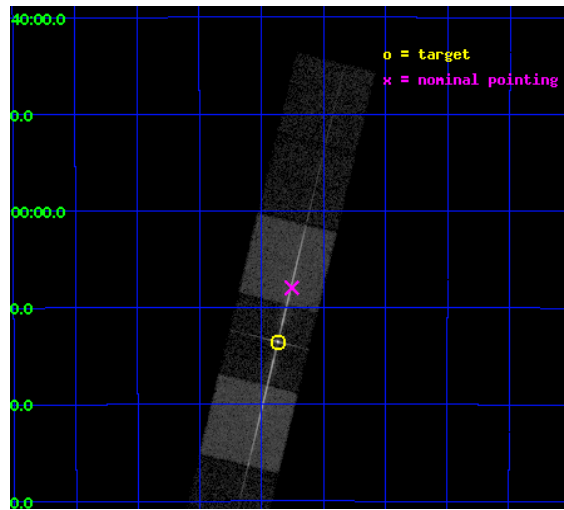
L2 Processing Date : Mar 20 2013

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1 Front

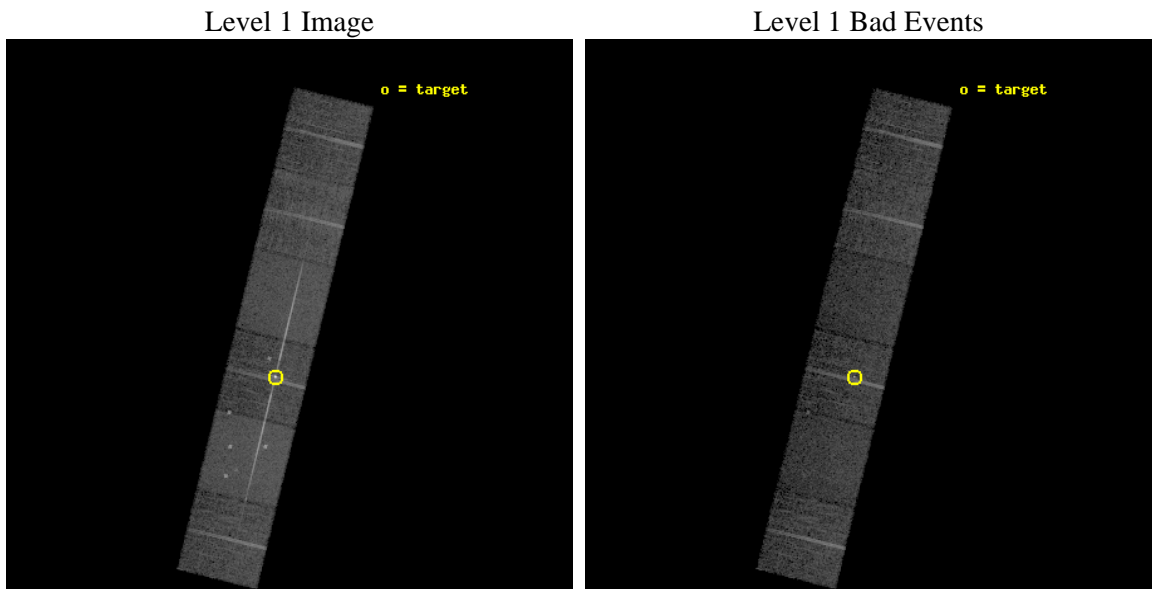
seq_num	390021	Sequence number
obs_id	2324	Observation id
title	GRATINGS CALIBRATION OBSERVATIONS OF PKS2155-304	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	PKS2155-304	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	329.716667	Observer's specified target RA [deg]
dec_targ	-30.225556	Observer's specified target Dec [deg]
ra_nom	329.68866222236	Nominal RA [deg]
dec_nom	-30.1328035185	Nominal Dec [deg]
roll_nom	283.73546007643	Nominal Roll [deg]
revision	4	Processing version of data
ontime	8754.9101247787	Sum of GTIs [s]
livetime	8644.0501812048	Livetime [s]
ontime4	8755.0332447737	Sum of GTIs [s]
ontime5	8754.9511647671	Sum of GTIs [s]
ontime6	8754.9101247787	Sum of GTIs [s]
ontime7	8754.9922047704	Sum of GTIs [s]
ontime8	8754.8689451665	Sum of GTIs [s]
ontime9	8754.8280447721	Sum of GTIs [s]
l2events	118535	Number of level 2 events



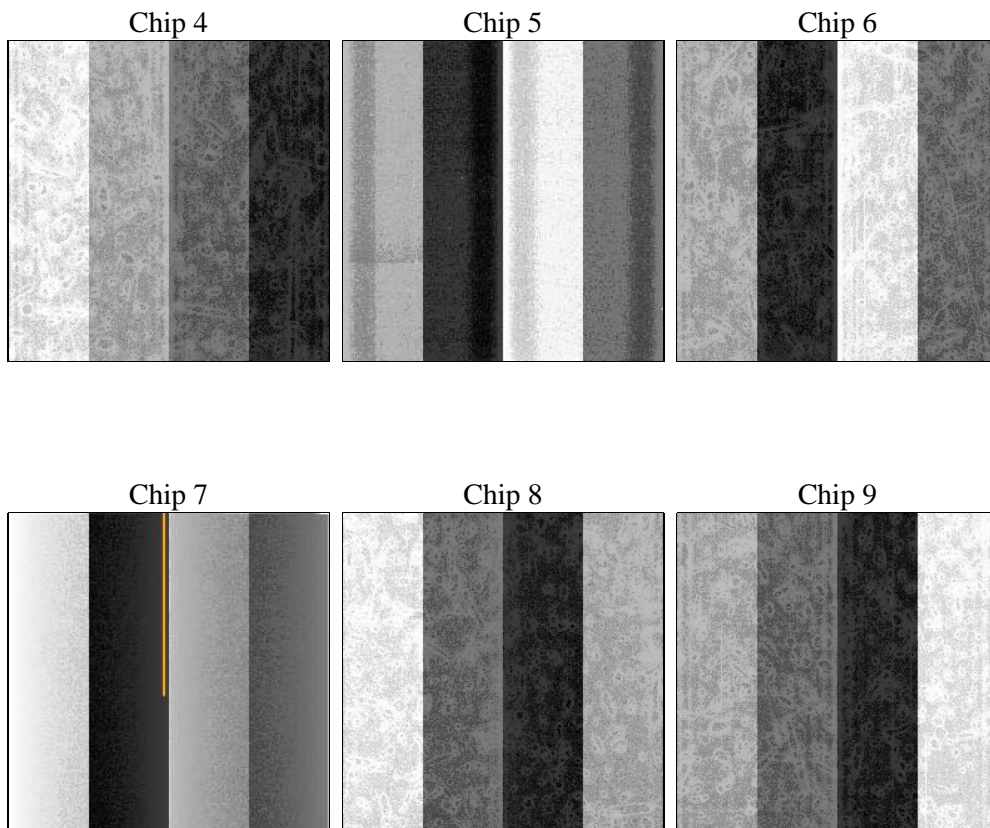
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	9000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	8754.9101247787	Sum of GTIs [s]
caldsver	4.5.1.1	 	ontime4	8755.0332447737	Sum of GTIs [s]
date	2012-09-04T04:31:58	Date and time of file creation	ontime5	8754.9511647671	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	8754.9101247787	Sum of GTIs [s]
			ontime7	8754.9922047704	Sum of GTIs [s]
			ontime8	8754.8689451665	Sum of GTIs [s]
			ontime9	8754.8280447721	Sum of GTIs [s]
			l1events	401253	Number of level 1 events

2.1.4 Events

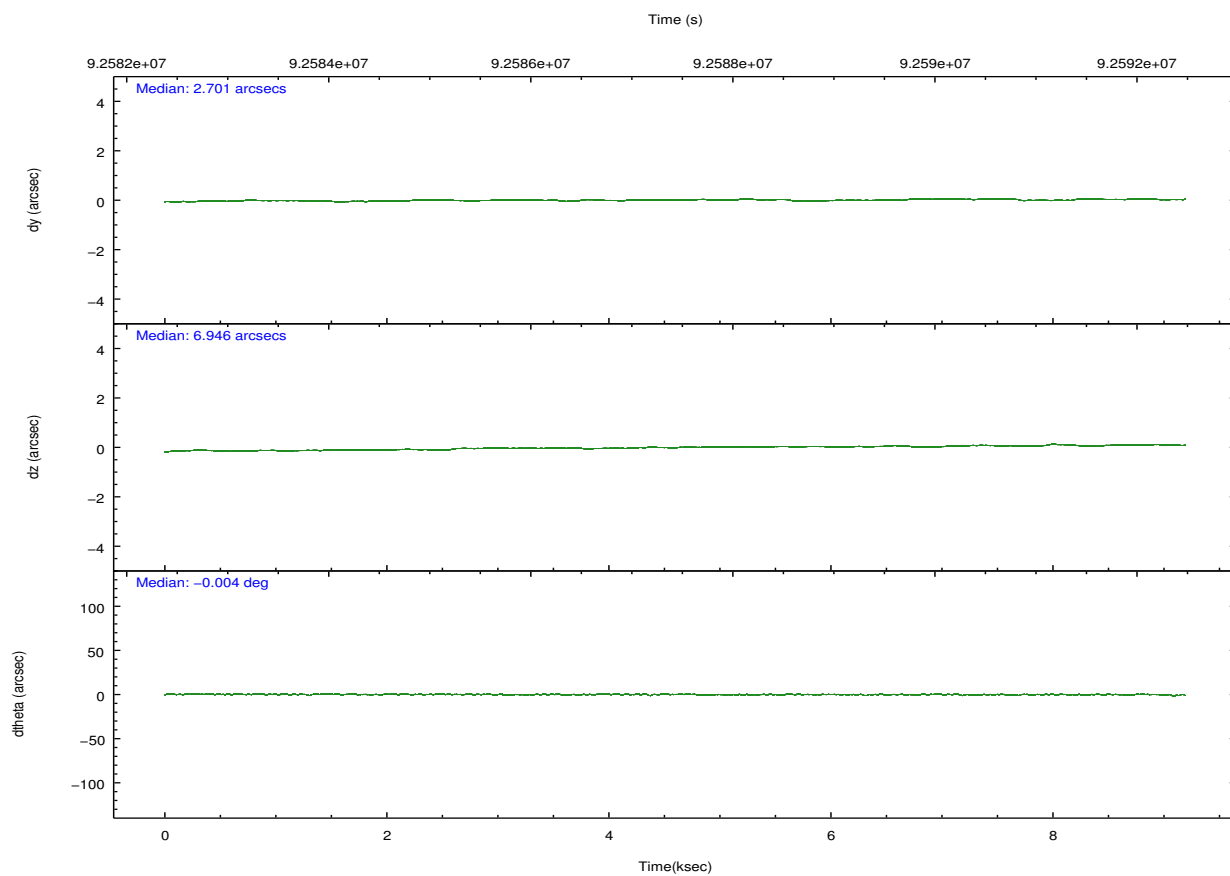
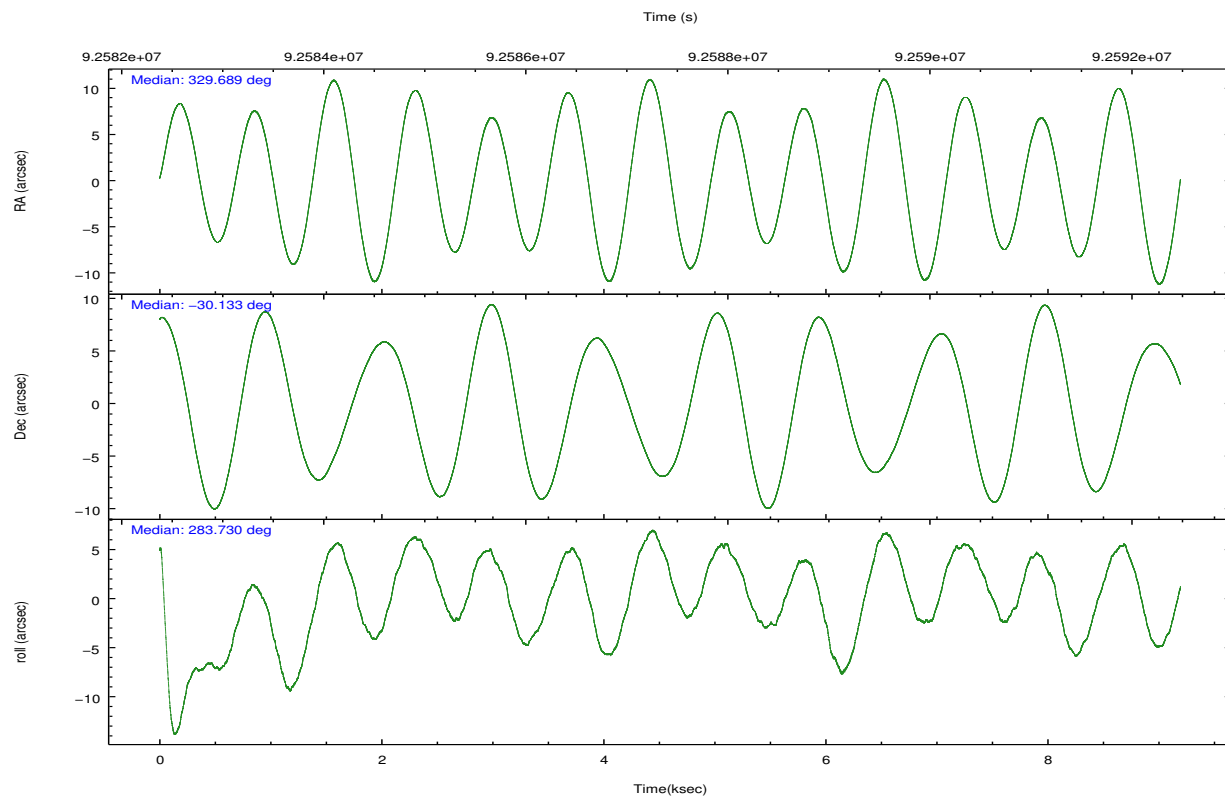
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	55492	82417	73566	73407	65463	50908	grade 0 events	2790	11425	21926	7035	4307	2483
rejected events	49177	38203	44605	36485	52396	44932		5%	13%	29%	9%	6%	4%
rejected %	88%	46%	60%	49%	80%	88%	grade 1 events	26	226	599	58	31	16
								0%	0%	0%	0%	0%	0%
							grade 2 events	1446	11524	3275	7877	2788	1203
								2%	13%	4%	10%	4%	2%
							grade 3 events	566	2187	1137	3614	1303	591
								1%	2%	1%	4%	1%	1%
							grade 4 events	527	2098	1206	3520	1218	537
								0%	2%	1%	4%	1%	1%
							grade 5 events	1763	5460	2275	6111	2567	2049
								3%	6%	3%	8%	3%	4%
							grade 6 events	990	17016	1443	14907	3458	1166
								1%	20%	1%	20%	5%	2%
							grade 7 events	47384	32481	41705	30285	49791	42863
								85%	39%	56%	41%	76%	84%

2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-456789	ACIS-456789
Grating	LETG	LETG
Data mode	FAINT	FAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	329.666644	329.6886622223582
[deg] Pointing Dec	-30.113233	-30.13280351849963
[deg] Pointing Roll	283.567785	283.7354600764268
[s] Window start time (MET)	89424064.184000	89424064.184000
[s] Window stop time (MET)	94608064.184000	94608064.184000
[mm] SIM focus pos	-0.684267	-0.6828225247311905
[mm] SIM defocus	0	0.001444936568705701
[mm] SIM translation stage pos	-193.132523	-193.1371298893314
[mm] SIM translation stage offset	3	3.004607306323607
[s] Observation start time (MET)	92583026.184000	92582649.52048901
Observation start date	2000-12-07T13:29:22	2000-12-07T13:24:09
[s] Observation end time (MET)	92592026.184000	92592924.120882
Observation end date	2000-12-07T15:59:22	2000-12-07T16:15:24
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.2

2.3 Aspect

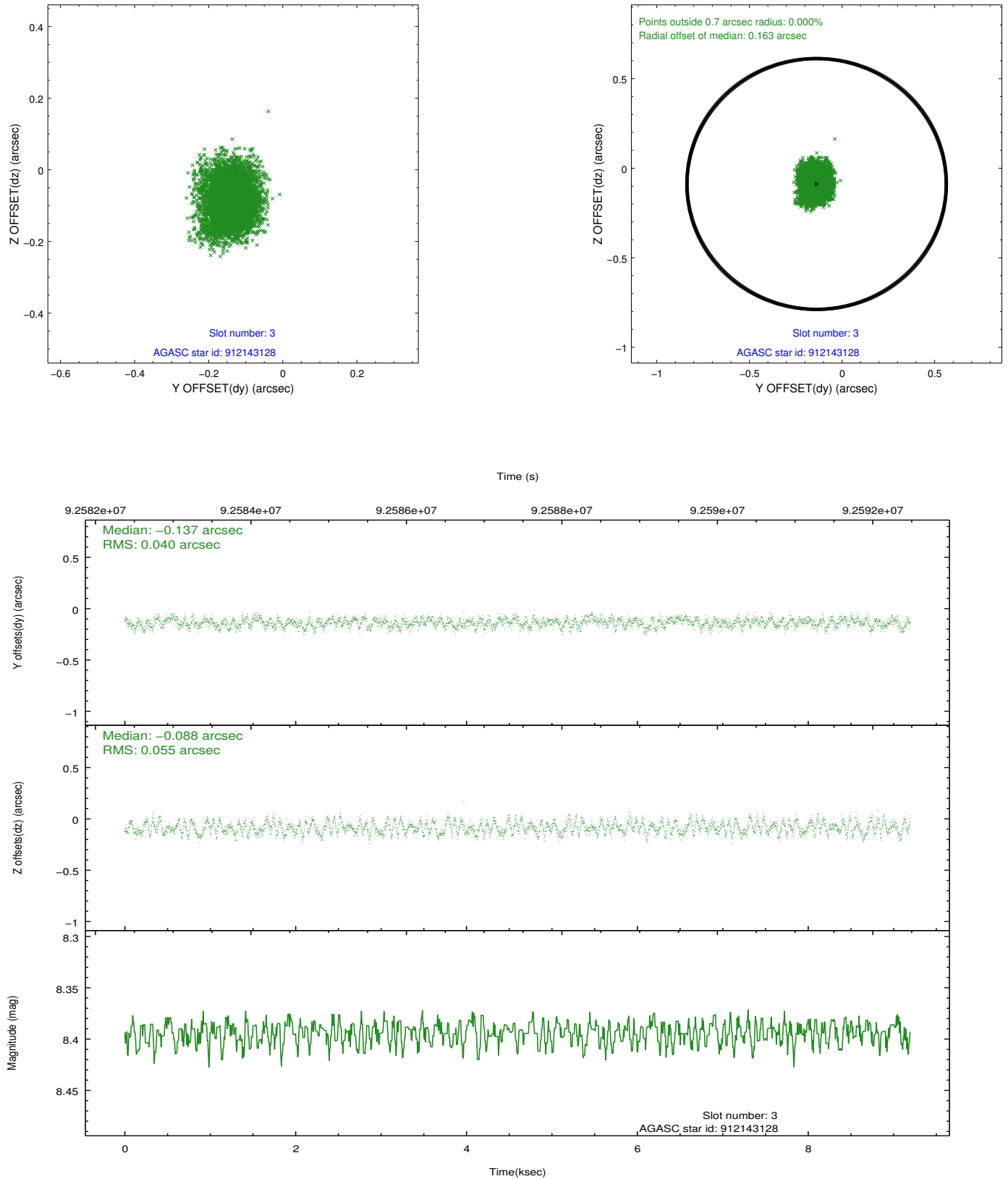


Slot Statistics

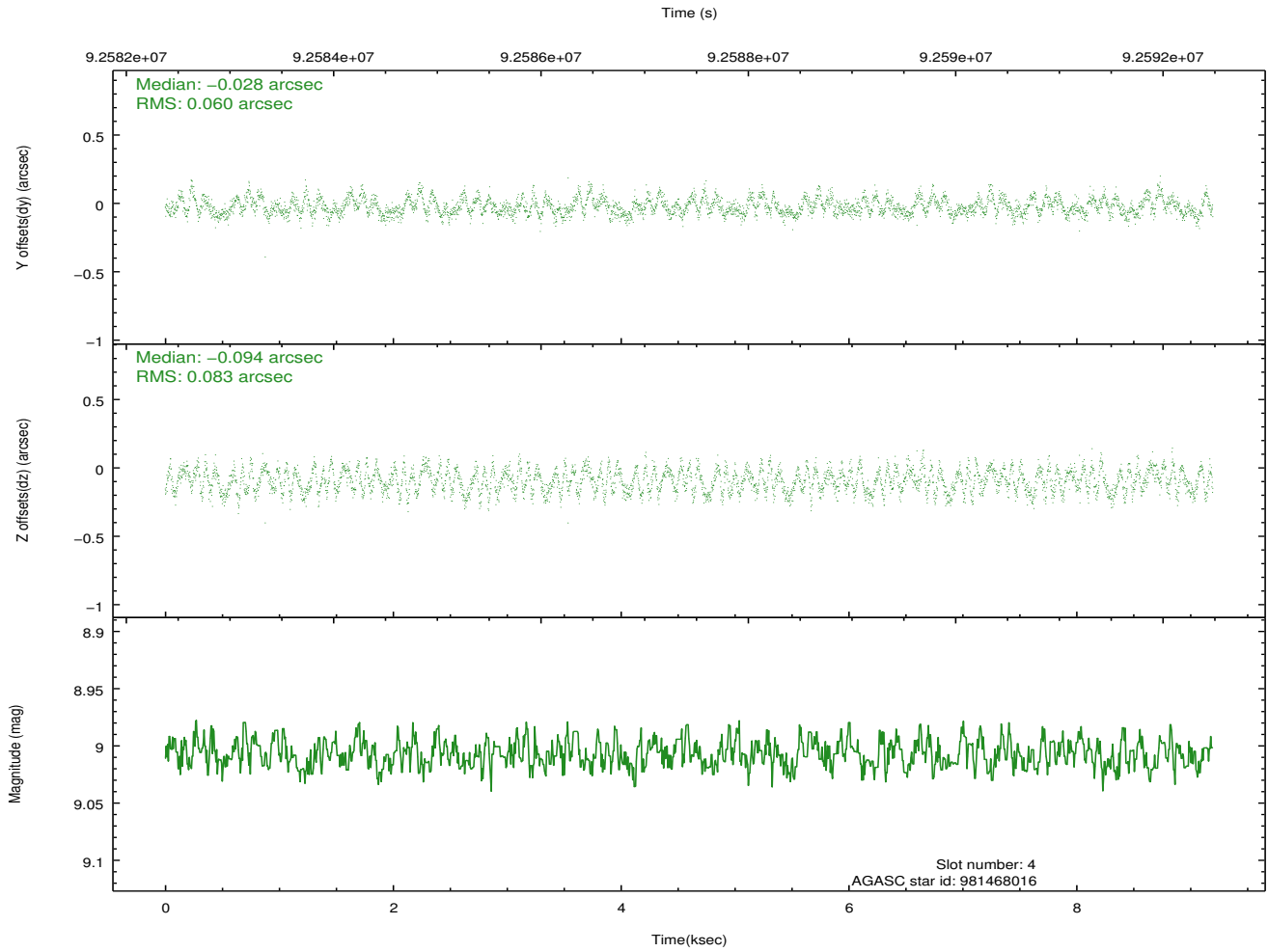
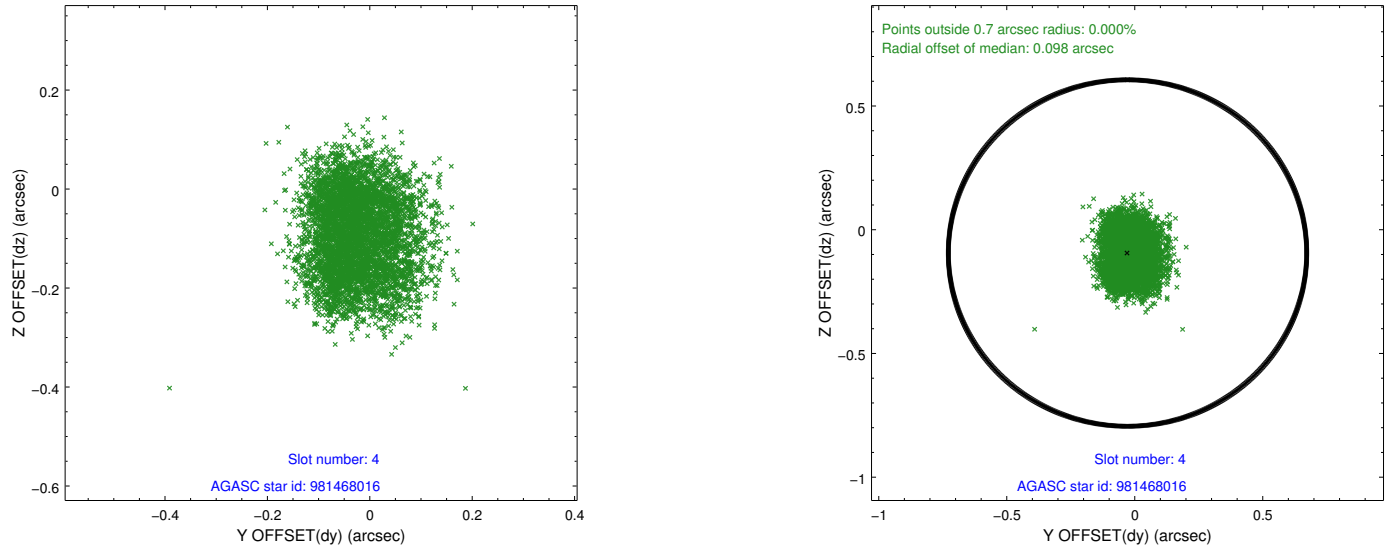
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	2243	-0.024	0.034	0.007	0.013	0.000000	0.000000	-755.56	-1666.28
1	FID	ACIS-S-4	7.21	2242	-0.012	0.003	0.008	0.016	0.000000	0.000000	2157.47	241.57
2	FID	ACIS-S-5	7.23	2242	0.005	-0.027	0.008	0.013	0.000000	0.000000	-1807.60	235.91
3	GUIDE	912143128	8.39	4485	-0.137	-0.088	0.073	0.116	328.924992	-29.706140	-1961.75	-1912.82
4	GUIDE	981468016	9.01	4487	-0.028	-0.094	0.111	0.168	328.842457	-30.034984	-868.21	-2433.87
5	GUIDE	912275088	9.05	4486	-0.006	0.017	0.064	0.106	329.619228	-29.738698	-1346.17	171.35
6	GUIDE	981478152	9.41	4485	0.072	0.116	0.075	0.124	329.415589	-30.057192	-379.48	-713.41
7	GUIDE	981469488	9.60	4486	0.093	0.051	0.092	0.145	329.261199	-30.045155	-532.88	-1171.63

2.4 Star Slots

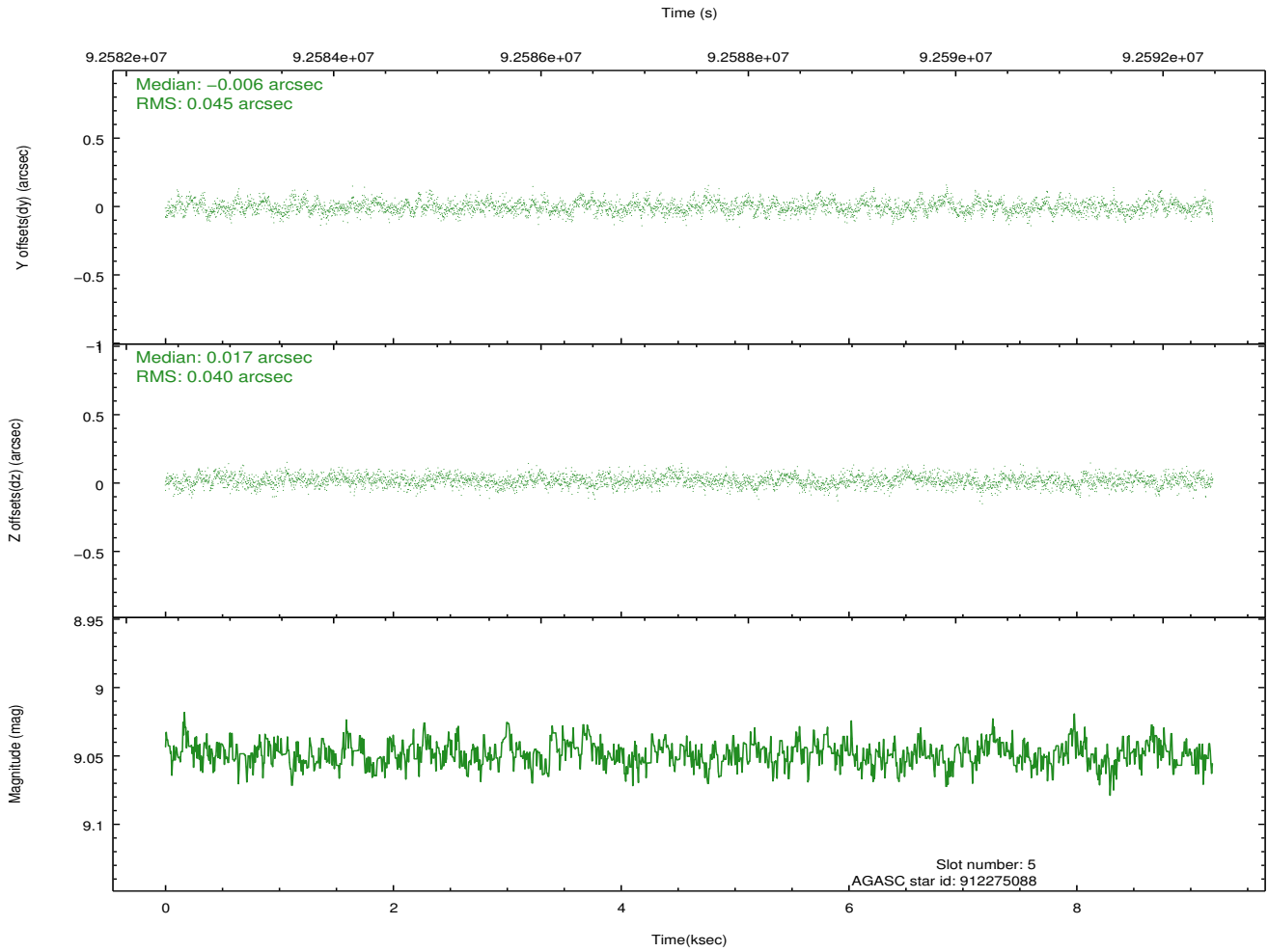
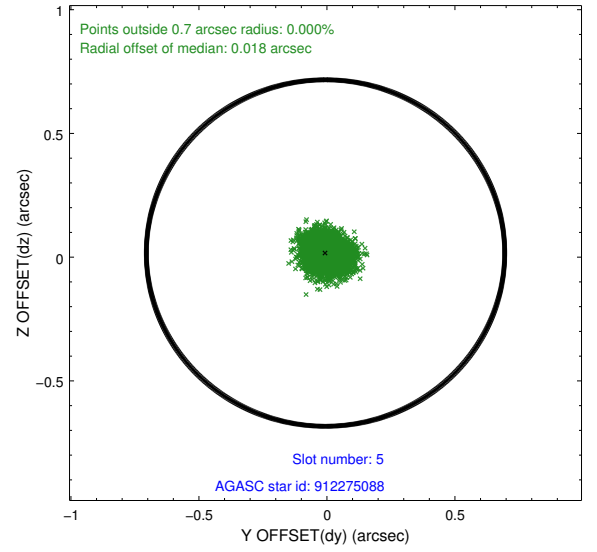
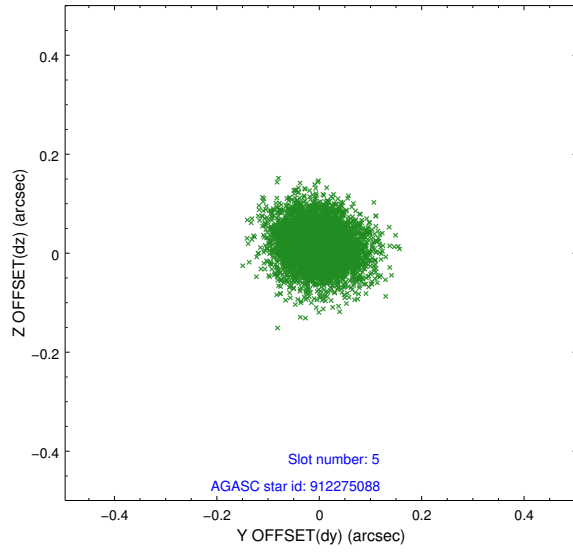
2.4.1 Slot 3



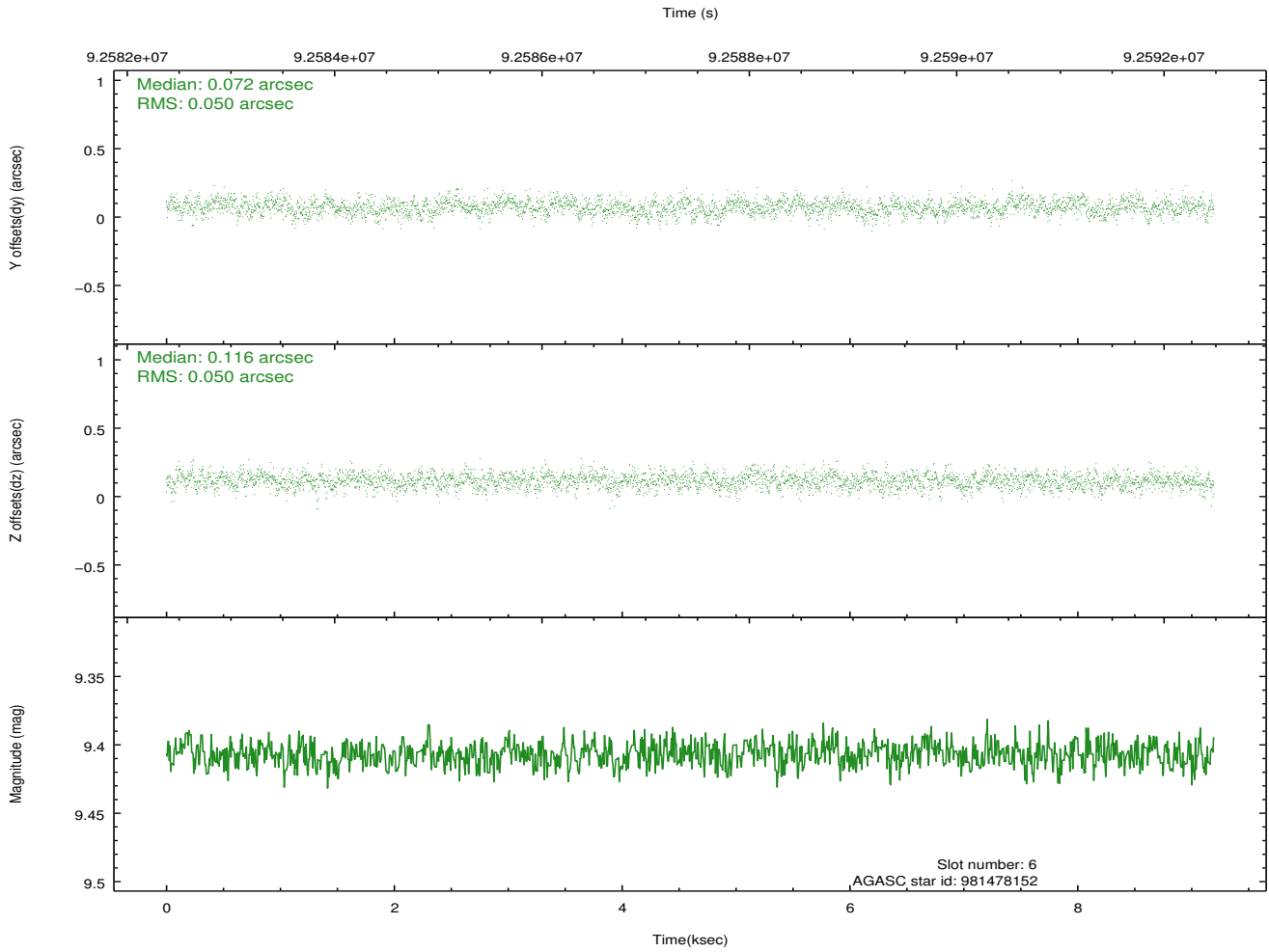
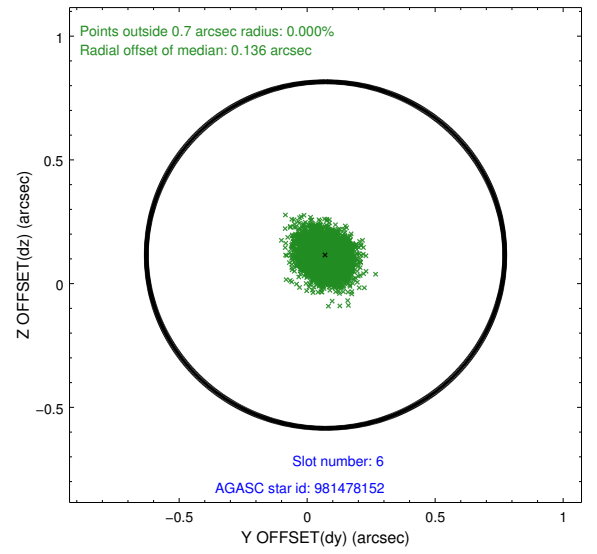
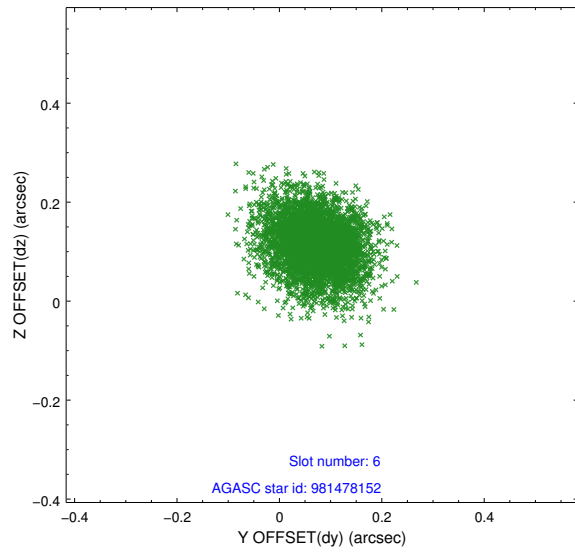
2.4.2 Slot 4



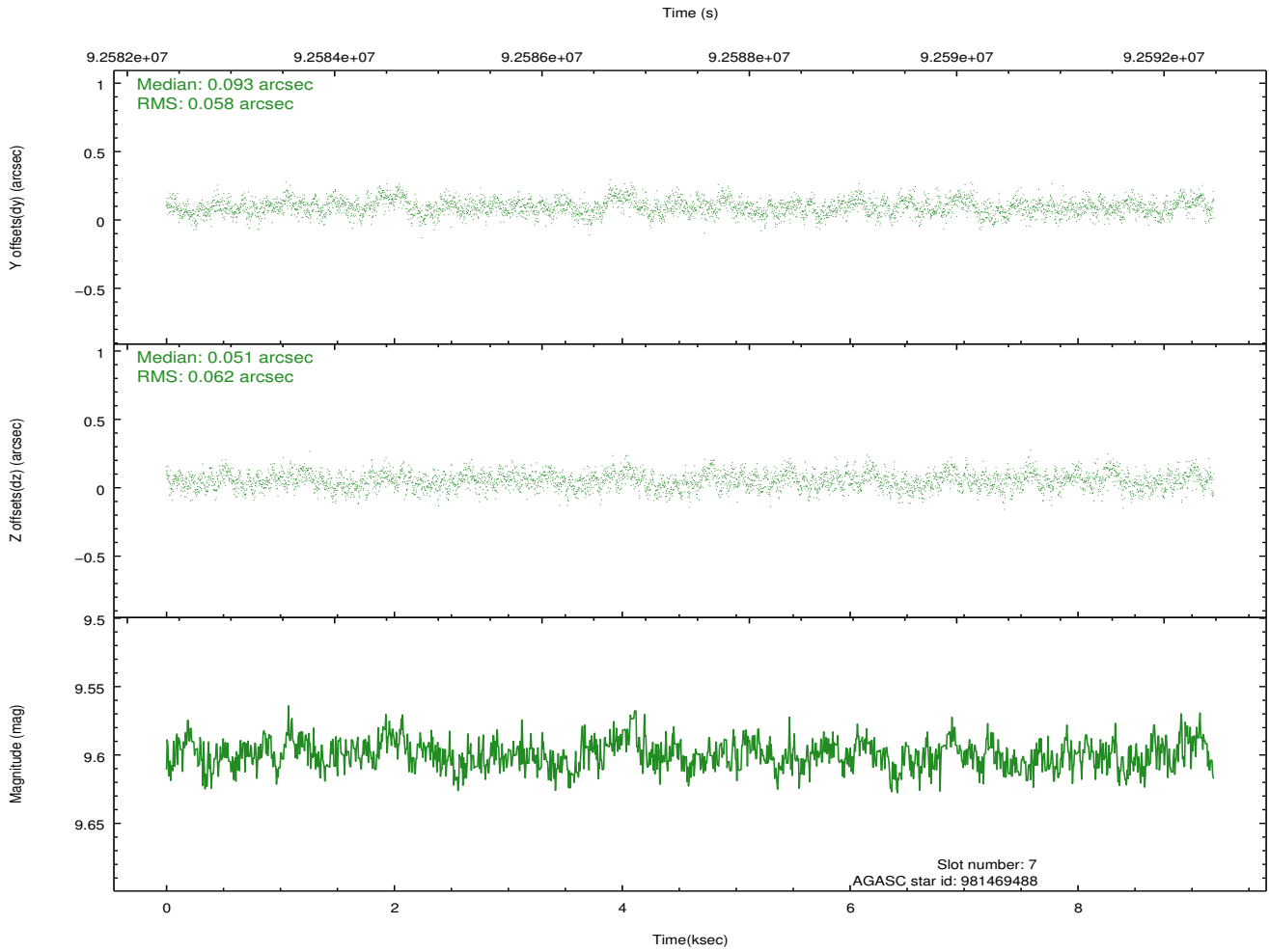
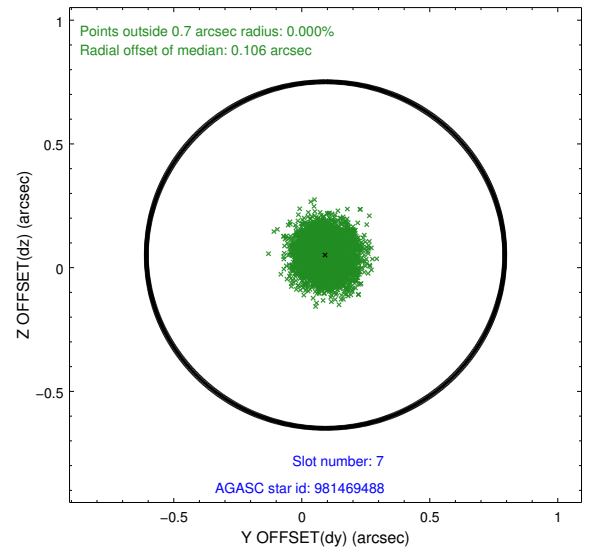
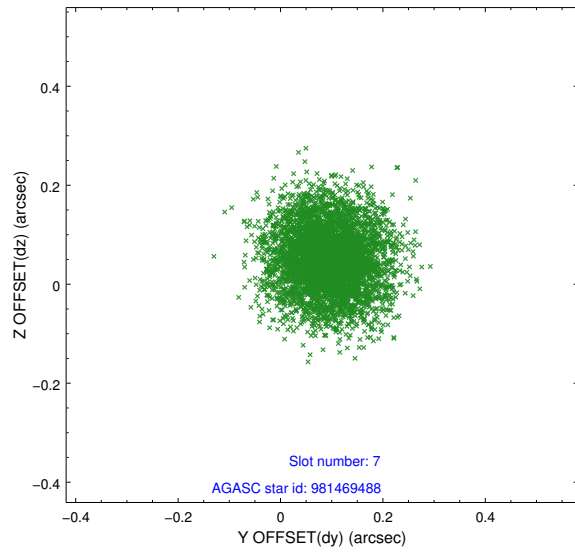
2.4.3 Slot 5



2.4.4 Slot 6

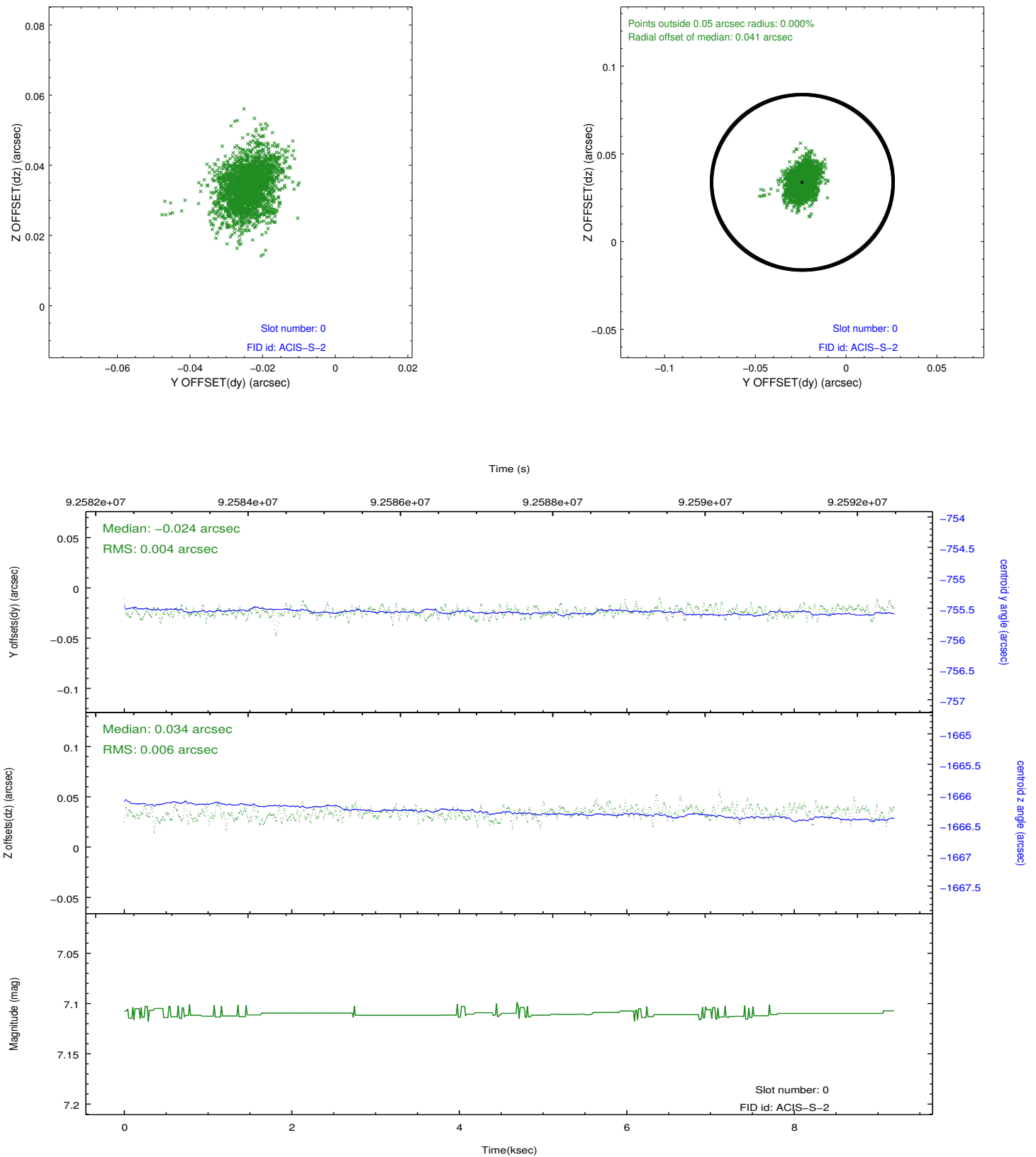


2.4.5 Slot 7

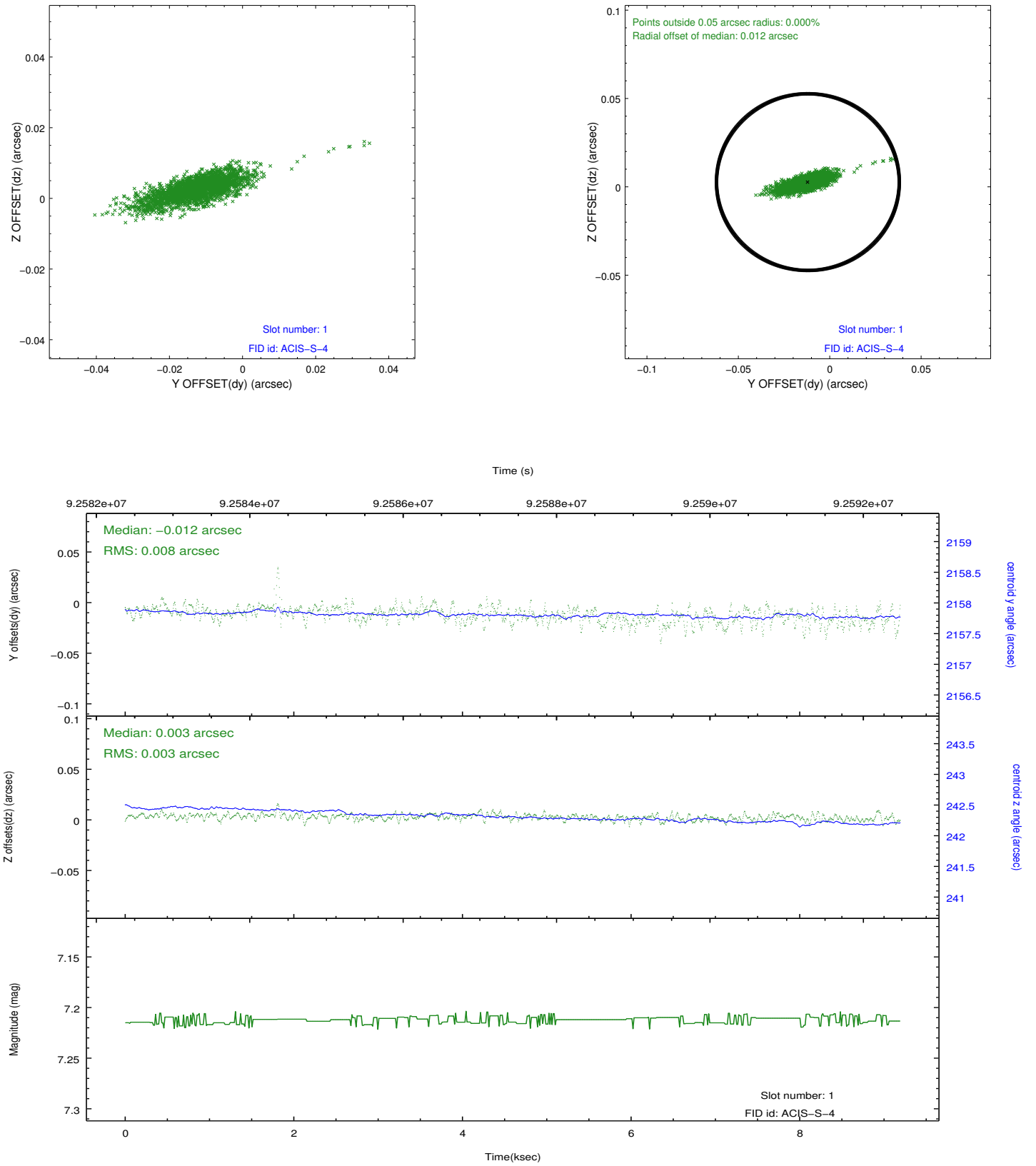


2.5 FID Slots

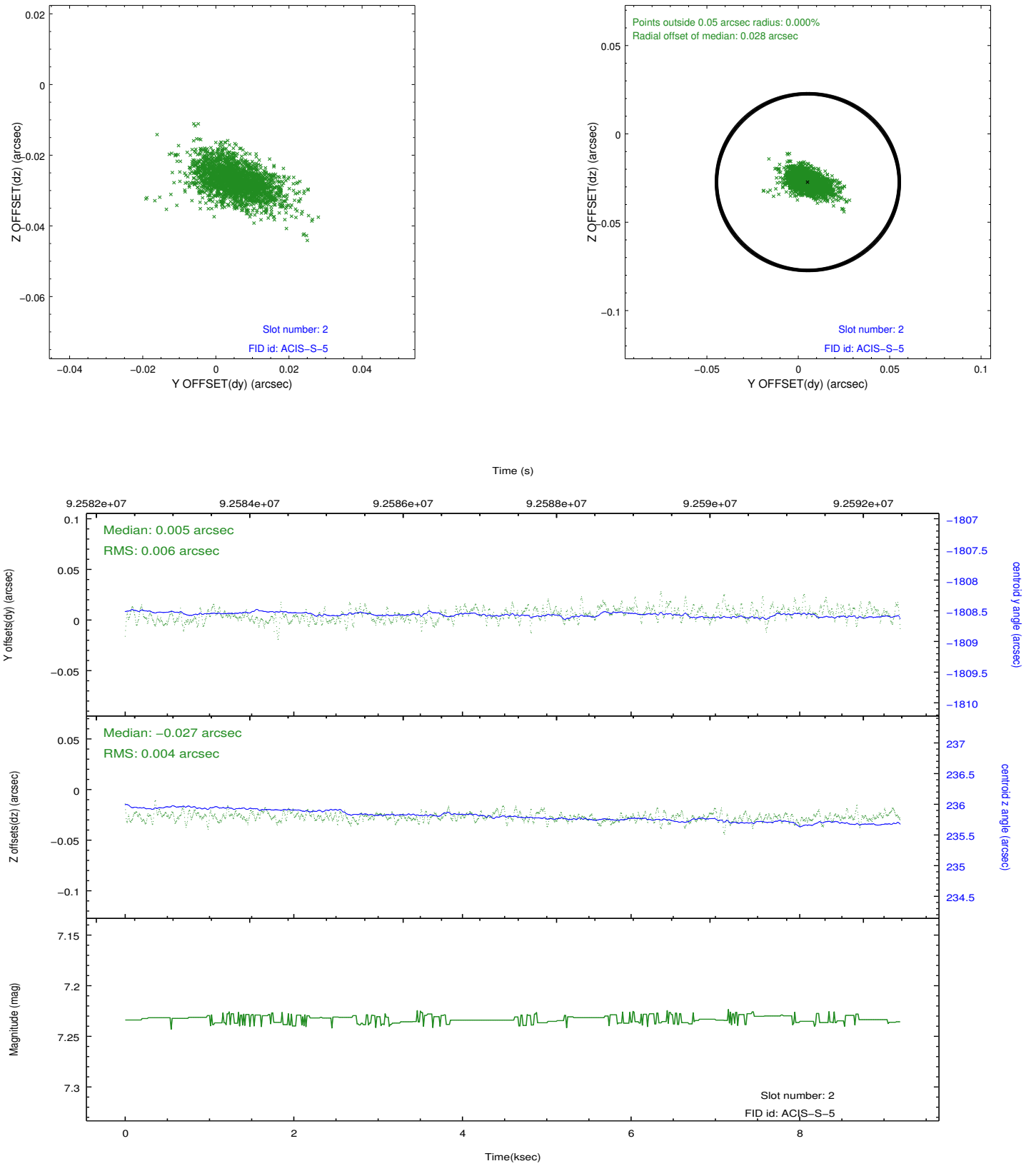
2.5.1 Slot 0



2.5.2 Slot 1

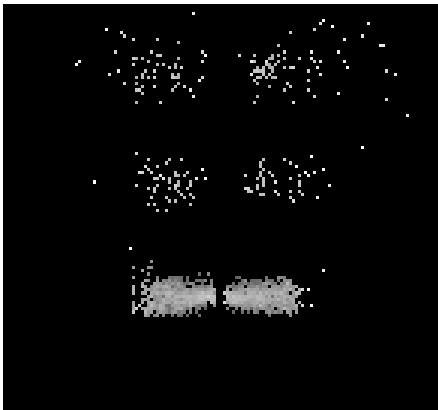


2.5.3 Slot 2

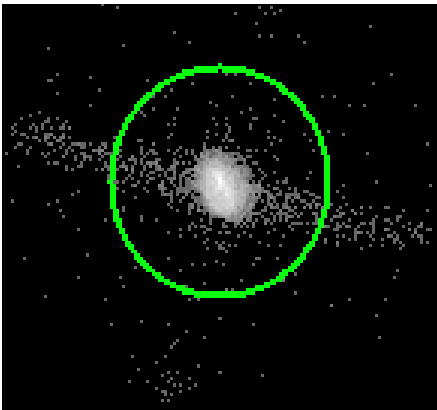


3 Gratings

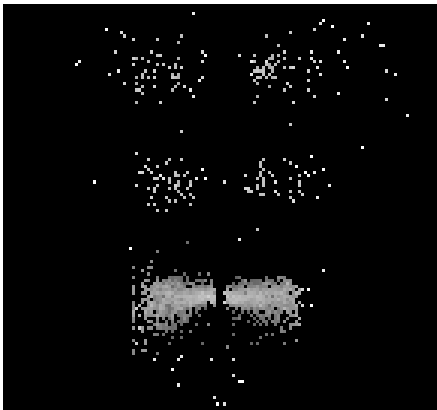
3.1 LETG Arm



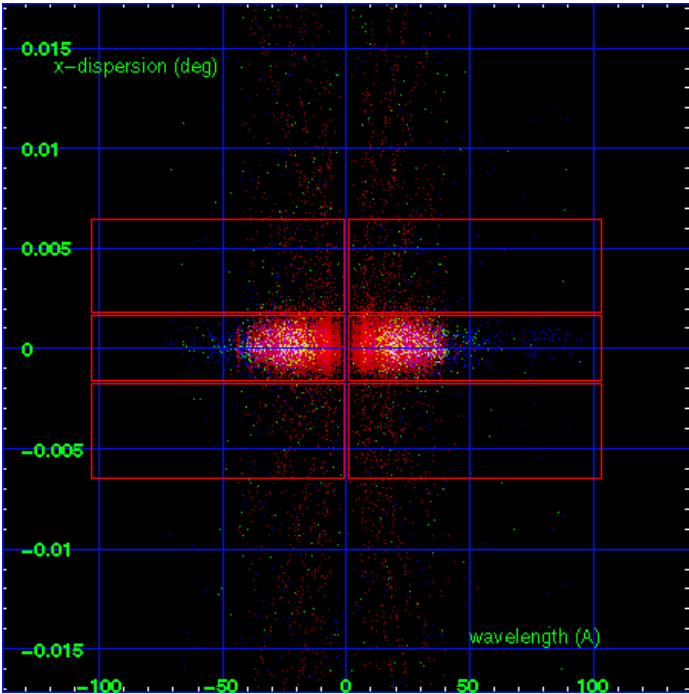
LETG Order Sort 123



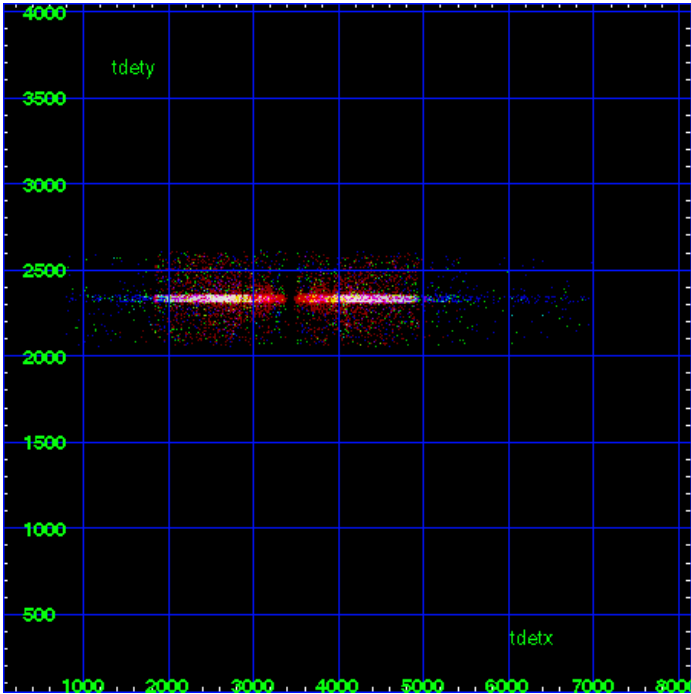
LETG Zero Order



LETG Order Sort ALL

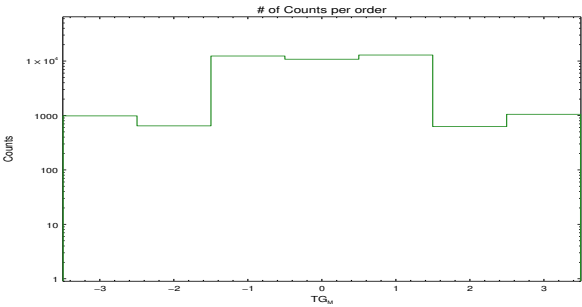


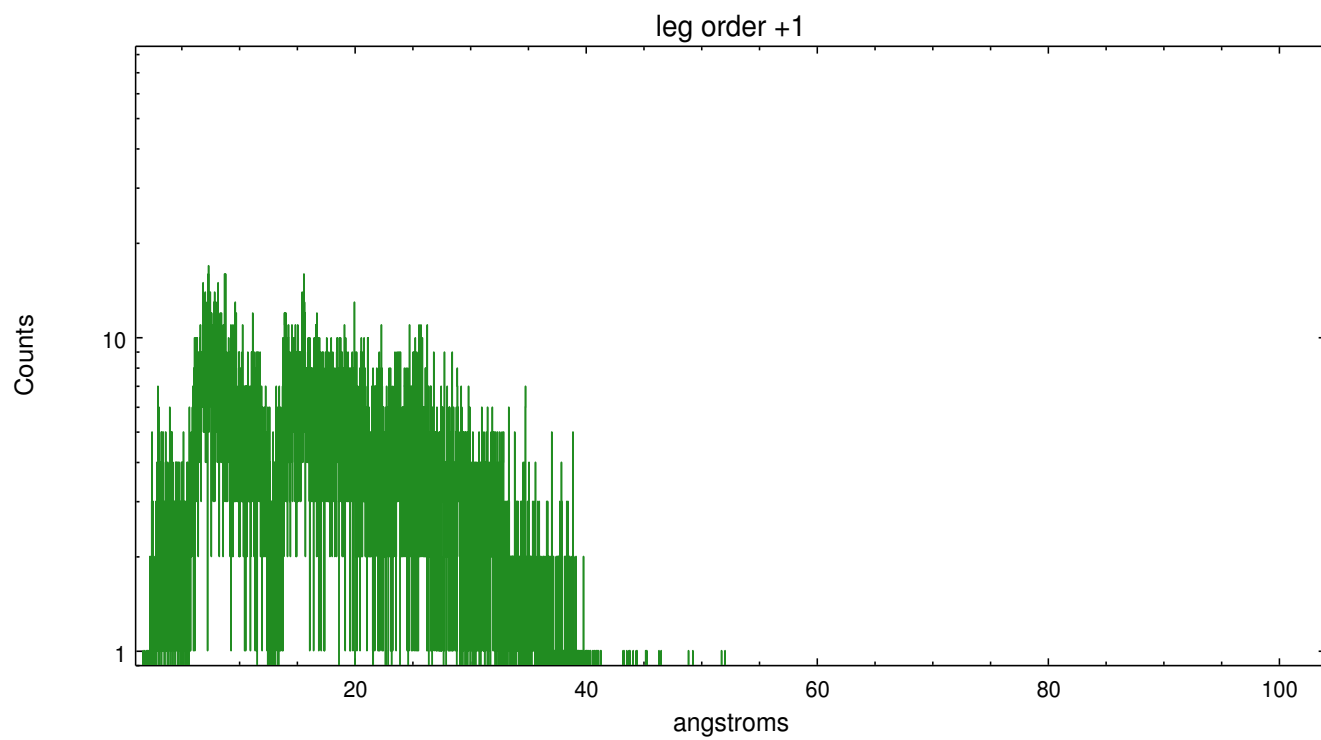
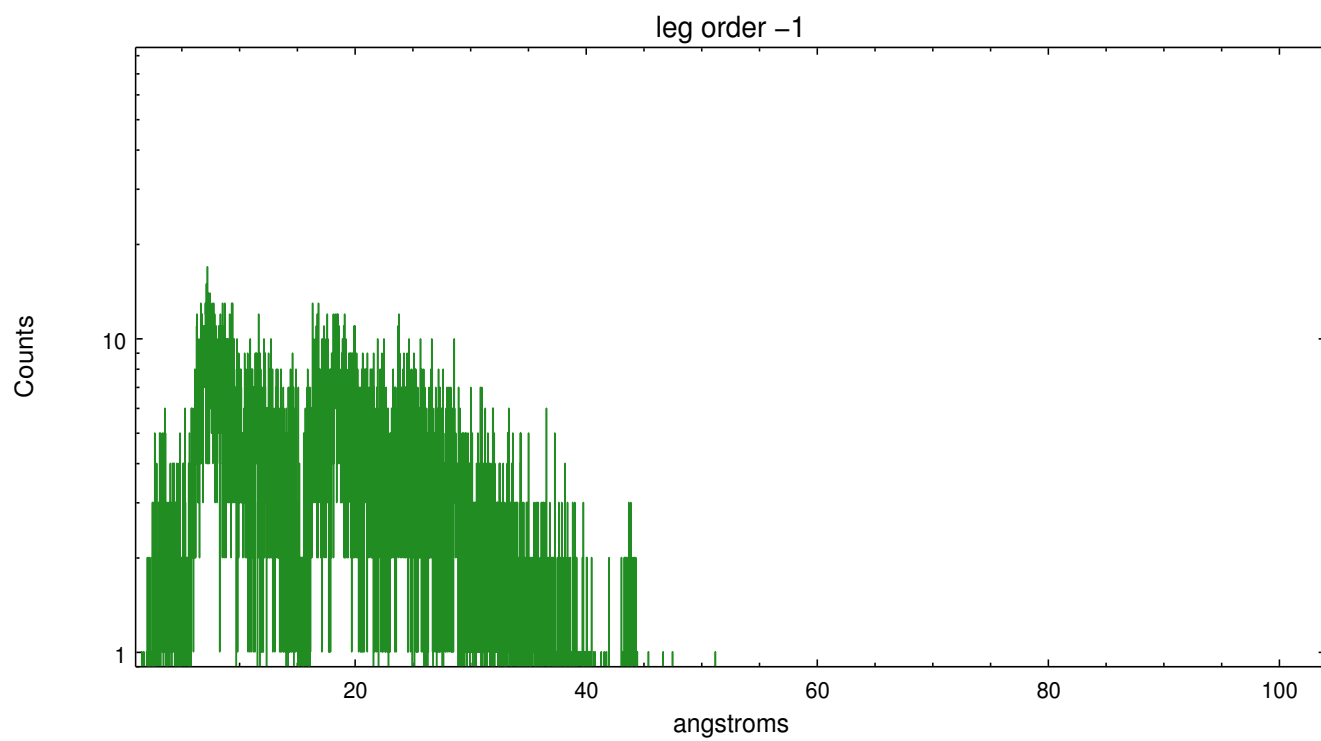
Spot Image LETG



Full Detector LETG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	986	646	12464	10870	12994	626	1054





A Summary

A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2013.03.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.755

A.2 Comments

warning: far off-axis source; there is no grating line spread function calibration off-axis (grating rmf).