

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 1795 - L2 Version 5
Chandra X-Ray Center

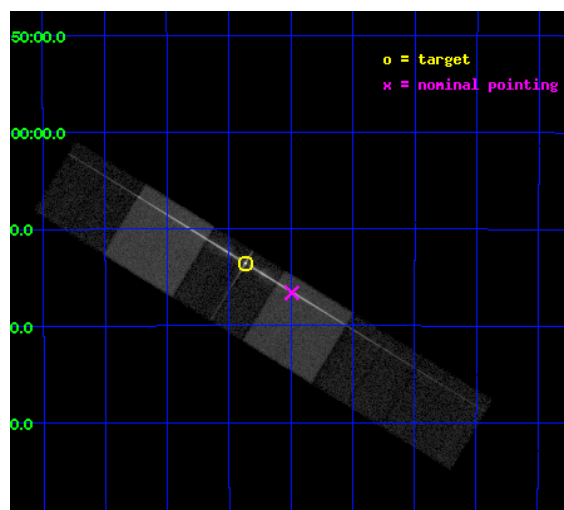
L2 Processing Date : Jan 9 2013

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1 Front

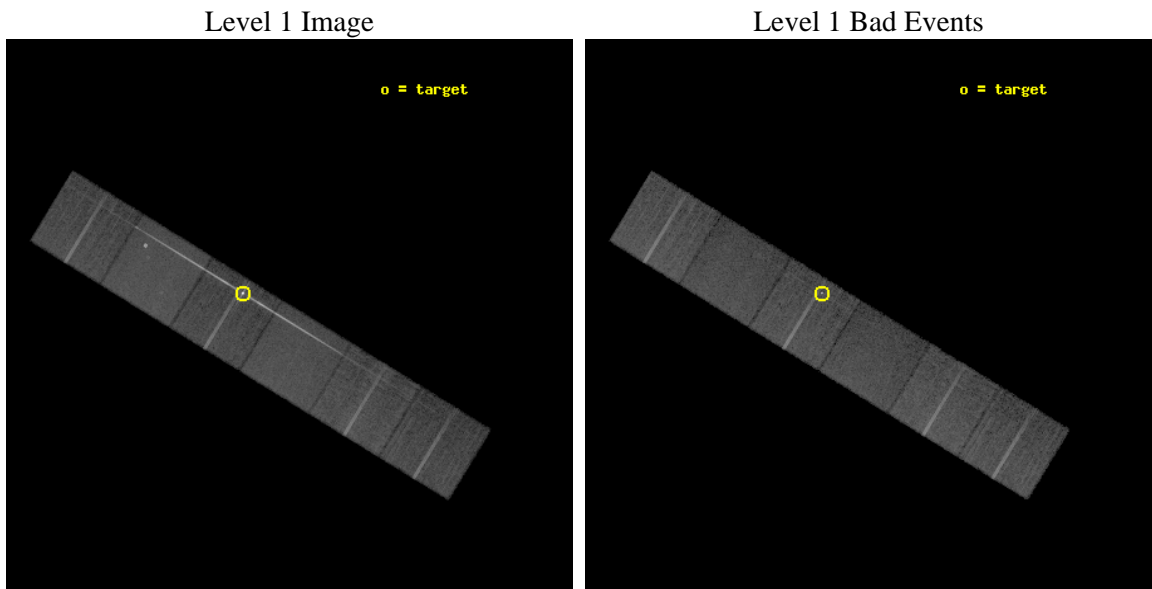
seq_num	390013	Sequence number
obs_id	1795	Observation id
title	GRATINGS CALIBRATION OBSERVATIONS OF PKS2155-304	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	PKS2155-304	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	329.716667	Observer's specified target RA [deg]
dec_targ	-30.225556	Observer's specified target Dec [deg]
ra_nom	329.62308396053	Nominal RA [deg]
dec_nom	-30.276836021556	Nominal Dec [deg]
roll_nom	31.459482514674	Nominal Roll [deg]
revision	5	Processing version of data
ontime	19954.09624286	Sum of GTIs [s]
livetime	19701.425461319	Livetime [s]
ontime4	19954.219362855	Sum of GTIs [s]
ontime5	19954.137282848	Sum of GTIs [s]
ontime6	19954.09624286	Sum of GTIs [s]
ontime7	19954.178322852	Sum of GTIs [s]
ontime8	19954.055202857	Sum of GTIs [s]
ontime9	19954.014162853	Sum of GTIs [s]
l2events	286153	Number of level 2 events



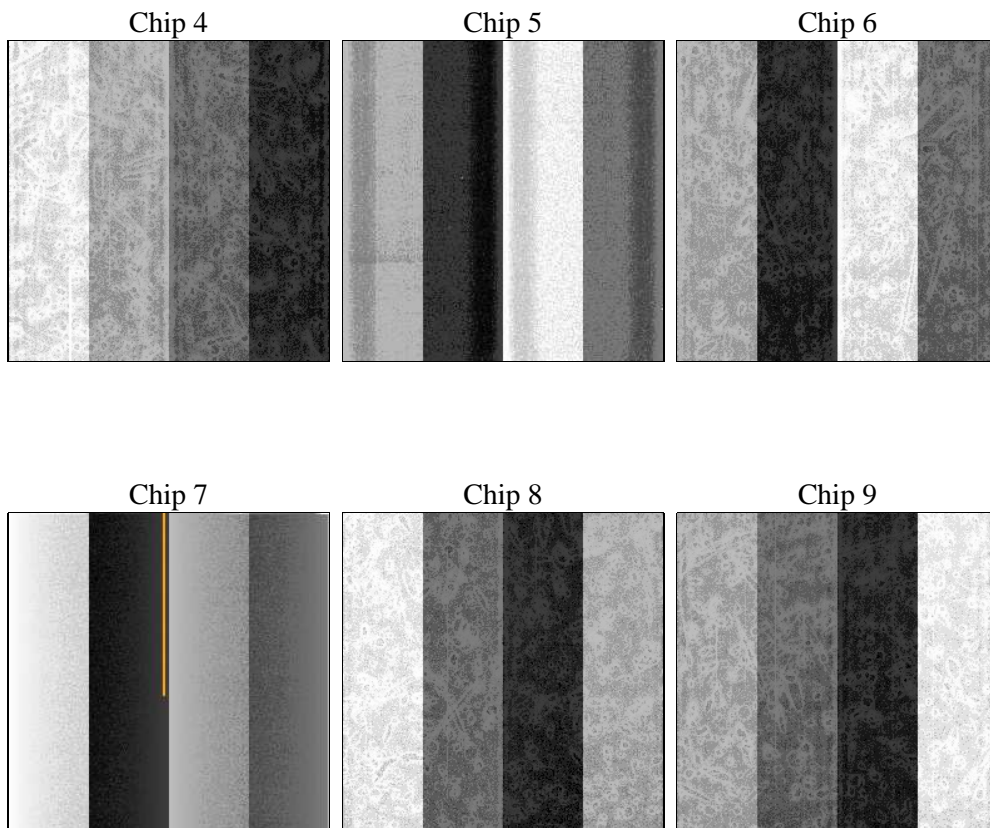
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	20000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	19954.09624286	Sum of GTIs [s]
caldsver	4.5.1.1	 	ontime4	19954.219362855	Sum of GTIs [s]
date	2012-08-31T14:27:51	Date and time of file creation	ontime5	19954.137282848	Sum of GTIs [s]
revision	4	Processing version of data	ontime6	19954.09624286	Sum of GTIs [s]
			ontime7	19954.178322852	Sum of GTIs [s]
			ontime8	19954.055202857	Sum of GTIs [s]
			ontime9	19954.014162853	Sum of GTIs [s]
			l1events	914874	Number of level 1 events

2.1.4 Events

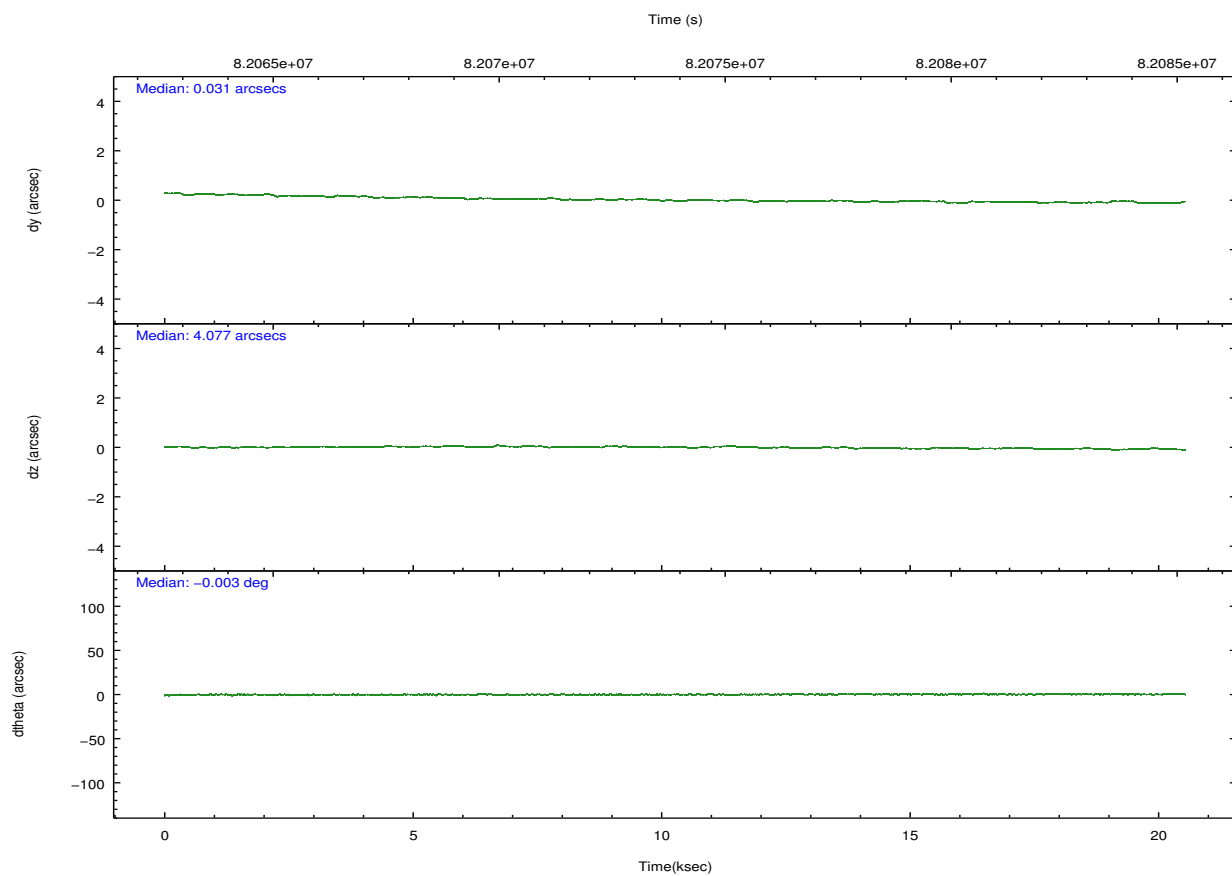
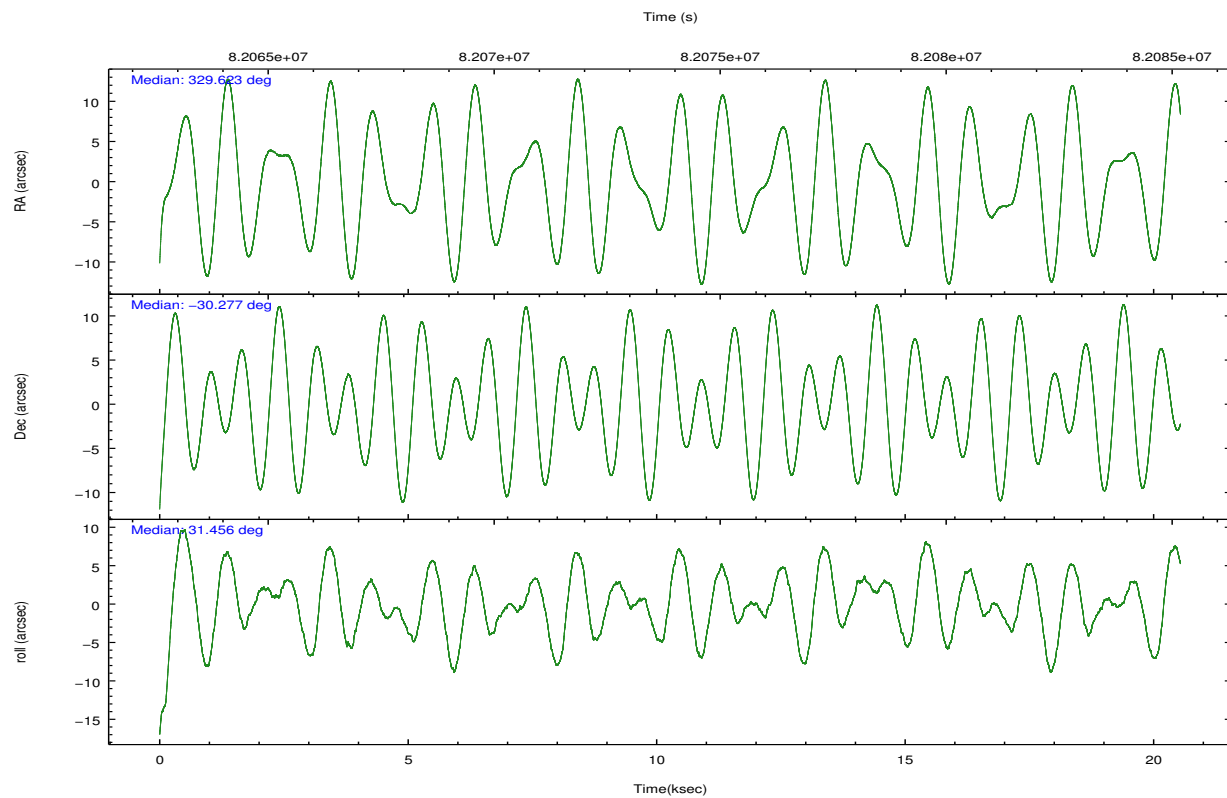
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	126850	175622	189113	165005	144465	113819	grade 0 events	6432	20633	62670	15728	10119	5904
rejected events	112570	82079	104986	80449	115468	100053		5%	11%	33%	9%	7%	5%
rejected %	88%	46%	55%	48%	79%	87%	grade 1 events	53	211	1989	153	85	48
								0%	0%	1%	0%	0%	0%
							grade 2 events	3131	25733	9922	18352	5967	2661
								2%	14%	5%	11%	4%	2%
							grade 3 events	1272	5231	3725	8516	3074	1351
								1%	2%	1%	5%	2%	1%
							grade 4 events	1230	5078	3559	8413	2832	1377
								0%	2%	1%	5%	1%	1%
							grade 5 events	3800	11764	5447	13574	5850	4616
								2%	6%	2%	8%	4%	4%
							grade 6 events	2216	36880	4268	33558	7009	2475
								1%	20%	2%	20%	4%	2%
							grade 7 events	108716	70092	97533	66711	109529	95387
								85%	39%	51%	40%	75%	83%

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	329.608077	329.6230839605297
[deg] Pointing Dec	-30.300974	-30.27683602155613
[deg] Pointing Roll	31.295283	31.45948251467441
[mm] SIM focus pos	-0.684267	-0.6828225247311905
[mm] SIM defocus	0	0.001444936568705701
[mm] SIM translation stage pos	-182.131972	-182.1344861297048
[mm] SIM translation stage offset	-8.000551	-7.998036453302973
[s] Observation start time (MET)	82064164.184000	82062939.84827501
Observation start date	2000-08-07T19:35:00	2000-08-07T19:15:39
[s] Observation end time (MET)	82084164.184000	82084453.06157701
Observation end date	2000-08-08T01:08:20	2000-08-08T01:14:13
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

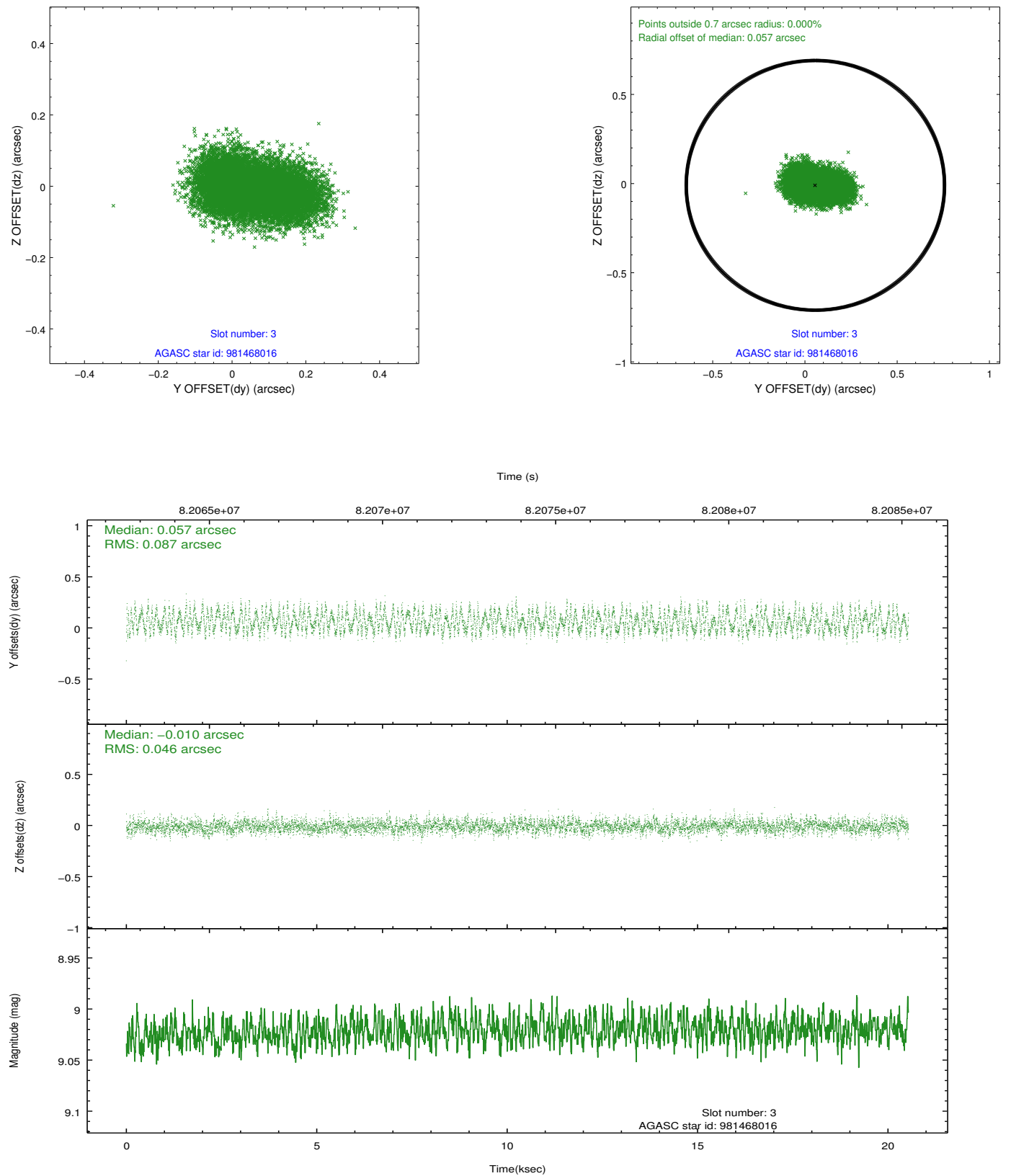


Slot Statistics

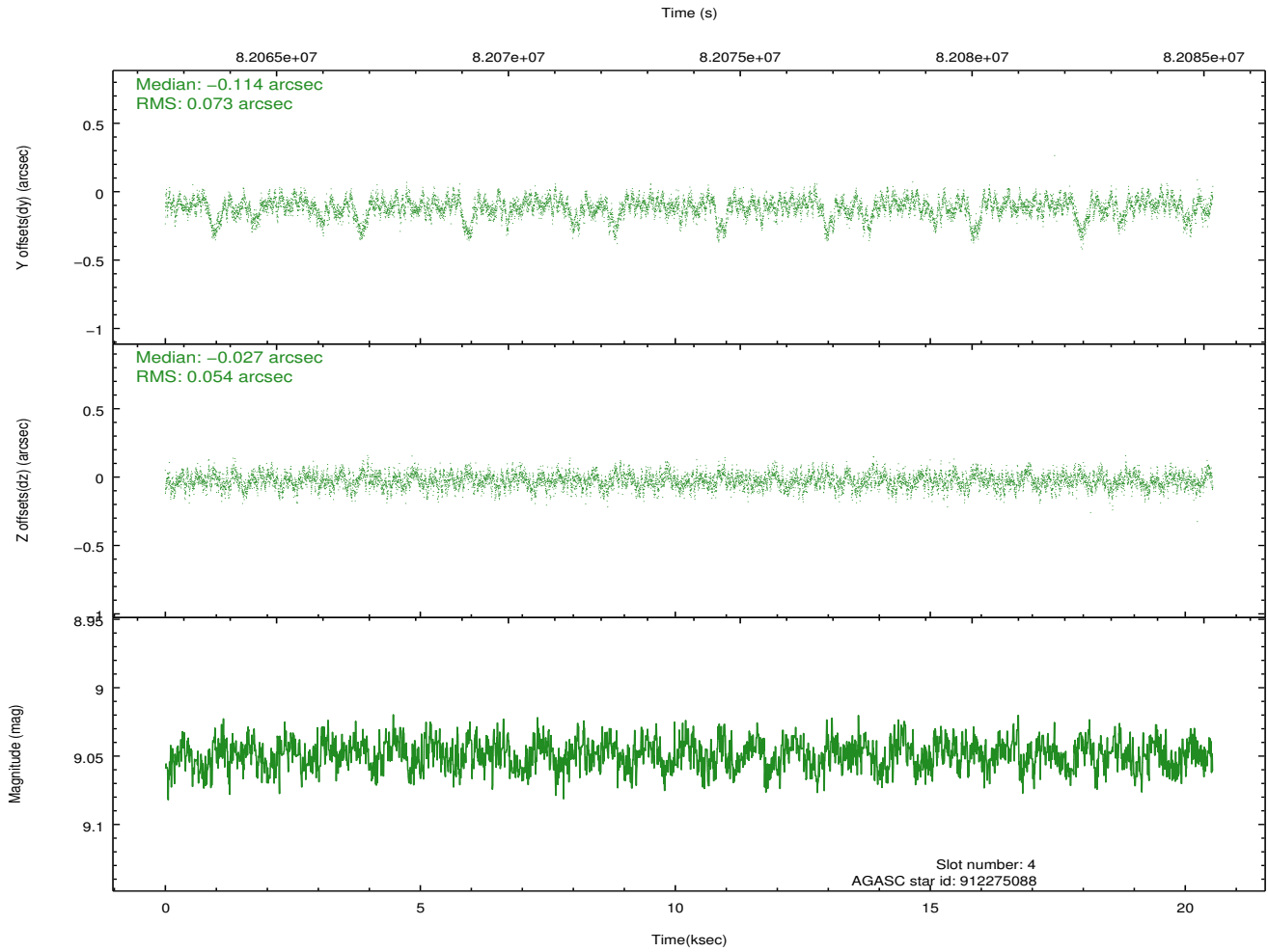
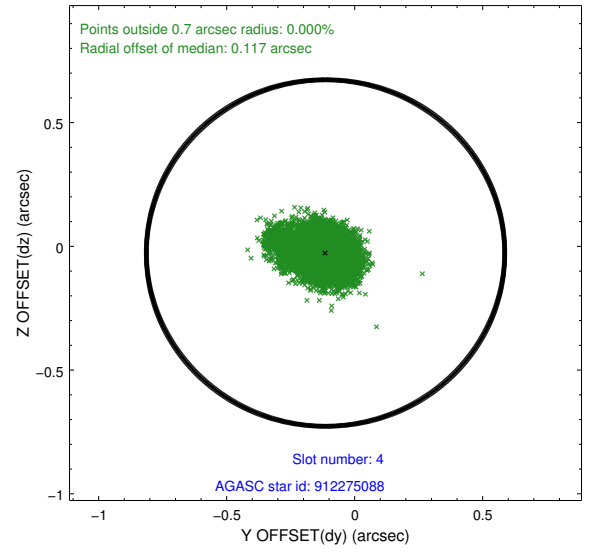
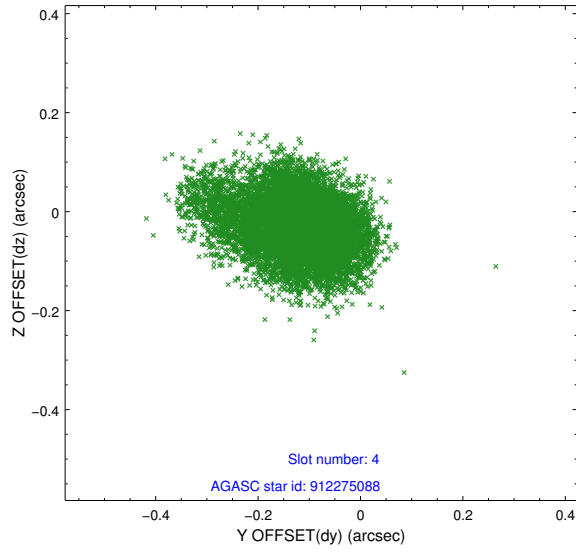
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	5009	-0.058	-0.102	0.008	0.012	0.000000	0.000000	-752.14	-1890.01
1	FID	ACIS-S-4	7.18	5009	0.079	0.055	0.007	0.013	0.000000	0.000000	2161.23	18.35
2	FID	ACIS-S-5	7.22	5010	-0.053	0.055	0.008	0.012	0.000000	0.000000	-1804.71	12.29
3	GUIDE	981468016	9.02	10018	0.057	-0.010	0.107	0.165	328.842457	-30.034984	-1546.04	2052.03
4	GUIDE	912275088	9.05	10013	-0.114	-0.027	0.093	0.166	329.619228	-29.738698	1080.67	1713.07
5	GUIDE	981478152	9.40	10012	0.040	0.071	0.087	0.142	329.415589	-30.057192	-57.04	1062.53
6	GUIDE	981468128	9.36	10013	0.034	-0.043	0.085	0.145	329.756350	-30.158334	660.75	200.12
7	GUIDE	981469488	9.60	10018	-0.018	0.008	0.087	0.140	329.261199	-30.045155	-446.42	1348.30

2.4 Star Slots

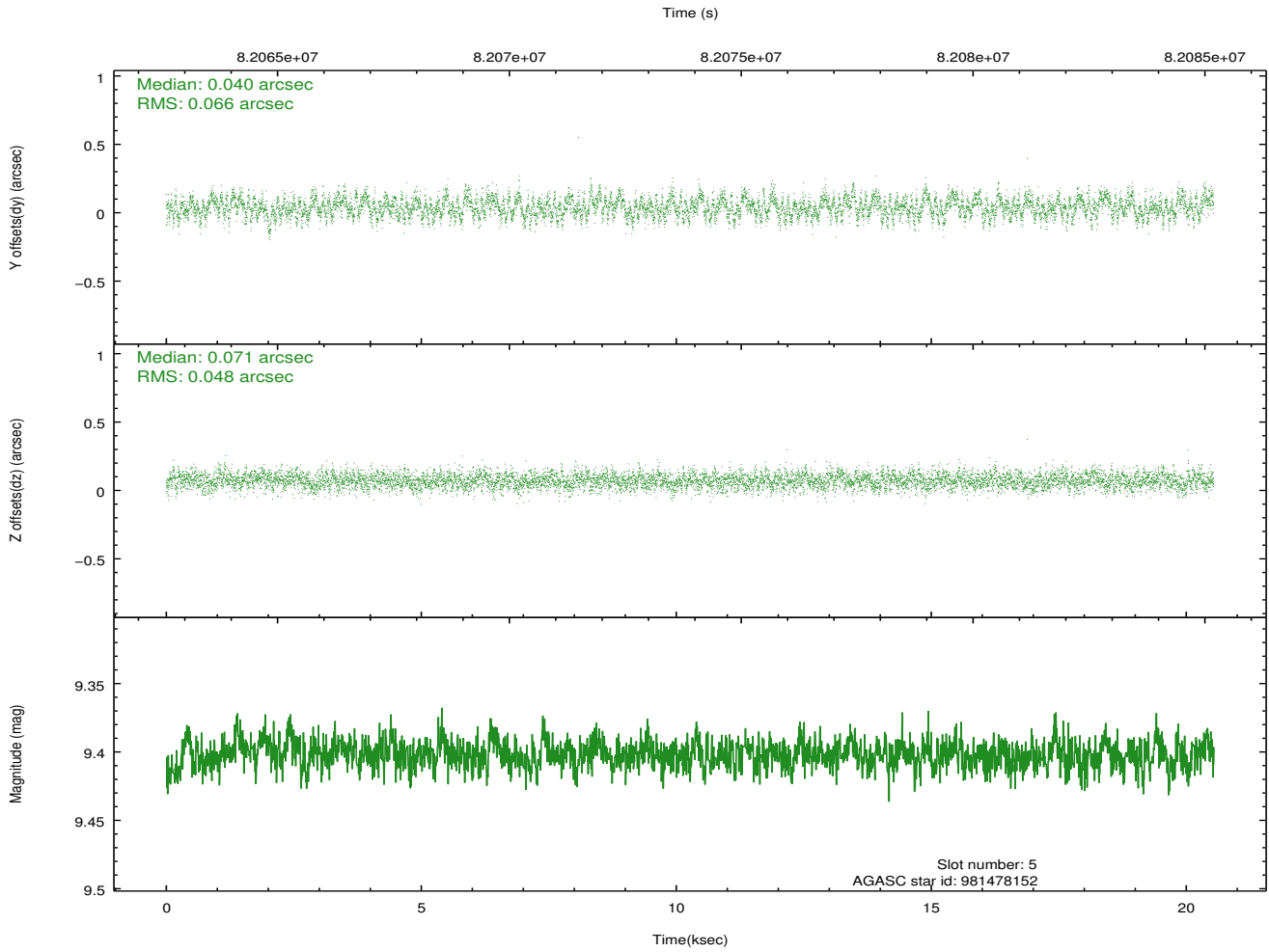
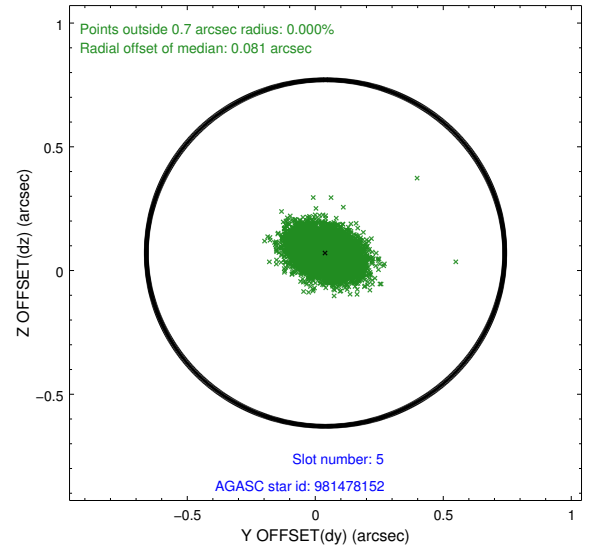
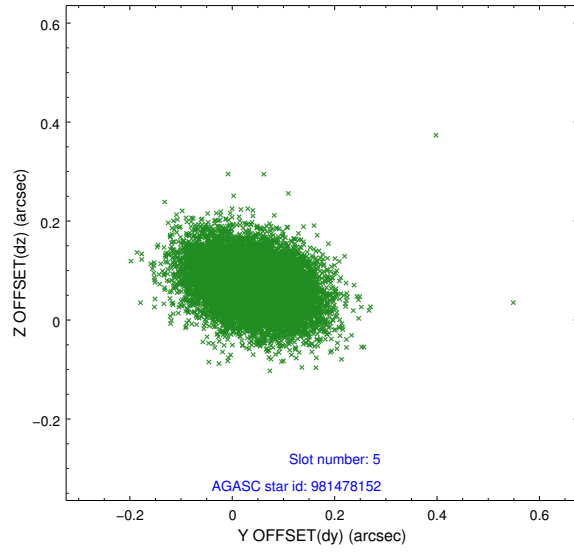
2.4.1 Slot 3



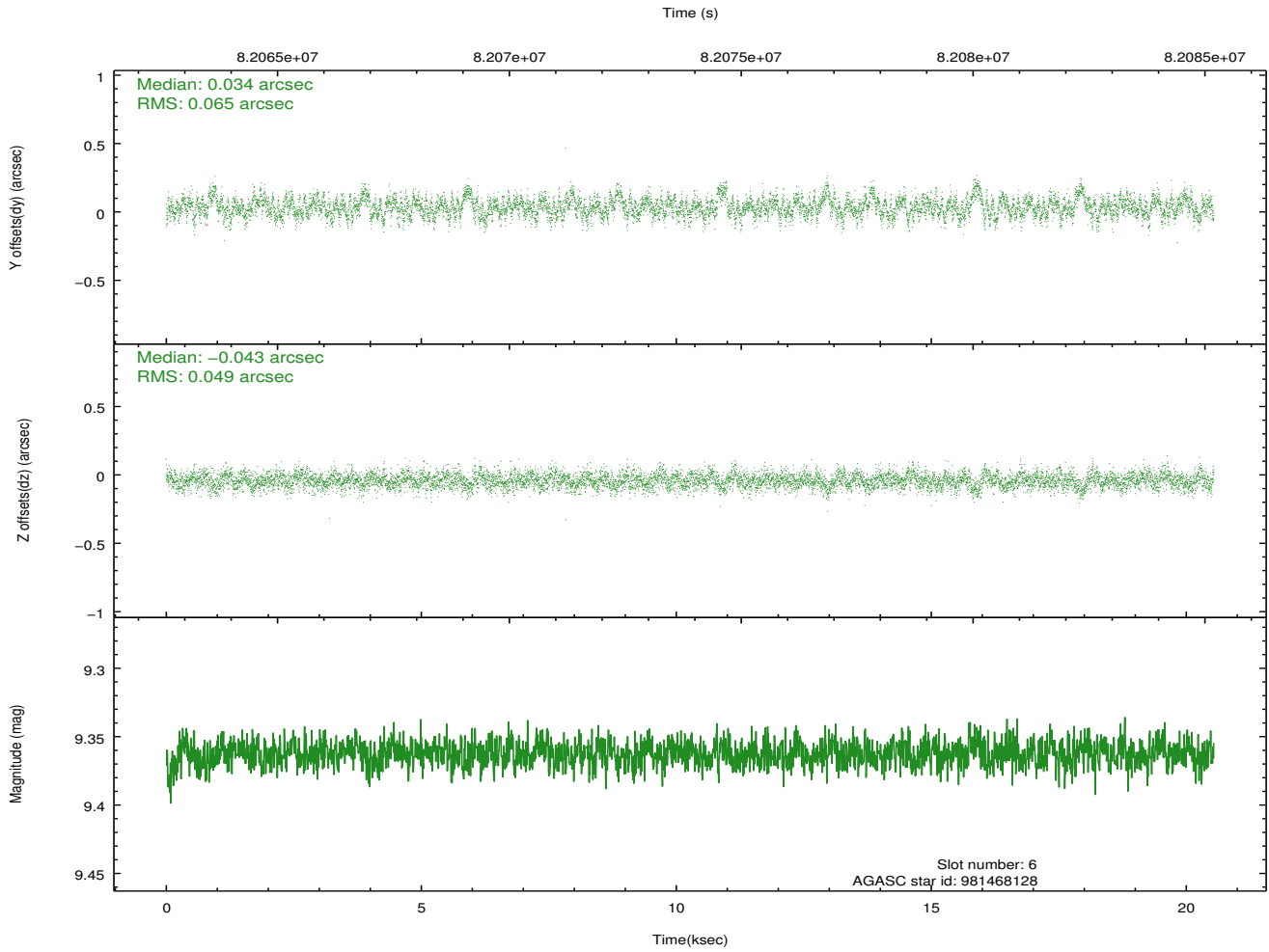
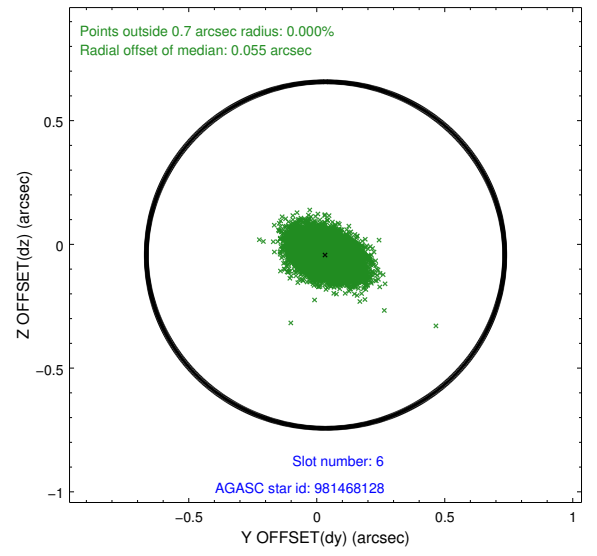
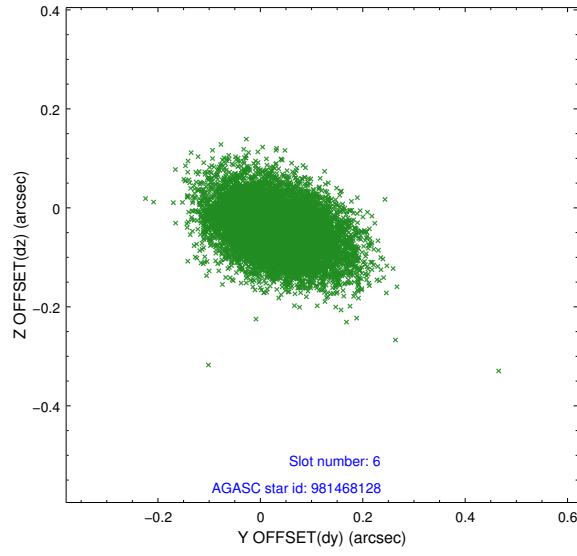
2.4.2 Slot 4



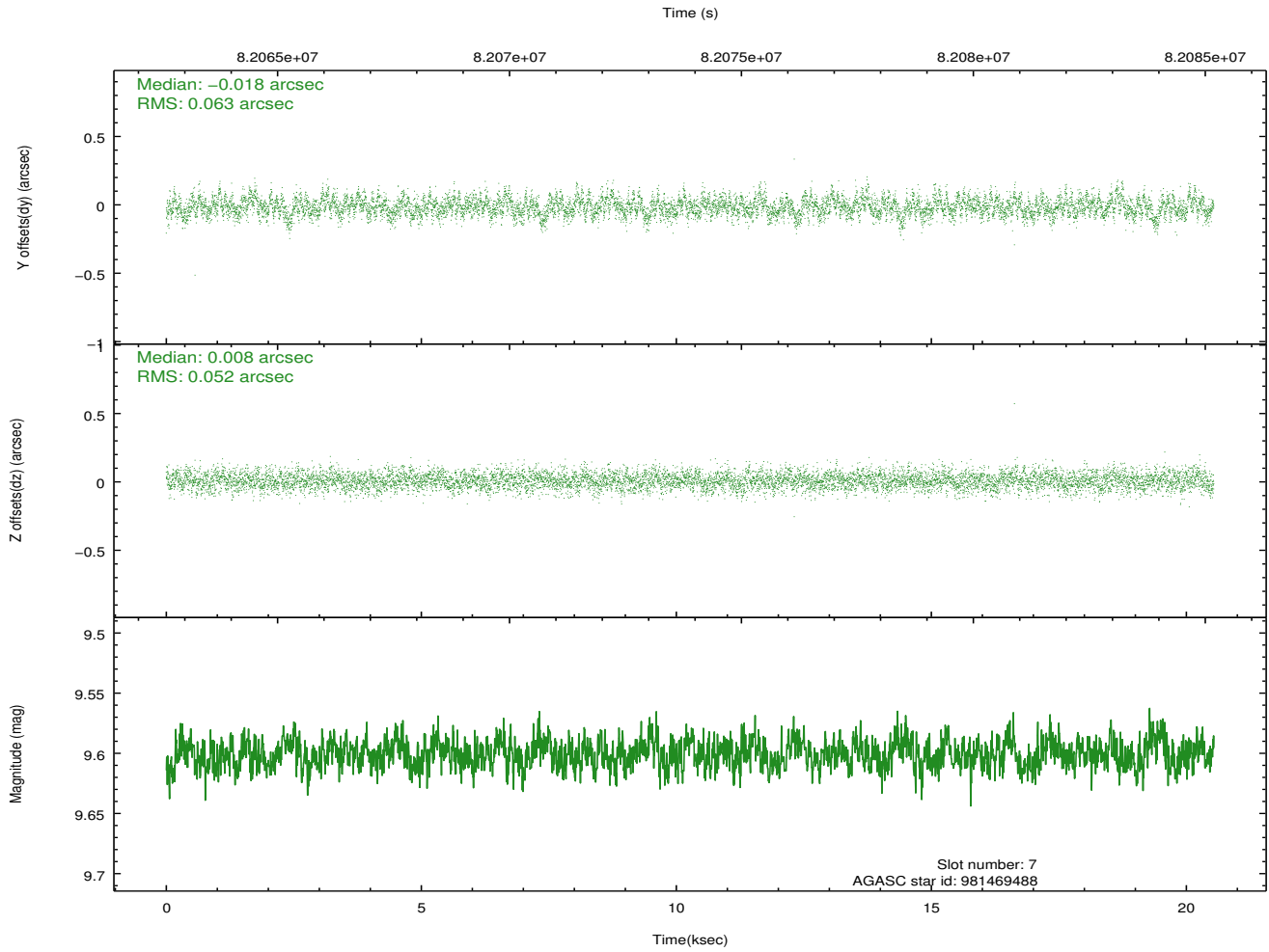
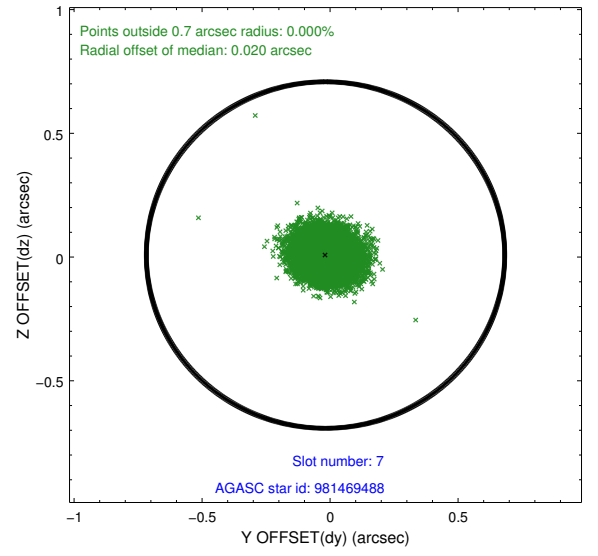
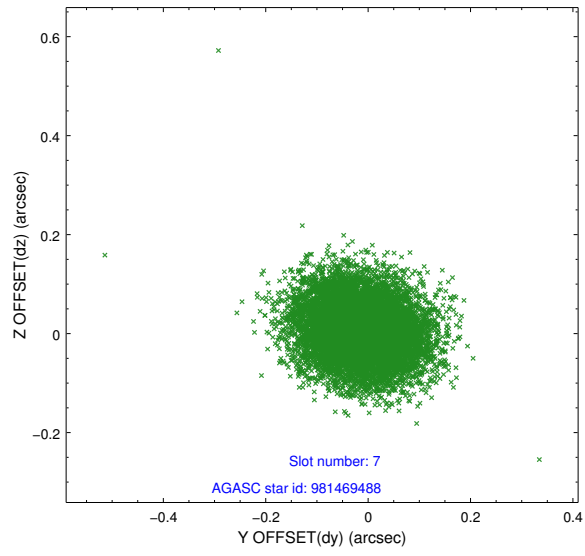
2.4.3 Slot 5



2.4.4 Slot 6

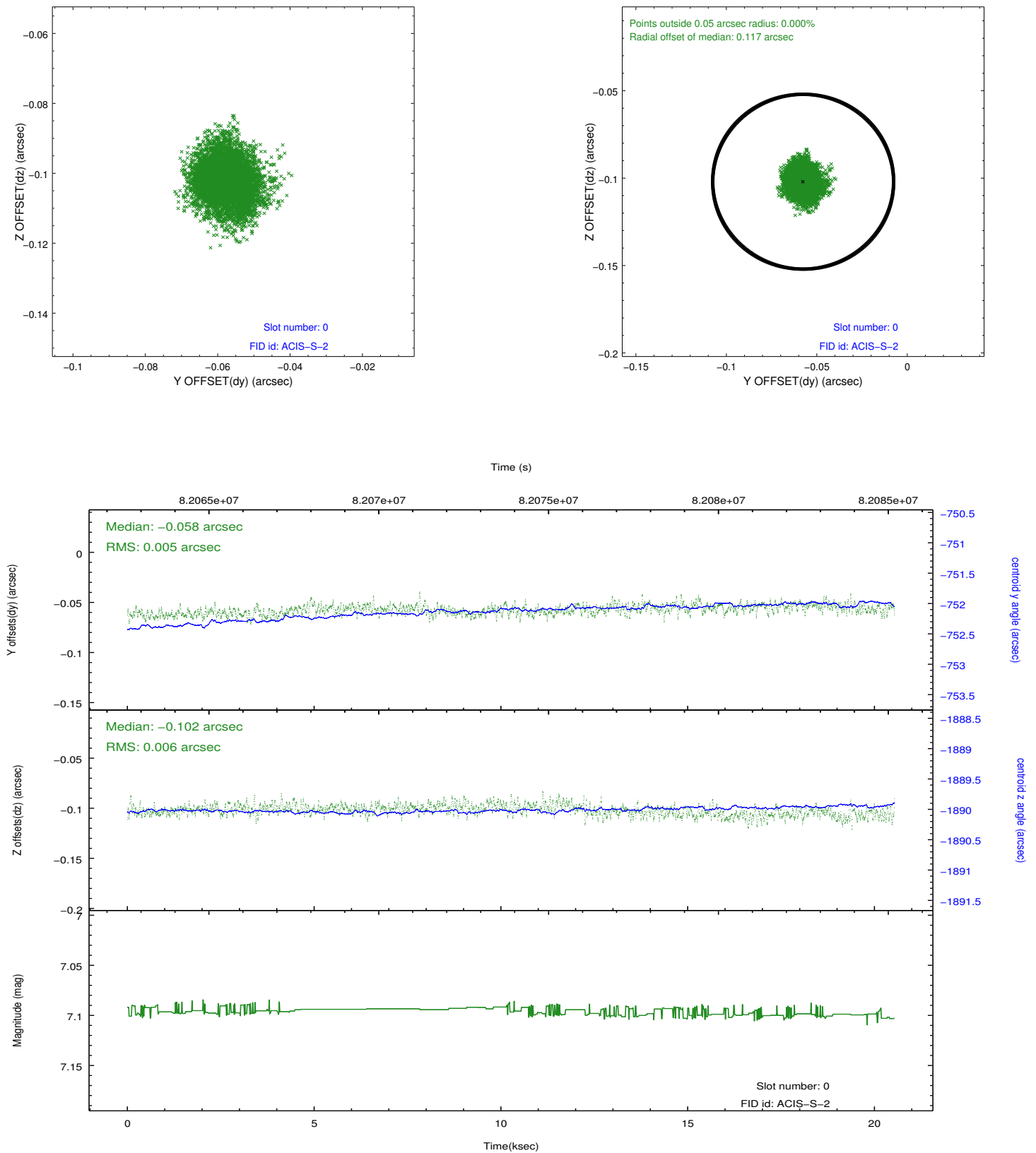


2.4.5 Slot 7

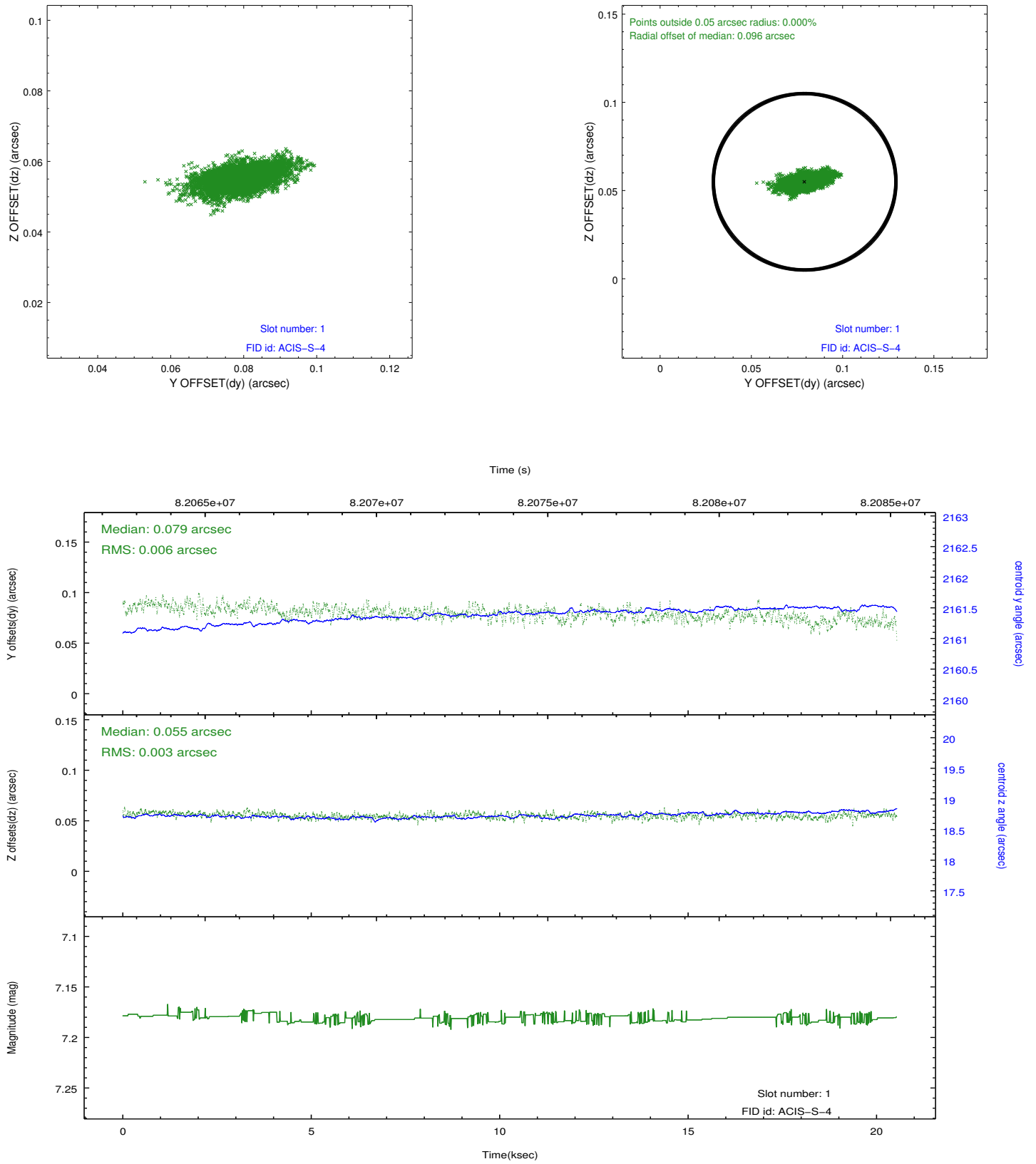


2.5 FID Slots

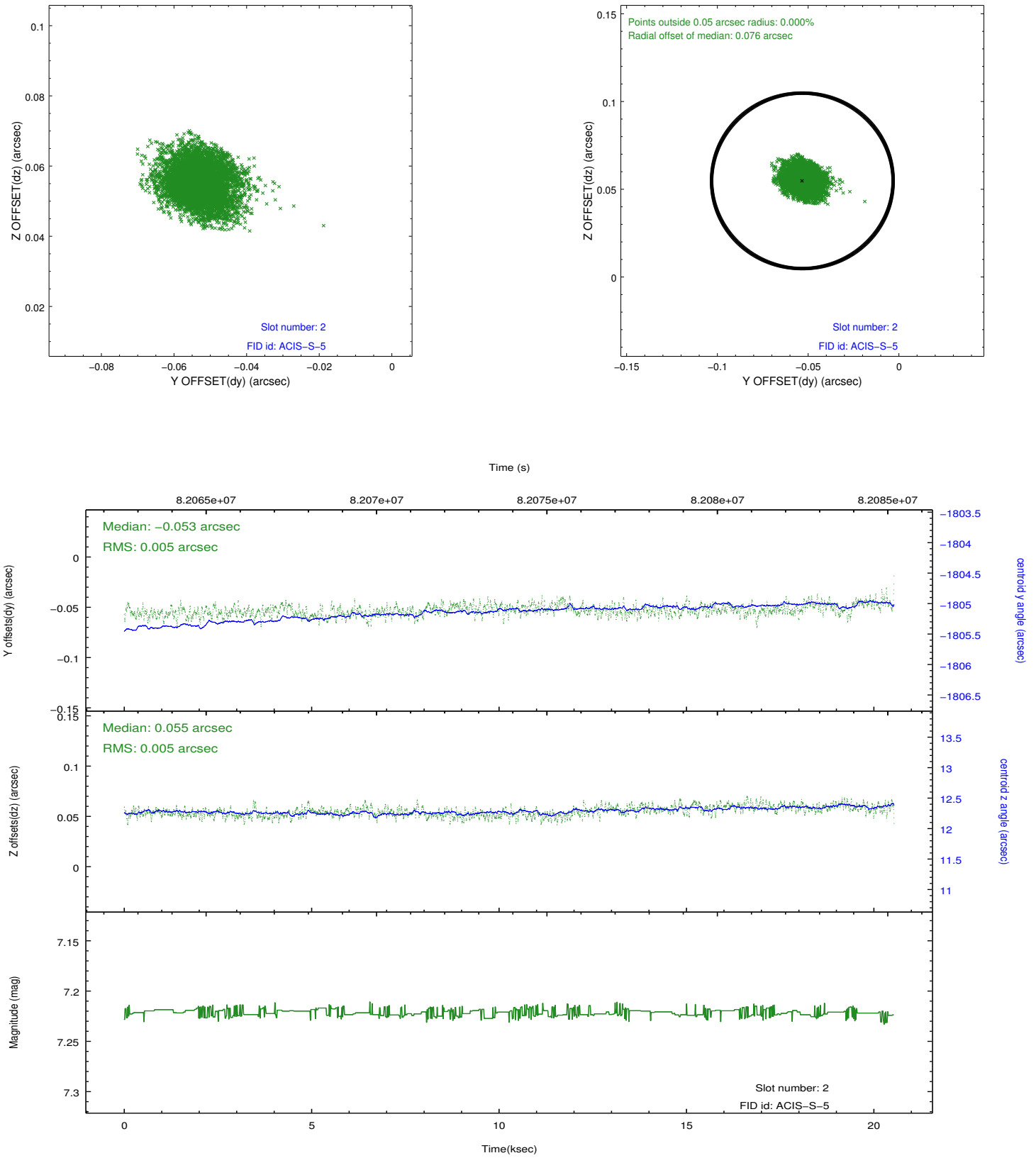
2.5.1 Slot 0



2.5.2 Slot 1

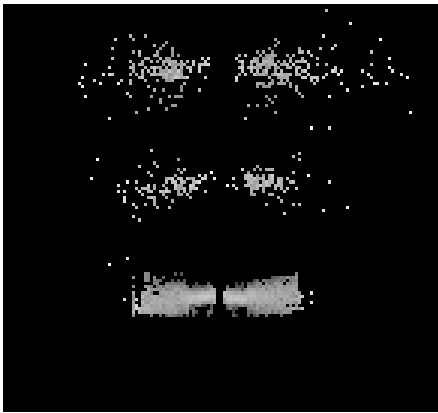


2.5.3 Slot 2

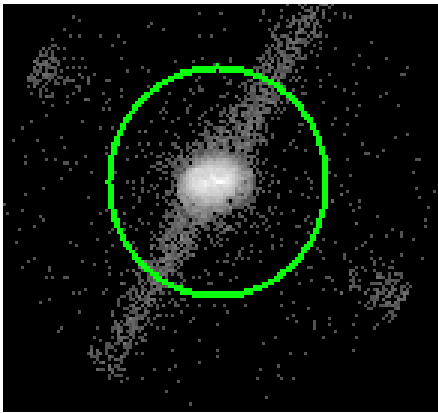


3 Gratings

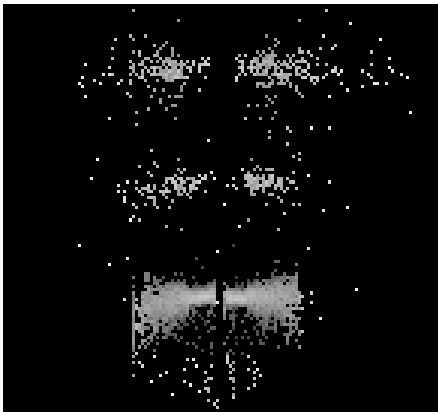
3.1 LETG Arm



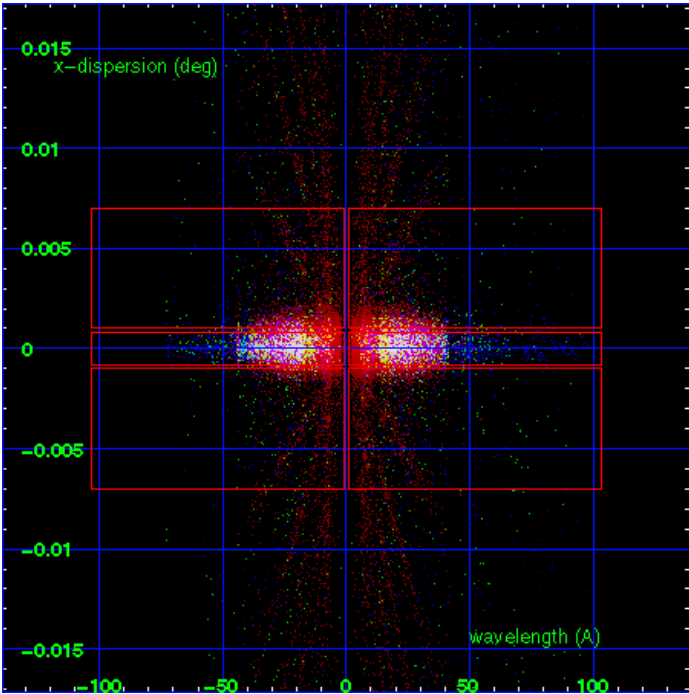
LETG Order Sort 123



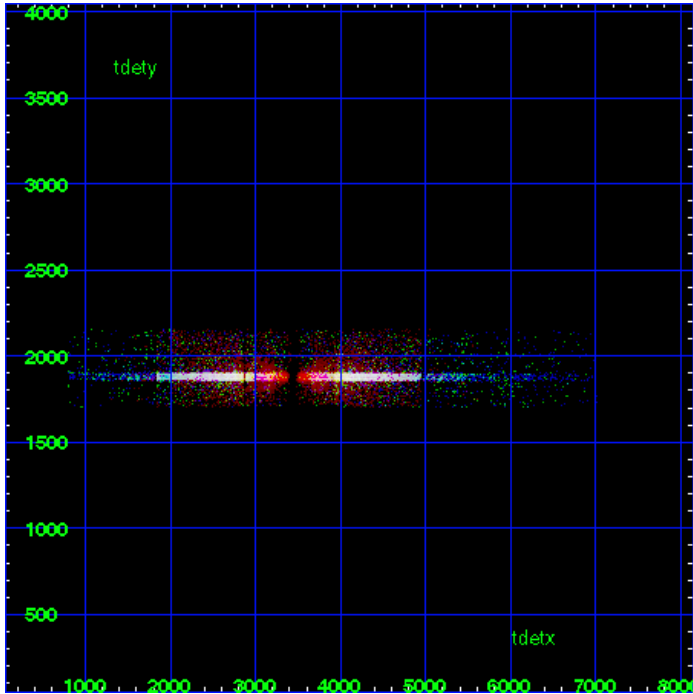
LETG Zero Order



LETG Order Sort ALL

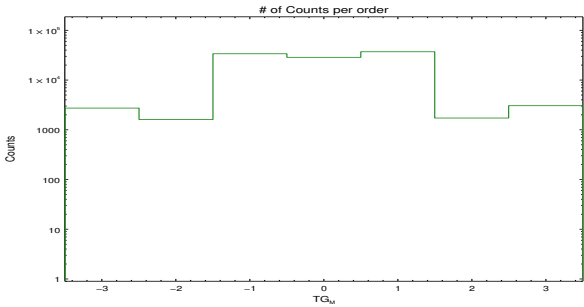


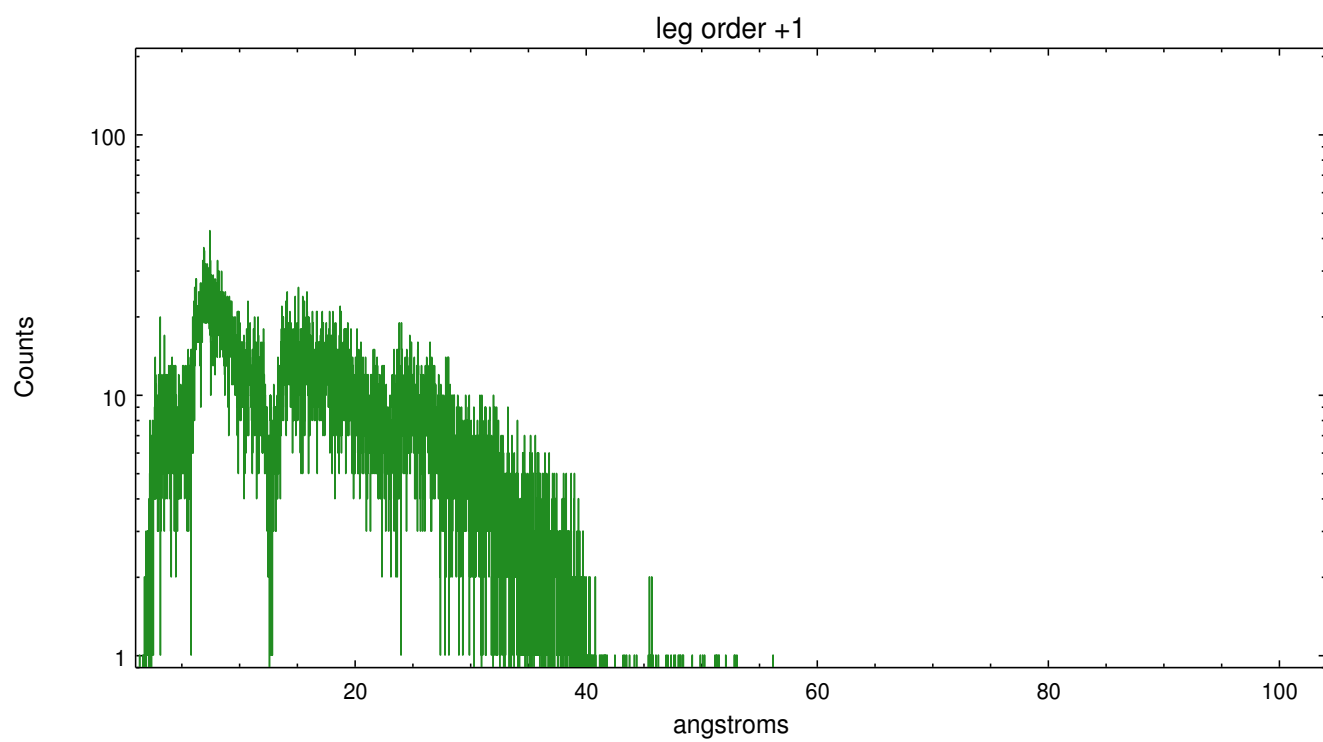
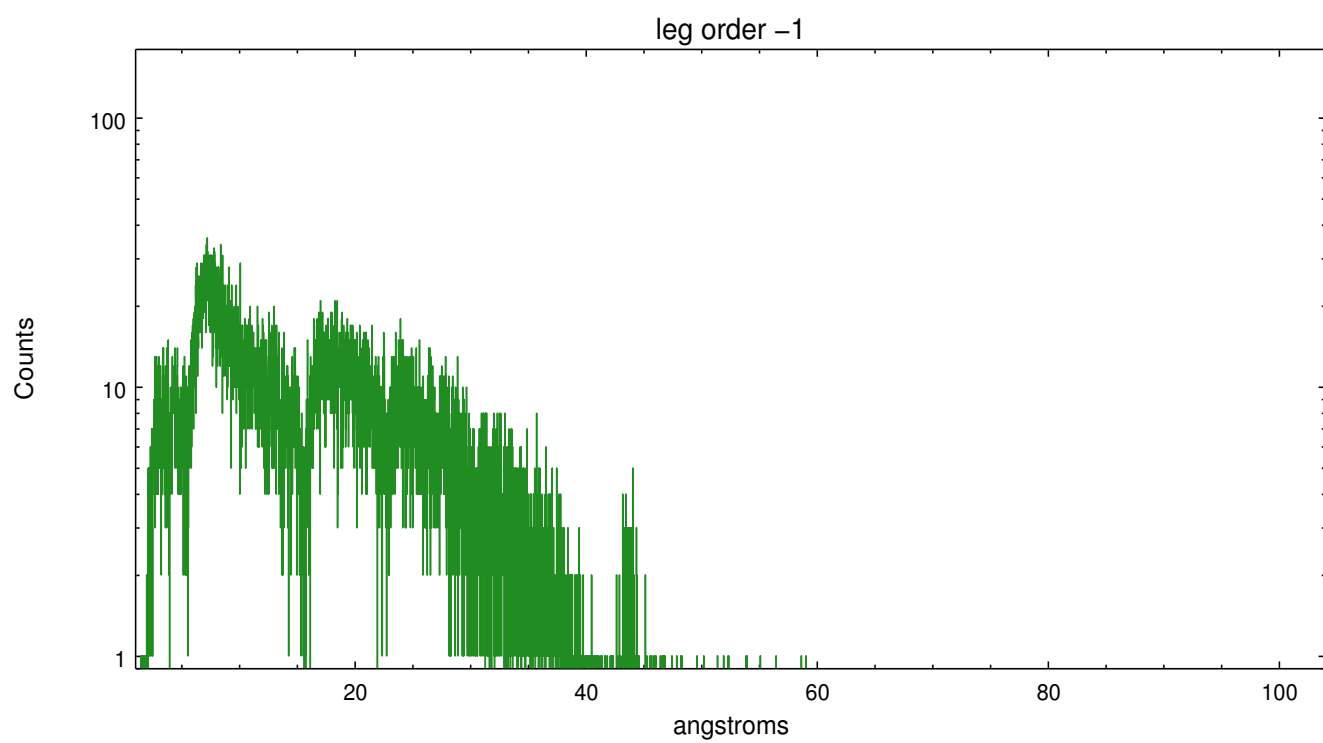
Spot Image LETG



Full Detector LETG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	2741	1617	34081	28853	37394	1728	3066





A Summary

A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2013.01.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	19.955

A.2 Comments

Far off-axis --- required custom region parameters;

Warning: the grating line-spread-function is not calibrated off-axis;
there is no valid grating RMF data for this observation.