

V&V Reference Report

L2 ASCDS Version : 10.6.4

Observation 20718 - L2 Version 1
Chandra X-Ray Center

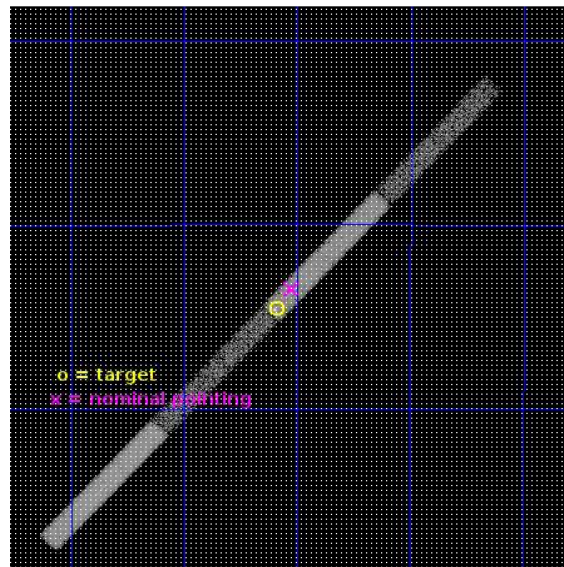
L2 Processing Date : Jul 24 2018

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1 Front

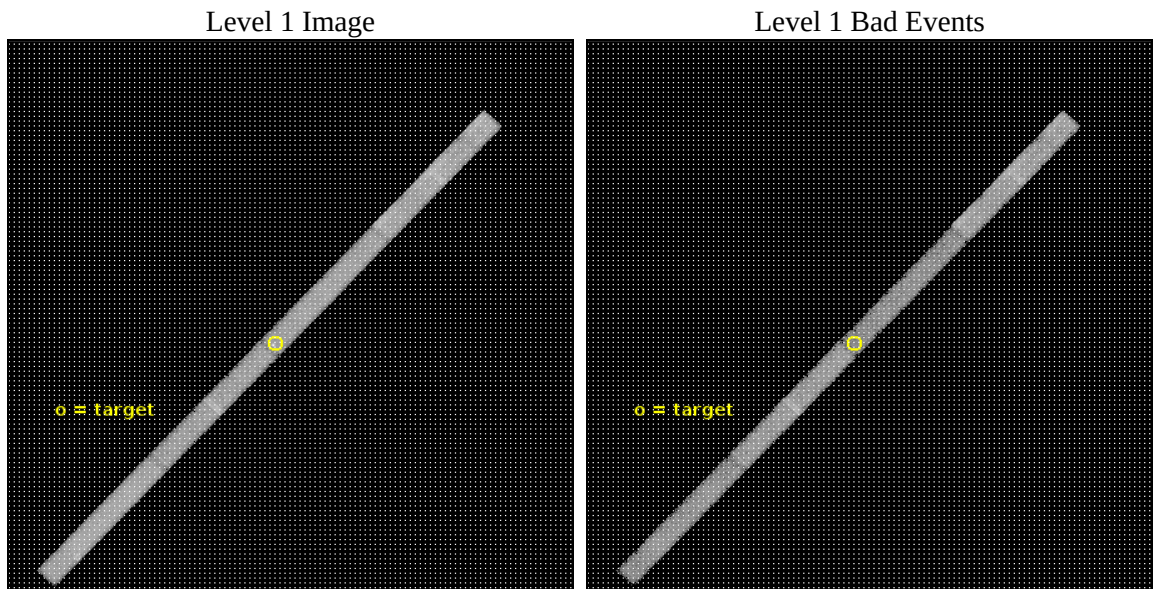
seq_num	590562	Sequence number
obs_id	20718	Observation id
title	AO-19 LETG/ACIS-S Calibration Observations of RXJ 1856	Proposal ti
observer	CXC Calibration	Principal investigator
object	RXJ 1856.5-3754	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	284.147083	Observer's specified target RA [deg]
dec_targ	-37.909611	Observer's specified target Dec [deg]
ra_nom	284.13149191091	Nominal RA [deg]
dec_nom	-37.891447154645	Nominal Dec [deg]
roll_nom	312.99895257338	Nominal Roll [deg]
revision	1	Processing version of data
ontime	30087.001195669	Sum of GTIs [s]
livetime	28160.802317175	Livetime [s]
ontime5	30087.001195669	Sum of GTIs [s]
ontime6	30087.001195669	Sum of GTIs [s]
ontime7	30087.001195669	Sum of GTIs [s]
ontime8	30087.001195669	Sum of GTIs [s]
l2events	48783	Number of level 2 events



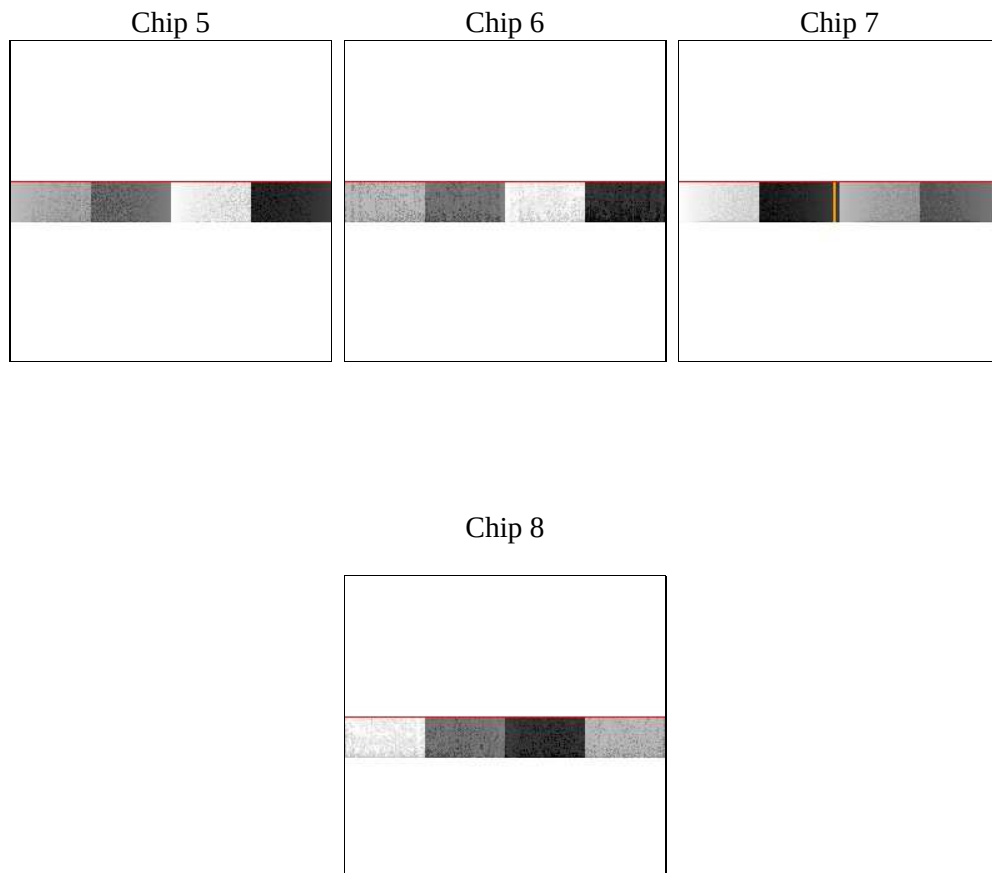
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	30000.000000	[s] Scheduled observation exposure time
ascdsver	10.6.4	Processing system revision	ontime	30087.001195669	Sum of GTIs [s]
caldsver	4.7.8	 	ontime5	30087.001195669	Sum of GTIs [s]
date	2018-07-24T06:23:35	Date and time of file creation	ontime6	30087.001195669	Sum of GTIs [s]
revision	1	Processing version of data	ontime7	30087.001195669	Sum of GTIs [s]
			ontime8	30087.001195669	Sum of GTIs [s]
			l1events	187769	Number of level 1 events
			tgmethod	TGDETECT	Method used to create src1a file
			zo_pos	(3986.21, 3957.06)	src1a sky pixel position

2.1.4 Events

	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	49591	39545	42875	55758
rejected events	25590	35325	22953	44242
rejected %	51%	89%	53%	79%

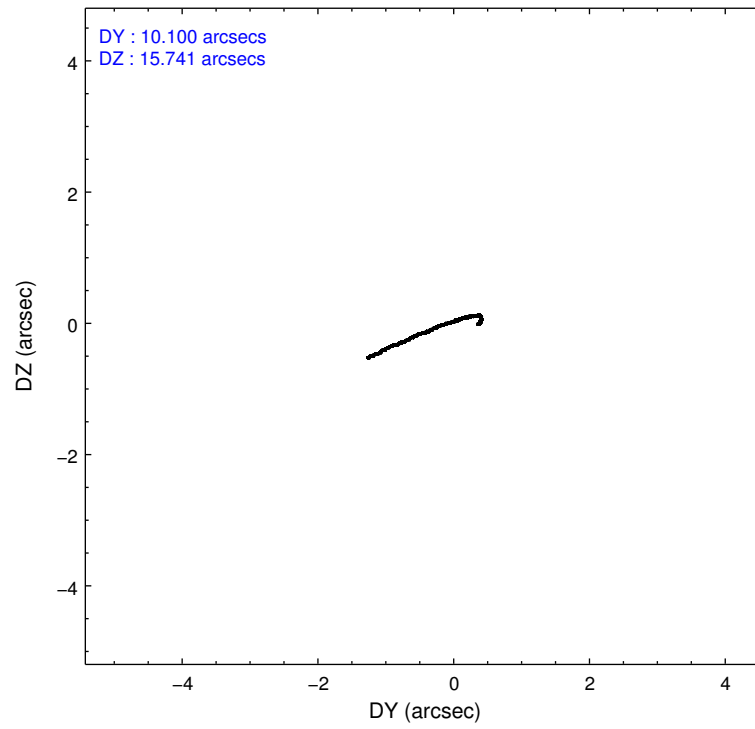
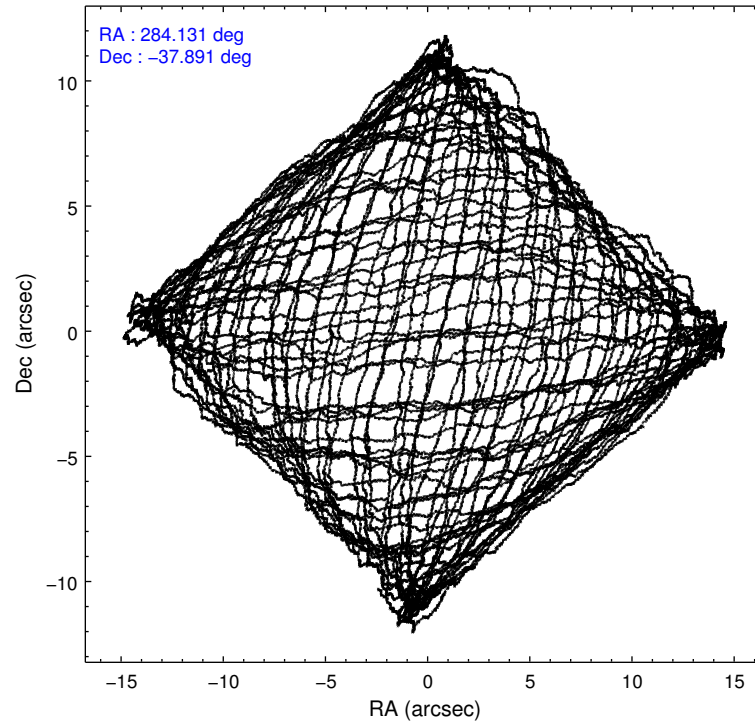
	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	1612	1066	2668	2425
	3%	2%	6%	4%
grade 1 events	133	18	56	21
	0%	0%	0%	0%
grade 2 events	7619	801	3756	2532
	15%	2%	8%	4%
grade 3 events	1226	732	2224	1310
	2%	1%	5%	2%
grade 4 events	1141	731	2170	1216
	2%	1%	5%	2%
grade 5 events	3182	1306	4225	2037
	6%	3%	9%	3%
grade 6 events	12404	891	9104	4033
	25%	2%	21%	7%
grade 7 events	22274	34000	18672	42184
	44%	85%	43%	75%

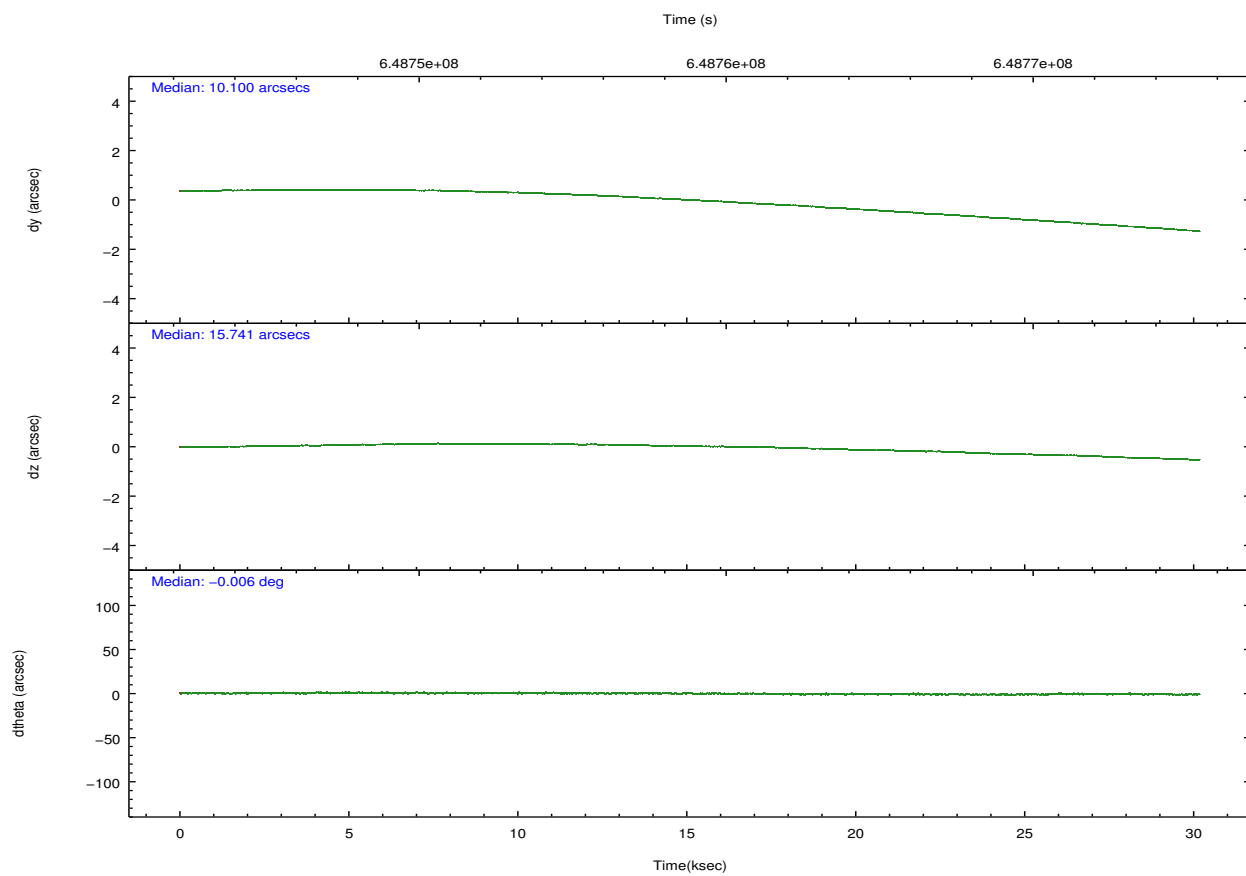
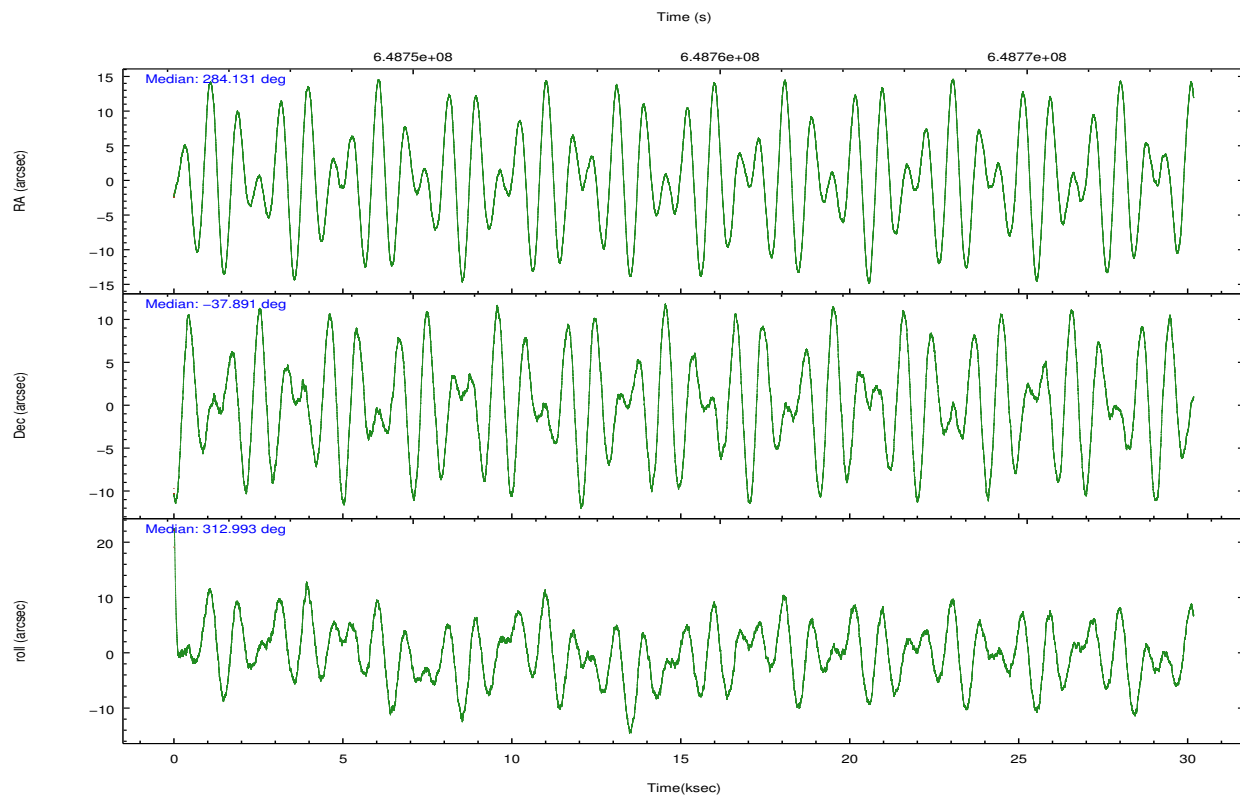
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-5678	ACIS-5678
Grating	LETG	LETG
Data mode	FAINT	FAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	284.098086	284.131491910908
[deg] Pointing Dec	-37.883758	-37.89144715464491
[deg] Pointing Roll	312.821801	312.9989525733808
[s] Window start time (MET)	646790469.184000	646790469.184000
[s] Window stop time (MET)	652060869.184000	652060869.184000
[mm] SIM focus pos	-0.684267	-0.6828225247311905
[mm] SIM defocus	0	0.001444936568705701
[mm] SIM translation stage pos	-190.132523	-190.1425803651734
[mm] SIM translation stage offset	0	0.01005778216563158
[s] Observation start time (MET)	648743922.184000	648742835.10294
Observation start date	2018-07-23T14:37:33	2018-07-23T14:20:35
[s] Observation end time (MET)	648773922.184000	648774911.4548399
Observation end date	2018-07-23T22:57:33	2018-07-23T23:15:11
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
CCD I0 on	N	N
CCD I1 on	N	N
CCD I2 on	N	N
CCD I3 on	N	N
CCD S0 on	N	N
CCD S1 on	Y	Y
CCD S2 on	Y	Y
CCD S3 on	Y	Y
CCD S4 on	Y	Y
CCD S5 on	O1	N
Number of optional ACIS chips dropped	1	1
On-chip summing requested	N	N
Subarray requested	CUSTOM	1/8
Subarray start row	448	448
Subarray row count	128	128
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	0.6

2.3 Aspect



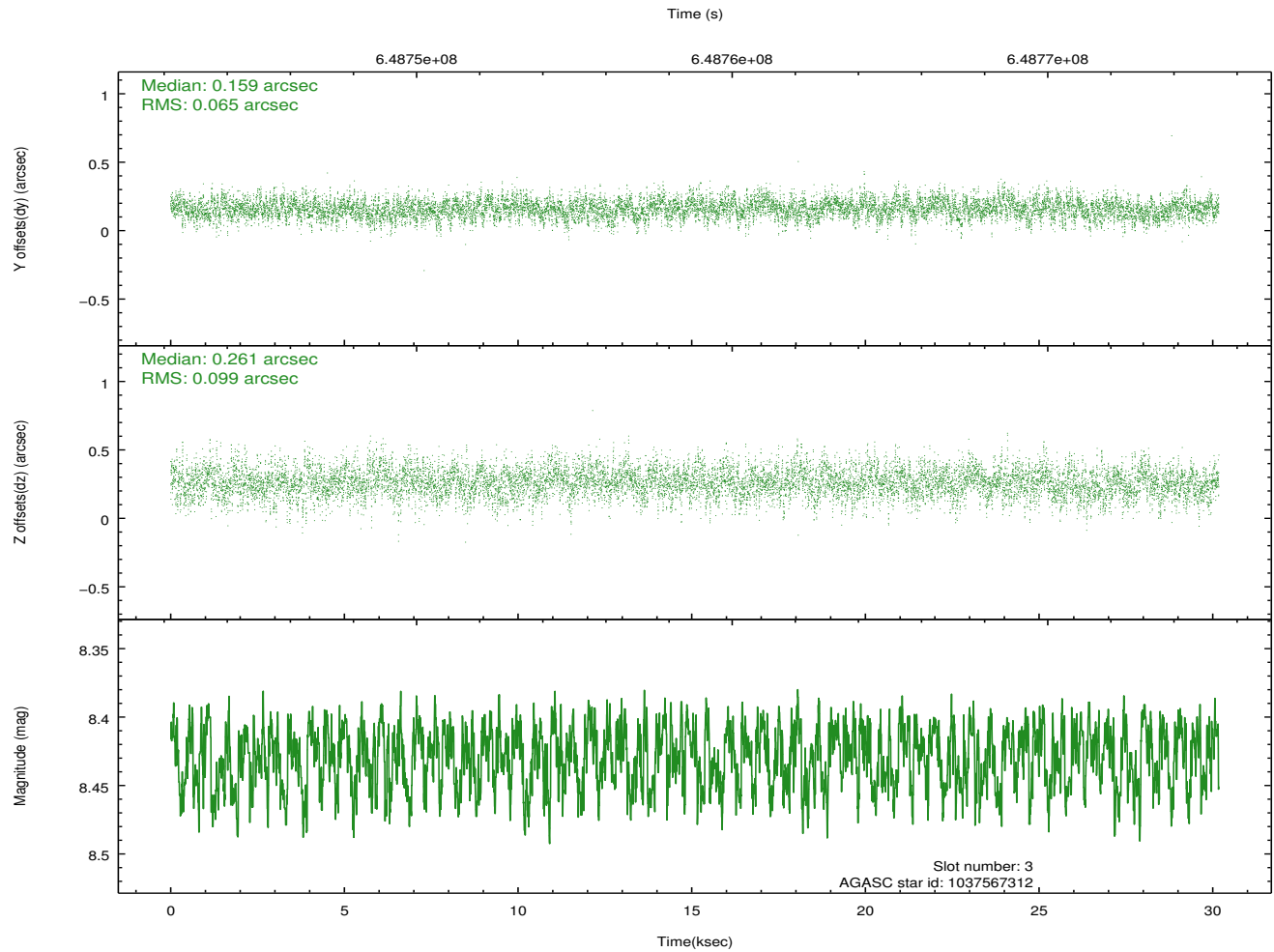
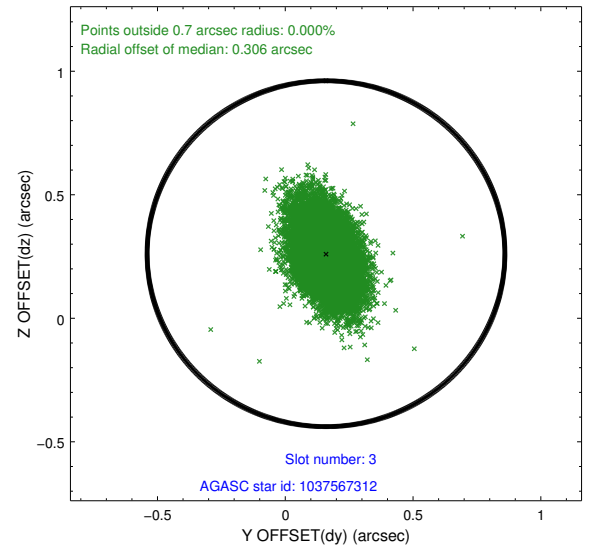
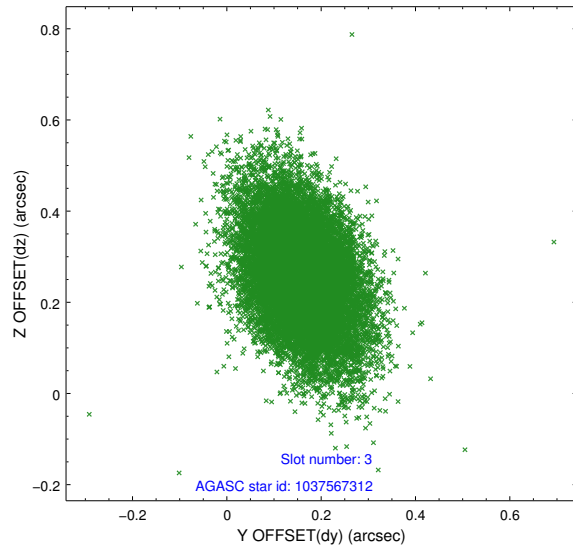


Slot Statistics

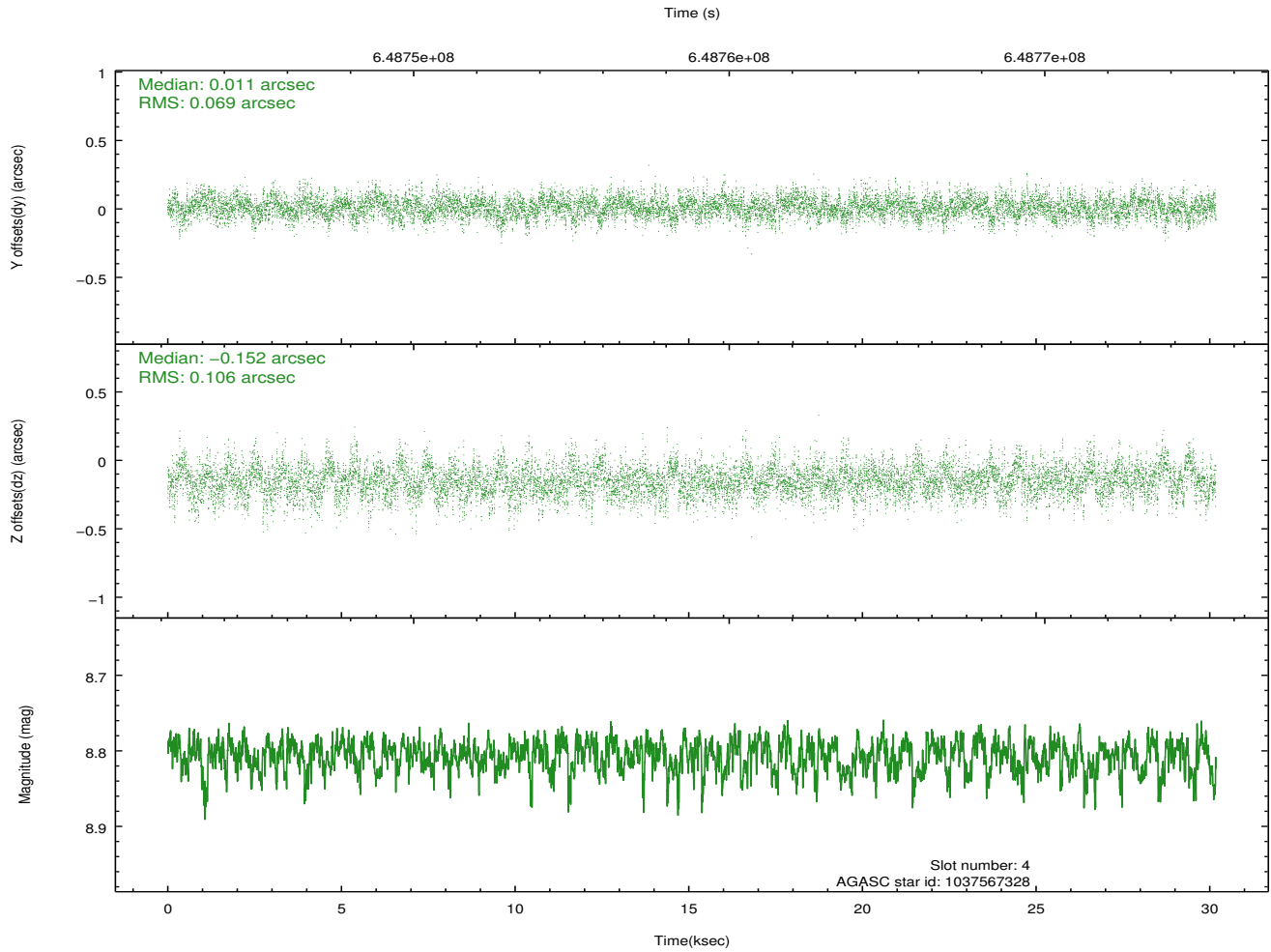
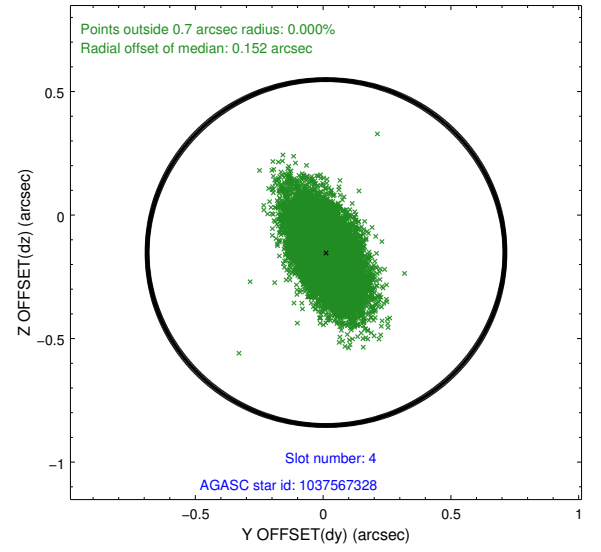
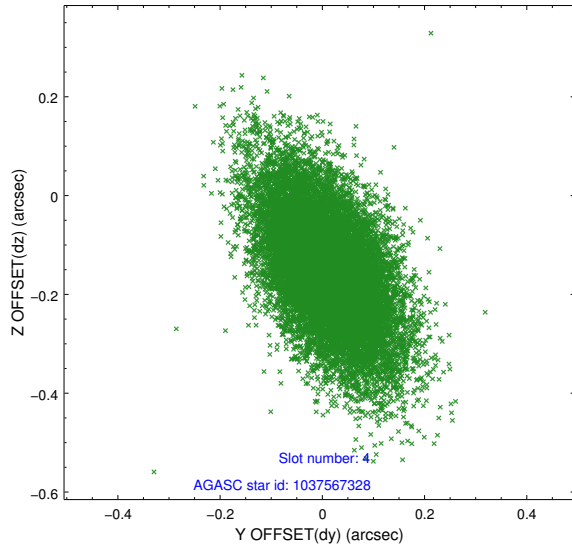
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-1	7.22	7361	1.000	0.003	-0.071	0.011	0.026	0.000000	0.000000	933.29	-1732
1	FID		ACIS-S-4	7.26	7361	1.000	0.327	0.052	0.011	0.018	0.000000	0.000000	2151.01	171
2	FID		ACIS-S-5	7.24	7361	1.000	-0.361	0.032	0.016	0.026	0.000000	0.000000	-1815.90	165
3	GUIDE	used	1037567312	8.43	14713	1.000	0.159	0.261	0.121	0.215	283.456056	-37.976515	-988.19	-1567
4	GUIDE	used	1037567328	8.81	14708	1.000	0.011	-0.152	0.128	0.231	284.052016	-37.647288	-713.36	482
5	GUIDE	used	1037568192	8.67	14704	1.000	-0.102	-0.130	0.144	0.257	284.446060	-38.037443	1077.99	346
6	GUIDE	used	1037576824	8.68	14704	1.000	0.002	0.153	0.125	0.219	284.177029	-38.323536	1313.40	-912
7	GUIDE	used	1037578168	8.09	14705	1.000	-0.072	-0.129	0.121	0.215	284.493659	-38.169059	1518.80	118

2.4 Star Slots

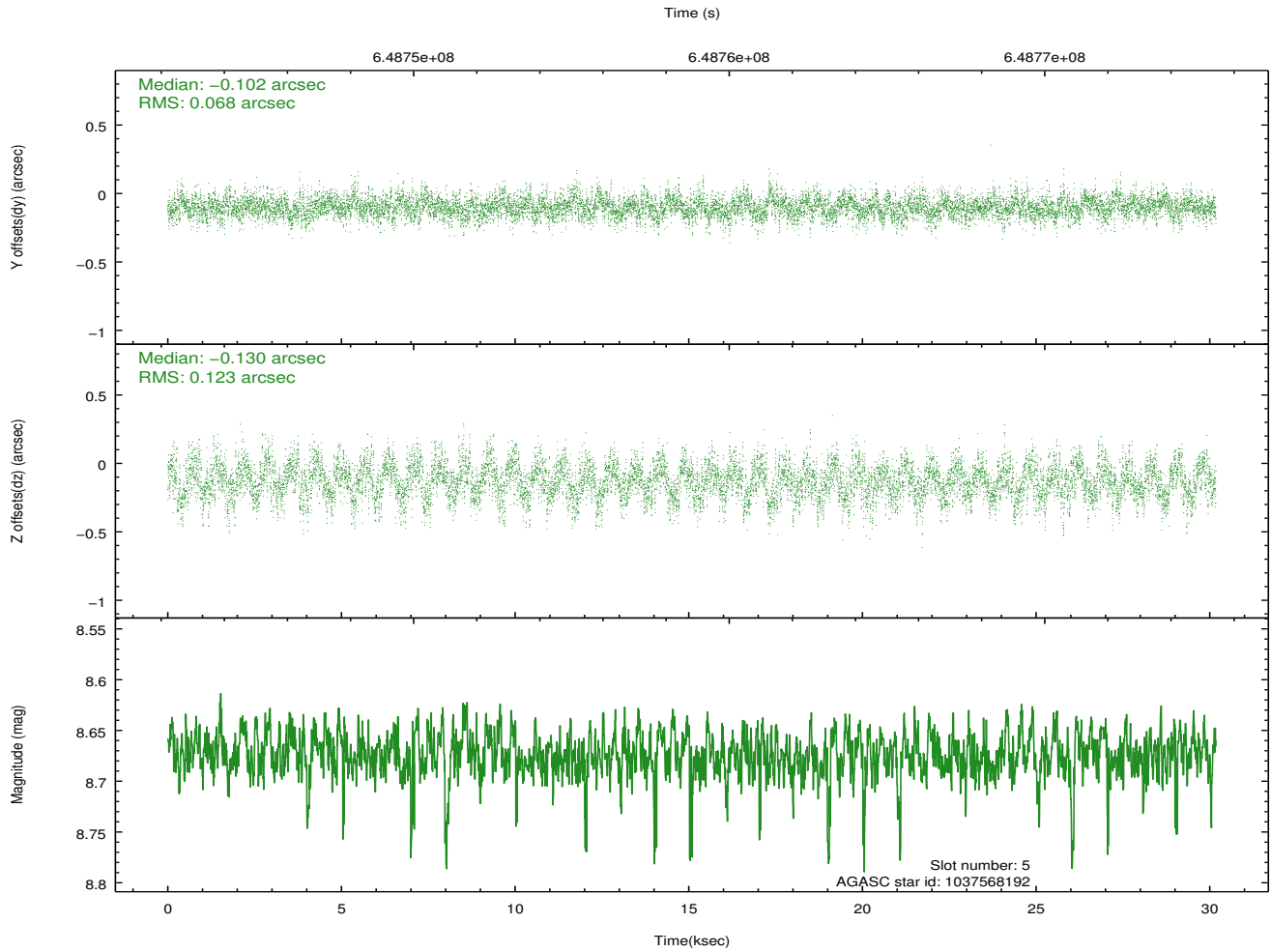
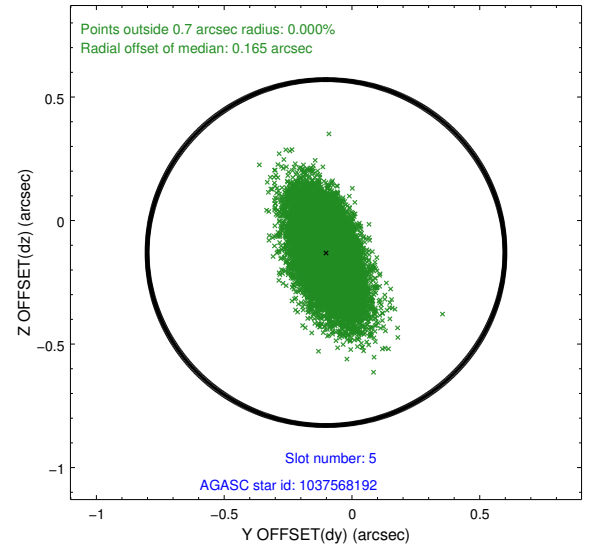
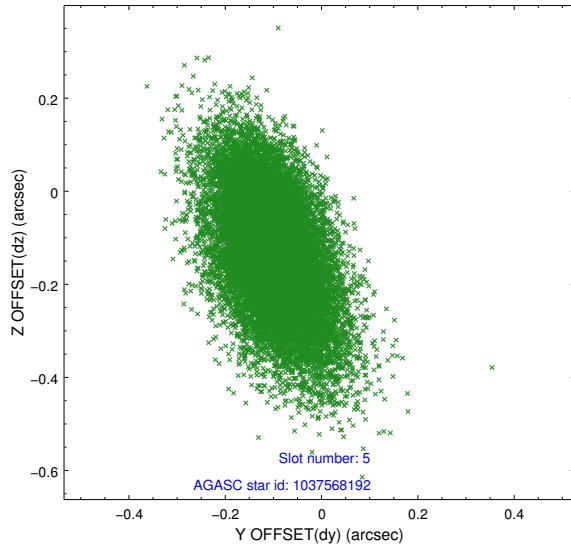
2.4.1 Slot 3



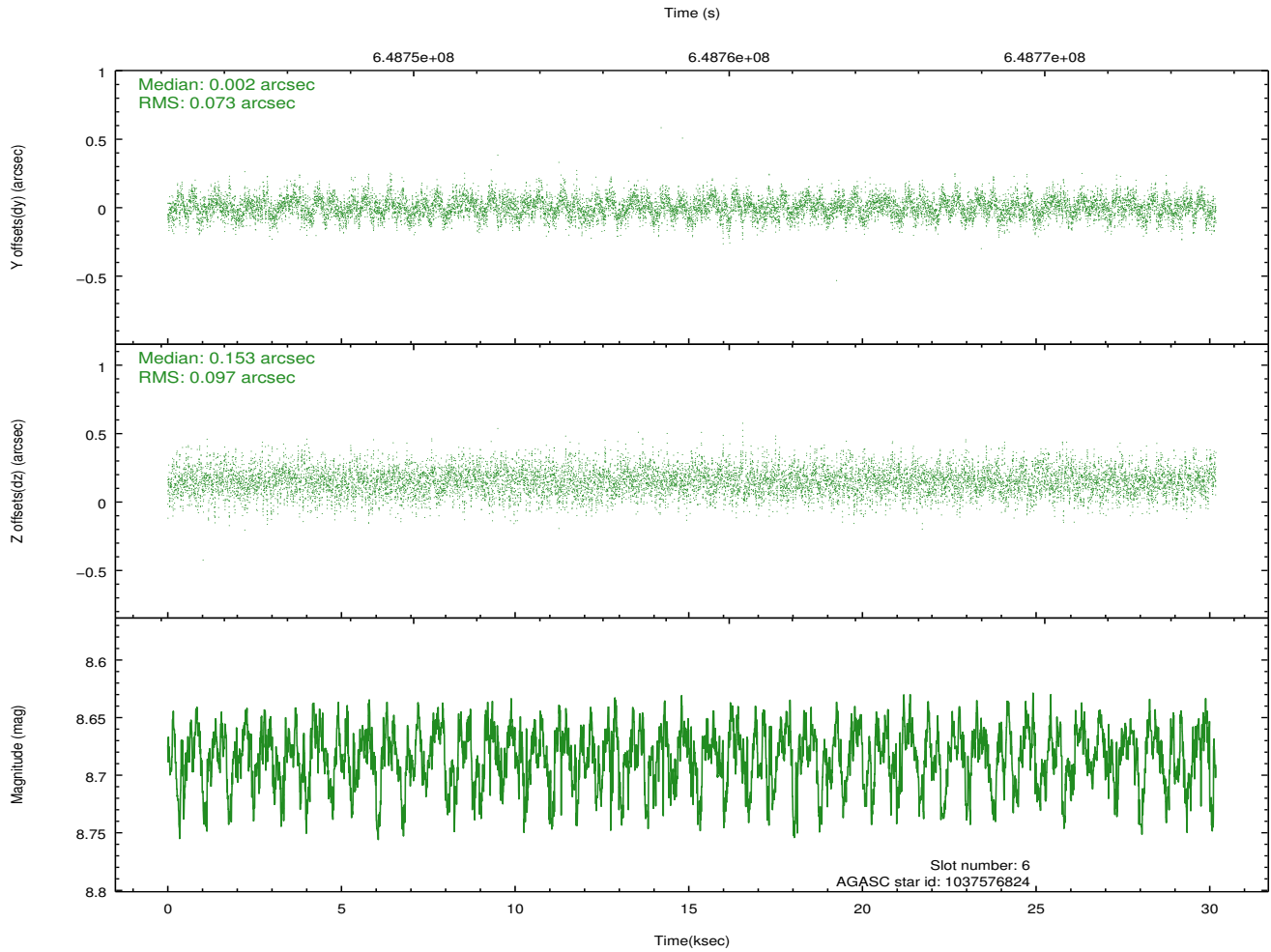
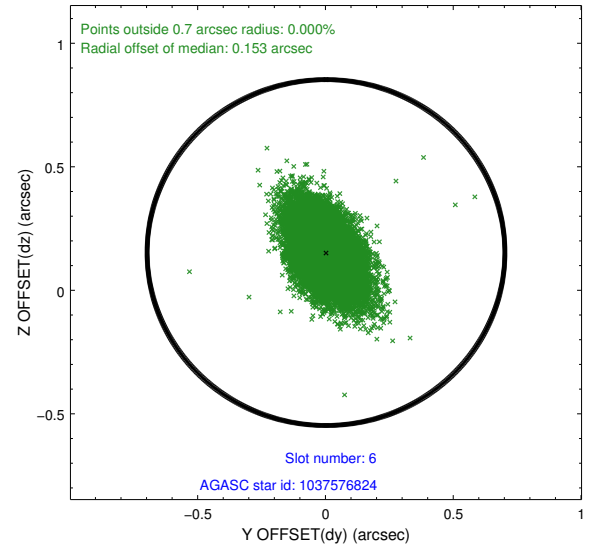
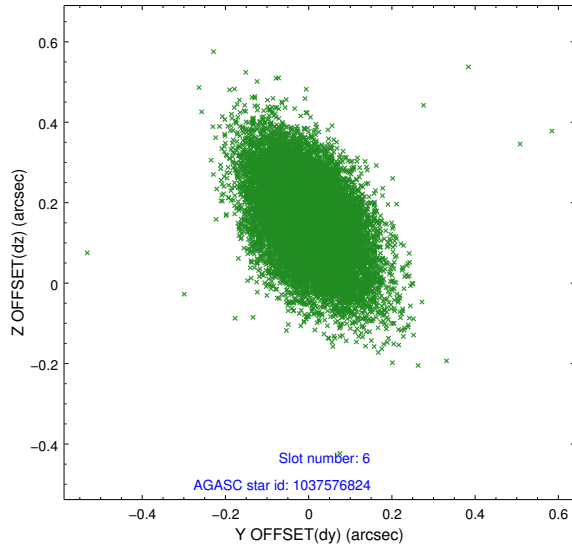
2.4.2 Slot 4



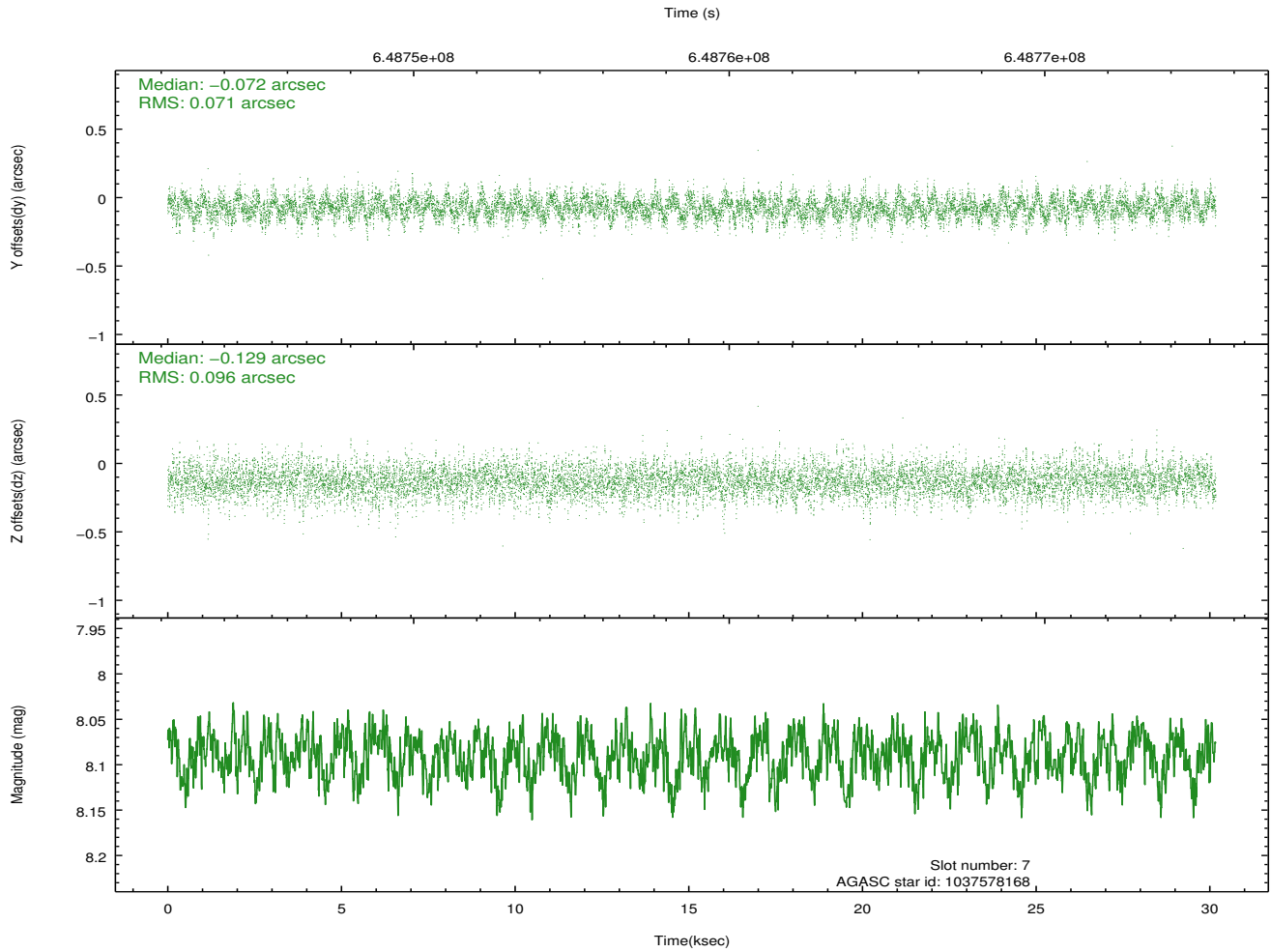
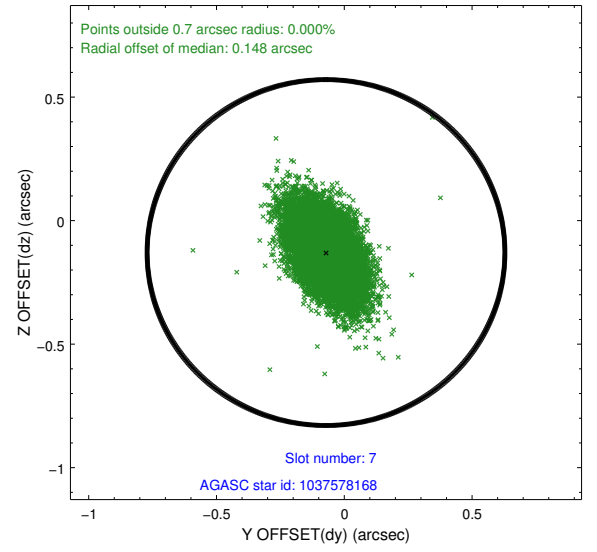
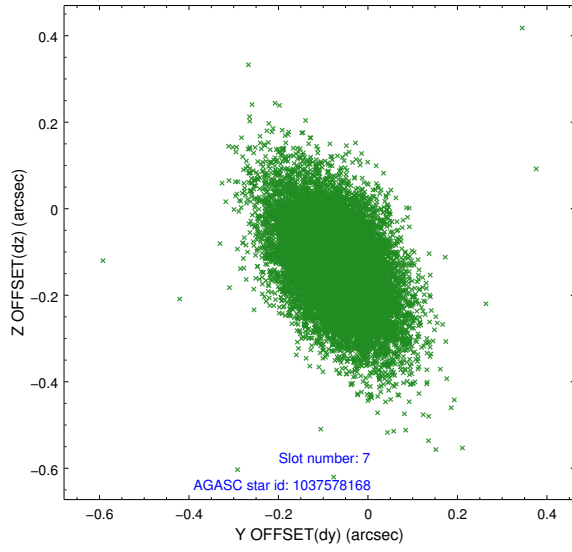
2.4.3 Slot 5



2.4.4 Slot 6

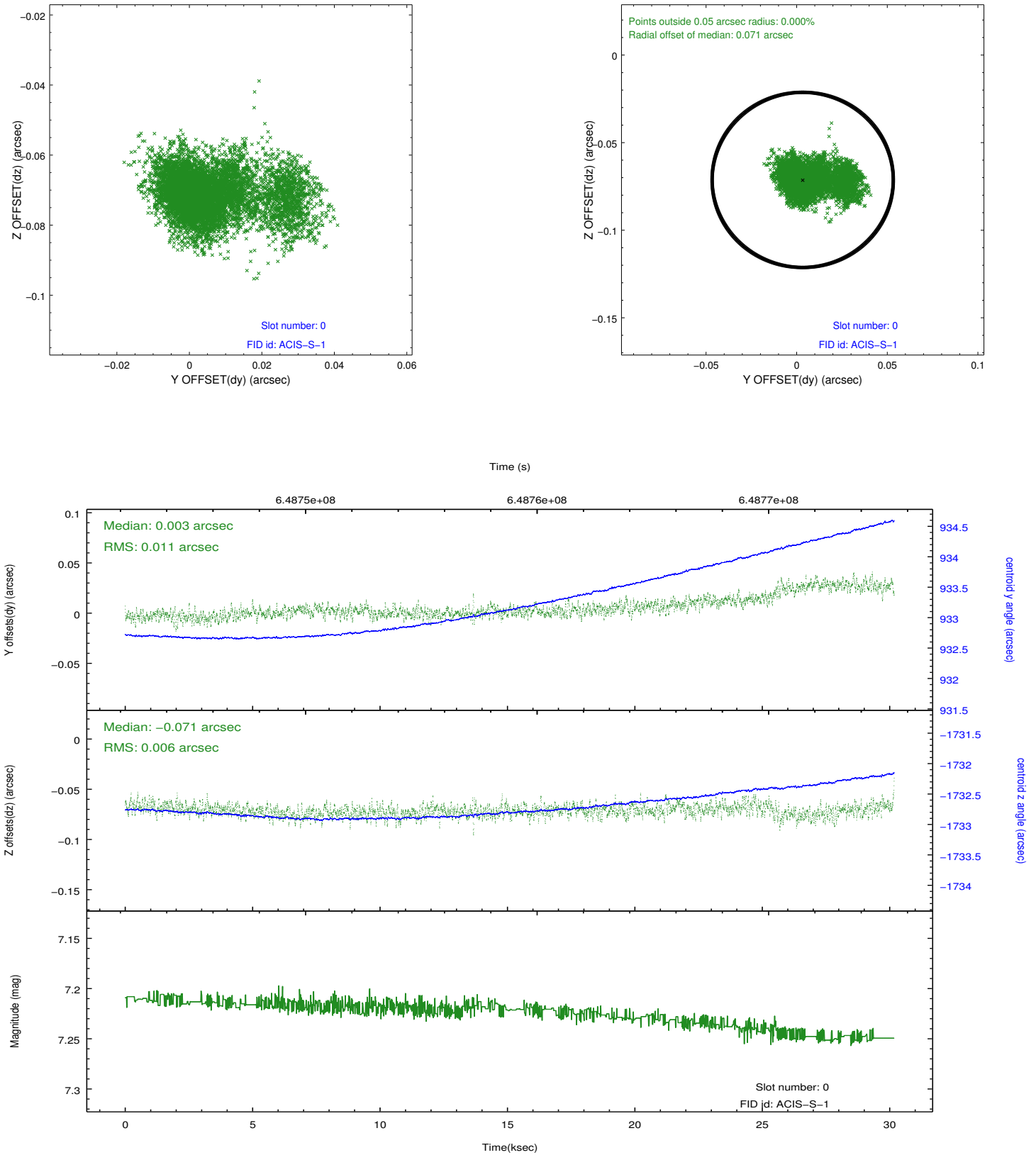


2.4.5 Slot 7

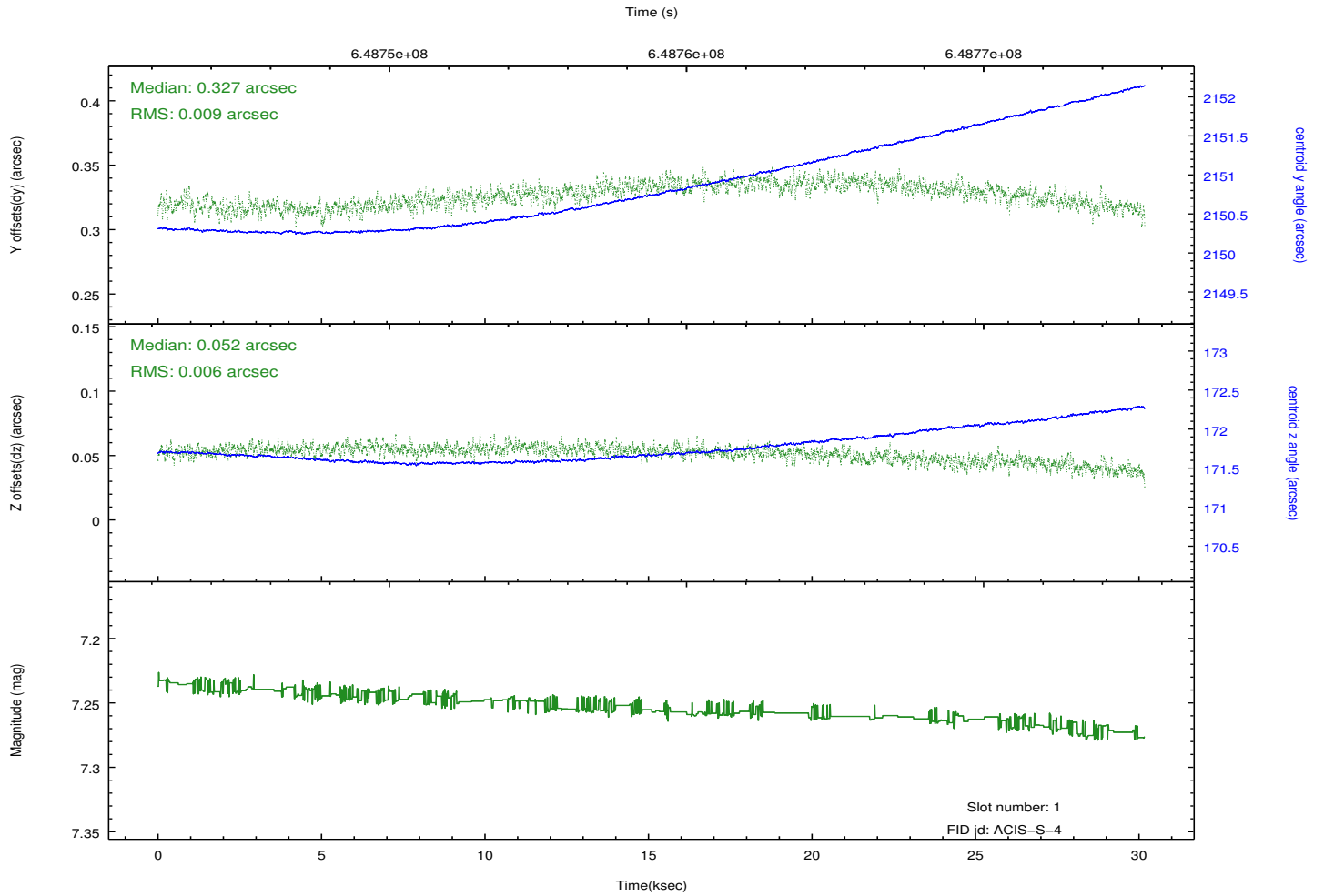
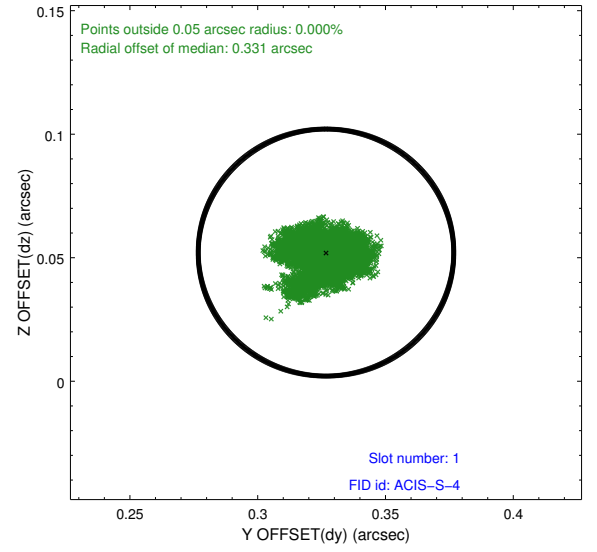
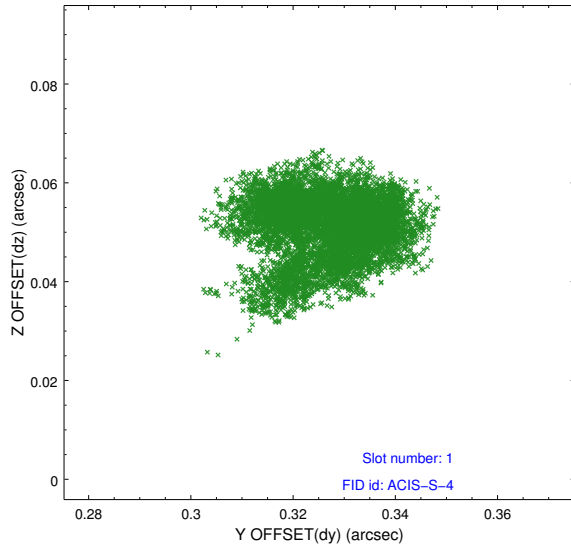


2.5 FID Slots

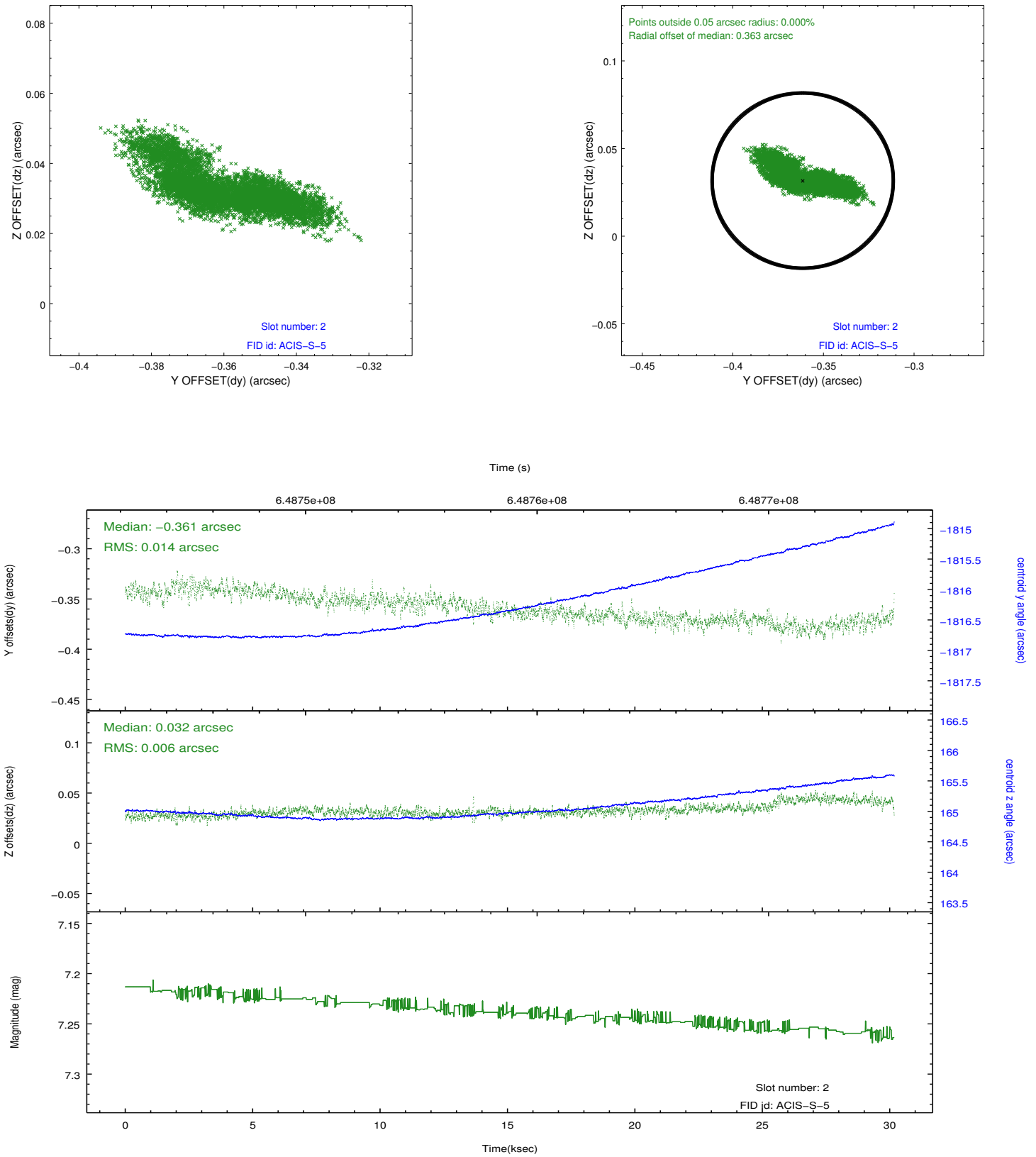
2.5.1 Slot 0



2.5.2 Slot 1

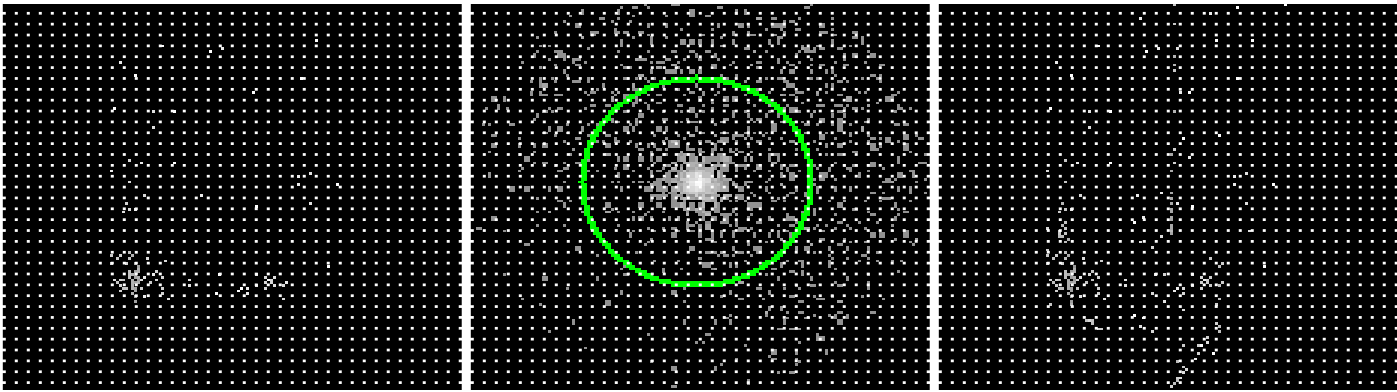


2.5.3 Slot 2



3 Gratings

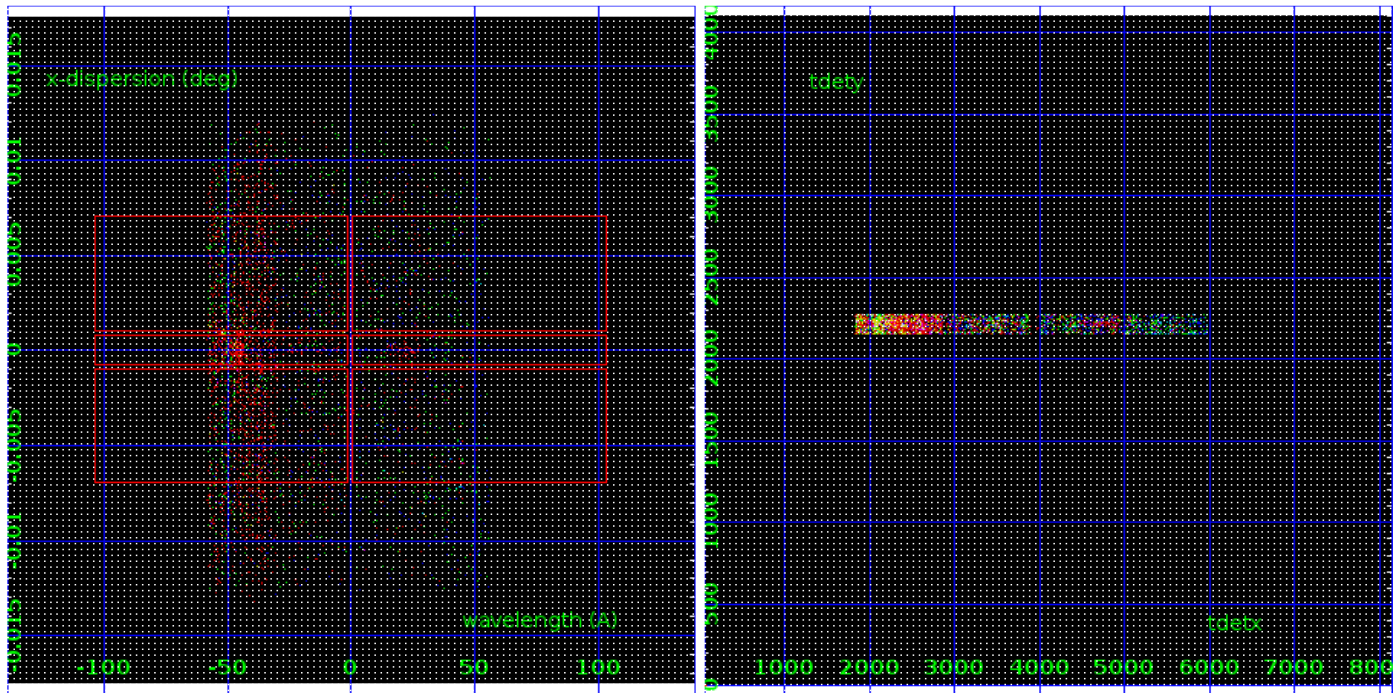
3.1 LETG Arm



LETG Order Sort 123

LETG Zero Order

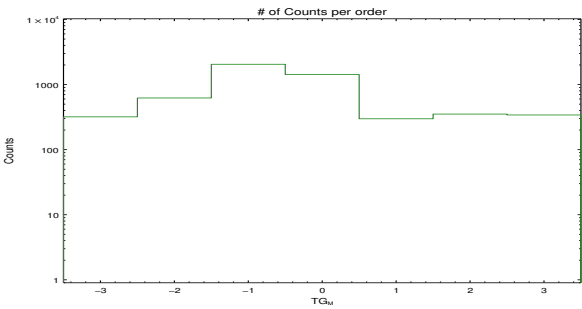
LETG Order Sort ALL

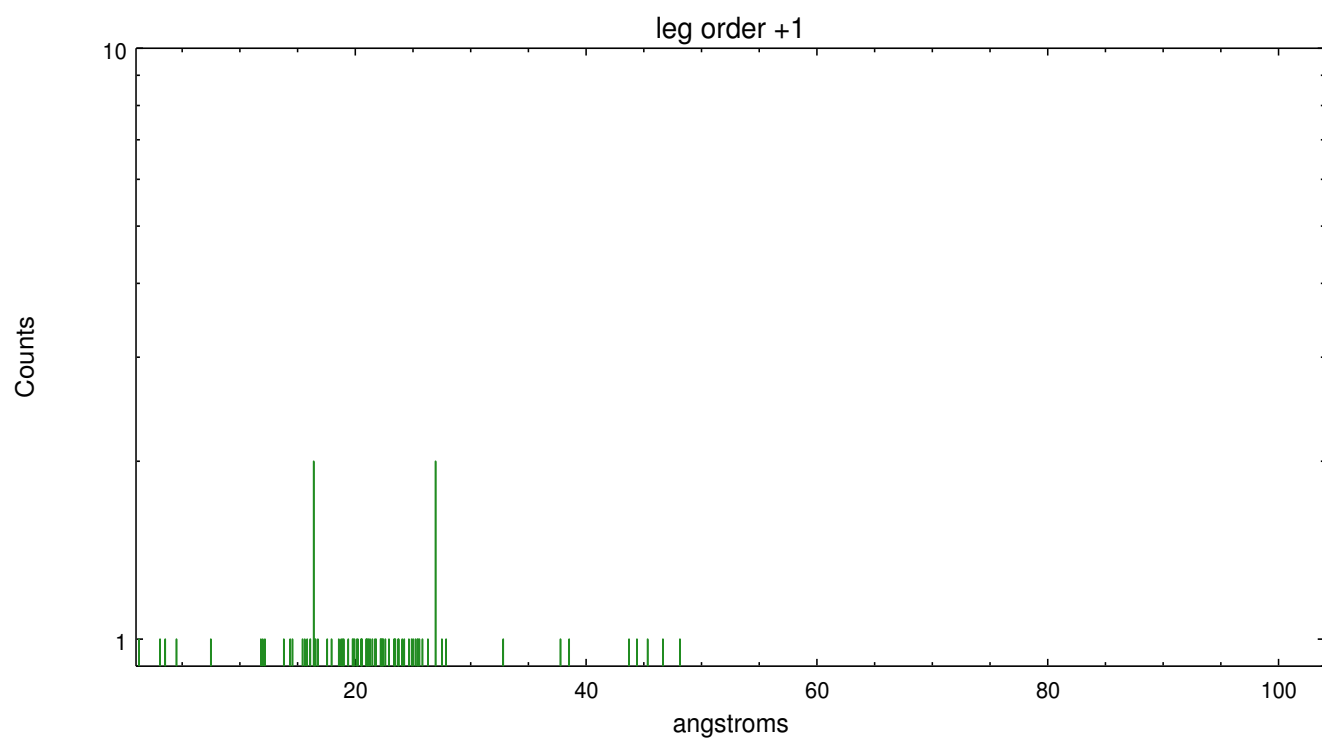
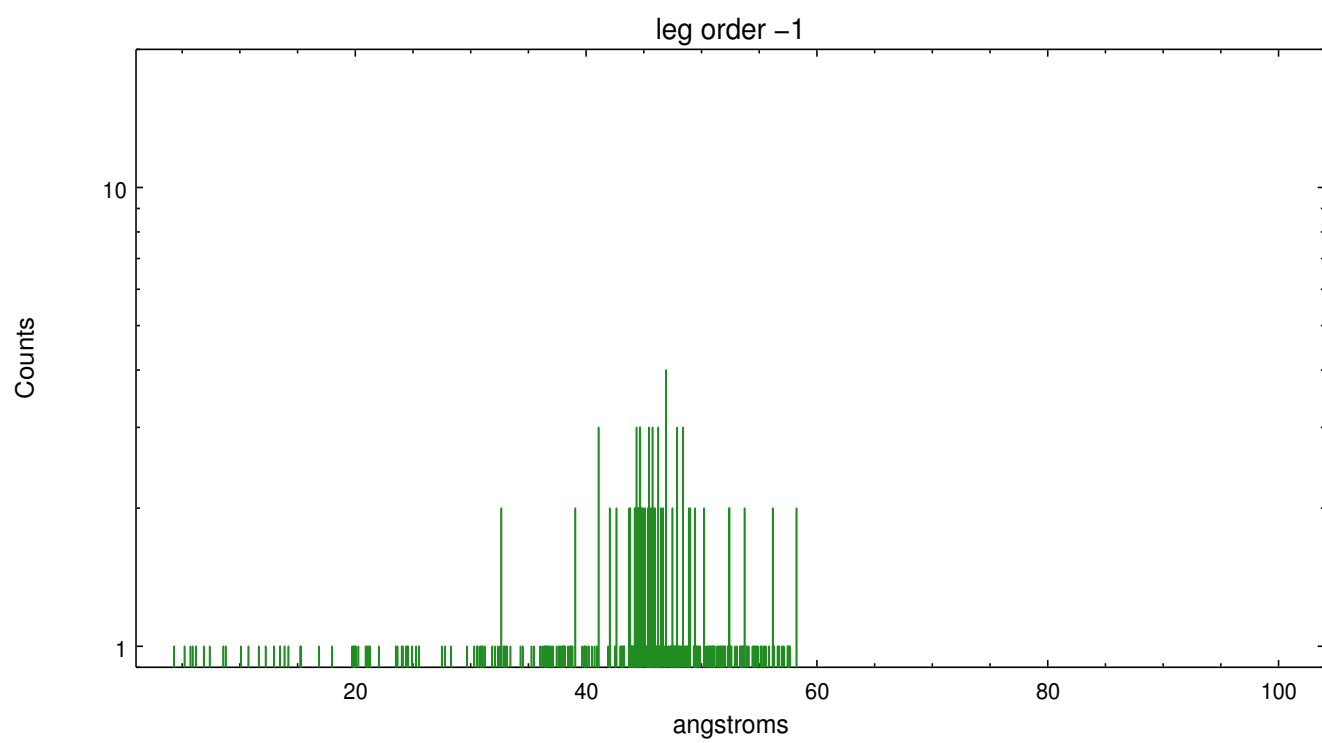


Spot Image LETG

Full Detector LETG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	319	622	2049	1426	298	352	341





A Summary

A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2018.07.24
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.087001195669

A.2 Comments