

V&V Reference Report

L2 ASCDS Version : 10.7.1

Observation 21201 - L2 Version 1
Chandra X-Ray Center

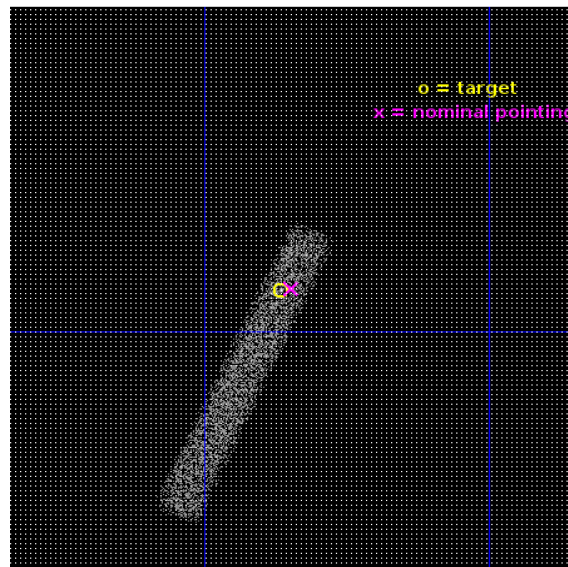
L2 Processing Date : May 6 2019

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1 Front

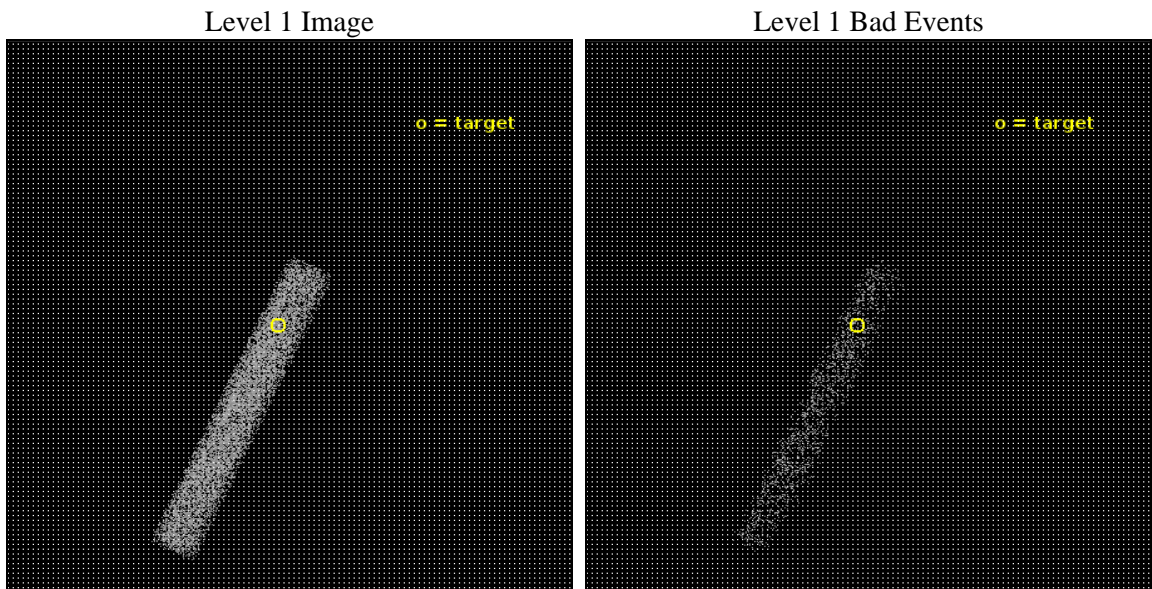
seq_num	402034	Sequence number
obs_id	21201	Observation id
title	Following a black hole X-ray transient through the transition into quiescence	Proposal title
observer	Elena Gallo	Principal investigator
object	MAXI J1820+070	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	275.09125	Observer's specified target RA [deg]
dec_targ	7.185361	Observer's specified target Dec [deg]
ra_nom	275.08685965467	Nominal RA [deg]
dec_nom	7.1858485844371	Nominal Dec [deg]
roll_nom	115.10370958244	Nominal Roll [deg]
revision	1	Processing version of data
ontime	9069.0432606936	Sum of GTIs [s]
livetime	8225.1435340954	Livetime [s]
ontime7	9069.0432606936	Sum of GTIs [s]
l2events	5757	Number of level 2 events



2 OBI

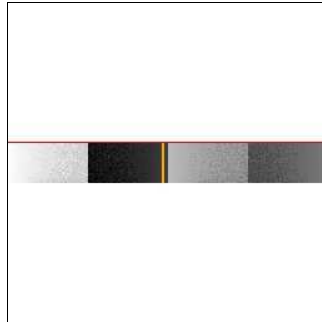
2.1 OBI

2.1.1 Images



2.1.2 Bias

Chip 7



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	9000.000000	[s] Scheduled observation exposure time
ascdsver	10.7.1	Processing system revision	ontime	9069.0432606936	Sum of GTIs [s]
caldsver	4.8.2	 	ontime7	9069.0432606936	Sum of GTIs [s]
date	2019-05-06T19:44:25	Date and time of file creation	l1events	12323	Number of level 1 events
revision	1	Processing version of data	tgmethod	TGDETECT	Method used to create src1a file
			zo_pos	(4063.39, 4092.52)	src1a sky pixel position

2.1.4 Events

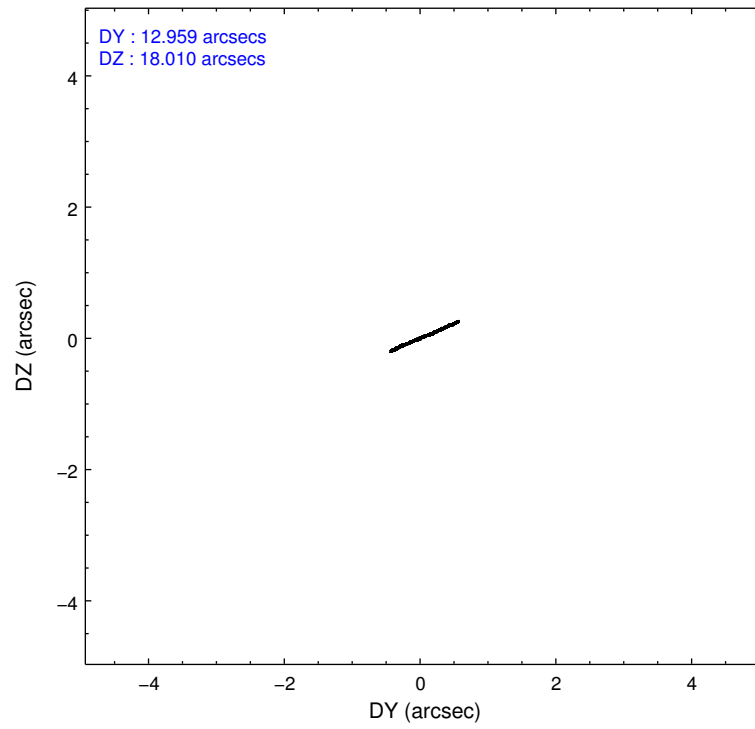
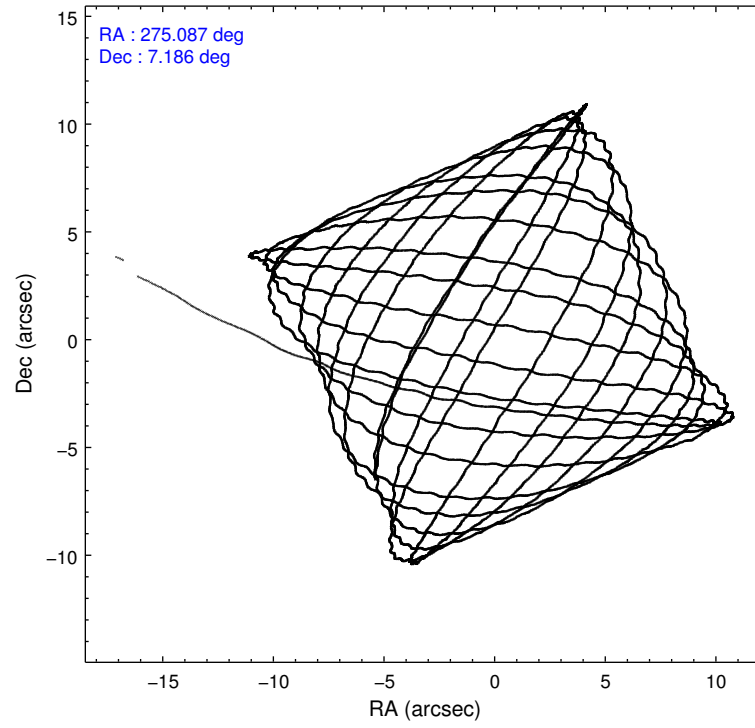
	ccd 7
level 1 events	12323
rejected events	6294
rejected %	51%

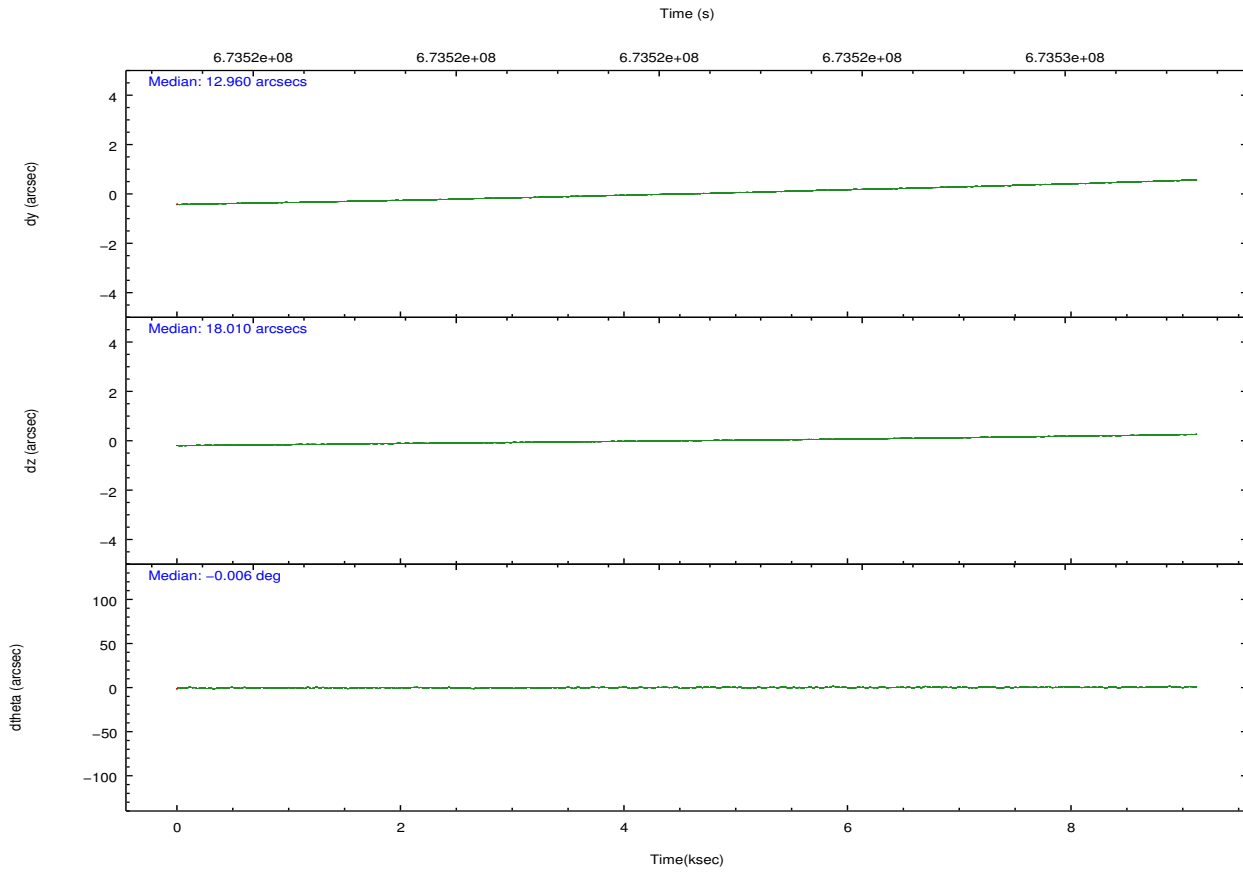
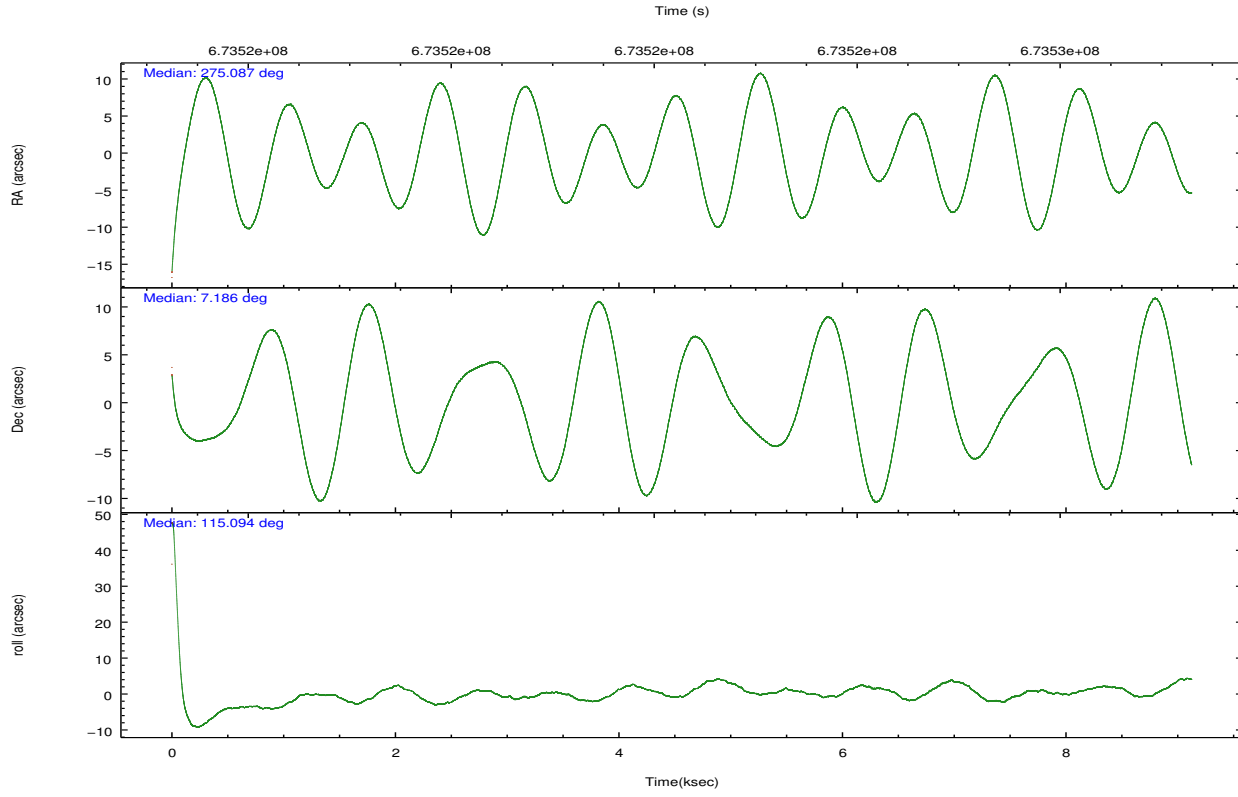
	ccd 7
grade 0 events	646
	5%
grade 1 events	13
	0%
grade 2 events	1127
	9%
grade 3 events	755
	6%
grade 4 events	700
	5%
grade 5 events	1190
	9%
grade 6 events	2801
	22%
grade 7 events	5091
	41%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-7	ACIS-7	Obspar file type	PREDICTED	ACTUAL
Grating	HETG	HETG	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
[deg] Pointing RA	275.109757	275.0868596546652	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	7.170444	7.185848584437061	Subarray start row	449	449
[deg] Pointing Roll	114.944144	115.1037095824444	Subarray row count	128	128
[mm] SIM focus pos	-0.684267	-0.6828225247311905	Alternating exposures requested	N	N
[mm] SIM defocus	0	0.001444936568705701	[s] Primary exposure time	0.000000	0.4
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	673517843.184000	673516497.79711			
Observation start date	2019-05-06T08:16:14	2019-05-06T07:54:57			
[s] Observation end time (MET)	673526843.184000	673527724.11028			
Observation end date	2019-05-06T10:46:14	2019-05-06T11:02:04			
Read mode	TIMED	TIMED			

2.3 Aspect



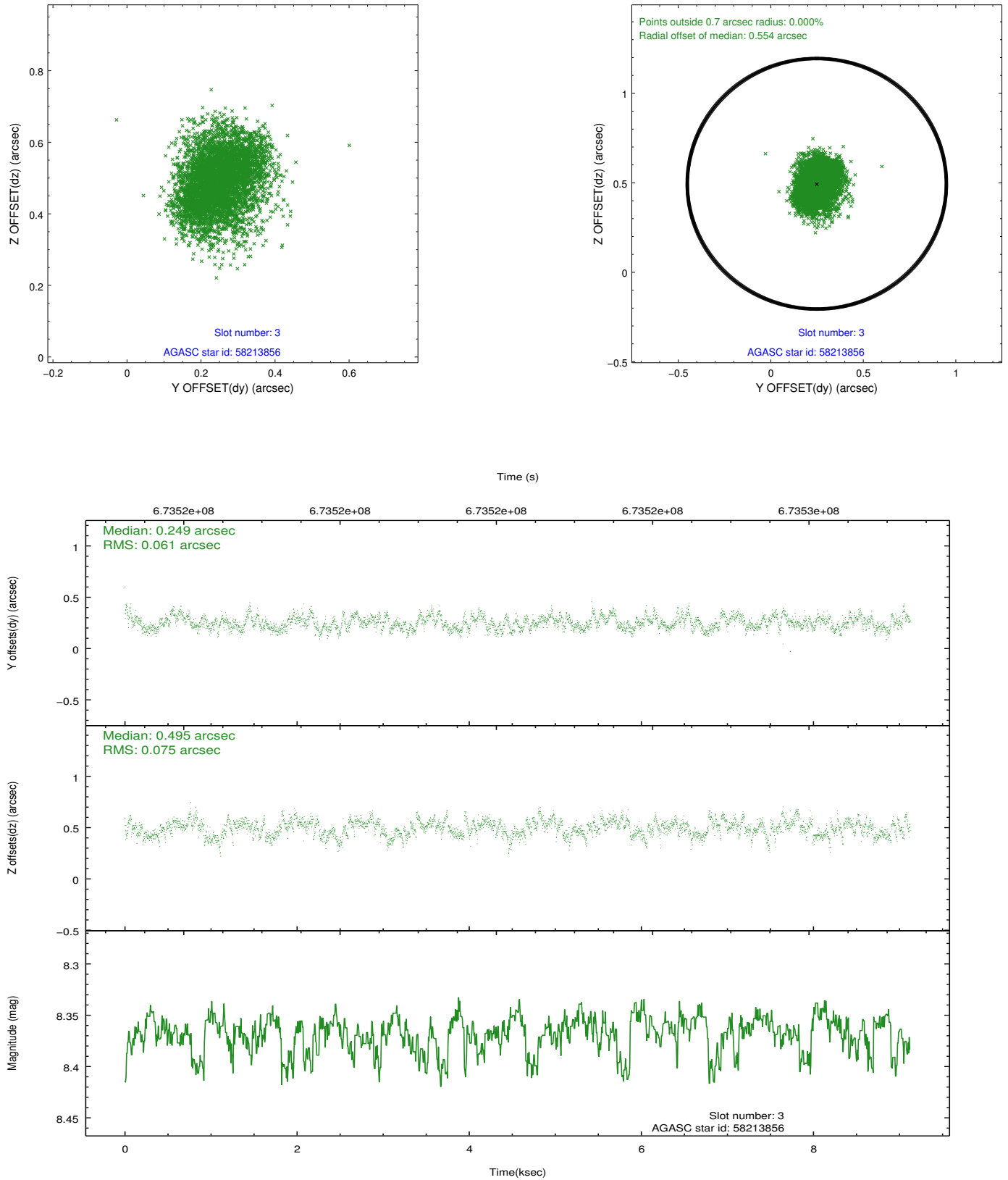


Slot Statistics

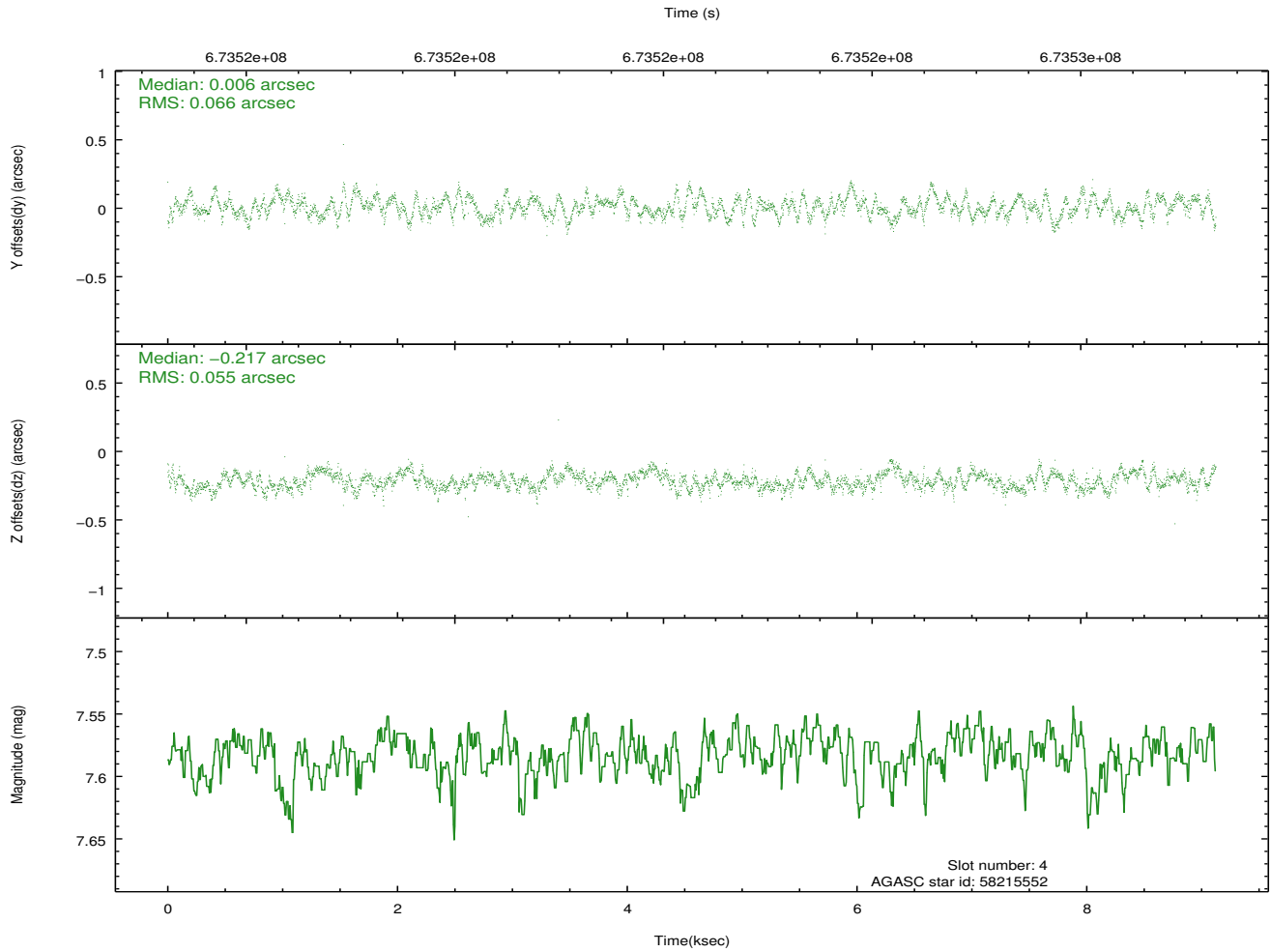
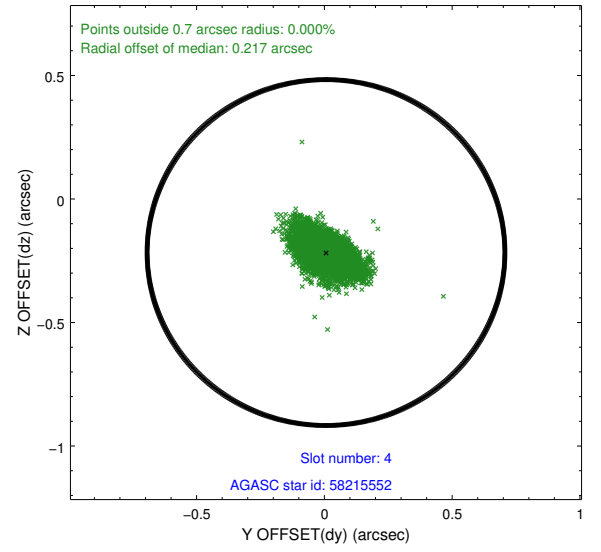
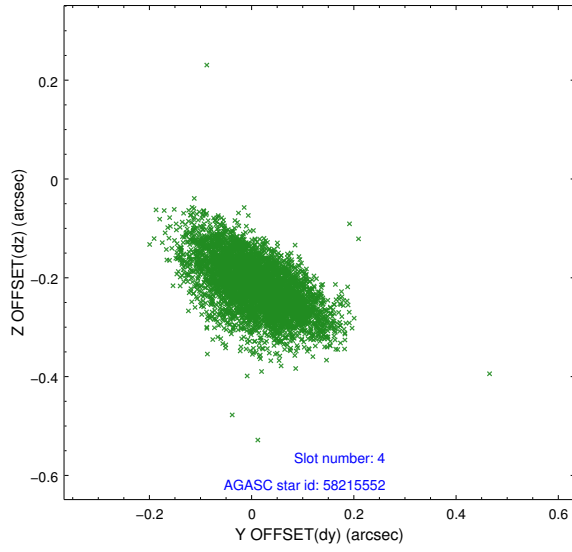
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.16	2226	1.000	-0.251	-0.248	0.014	0.021	0.000000	0.000000	-766.09	-1739
1	FID		ACIS-S-4	7.29	2226	1.000	0.765	0.187	0.019	0.029	0.000000	0.000000	2147.87	168
2	FID		ACIS-S-5	7.26	2225	1.000	-0.547	0.069	0.017	0.029	0.000000	0.000000	-1818.52	162
3	GUIDE	used	58213856	8.37	4450	1.000	0.249	0.495	0.104	0.164	275.612553	7.226303	-573.23	-1712
4	GUIDE	used	58215552	7.58	4447	1.000	0.006	-0.217	0.090	0.155	275.048740	7.069088	-238.84	351
5	GUIDE	used	58338368	6.74	4452	1.000	0.142	0.528	0.130	0.210	275.704454	7.206741	-775.32	-1980
6	GUIDE	used	132401928	7.34	4452	1.000	-0.023	0.173	0.097	0.162	275.575114	7.548927	536.12	-2078
7	GUIDE	used	58208648	8.05	4450	1.000	-0.377	-0.971	0.086	0.139	274.402649	7.152383	1007.73	2316

2.4 Star Slots

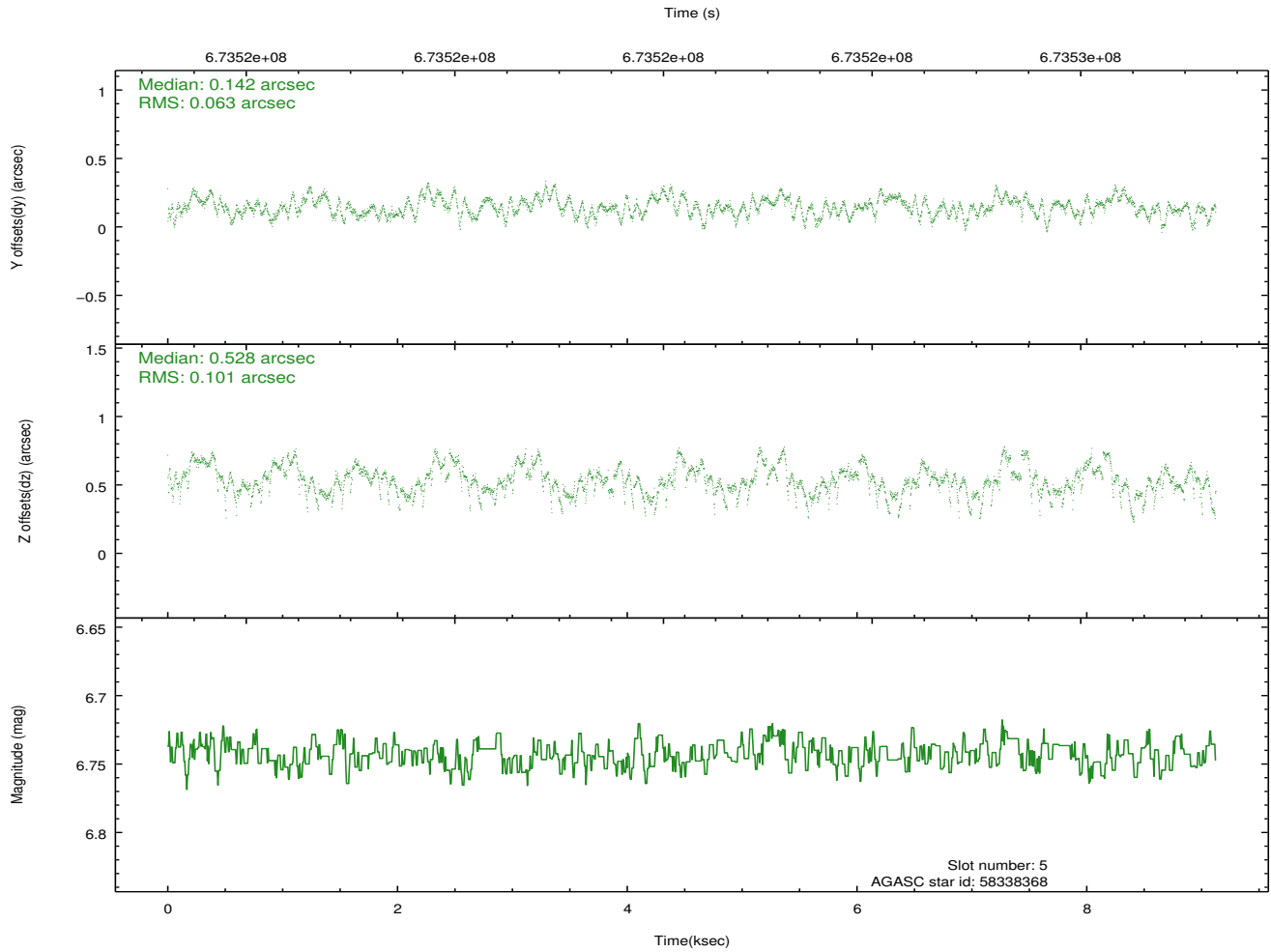
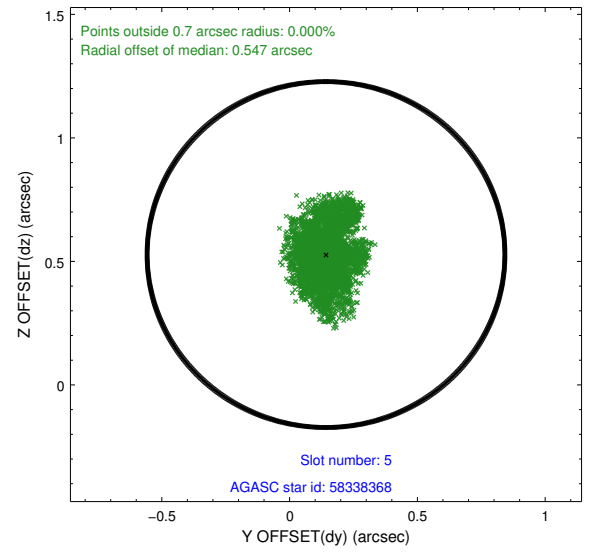
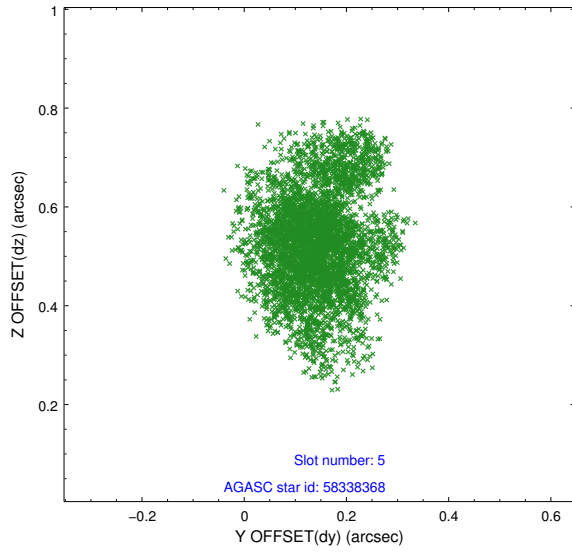
2.4.1 Slot 3



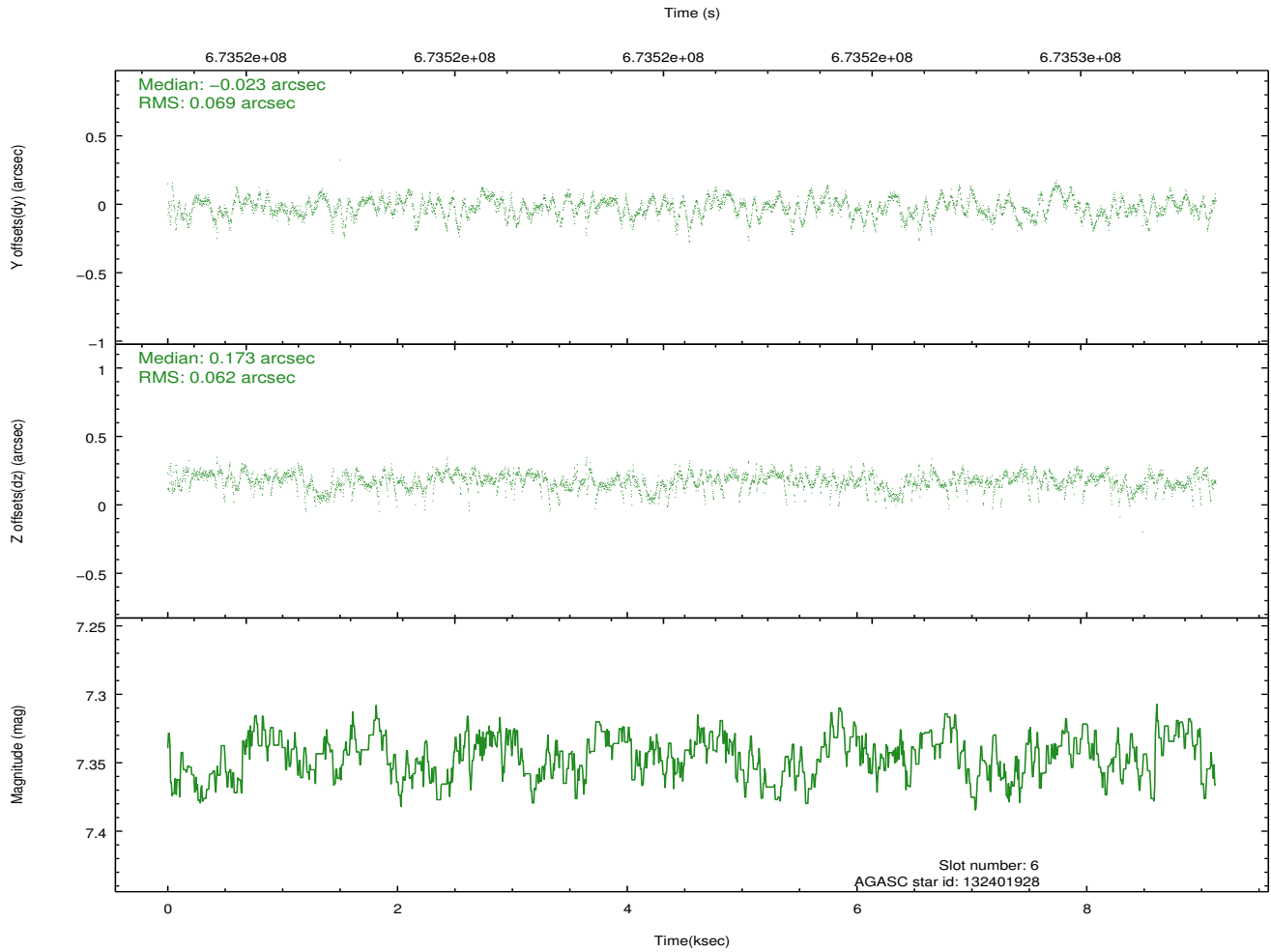
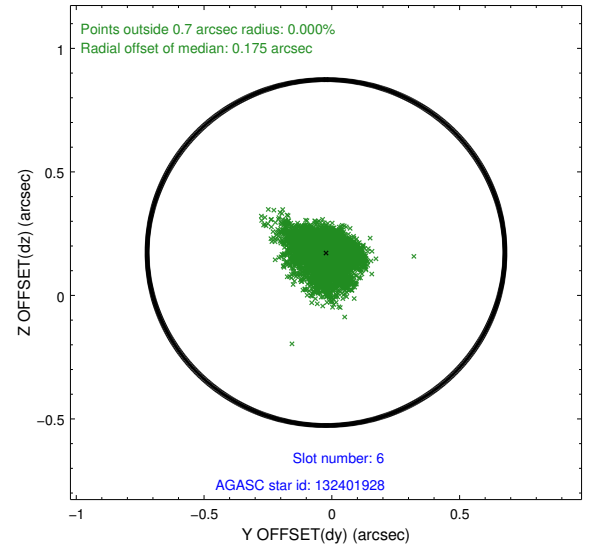
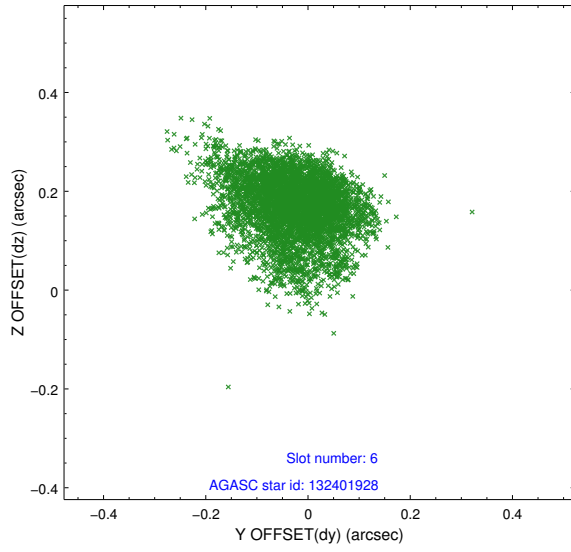
2.4.2 Slot 4



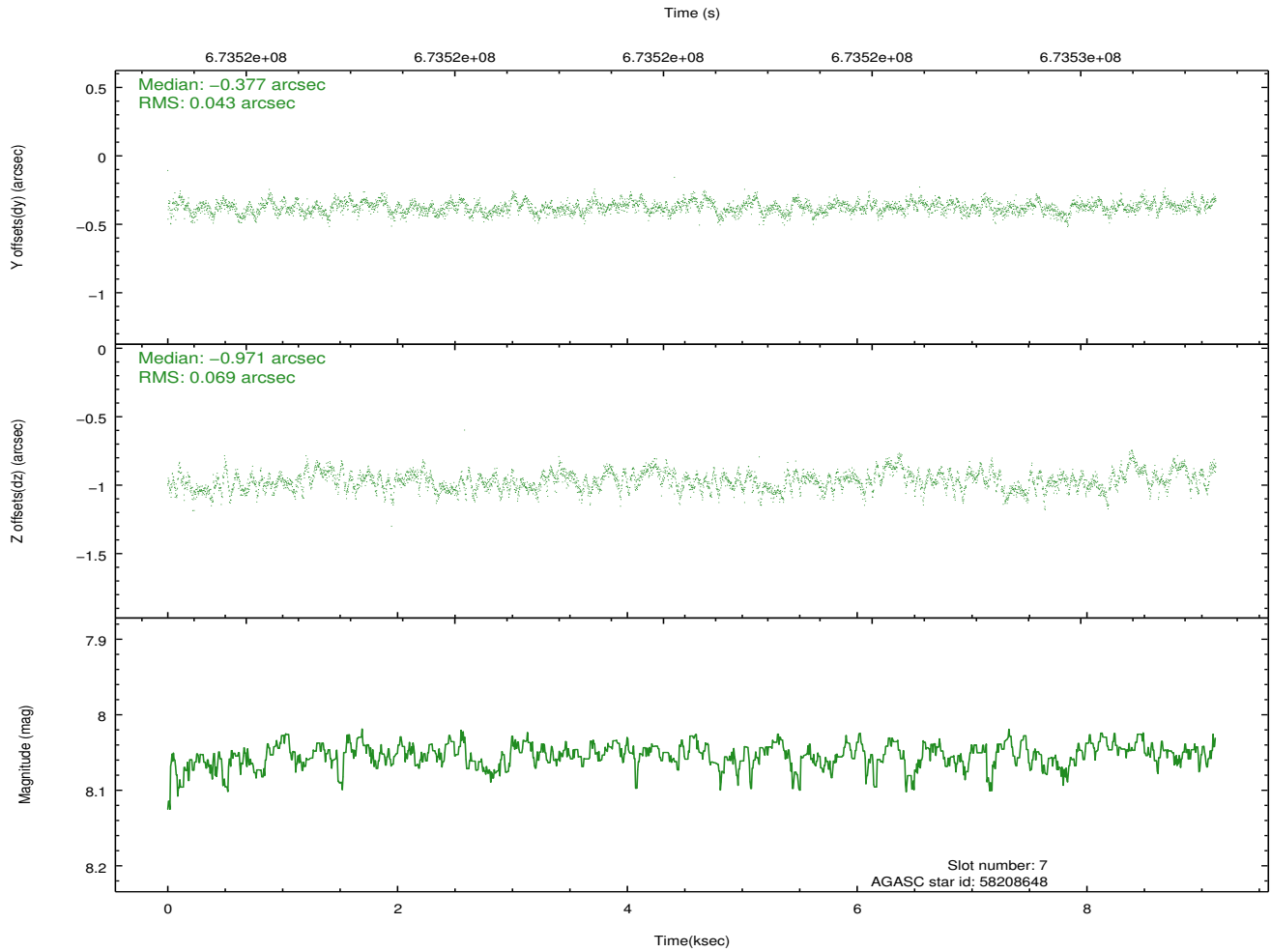
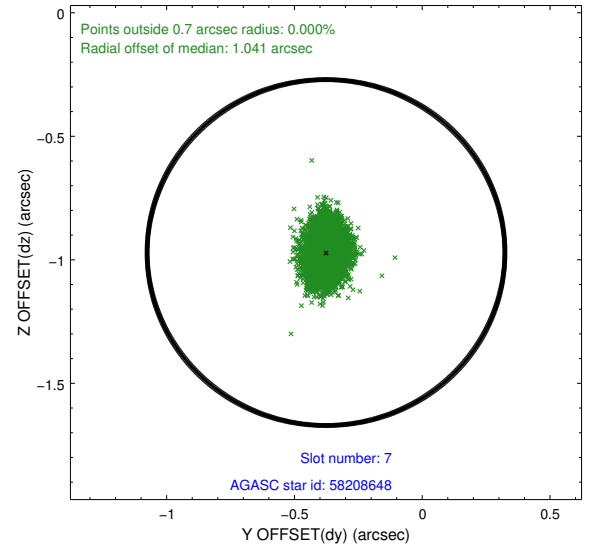
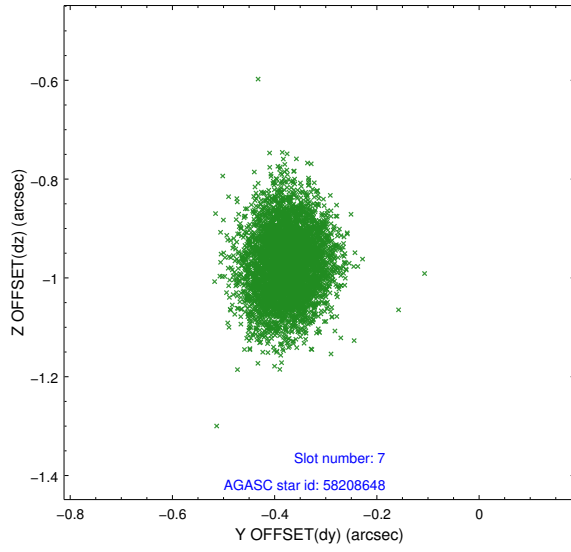
2.4.3 Slot 5



2.4.4 Slot 6

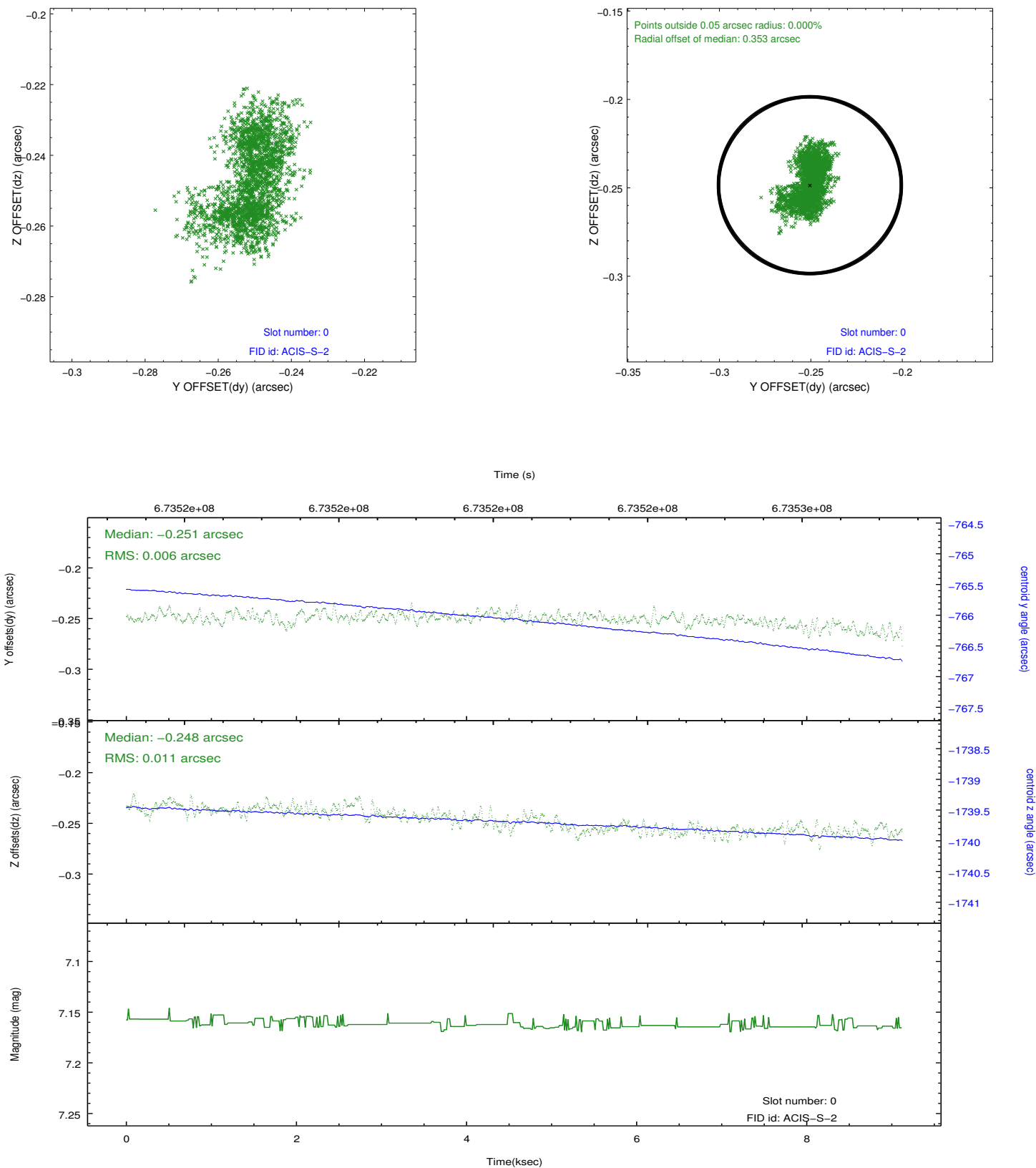


2.4.5 Slot 7

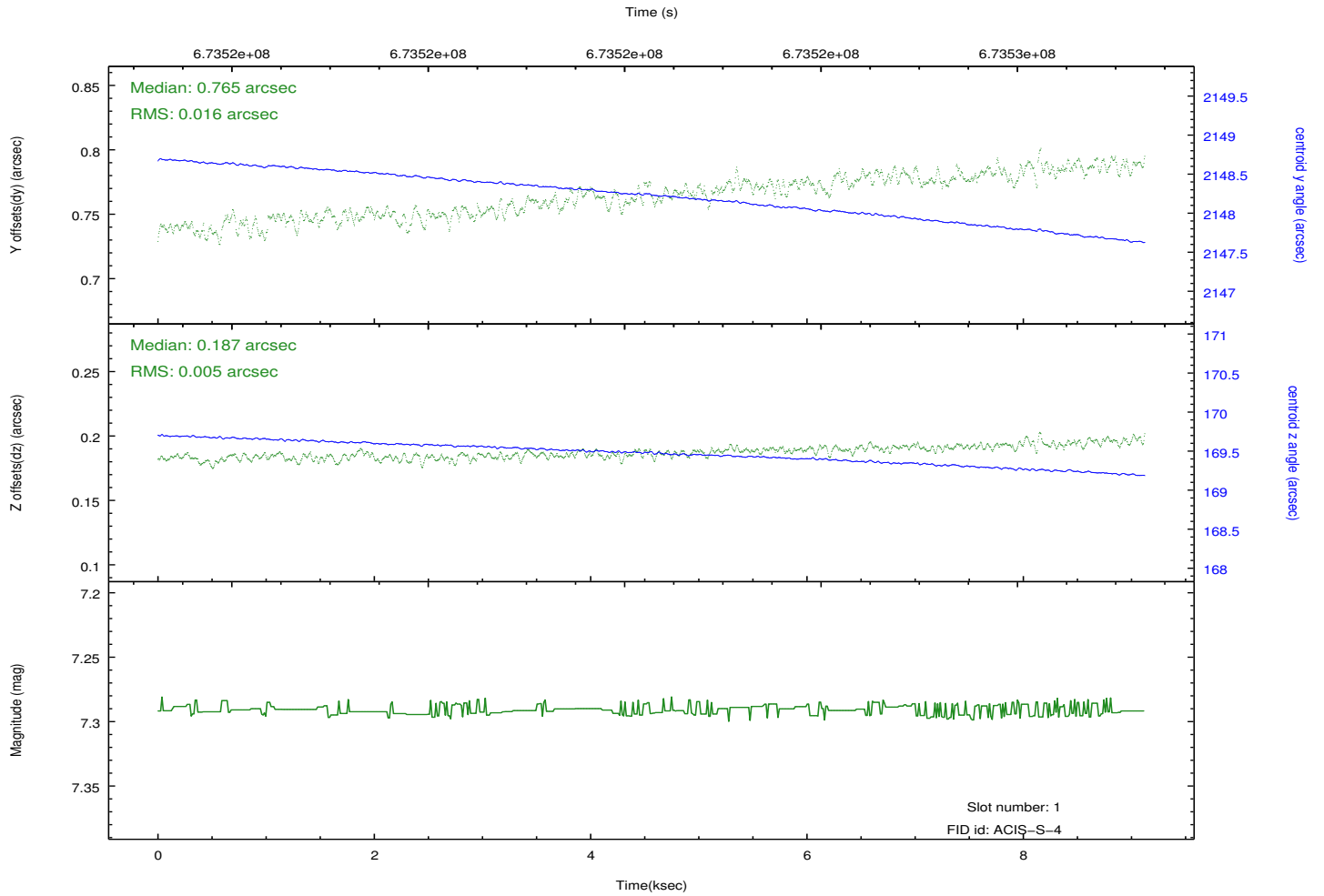
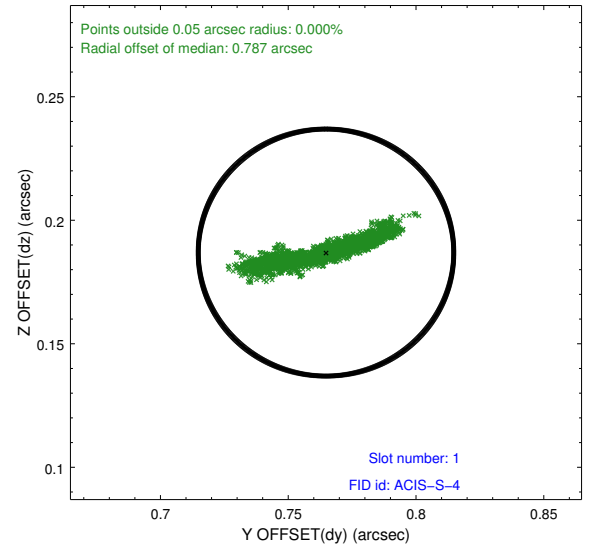
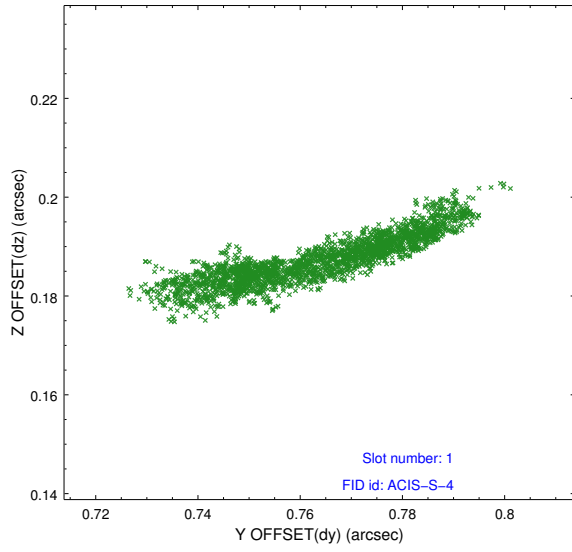


2.5 FID Slots

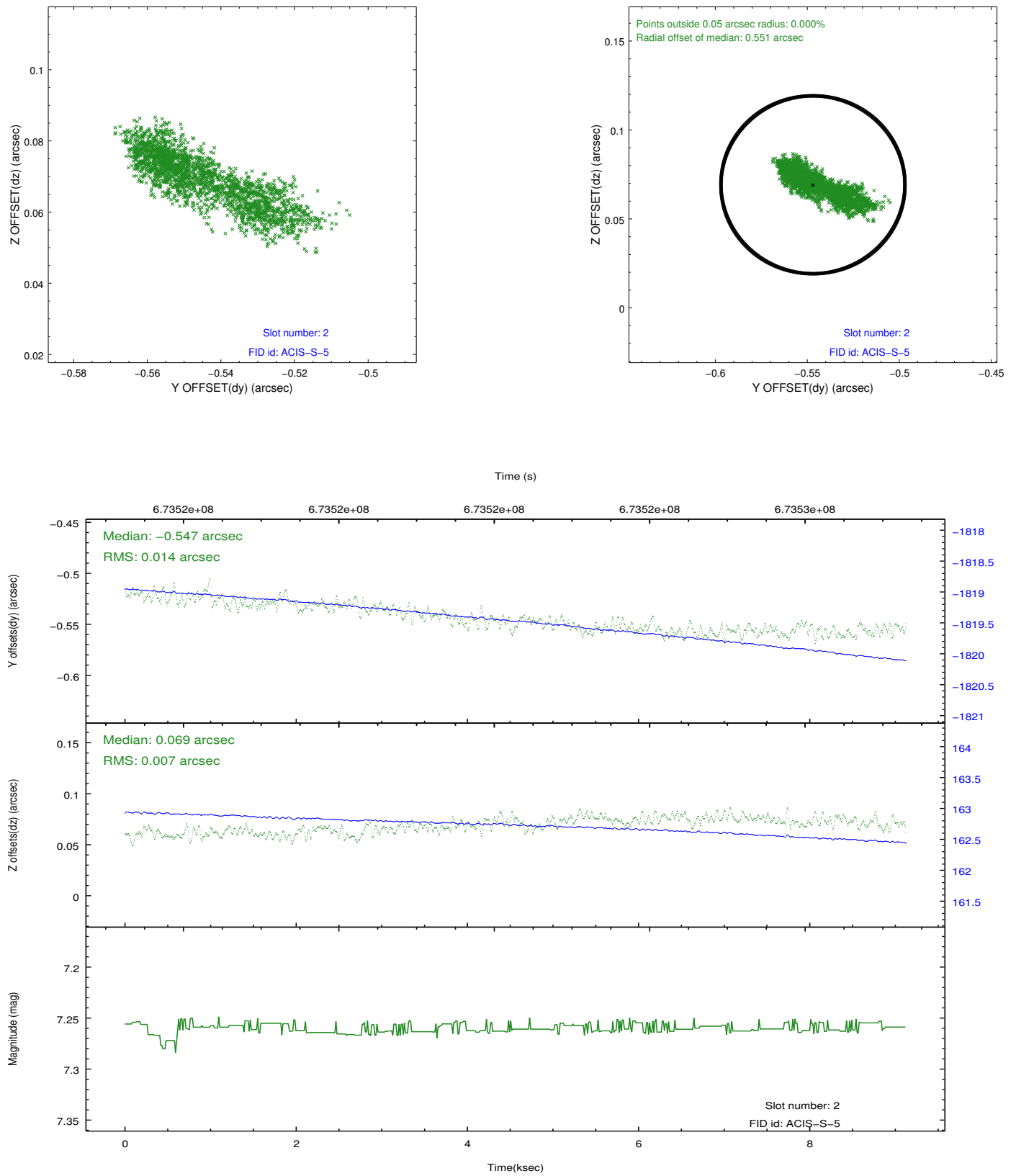
2.5.1 Slot 0



2.5.2 Slot 1

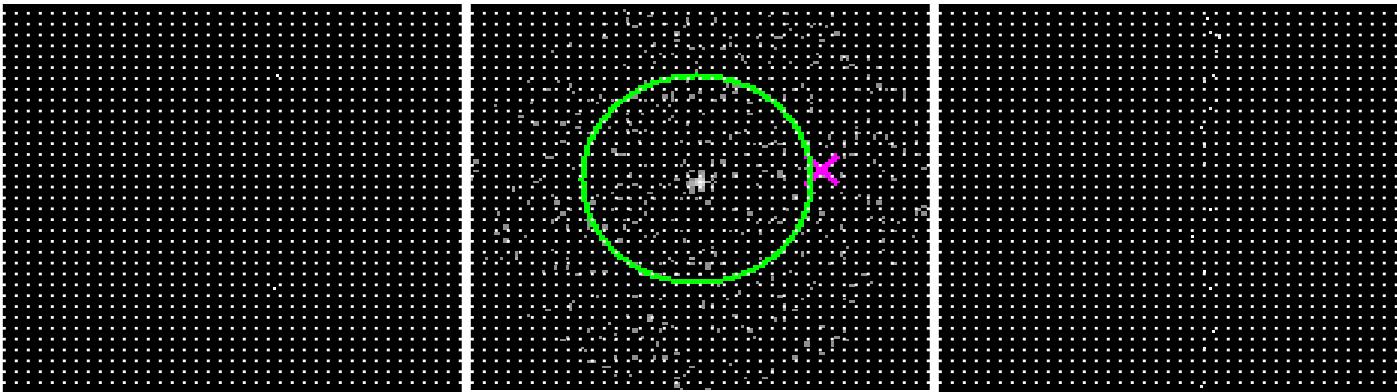


2.5.3 Slot 2



3 Gratings

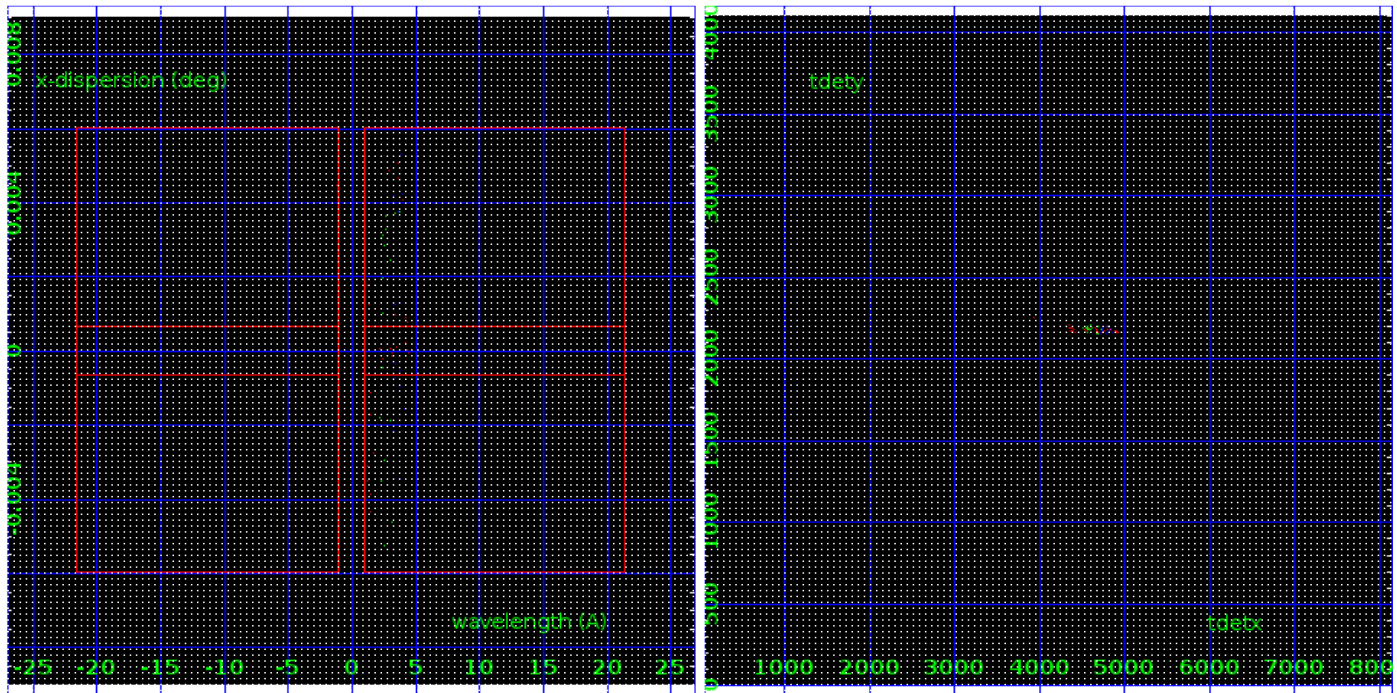
3.1 HEG Arm



HEG Order Sort 123

HEG Zero Order

HEG Order Sort ALL

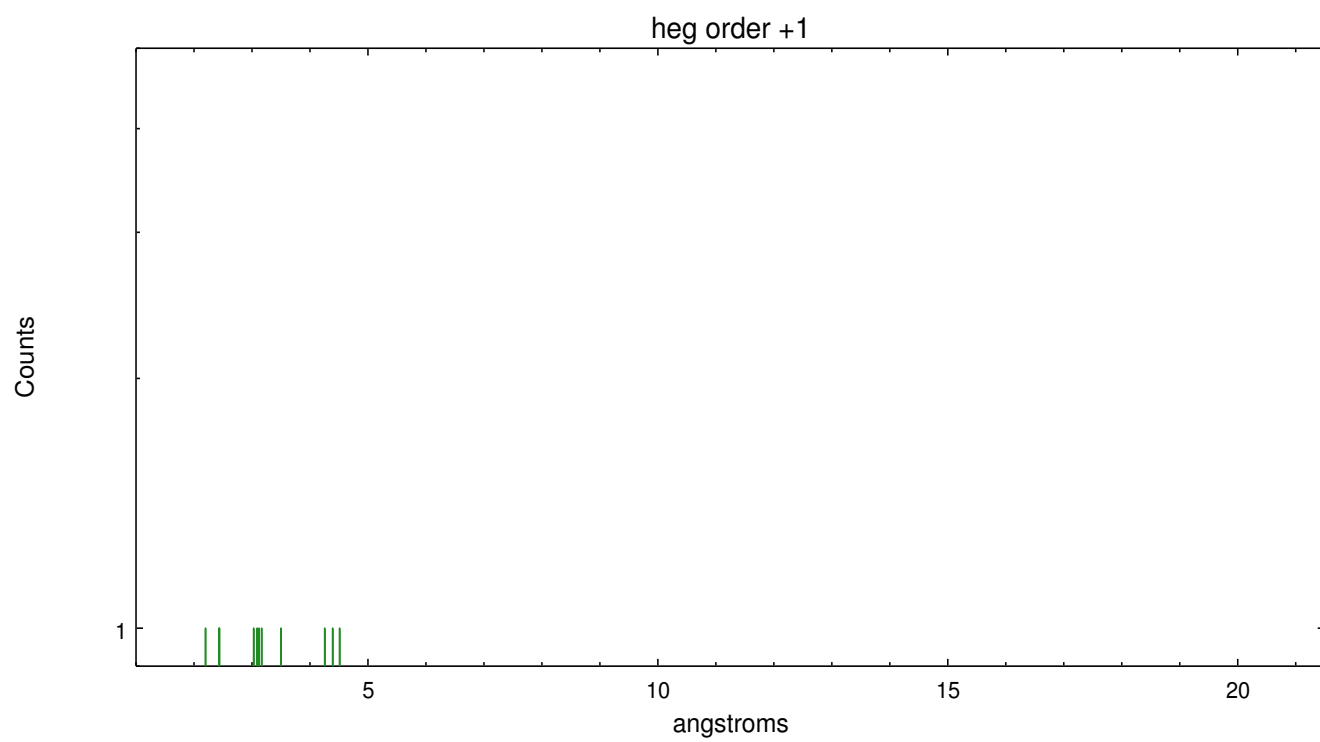
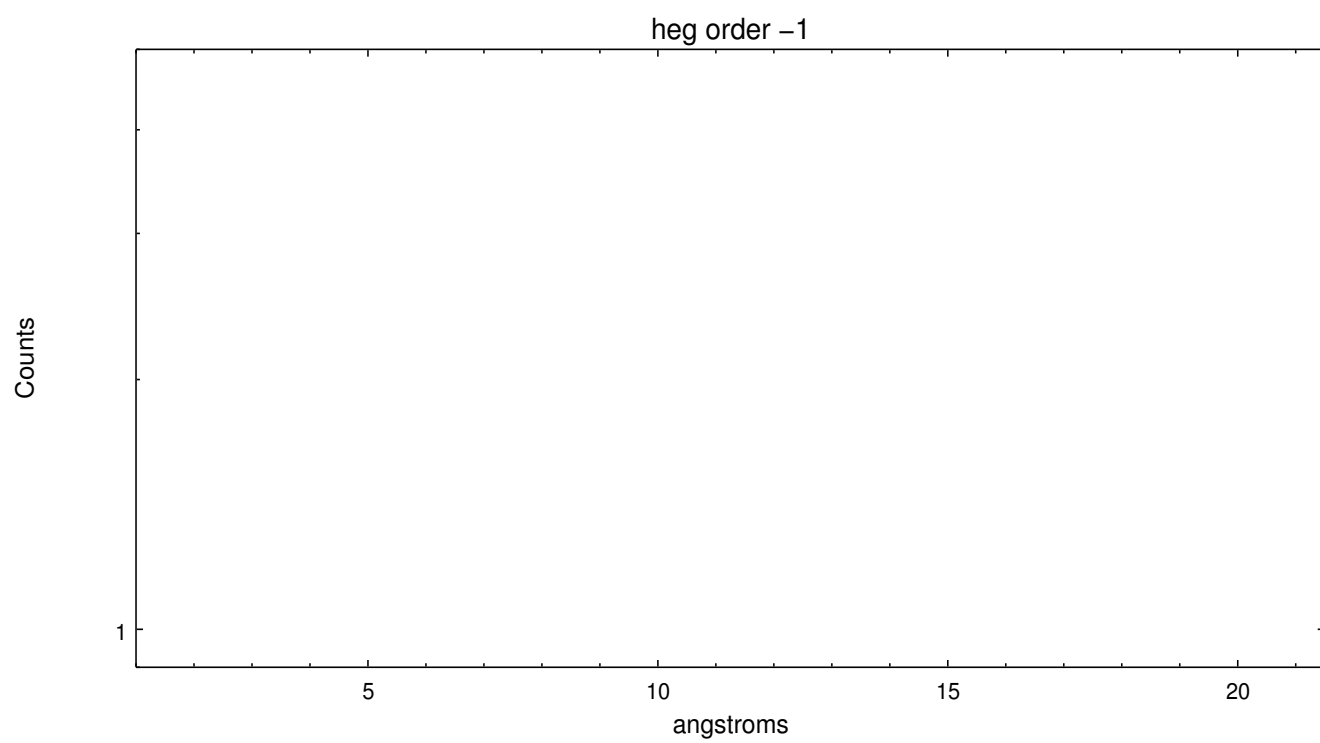


Spot Image HEG

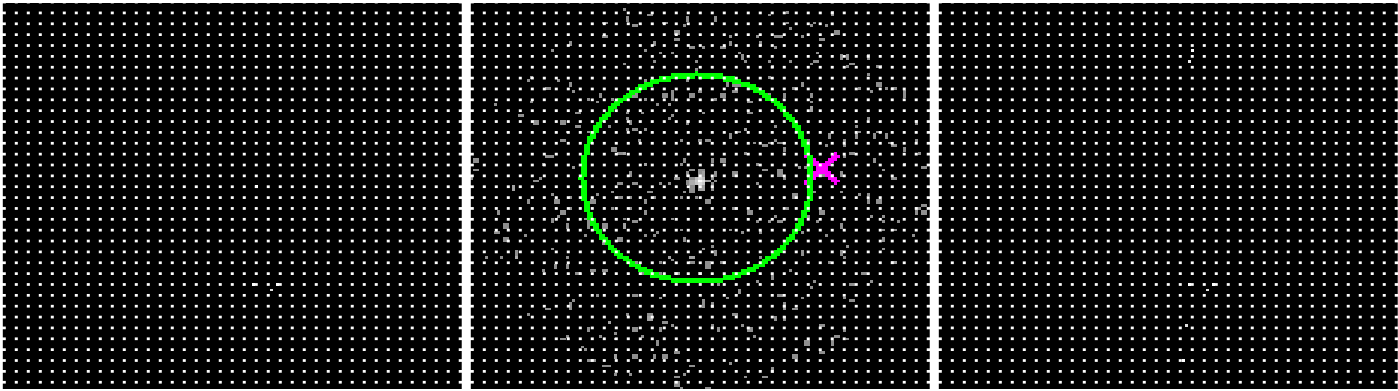
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	0	0	1	311	27	17	13





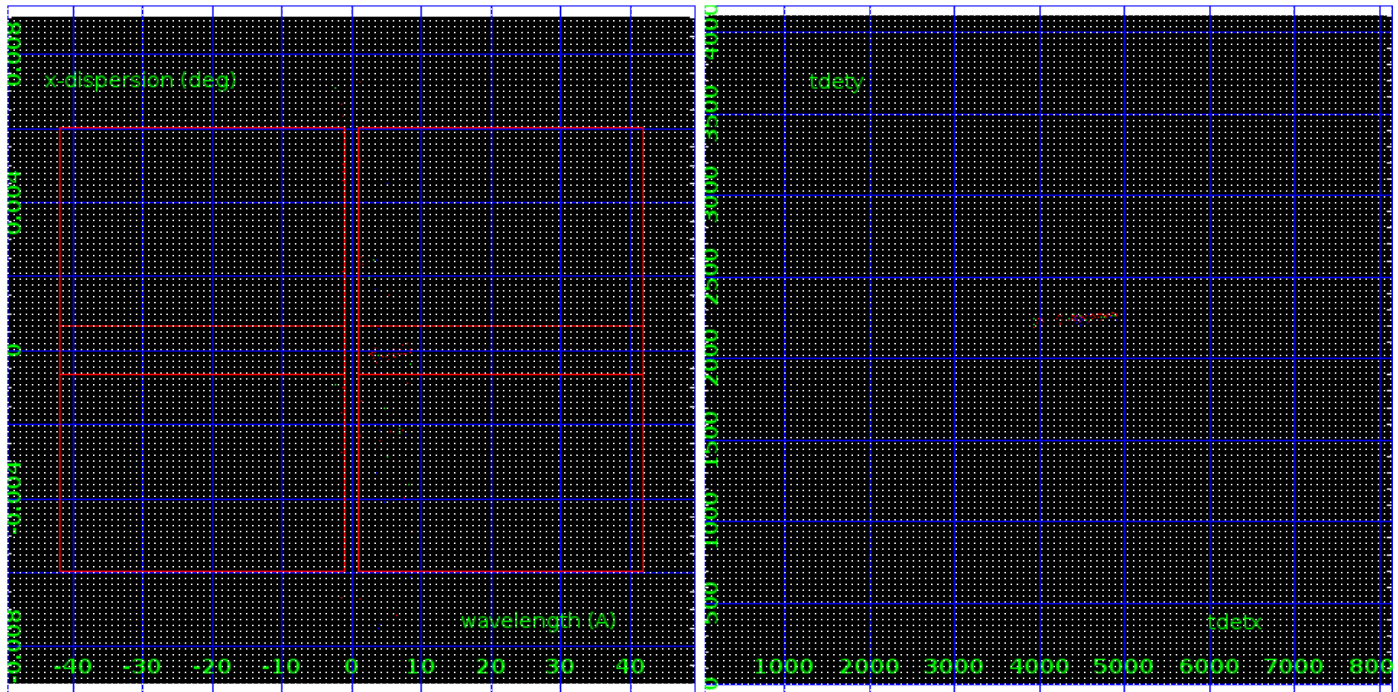
3.2 MEG Arm



MEG Order Sort 123

MEG Zero Order

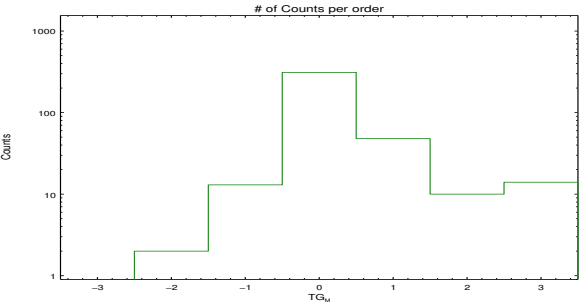
MEG Order Sort ALL

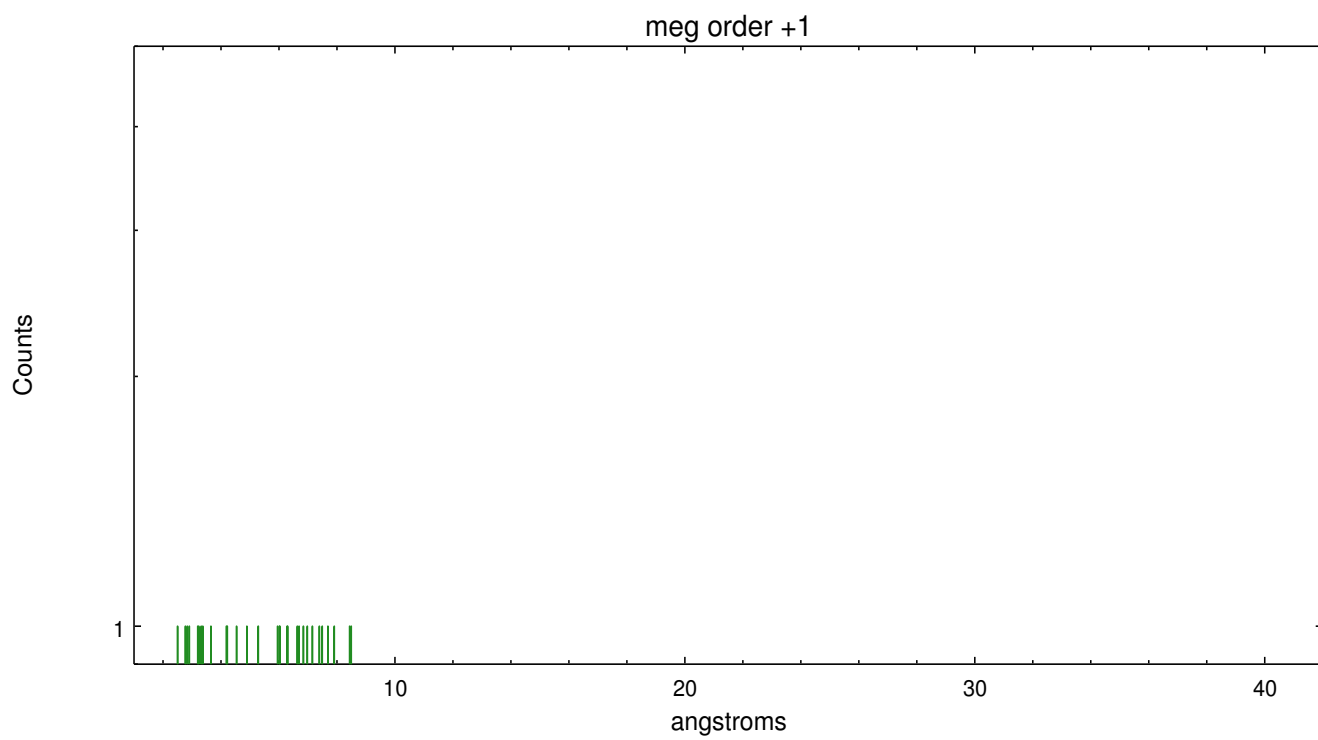
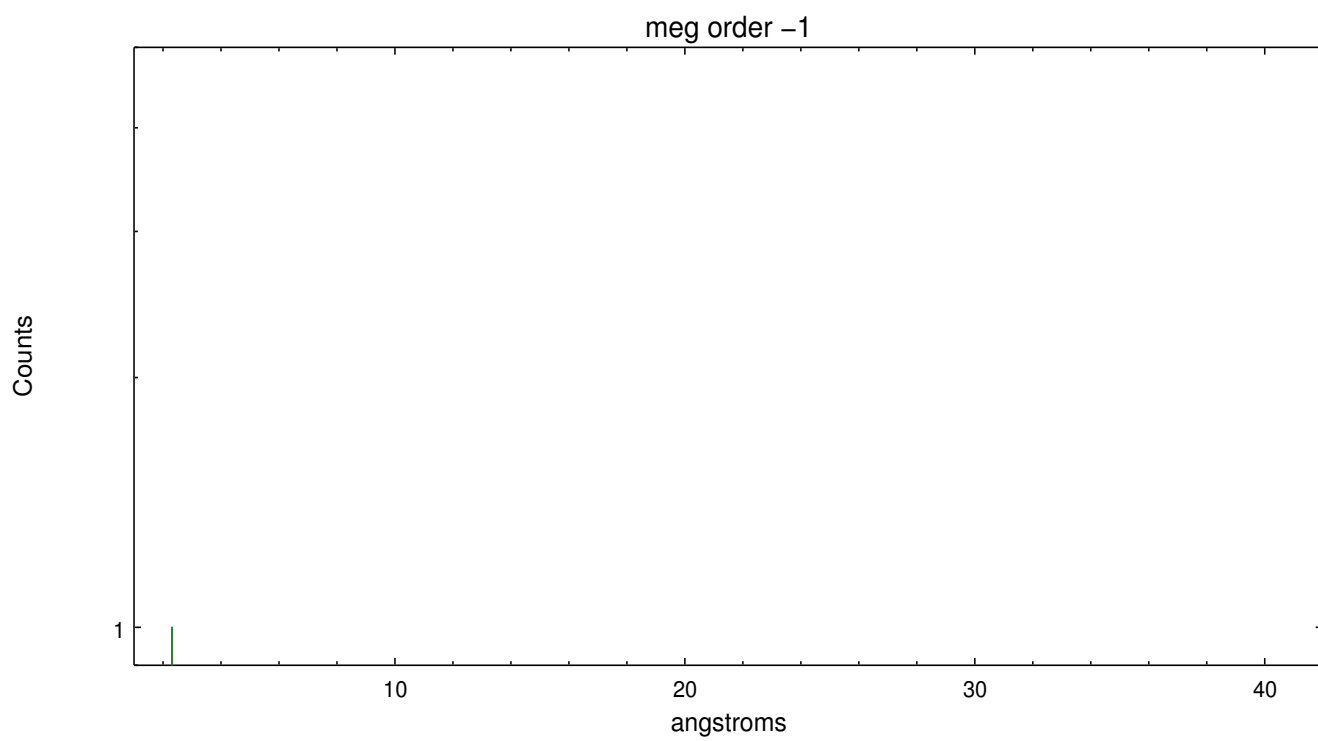


Spot Image MEG

Full Detector MEG

	order	order	order	order	order	order	order
	-3	-2	-1	0	1	2	3
Events	0	2	13	311	48	10	14





A Summary

A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2019.05.07
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.0690432606936

A.2 Comments