

V&V Reference Report

L2 ASCDS Version : 10.5.2

Observation 19717 - L2 Version 1
Chandra X-Ray Center

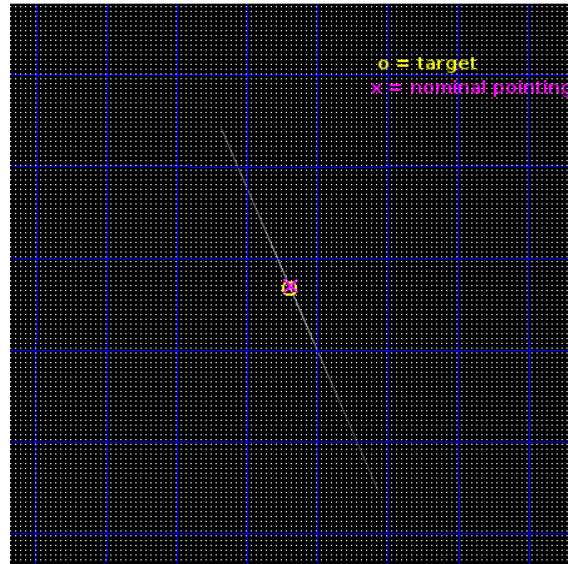
L2 Processing Date : Feb 22 2017

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1 Front

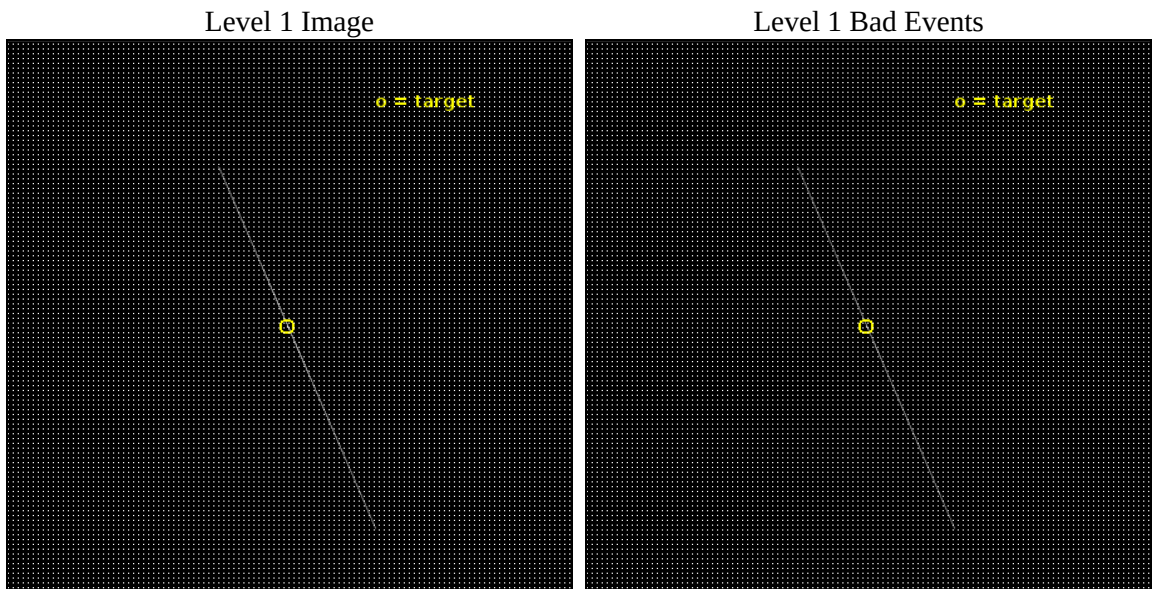
seq_num	401884	Sequence number
obs_id	19717	Observation id
title	A Chandra Legacy for GRS 1915+105	Proposal title
observer	Claude Canizares	Principal investigator
object	GRS 1915+105	Source name
ra_targ	288.798333	Observer's specified target RA [deg]
dec_targ	10.945778	Observer's specified target Dec [deg]
ra_nom	288.79584507041	Nominal RA [deg]
dec_nom	10.950209473553	Nominal Dec [deg]
roll_nom	67.37780210537	Nominal Roll [deg]
revision	1	Processing version of data
ontime	25055.25	Sum of GTIs [s]
livetime	24957.377929688	Livetime [s]
ontime5	25055.25	Sum of GTIs [s]
ontime6	25055.25	Sum of GTIs [s]
ontime7	25055.25	Sum of GTIs [s]
ontime8	25055.25	Sum of GTIs [s]
ontime9	25055.25	Sum of GTIs [s]
l2events	3024846	Number of level 2 events



2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Parameters

obi_num	0	Obi number	sched_exp_time	25000.000000	[s] Scheduled observation exposure time
ascdsver	10.5.2	Processing system revision	ontime	25055.25	Sum of GTIs [s]
caldsver	4.7.3	 	ontime5	25055.25	Sum of GTIs [s]
date	2017-02-22T22:00:19	Date and time of file creation	ontime6	25055.25	Sum of GTIs [s]
revision	1	Processing version of data	ontime7	25055.25	Sum of GTIs [s]
			ontime8	25055.25	Sum of GTIs [s]
			ontime9	25055.25	Sum of GTIs [s]
			l1events	5388587	Number of level 1 events
			tgmethod	TGDETECT	Method used to create src1a file
			zo_pos	(4078.83, 4063.44)	src1a sky pixel position

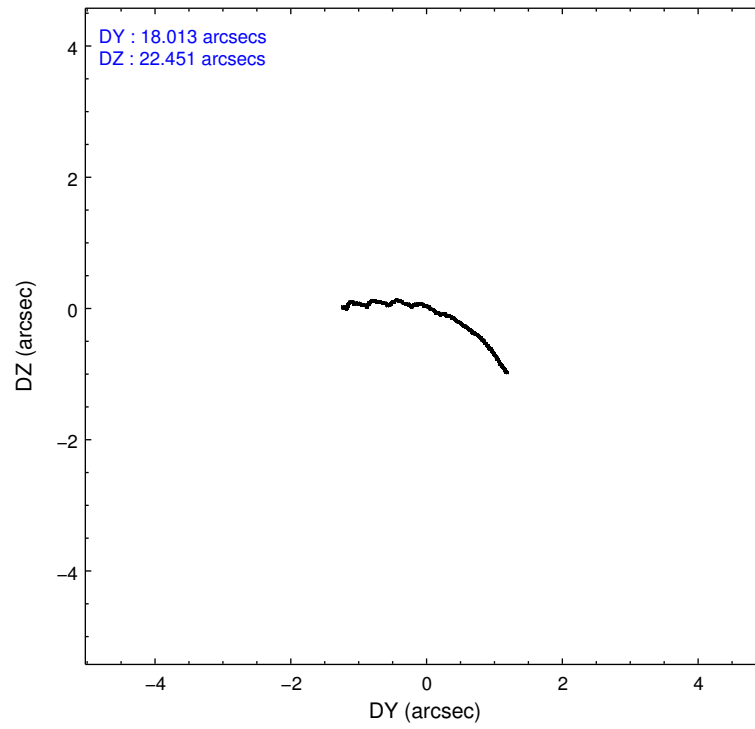
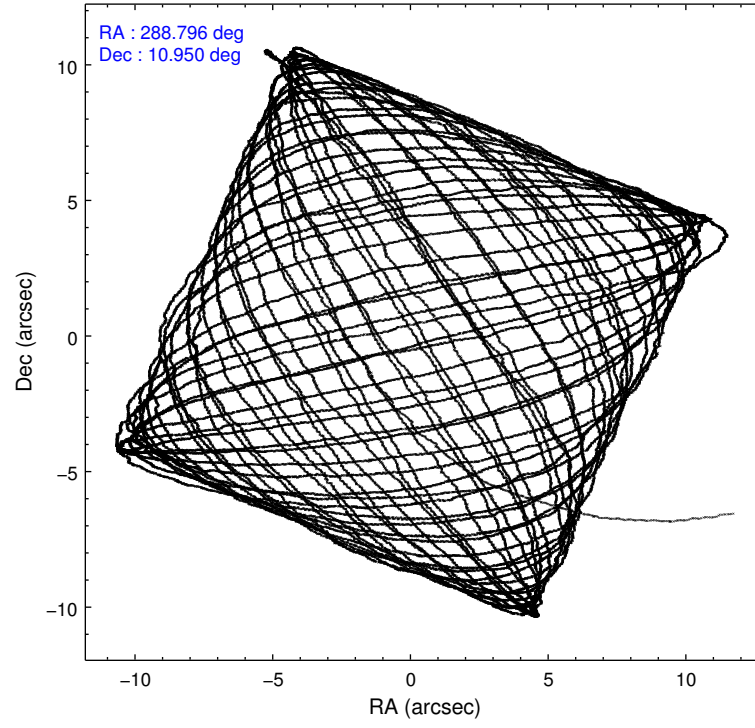
2.1.3 Events

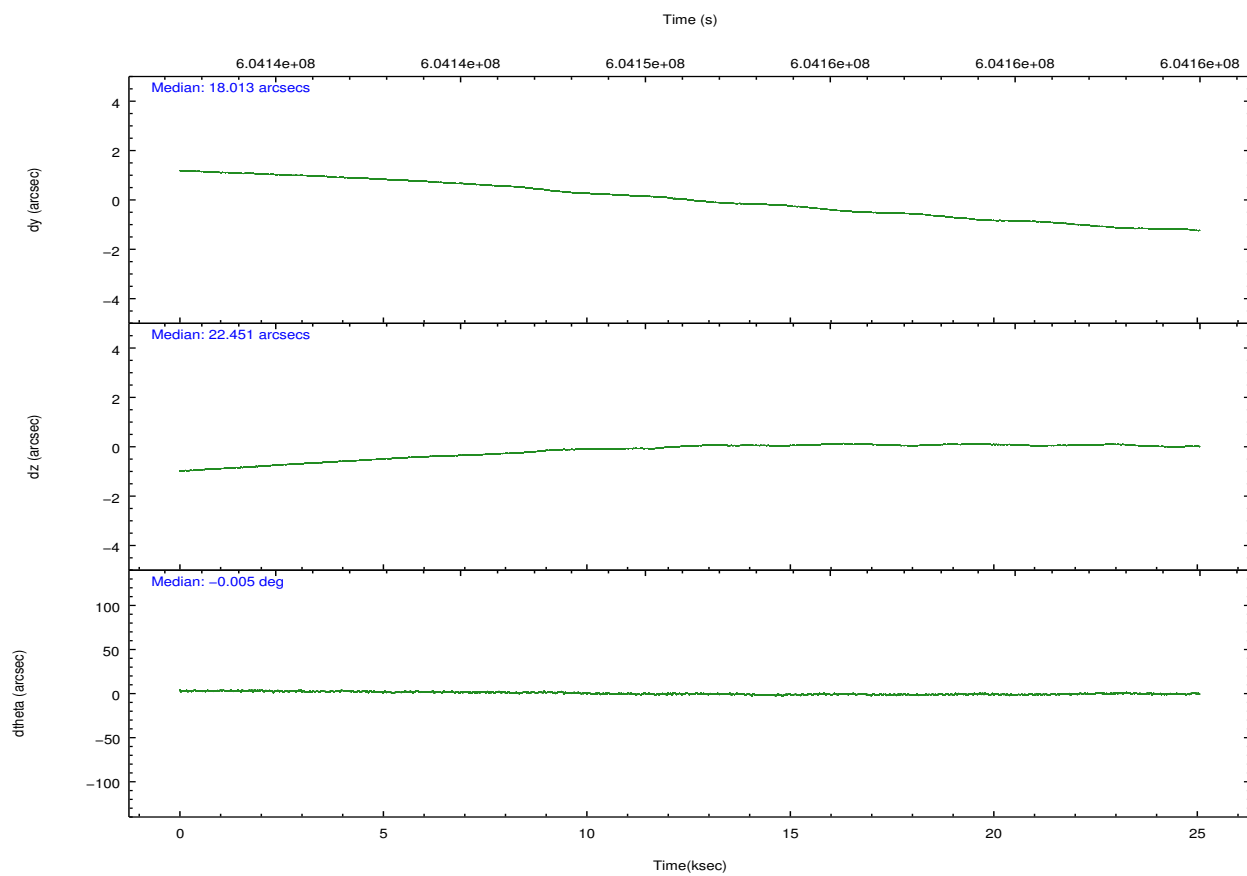
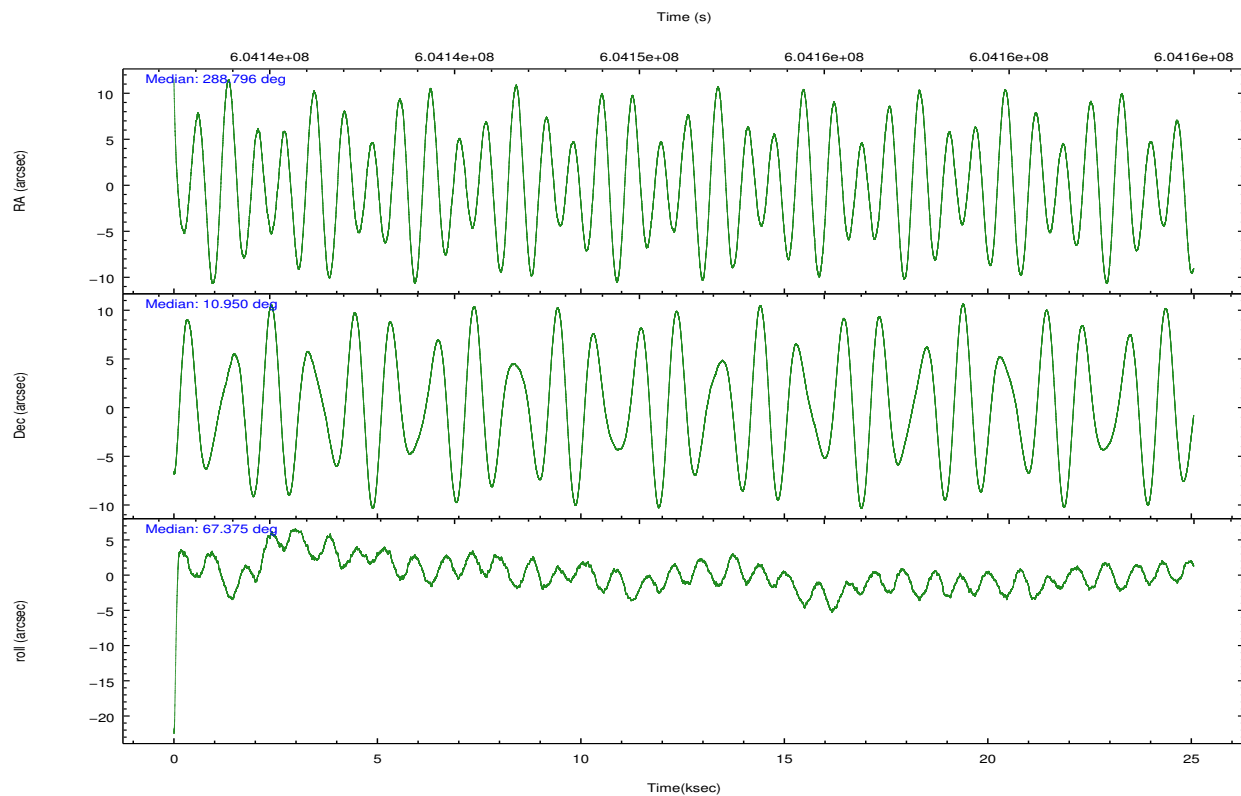
	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	468853	1066185	2831609	660455	361485	grade 0 events	10499	9809	134016	25502	4521
rejected events	261165	350900	863728	433063	299177		2%	0%	4%	3%	1%
rejected %	55%	32%	30%	65%	82%	grade 1 events	315	162	6505	347	144
							0%	0%	0%	0%	0%
						grade 2 events	80666	605114	765530	147585	38393
							17%	56%	27%	22%	10%
						grade 3 events	3619	4207	80907	9306	3510
							0%	0%	2%	1%	0%
						grade 4 events	3643	3807	79609	9051	3898
							0%	0%	2%	1%	1%
						grade 5 events	15800	11454	87623	13524	9366
							3%	1%	3%	2%	2%
						grade 6 events	110002	93759	911862	36428	12114
							23%	8%	32%	5%	3%
						grade 7 events	244309	337873	765557	418712	289539
							52%	31%	27%	63%	80%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-56789	ACIS-56789	Obspar file type	PREDICTED	ACTUAL
Grating	HETG	HETG	Obspar update status	NONE	UPDATED
Data mode	CC33_GRADED	CC33_GRADED	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	288.799811	288.7958450704129	CCD I2 on	N	N
[deg] Pointing Dec	10.923042	10.95020947355329	CCD I3 on	N	N
[deg] Pointing Roll	67.220438	67.37780210537002	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	Y	Y
[s] Observation start time (MET)	604138712.184000	604137358.08772	CCD S5 on	O1	Y
Observation start date	2017-02-22T08:17:23	2017-02-22T07:55:58	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	604163712.184000	604164710.72681	On-chip summing requested	N	N
Observation end date	2017-02-22T15:14:03	2017-02-22T15:31:50	Subarray requested	NONE	NONE
Read mode	CONTINUOUS	CONTINUOUS	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	0

2.3 Aspect



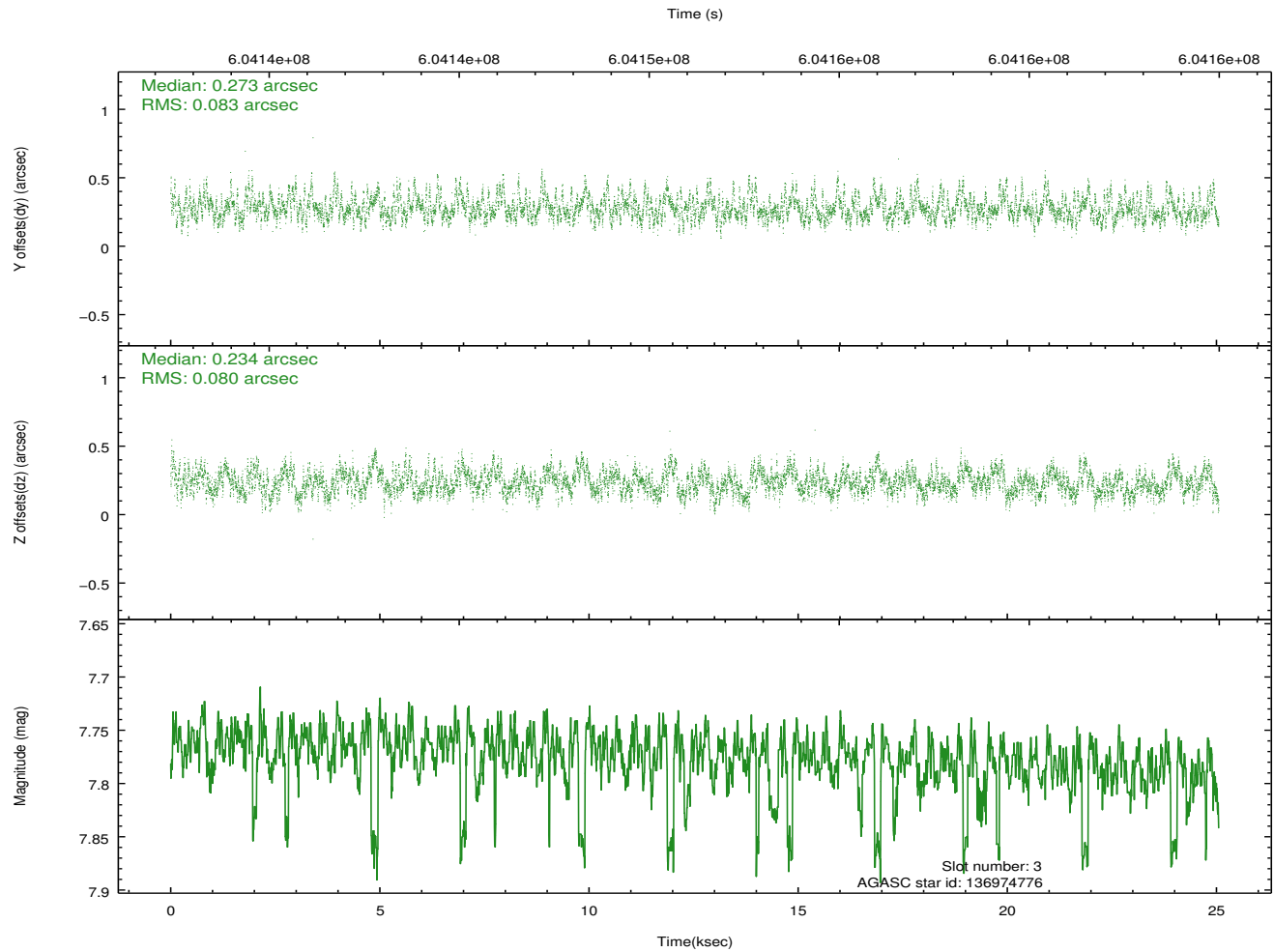
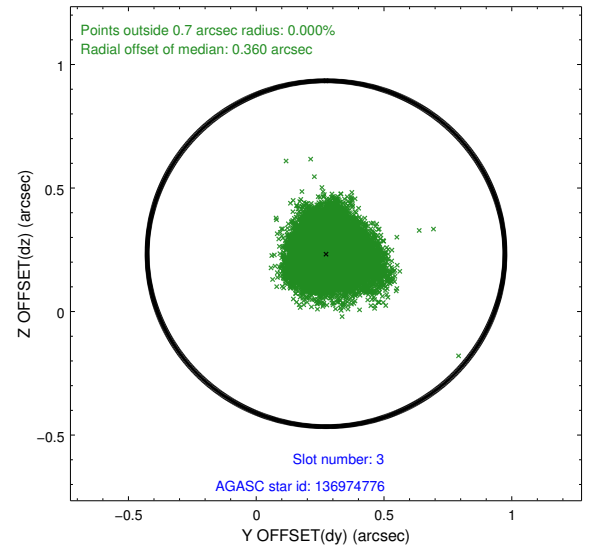
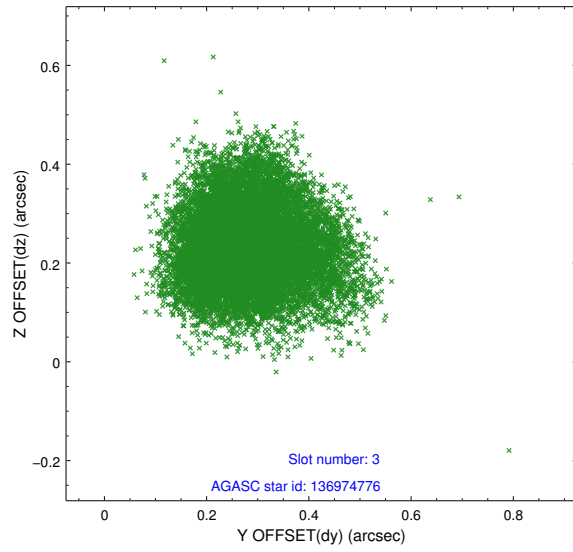


Slot Statistics

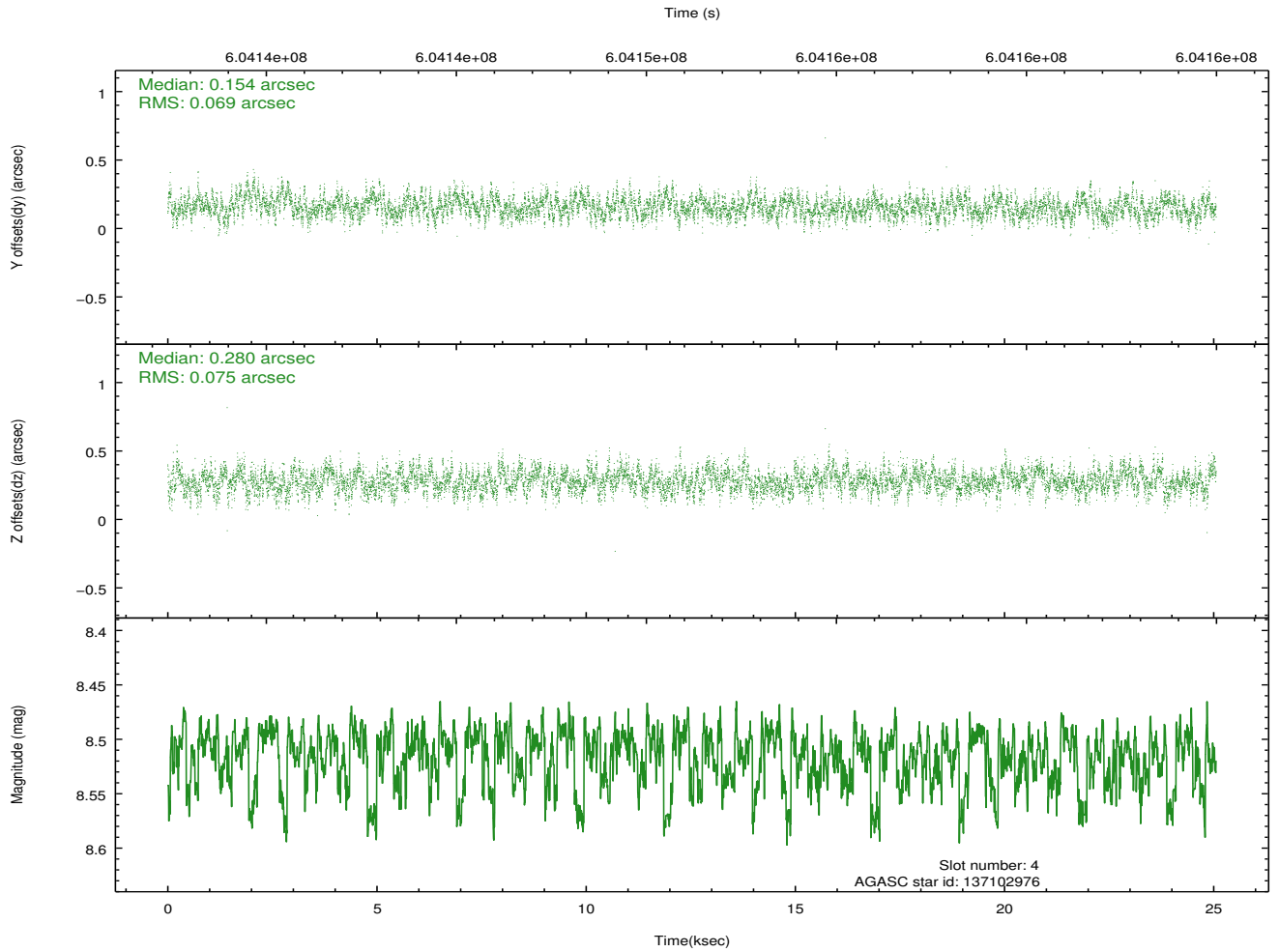
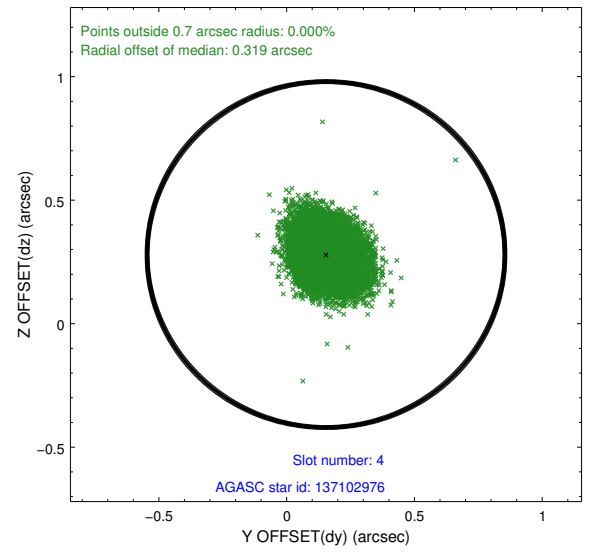
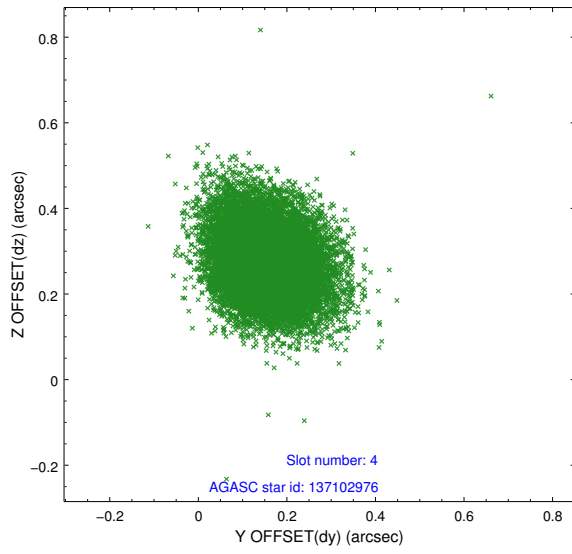
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-1	7.09	6112	-0.058	-0.020	0.018	0.059	0.000000	0.000000	924.90	-1739.51
1	FID		ACIS-S-4	7.10	6111	0.168	0.024	0.020	0.050	0.000000	0.000000	2142.60	164.59
2	FID		ACIS-S-6	7.25	6112	-0.132	0.008	0.010	0.019	0.000000	0.000000	390.91	802.05
3	GUIDE	used	136974776	7.77	12220	0.273	0.234	0.125	0.194	288.742109	10.409402	-1783.40	-527.23
4	GUIDE	used	137102976	8.51	12216	0.154	0.280	0.108	0.175	289.193436	10.979652	727.69	-1202.90
5	GUIDE	used	137497048	7.96	12223	-0.388	-0.313	0.092	0.151	288.896055	11.554718	2226.56	563.37
6	GUIDE	used	137498872	7.04	12223	-0.510	-0.514	0.110	0.176	288.350862	11.344926	787.41	2048.97
7	GUIDE	used	136974408	6.93	12224	0.462	0.315	0.100	0.159	288.806802	10.212409	-2348.33	-1012.84

2.4 Star Slots

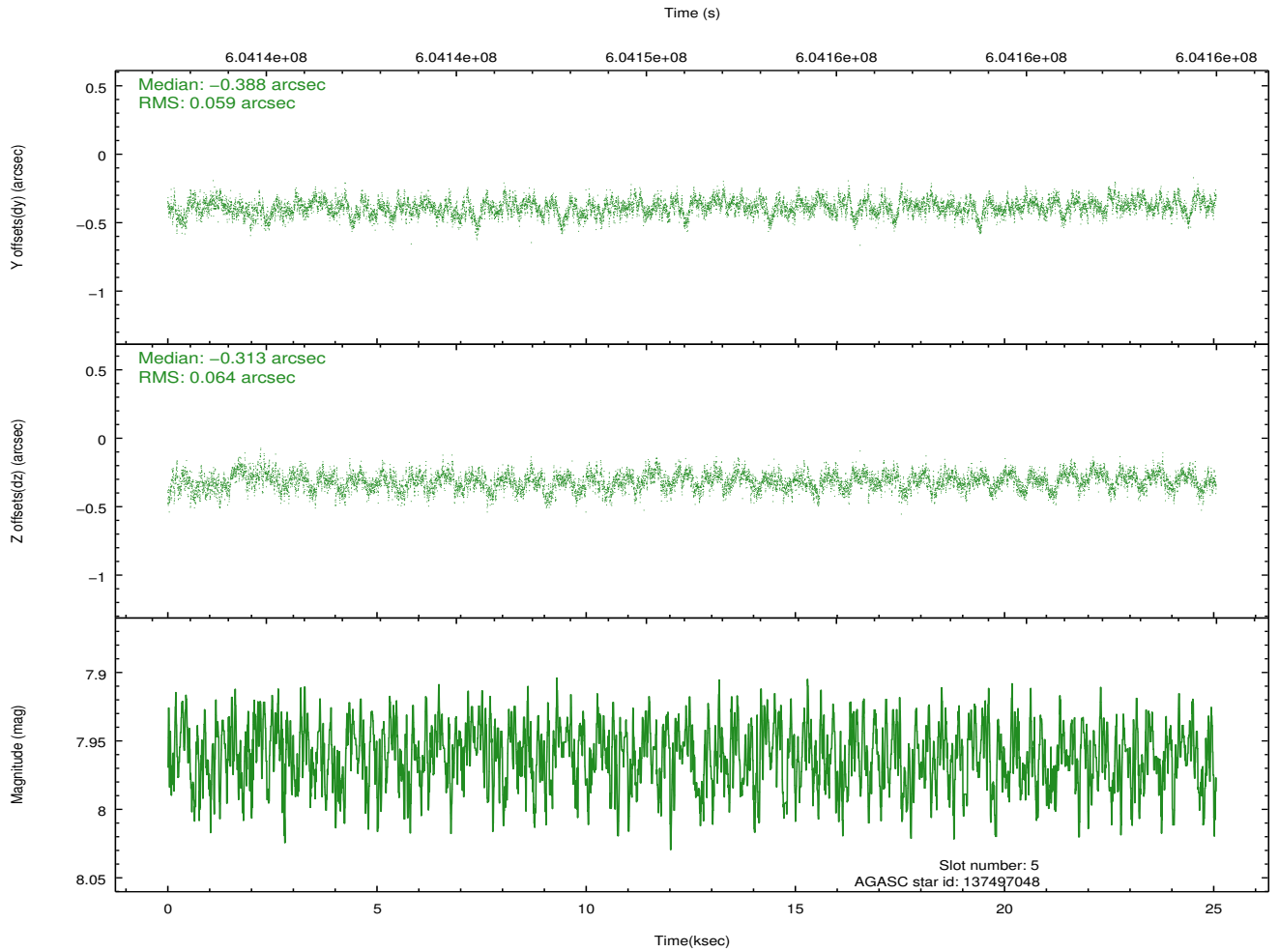
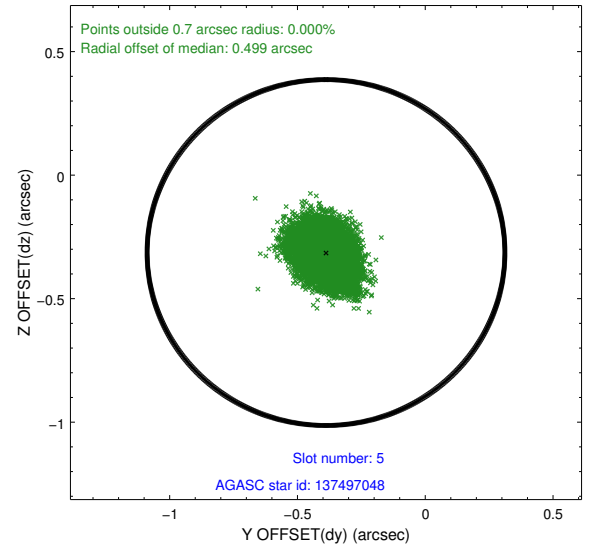
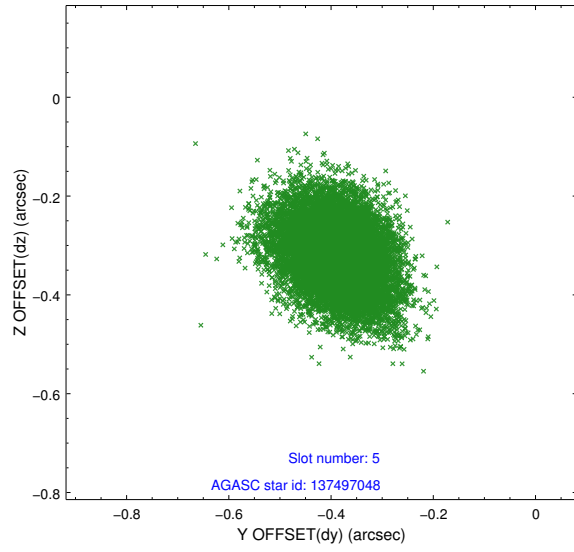
2.4.1 Slot 3



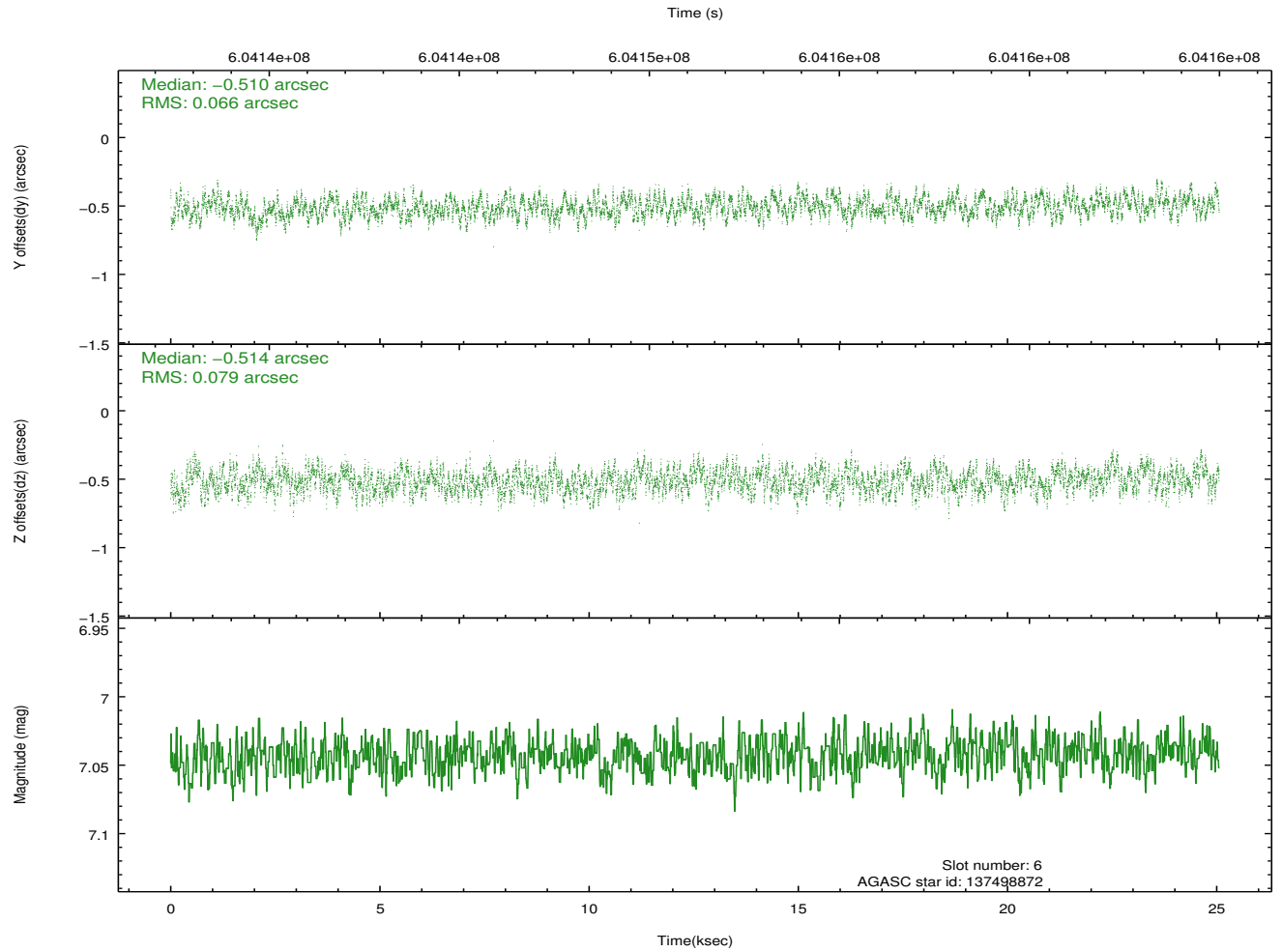
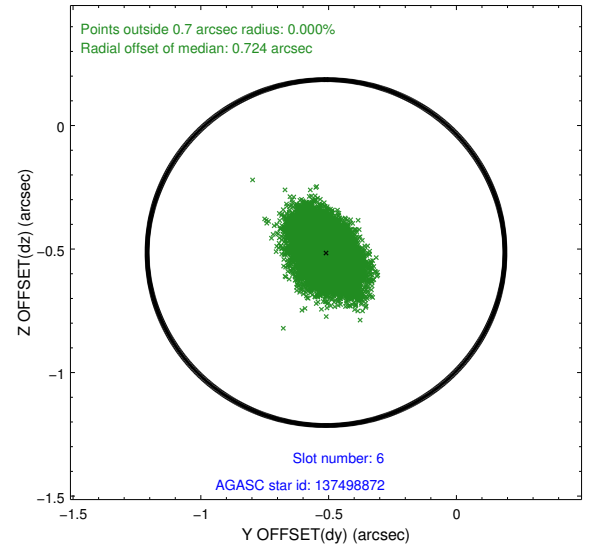
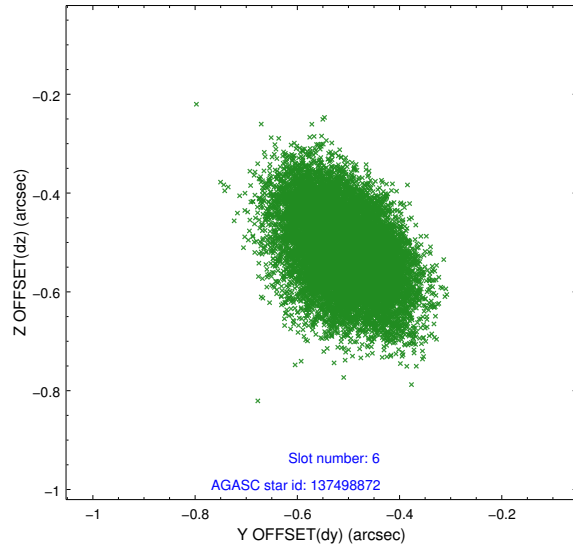
2.4.2 Slot 4



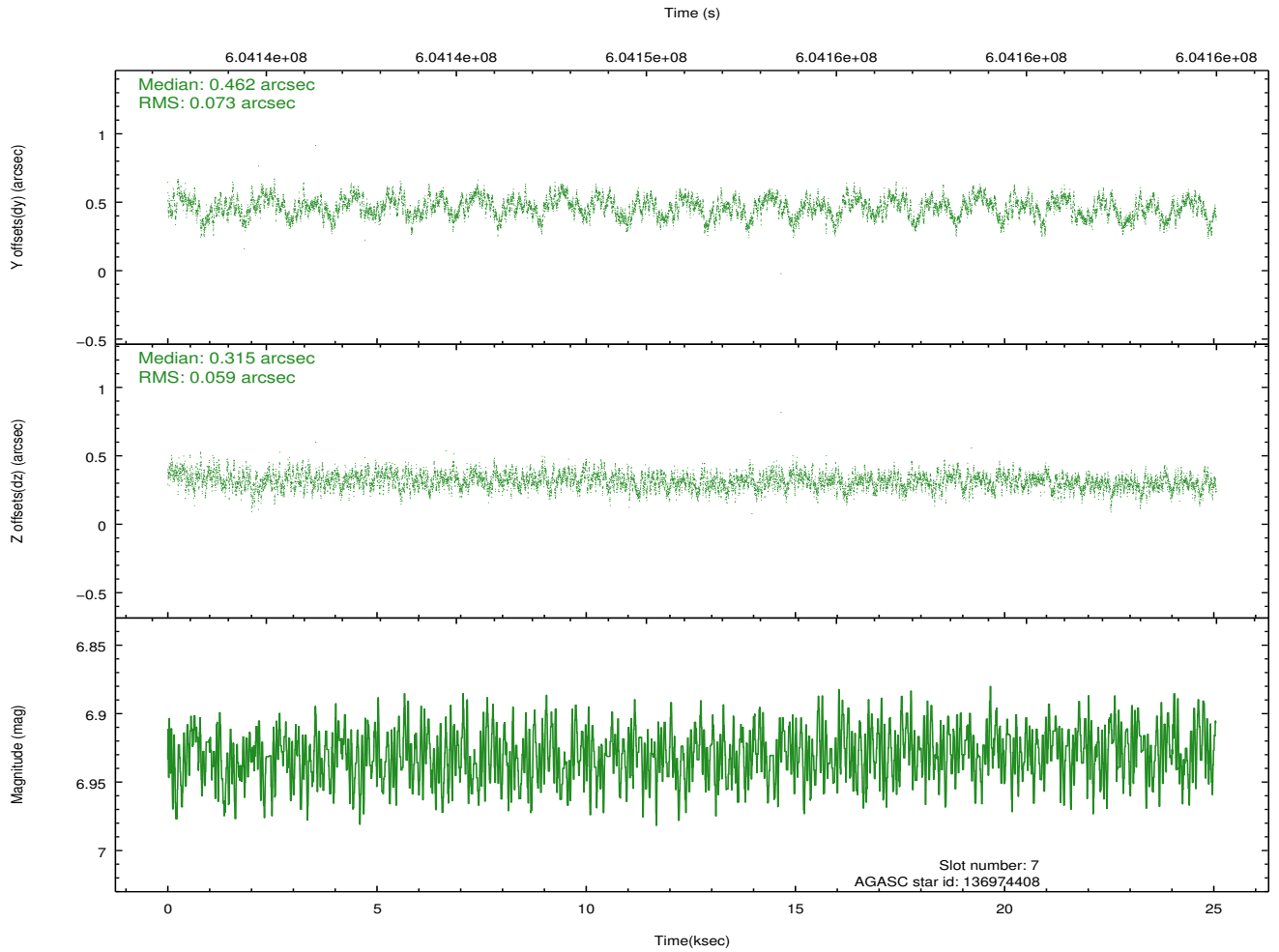
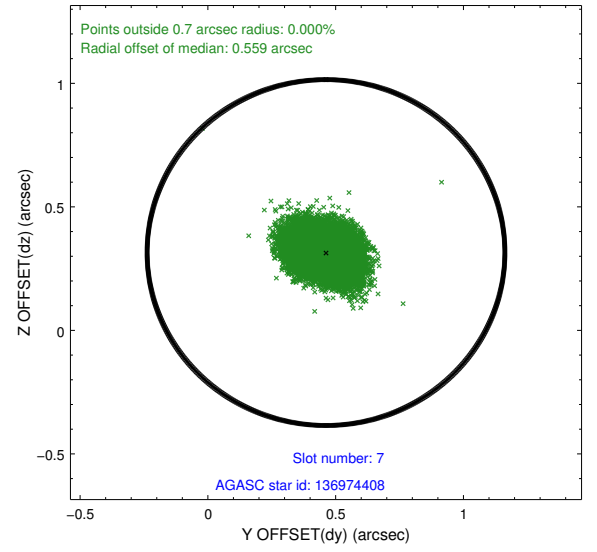
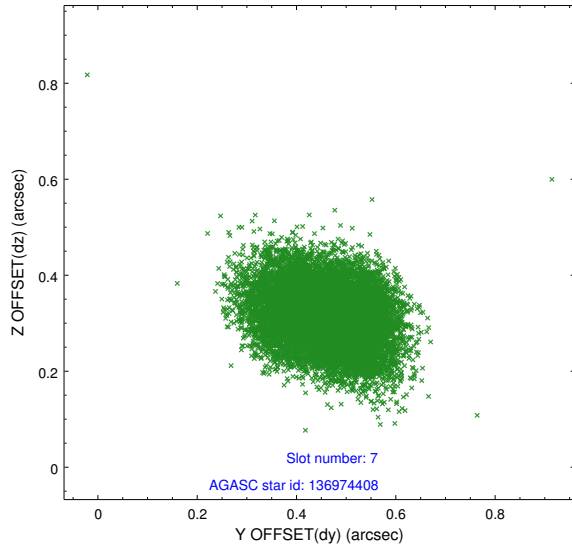
2.4.3 Slot 5



2.4.4 Slot 6

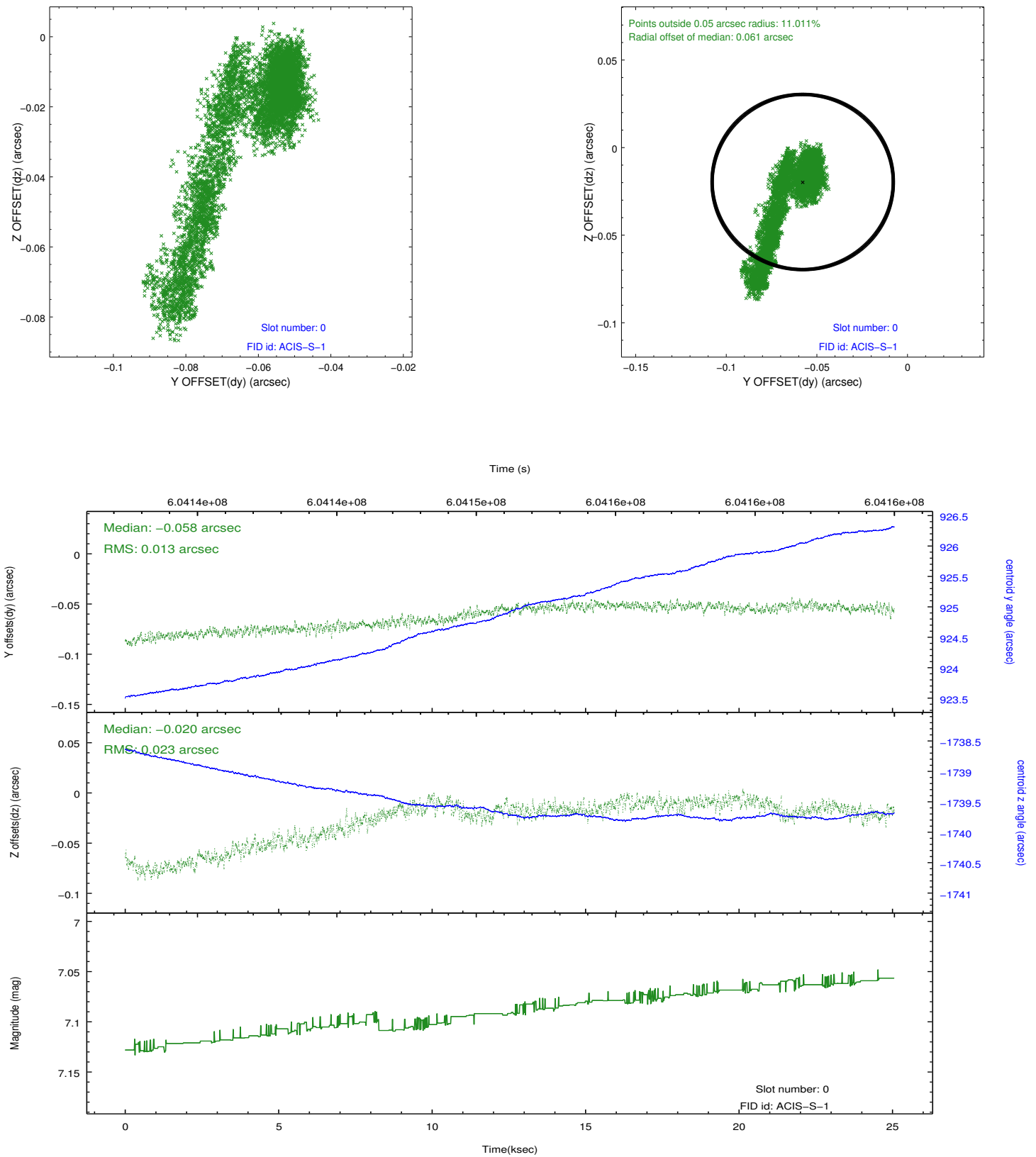


2.4.5 Slot 7

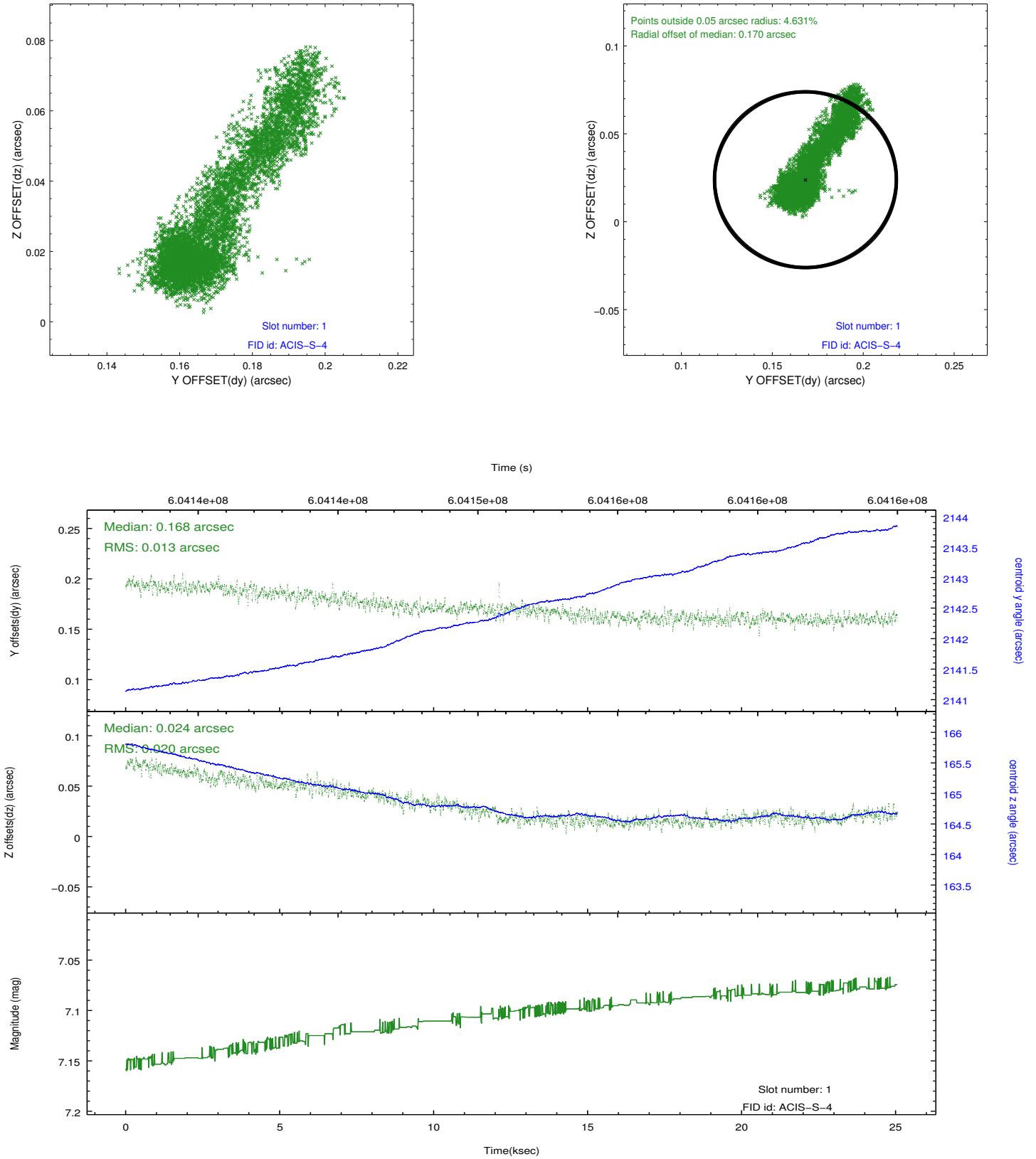


2.5 FID Slots

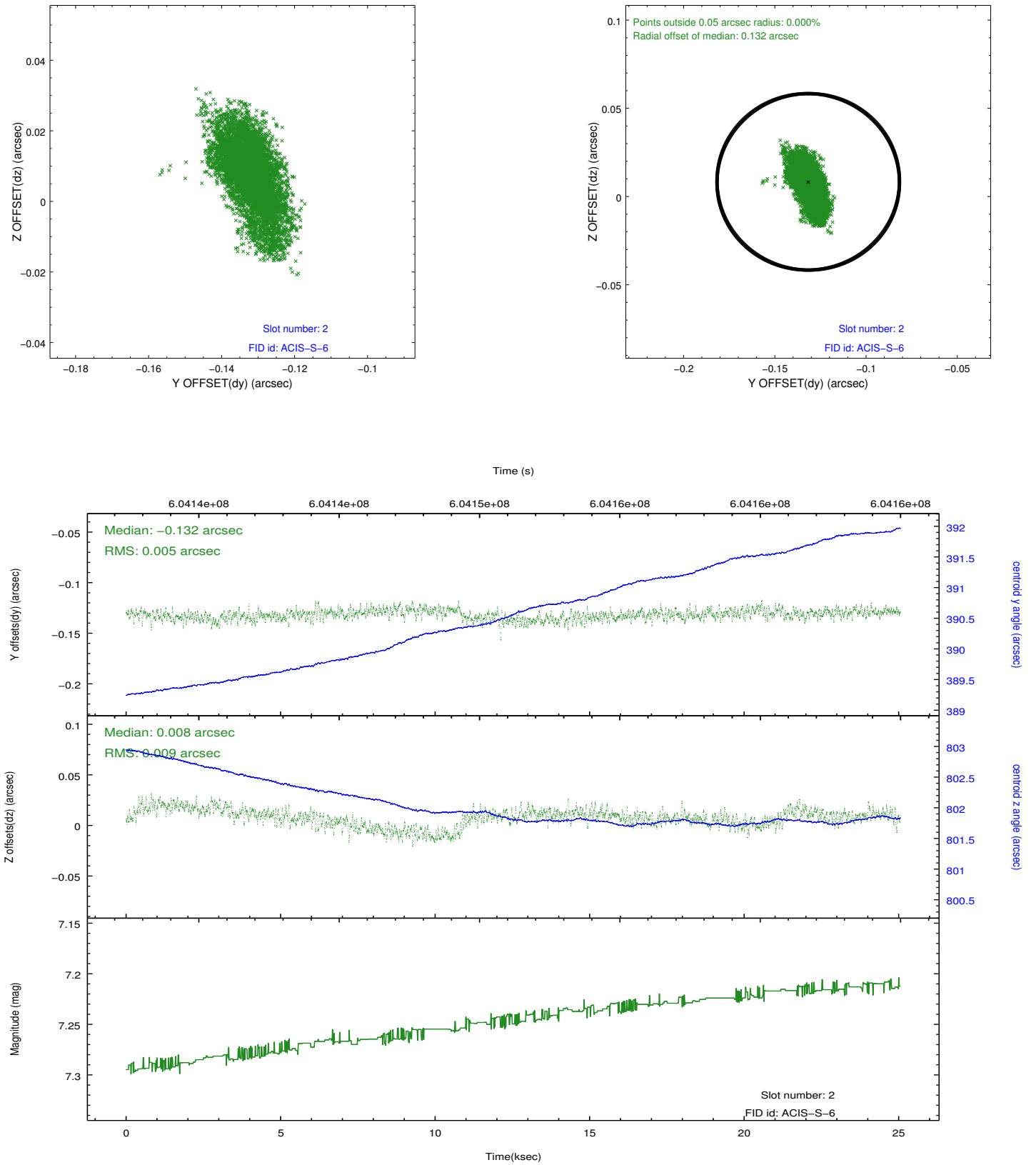
2.5.1 Slot 0



2.5.2 Slot 1

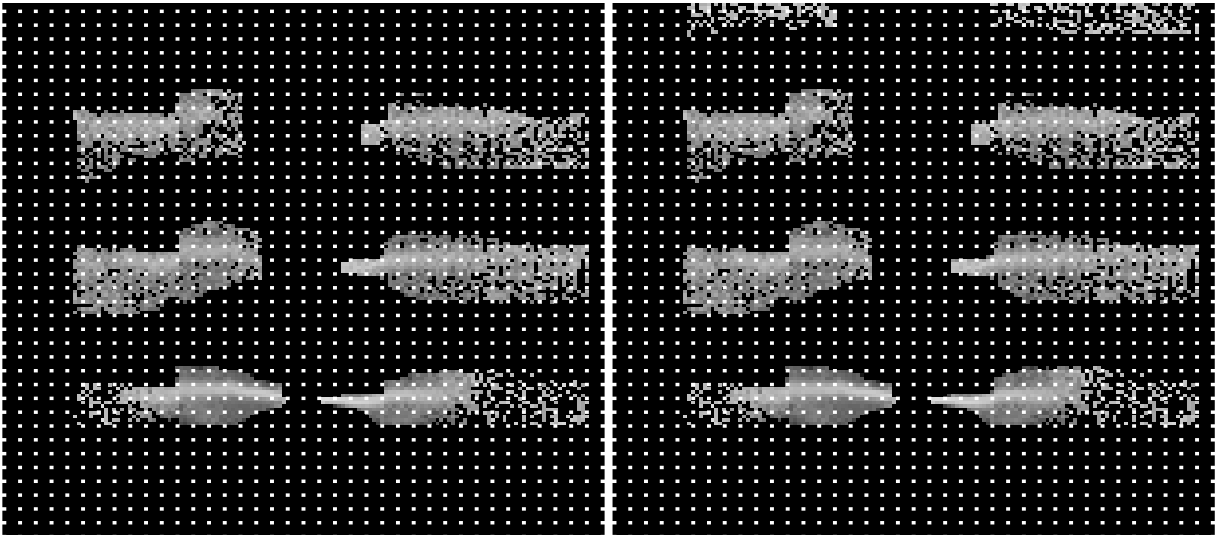


2.5.3 Slot 2



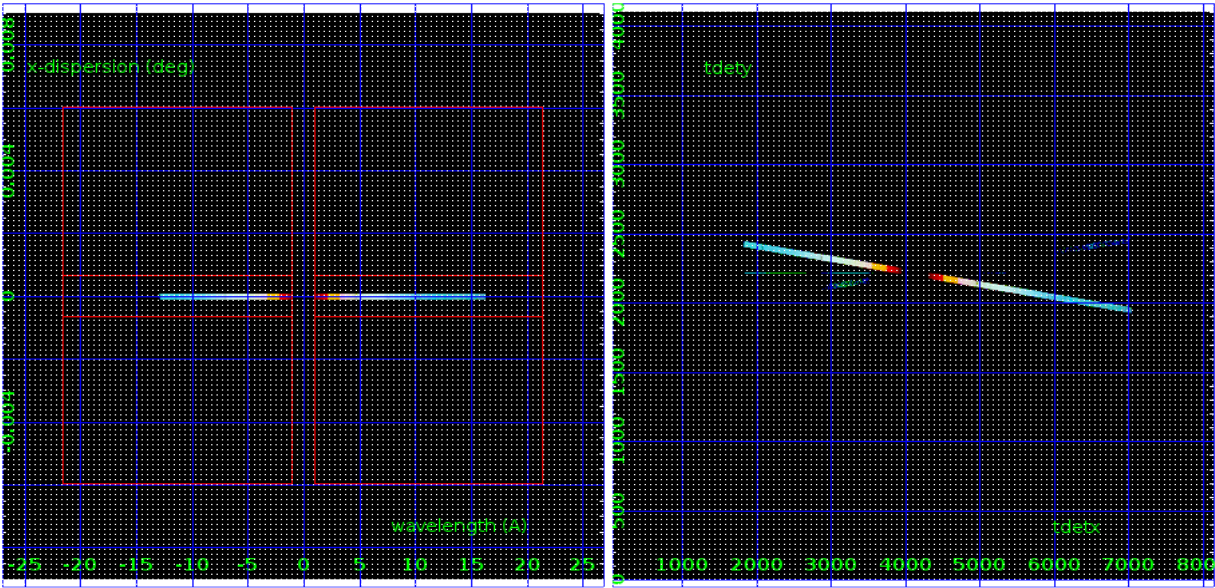
3 Gratings

3.1 HEG Arm



HEG Order Sort 123

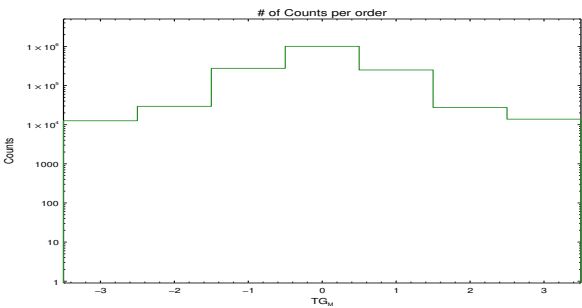
HEG Order Sort ALL

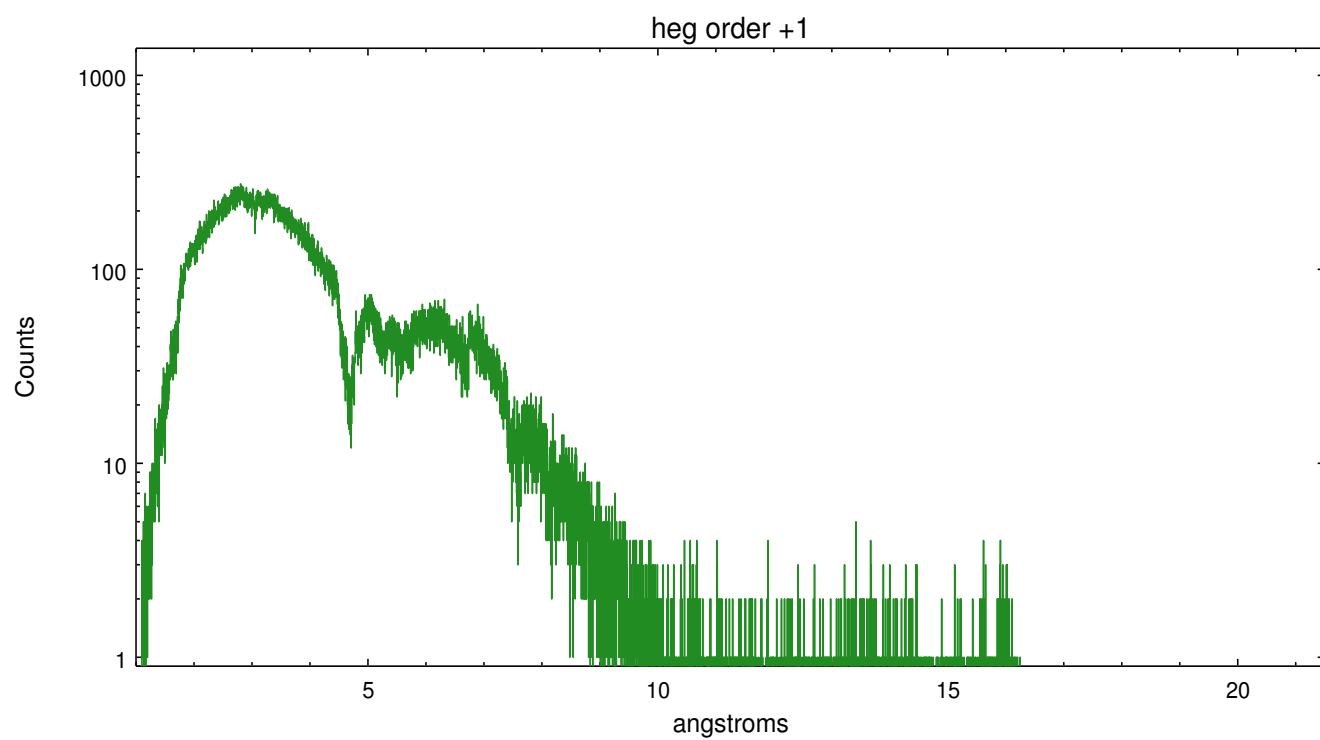
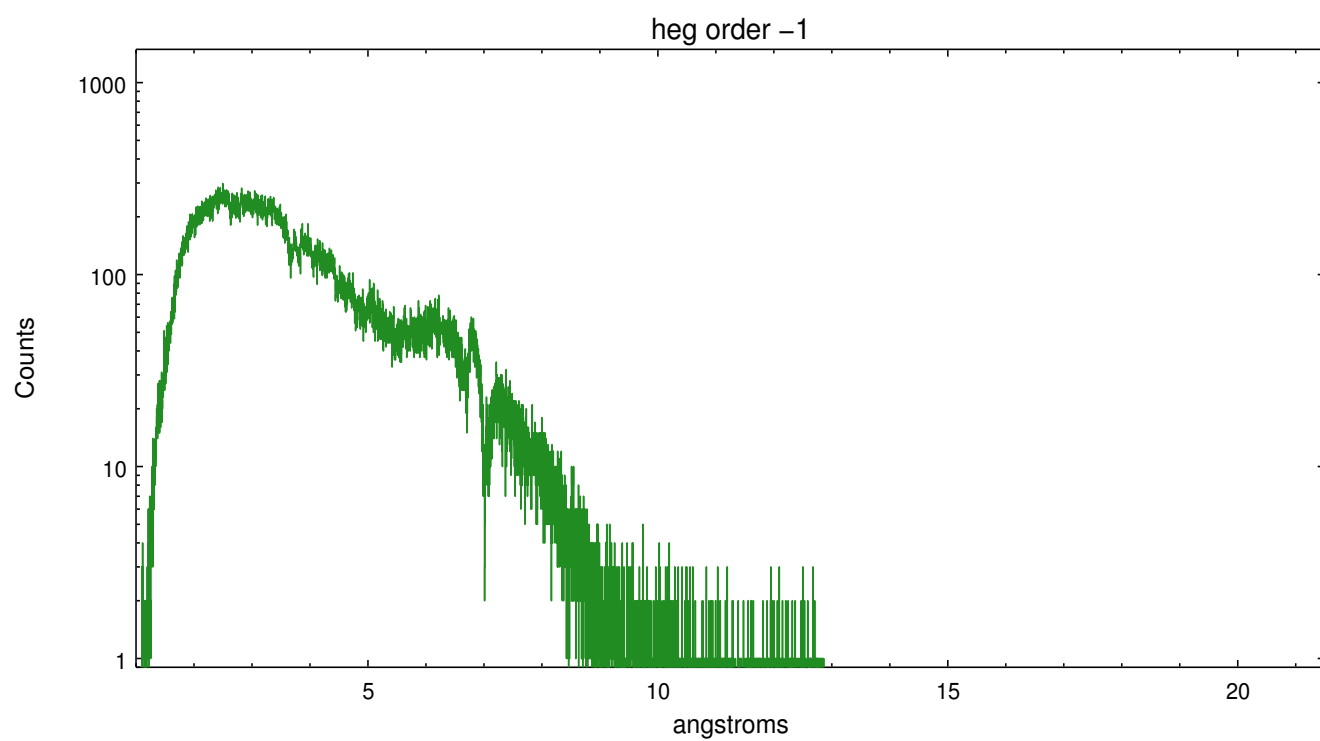


Spot Image HEG

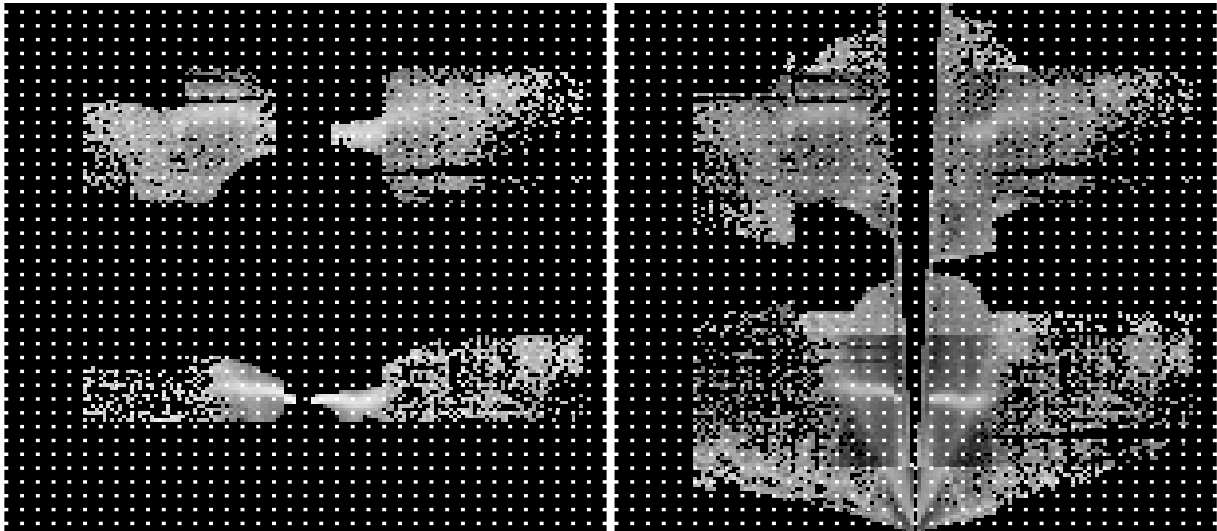
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	12593	29436	275351	1004771	250139	27419	13829



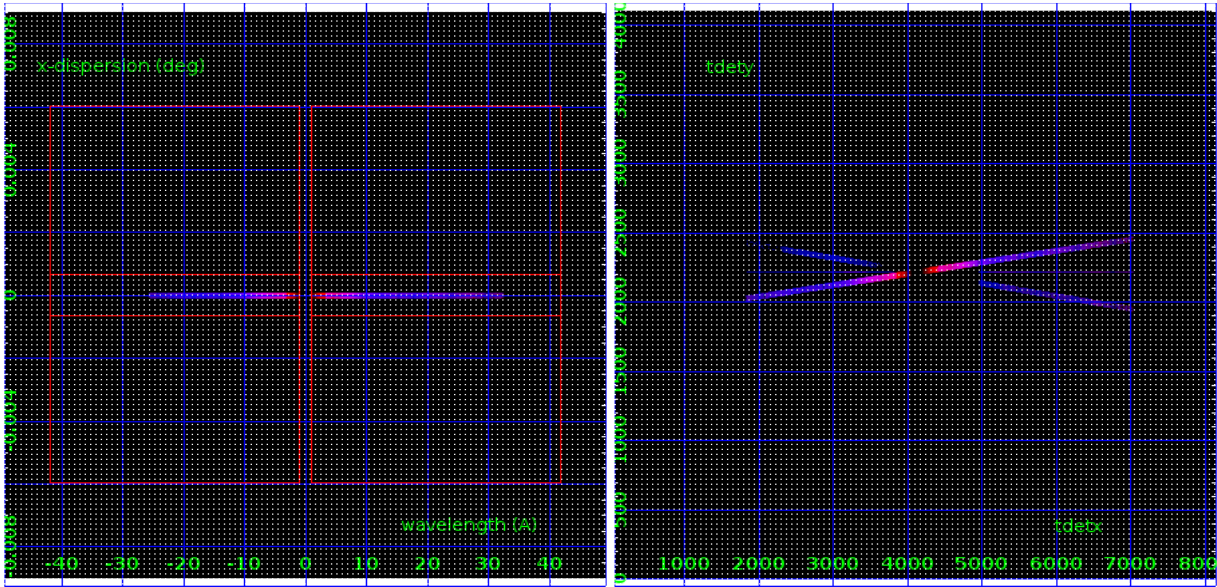


3.2 MEG Arm



MEG Order Sort 123

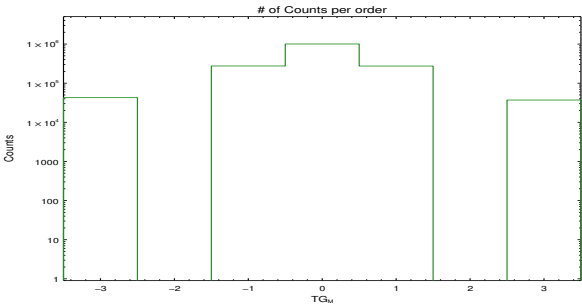
MEG Order Sort ALL

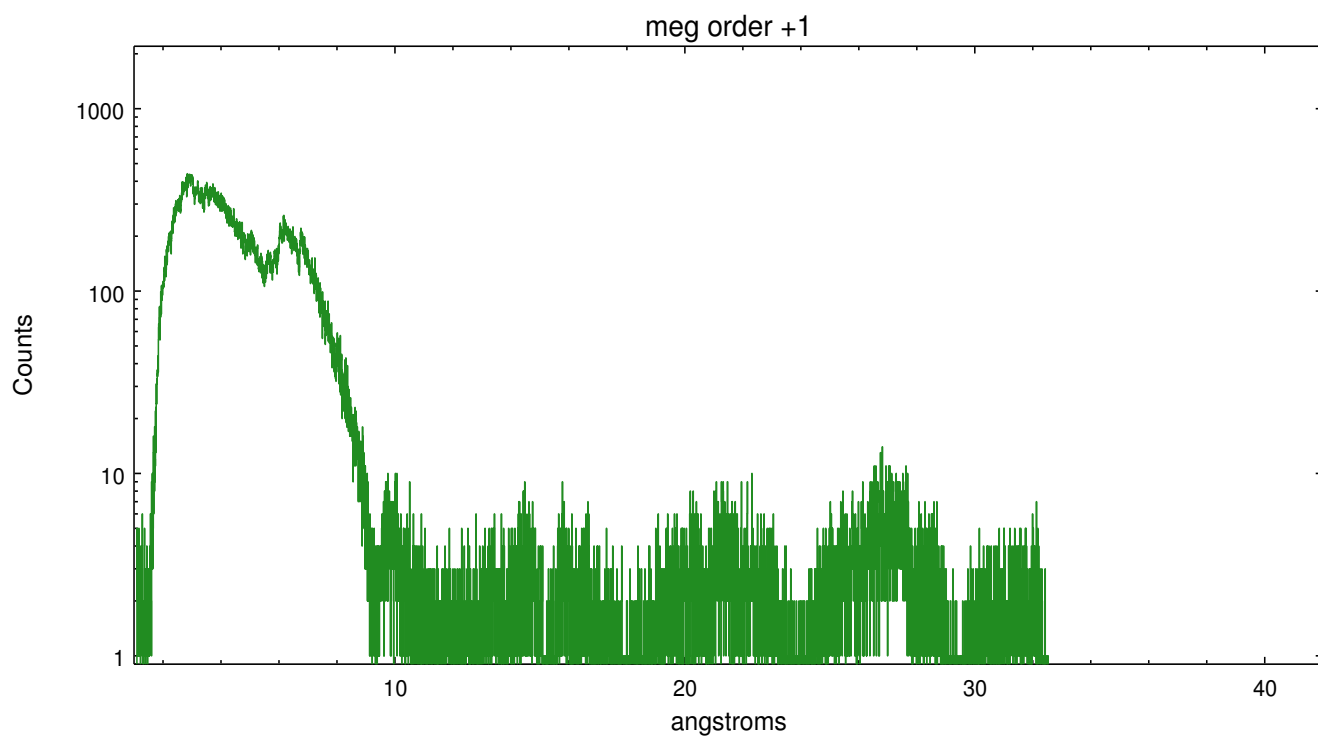
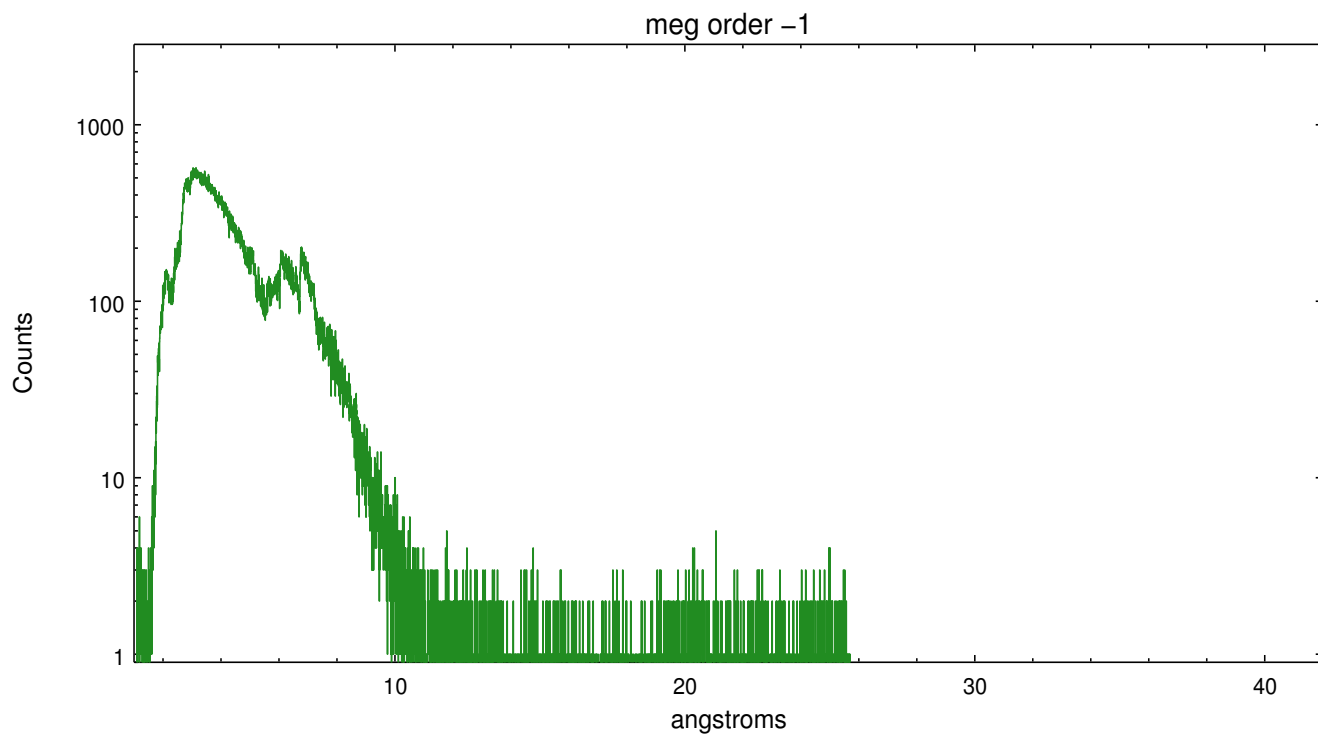


Spot Image MEG

Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	42707	0	275243	1004771	274086	0	37134





A Summary

A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2017.02.23
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	25.05525

A.2 Comments