

V&V Reference Report

L2 ASCDS Version : 10.2.4

Observation 15749 - L2 Version 1
Chandra X-Ray Center

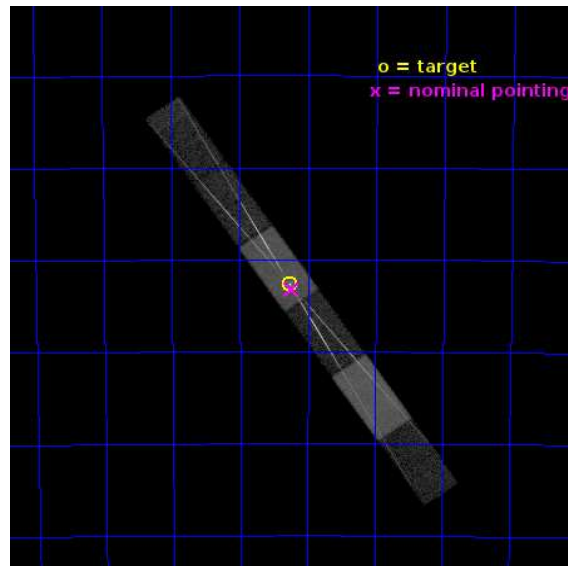
L2 Processing Date : Oct 27 2014

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1 Front

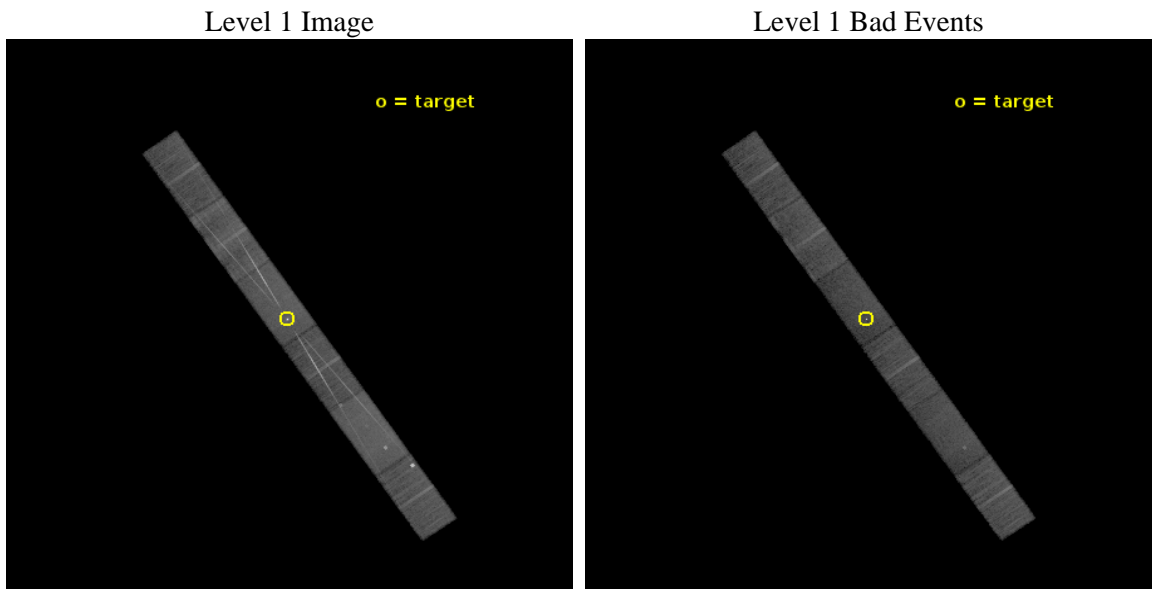
seq_num	401546	Sequence number
obs_id	15749	Observation id
title	Chandra Spectroscopy of a Remarkable Neutron Star	Proposal title
observer	Dr. Jon Miller	Principal investigator
object	IGR J17062-6143	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	256.567708	Observer's specified target RA [deg]
dec_targ	-61.71125	Observer's specified target Dec [deg]
ra_nom	256.56044366909	Nominal RA [deg]
dec_nom	-61.720703403752	Nominal Dec [deg]
roll_nom	235.1502233372	Nominal Roll [deg]
revision	1	Processing version of data
ontime	30045.758788288	Sum of GTIs [s]
livetime	29337.5166223	Livetime [s]
ontime4	30045.799789369	Sum of GTIs [s]
ontime5	30045.717748284	Sum of GTIs [s]
ontime6	30045.676708281	Sum of GTIs [s]
ontime7	30045.758788288	Sum of GTIs [s]
ontime8	30045.635668278	Sum of GTIs [s]
ontime9	30045.594628274	Sum of GTIs [s]
l2events	217703	Number of level 2 events



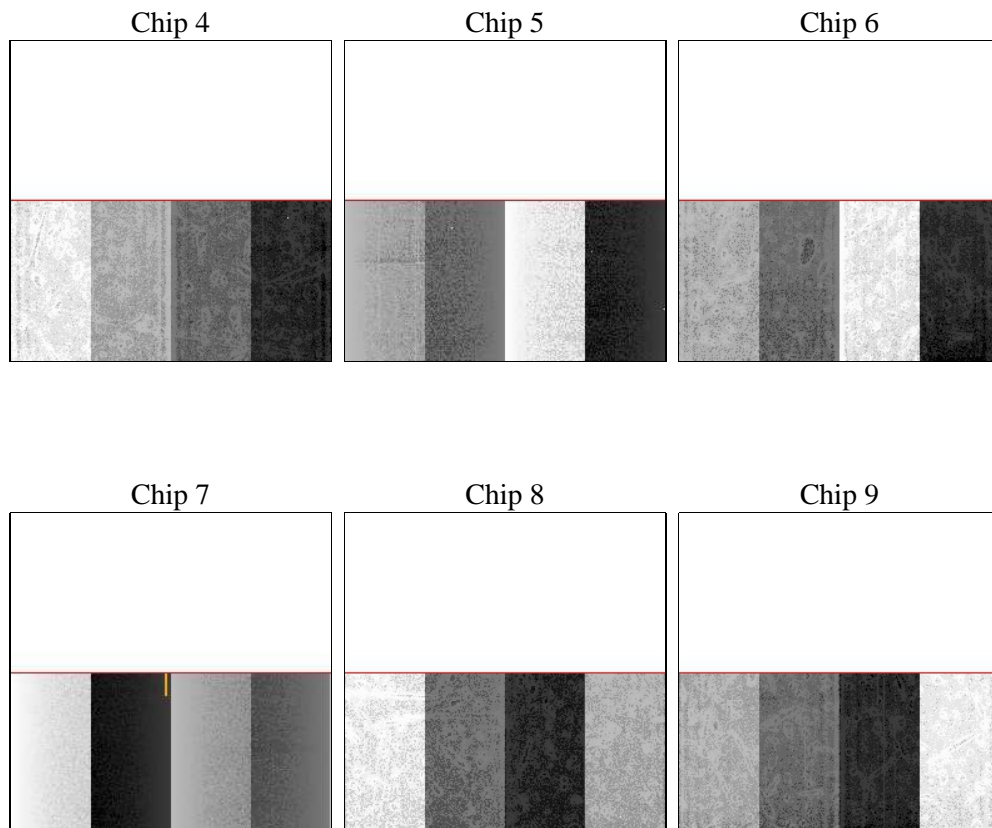
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	30000.000000	[s] Scheduled observation exposure time
ascdsver	10.2.4	Processing system revision	ontime	30045.758788288	Sum of GTIs [s]
caldsver	4.6.3	 	ontime4	30045.799789369	Sum of GTIs [s]
date	2014-10-27T14:30:15	Date and time of file creation	ontime5	30045.717748284	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	30045.676708281	Sum of GTIs [s]
			ontime7	30045.758788288	Sum of GTIs [s]
			ontime8	30045.635668278	Sum of GTIs [s]
			ontime9	30045.594628274	Sum of GTIs [s]
			l1events	692643	Number of level 1 events
			tgmethod	FINDZO	Method used to create src1a file
			ra_pos	(4071.63, 4165.15)	grade sky pixel position

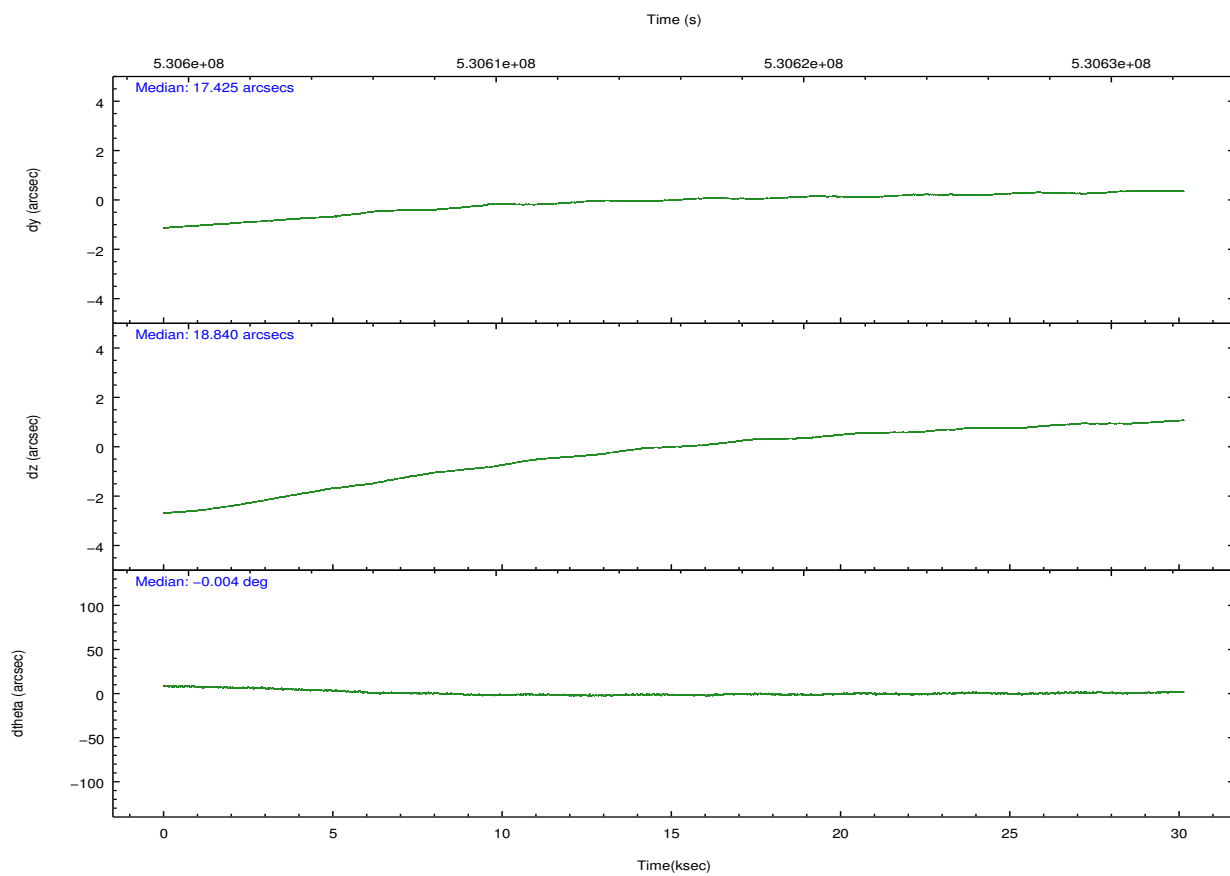
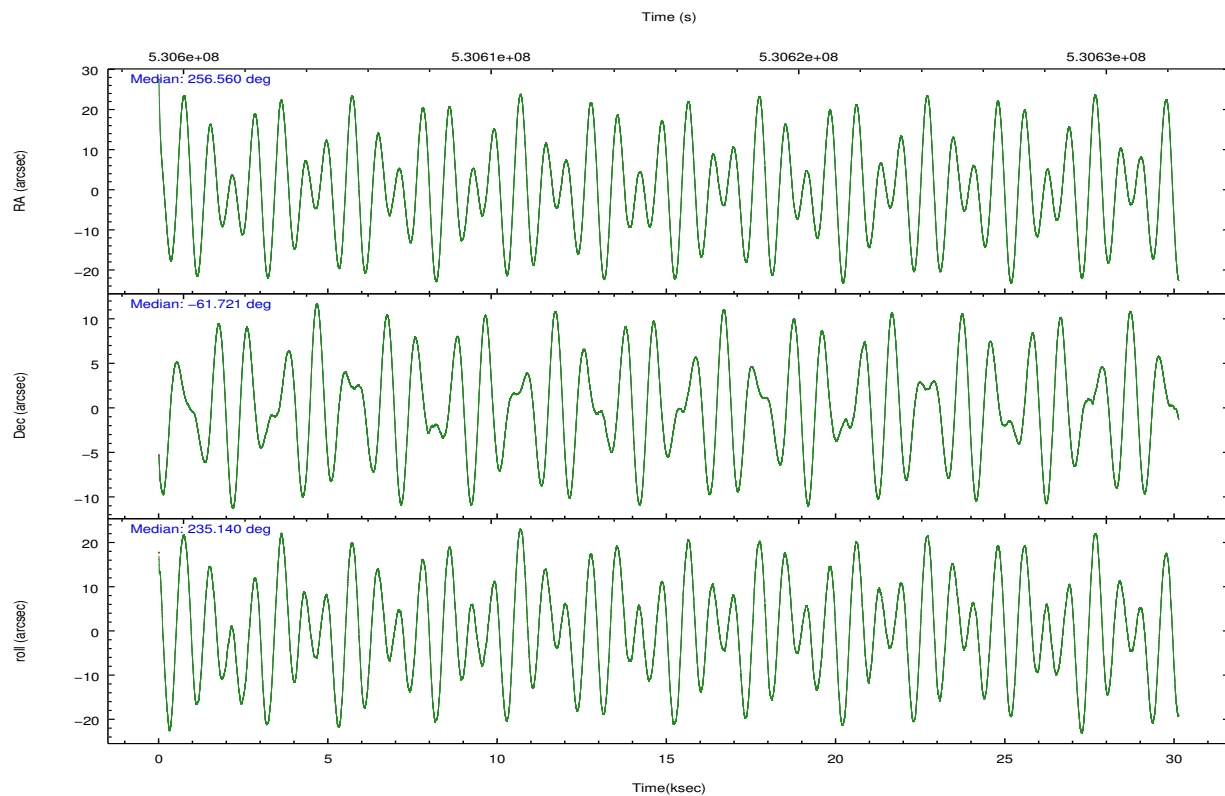
2.1.4 Events

	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	108298	133609	105696	143249	121959	79832	grade 0 events	18902	9352	23886	10715	19953	5453
rejected events	82427	64674	69859	63496	78442	67119		17%	6%	22%	7%	16%	6%
rejected %	76%	48%	66%	44%	64%	84%	grade 1 events	82	841	76	465	101	36
								0%	0%	0%	0%	0%	0%
							grade 2 events	2702	19253	5087	17536	8320	2527
								2%	14%	4%	12%	6%	3%
							grade 3 events	1222	3619	2031	7742	3499	1281
								1%	2%	1%	5%	2%	1%
							grade 4 events	1129	3422	2056	7723	3341	1240
								1%	2%	1%	5%	2%	1%
							grade 5 events	3658	9668	3762	12454	5486	3989
								3%	7%	3%	8%	4%	4%
							grade 6 events	1917	33300	2781	36040	8408	2214
								1%	24%	2%	25%	6%	2%
							grade 7 events	78686	54154	66017	50574	72851	63092
								72%	40%	62%	35%	59%	79%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-456789	ACIS-456789	Obspar file type	PREDICTED	ACTUAL
Grating	HETG	HETG	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	256.564580	256.5604436690867	CCD I2 on	N	N
[deg] Pointing Dec	-61.693325	-61.7207034037518	CCD I3 on	N	N
[deg] Pointing Roll	234.997242	235.1502233371964	CCD S0 on	O1	Y
[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	-183.992523	-183.9900508222561	CCD S3 on	Y	Y
[mm] SIM translation stage offset	-6.14	-6.142471760751675	CCD S4 on	Y	Y
[s] Observation start time (MET)	530600841.184000	530599664.01323	CCD S5 on	Y	Y
Observation start date	2014-10-25T05:06:14	2014-10-25T04:47:44	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	530630841.184000	530631524.6025	On-chip summing requested	N	N
Observation end date	2014-10-25T13:26:14	2014-10-25T13:38:44	Subarray requested	CUSTOM	1/2
Read mode	TIMED	TIMED	Subarray start row	1	1
			Subarray row count	512	512
			Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	1.7

2.3 Aspect

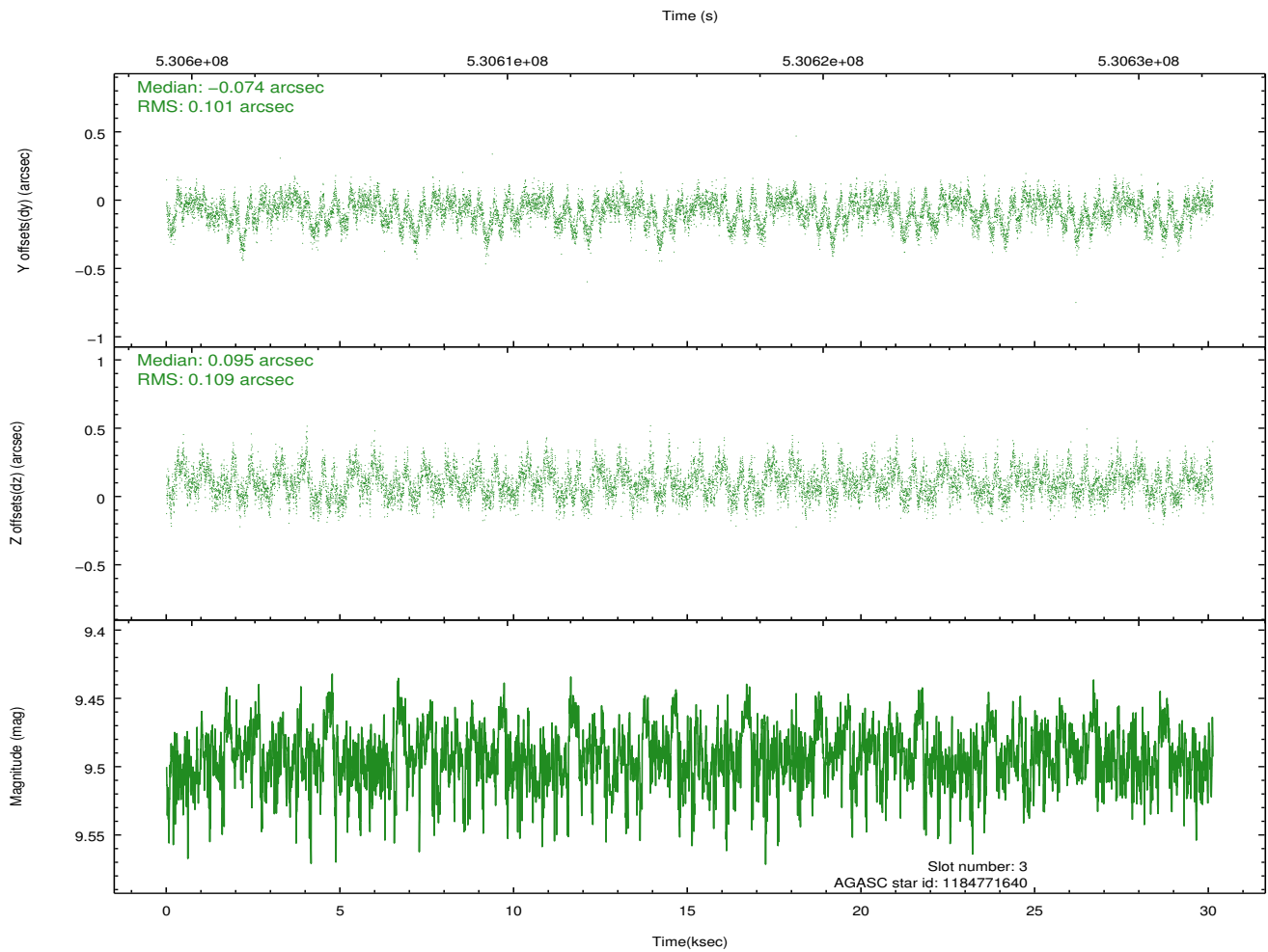
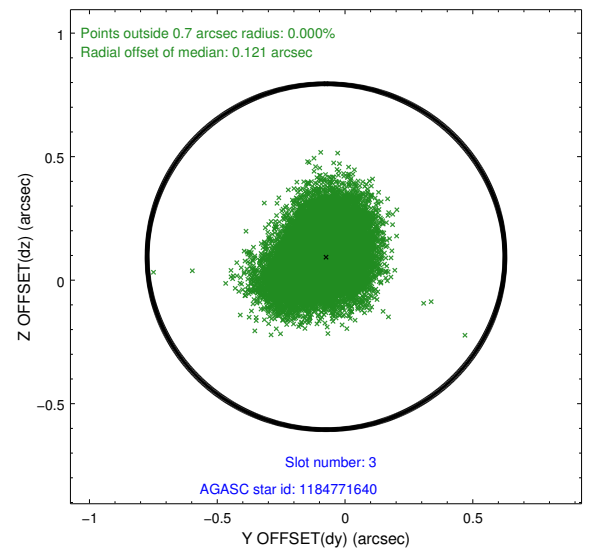
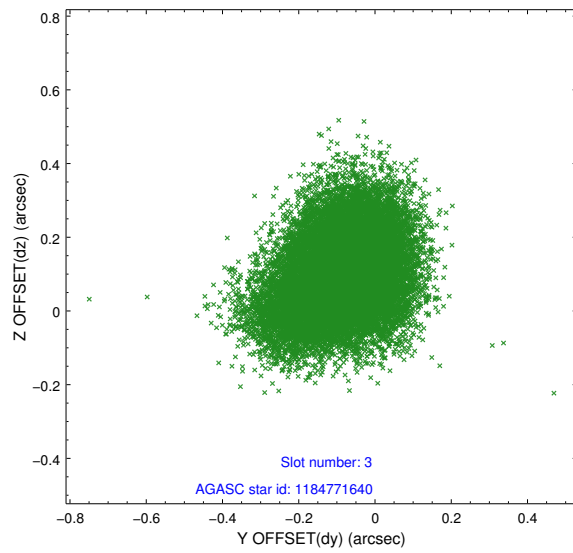


Slot Statistics

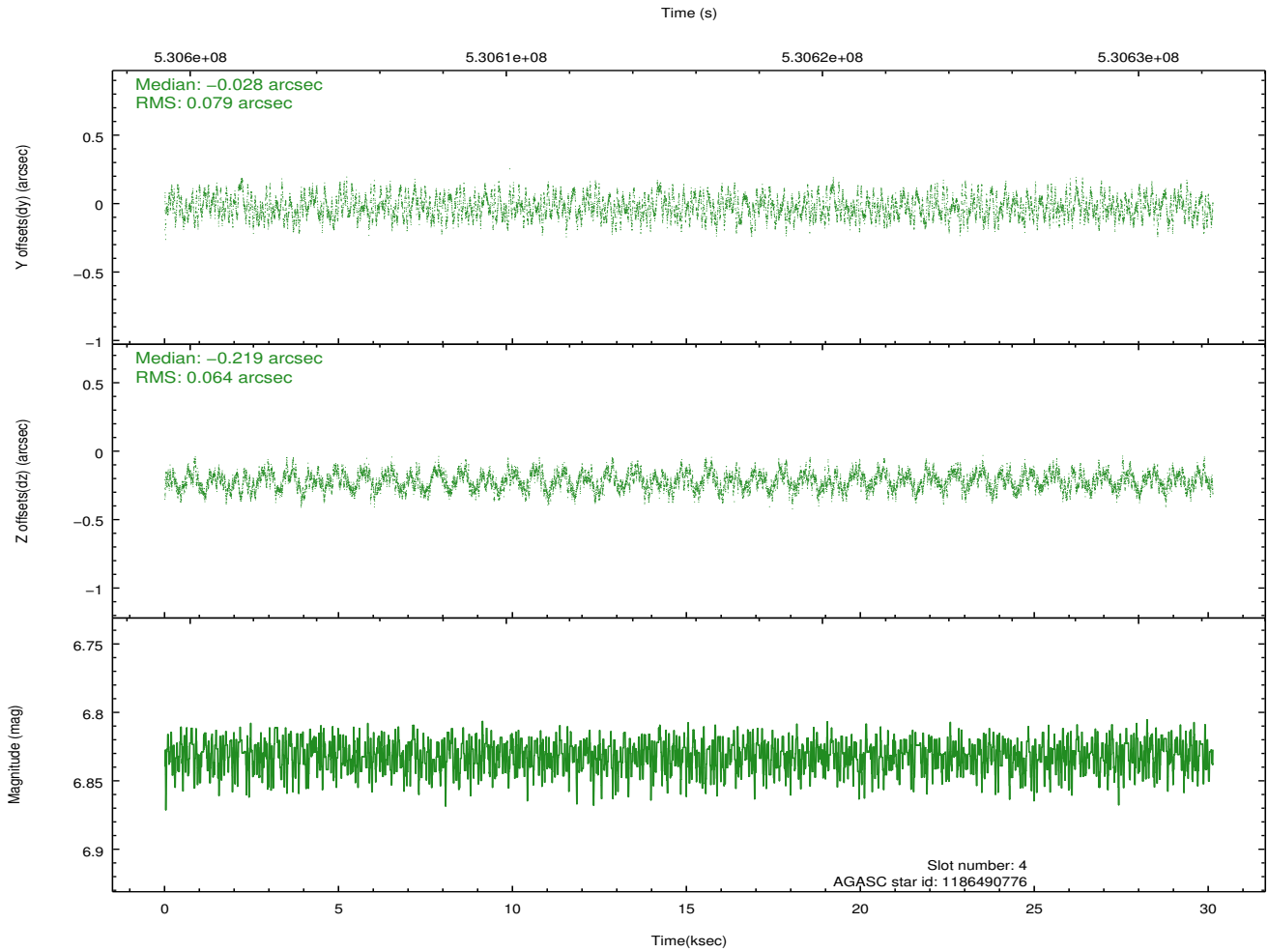
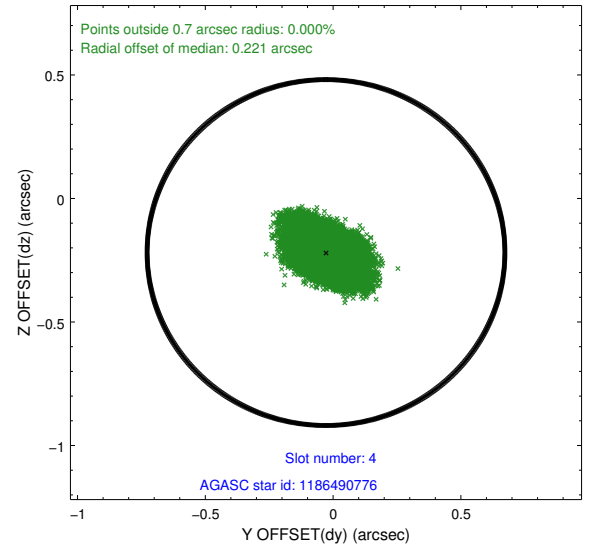
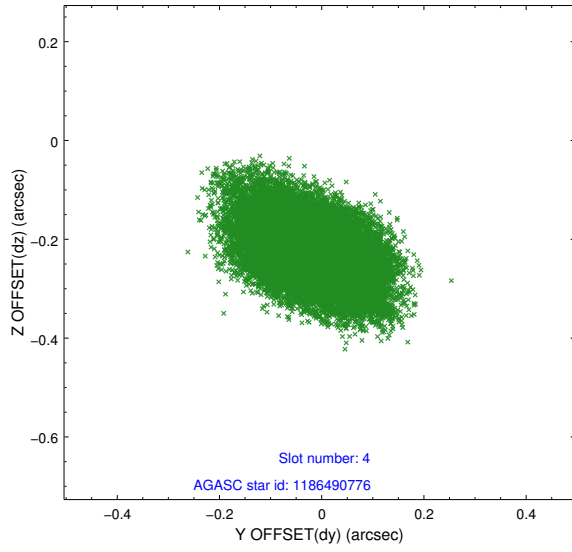
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.09	7349	-0.106	-0.126	0.029	0.047	0.000000	0.000000	-770.01	-1866.71
1	FID	ACIS-S-4	7.19	7348	0.249	0.082	0.012	0.022	0.000000	0.000000	2143.61	41.85
2	FID	ACIS-S-5	7.24	7348	-0.176	0.049	0.025	0.039	0.000000	0.000000	-1822.81	35.60
3	GUIDE	1184771640	9.49	14684	-0.074	0.095	0.159	0.252	256.117801	-61.039584	-1478.27	-1986.18
4	GUIDE	1186490776	6.83	14697	-0.028	-0.219	0.108	0.172	257.526148	-61.675459	-984.82	1315.26
5	GUIDE	1184781280	8.41	14689	0.270	0.275	0.091	0.148	256.426256	-60.934517	-2097.80	-1764.62
6	GUIDE	1184777064	9.70	14680	0.127	0.126	0.126	0.203	256.764711	-61.082971	-1998.73	-974.68
7	GUIDE	1185289120	9.85	14684	-0.283	-0.284	0.179	0.276	257.115370	-61.922866	144.55	1240.79

2.4 Star Slots

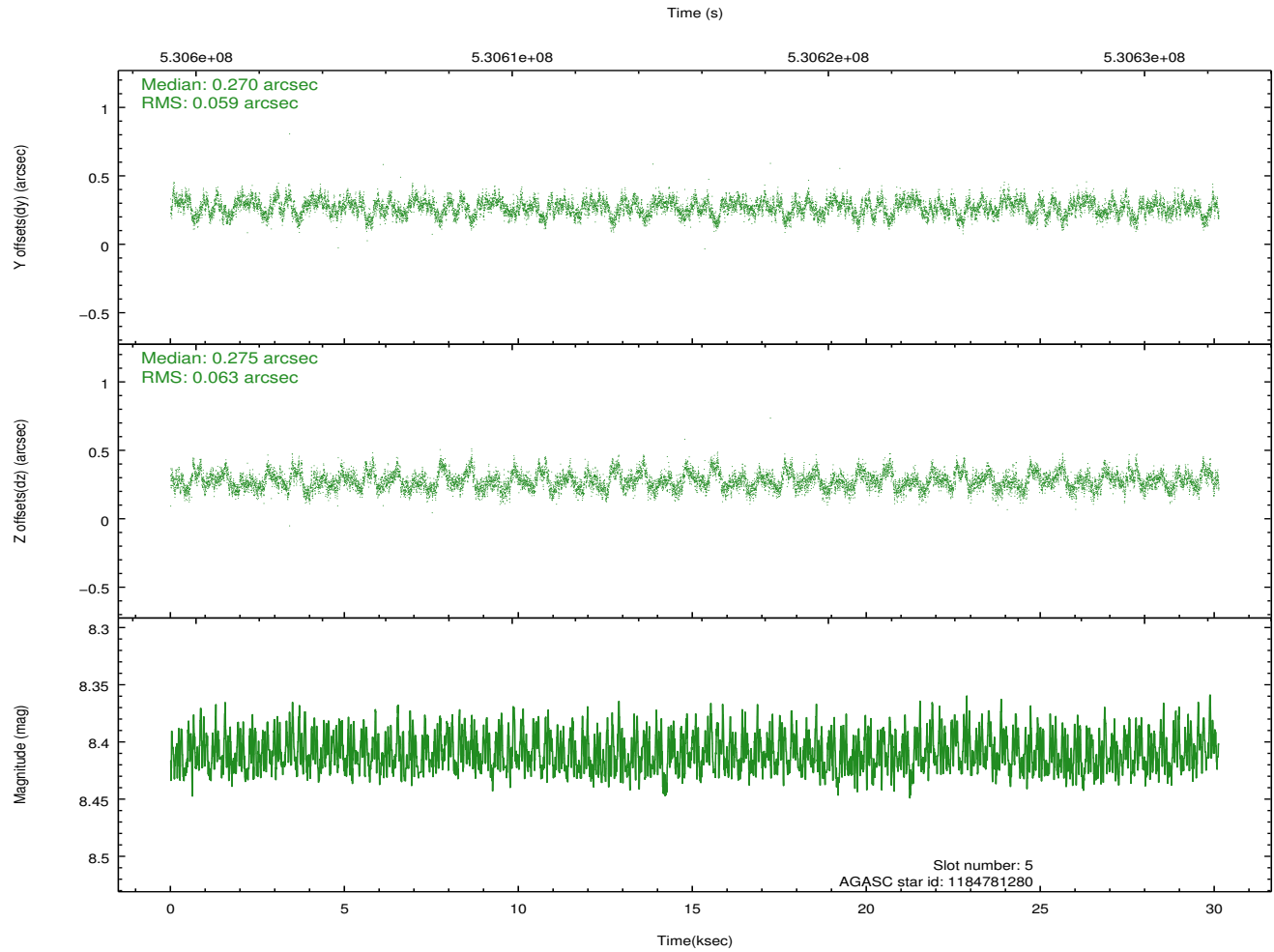
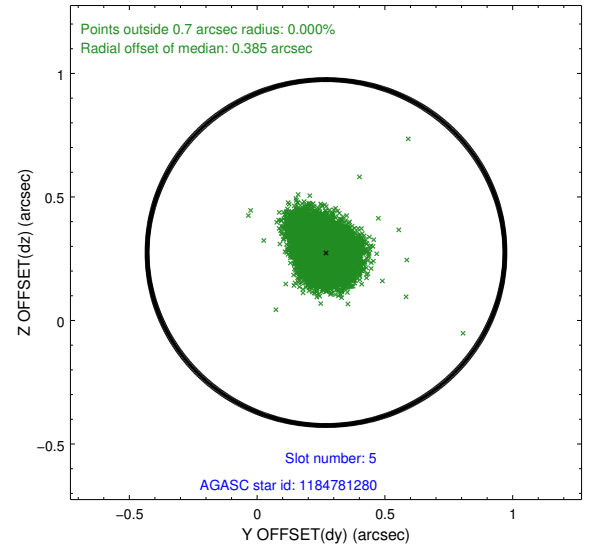
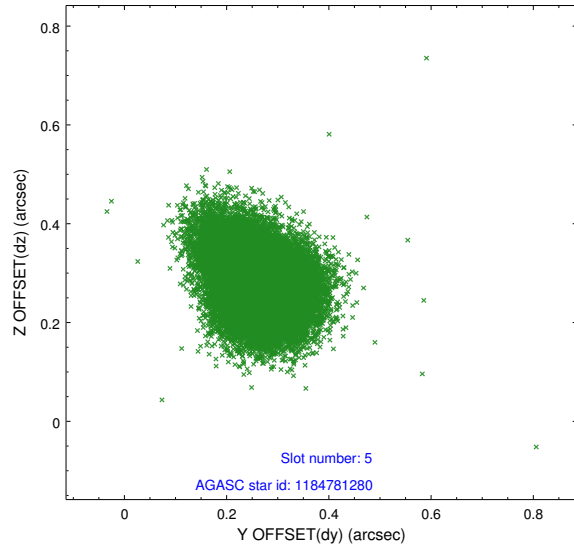
2.4.1 Slot 3



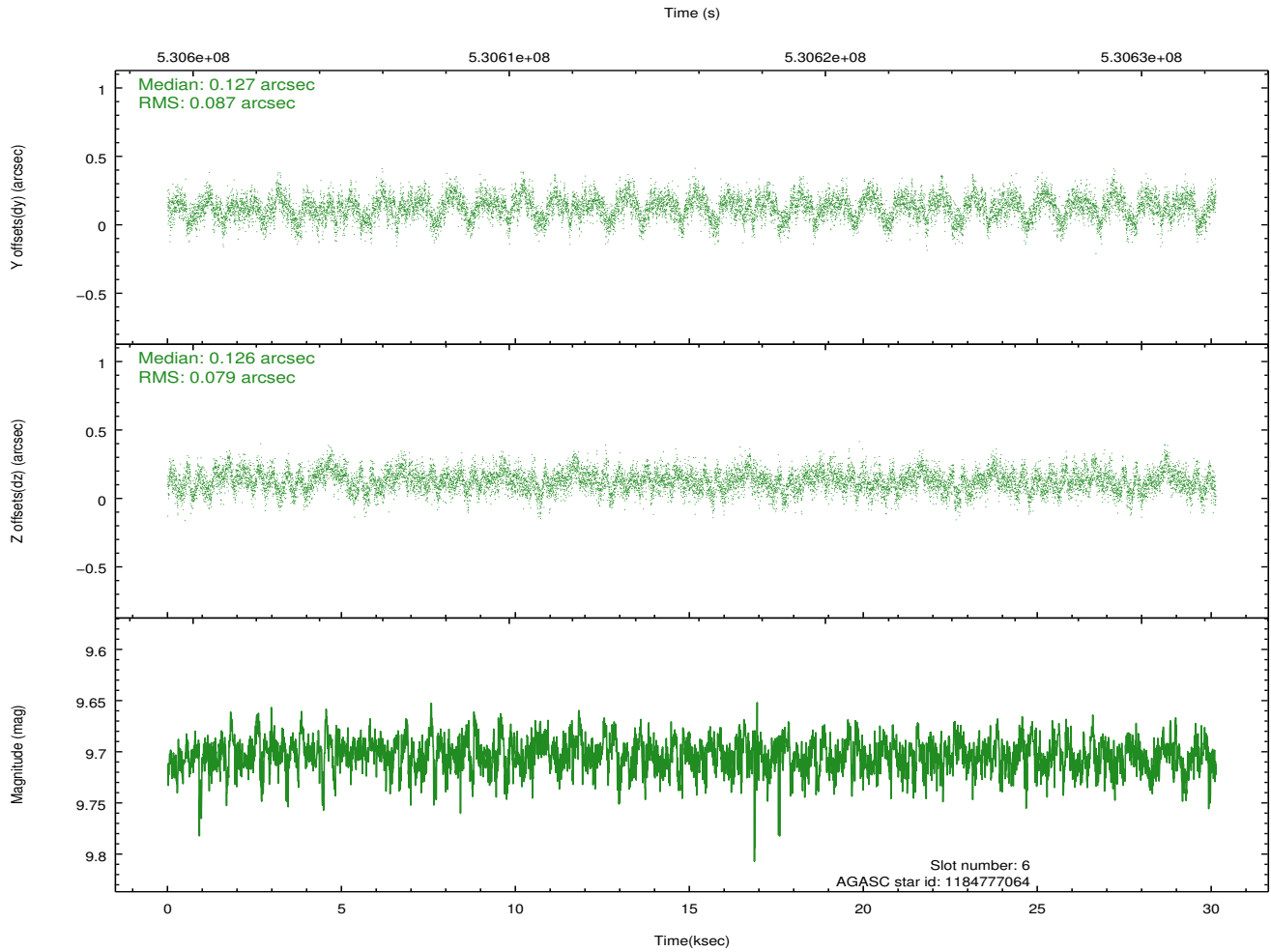
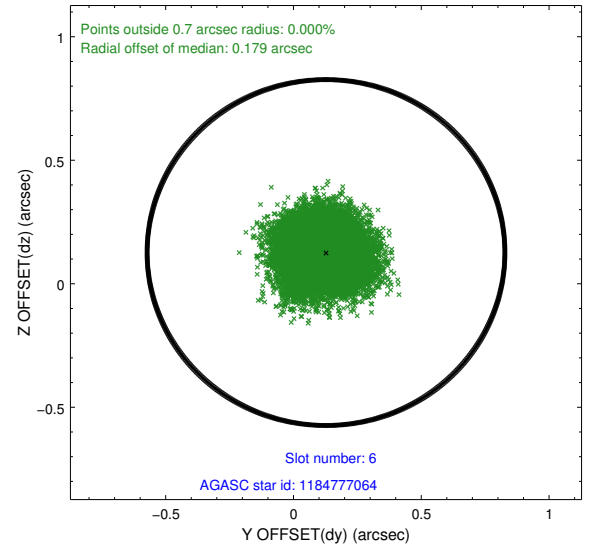
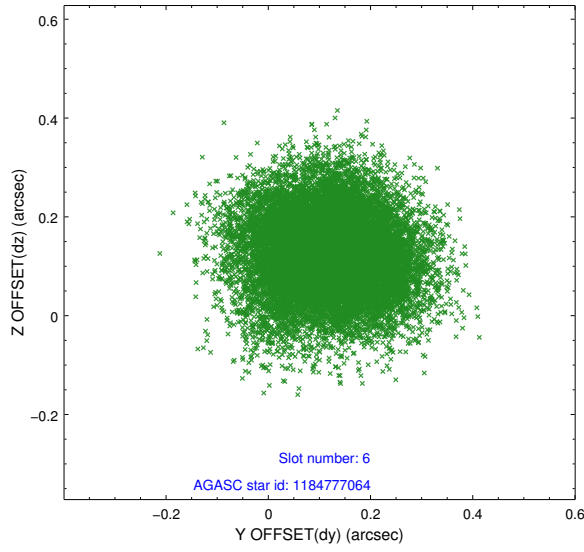
2.4.2 Slot 4



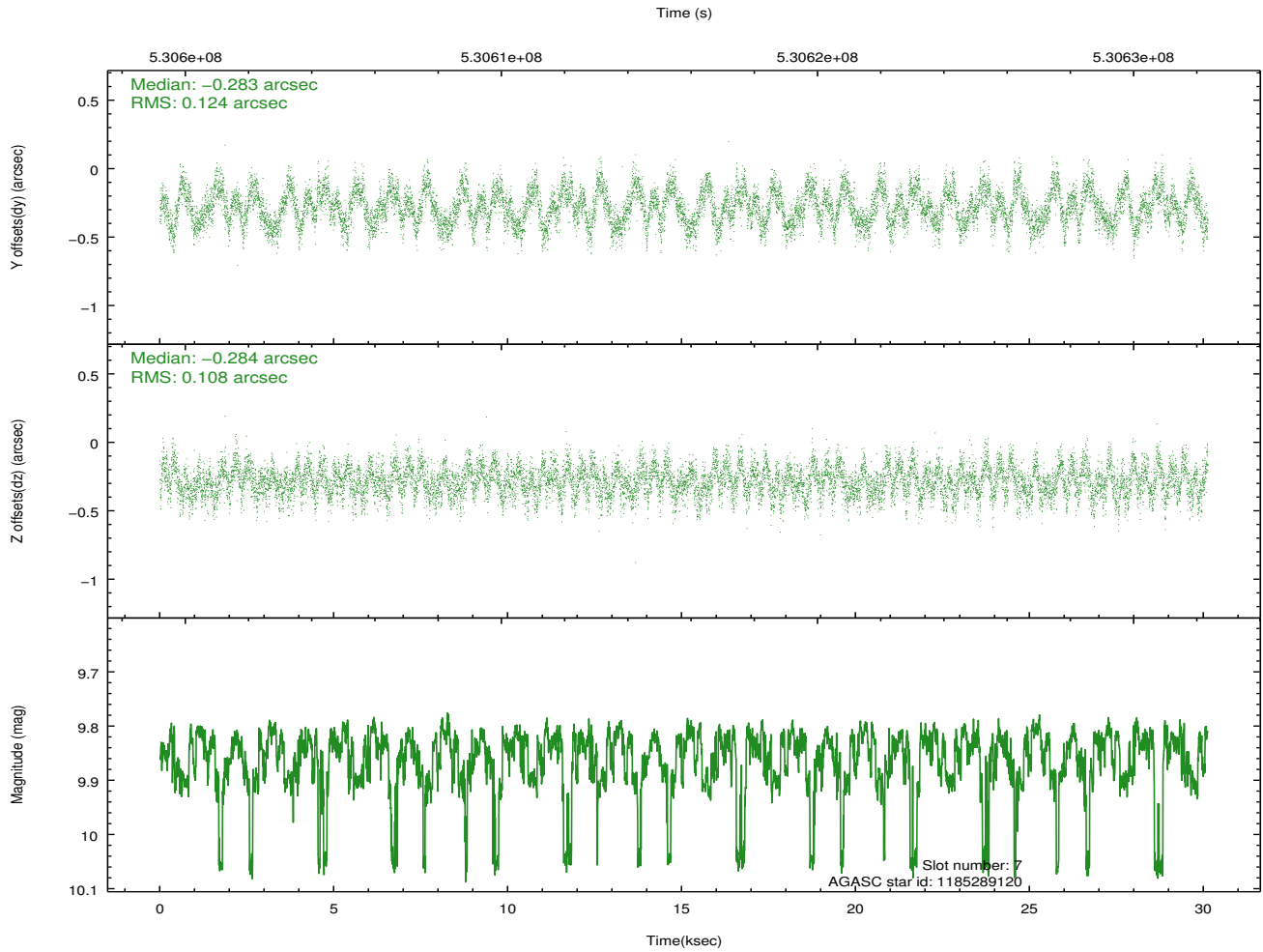
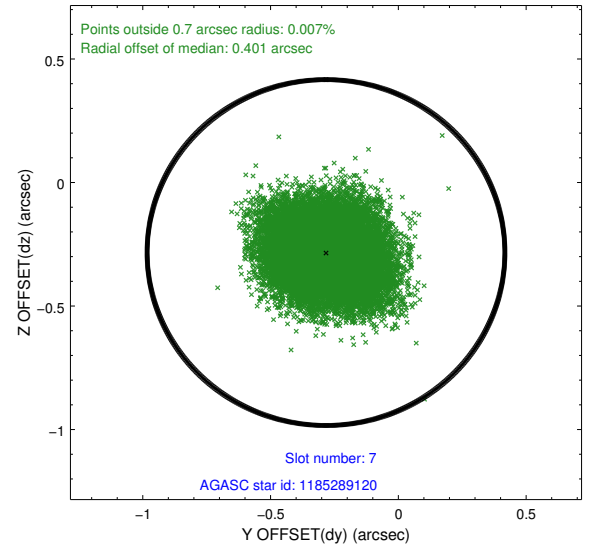
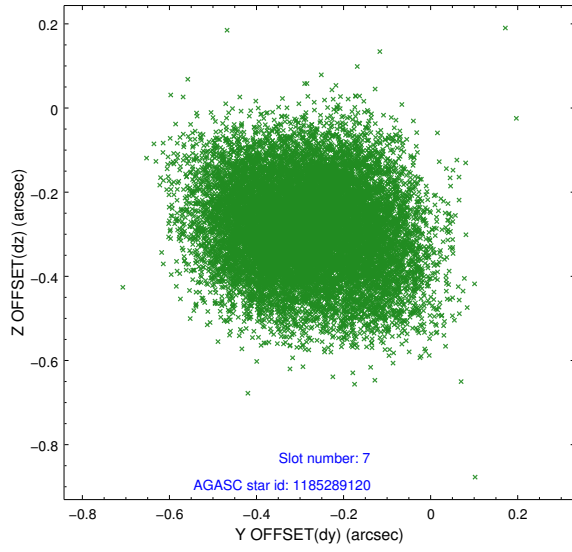
2.4.3 Slot 5



2.4.4 Slot 6

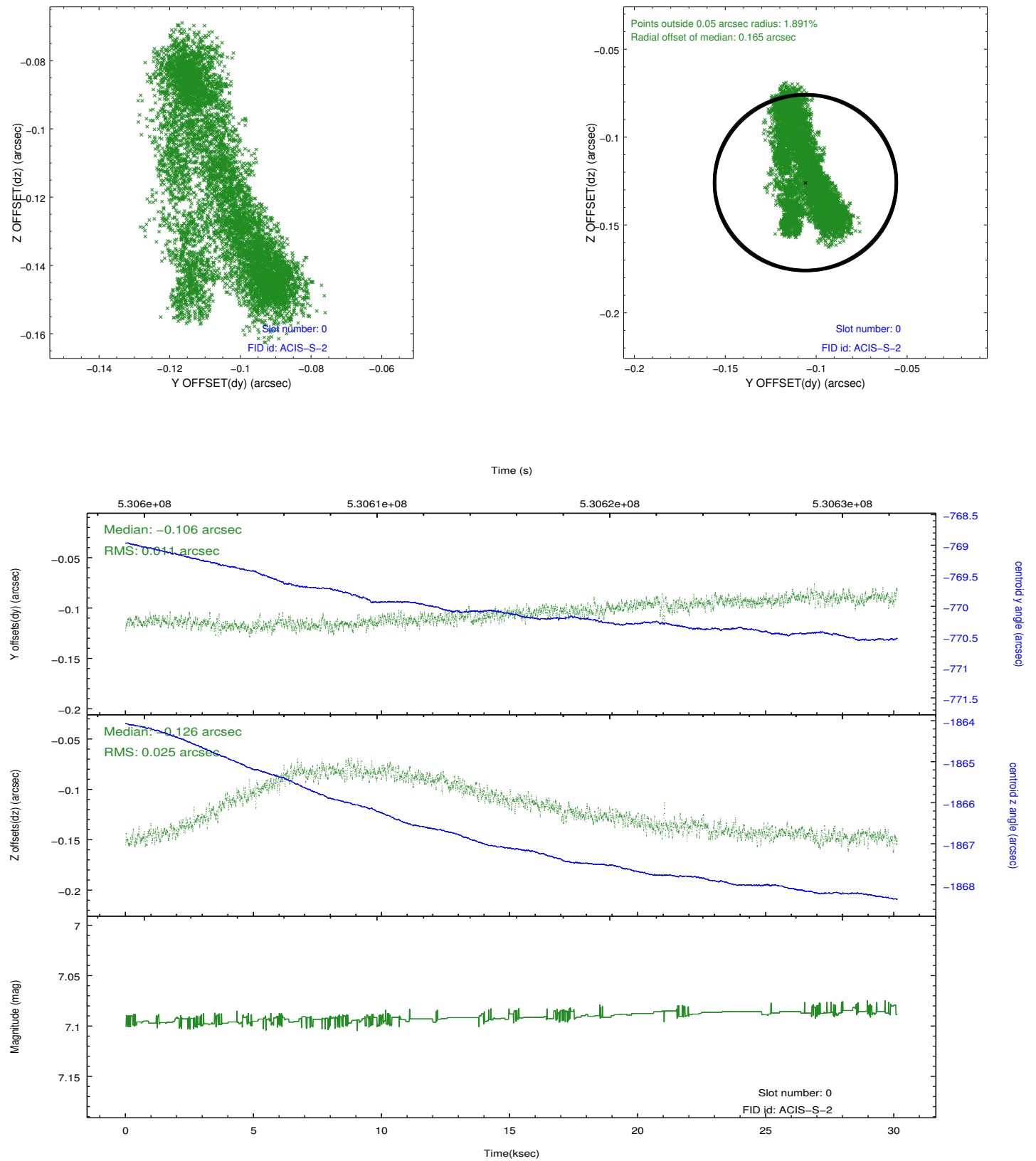


2.4.5 Slot 7

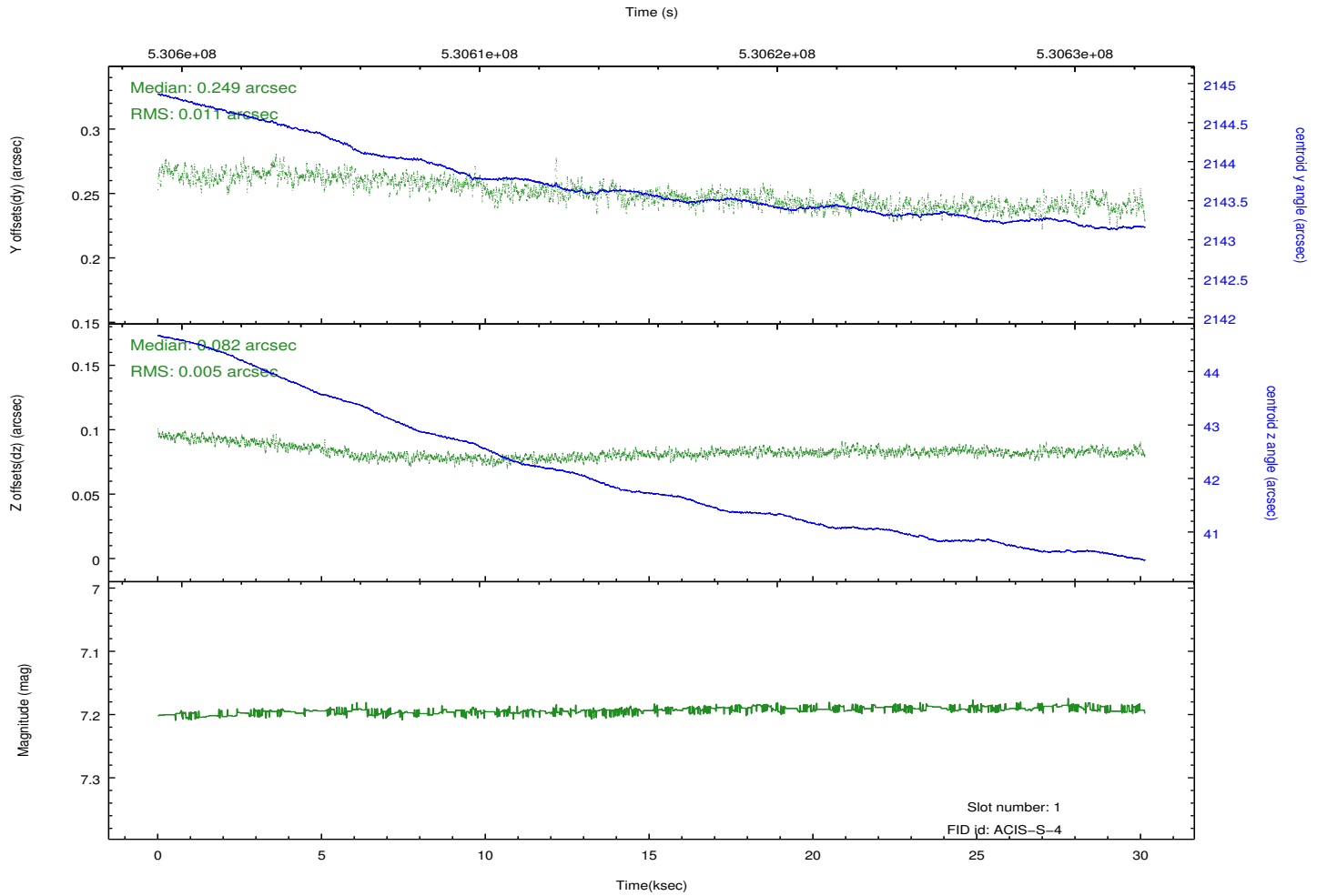
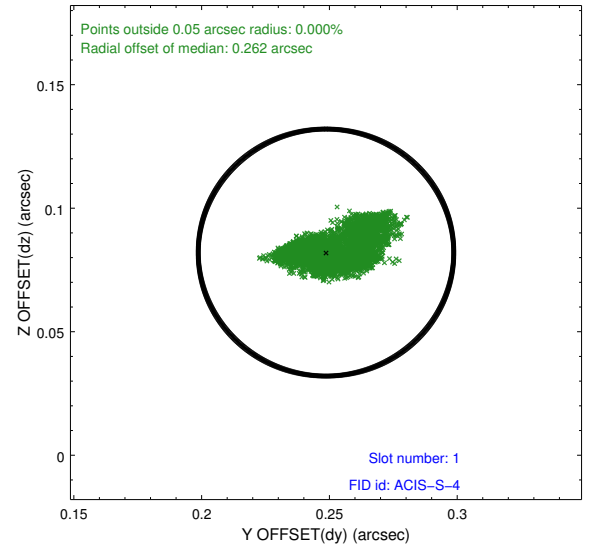
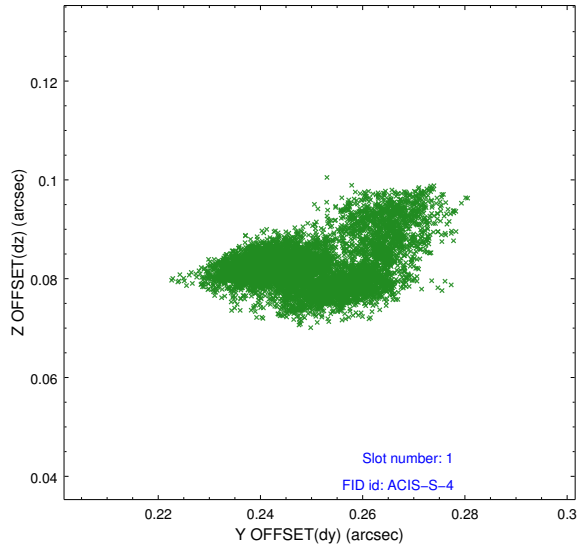


2.5 FID Slots

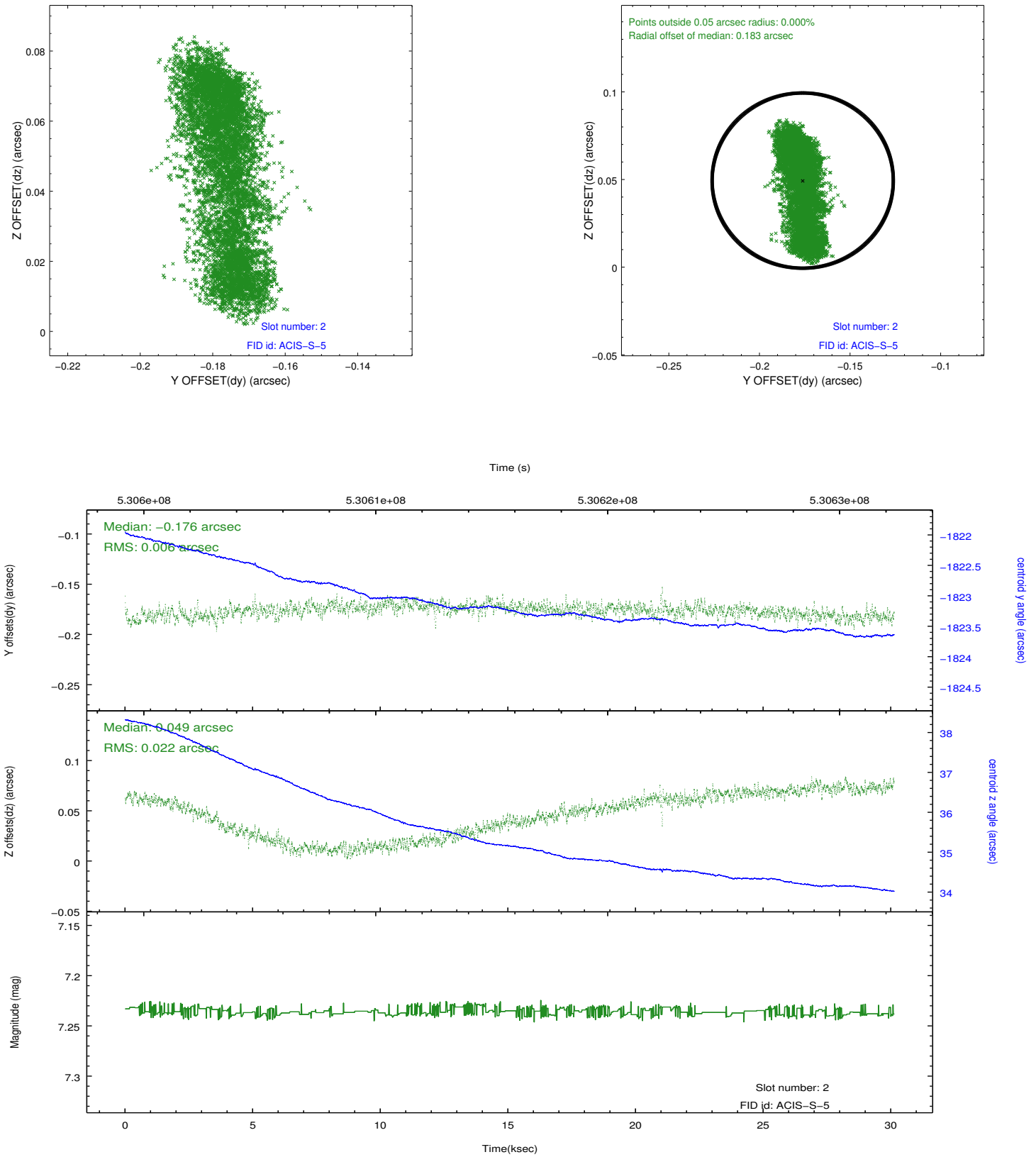
2.5.1 Slot 0



2.5.2 Slot 1

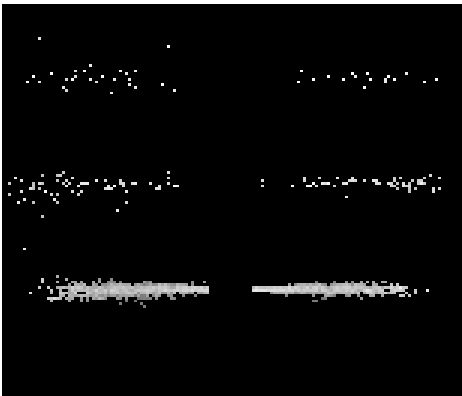


2.5.3 Slot 2

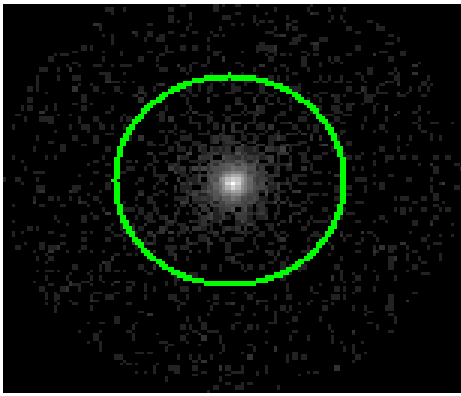


3 Gratings

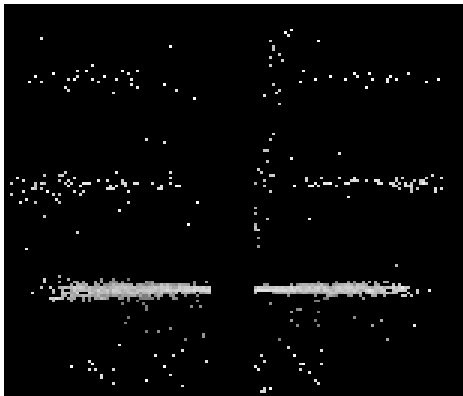
3.1 HEG Arm



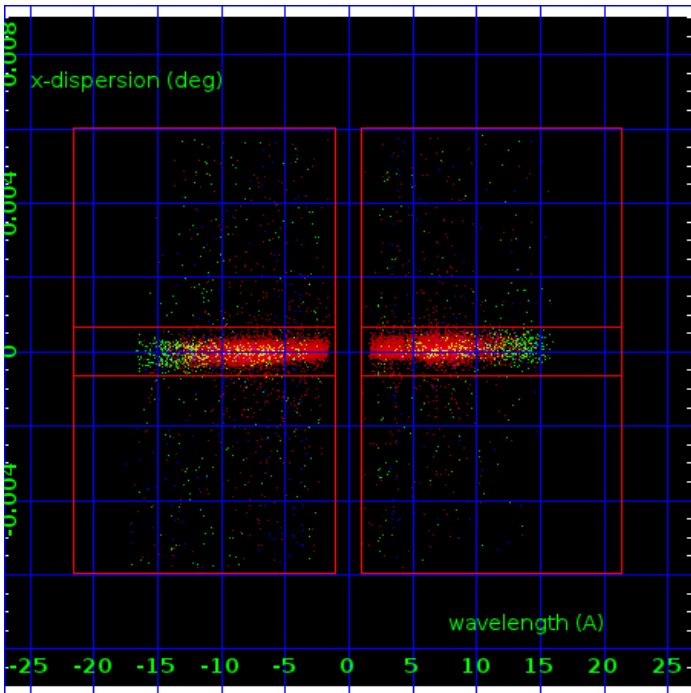
HEG Order Sort 123



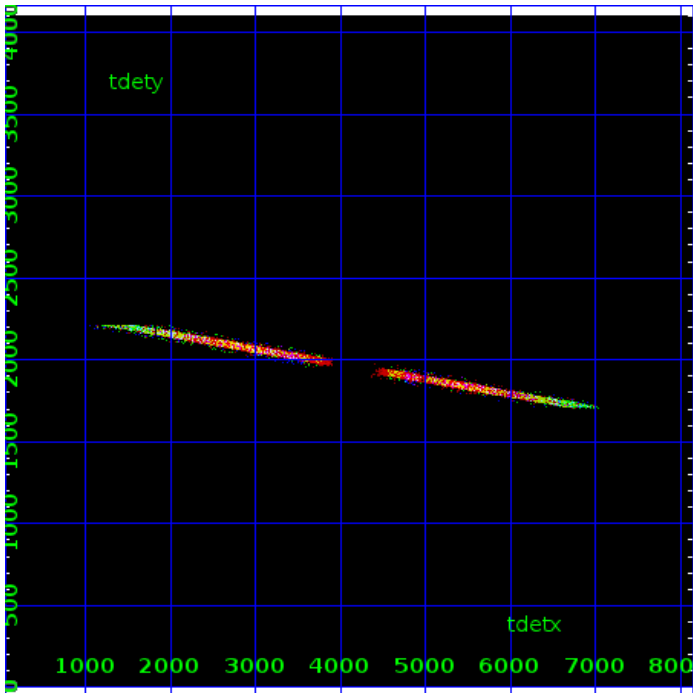
HEG Zero Order



HEG Order Sort ALL

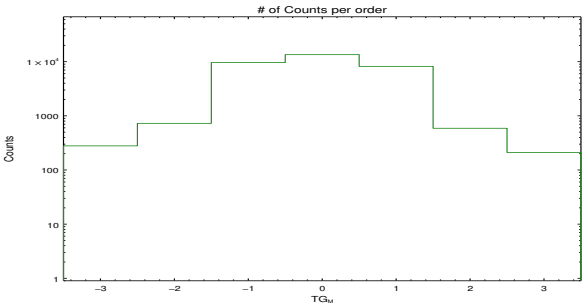


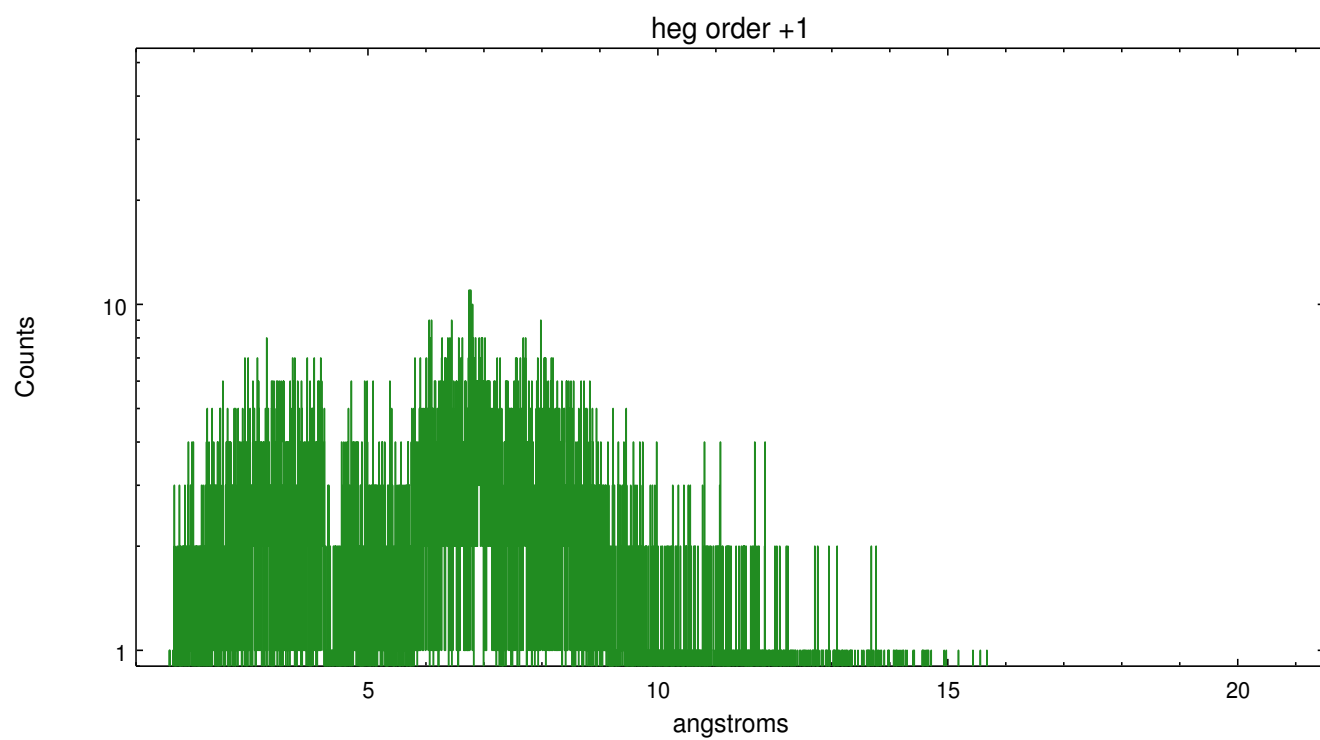
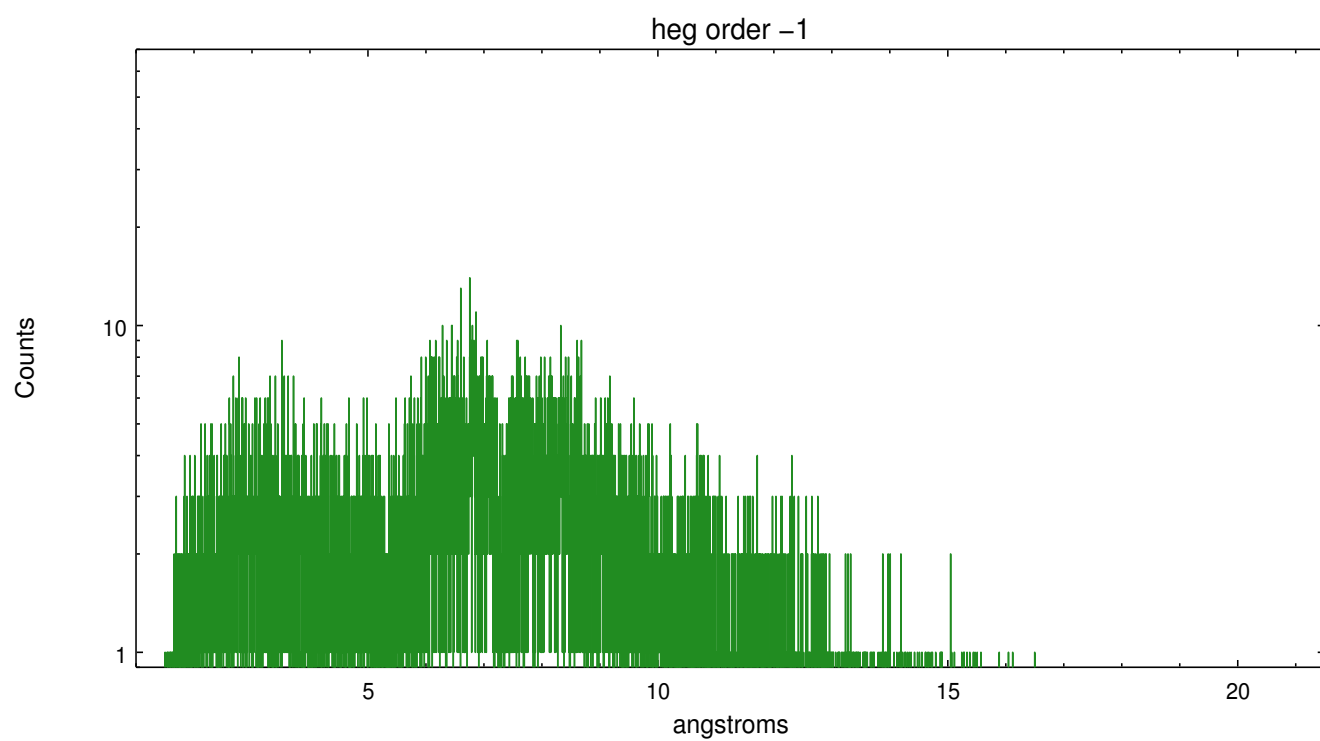
Spot Image HEG



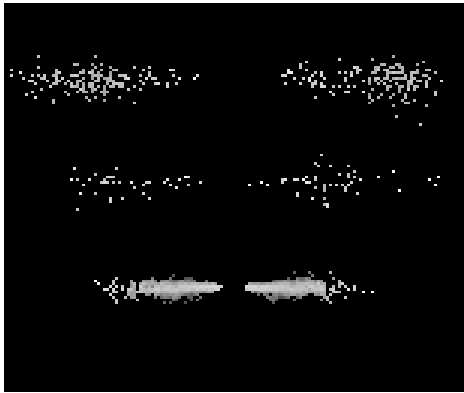
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	279	726	9628	13484	8184	589	211

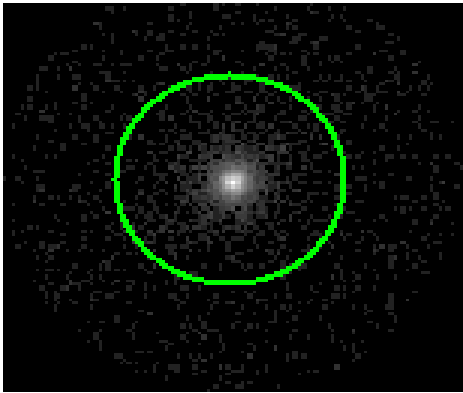




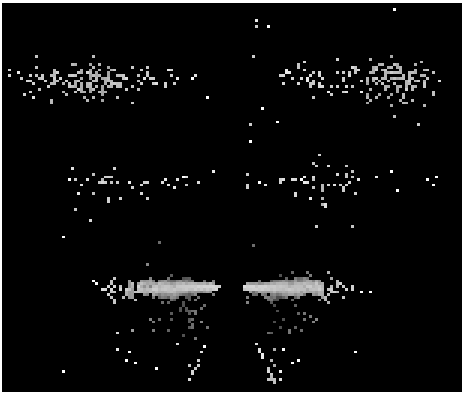
3.2 MEG Arm



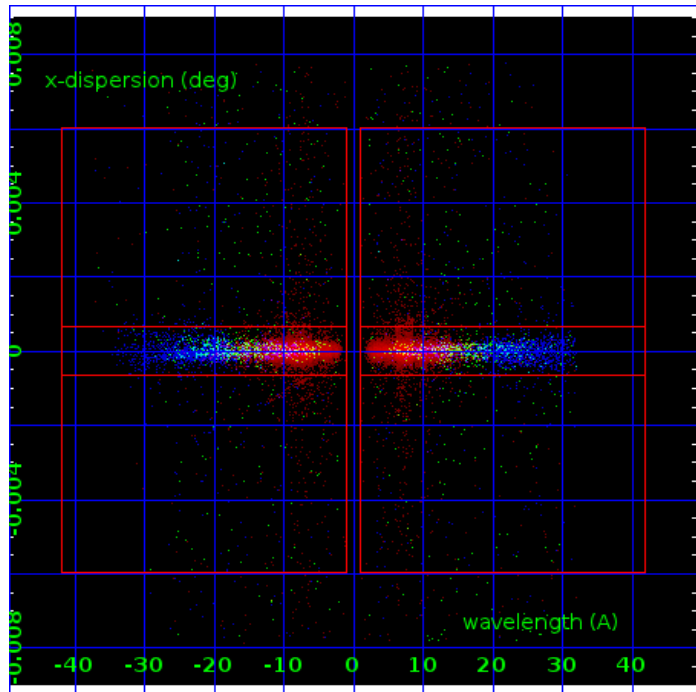
MEG Order Sort 123



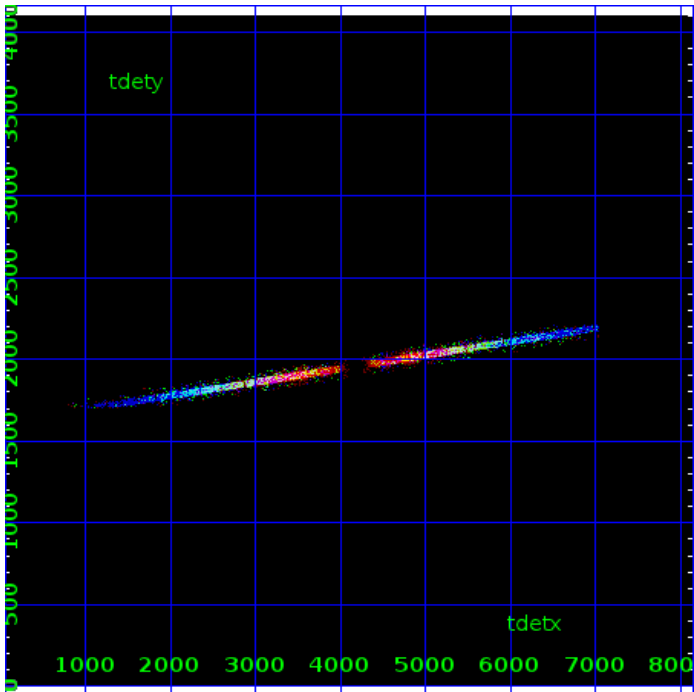
MEG Zero Order



MEG Order Sort ALL

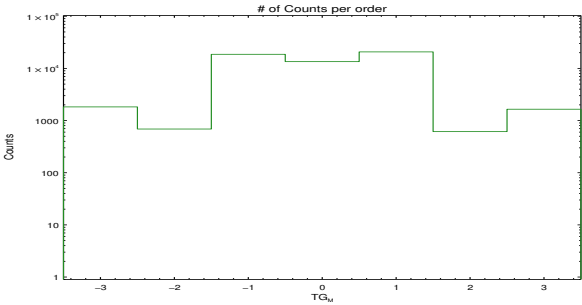


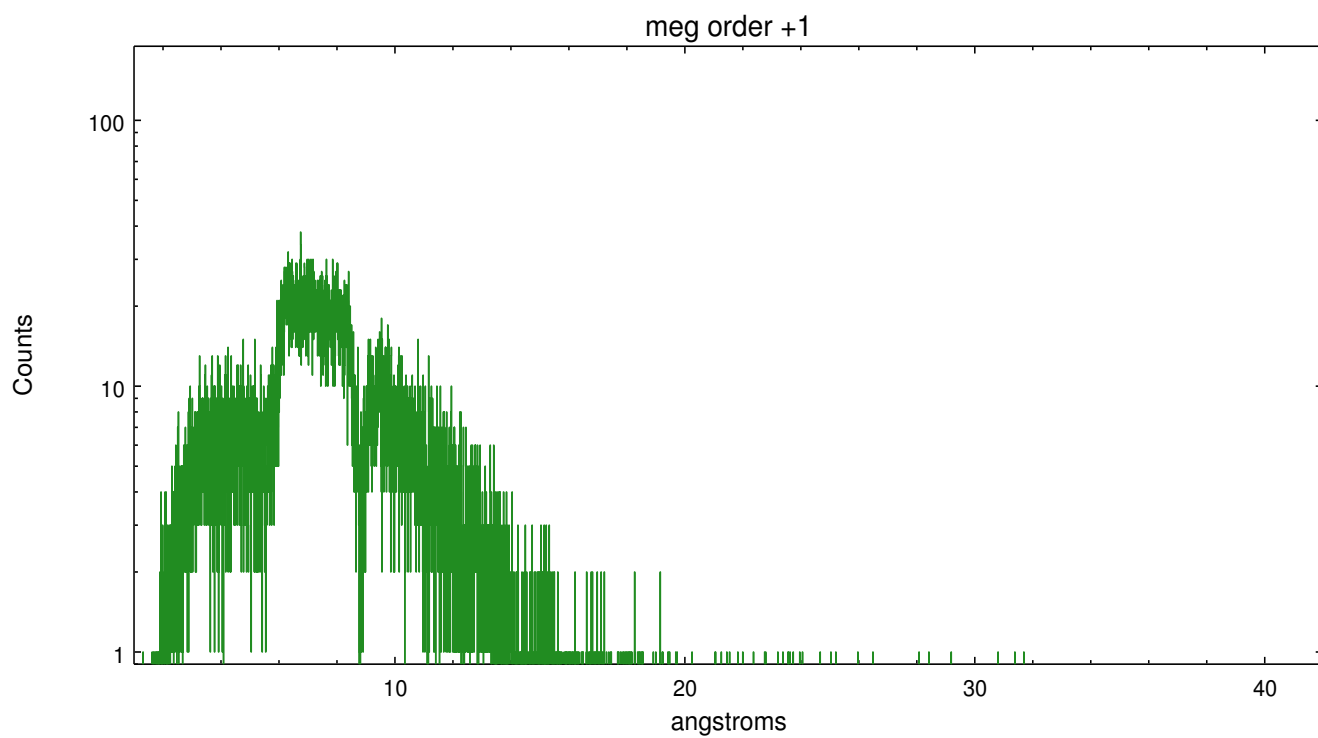
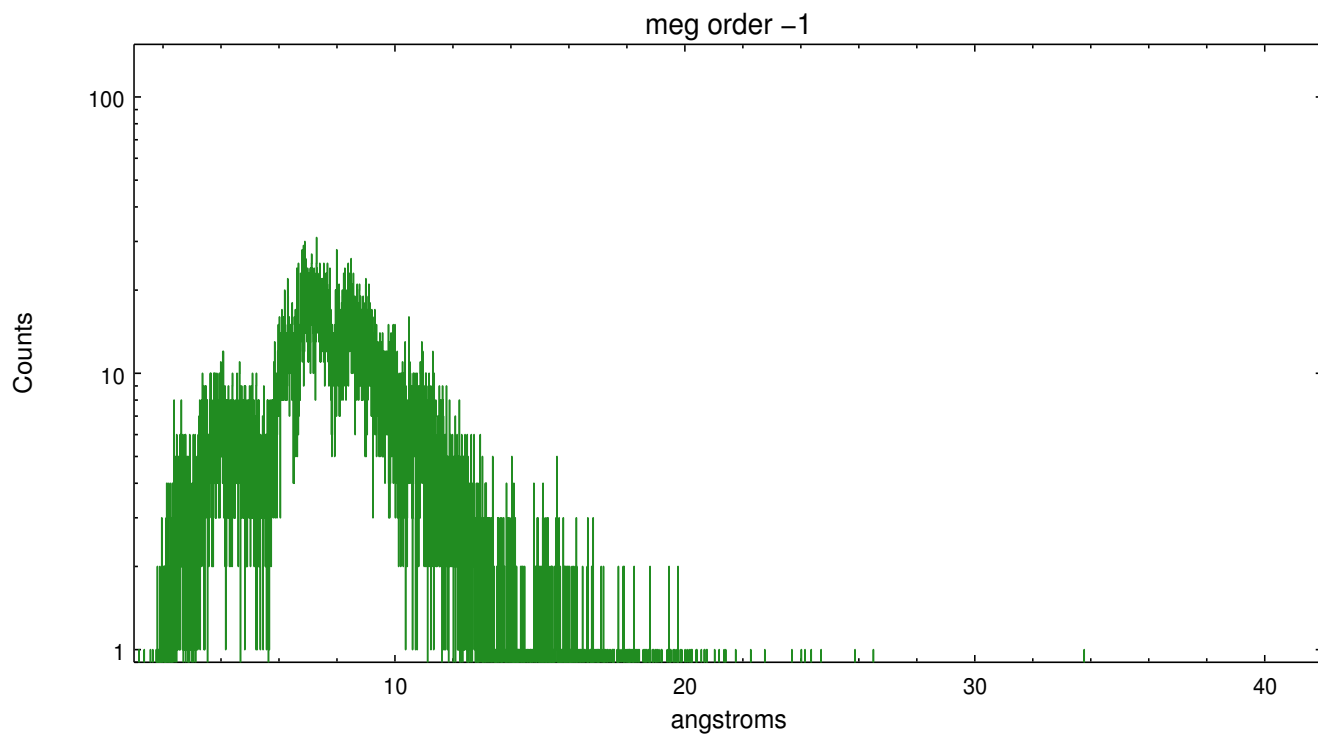
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	1828	688	18625	13484	20729	614	1649





A Summary

A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2014.10.27
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.045758788288

A.2 Comments