

V&V Reference Report

L2 ASCDS Version : 10.5

Observation 18616 - L2 Version 1
Chandra X-Ray Center

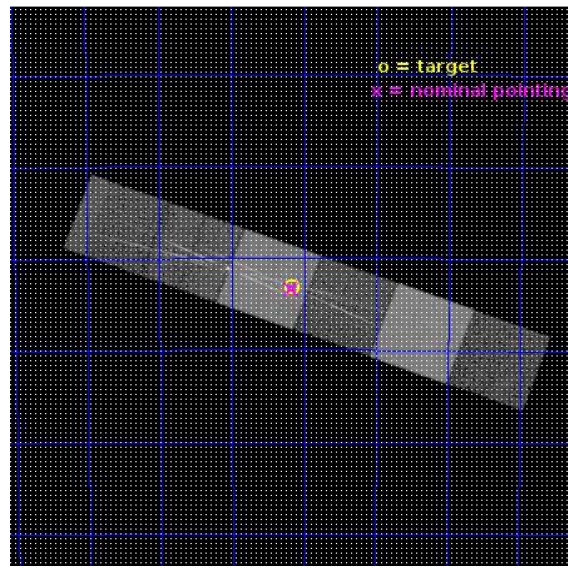
L2 Processing Date : Aug 11 2016

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1 Front

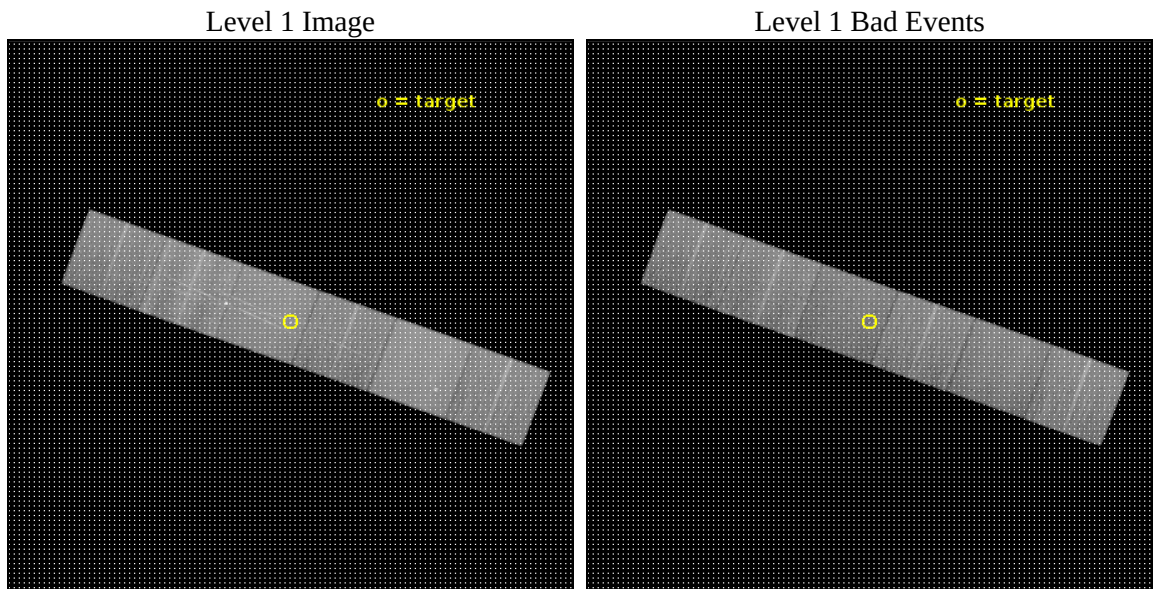
seq_num	201083	Sequence number
obs_id	18616	Observation id
title	High Resolution X-ray Spectra of Colliding Winds in WR 25	Proposal
observer	Claude Canizares	Principal investigator
object	WR 25	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	161.042917	Observer's specified target RA [deg]
dec_targ	-59.719833	Observer's specified target Dec [deg]
ra_nom	161.0439504385	Nominal RA [deg]
dec_nom	-59.722300610783	Nominal Dec [deg]
roll_nom	200.15750843825	Nominal Roll [deg]
revision	1	Processing version of data
ontime	28187.707873821	Sum of GTIs [s]
livetime	27830.778144123	Livetime [s]
ontime4	28187.748913765	Sum of GTIs [s]
ontime5	28187.666833758	Sum of GTIs [s]
ontime6	28187.625793815	Sum of GTIs [s]
ontime7	28187.707873821	Sum of GTIs [s]
ontime8	28187.584753752	Sum of GTIs [s]
ontime9	28187.543713808	Sum of GTIs [s]
l2events	344204	Number of level 2 events



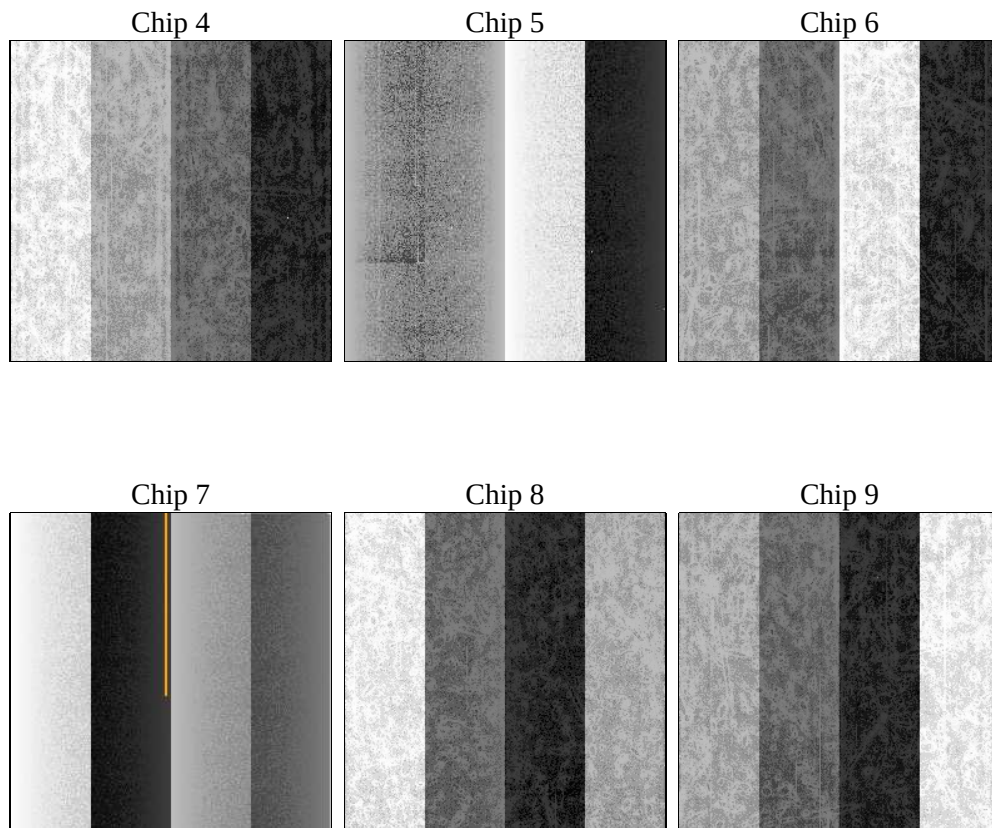
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	29000.000000	[s] Scheduled observation exposure time
ascdsver	10.5	Processing system revision	ontime	28187.707873821	Sum of GTIs [s]
caldsver	4.7.2	 	ontime4	28187.748913765	Sum of GTIs [s]
date	2016-08-11T19:12:18	Date and time of file creation	ontime5	28187.666833758	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	28187.625793815	Sum of GTIs [s]
			ontime7	28187.707873821	Sum of GTIs [s]
			ontime8	28187.584753752	Sum of GTIs [s]
			ontime9	28187.543713808	Sum of GTIs [s]
			l1events	1339252	Number of level 1 events
			tgmethod	TGDETECT	Method used to create src1a file
			src1a_pos	(4000.05 -4114.28)	src1a sky pixel position

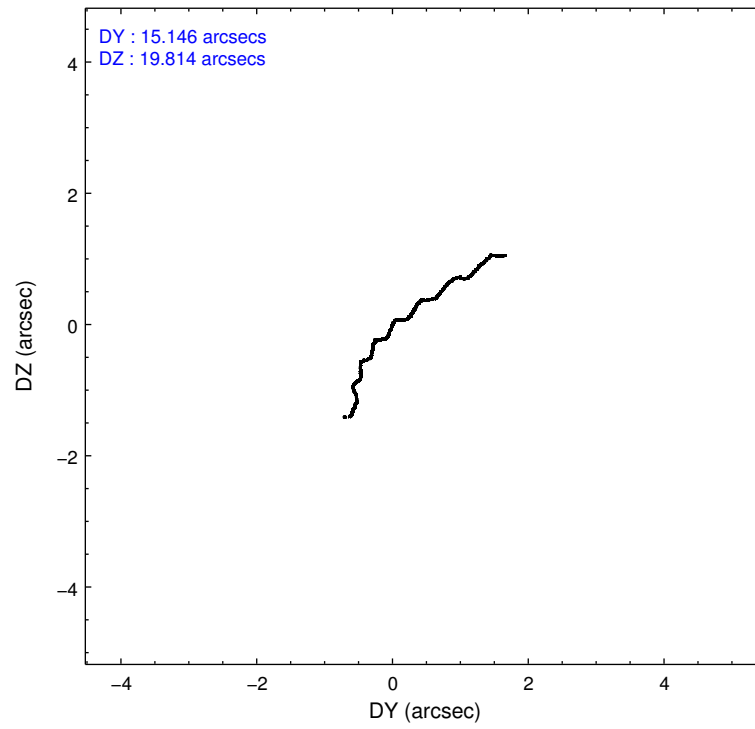
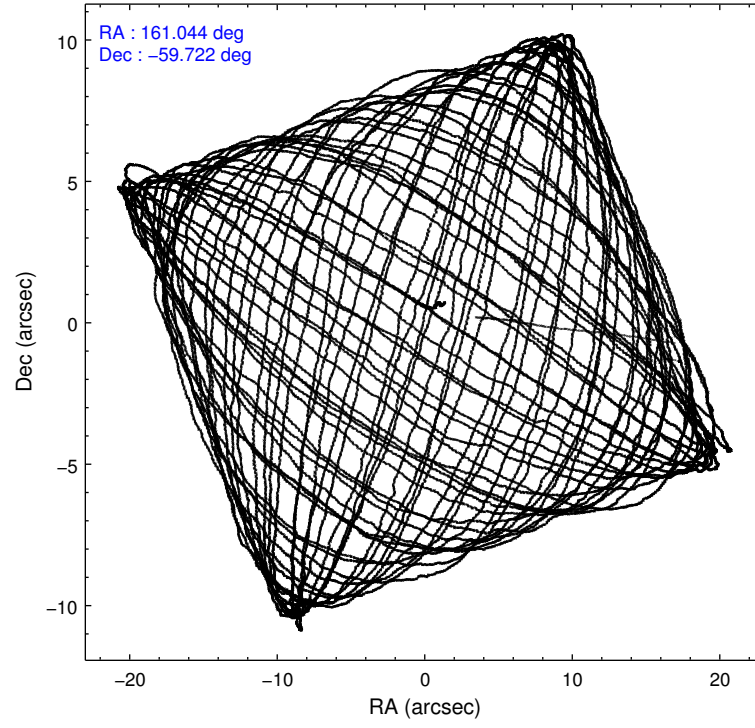
2.1.4 Events

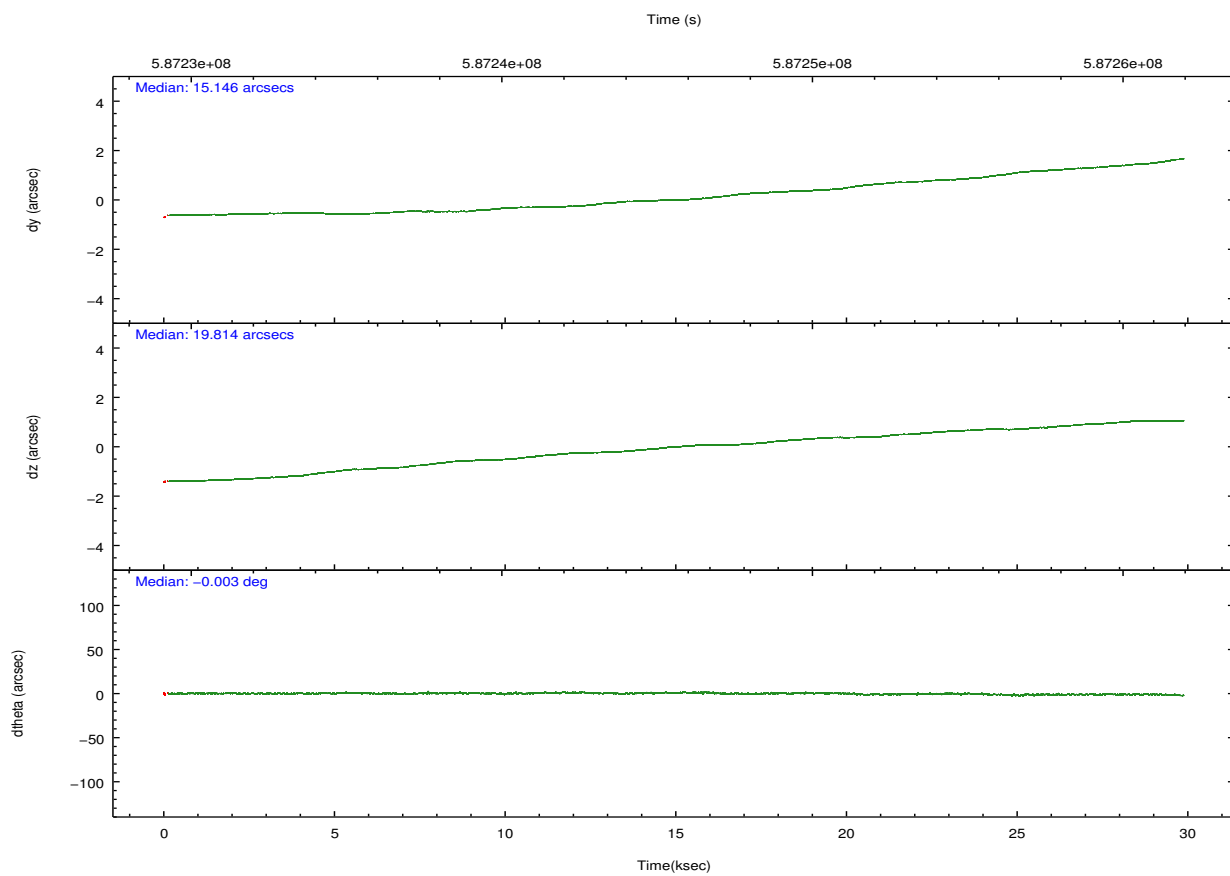
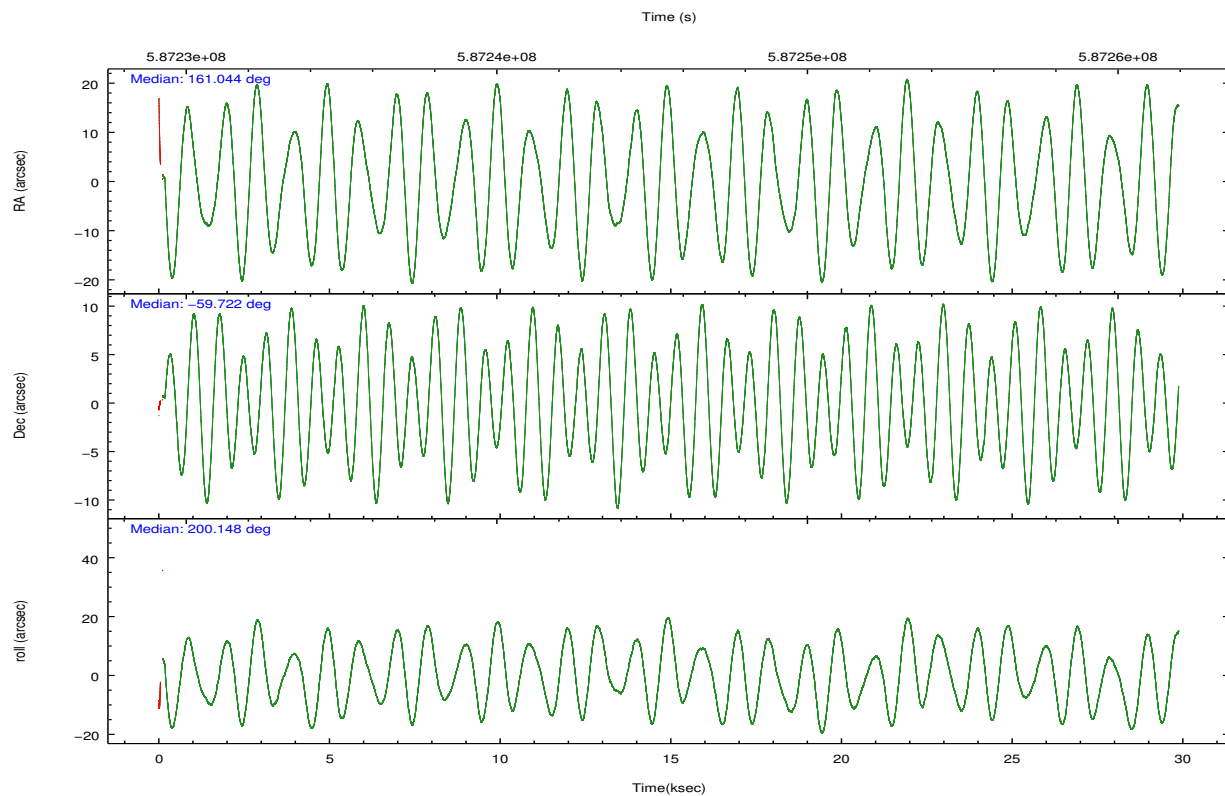
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	200210	279361	181909	246961	253774	177037	grade 0 events	9390	10858	12057	13127	33100	9656
rejected events	176970	143468	155368	128337	169690	152821		4%	3%	6%	5%	13%	5%
rejected %	88%	51%	85%	51%	66%	86%	grade 1 events	205	637	122	365	317	125
								0%	0%	0%	0%	0%	0%
							grade 2 events	5597	42524	5347	25830	18046	5214
								2%	15%	2%	10%	7%	2%
							grade 3 events	2268	4868	2231	10365	7503	2306
								1%	1%	1%	4%	2%	1%
							grade 4 events	2168	4656	2111	10375	7073	2276
								1%	1%	1%	4%	2%	1%
							grade 5 events	8777	20434	8482	23487	12840	9624
								4%	7%	4%	9%	5%	5%
							grade 6 events	3821	73020	4797	58955	18382	4767
								1%	26%	2%	23%	7%	2%
							grade 7 events	167984	122364	146762	104457	156513	143069
								83%	43%	80%	42%	61%	80%

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	161.078270	161.0439504384984	CCD I2 on	N	N
[deg] Pointing Dec	-59.700993	-59.72230061078285	CCD I3 on	N	N
[deg] Pointing Roll	200.030523	200.1575084382458	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	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	Y	Y
Phase constraints	Y	Y	CCD S5 on	O2	Y
[d] Phase period	207.808000	207.808000	Number of optional ACIS chips dropped	0	0
[d] Phase epoch (MJD)	57414.424000	57414.424000	On-chip summing requested	N	N
Phase start	0.895000	0.895000	Subarray requested	NONE	NONE
Phase end	1.000000	1.000000	Alternating exposures requested	N	N
Phase start error	0.010000	0.010000	[s] Primary exposure time	0.000000	3.2
Phase end error	0.010000	0.010000			
[s] Observation start time (MET)	587231470.184000	587229573.6492701			
Observation start date	2016-08-10T15:50:02	2016-08-10T15:19:33			
[s] Observation end time (MET)	587260470.184000	587261472.67611			
Observation end date	2016-08-10T23:53:22	2016-08-11T00:11:12			
Read mode	TIMED	TIMED			

2.3 Aspect



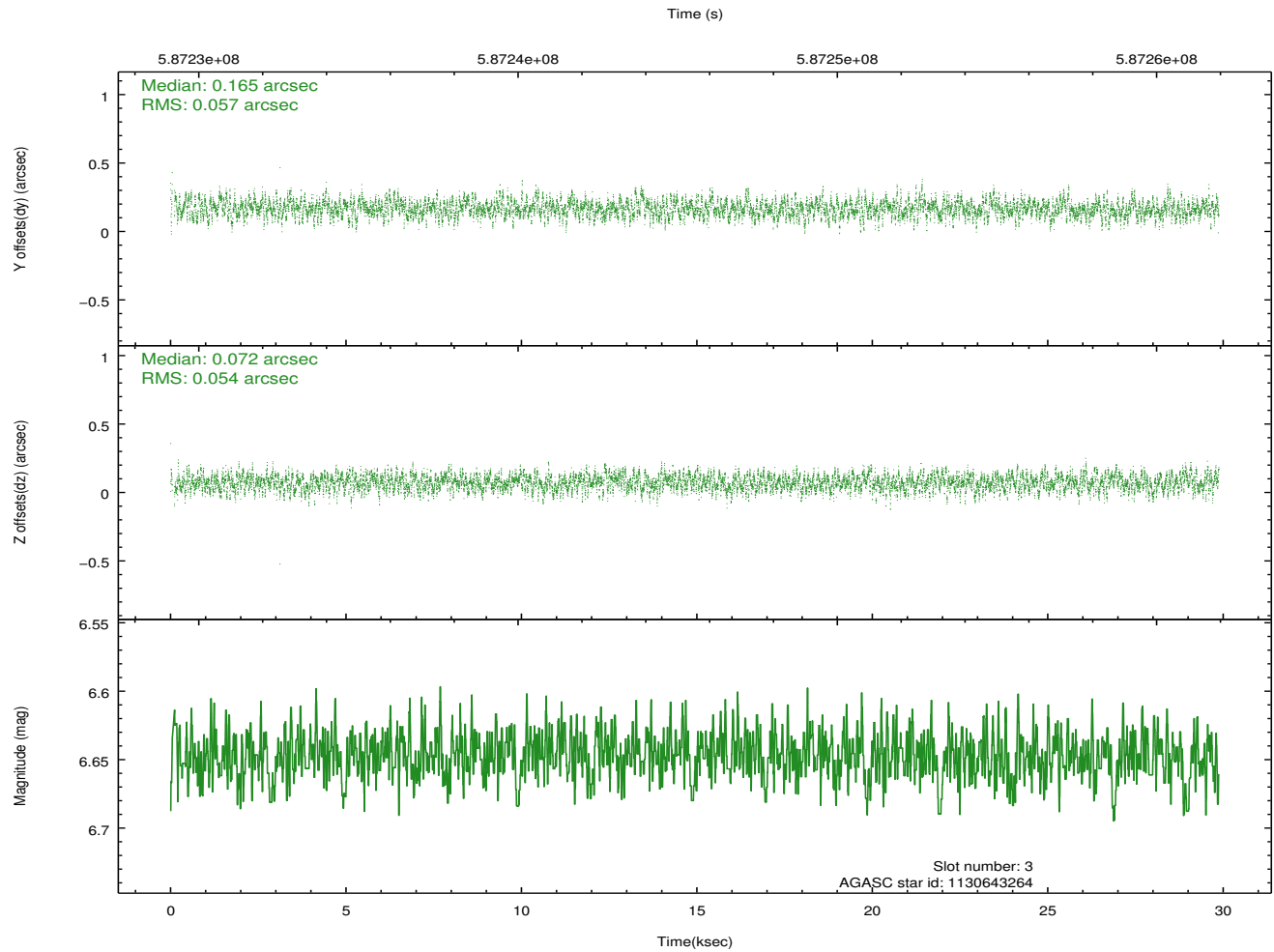
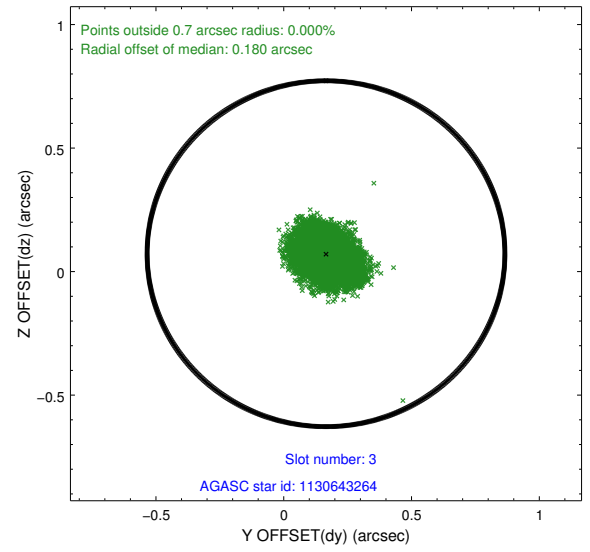
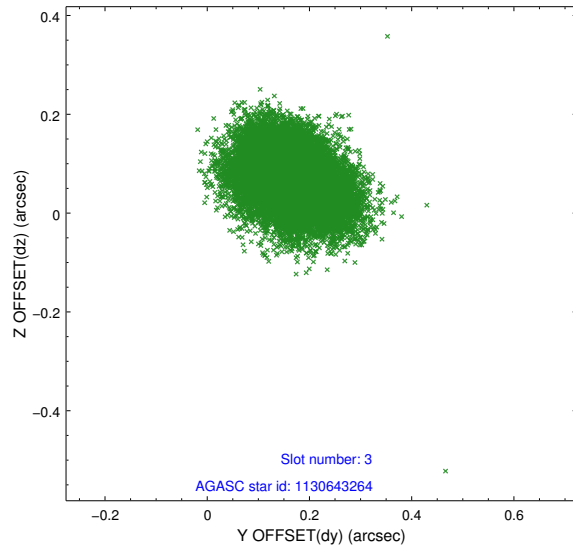


Slot Statistics

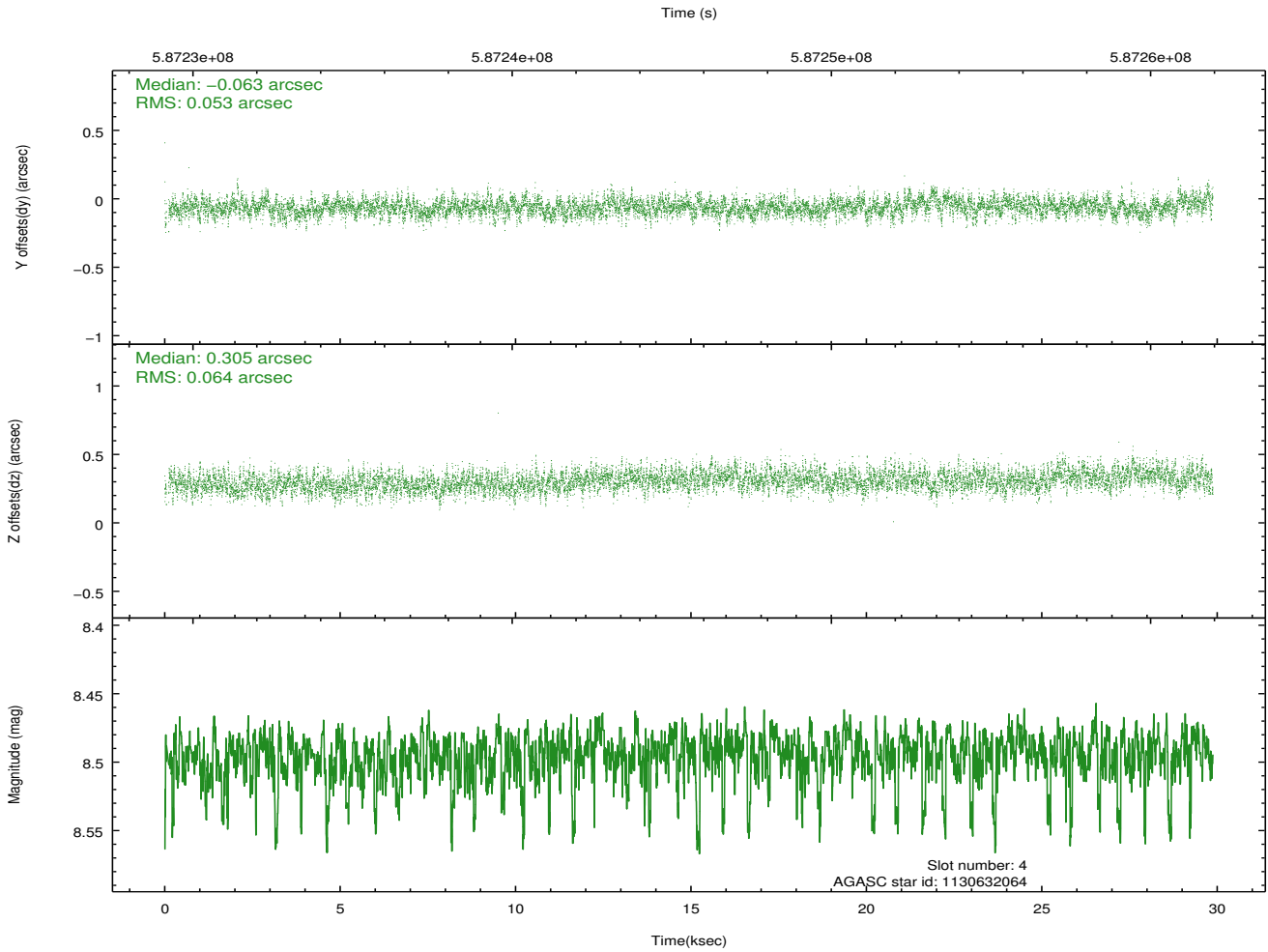
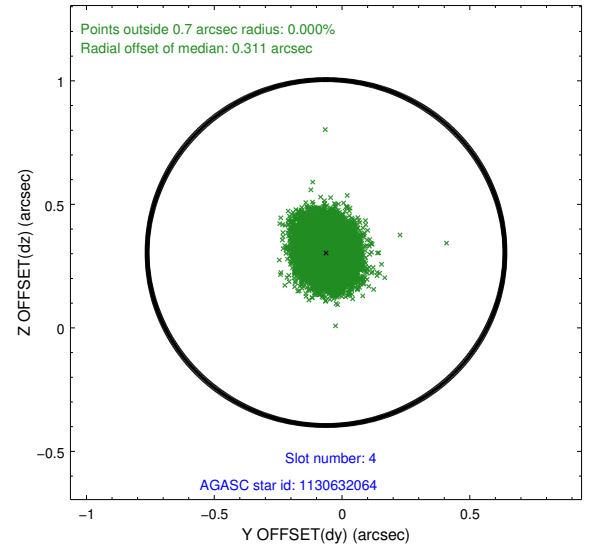
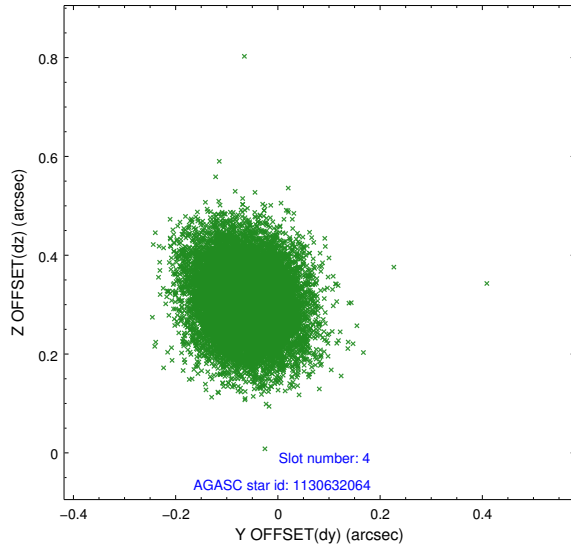
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.98	7272	-0.262	-0.163	0.013	0.024	0.000000	0.000000	-768.62	-1741.36
1	FID		ACIS-S-4	7.08	7273	0.283	0.158	0.013	0.023	0.000000	0.000000	2145.22	167.29
2	FID		ACIS-S-6	7.21	7272	-0.050	0.013	0.011	0.019	0.000000	0.000000	393.73	804.67
3	GUIDE	used	1130643264	6.65	14544	0.165	0.072	0.084	0.134	160.322990	-59.676912	1263.25	-543.94
4	GUIDE	used	1130632064	8.49	14538	-0.063	0.305	0.088	0.146	160.452382	-59.130948	385.84	-2318.48
5	GUIDE	used	1174012960	7.13	14544	-0.081	-0.355	0.087	0.134	160.855674	-60.332270	1151.25	1999.68
6	GUIDE	used	1174033752	8.45	14536	-0.024	-0.021	0.085	0.142	162.418977	-60.164599	-1676.02	2413.25
7	MONITOR	unused		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00

2.4 Star Slots

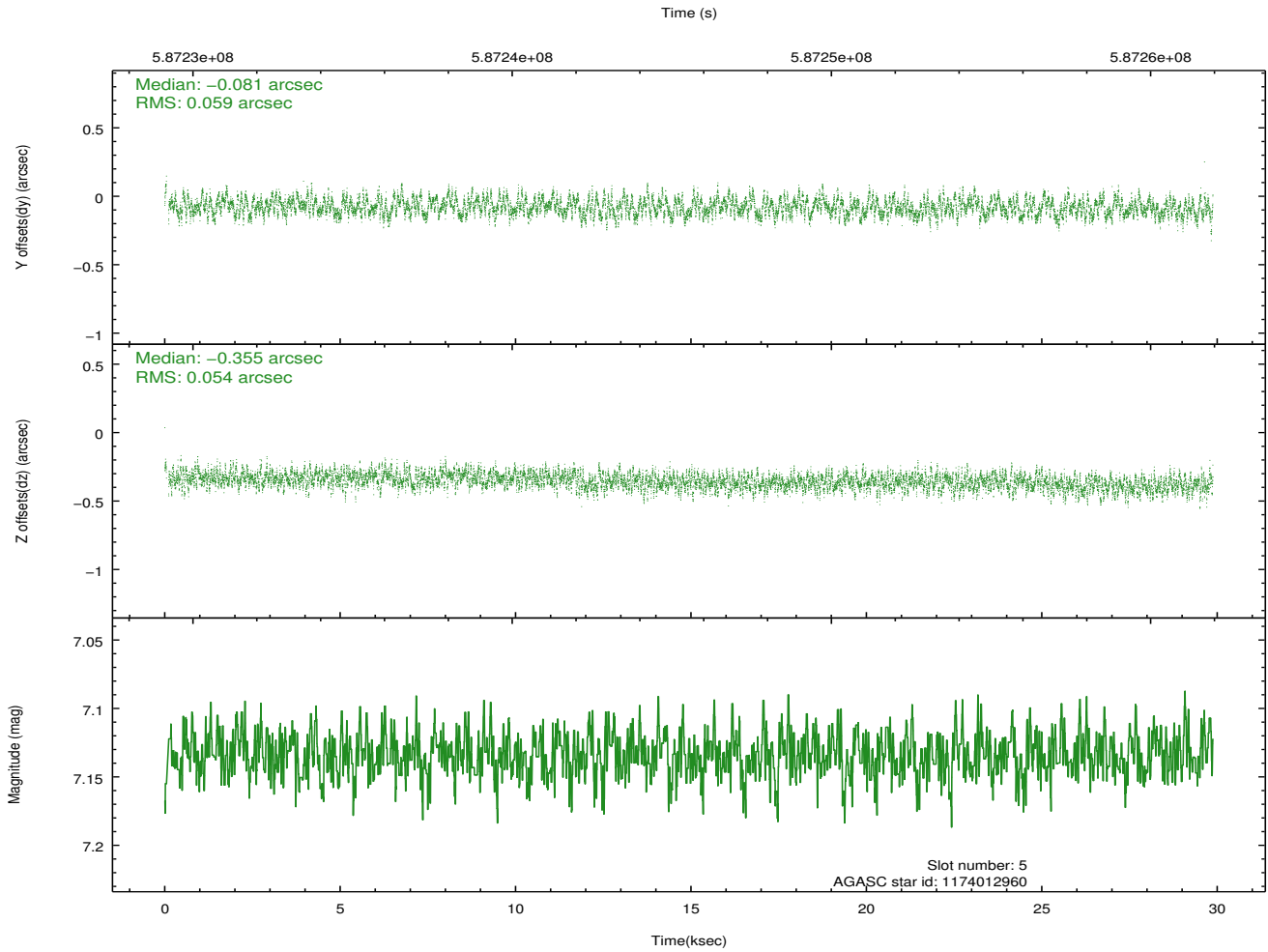
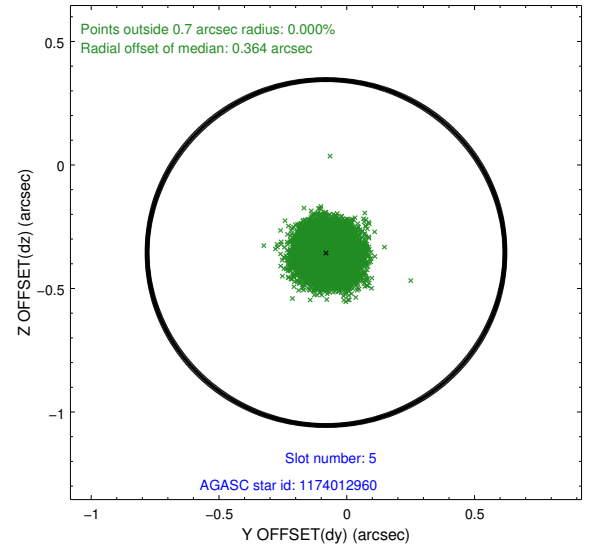
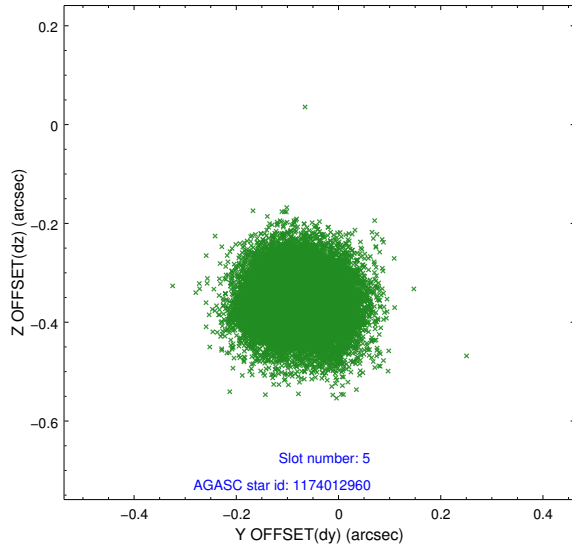
2.4.1 Slot 3



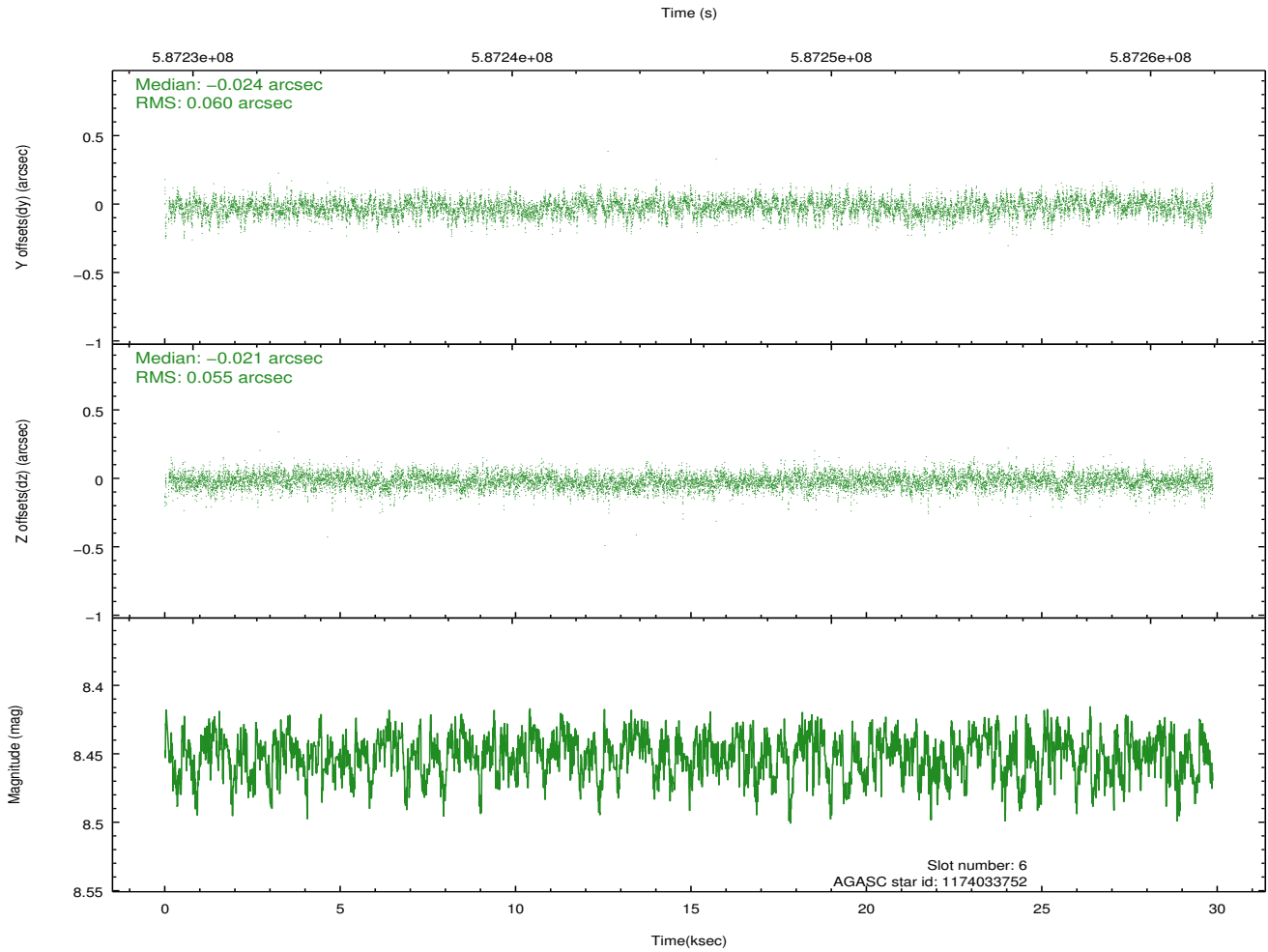
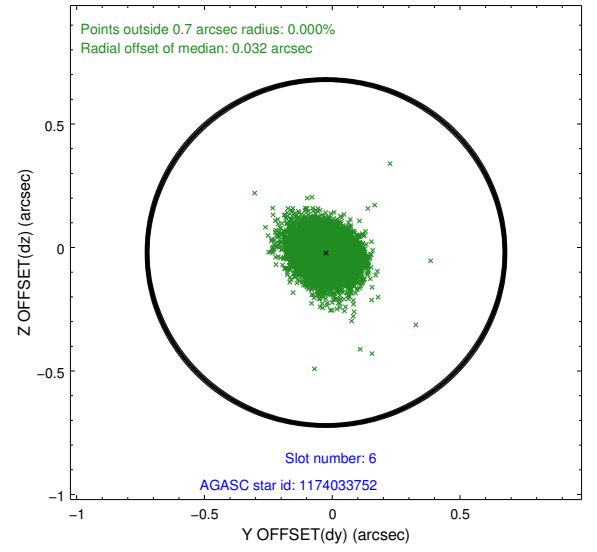
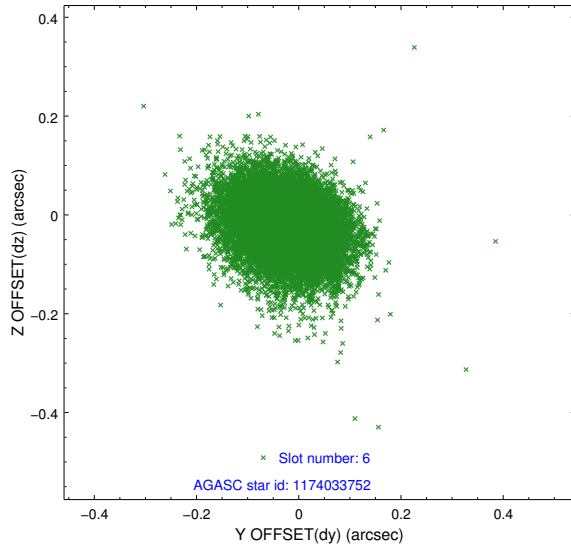
2.4.2 Slot 4



2.4.3 Slot 5

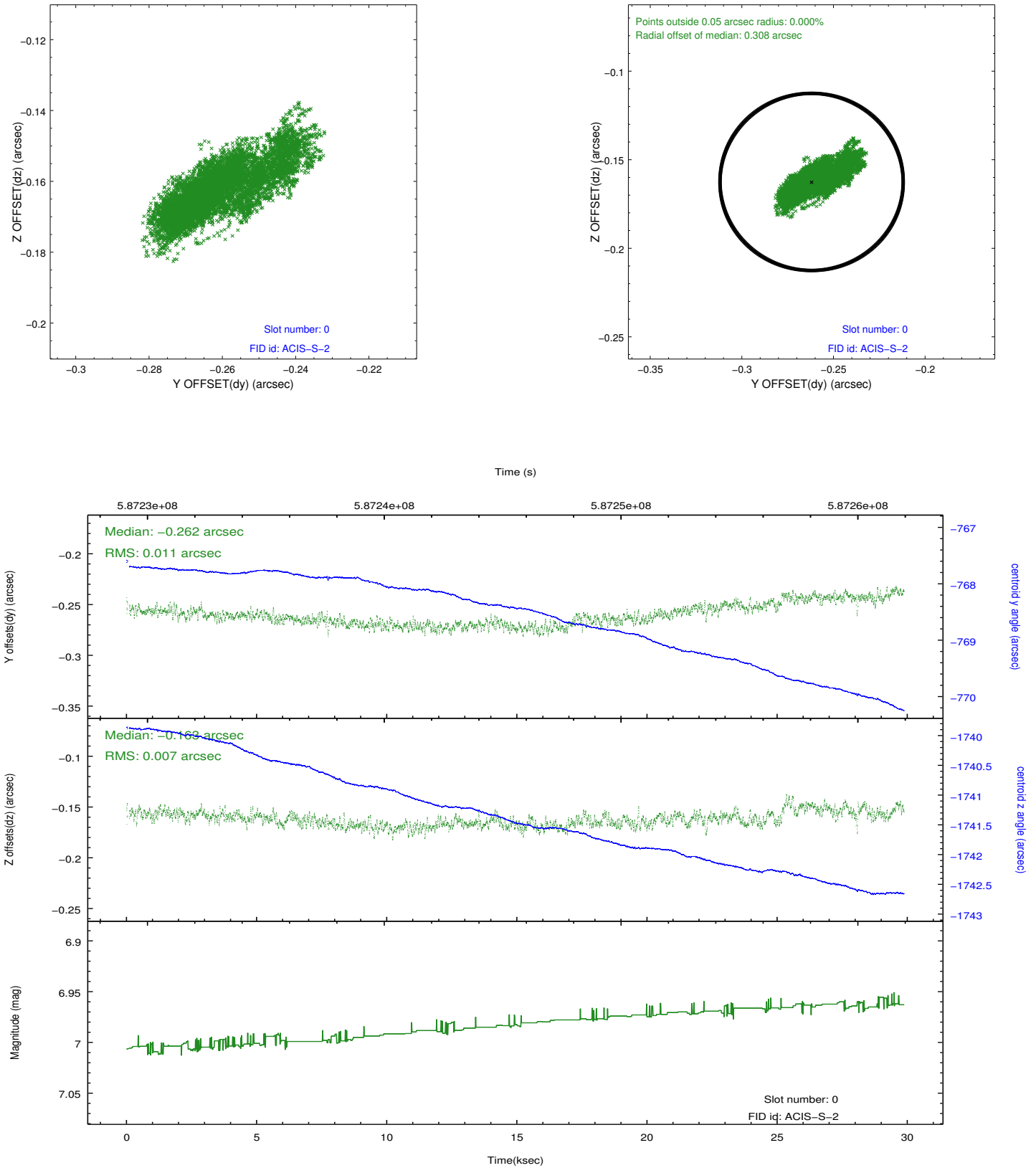


2.4.4 Slot 6

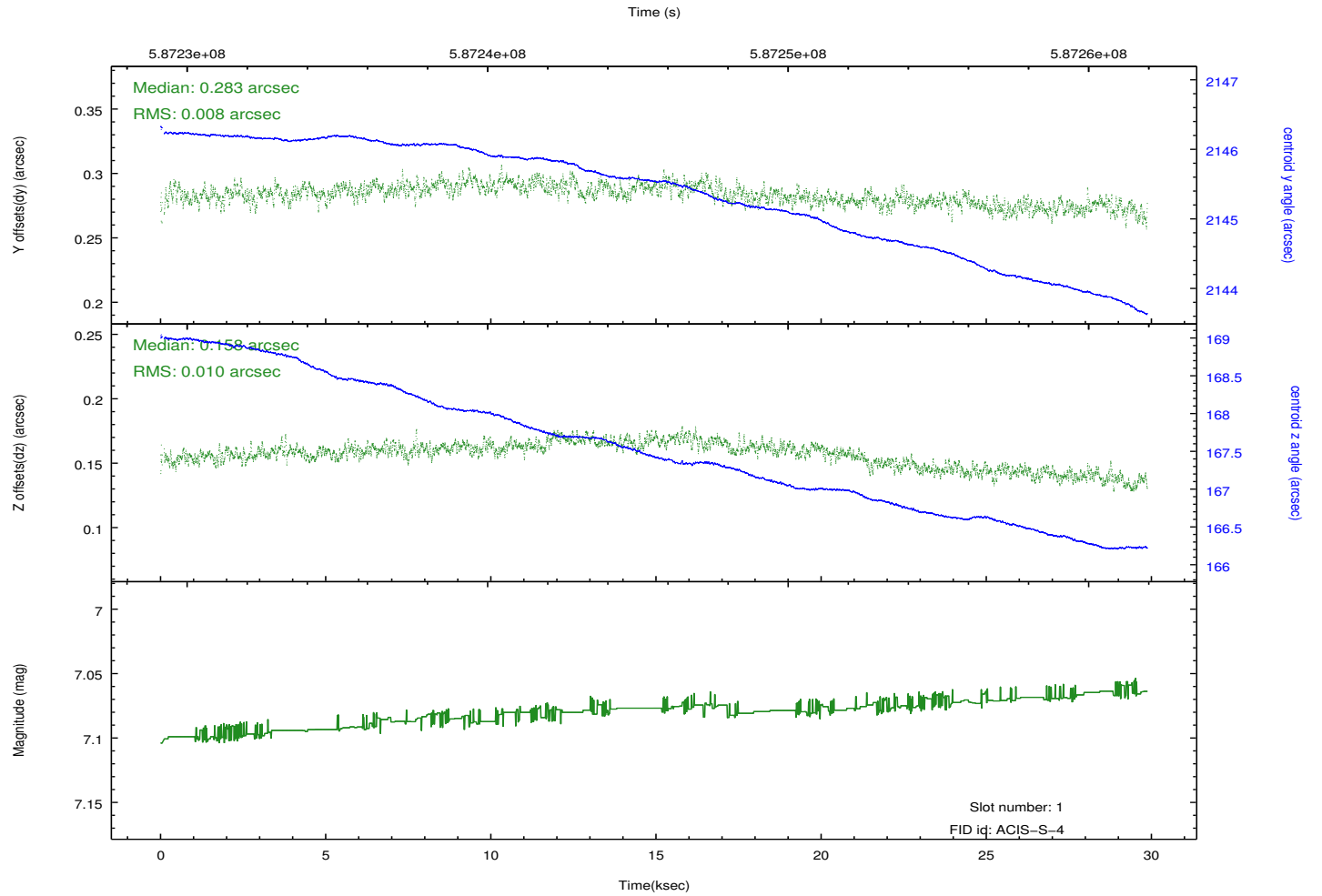
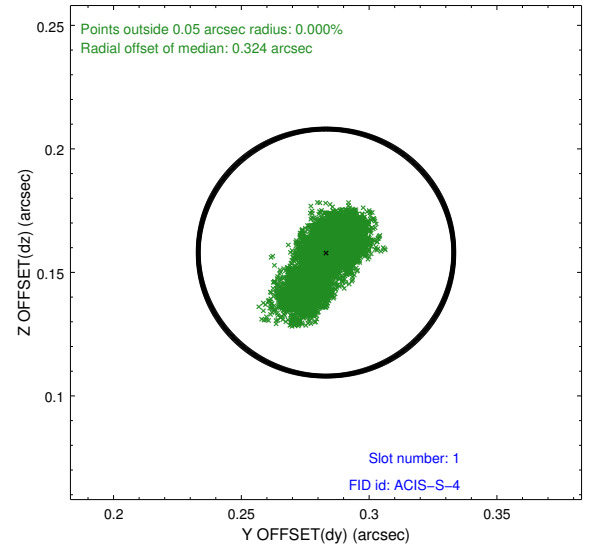
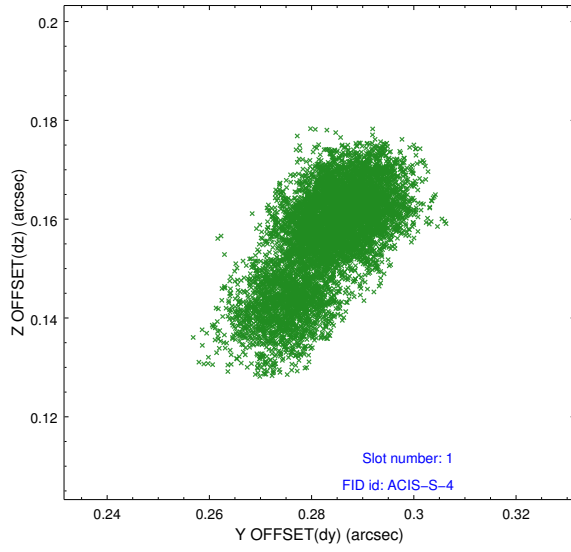


2.5 FID Slots

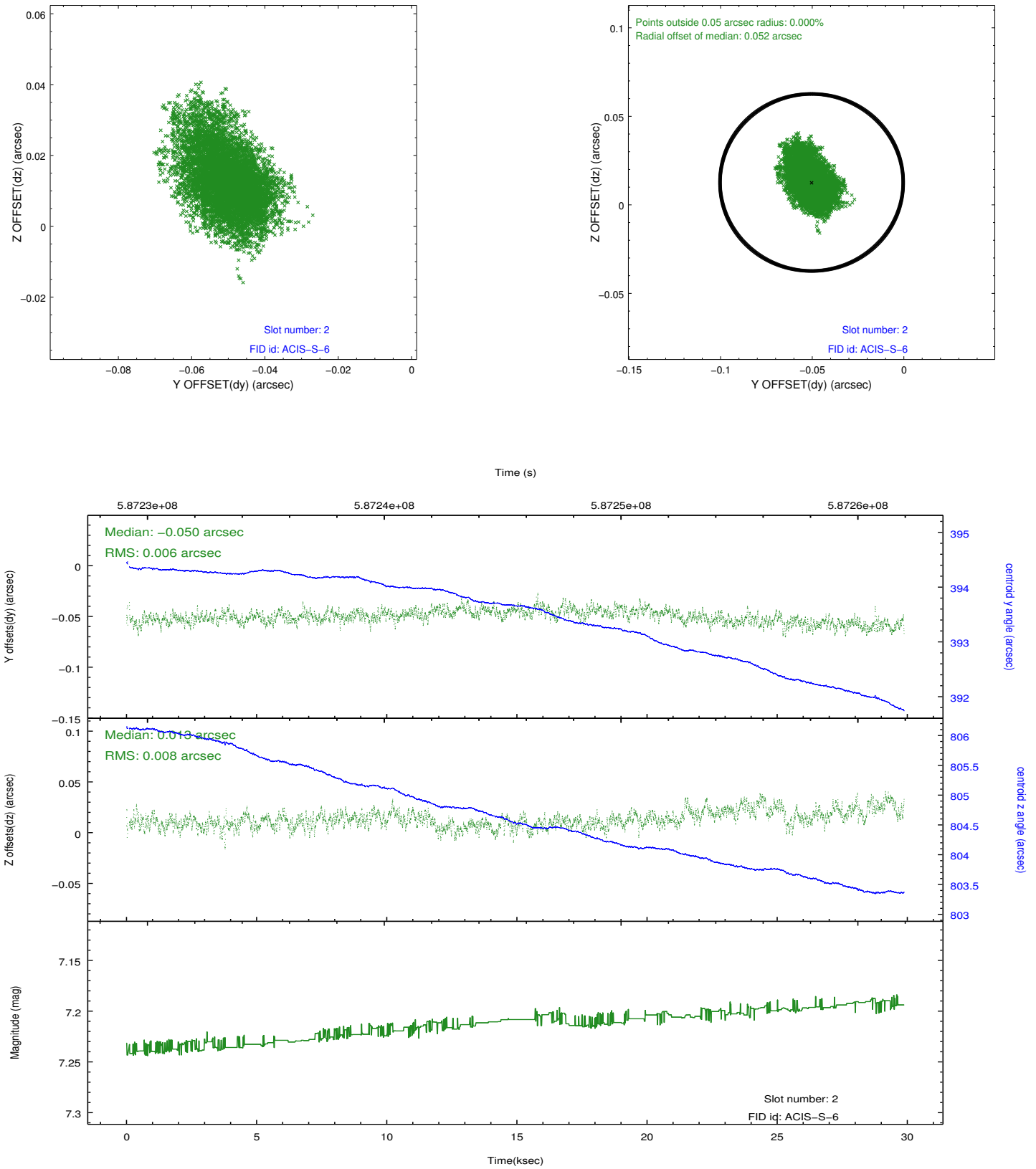
2.5.1 Slot 0



2.5.2 Slot 1

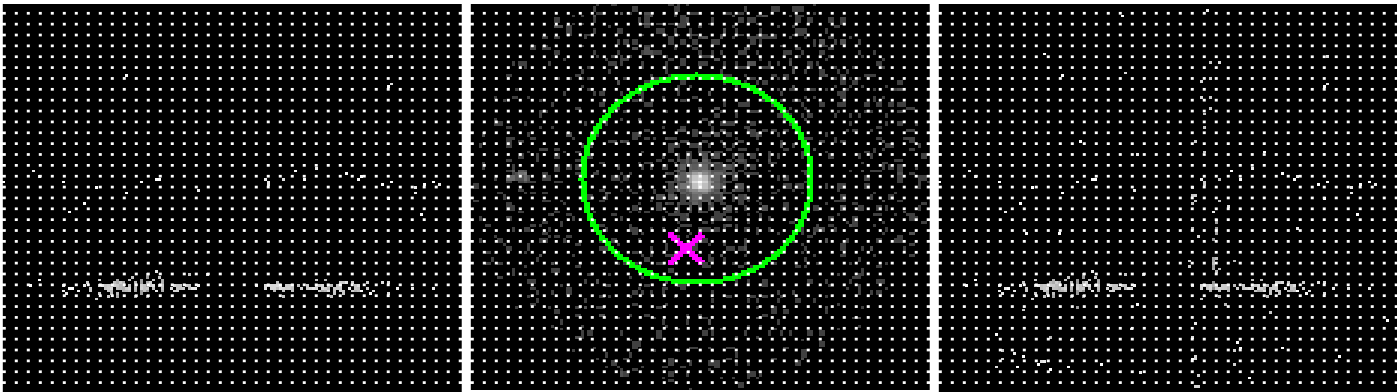


2.5.3 Slot 2



3 Gratings

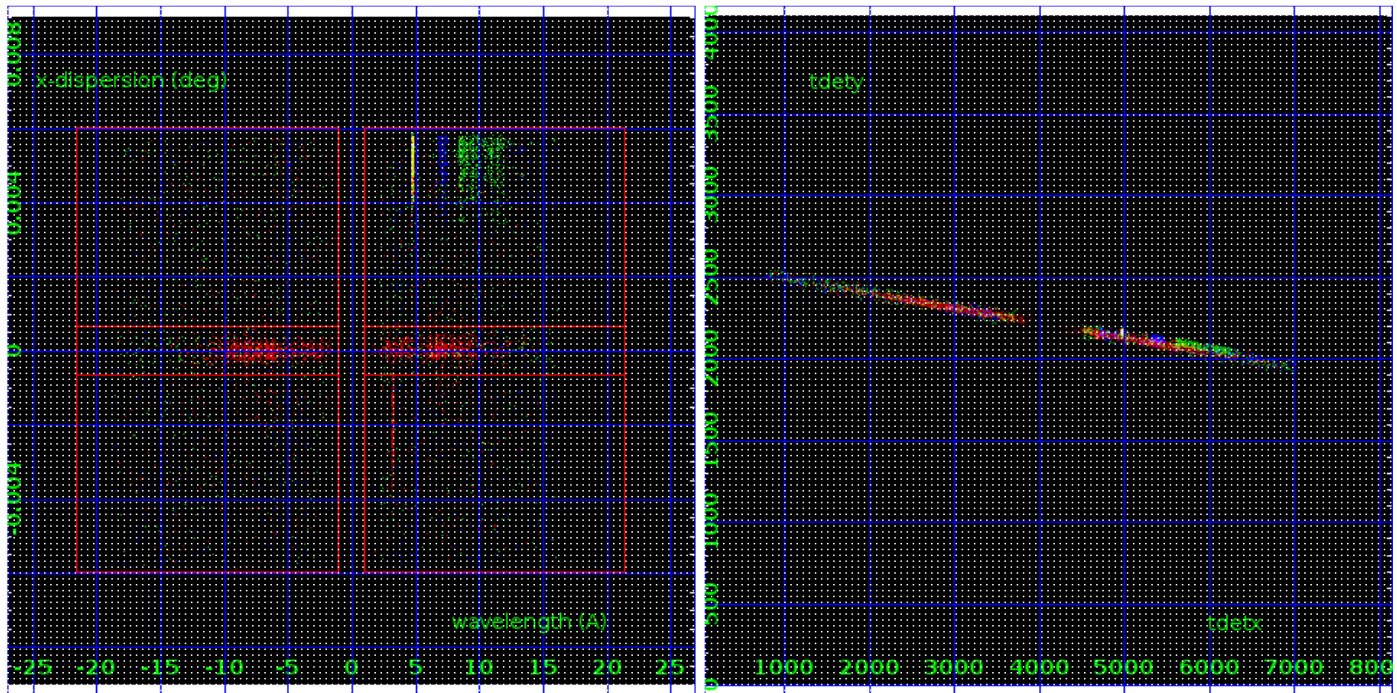
3.1 HEG Arm



HEG Order Sort 123

HEG Zero Order

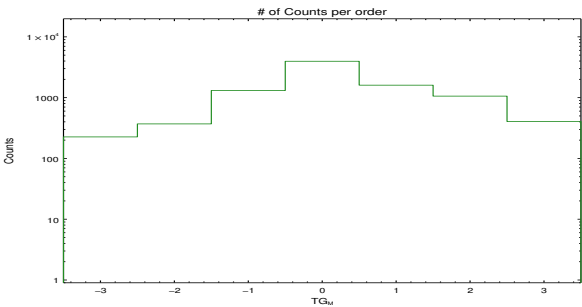
HEG Order Sort ALL

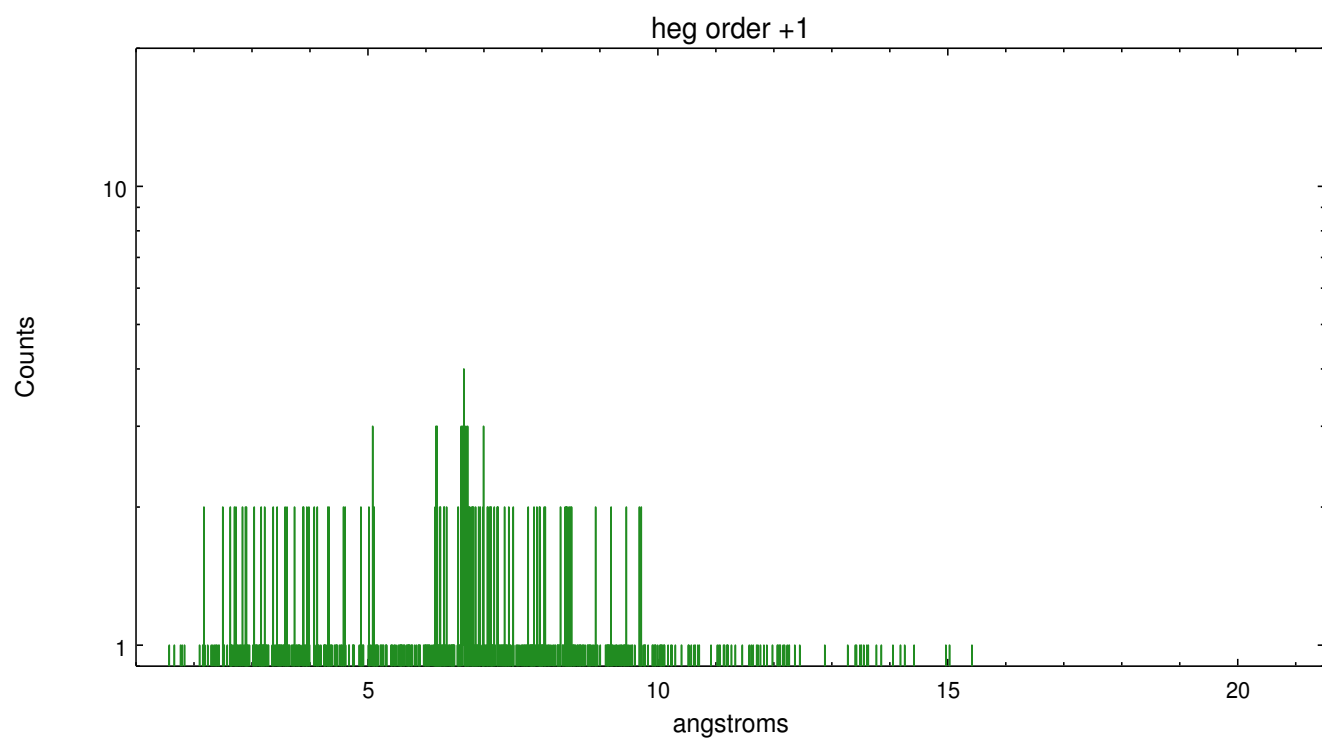
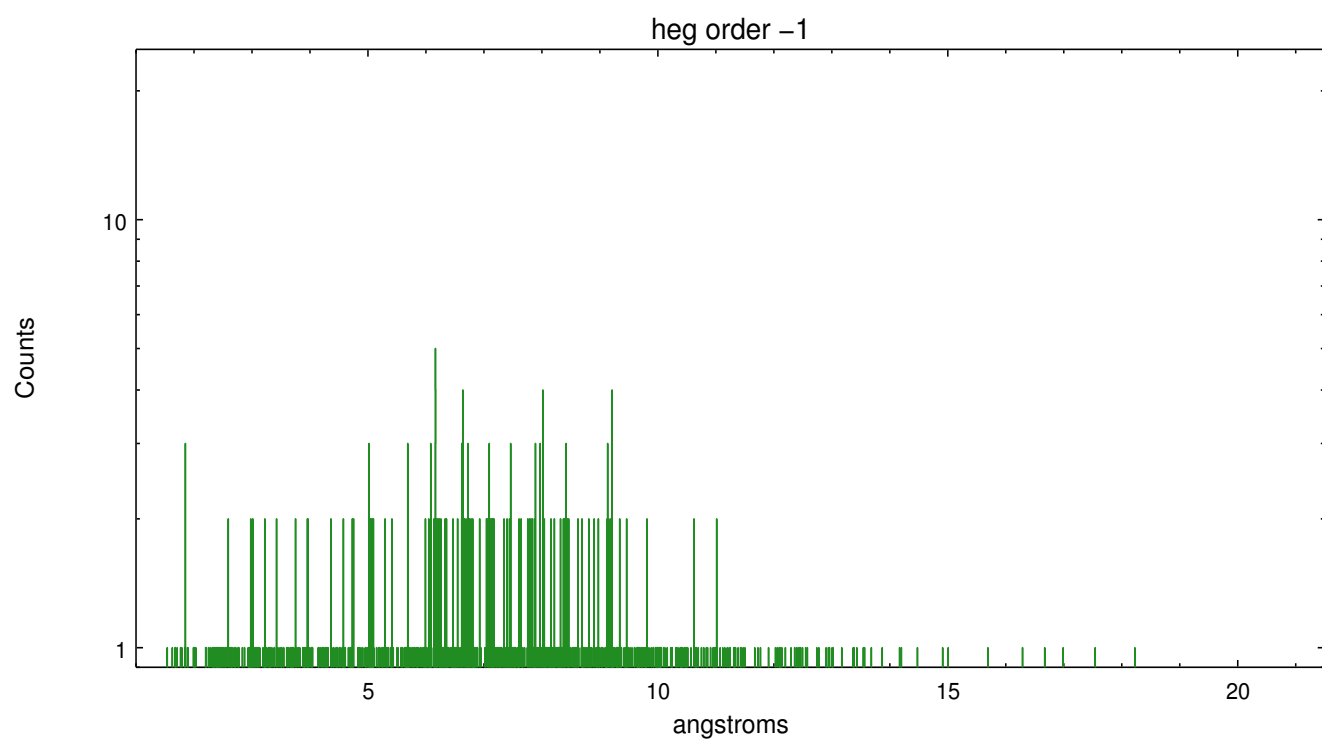


Spot Image HEG

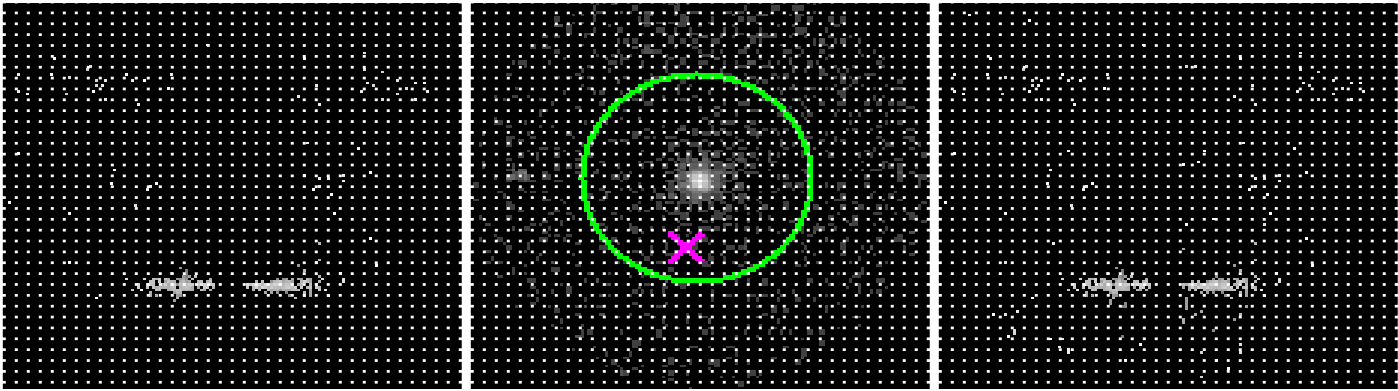
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	226	370	1310	3965	1603	1059	405





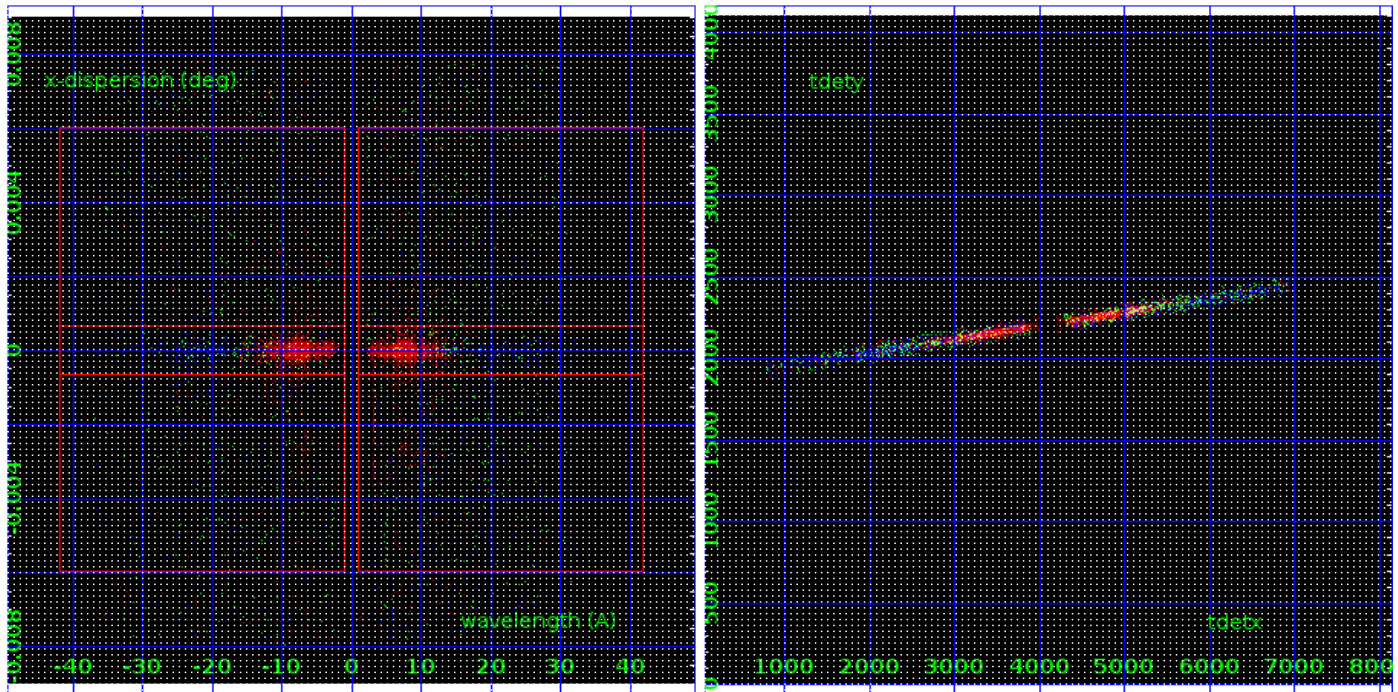
3.2 MEG Arm



MEG Order Sort 123

MEG Zero Order

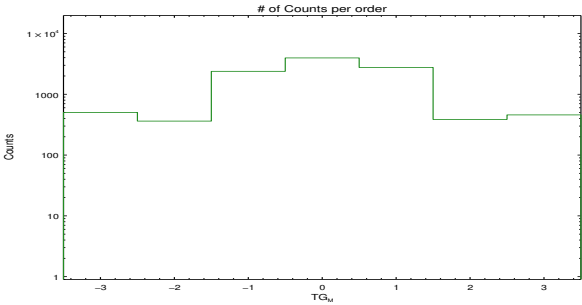
MEG Order Sort ALL

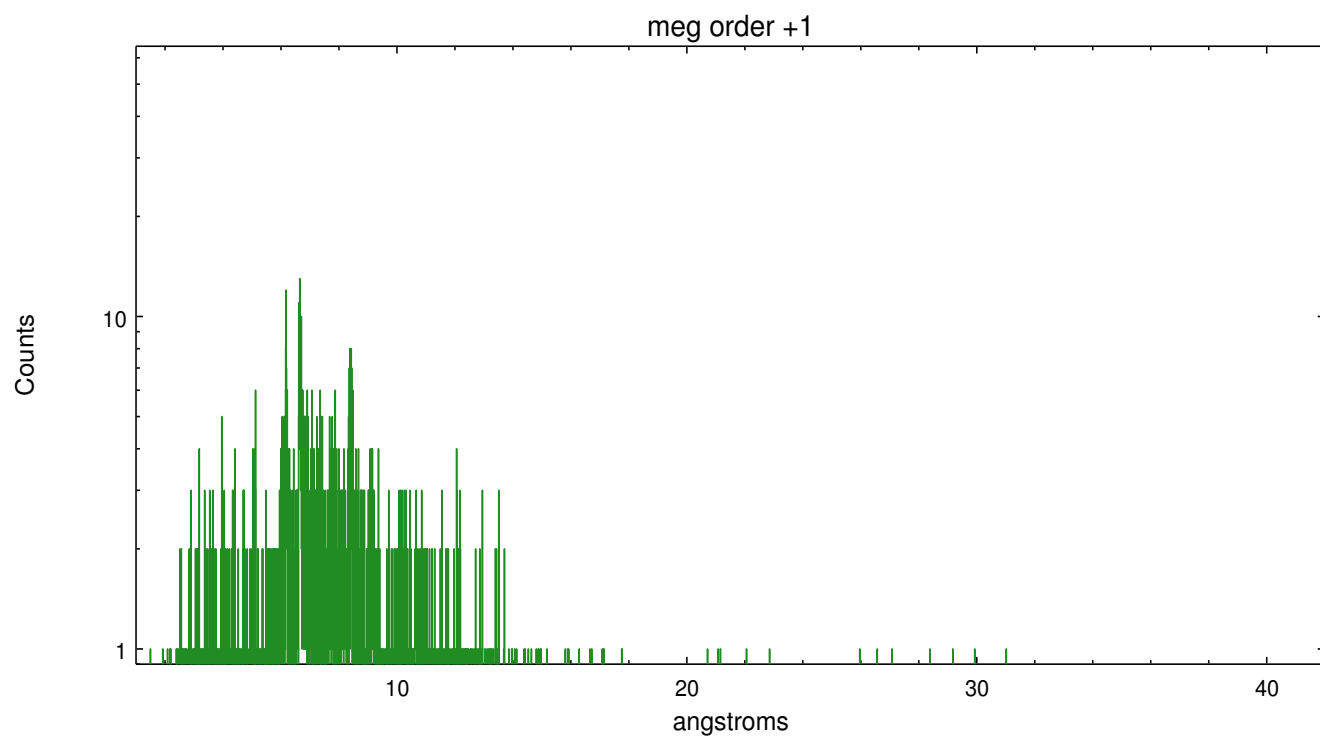
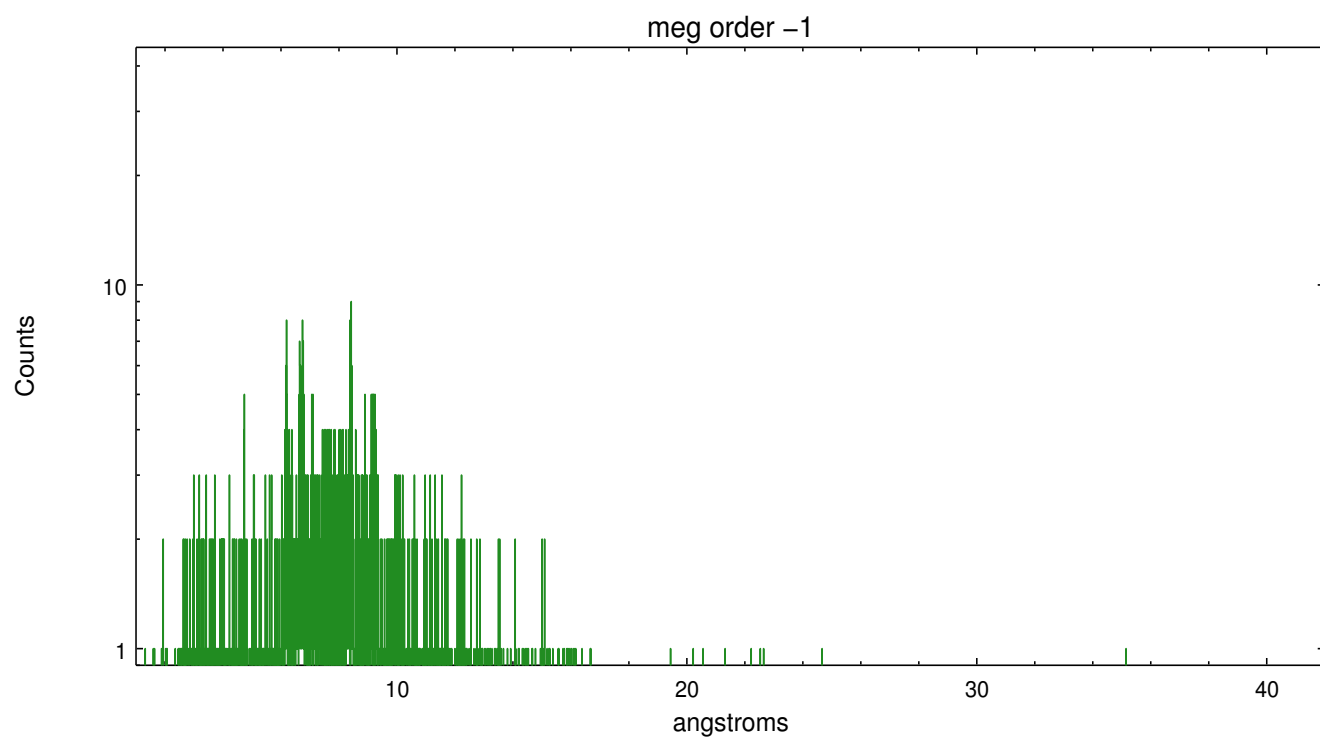


Spot Image MEG

Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	503	362	2384	3965	2763	386	458





A Summary

A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2016.08.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	28.187707873821

A.2 Comments

Warning: a bright off-axis source in field could cause some confusion in the dispersed spectra, at shorter wavelengths (2--4A) on the positive orders side.

phase/window constraint was met (phase ~ 0.94)