

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 5330 - L2 Version 4
Chandra X-Ray Center

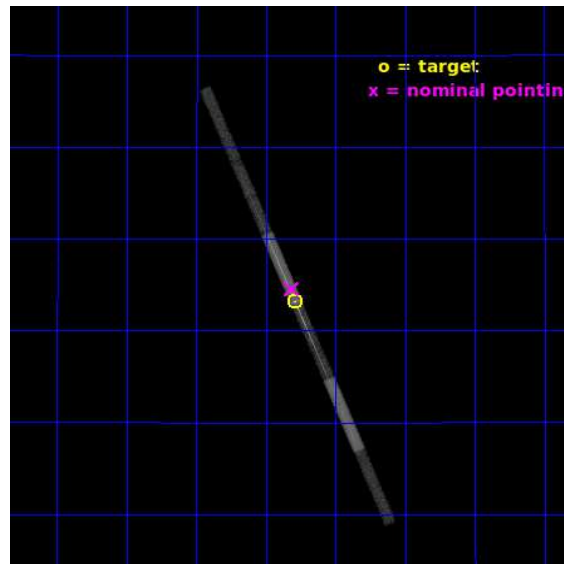
L2 Processing Date : Sep 26 2020

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1 Front

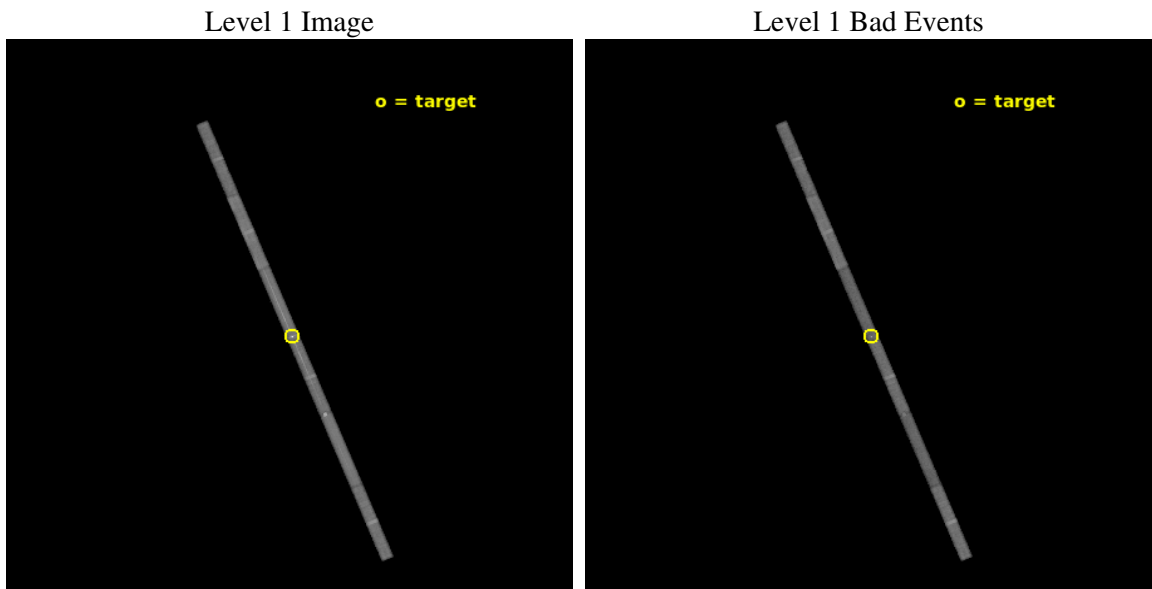
seq_num	700962	Sequence number
obs_id	5330	Observation id
title	Revealing the High Velocity Outflow in PG 1211+143	Proposal title
observer	James Reeves	Principal investigator
object	PG 1211+143	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	183.57375	Observer's specified target RA [deg]
dec_targ	14.053611	Observer's specified target Dec [deg]
ra_nom	183.5783685088	Nominal RA [deg]
dec_nom	14.076228698888	Nominal Dec [deg]
roll_nom	247.70822962763	Nominal Roll [deg]
revision	4	Processing version of data
ontime	45189.199230433	Sum of GTIs [s]
livetime	42686.547907404	Livetime [s]
ontime4	45189.199230433	Sum of GTIs [s]
ontime5	45189.199230433	Sum of GTIs [s]
ontime6	45189.199230433	Sum of GTIs [s]
ontime7	45189.199230433	Sum of GTIs [s]
ontime8	45189.199230433	Sum of GTIs [s]
ontime9	45189.199230433	Sum of GTIs [s]
l2events	112027	Number of level 2 events



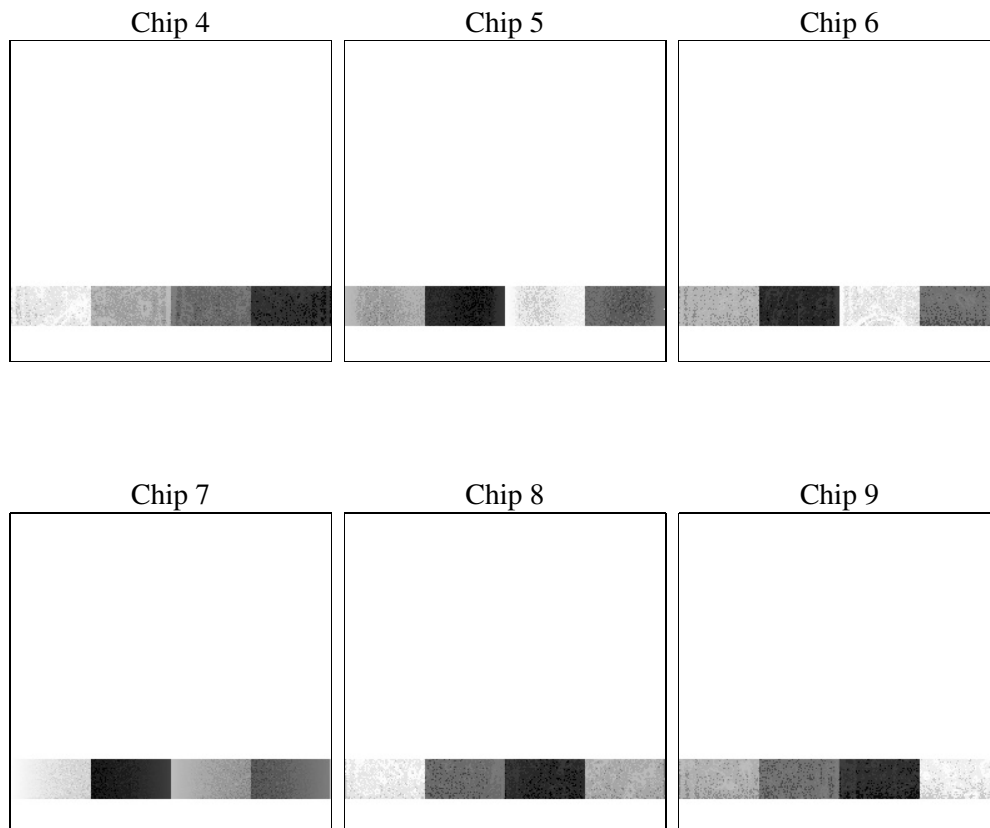
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	45000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	45189.199230433	Sum of GTIs [s]
caldbver	4.9.2	 	ontime4	45189.199230433	Sum of GTIs [s]
date	2020-09-26T20:48:23	Date and time of file creation	ontime5	45189.199230433	Sum of GTIs [s]
revision	4	Processing version of data	ontime6	45189.199230433	Sum of GTIs [s]
			ontime7	45189.199230433	Sum of GTIs [s]
			ontime8	45189.199230433	Sum of GTIs [s]
			ontime9	45189.199230433	Sum of GTIs [s]
			l1events	425612	Number of level 1 events
			tgmethod	TGDETECT	Method used to create src1a file
			zpc_pos	(4130.12, 3031.01)	grade sky pixel position

2.1.4 Events

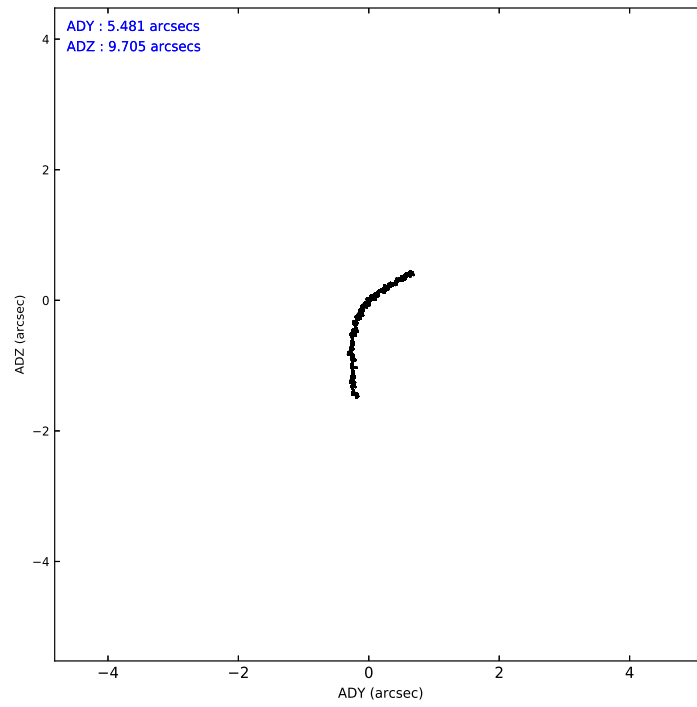
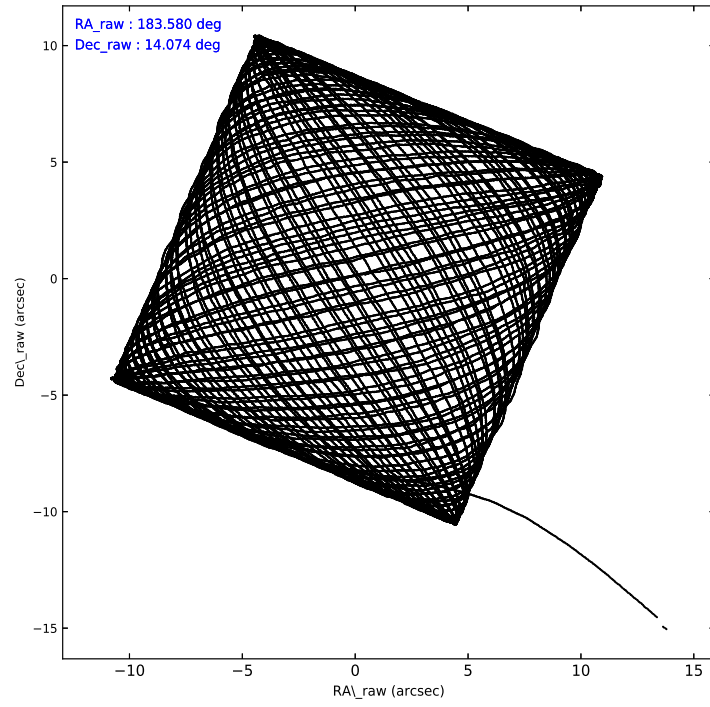
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	65240	74602	64347	89690	79019	52714
rejected events	58351	37606	51086	36266	64519	46475
rejected %	89%	50%	79%	40%	81%	88%

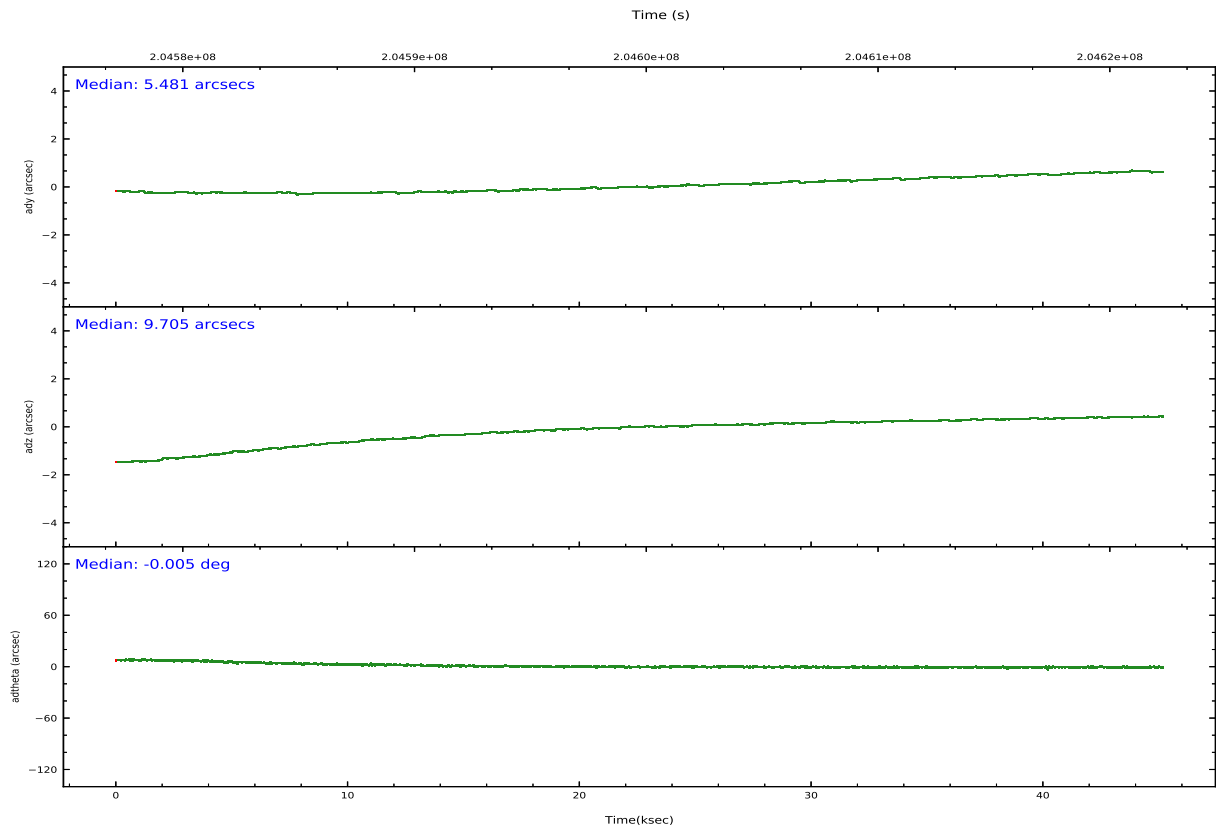
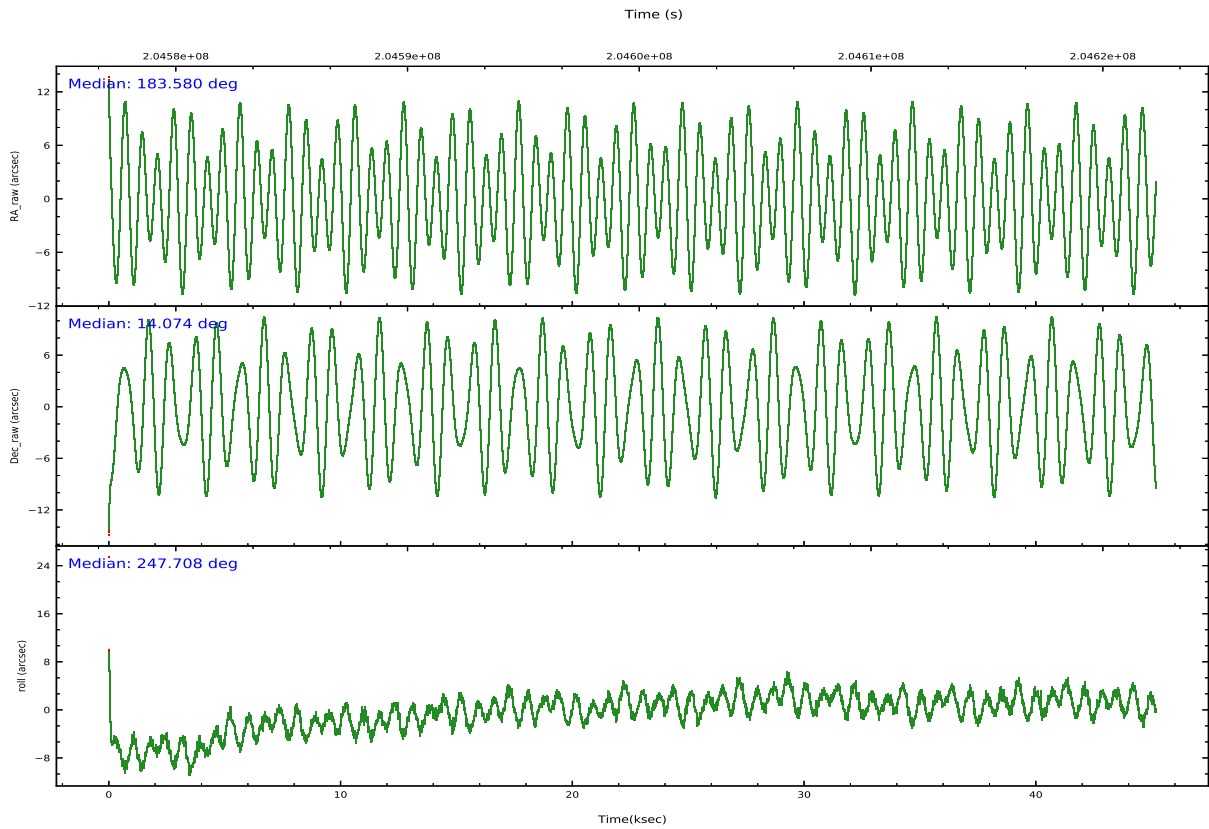
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	2549	8696	8051	11325	4217	2394
	3%	11%	12%	12%	5%	4%
grade 1 events	20	822	20	192	23	15
	0%	1%	0%	0%	0%	0%
grade 2 events	1379	8859	1746	12451	2736	1018
	2%	11%	2%	13%	3%	1%
grade 3 events	1117	3287	1256	6205	1851	1034
	1%	4%	1%	6%	2%	1%
grade 4 events	1015	3094	1180	5964	1726	982
	1%	4%	1%	6%	2%	1%
grade 5 events	1859	6127	1852	6030	2448	1881
	2%	8%	2%	6%	3%	3%
grade 6 events	1088	15353	1273	18494	4500	1021
	1%	20%	1%	20%	5%	1%
grade 7 events	56213	28364	48969	29029	61518	44369
	86%	38%	76%	32%	77%	84%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-456789	ACIS-456789	Obspar file type	PREDICTED	ACTUAL
Grating	LETG	LETG	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	183.576275	183.5783685088	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	14.100567	14.076228698888	Subarray start row	113	113
[deg] Pointing Roll	247.557528	247.70822962763	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	0.7
[mm] SIM translation stage pos	-182.132523	-182.1370004450064			
[mm] SIM translation stage offset	-8	-7.995522138001405			
[s] Observation start time (MET)	204577302.184000	204575427.70642			
Observation start date	2004-06-25T19:00:38	2004-06-25T18:30:27			
[s] Observation end time (MET)	204622302.184000	204623974.27108			
Observation end date	2004-06-26T07:30:38	2004-06-26T07:59:34			
Read mode	TIMED	TIMED			

2.3 Aspect





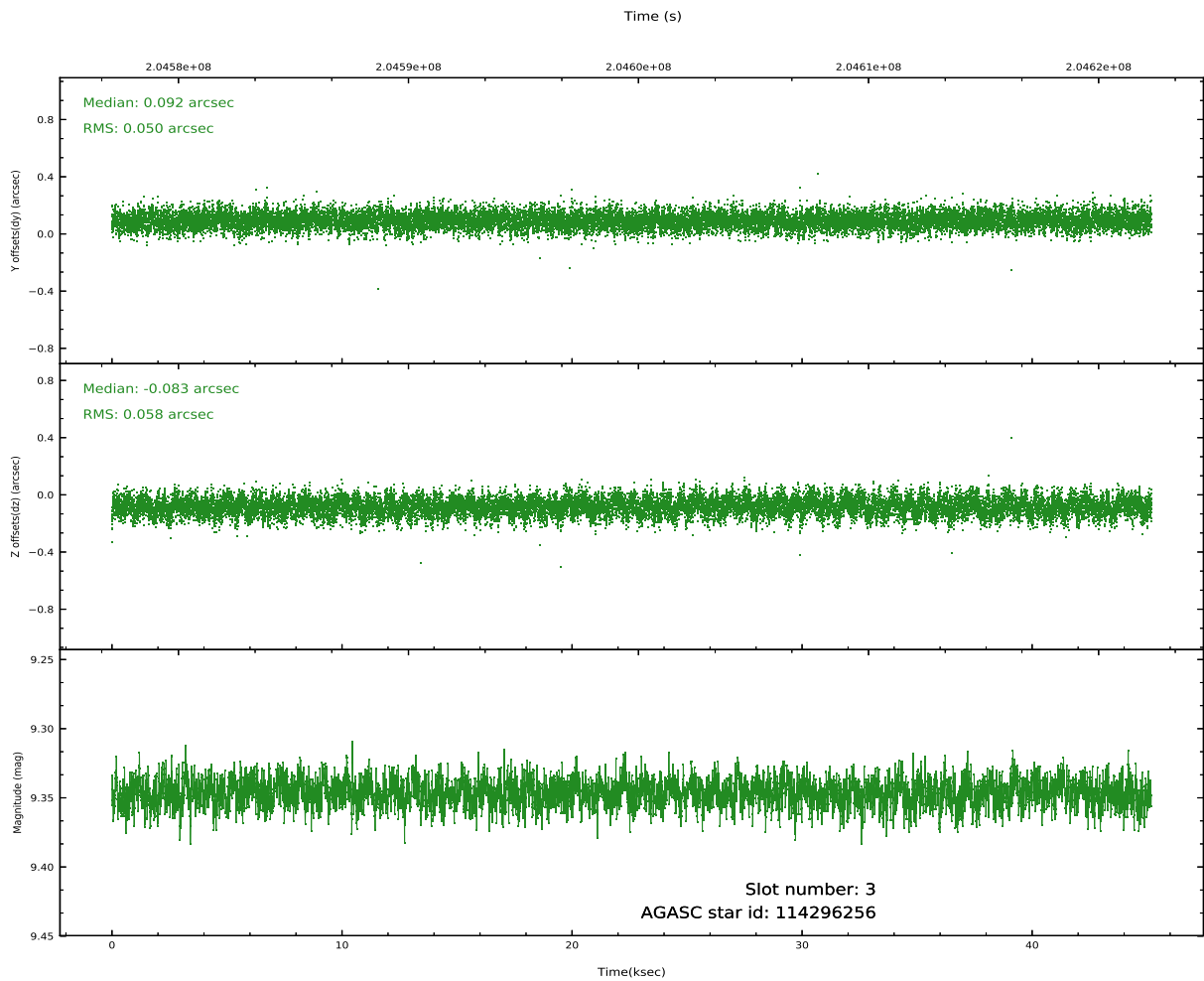
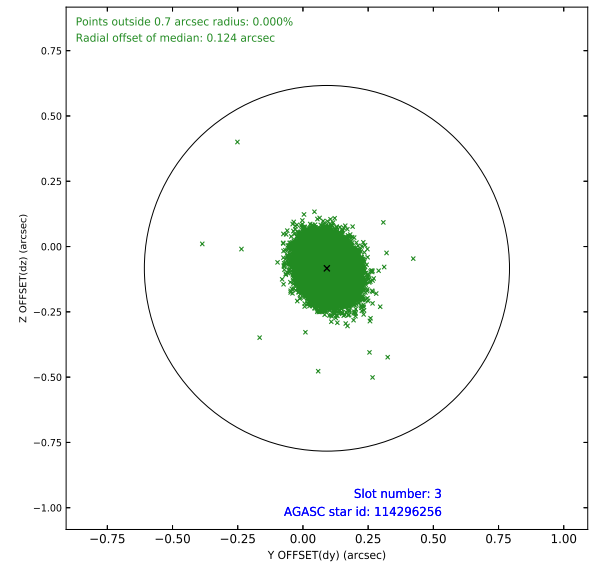
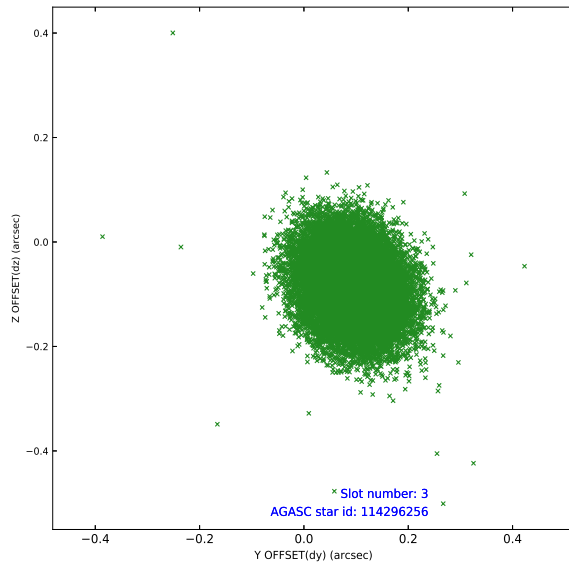
Slot Statistics

slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-4	7.17	11023	1.000	0.150	0.040	0.016	0.025	0.000000	0.000000	2155.81	13
1	FID		ACIS-S-5	7.23	11023	1.000	-0.200	0.024	0.011	0.018	0.000000	0.000000	-1810.74	6
2	FID		ACIS-S-6	7.40	11022	1.000	0.021	-0.050	0.010	0.017	0.000000	0.000000	403.94	650
3	GUIDE	used	114296256	9.35	22027	1.000	0.092	-0.083	0.081	0.132	182.985406	14.017213	1063.56	-1793
4	GUIDE	used	114297536	9.25	22028	1.000	0.013	-0.002	0.095	0.159	183.757120	14.264956	-787.81	357
5	GUIDE	used	114301168	9.22	22030	1.000	0.107	-0.118	0.090	0.146	182.996668	14.071189	868.78	-1830
6	GUIDE	used	114303096	9.30	22036	1.000	-0.015	-0.100	0.093	0.146	183.214020	14.515722	-899.68	-1737
7	GUIDE	used	115218912	8.29	22040	1.000	-0.205	0.302	0.081	0.128	184.400783	14.442830	-2240.95	2184

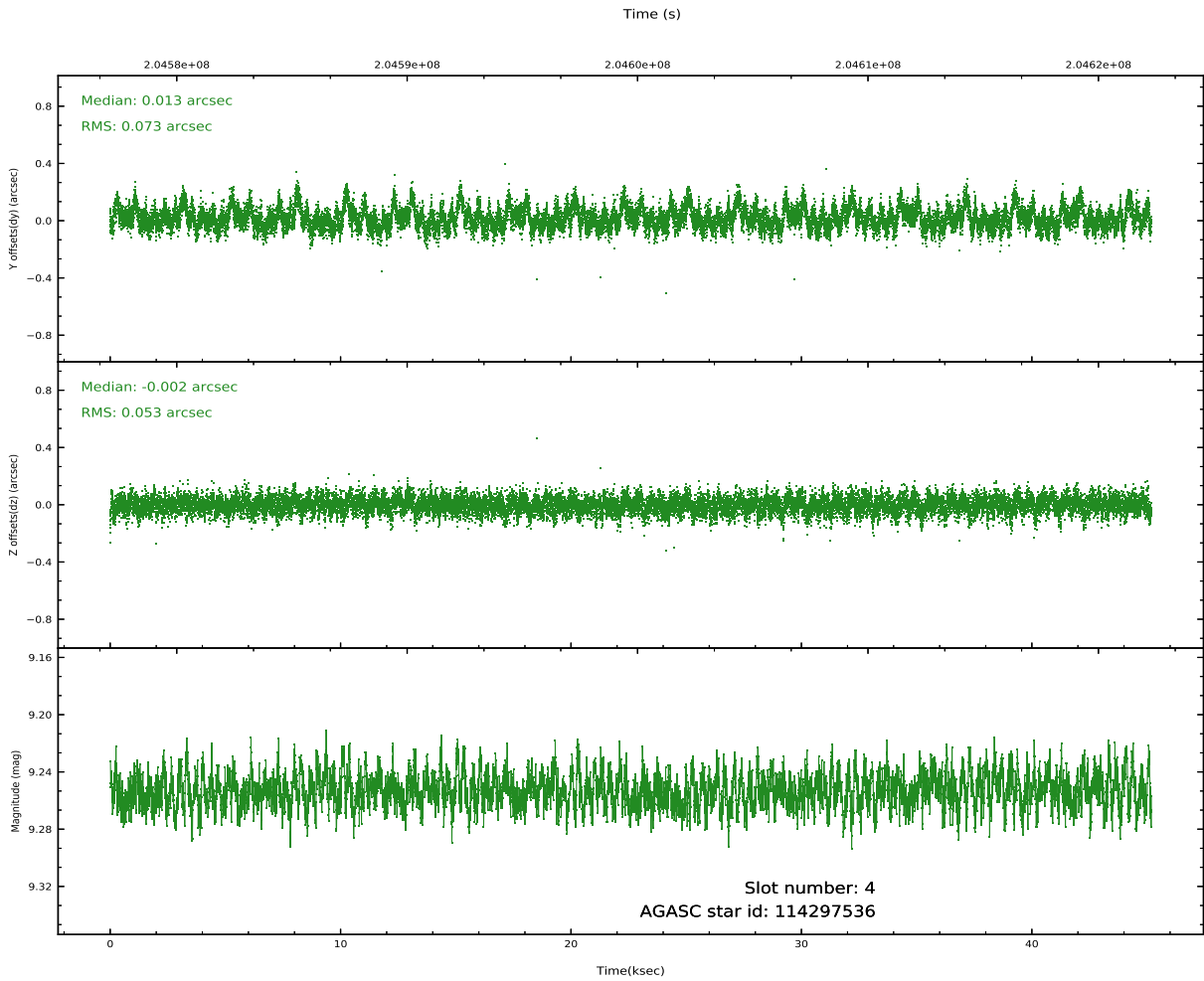
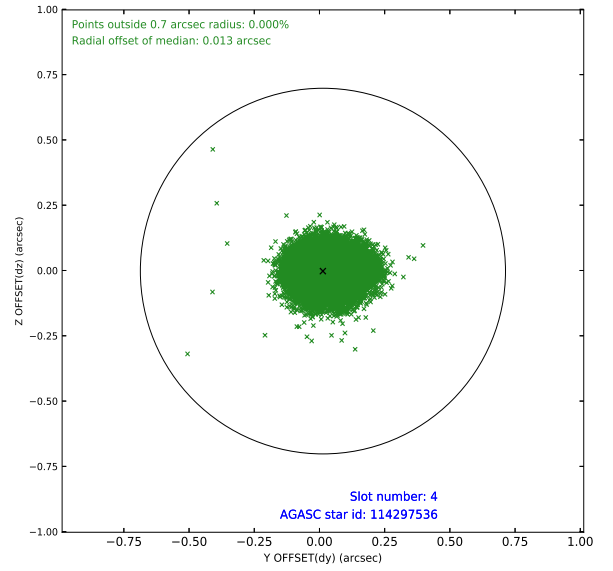
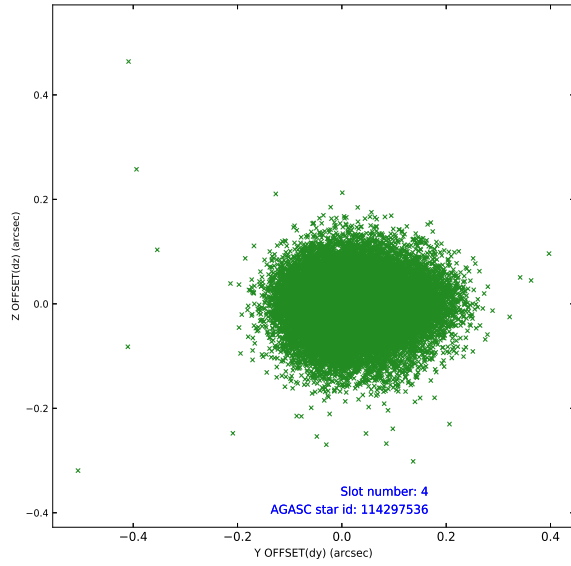
∞

2.4 Star Slots

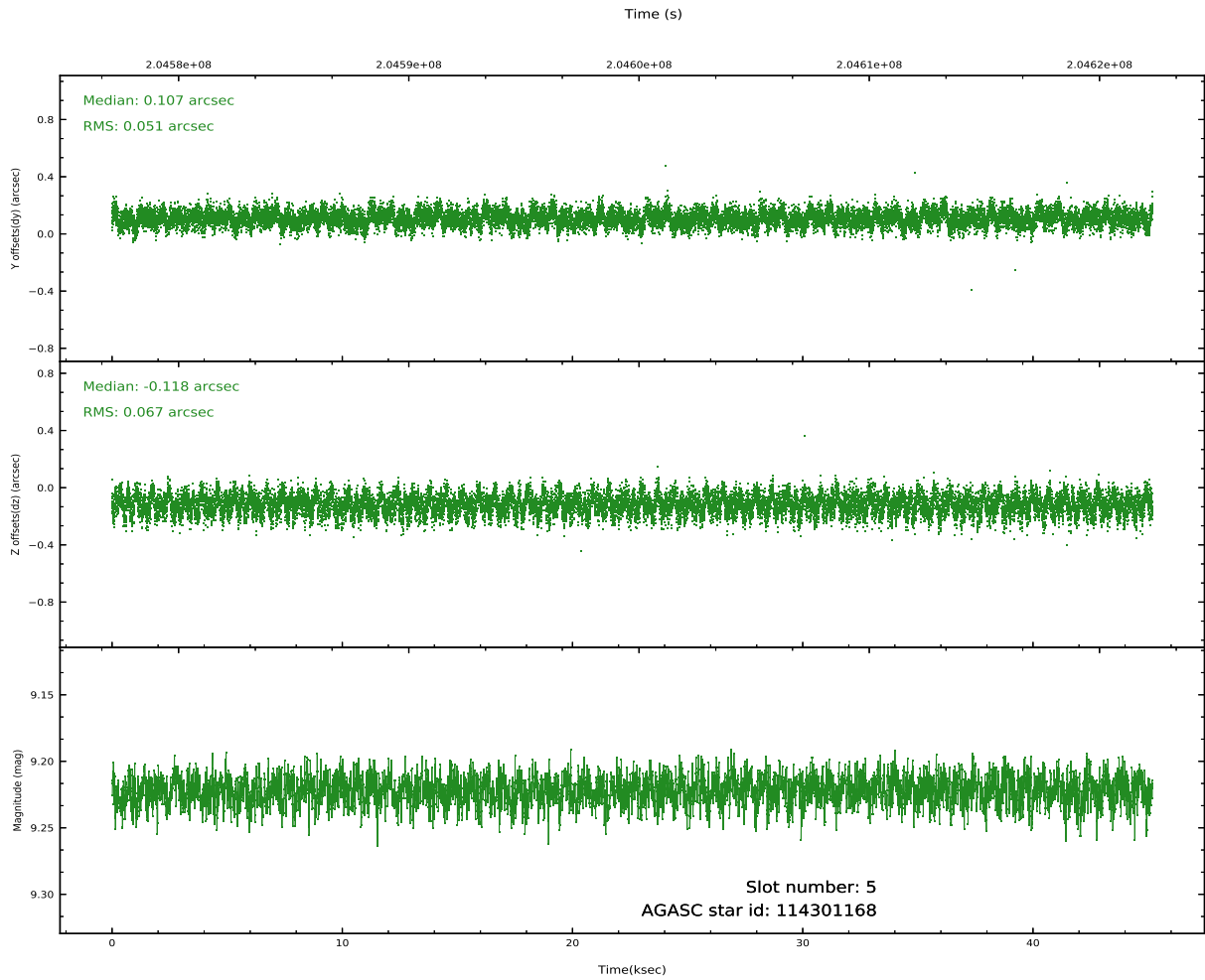
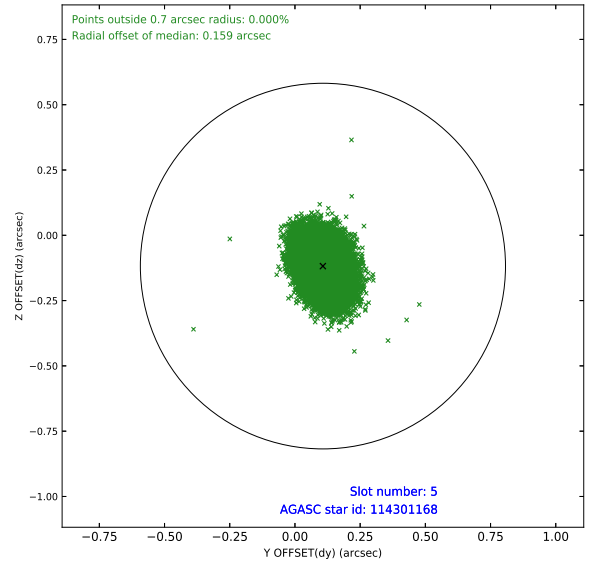
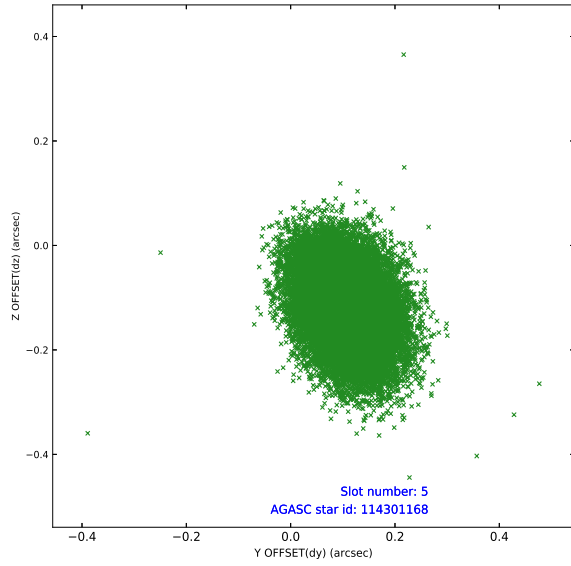
2.4.1 Slot 3



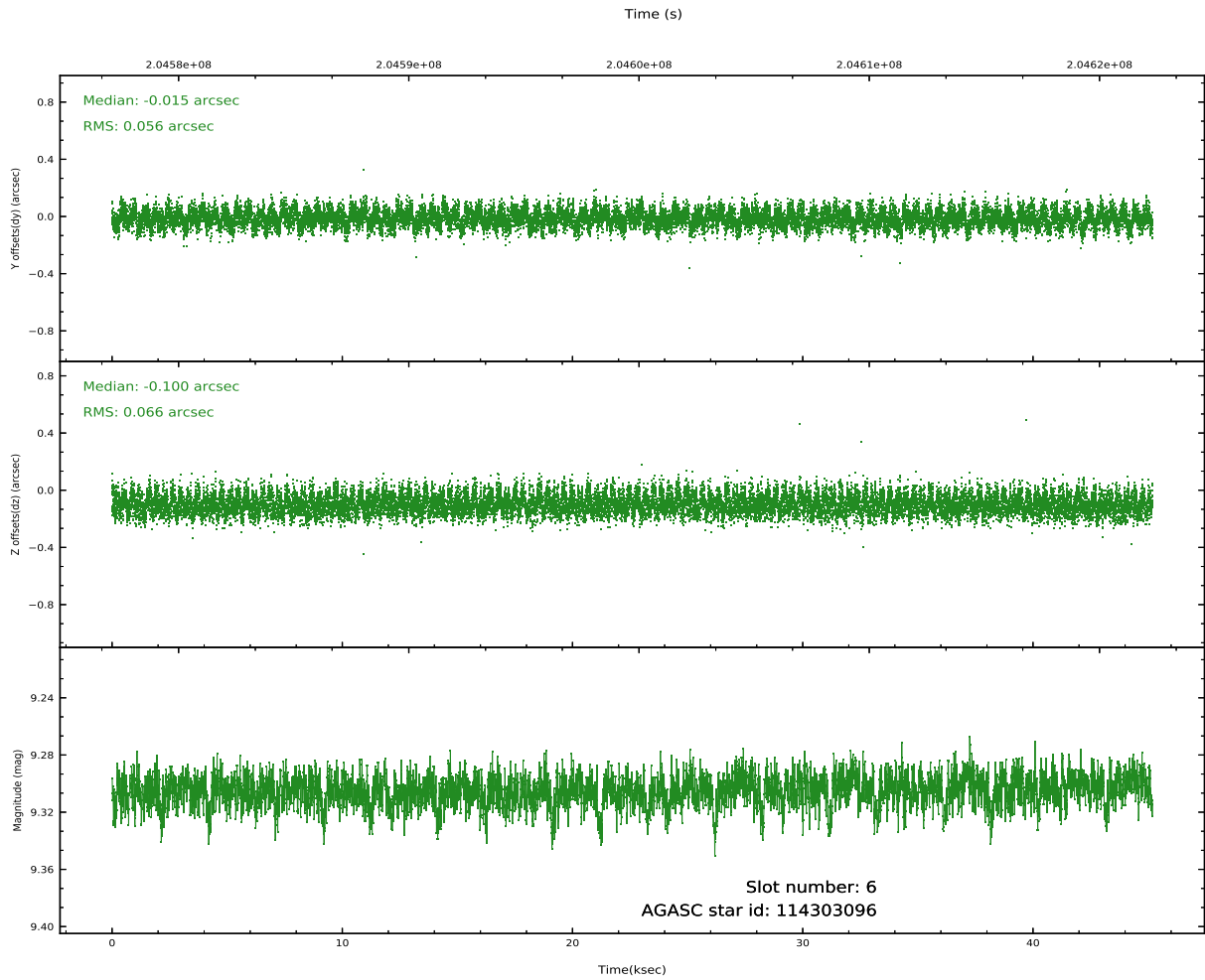
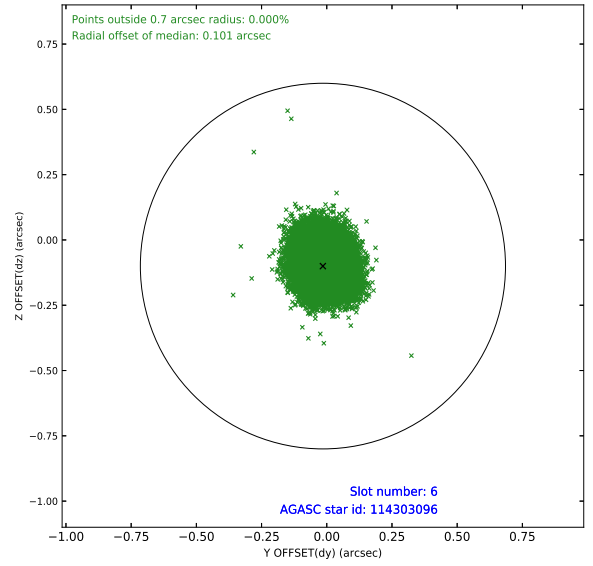
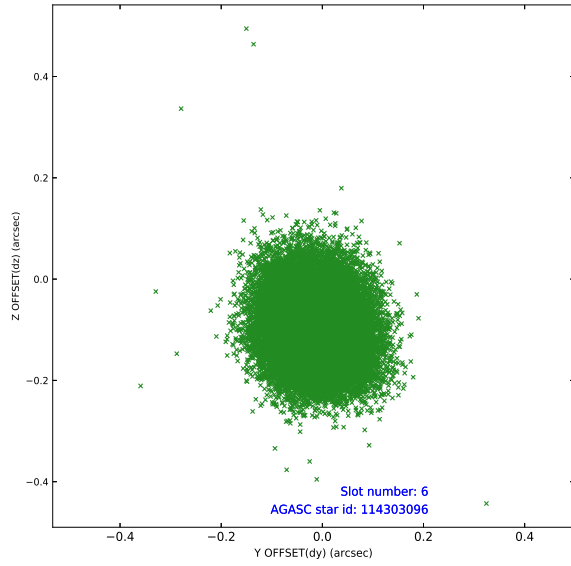
2.4.2 Slot 4



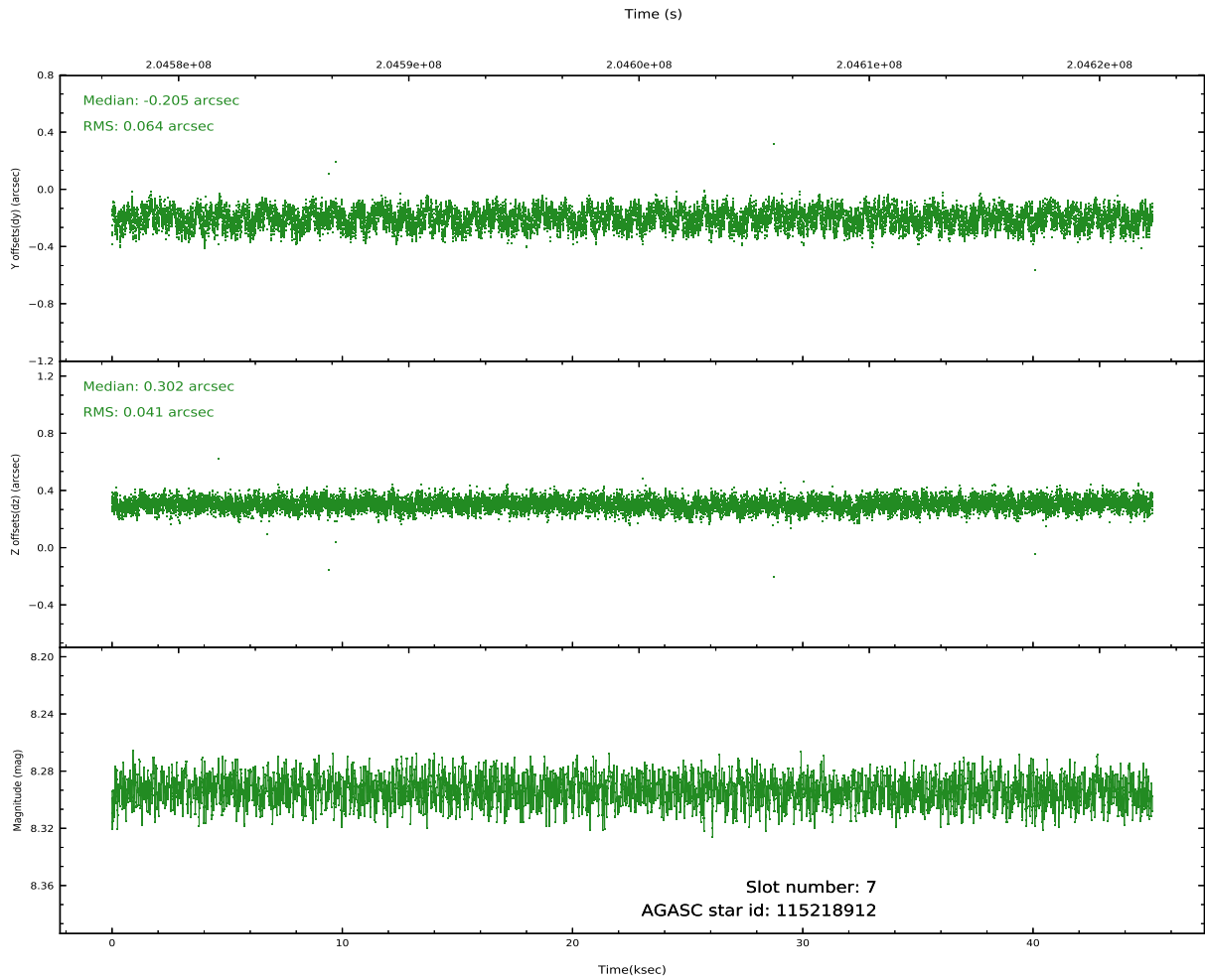
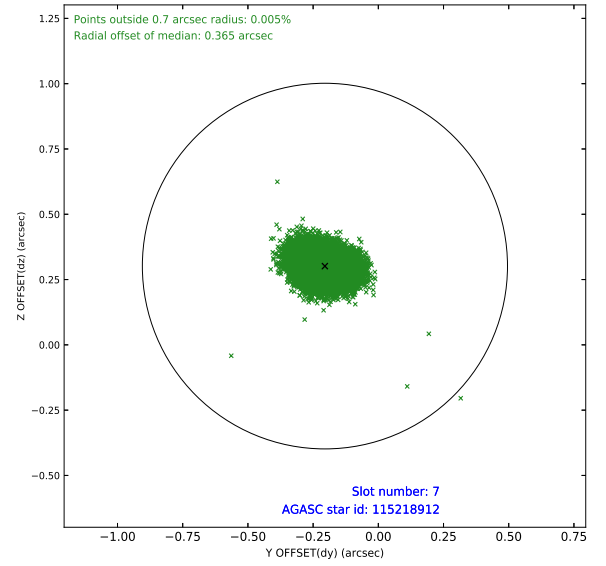
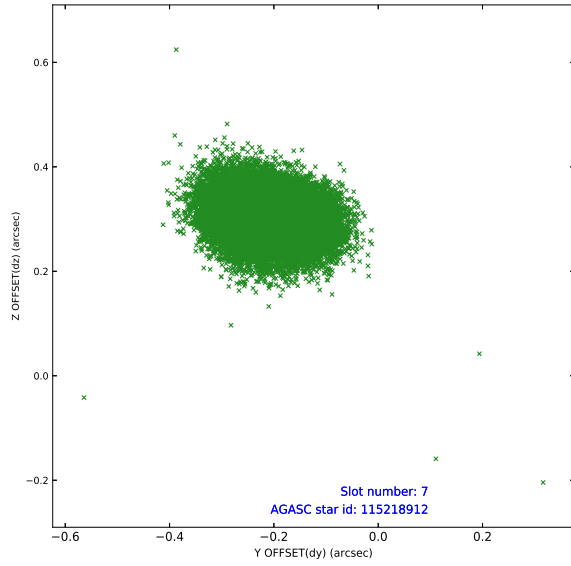
2.4.3 Slot 5



2.4.4 Slot 6

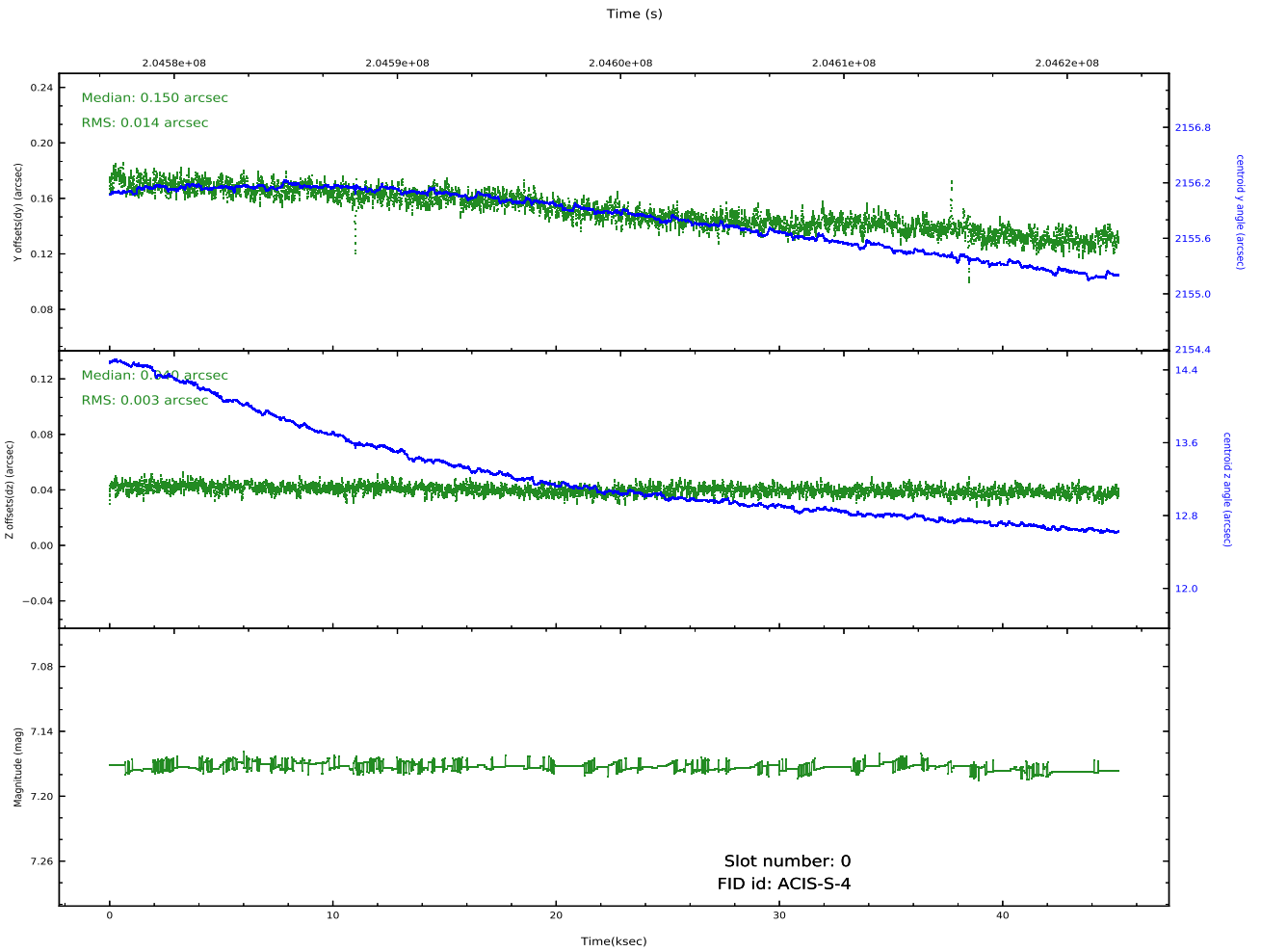
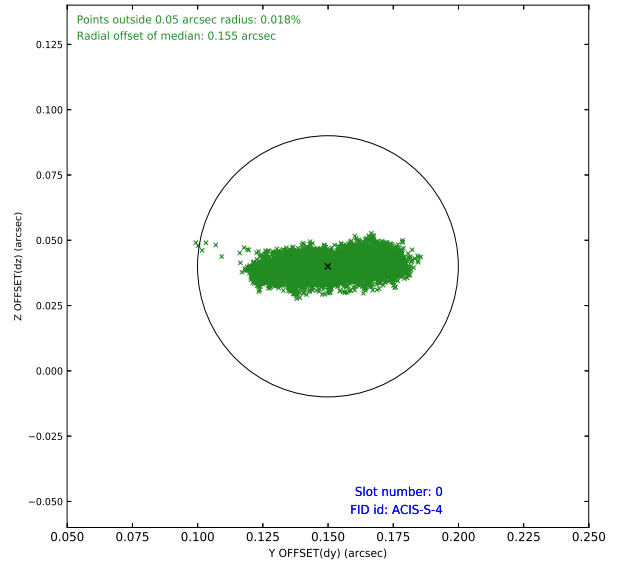
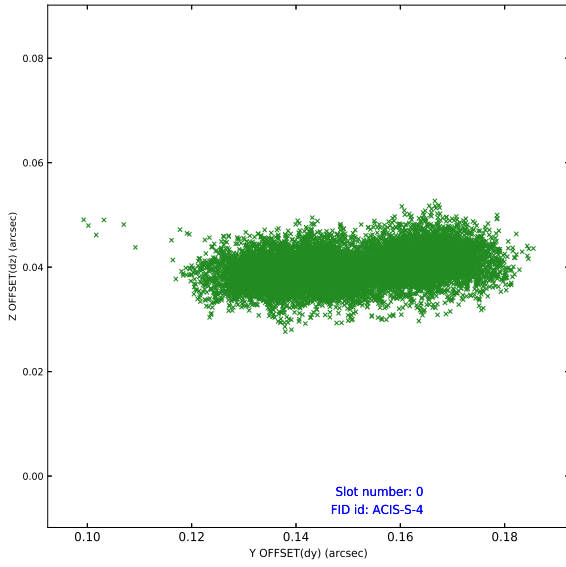


2.4.5 Slot 7

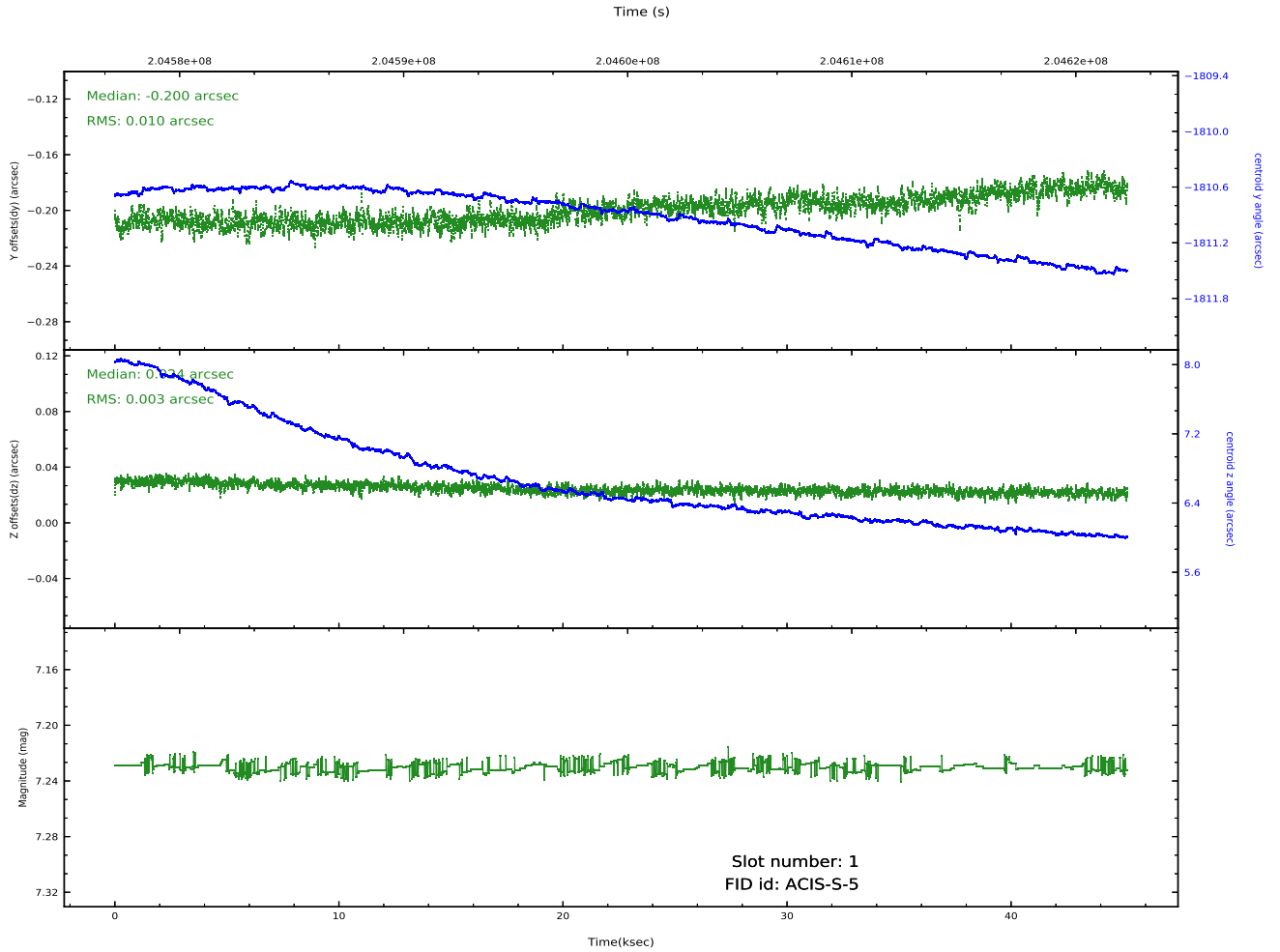
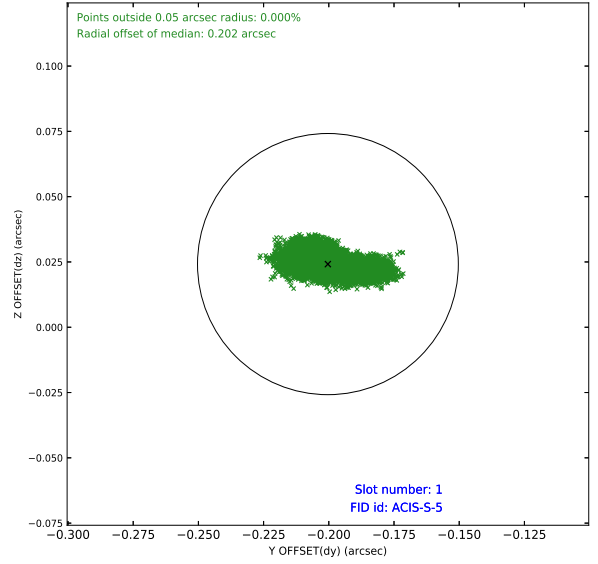
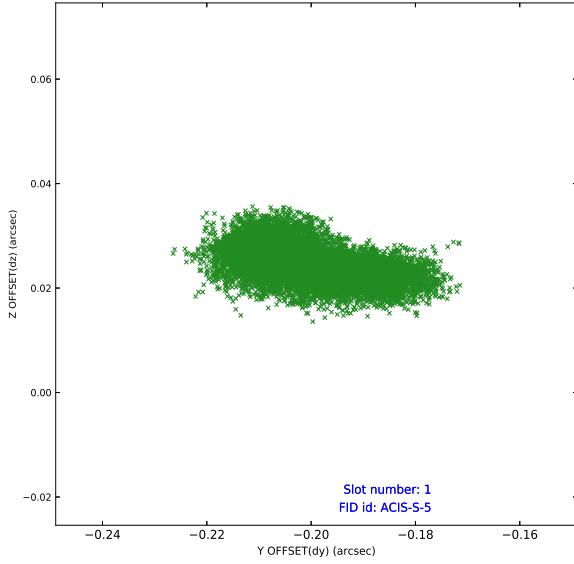


2.5 FID Slots

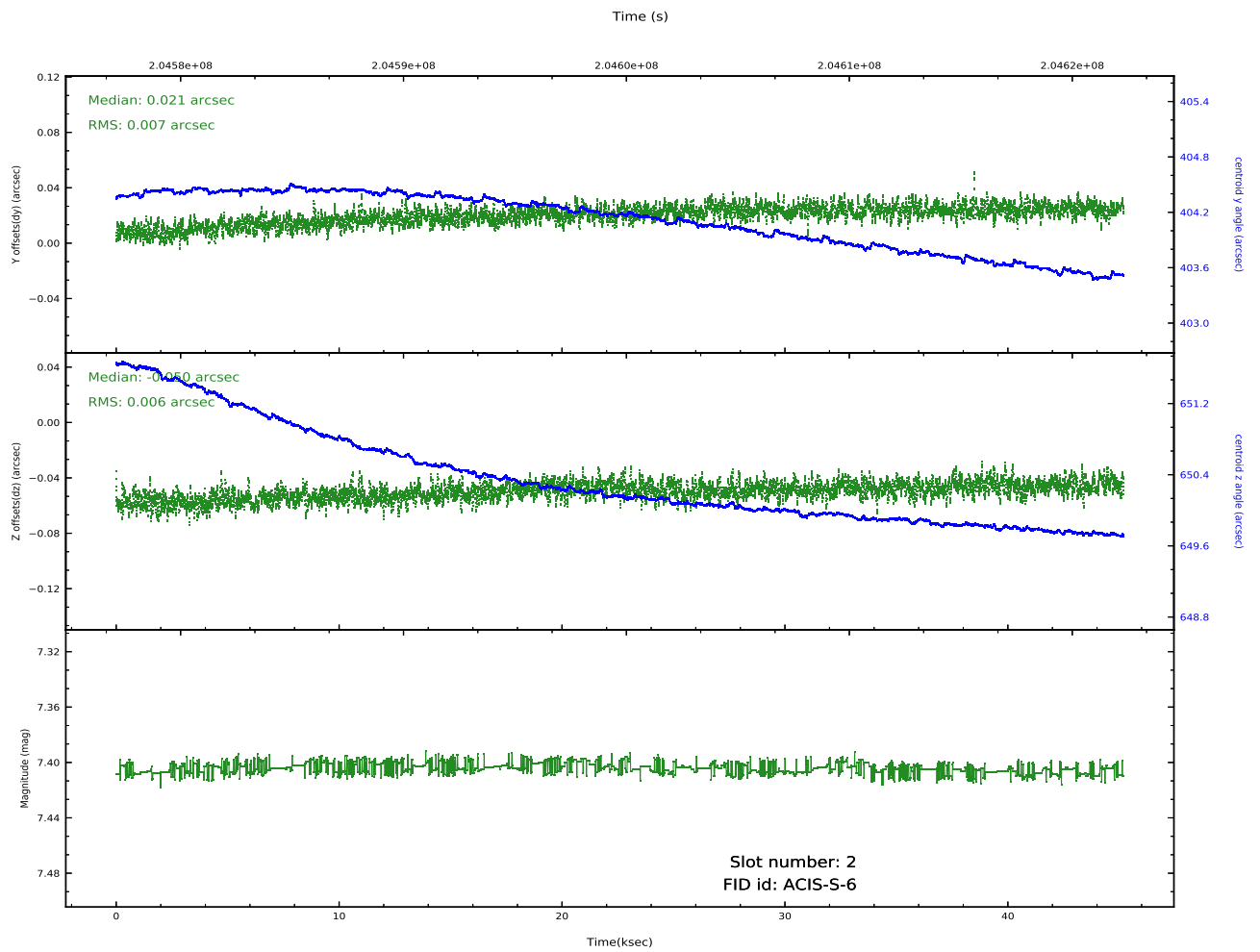
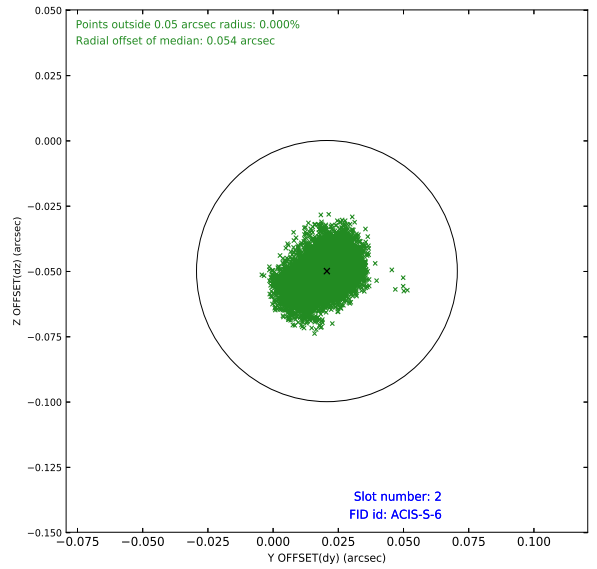
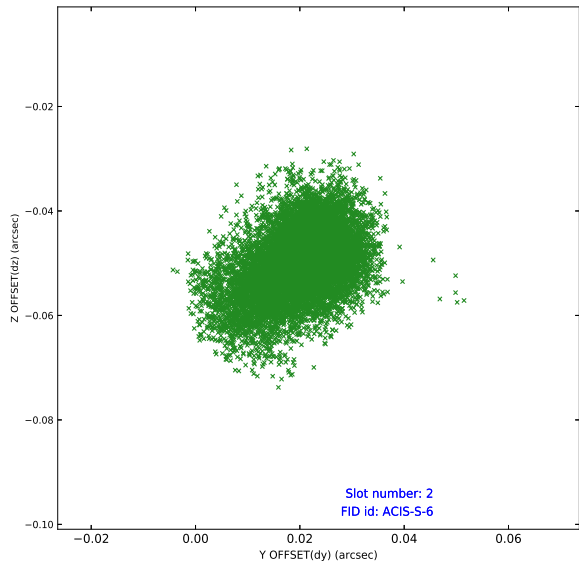
2.5.1 Slot 0



2.5.2 Slot 1

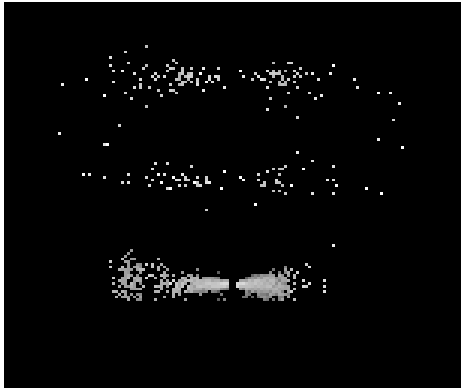


2.5.3 Slot 2

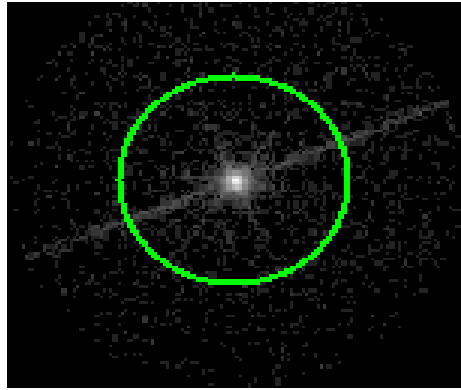


3 Gratings

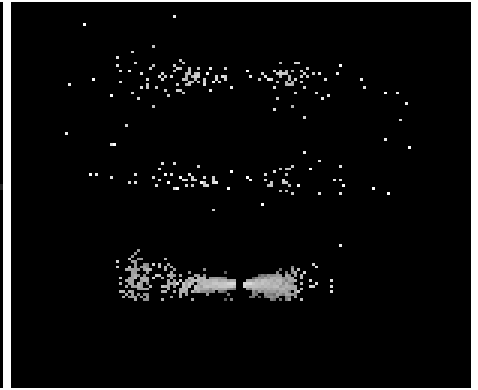
3.1 LETG Arm



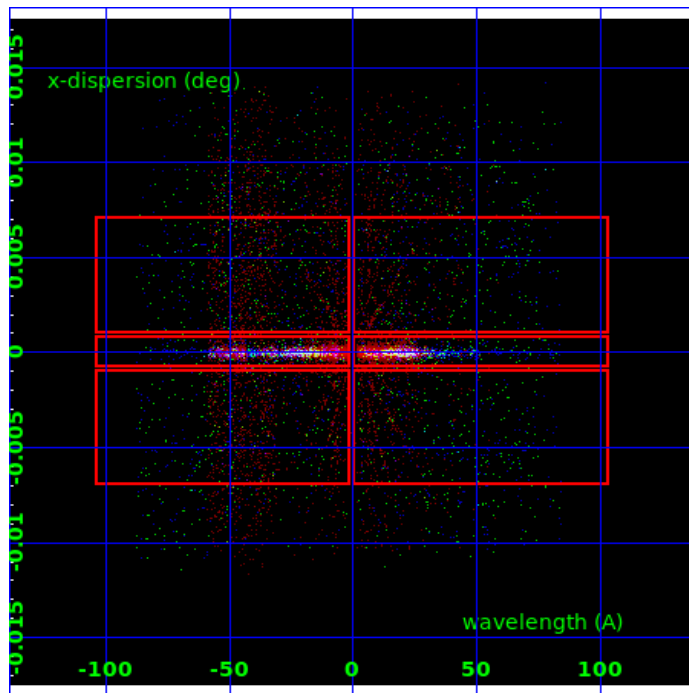
LETG Order Sort 123



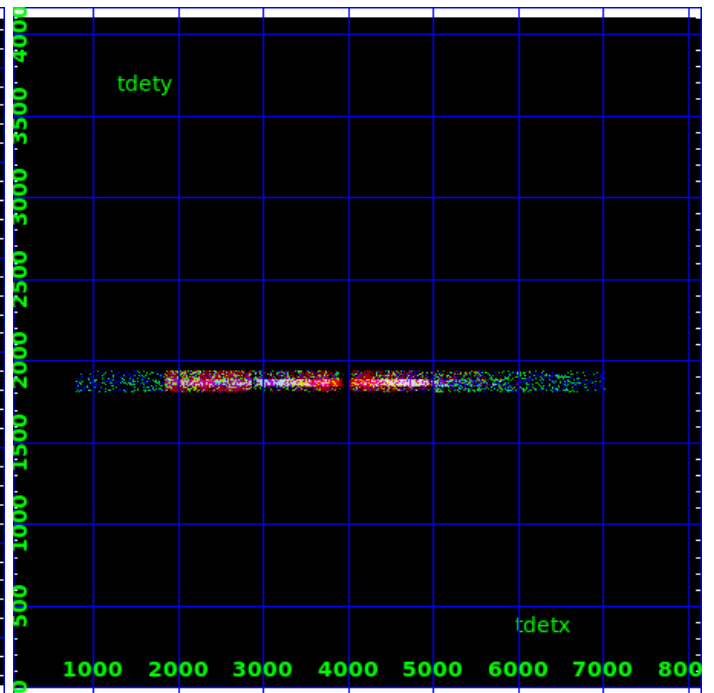
LETG Zero Order



LETG Order Sort ALL

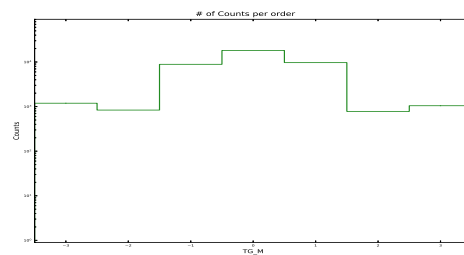


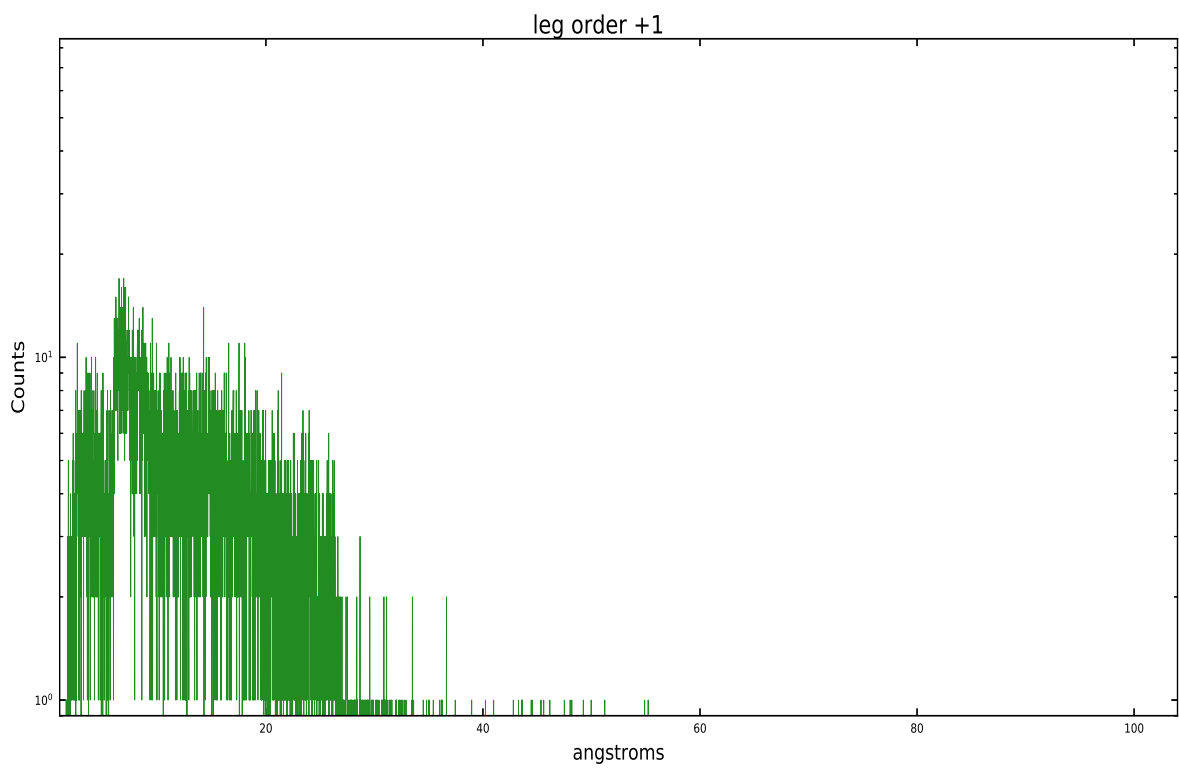
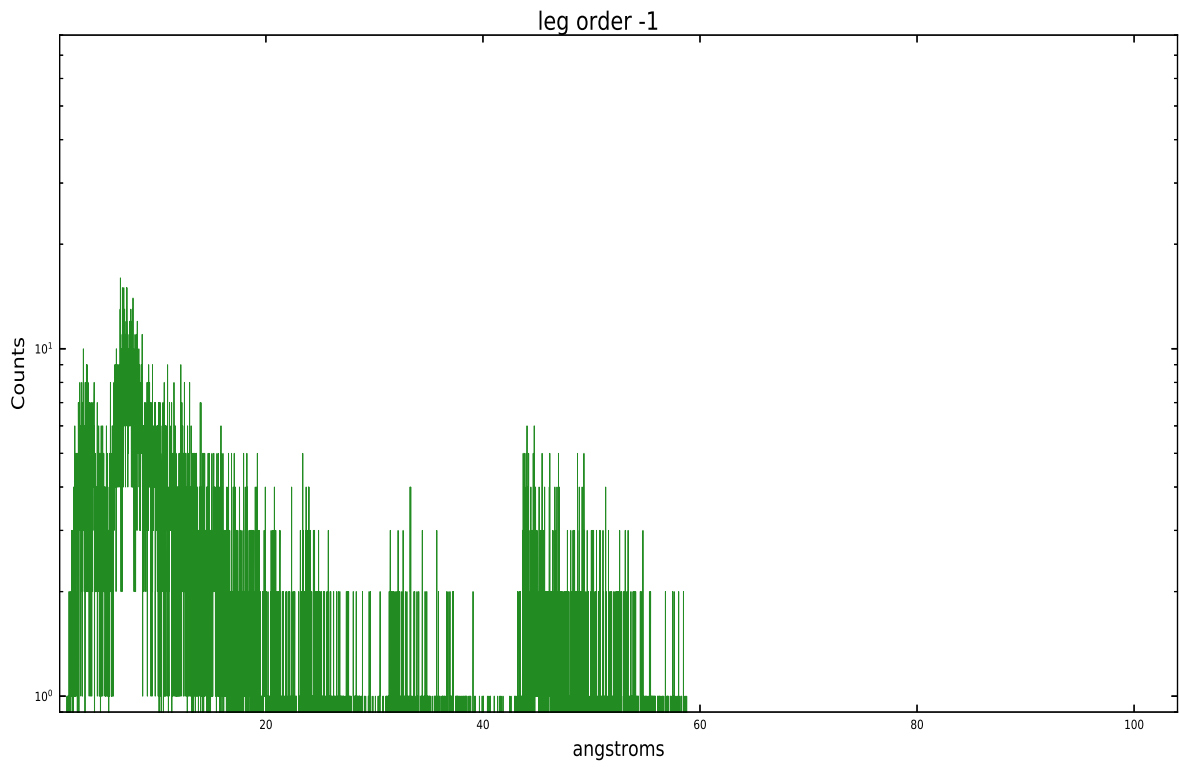
Spot Image LETG



Full Detector LETG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	1190	835	8867	18143	9684	780	1046





A Summary

A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2020.10.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	45.189

A.2 Comments