

V&V Reference Report

L2 ASCDS Version : 10.4.3

Observation 18728 - L2 Version 1
Chandra X-Ray Center

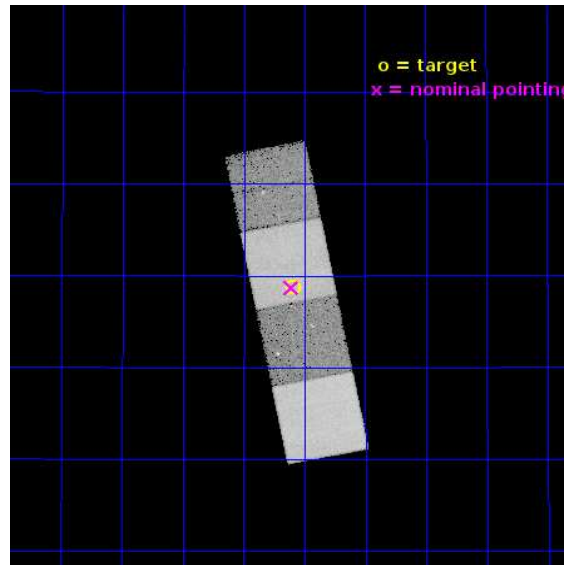
L2 Processing Date : Dec 19 2015

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1 Front

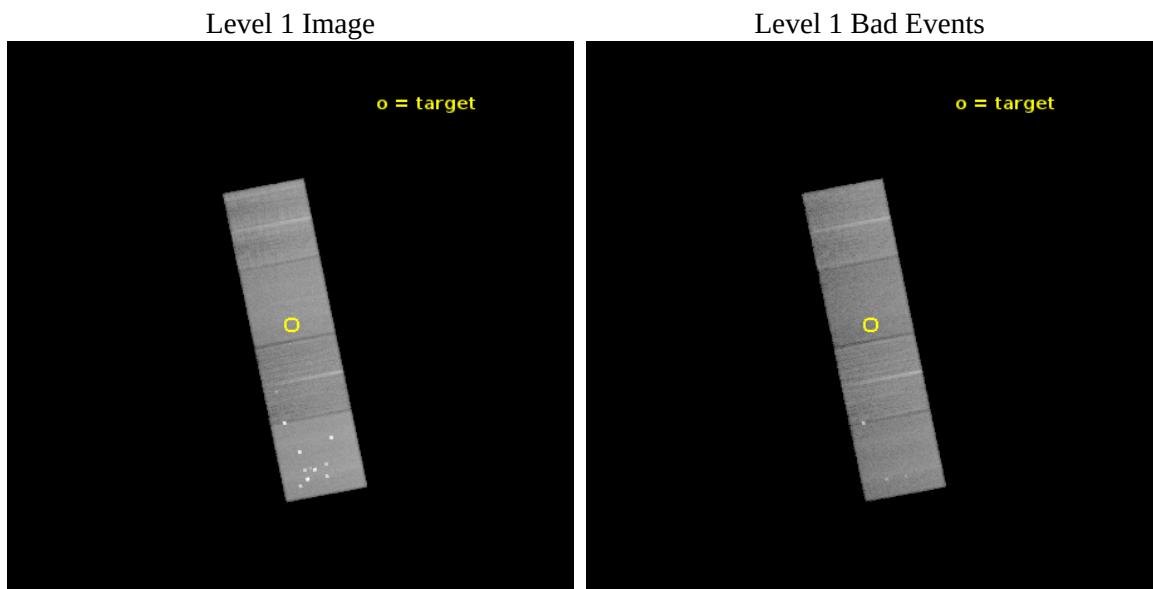
seq_num	201048	Sequence number
obs_id	18728	Observation id
title	Using high resolution x-ray spectra to probe accretion, abundances, and coronal activity in the young cluster IC 348	Proposal title
observer	Dr. David Huenemoerder	Principal investigator
object	IC 348	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	56.149167	Observer's specified target RA [deg]
dec_targ	32.145306	Observer's specified target Dec [deg]
ra_nom	56.151952150553	Nominal RA [deg]
dec_nom	32.144895057913	Nominal Dec [deg]
roll_nom	258.7948098255	Nominal Roll [deg]
revision	1	Processing version of data
ontime	30330.400233388	Sum of GTIs [s]
livetime	29934.111225423	Livetime [s]
ontime5	30330.400233388	Sum of GTIs [s]
ontime6	30327.259153128	Sum of GTIs [s]
ontime7	30330.400233388	Sum of GTIs [s]
ontime8	30330.400233388	Sum of GTIs [s]
l2events	255329	Number of level 2 events



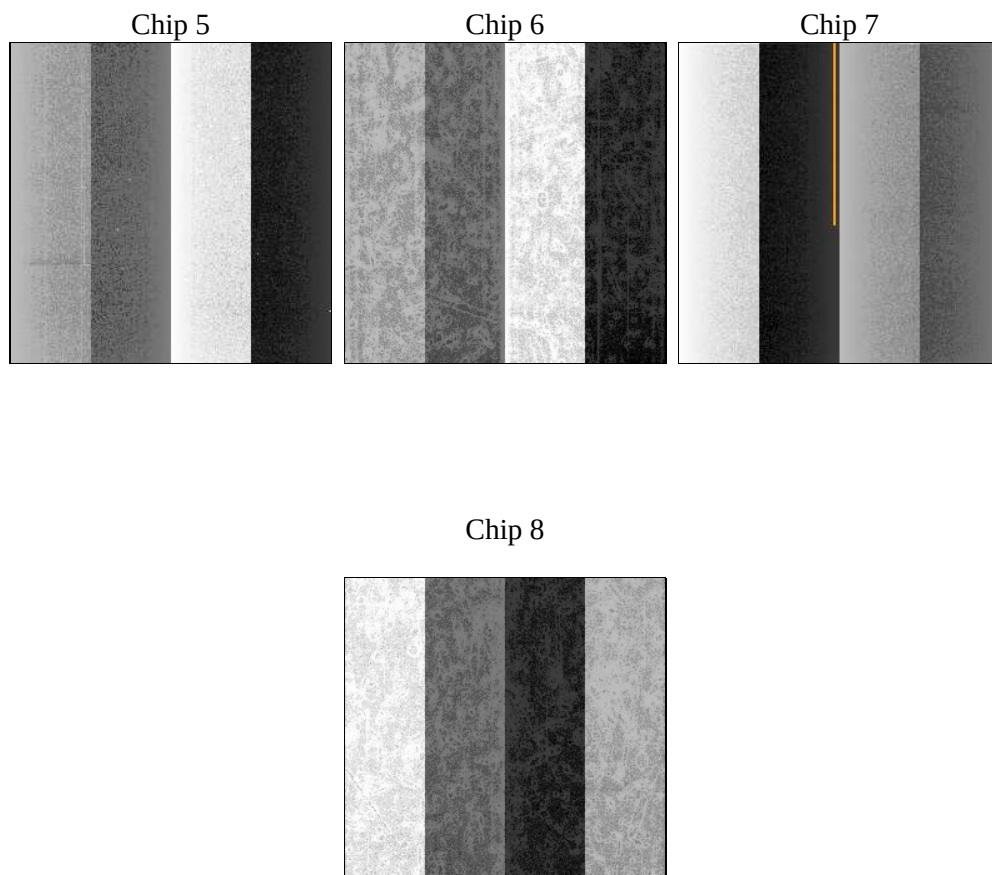
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	30268.078000	[s] Scheduled observation exposure time
ascdsver	10.4.3	Processing system revision	ontime	30330.400233388	Sum of GTIs [s]
caldsver	4.7.0	 	ontime5	30330.400233388	Sum of GTIs [s]
date	2015-12-19T05:34:03	Date and time of file creation	ontime6	30327.259153128	Sum of GTIs [s]
revision	1	Processing version of data	ontime7	30330.400233388	Sum of GTIs [s]
			ontime8	30330.400233388	Sum of GTIs [s]
			l1events	963176	Number of level 1 events
			tgmethod	TGDETECT	Method used to create src1a file
			zo_pos	(4192.19, 4088.95)	src1a sky pixel position

2.1.4 Events

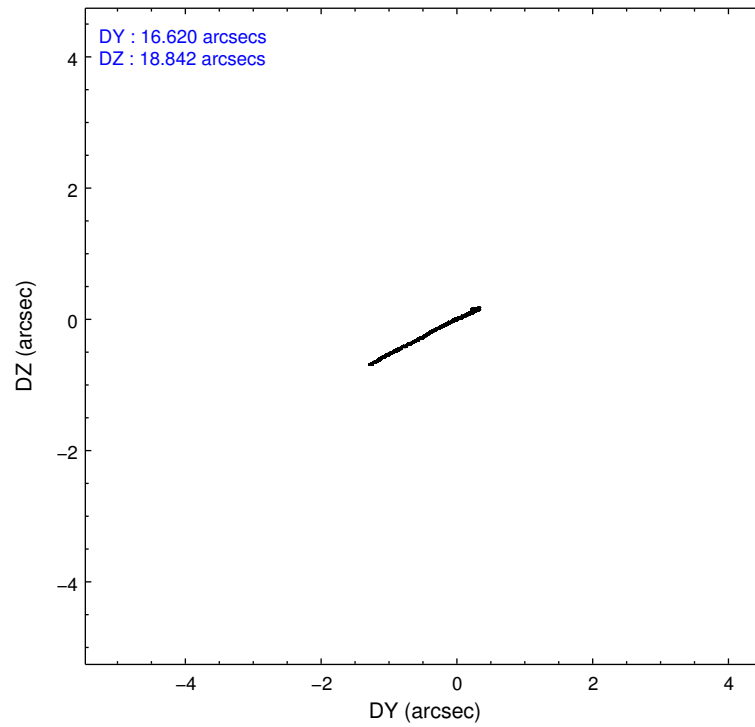
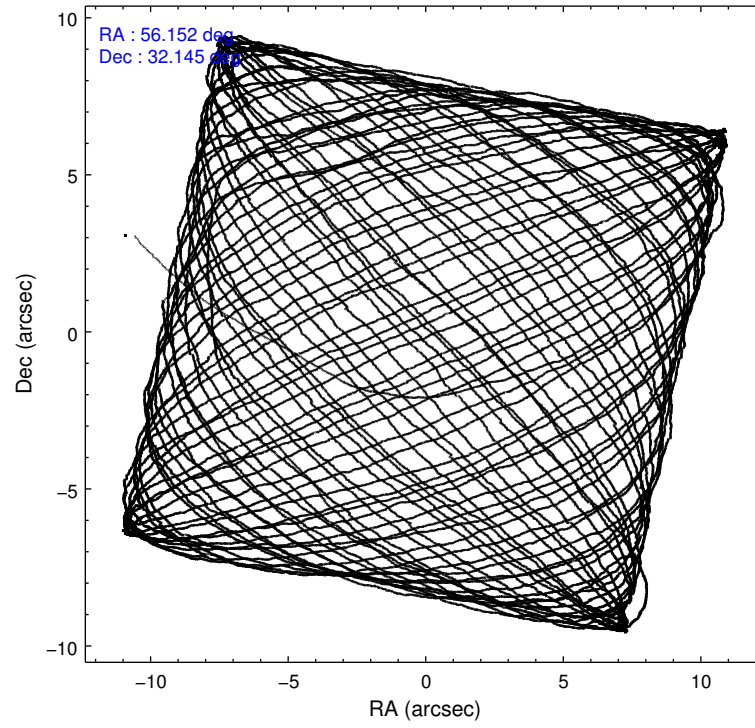
	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	334298	178117	227027	223734
rejected events	146857	156580	129902	167288
rejected %	43%	87%	57%	74%

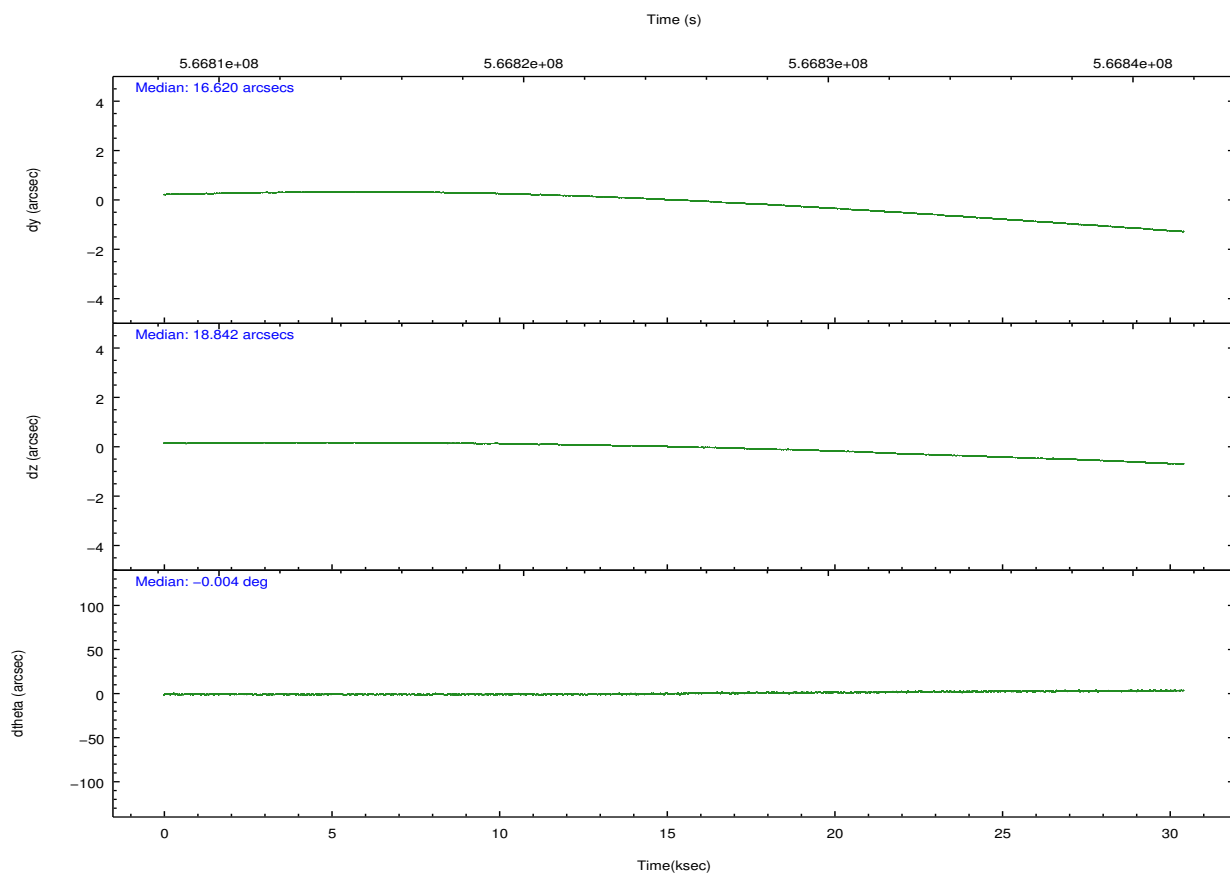
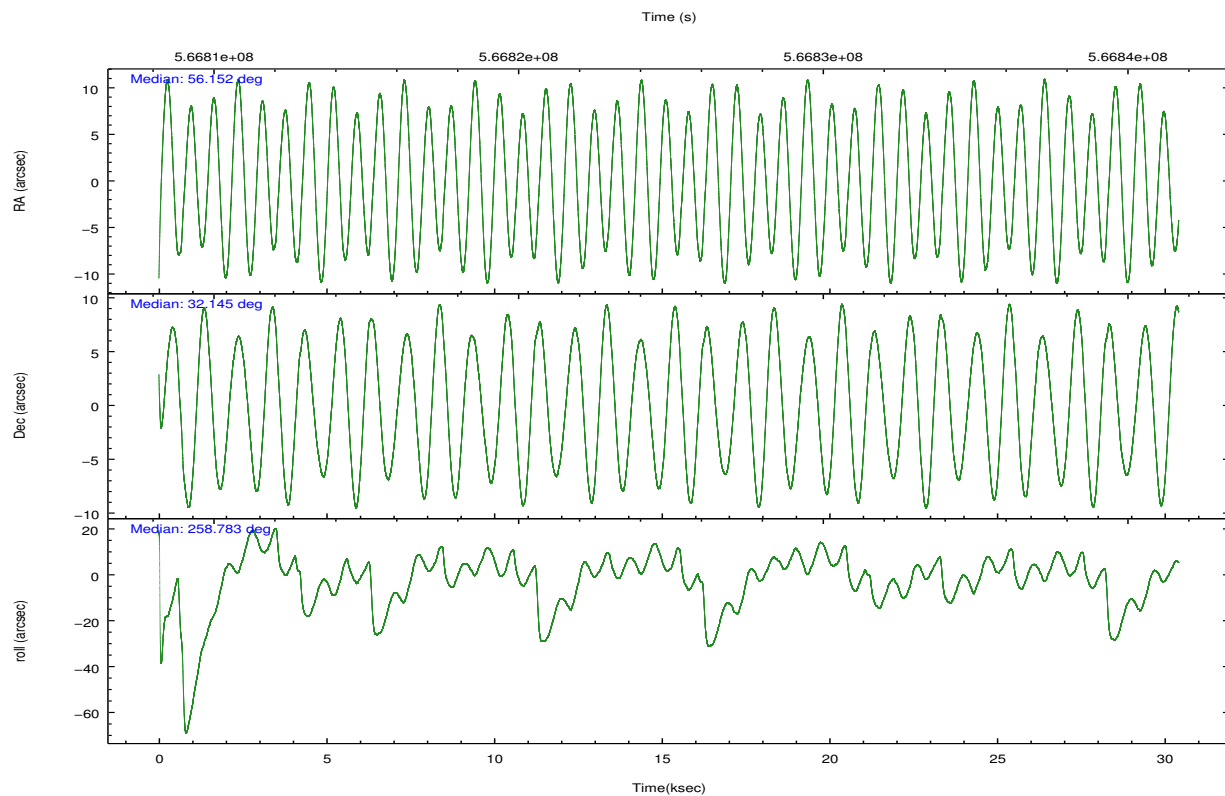
	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	50167	7703	8002	15932
	15%	4%	3%	7%
grade 1 events	1624	72	238	137
	0%	0%	0%	0%
grade 2 events	50023	4984	20337	13846
	14%	2%	8%	6%
grade 3 events	4449	1884	7517	5727
	1%	1%	3%	2%
grade 4 events	4186	1838	7303	5349
	1%	1%	3%	2%
grade 5 events	19710	8190	21645	12251
	5%	4%	9%	5%
grade 6 events	78654	5128	53982	15598
	23%	2%	23%	6%
grade 7 events	125485	148318	108003	154894
	37%	83%	47%	69%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-5678	ACIS-5678	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	56.141098	56.15195215055297	CCD I2 on	N	N
[deg] Pointing Dec	32.170745	32.14489505791266	CCD I3 on	N	N
[deg] Pointing Roll	258.643940	258.794809825502	CCD S0 on	O1	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)	566809862.184000	566808421.18512	CCD S5 on	O2	N
Observation start date	2015-12-18T07:09:54	2015-12-18T06:47:01	Number of optional ACIS chips dropped	2	2
[s] Observation end time (MET)	566840130.184000	566840356.08693	On-chip summing requested	N	N
Observation end date	2015-12-18T15:34:22	2015-12-18T15:39:16	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



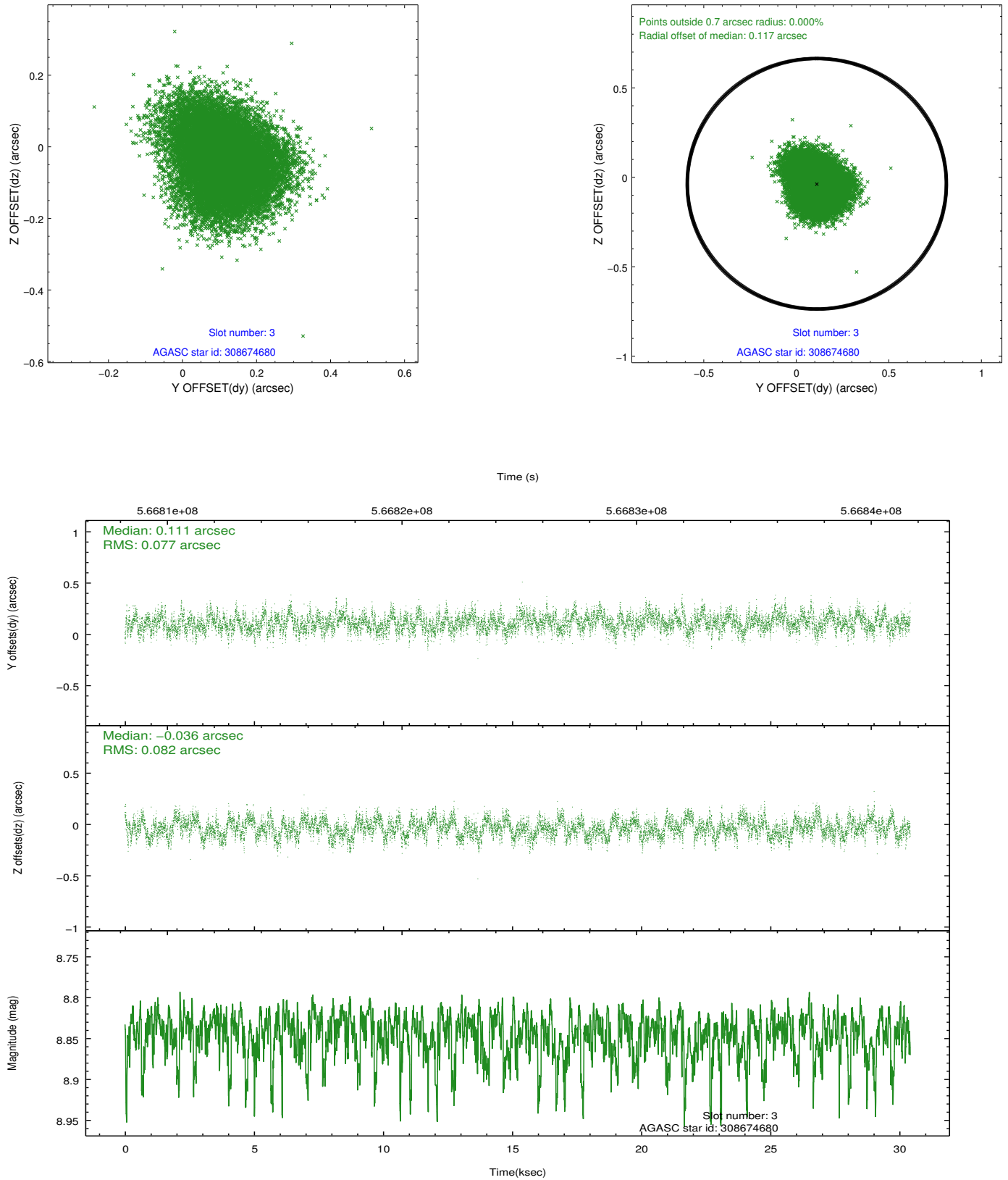


Slot Statistics

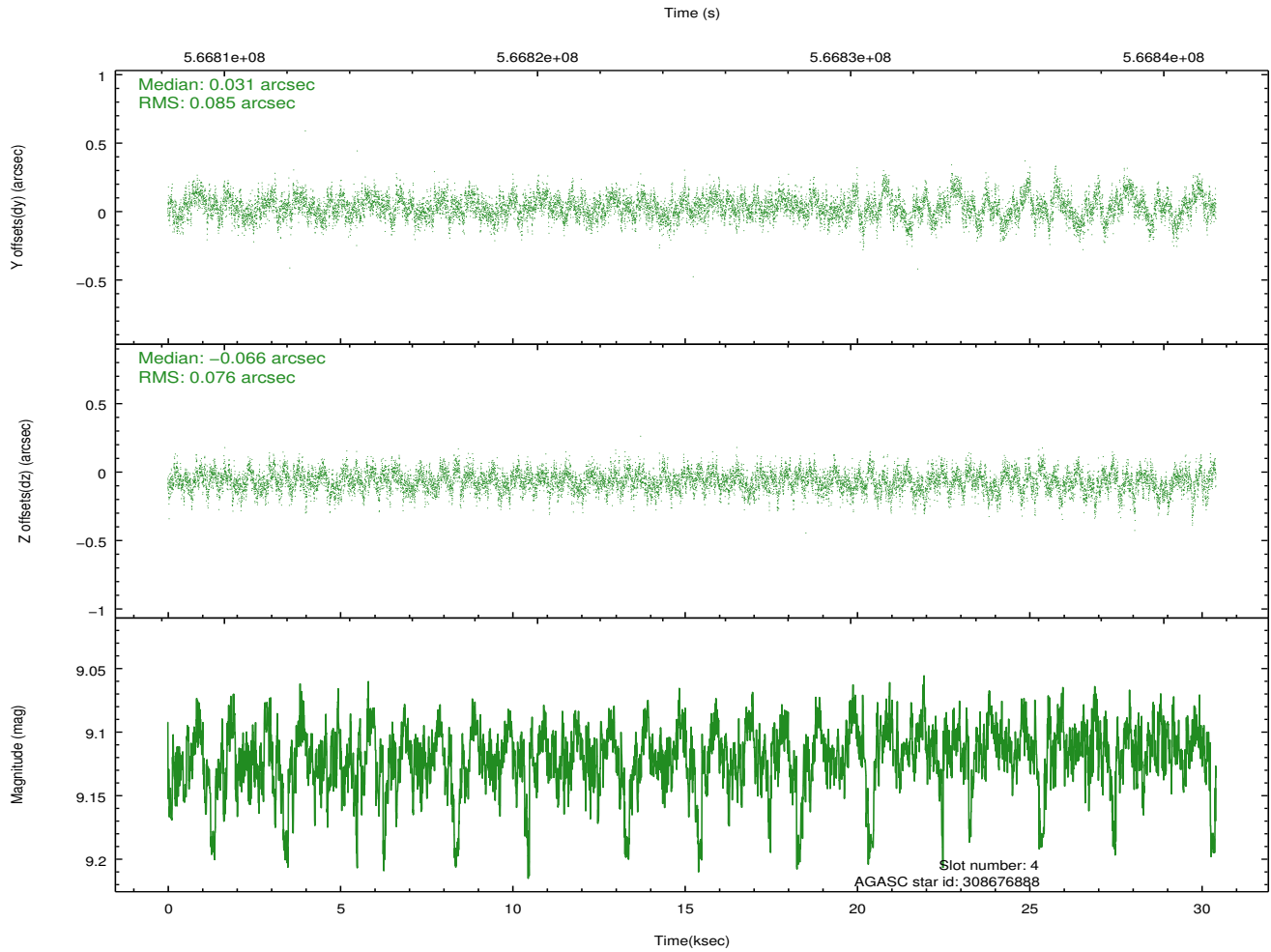
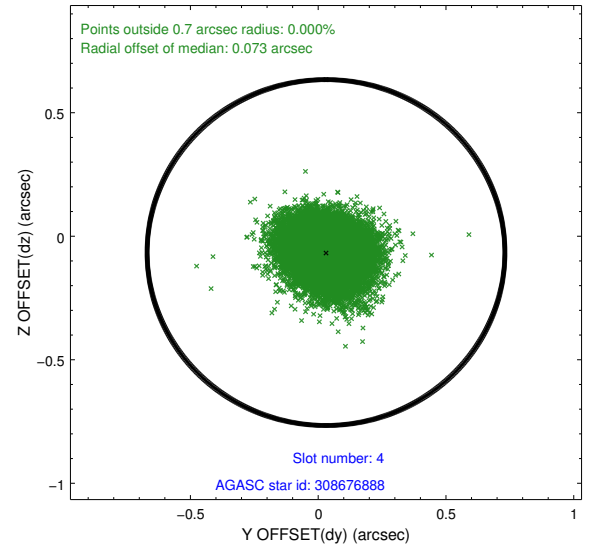
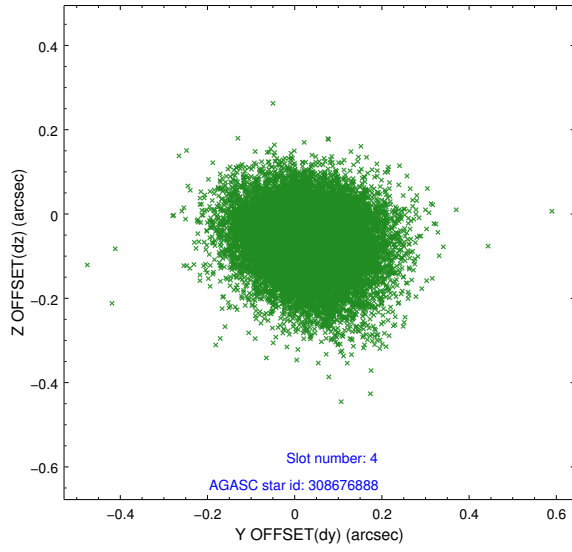
lot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_x
0	FID		ACIS-S-2	7.15	7419	-0.179	-0.142	0.013	0.019	0.000000	0.000000	-769.62	-1740.37
1	FID		ACIS-S-4	7.24	7419	0.439	0.125	0.008	0.014	0.000000	0.000000	2144.23	168.37
2	FID		ACIS-S-5	7.26	7418	-0.291	0.026	0.011	0.016	0.000000	0.000000	-1822.49	161.96
3	GUIDE	used	308674680	8.84	14825	0.111	-0.036	0.121	0.191	55.747345	31.652644	2063.85	-815.03
4	GUIDE	used	308676888	9.12	14822	0.031	-0.066	0.122	0.199	55.566279	31.676245	2088.87	-1376.15
5	BAD	unused	309330608	9.31	11032	0.189	0.336	0.581	38.820	56.696267	32.605248	-1865.28	1347.20
6	GUIDE	used	309332904	7.54	14837	-0.072	0.048	0.076	0.123	56.362777	32.287653	-546.42	578.37
7	GUIDE	used	309336160	7.09	14835	-0.076	0.056	0.079	0.127	56.670296	32.290187	-742.53	1493.64

2.4 Star Slots

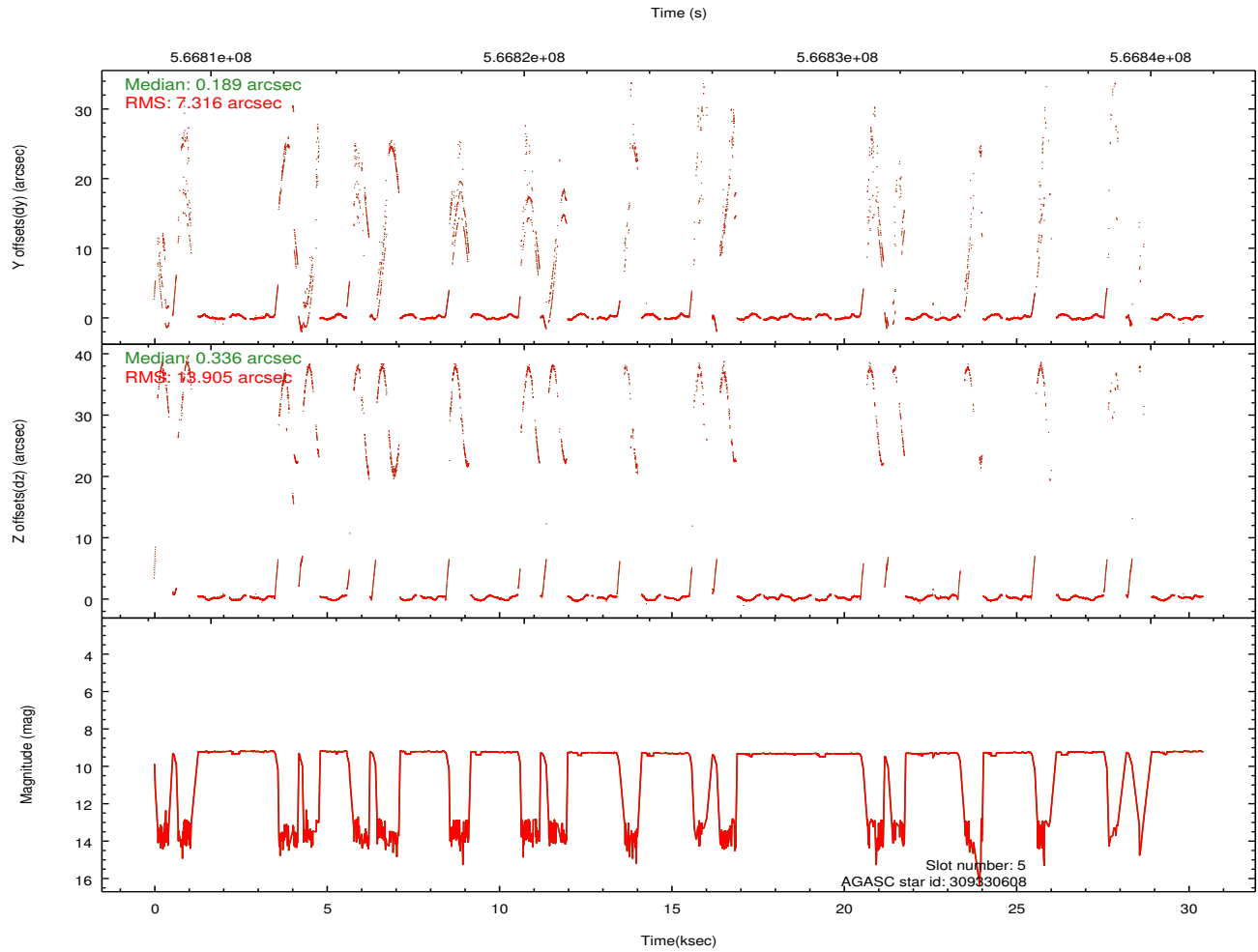
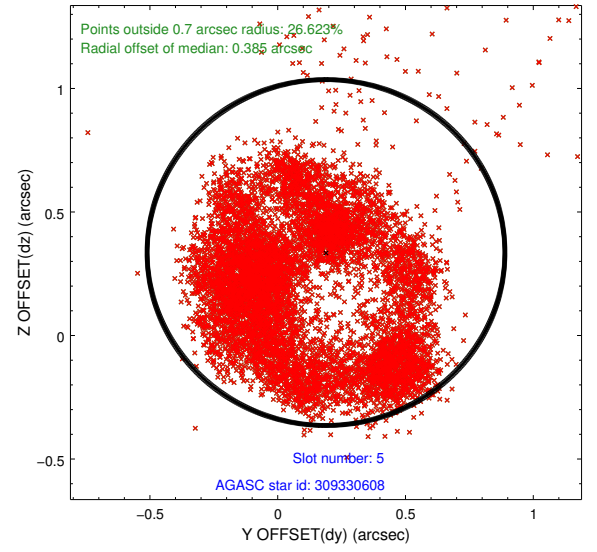
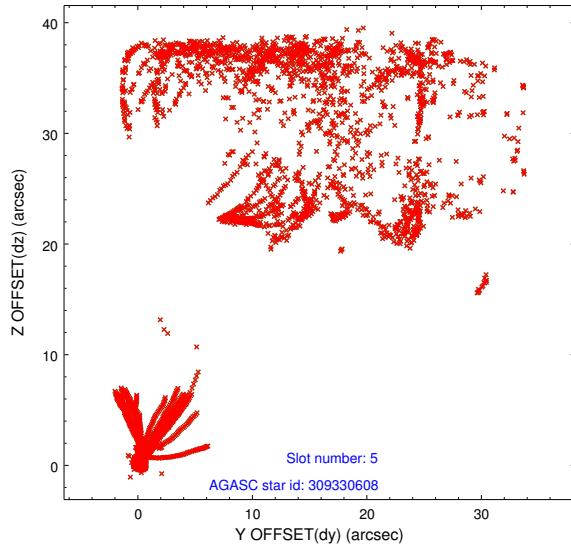
2.4.1 Slot 3



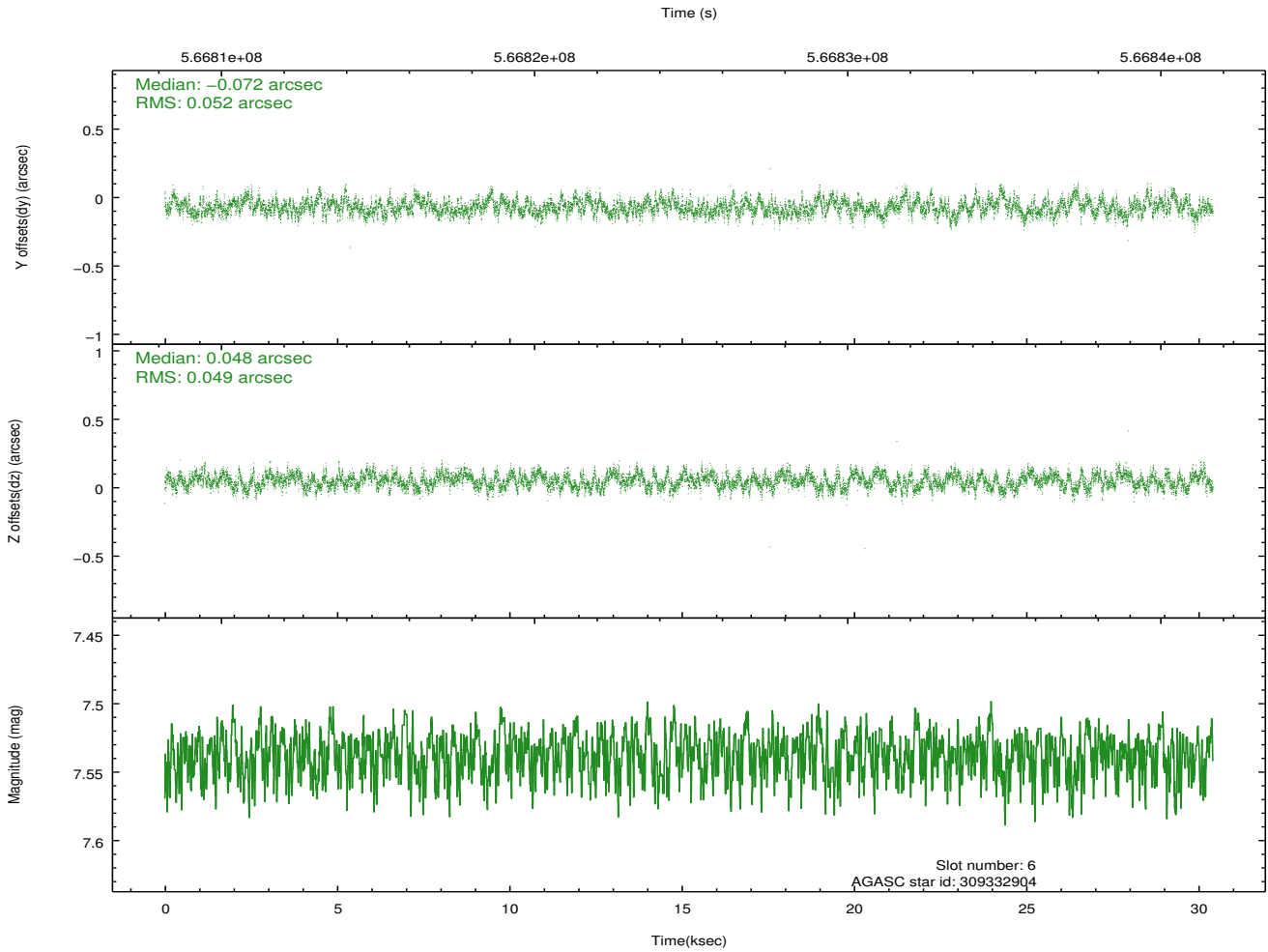
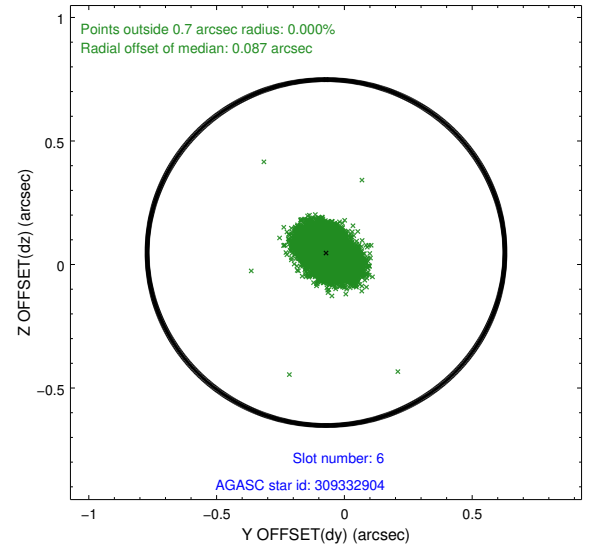
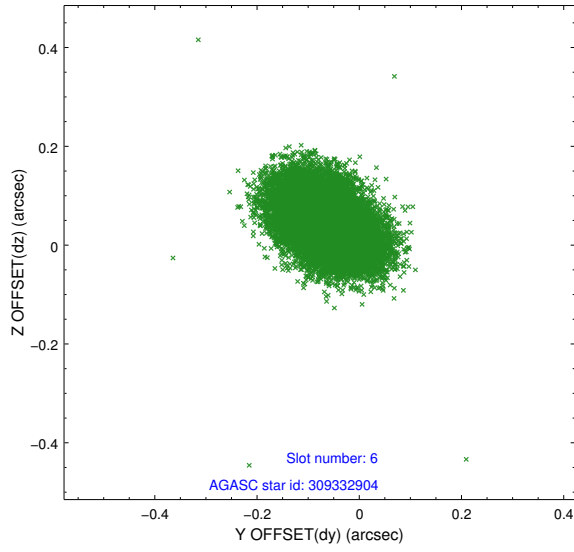
2.4.2 Slot 4



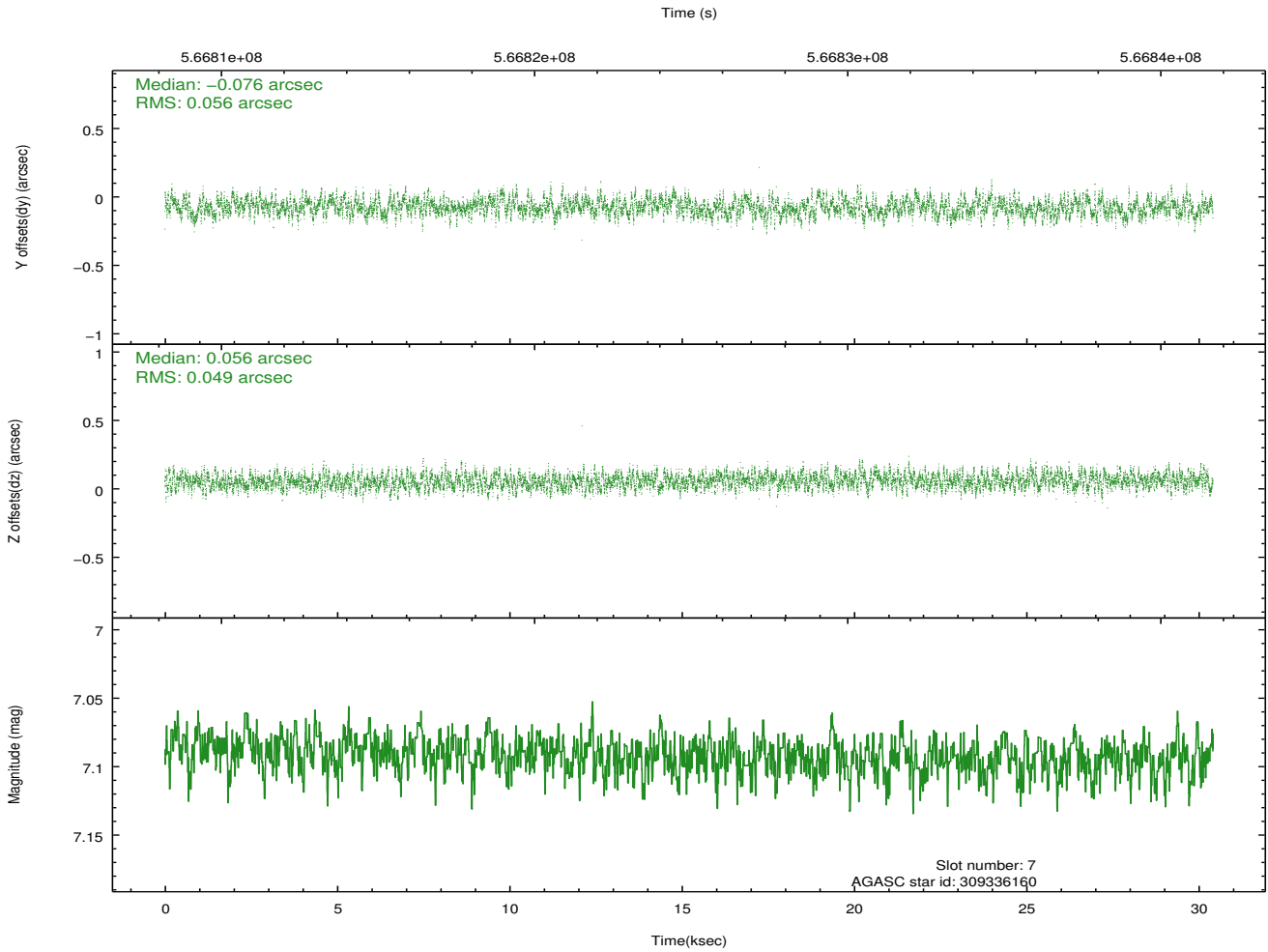
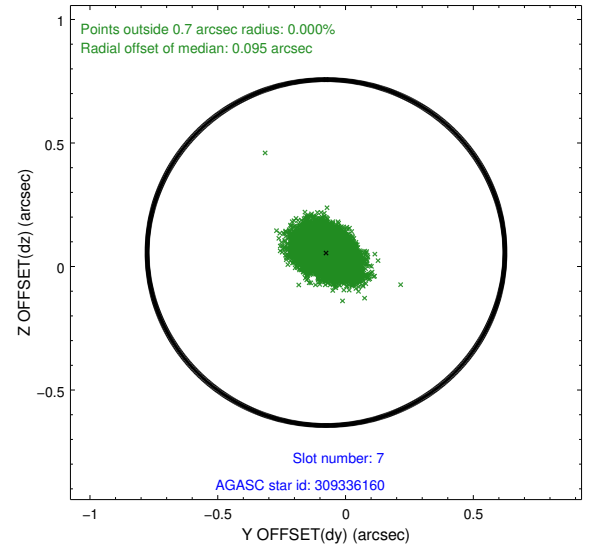
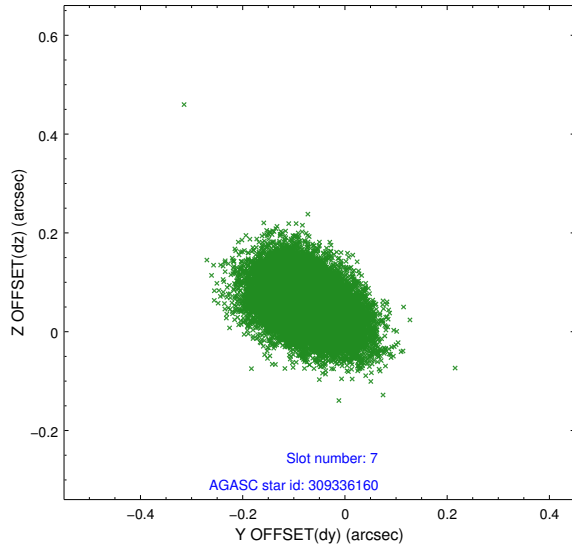
2.4.3 Slot 5



2.4.4 Slot 6

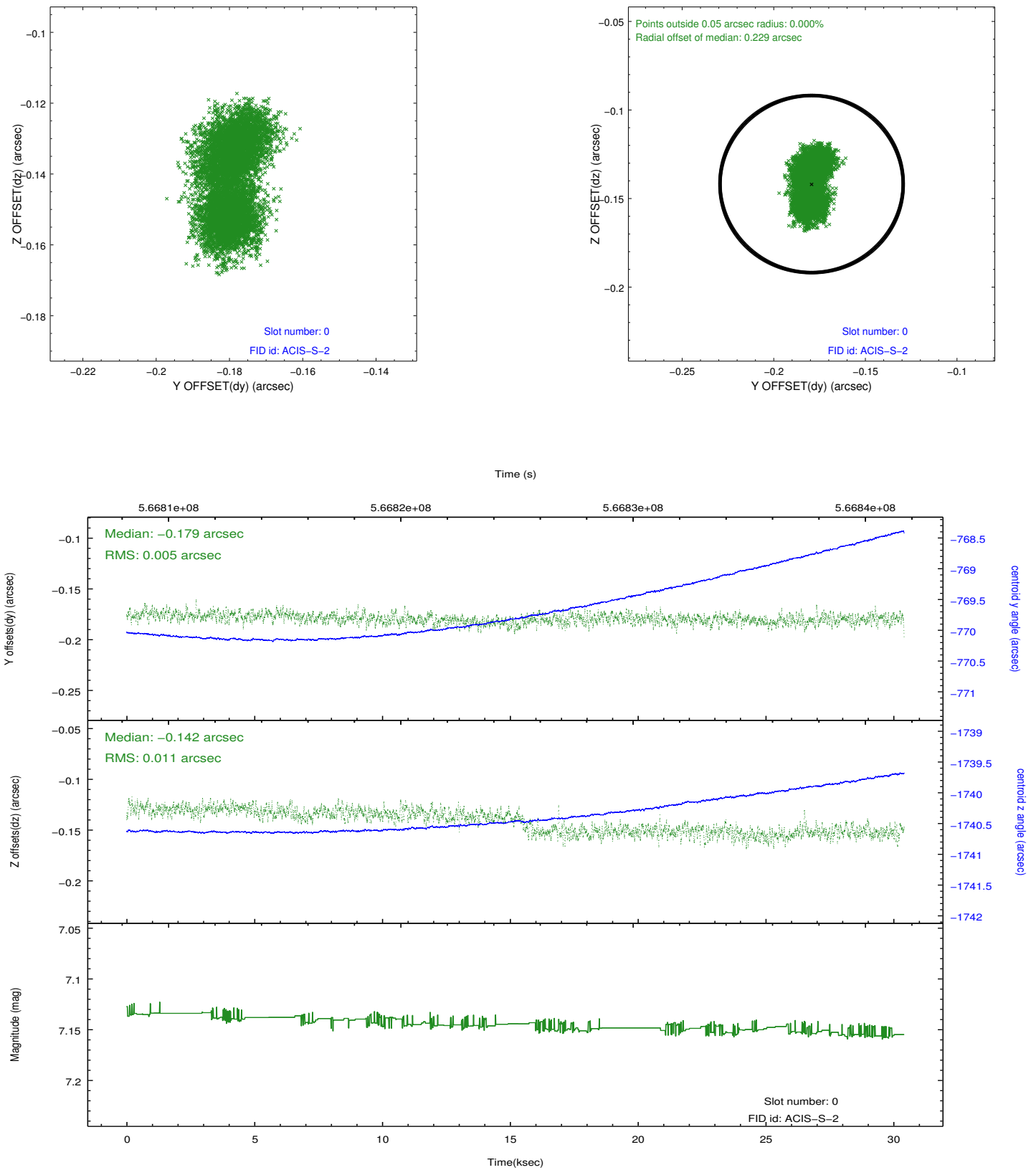


2.4.5 Slot 7

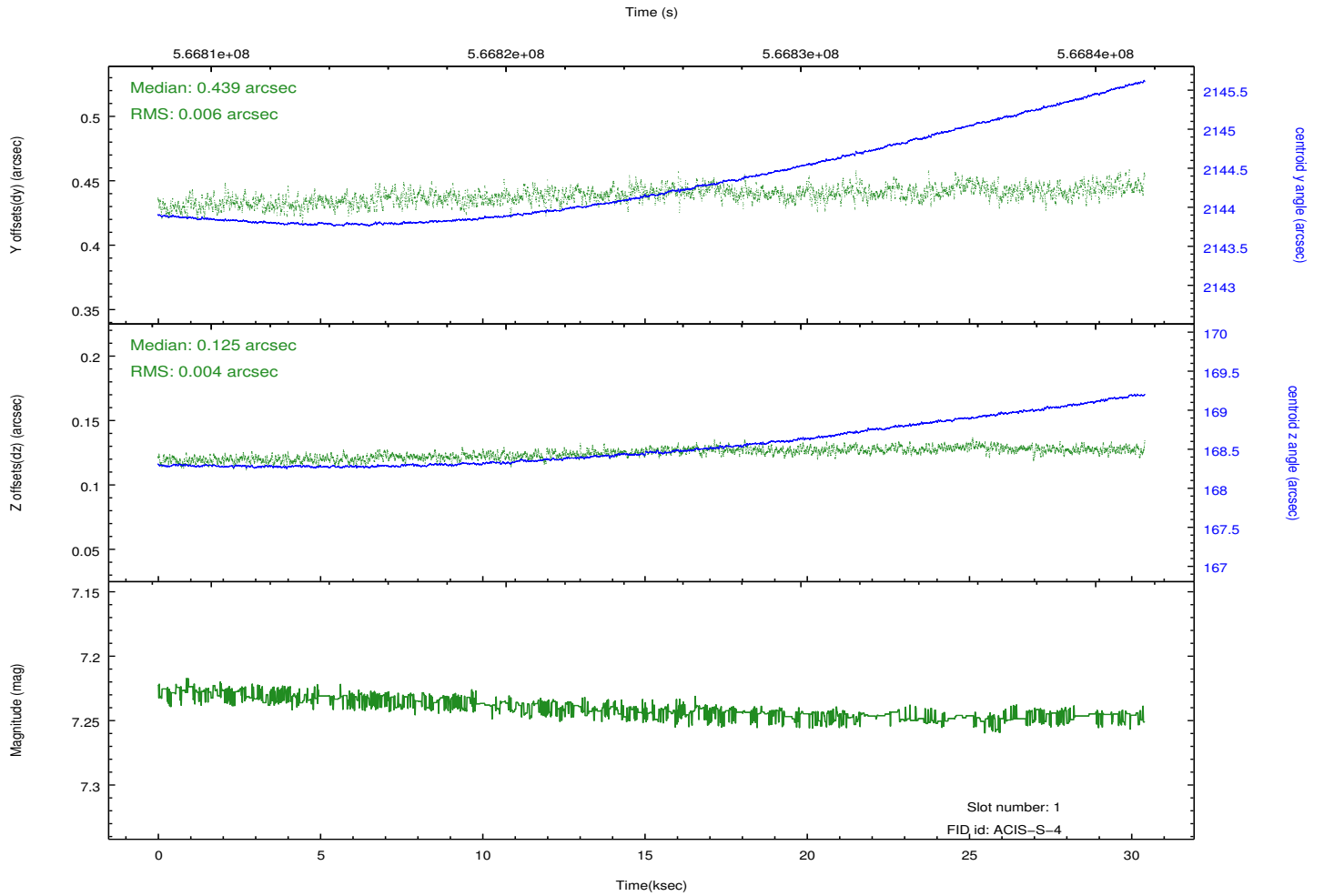
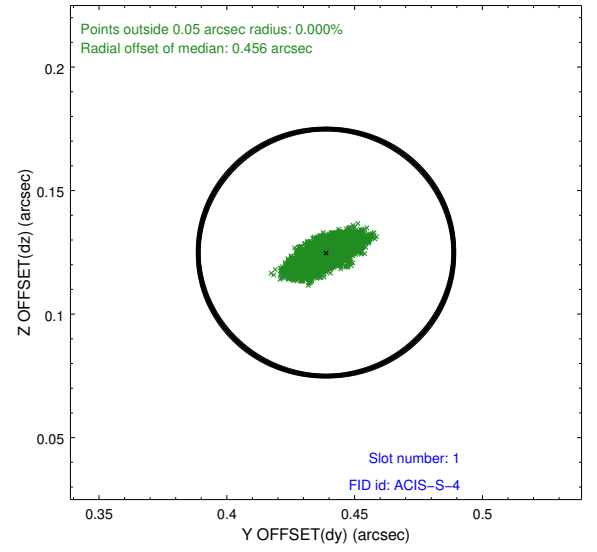
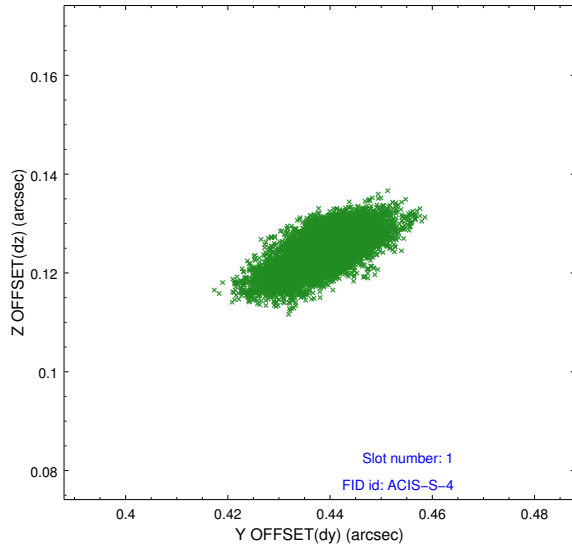


2.5 FID Slots

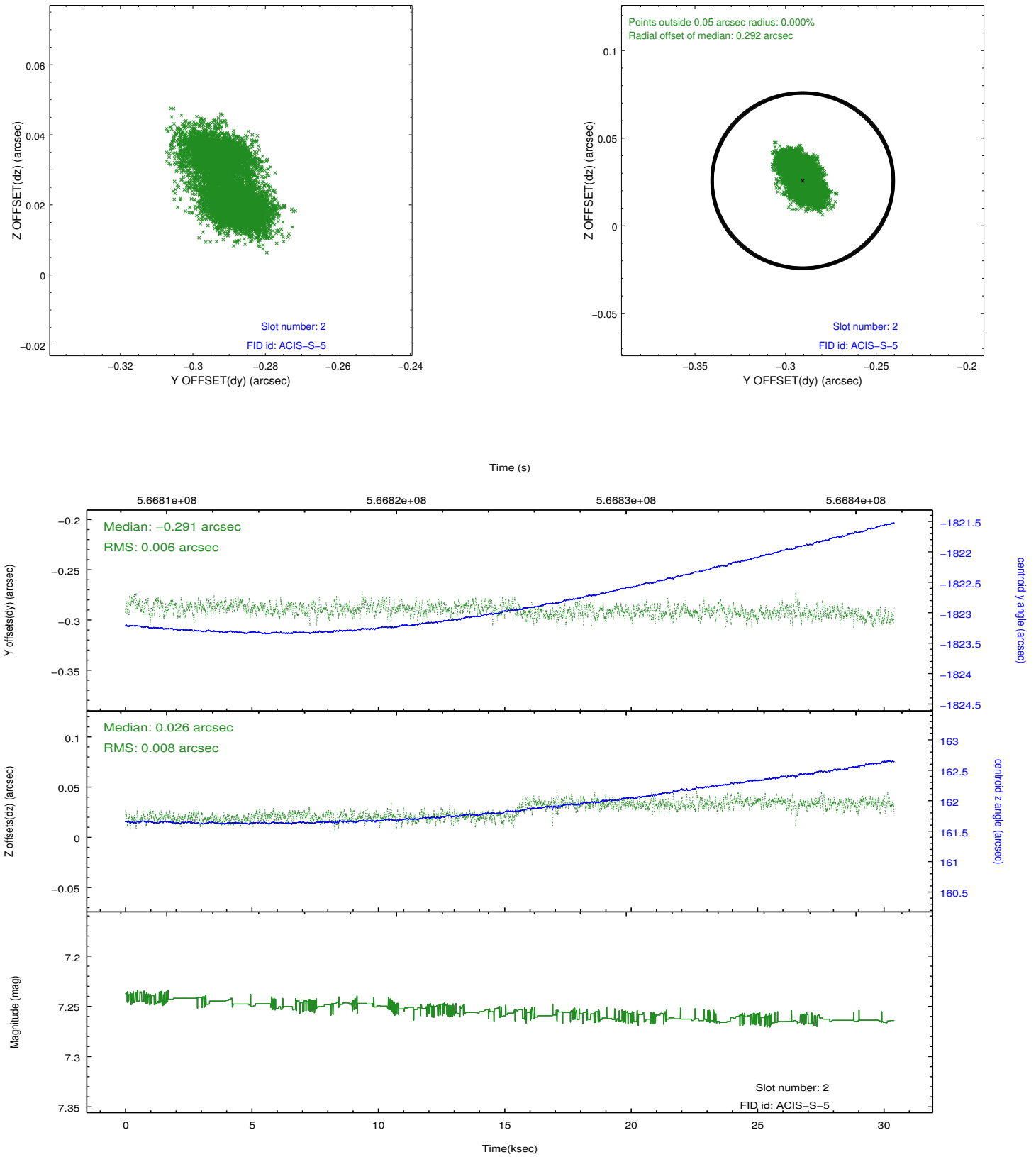
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

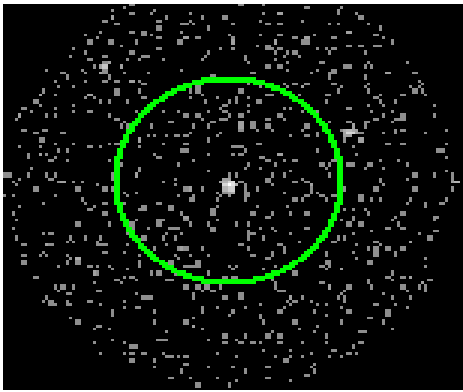


3 Gratings

3.1 HEG Arm



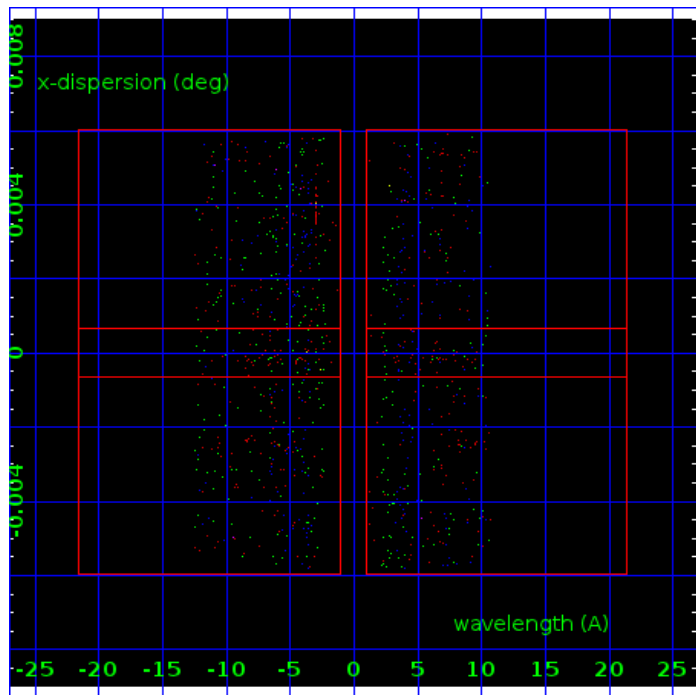
HEG Order Sort 123



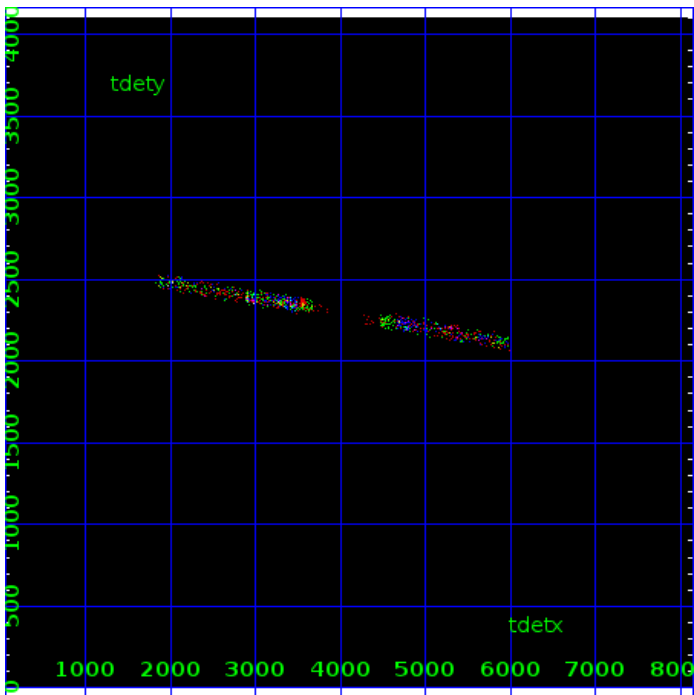
HEG Zero Order



HEG Order Sort ALL

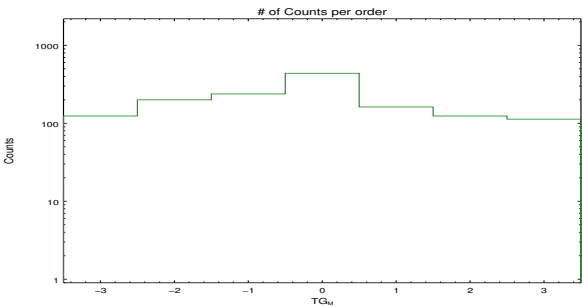


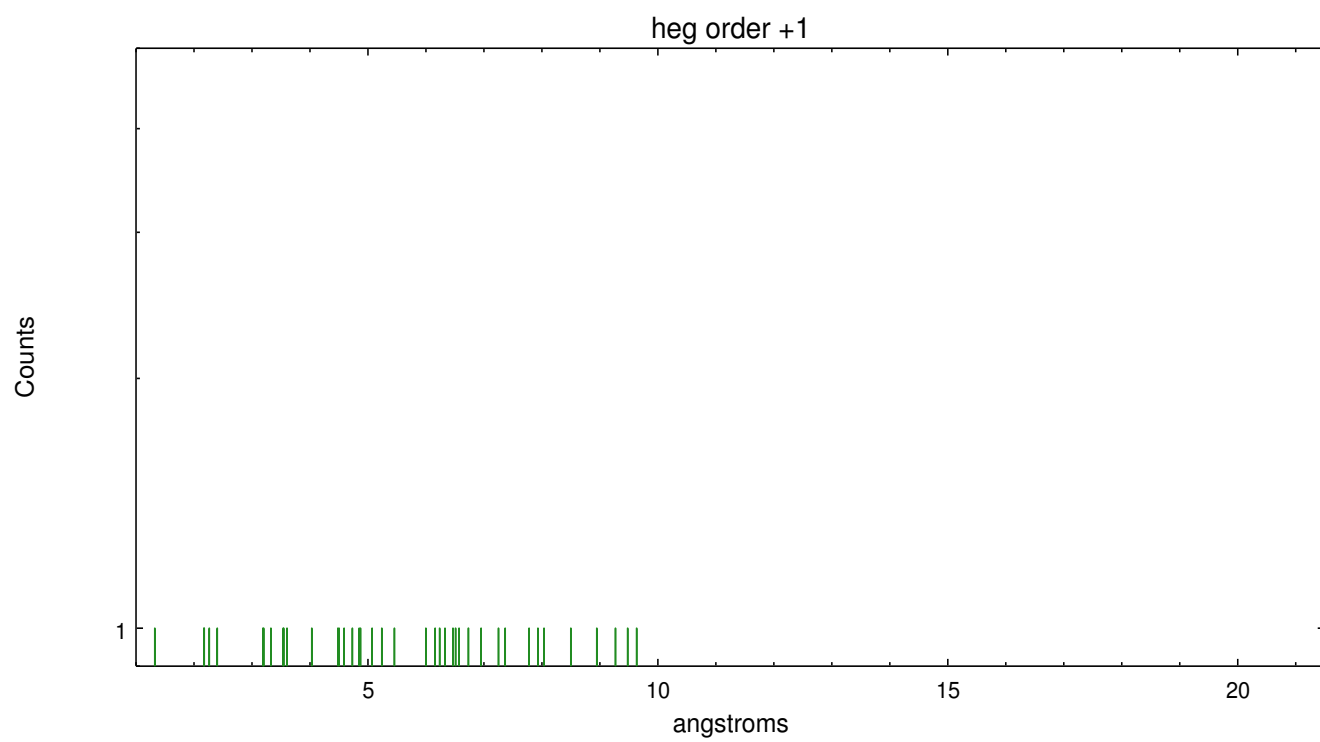
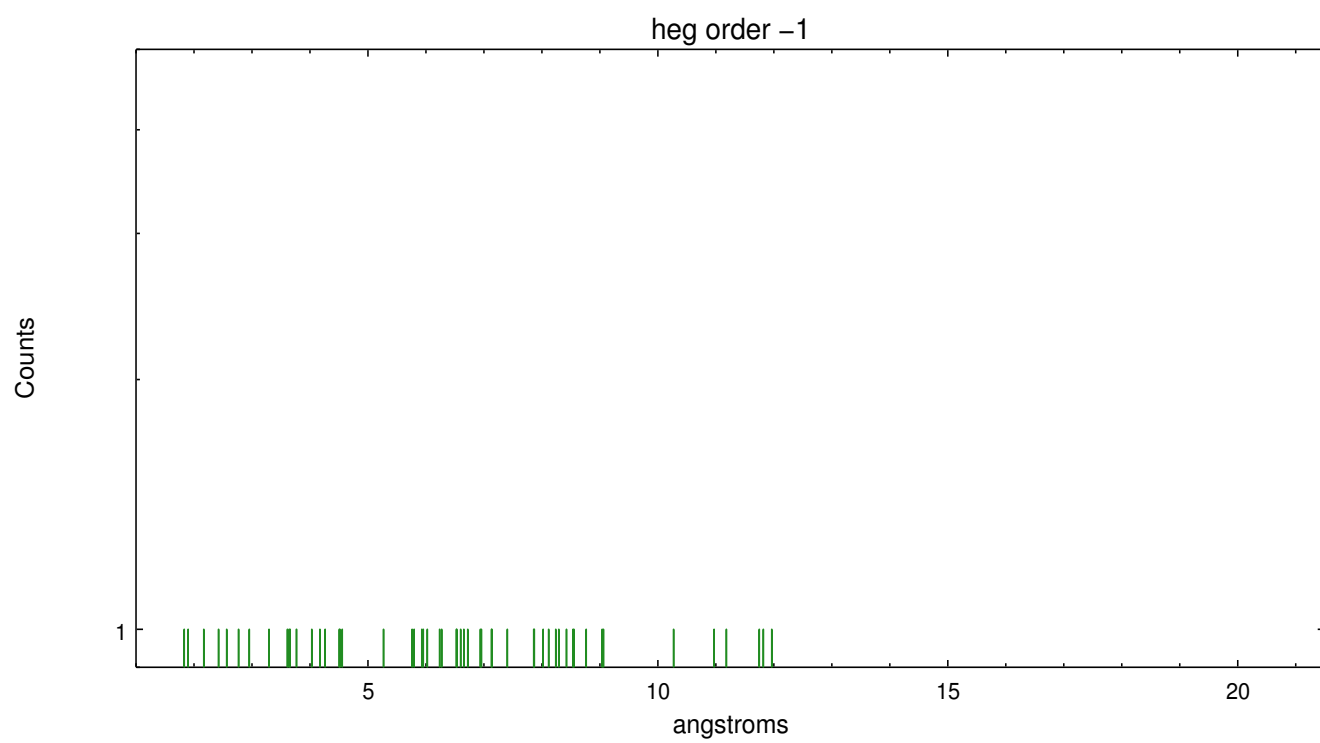
Spot Image HEG



Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	124	200	238	438	162	124	113

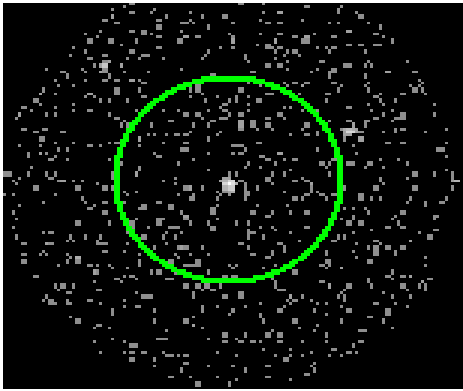




3.2 MEG Arm



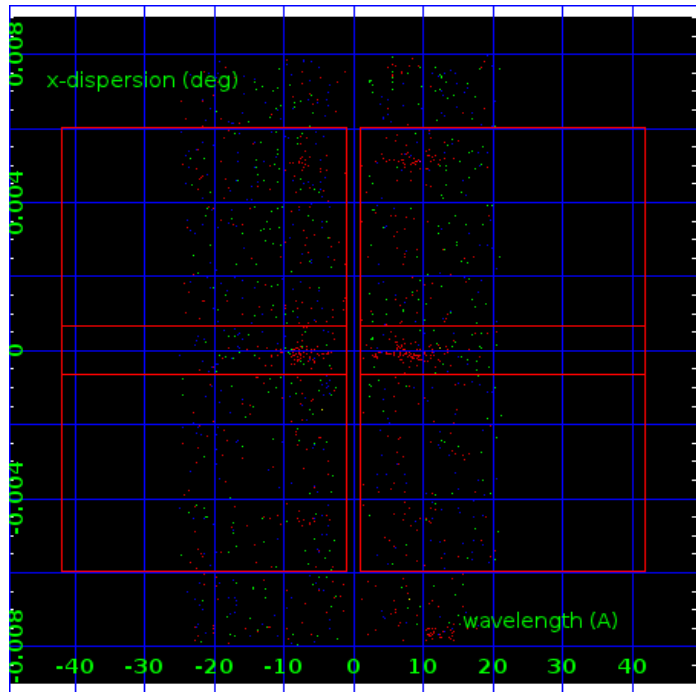
MEG Order Sort 123



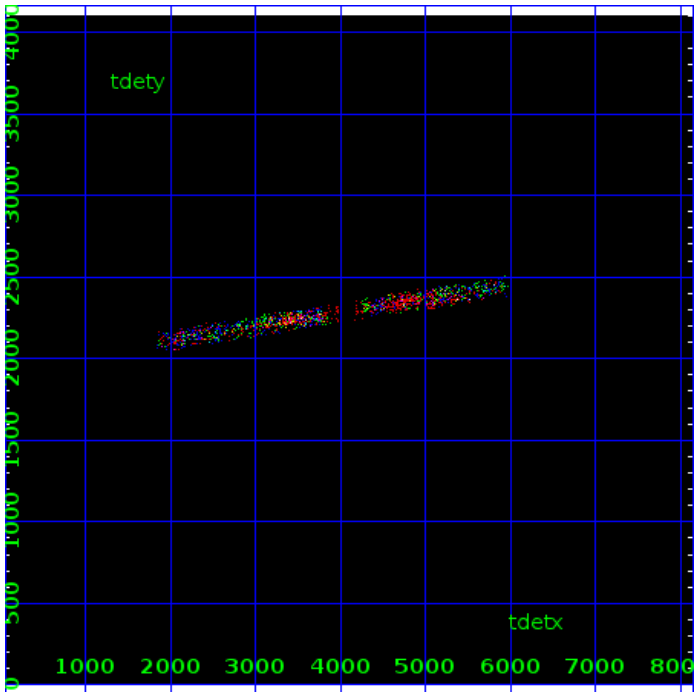
MEG Zero Order



MEG Order Sort ALL

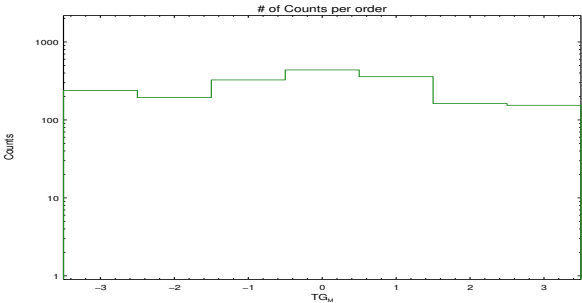


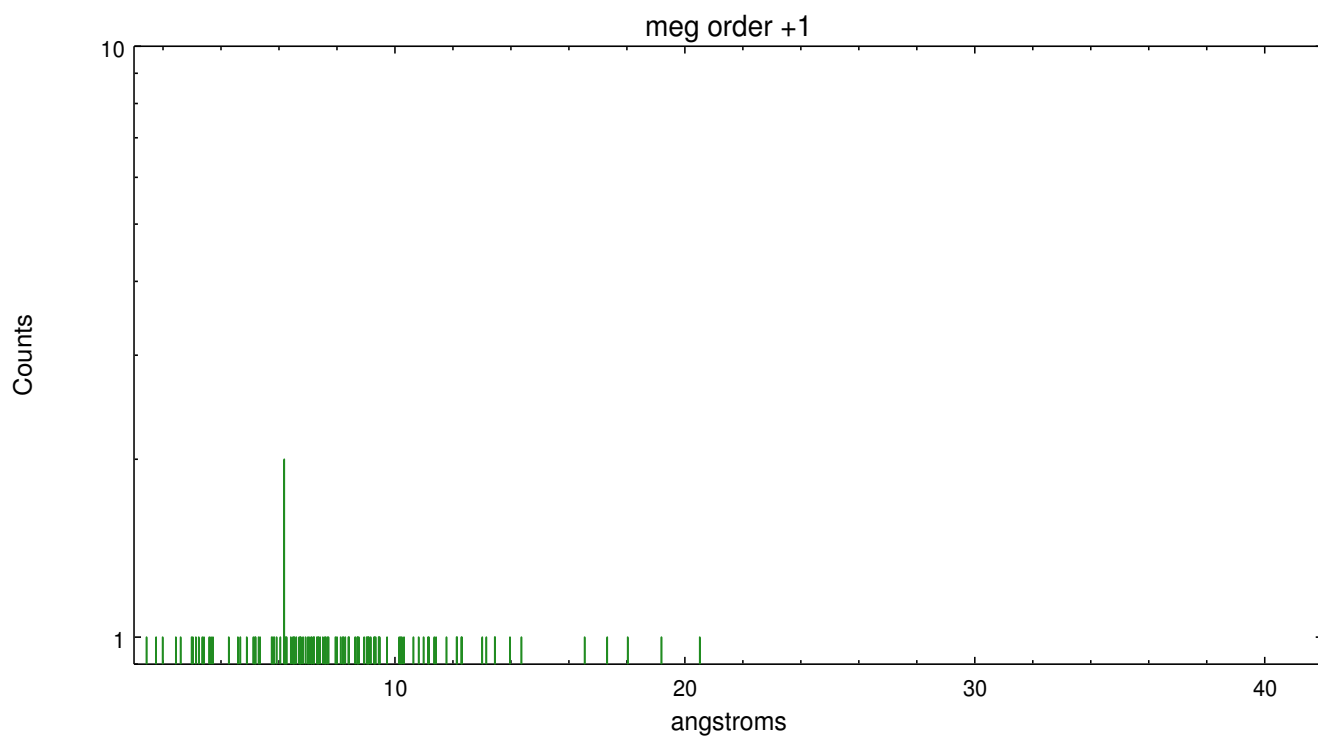
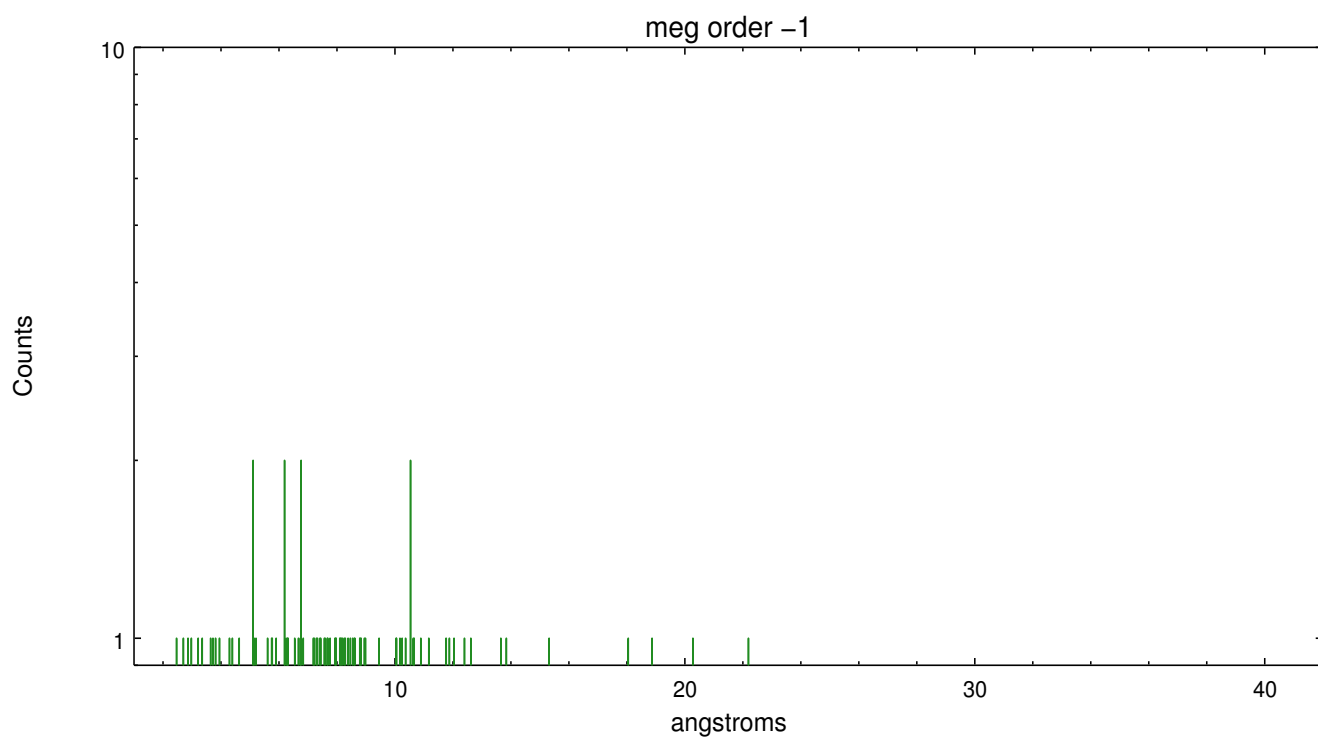
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	239	194	326	438	359	162	154





A Summary

A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2015.12.21
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.330400233388

A.2 Comments

Comments for Obi 0

Star in slot 5 has an RMS deviation > 0.300000 arcsec

Star in slot 5 has deviations > 0.050000 for more than 0.238488% of the observation

(this slot was ignored)

Extraction centered on V914 Per (as are other obsids in this sequence)