

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 14428 - L2 Version 1
Chandra X-Ray Center

L2 Processing Date : May 4 2012

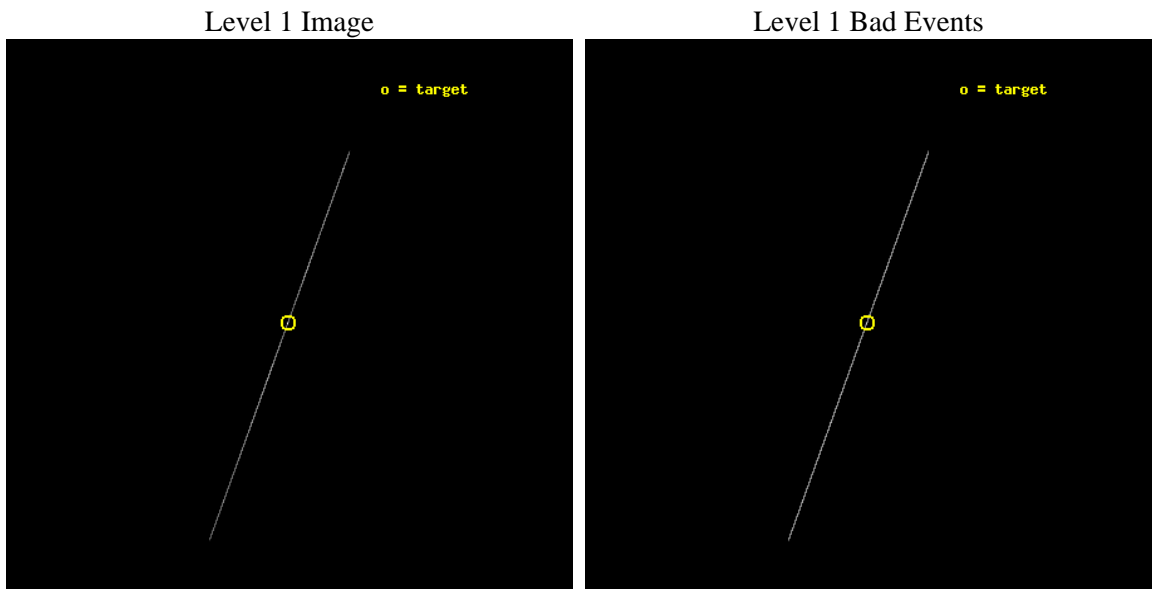
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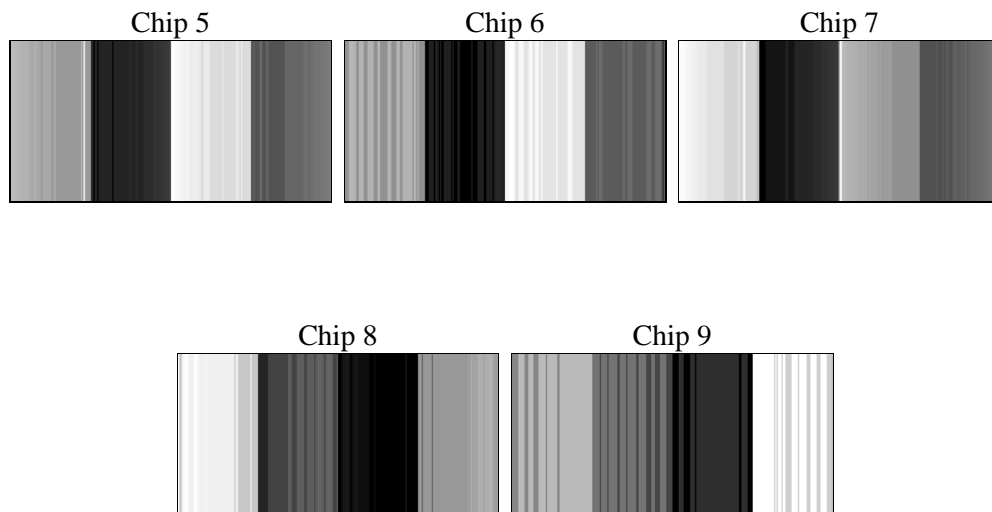
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	20000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	20103.5	Sum of GTIs [s]
caldbver	4.4.9	 	ontime5	20103.5	Sum of GTIs [s]
date	2012-05-04T17:09:20	Date and time of file creation	ontime6	18610.793015003	Sum of GTIs [s]
revision	1	Processing version of data	ontime7	20103.5	Sum of GTIs [s]
			ontime8	19613.264125943	Sum of GTIs [s]
			ontime9	20094.738956034	Sum of GTIs [s]
			l1events	3394516	Number of level 1 events

2.1.4 Events

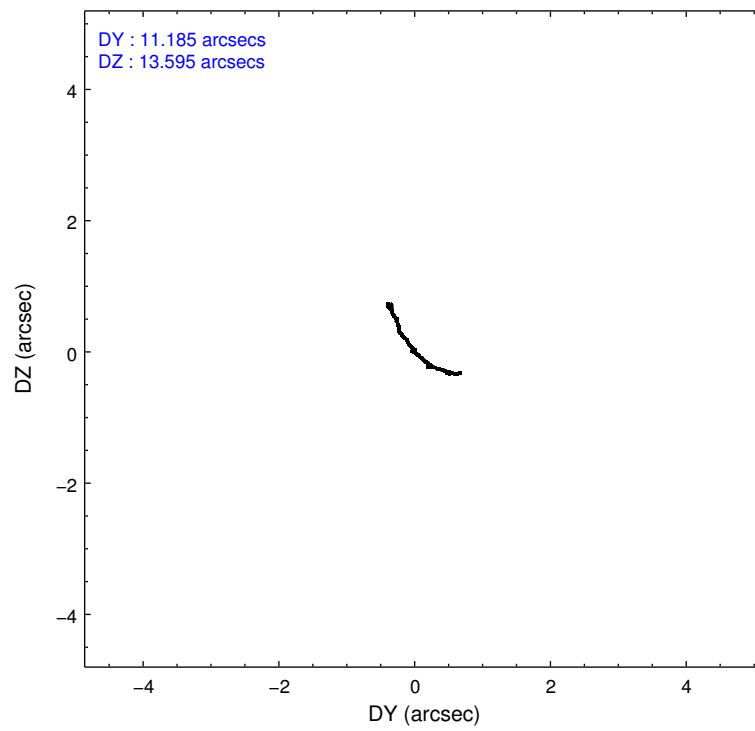
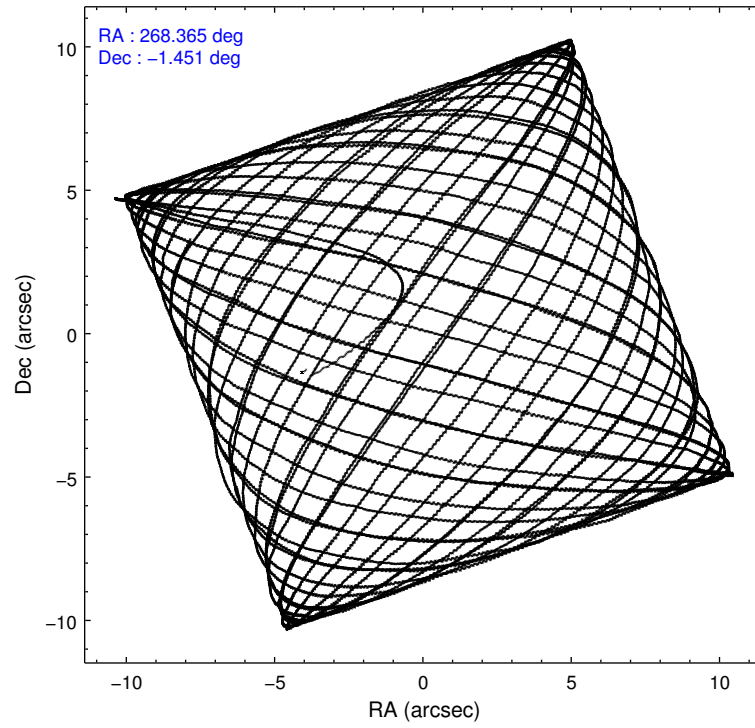
	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	539643	638607	1321438	612839	281989
rejected events	184463	198379	261301	280707	204133
rejected %	34%	31%	19%	45%	72%

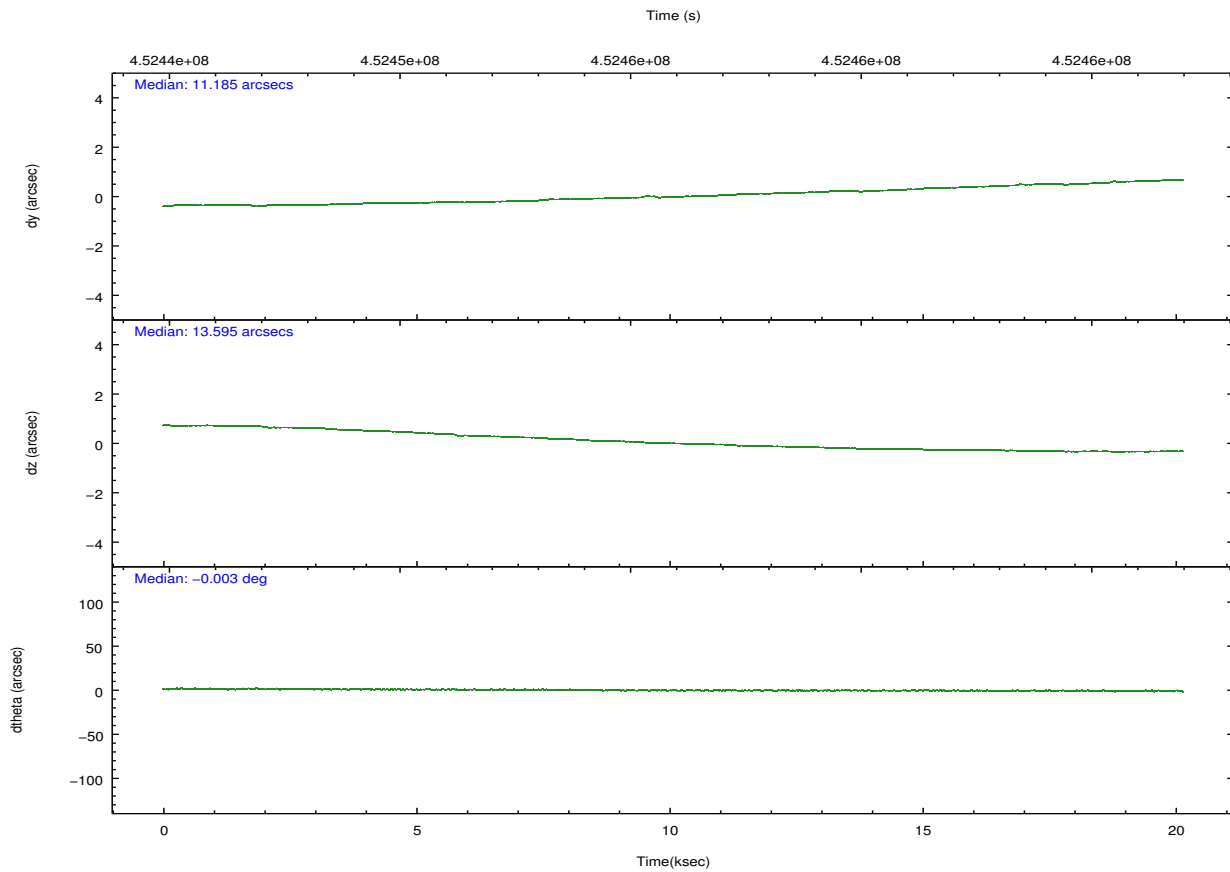
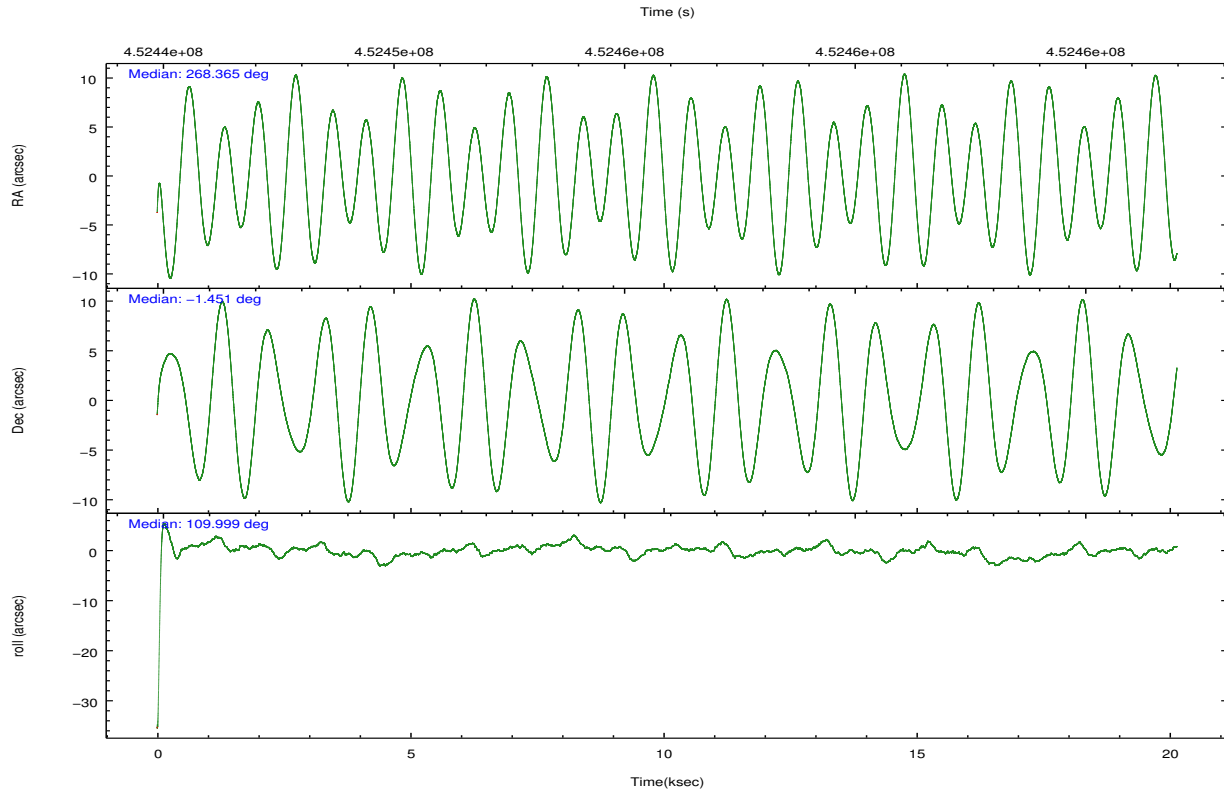
	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	111532	122134	214773	186077	24649
	20%	19%	16%	30%	8%
grade 1 events	261	266	7454	470	206
	0%	0%	0%	0%	0%
grade 2 events	127652	274788	307619	102457	37941
	23%	43%	23%	16%	13%
grade 3 events	12470	6984	104344	11539	3420
	2%	1%	7%	1%	1%
grade 4 events	12402	7068	103216	11251	3701
	2%	1%	7%	1%	1%
grade 5 events	15850	7657	46112	9807	6998
	2%	1%	3%	1%	2%
grade 6 events	91157	29321	330332	20872	8152
	16%	4%	24%	3%	2%
grade 7 events	168319	190389	207588	270366	196922
	31%	29%	15%	44%	69%

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_FAINT	CC33_FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	268.386155	268.3649344371223	CCD I2 on	N	N
[deg] Pointing Dec	-1.468361	-1.451071567980532	CCD I3 on	N	N
[deg] Pointing Roll	109.847291	110.0033517637473	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	-183.992523	-183.9875365069546	CCD S3 on	Y	Y
[mm] SIM translation stage offset	-6.14	-6.144986076053243	CCD S4 on	Y	Y
[s] Observation start time (MET)	452445987.184000	452444812.4741	CCD S5 on	O1	Y
Observation start date	2012-05-03T15:25:21	2012-05-03T15:06:52	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	452465987.184000	452466794.62527	On-chip summing requested	N	N
Observation end date	2012-05-03T20:58:41	2012-05-03T21:13:14	Subarray requested	NONE	NONE
Read mode	CONTINUOUS	CONTINUOUS	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	0

2.3 Aspect



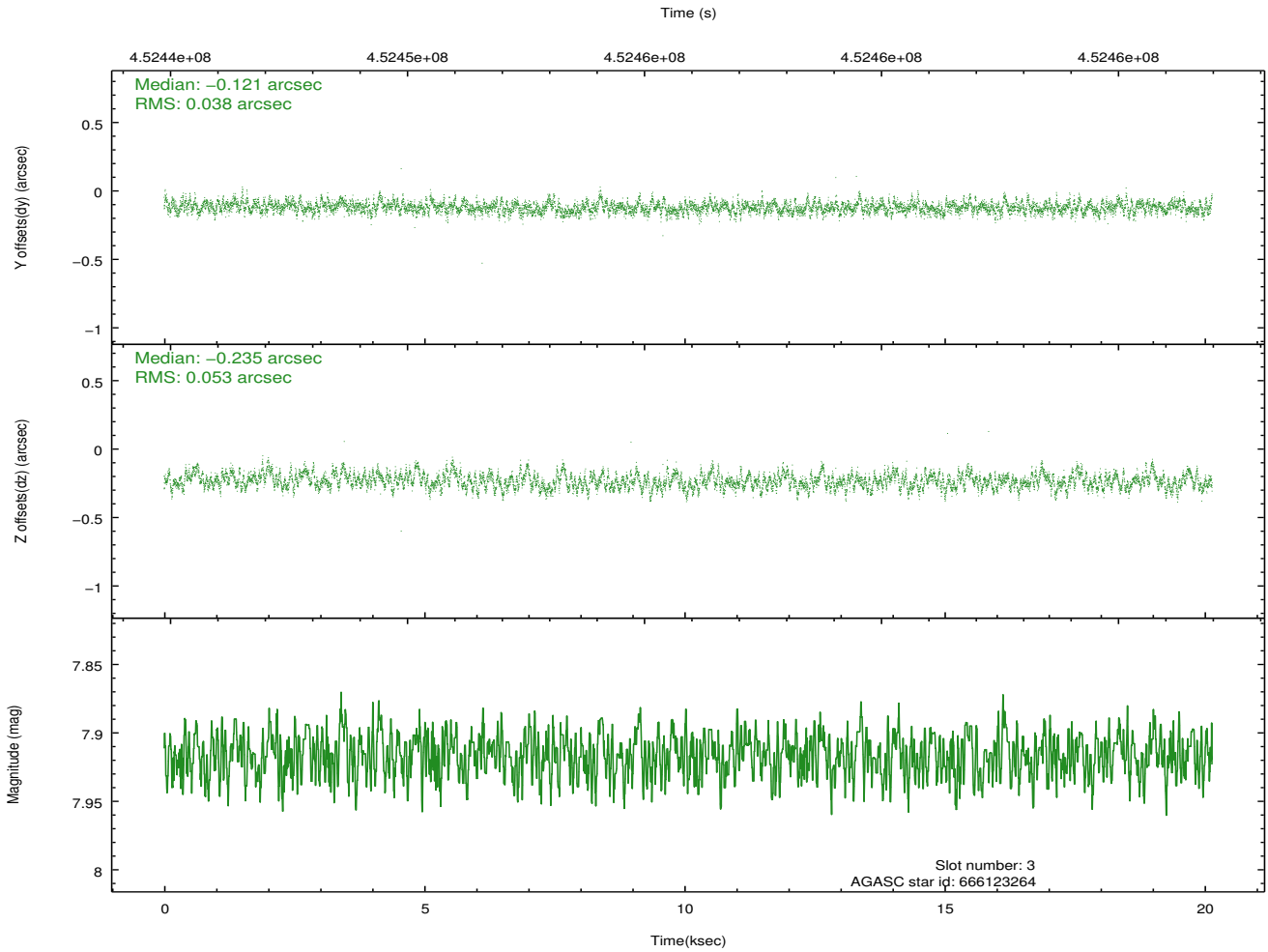
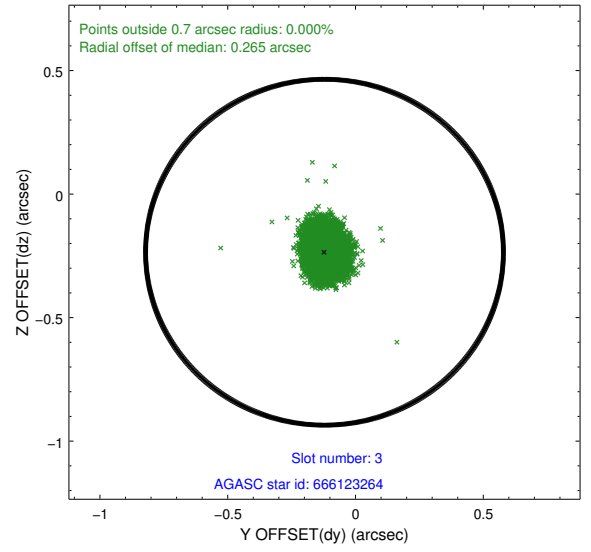
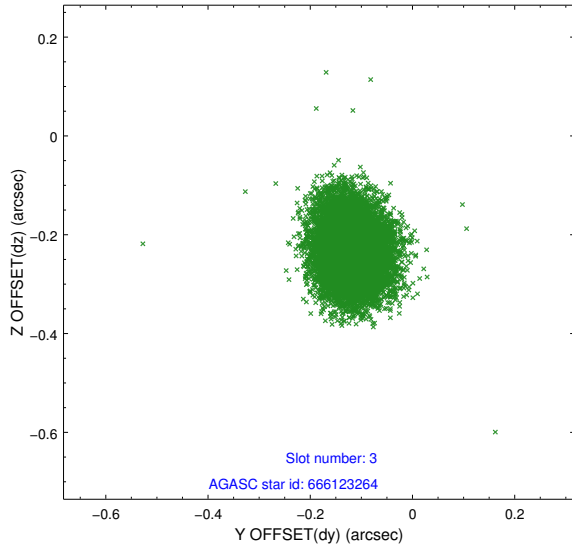


Slot Statistics

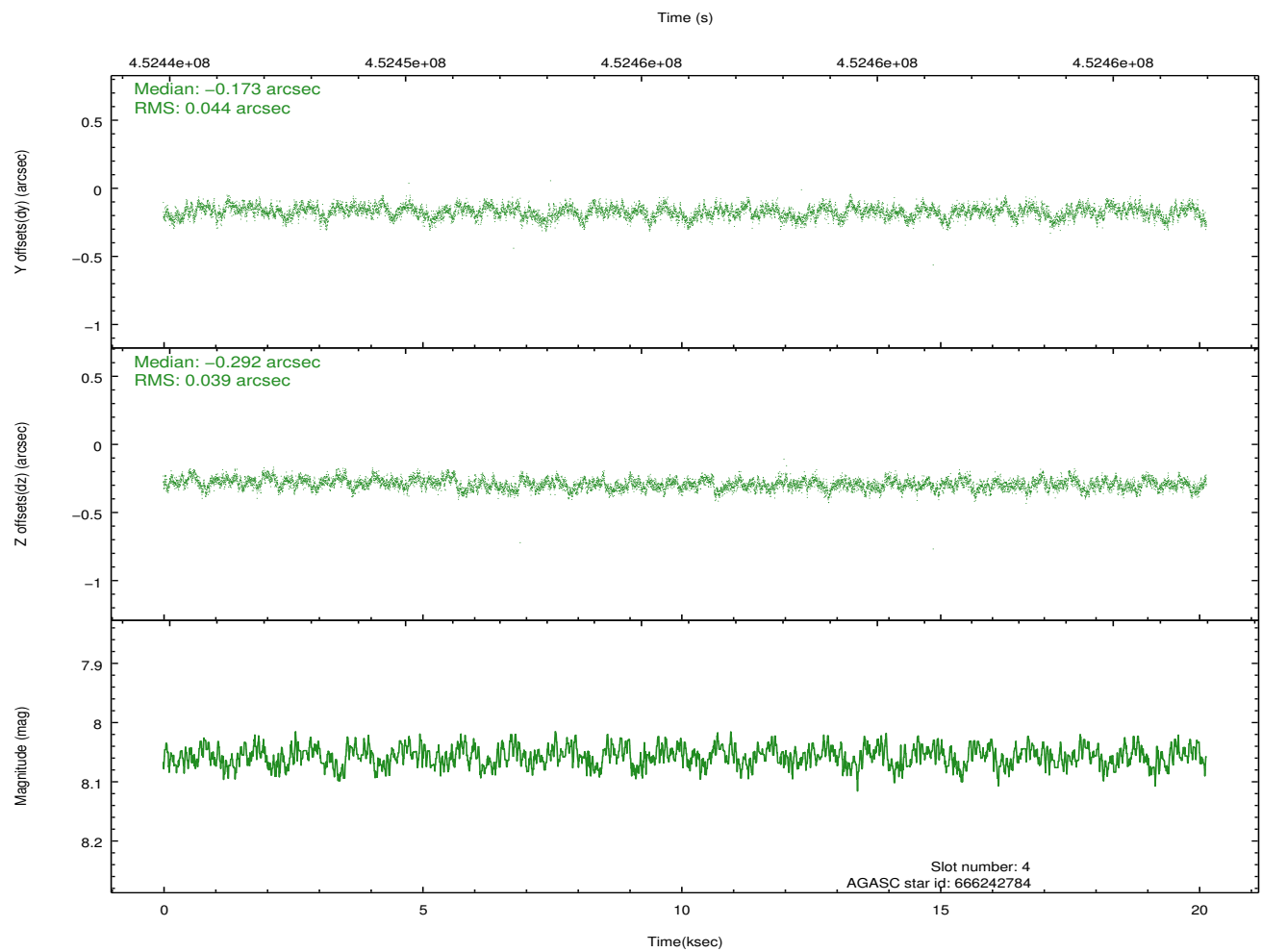
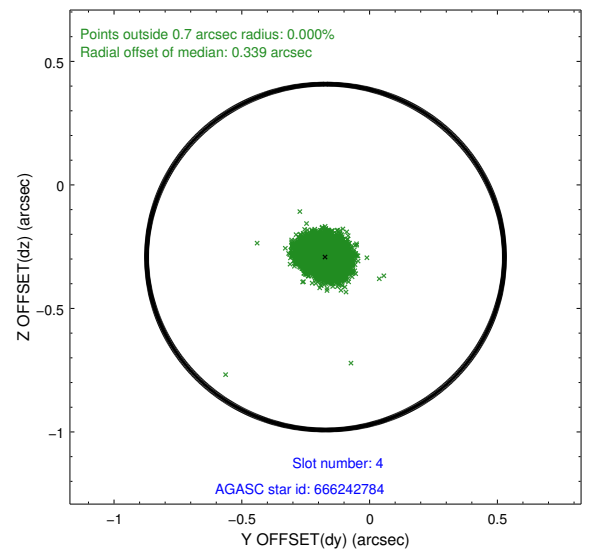
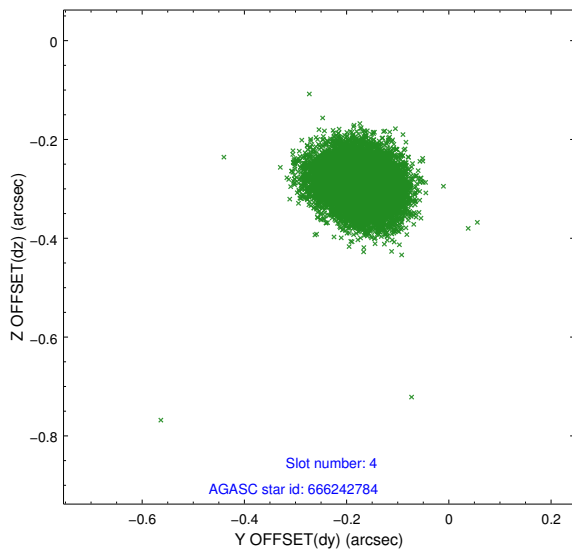
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.93	4914	-0.116	-0.063	0.015	0.042	0.000000	0.000000	-763.82	-1861.75
1	FID	ACIS-S-4	7.01	4913	0.204	0.073	0.013	0.022	0.000000	0.000000	2149.73	46.60
2	FID	ACIS-S-5	7.06	4914	-0.119	-0.001	0.013	0.035	0.000000	0.000000	-1816.39	40.49
3	GUIDE	666123264	7.92	9826	-0.121	-0.235	0.068	0.112	268.093281	-1.430243	486.72	944.81
4	GUIDE	666242784	8.06	9824	-0.173	-0.292	0.063	0.100	268.143106	-1.510356	154.77	874.03
5	GUIDE	666243920	8.72	9824	0.135	0.109	0.092	0.151	268.788759	-1.729599	-1376.08	-1043.23
6	GUIDE	666248832	8.79	9824	0.042	0.230	0.097	0.156	269.071535	-1.472824	-852.63	-2314.25
7	GUIDE	666247984	9.45	9779	0.116	0.195	0.129	0.200	269.120666	-1.627899	-1437.68	-2291.07

2.4 Star Slots

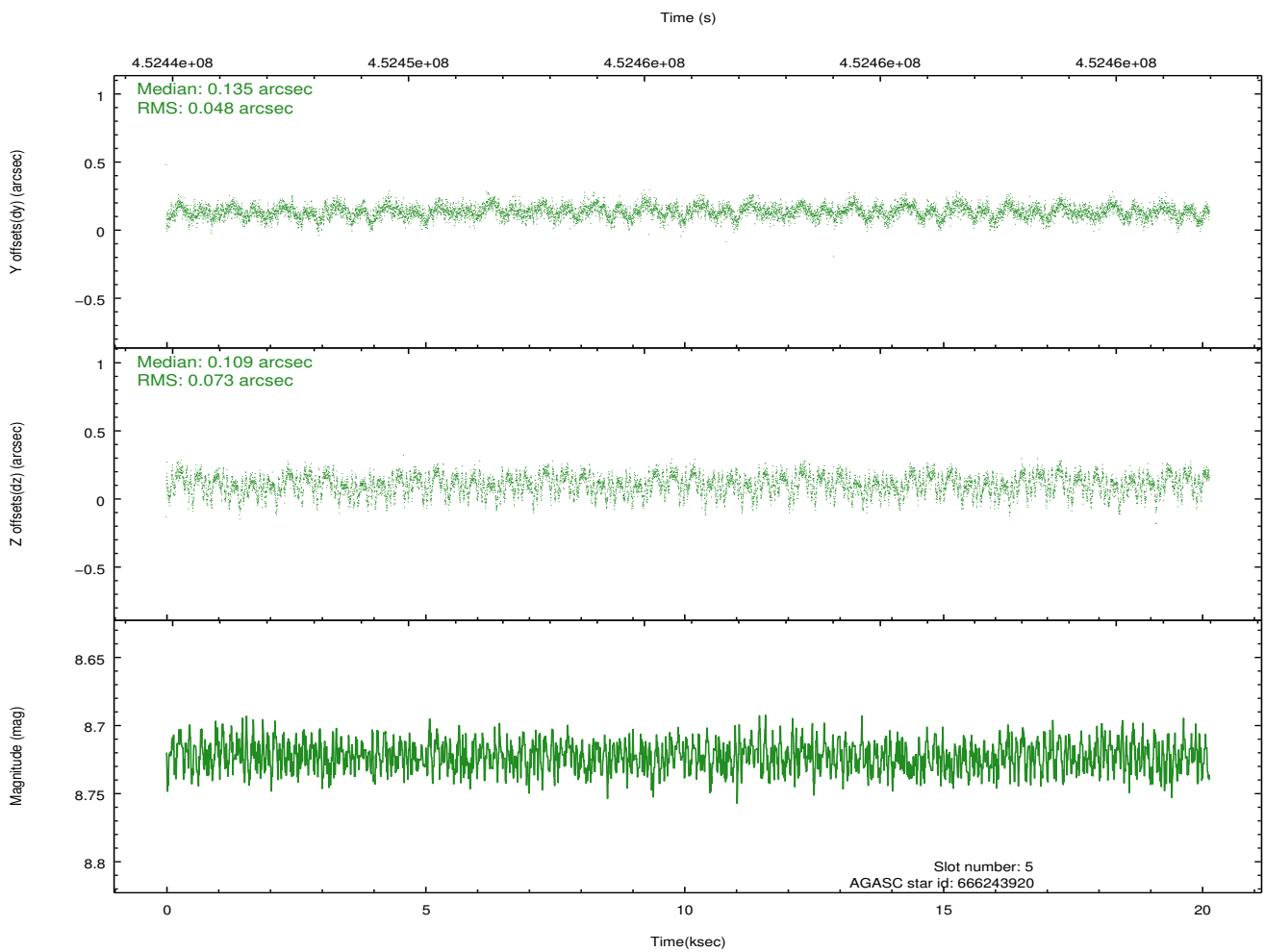
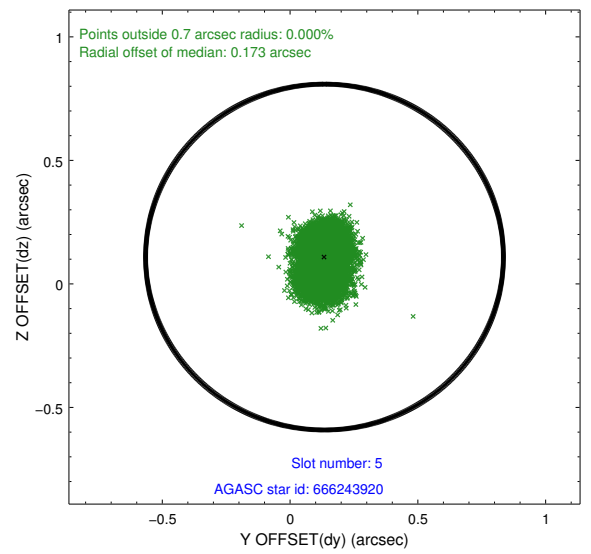
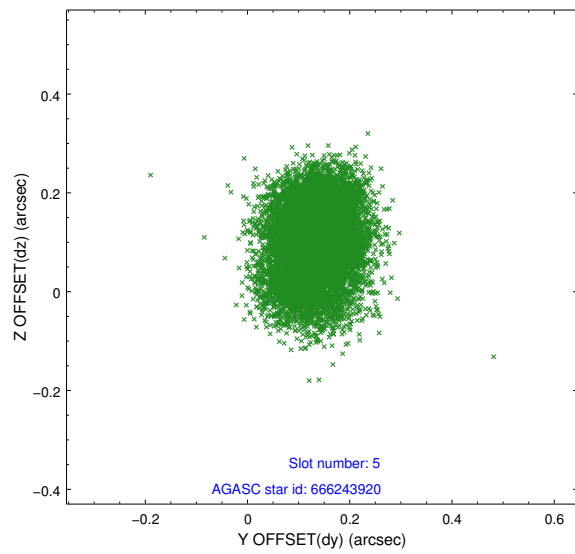
2.4.1 Slot 3



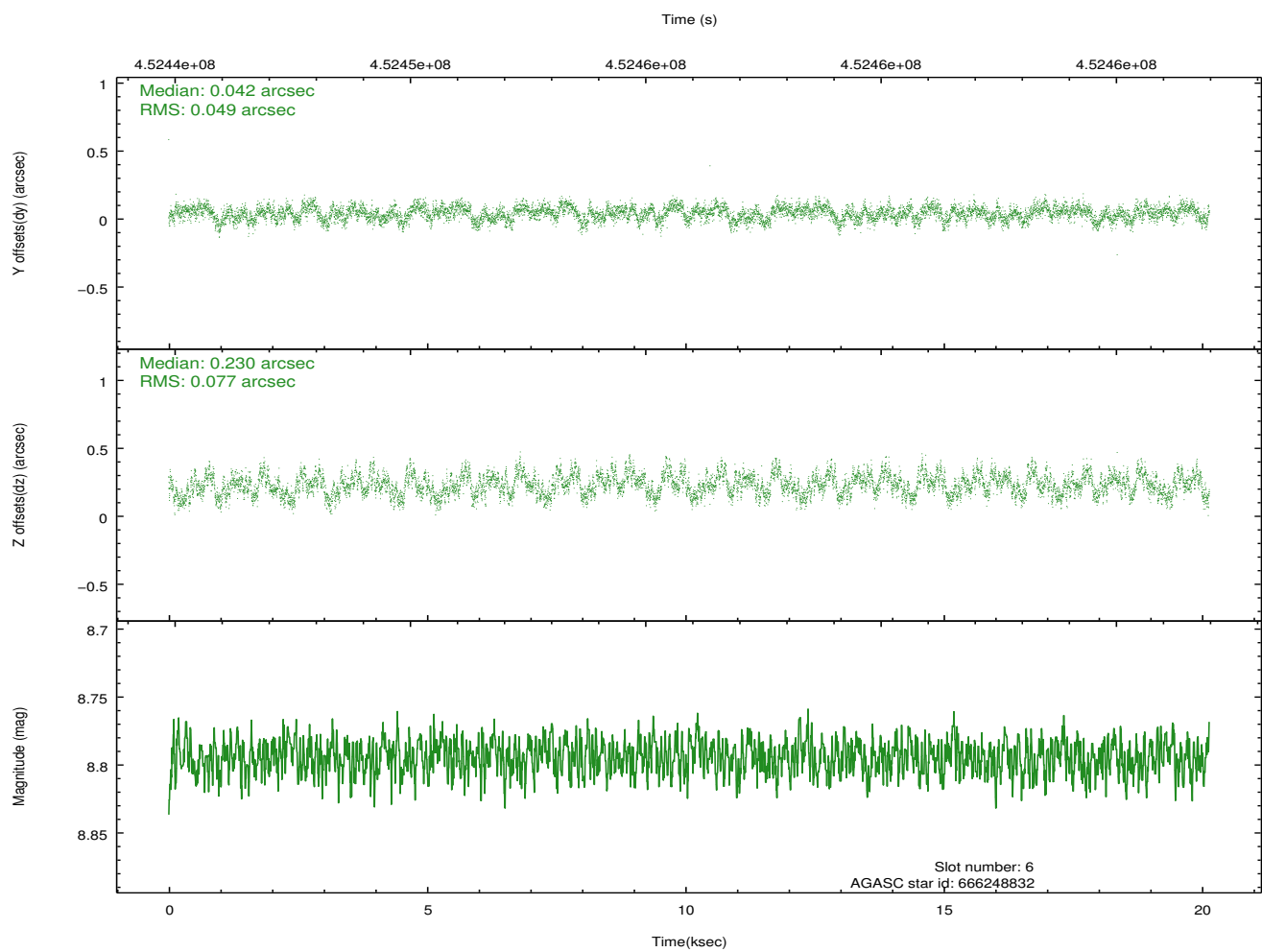
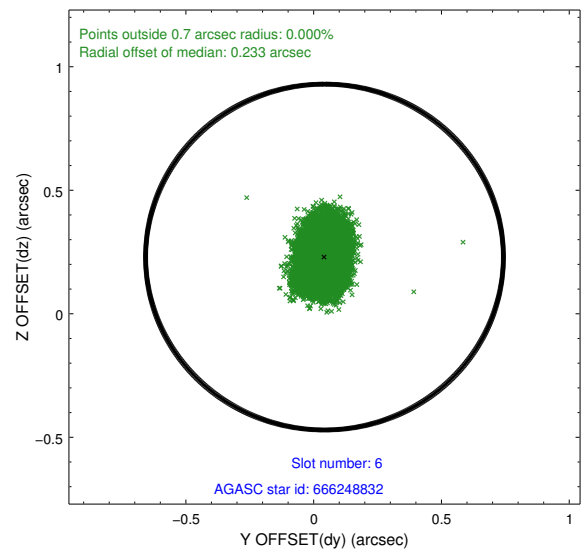
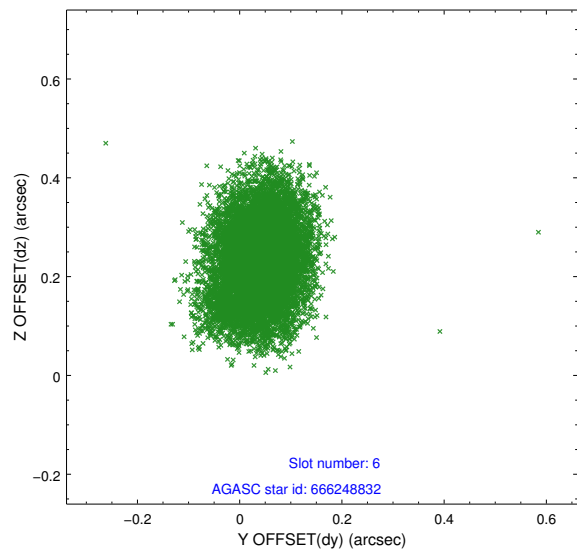
2.4.2 Slot 4



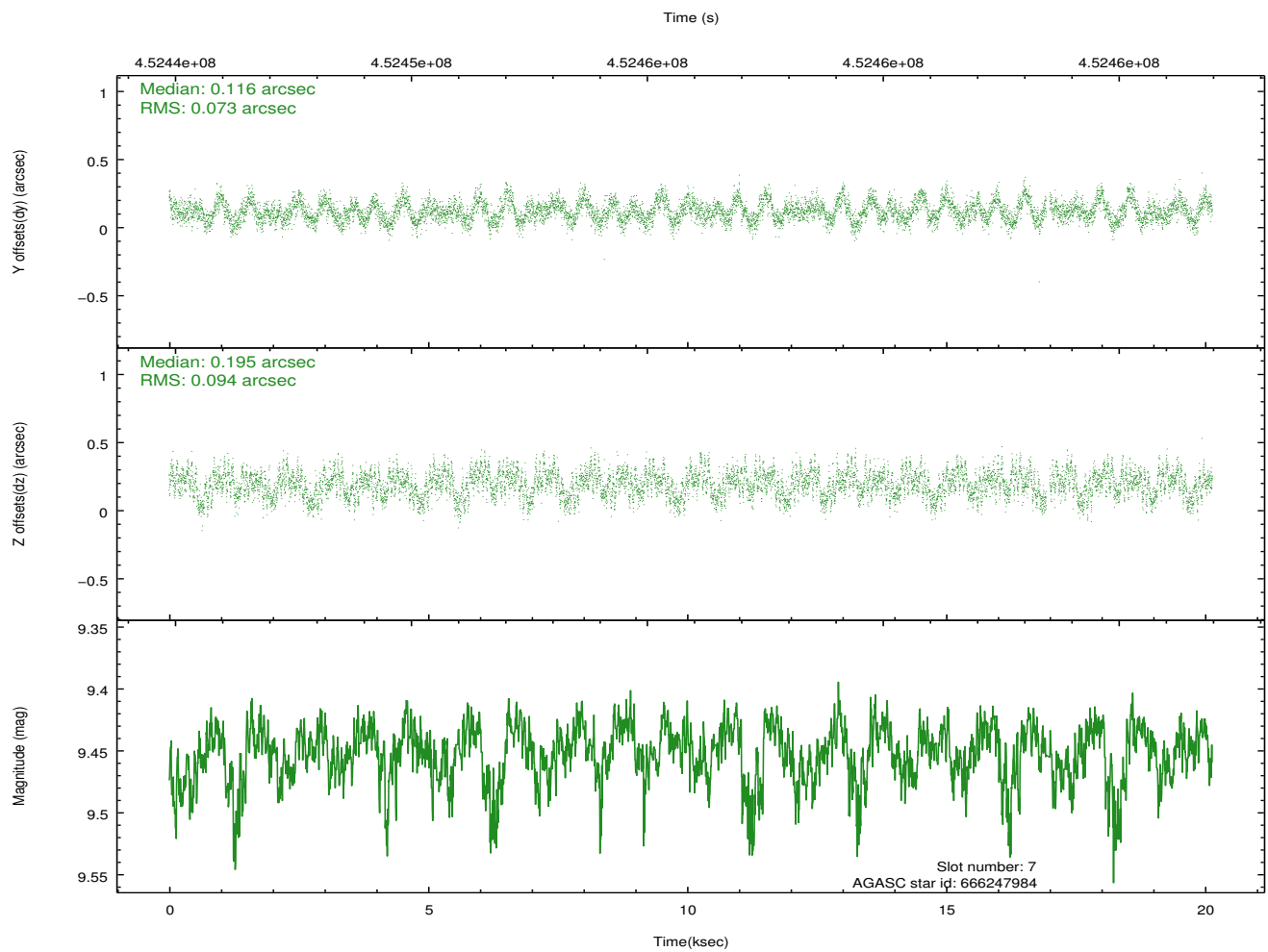
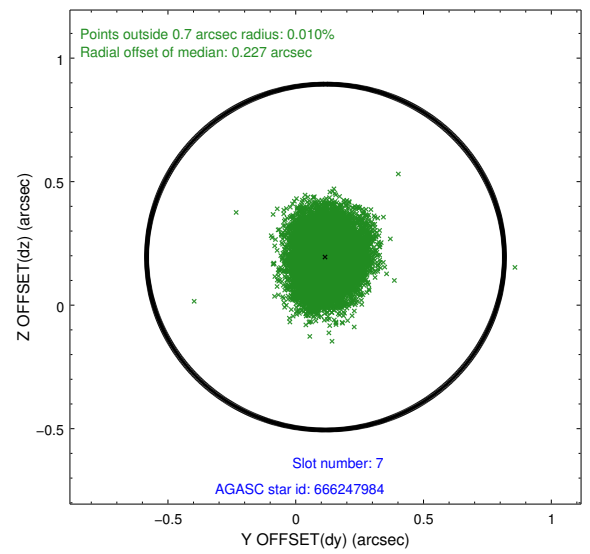
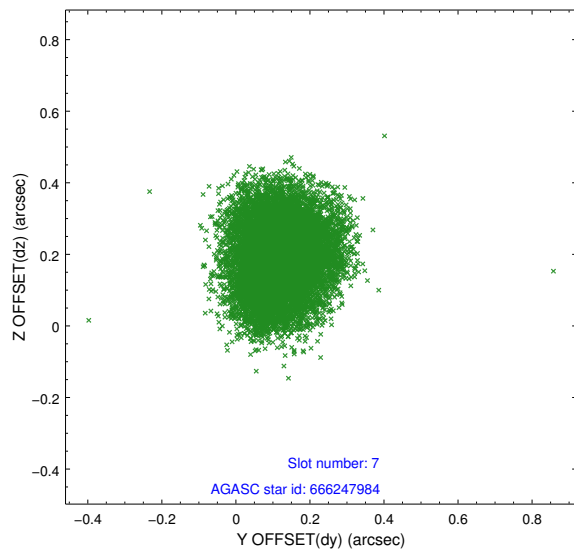
2.4.3 Slot 5



2.4.4 Slot 6

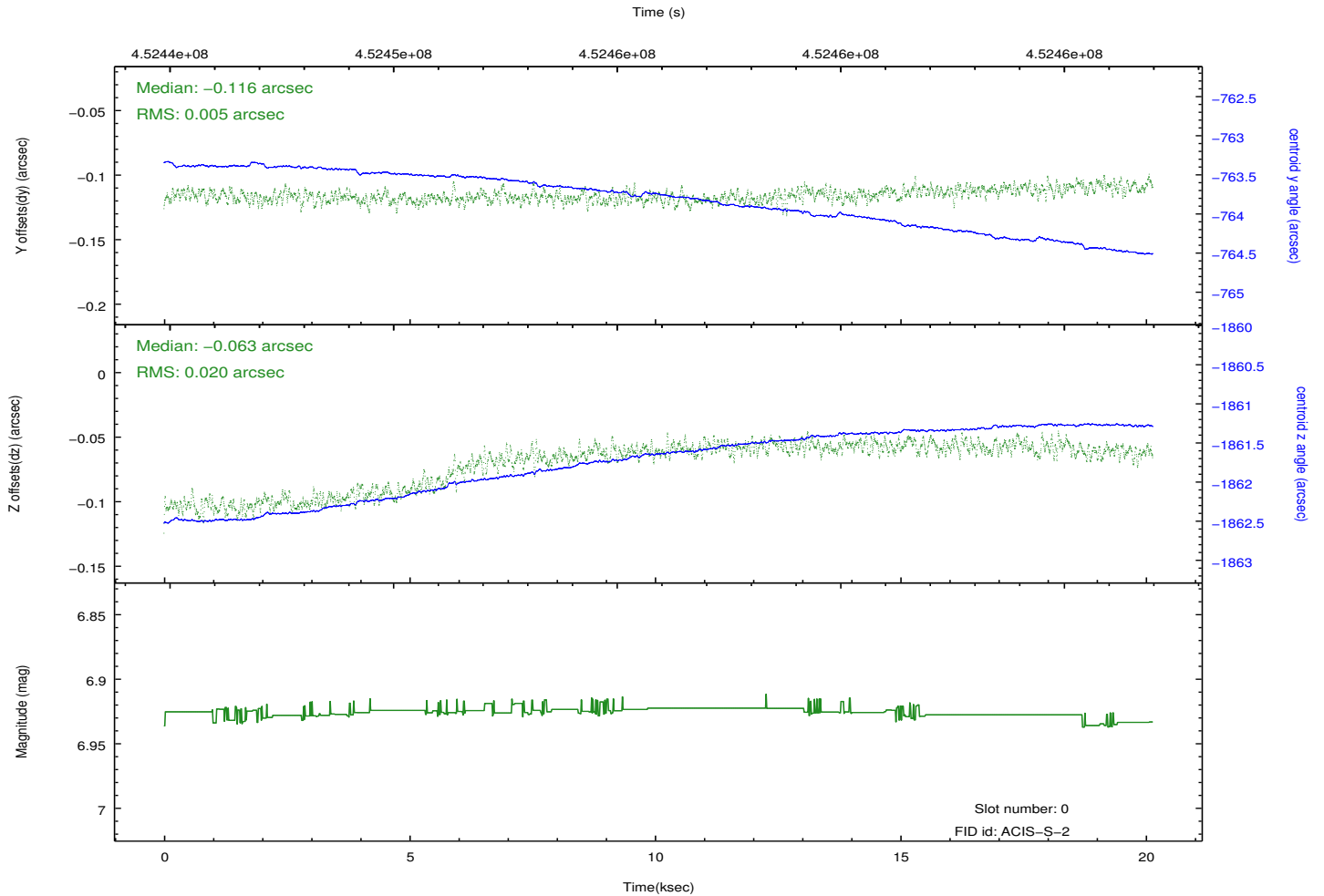
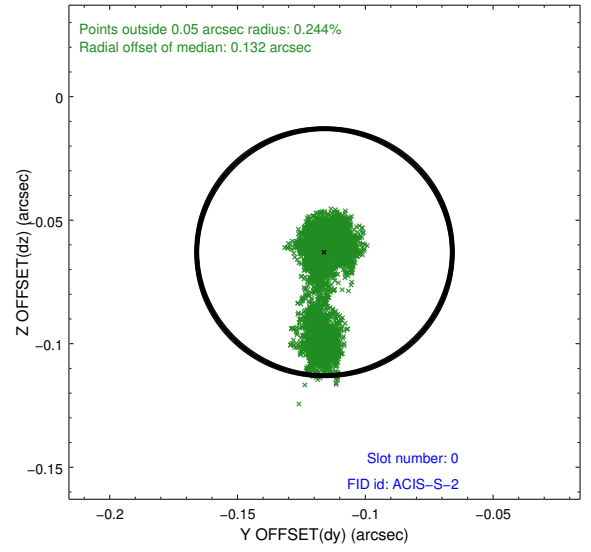
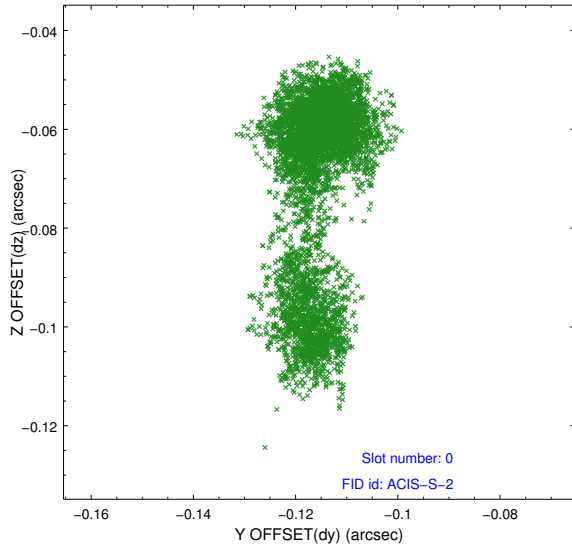


2.4.5 Slot 7

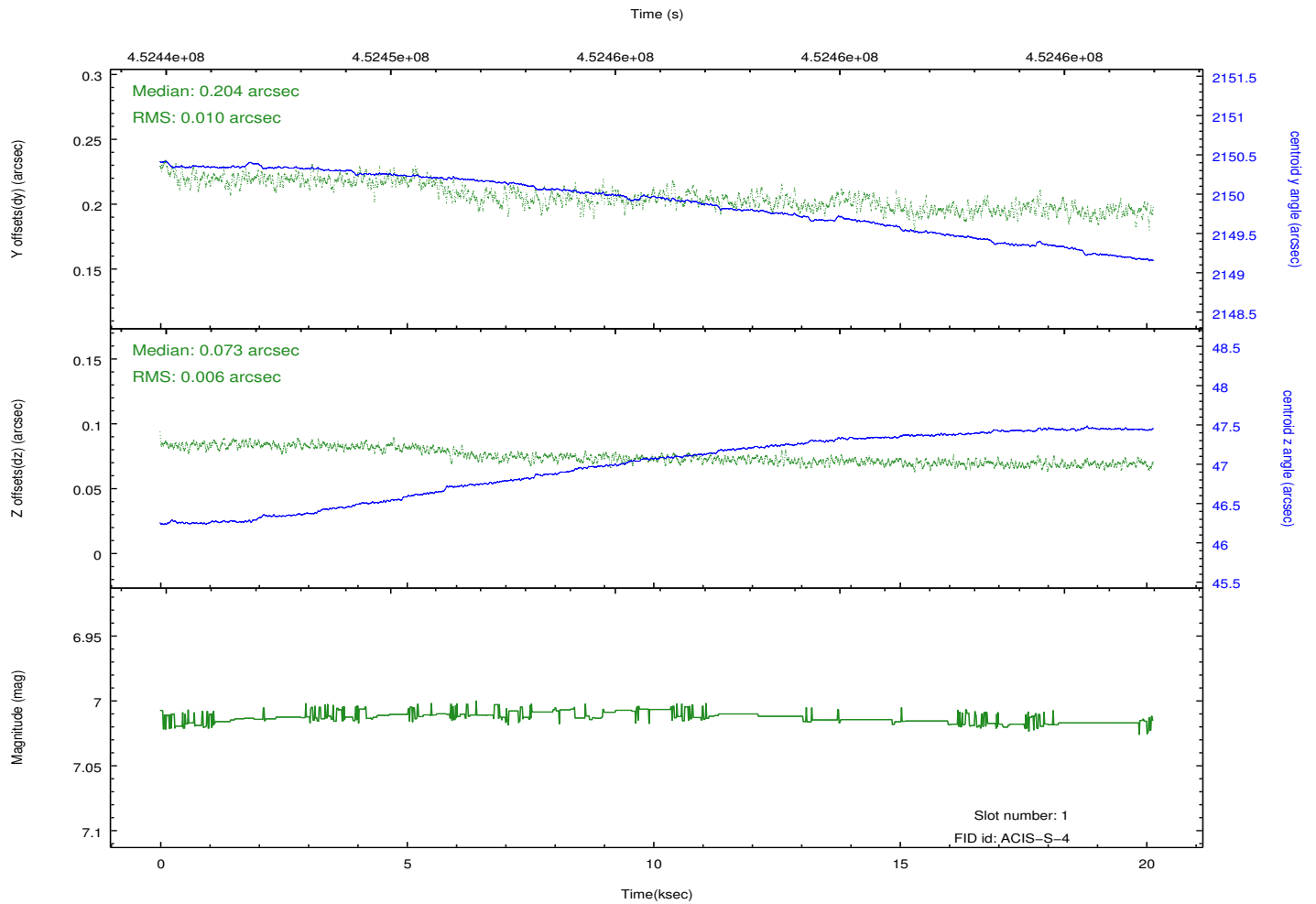
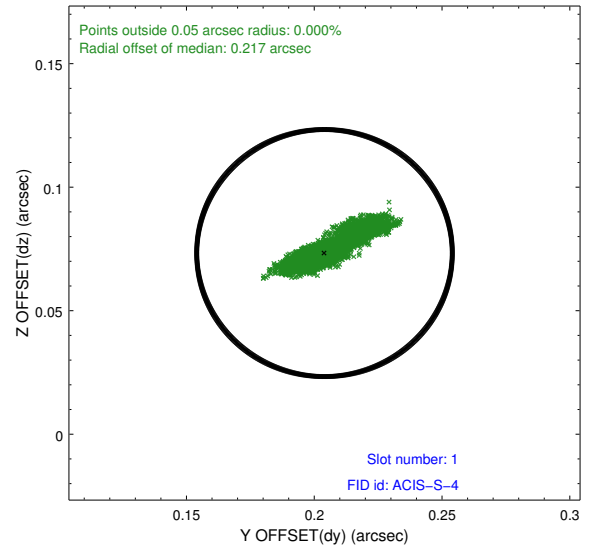
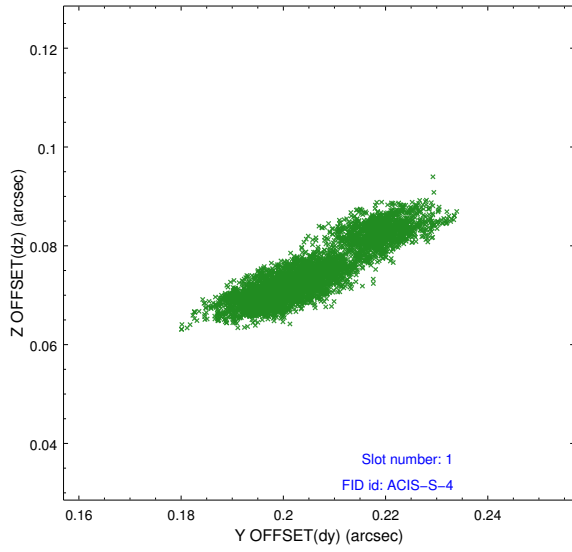


2.5 FID Slots

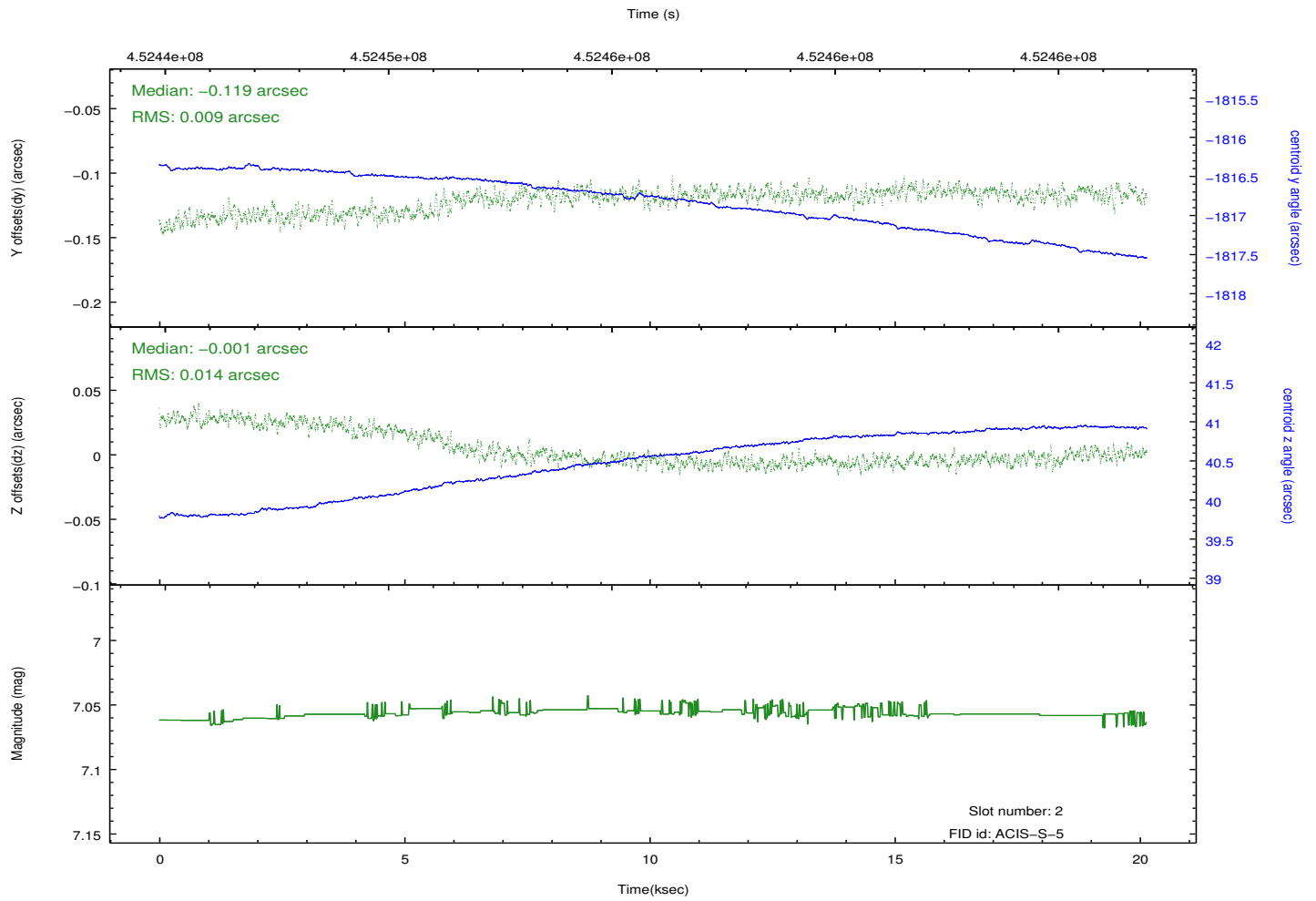
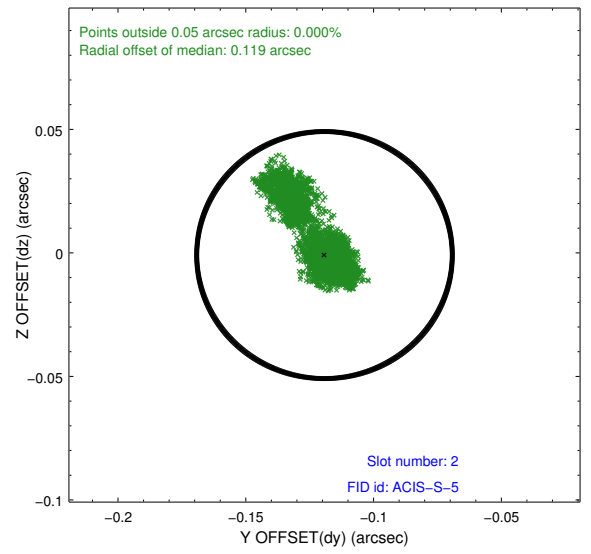
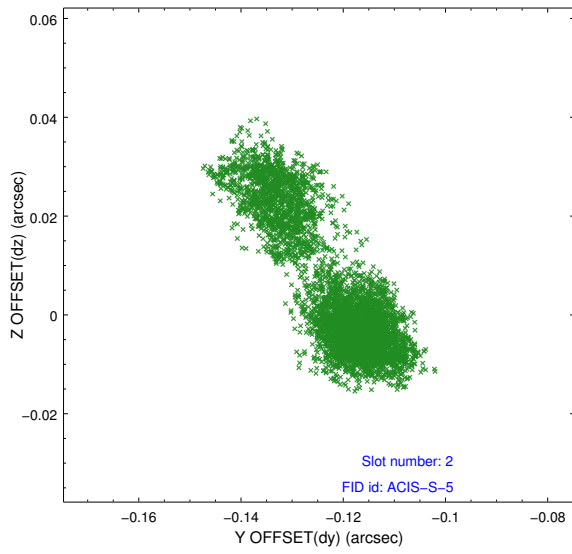
2.5.1 Slot 0



2.5.2 Slot 1

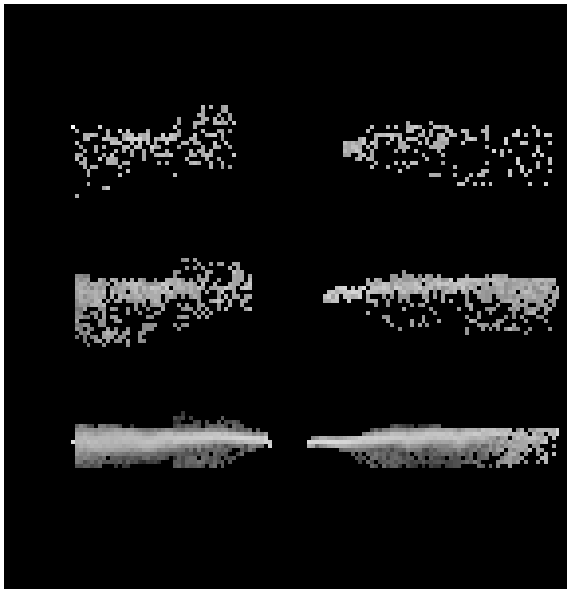


2.5.3 Slot 2

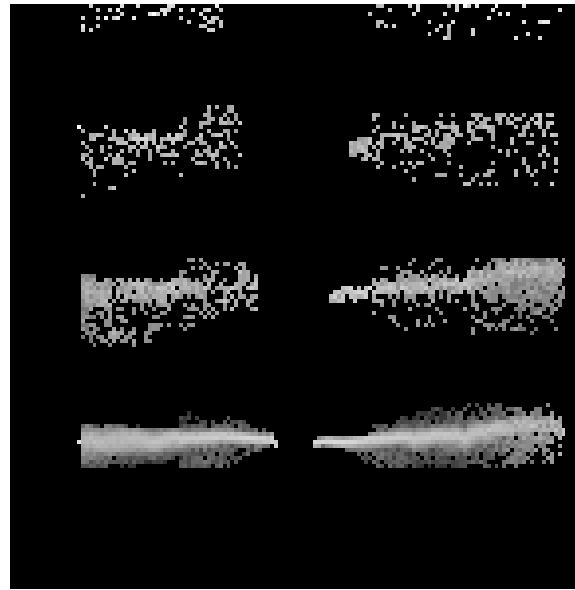


3 Gratings

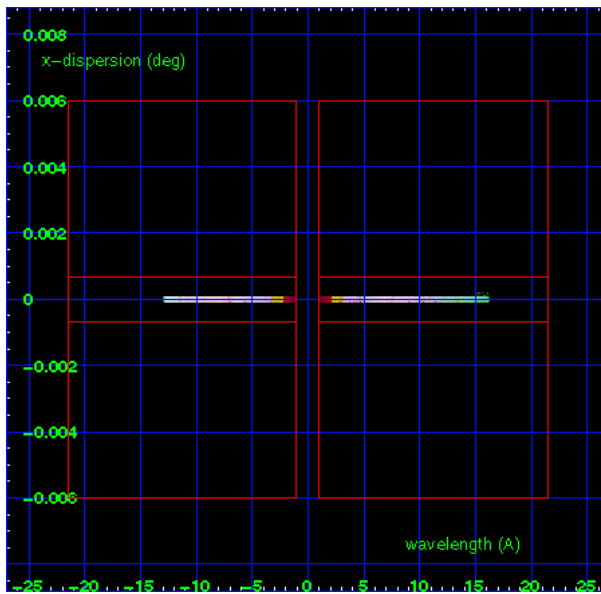
3.1 HEG Arm



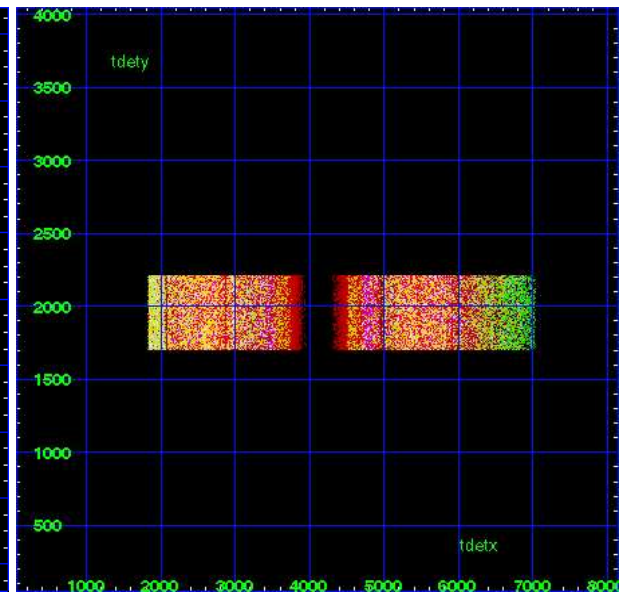
HEG Order Sort 123



HEG Order Sort ALL

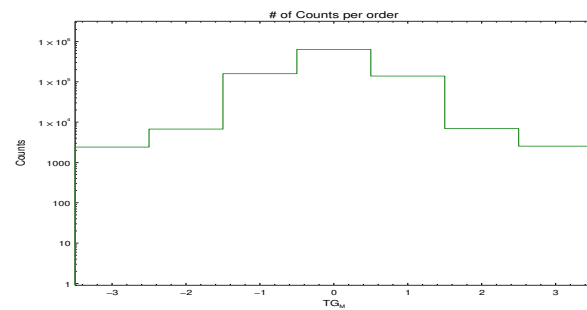


Spot Image HEG

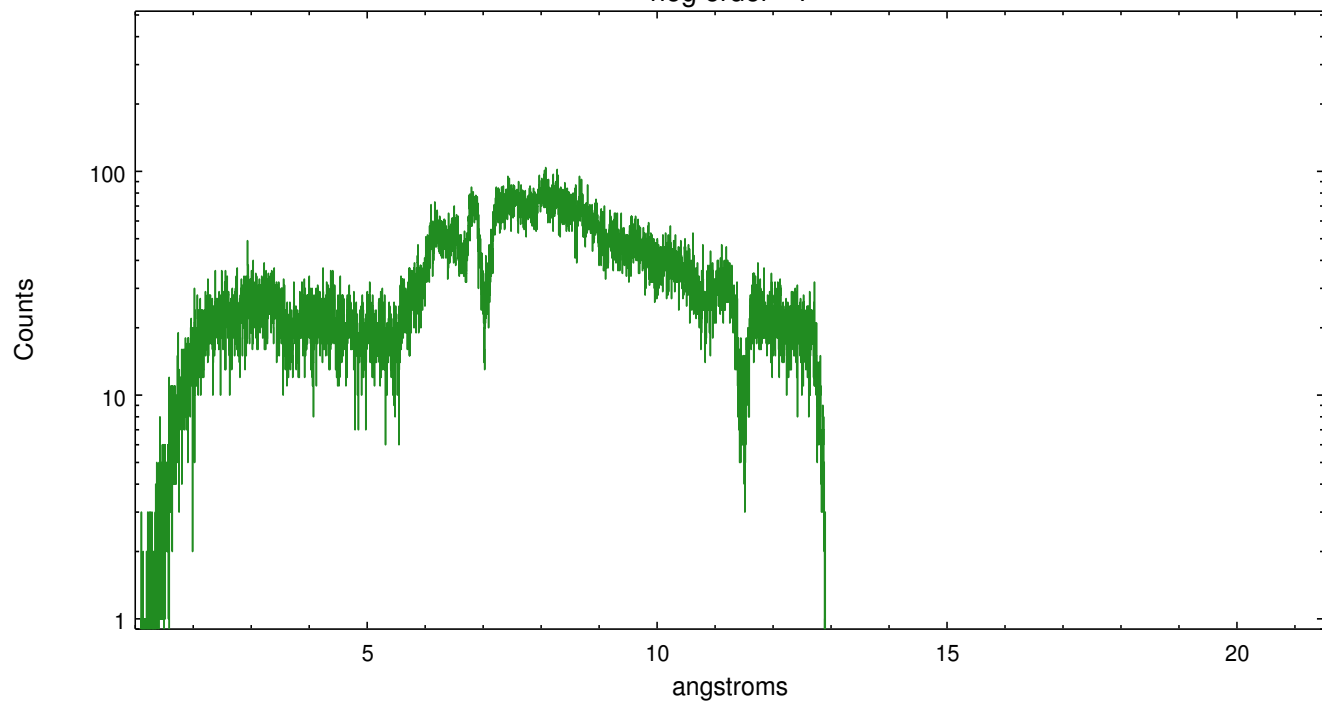


Full Detector HEG

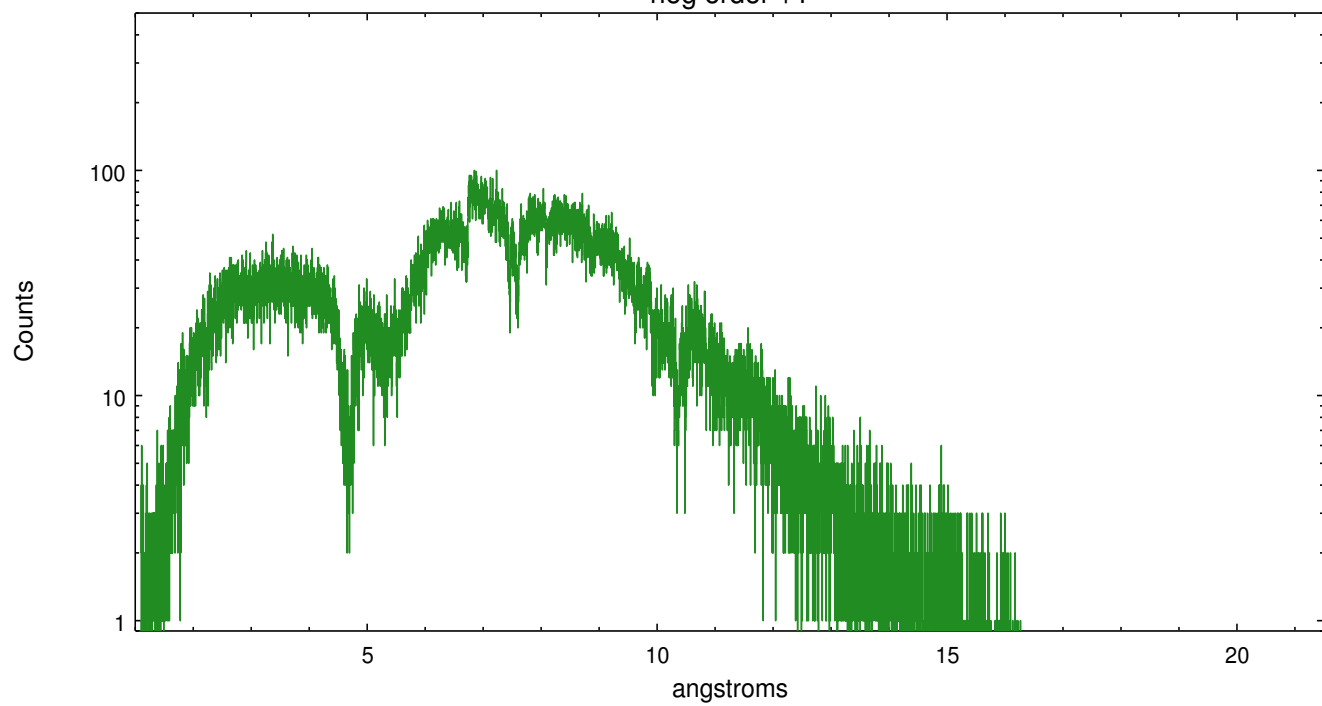
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	2404	6724	159167	635754	138764	6912	2533



heg order -1



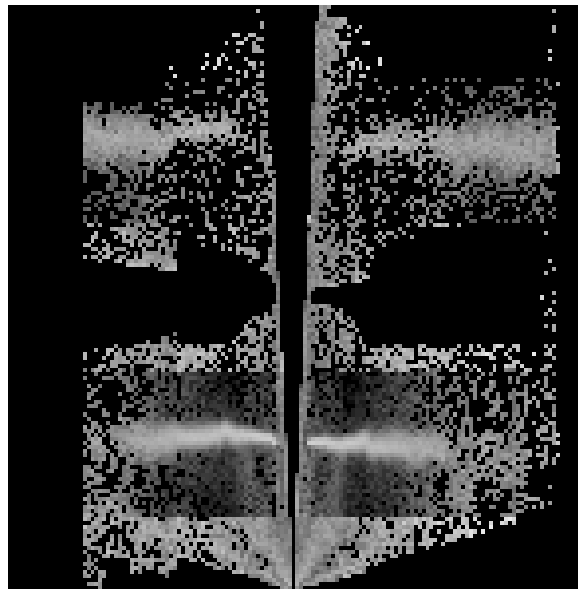
heg order +1



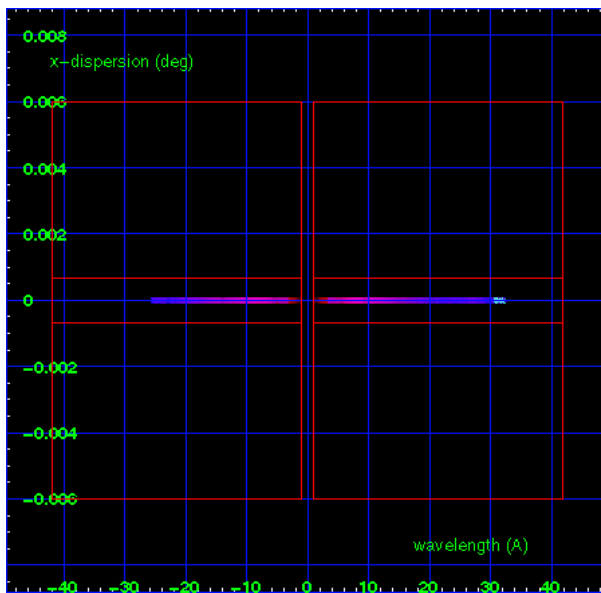
3.2 MEG Arm



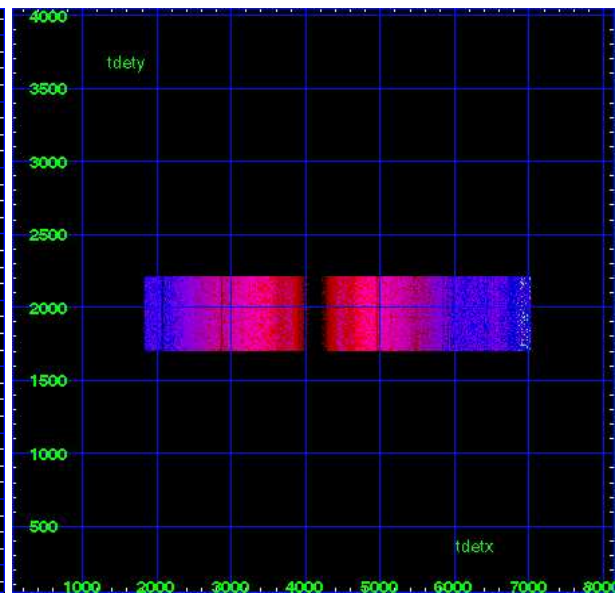
MEG Order Sort 123



MEG Order Sort ALL

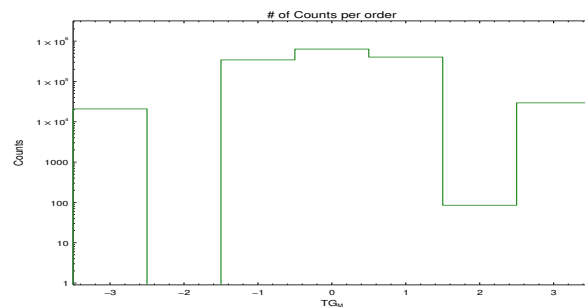


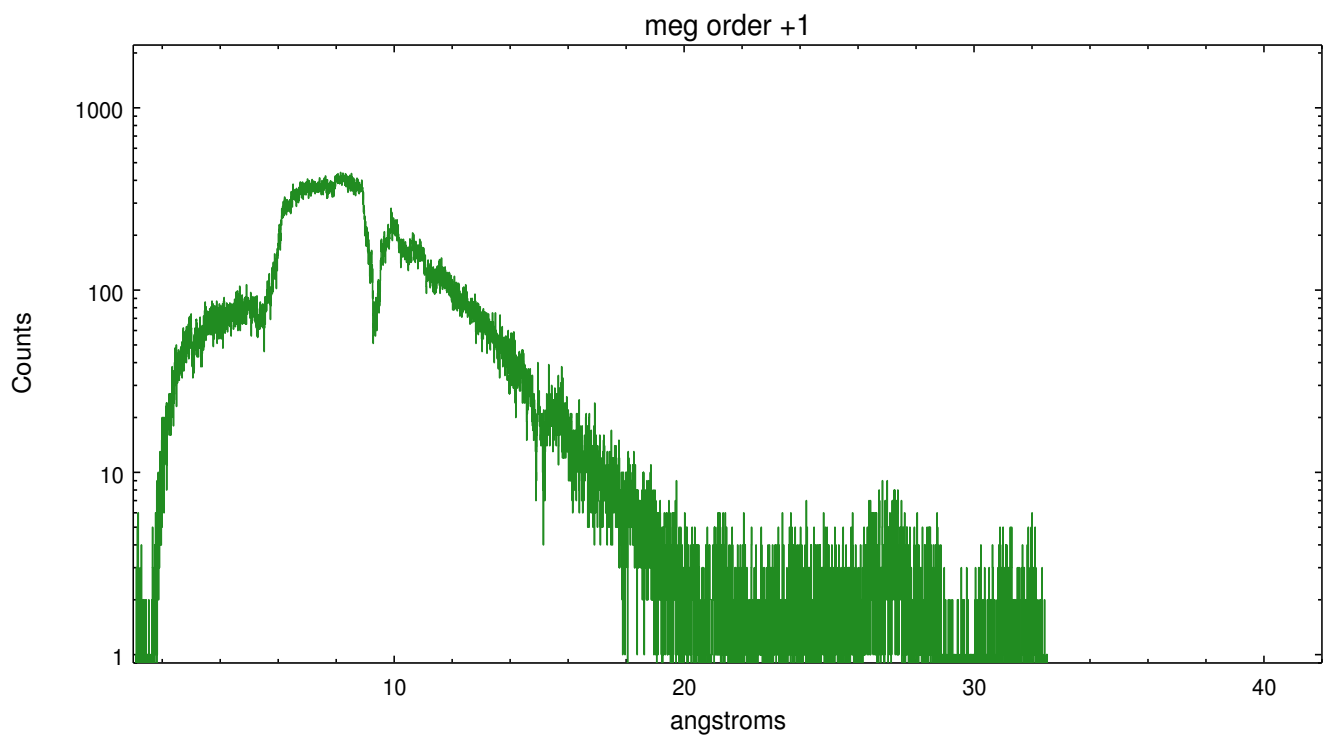
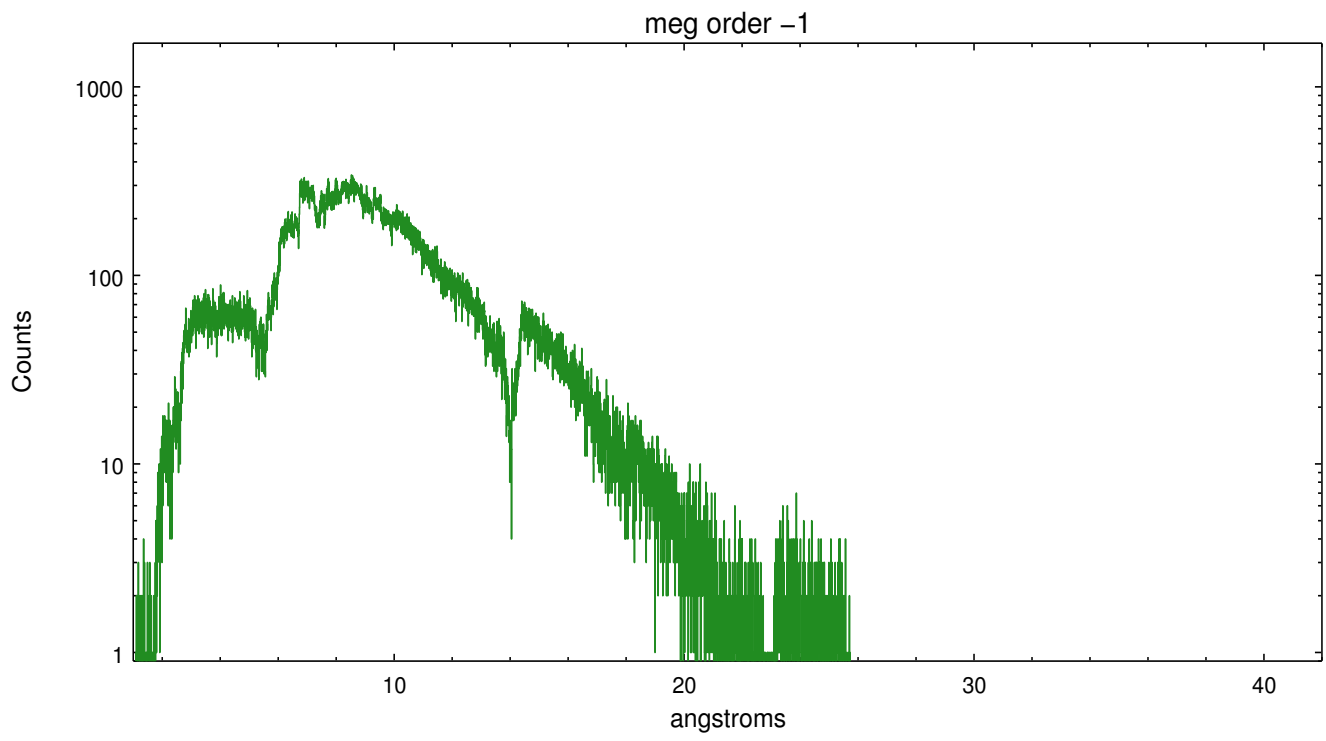
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	20857	0	342516	635754	401851	85	29468





A Summary

A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2012.05.07
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.1035

A.2 Comments