

V&V Reference Report

L2 ASCDS Version : 10.6

Observation 20206 - L2 Version 1
Chandra X-Ray Center

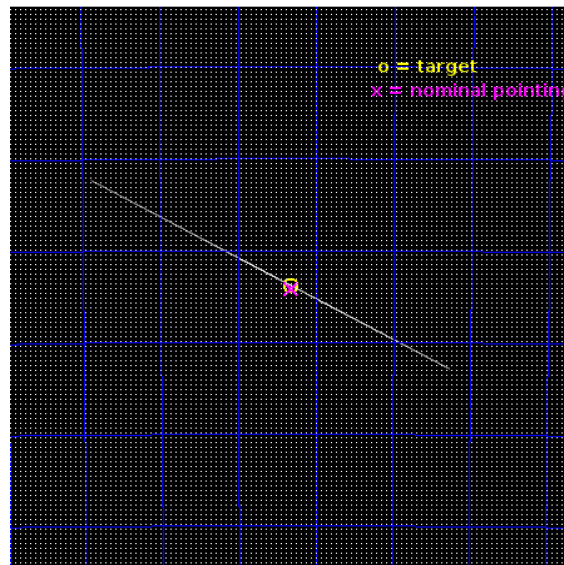
L2 Processing Date : Oct 24 2017

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1 Front

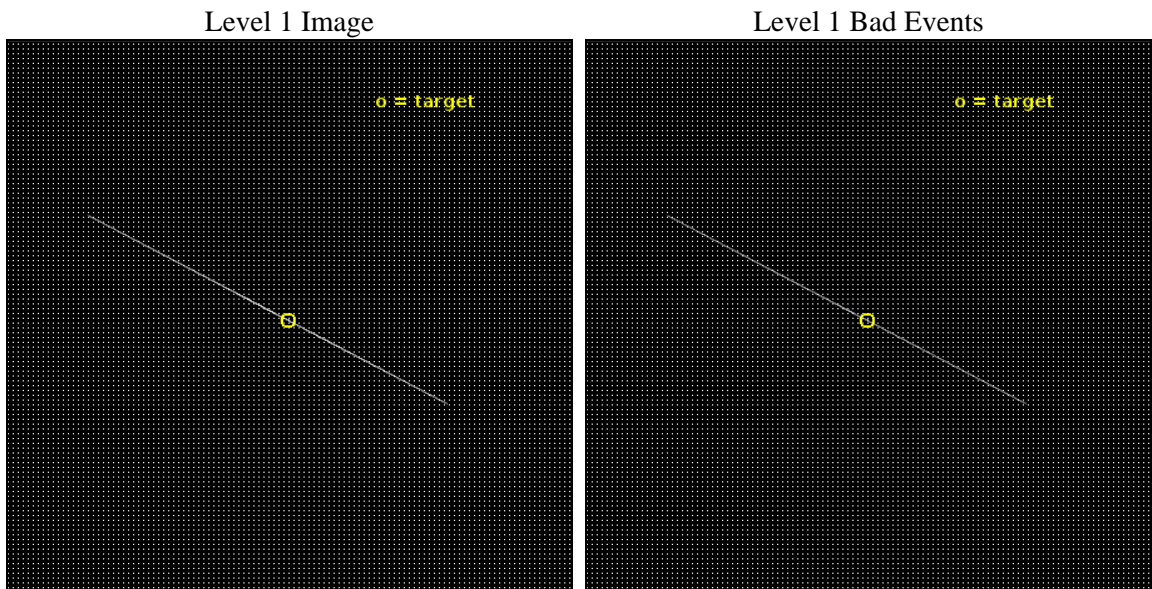
seq_num	401933	Sequence number
obs_id	20206	Observation id
title	An Integrated Approach to Winds, Jets, and State Transitions	Propo
observer	Joseph Neilsen	Principal investigator
object	MAXI J1535-571	Source name
ra_targ	233.832142	Observer's specified target RA [deg]
dec_targ	-57.229884	Observer's specified target Dec [deg]
ra_nom	233.8286497825	Nominal RA [deg]
dec_nom	-57.236393150437	Nominal Dec [deg]
roll_nom	208.65369632912	Nominal Roll [deg]
revision	1	Processing version of data
ontime	26688.066350818	Sum of GTIs [s]
livetime	26583.816091635	Livetime [s]
ontime5	28003.25	Sum of GTIs [s]
ontime6	25960.239858985	Sum of GTIs [s]
ontime7	26688.066350818	Sum of GTIs [s]
ontime8	28003.25	Sum of GTIs [s]
ontime9	28003.25	Sum of GTIs [s]
l2events	7253983	Number of level 2 events



2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Parameters

obi_num	0	Obi number	sched_exp_time	27900.000000	[s] Scheduled observation exposure time
ascdsver	10.6	Processing system revision	ontime	26688.066350818	Sum of GTIs [s]
caldbver	4.7.6	 	ontime5	28003.25	Sum of GTIs [s]
date	2017-10-24T23:51:38	Date and time of file creation	ontime6	25960.239858985	Sum of GTIs [s]
revision	1	Processing version of data	ontime7	26688.066350818	Sum of GTIs [s]
			ontime8	28003.25	Sum of GTIs [s]
			ontime9	28003.25	Sum of GTIs [s]
			l1events	10397492	Number of level 1 events
			tgmethod	TGDETECT	Method used to create src1a file
			zo_pos	(4081.71, 4144.62)	src1a sky pixel position

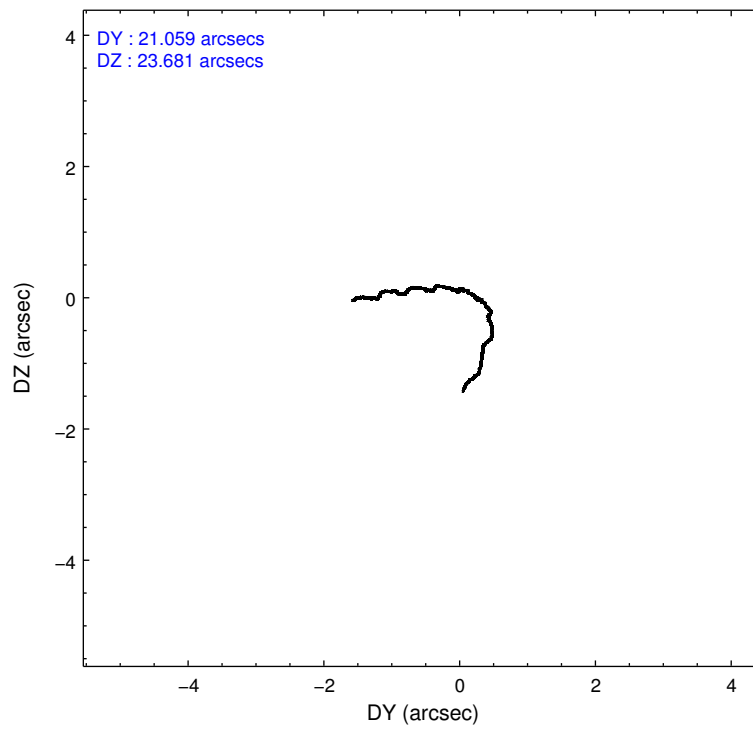
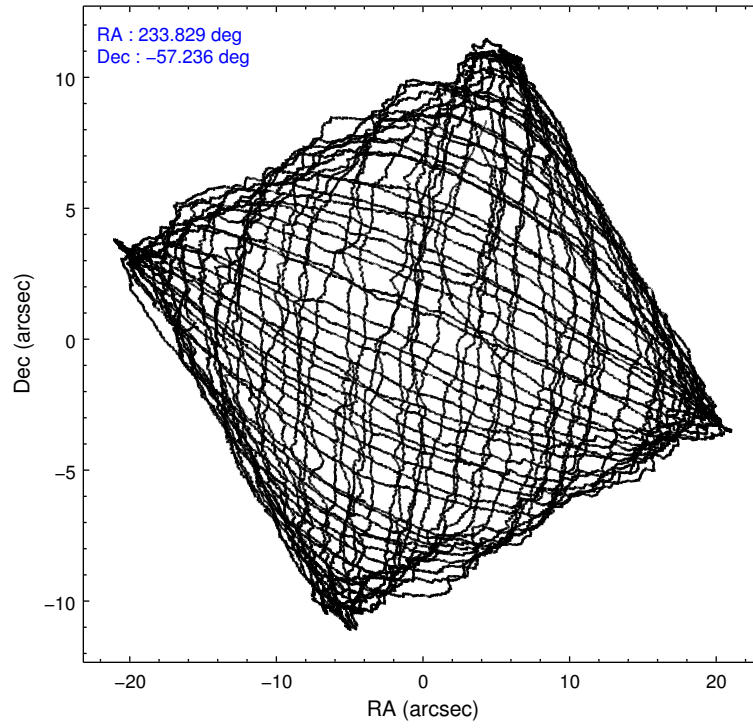
2.1.3 Events

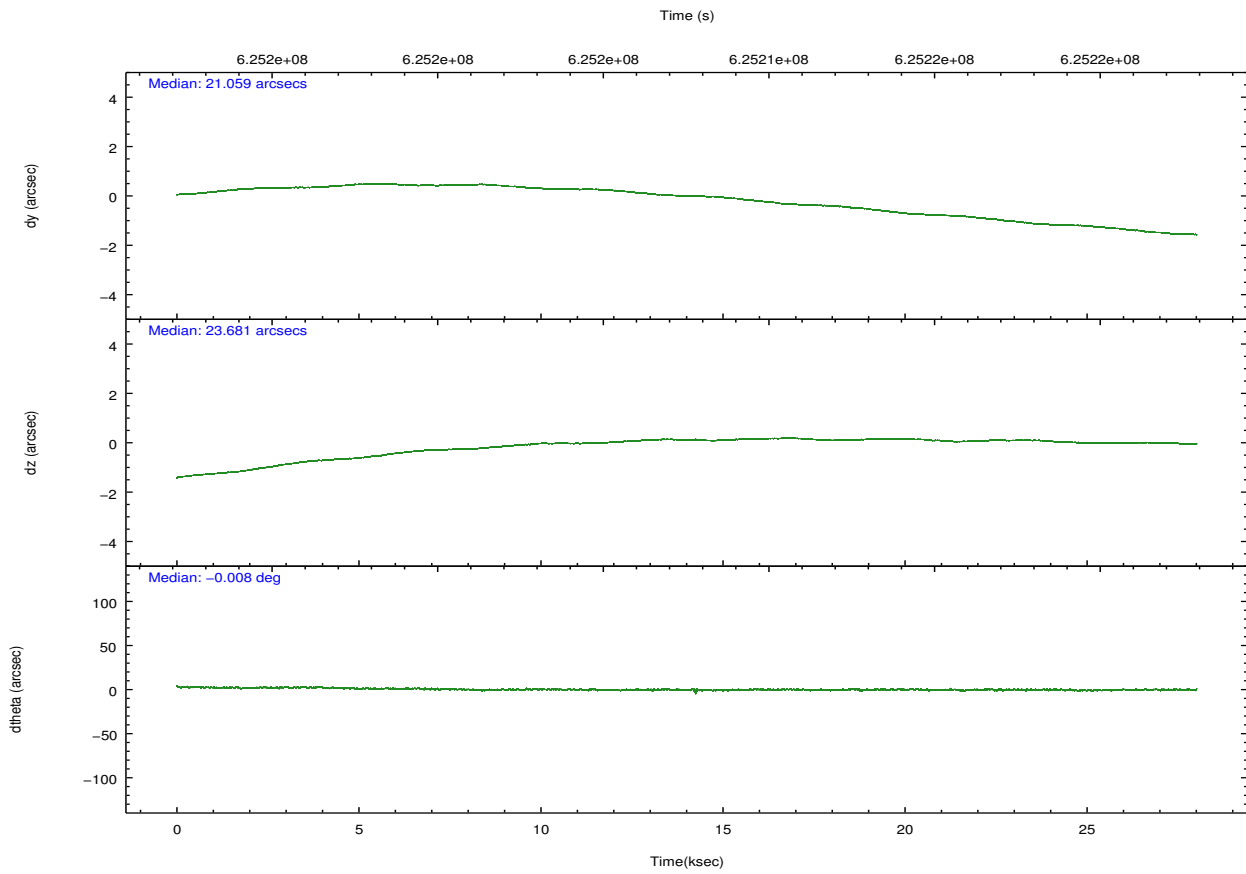
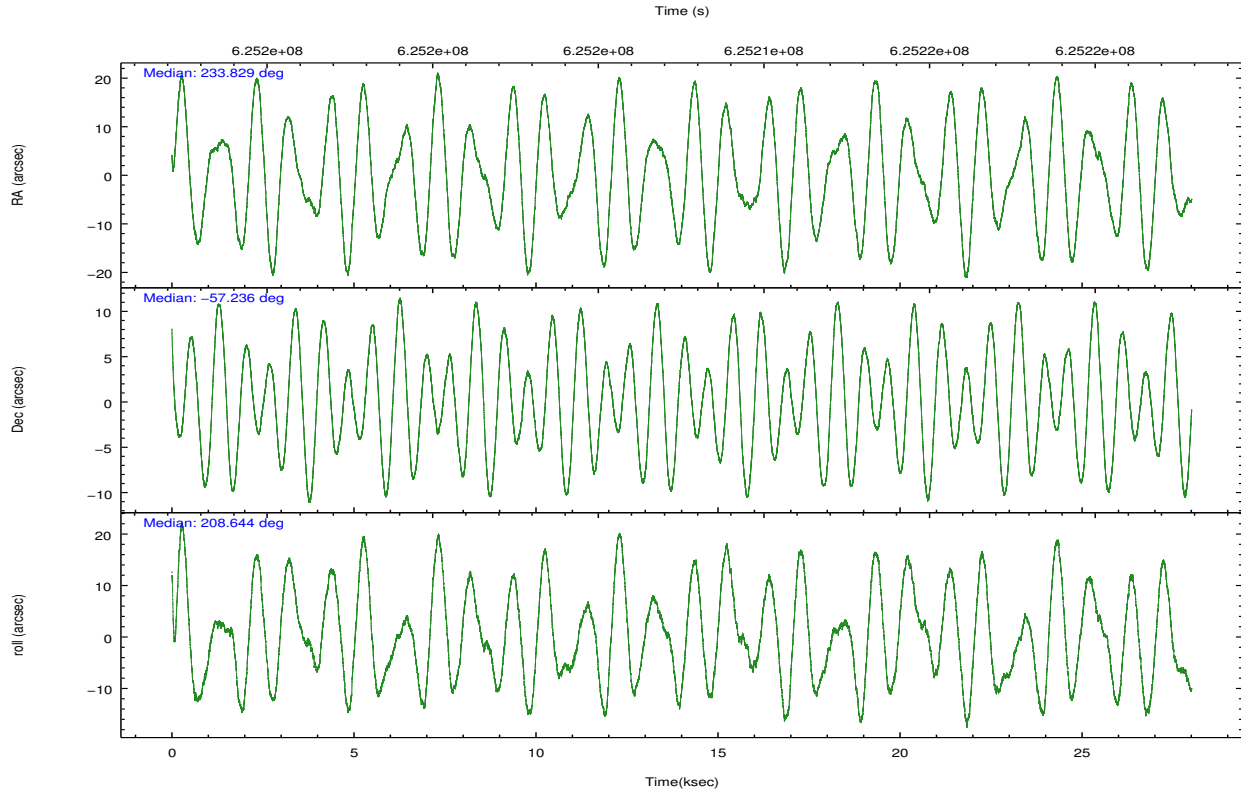
	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	988425	2719687	5103306	1062472	523602	grade 0 events	95479	1197718	510716	289808	31421
rejected events	334186	392766	1134638	460871	322289		9%	44%	10%	27%	6%
rejected %	33%	14%	22%	43%	61%	grade 1 events	357	4982	7569	1131	186
							0%	0%	0%	0%	0%
						grade 2 events	292115	796266	1310220	221247	137358
							29%	29%	25%	20%	26%
						grade 3 events	18476	83572	308136	21254	5554
							1%	3%	6%	2%	1%
						grade 4 events	18171	83023	305786	21063	5630
							1%	3%	5%	1%	1%
						grade 5 events	22795	20649	99334	15619	10699
							2%	0%	1%	1%	2%
						grade 6 events	230043	196960	1747118	48278	21380
							23%	7%	34%	4%	4%
						grade 7 events	310989	336517	814427	444072	311374
							31%	12%	15%	41%	59%

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_GRADED	CC33_GRADED	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	233.854427	233.8286497825024	CCD I2 on	N	N
[deg] Pointing Dec	-57.212759	-57.23639315043709	CCD I3 on	N	N
[deg] Pointing Roll	208.518733	208.6536963291188	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	-177.532523	-177.5307748125485	CCD S3 on	Y	Y
[mm] SIM translation stage offset	-12.6	-12.60174777045933	CCD S4 on	Y	Y
[s] Observation start time (MET)	625193629.184000	625191962.72715	CCD S5 on	O2	Y
Observation start date	2017-10-24T00:52:40	2017-10-24T00:26:02	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	625221529.184000	625223057.12898	On-chip summing requested	N	N
Observation end date	2017-10-24T08:37:40	2017-10-24T09:04:17	Subarray requested	NONE	NONE
Read mode	CONTINUOUS	CONTINUOUS	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	0

2.3 Aspect





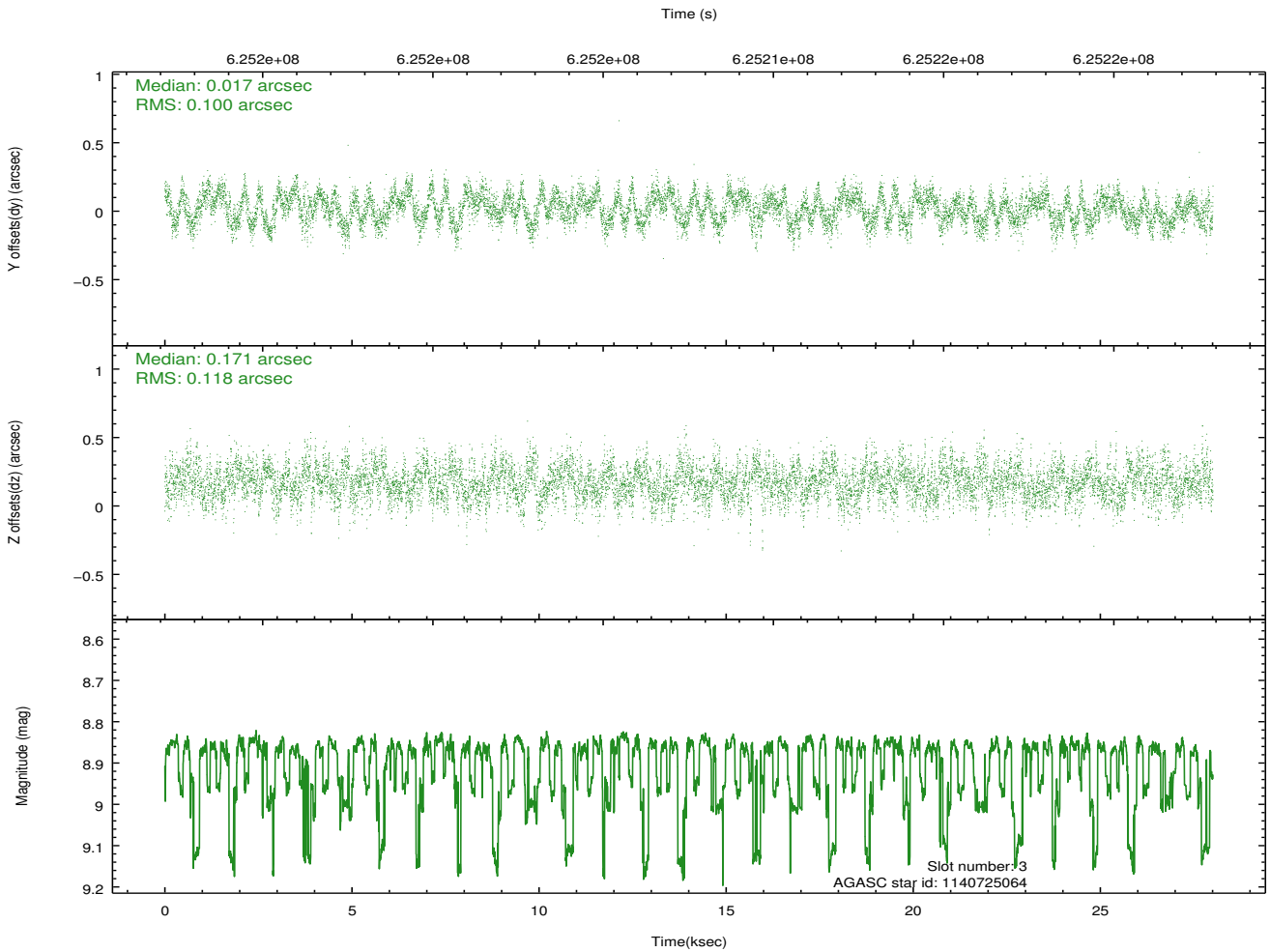
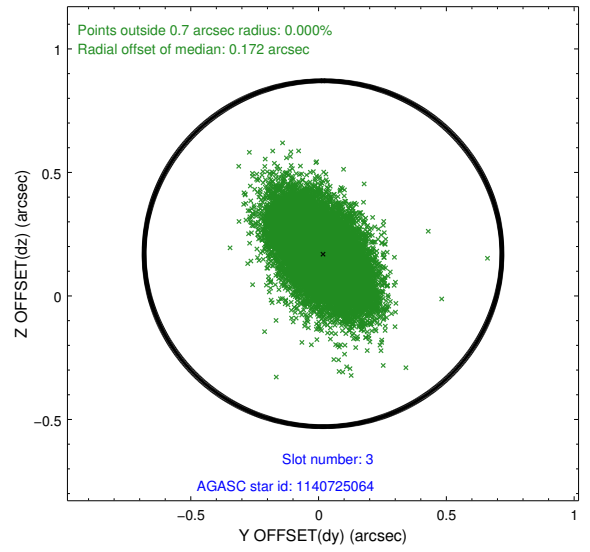
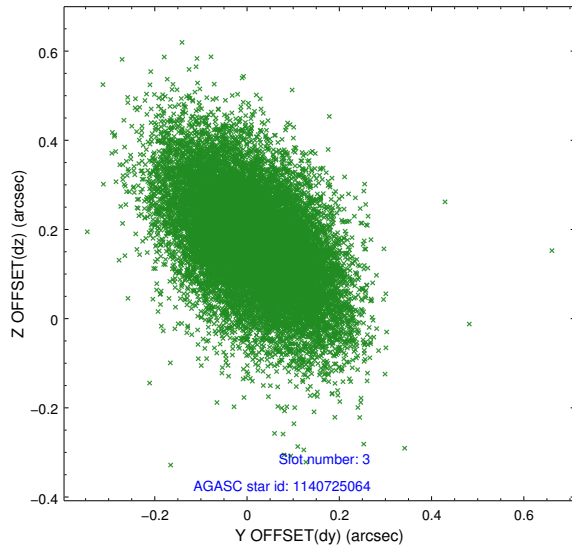
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-1	7.05	6832	0.025	0.111	0.013	0.019	0.000000	0.000000	923.13	-1999.95
1	FID		ACIS-S-2	6.94	6833	-0.537	-0.377	0.016	0.036	0.000000	0.000000	-773.28	-2005.18
2	FID		ACIS-S-4	7.00	6832	0.488	0.268	0.019	0.039	0.000000	0.000000	2140.72	-95.75
3	GUIDE	used	1140725064	8.88	13651	0.017	0.171	0.162	0.270	233.128603	-56.809070	567.96	-1952.33
4	GUIDE	used	1140852176	8.26	13655	0.063	0.419	0.123	0.216	234.112484	-57.014325	-784.27	-384.93
5	GUIDE	used	1140856080	8.28	13584	-0.068	-0.086	0.136	0.233	233.861514	-57.417305	339.61	653.72
6	GUIDE	used	1140723680	8.57	13654	0.028	-0.088	0.139	0.240	232.754853	-57.486193	2348.05	-135.28
7	GUIDE	used	1140860856	7.85	13663	-0.046	-0.415	0.125	0.217	234.739799	-57.707576	-638.77	2388.68

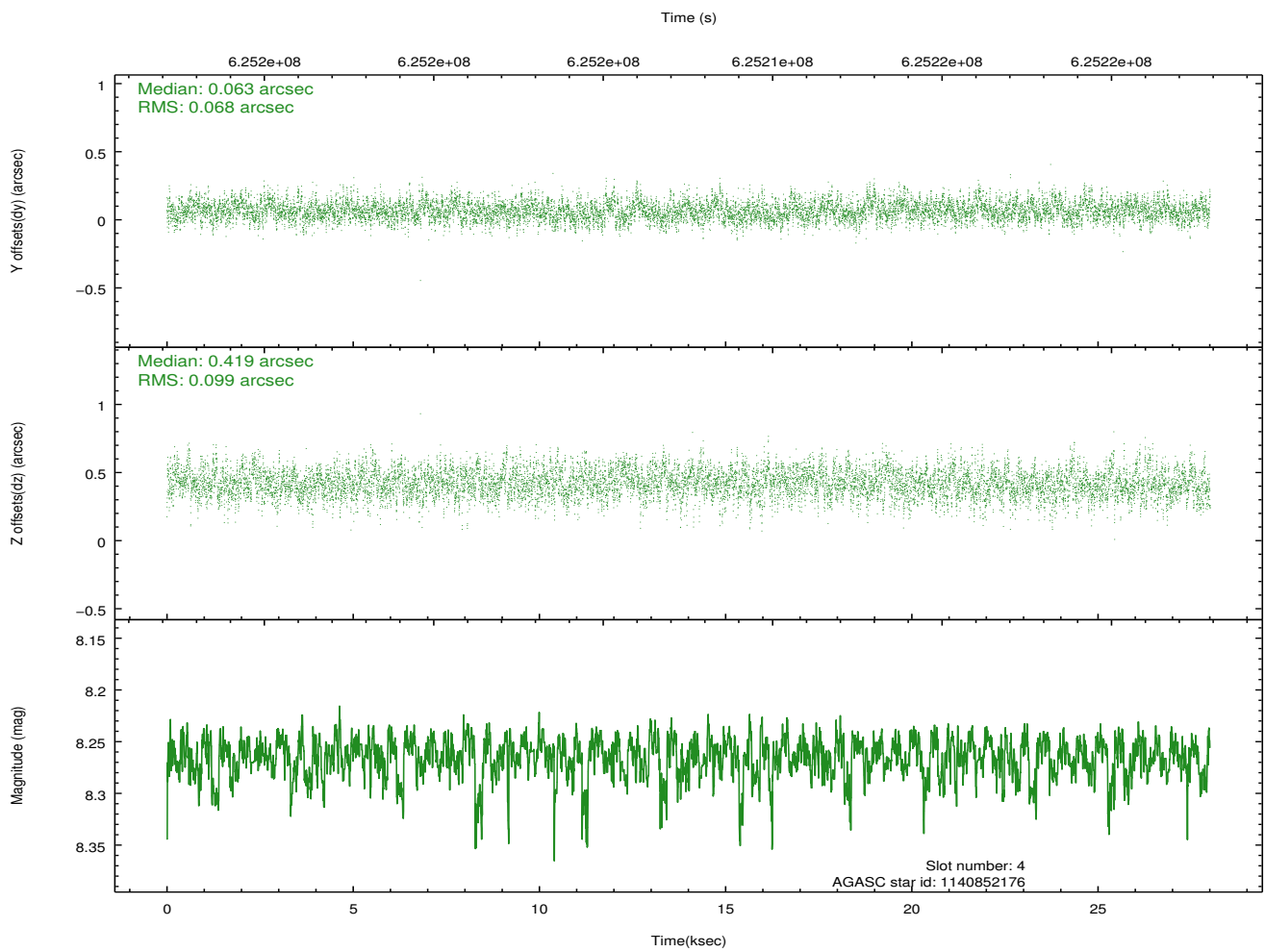
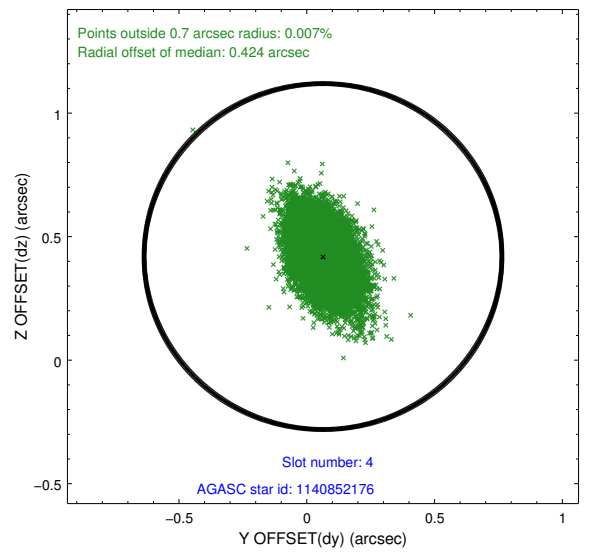
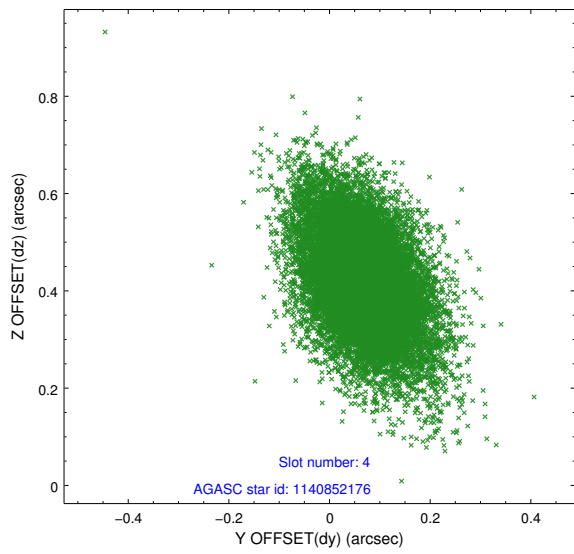
∞

2.4 Star Slots

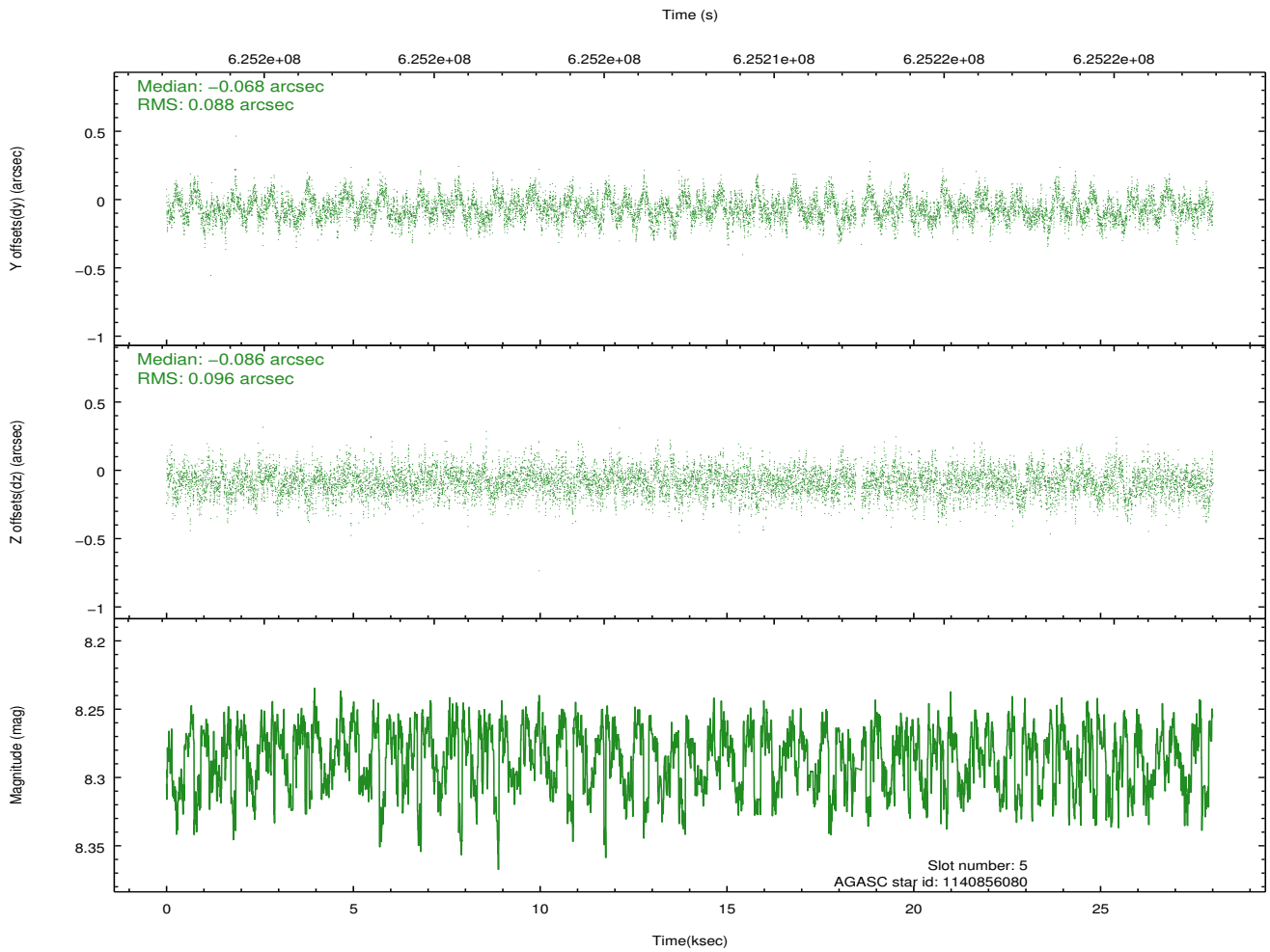
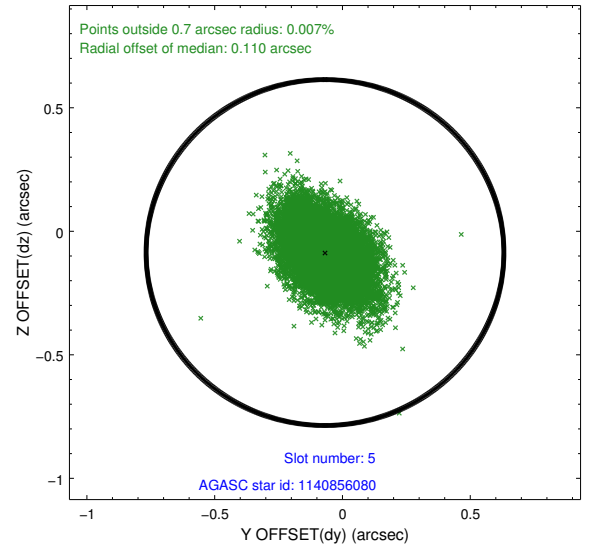
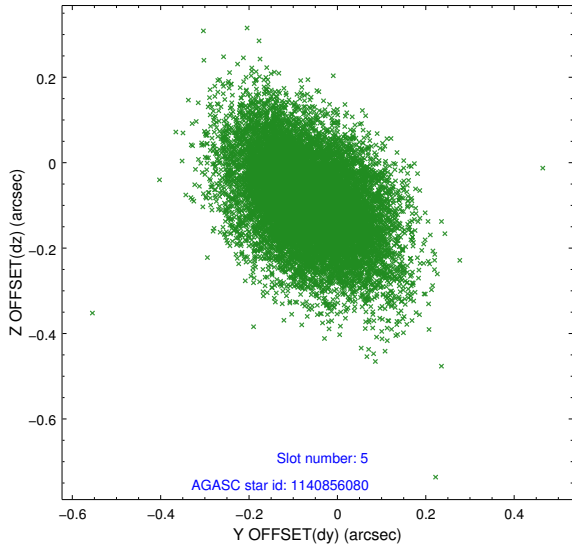
2.4.1 Slot 3



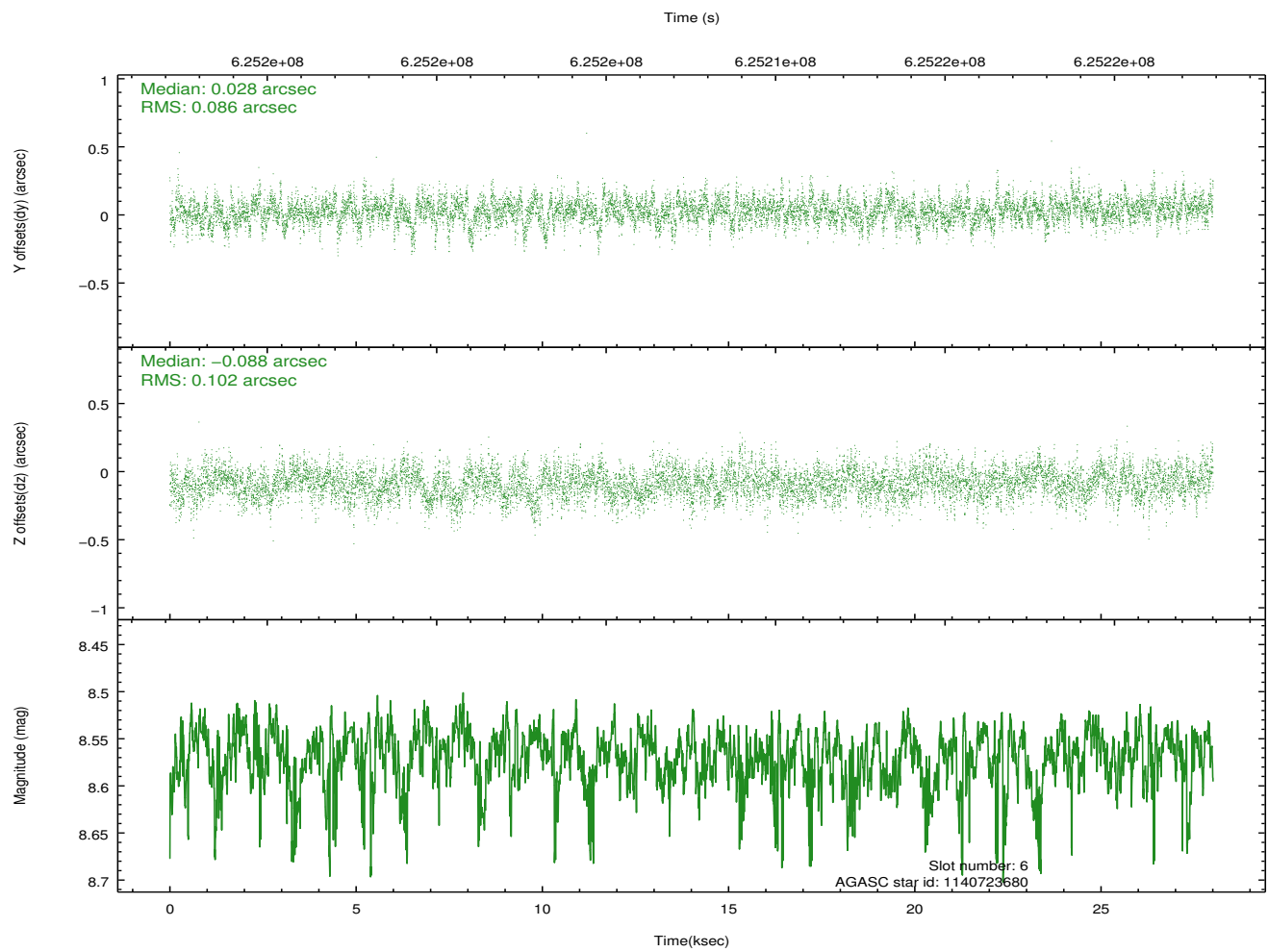
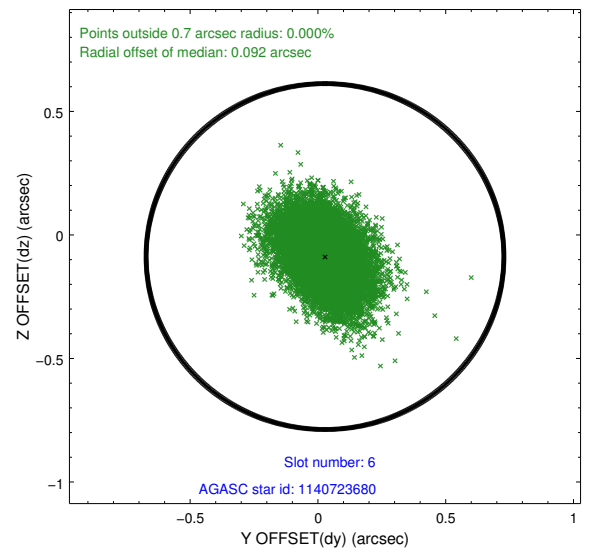
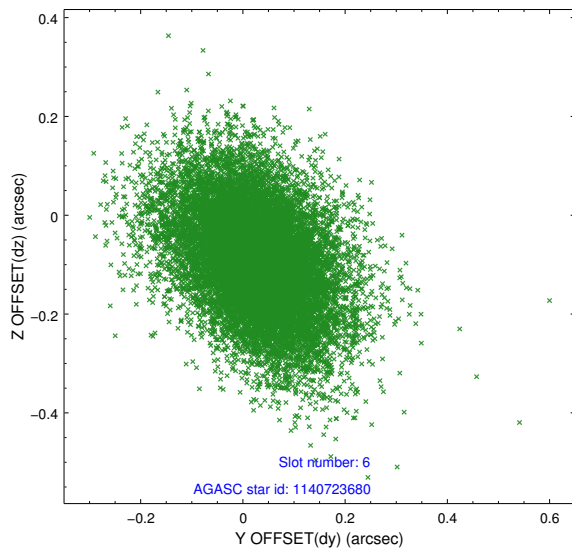
2.4.2 Slot 4



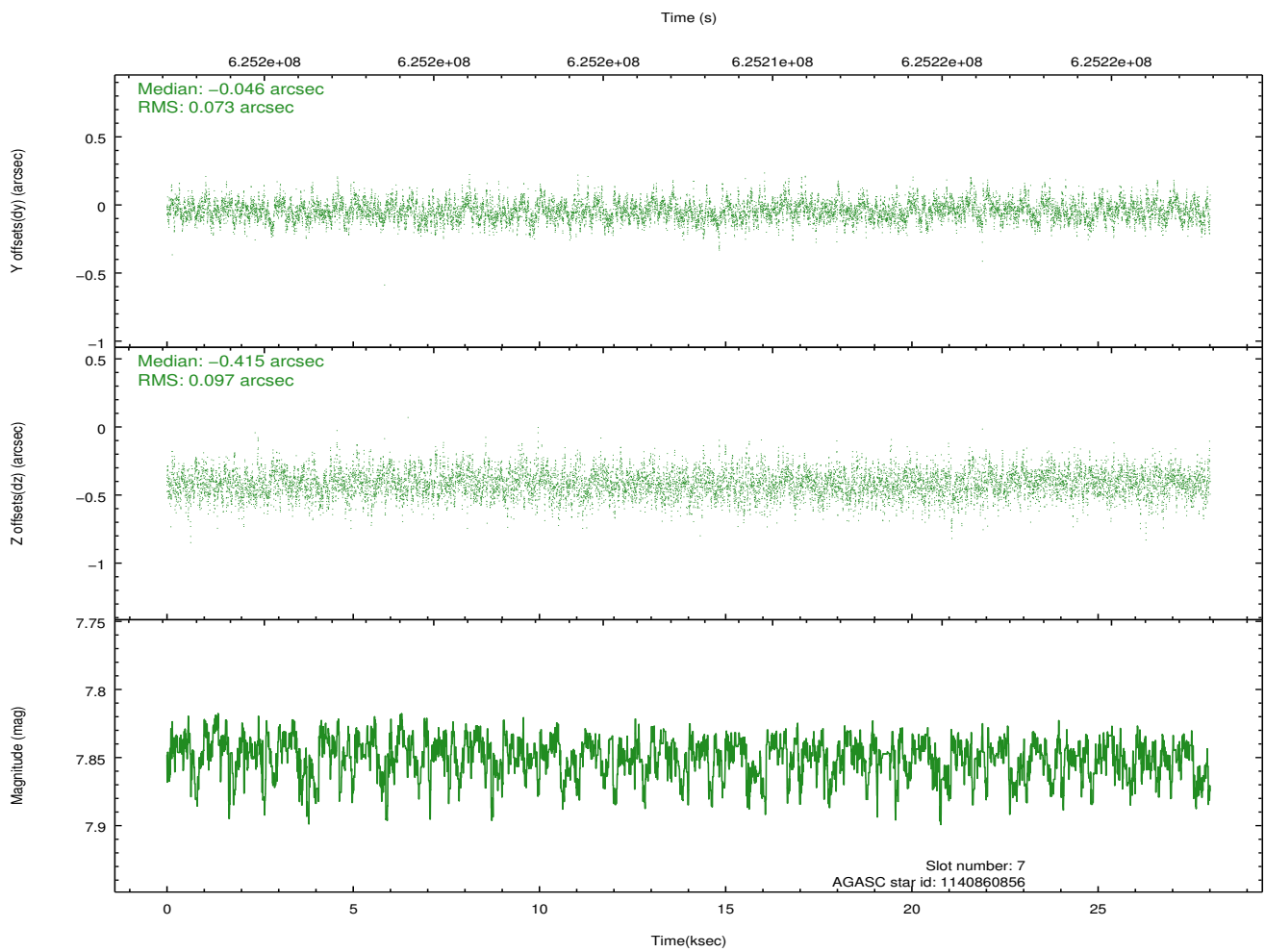
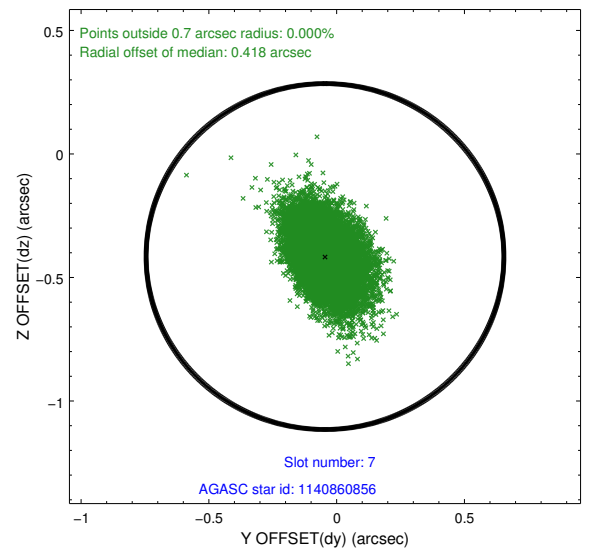
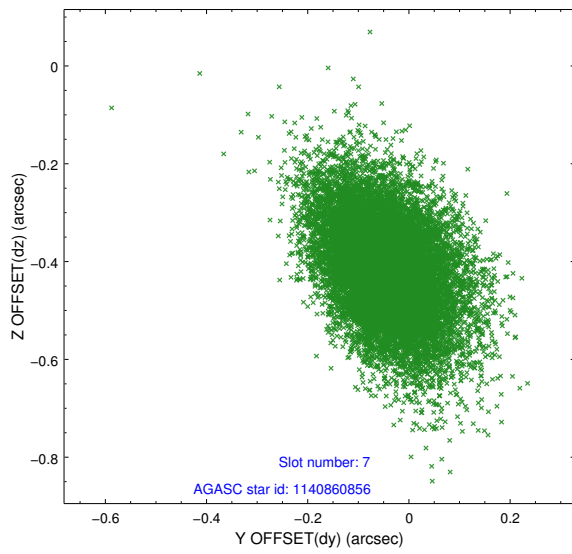
2.4.3 Slot 5



2.4.4 Slot 6

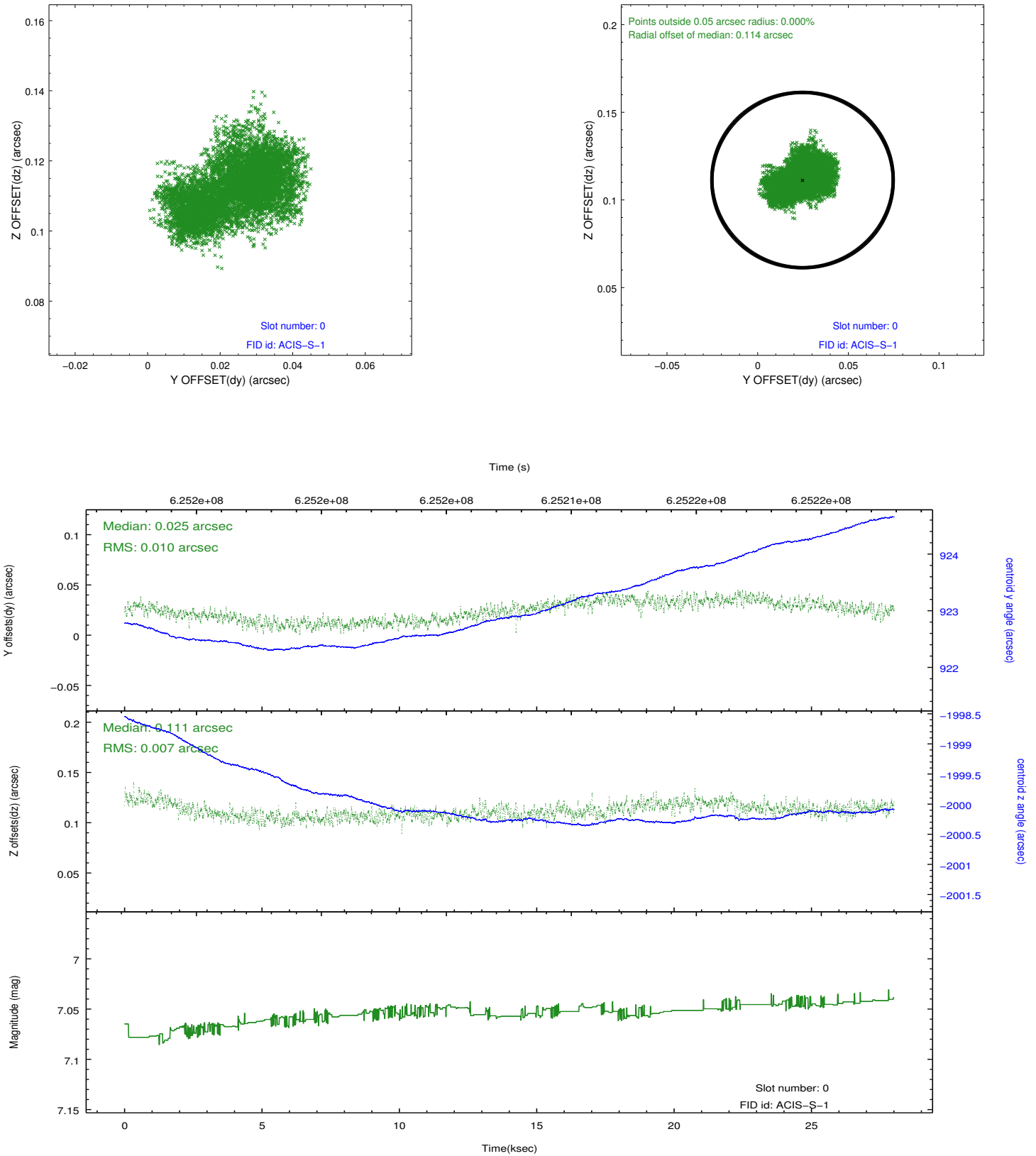


2.4.5 Slot 7

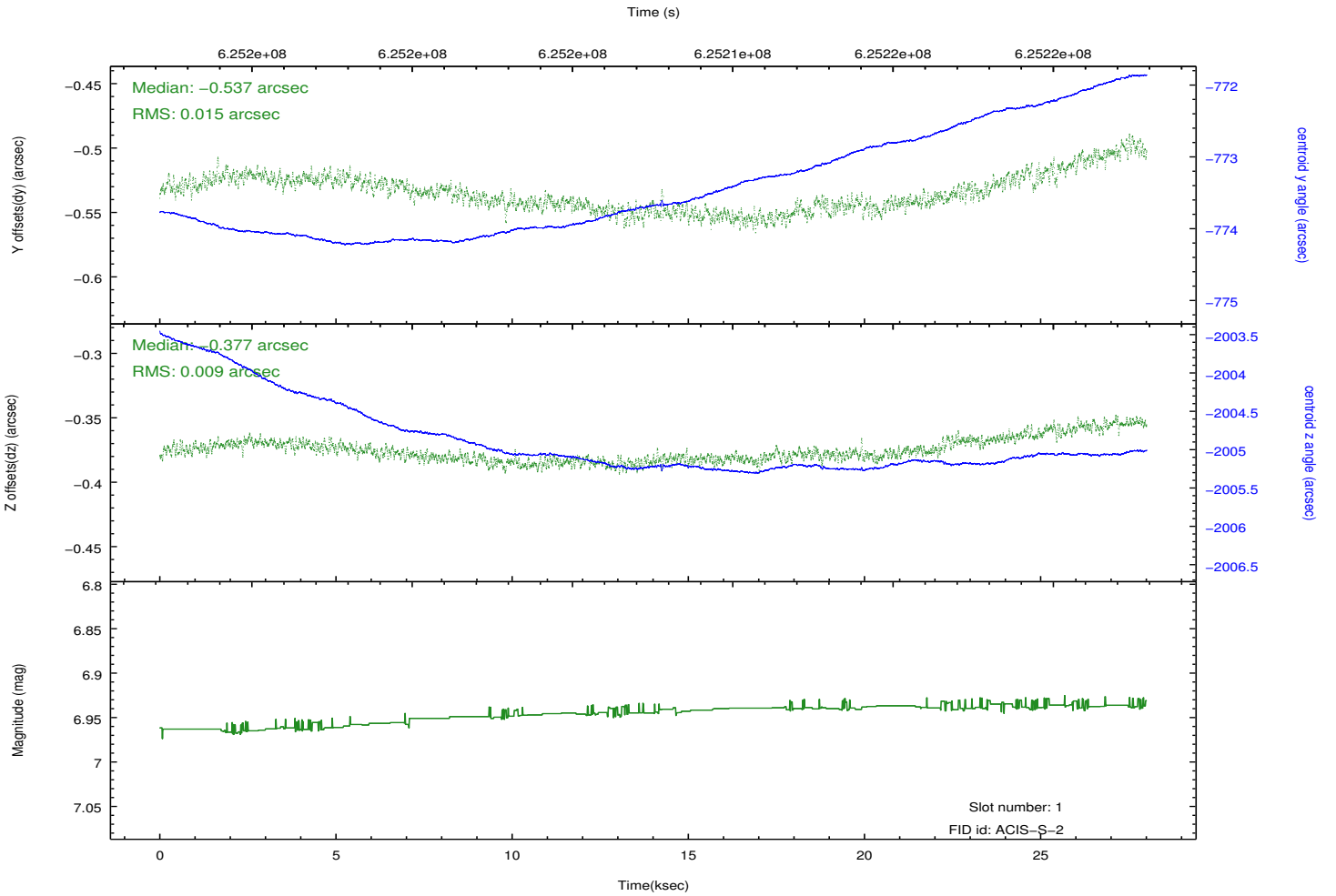
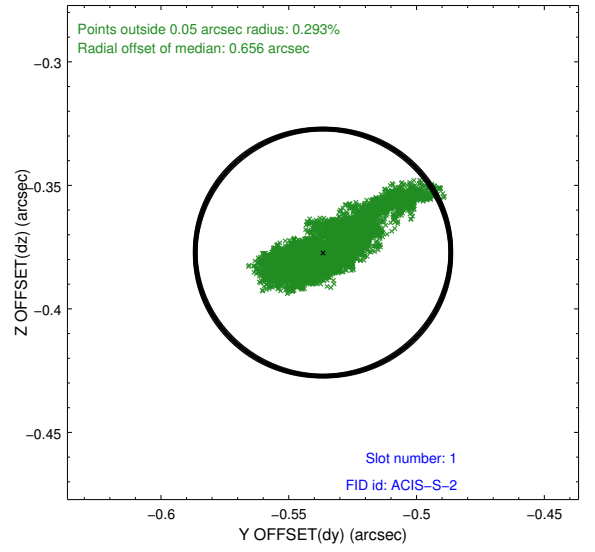
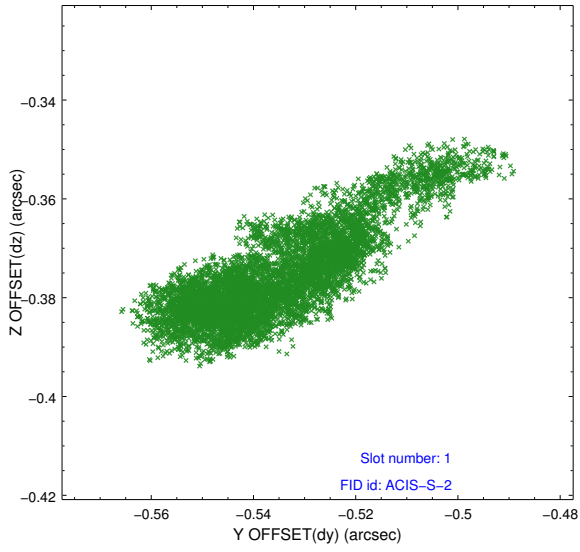


2.5 FID Slots

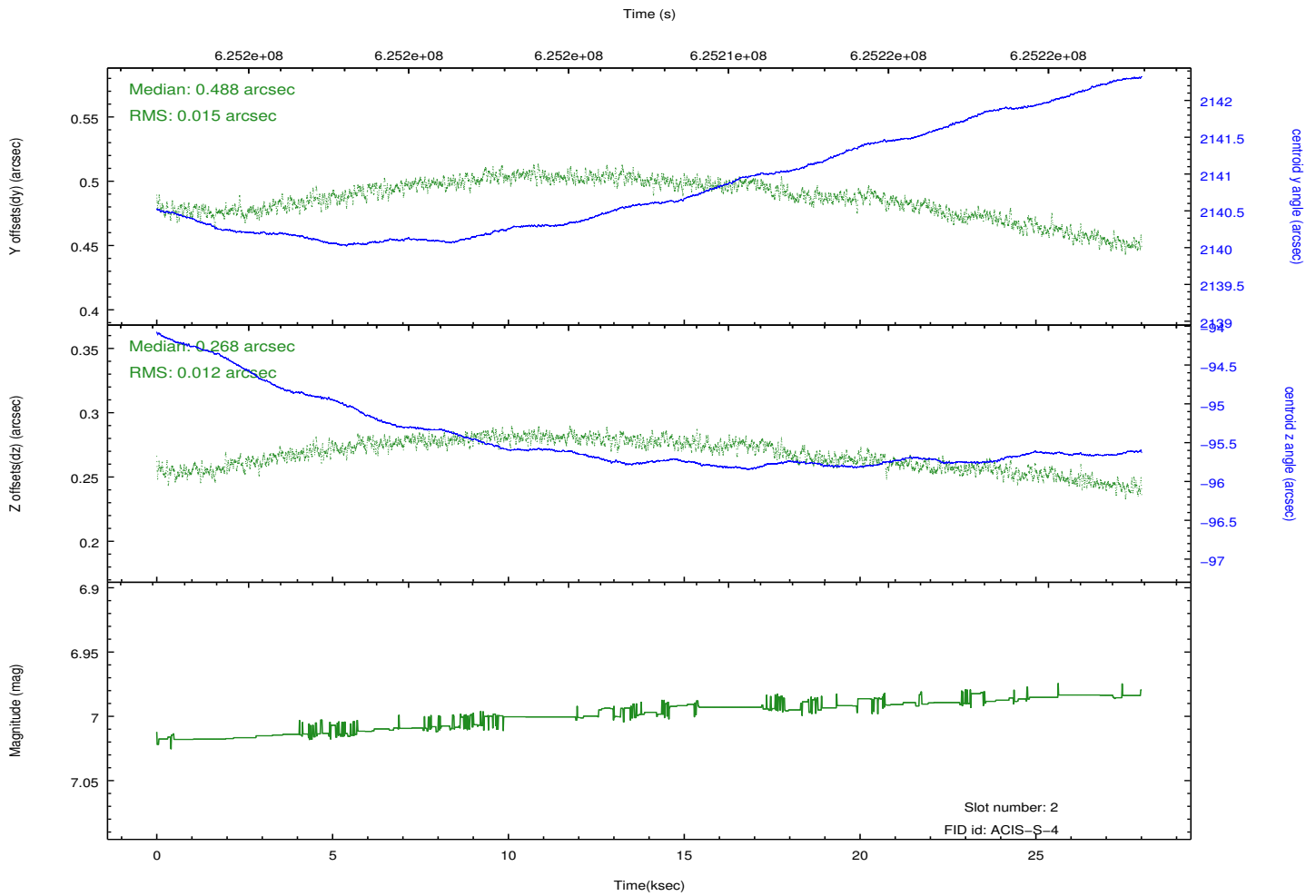
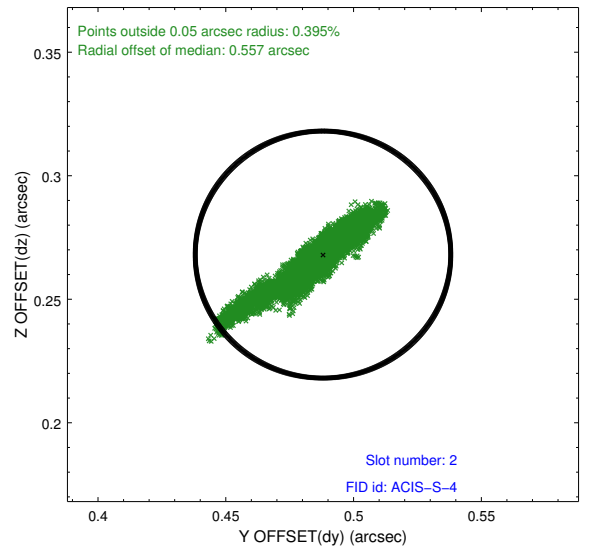
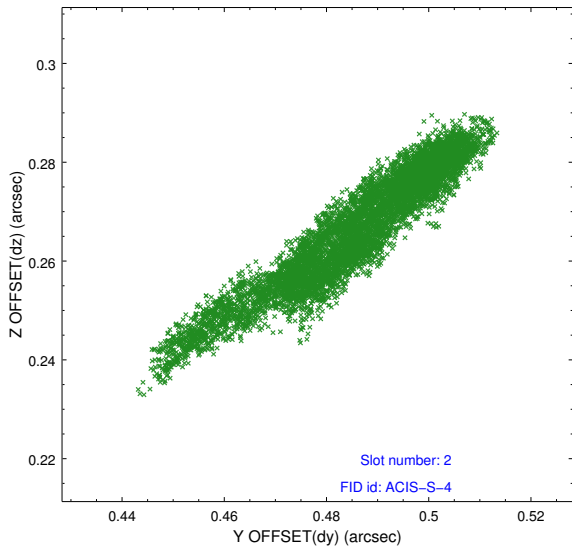
2.5.1 Slot 0



2.5.2 Slot 1

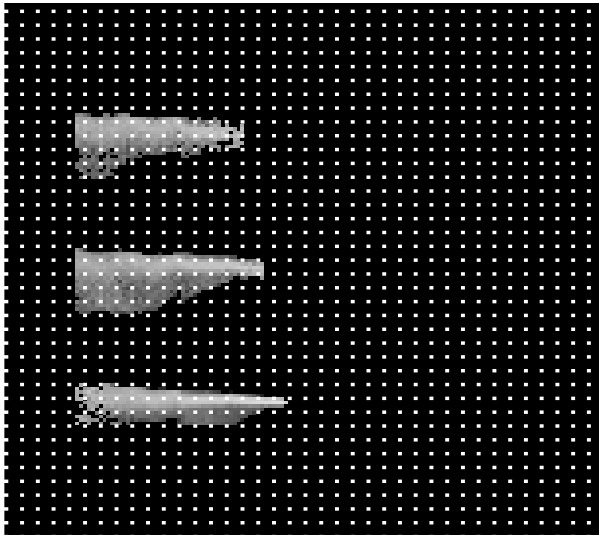


2.5.3 Slot 2

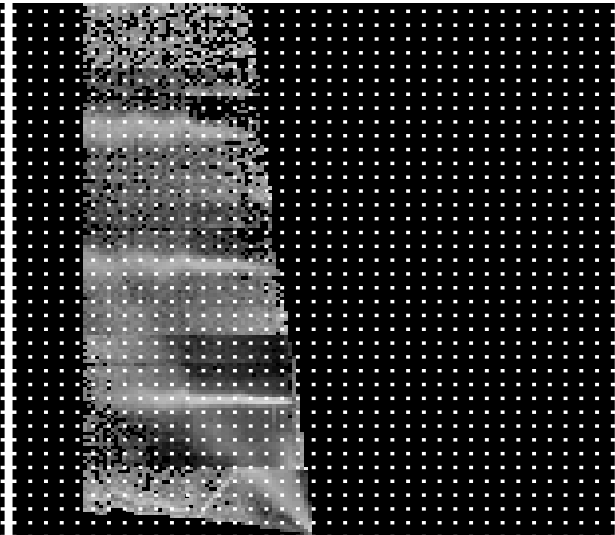


3 Gratings

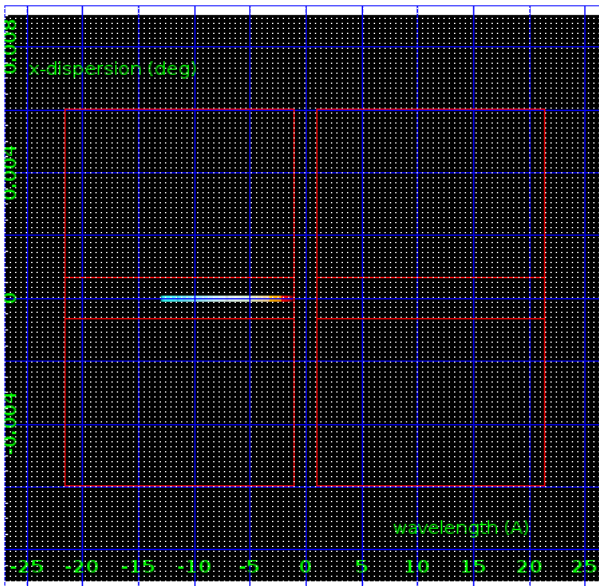
3.1 HEG Arm



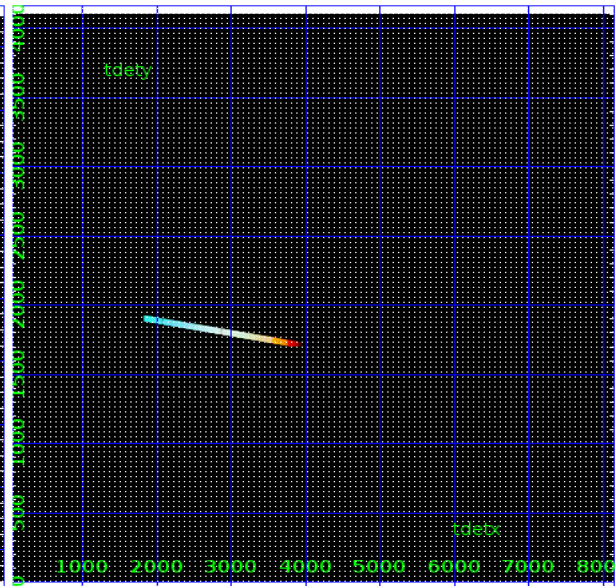
HEG Order Sort 123



HEG Order Sort ALL

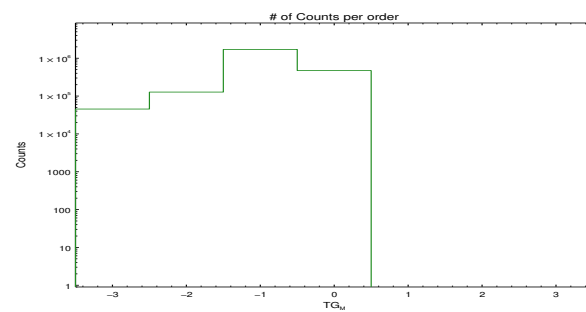


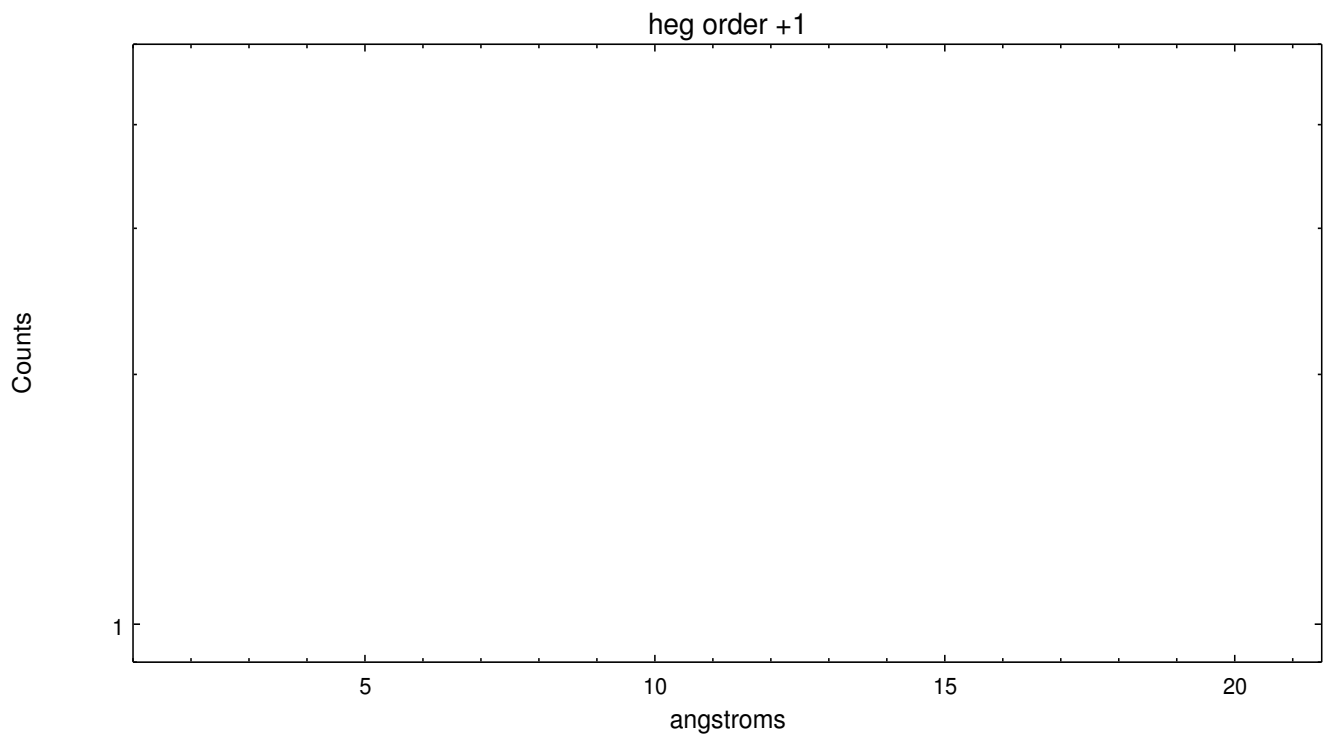
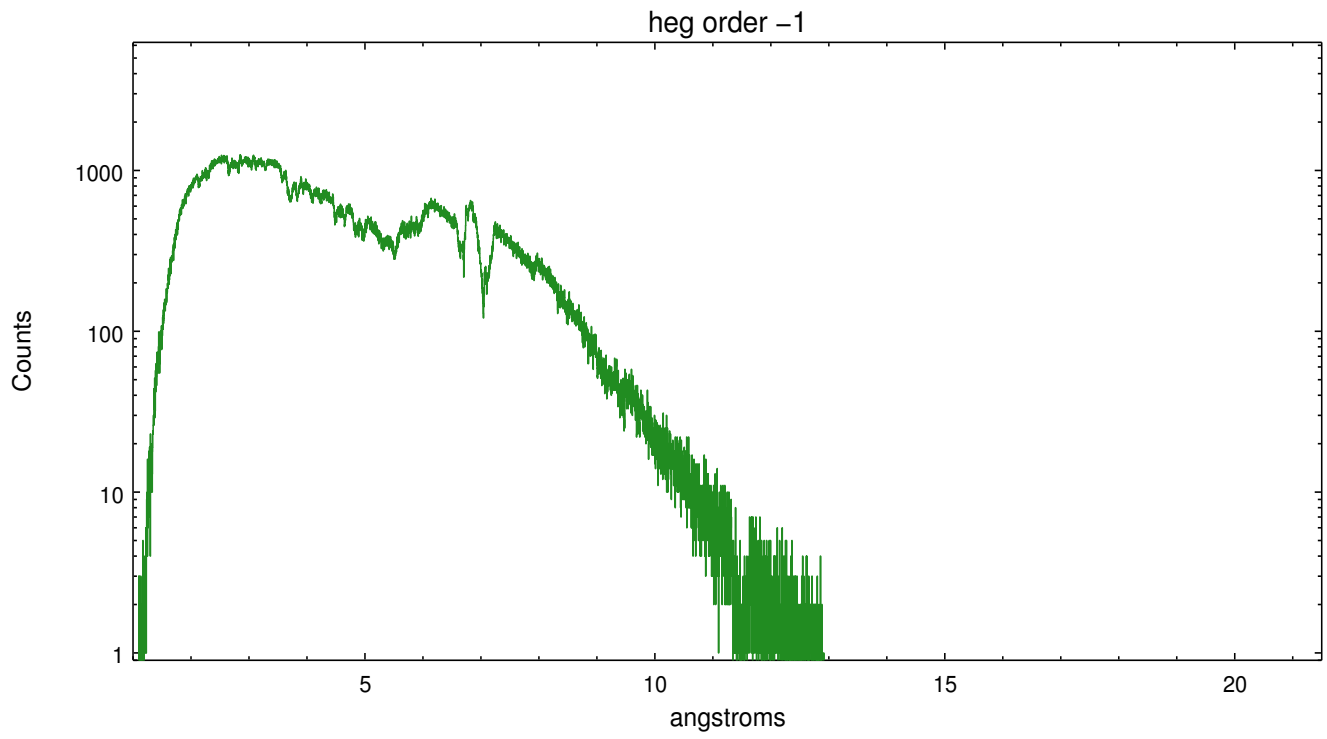
Spot Image HEG



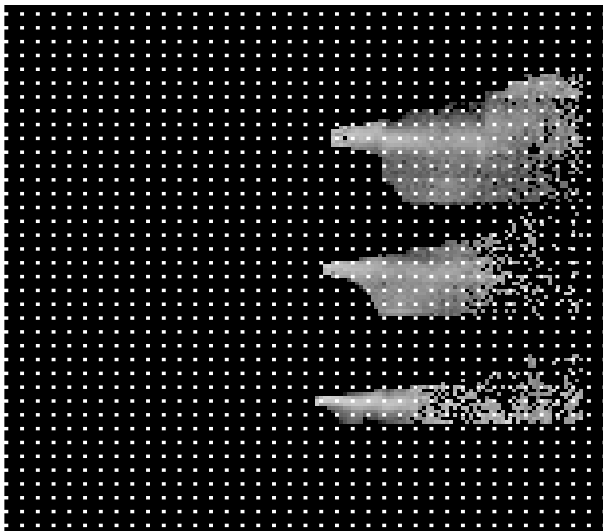
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	45379	127451	1708108	471115	0	0	0

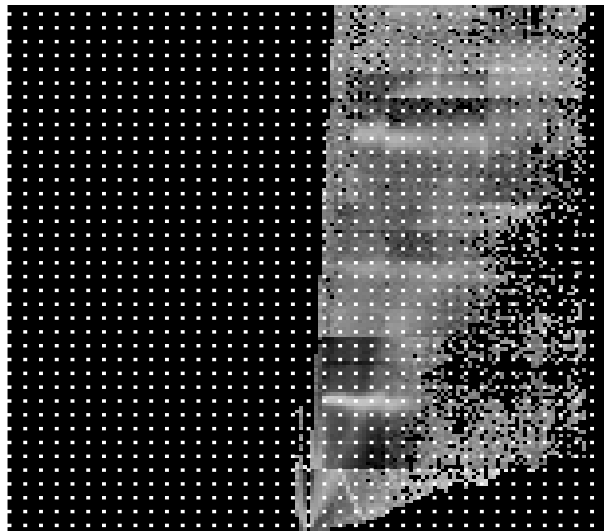




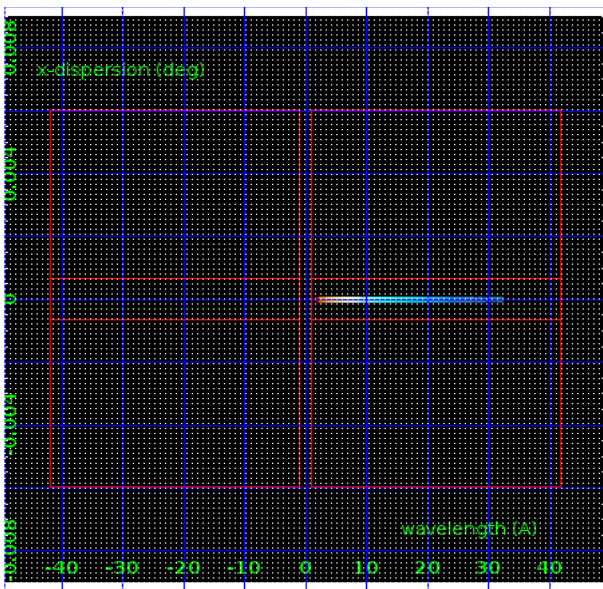
3.2 MEG Arm



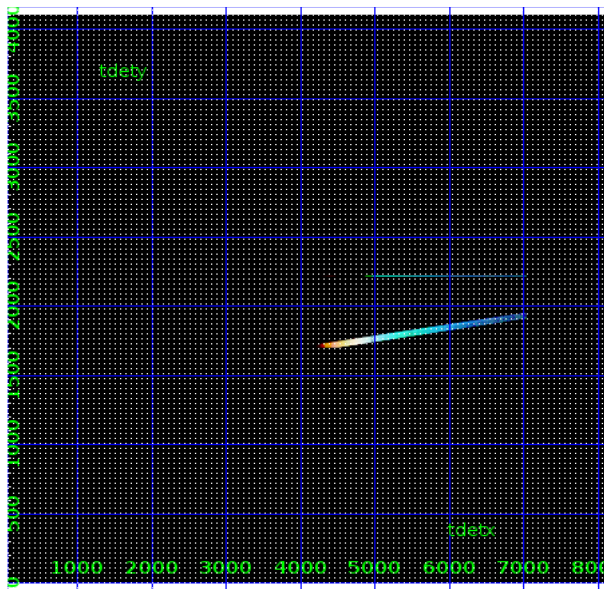
MEG Order Sort 123



MEG Order Sort ALL

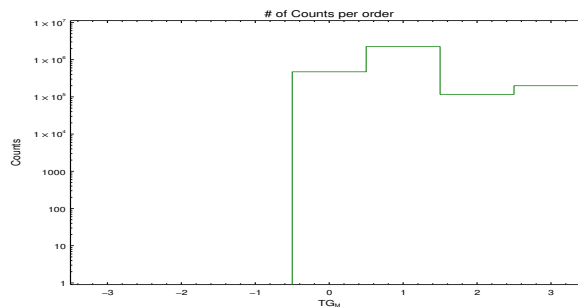


Spot Image MEG

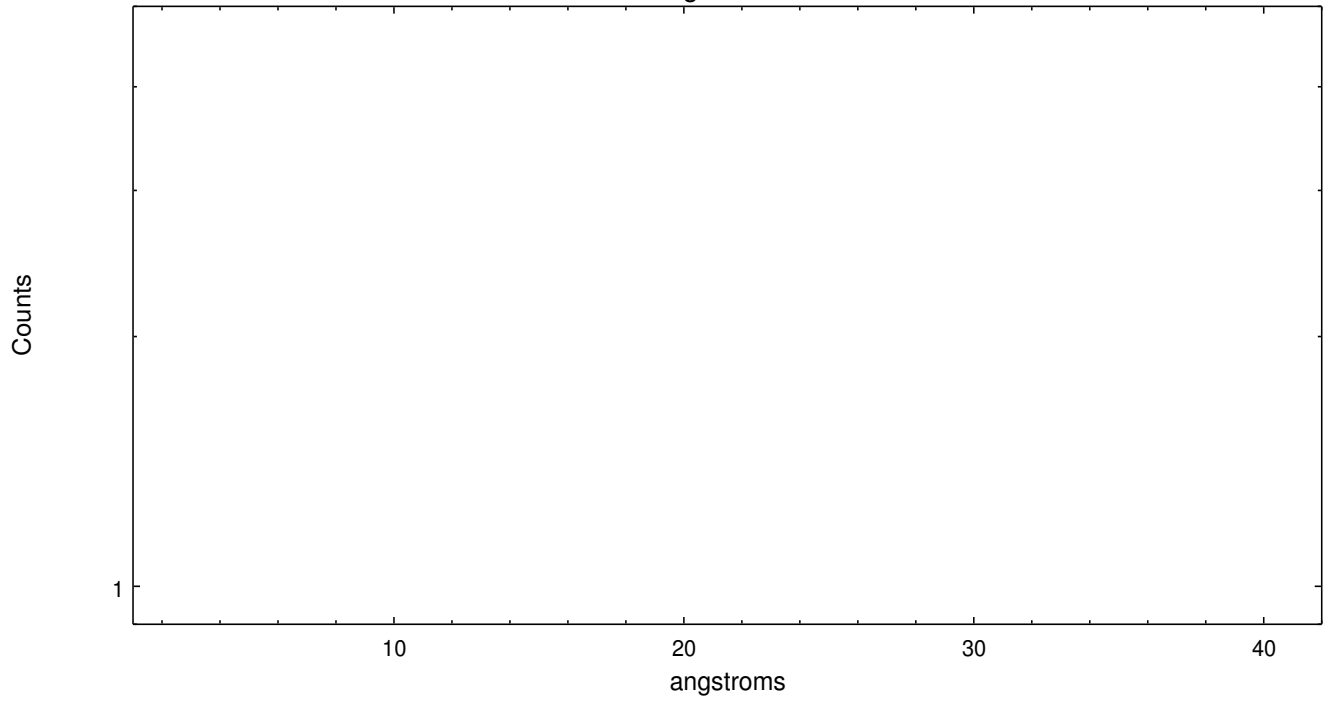


Full Detector MEG

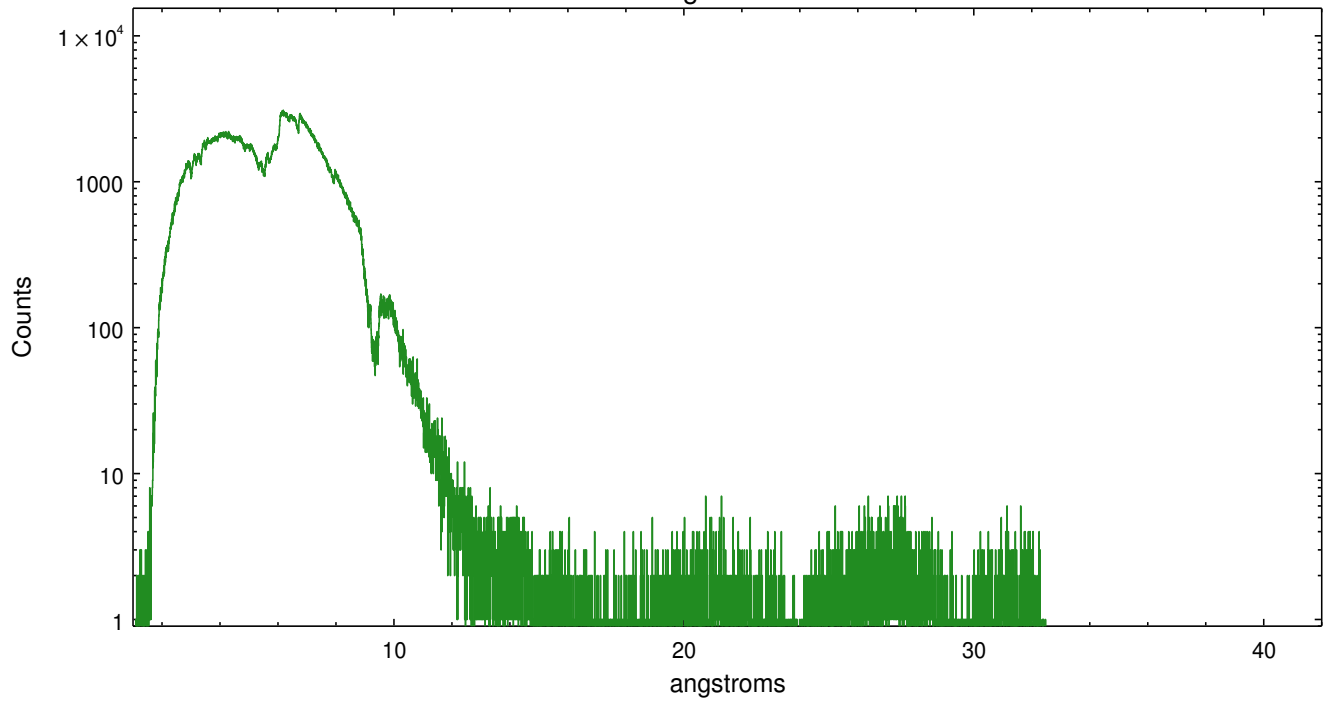
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	0	0	0	471115	2235253	116614	199325



meg order -1



meg order +1



A Summary

A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2017.10.25
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	26.688066350818

A.2 Comments

Aspect residuals are acceptable.

Note: pointing is such that 2 grating arms are mostly off the array; data will be mostly HEG negative and MEG positive orders.

Comments for Obi 0

Fid in slot 1 radial offset > 0.550000 arcsec

Fid in slot 2 radial offset > 0.550000 arcsec