

V&V Reference Report

L2 ASCDS Version : 8.1.1

Observation 111 - L2 Version 4

Chandra X-Ray Center

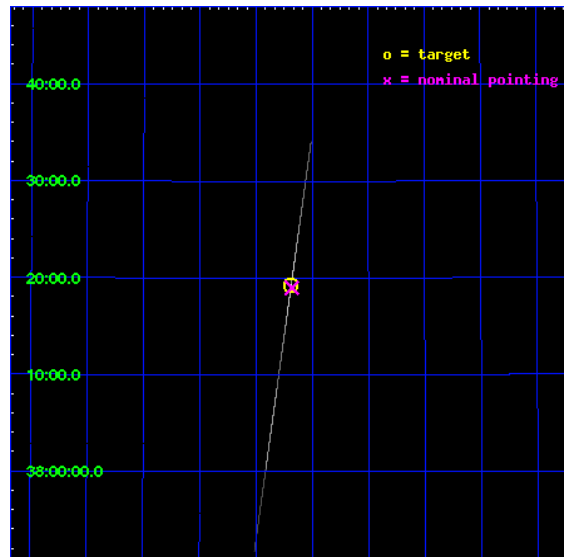
L2 Processing Date : Nov 23 2009

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 4	9
2.4.2	Slot 5	10
2.4.3	Slot 6	11
2.4.4	Slot 7	12
2.5	FID Slots	13
2.5.1	Slot 0	13
2.5.2	Slot 1	14
2.5.3	Slot 2	15
3	Gratings	16
3.1	LETG Arm	16
A	Summary	18
A.1	Status	18
A.2	Comments	18

1 Front

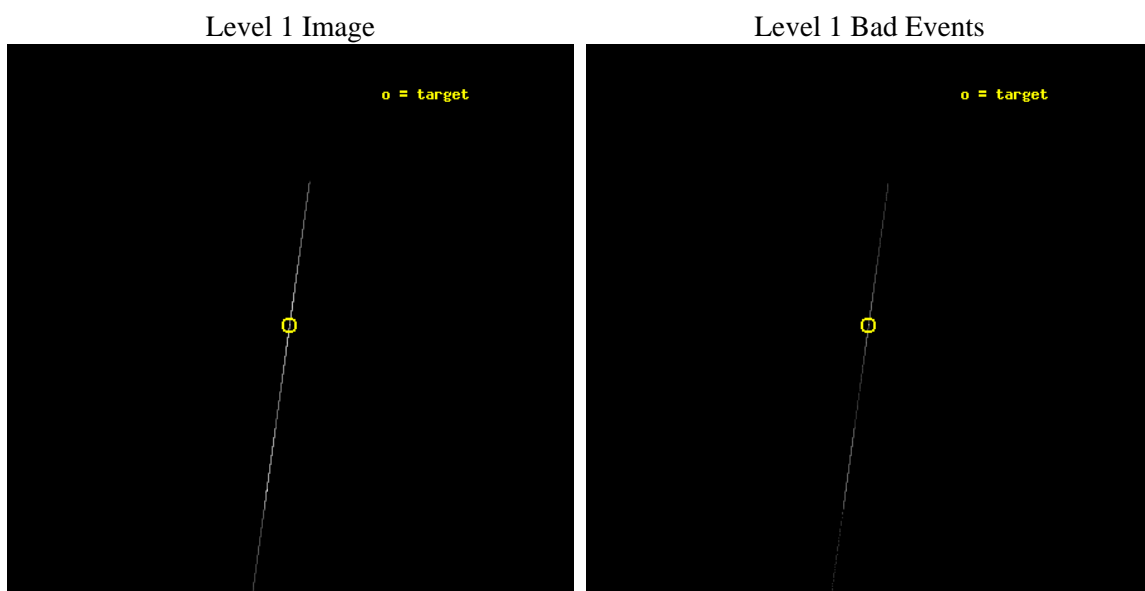
seq_num	490001	Sequence number
obs_id	111	Observation id
title	DEMONSTRATION SPECTRA OF AN ACCRETION-POWERED BINARY	Proposal titl
observer	Dr. CXC Calibration	Principal investigator
object	CYG X2, LETG-CC	Source name
ra_targ	326.171667	Observer's specified target RA
dec_targ	38.321389	Observer's specified target Dec
ra_nom	326.17005952192	Nominal RA
dec_nom	38.316509884419	Nominal Dec
roll_nom	277.94580729043	Nominal Roll
revision	4	Processing version of data
ontime	1562.2839788496	Sum of GTIs [s]
livetime	1556.1813070573	Livetime [s]
ontime4	2309.395503819	Sum of GTIs [s]
ontime5	5636.3571143299	Sum of GTIs [s]
ontime6	2271.4490914419	Sum of GTIs [s]
ontime7	1562.2839788496	Sum of GTIs [s]
ontime8	2766.0285092592	Sum of GTIs [s]
l2events	950394	Number of level 2 events



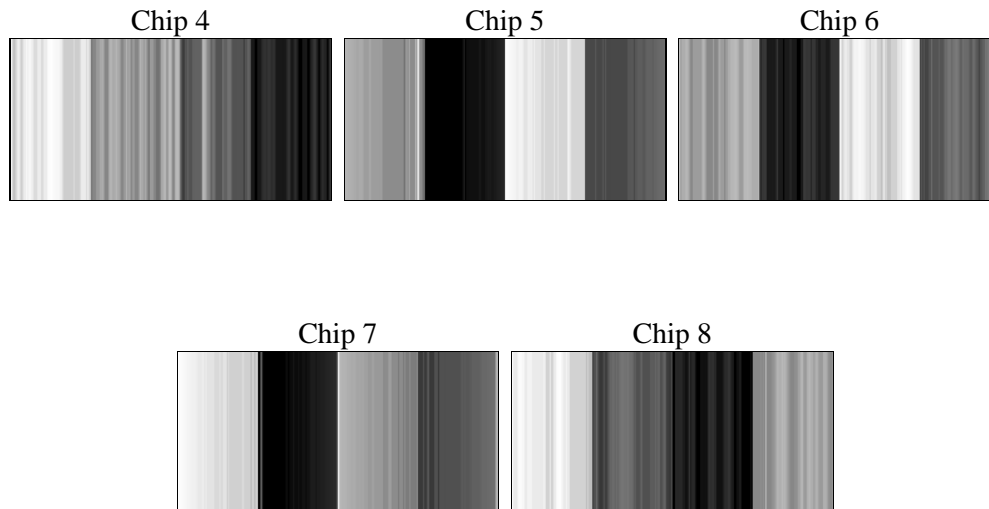
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	4000.000000	Scheduled observation exposure time
ascdsver	8.1.1	ASCDS version number	ontime	1562.2839788496	Sum of GTIs [s]
caldbver	4.1.4	 	ontime4	2309.395503819	Sum of GTIs [s]
date	2009-11-23T18:04:11	Date and time of file creation	ontime5	5636.3571143299	Sum of GTIs [s]
revision	5	Processing version of data	ontime6	2271.4490914419	Sum of GTIs [s]
			ontime7	1562.2839788496	Sum of GTIs [s]
			ontime8	2766.0285092592	Sum of GTIs [s]
			l1events	1137319	Number of level 1 events

2.1.4 Events

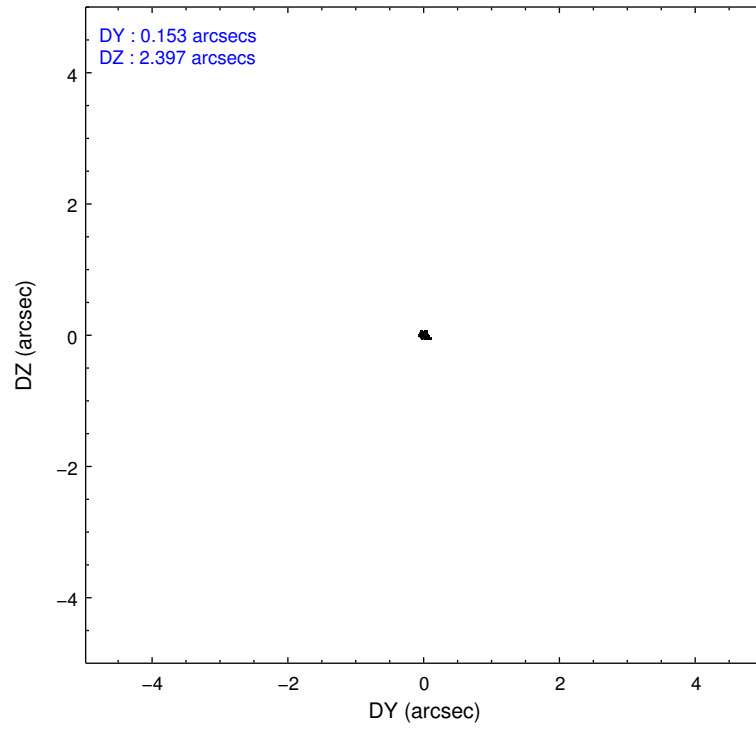
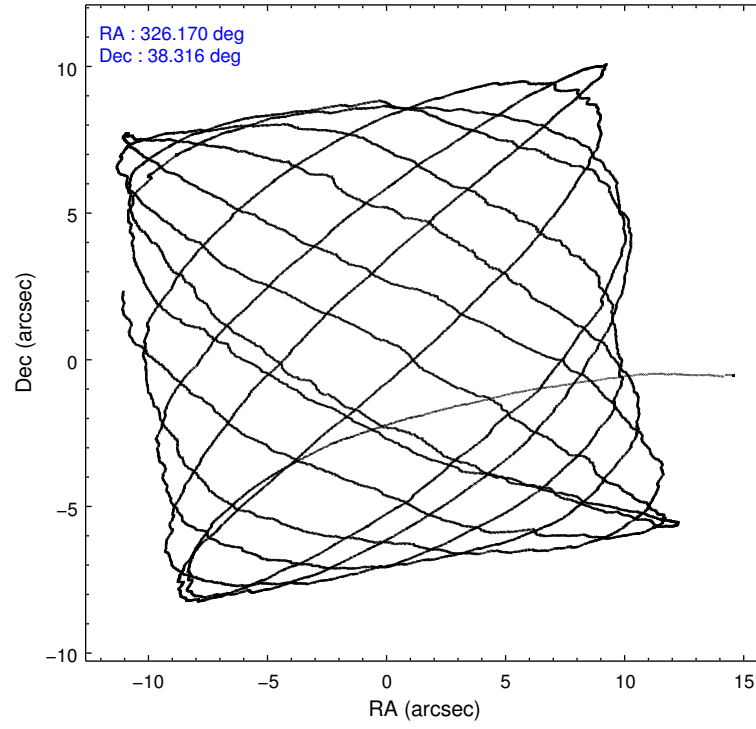
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	11991	329503	157678	589225	48922
rejected events	388	5975	1353	24900	981
rejected %	3%	1%	0%	4%	2%

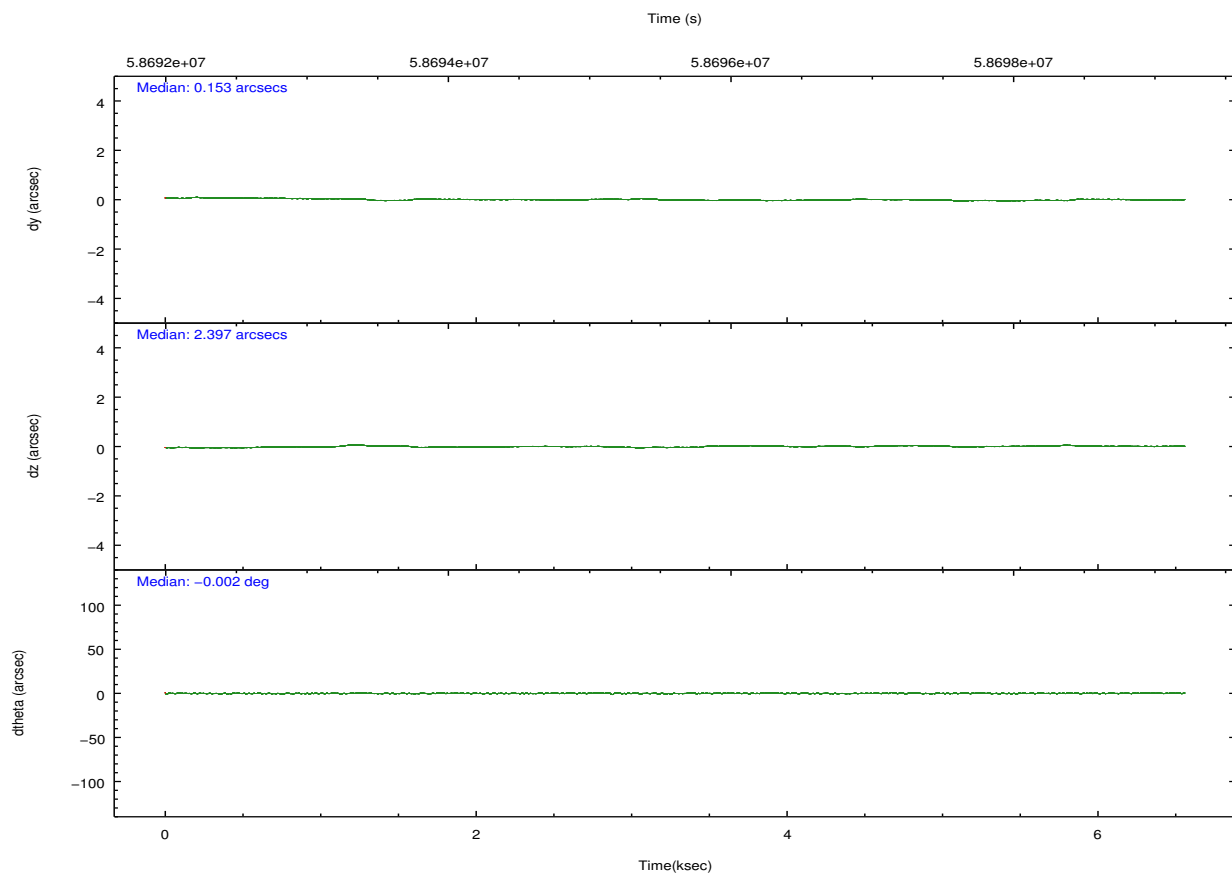
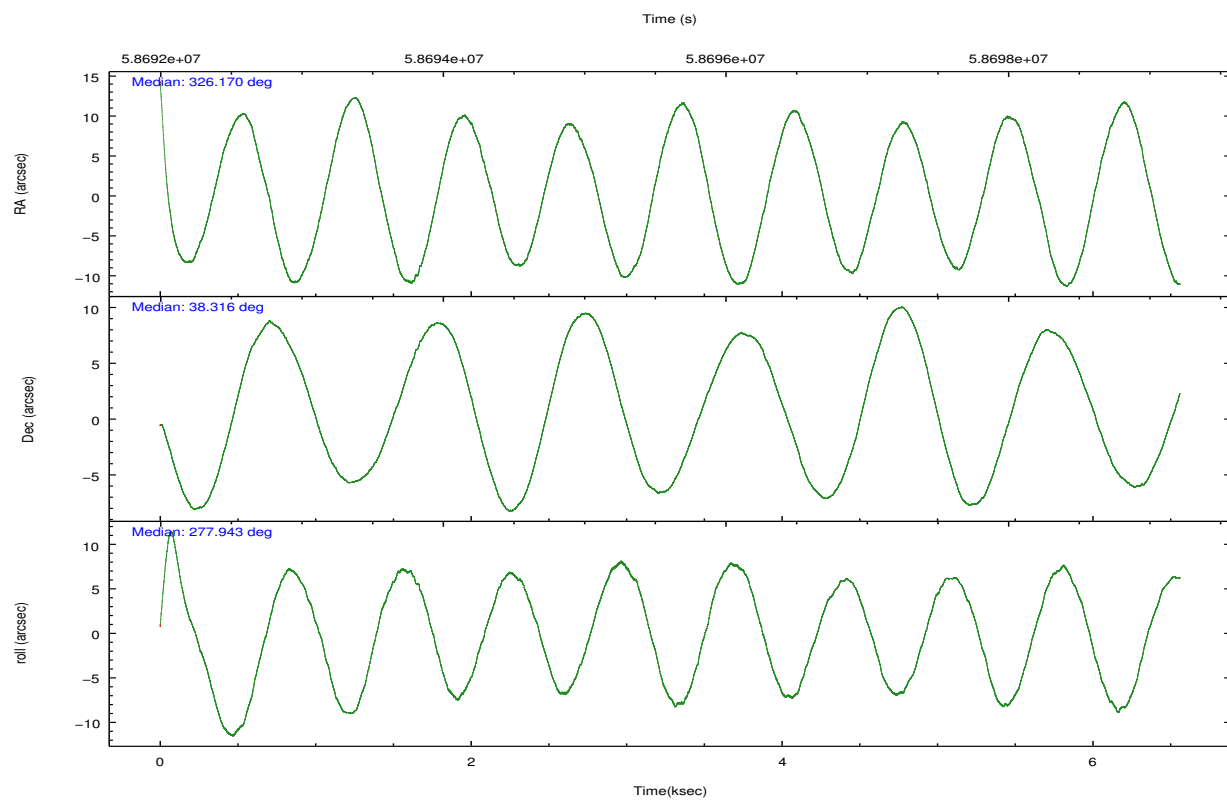
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	2187	117234	82675	109550	27434
	18%	35%	52%	18%	56%
grade 1 events	11	222	233	4849	85
	0%	0%	0%	0%	0%
grade 2 events	7375	88203	60938	138721	14650
	61%	26%	38%	23%	29%
grade 3 events	617	14672	3261	61193	1713
	5%	4%	2%	10%	3%
grade 4 events	644	13925	3389	58912	1709
	5%	4%	2%	9%	3%
grade 5 events	372	5351	1096	19357	866
	3%	1%	0%	3%	1%
grade 6 events	785	89896	6086	196643	2465
	6%	27%	3%	33%	5%
grade 7 events	0	0	0	0	0
	0%	0%	0%	0%	0%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-45678	ACIS-45678	Obspar file type	PREDICTED	ACTUAL
Grating	LETG	LETG	Obspar update status	NONE	UPDATED
Data mode	FAINT	CC33_FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
Pointing RA	326.148534	326.1700595219171	Subarray requested	NONE	NONE
Pointing Dec	38.338415	38.31650988441907	Alternating exposures requested	N	N
Pointing Roll	277.802513	277.9458072904345	Primary exposure time	0.000000	0
SIM focus pos (mm)	-0.684267	-0.6828225247311905			
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-182.132523	-182.1344861297048			
SIM translation stage offset (mm)	-8	-7.998036453302973			
Observation start time	58692792.184000	58691280.489394			
Observation start date	1999-11-11T07:32:08	1999-11-11T07:08:00			
Observation end time	58696792.184000	58699568.127194			
Observation end date	1999-11-11T08:38:48	1999-11-11T09:26:08			
Read mode	TIMED	CONTINUOUS			

2.3 Aspect



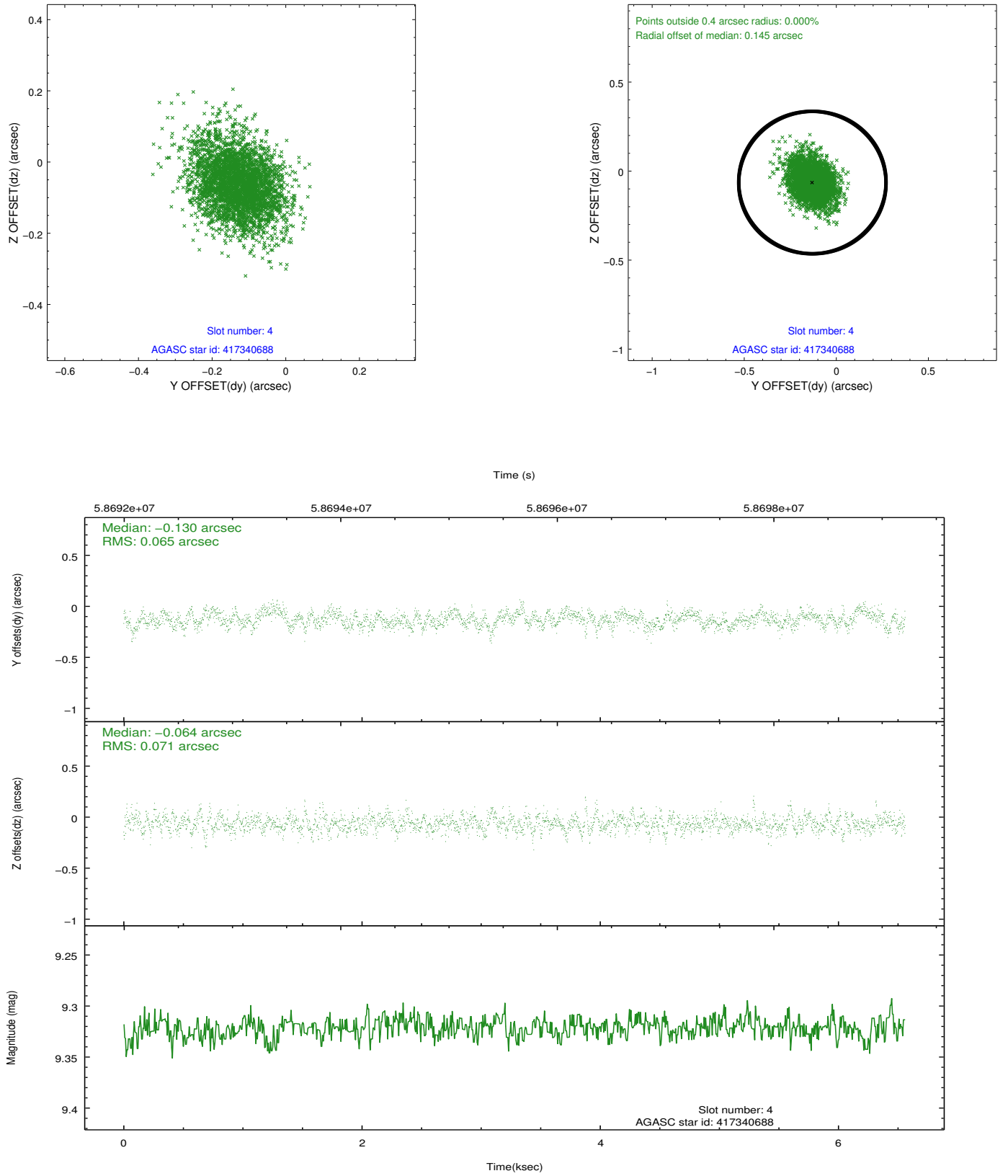


Slot Statistics

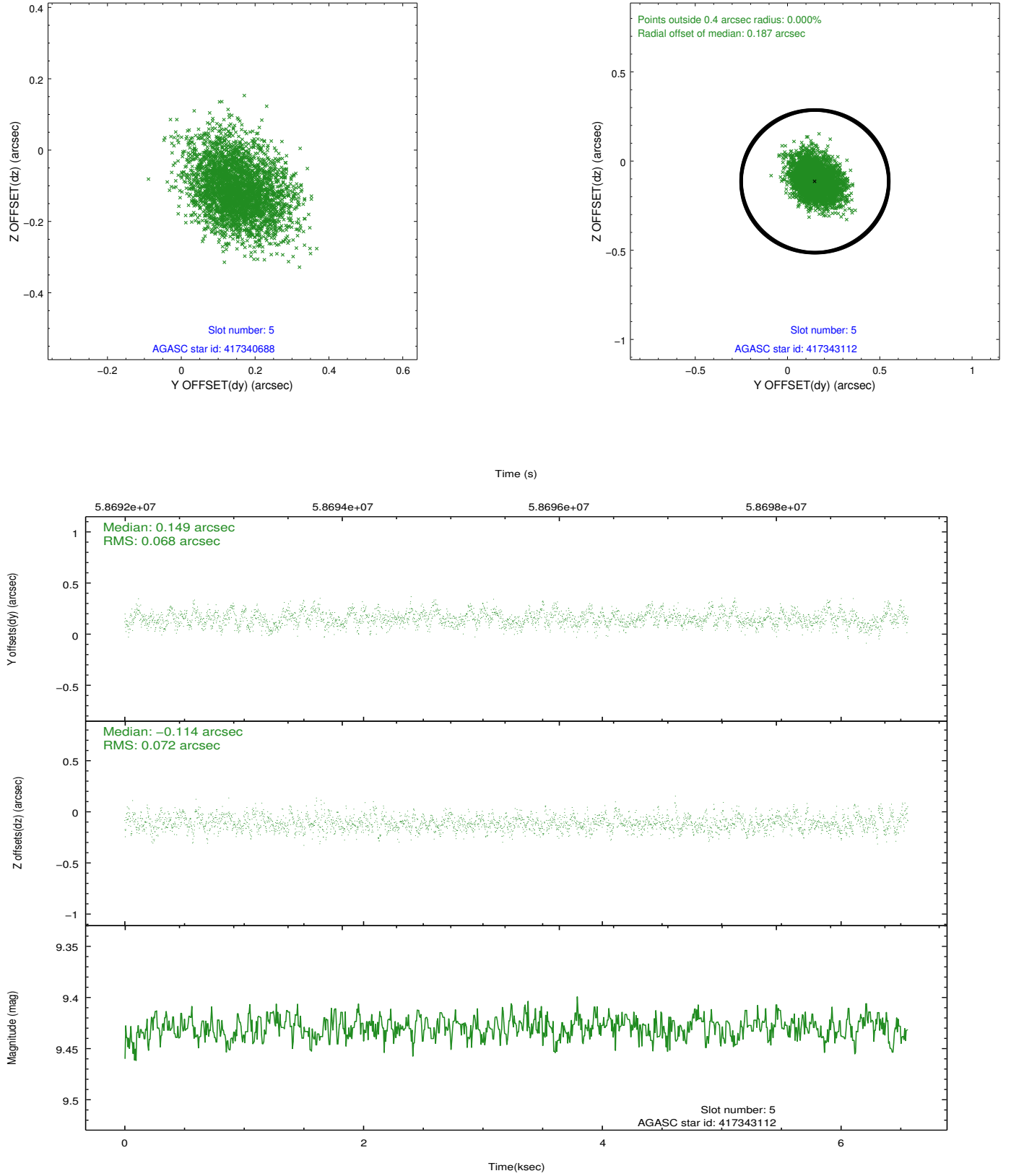
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	3201	-0.044	-0.138	0.006	0.011	0.000000	0.000000	-752.27	-1888.31
1	FID	ACIS-S-4	7.19	3201	0.100	0.058	0.005	0.010	0.000000	0.000000	2161.06	19.82
2	FID	ACIS-S-5	7.23	3201	-0.087	0.088	0.006	0.010	0.000000	0.000000	-1804.60	14.09
3	OMITTED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
4	GUIDE	417340688	9.32	3201	-0.130	-0.064	0.100	0.169	325.475551	38.907768	-2293.43	-1588.00
5	GUIDE	417343112	9.43	3197	0.149	-0.114	0.105	0.172	325.566672	37.651709	2218.68	-1977.73
6	GUIDE	417342368	9.59	3196	-0.021	0.010	0.092	0.156	325.863665	38.726048	-1491.58	-602.85
7	GUIDE	417347584	9.44	3197	0.001	0.161	0.099	0.168	326.789051	38.342651	223.78	1795.55

2.4 Star Slots

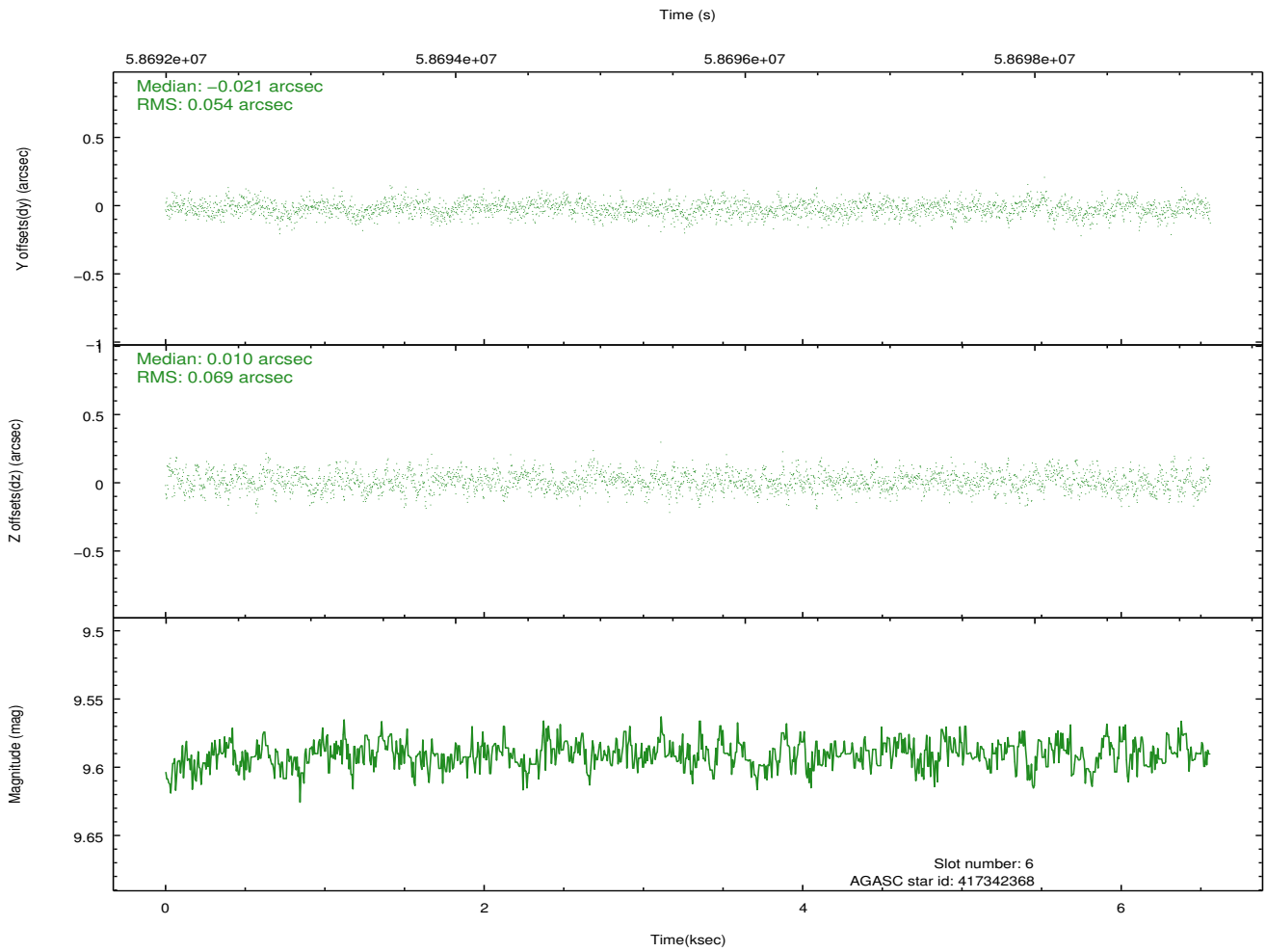
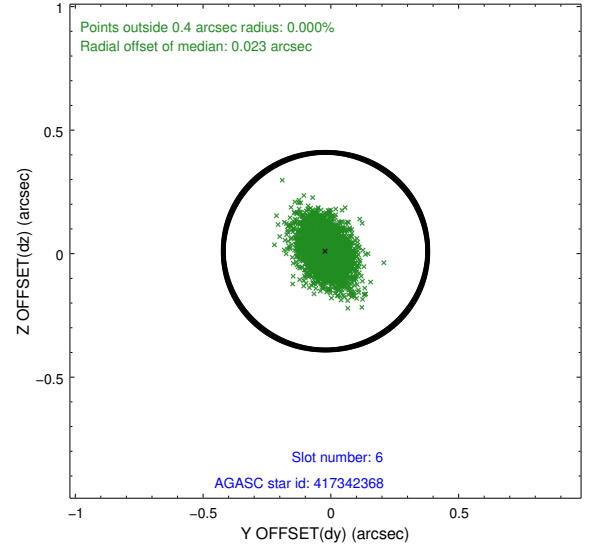
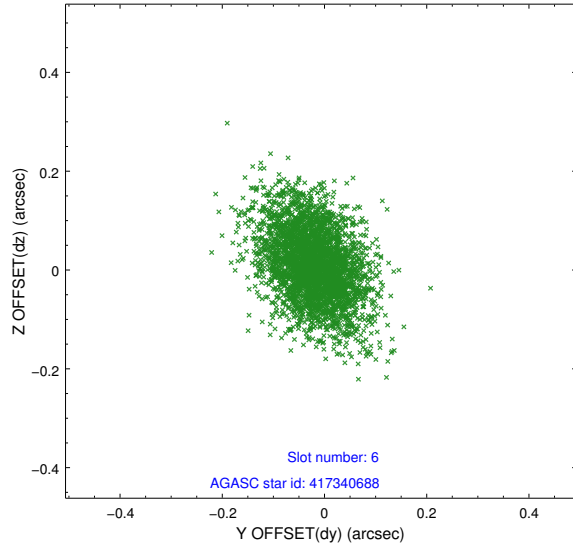
2.4.1 Slot 4



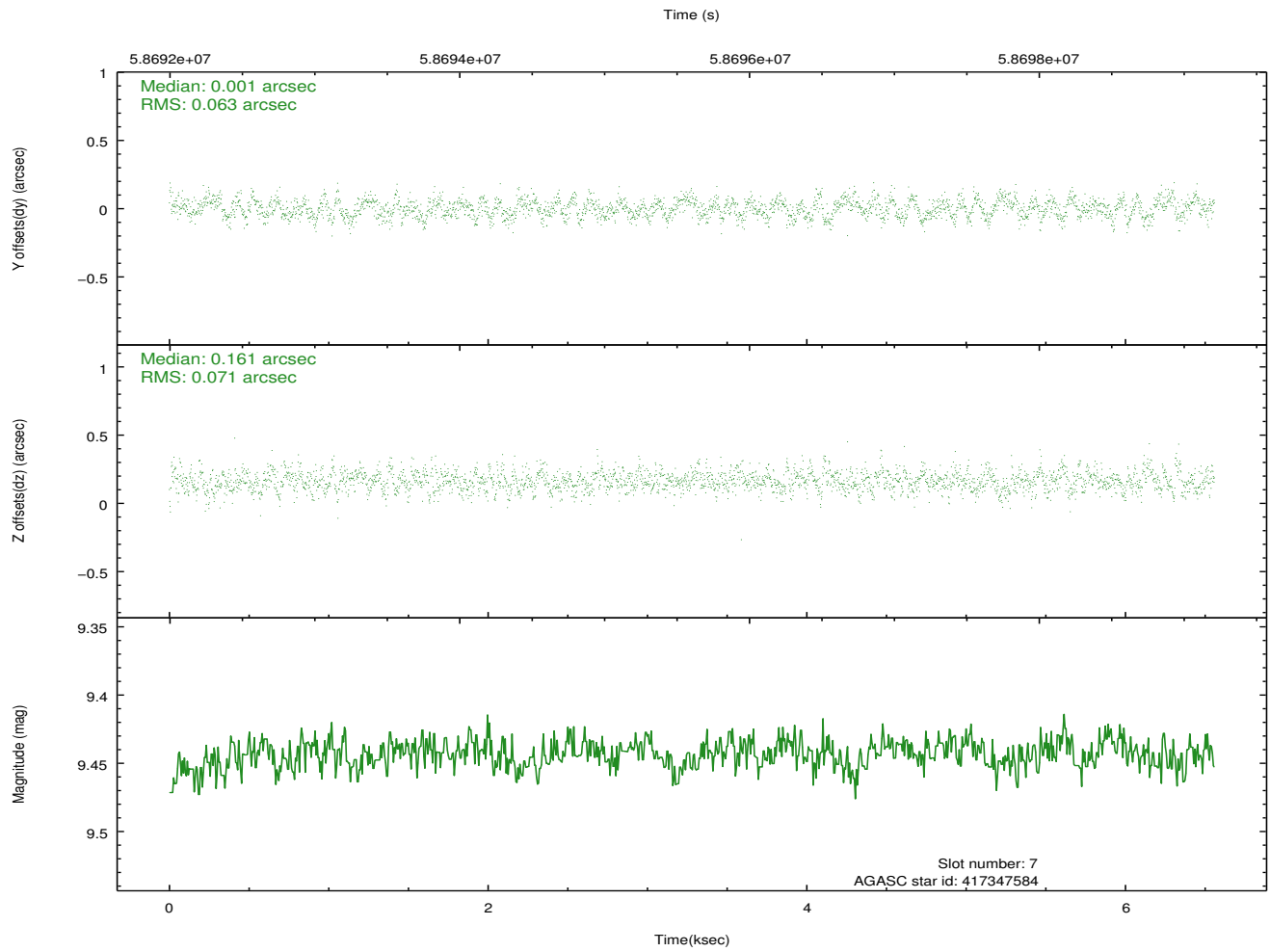
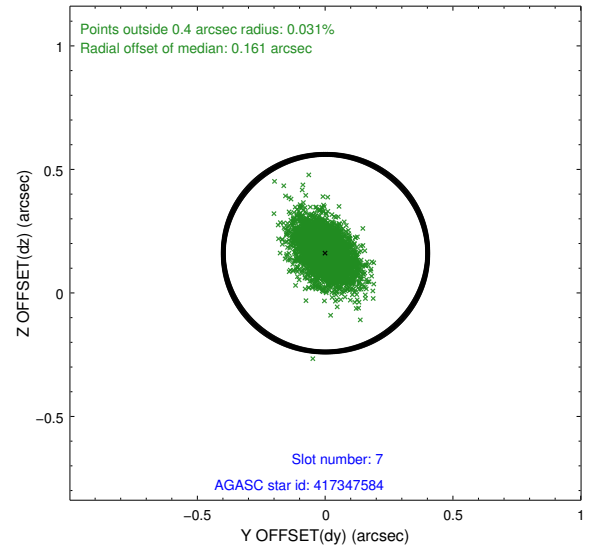
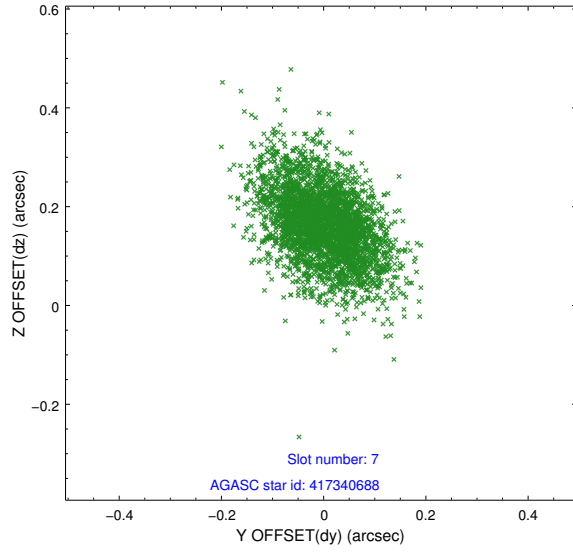
2.4.2 Slot 5



2.4.3 Slot 6

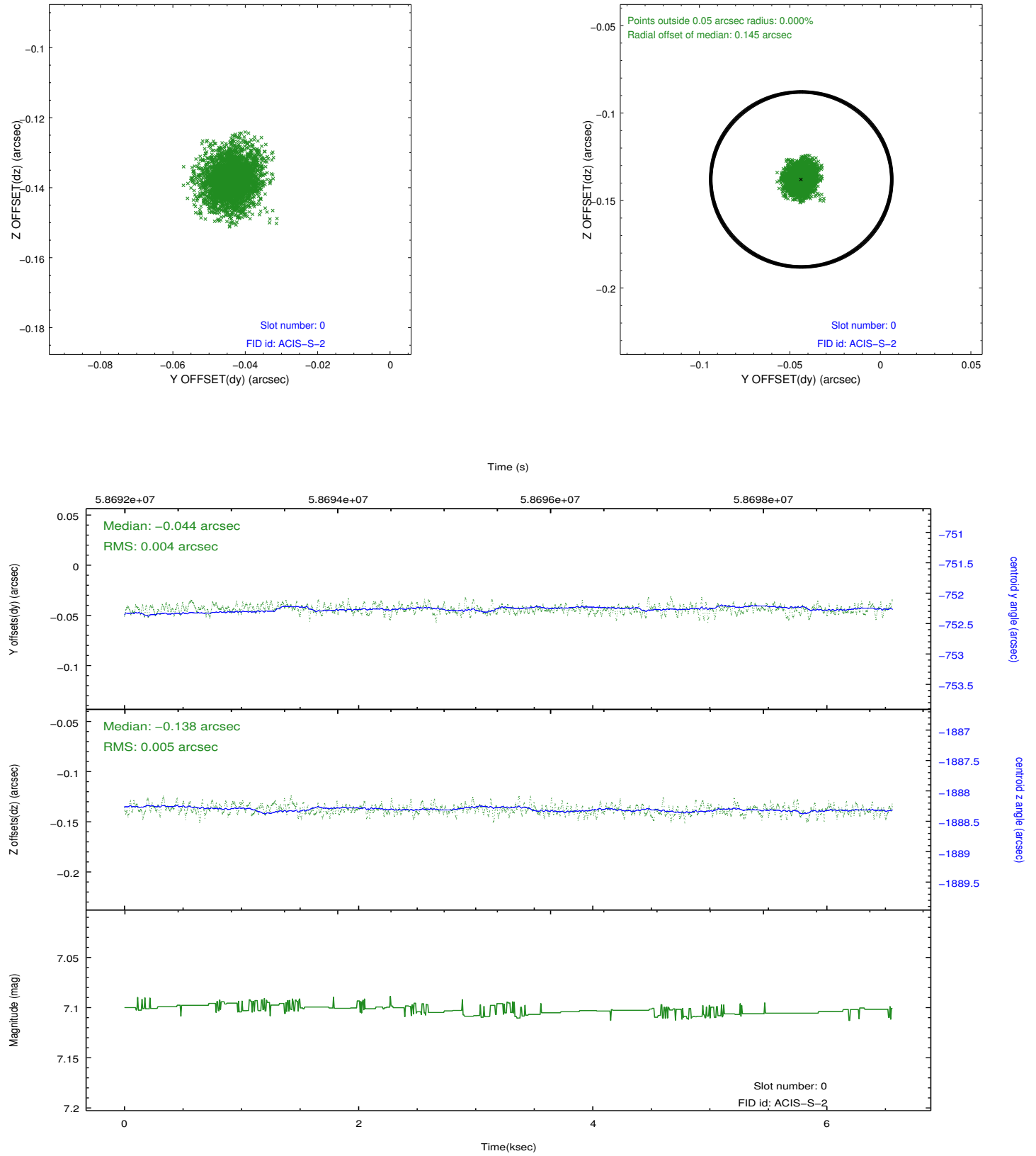


2.4.4 Slot 7

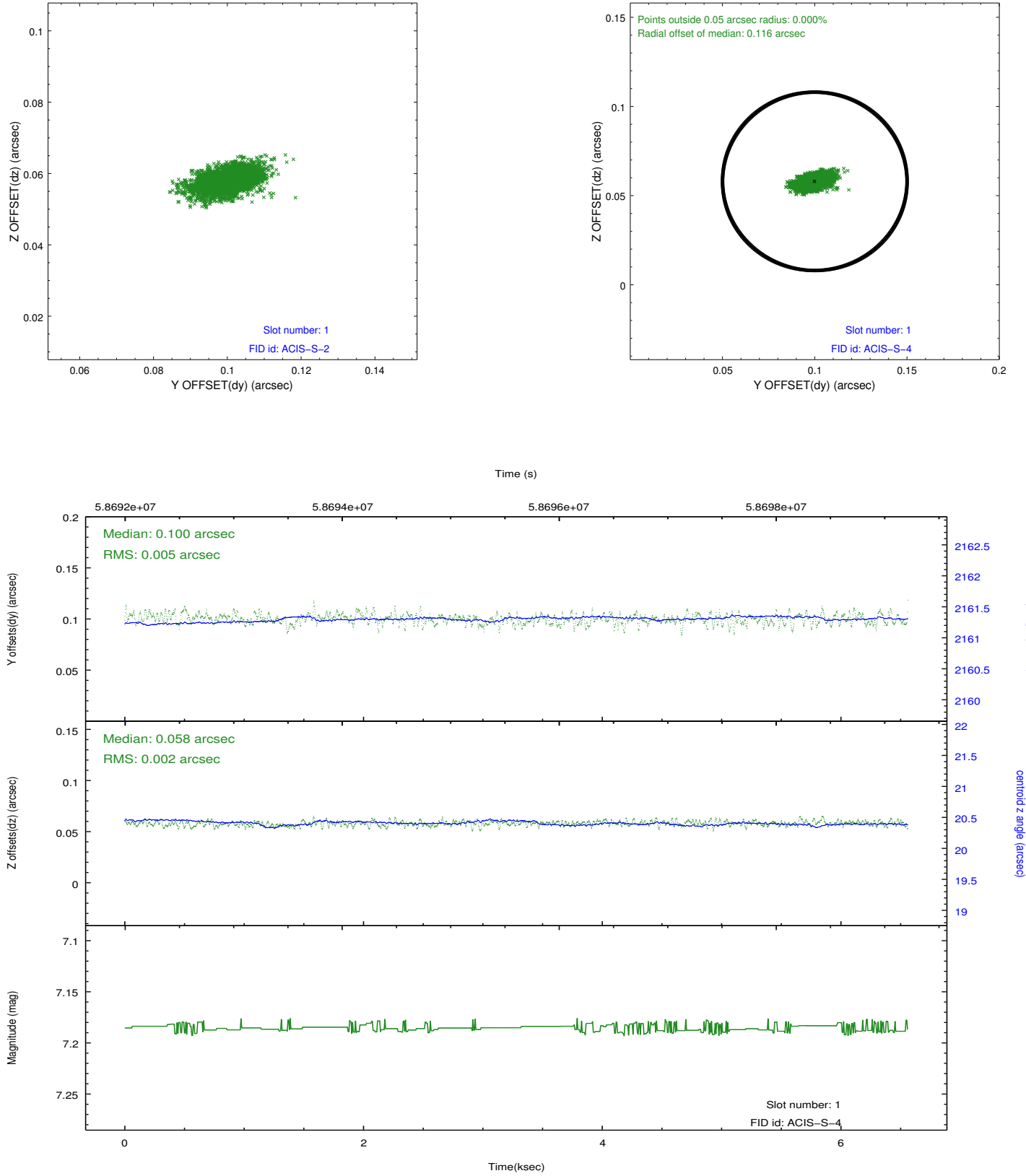


2.5 FID Slots

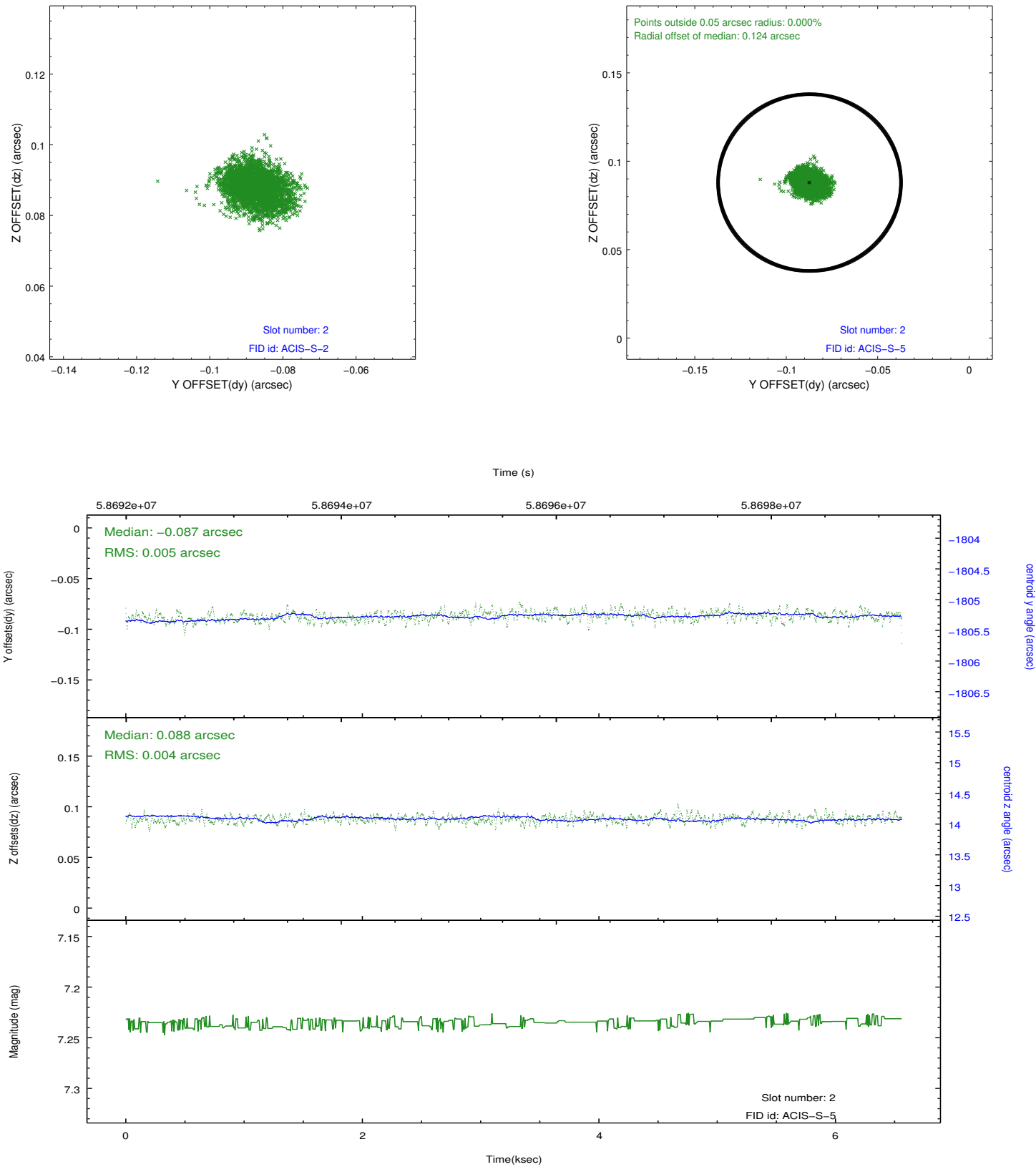
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



3 Gratings

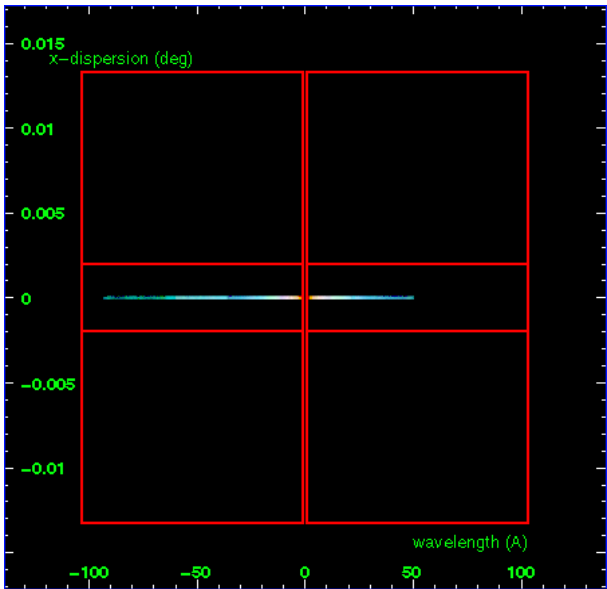
3.1 LETG Arm



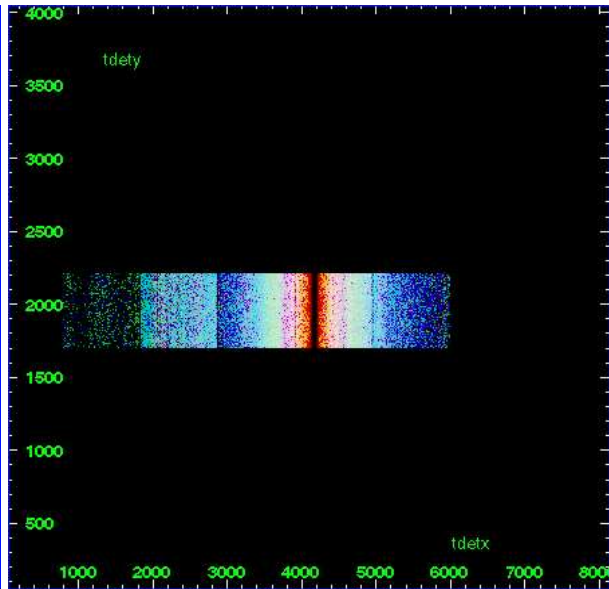
LETG Order Sort 123



LETG Order Sort ALL

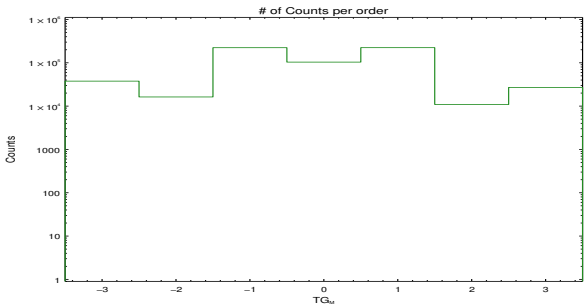


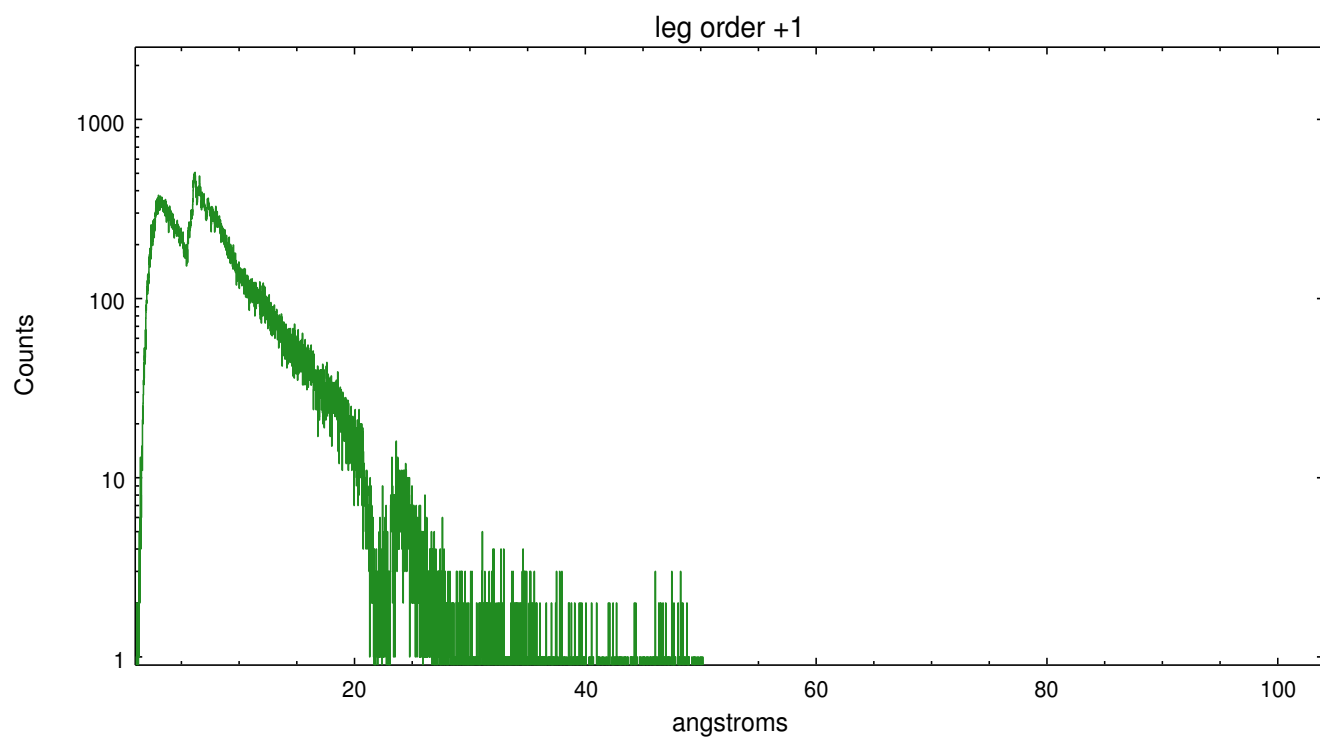
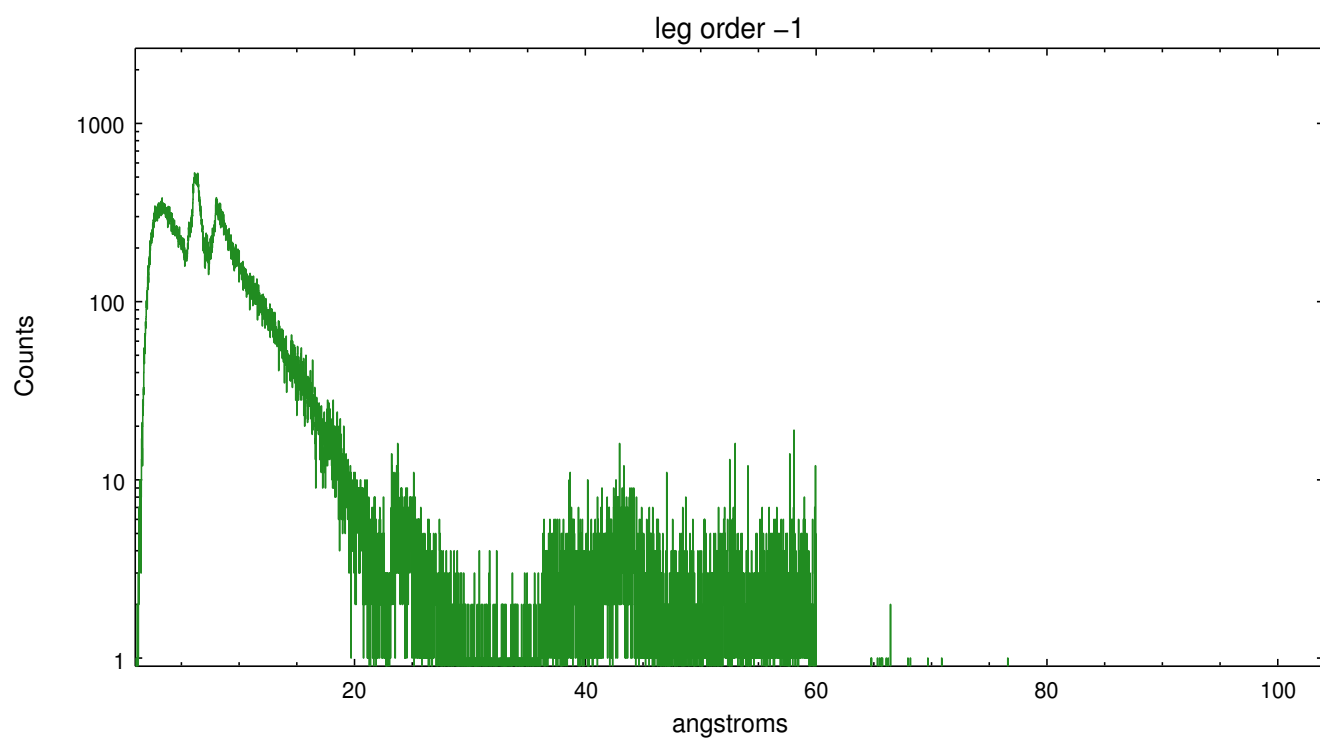
Spot Image LETG



Full Detector LETG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	37711	16273	223373	103655	223779	10918	27030





A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2010.10.01
V&V Edition	2
V&V Disposition and Status	OK
V&V Charge Time	5.6

A.2 Comments

Due to telemetry saturation by this bright source, the effective exposure time varies with CCD and is less than the duration. This is expected.

=====

=====

This observation was acquired with the focal plane temperature raised from -120C to -110C, for attempted recalibration of ACIS for the 1999-09-16 through 2000-01-28 period.

=====

This reprocessing of the data applies no CTI correction because none is available for that temperature.

=====

The guide star in slot 3 was manually excluded from the processing due to poor data quality.