

V&V Reference Report

L2 ASCDS Version : 10

Observation 14520 - L2 Version 2
Chandra X-Ray Center

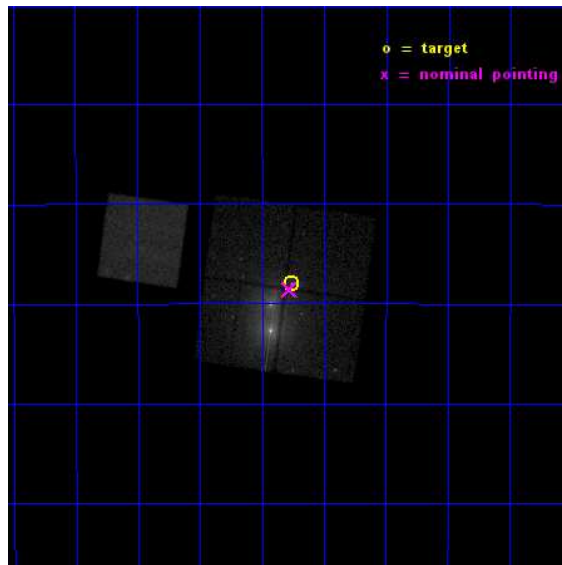
L2 Processing Date : Dec 4 2014

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1 Front

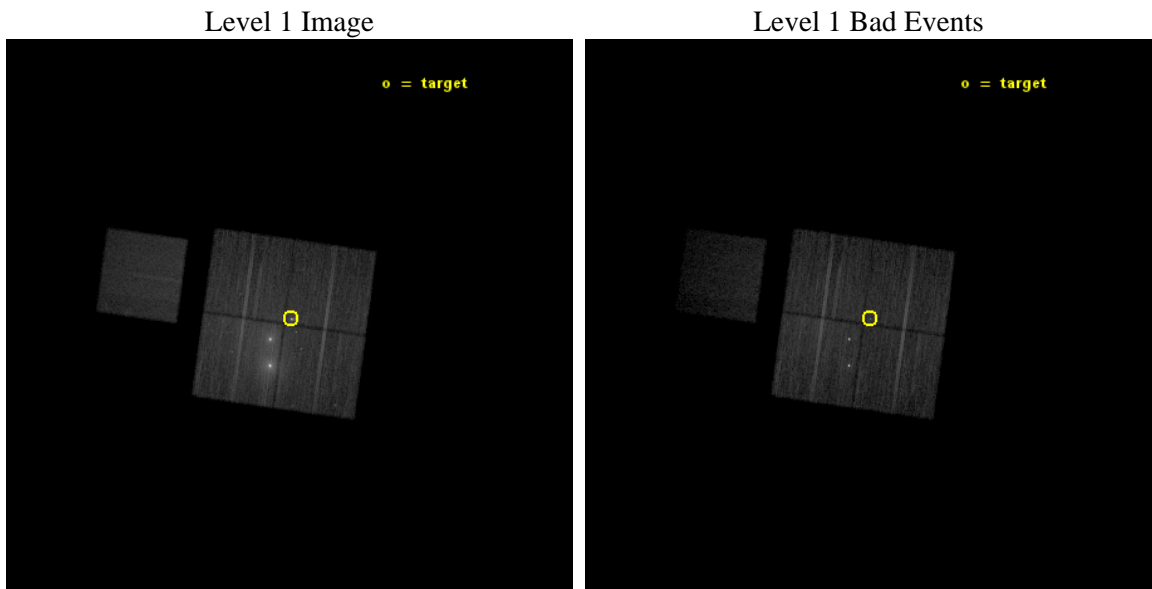
seq_num	501805	Sequence number
obs_id	14520	Observation id
title	A comparative study of two outstanding pulsar tails	Proposal title
observer	Dr Oleg Kargaltsev	Principal investigator
object	The Mouse	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	266.81625	Observer's specified target RA [deg]
dec_targ	-29.967222	Observer's specified target Dec [deg]
ra_nom	266.81955284533	Nominal RA [deg]
dec_nom	-29.976290908637	Nominal Dec [deg]
roll_nom	277.99648968613	Nominal Roll [deg]
revision	2	Processing version of data
ontime	30955.188299716	Sum of GTIs [s]
livetime	30550.735975702	Livetime [s]
ontime0	30955.147259712	Sum of GTIs [s]
ontime1	30955.188299716	Sum of GTIs [s]
ontime2	30952.08836931	Sum of GTIs [s]
ontime3	30955.270379722	Sum of GTIs [s]
ontime7	30955.311419725	Sum of GTIs [s]
l2events	259266	Number of level 2 events



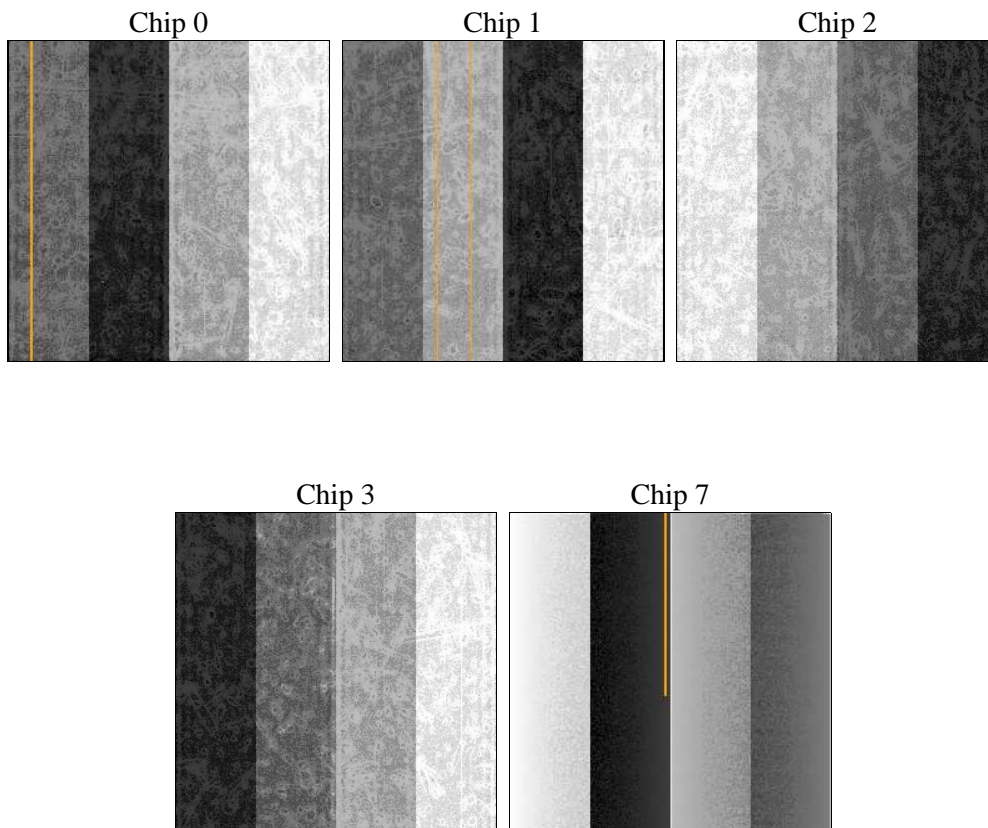
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	30839.816000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	30955.188299716	Sum of GTIs [s]
caldbver	4.6.4	 	ontime0	30955.147259712	Sum of GTIs [s]
date	2014-12-04T21:46:02	Date and time of file creation	ontime1	30955.188299716	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	30952.08836931	Sum of GTIs [s]
			ontime3	30955.270379722	Sum of GTIs [s]
			ontime7	30955.311419725	Sum of GTIs [s]
			l1events	762388	Number of level 1 events

2.1.4 Events

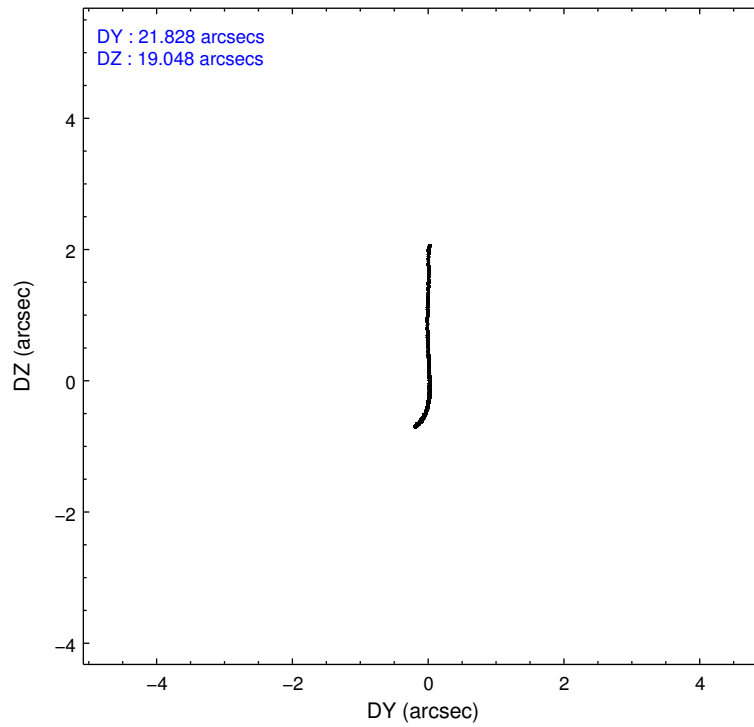
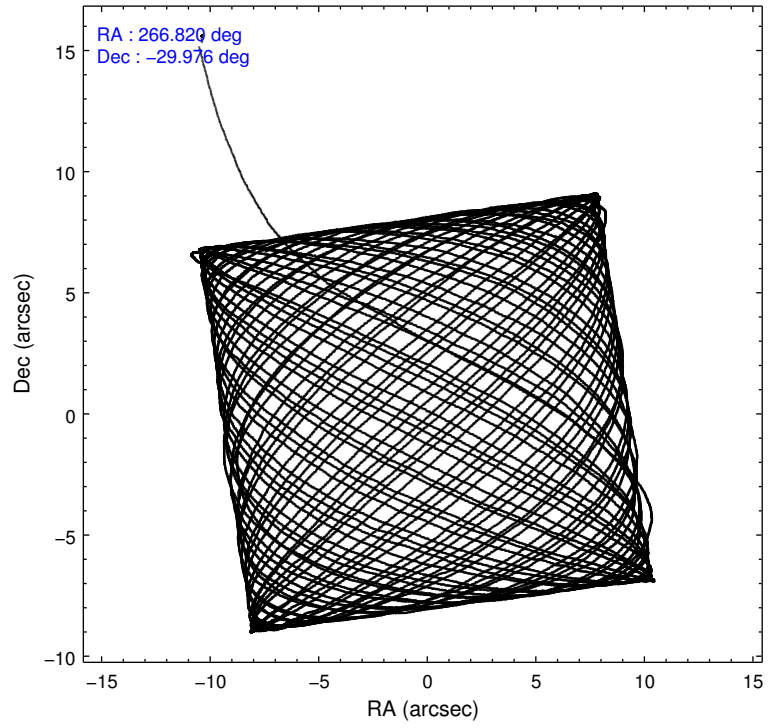
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
level 1 events	130843	126811	278370	126444	99920
rejected events	94663	97616	140026	104318	42779
rejected %	72%	76%	50%	82%	42%

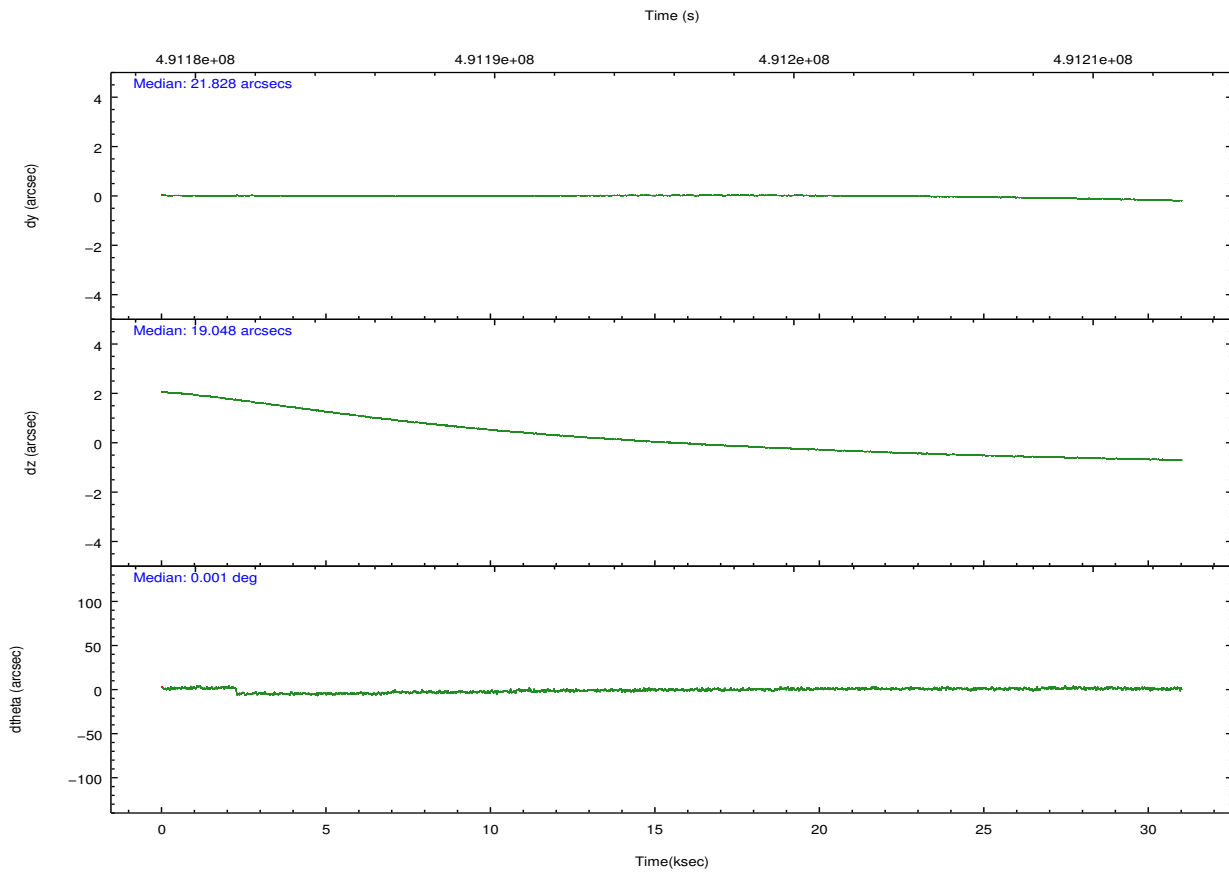
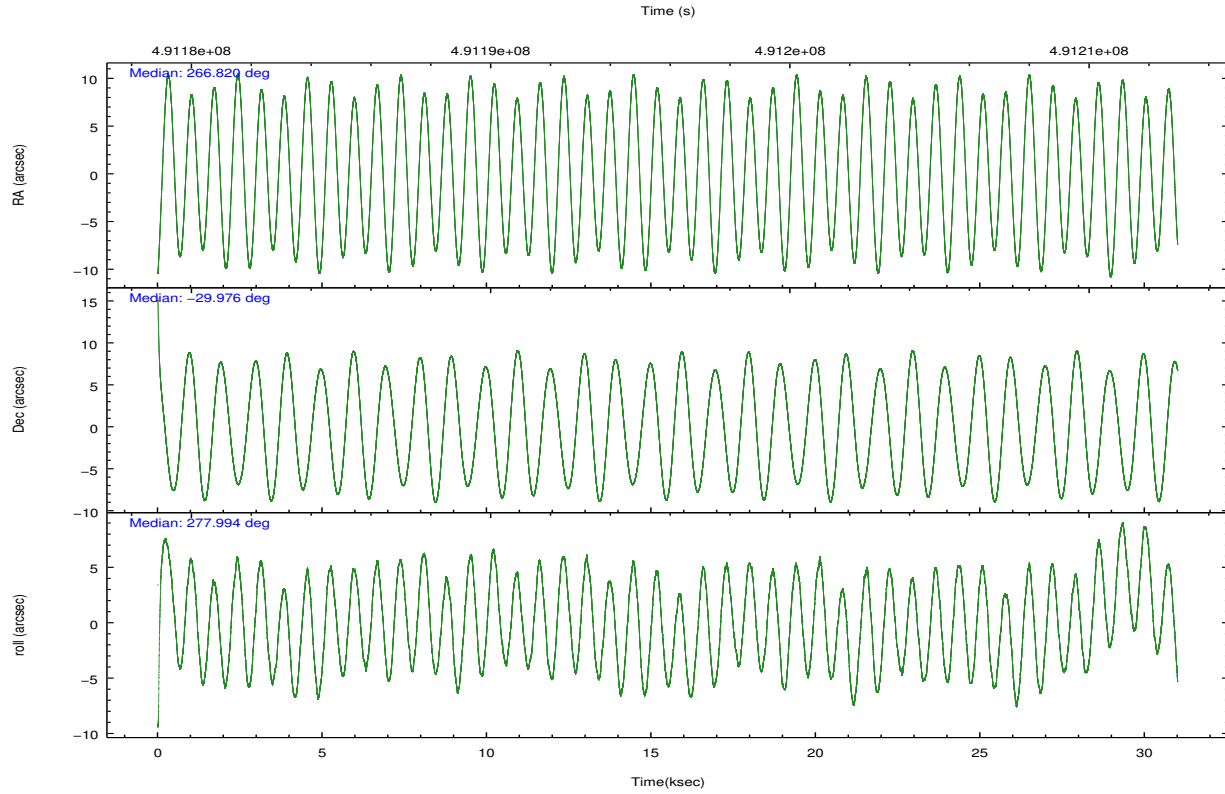
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
grade 0 events	22826	16368	86270	12470	7613
	17%	12%	30%	9%	7%
grade 1 events	113	223	8752	116	217
	0%	0%	3%	0%	0%
grade 2 events	6102	5404	22614	3890	13870
	4%	4%	8%	3%	13%
grade 3 events	2183	2038	8150	1634	5482
	1%	1%	2%	1%	5%
grade 4 events	2041	2081	8115	1645	5331
	1%	1%	2%	1%	5%
grade 5 events	3123	3602	9654	3609	9926
	2%	2%	3%	2%	9%
grade 6 events	3037	3310	13224	2493	24856
	2%	2%	4%	1%	24%
grade 7 events	91418	93785	121591	100587	32625
	69%	73%	43%	79%	32%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01237	ACIS-01237	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	266.799900	266.8195528453339	CCD I2 on	Y	Y
[deg] Pointing Dec	-29.954699	-29.97629090863714	CCD I3 on	Y	Y
[deg] Pointing Roll	277.777994	277.9964896861339	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	N	N
[mm] SIM translation stage pos	-237.394963	-237.3890791967874	CCD S3 on	O1	Y
[mm] SIM translation stage offset	3.8025	3.796626193857719	CCD S4 on	N	N
[s] Observation start time (MET)	491180590.184000	491179413.3674	CCD S5 on	N	N
Observation start date	2013-07-25T23:02:03	2013-07-25T22:43:33	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	491211430.184000	491211668.58166	On-chip summing requested	N	N
Observation end date	2013-07-26T07:36:03	2013-07-26T07:41:08	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





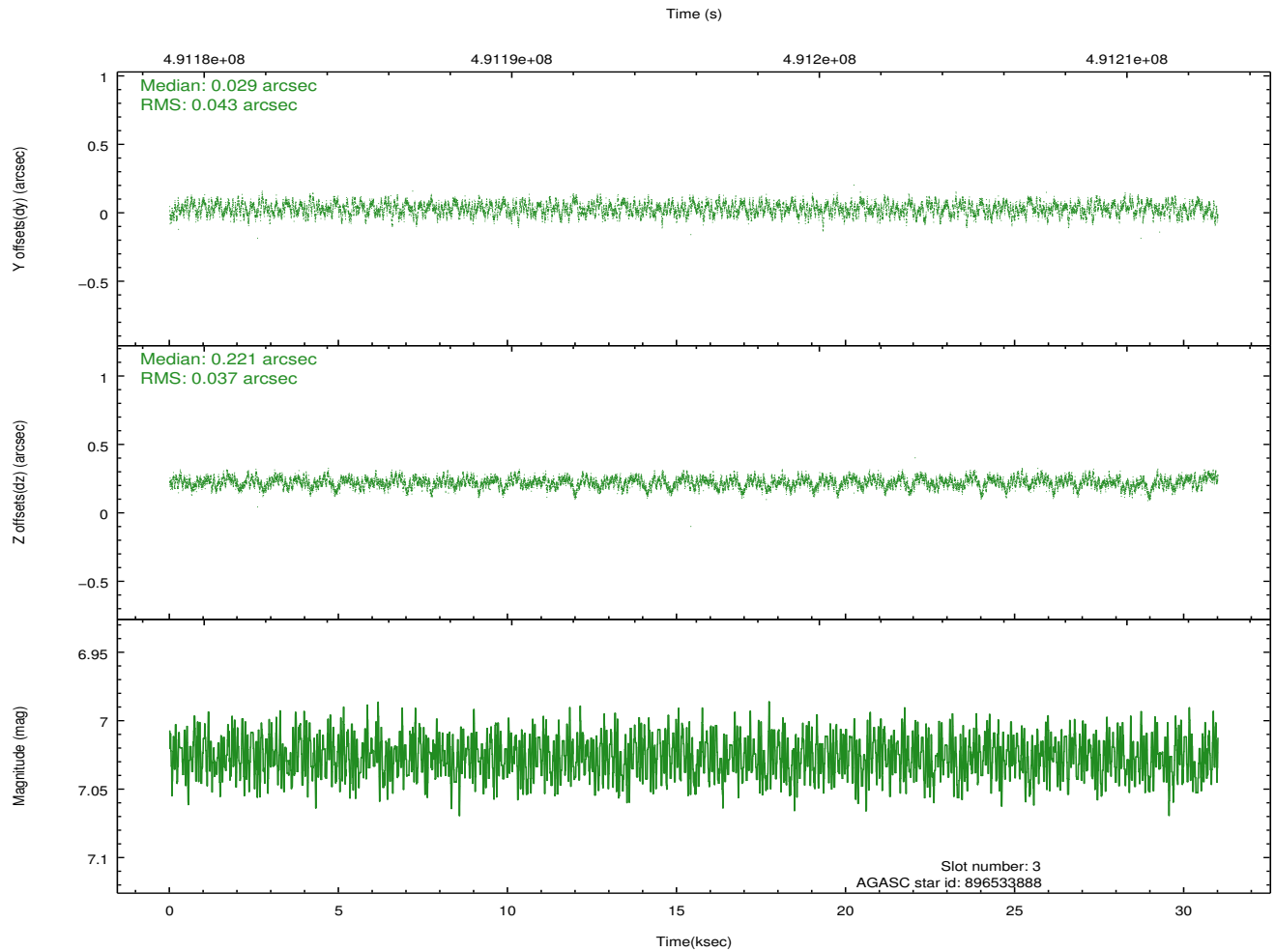
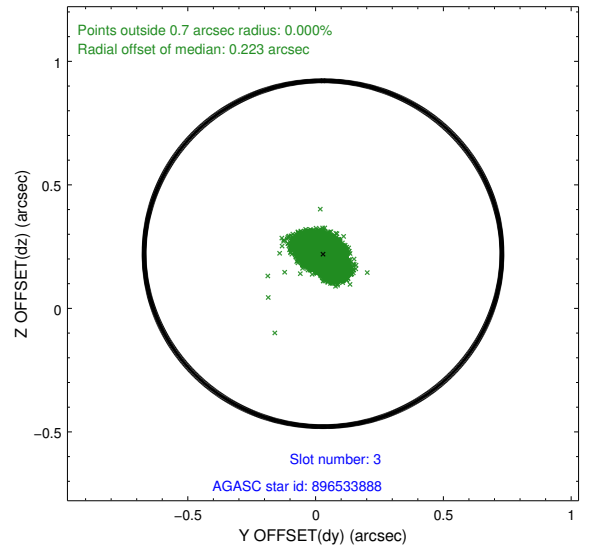
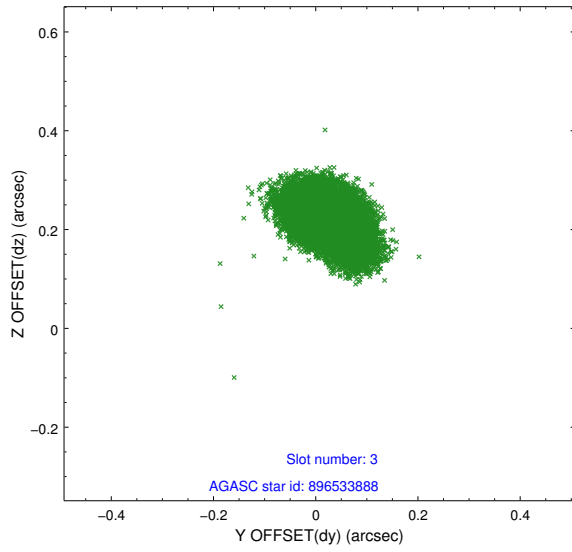
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.12	7562	-0.082	0.088	0.029	0.052	0.000000	0.000000	917.42	-764.87
1	FID		ACIS-I-2	7.01	7562	-0.166	-0.124	0.012	0.018	0.000000	0.000000	-776.52	-771.97
2	FID		ACIS-I-4	7.05	7559	0.149	0.105	0.023	0.042	0.000000	0.000000	2137.80	1134.41
3	GUIDE	used	896533888	7.03	15123	0.029	0.221	0.061	0.097	266.666434	-29.392757	-2060.59	-140.78
4	GUIDE	used	896540528	8.27	15116	-0.016	-0.095	0.089	0.146	267.368305	-29.314773	-2036.56	2079.59
5	GUIDE	used	896541168	8.15	15122	0.235	0.043	0.074	0.123	266.319970	-29.850801	-569.82	-1434.50
6	GUIDE	used	966920512	8.35	15120	-0.199	-0.099	0.064	0.105	267.231170	-30.494681	2109.53	1062.15
7	GUIDE	used	966920552	8.88	15039	-0.050	-0.071	0.069	0.110	267.271588	-30.476409	2062.17	1195.68

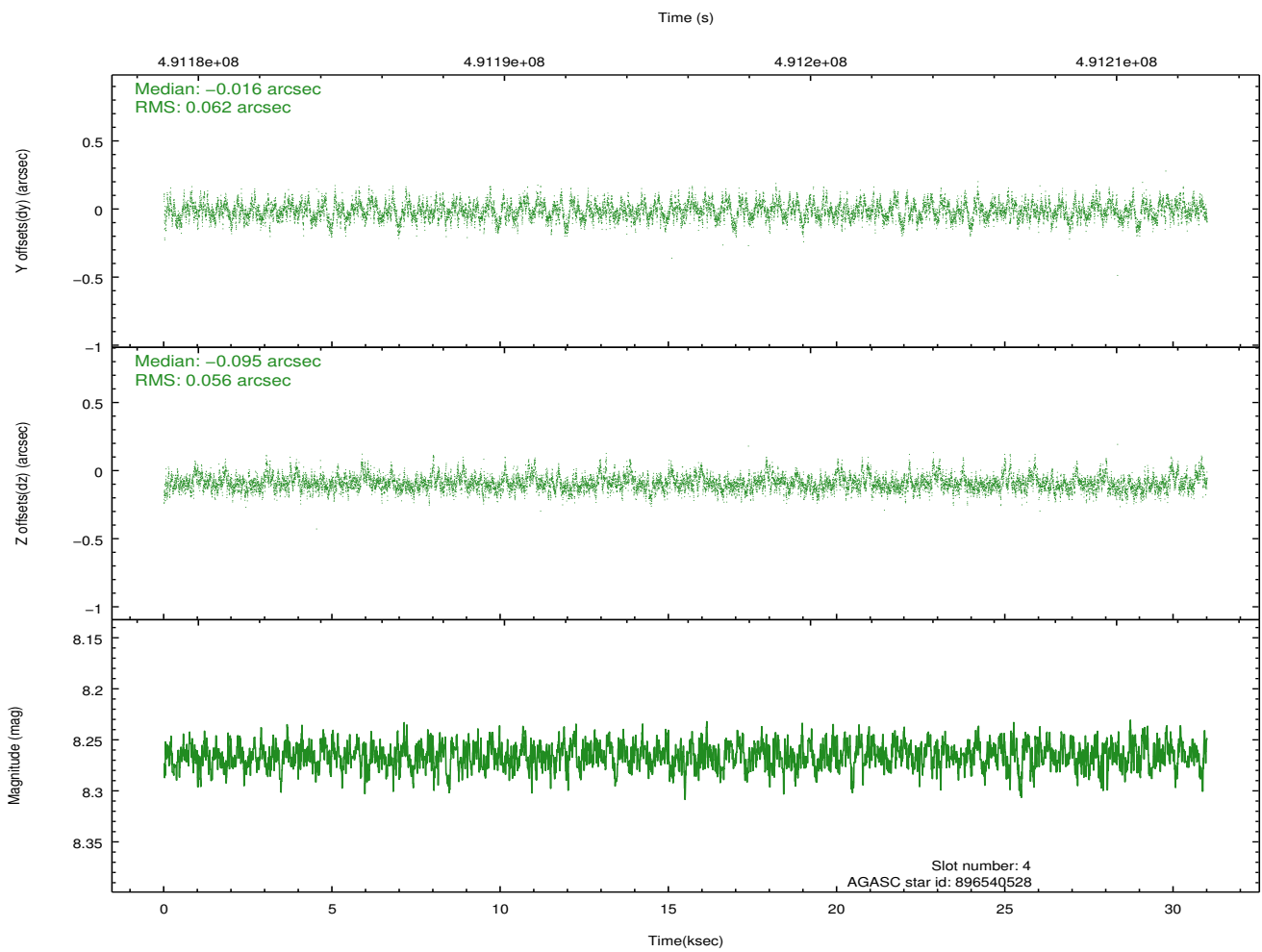
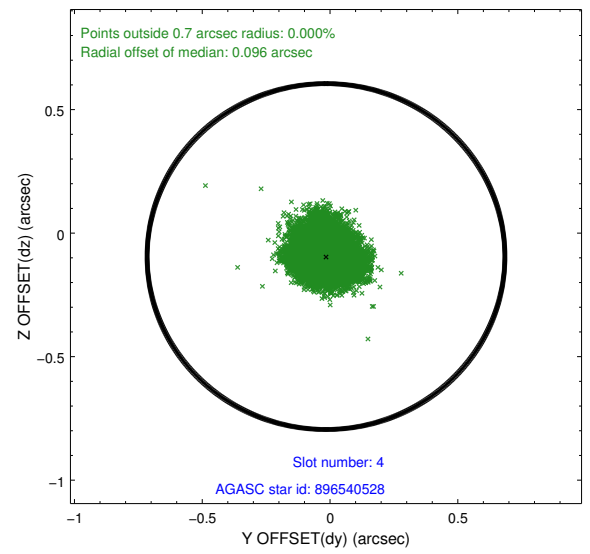
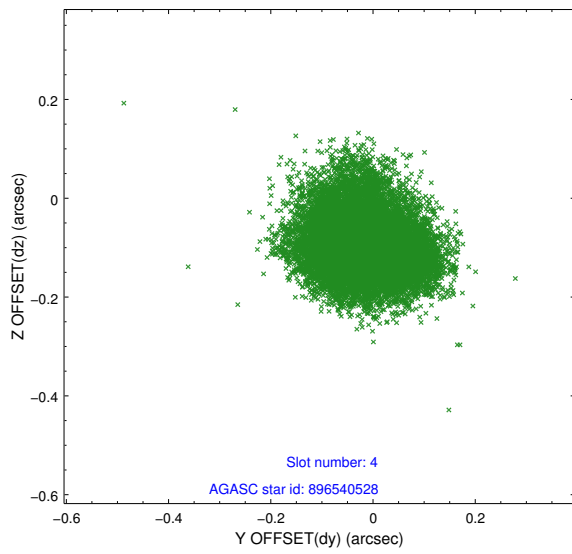
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2.4 Star Slots

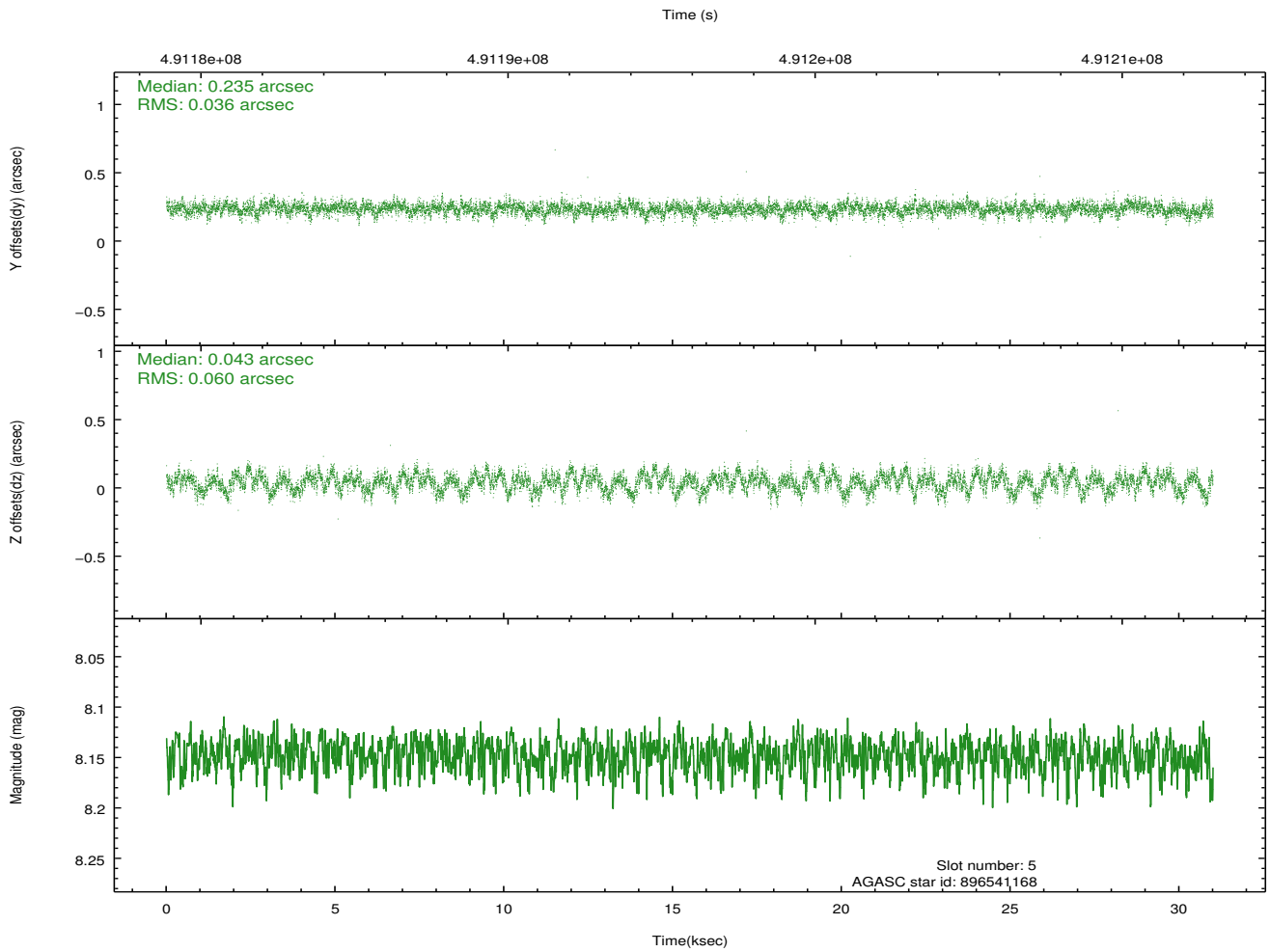
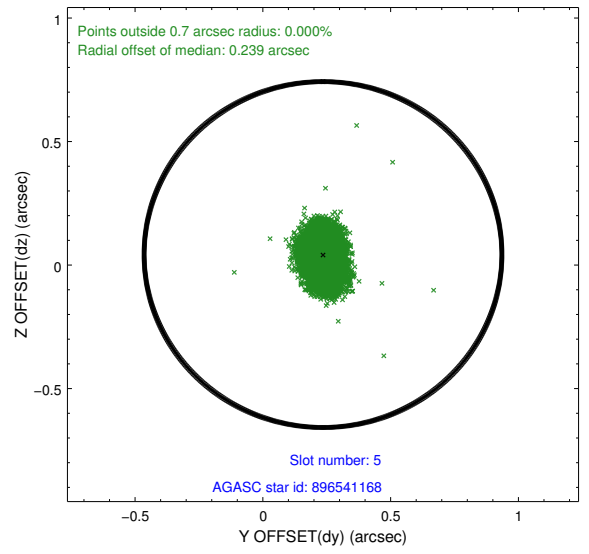
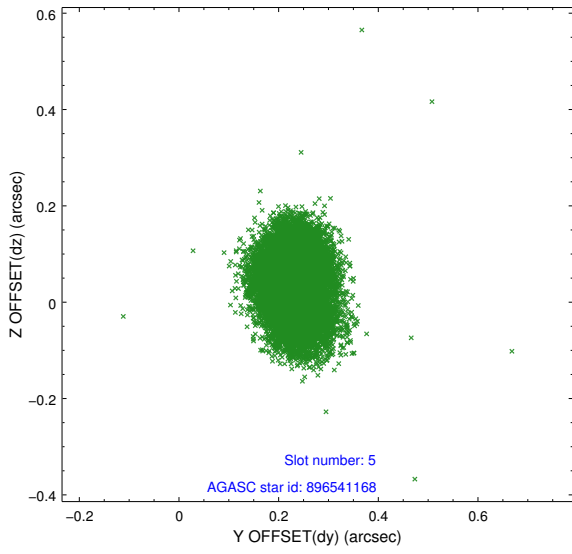
2.4.1 Slot 3



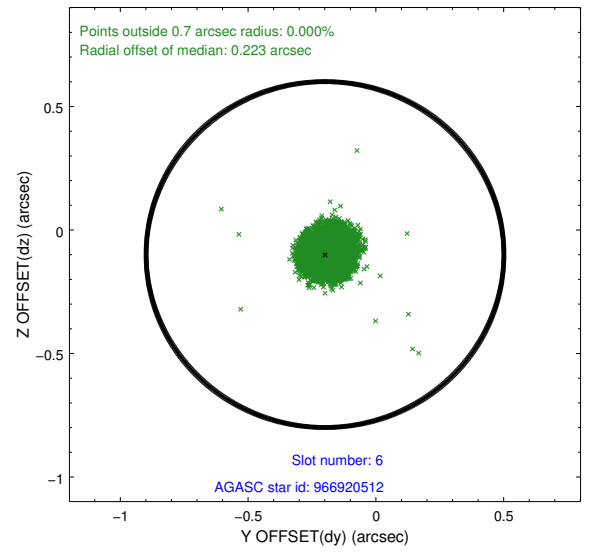
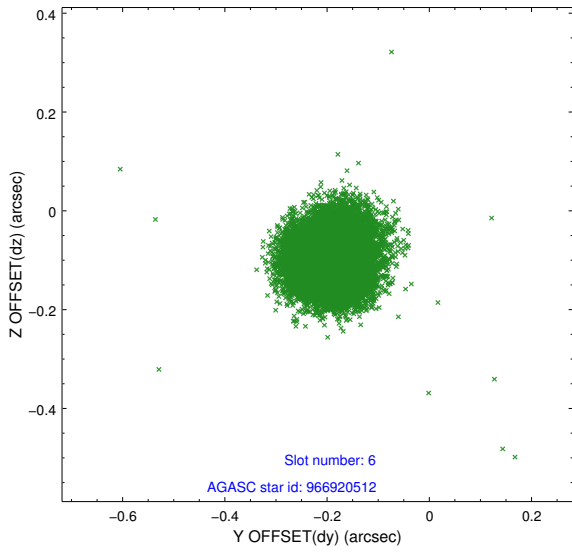
2.4.2 Slot 4



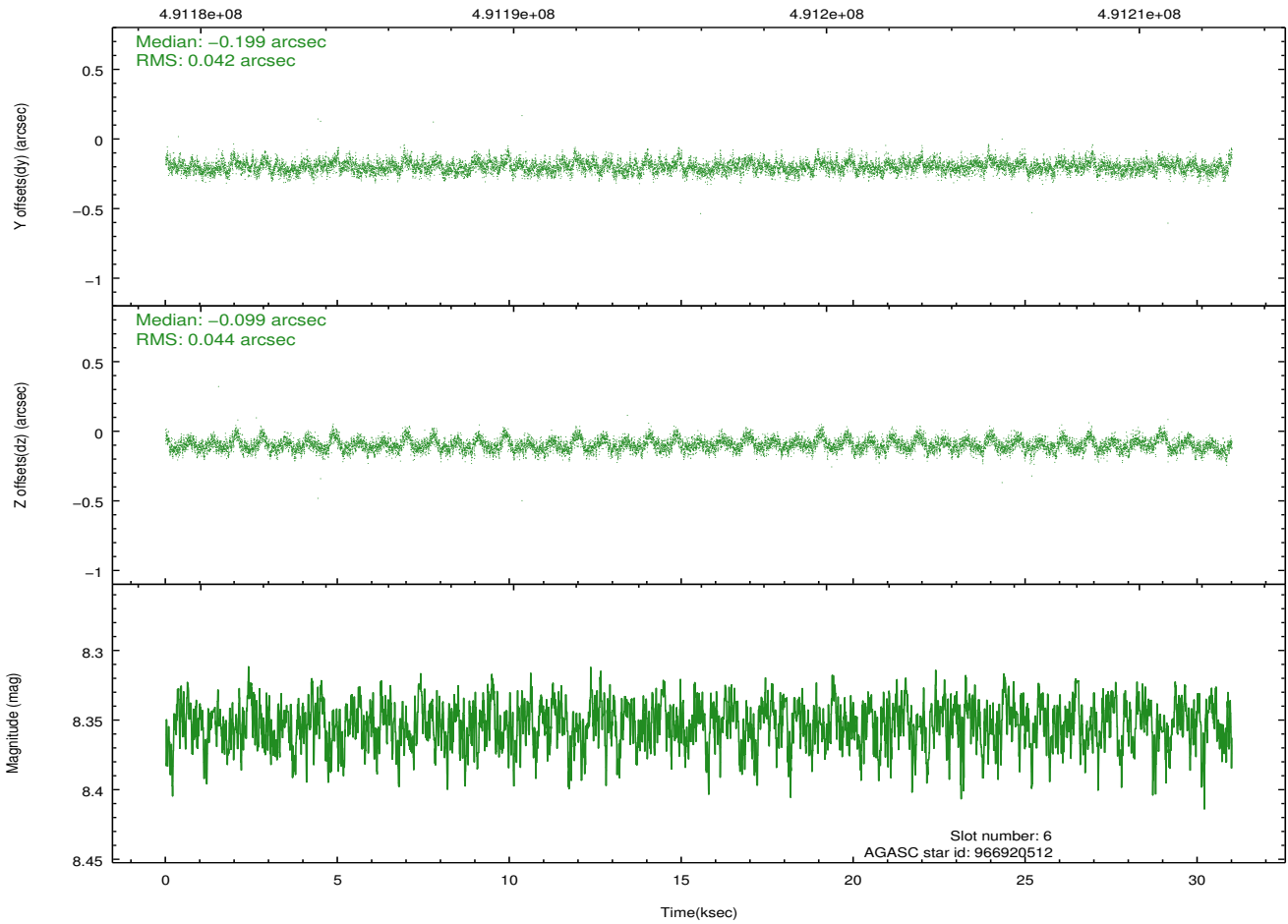
2.4.3 Slot 5



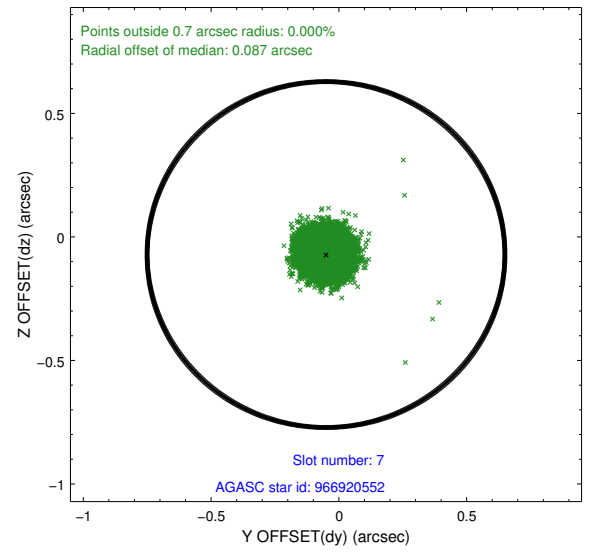
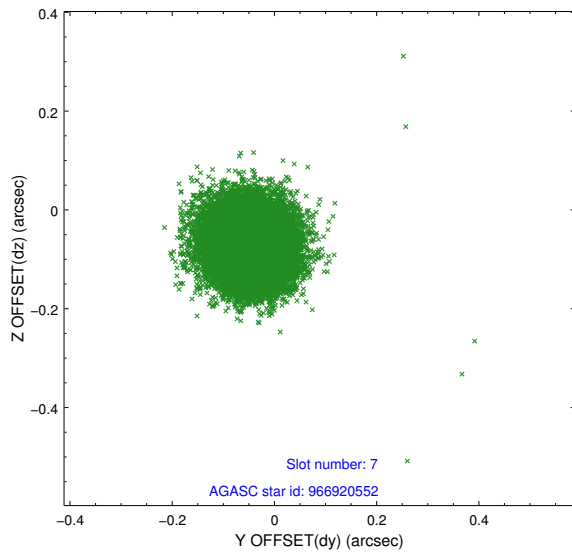
2.4.4 Slot 6



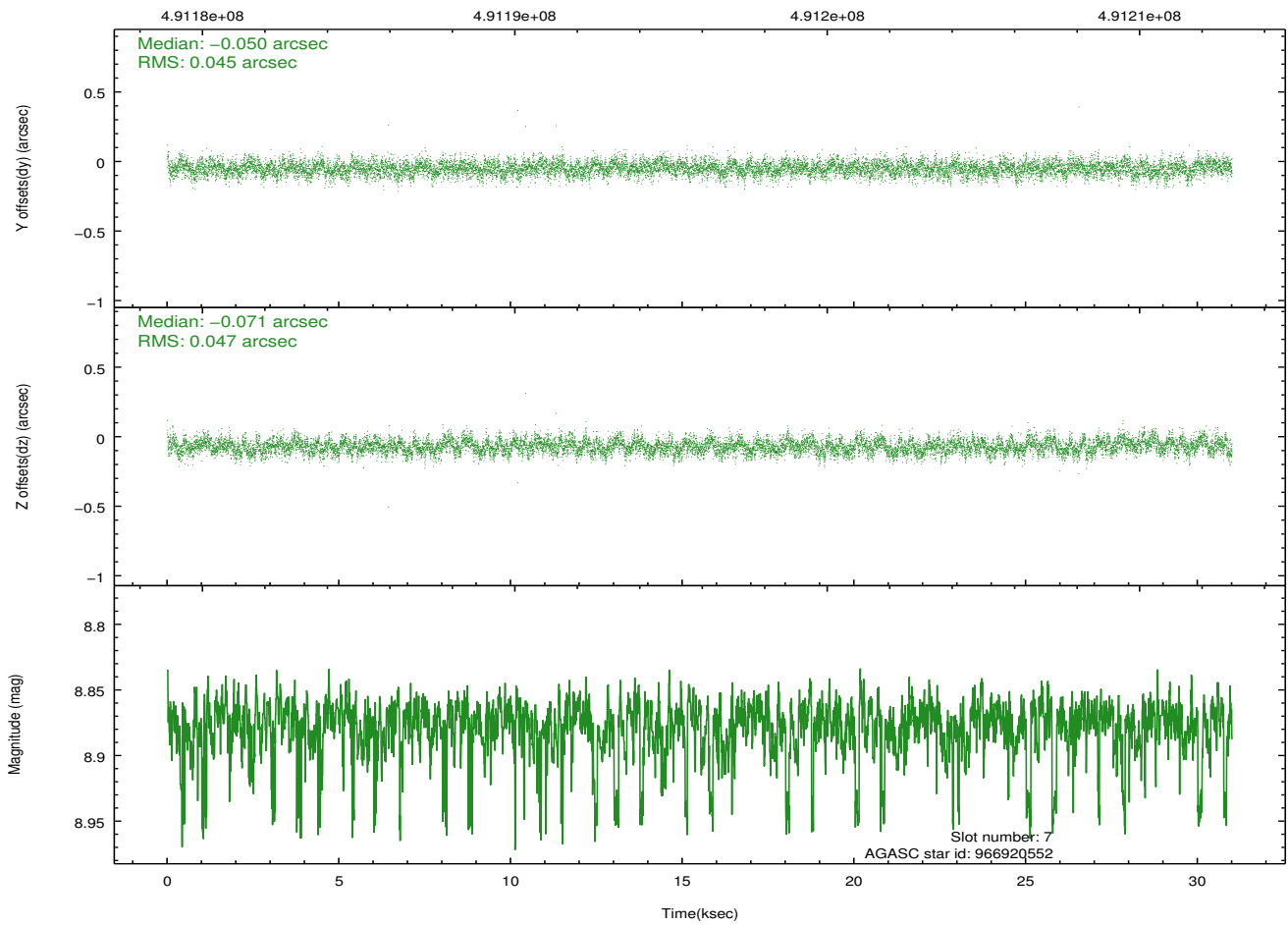
Time (s)



2.4.5 Slot 7

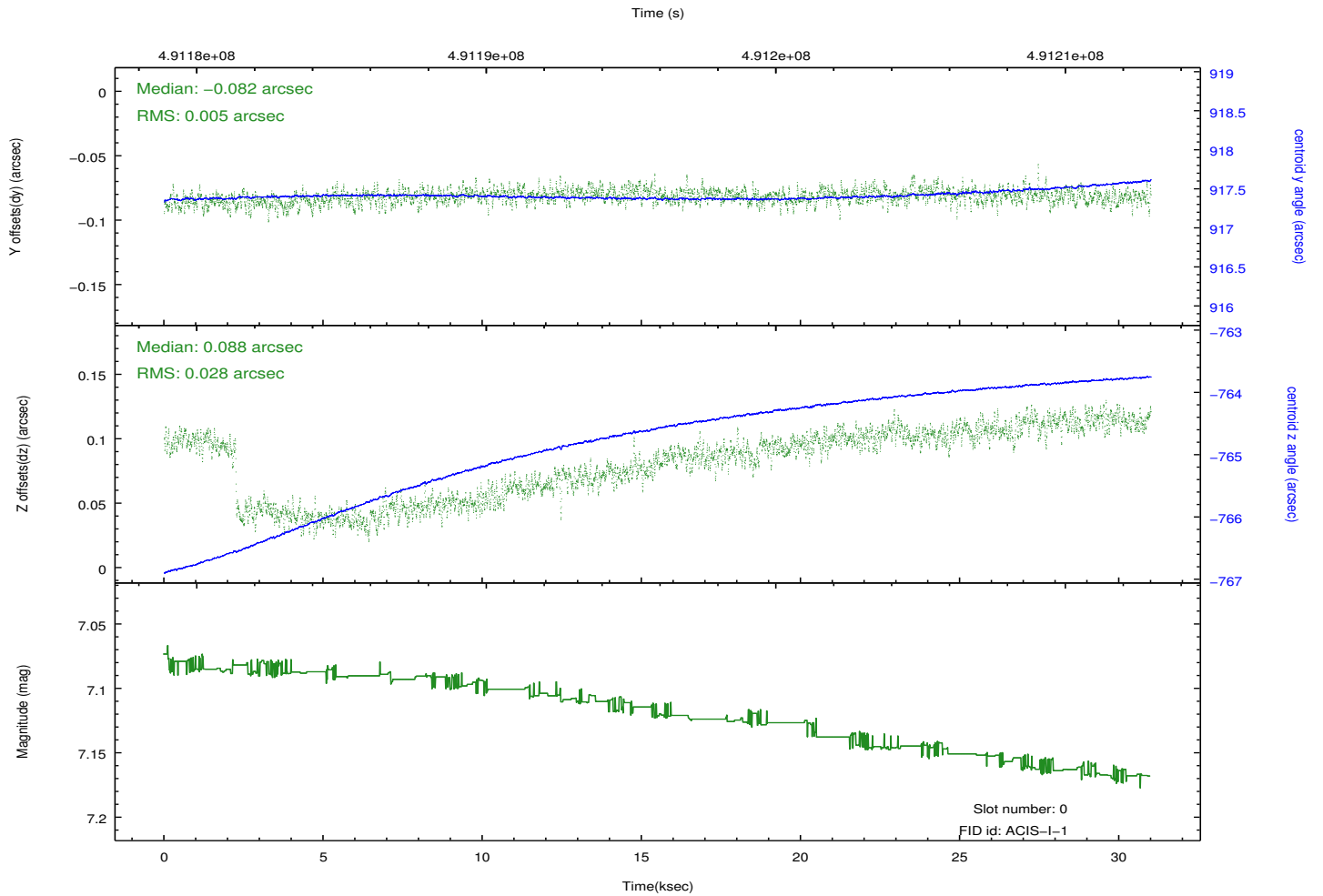
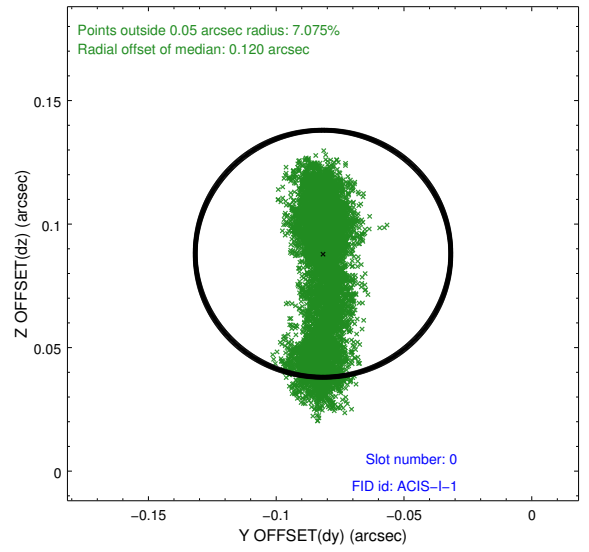
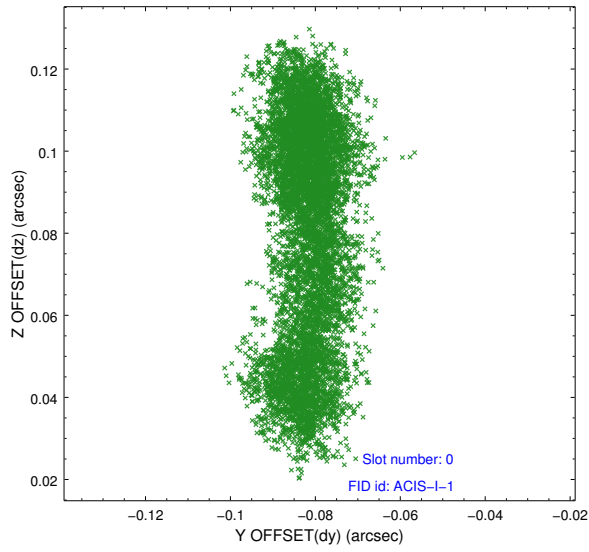


Time (s)

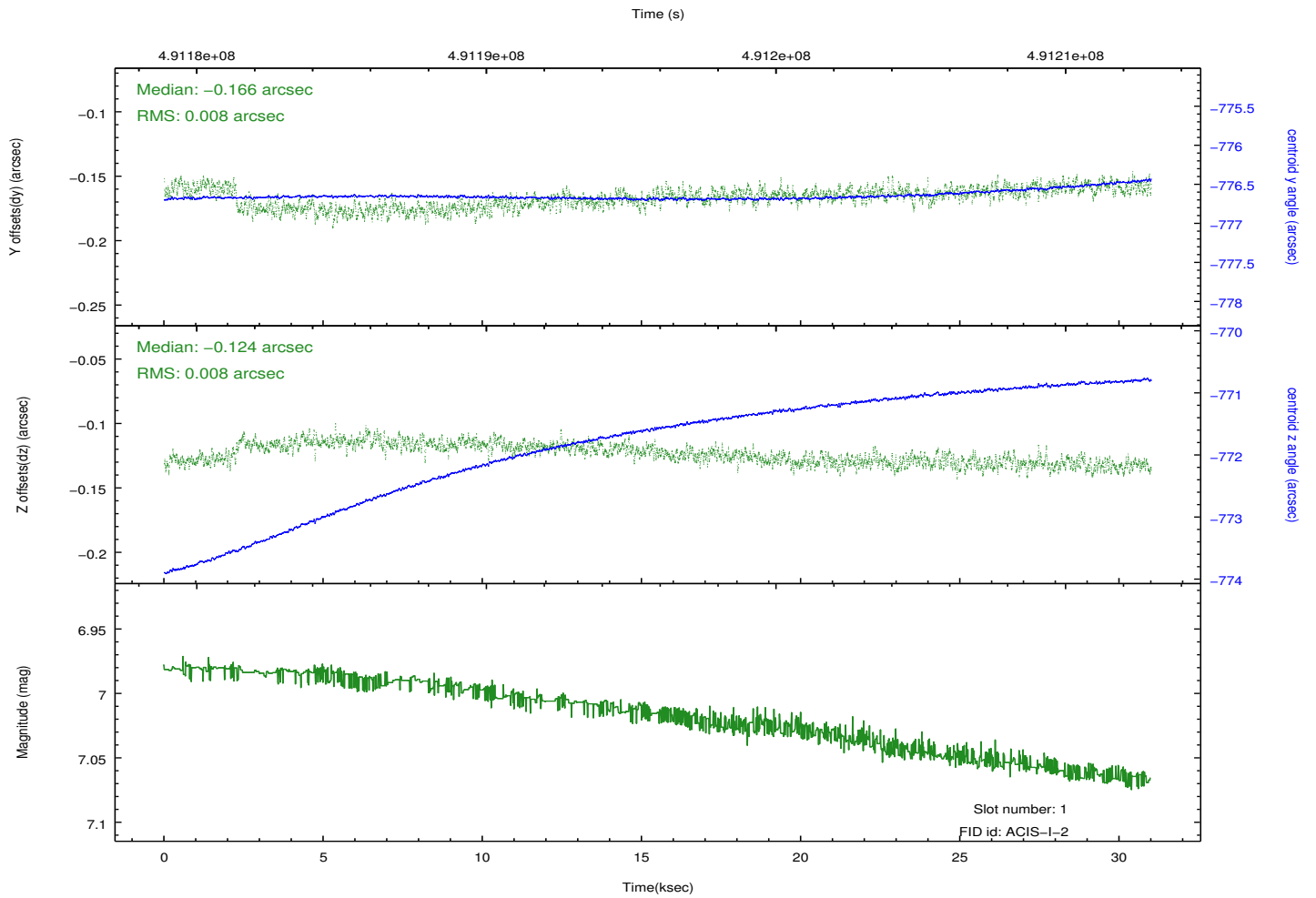
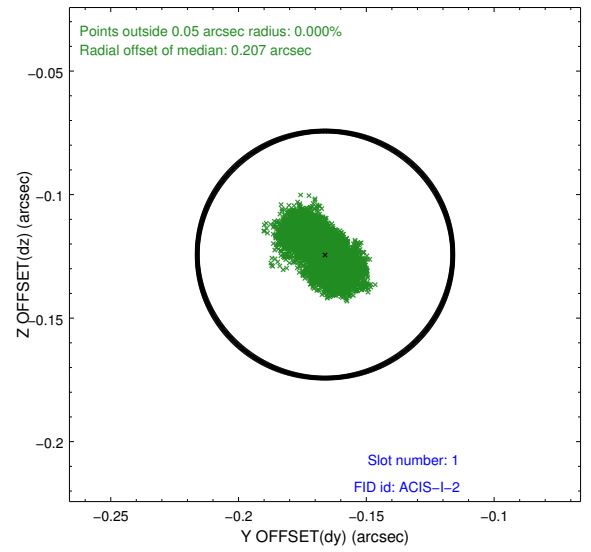
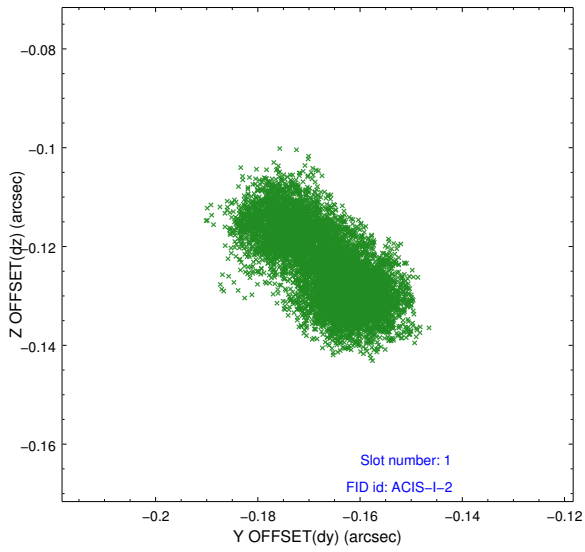


2.5 FID Slots

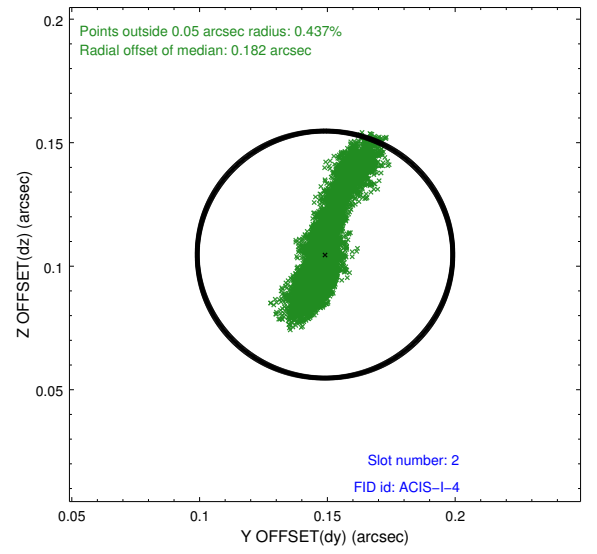
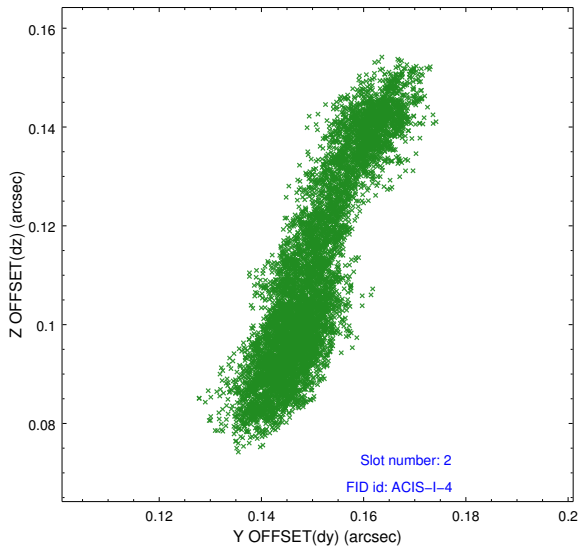
2.5.1 Slot 0



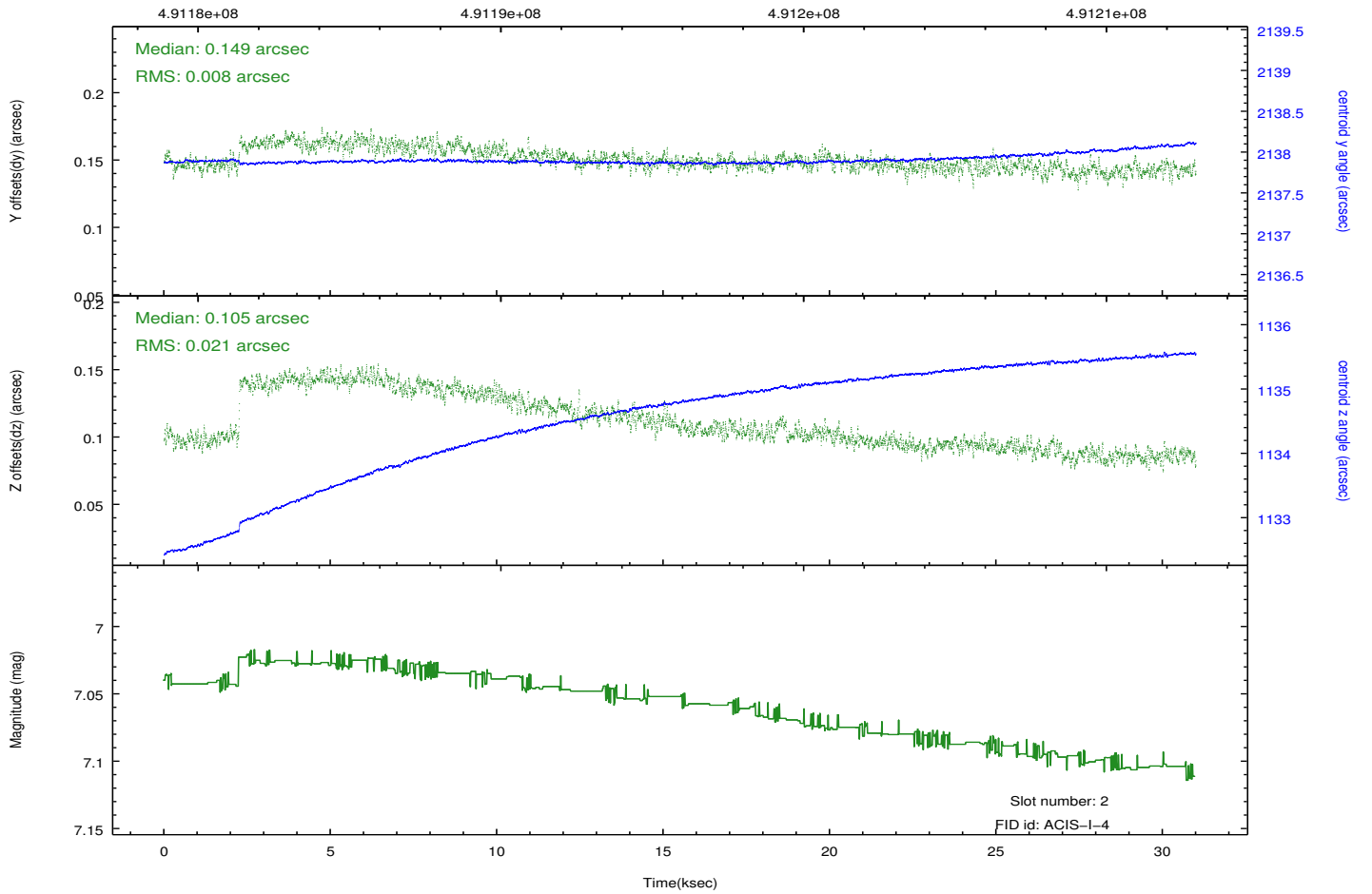
2.5.2 Slot 1



2.5.3 Slot 2



Time (s)



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2014.12.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.955188299716

A.2 Comments

These data have been reprocessed with new aspect alignment calibration files that correct small mean offsets (up to 0.4 arcsecs) and improve overall astrometric accuracy. The new calibration was determined using data from the time period being reprocessed and was performed using cross-correlation of X-ray sources with radio and optical counterparts.