

V&V Reference Report

L2 ASCDS Version : 10

Observation 16263 - L2 Version 2
Chandra X-Ray Center

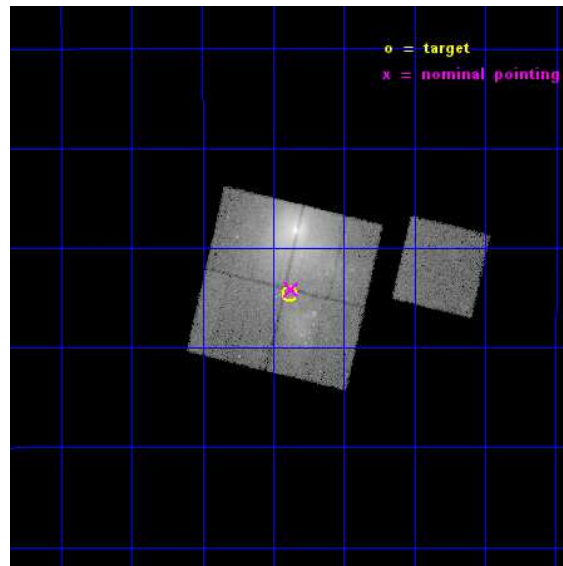
L2 Processing Date : Dec 5 2014

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1 Front

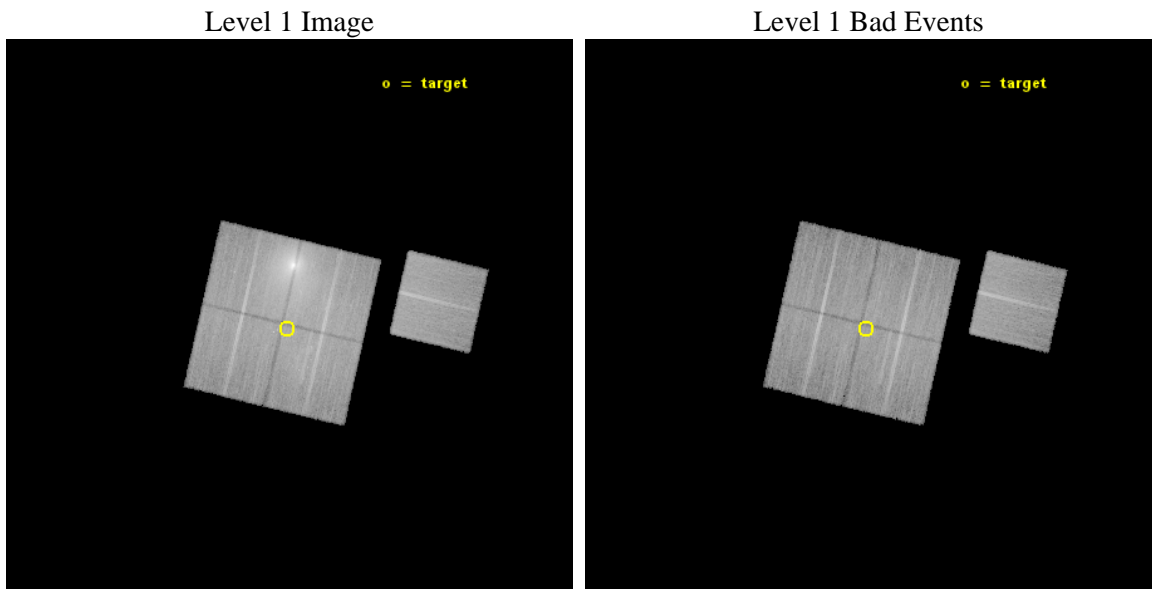
seq_num	801301	Sequence number
obs_id	16263	Observation id
title	Tracing a merger from start to finish in Abell 85	Proposal title
observer	Prof. Steven Allen	Principal investigator
object	Abell 85	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	10.471913	Observer's specified target RA [deg]
dec_targ	-9.409453	Observer's specified target Dec [deg]
ra_nom	10.467759806025	Nominal RA [deg]
dec_nom	-9.4024900480234	Nominal Dec [deg]
roll_nom	103.2080173567	Nominal Roll [deg]
revision	2	Processing version of data
ontime	38655.612941623	Sum of GTIs [s]
livetime	38150.548900692	Livetime [s]
ontime0	38655.489821613	Sum of GTIs [s]
ontime1	38655.530861616	Sum of GTIs [s]
ontime2	38652.430871248	Sum of GTIs [s]
ontime3	38655.612941623	Sum of GTIs [s]
ontime6	38646.025720537	Sum of GTIs [s]
l2events	327512	Number of level 2 events



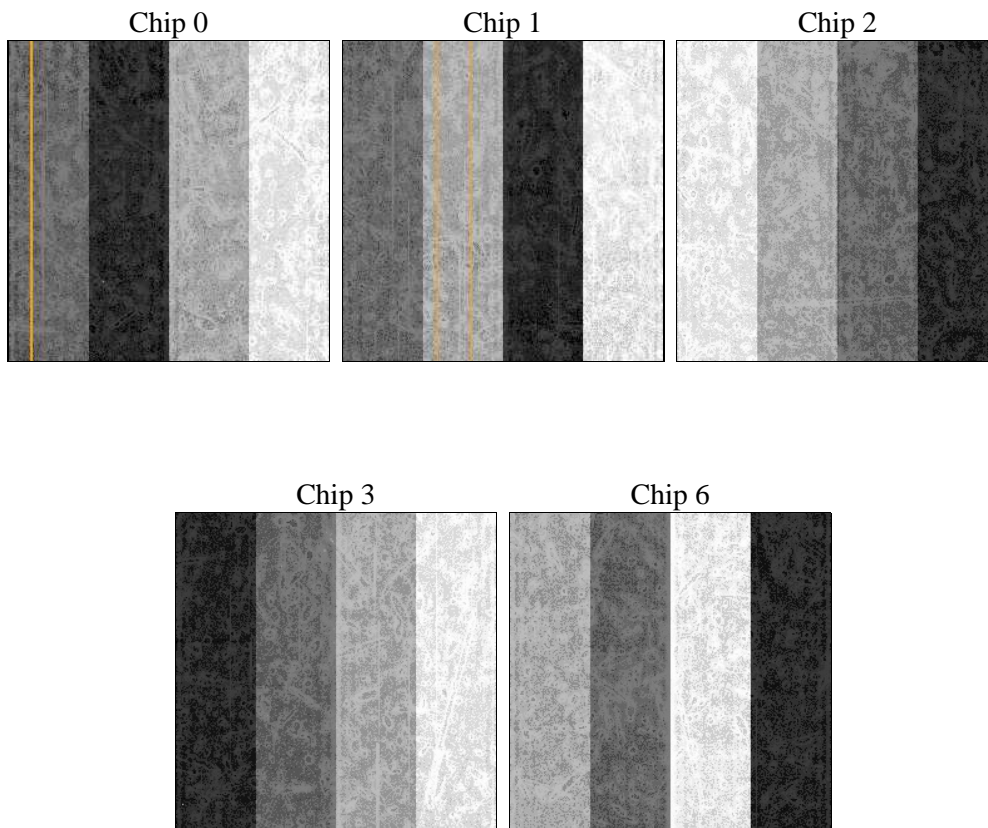
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	38568.760000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	38655.612941623	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	38655.489821613	Sum of GTIs [s]
date	2014-12-06T03:56:31	Date and time of file creation	ontime1	38655.530861616	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	38652.430871248	Sum of GTIs [s]
			ontime3	38655.612941623	Sum of GTIs [s]
			ontime6	38646.025720537	Sum of GTIs [s]
			l1events	1148655	Number of level 1 events

2.1.4 Events

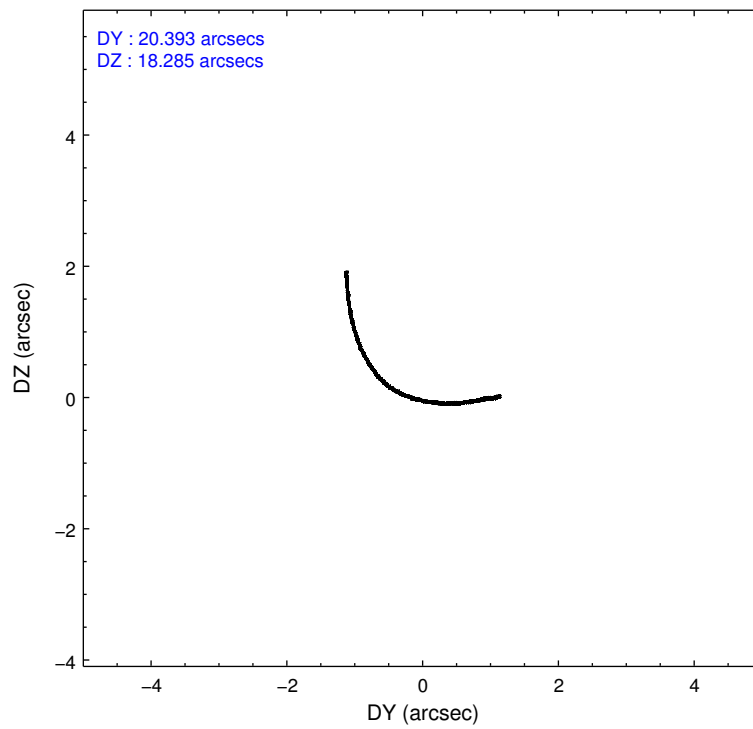
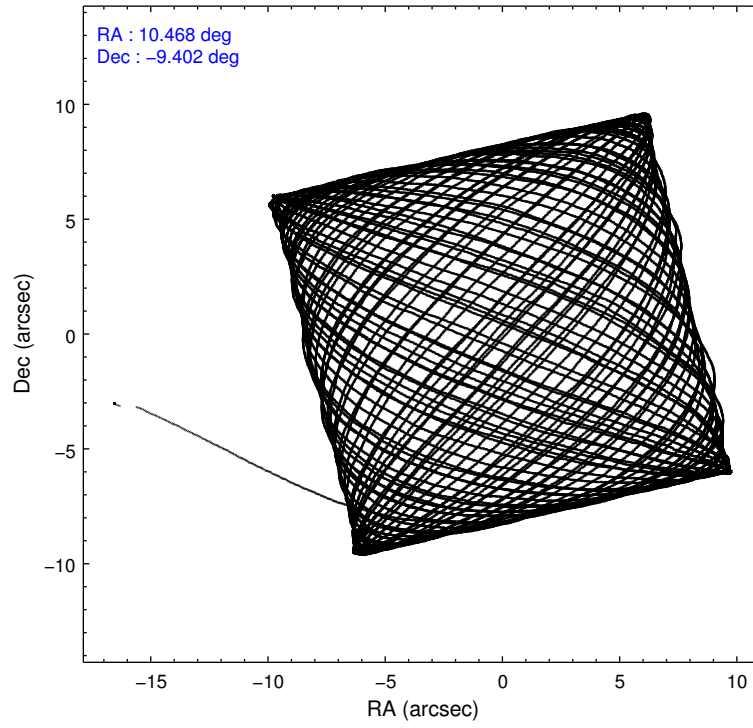
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	287187	183100	285901	201448	191019
rejected events	145598	147637	164744	158603	166639
rejected %	50%	80%	57%	78%	87%

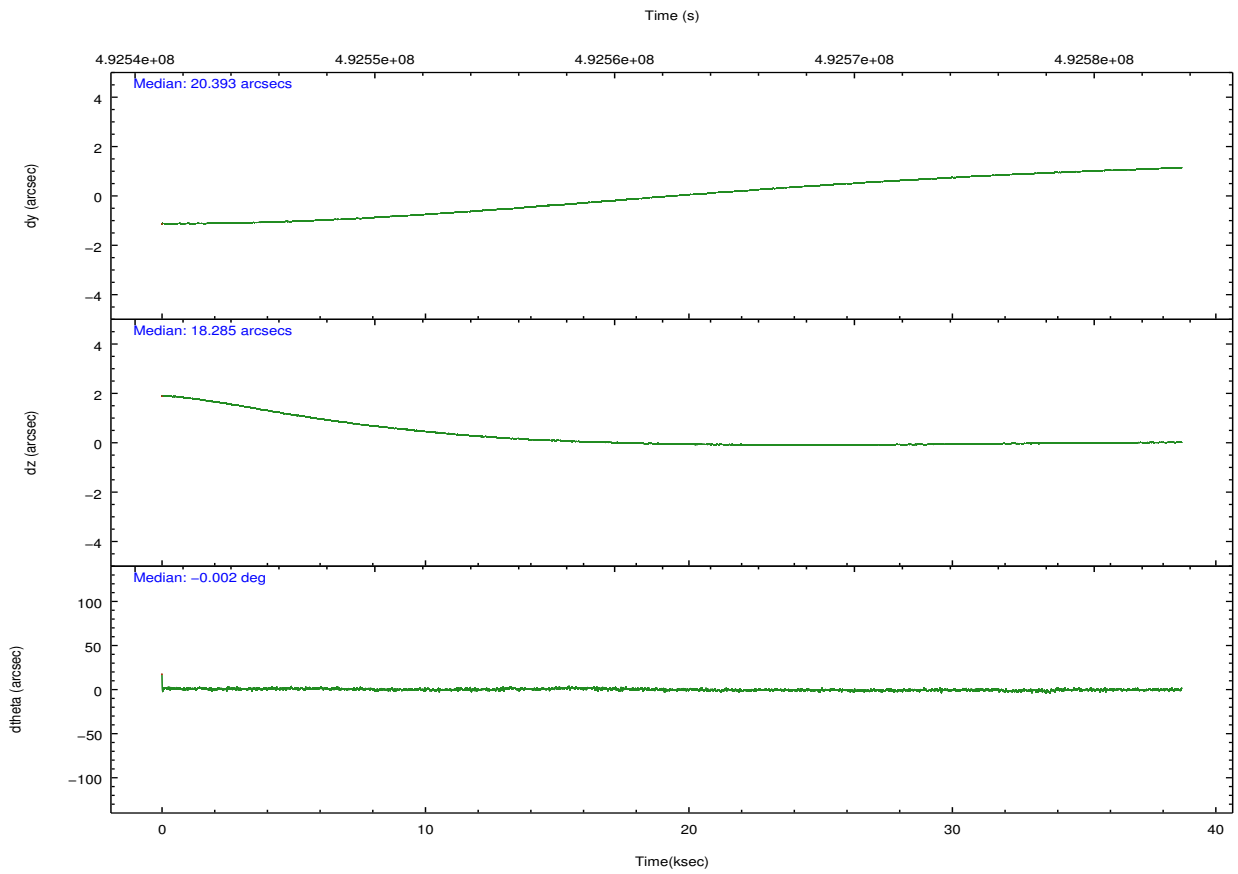
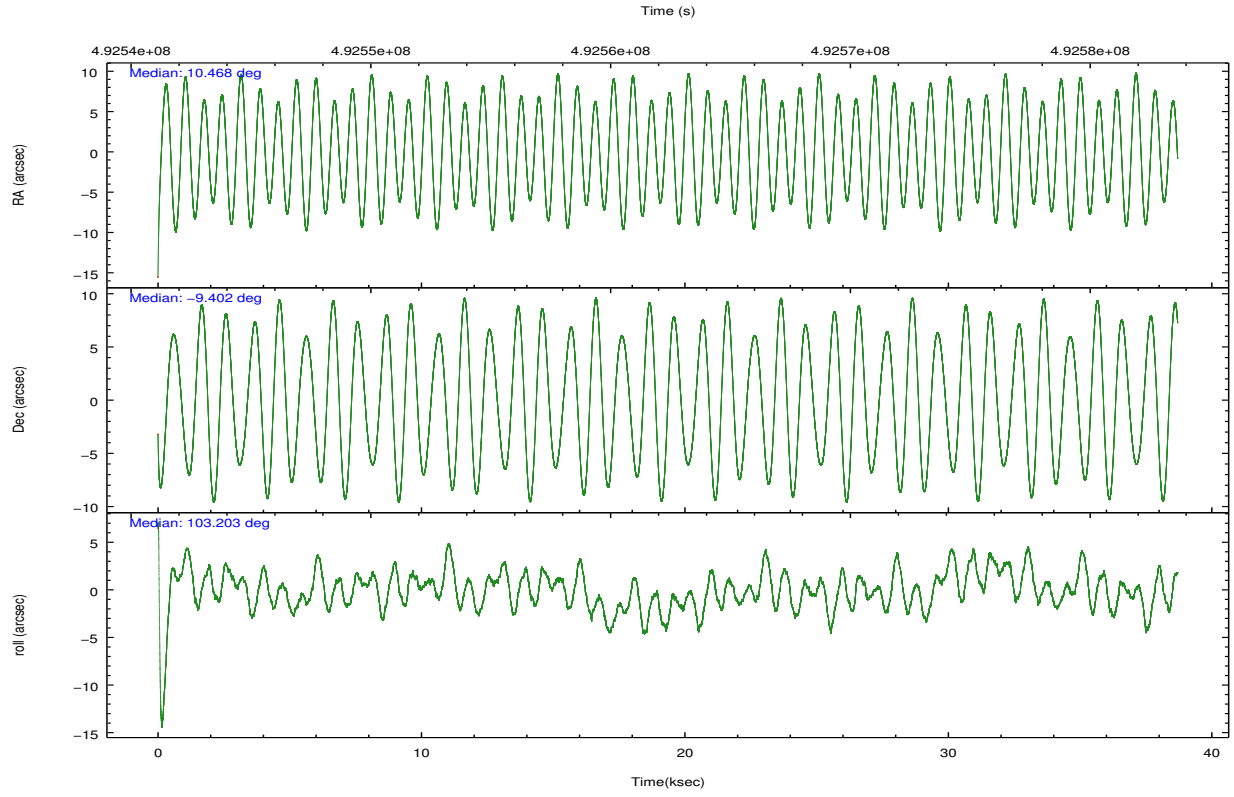
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	103019	17251	87588	25283	9156
	35%	9%	30%	12%	4%
grade 1 events	434	120	397	178	83
	0%	0%	0%	0%	0%
grade 2 events	18308	7159	15679	6810	5152
	6%	3%	5%	3%	2%
grade 3 events	6288	2773	5415	2894	2460
	2%	1%	1%	1%	1%
grade 4 events	5946	2736	5436	2921	2362
	2%	1%	1%	1%	1%
grade 5 events	9056	9277	8499	9982	9824
	3%	5%	2%	4%	5%
grade 6 events	8043	5546	7046	4939	5252
	2%	3%	2%	2%	2%
grade 7 events	136093	138238	155841	148441	156730
	47%	75%	54%	73%	82%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	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	10.486921	10.46775980602488	CCD I2 on	Y	Y
[deg] Pointing Dec	-9.422456	-9.402490048023418	CCD I3 on	Y	Y
[deg] Pointing Roll	103.002460	103.2080173567037	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	O1	Y
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	N	N
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	492543176.184000	492541824.99162	CCD S5 on	N	N
Observation start date	2013-08-10T17:31:49	2013-08-10T17:10:24	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	492581744.184000	492581981.41881	On-chip summing requested	N	N
Observation end date	2013-08-11T04:14:37	2013-08-11T04:19:41	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



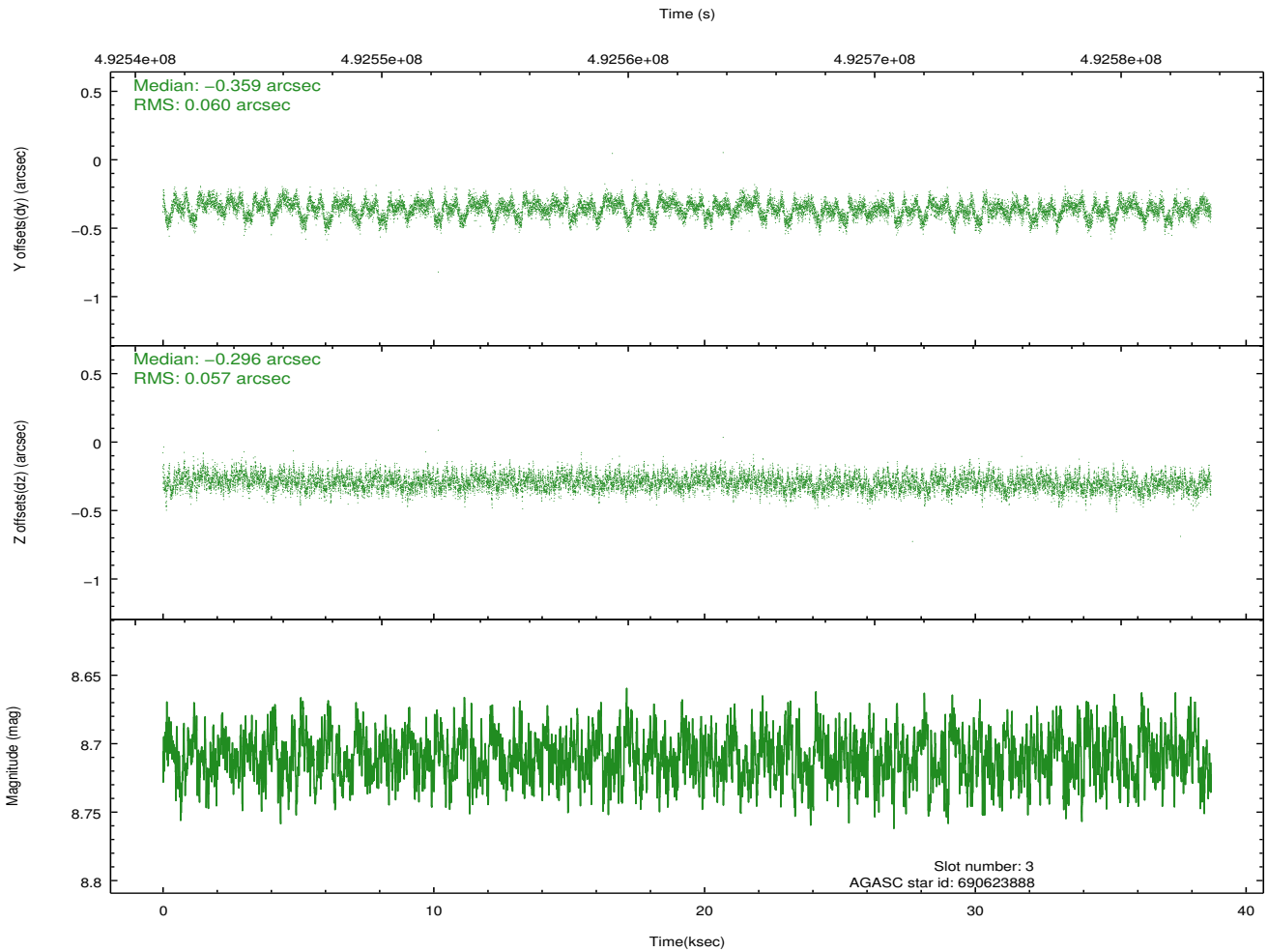
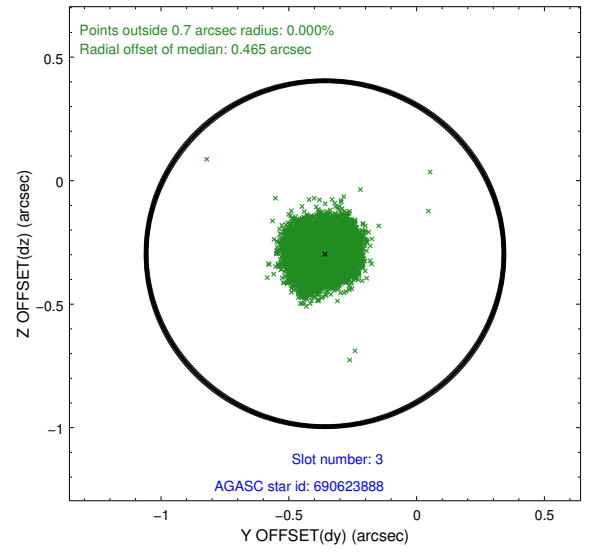
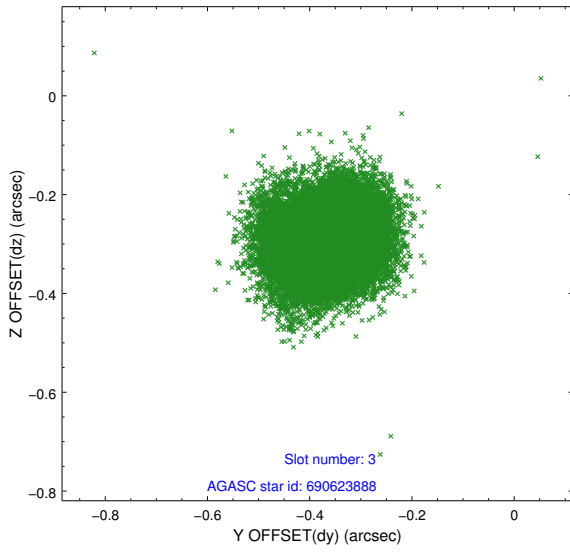


Slot Statistics

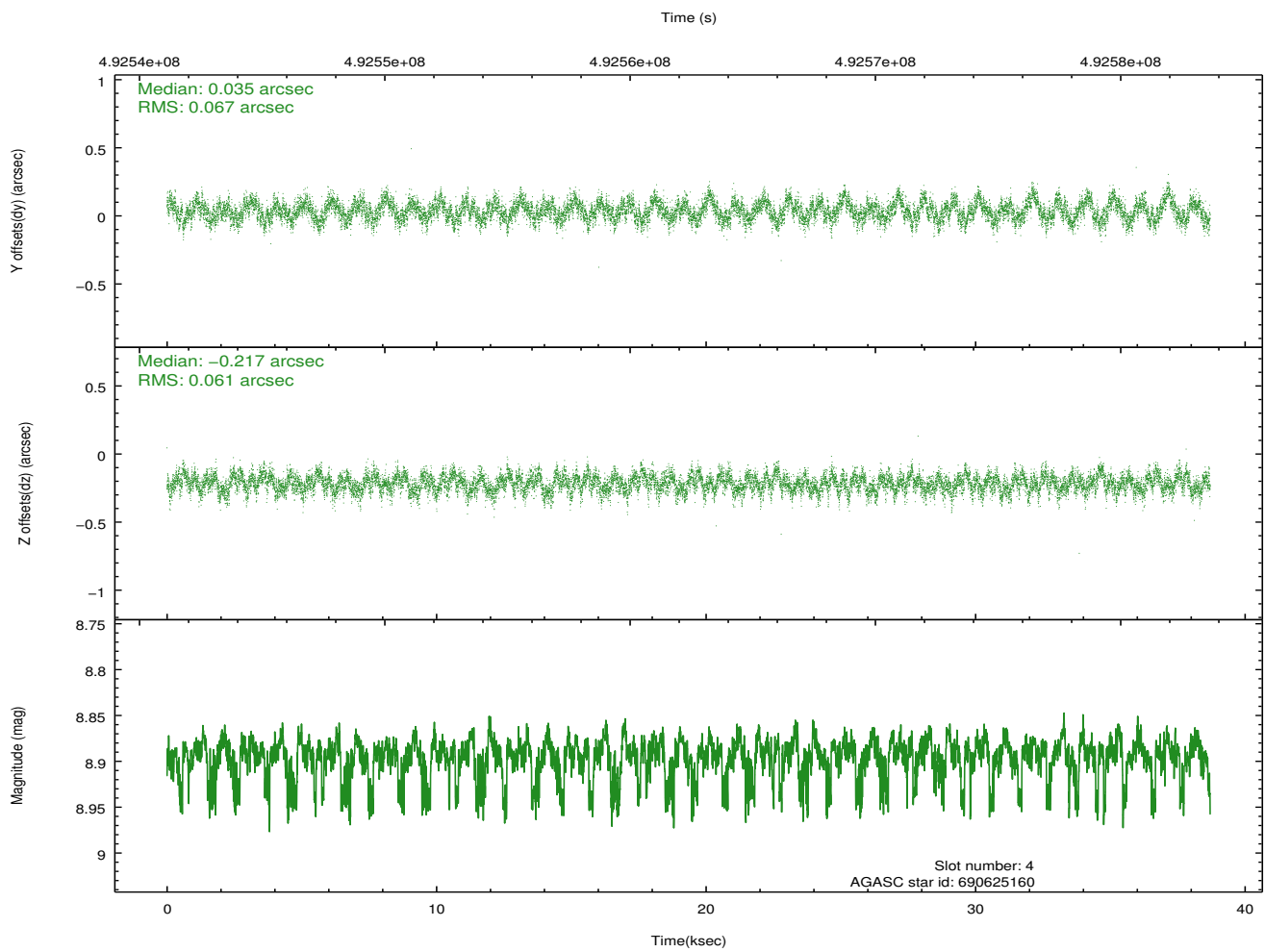
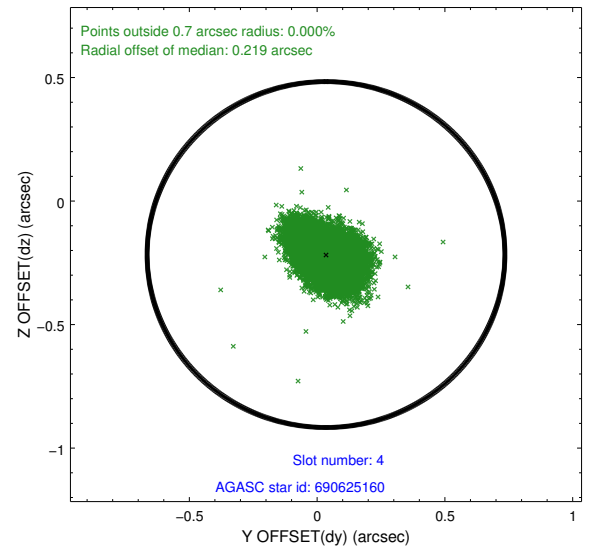
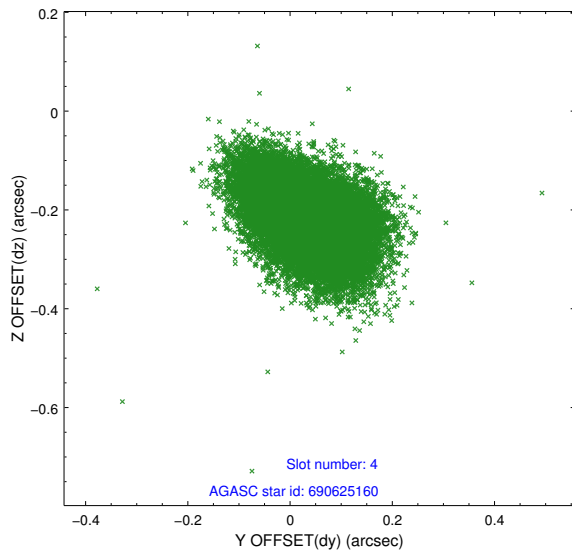
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.10	9441	-0.071	0.046	0.023	0.050	0.000000	0.000000	918.88	-842.23
1	FID		ACIS-I-2	7.00	9441	-0.166	-0.102	0.016	0.028	0.000000	0.000000	-775.29	-848.84
2	FID		ACIS-I-4	7.04	9440	0.139	0.126	0.016	0.032	0.000000	0.000000	2138.96	1057.66
3	GUIDE	used	690623888	8.71	18870	-0.359	-0.296	0.088	0.141	10.089843	-9.212040	1054.33	1204.65
4	GUIDE	used	690625160	8.89	18873	0.035	-0.217	0.096	0.157	10.224219	-9.960066	-1676.46	1343.12
5	GUIDE	used	690632656	9.24	18879	0.103	-0.170	0.134	0.222	10.397747	-9.674983	-814.79	513.19
6	GUIDE	used	690636928	9.26	18819	0.252	0.332	0.127	0.207	11.054156	-9.568424	-966.17	-1842.89
7	GUIDE	used	690637960	6.81	18878	-0.031	0.339	0.095	0.152	10.711431	-9.921690	-1930.65	-370.60

2.4 Star Slots

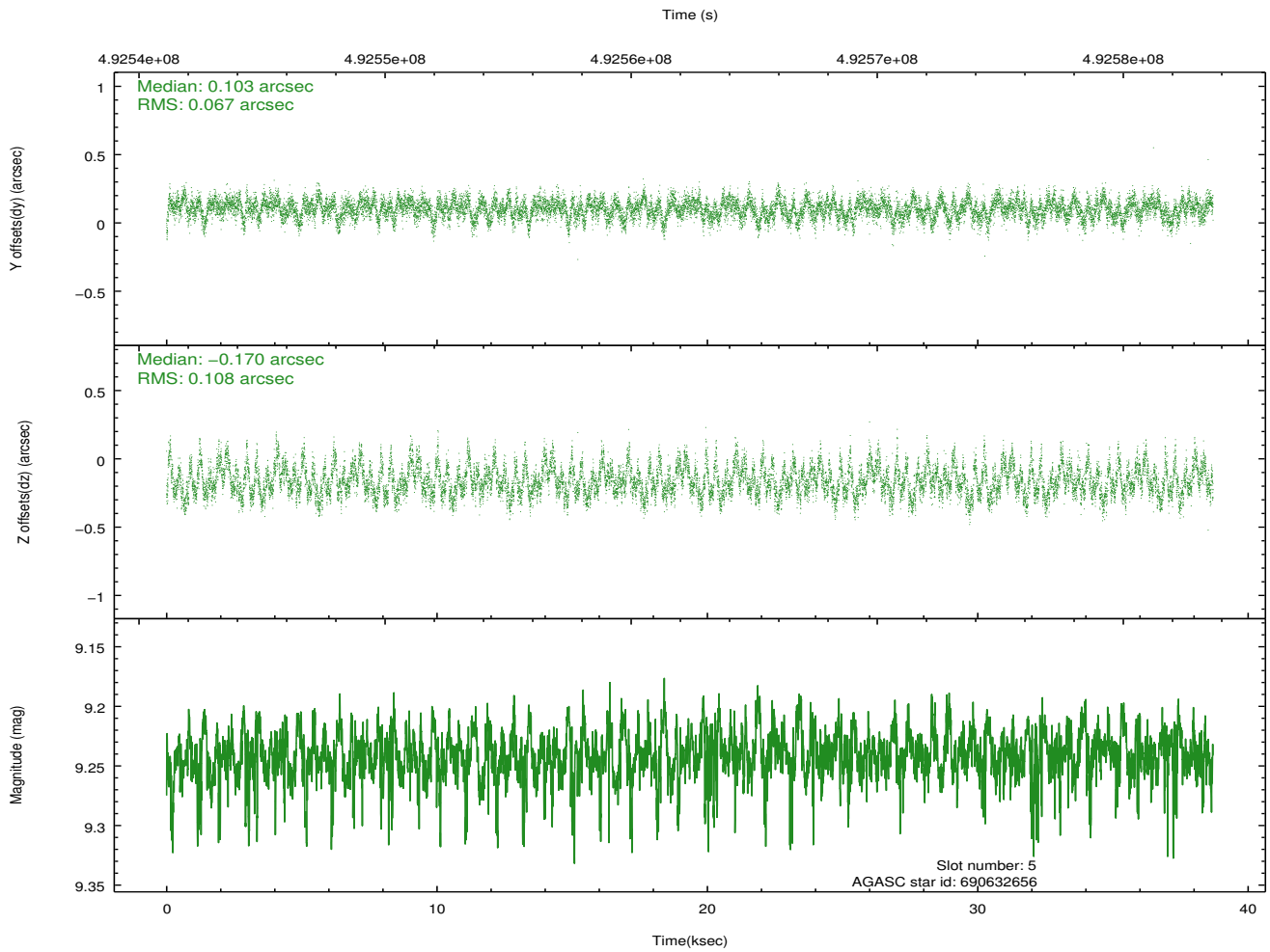
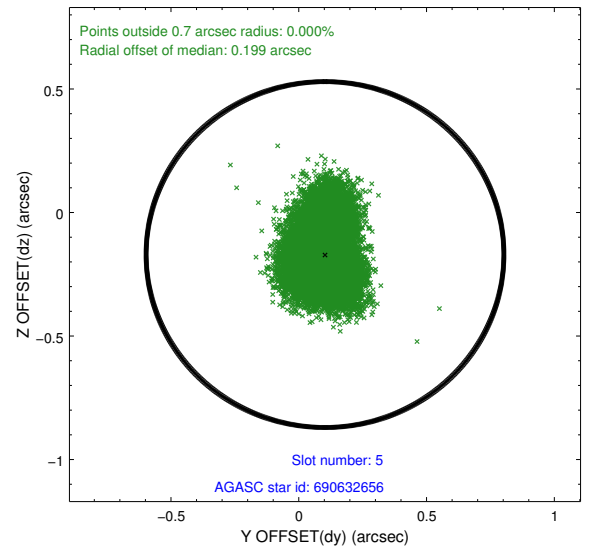
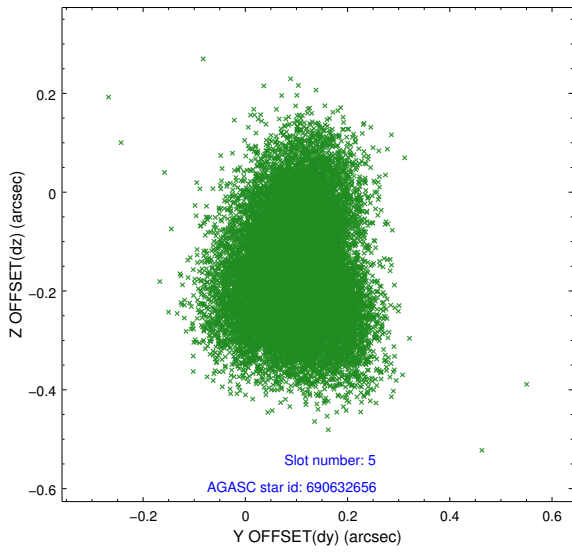
2.4.1 Slot 3



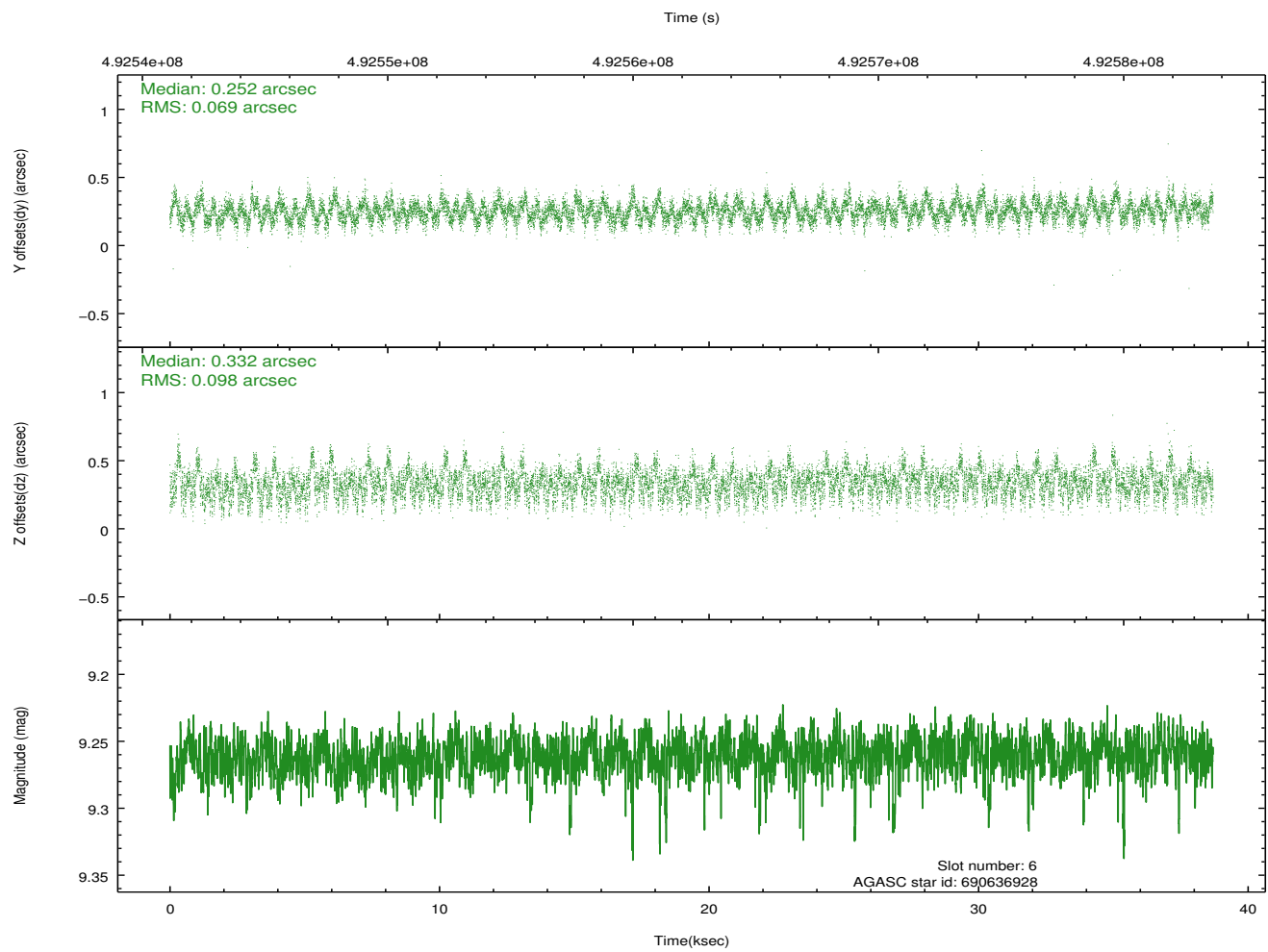
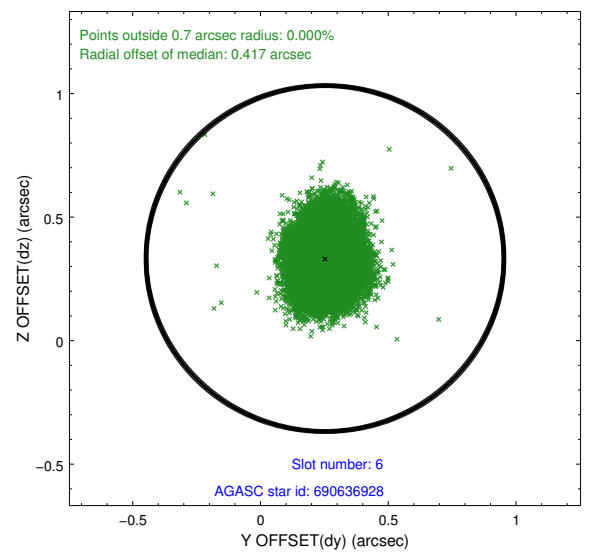
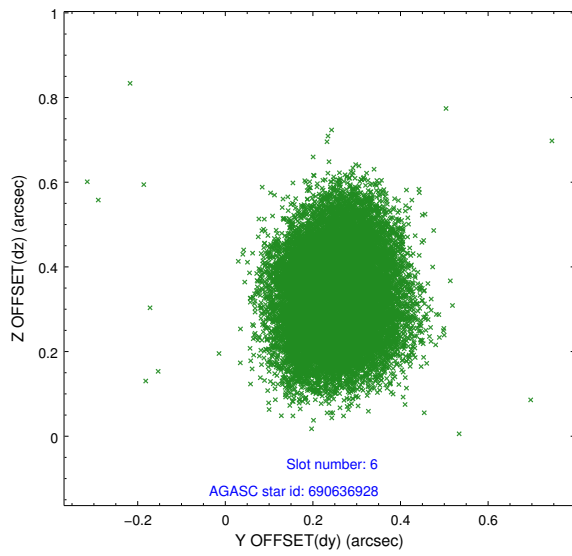
2.4.2 Slot 4



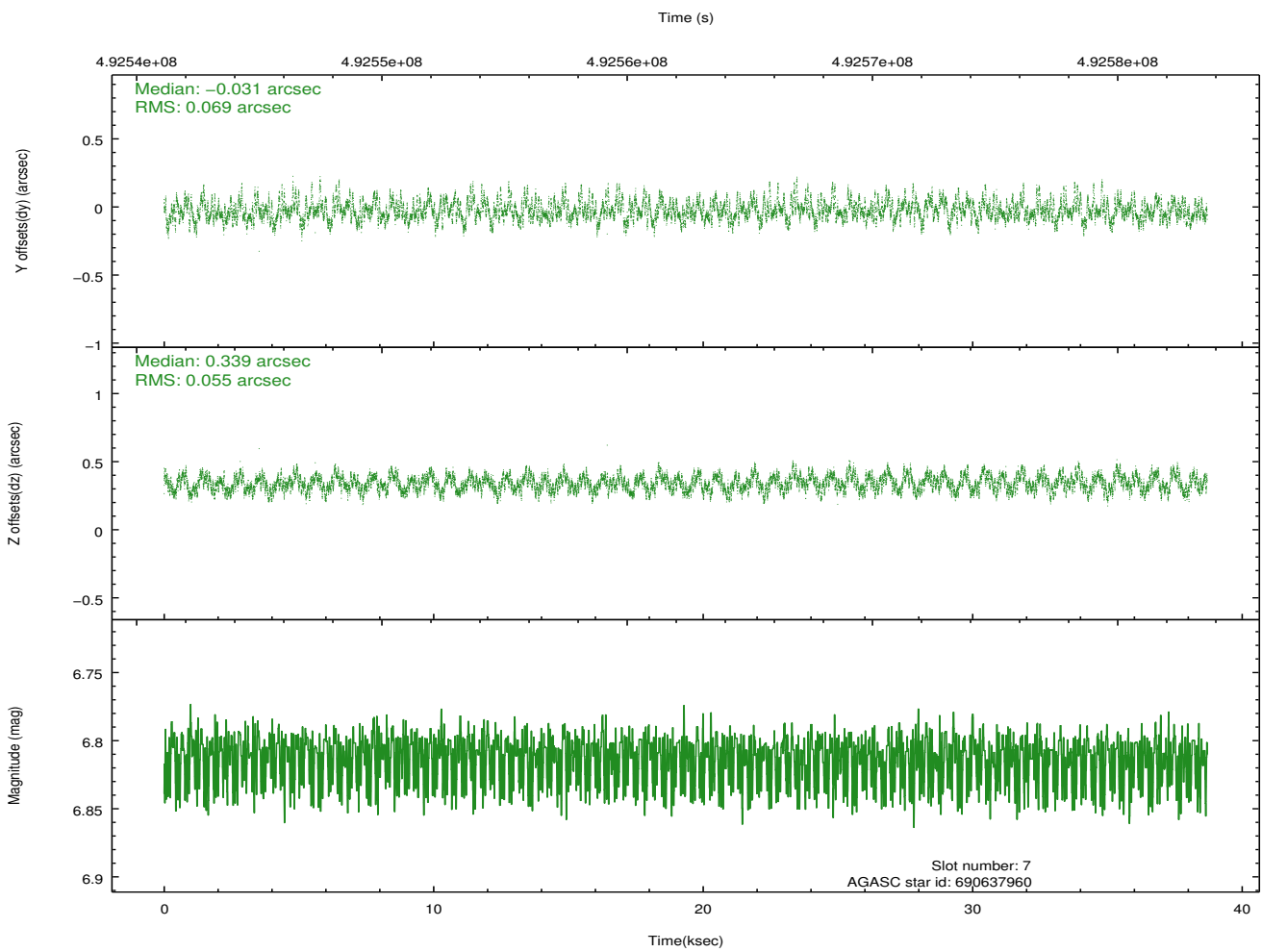
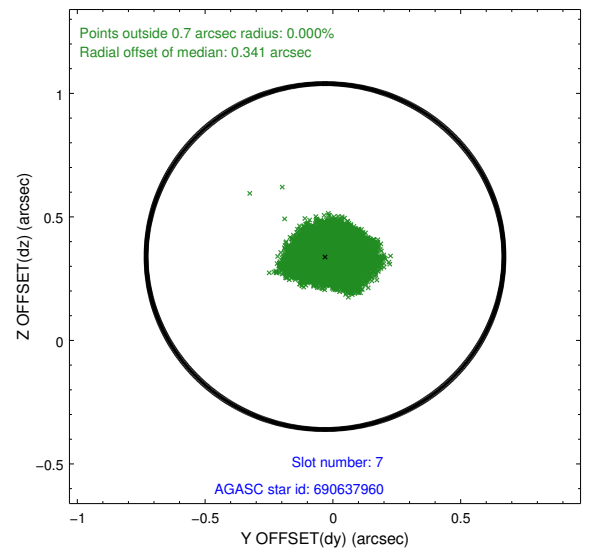
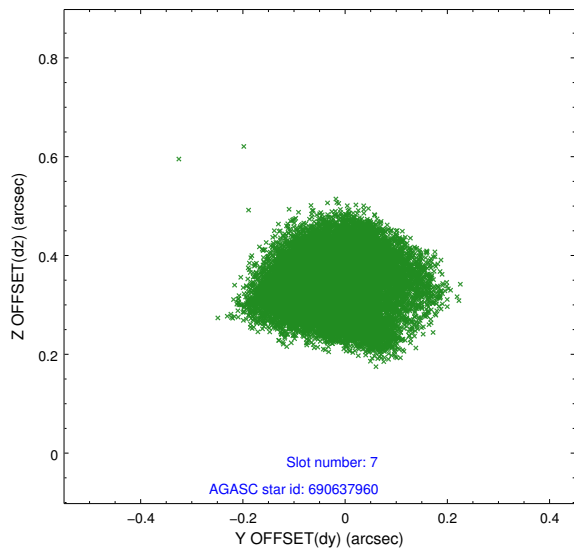
2.4.3 Slot 5



2.4.4 Slot 6

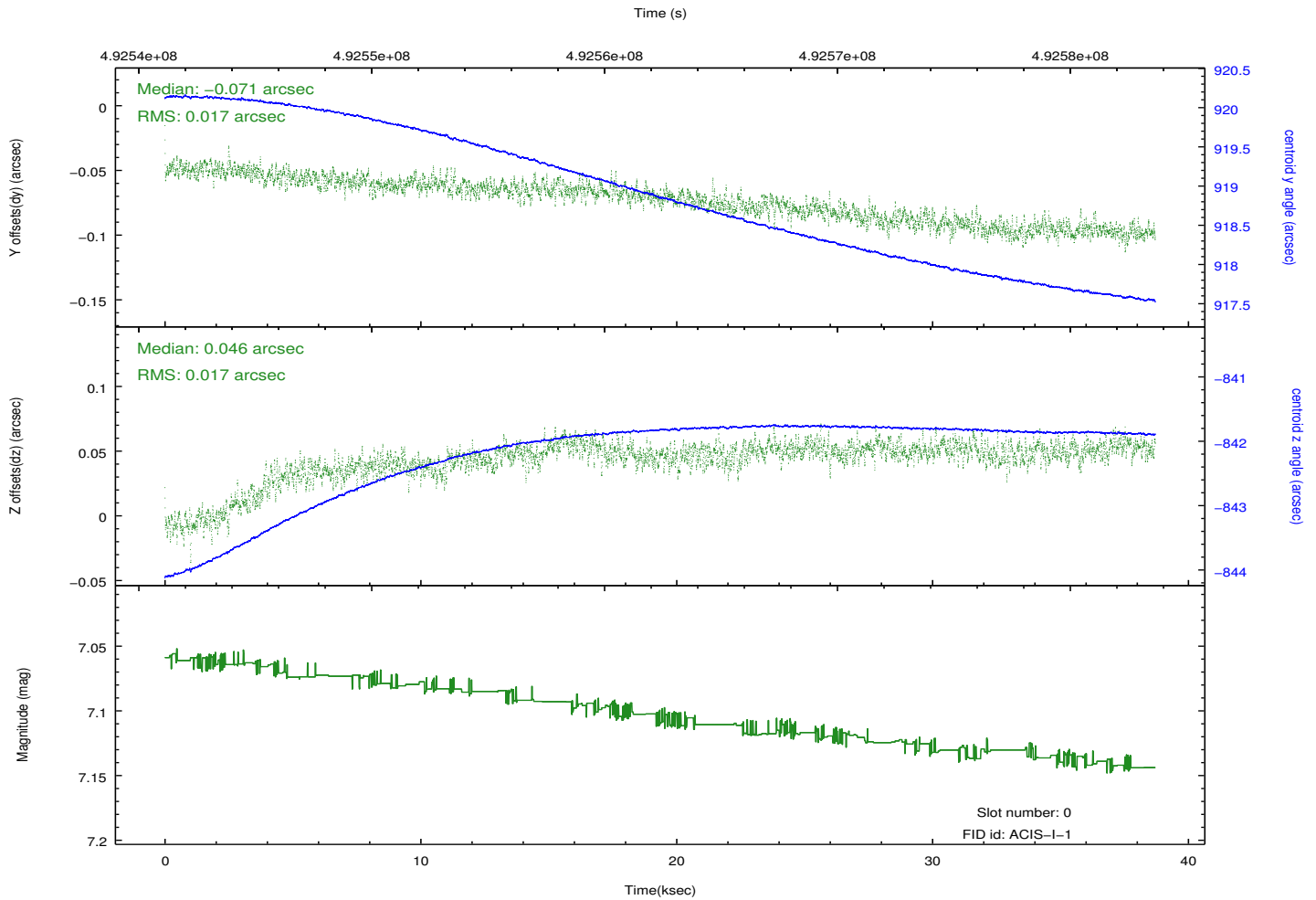
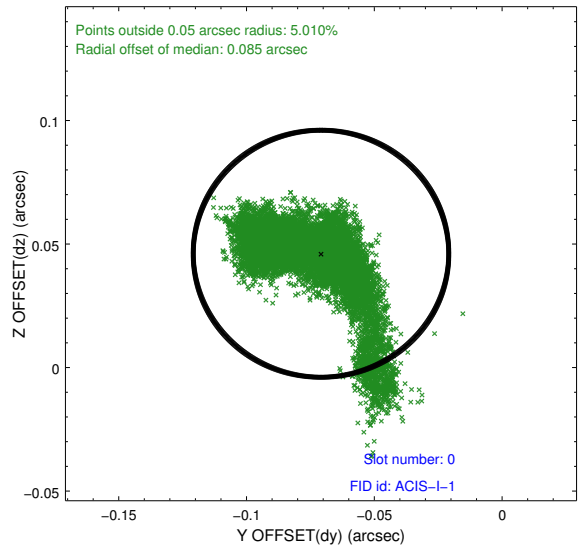
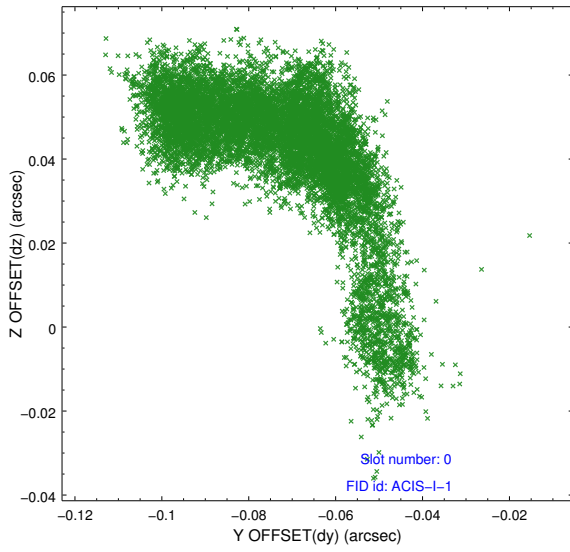


2.4.5 Slot 7

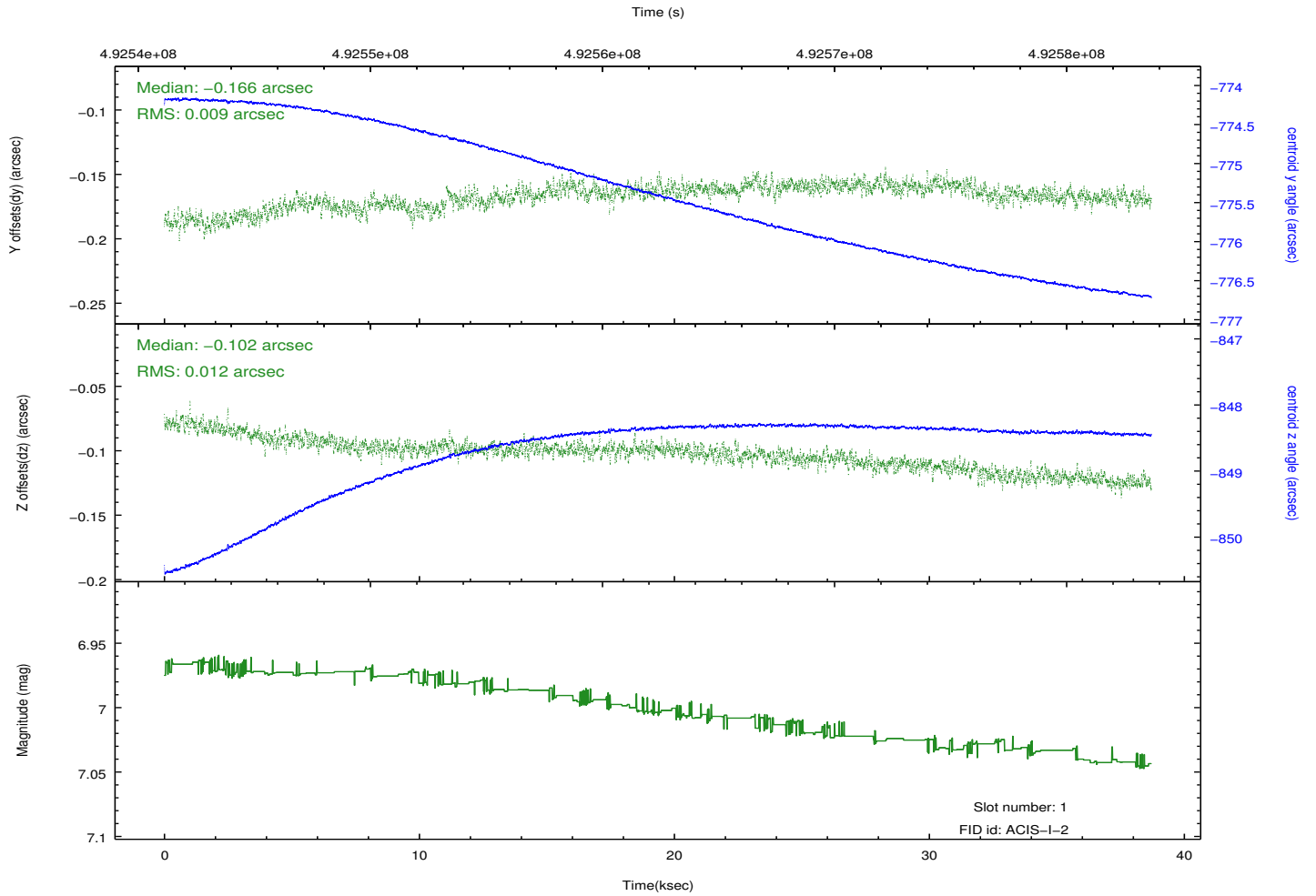
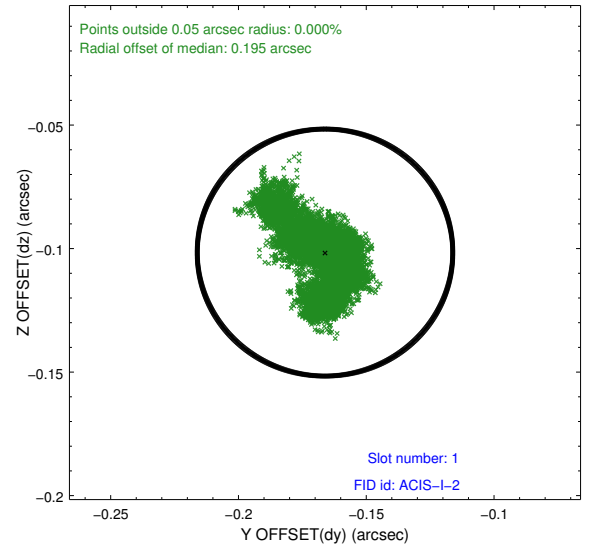
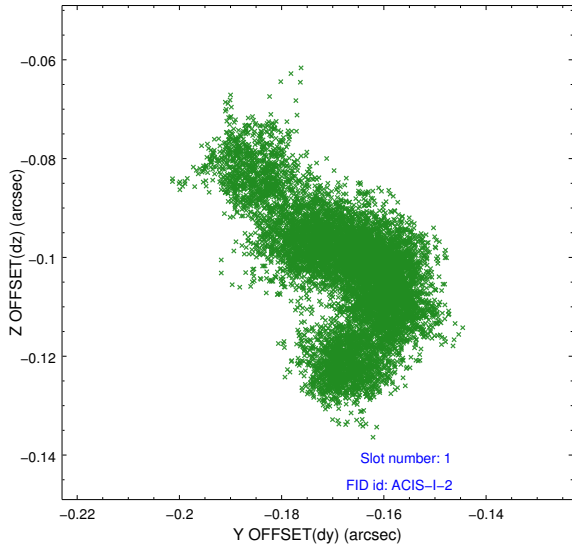


2.5 FID Slots

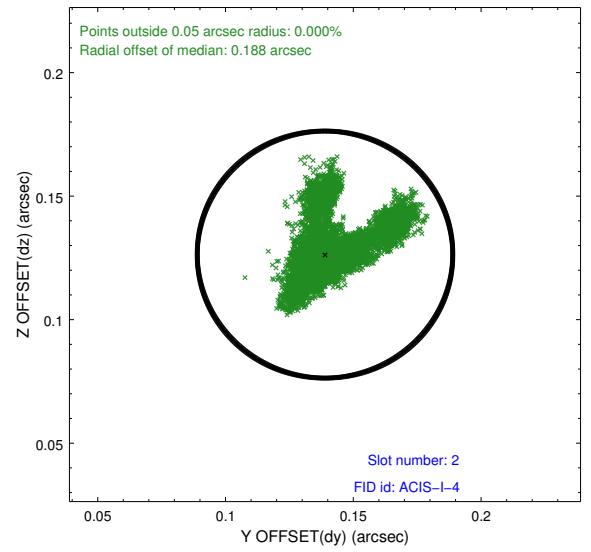
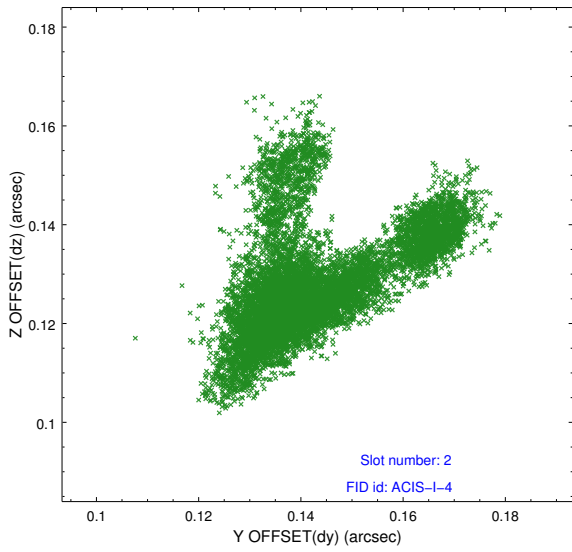
2.5.1 Slot 0



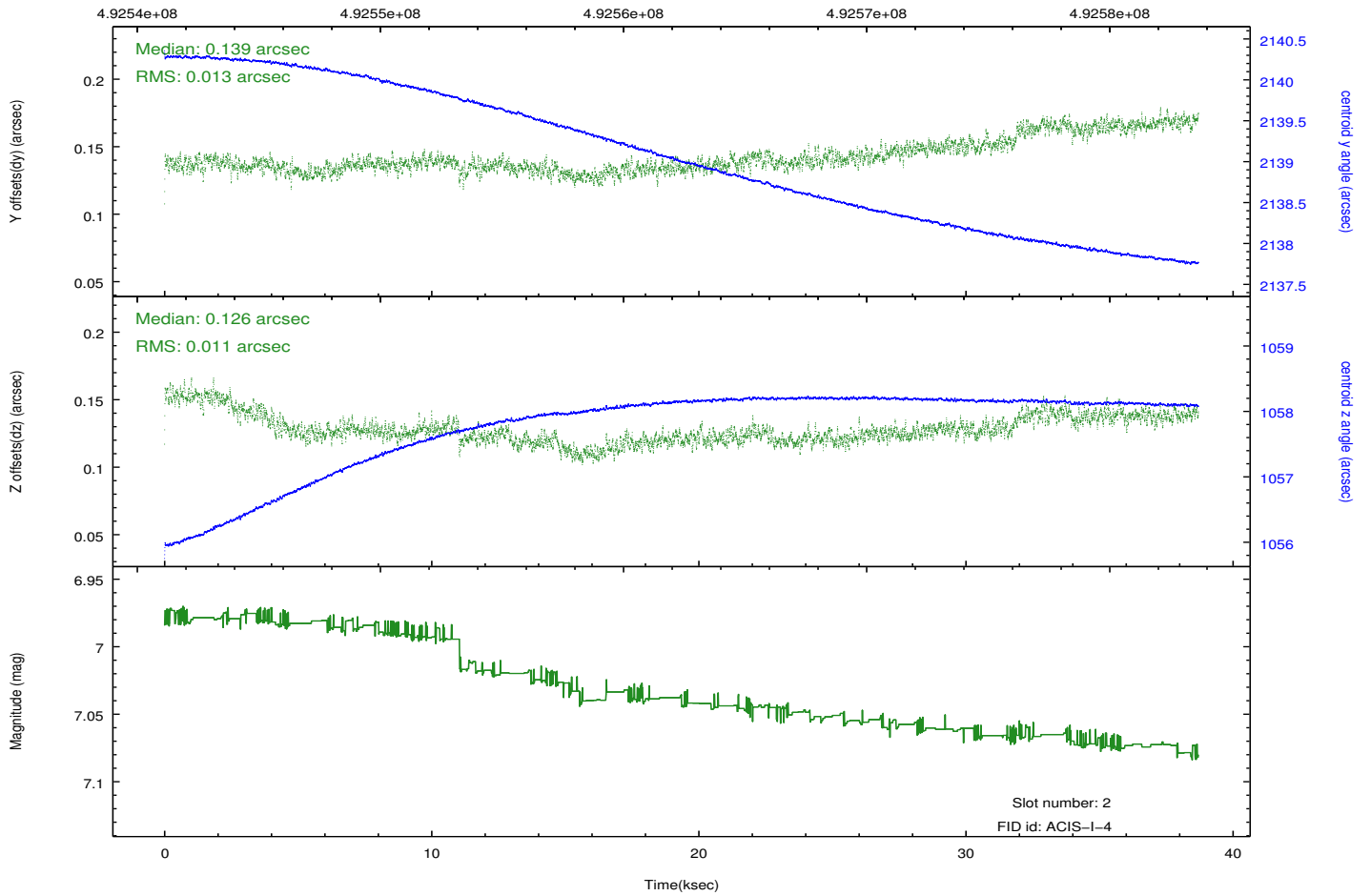
2.5.2 Slot 1



2.5.3 Slot 2



Time (s)



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2014.12.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	38.655612941623

A.2 Comments

Joint Proposal with Suzaku

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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.