

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 15316 - L2 Version 2
Chandra X-Ray Center

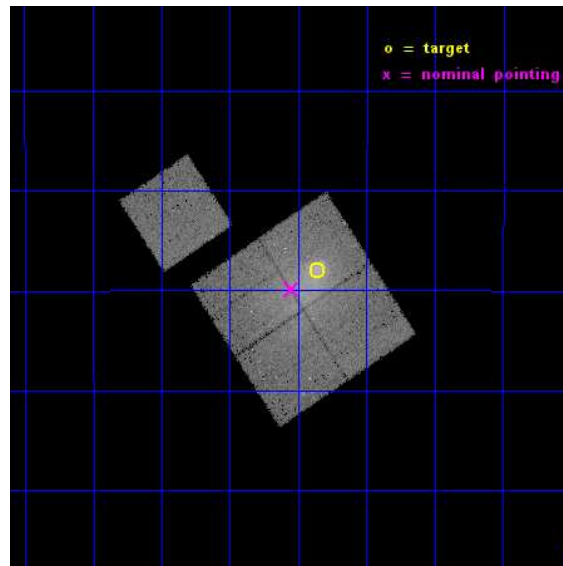
L2 Processing Date : Dec 1 2014

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1 Front

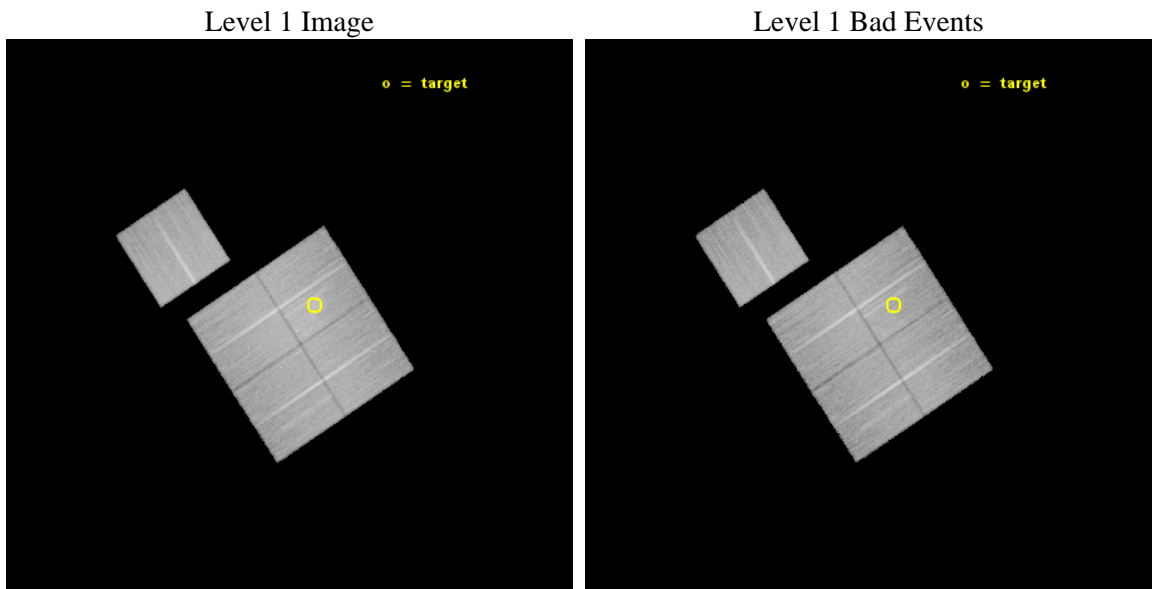
seq_num	801349	Sequence number
obs_id	15316	Observation id
title	Characterizing the Most Massive Clusters in the z	Proposal title
observer	Dr. Stephen Murray	Principal investigator
object	G241.97+14.85	Source name
dtycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	130.465833	Observer's specified target RA [deg]
dec_targ	-17.466583	Observer's specified target Dec [deg]
ra_nom	130.51235074497	Nominal RA [deg]
dec_nom	-17.498074836082	Nominal Dec [deg]
roll_nom	326.67960824727	Nominal Roll [deg]
revision	2	Processing version of data
ontime	39065.47970593	Sum of GTIs [s]
livetime	38555.060453984	Livetime [s]
ontime0	39077.920877457	Sum of GTIs [s]
ontime1	39071.679776728	Sum of GTIs [s]
ontime2	39074.861897171	Sum of GTIs [s]
ontime3	39065.47970593	Sum of GTIs [s]
ontime6	39074.738767087	Sum of GTIs [s]
l2events	142925	Number of level 2 events



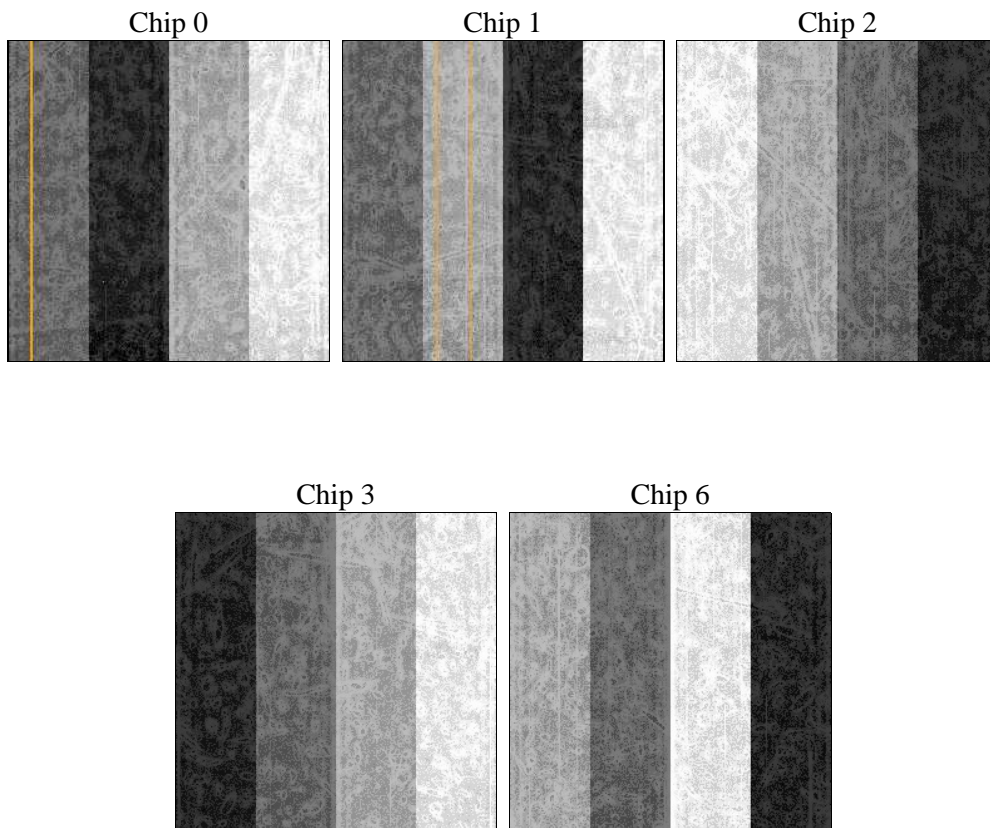
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	39000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	39065.47970593	Sum of GTIs [s]
caldbver	4.6.4	 	ontime0	39077.920877457	Sum of GTIs [s]
date	2014-12-01T13:36:06	Date and time of file creation	ontime1	39071.679776728	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	39074.861897171	Sum of GTIs [s]
			ontime3	39065.47970593	Sum of GTIs [s]
			ontime6	39074.738767087	Sum of GTIs [s]
			l1events	1121899	Number of level 1 events

2.1.4 Events

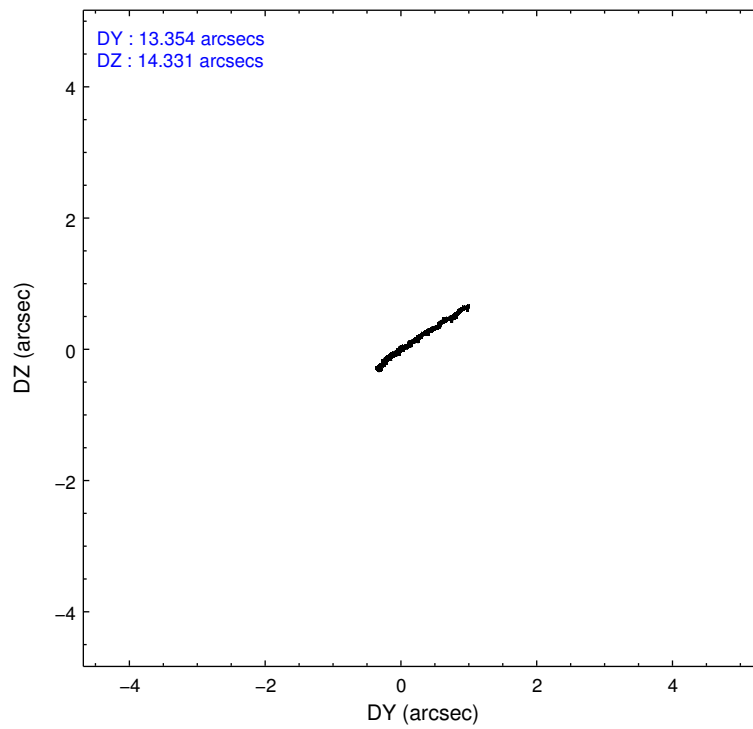
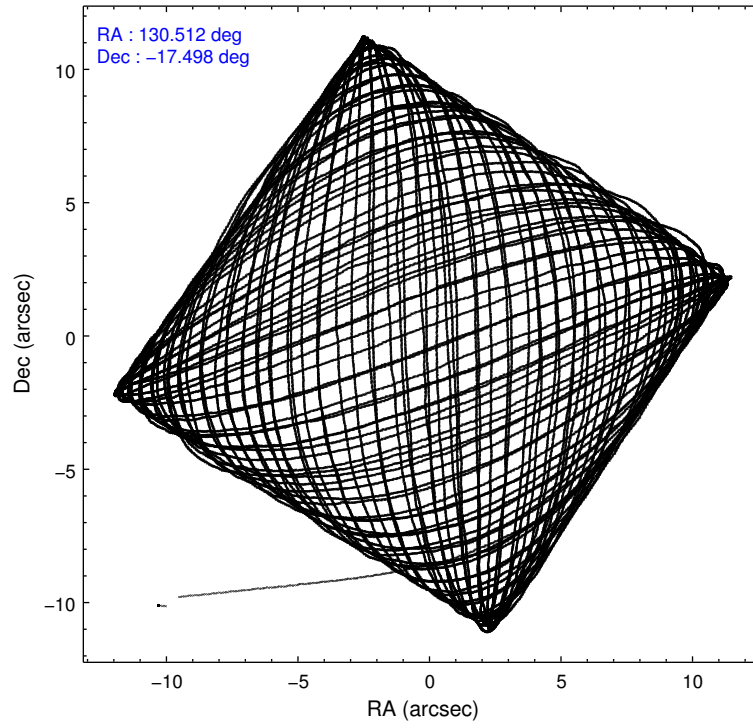
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	208206	213249	232118	241513	226813
rejected events	178862	182639	200512	195428	201268
rejected %	85%	85%	86%	80%	88%

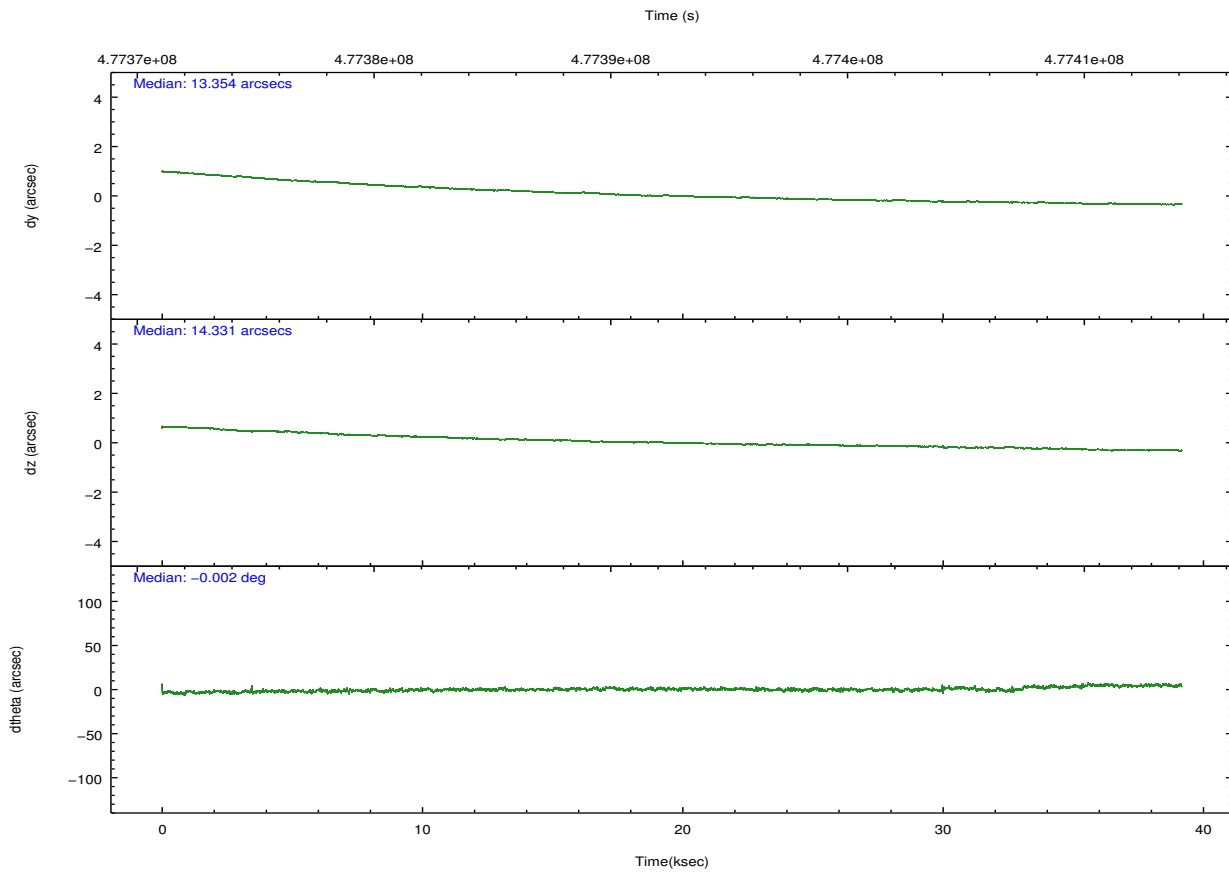
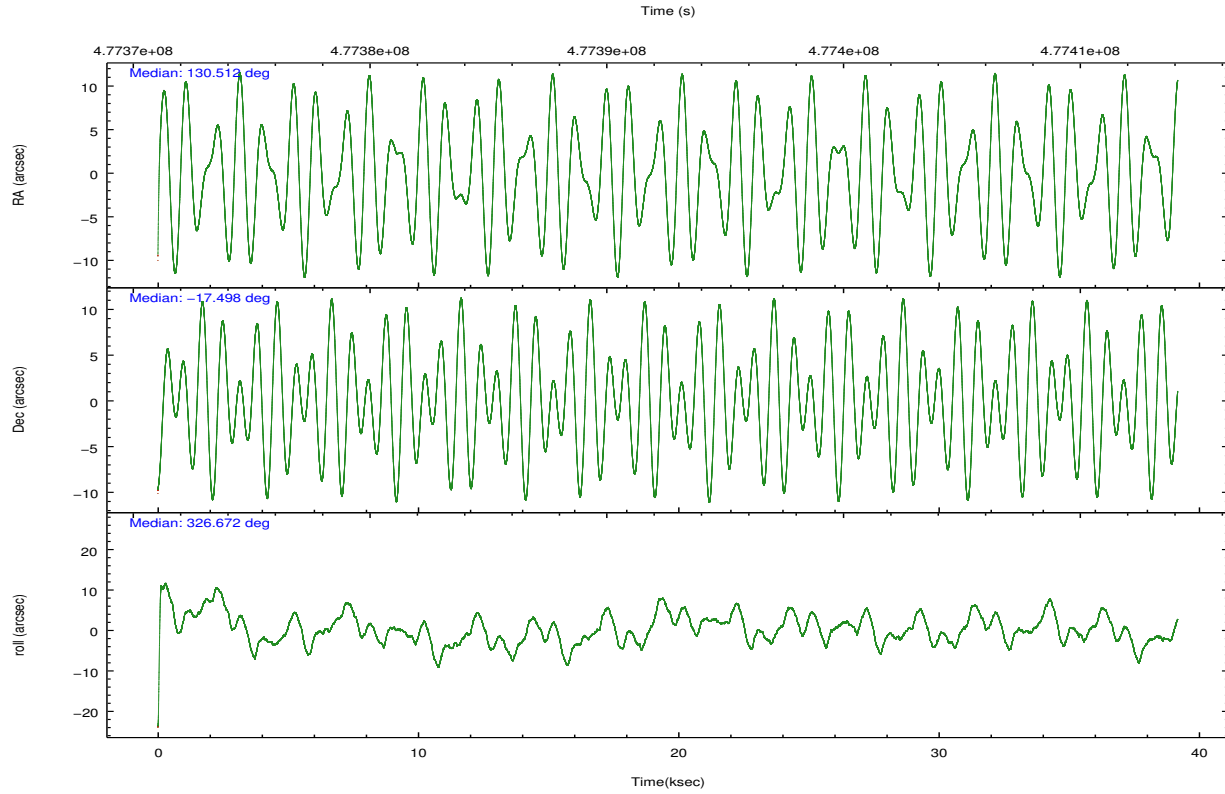
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	11934	12167	14892	26429	8457
	5%	5%	6%	10%	3%
grade 1 events	118	89	136	197	103
	0%	0%	0%	0%	0%
grade 2 events	6371	6602	6327	7341	5925
	3%	3%	2%	3%	2%
grade 3 events	2872	2815	2743	3289	2623
	1%	1%	1%	1%	1%
grade 4 events	2755	2814	2688	3245	2543
	1%	1%	1%	1%	1%
grade 5 events	10168	10543	9459	11608	10633
	4%	4%	4%	4%	4%
grade 6 events	5416	6220	4966	5787	6004
	2%	2%	2%	2%	2%
grade 7 events	168572	171999	190907	183617	190525
	80%	80%	82%	76%	84%

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	130.483563	130.5123507449749	CCD I2 on	Y	Y
[deg] Pointing Dec	-17.496589	-17.49807483608181	CCD I3 on	Y	Y
[deg] Pointing Roll	326.462280	326.6796082472688	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	-228.842463	-228.8404071714834	CCD S3 on	N	N
[mm] SIM translation stage offset	-4.75	-4.752045831446281	CCD S4 on	N	N
[s] Observation start time (MET)	477373155.184000	477371787.26887	CCD S5 on	N	N
Observation start date	2013-02-16T03:38:08	2013-02-16T03:16:27	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	477412155.184000	477413550.38363	On-chip summing requested	N	N
Observation end date	2013-02-16T14:28:08	2013-02-16T14:52:30	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





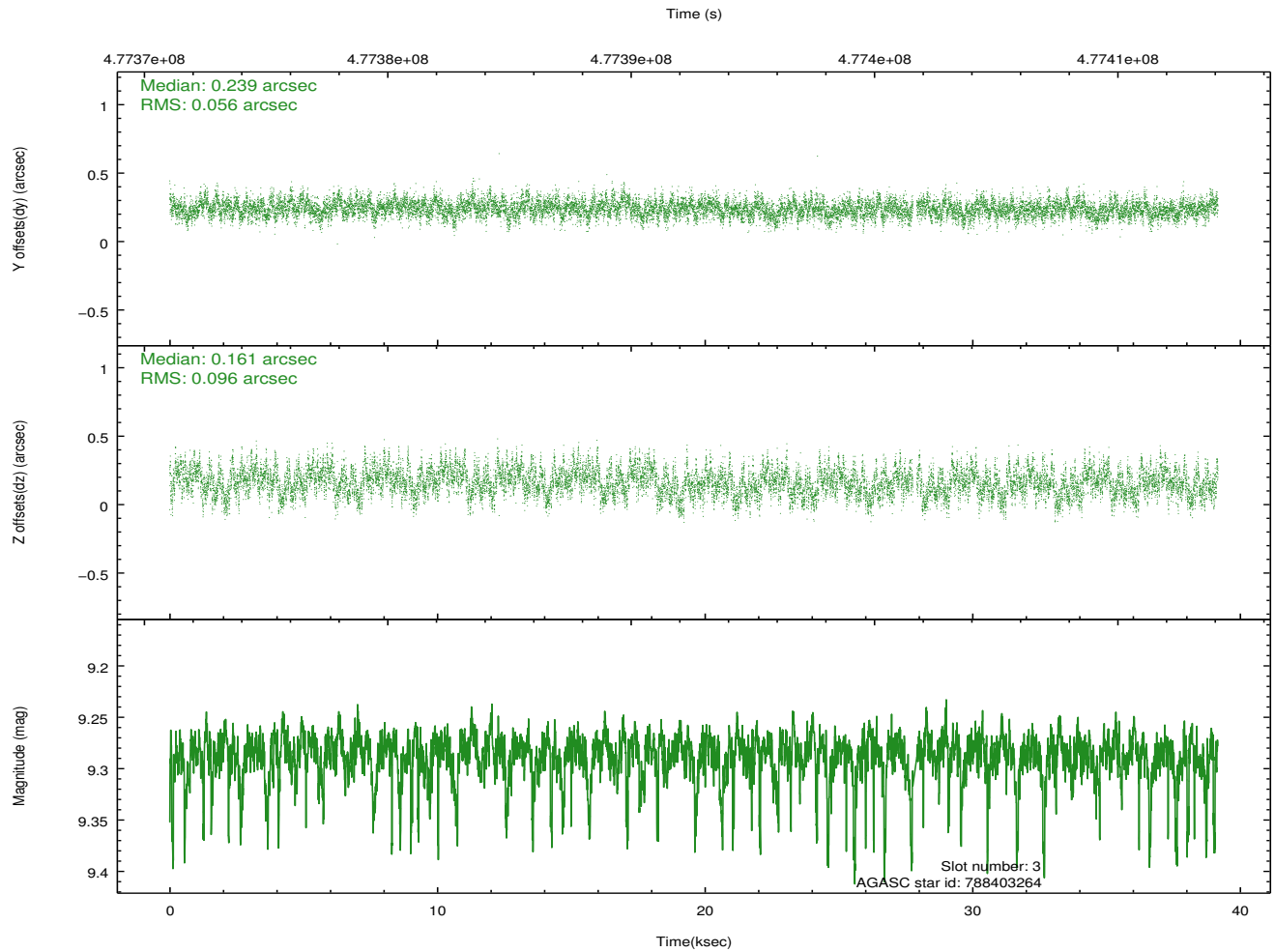
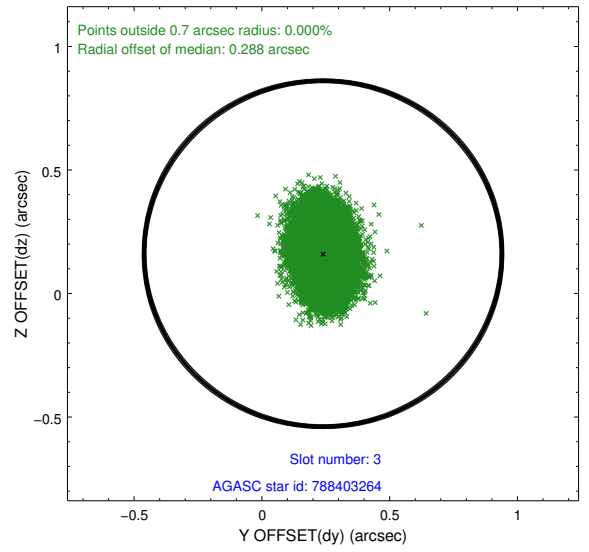
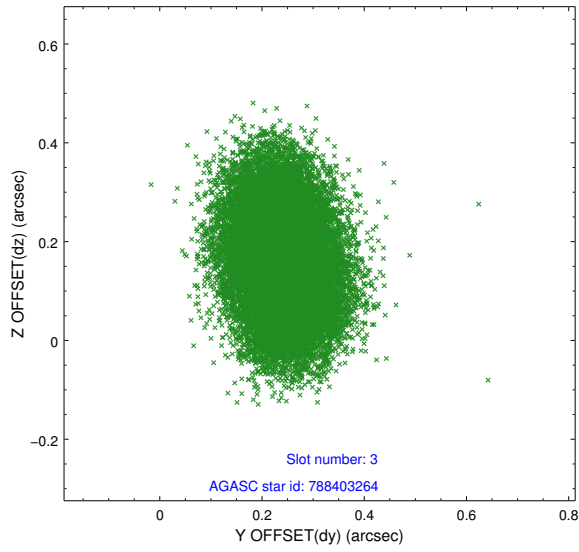
Slot Statistics

lot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_x
0	FID		ACIS-I-1	7.22	9553	0.062	-0.041	0.019	0.045	0.000000	0.000000	926.02	-935.52
1	FID		ACIS-I-2	7.14	9554	-0.277	-0.053	0.012	0.037	0.000000	0.000000	-768.65	-941.36
2	FID		ACIS-I-4	7.13	9555	0.117	0.161	0.014	0.028	0.000000	0.000000	2145.67	965.07
3	GUIDE	used	788403264	9.29	19023	0.239	0.161	0.118	0.196	129.988745	-17.706292	-995.74	-1568.46
4	BAD	used	788418168	4.48	9551	-0.067	0.324	0.134	0.197	129.973099	-17.302976	-1845.18	-391.68
5	GUIDE	used	788546808	8.87	19105	-0.021	-0.057	0.081	0.129	131.022424	-17.370468	1293.74	1399.35
6	GUIDE	used	788548808	8.69	19027	-0.213	-0.106	0.083	0.132	130.875619	-17.230270	594.61	1542.88
7	GUIDE	used	788552320	8.50	19099	0.028	-0.156	0.085	0.132	130.958057	-17.020554	417.28	2328.05

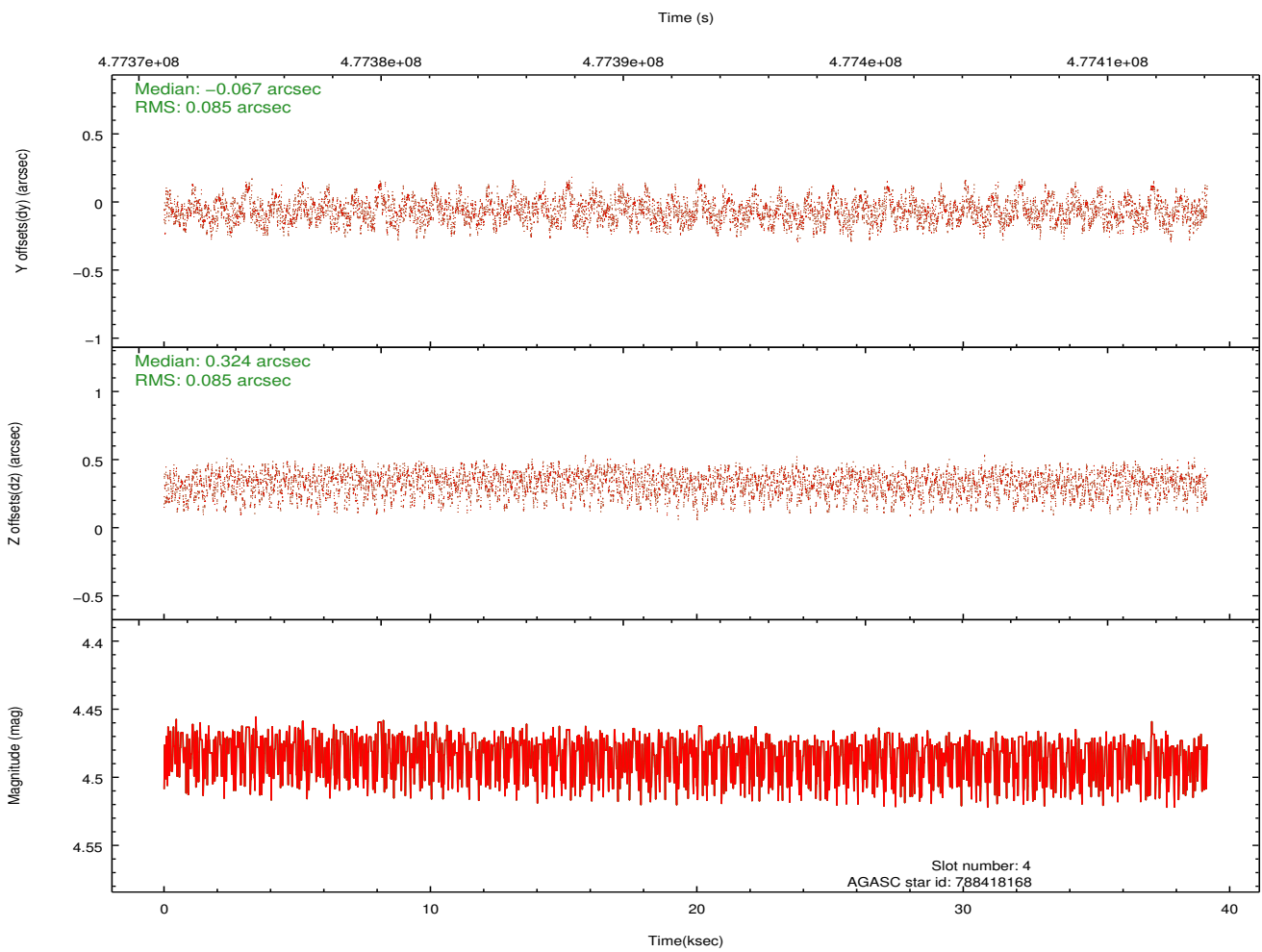
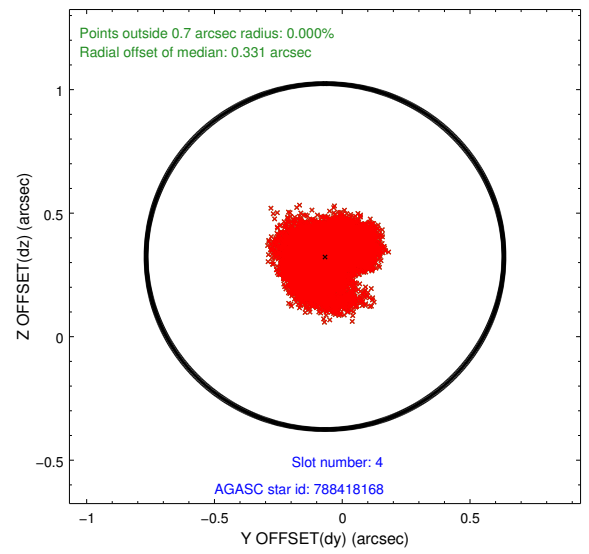
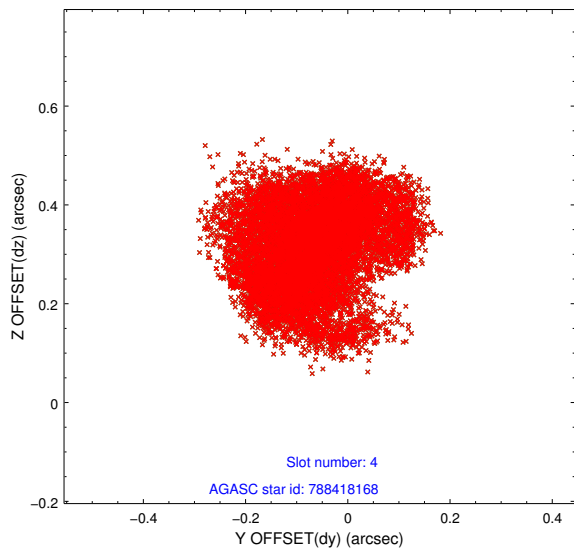
∞

2.4 Star Slots

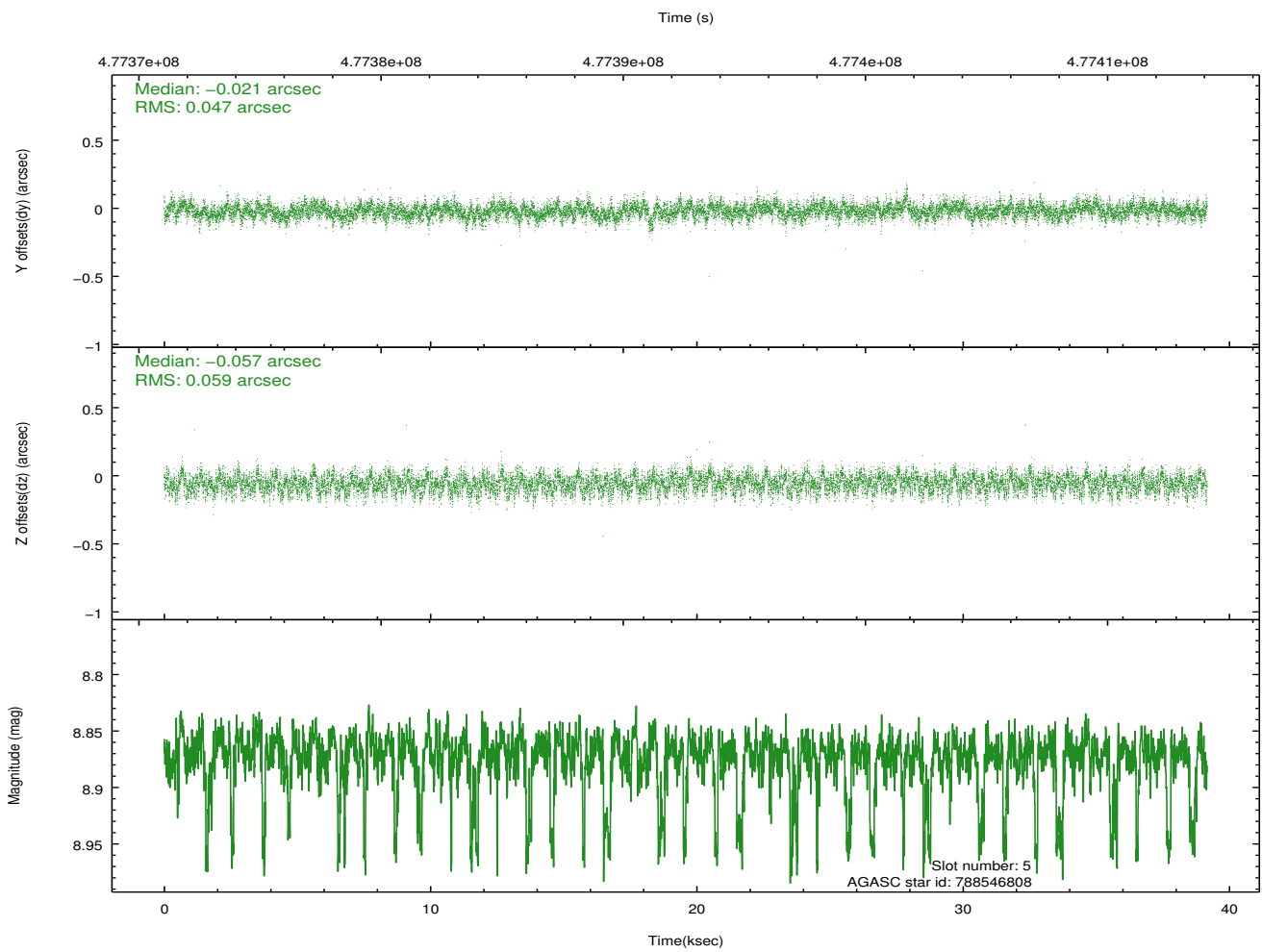
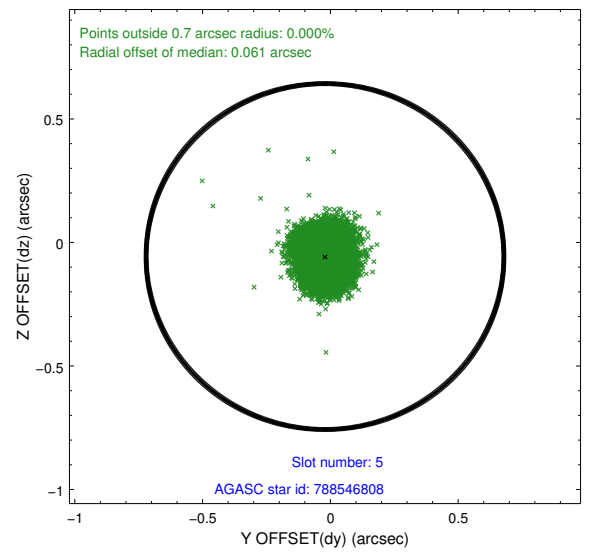
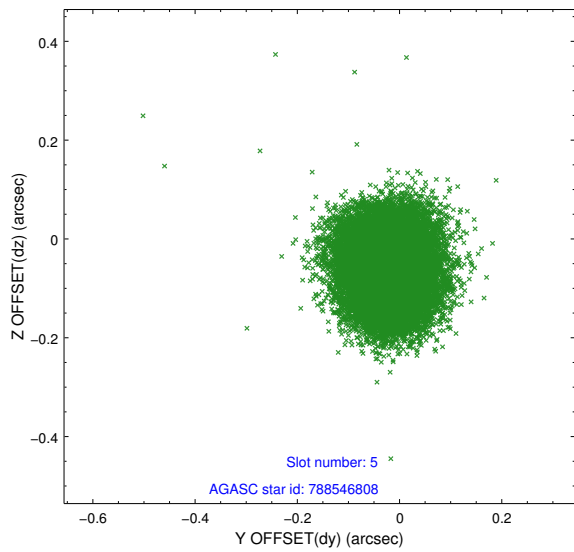
2.4.1 Slot 3



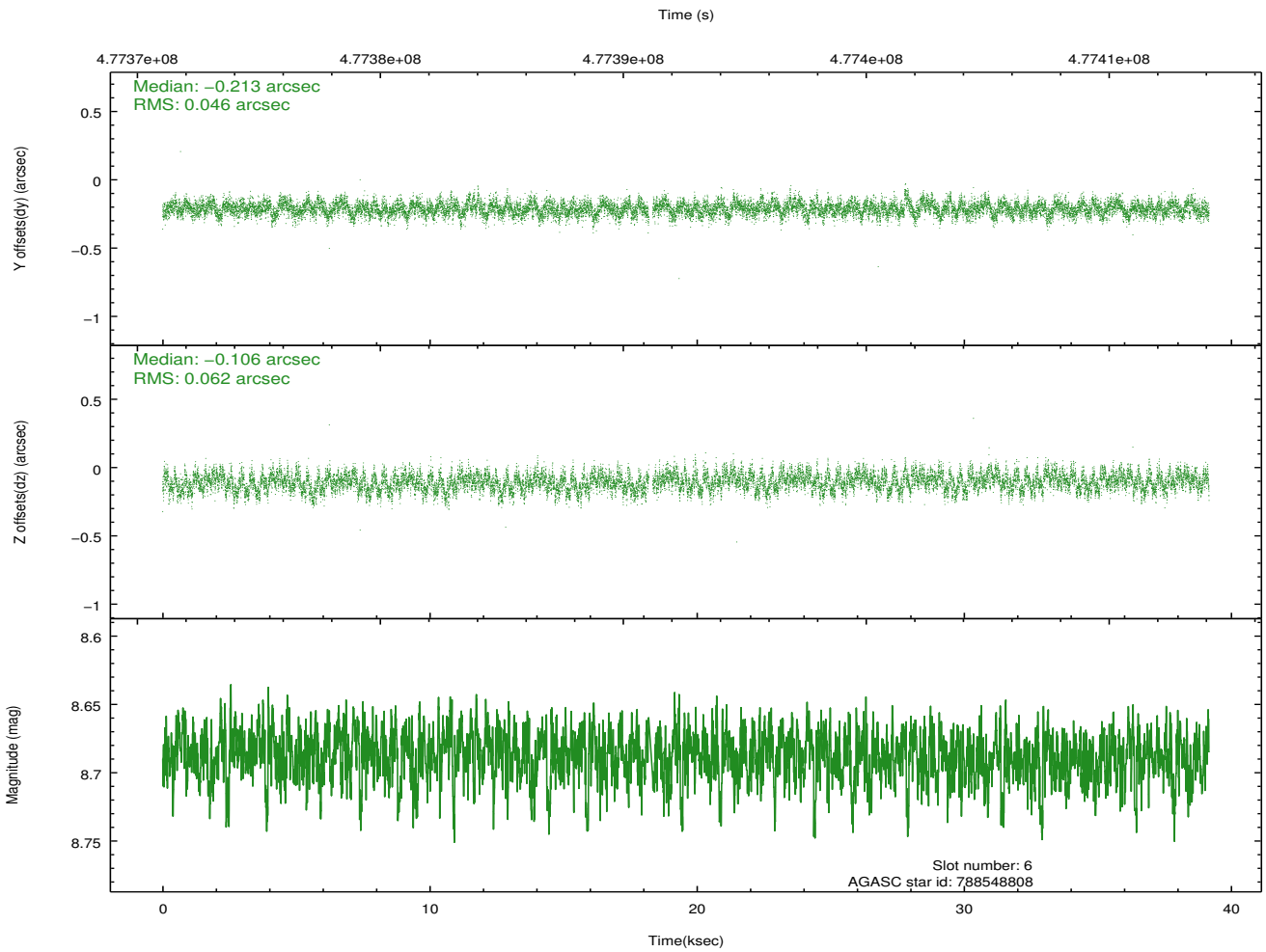
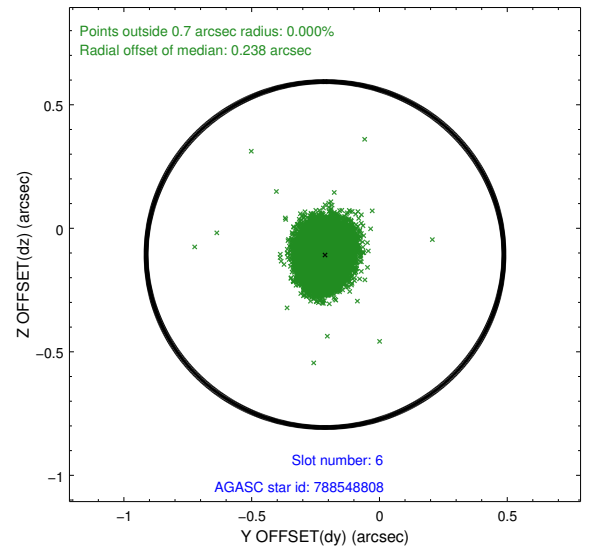
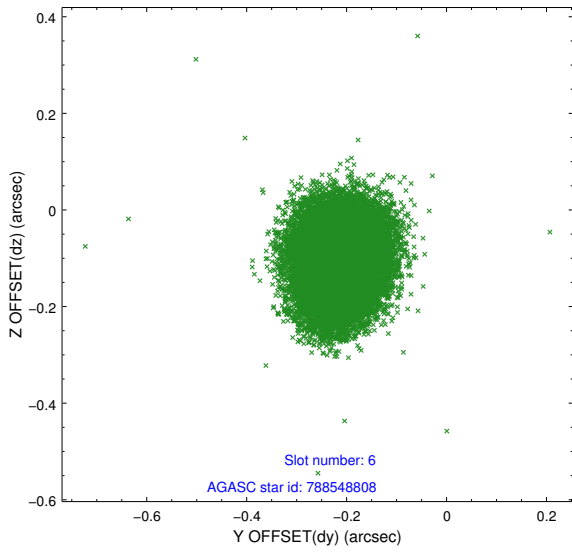
2.4.2 Slot 4



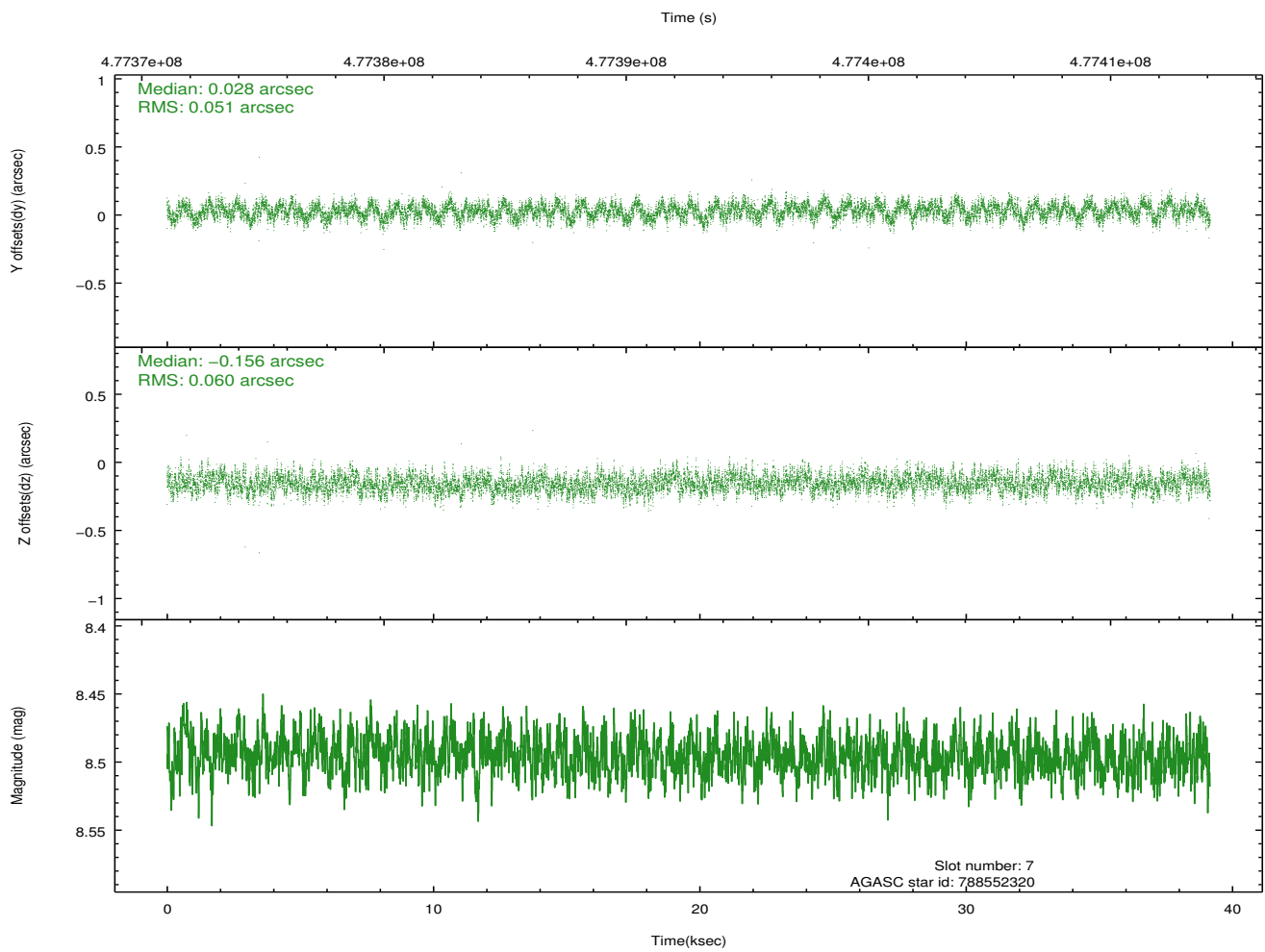
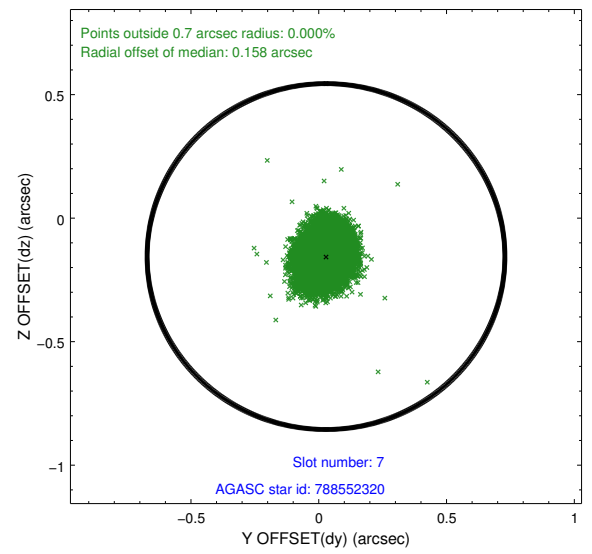
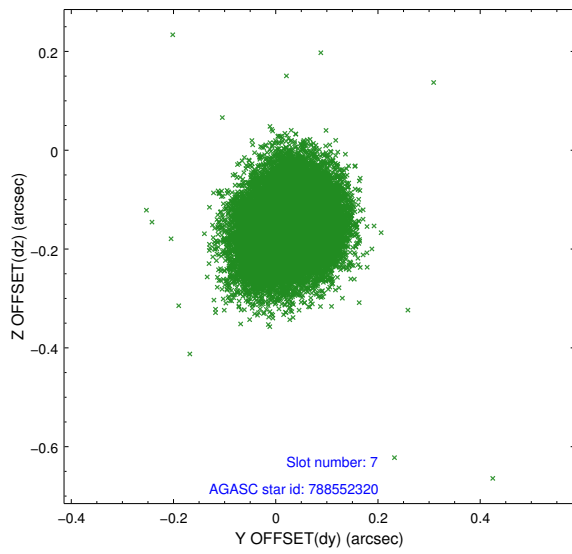
2.4.3 Slot 5



2.4.4 Slot 6

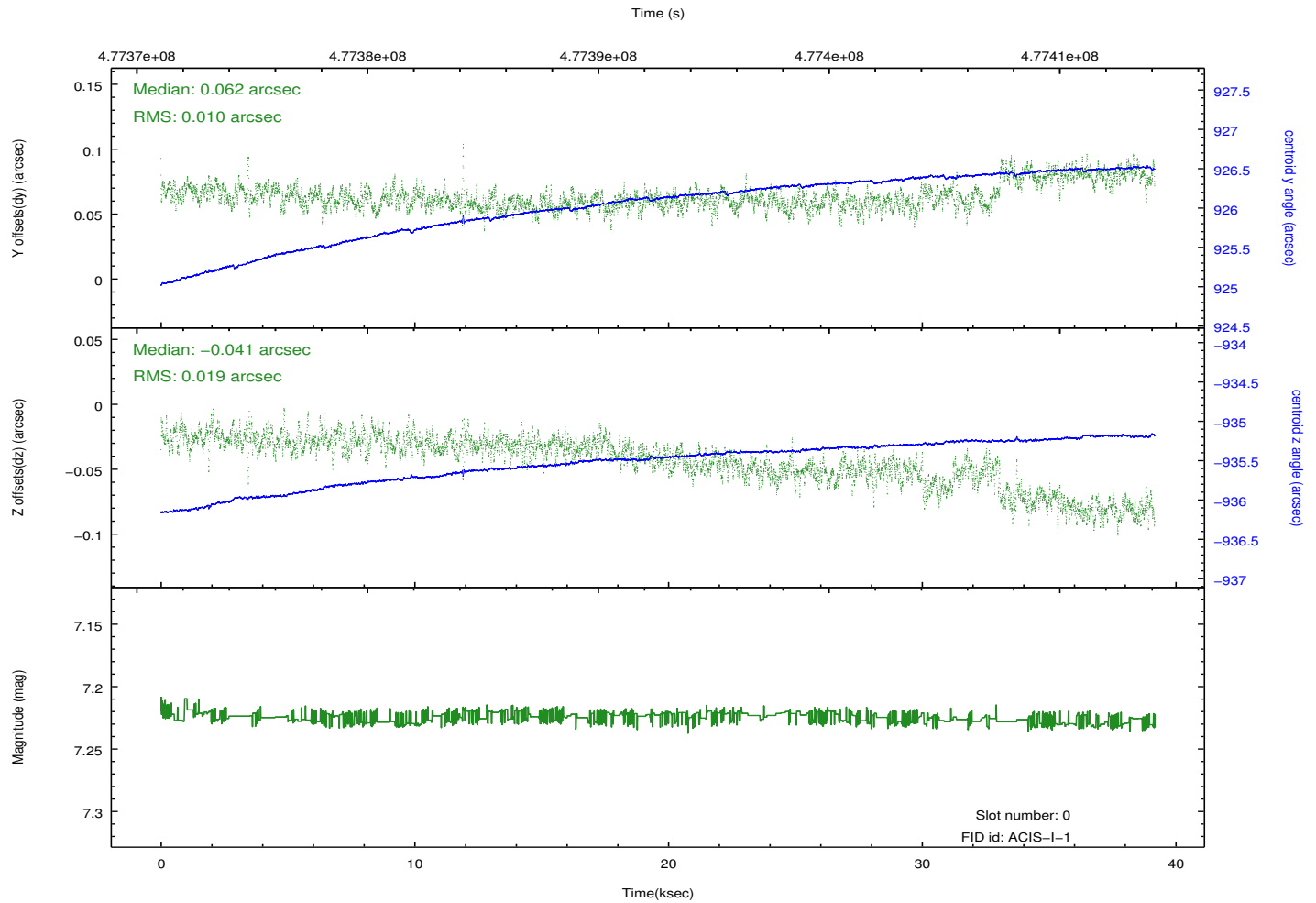
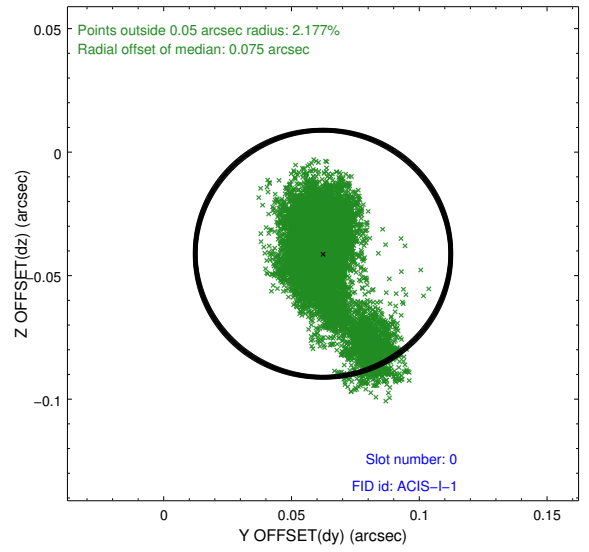
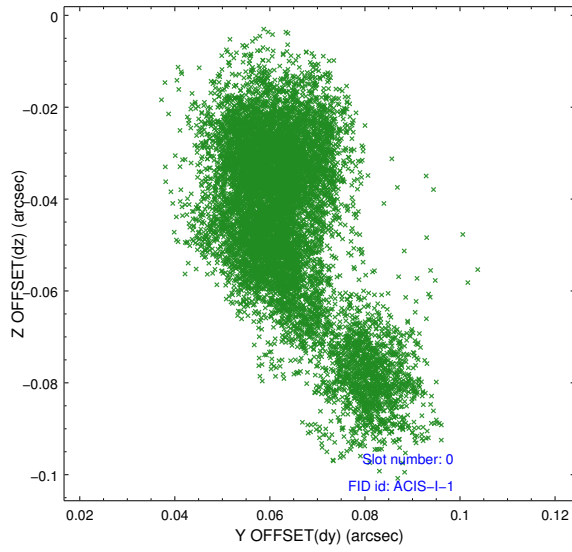


2.4.5 Slot 7

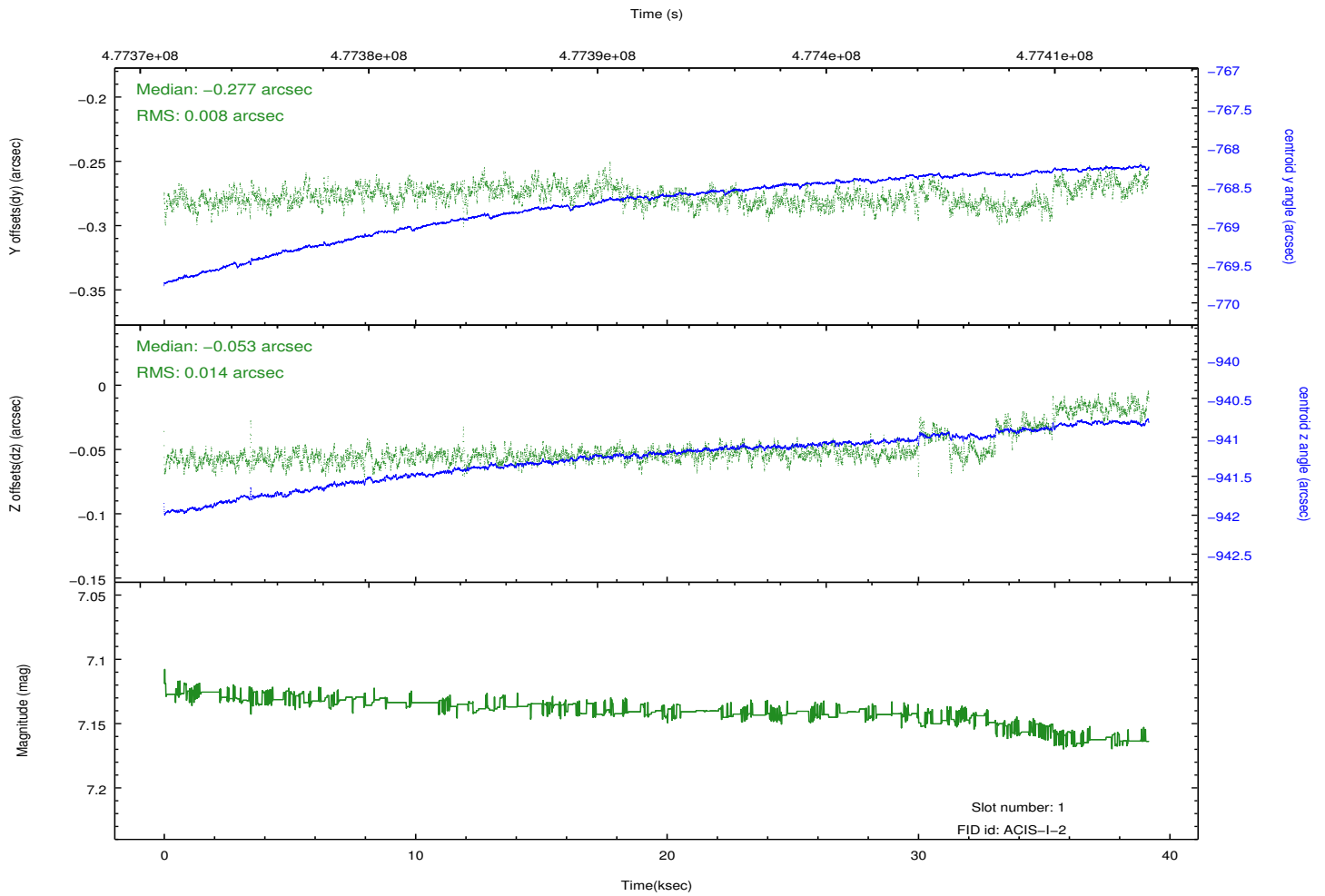
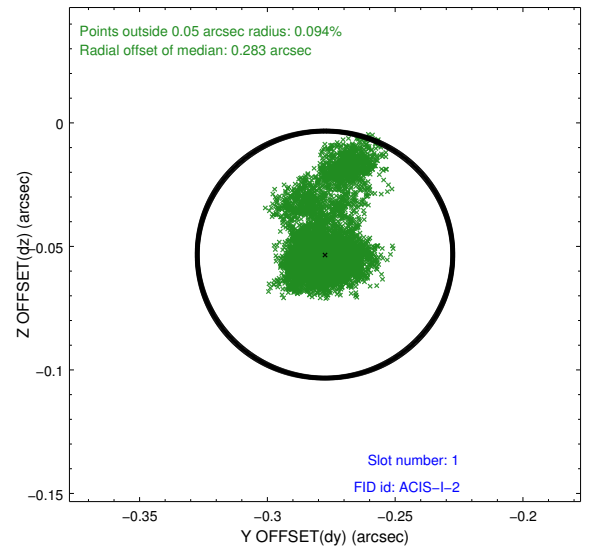
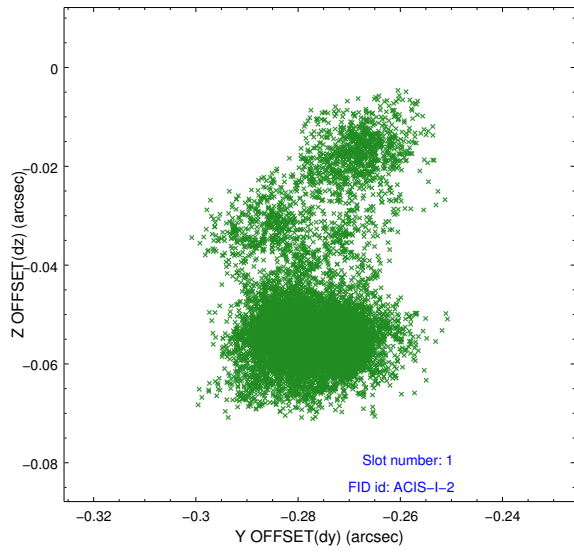


2.5 FID Slots

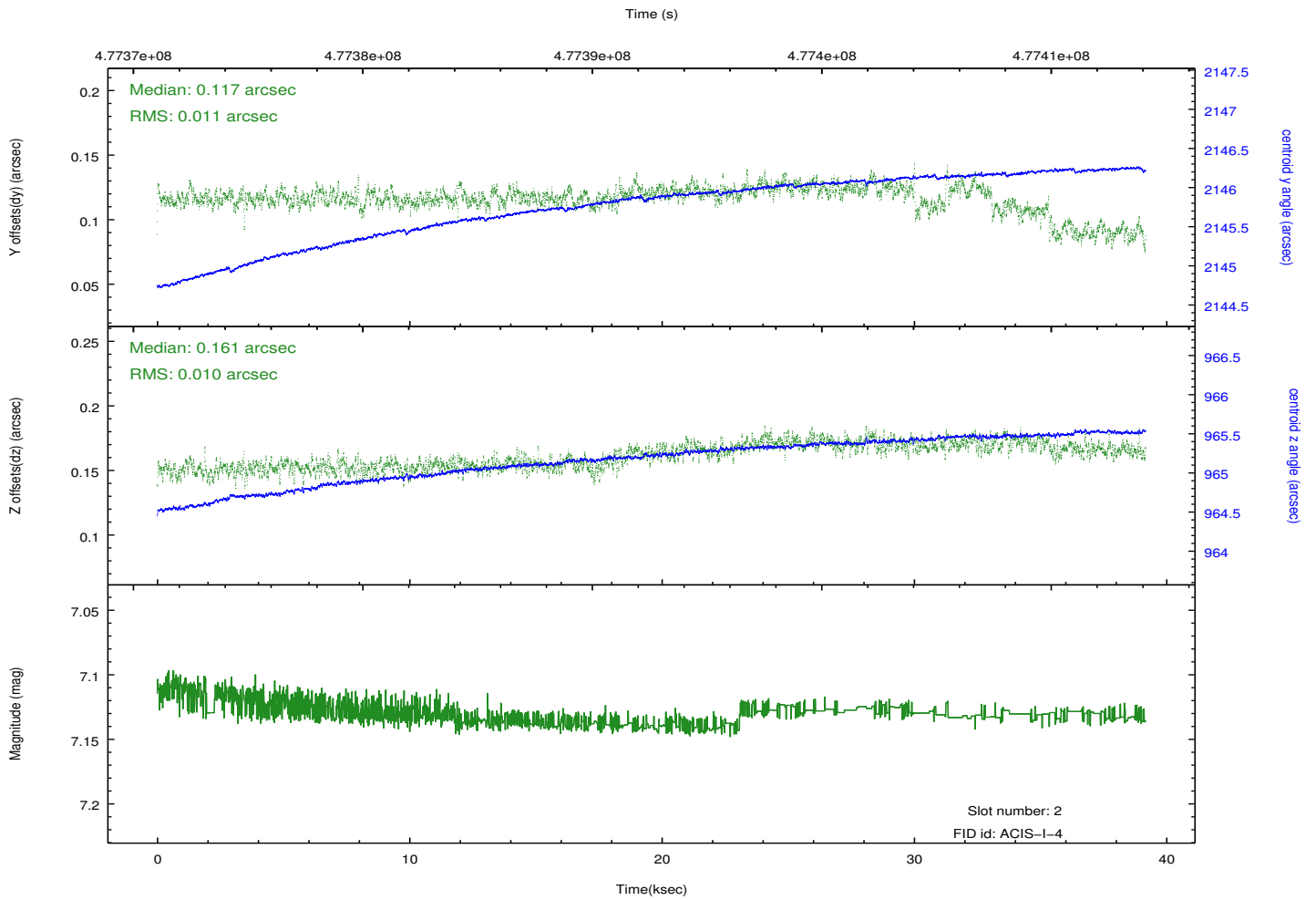
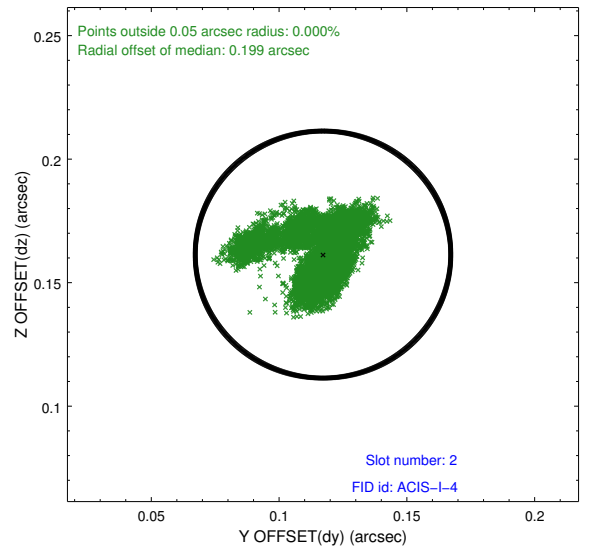
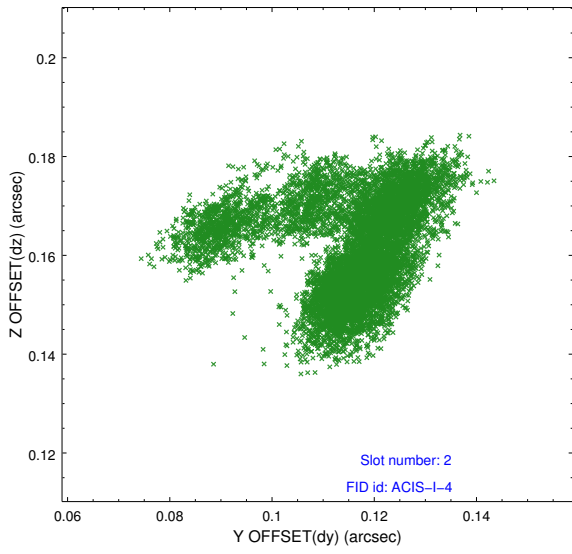
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2014.12.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	39.06547970593

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.