

V&V Reference Report

L2 ASCDS Version : 10.2.1

Observation 15176 - L2 Version 2
Chandra X-Ray Center

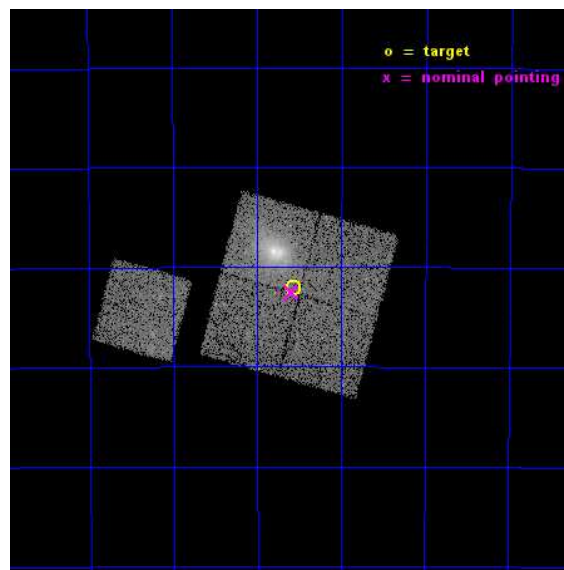
L2 Processing Date : Dec 10 2014

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 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
A	Summary	17
A.1	Status	17
A.2	Comments	17

1 Front

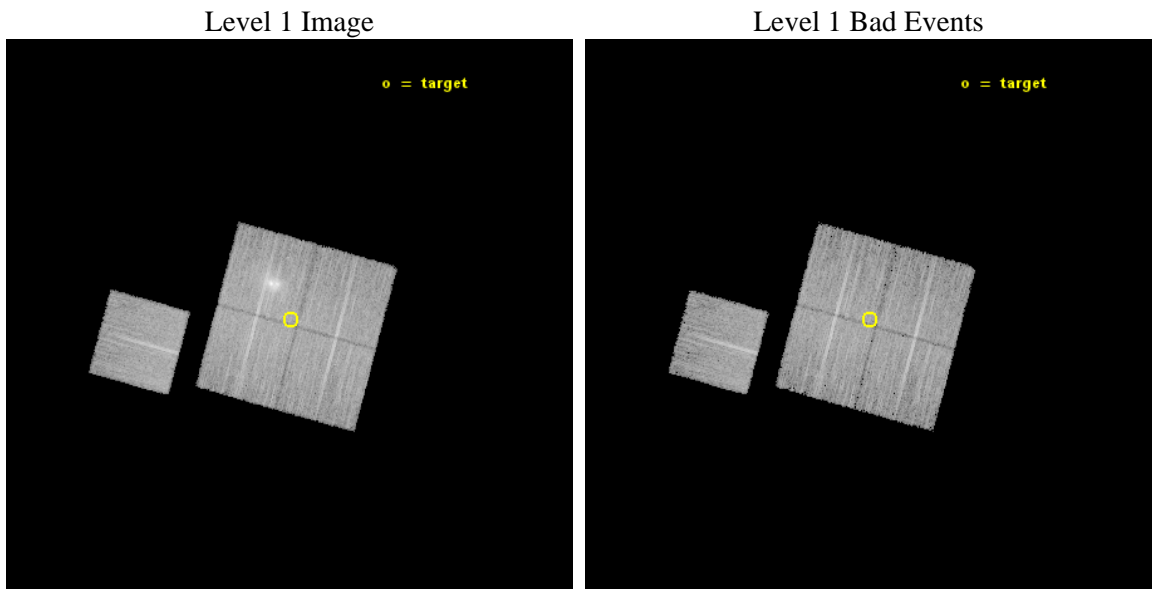
seq_num	801303	Sequence number
obs_id	15176	Observation id
title	Extreme Cluster Mergers - Deep Chandra Follow-up to Two Massive Cluster Mergers at Redshift 0.25 Detected by Planck	Proposal title
observer	Dr Ralph Kraft	Principal investigator
object	Abell S0592	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	99.641219	Observer's specified target RA [deg]
dec_targ	-54.035674	Observer's specified target Dec [deg]
ra_nom	99.648623279755	Nominal RA [deg]
dec_nom	-54.042504609517	Nominal Dec [deg]
roll_nom	285.31468711163	Nominal Roll [deg]
revision	2	Processing version of data
ontime	19365.70014894	Sum of GTIs [s]
livetime	19112.673019673	Livetime [s]
ontime0	19362.559178531	Sum of GTIs [s]
ontime1	19365.70014894	Sum of GTIs [s]
ontime2	19362.559158623	Sum of GTIs [s]
ontime3	19365.70014894	Sum of GTIs [s]
ontime6	19365.70014894	Sum of GTIs [s]
l2events	60388	Number of level 2 events



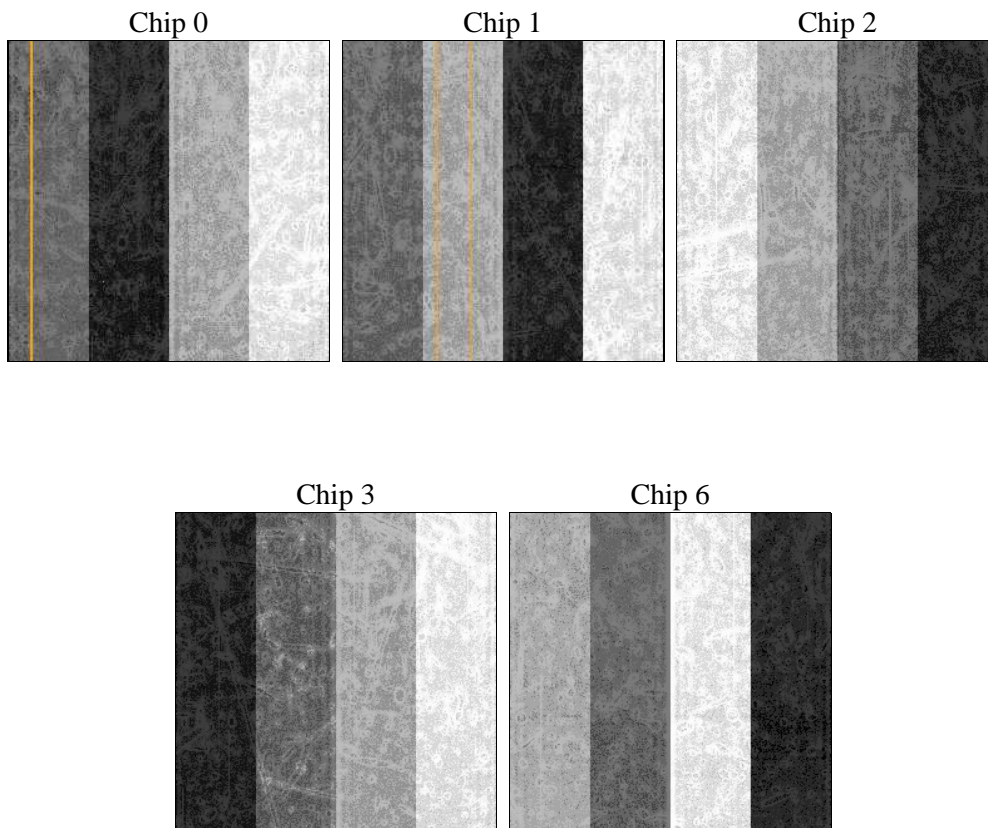
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	19281.149000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	19365.70014894	Sum of GTIs [s]
caldbver	4.6.4	 	ontime0	19362.559178531	Sum of GTIs [s]
date	2014-12-10T16:10:34	Date and time of file creation	ontime1	19365.70014894	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	19362.559158623	Sum of GTIs [s]
			ontime3	19365.70014894	Sum of GTIs [s]
			ontime6	19365.70014894	Sum of GTIs [s]
			l1events	412285	Number of level 1 events

2.1.4 Events

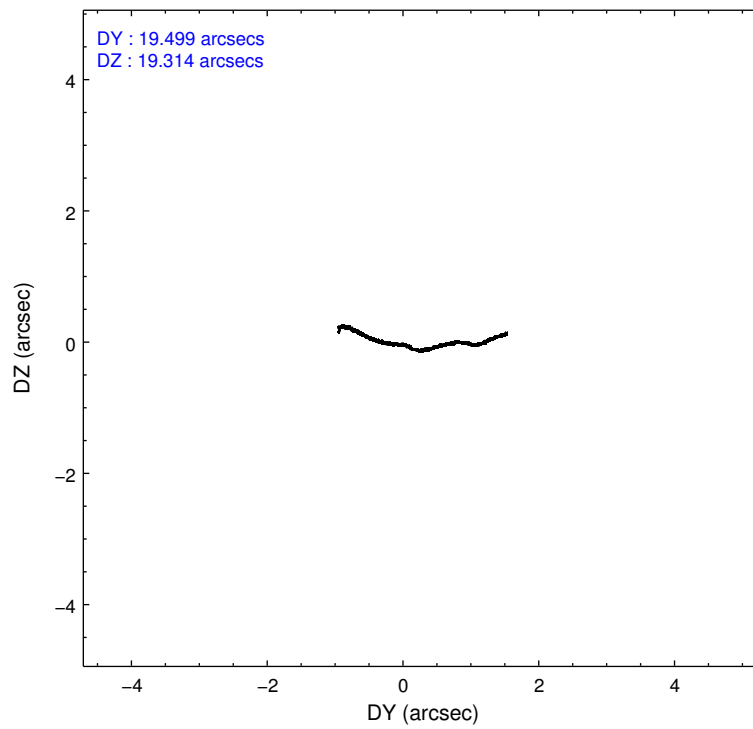
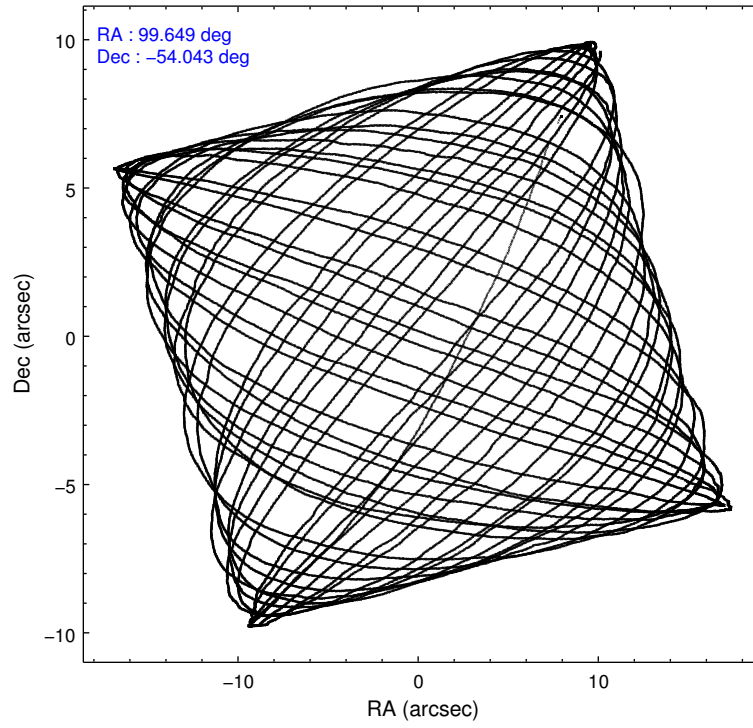
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	77336	74436	84261	96698	79554
rejected events	67545	64076	74032	68323	69317
rejected %	87%	86%	87%	70%	87%

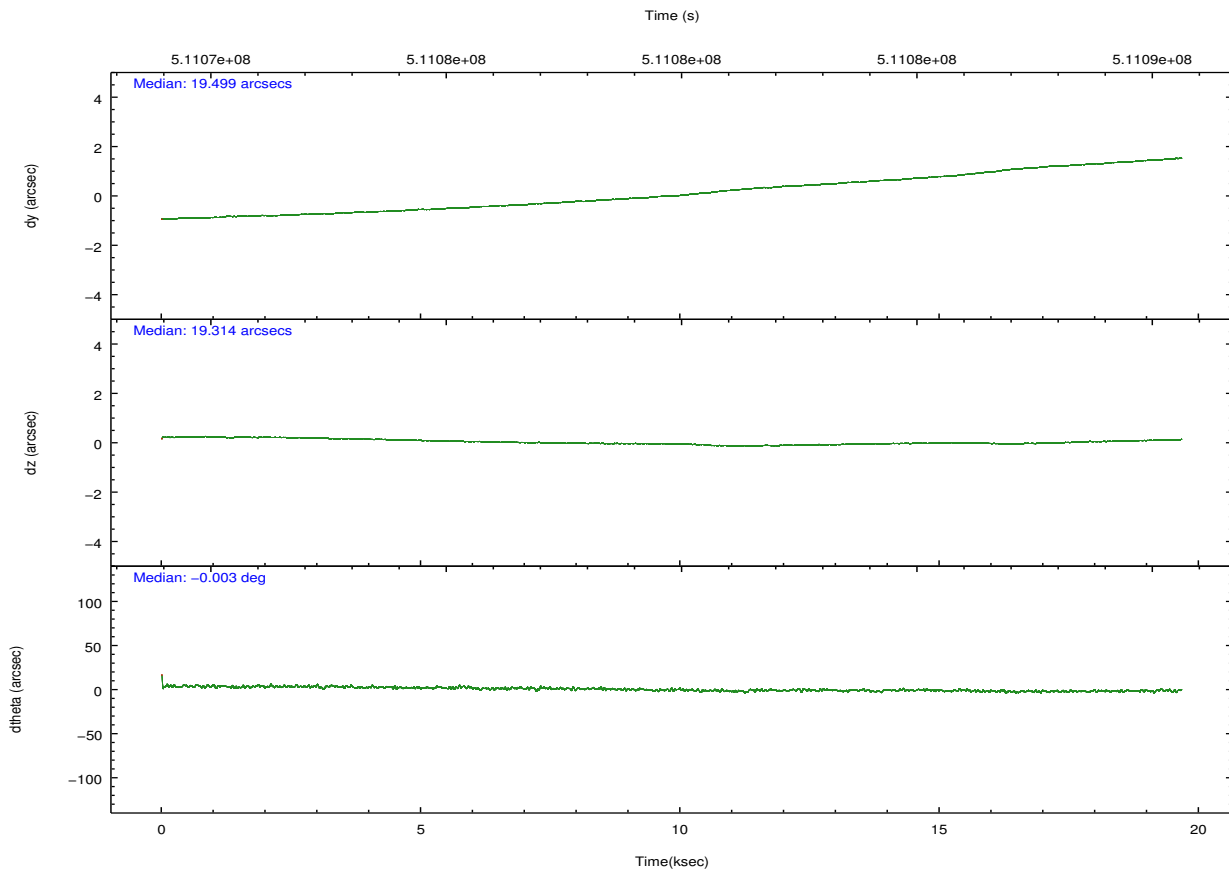
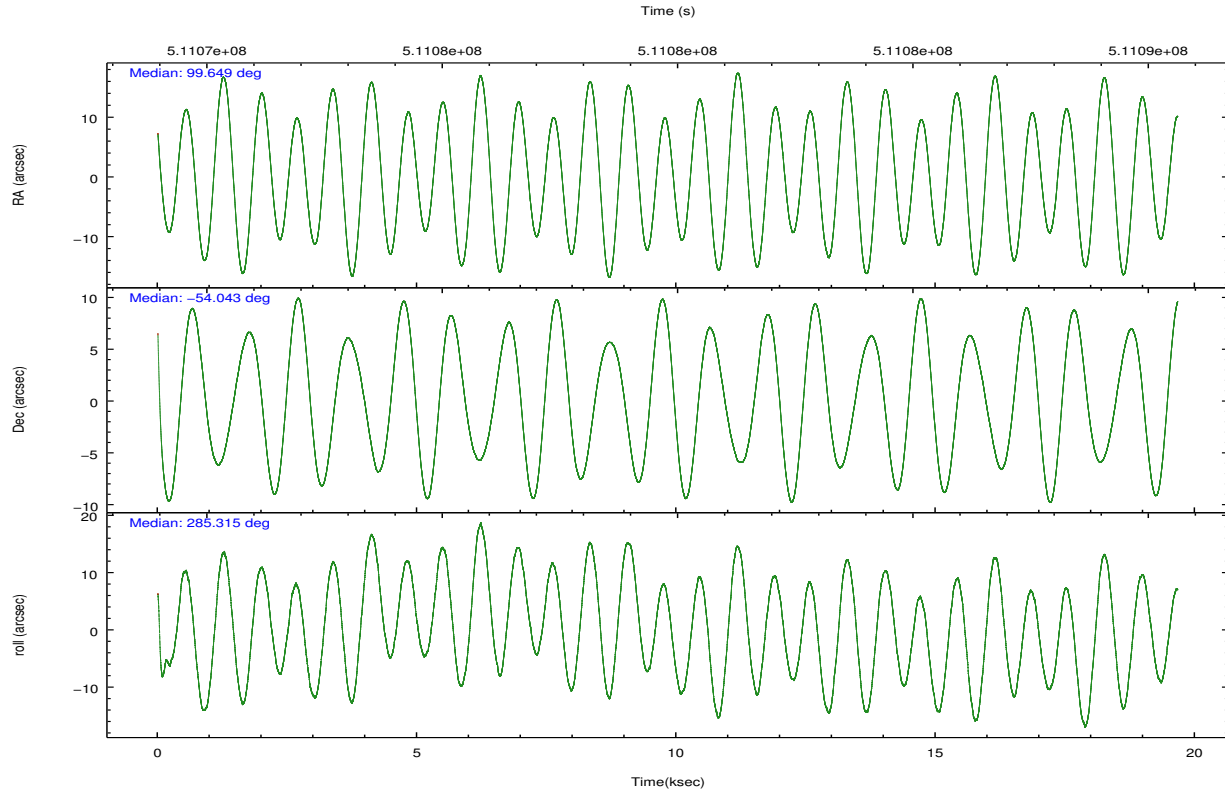
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	3548	3723	4110	18747	3803
	4%	5%	4%	19%	4%
grade 1 events	48	44	42	102	32
	0%	0%	0%	0%	0%
grade 2 events	2464	2390	2473	4060	2339
	3%	3%	2%	4%	2%
grade 3 events	1063	997	933	1617	1041
	1%	1%	1%	1%	1%
grade 4 events	930	1077	937	1616	972
	1%	1%	1%	1%	1%
grade 5 events	3363	3703	3064	3955	3708
	4%	4%	3%	4%	4%
grade 6 events	1787	2178	1776	2340	2083
	2%	2%	2%	2%	2%
grade 7 events	64133	60324	70926	64261	65576
	82%	81%	84%	66%	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	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	99.615220	99.64862327975455	Subarray requested	NONE	NONE
[deg] Pointing Dec	-54.023220	-54.04250460951717	Alternating exposures requested	N	N
[deg] Pointing Roll	285.078956	285.3146871116262	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	511070350.184000	511069312.41973			
Observation start date	2014-03-13T03:58:03	2014-03-13T03:41:52			
[s] Observation end time (MET)	511089631.184000	511089869.30836			
Observation end date	2014-03-13T09:19:24	2014-03-13T09:24:29			
Read mode	TIMED	TIMED			

2.3 Aspect





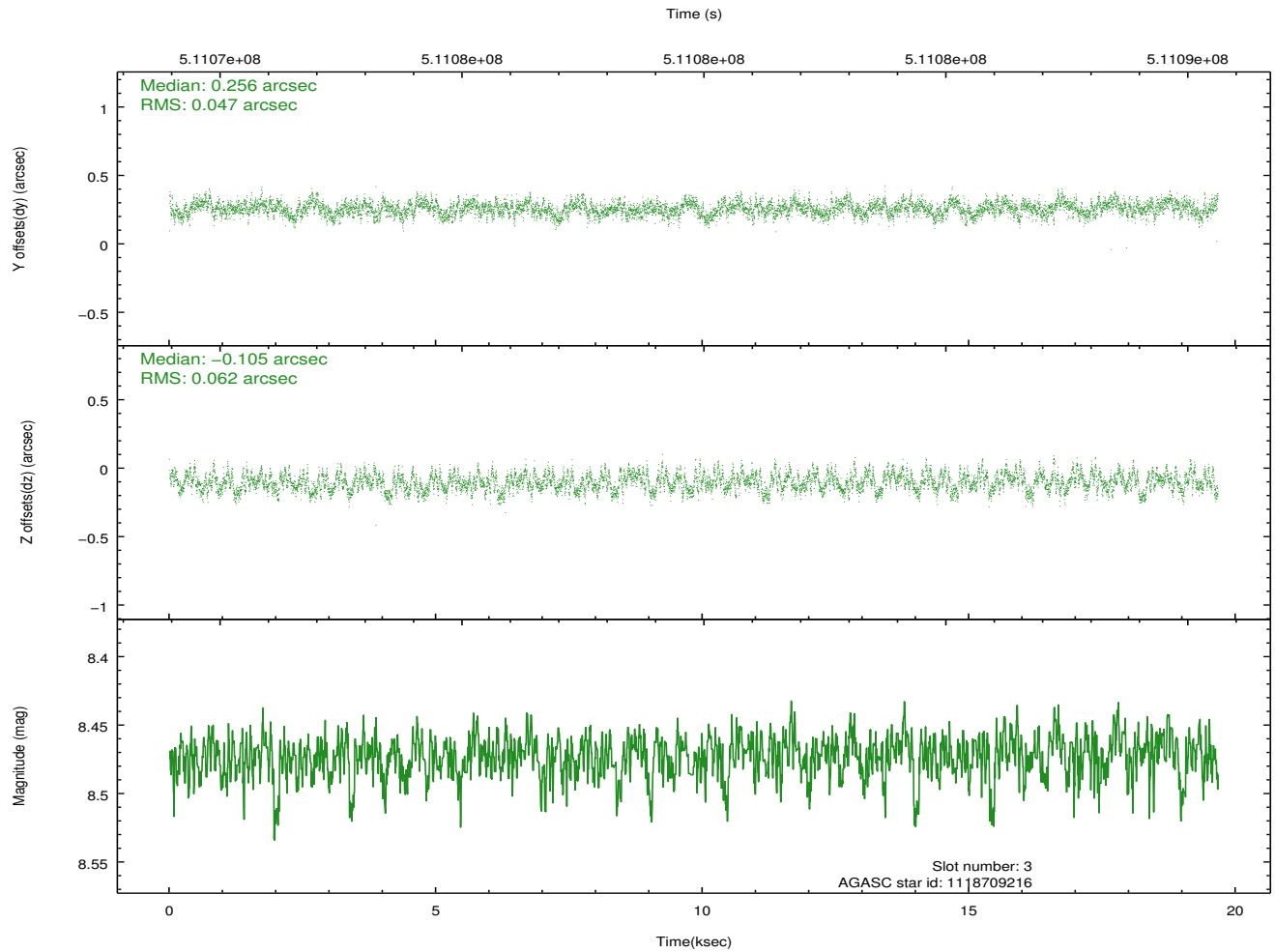
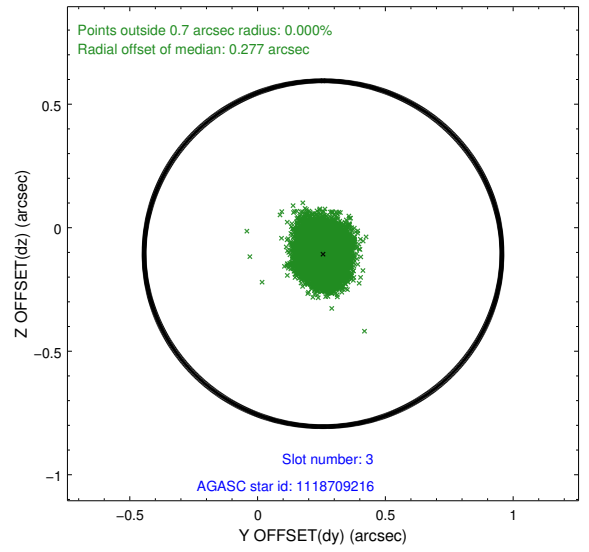
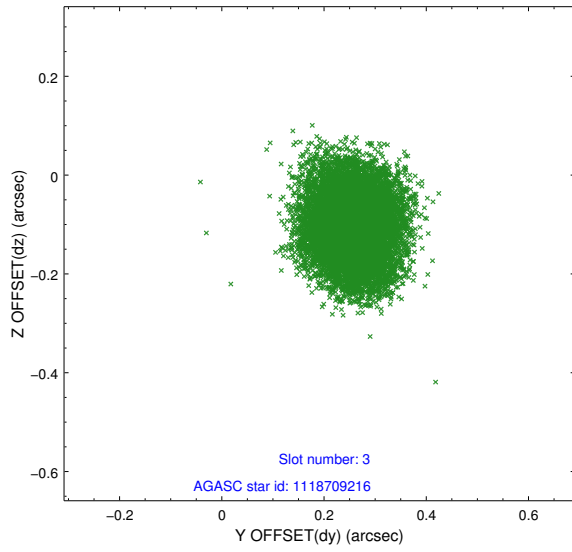
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.08	4795	-0.057	0.028	0.012	0.021	0.000000	0.000000	919.65	-843.03
1	FID		ACIS-I-2	6.98	4797	-0.168	-0.088	0.012	0.017	0.000000	0.000000	-774.44	-849.69
2	FID		ACIS-I-4	7.00	4797	0.130	0.128	0.011	0.020	0.000000	0.000000	2139.62	1056.79
3	GUIDE	used	1118709216	8.47	9593	0.256	-0.105	0.085	0.132	99.610405	-53.652137	-1292.61	337.88
4	GUIDE	used	1118712456	7.72	9593	0.062	-0.111	0.081	0.135	99.930550	-53.451369	-1810.25	1188.49
5	GUIDE	used	1118715984	8.87	9592	-0.149	0.212	0.117	0.179	98.870437	-53.710801	-1490.98	-1241.13
6	GUIDE	used	1119230000	9.48	9587	0.168	0.127	0.143	0.226	99.372506	-54.486244	1478.45	-923.64
7	GUIDE	used	1119356480	8.29	9593	-0.339	-0.118	0.062	0.100	100.106738	-54.468226	1817.81	575.38

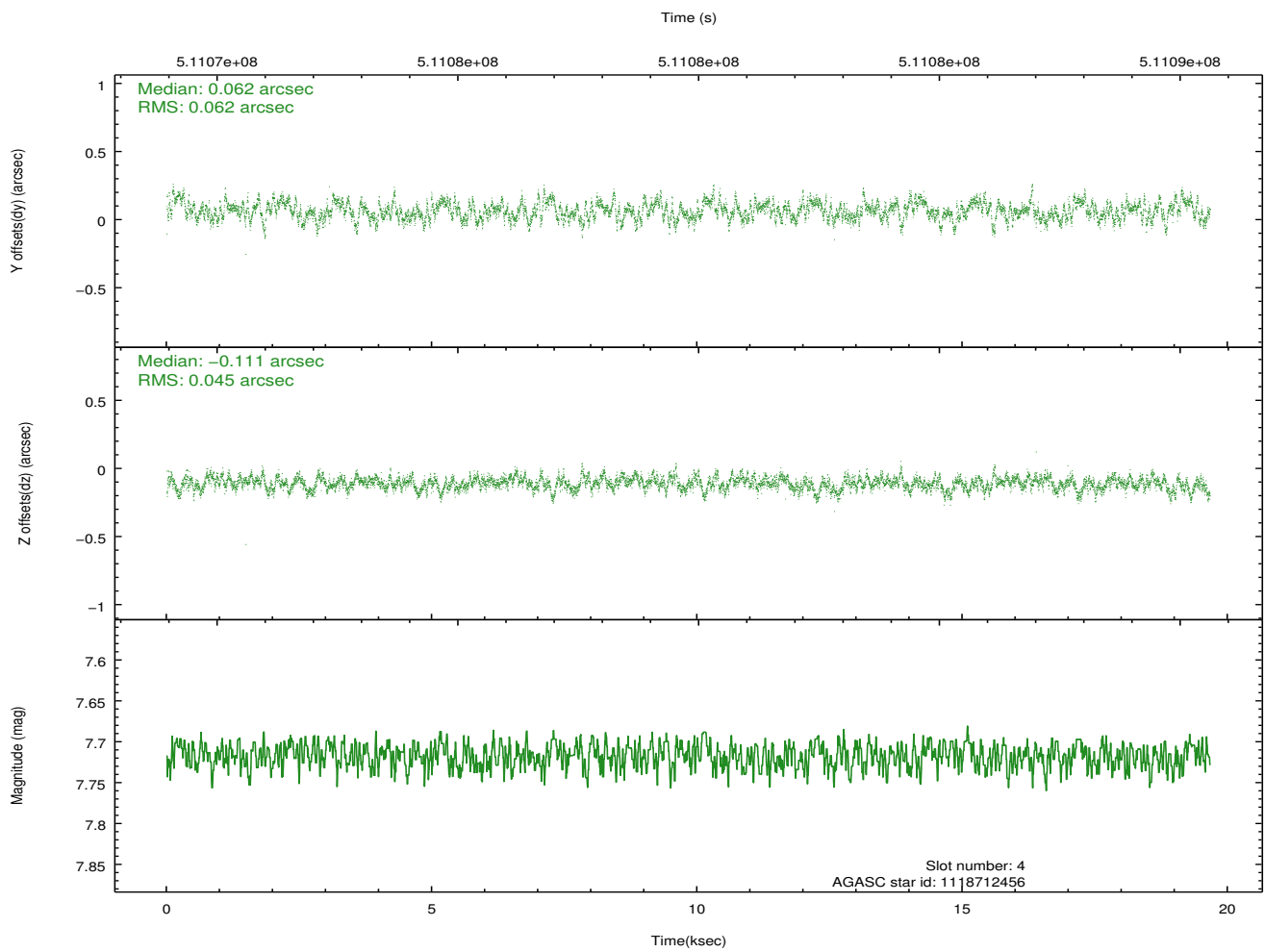
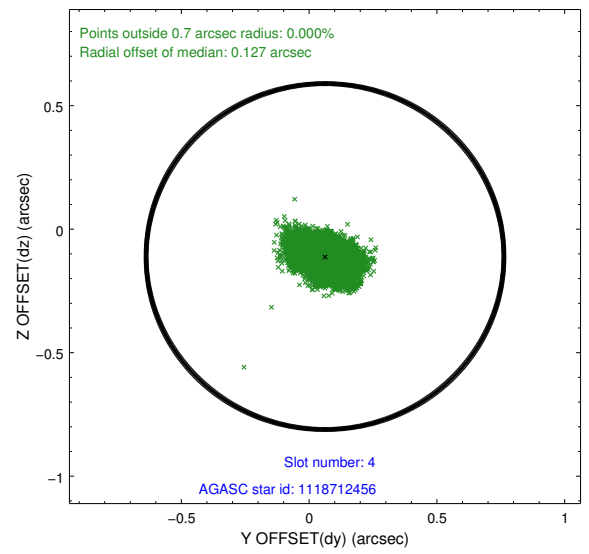
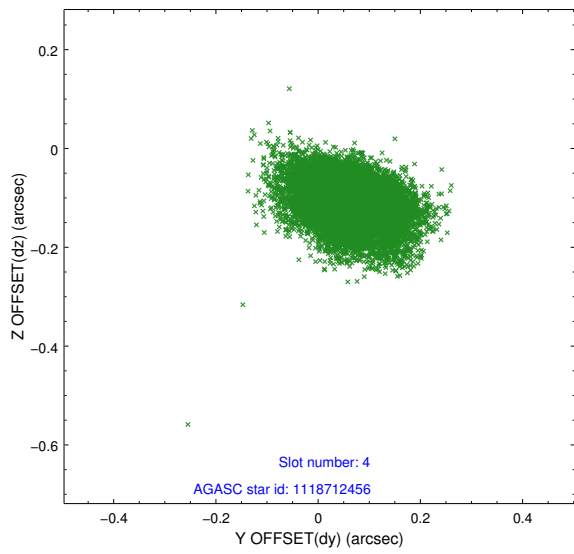
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2.4 Star Slots

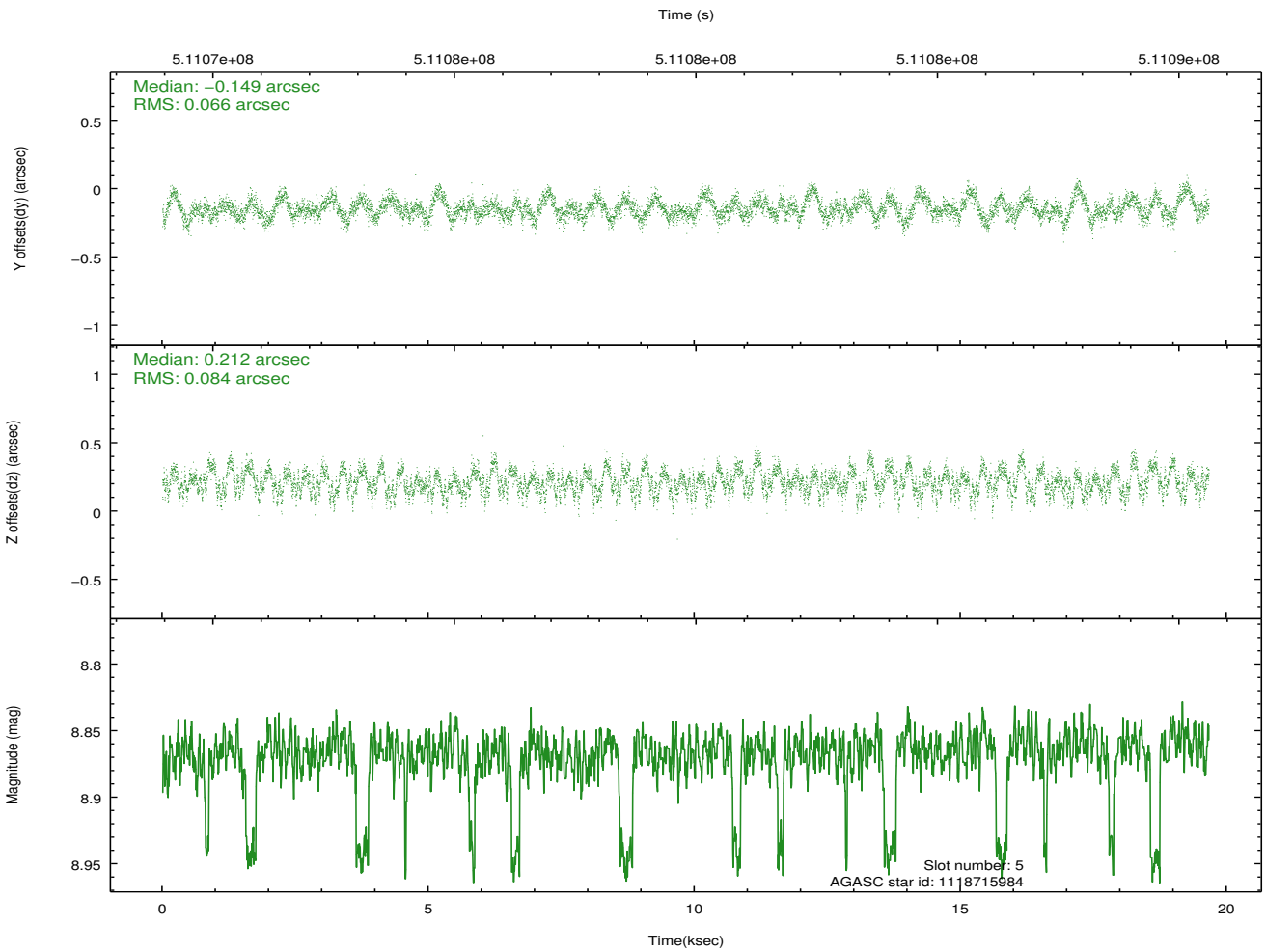
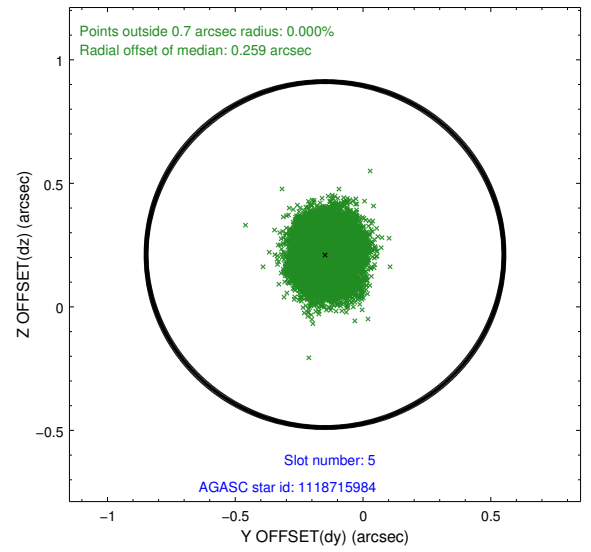
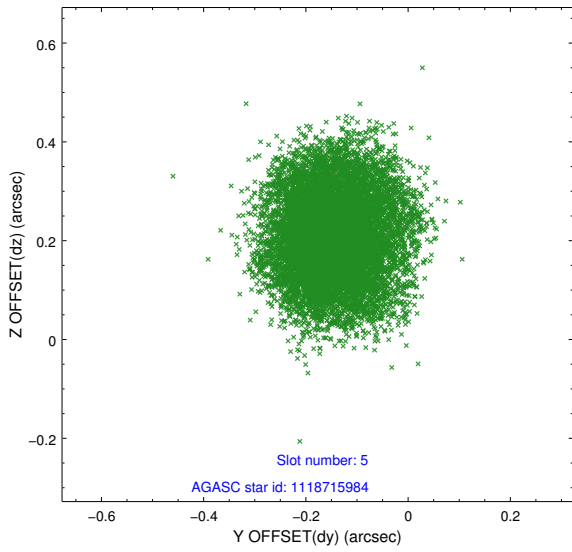
2.4.1 Slot 3



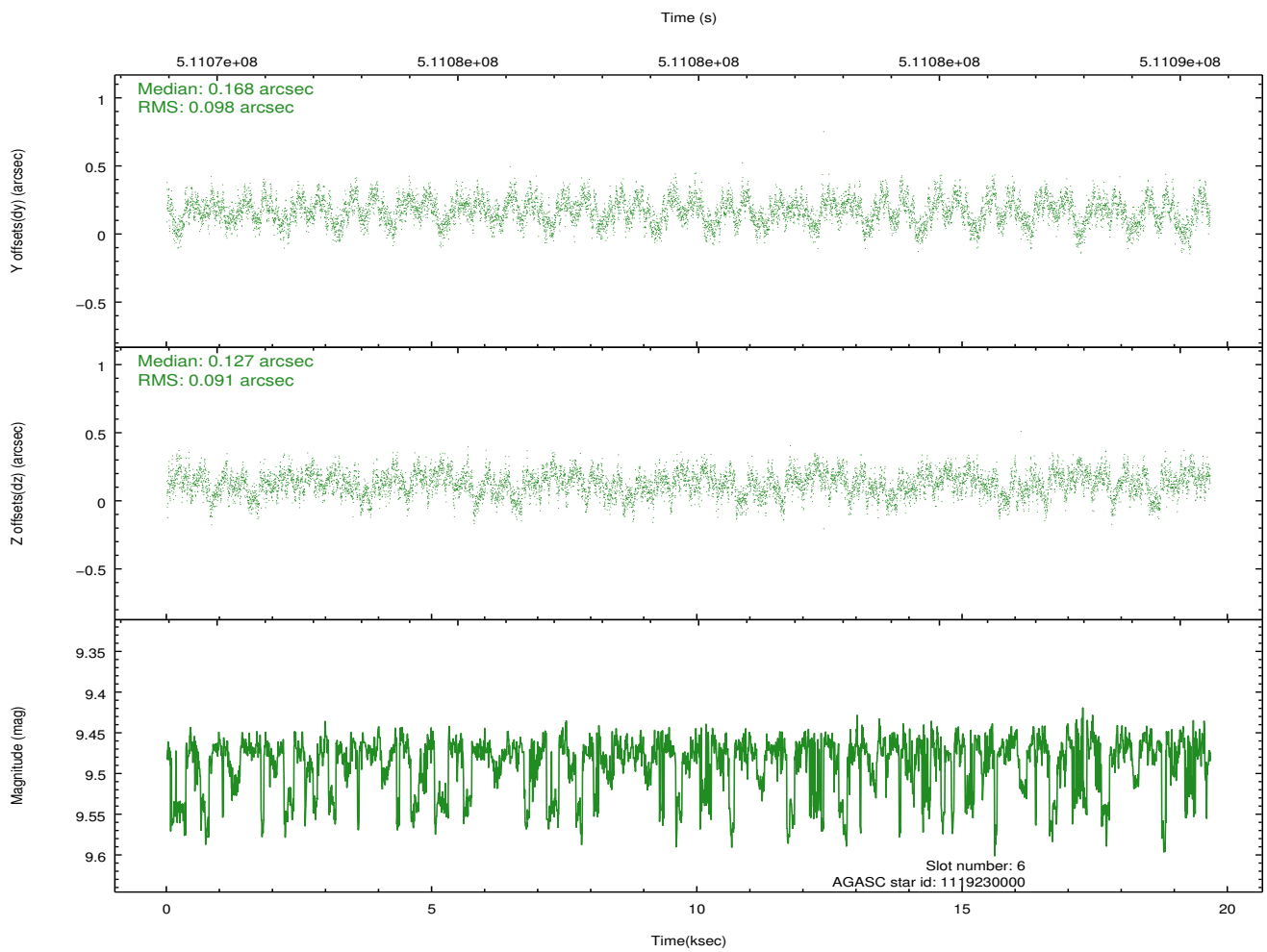
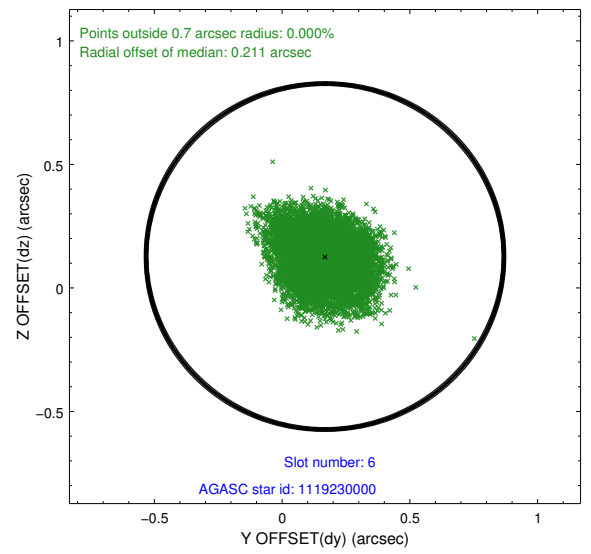
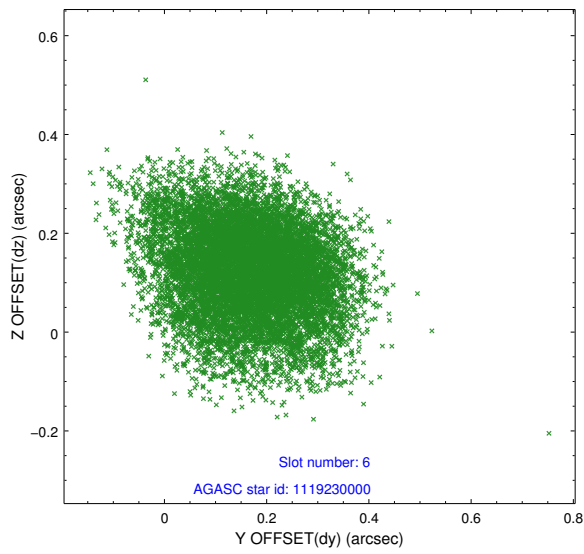
2.4.2 Slot 4



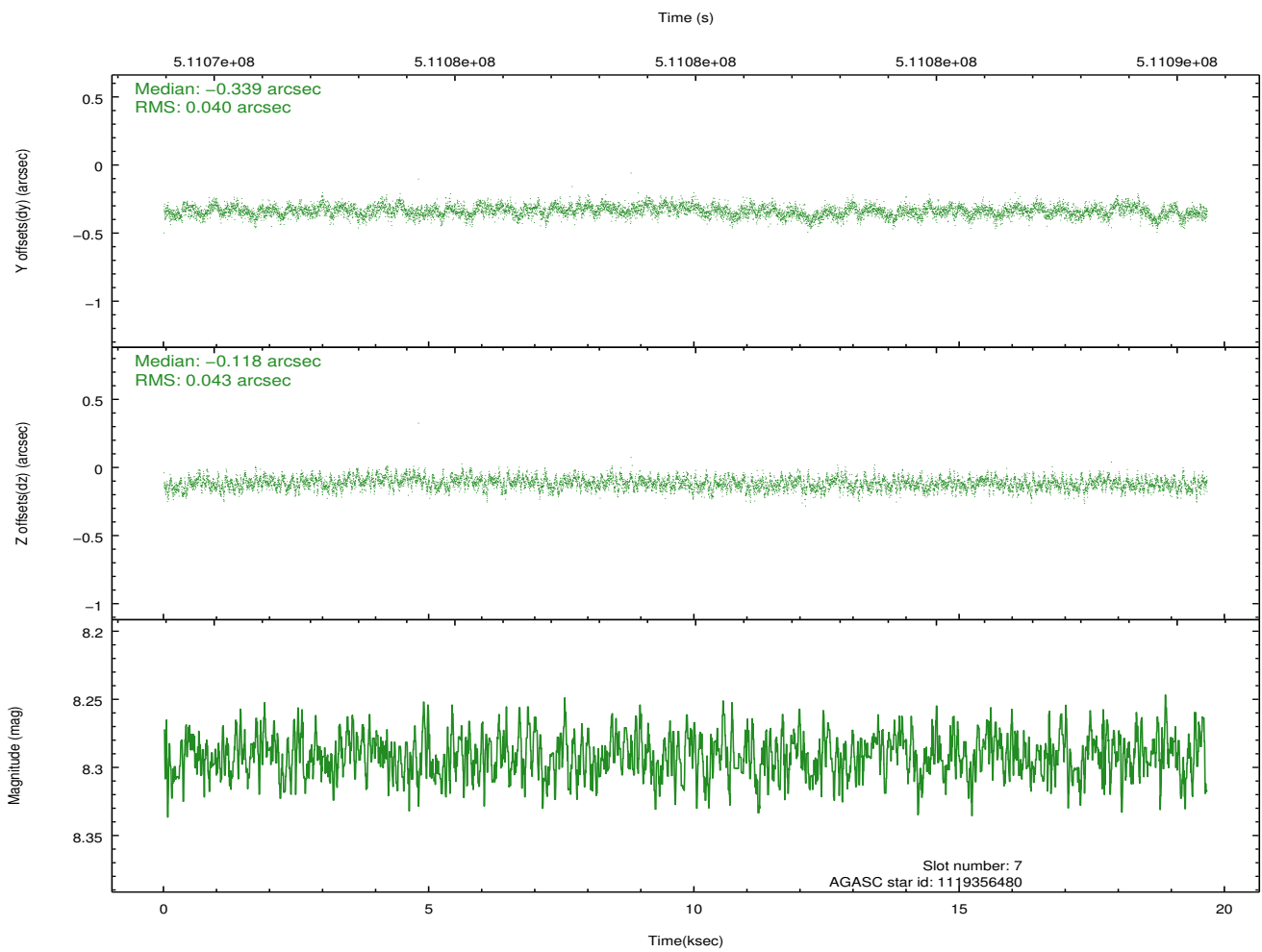
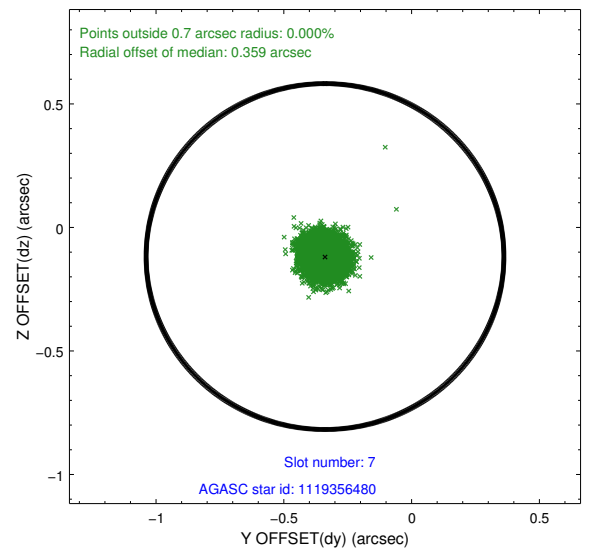
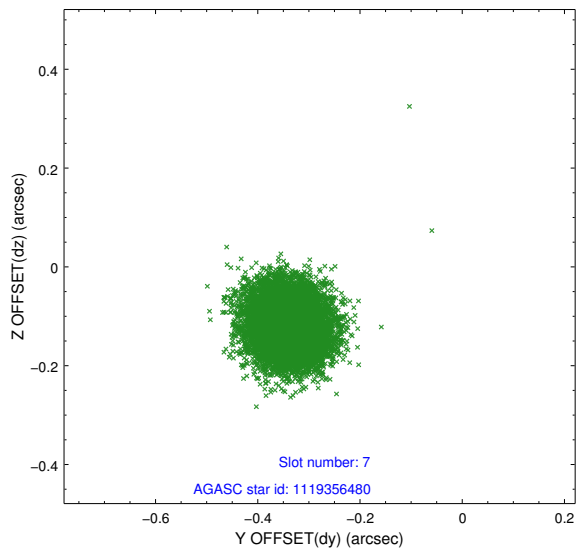
2.4.3 Slot 5



2.4.4 Slot 6

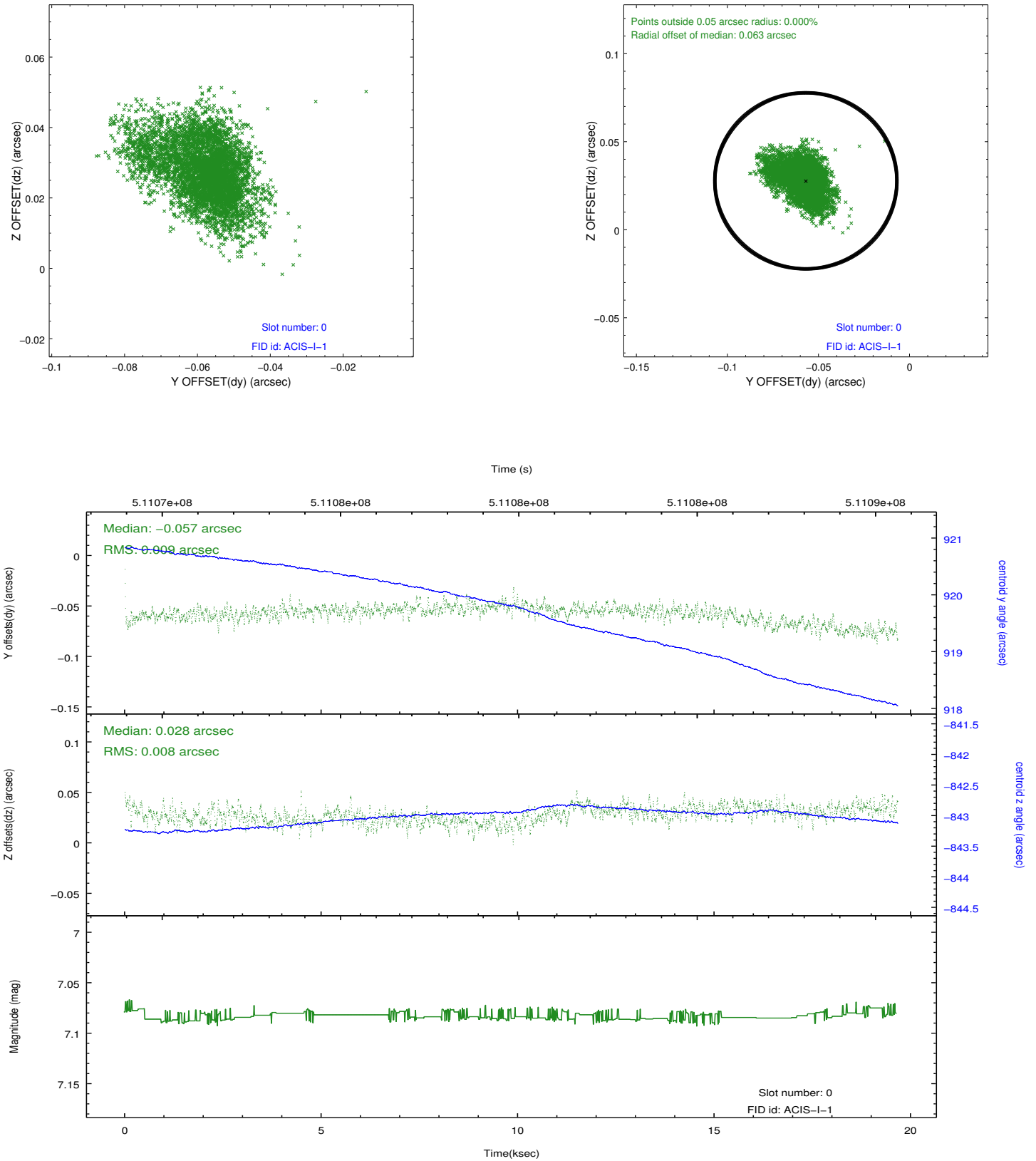


2.4.5 Slot 7

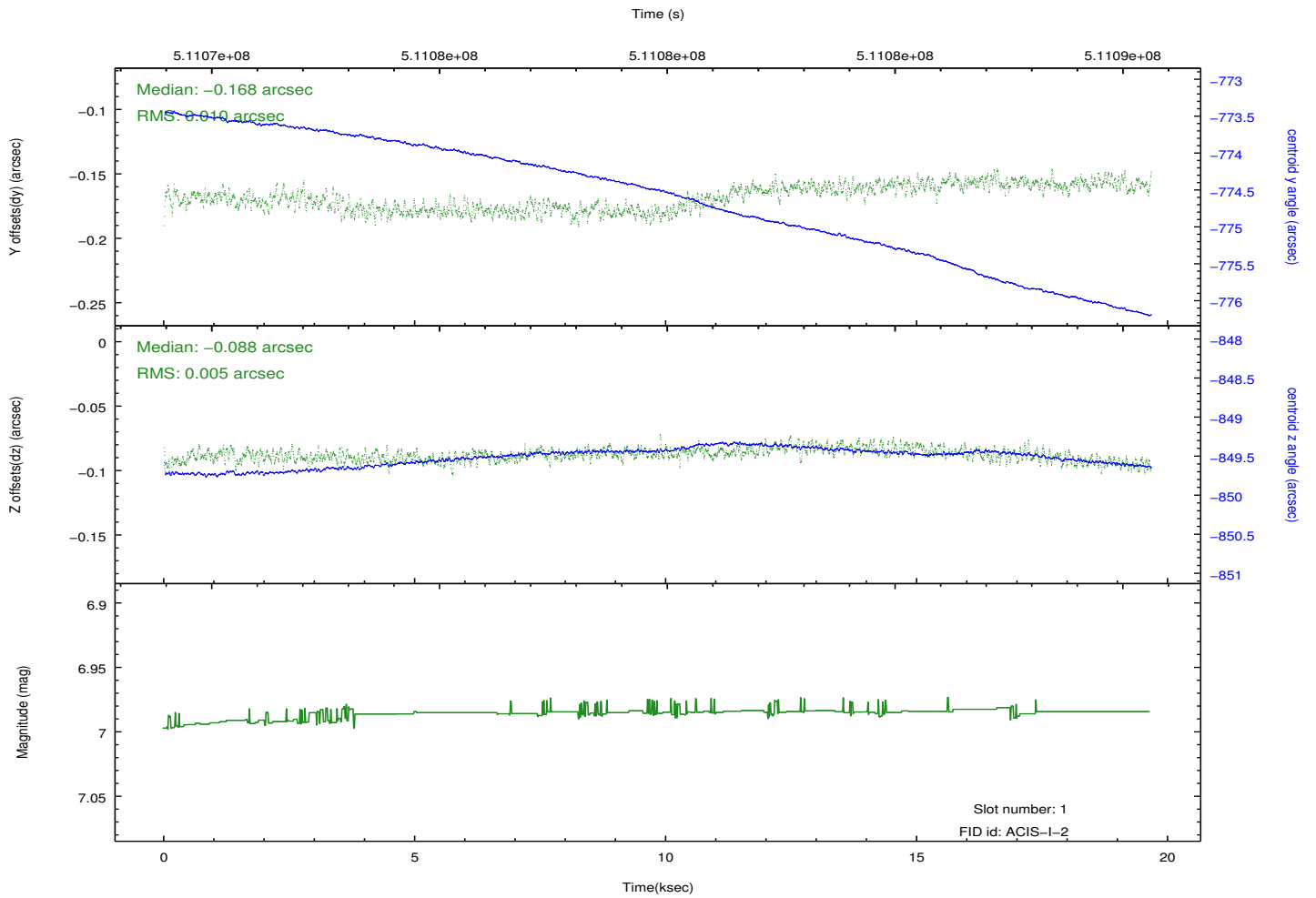
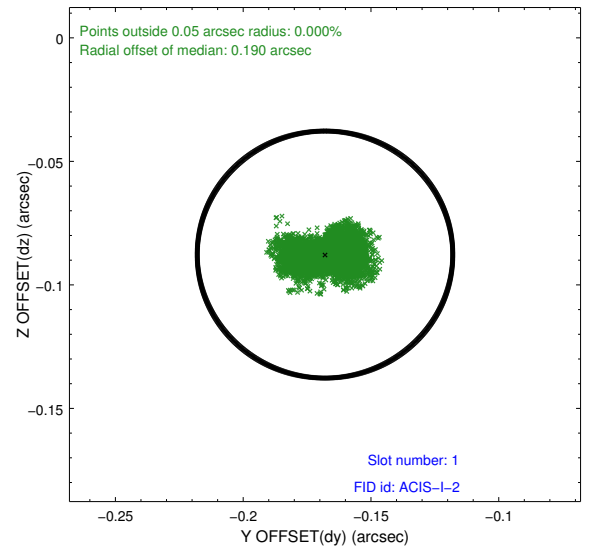
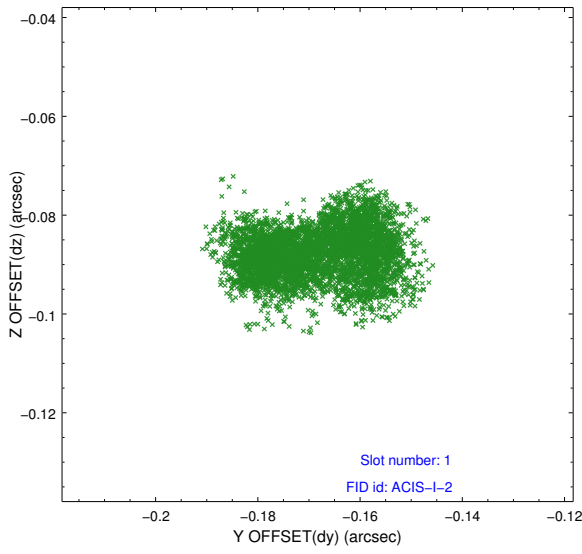


2.5 FID Slots

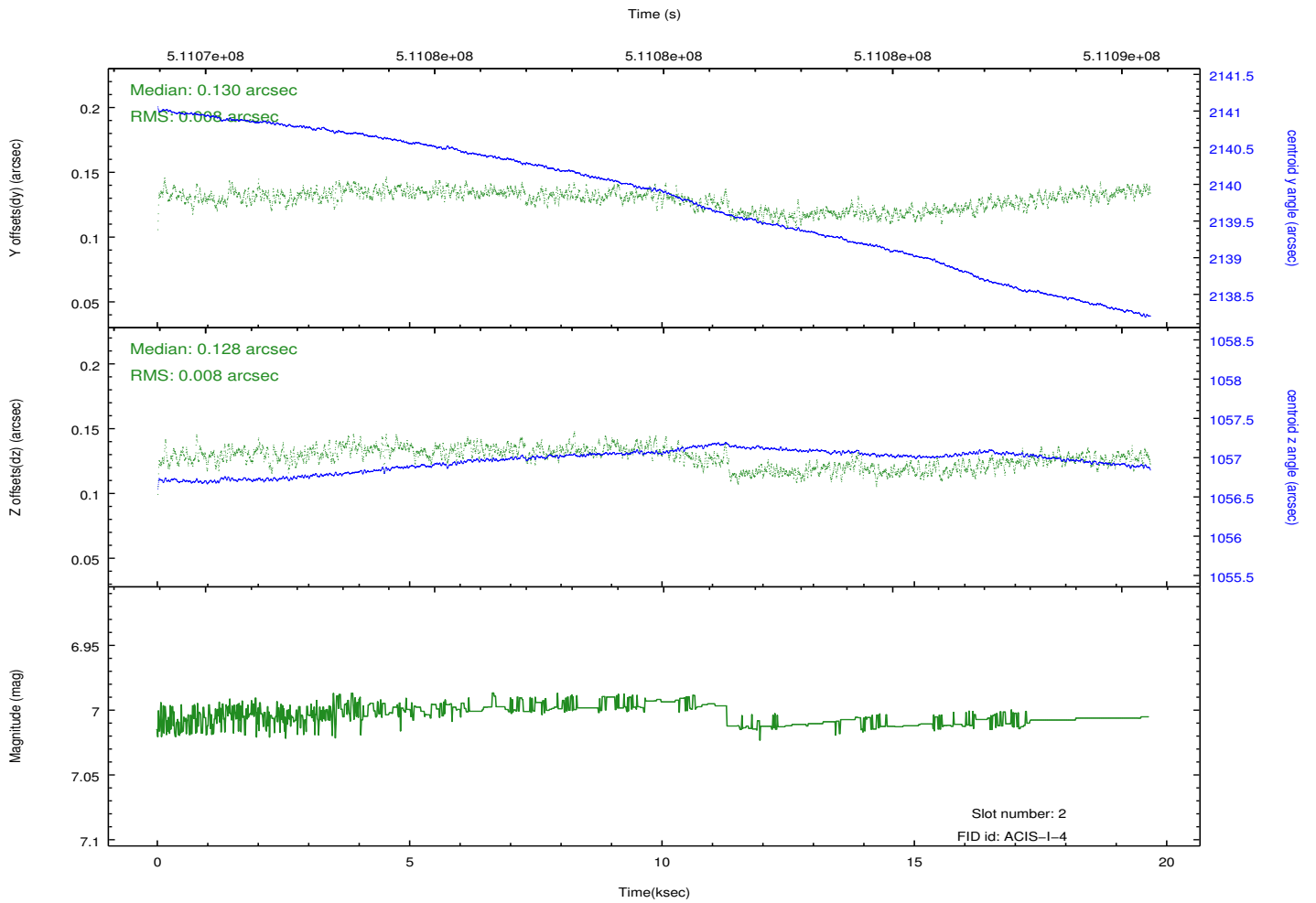
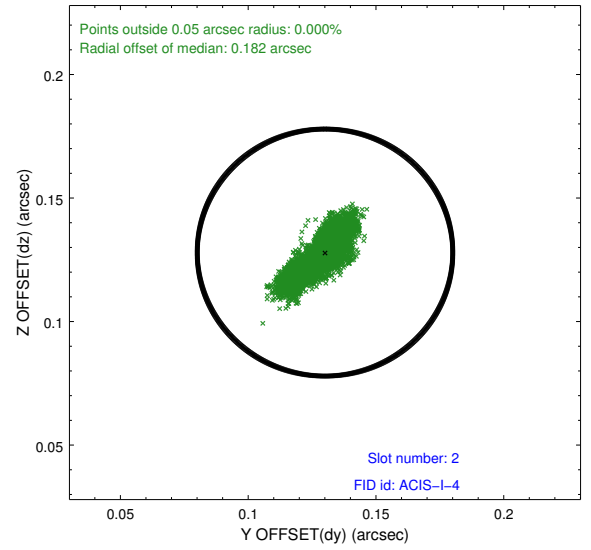
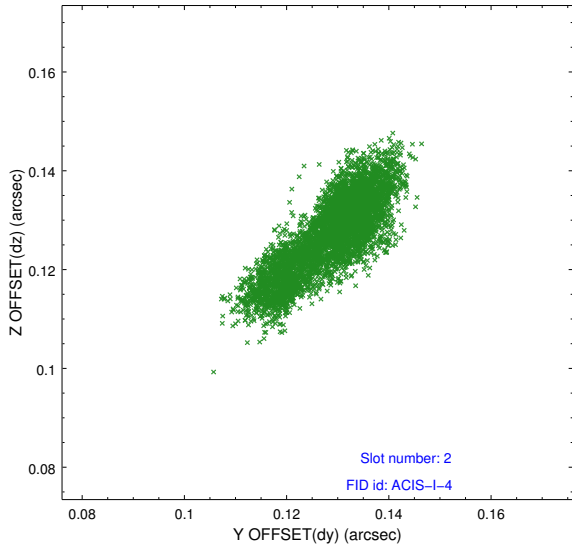
2.5.1 Slot 0



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)	2014.12.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	19.36570014894

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.