

V&V Reference Report

L2 ASCDS Version : 10.2.1

Observation 15168 - L2 Version 2
Chandra X-Ray Center

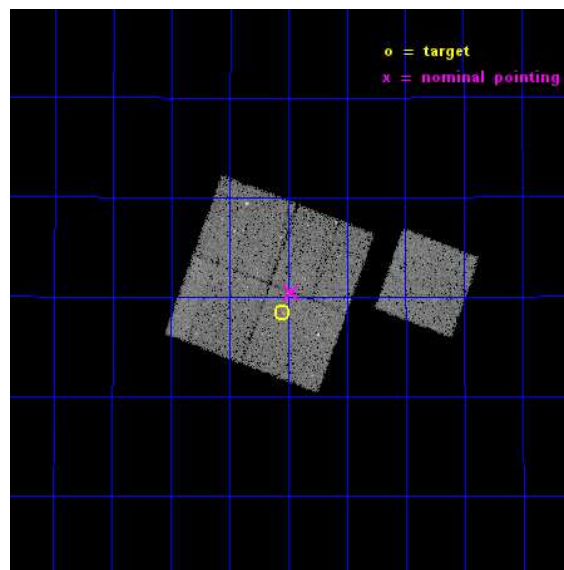
L2 Processing Date : Dec 10 2014

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

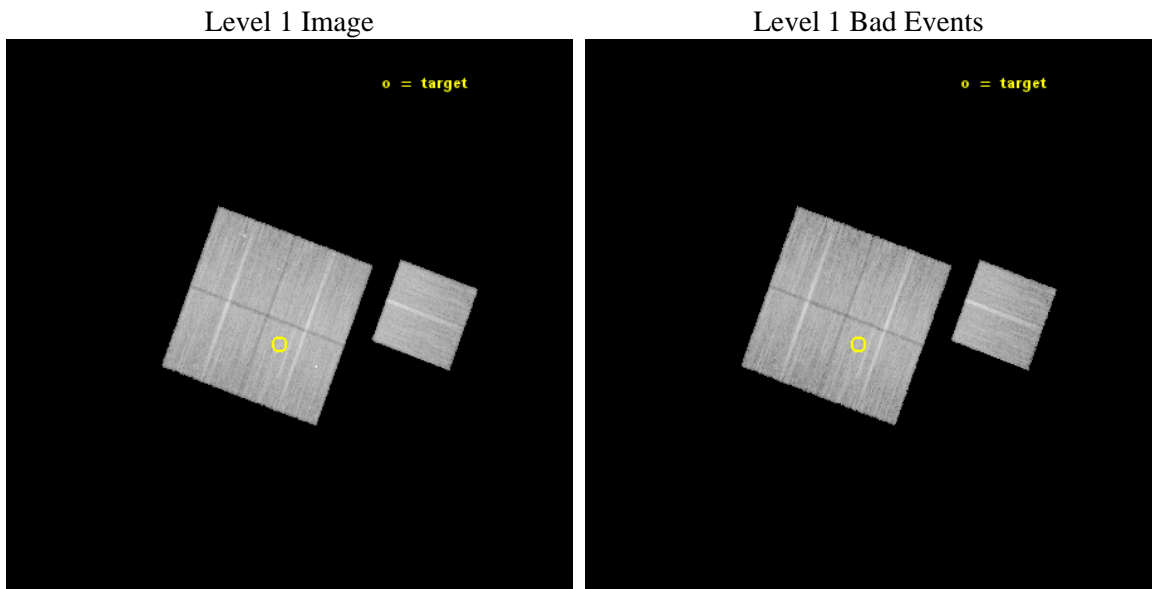
seq_num	801296	Sequence number
obs_id	15168	Observation id
title	X-ray Observations of IDCS J1426.5+3508: A Very Massive, SZ-detected Galaxy Cluster at z=1.75	Proposal title
observer	Prof. Mark Brodwin	Principal investigator
object	IDCS J1426.5+3508	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	216.637083	Observer's specified target RA [deg]
dec_targ	35.139889	Observer's specified target Dec [deg]
ra_nom	216.61836518674	Nominal RA [deg]
dec_nom	35.174453167111	Nominal Dec [deg]
roll_nom	110.40844878613	Nominal Roll [deg]
revision	2	Processing version of data
ontime	30085.500231385	Sum of GTIs [s]
livetime	29692.411022239	Livetime [s]
ontime0	30085.500231385	Sum of GTIs [s]
ontime1	30085.500231385	Sum of GTIs [s]
ontime2	30085.500231385	Sum of GTIs [s]
ontime3	30085.500231385	Sum of GTIs [s]
ontime6	30085.500231385	Sum of GTIs [s]
l2events	71103	Number of level 2 events



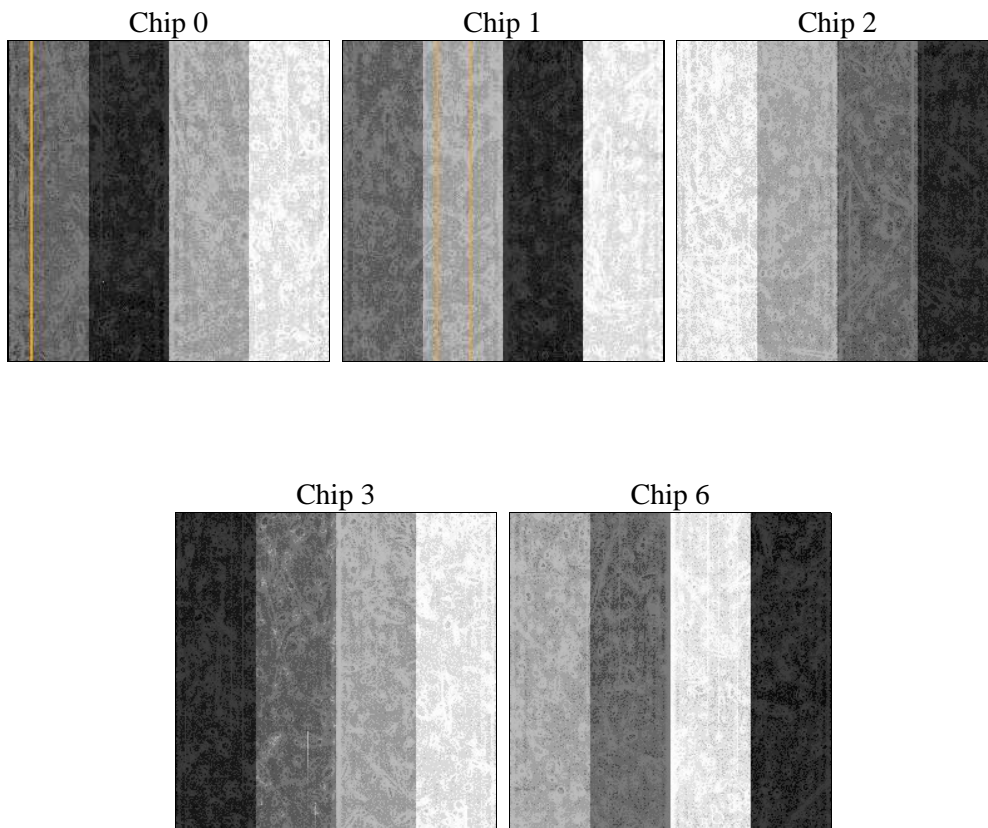
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	30000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	30085.500231385	Sum of GTIs [s]
caldbver	4.6.4	 	ontime0	30085.500231385	Sum of GTIs [s]
date	2014-12-10T16:15:36	Date and time of file creation	ontime1	30085.500231385	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	30085.500231385	Sum of GTIs [s]
			ontime3	30085.500231385	Sum of GTIs [s]
			ontime6	30085.500231385	Sum of GTIs [s]
			l1events	638553	Number of level 1 events

2.1.4 Events

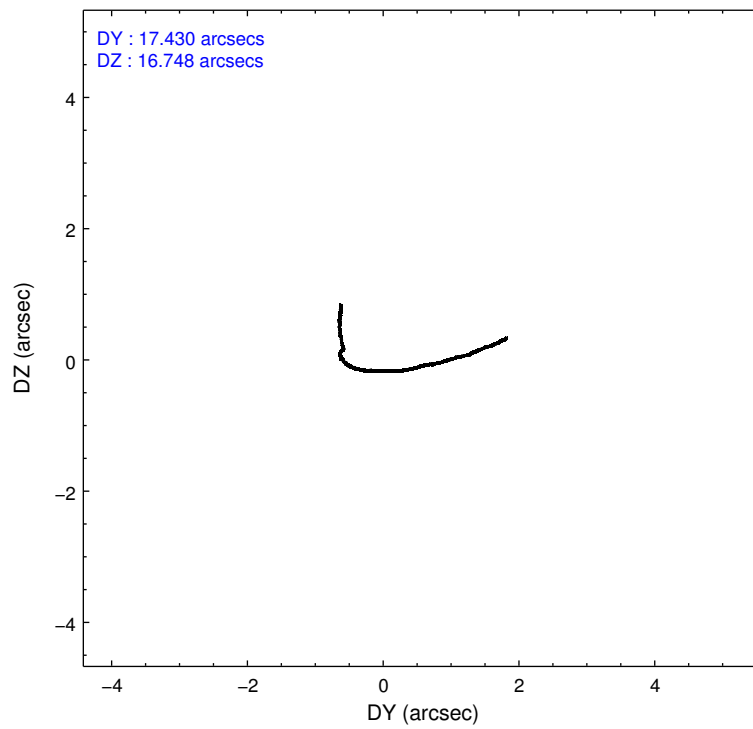
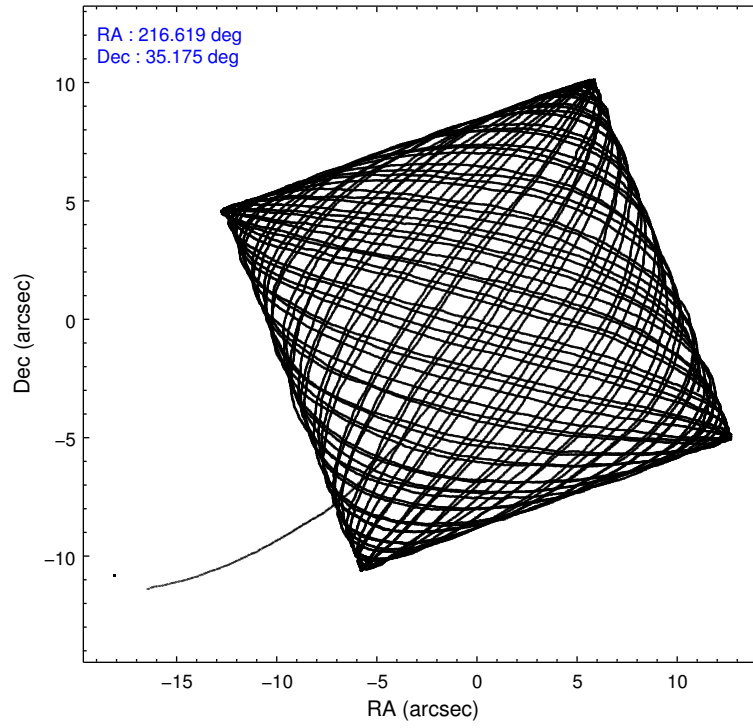
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	121358	120799	133534	130321	132541
rejected events	104628	102982	117188	113845	116168
rejected %	86%	85%	87%	87%	87%

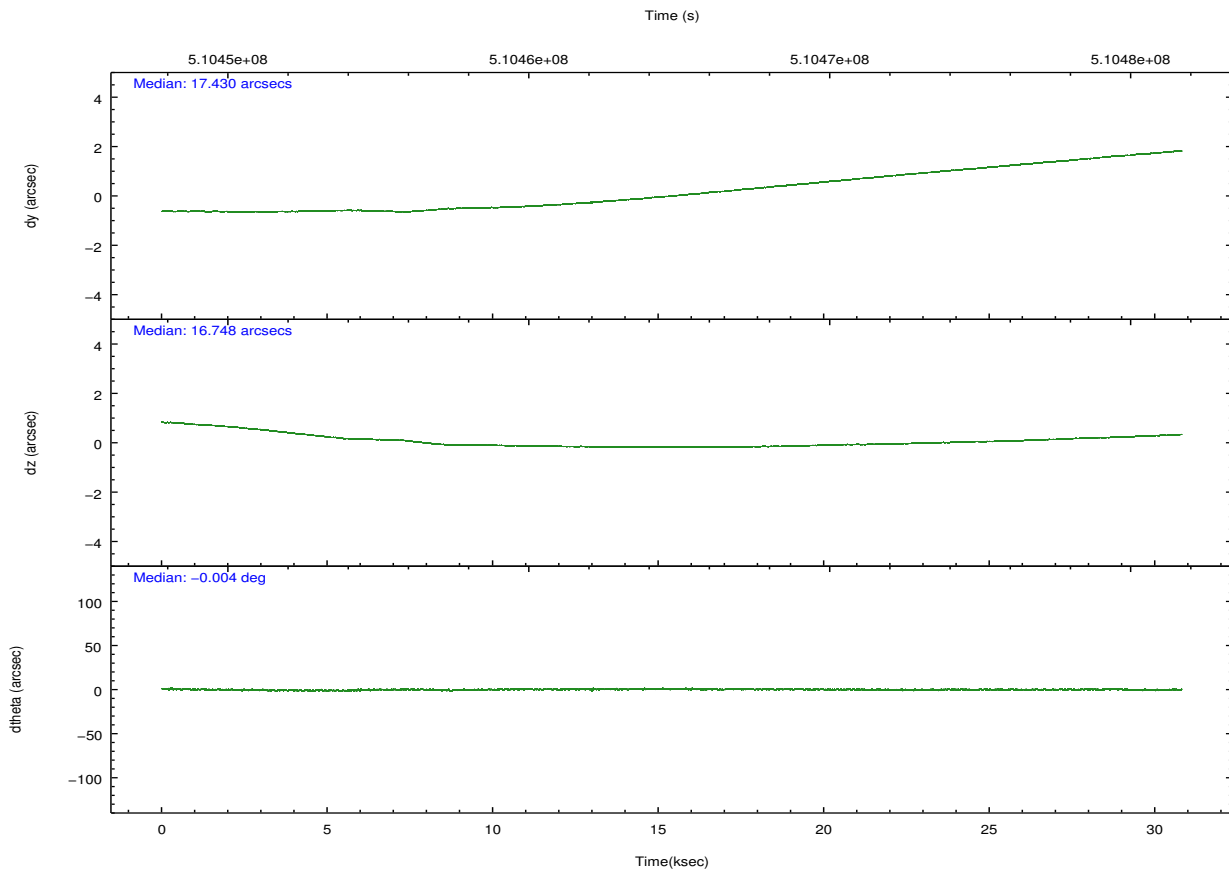
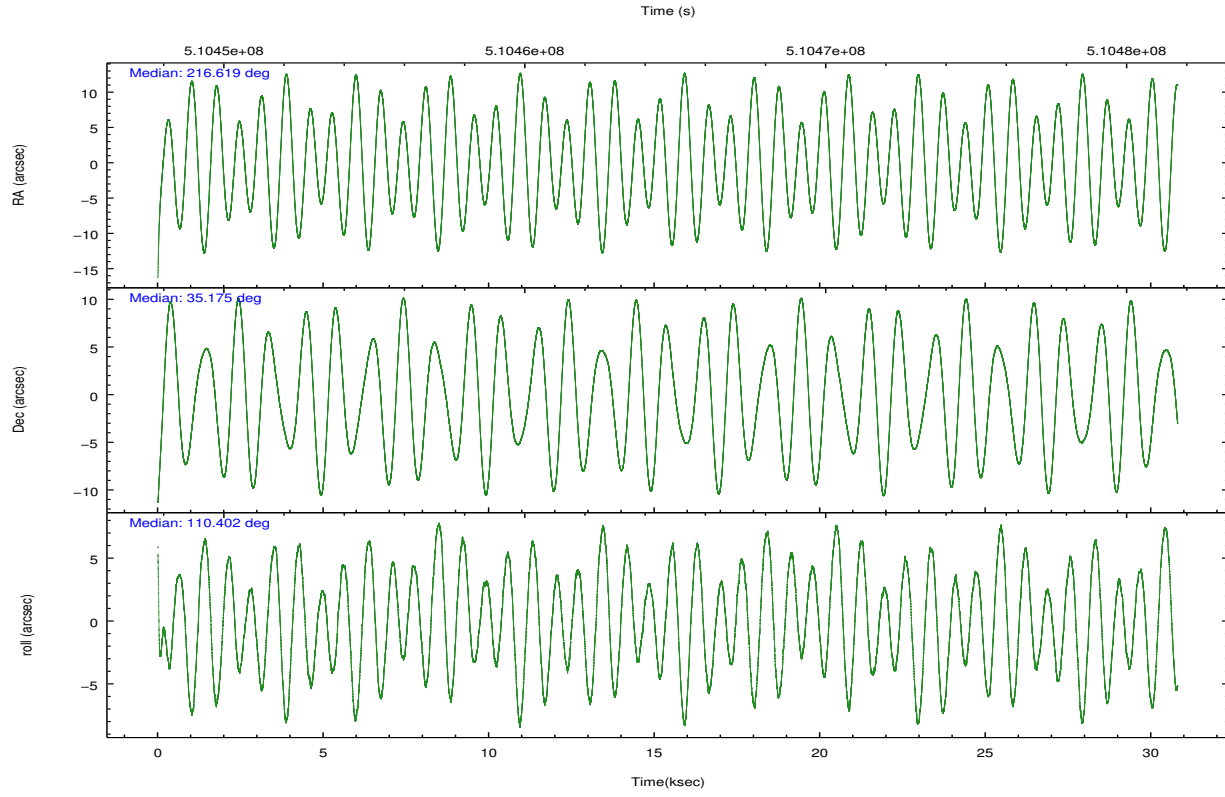
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	6007	6362	5903	6223	5534
	4%	5%	4%	4%	4%
grade 1 events	64	66	83	88	58
	0%	0%	0%	0%	0%
grade 2 events	4146	4263	4023	3685	3652
	3%	3%	3%	2%	2%
grade 3 events	1697	1675	1552	1679	1718
	1%	1%	1%	1%	1%
grade 4 events	1566	1754	1677	1660	1633
	1%	1%	1%	1%	1%
grade 5 events	6326	6838	6124	7227	6855
	5%	5%	4%	5%	5%
grade 6 events	3315	3770	3197	3232	3838
	2%	3%	2%	2%	2%
grade 7 events	98237	96071	110975	106527	109253
	80%	79%	83%	81%	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	216.644382	216.6183651867429	CCD I2 on	Y	Y
[deg] Pointing Dec	35.156997	35.17445316711085	CCD I3 on	Y	Y
[deg] Pointing Roll	110.184779	110.4084487861258	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	-228.392463	-228.3978876784088	CCD S3 on	N	N
[mm] SIM translation stage offset	-5.2	-5.194565324520852	CCD S4 on	N	N
[s] Observation start time (MET)	510450157.184000	510448330.99803	CCD S5 on	N	N
Observation start date	2014-03-05T23:41:30	2014-03-05T23:12:10	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	510480157.184000	510480859.37482	On-chip summing requested	N	N
Observation end date	2014-03-06T08:01:30	2014-03-06T08:14:19	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





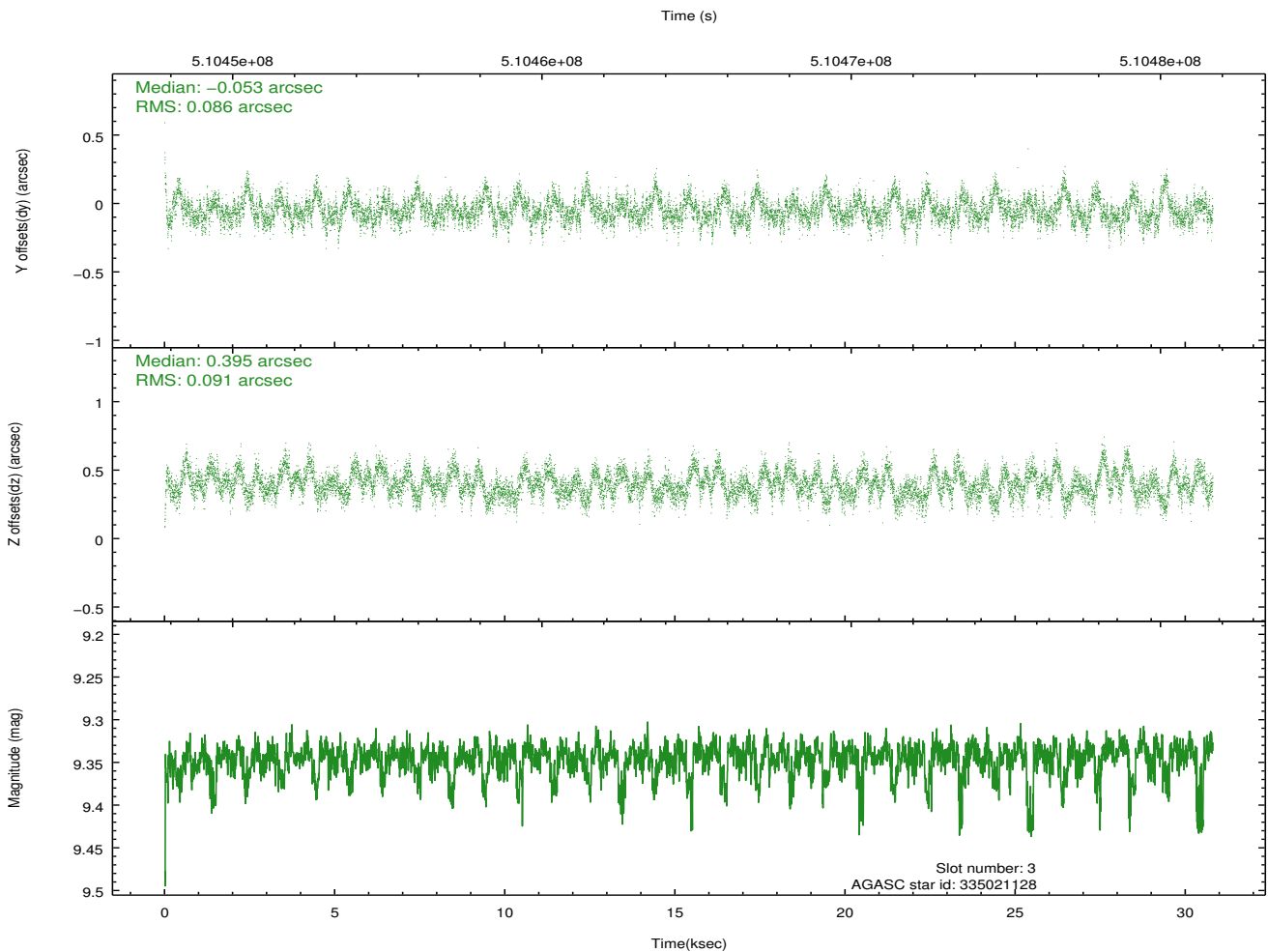
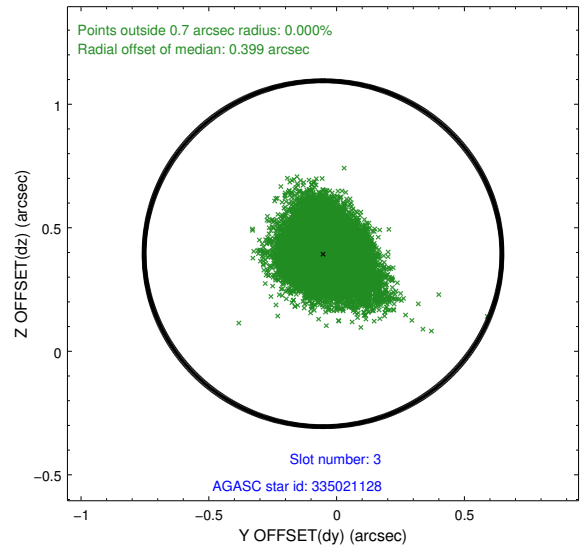
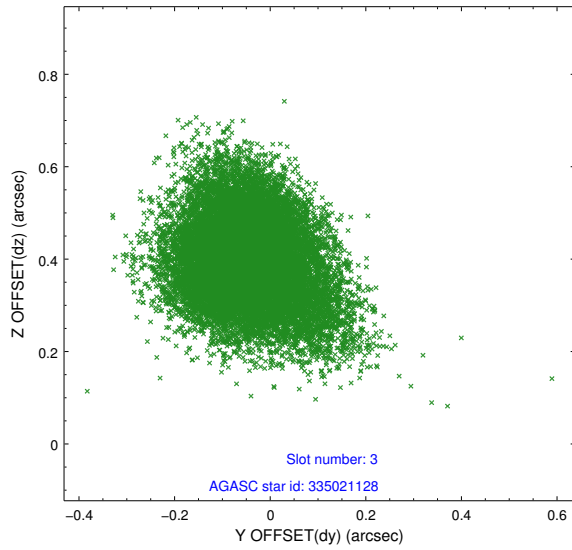
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.04	7513	0.080	-0.044	0.012	0.021	0.000000	0.000000	921.76	-947.09
1	FID		ACIS-I-5	7.04	7513	-0.271	0.063	0.025	0.051	0.000000	0.000000	-1826.75	950.35
2	FID		ACIS-I-6	7.04	7513	0.100	0.055	0.027	0.048	0.000000	0.000000	387.16	1595.01
3	GUIDE	used	335021128	9.35	15017	-0.053	0.395	0.132	0.217	216.159551	34.422539	-1981.73	2263.43
4	GUIDE	used	335028336	9.47	15011	0.145	-0.192	0.111	0.182	217.189840	34.665629	-2213.11	-906.69
5	GUIDE	used	335030384	8.82	15020	-0.018	-0.409	0.085	0.135	216.806407	34.722197	-1634.16	90.02
6	GUIDE	used	335414448	7.38	15026	-0.293	-0.138	0.071	0.116	216.992261	35.577204	1068.57	-1478.40
7	GUIDE	used	335417968	9.38	15011	0.208	0.344	0.126	0.213	217.358149	35.055285	-1061.70	-1849.70

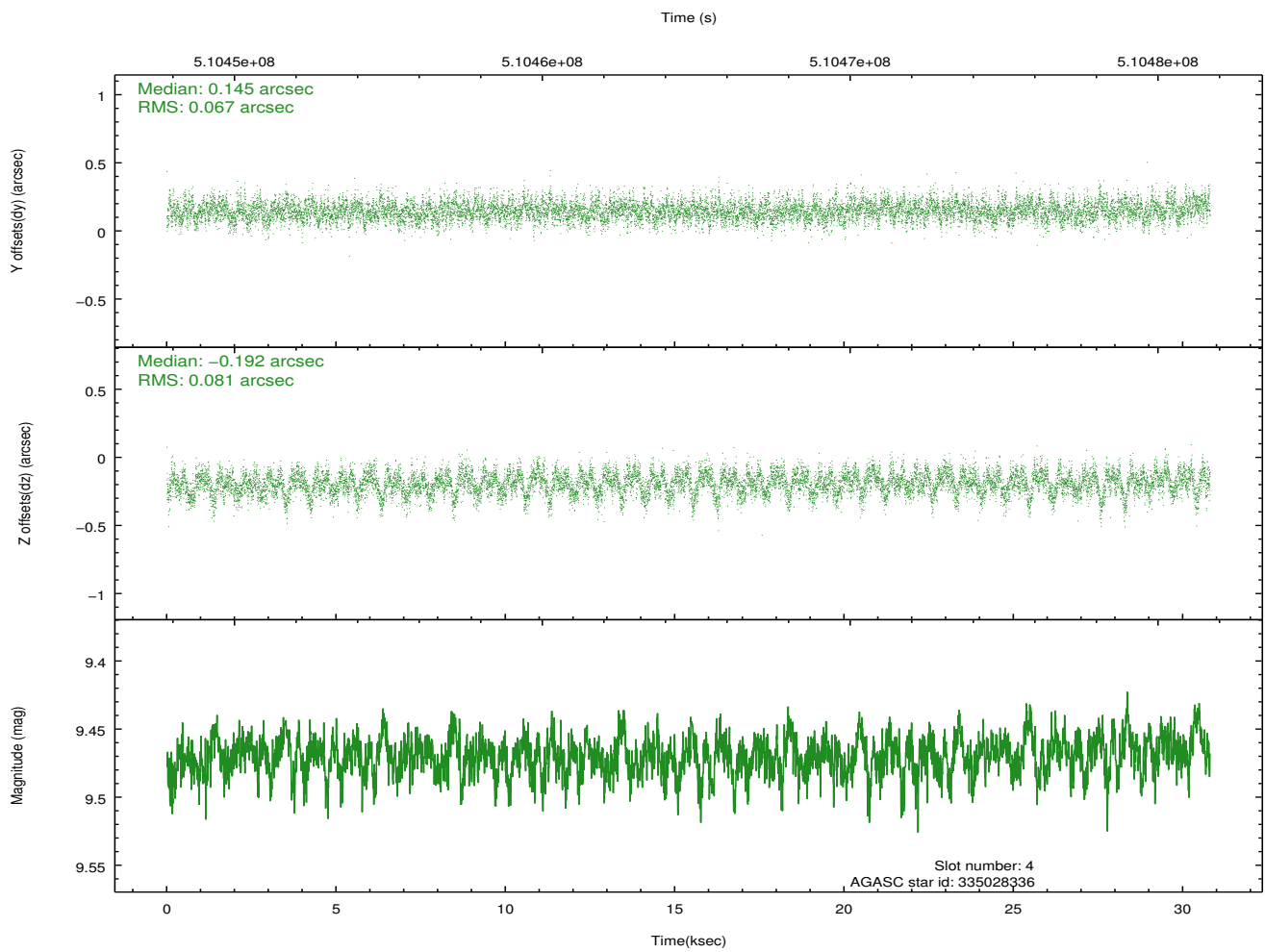
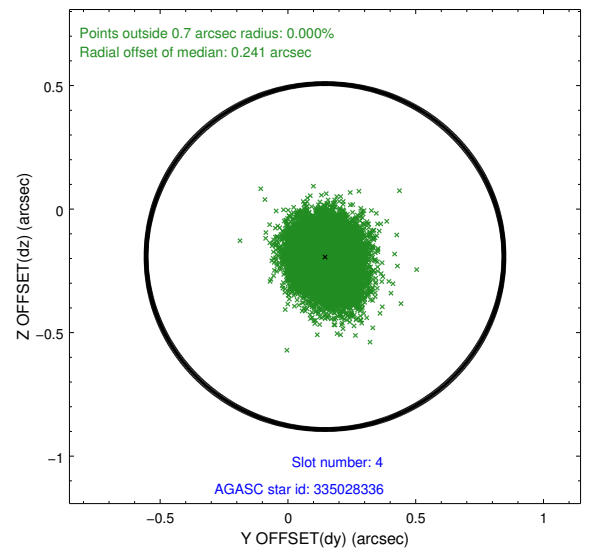
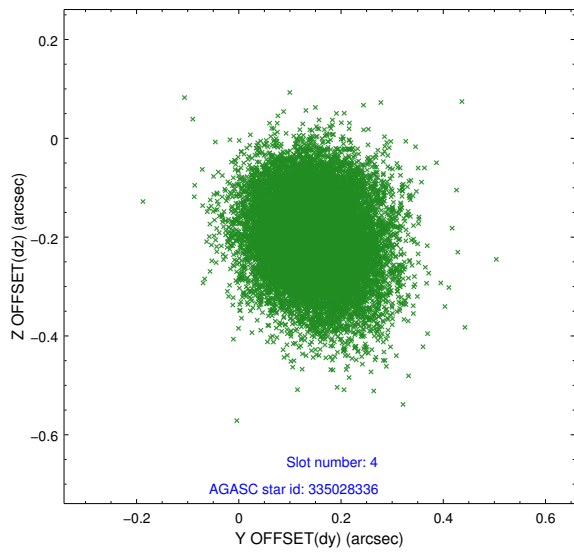
∞

2.4 Star Slots

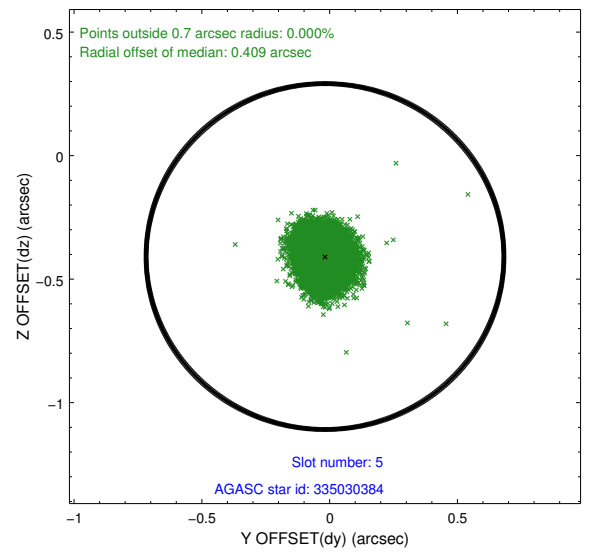
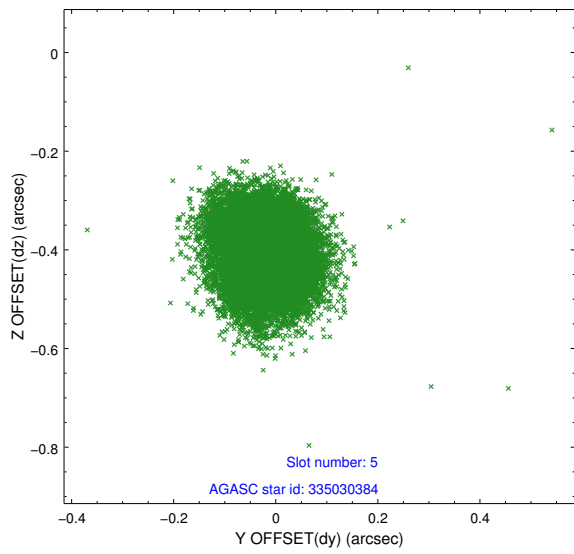
2.4.1 Slot 3



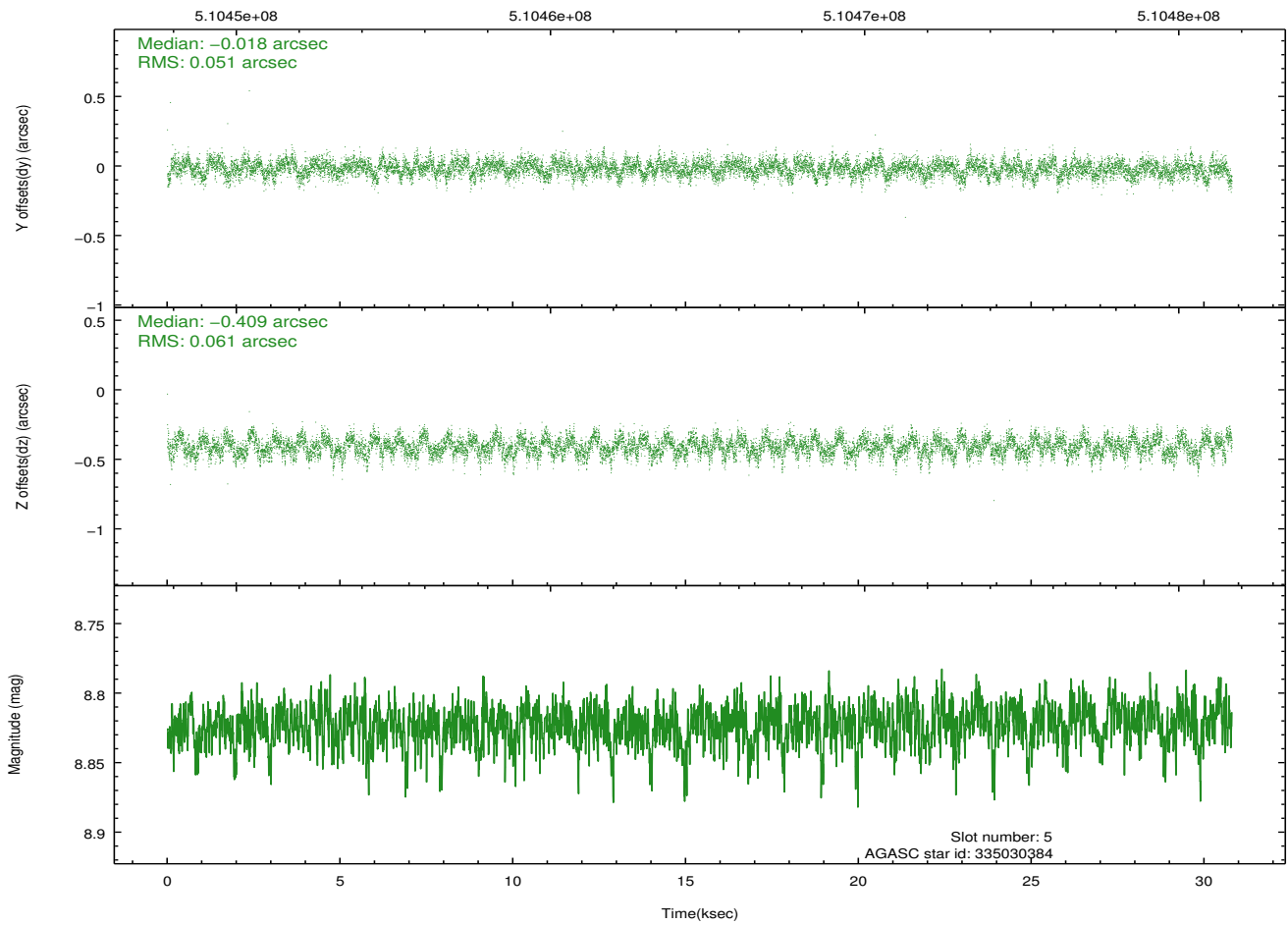
2.4.2 Slot 4



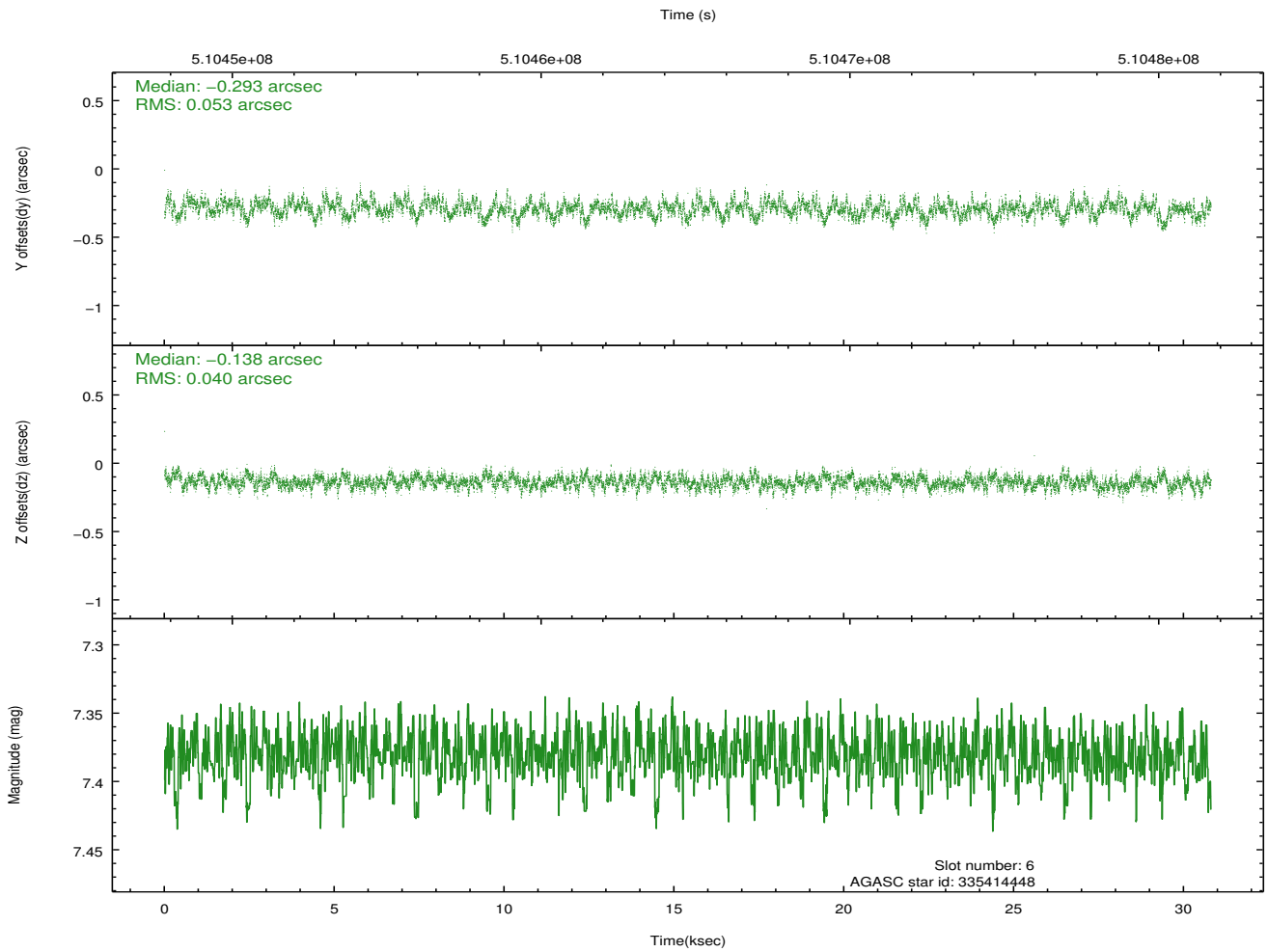
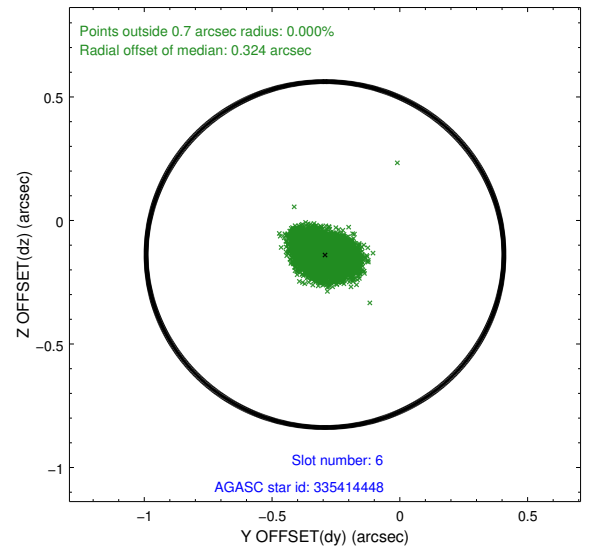
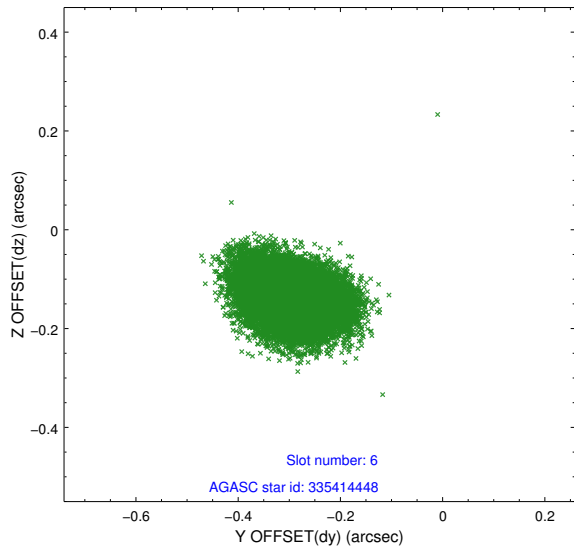
2.4.3 Slot 5



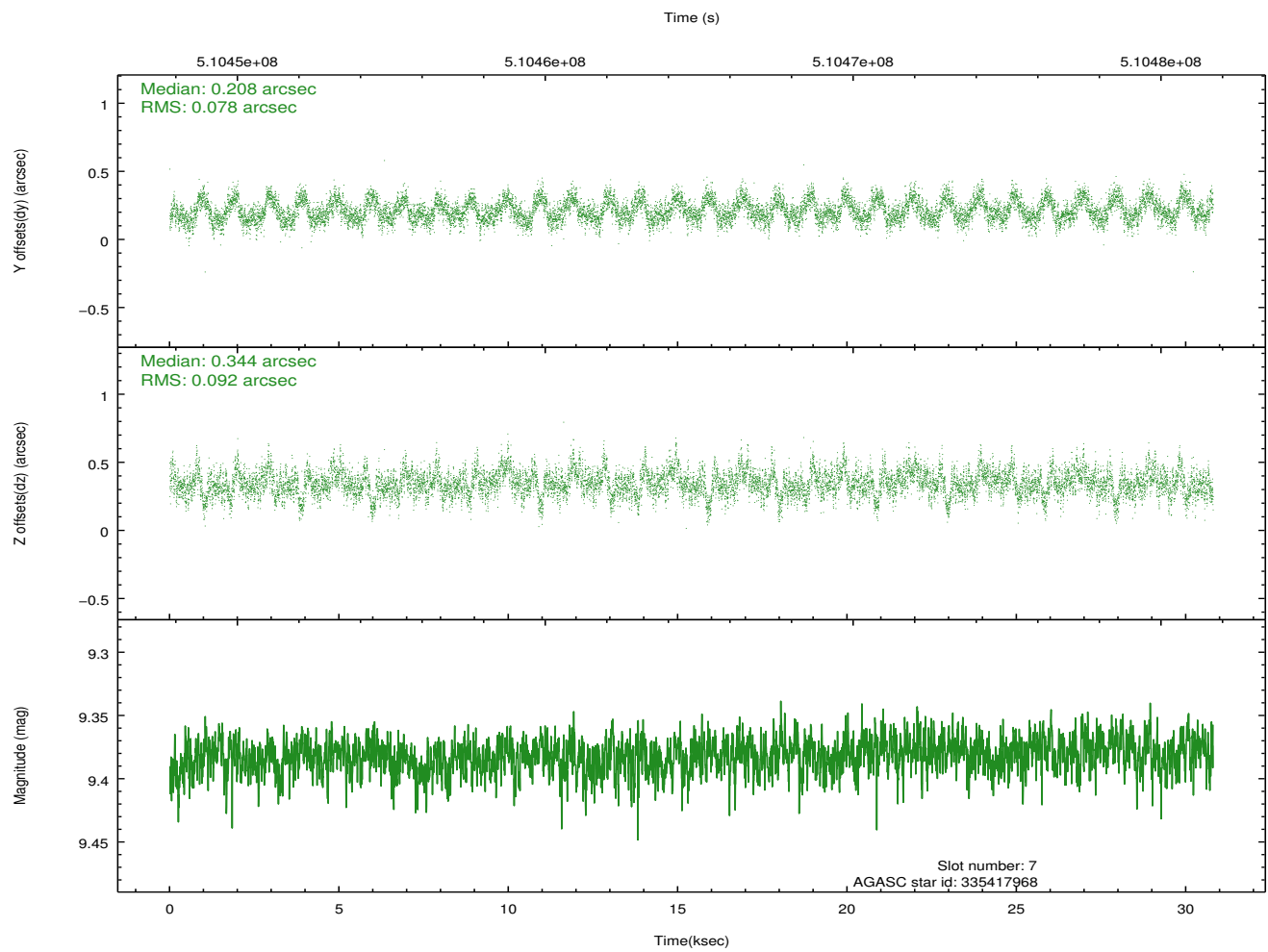
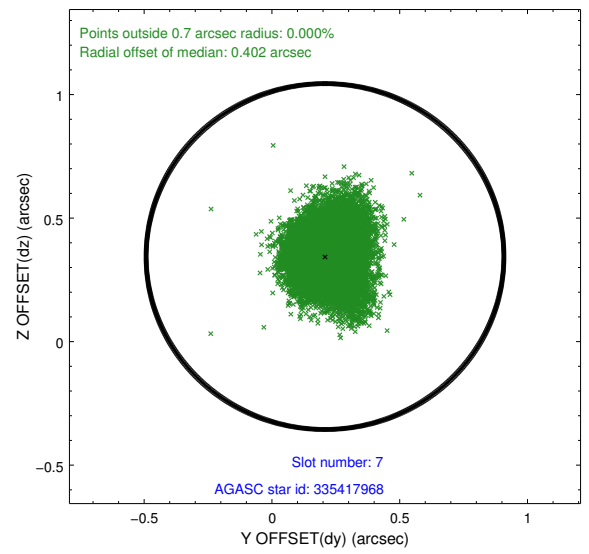
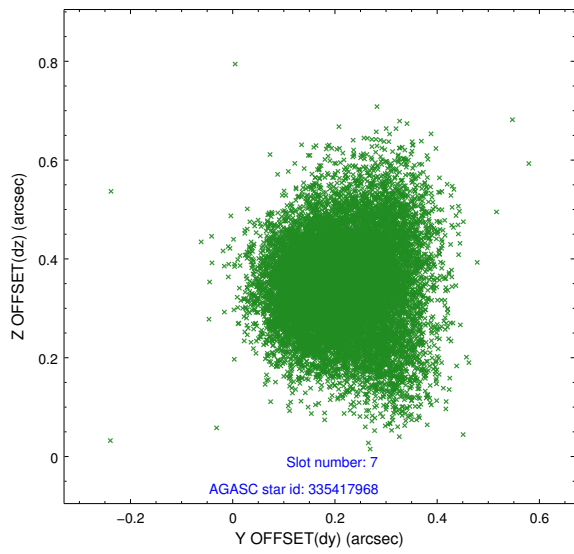
Time (s)



2.4.4 Slot 6

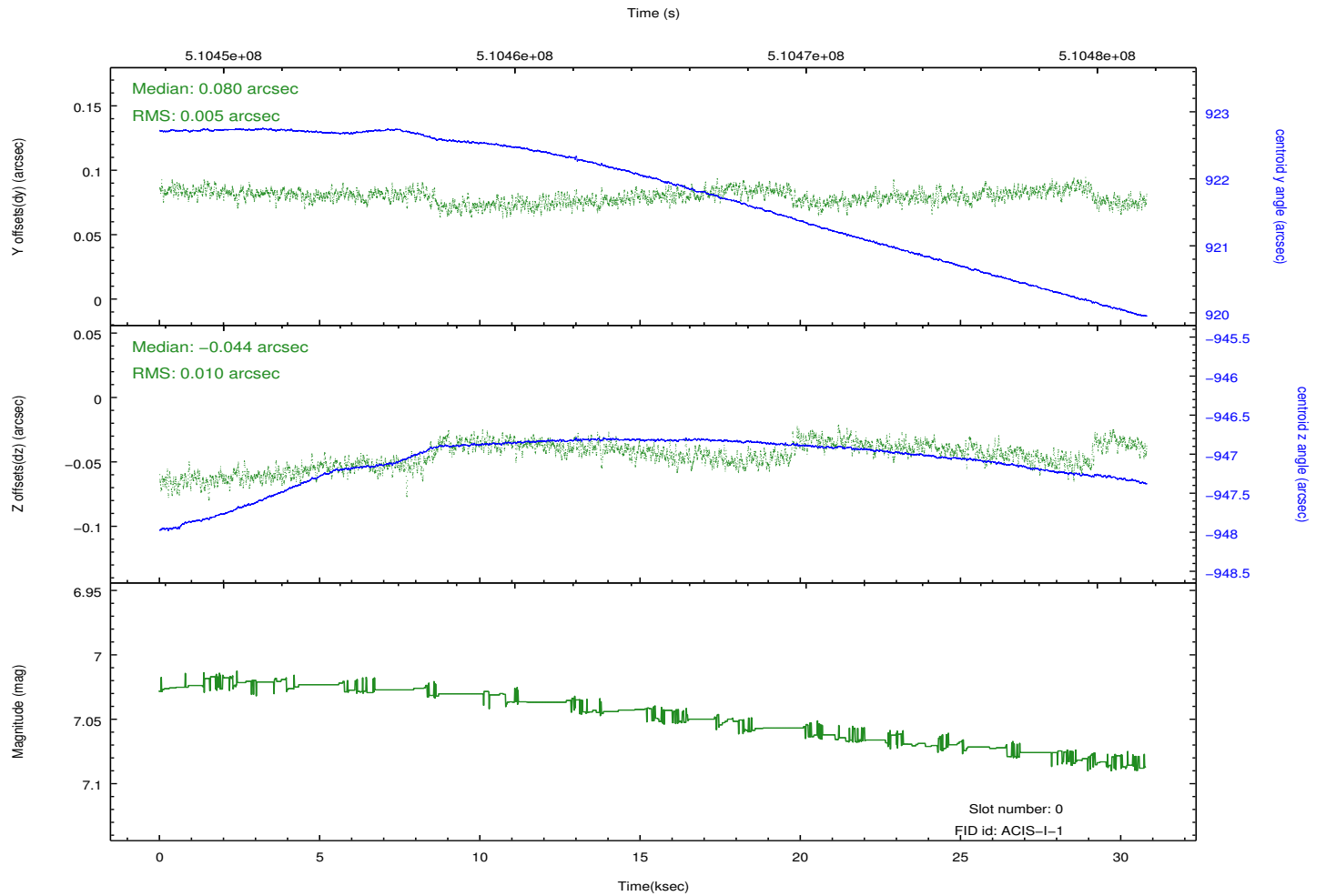
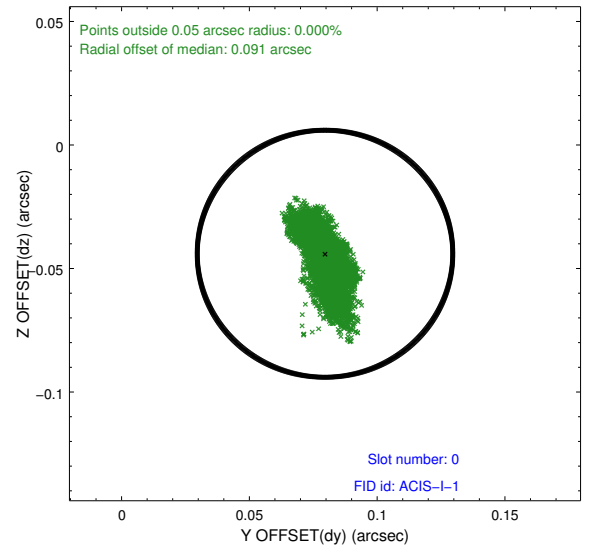
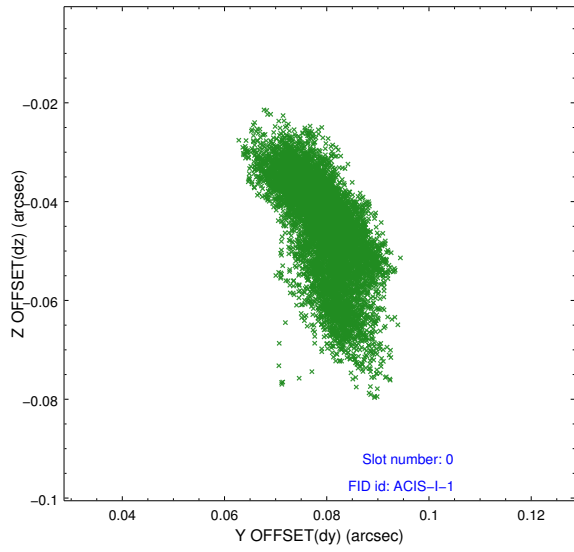


2.4.5 Slot 7

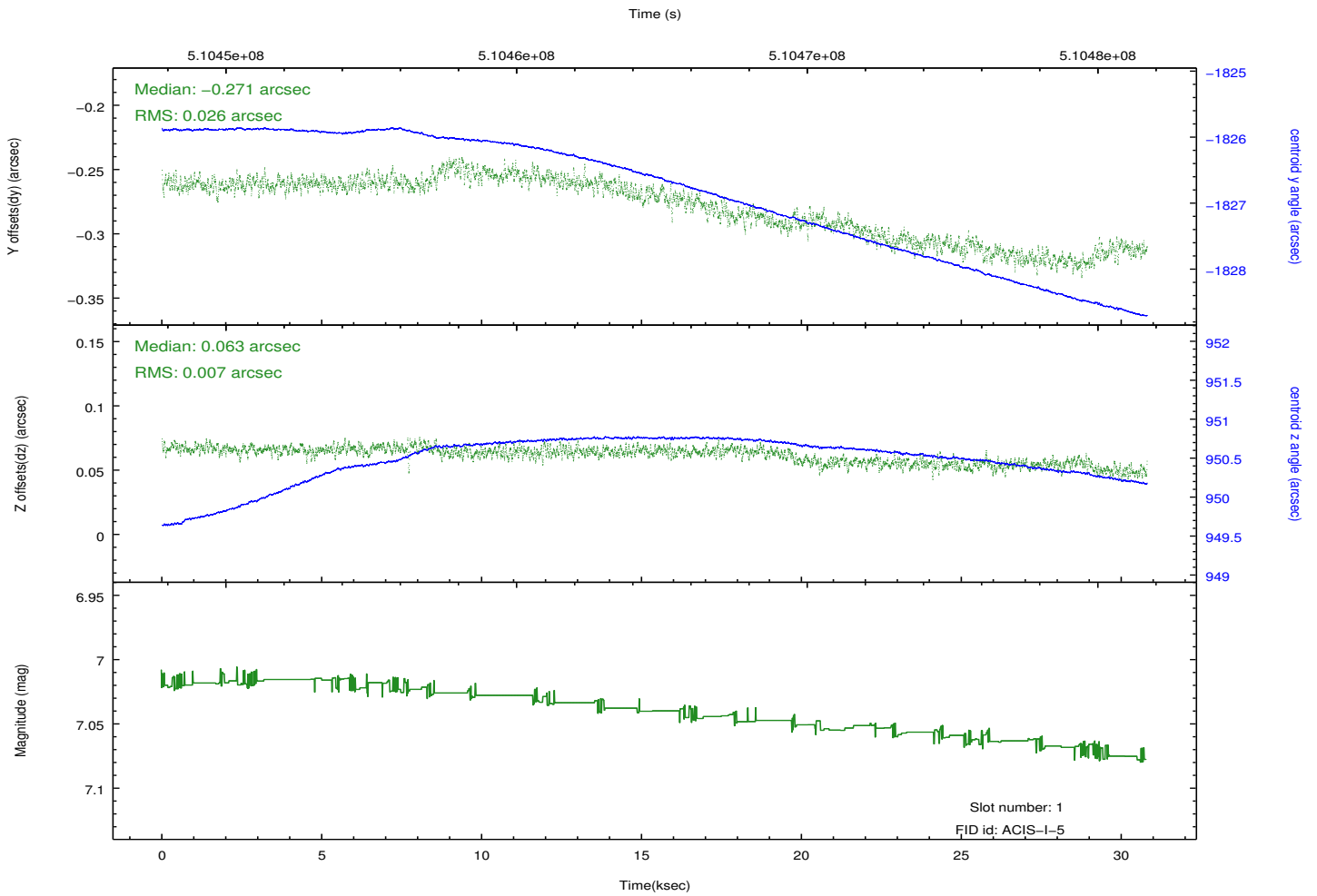
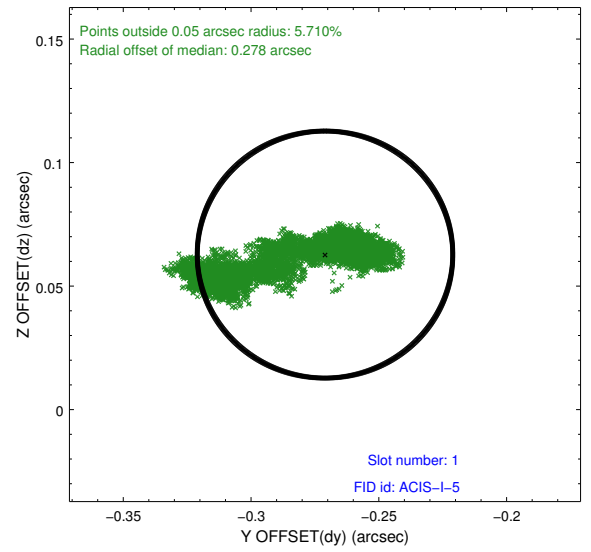
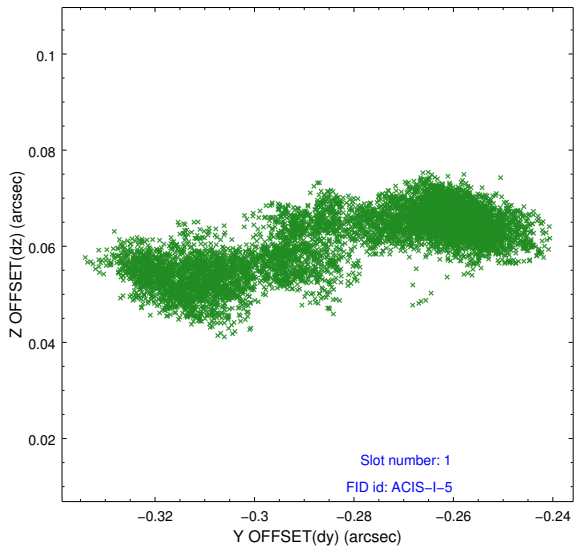


2.5 FID Slots

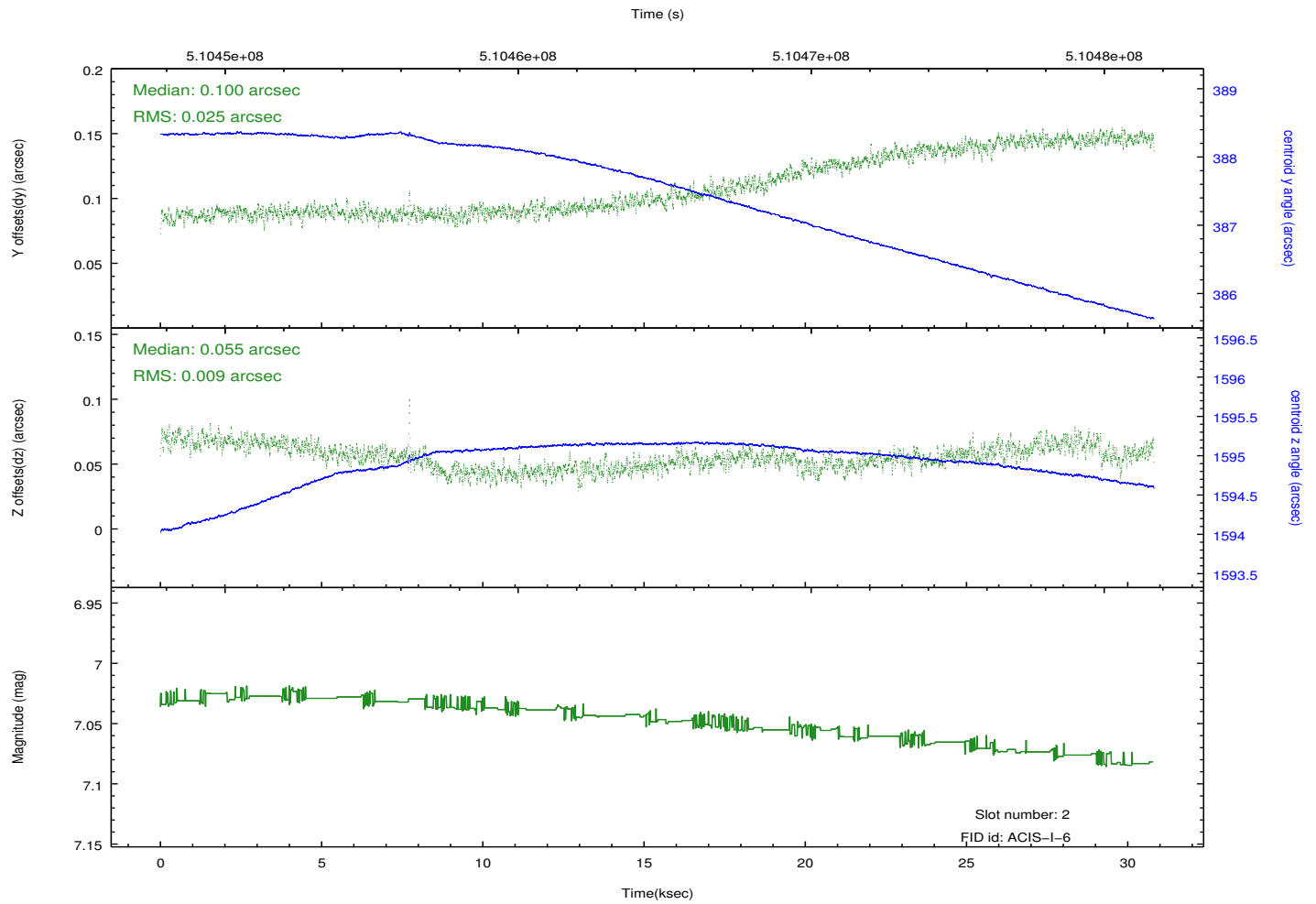
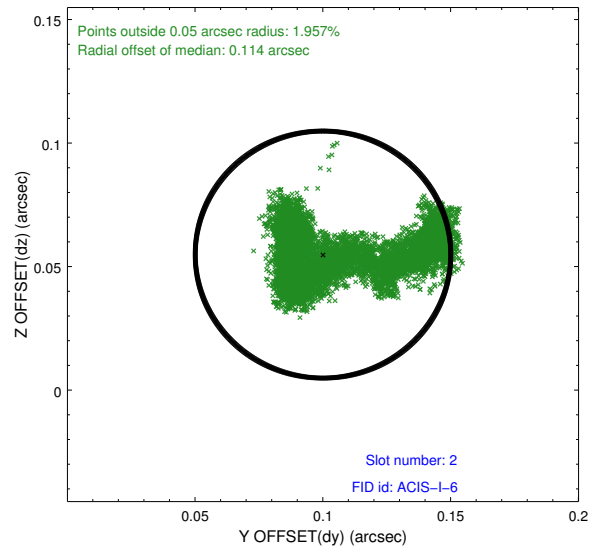
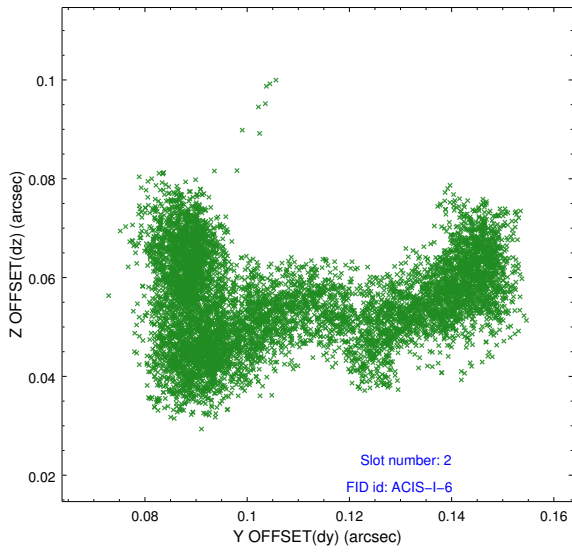
2.5.1 Slot 0



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	30.085500231385

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.