

V&V Reference Report

L2 ASCDS Version : 10.2.1

Observation 15306 - L2 Version 2
Chandra X-Ray Center

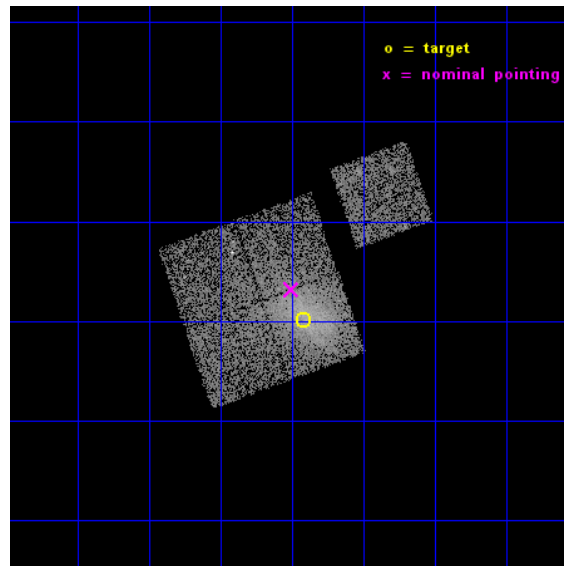
L2 Processing Date : Dec 10 2014

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

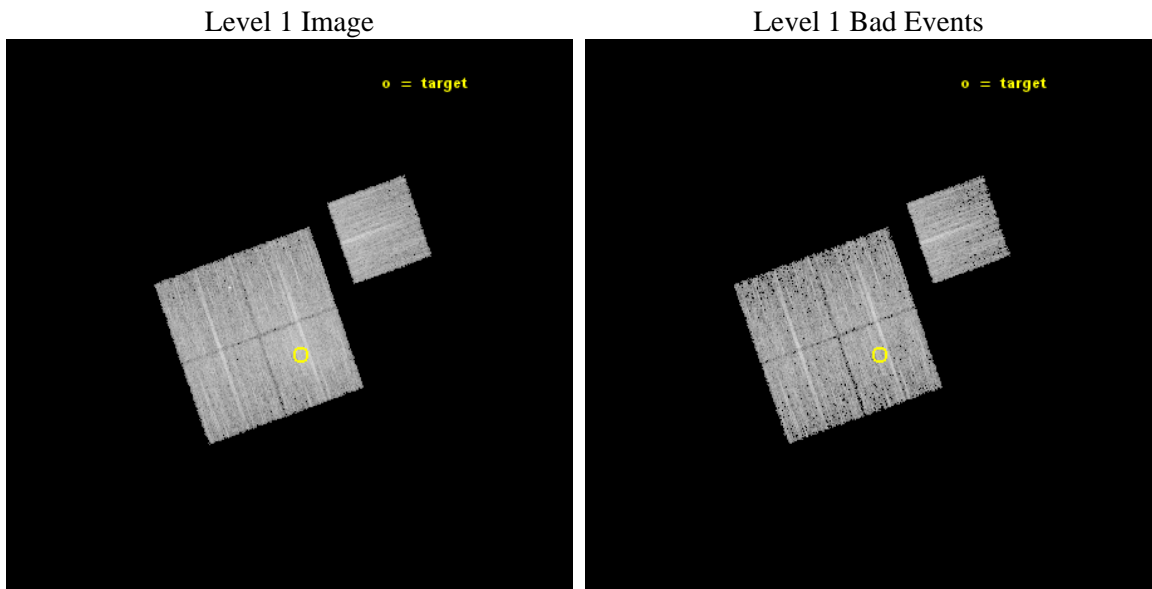
seq_num	801339	Sequence number
obs_id	15306	Observation id
title	Characterizing the Most Massive Clusters in the z	Proposal title
observer	Dr Stephen Murray	Principal investigator
object	G273.64+63.28	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	180.10625	Observer's specified target RA [deg]
dec_targ	3.335972	Observer's specified target Dec [deg]
ra_nom	180.12627677151	Nominal RA [deg]
dec_nom	3.3866012789404	Nominal Dec [deg]
roll_nom	70.46119489545	Nominal Roll [deg]
revision	2	Processing version of data
ontime	10079.895350099	Sum of GTIs [s]
livetime	9948.1940966386	Livetime [s]
ontime0	10082.913300455	Sum of GTIs [s]
ontime1	10082.954340458	Sum of GTIs [s]
ontime2	10082.995380461	Sum of GTIs [s]
ontime3	10079.895350099	Sum of GTIs [s]
ontime6	10079.731190085	Sum of GTIs [s]
l2events	34599	Number of level 2 events



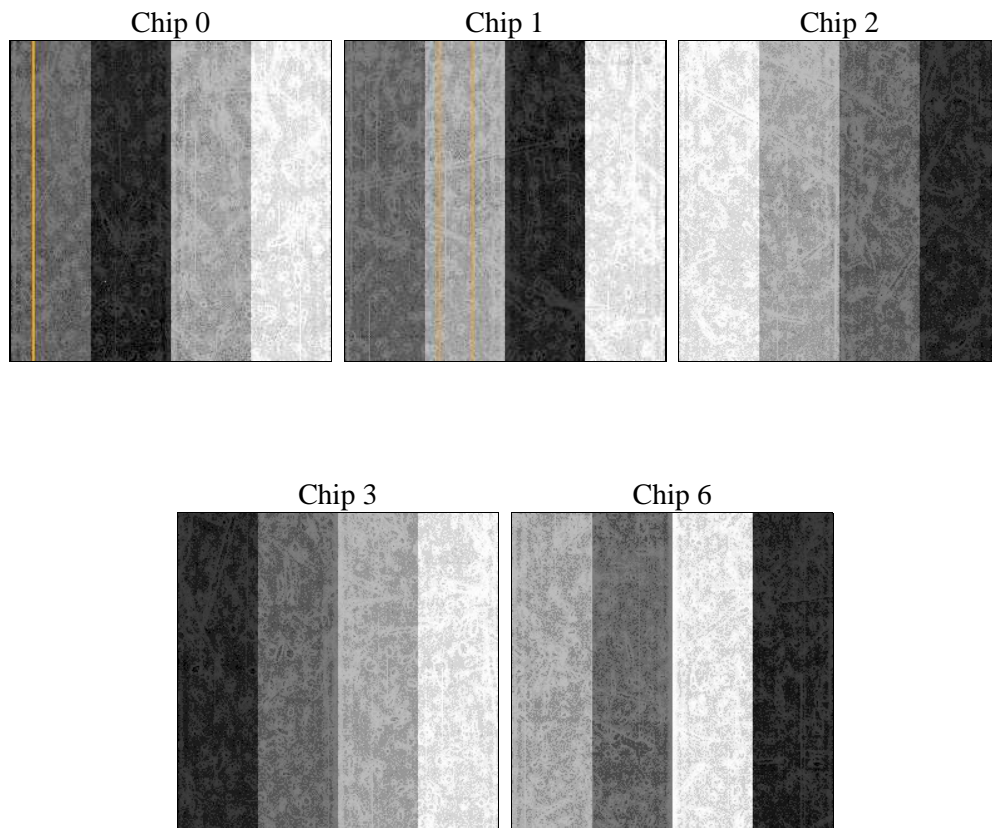
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	10079.895350099	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	10082.913300455	Sum of GTIs [s]
date	2014-12-10T06:20:17	Date and time of file creation	ontime1	10082.954340458	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	10082.995380461	Sum of GTIs [s]
			ontime3	10079.895350099	Sum of GTIs [s]
			ontime6	10079.731190085	Sum of GTIs [s]
			l1events	240700	Number of level 1 events

2.1.4 Events

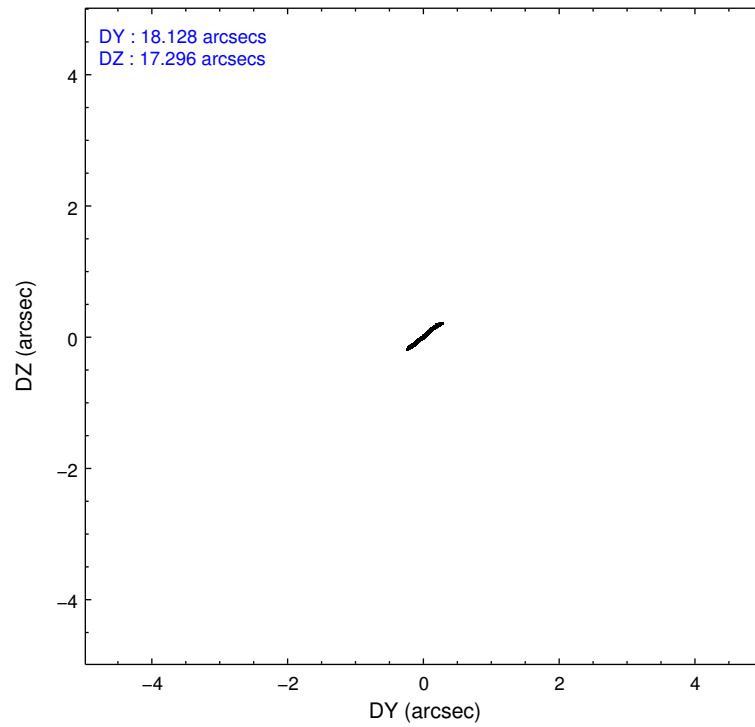
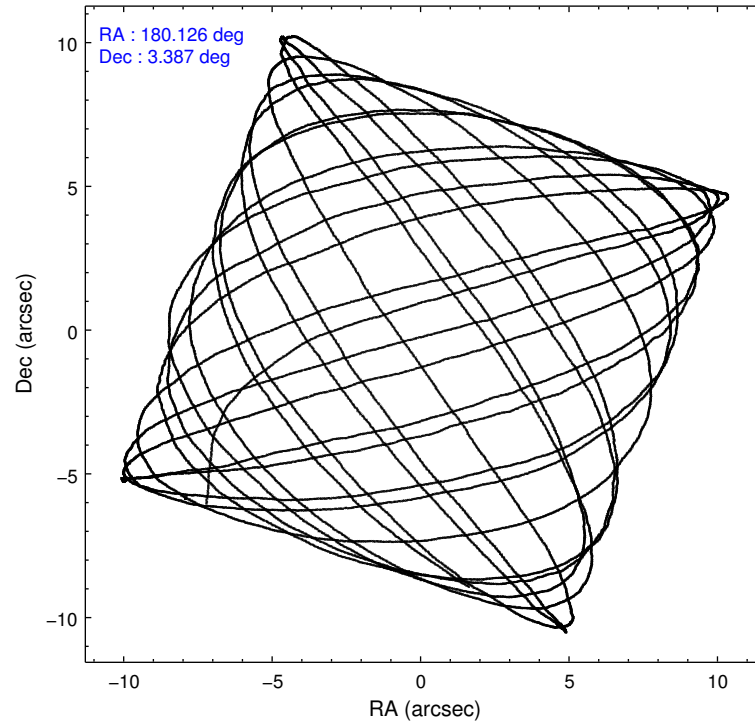
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	43479	45656	47303	56737	47525
rejected events	37349	38981	40846	42660	41697
rejected %	85%	85%	86%	75%	87%

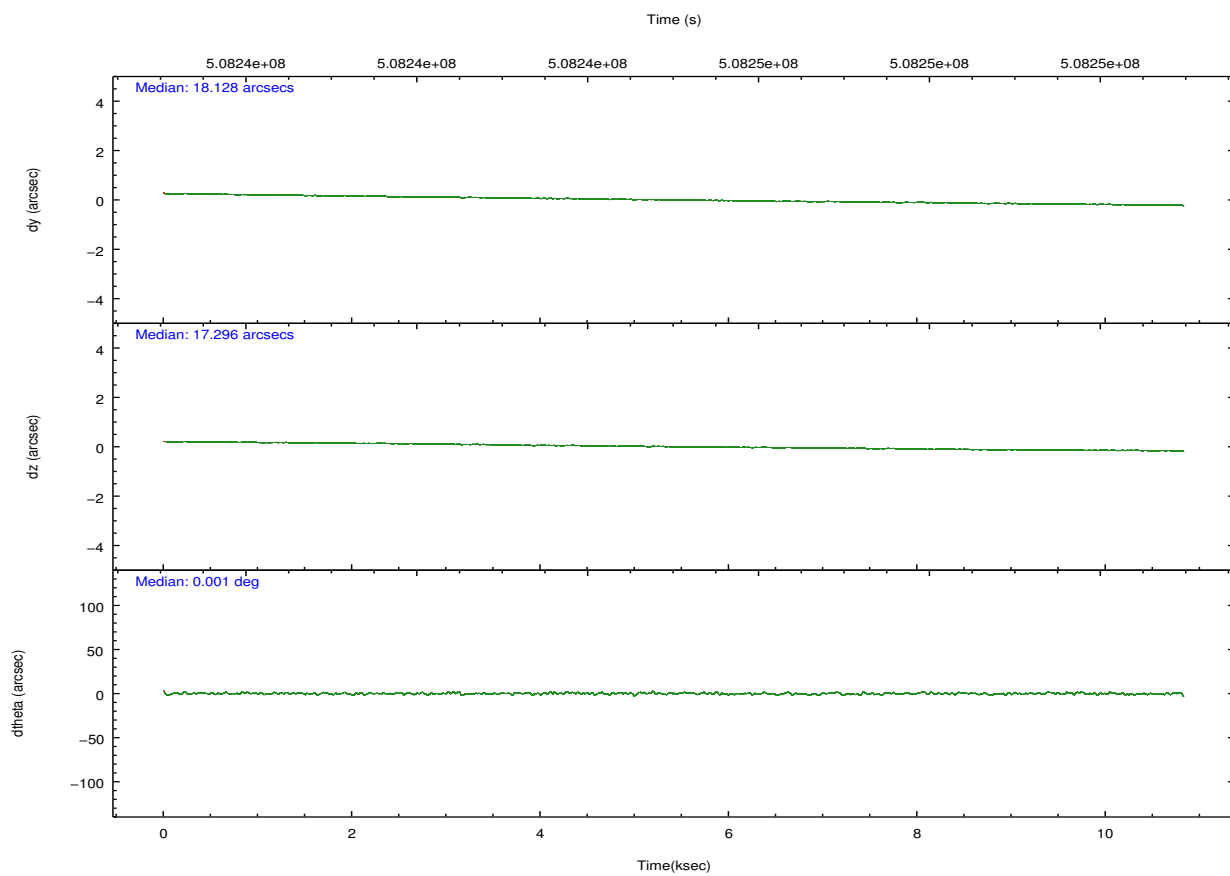
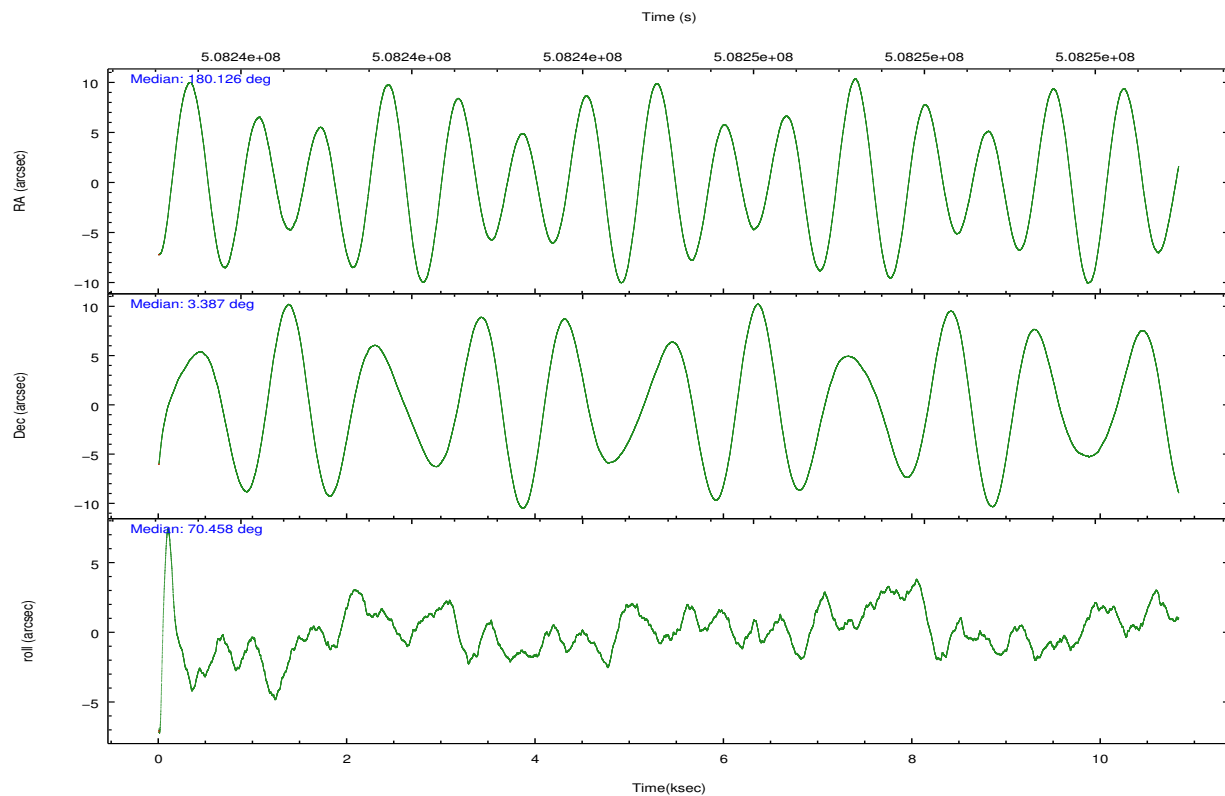
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	2408	2620	2800	9016	2012
	5%	5%	5%	15%	4%
grade 1 events	36	26	26	53	25
	0%	0%	0%	0%	0%
grade 2 events	1416	1423	1341	1980	1317
	3%	3%	2%	3%	2%
grade 3 events	609	606	587	847	581
	1%	1%	1%	1%	1%
grade 4 events	519	568	615	842	575
	1%	1%	1%	1%	1%
grade 5 events	2282	2371	2086	2604	2484
	5%	5%	4%	4%	5%
grade 6 events	1181	1462	1116	1401	1349
	2%	3%	2%	2%	2%
grade 7 events	35028	36580	38732	39994	39182
	80%	80%	81%	70%	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	180.131401	180.126276771512	CCD I2 on	Y	Y
[deg] Pointing Dec	3.359542	3.38660127894038	CCD I3 on	Y	Y
[deg] Pointing Roll	70.252225	70.46119489545001	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	-225.840463	-225.8433433320239	CCD S3 on	N	N
[mm] SIM translation stage offset	-7.752	-7.749109670905796	CCD S4 on	N	N
[s] Observation start time (MET)	508240418.184000	508239160.16384	CCD S5 on	N	N
Observation start date	2014-02-08T09:52:31	2014-02-08T09:32:40	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	508250418.184000	508251252.08951	On-chip summing requested	N	N
Observation end date	2014-02-08T12:39:11	2014-02-08T12:54:12	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



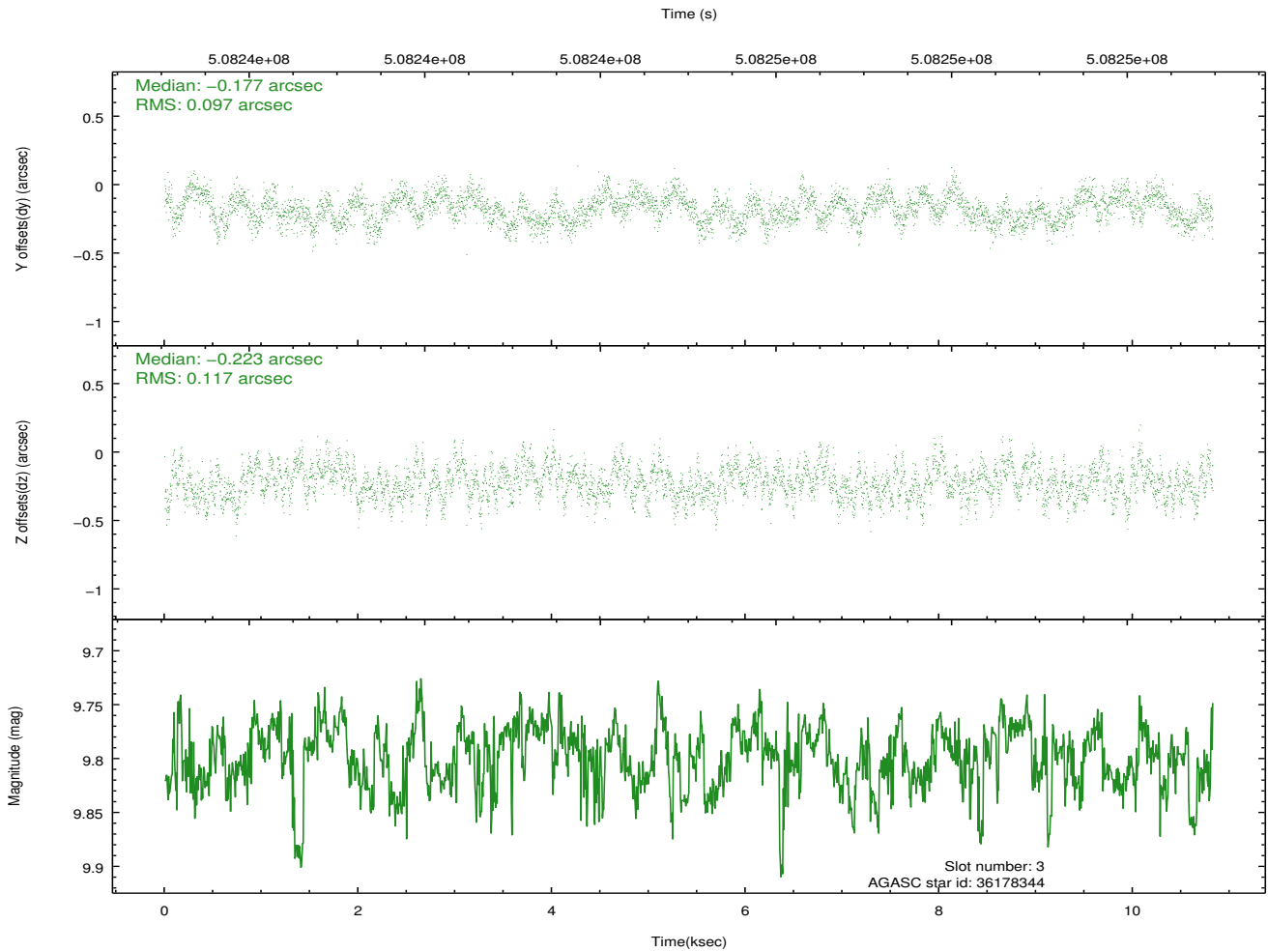
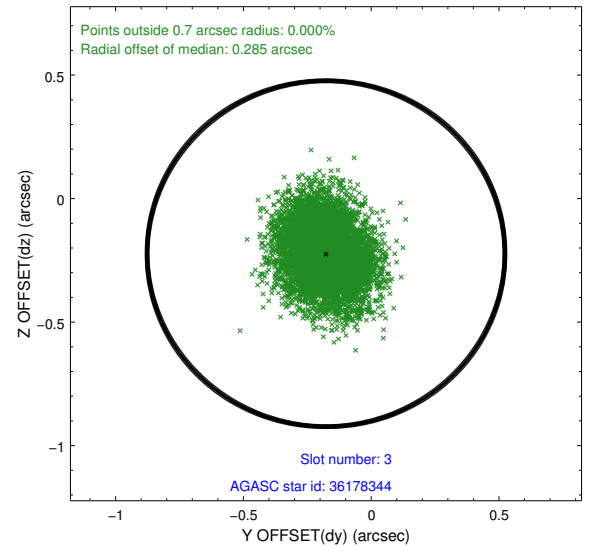
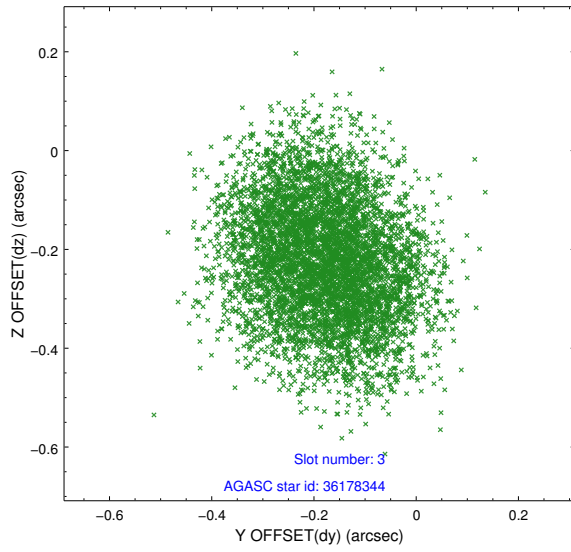


Slot Statistics

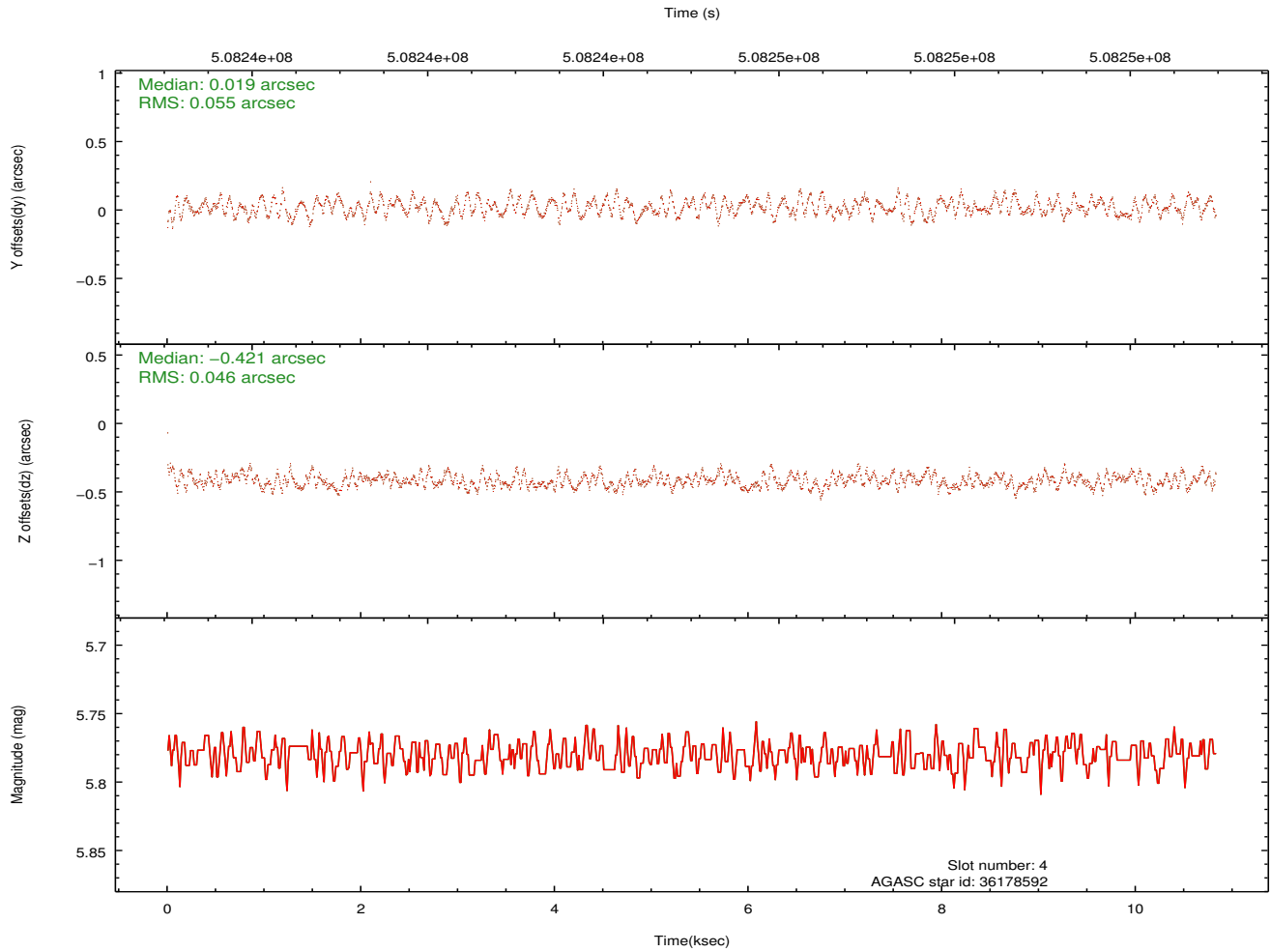
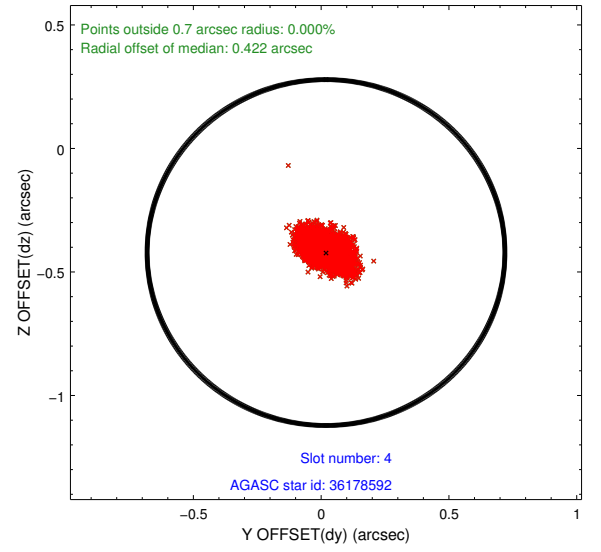
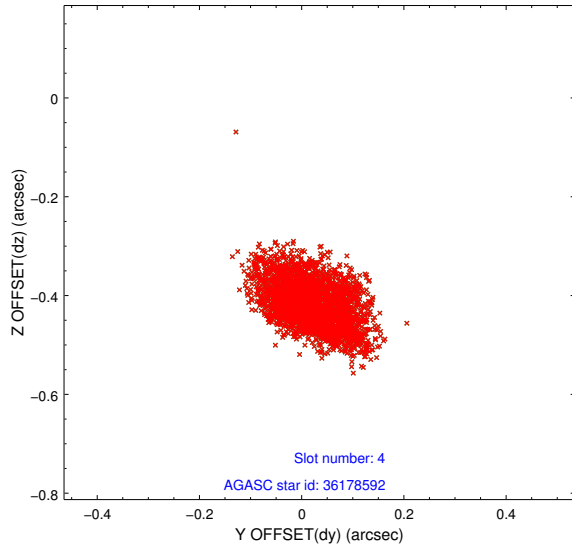
lot	status	used	id	mag	n_pts	med_dy	med_dz	drl	dr2	ra	dec	mean_y	mean_x
0	BAD		ACIS-I-1	7.19	976	0.366	0.047	0.017	0.028	0.000000	0.000000	921.25	-1000.17
1	FID		ACIS-I-5	7.18	2641	-0.203	-0.024	0.004	0.008	0.000000	0.000000	-1826.91	897.27
2	FID		ACIS-I-6	7.20	2641	0.140	0.071	0.004	0.008	0.000000	0.000000	386.33	1542.25
3	GUIDE	used	36178344	9.80	5274	-0.177	-0.223	0.165	0.255	179.664826	3.970826	1504.76	2321.28
4	BAD	used	36178592	5.78	2642	0.019	-0.421	0.077	0.124	179.558038	3.482007	-280.43	2088.75
5	GUIDE	used	36179496	9.03	5280	-0.061	0.256	0.107	0.175	179.348534	3.050231	-1998.28	2273.86
6	GUIDE	used	36185320	9.18	5279	0.232	-0.044	0.117	0.187	179.866360	2.888914	-1917.18	324.96
7	GUIDE	used	37094120	7.95	5281	-0.001	0.213	0.068	0.109	180.291928	3.632326	1118.25	-209.74

2.4 Star Slots

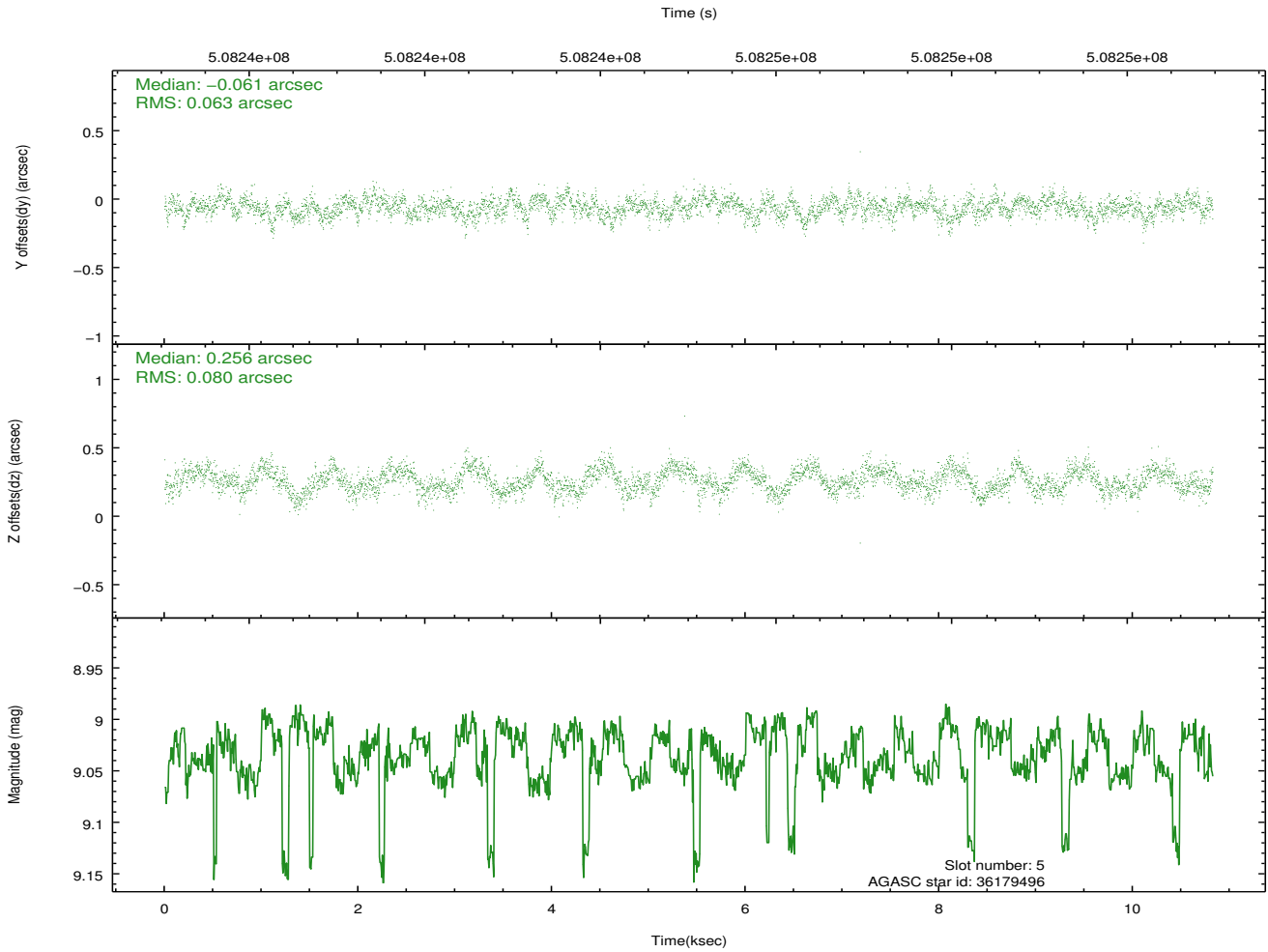
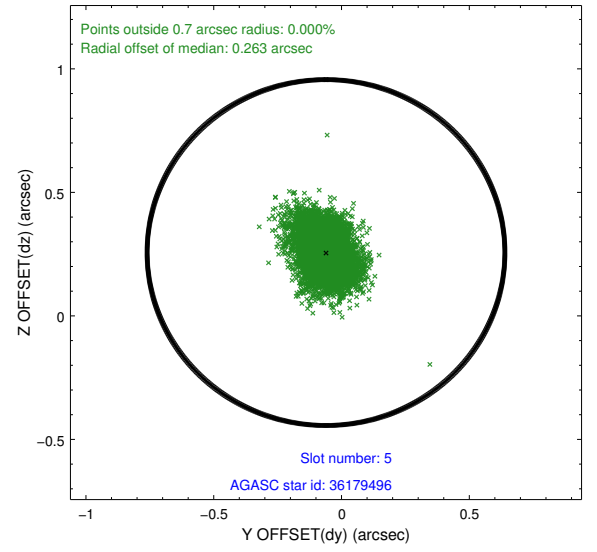
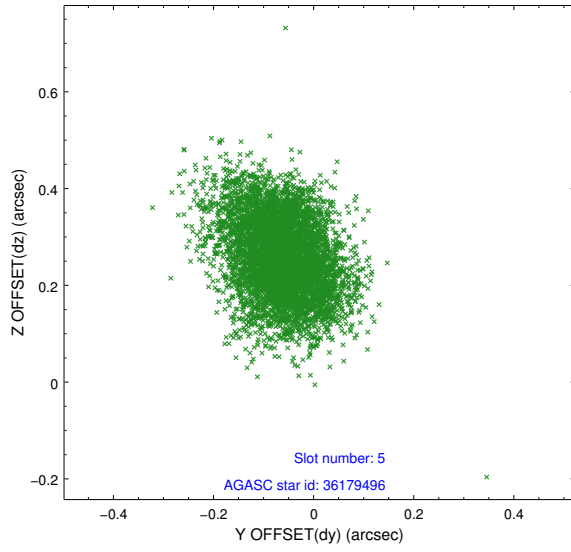
2.4.1 Slot 3



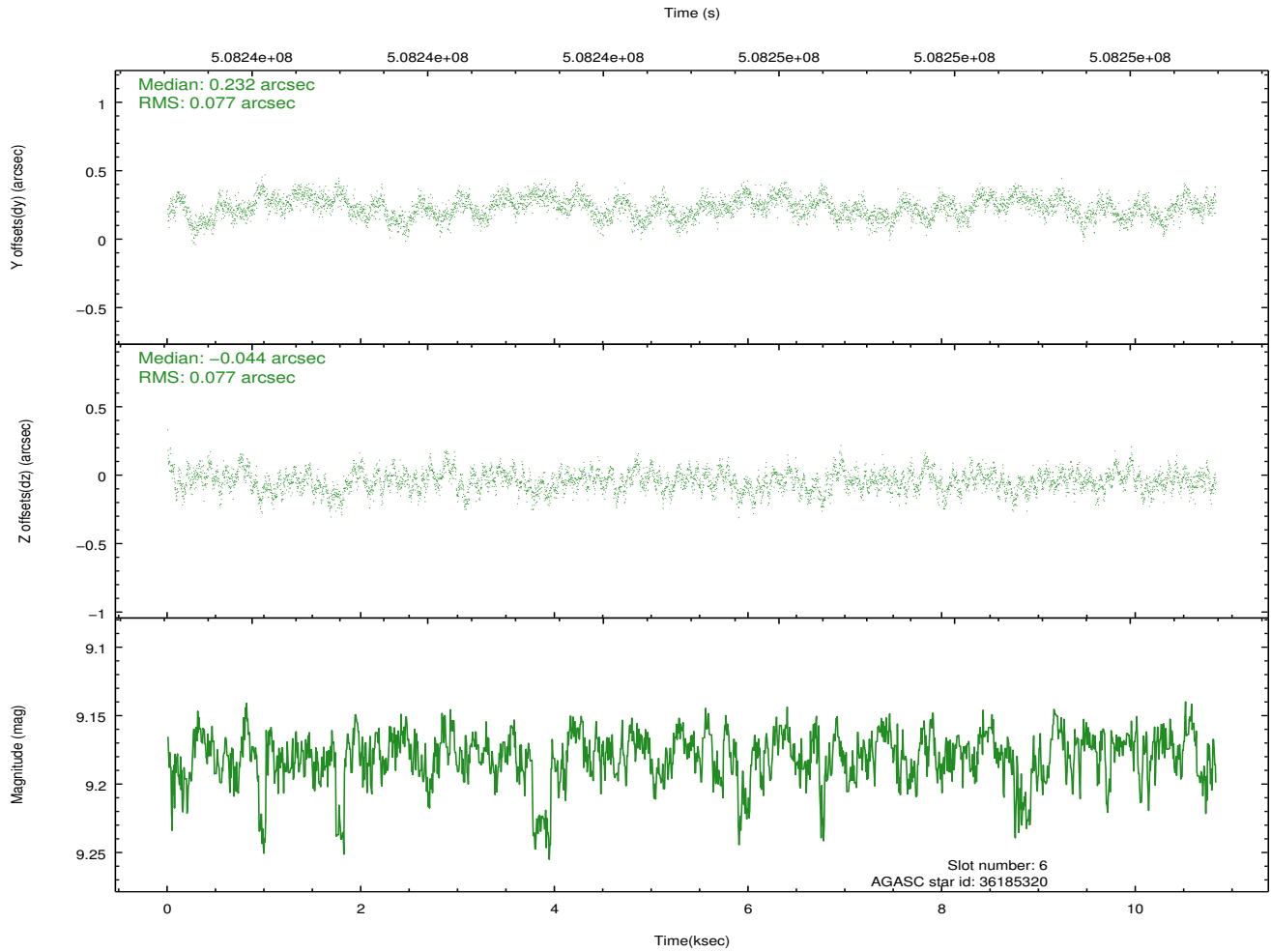
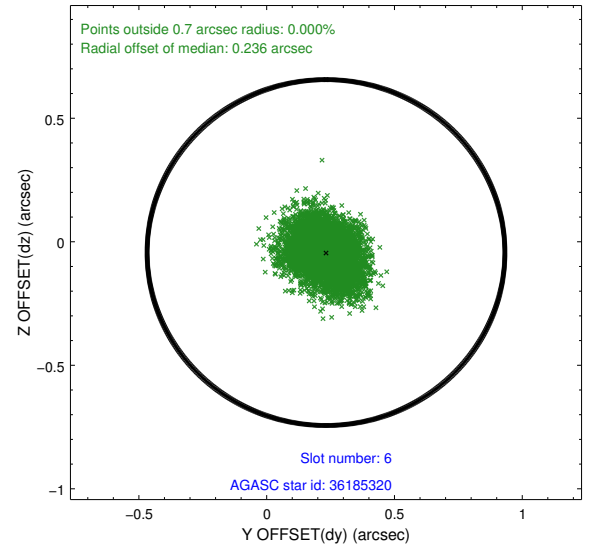
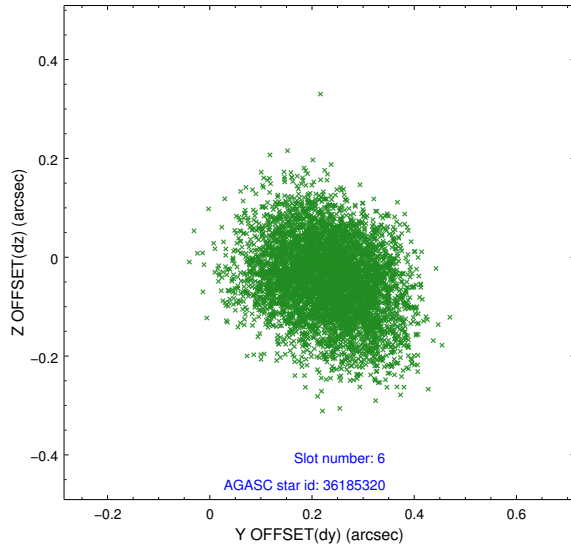
2.4.2 Slot 4



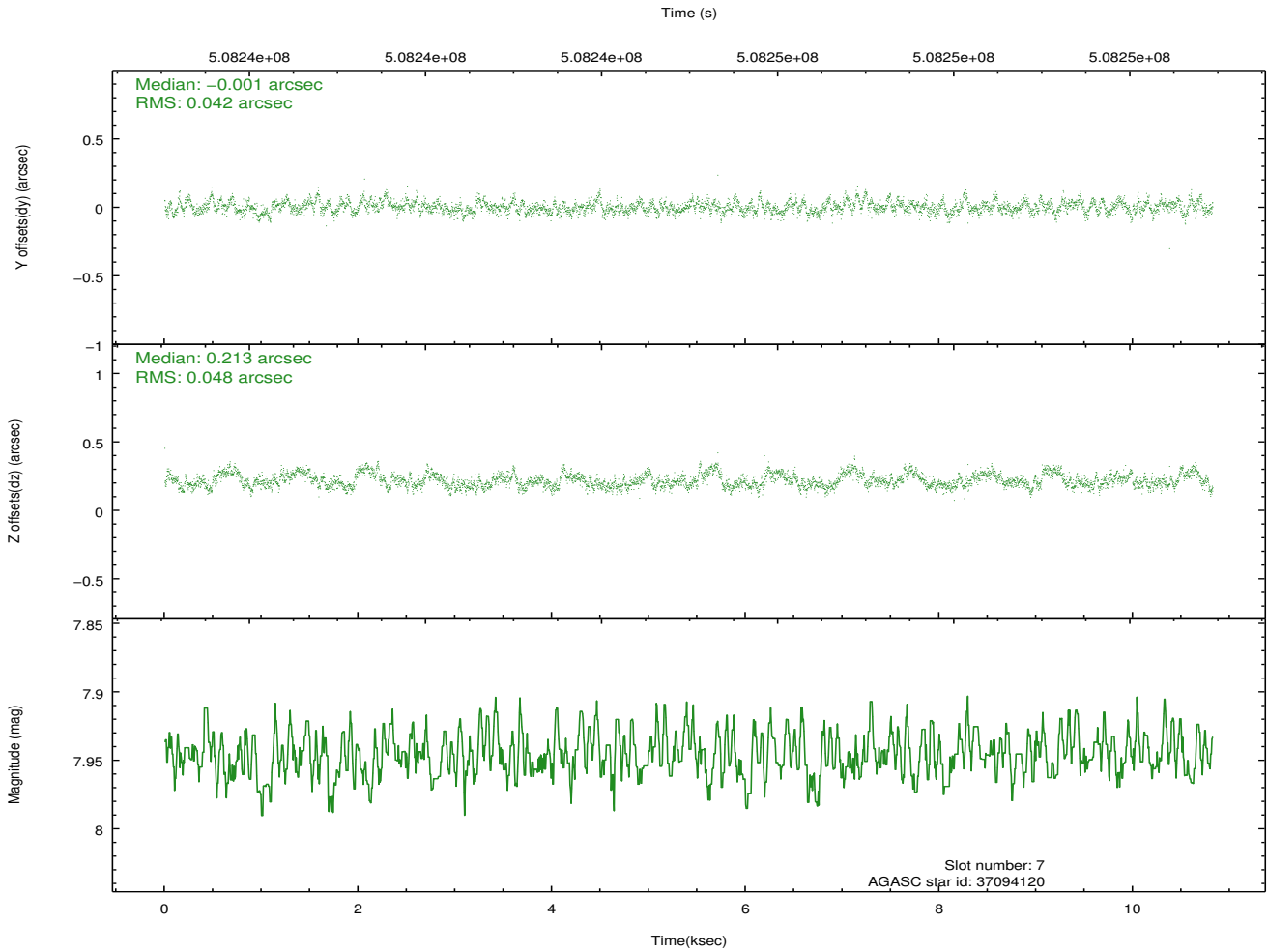
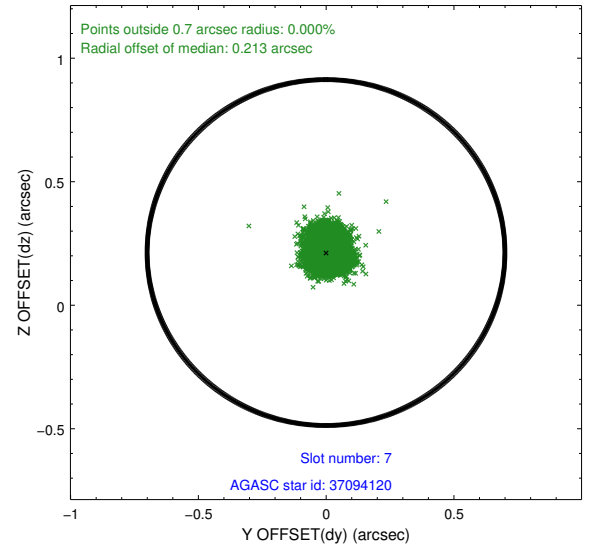
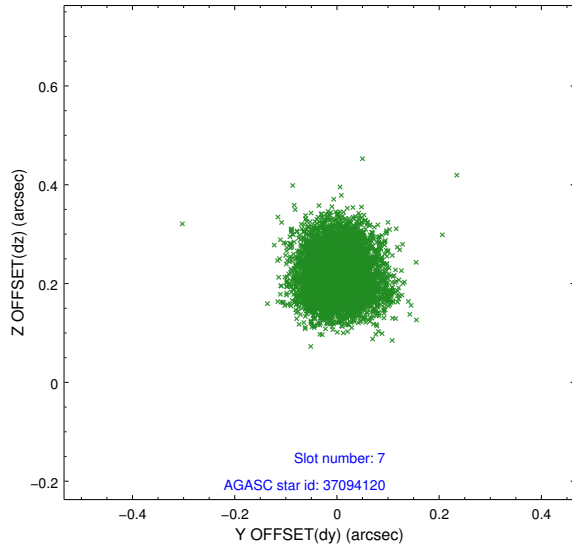
2.4.3 Slot 5



2.4.4 Slot 6

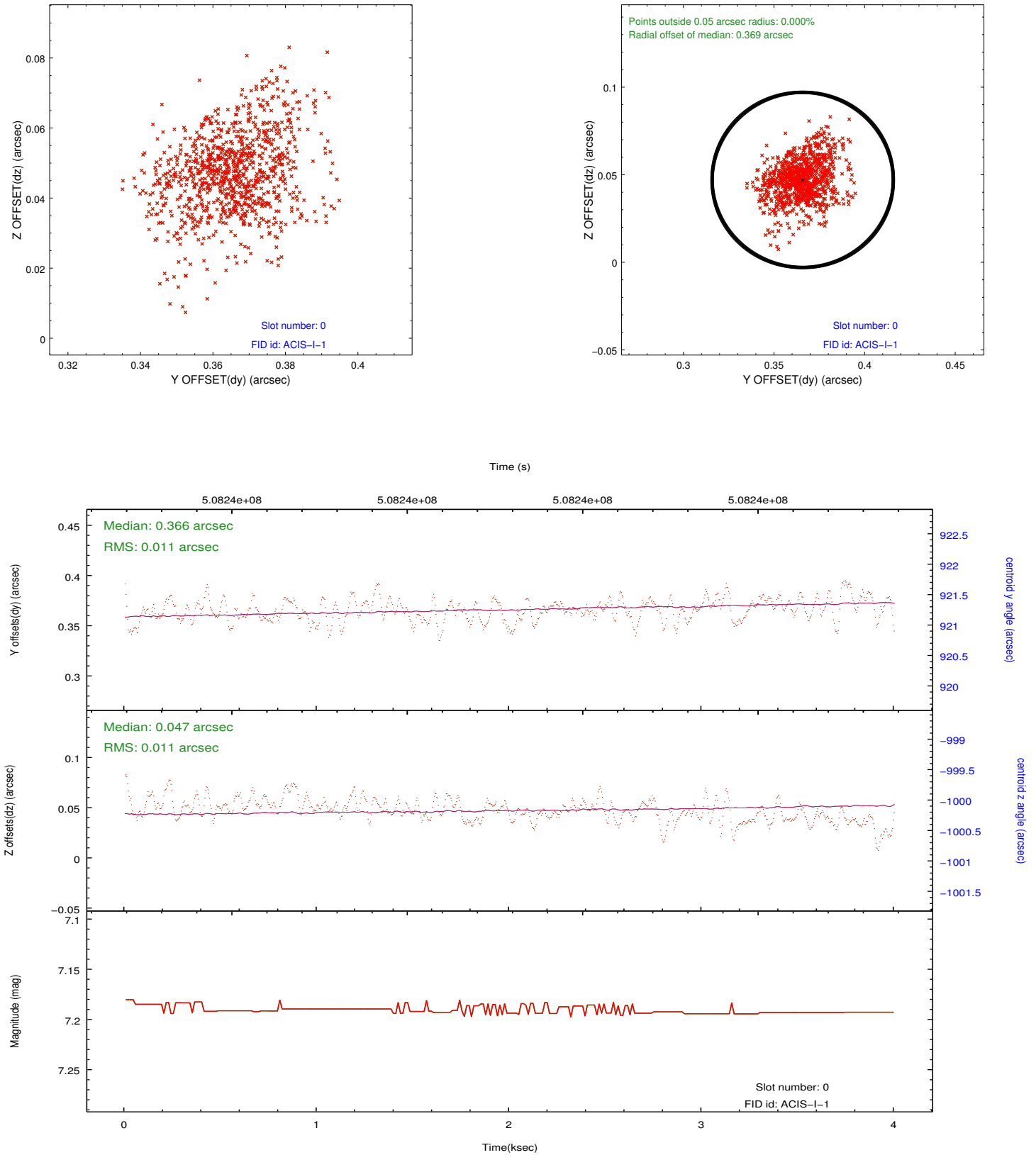


2.4.5 Slot 7

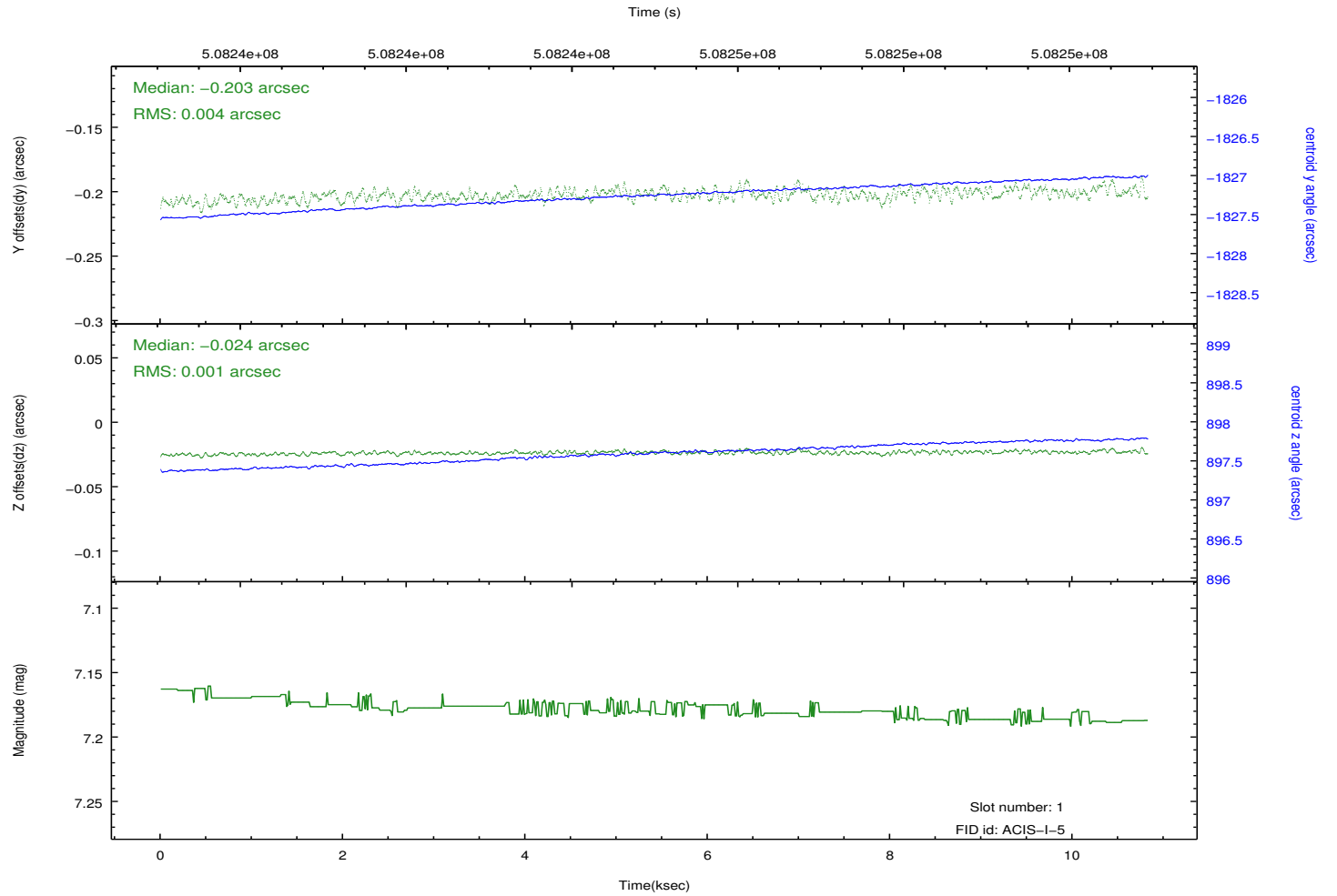
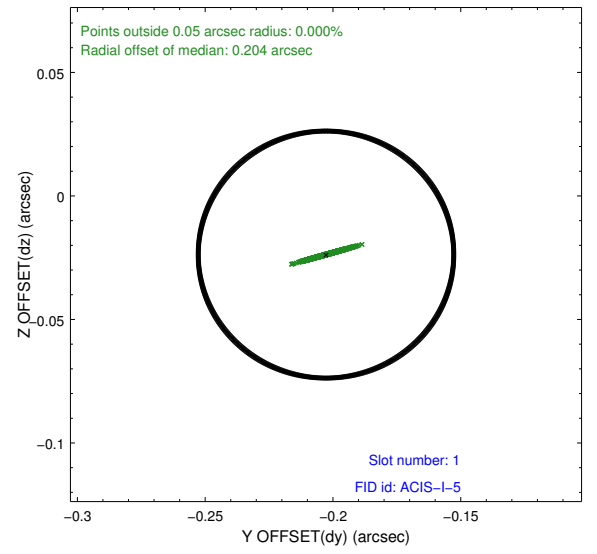
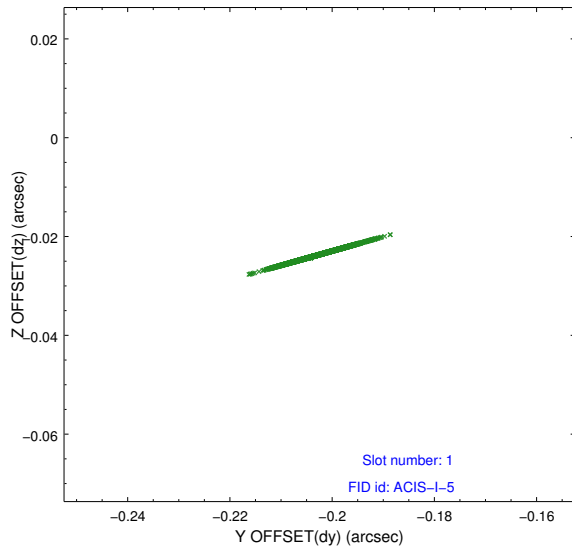


2.5 FID Slots

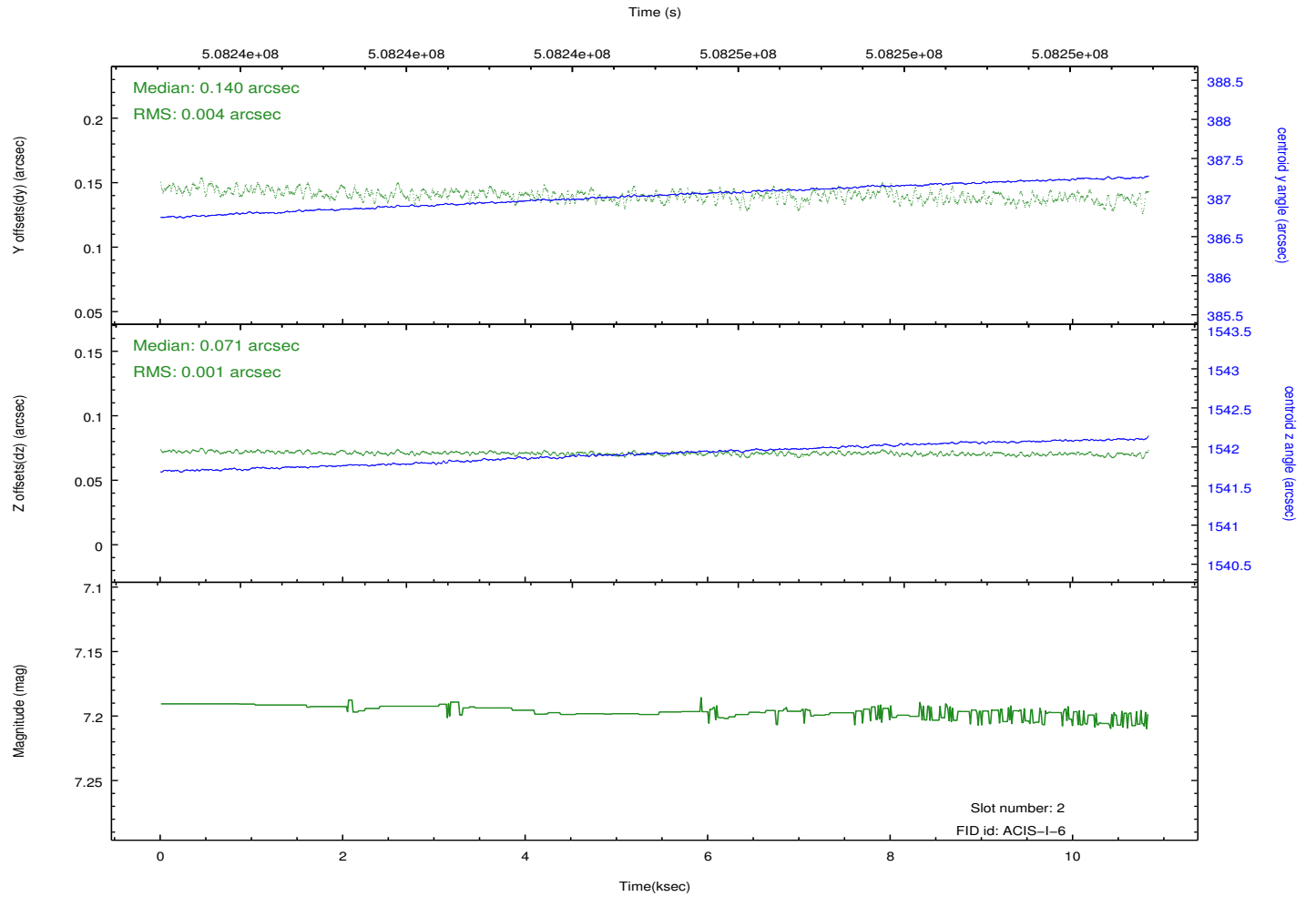
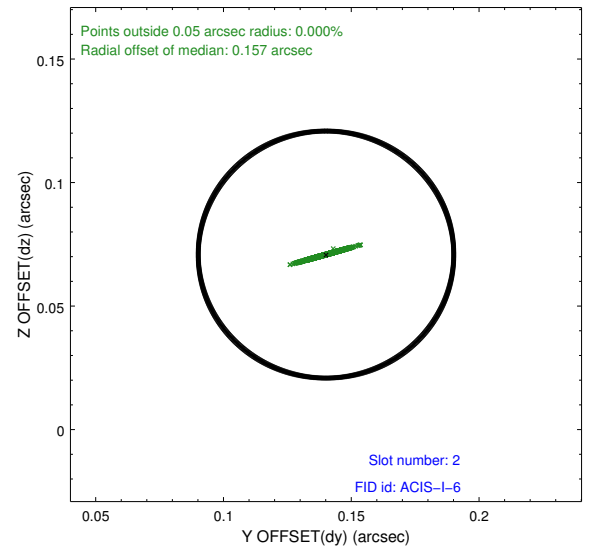
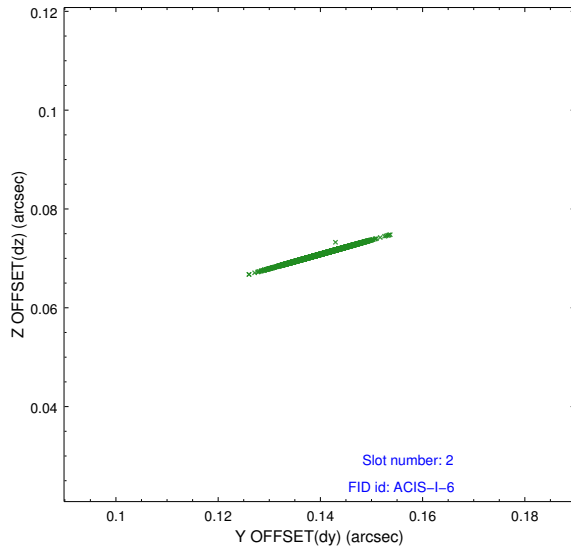
2.5.1 Slot 0



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	10.079895350099

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.