

V&V Reference Report

L2 ASCDS Version : 10

Observation 15152 - L2 Version 2
Chandra X-Ray Center

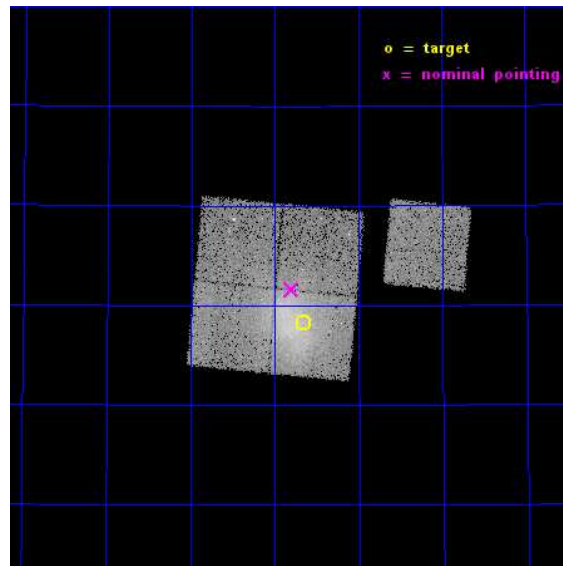
L2 Processing Date : Dec 3 2014

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

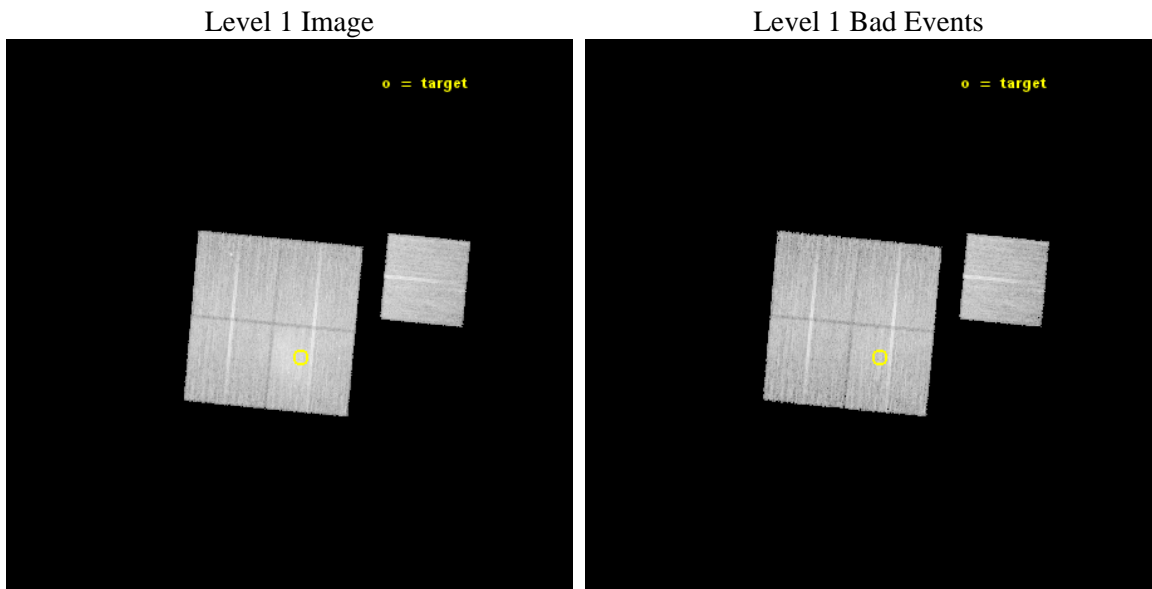
seq_num	801280	Sequence number
obs_id	15152	Observation id
title	Understanding the Nature and Environment of Radio Relics	Proposal
observer	Dr. Scott Randall	Principal investigator
object	CIZA J0107.7+5408	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	16.913854	Observer's specified target RA [deg]
dec_targ	54.137476	Observer's specified target Dec [deg]
ra_nom	16.950906225722	Nominal RA [deg]
dec_nom	54.194033883501	Nominal Dec [deg]
roll_nom	95.409251067125	Nominal Roll [deg]
revision	2	Processing version of data
ontime	23085.06729275	Sum of GTIs [s]
livetime	22783.443893591	Livetime [s]
ontime0	23081.803202391	Sum of GTIs [s]
ontime1	23084.985212743	Sum of GTIs [s]
ontime2	23085.026252747	Sum of GTIs [s]
ontime3	23085.06729275	Sum of GTIs [s]
ontime6	23084.903132737	Sum of GTIs [s]
l2events	88906	Number of level 2 events



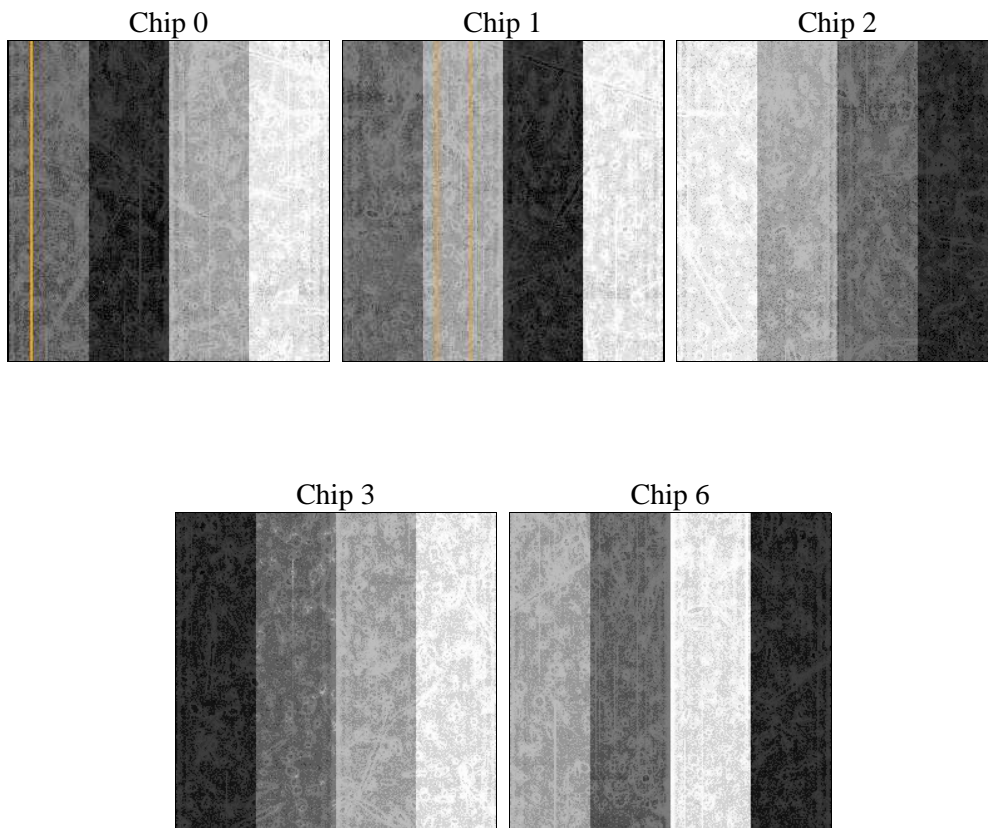
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	23000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	23085.06729275	Sum of GTIs [s]
caldbver	4.6.4	 	ontime0	23081.803202391	Sum of GTIs [s]
date	2014-12-04T01:42:35	Date and time of file creation	ontime1	23084.985212743	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	23085.026252747	Sum of GTIs [s]
			ontime3	23085.06729275	Sum of GTIs [s]
			ontime6	23084.903132737	Sum of GTIs [s]
			l1events	562327	Number of level 1 events

2.1.4 Events

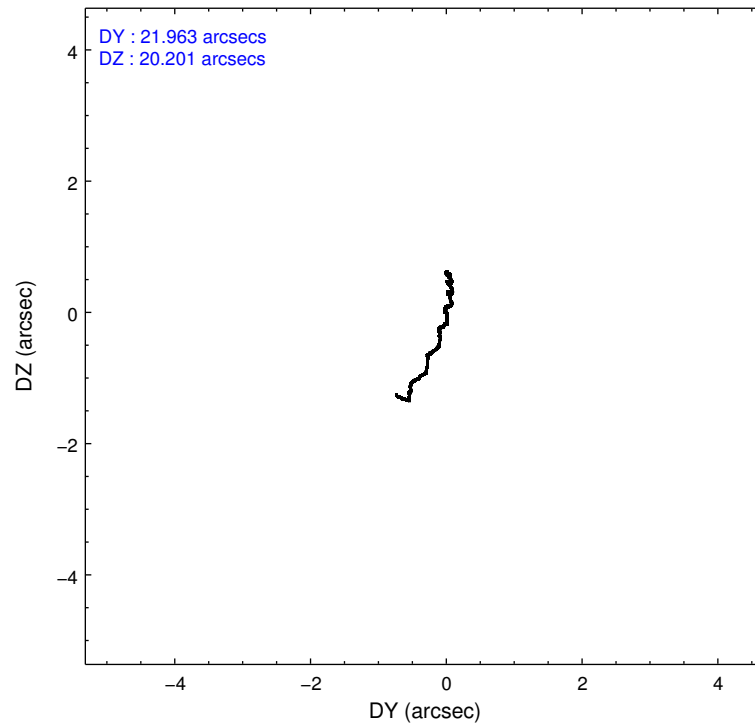
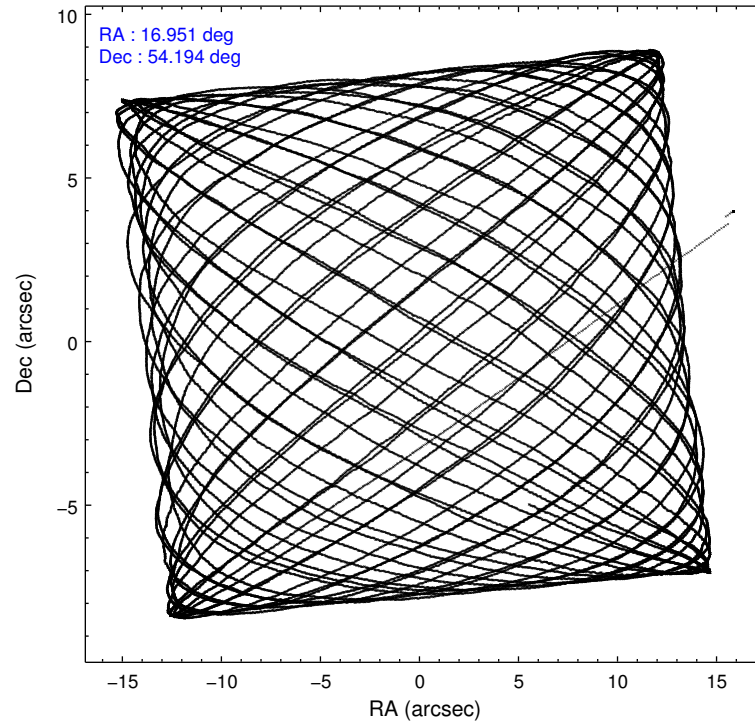
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	101621	104743	110242	136581	109140
rejected events	87279	84959	95672	97495	95829
rejected %	85%	81%	86%	71%	87%

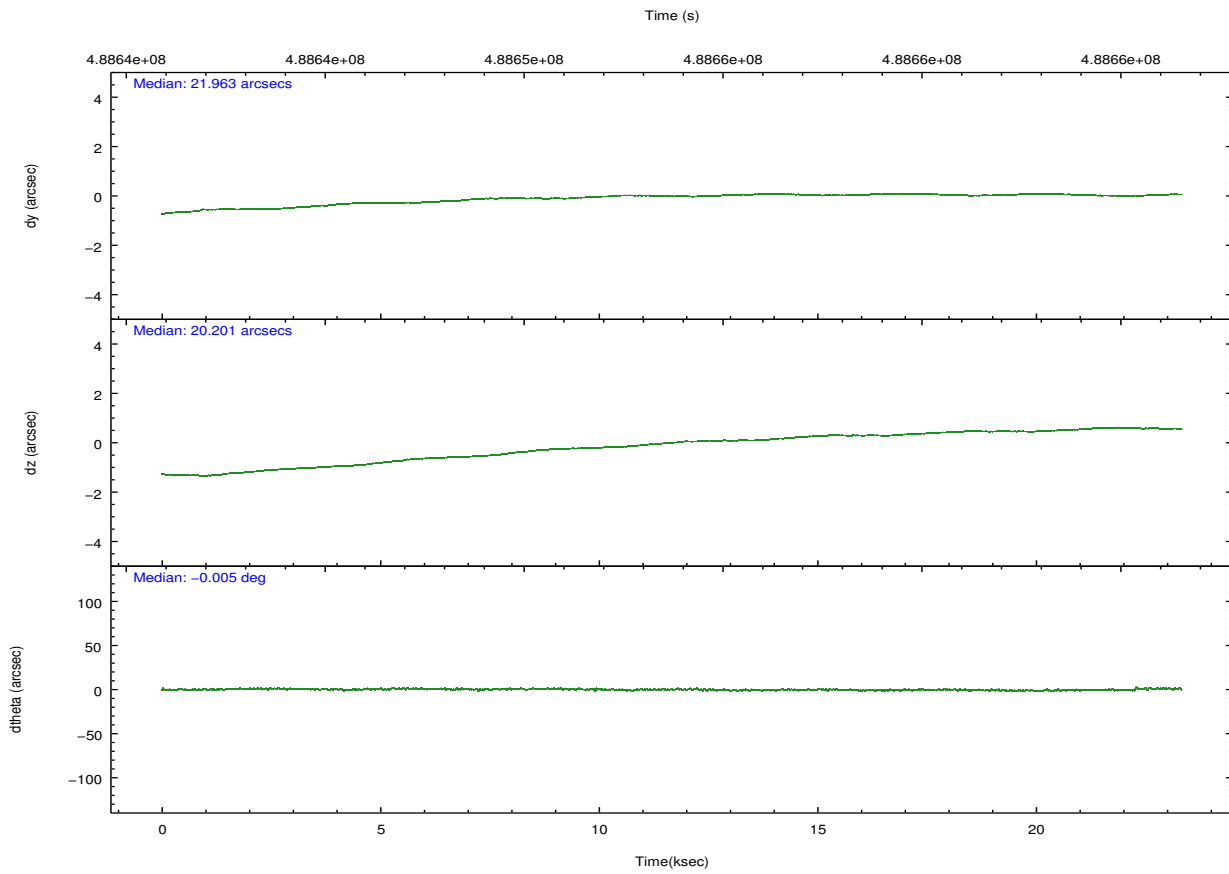
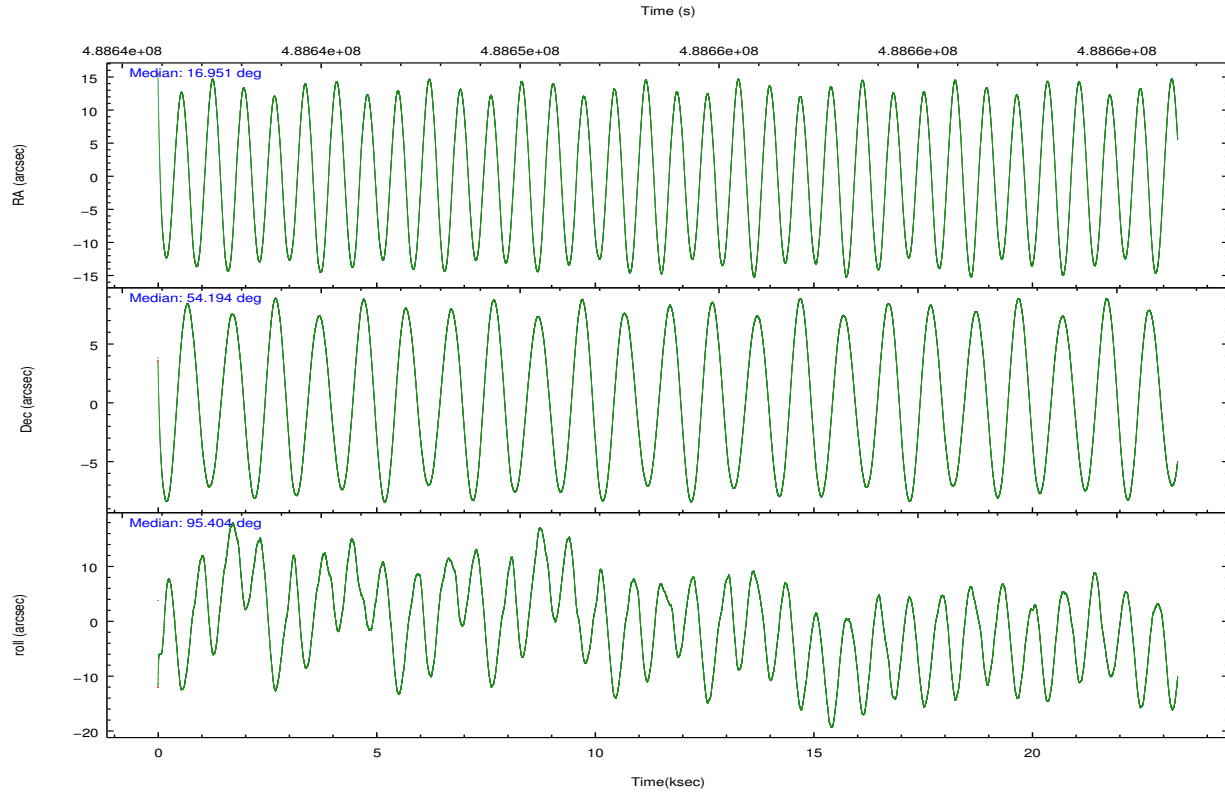
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	5508	9148	6003	25036	4558
	5%	8%	5%	18%	4%
grade 1 events	66	73	68	153	52
	0%	0%	0%	0%	0%
grade 2 events	3450	4222	3397	5871	3056
	3%	4%	3%	4%	2%
grade 3 events	1413	1638	1254	2289	1387
	1%	1%	1%	1%	1%
grade 4 events	1276	1566	1392	2298	1327
	1%	1%	1%	1%	1%
grade 5 events	4869	5299	4542	5817	5620
	4%	5%	4%	4%	5%
grade 6 events	2696	3211	2527	3597	2989
	2%	3%	2%	2%	2%
grade 7 events	82343	79586	91059	91520	90151
	81%	75%	82%	67%	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	16.978267	16.95090622572206	CCD I2 on	Y	Y
[deg] Pointing Dec	54.171702	54.19403388350074	CCD I3 on	Y	Y
[deg] Pointing Roll	95.178368	95.40925106712511	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	-230.842463	-230.8317448903189	CCD S3 on	N	N
[mm] SIM translation stage offset	-2.75	-2.760708112610757	CCD S4 on	N	N
[s] Observation start time (MET)	488642371.184000	488641350.76682	CCD S5 on	N	N
Observation start date	2013-06-26T13:58:24	2013-06-26T13:42:30	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	488665371.184000	488666236.74317	On-chip summing requested	N	N
Observation end date	2013-06-26T20:21:44	2013-06-26T20:37:16	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



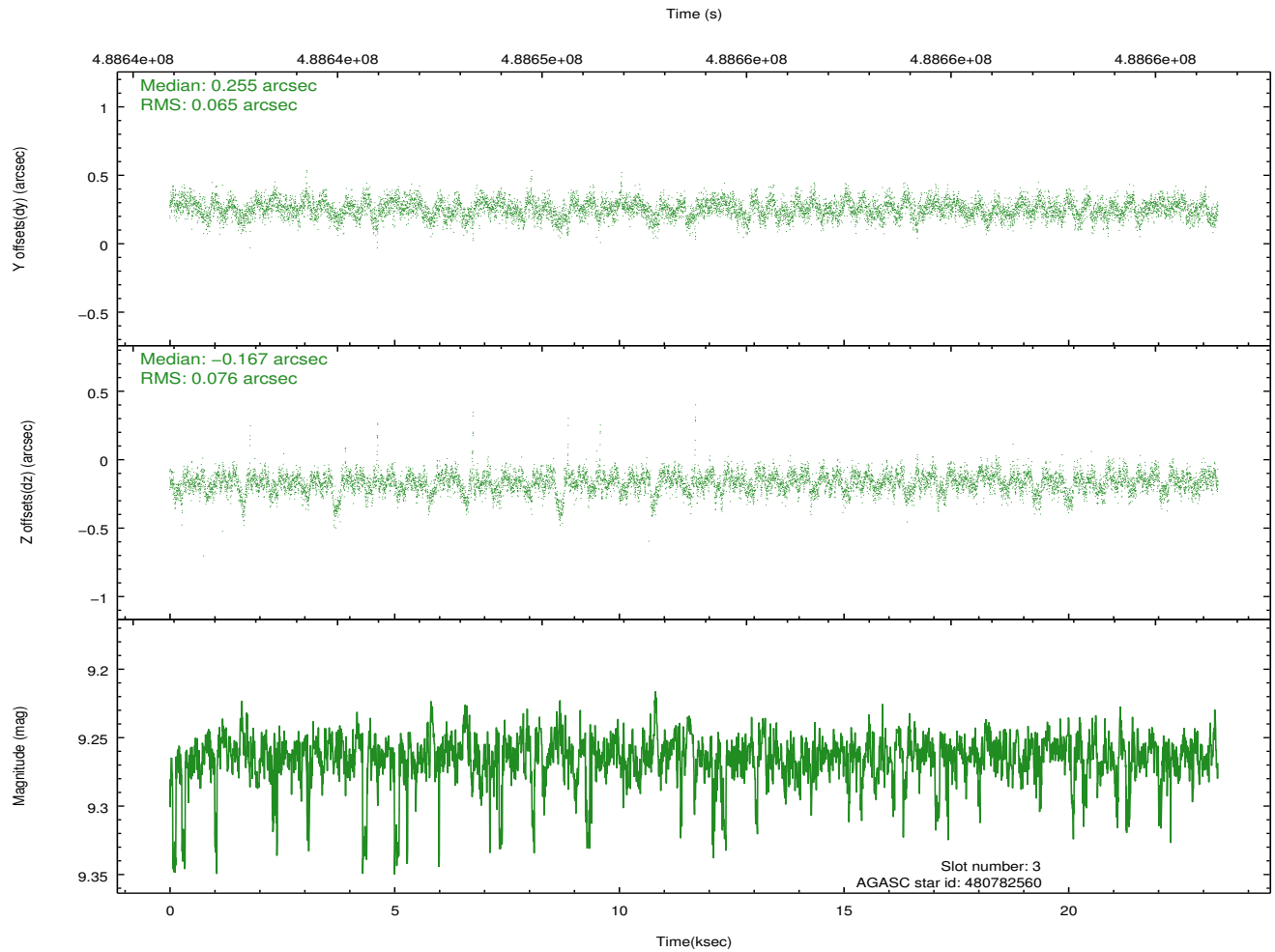
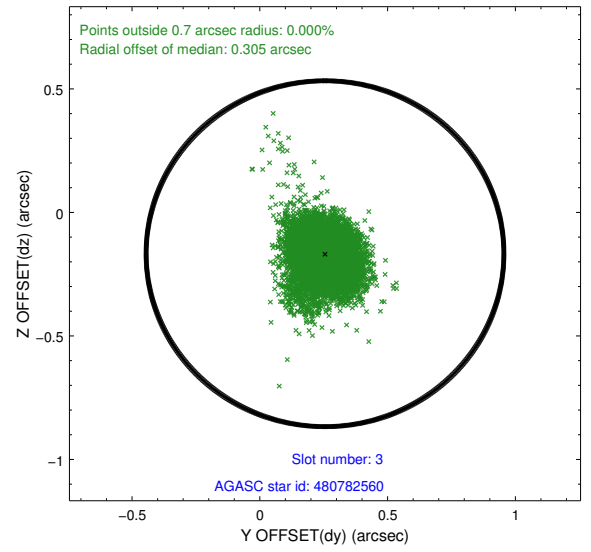
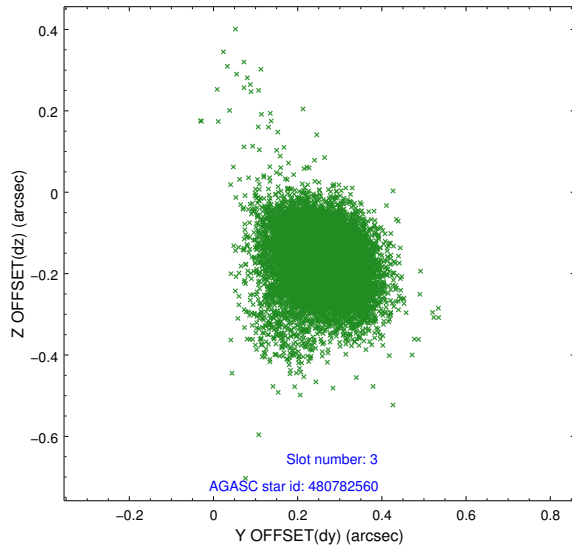


Slot Statistics

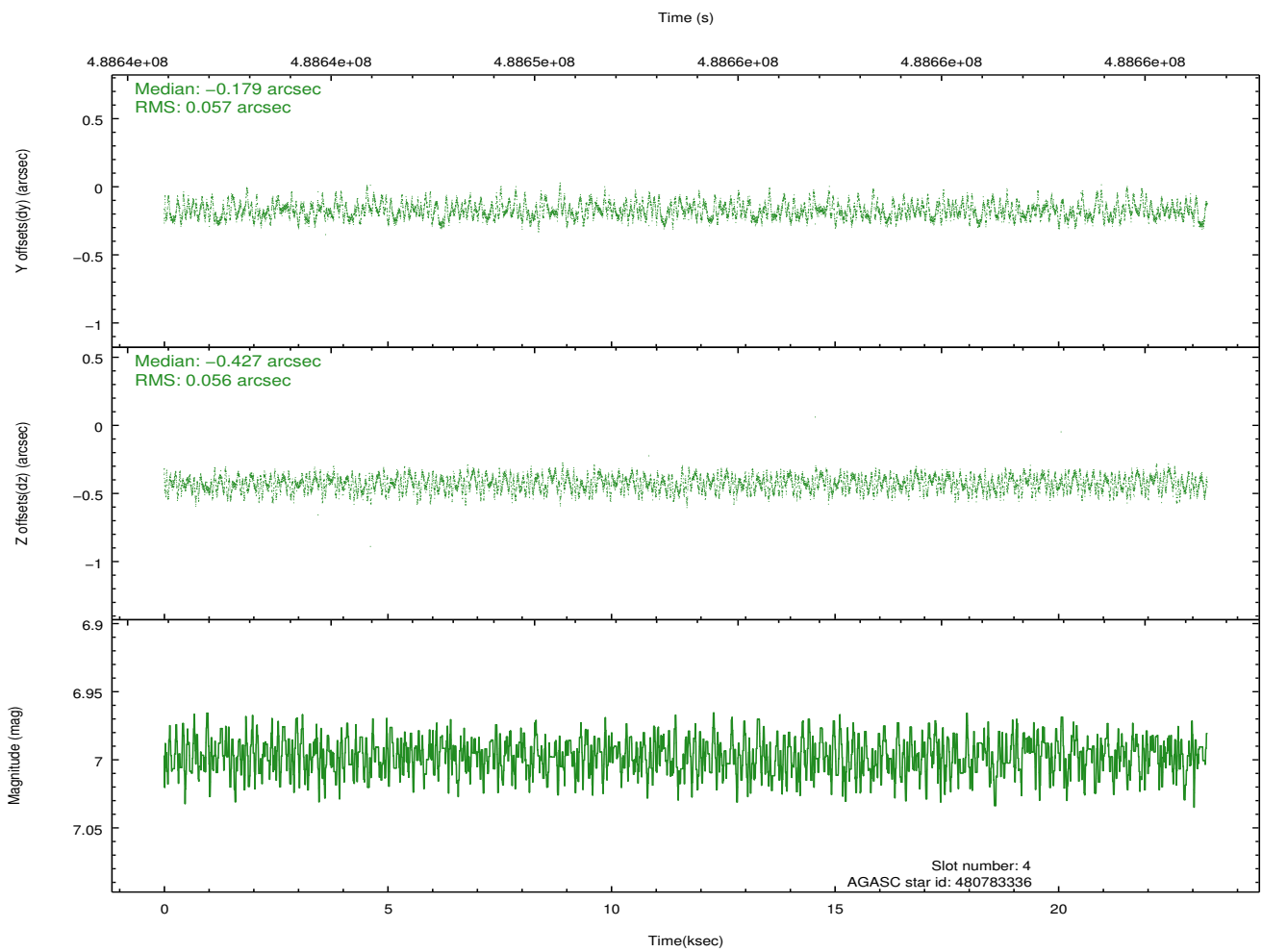
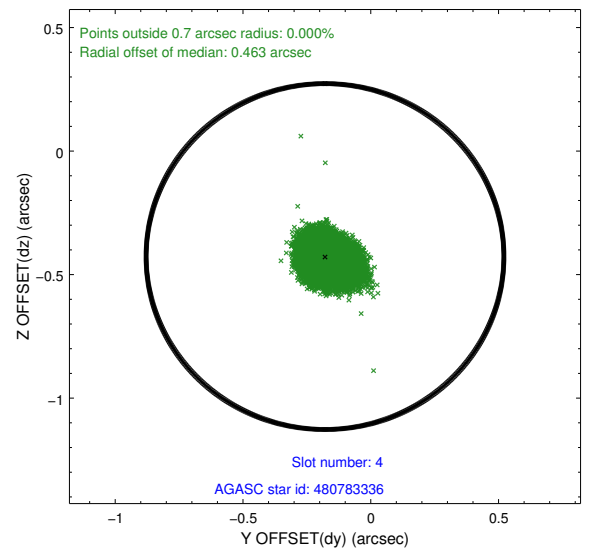
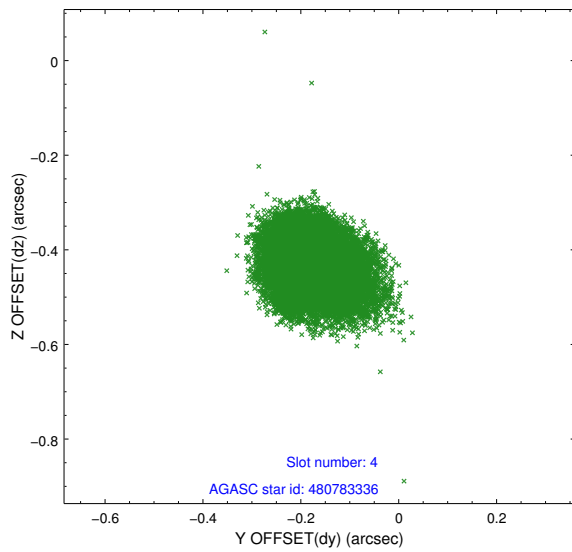
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.07	5691	0.004	-0.078	0.019	0.035	0.000000	0.000000	917.42	-900.40
1	FID		ACIS-I-4	6.98	5691	0.221	0.075	0.015	0.035	0.000000	0.000000	2137.51	999.88
2	FID		ACIS-I-5	7.05	5691	-0.320	0.074	0.013	0.022	0.000000	0.000000	-1830.81	997.36
3	GUIDE	used	480782560	9.26	11293	0.255	-0.167	0.101	0.176	16.404406	53.602878	-1923.55	1404.20
4	GUIDE	used	480783336	7.00	11380	-0.179	-0.427	0.086	0.131	16.069173	54.204250	301.04	1896.52
5	GUIDE	used	480907752	8.18	11376	0.253	0.304	0.068	0.108	17.595634	53.733148	-1684.64	-1167.31
6	GUIDE	used	481436848	8.12	11345	-0.295	0.097	0.098	0.144	17.437163	54.628771	1555.61	-1100.87
7	GUIDE	used	481430144	9.09	11365	-0.033	0.195	0.107	0.174	18.071462	54.646446	1514.98	-2423.25

2.4 Star Slots

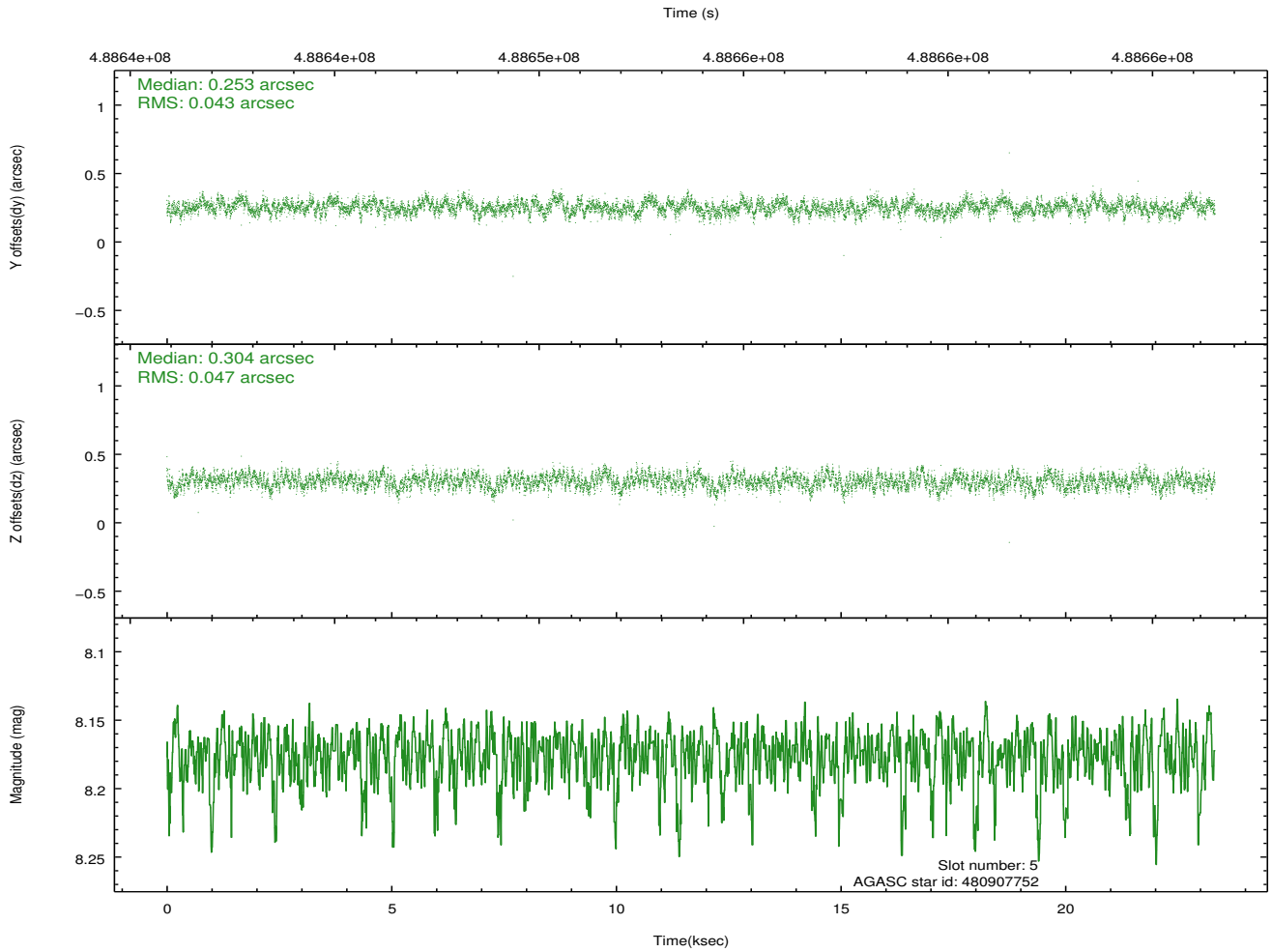
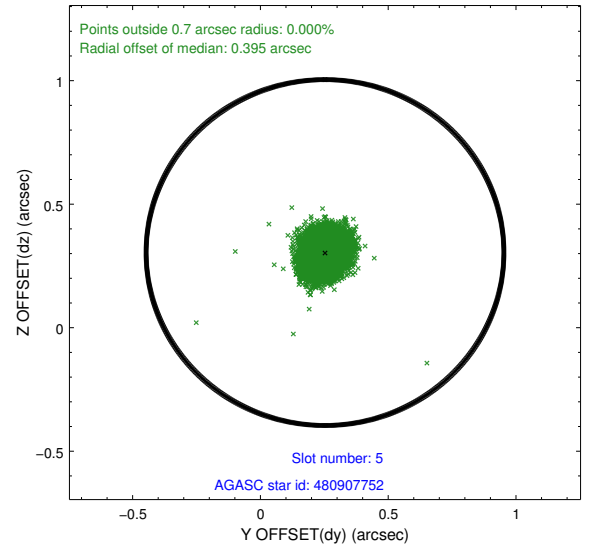
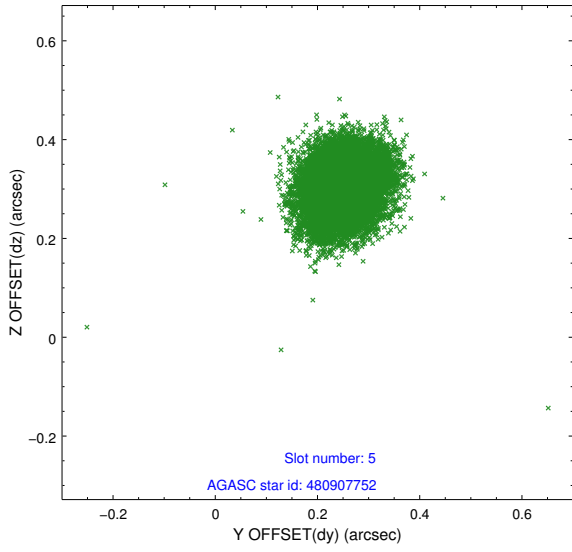
2.4.1 Slot 3



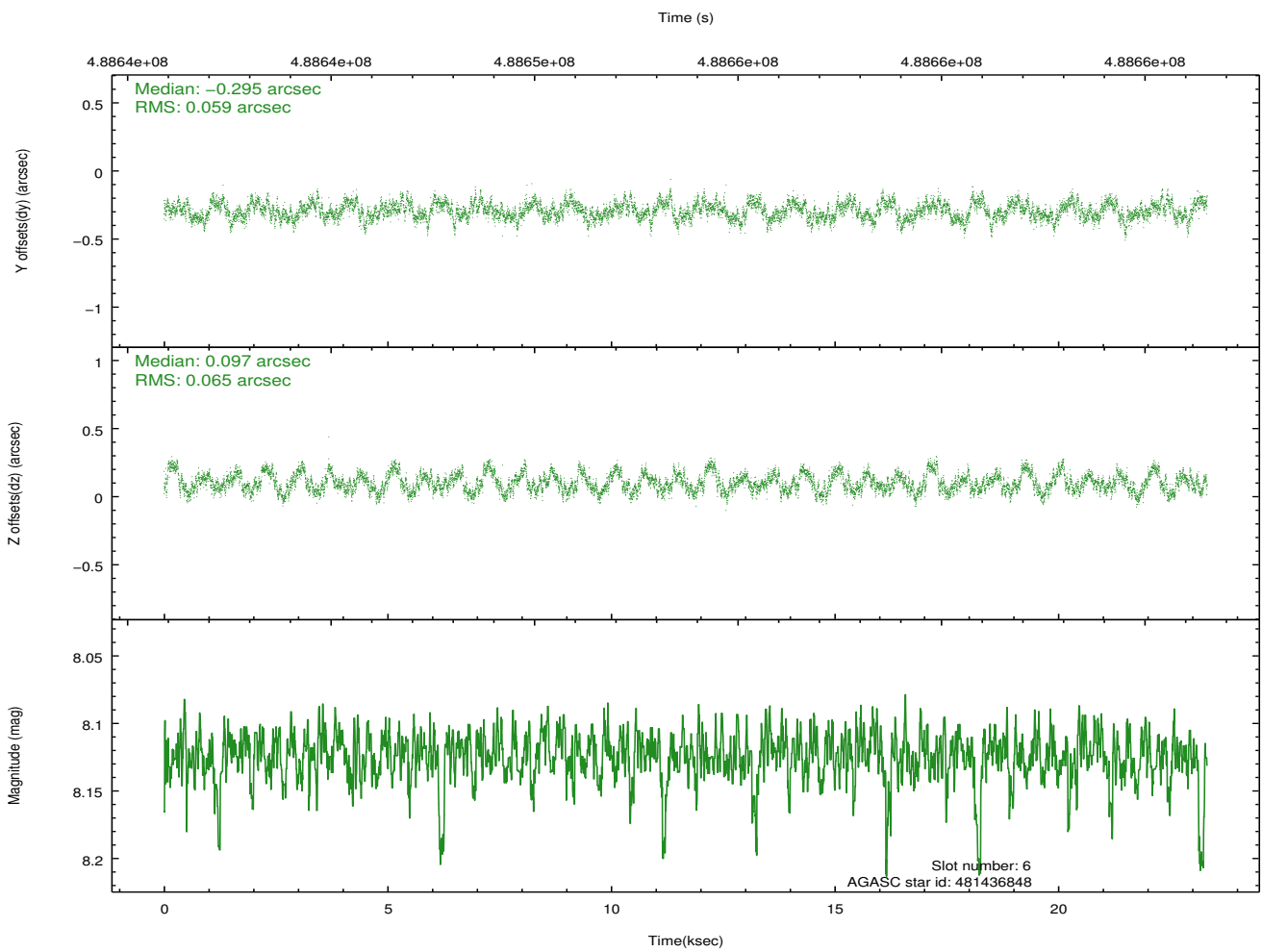
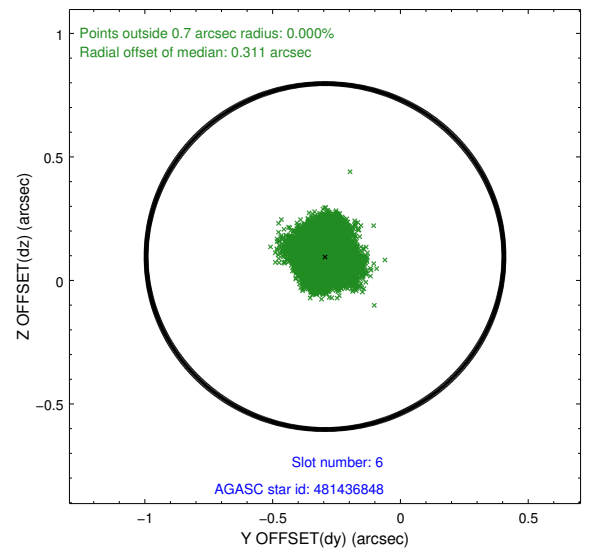
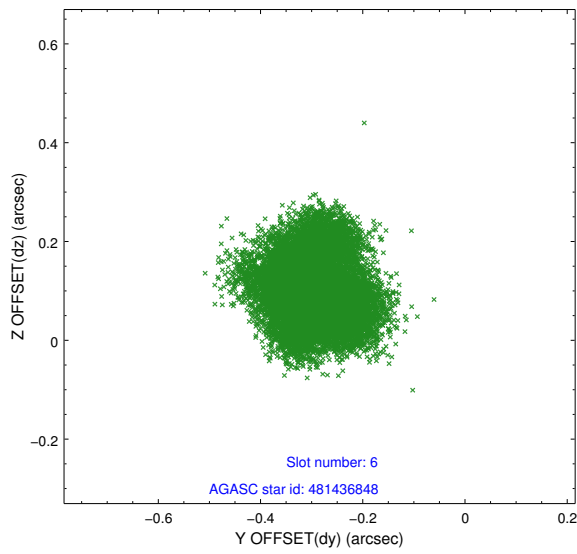
2.4.2 Slot 4



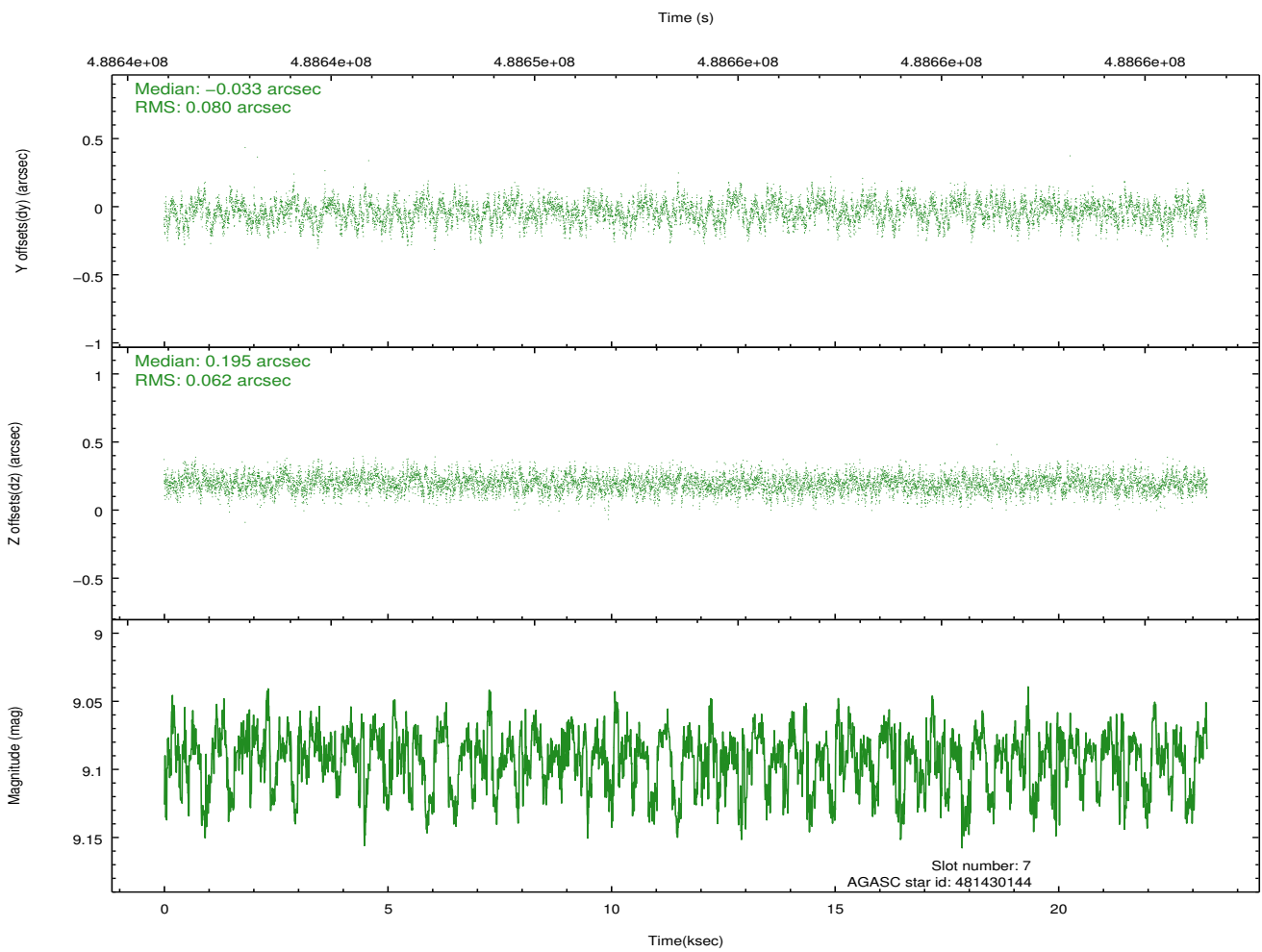
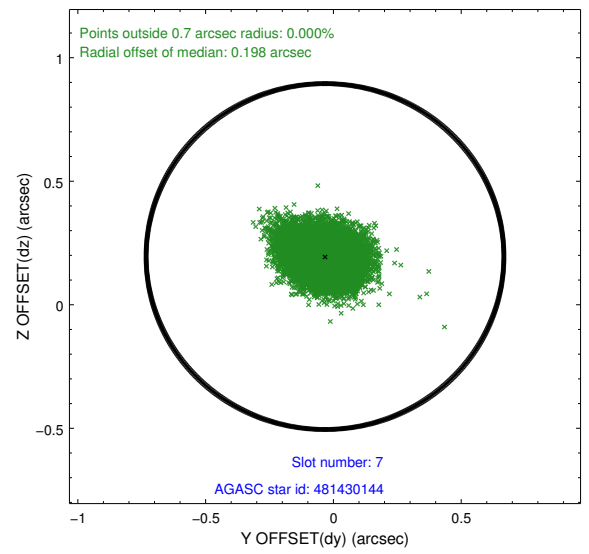
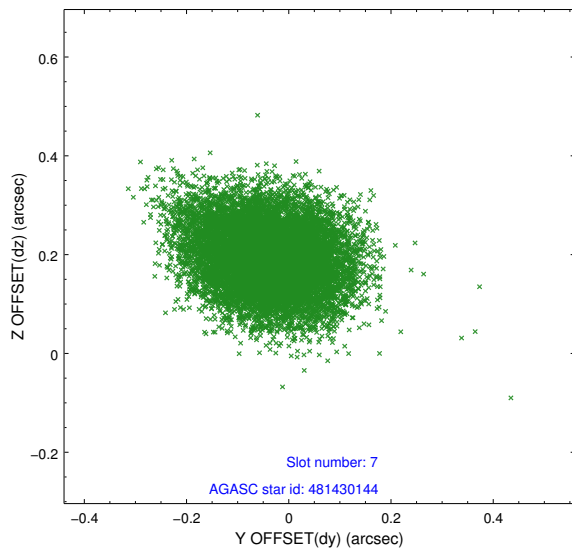
2.4.3 Slot 5



2.4.4 Slot 6

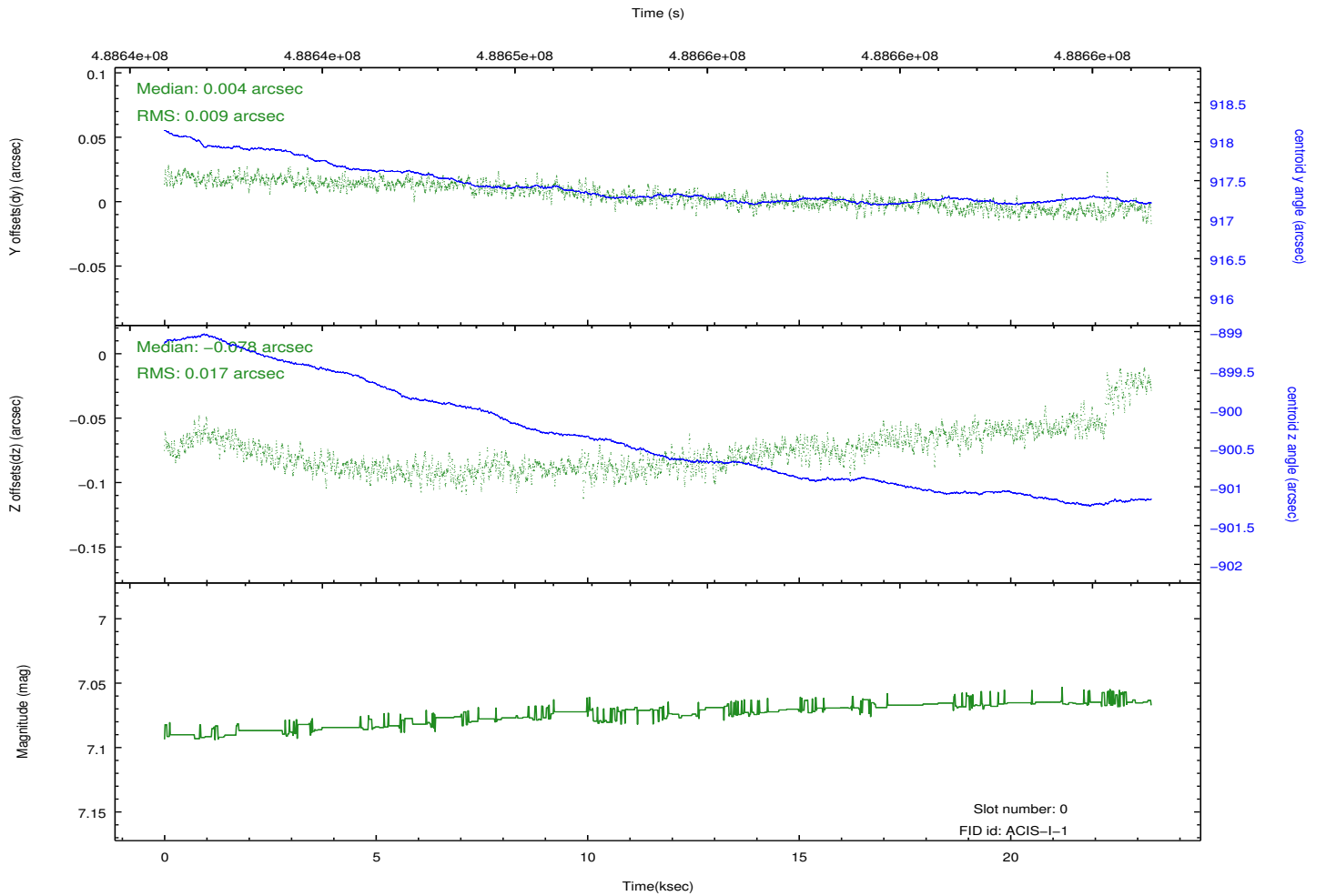
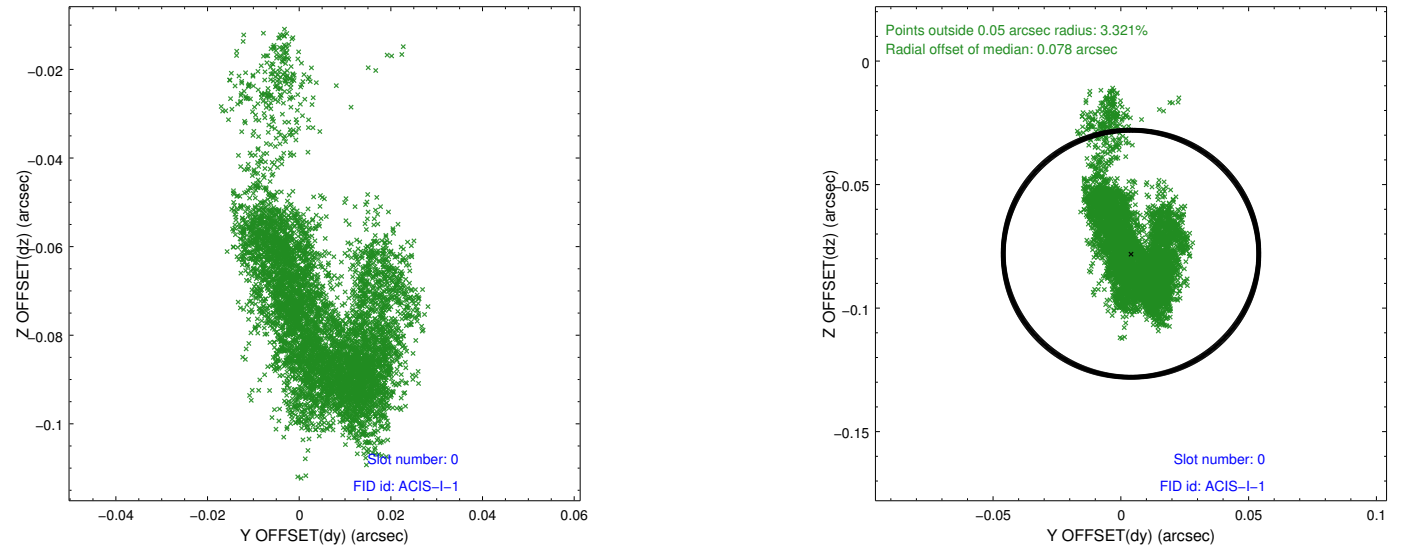


2.4.5 Slot 7

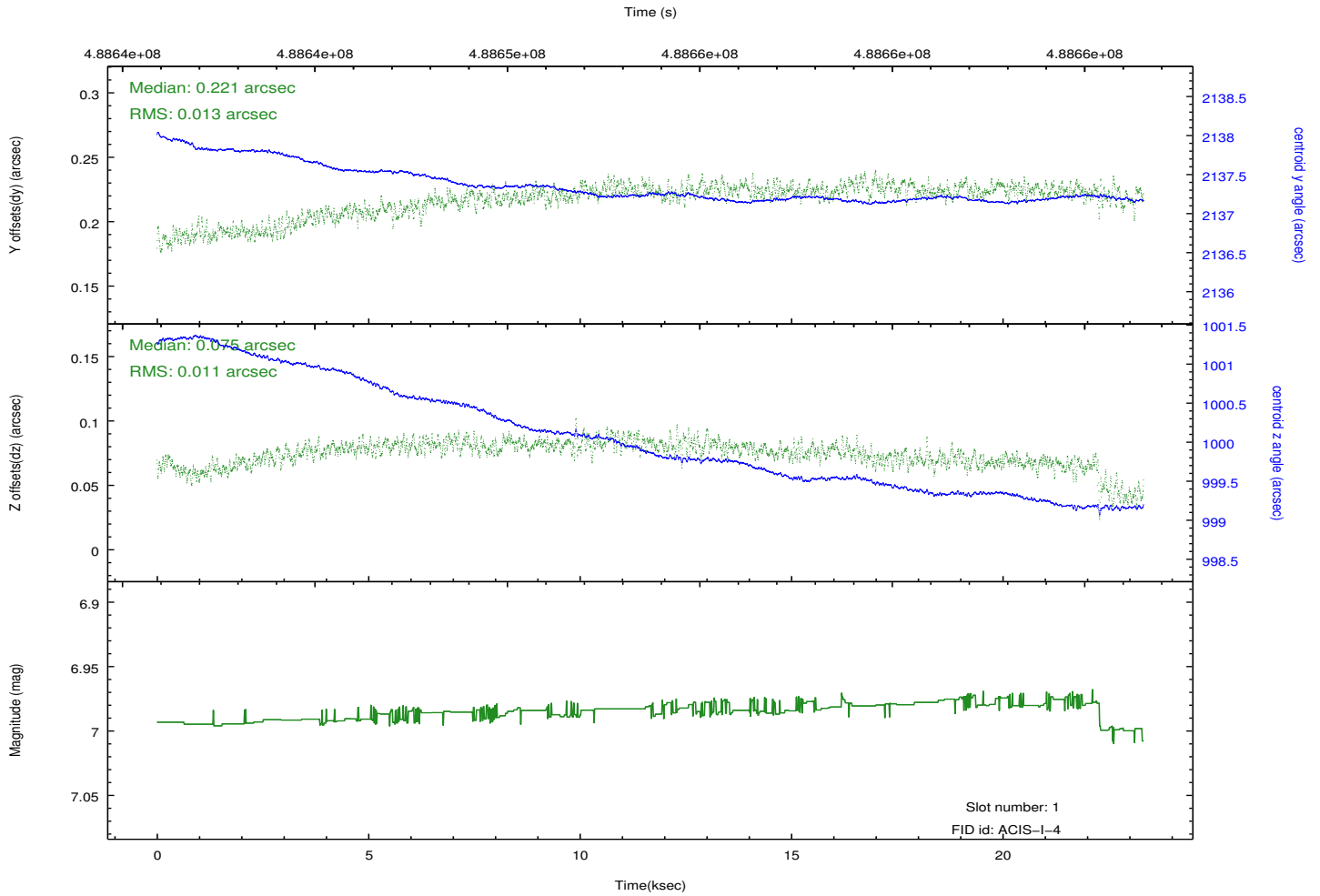
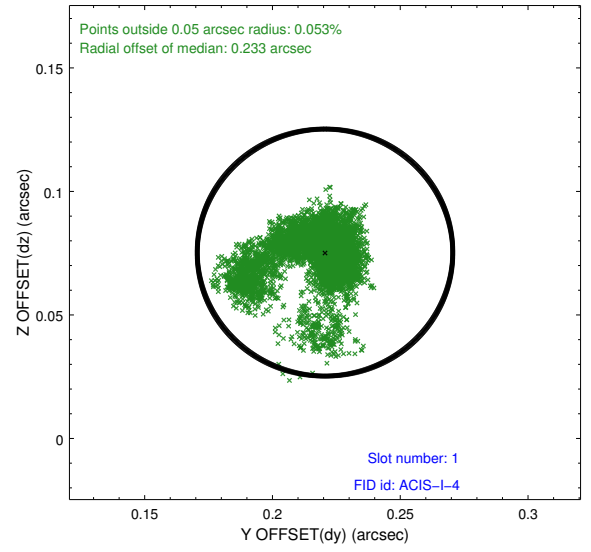
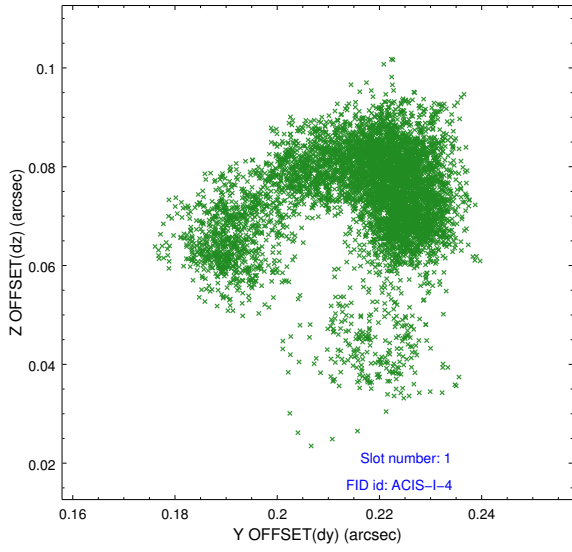


2.5 FID Slots

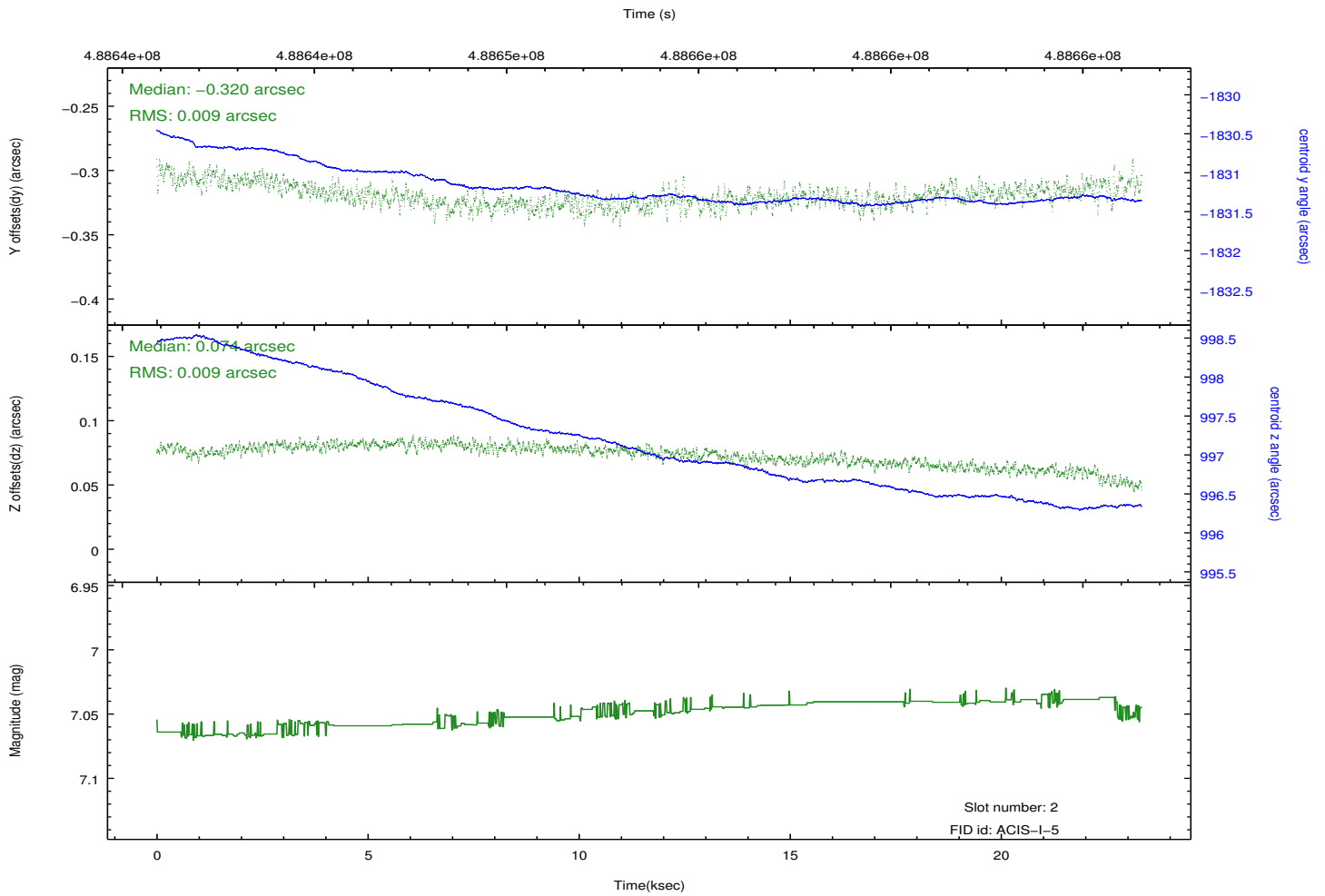
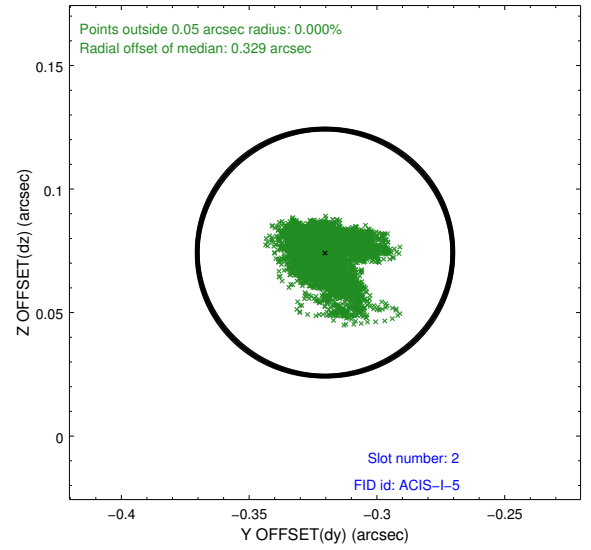
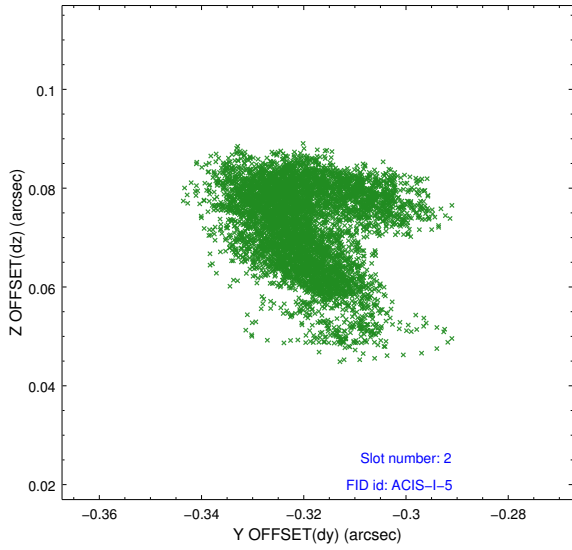
2.5.1 Slot 0



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)	2014.12.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	23.08506729275

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.