

V&V Reference Report

L2 ASCDS Version : 10.2.1

Observation 16433 - L2 Version 2
Chandra X-Ray Center

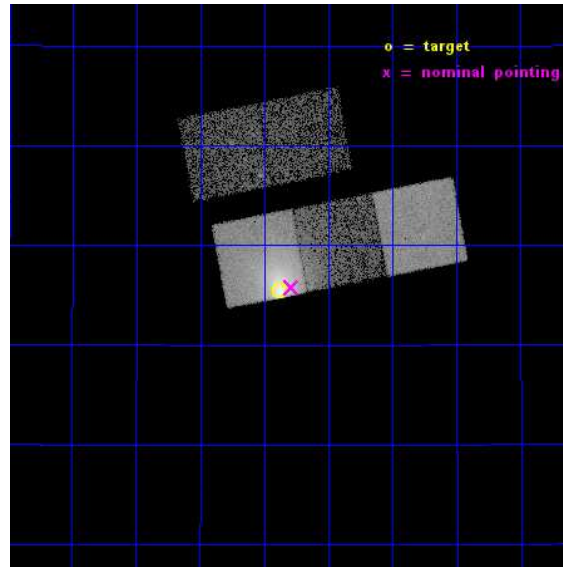
L2 Processing Date : Dec 11 2014

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

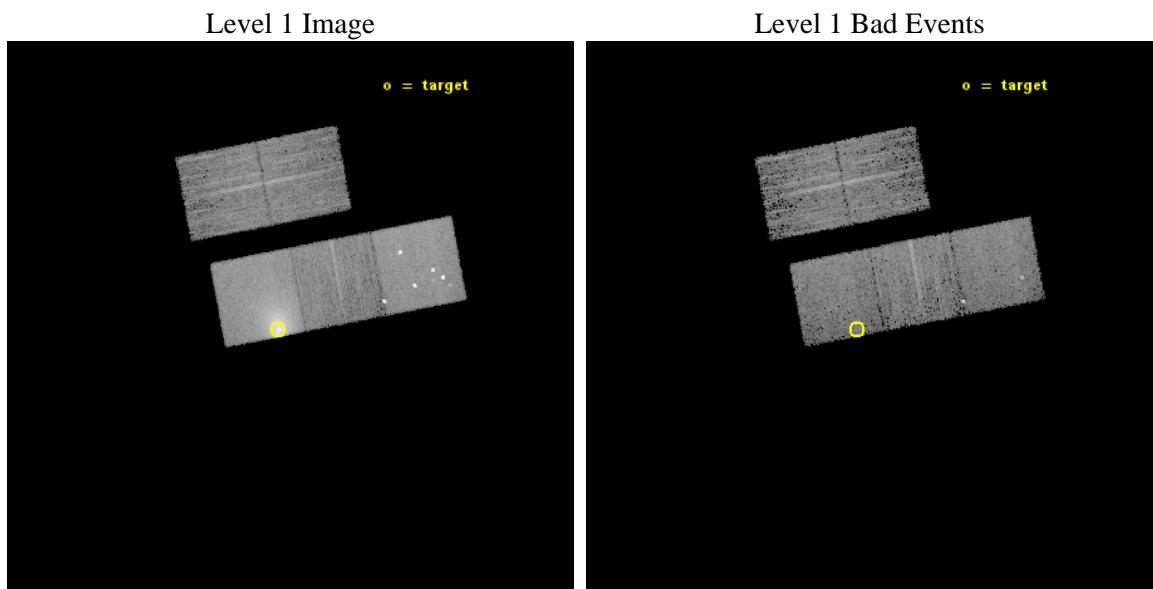
seq_num	890080	Sequence number
obs_id	16433	Observation id
title	AO-15 Calibration Observations of A1795	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	A1795	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	207.219583	Observer's specified target RA [deg]
dec_targ	26.590833	Observer's specified target Dec [deg]
ra_nom	207.19713143139	Nominal RA [deg]
dec_nom	26.59636691033	Nominal Dec [deg]
roll_nom	169.16677843765	Nominal Roll [deg]
revision	2	Processing version of data
ontime	10064.280227602	Sum of GTIs [s]
livetime	9932.7829972126	Livetime [s]
ontime2	10064.116067588	Sum of GTIs [s]
ontime3	10064.157107592	Sum of GTIs [s]
ontime5	10064.239187598	Sum of GTIs [s]
ontime6	10064.198147595	Sum of GTIs [s]
ontime7	10064.280227602	Sum of GTIs [s]
l2events	146262	Number of level 2 events



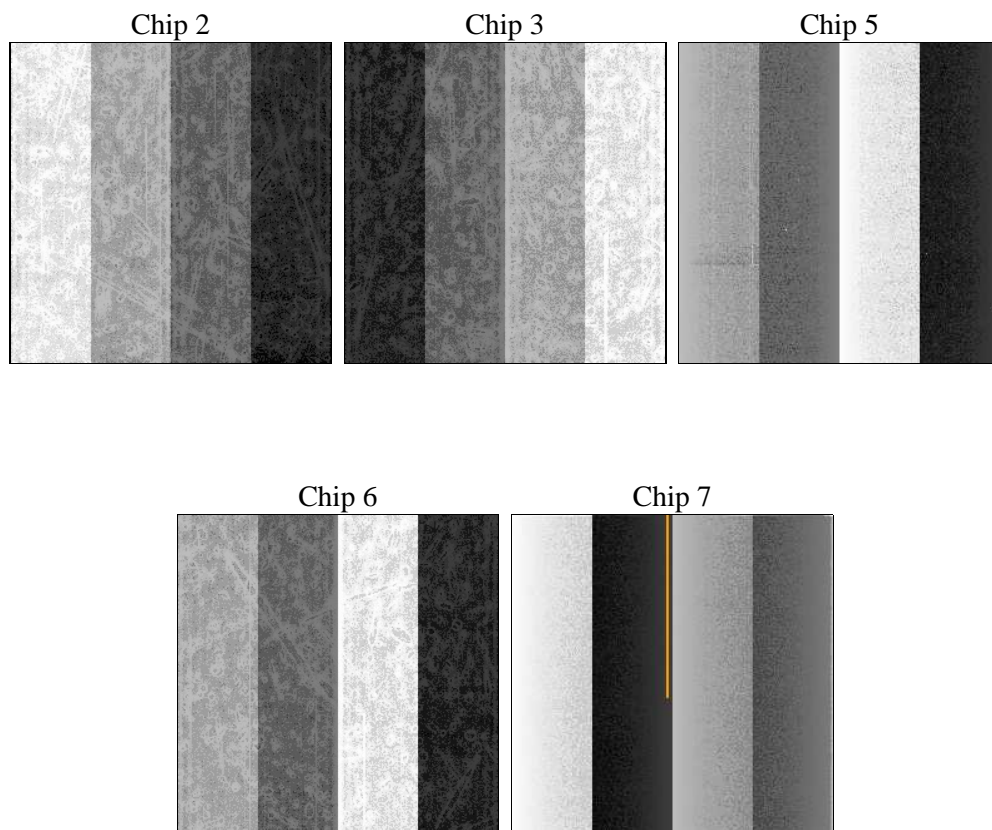
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	10064.280227602	Sum of GTIs [s]
caldsver	4.6.4	 	ontime2	10064.116067588	Sum of GTIs [s]
date	2014-12-11T05:39:54	Date and time of file creation	ontime3	10064.157107592	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	10064.239187598	Sum of GTIs [s]
			ontime6	10064.198147595	Sum of GTIs [s]
			ontime7	10064.280227602	Sum of GTIs [s]
			l1events	369337	Number of level 1 events

2.1.4 Events

	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	44031	46298	94624	52626	131758
rejected events	38551	40828	42954	43025	38016
rejected %	87%	88%	45%	81%	28%

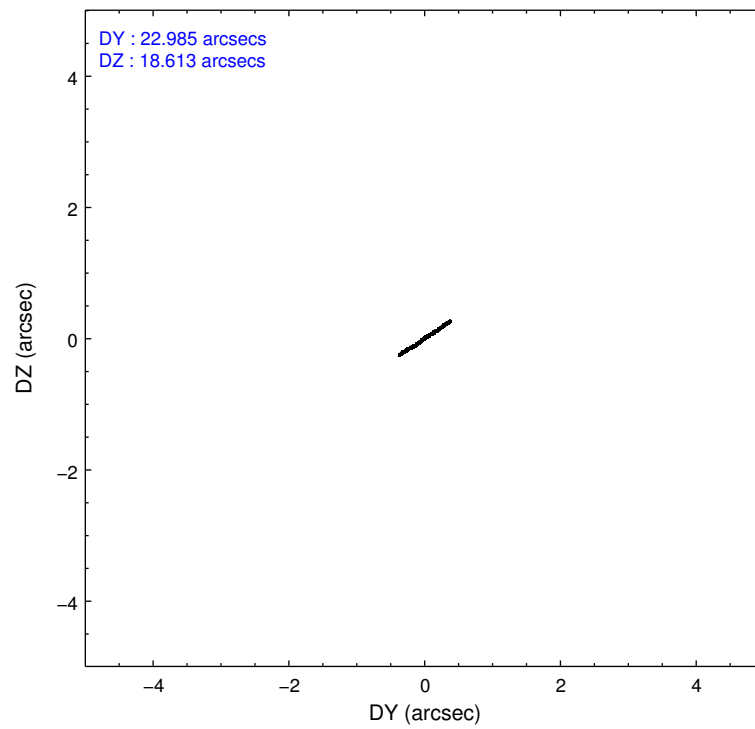
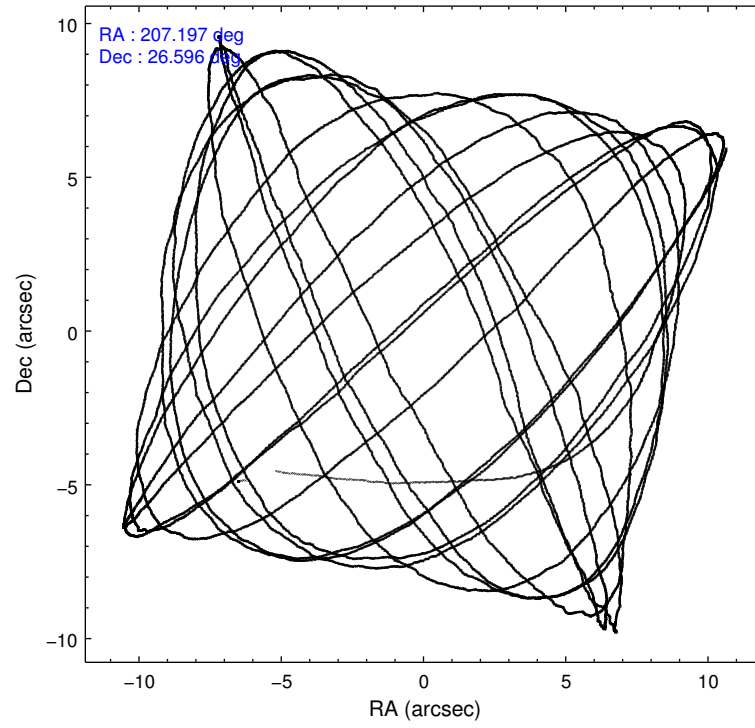
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	2003	2116	12619	5086	20026
	4%	4%	13%	9%	15%
grade 1 events	19	19	808	32	89
	0%	0%	0%	0%	0%
grade 2 events	1288	1128	14713	1701	22975
	2%	2%	15%	3%	17%
grade 3 events	568	542	1368	703	9810
	1%	1%	1%	1%	7%
grade 4 events	576	599	1151	684	9921
	1%	1%	1%	1%	7%
grade 5 events	2006	2476	6198	2502	6796
	4%	5%	6%	4%	5%
grade 6 events	1049	1087	21858	1437	31065
	2%	2%	23%	2%	23%
grade 7 events	36522	38331	35909	40481	31076
	82%	82%	37%	76%	23%

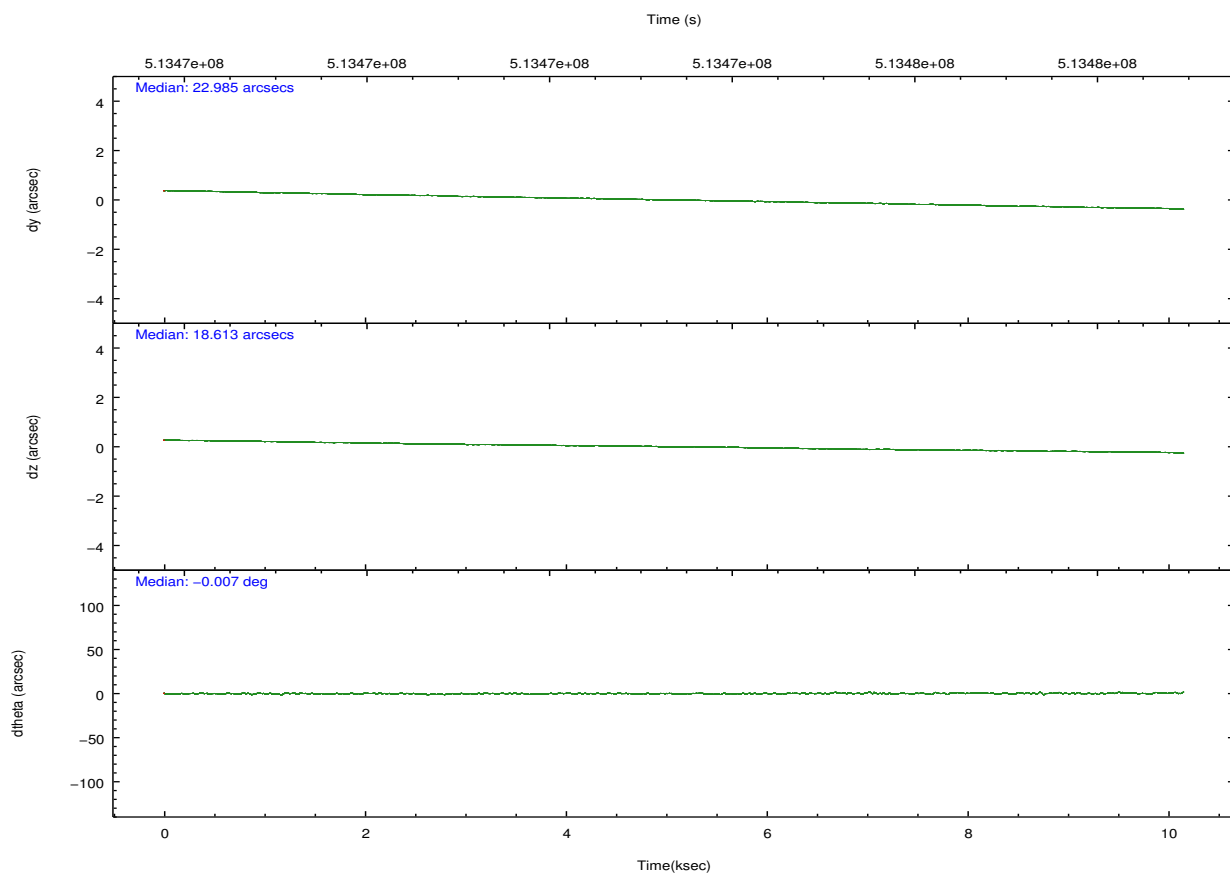
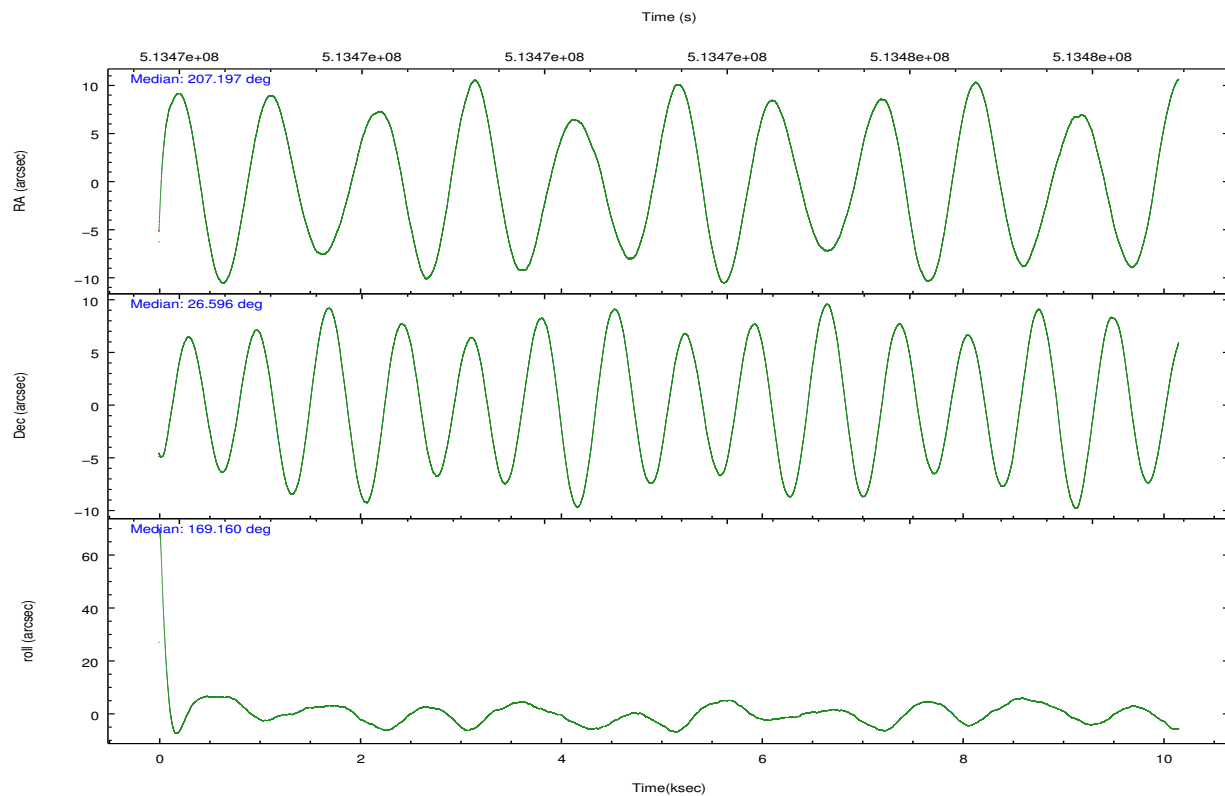
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-23567	ACIS-23567
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	207.225855	207.1971314313946
[deg] Pointing Dec	26.605702	26.59636691032951
[deg] Pointing Roll	168.997193	169.1667784376543
[s] Window start time (MET)	512697667.184000	512697667.184000
[s] Window stop time (MET)	515203267.184000	515203267.184000
[mm] SIM focus pos	-0.684267	-0.6828225247311905
[mm] SIM defocus	0	0.001444936568705701
[mm] SIM translation stage pos	-180.332523	-180.3266934278832
[mm] SIM translation stage offset	-9.800000000000001	-9.805829155124599
[s] Observation start time (MET)	513468435.184000	513466667.11439
Observation start date	2014-04-09T22:06:08	2014-04-09T21:37:47
[s] Observation end time (MET)	513478435.184000	513479429.90259
Observation end date	2014-04-10T00:52:48	2014-04-10T01:10:29
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.1

2.3 Aspect



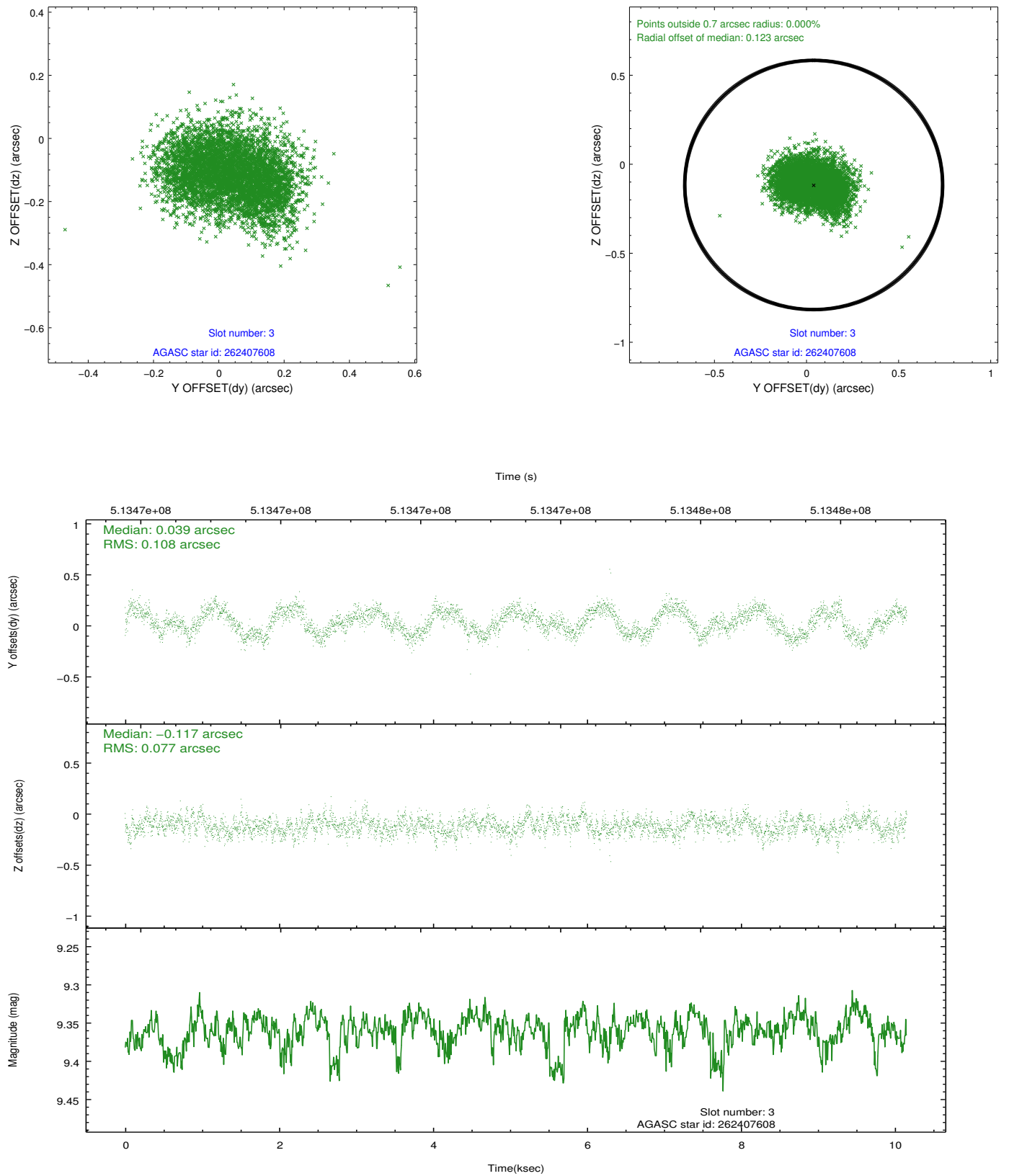


Slot Statistics

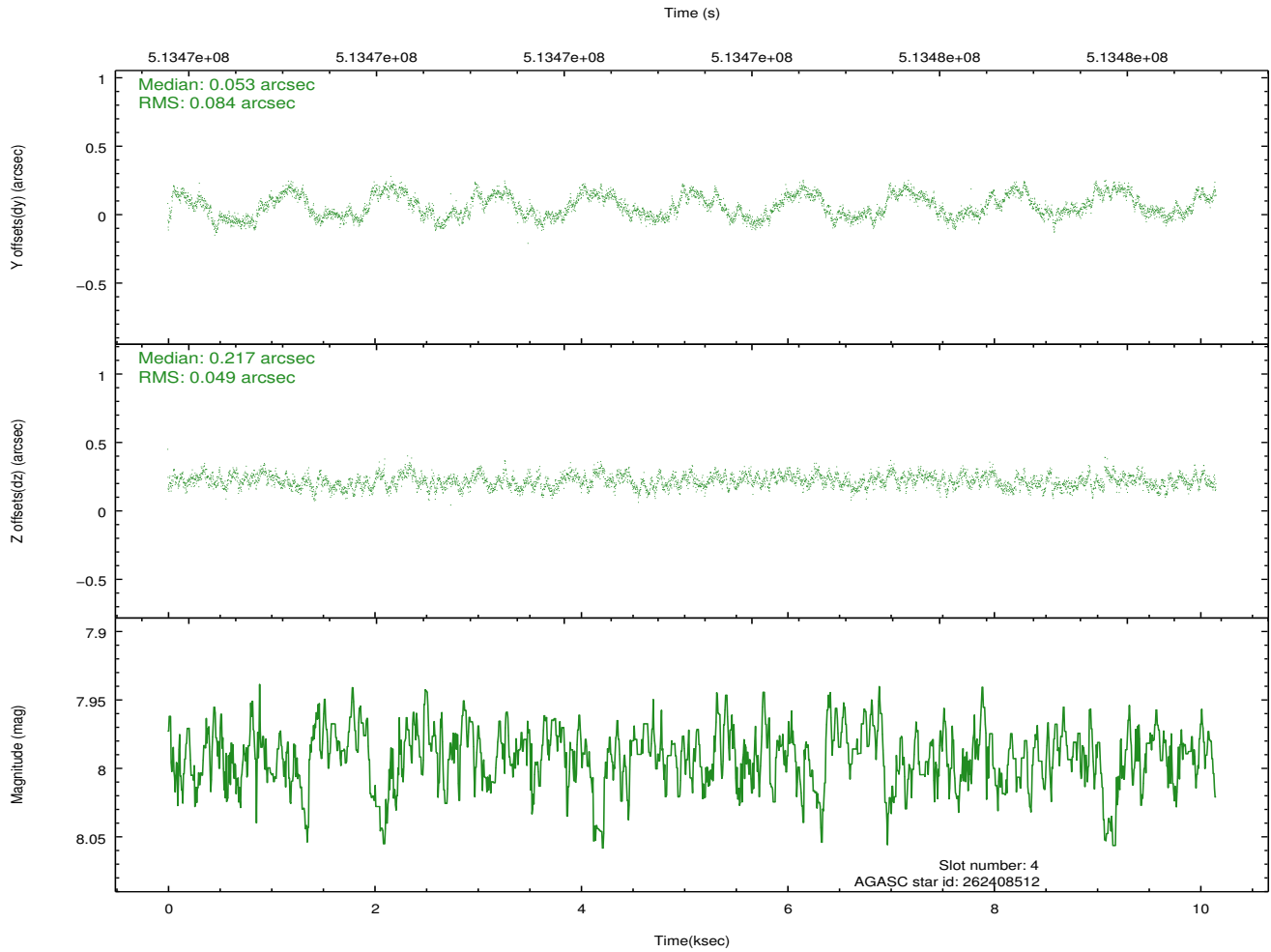
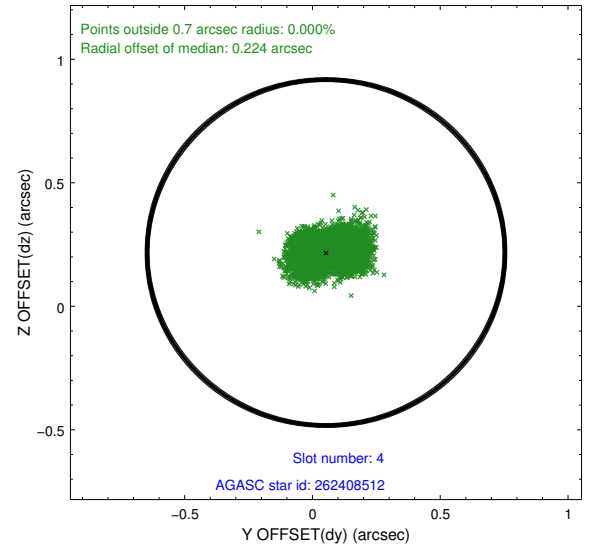
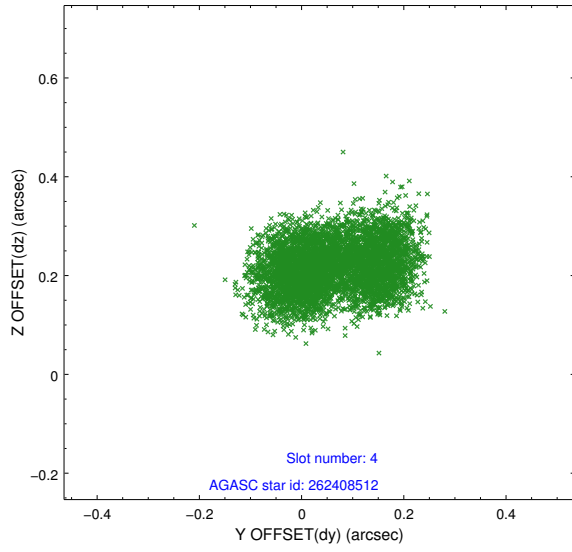
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-1	7.17	2477	0.157	0.196	0.009	0.015	0.000000	0.000000	920.80	-1937.42
1	FID		ACIS-S-2	7.08	2477	-0.305	-0.208	0.013	0.021	0.000000	0.000000	-775.28	-1943.05
2	FID		ACIS-S-6	7.37	2477	0.128	0.015	0.009	0.016	0.000000	0.000000	386.11	603.08
3	GUIDE	used	262407608	9.36	4952	0.039	-0.117	0.144	0.221	207.378401	26.435507	-599.37	507.37
4	GUIDE	used	262408512	7.99	4953	0.053	0.217	0.107	0.158	207.800210	27.128796	-1445.58	-2203.50
5	GUIDE	used	262408936	9.62	4948	0.001	0.040	0.179	0.274	207.154731	26.726554	307.45	-383.51
6	GUIDE	used	262409552	8.20	4951	0.040	0.015	0.166	0.255	206.584269	27.192805	2421.96	-1687.06
7	GUIDE	used	262408096	9.29	4952	-0.123	-0.184	0.207	0.330	207.011678	26.515421	616.59	449.81

2.4 Star Slots

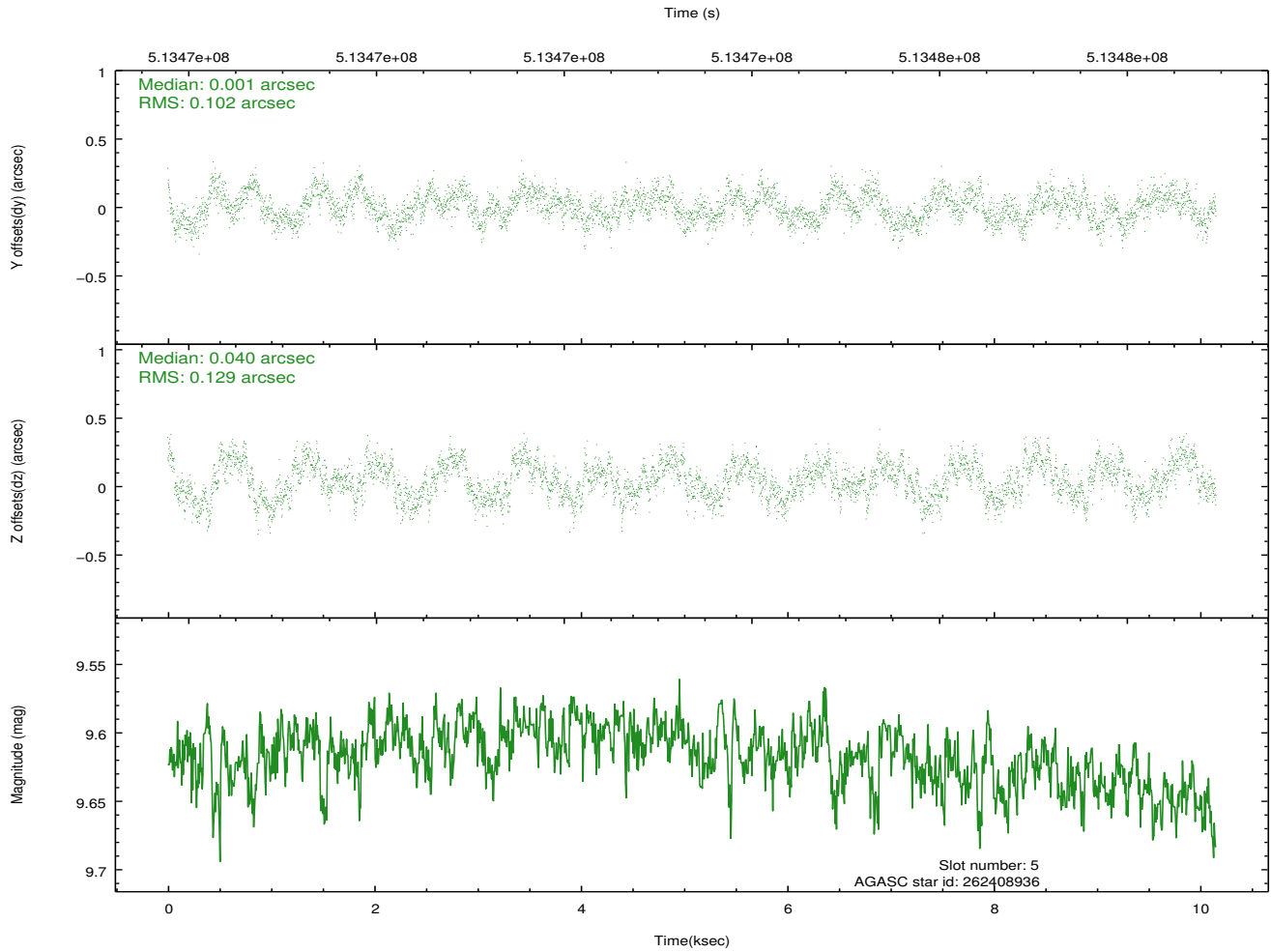
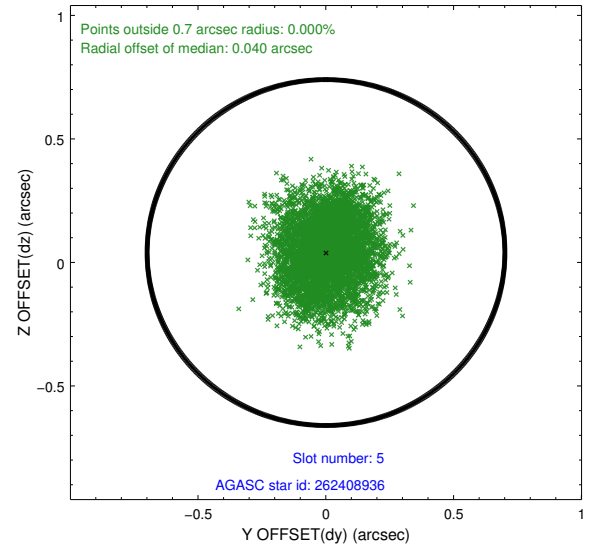
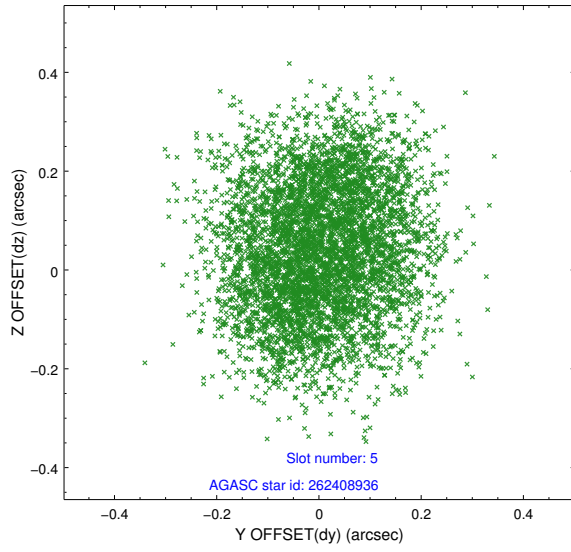
2.4.1 Slot 3



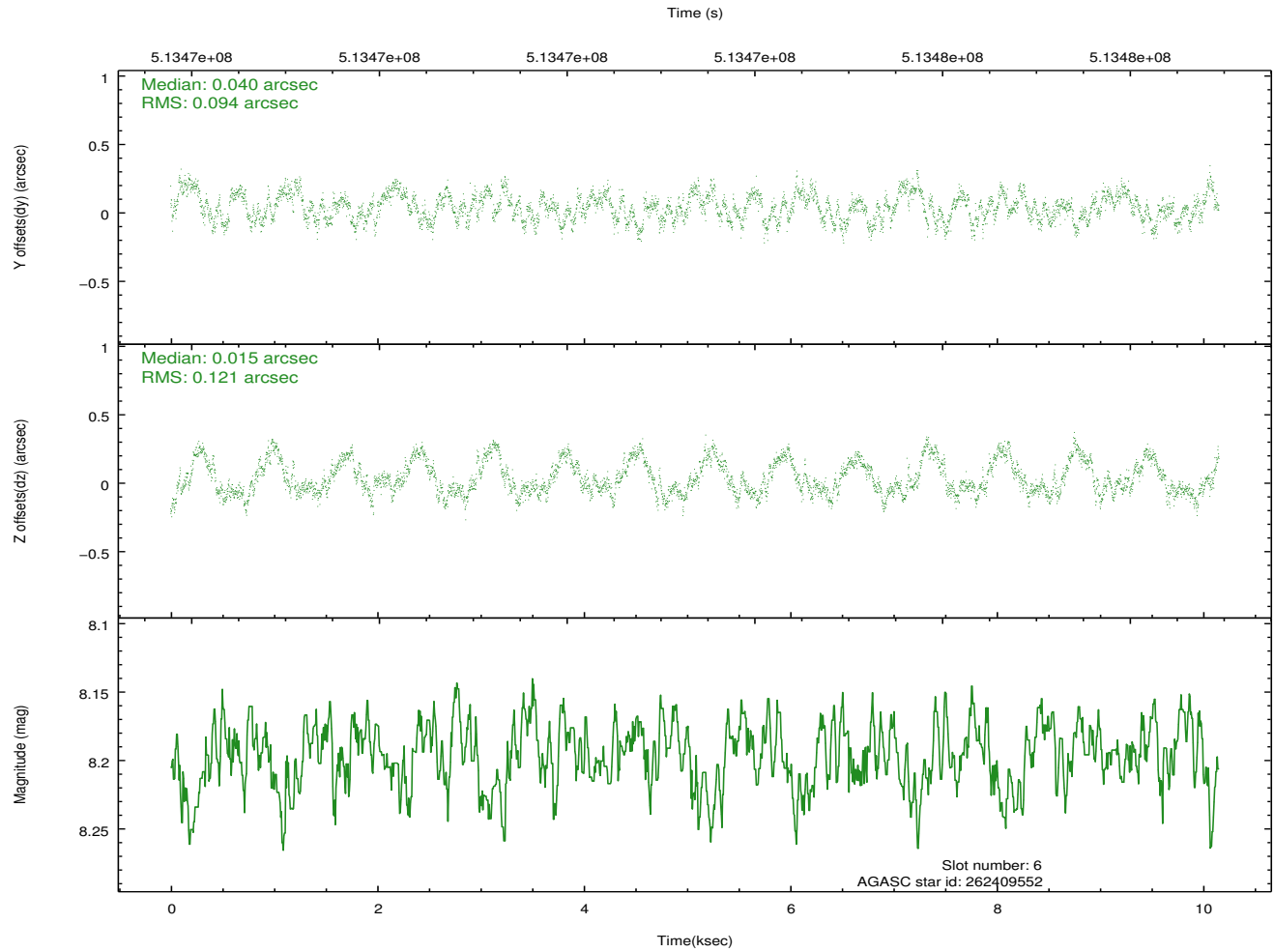
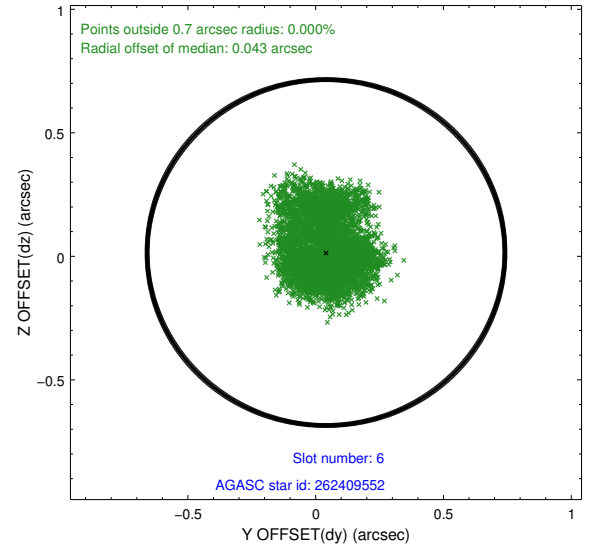
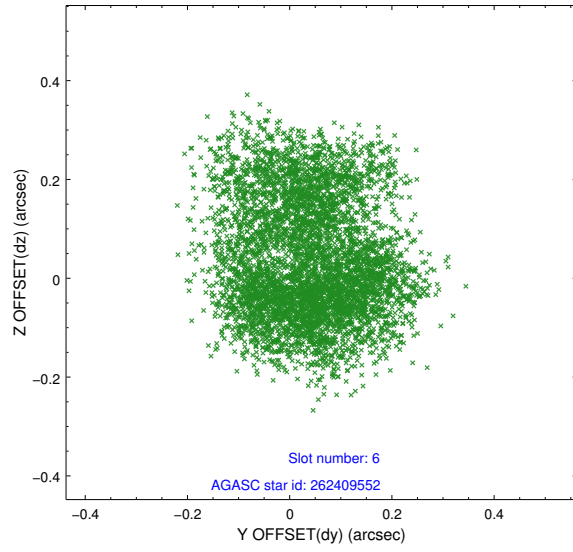
2.4.2 Slot 4



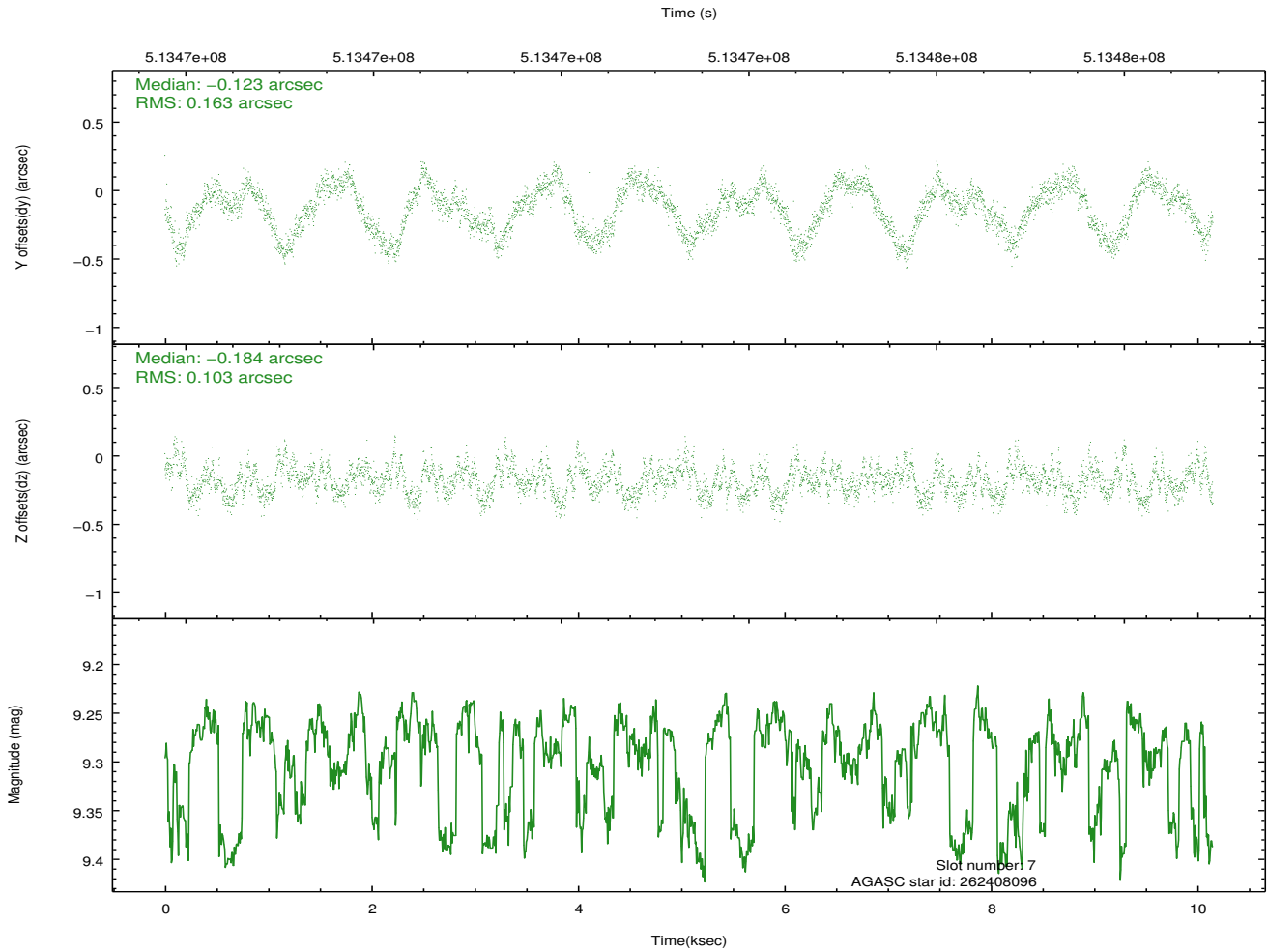
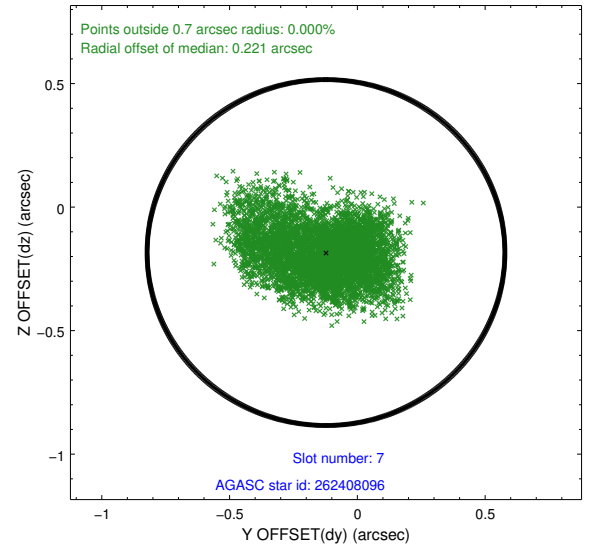
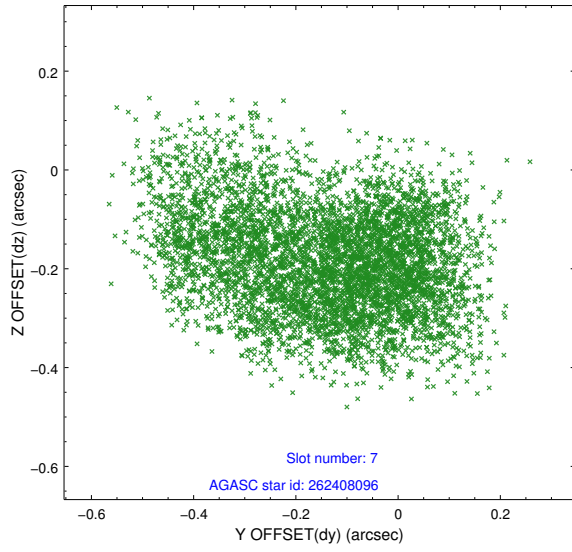
2.4.3 Slot 5



2.4.4 Slot 6

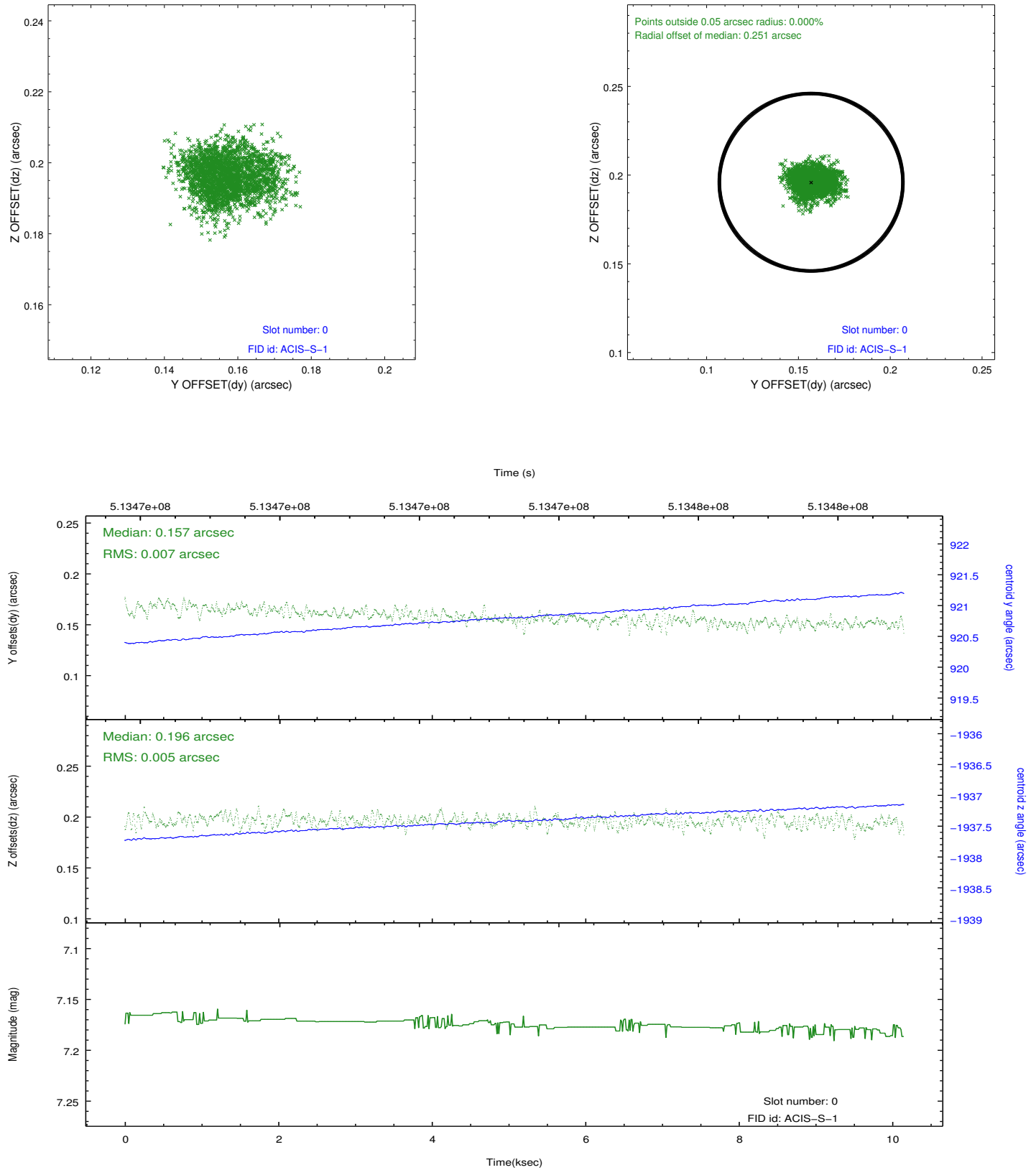


2.4.5 Slot 7

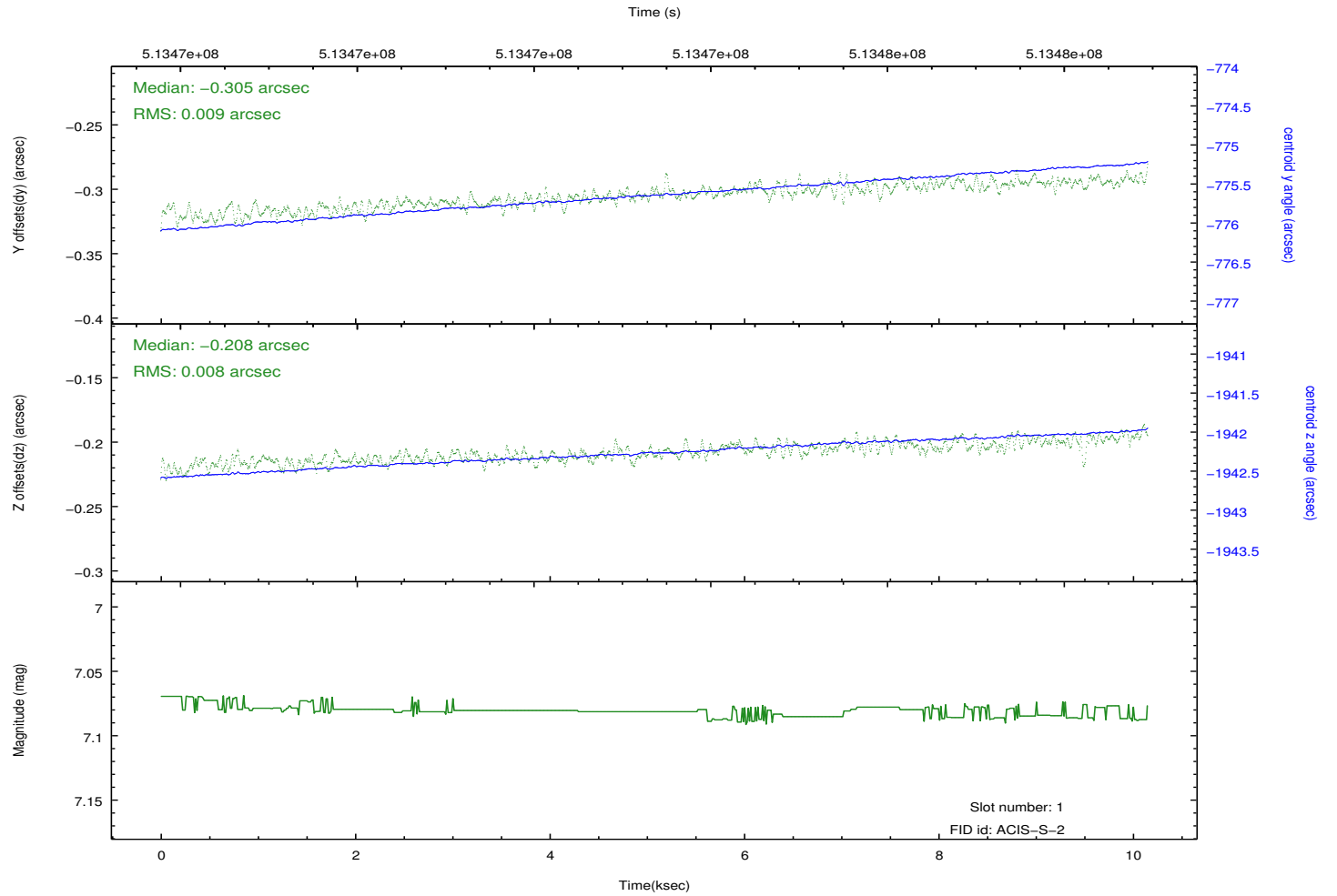
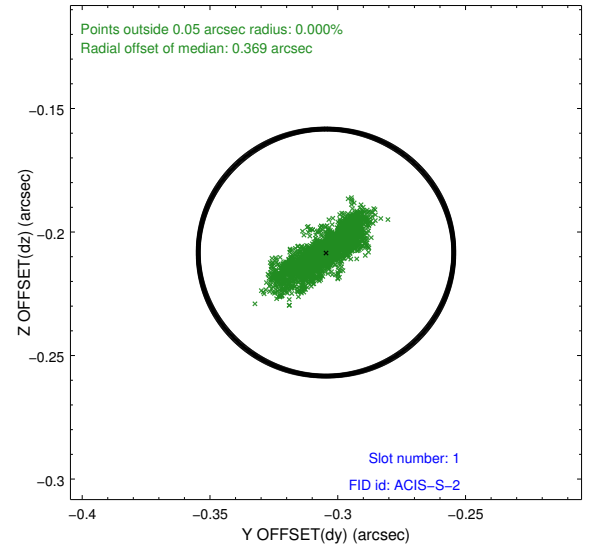
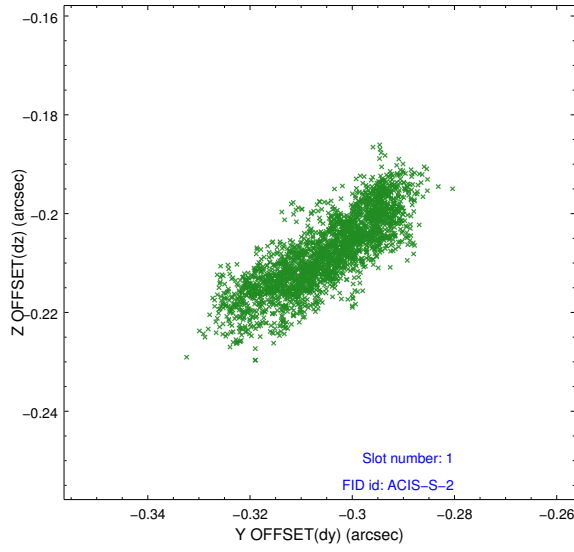


2.5 FID Slots

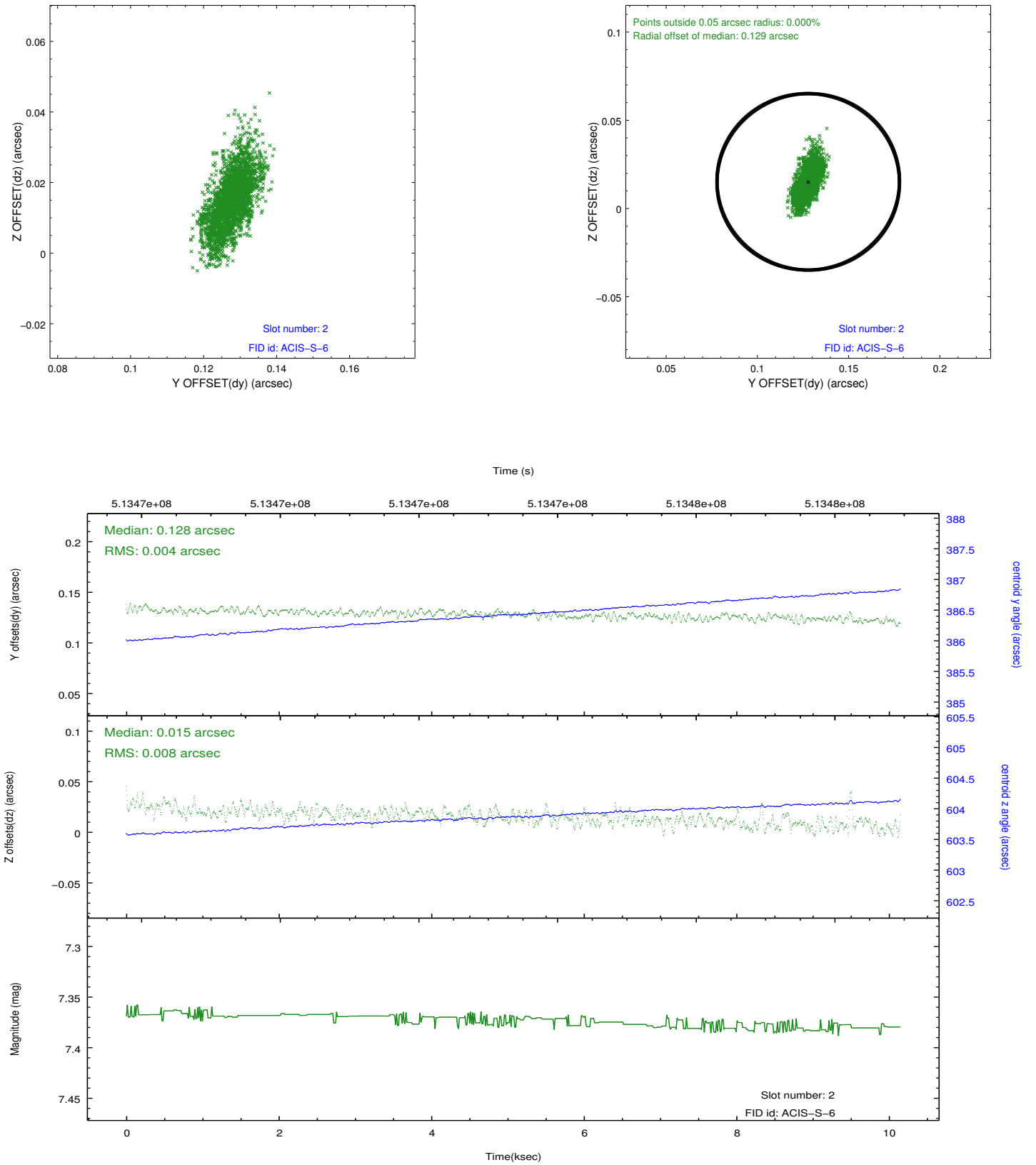
2.5.1 Slot 0



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)	2014.12.18
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.064280227602

A.2 Comments

Window preference met.

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.