

V&V Reference Report

L2 ASCDS Version : 8.5.1

Observation 15211 - L2 Version 2
Chandra X-Ray Center

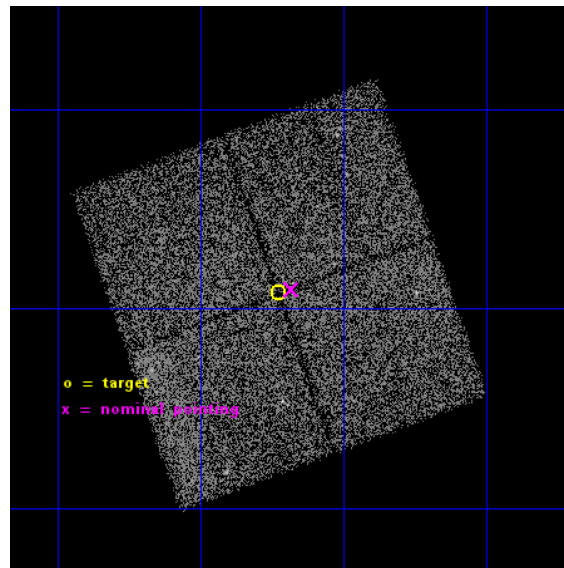
L2 Processing Date : Nov 30 2014

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

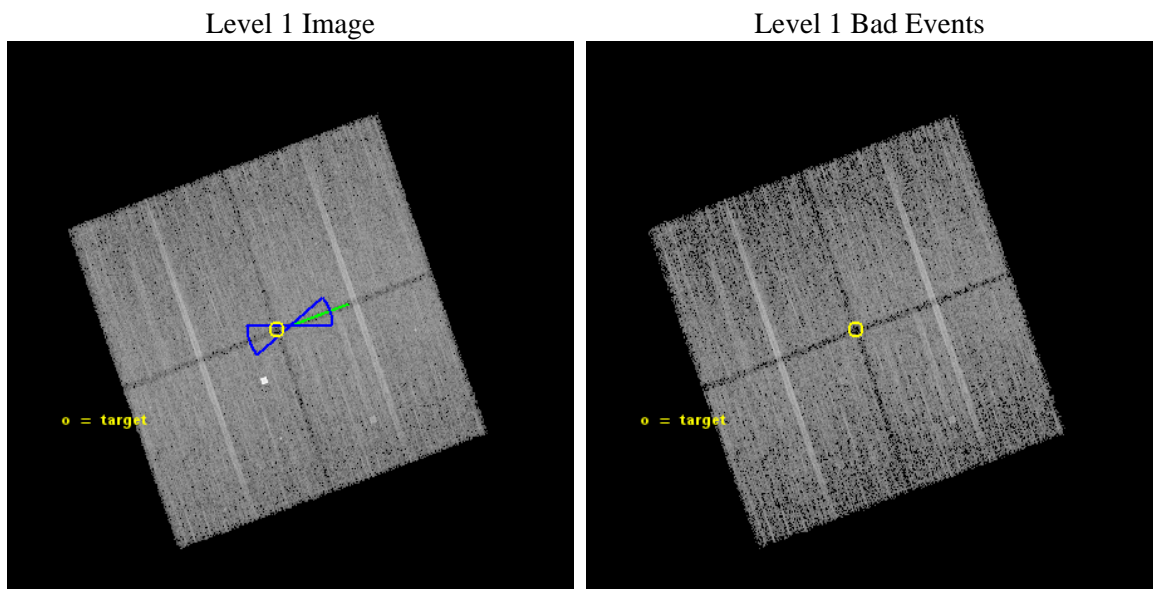
seq_num	901041	Sequence number
obs_id	15211	Observation id
title	The COSMOS Legacy Survey	Proposal title
observer	Dr Francesca Civano	Principal investigator
object	COSMOS Legacy	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	150.05698	Observer's specified target RA [deg]
dec_targ	2.680278	Observer's specified target Dec [deg]
ra_nom	150.04556964283	Nominal RA [deg]
dec_nom	2.682903838397	Nominal Dec [deg]
roll_nom	70.20922494779	Nominal Roll [deg]
revision	2	Processing version of data
ontime	23884.762634575	Sum of GTIs [s]
livetime	23572.690627048	Livetime [s]
ontime0	23887.862604797	Sum of GTIs [s]
ontime1	23884.762634575	Sum of GTIs [s]
ontime2	23884.803684592	Sum of GTIs [s]
ontime3	23887.985724807	Sum of GTIs [s]
l2events	50736	Number of level 2 events



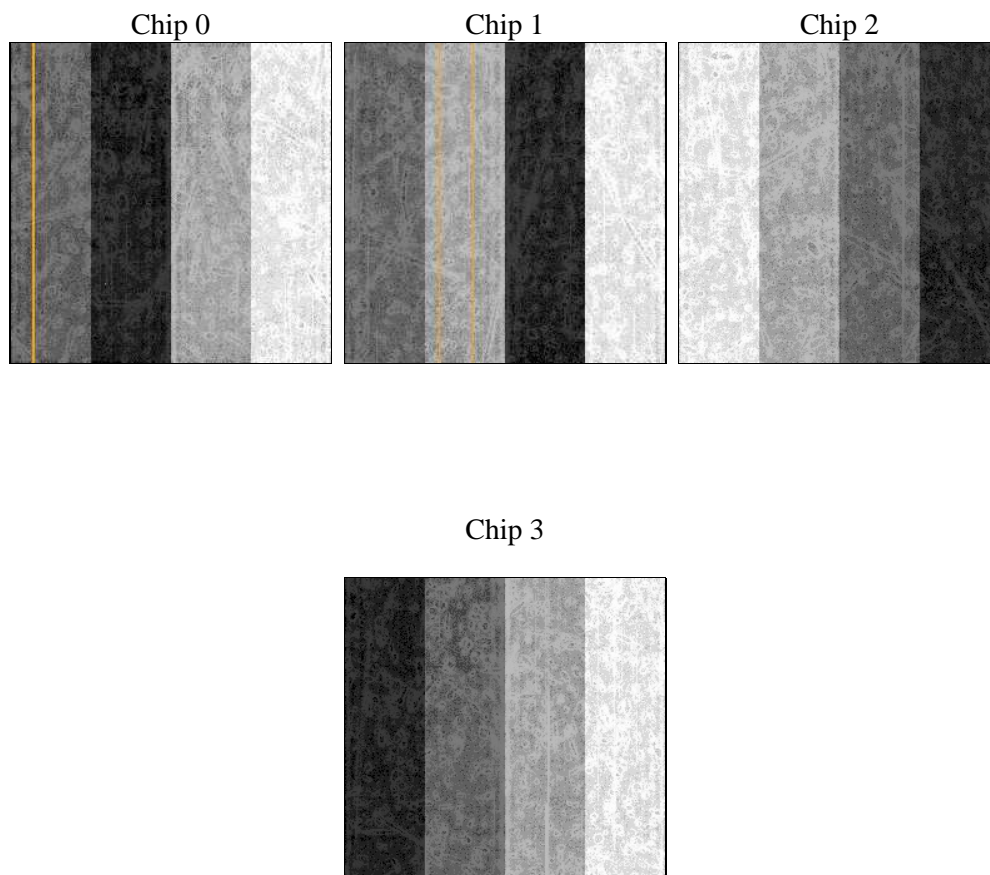
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	23800.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	23884.762634575	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	23887.862604797	Sum of GTIs [s]
date	2014-11-30T10:20:54	Date and time of file creation	ontime1	23884.762634575	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	23884.803684592	Sum of GTIs [s]
			ontime3	23887.985724807	Sum of GTIs [s]
			l1events	486335	Number of level 1 events

2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	113459	126410	123491	122975
rejected events	98655	102193	108697	108899
rejected %	86%	80%	88%	88%

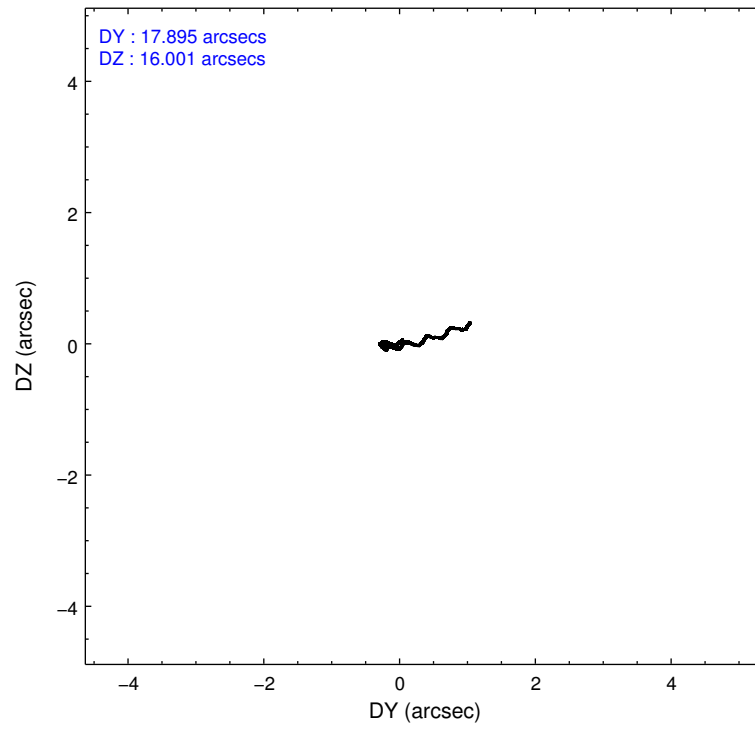
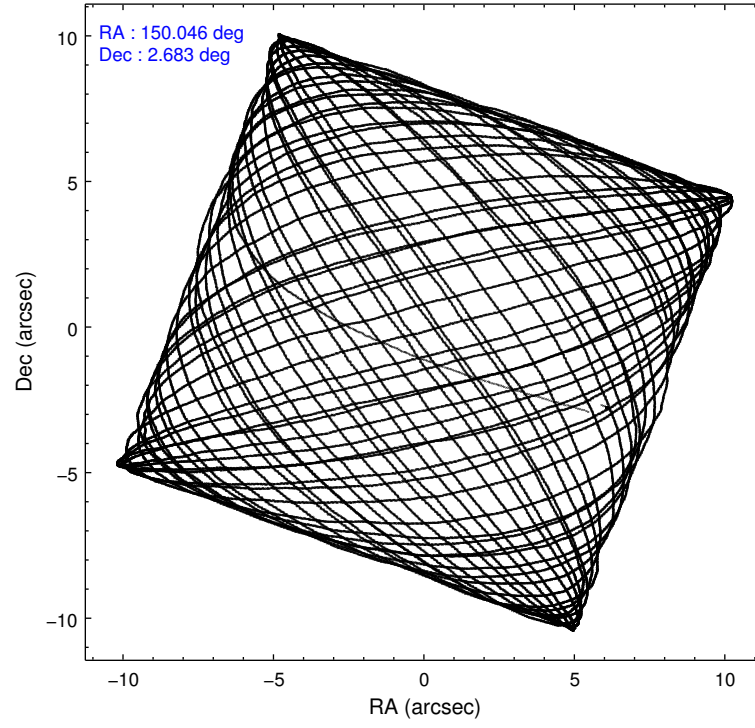
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	4973	6065	5298	4893
	4%	4%	4%	3%
grade 1 events	84	60	74	80
	0%	0%	0%	0%
grade 2 events	3699	11378	3555	3147
	3%	9%	2%	2%
grade 3 events	1652	1605	1567	1490
	1%	1%	1%	1%
grade 4 events	1482	1599	1541	1540
	1%	1%	1%	1%
grade 5 events	5834	6064	5556	6640
	5%	4%	4%	5%
grade 6 events	3001	3577	2835	3011
	2%	2%	2%	2%
grade 7 events	92734	96062	103065	102174
	81%	75%	83%	83%

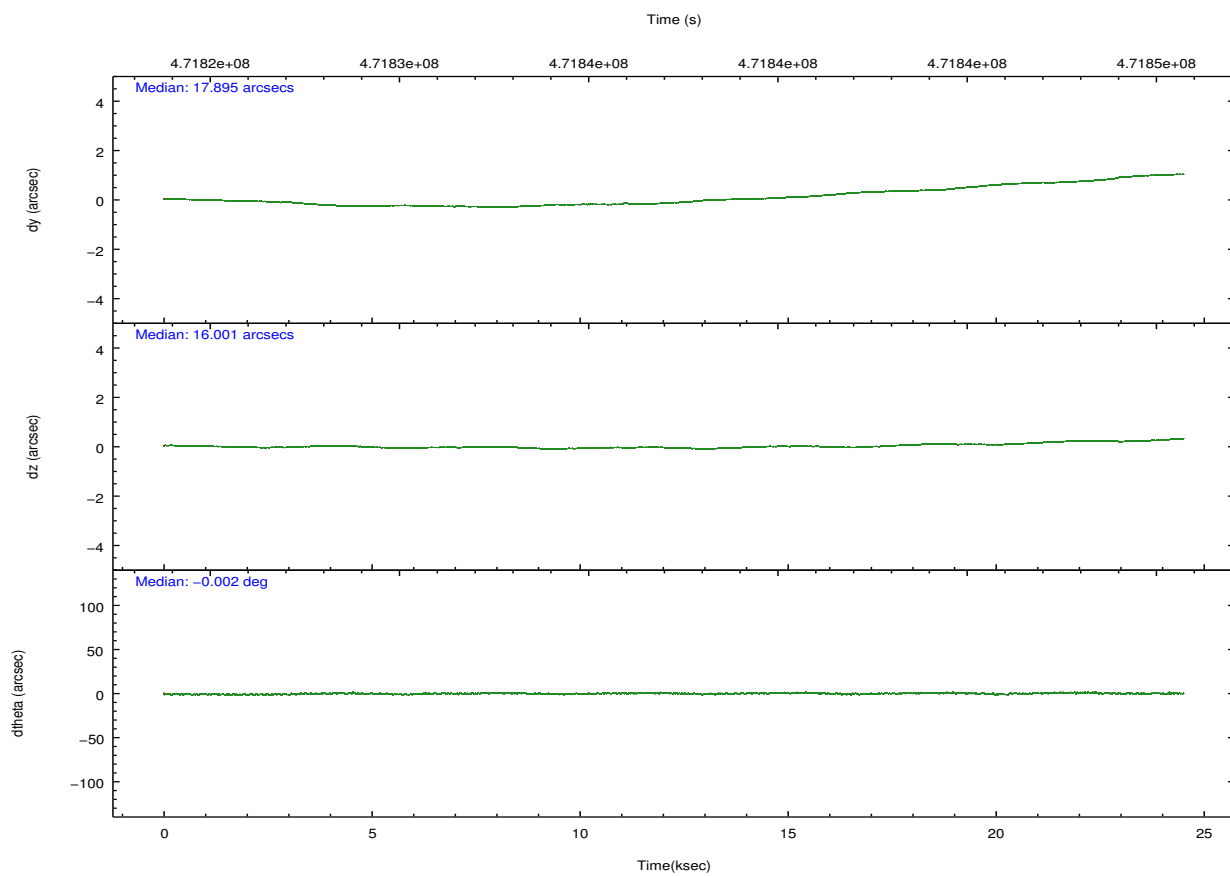
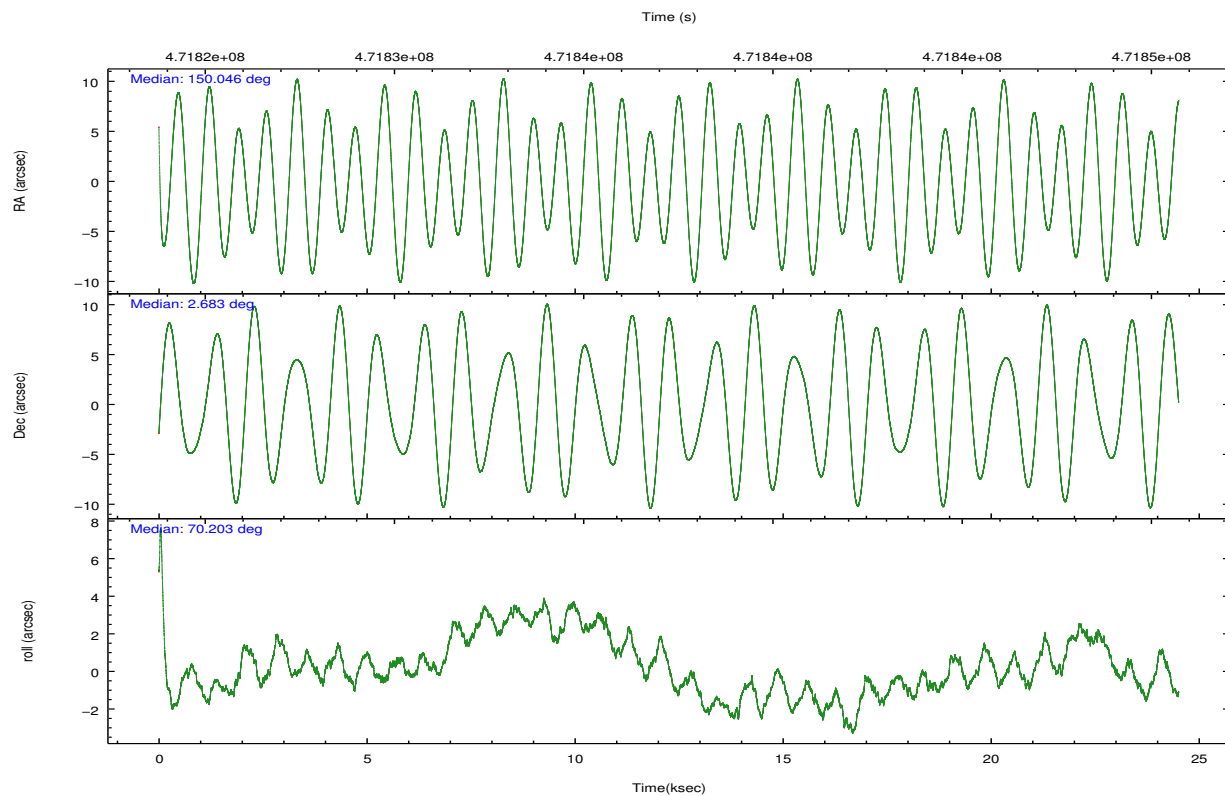
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-0123	ACIS-0123
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	150.050561	150.0455696428297
[deg] Pointing Dec	2.655835	2.682903838397015
[deg] Pointing Roll	70.000311	70.20922494779012
[deg] Roll angle	250.000000	250.000000
[deg] Roll tolerance	20.000000	20.000000
Roll constraint allows 180D rotation	Y	Y
[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)	471825697.184000	471824186.13217
Observation start date	2012-12-13T22:40:30	2012-12-13T22:16:26
[s] Observation end time (MET)	471849497.184000	471850117.09607
Observation end date	2012-12-14T05:17:10	2012-12-14T05:28:37
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



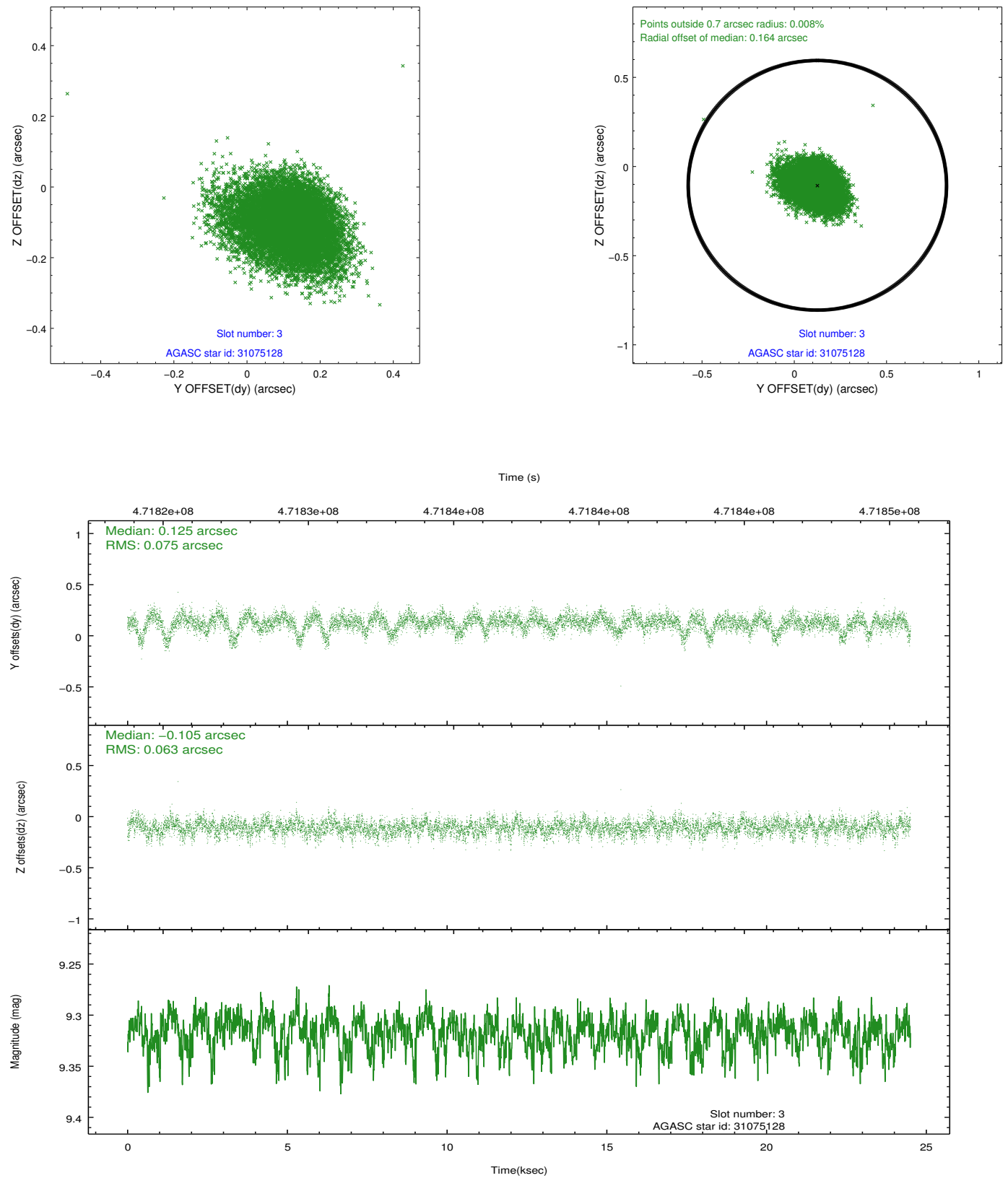


Slot Statistics

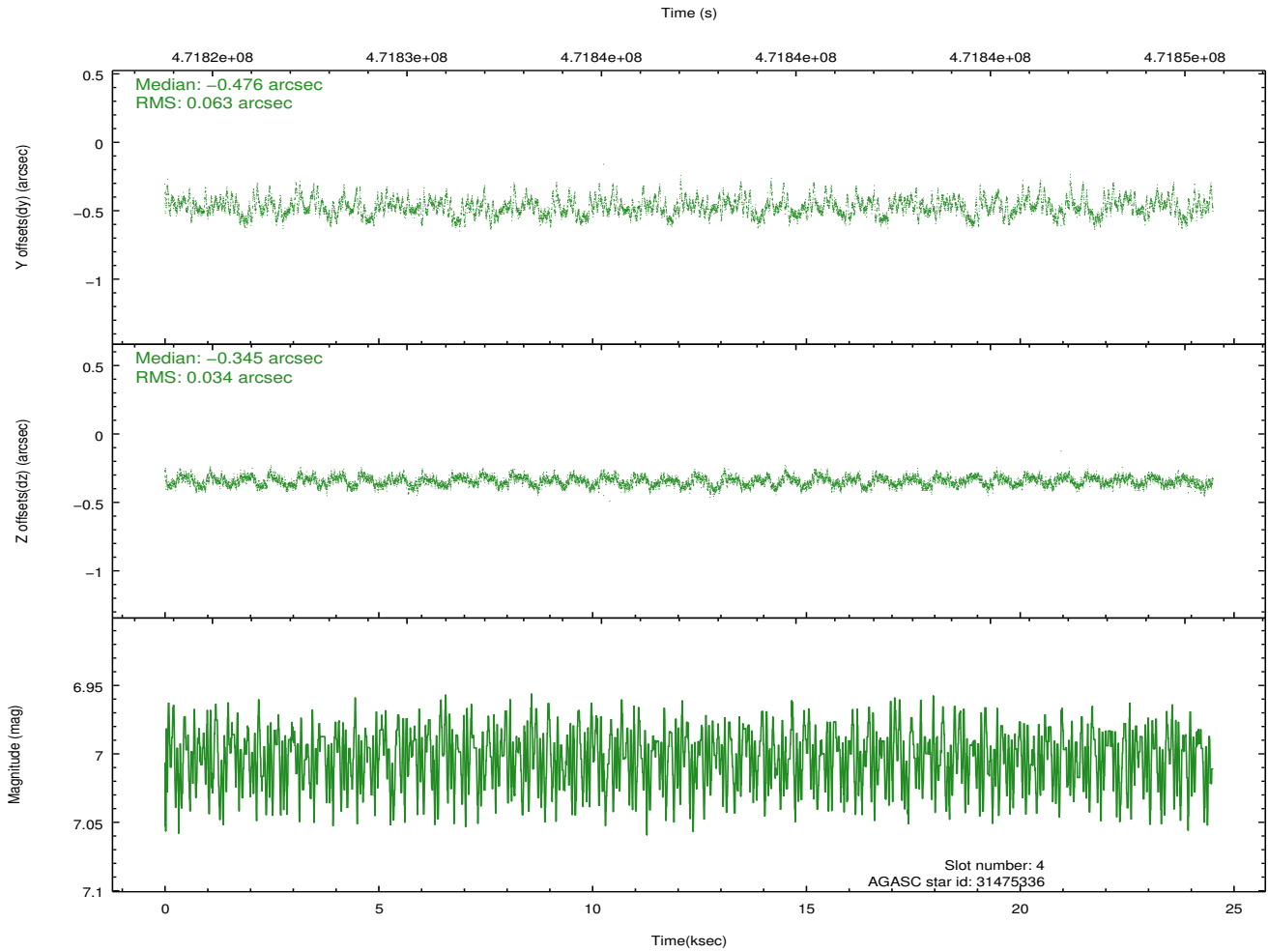
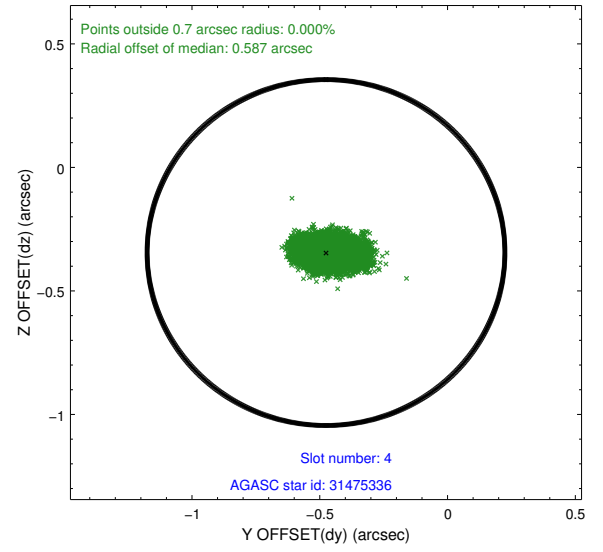
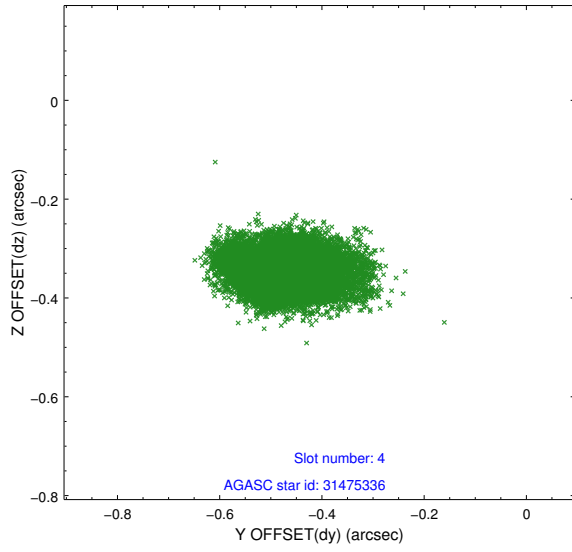
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.08	5979	0.053	-0.025	0.011	0.020	0.000000	0.000000	921.41	-839.68
1	FID		ACIS-I-5	7.07	5979	-0.252	0.045	0.012	0.019	0.000000	0.000000	-1826.95	1057.80
2	FID		ACIS-I-6	7.08	5979	0.107	0.051	0.007	0.011	0.000000	0.000000	386.85	1702.46
3	GUIDE	used	31075128	9.32	11950	0.125	-0.105	0.101	0.178	149.584516	2.364347	-1558.85	1216.32
4	GUIDE	used	31475336	7.00	11955	-0.476	-0.345	0.074	0.128	149.929497	3.384805	2316.84	1307.44
5	GUIDE	used	31983336	8.59	11946	0.573	0.318	0.093	0.155	150.429924	2.291234	-765.28	-1730.72
6	GUIDE	used	32387968	9.18	11884	-0.109	-0.307	0.109	0.175	150.106347	3.119099	1635.97	381.75
7	GUIDE	used	32374896	9.21	11952	-0.111	0.435	0.104	0.168	150.682269	2.512794	294.01	-2310.44

2.4 Star Slots

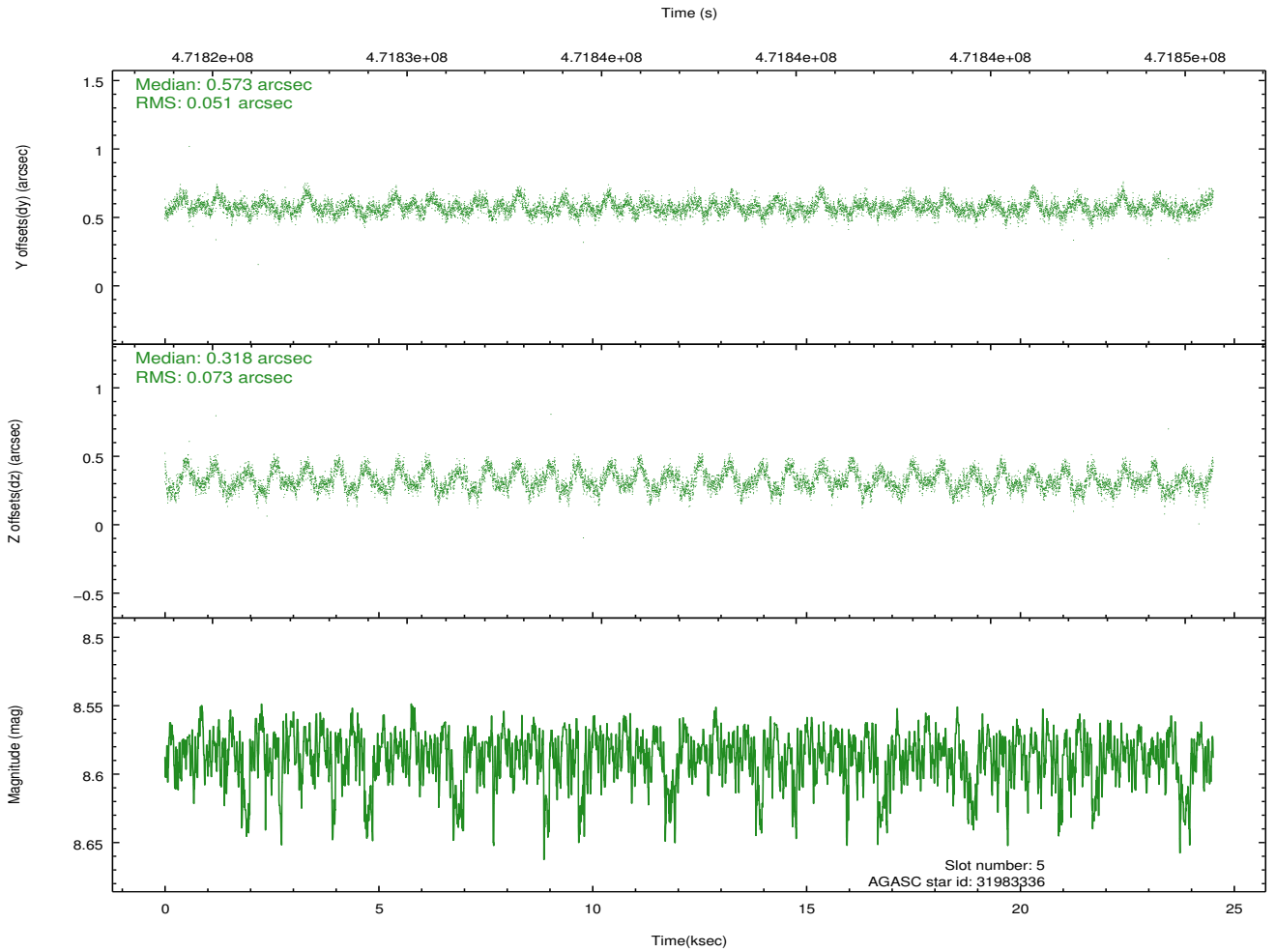
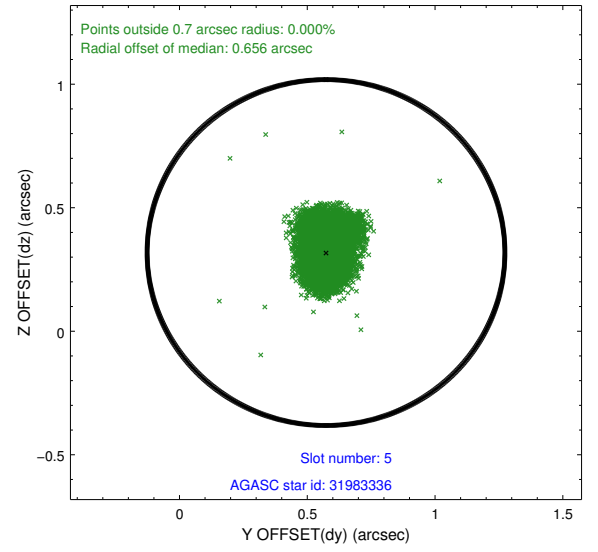
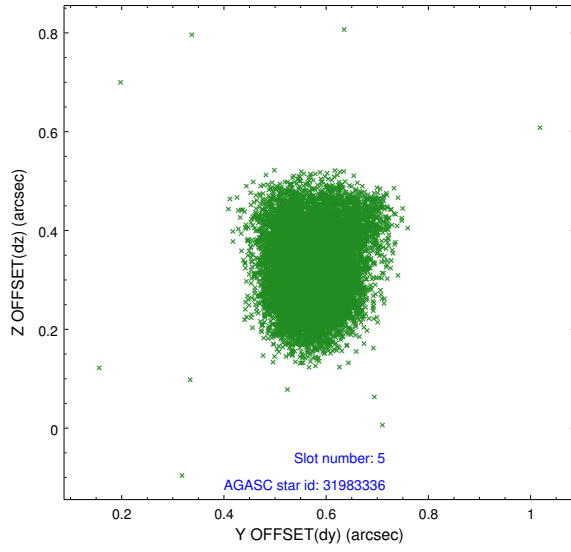
2.4.1 Slot 3



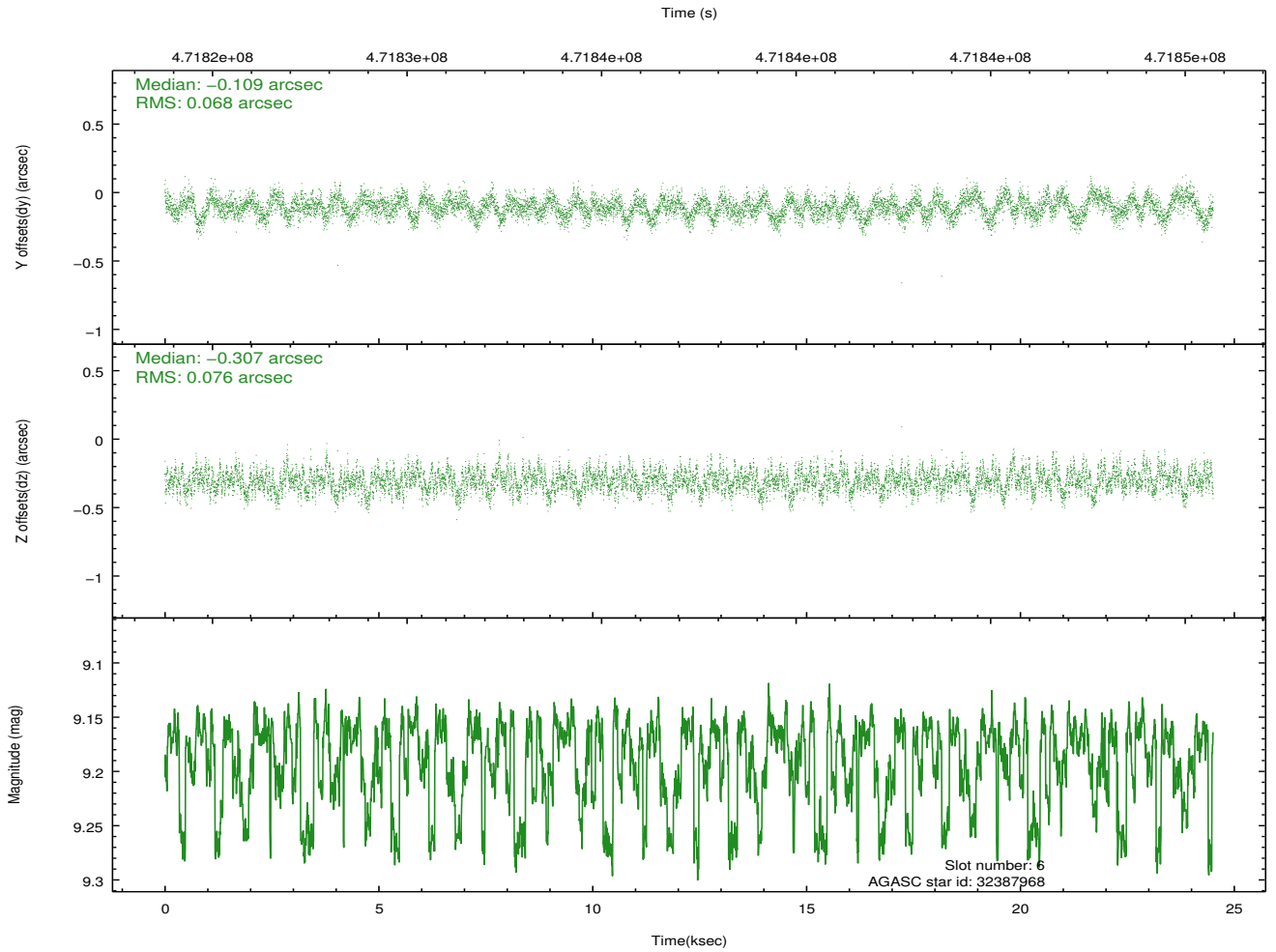
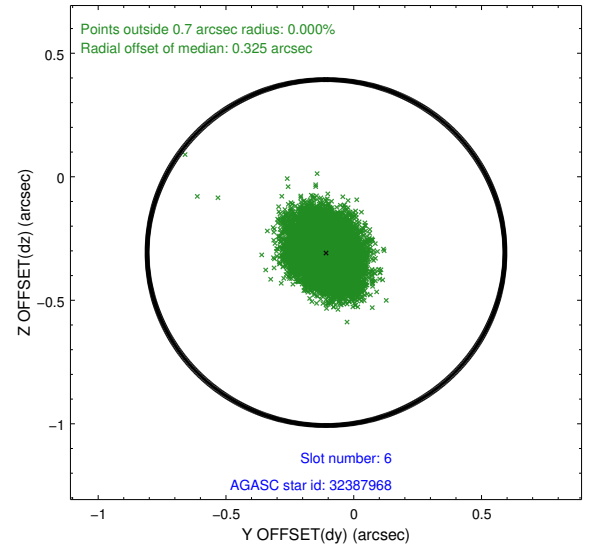
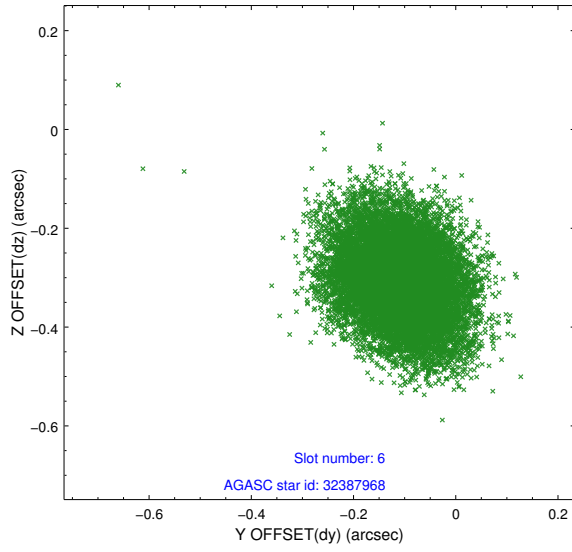
2.4.2 Slot 4



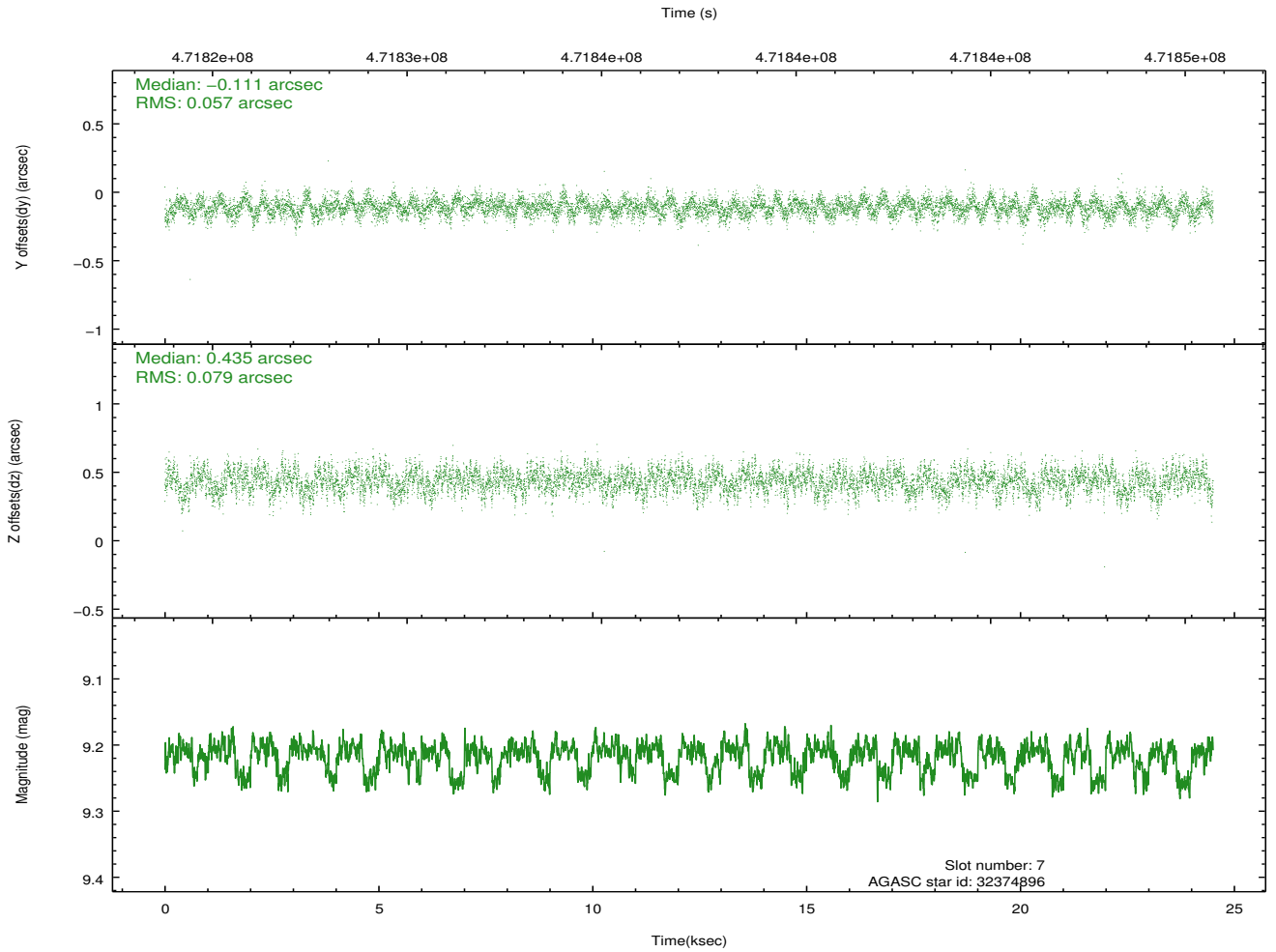
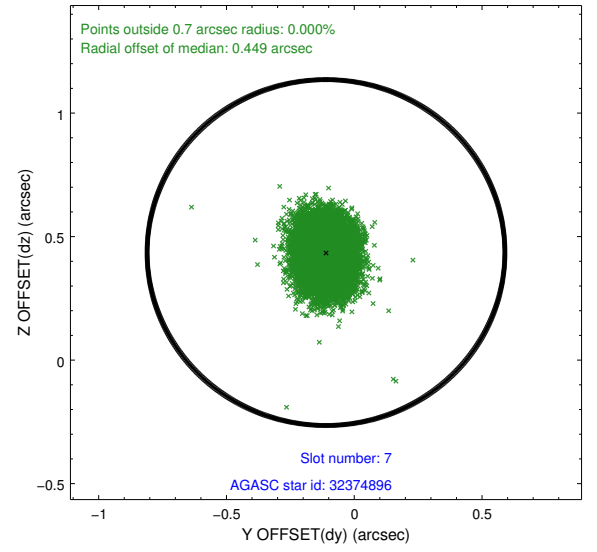
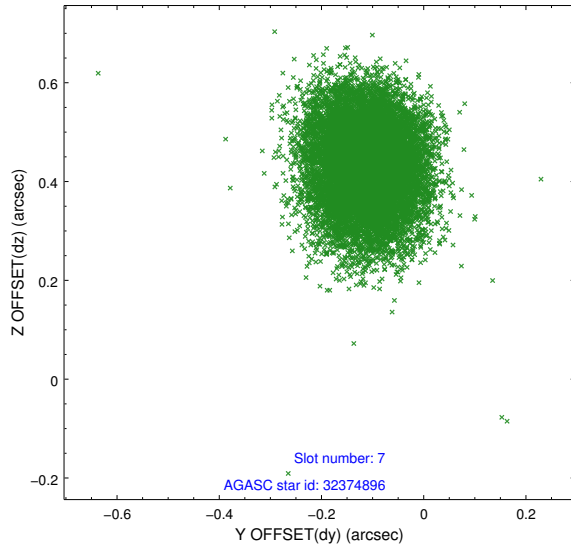
2.4.3 Slot 5



2.4.4 Slot 6

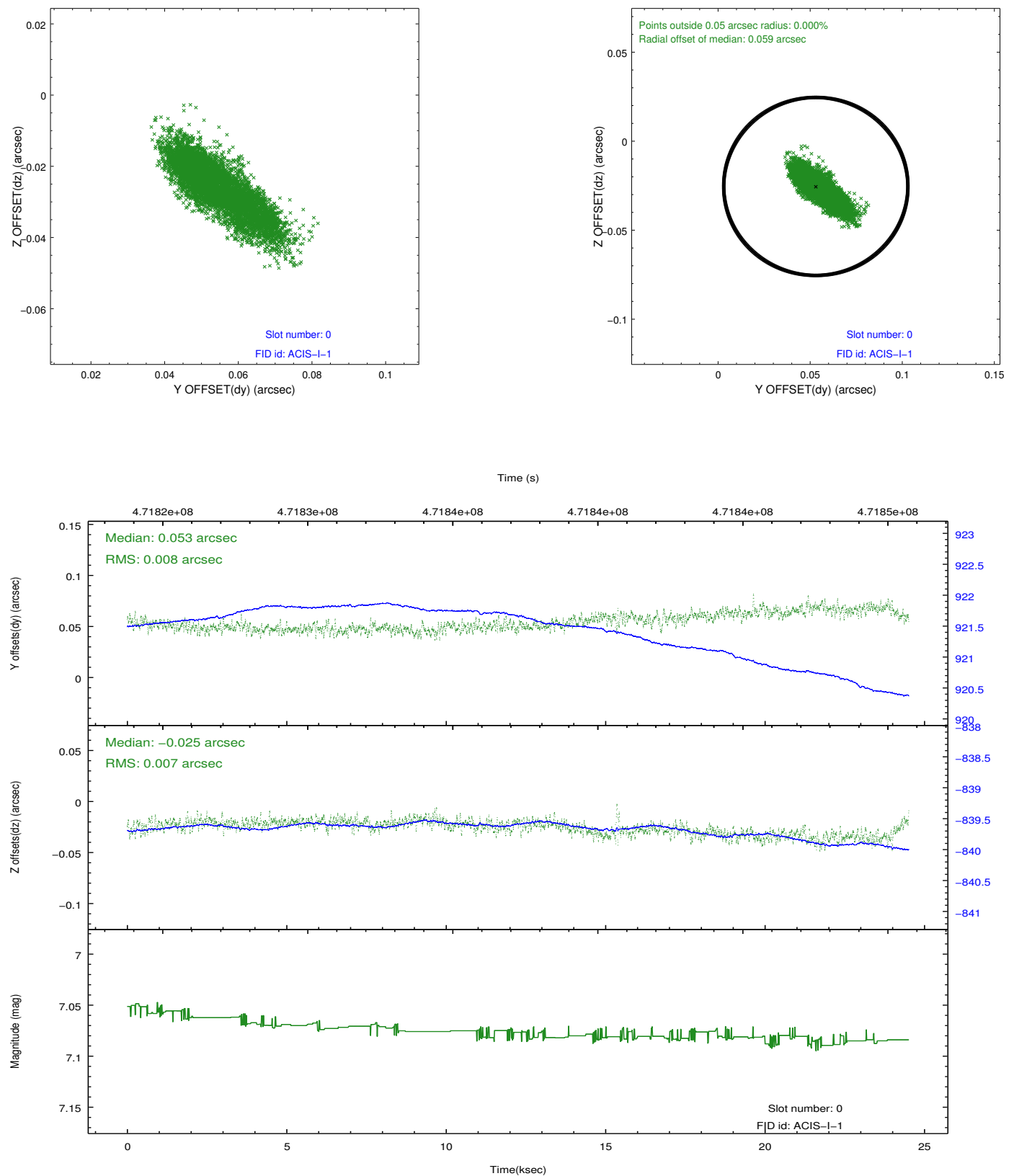


2.4.5 Slot 7

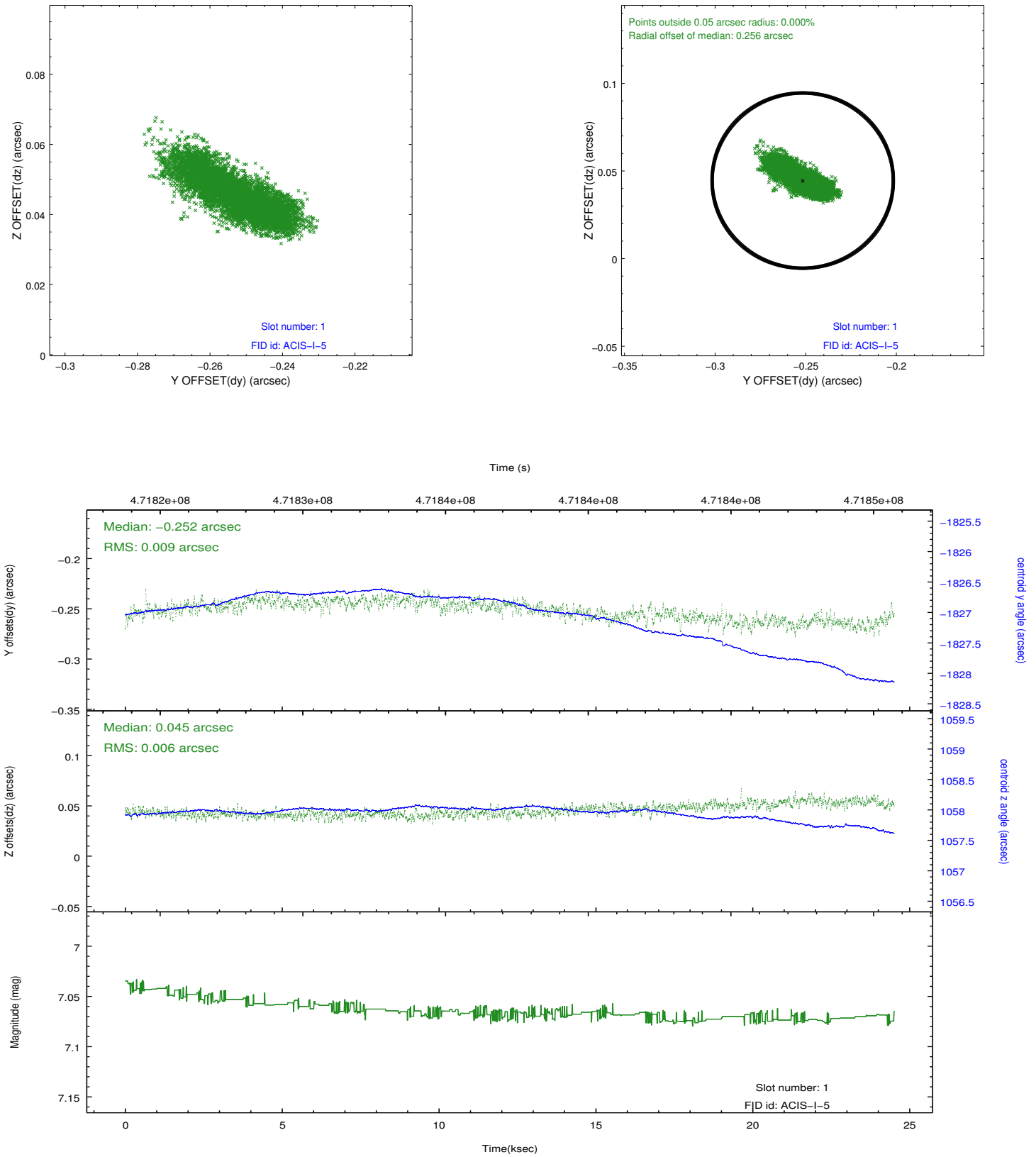


2.5 FID Slots

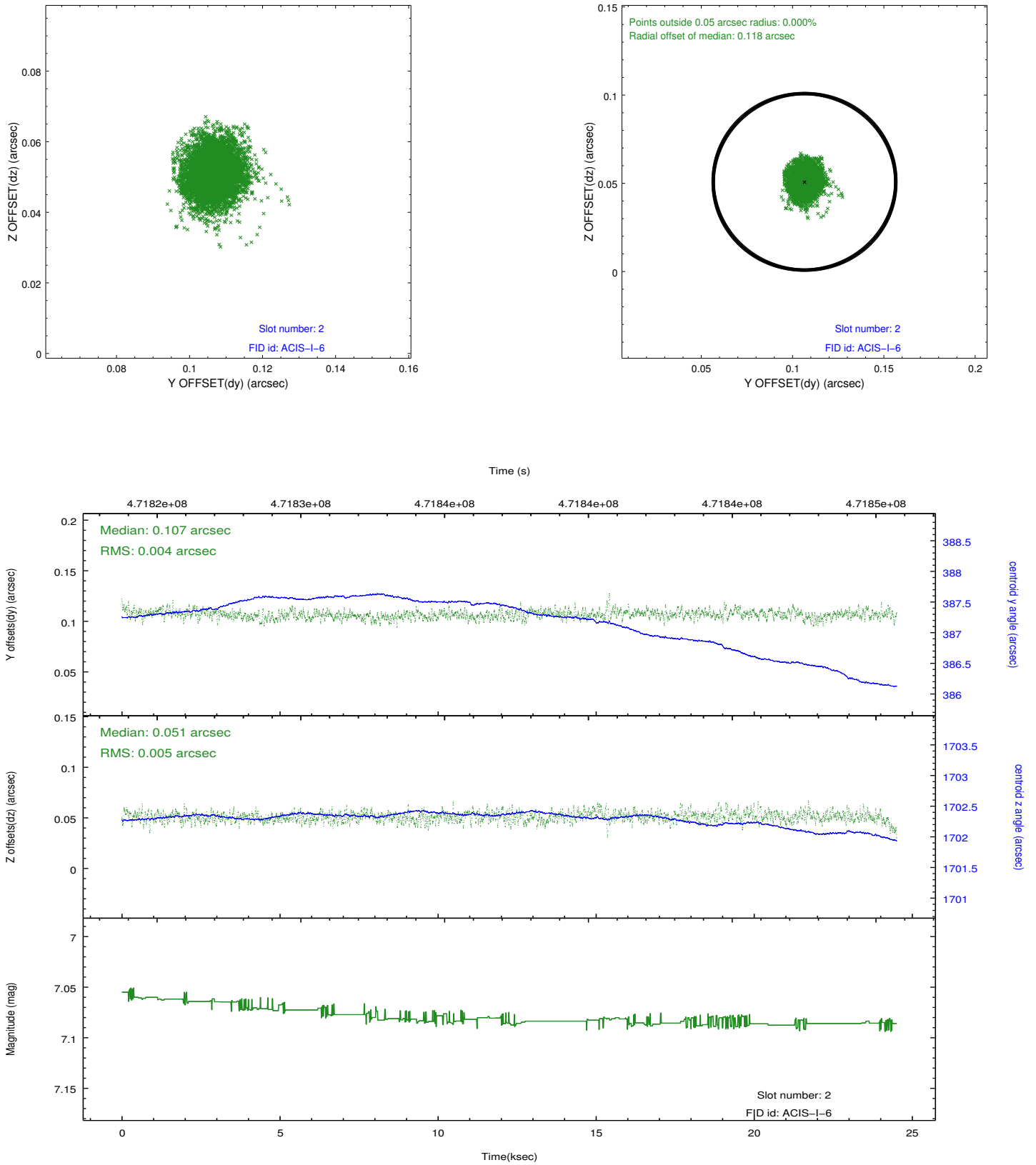
2.5.1 Slot 0



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)	2014.12.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	23.884762634575

A.2 Comments

Roll 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.