

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 12029 - L2 Version 3
Chandra X-Ray Center

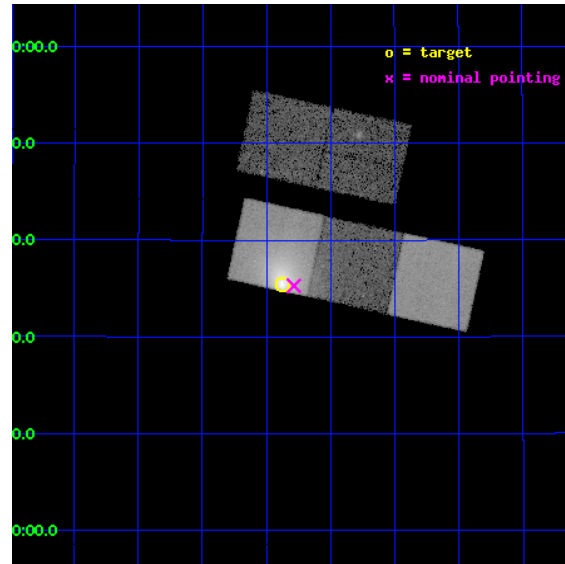
L2 Processing Date : Jun 25 2012

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1 Front

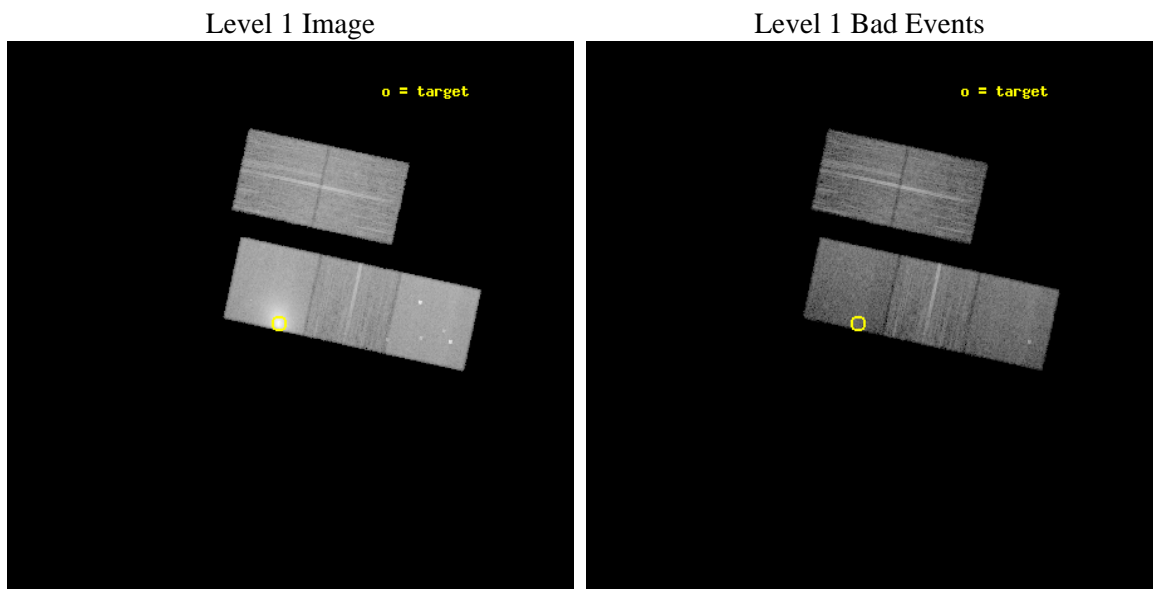
seq_num	890045	Sequence number
obs_id	12029	Observation id
title	AO-11 Calibration Observations of A1795	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	A1795	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	207.219583	Observer's specified target RA [deg]
dec_targ	26.590833	Observer's specified target Dec [deg]
ra_nom	207.19650170912	Nominal RA [deg]
dec_nom	26.588021859492	Nominal Dec [deg]
roll_nom	192.29720036705	Nominal Roll [deg]
revision	3	Processing version of data
ontime	14889.300114512	Sum of GTIs [s]
livetime	14694.760447173	Livetime [s]
ontime2	14883.018123746	Sum of GTIs [s]
ontime3	14886.159124196	Sum of GTIs [s]
ontime5	14889.300114512	Sum of GTIs [s]
ontime6	14883.018133819	Sum of GTIs [s]
ontime7	14889.300114512	Sum of GTIs [s]
l2events	299325	Number of level 2 events



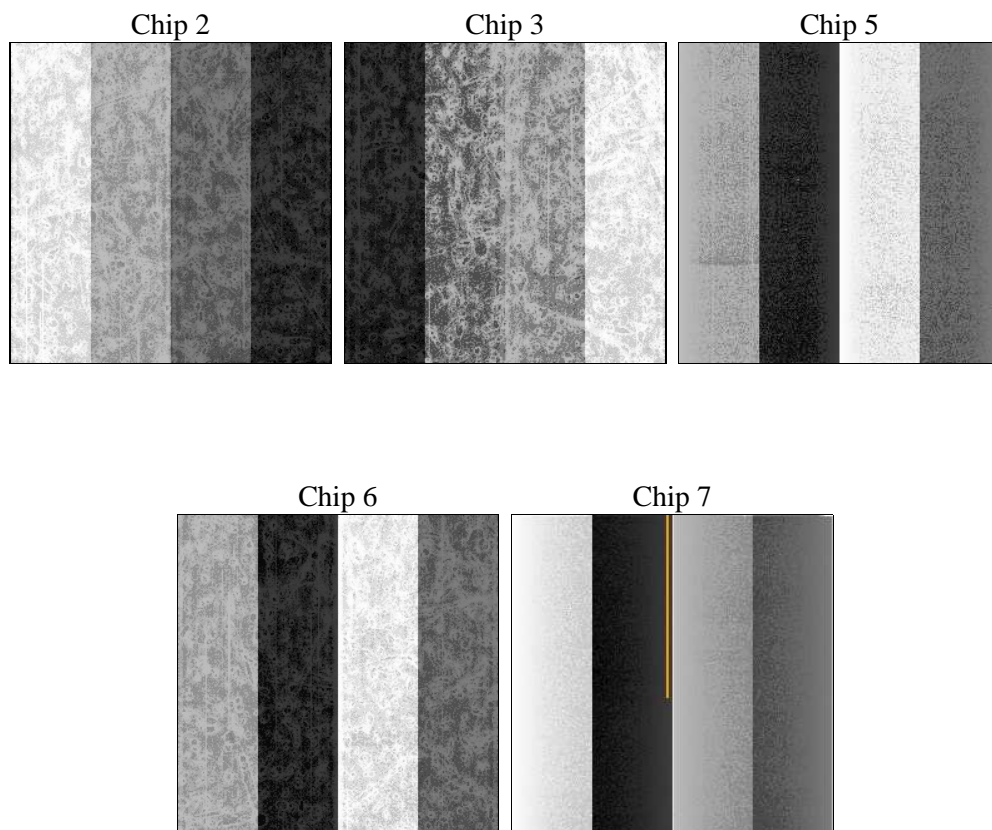
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	14706.213000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	14889.300114512	Sum of GTIs [s]
caldsver	4.4.10	 	ontime2	14883.018123746	Sum of GTIs [s]
date	2012-06-25T20:49:20	Date and time of file creation	ontime3	14886.159124196	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	14889.300114512	Sum of GTIs [s]
			ontime6	14883.018133819	Sum of GTIs [s]
			ontime7	14889.300114512	Sum of GTIs [s]
			l1events	776619	Number of level 1 events

2.1.4 Events

	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	112190	111251	173302	117083	262793
rejected events	99704	99518	86194	98827	77492
rejected %	88%	89%	49%	84%	29%

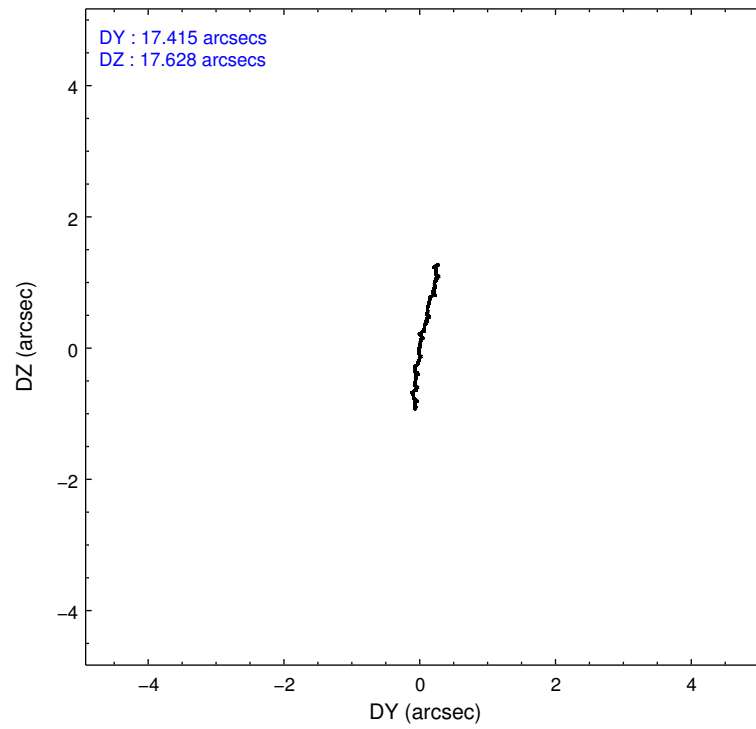
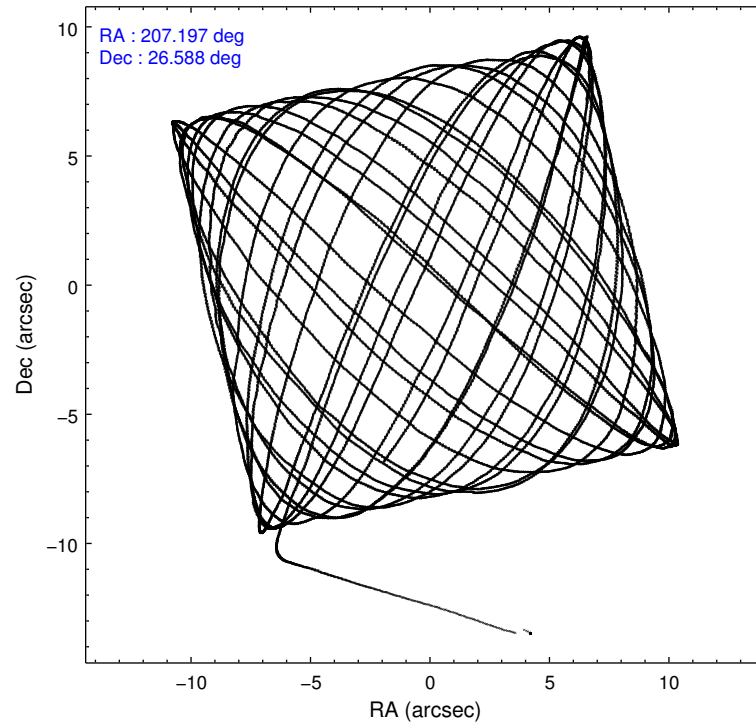
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	4825	4334	10013	9083	41726
	4%	3%	5%	7%	15%
grade 1 events	58	65	299	78	193
	0%	0%	0%	0%	0%
grade 2 events	2921	2534	26081	3413	45178
	2%	2%	15%	2%	17%
grade 3 events	1180	1294	3566	1504	20243
	1%	1%	2%	1%	7%
grade 4 events	1334	1326	3261	1485	19745
	1%	1%	1%	1%	7%
grade 5 events	4249	4987	13544	5115	15096
	3%	4%	7%	4%	5%
grade 6 events	2292	2322	44614	2881	59463
	2%	2%	25%	2%	22%
grade 7 events	95331	94389	71924	93524	61149
	84%	84%	41%	79%	23%

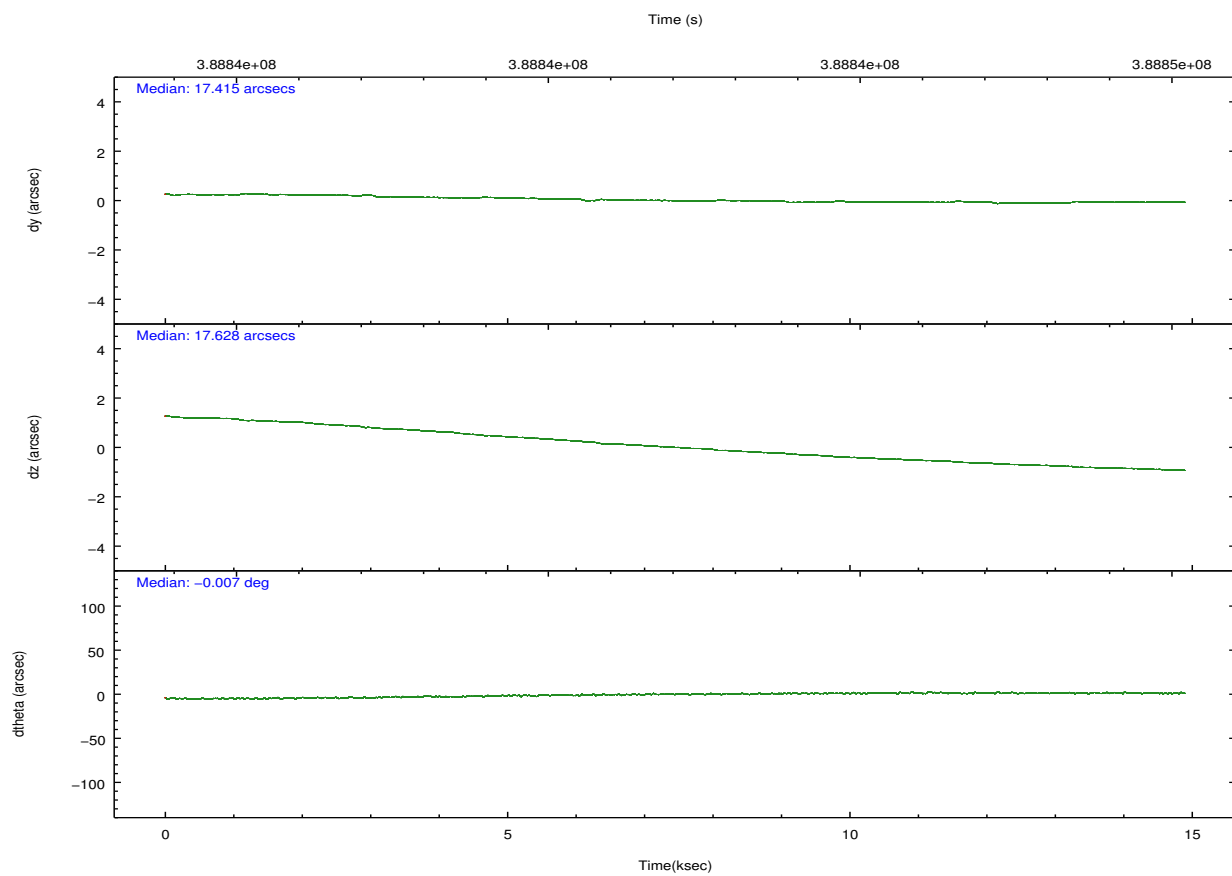
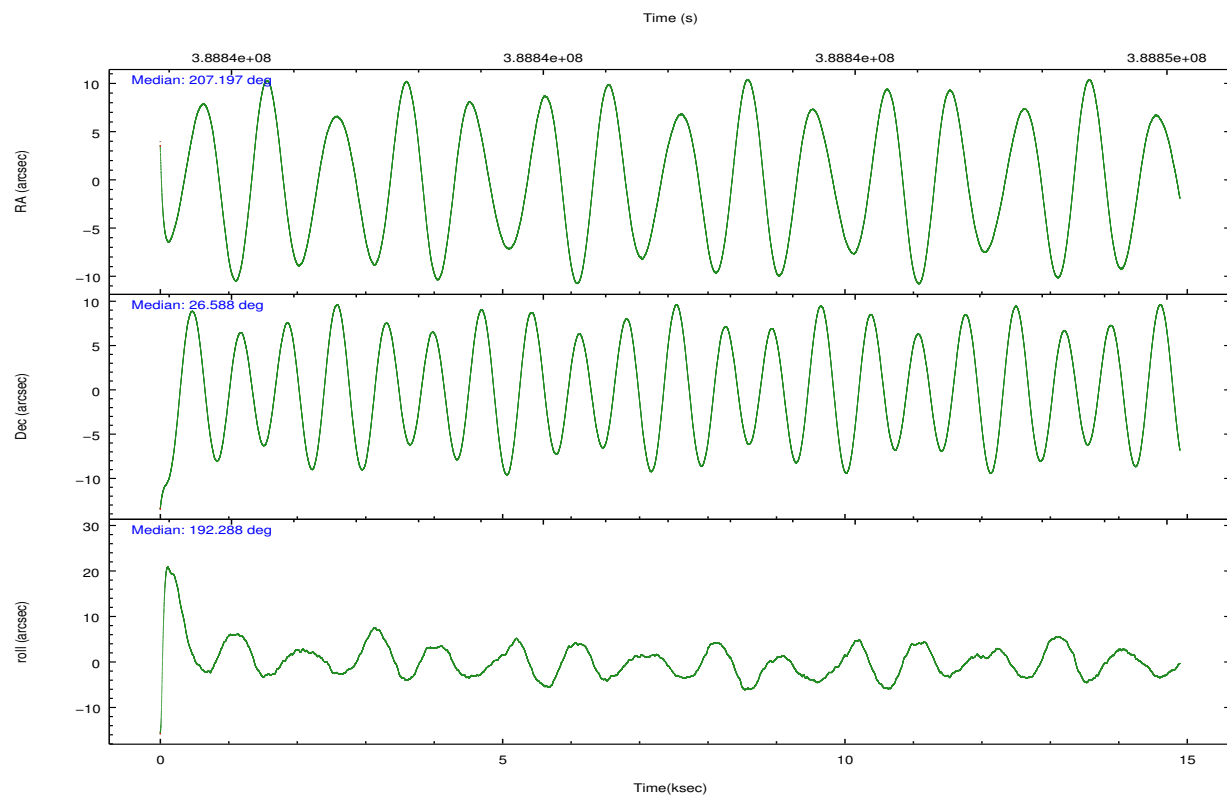
2.2 Compared Parameters

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	207.218818	207.1965017091195
[deg] Pointing Dec	26.606713	26.5880218594915
[deg] Pointing Roll	192.130605	192.2972003670502
[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)	388834778.184000	388833596.23857
Observation start date	2010-04-28T09:38:32	2010-04-28T09:19:56
[s] Observation end time (MET)	388849484.184000	388849698.47689
Observation end date	2010-04-28T13:43:38	2010-04-28T13:48:18
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



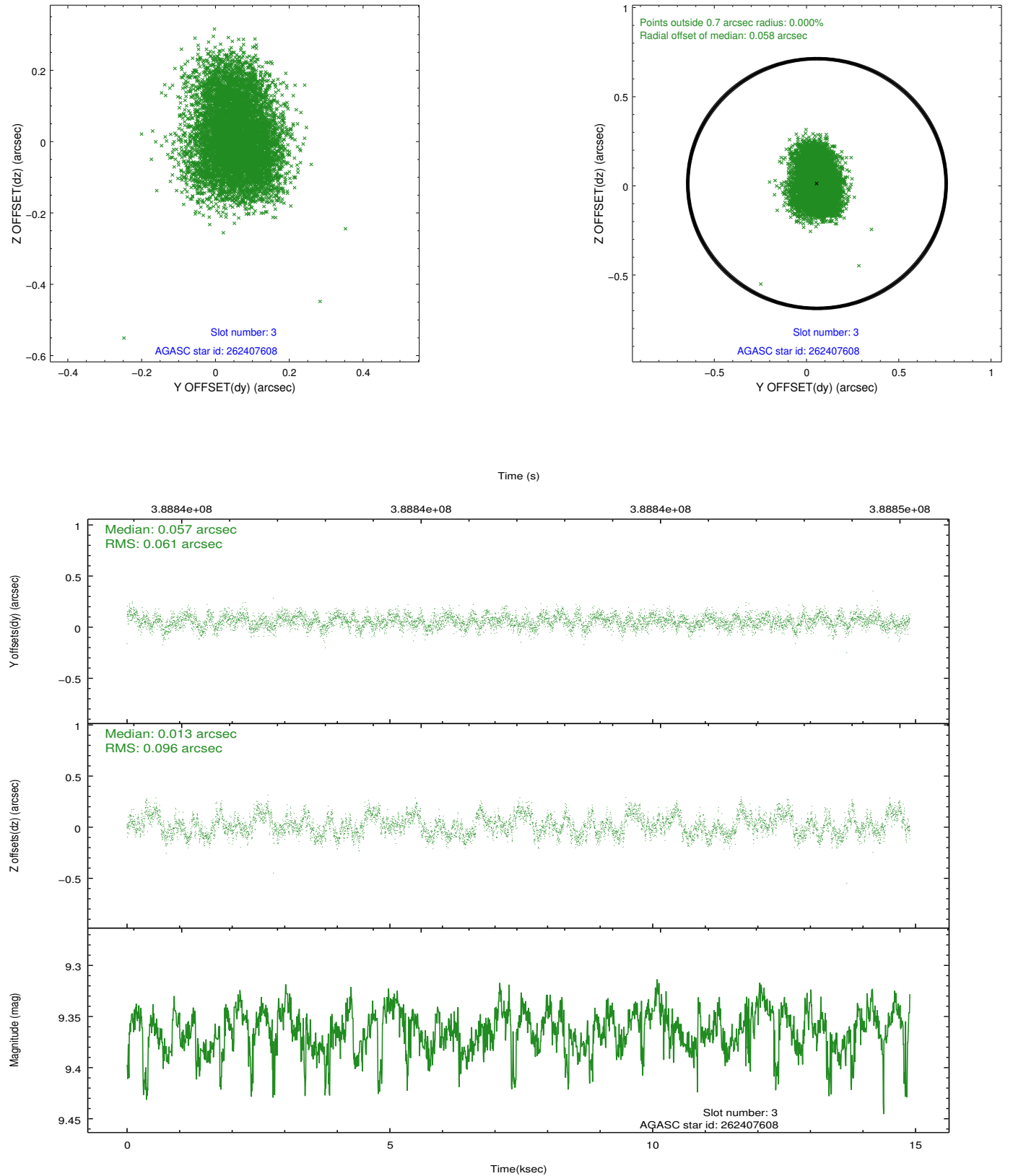


Slot Statistics

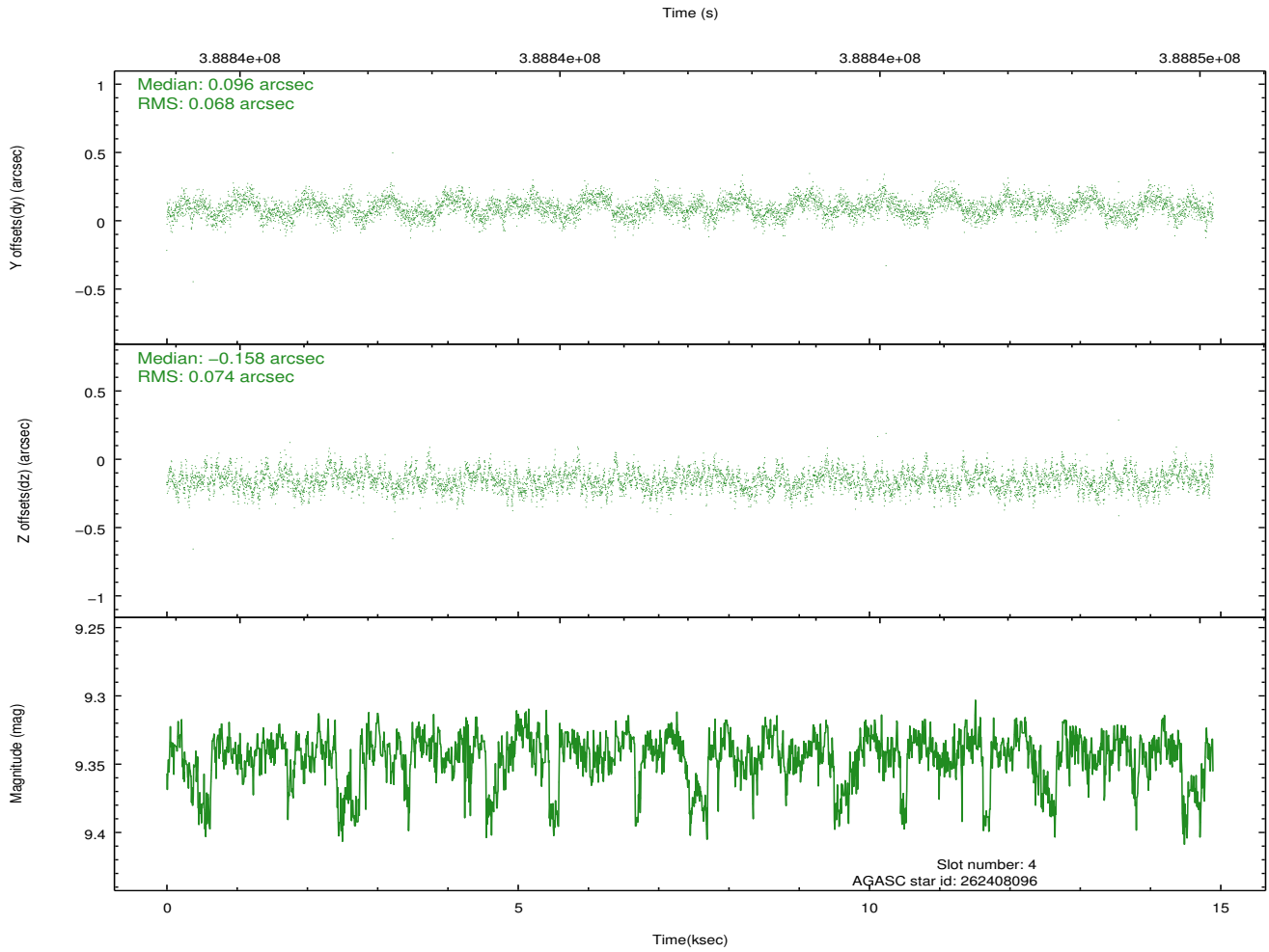
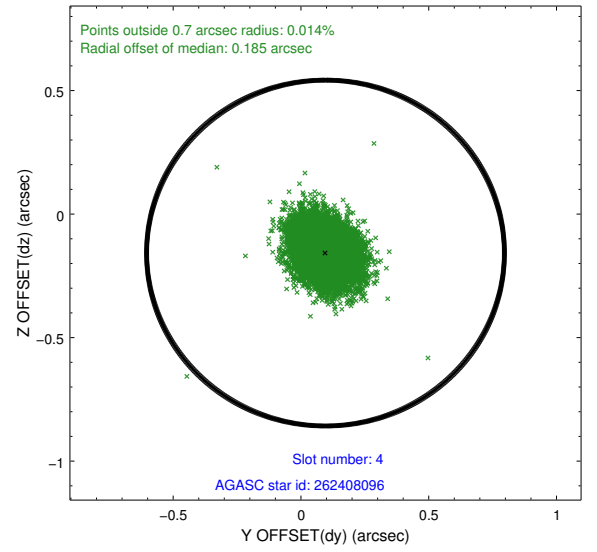
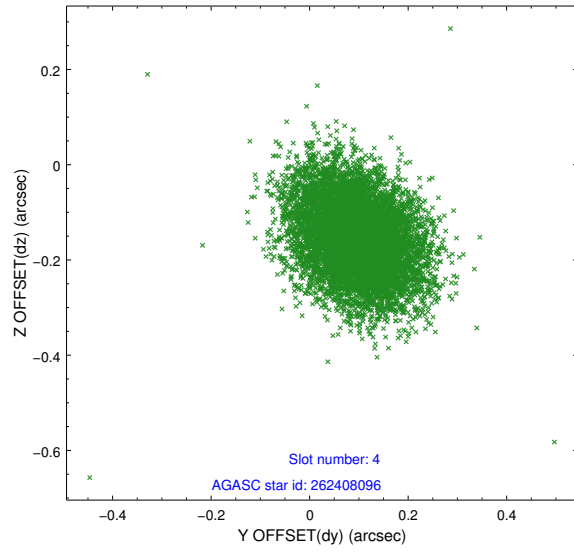
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	6.94	3633	0.070	0.162	0.012	0.025	0.000000	0.000000	926.38	-1936.52
1	FID	ACIS-S-2	6.85	3634	-0.169	-0.109	0.025	0.066	0.000000	0.000000	-769.59	-1941.77
2	FID	ACIS-S-6	7.15	3634	0.075	-0.040	0.028	0.046	0.000000	0.000000	391.84	604.21
3	GUIDE	262407608	9.36	7245	0.057	0.013	0.123	0.194	207.378401	26.435507	-373.35	710.75
4	GUIDE	262408096	9.34	7255	0.096	-0.158	0.107	0.173	207.011678	26.515421	721.98	180.74
5	GUIDE	262408512	7.99	7266	-0.093	0.020	0.068	0.109	207.800210	27.128796	-2216.51	-1450.27
6	GUIDE	262408936	9.65	7259	0.053	0.151	0.128	0.206	207.154731	26.726554	110.77	-464.67
7	GUIDE	262414456	9.28	7260	-0.114	-0.014	0.157	0.243	208.043290	26.129682	-2246.42	2230.79

2.4 Star Slots

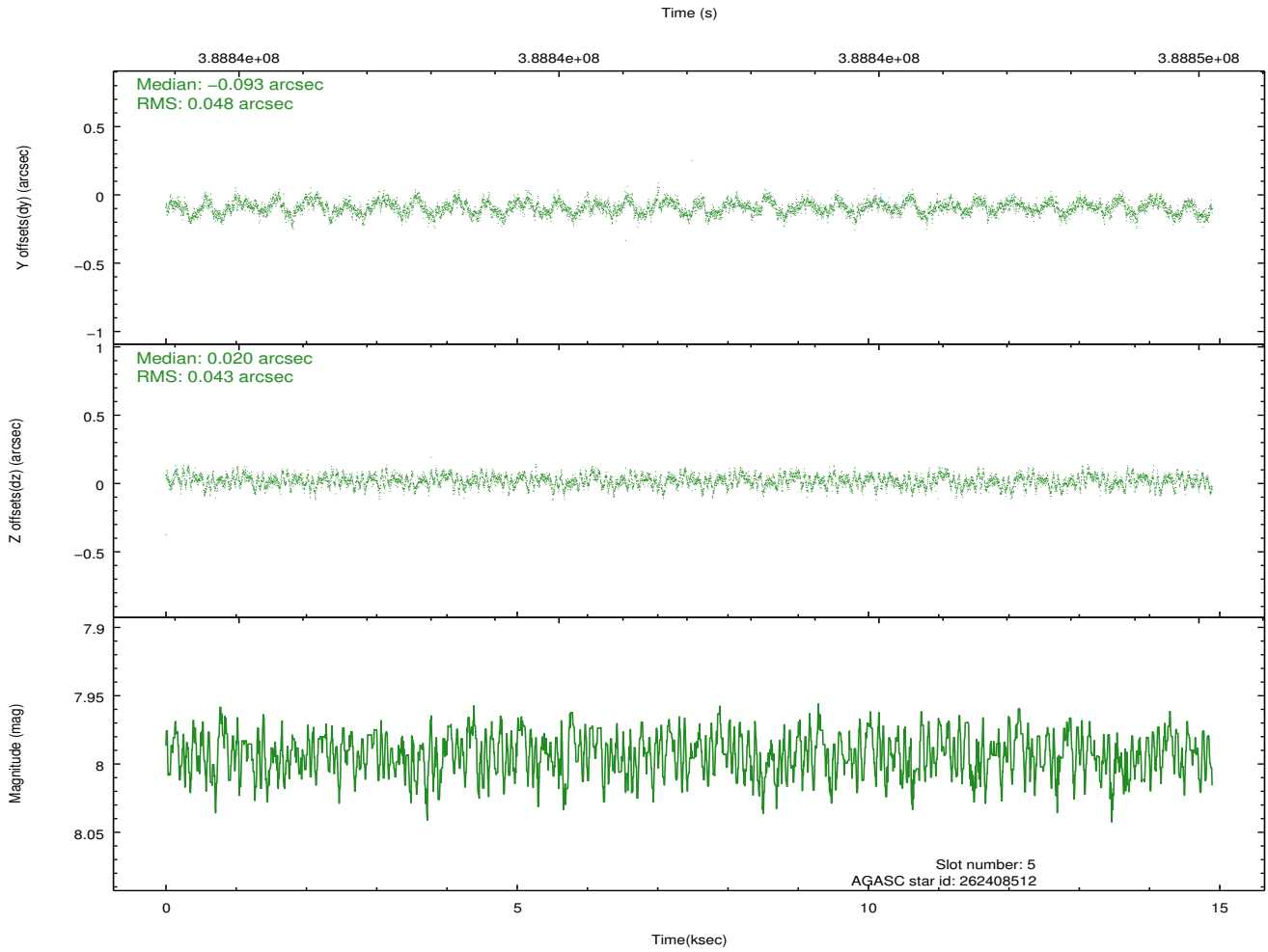
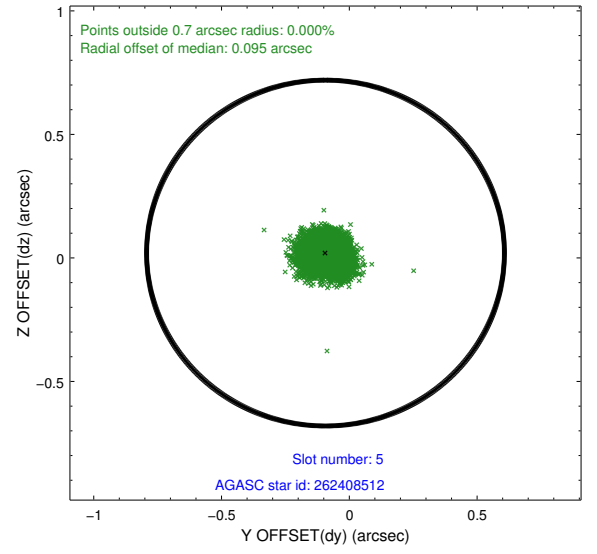
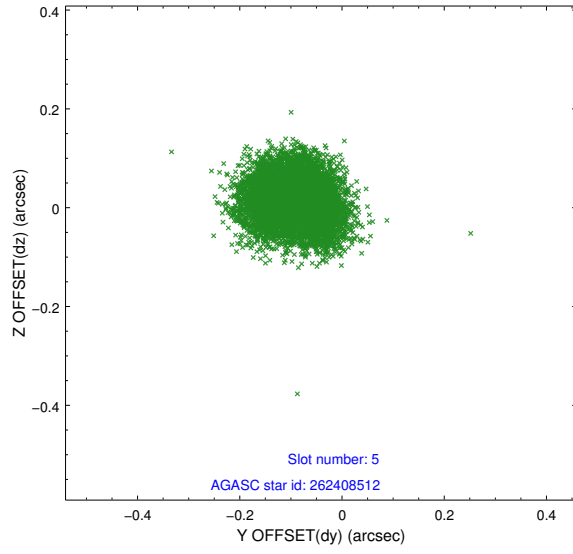
2.4.1 Slot 3



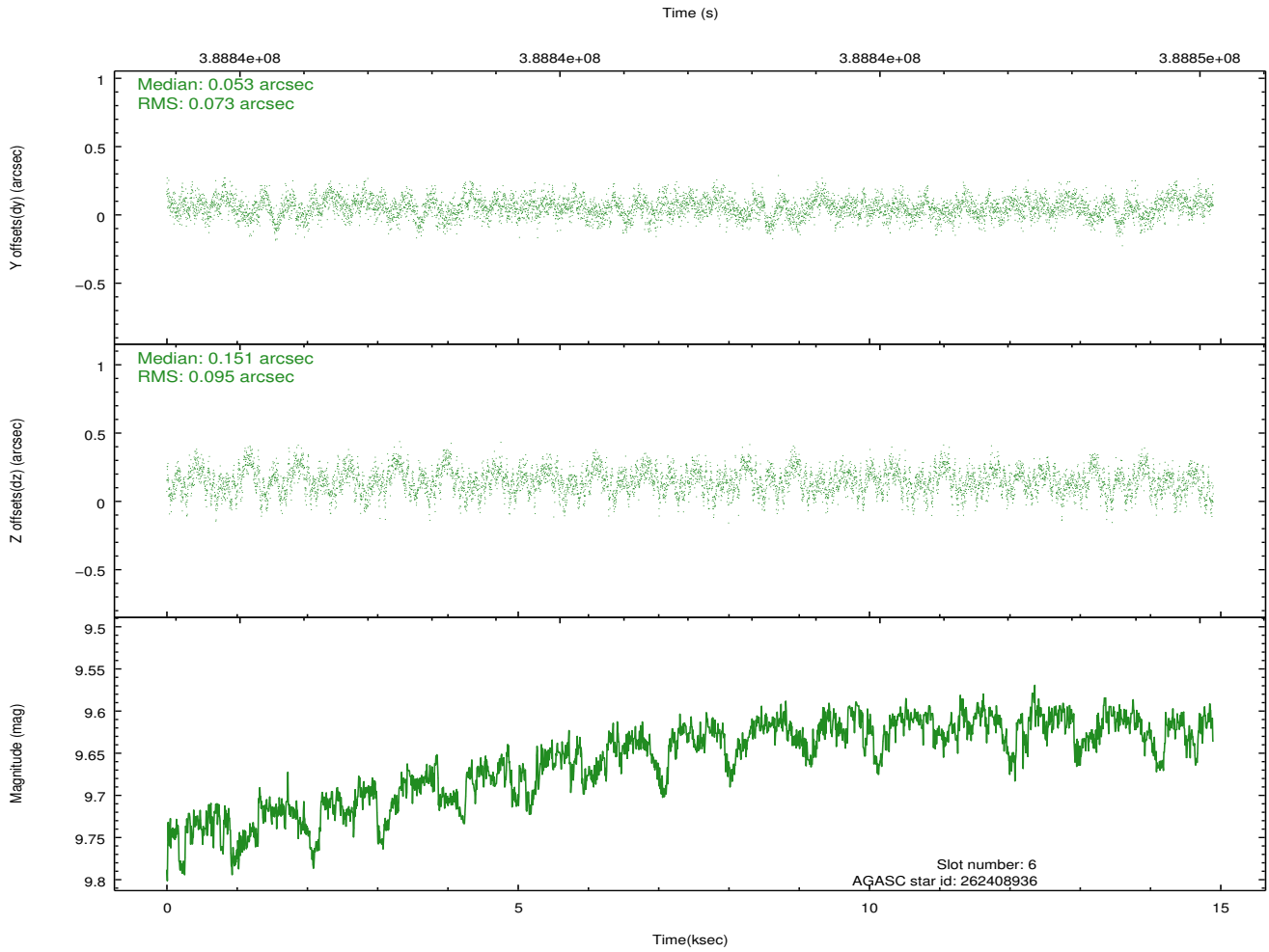
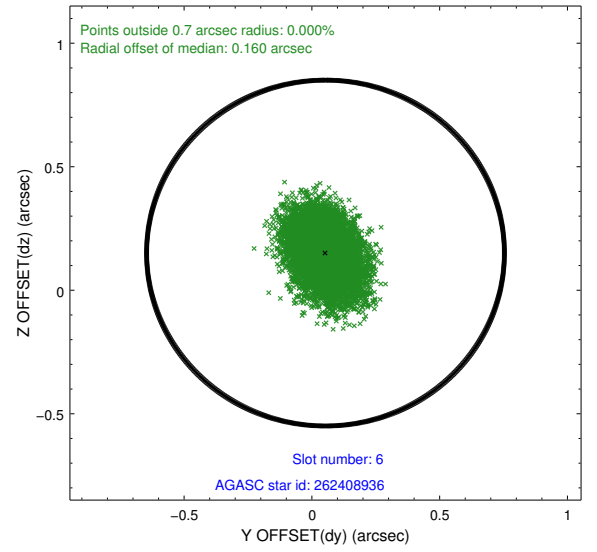
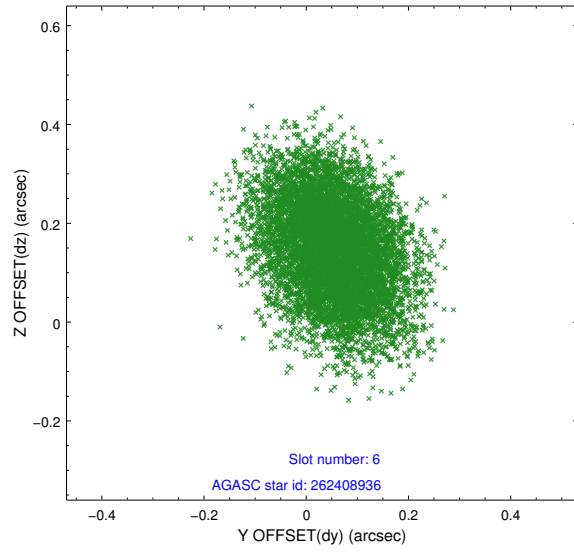
2.4.2 Slot 4



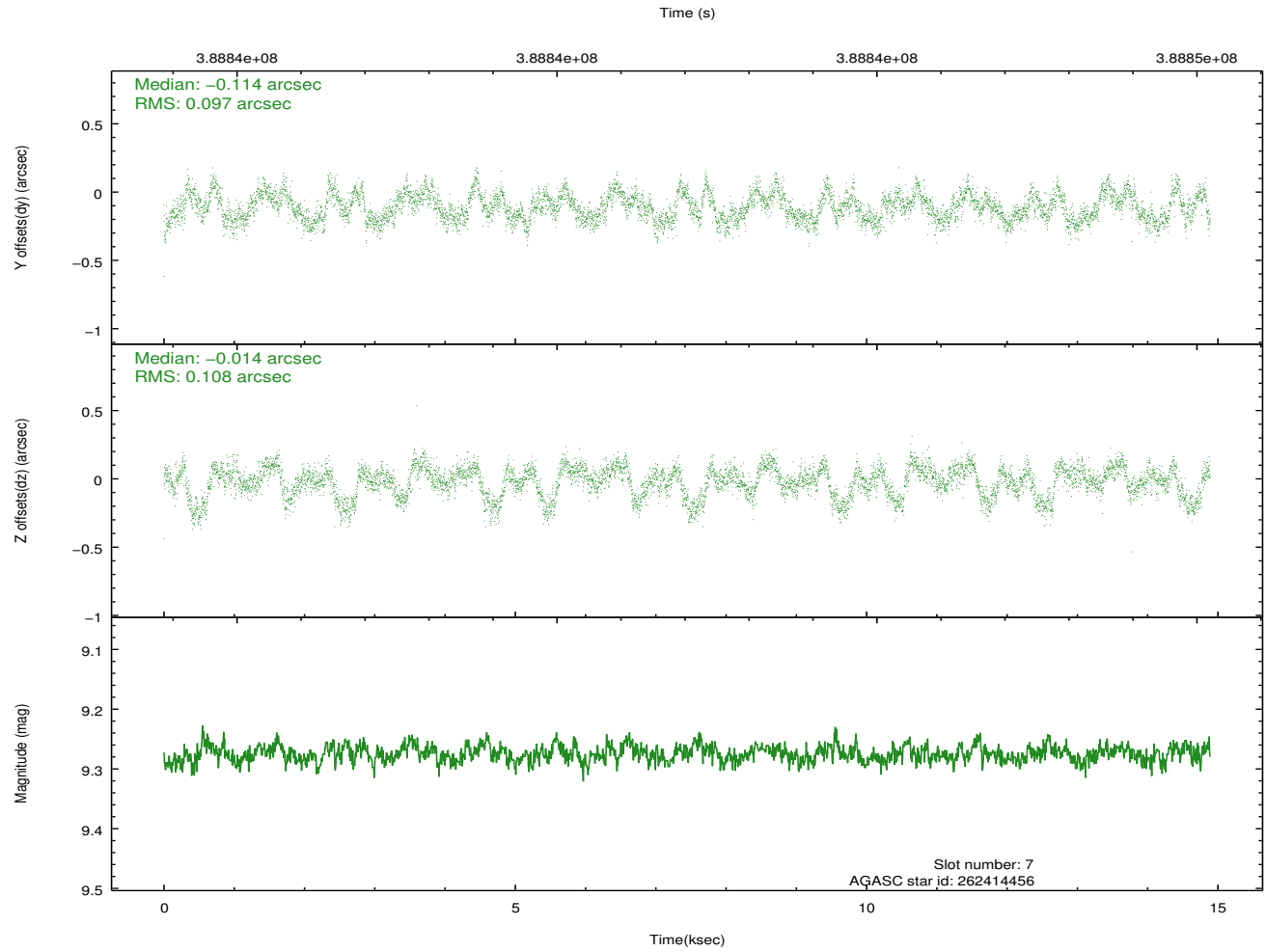
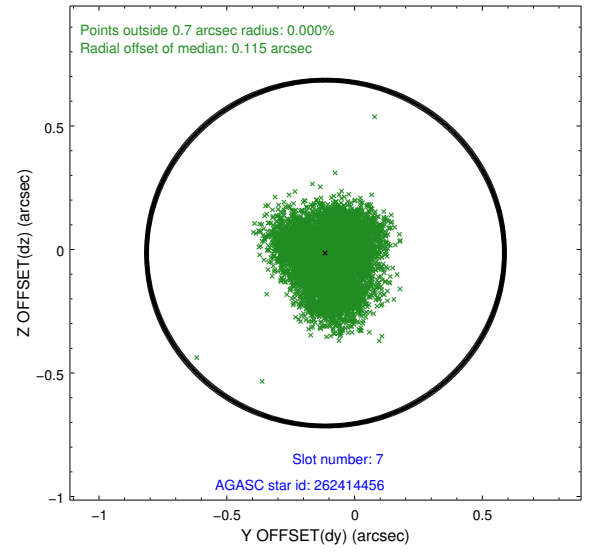
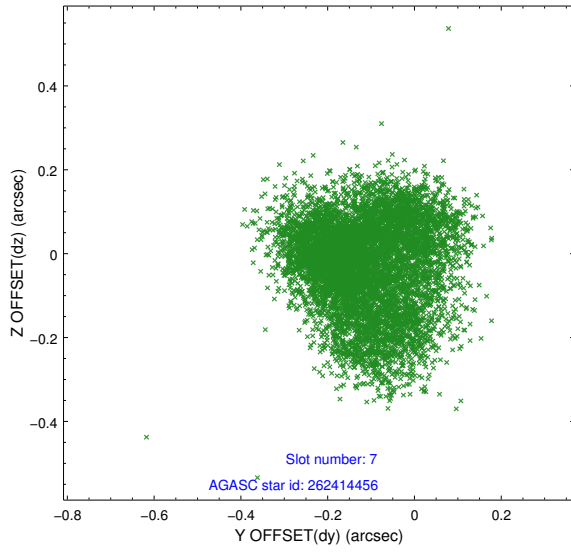
2.4.3 Slot 5



2.4.4 Slot 6

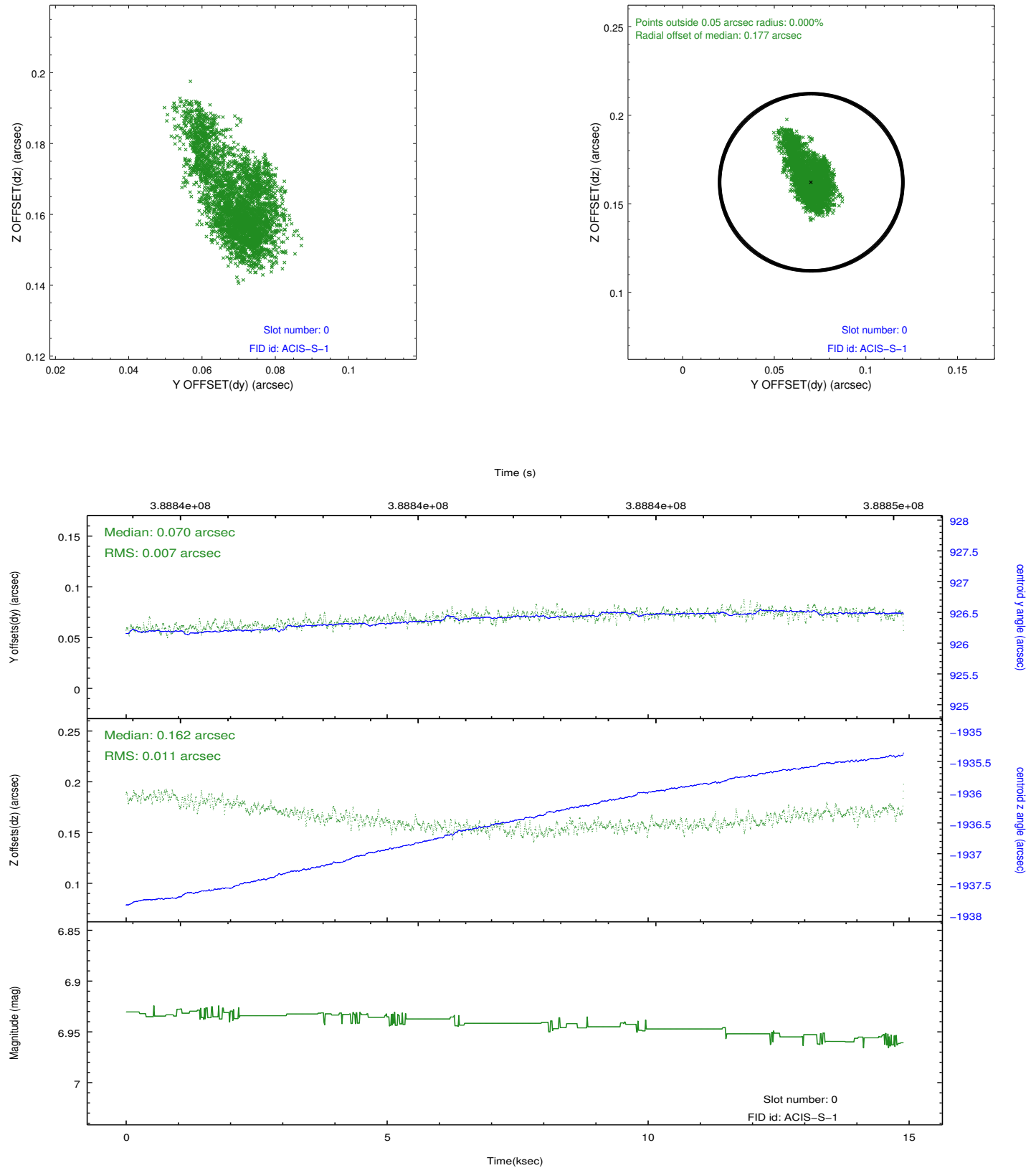


2.4.5 Slot 7

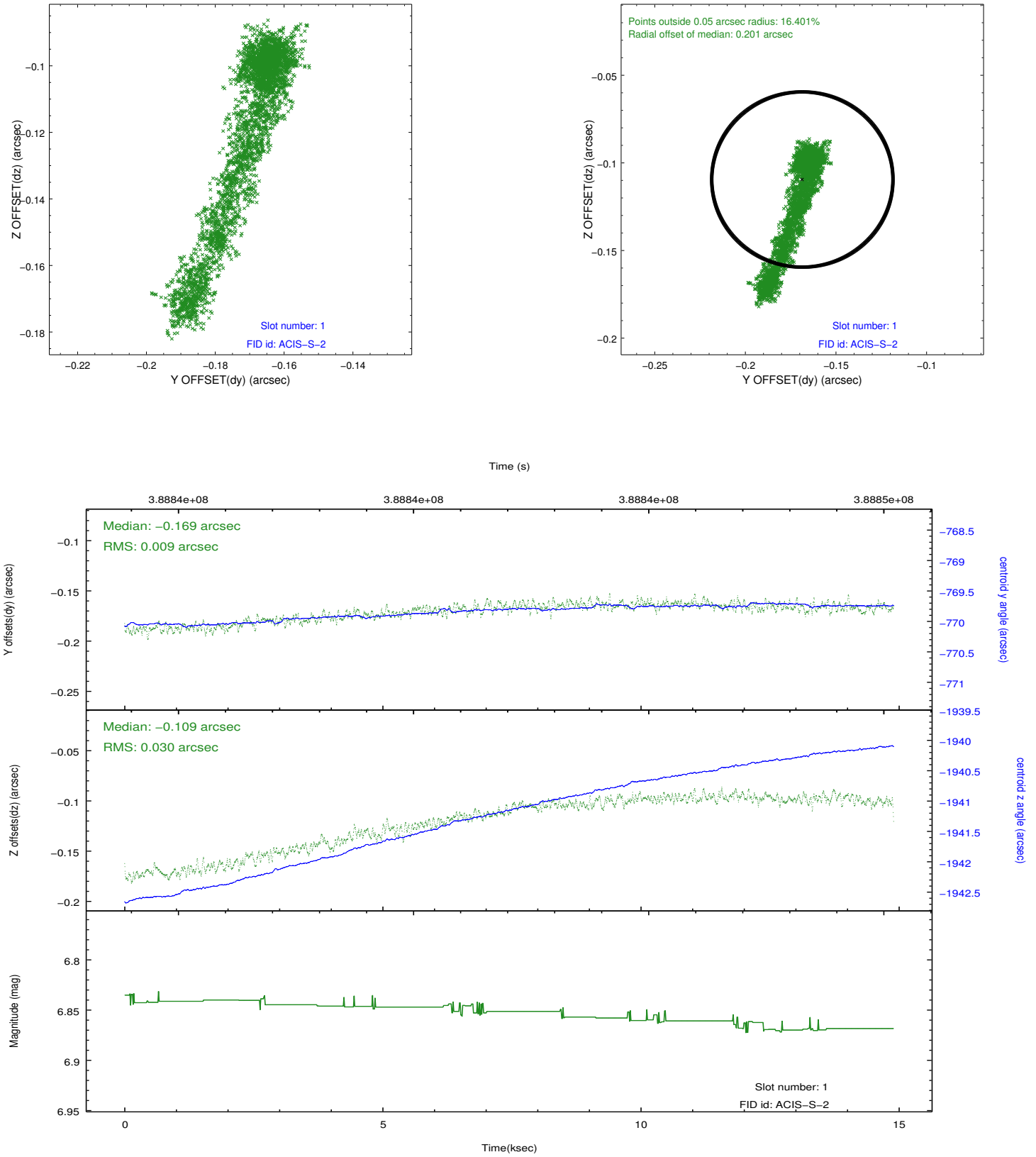


2.5 FID Slots

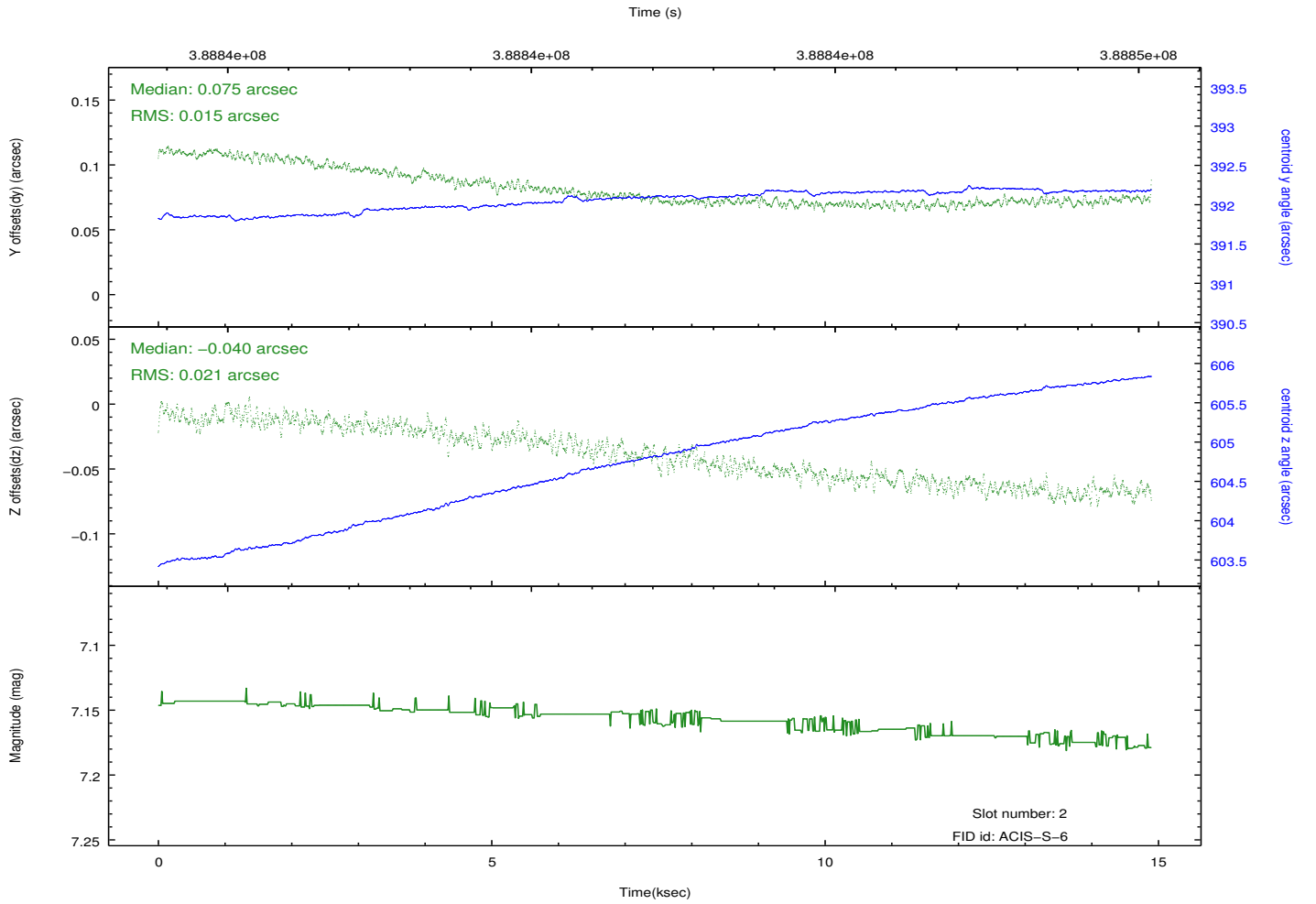
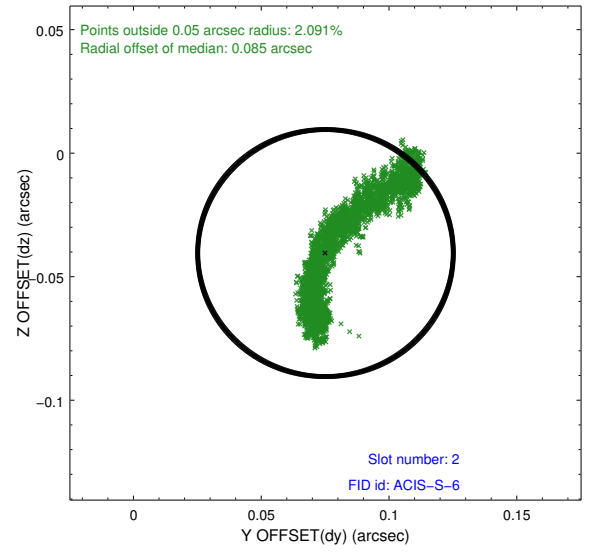
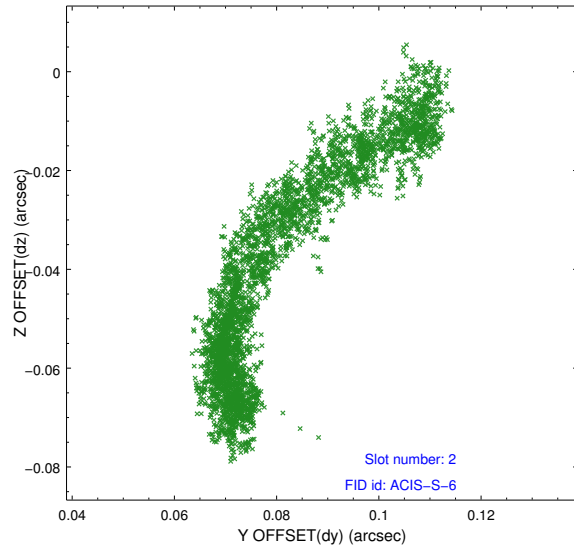
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.07.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	14.889300114512

A.2 Comments

Spatial regions of the original bias maps for CCD = 3 and 6 suffered from anomalously high data values. Pixels in the event data that were bias-corrected by one of the original affected bias pixels may have an apparent energy shift. While the change in energy is expected to be small (~ 20 eV), it depends on many parameters that have not yet been fully explored for this bias anomaly. The bias maps for CCD = 3 and 6 have been reconstructed for this processing to remove this anomaly using scaled data from a comparable bias map from another observation. The pixels affected by the anomaly are bounded by sky coords:

CCD3:

(207.25741,26.82409), (207.25668,26.82716), (207.20369,26.81685), (207.20443,26.81378)

CCD6:

(207.03751,26.54492), (207.04466,26.54633), (207.03264,26.59512), (207.02700,26.58758)