

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 4918 - L2 Version 3  
Chandra X-Ray Center

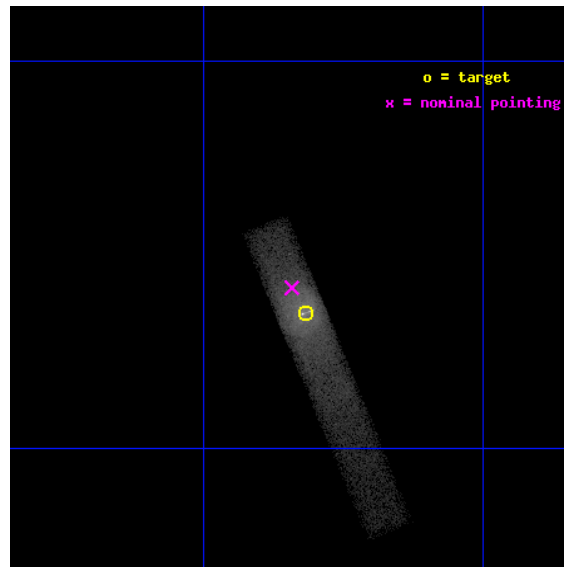
L2 Processing Date : Nov 9 2012

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# 1 Front

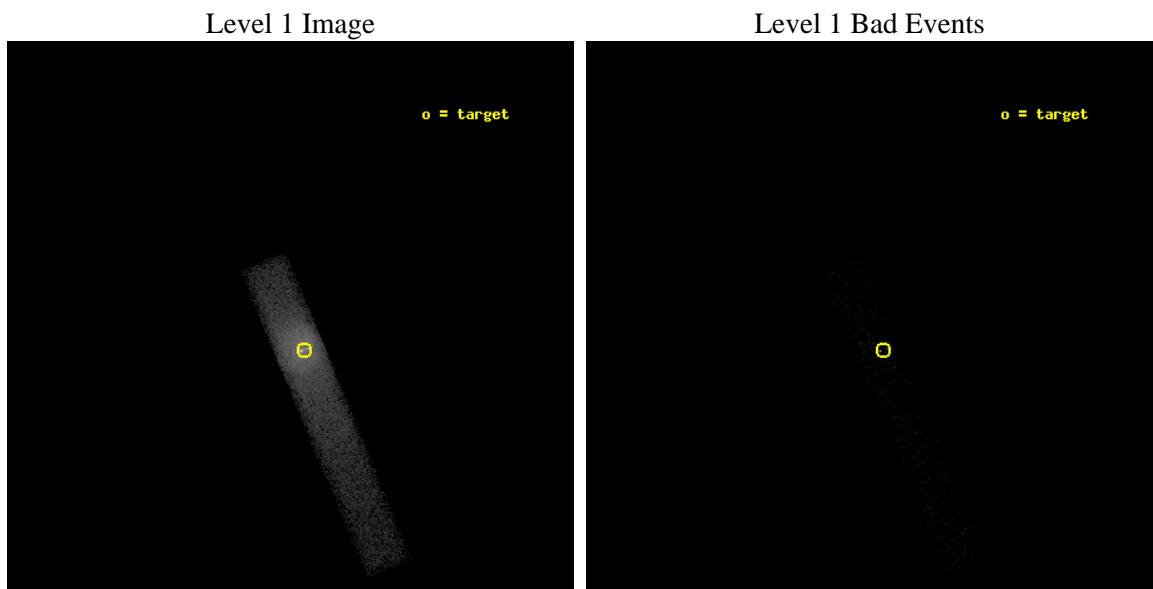
seq_num	700999	Sequence number
obs_id	4918	Observation id
title	HST/Chandra Monitoring of a Dramatic Flare in the M87 Jet	Proposal
observer	Dr. John Biretta	Principal investigator
object	M87	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	187.704167	Observer's specified target RA [deg]
dec_targ	12.391667	Observer's specified target Dec [deg]
ra_nom	187.71057778258	Nominal RA [deg]
dec_nom	12.402403433027	Nominal Dec [deg]
roll_nom	67.380251203449	Nominal Roll [deg]
revision	3	Processing version of data
ontime	5157.2000768185	Sum of GTIs [s]
livetime	4677.3082503342	Livetime [s]
ontime7	5157.2000768185	Sum of GTIs [s]
l2events	58224	Number of level 2 events



## 2 OBI

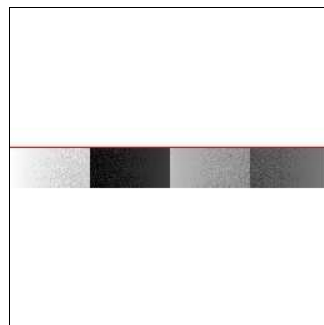
### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias

Chip 7



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	5157.2000768185	Sum of GTIs [s]
caldsver	4.5.2	&#160	ontime7	5157.2000768185	Sum of GTIs [s]
date	2012-11-09T15:26:03	Date and time of file creation	l1events	65949	Number of level 1 events
revision	3	Processing version of data			

### 2.1.4 Events

	<b>ccd 7</b>
level 1 events	65949
rejected events	7056
rejected %	10%

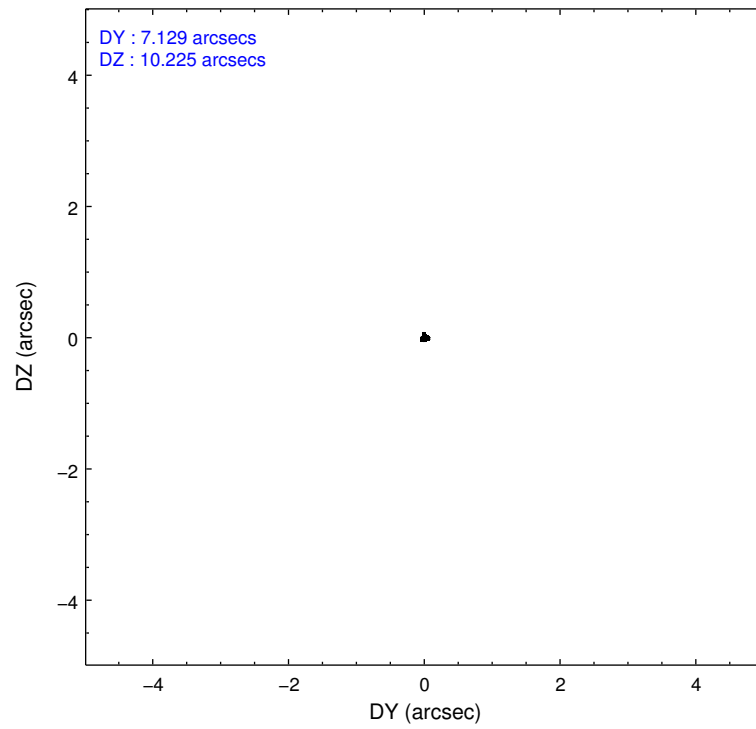
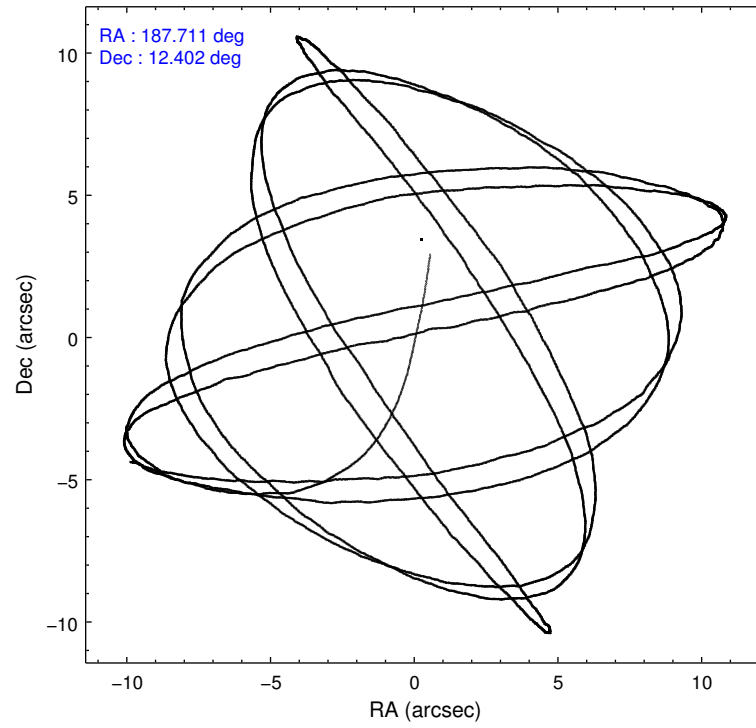
	<b>ccd 7</b>
grade 0 events	19692
	29%
grade 1 events	188
	0%
grade 2 events	15707
	23%
grade 3 events	7071
	10%
grade 4 events	7066
	10%
grade 5 events	1431
	2%
grade 6 events	11426
	17%
grade 7 events	3368
	5%

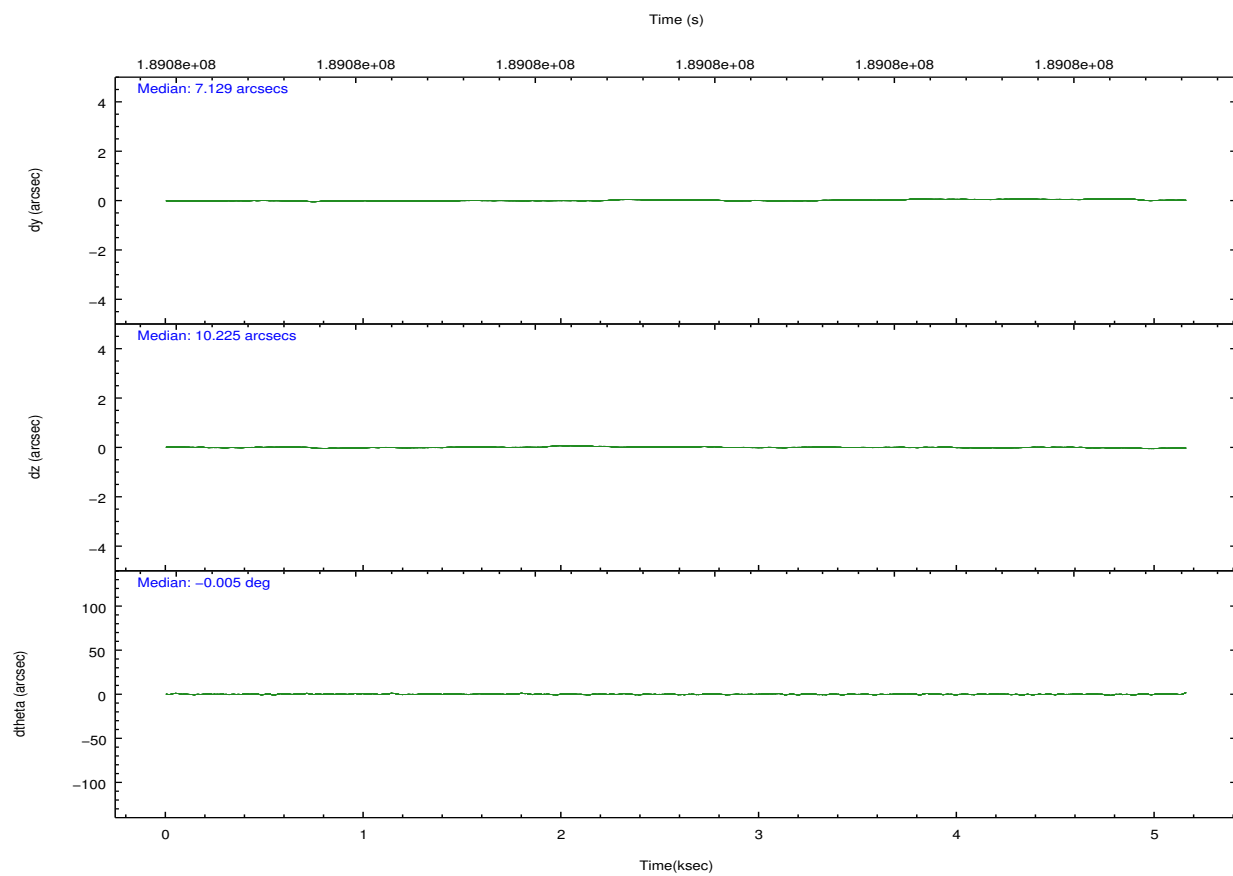
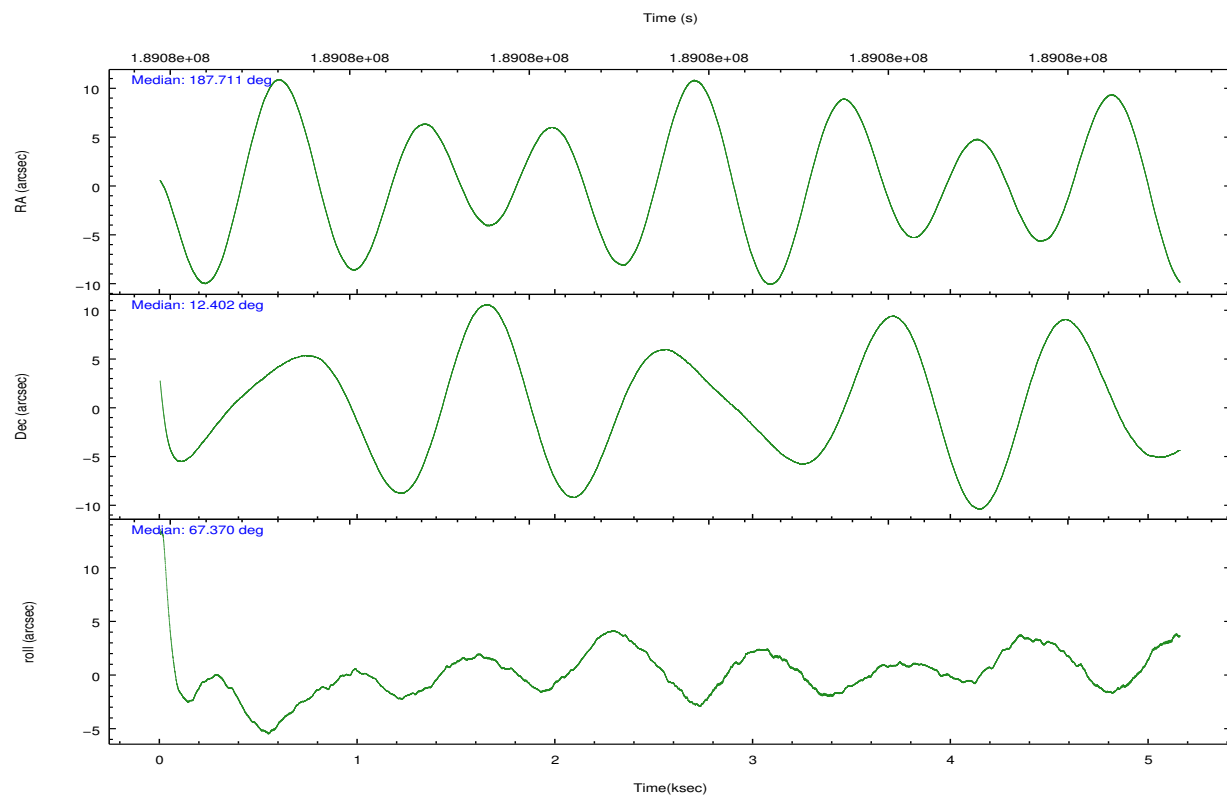


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-7	ACIS-7	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	187.714596	187.7105777825759	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	12.375459	12.40240343302693	Subarray start row	449	449
[deg] Pointing Roll	67.222717	67.38025120344879	Subarray row count	128	128
[mm] SIM focus pos	-0.684267	-0.6828225247311905	Alternating exposures requested	N	N
[mm] SIM defocus	0	0.001444936568705701	[s] Primary exposure time	0.000000	0.4
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	189079362.184000	189078340.81321			
Observation start date	2003-12-29T10:01:38	2003-12-29T09:45:40			
[s] Observation end time (MET)	189084362.184000	189085010.4885			
Observation end date	2003-12-29T11:24:58	2003-12-29T11:36:50			
Read mode	TIMED	TIMED			

## 2.3 Aspect



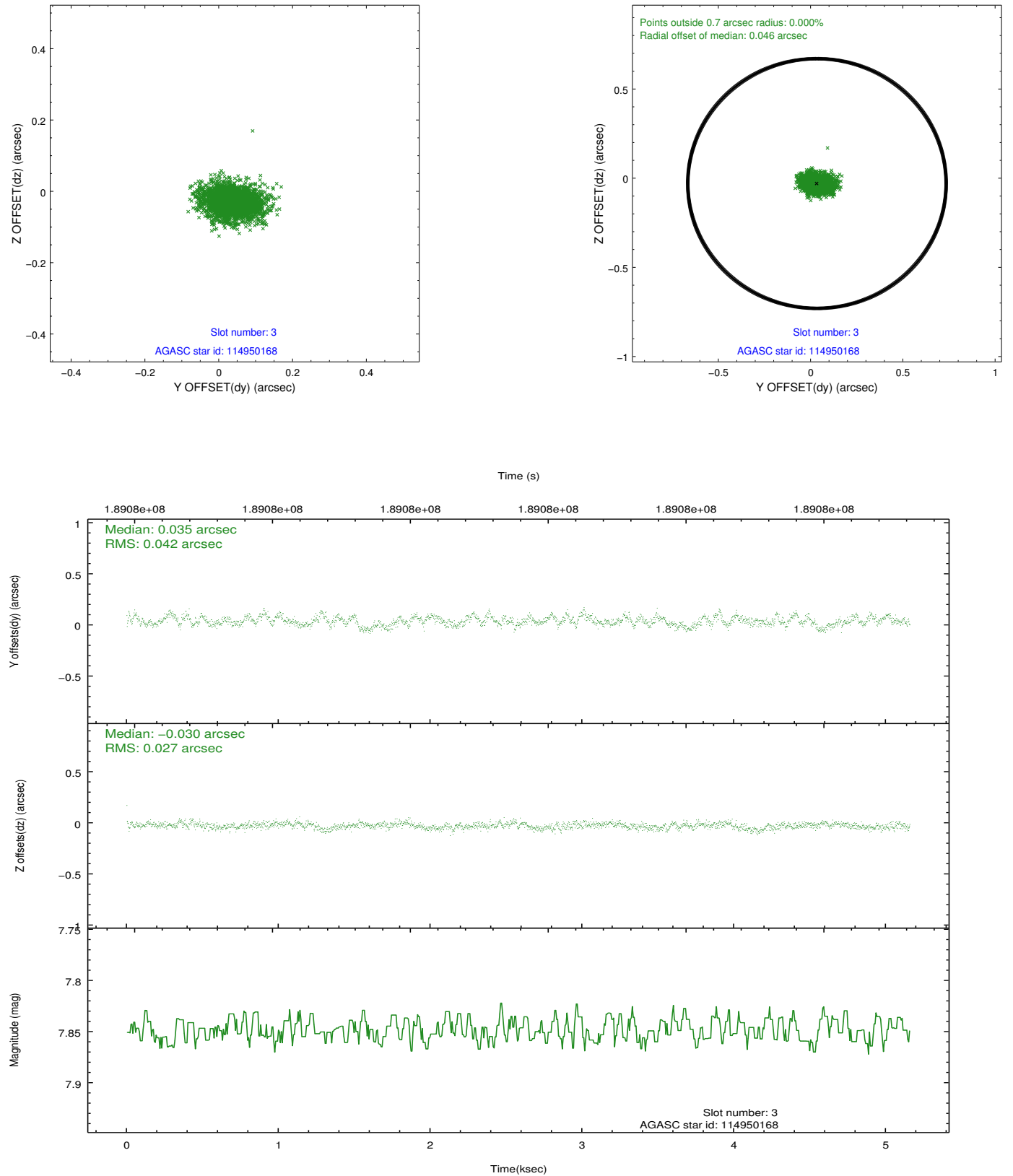


### Slot Statistics

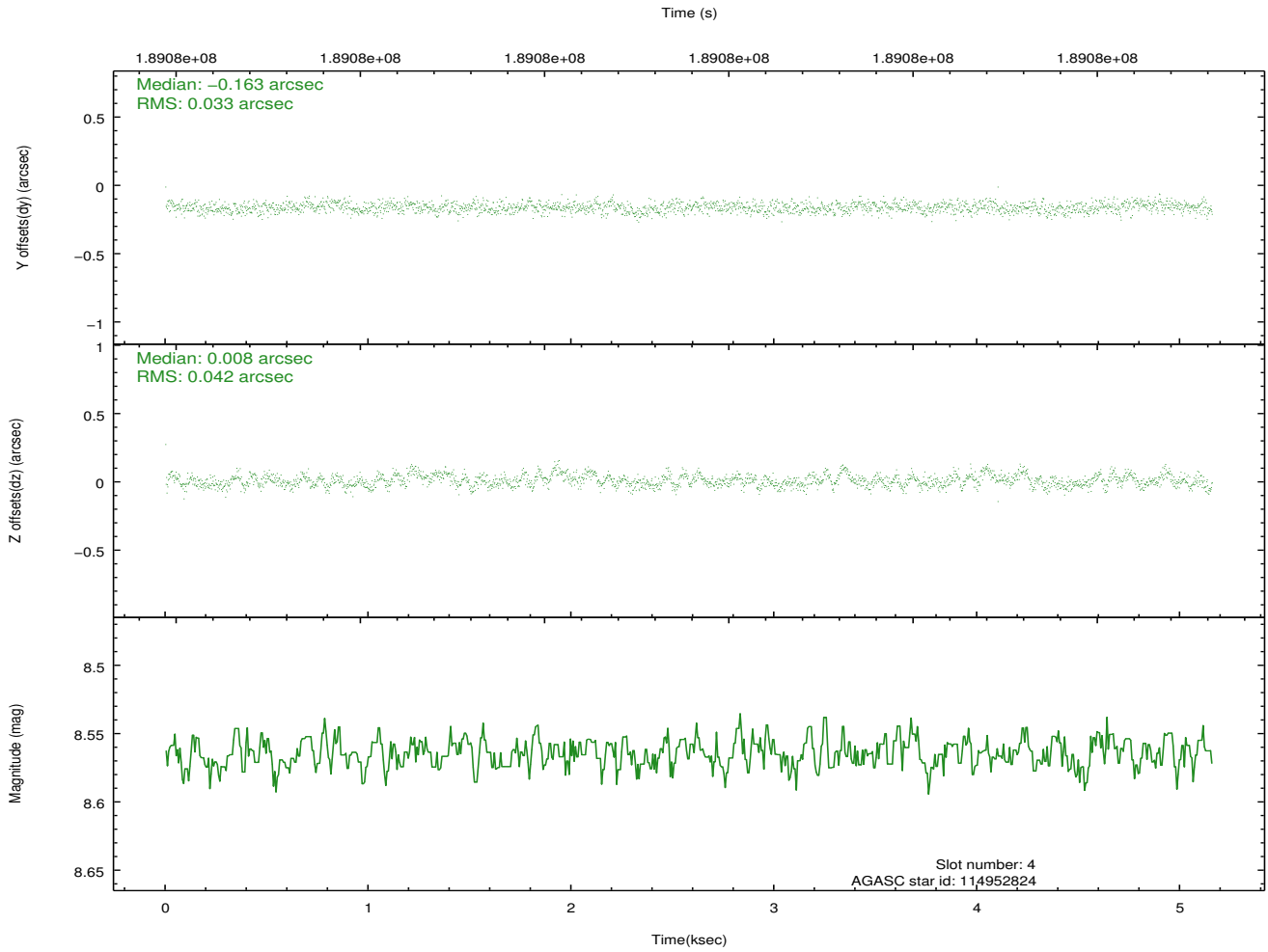
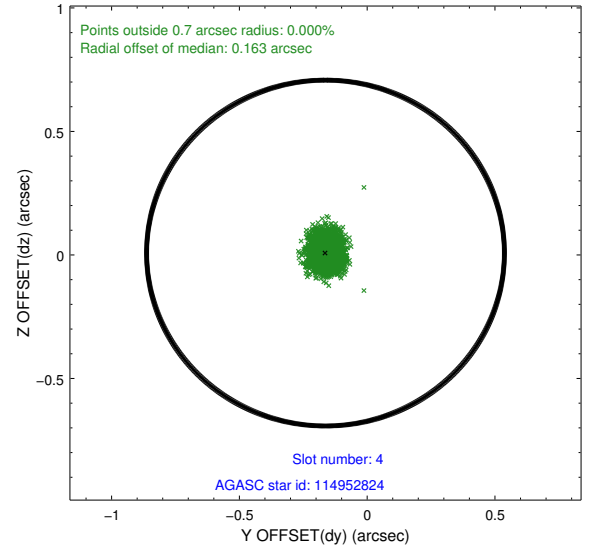
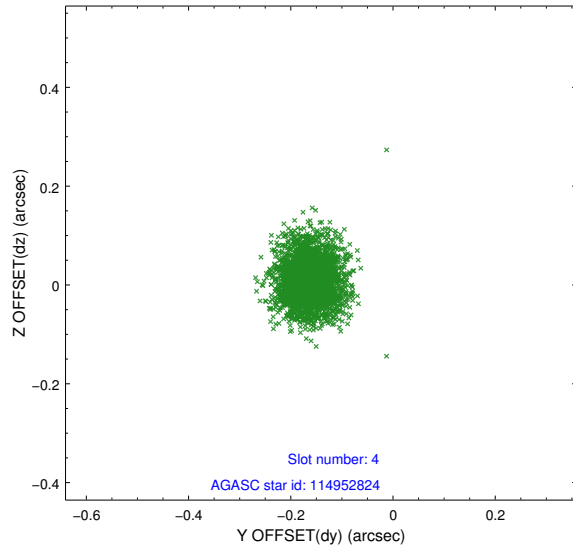
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.09	1258	-0.036	-0.002	0.007	0.011	0.000000	0.000000	-759.90	-1731.50
1	FID	ACIS-S-4	7.20	1258	0.053	0.018	0.006	0.010	0.000000	0.000000	2152.90	175.85
2	FID	ACIS-S-5	7.23	1259	-0.048	-0.007	0.006	0.011	0.000000	0.000000	-1811.28	170.75
3	GUIDE	114950168	7.85	2517	0.035	-0.030	0.052	0.089	187.143398	12.117441	-1632.88	1494.85
4	GUIDE	114952824	8.56	2517	-0.163	0.008	0.057	0.092	187.703904	12.486727	354.11	190.76
5	GUIDE	114955056	8.33	2517	-0.058	0.424	0.062	0.102	187.914001	12.127854	-549.42	-991.42
6	GUIDE	114957008	8.24	2516	0.071	-0.122	0.083	0.135	186.894794	12.099160	-2030.76	2276.97
7	GUIDE	114954440	9.22	2513	0.117	-0.280	0.112	0.185	186.915066	12.219118	-1605.04	2377.71

## 2.4 Star Slots

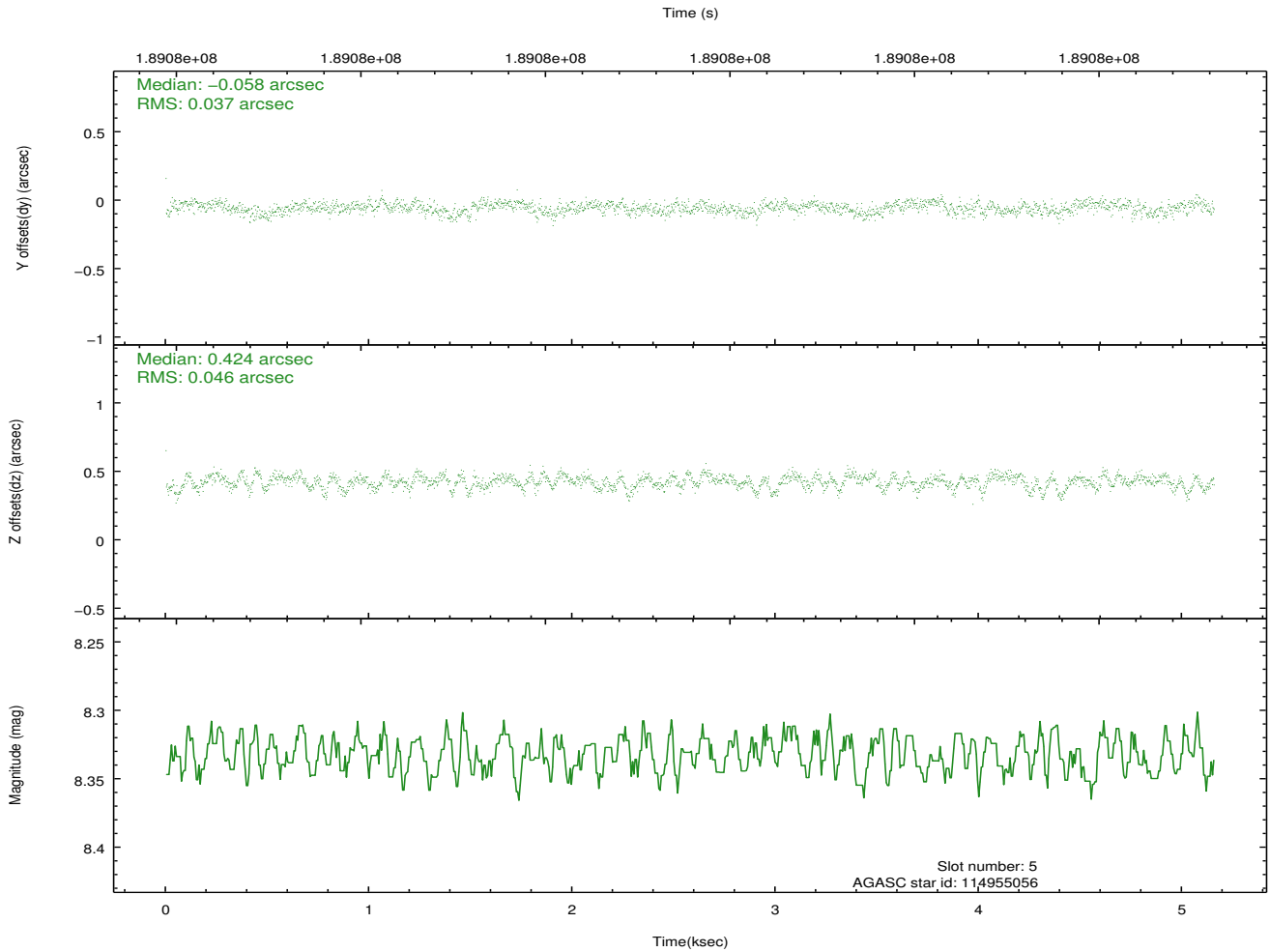
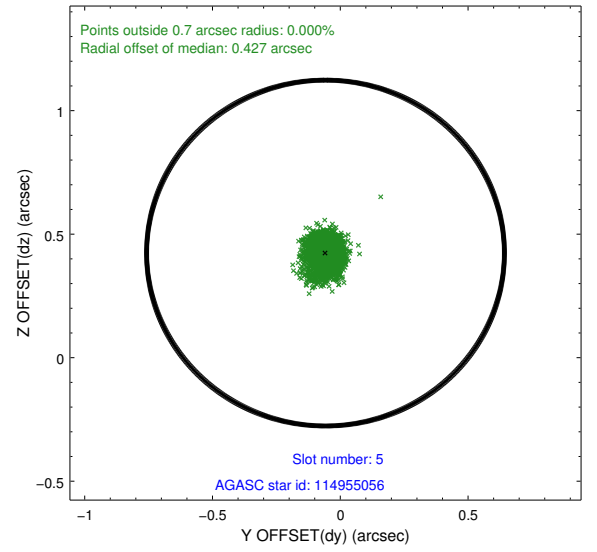
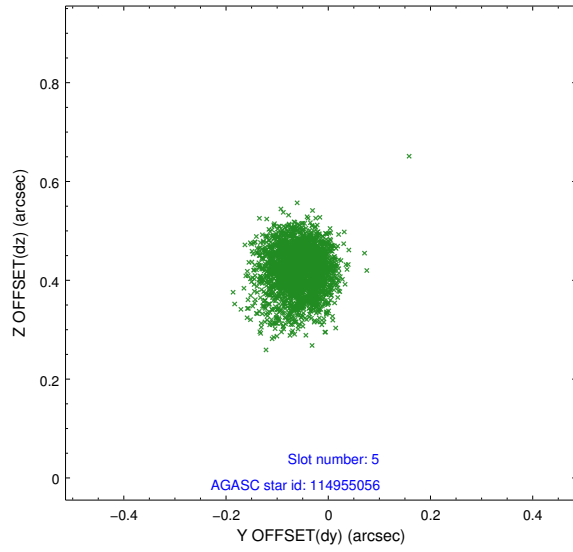
### 2.4.1 Slot 3



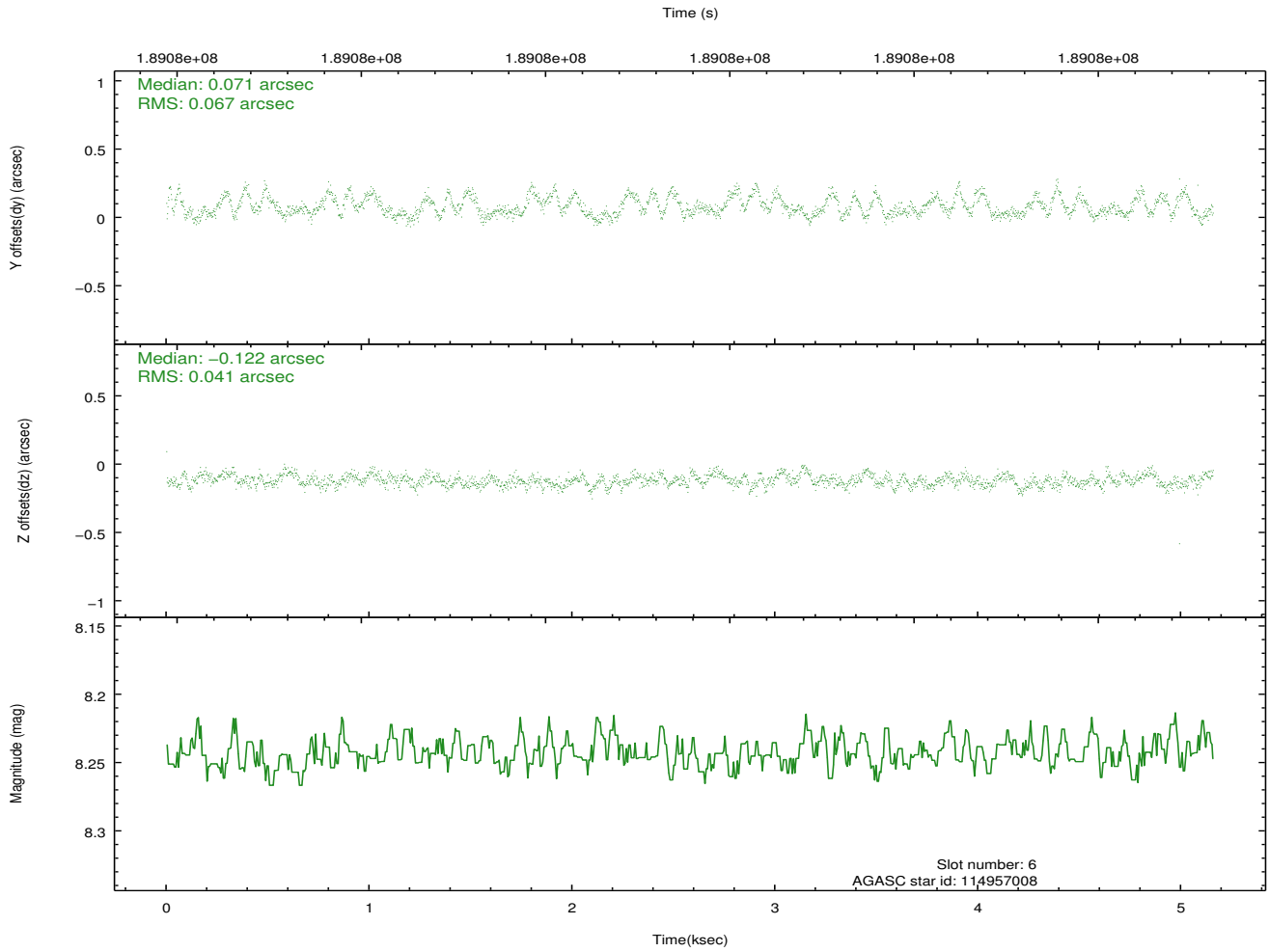
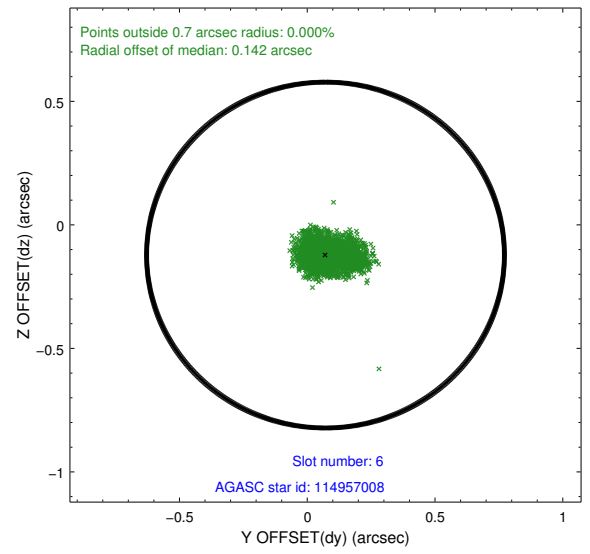
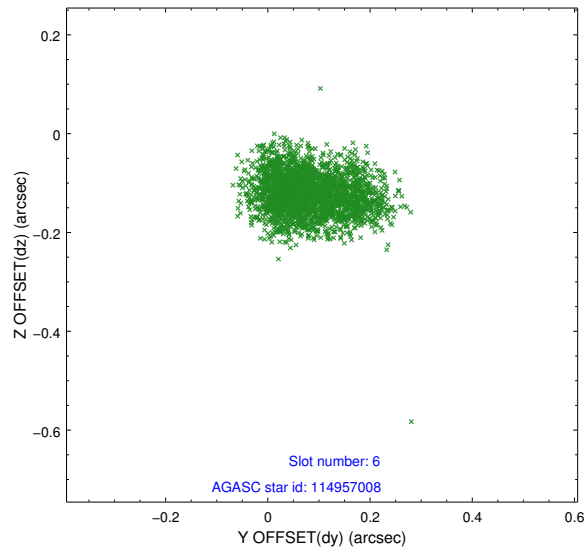
## 2.4.2 Slot 4



### 2.4.3 Slot 5

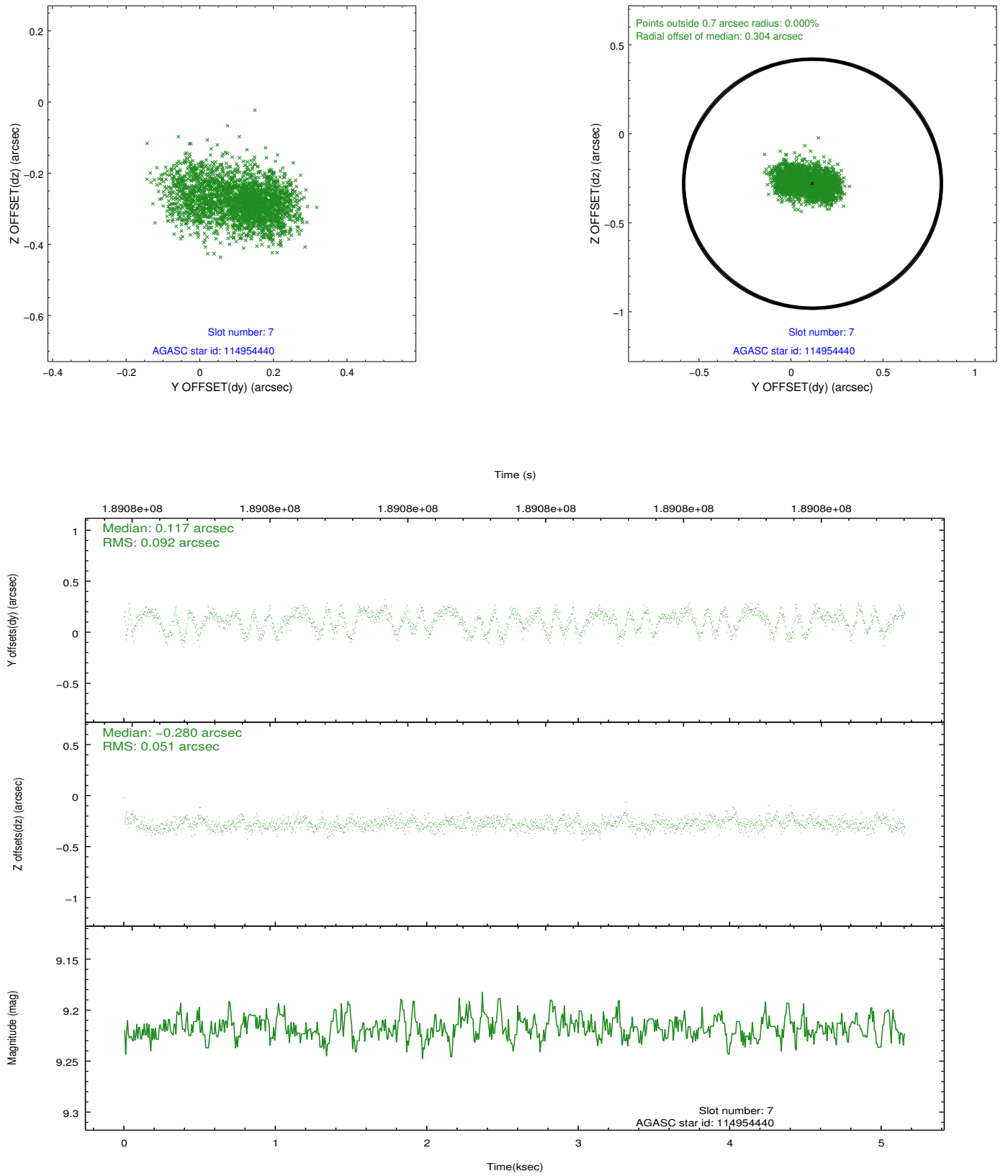


## 2.4.4 Slot 6



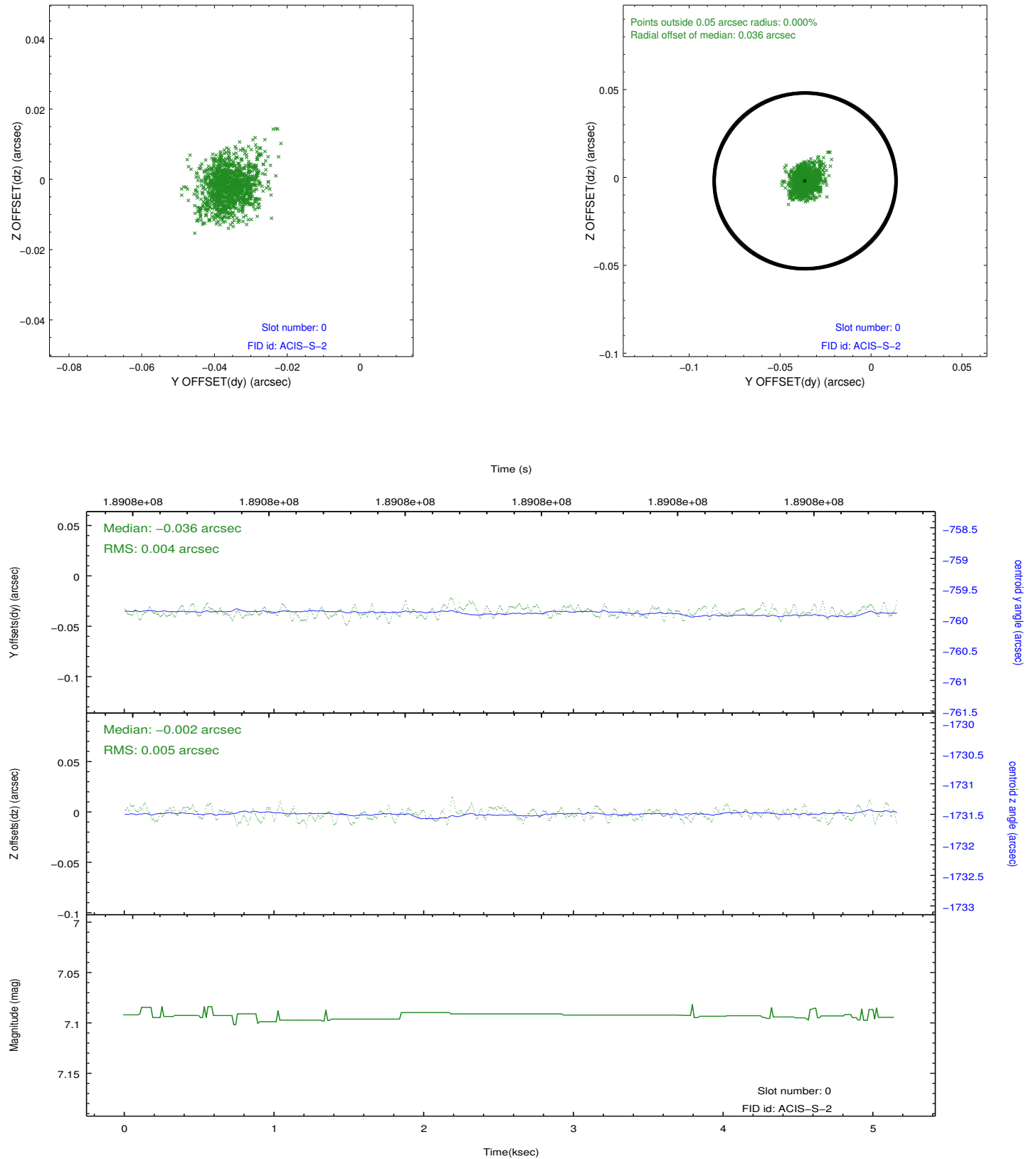


## 2.4.5 Slot 7

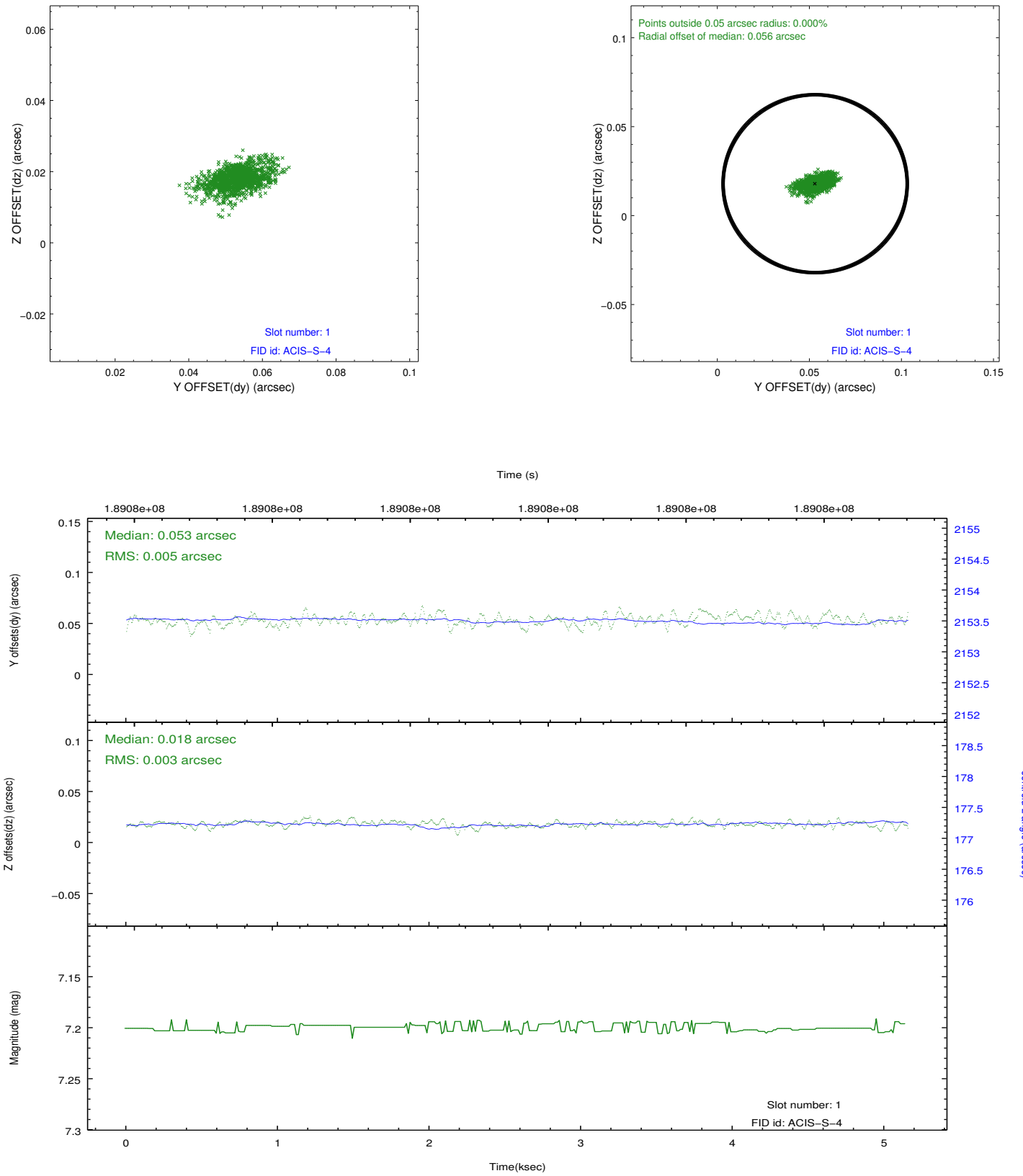


## 2.5 FID Slots

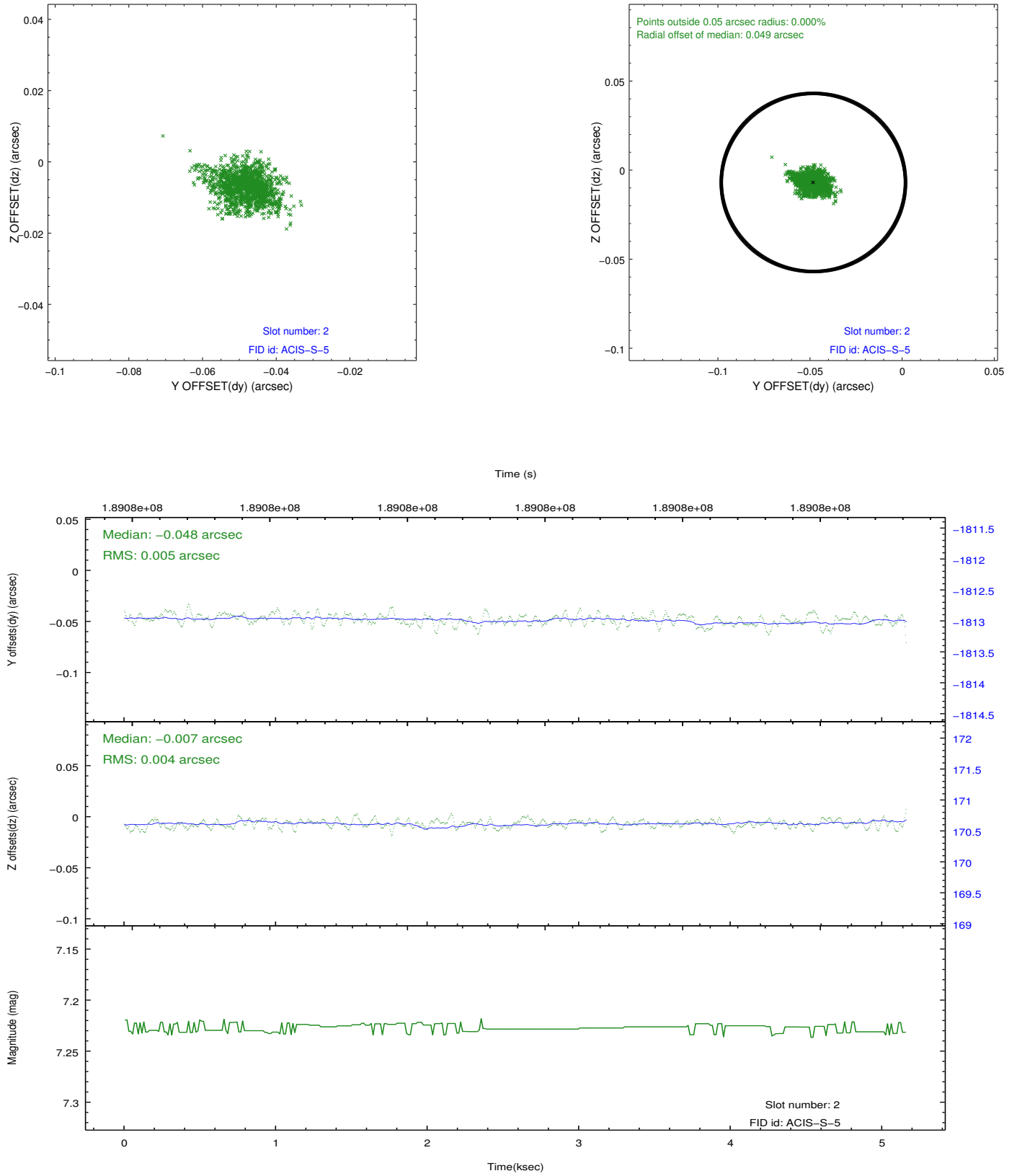
### 2.5.1 Slot 0



## 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)	2012.12.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.157

## A.2 Comments

Monitor constraint met. On day 356 at about 00:30, the OBA heater stuck in the 'on' position. This situation affected obsid 4901 and all subsequent observations to this point. The result of this anomaly could be a displacement of the target on the chip in the z direction. The displacement will be small because everything is still within spec, but the target may be spatially displaced, have a different point spread function, or trail across the chip.

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Joint Proposal: CX0-HST