

# V&V Reference Report

## L2 ASCDS Version : 8.4.3

Observation 14328 - L2 Version 2  
Chandra X-Ray Center

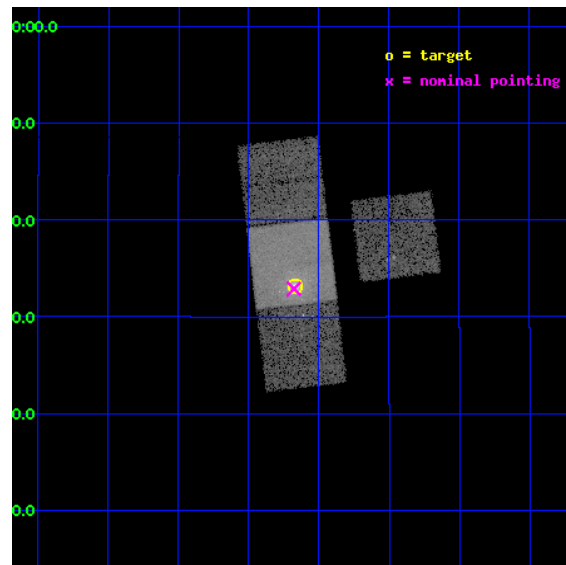
L2 Processing Date : Feb 19 2012

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# 1 Front

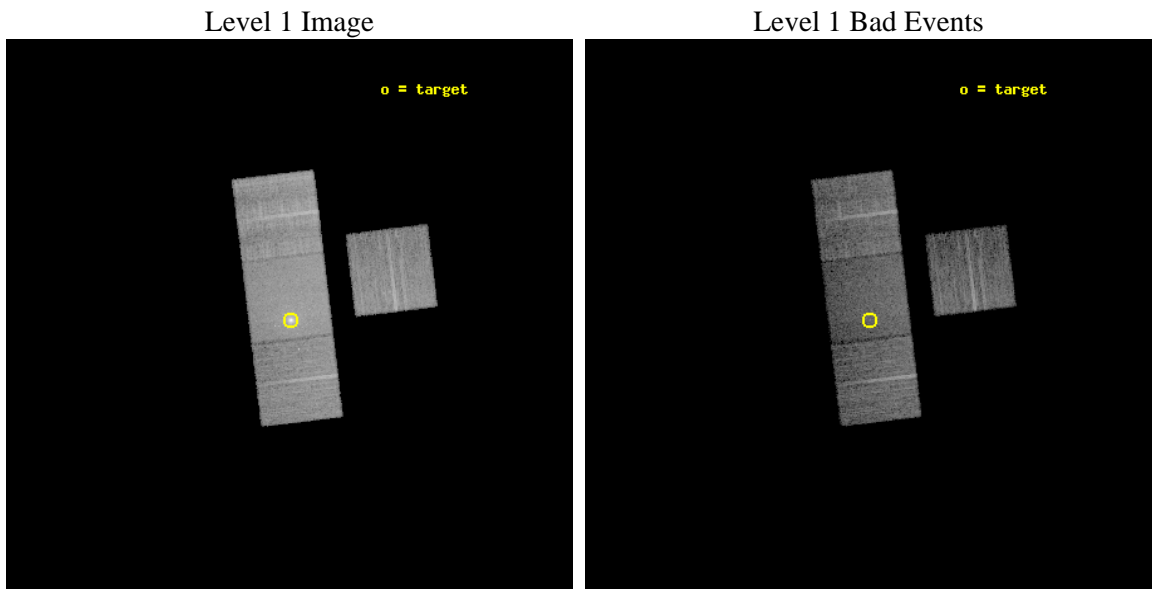
seq_num	600943	Sequence number
obs_id	14328	Observation id
title	CONSTRAINING THE TRANSIENT BLACK HOLE (BH) LOW-MASS X-RAY BINARY (LMXB) POPULATION	Proposal title
observer	Dr Giuseppina Fabbiano	Principal investigator
object	NGC 4649	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	190.9175	Observer's specified target RA [deg]
dec_targ	11.552472	Observer's specified target Dec [deg]
ra_nom	190.91956364312	Nominal RA [deg]
dec_nom	11.54810845437	Nominal Dec [deg]
roll_nom	263.15620596378	Nominal Roll [deg]
revision	2	Processing version of data
ontime	14153.971733451	Sum of GTIs [s]
livetime	13969.039672751	Livetime [s]
ontime3	14153.889653444	Sum of GTIs [s]
ontime6	14153.930693448	Sum of GTIs [s]
ontime7	14153.971733451	Sum of GTIs [s]
ontime8	14147.566702724	Sum of GTIs [s]
l2events	93378	Number of level 2 events



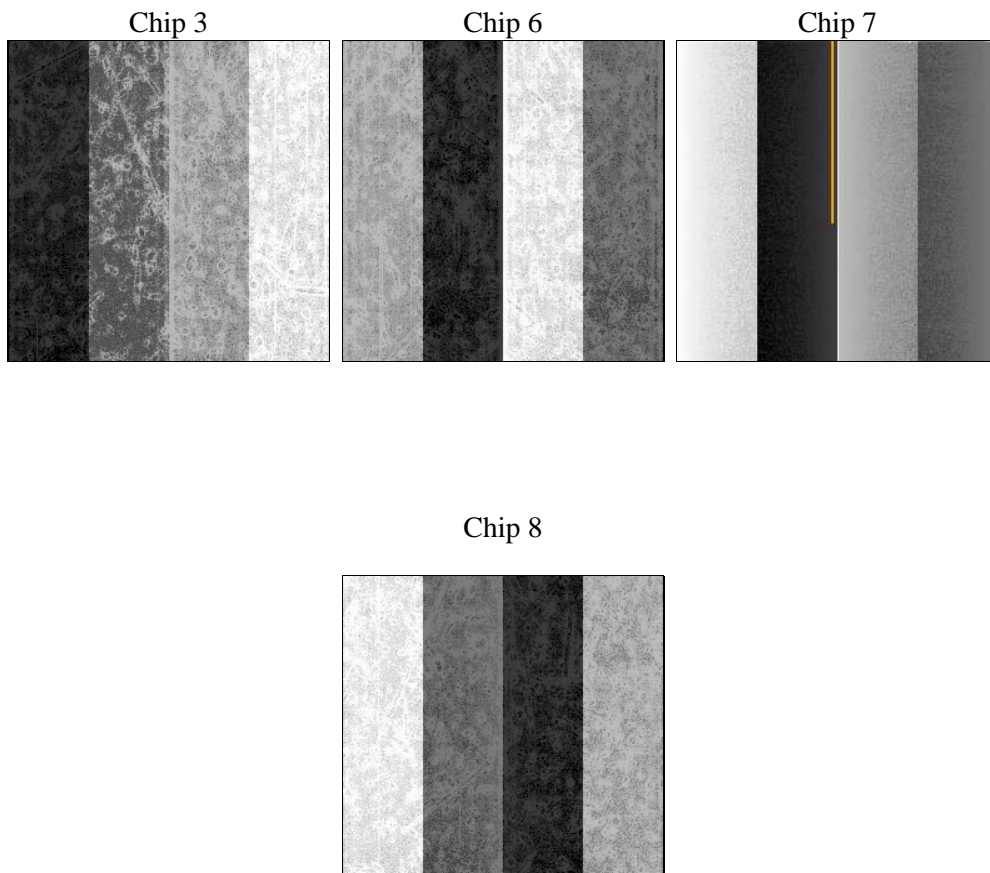
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	14102.611000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	14153.971733451	Sum of GTIs [s]
caldbver	4.4.8	&#160	ontime3	14153.889653444	Sum of GTIs [s]
date	2012-02-19T23:40:49	Date and time of file creation	ontime6	14153.930693448	Sum of GTIs [s]
revision	2	Processing version of data	ontime7	14153.971733451	Sum of GTIs [s]
			ontime8	14147.566702724	Sum of GTIs [s]
			l1events	409427	Number of level 1 events

### 2.1.4 Events

	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	82843	86050	125556	114978
rejected events	72829	74709	61283	82078
rejected %	87%	86%	48%	71%

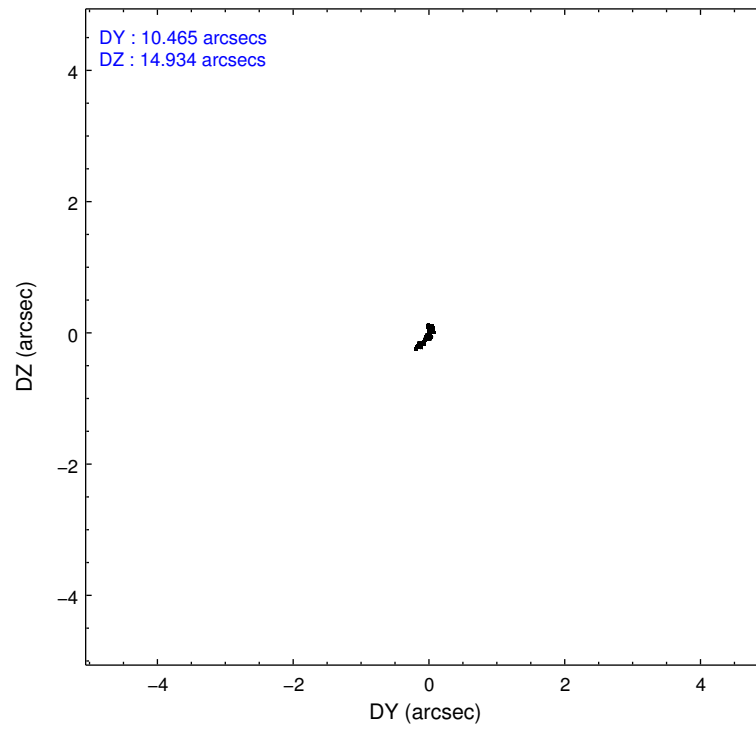
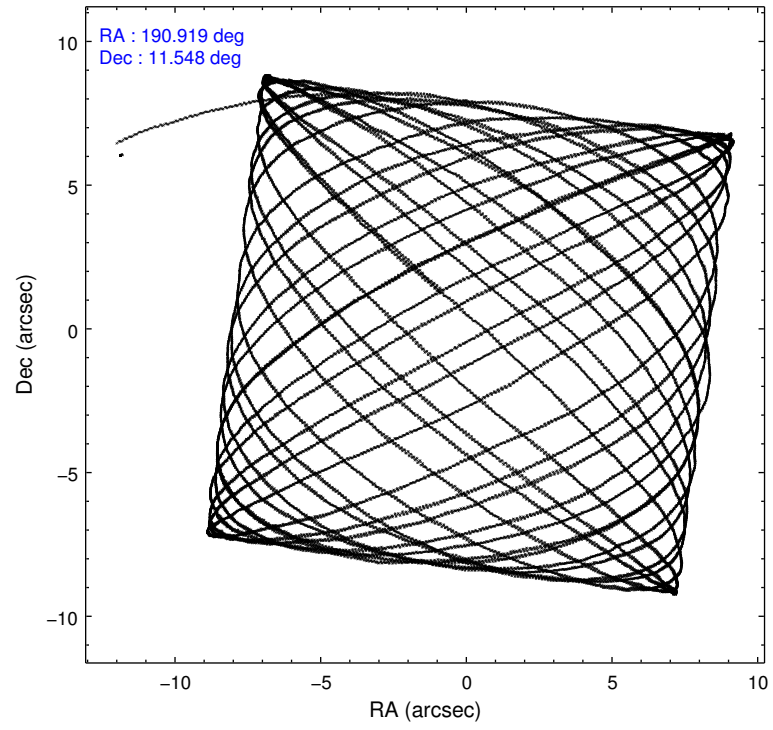
	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	3949	4480	9335	9864
	4%	5%	7%	8%
grade 1 events	65	56	141	94
	0%	0%	0%	0%
grade 2 events	2058	2374	14136	7741
	2%	2%	11%	6%
grade 3 events	1062	1069	6199	3338
	1%	1%	4%	2%
grade 4 events	1019	1067	5928	3268
	1%	1%	4%	2%
grade 5 events	4115	4106	11586	5969
	4%	4%	9%	5%
grade 6 events	1929	2356	28697	8702
	2%	2%	22%	7%
grade 7 events	68646	70542	49534	76002
	82%	81%	39%	66%

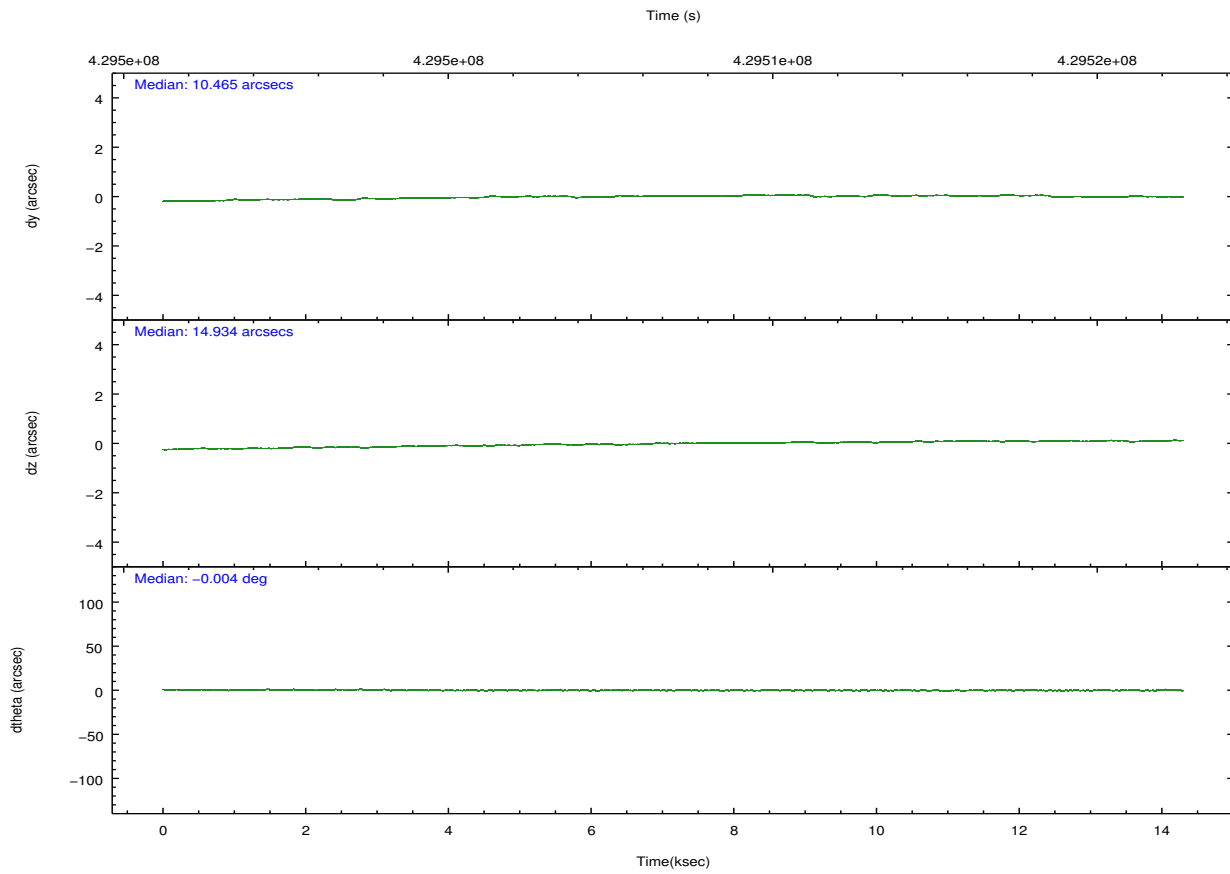
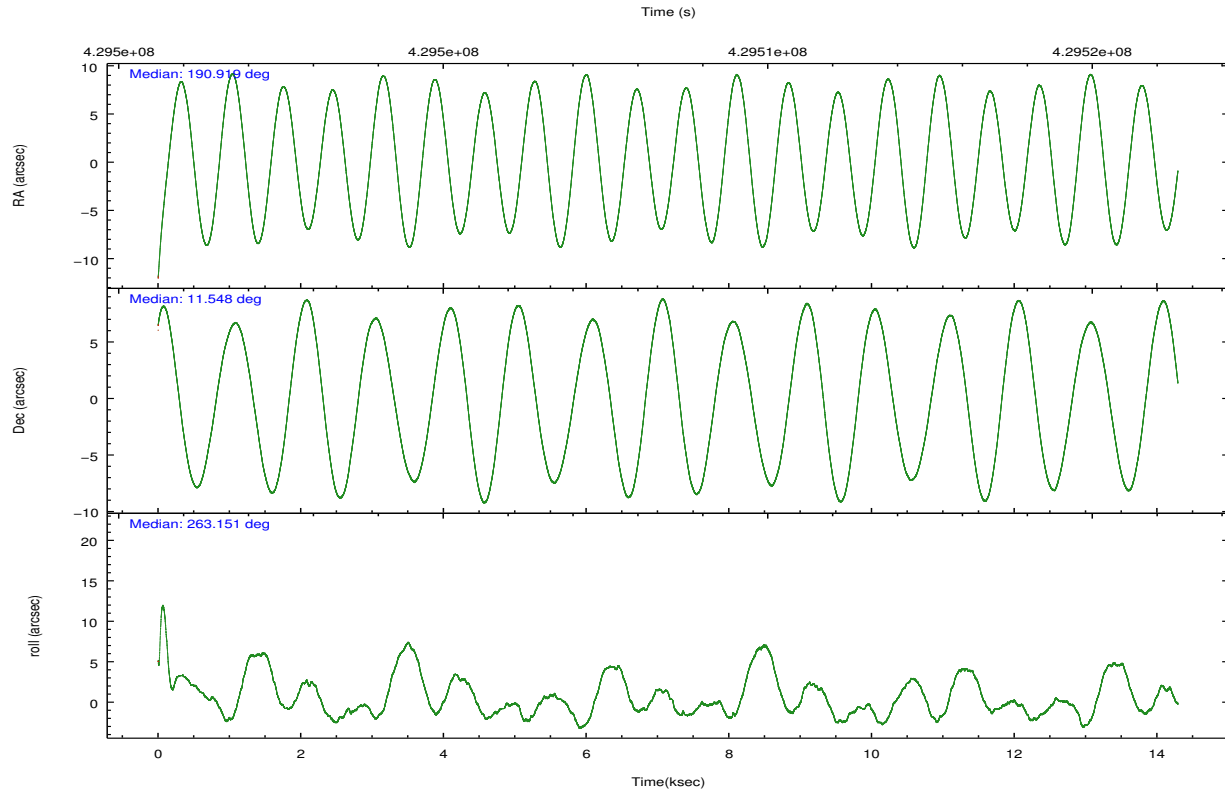


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-3678	ACIS-3678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	190.908258	190.9195636431153	CCD I2 on	N	N
[deg] Pointing Dec	11.573061	11.54810845437015	CCD I3 on	O3	Y
[deg] Pointing Roll	263.001857	263.156205963783	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	O1	Y
[mm] SIM translation stage pos	-190.132523	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	O2	Y
[s] Observation start time (MET)	429501505.184000	429500203.38872	CCD S5 on	N	N
Observation start date	2011-08-12T01:57:19	2011-08-12T01:36:43	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	429515607.184000	429515834.63954	On-chip summing requested	N	N
Observation end date	2011-08-12T05:52:21	2011-08-12T05:57:14	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



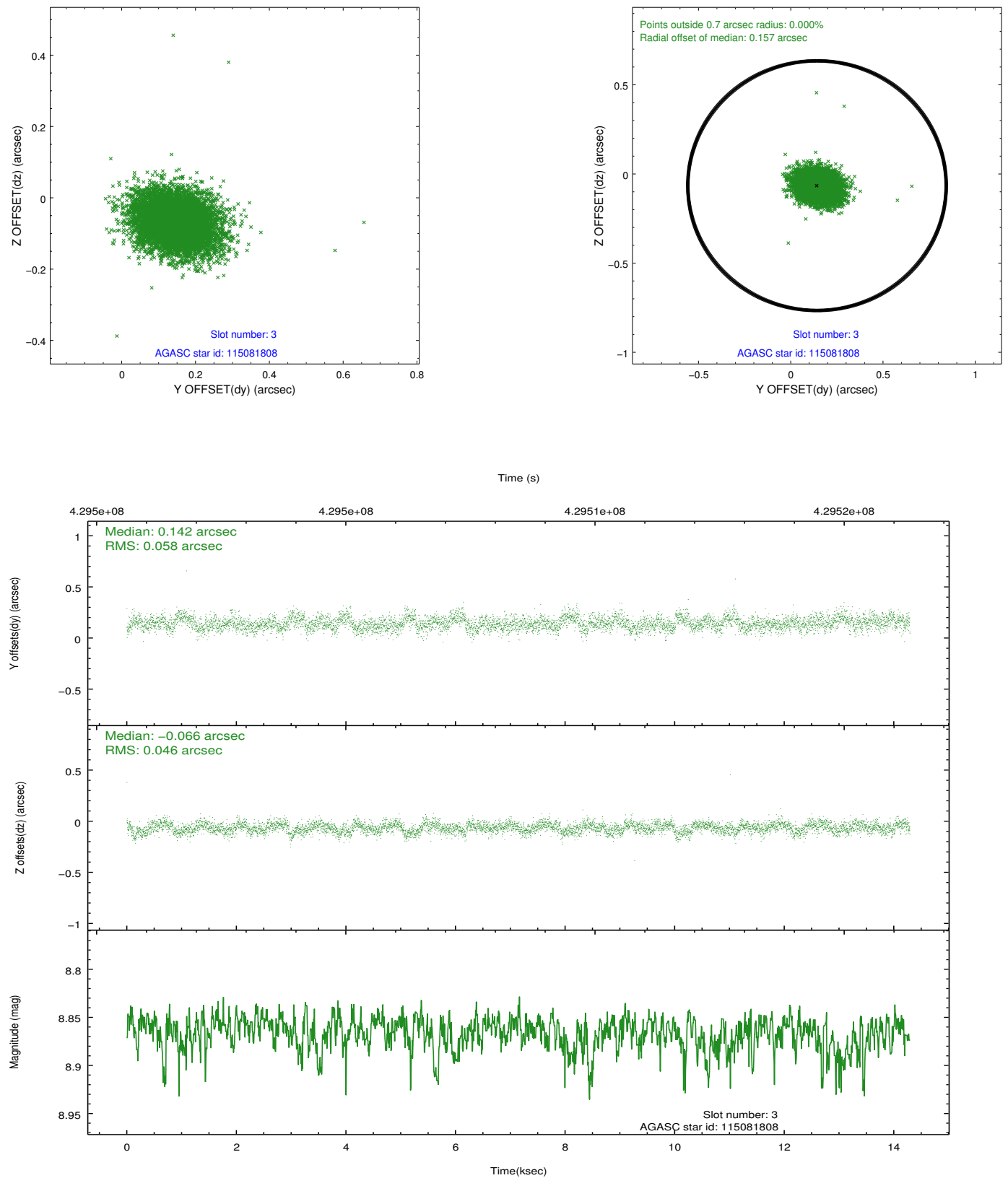


### Slot Statistics

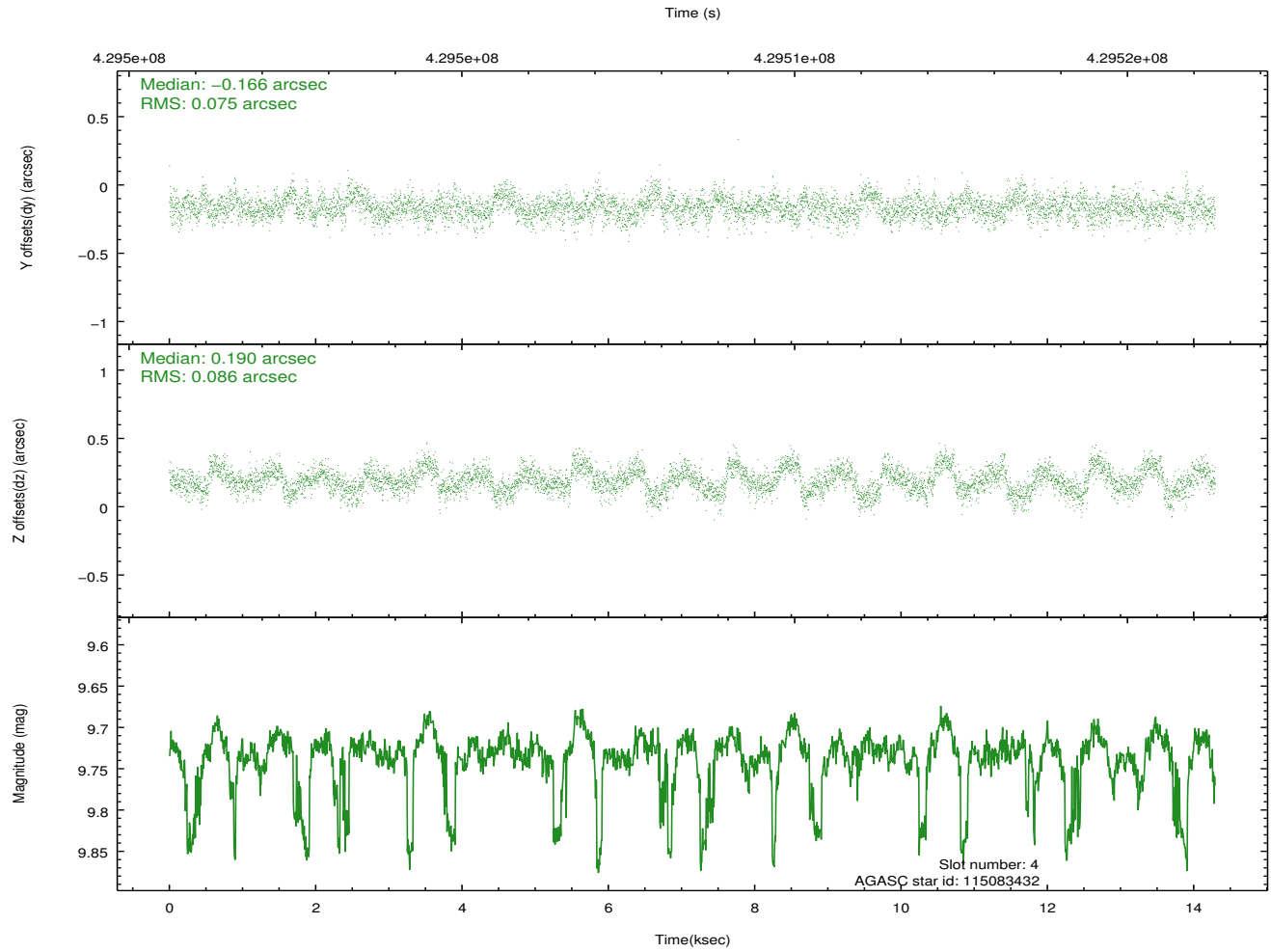
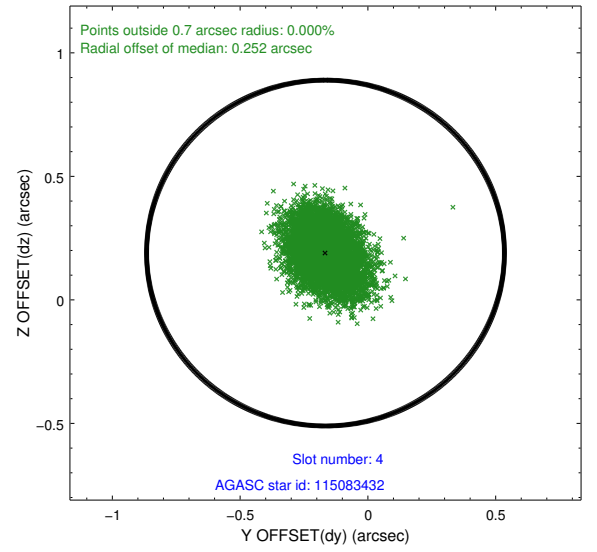
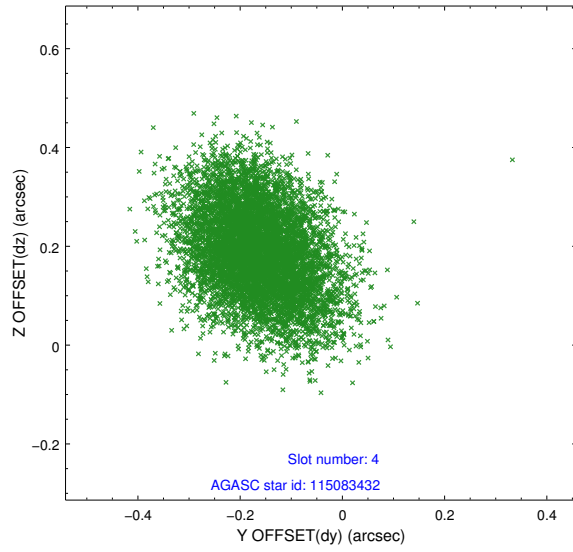
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.90	3487	-0.066	-0.021	0.007	0.011	0.000000	0.000000	-763.35	-1736.25
1	FID	ACIS-S-4	6.99	3487	0.195	0.038	0.006	0.011	0.000000	0.000000	2150.04	171.95
2	FID	ACIS-S-5	7.01	3487	-0.160	-0.008	0.007	0.012	0.000000	0.000000	-1815.87	165.95
3	GUIDE	115081808	8.87	6967	0.142	-0.066	0.077	0.129	191.005561	10.921316	2287.51	627.37
4	GUIDE	115083432	9.73	6931	-0.166	0.190	0.122	0.199	190.888504	12.192141	-2202.98	-340.10
5	GUIDE	115084248	8.88	6969	-0.234	0.029	0.106	0.171	191.376307	11.903207	-1382.01	1491.96
6	GUIDE	115084352	9.26	6970	0.095	-0.051	0.113	0.182	190.760225	11.783180	-685.46	-609.81
7	GUIDE	115089400	9.85	6961	0.156	-0.105	0.160	0.267	190.425194	11.760272	-461.76	-1770.73

## 2.4 Star Slots

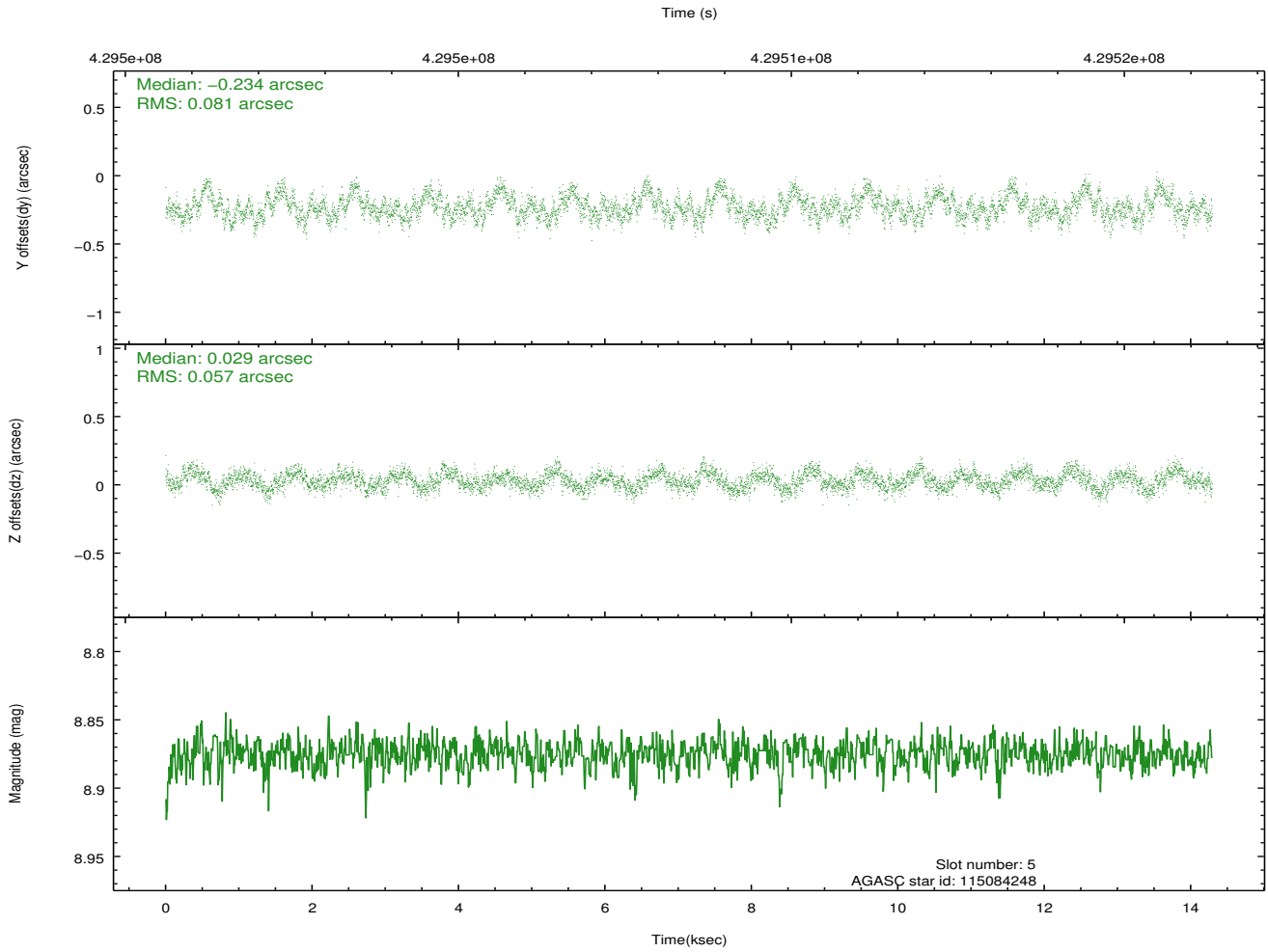
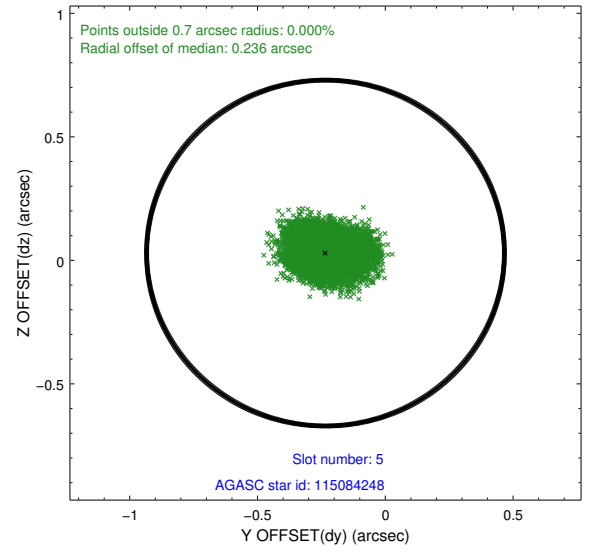
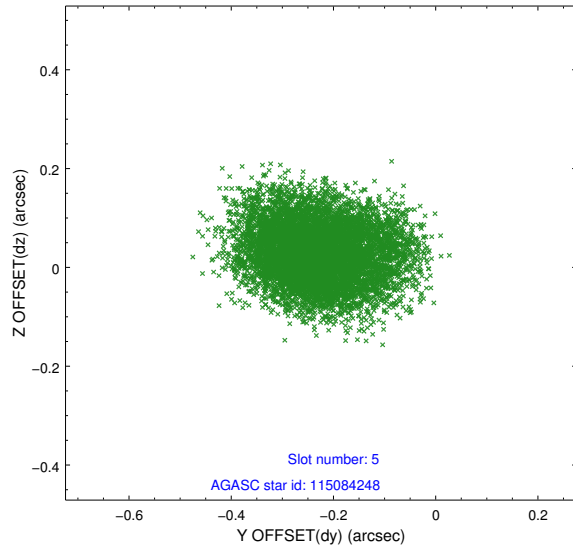
### 2.4.1 Slot 3



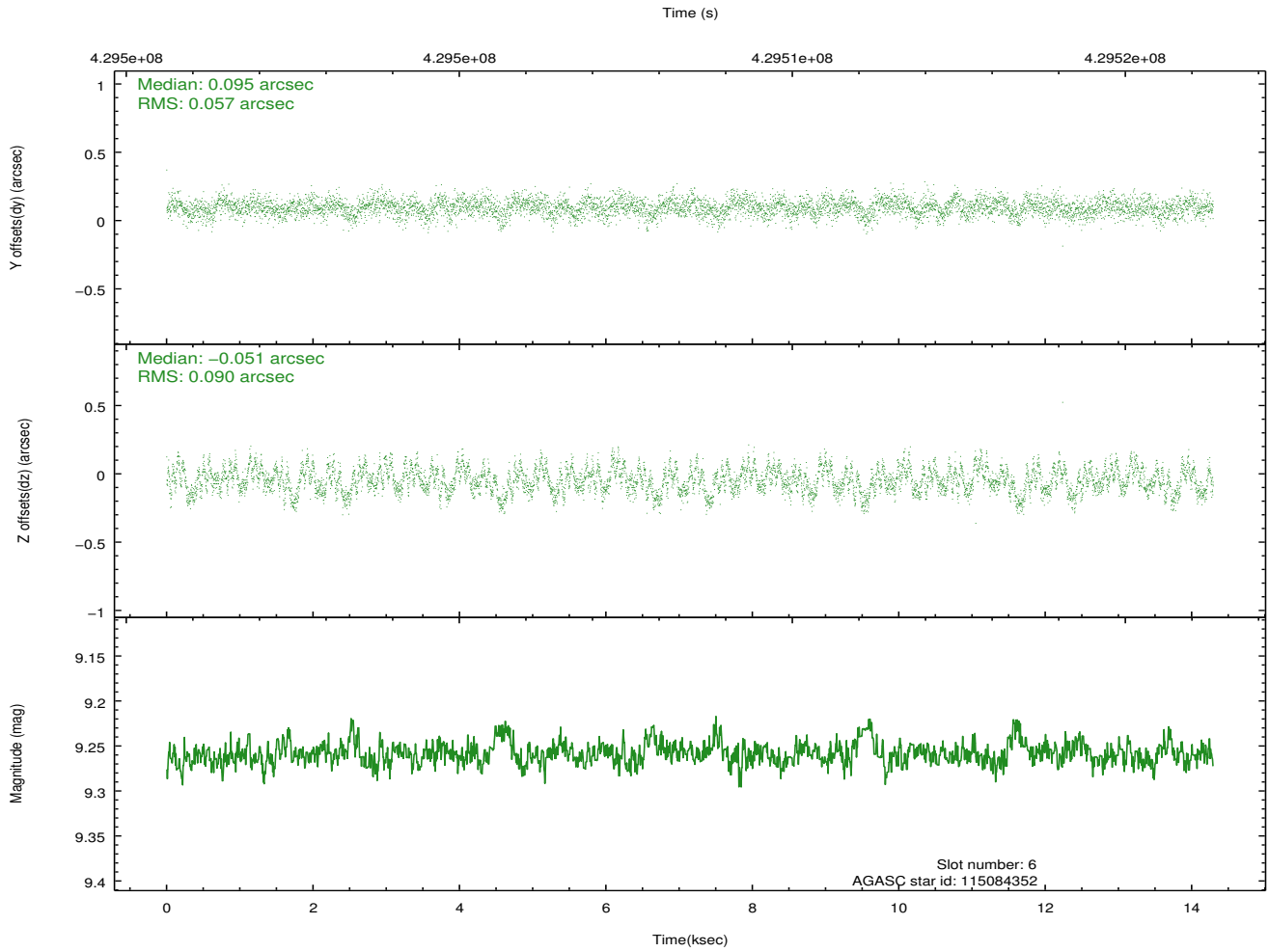
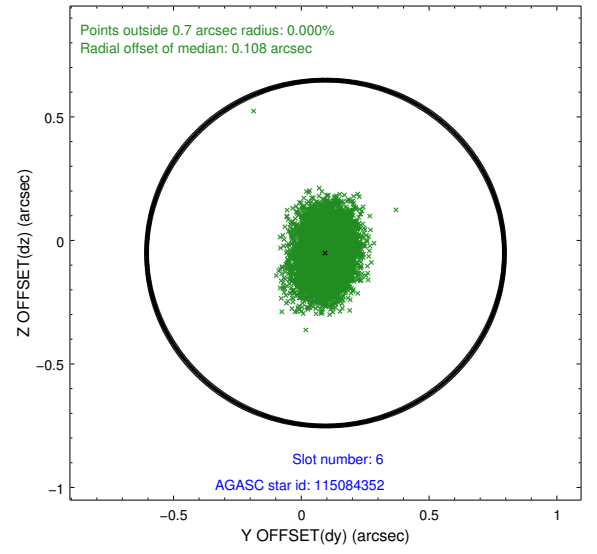
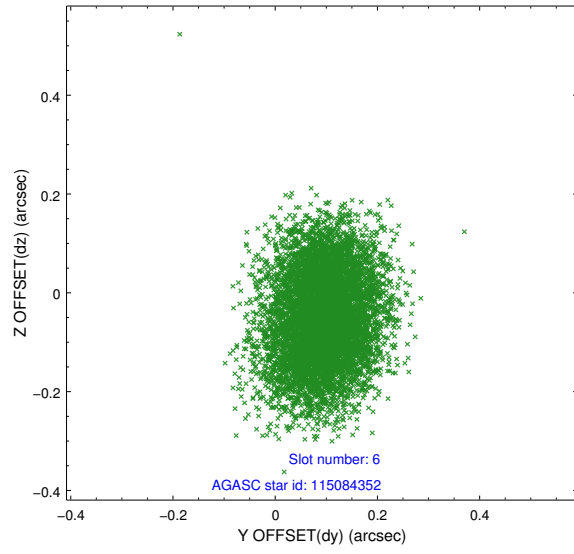
## 2.4.2 Slot 4



### 2.4.3 Slot 5

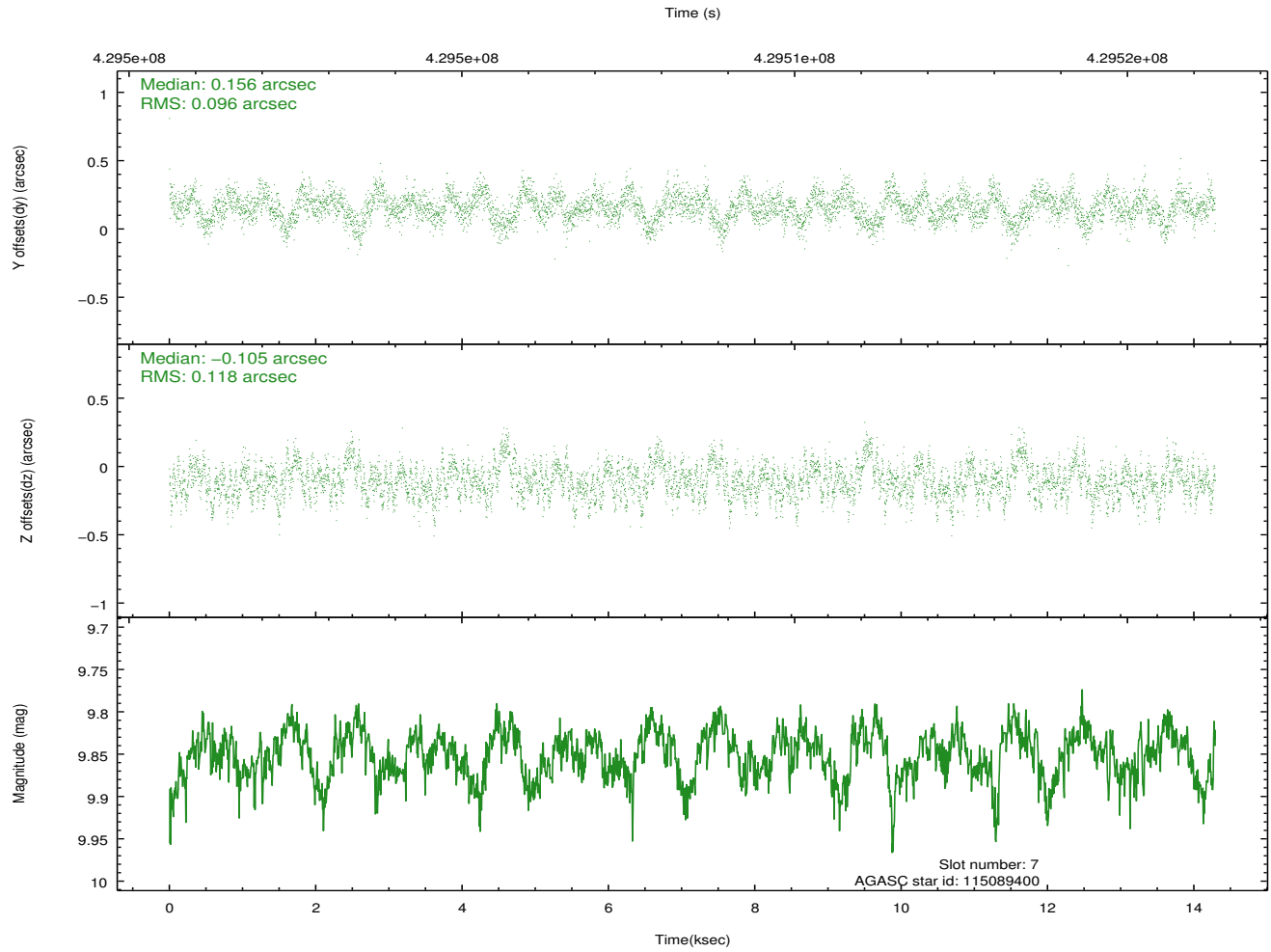
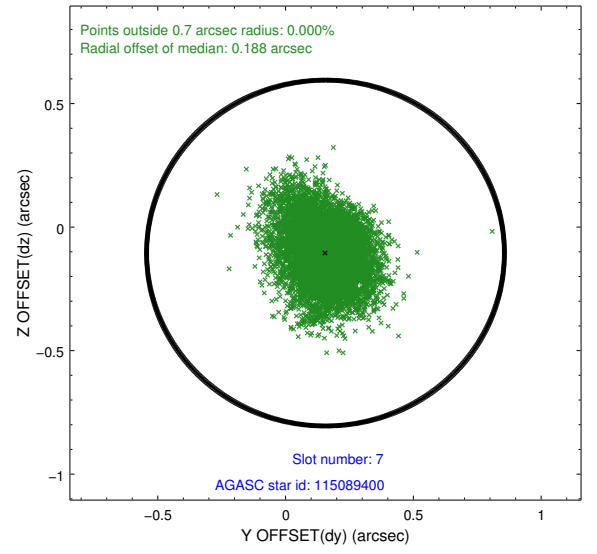
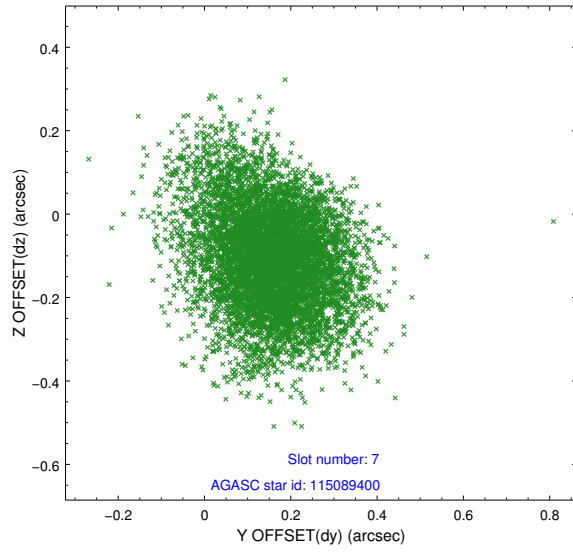


### 2.4.4 Slot 6



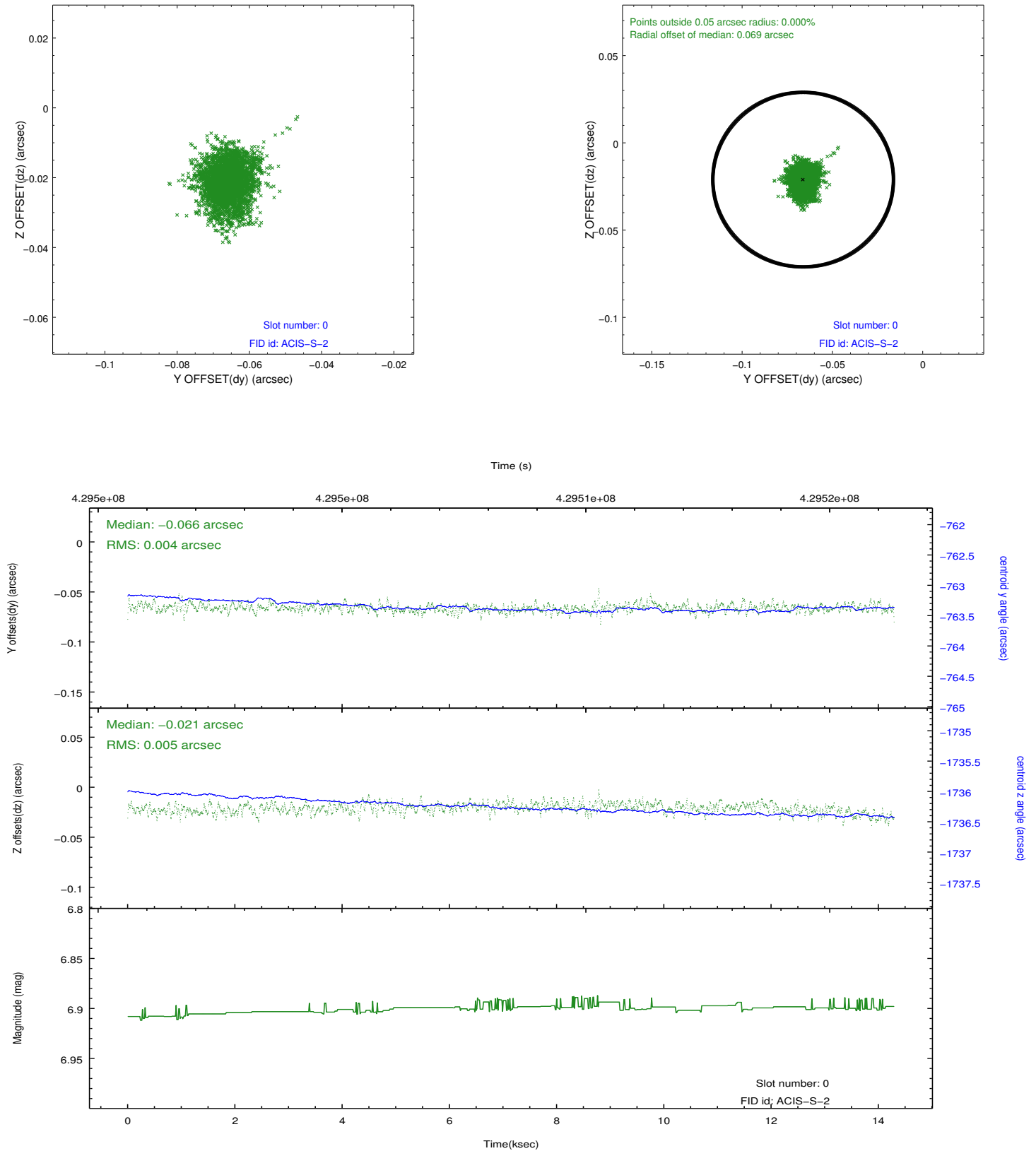


### 2.4.5 Slot 7

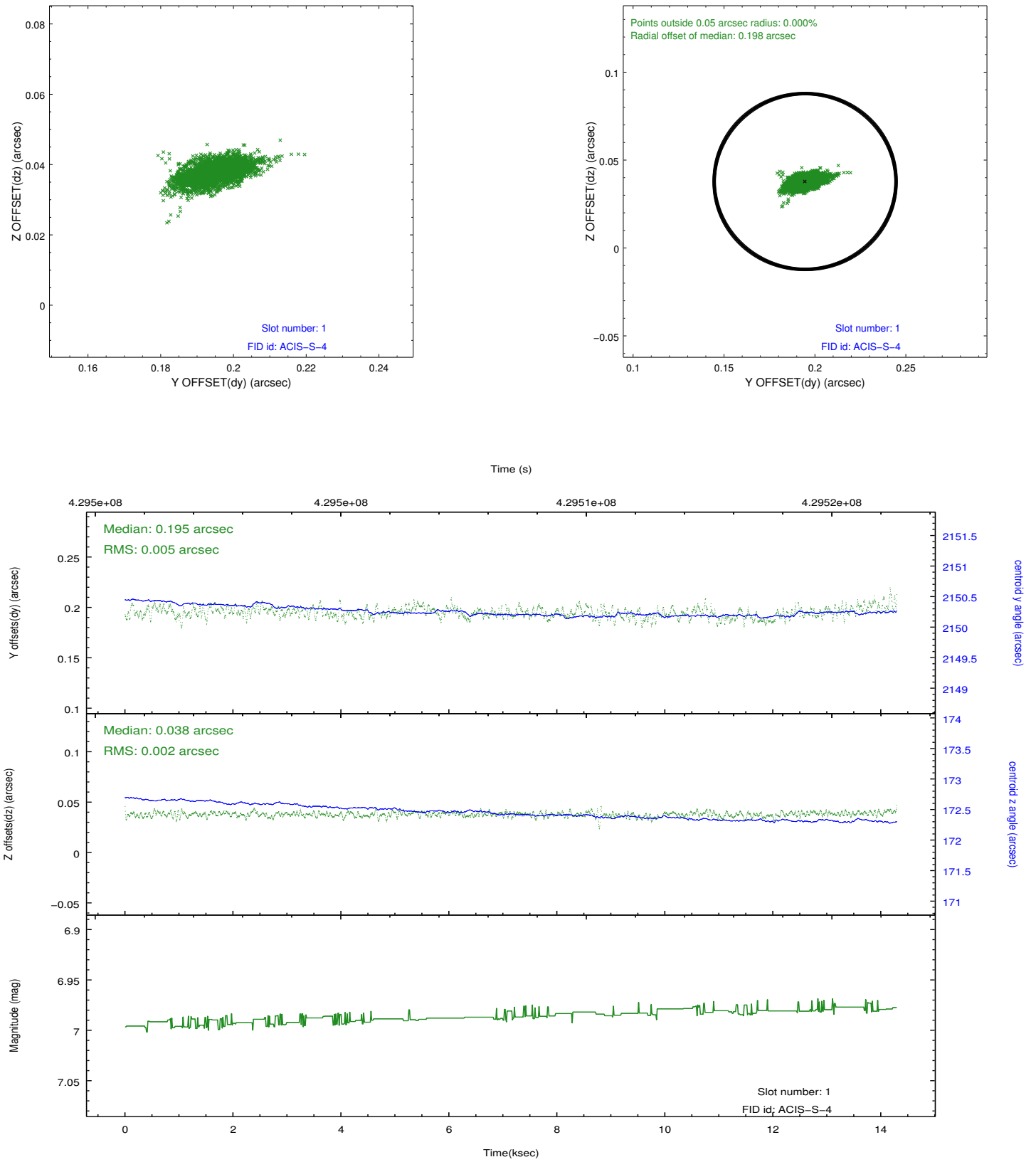


## 2.5 FID Slots

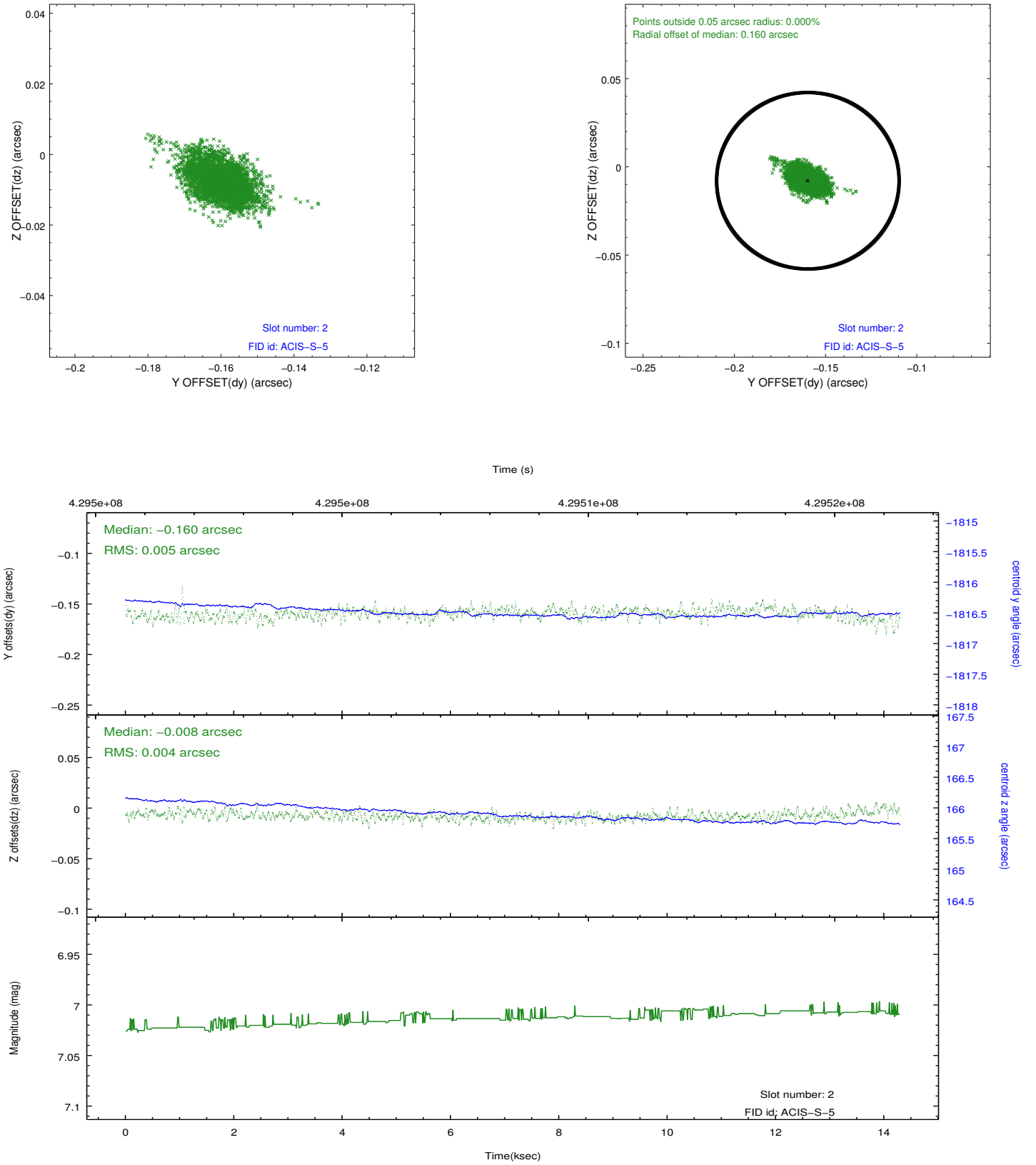
### 2.5.1 Slot 0



## 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)	2012.02.21
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	14.153971730292

### A.2 Comments

Joint proposal: HST