

# V&V Reference Report

## L2 ASCDS Version : 10.5

Observation 18218 - L2 Version 1  
Chandra X-Ray Center

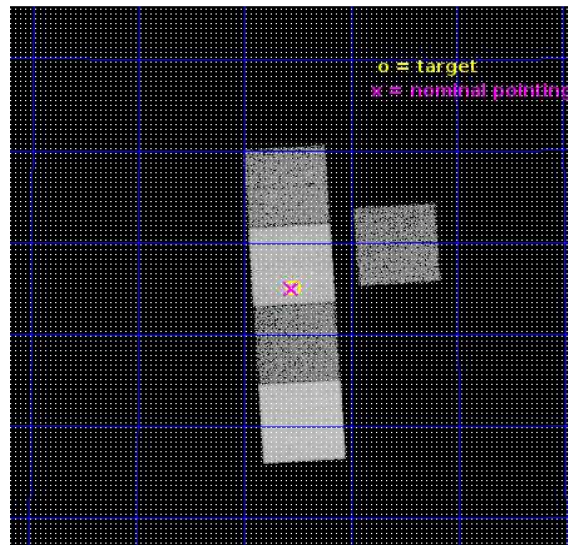
L2 Processing Date : Aug 1 2016

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# 1 Front

seq_num	801546	Sequence number
obs_id	18218	Observation id
title	Searching for Fossil Group Progenitors Via Strong Gravitational Lensing	Proposal title
observer	Lucas Johnson	Principal investigator
object	CSWA 28	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	205.886667	Observer's specified target RA [deg]
dec_targ	41.917611	Observer's specified target Dec [deg]
ra_nom	205.88996404045	Nominal RA [deg]
dec_nom	41.917109747714	Nominal Dec [deg]
roll_nom	266.39580066637	Nominal Roll [deg]
revision	1	Processing version of data
ontime	17024.118789911	Sum of GTIs [s]
livetime	16801.686144947	Livetime [s]
ontime3	17020.854679585	Sum of GTIs [s]
ontime5	17024.077749968	Sum of GTIs [s]
ontime6	17024.036709905	Sum of GTIs [s]
ontime7	17024.118789911	Sum of GTIs [s]
ontime8	17023.954629898	Sum of GTIs [s]
l2events	178119	Number of level 2 events

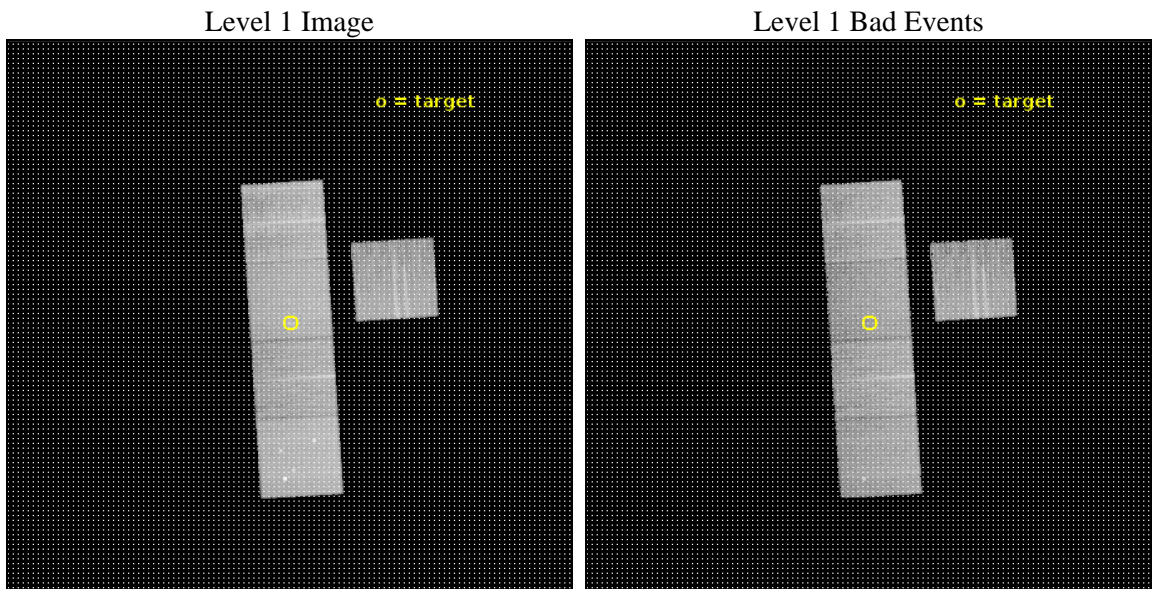




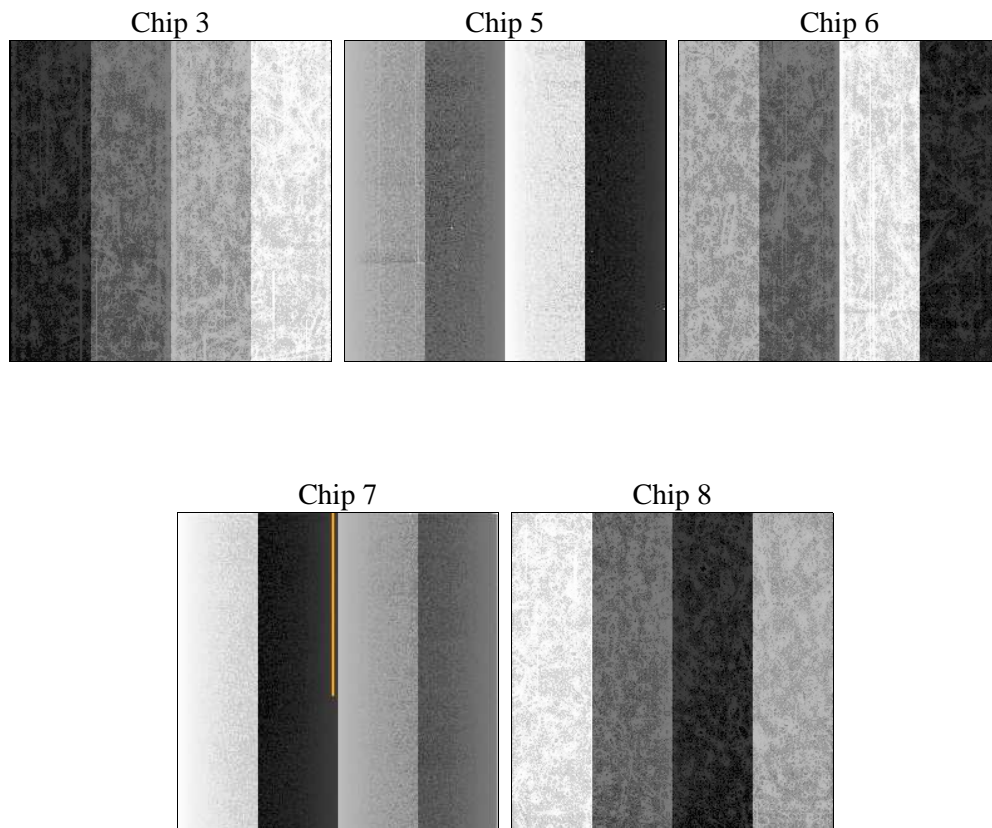
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	17000.000000	[s] Scheduled observation exposure time
ascdsver	10.5	Processing system revision	ontime	17024.118789911	Sum of GTIs [s]
caldsver	4.7.2	&#160	ontime3	17020.854679585	Sum of GTIs [s]
date	2016-08-01T16:36:42	Date and time of file creation	ontime5	17024.077749968	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	17024.036709905	Sum of GTIs [s]
			ontime7	17024.118789911	Sum of GTIs [s]
			ontime8	17023.954629898	Sum of GTIs [s]
			l1events	713804	Number of level 1 events

### 2.1.4 Events

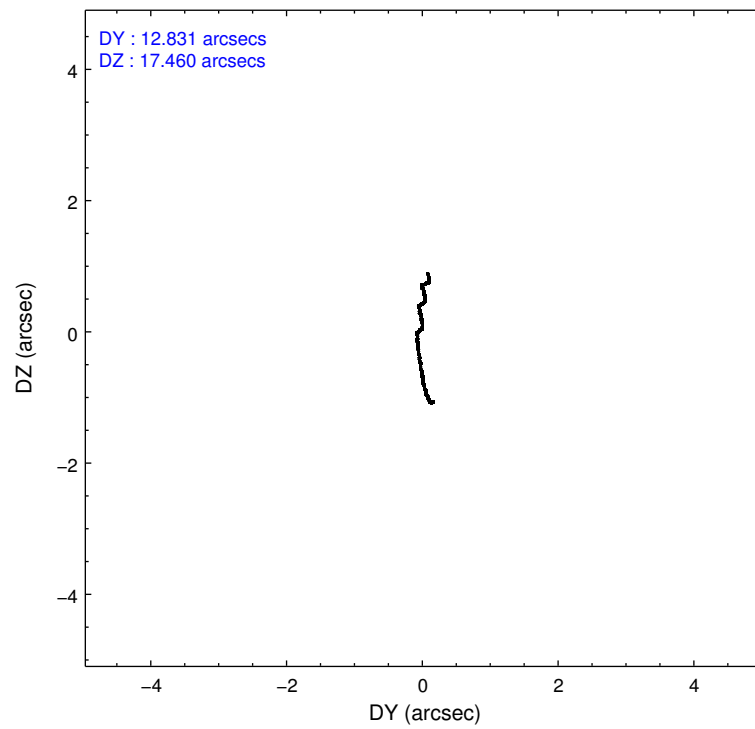
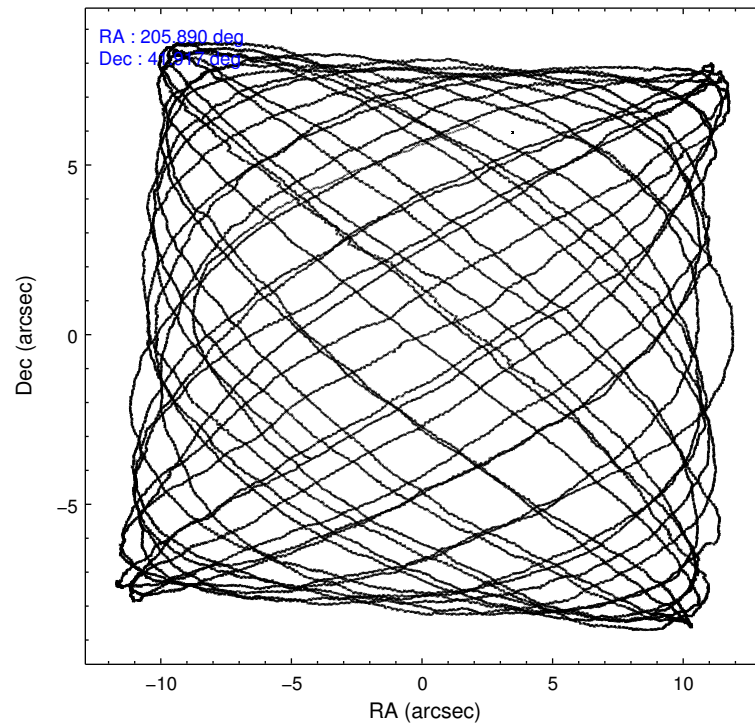
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	111785	182525	118371	148031	153092
rejected events	100356	93892	105936	84182	114384
rejected %	89%	51%	89%	56%	74%

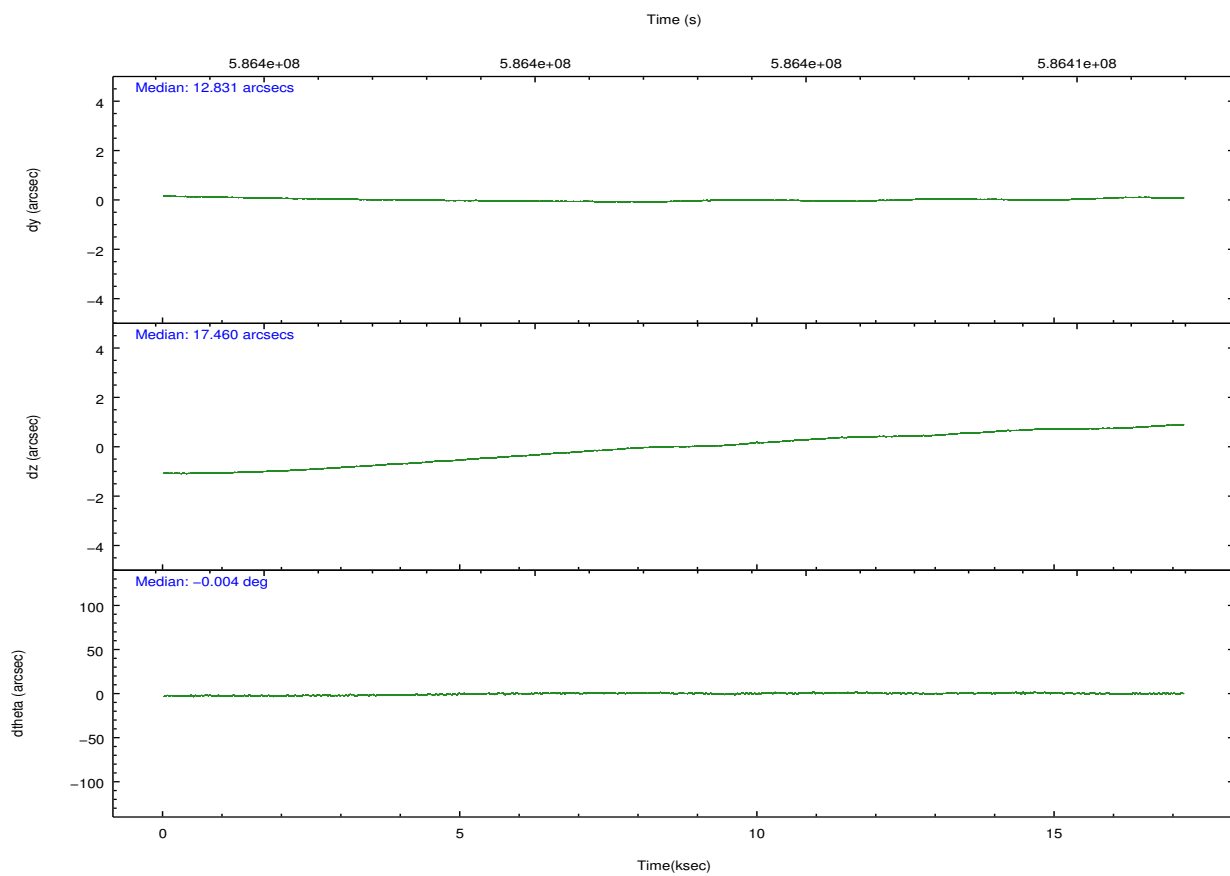
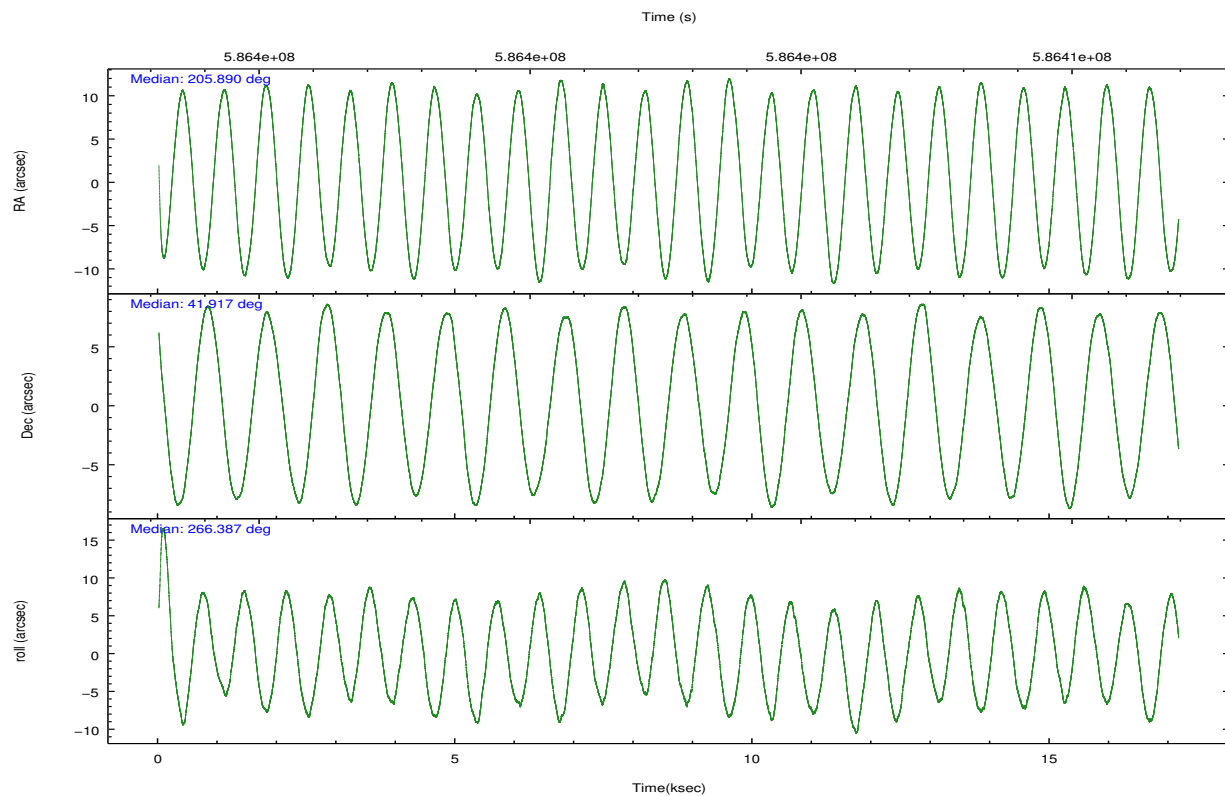
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	4023	8577	3957	5497	10806
	3%	4%	3%	3%	7%
grade 1 events	63	1103	57	210	112
	0%	0%	0%	0%	0%
grade 2 events	2553	26774	3042	13713	9619
	2%	14%	2%	9%	6%
grade 3 events	1209	2877	1190	4956	3897
	1%	1%	1%	3%	2%
grade 4 events	1171	2853	1175	4630	3611
	1%	1%	0%	3%	2%
grade 5 events	5168	12054	5247	13911	8041
	4%	6%	4%	9%	5%
grade 6 events	2474	47574	3071	35059	10779
	2%	26%	2%	23%	7%
grade 7 events	95124	80713	100632	70055	106227
	85%	44%	85%	47%	69%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-35678	ACIS-35678	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	205.873146	205.8899640404517	CCD I2 on	N	N
[deg] Pointing Dec	41.941518	41.9171097477139	CCD I3 on	Y	Y
[deg] Pointing Roll	266.250417	266.3958006663735	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	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	O1	Y
[s] Observation start time (MET)	586394166.184000	586393039.83872	CCD S5 on	N	N
Observation start date	2016-07-31T23:14:58	2016-07-31T22:57:19	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	586411166.184000	586412031.55231	On-chip summing requested	N	N
Observation end date	2016-08-01T03:58:18	2016-08-01T04:13:51	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



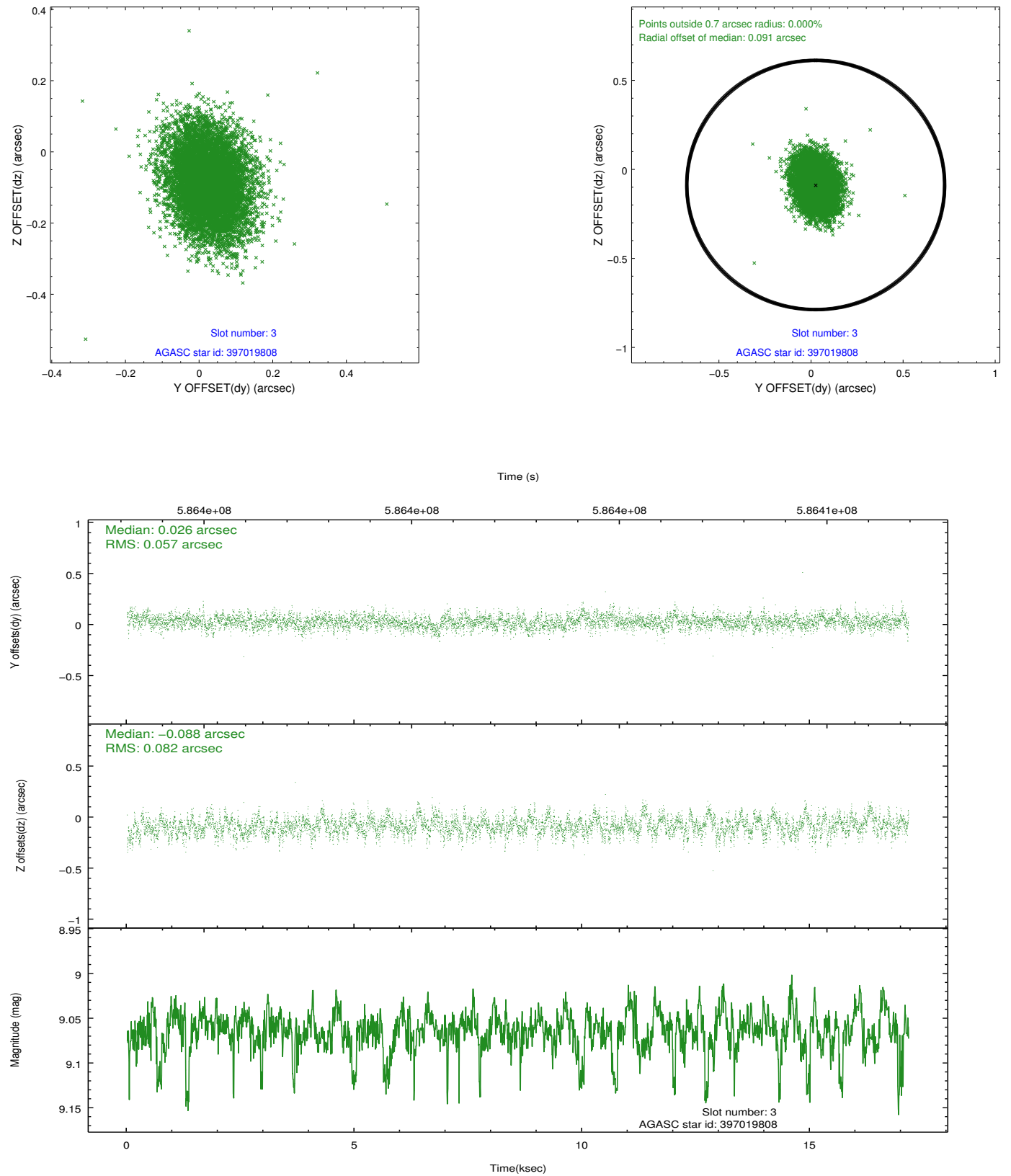


### Slot Statistics

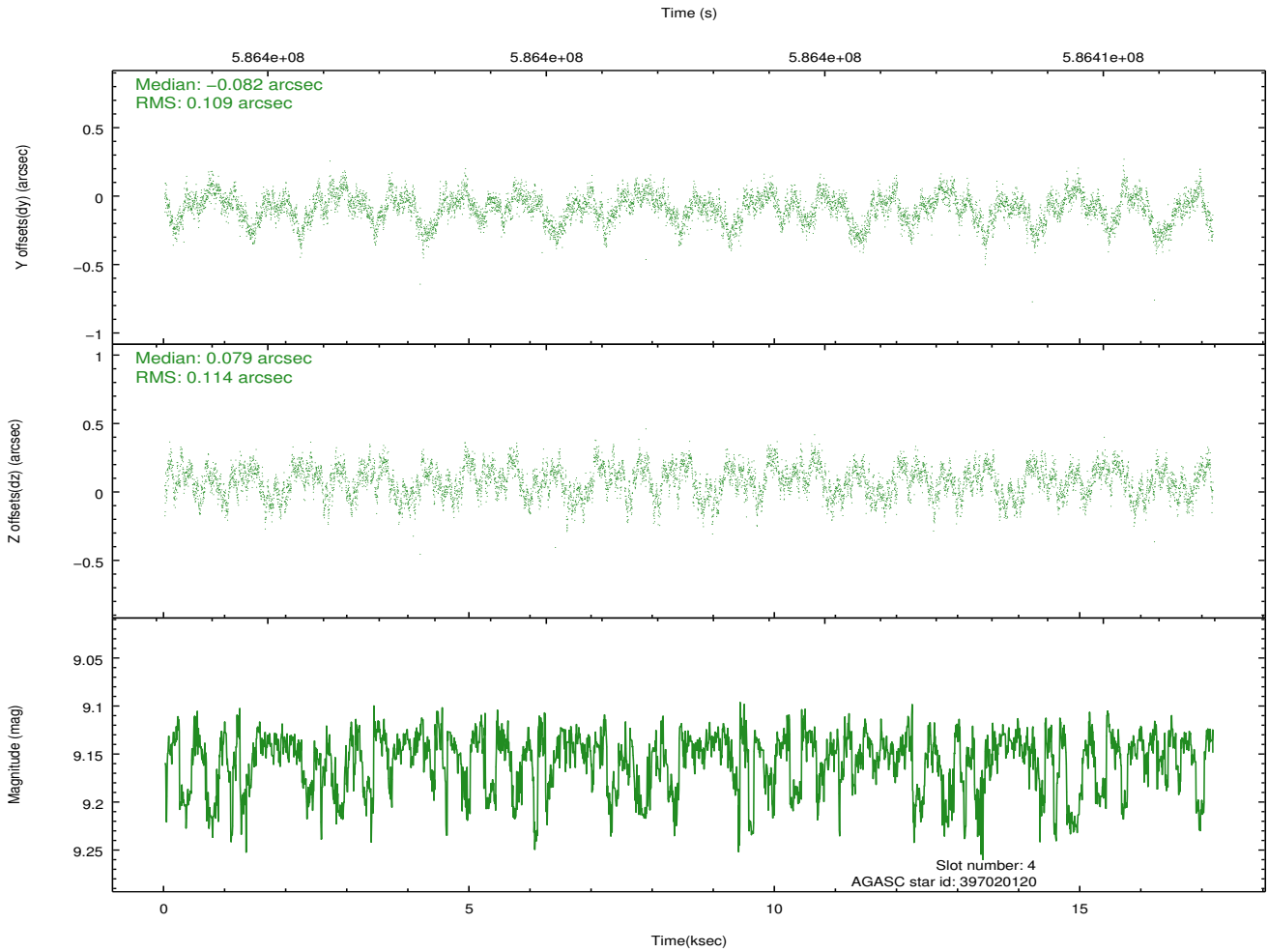
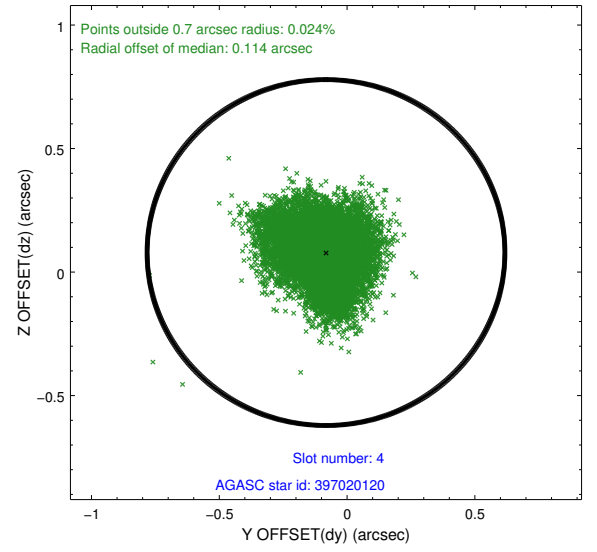
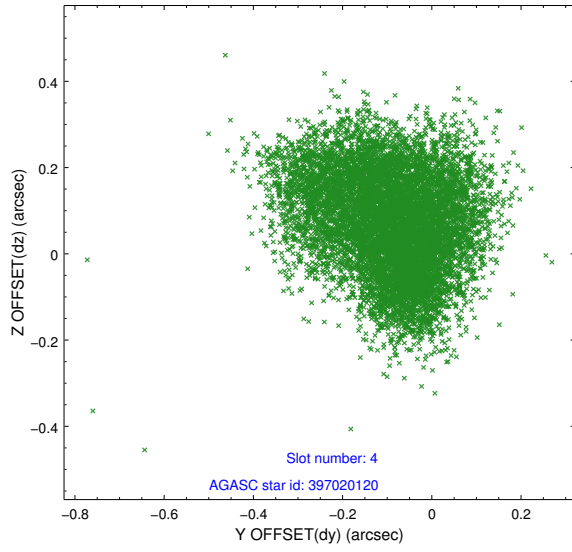
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.09	4184	-0.117	-0.111	0.018	0.053	0.000000	0.000000	-765.86	-1738.89
1	FID		ACIS-S-4	7.20	4185	0.384	0.085	0.009	0.020	0.000000	0.000000	2147.80	169.55
2	FID		ACIS-S-5	7.22	4185	-0.297	0.035	0.016	0.046	0.000000	0.000000	-1818.58	163.41
3	GUIDE	used	397019808	9.06	8363	0.026	-0.088	0.105	0.175	206.506167	42.018865	-394.38	1671.18
4	GUIDE	used	397020120	9.15	8365	-0.082	0.079	0.171	0.260	206.442748	42.289820	-1355.77	1430.44
5	GUIDE	used	397023320	9.22	8359	-0.140	-0.175	0.170	0.266	206.078369	41.715345	775.97	604.10
6	GUIDE	used	397024016	8.80	8367	0.176	0.195	0.138	0.212	205.503409	42.211091	-903.83	-1047.55
7	GUIDE	used	397025632	6.27	8370	0.025	0.003	0.098	0.157	205.620029	41.674282	1003.82	-617.36

## 2.4 Star Slots

### 2.4.1 Slot 3

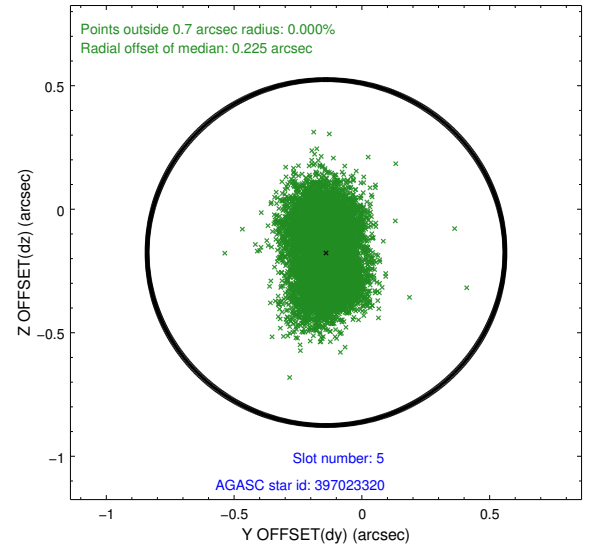
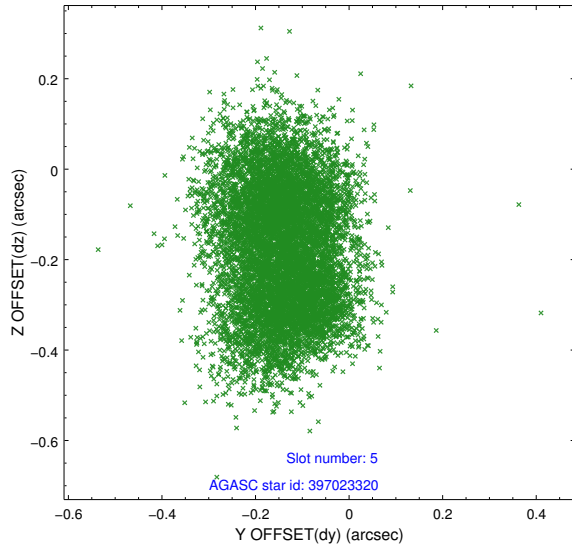


## 2.4.2 Slot 4

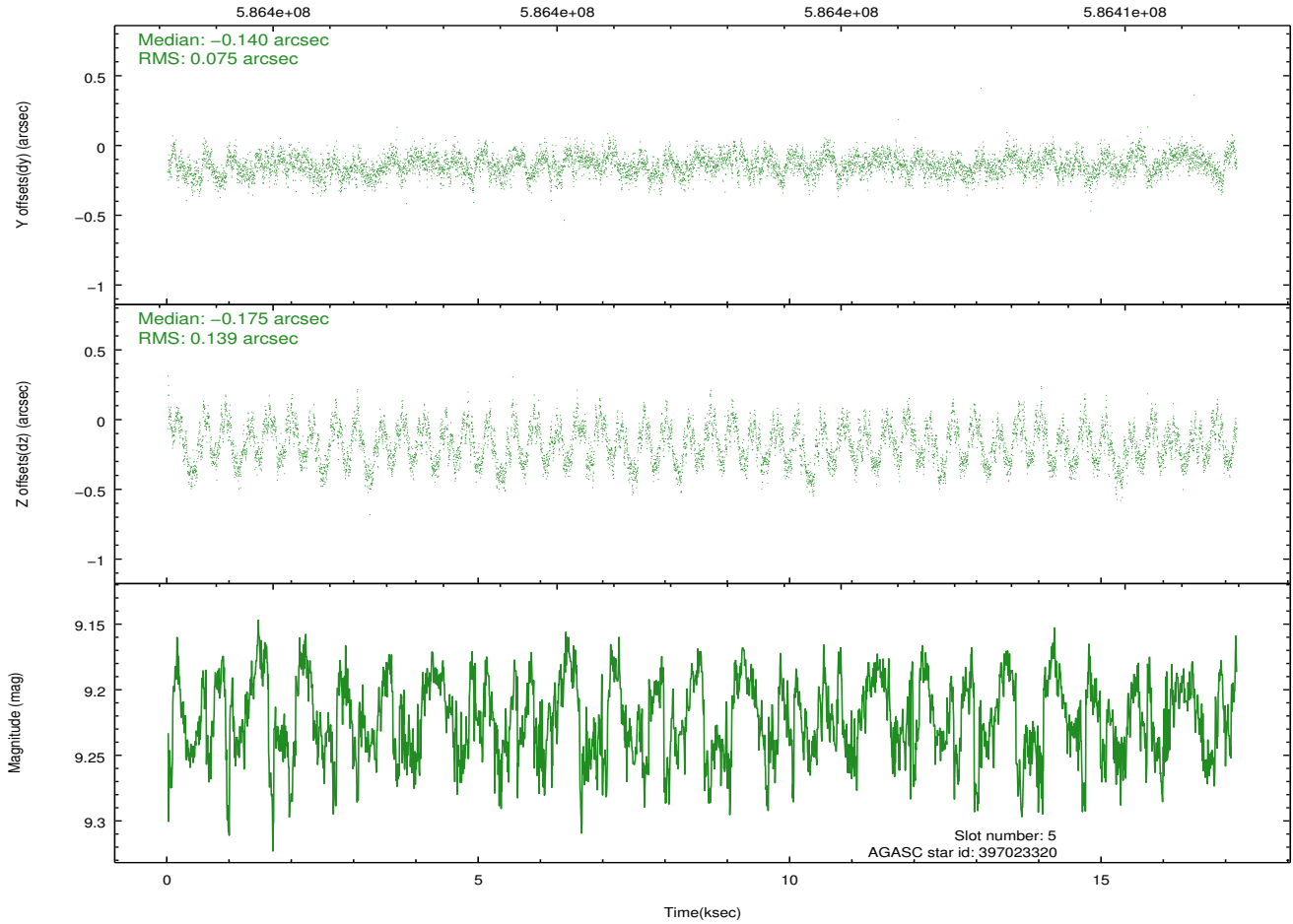




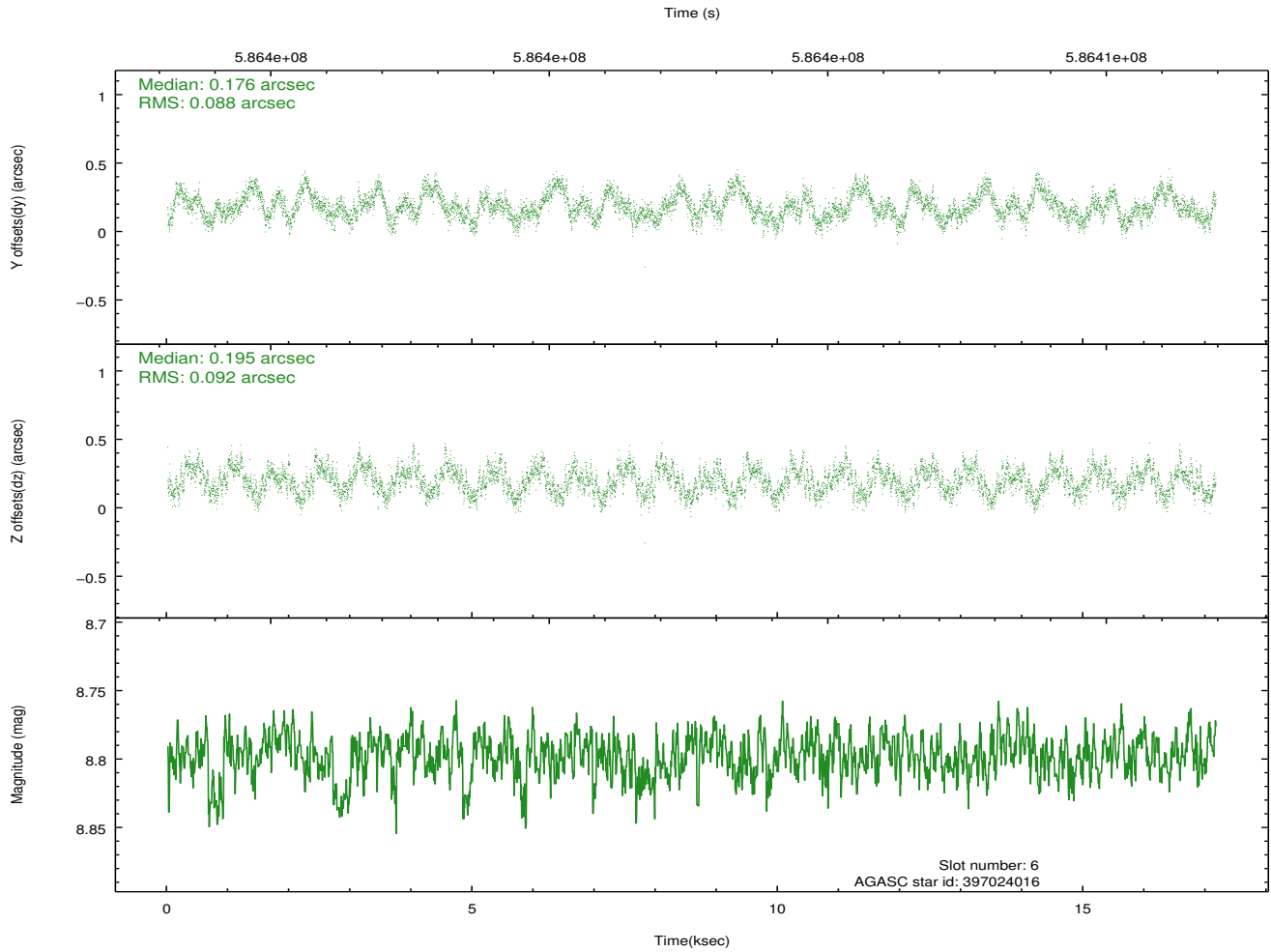
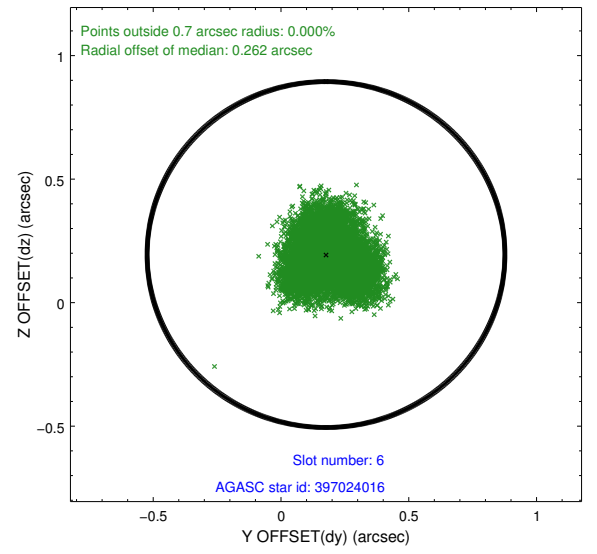
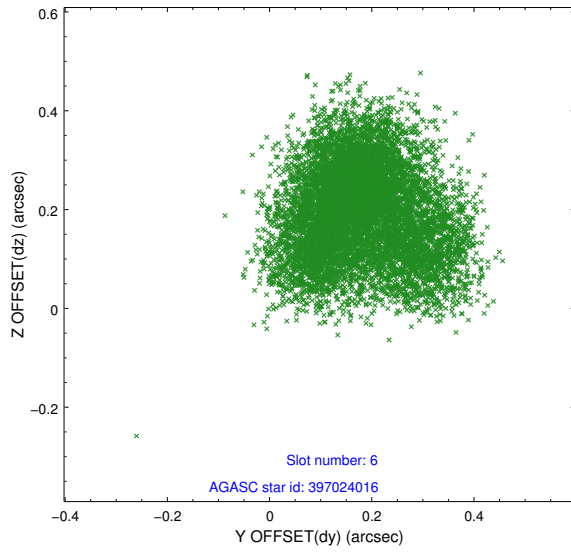
### 2.4.3 Slot 5



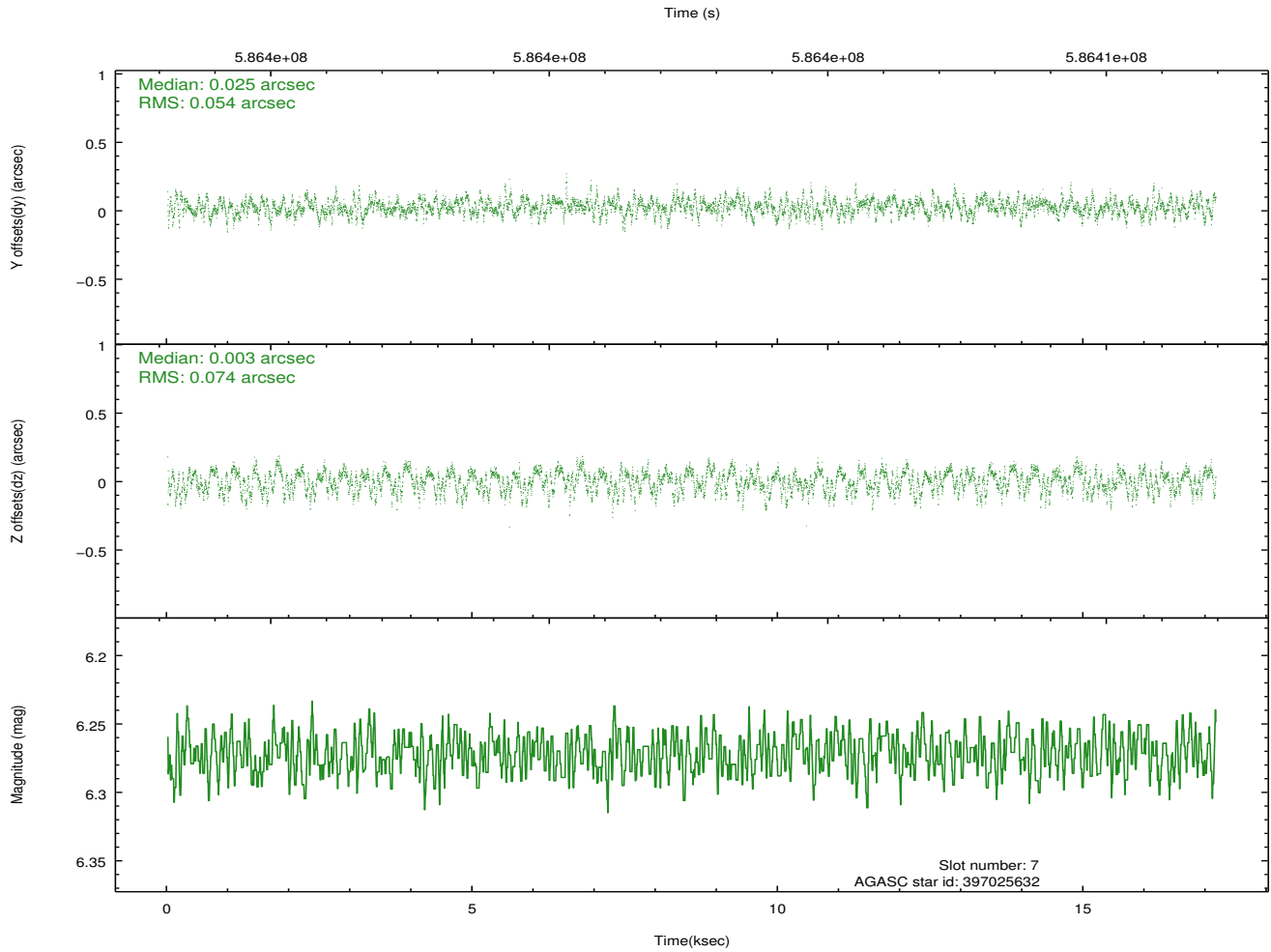
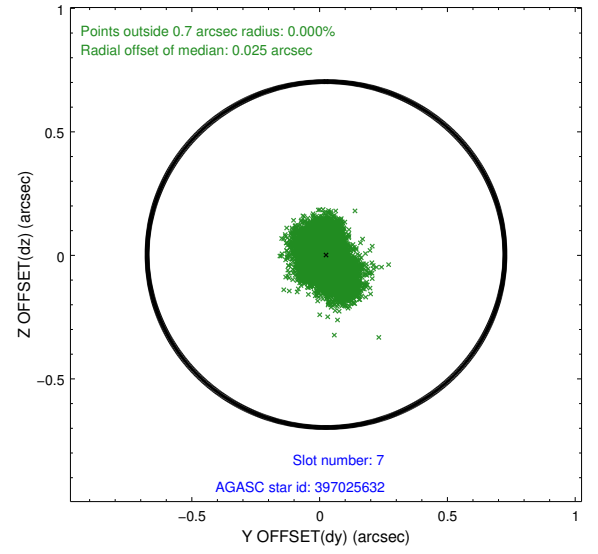
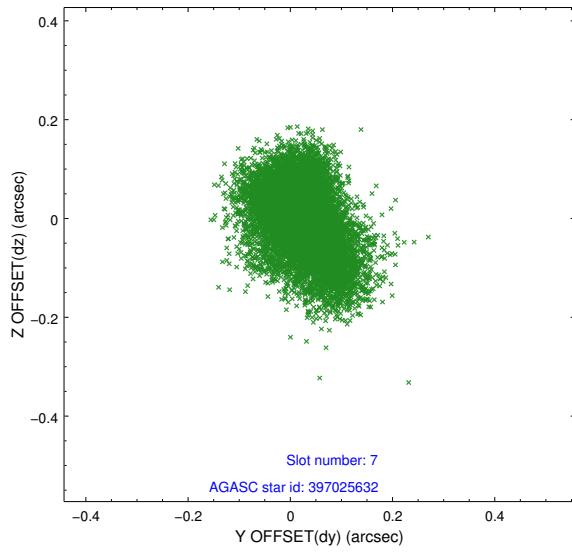
Time (s)



## 2.4.4 Slot 6

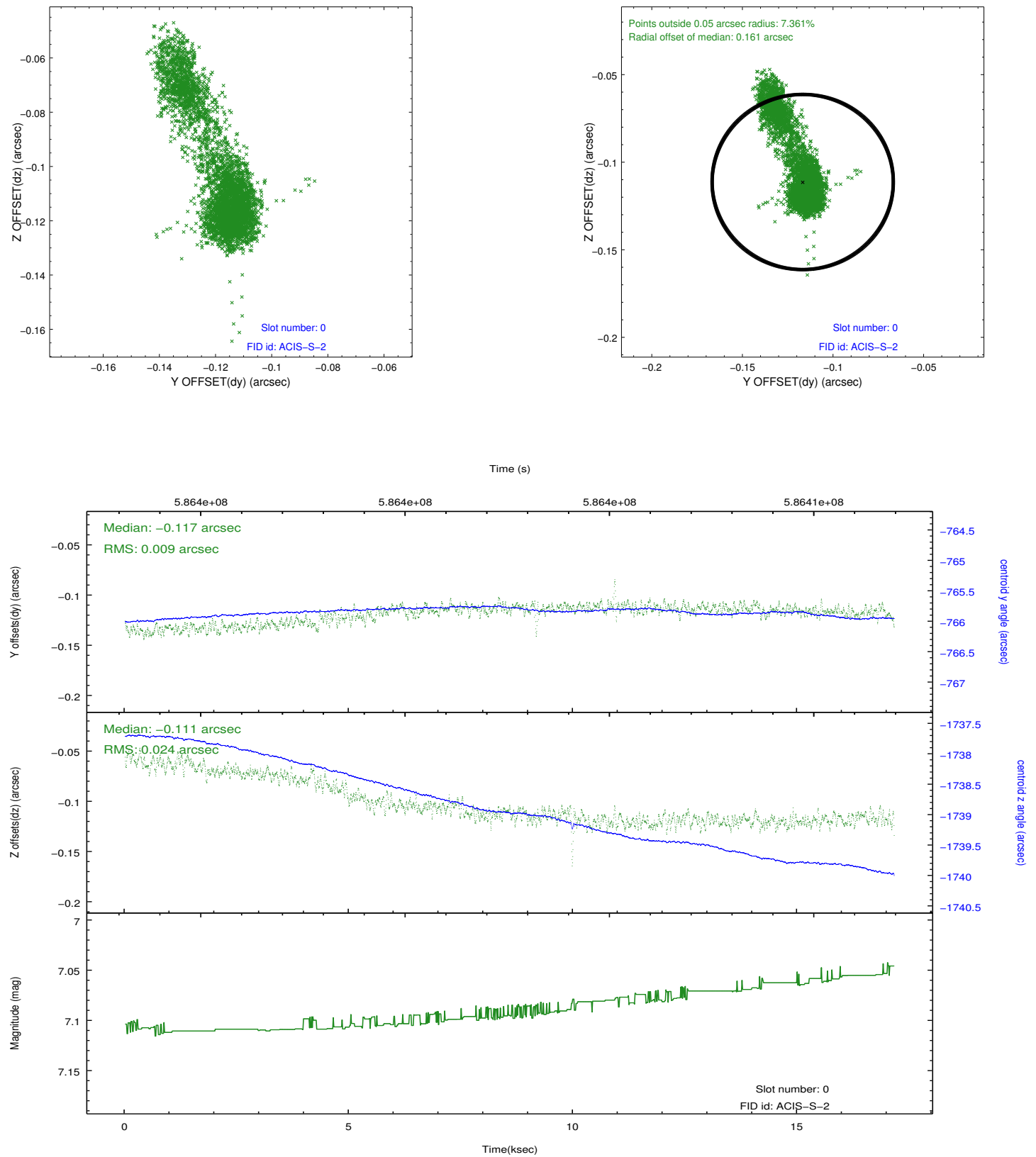


## 2.4.5 Slot 7

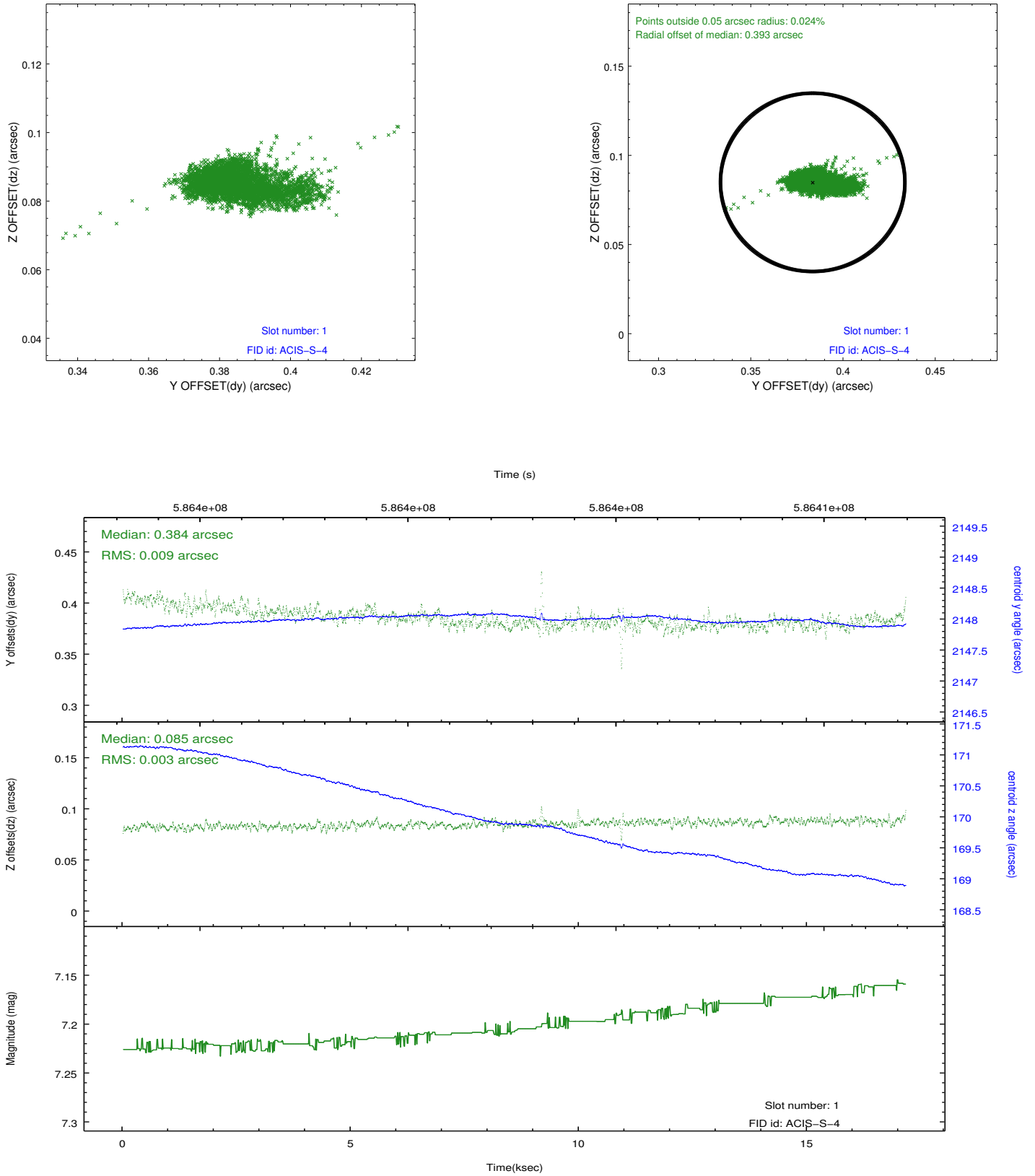


## 2.5 FID Slots

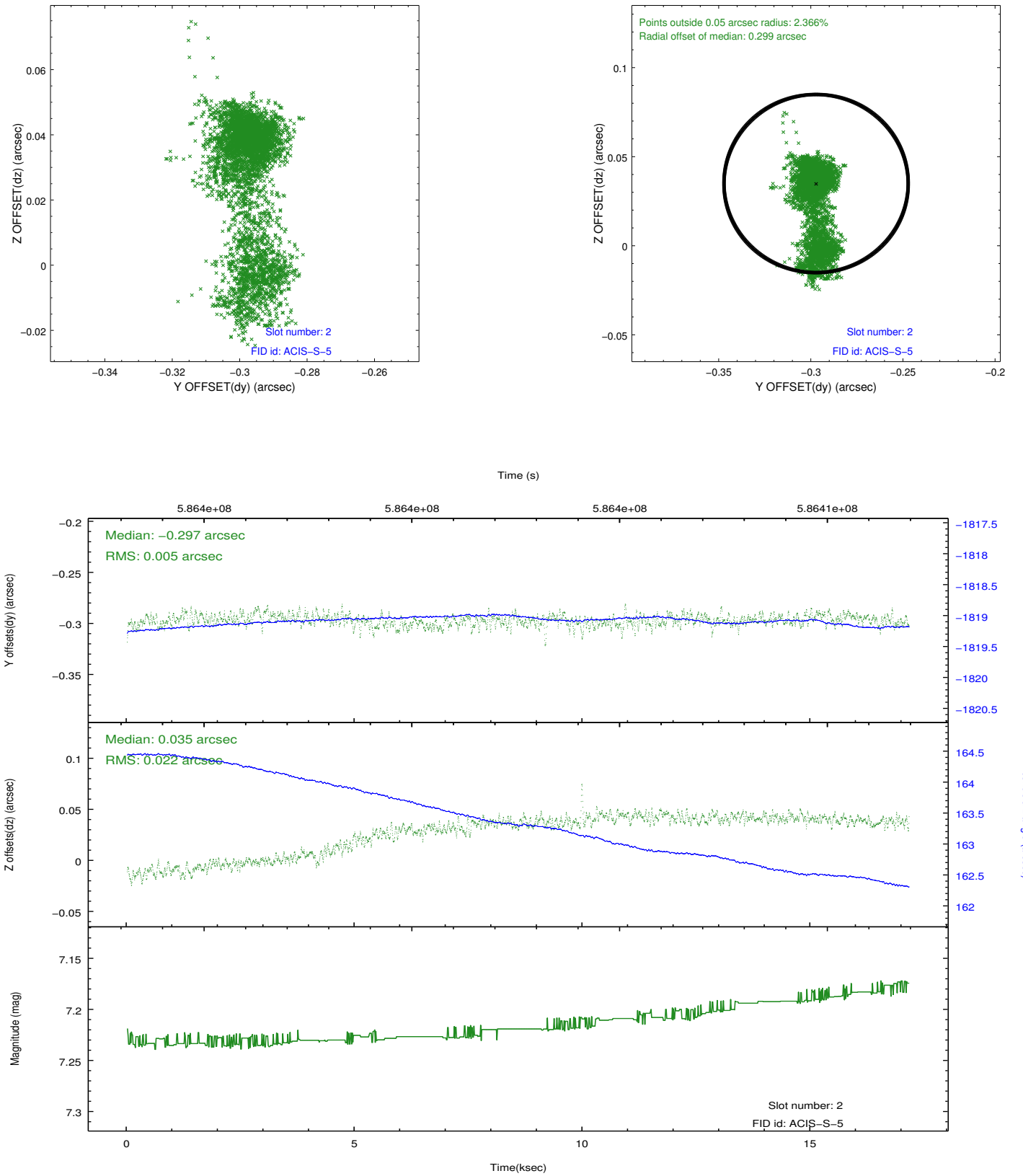
### 2.5.1 Slot 0



## 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)	2016.08.01
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	17.024118789911

### A.2 Comments

Joint Proposal: HST