

# V&V Reference Report

## L2 ASCDS Version : 10.2.4

Observation 16285 - L2 Version 1  
Chandra X-Ray Center

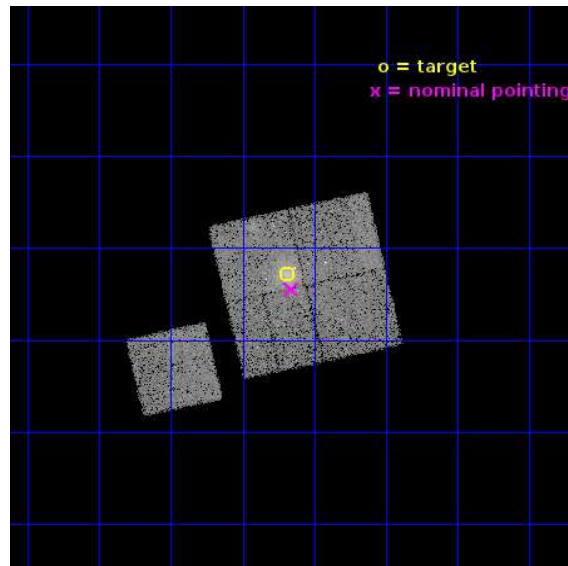
L2 Processing Date : Sep 8 2014

## Contents

<b>1</b>	<b>Front</b>	<b>2</b>
<b>2</b>	<b>OBI</b>	<b>3</b>
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
<b>A</b>	<b>Summary</b>	<b>17</b>
A.1	Status . . . . .	17
A.2	Comments . . . . .	17

# 1 Front

seq_num	801427	Sequence number
obs_id	16285	Observation id
title	Chandra observations of the Planck ESZ Cluster Sample	Proposal tit
observer	Dr. Stephen Murray	Principal investigator
object	G053.44-36.26	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	323.797917	Observer's specified target RA [deg]
dec_targ	-1.047778	Observer's specified target Dec [deg]
ra_nom	323.78999636738	Nominal RA [deg]
dec_nom	-1.0744720202919	Nominal Dec [deg]
roll_nom	257.21277754357	Nominal Roll [deg]
revision	1	Processing version of data
ontime	20078.368411481	Sum of GTIs [s]
livetime	19816.029746706	Livetime [s]
ontime0	20078.245252073	Sum of GTIs [s]
ontime1	20081.427312434	Sum of GTIs [s]
ontime2	20081.468352437	Sum of GTIs [s]
ontime3	20078.368411481	Sum of GTIs [s]
ontime6	20081.345232427	Sum of GTIs [s]
l2events	60961	Number of level 2 events

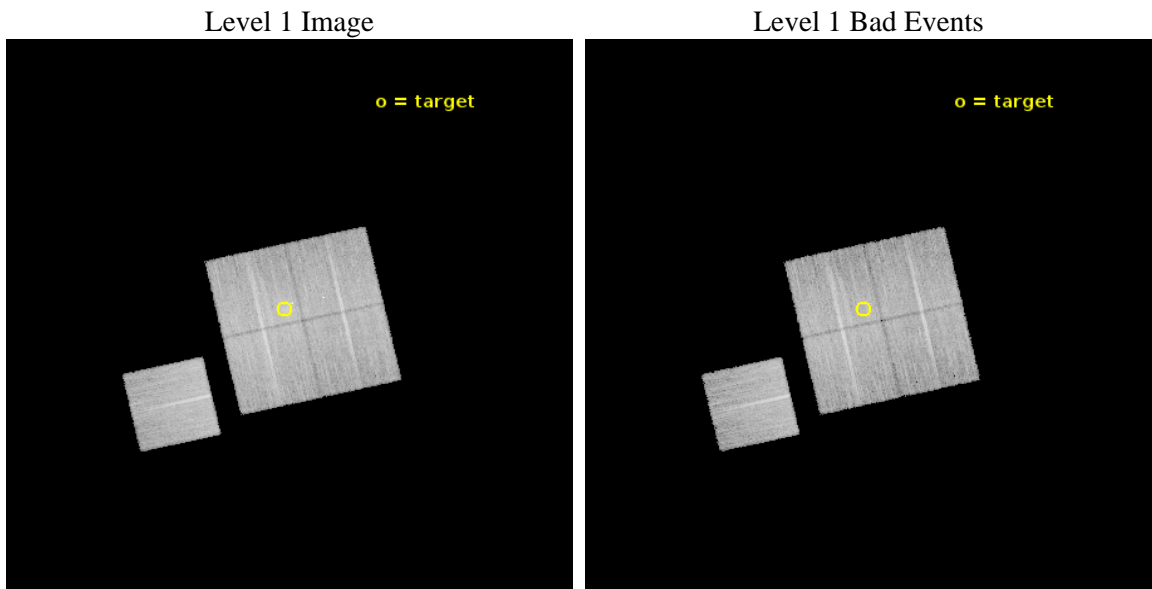




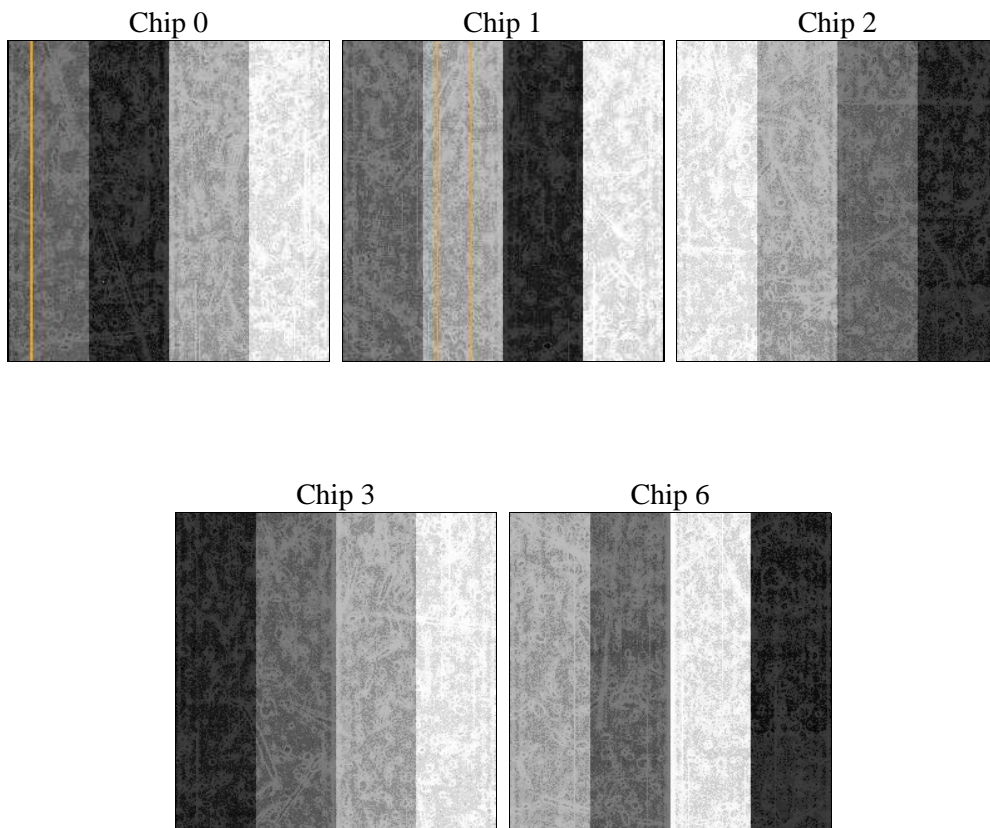
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	20000.000000	[s] Scheduled observation exposure time
ascdsver	10.2.4	Processing system revision	ontime	20078.368411481	Sum of GTIs [s]
caldsver	4.6.3	&#160	ontime0	20078.245252073	Sum of GTIs [s]
date	2014-09-08T12:15:43	Date and time of file creation	ontime1	20081.427312434	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	20081.468352437	Sum of GTIs [s]
			ontime3	20078.368411481	Sum of GTIs [s]
			ontime6	20081.345232427	Sum of GTIs [s]
			l1events	542161	Number of level 1 events

### 2.1.4 Events

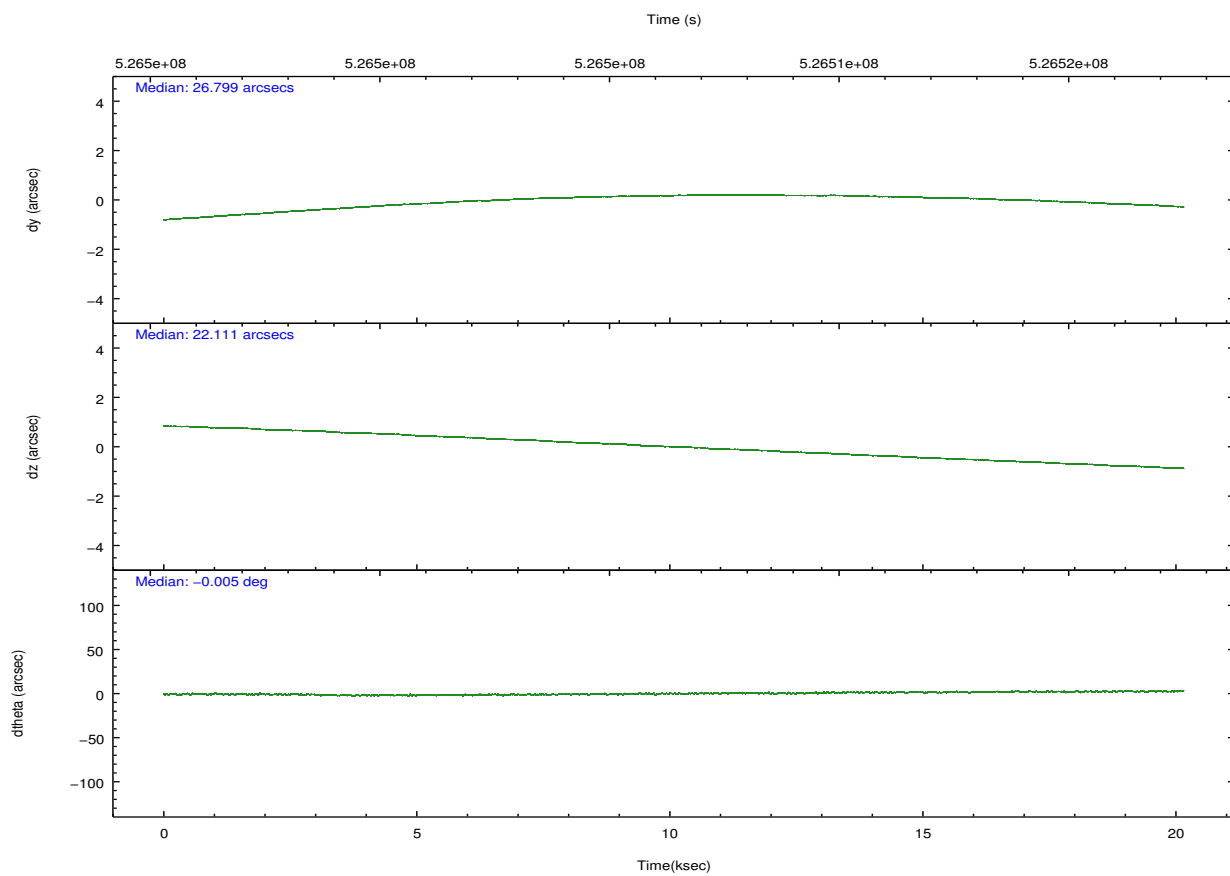
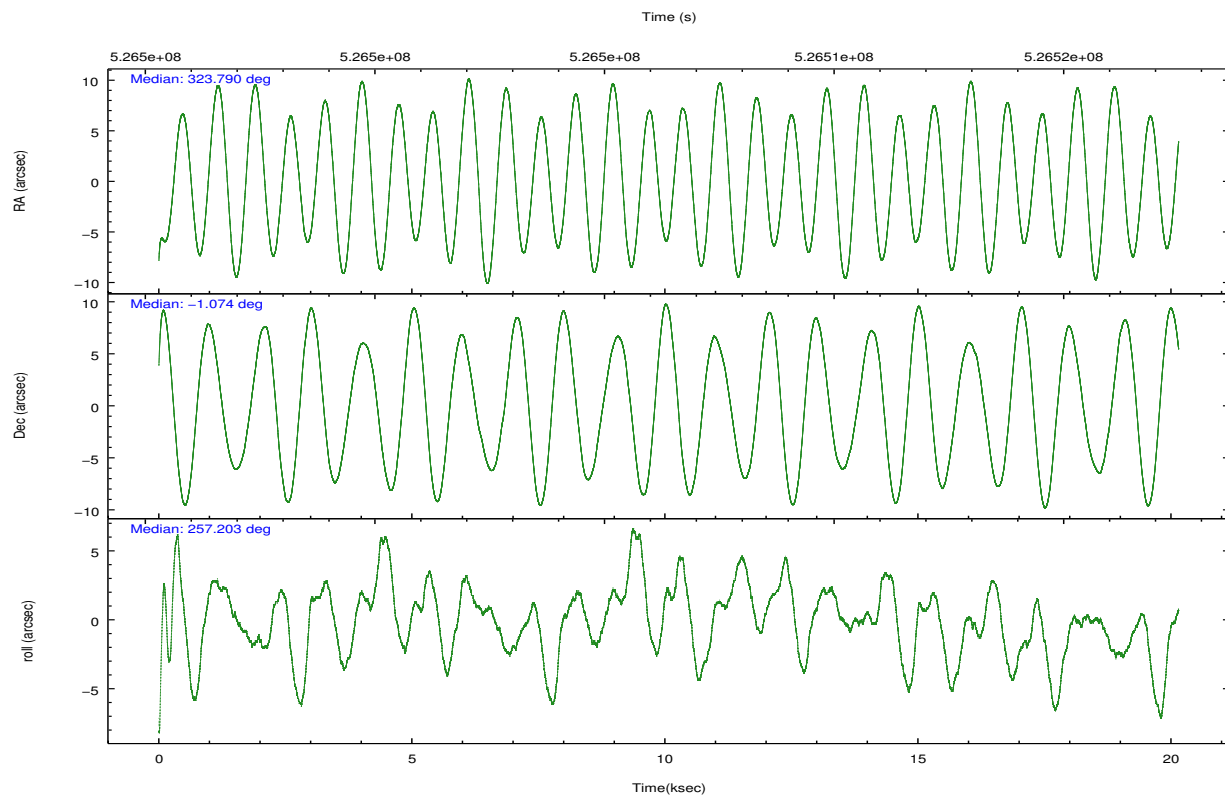
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	98738	102534	112712	114930	113247
rejected events	85203	87291	98763	97298	99627
rejected %	86%	85%	87%	84%	87%

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	5024	5886	5431	8817	4930
	5%	5%	4%	7%	4%
grade 1 events	76	78	62	90	48
	0%	0%	0%	0%	0%
grade 2 events	3518	3595	3552	3268	3252
	3%	3%	3%	2%	2%
grade 3 events	1317	1320	1169	1428	1284
	1%	1%	1%	1%	1%
grade 4 events	1190	1312	1329	1466	1286
	1%	1%	1%	1%	1%
grade 5 events	4637	4884	4328	5513	5209
	4%	4%	3%	4%	4%
grade 6 events	2489	3133	2475	2655	2876
	2%	3%	2%	2%	2%
grade 7 events	80487	82326	94366	91693	94362
	81%	80%	83%	79%	83%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	323.781748	323.7899963673806	CCD I2 on	Y	Y
[deg] Pointing Dec	-1.048152	-1.074472020291871	CCD I3 on	Y	Y
[deg] Pointing Roll	257.003943	257.2127775435744	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	O1	Y
[mm] SIM translation stage pos	-231.592463	-231.5986110572947	CCD S3 on	N	N
[mm] SIM translation stage offset	-2	-1.993841945634955	CCD S4 on	N	N
[s] Observation start time (MET)	526496472.184000	526495401.83525	CCD S5 on	N	N
Observation start date	2014-09-07T17:00:05	2014-09-07T16:43:21	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	526516472.184000	526517202.56147	On-chip summing requested	N	N
Observation end date	2014-09-07T22:33:25	2014-09-07T22:46:42	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect

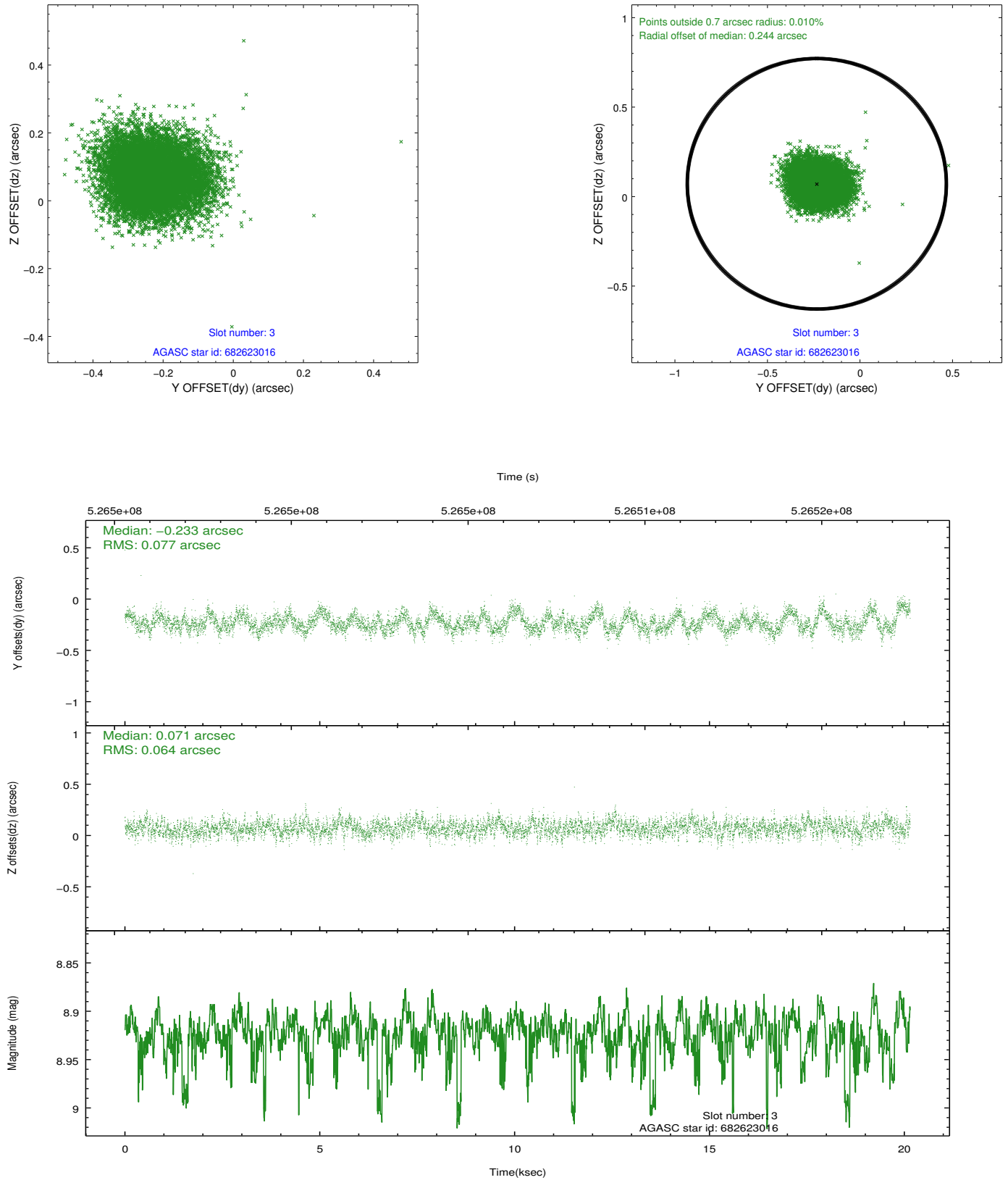


### Slot Statistics

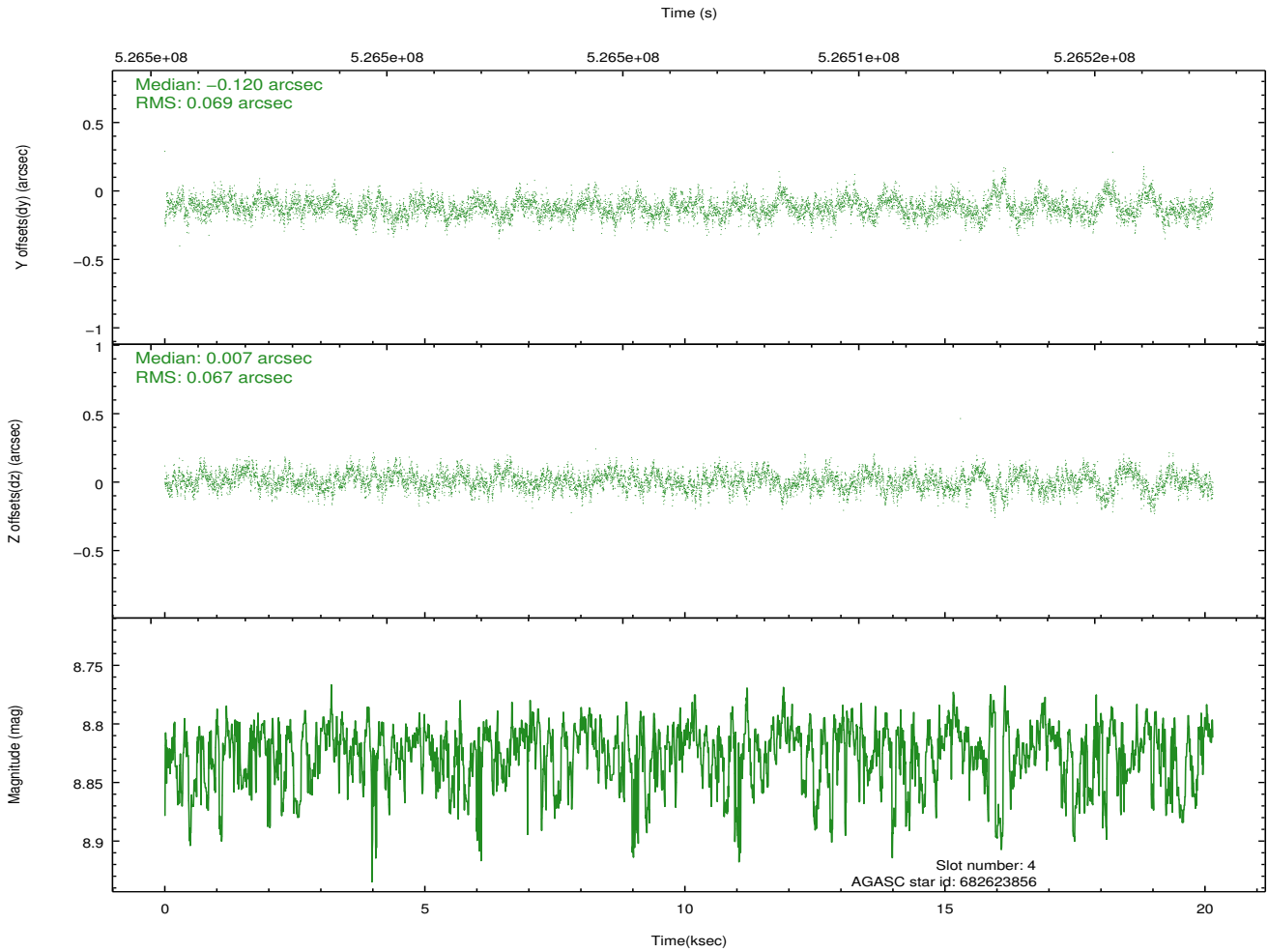
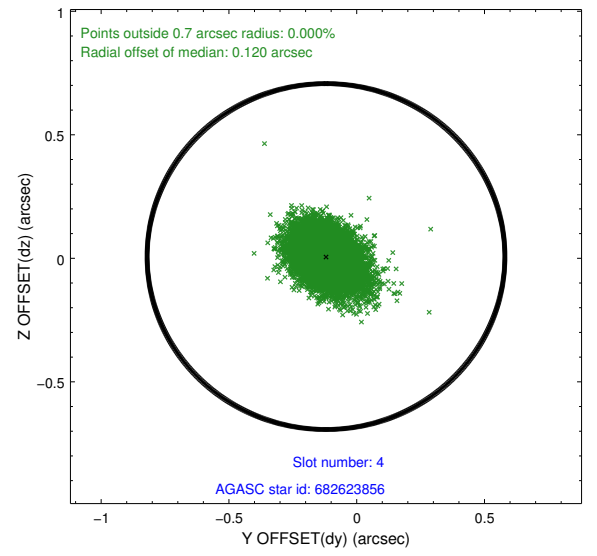
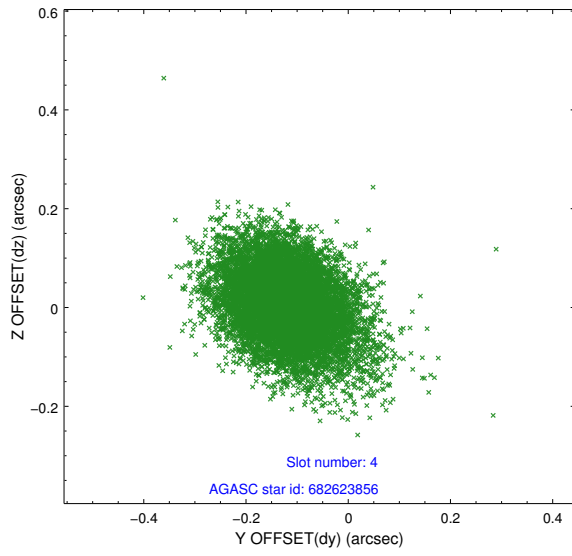
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.07	4915	0.039	0.038	0.018	0.032	0.000000	0.000000	912.48	-886.66
1	FID	ACIS-I-5	7.07	4915	-0.303	0.029	0.010	0.016	0.000000	0.000000	-1835.99	1010.56
2	FID	ACIS-I-6	7.07	4915	0.172	0.003	0.011	0.021	0.000000	0.000000	377.79	1655.38
3	GUIDE	682623016	8.92	9823	-0.233	0.071	0.106	0.171	323.277710	-1.353202	1478.77	-1519.93
4	GUIDE	682623856	8.82	9826	-0.120	0.007	0.101	0.169	323.527756	-1.561498	2007.61	-474.54
5	GUIDE	682759560	8.68	9827	0.025	0.013	0.105	0.164	324.469595	-0.769931	-1532.13	2187.63
6	GUIDE	682623792	8.44	9826	0.247	-0.039	0.121	0.215	323.021646	-1.542889	2352.08	-2263.89
7	GUIDE	682759480	9.73	9702	0.077	-0.055	0.151	0.248	324.509401	-0.758821	-1603.38	2317.88

## 2.4 Star Slots

### 2.4.1 Slot 3

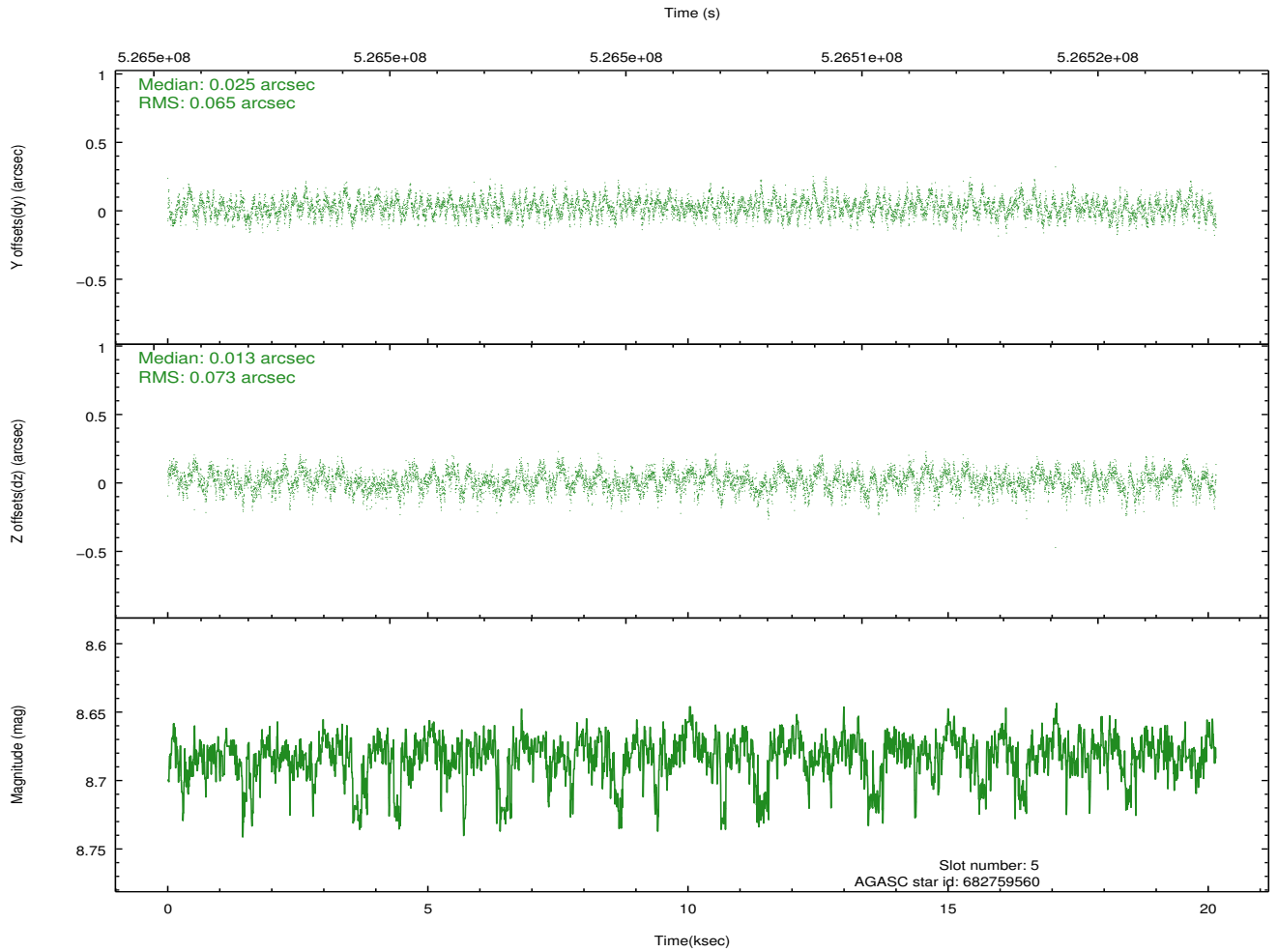
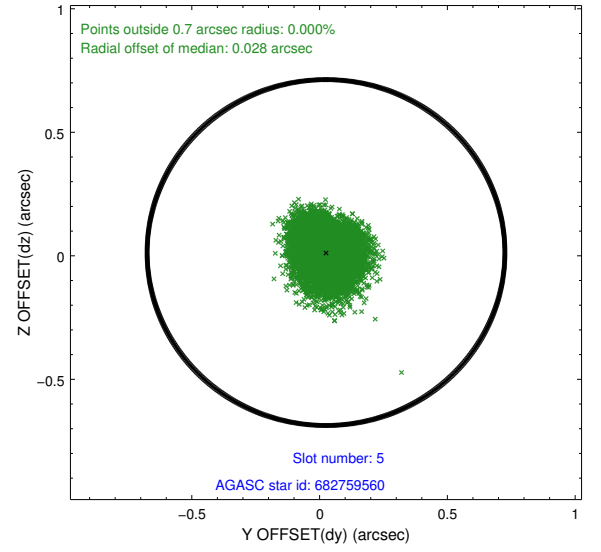
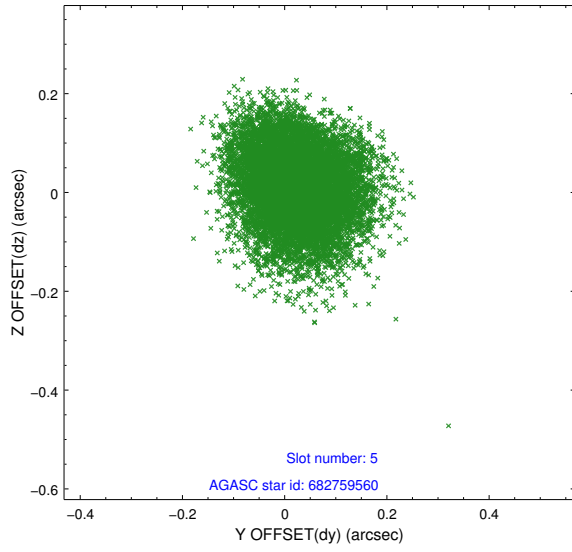


## 2.4.2 Slot 4

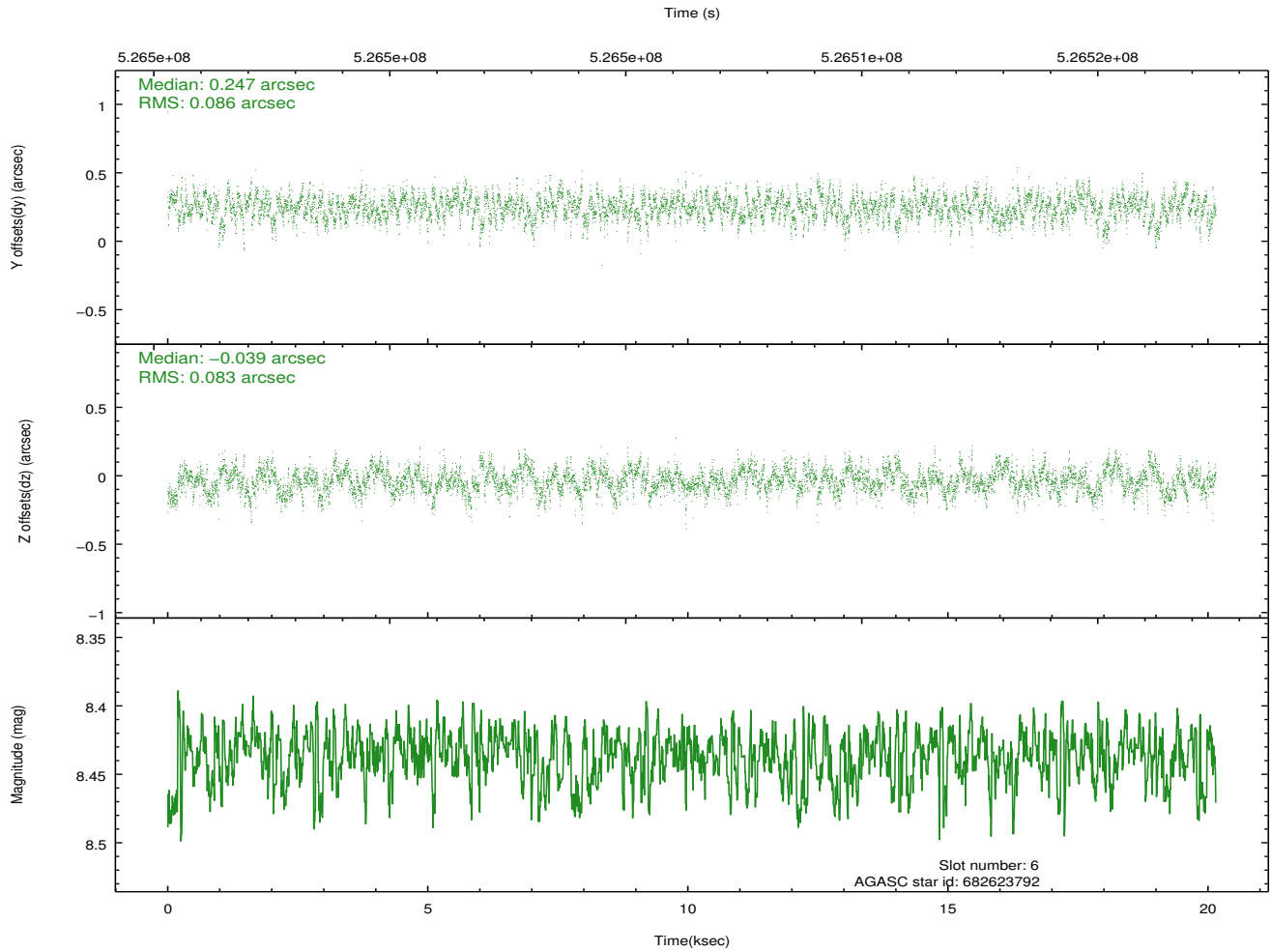
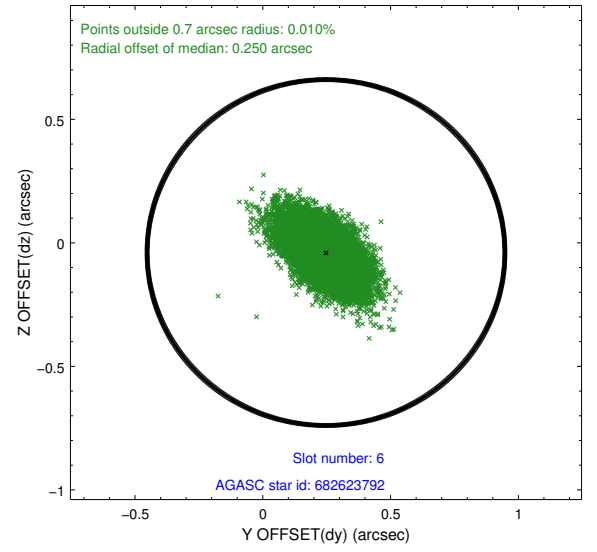
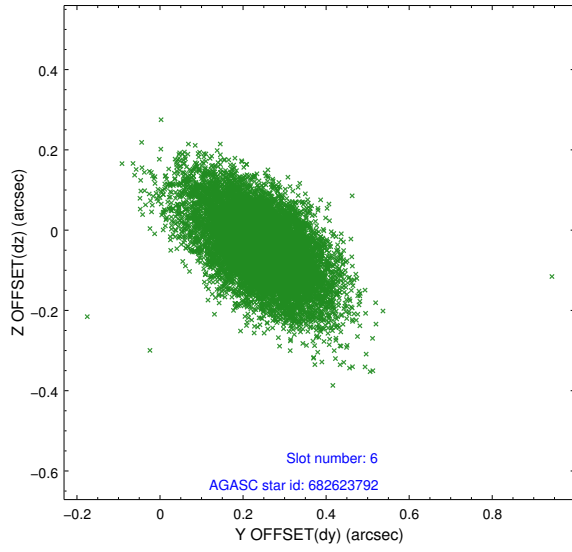




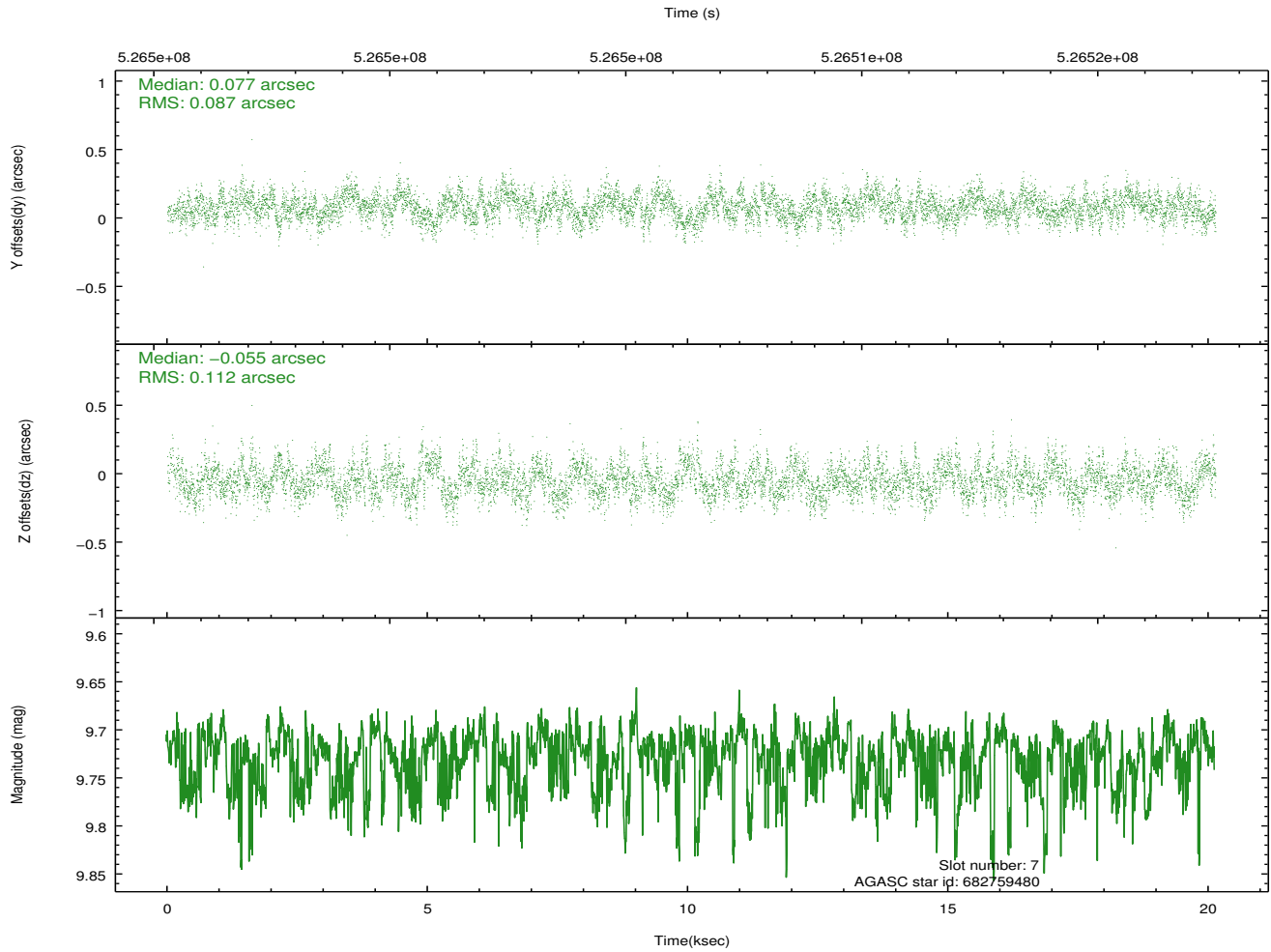
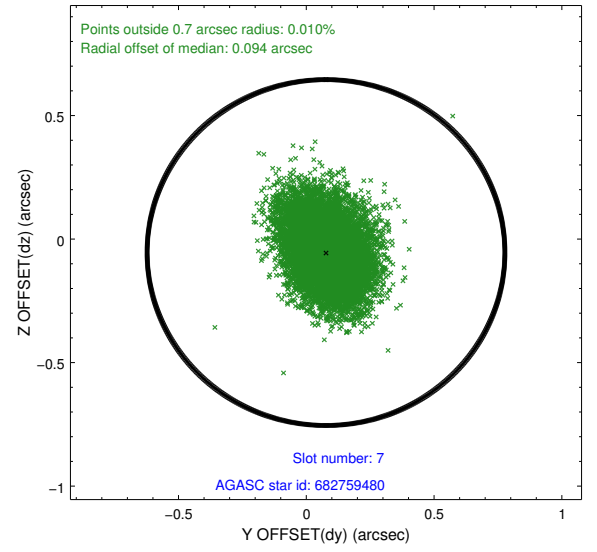
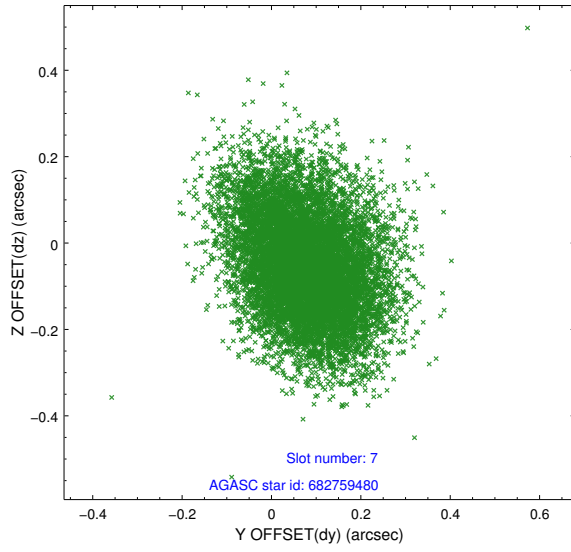
### 2.4.3 Slot 5



## 2.4.4 Slot 6

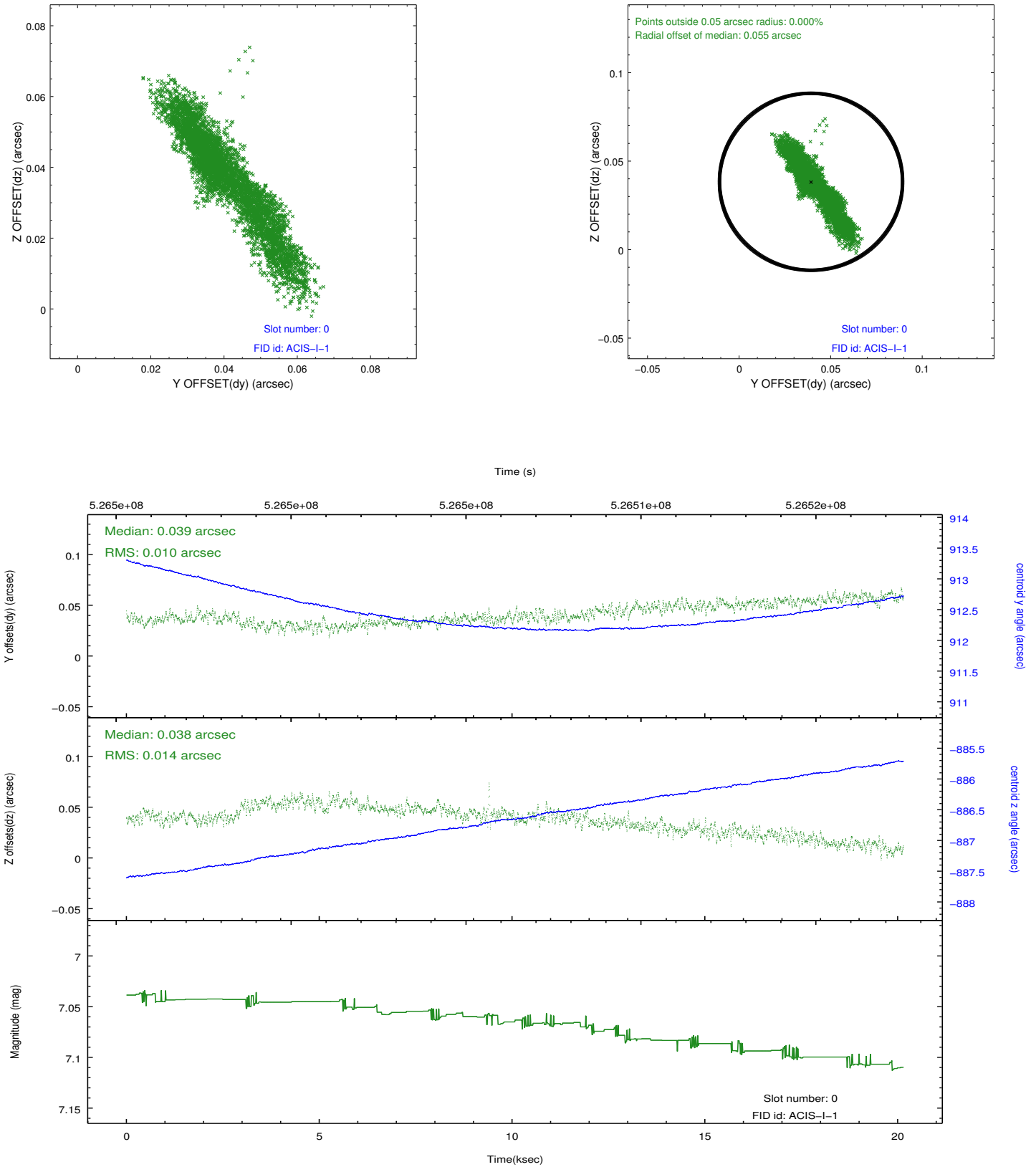


## 2.4.5 Slot 7

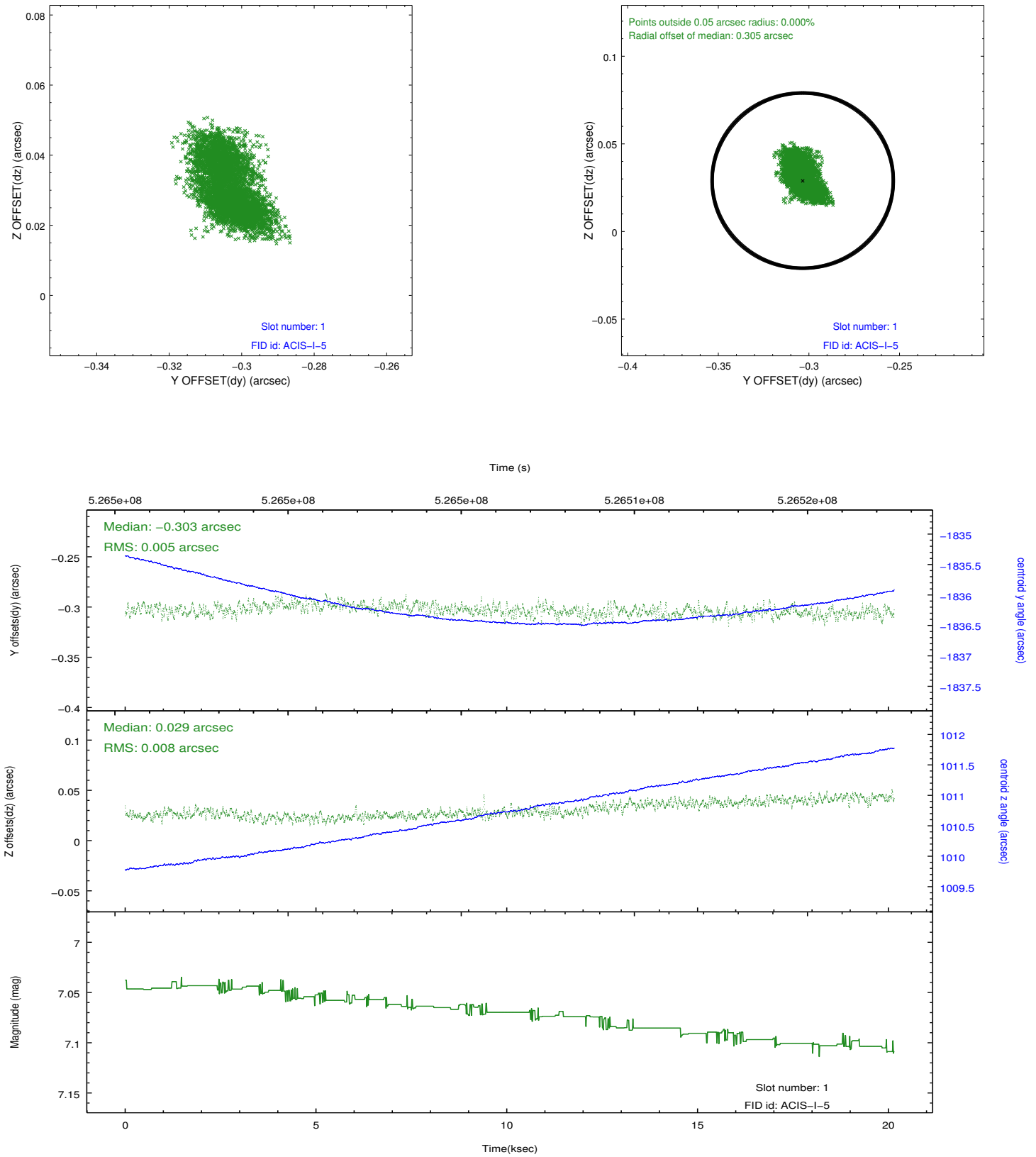


## 2.5 FID Slots

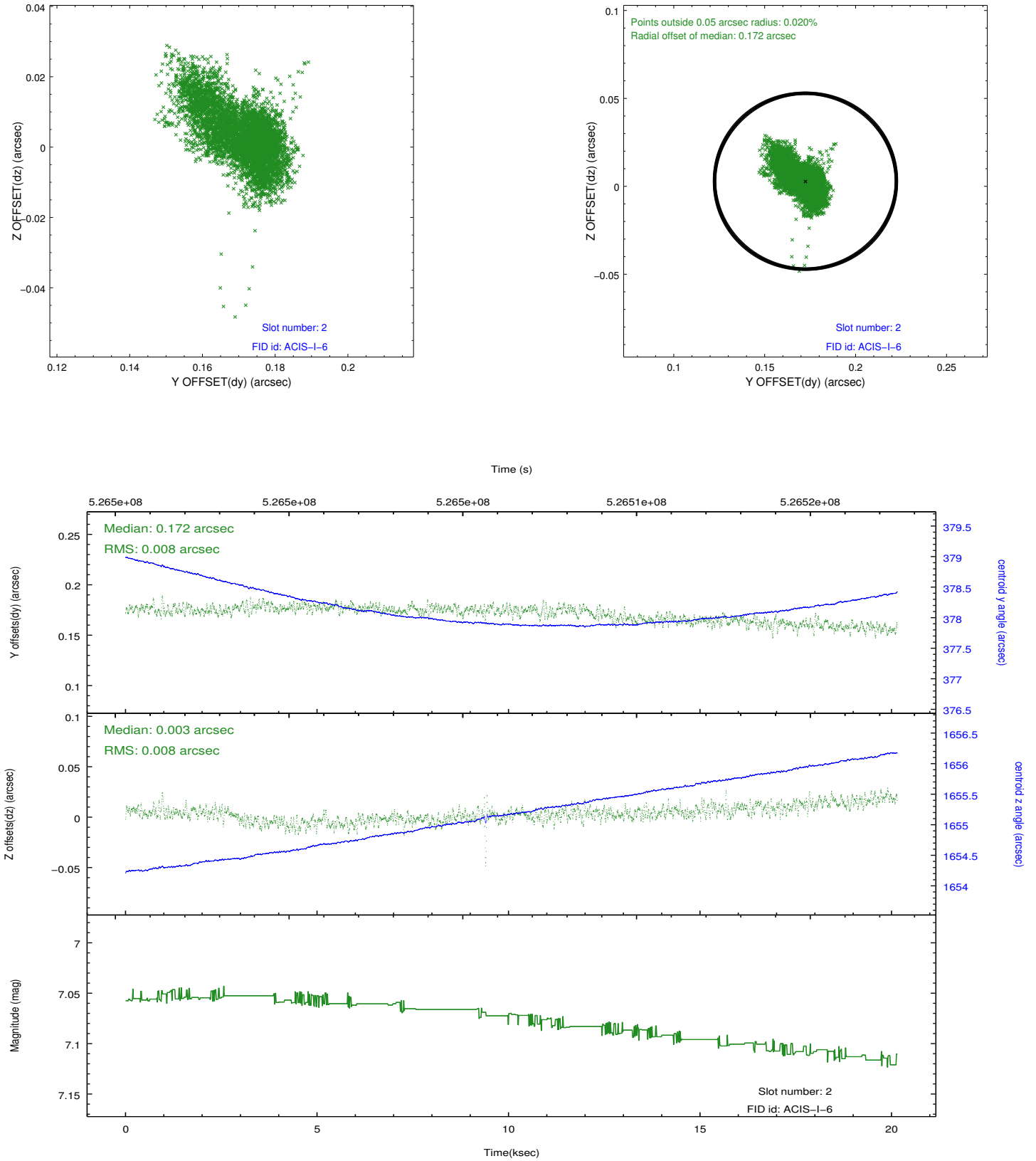
### 2.5.1 Slot 0



## 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)	2014.09.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.078368411481

### A.2 Comments