

# V&V Reference Report

## L2 ASCDS Version : 8.5

Observation 5020 - L2 Version 3  
Chandra X-Ray Center

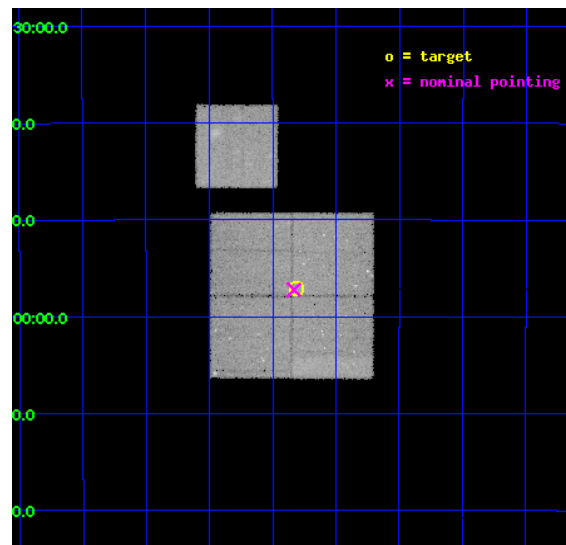
L2 Processing Date : Dec 12 2012

## 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	900328	Sequence number
obs_id	5020	Observation id
title	The Extended Chandra Deep Field-South Survey: A Public Chandra Legacy	Proposal title
observer	Prof. William Brandt	Principal investigator
object	Extended CDF-S #3	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	52.953271	Observer's specified target RA [deg]
dec_targ	-27.95225	Observer's specified target Dec [deg]
ra_nom	52.958128995756	Nominal RA [deg]
dec_nom	-27.954044160986	Nominal Dec [deg]
roll_nom	0.21096175232138	Nominal Roll [deg]
revision	3	Processing version of data
ontime	78617.985629946	Sum of GTIs [s]
livetime	77590.783769972	Livetime [s]
ontime0	78602.157638311	Sum of GTIs [s]
ontime1	78614.762549698	Sum of GTIs [s]
ontime2	78617.944629729	Sum of GTIs [s]
ontime3	78617.985629946	Sum of GTIs [s]
ontime6	78620.962479949	Sum of GTIs [s]
l2events	201018	Number of level 2 events

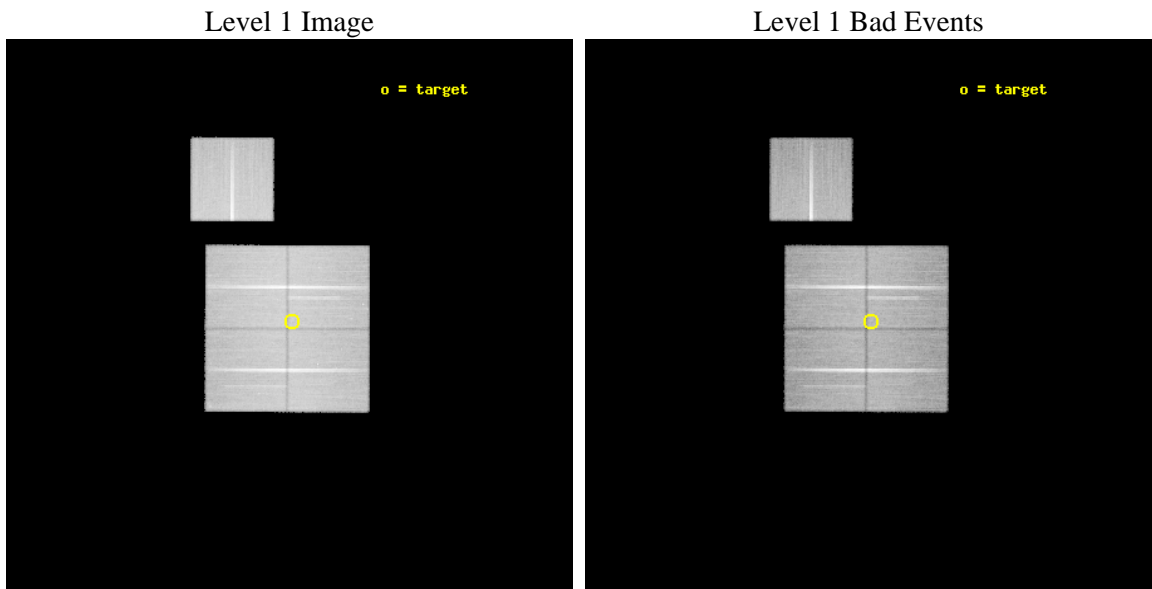




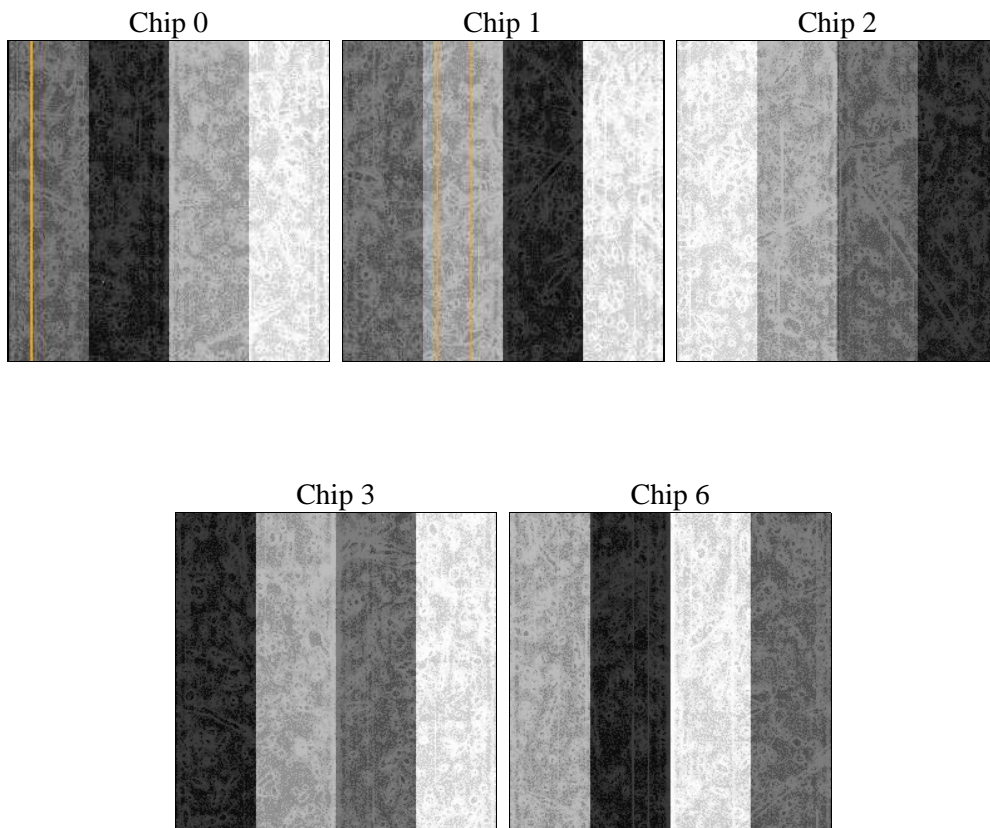
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	2	Obi number	sched_exp_time	78858.696000	[s] Scheduled observation exposure time
ascdsver	8.5	Processing system revision	ontime	78617.985629946	Sum of GTIs [s]
caldbver	4.5.4	&#160	ontime0	78602.157638311	Sum of GTIs [s]
date	2012-12-12T02:58:02	Date and time of file creation	ontime1	78614.762549698	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	78617.944629729	Sum of GTIs [s]
			ontime3	78617.985629946	Sum of GTIs [s]
			ontime6	78620.962479949	Sum of GTIs [s]
			l1events	2359862	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	444675	449628	497073	484017	484469
rejected events	396654	395919	450235	438215	434656
rejected %	89%	88%	90%	90%	89%

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	16643	19554	16378	16188	17721
	3%	4%	3%	3%	3%
grade 1 events	235	199	253	243	194
	0%	0%	0%	0%	0%
grade 2 events	11577	11824	11288	10003	10766
	2%	2%	2%	2%	2%
grade 3 events	5545	5904	5111	5314	5564
	1%	1%	1%	1%	1%
grade 4 events	5152	5897	5324	5166	5410
	1%	1%	1%	1%	1%
grade 5 events	16987	18185	15582	18789	18620
	3%	4%	3%	3%	3%
grade 6 events	9107	10532	8740	9132	10354
	2%	2%	1%	1%	2%
grade 7 events	379429	377533	434397	419182	415840
	85%	83%	87%	86%	85%

## 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	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	52.931381	52.95812899575641	Subarray requested	NONE	NONE
[deg] Pointing Dec	-27.967918	-27.95404416098638	Alternating exposures requested	N	N
[deg] Pointing Roll	359.989736	0.2109617523213793	[s] Primary exposure time	0.000000	3.1
[deg] Roll angle	0.000000	0.000000			
[deg] Roll tolerance	2.000000	2.000000			
Roll constraint allows 180D rotation	N	N			
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	216948751.184000	216948375.97064			
Observation start date	2004-11-15T23:31:27	2004-11-15T23:26:15			
[s] Observation end time (MET)	217027610.184000	217027832.4367			
Observation end date	2004-11-16T21:25:46	2004-11-16T21:30:32			
Read mode	TIMED	TIMED			

## 2.3 Aspect

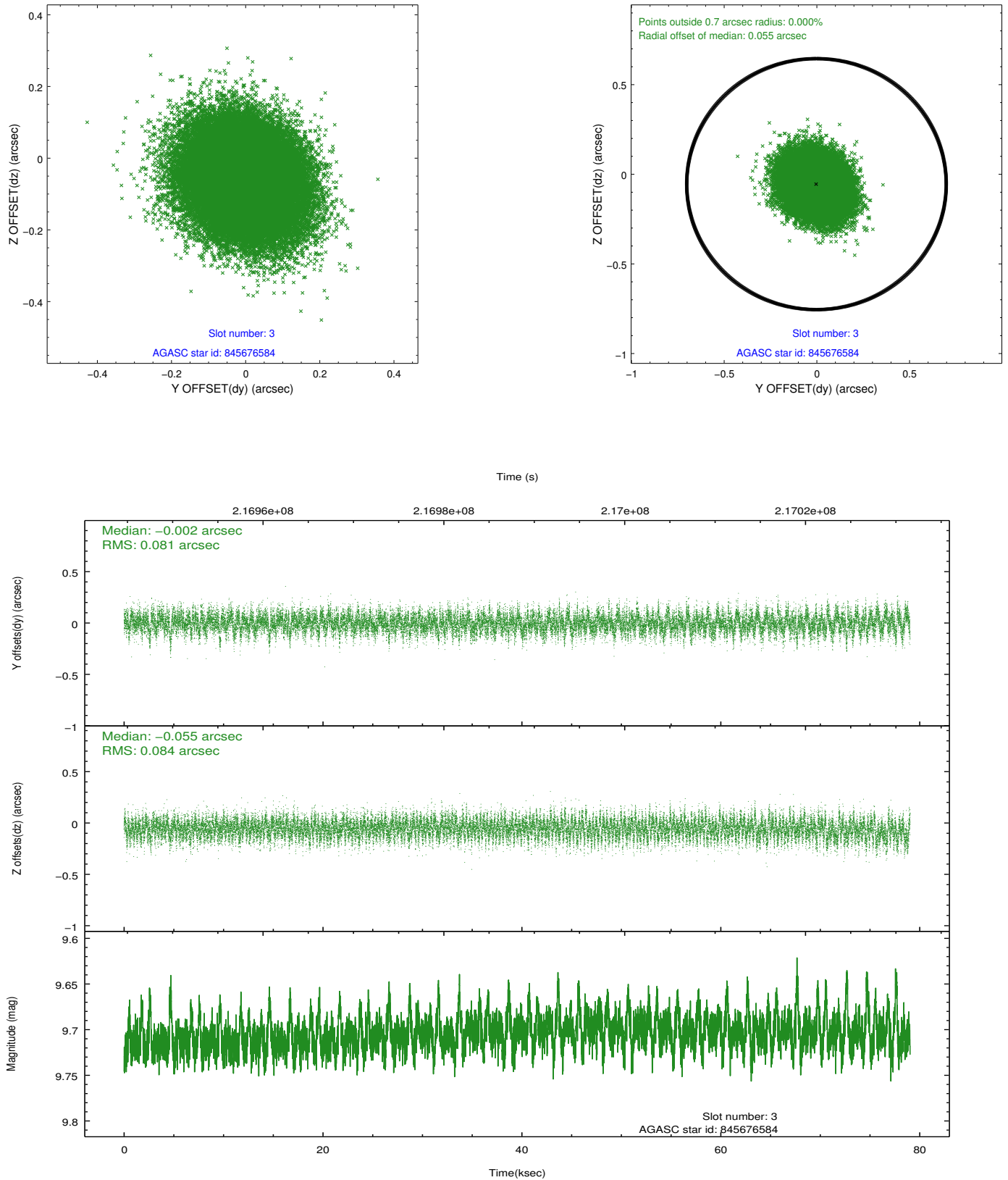


### Slot Statistics

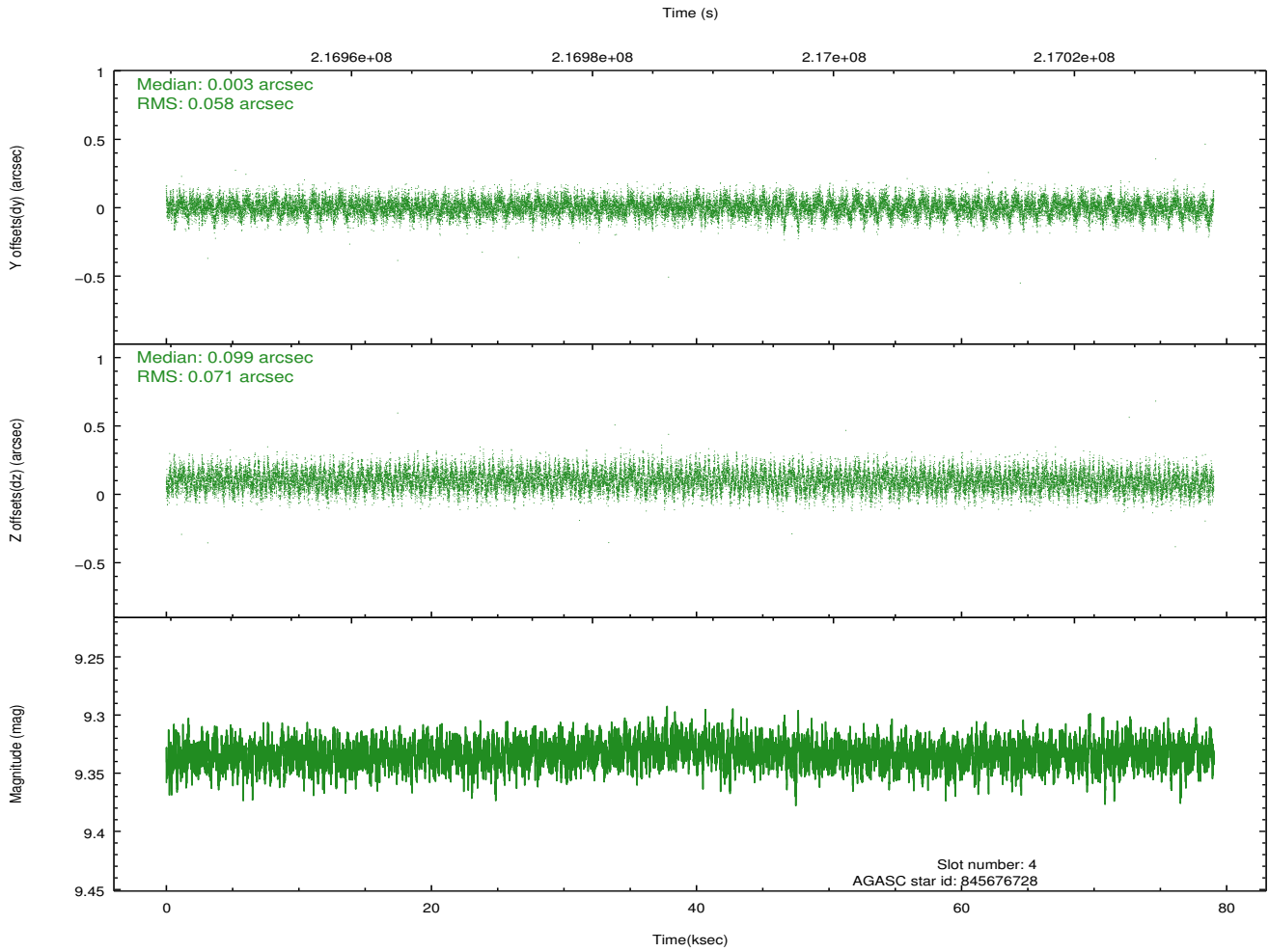
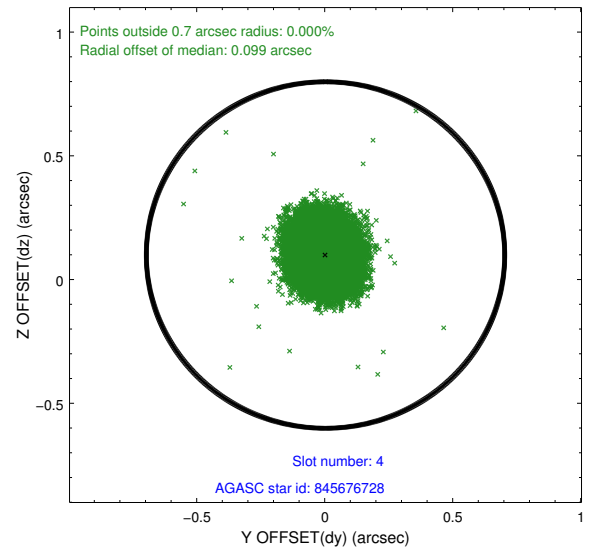
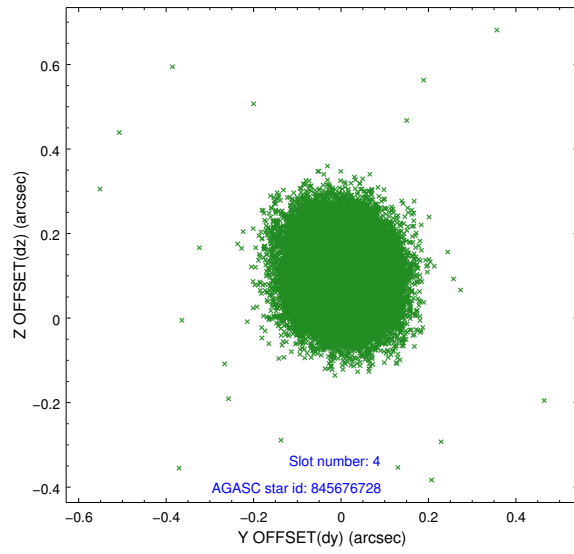
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.25	19278	0.004	0.019	0.010	0.017	0.000000	0.000000	932.78	-833.24
1	FID	ACIS-I-5	7.23	19276	-0.164	0.024	0.008	0.014	0.000000	0.000000	-1815.54	1064.27
2	FID	ACIS-I-6	7.26	19277	0.069	0.028	0.009	0.014	0.000000	0.000000	398.45	1708.71
3	GUIDE	845676584	9.70	38523	-0.002	-0.055	0.125	0.201	52.264247	-27.542890	-2129.70	1523.99
4	GUIDE	845676728	9.33	38523	0.003	0.099	0.097	0.156	52.877179	-27.664318	-172.92	1093.24
5	GUIDE	845676936	9.49	38516	-0.013	-0.143	0.092	0.148	52.843773	-27.880153	-278.46	315.95
6	GUIDE	845682456	9.49	38531	0.039	0.037	0.094	0.151	52.409641	-28.494459	-1649.83	-1899.37
7	GUIDE	845683416	8.60	38548	-0.024	0.064	0.080	0.128	52.400573	-28.566798	-1677.66	-2159.87

## 2.4 Star Slots

### 2.4.1 Slot 3

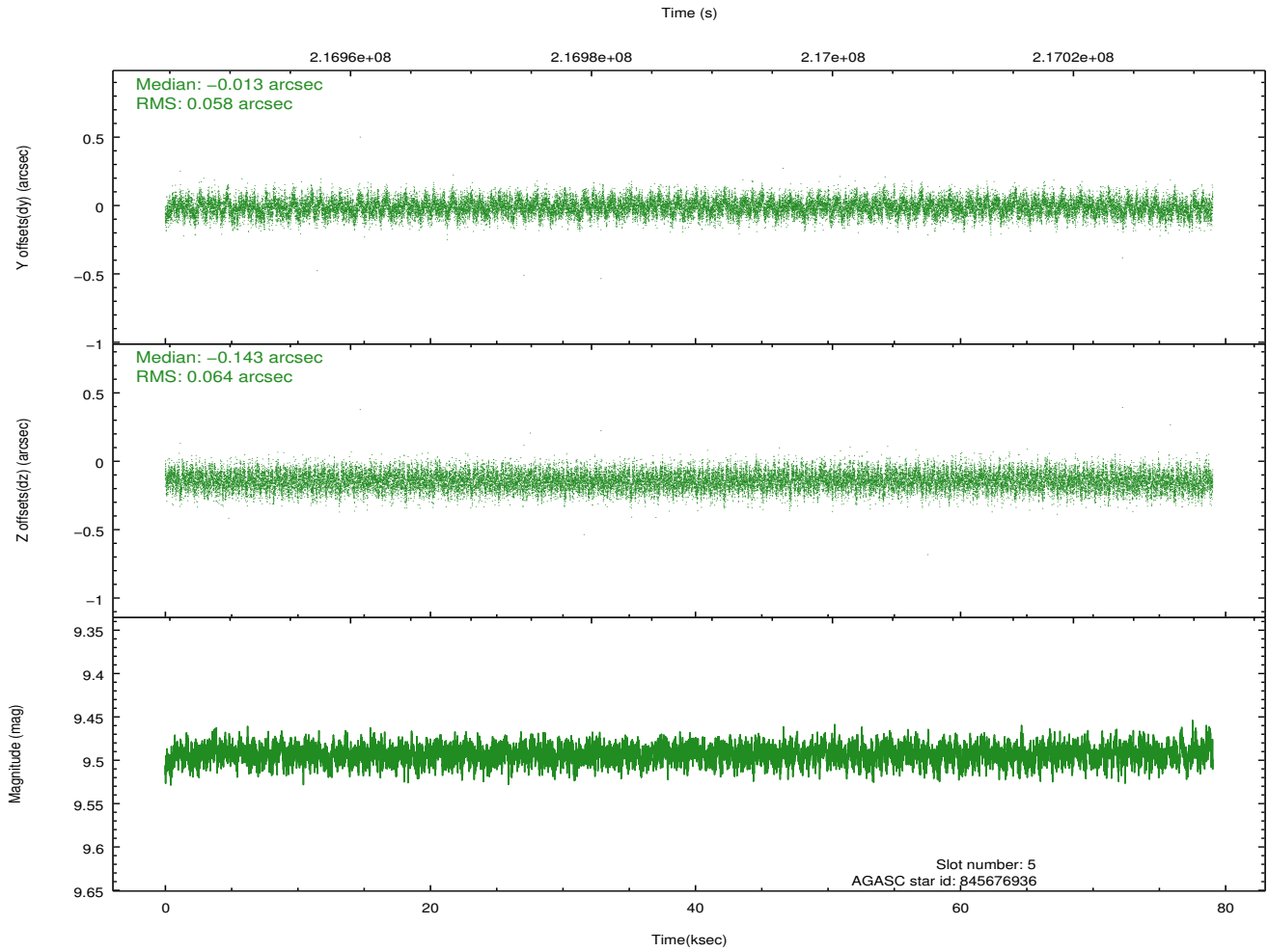
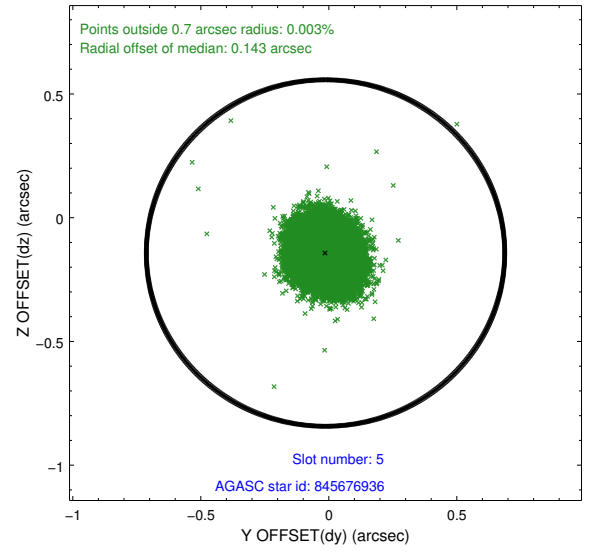
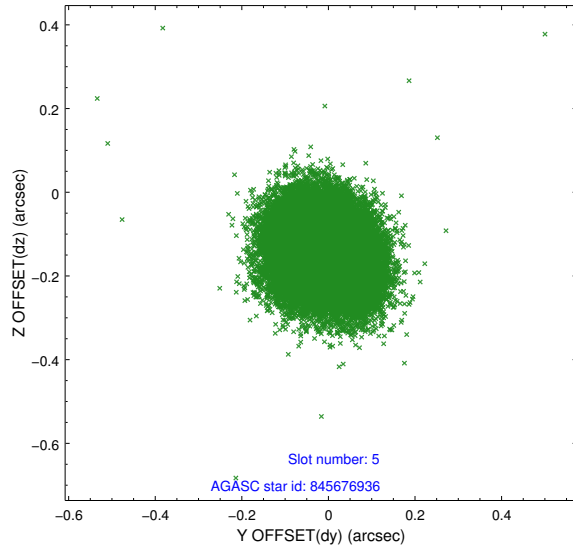


## 2.4.2 Slot 4

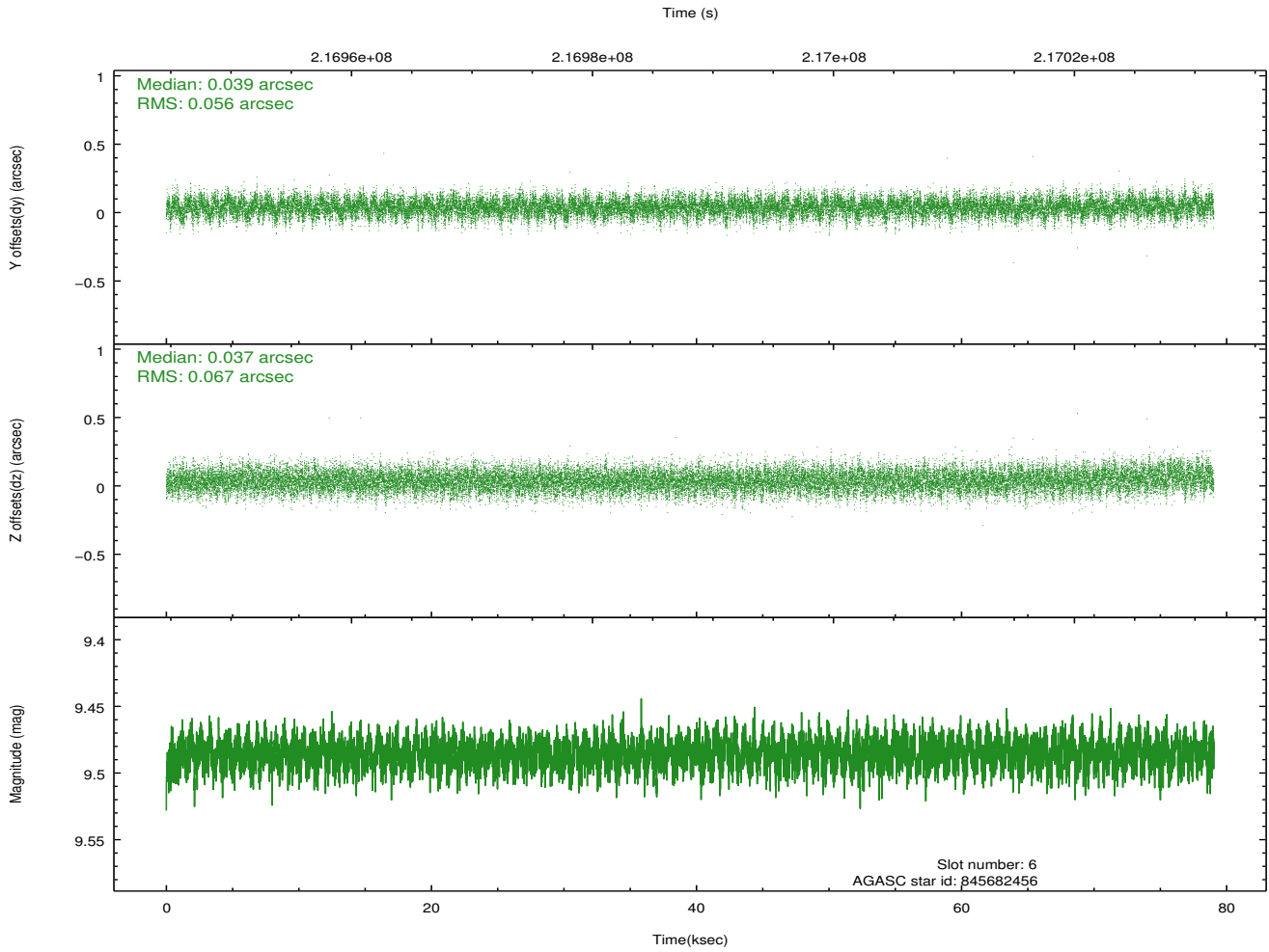
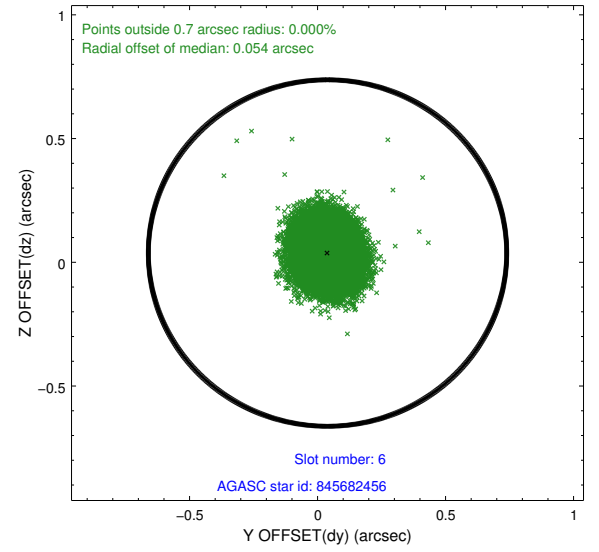
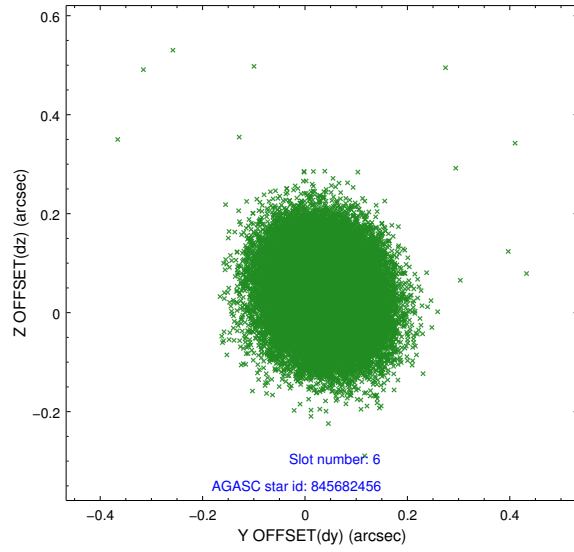




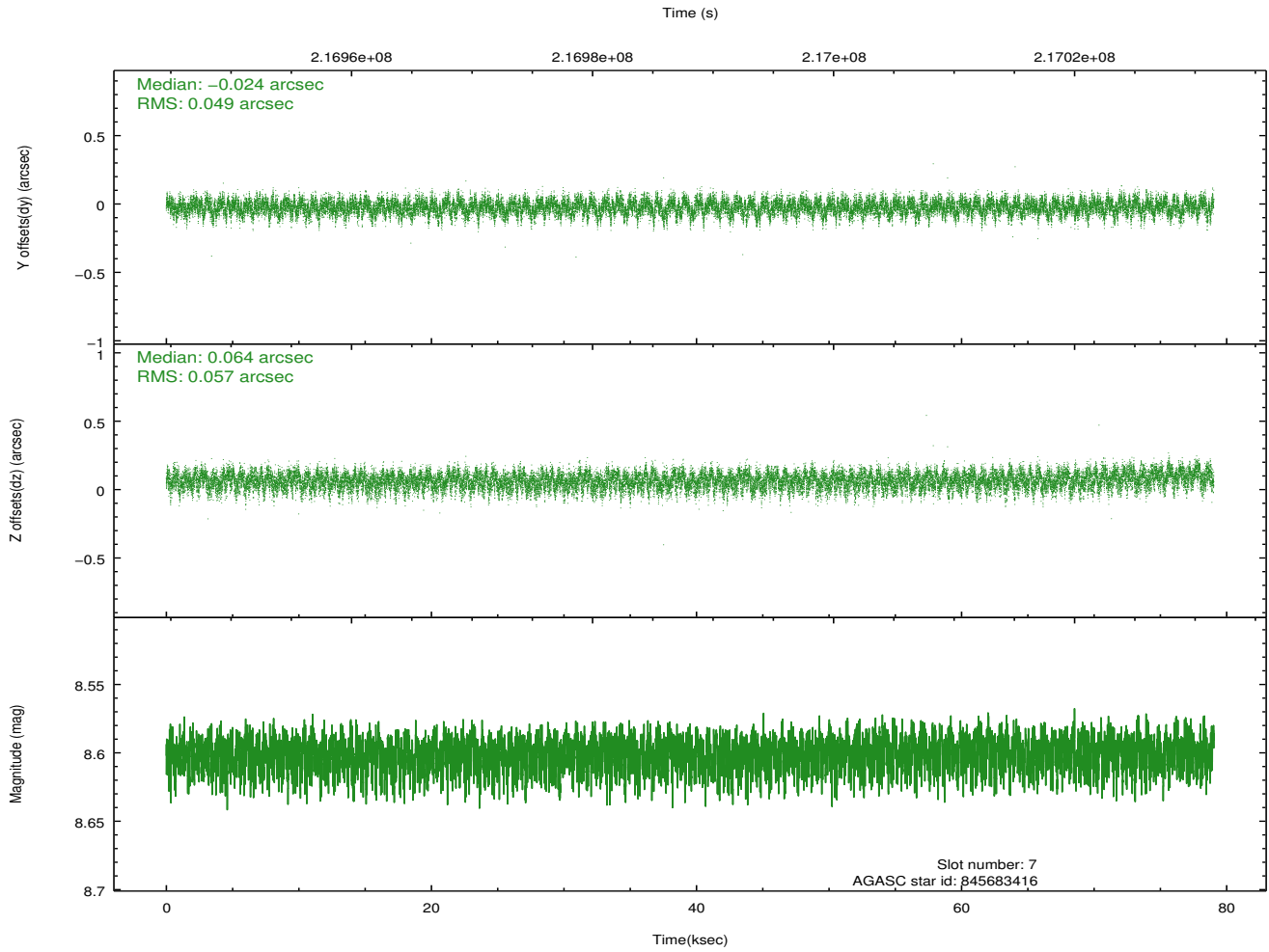
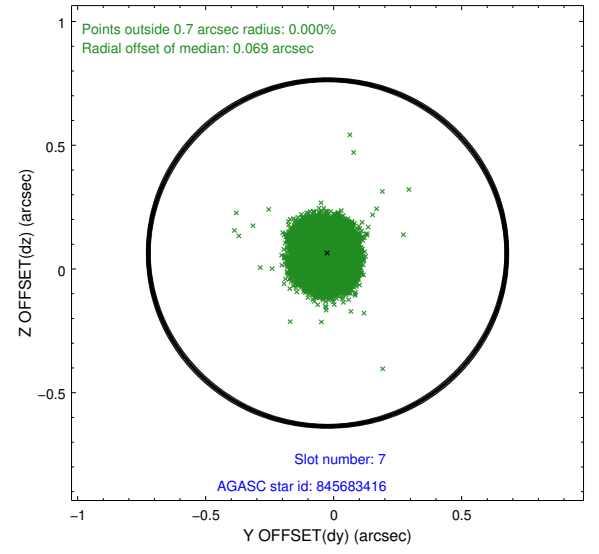
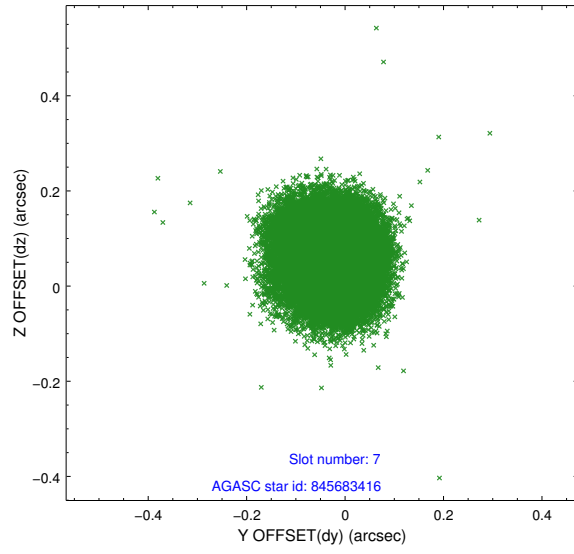
### 2.4.3 Slot 5



## 2.4.4 Slot 6

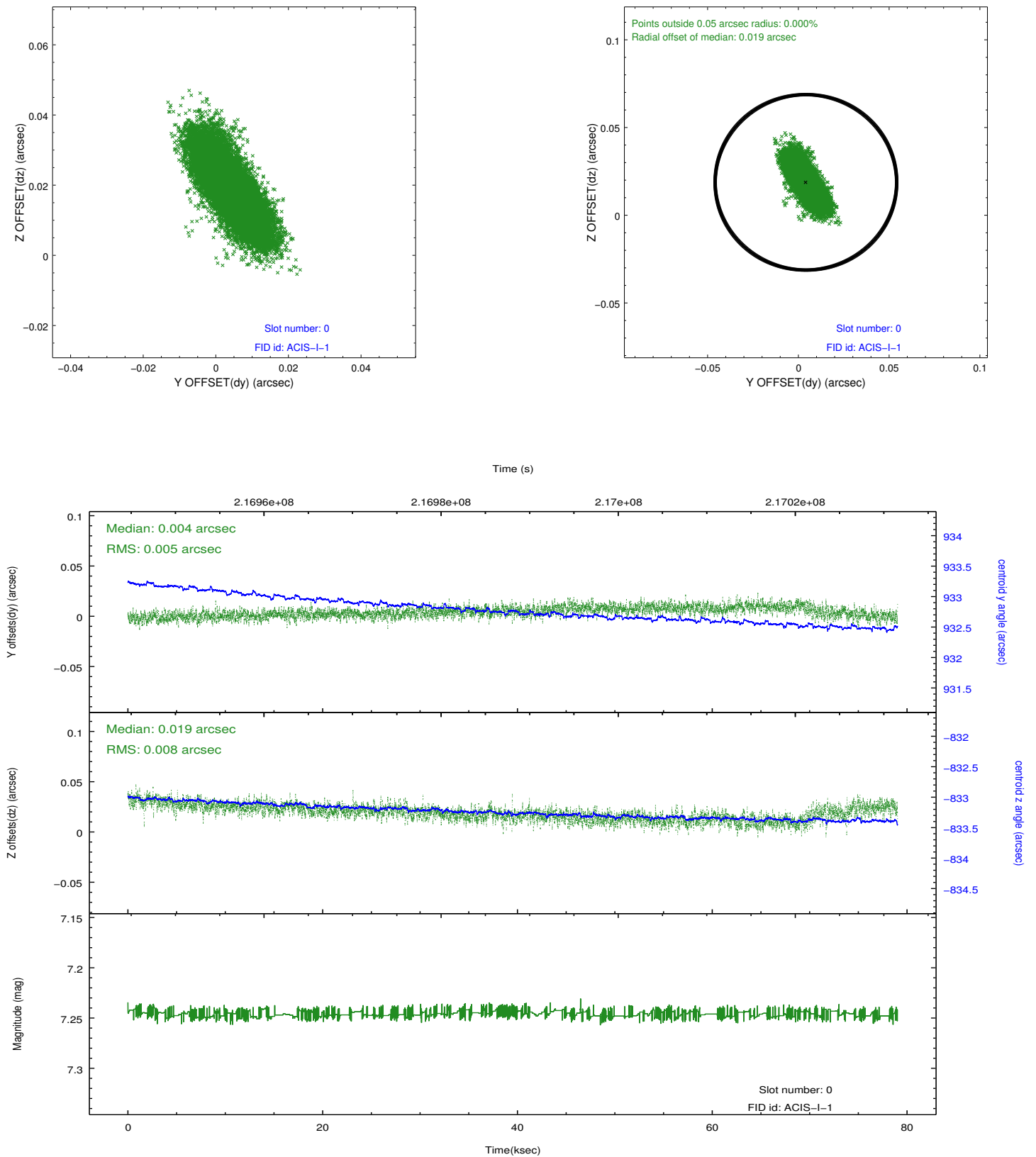


## 2.4.5 Slot 7

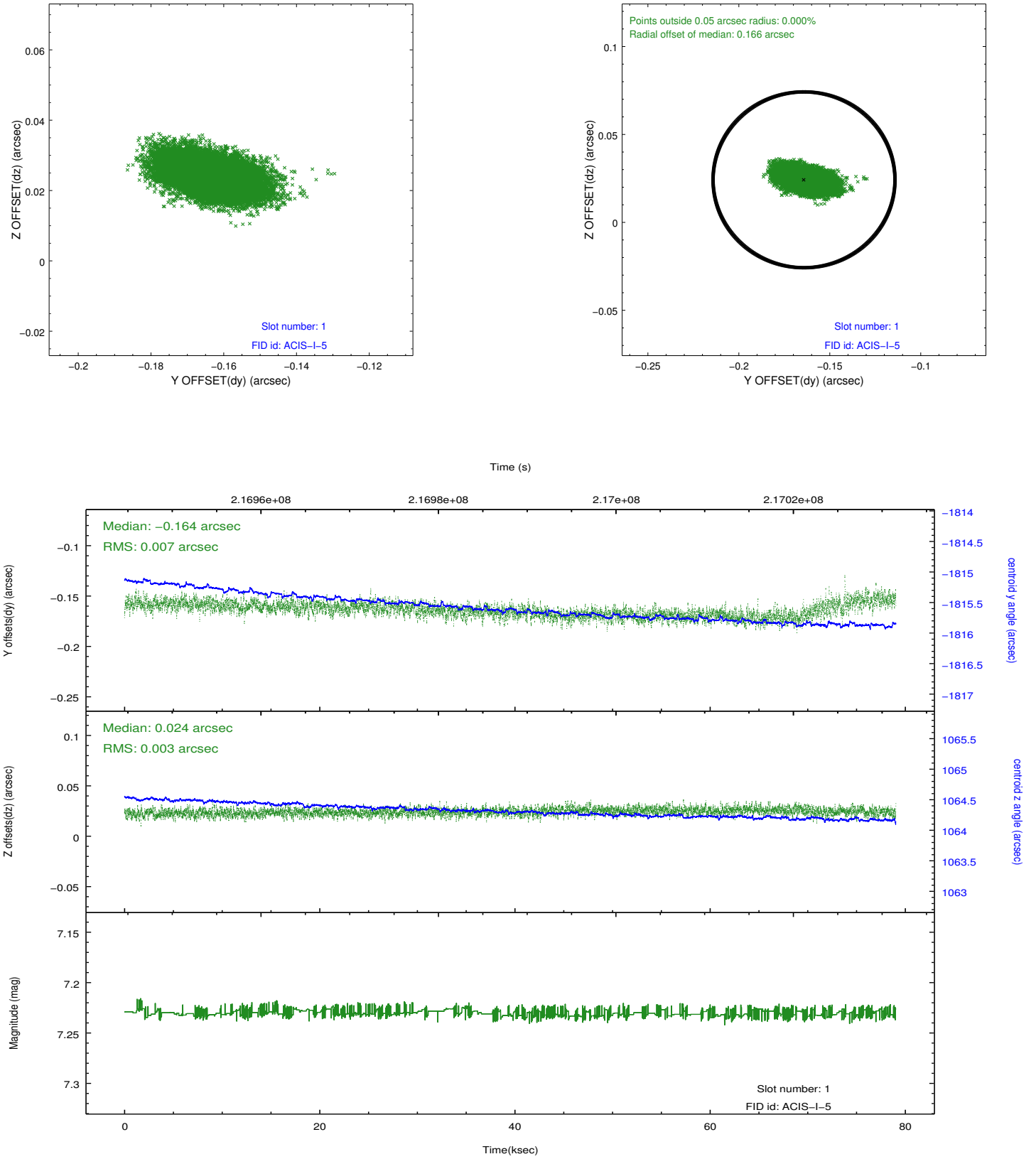


## 2.5 FID Slots

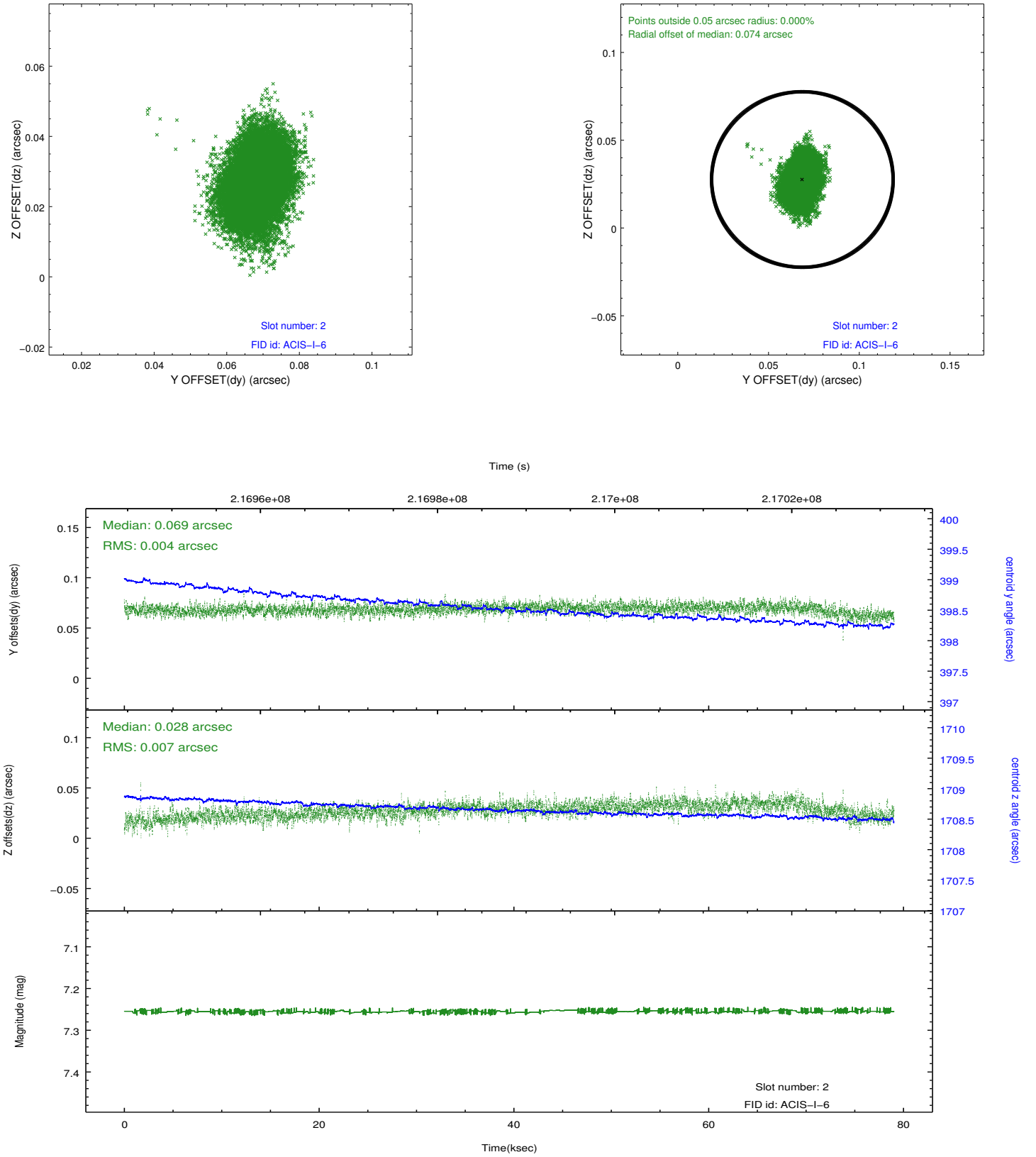
### 2.5.1 Slot 0



## 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)	2013.01.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	78.618

### A.2 Comments

Roll constraint met.