

# V&V Reference Report

## L2 ASCDS Version : 8.5.1.1

Observation 6931 - L2 Version 3  
Chandra X-Ray Center

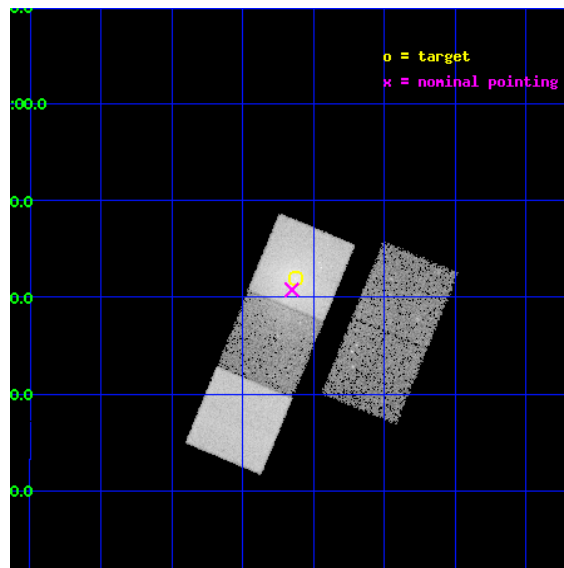
L2 Processing Date : Dec 31 2012

## 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

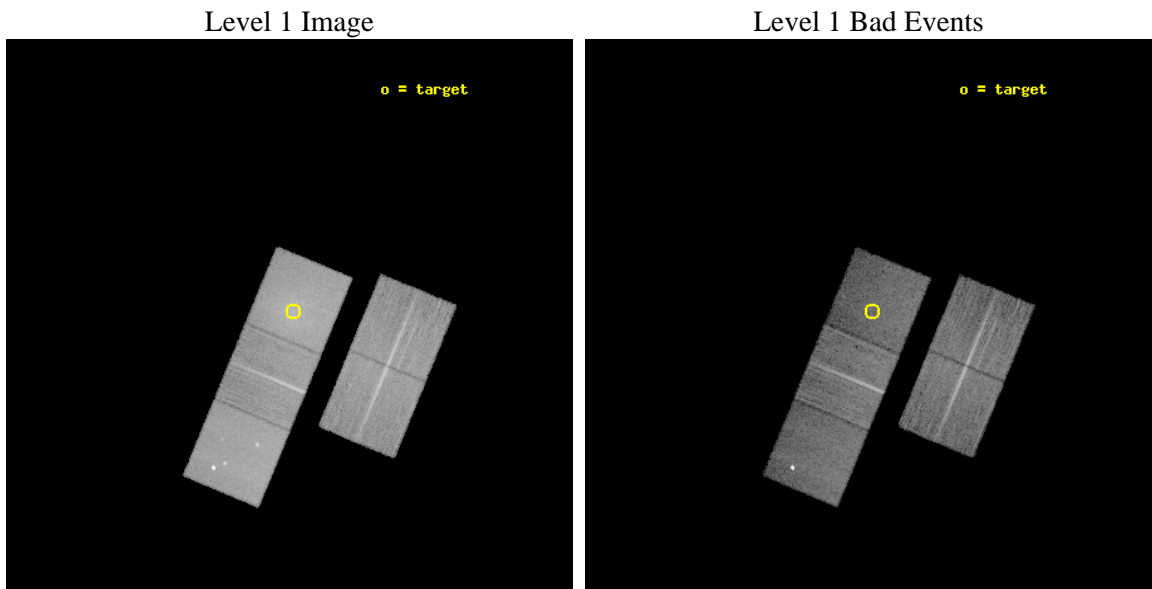
seq_num	800564	Sequence number
obs_id	6931	Observation id
title	Probing the triple nucleus in the brightest galaxy of the cluster Abell 193	Proposal title
observer	Dr Caleb Scharf	Principal investigator
object	Abell 193	Source name
dtycycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	21.281667	Observer's specified target RA [deg]
dec_targ	8.699444	Observer's specified target Dec [deg]
ra_nom	21.288082961576	Nominal RA [deg]
dec_nom	8.6796896331425	Nominal Dec [deg]
roll_nom	292.47464502407	Nominal Roll [deg]
revision	3	Processing version of data
ontime	18181.458984613	Sum of GTIs [s]
livetime	17943.904837984	Livetime [s]
ontime2	18184.599965006	Sum of GTIs [s]
ontime3	18181.458974749	Sum of GTIs [s]
ontime5	18181.458974779	Sum of GTIs [s]
ontime6	18184.599965006	Sum of GTIs [s]
ontime7	18181.458984613	Sum of GTIs [s]
l2events	213796	Number of level 2 events



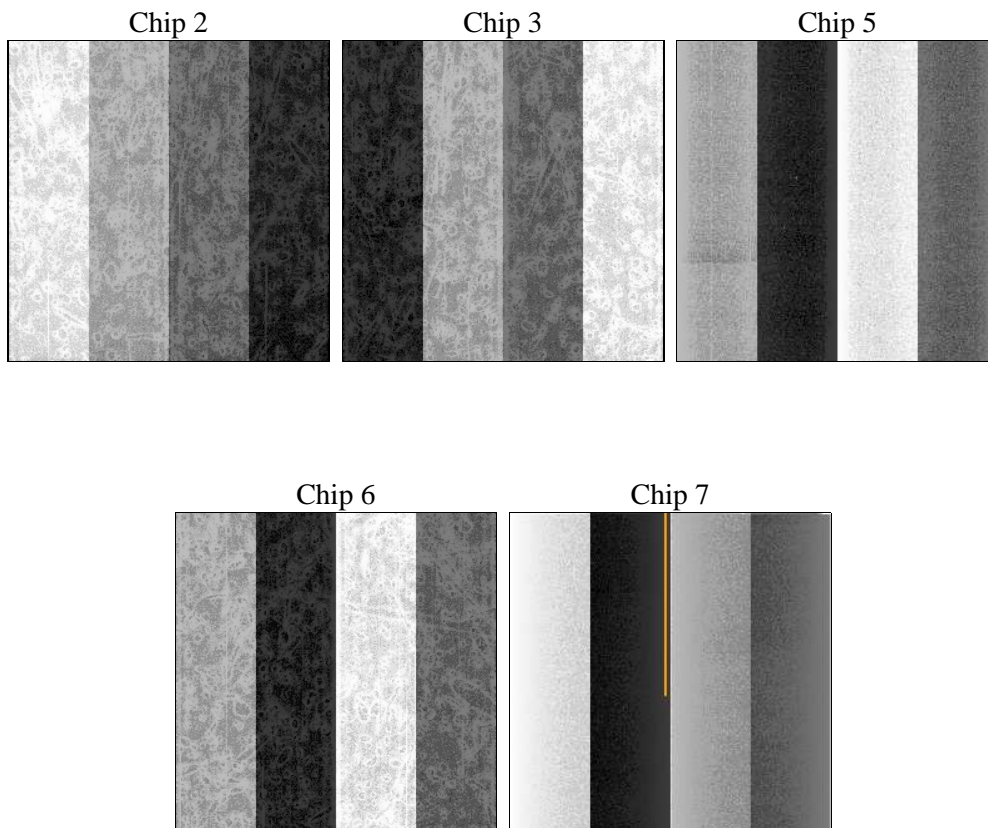
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	18000.000000	[s] Scheduled observation exposure time
ascdsver	8.5.1.1	Processing system revision	ontime	18181.458984613	Sum of GTIs [s]
caldbver	4.5.5	&#160	ontime2	18184.599965006	Sum of GTIs [s]
date	2012-12-31T12:06:48	Date and time of file creation	ontime3	18181.458974749	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	18181.458974779	Sum of GTIs [s]
			ontime6	18184.599965006	Sum of GTIs [s]
			ontime7	18181.458984613	Sum of GTIs [s]
			l1events	740268	Number of level 1 events

### 2.1.4 Events

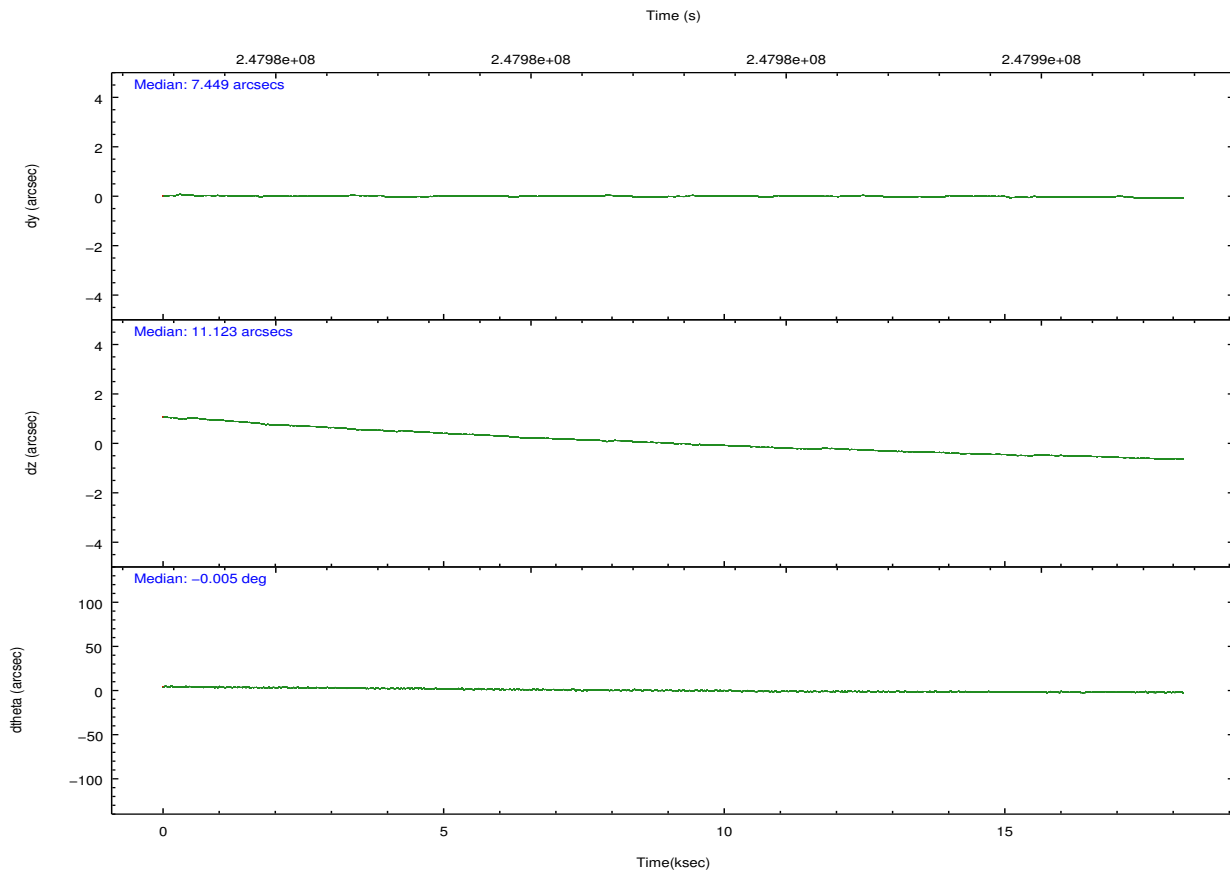
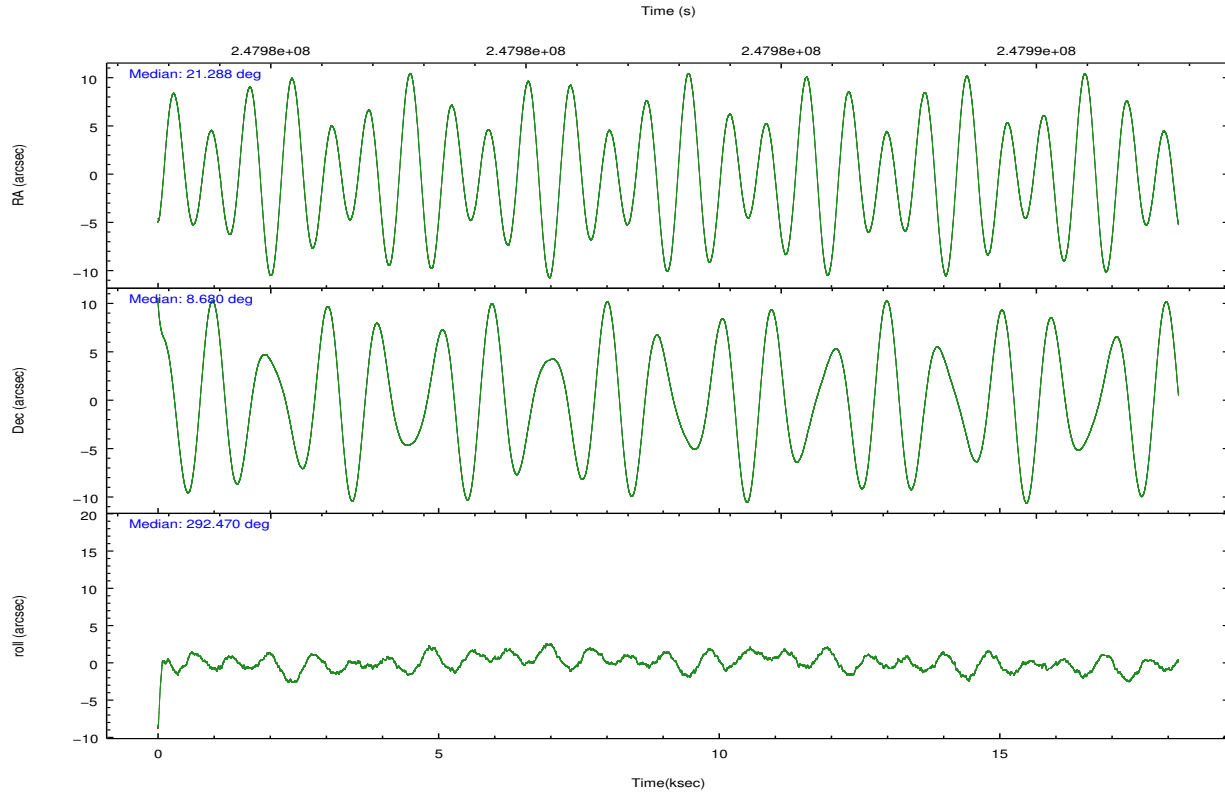
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	128831	123643	175538	131234	181022
rejected events	116411	111797	93375	112943	78892
rejected %	90%	90%	53%	86%	43%

	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	5052	4641	7663	9252	18017
	3%	3%	4%	7%	9%
grade 1 events	71	67	426	82	143
	0%	0%	0%	0%	0%
grade 2 events	2866	2499	25328	3325	23564
	2%	2%	14%	2%	13%
grade 3 events	1325	1317	3734	1549	10724
	1%	1%	2%	1%	5%
grade 4 events	1329	1358	3504	1599	10686
	1%	1%	1%	1%	5%
grade 5 events	3803	4845	15524	5191	15165
	2%	3%	8%	3%	8%
grade 6 events	2172	2367	44139	2972	41051
	1%	1%	25%	2%	22%
grade 7 events	112213	106549	75220	107264	61672
	87%	86%	42%	81%	34%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23567	ACIS-23567	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	21.265985	21.28808296157559	Subarray requested	NONE	NONE
[deg] Pointing Dec	8.695960	8.679689633142468	Alternating exposures requested	N	N
[deg] Pointing Roll	292.321357	292.47464502407	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	247973880.184000	247972574.62094			
Observation start date	2005-11-10T01:36:56	2005-11-10T01:16:14			
[s] Observation end time (MET)	247991880.184000	247992194.65934			
Observation end date	2005-11-10T06:36:56	2005-11-10T06:43:14			
Read mode	TIMED	TIMED			

## 2.3 Aspect

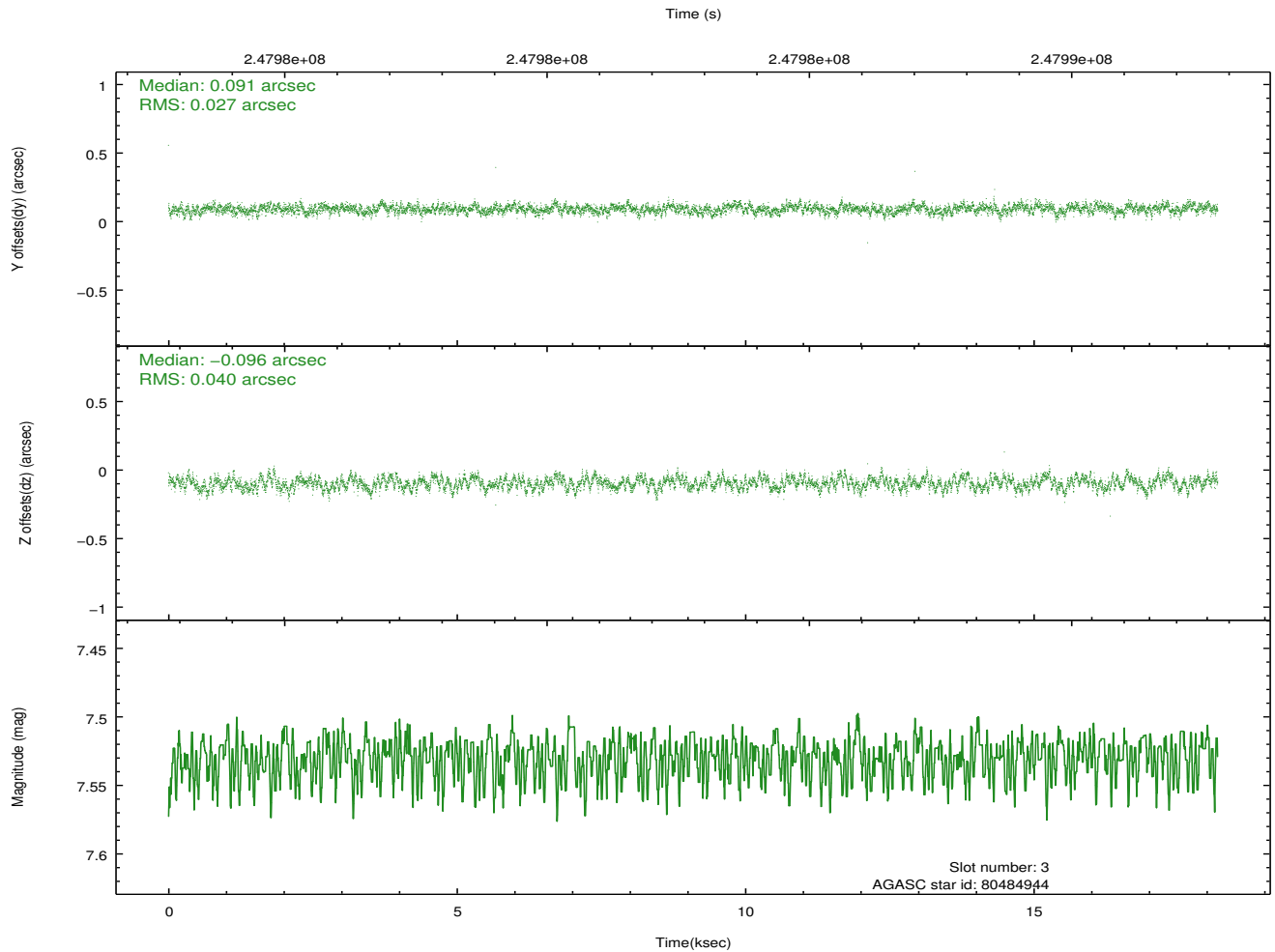
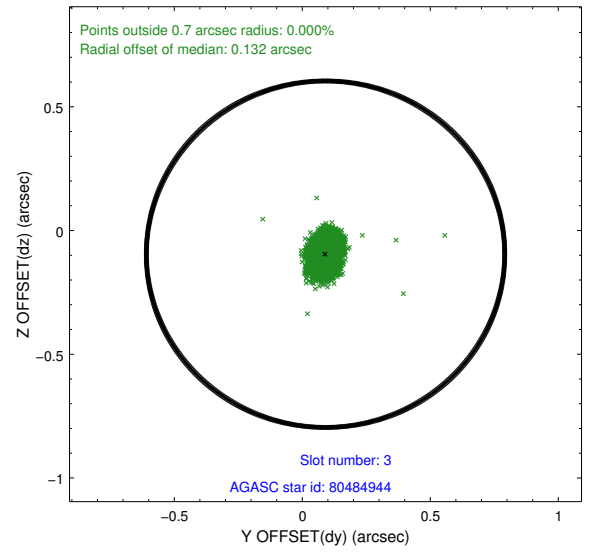
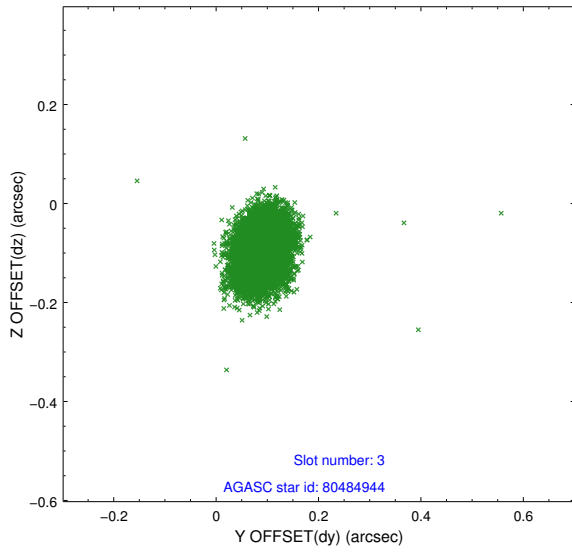


### Slot Statistics

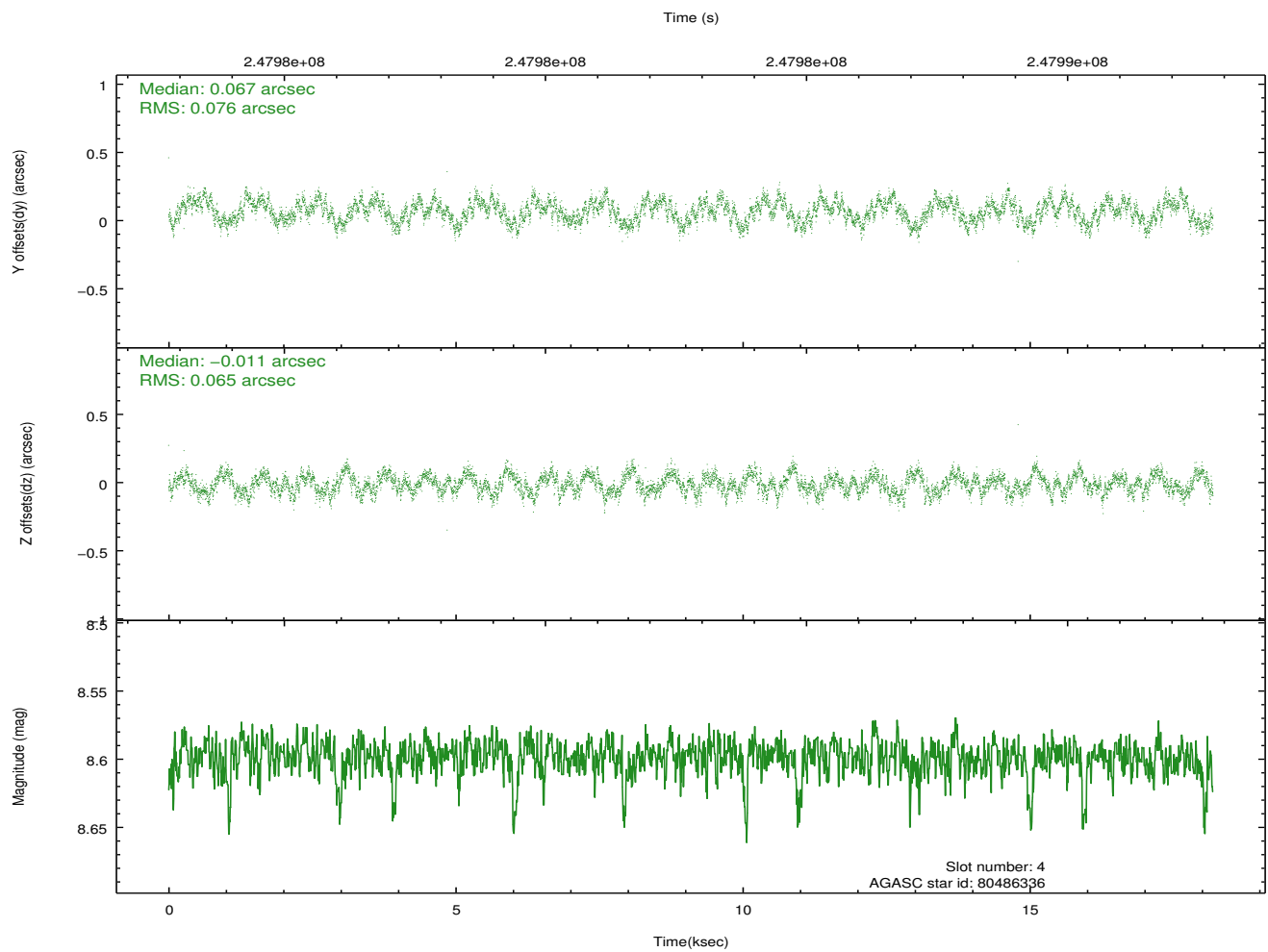
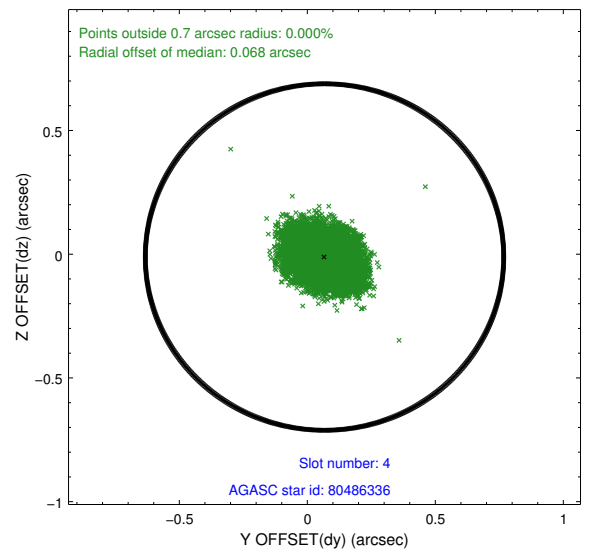
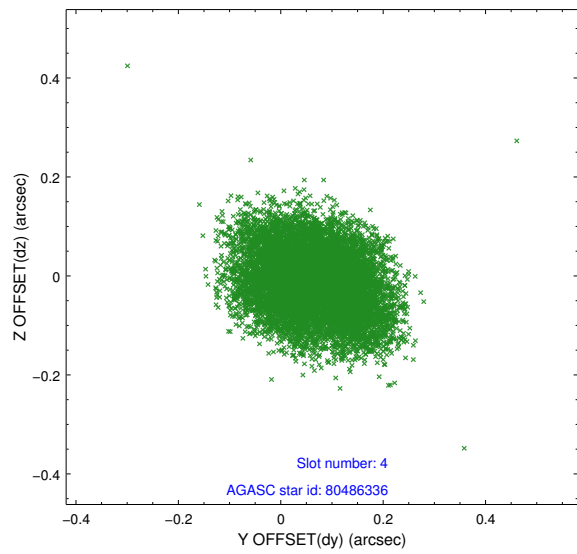
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.19	4435	0.017	-0.073	0.020	0.031	0.000000	0.000000	935.84	-1728.17
1	FID	ACIS-S-4	7.21	4434	0.060	0.045	0.011	0.016	0.000000	0.000000	2153.41	175.87
2	FID	ACIS-S-5	7.23	4435	-0.104	0.039	0.012	0.025	0.000000	0.000000	-1812.87	169.71
3	GUIDE	80484944	7.53	8872	0.091	-0.096	0.051	0.083	20.717806	8.737577	-880.15	-1746.95
4	GUIDE	80486336	8.60	8867	0.067	-0.011	0.108	0.165	20.917445	8.189304	1215.60	-1841.45
5	GUIDE	80487656	8.48	8865	-0.018	-0.000	0.061	0.096	21.685769	8.603598	874.70	1256.34
6	GUIDE	80488328	7.69	8871	-0.093	0.045	0.084	0.132	20.778363	9.187625	-2295.85	-930.17
7	GUIDE	80483632	8.55	8867	-0.040	0.060	0.073	0.115	20.803064	9.191073	-2274.44	-844.73

## 2.4 Star Slots

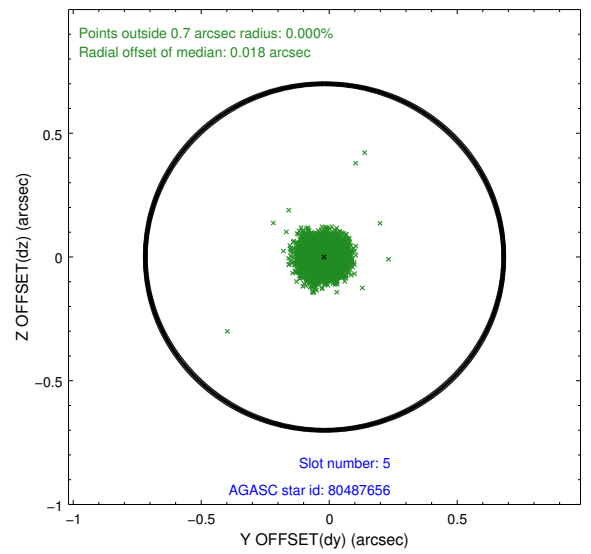
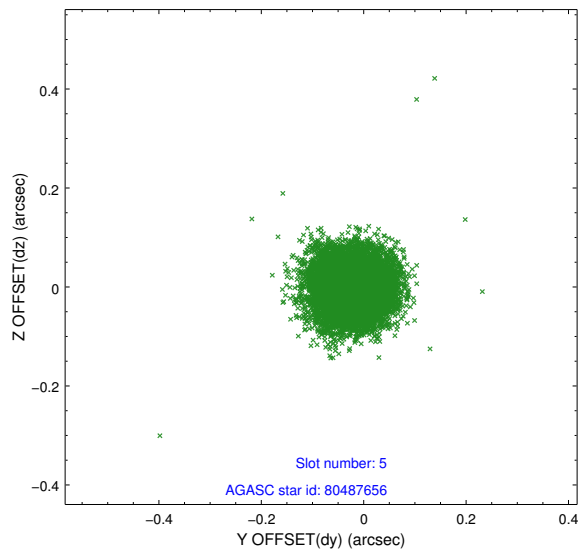
### 2.4.1 Slot 3



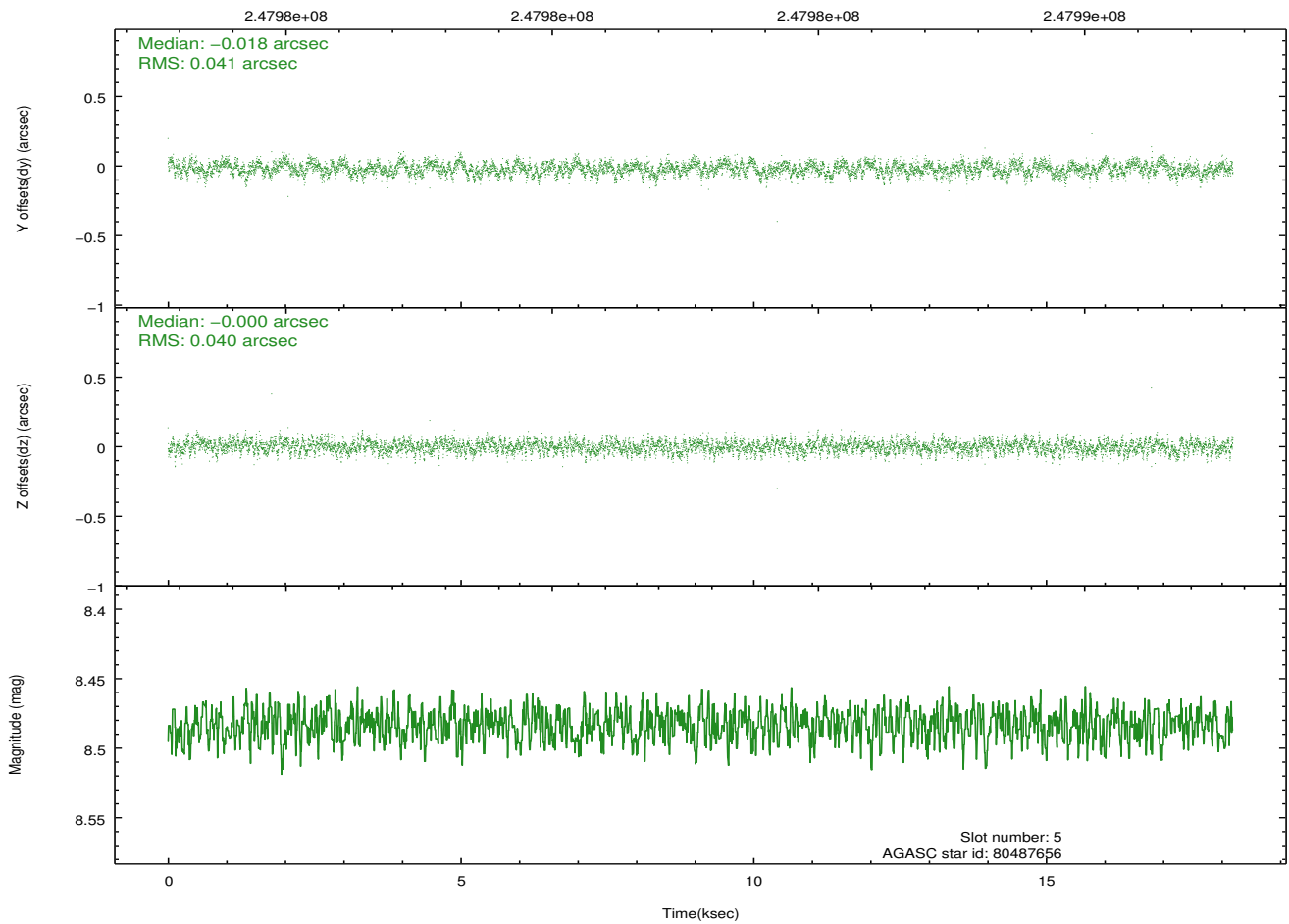
## 2.4.2 Slot 4



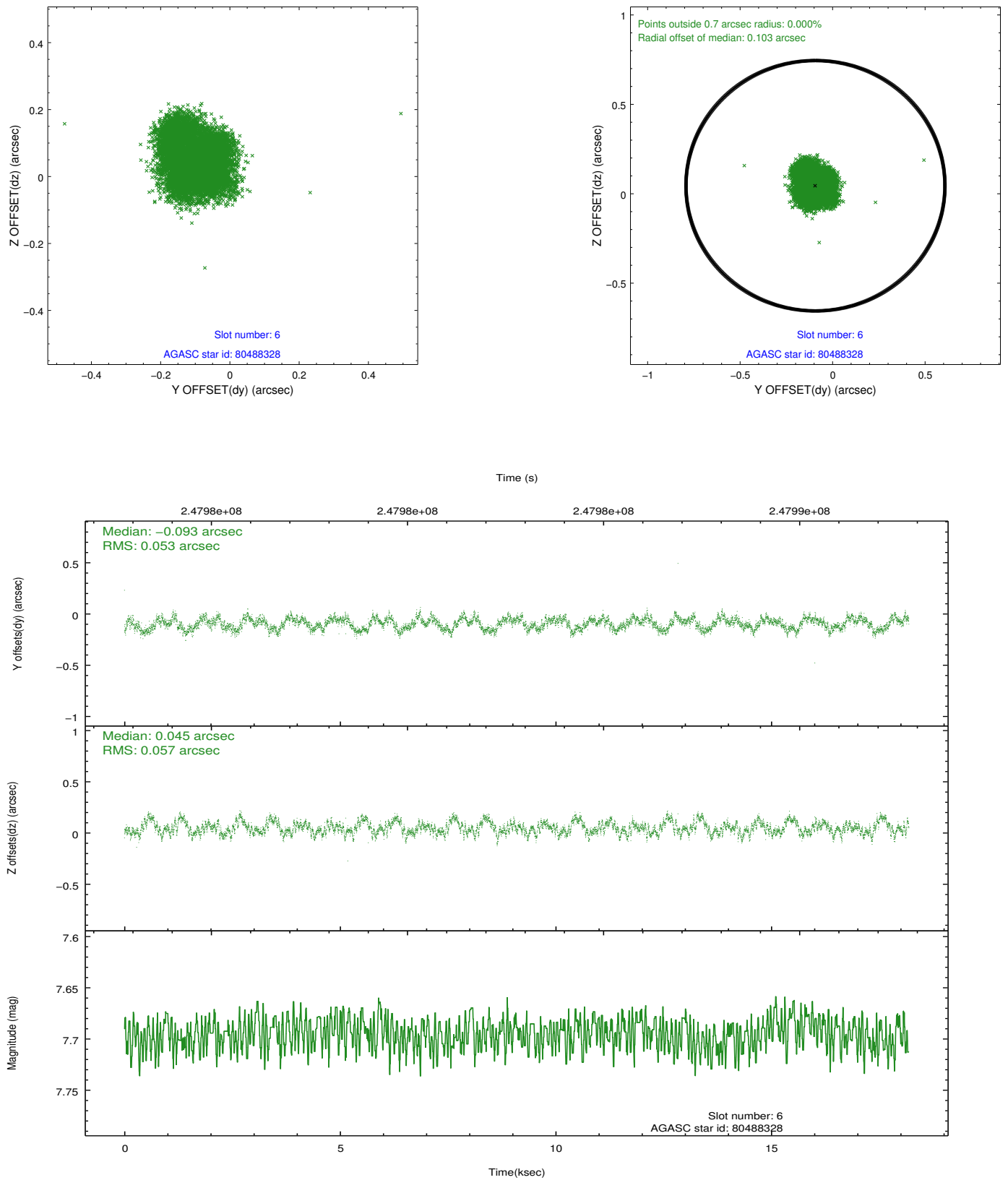
### 2.4.3 Slot 5



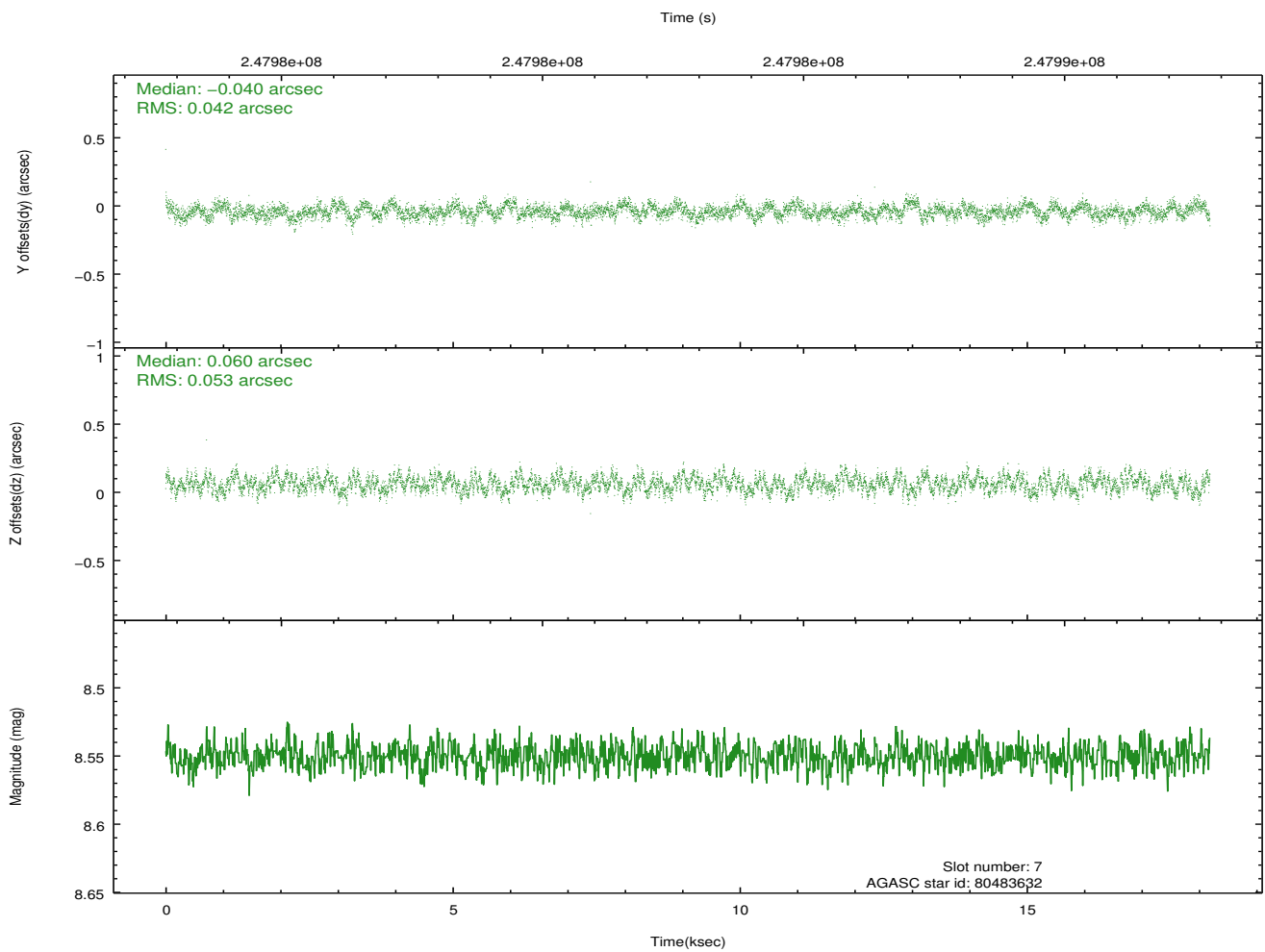
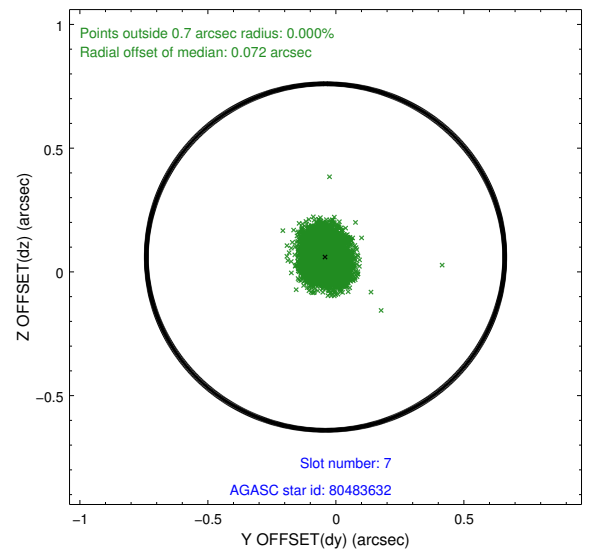
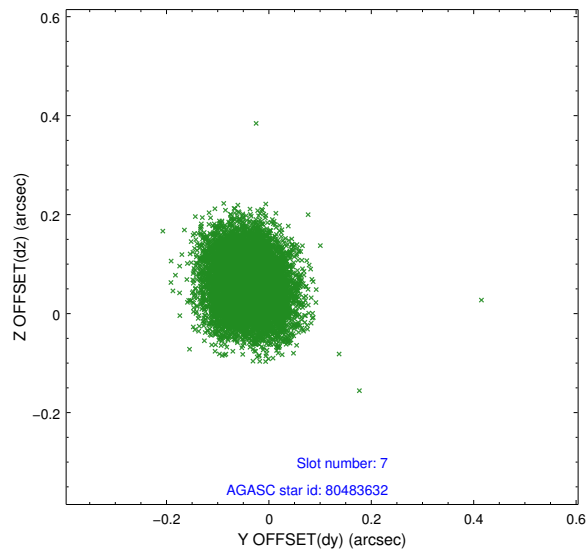
Time (s)



## 2.4.4 Slot 6

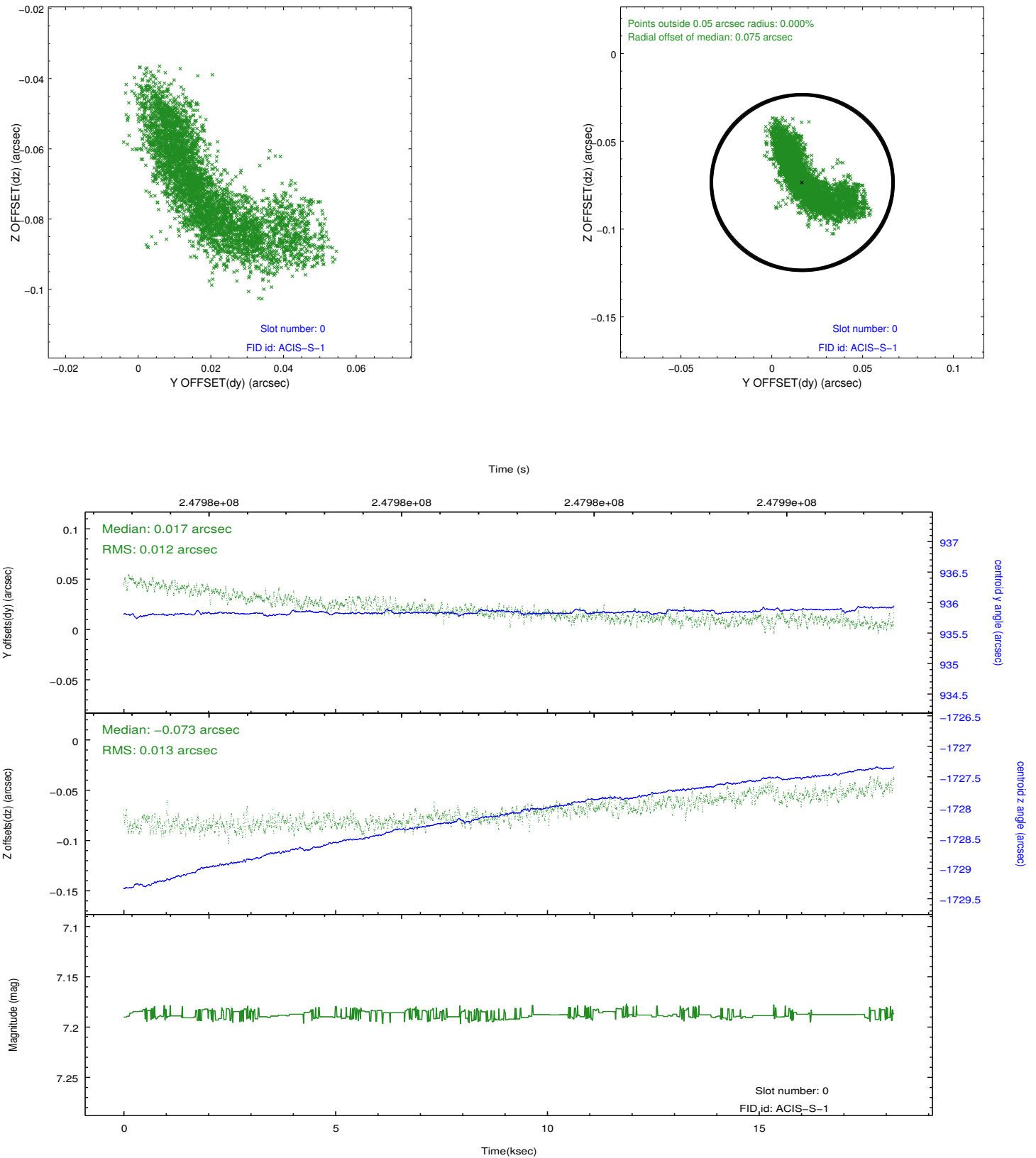


## 2.4.5 Slot 7

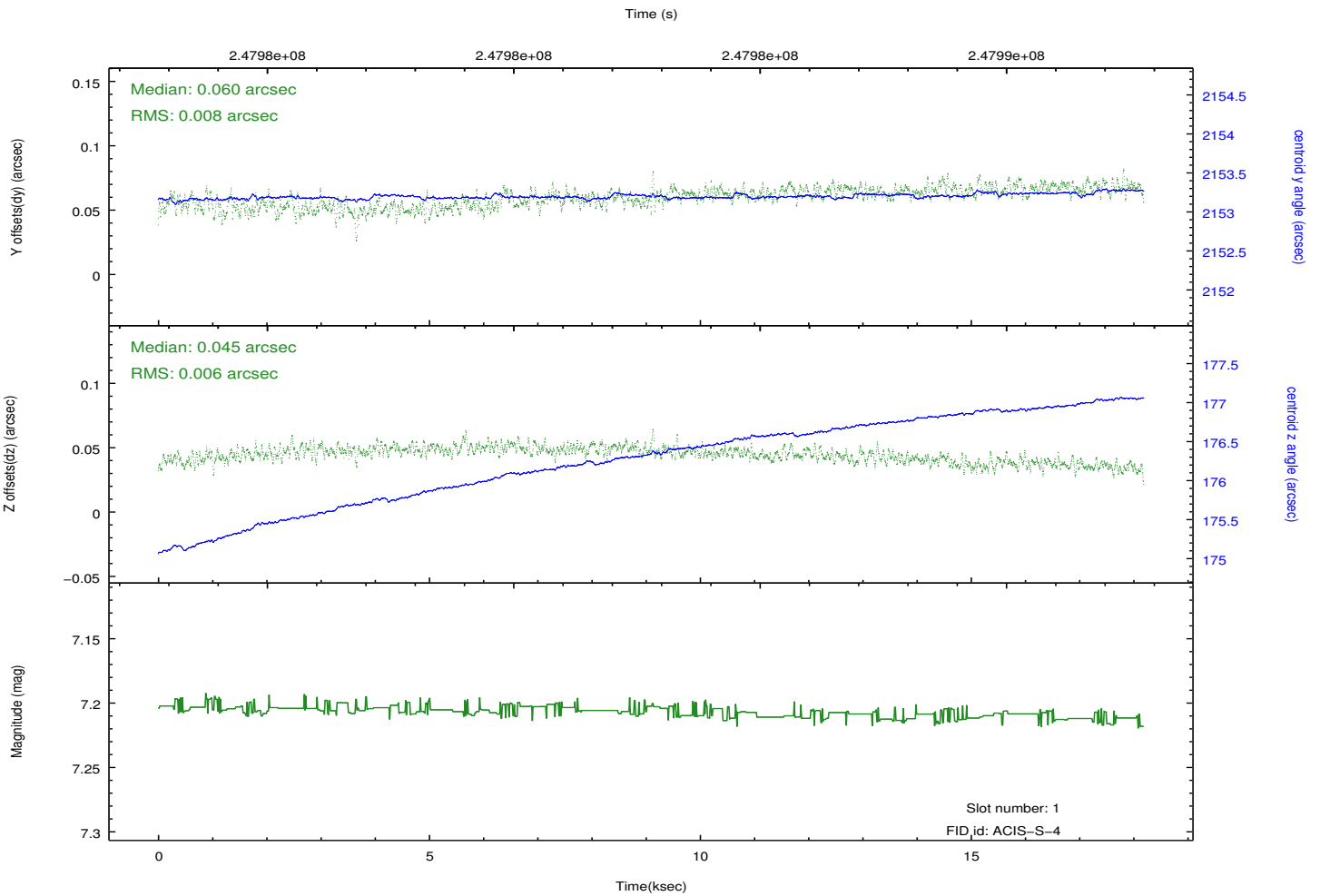
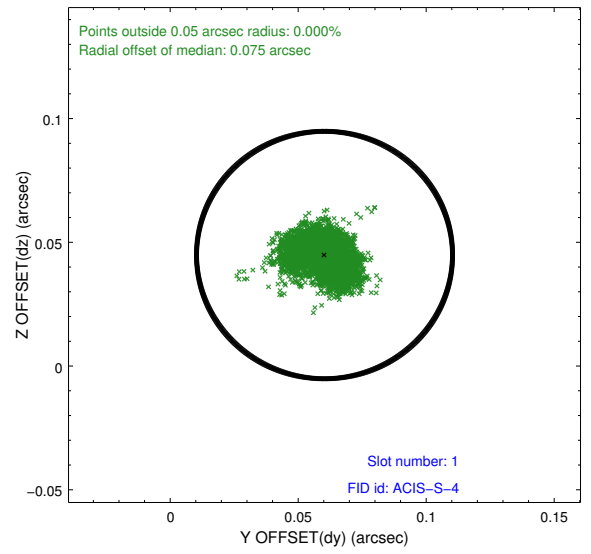
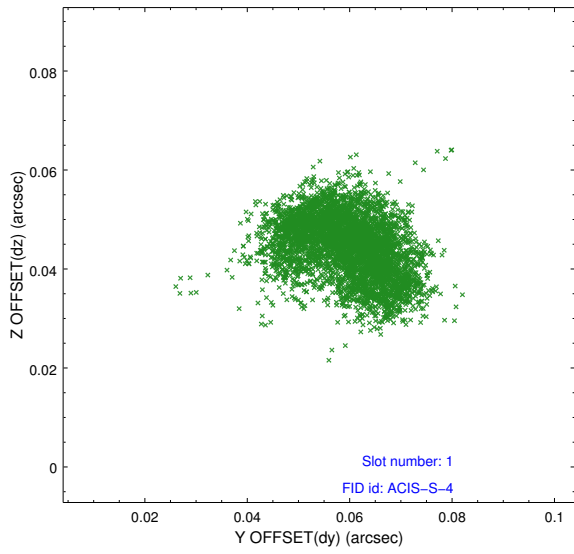


## 2.5 FID Slots

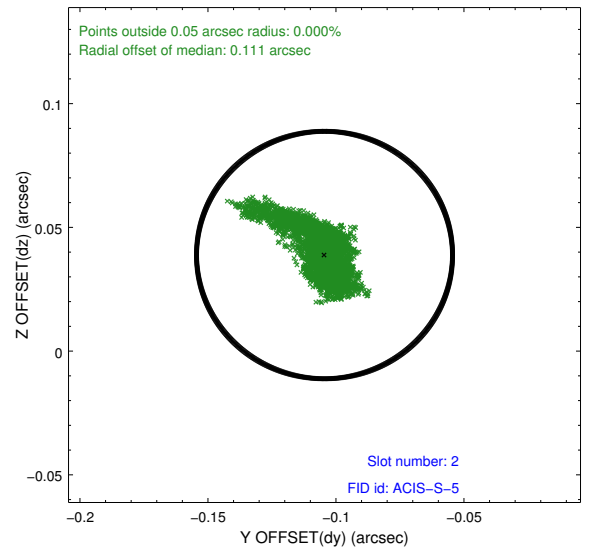
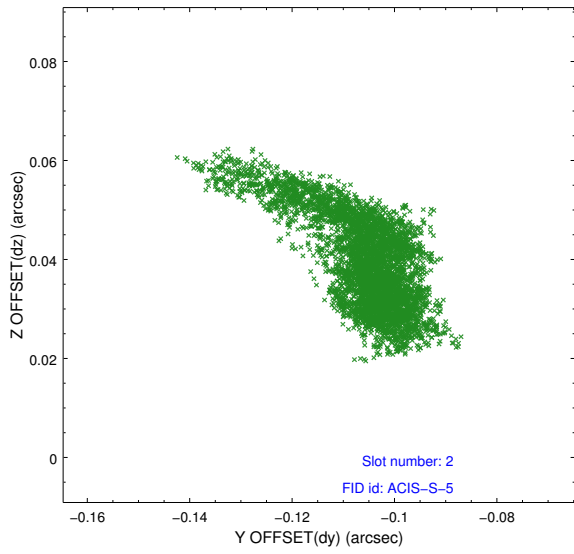
### 2.5.1 Slot 0



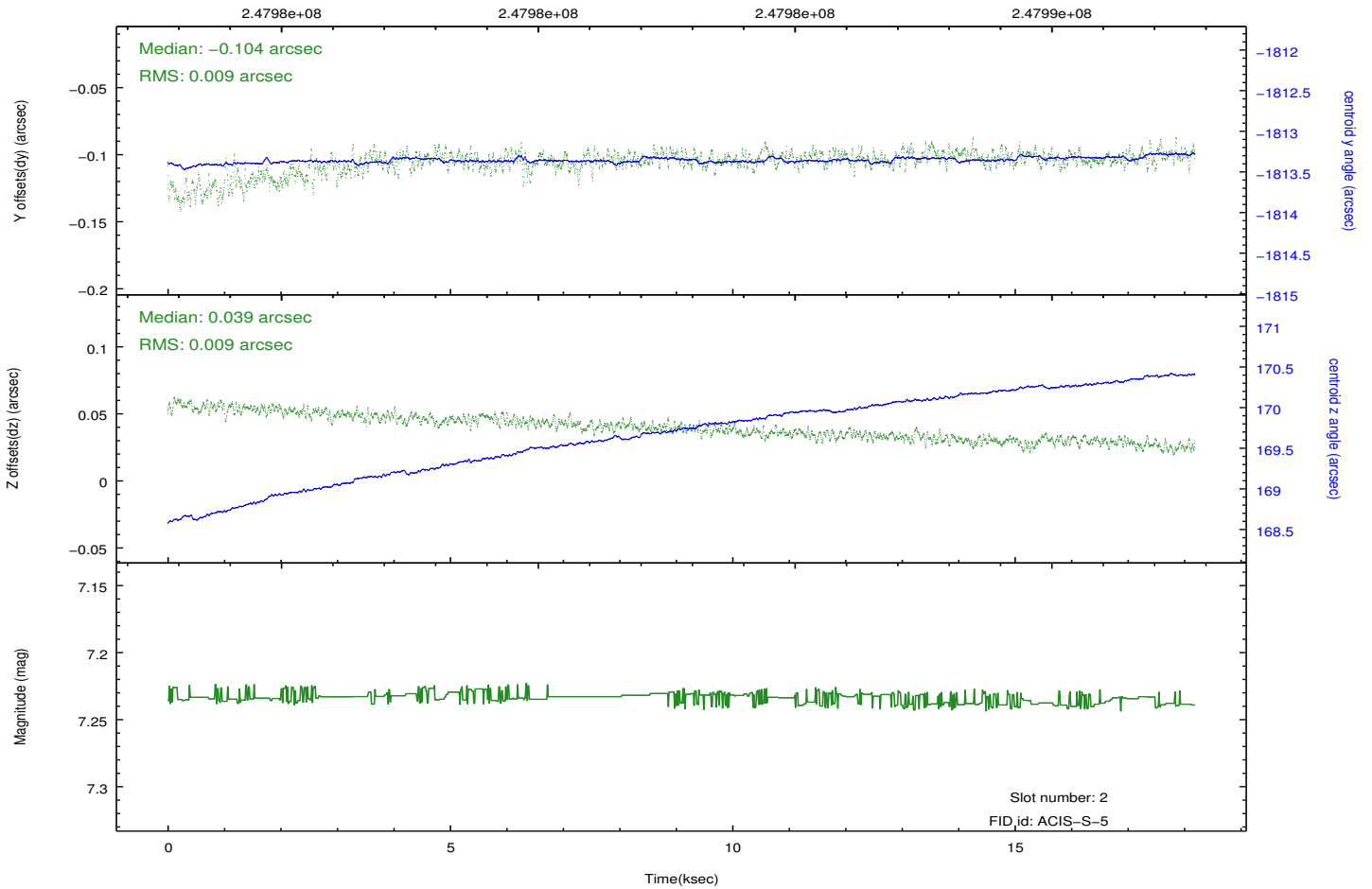
## 2.5.2 Slot 1



### 2.5.3 Slot 2



Time (s)



# A Summary

## A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2013.01.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	18.18145

## A.2 Comments