

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 10936 - L2 Version 2  
Chandra X-Ray Center

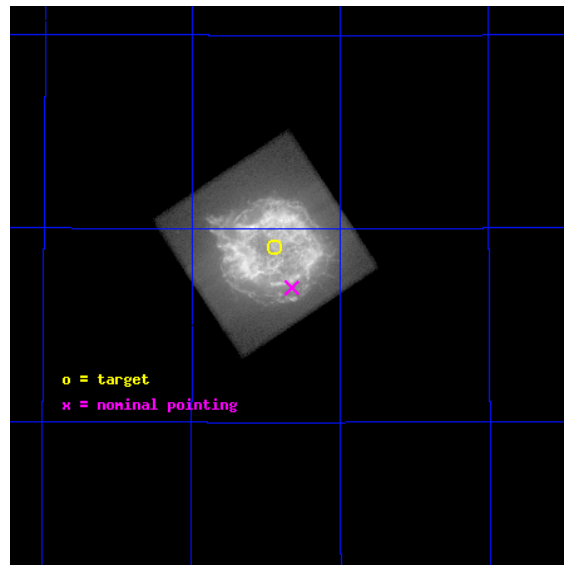
L2 Processing Date : Jul 6 2012

## 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	Parameters . . . . .	4
2.1.3	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	501176	Sequence number
obs_id	10936	Observation id
title	Testing Shock Physics Through Flux Variability in Cas A	Proposal t
observer	Daniel Patnaude	Principal investigator
object	Cassiopeia A	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	350.86125	Observer's specified target RA [deg]
dec_targ	58.8175	Observer's specified target Dec [deg]
ra_nom	350.83196097496	Nominal RA [deg]
dec_nom	58.782606250862	Nominal Dec [deg]
roll_nom	236.48168146501	Nominal Roll [deg]
revision	2	Processing version of data
ontime	32678.503557384	Sum of GTIs [s]
livetime	32237.494630834	Livetime [s]
ontime7	32678.503557384	Sum of GTIs [s]
l2events	9096672	Number of level 2 events

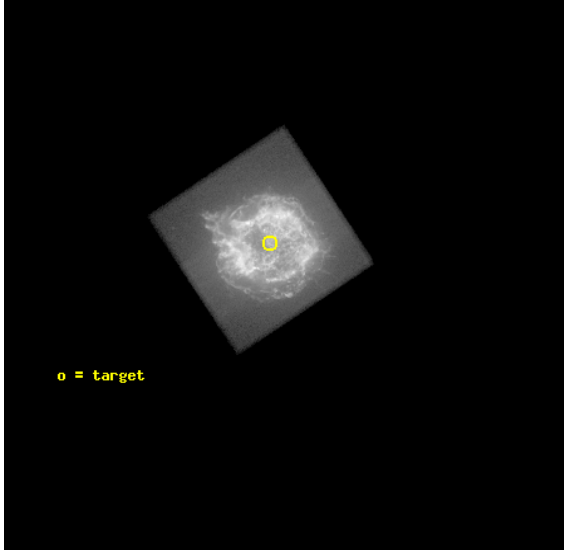


## 2 OBI

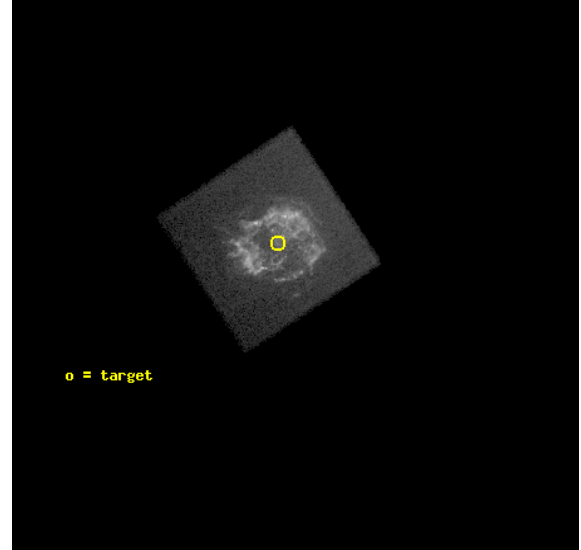
### 2.1 OBI

#### 2.1.1 Images

Level 1 Image



Level 1 Bad Events



## 2.1.2 Parameters

obi_num	0	Obi number	sched_exp_time	32600.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	32678.503557384	Sum of GTIs [s]
caldbver	4.5.0	&#160	ontime7	32678.503557384	Sum of GTIs [s]
date	2012-07-06T01:57:25	Date and time of file creation	l1events	9744848	Number of level 1 events
revision	2	Processing version of data			

## 2.1.3 Events

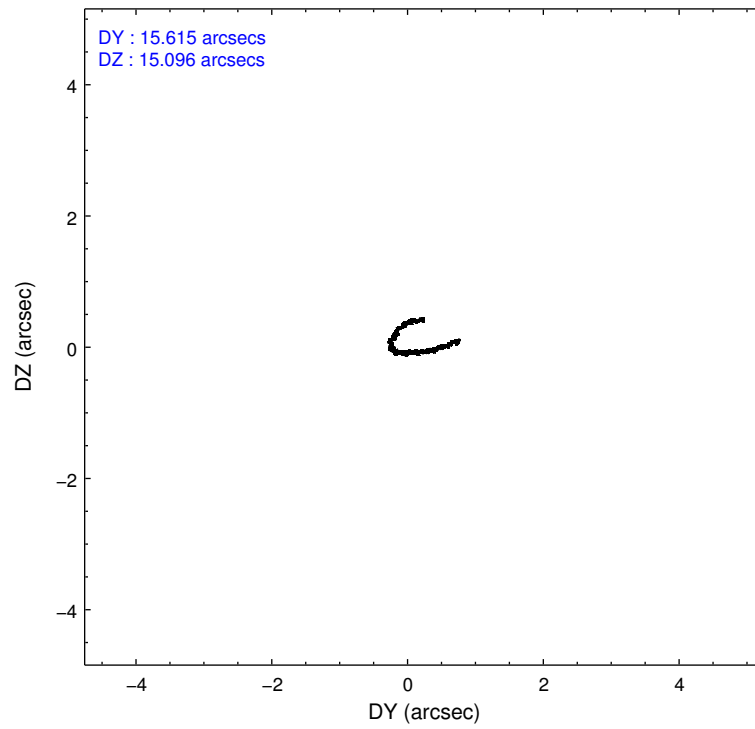
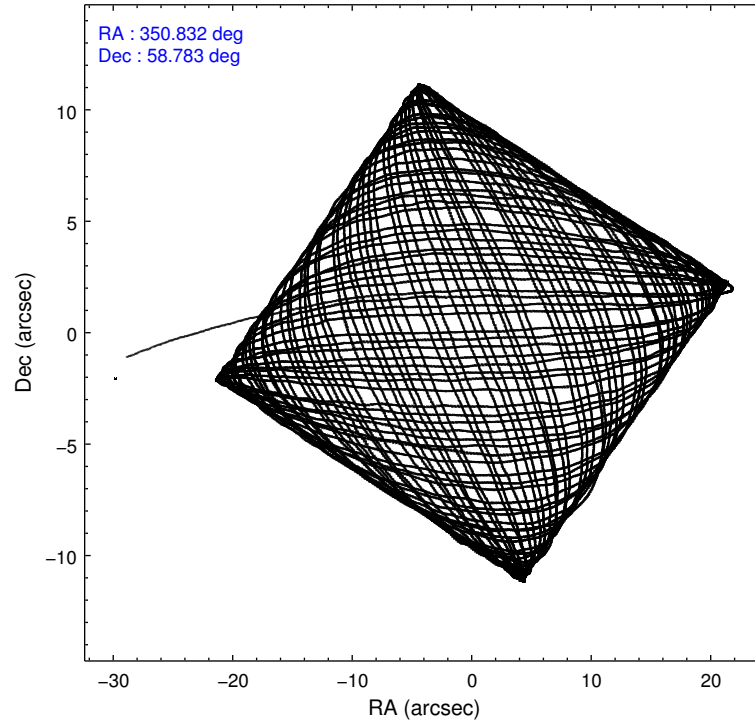
	<b>ccd 7</b>
level 1 events	9744848
rejected events	545216
rejected %	5%

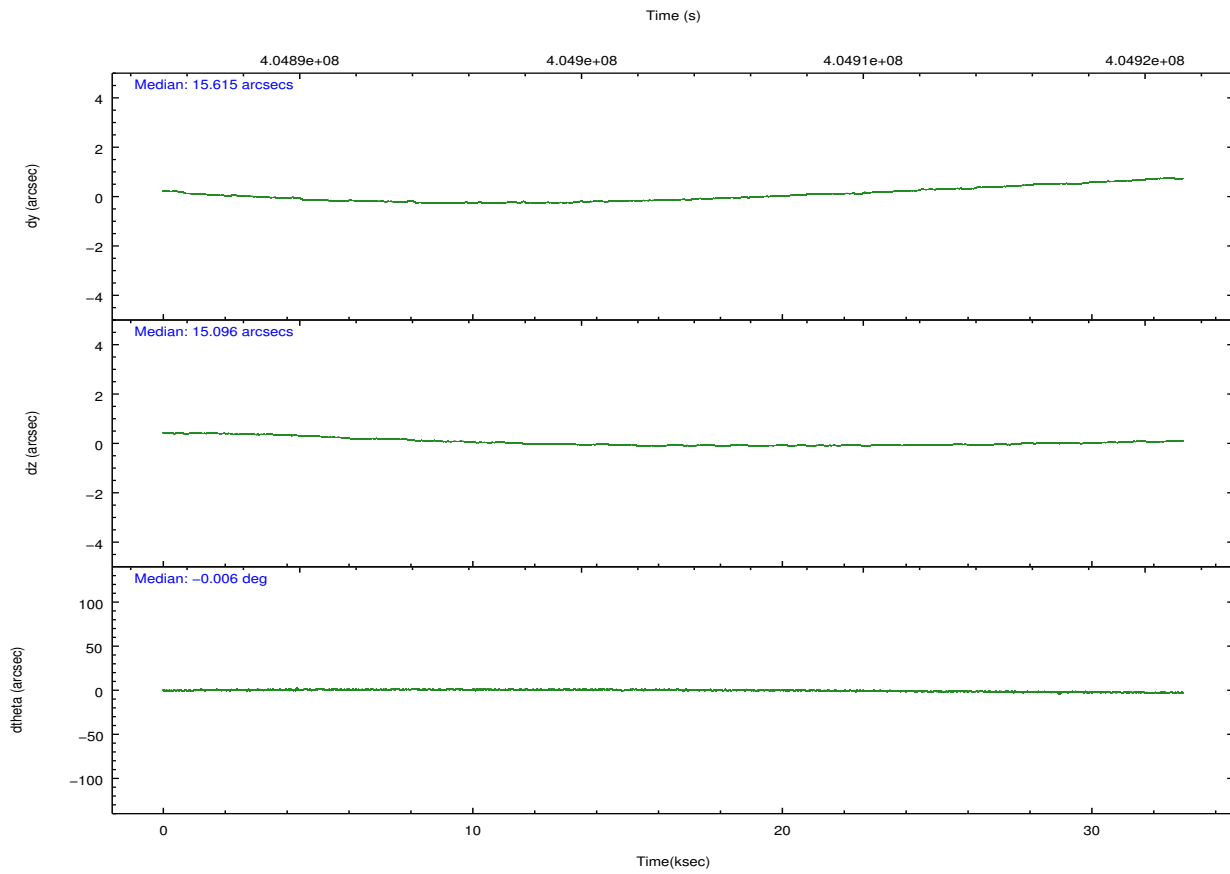
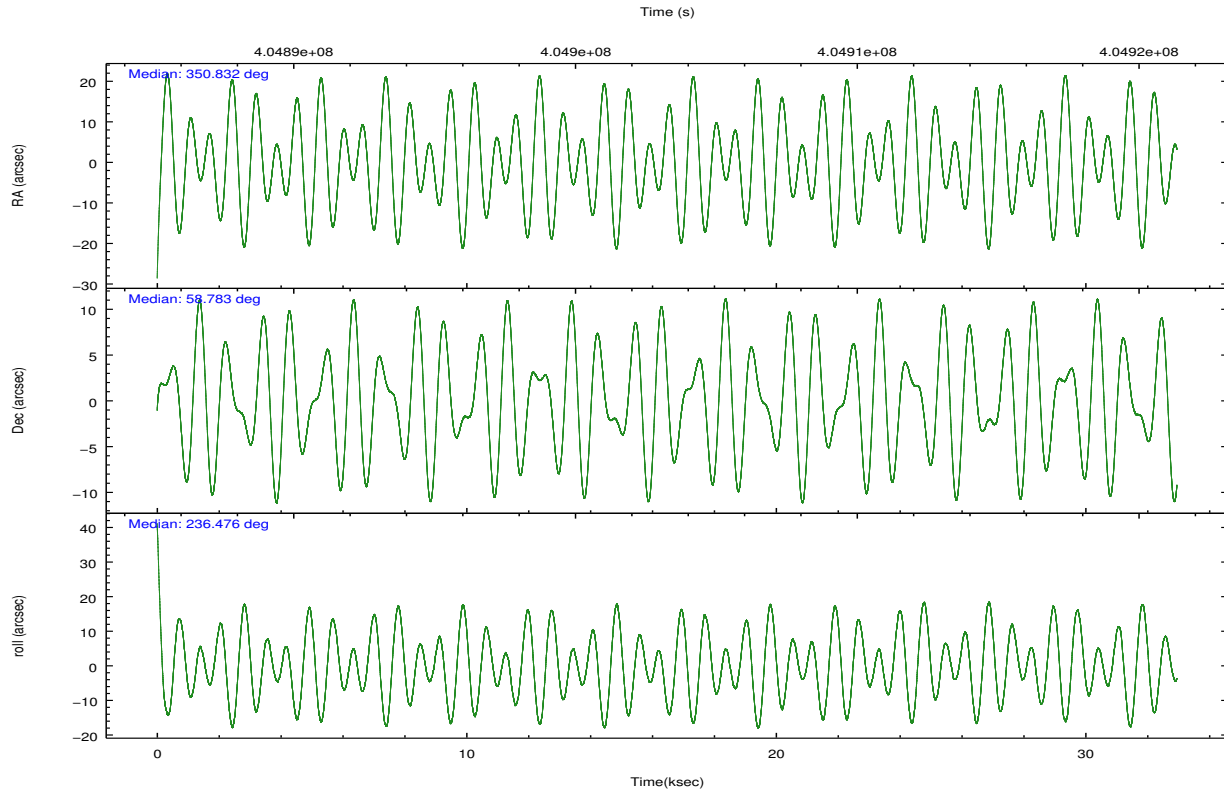
	<b>ccd 7</b>
grade 0 events	2003712
	20%
grade 1 events	33225
	0%
grade 2 events	2813588
	28%
grade 3 events	942048
	9%
grade 4 events	932257
	9%
grade 5 events	167248
	1%
grade 6 events	2508924
	25%
grade 7 events	343846
	3%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-7	ACIS-7	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	GRADED	GRADED	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	350.834457	350.8319609749624	Subarray requested	NONE	NONE
[deg] Pointing Dec	58.809917	58.78260625086203	Alternating exposures requested	N	N
[deg] Pointing Roll	236.322912	236.4816814650099	[s] Primary exposure time	0.000000	3
[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)	404887125.184000	404886136.92222			
Observation start date	2010-10-31T04:37:39	2010-10-31T04:22:16			
[s] Observation end time (MET)	404919725.184000	404920486.72398			
Observation end date	2010-10-31T13:40:59	2010-10-31T13:54:46			
Read mode	TIMED	TIMED			

## 2.3 Aspect



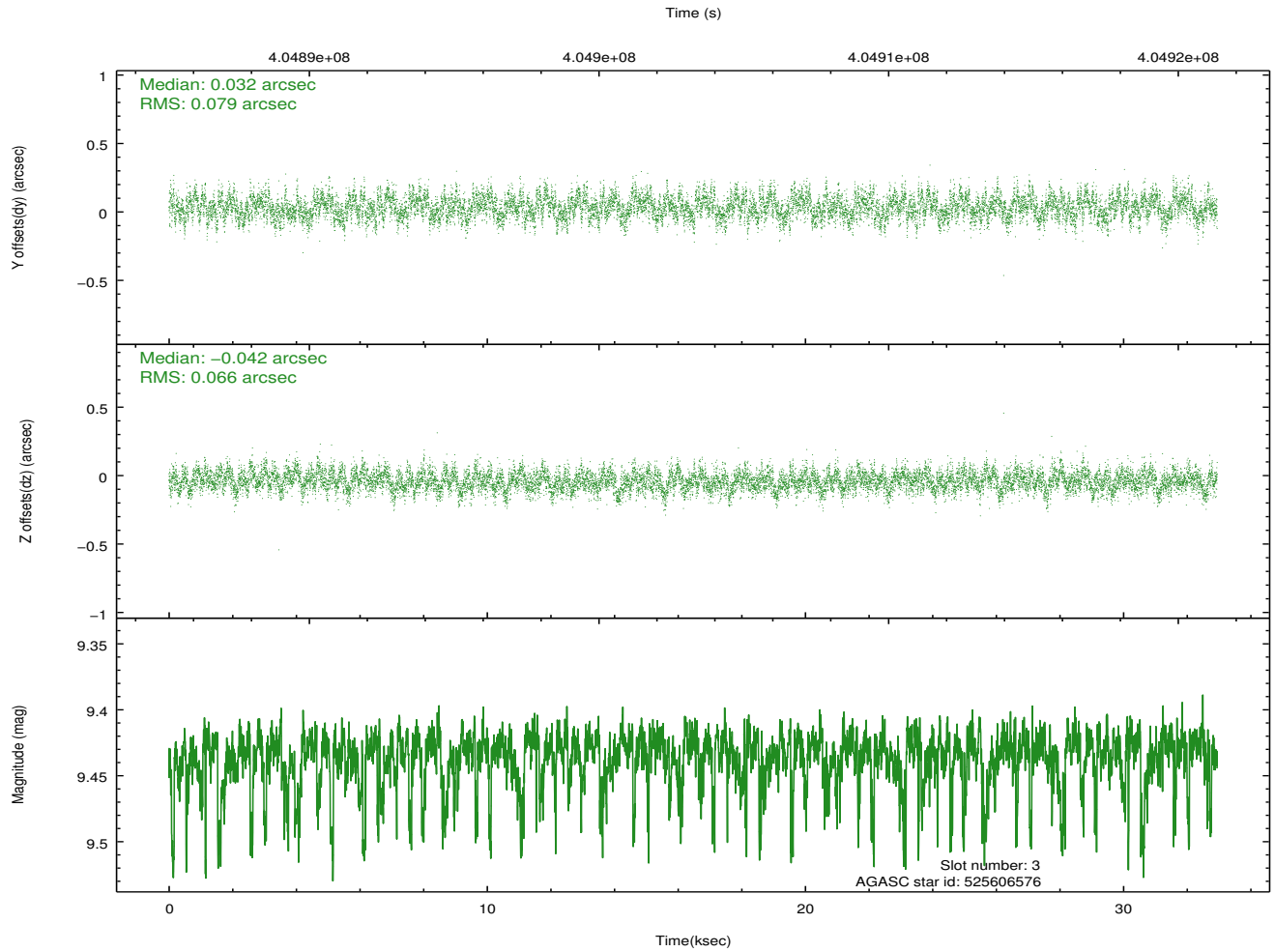
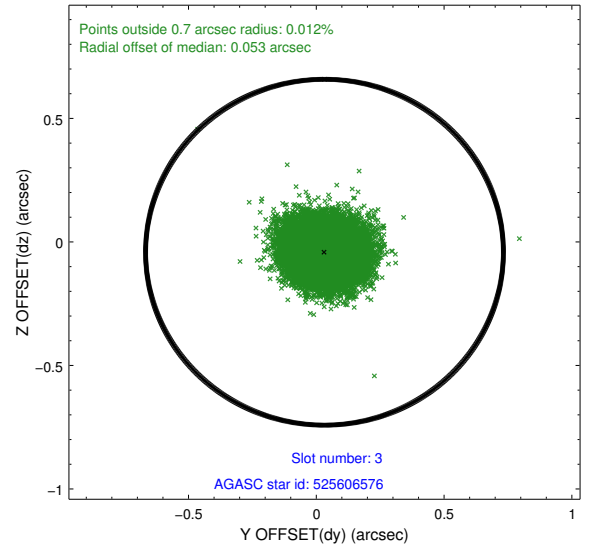
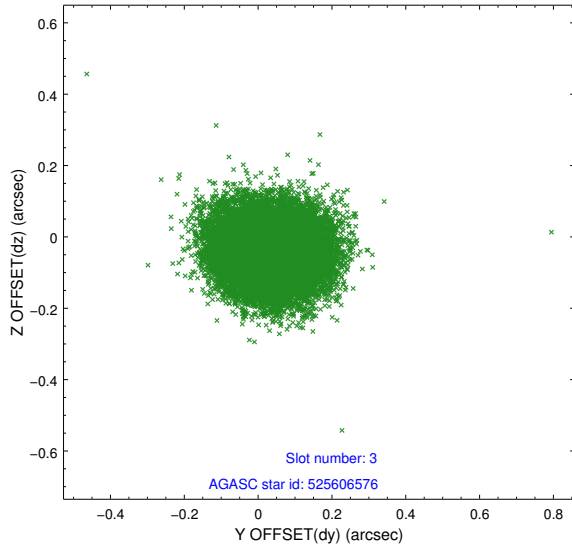


### Slot Statistics

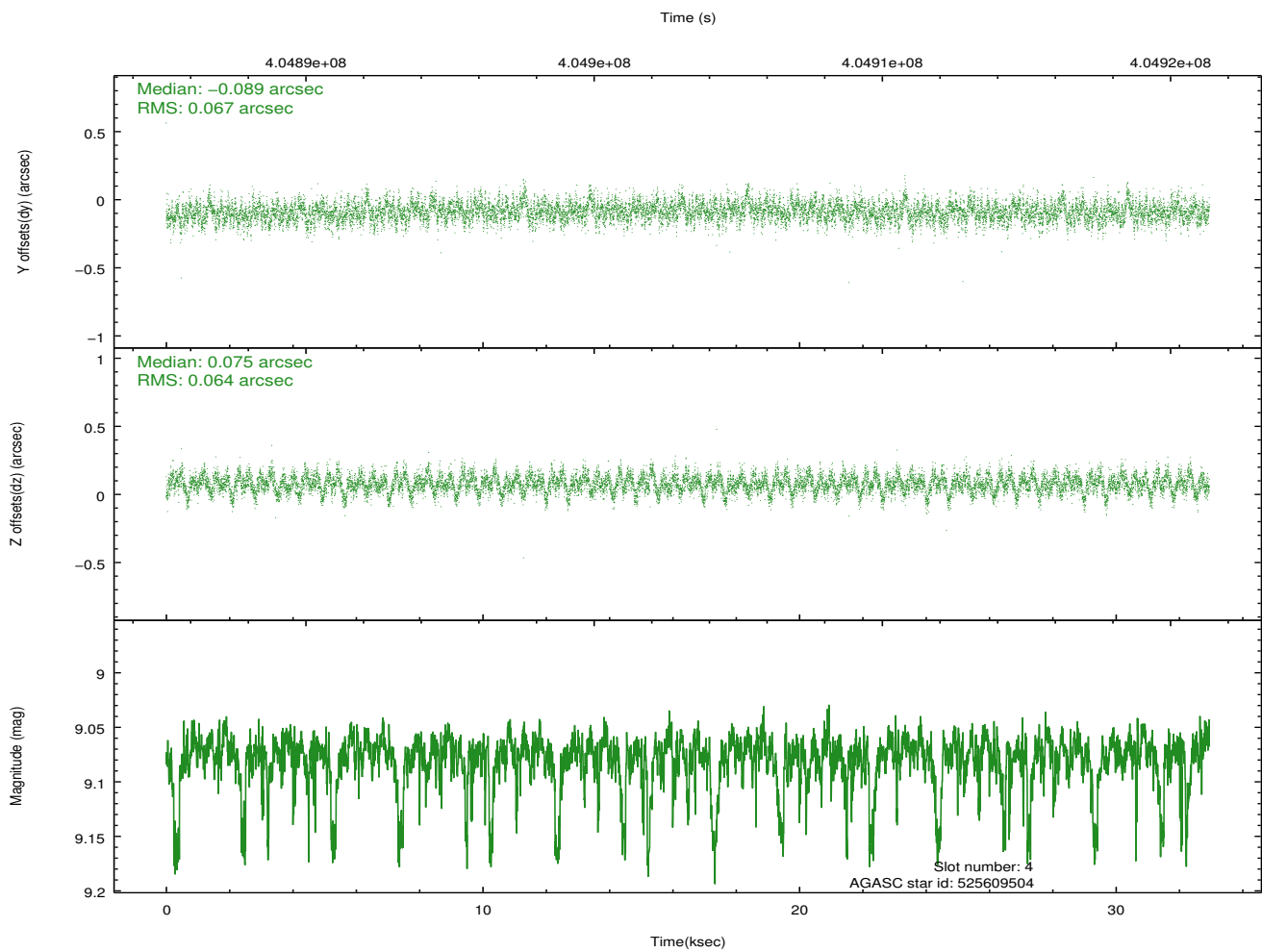
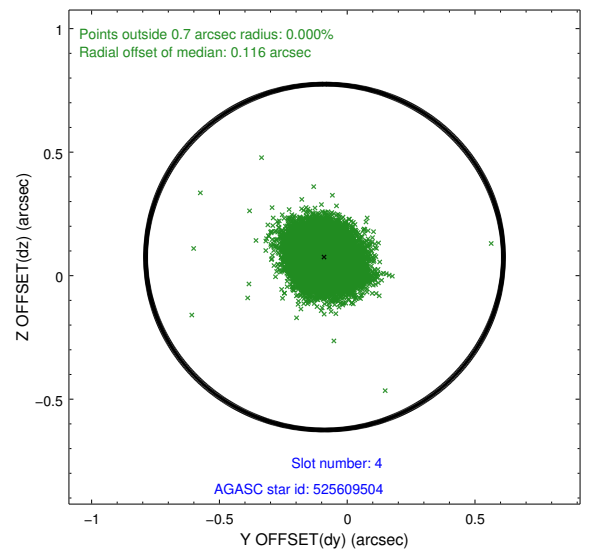
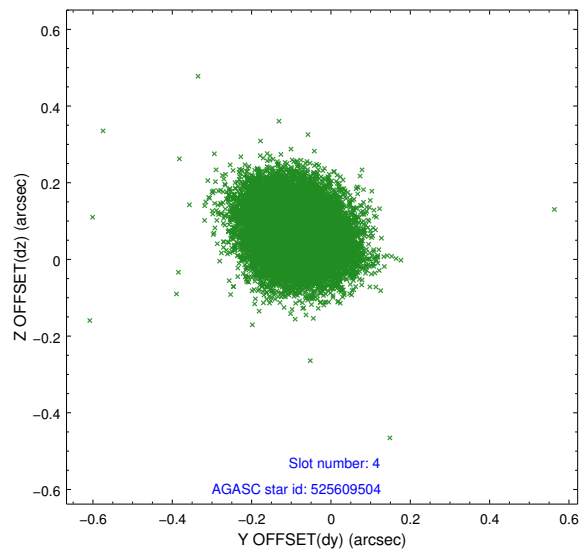
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	6.99	8035	0.055	-0.051	0.010	0.019	0.000000	0.000000	927.45	-1732.20
1	FID	ACIS-S-5	7.04	8036	-0.118	0.029	0.017	0.023	0.000000	0.000000	-1821.73	165.33
2	FID	ACIS-S-6	7.15	8036	0.044	0.034	0.017	0.027	0.000000	0.000000	392.89	809.40
3	GUIDE	525606576	9.43	16018	0.032	-0.042	0.110	0.175	349.543555	58.678895	1713.84	-1761.40
4	GUIDE	525609504	9.08	16043	-0.089	0.075	0.097	0.159	349.896632	58.356658	2330.41	-576.07
5	GUIDE	525732232	9.12	16065	0.086	-0.066	0.119	0.190	351.669550	58.757012	-713.42	1399.51
6	GUIDE	525732488	8.41	15996	0.020	0.026	0.078	0.127	350.087090	58.516915	1650.71	-588.30
7	GUIDE	525735456	6.79	16071	-0.053	0.003	0.061	0.095	350.628183	59.307249	-1279.53	-1308.71

## 2.4 Star Slots

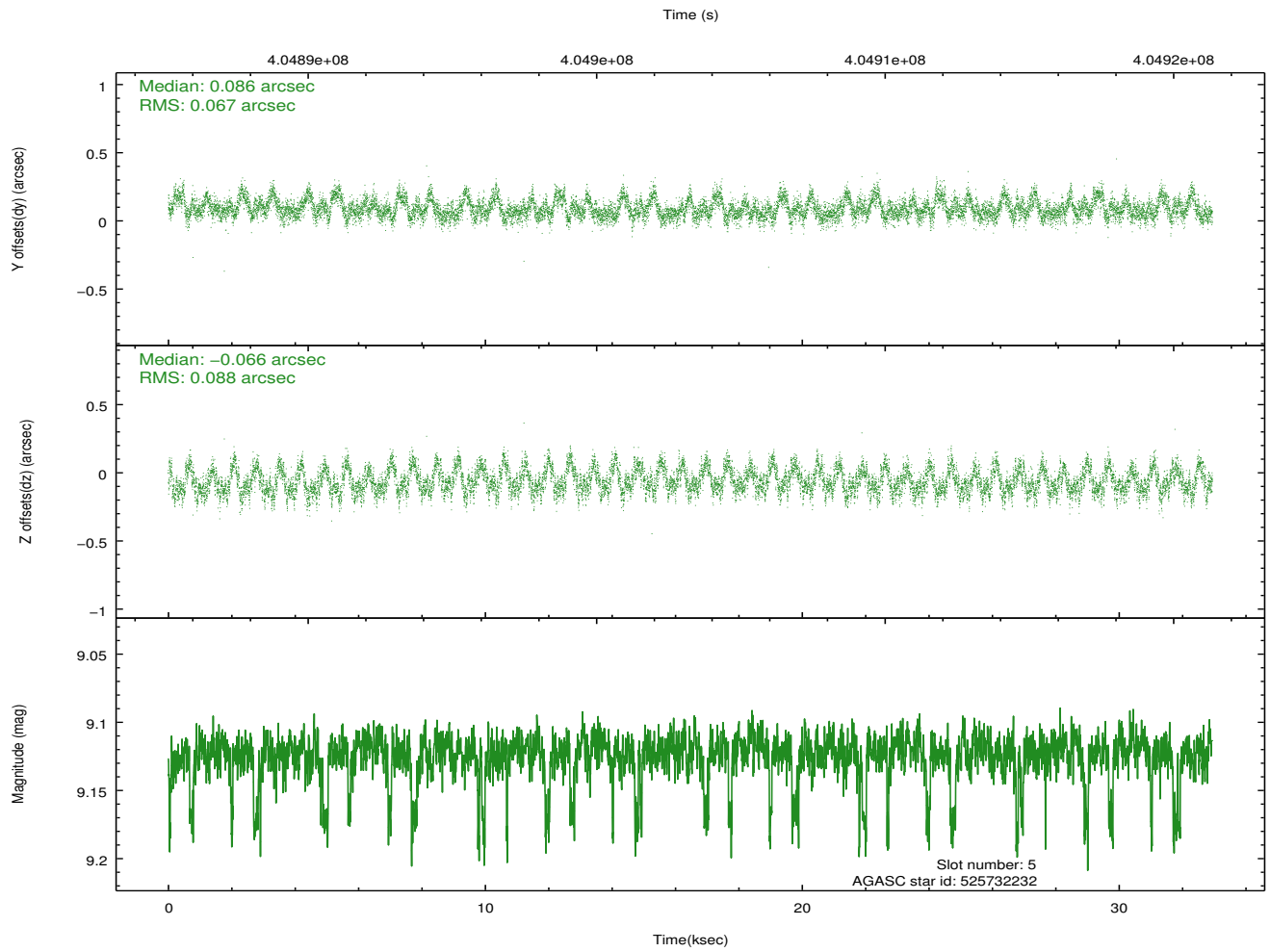
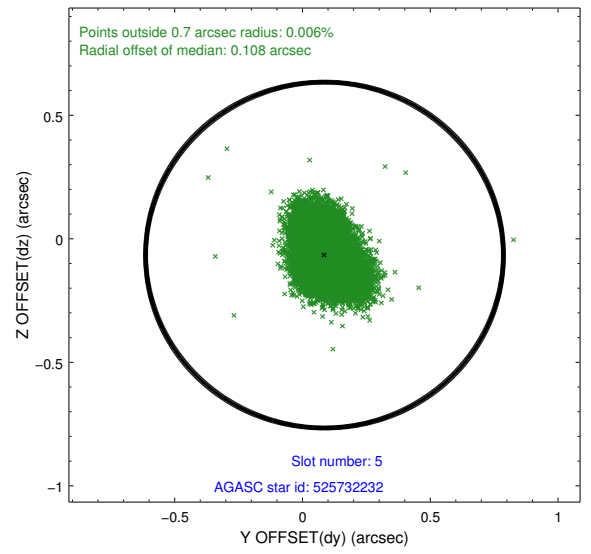
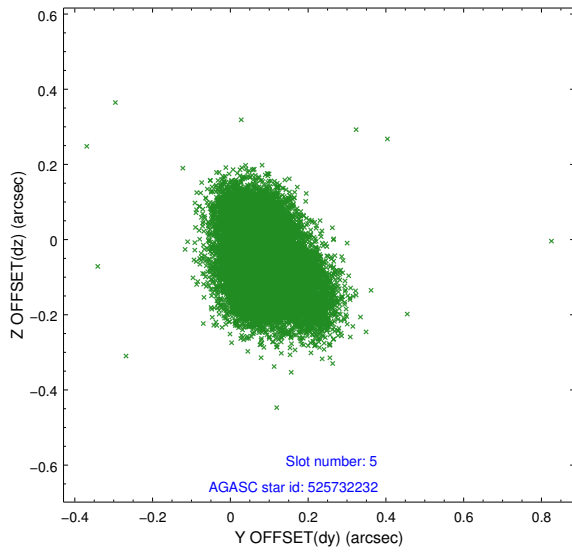
### 2.4.1 Slot 3



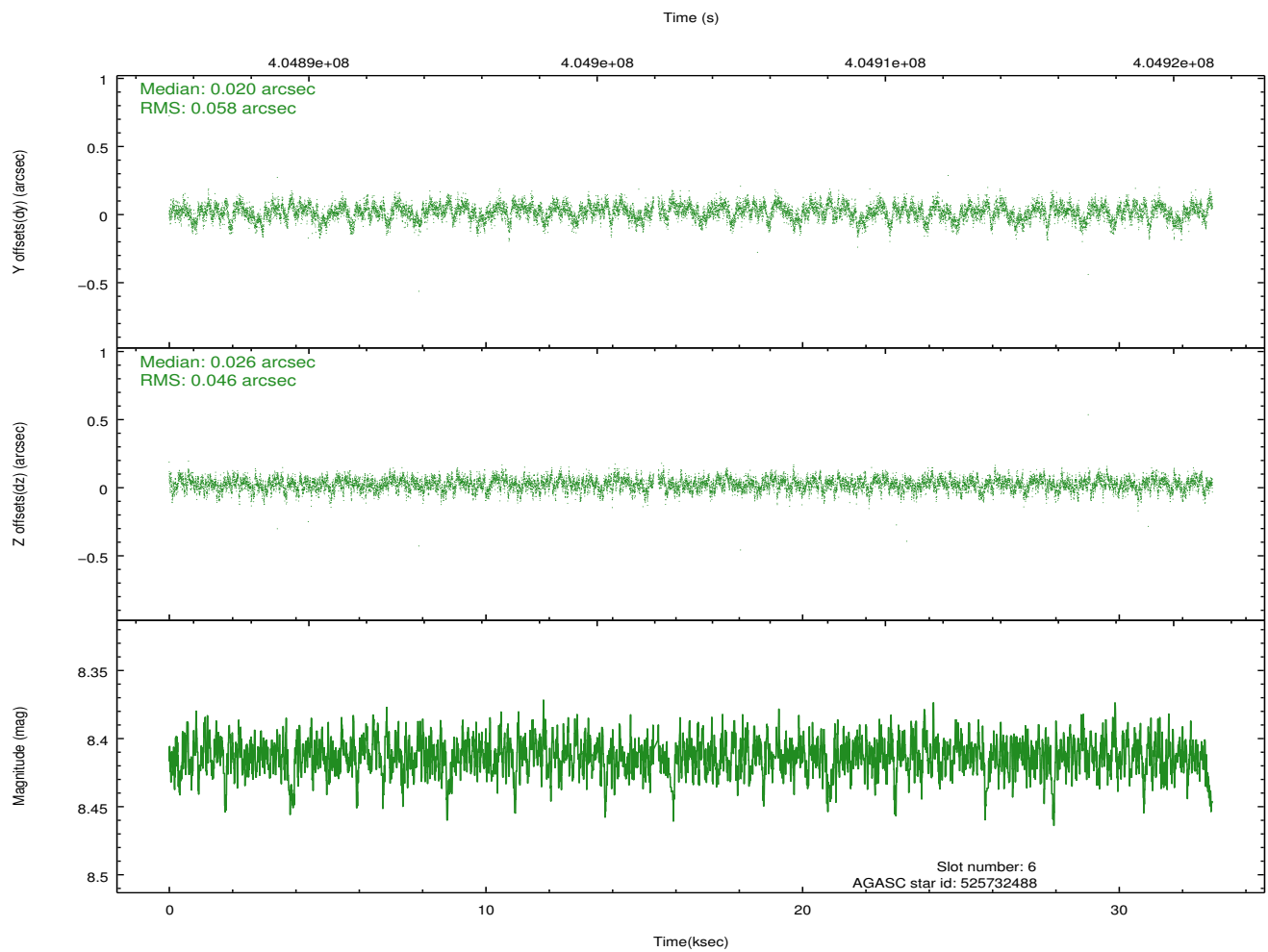
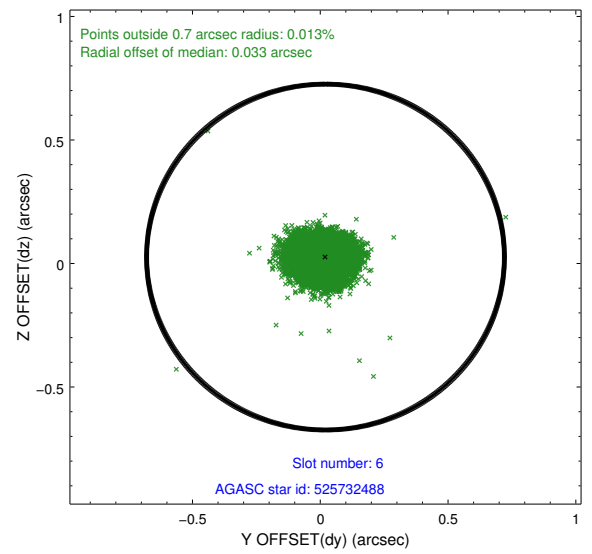
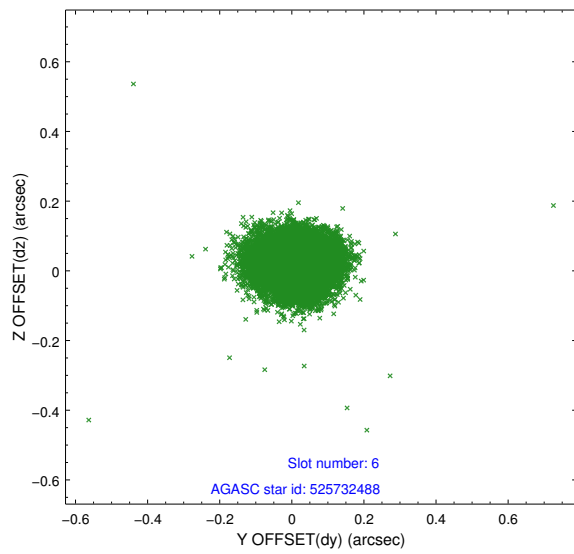
## 2.4.2 Slot 4



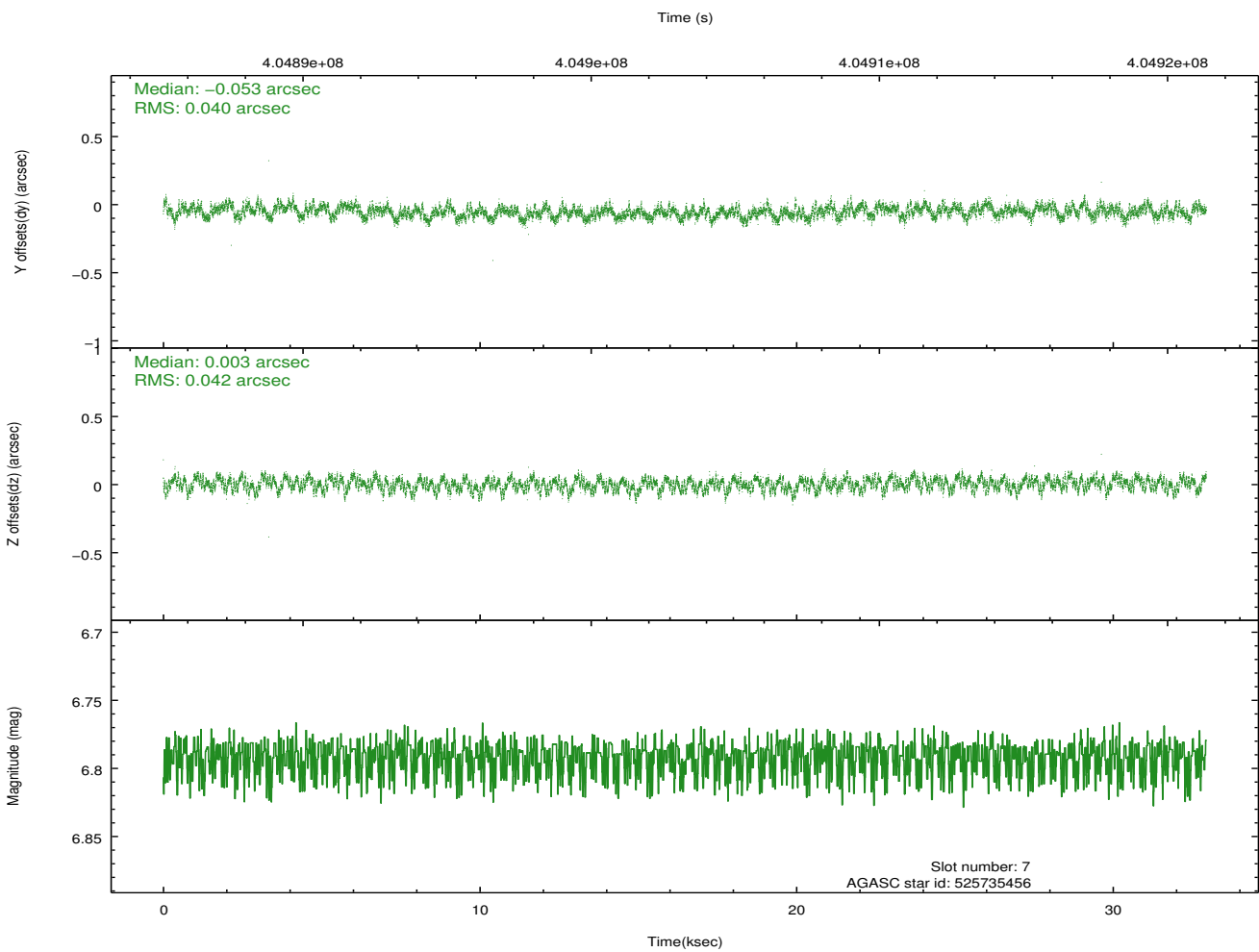
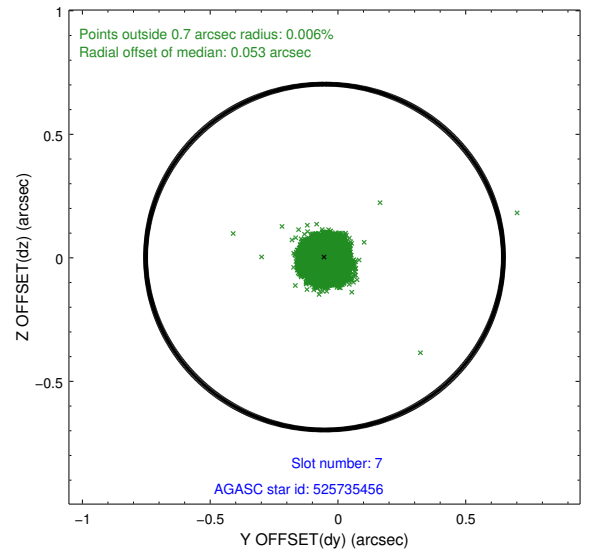
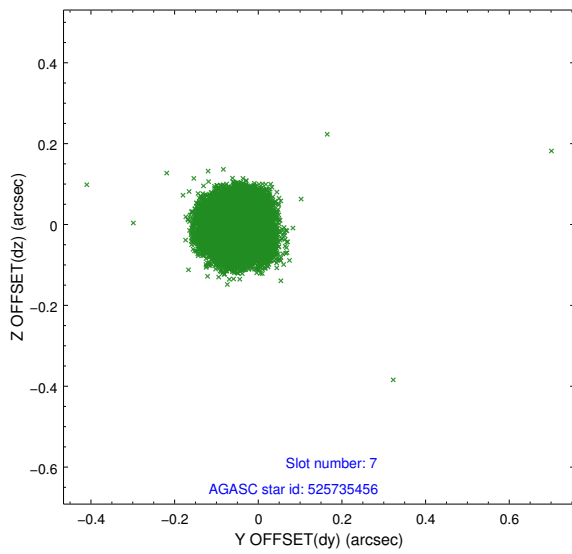
### 2.4.3 Slot 5



## 2.4.4 Slot 6

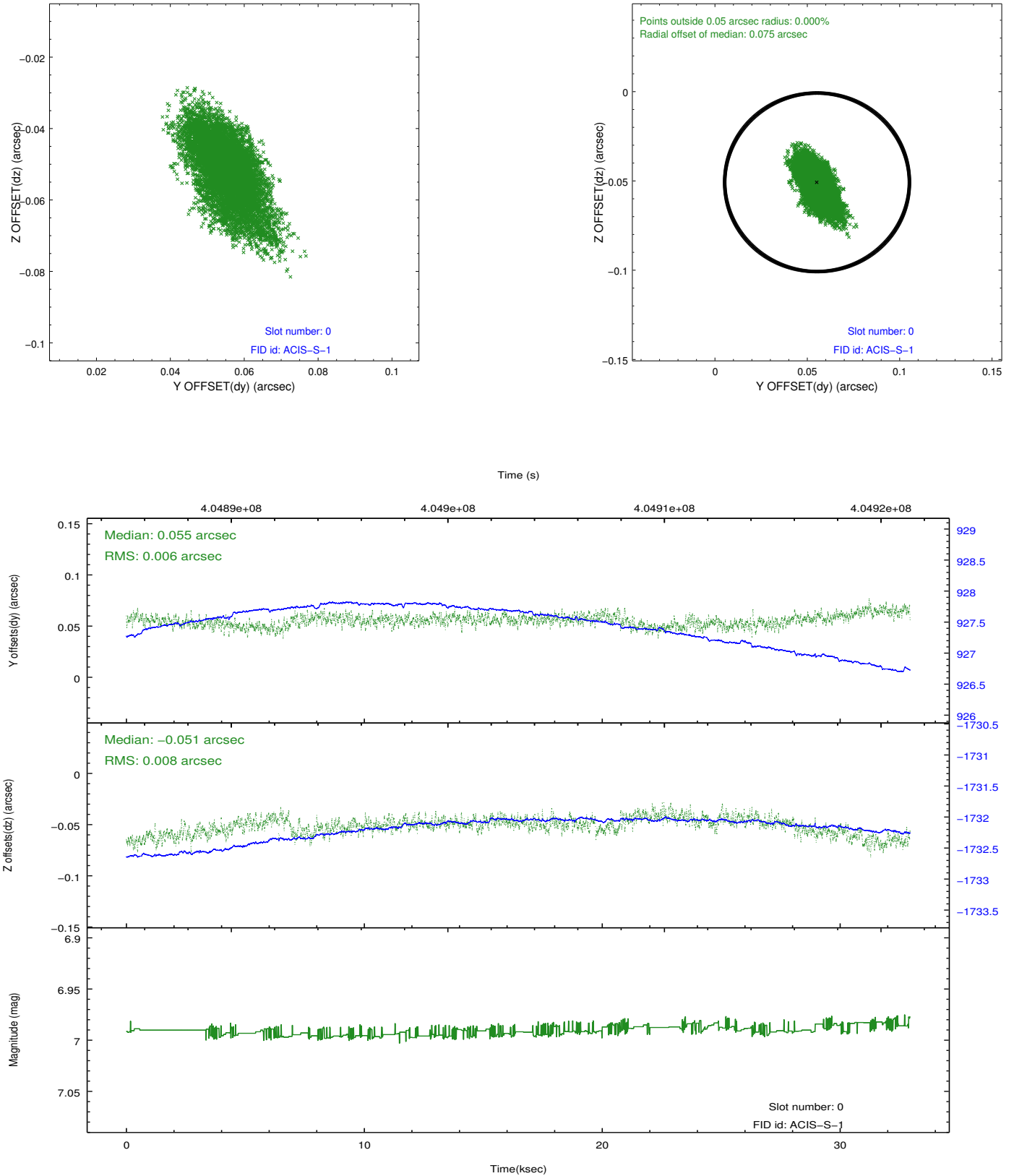


## 2.4.5 Slot 7

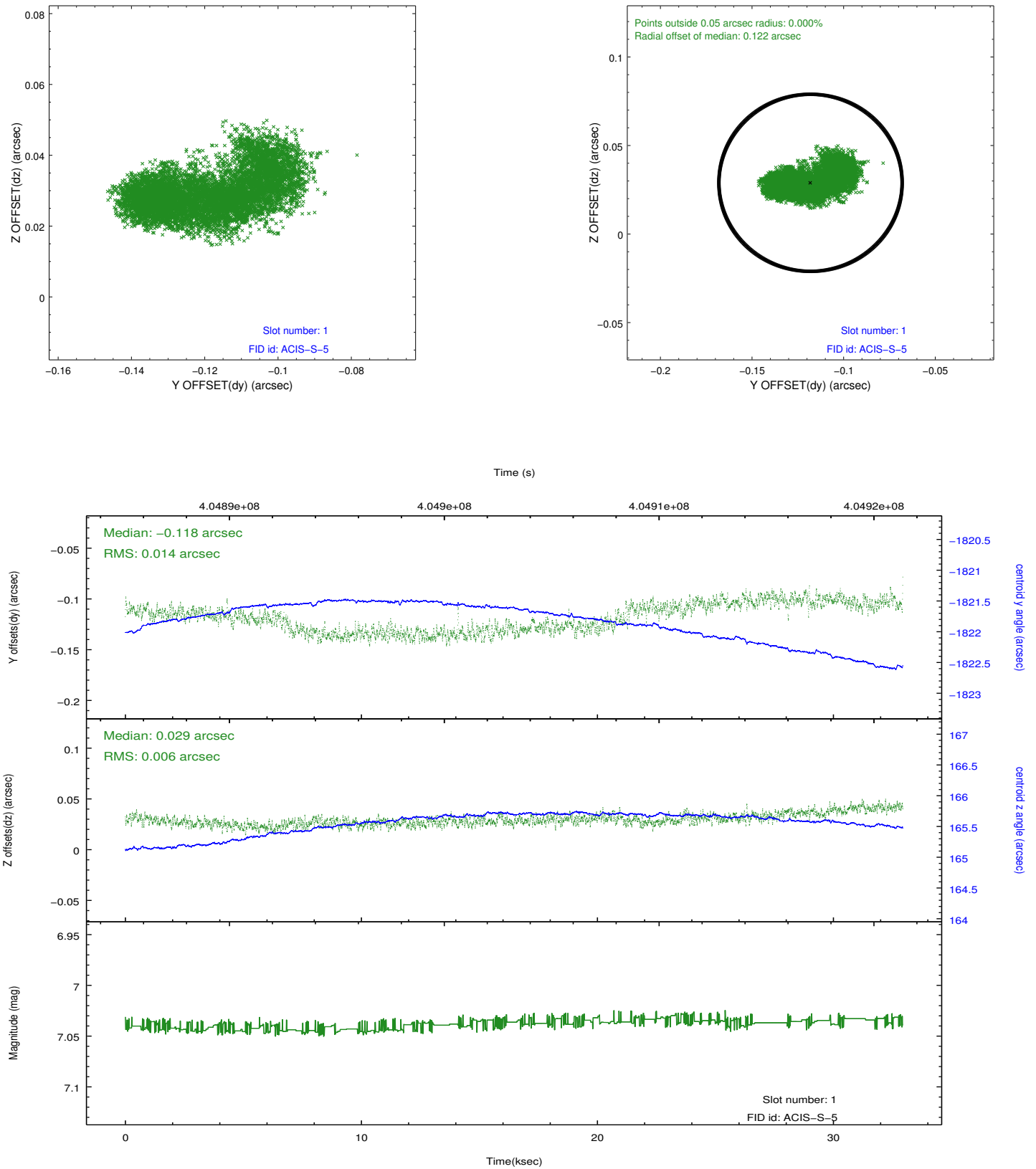


## 2.5 FID Slots

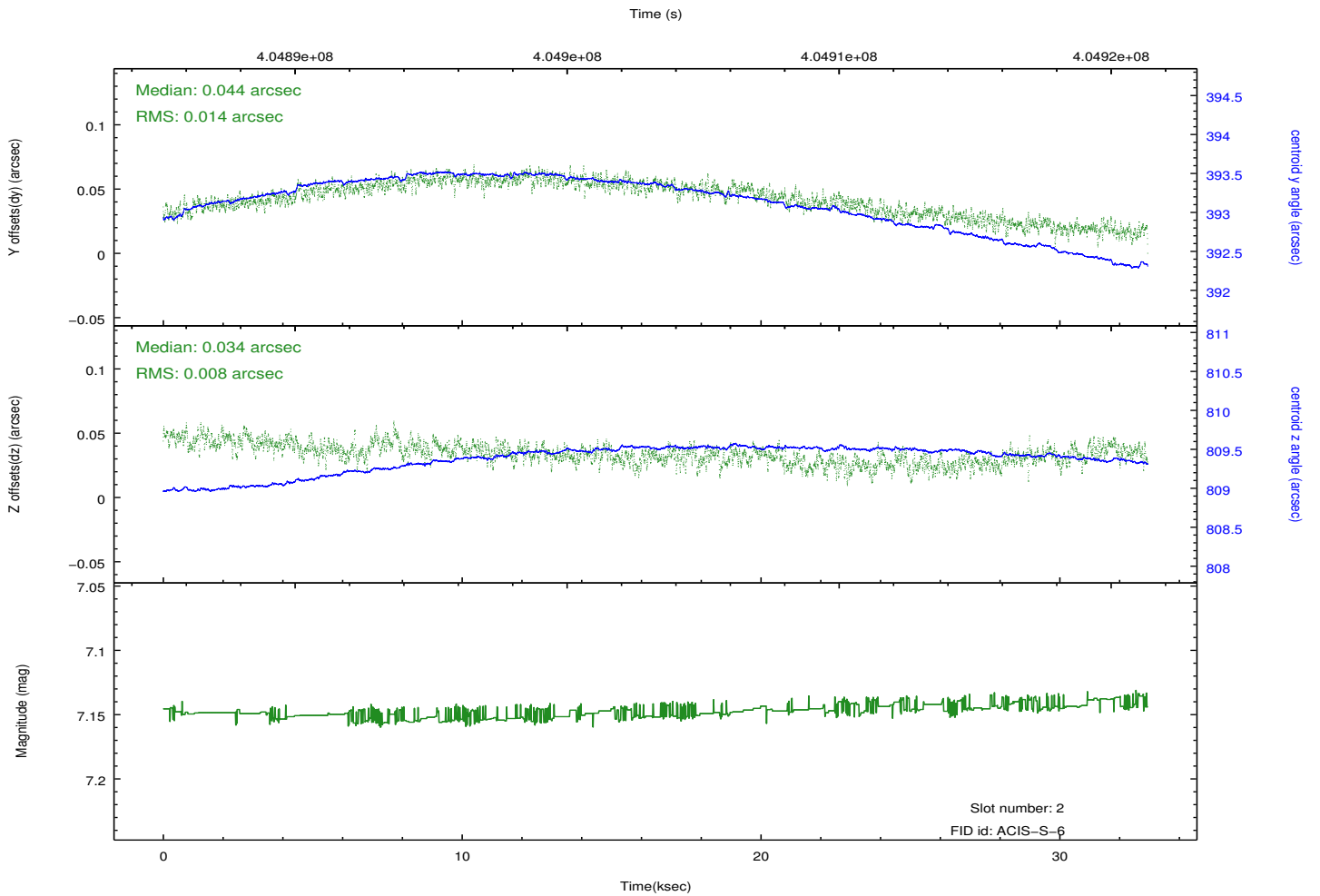
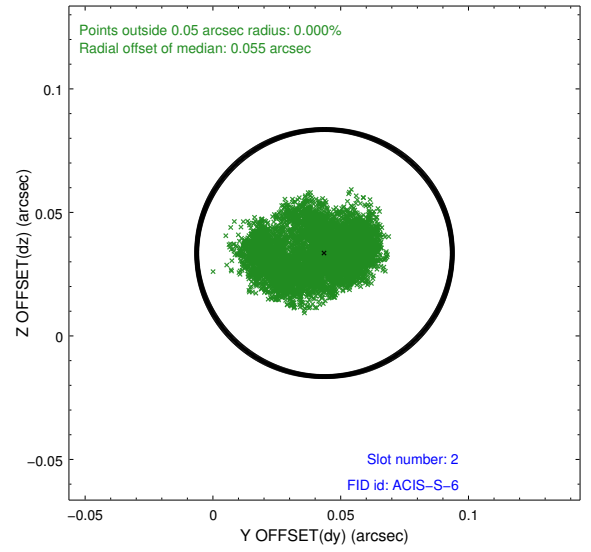
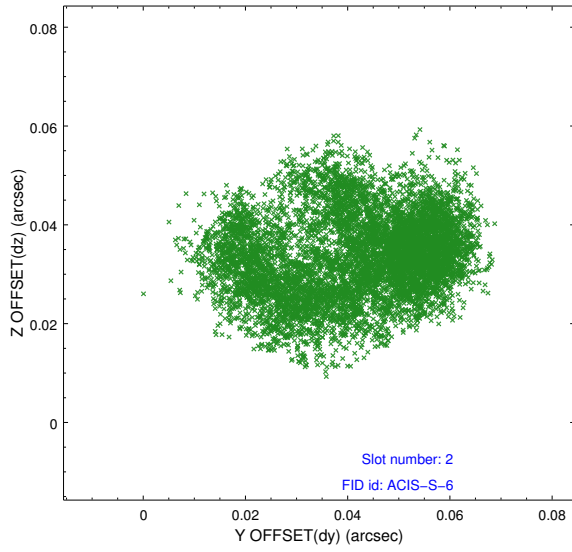
### 2.5.1 Slot 0



## 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)	2012.07.16
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	32.678503553212

## A.2 Comments