

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 7659 - L2 Version 3  
Chandra X-Ray Center

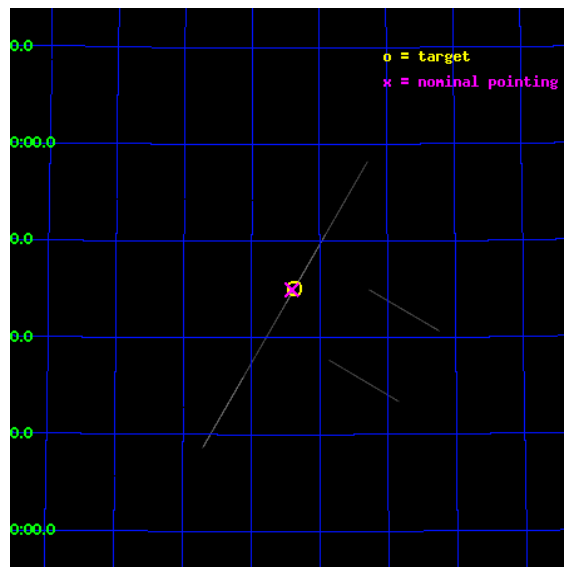
L2 Processing Date : Apr 19 2012

## 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

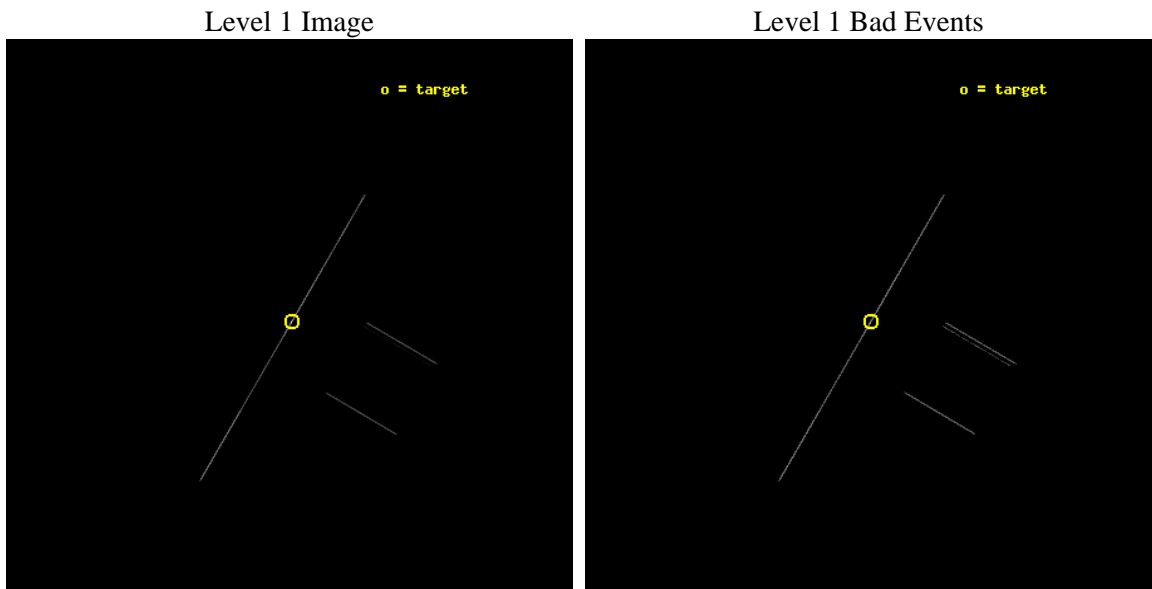
seq_num	500788	Sequence number
obs_id	7659	Observation id
title	Tiny Hiccups To Titanic Explosions: Tackling Transients in Anomalous X-ray Pulsars	Proposal title
observer	Professor Victoria Kaspi	Principal investigator
object	4U 0142+61	Source name
ra_targ	26.592917	Observer's specified target RA [deg]
dec_targ	61.751944	Observer's specified target Dec [deg]
ra_nom	26.601939135353	Nominal RA [deg]
dec_nom	61.749634286426	Nominal Dec [deg]
roll_nom	300.21983782634	Nominal Roll [deg]
revision	3	Processing version of data
ontime	20179.25	Sum of GTIs [s]
livetime	20100.424804688	Livetime [s]
ontime2	20179.25	Sum of GTIs [s]
ontime3	20179.25	Sum of GTIs [s]
ontime5	20179.25	Sum of GTIs [s]
ontime6	20179.25	Sum of GTIs [s]
ontime7	20179.25	Sum of GTIs [s]
ontime8	20179.25	Sum of GTIs [s]
l2events	794105	Number of level 2 events



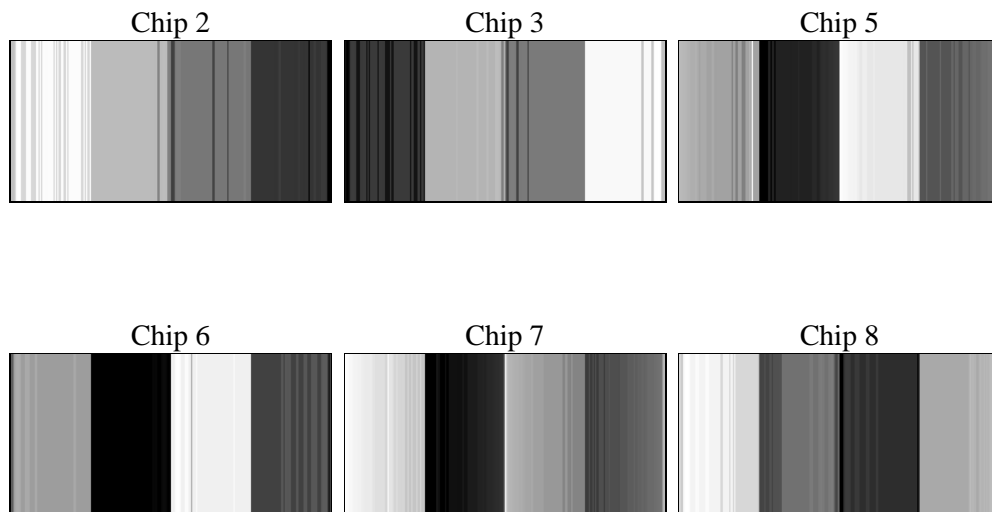
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	20000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	20179.25	Sum of GTIs [s]
caldbver	4.4.9	&#160	ontime2	20179.25	Sum of GTIs [s]
date	2012-04-19T15:19:57	Date and time of file creation	ontime3	20179.25	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	20179.25	Sum of GTIs [s]
			ontime6	20179.25	Sum of GTIs [s]
			ontime7	20179.25	Sum of GTIs [s]
			ontime8	20179.25	Sum of GTIs [s]
			l1events	978948	Number of level 1 events

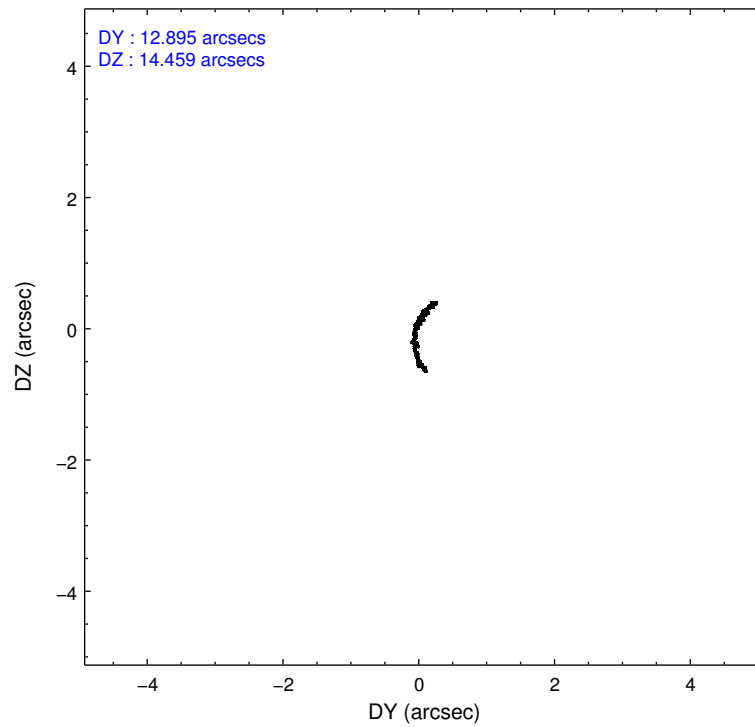
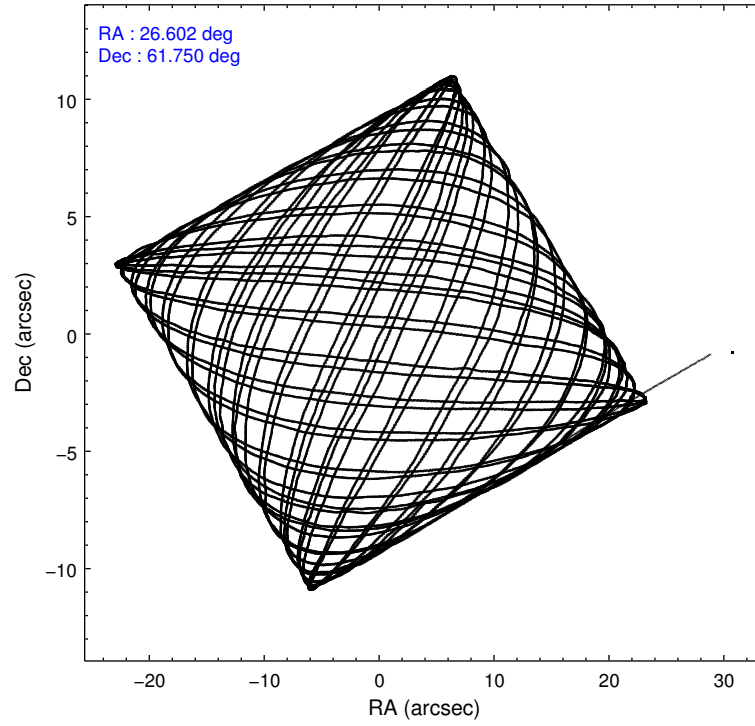
### 2.1.4 Events

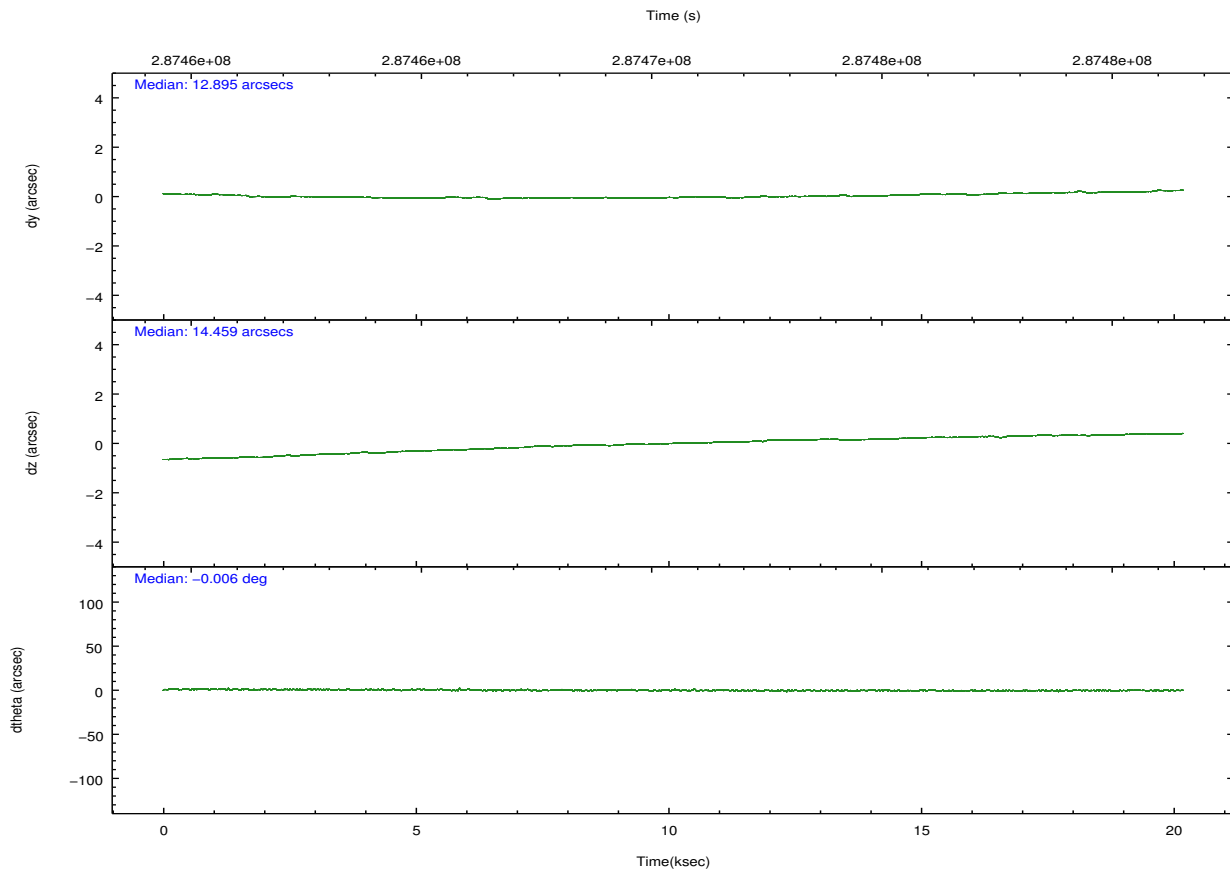
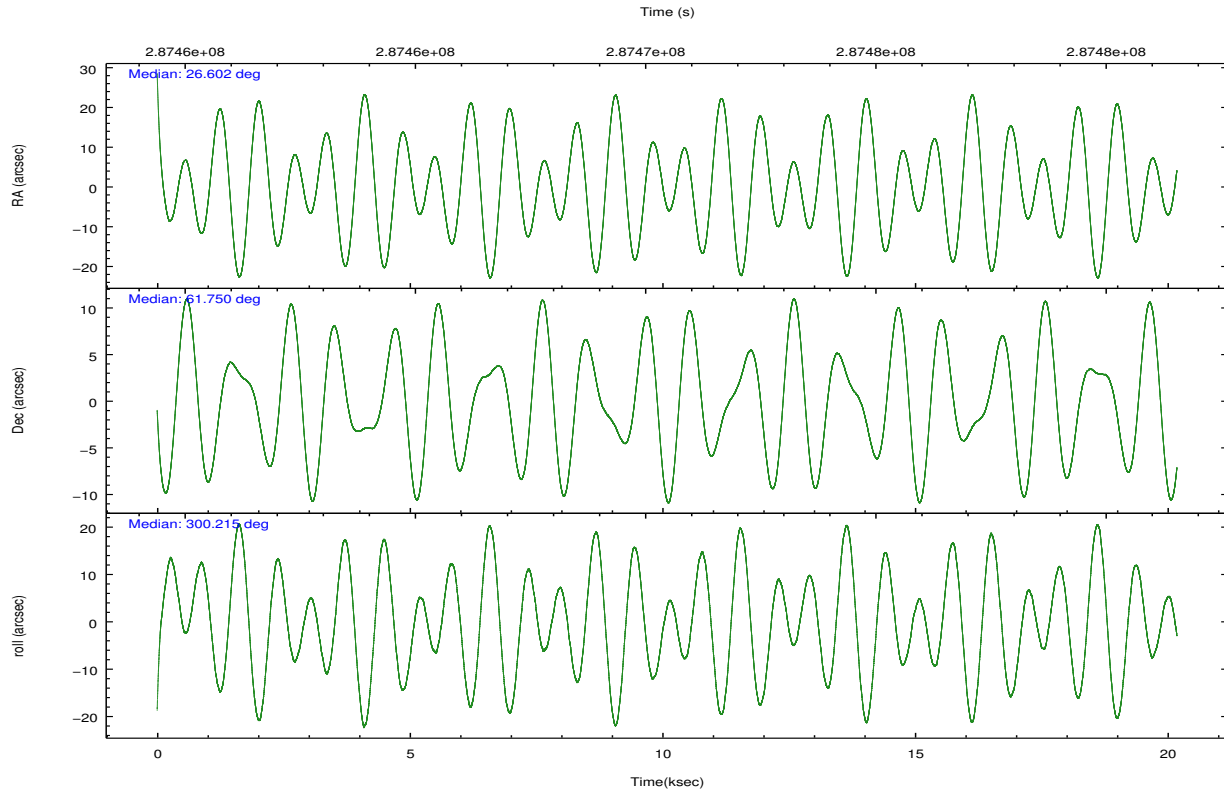
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	40125	43419	160550	49430	596171	89253	grade 0 events	4805	4955	11273	5586	122024	15839
rejected events	9000	9722	24527	10171	45109	14995		11%	11%	7%	11%	20%	17%
rejected %	22%	22%	15%	20%	7%	16%	grade 1 events	194	184	300	167	3760	334
								0%	0%	0%	0%	0%	0%
							grade 2 events	12565	13400	45349	17709	153722	24165
								31%	30%	28%	35%	25%	27%
							grade 3 events	4173	4815	3641	4409	58002	8654
								10%	11%	2%	8%	9%	9%
							grade 4 events	4353	4157	3506	4256	56327	8372
								10%	9%	2%	8%	9%	9%
							grade 5 events	7310	8164	18049	8697	34645	11921
								18%	18%	11%	17%	5%	13%
							grade 6 events	6725	7744	78432	8606	167691	19968
								16%	17%	48%	17%	28%	22%
							grade 7 events	0	0	0	0	0	0
								0%	0%	0%	0%	0%	0%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	CC33_FAINT	CC33_FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	26.551410	26.6019391353527	Subarray requested	NONE	NONE
[deg] Pointing Dec	61.762899	61.74963428642636	Alternating exposures requested	N	N
[deg] Pointing Roll	300.107726	300.2198378263393	[s] Primary exposure time	0.000000	0
[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)	287460557.184000	287459582.68176			
Observation start date	2007-02-10T02:08:12	2007-02-10T01:53:02			
[s] Observation end time (MET)	287480557.184000	287481823.64531			
Observation end date	2007-02-10T07:41:32	2007-02-10T08:03:43			
Read mode	CONTINUOUS	CONTINUOUS			

## 2.3 Aspect



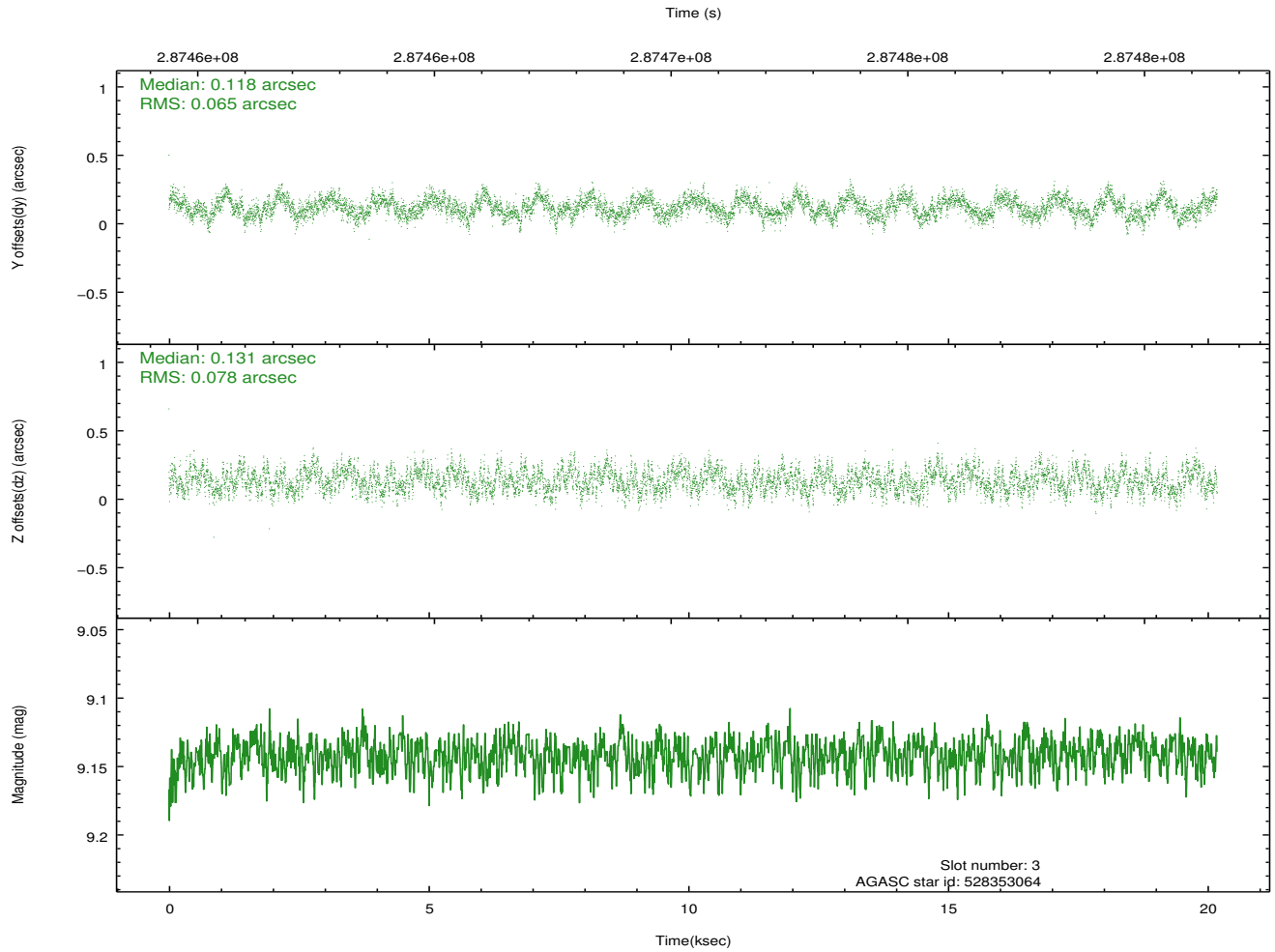
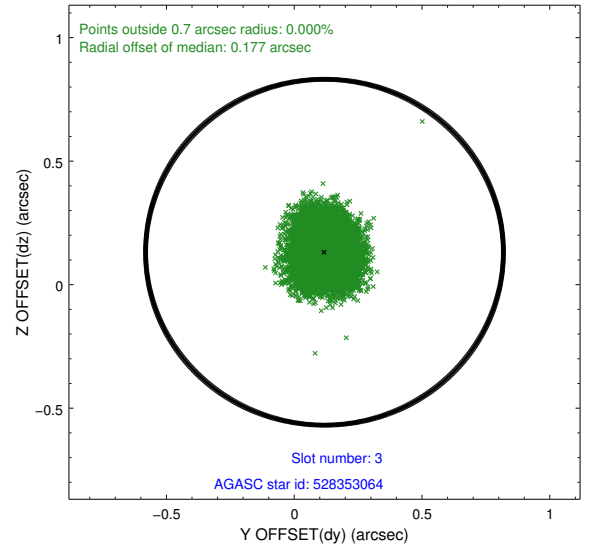
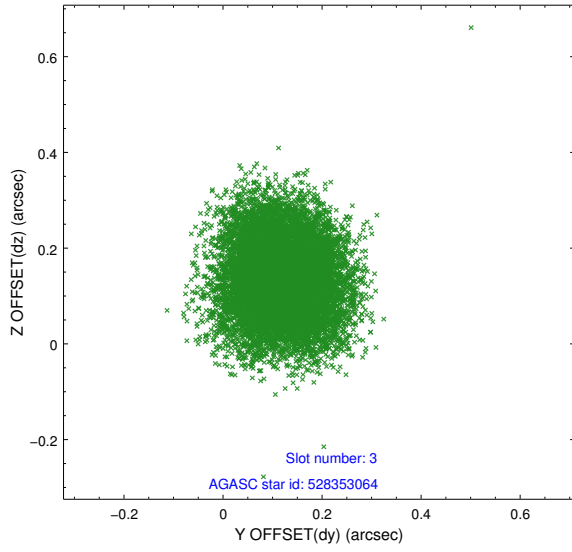


### Slot Statistics

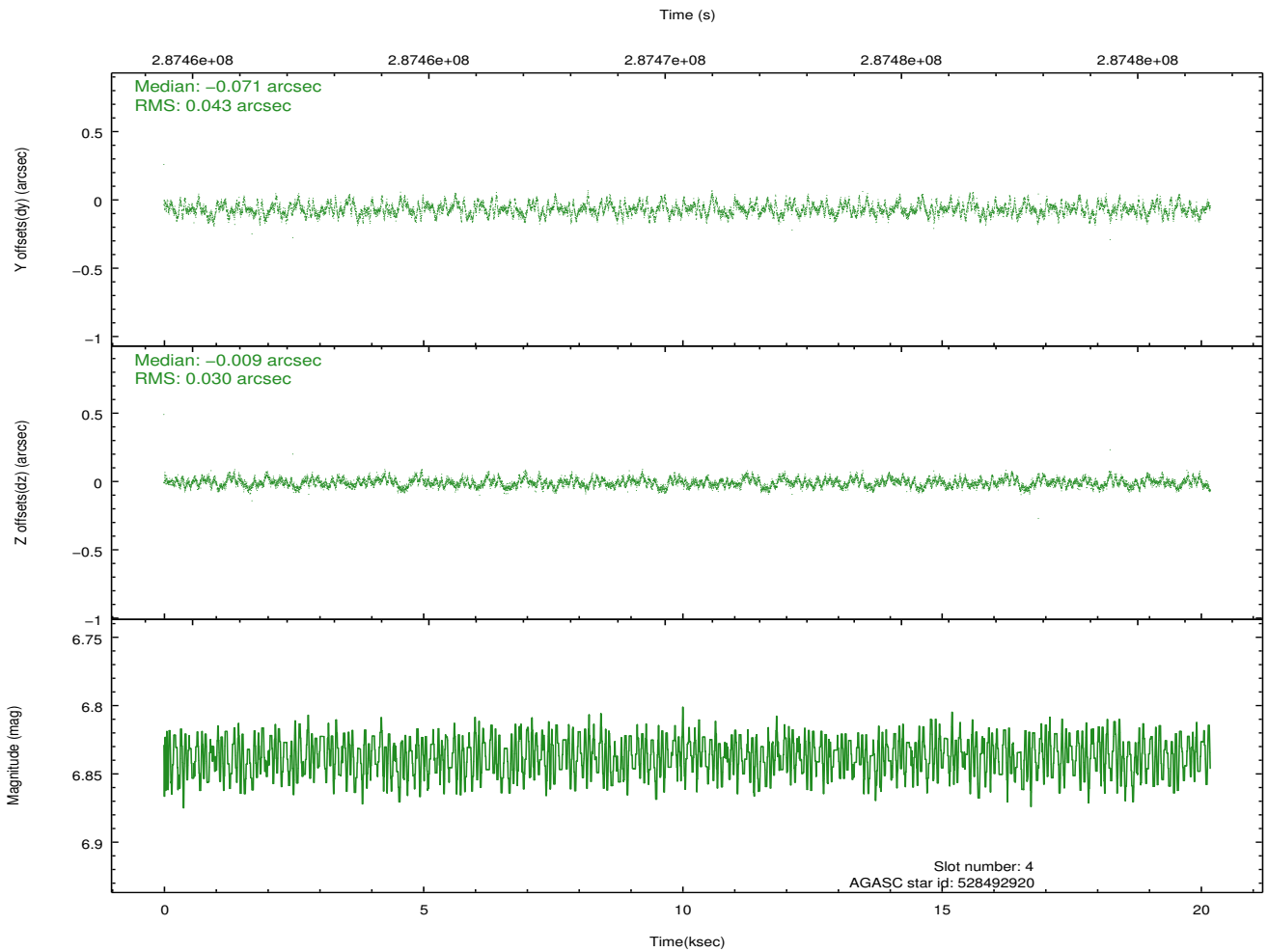
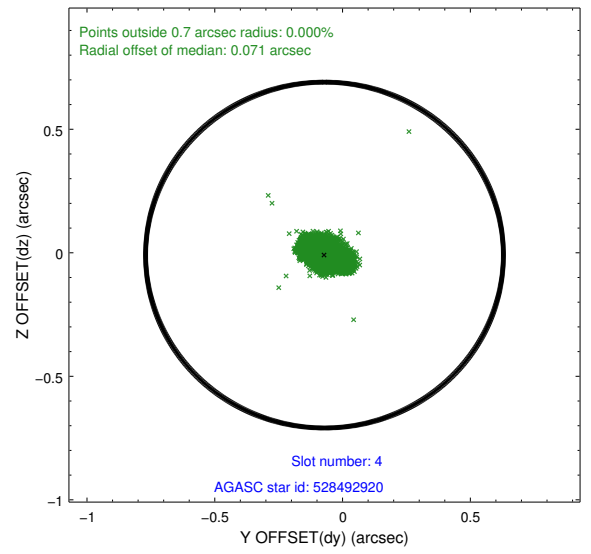
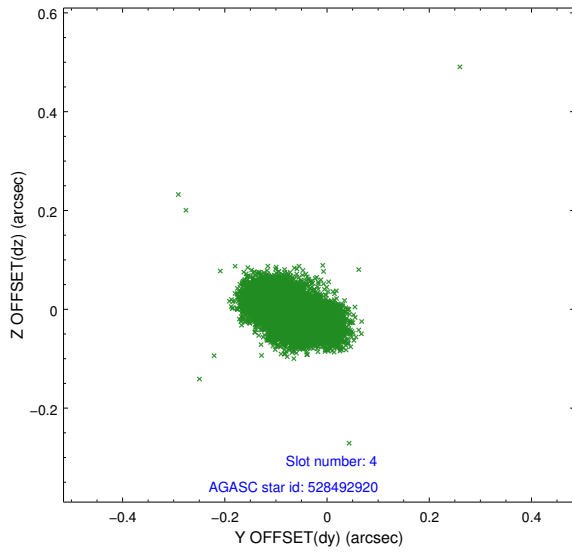
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.18	4922	0.084	-0.054	0.012	0.020	0.000000	0.000000	930.31	-1731.45
1	FID	ACIS-S-5	7.23	4923	-0.144	0.054	0.010	0.015	0.000000	0.000000	-1818.84	165.99
2	FID	ACIS-S-6	7.34	4922	0.039	0.012	0.019	0.029	0.000000	0.000000	395.58	810.15
3	GUIDE	528353064	9.14	9841	0.118	0.131	0.110	0.170	25.140625	61.635543	-835.71	-2303.63
4	GUIDE	528492920	6.84	9846	-0.071	-0.009	0.055	0.092	26.048398	61.849802	-701.89	-580.44
5	GUIDE	529024856	8.79	9842	-0.058	-0.010	0.080	0.125	26.625085	62.150671	-1145.48	807.66
6	GUIDE	529029216	9.38	9835	0.037	-0.041	0.095	0.155	26.467549	62.103625	-1131.74	493.61
7	GUIDE	528494712	7.16	9846	-0.029	-0.072	0.048	0.081	26.522817	60.993527	2371.29	-1432.10

## 2.4 Star Slots

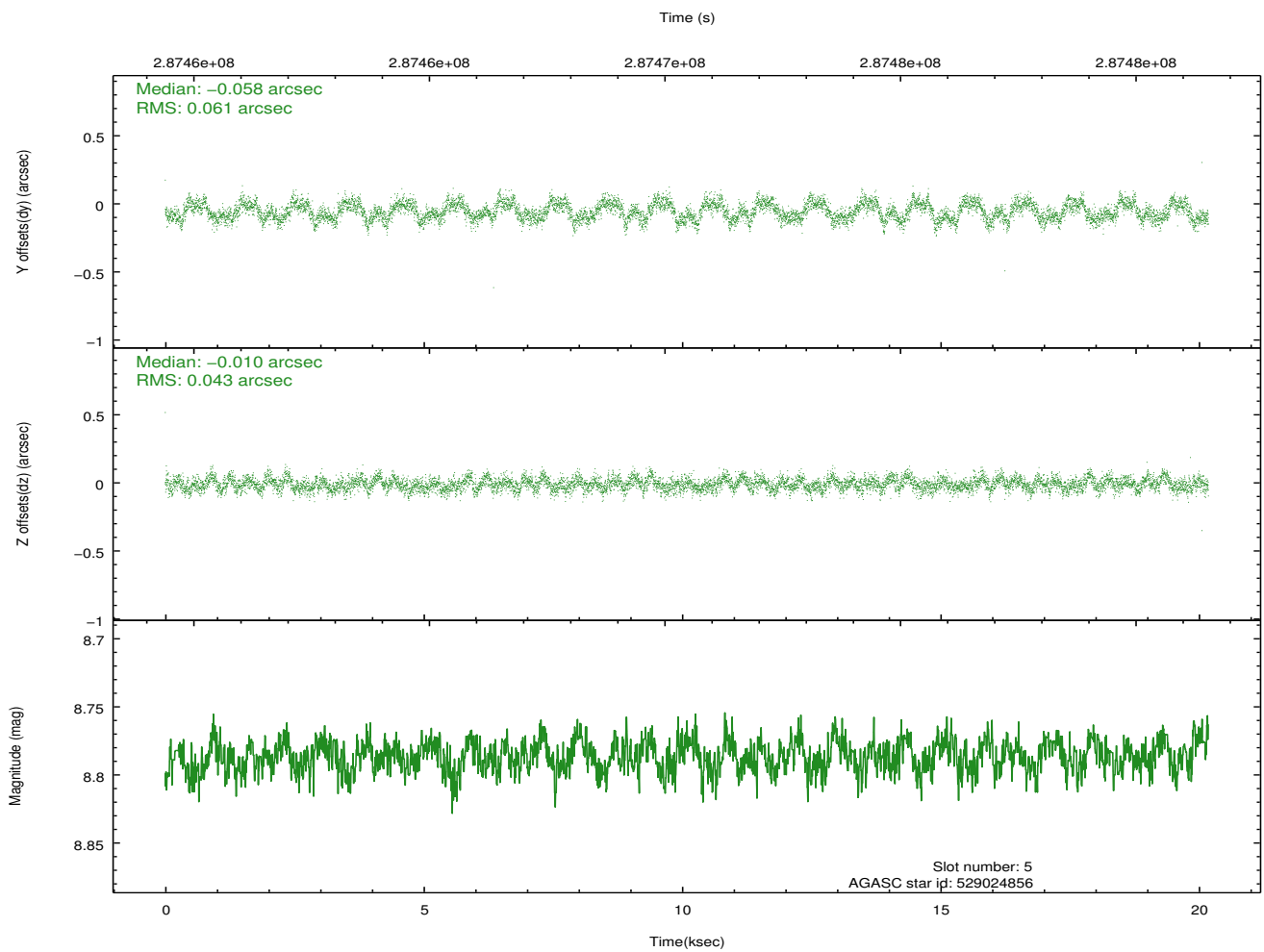
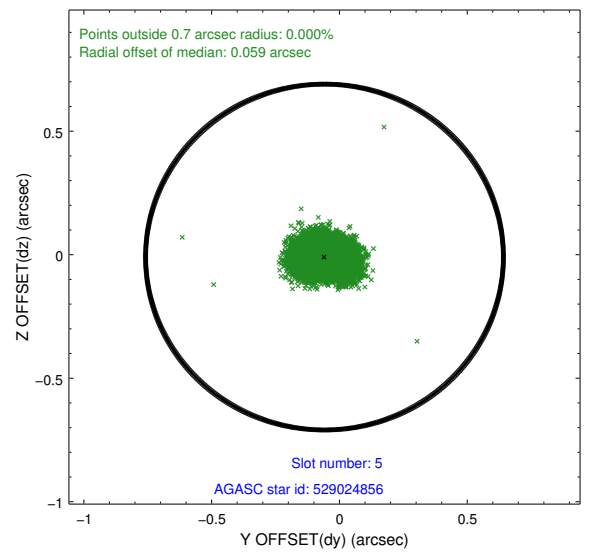
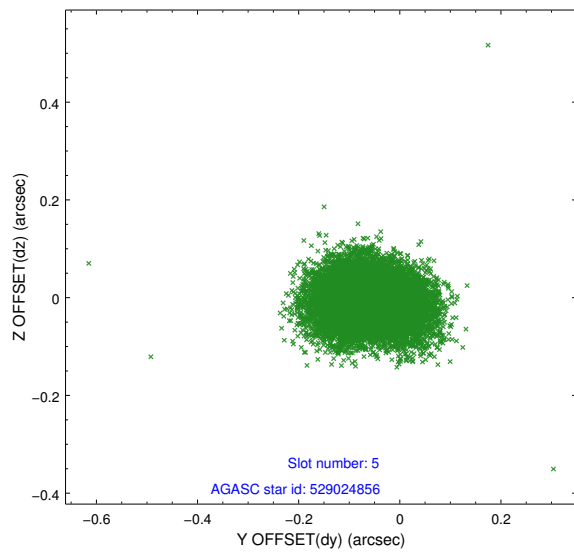
### 2.4.1 Slot 3



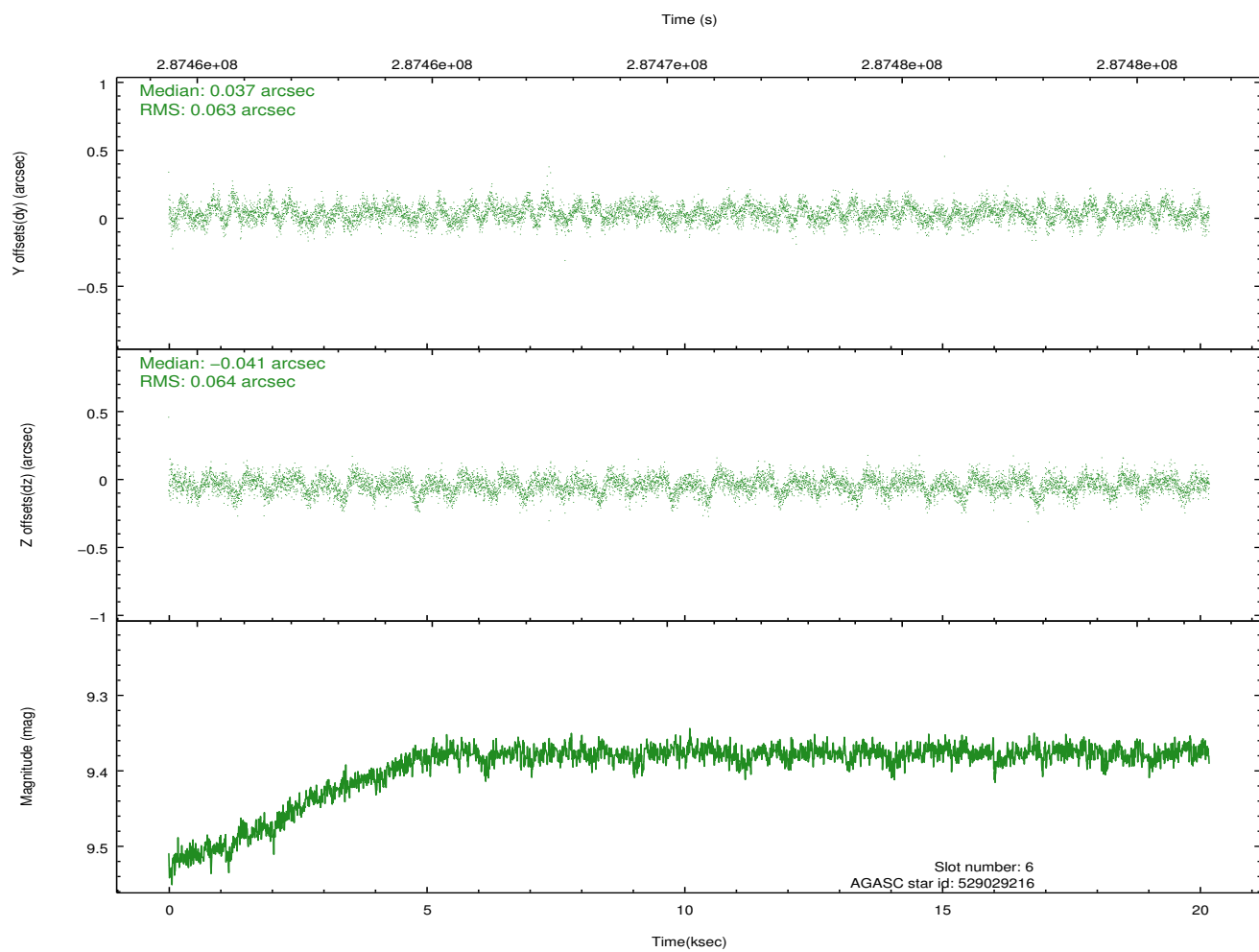
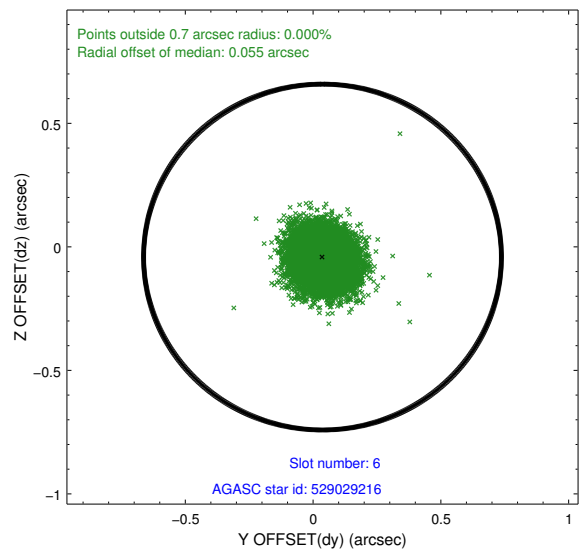
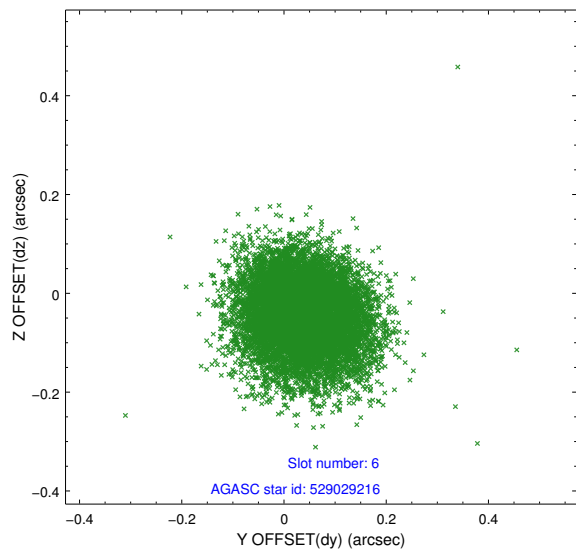
### 2.4.2 Slot 4



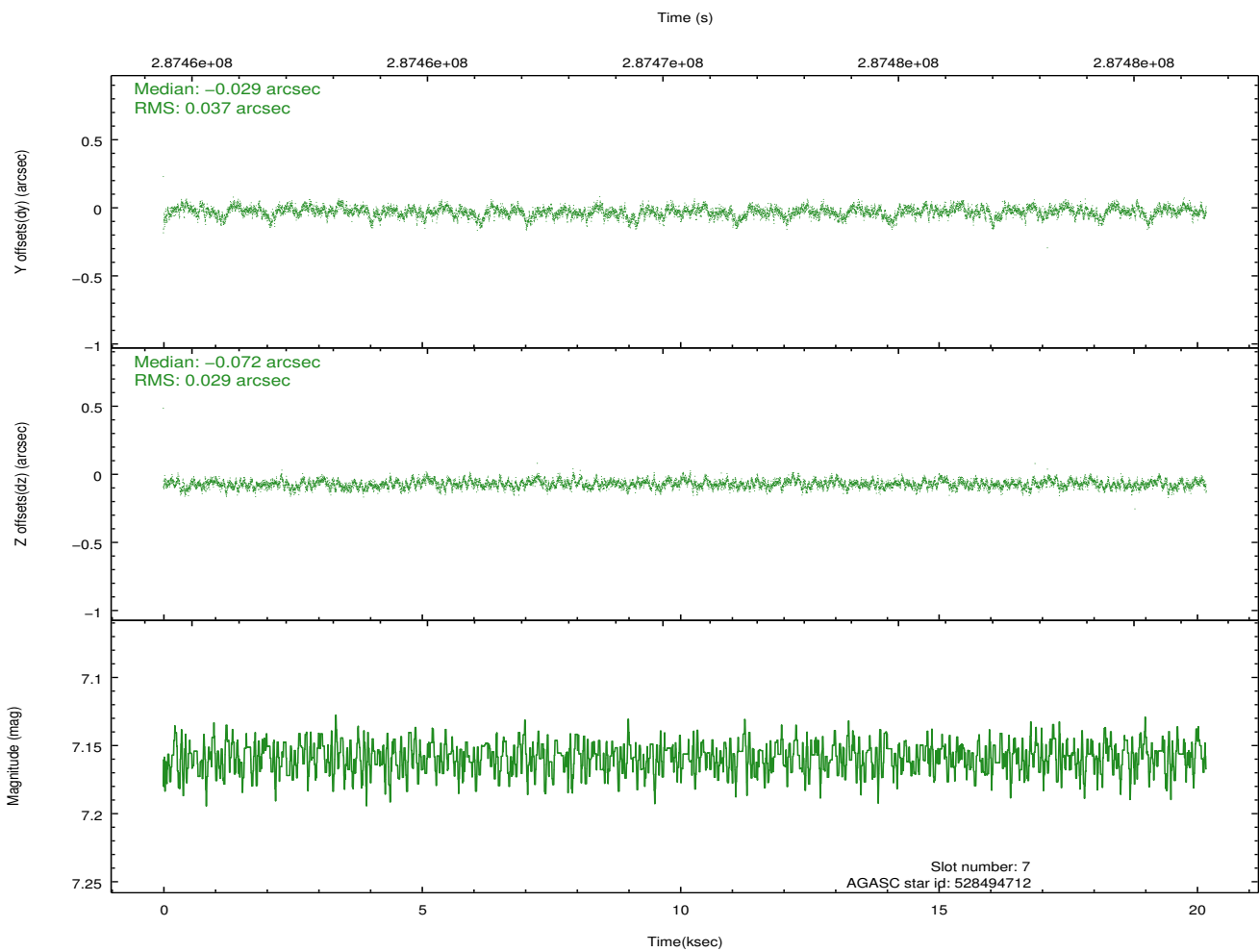
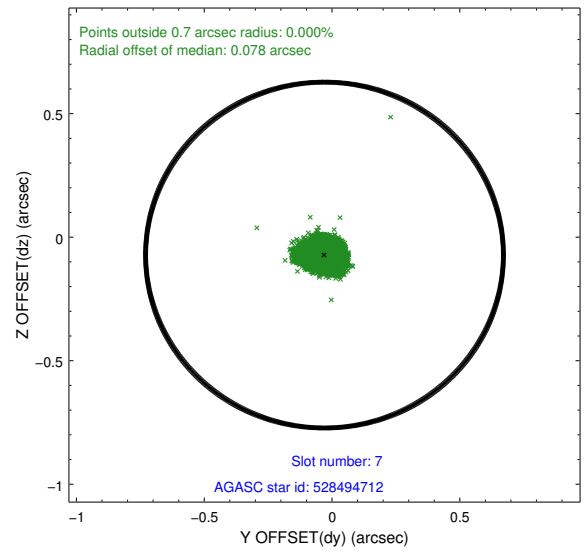
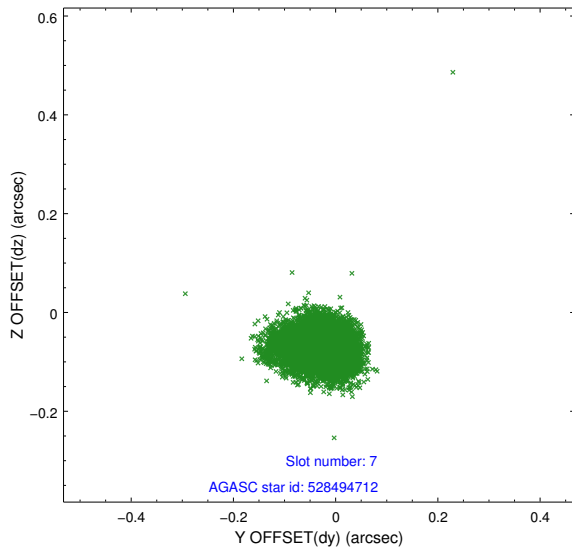
### 2.4.3 Slot 5



## 2.4.4 Slot 6

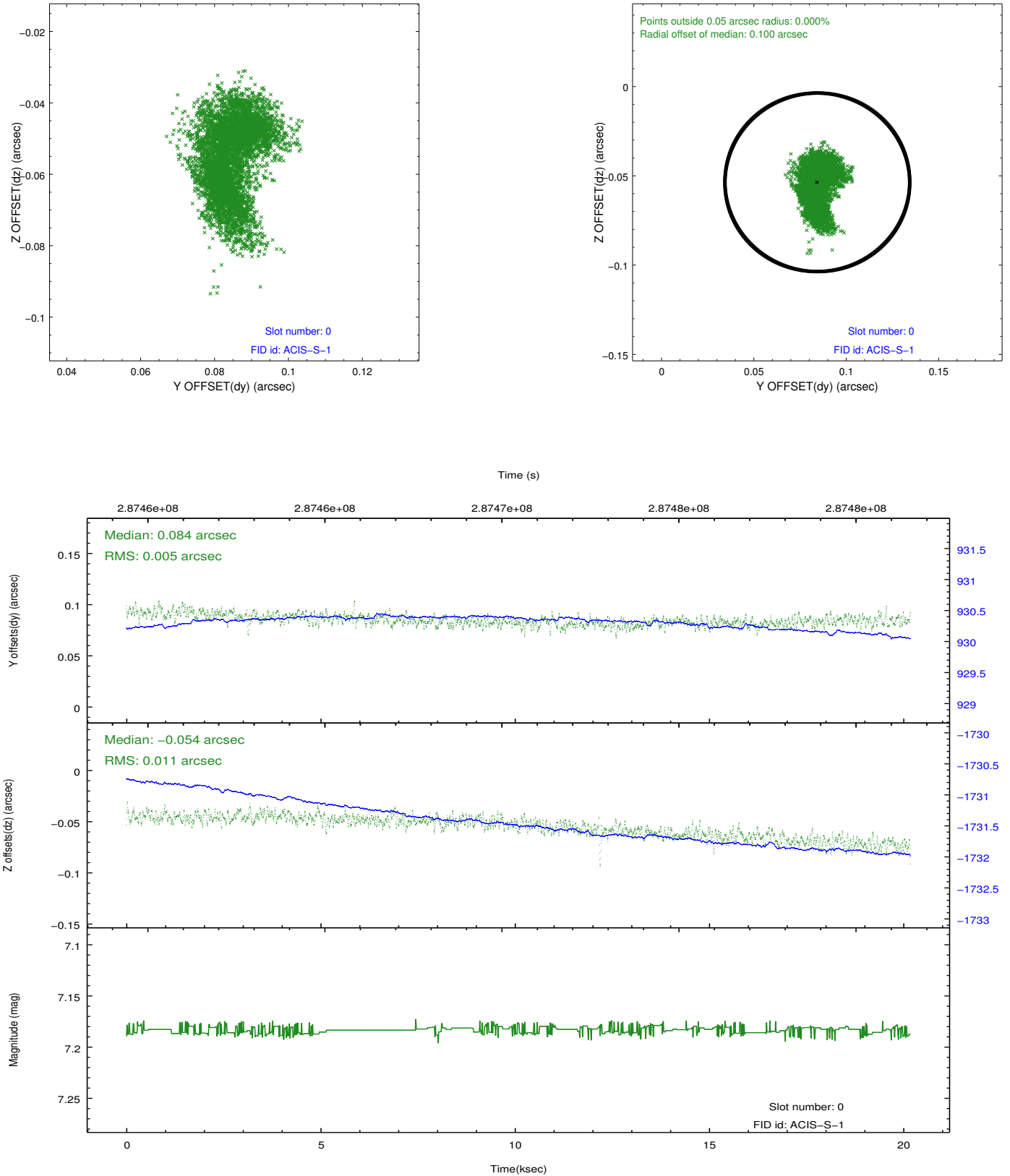


## 2.4.5 Slot 7

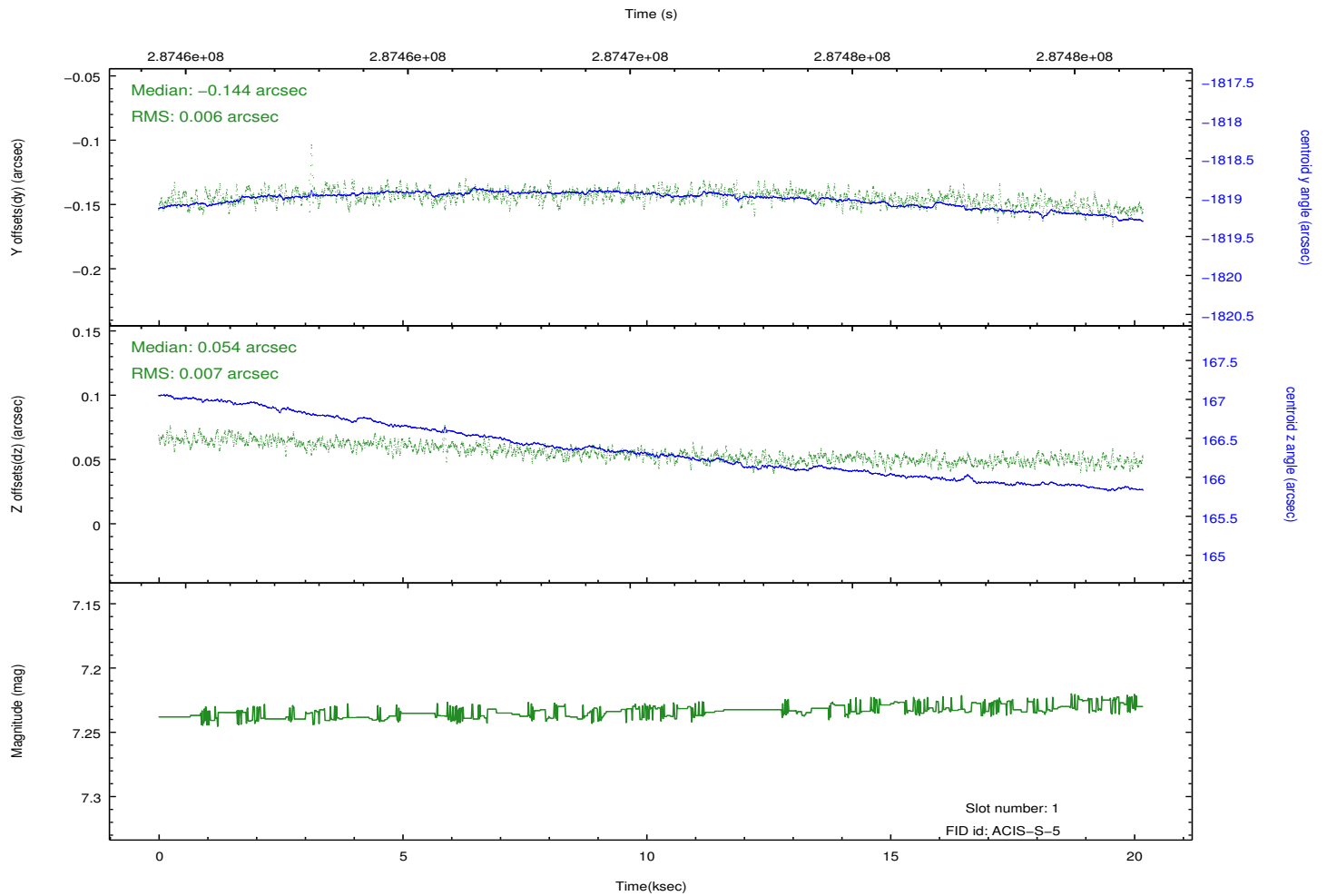
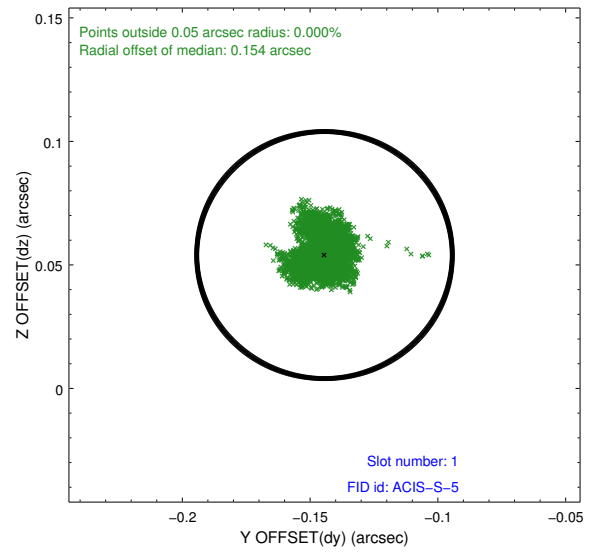
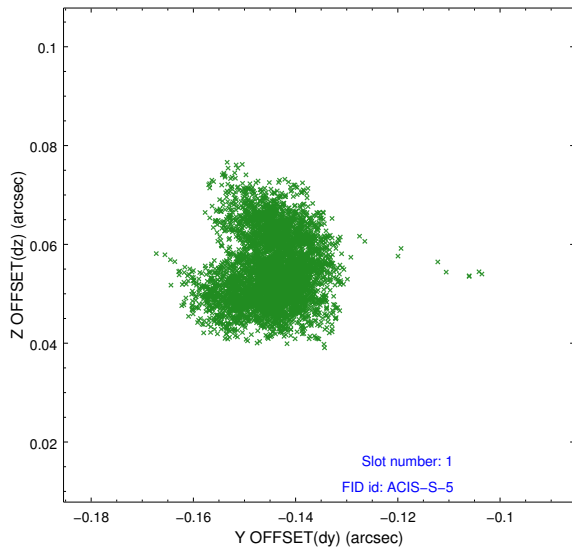


## 2.5 FID Slots

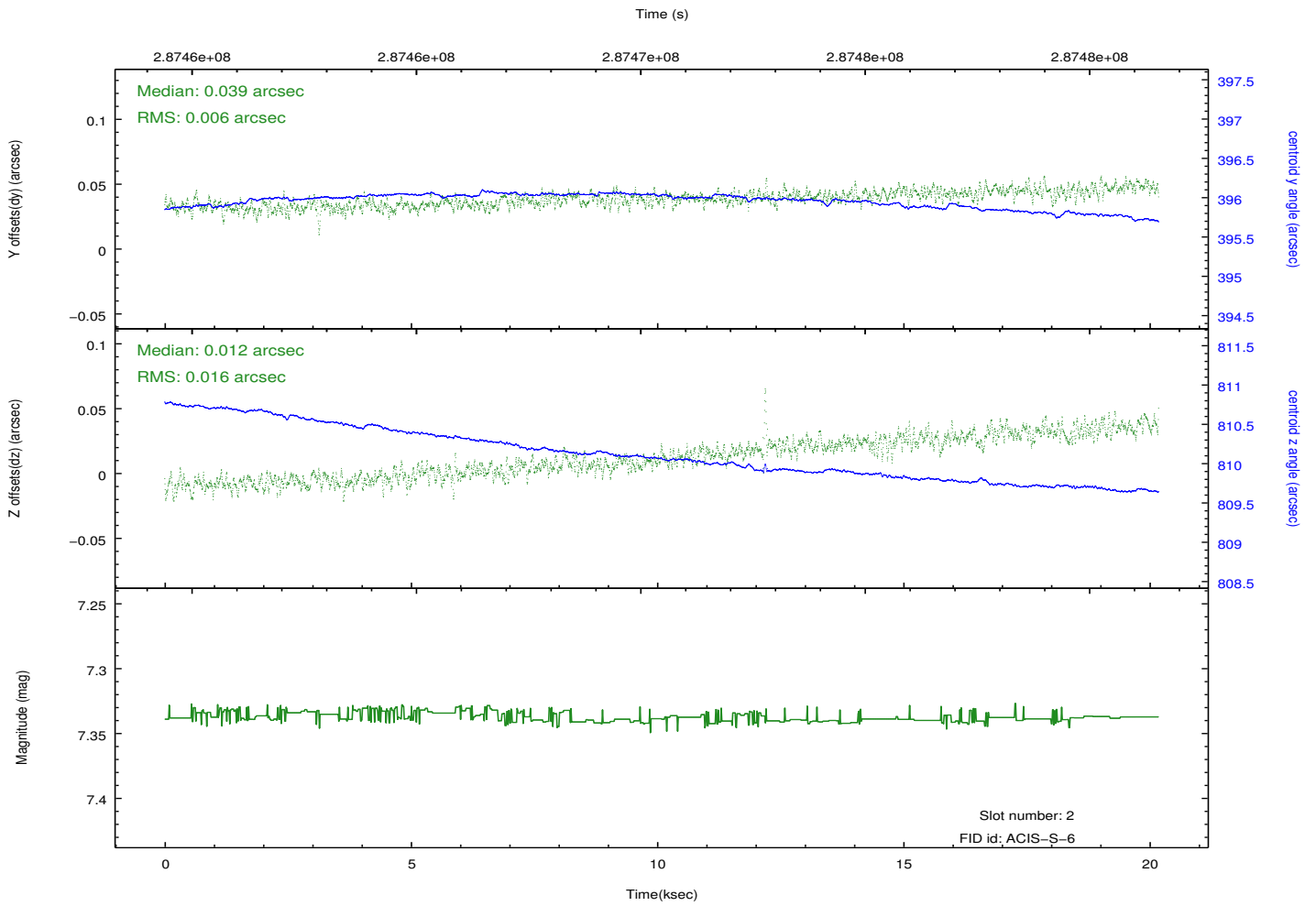
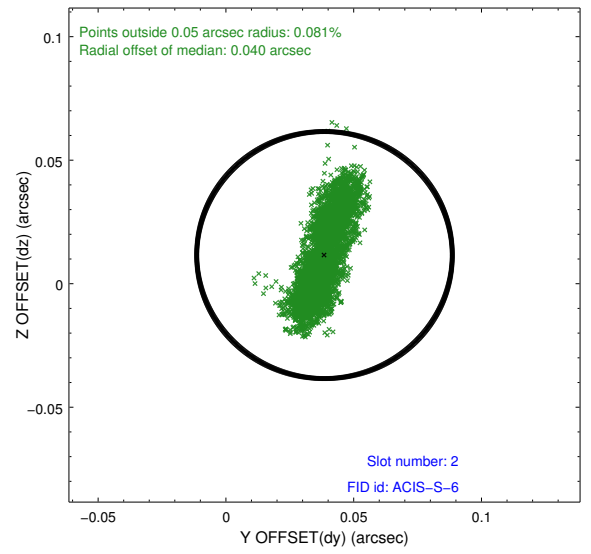
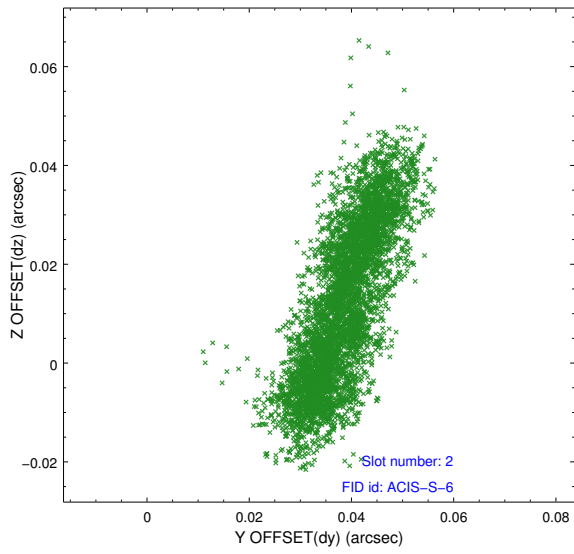
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



# A Summary

## A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.04.20
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.17925

## A.2 Comments