

# V&V Reference Report

## L2 ASCDS Version : 8.5.1

Observation 5534 - L2 Version 3  
Chandra X-Ray Center

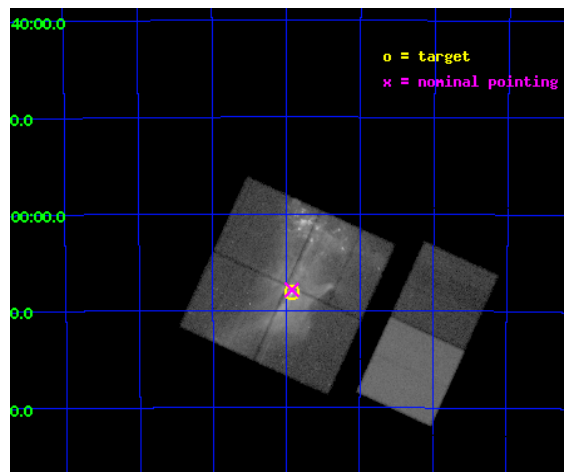
L2 Processing Date : Dec 15 2012

## 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

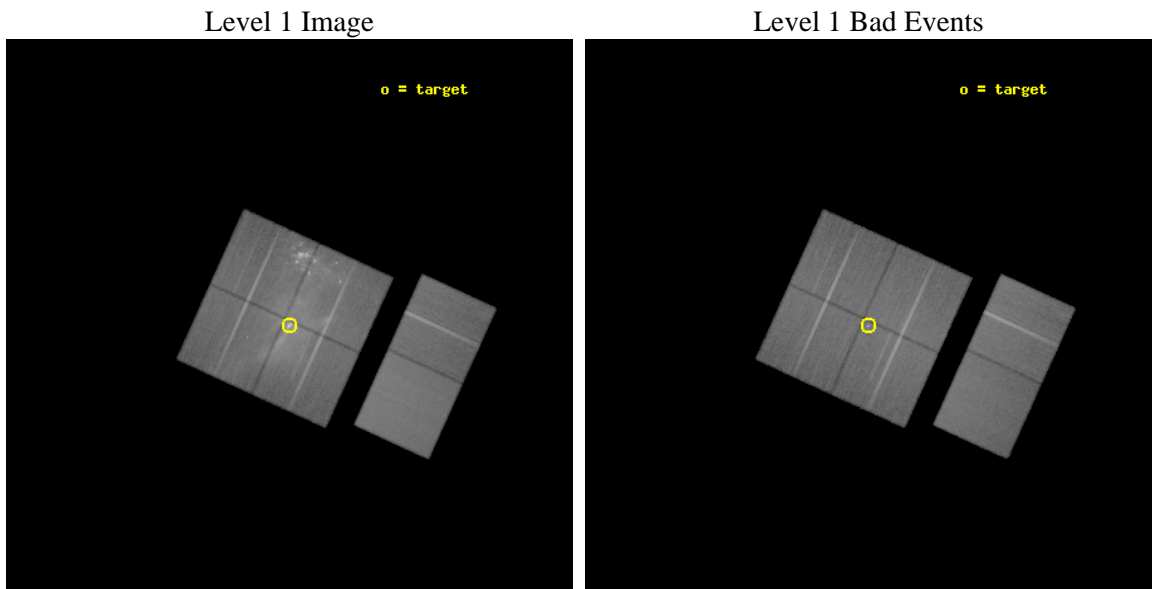
seq_num	500528	Sequence number
obs_id	5534	Observation id
title	The Structure and Composition of Pulsar Winds and their Nebulae	Pr
observer	Dr. Patrick Slane	Principal investigator
object	PSR B1509-58	Source name
dtycycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	228.481667	Observer's specified target RA [deg]
dec_targ	-59.135806	Observer's specified target Dec [deg]
ra_nom	228.48141829624	Nominal RA [deg]
dec_nom	-59.131150588383	Nominal Dec [deg]
roll_nom	114.49710947421	Nominal Roll [deg]
revision	3	Processing version of data
ontime	50127.999813259	Sum of GTIs [s]
livetime	49493.248896165	Livetime [s]
ontime0	50124.758823037	Sum of GTIs [s]
ontime1	50127.999813259	Sum of GTIs [s]
ontime2	50121.517902642	Sum of GTIs [s]
ontime3	50127.999813259	Sum of GTIs [s]
ontime6	50124.758823037	Sum of GTIs [s]
ontime7	50127.999813259	Sum of GTIs [s]
l2events	894319	Number of level 2 events



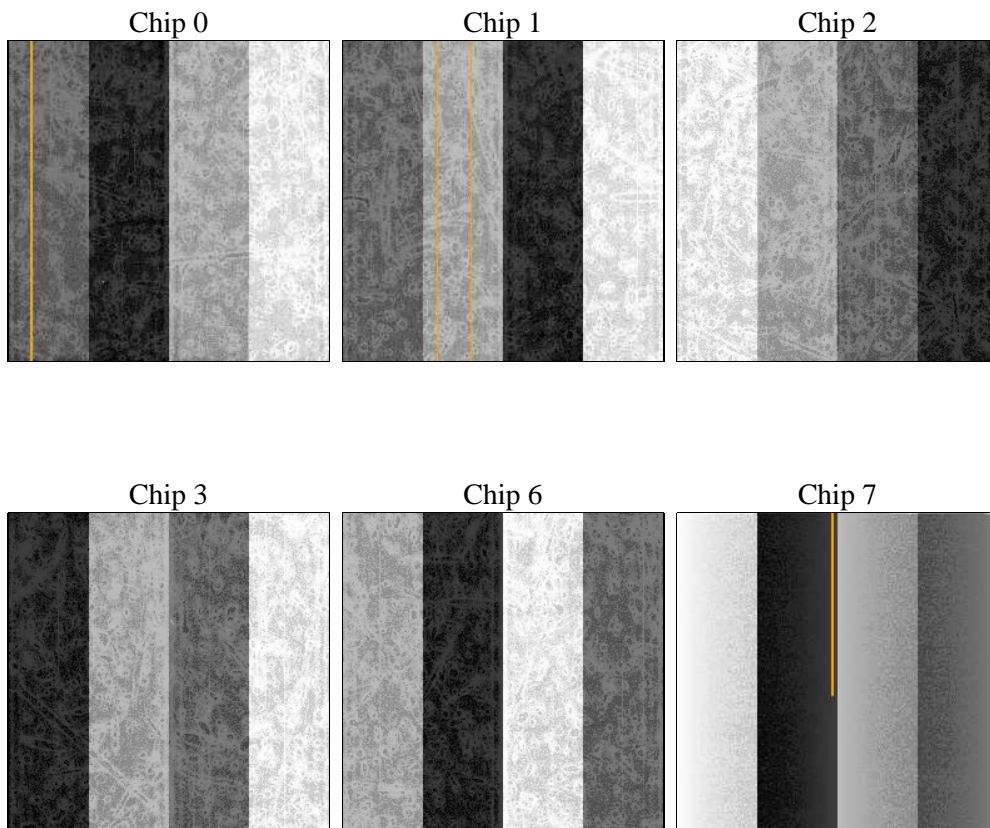
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	50000.000000	[s] Scheduled observation exposure time
ascdsver	8.5.1	Processing system revision	ontime	50127.999813259	Sum of GTIs [s]
caldbver	4.5.5	&#160	ontime0	50124.758823037	Sum of GTIs [s]
date	2012-12-15T07:07:40	Date and time of file creation	ontime1	50127.999813259	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	50121.517902642	Sum of GTIs [s]
			ontime3	50127.999813259	Sum of GTIs [s]
			ontime6	50124.758823037	Sum of GTIs [s]
			ontime7	50127.999813259	Sum of GTIs [s]
			l1events	2897682	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	467746	424083	556014	533004	400051	516784	grade 0 events	117603	74912	152287	132513	21831	20365
rejected events	302175	304280	345812	336710	349467	300436		25%	17%	27%	24%	5%	3%
rejected %	64%	71%	62%	63%	87%	58%	grade 1 events	622	467	993	2628	211	507
								0%	0%	0%	0%	0%	0%
							grade 2 events	21945	19154	26878	27092	10595	44108
								4%	4%	4%	5%	2%	8%
							grade 3 events	8088	7224	9827	10758	4563	19612
								1%	1%	1%	2%	1%	3%
							grade 4 events	8000	7259	10098	10617	4512	19216
								1%	1%	1%	1%	1%	3%
							grade 5 events	15462	16082	15092	20434	18121	49359
								3%	3%	2%	3%	4%	9%
							grade 6 events	10773	11991	12043	16062	9377	114288
								2%	2%	2%	3%	2%	22%
							grade 7 events	285253	286994	328796	312900	330841	249329
								60%	67%	59%	58%	82%	48%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	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	228.525025	228.481418296235	Subarray requested	NONE	NONE
[deg] Pointing Dec	-59.146985	-59.13115058838258	Alternating exposures requested	N	N
[deg] Pointing Roll	114.325866	114.4971094742149	[s] Primary exposure time	0.000000	3.2
[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)	220618049.184000	220616859.84813			
Observation start date	2004-12-28T10:46:25	2004-12-28T10:27:39			
[s] Observation end time (MET)	220668049.184000	220669187.12548			
Observation end date	2004-12-29T00:39:45	2004-12-29T00:59:47			
Read mode	TIMED	TIMED			

## 2.3 Aspect

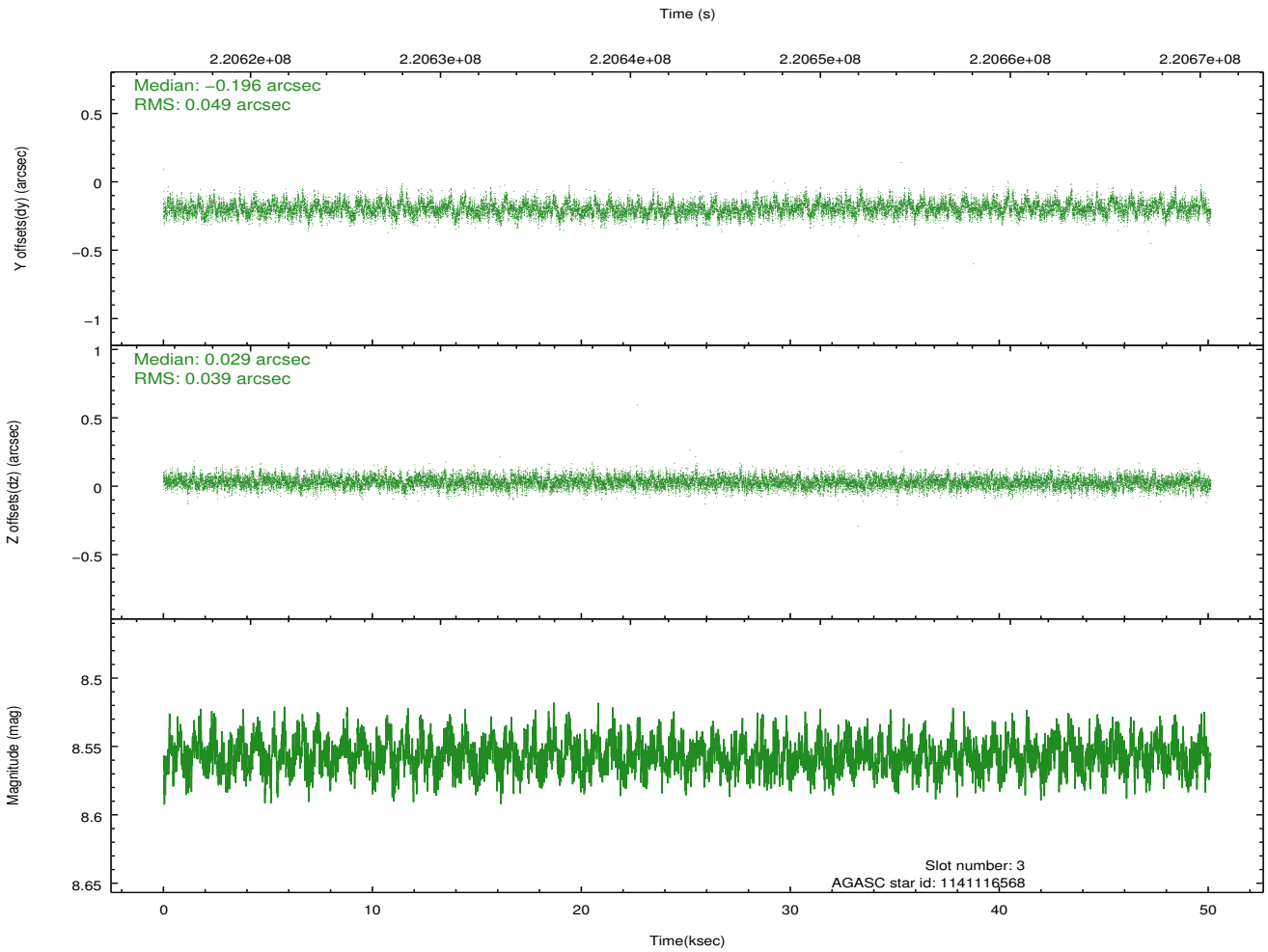
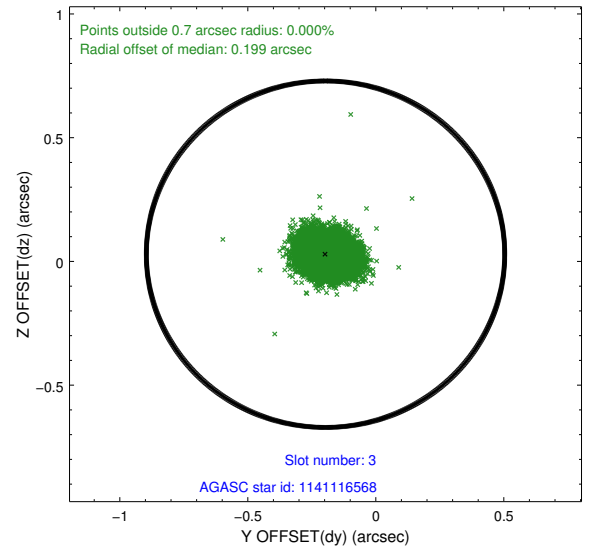
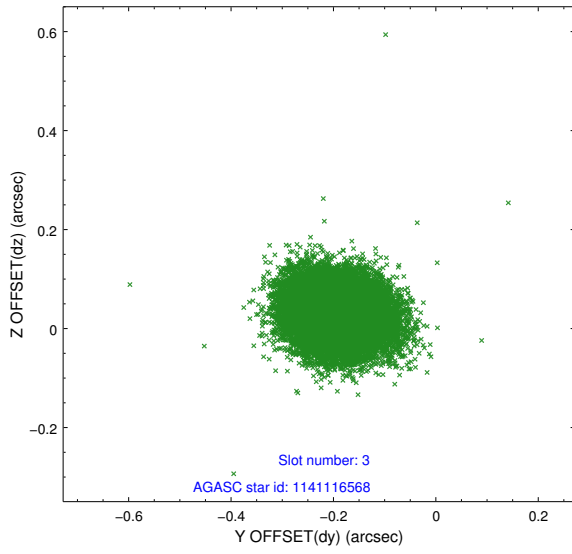


### Slot Statistics

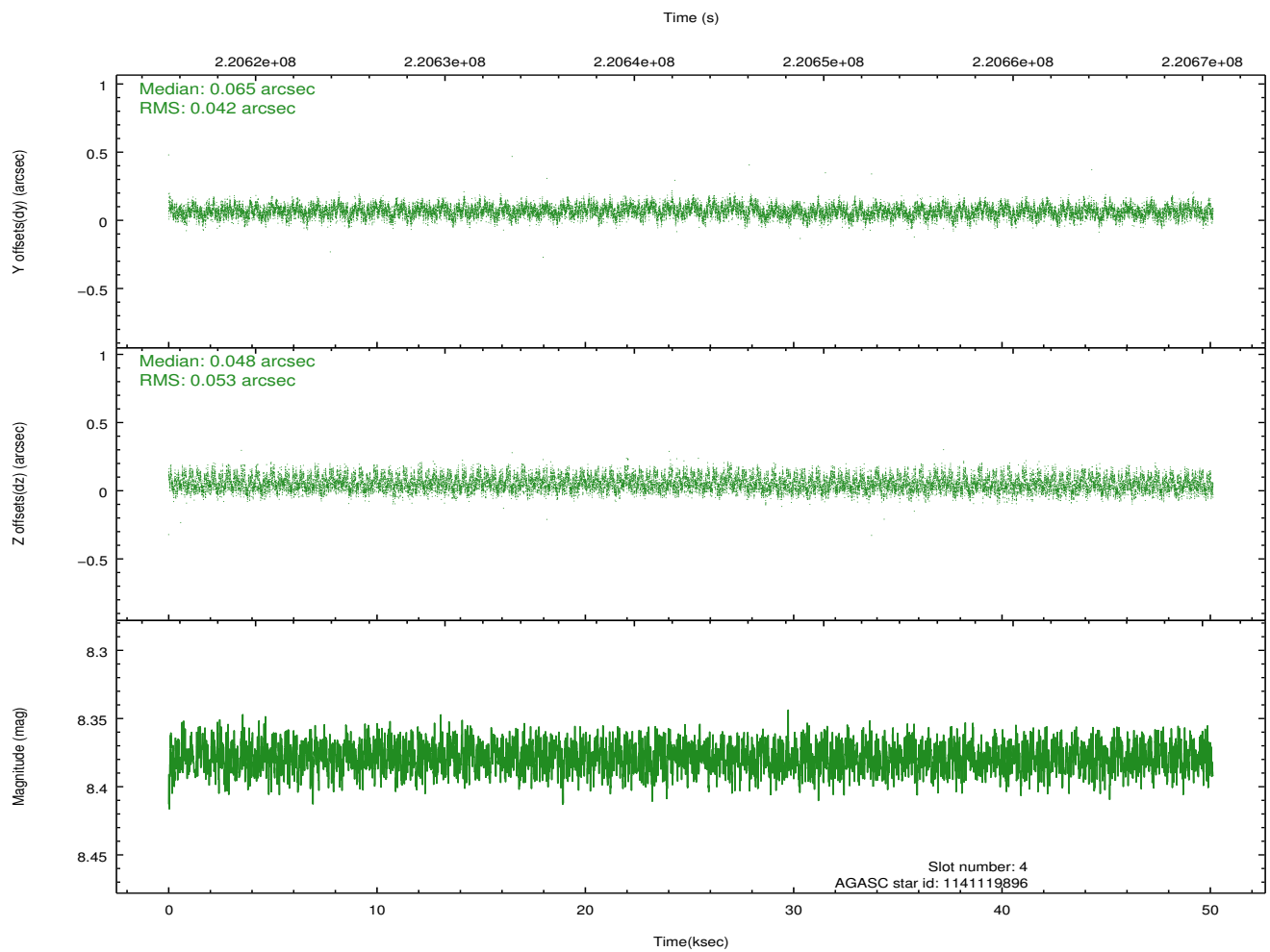
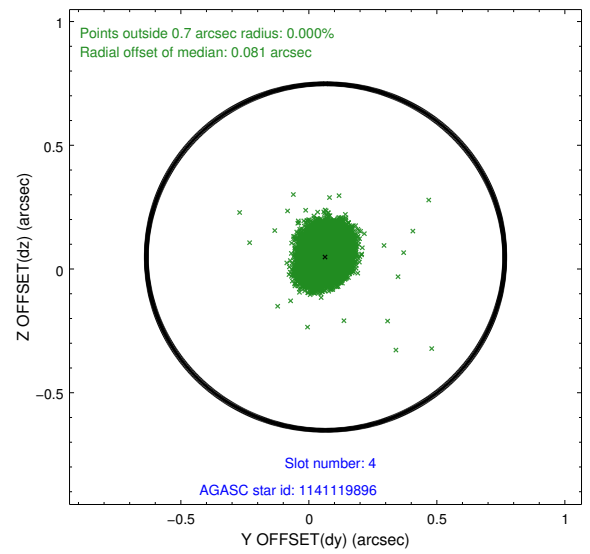
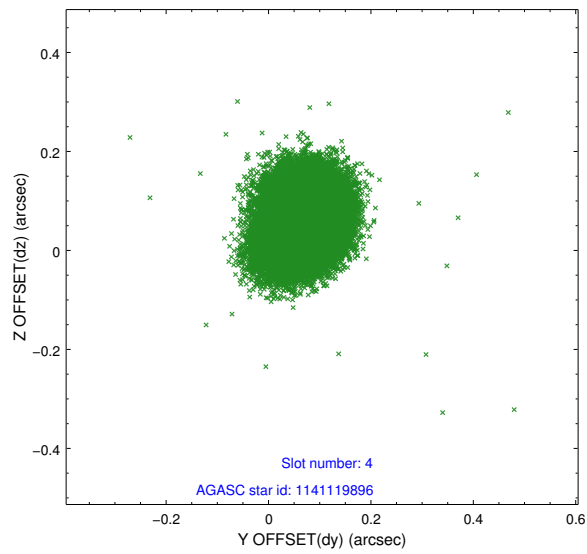
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.24	12228	0.043	-0.020	0.013	0.049	0.000000	0.000000	933.33	-834.91
1	FID	ACIS-I-5	7.23	12228	-0.163	0.060	0.013	0.035	0.000000	0.000000	-1814.95	1062.72
2	FID	ACIS-I-6	7.25	12228	0.030	0.031	0.011	0.028	0.000000	0.000000	398.95	1707.13
3	GUIDE	1141116568	8.56	24447	-0.196	0.029	0.066	0.108	228.578452	-58.520066	2015.41	-1020.76
4	GUIDE	1141119896	8.38	24447	0.065	0.048	0.072	0.116	229.637327	-59.405643	-1702.91	-1466.29
5	GUIDE	1141120488	8.76	24448	-0.025	0.006	0.067	0.109	228.236450	-59.504731	-957.20	1011.54
6	GUIDE	1141118720	9.45	24409	0.149	-0.208	0.106	0.165	227.772709	-59.614232	-975.16	1944.42
7	GUIDE	1141116760	9.45	24437	0.004	0.118	0.097	0.157	229.350077	-58.445284	1653.45	-2452.42

## 2.4 Star Slots

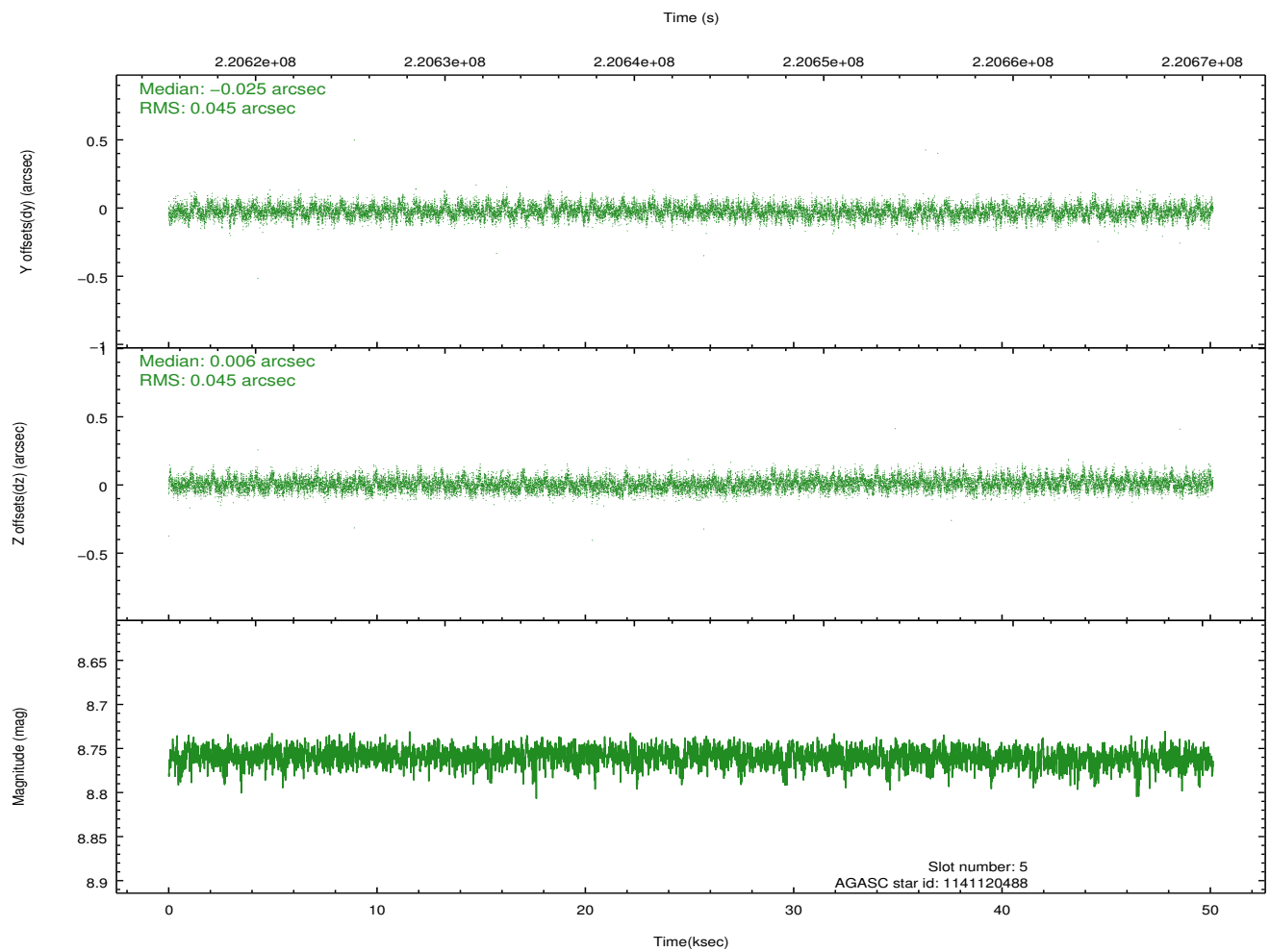
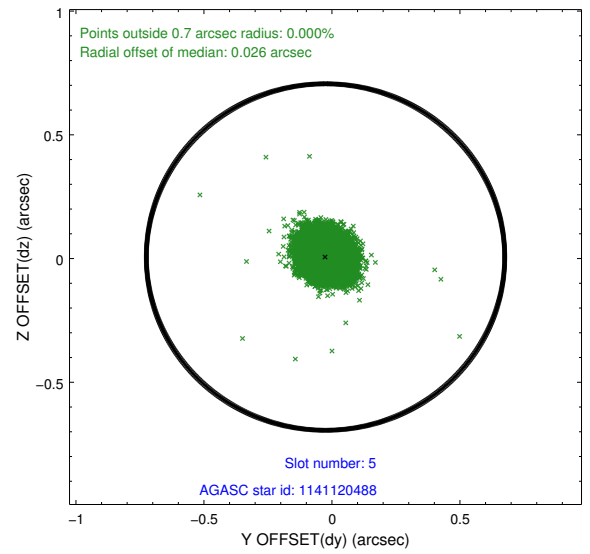
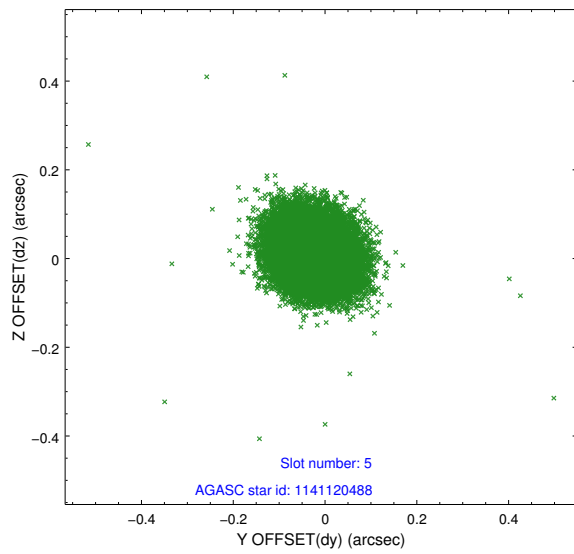
### 2.4.1 Slot 3



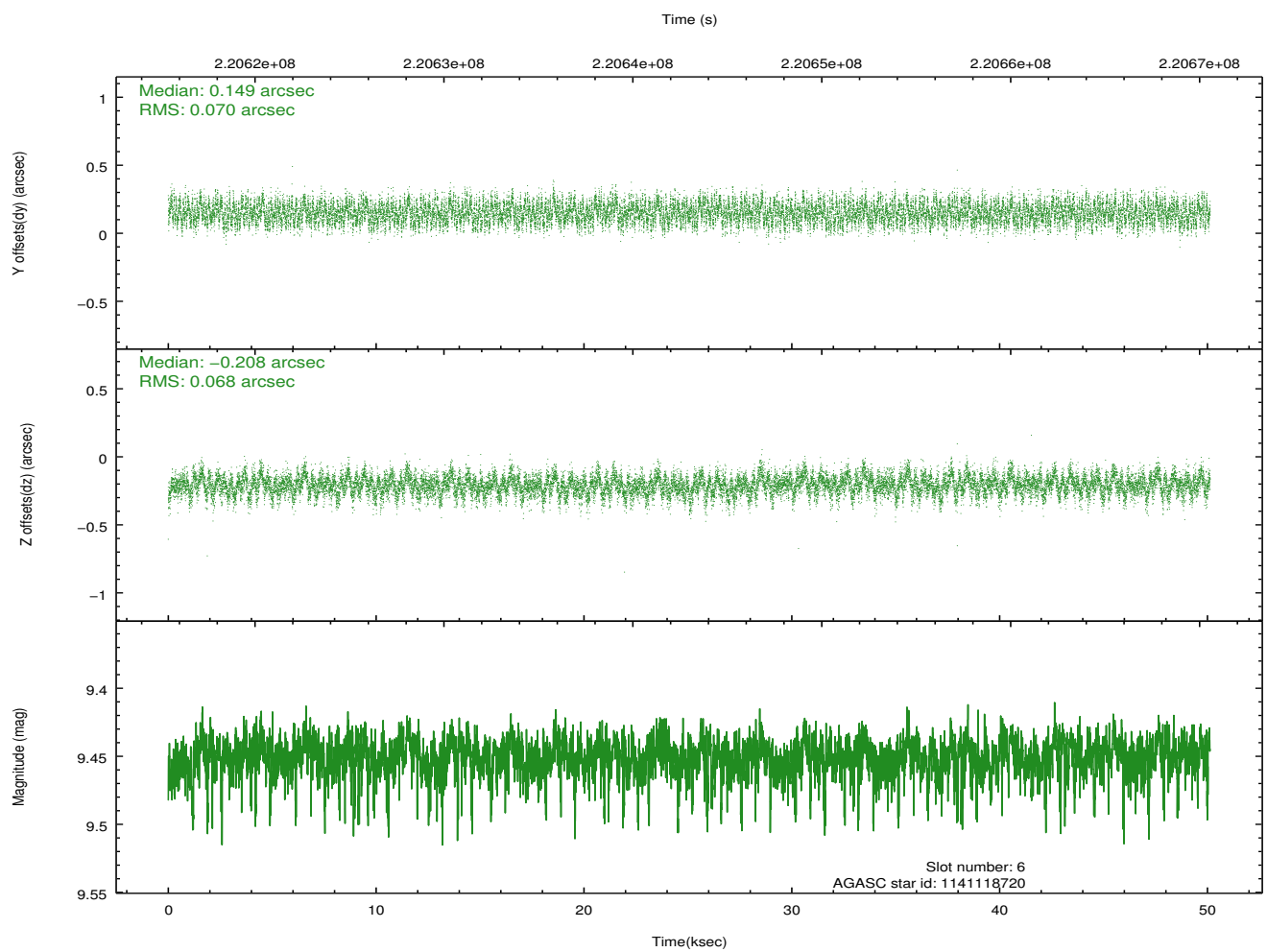
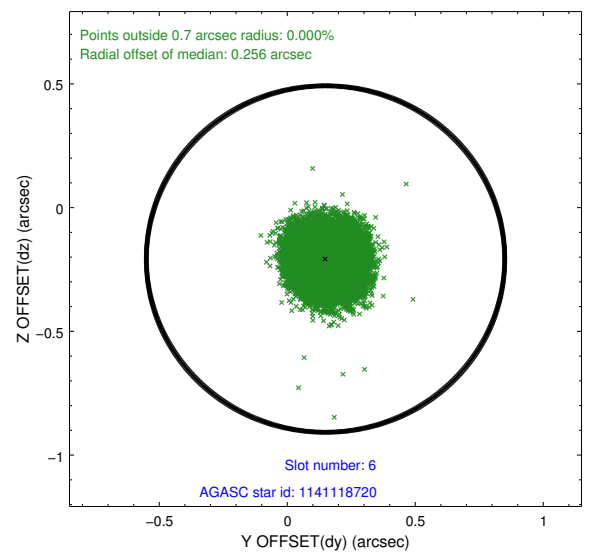
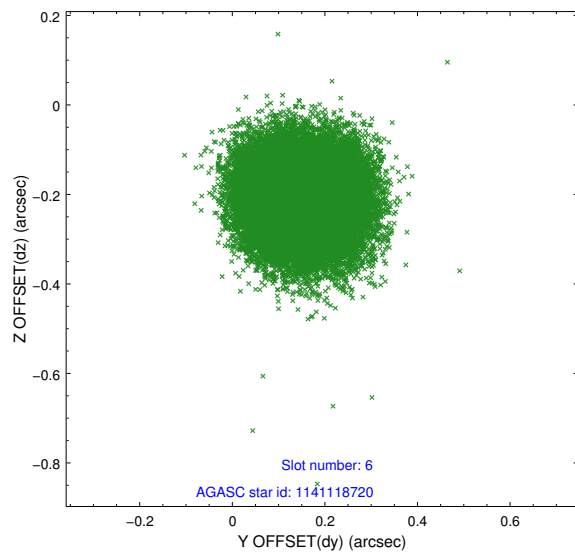
## 2.4.2 Slot 4



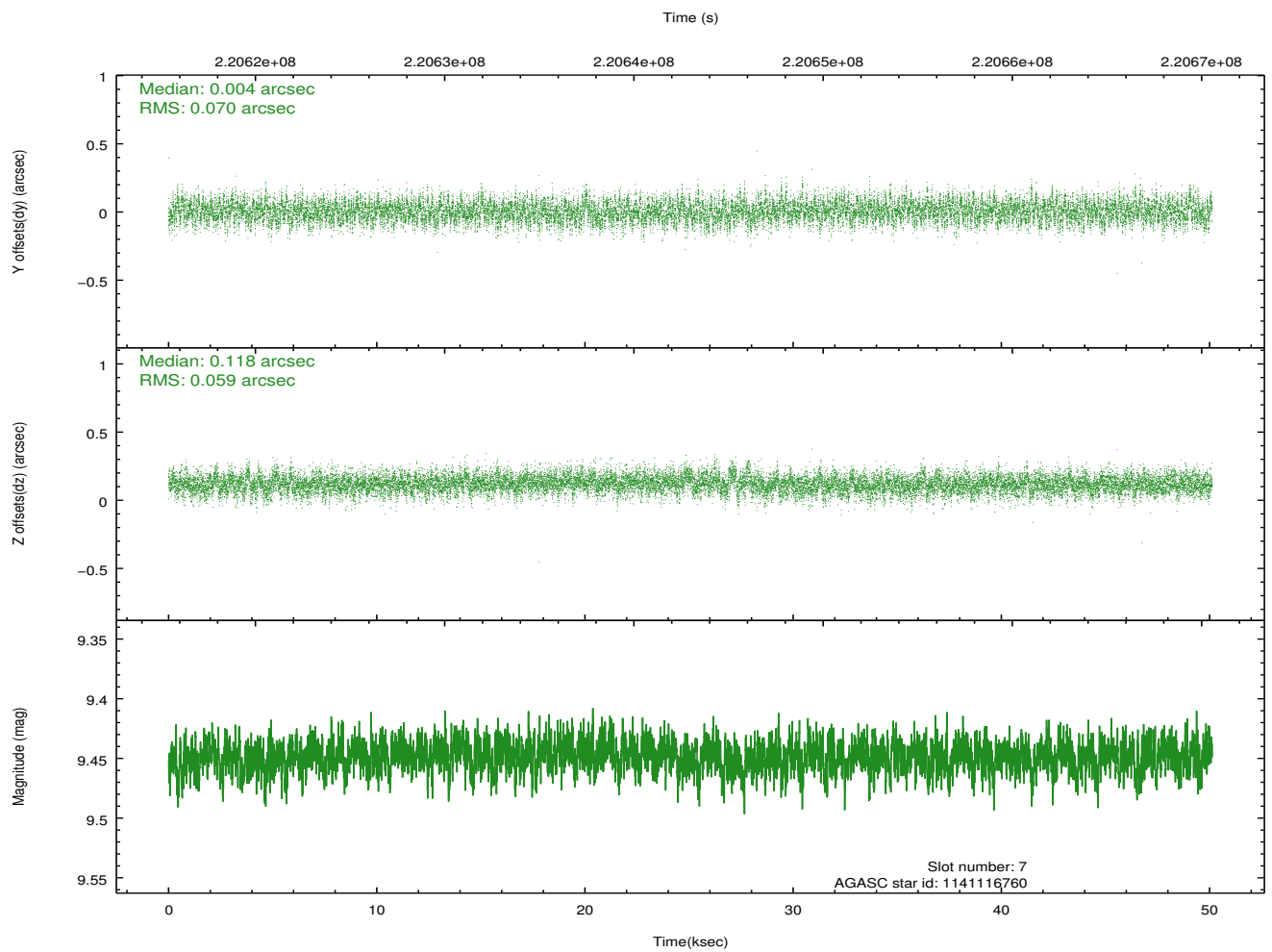
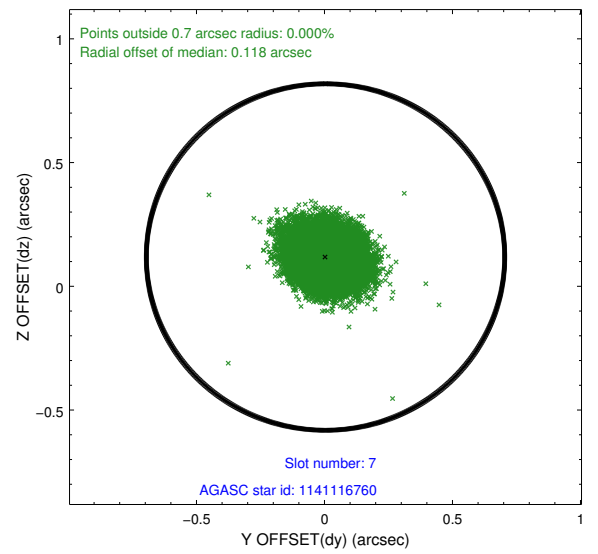
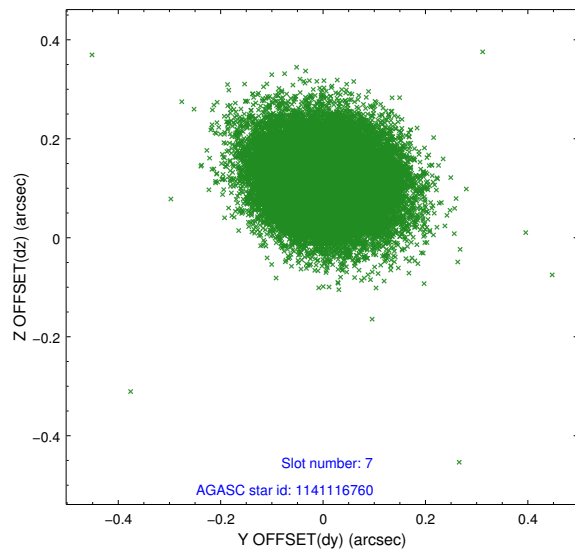
### 2.4.3 Slot 5



## 2.4.4 Slot 6

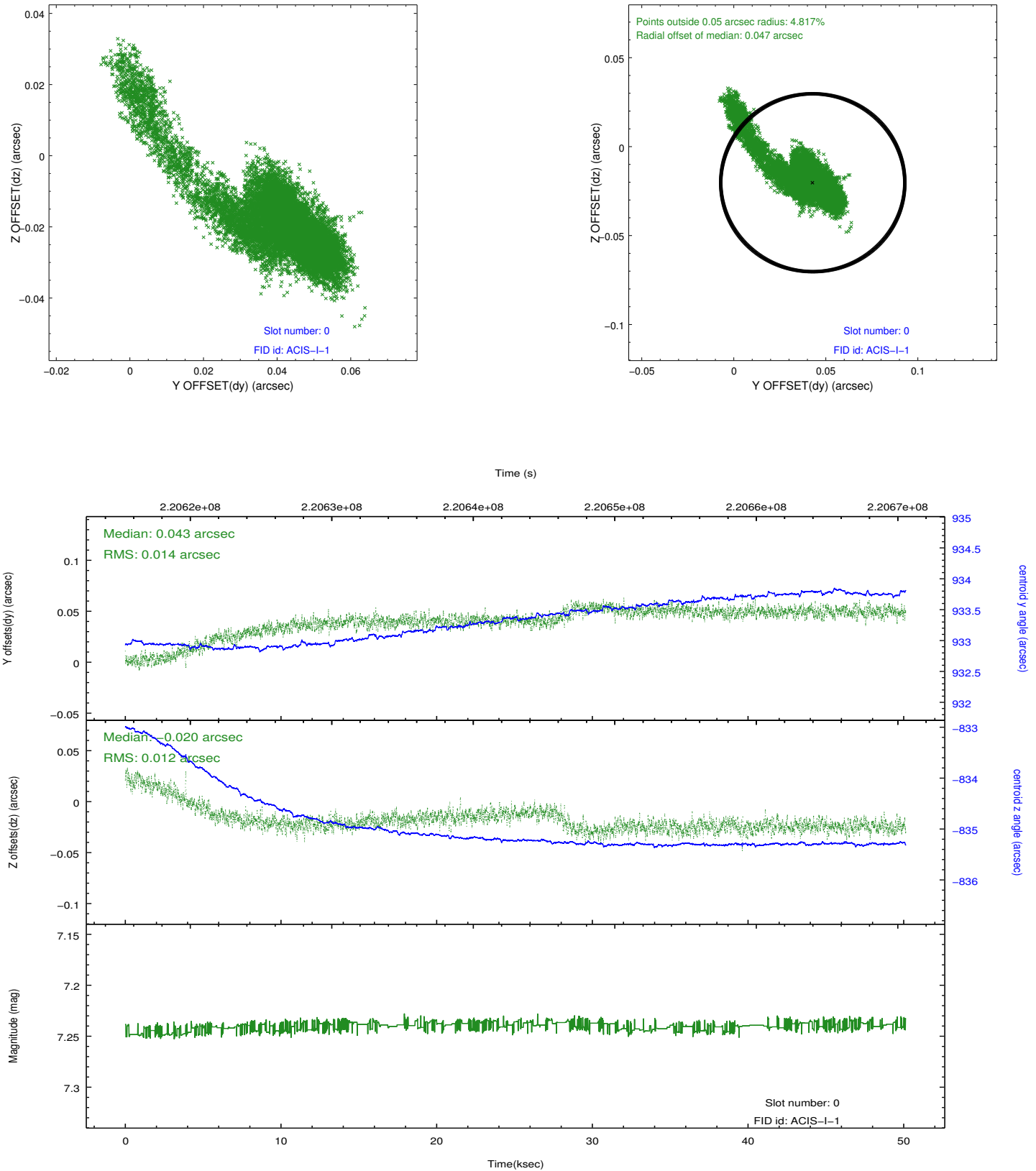


## 2.4.5 Slot 7

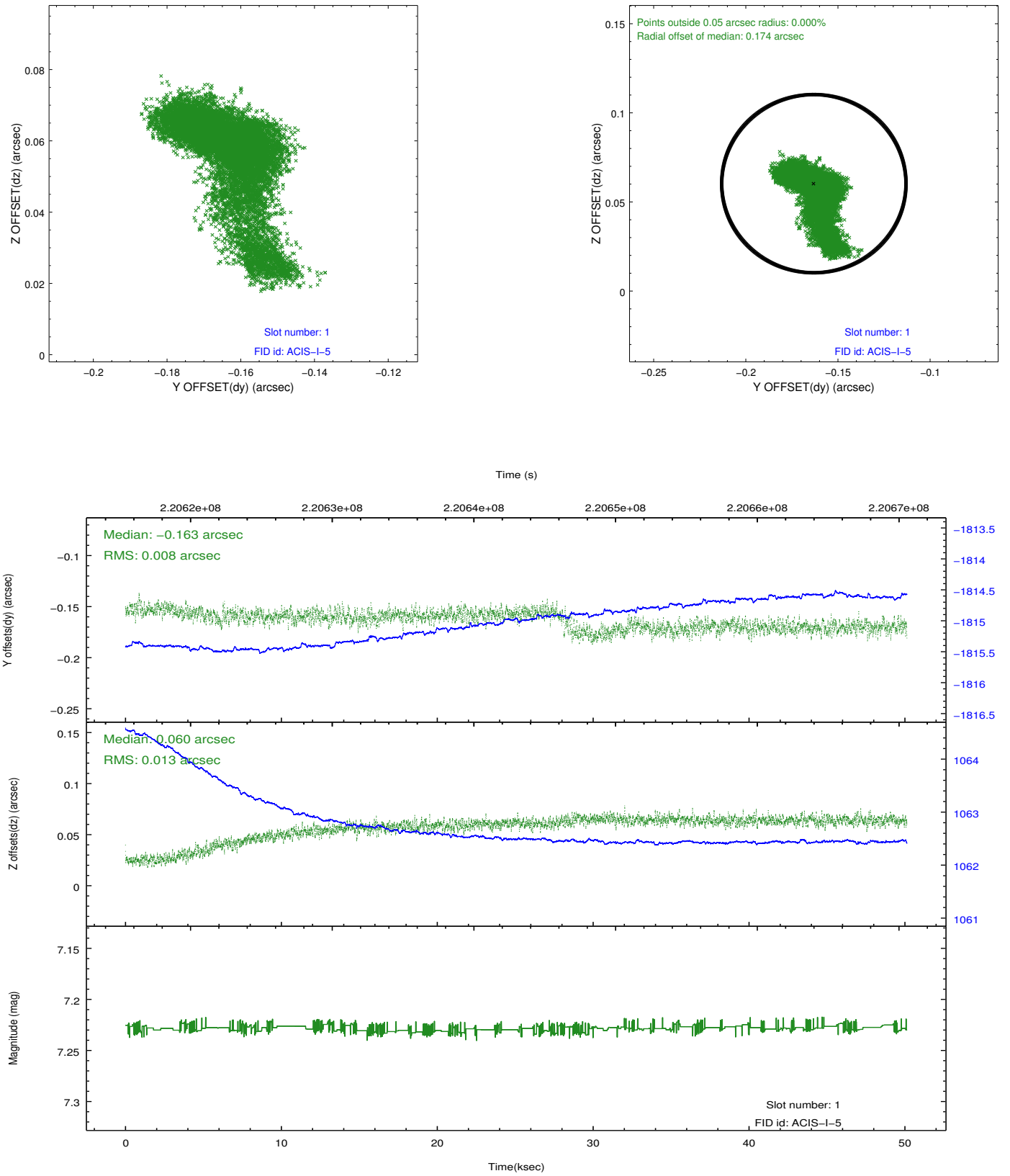


## 2.5 FID Slots

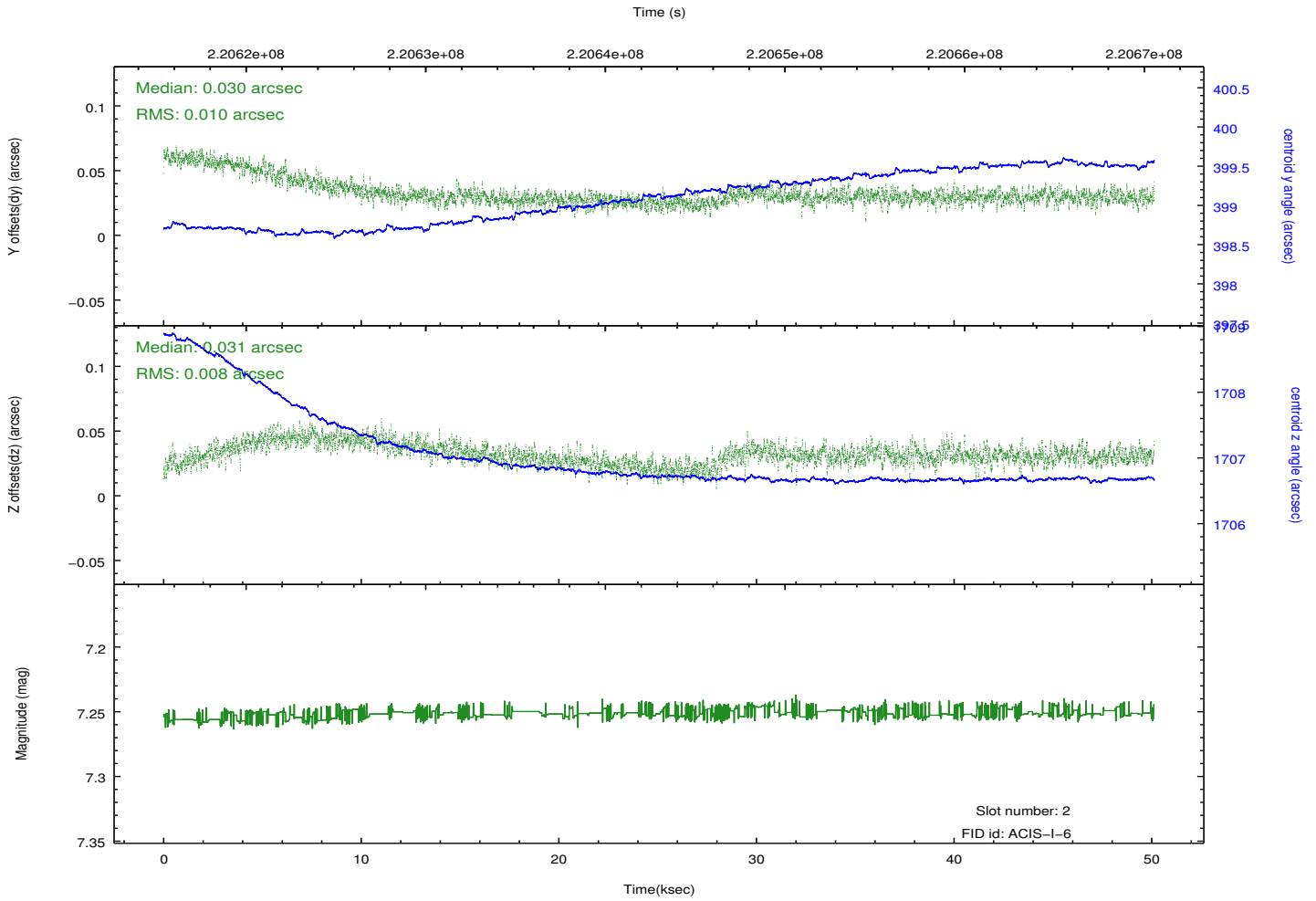
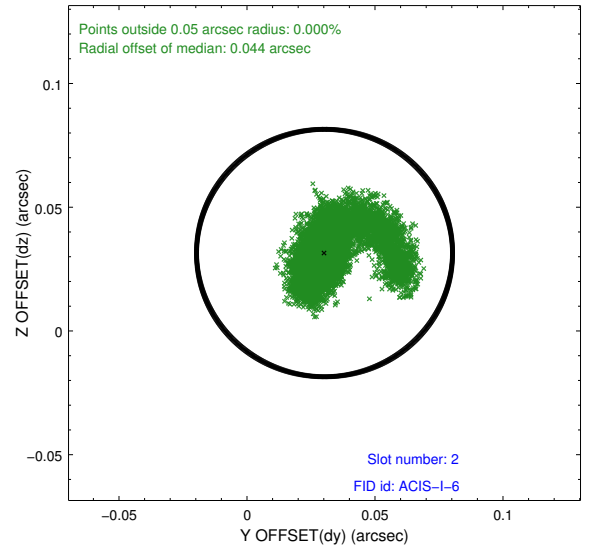
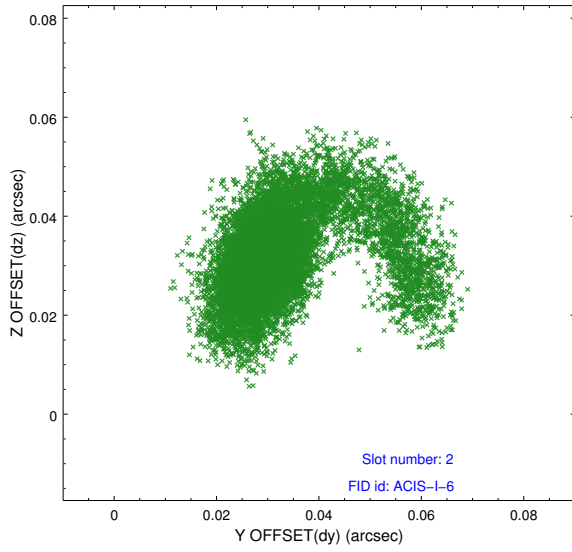
### 2.5.1 Slot 0



## 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)	2013.01.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	50.12799

## A.2 Comments