

# V&V Reference Report

## L2 ASCDS Version : 10.7

Observation 21688 - L2 Version 1  
Chandra X-Ray Center

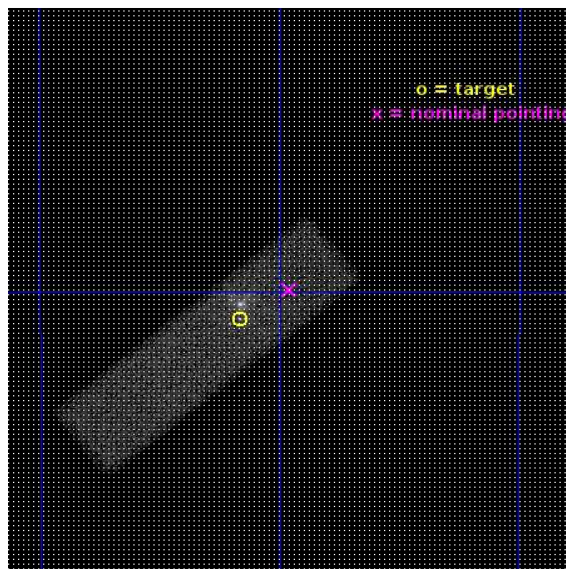
L2 Processing Date : Nov 28 2018

## 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	503142	Sequence number
obs_id	21688	Observation id
title	Witnessing the Birth of a Supernova Remnant	Proposal title
observer	Ralph Kraft	Principal investigator
object	SN 1996cr	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	213.291875	Observer's specified target RA [deg]
dec_targ	-65.345781	Observer's specified target Dec [deg]
ra_nom	213.23975098673	Nominal RA [deg]
dec_nom	-65.332640743509	Nominal Dec [deg]
roll_nom	141.10924308128	Nominal Roll [deg]
revision	1	Processing version of data
ontime	29060.426575899	Sum of GTIs [s]
livetime	27642.372848758	Livetime [s]
ontime7	29060.426575899	Sum of GTIs [s]
l2events	49343	Number of level 2 events

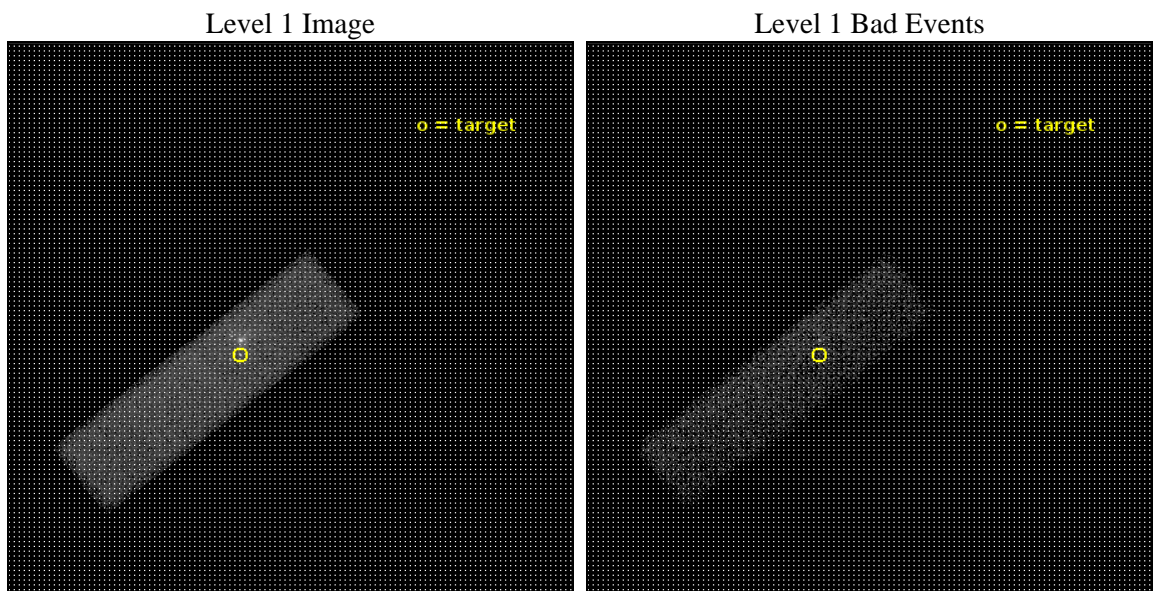




## 2 OBI

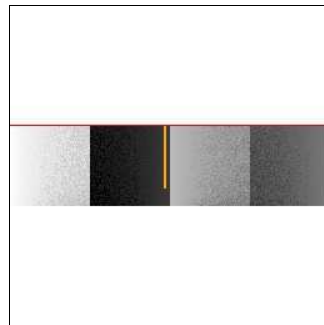
### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias

Chip 7



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	29000.000000	[s] Scheduled observation exposure time
ascdsver	10.7	Processing system revision	ontime	29060.426575899	Sum of GTIs [s]
caldsver	4.8.0.1	&#160	ontime7	29060.426575899	Sum of GTIs [s]
date	2018-11-28T13:47:25	Date and time of file creation	l1events	89142	Number of level 1 events
revision	1	Processing version of data			

### 2.1.4 Events

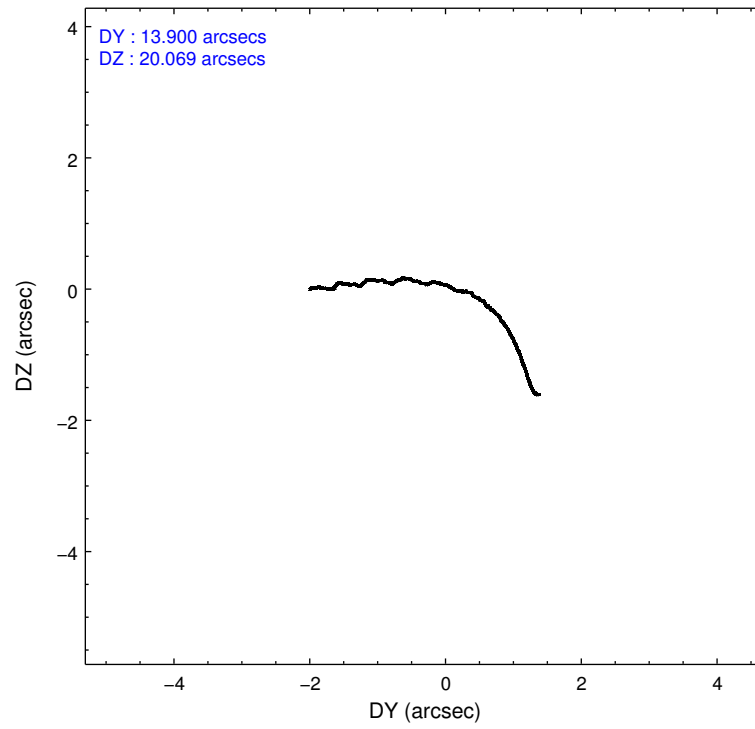
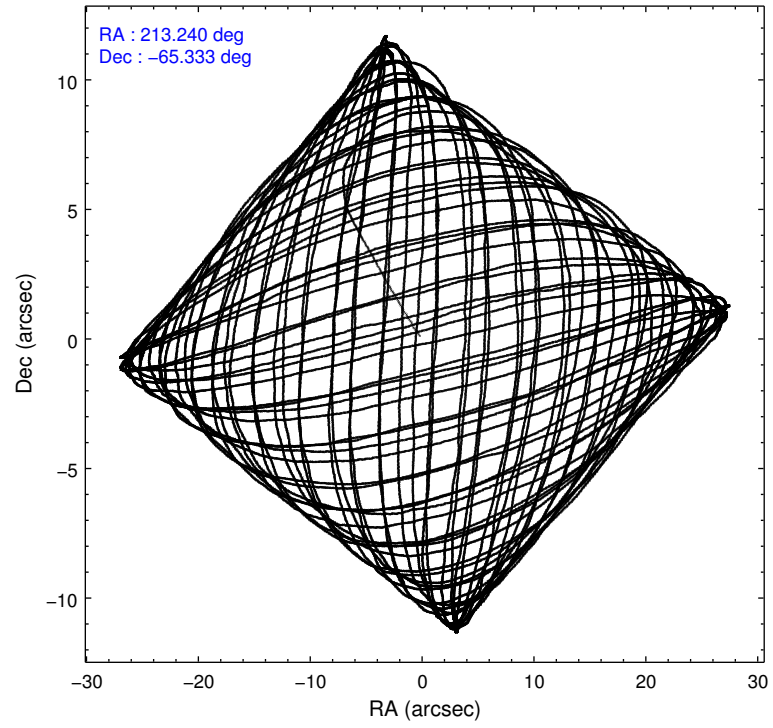
	<b>ccd 7</b>
level 1 events	89142
rejected events	38589
rejected %	43%

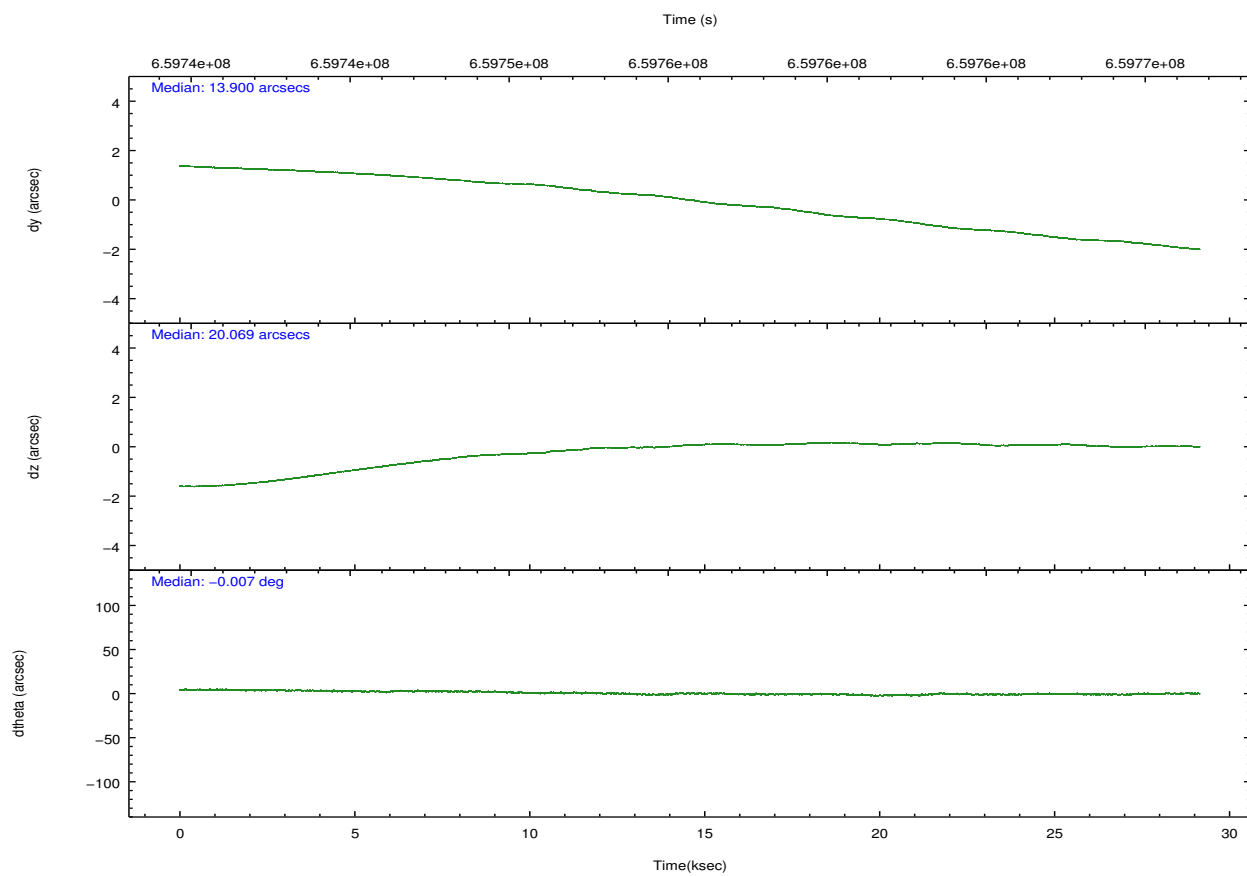
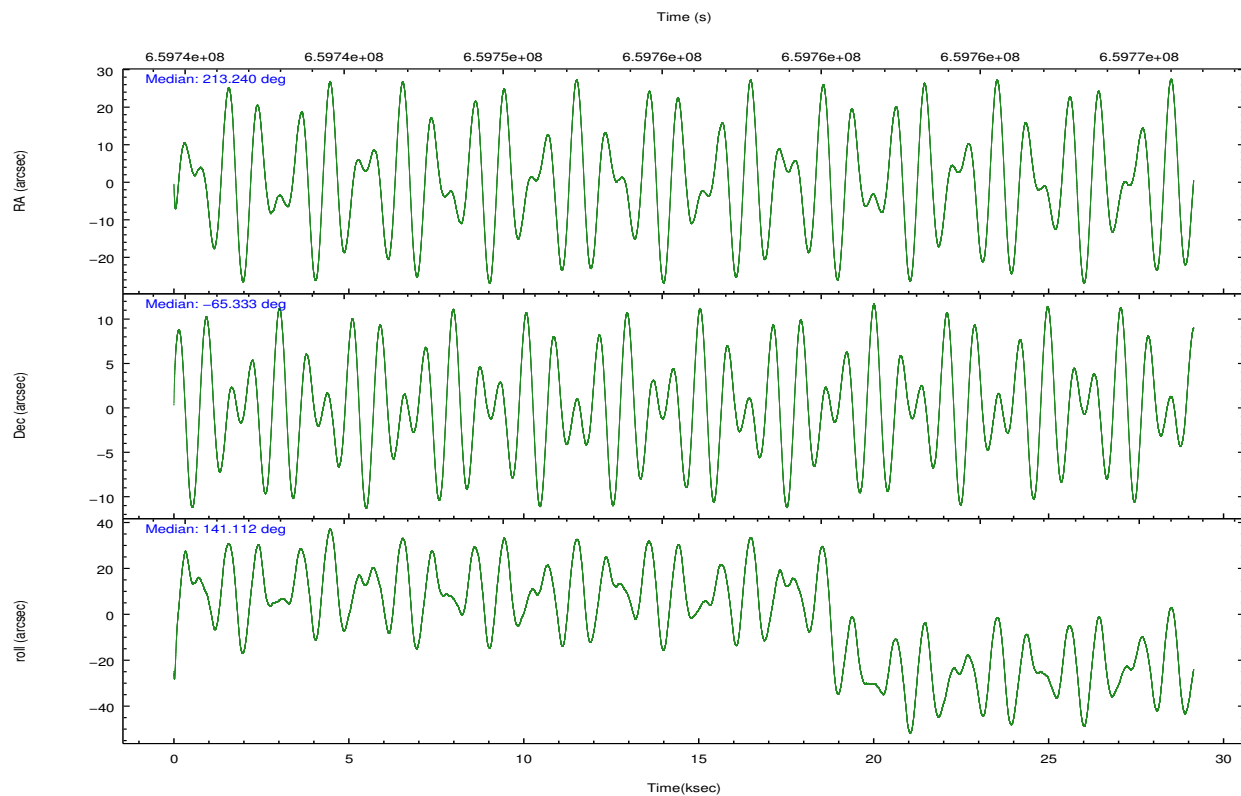
	<b>ccd 7</b>
grade 0 events	7542
	8%
grade 1 events	147
	0%
grade 2 events	11038
	12%
grade 3 events	5542
	6%
grade 4 events	5567
	6%
grade 5 events	7796
	8%
grade 6 events	20865
	23%
grade 7 events	30645
	34%

## 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	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	213.304857	213.2397509867342	Subarray requested	CUSTOM	1/4
[deg] Pointing Dec	-65.336532	-65.33264074350866	Subarray start row	385	385
[deg] Pointing Roll	141.011796	141.1092430812812	Subarray row count	256	256
[mm] SIM focus pos	-0.684267	-0.6828225247311905	Alternating exposures requested	N	N
[mm] SIM defocus	0	0.001444936568705701	[s] Primary exposure time	0.000000	0.8
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	659741248.184000	659739960.89889			
Observation start date	2018-11-27T21:26:19	2018-11-27T21:06:00			
[s] Observation end time (MET)	659770248.184000	659771479.13826			
Observation end date	2018-11-28T05:29:39	2018-11-28T05:51:19			
Read mode	TIMED	TIMED			

## 2.3 Aspect



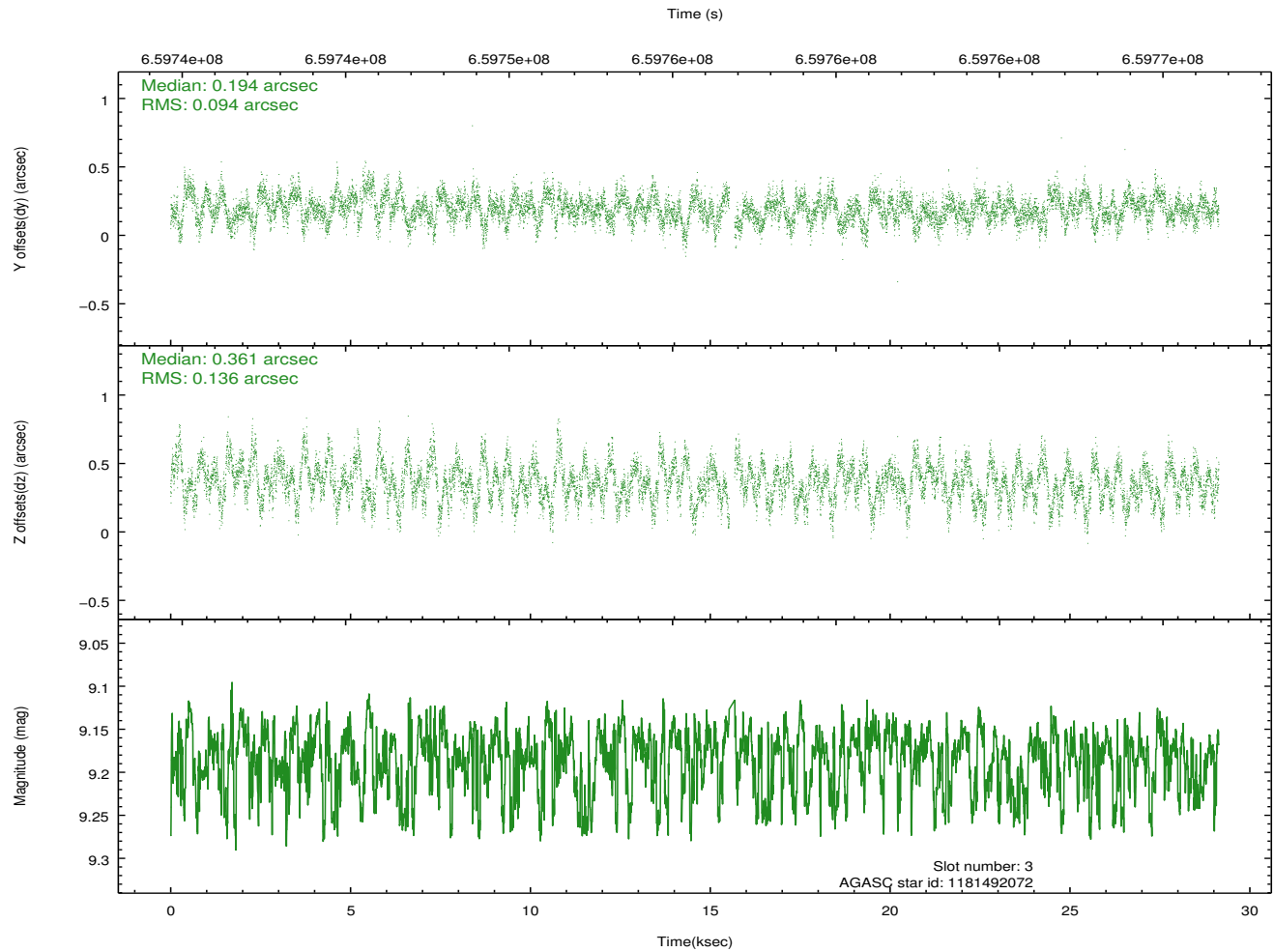
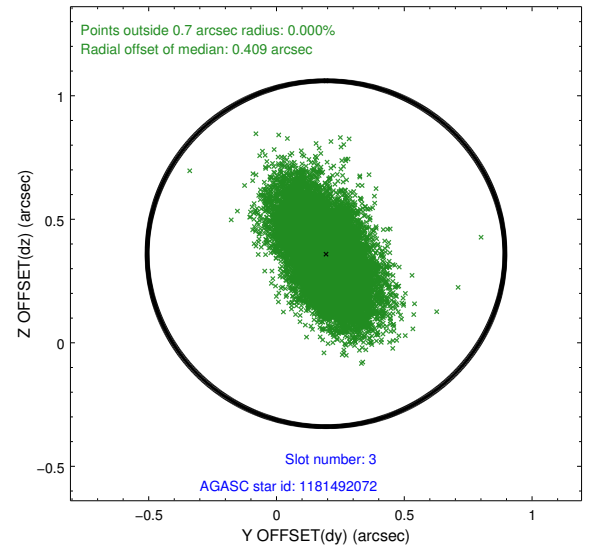
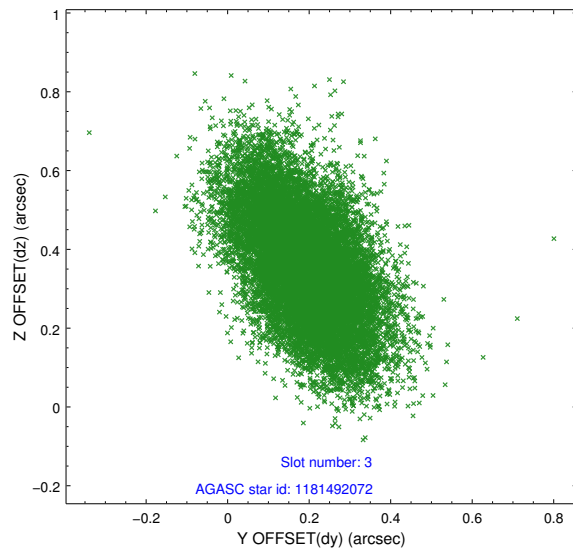


Slot Statistics

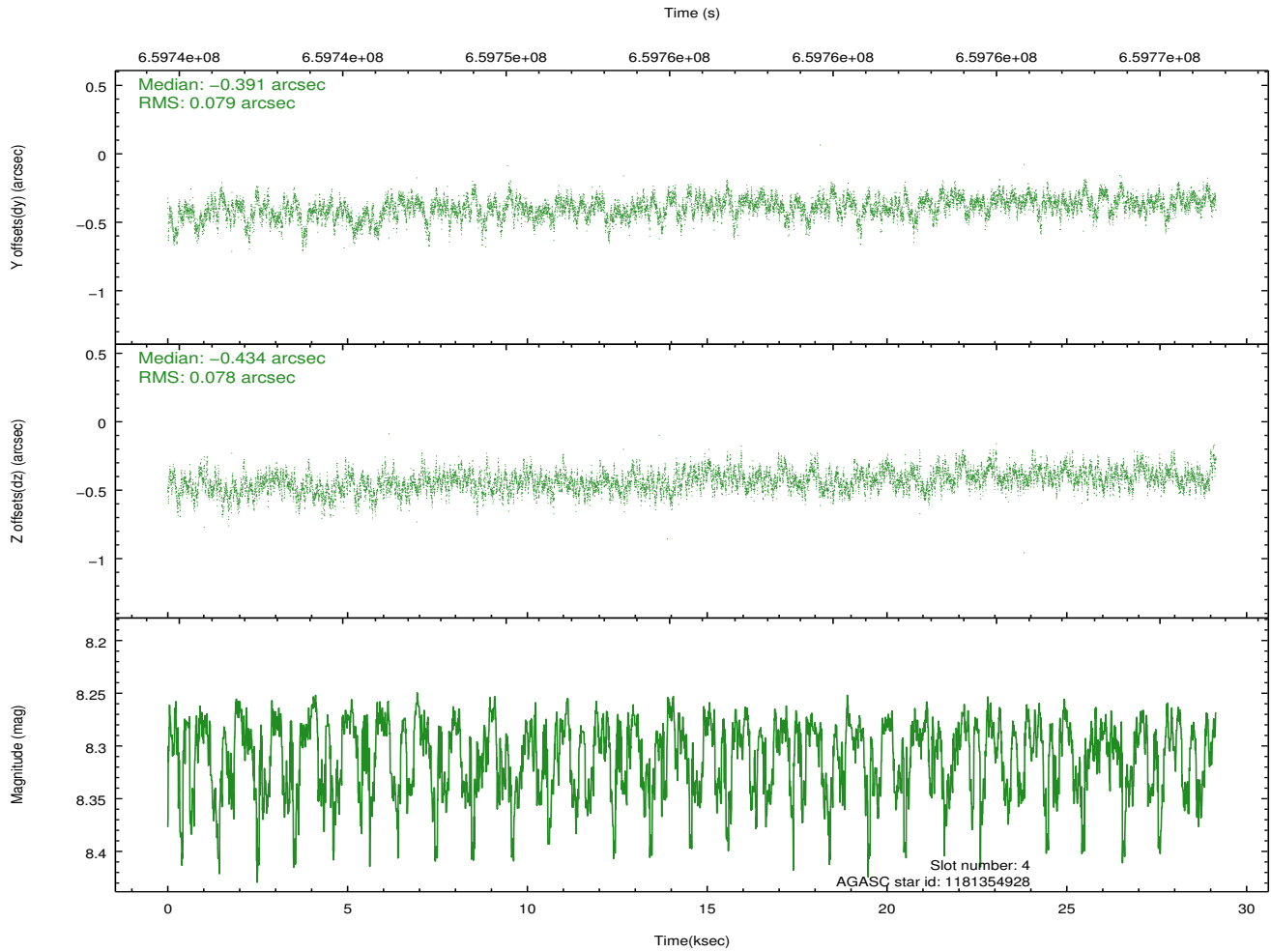
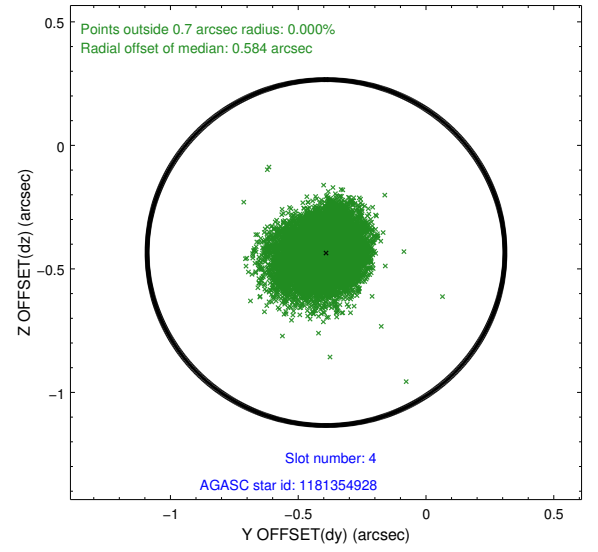
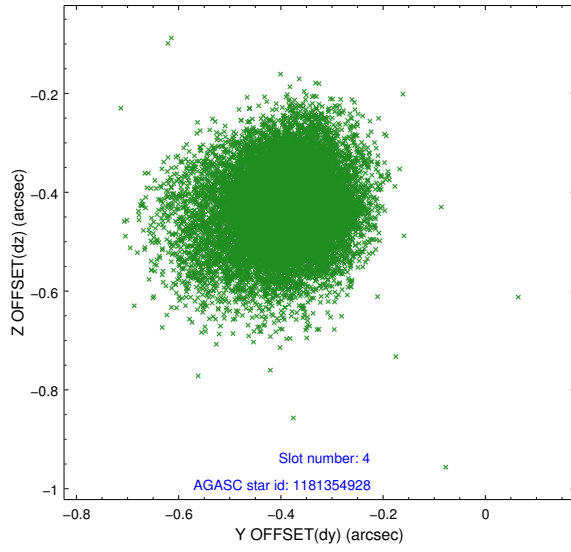
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.05	7108	1.000	-0.327	-0.178	0.055	0.068	0.000000	0.000000	-766.96	-1741
1	FID		ACIS-S-4	7.18	7108	1.000	0.792	0.204	0.051	0.118	0.000000	0.000000	2147.28	167
2	FID		ACIS-S-5	7.15	7108	1.000	-0.495	-0.018	0.028	0.082	0.000000	0.000000	-1819.95	160
3	GUIDE	used	1181492072	9.18	14127	1.000	0.194	0.361	0.172	0.300	214.479575	-65.592809	-1948.48	-369
4	GUIDE	used	1181354928	8.30	14214	1.000	-0.391	-0.434	0.116	0.196	211.086945	-65.415987	2364.52	2356
5	GUIDE	used	1181362720	8.23	14212	1.000	0.004	-0.036	0.105	0.173	212.359703	-64.776136	2389.96	-647
6	GUIDE	used	1181492872	9.05	14136	1.000	0.464	0.309	0.182	0.310	214.965330	-65.517798	-2355.37	-1025
7	GUIDE	used	1181880992	9.02	14204	1.000	-0.290	-0.194	0.133	0.255	213.720648	-66.170562	-2360.38	1955

## 2.4 Star Slots

### 2.4.1 Slot 3

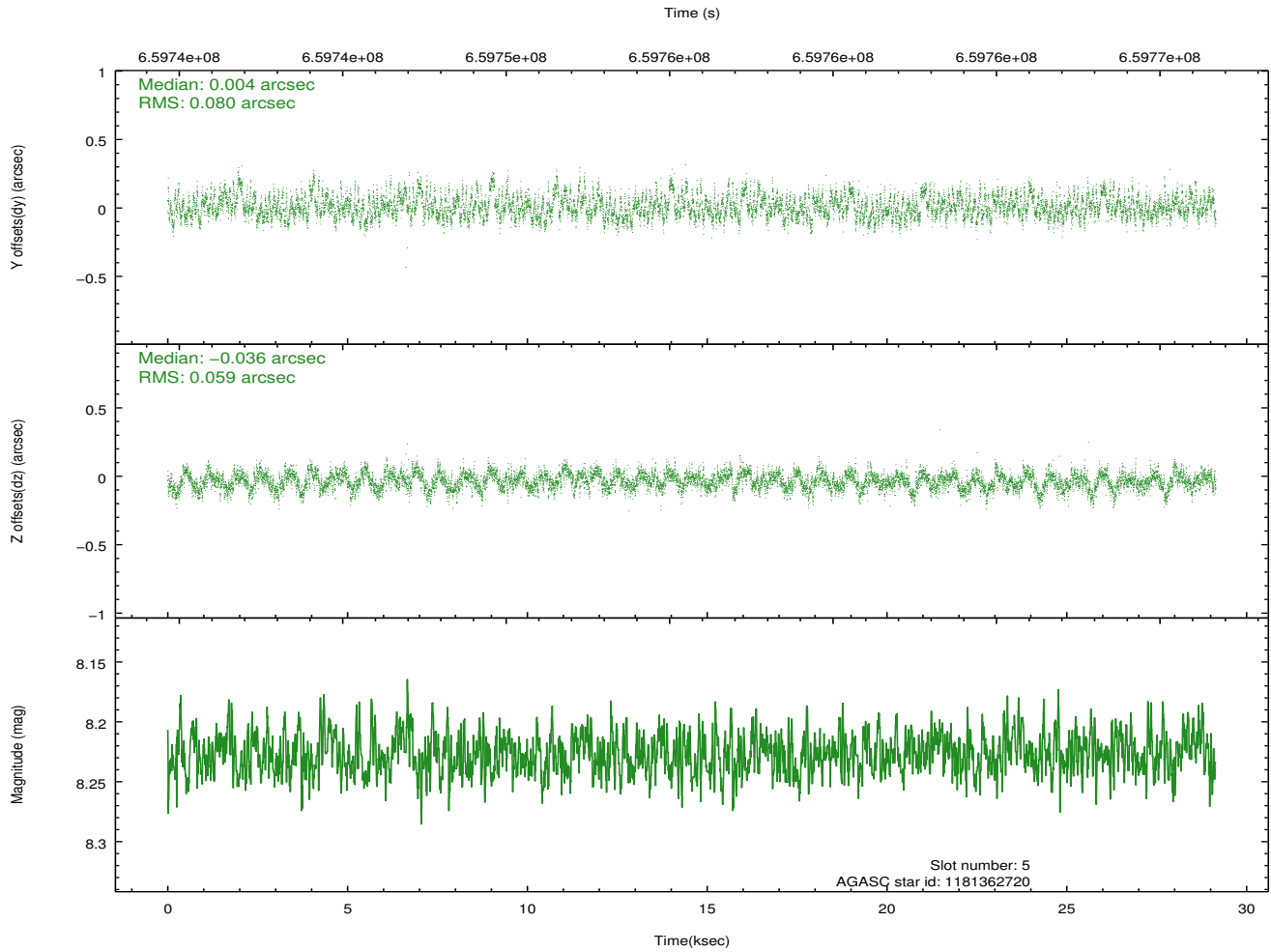
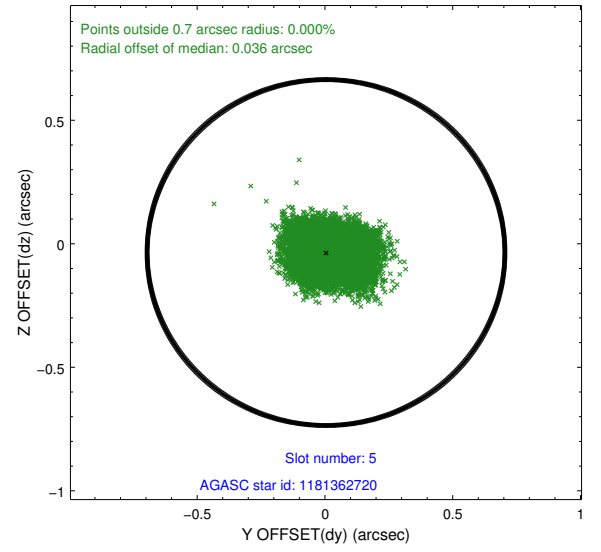
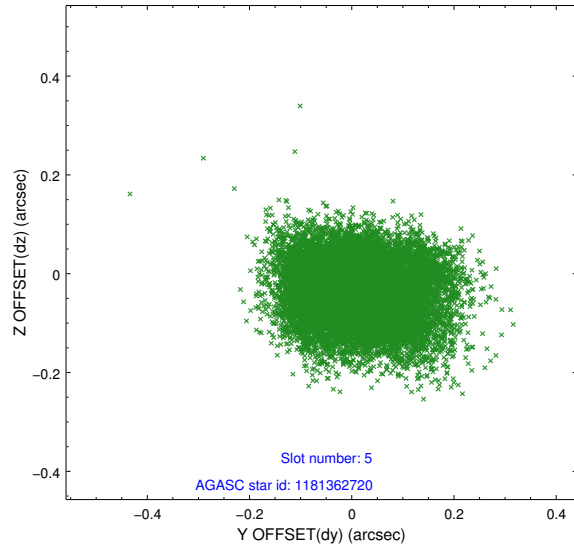


## 2.4.2 Slot 4

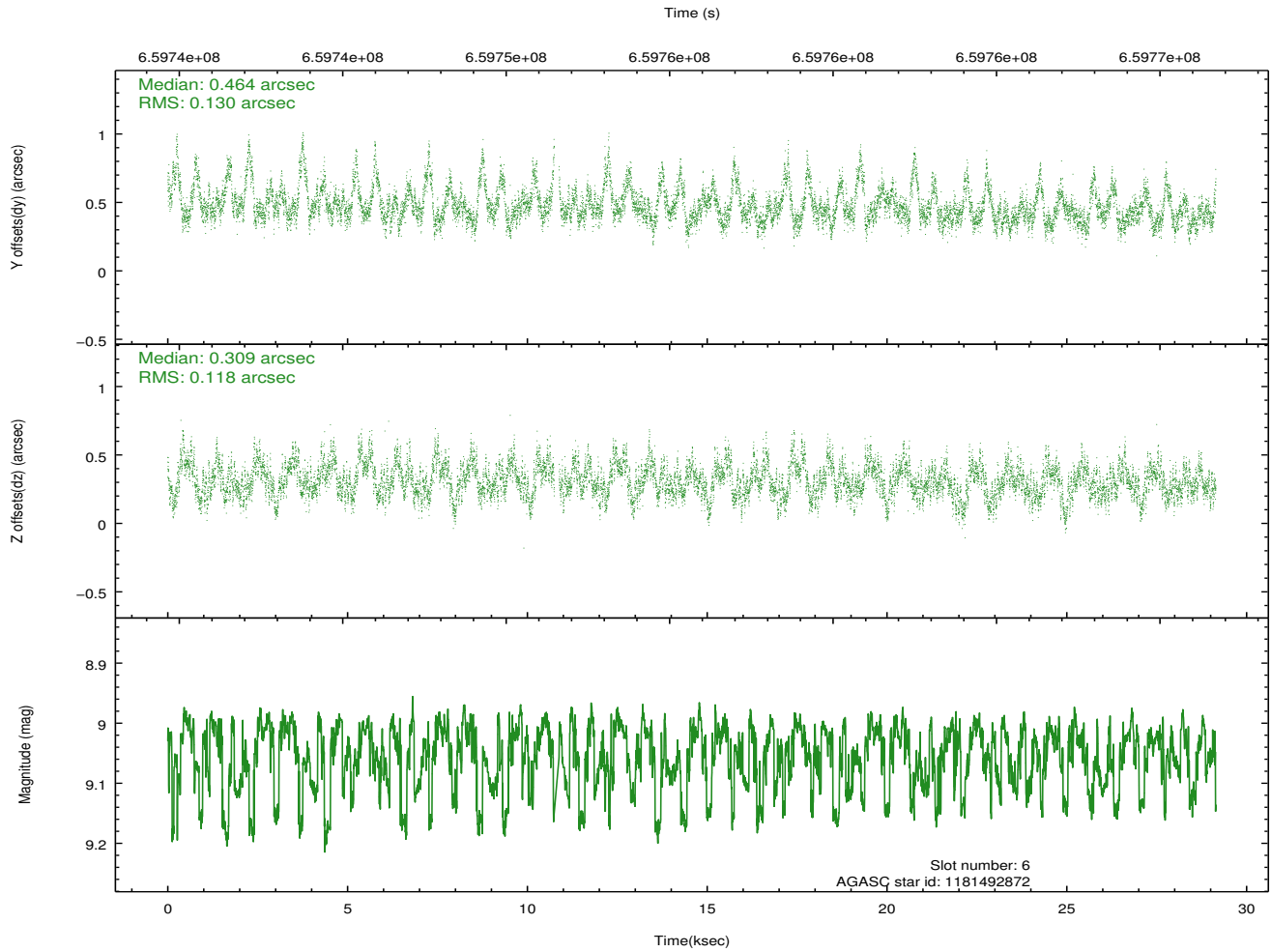
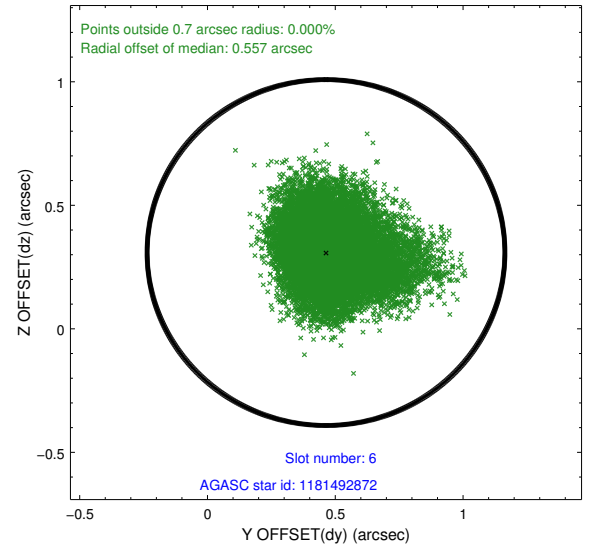
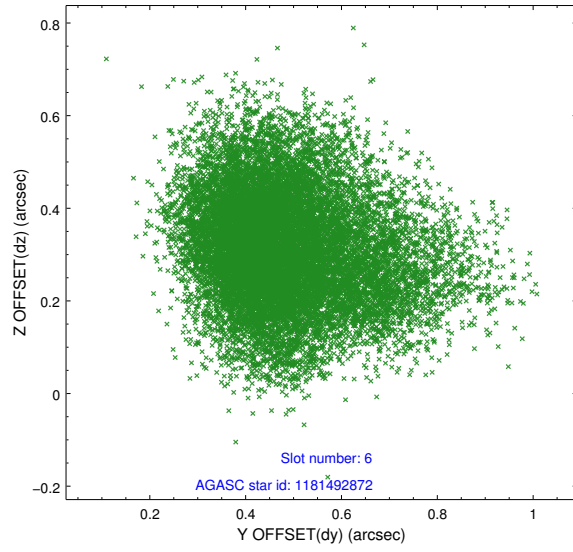




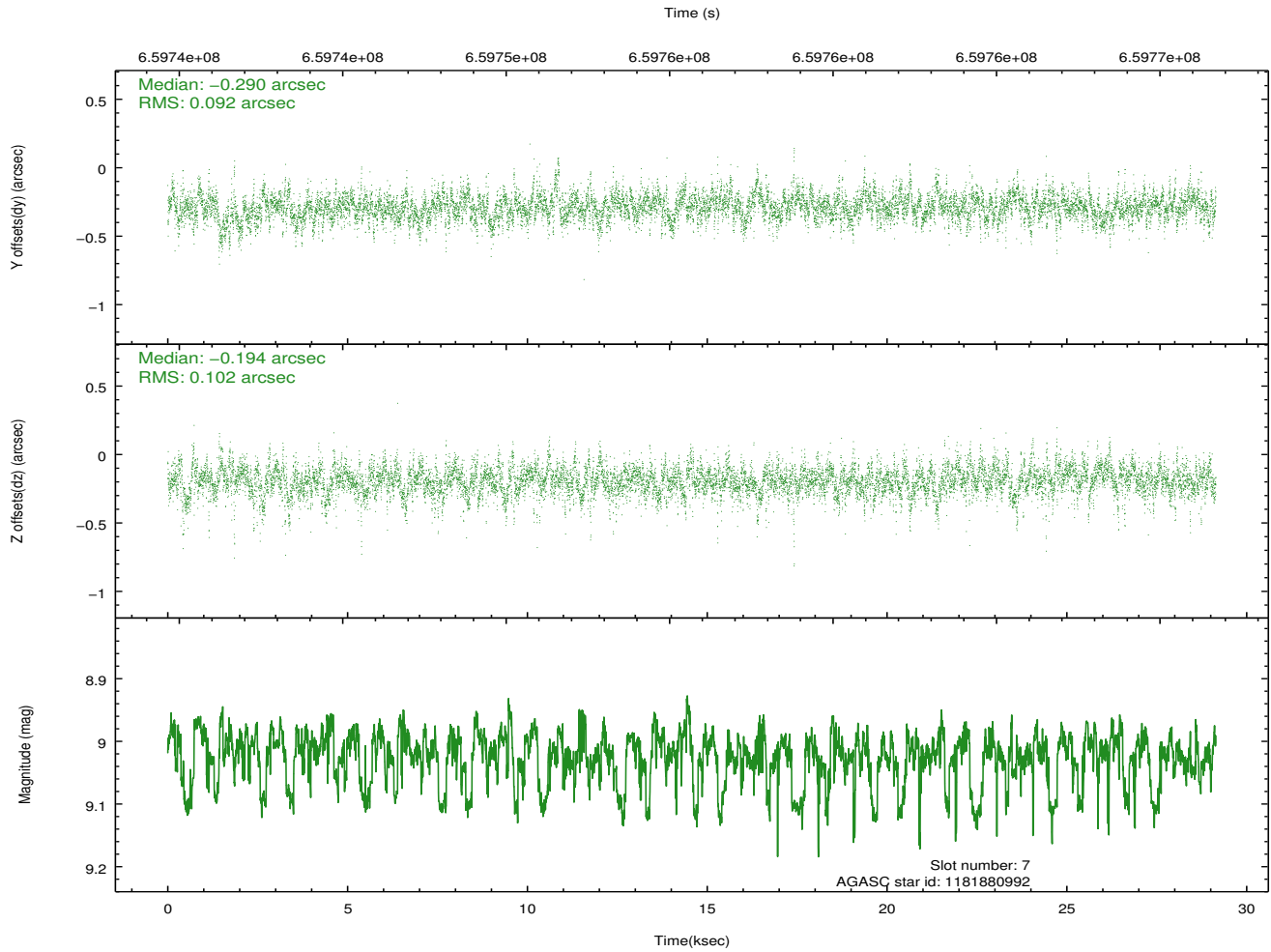
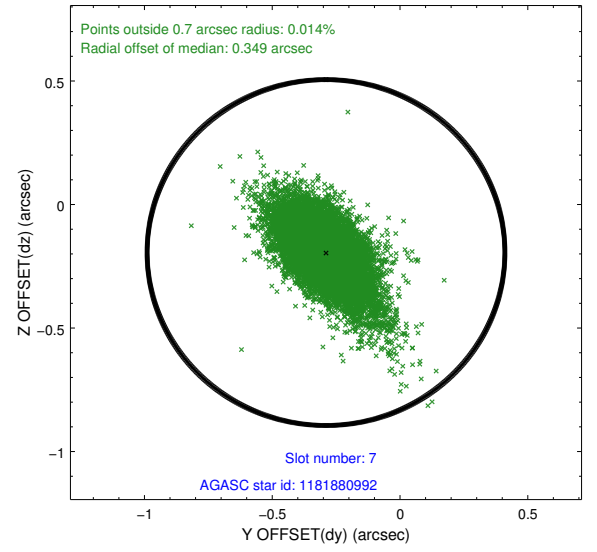
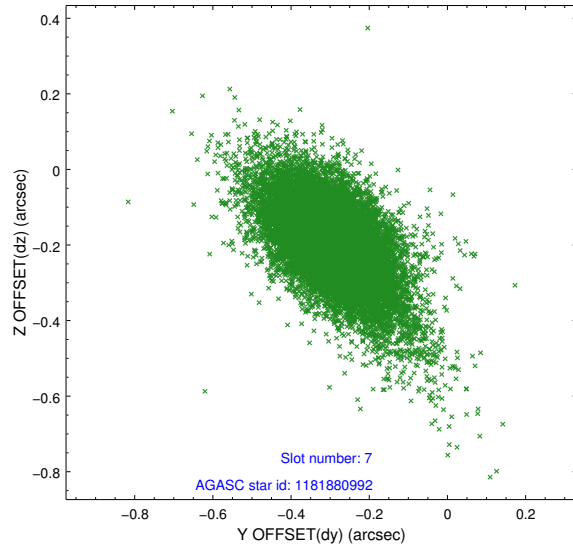
### 2.4.3 Slot 5



## 2.4.4 Slot 6

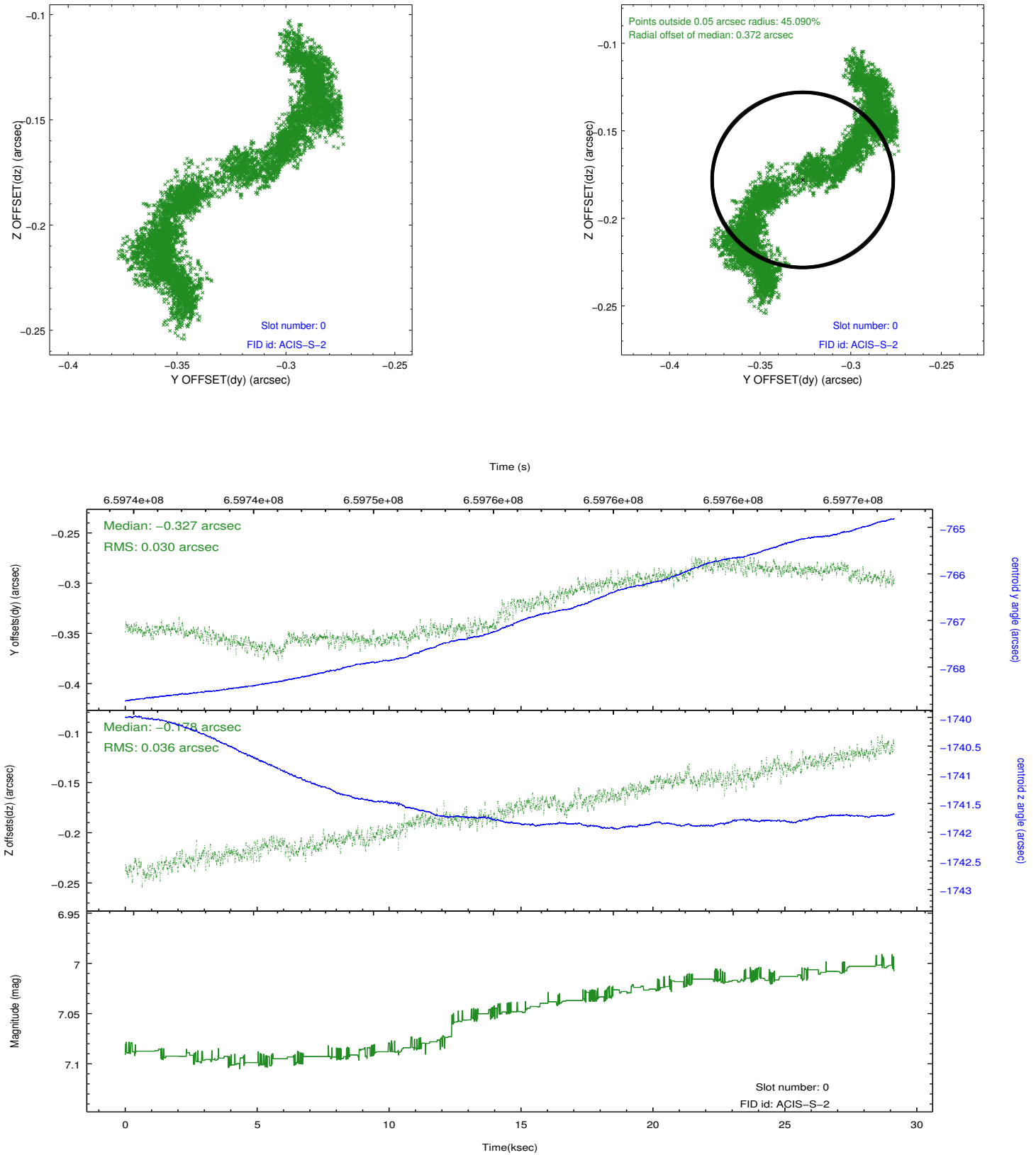


## 2.4.5 Slot 7

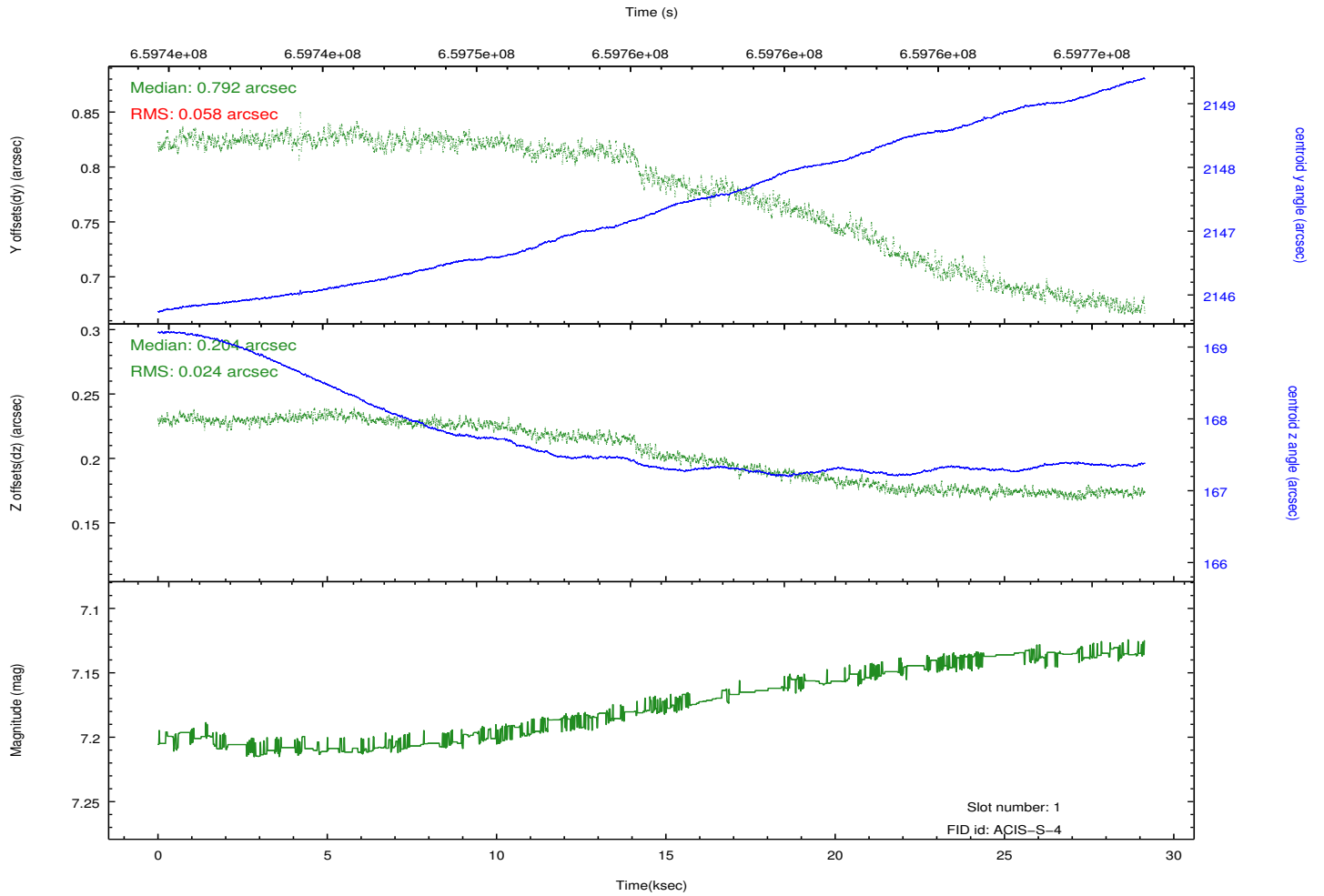
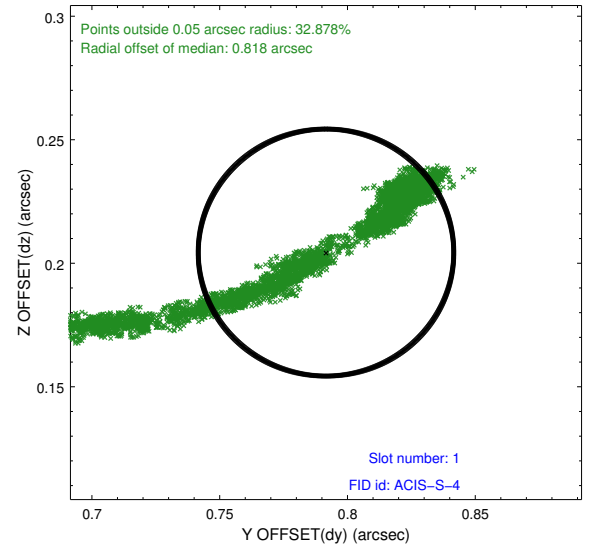
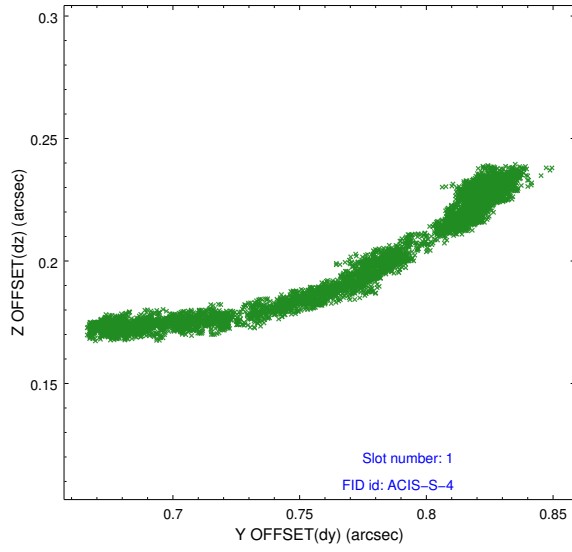


## 2.5 FID Slots

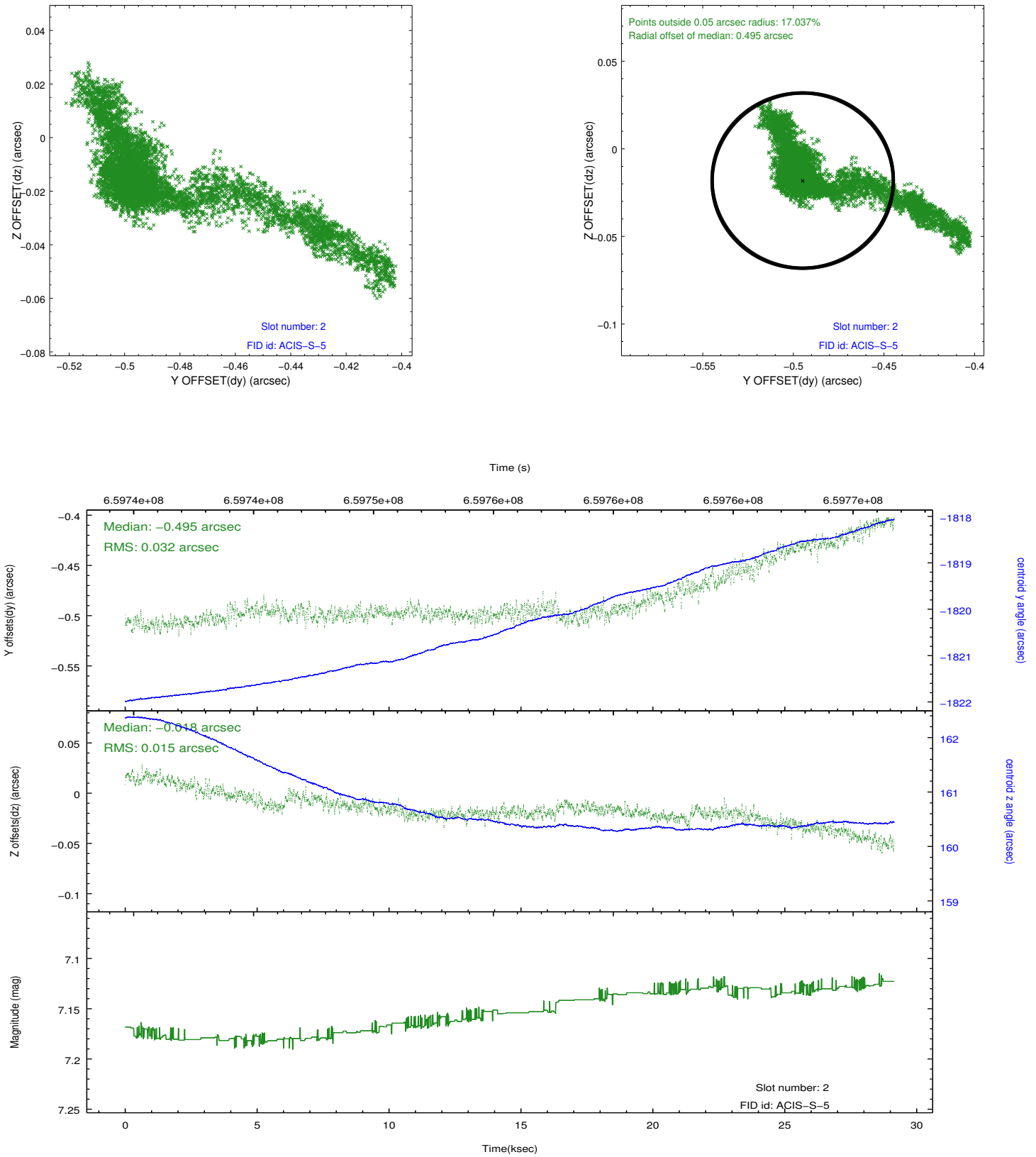
### 2.5.1 Slot 0



## 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)	2018.11.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	29.060426575899

### A.2 Comments