

# V&V Reference Report

## L2 ASCDS Version : 10.5.2

Observation 19027 - L2 Version 1  
Chandra X-Ray Center

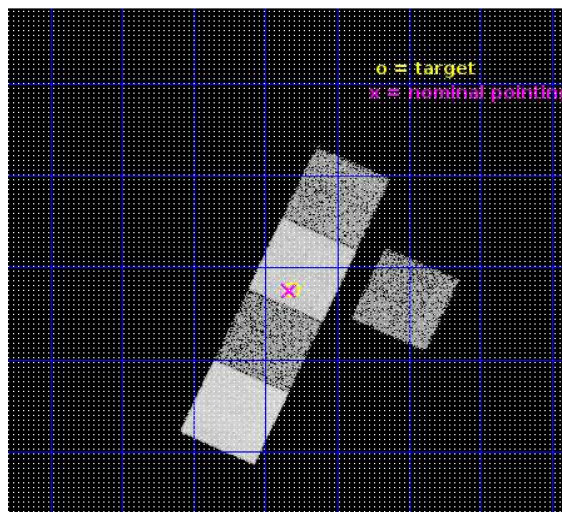
L2 Processing Date : Jan 16 2017

## 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

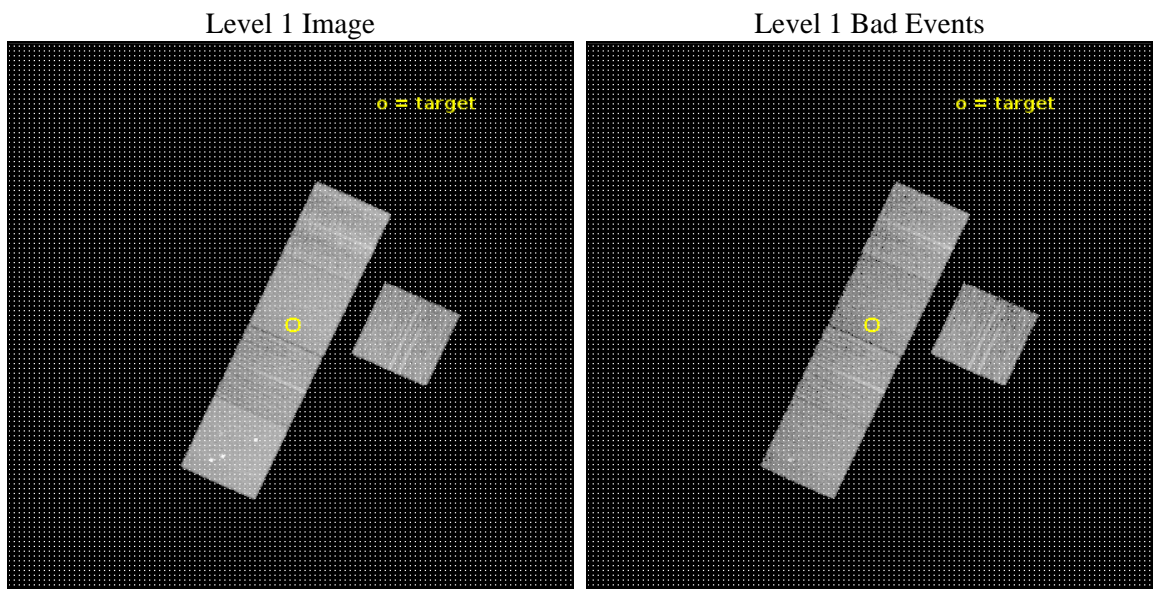
seq_num	502677	Sequence number
obs_id	19027	Observation id
title	Chandra Observations of Extreme Mass Loss from the Progenitors of Luminous Type II <sub>n</sub> SNe	Proposal title
observer	Maria Drout	Principal investigator
object	PS11aop	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	352.70375	Observer's specified target RA [deg]
dec_targ	-1.207389	Observer's specified target Dec [deg]
ra_nom	352.70833908349	Nominal RA [deg]
dec_nom	-1.2083976261123	Nominal Dec [deg]
roll_nom	294.62283156864	Nominal Roll [deg]
revision	1	Processing version of data
ontime	10050.200077415	Sum of GTIs [s]
livetime	9918.8868145534	Livetime [s]
ontime3	10047.059117198	Sum of GTIs [s]
ontime5	10050.200077415	Sum of GTIs [s]
ontime6	10050.200077415	Sum of GTIs [s]
ontime7	10050.200077415	Sum of GTIs [s]
ontime8	10050.200077415	Sum of GTIs [s]
l2events	116159	Number of level 2 events



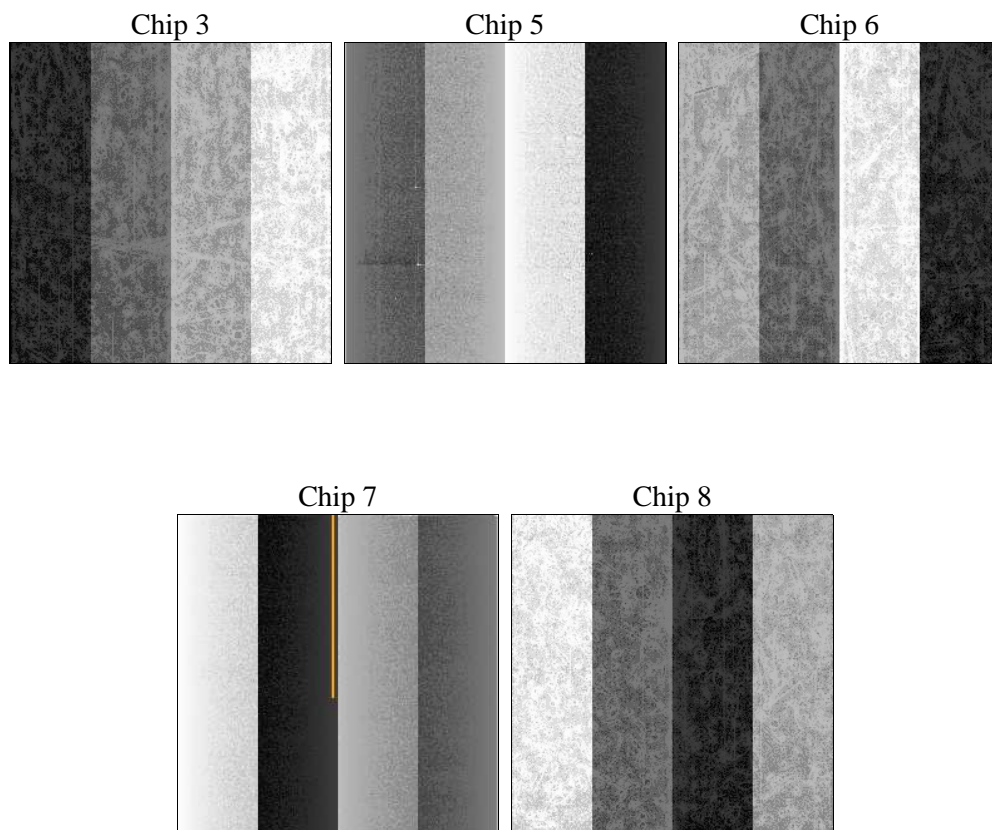
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	10.5.2	Processing system revision	ontime	10050.200077415	Sum of GTIs [s]
caldbver	4.7.3	&#160	ontime3	10047.059117198	Sum of GTIs [s]
date	2017-01-17T01:53:11	Date and time of file creation	ontime5	10050.200077415	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	10050.200077415	Sum of GTIs [s]
			ontime7	10050.200077415	Sum of GTIs [s]
			ontime8	10050.200077415	Sum of GTIs [s]
			l1events	452050	Number of level 1 events

### 2.1.4 Events

	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	71184	121155	72687	91964	95060
rejected events	63395	58953	64359	51182	68070
rejected %	89%	48%	88%	55%	71%

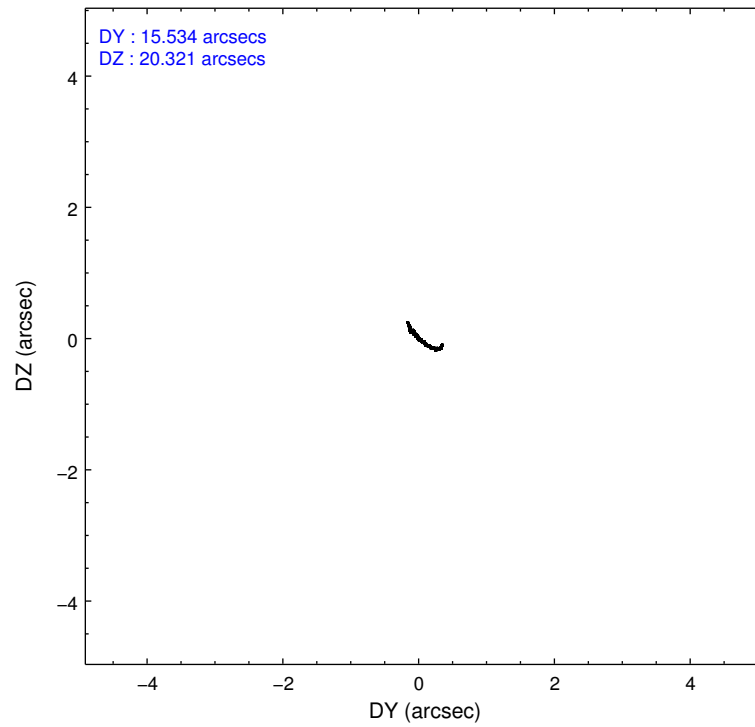
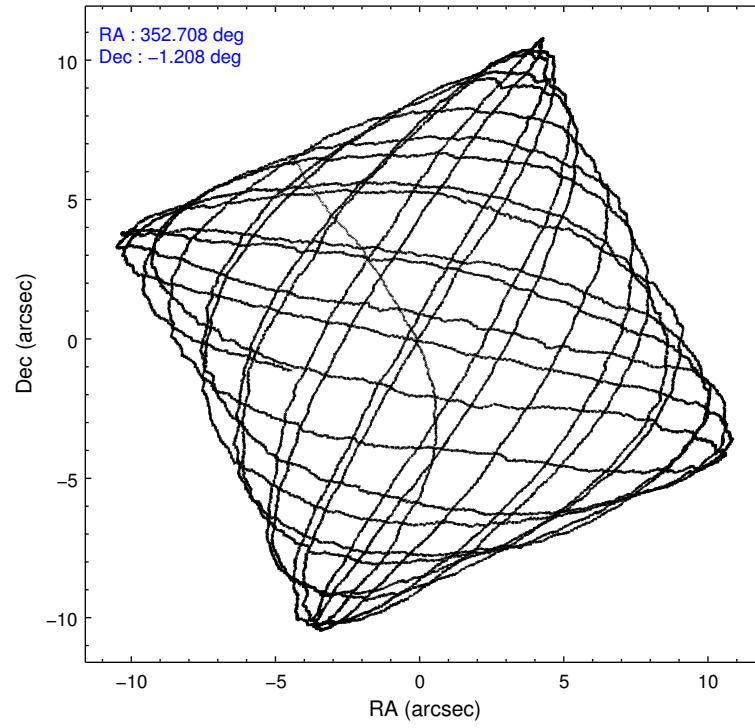
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	2929	9994	2898	3495	7701
	4%	8%	3%	3%	8%
grade 1 events	35	842	36	144	95
	0%	0%	0%	0%	0%
grade 2 events	1701	18451	1987	8623	6645
	2%	15%	2%	9%	6%
grade 3 events	779	1884	757	3445	2823
	1%	1%	1%	3%	2%
grade 4 events	785	1920	804	3278	2670
	1%	1%	1%	3%	2%
grade 5 events	3405	8430	3411	9293	4969
	4%	6%	4%	10%	5%
grade 6 events	1600	29974	1886	21949	7158
	2%	24%	2%	23%	7%
grade 7 events	59950	49660	60908	41737	62999
	84%	40%	83%	45%	66%

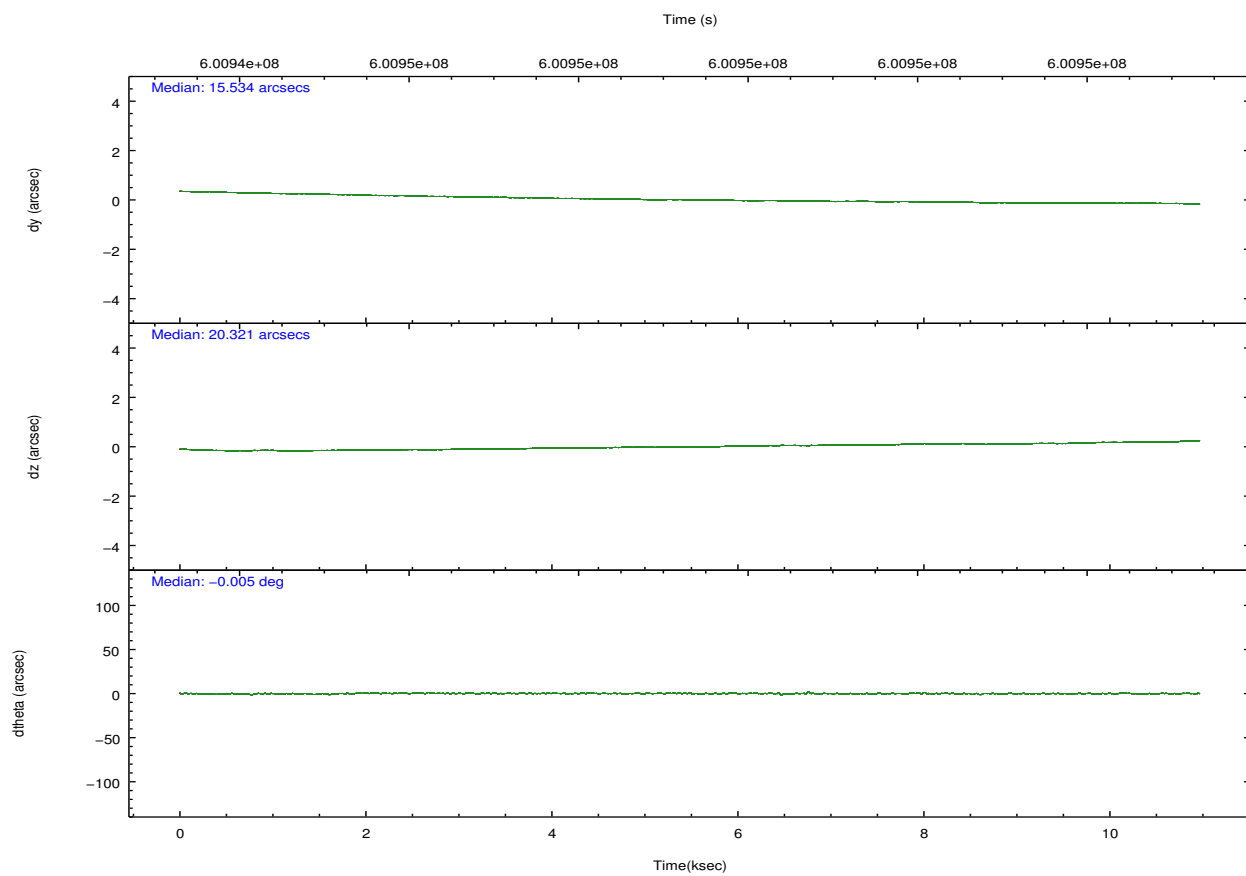
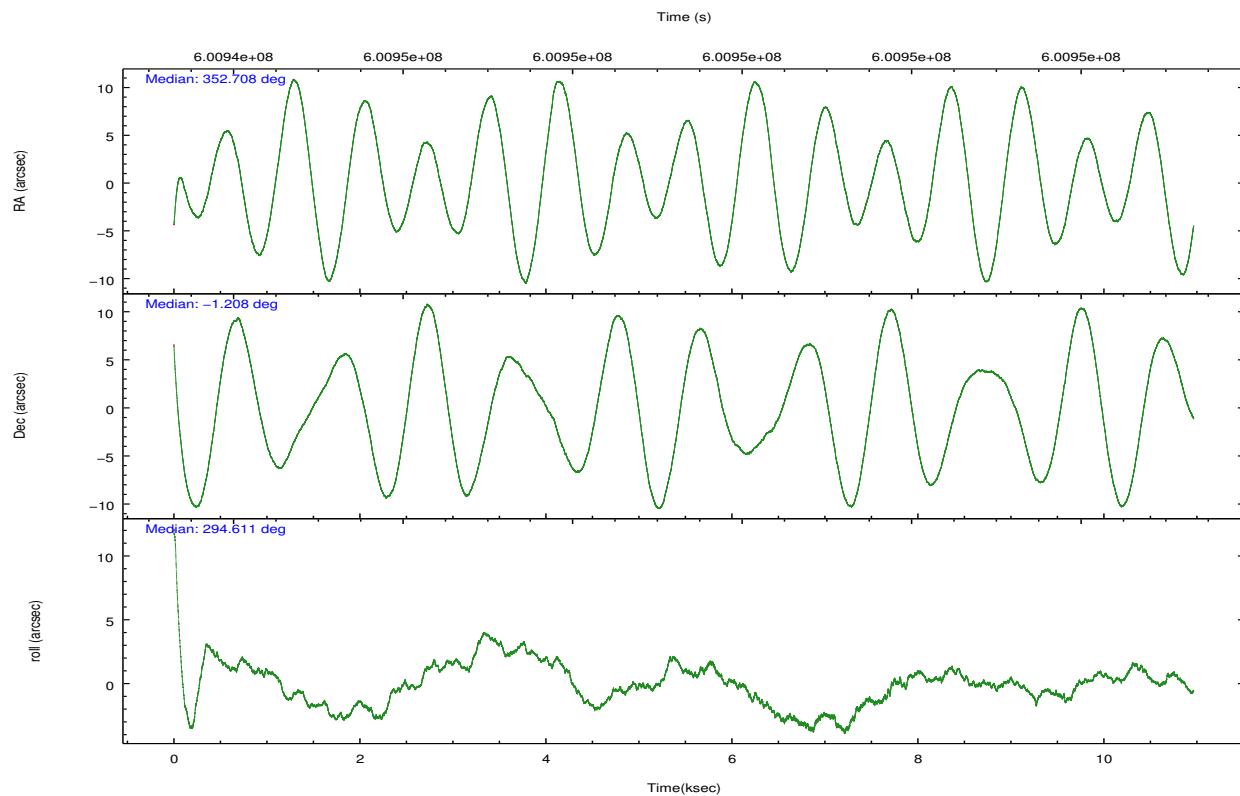


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-35678	ACIS-35678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	352.685792	352.7083390834902	CCD I2 on	N	N
[deg] Pointing Dec	-1.192792	-1.208397626112331	CCD I3 on	O1	Y
[deg] Pointing Roll	294.465717	294.6228315686399	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	Y	Y
[s] Observation start time (MET)	600944788.184000	600942640.46516	CCD S5 on	N	N
Observation start date	2017-01-16T09:05:19	2017-01-16T08:30:40	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	600954788.184000	600955207.47839	On-chip summing requested	N	N
Observation end date	2017-01-16T11:51:59	2017-01-16T12:00:07	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



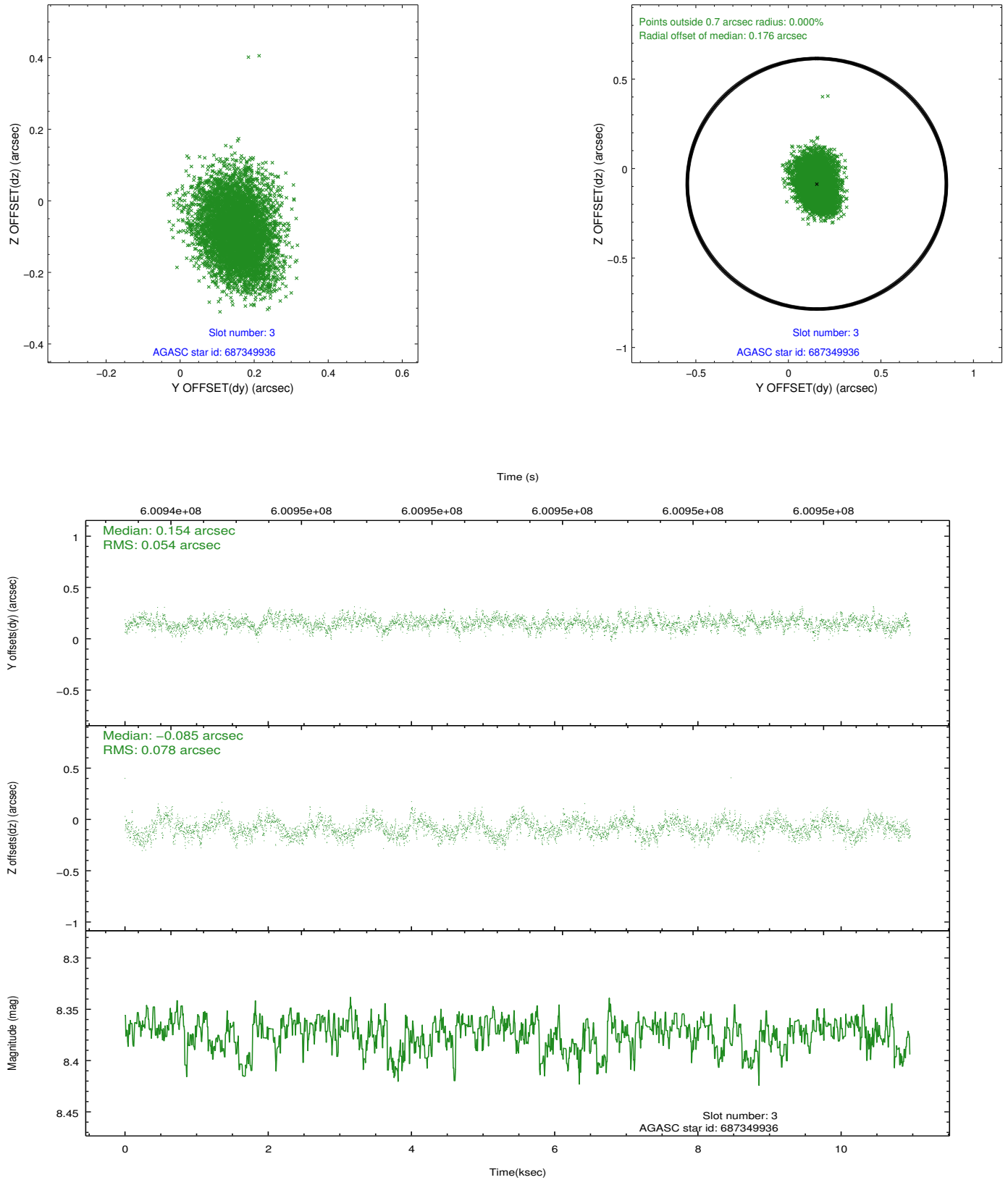


### Slot Statistics

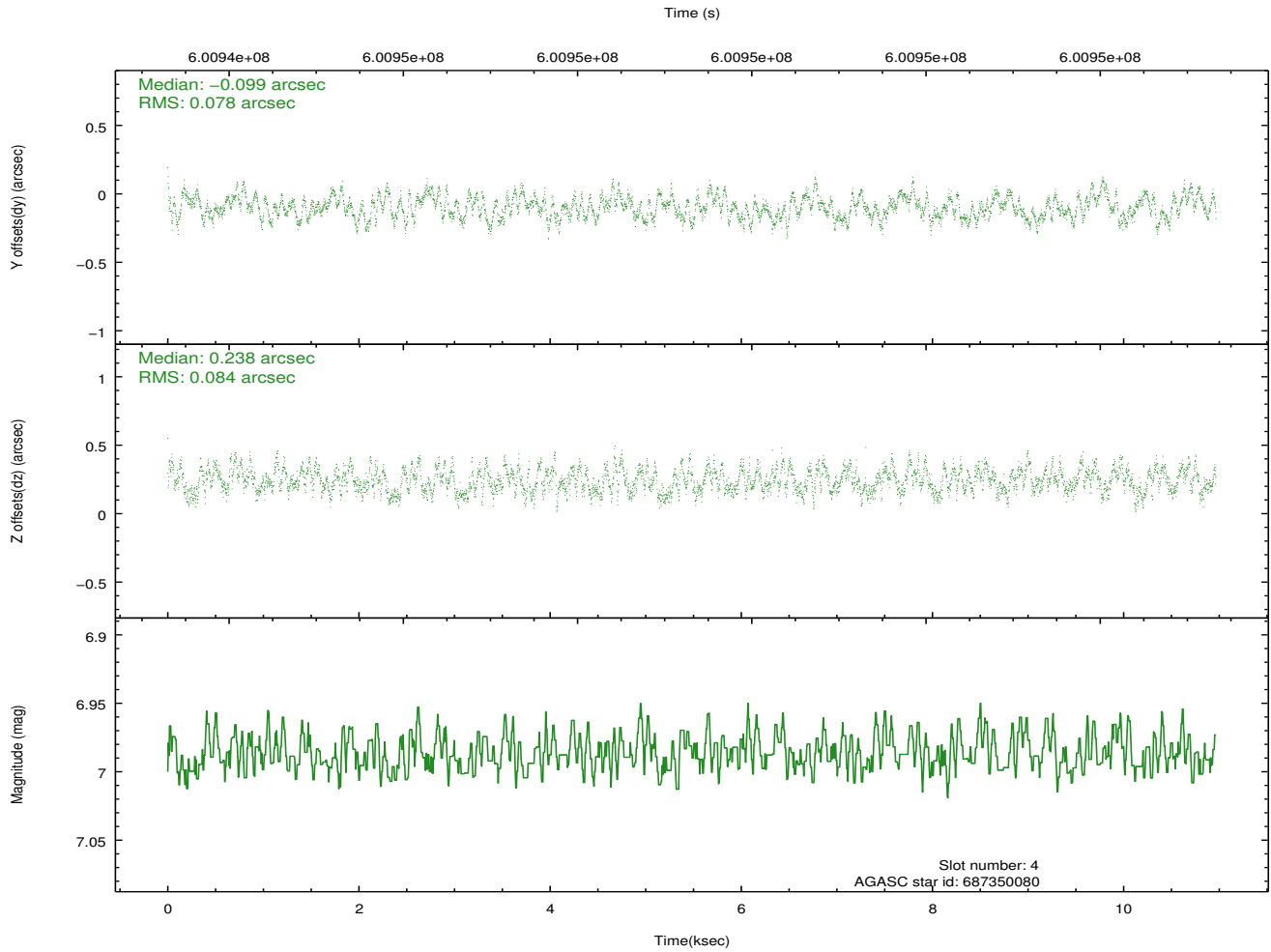
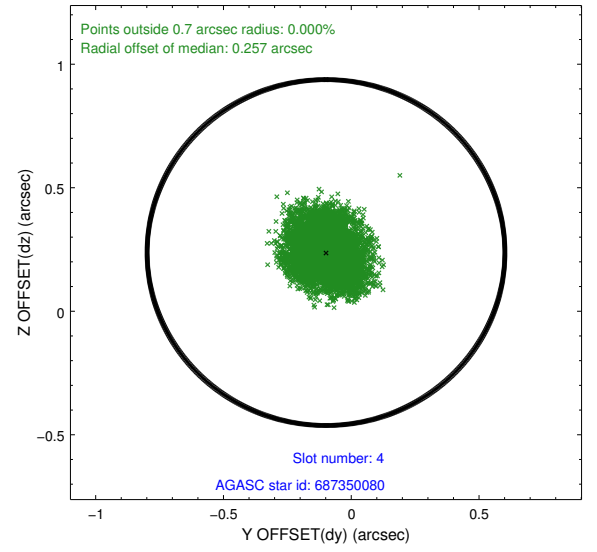
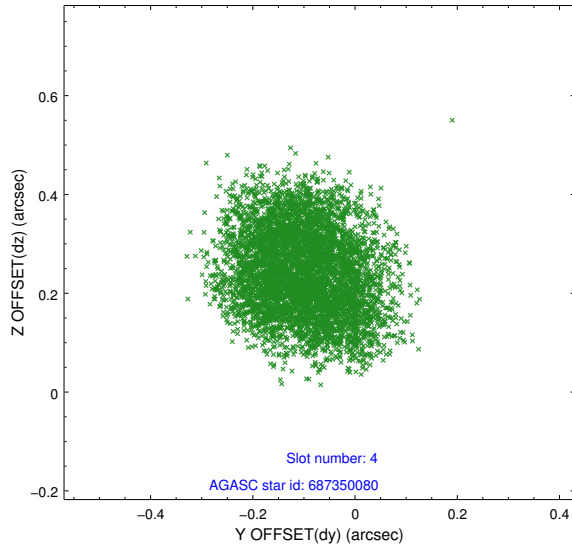
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.93	2675	-0.209	-0.055	0.007	0.013	0.000000	0.000000	-768.73	-1741.92
1	FID		ACIS-S-4	7.04	2675	0.415	0.115	0.006	0.010	0.000000	0.000000	2144.92	166.29
2	FID		ACIS-S-5	7.03	2674	-0.237	-0.052	0.007	0.013	0.000000	0.000000	-1821.03	160.27
3	GUIDE	used	687349936	8.37	5344	0.154	-0.085	0.100	0.165	352.258836	-1.470329	274.02	-1811.90
4	GUIDE	used	687350080	6.99	5350	-0.099	0.238	0.125	0.187	352.376323	-1.035903	-974.54	-780.17
5	GUIDE	used	687351496	6.22	5350	0.033	-0.007	0.090	0.153	352.362444	-1.791217	1479.96	-1951.01
6	GUIDE	used	688259864	9.16	5345	0.041	-0.227	0.144	0.256	353.194897	-0.842717	-387.82	2189.81
7	GUIDE	used	688264664	7.84	5349	-0.128	0.072	0.090	0.153	352.757580	-0.596012	-1848.42	1125.82

## 2.4 Star Slots

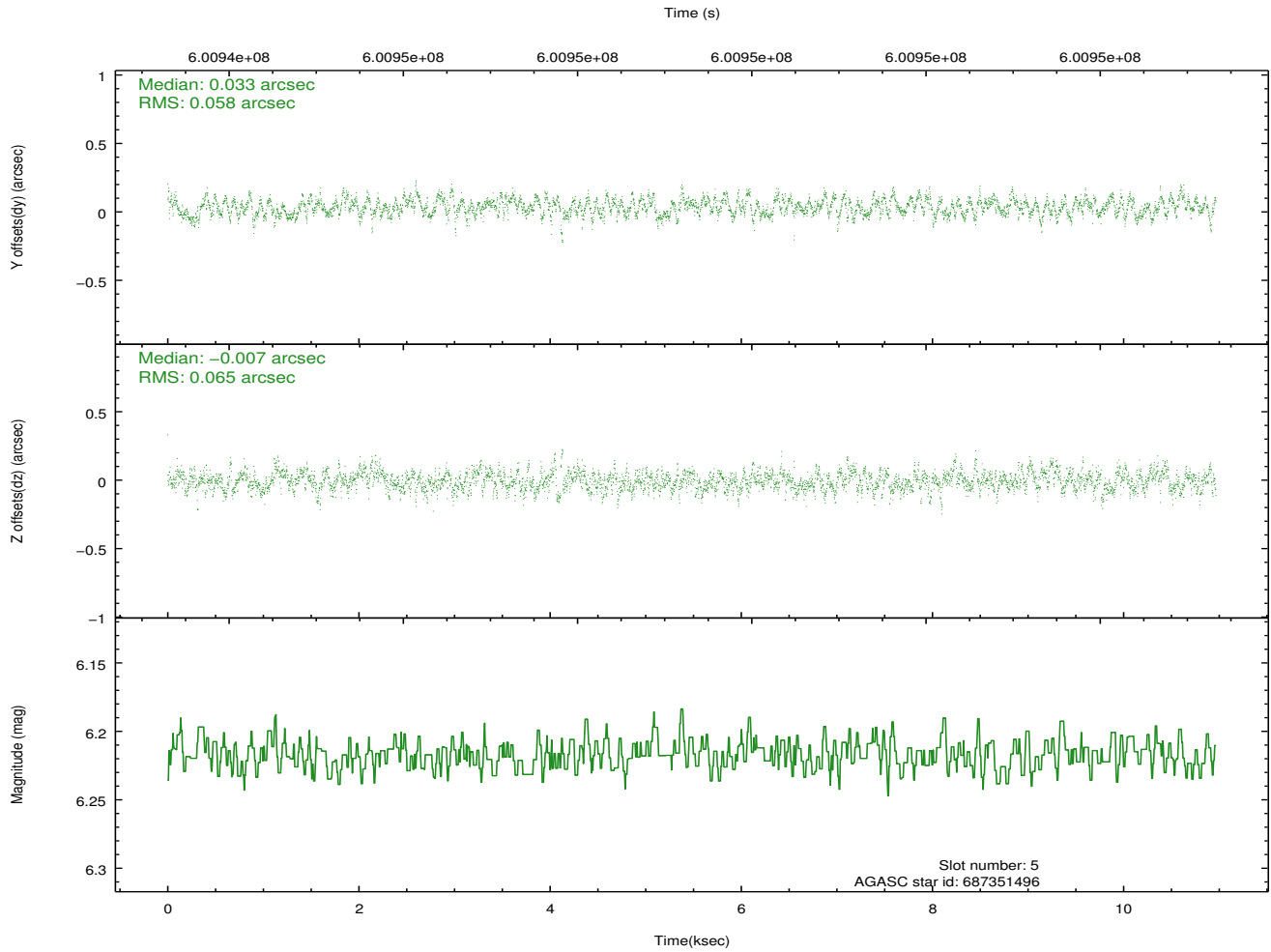
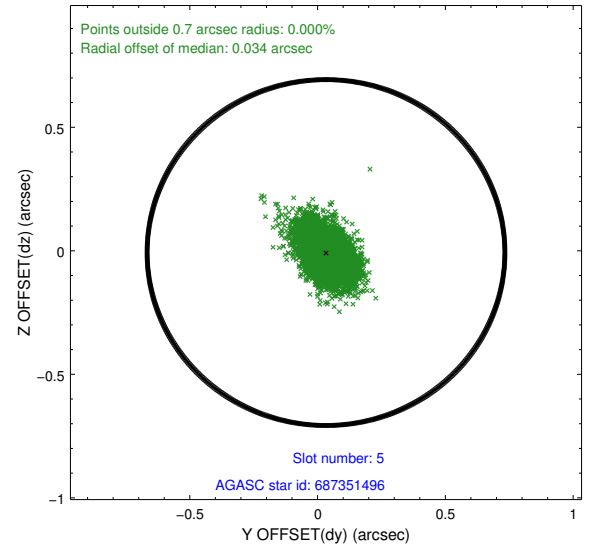
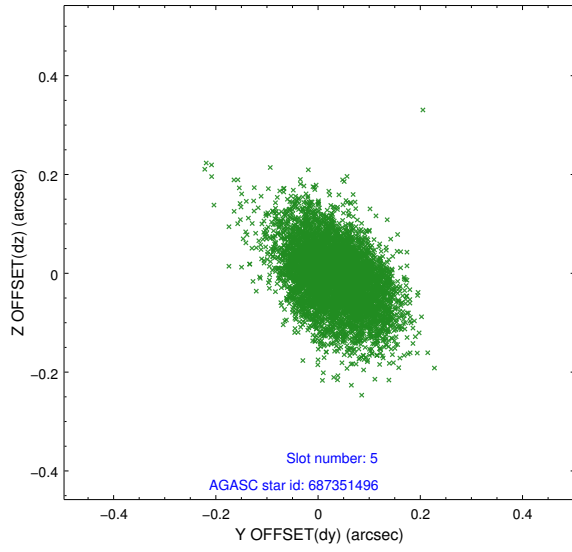
### 2.4.1 Slot 3



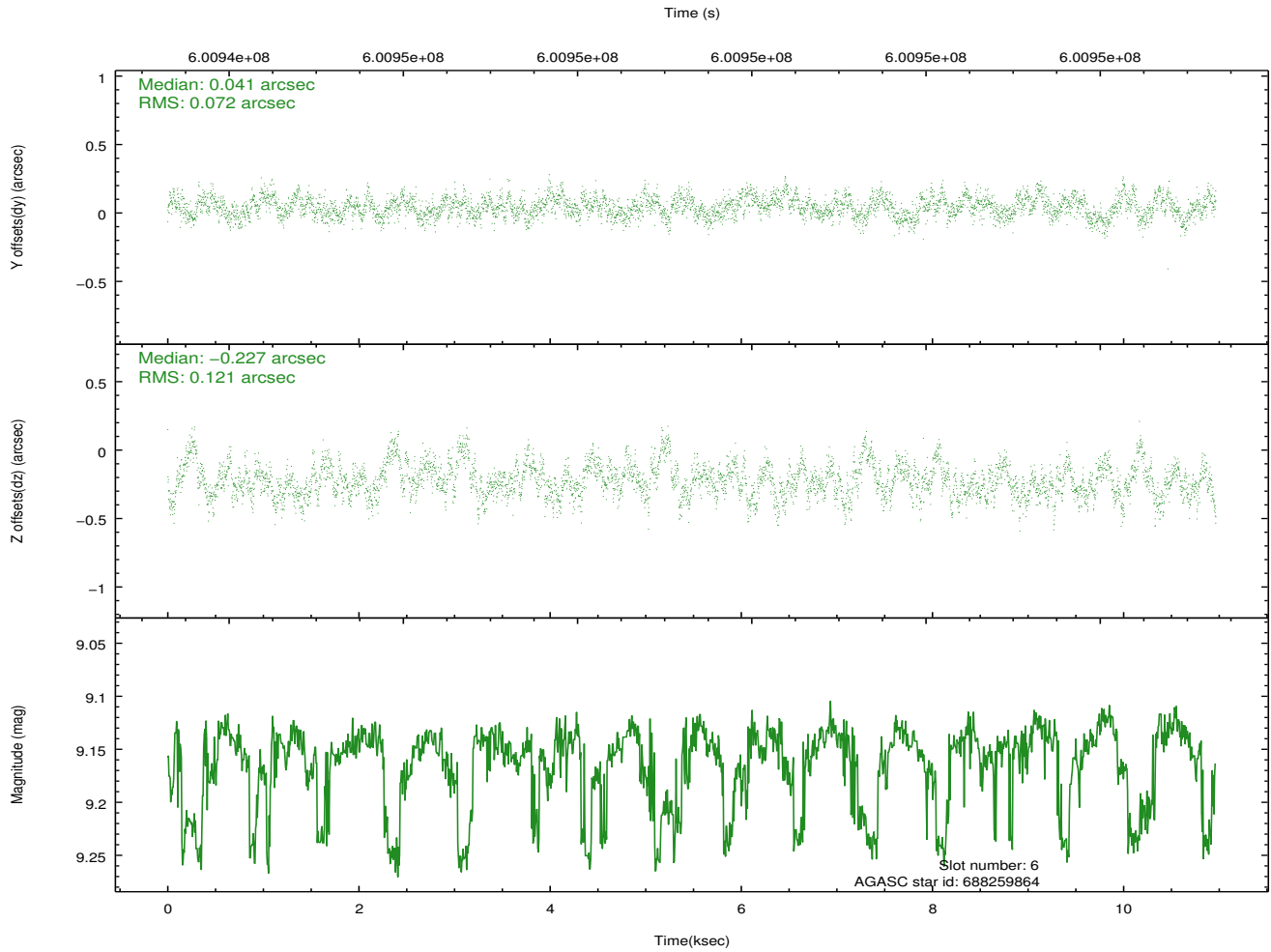
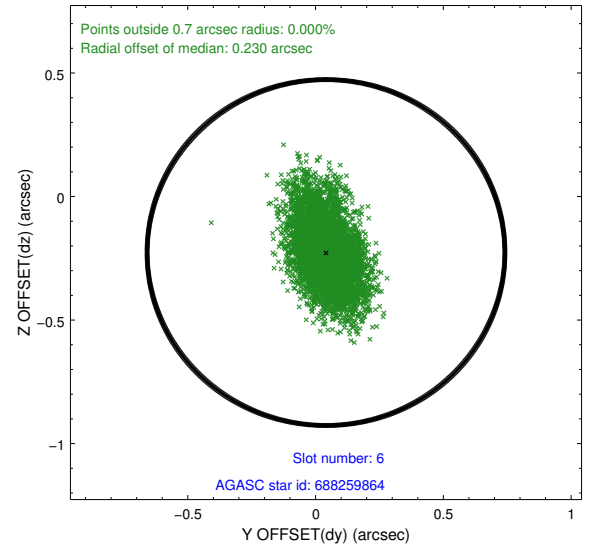
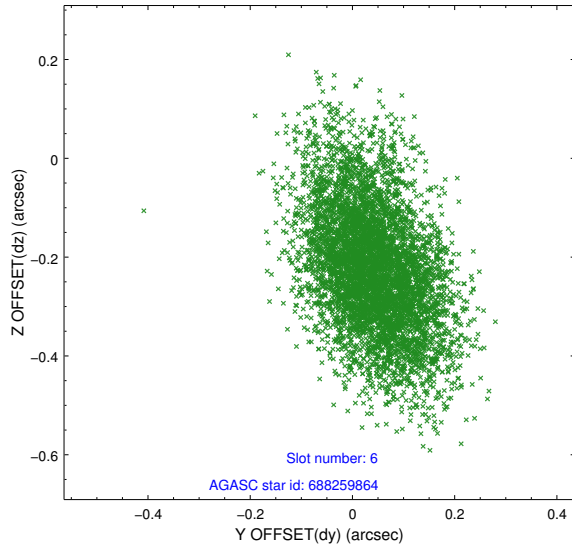
## 2.4.2 Slot 4



### 2.4.3 Slot 5

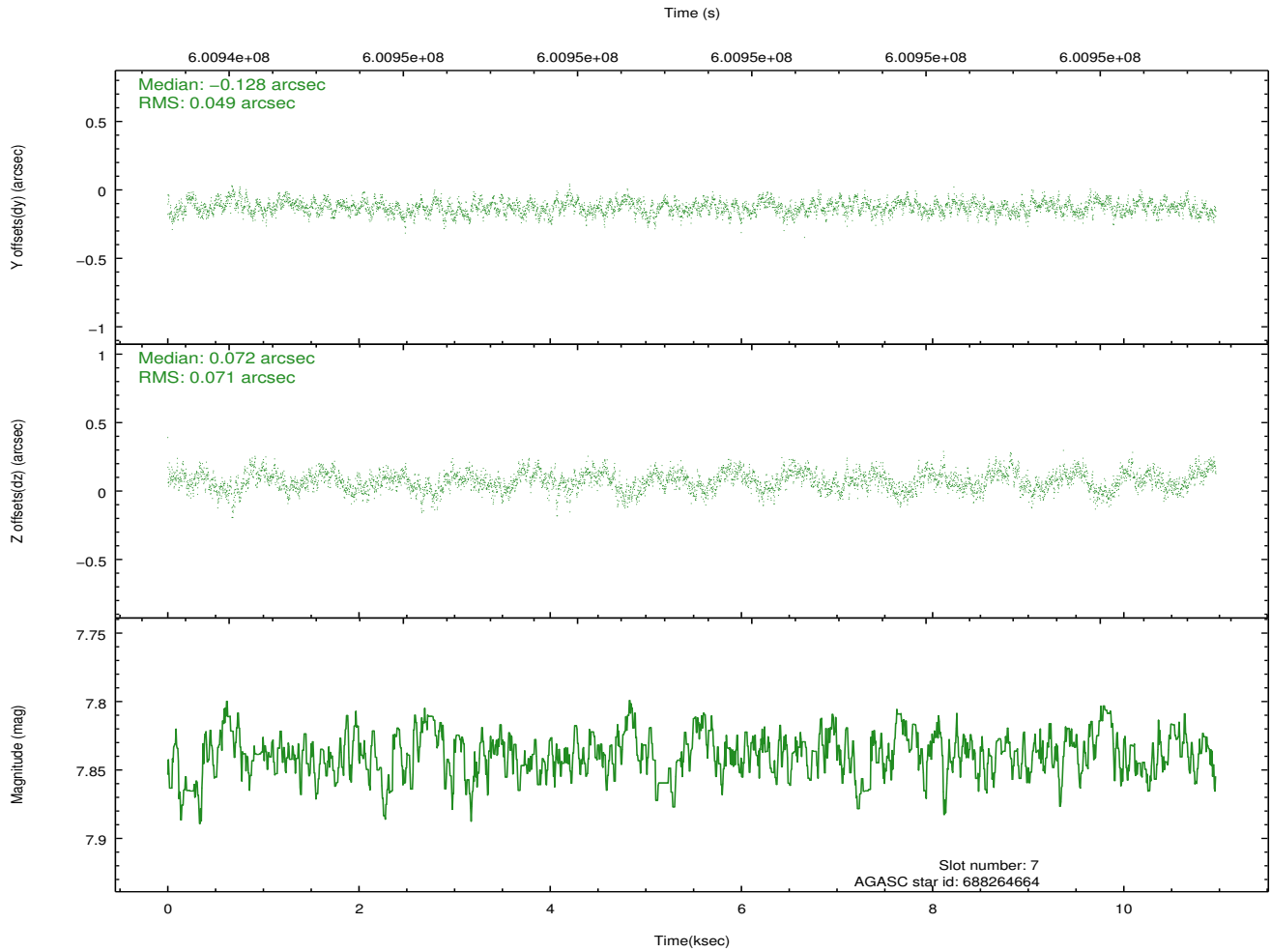
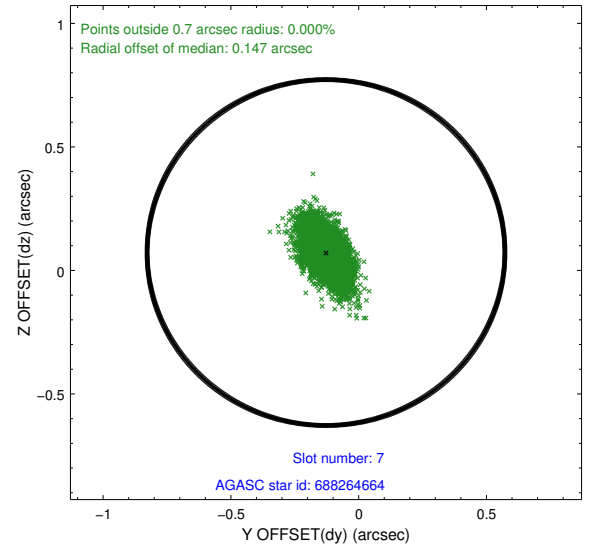
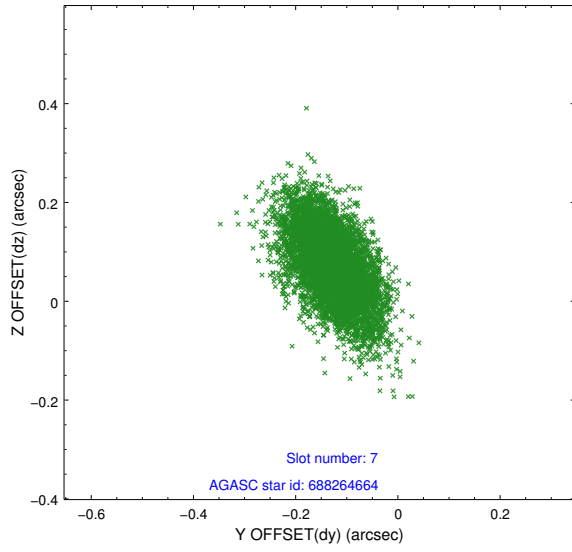


## 2.4.4 Slot 6



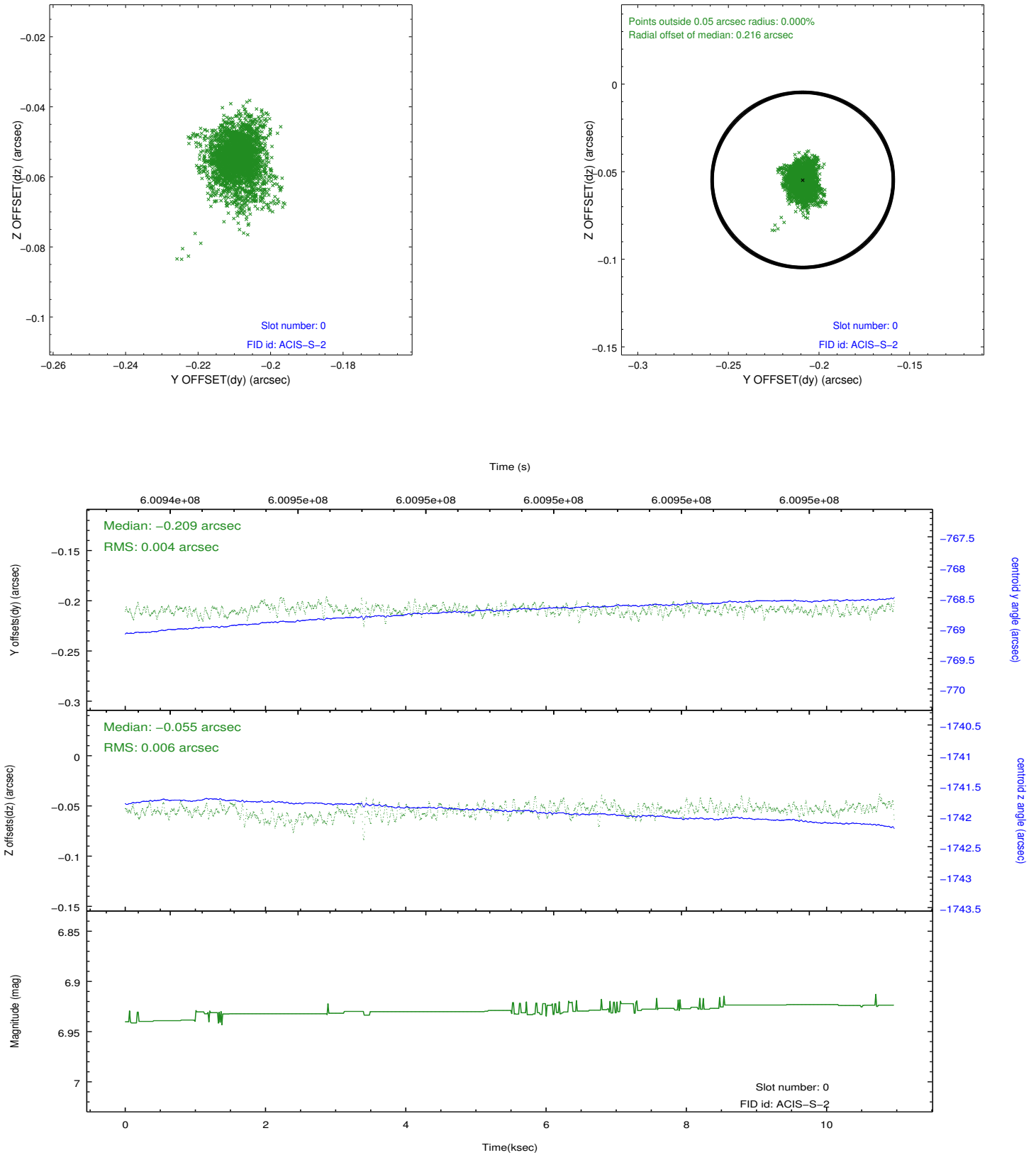


## 2.4.5 Slot 7

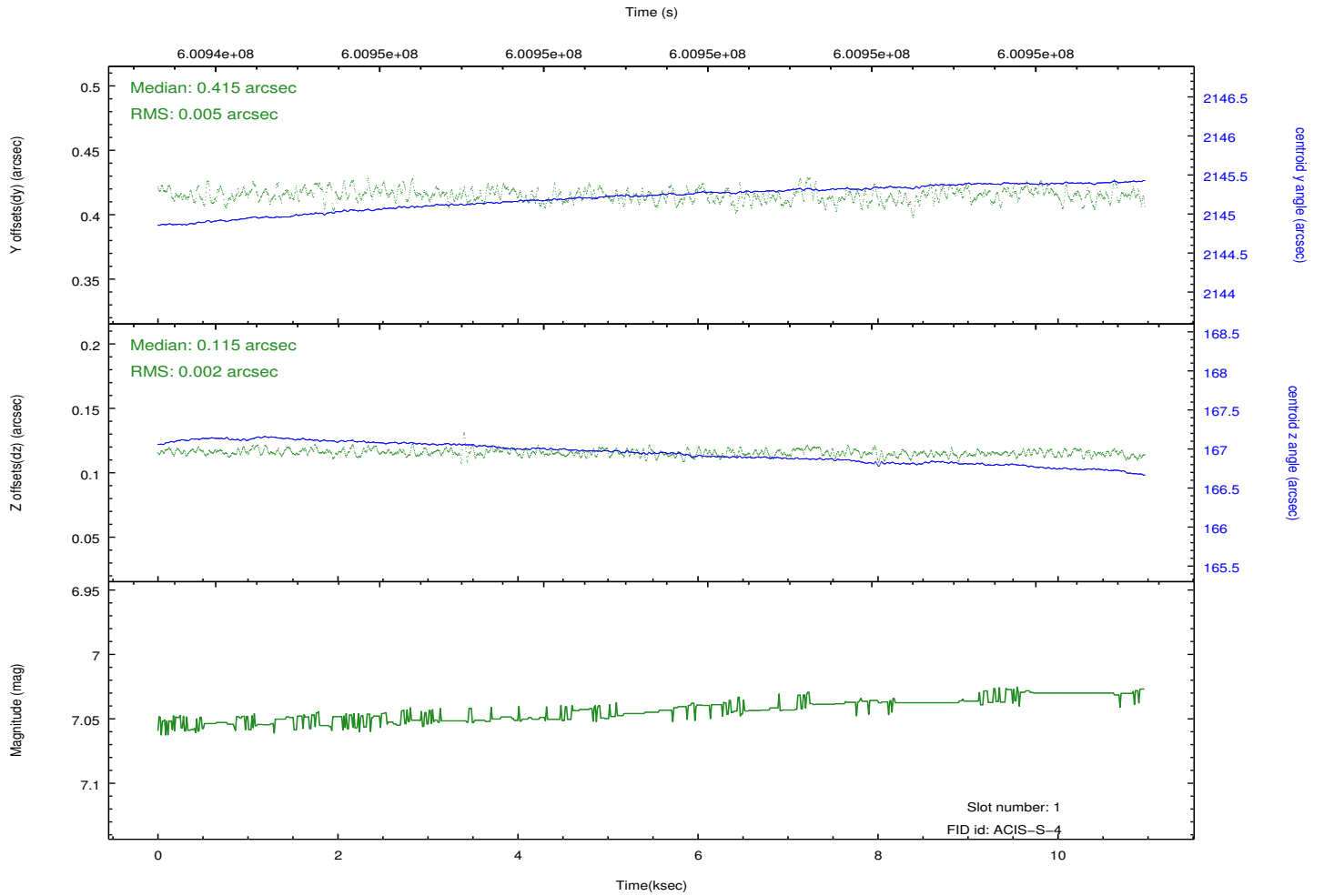
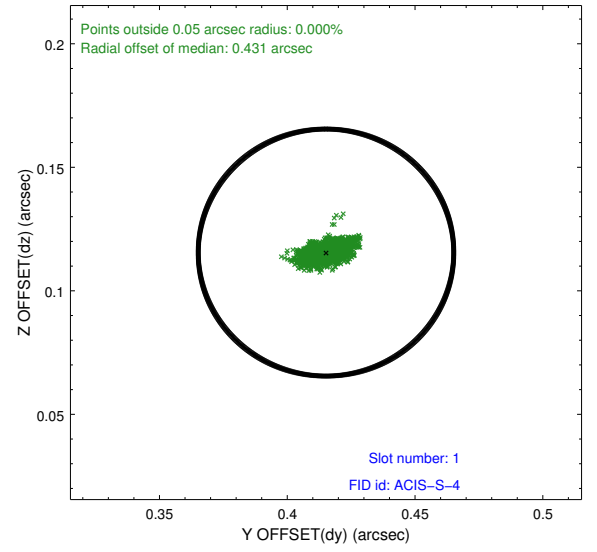
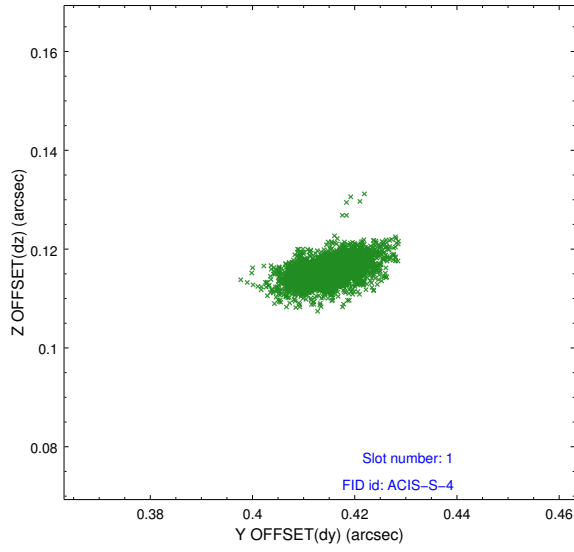


## 2.5 FID Slots

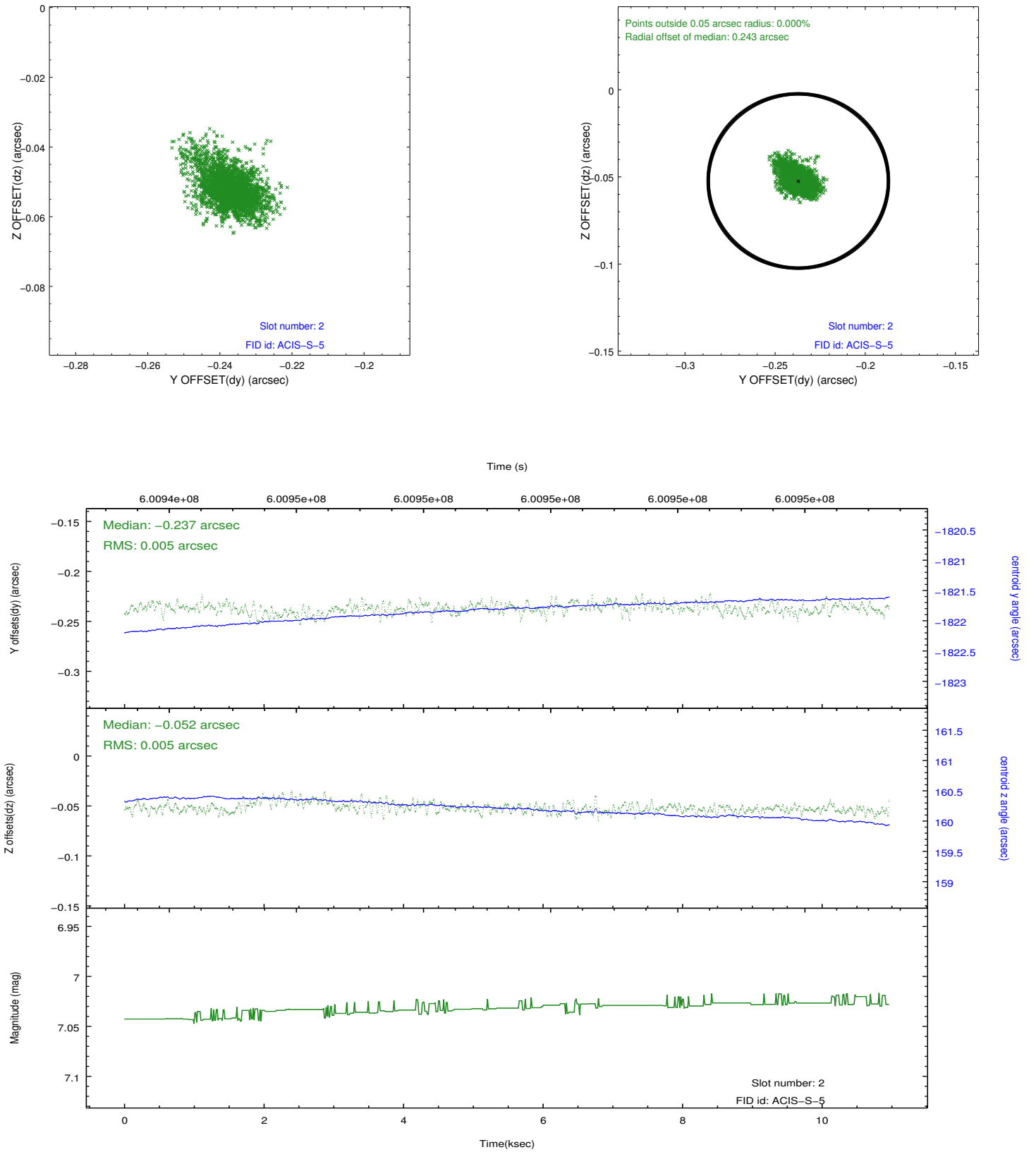
### 2.5.1 Slot 0



## 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)	2017.01.17
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.050200077415

### A.2 Comments