

# V&V Reference Report

## L2 ASCDS Version : 10.7

Observation 21283 - L2 Version 1  
Chandra X-Ray Center

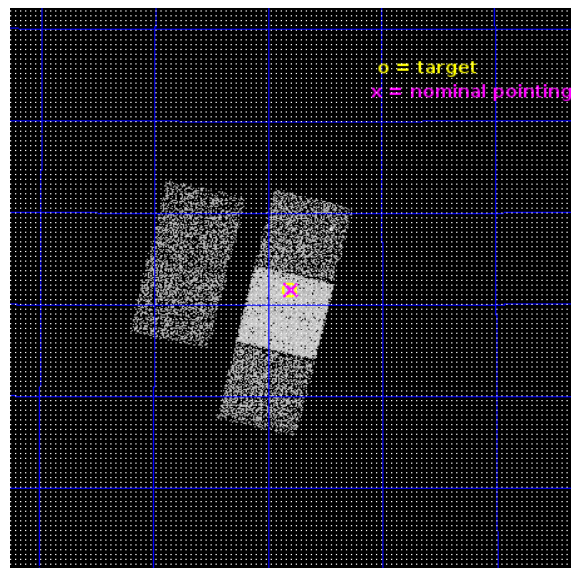
L2 Processing Date : Nov 12 2018

## 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

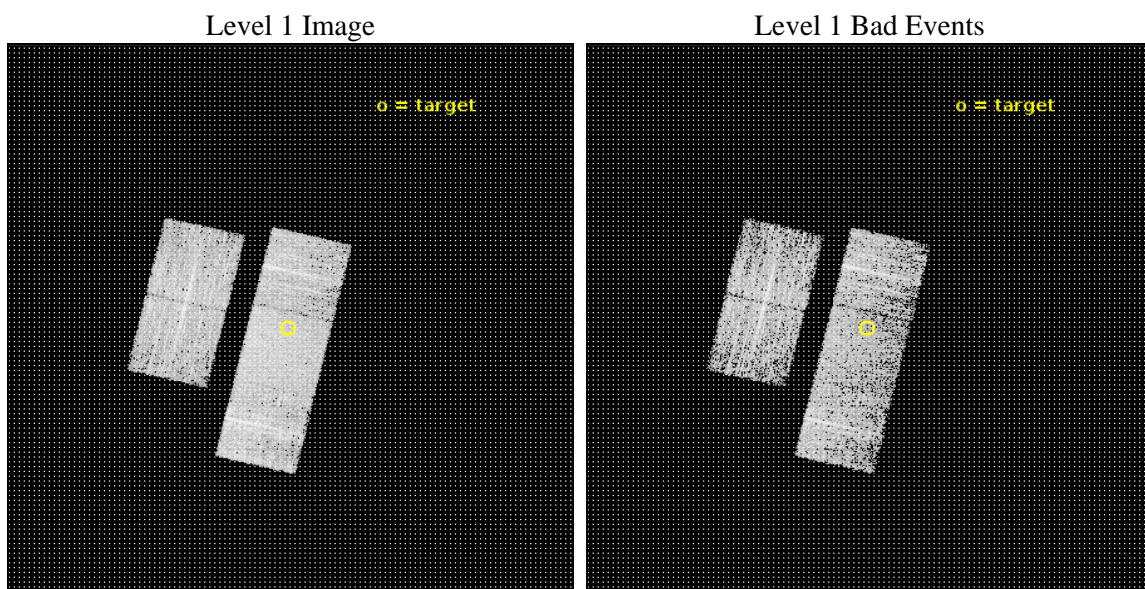
seq_num	503056	Sequence number
obs_id	21283	Observation id
title	Where Have All the Central Compact Objects Gone?	Proposal title
observer	Eric Gotthelf	Principal investigator
object	PSR J0612+3721	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	93.2025	Observer's specified target RA [deg]
dec_targ	37.360361	Observer's specified target Dec [deg]
ra_nom	93.198266083412	Nominal RA [deg]
dec_nom	37.360750324468	Nominal Dec [deg]
roll_nom	103.40196730665	Nominal Roll [deg]
revision	1	Processing version of data
ontime	3552.600027442	Sum of GTIs [s]
livetime	3506.1826926974	Livetime [s]
ontime2	3552.600027442	Sum of GTIs [s]
ontime3	3552.600027442	Sum of GTIs [s]
ontime6	3552.600027442	Sum of GTIs [s]
ontime7	3552.600027442	Sum of GTIs [s]
ontime8	3552.600027442	Sum of GTIs [s]
l2events	24071	Number of level 2 events



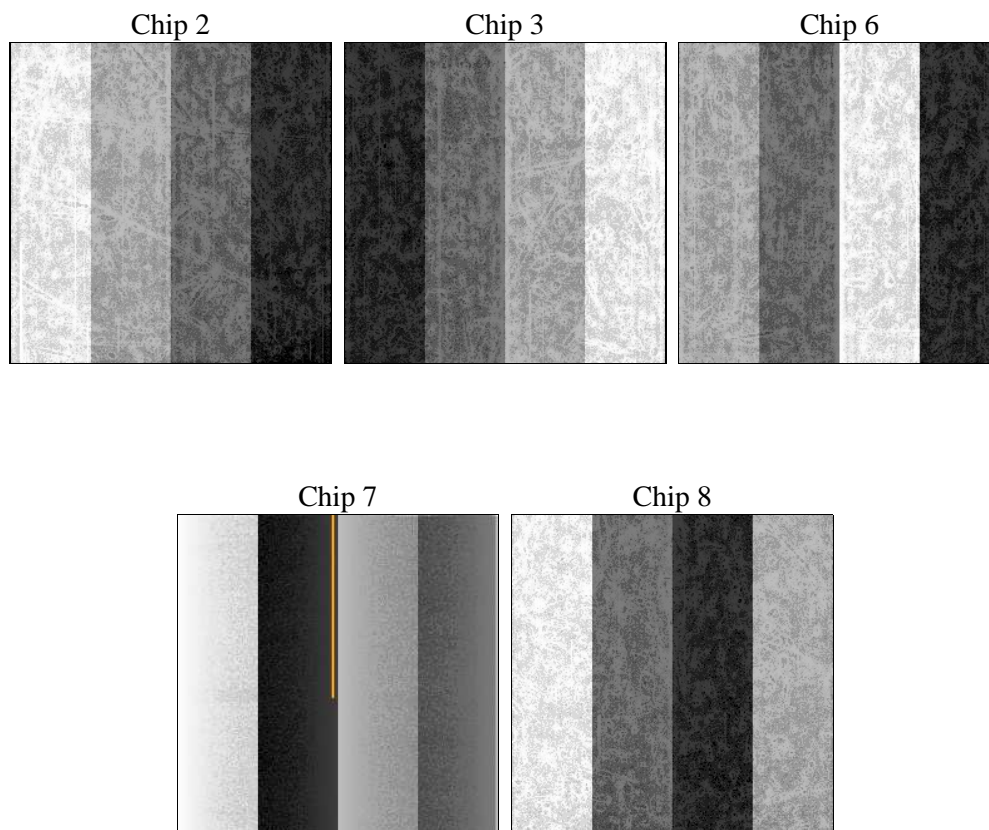
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	3500.000000	[s] Scheduled observation exposure time
ascdsver	10.7	Processing system revision	ontime	3552.600027442	Sum of GTIs [s]
caldsver	4.8.0.1	&#160	ontime2	3552.600027442	Sum of GTIs [s]
date	2018-11-13T02:39:29	Date and time of file creation	ontime3	3552.600027442	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	3552.600027442	Sum of GTIs [s]
			ontime7	3552.600027442	Sum of GTIs [s]
			ontime8	3552.600027442	Sum of GTIs [s]
			l1events	146649	Number of level 1 events

### 2.1.4 Events

	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	27035	25660	27114	33924	32916
rejected events	24399	23063	23998	19526	24160
rejected %	90%	89%	88%	57%	73%

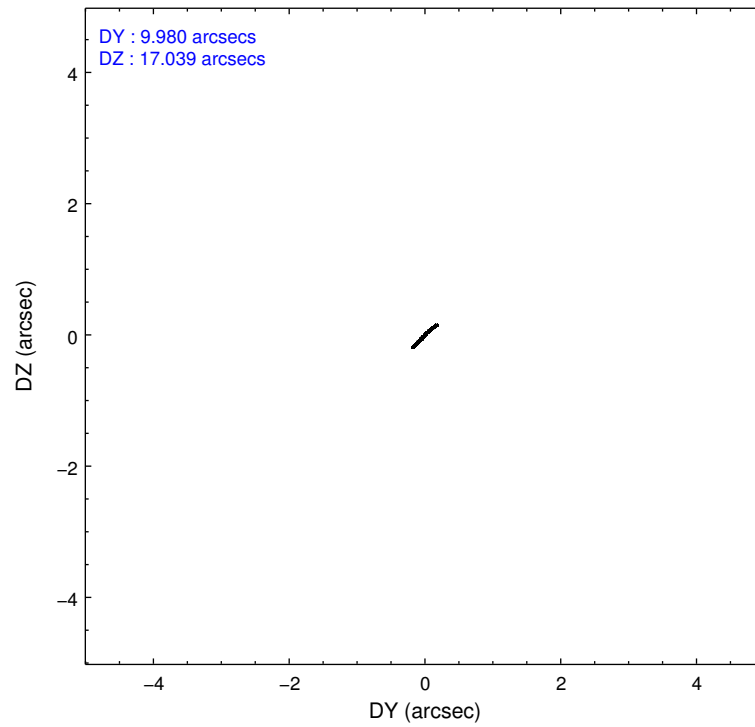
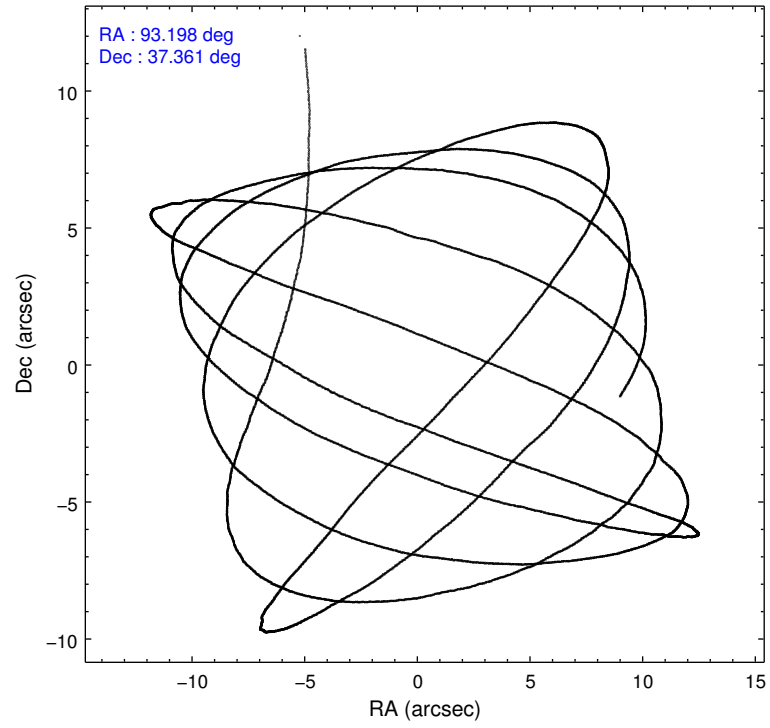
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	953	906	983	1139	2402
	3%	3%	3%	3%	7%
grade 1 events	10	15	13	57	37
	0%	0%	0%	0%	0%
grade 2 events	580	542	802	3012	2104
	2%	2%	2%	8%	6%
grade 3 events	273	290	273	1130	924
	1%	1%	1%	3%	2%
grade 4 events	292	277	277	1104	869
	1%	1%	1%	3%	2%
grade 5 events	1005	1195	1131	3324	1876
	3%	4%	4%	9%	5%
grade 6 events	547	585	785	8036	2485
	2%	2%	2%	23%	7%
grade 7 events	23375	21850	22850	16122	22219
	86%	85%	84%	47%	67%

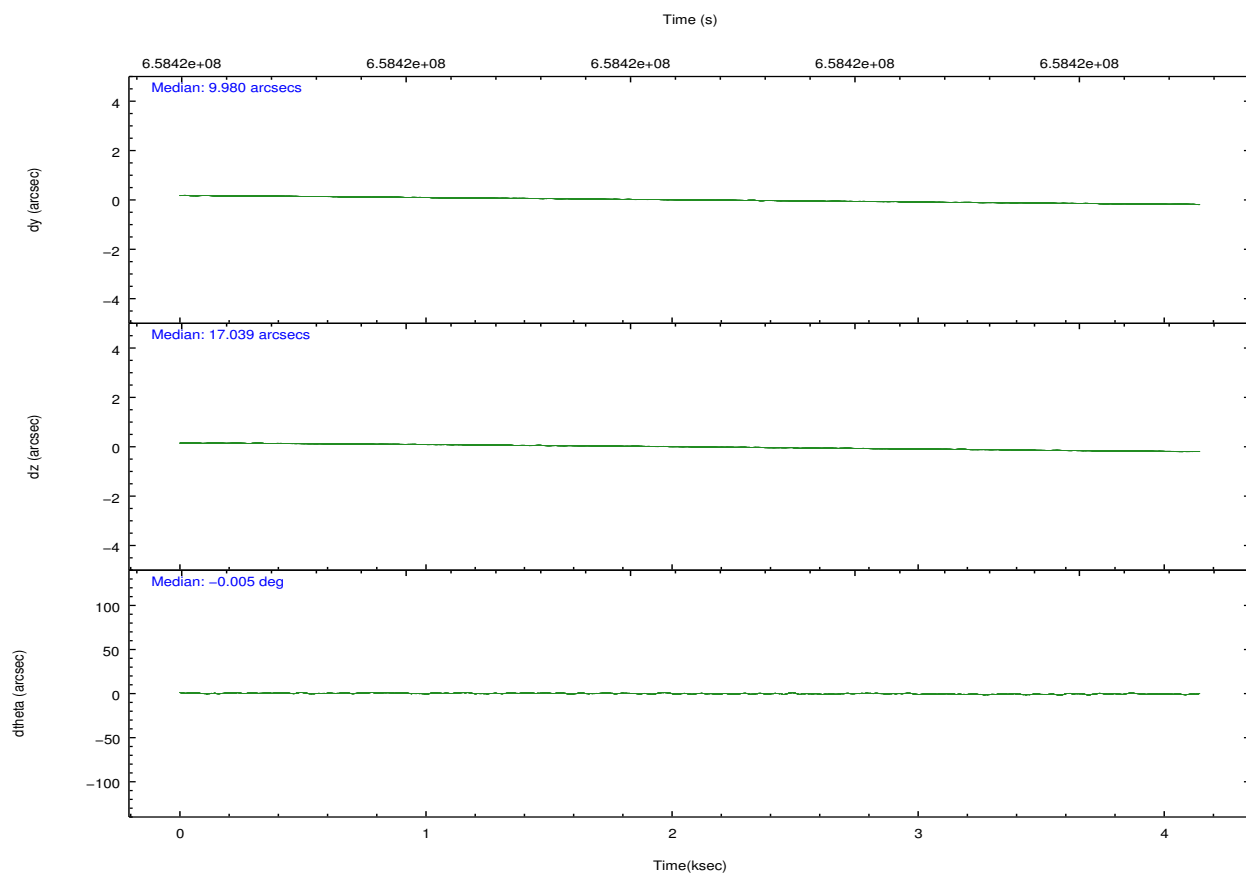
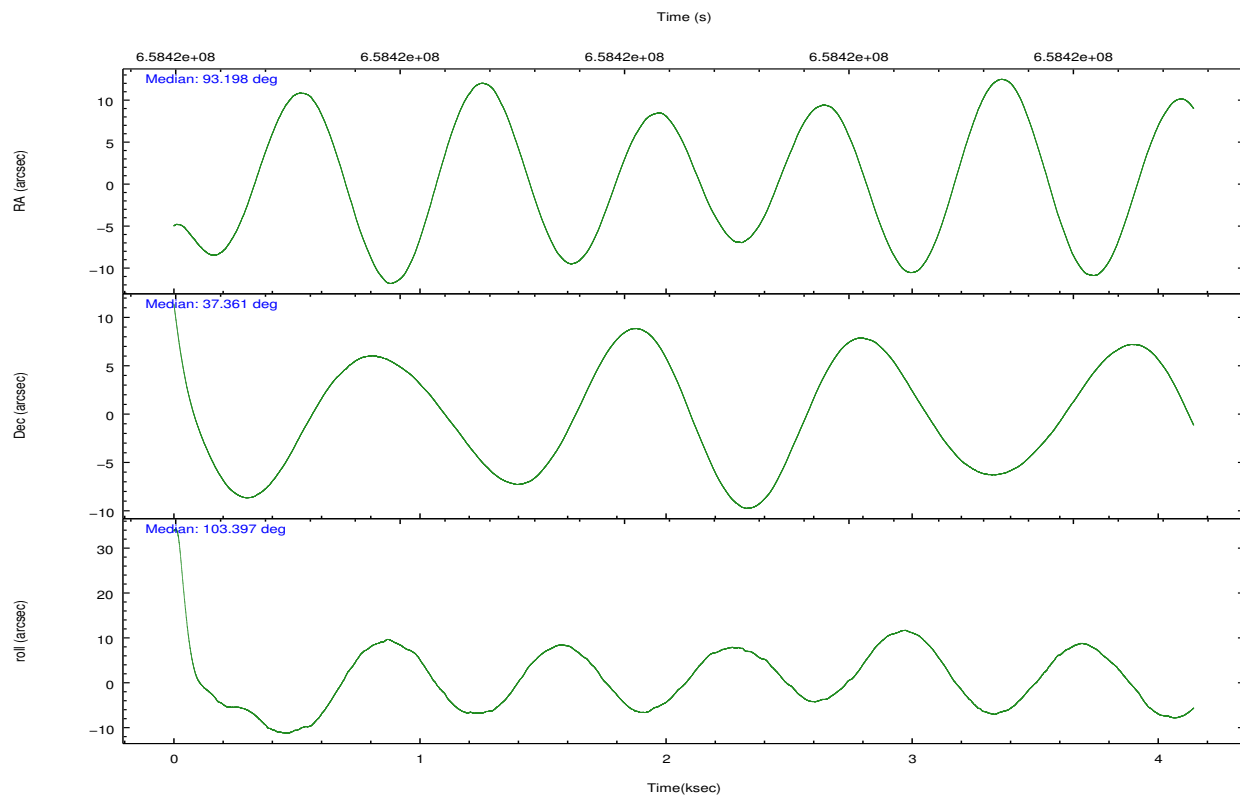


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23678	ACIS-23678	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	93.222401	93.19826608341182	CCD I2 on	O1	Y
[deg] Pointing Dec	37.341036	37.36075032446818	CCD I3 on	O2	Y
[deg] Pointing Roll	103.230563	103.4019673066532	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	Y	Y
[s] Observation start time (MET)	658421858.184000	658420540.33279	CCD S5 on	N	N
Observation start date	2018-11-12T14:56:29	2018-11-12T14:35:40	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	658425358.184000	658426244.97063	On-chip summing requested	N	N
Observation end date	2018-11-12T15:54:49	2018-11-12T16:10:44	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



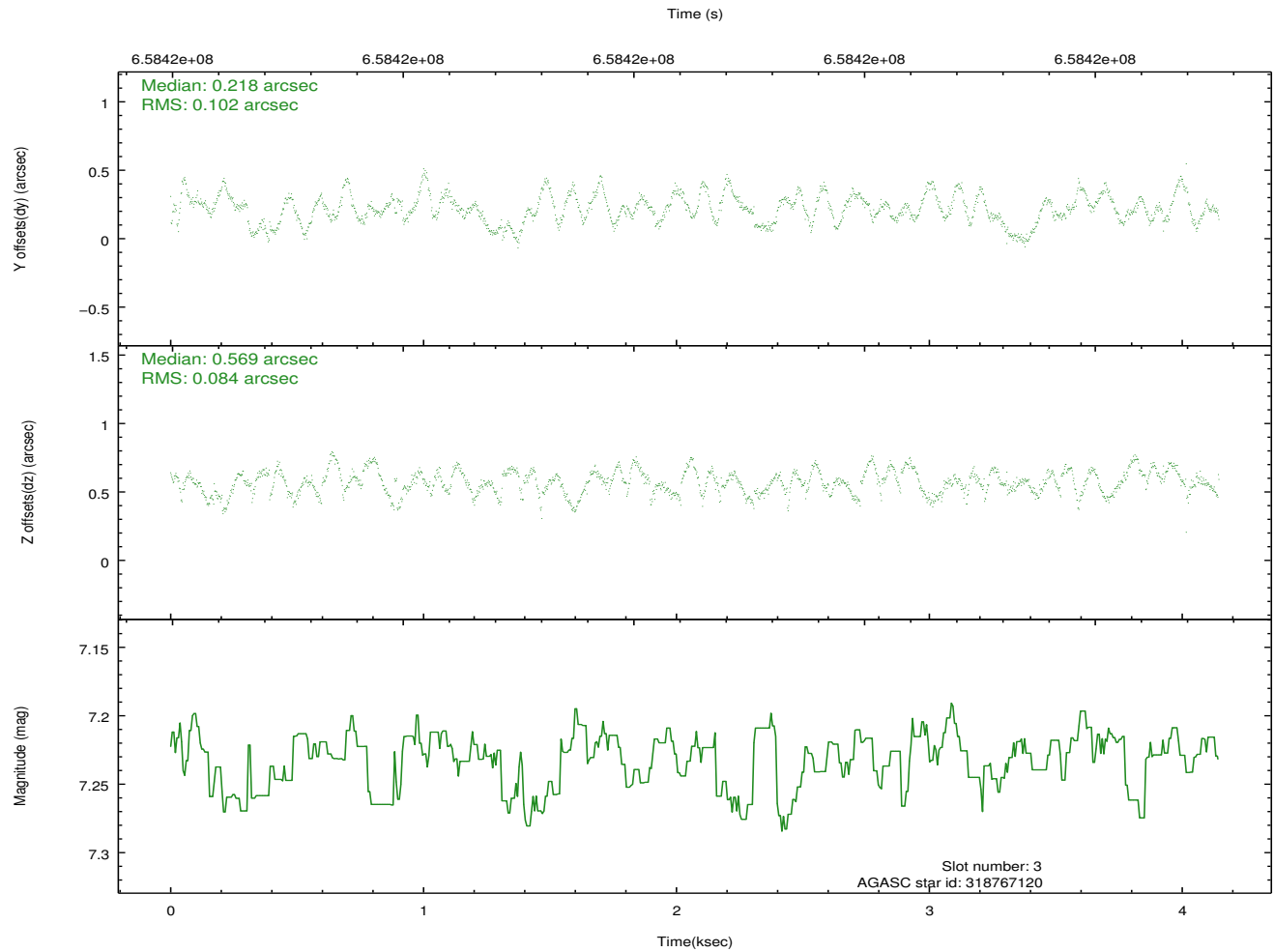
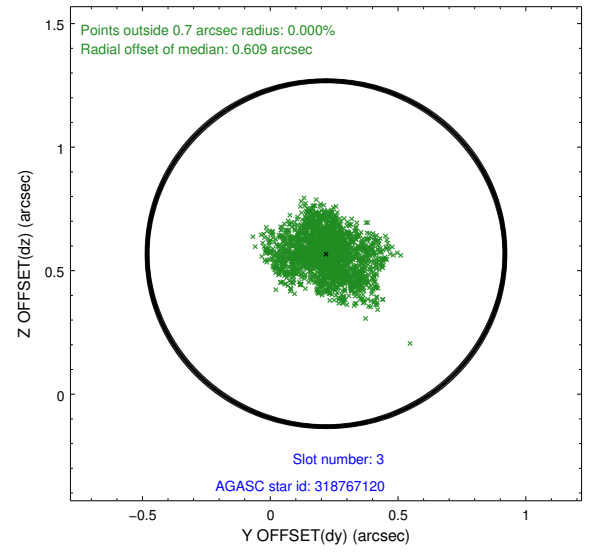
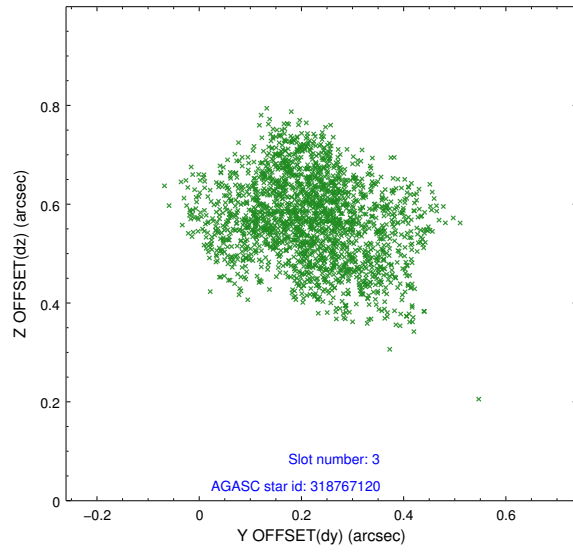


Slot Statistics

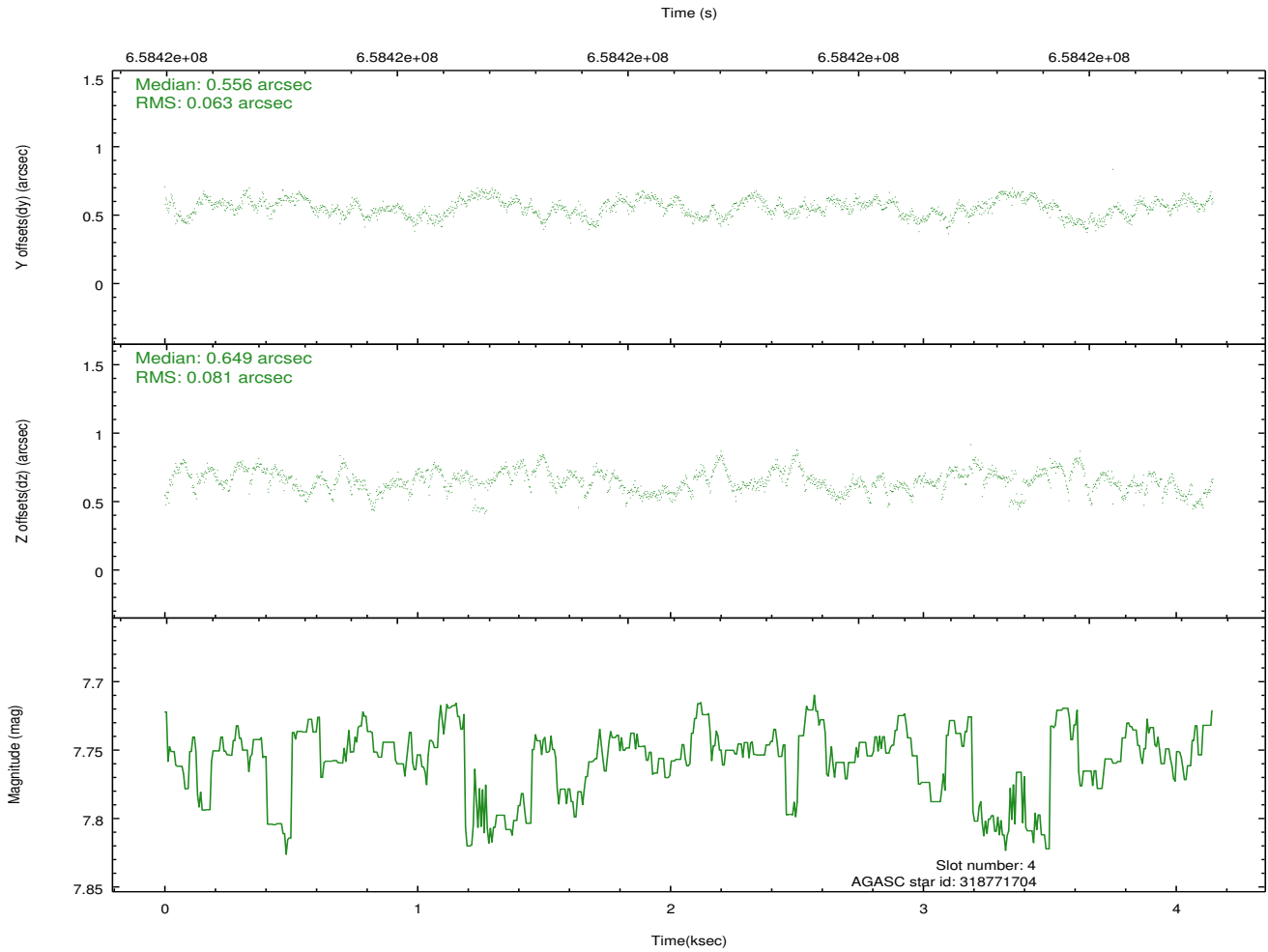
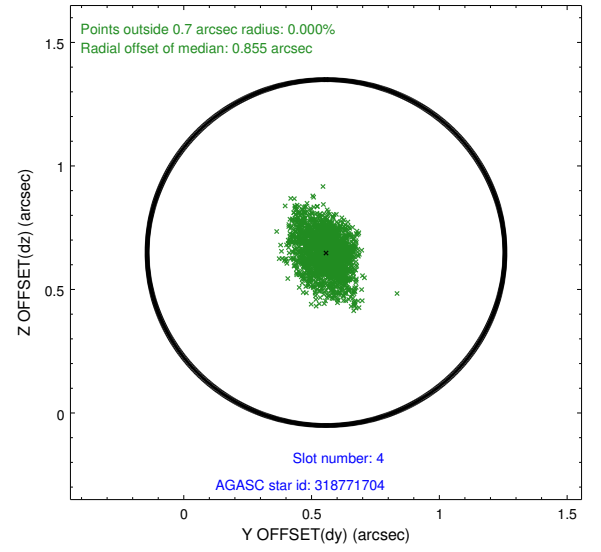
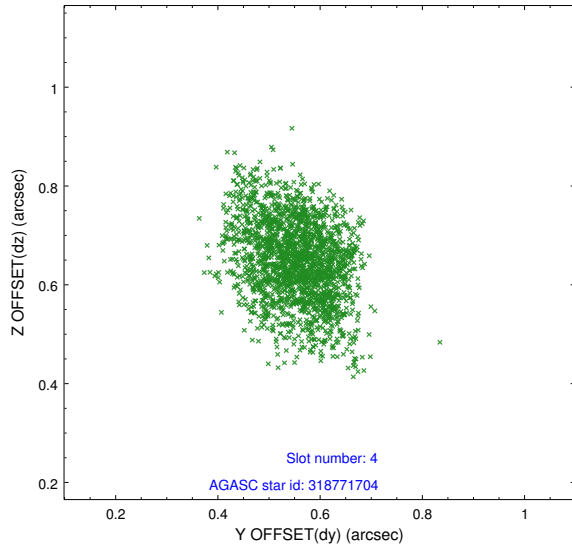
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.10	1011	1.000	-0.289	-0.186	0.007	0.013	0.000000	0.000000	-763.07	-1738
1	FID		ACIS-S-4	7.24	1011	1.000	0.710	0.189	0.007	0.013	0.000000	0.000000	2150.49	168
2	FID		ACIS-S-5	7.21	1012	1.000	-0.452	0.005	0.009	0.015	0.000000	0.000000	-1814.18	163
3	GUIDE	used	318767120	7.23	2023	1.000	0.218	0.569	0.146	0.220	93.377052	37.159124	-738.37	-281
4	GUIDE	used	318771704	7.75	2021	1.000	0.556	0.649	0.108	0.180	93.835466	37.387442	-233.40	-1746
5	GUIDE	used	383394664	8.09	2023	1.000	-0.332	-0.285	0.094	0.149	92.467164	37.571081	1306.36	1906
6	GUIDE	used	383393624	8.24	2023	1.000	-0.353	-0.520	0.090	0.154	92.265586	37.628690	1645.94	2415
7	GUIDE	used	383393352	9.22	2019	1.000	-0.093	-0.424	0.131	0.221	92.330894	37.789781	2165.14	2097

## 2.4 Star Slots

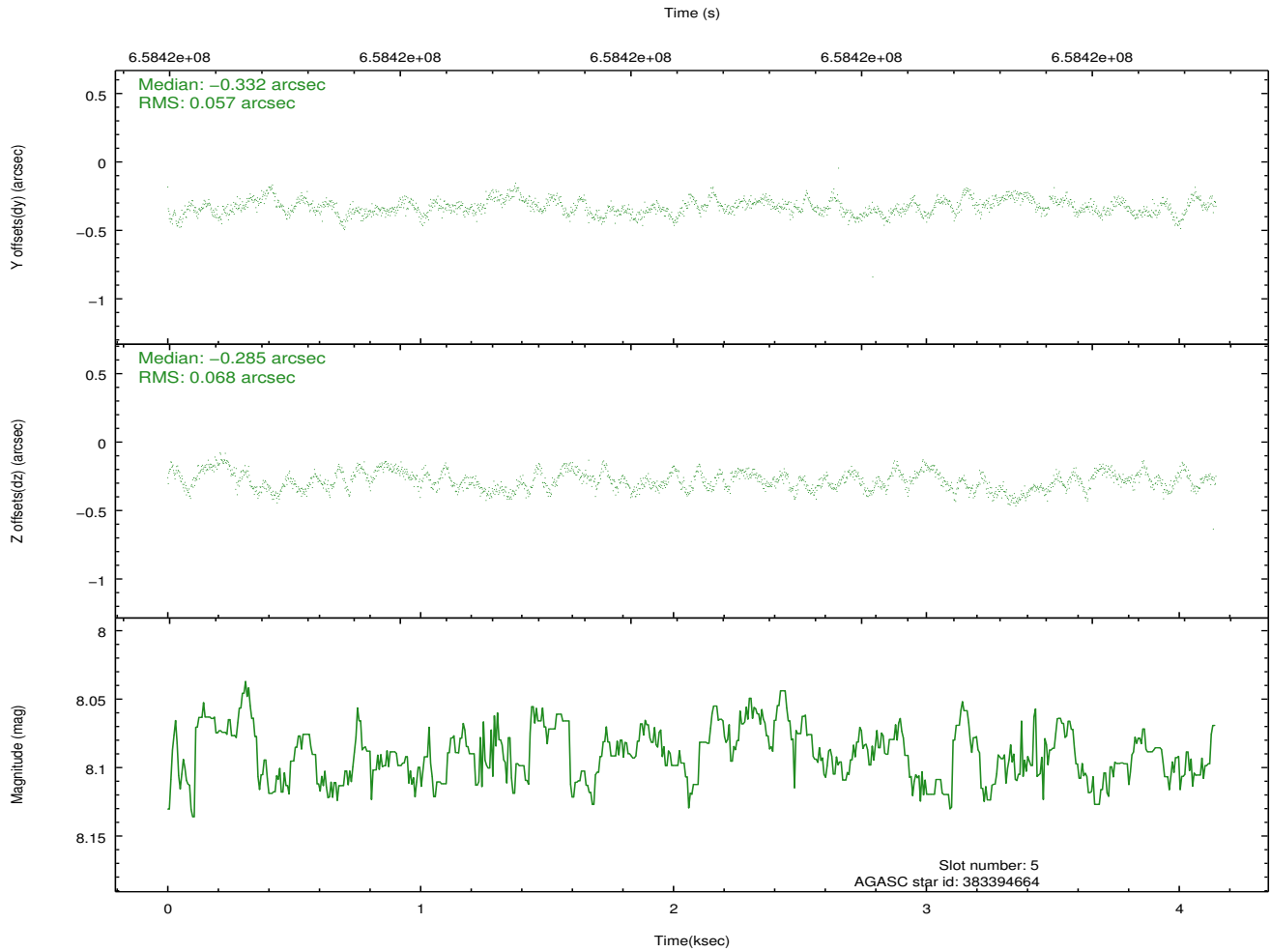
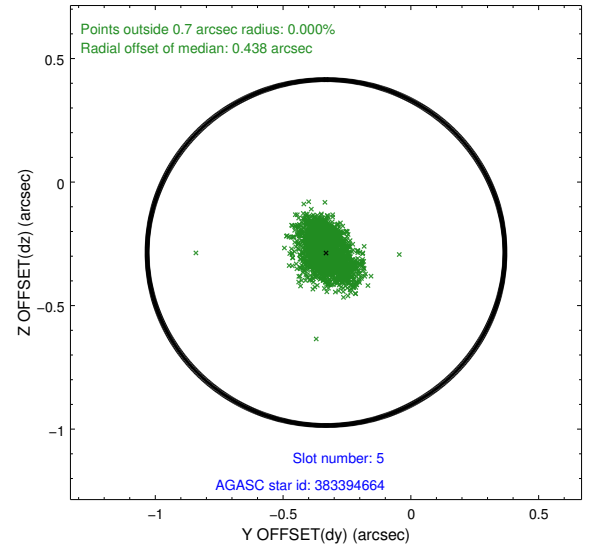
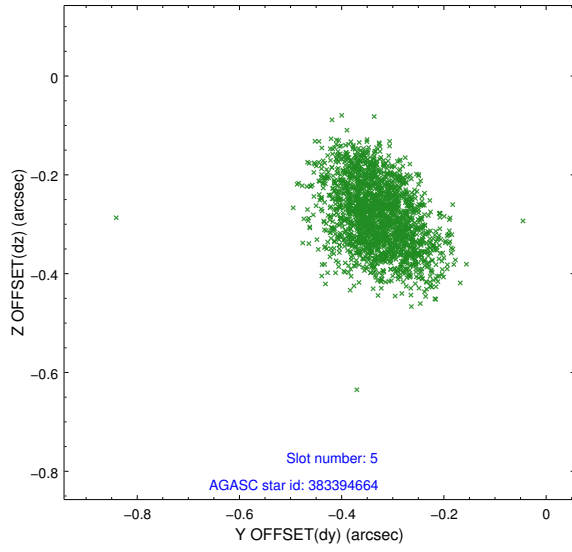
### 2.4.1 Slot 3



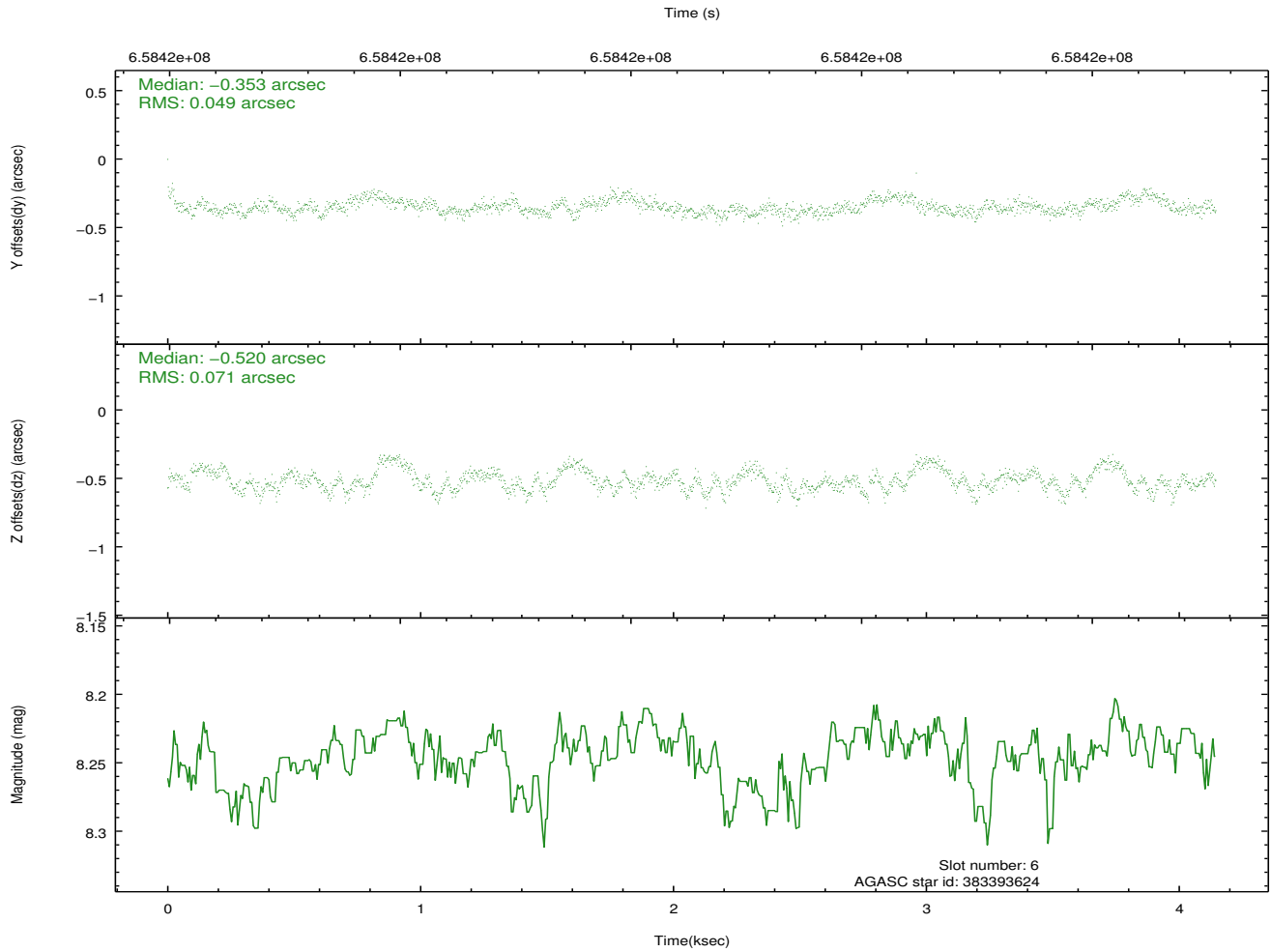
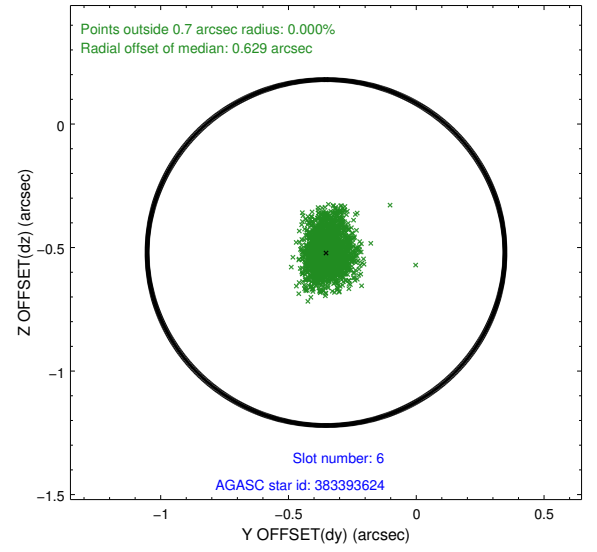
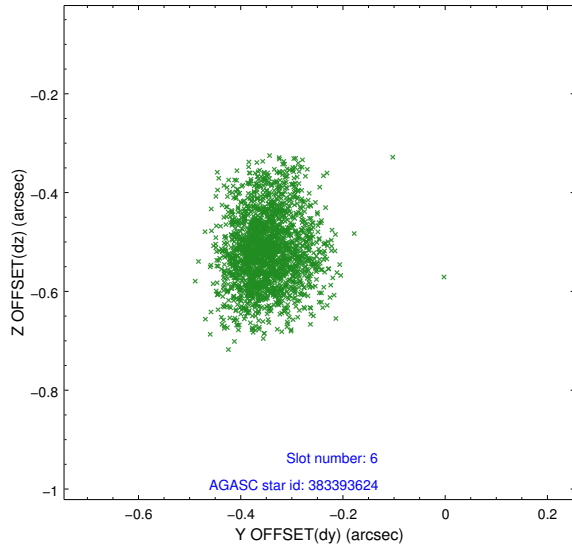
## 2.4.2 Slot 4



### 2.4.3 Slot 5

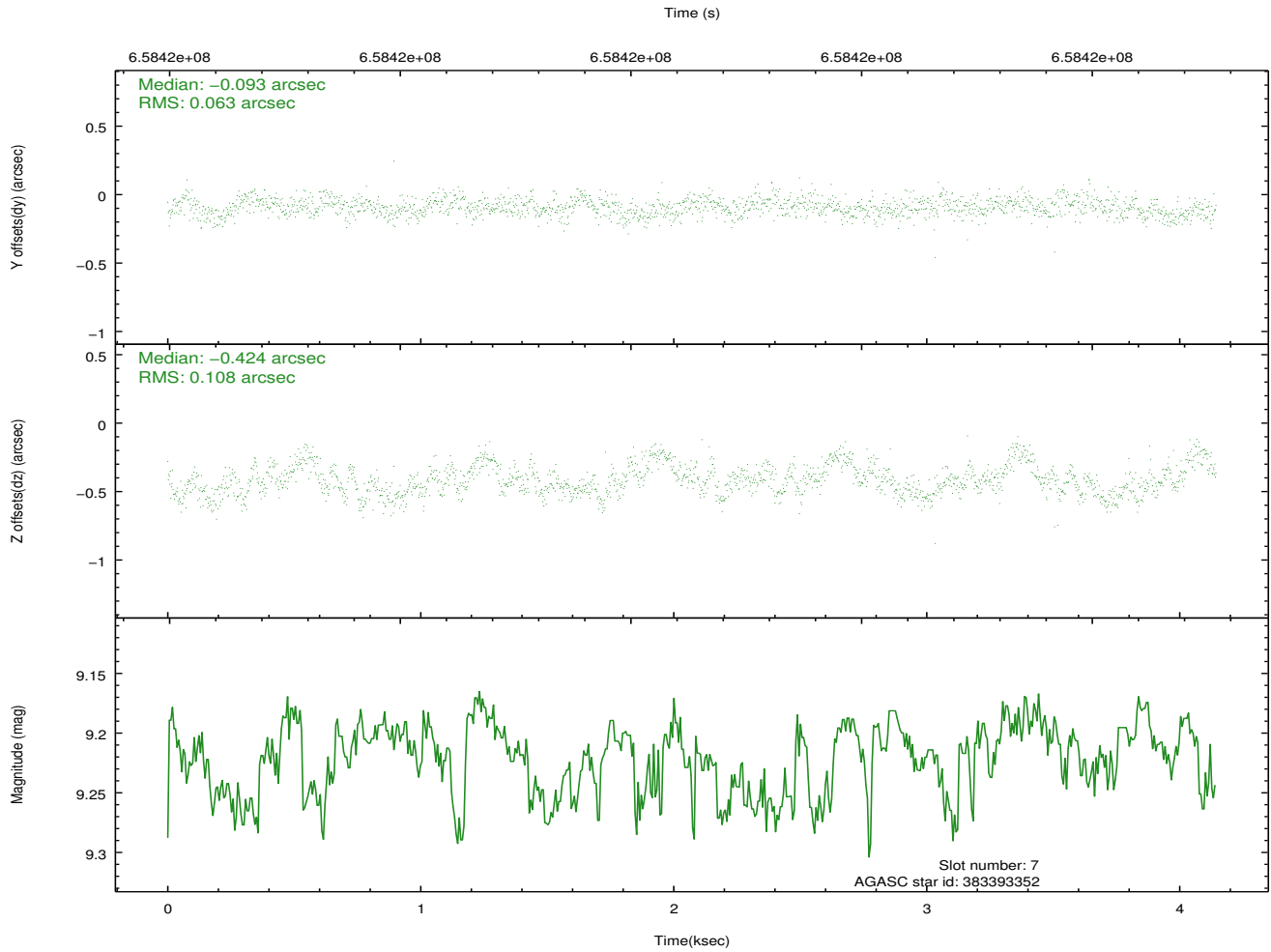
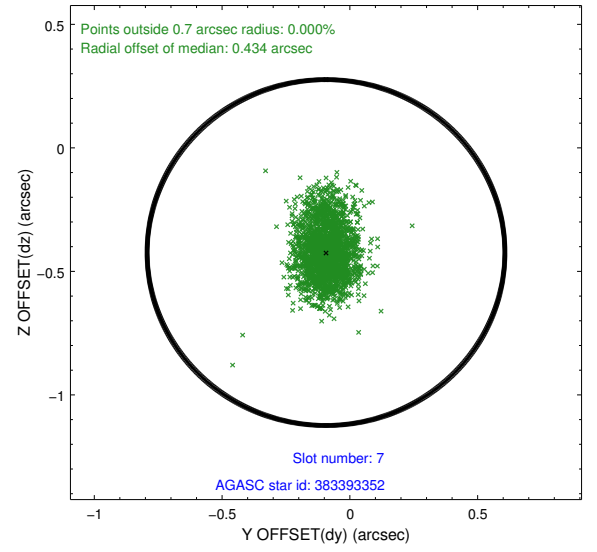
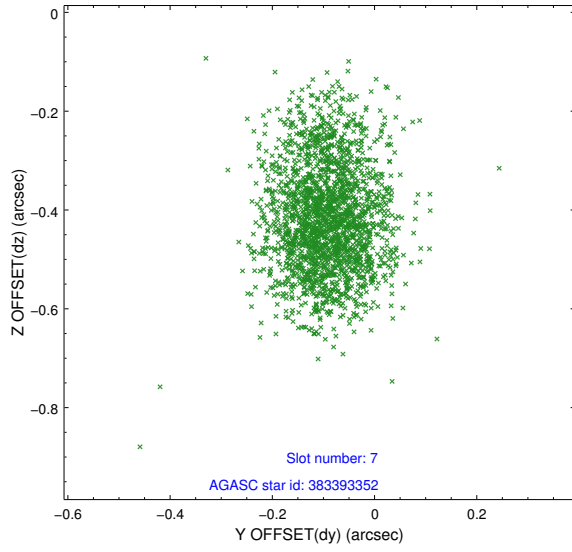


## 2.4.4 Slot 6



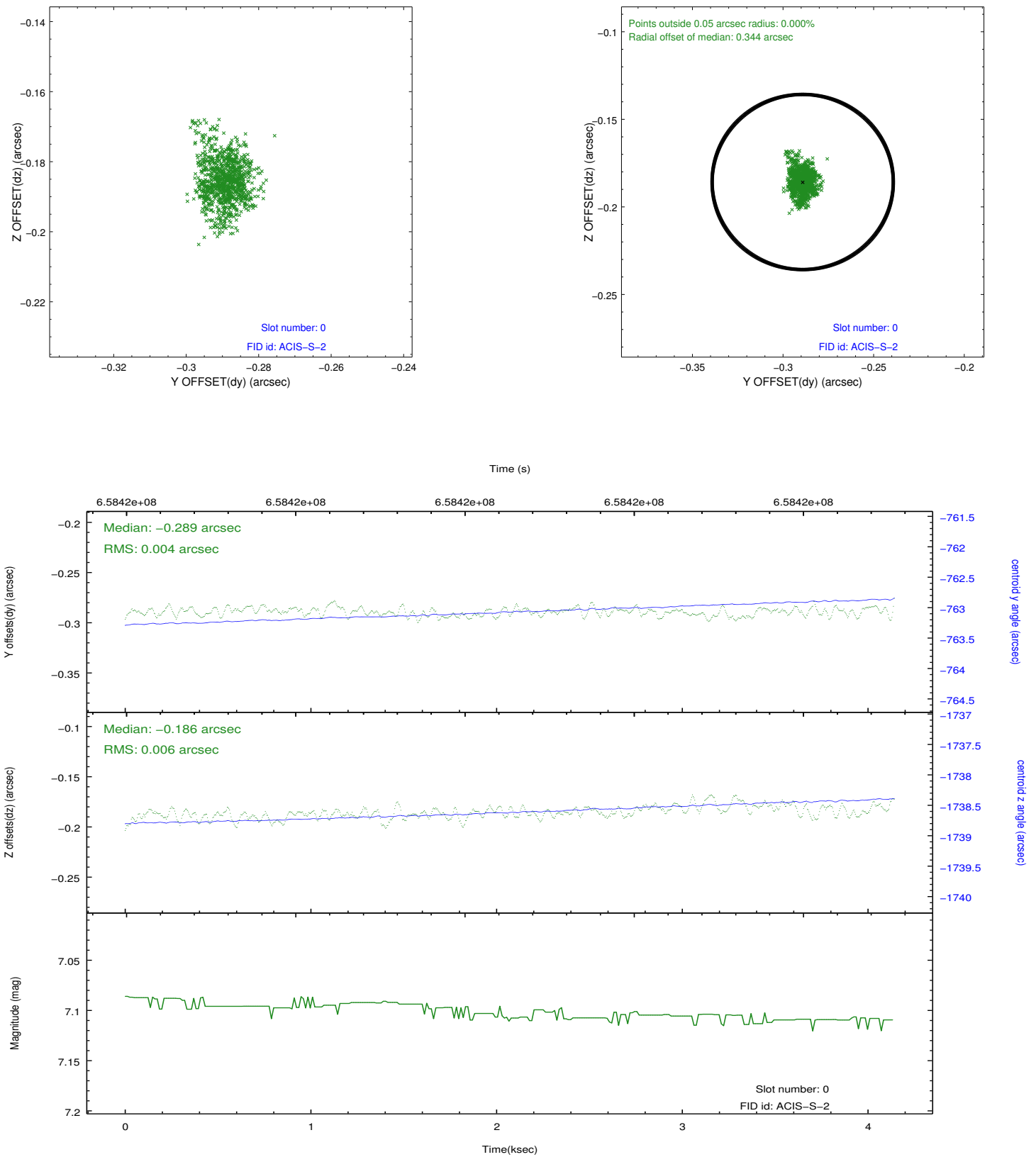


## 2.4.5 Slot 7

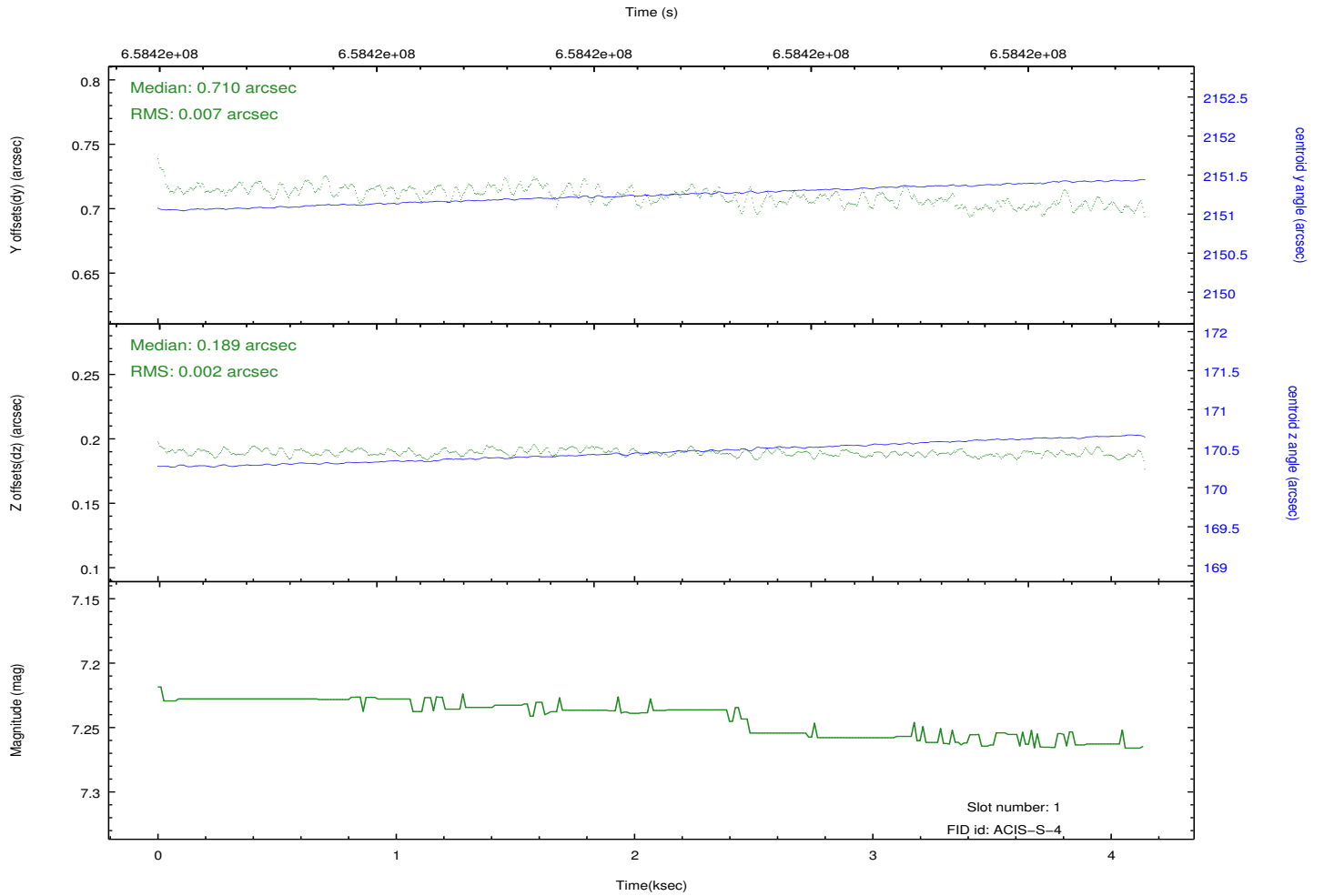
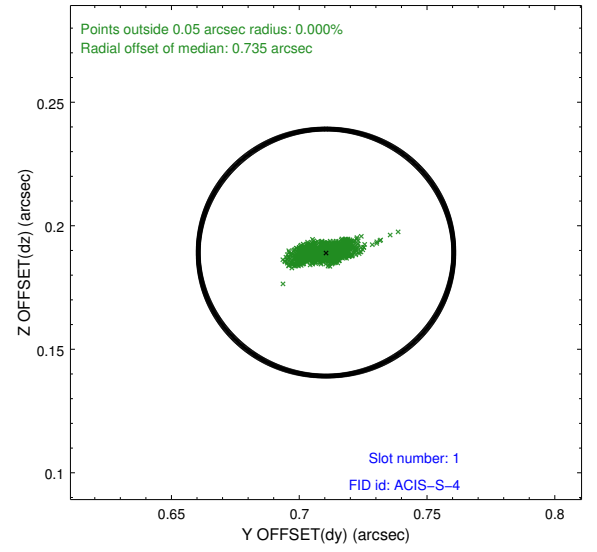
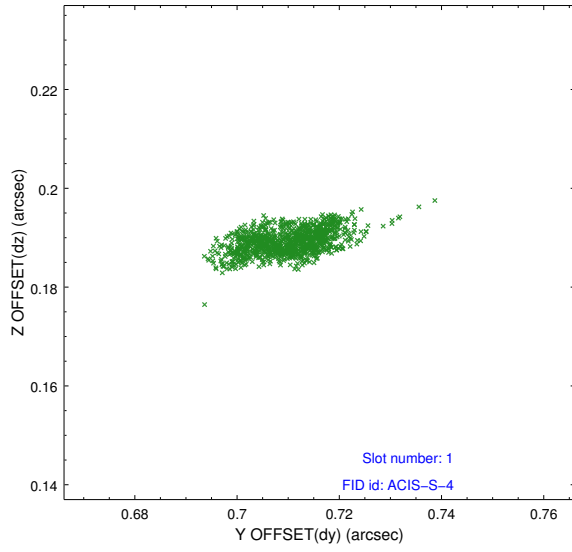


## 2.5 FID Slots

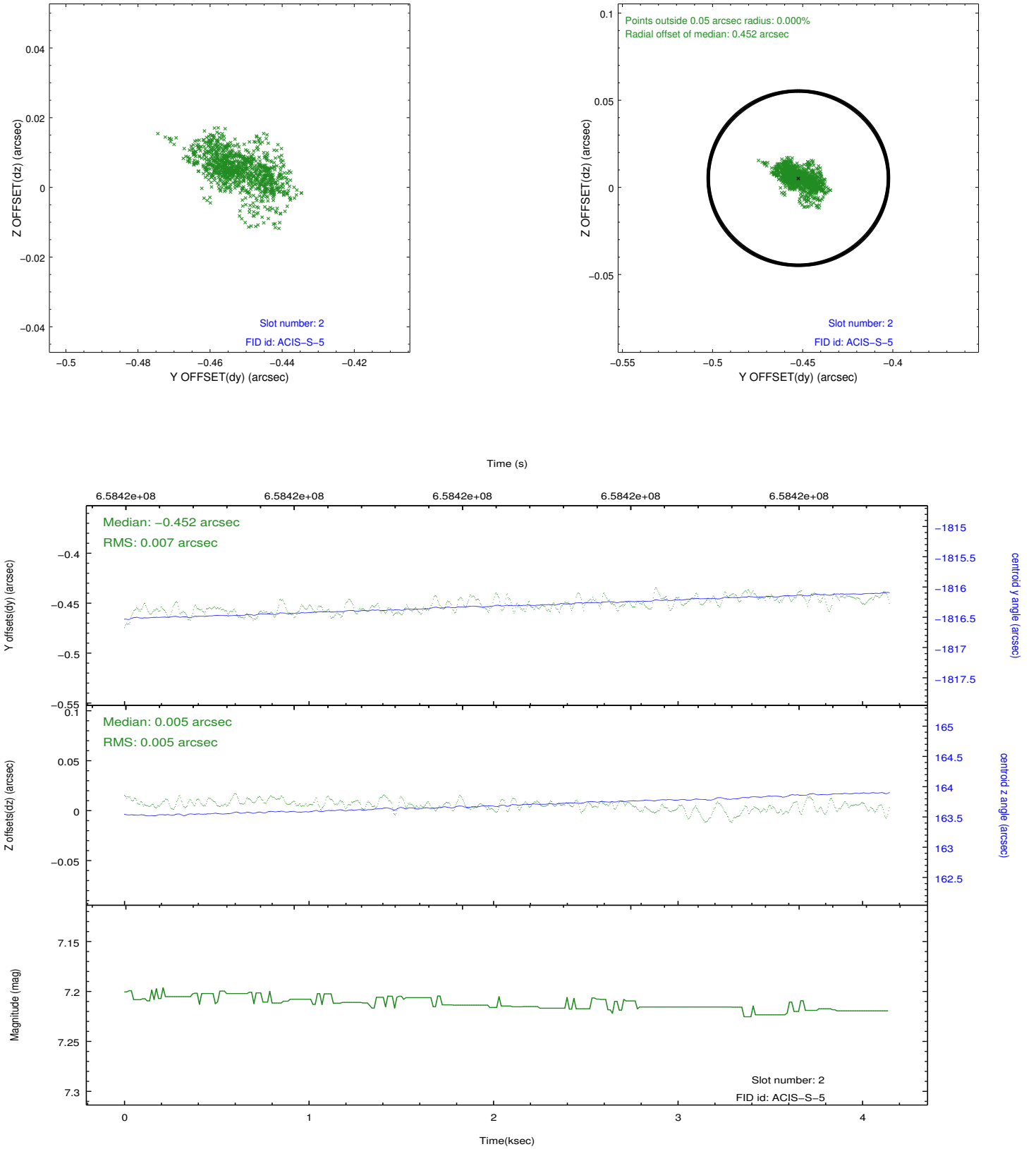
### 2.5.1 Slot 0



## 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)	2018.11.14
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	3.552600027442

### A.2 Comments