

# V&V Reference Report

## L2 ASCDS Version : 10.9.2

Observation 18343 - L2 Version 2  
Chandra X-Ray Center

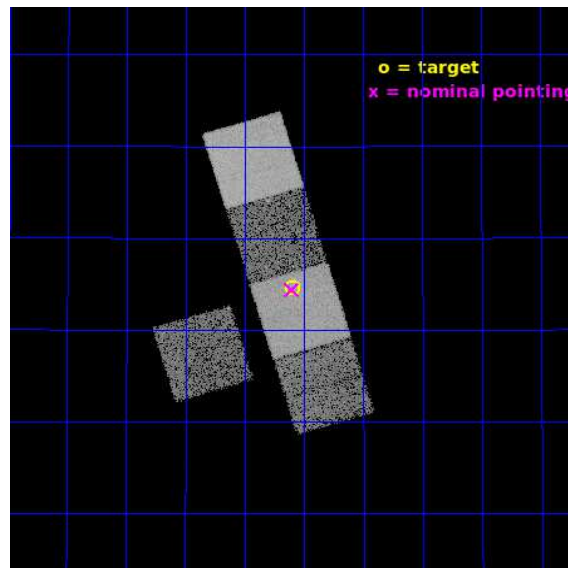
L2 Processing Date : Oct 25 2020

## 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

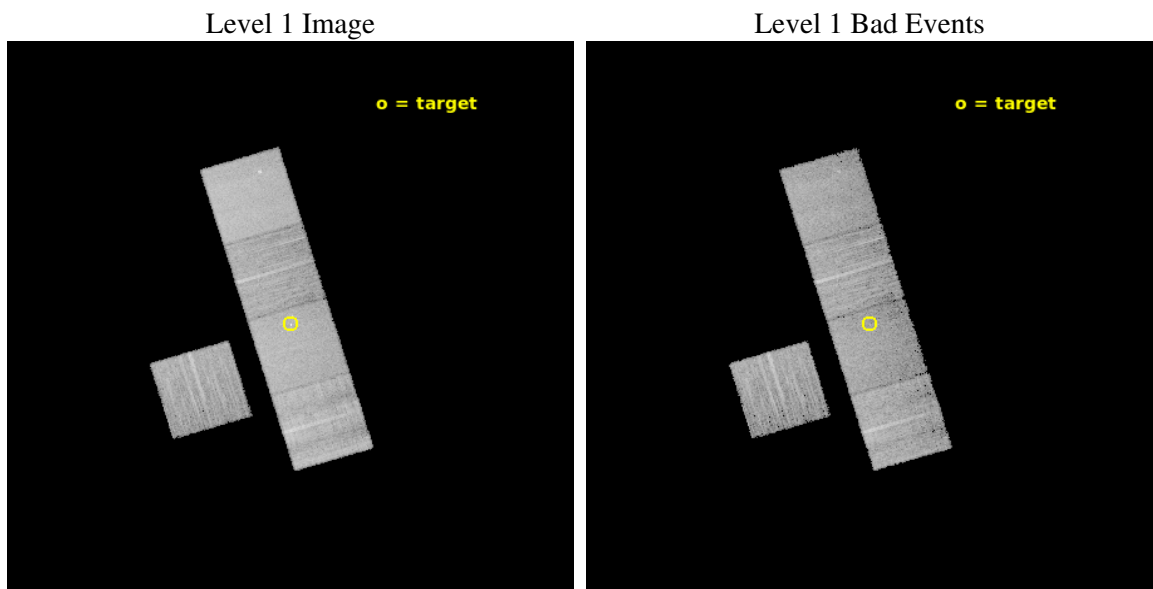
seq_num	502654	Sequence number
obs_id	18343	Observation id
title	The unprecedented metamorphosis of SN2014C: from a H-stripped explosion to a strongly interacting supernova	Proposal title
observer	RAFFAELLA MARGUTTI	Principal investigator
object	SN2014C	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	339.273333	Observer's specified target RA [deg]
dec_targ	34.408861	Observer's specified target Dec [deg]
ra_nom	339.27557263622	Nominal RA [deg]
dec_nom	34.406597620701	Nominal Dec [deg]
roll_nom	73.155560084198	Nominal Roll [deg]
revision	2	Processing version of data
ontime	10053.300077438	Sum of GTIs [s]
livetime	9921.9463107948	Livetime [s]
ontime3	10053.300077438	Sum of GTIs [s]
ontime5	10053.300077438	Sum of GTIs [s]
ontime6	10053.300077438	Sum of GTIs [s]
ontime7	10053.300077438	Sum of GTIs [s]
ontime8	10053.300077438	Sum of GTIs [s]
l2events	117850	Number of level 2 events



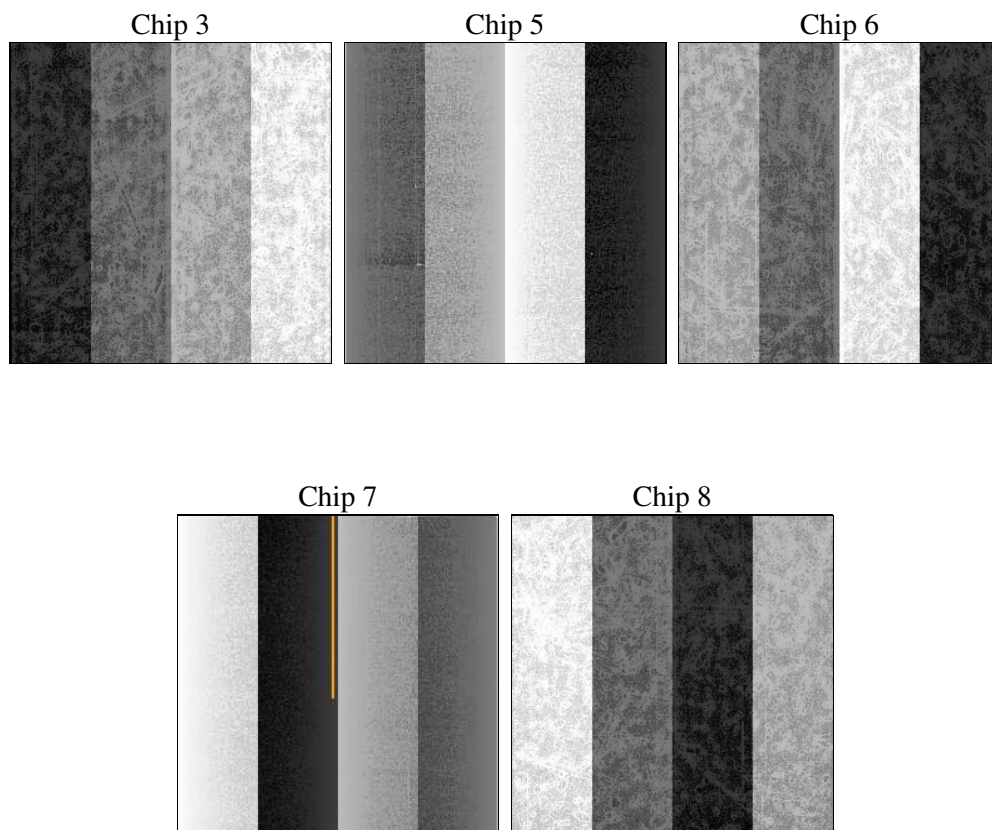
## 2 OBI

### 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	10.9.2	Processing system revision	ontime	10053.300077438	Sum of GTIs [s]
caldsver	4.9.3	&#160	ontime3	10053.300077438	Sum of GTIs [s]
date	2020-10-25T14:41:34	Date and time of file creation	ontime5	10053.300077438	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	10053.300077438	Sum of GTIs [s]
			ontime7	10053.300077438	Sum of GTIs [s]
			ontime8	10053.300077438	Sum of GTIs [s]
			l1events	450623	Number of level 1 events

### 2.1.4 Events

	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	69814	114948	72066	95446	98349
rejected events	61826	59977	63606	53137	70233
rejected %	88%	52%	88%	55%	71%

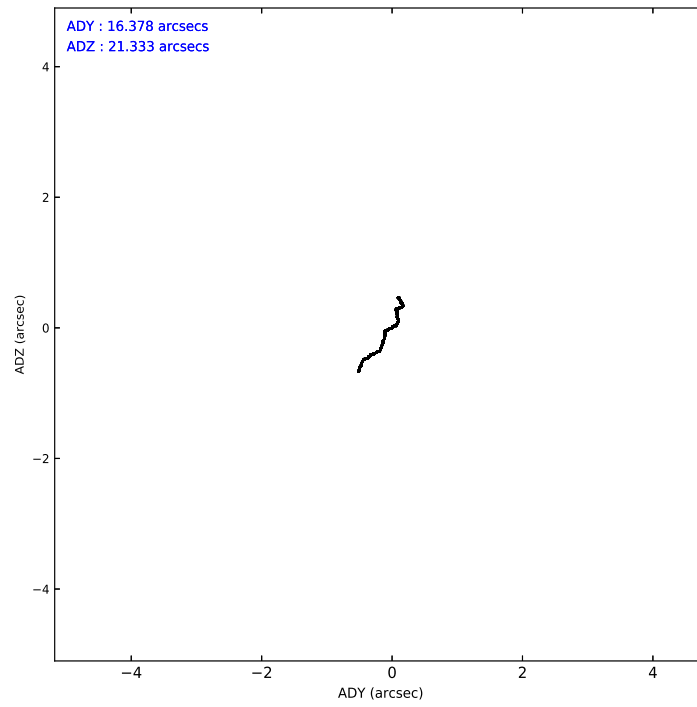
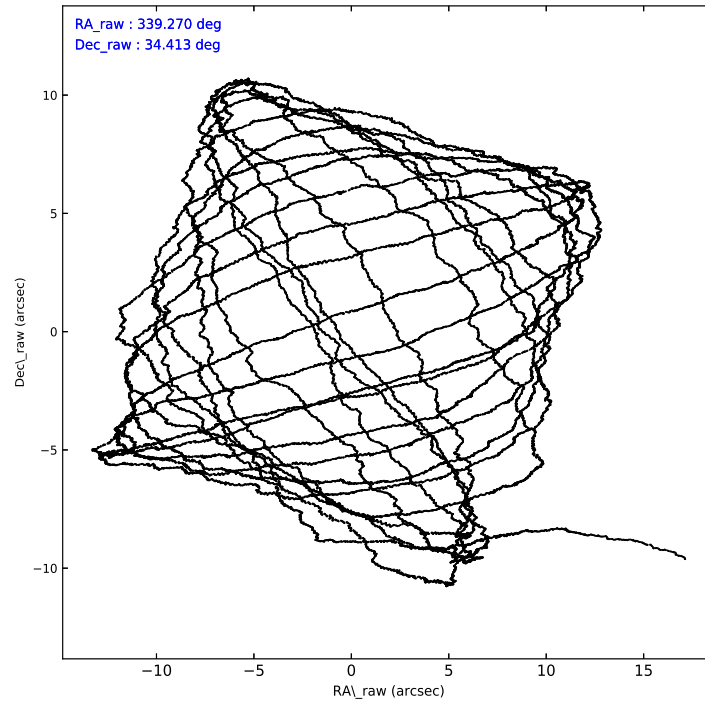
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	2981	3118	2976	3795	8135
	4%	2%	4%	3%	8%
grade 1 events	47	256	39	146	77
	0%	0%	0%	0%	0%
grade 2 events	1763	17796	1976	9361	6879
	2%	15%	2%	9%	6%
grade 3 events	812	1875	827	3439	2880
	1%	1%	1%	3%	2%
grade 4 events	840	1664	804	3353	2647
	1%	1%	1%	3%	2%
grade 5 events	3429	8350	3440	9428	5284
	4%	7%	4%	9%	5%
grade 6 events	1599	30545	1883	22385	7584
	2%	26%	2%	23%	7%
grade 7 events	58343	51344	60121	43539	64863
	83%	44%	83%	45%	65%

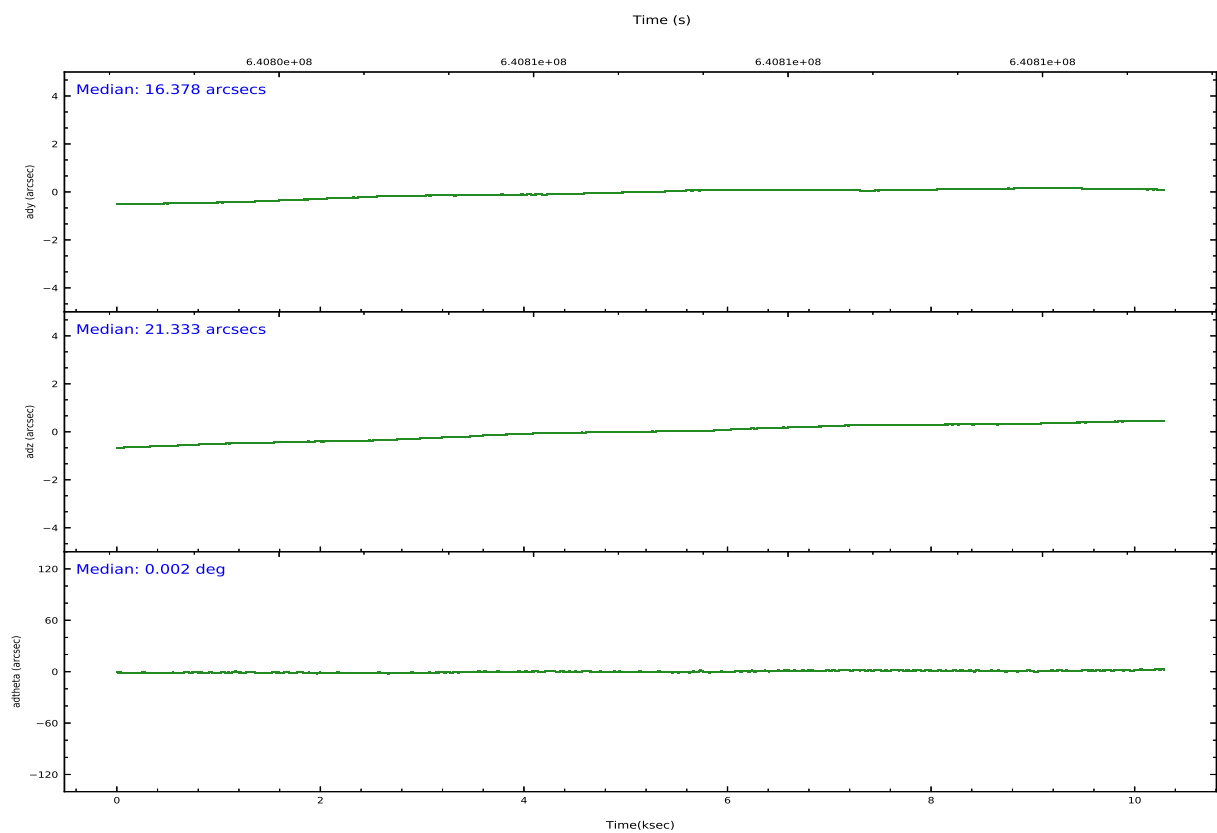
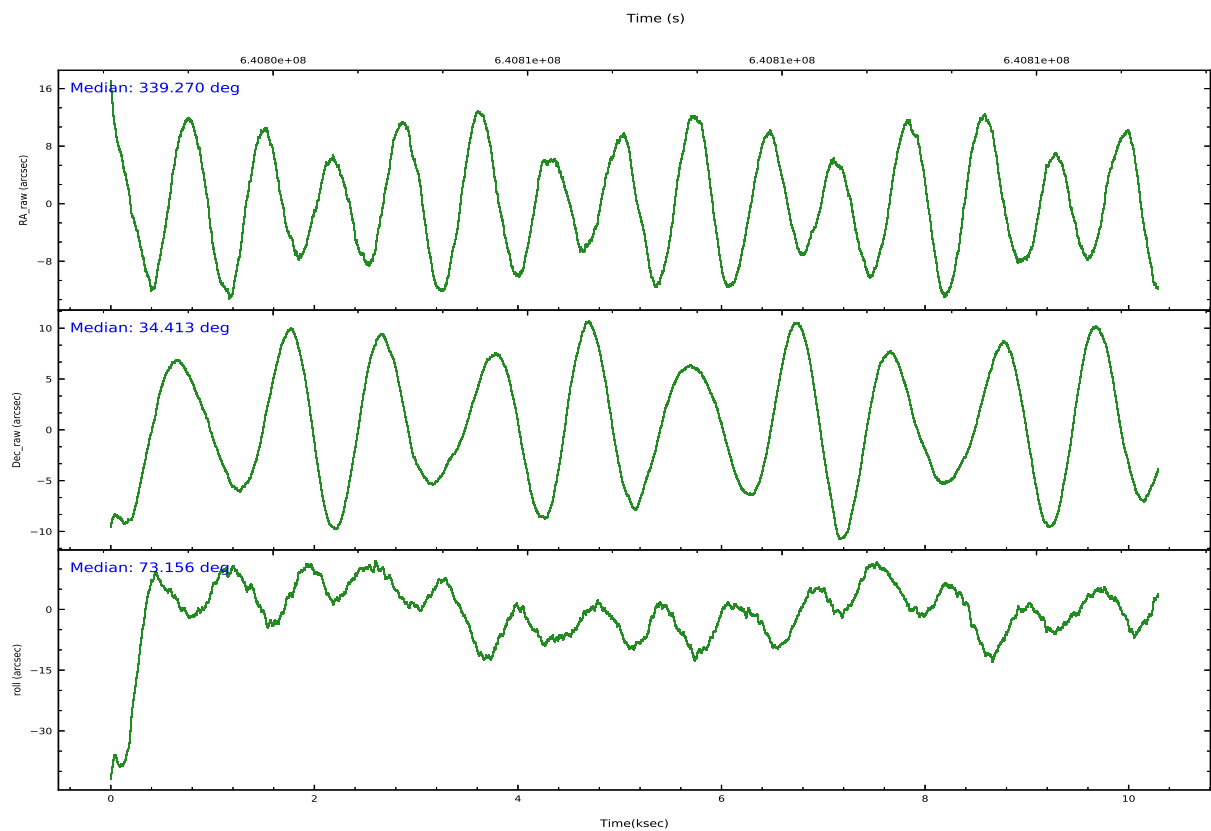


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
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	339.278083	339.27557263622	CCD I2 on	N	N
[deg] Pointing Dec	34.386265	34.406597620701	CCD I3 on	O1	Y
[deg] Pointing Roll	72.997321	73.155560084198	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	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	Y	Y
[s] Observation start time (MET)	640803696.184000	640802701.34578	CCD S5 on	N	N
Observation start date	2018-04-22T17:00:27	2018-04-22T16:45:01	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	640813696.184000	640814737.92149	On-chip summing requested	N	N
Observation end date	2018-04-22T19:47:07	2018-04-22T20:05:37	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



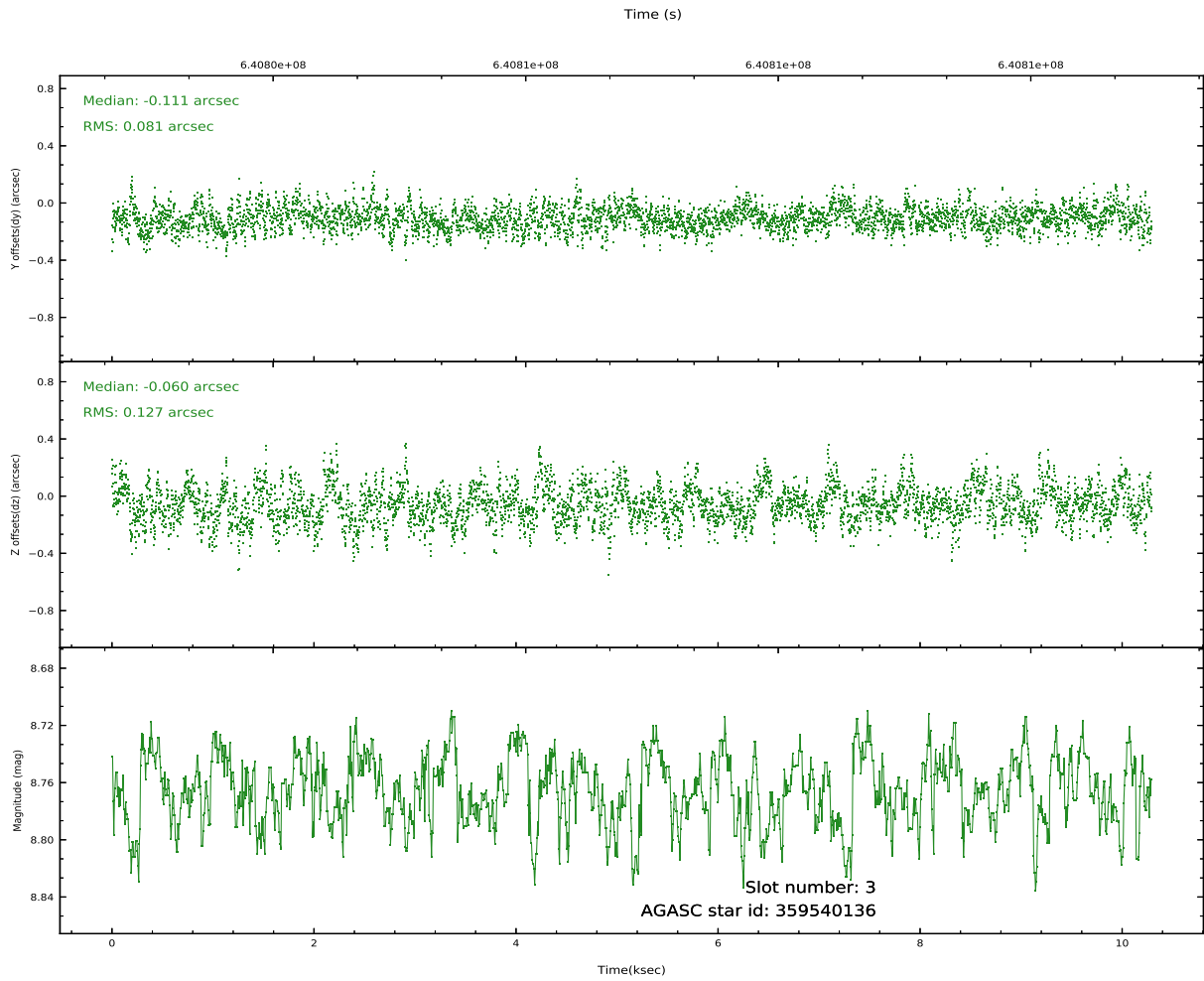
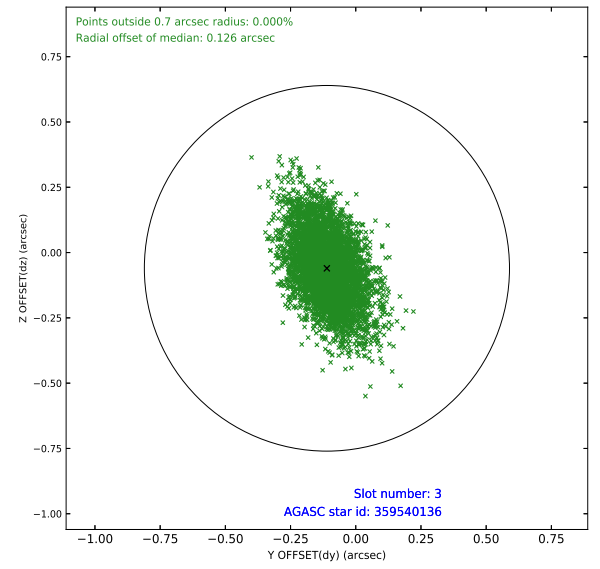
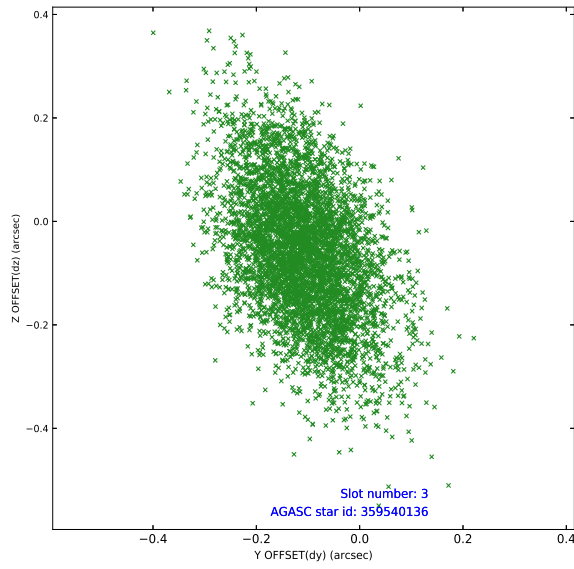


Slot Statistics

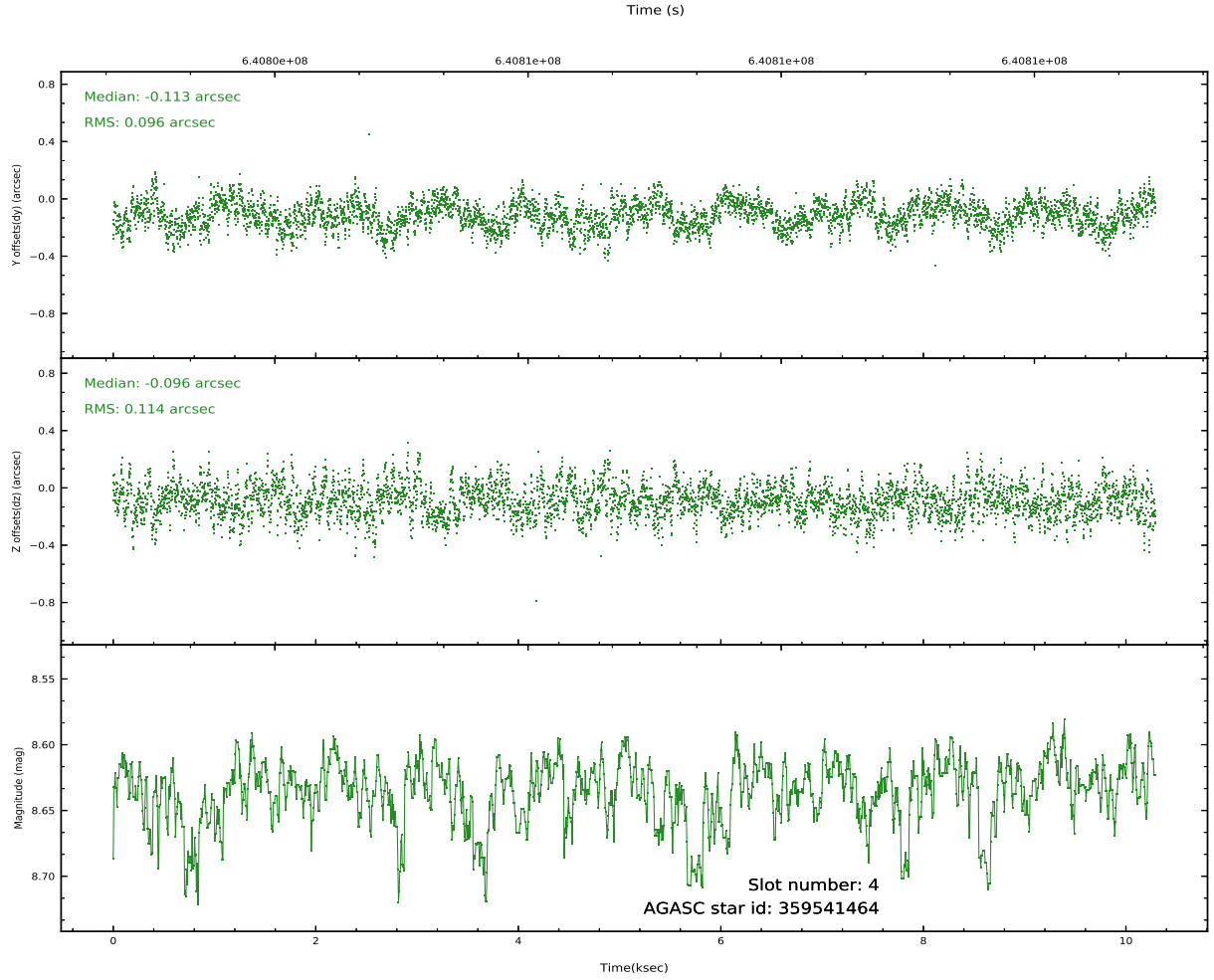
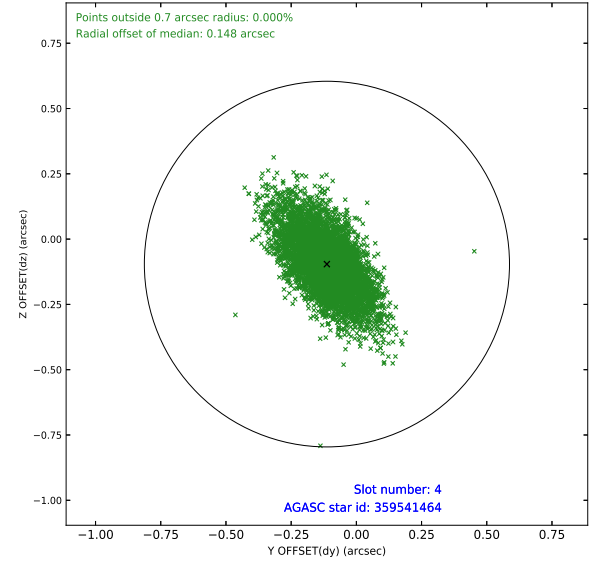
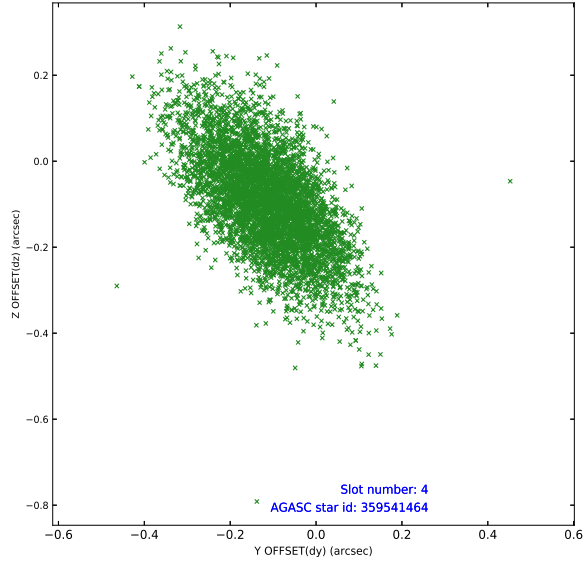
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.03	2510	1.000	0.093	-0.075	0.018	0.028	0.000000	0.000000	-769.40	-1742
1	FID		ACIS-S-4	7.14	2508	1.000	0.114	-0.023	0.010	0.020	0.000000	0.000000	2143.86	164
2	FID		ACIS-S-5	7.13	2511	1.000	-0.238	0.109	0.015	0.025	0.000000	0.000000	-1821.72	159
3	GUIDE	used	359540136	8.77	5019	1.000	-0.111	-0.060	0.155	0.273	339.014971	34.618247	571.45	990
4	GUIDE	used	359541464	8.63	5015	1.000	-0.113	-0.096	0.153	0.274	339.073218	34.654496	746.91	863
5	GUIDE	used	359547944	9.34	5013	1.000	-0.121	0.036	0.191	0.328	338.858049	34.436167	-190.14	1246
6	GUIDE	used	359532480	9.13	5015	1.000	0.078	0.099	0.179	0.318	338.355352	34.103802	-1764.60	2337
7	GUIDE	used	359542616	9.51	5007	1.000	0.260	0.026	0.205	0.346	339.585370	35.009667	2412.66	-208

## 2.4 Star Slots

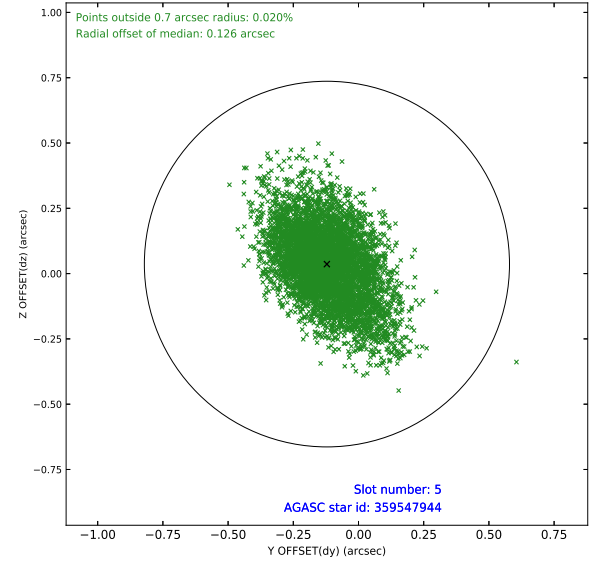
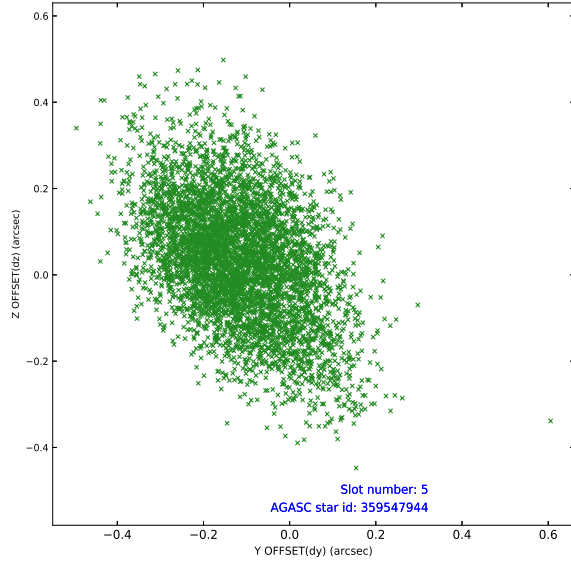
### 2.4.1 Slot 3



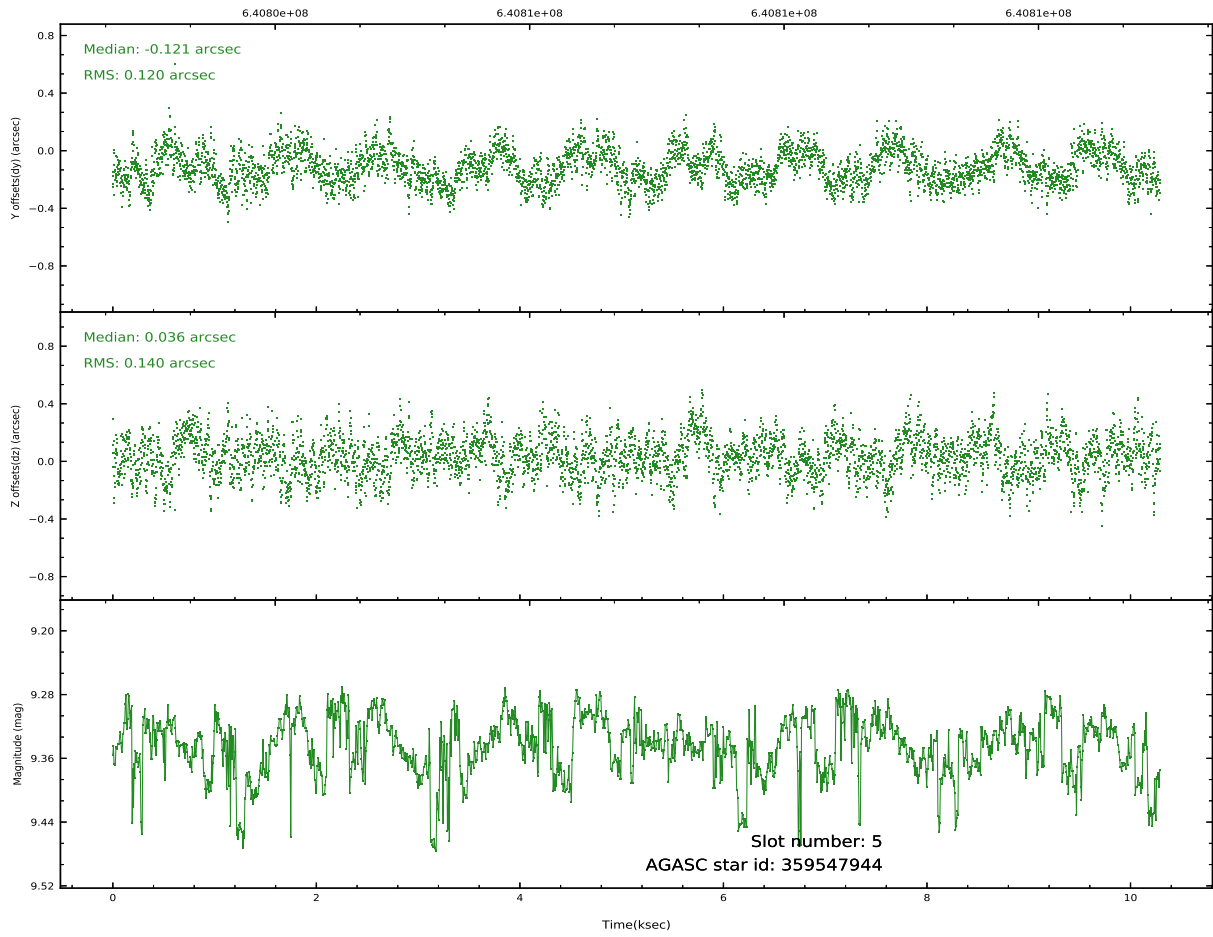
## 2.4.2 Slot 4



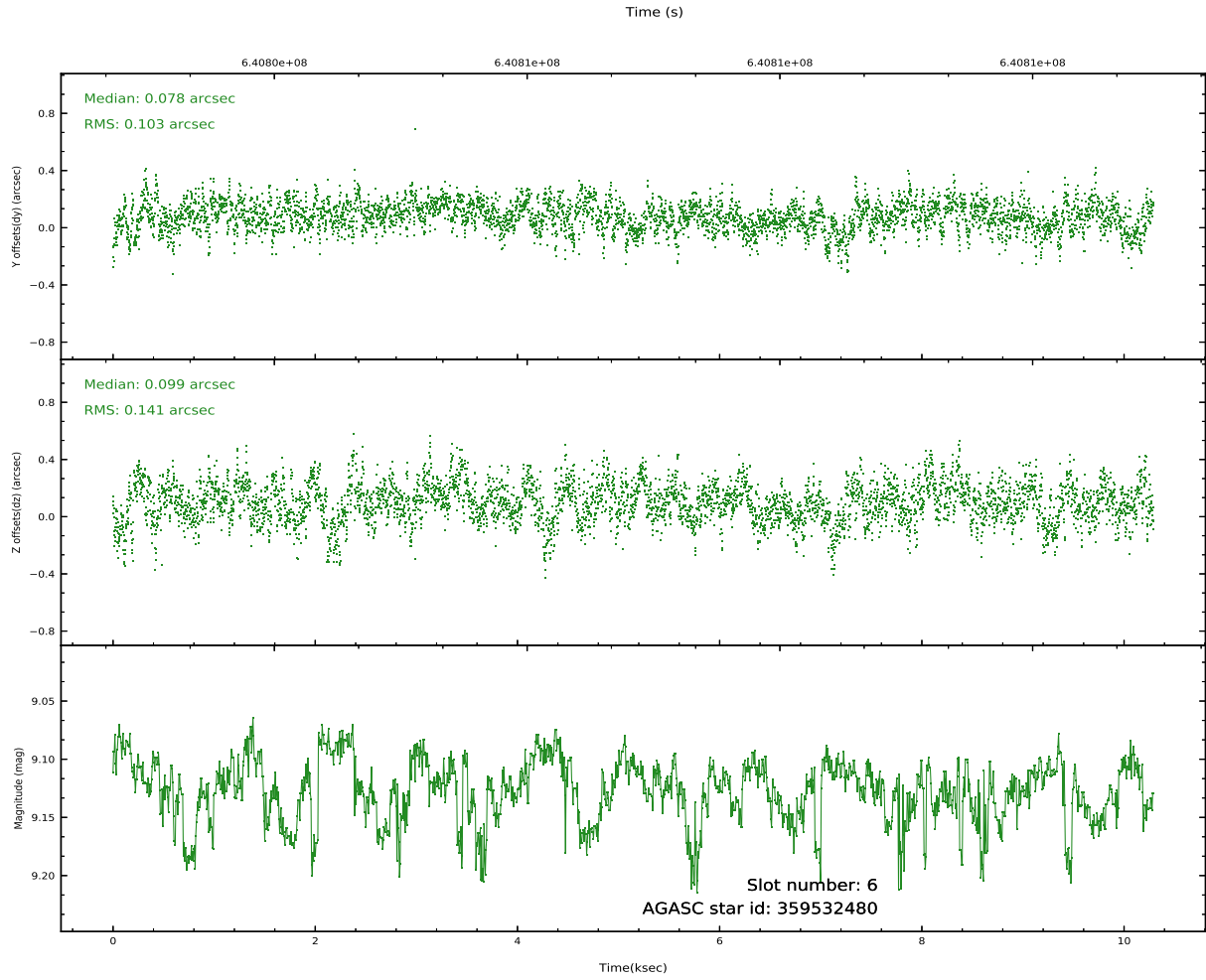
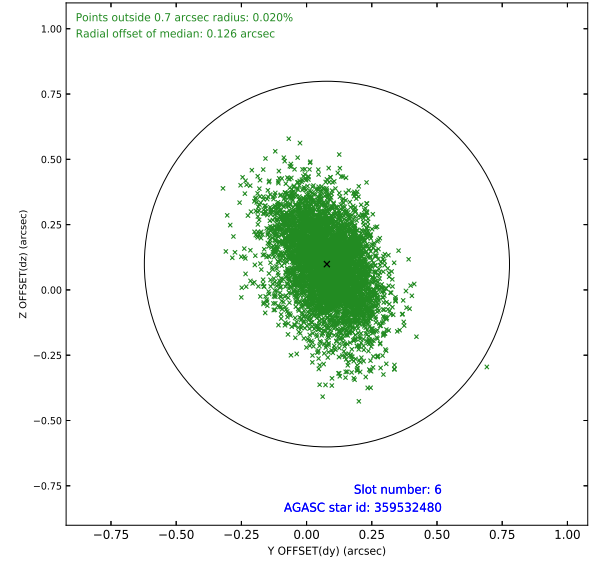
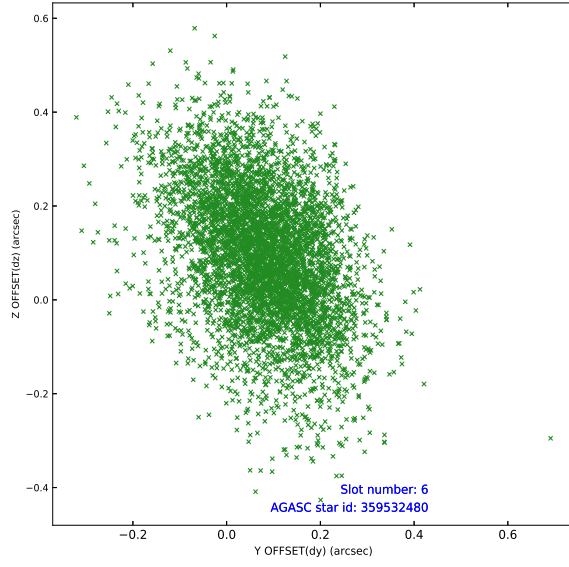
### 2.4.3 Slot 5



Time (s)

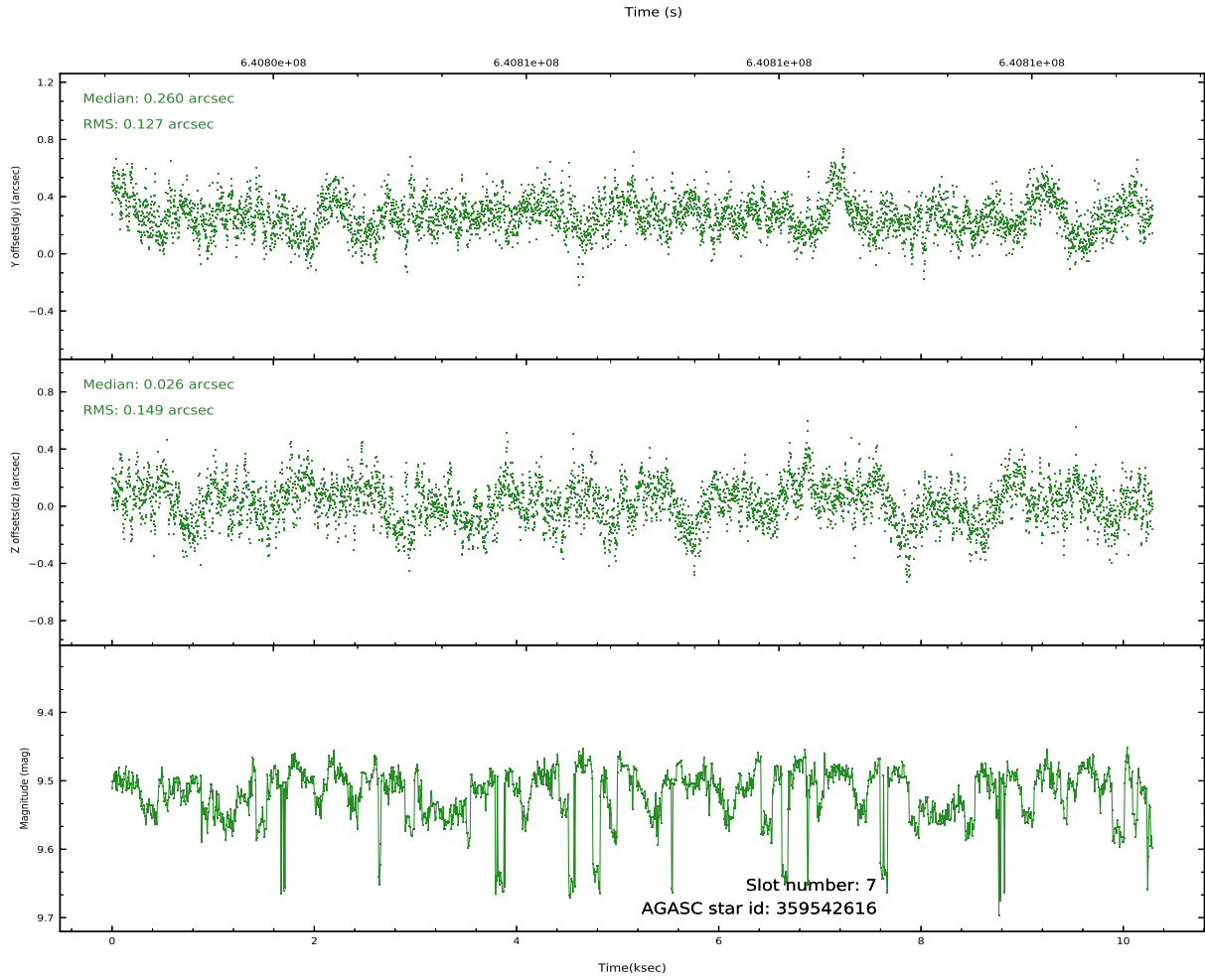
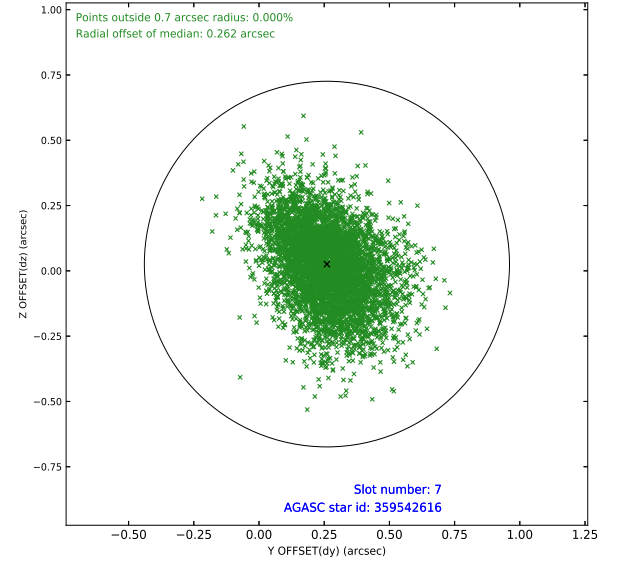
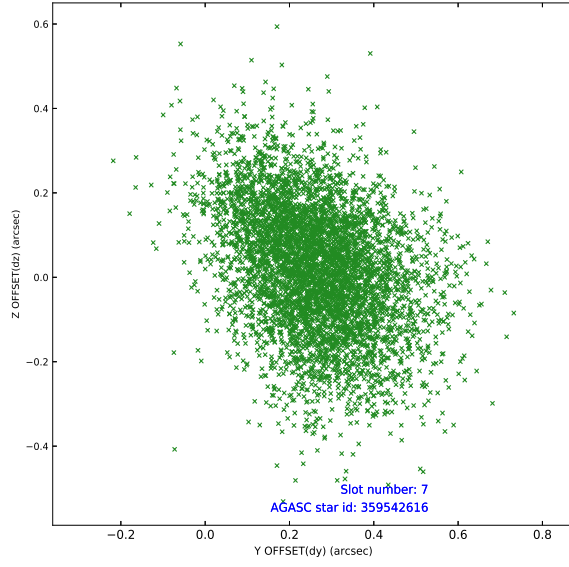


## 2.4.4 Slot 6



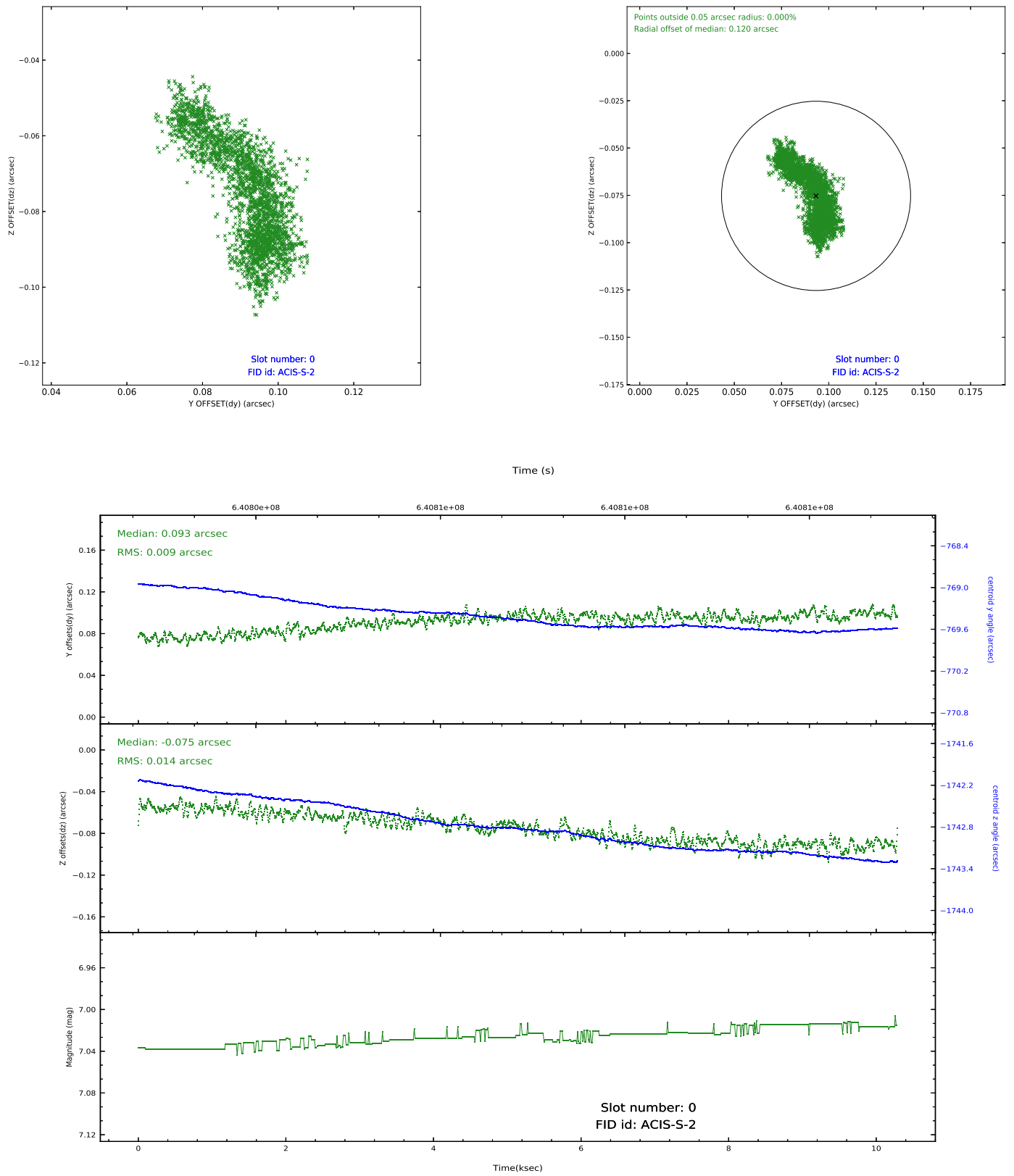


## 2.4.5 Slot 7

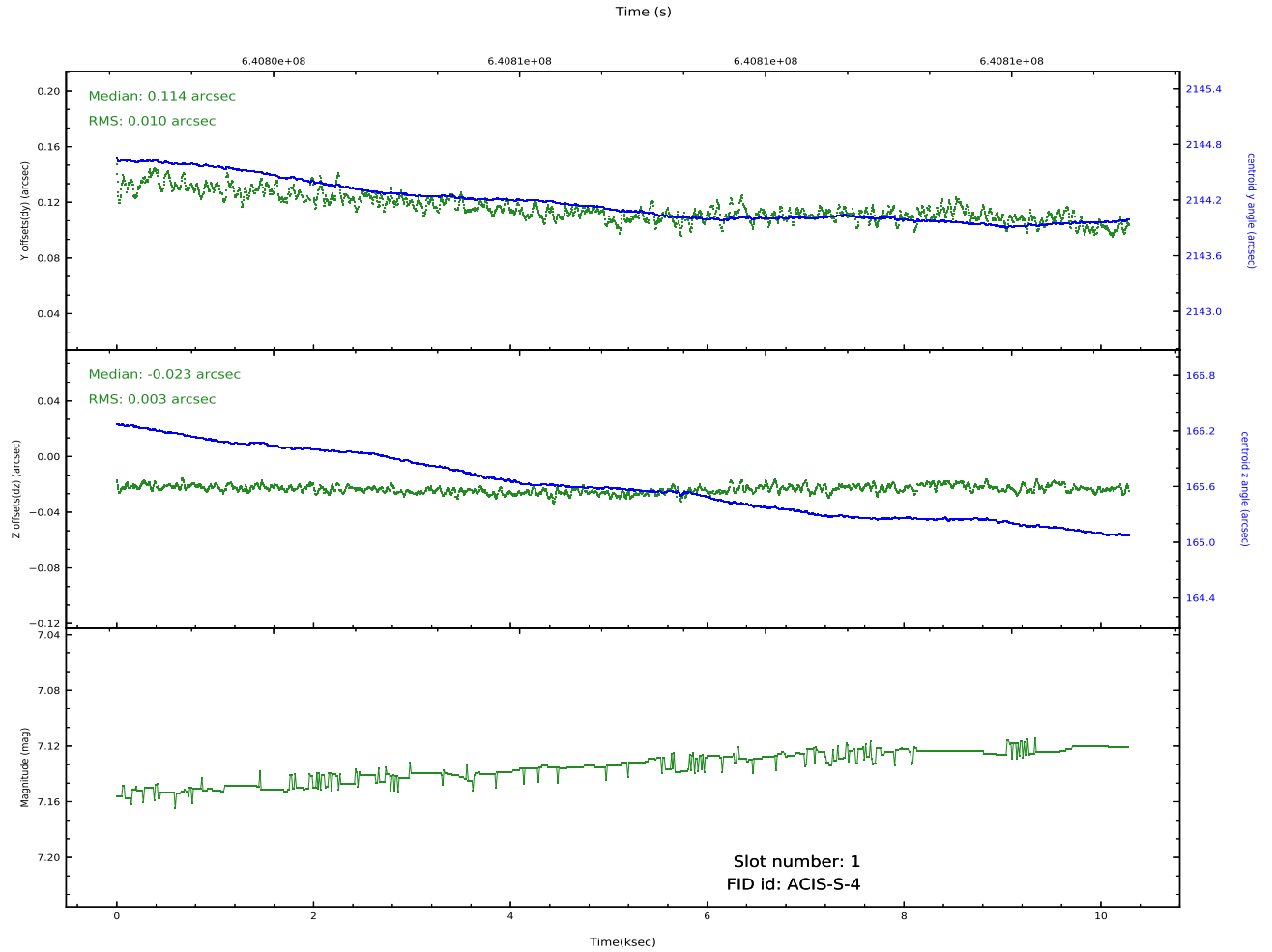
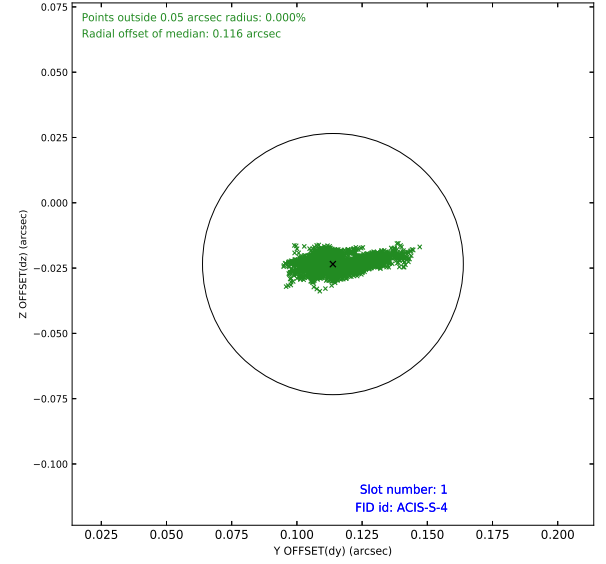
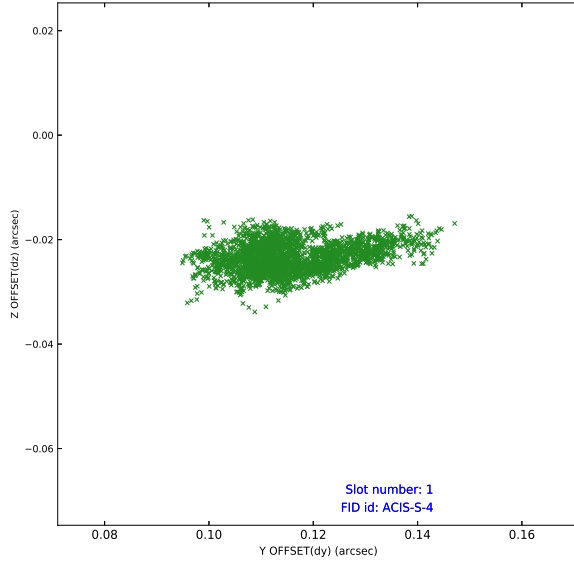


## 2.5 FID Slots

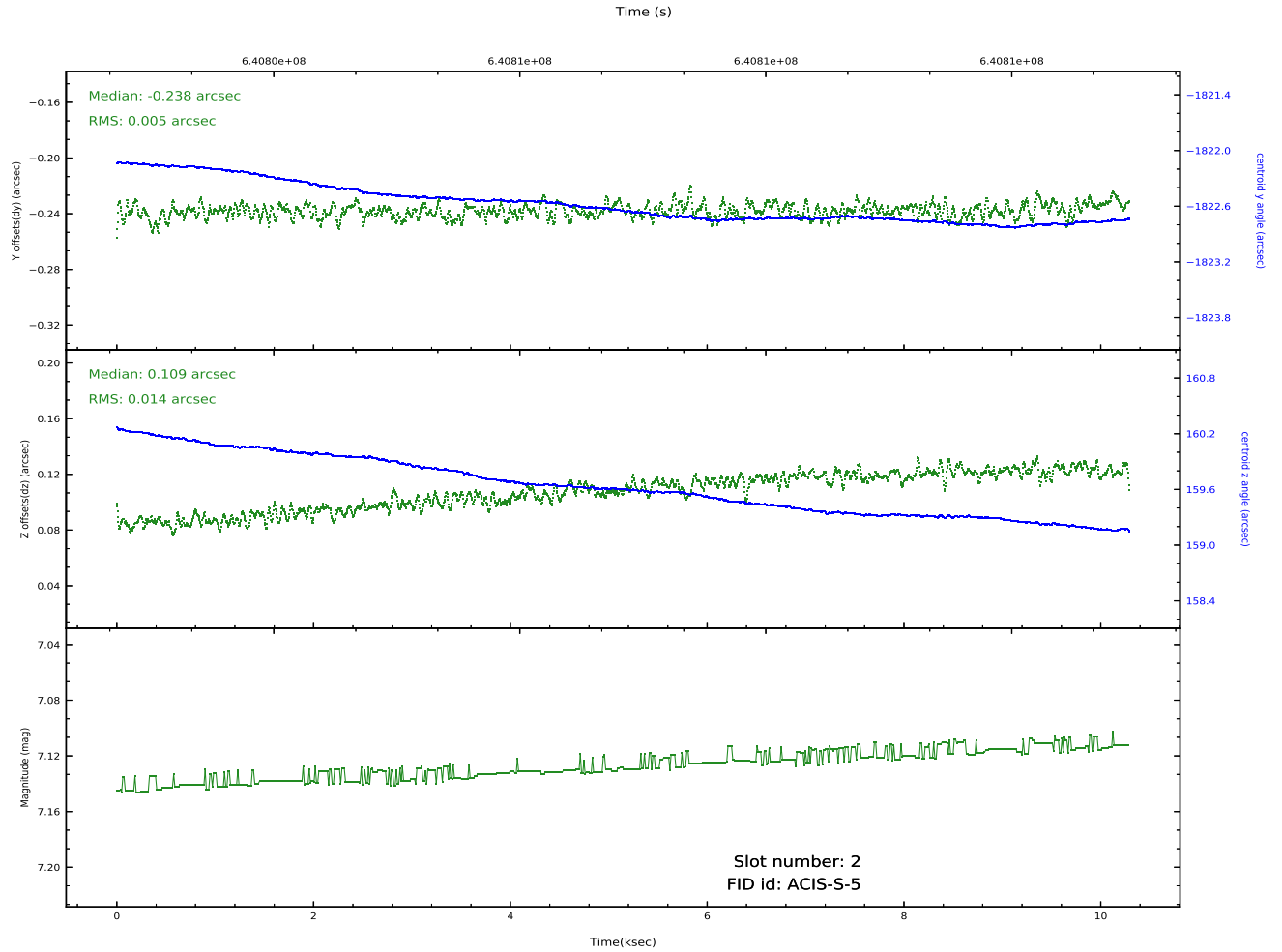
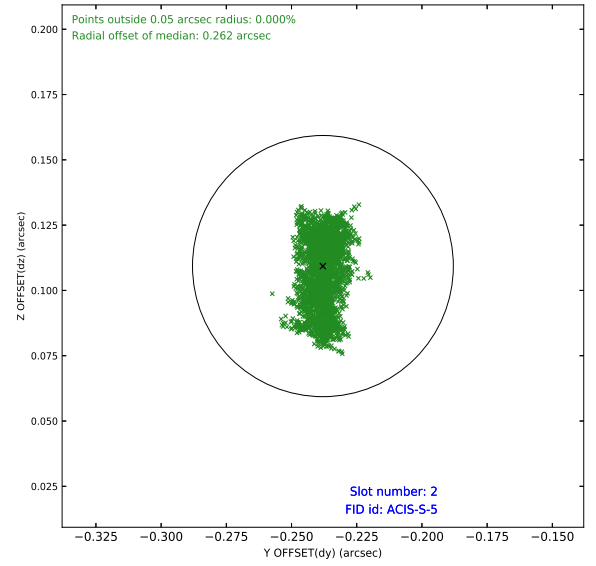
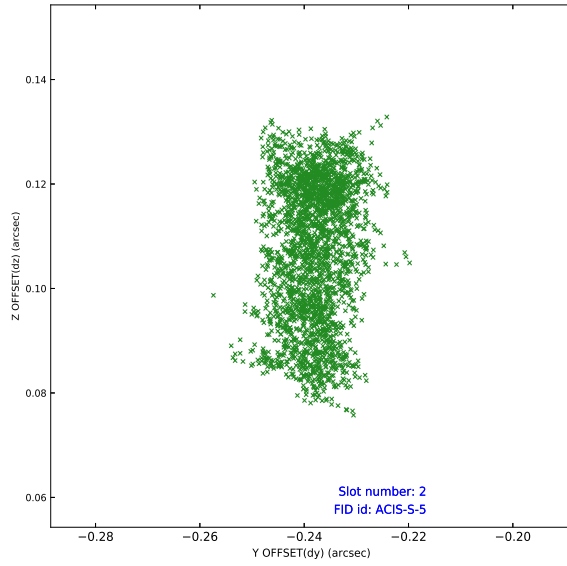
### 2.5.1 Slot 0



## 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)	2020.10.26
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.053300077438

### A.2 Comments