

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 4700 - L2 Version 4  
Chandra X-Ray Center

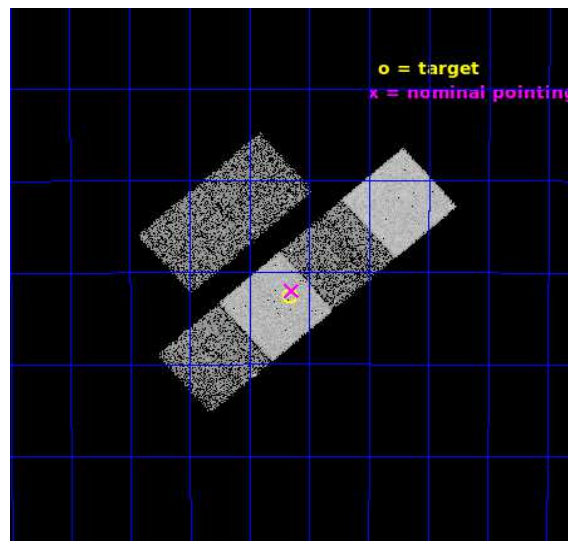
L2 Processing Date : Sep 26 2020

## 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

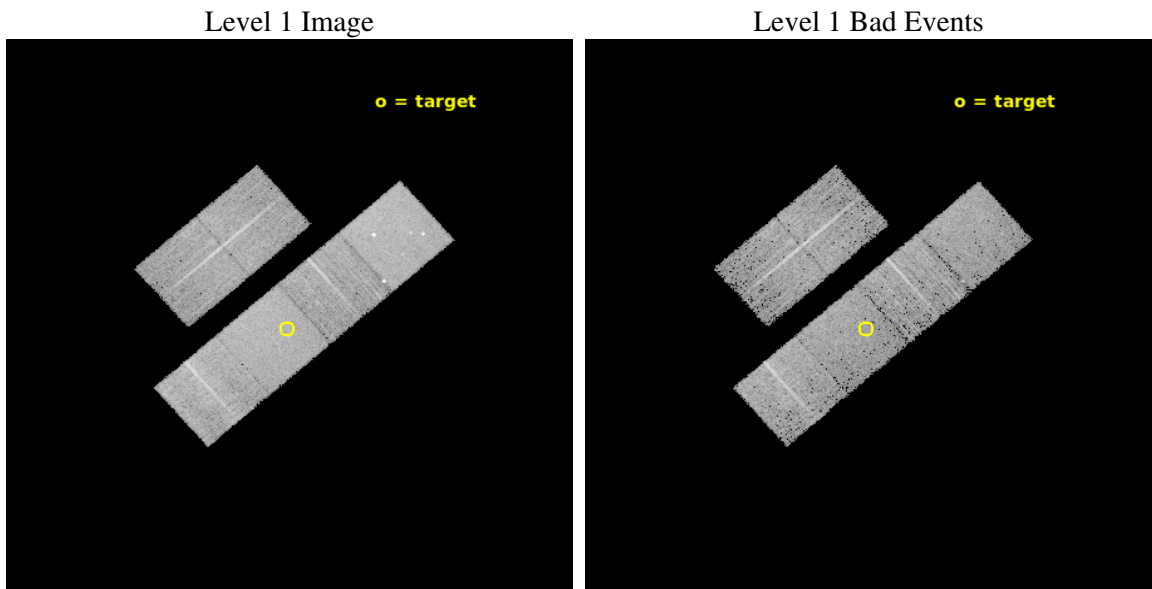
seq_num	600355	Sequence number
obs_id	4700	Observation id
title	Using the Sculptor Dwarf Spheroidal Galaxy to Constrain X-ray Binary Production in Population II	Proposal title
observer	Thomas Maccarone	Principal investigator
object	SCULPTOR DWARF SPHEROIDAL	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	15.039167	Observer's specified target RA [deg]
dec_targ	-33.708889	Observer's specified target Dec [deg]
ra_nom	15.036130777622	Nominal RA [deg]
dec_nom	-33.700042244565	Nominal Dec [deg]
roll_nom	138.77667843437	Nominal Roll [deg]
revision	4	Processing version of data
ontime	6182.3999769688	Sum of GTIs [s]
livetime	6104.114705866	Livetime [s]
ontime2	6182.3999769688	Sum of GTIs [s]
ontime3	6182.3999769688	Sum of GTIs [s]
ontime5	6182.3999769688	Sum of GTIs [s]
ontime6	6182.3999769688	Sum of GTIs [s]
ontime7	6182.3999769688	Sum of GTIs [s]
ontime8	6182.399356246	Sum of GTIs [s]
l2events	71261	Number of level 2 events



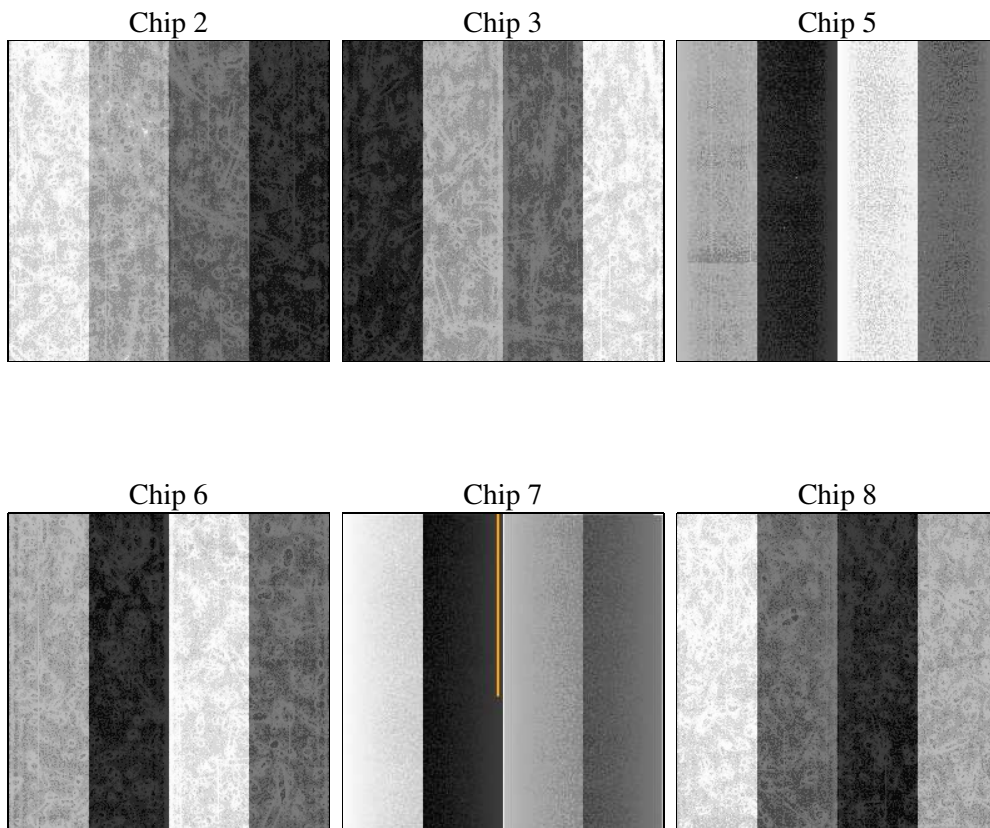
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	6222.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	6182.3999769688	Sum of GTIs [s]
caldsver	4.9.2	&#160	ontime2	6182.3999769688	Sum of GTIs [s]
date	2020-09-26T02:39:37	Date and time of file creation	ontime3	6182.3999769688	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	6182.3999769688	Sum of GTIs [s]
			ontime6	6182.3999769688	Sum of GTIs [s]
			ontime7	6182.3999769688	Sum of GTIs [s]
			ontime8	6182.399356246	Sum of GTIs [s]
			l1events	317803	Number of level 1 events

### 2.1.4 Events

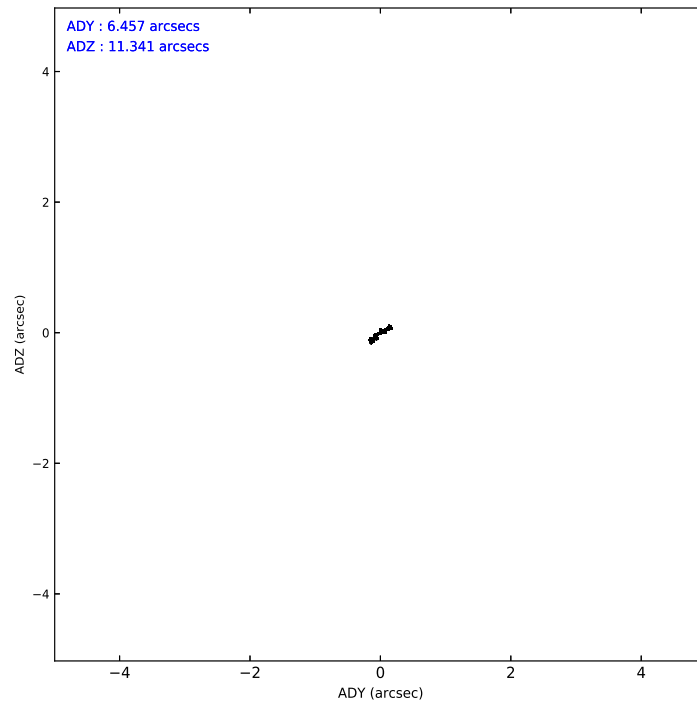
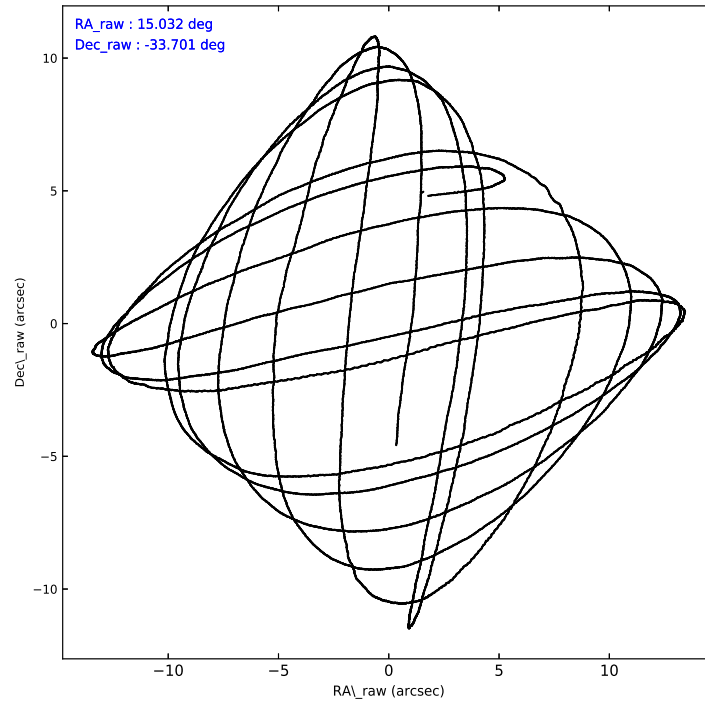
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	45008	42290	68570	44771	59757	57407	grade 0 events	2404	2337	3861	2101	2310	3823
rejected events	39664	37158	36662	39514	34999	45173		5%	5%	5%	4%	3%	6%
rejected %	88%	87%	53%	88%	58%	78%	grade 1 events	29	22	202	26	48	40
								0%	0%	0%	0%	0%	0%
							grade 2 events	1078	921	9294	1049	4891	2589
								2%	2%	13%	2%	8%	4%
							grade 3 events	476	458	1318	501	2084	1373
								1%	1%	1%	1%	3%	2%
							grade 4 events	455	558	1338	524	2123	1292
								1%	1%	1%	1%	3%	2%
							grade 5 events	1828	1926	4957	2073	5687	2732
								4%	4%	7%	4%	9%	4%
							grade 6 events	931	859	16114	1086	13359	3166
								2%	2%	23%	2%	22%	5%
							grade 7 events	37807	35209	31486	37411	29255	42392
								84%	83%	45%	83%	48%	73%

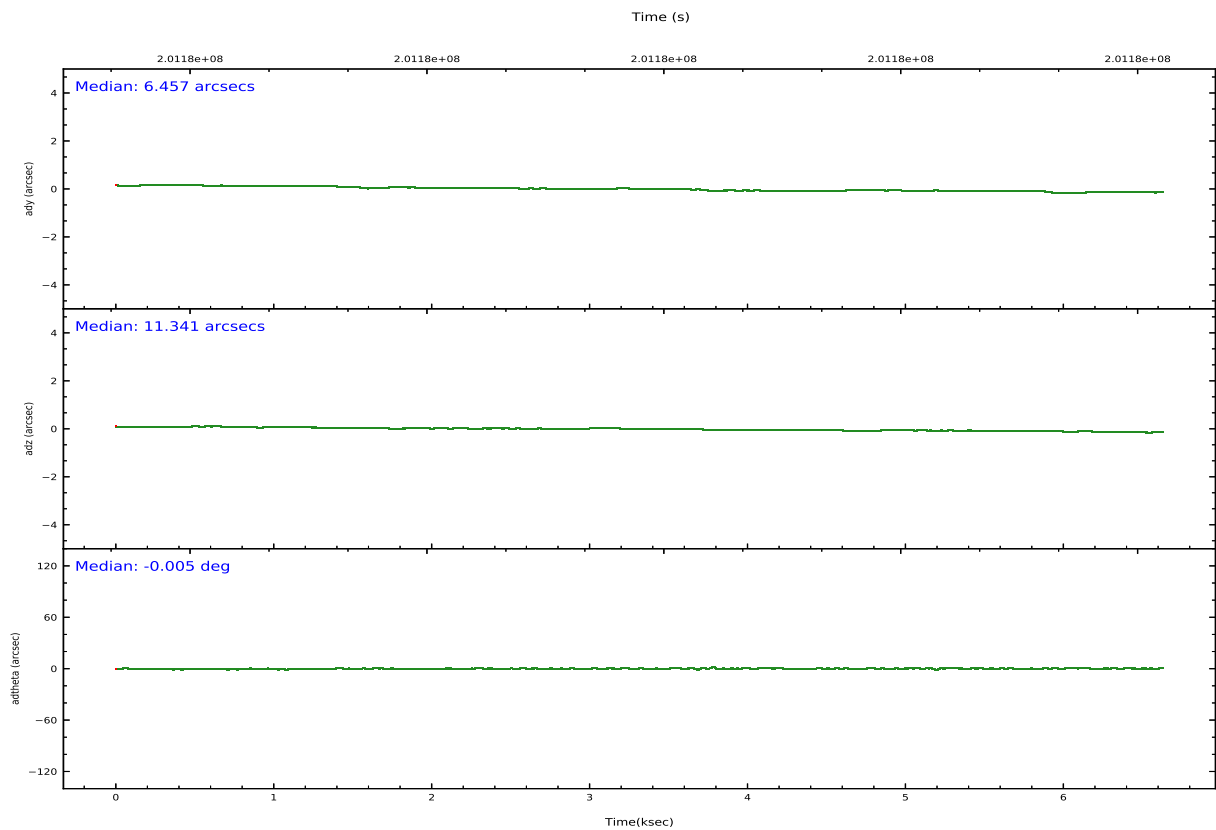
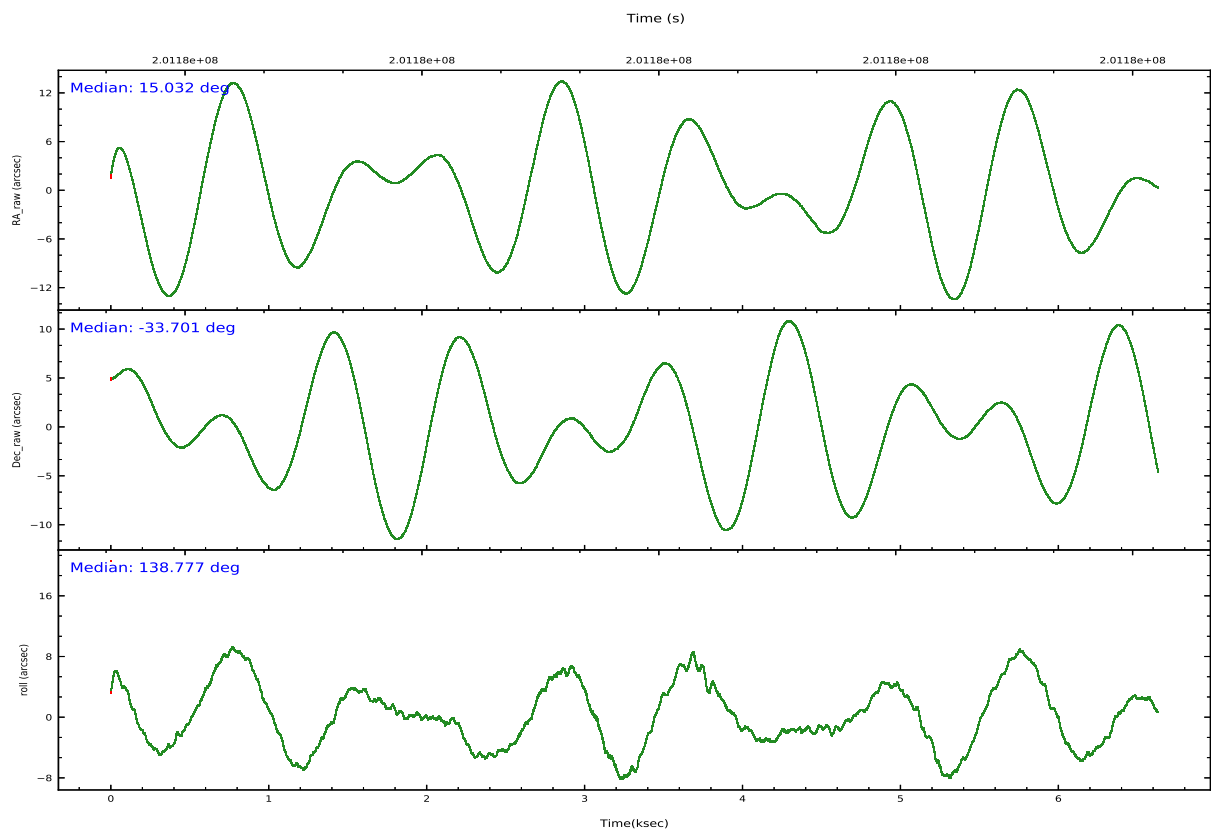


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-235678	ACIS-235678	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	15.064087	15.036130777622	Subarray requested	NONE	NONE
[deg] Pointing Dec	-33.706275	-33.700042244565	Alternating exposures requested	N	N
[deg] Pointing Roll	138.639090	138.77667843437	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	201177939.184000	201176868.88116			
Observation start date	2004-05-17T10:44:35	2004-05-17T10:27:48			
[s] Observation end time (MET)	201184161.184000	201184675.2815			
Observation end date	2004-05-17T12:28:17	2004-05-17T12:37:55			
Read mode	TIMED	TIMED			

## 2.3 Aspect



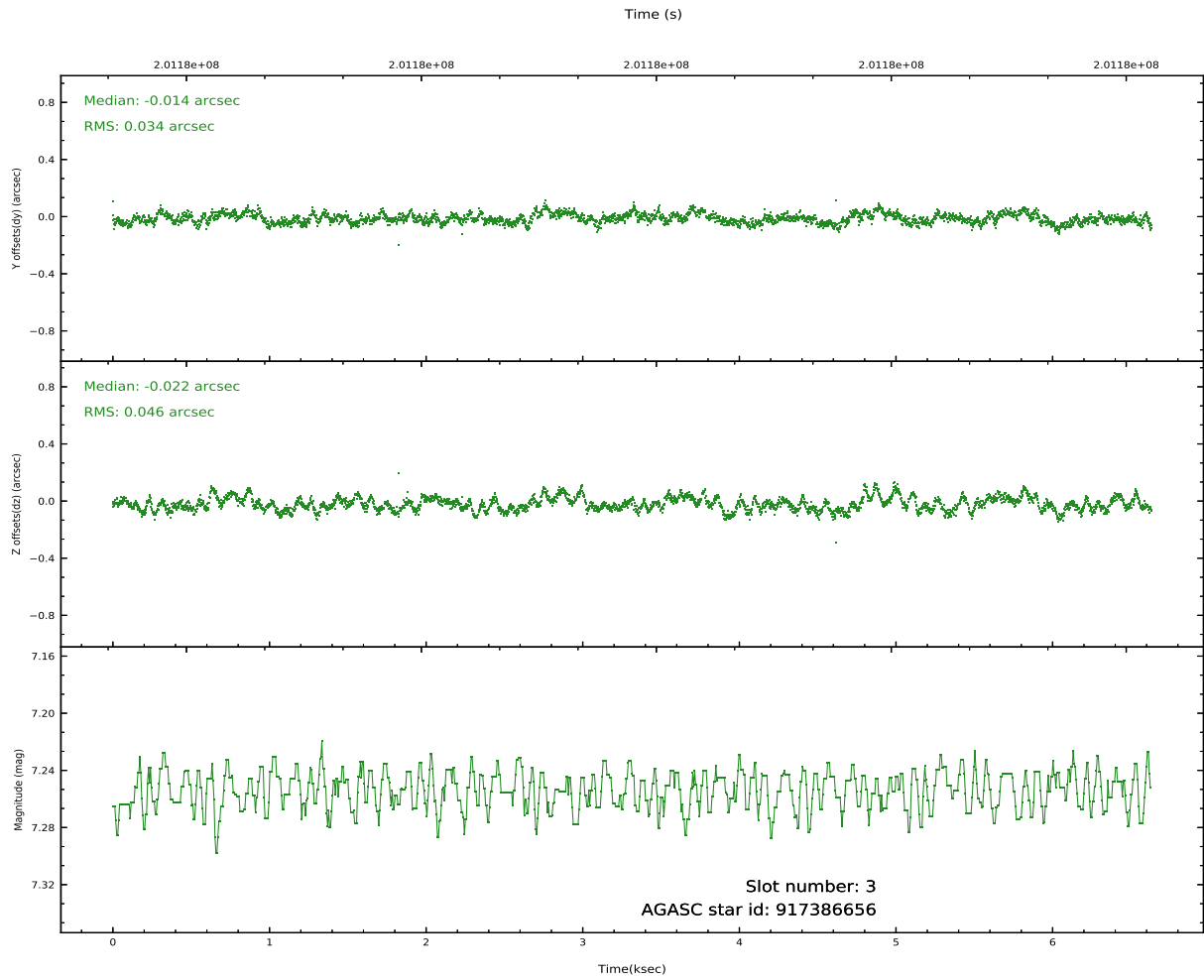
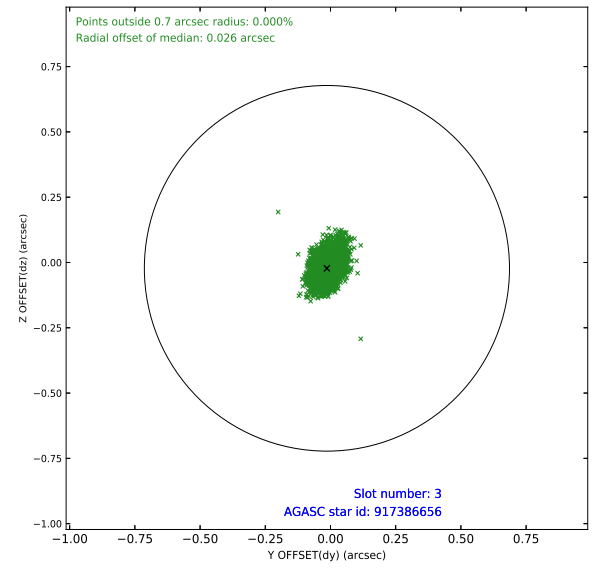
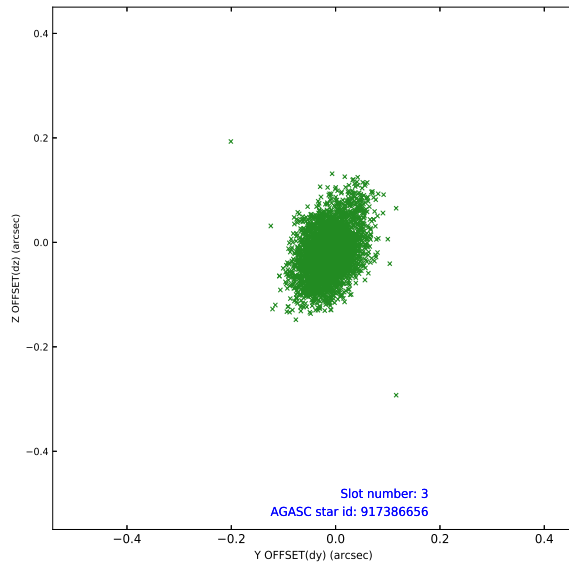


Slot Statistics

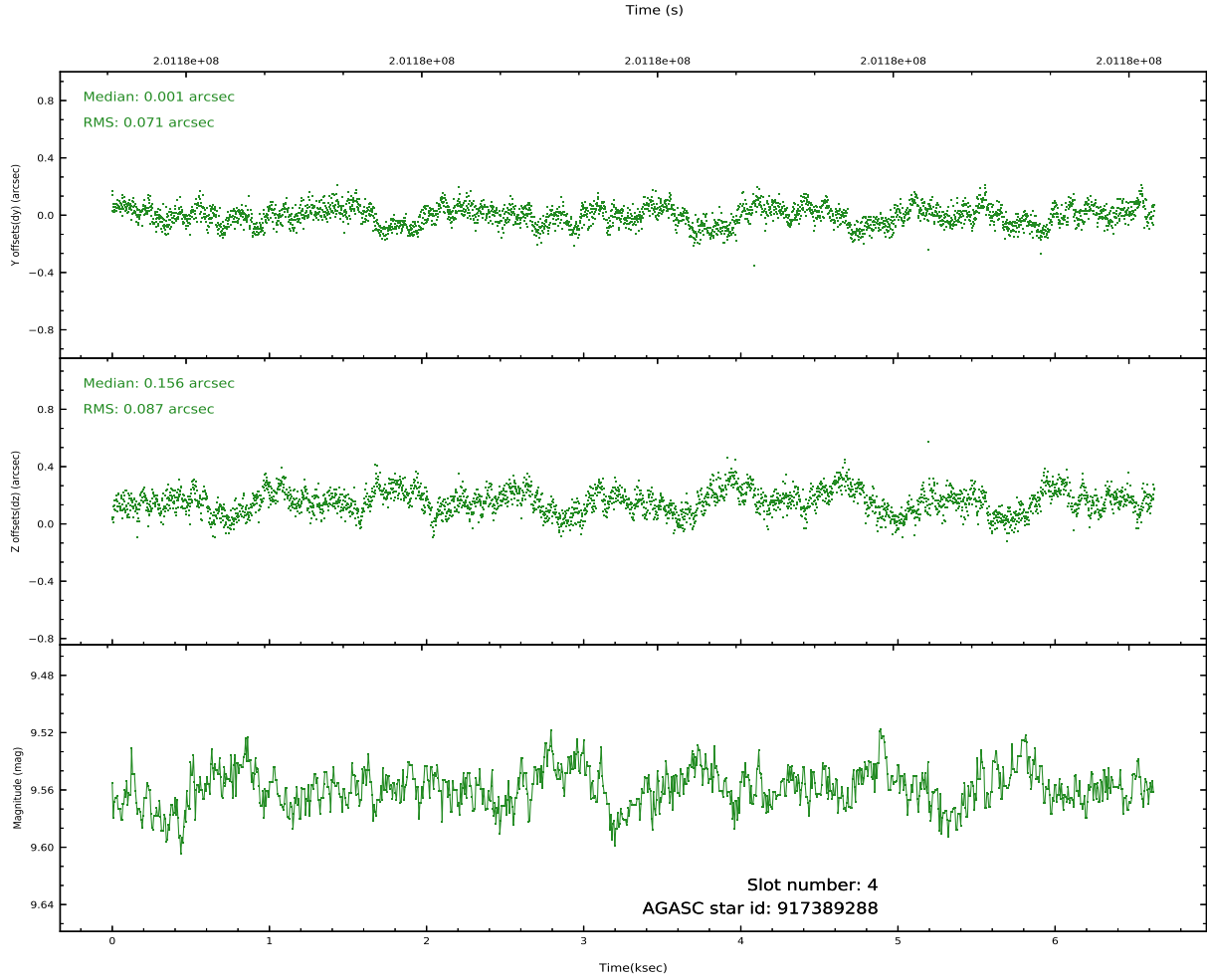
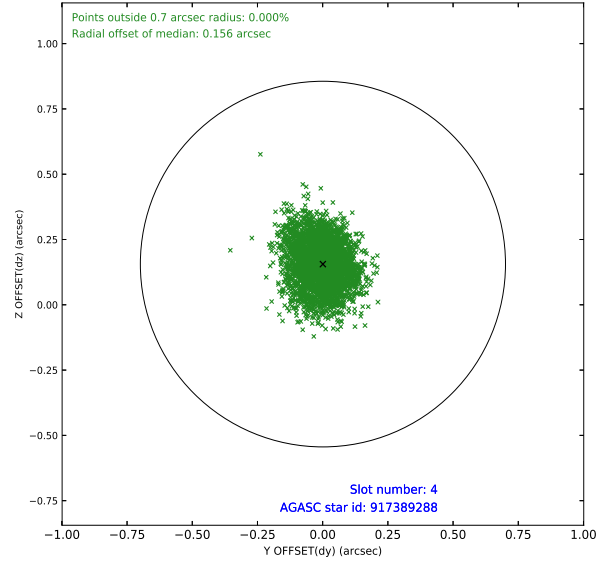
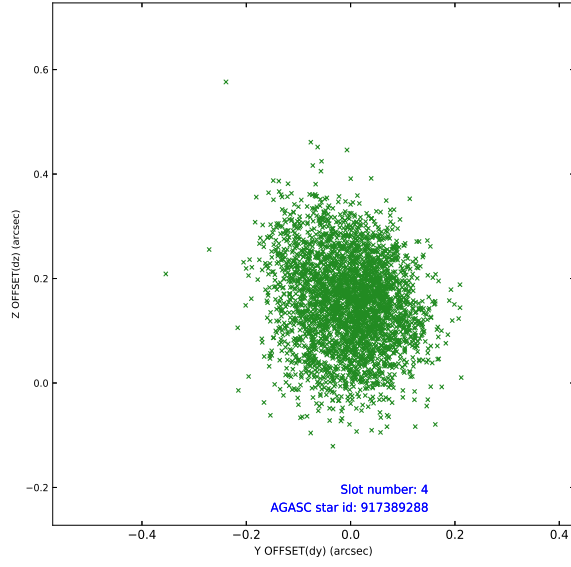
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.09	1618	1.000	-0.096	-0.083	0.006	0.011	0.000000	0.000000	-759.26	-1732
1	FID		ACIS-S-4	7.20	1618	1.000	0.084	0.042	0.006	0.011	0.000000	0.000000	2153.77	175
2	FID		ACIS-S-6	7.34	1617	1.000	-0.015	0.048	0.007	0.012	0.000000	0.000000	403.90	813
3	GUIDE	used	917386656	7.25	3236	1.000	-0.014	-0.022	0.059	0.101	15.342124	-33.359890	195.82	-1487
4	GUIDE	used	917389288	9.56	3232	1.000	0.001	0.156	0.122	0.192	15.394706	-33.185862	489.44	-2063
5	GUIDE	used	917389592	9.99	3232	1.000	0.167	0.139	0.129	0.207	16.074673	-33.644125	-2134.90	-2158
6	GUIDE	used	917650528	8.72	3236	1.000	-0.134	-0.196	0.086	0.132	14.274554	-33.869842	1375.16	2007
7	GUIDE	used	917651768	9.62	3228	1.000	-0.015	-0.074	0.121	0.185	14.115744	-33.817552	1855.58	2185

## 2.4 Star Slots

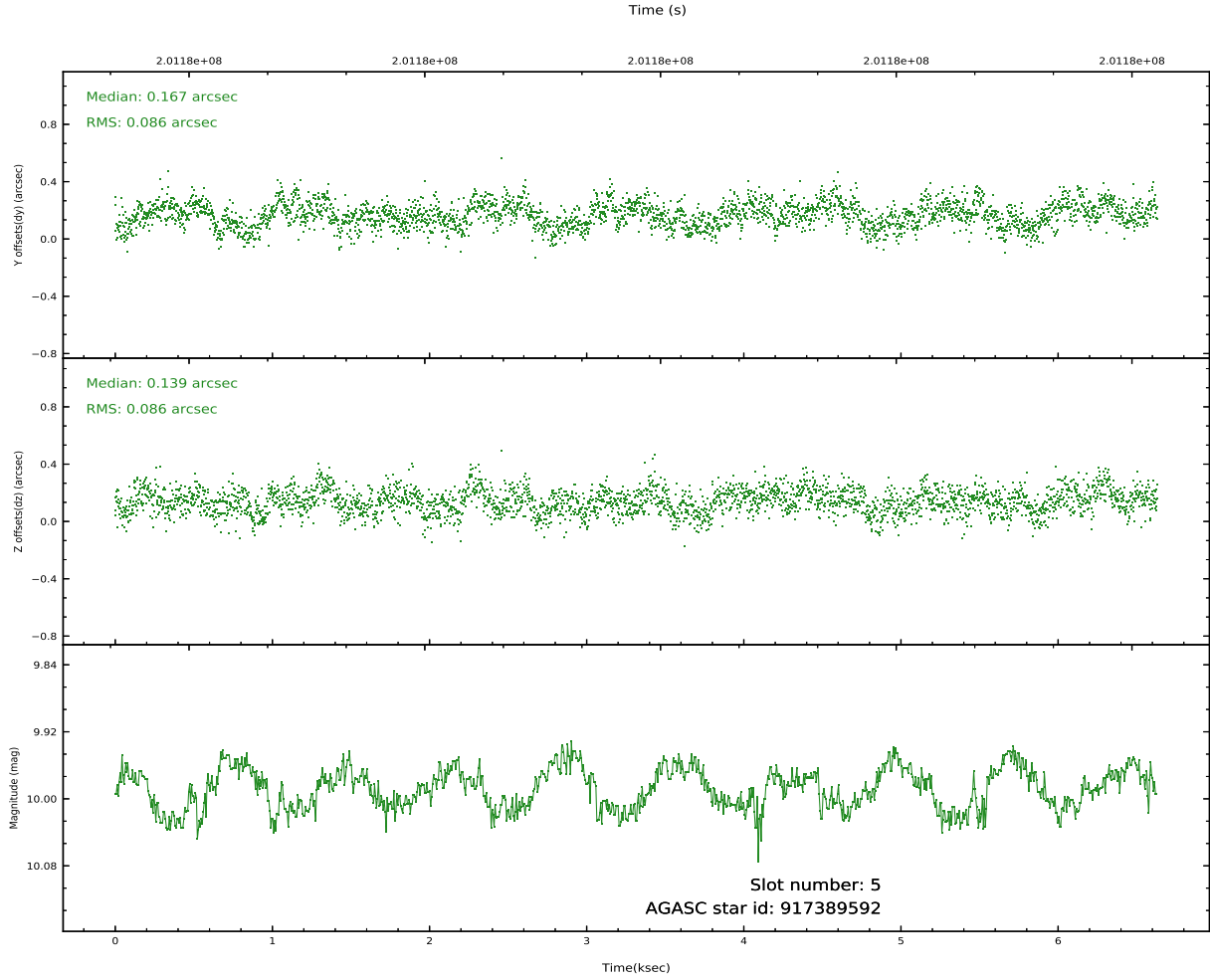
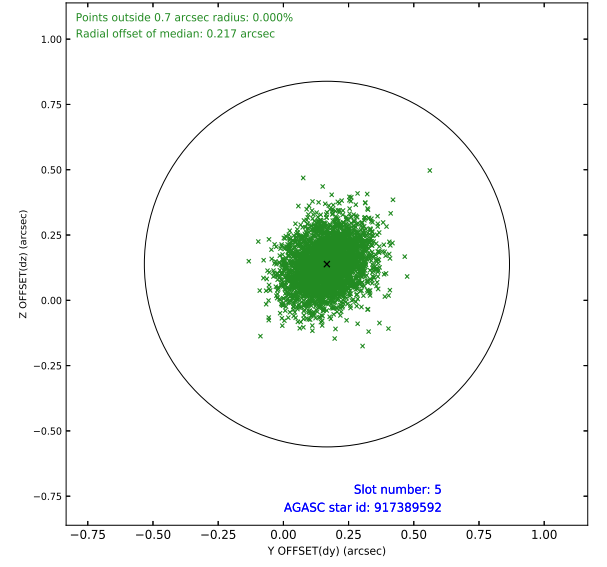
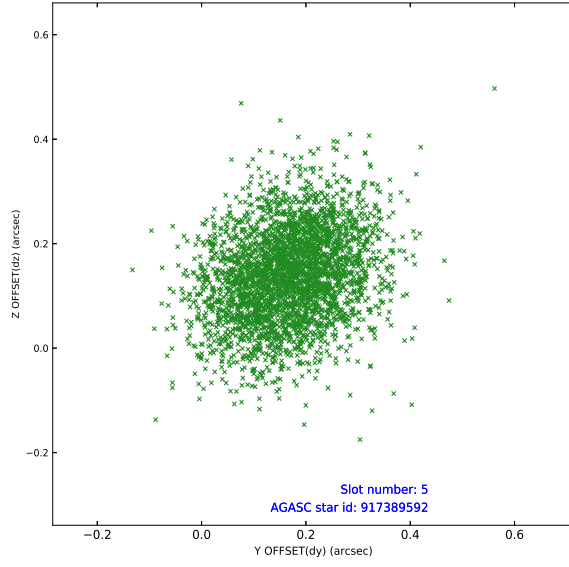
### 2.4.1 Slot 3



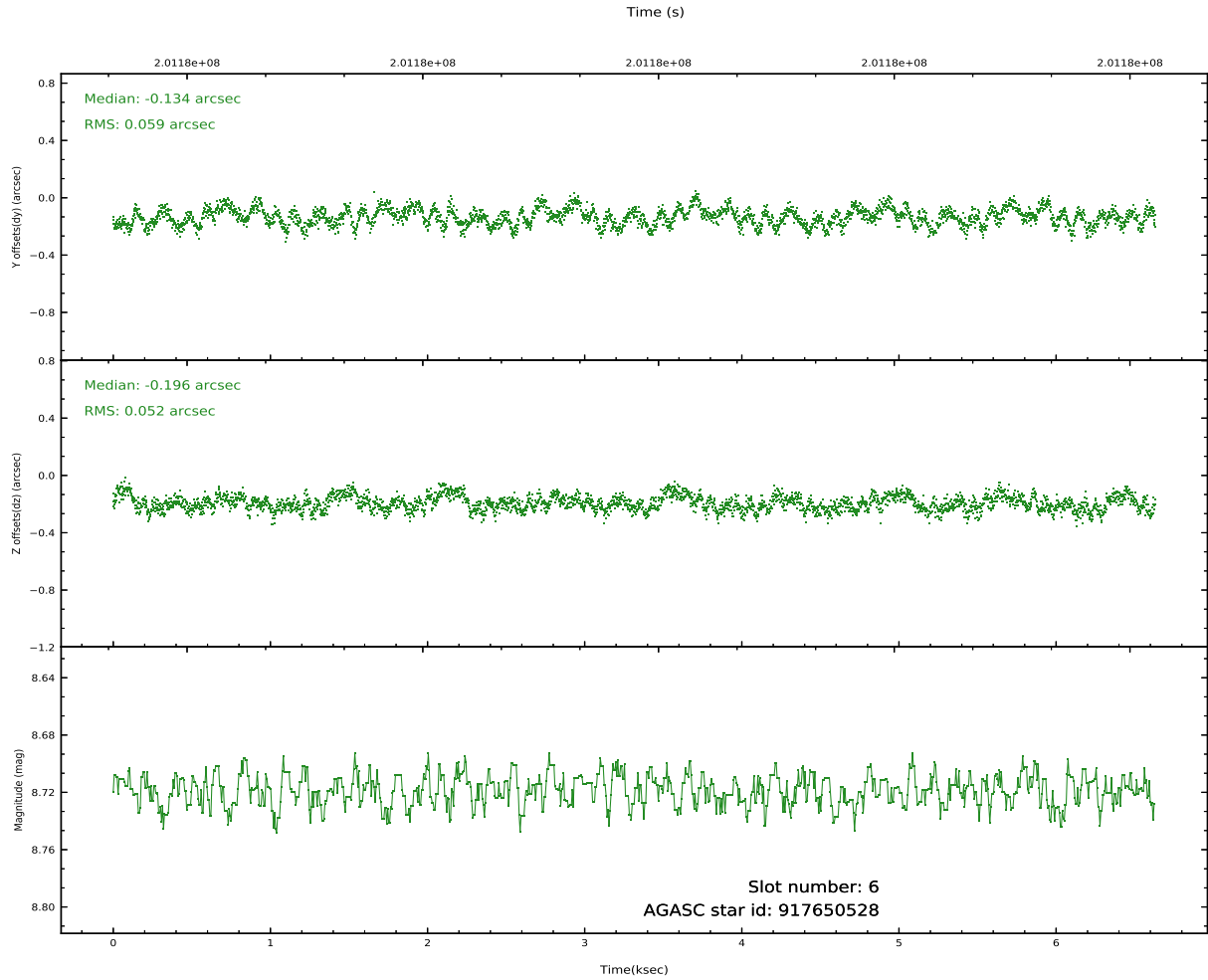
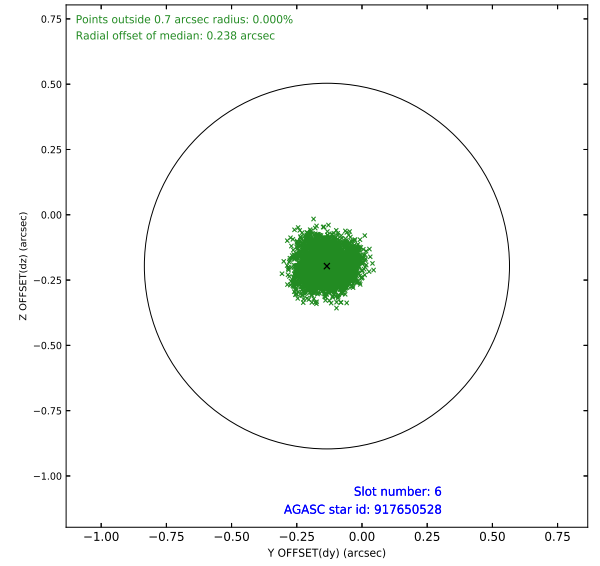
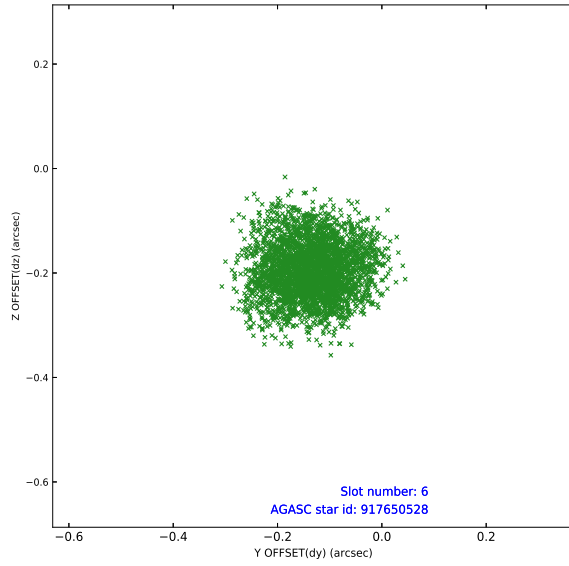
## 2.4.2 Slot 4



### 2.4.3 Slot 5

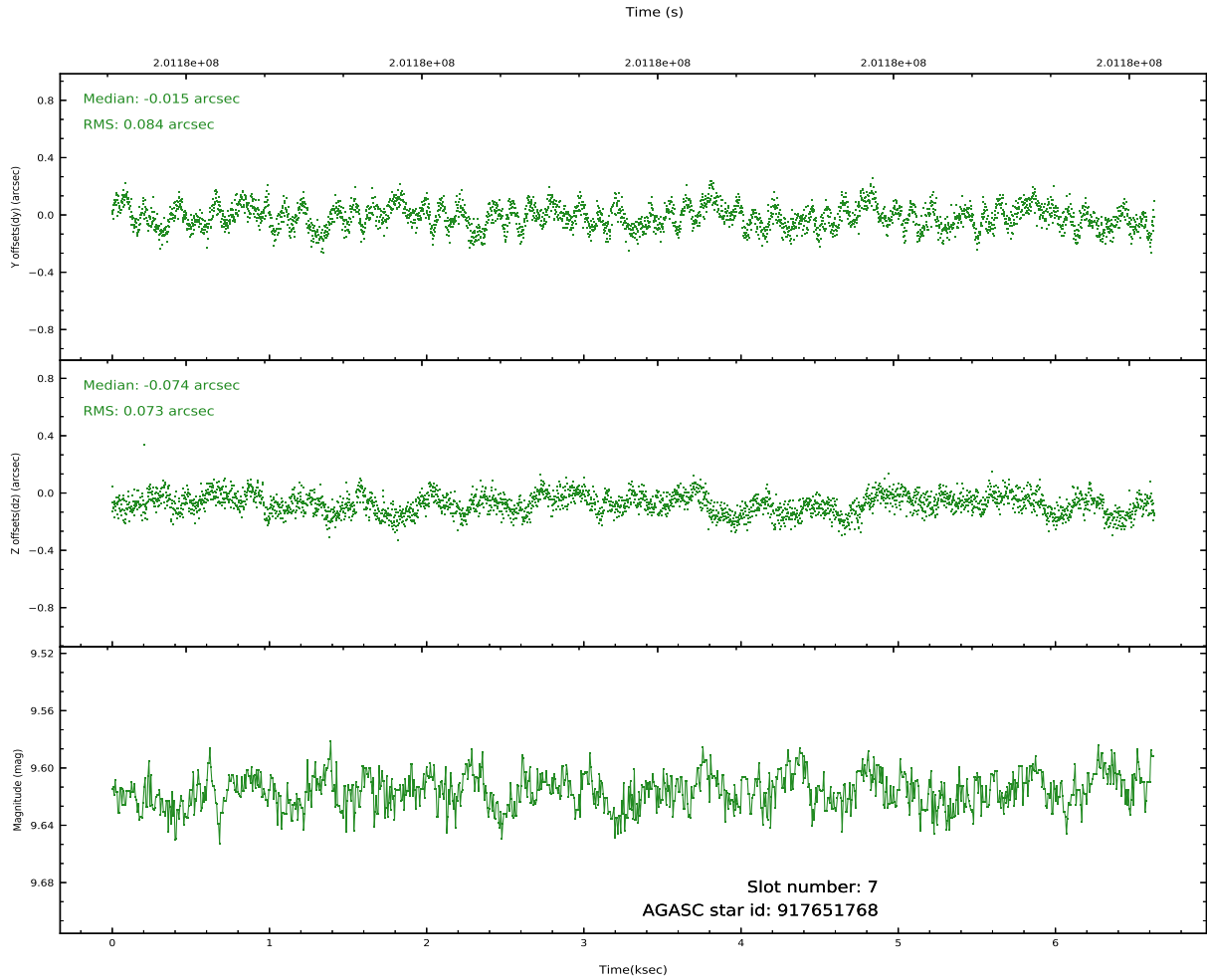
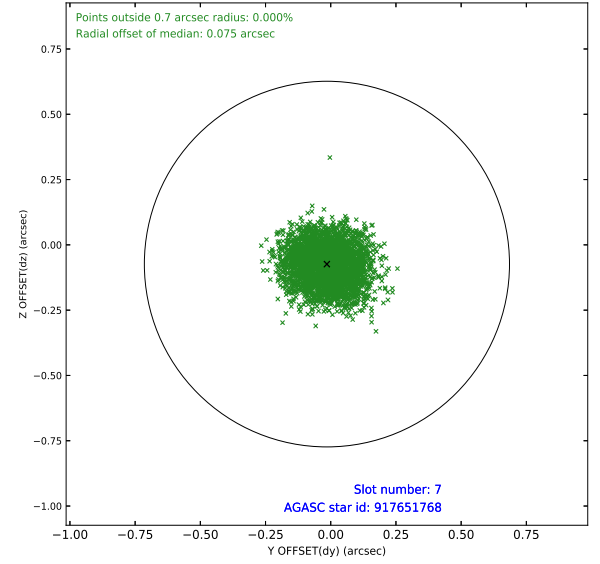
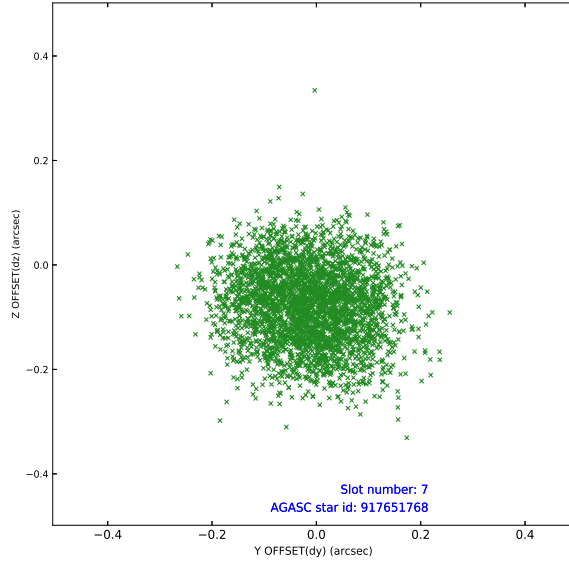


## 2.4.4 Slot 6



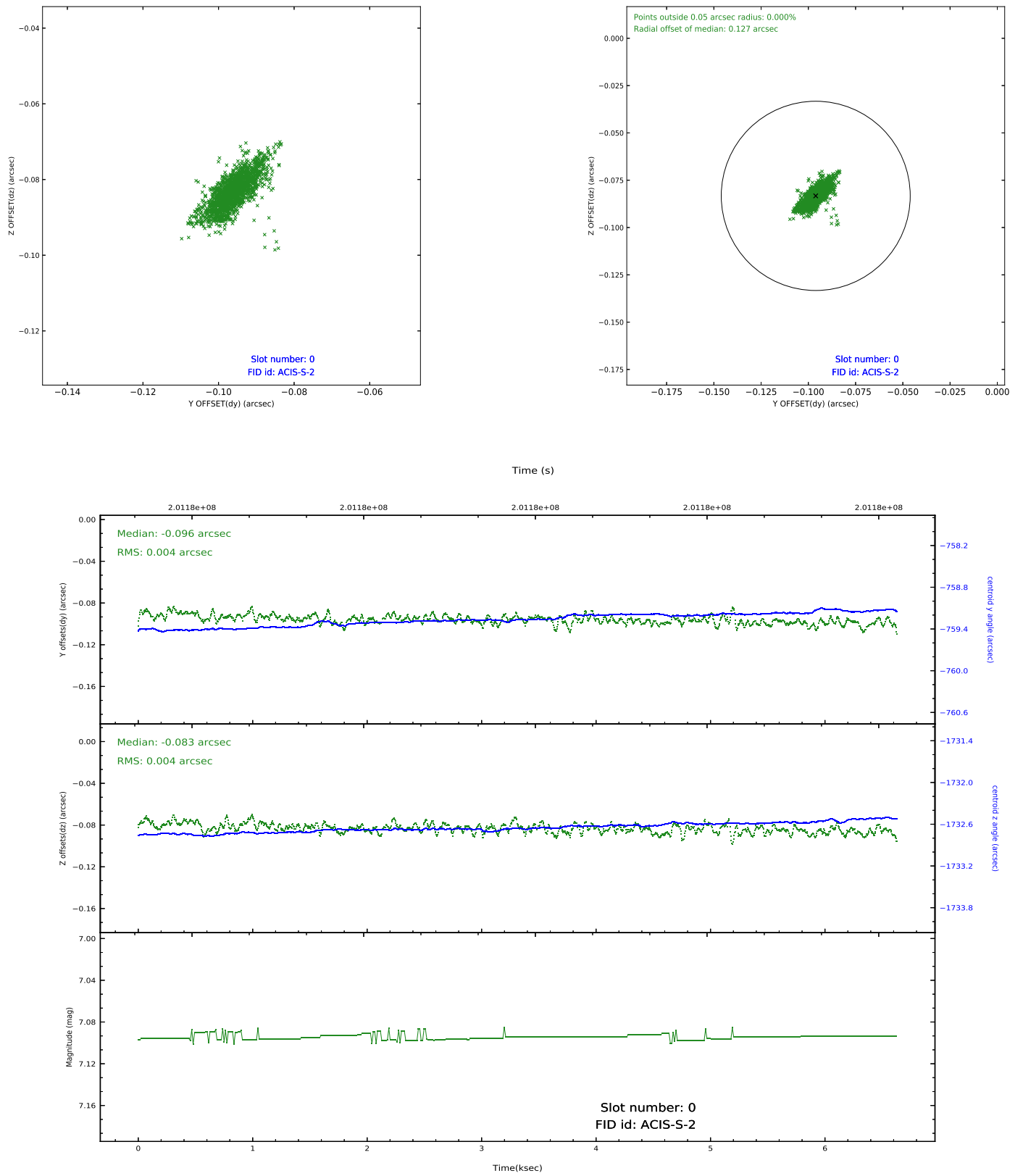


## 2.4.5 Slot 7

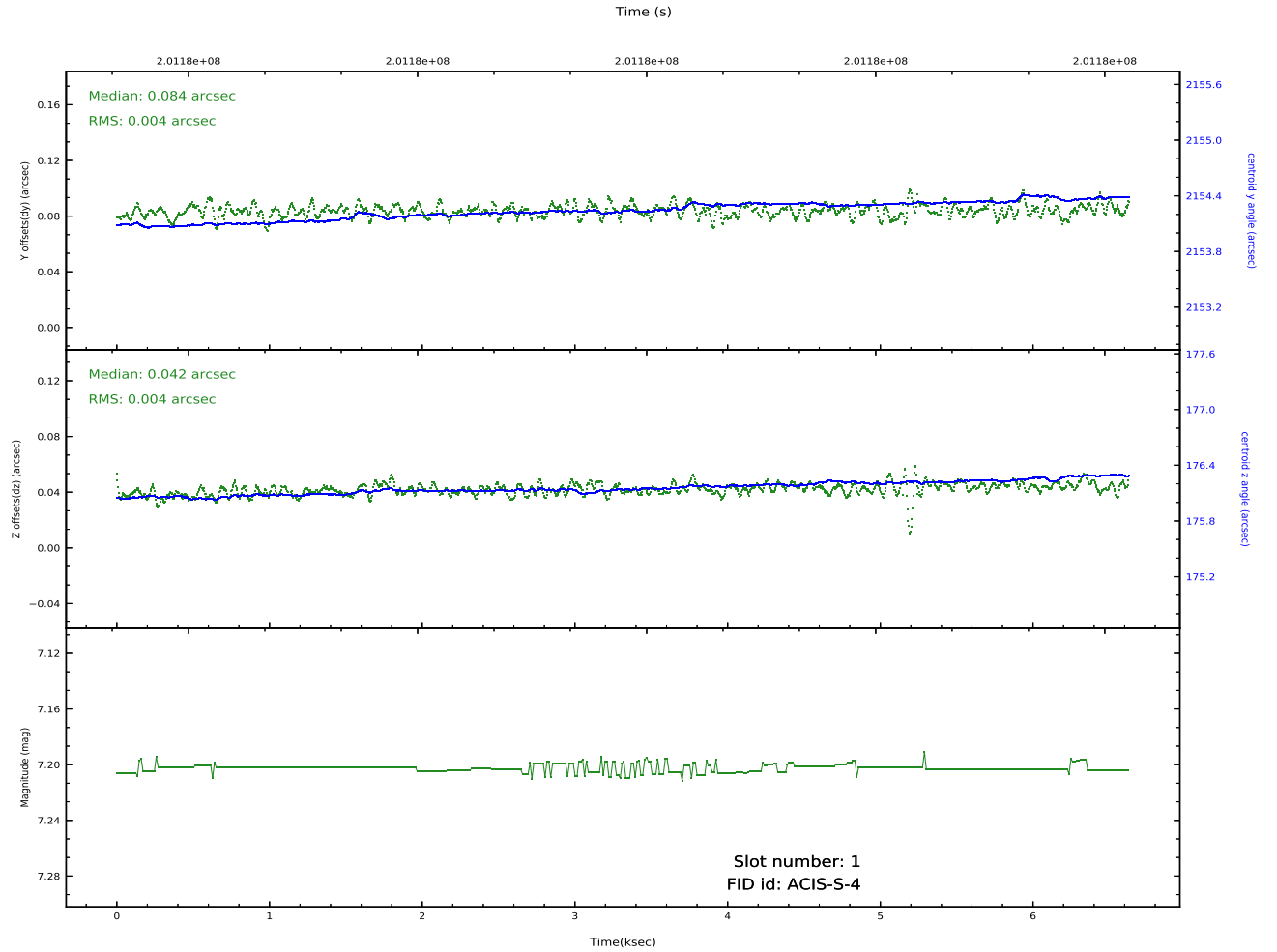
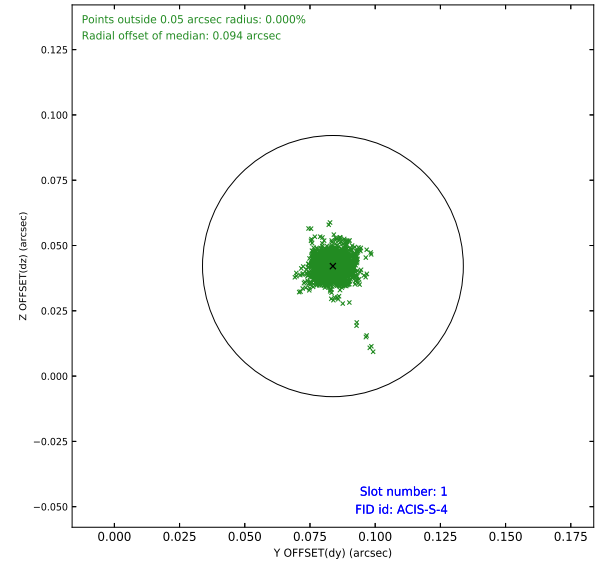
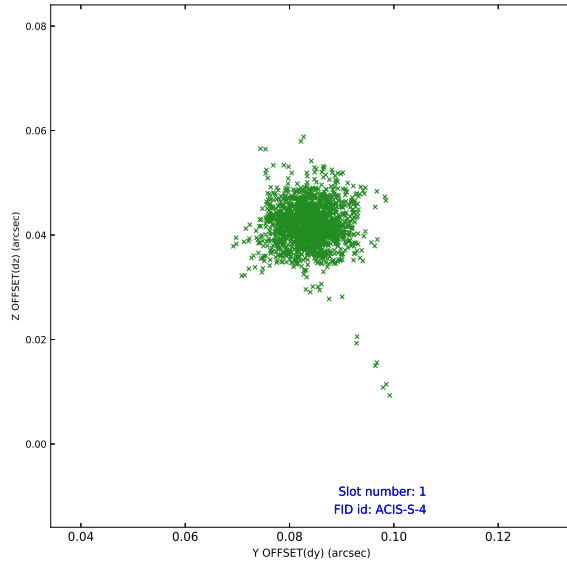


## 2.5 FID Slots

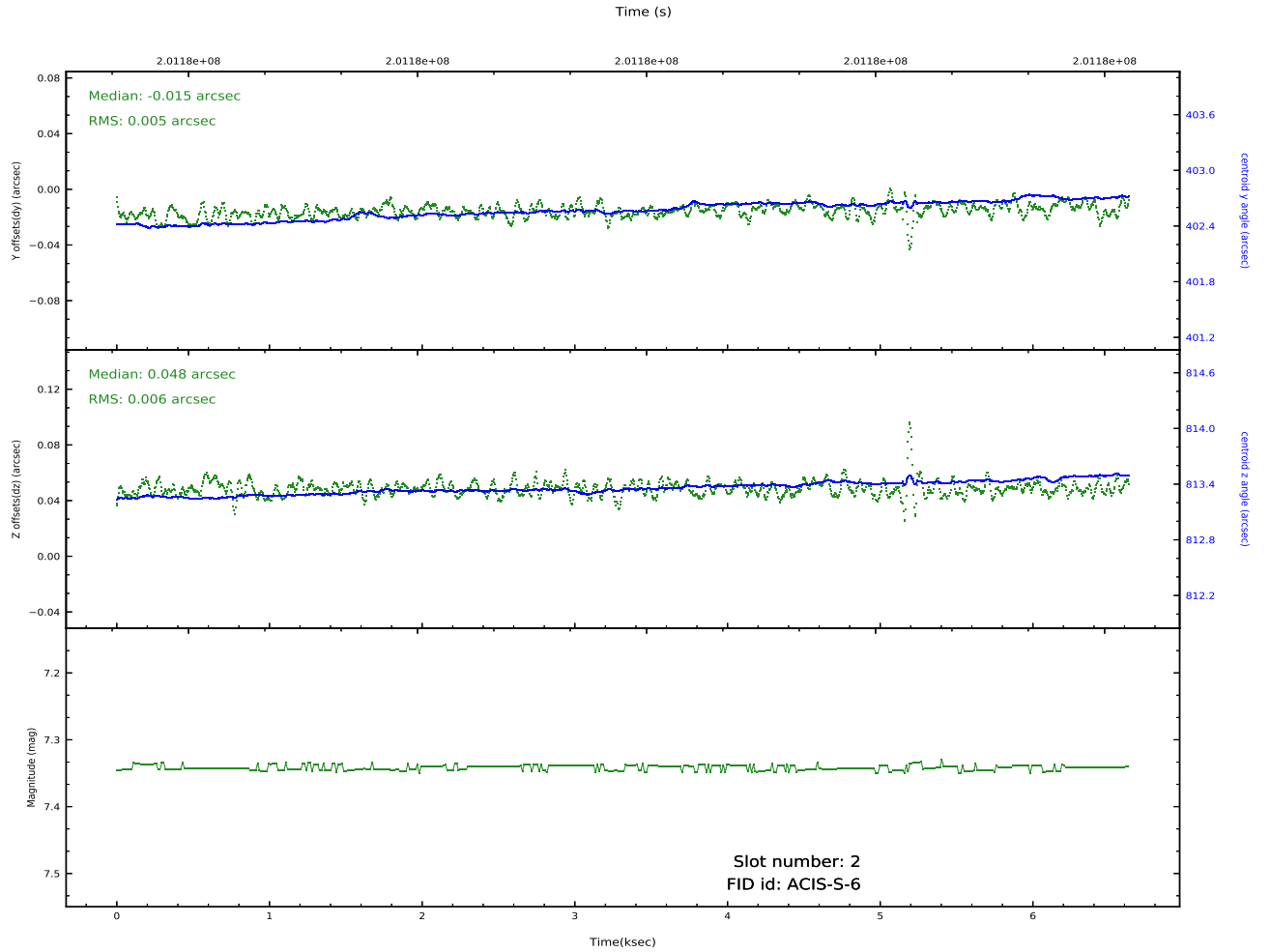
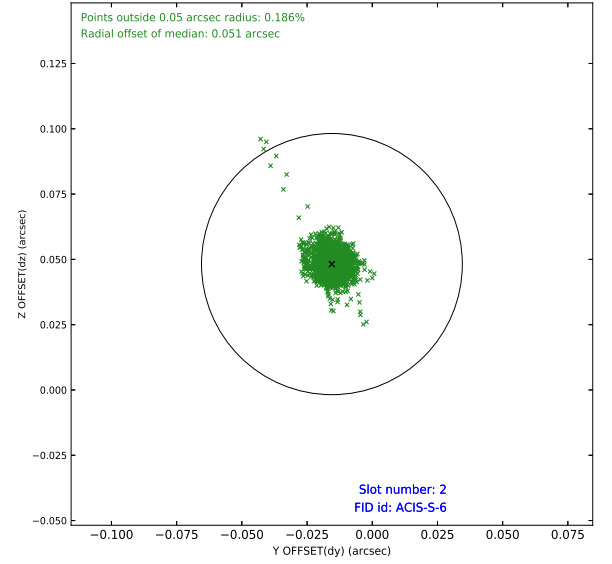
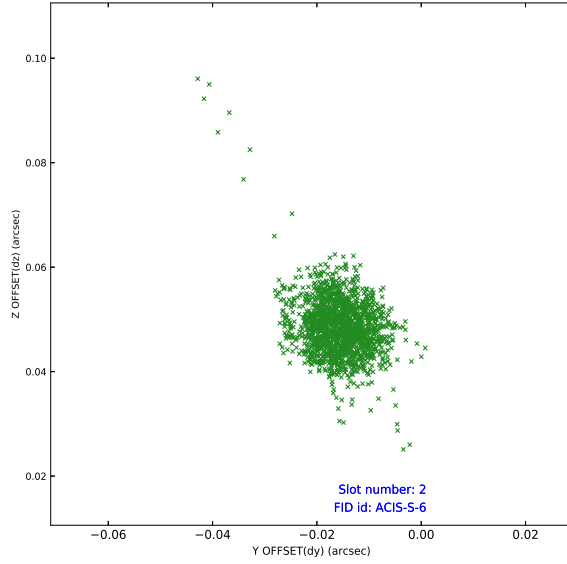
### 2.5.1 Slot 0



## 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)	2020.09.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	6.185

### A.2 Comments

Monitor constraint met. Joint Proposal: NOAO