

# V&V Reference Report

## L2 ASCDS Version : 10.9.2

Observation 21077 - L2 Version 2  
Chandra X-Ray Center

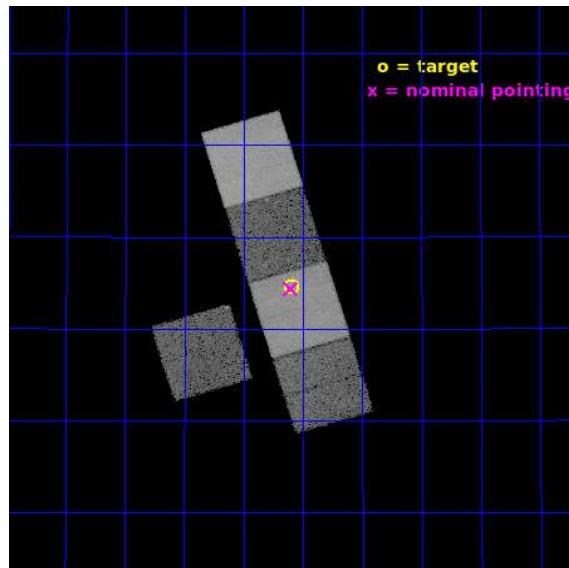
L2 Processing Date : Oct 25 2020

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# 1 Front

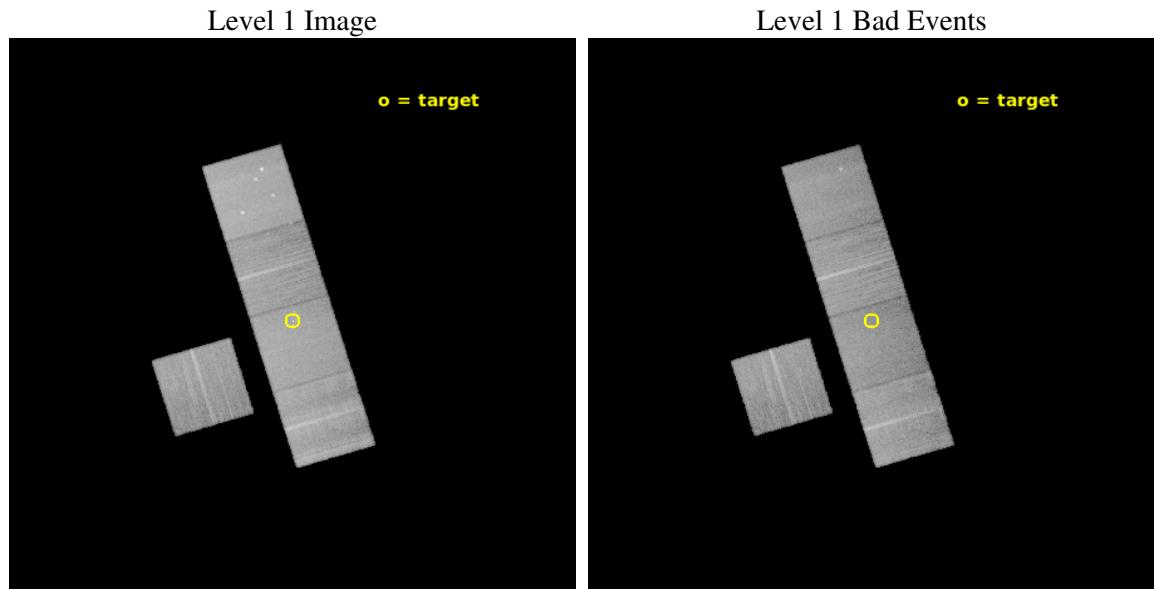
seq_num	502654	Sequence number
obs_id	21077	Observation id
title	The unprecedented metamorphosis of SN2014C: from a H-stripped explosion to a strongly interacting supernova	Proposal title
observer	RAFFAELLA MARGUTTI	Principal investigator
object	SN2014C	Source name
dtycycle	0	&#160
cycle	P	events from 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	339.27543313286	Nominal RA [deg]
dec_nom	34.406388582025	Nominal Dec [deg]
roll_nom	73.15569533553	Nominal Roll [deg]
revision	2	Processing version of data
ontime	20050.800154328	Sum of GTIs [s]
livetime	19788.821689128	Livetime [s]
ontime3	20047.659184098	Sum of GTIs [s]
ontime5	20050.800154328	Sum of GTIs [s]
ontime6	20050.800154328	Sum of GTIs [s]
ontime7	20050.800154328	Sum of GTIs [s]
ontime8	20044.5181638	Sum of GTIs [s]
l2events	242093	Number of level 2 events



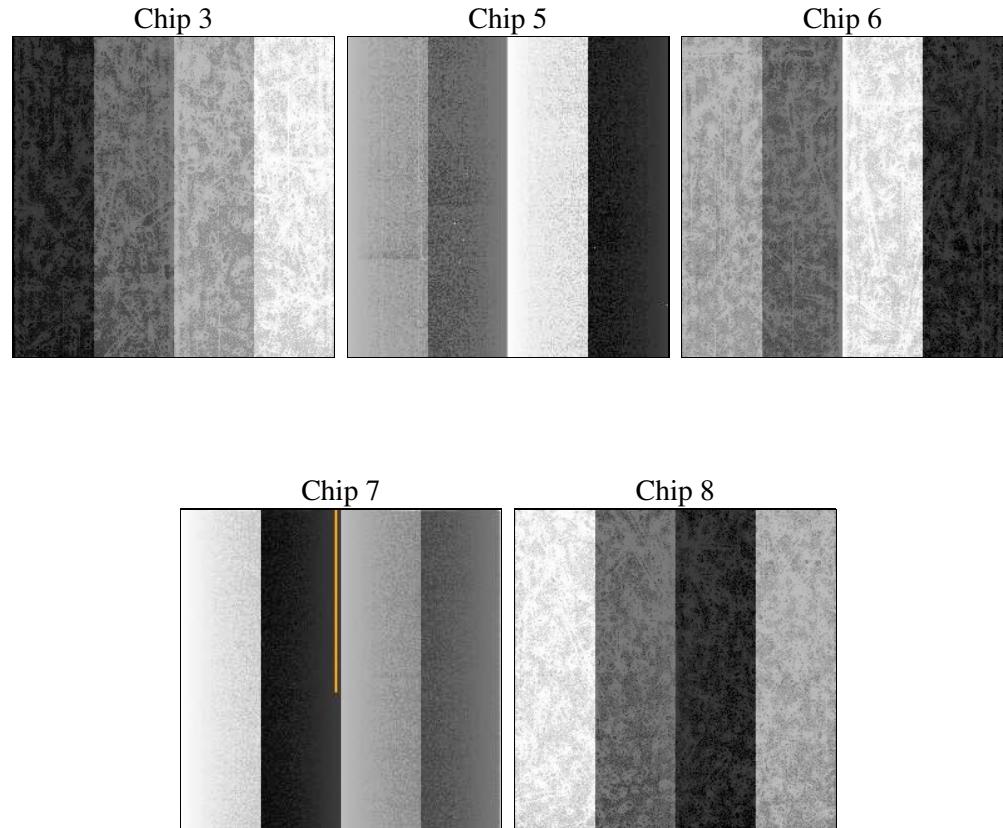
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	20000.000000	[s] Scheduled observation exposure time
ascdsvr	10.9.2	Processing system revision	ontime	20050.800154328	Sum of GTIs [s]
caldbver	4.9.3	&#160	ontime3	20047.659184098	Sum of GTIs [s]
date	2020-10-25T12:51:30	Date and time of file creation	ontime5	20050.800154328	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	20050.800154328	Sum of GTIs [s]
			ontime7	20050.800154328	Sum of GTIs [s]
			ontime8	20044.5181638	Sum of GTIs [s]
			l1events	960776	Number of level 1 events

### 2.1.4 Events

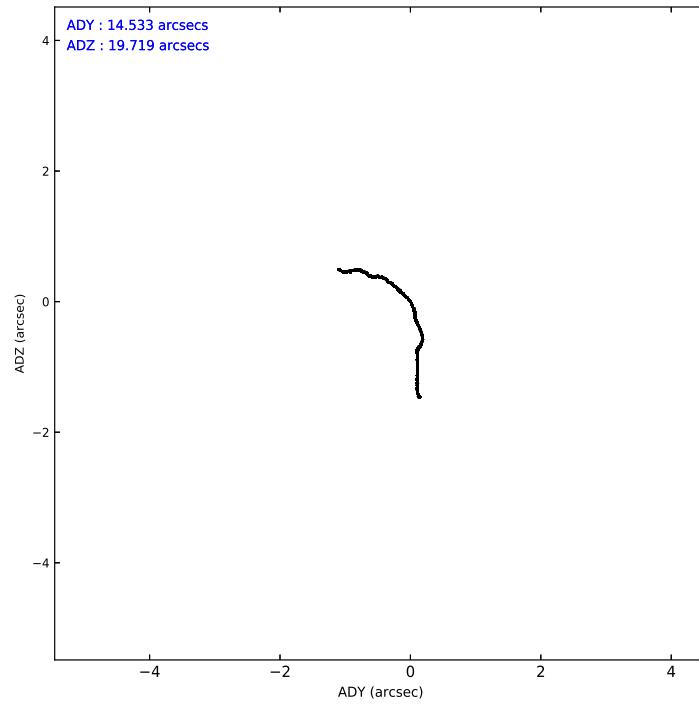
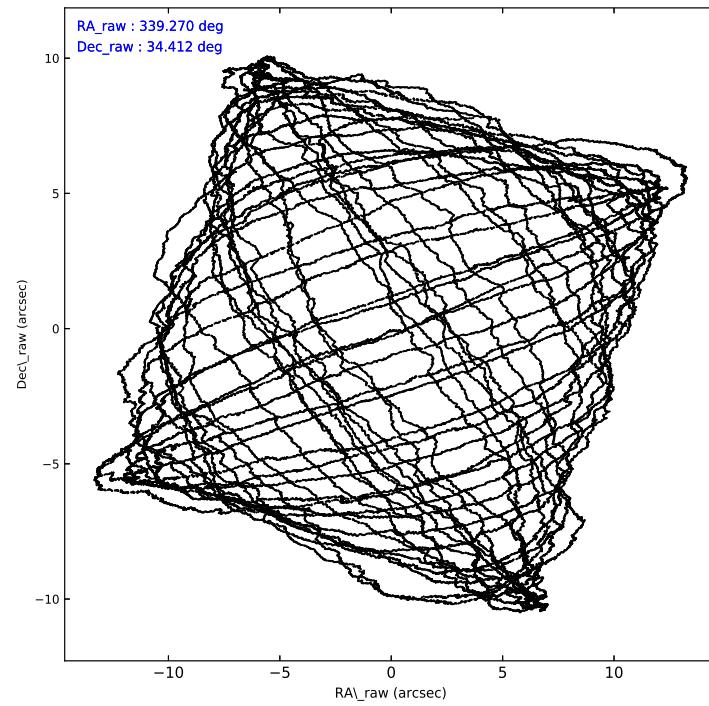
	<b>ccd 3</b>	<b>ccd 5</b>	<b>ccd 6</b>	<b>ccd 7</b>	<b>ccd 8</b>
level 1 events	154571	242813	162630	197829	202933
rejected events	138438	125403	145136	110658	148530
rejected %	89%	51%	89%	55%	73%

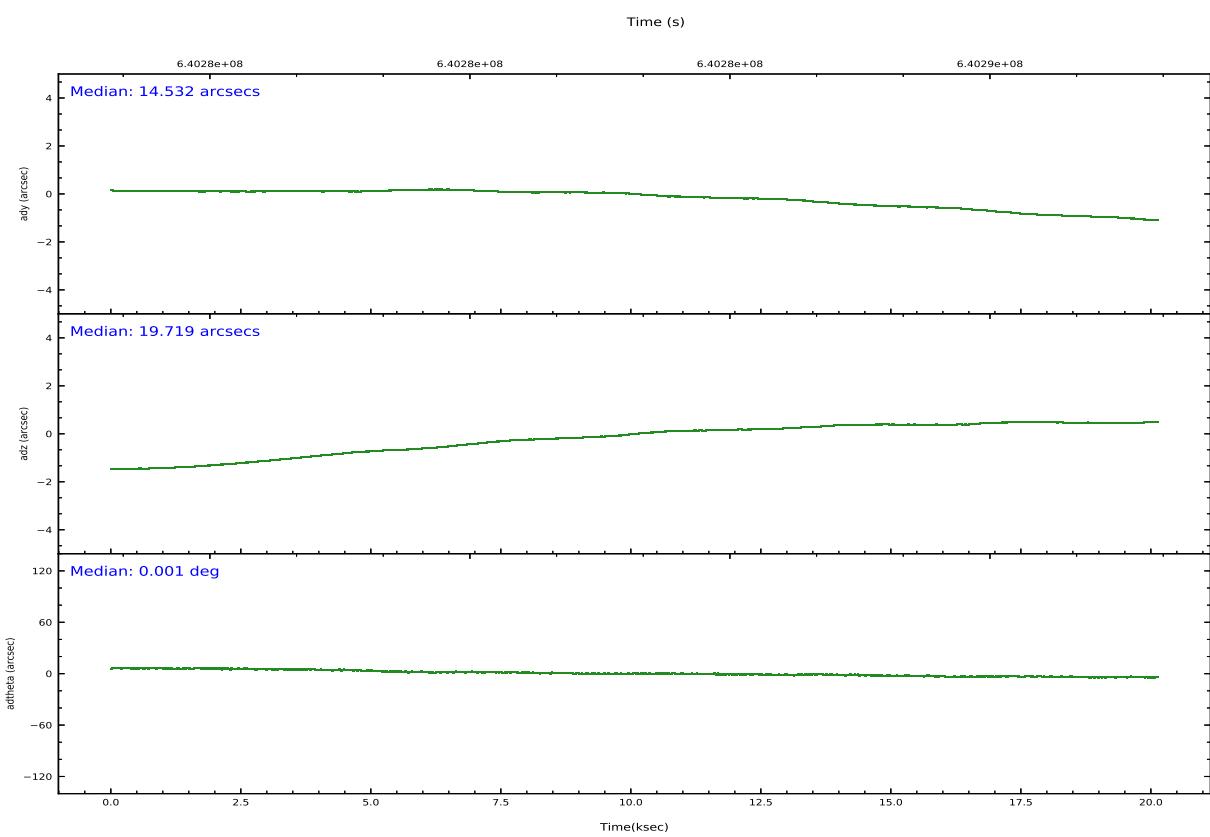
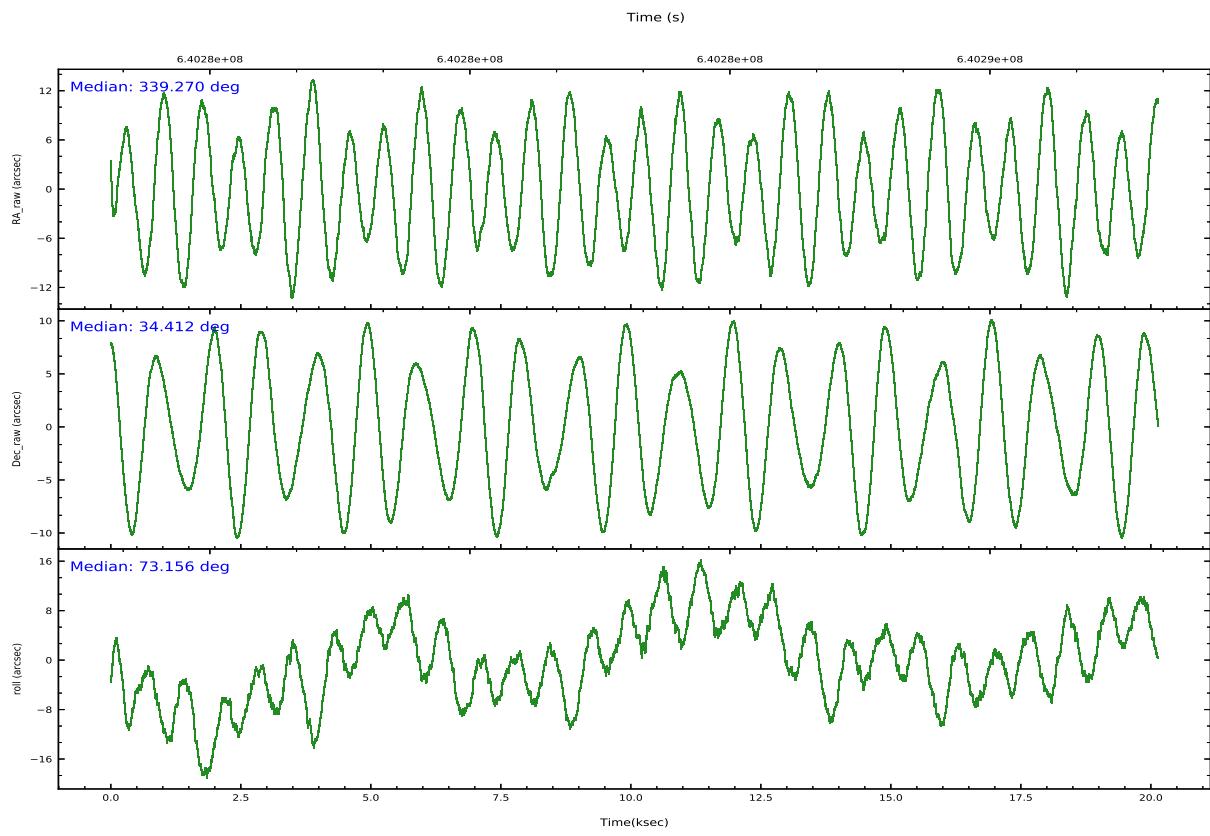
	<b>ccd 3</b>	<b>ccd 5</b>	<b>ccd 6</b>	<b>ccd 7</b>	<b>ccd 8</b>
grade 0 events	6082	10345	5893	7820	15660
	3%	4%	3%	3%	7%
grade 1 events	86	1217	59	261	165
	0%	0%	0%	0%	0%
grade 2 events	3422	36250	4174	18565	13074
	2%	14%	2%	9%	6%
grade 3 events	1636	3427	1633	7143	5671
	1%	1%	1%	3%	2%
grade 4 events	1610	3343	1602	6795	5222
	1%	1%	0%	3%	2%
grade 5 events	7036	16152	6763	19468	10602
	4%	6%	4%	9%	5%
grade 6 events	3384	64064	4194	46865	14801
	2%	26%	2%	23%	7%
grade 7 events	131315	108015	138312	90912	137738
	84%	44%	85%	45%	67%

## 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	339.278274	339.27543313286	CCD I2 on	N	N
[deg] Pointing Dec	34.385257	34.406388582025	CCD I3 on	O1	Y
[deg] Pointing Roll	72.997216	73.15569533553	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)	640273235.184000	640271931.2019399	CCD S5 on	N	N
Observation start date	2018-04-16T13:39:26	2018-04-16T13:18:51	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	640293235.184000	640294273.6407501	On-chip summing requested	N	N
Observation end date	2018-04-16T19:12:46	2018-04-16T19:31:13	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect





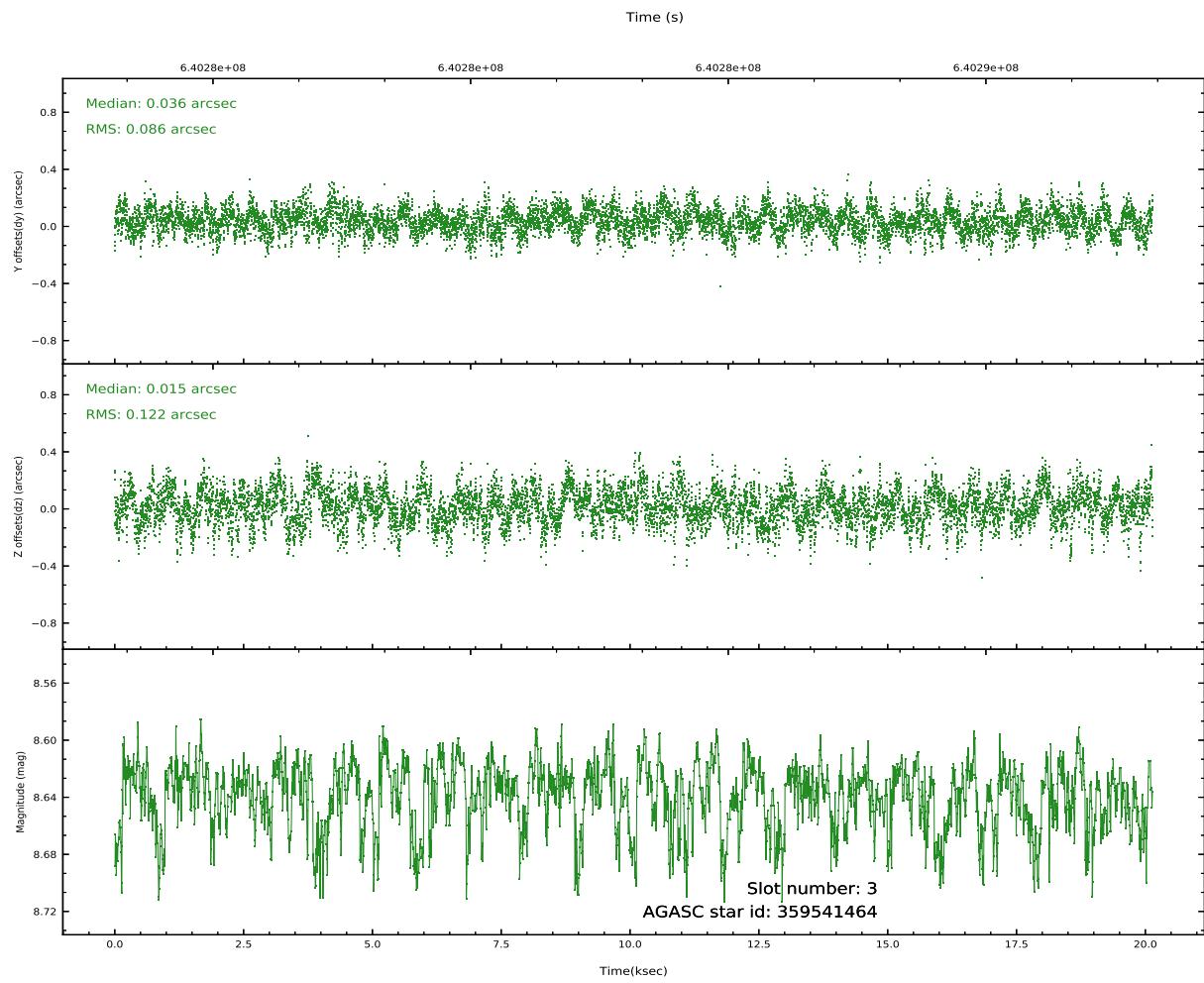
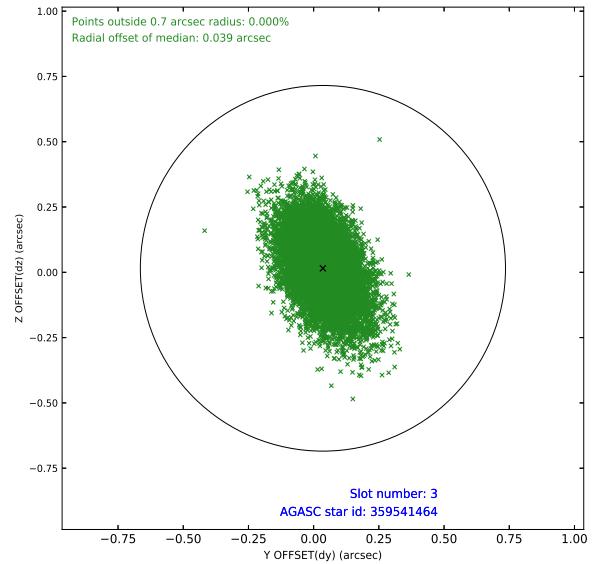
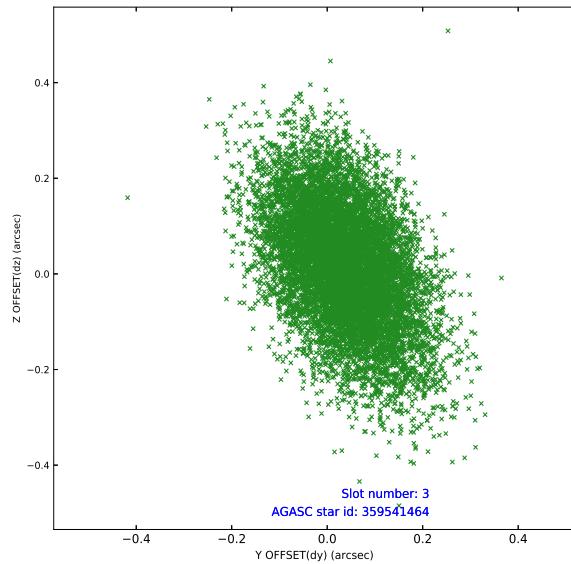
### Slot Statistics

st	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.06	4913	1.000	0.064	-0.069	0.024	0.051	0.000000	0.000000	-767.37	-1741
1	FID		ACIS-S-4	7.16	4913	1.000	0.171	-0.011	0.011	0.018	0.000000	0.000000	2146.10	167
2	FID		ACIS-S-5	7.15	4911	1.000	-0.271	0.088	0.022	0.047	0.000000	0.000000	-1820.14	161
3	GUIDE	used	359541464	8.64	9820	1.000	0.036	0.015	0.155	0.266	339.073218	34.654496	749.80	864
4	GUIDE	used	359547944	9.34	9813	1.000	-0.047	-0.014	0.166	0.289	338.858049	34.436167	-187.30	1248
5	GUIDE	used	359532480	9.13	9814	1.000	0.033	-0.100	0.163	0.287	338.355352	34.103802	-1761.79	2338
6	GUIDE	used	359538352	8.57	9822	1.000	-0.005	0.078	0.160	0.298	338.308674	33.941529	-2362.95	2306
7	GUIDE	used	359540136	8.77	9813	1.000	-0.015	0.018	0.145	0.247	339.014971	34.618247	574.15	992

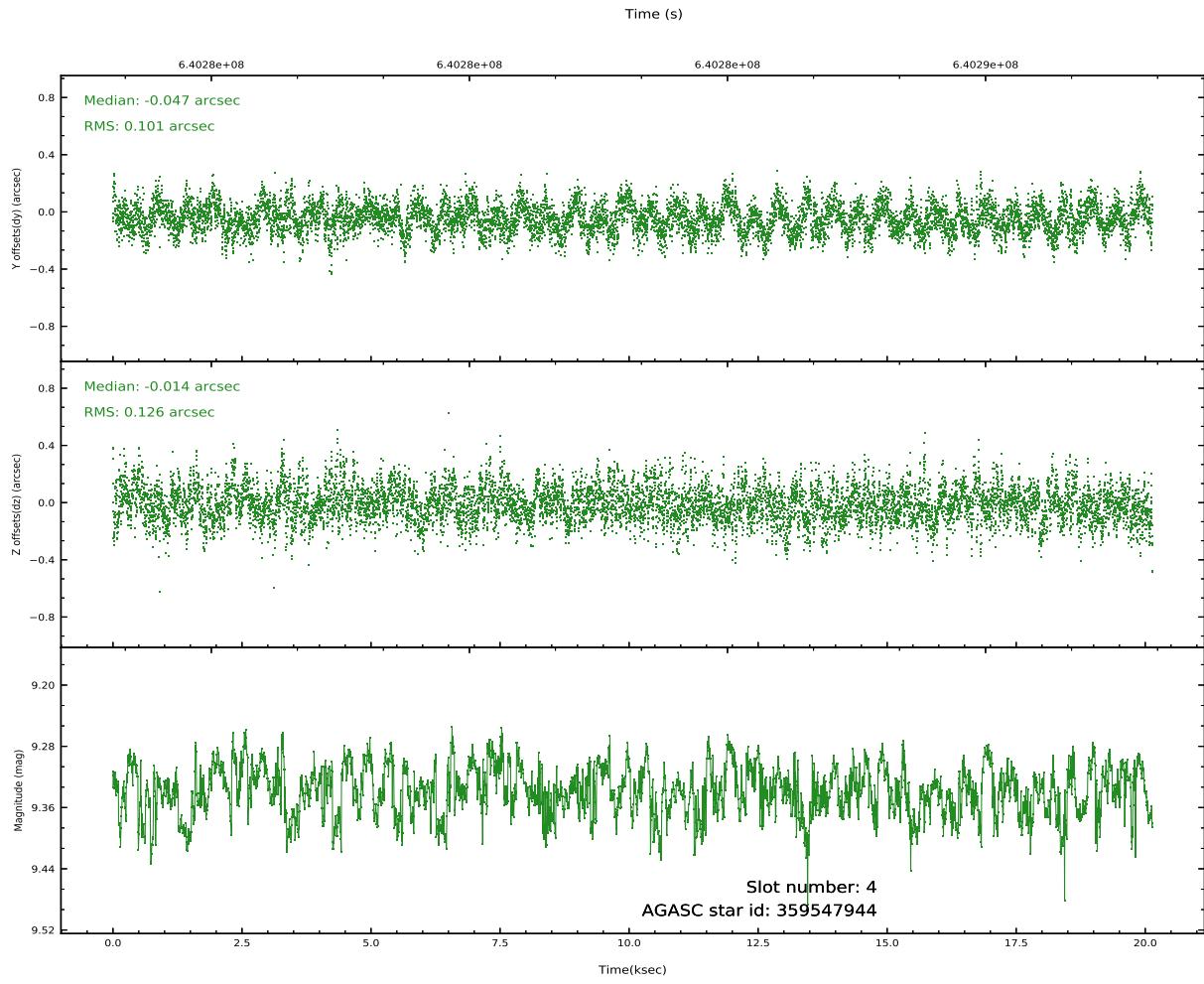
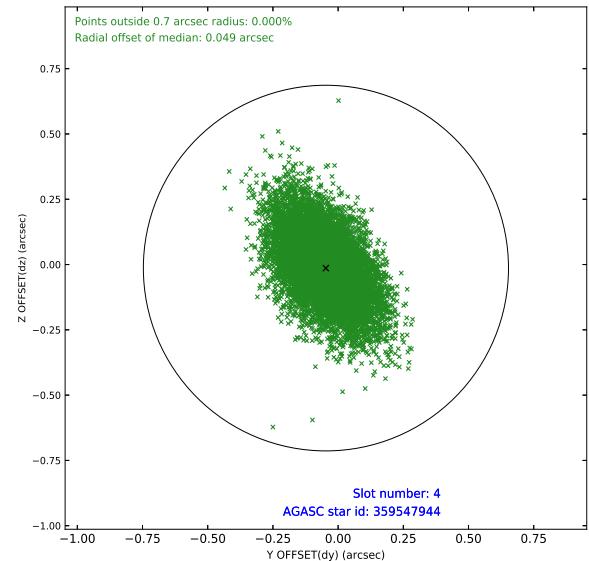
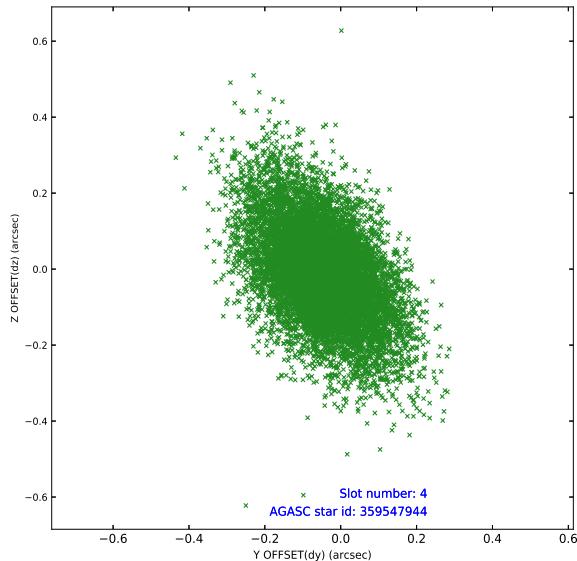
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## 2.4 Star Slots

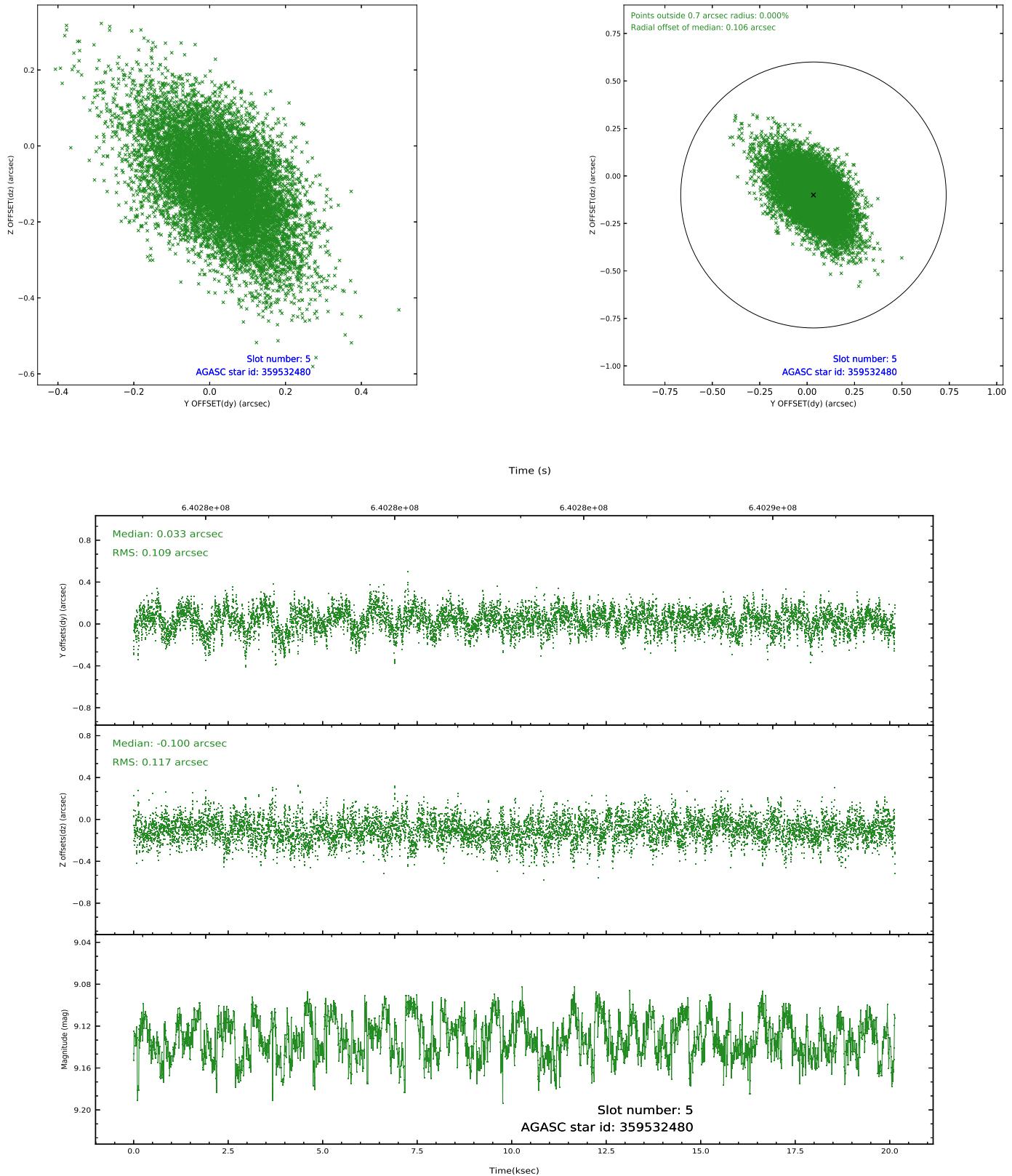
### 2.4.1 Slot 3



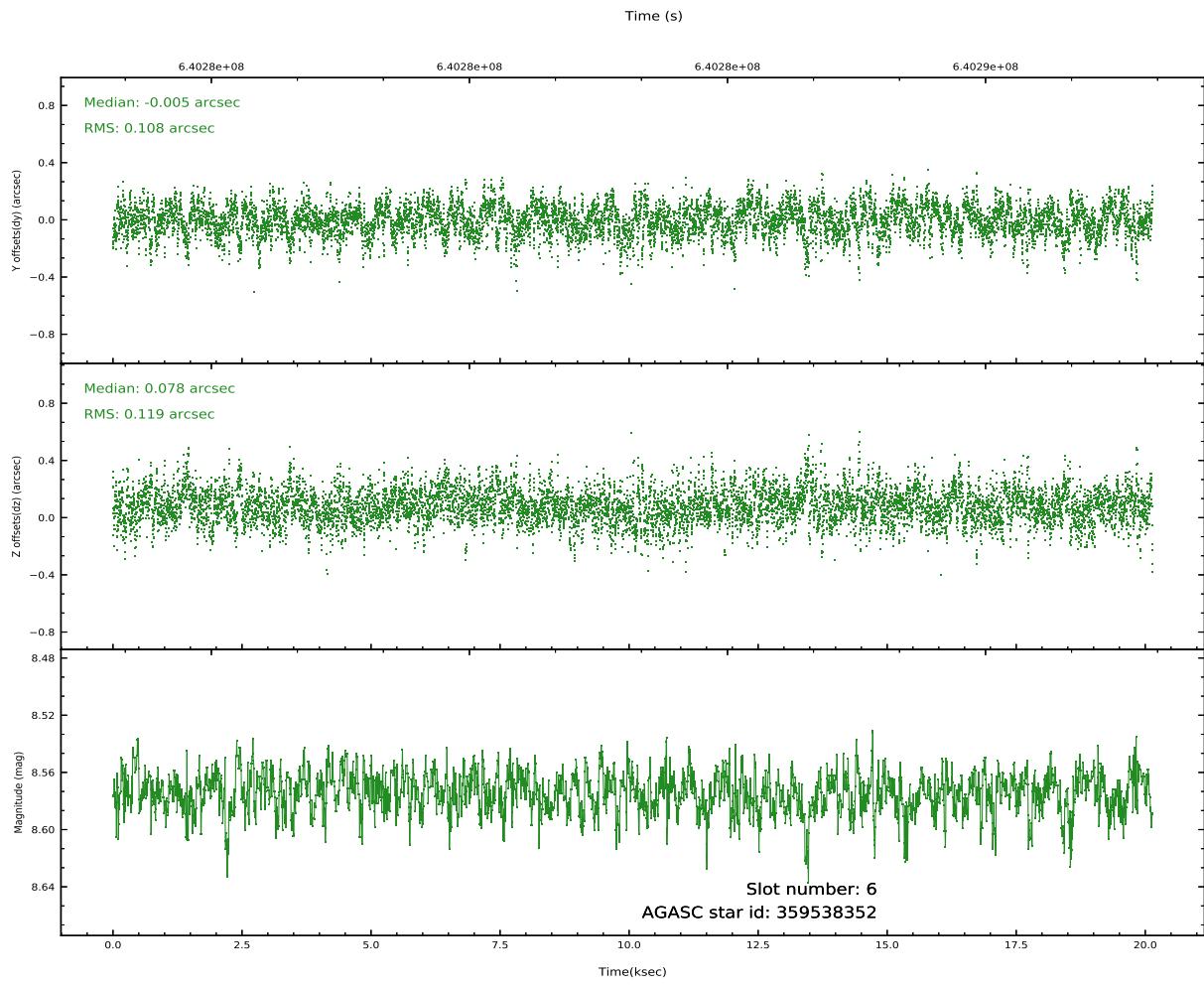
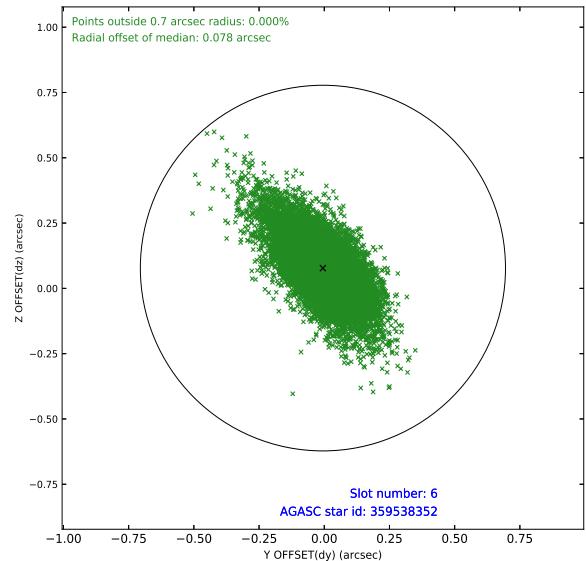
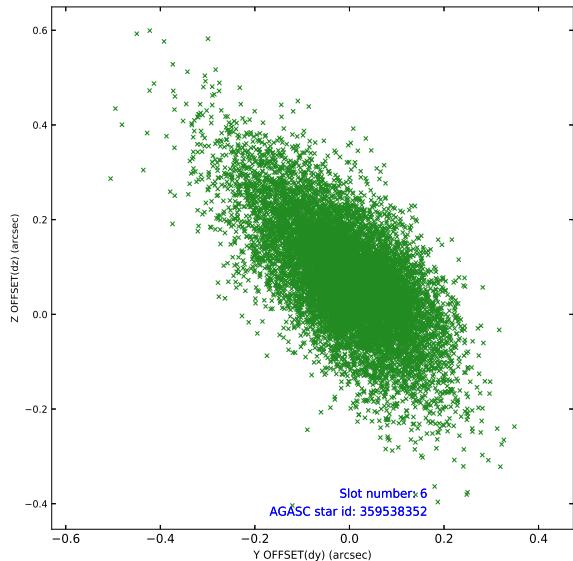
## 2.4.2 Slot 4



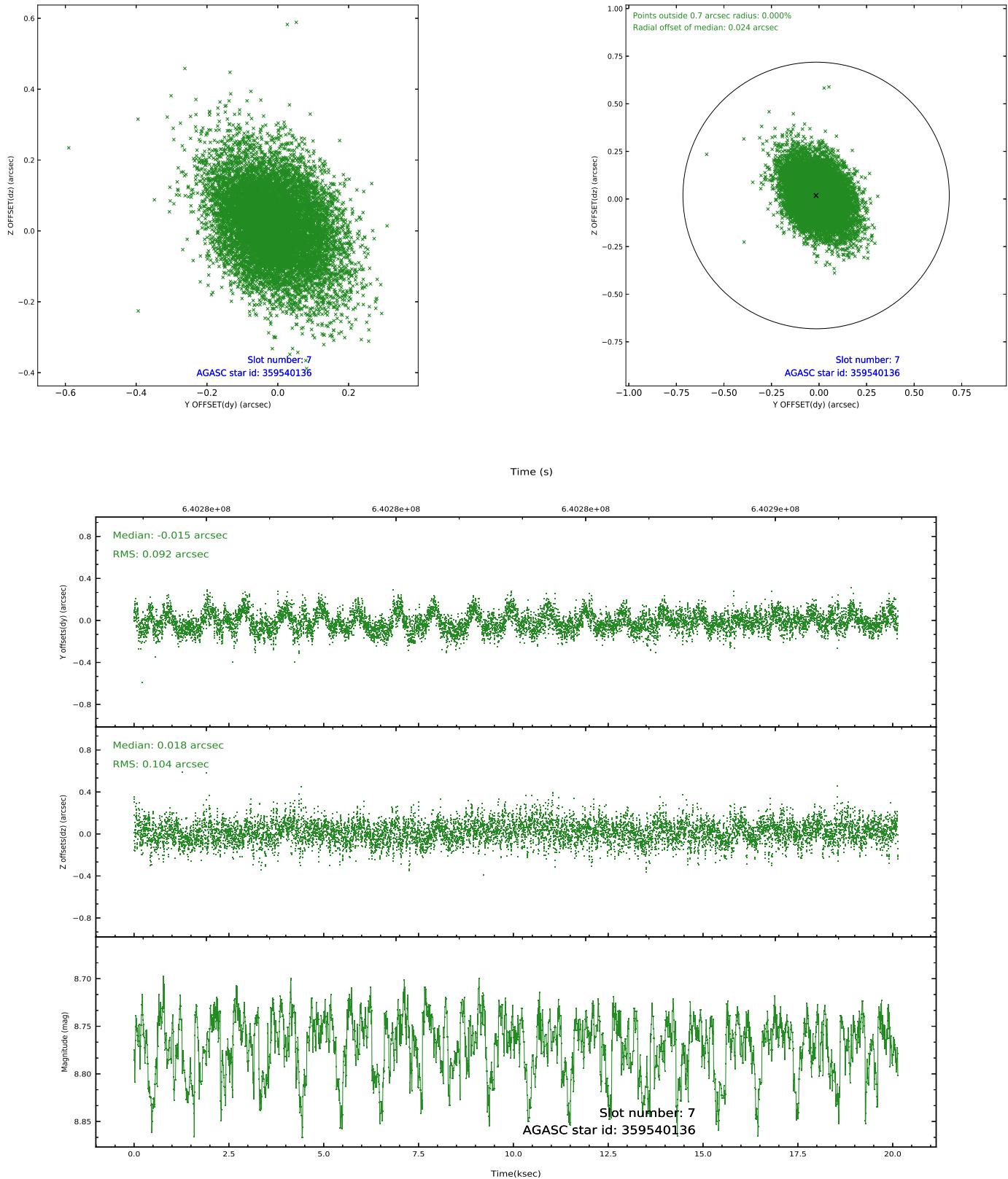
### 2.4.3 Slot 5



#### 2.4.4 Slot 6

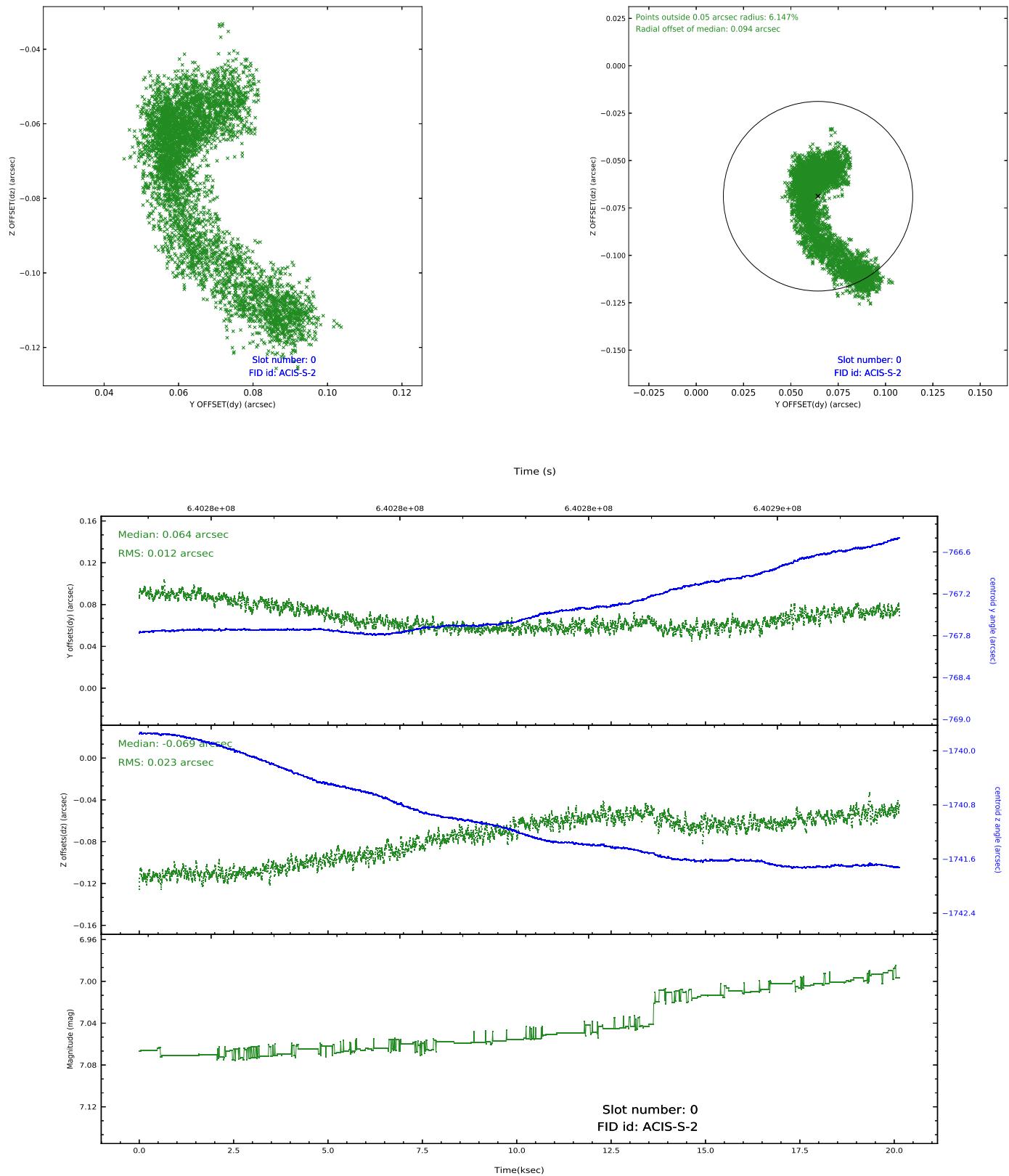


## 2.4.5 Slot 7

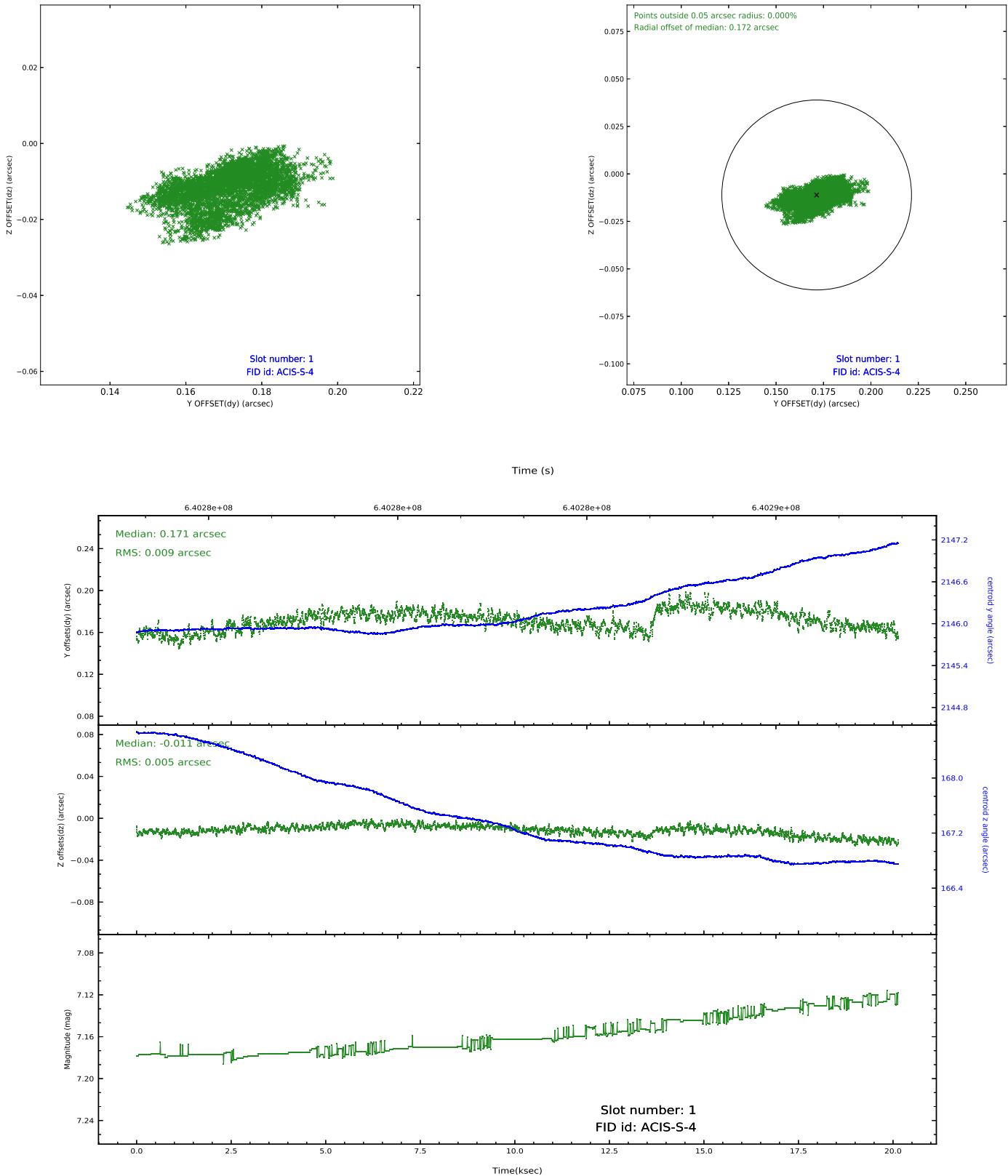


## 2.5 FID Slots

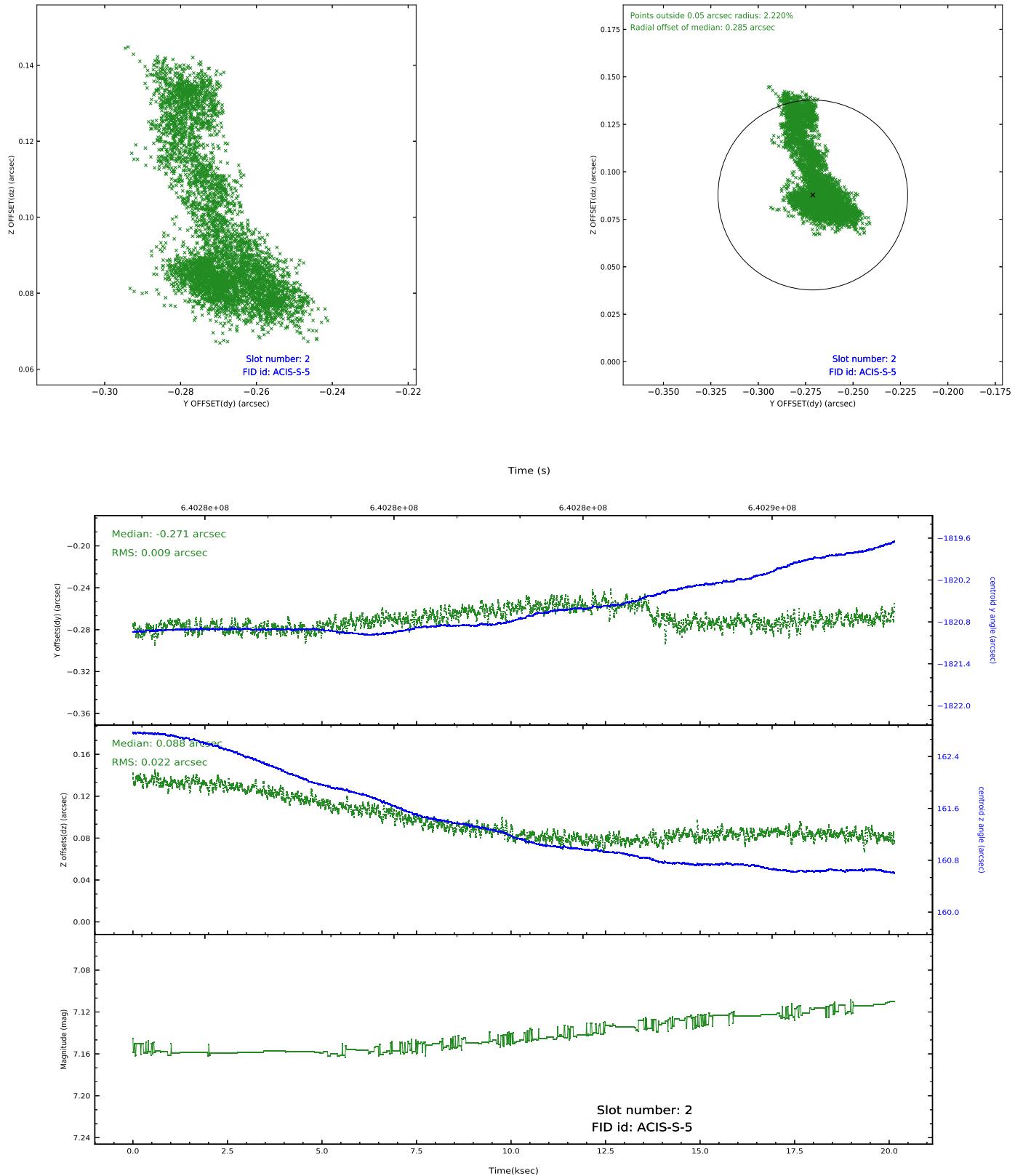
### 2.5.1 Slot 0



### 2.5.2 Slot 1



### 2.5.3 Slot 2



# A Summary

## A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.10.30
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.050800154328

## A.2 Comments