

# V&V Reference Report

## L2 ASCDS Version : 10.9.2

Observation 20754 - L2 Version 2  
Chandra X-Ray Center

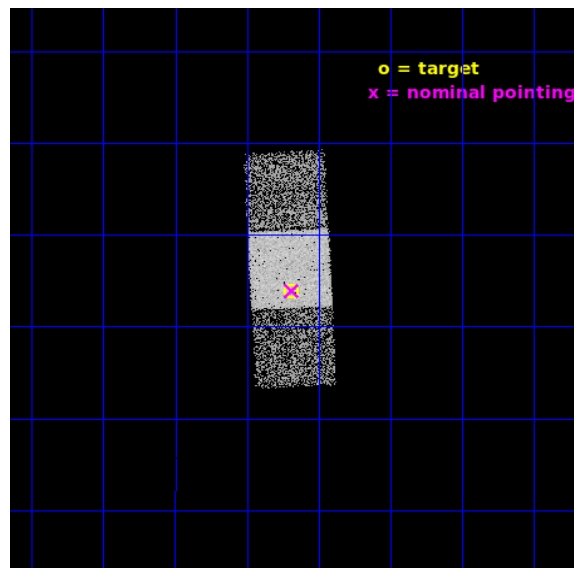
L2 Processing Date : Oct 25 2020

## 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

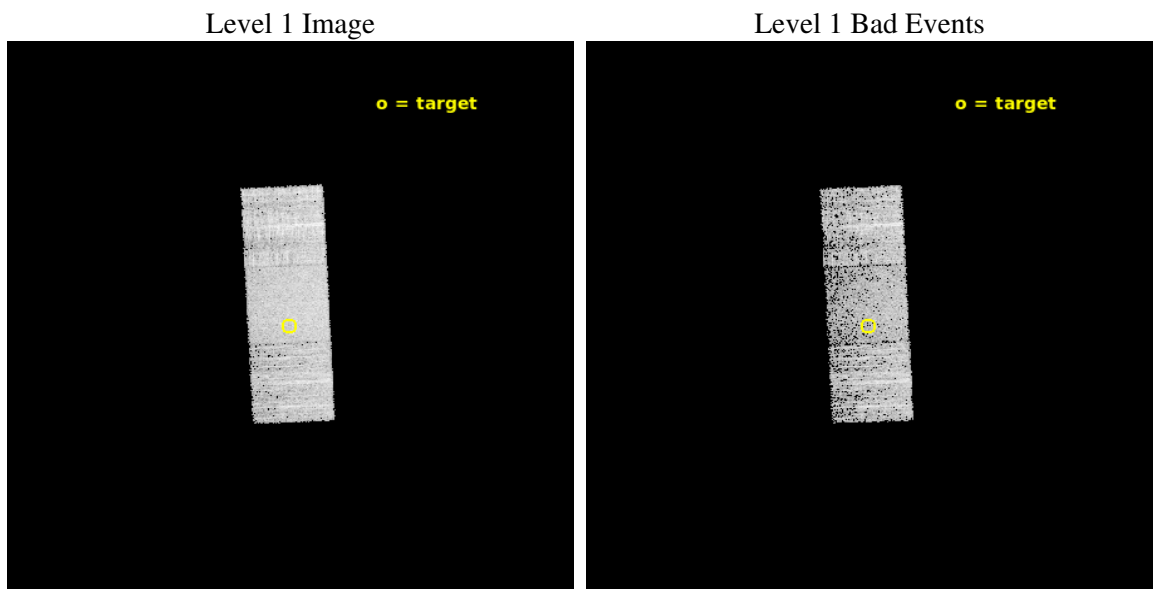
seq_num	703619	Sequence number
obs_id	20754	Observation id
title	A Chandra Snapshot Survey of Extremely Red Quasars from SDSS BOSS and WISE	Proposal title
observer	Gordon Garmire	Principal investigator
object	J1046+0243	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	161.547917	Observer's specified target RA [deg]
dec_targ	2.731	Observer's specified target Dec [deg]
ra_nom	161.5464587872	Nominal RA [deg]
dec_nom	2.7320892341898	Nominal Dec [deg]
roll_nom	267.1578229084	Nominal Roll [deg]
revision	2	Processing version of data
ontime	4113.7000317574	Sum of GTIs [s]
livetime	4059.9515123805	Livetime [s]
ontime6	4113.7000317574	Sum of GTIs [s]
ontime7	4113.7000317574	Sum of GTIs [s]
ontime8	4113.7000317574	Sum of GTIs [s]
l2events	22901	Number of level 2 events



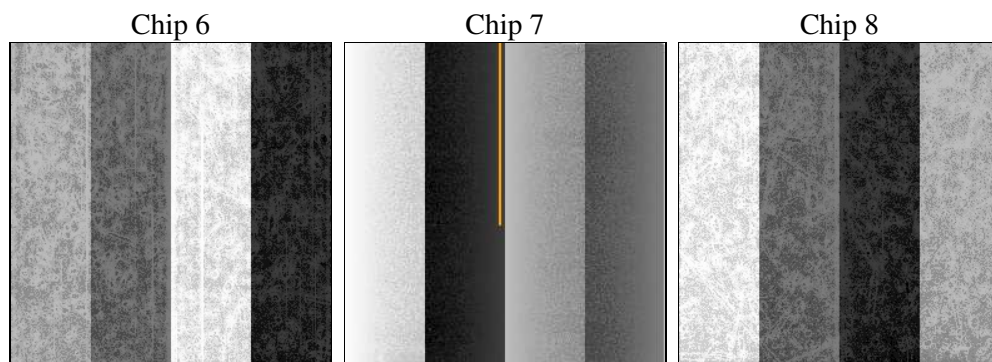
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	4000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	4113.7000317574	Sum of GTIs [s]
caldsver	4.9.3	&#160	ontime6	4113.7000317574	Sum of GTIs [s]
date	2020-10-25T05:12:16	Date and time of file creation	ontime7	4113.7000317574	Sum of GTIs [s]
revision	2	Processing version of data	ontime8	4113.7000317574	Sum of GTIs [s]
			l1events	109272	Number of level 1 events

### 2.1.4 Events

	<b>ccd 6</b>	<b>ccd 7</b>	<b>ccd 8</b>
level 1 events	31227	37996	40049
rejected events	27852	21016	28643
rejected %	89%	55%	71%

	<b>ccd 6</b>	<b>ccd 7</b>	<b>ccd 8</b>
grade 0 events	1061	1392	3496
	3%	3%	8%
grade 1 events	15	51	26
	0%	0%	0%
grade 2 events	842	3688	2618
	2%	9%	6%
grade 3 events	335	1413	1274
	1%	3%	3%
grade 4 events	336	1370	1191
	1%	3%	2%
grade 5 events	1390	3796	2172
	4%	9%	5%
grade 6 events	803	9131	2829
	2%	24%	7%
grade 7 events	26445	17155	26443
	84%	45%	66%

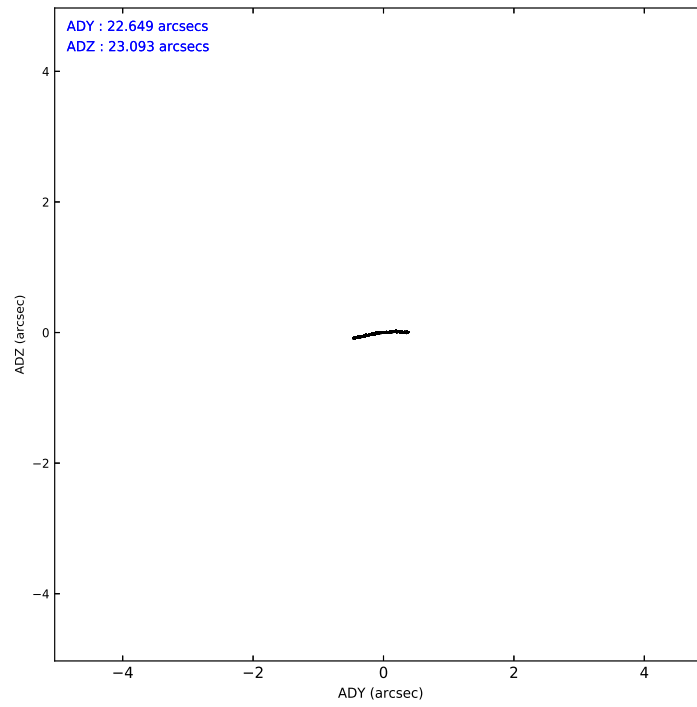
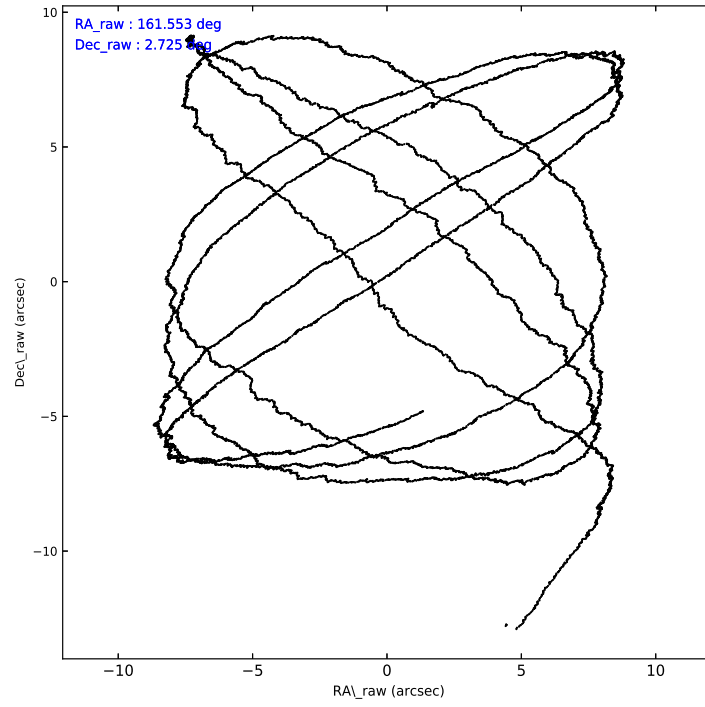


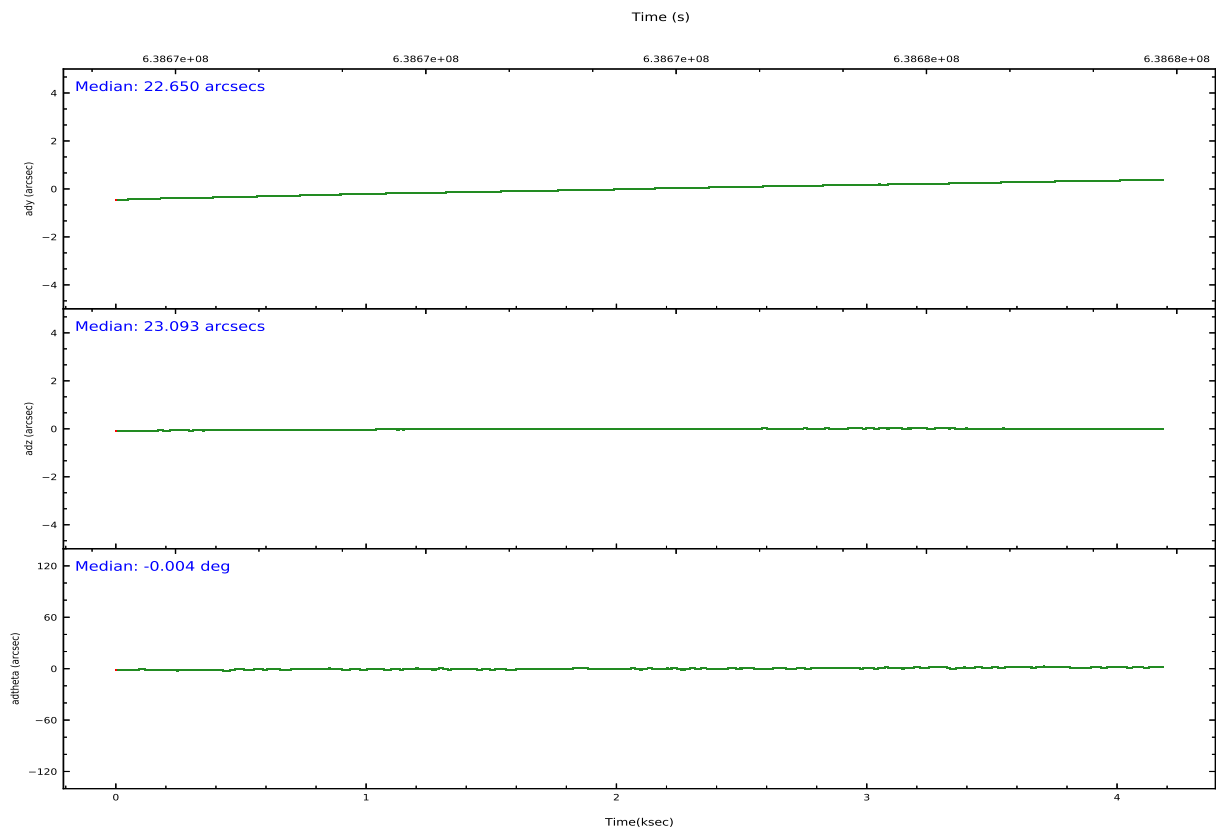
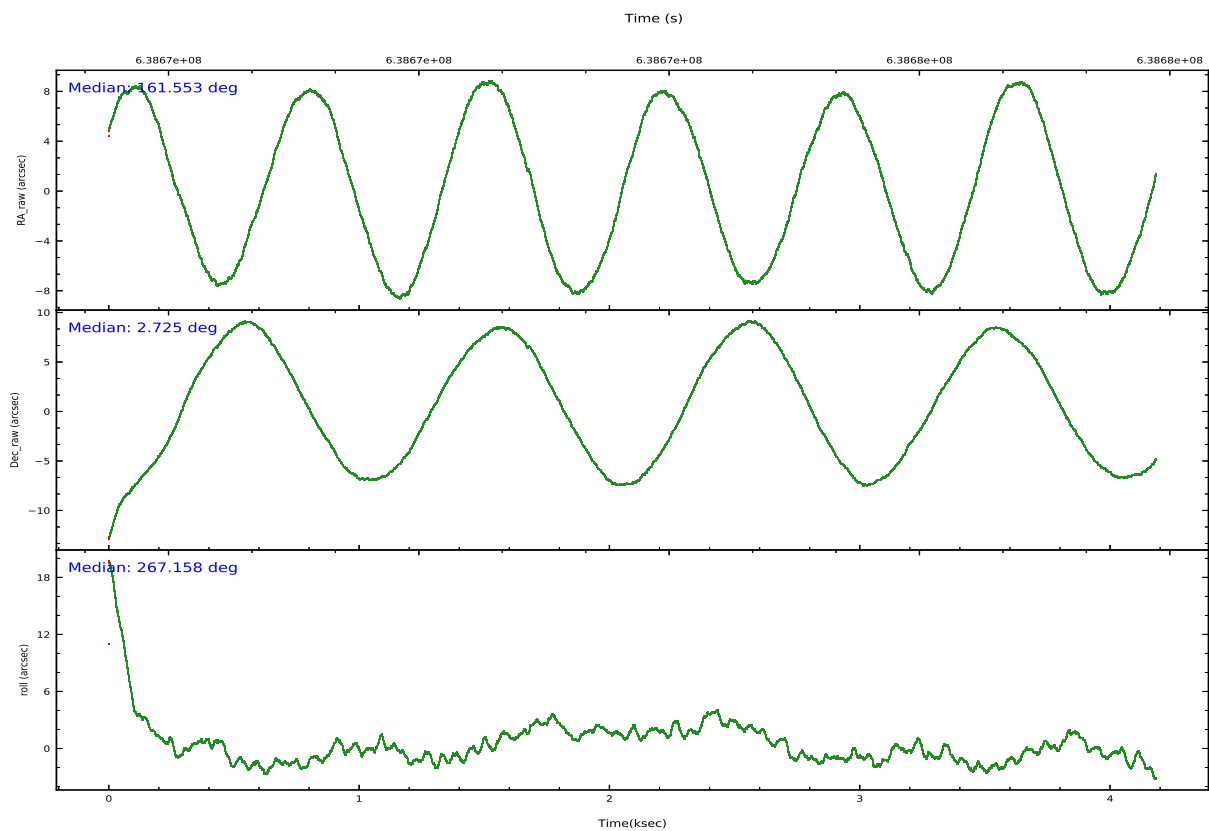
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-678	ACIS-678
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	161.539899	161.5464587872
[deg] Pointing Dec	2.749622	2.7320892341898
[deg] Pointing Roll	267.000382	267.1578229084
[mm] SIM focus pos	-0.684267	-0.6828225247311905
[mm] SIM defocus	0	0.001444936568705701
[mm] SIM translation stage pos	-190.132523	-190.1400660498719
[mm] SIM translation stage offset	0	0.00754346686406393
[s] Observation start time (MET)	638671947.184000	638670689.94495
Observation start date	2018-03-29T00:51:18	2018-03-29T00:31:29
[s] Observation end time (MET)	638675947.184000	638677472.8828501
Observation end date	2018-03-29T01:57:58	2018-03-29T02:24:32
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar version number	8	8
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



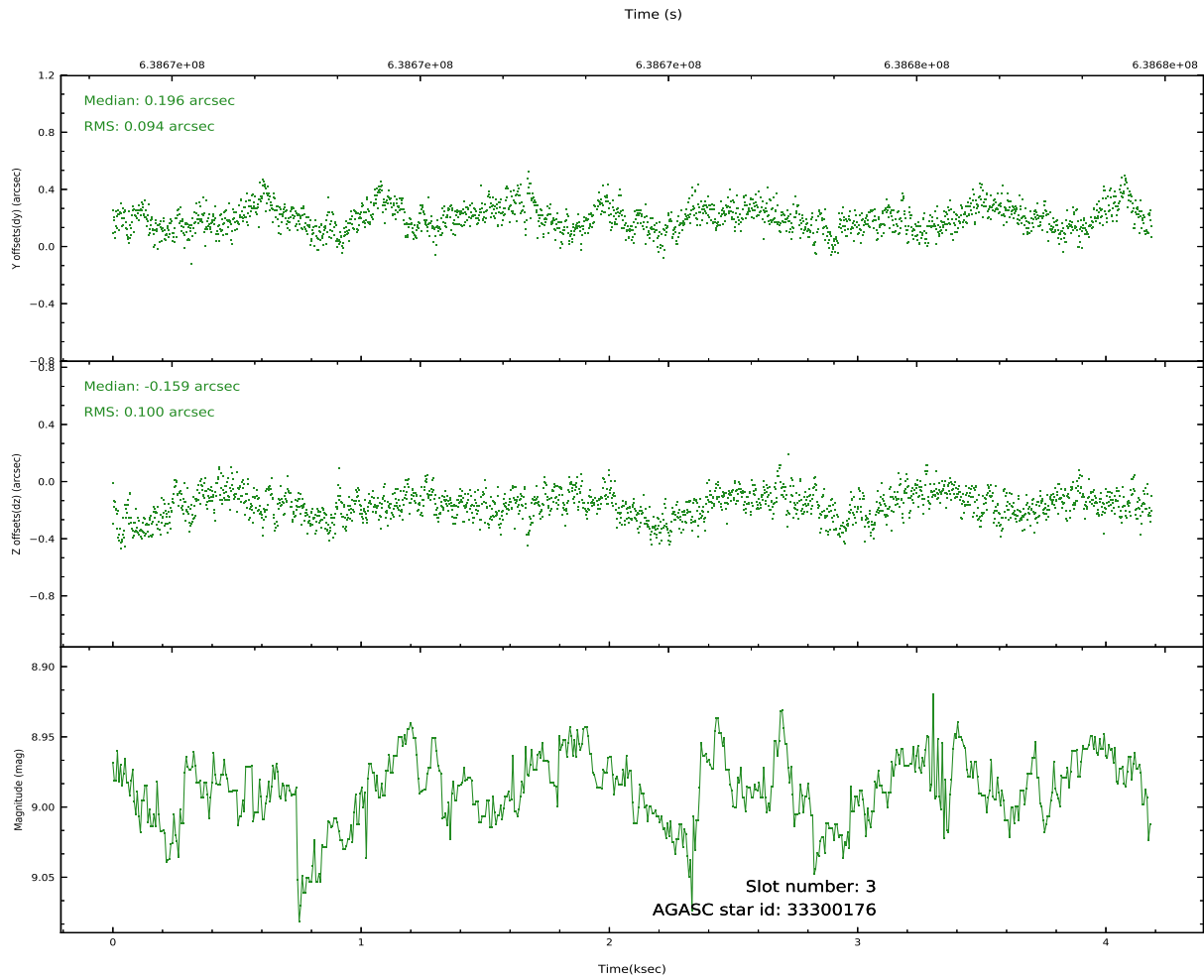
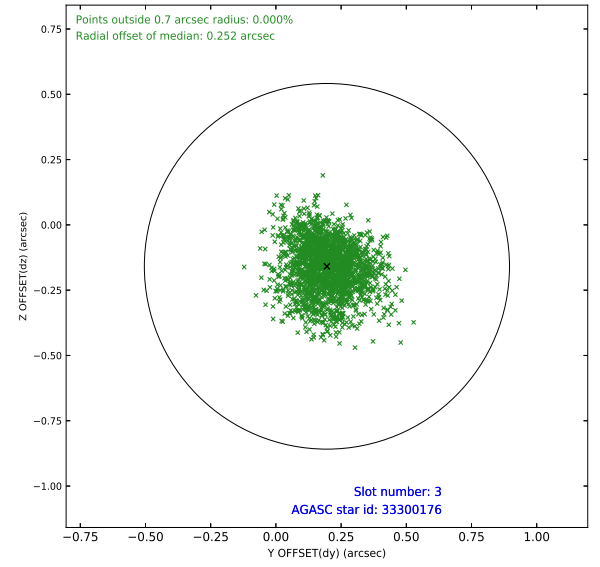
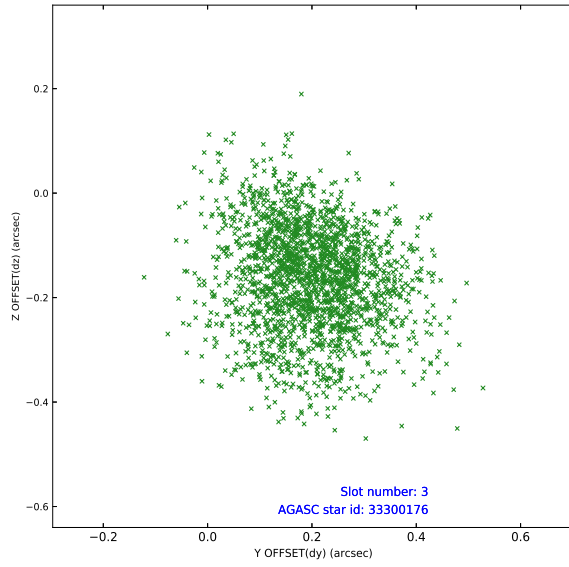


Slot Statistics

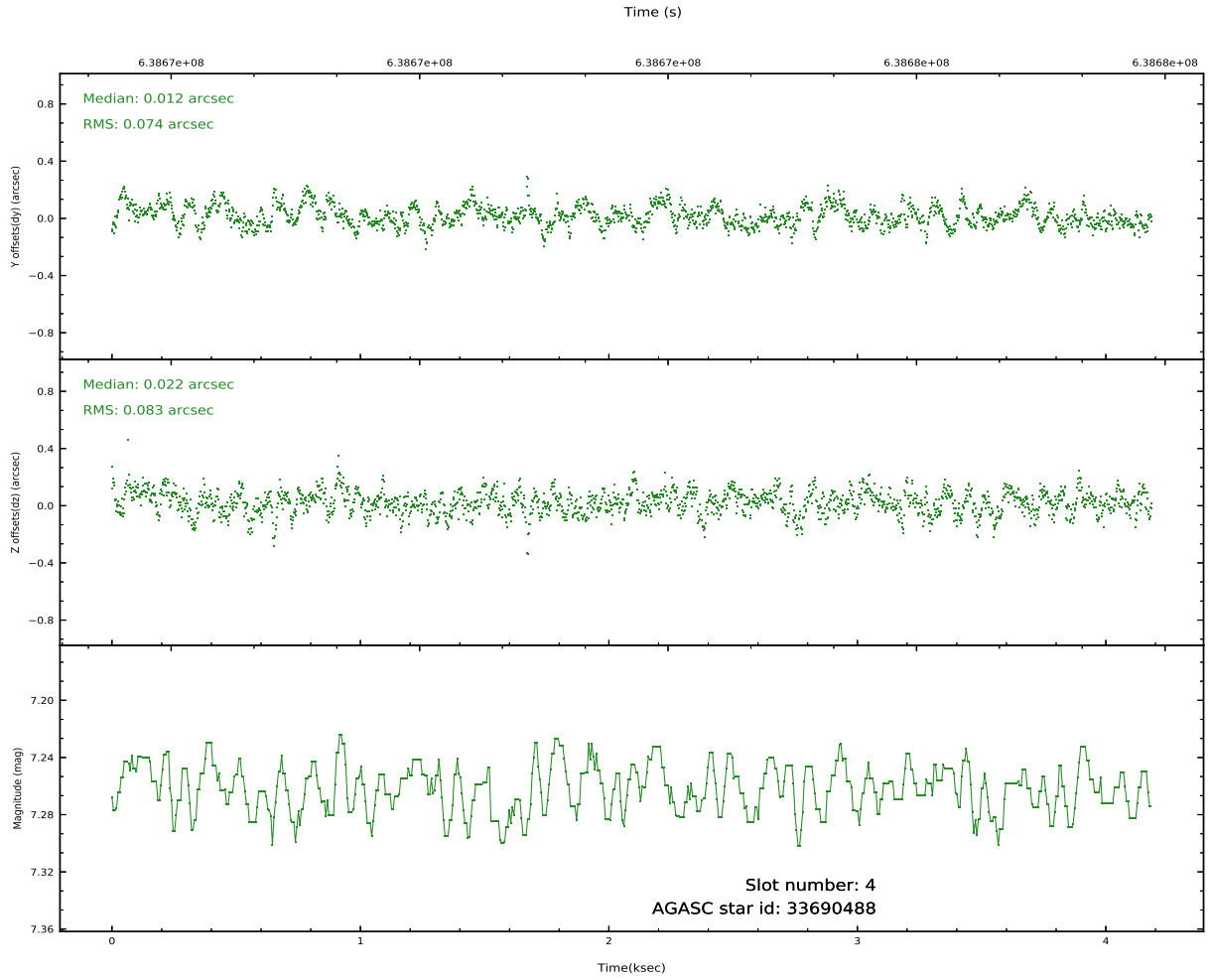
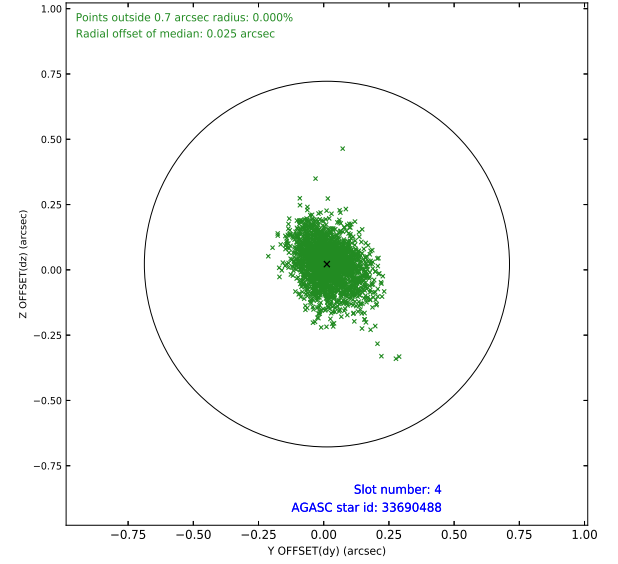
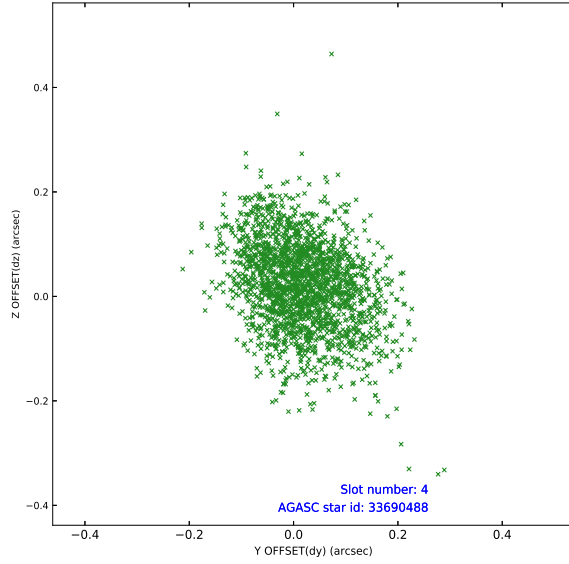
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-1	7.03	1021	1.000	0.142	-0.090	0.007	0.012	0.000000	0.000000	920.31	-1740
1	FID		ACIS-S-2	6.95	1021	1.000	-0.100	0.077	0.007	0.012	0.000000	0.000000	-775.02	-1746
2	FID		ACIS-S-6	7.22	1020	1.000	-0.062	0.019	0.006	0.011	0.000000	0.000000	385.14	799
3	GUIDE	used	33300176	8.99	2038	1.000	0.196	-0.159	0.145	0.240	161.576438	2.137214	2195.42	246
4	GUIDE	used	33690488	7.26	2042	1.000	0.012	0.022	0.116	0.191	161.259483	3.306676	-1948.69	-1109
5	GUIDE	used	33692096	8.90	2042	1.000	-0.065	0.058	0.135	0.239	162.068653	3.259314	-1933.40	1801
6	GUIDE	used	33302168	8.93	2039	1.000	-0.056	0.082	0.169	0.273	162.037492	2.293695	1543.24	1873
7	GUIDE	used	33300896	9.05	2030	1.000	-0.085	-0.002	0.152	0.243	162.130315	2.387806	1190.14	2189

## 2.4 Star Slots

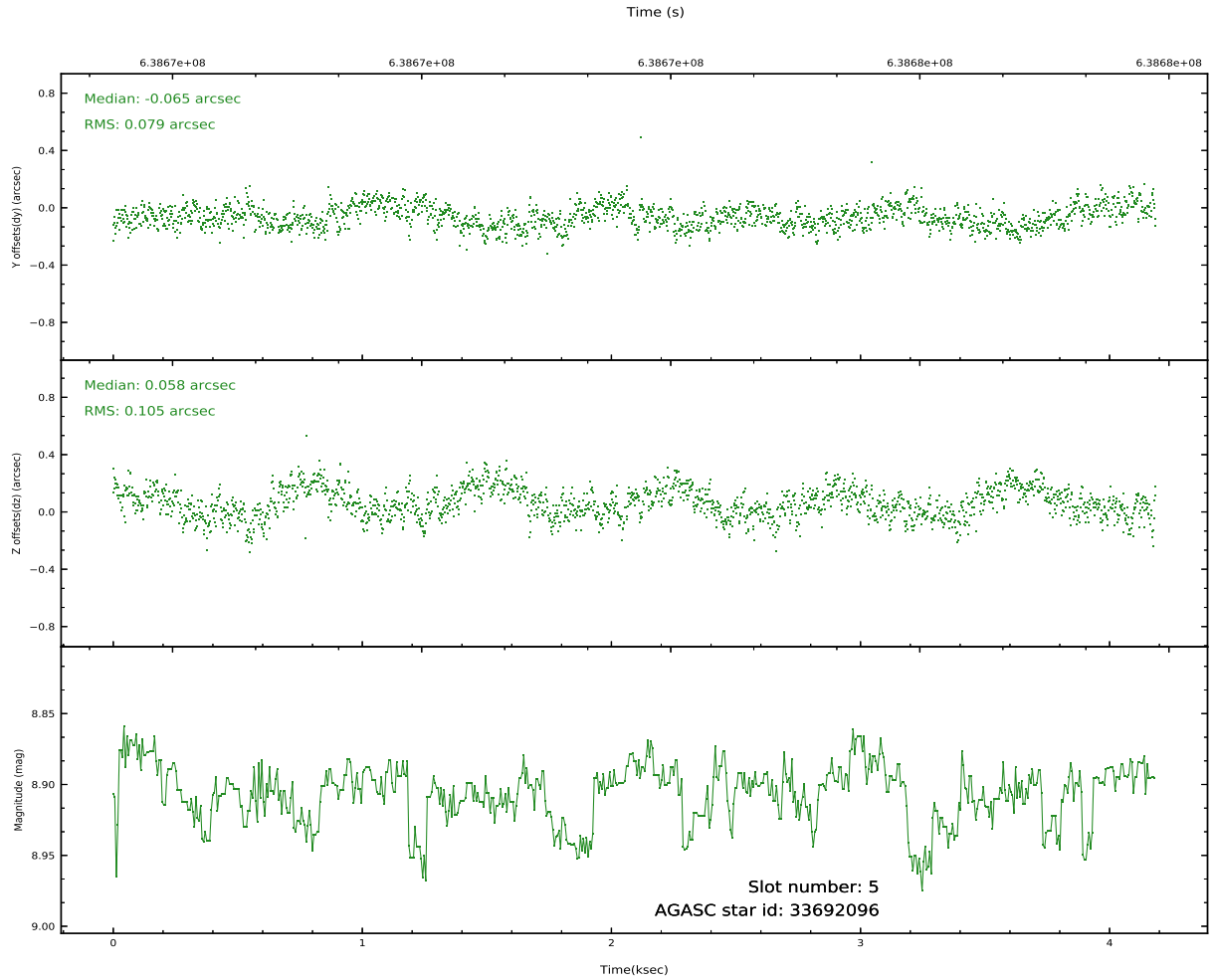
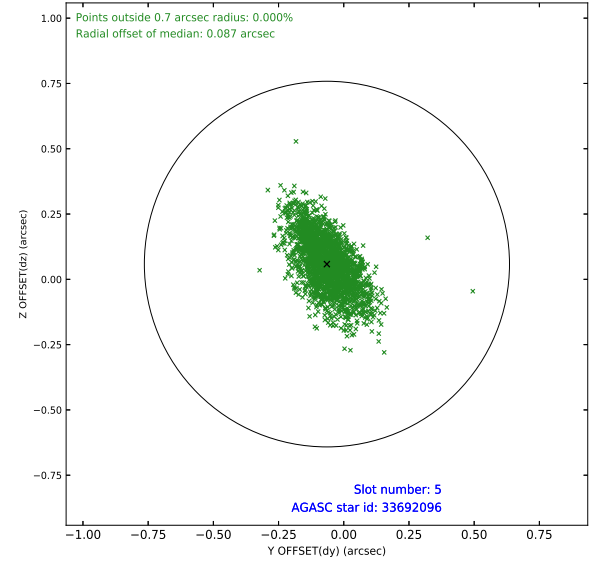
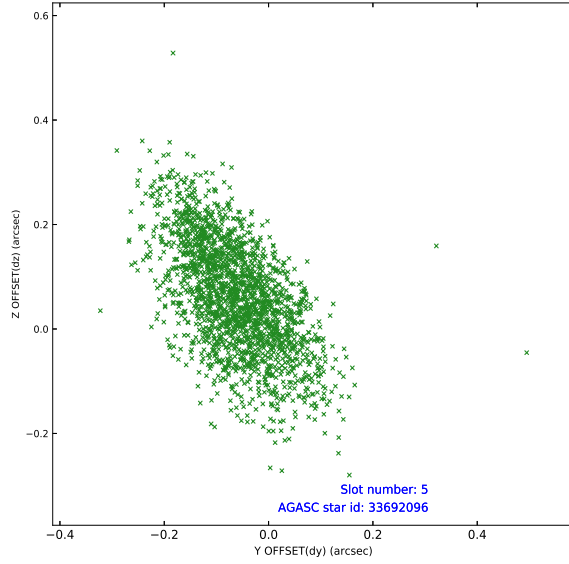
### 2.4.1 Slot 3



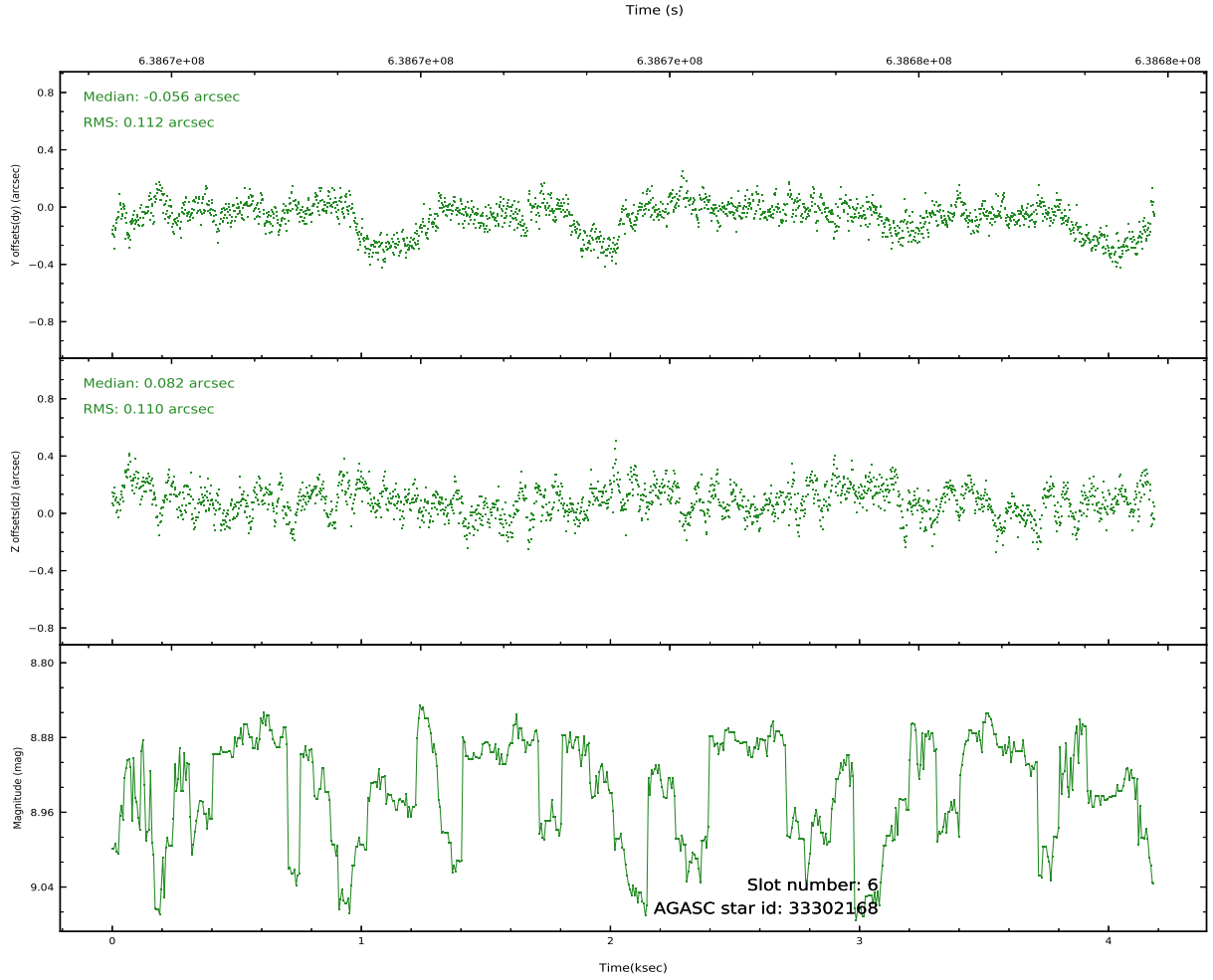
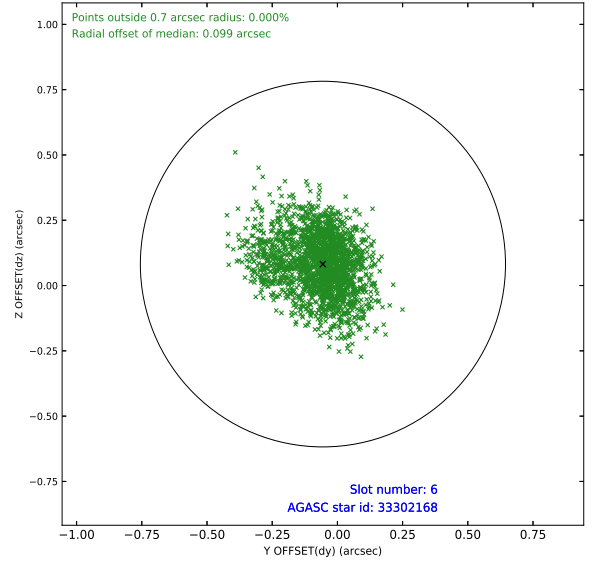
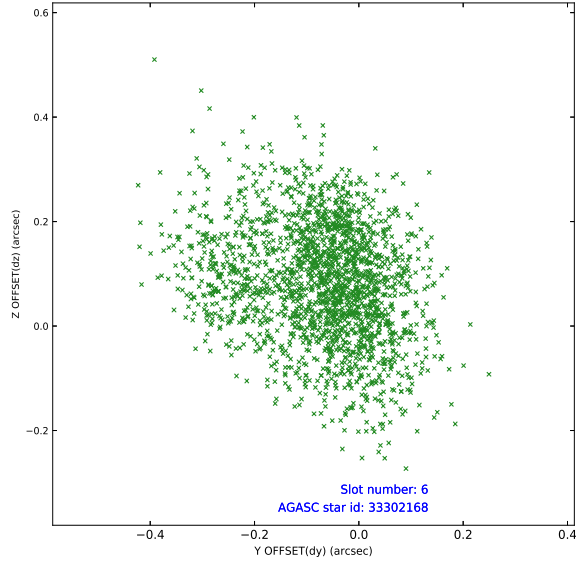
## 2.4.2 Slot 4



### 2.4.3 Slot 5

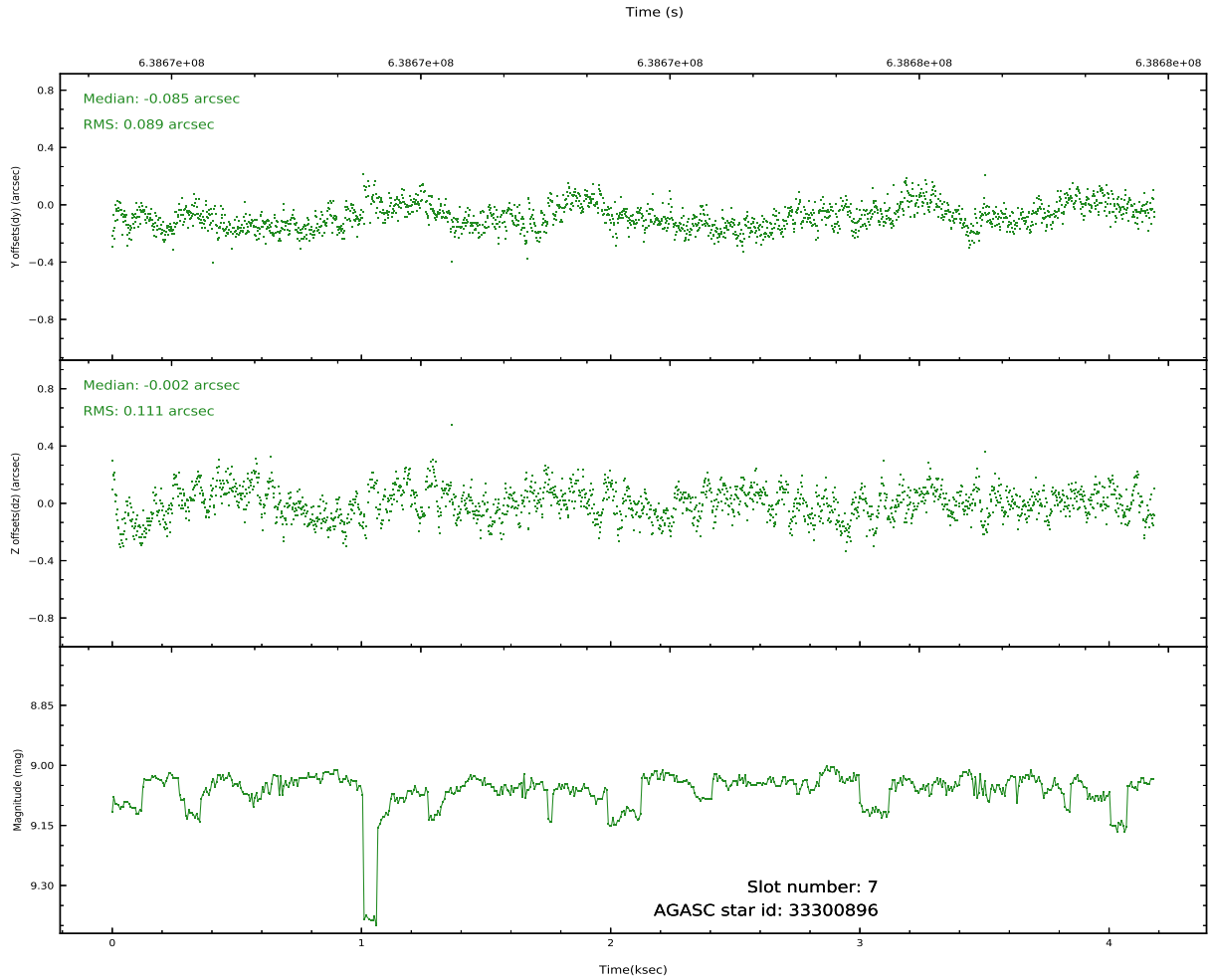
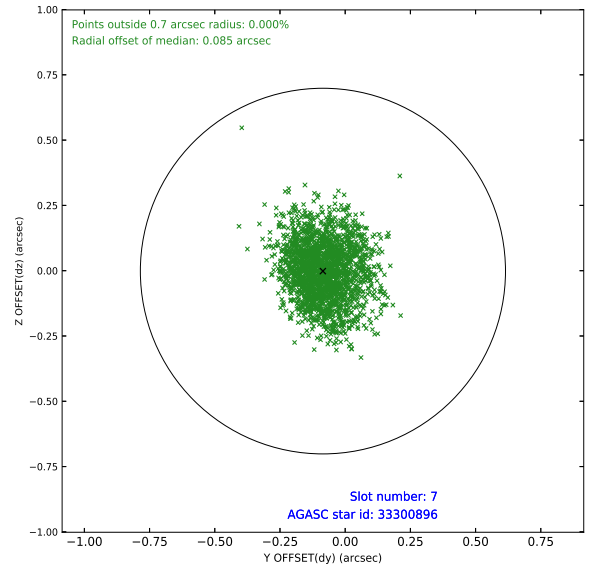
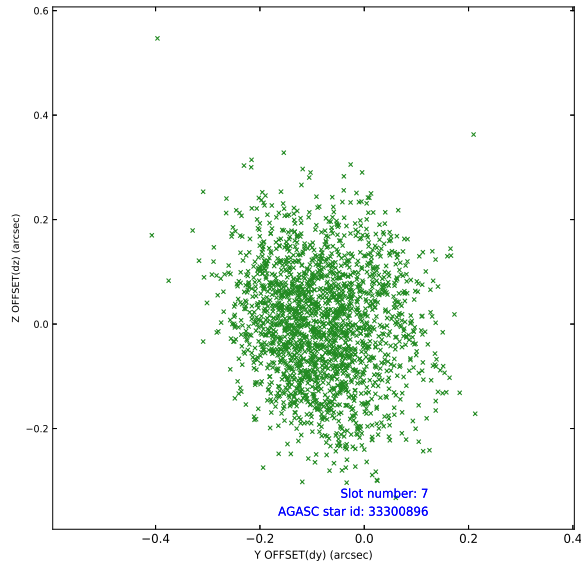


## 2.4.4 Slot 6



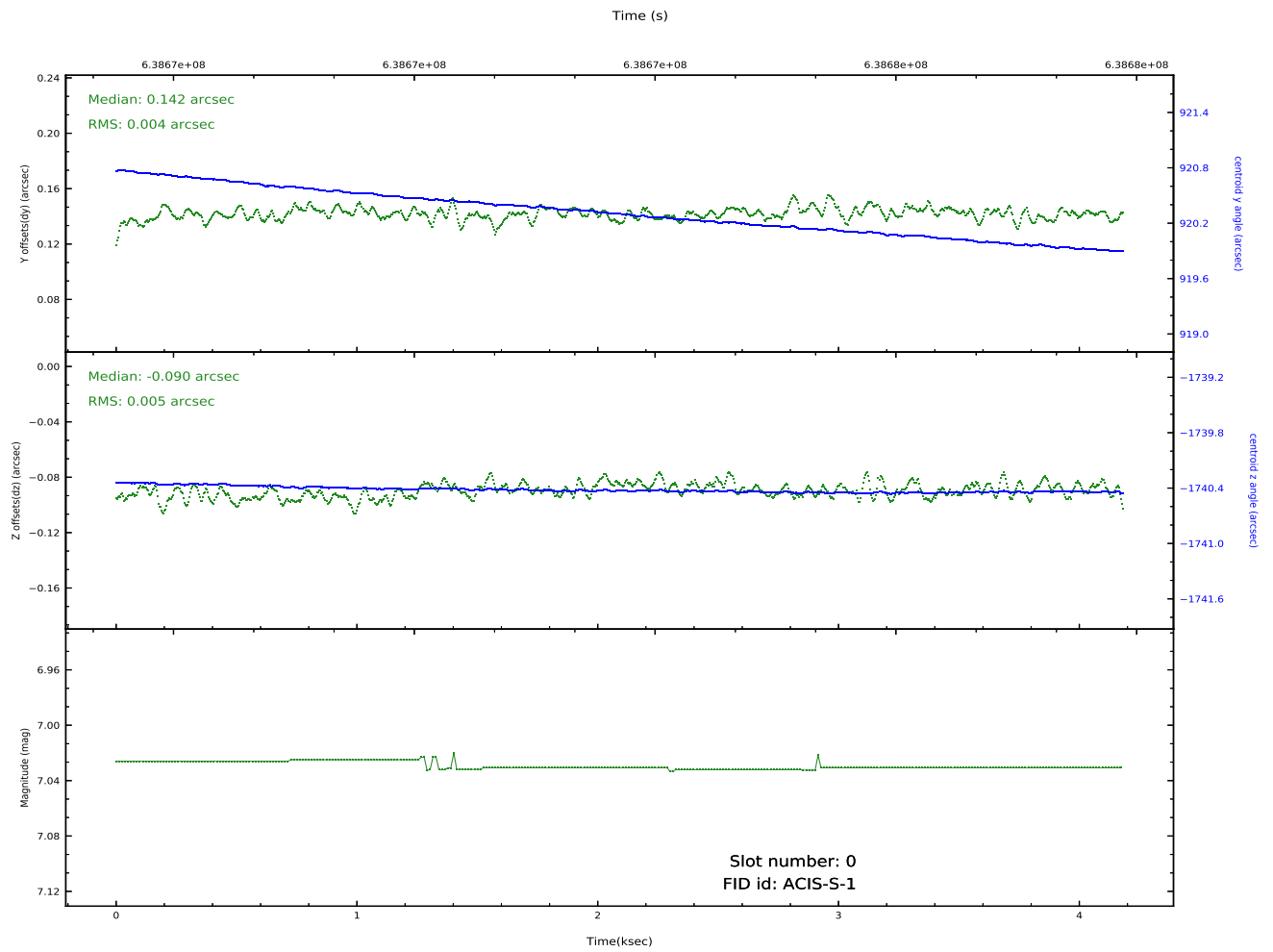
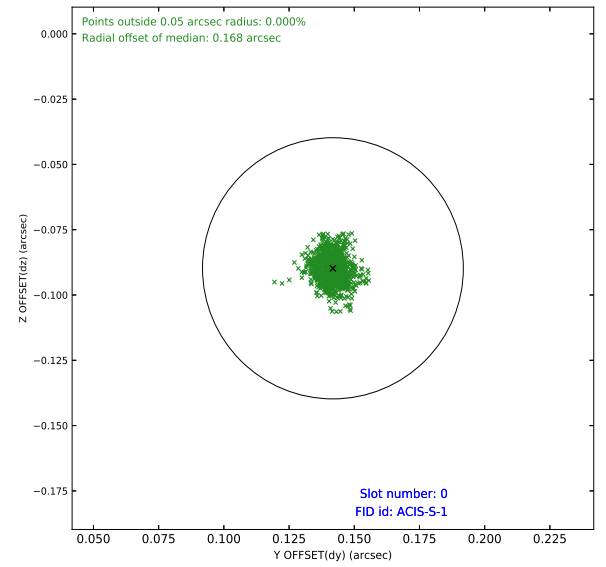
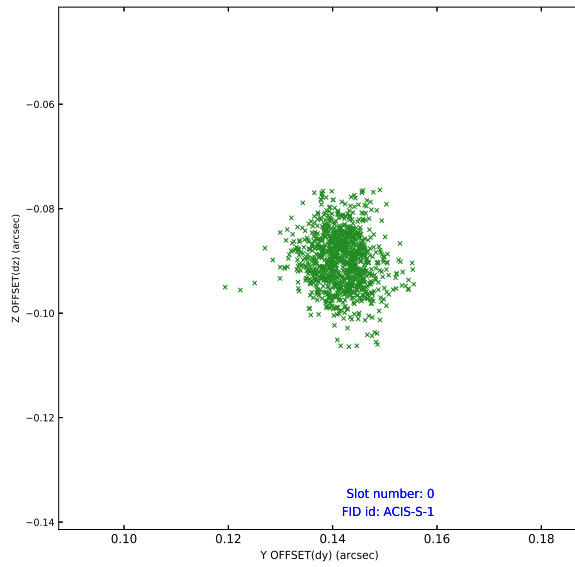


## 2.4.5 Slot 7

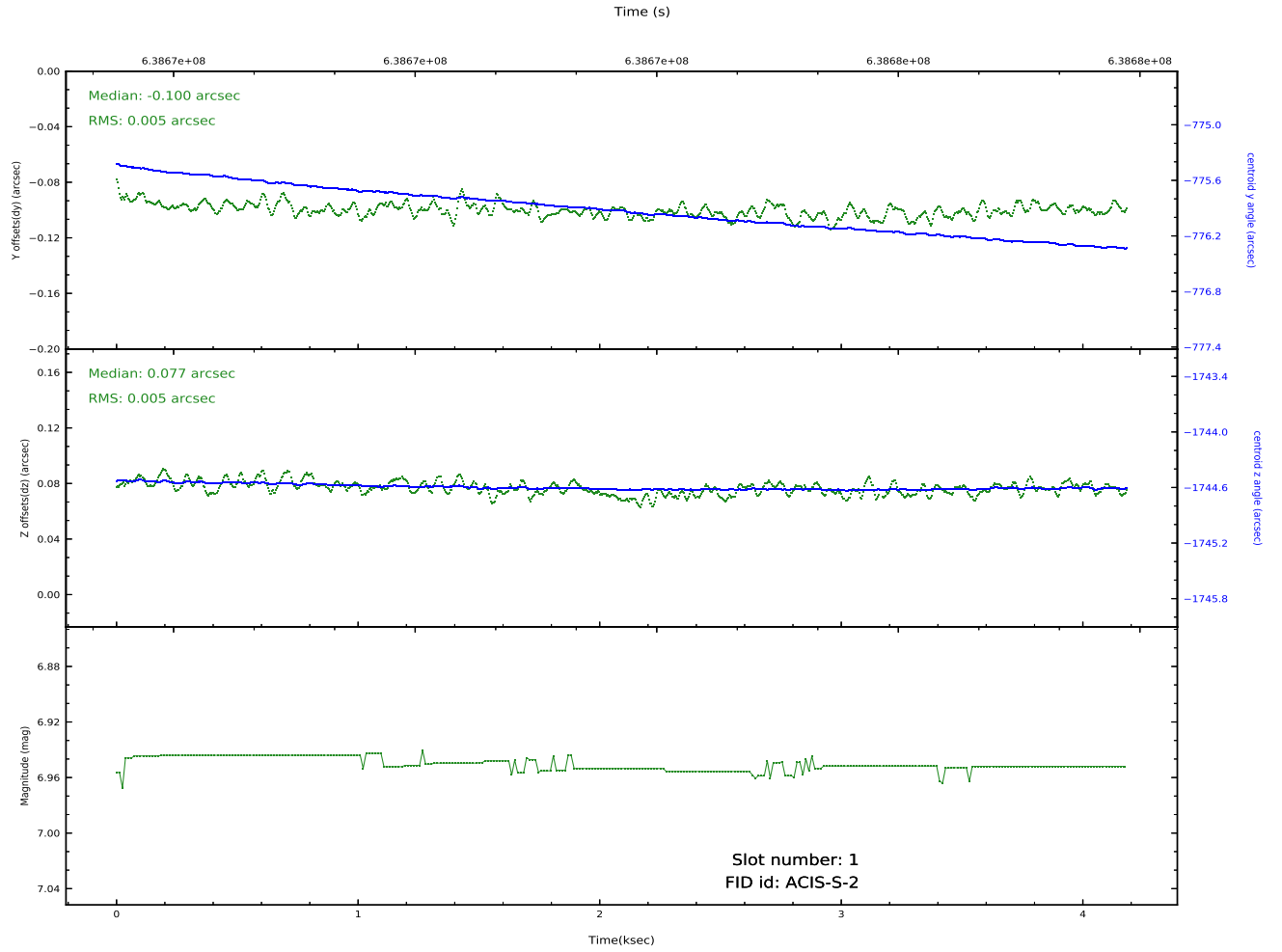
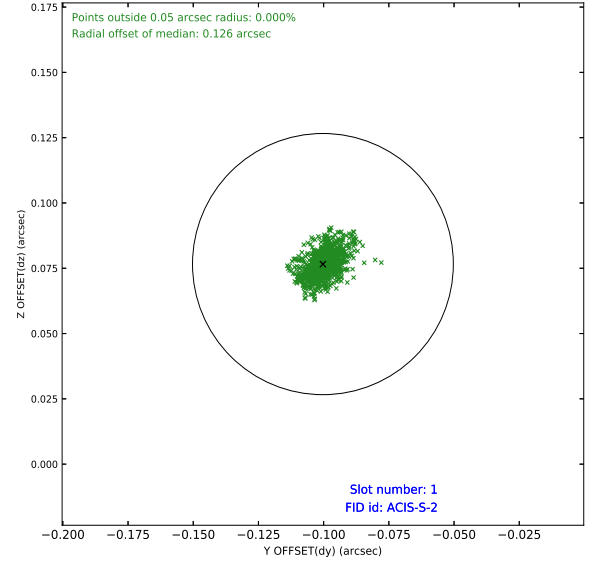
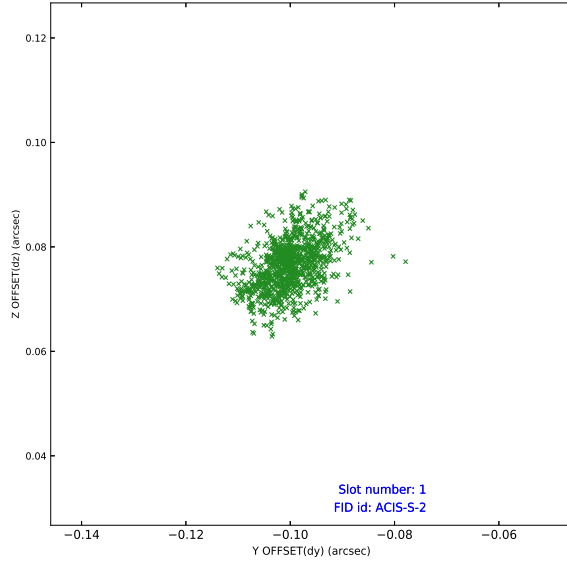


## 2.5 FID Slots

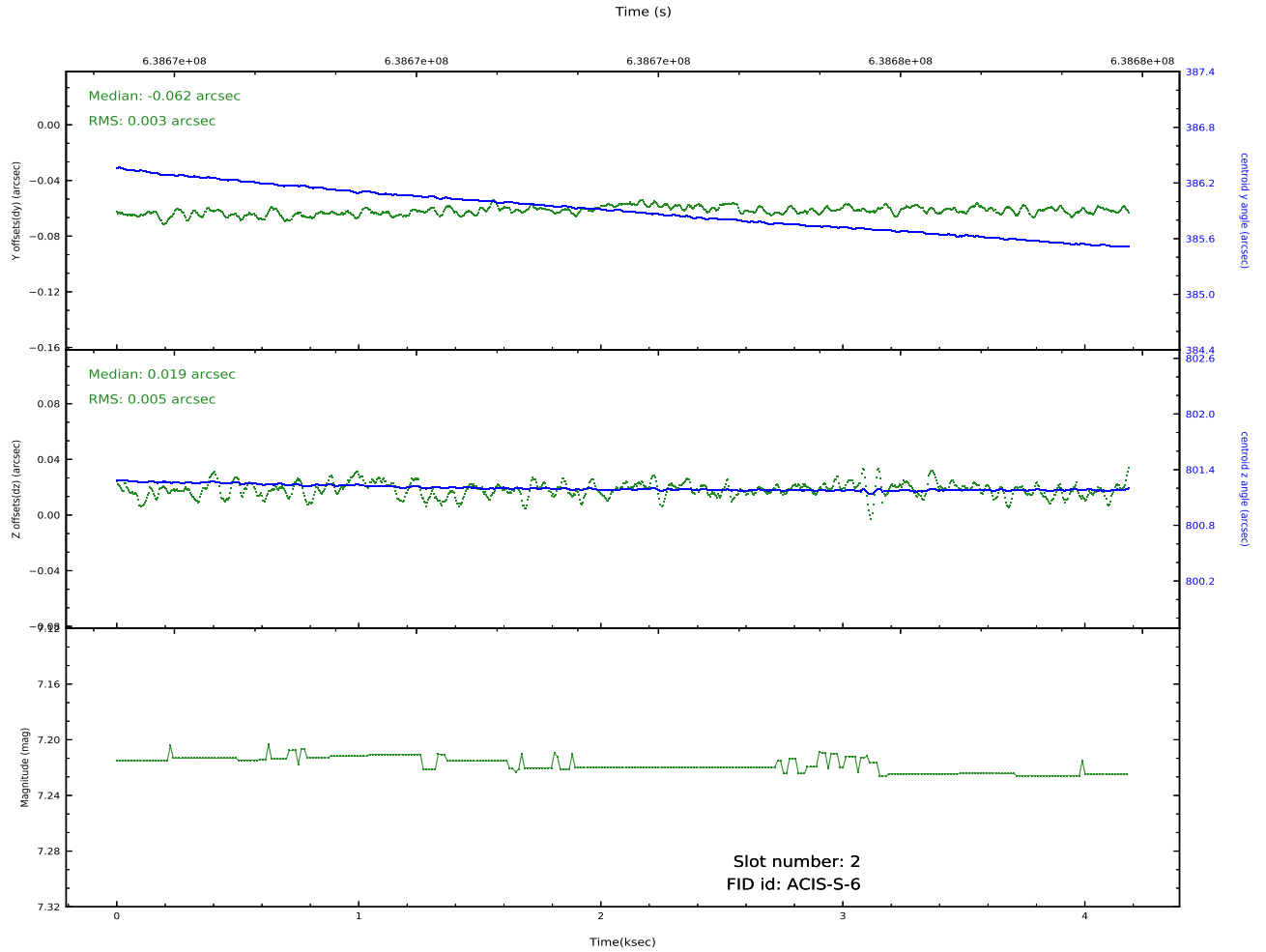
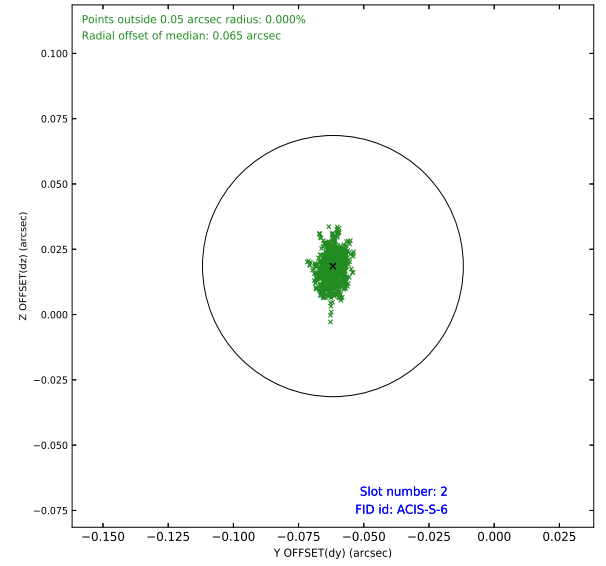
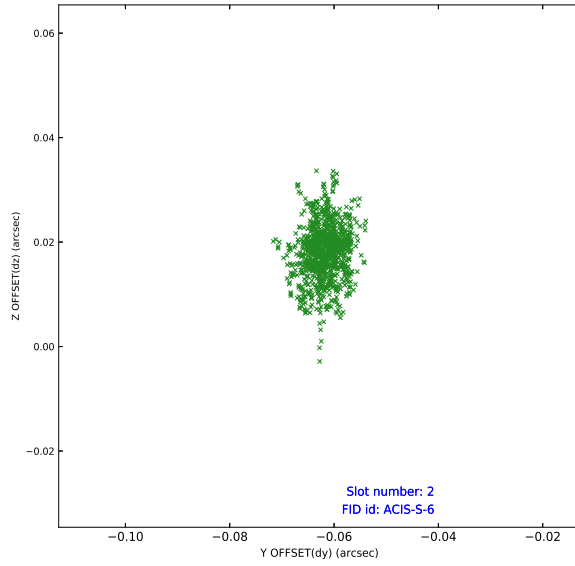
### 2.5.1 Slot 0



## 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)	2020.10.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.1137000317574

### A.2 Comments