

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 4744 - L2 Version 4  
Chandra X-Ray Center

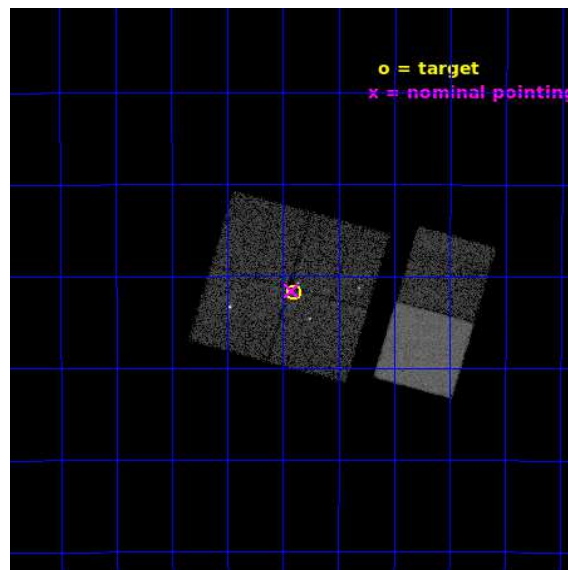
L2 Processing Date : Sep 26 2020

## 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

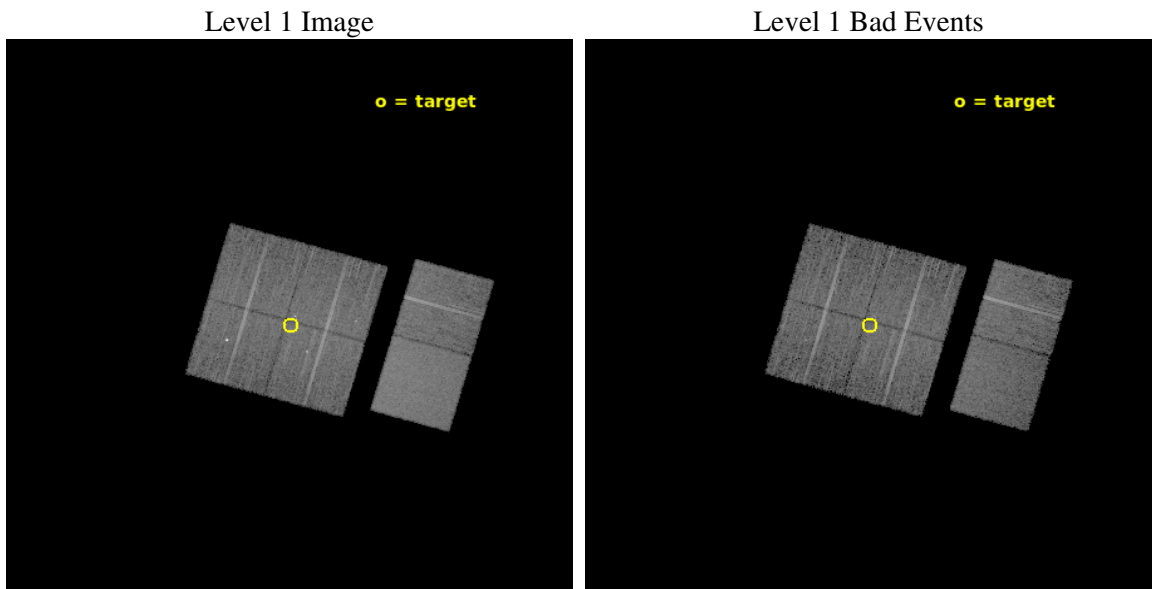
seq_num	600399	Sequence number
obs_id	4744	Observation id
title	The discrete X-ray source populations in an age sequence of nearby starburst galaxies	Proposal title
observer	Dr Andreas Zezas	Principal investigator
object	NGC55	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	3.725	Observer's specified target RA [deg]
dec_targ	-39.196944	Observer's specified target Dec [deg]
ra_nom	3.7300404359595	Nominal RA [deg]
dec_nom	-39.193030871094	Nominal Dec [deg]
roll_nom	105.9900431756	Nominal Roll [deg]
revision	4	Processing version of data
ontime	9688.2660142779	Sum of GTIs [s]
livetime	9565.5873564317	Livetime [s]
ontime0	9688.1428942978	Sum of GTIs [s]
ontime1	9688.1839342713	Sum of GTIs [s]
ontime2	9688.2249742746	Sum of GTIs [s]
ontime3	9688.2660142779	Sum of GTIs [s]
ontime6	9688.3480942845	Sum of GTIs [s]
ontime7	9688.3070542812	Sum of GTIs [s]
l2events	81437	Number of level 2 events



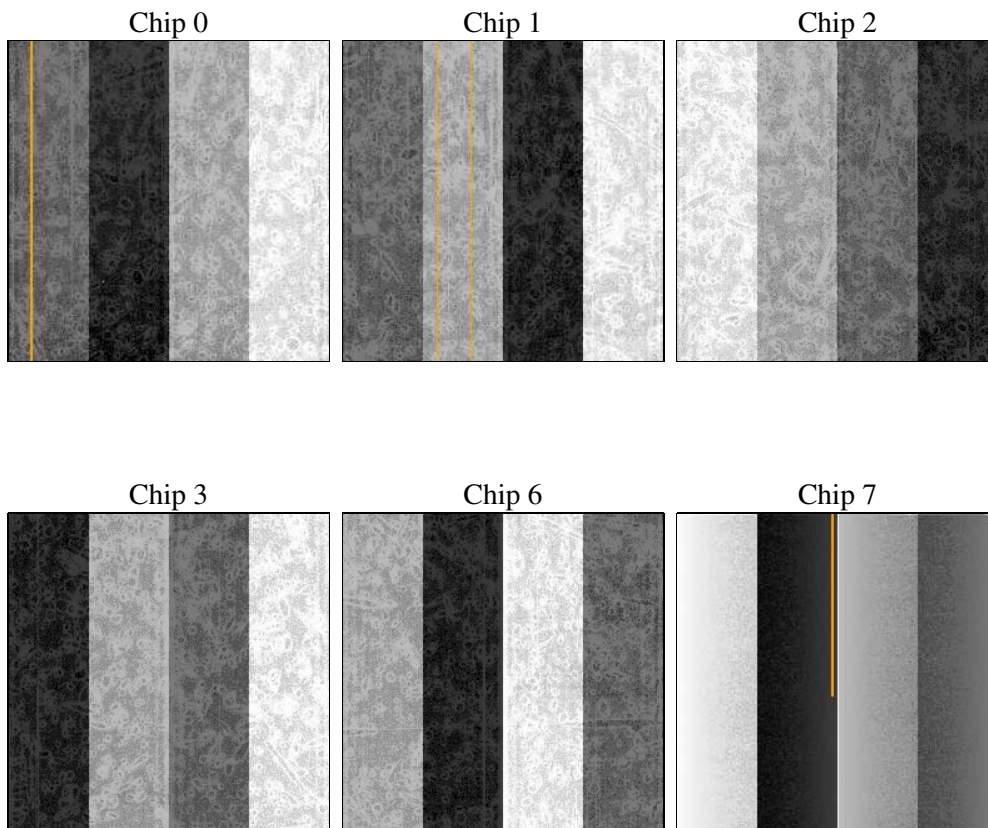
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	9692.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	9688.2660142779	Sum of GTIs [s]
caldbver	4.9.2	&#160	ontime0	9688.1428942978	Sum of GTIs [s]
date	2020-09-26T20:57:35	Date and time of file creation	ontime1	9688.1839342713	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	9688.2249742746	Sum of GTIs [s]
			ontime3	9688.2660142779	Sum of GTIs [s]
			ontime6	9688.3480942845	Sum of GTIs [s]
			ontime7	9688.3070542812	Sum of GTIs [s]
			l1events	450041	Number of level 1 events

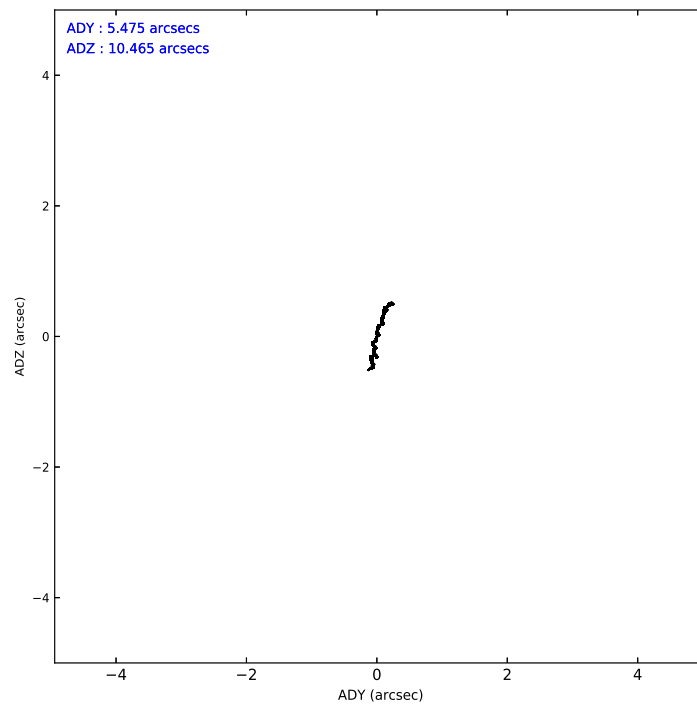
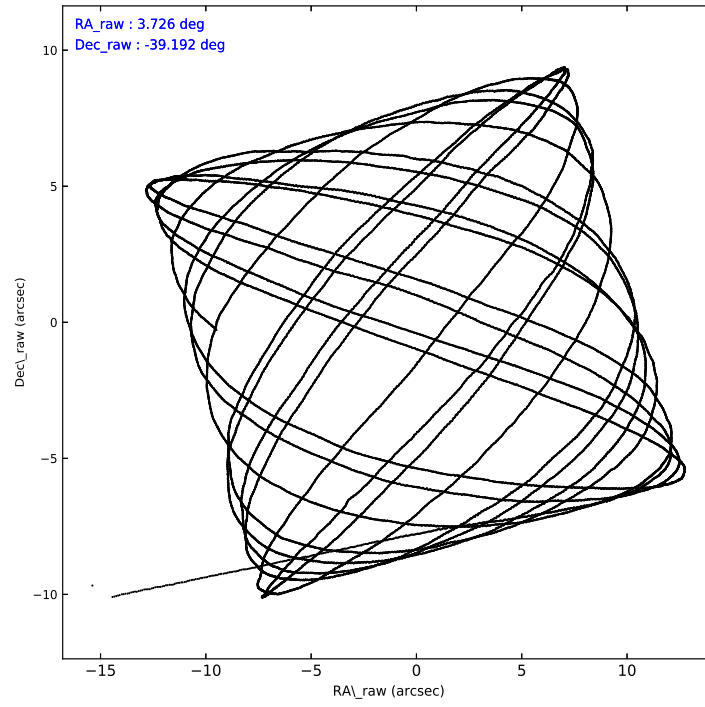
### 2.1.4 Events

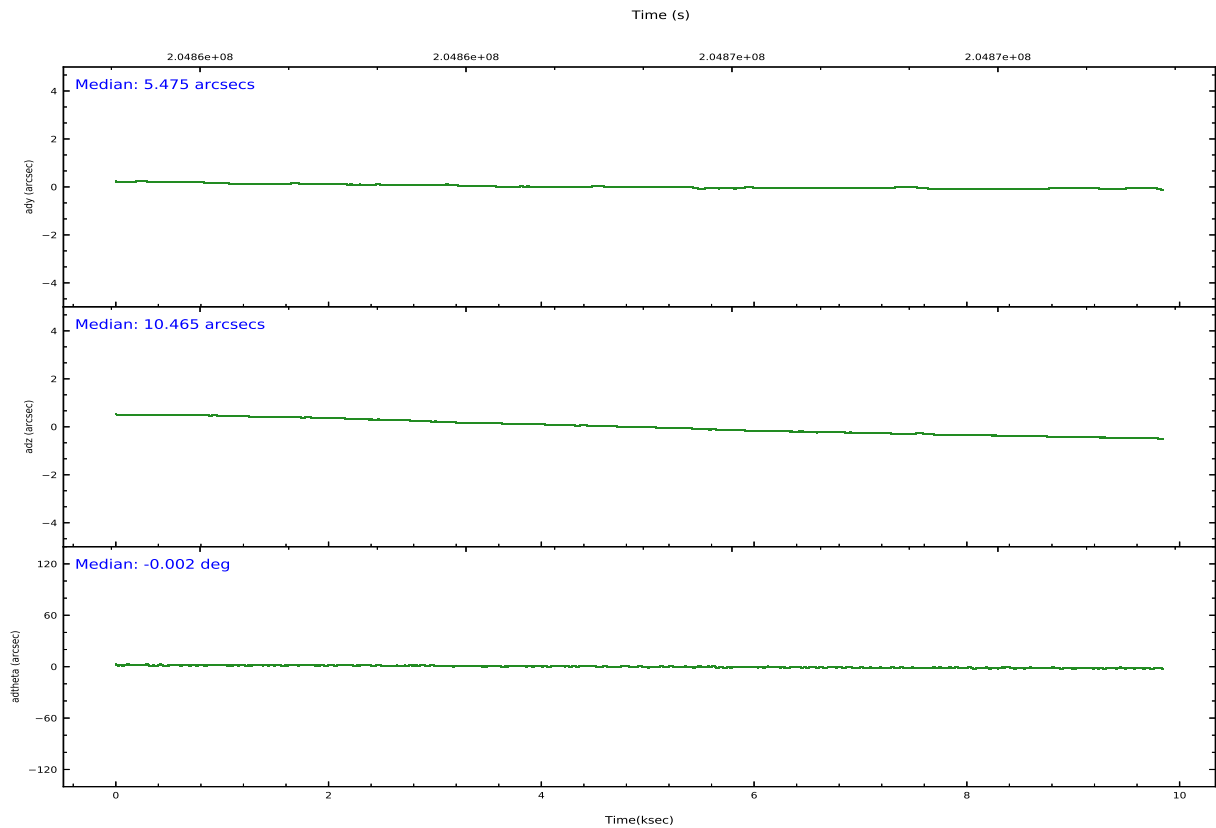
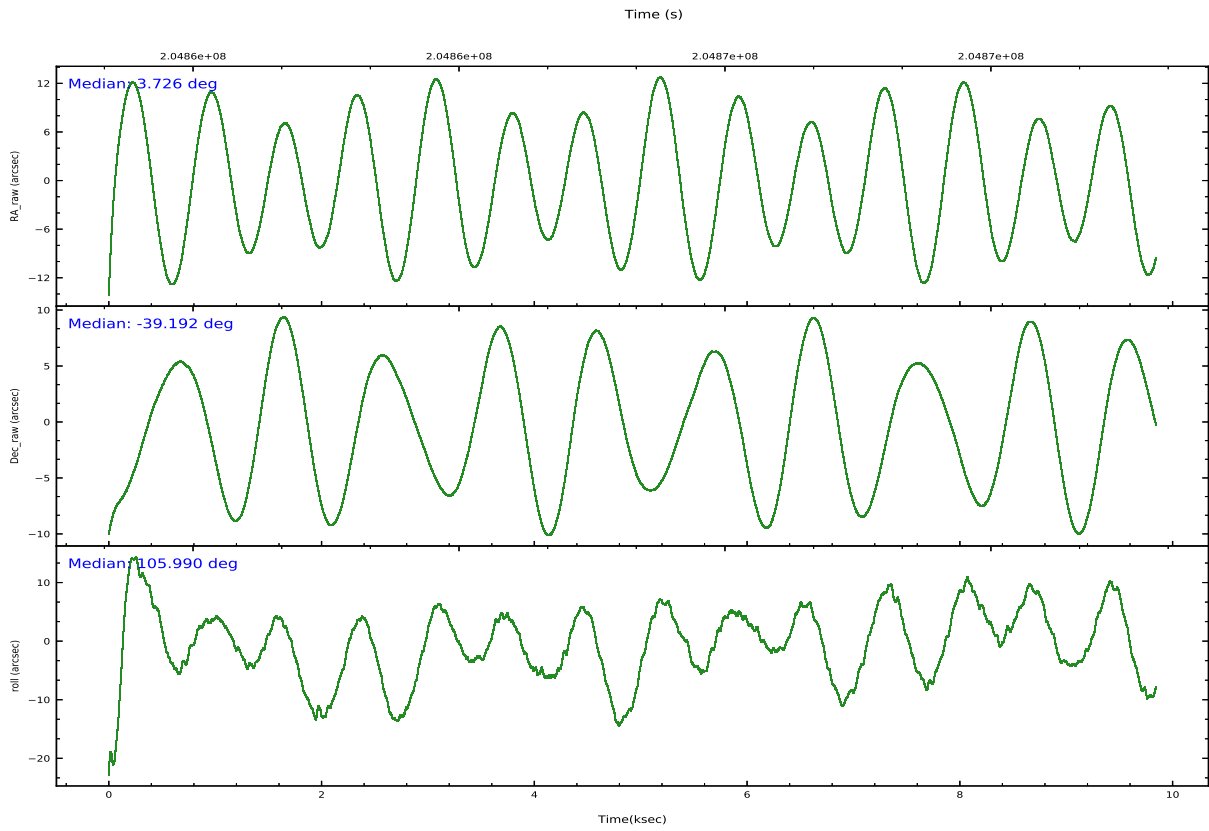
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	65923	69109	73450	71391	73839	96329	grade 0 events	3676	6829	4765	4114	3349	3626
rejected events	57394	56158	63720	62349	65204	56286		5%	9%	6%	5%	4%	3%
rejected %	87%	81%	86%	87%	88%	58%	grade 1 events	42	109	56	53	32	98
								0%	0%	0%	0%	0%	0%
							grade 2 events	1775	2298	1850	1770	1840	8023
								2%	3%	2%	2%	2%	8%
							grade 3 events	788	987	827	823	799	3425
								1%	1%	1%	1%	1%	3%
							grade 4 events	799	992	865	841	808	3500
								1%	1%	1%	1%	1%	3%
							grade 5 events	2952	3106	2746	3190	3374	9460
								4%	4%	3%	4%	4%	9%
							grade 6 events	1494	1853	1429	1502	1842	21495
								2%	2%	1%	2%	2%	22%
							grade 7 events	54397	52935	60912	59098	61795	46702
								82%	76%	82%	82%	83%	48%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-012367	ACIS-012367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	3.751240	3.7300404359595	Subarray requested	NONE	NONE
[deg] Pointing Dec	-39.211279	-39.193030871094	Alternating exposures requested	N	N
[deg] Pointing Roll	105.798463	105.9900431756	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	204861861.184000	204860881.50657			
Observation start date	2004-06-29T02:03:17	2004-06-29T01:48:01			
[s] Observation end time (MET)	204871553.184000	204873424.43213			
Observation end date	2004-06-29T04:44:49	2004-06-29T05:17:04			
Read mode	TIMED	TIMED			

## 2.3 Aspect





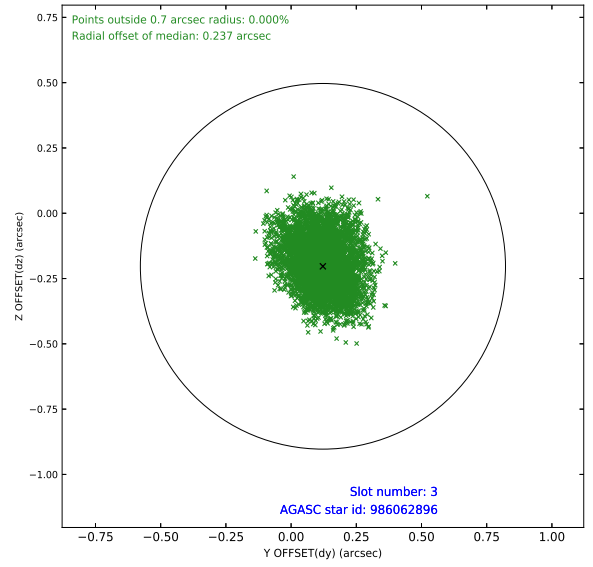
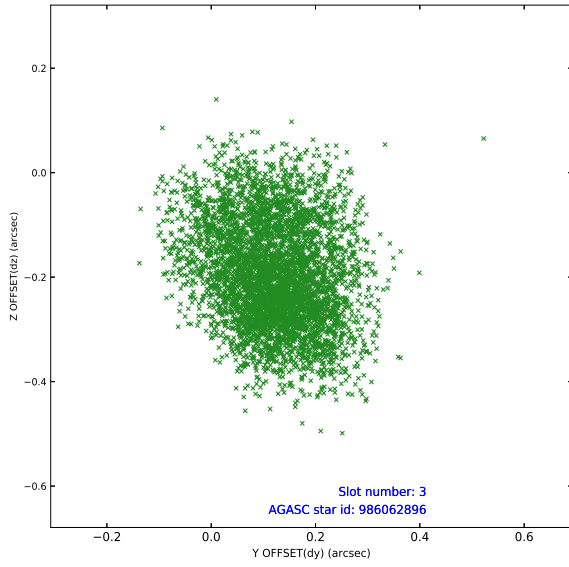
### Slot Statistics

slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.24	2402	1.000	0.034	-0.022	0.017	0.025	0.000000	0.000000	934.26	-833
1	FID		ACIS-I-5	7.23	2401	1.000	-0.207	0.036	0.010	0.014	0.000000	0.000000	-1813.79	1063
2	FID		ACIS-I-6	7.25	2402	1.000	0.083	0.055	0.012	0.018	0.000000	0.000000	399.26	1708
3	GUIDE	used	986062896	9.42	4800	1.000	0.122	-0.203	0.139	0.219	3.098710	-39.608867	-890.67	2132
4	GUIDE	used	986186112	10.07	4800	1.000	0.220	0.125	0.143	0.227	4.129797	-39.348756	-765.06	-877
5	GUIDE	used	986186168	9.99	4780	1.000	-0.040	0.140	0.127	0.211	4.318921	-39.027908	198.24	-1705
6	GUIDE	used	986186240	9.36	4802	1.000	0.219	0.198	0.139	0.208	4.166509	-39.491915	-1288.40	-834
7	GUIDE	used	986059312	10.15	4799	1.000	-0.515	-0.271	0.181	0.285	3.033746	-38.695256	2328.03	1436

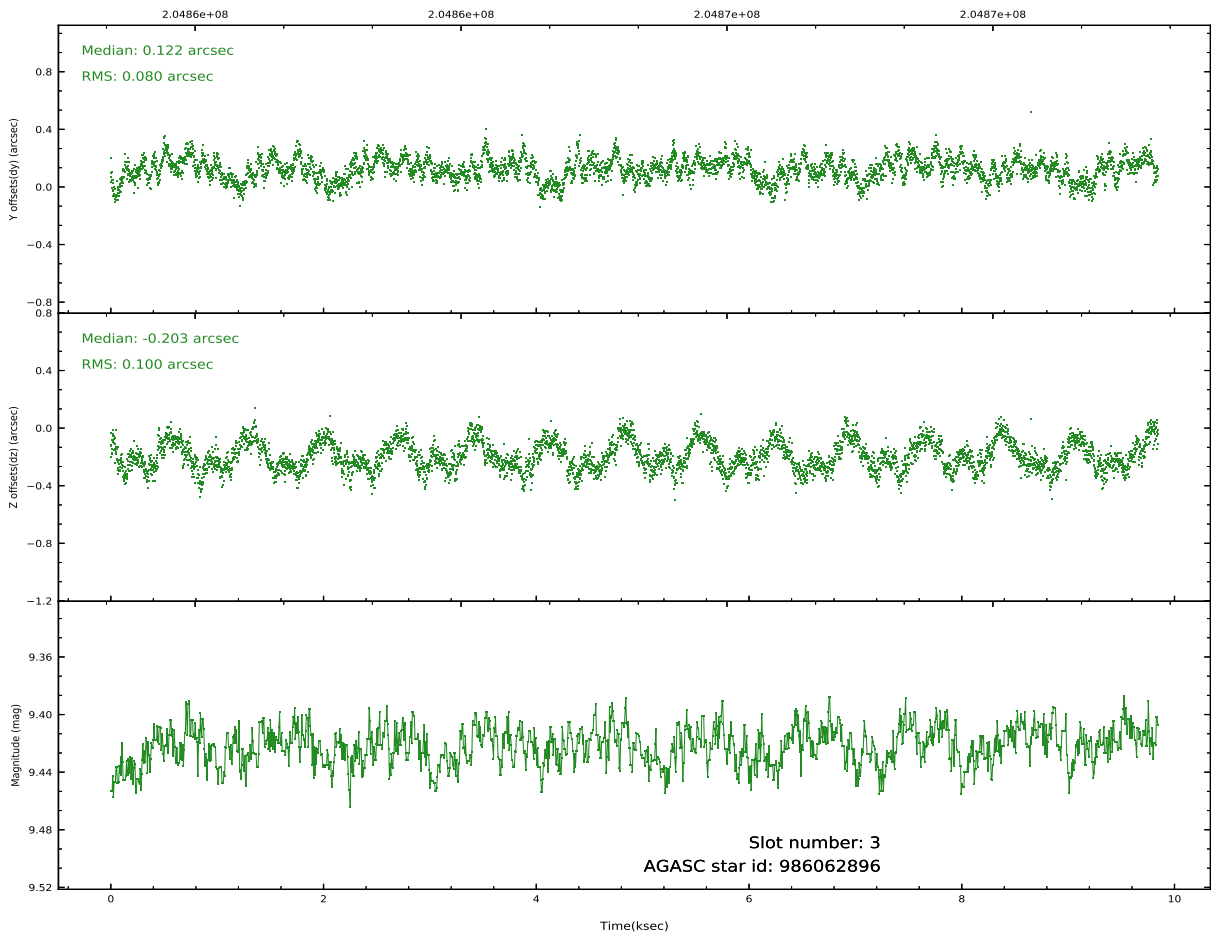
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## 2.4 Star Slots

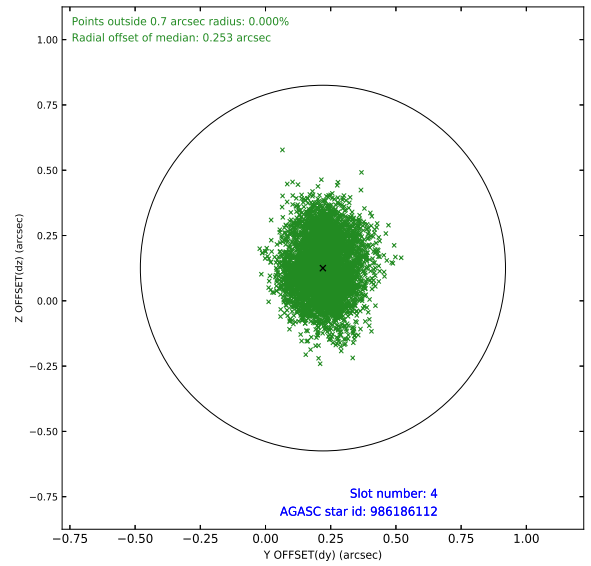
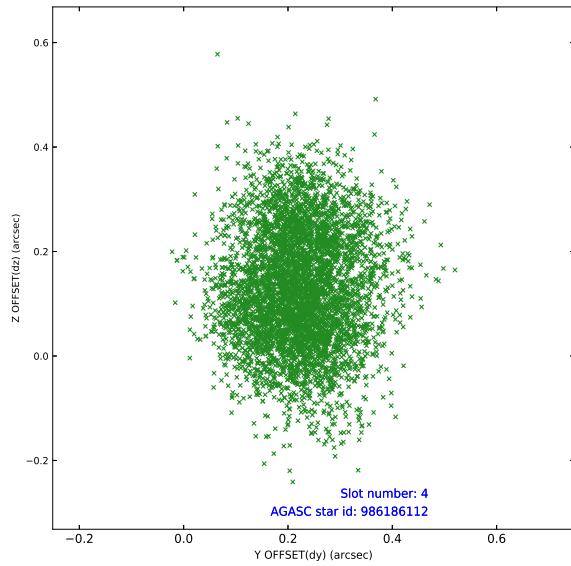
### 2.4.1 Slot 3



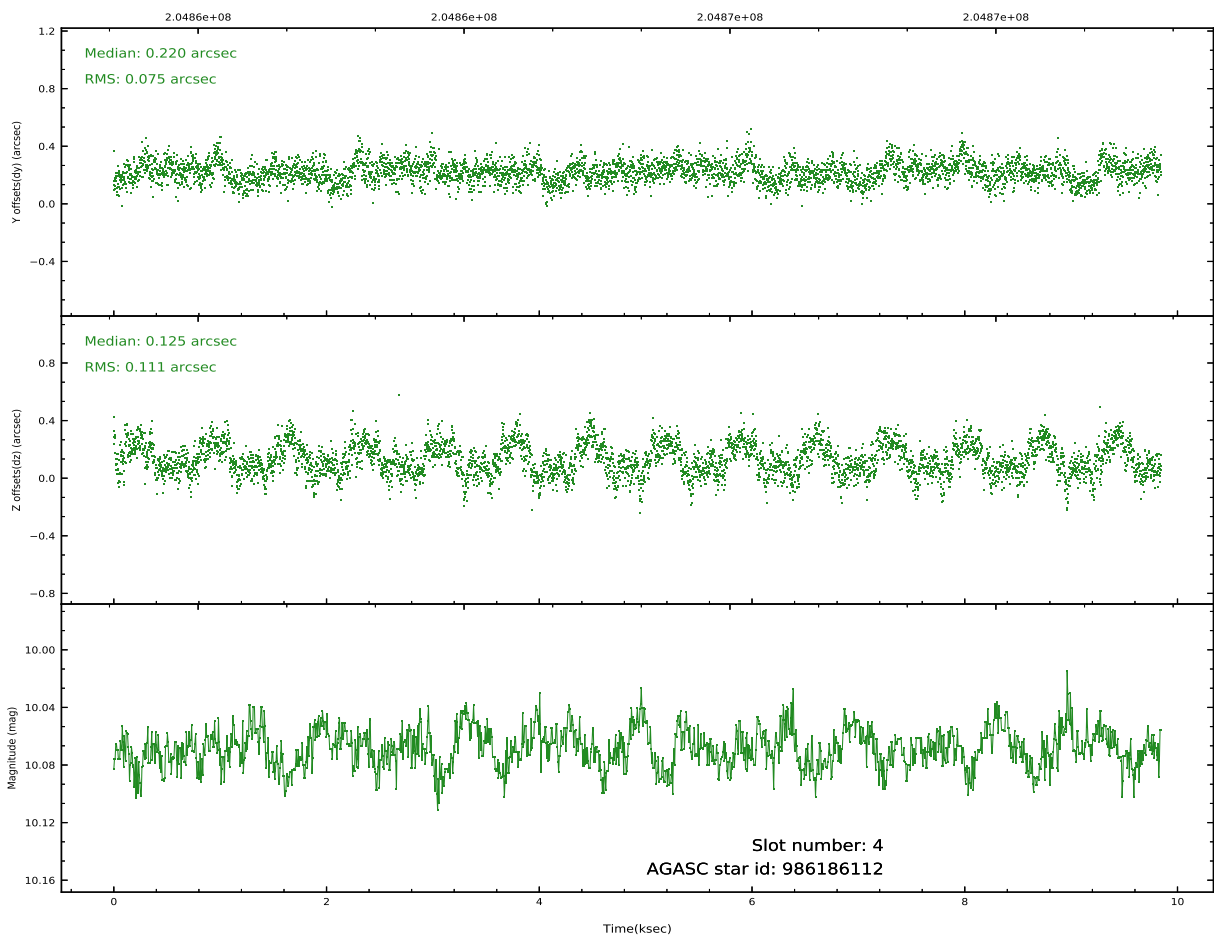
Time (s)



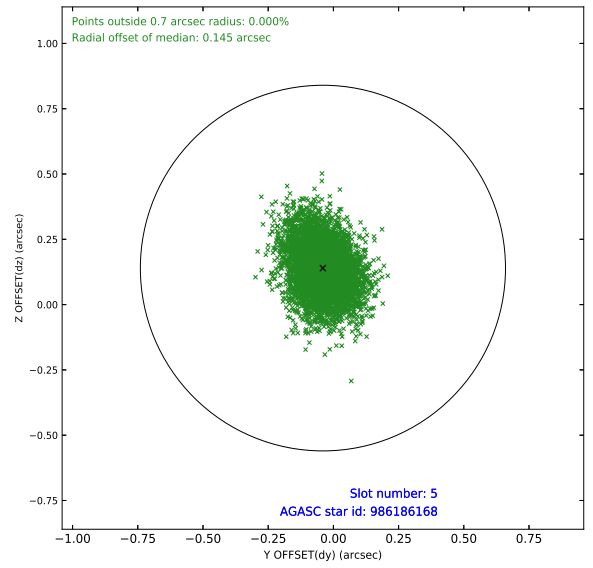
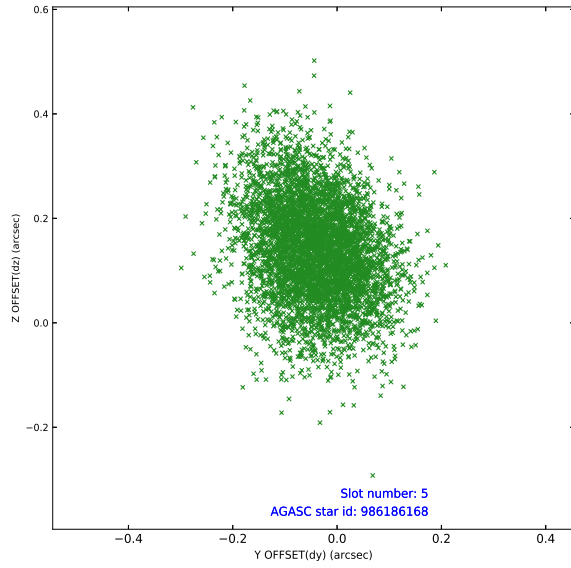
## 2.4.2 Slot 4



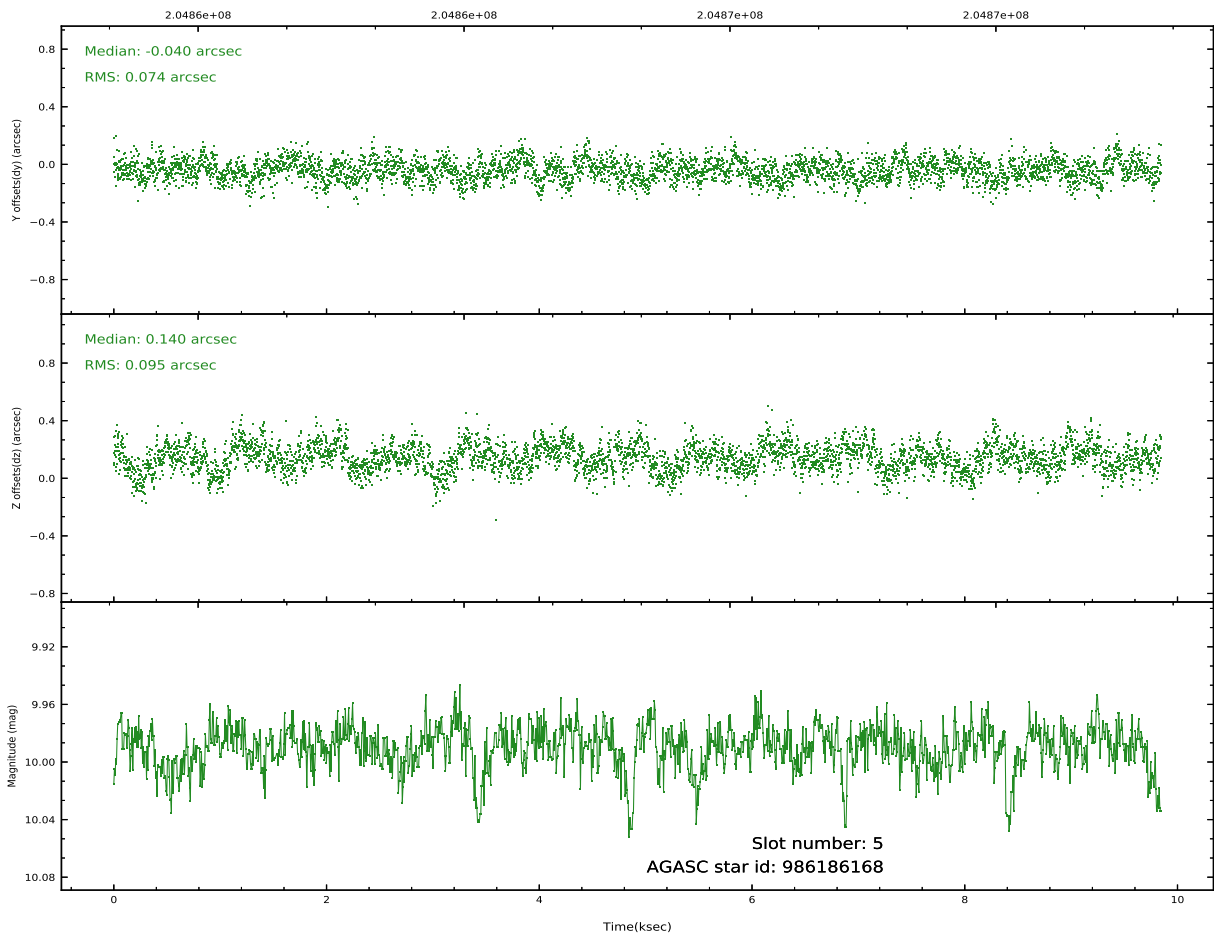
Time (s)



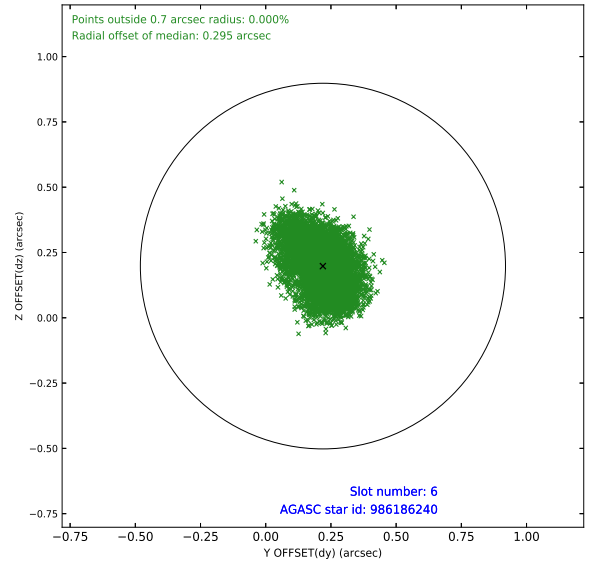
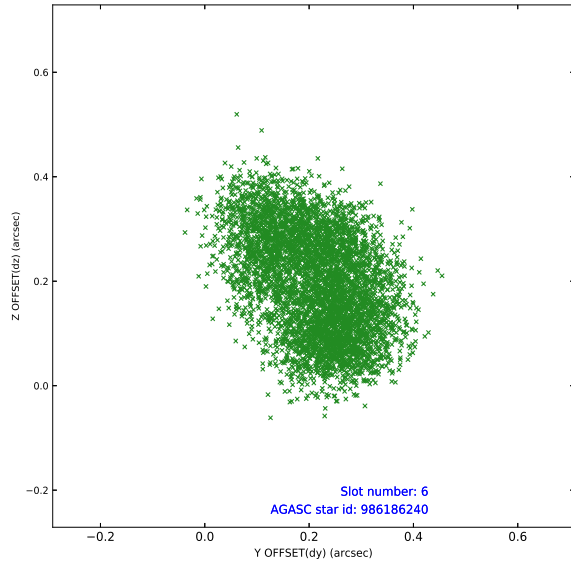
### 2.4.3 Slot 5



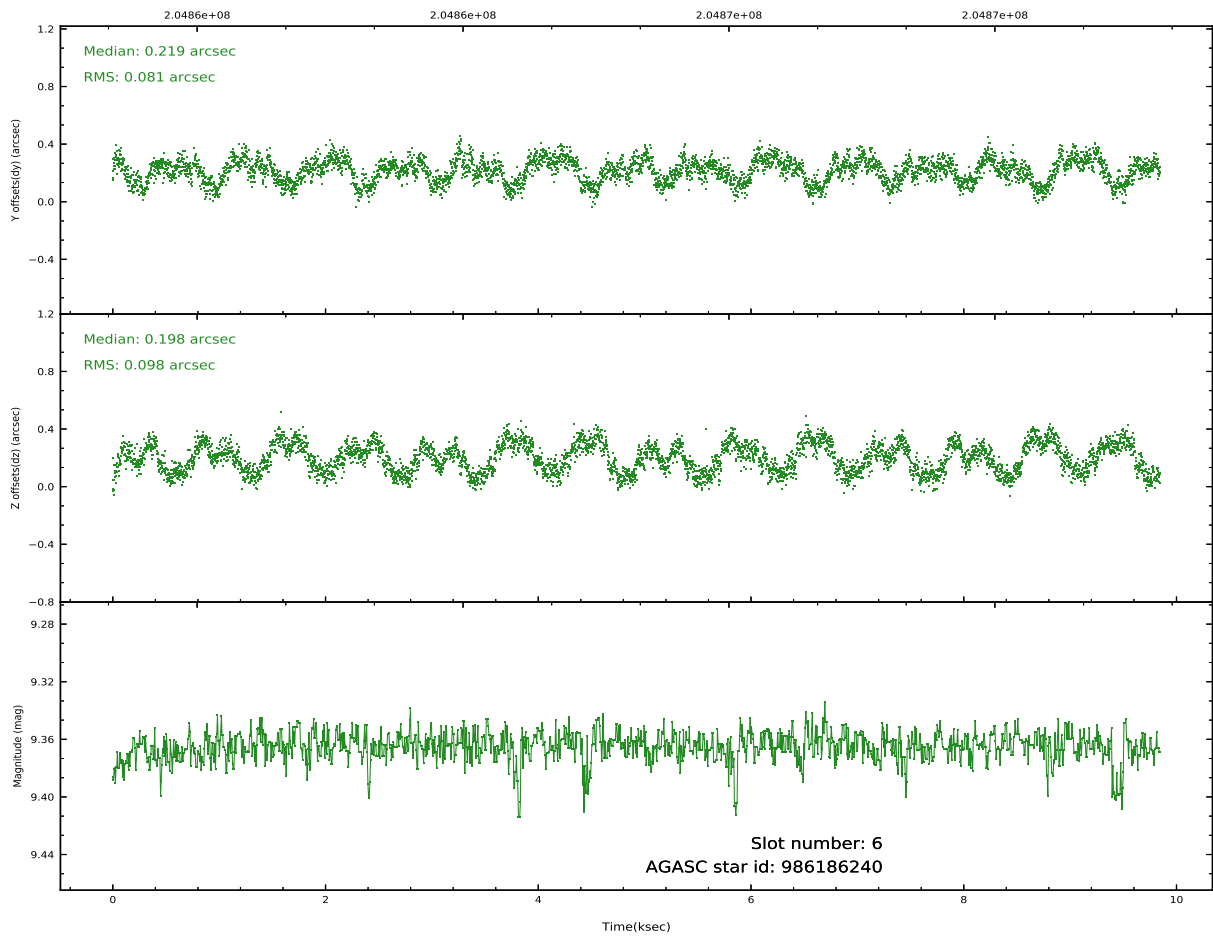
Time (s)



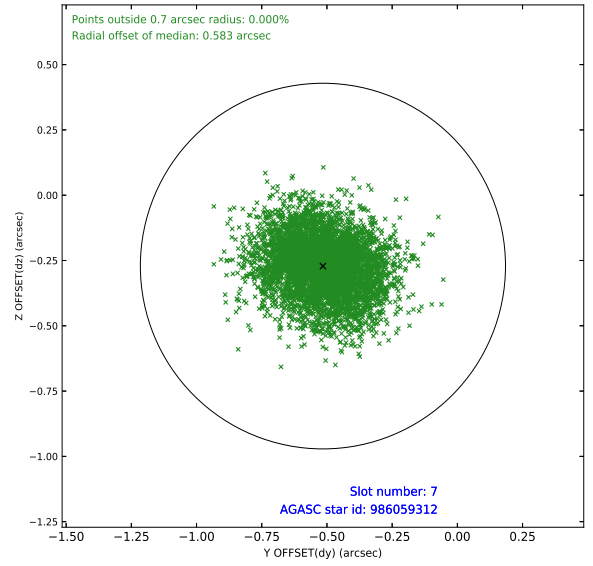
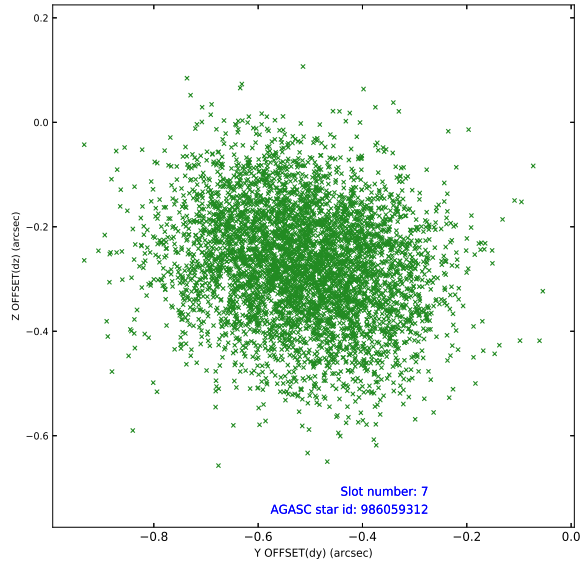
## 2.4.4 Slot 6



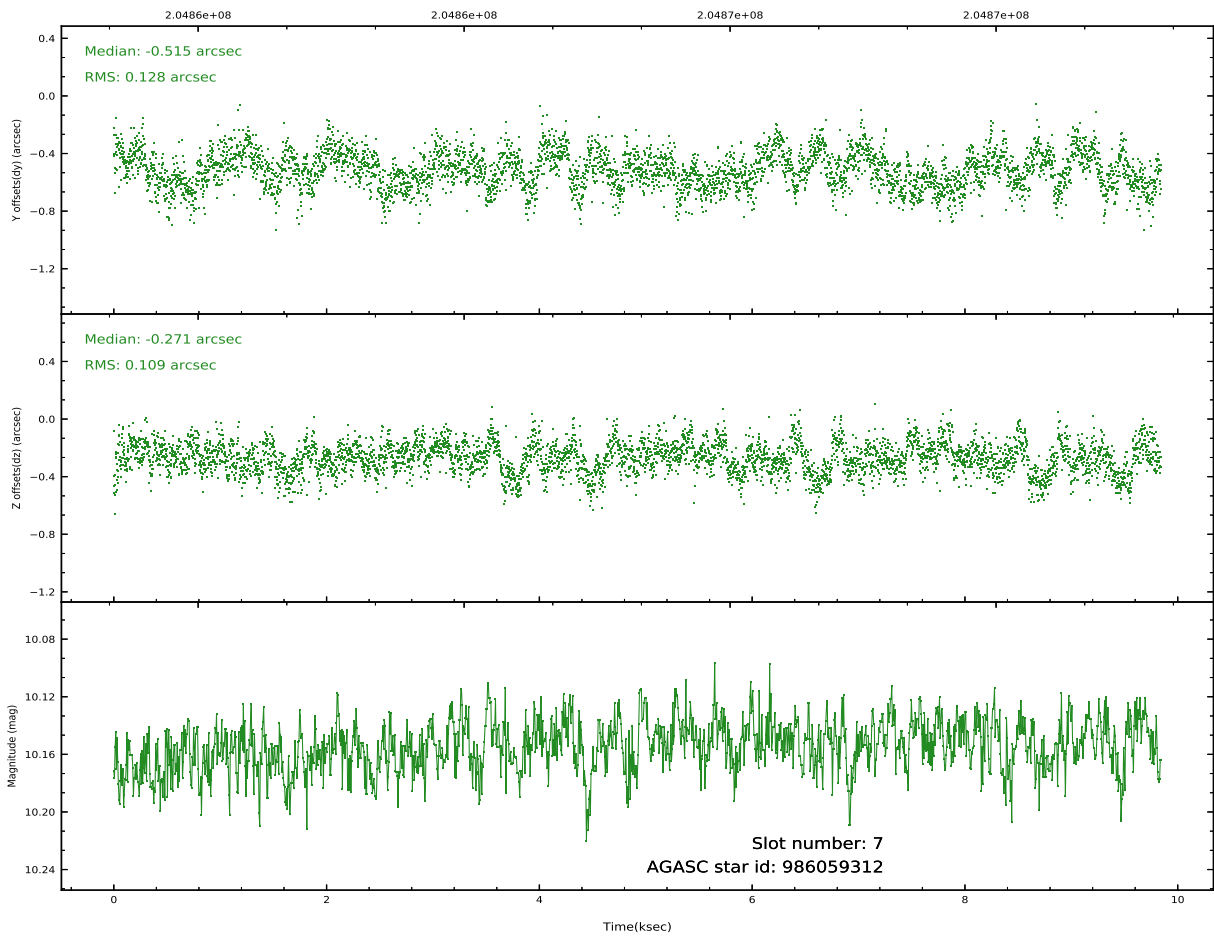
Time (s)



## 2.4.5 Slot 7

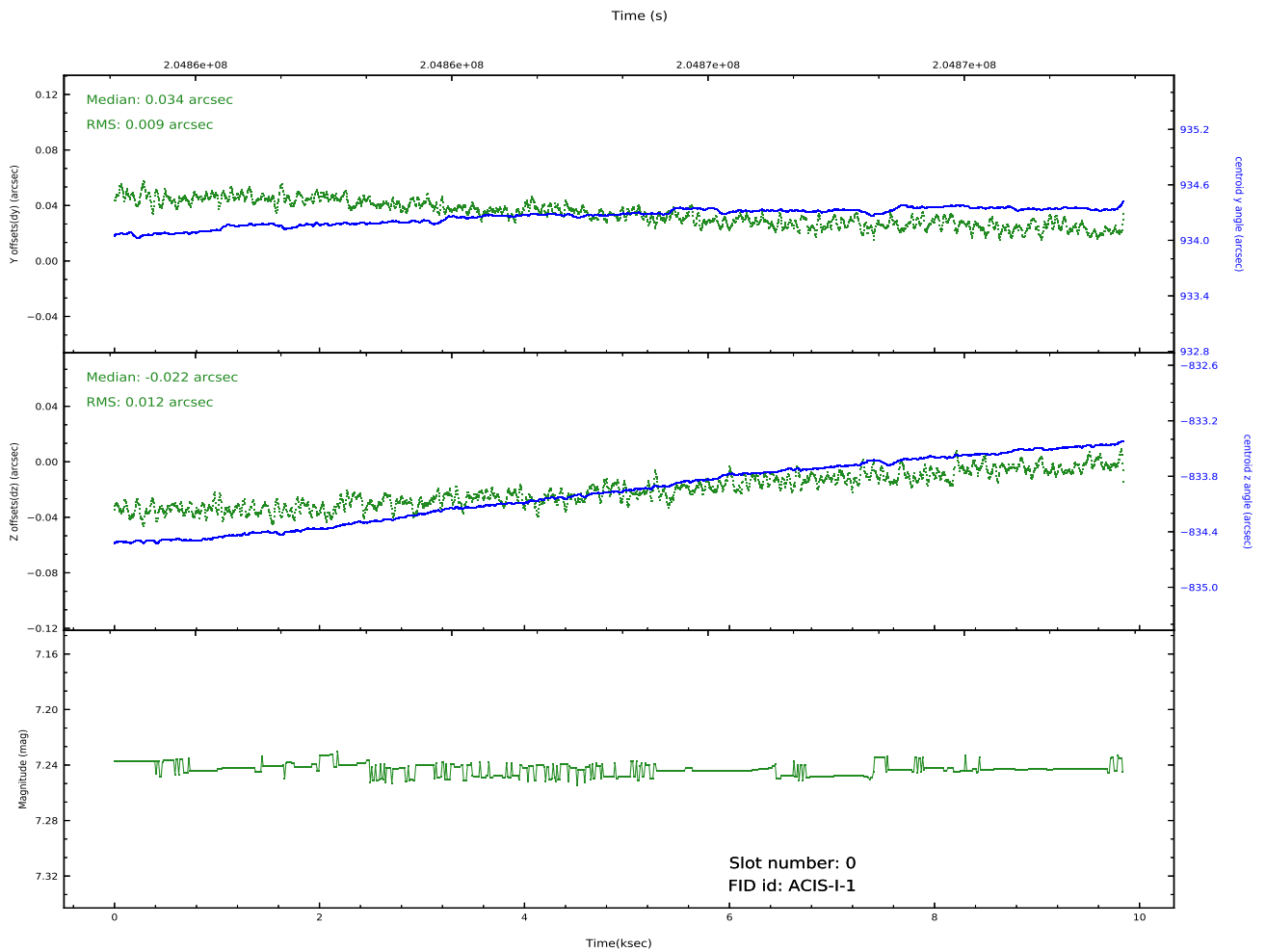
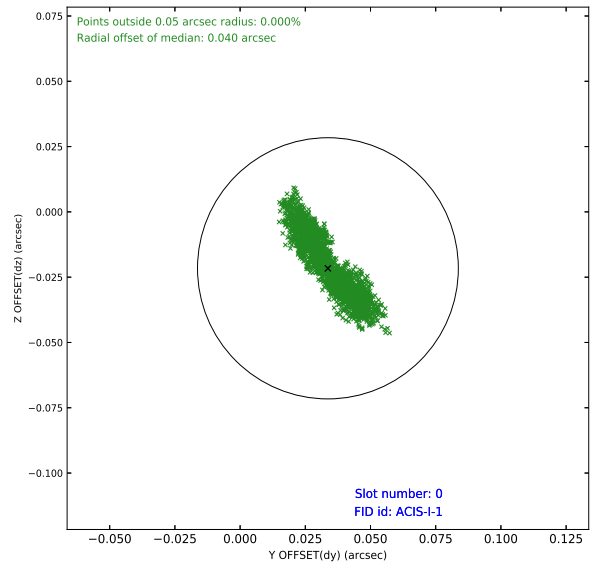
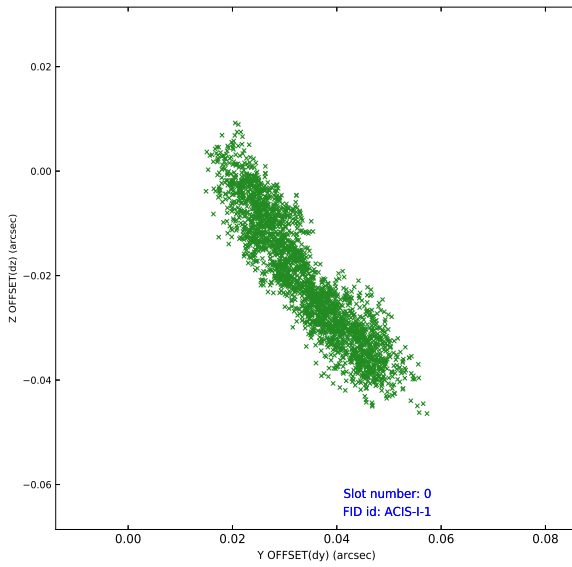


Time (s)

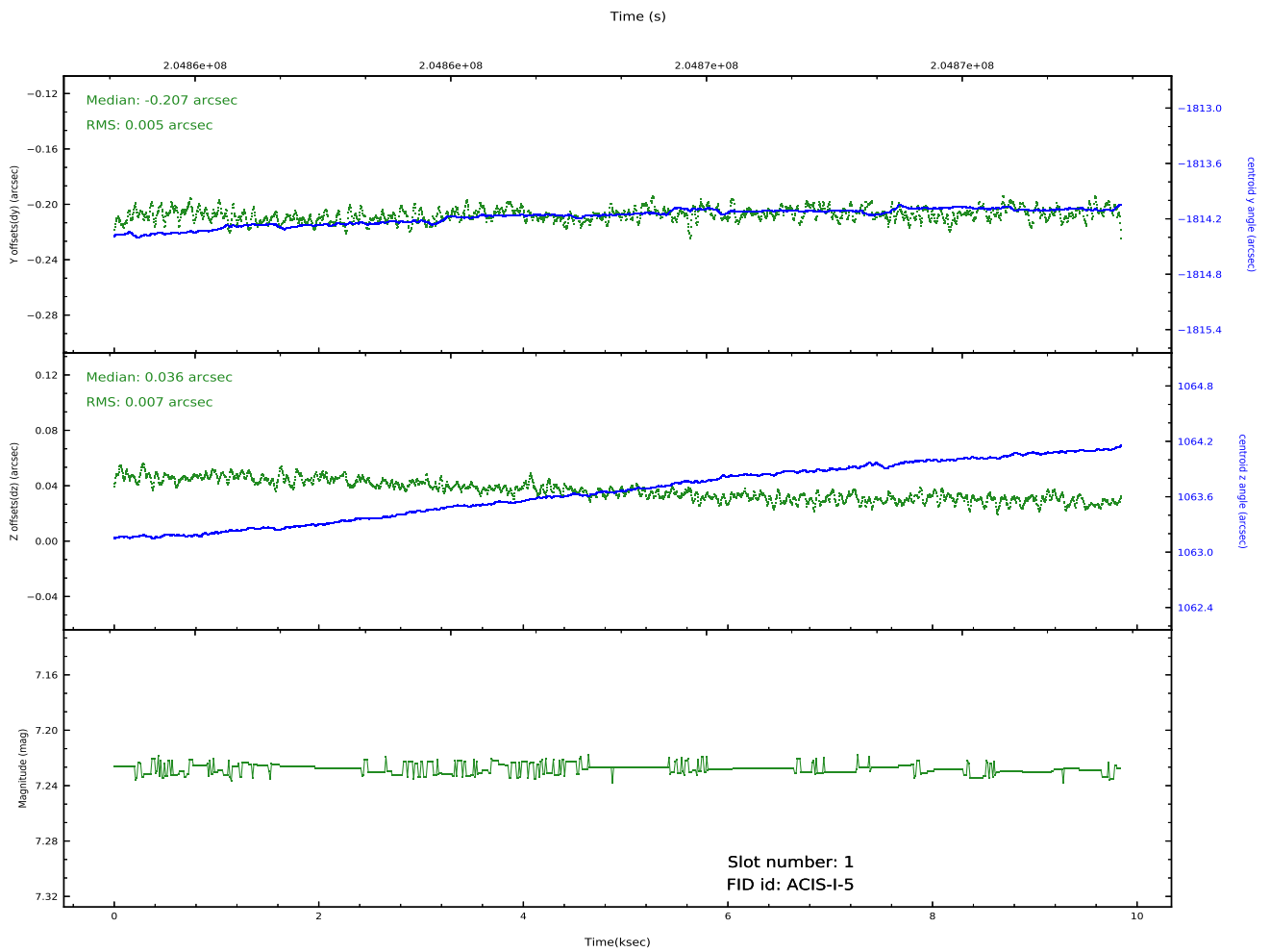
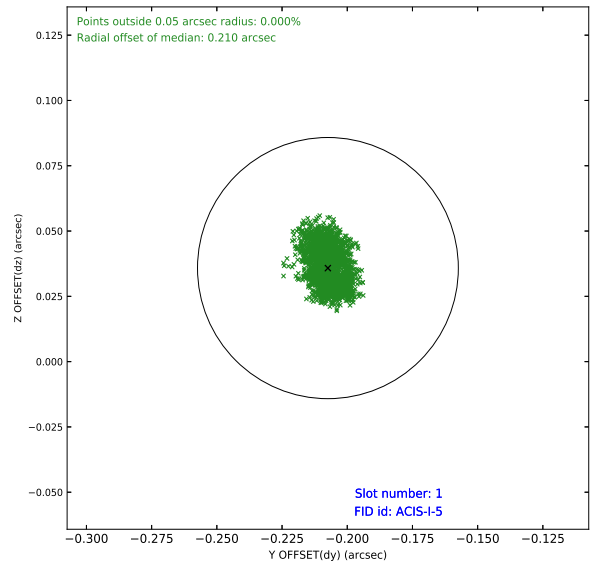
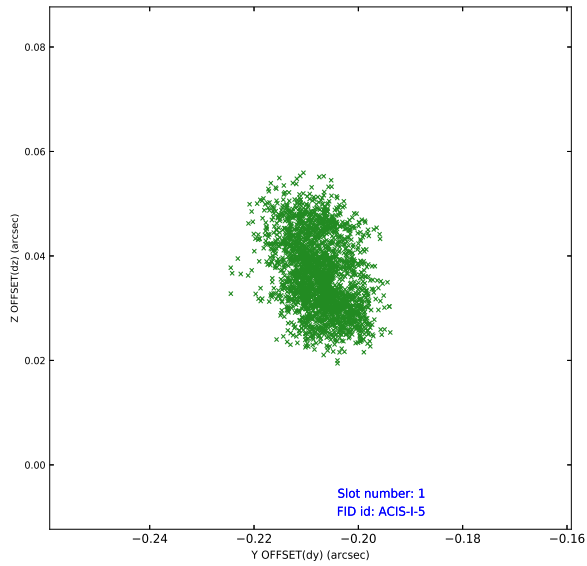


## 2.5 FID Slots

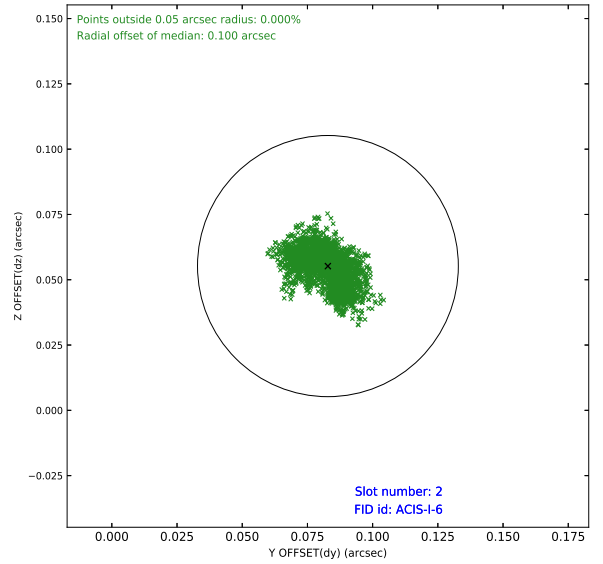
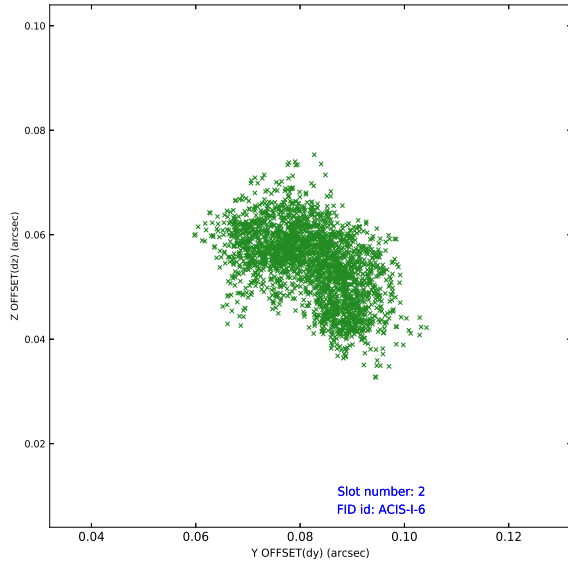
### 2.5.1 Slot 0



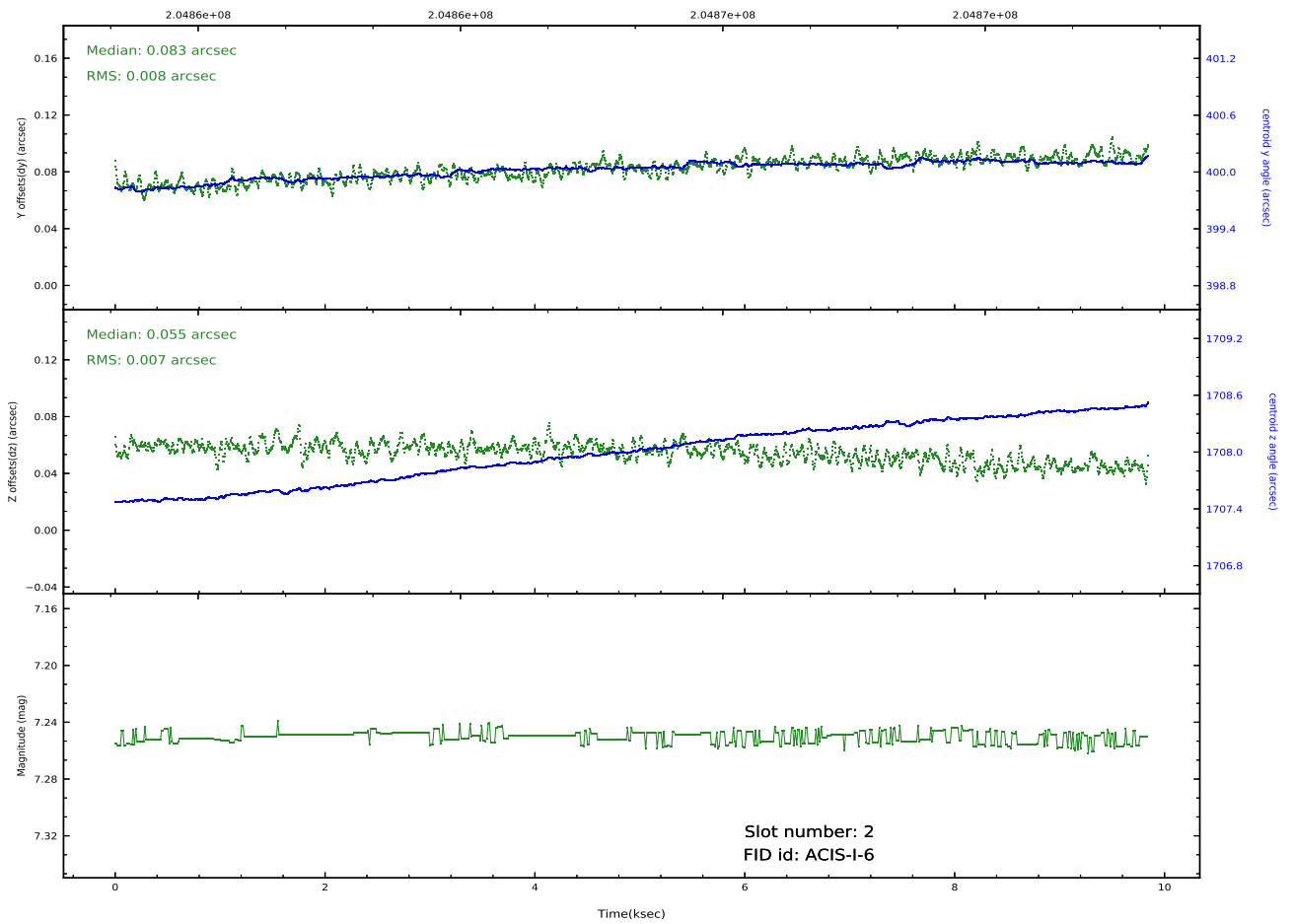
## 2.5.2 Slot 1



### 2.5.3 Slot 2



Time (s)



# A Summary

## A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.09.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.689

## A.2 Comments