

# V&V Reference Report

## L2 ASCDS Version : 10.9.2

Observation 20481 - L2 Version 2  
Chandra X-Ray Center

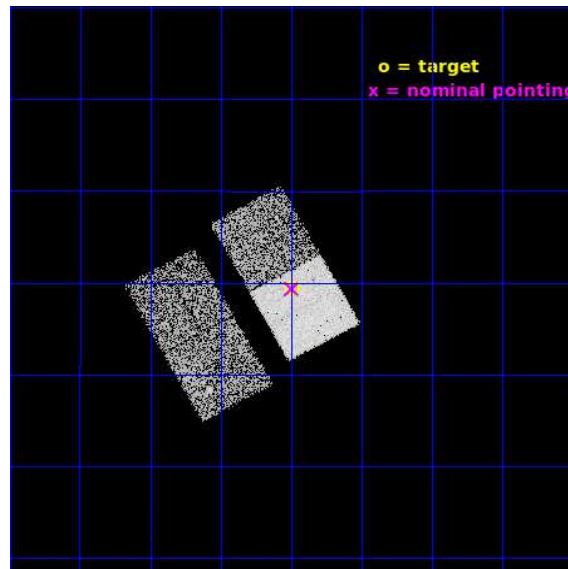
L2 Processing Date : Oct 24 2020

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# 1 Front

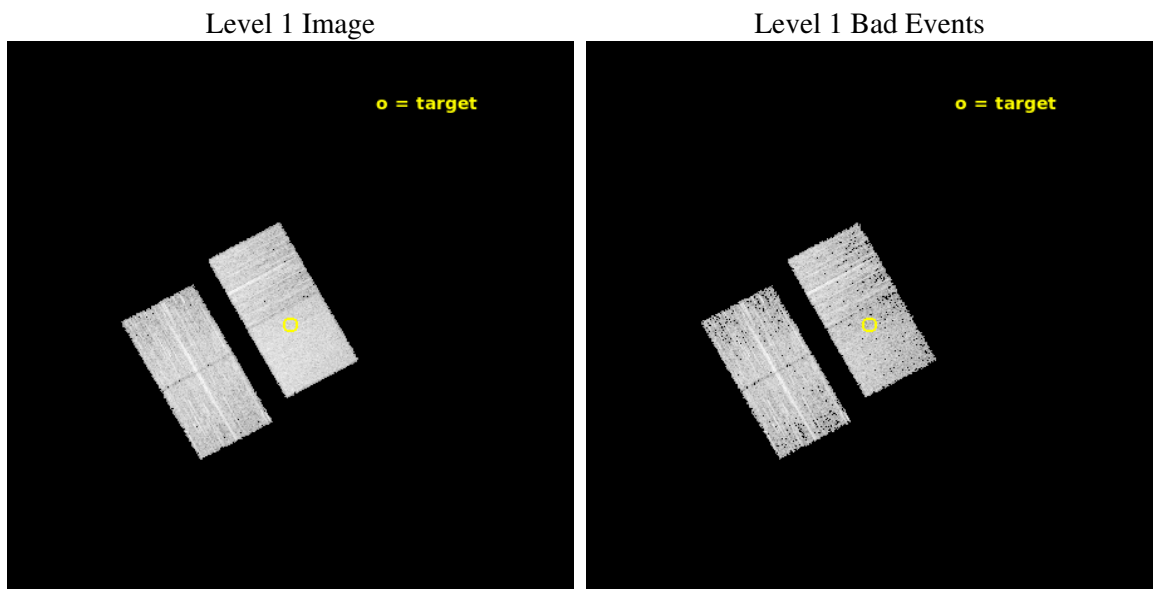
seq_num	703584	Sequence number
obs_id	20481	Observation id
title	Young Radio Sources at High Redshift	Proposal title
observer	Aneta Siemiginowska	Principal investigator
object	NVSS J145459+110928	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	223.747083	Observer's specified target RA [deg]
dec_targ	11.15775	Observer's specified target Dec [deg]
ra_nom	223.74858691504	Nominal RA [deg]
dec_nom	11.156226858427	Nominal Dec [deg]
roll_nom	61.128078429062	Nominal Roll [deg]
revision	2	Processing version of data
ontime	6069.8000468016	Sum of GTIs [s]
liveltime	5990.4936406683	Livetime [s]
ontime2	6069.7058970928	Sum of GTIs [s]
ontime3	6069.7469370365	Sum of GTIs [s]
ontime6	6069.7879770994	Sum of GTIs [s]
ontime7	6069.8000468016	Sum of GTIs [s]
l2events	36731	Number of level 2 events



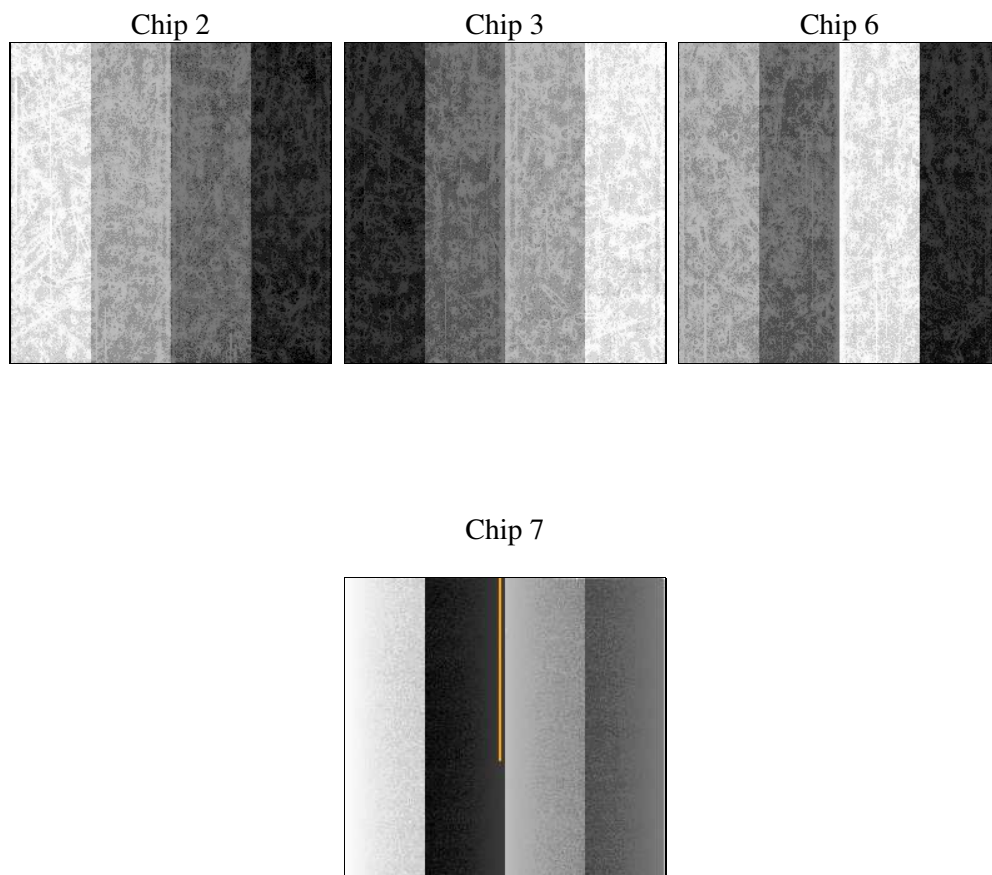
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	6000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	6069.8000468016	Sum of GTIs [s]
caldsver	4.9.3	&#160	ontime2	6069.7058970928	Sum of GTIs [s]
date	2020-10-24T05:22:33	Date and time of file creation	ontime3	6069.7469370365	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	6069.7879770994	Sum of GTIs [s]
			ontime7	6069.8000468016	Sum of GTIs [s]
			l1events	185807	Number of level 1 events

### 2.1.4 Events

	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	42963	42205	44233	56406
rejected events	38130	37390	39140	31539
rejected %	88%	88%	88%	55%

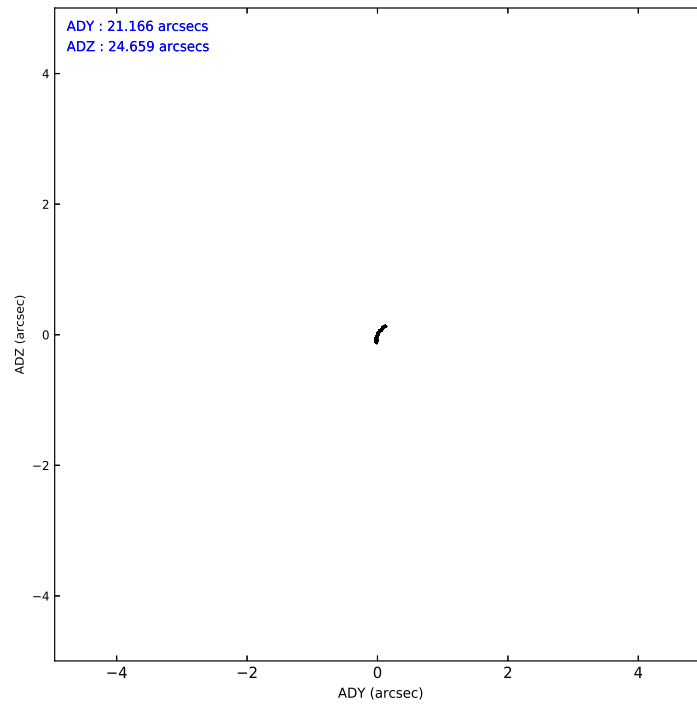
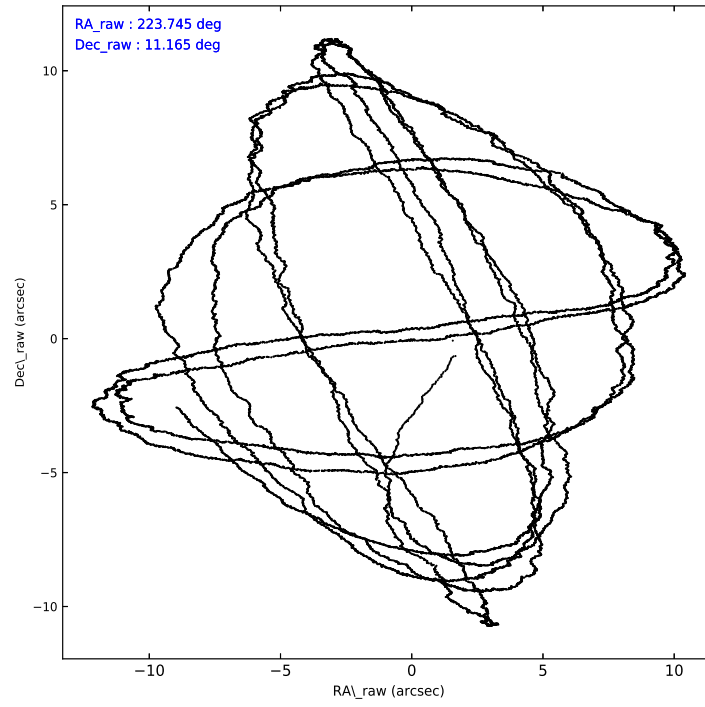
	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	1697	1871	1740	2149
	3%	4%	3%	3%
grade 1 events	24	38	22	82
	0%	0%	0%	0%
grade 2 events	1197	1042	1133	5380
	2%	2%	2%	9%
grade 3 events	512	481	512	1943
	1%	1%	1%	3%
grade 4 events	494	491	491	1998
	1%	1%	1%	3%
grade 5 events	1836	2105	2096	5633
	4%	4%	4%	9%
grade 6 events	939	931	1224	13418
	2%	2%	2%	23%
grade 7 events	36264	35246	37015	25803
	84%	83%	83%	45%

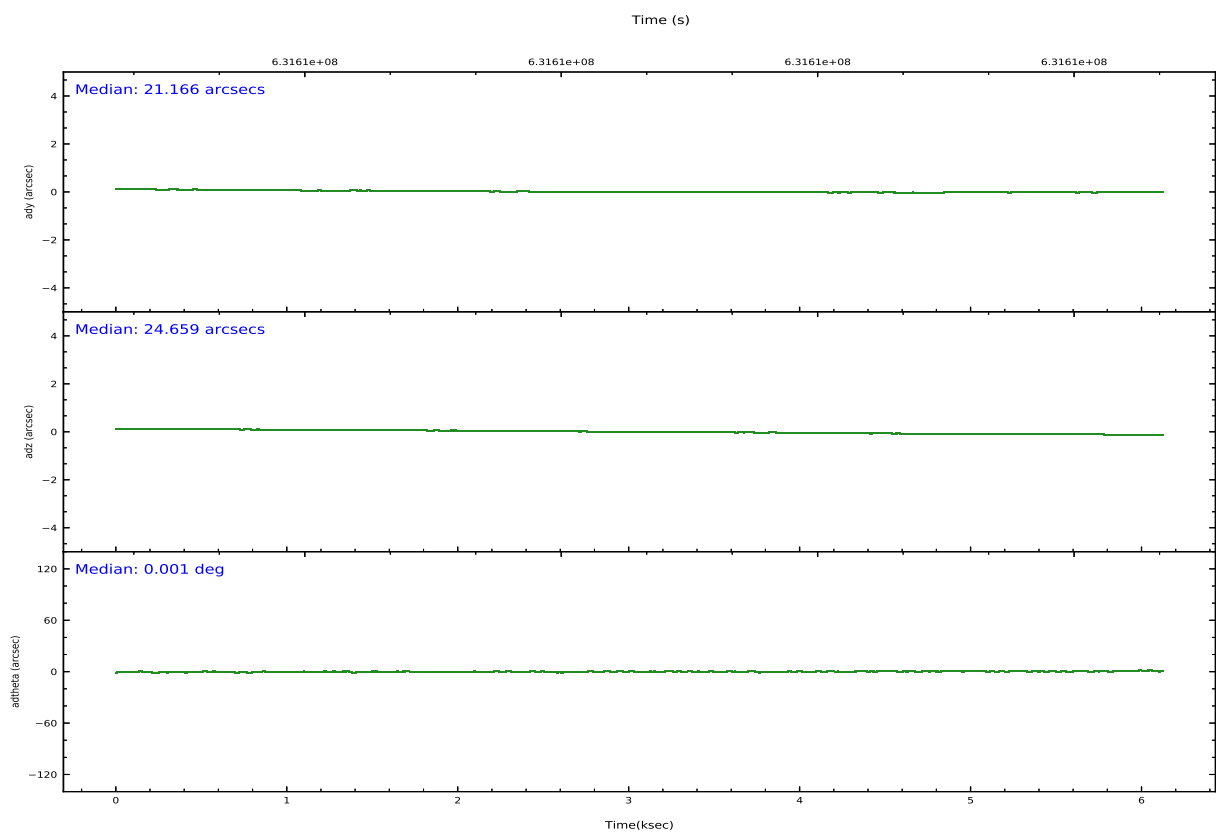
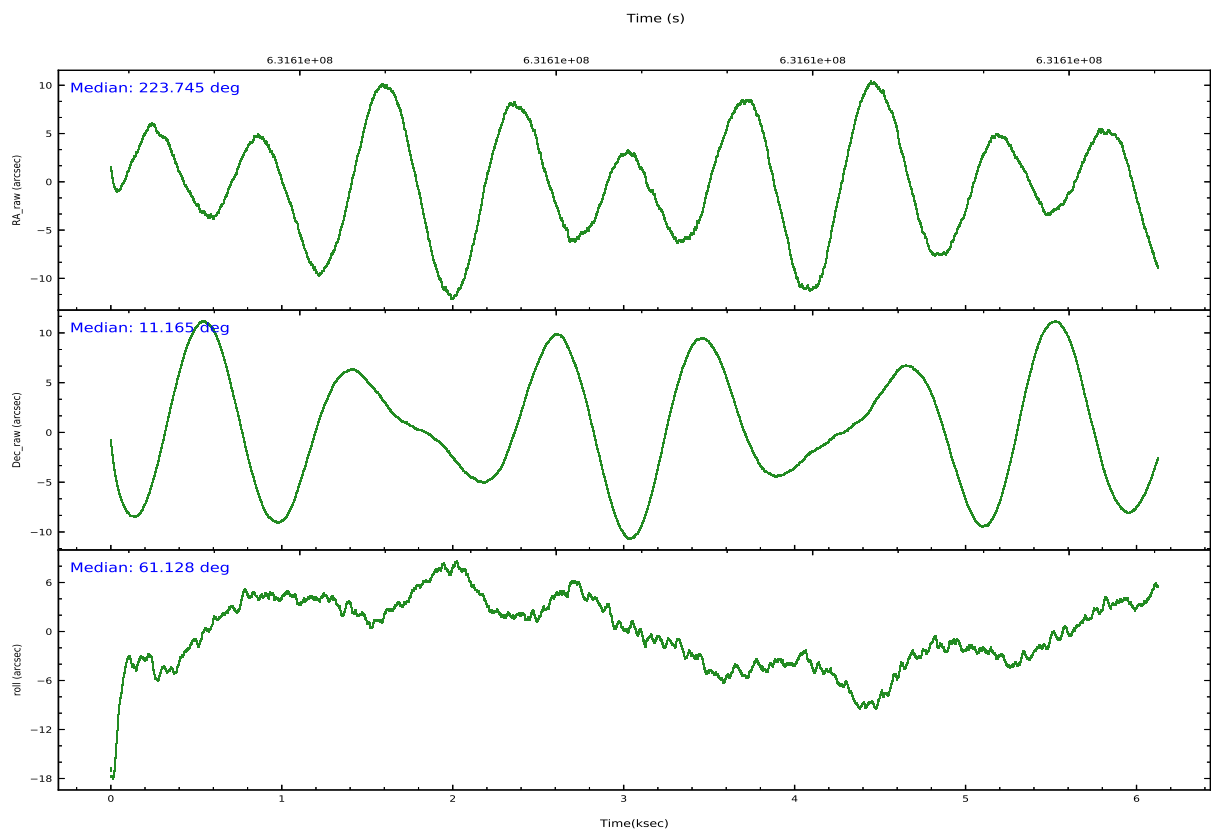


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-2367	ACIS-2367	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	223.746106	223.74858691504	CCD I2 on	O1	Y
[deg] Pointing Dec	11.137562	11.156226858427	CCD I3 on	O3	Y
[deg] Pointing Roll	60.981126	61.128078429062	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	O2	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	N	N
[s] Observation start time (MET)	631605020.184000	631603876.74112	CCD S5 on	N	N
Observation start date	2018-01-06T05:49:11	2018-01-06T05:31:16	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	631611020.184000	631611988.59159	On-chip summing requested	N	N
Observation end date	2018-01-06T07:29:11	2018-01-06T07:46:28	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



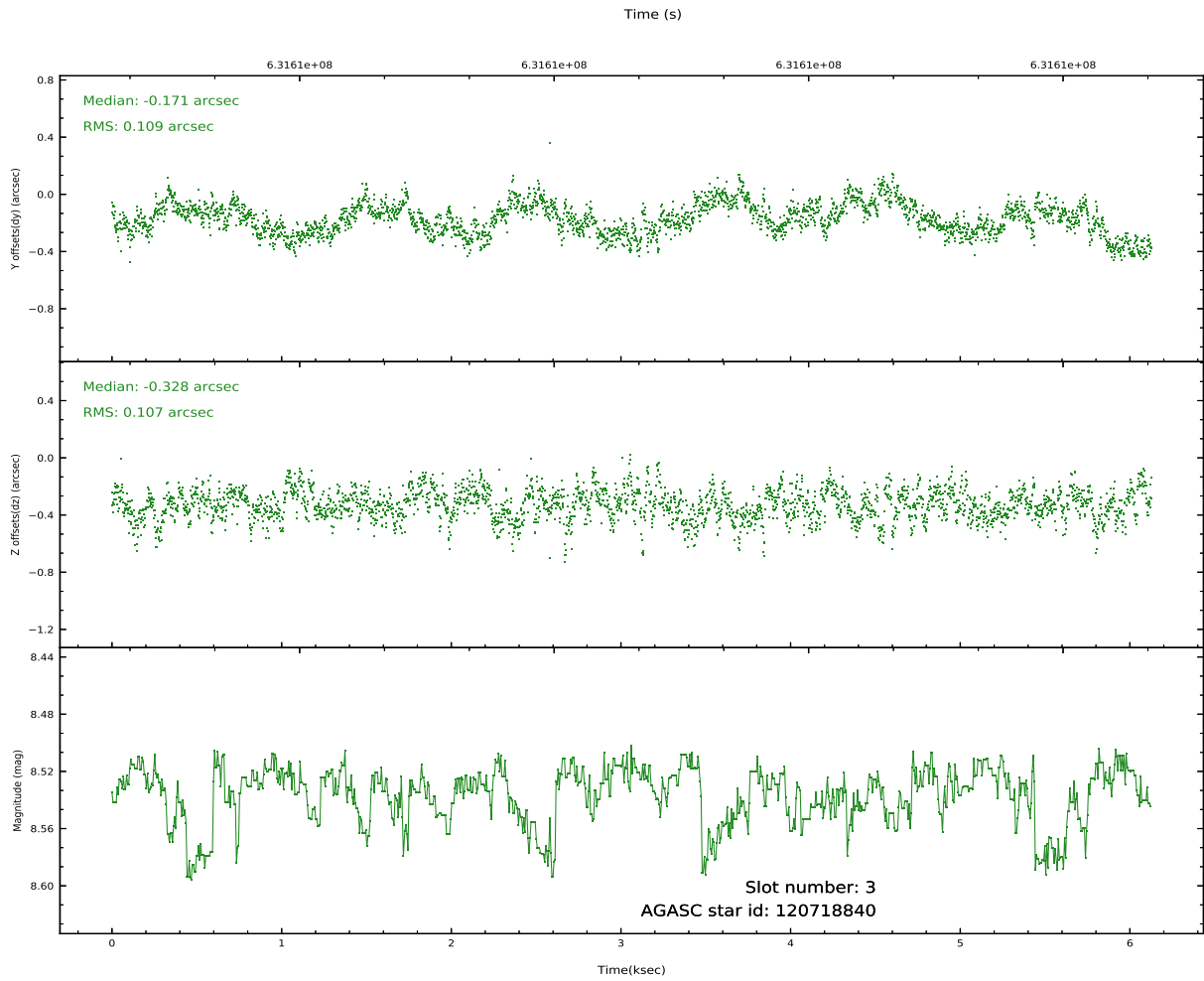
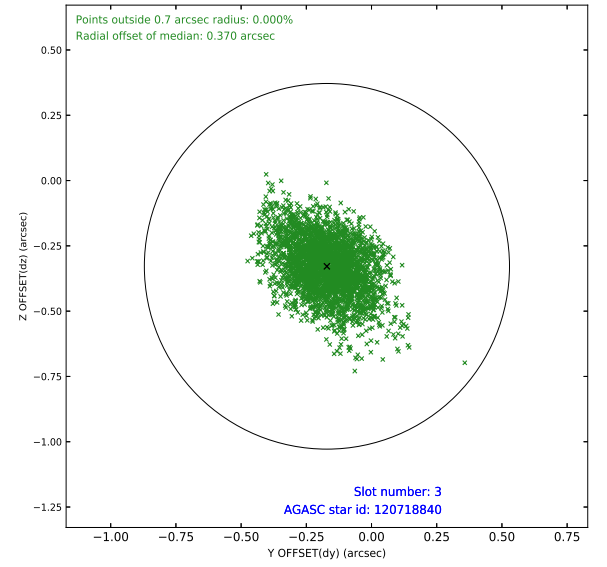
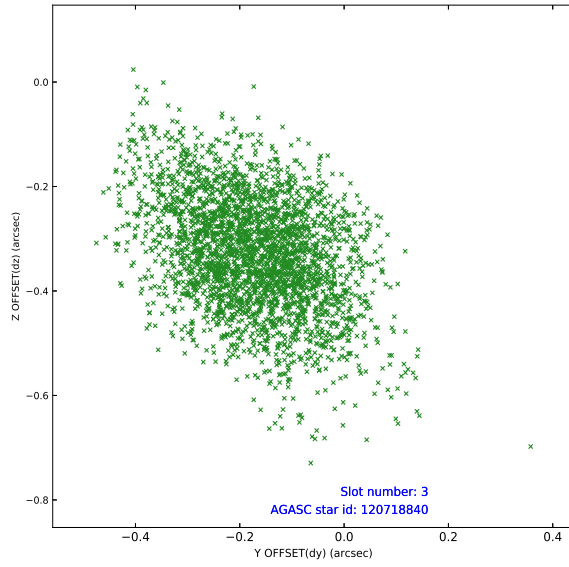


Slot Statistics

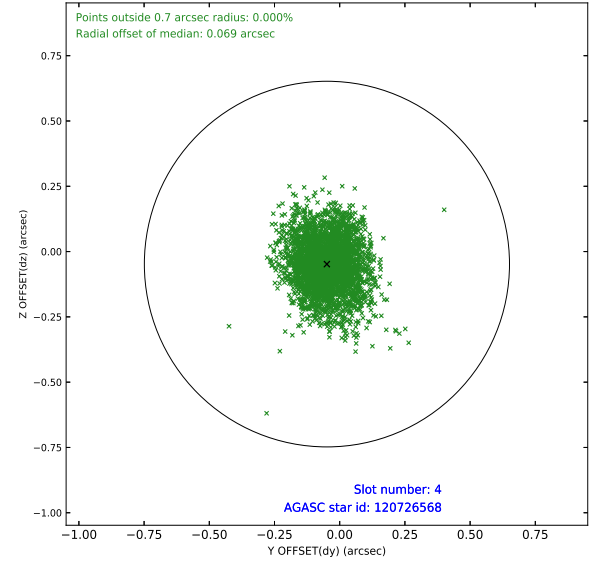
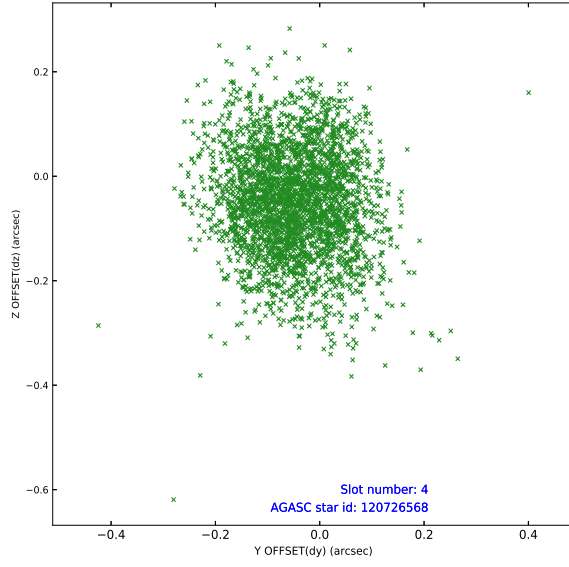
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	6.95	1495	1.000	0.033	0.019	0.006	0.012	0.000000	0.000000	-774.45	-1746
1	FID		ACIS-S-4	7.05	1495	1.000	0.054	-0.067	0.006	0.011	0.000000	0.000000	2138.57	160
2	FID		ACIS-S-6	7.21	1495	1.000	-0.114	0.054	0.007	0.012	0.000000	0.000000	388.84	799
3	GUIDE	used	120718840	8.53	2984	1.000	-0.171	-0.328	0.160	0.264	223.203204	11.251993	-568.73	1879
4	GUIDE	used	120726568	8.62	2987	1.000	-0.049	-0.048	0.135	0.220	223.810322	10.830287	-857.23	-734
5	GUIDE	used	120726728	9.59	2983	1.000	0.097	-0.251	0.225	0.371	223.466962	10.745627	-1713.52	179
6	GUIDE	used	120727056	8.22	2926	1.000	-0.061	0.239	0.139	0.237	223.682434	10.523637	-2042.76	-875
7	GUIDE	used	120727400	9.26	2983	1.000	0.164	0.403	0.171	0.282	224.027929	10.374640	-1917.63	-2204

## 2.4 Star Slots

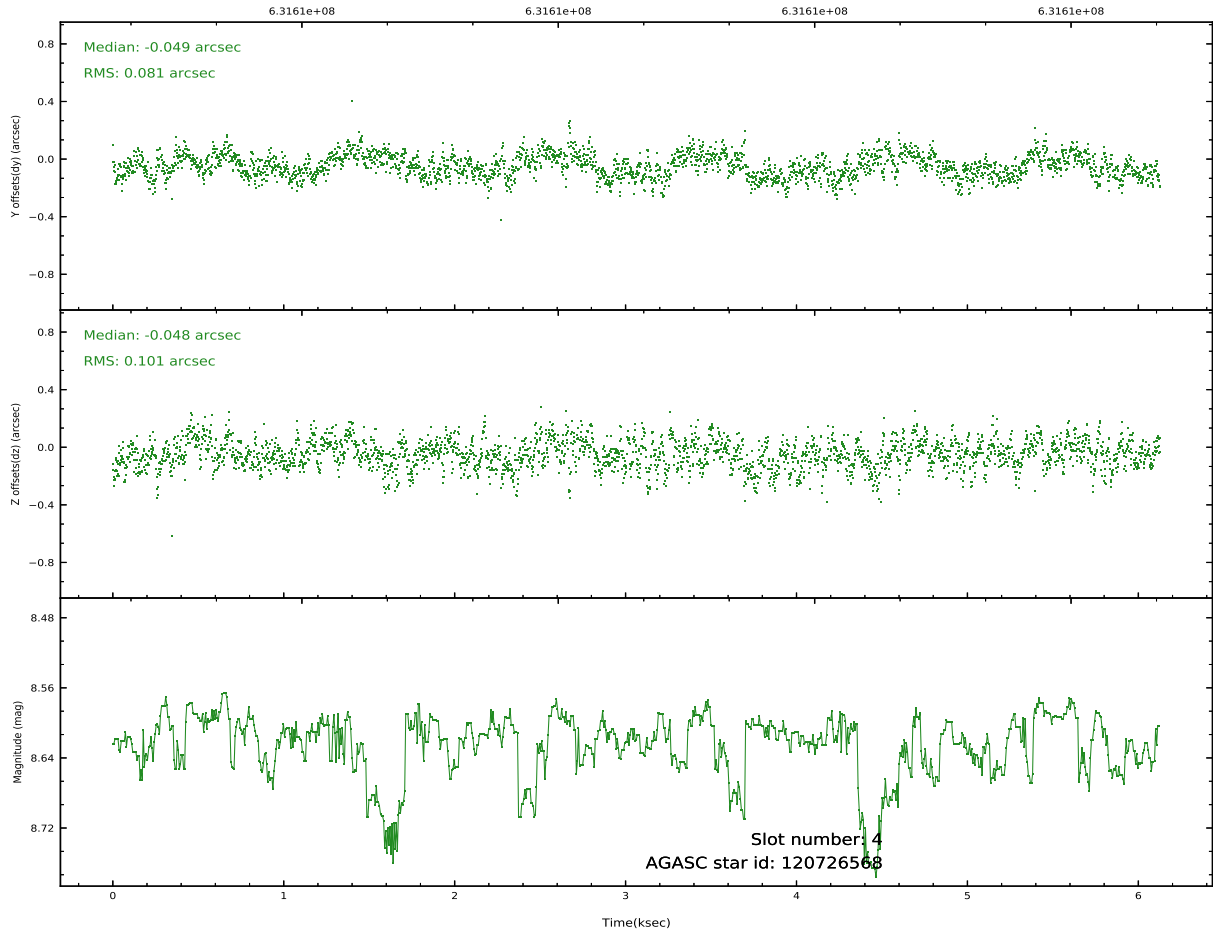
### 2.4.1 Slot 3



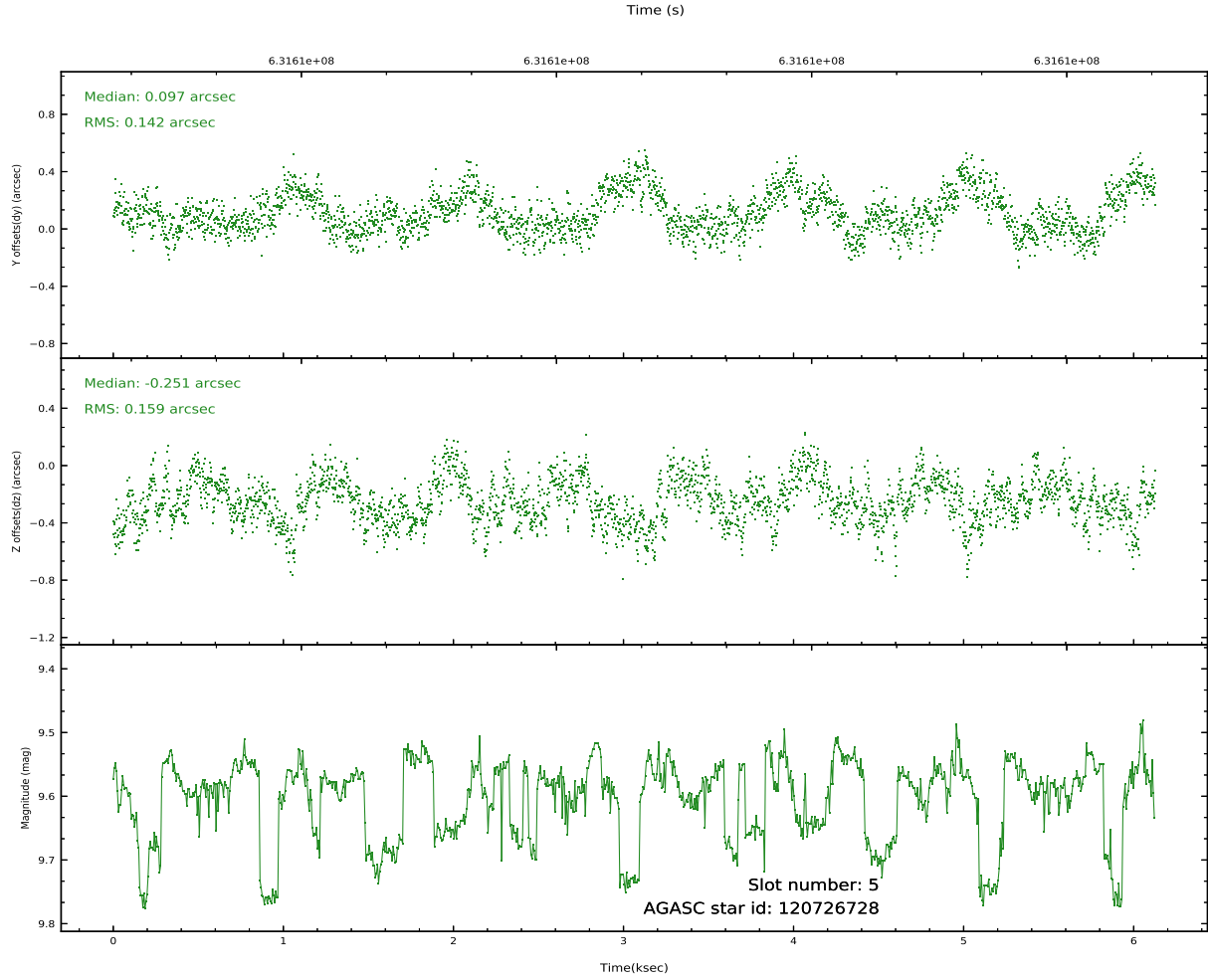
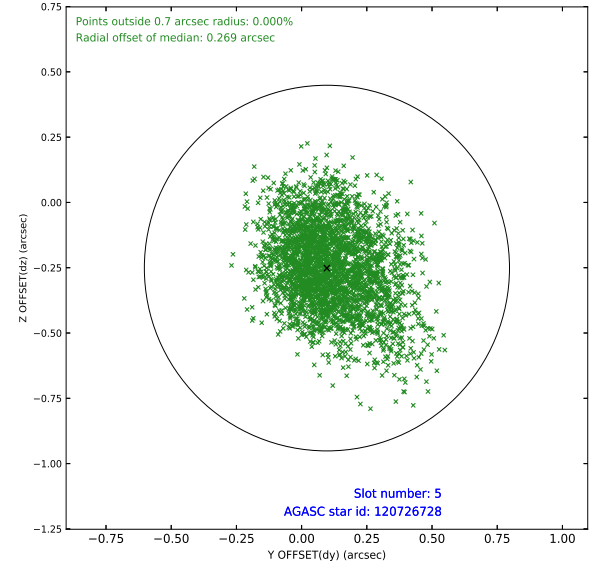
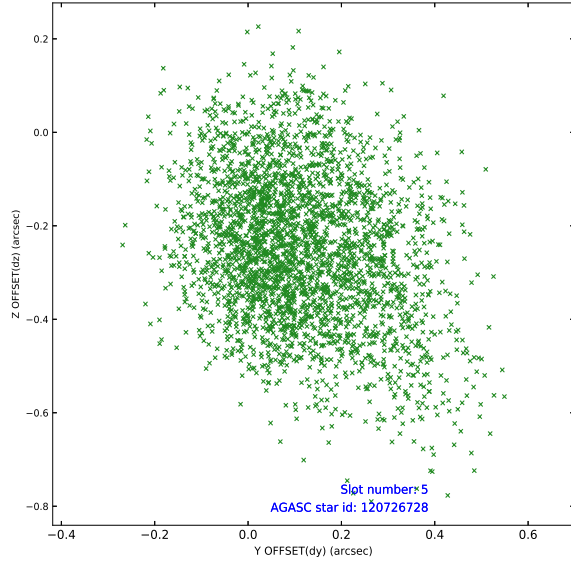
## 2.4.2 Slot 4



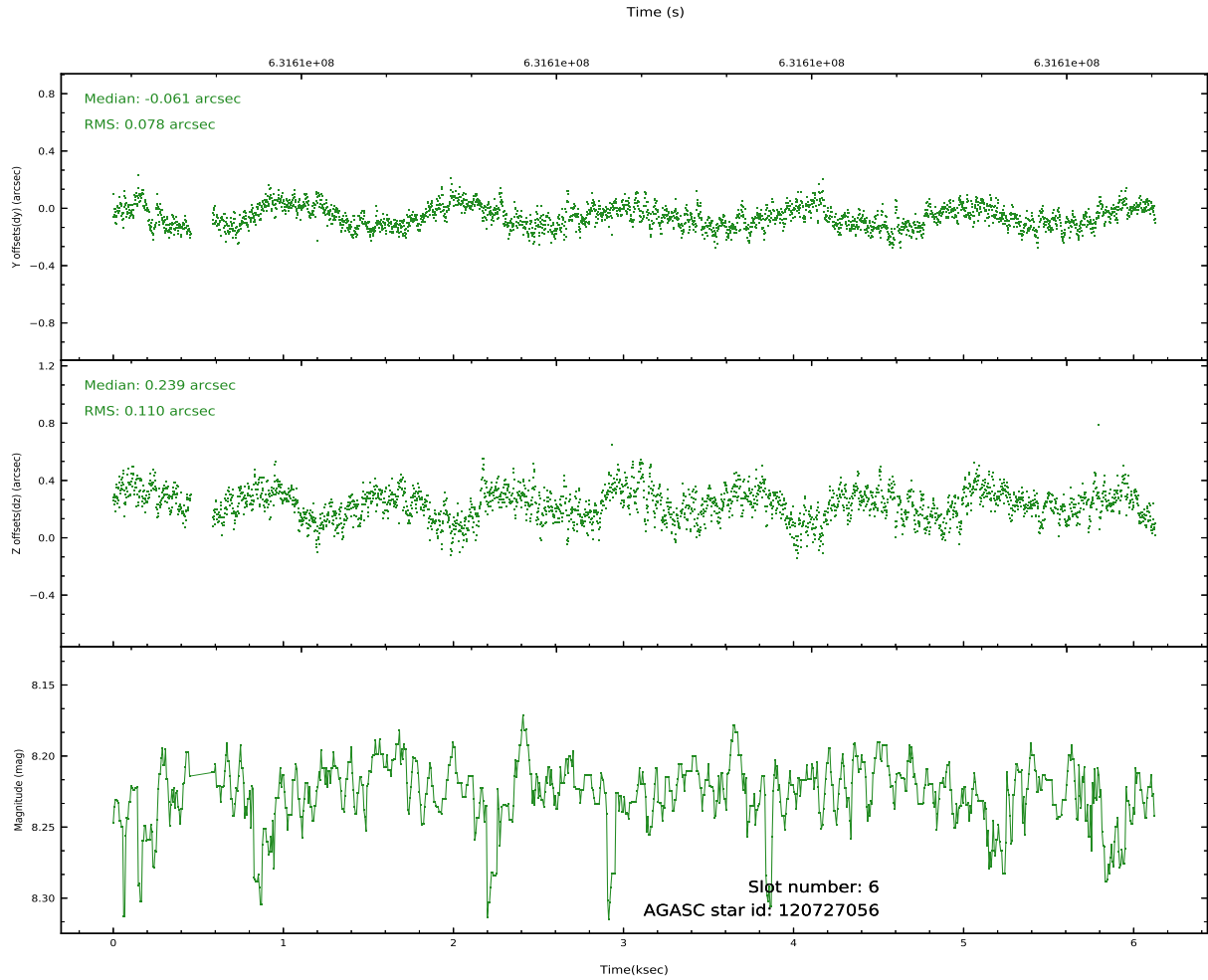
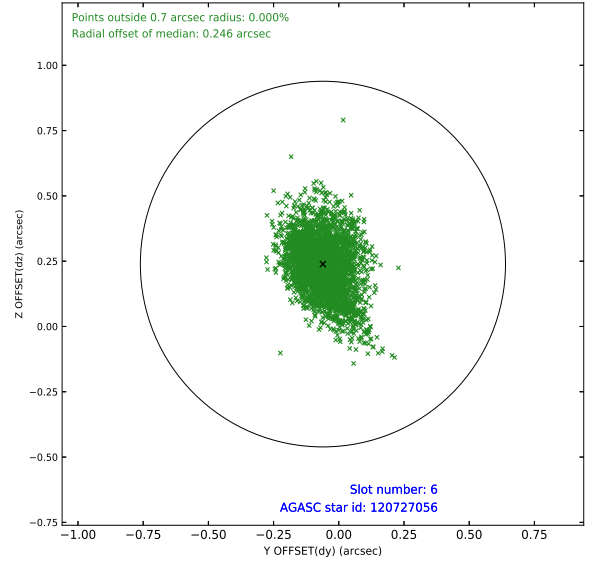
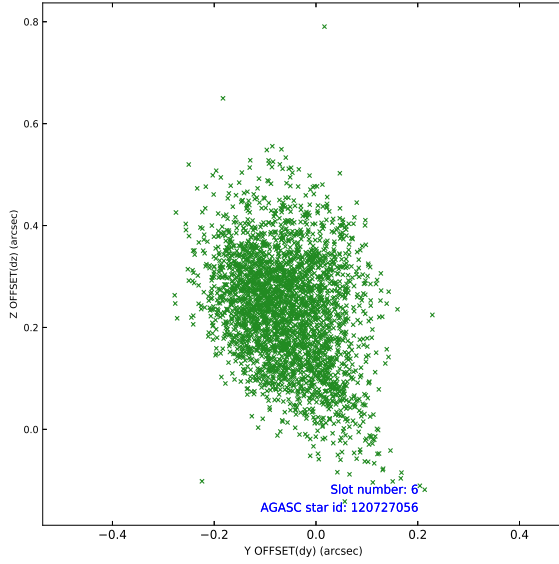
Time (s)



### 2.4.3 Slot 5

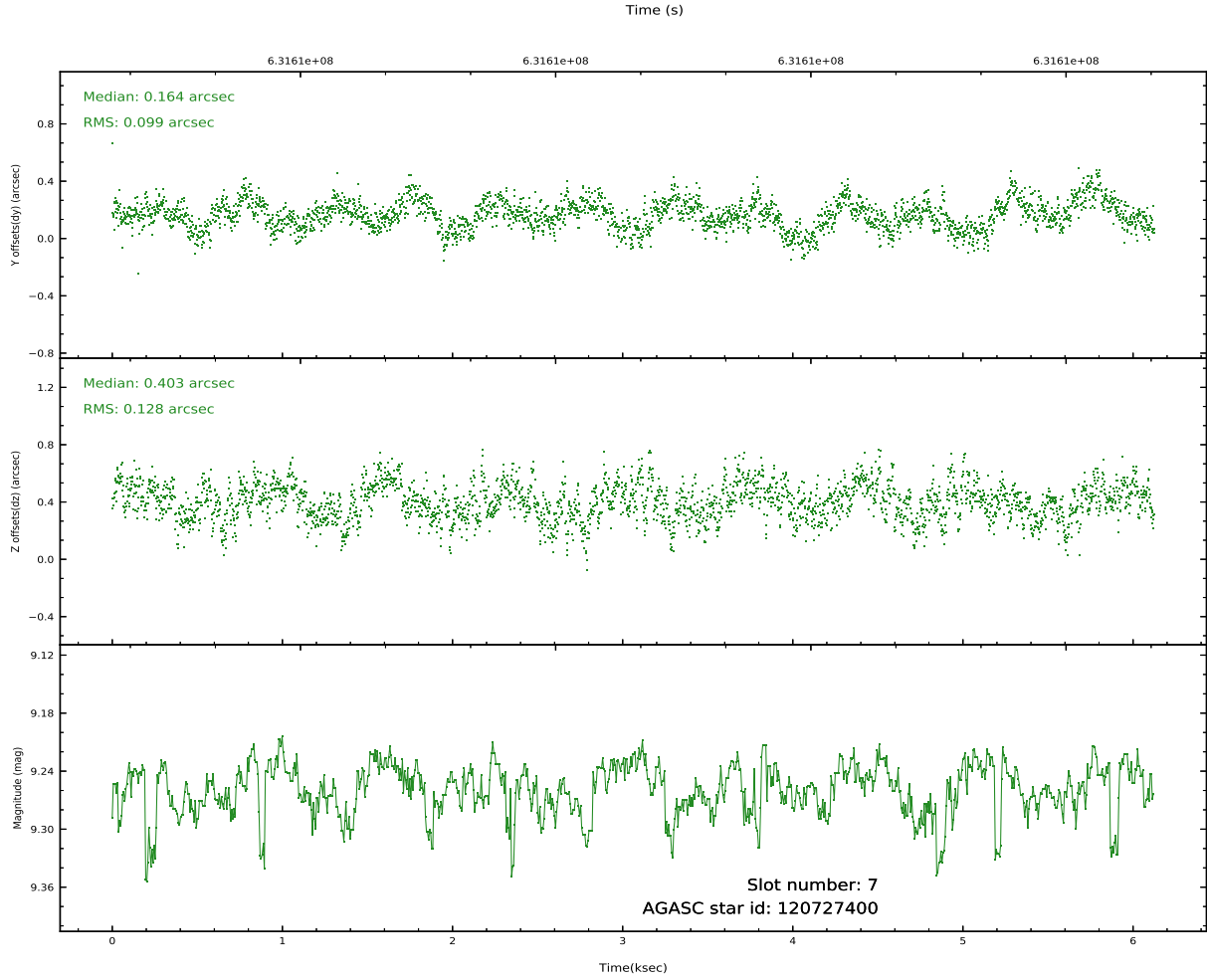
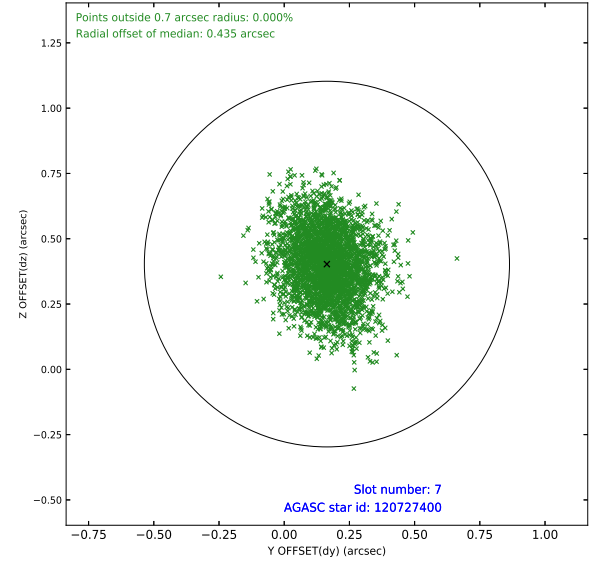
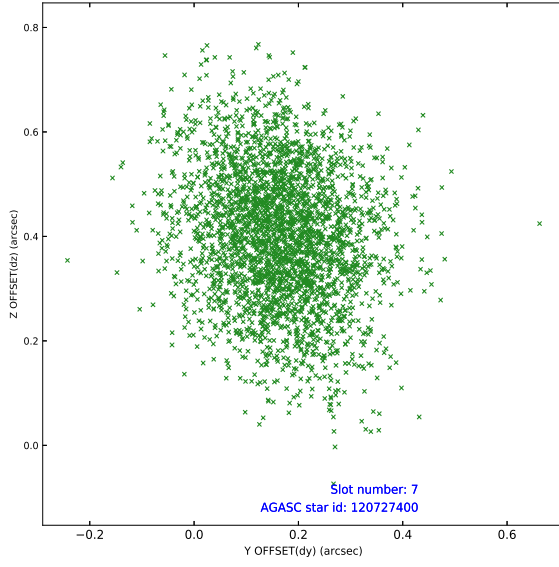


## 2.4.4 Slot 6



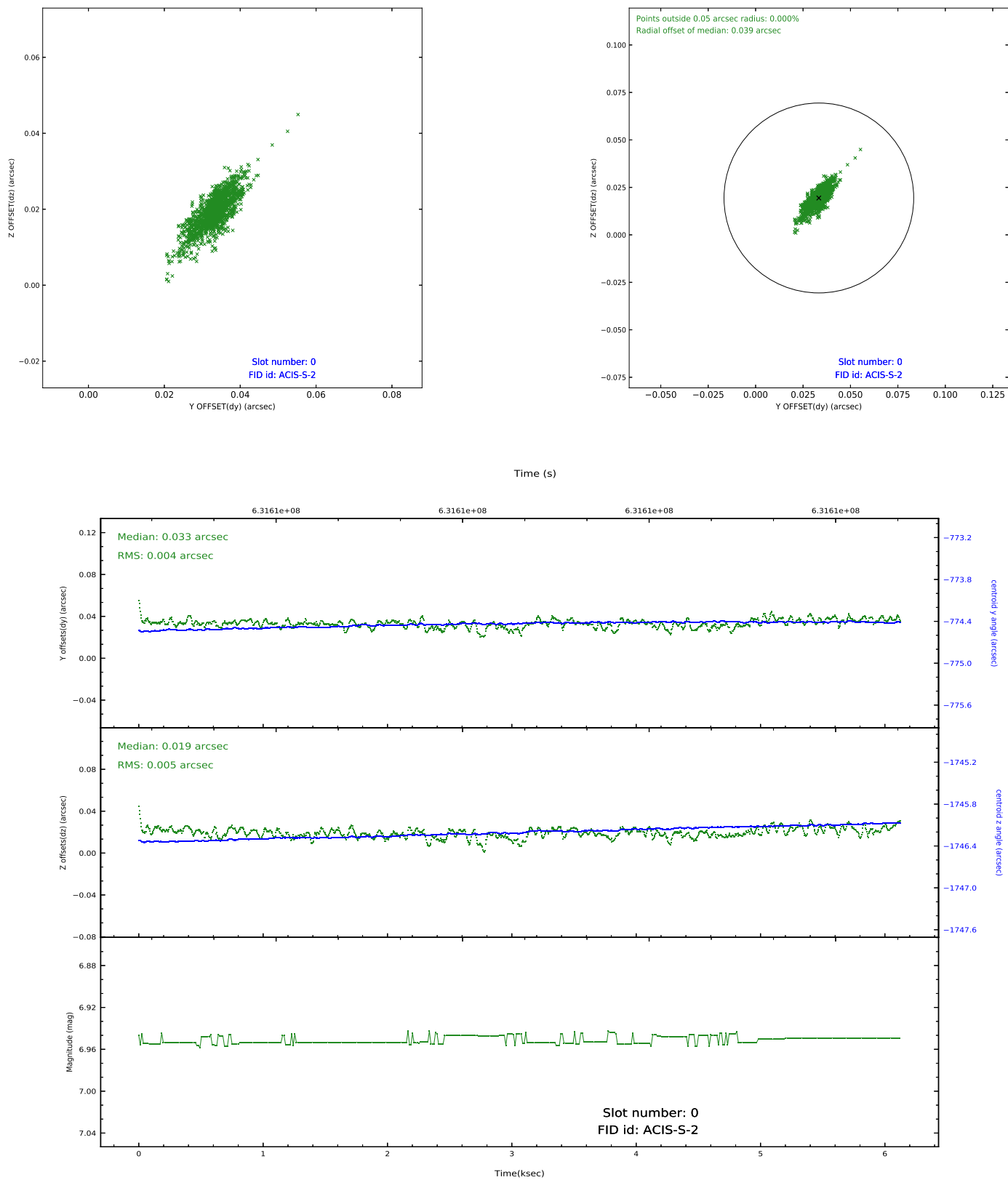


## 2.4.5 Slot 7

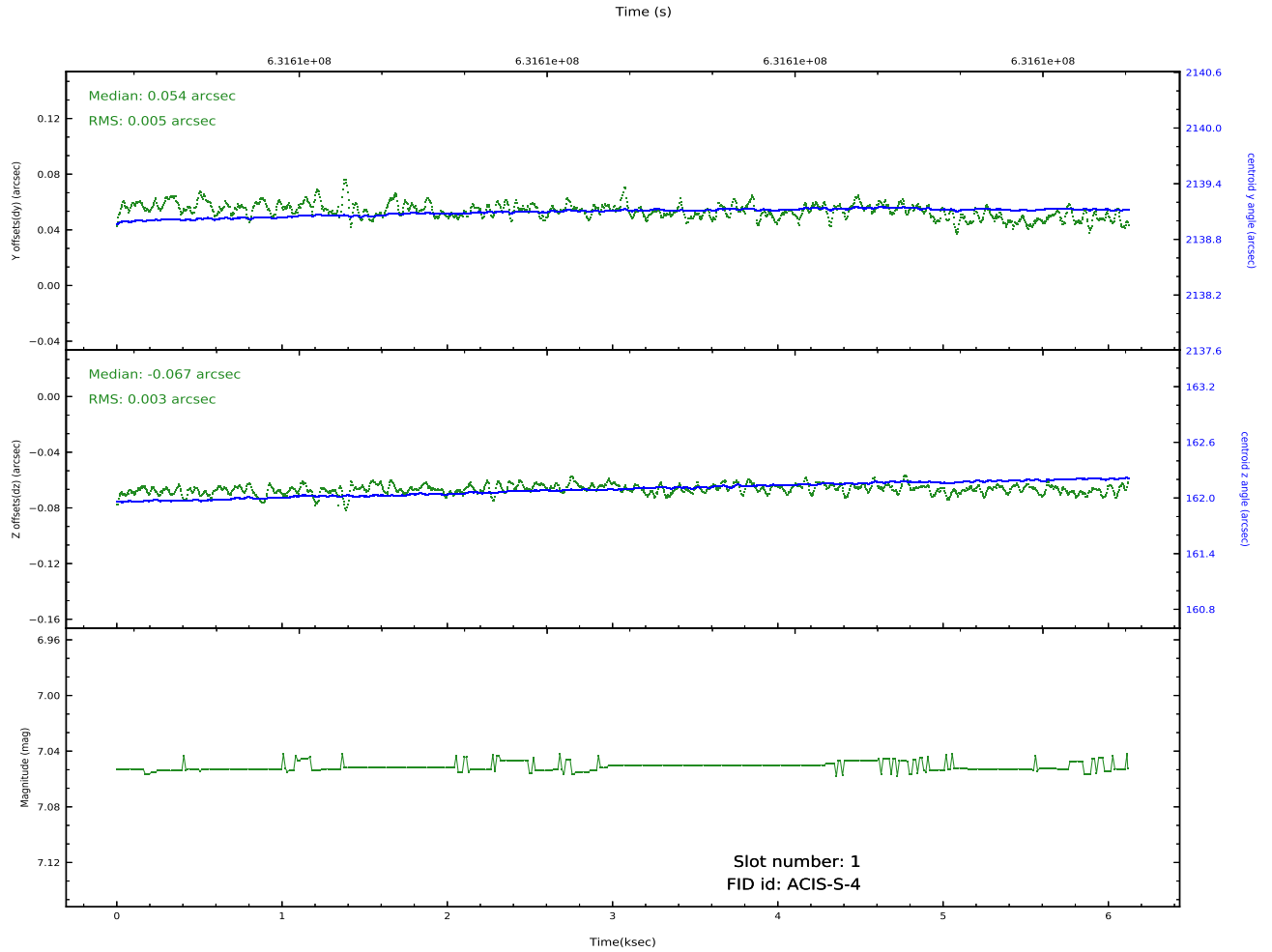
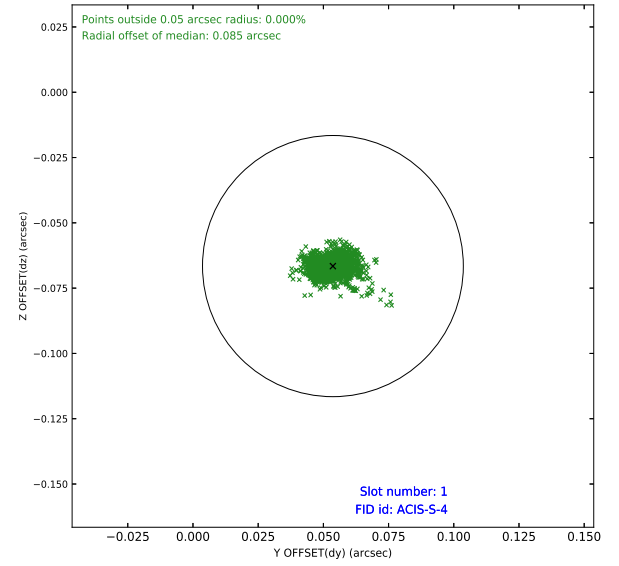
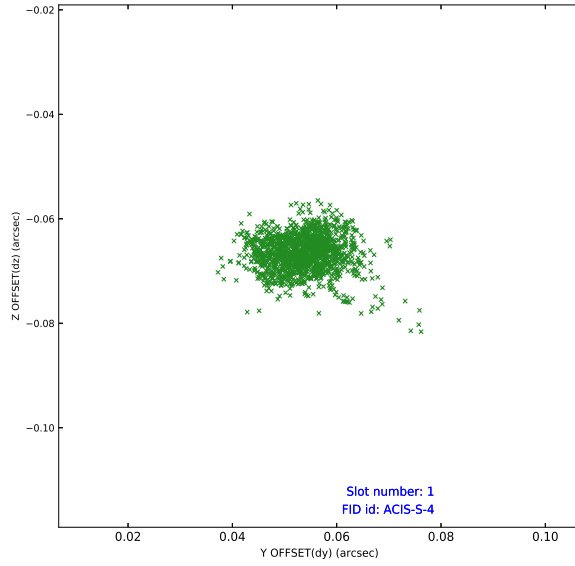


## 2.5 FID Slots

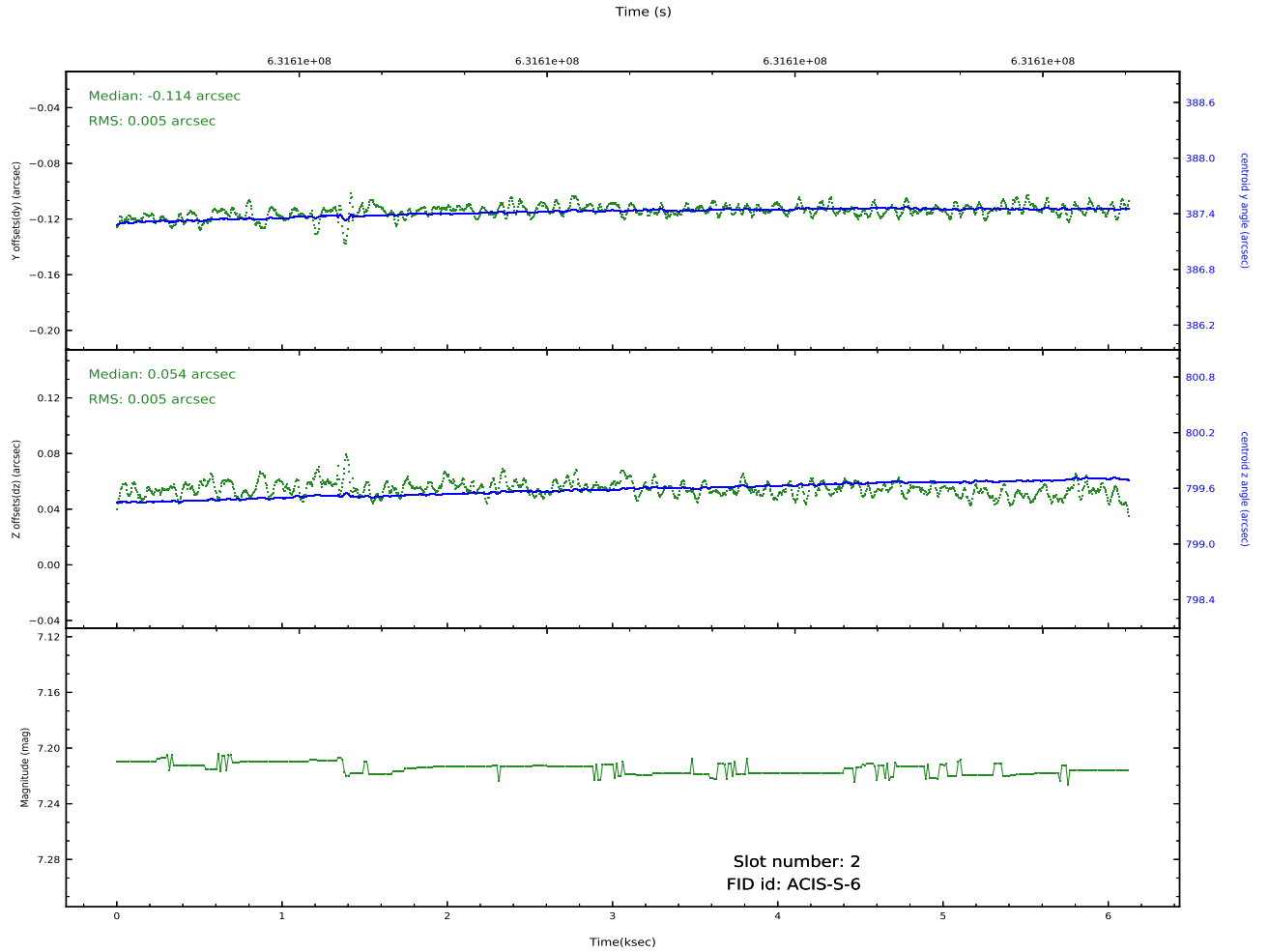
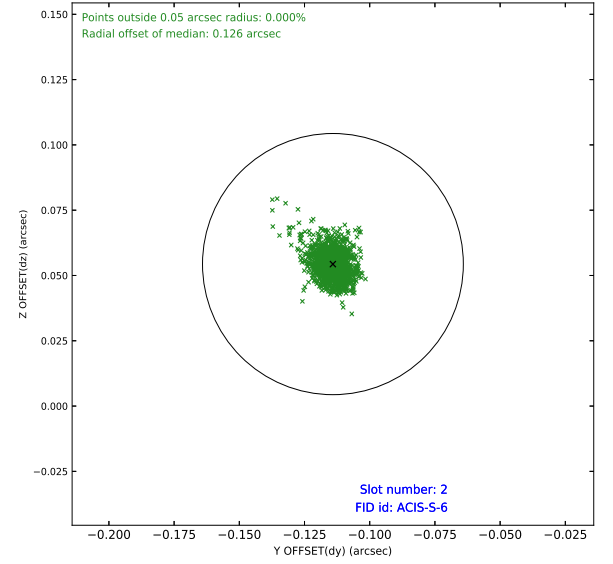
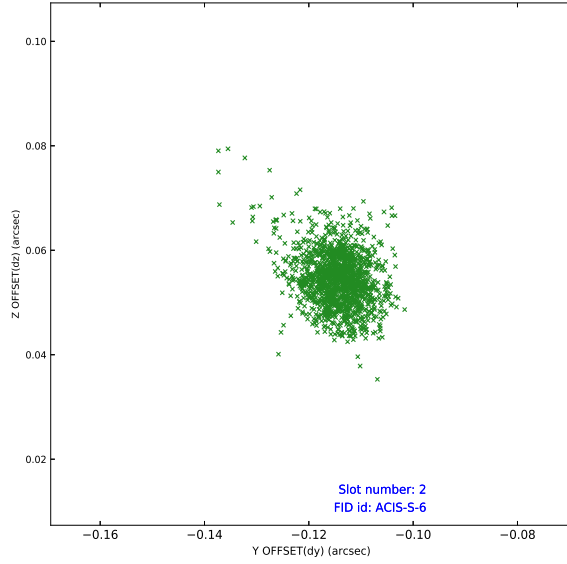
### 2.5.1 Slot 0



## 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)	2020.10.26
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	6.0698000468016

### A.2 Comments