

# V&V Reference Report

## L2 ASCDS Version : 10.9.2

Observation 20896 - L2 Version 2  
Chandra X-Ray Center

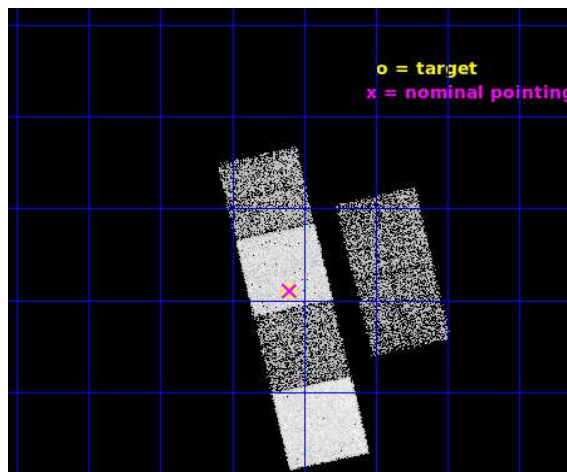
L2 Processing Date : Oct 25 2020

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# 1 Front

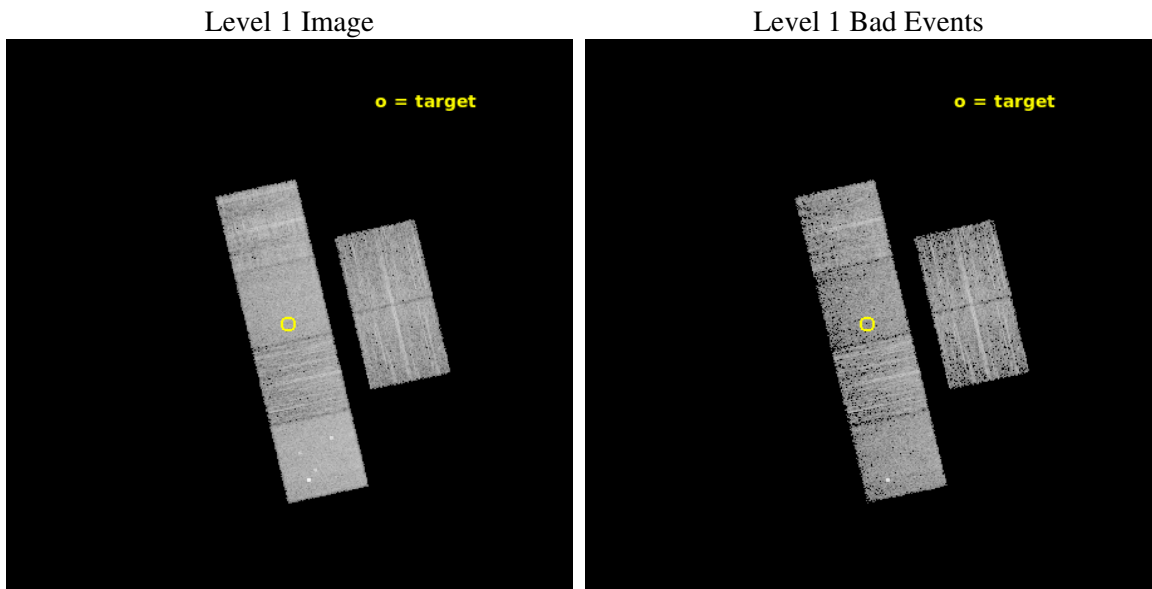
seq_num	703645	Sequence number
obs_id	20896	Observation id
title	Can Radio Emission From Luminous Obscured AGN Blow Kpc-scale Ionized Outflows?	Proposal title
observer	Andy Goulding	Principal investigator
object	SDSS J115606.14-021901.0	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	179.025833	Observer's specified target RA [deg]
dec_targ	-2.316972	Observer's specified target Dec [deg]
ra_nom	179.02448602411	Nominal RA [deg]
dec_nom	-2.315702432366	Nominal Dec [deg]
roll_nom	257.14718148896	Nominal Roll [deg]
revision	2	Processing version of data
ontime	4952.4185473919	Sum of GTIs [s]
livetime	4889.7080417564	Livetime [s]
ontime2	4952.4595873356	Sum of GTIs [s]
ontime3	4949.0544070005	Sum of GTIs [s]
ontime5	4952.377507329	Sum of GTIs [s]
ontime6	4942.6134161949	Sum of GTIs [s]
ontime7	4952.4185473919	Sum of GTIs [s]
ontime8	4952.2543873787	Sum of GTIs [s]
l2events	61869	Number of level 2 events



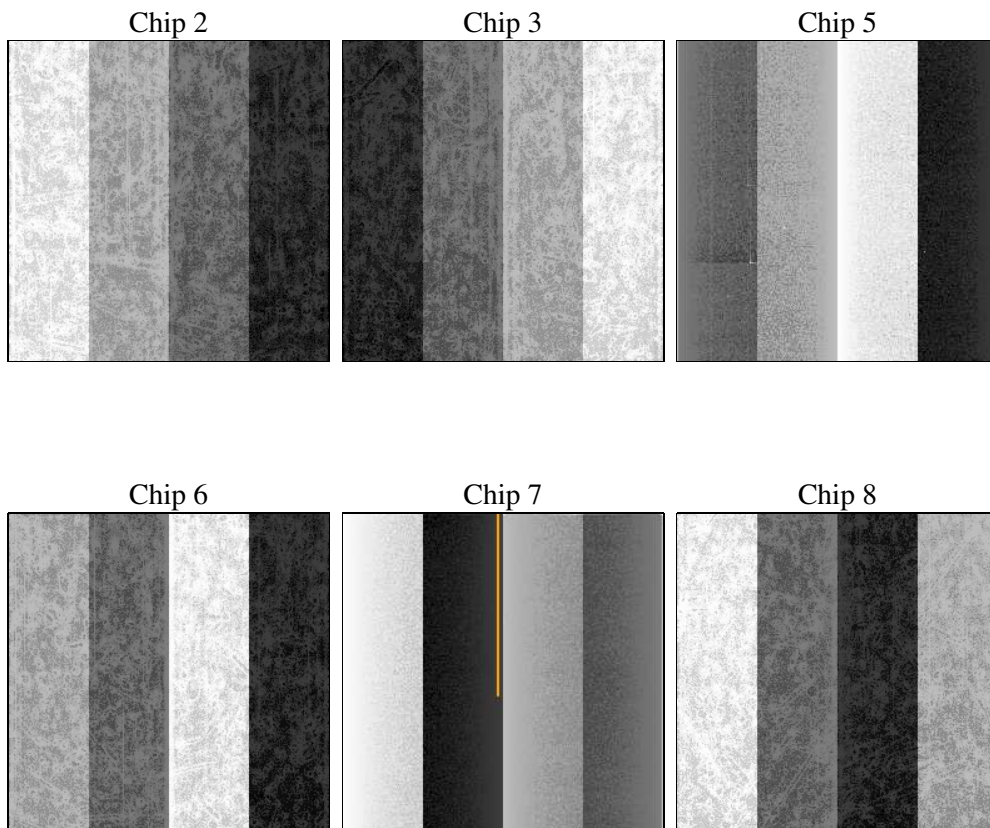
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	4952.4185473919	Sum of GTIs [s]
caldbver	4.9.3	&#160	ontime2	4952.4595873356	Sum of GTIs [s]
date	2020-10-25T12:35:52	Date and time of file creation	ontime3	4949.0544070005	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	4952.377507329	Sum of GTIs [s]
			ontime6	4942.6134161949	Sum of GTIs [s]
			ontime7	4952.4185473919	Sum of GTIs [s]
			ontime8	4952.2543873787	Sum of GTIs [s]
			l1events	269033	Number of level 1 events

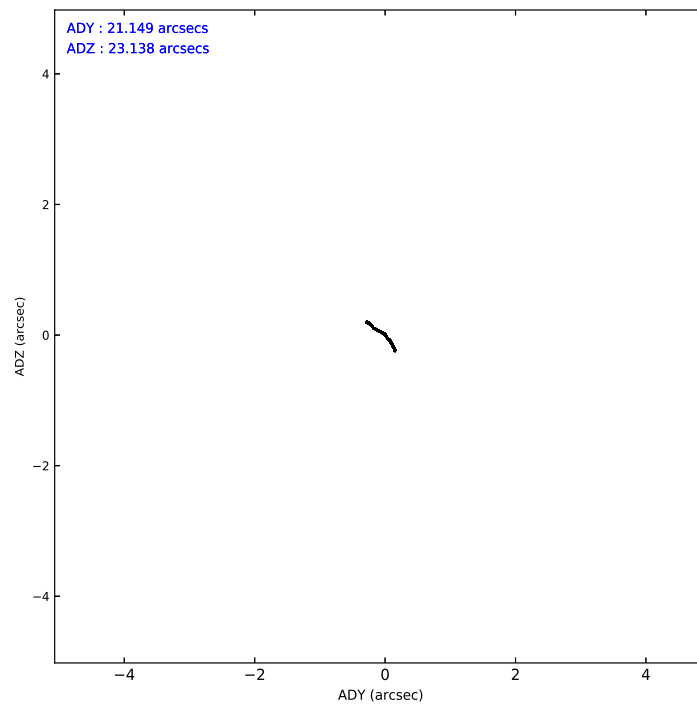
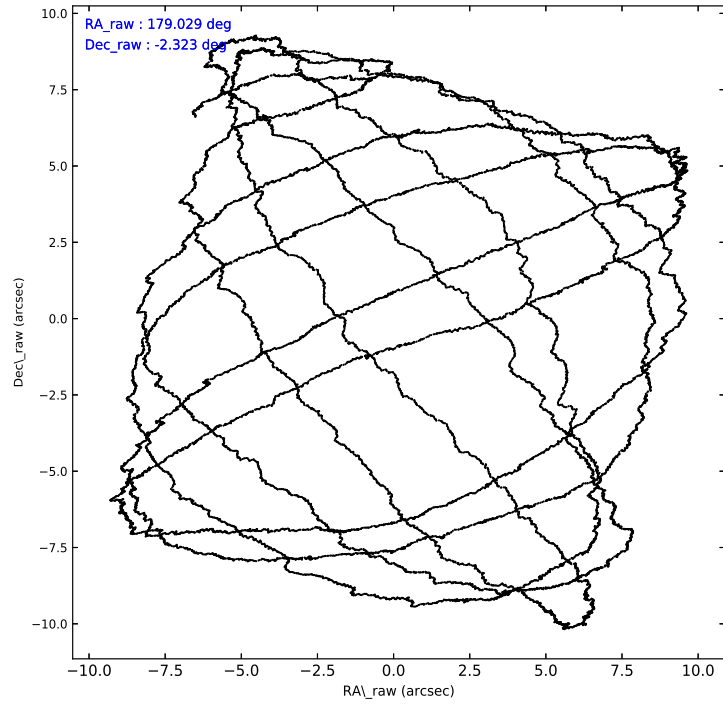
### 2.1.4 Events

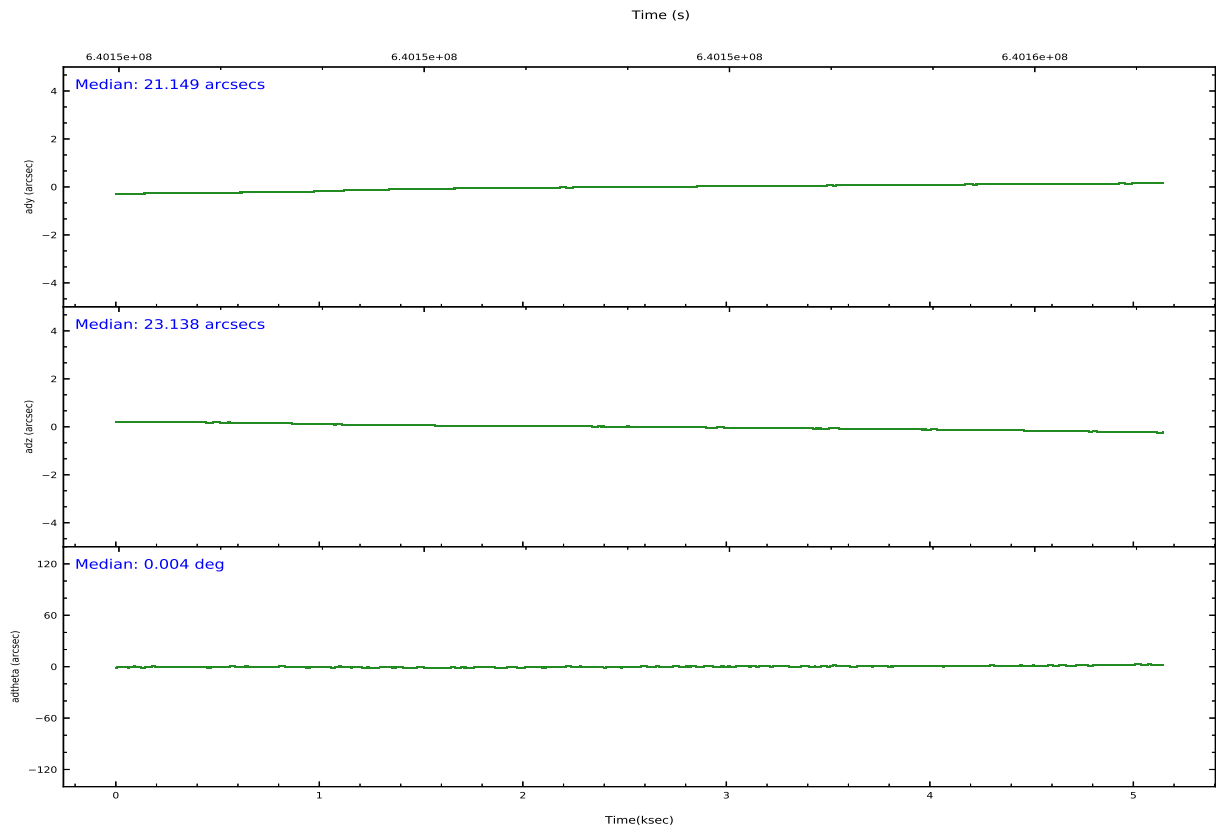
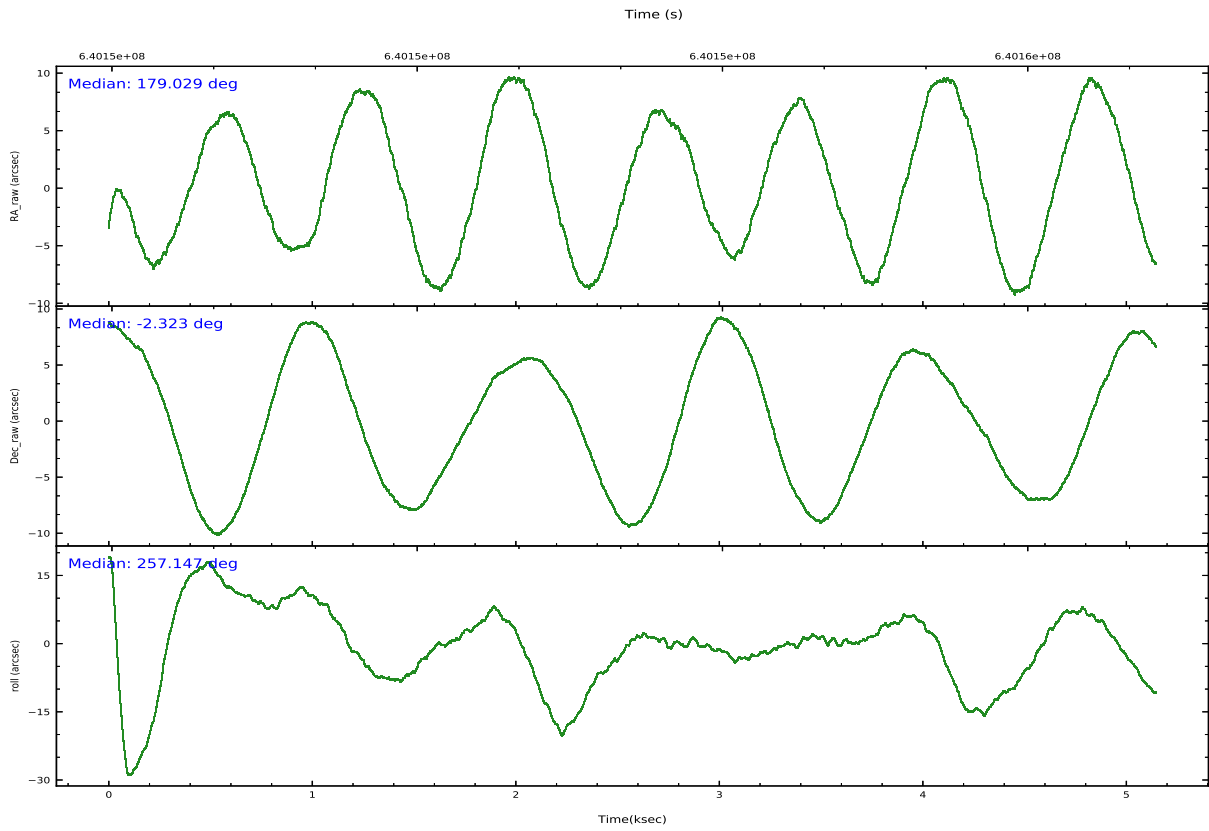
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	36996	36438	60538	37771	47712	49578	grade 0 events	1453	1473	2615	1466	1803	4070
rejected events	32891	32473	31566	33559	26958	35312		3%	4%	4%	3%	3%	8%
rejected %	88%	89%	52%	88%	56%	71%	grade 1 events	26	26	139	17	81	46
								0%	0%	0%	0%	0%	0%
							grade 2 events	1047	872	9253	955	4452	3475
								2%	2%	15%	2%	9%	7%
							grade 3 events	395	403	907	409	1637	1474
								1%	1%	1%	1%	3%	2%
							grade 4 events	405	382	941	436	1607	1381
								1%	1%	1%	1%	3%	2%
							grade 5 events	1503	1781	4587	1751	4763	2692
								4%	4%	7%	4%	9%	5%
							grade 6 events	811	841	15293	952	11277	3920
								2%	2%	25%	2%	23%	7%
							grade 7 events	31356	30660	26803	31785	22092	32520
								84%	84%	44%	84%	46%	65%

## 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	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	179.021154	179.02448602411	CCD I2 on	O1	Y
[deg] Pointing Dec	-2.297108	-2.315702432366	CCD I3 on	O2	Y
[deg] Pointing Roll	256.999815	257.14718148896	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	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	Y	Y
[s] Observation start time (MET)	640151632.184000	640150357.48226	CCD S5 on	N	N
Observation start date	2018-04-15T03:52:43	2018-04-15T03:32:37	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	640156632.184000	640157545.80768	On-chip summing requested	N	N
Observation end date	2018-04-15T05:16:03	2018-04-15T05:32:25	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect





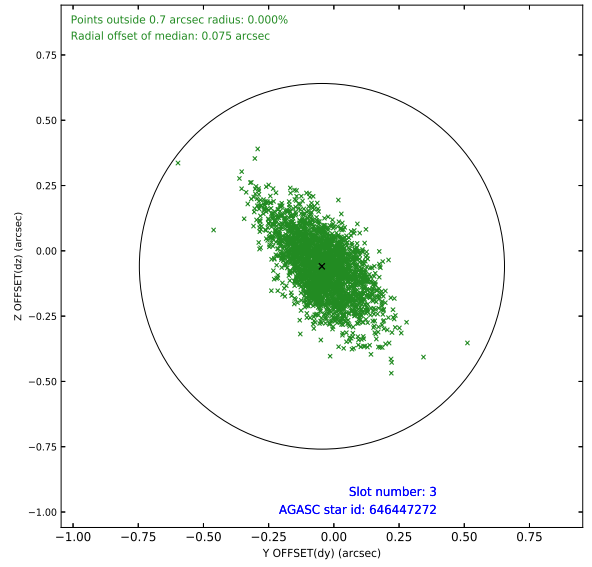
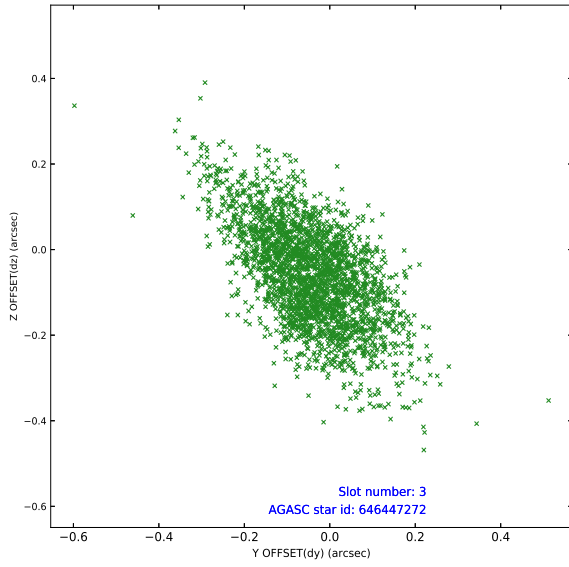
### Slot Statistics

slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_x
0	FID		ACIS-S-2	7.02	1256	1.000	0.136	-0.116	0.012	0.022	0.000000	0.000000	-774.37	-1744
1	FID		ACIS-S-4	7.12	1256	1.000	0.070	-0.034	0.010	0.025	0.000000	0.000000	2138.56	162
2	FID		ACIS-S-5	7.13	1256	1.000	-0.237	0.160	0.009	0.016	0.000000	0.000000	-1825.82	158
3	GUIDE	used	646447272	8.23	2512	1.000	-0.046	-0.059	0.158	0.286	178.727936	-2.375175	512.32	-963
4	GUIDE	used	646448760	8.38	2511	1.000	0.105	0.179	0.137	0.250	178.661013	-1.698317	-1807.62	-1748
5	GUIDE	used	646846120	9.90	2481	1.000	-0.152	-0.177	0.286	0.485	179.216286	-2.576707	823.09	909
6	GUIDE	used	646846368	9.34	2509	1.000	-0.066	-0.075	0.246	0.390	179.171602	-2.778953	1570.39	917
7	GUIDE	used	646447824	9.47	2503	1.000	0.148	0.148	0.239	0.370	178.405504	-2.010198	-503.84	-2389

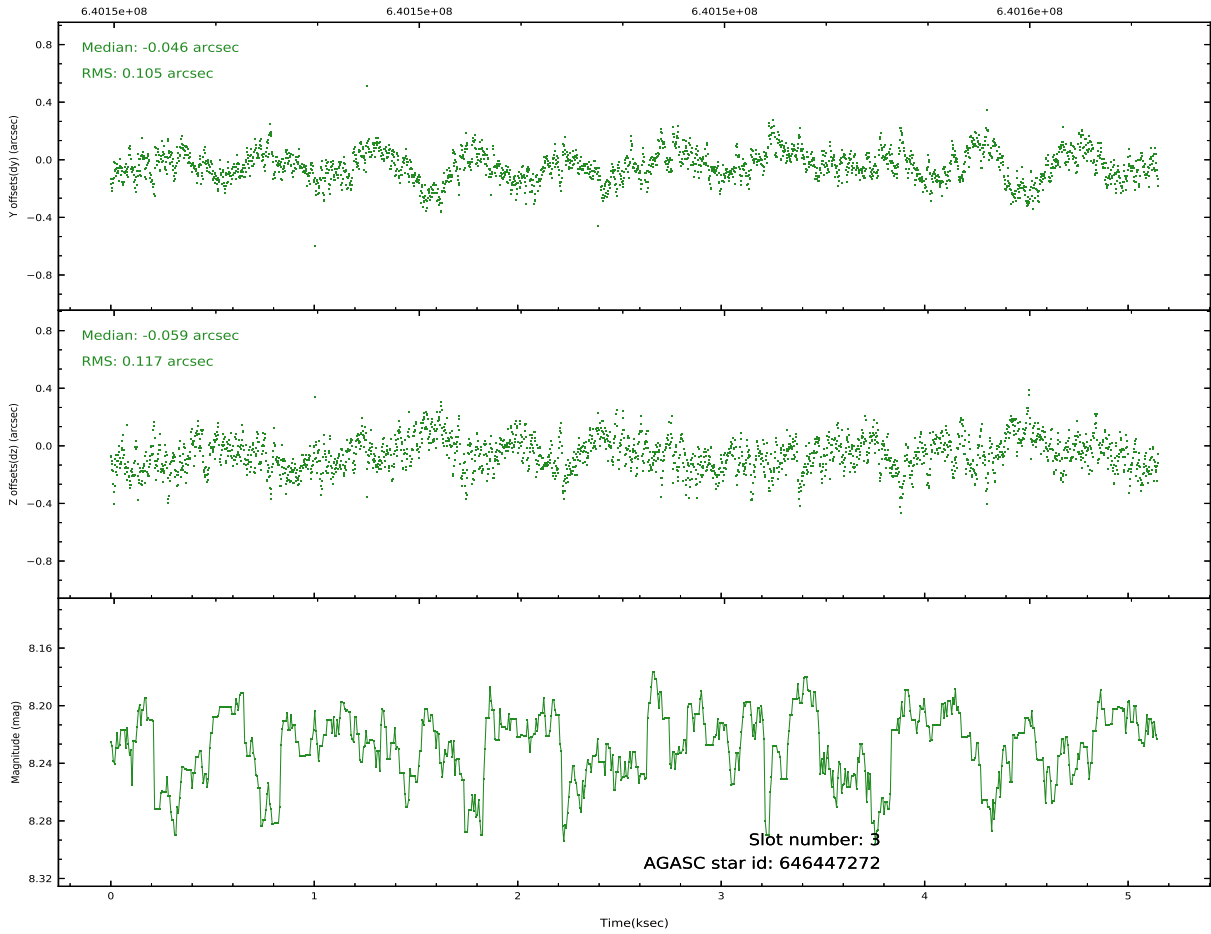
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## 2.4 Star Slots

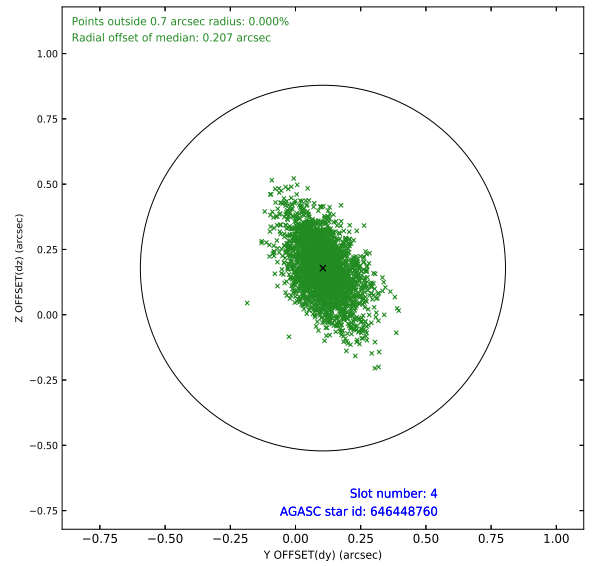
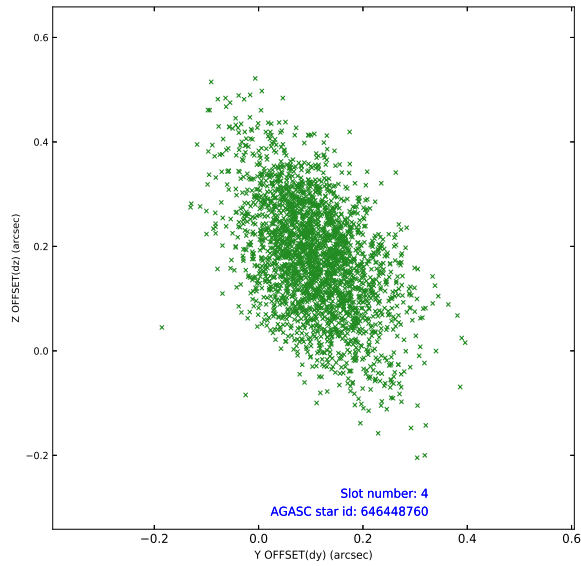
### 2.4.1 Slot 3



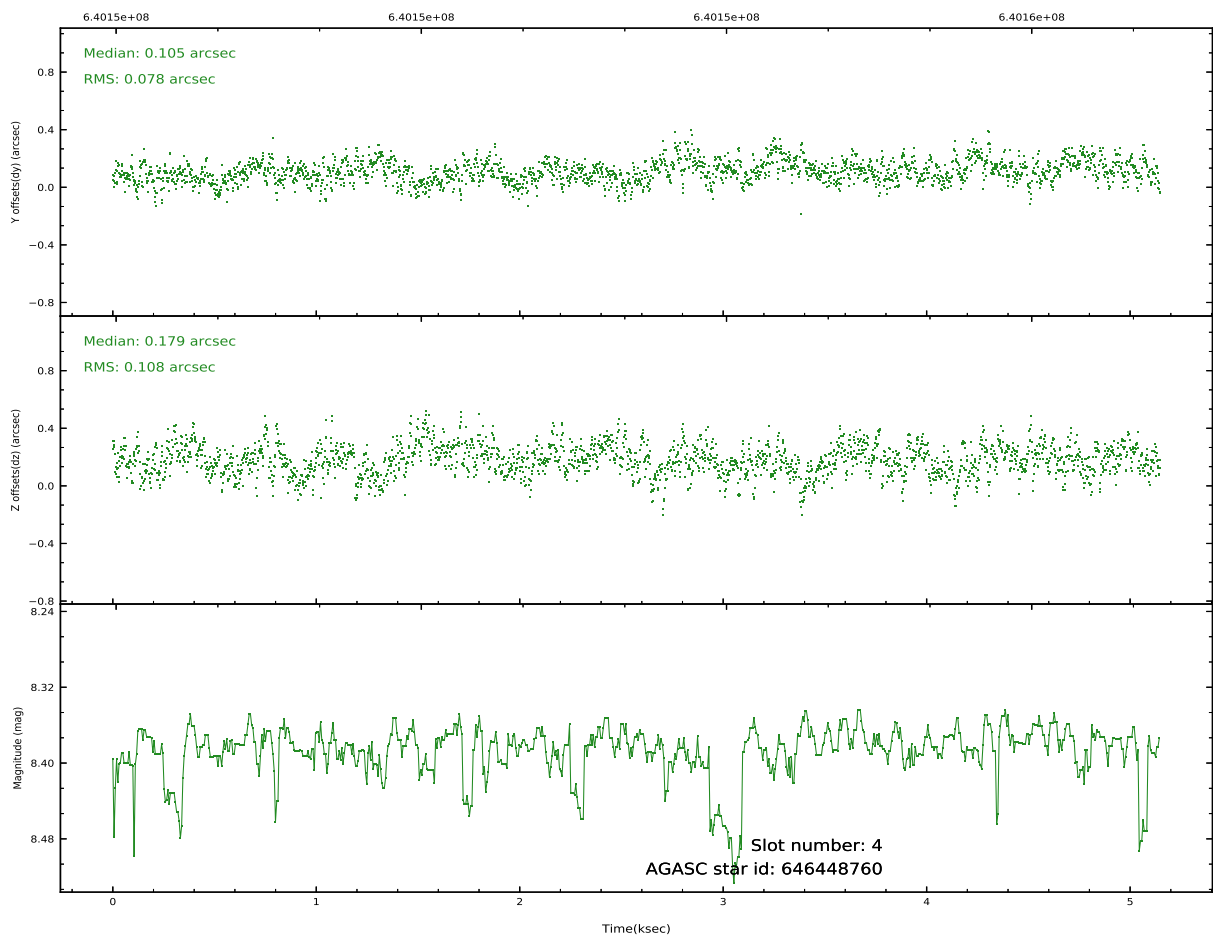
Time (s)



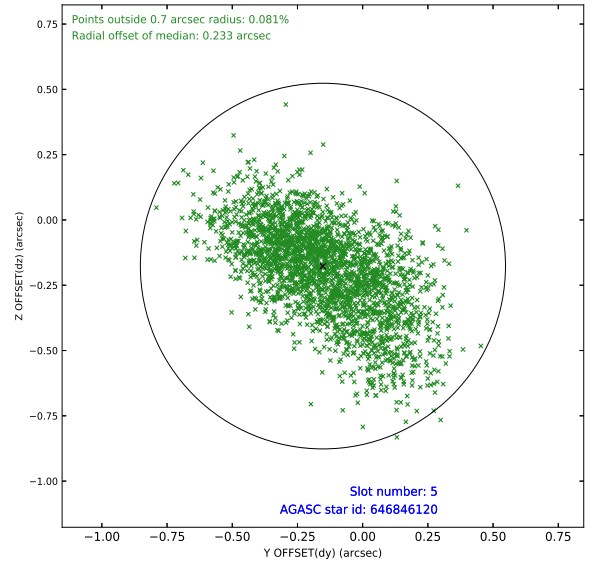
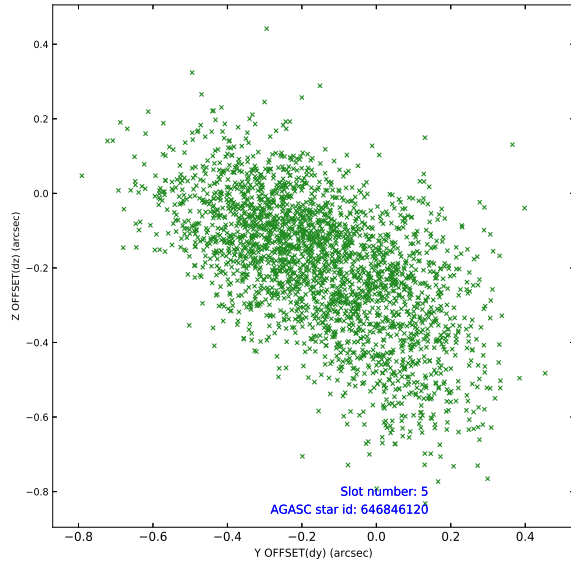
## 2.4.2 Slot 4



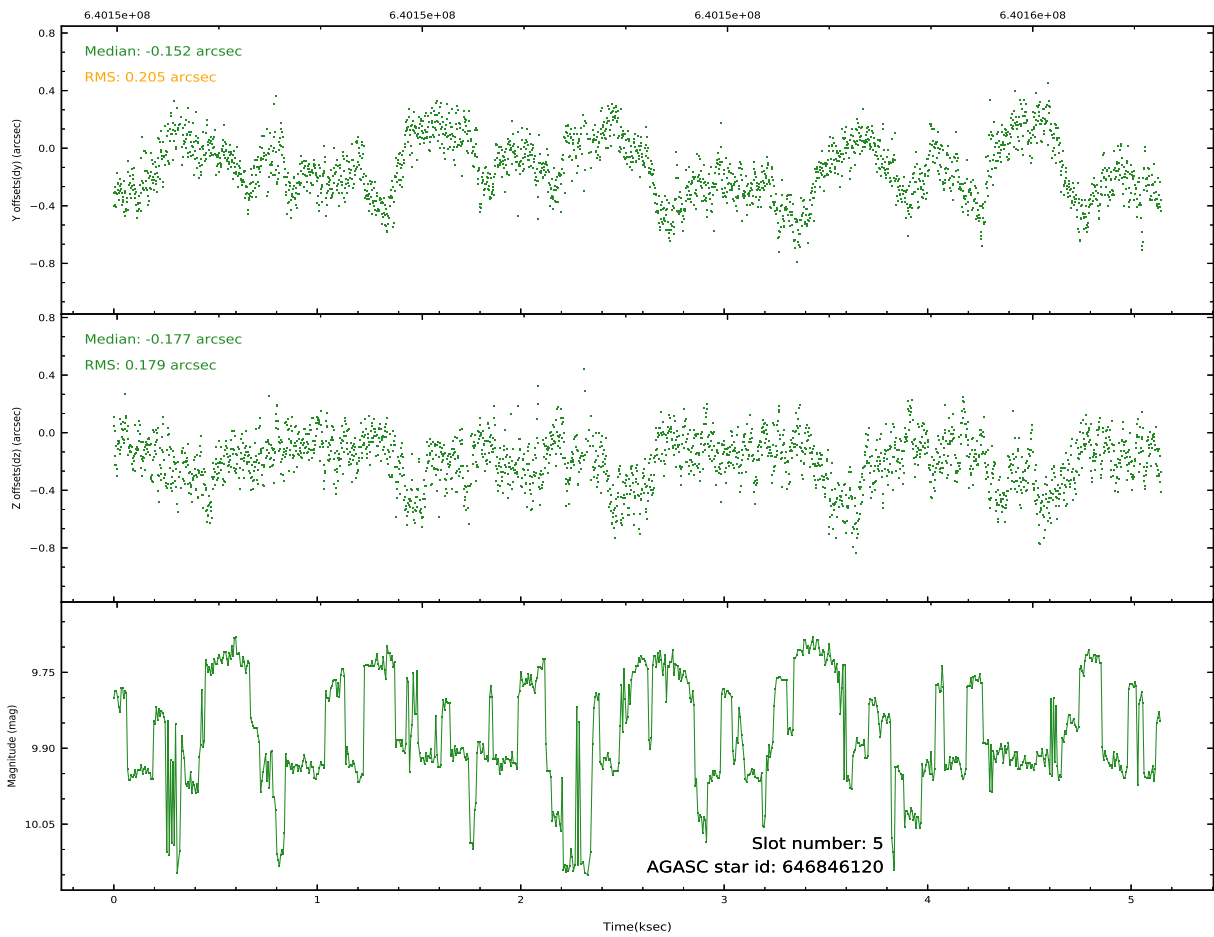
Time (s)



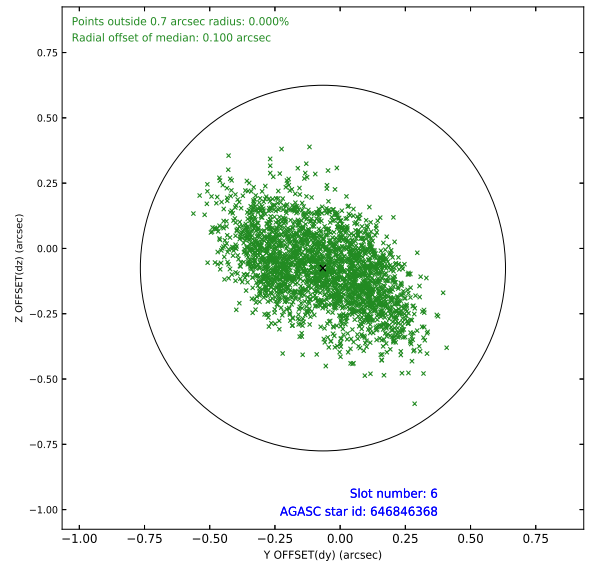
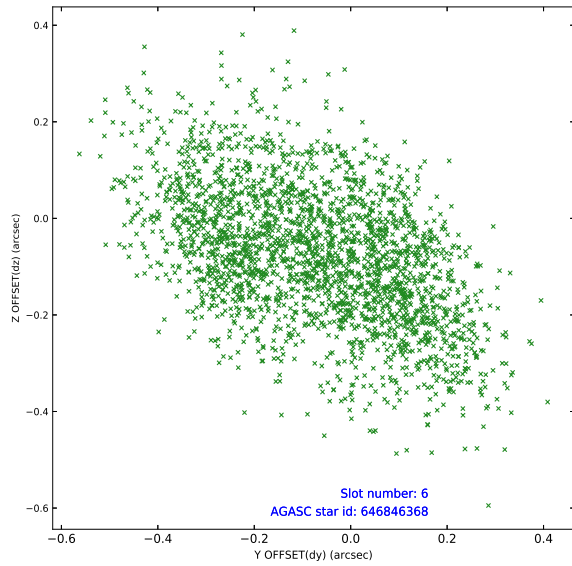
### 2.4.3 Slot 5



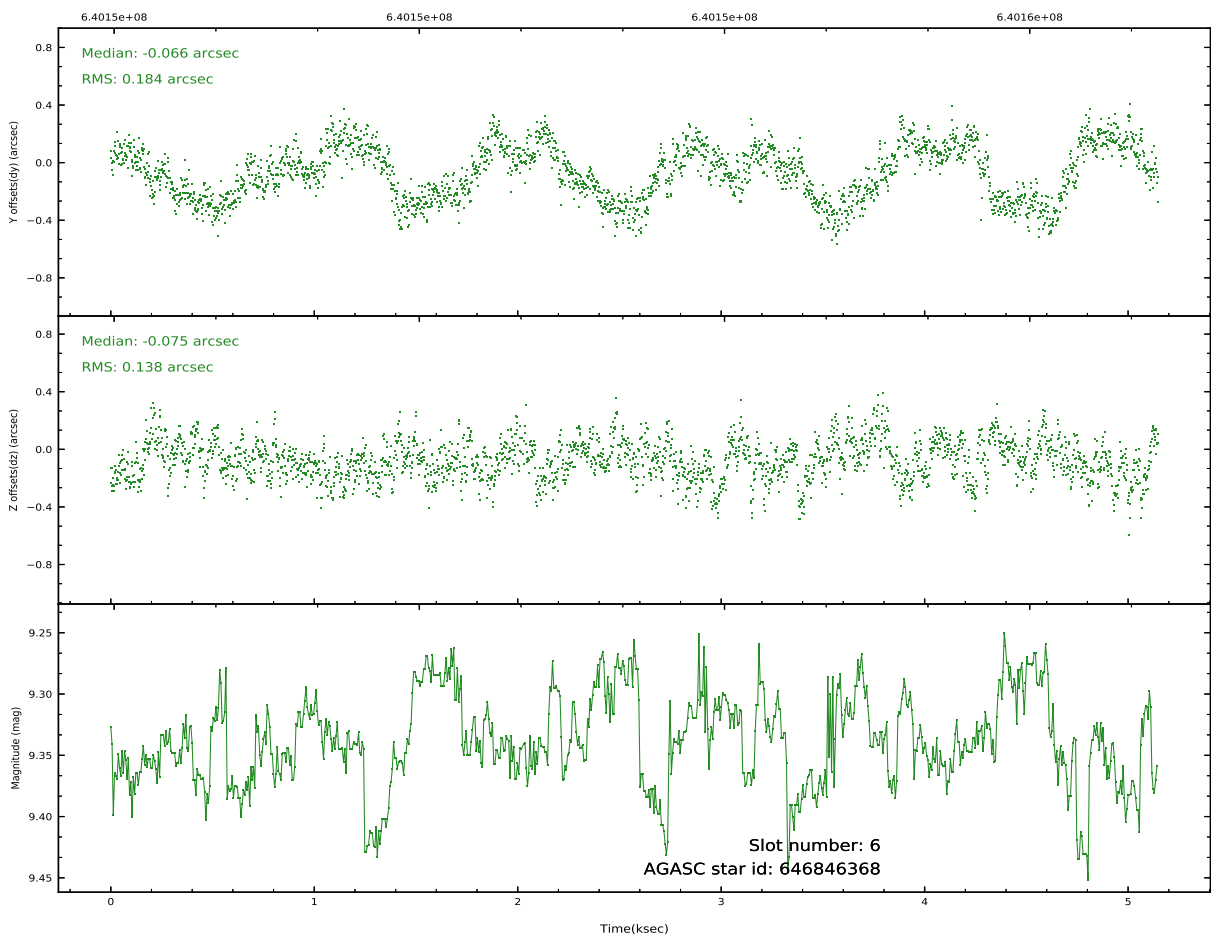
Time (s)



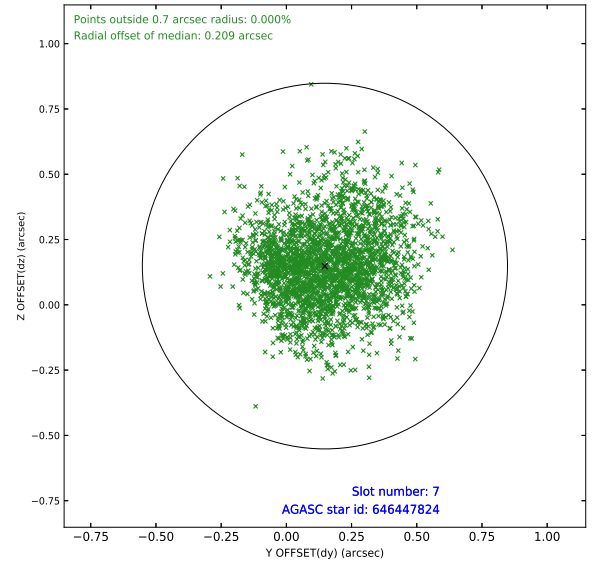
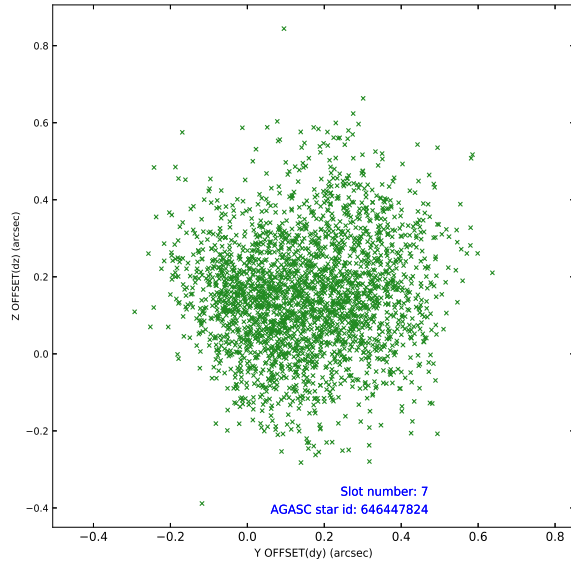
## 2.4.4 Slot 6



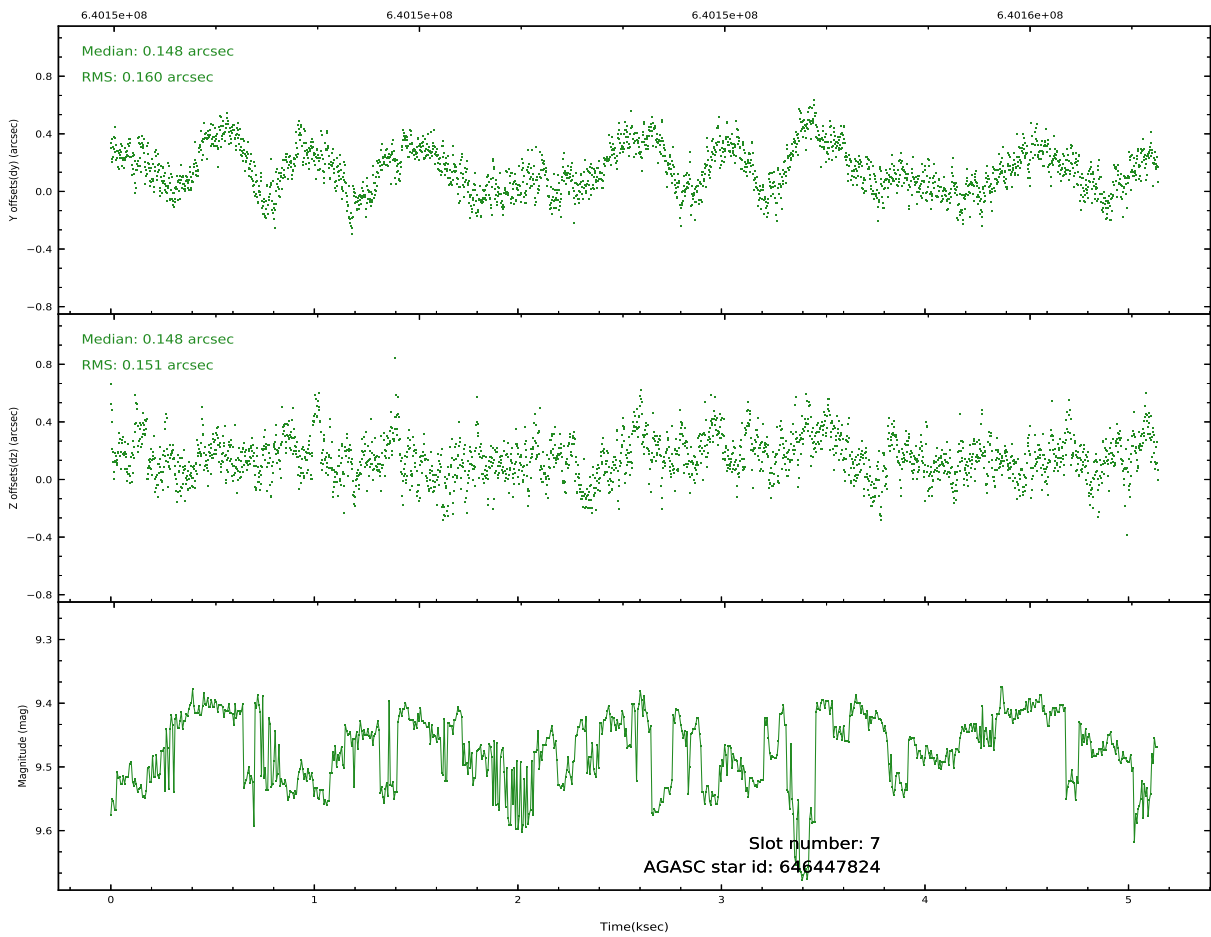
Time (s)



## 2.4.5 Slot 7

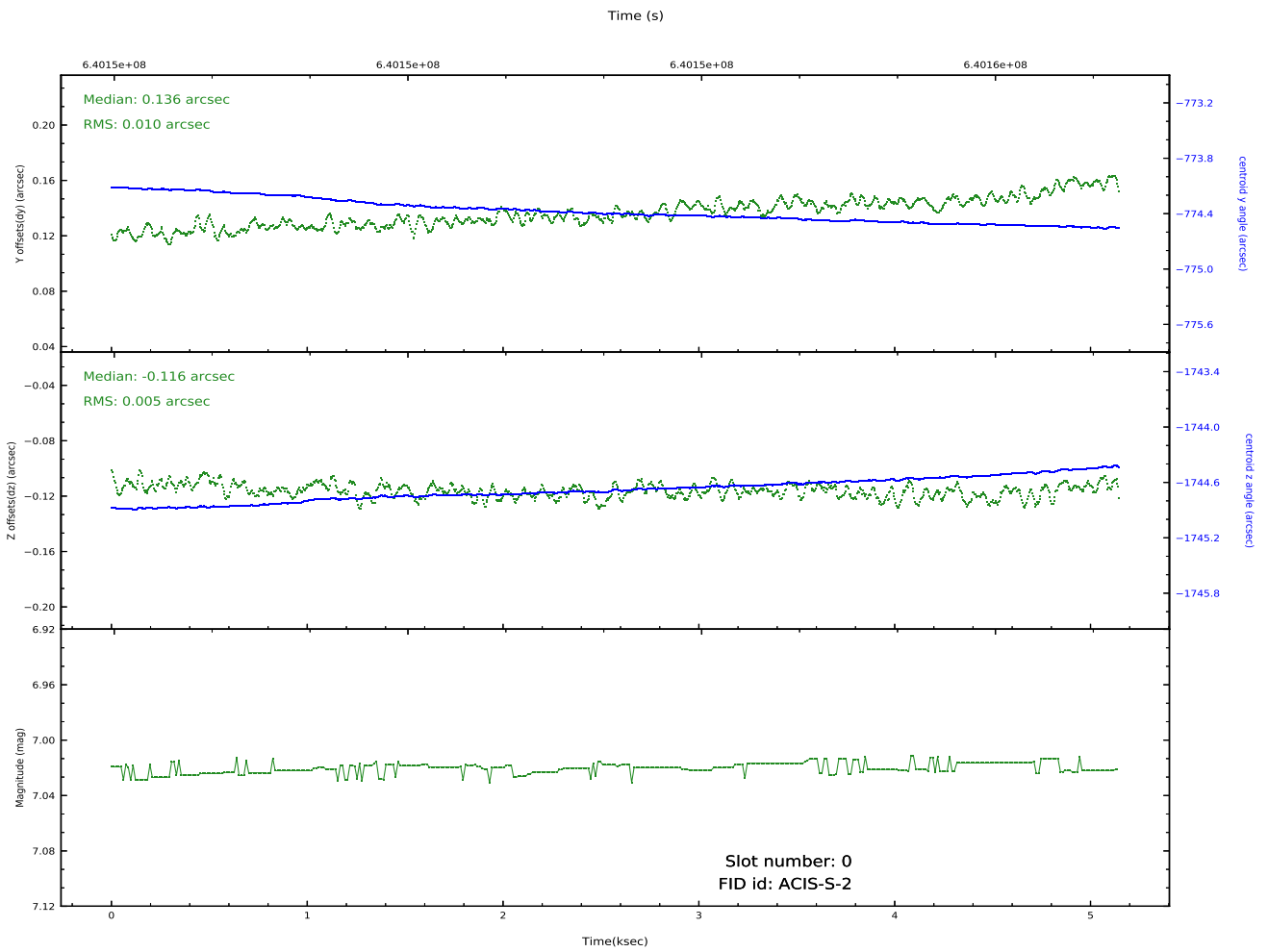
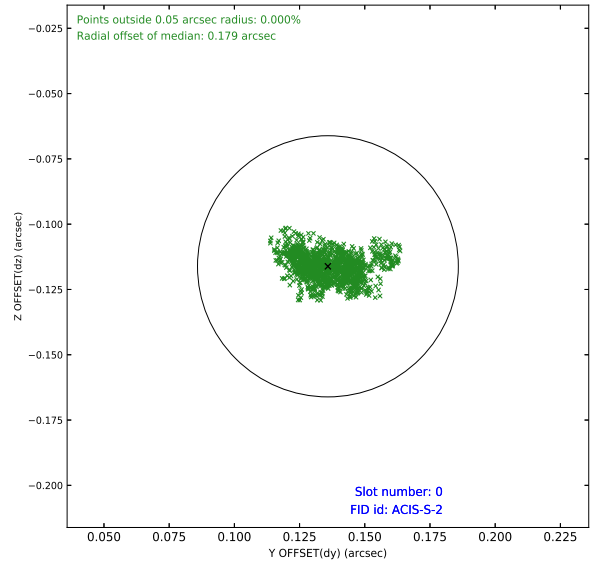
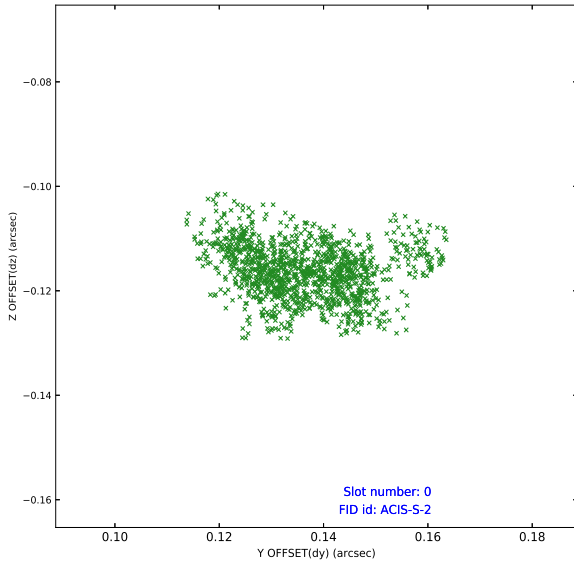


Time (s)

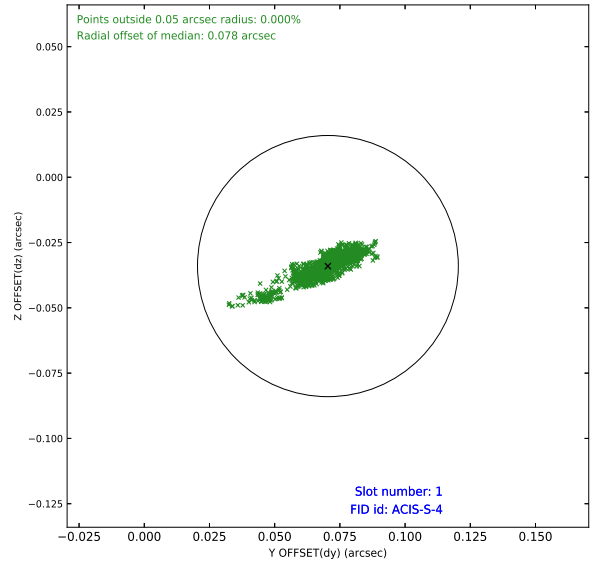
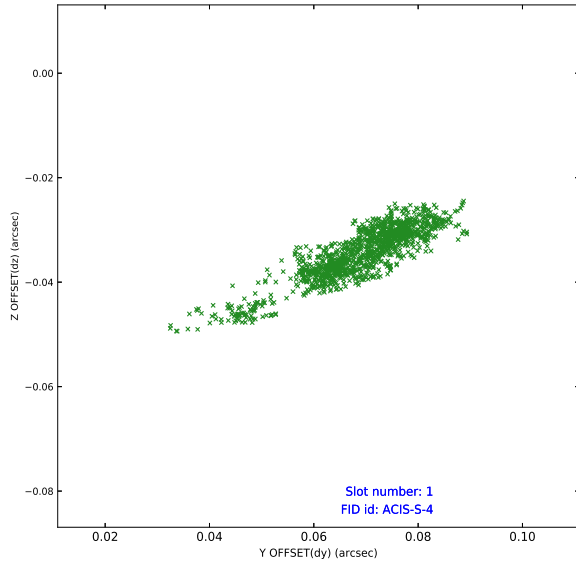


## 2.5 FID Slots

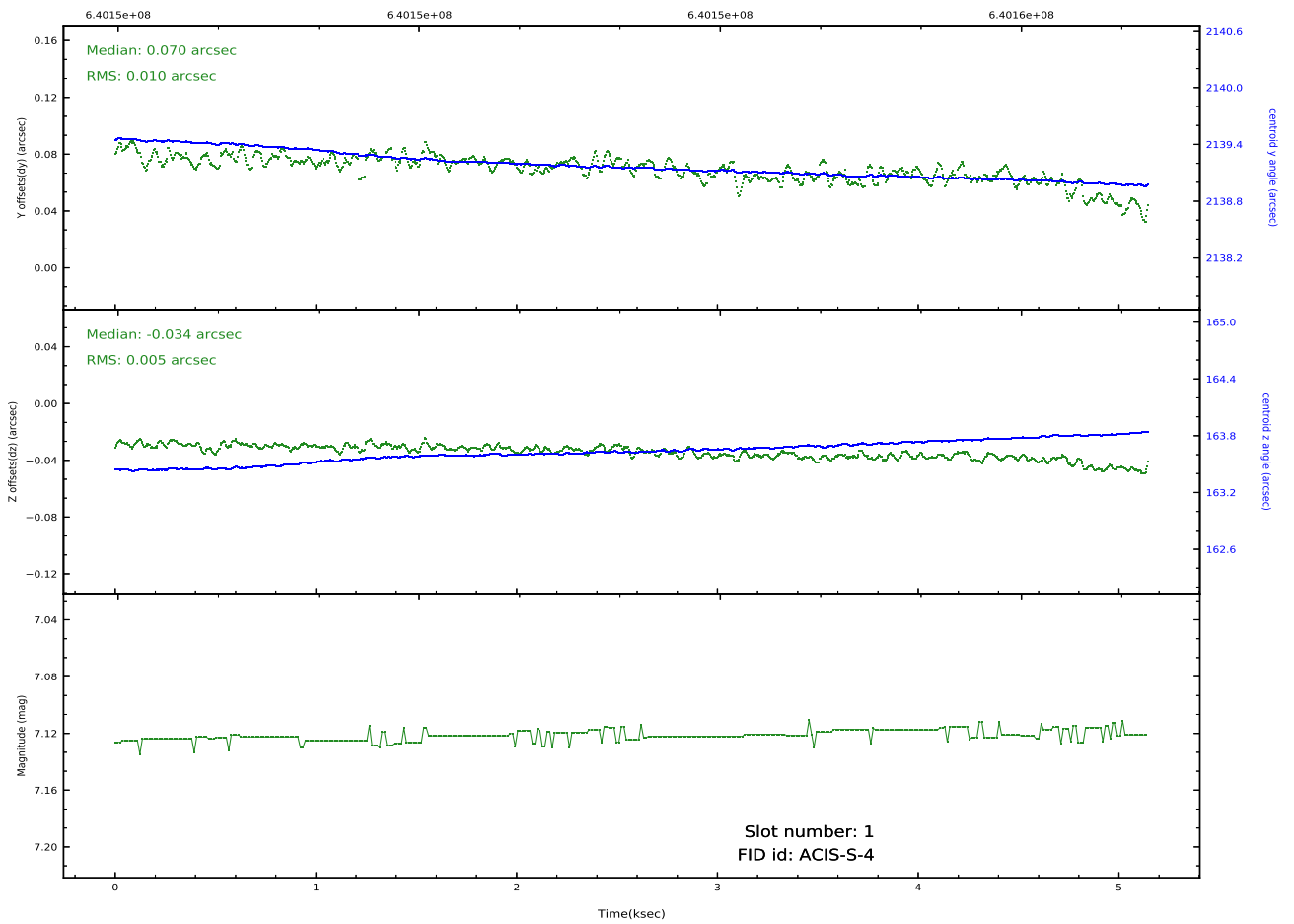
### 2.5.1 Slot 0



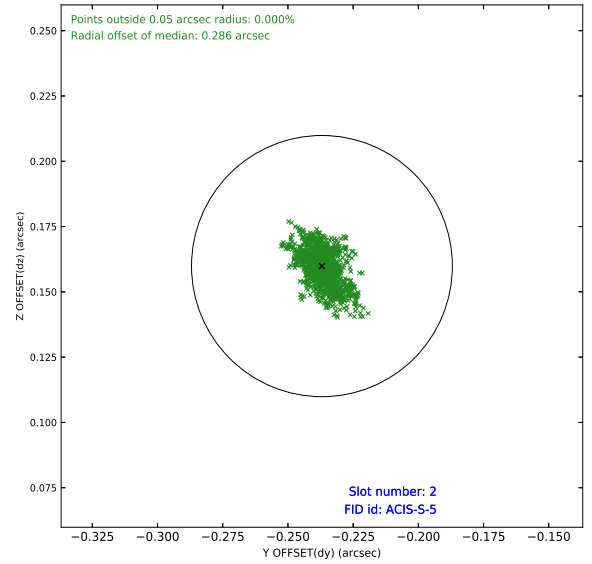
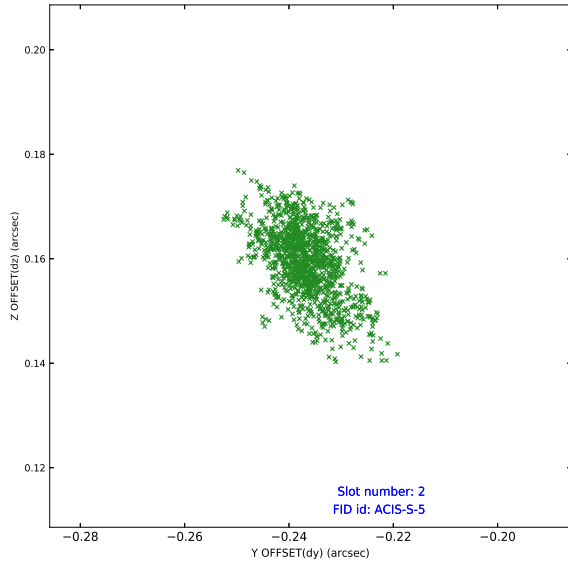
## 2.5.2 Slot 1



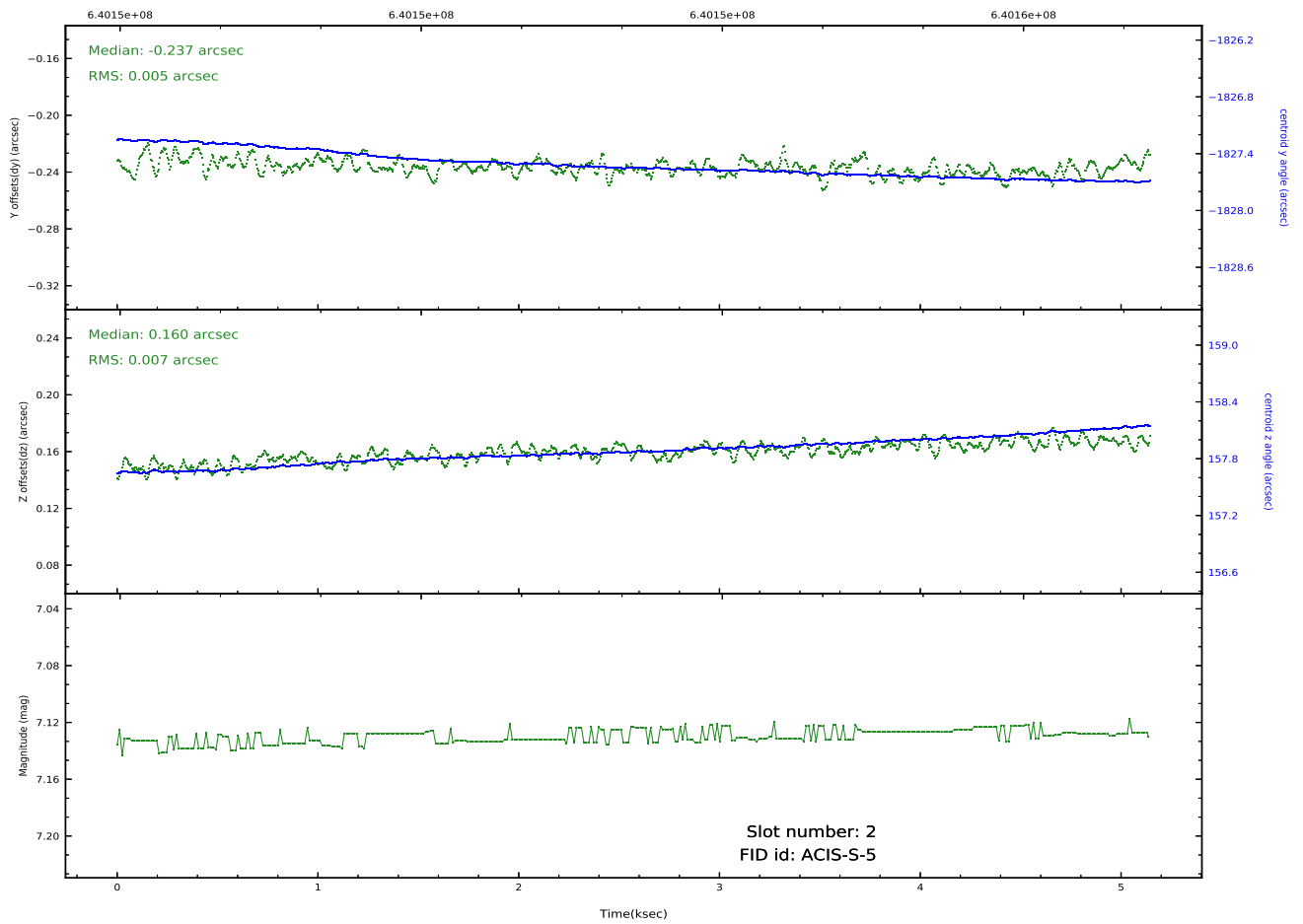
Time (s)



### 2.5.3 Slot 2



Time (s)



# A Summary

## A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.10.29
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.9524185442924

## A.2 Comments

Joint proposal with NRAO.