

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 4643 - L2 Version 5  
Chandra X-Ray Center

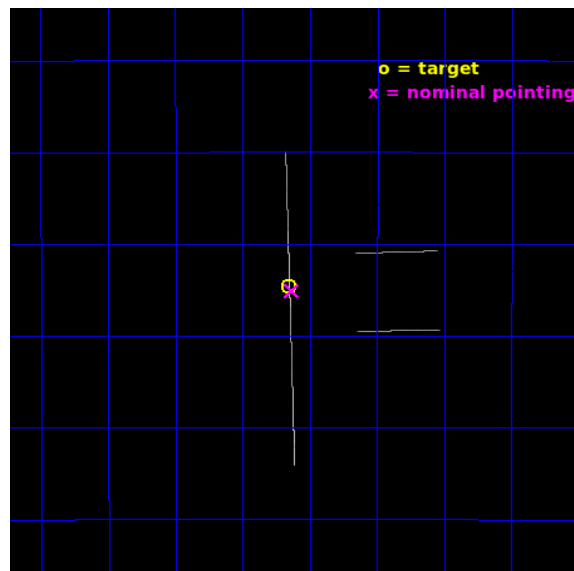
L2 Processing Date : Sep 28 2020

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# 1 Front

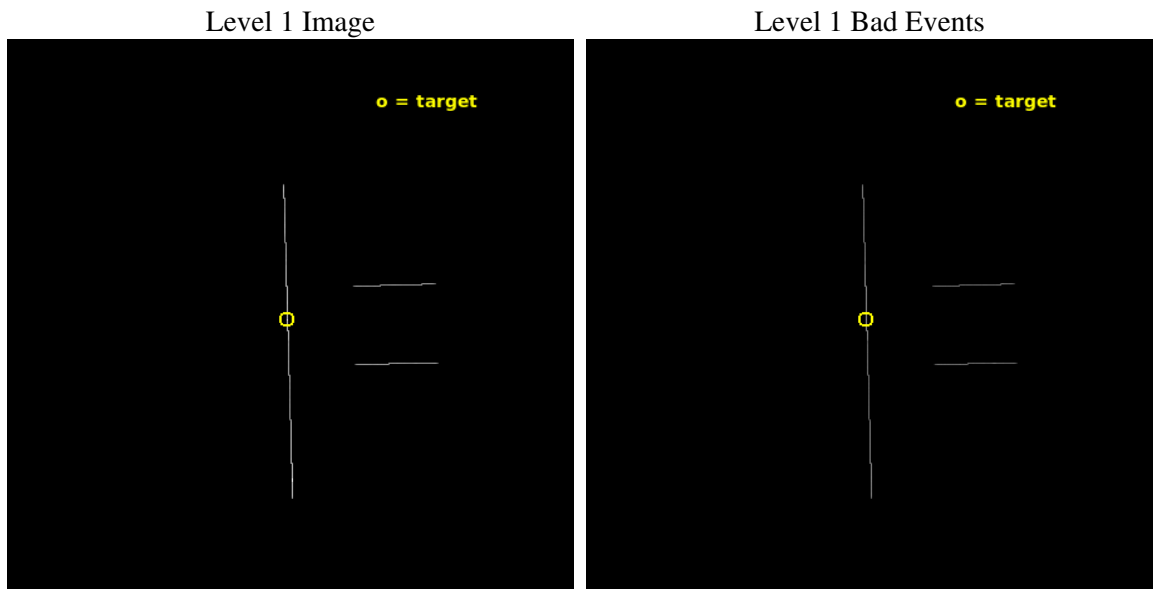
seq_num	500462	Sequence number
obs_id	4643	Observation id
title	ToO Observations of Soft Gamma Repeaters	Proposal title
observer	Dr. Peter Woods	Principal investigator
object	SGR 1806-20	Source name
ra_targ	272.16375	Observer's specified target RA [deg]
dec_targ	-20.410972	Observer's specified target Dec [deg]
ra_nom	272.15852055769	Nominal RA [deg]
dec_nom	-20.418224836739	Nominal Dec [deg]
roll_nom	268.41000378139	Nominal Roll [deg]
revision	5	Processing version of data
ontime	35157.75	Sum of GTIs [s]
livetime	35020.415039062	Livetime [s]
ontime2	35157.75	Sum of GTIs [s]
ontime3	35157.75	Sum of GTIs [s]
ontime5	35157.75	Sum of GTIs [s]
ontime6	35157.75	Sum of GTIs [s]
ontime7	35157.75	Sum of GTIs [s]
ontime8	35157.75	Sum of GTIs [s]
l2events	532728	Number of level 2 events



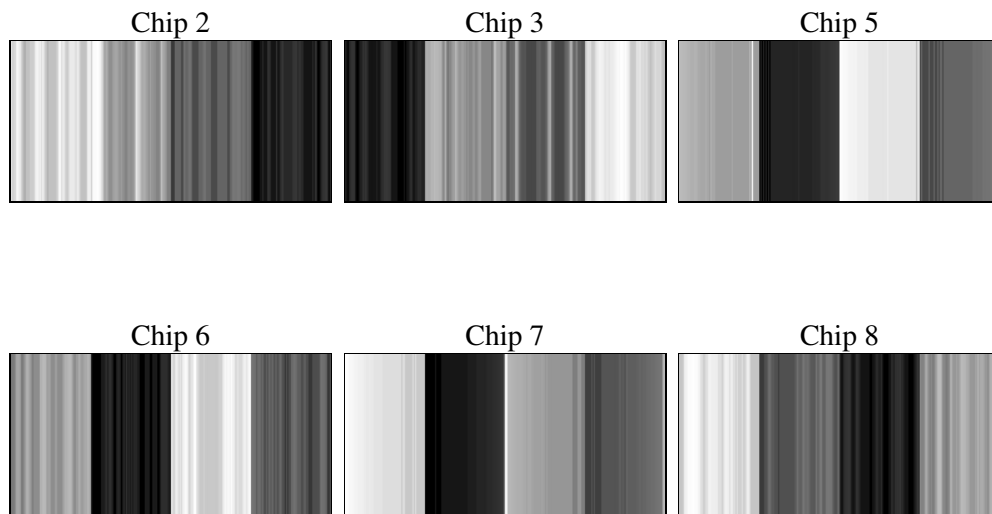
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	35000.793000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	35157.75	Sum of GTIs [s]
caldbver	4.9.2	&#160	ontime2	35157.75	Sum of GTIs [s]
date	2020-09-28T09:58:50	Date and time of file creation	ontime3	35157.75	Sum of GTIs [s]
revision	5	Processing version of data	ontime5	35157.75	Sum of GTIs [s]
			ontime6	35157.75	Sum of GTIs [s]
			ontime7	35157.75	Sum of GTIs [s]
			ontime8	35157.75	Sum of GTIs [s]
			l1events	832033	Number of level 1 events

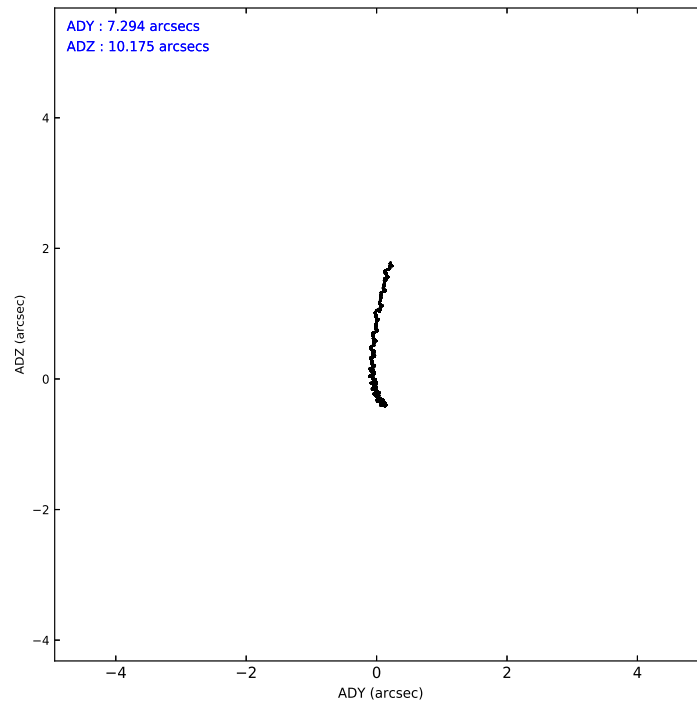
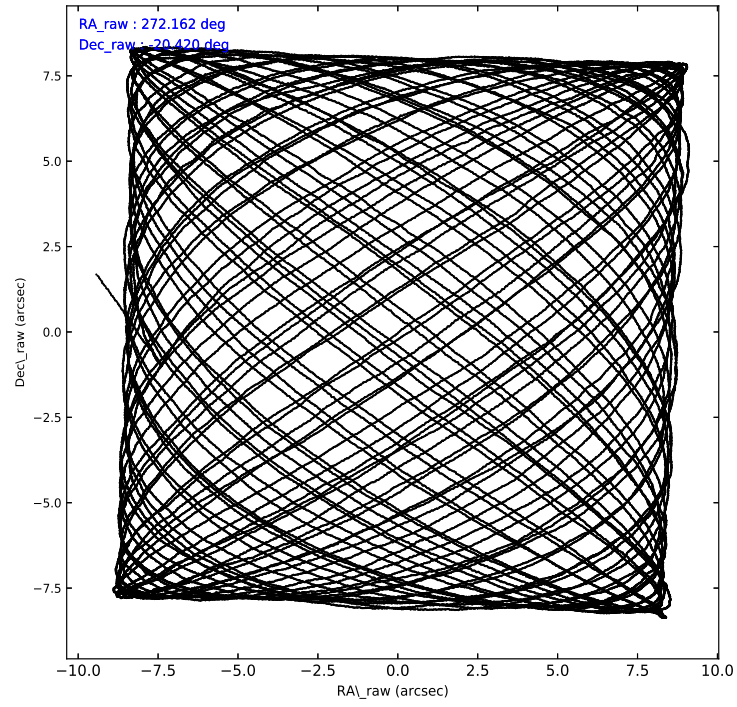
### 2.1.4 Events

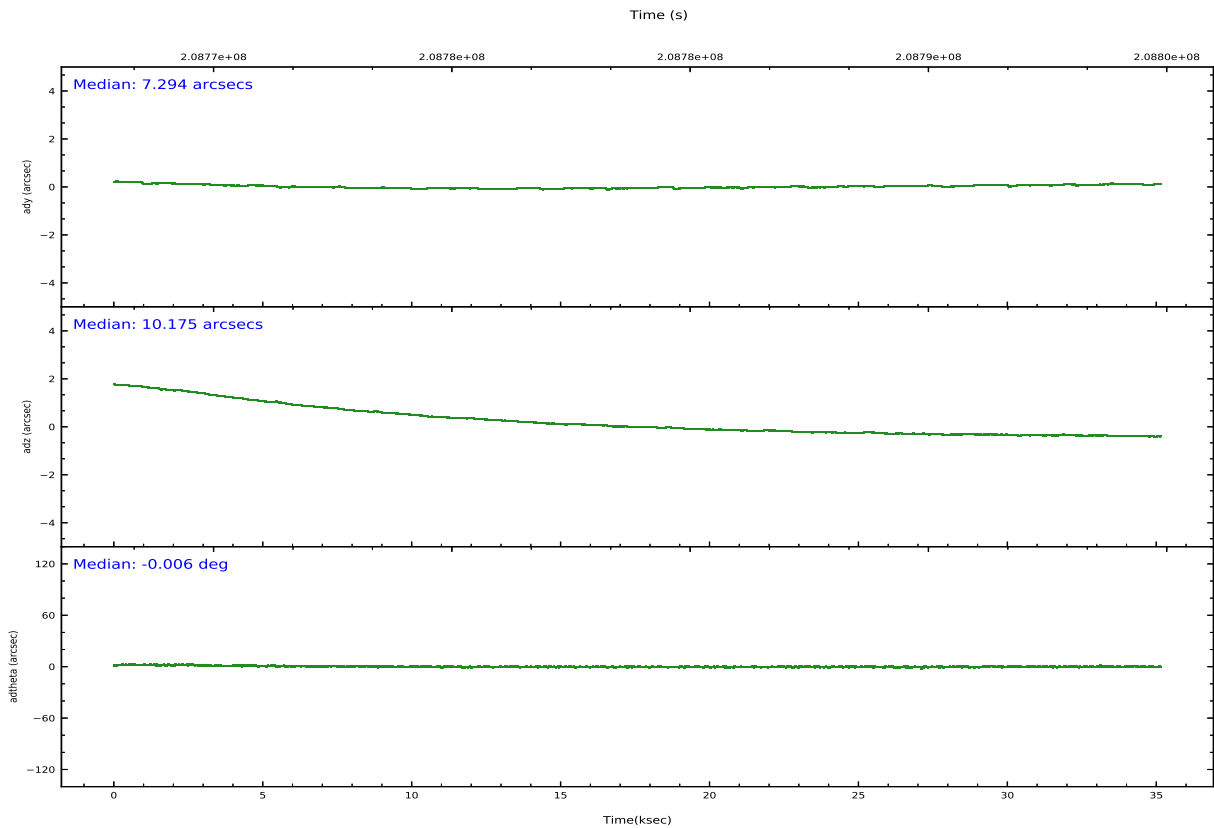
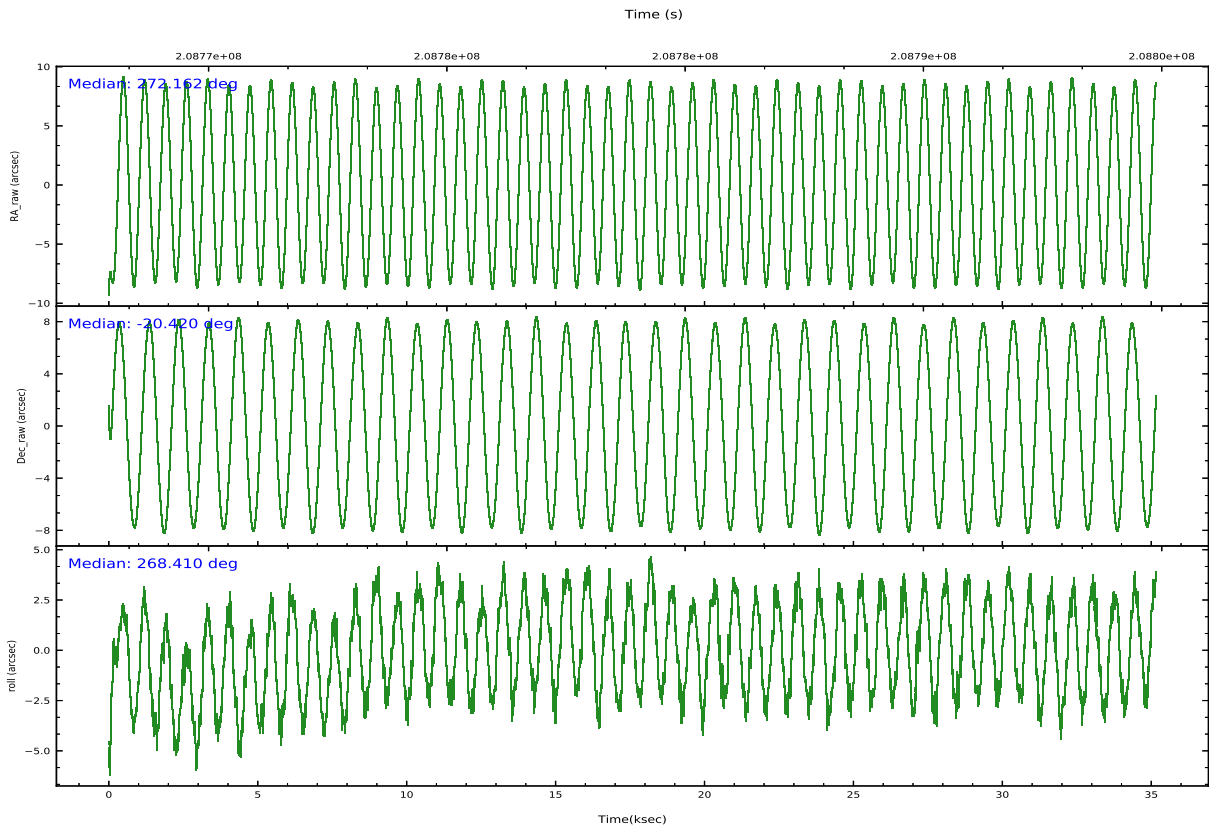
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	58222	62709	310691	62708	221243	116460	grade 0 events	7375	7410	85237	6119	21189	19614
rejected events	11622	12958	34599	12635	35614	18585		12%	11%	27%	9%	9%	16%
rejected %	19%	20%	11%	20%	16%	15%	grade 1 events	261	304	435	204	453	443
								0%	0%	0%	0%	0%	0%
							grade 2 events	19204	20458	78123	22115	47298	32670
								32%	32%	25%	35%	21%	28%
							grade 3 events	5698	6801	5839	5802	15143	11002
								9%	10%	1%	9%	6%	9%
							grade 4 events	5867	5927	5504	5532	14631	10826
								10%	9%	1%	8%	6%	9%
							grade 5 events	10304	11354	25220	11134	31134	15780
								17%	18%	8%	17%	14%	13%
							grade 6 events	9513	10455	110333	11802	91395	26125
								16%	16%	35%	18%	41%	22%
							grade 7 events	0	0	0	0	0	0
								0%	0%	0%	0%	0%	0%

## 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	CC33_FAINT	CC33_FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	272.147496	272.15852055769	Subarray requested	NONE	NONE
[deg] Pointing Dec	-20.396663	-20.418224836739	Alternating exposures requested	N	N
[deg] Pointing Roll	268.245639	268.41000378139	[s] Primary exposure time	0.000000	0
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	208764811.184000	208763726.51742			
Observation start date	2004-08-13T06:12:27	2004-08-13T05:55:26			
[s] Observation end time (MET)	208799812.184000	208800038.68153			
Observation end date	2004-08-13T15:55:48	2004-08-13T16:00:38			
Read mode	CONTINUOUS	CONTINUOUS			

## 2.3 Aspect



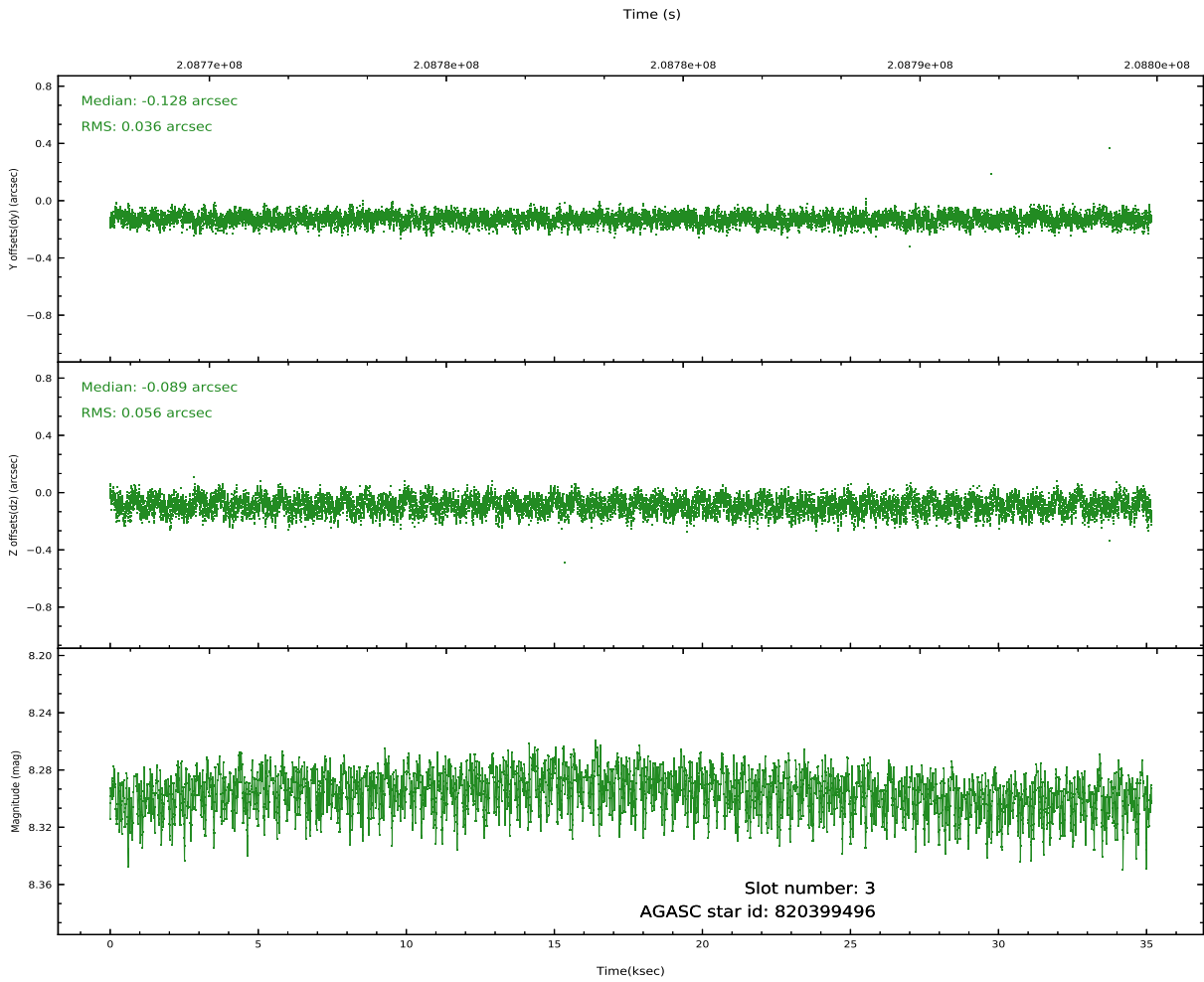
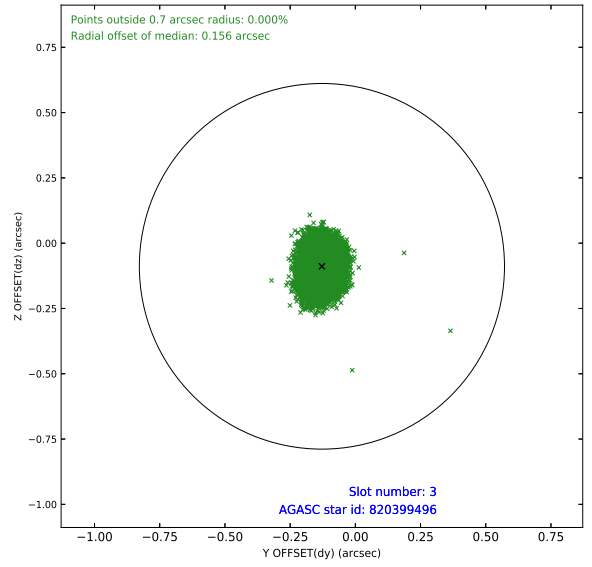
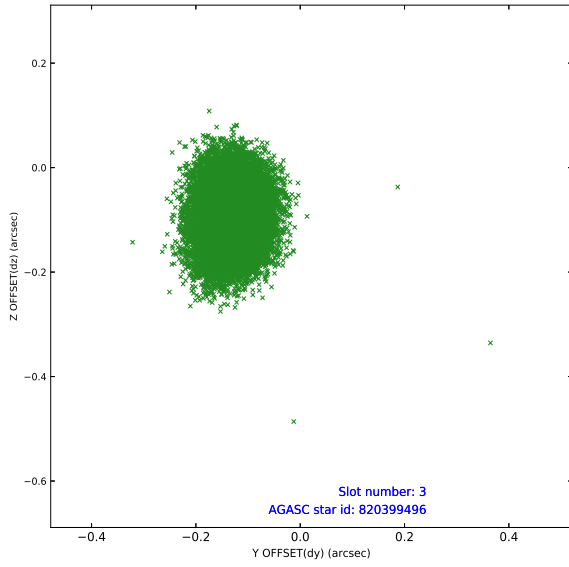


### Slot Statistics

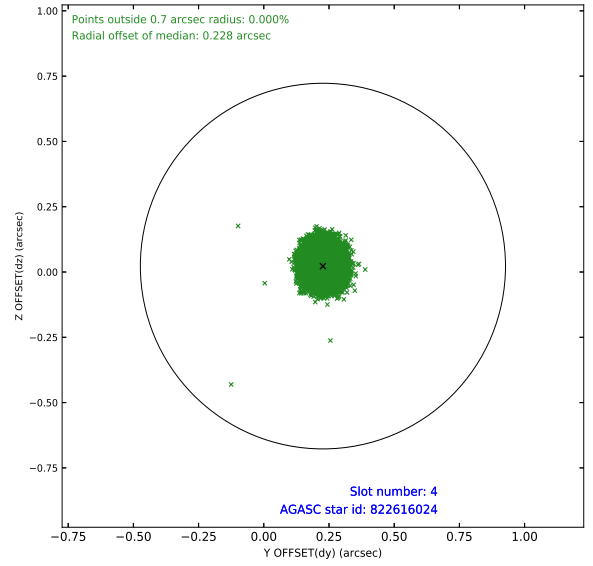
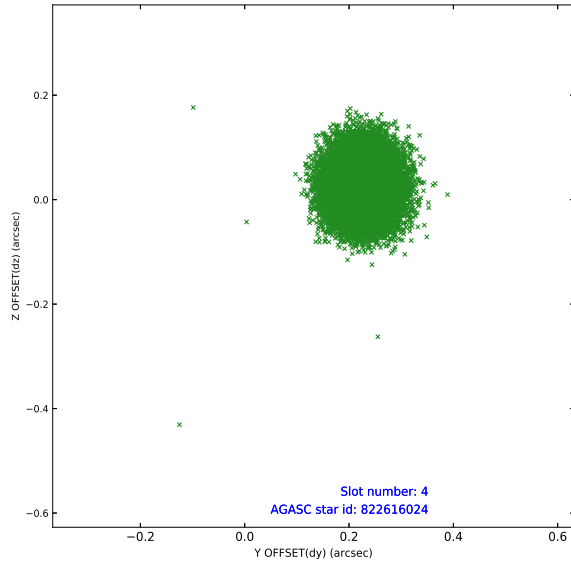
slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_x
0	FID		ACIS-S-2	7.11	8577	1.000	-0.108	-0.090	0.009	0.025	0.000000	0.000000	-760.13	-1731
1	FID		ACIS-S-4	7.20	8577	1.000	0.096	0.051	0.010	0.023	0.000000	0.000000	2153.28	176
2	FID		ACIS-S-6	7.35	8577	1.000	-0.016	0.048	0.011	0.022	0.000000	0.000000	401.93	814
3	GUIDE	used	820399496	8.30	17150	1.000	-0.128	-0.089	0.072	0.115	271.495152	-19.953854	-1521.30	-2255
4	GUIDE	used	822616024	8.43	17152	1.000	0.227	0.023	0.060	0.095	272.218514	-20.919122	1873.17	296
5	GUIDE	used	822617304	8.97	17150	1.000	0.093	0.125	0.078	0.123	272.421826	-20.831304	1536.98	970
6	GUIDE	used	822102416	7.48	17154	1.000	-0.162	-0.143	0.055	0.088	272.173216	-20.087156	-1116.21	52
7	GUIDE	used	822102232	8.80	17144	1.000	-0.030	0.085	0.065	0.106	272.350923	-20.034935	-1322.16	648

## 2.4 Star Slots

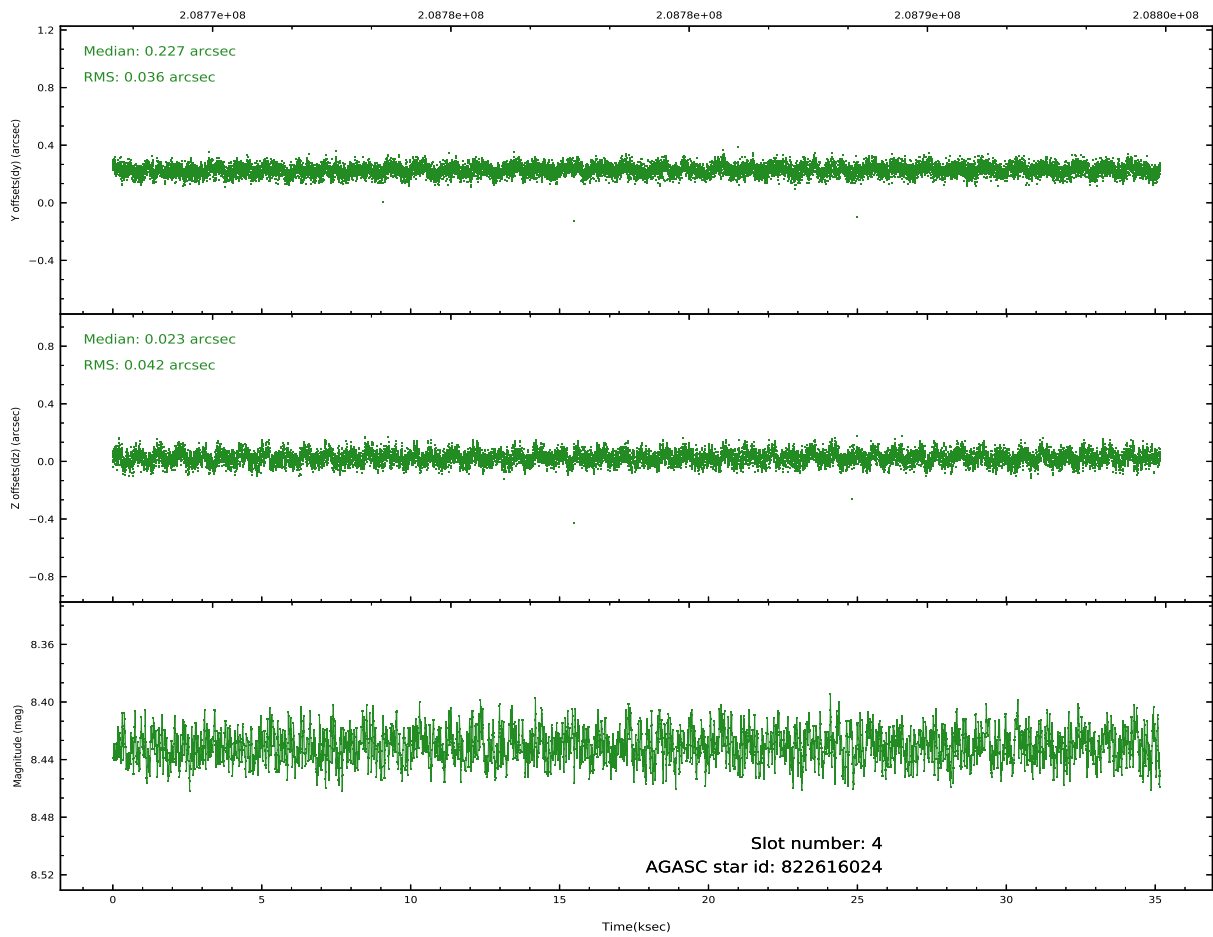
### 2.4.1 Slot 3



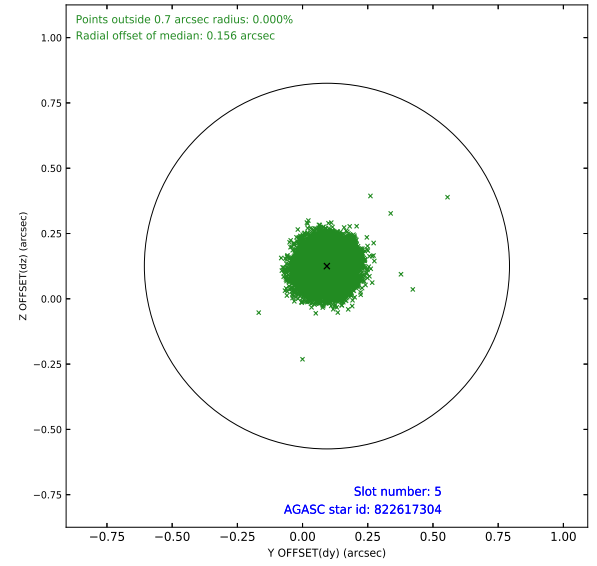
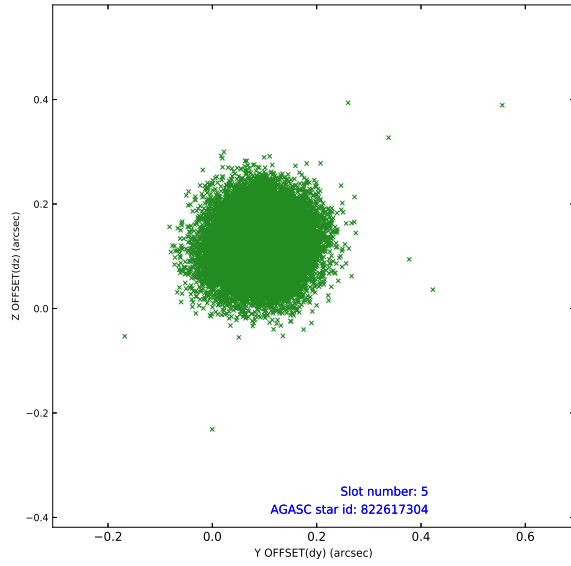
## 2.4.2 Slot 4



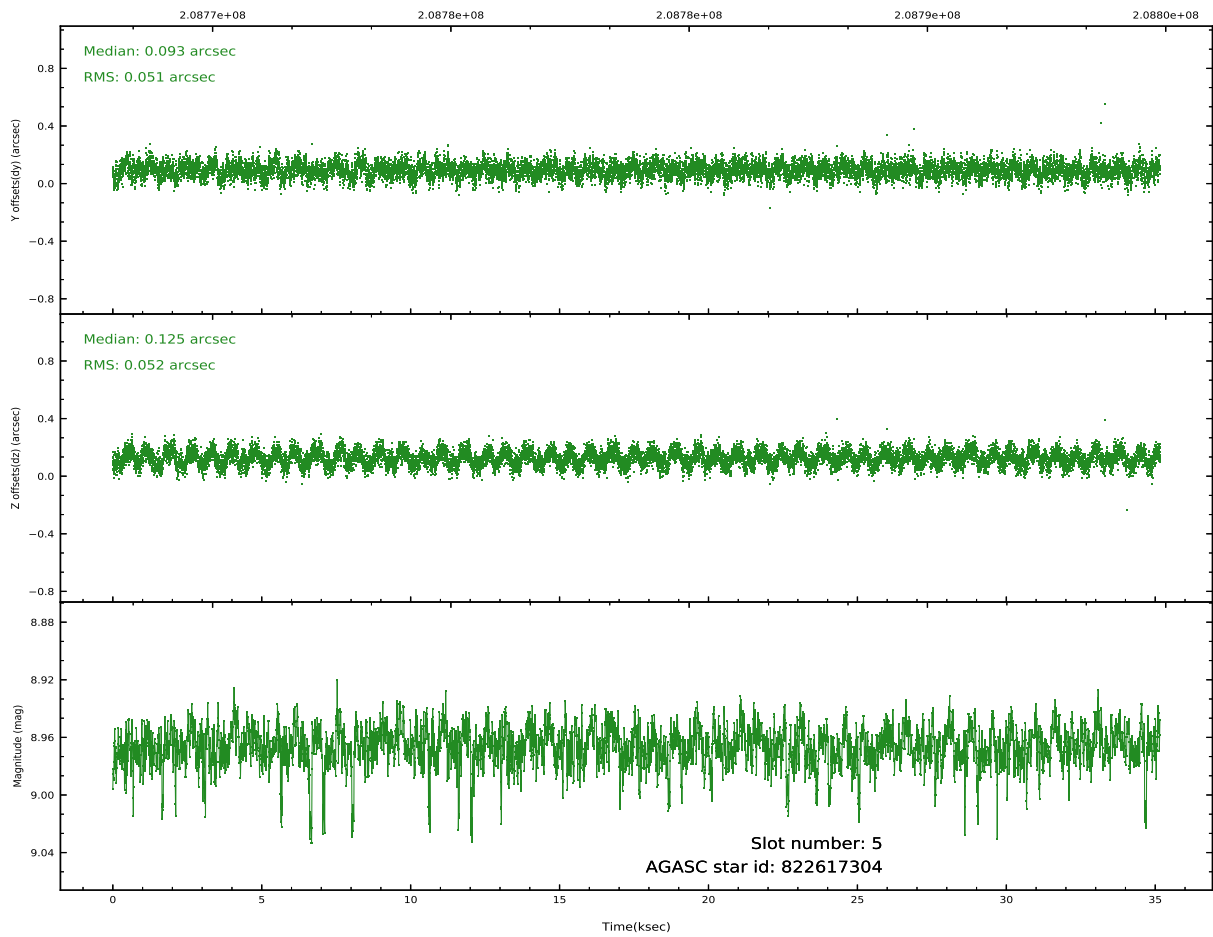
Time (s)



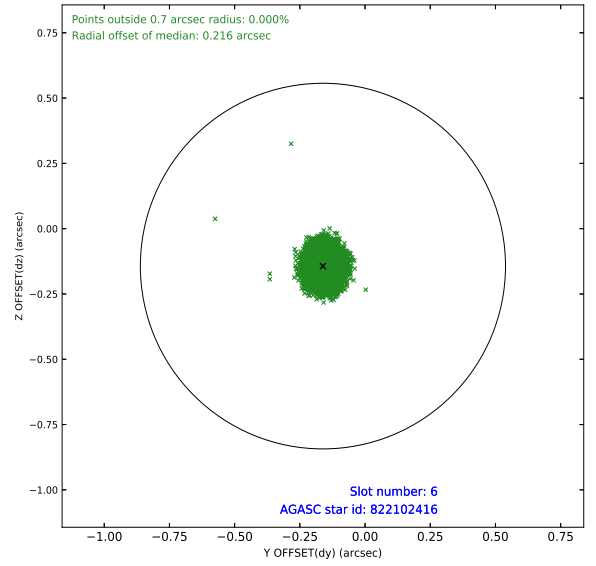
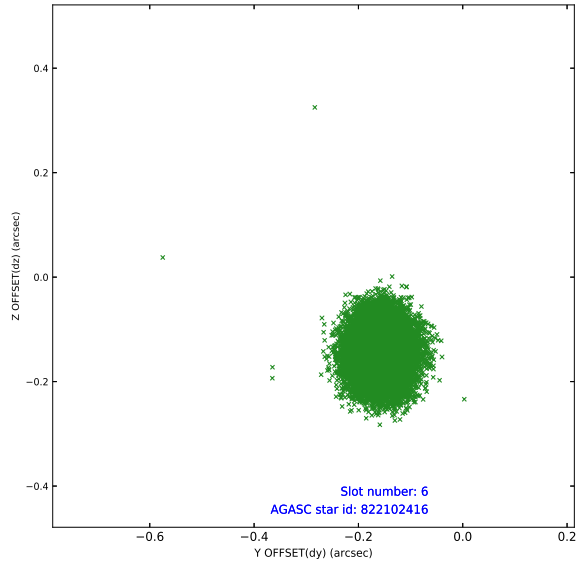
### 2.4.3 Slot 5



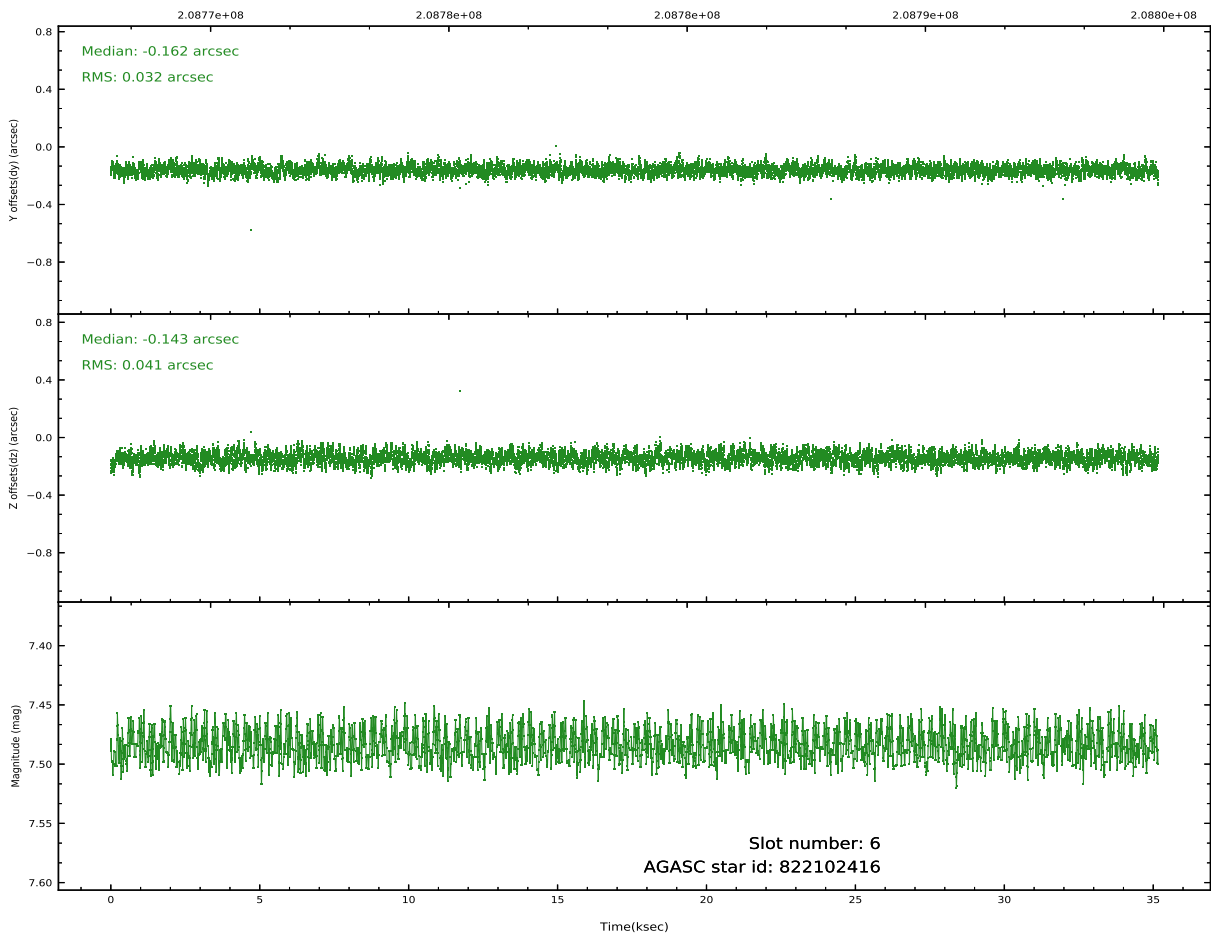
Time (s)



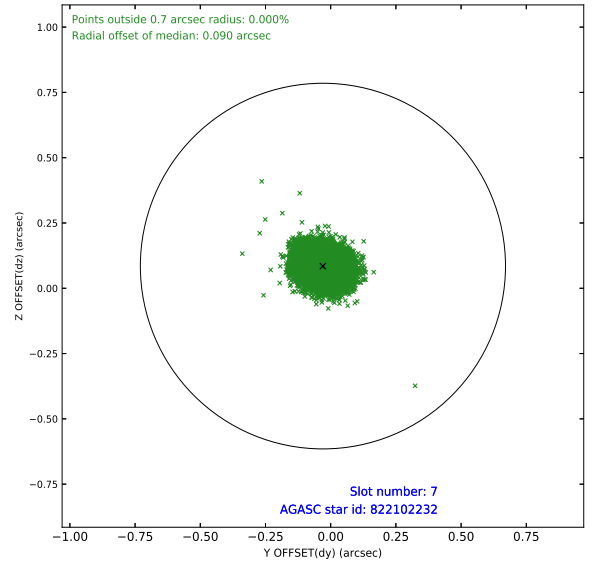
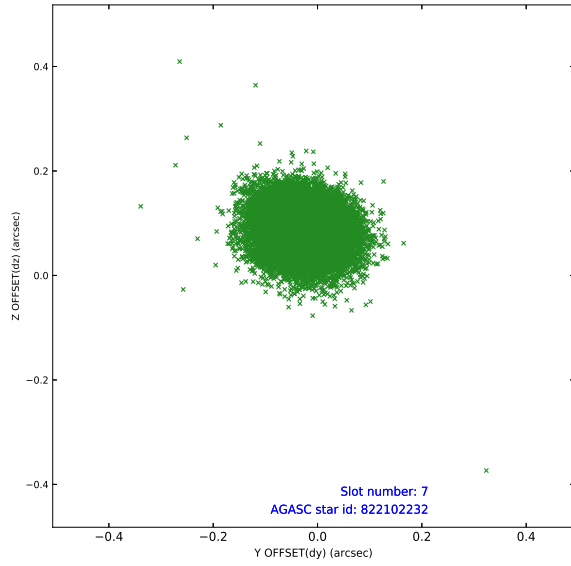
## 2.4.4 Slot 6



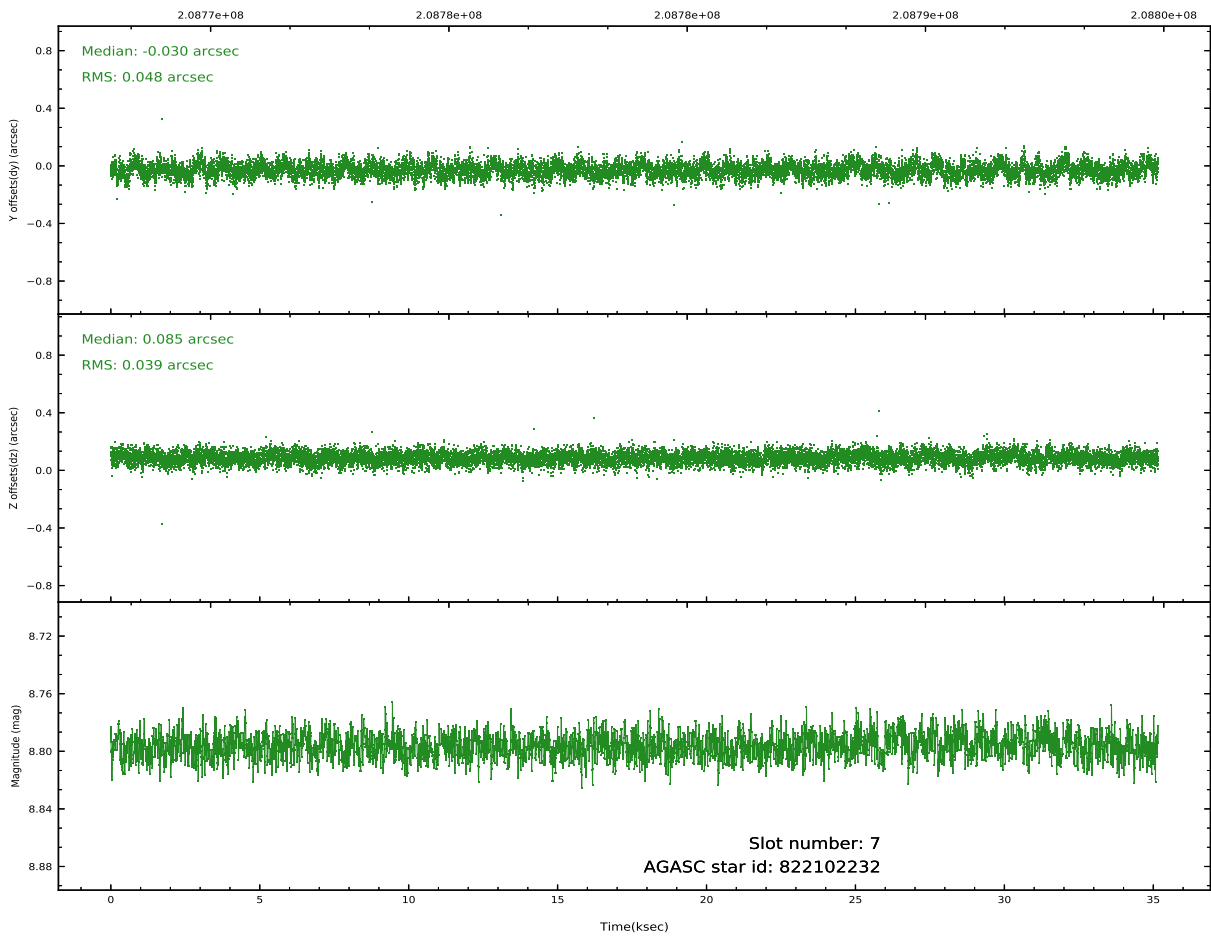
Time (s)



## 2.4.5 Slot 7

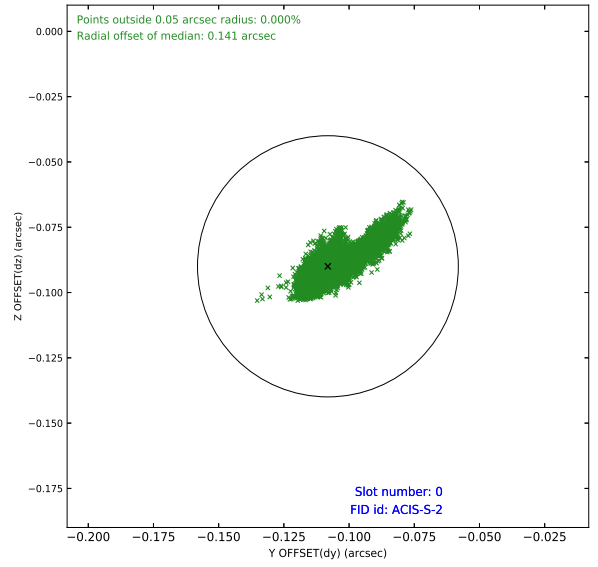
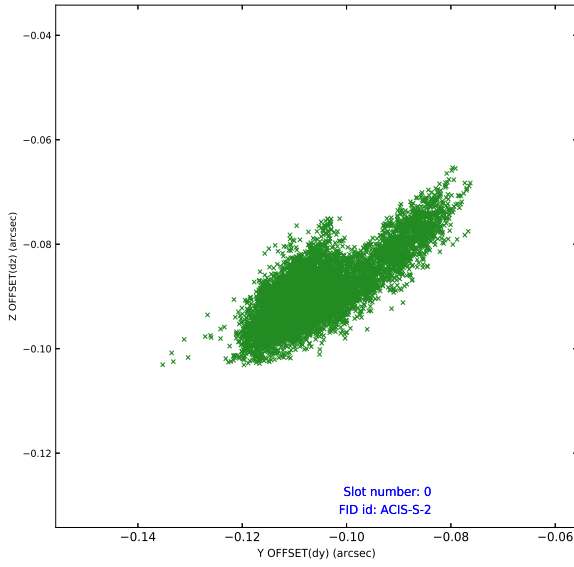


Time (s)

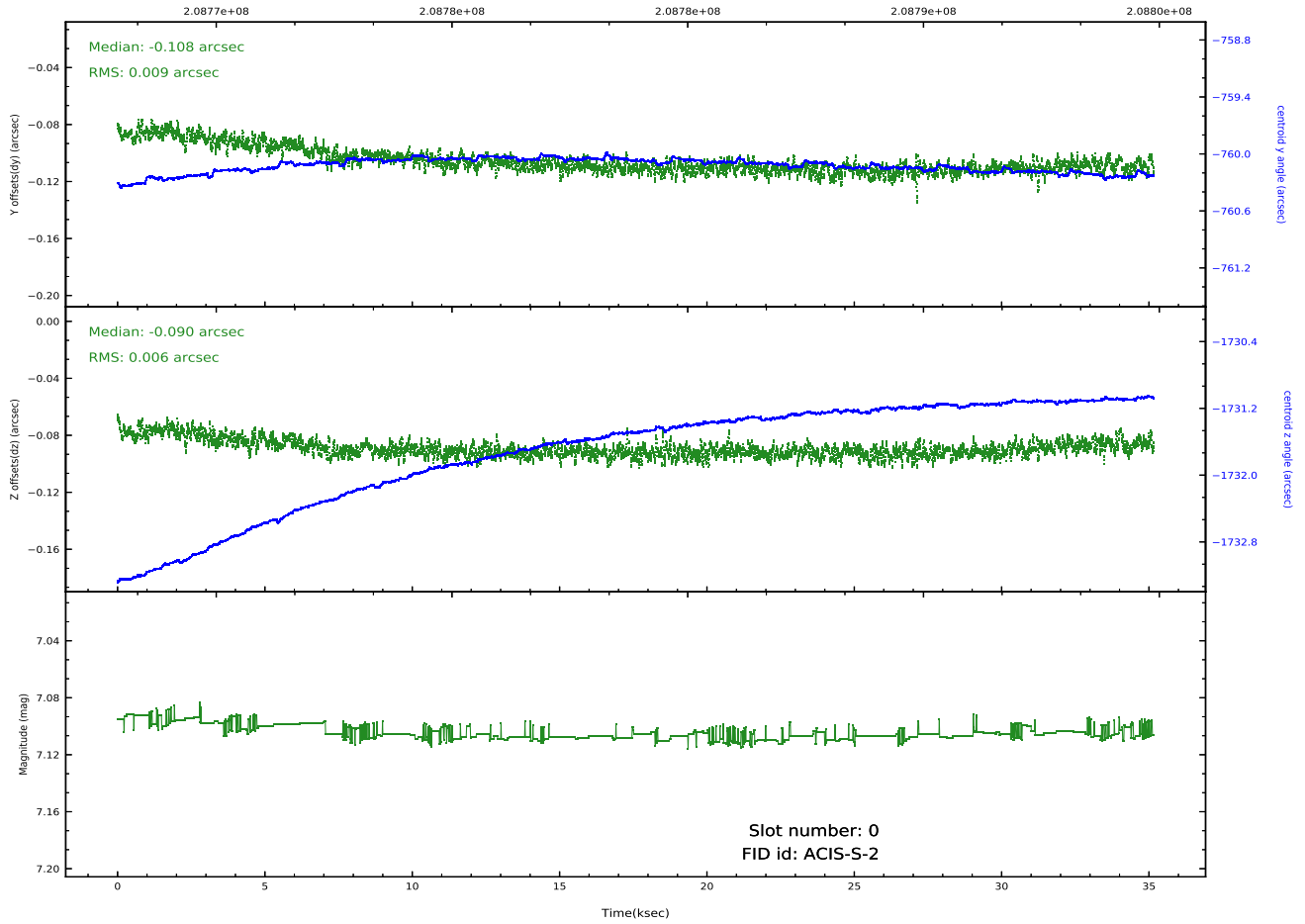


## 2.5 FID Slots

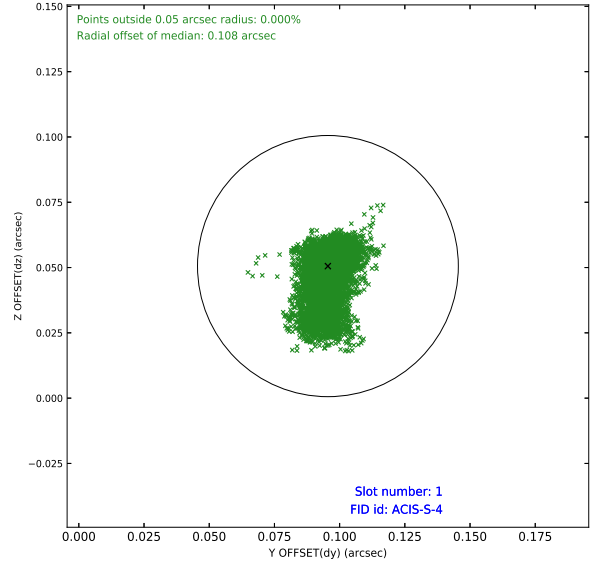
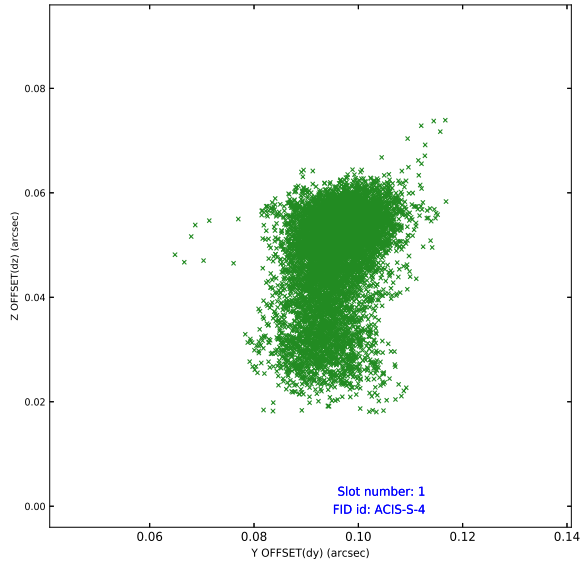
### 2.5.1 Slot 0



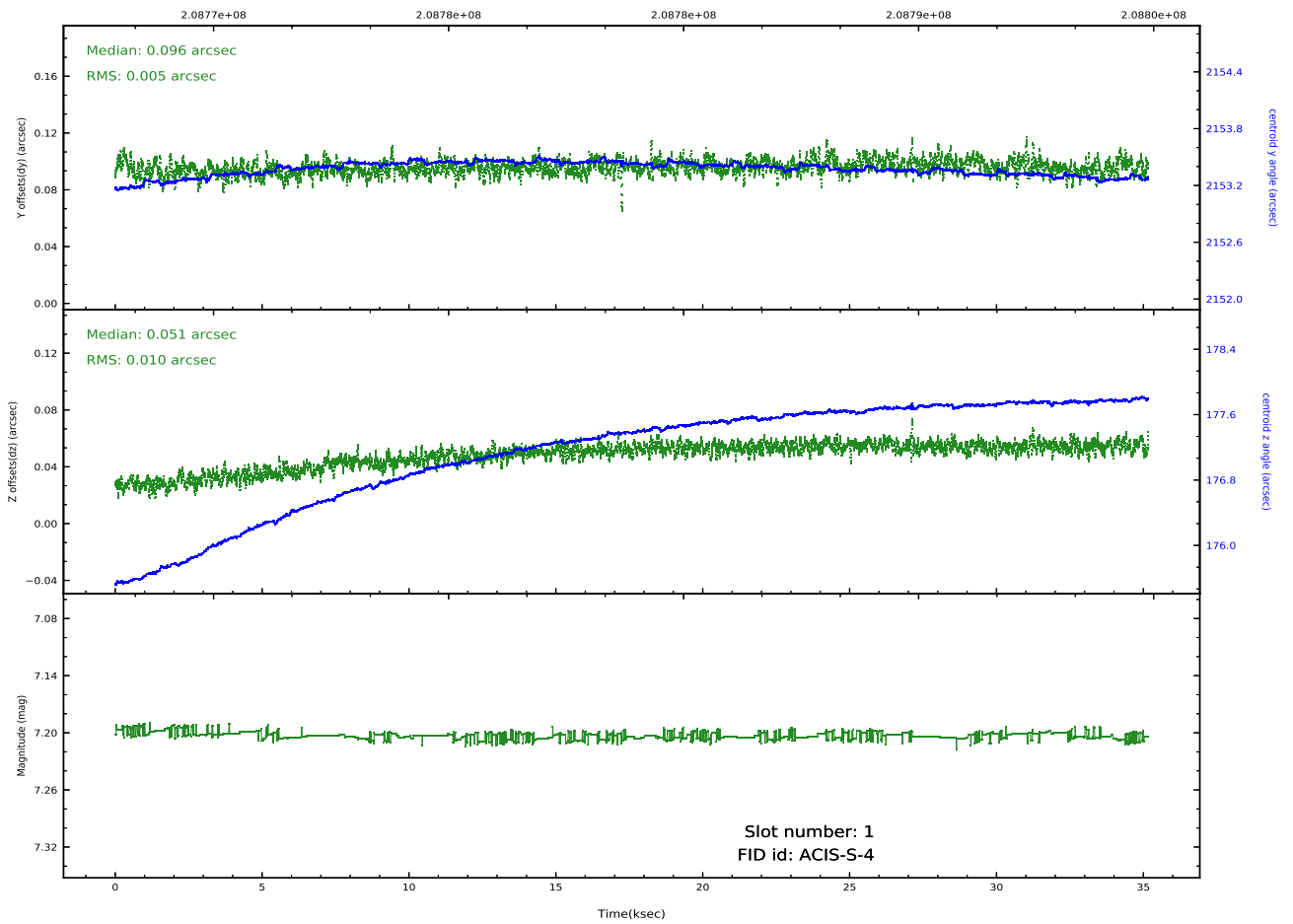
Time (s)



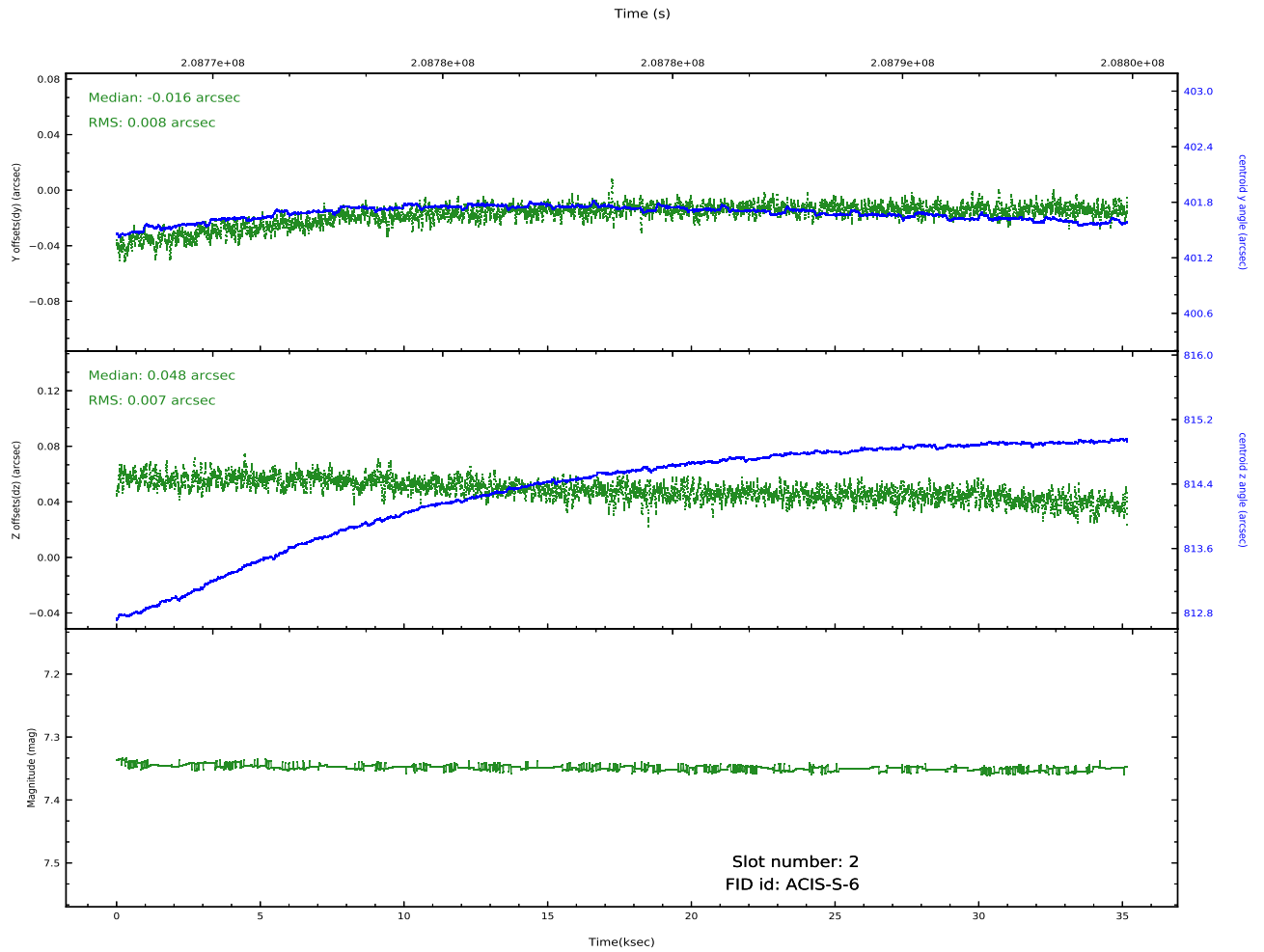
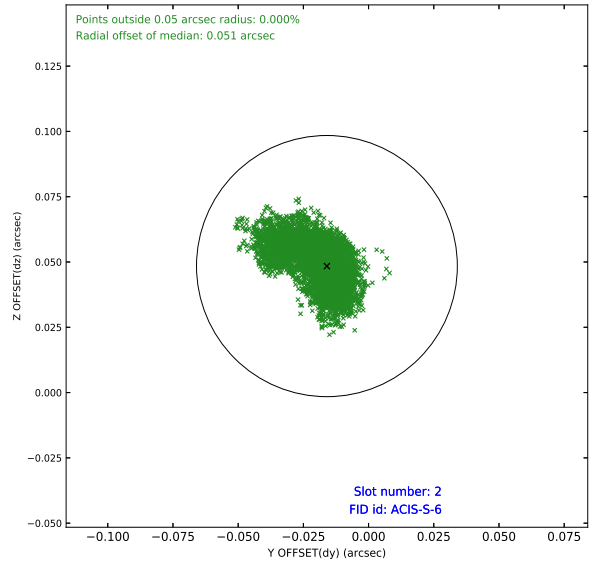
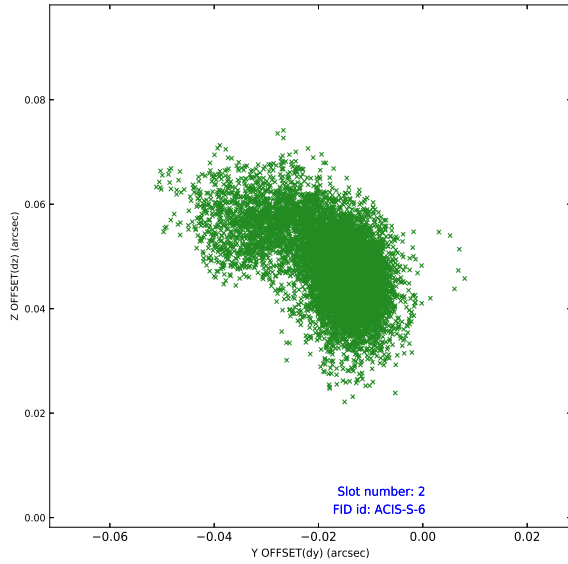
## 2.5.2 Slot 1



Time (s)



### 2.5.3 Slot 2



# A Summary

## A.1 Status

V&V Scientist	Melania Nynka
V&V Date (YYYY-MM-DD)	2020.10.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	35.161

## A.2 Comments