

# V&V Reference Report

## L2 ASCDS Version : 10.9.2

Observation 20353 - L2 Version 2  
Chandra X-Ray Center

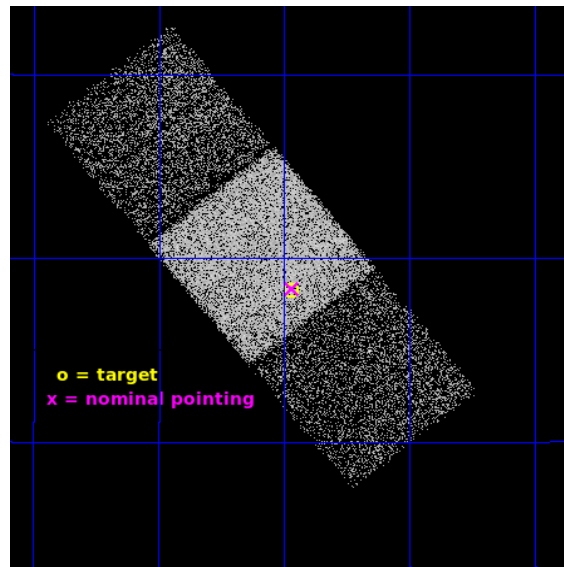
L2 Processing Date : Oct 25 2020

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# 1 Front

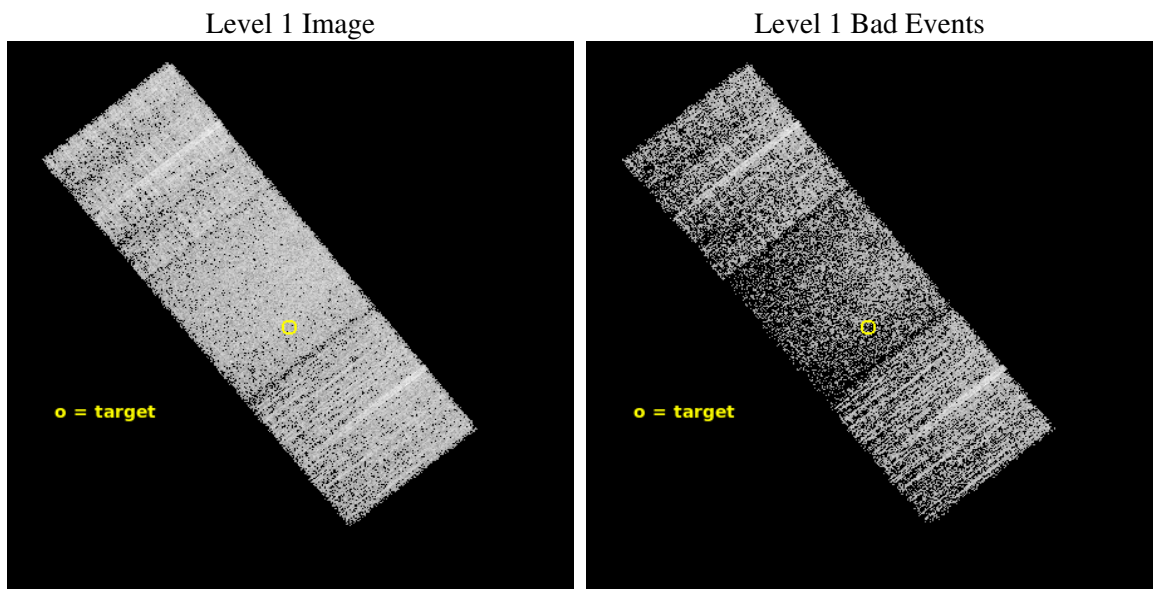
seq_num	601419	Sequence number
obs_id	20353	Observation id
title	X-ray Ionized Nebulae in Nearby Dwarf Galaxies	Proposal title
observer	Richard Plotkin	Principal investigator
object	SDSS J110458.30+290816.5	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	166.242917	Observer's specified target RA [deg]
dec_targ	29.137917	Observer's specified target Dec [deg]
ra_nom	166.24238576671	Nominal RA [deg]
dec_nom	29.139115069673	Nominal Dec [deg]
roll_nom	231.19660178301	Nominal Roll [deg]
revision	2	Processing version of data
ontime	8069.3000621796	Sum of GTIs [s]
livetime	7963.8687163349	Livetime [s]
ontime6	8069.3000621796	Sum of GTIs [s]
ontime7	8069.3000621796	Sum of GTIs [s]
ontime8	8069.3000621796	Sum of GTIs [s]
l2events	38337	Number of level 2 events



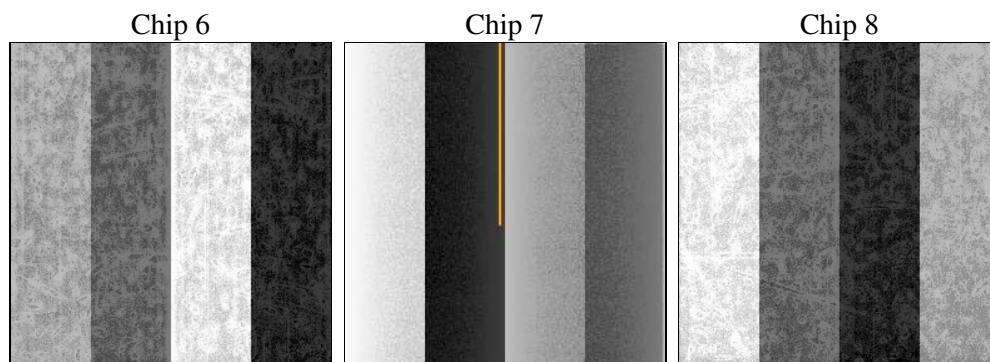
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	8000.118000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	8069.3000621796	Sum of GTIs [s]
caldsver	4.9.3	&#160	ontime6	8069.3000621796	Sum of GTIs [s]
date	2020-10-25T14:31:56	Date and time of file creation	ontime7	8069.3000621796	Sum of GTIs [s]
revision	2	Processing version of data	ontime8	8069.3000621796	Sum of GTIs [s]
			l1events	180933	Number of level 1 events

### 2.1.4 Events

	ccd 6	ccd 7	ccd 8
level 1 events	55551	59748	65634
rejected events	49530	31600	48114
rejected %	89%	52%	73%

	ccd 6	ccd 7	ccd 8
grade 0 events	1913	2513	4835
	3%	4%	7%
grade 1 events	34	97	50
	0%	0%	0%
grade 2 events	1585	5992	4311
	2%	10%	6%
grade 3 events	534	2308	1739
	0%	3%	2%
grade 4 events	505	2192	1661
	0%	3%	2%
grade 5 events	1923	5803	3252
	3%	9%	4%
grade 6 events	1487	15169	4977
	2%	25%	7%
grade 7 events	47570	25674	44809
	85%	42%	68%

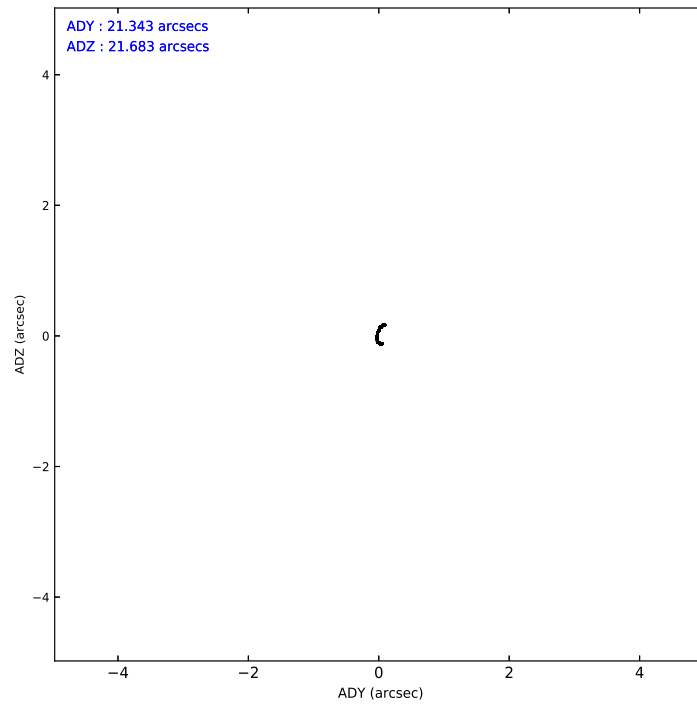
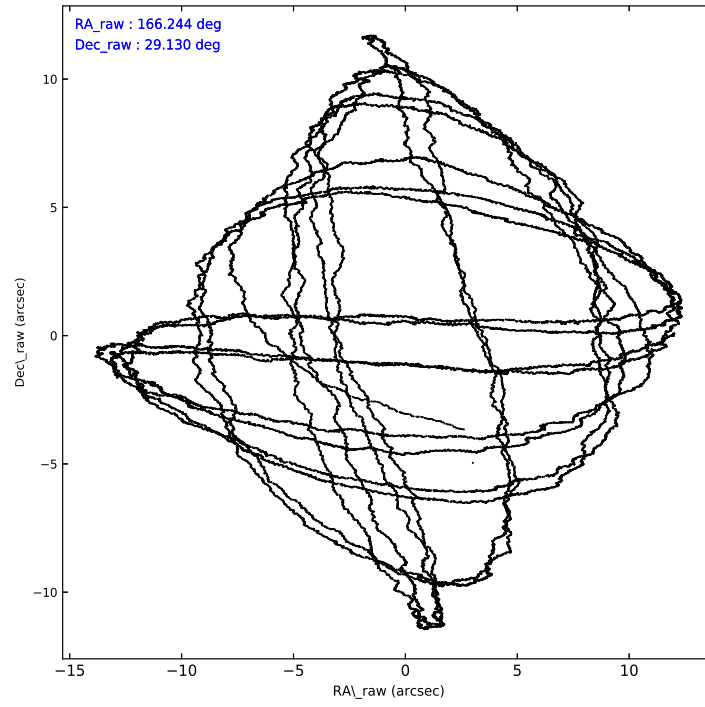


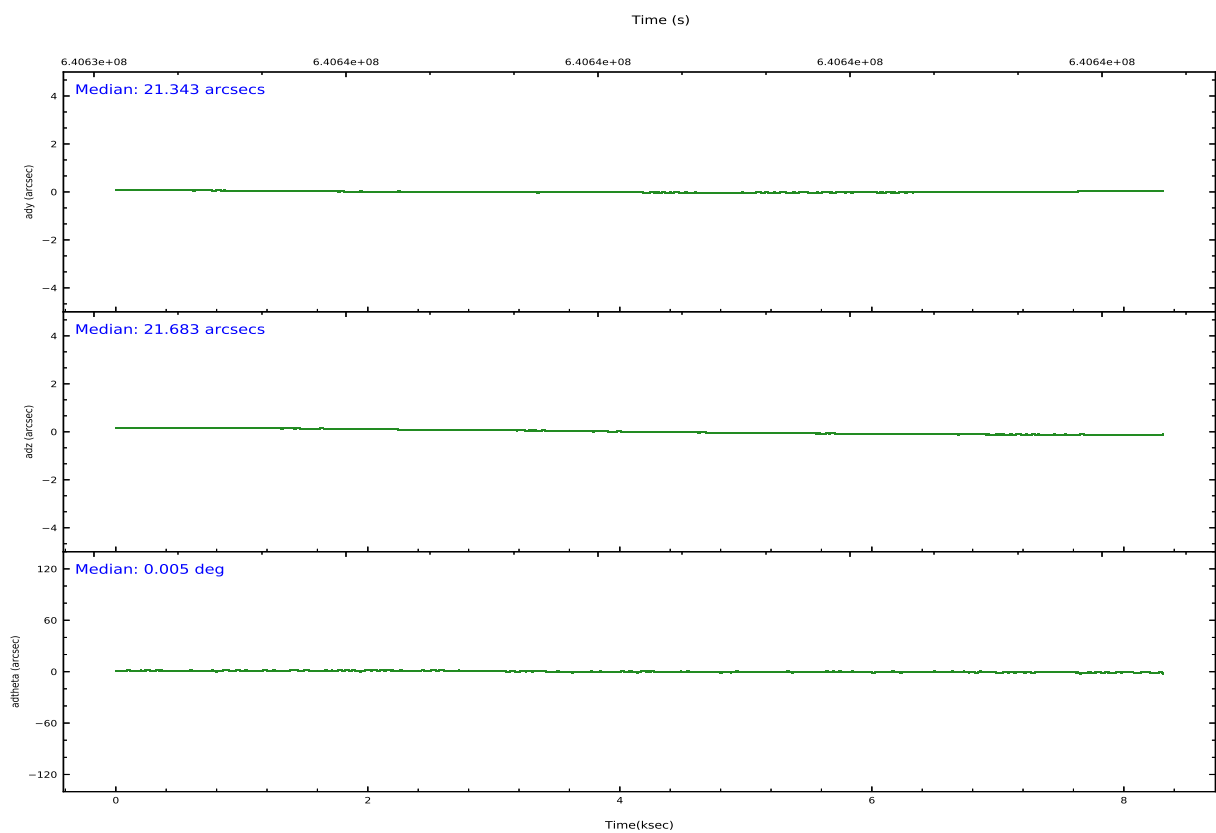
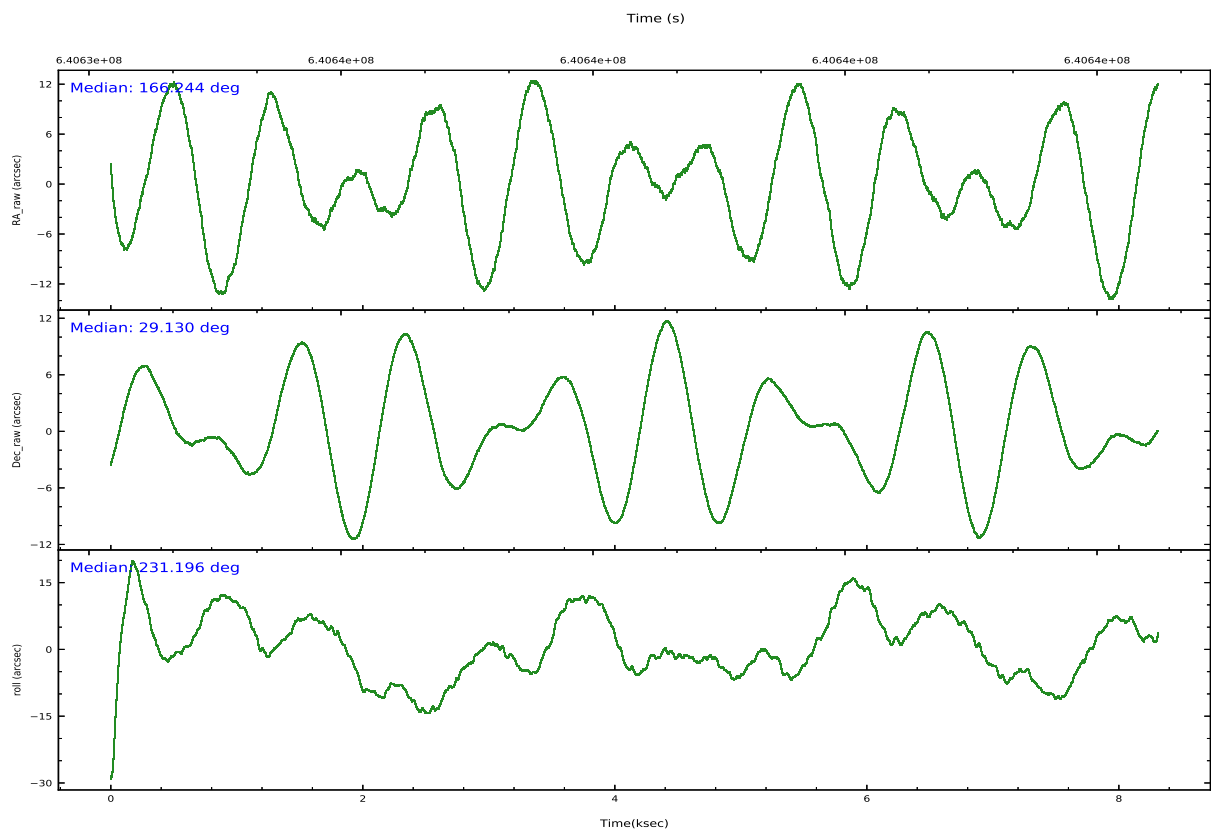
## 2.2 Compared Parameters

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	166.247983	166.24238576671
[deg] Pointing Dec	29.157534	29.139115069673
[deg] Pointing Roll	231.042291	231.19660178301
[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)	640634485.184000	640633600.9357899
Observation start date	2018-04-20T18:00:16	2018-04-20T17:46:40
[s] Observation end time (MET)	640642485.184000	640643047.33635
Observation end date	2018-04-20T20:13:36	2018-04-20T20:24:07
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar version number	8	8
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
CCD I0 on	N	N
CCD I1 on	N	N
CCD I2 on	N	N
CCD I3 on	N	N
CCD S0 on	N	N
CCD S1 on	N	N
CCD S2 on	O2	Y
CCD S3 on	Y	Y
CCD S4 on	O1	Y
CCD S5 on	N	N
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



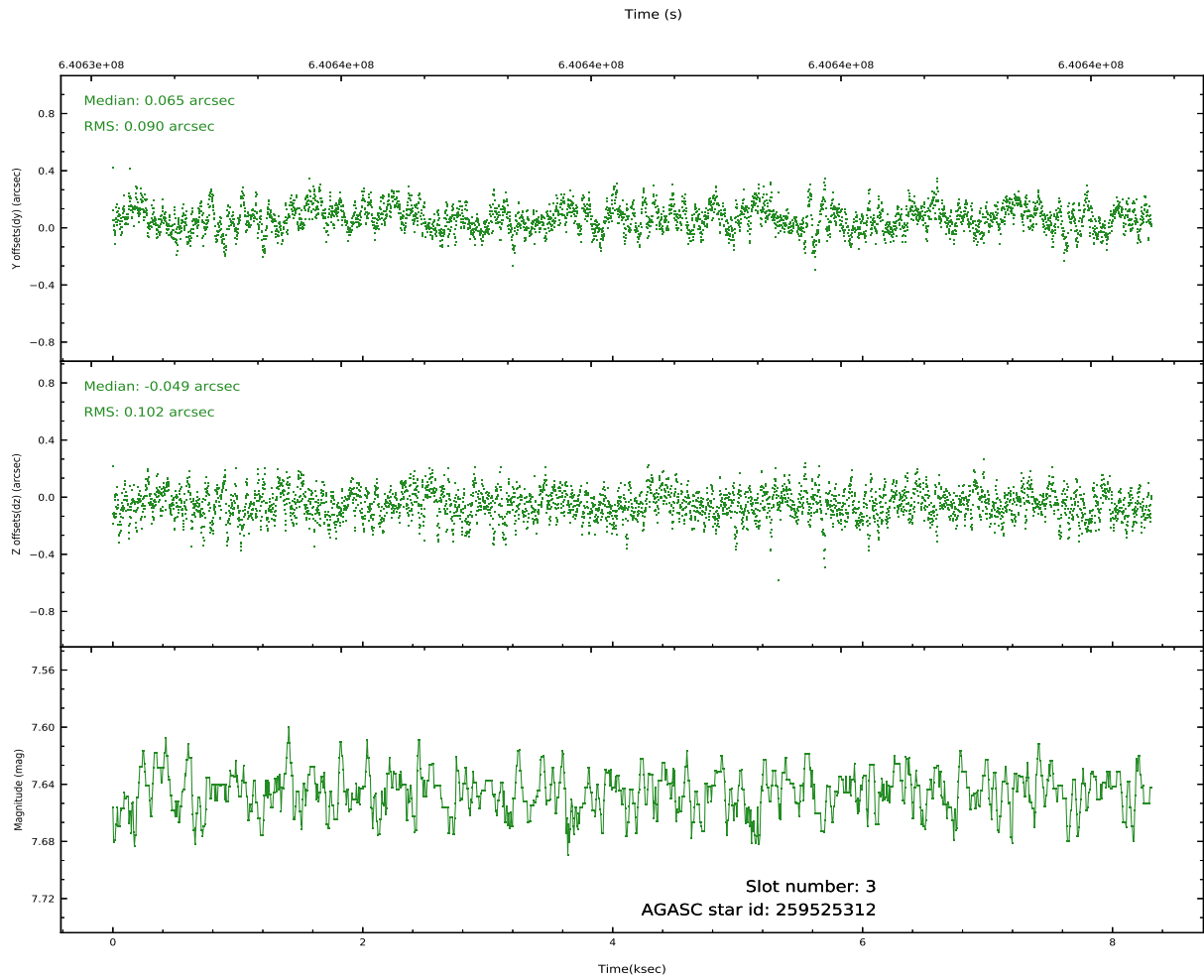
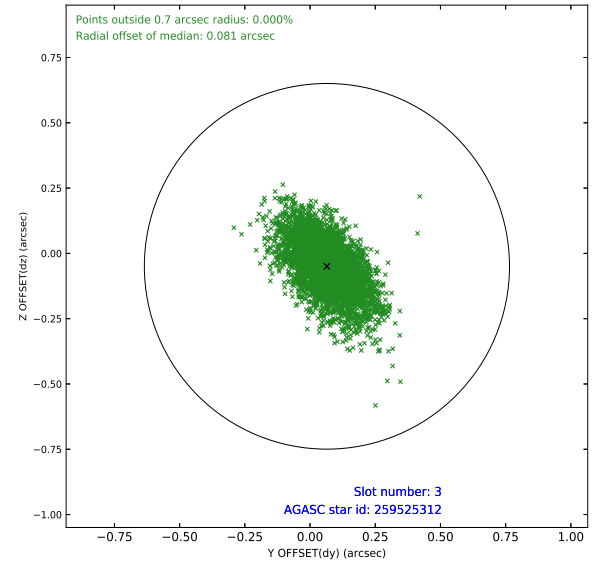
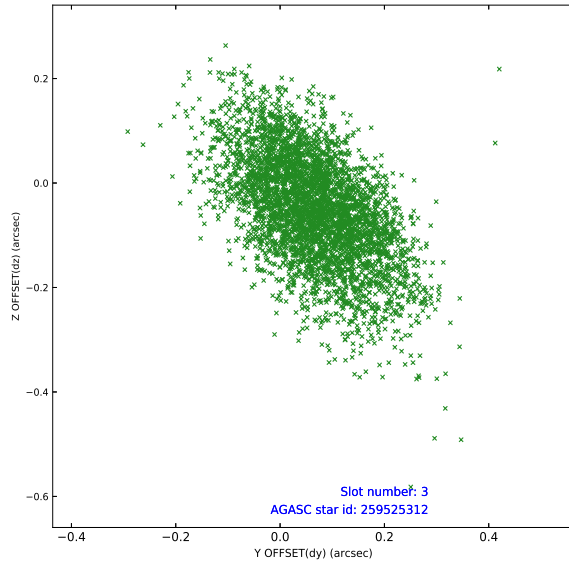


Slot Statistics

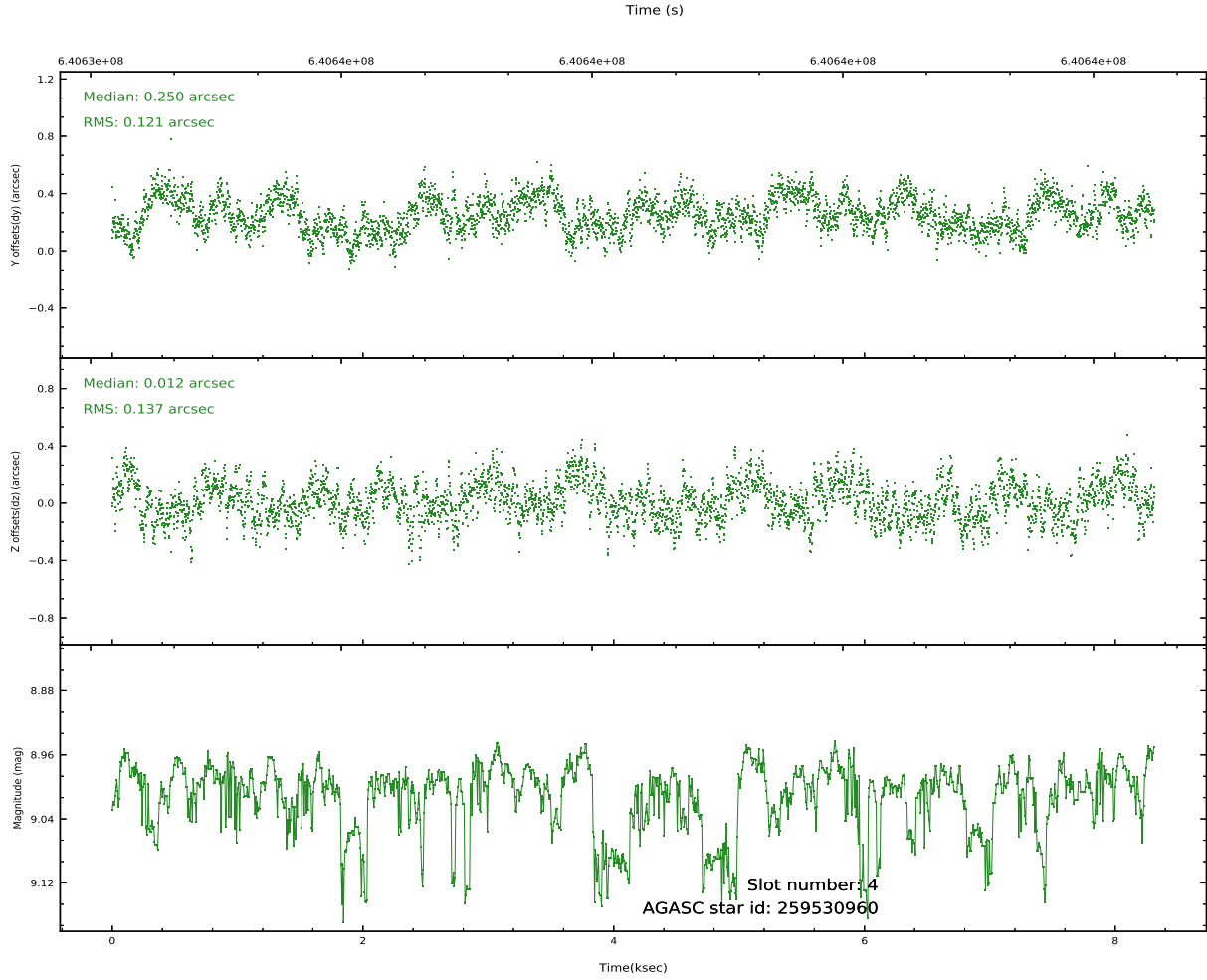
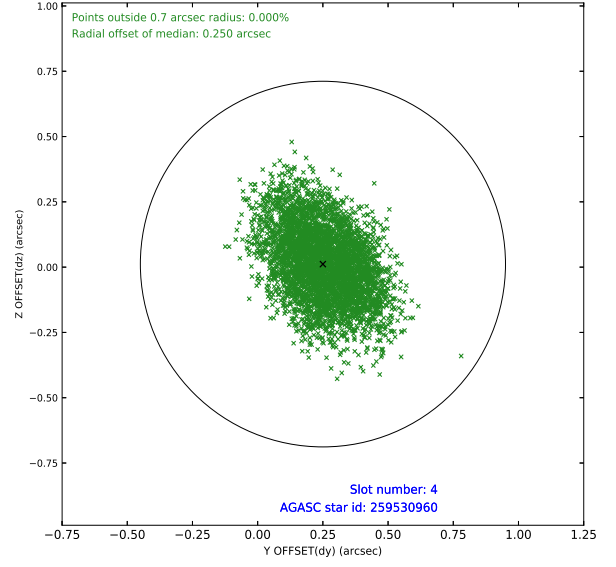
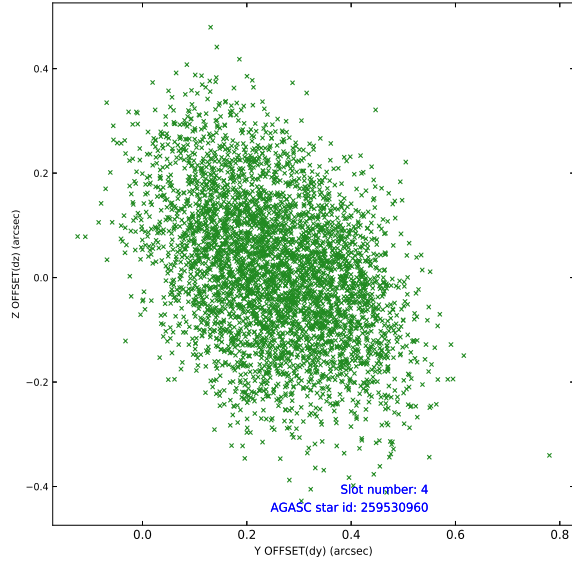
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.10	2027	1.000	0.157	-0.126	0.010	0.016	0.000000	0.000000	-774.62	-1743
1	FID		ACIS-S-4	7.22	2028	1.000	0.065	-0.042	0.010	0.018	0.000000	0.000000	2138.56	164
2	FID		ACIS-S-5	7.21	2028	1.000	-0.253	0.177	0.007	0.011	0.000000	0.000000	-1826.71	159
3	GUIDE	used	259525312	7.64	4054	1.000	0.065	-0.049	0.140	0.243	166.150950	29.172130	151.04	-268
4	GUIDE	used	259530960	9.00	4050	1.000	0.250	0.012	0.195	0.315	166.122202	28.544203	1968.03	1078
5	GUIDE	used	259531792	6.94	4055	1.000	0.209	-0.039	0.135	0.243	165.797842	28.930132	1527.24	-589
6	GUIDE	used	259533512	9.54	4012	1.000	-0.403	0.261	0.212	0.355	167.126871	29.314354	-2181.59	1783
7	GUIDE	used	259536320	9.06	4053	1.000	-0.130	-0.181	0.172	0.291	166.369289	28.977252	264.31	705

## 2.4 Star Slots

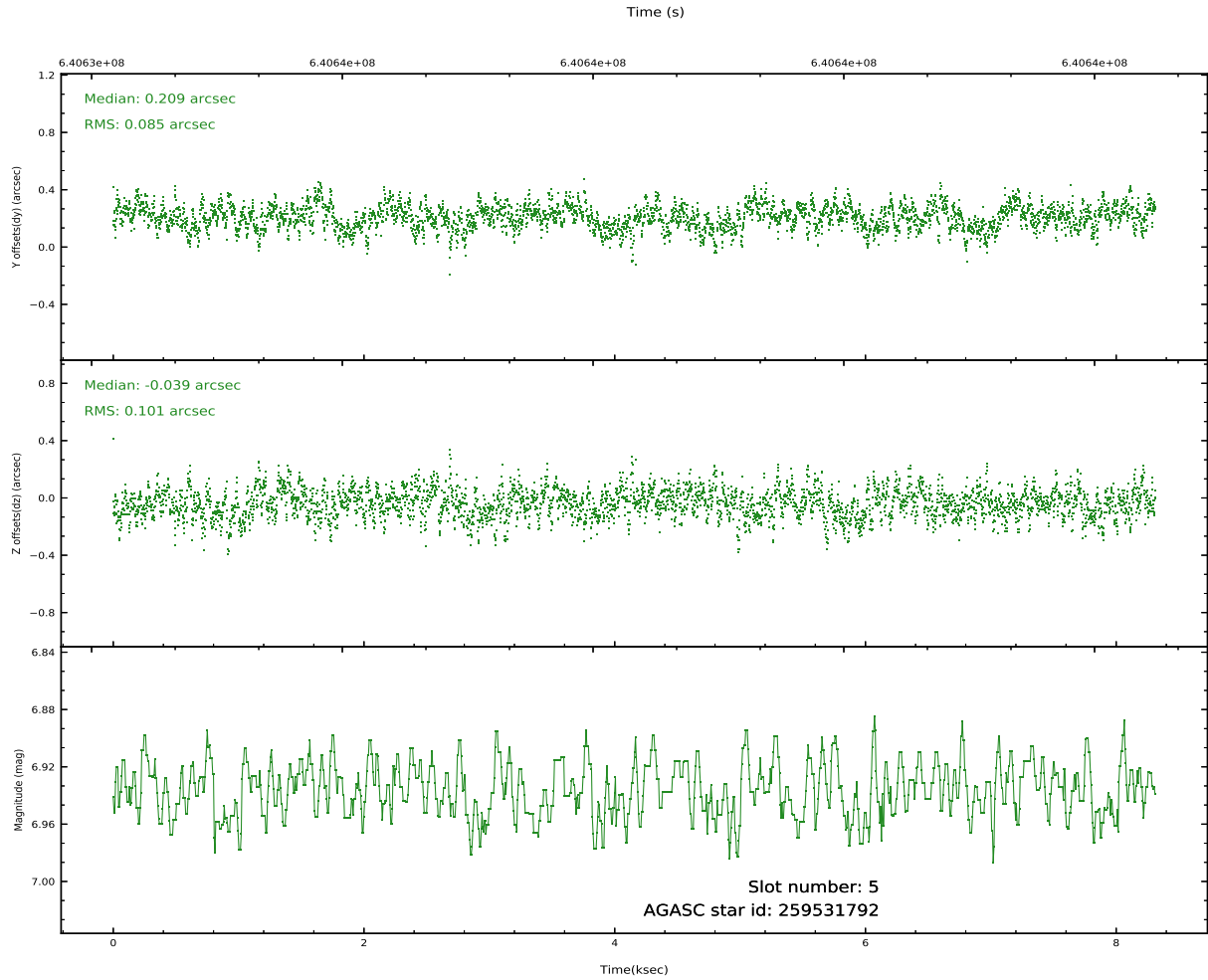
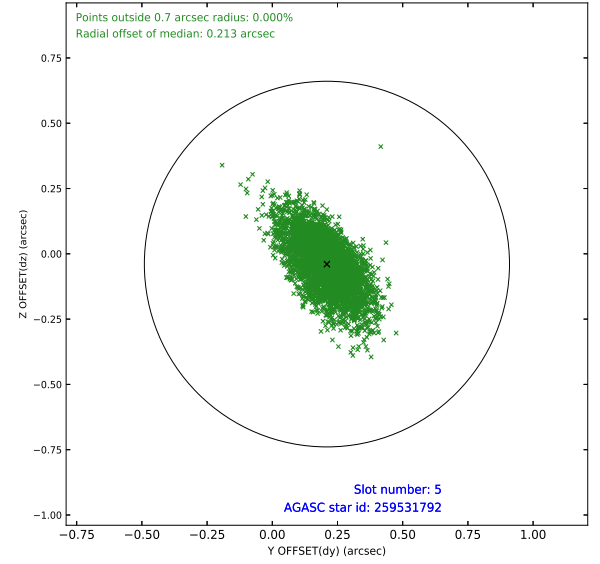
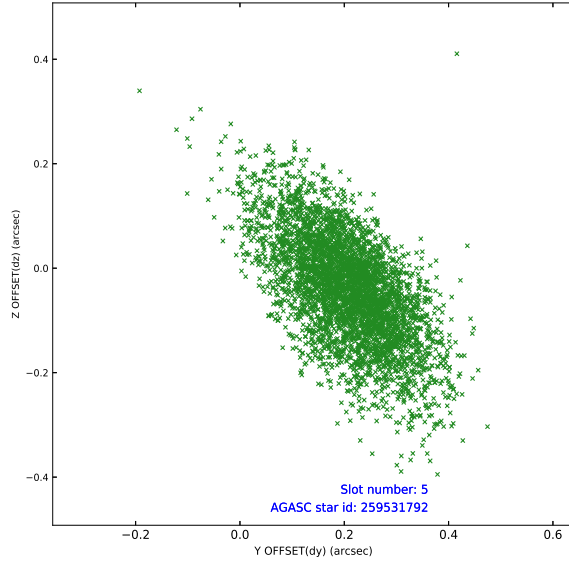
### 2.4.1 Slot 3



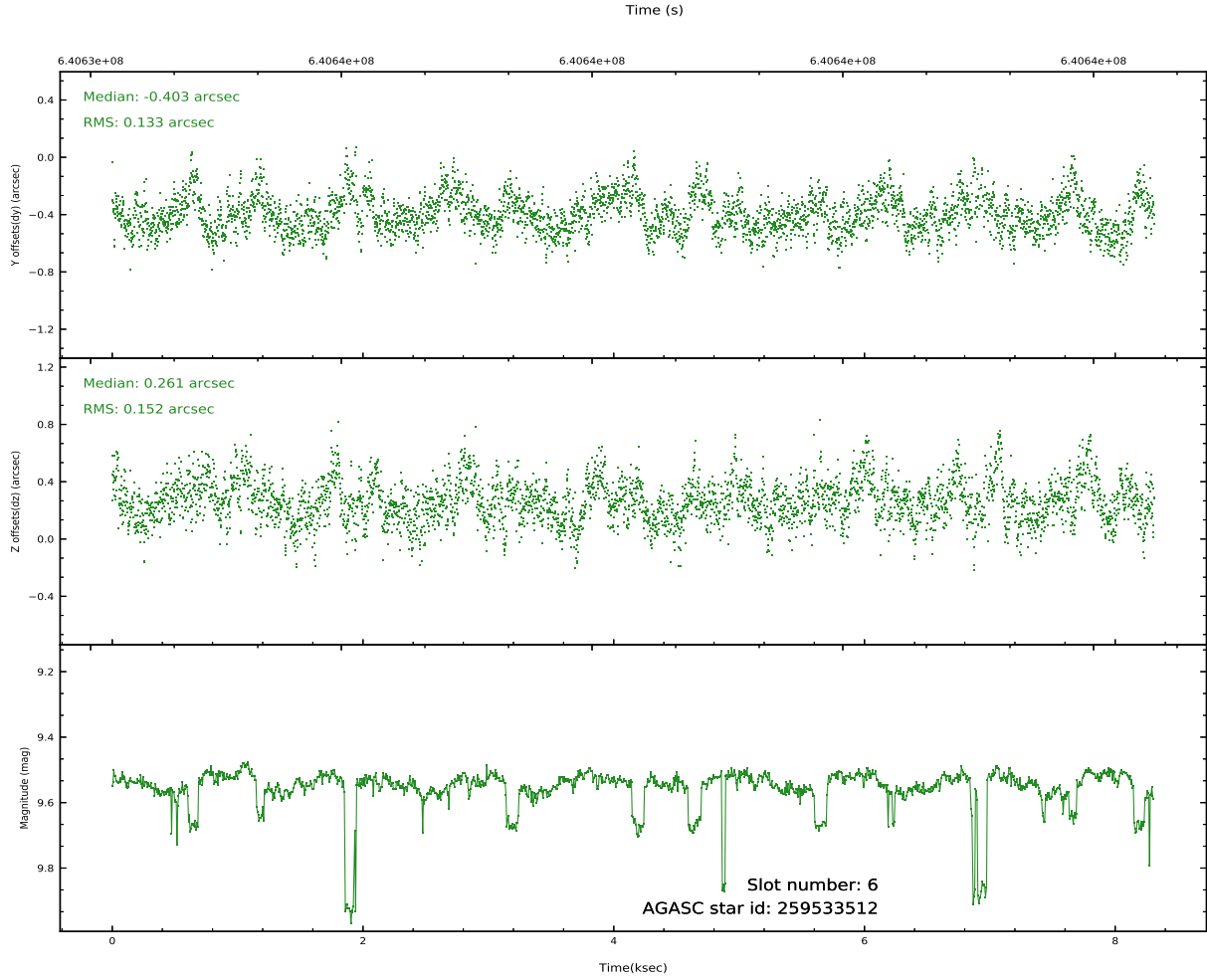
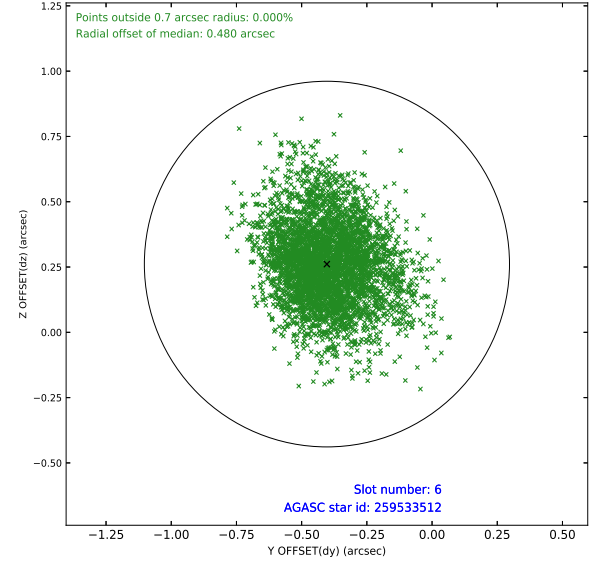
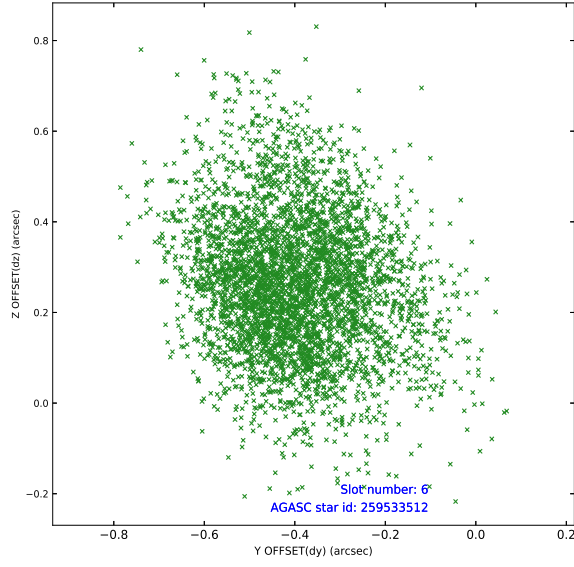
## 2.4.2 Slot 4



### 2.4.3 Slot 5

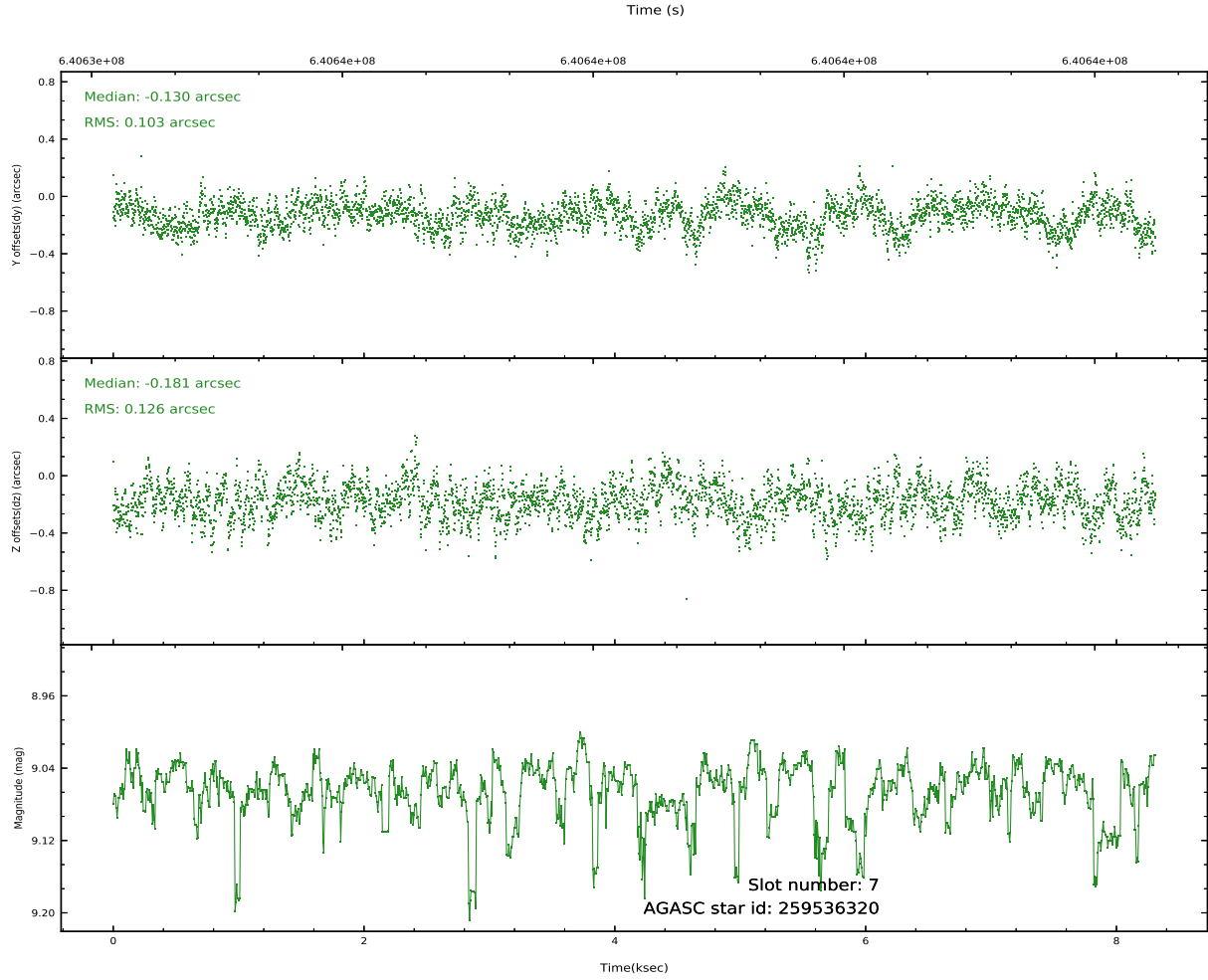
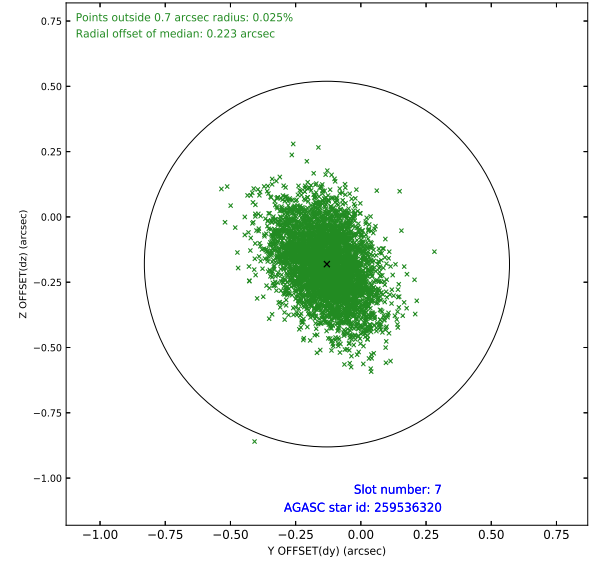
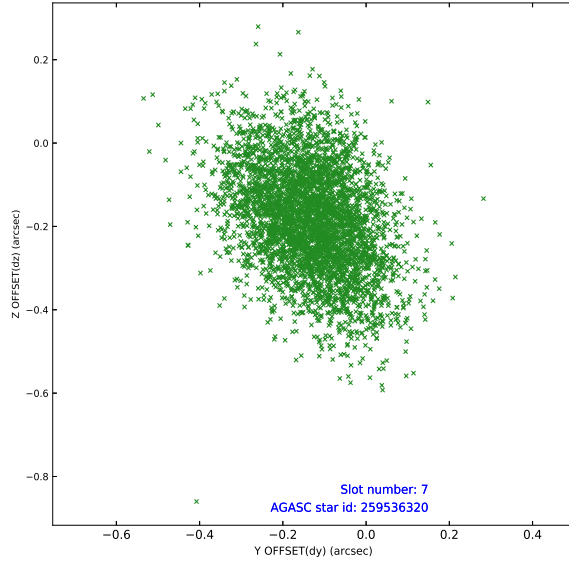


## 2.4.4 Slot 6



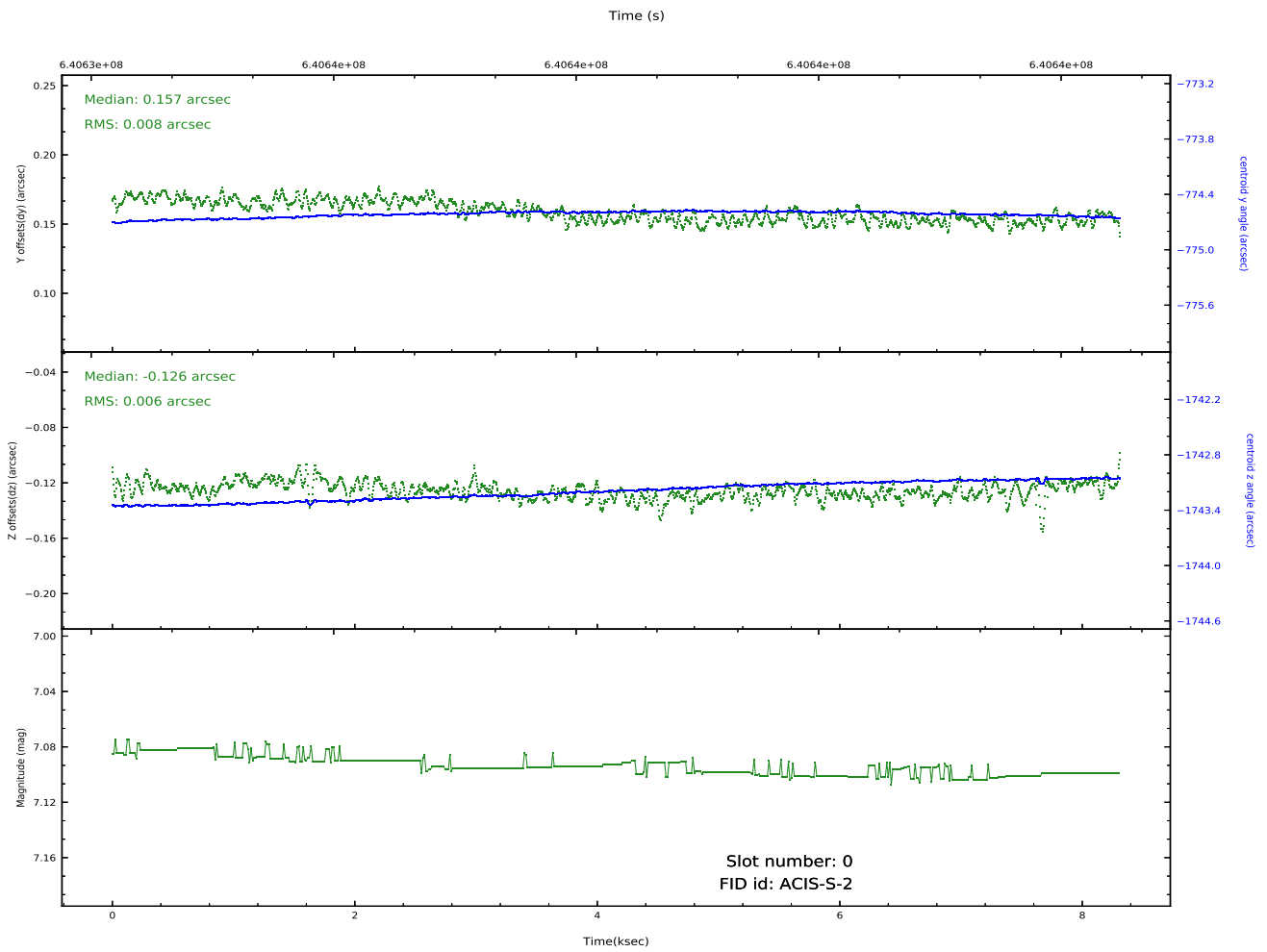
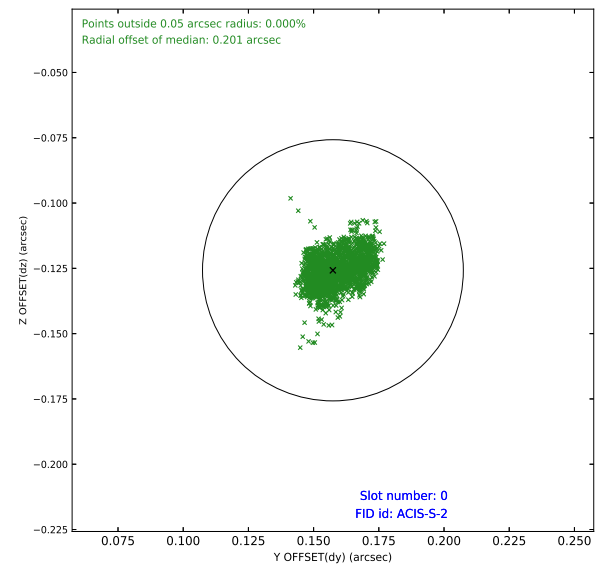
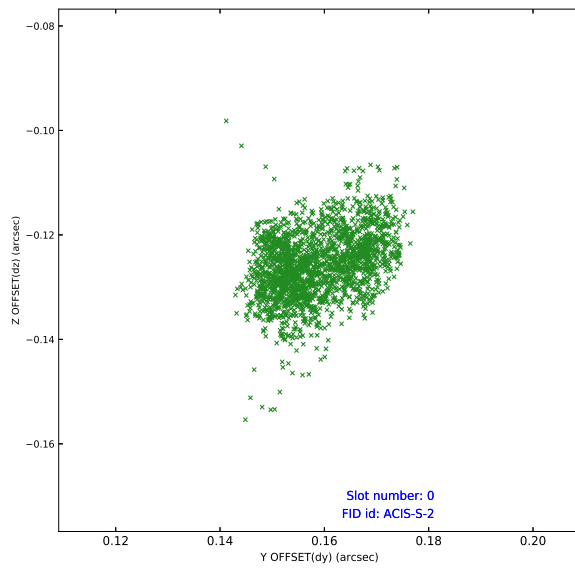


## 2.4.5 Slot 7

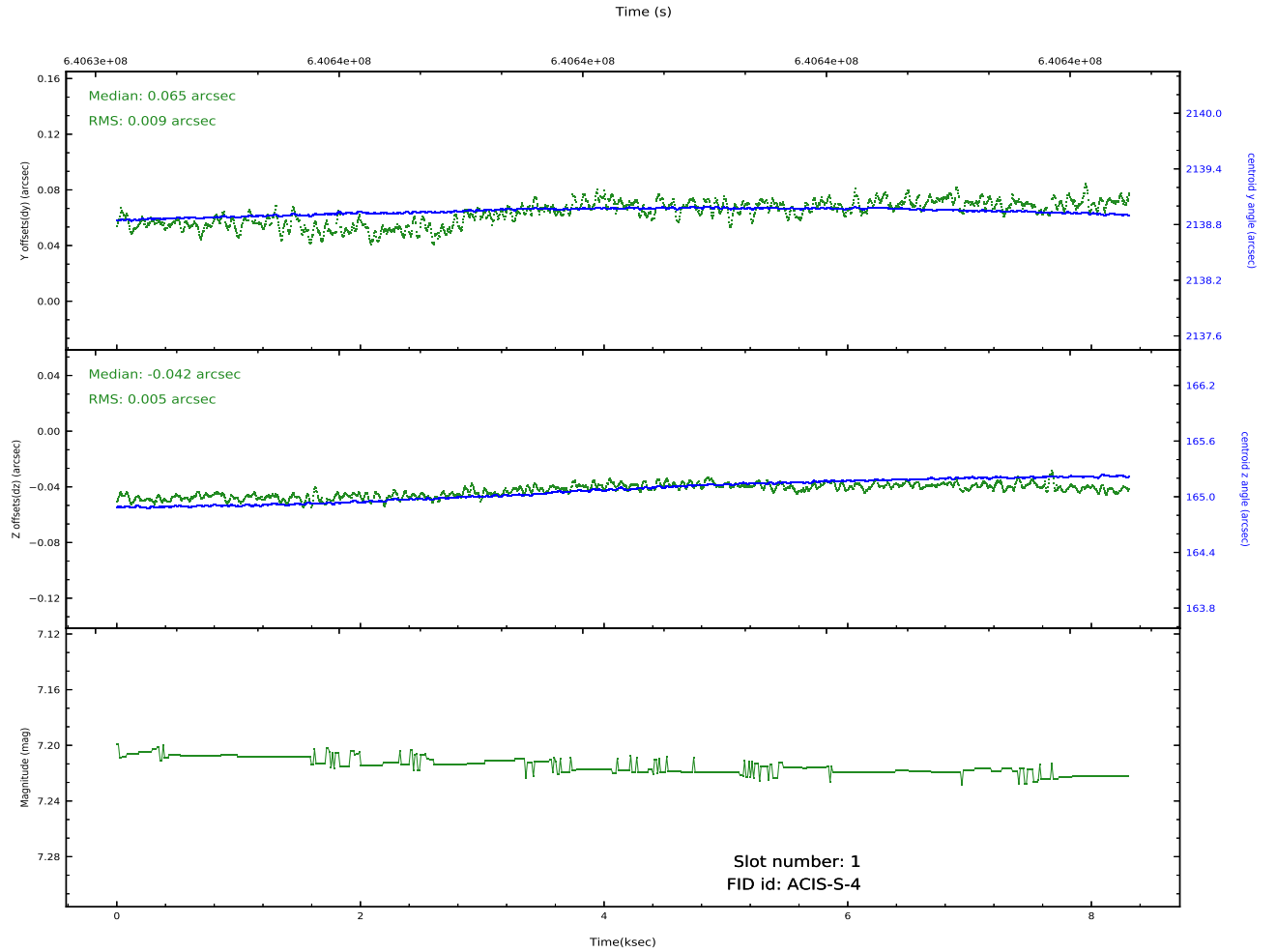
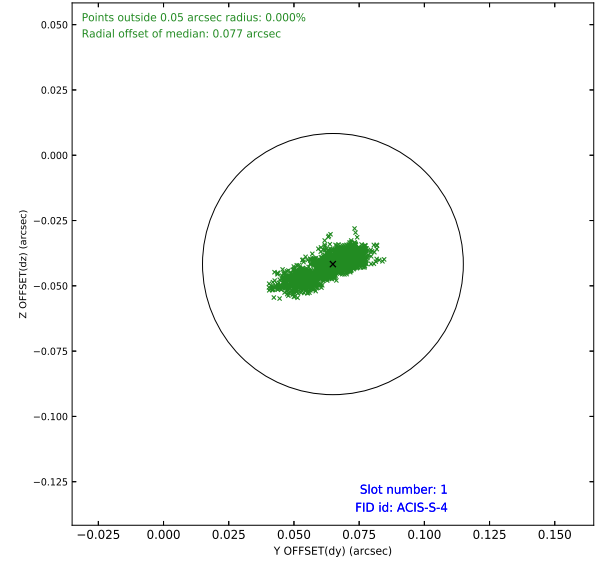
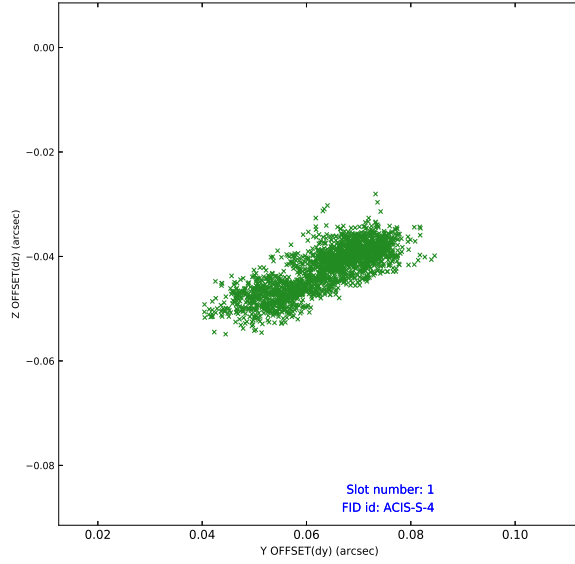


## 2.5 FID Slots

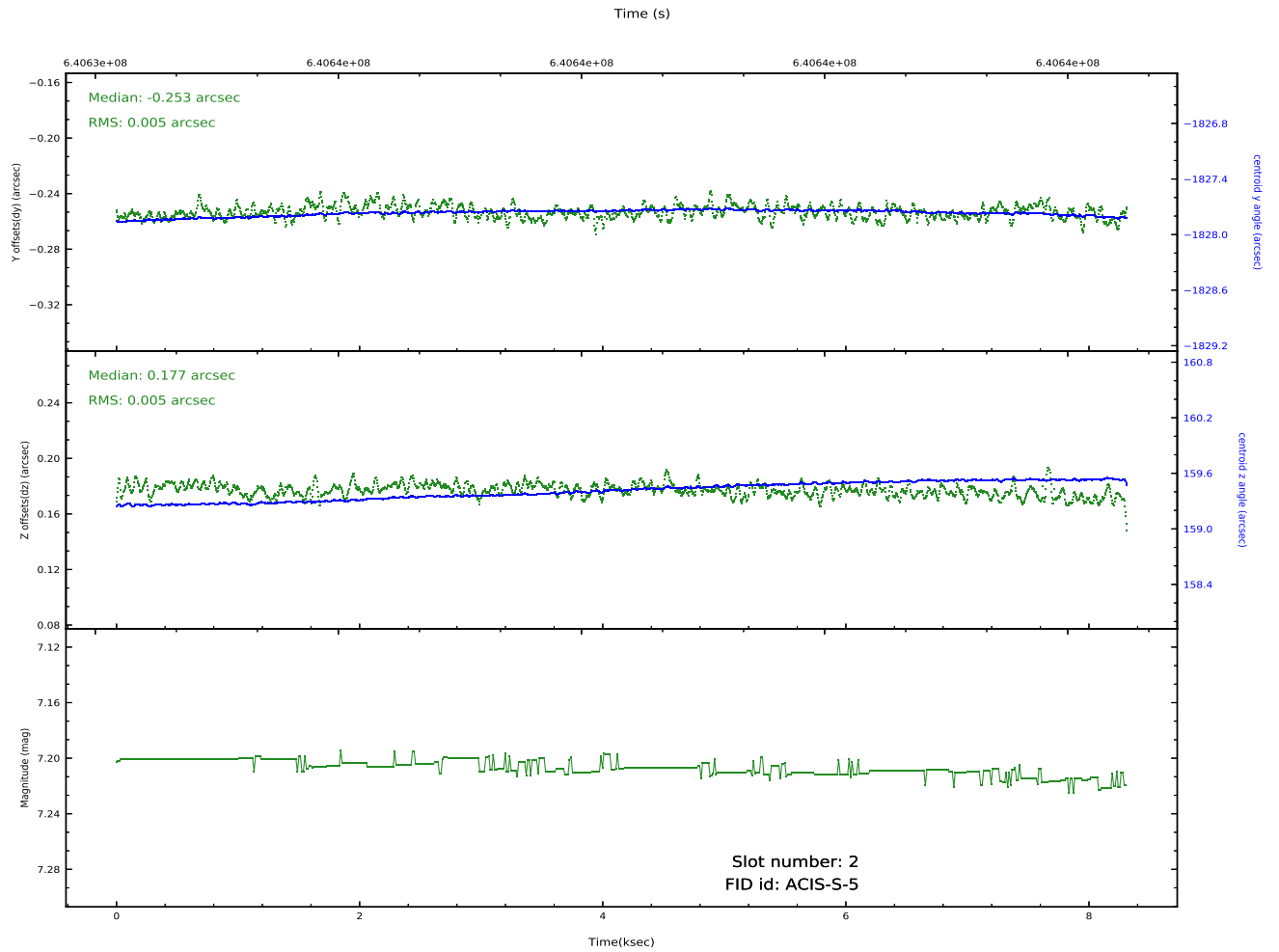
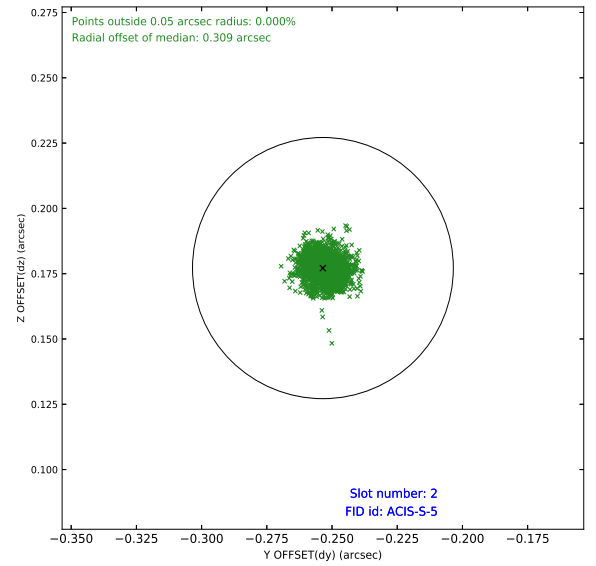
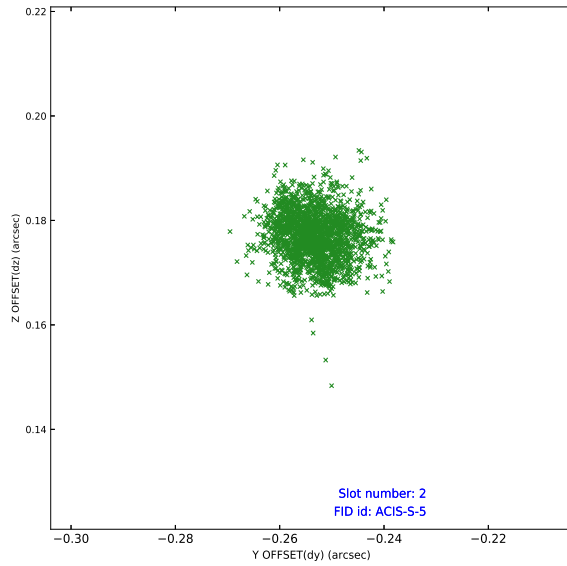
### 2.5.1 Slot 0



## 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)	2020.10.27
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.0693000621796

### A.2 Comments