

# V&V Reference Report

## L2 ASCDS Version : 10.6

Observation 20892 - L2 Version 1  
Chandra X-Ray Center

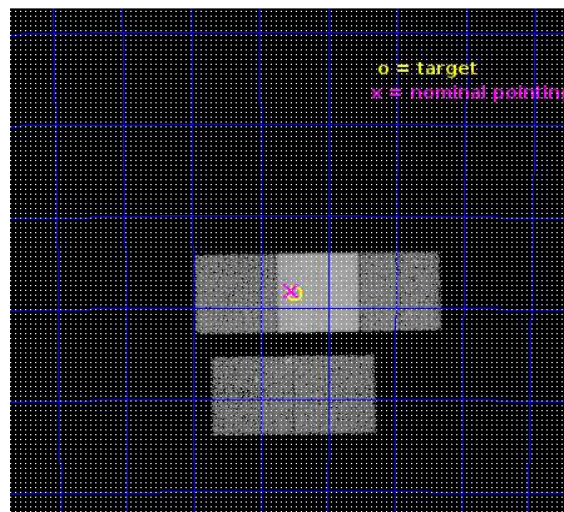
L2 Processing Date : Dec 25 2017

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# 1 Front

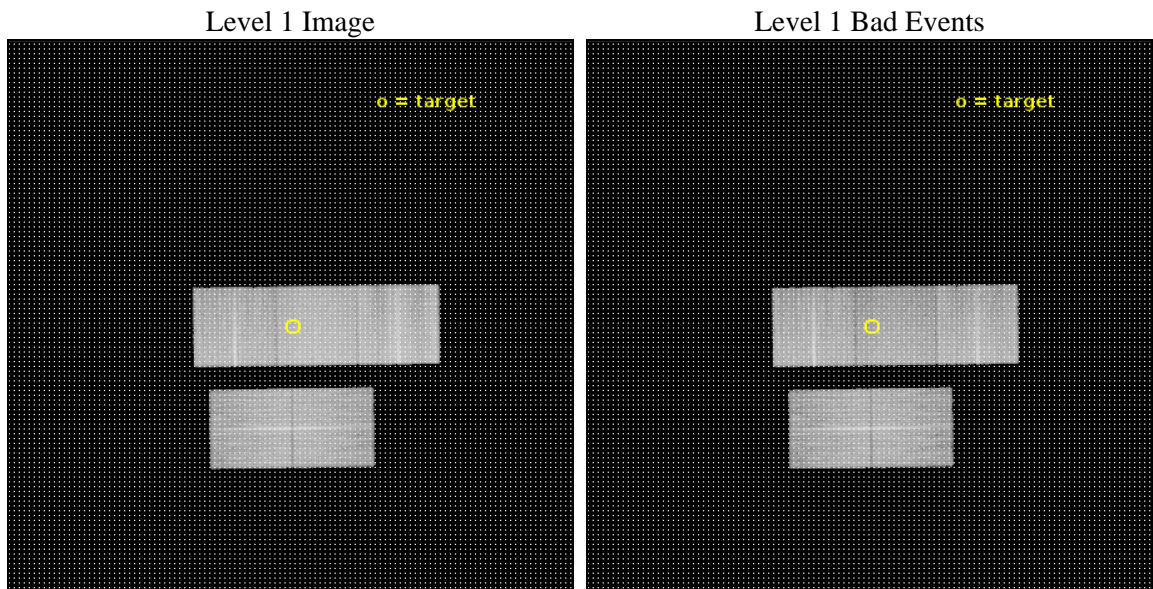
seq_num	703371	Sequence number
obs_id	20892	Observation id
title	Towards A Complete Census of the Compton-thick AGN Population in our Cosmic Backyard	Proposal title
observer	Ady Annuar	Principal investigator
object	ESO121-G6	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	91.874583	Observer's specified target RA [deg]
dec_targ	-61.807583	Observer's specified target Dec [deg]
ra_nom	91.885405741716	Nominal RA [deg]
dec_nom	-61.802731625231	Nominal Dec [deg]
roll_nom	359.16615148508	Nominal Roll [deg]
revision	1	Processing version of data
ontime	22245.600171208	Sum of GTIs [s]
livetime	21954.945027999	Livetime [s]
ontime2	22245.600171208	Sum of GTIs [s]
ontime3	22245.600171208	Sum of GTIs [s]
ontime6	22245.600171208	Sum of GTIs [s]
ontime7	22245.600171208	Sum of GTIs [s]
ontime8	22239.318071008	Sum of GTIs [s]
l2events	151380	Number of level 2 events



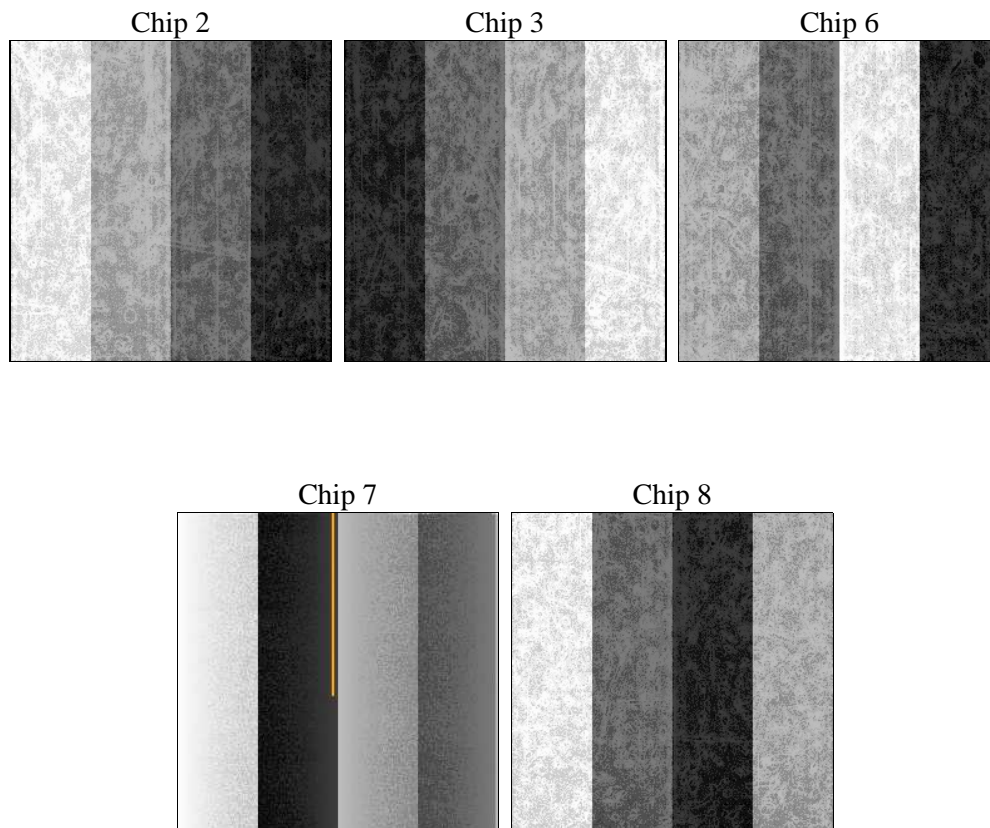
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	22200.000000	[s] Scheduled observation exposure time
ascdsver	10.6	Processing system revision	ontime	22245.600171208	Sum of GTIs [s]
caldbver	4.7.7	&#160	ontime2	22245.600171208	Sum of GTIs [s]
date	2017-12-25T04:41:22	Date and time of file creation	ontime3	22245.600171208	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	22245.600171208	Sum of GTIs [s]
			ontime7	22245.600171208	Sum of GTIs [s]
			ontime8	22239.318071008	Sum of GTIs [s]
			l1events	924176	Number of level 1 events

### 2.1.4 Events

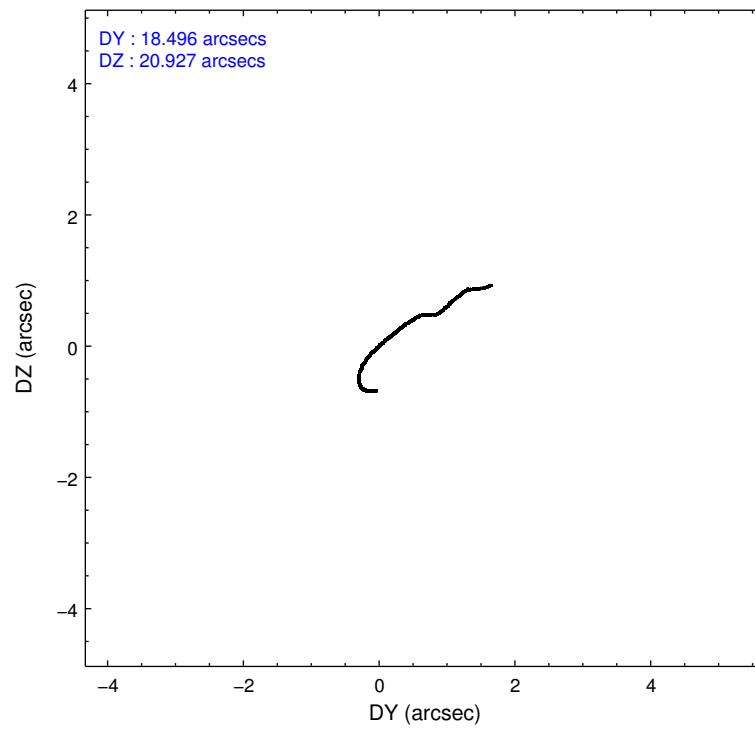
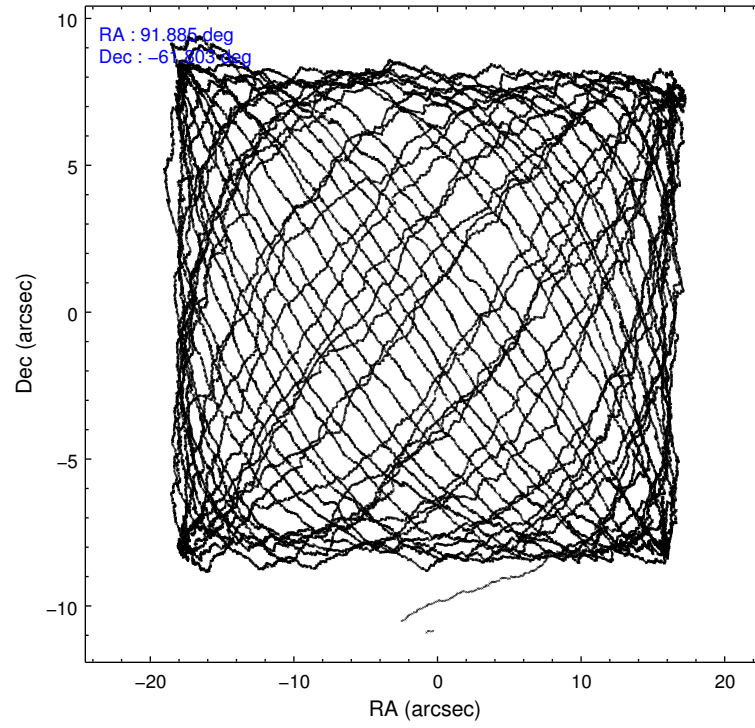
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	165435	160500	173698	210627	213916
rejected events	148334	144018	155402	119467	159521
rejected %	89%	89%	89%	56%	74%

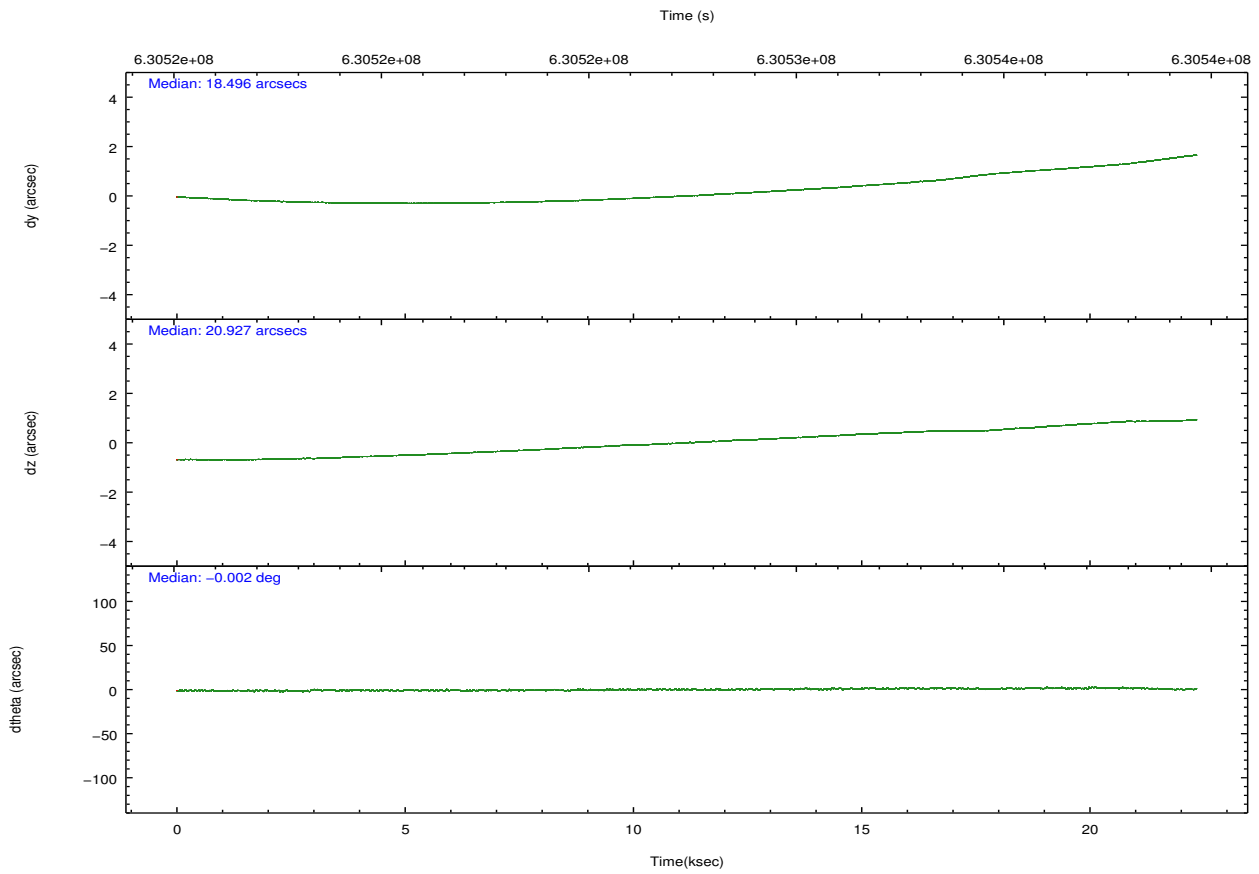
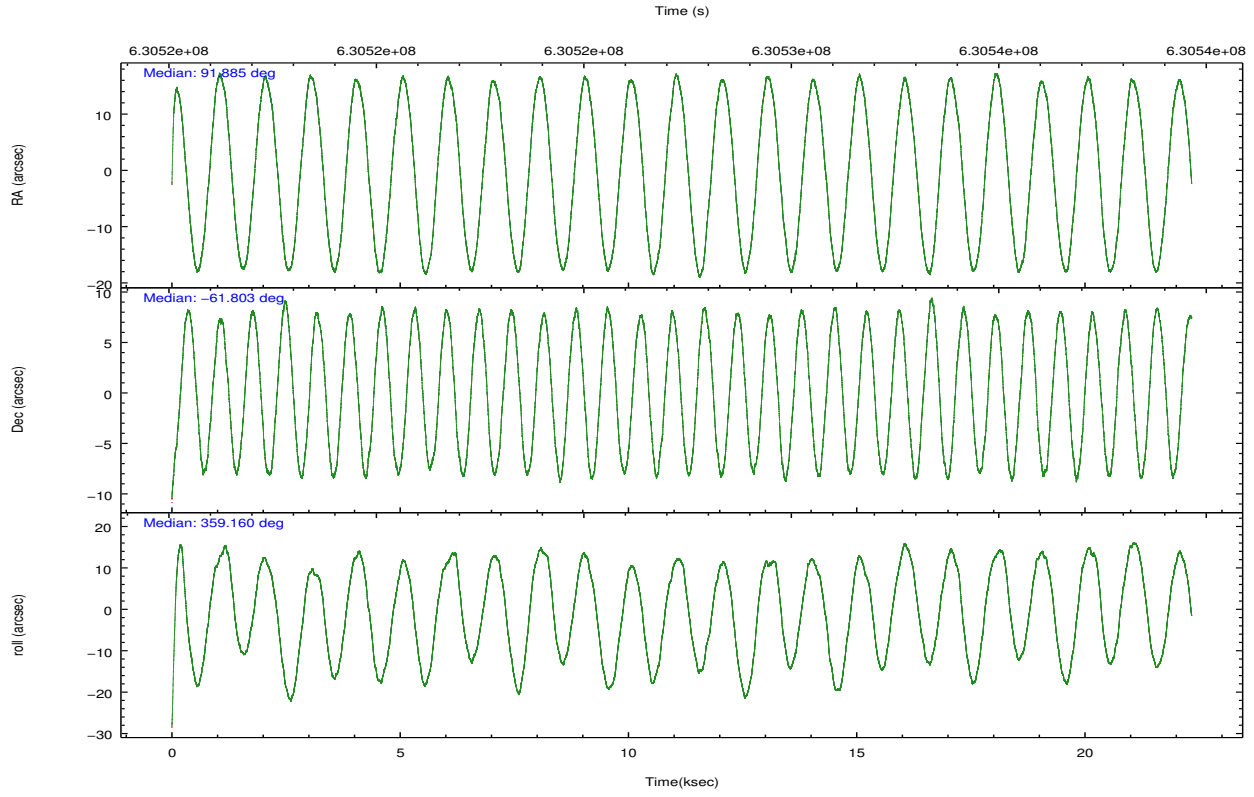
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	6256	5721	5417	7772	15179
	3%	3%	3%	3%	7%
grade 1 events	68	86	74	318	161
	0%	0%	0%	0%	0%
grade 2 events	4017	3592	4798	18642	13361
	2%	2%	2%	8%	6%
grade 3 events	1670	1786	1537	7282	5570
	1%	1%	0%	3%	2%
grade 4 events	1751	1720	1640	7231	5149
	1%	1%	0%	3%	2%
grade 5 events	5975	7333	7156	20738	11084
	3%	4%	4%	9%	5%
grade 6 events	3411	3667	4906	50261	15156
	2%	2%	2%	23%	7%
grade 7 events	142287	136595	148170	98383	148256
	86%	85%	85%	46%	69%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23678	ACIS-23678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	91.835007	91.88540574171635	CCD I2 on	O1	Y
[deg] Pointing Dec	-61.816416	-61.80273162523085	CCD I3 on	Y	Y
[deg] Pointing Roll	358.965124	359.1661514850807	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	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)	630516306.184000	630515285.1646	CCD S5 on	N	N
Observation start date	2017-12-24T15:23:57	2017-12-24T15:08:05	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	630538506.184000	630539293.74101	On-chip summing requested	N	N
Observation end date	2017-12-24T21:33:57	2017-12-24T21:48:13	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect





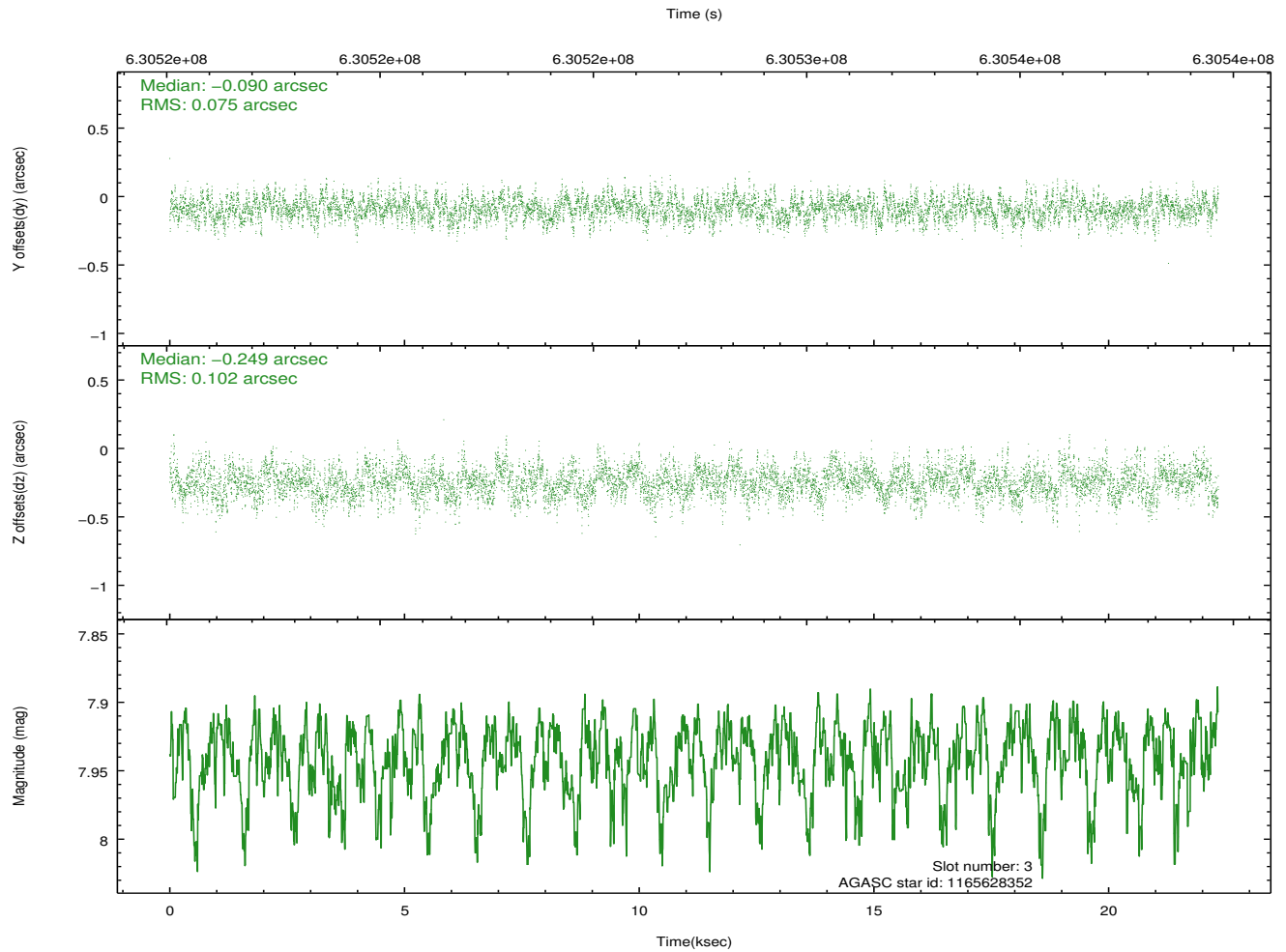
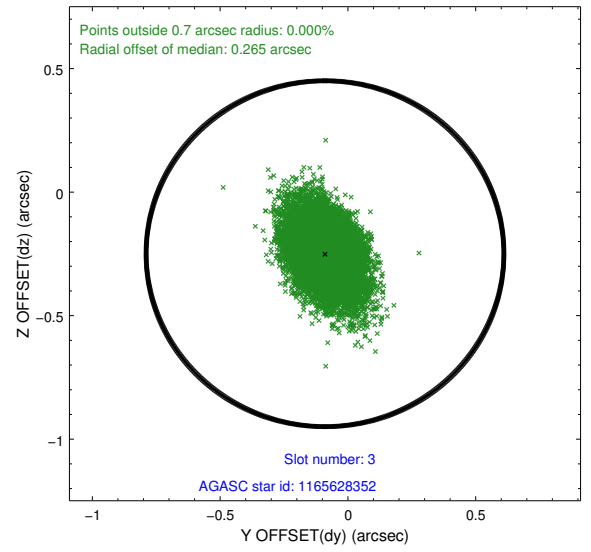
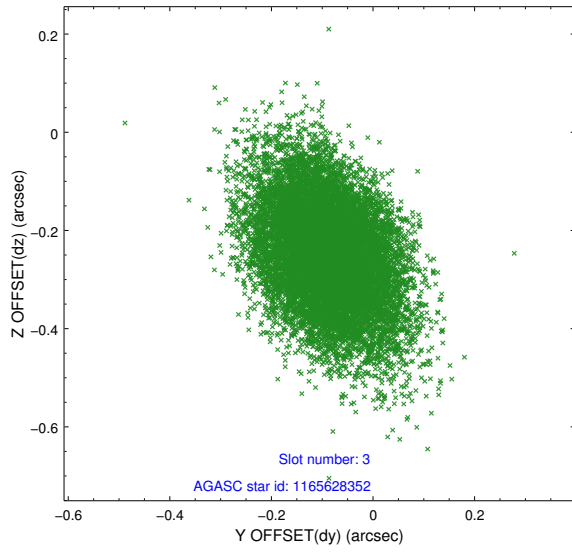
### Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.15	5449	-0.361	-0.248	0.016	0.023	0.000000	0.000000	-772.25	-1742.66
1	FID		ACIS-S-4	7.26	5449	0.384	0.207	0.008	0.014	0.000000	0.000000	2141.77	166.02
2	FID		ACIS-S-6	7.42	5449	-0.051	0.049	0.018	0.025	0.000000	0.000000	390.33	803.49
3	GUIDE	used	1165628352	7.94	10893	-0.090	-0.249	0.133	0.221	91.425078	-61.748582	-703.30	229.58
4	GUIDE	used	1166154992	9.03	10882	0.157	0.568	0.158	0.271	90.891677	-62.198584	-1557.85	-1414.90
5	GUIDE	used	1166155944	8.77	10889	0.241	0.275	0.125	0.218	90.968371	-62.153072	-1434.29	-1247.45
6	GUIDE	used	1166157360	8.95	10884	-0.078	-0.147	0.150	0.253	93.244228	-62.071450	2392.80	-900.90
7	GUIDE	used	1165624368	9.40	10879	-0.224	-0.441	0.195	0.324	91.130065	-61.277447	-1254.05	1911.11

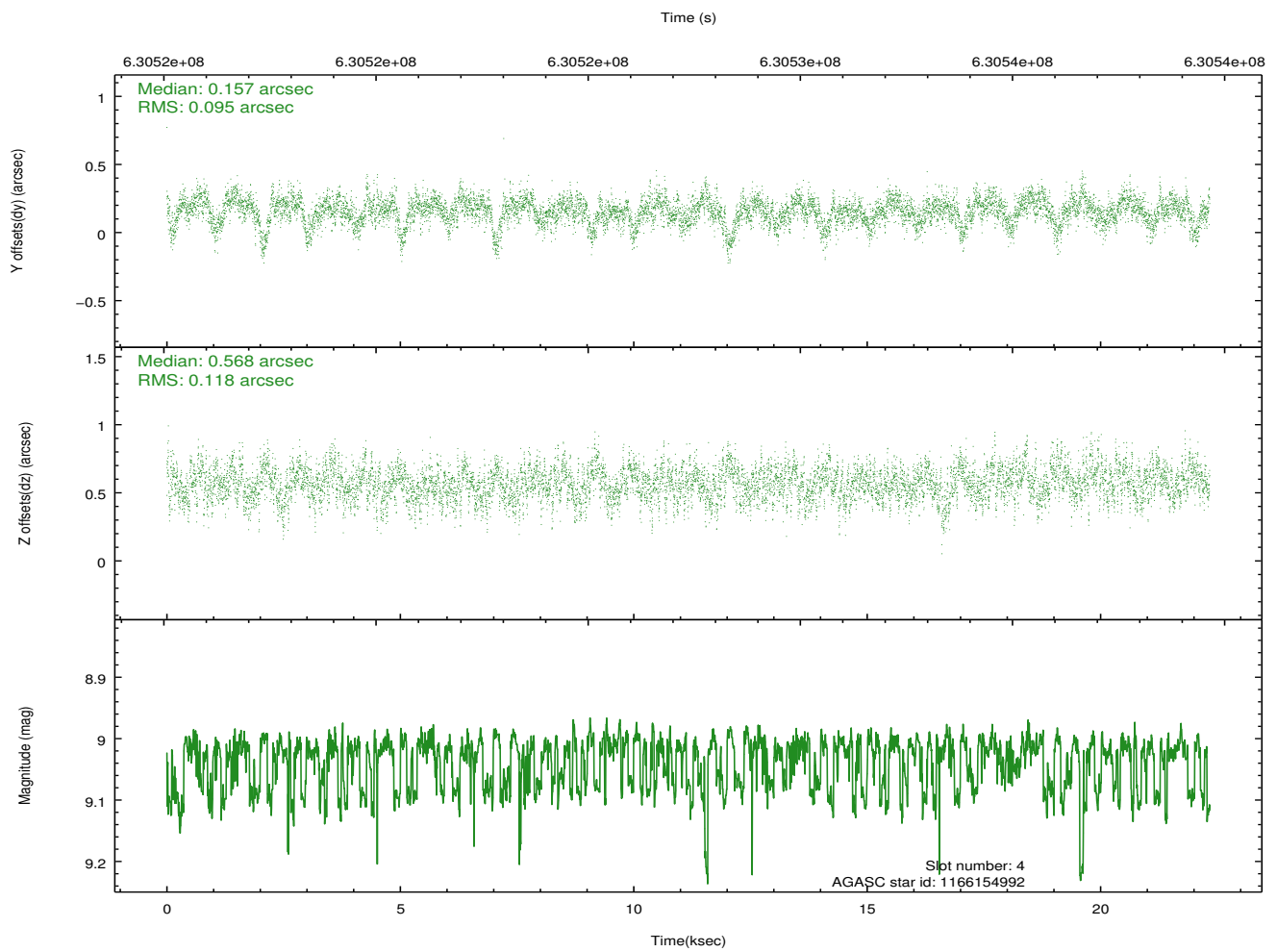
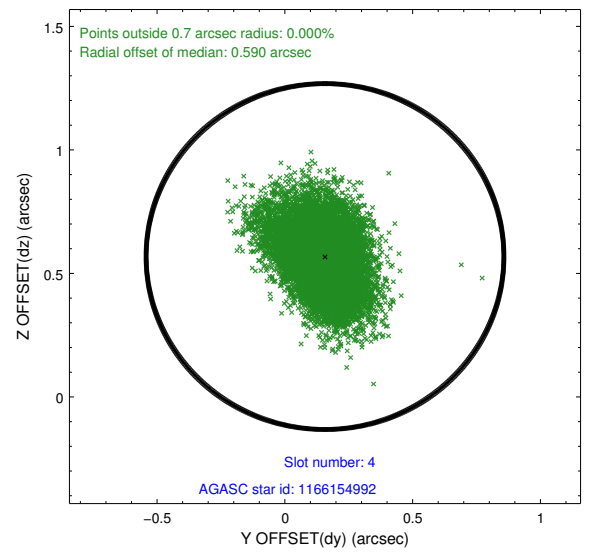
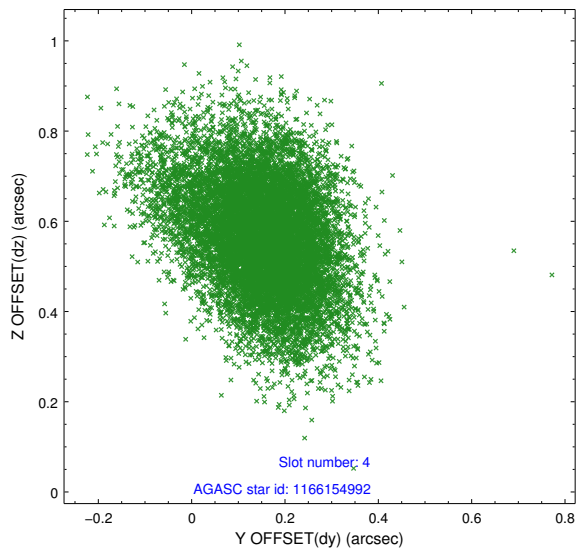
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## 2.4 Star Slots

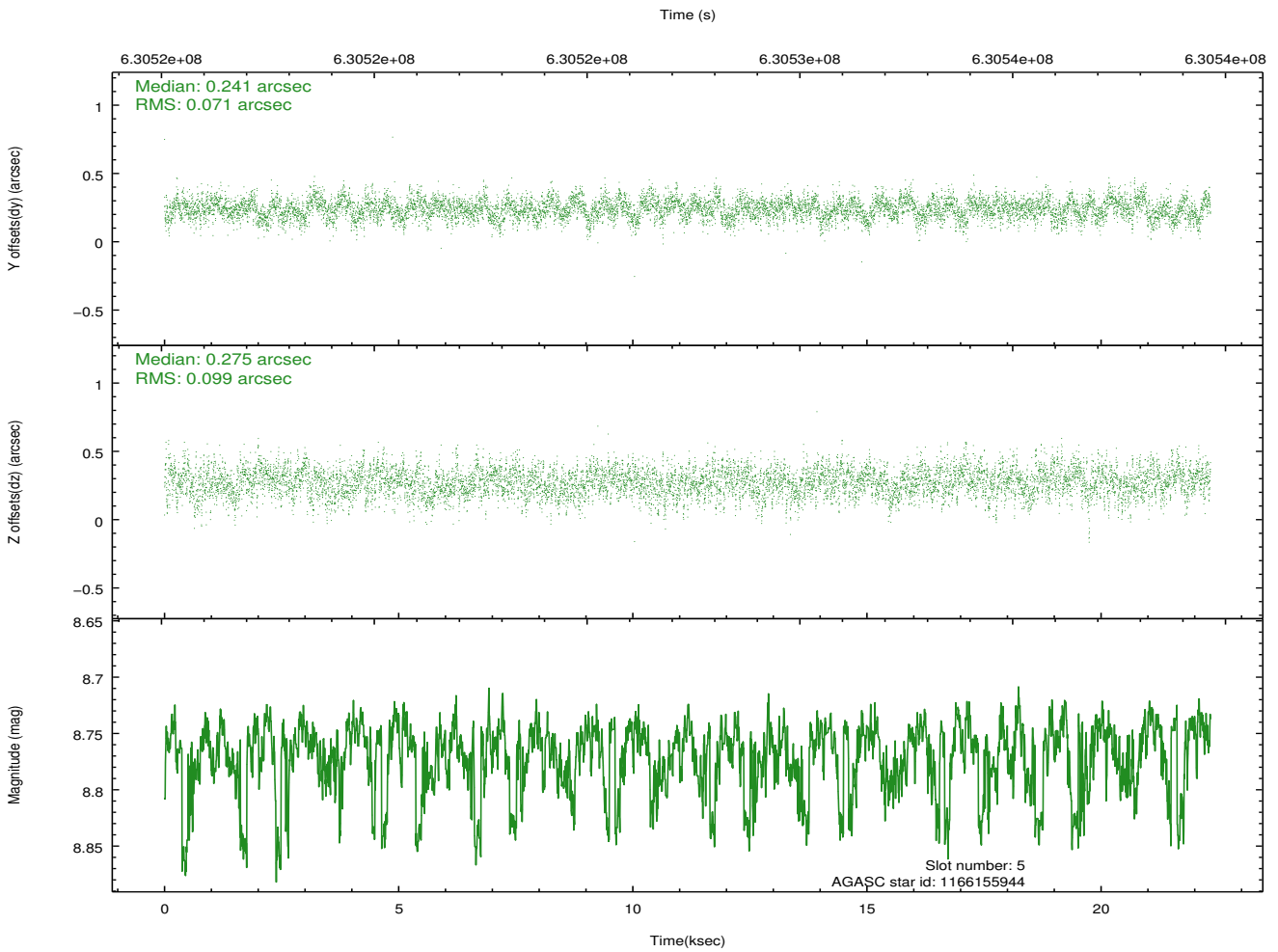
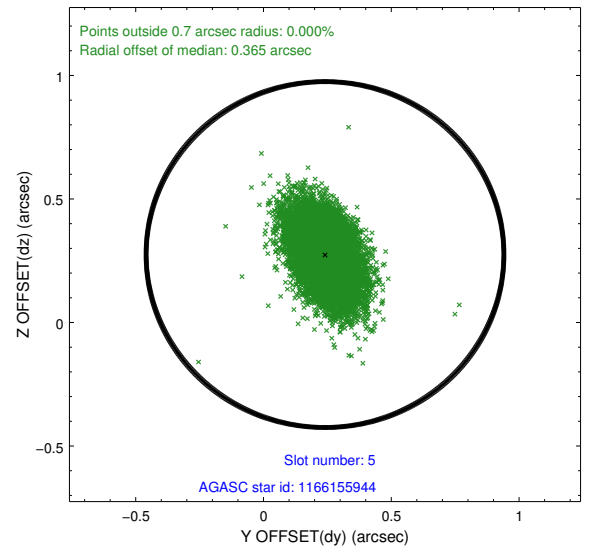
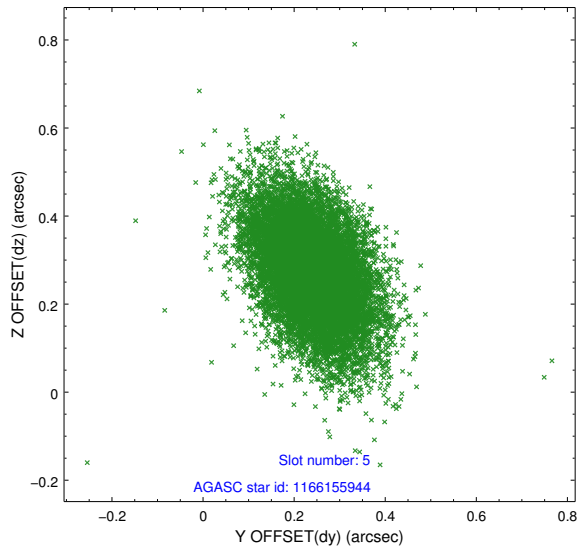
### 2.4.1 Slot 3



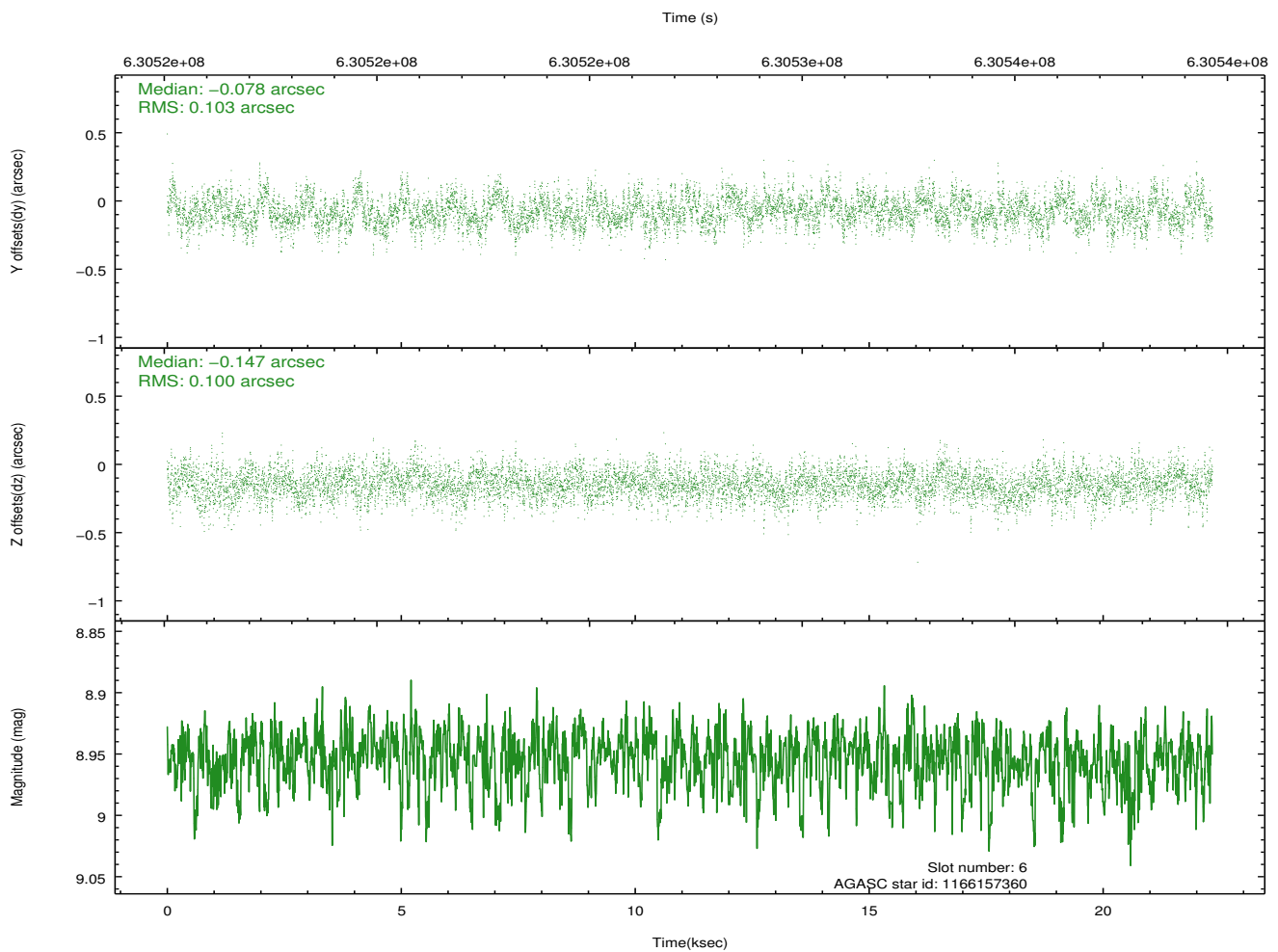
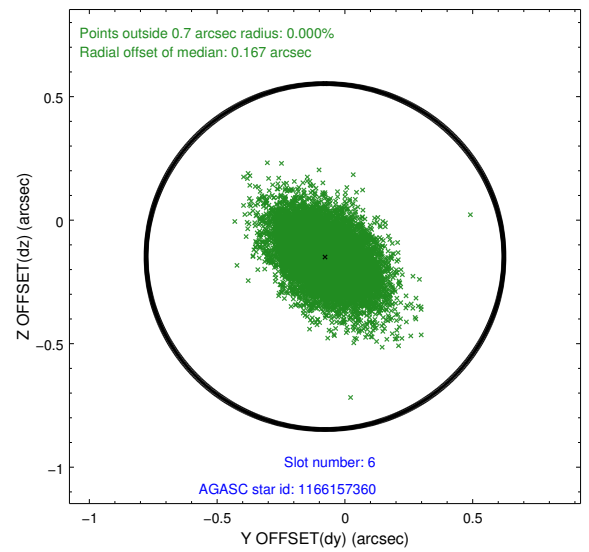
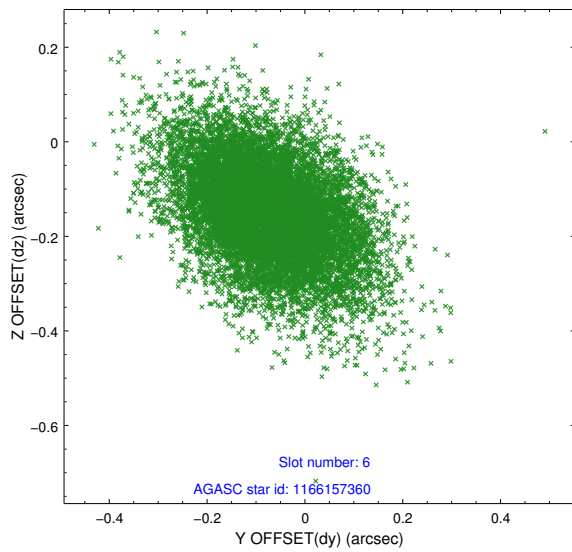
## 2.4.2 Slot 4



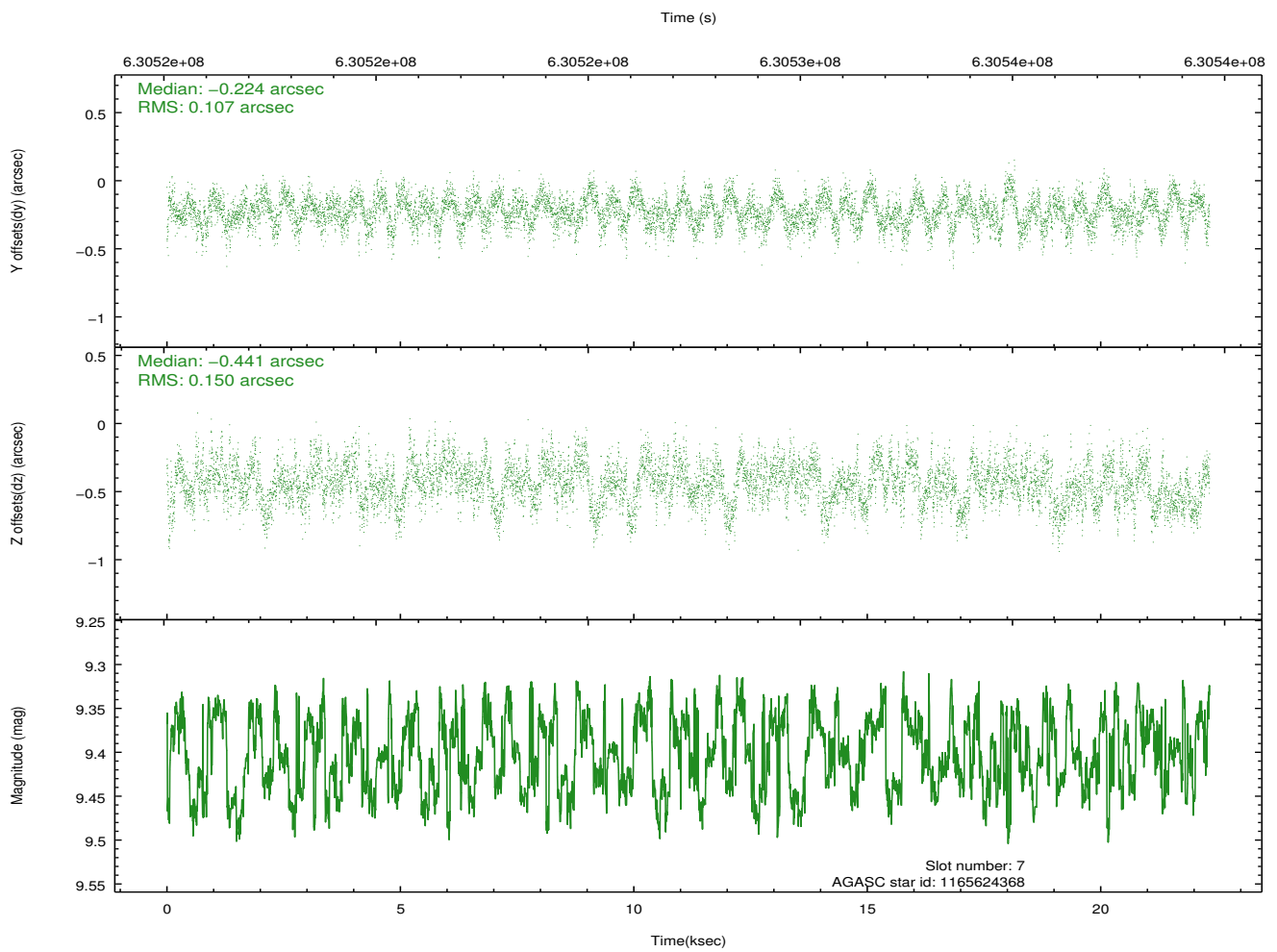
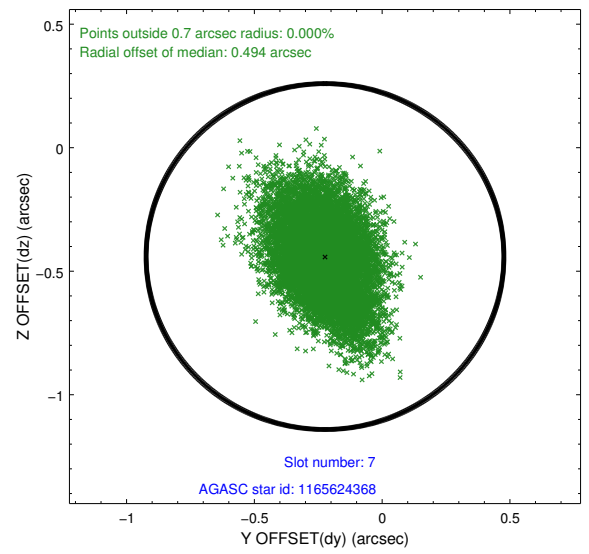
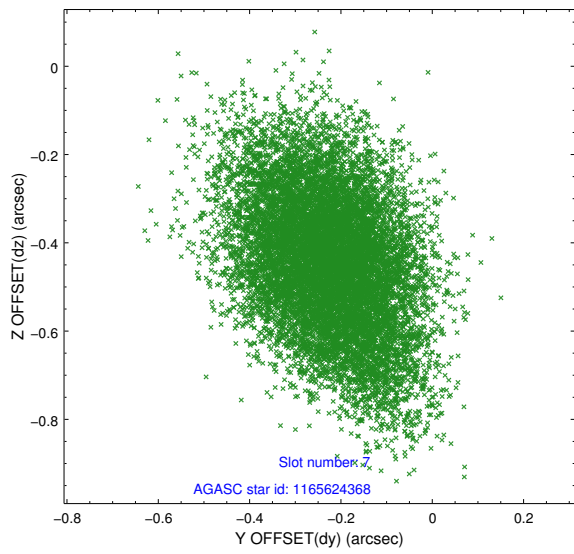
### 2.4.3 Slot 5



## 2.4.4 Slot 6

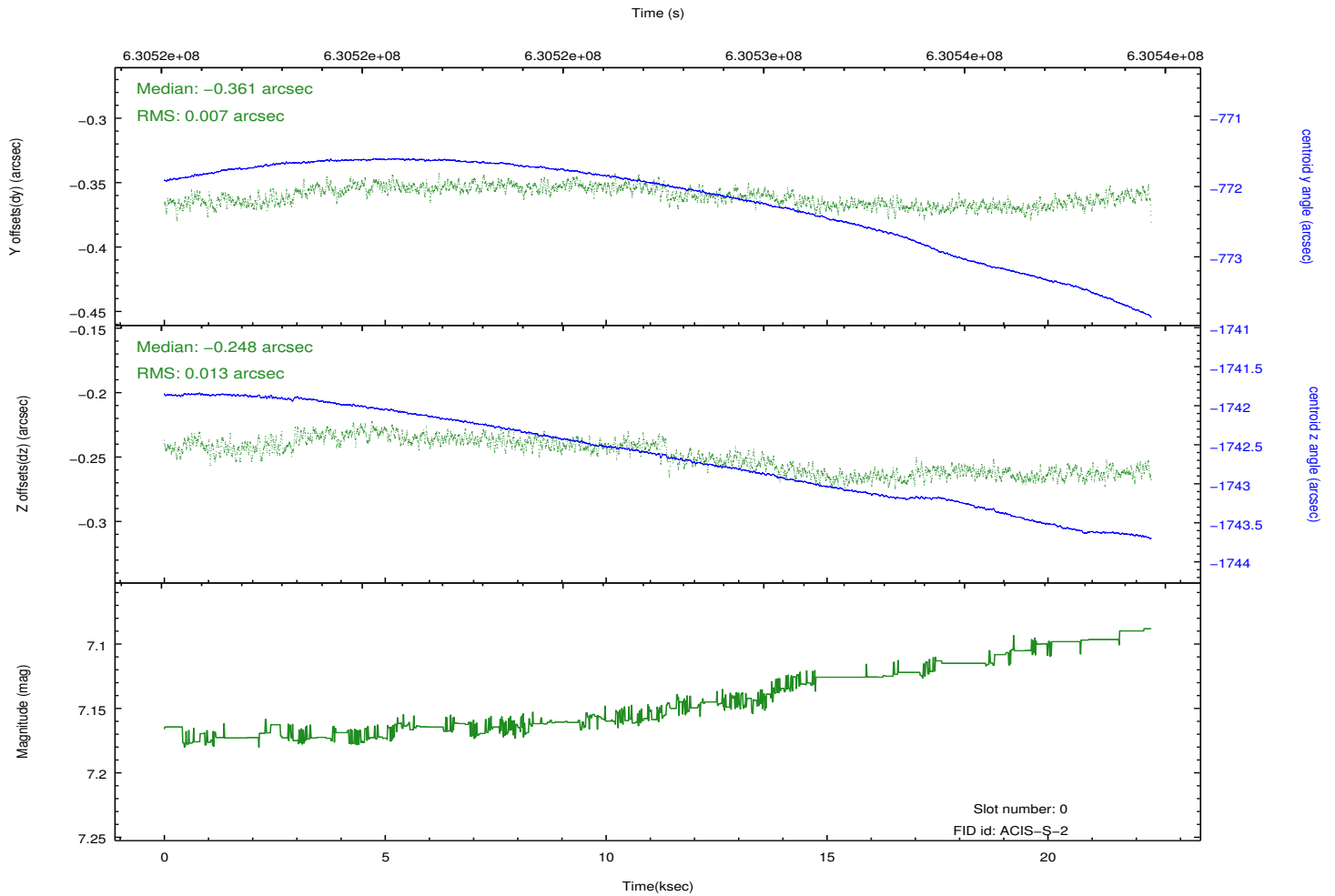
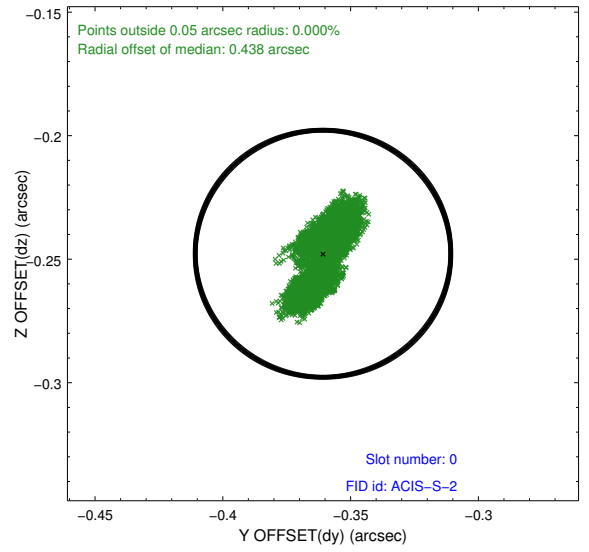
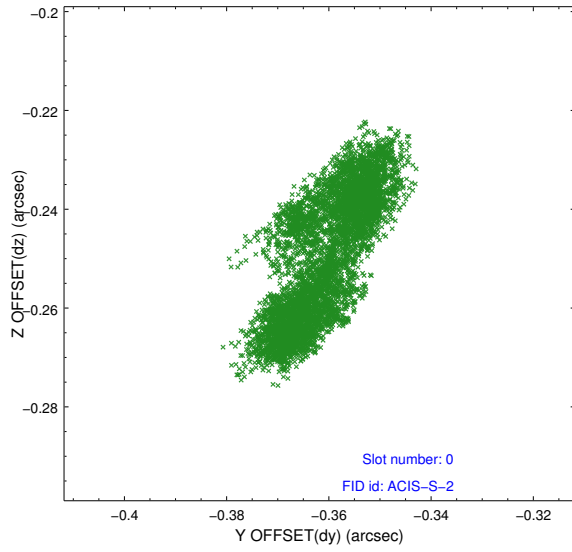


## 2.4.5 Slot 7

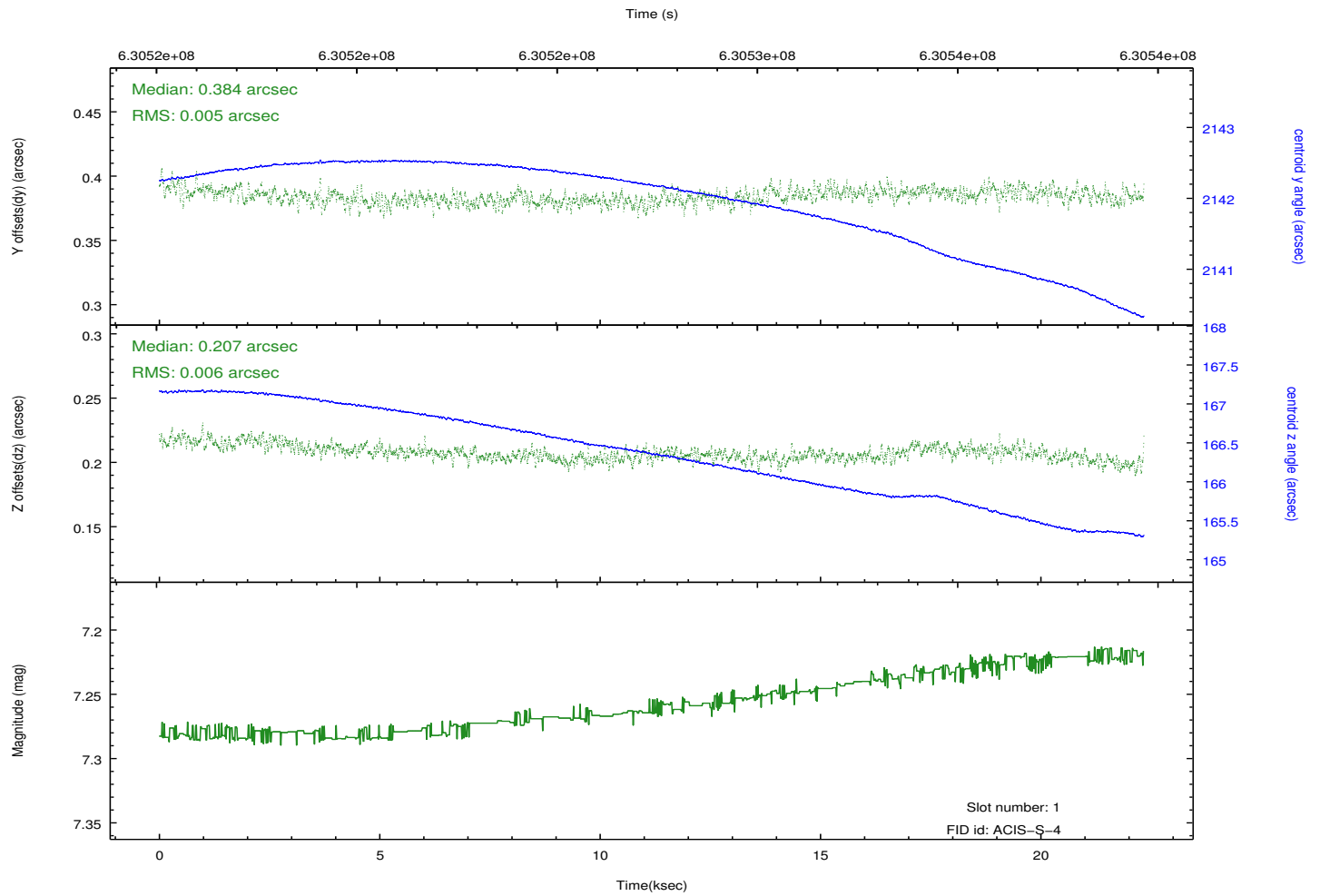
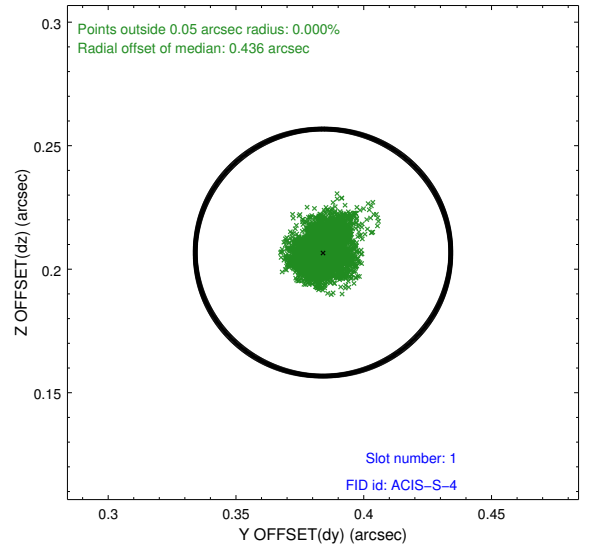
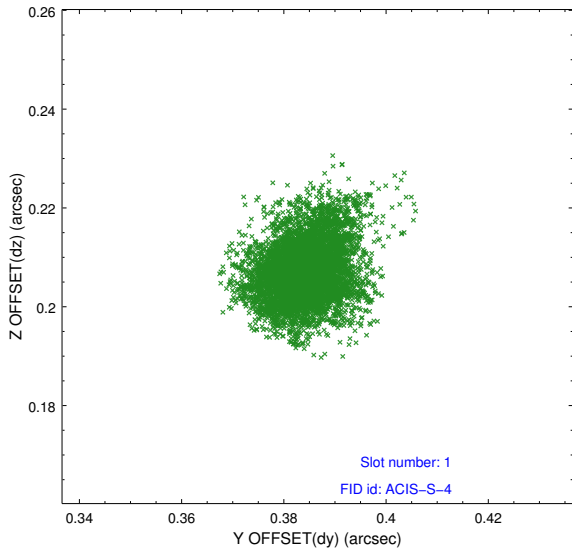


## 2.5 FID Slots

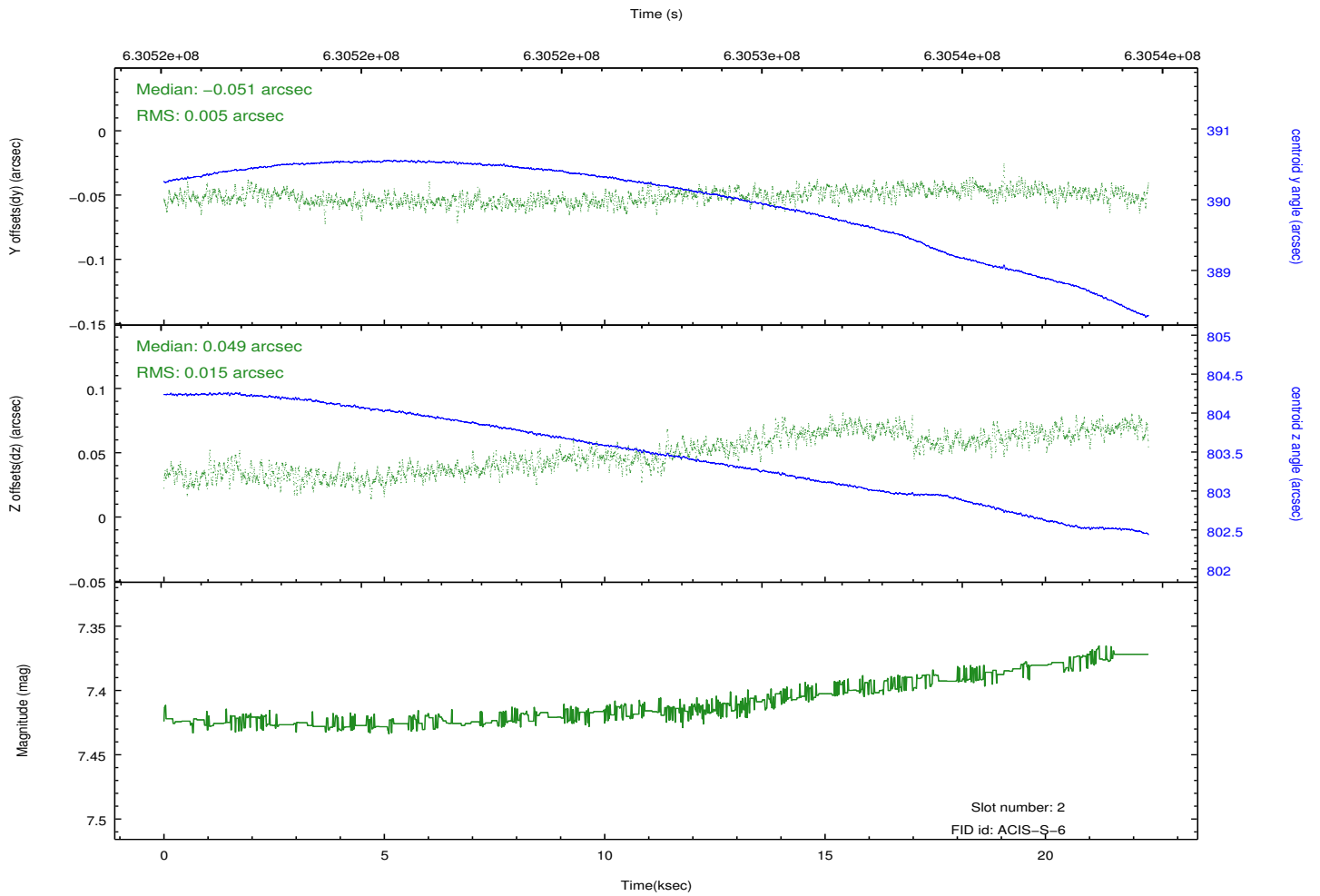
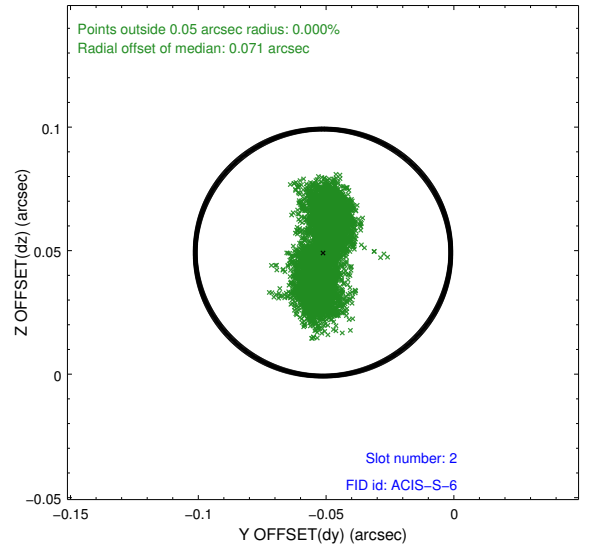
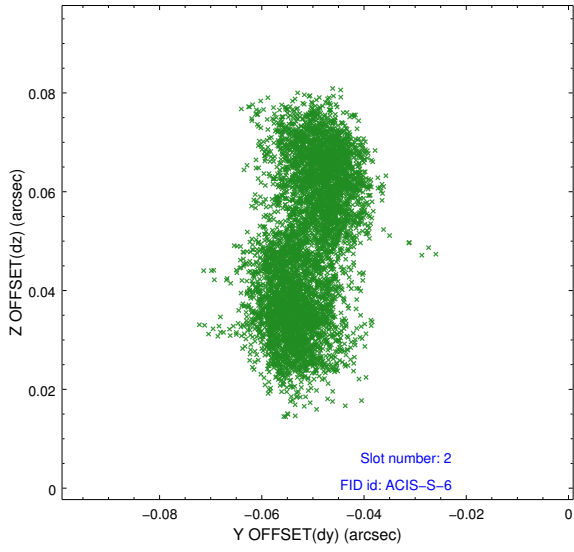
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



# A Summary

## A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2017.12.26
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	22.245600171208

## A.2 Comments

Joint Proposal: NuSTAR