

# V&V Reference Report

## L2 ASCDS Version : 10.6

Observation 19480 - L2 Version 2  
Chandra X-Ray Center

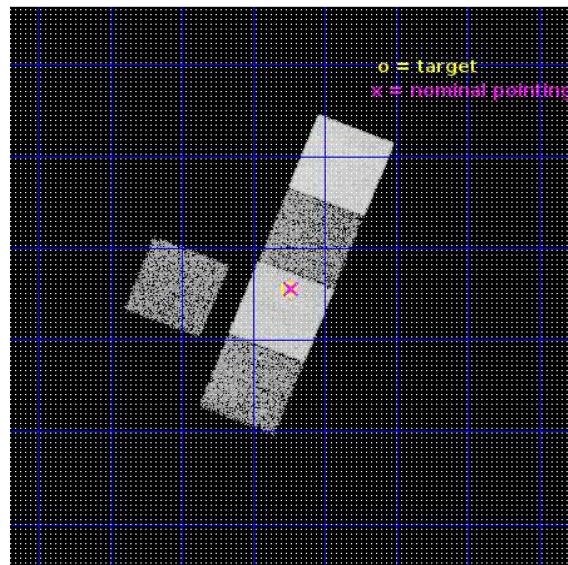
L2 Processing Date : Aug 14 2017

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# 1 Front

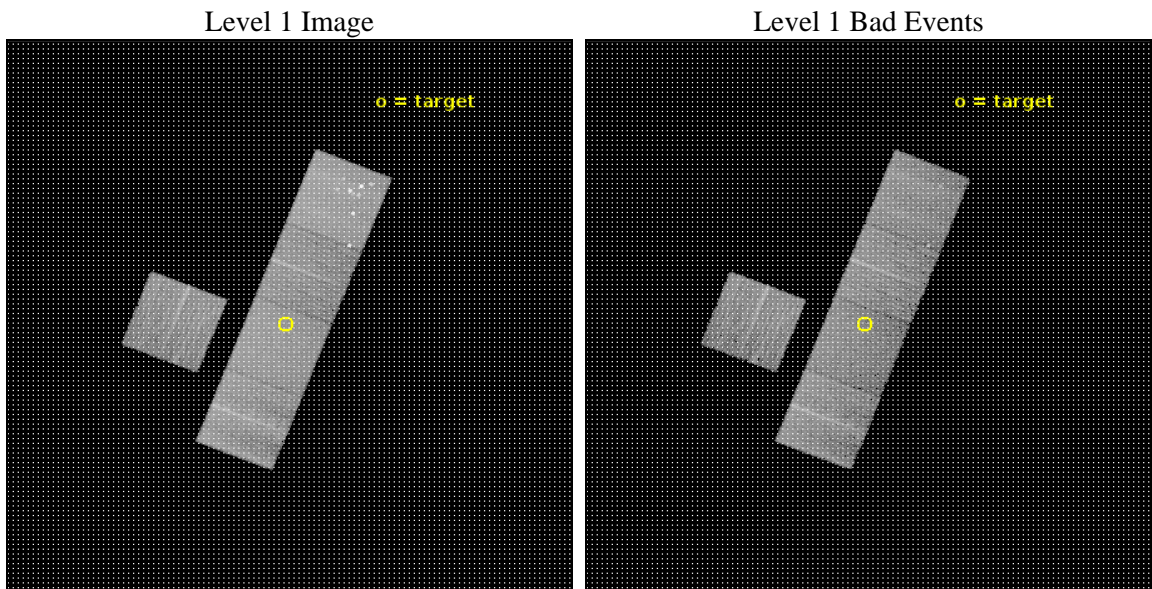
seq_num	703328	Sequence number
obs_id	19480	Observation id
title	UNDERSTANDING THE ROLE OF AGN IN TRANSITIONING GALAXI	Proposal tit
observer	Lauranne Lanz	Principal investigator
object	spog38	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	2.938333	Observer's specified target RA [deg]
dec_targ	-0.9085	Observer's specified target Dec [deg]
ra_nom	2.9331923917025	Nominal RA [deg]
dec_nom	-0.90682641932879	Nominal Dec [deg]
roll_nom	111.53319242369	Nominal Roll [deg]
revision	2	Processing version of data
ontime	10121.500077963	Sum of GTIs [s]
livetime	9989.2552281043	Livetime [s]
ontime3	10118.358997703	Sum of GTIs [s]
ontime5	10121.500077963	Sum of GTIs [s]
ontime6	10121.500077963	Sum of GTIs [s]
ontime7	10121.500077963	Sum of GTIs [s]
ontime8	10121.500077963	Sum of GTIs [s]
l2events	109518	Number of level 2 events



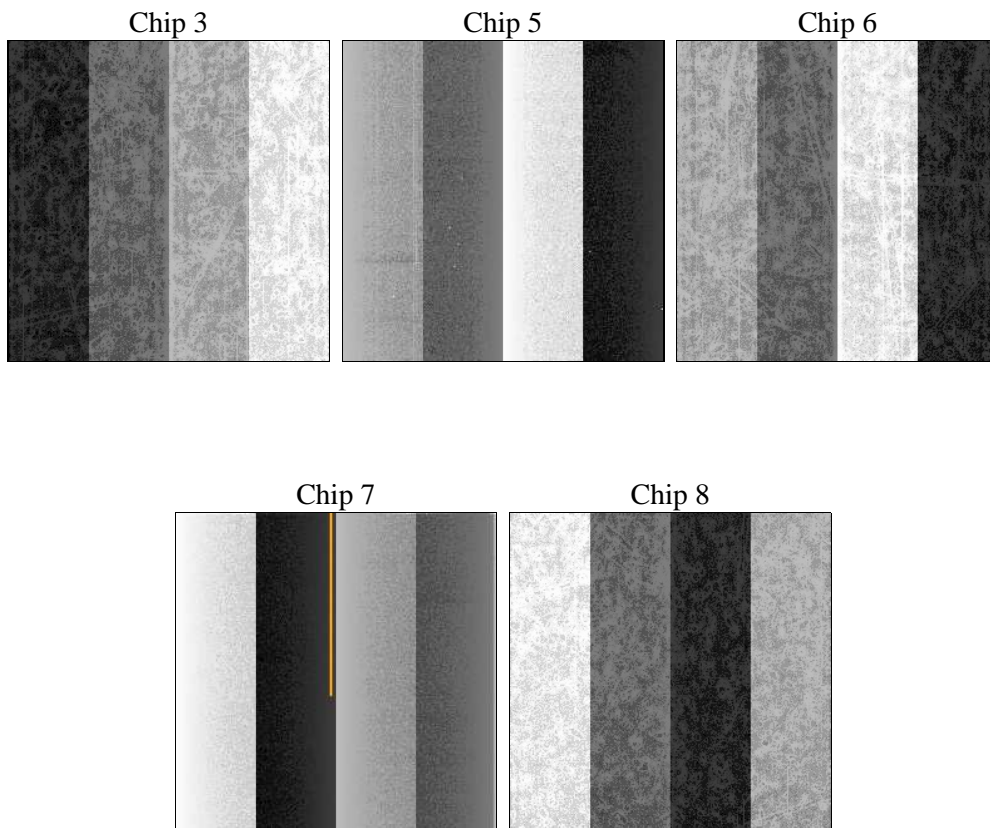
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10069.408000	[s] Scheduled observation exposure time
ascdsver	10.6	Processing system revision	ontime	10121.500077963	Sum of GTIs [s]
caldsver	4.7.5	&#160	ontime3	10118.358997703	Sum of GTIs [s]
date	2017-08-14T13:40:30	Date and time of file creation	ontime5	10121.500077963	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	10121.500077963	Sum of GTIs [s]
			ontime7	10121.500077963	Sum of GTIs [s]
			ontime8	10121.500077963	Sum of GTIs [s]
			l1events	455017	Number of level 1 events

### 2.1.4 Events

	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	69951	128064	73496	91742	91764
rejected events	63082	60628	65614	52529	69640
rejected %	90%	47%	89%	57%	75%

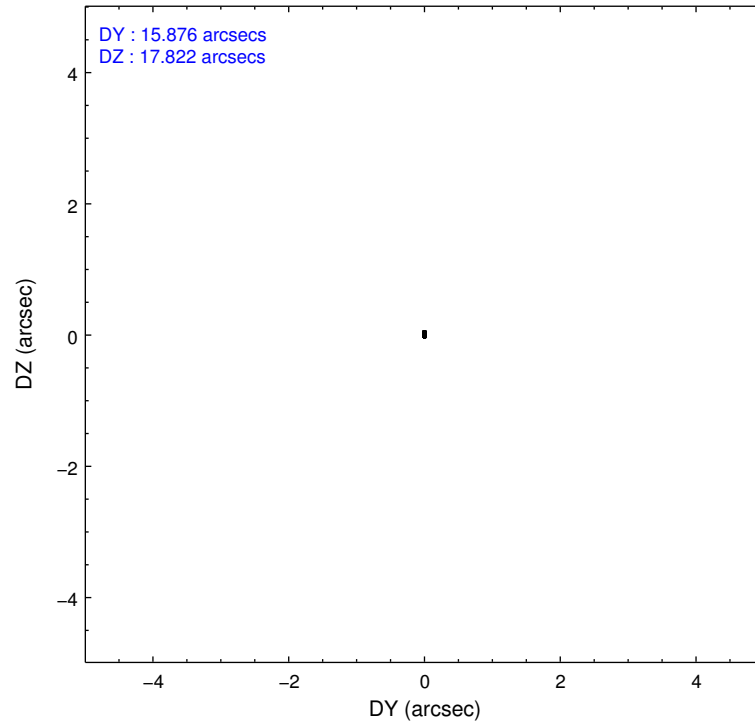
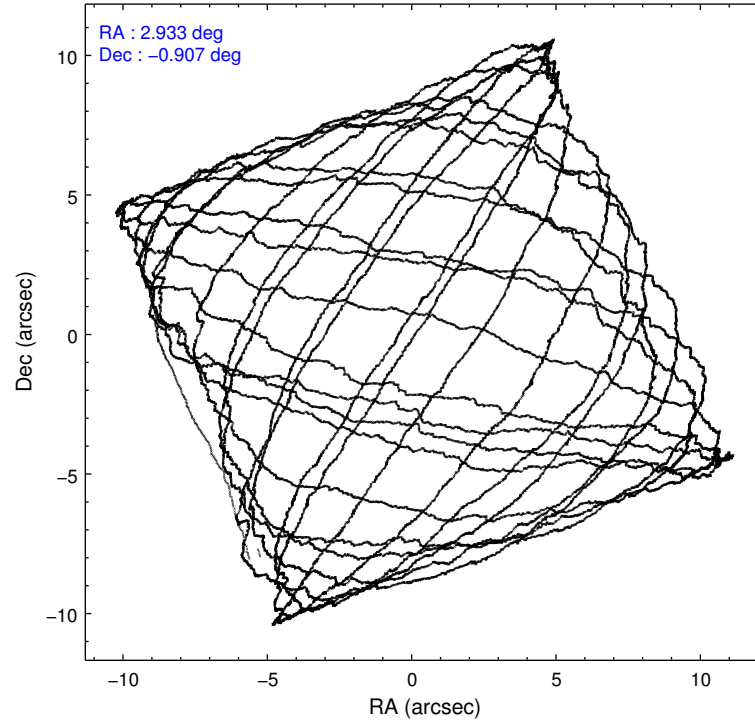
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	2336	13407	2184	3192	6195
	3%	10%	2%	3%	6%
grade 1 events	37	675	29	136	63
	0%	0%	0%	0%	0%
grade 2 events	1471	19054	2201	7946	5577
	2%	14%	2%	8%	6%
grade 3 events	740	2233	698	3219	2205
	1%	1%	0%	3%	2%
grade 4 events	687	2197	658	3163	2106
	0%	1%	0%	3%	2%
grade 5 events	3115	7411	2868	8836	4660
	4%	5%	3%	9%	5%
grade 6 events	1639	30565	2144	21702	6043
	2%	23%	2%	23%	6%
grade 7 events	59926	52522	62714	43548	64915
	85%	41%	85%	47%	70%

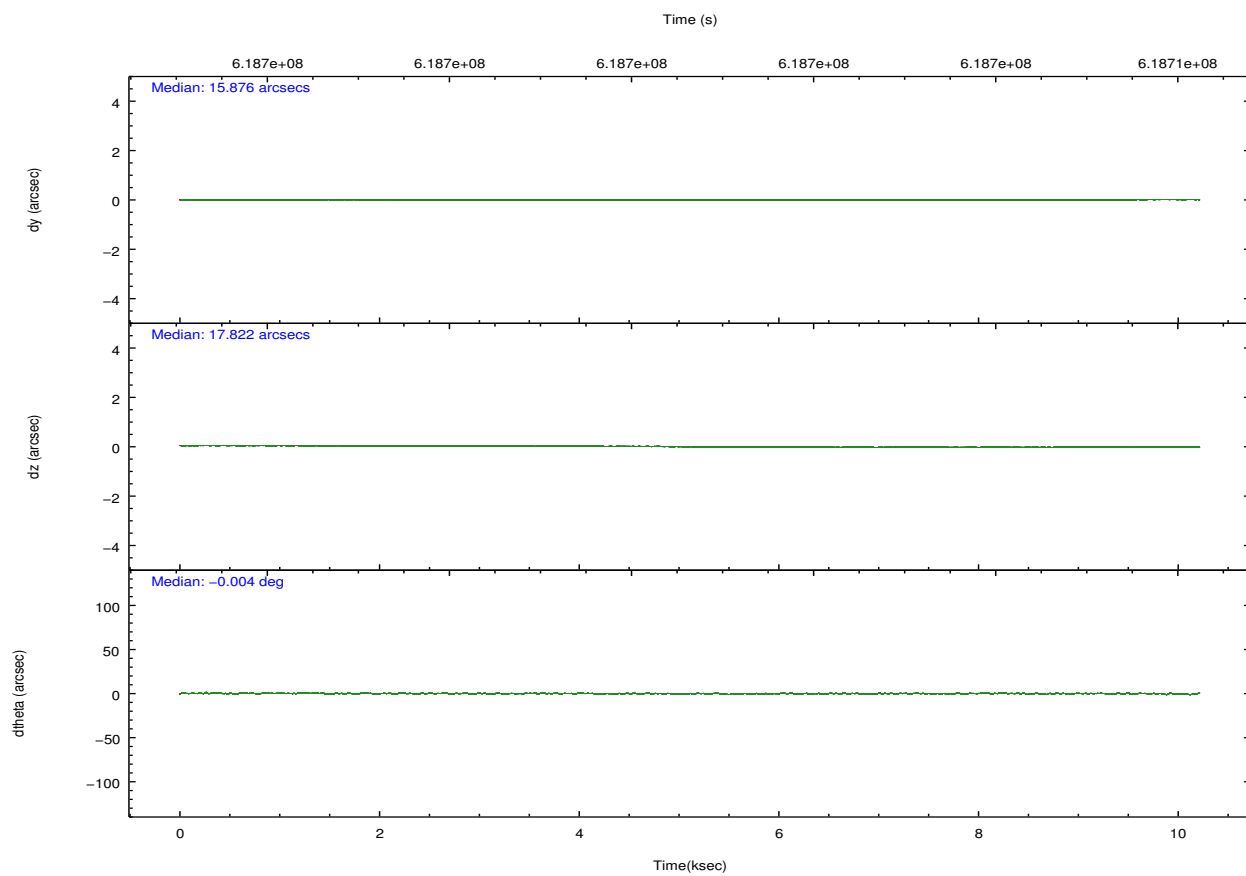
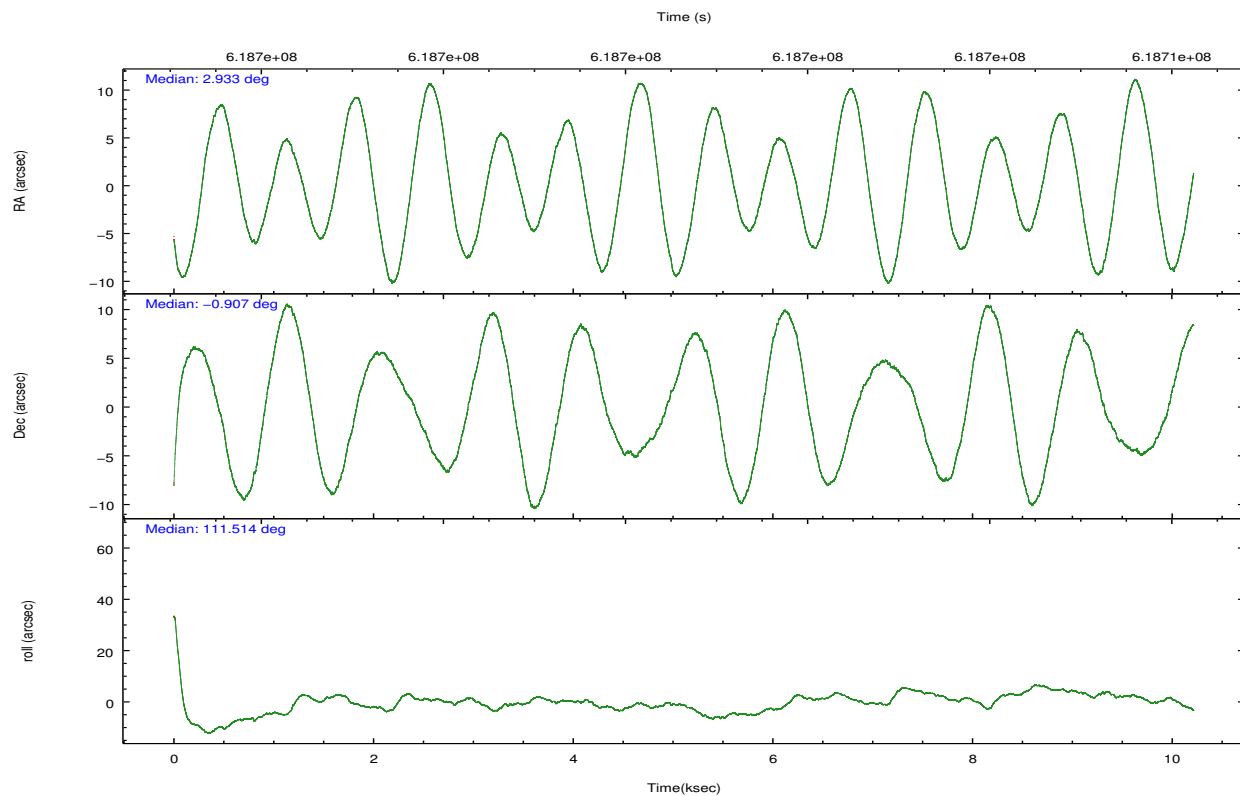


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-35678	ACIS-35678	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	2.954973	2.933192391702505	CCD I2 on	O1	N
[deg] Pointing Dec	-0.923625	-0.9068264193287863	CCD I3 on	O2	Y
[deg] Pointing Roll	111.376850	111.533192423691	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)	618695685.184000	618694260.82197	CCD S5 on	N	N
Observation start date	2017-08-09T19:53:36	2017-08-09T19:31:00	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	618705755.184000	618705982.21015	On-chip summing requested	N	N
Observation end date	2017-08-09T22:41:26	2017-08-09T22:46:22	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



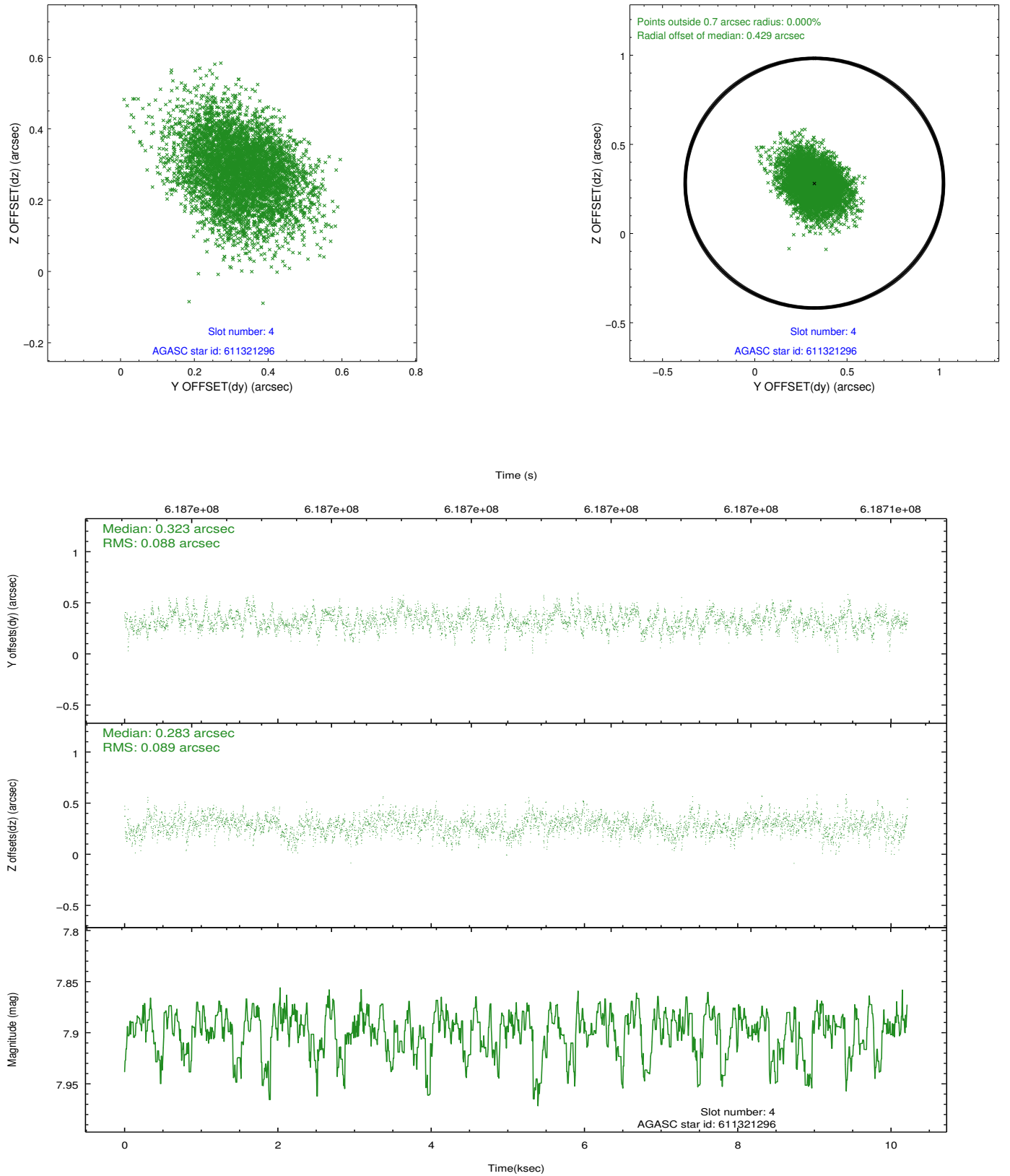


### Slot Statistics

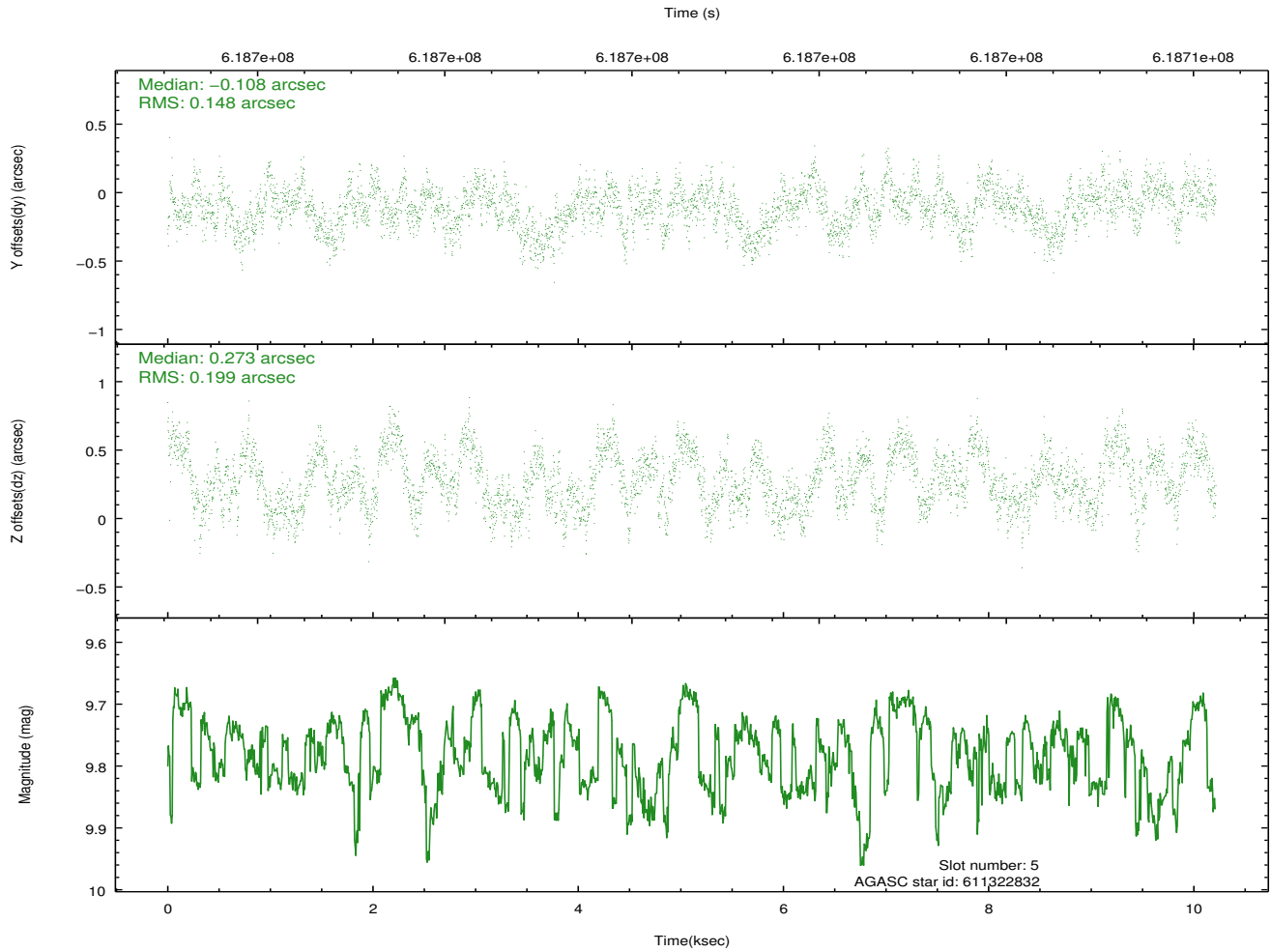
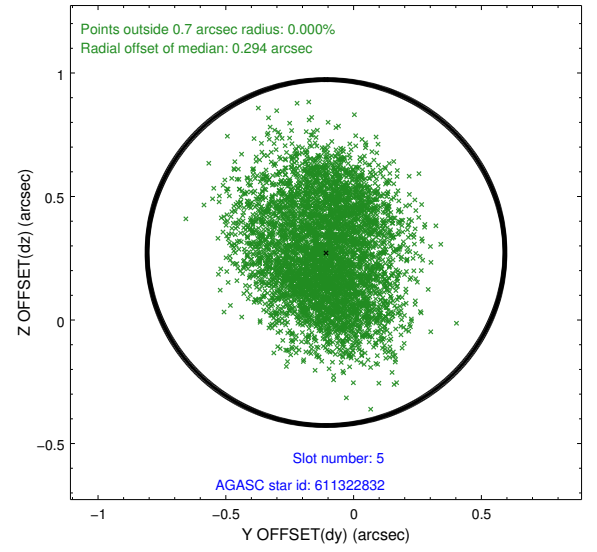
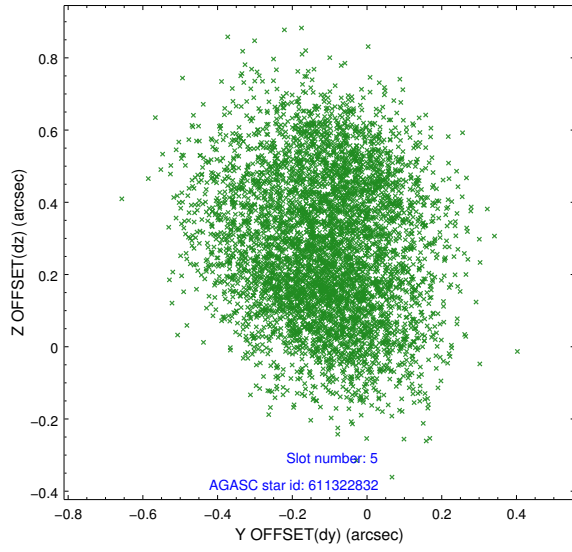
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.15	2492	-0.207	-0.151	0.007	0.012	0.000000	0.000000	-769.07	-1739.38
1	FID		ACIS-S-4	7.27	2492	0.532	0.140	0.006	0.011	0.000000	0.000000	2144.70	168.86
2	FID		ACIS-S-5	7.26	2492	-0.357	0.020	0.007	0.012	0.000000	0.000000	-1821.41	162.99
3	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
4	GUIDE	used	611321296	7.90	4984	0.323	0.283	0.132	0.216	2.879171	-1.123345	-570.36	515.48
5	GUIDE	used	611322832	9.78	4976	-0.108	0.273	0.270	0.412	3.142733	-0.431778	1401.89	-1275.07
6	GUIDE	used	611323648	8.89	4980	-0.098	-0.138	0.164	0.275	2.997068	-0.229699	2271.47	-1051.77
7	GUIDE	used	611326072	7.05	4983	-0.118	-0.418	0.147	0.238	3.168071	-1.227195	-1296.93	-317.31

## 2.4 Star Slots

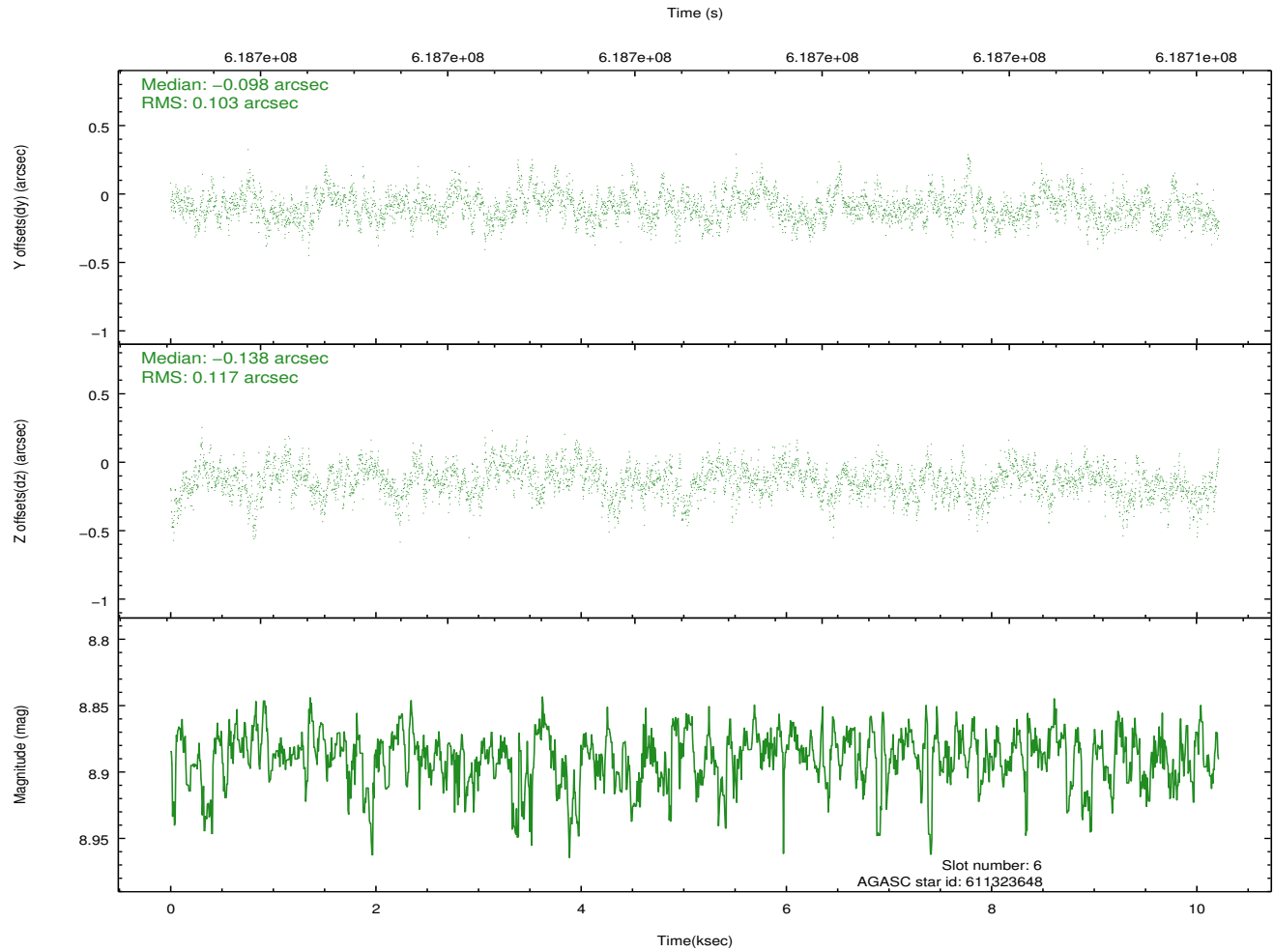
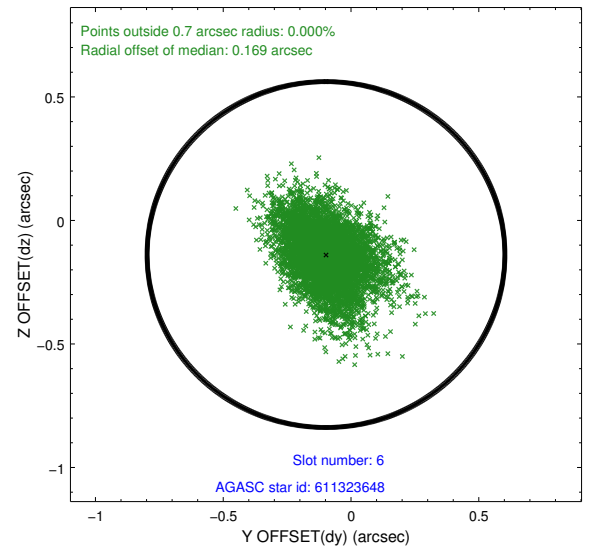
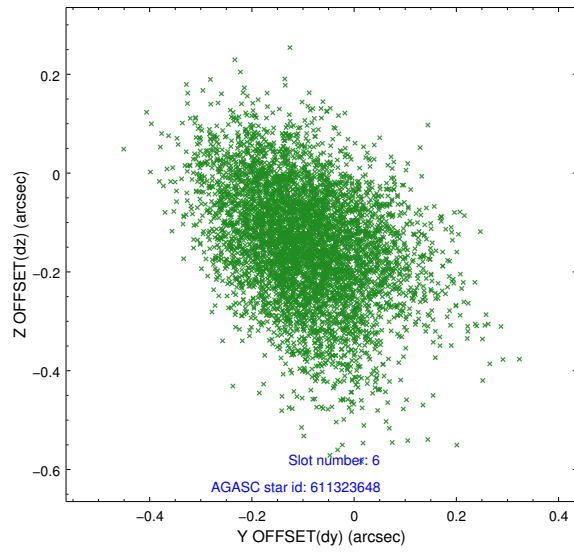
### 2.4.1 Slot 4



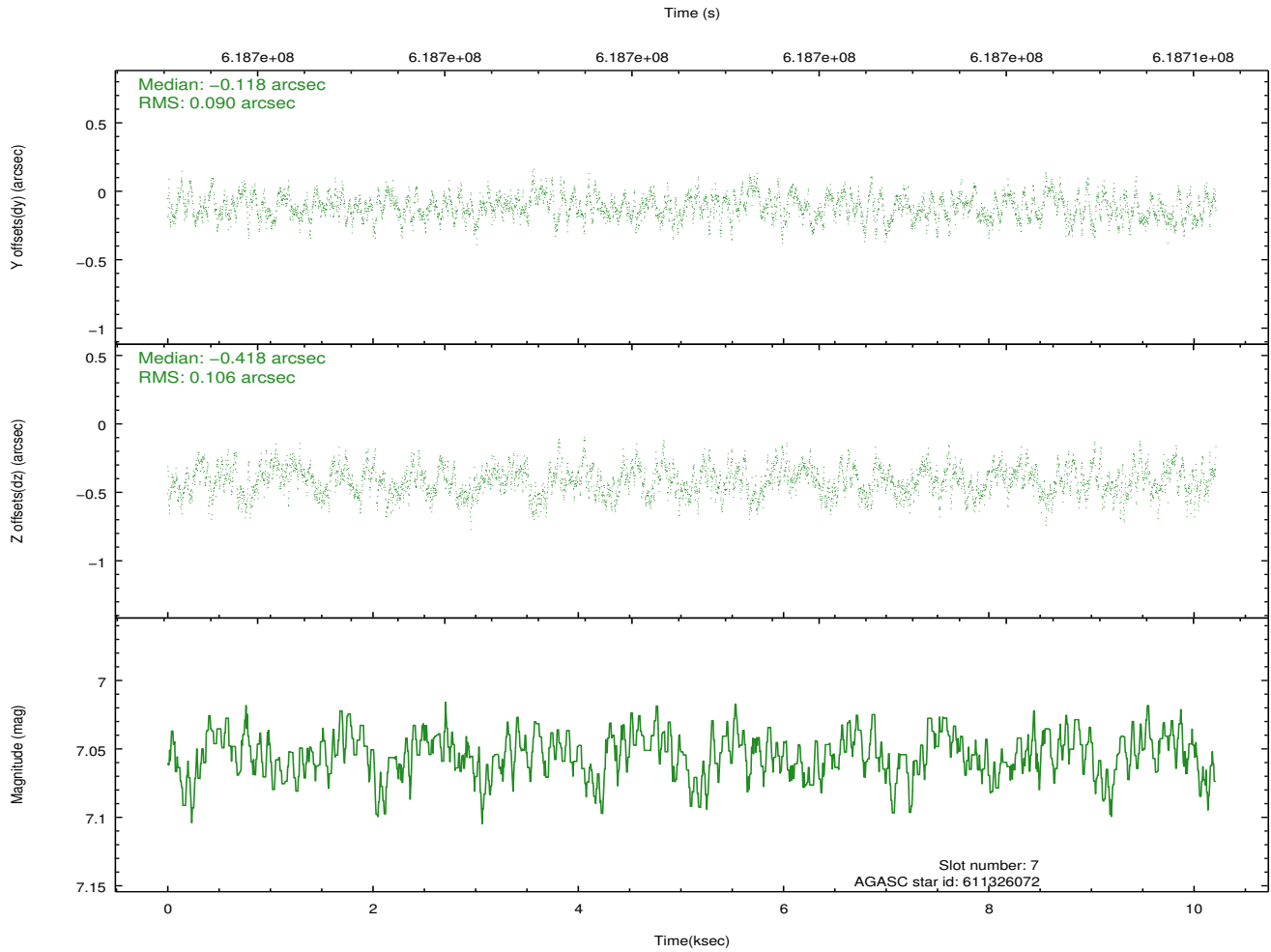
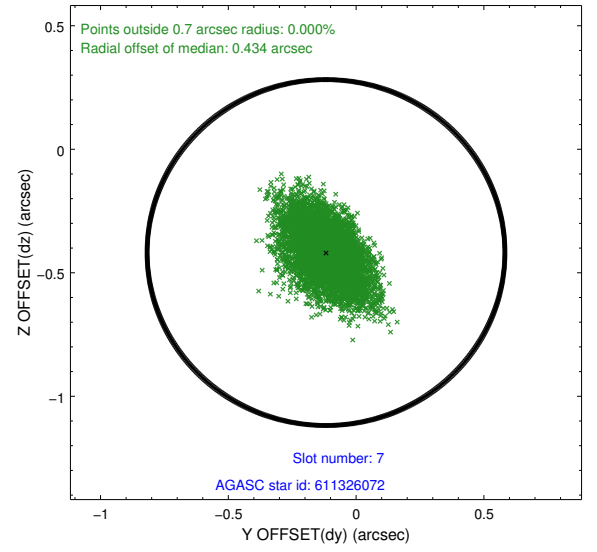
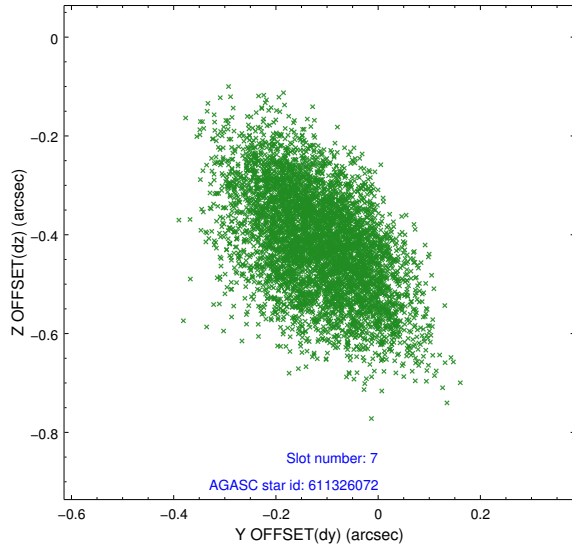
## 2.4.2 Slot 5



### 2.4.3 Slot 6



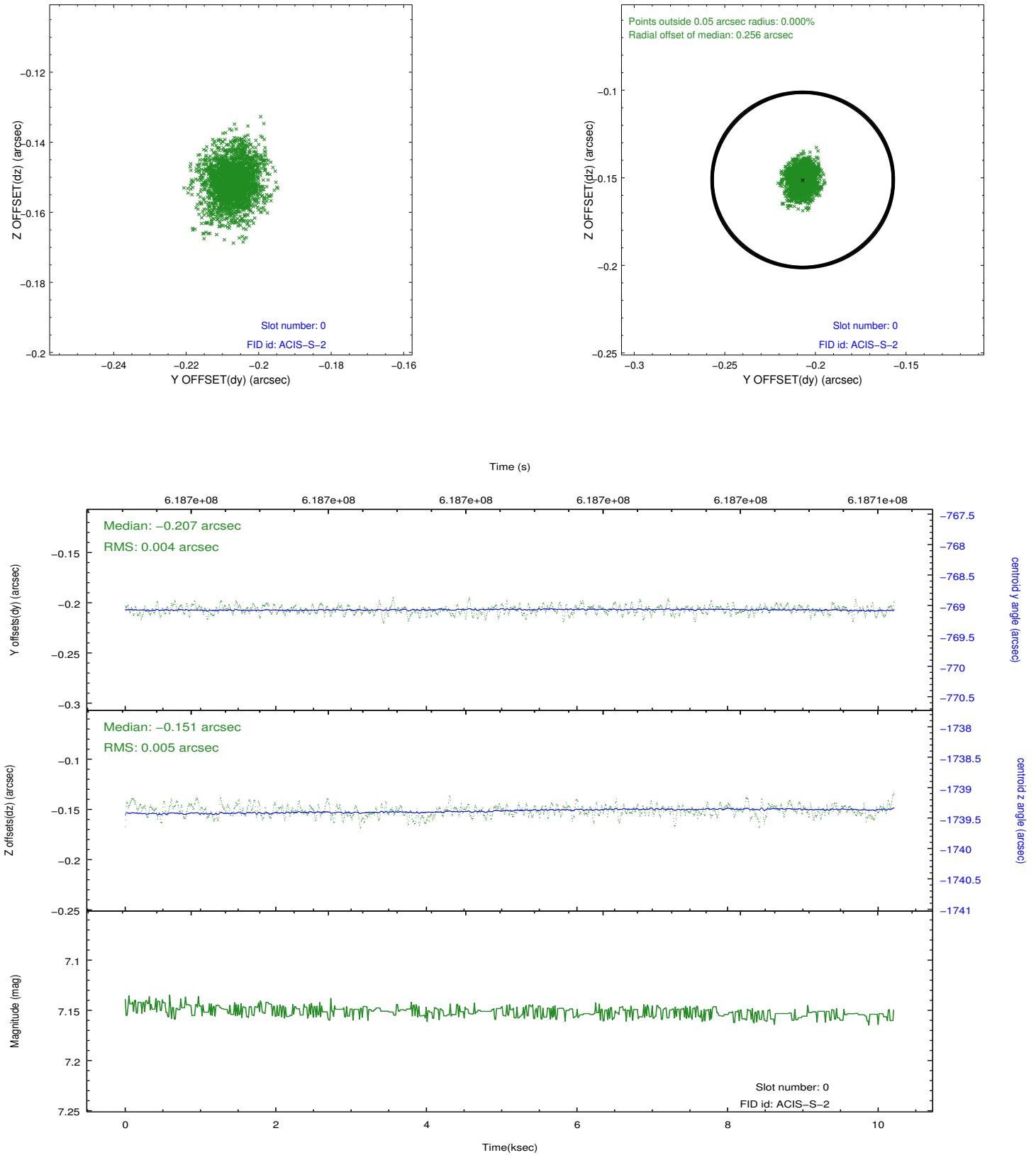
## 2.4.4 Slot 7



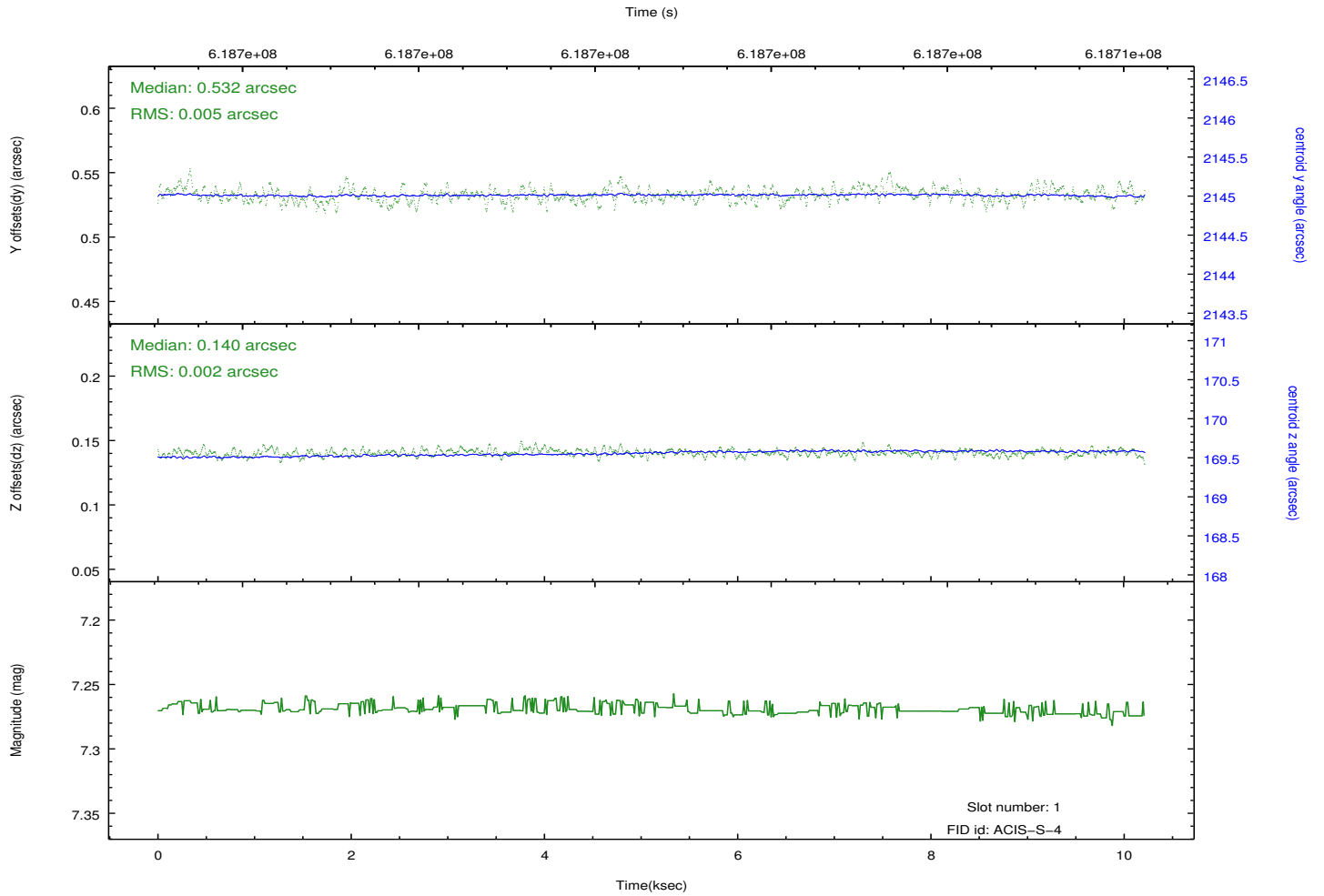
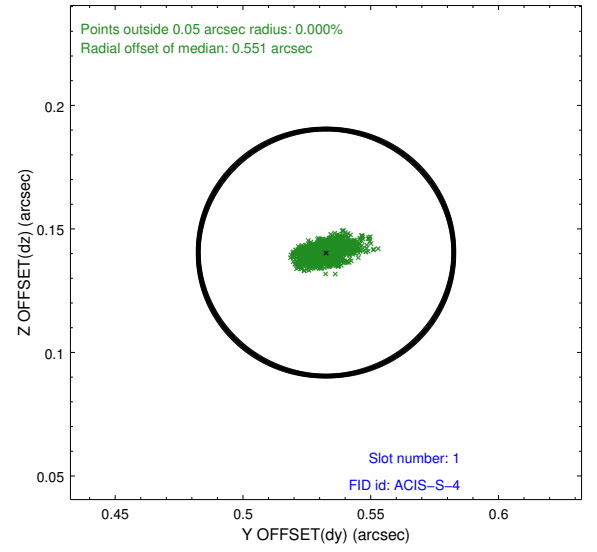
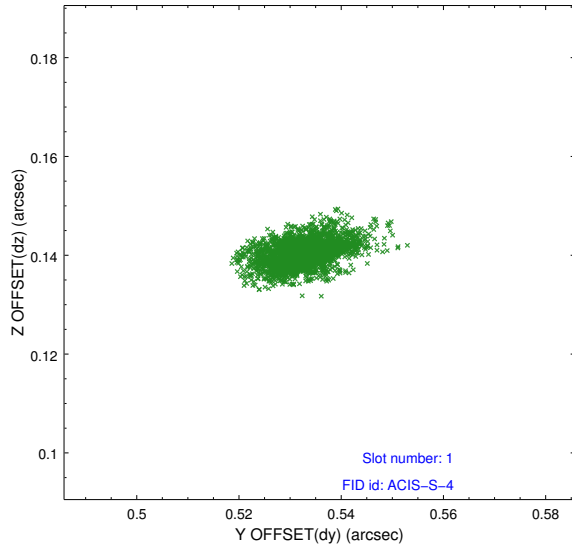


## 2.5 FID Slots

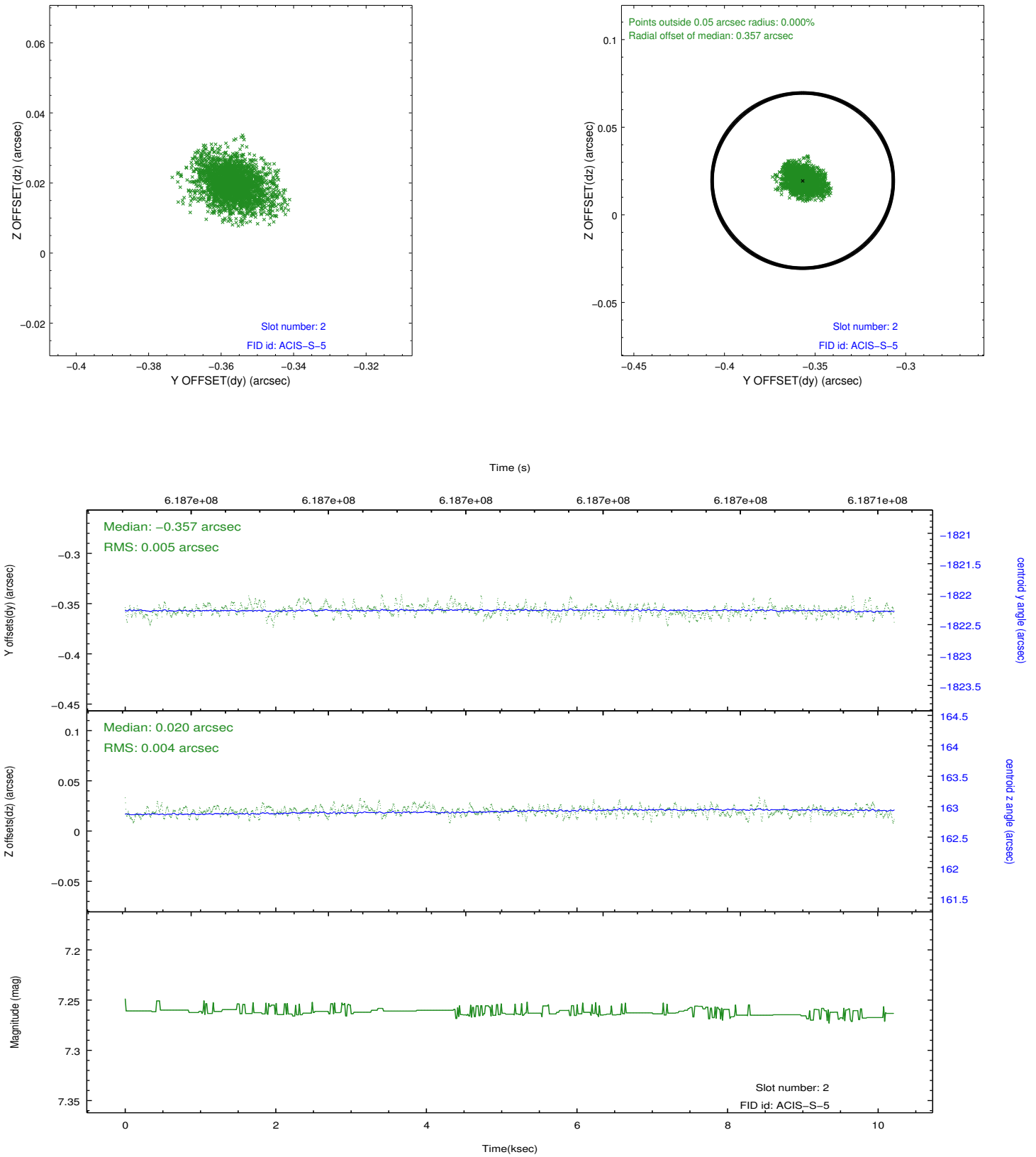
### 2.5.1 Slot 0



## 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)	2017.08.14
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.121500077963

## A.2 Comments

The guide star in slot 3 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this slot from the solution.

One optional chip was dropped.