

# V&V Reference Report

## L2 ASCDS Version : 10.6

Observation 20804 - L2 Version 1  
Chandra X-Ray Center

L2 Processing Date : Oct 6 2017

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# 1 Front

seq_num	601263	Sequence number
obs_id	20804	Observation id
title	Gaseous Galaxy Halos in the Transition Between Hot and Cold Mode Accretion	Proposal title
observer	Joel Bregman	Principal investigator
object	HE 0226-4110	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	37.062917	Observer's specified target RA [deg]
dec_targ	-40.953889	Observer's specified target Dec [deg]
ra_nom	37.061995326942	Nominal RA [deg]
dec_nom	-40.948480280933	Nominal Dec [deg]
roll_nom	47.155990791901	Nominal Roll [deg]
revision	1	Processing version of data
ontime	25068.374020576	Sum of GTIs [s]
livetime	24740.837258929	Livetime [s]
ontime3	25068.29194057	Sum of GTIs [s]
ontime6	25068.332980633	Sum of GTIs [s]
ontime7	25068.374020576	Sum of GTIs [s]
ontime8	25068.250900626	Sum of GTIs [s]
l2events	146464	Number of level 2 events

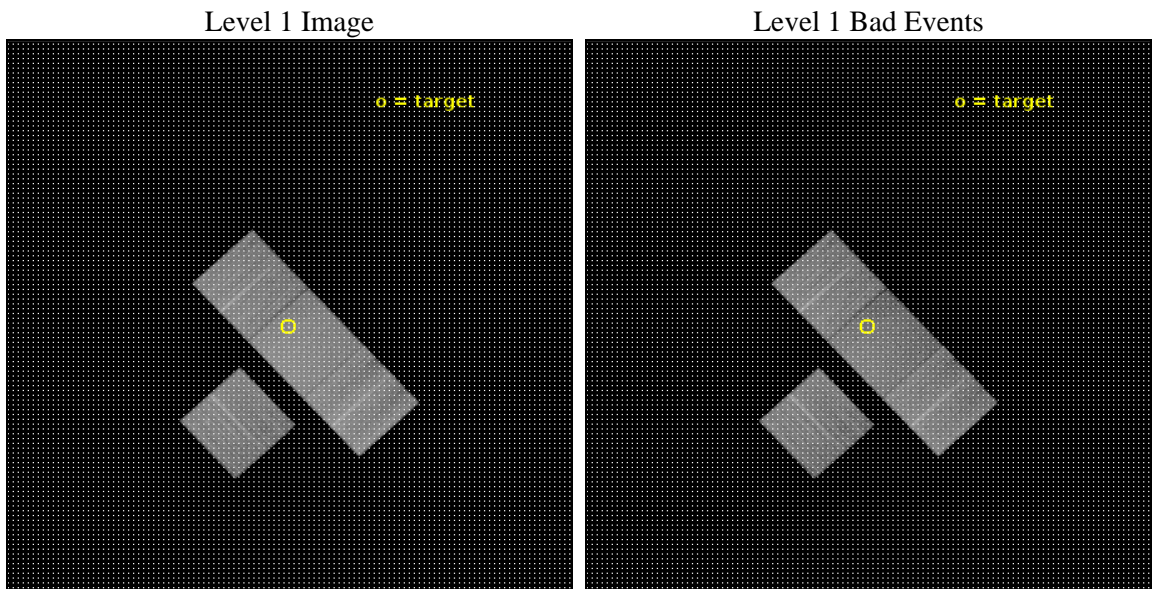




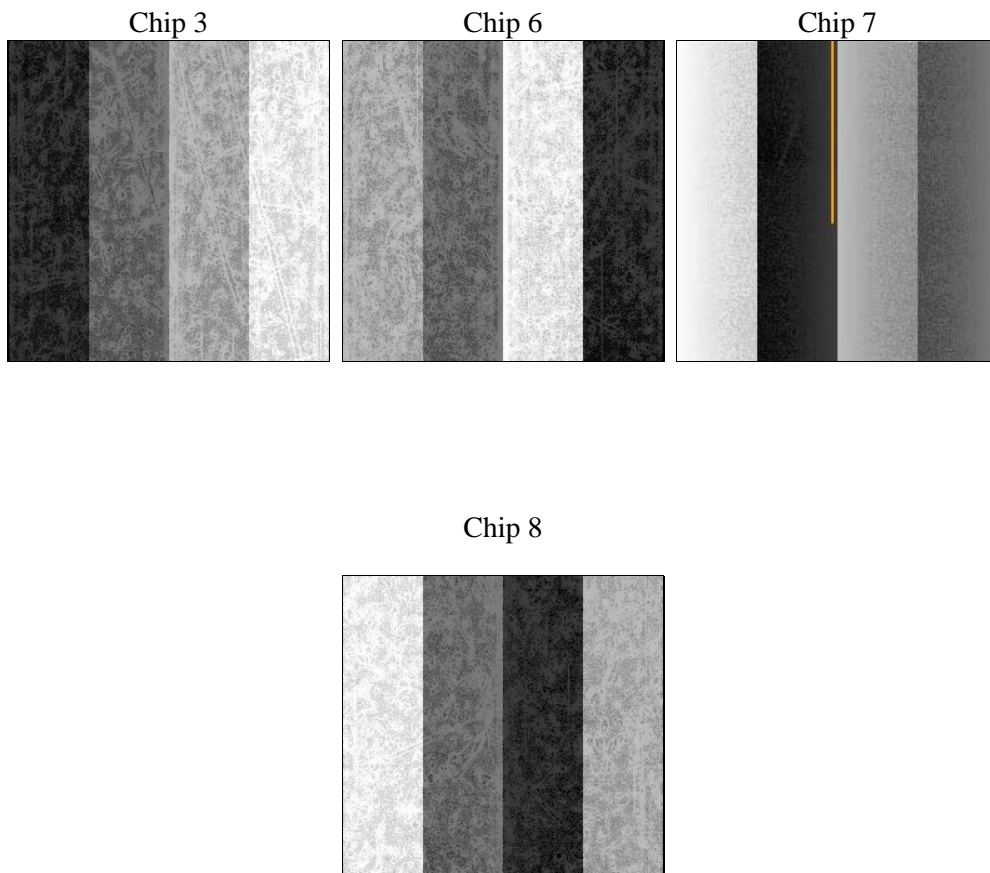
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	25000.000000	[s] Scheduled observation exposure time
ascdsver	10.6	Processing system revision	ontime	25068.374020576	Sum of GTIs [s]
caldsver	4.7.6	&#160	ontime3	25068.29194057	Sum of GTIs [s]
date	2017-10-07T01:12:27	Date and time of file creation	ontime6	25068.332980633	Sum of GTIs [s]
revision	1	Processing version of data	ontime7	25068.374020576	Sum of GTIs [s]
			ontime8	25068.250900626	Sum of GTIs [s]
			l1events	790415	Number of level 1 events

### 2.1.4 Events

	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	168040	179960	221689	220726
rejected events	150719	160994	123821	166418
rejected %	89%	89%	55%	75%

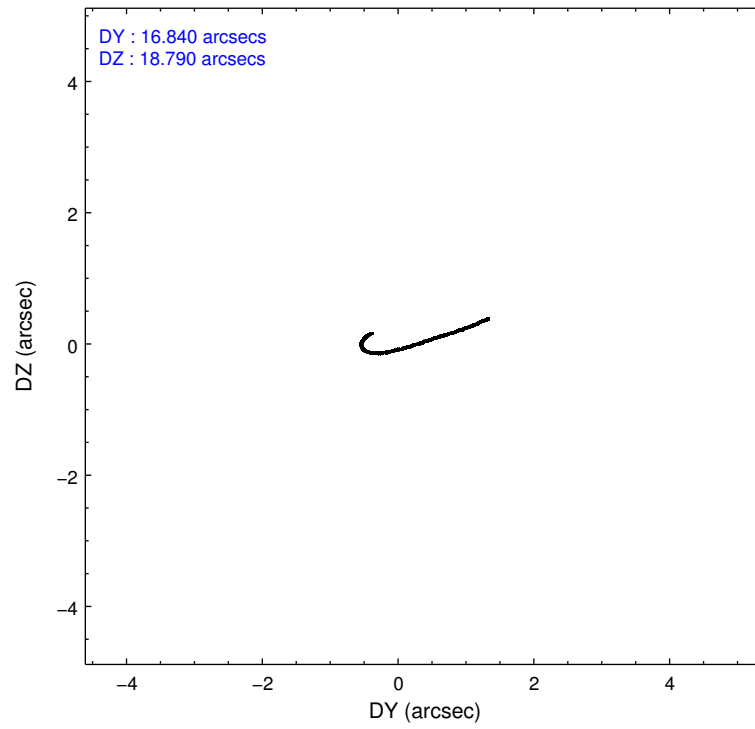
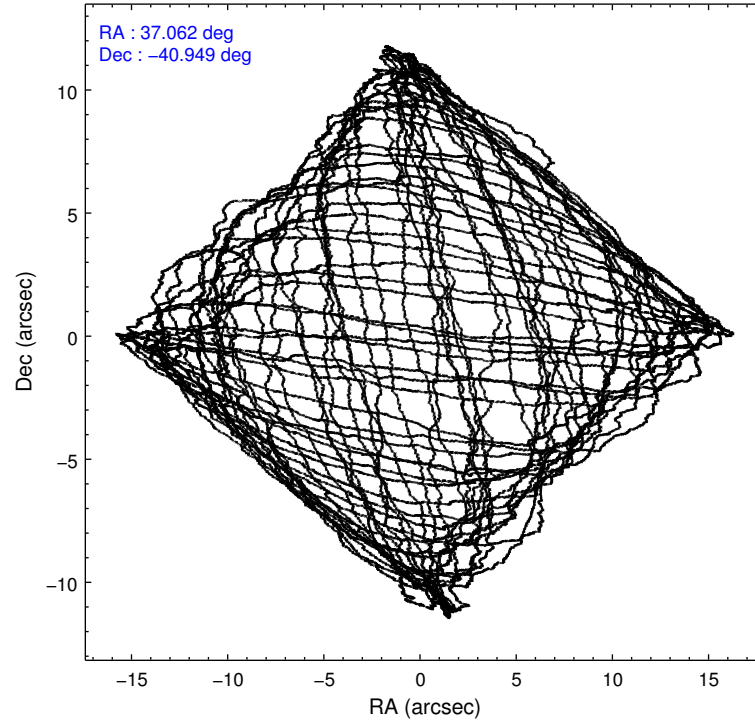
	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	6195	5588	9364	14658
	3%	3%	4%	6%
grade 1 events	76	59	335	169
	0%	0%	0%	0%
grade 2 events	3707	4884	20226	13490
	2%	2%	9%	6%
grade 3 events	1796	1757	7874	5588
	1%	0%	3%	2%
grade 4 events	1857	1702	7899	5282
	1%	0%	3%	2%
grade 5 events	7522	7334	21535	11535
	4%	4%	9%	5%
grade 6 events	3768	5037	52519	15295
	2%	2%	23%	6%
grade 7 events	143119	153599	101937	154709
	85%	85%	45%	70%

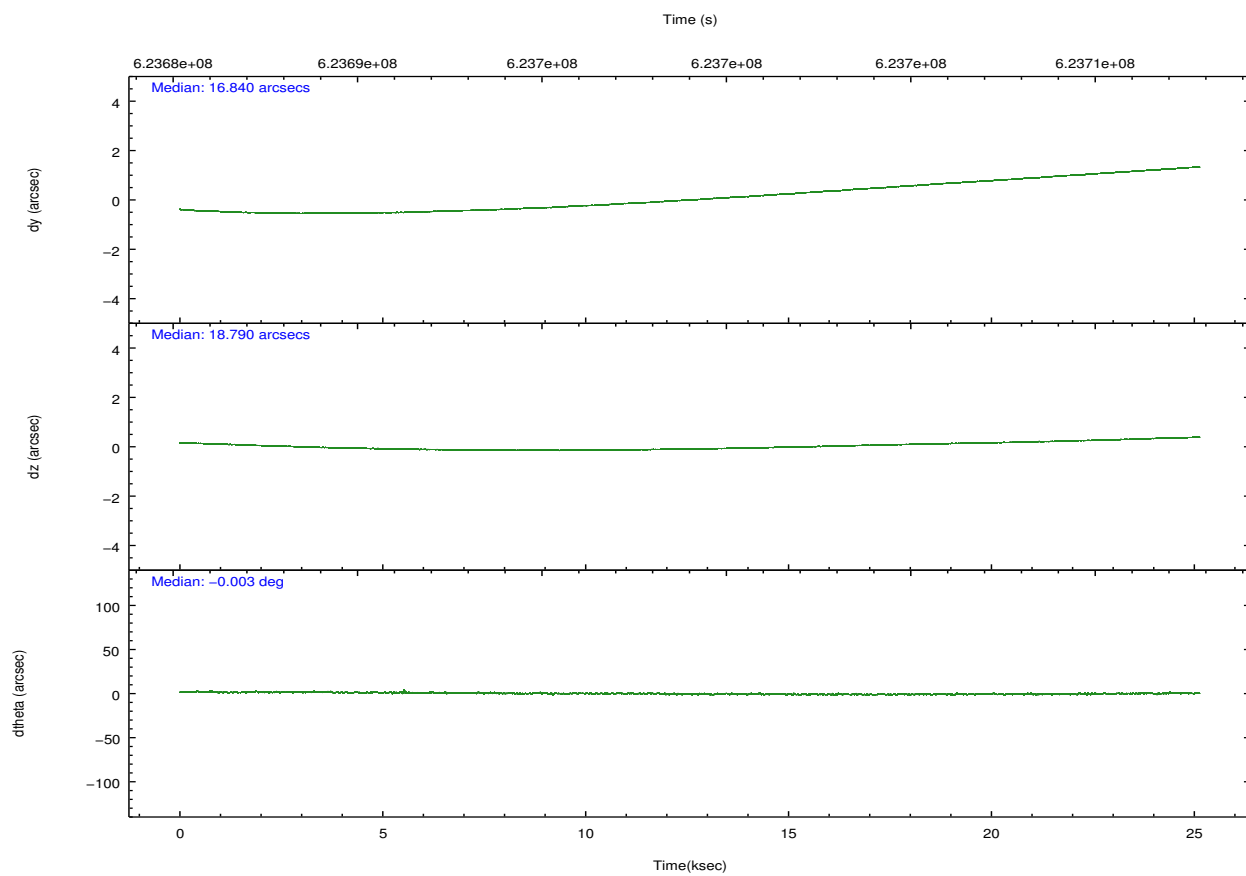
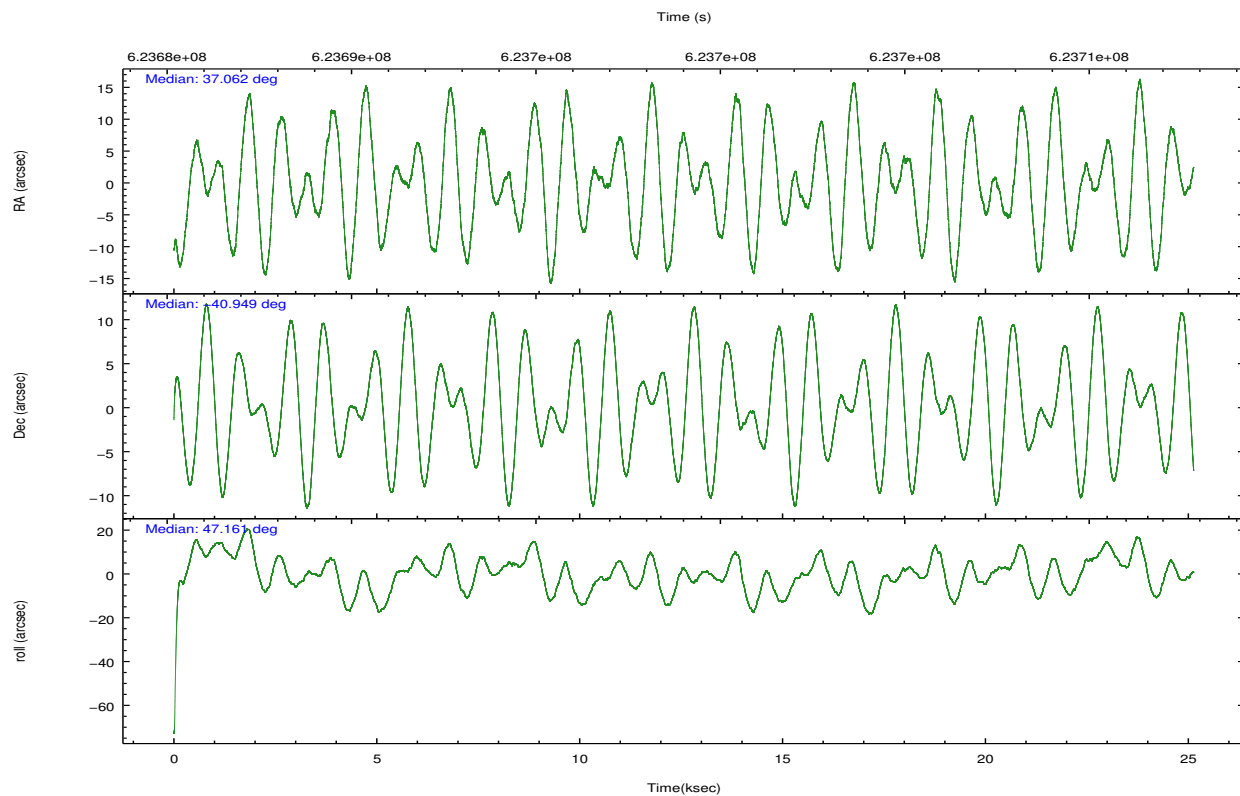
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-3678	ACIS-3678
Grating	NONE	NONE
Data mode	FAINT	FAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	37.054404	37.06199532694188
[deg] Pointing Dec	-40.975324	-40.9484802809332
[deg] Pointing Roll	46.994418	47.15599079190081
[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)	623686544.184000	623685341.2763799
Observation start date	2017-10-06T14:14:35	2017-10-06T13:55:41
[s] Observation end time (MET)	623711544.184000	623712361.3029701
Observation end date	2017-10-06T21:11:15	2017-10-06T21:26:01
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
CCD I0 on	N	N
CCD I1 on	N	N
CCD I2 on	O1	N
CCD I3 on	Y	Y
CCD S0 on	N	N
CCD S1 on	N	N
CCD S2 on	Y	Y
CCD S3 on	Y	Y
CCD S4 on	Y	Y
CCD S5 on	N	N
Number of optional ACIS chips dropped	1	1
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



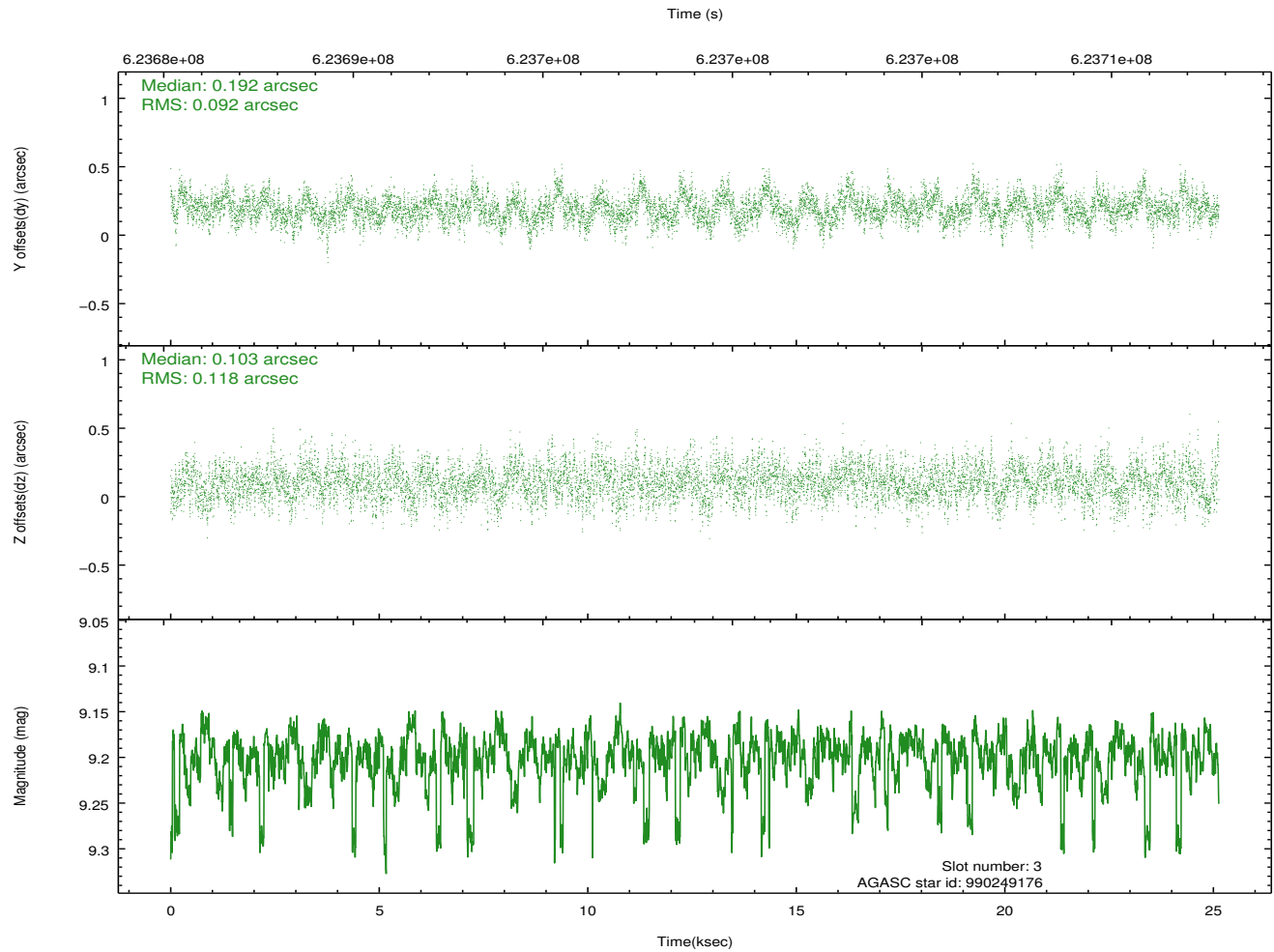
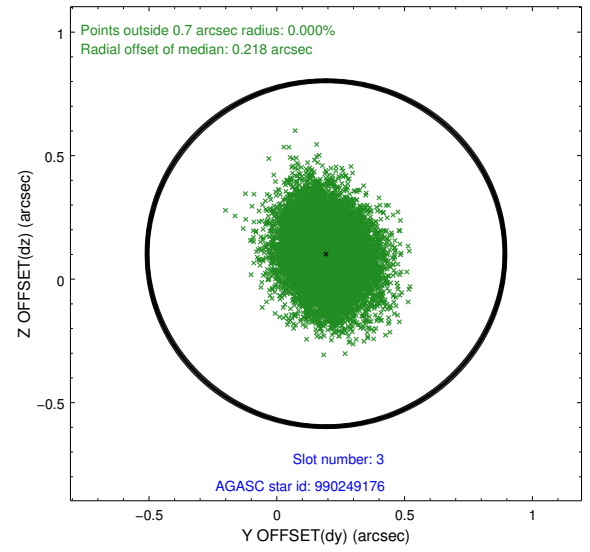
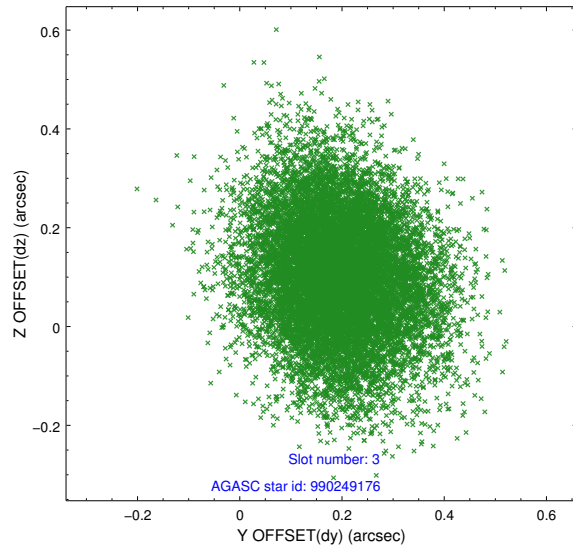


### Slot Statistics

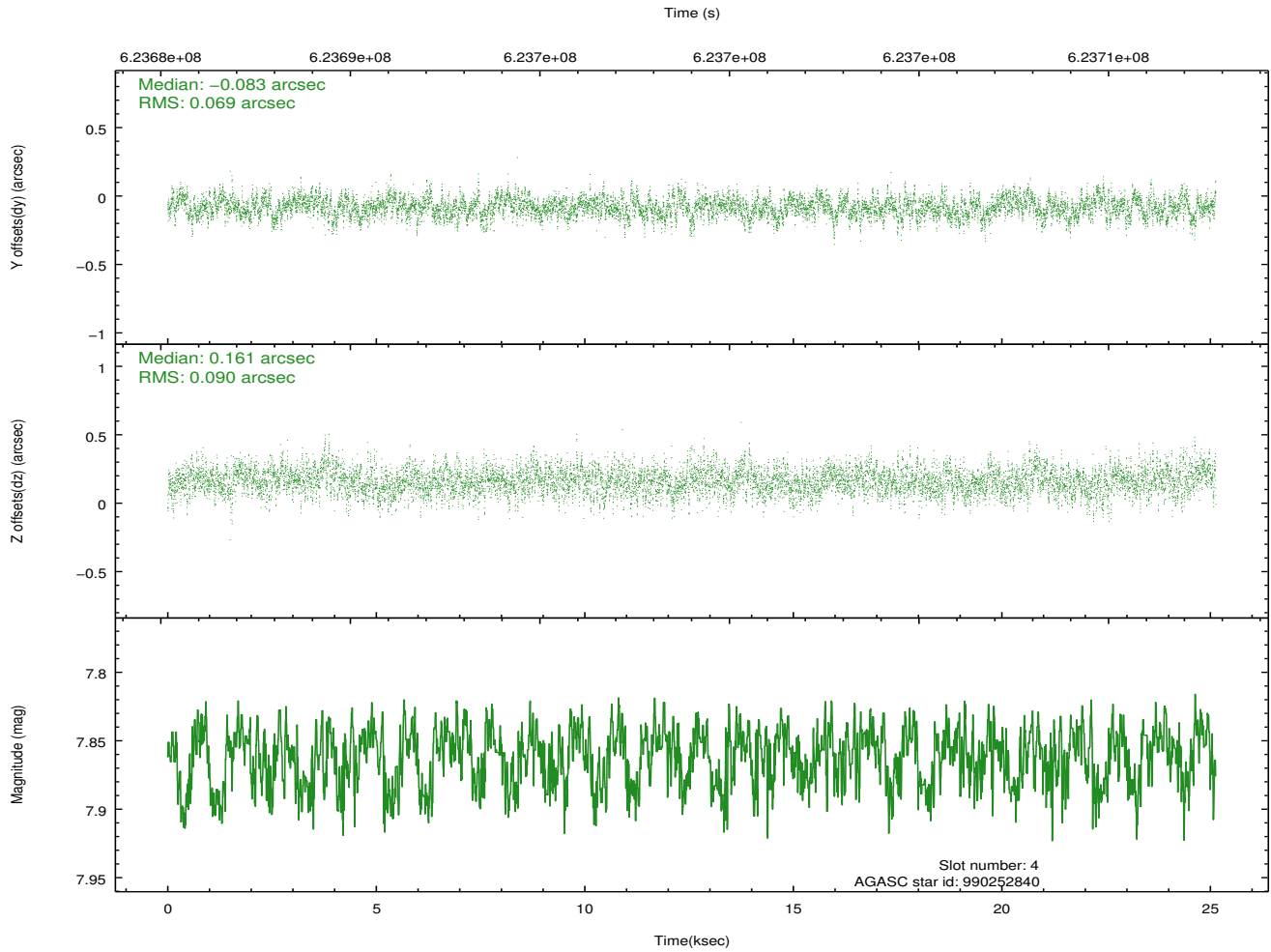
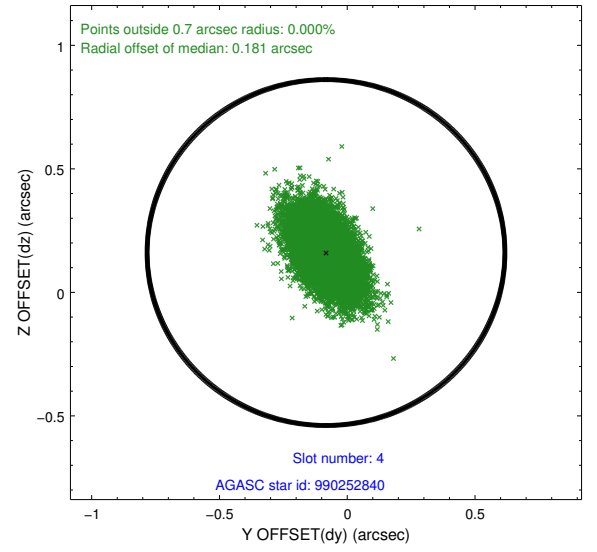
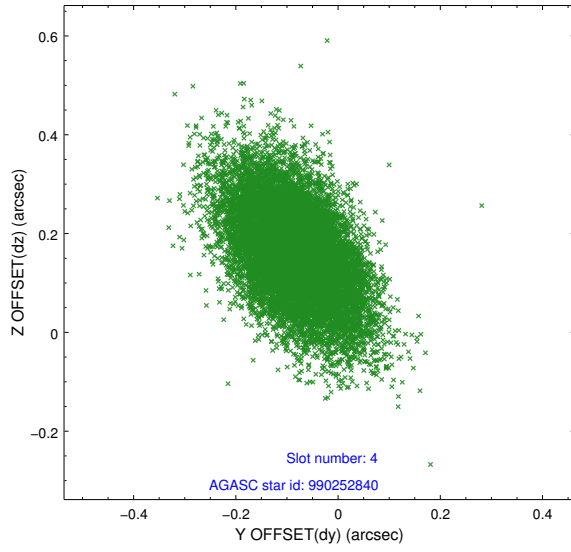
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.14	6129	-0.304	-0.201	0.010	0.019	0.000000	0.000000	-770.33	-1740.44
1	FID		ACIS-S-4	7.25	6130	0.353	0.168	0.010	0.018	0.000000	0.000000	2143.57	168.24
2	FID		ACIS-S-6	7.40	6130	-0.076	0.039	0.012	0.020	0.000000	0.000000	392.07	805.67
3	GUIDE	used	990249176	9.20	12246	0.192	0.103	0.160	0.261	36.943069	-41.181544	-748.31	-285.72
4	GUIDE	used	990252840	7.86	12260	-0.083	0.161	0.118	0.206	36.693454	-41.366849	-1696.95	-249.23
5	GUIDE	used	990253064	9.36	12242	0.401	0.129	0.181	0.304	37.375561	-41.363675	-429.13	-1592.00
6	GUIDE	used	990254456	7.87	12258	-0.457	-0.327	0.128	0.231	37.220457	-40.435298	1731.71	992.37
7	GUIDE	used	990256096	9.50	12174	-0.052	-0.056	0.195	0.322	37.778577	-40.971578	1346.73	-1435.70

## 2.4 Star Slots

### 2.4.1 Slot 3

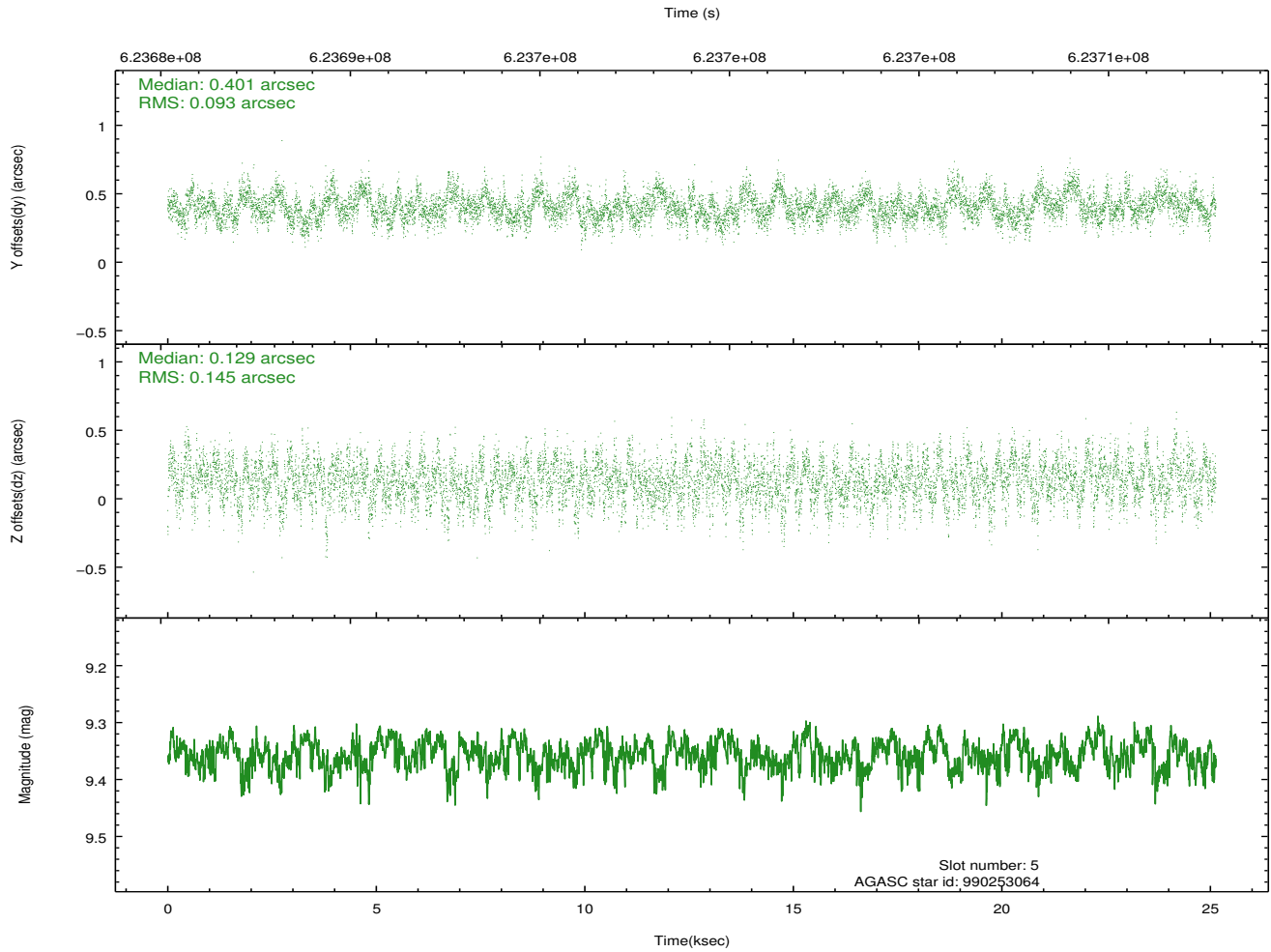
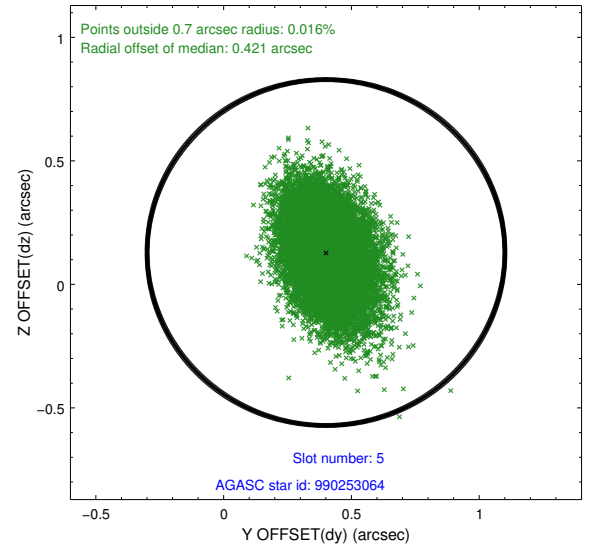
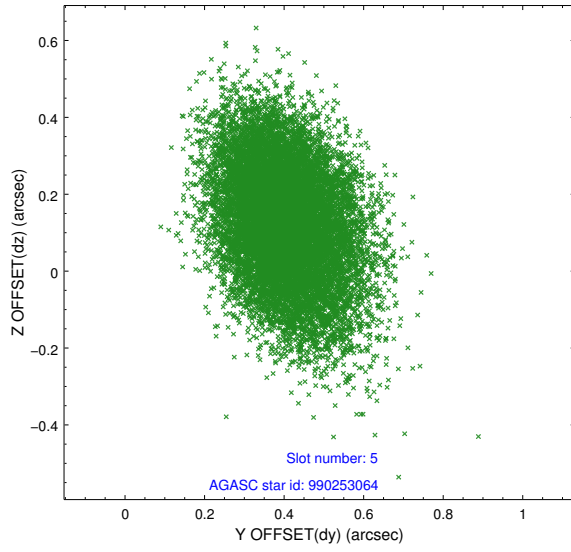


## 2.4.2 Slot 4

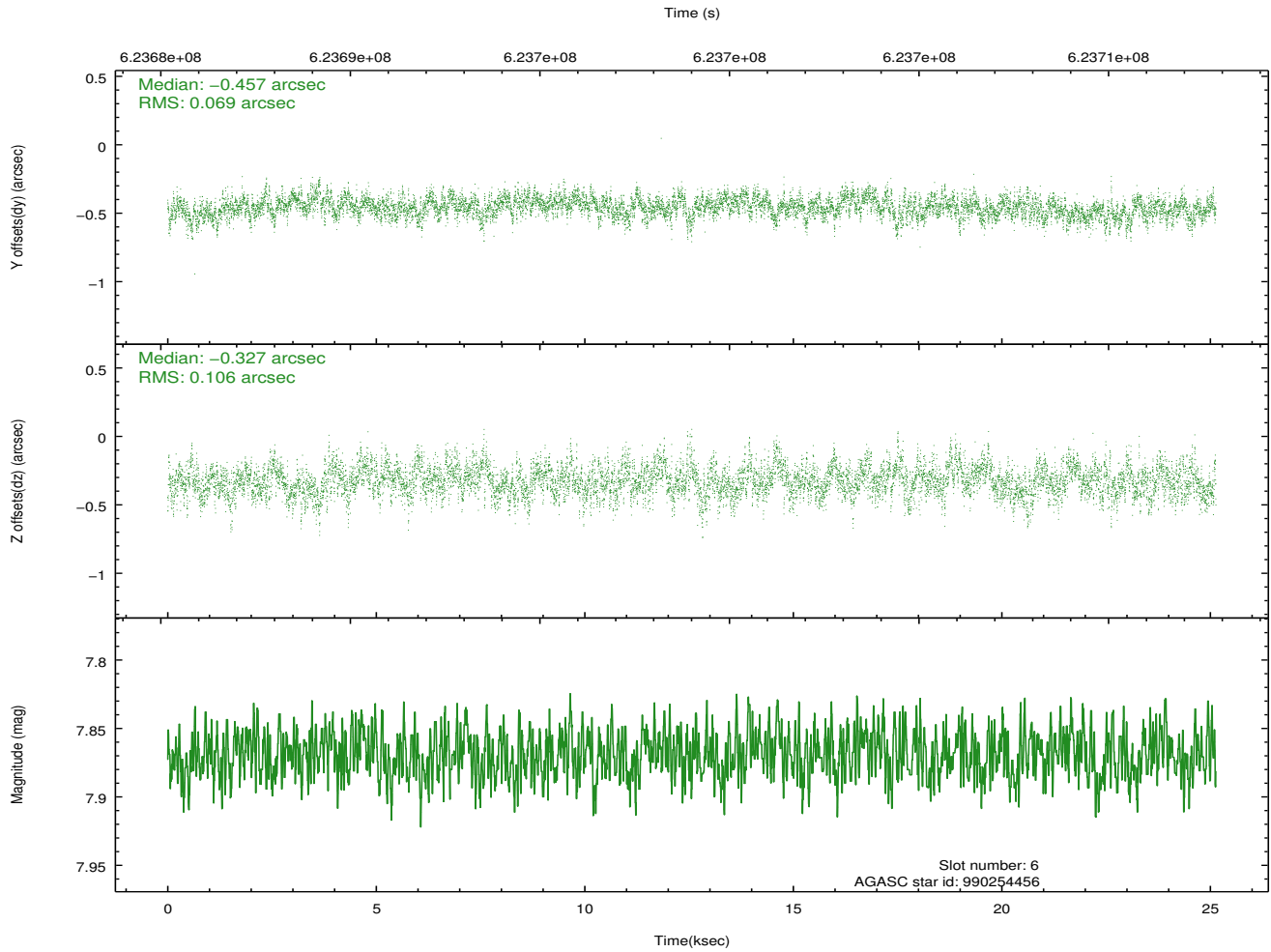
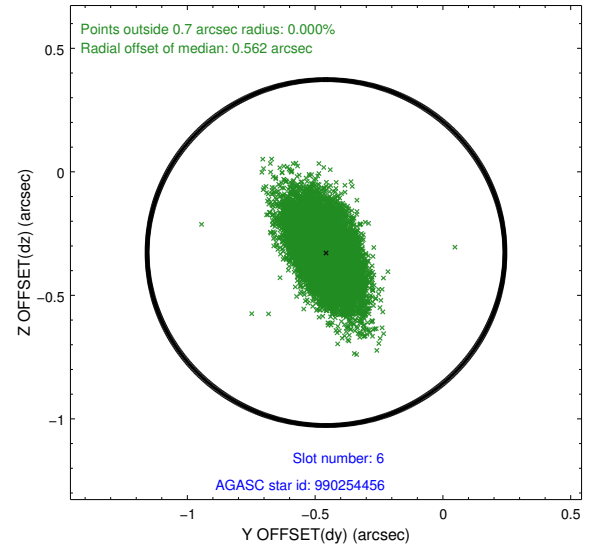
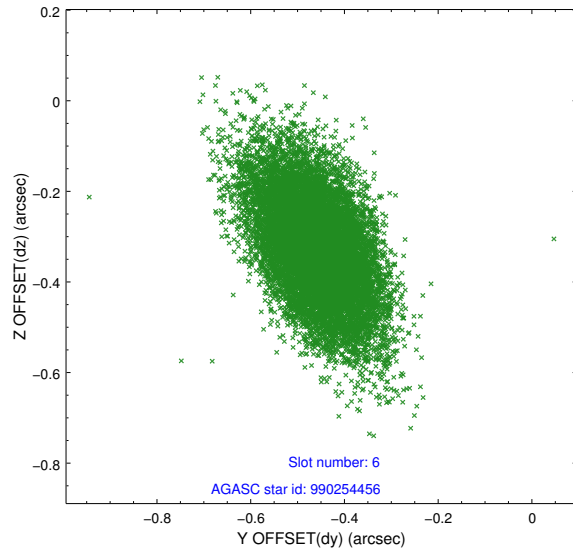




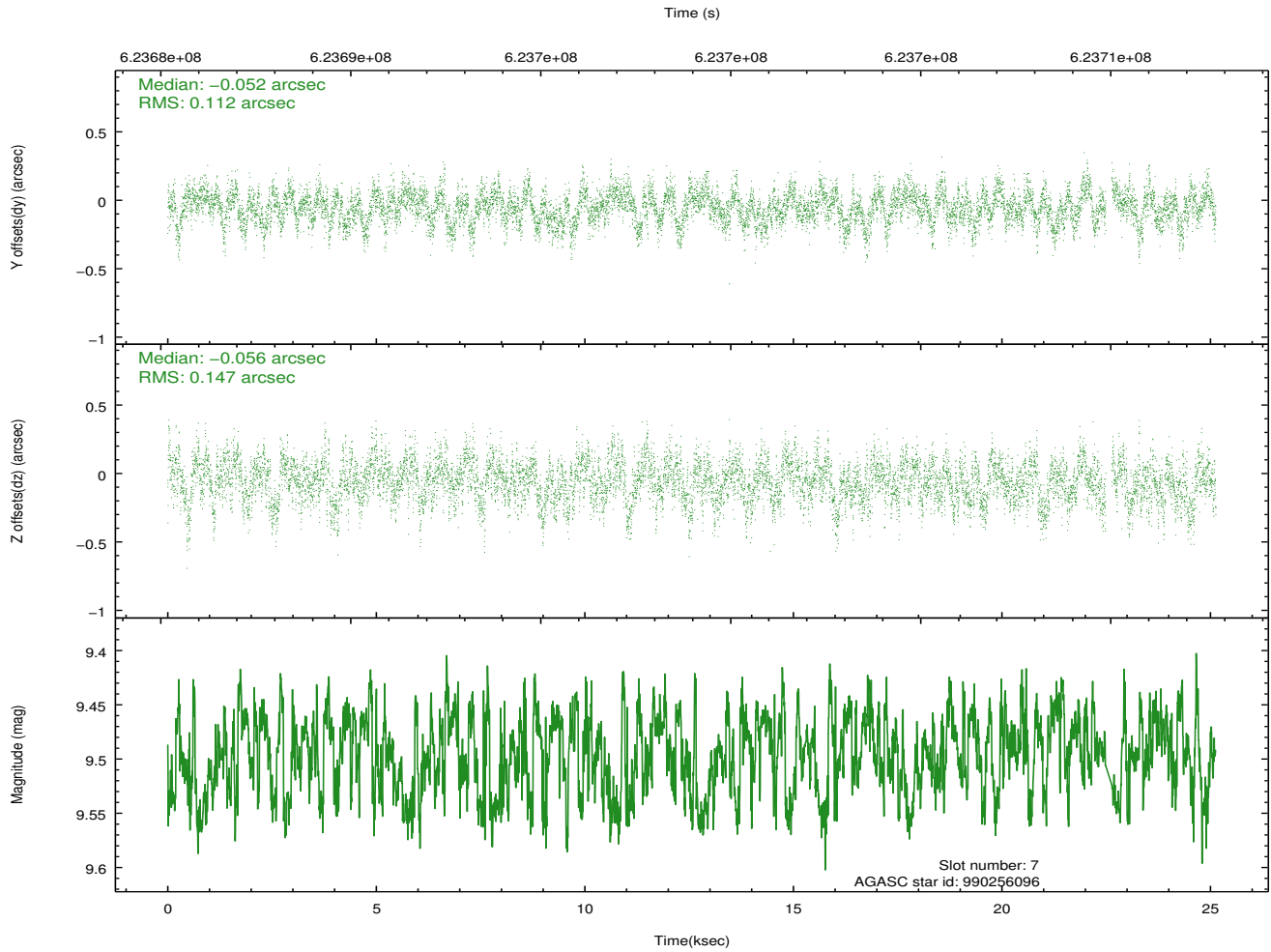
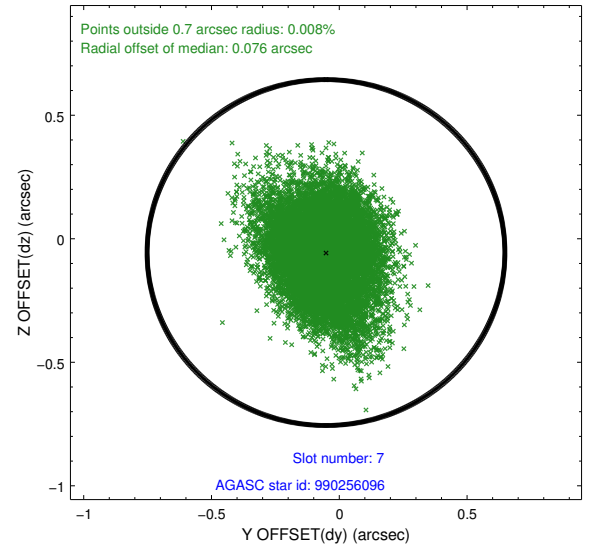
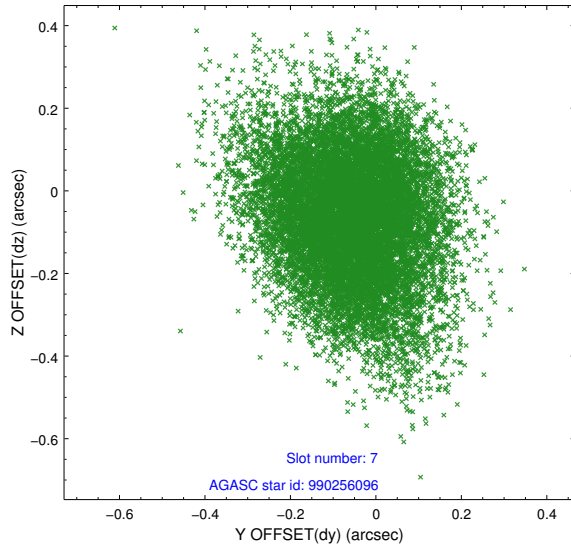
### 2.4.3 Slot 5



## 2.4.4 Slot 6

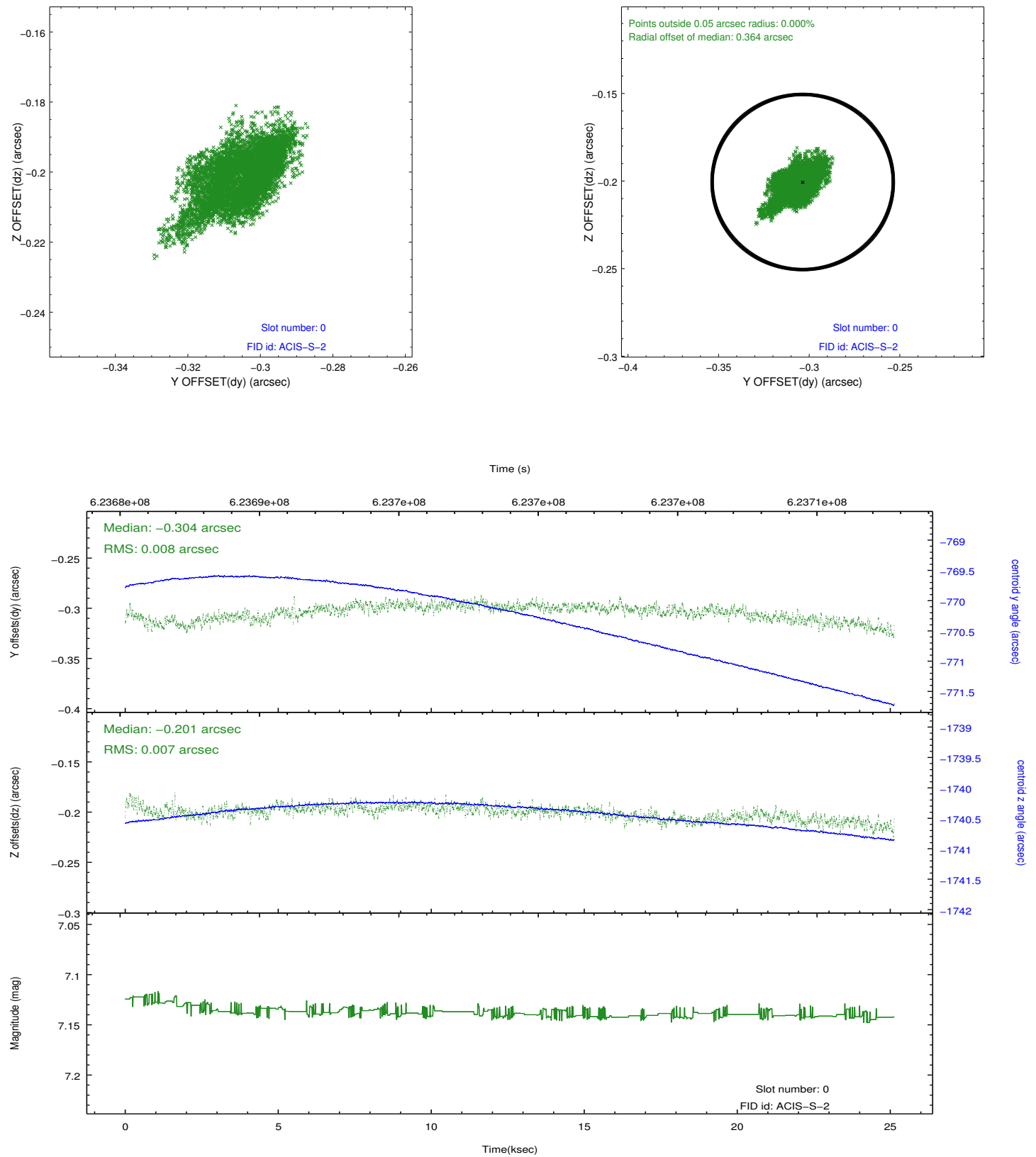


## 2.4.5 Slot 7

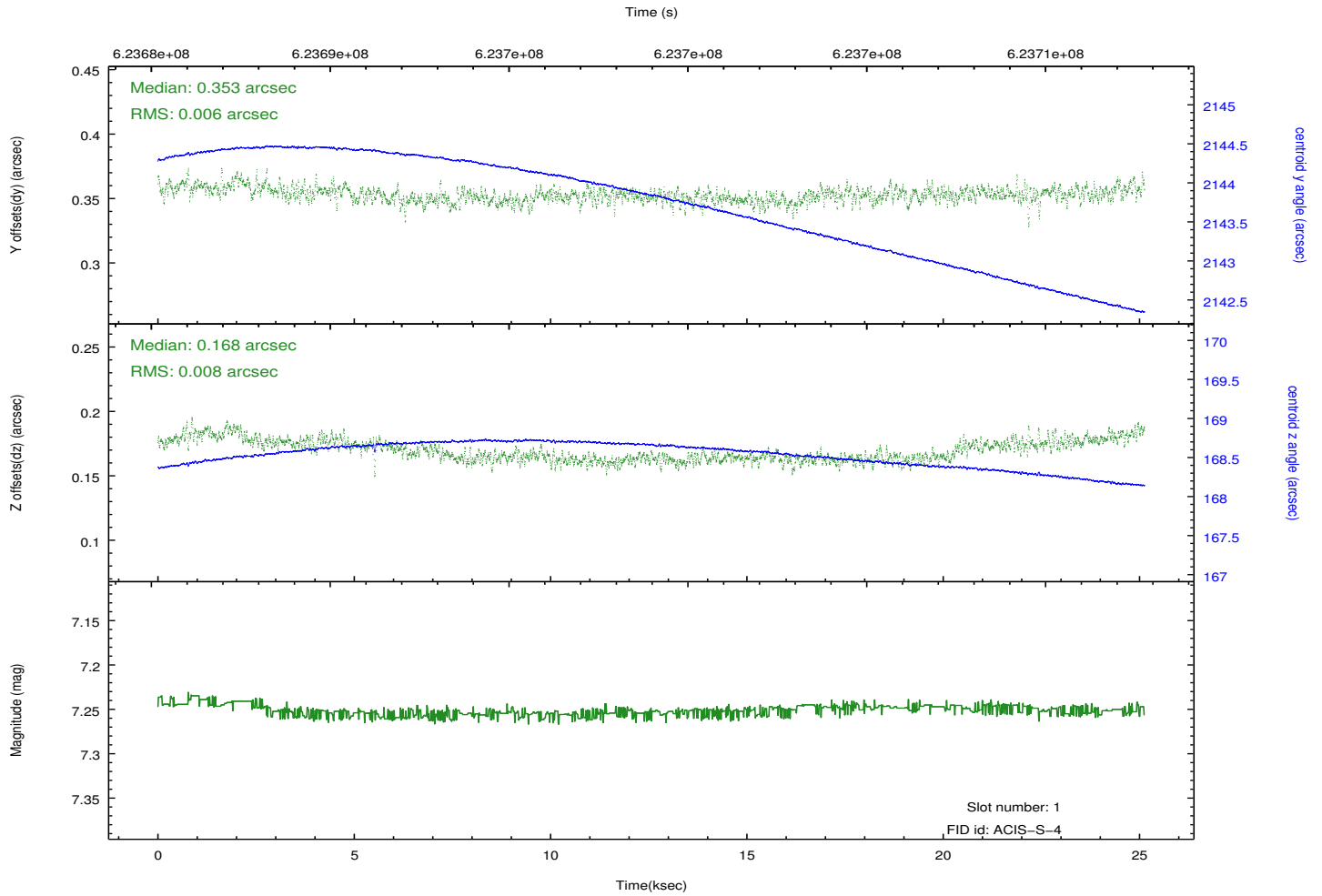
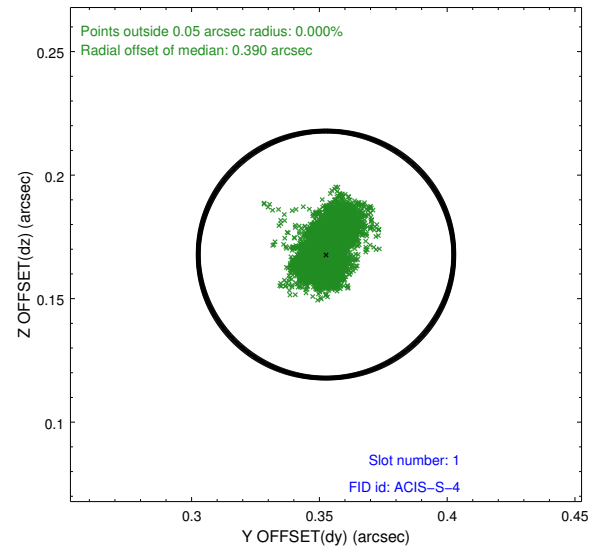
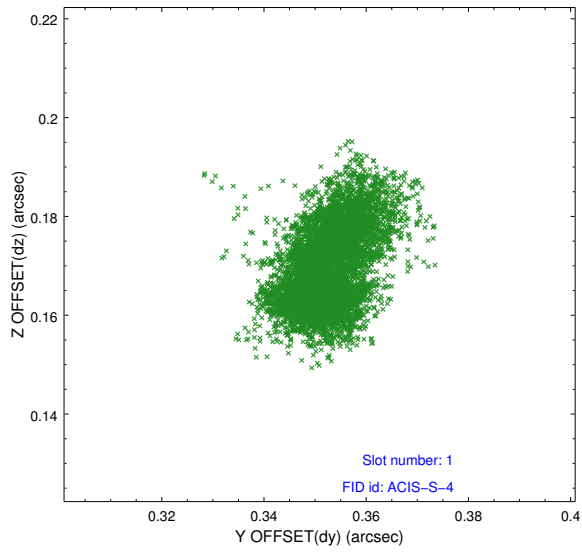


## 2.5 FID Slots

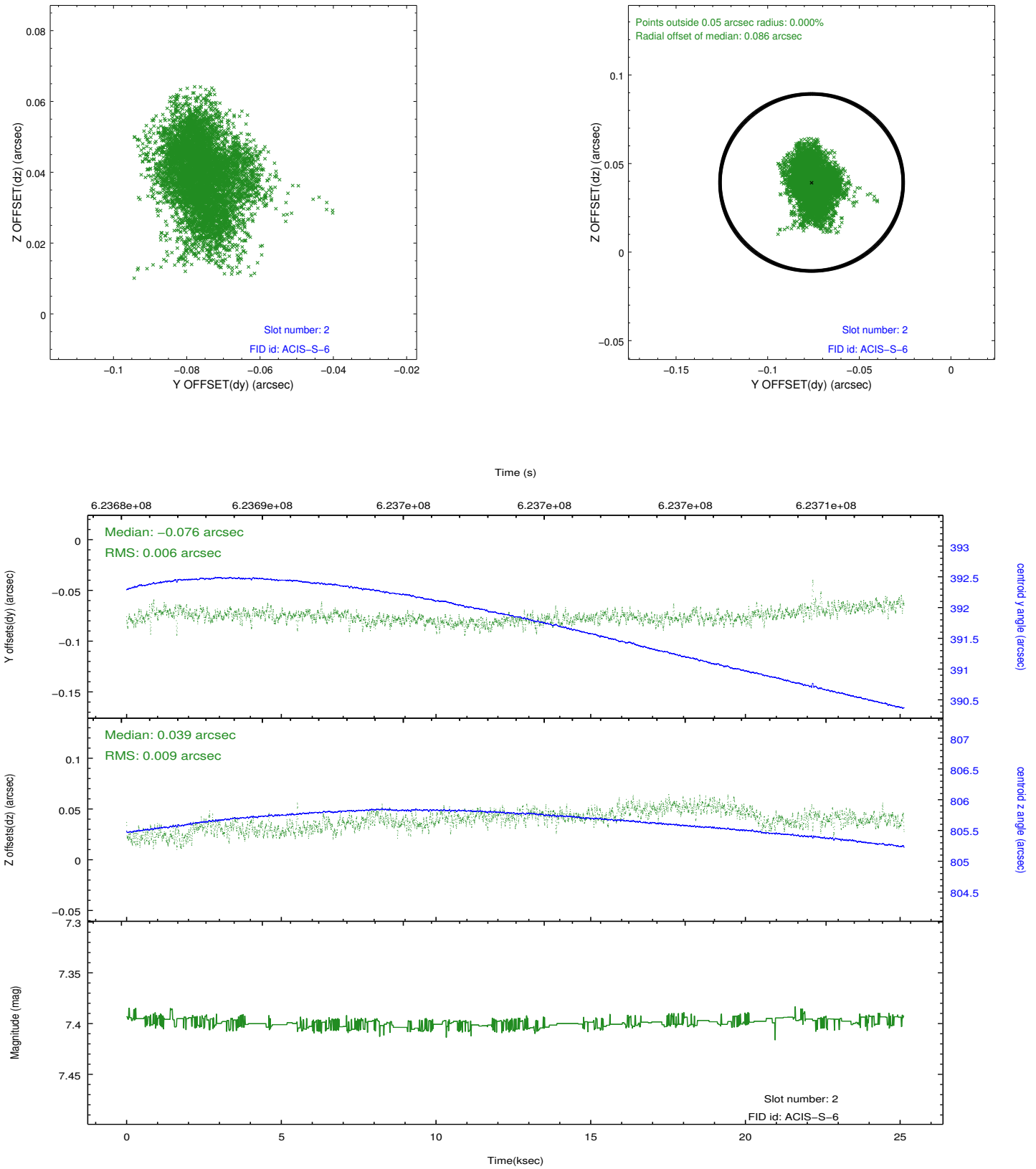
### 2.5.1 Slot 0



## 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)	2017.10.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	25.068374020576

### A.2 Comments

One optional chip was dropped.