

# V&V Reference Report

## L2 ASCDS Version : 10.5.2

Observation 19384 - L2 Version 1  
Chandra X-Ray Center

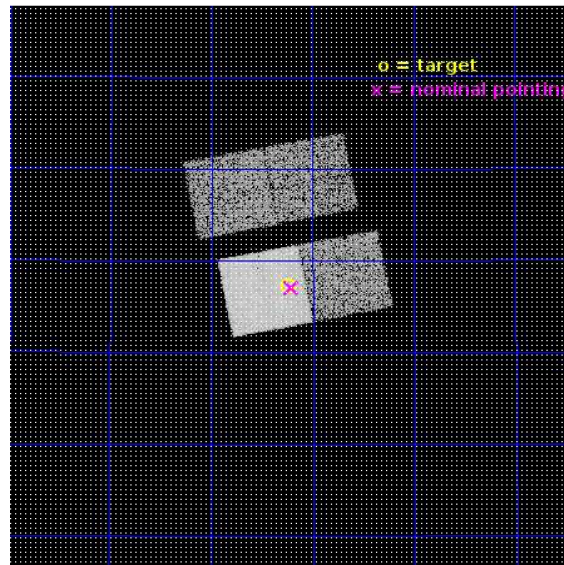
L2 Processing Date : Jan 31 2017

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# 1 Front

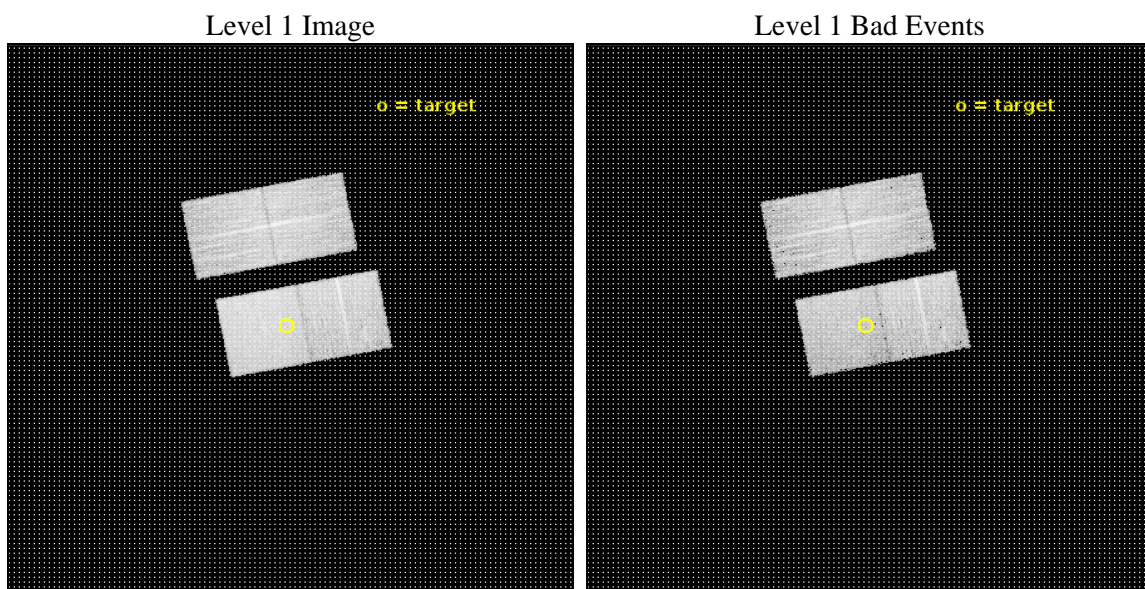
seq_num	601341	Sequence number
obs_id	19384	Observation id
title	A Statistically Complete High Resolution Chandra and Radio (eMERLIN) Survey of the Palomar Nearby Galaxies Sample	Proposal title
observer	Ian McHardy	Principal investigator
object	NGC 2776	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	138.060417	Observer's specified target RA [deg]
dec_targ	44.954889	Observer's specified target Dec [deg]
ra_nom	138.0525423113	Nominal RA [deg]
dec_nom	44.951139127346	Nominal Dec [deg]
roll_nom	169.07962665424	Nominal Roll [deg]
revision	1	Processing version of data
ontime	10068.272613406	Sum of GTIs [s]
livetime	9936.7232195576	Livetime [s]
ontime2	10068.149493456	Sum of GTIs [s]
ontime3	10068.1905334	Sum of GTIs [s]
ontime6	10068.231573462	Sum of GTIs [s]
ontime7	10068.272613406	Sum of GTIs [s]
l2events	58262	Number of level 2 events



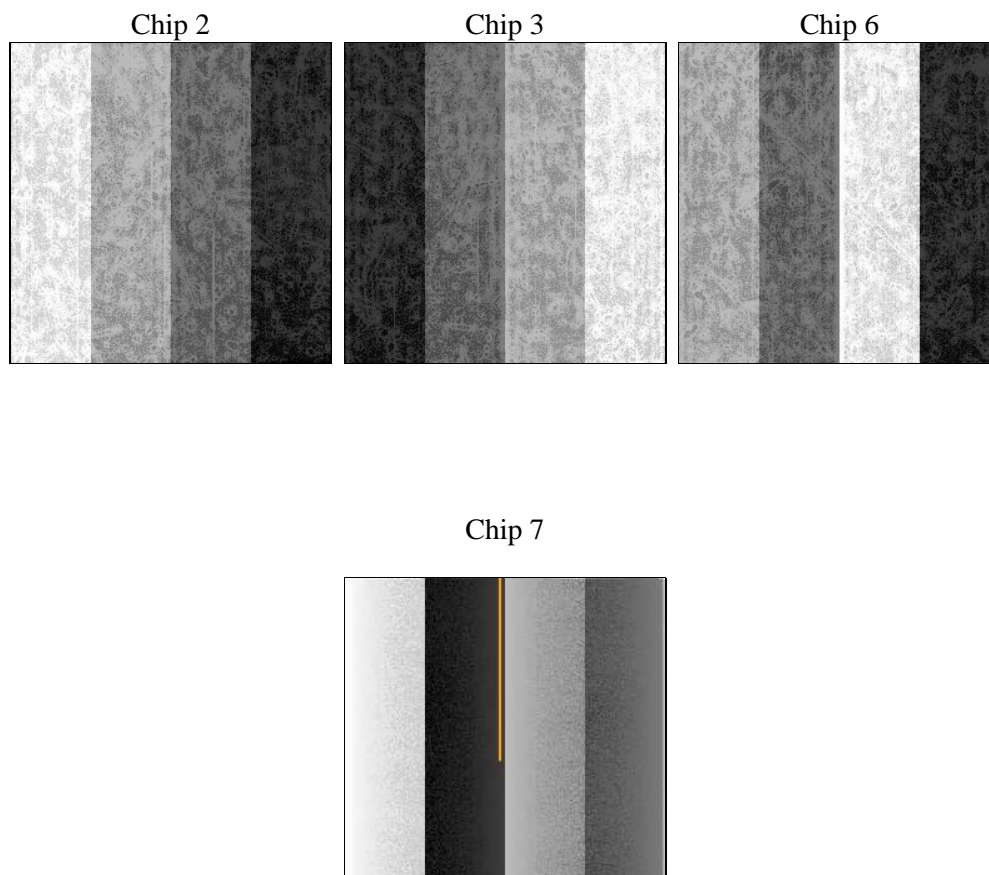
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	10.5.2	Processing system revision	ontime	10068.272613406	Sum of GTIs [s]
caldsver	4.7.3	&#160	ontime2	10068.149493456	Sum of GTIs [s]
date	2017-01-31T11:41:56	Date and time of file creation	ontime3	10068.1905334	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	10068.231573462	Sum of GTIs [s]
			ontime7	10068.272613406	Sum of GTIs [s]
			l1events	311744	Number of level 1 events

### 2.1.4 Events

	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	73059	71381	74401	92903
rejected events	65713	64190	66339	53175
rejected %	89%	89%	89%	57%

	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	2561	2495	2608	3243
	3%	3%	3%	3%
grade 1 events	27	43	29	126
	0%	0%	0%	0%
grade 2 events	1785	1589	1950	8367
	2%	2%	2%	9%
grade 3 events	790	840	770	2973
	1%	1%	1%	3%
grade 4 events	737	771	764	2915
	1%	1%	1%	3%
grade 5 events	2527	3463	3238	8792
	3%	4%	4%	9%
grade 6 events	1476	1501	1978	22249
	2%	2%	2%	23%
grade 7 events	63156	60679	63064	44238
	86%	85%	84%	47%

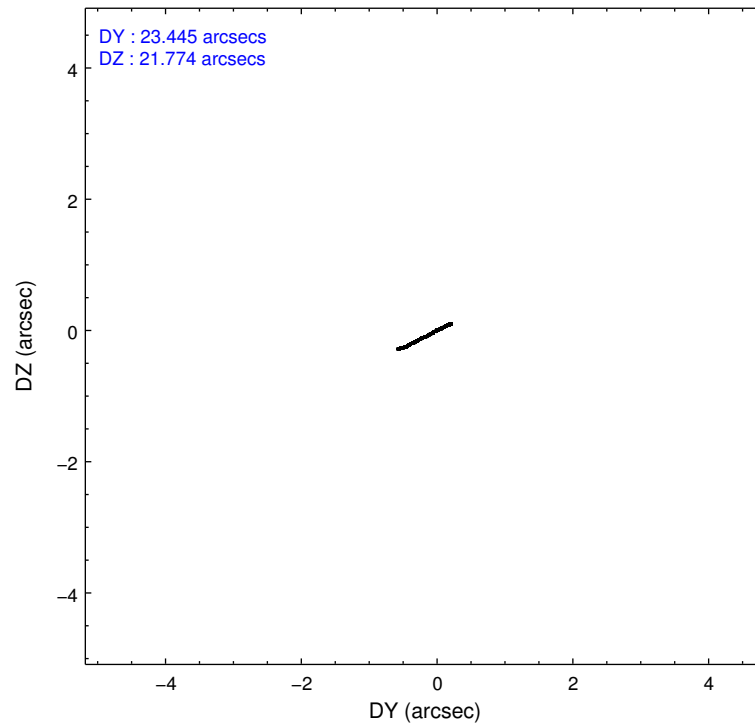
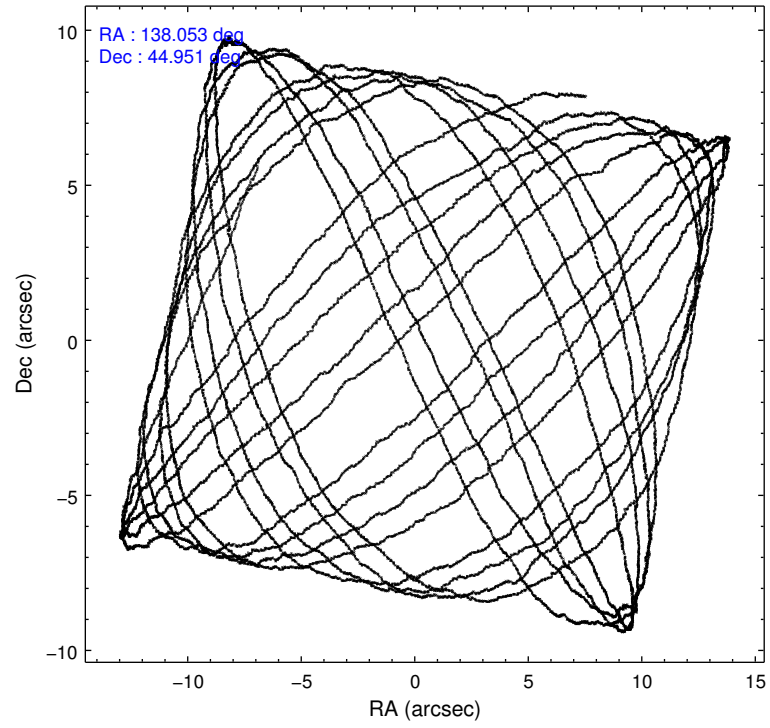


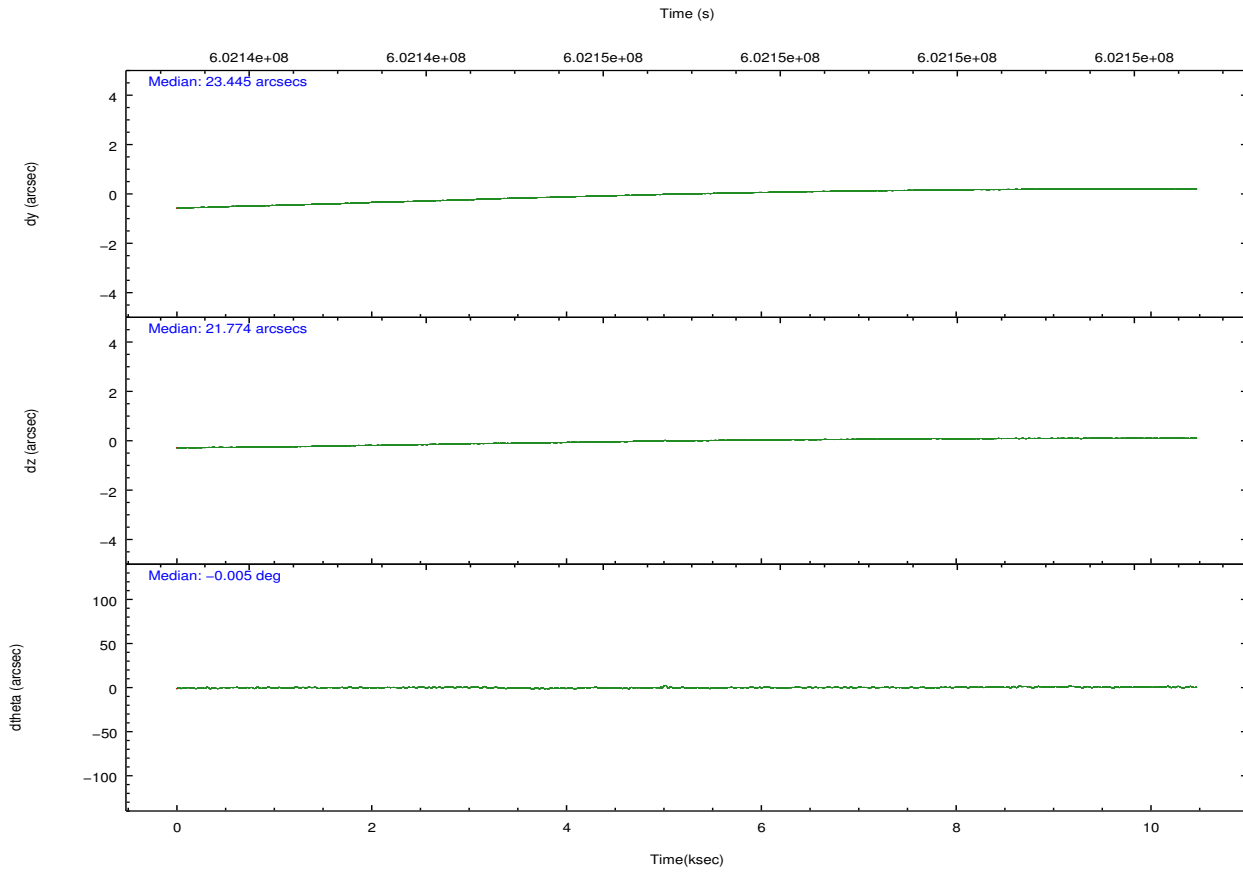
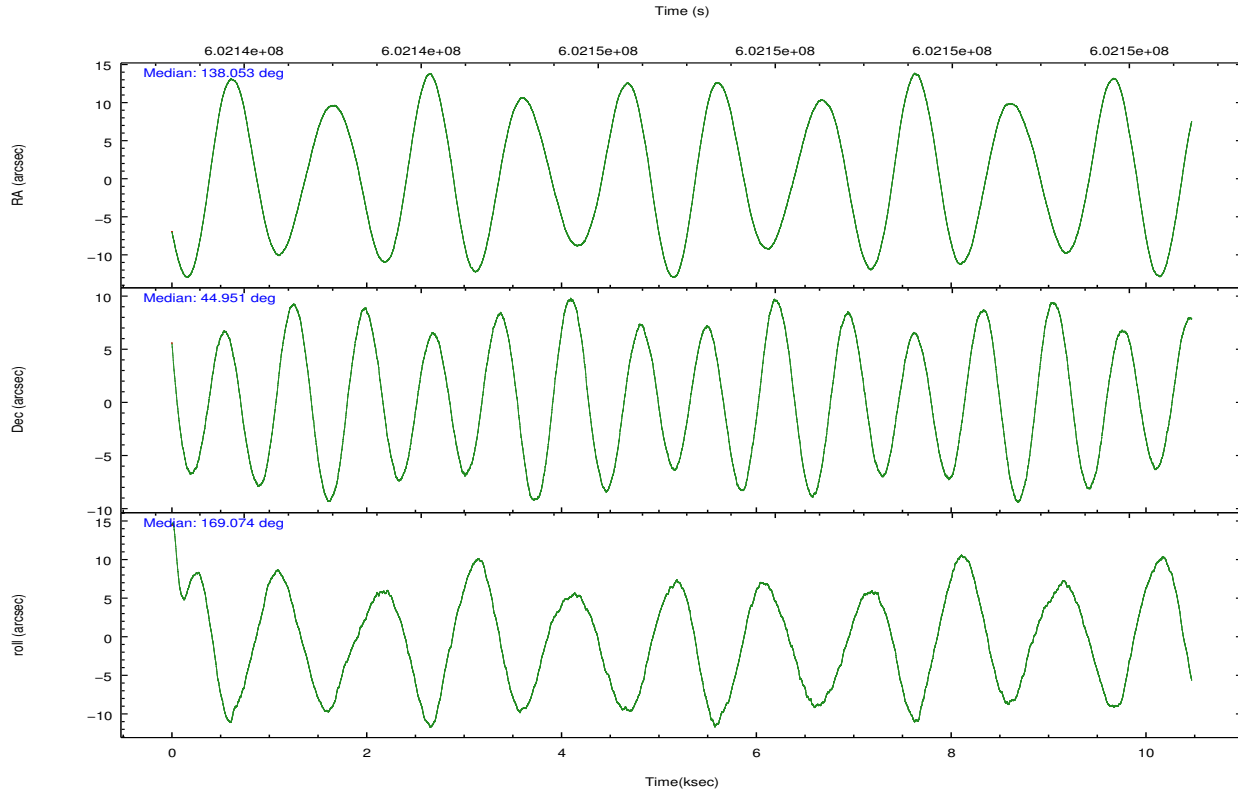
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-2367	ACIS-2367
Grating	NONE	NONE
Data mode	FAINT	FAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	138.089116	138.0525423112967
[deg] Pointing Dec	44.960476	44.9511391273459
[deg] Pointing Roll	168.897144	169.0796266542367
[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)	602142164.184000	602141144.3345701
Observation start date	2017-01-30T05:41:35	2017-01-30T05:25:44
[s] Observation end time (MET)	602152164.184000	602152616.64773
Observation end date	2017-01-30T08:28:15	2017-01-30T08:36:56
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
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



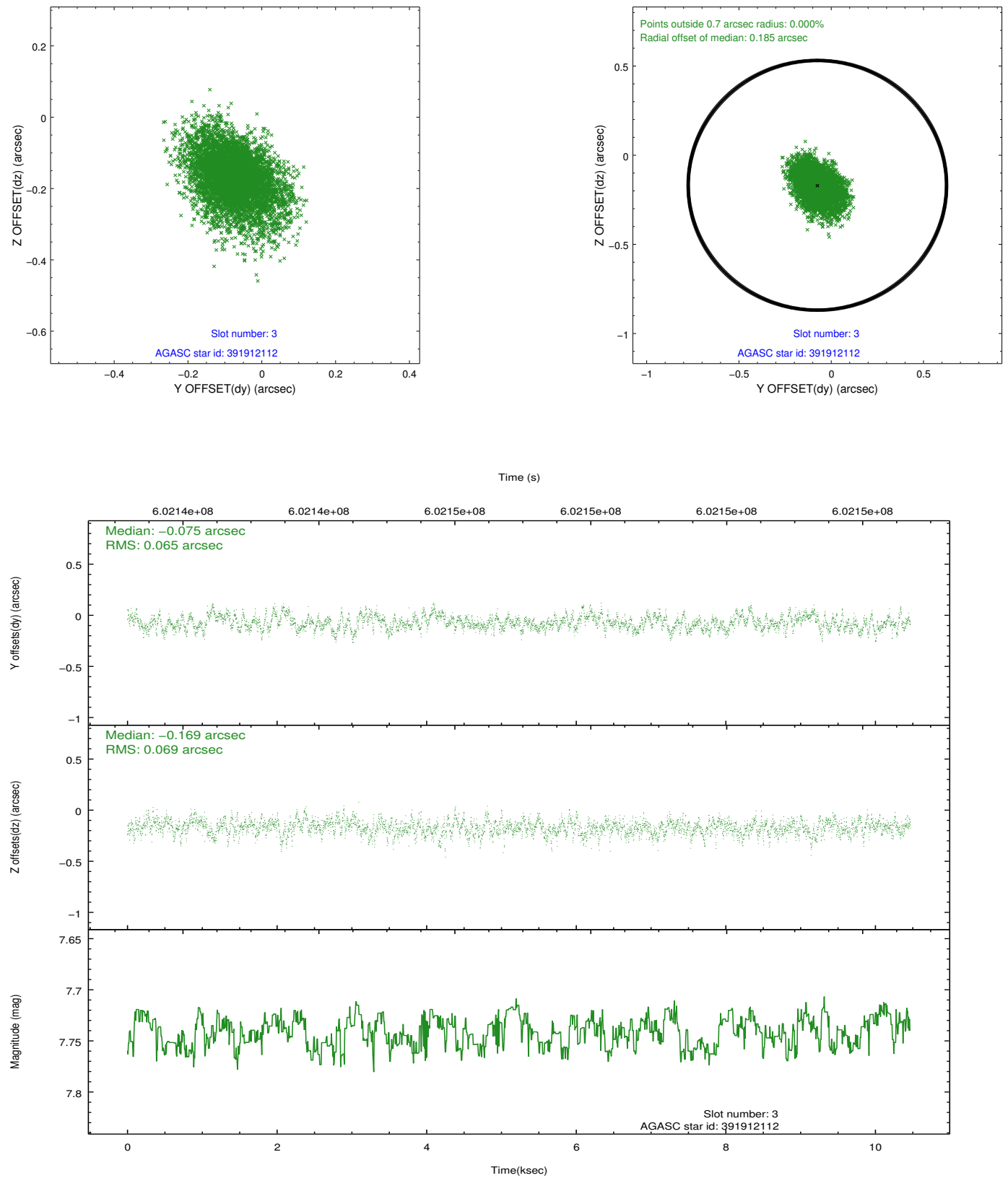


### Slot Statistics

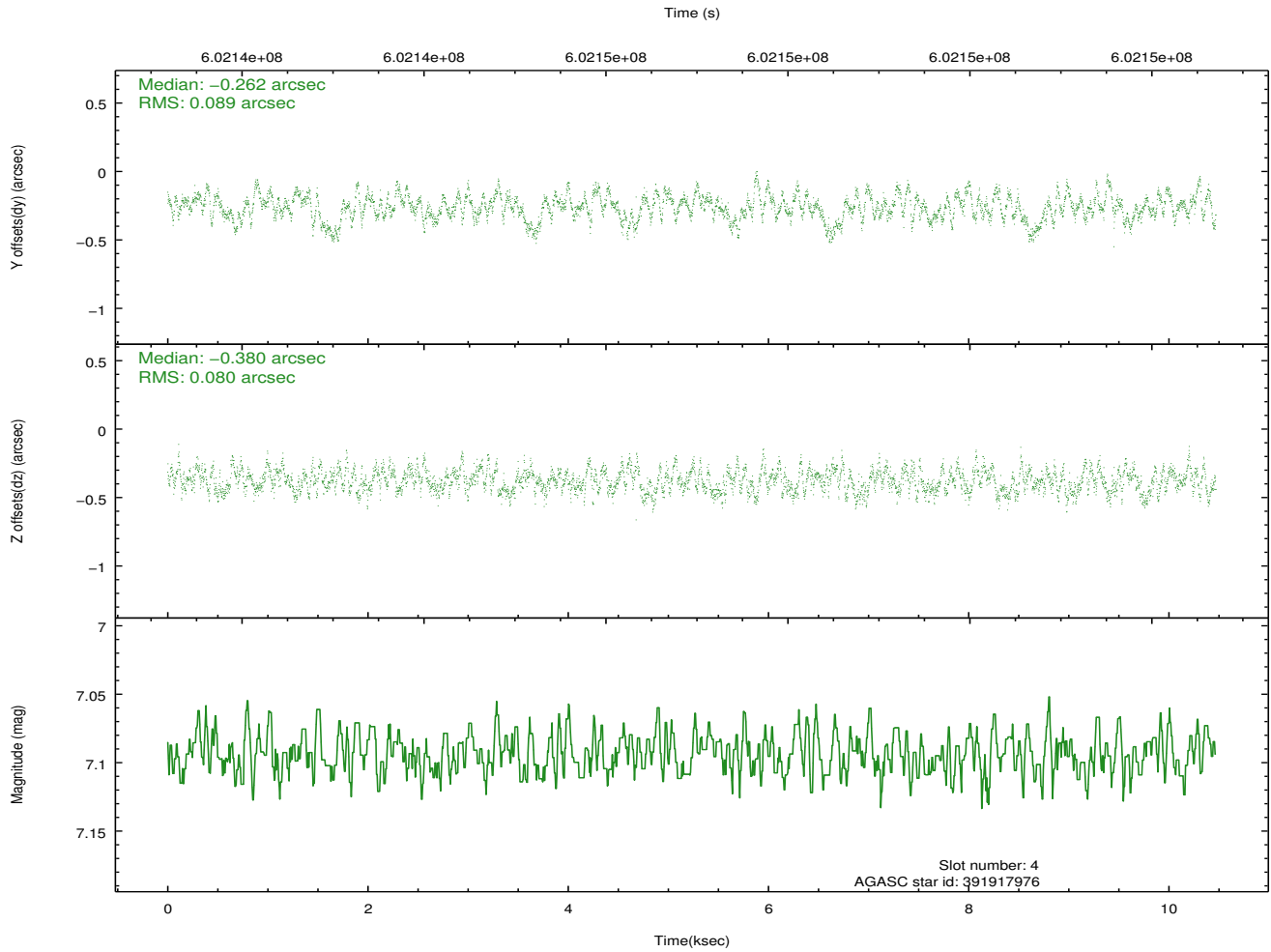
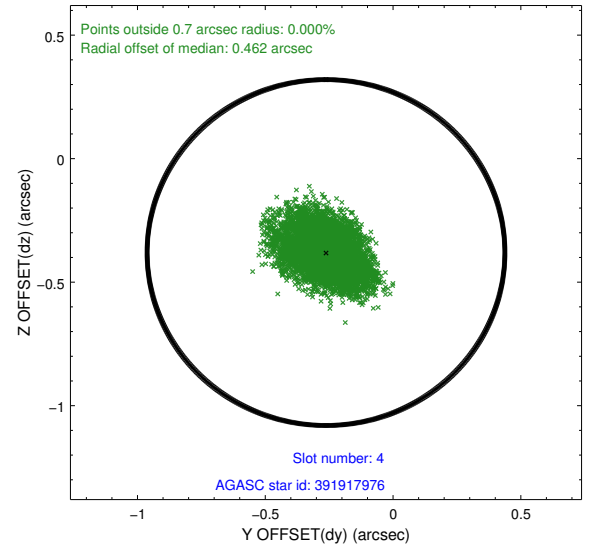
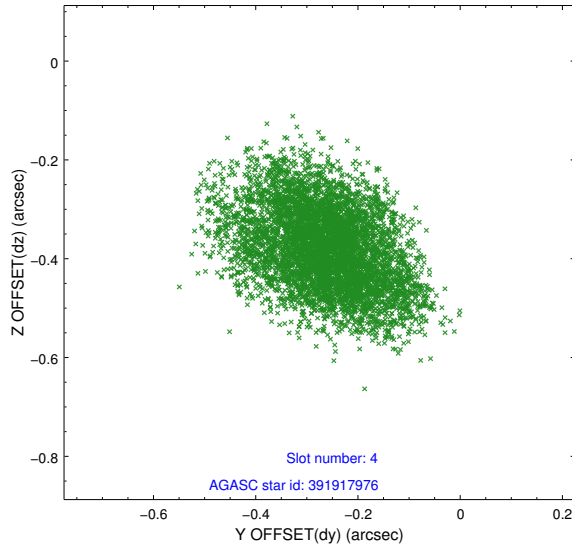
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.09	2553	-0.253	-0.165	0.014	0.022	0.000000	0.000000	-776.81	-1743.41
1	FID		ACIS-S-4	7.20	2552	0.587	0.167	0.013	0.023	0.000000	0.000000	2137.06	164.90
2	FID		ACIS-S-5	7.20	2554	-0.366	0.010	0.008	0.013	0.000000	0.000000	-1829.14	158.95
3	GUIDE	used	391912112	7.74	5102	-0.075	-0.169	0.098	0.169	138.344023	44.310586	-1095.01	2168.23
4	GUIDE	used	391917976	7.09	5108	-0.262	-0.380	0.128	0.206	137.943549	44.824070	270.36	553.77
5	GUIDE	used	448801008	9.27	5083	0.079	-0.075	0.155	0.261	137.410087	45.443227	2019.41	-1381.81
6	GUIDE	used	448801744	7.90	5105	-0.042	0.023	0.087	0.147	137.259812	45.397360	2362.62	-1150.10
7	GUIDE	used	448930880	8.20	5104	0.281	0.603	0.174	0.248	138.874475	45.439919	-1611.22	-2084.68

## 2.4 Star Slots

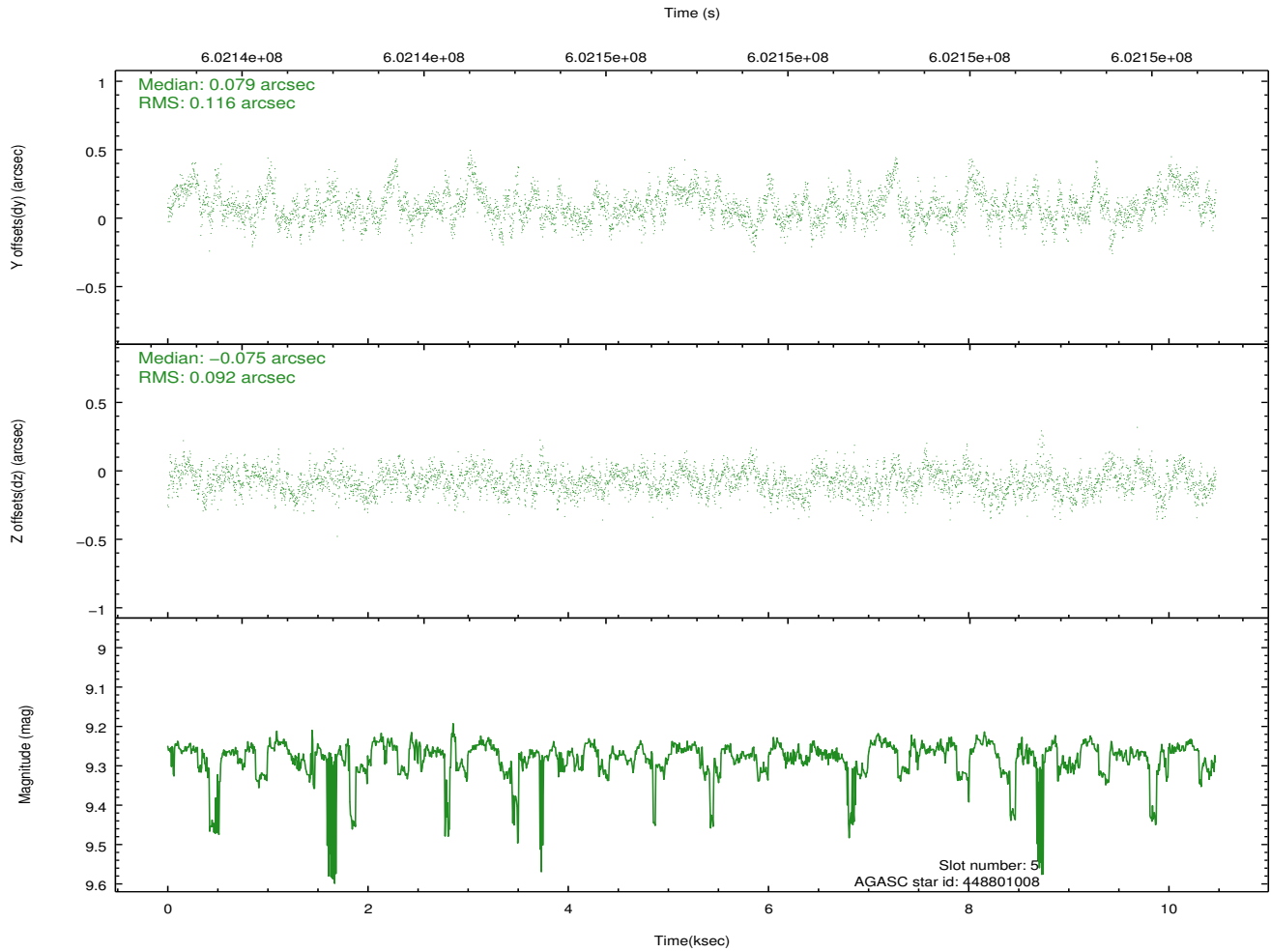
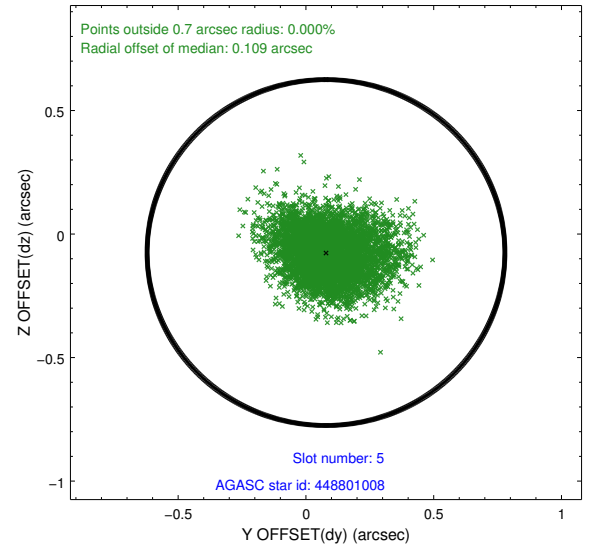
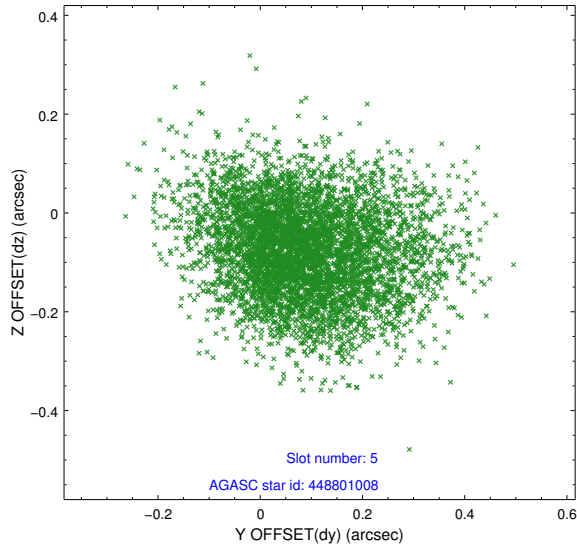
### 2.4.1 Slot 3



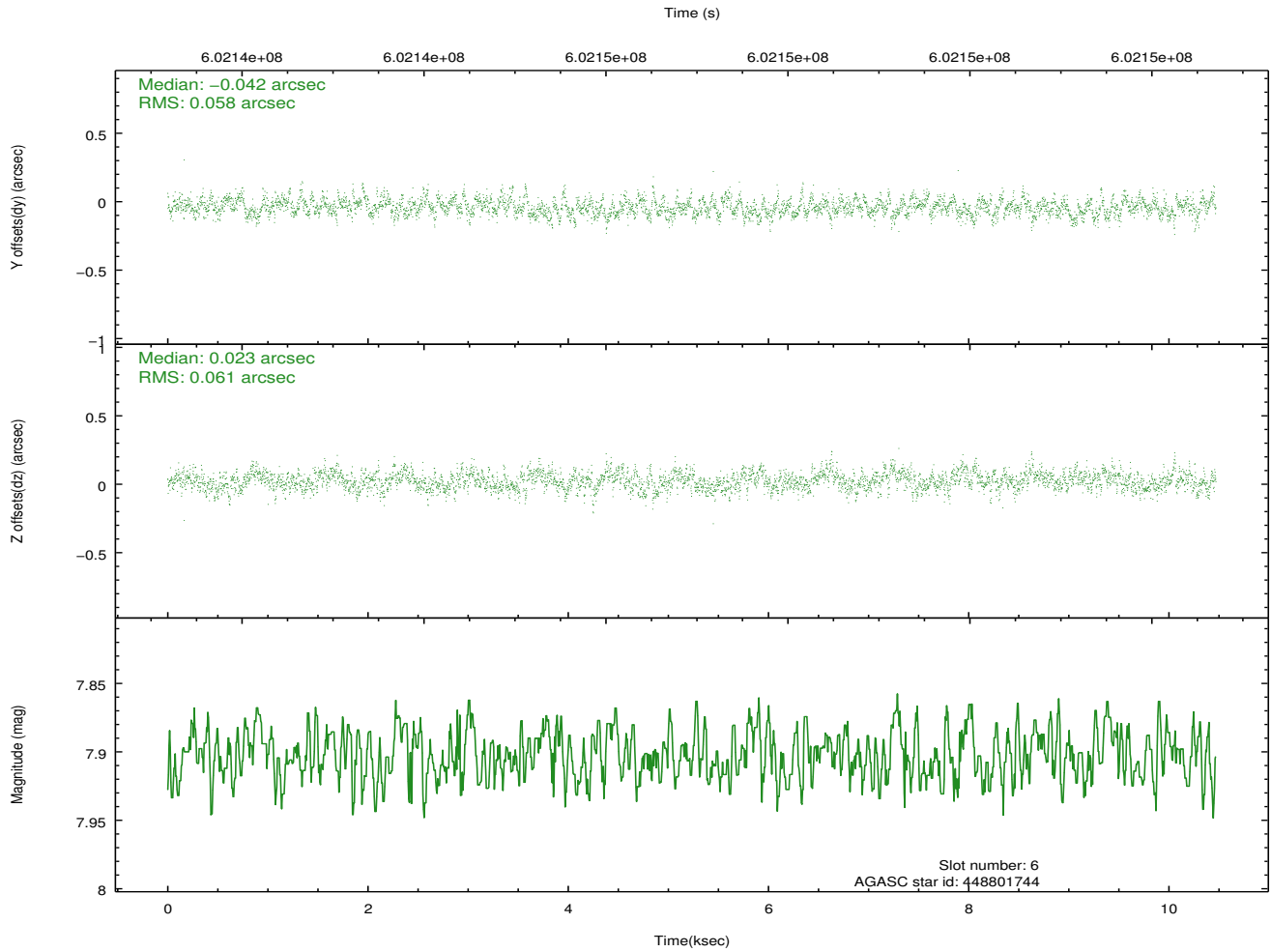
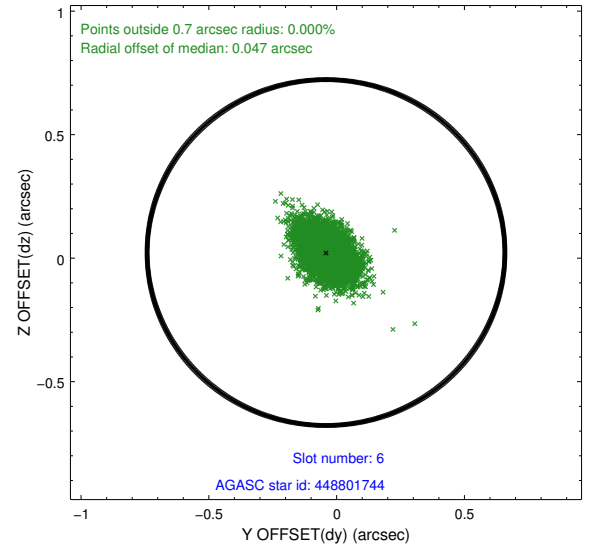
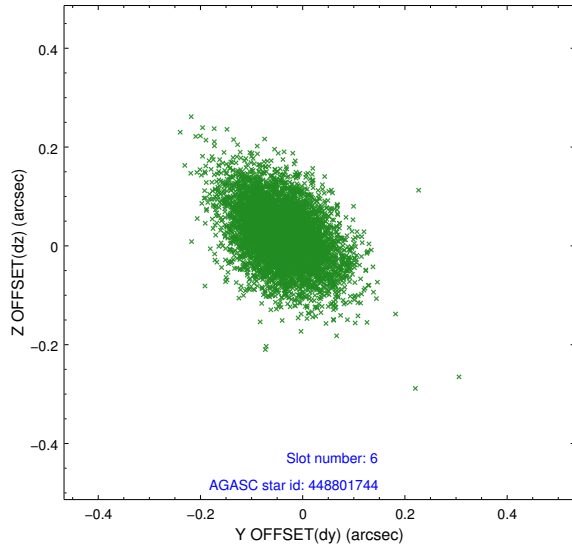
## 2.4.2 Slot 4



### 2.4.3 Slot 5

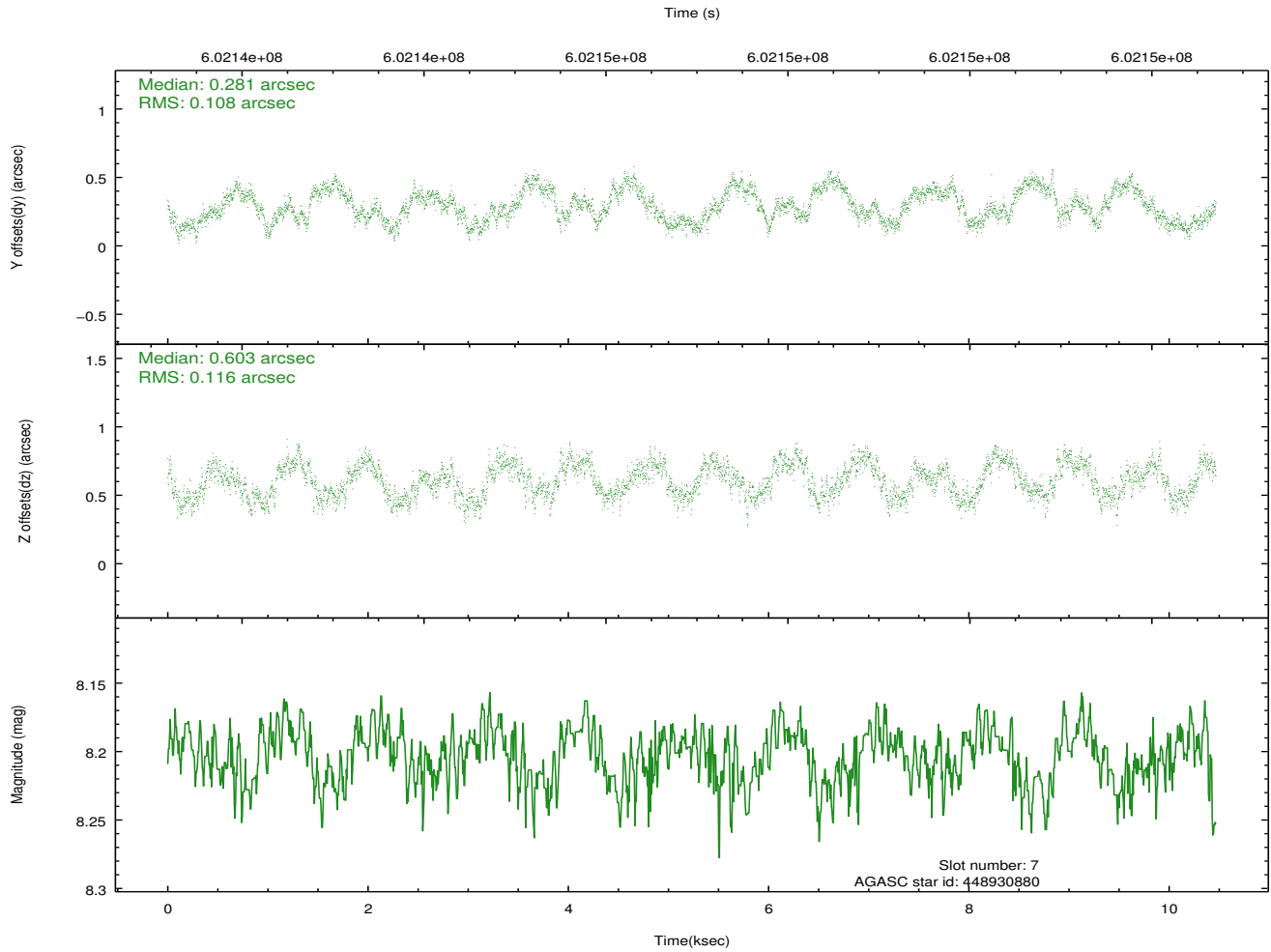
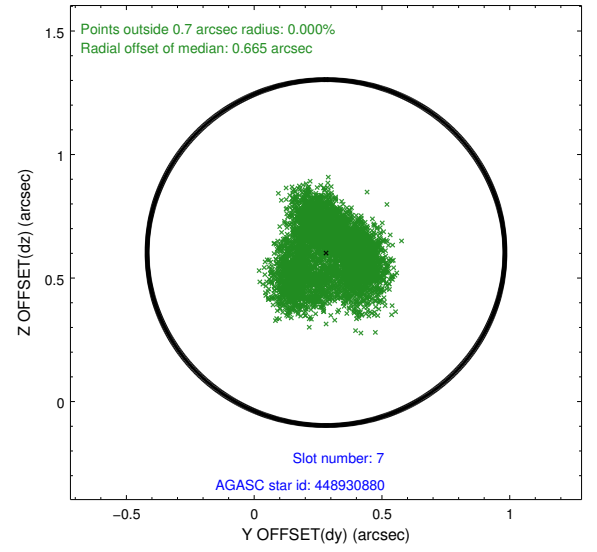
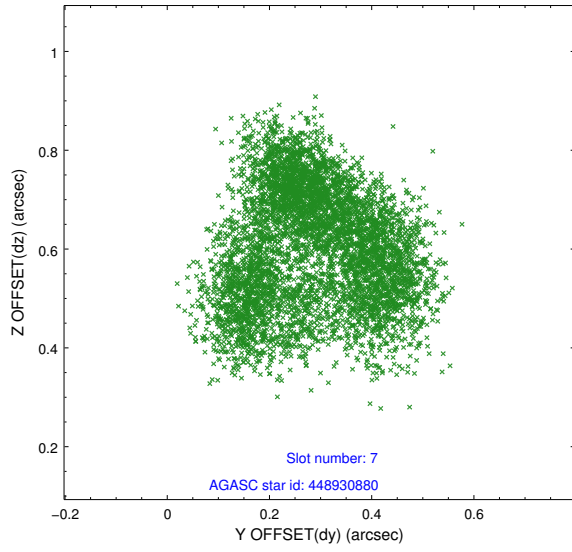


## 2.4.4 Slot 6



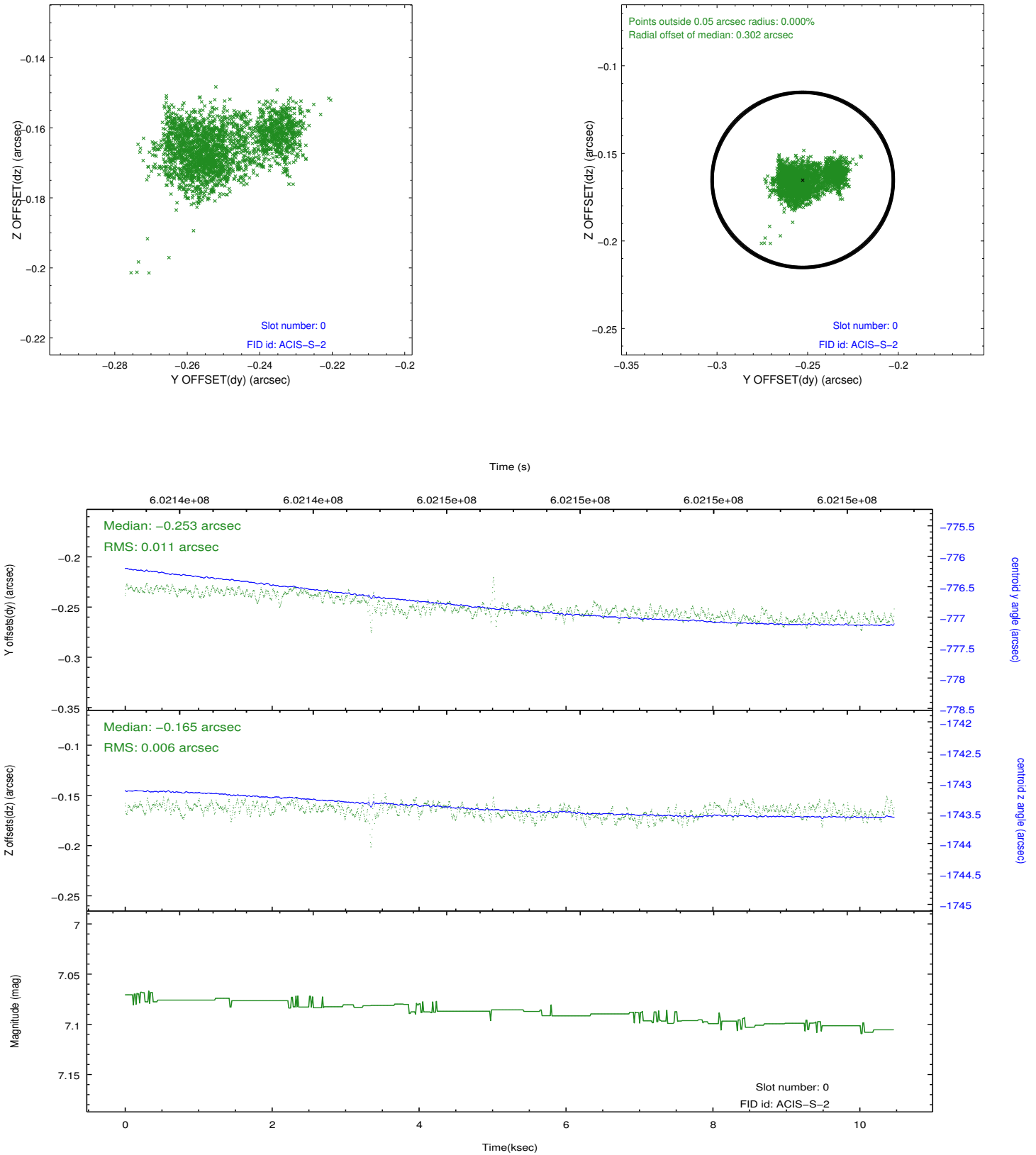


## 2.4.5 Slot 7

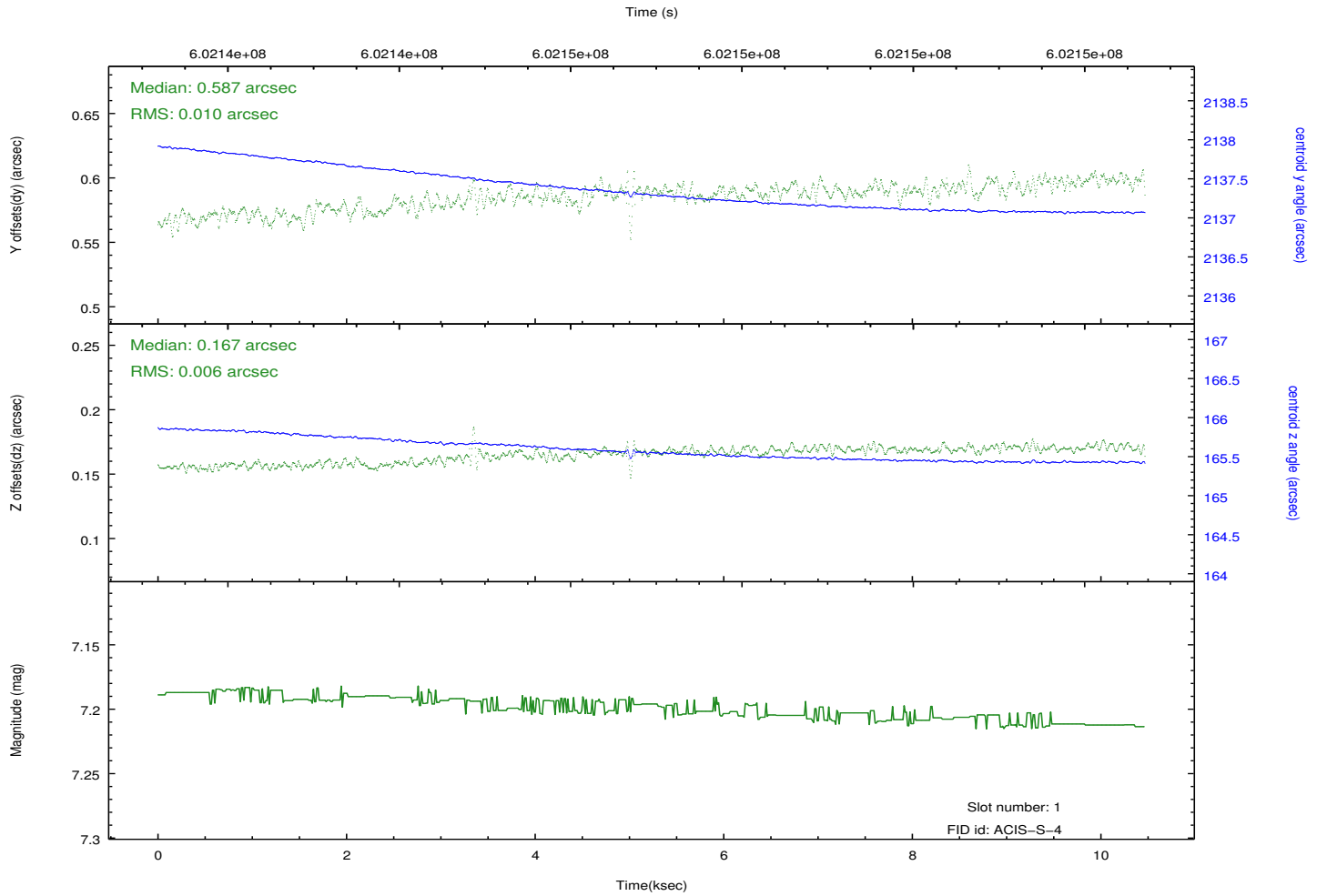
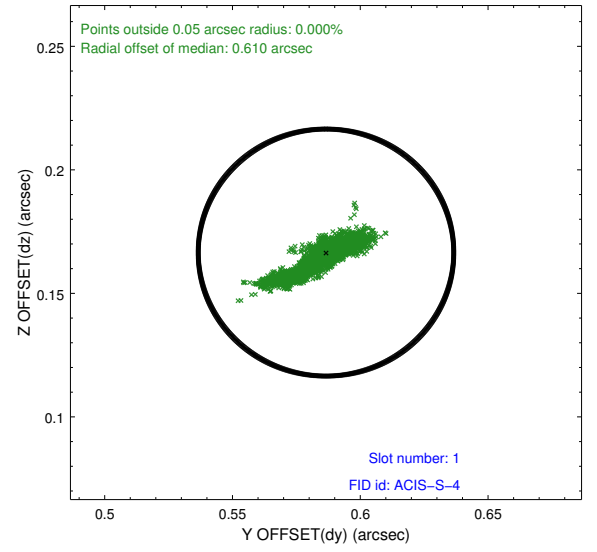
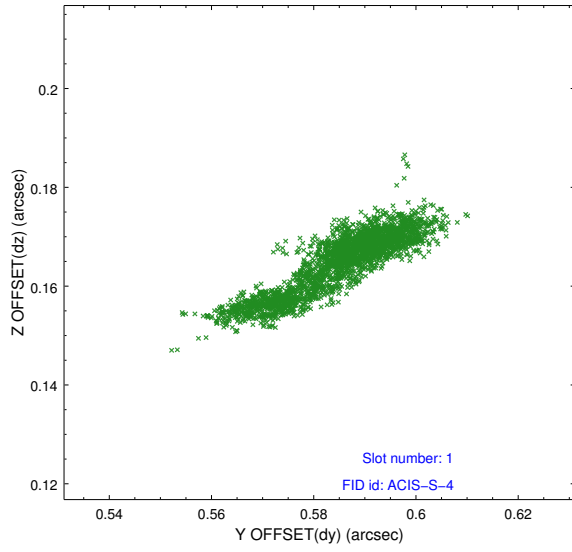


## 2.5 FID Slots

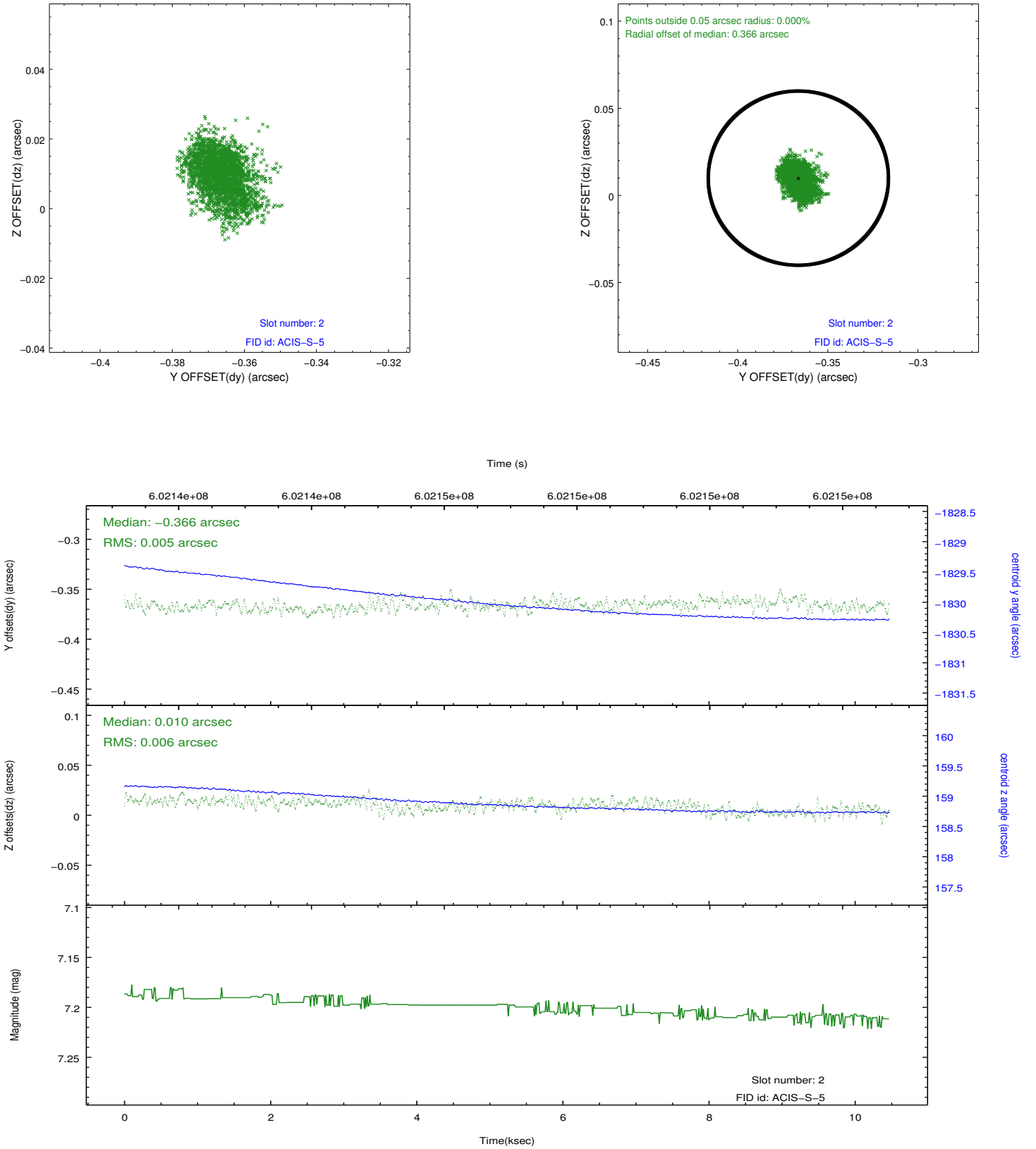
### 2.5.1 Slot 0



## 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)	2017.01.31
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.068272613406

### A.2 Comments