

# V&V Reference Report

## L2 ASCDS Version : 8.5.1.1

Observation 5820 - L2 Version 3  
Chandra X-Ray Center

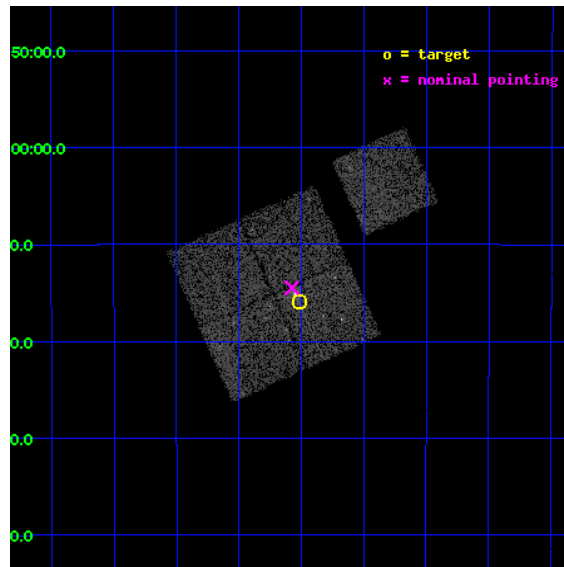
L2 Processing Date : Dec 21 2012

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# 1 Front

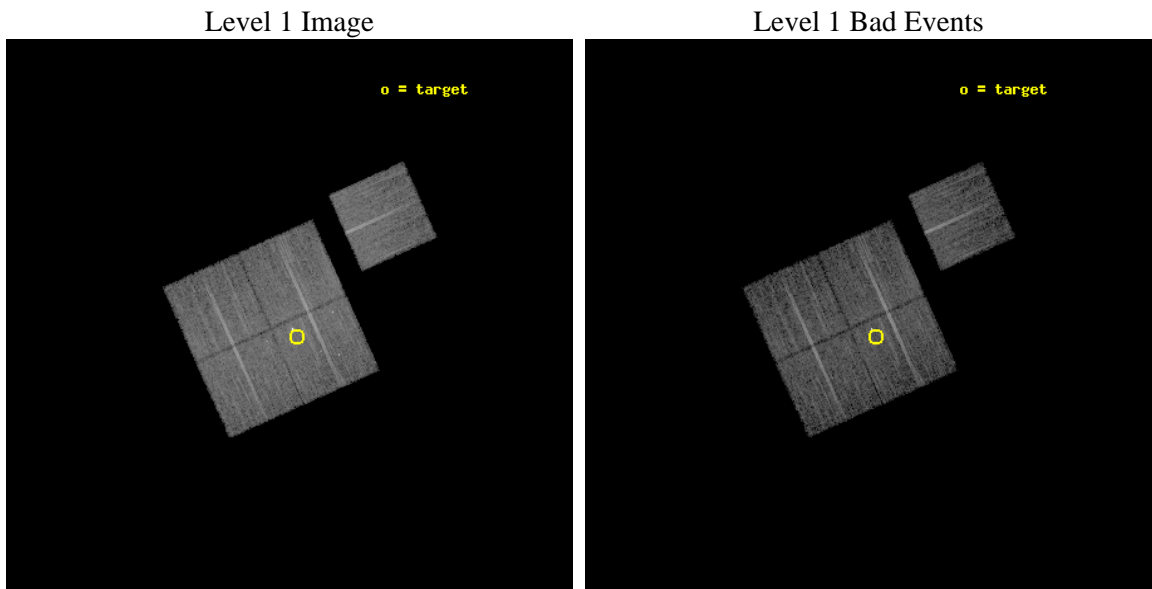
seq_num	800533	Sequence number
obs_id	5820	Observation id
title	MACS: The most massive galaxy clusters at $z>0.3$	Proposal title
observer	Dr. Harald Ebeling	Principal investigator
object	MACSJ1542.0-2915	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	235.504083	Observer's specified target RA [deg]
dec_targ	-29.266	Observer's specified target Dec [deg]
ra_nom	235.51903717911	Nominal RA [deg]
dec_nom	-29.241562172818	Nominal Dec [deg]
roll_nom	65.842599806067	Nominal Roll [deg]
revision	3	Processing version of data
ontime	10127.699980497	Sum of GTIs [s]
livetime	9995.3741243479	Livetime [s]
ontime0	10127.699980497	Sum of GTIs [s]
ontime1	10124.559010237	Sum of GTIs [s]
ontime2	10127.699980497	Sum of GTIs [s]
ontime3	10127.699980497	Sum of GTIs [s]
ontime6	10124.559020251	Sum of GTIs [s]
l2events	33608	Number of level 2 events



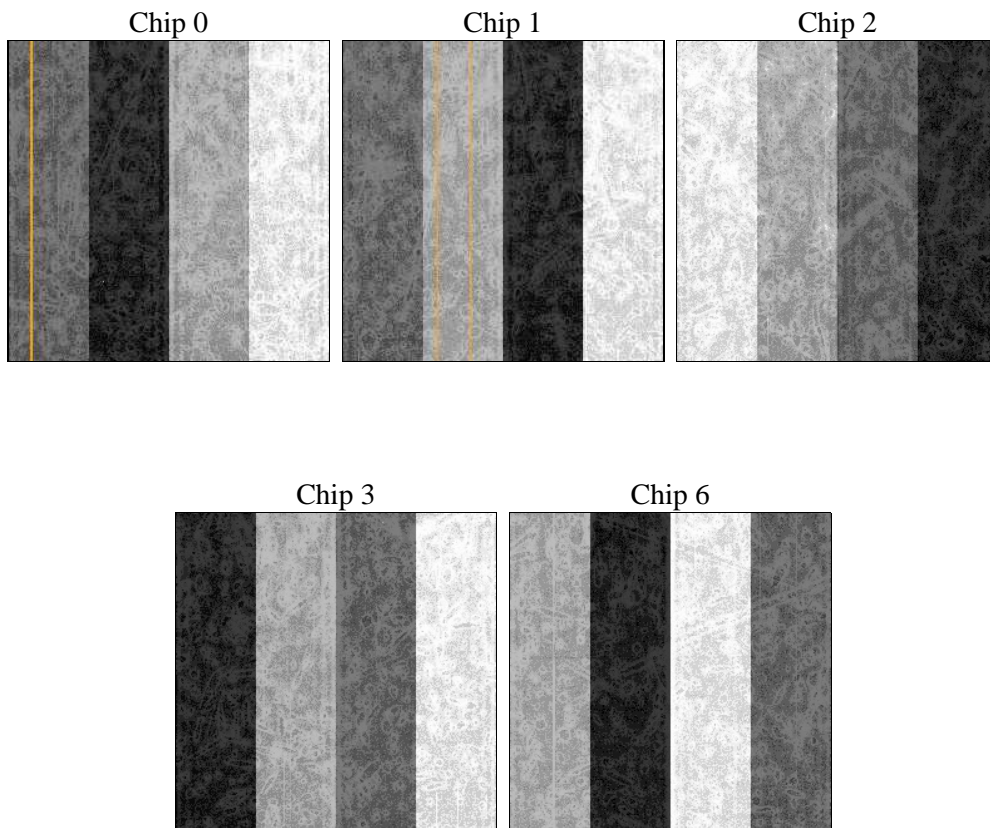
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	8.5.1.1	Processing system revision	ontime	10127.699980497	Sum of GTIs [s]
caldsver	4.5.5	&#160	ontime0	10127.699980497	Sum of GTIs [s]
date	2012-12-21T22:37:14	Date and time of file creation	ontime1	10124.559010237	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	10127.699980497	Sum of GTIs [s]
			ontime3	10127.699980497	Sum of GTIs [s]
			ontime6	10124.559020251	Sum of GTIs [s]
			l1events	341638	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	64487	64187	71232	74729	67003
rejected events	57763	56316	64543	63938	59931
rejected %	89%	87%	90%	85%	89%

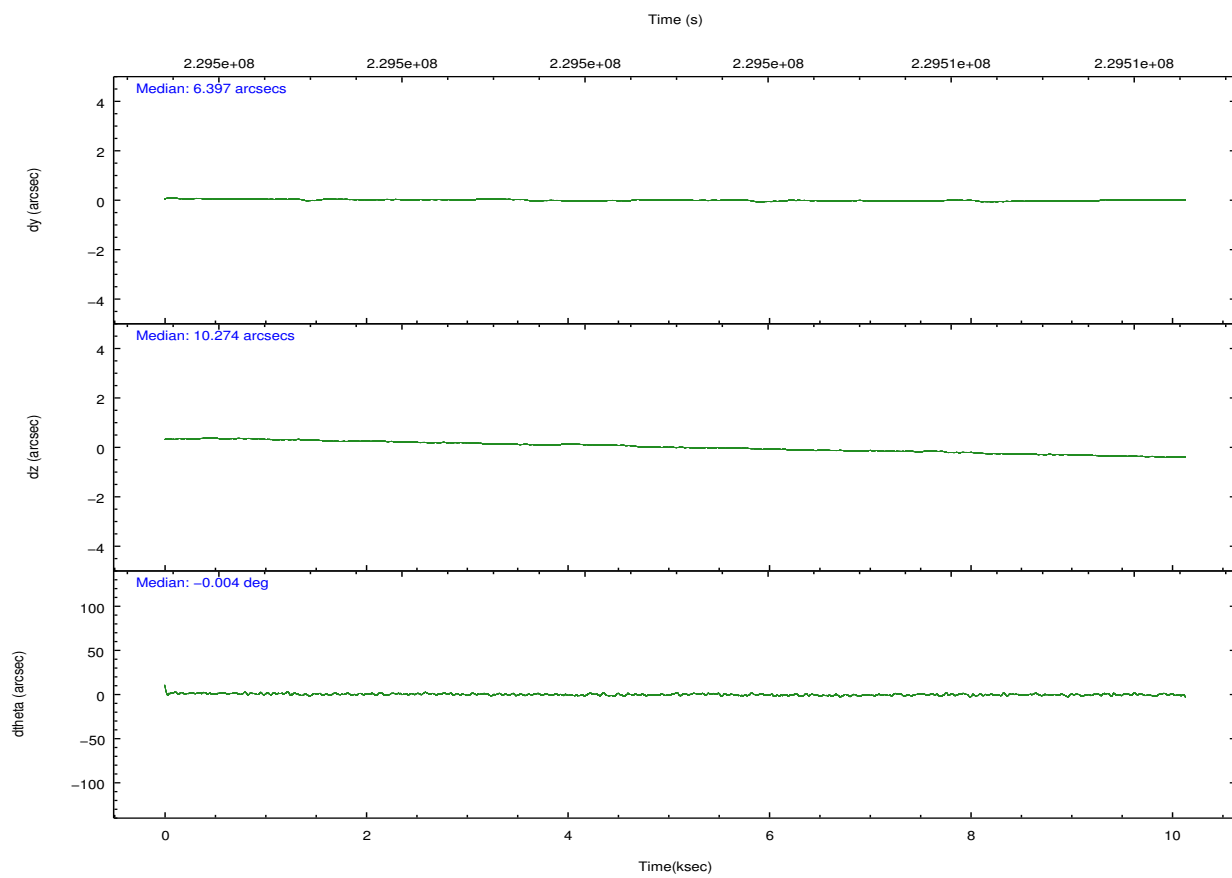
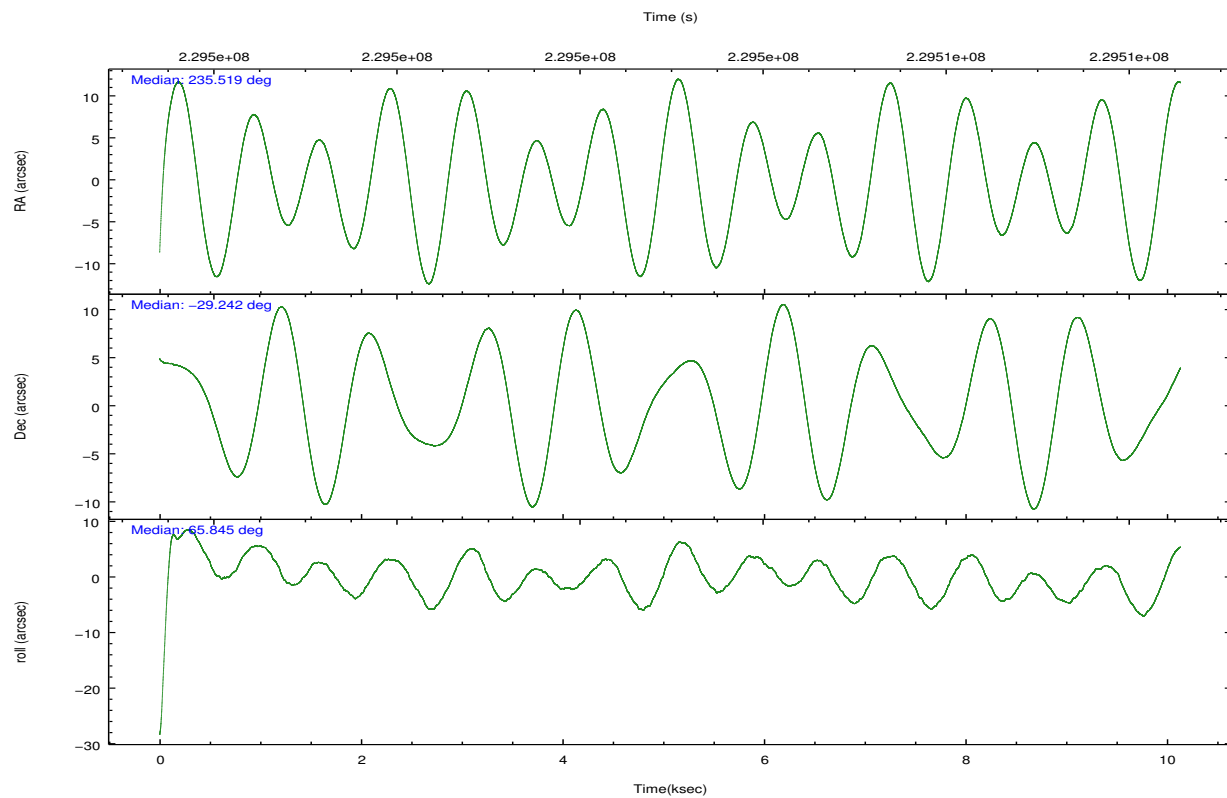
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	2518	3354	2835	5216	2872
	3%	5%	3%	6%	4%
grade 1 events	31	33	28	523	32
	0%	0%	0%	0%	0%
grade 2 events	1658	1651	1475	1994	1478
	2%	2%	2%	2%	2%
grade 3 events	797	830	693	1032	782
	1%	1%	0%	1%	1%
grade 4 events	699	836	751	992	736
	1%	1%	1%	1%	1%
grade 5 events	2348	2627	2266	3330	2615
	3%	4%	3%	4%	3%
grade 6 events	1298	1455	1150	1917	1456
	2%	2%	1%	2%	2%
grade 7 events	55138	53401	62034	59725	57032
	85%	83%	87%	79%	85%



## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	235.522336	235.5190371791134	Subarray requested	NONE	NONE
[deg] Pointing Dec	-29.268822	-29.24156217281762	Alternating exposures requested	N	N
[deg] Pointing Roll	65.635564	65.84259980606689	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-229.442463	-229.4438428438578			
[mm] SIM translation stage offset	-4.15	-4.148610159071865			
[s] Observation start time (MET)	229498049.184000	229496902.64995			
Observation start date	2005-04-10T05:26:25	2005-04-10T05:08:22			
[s] Observation end time (MET)	229508049.184000	229508831.60049			
Observation end date	2005-04-10T08:13:05	2005-04-10T08:27:11			
Read mode	TIMED	TIMED			

## 2.3 Aspect

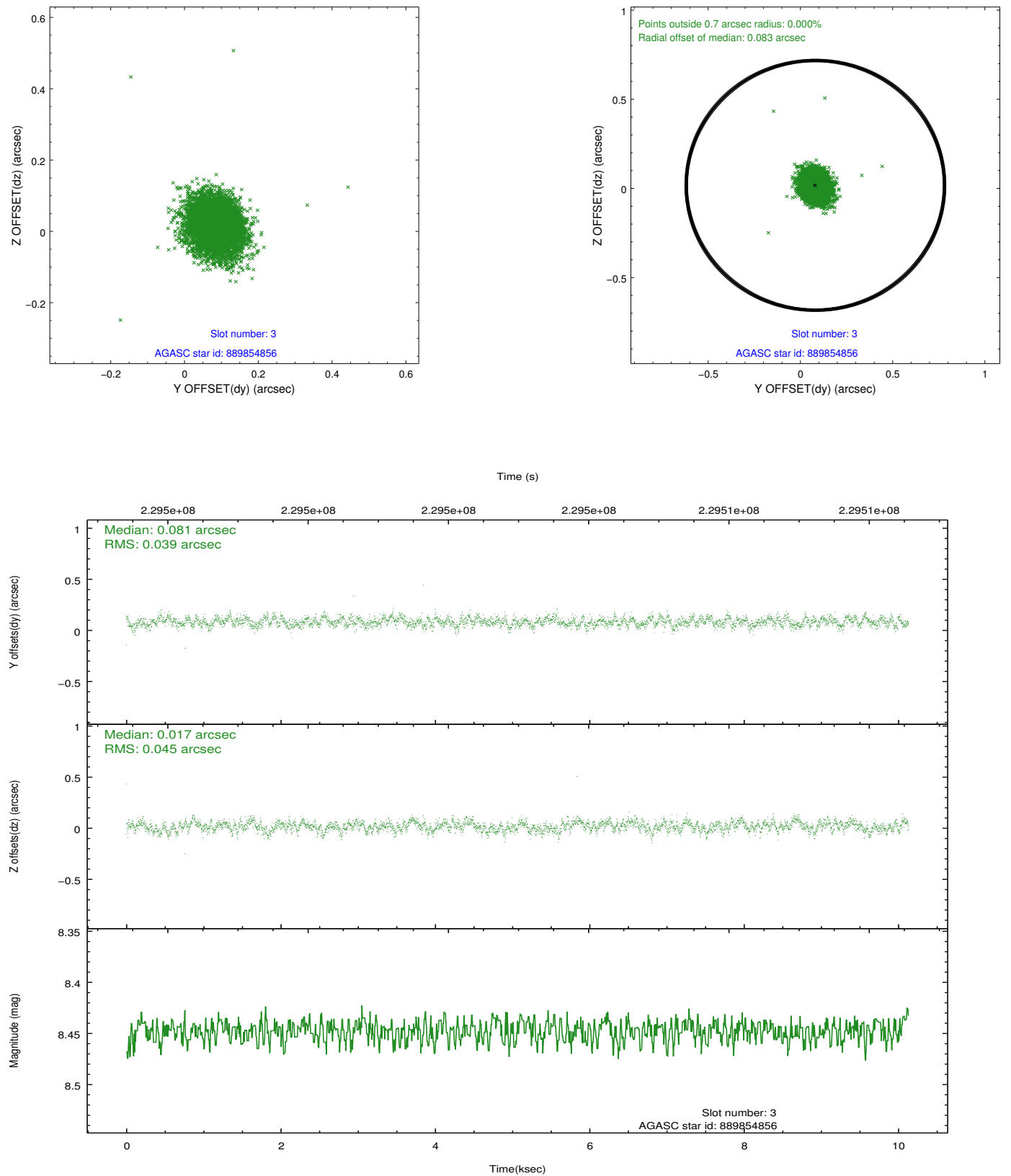


### Slot Statistics

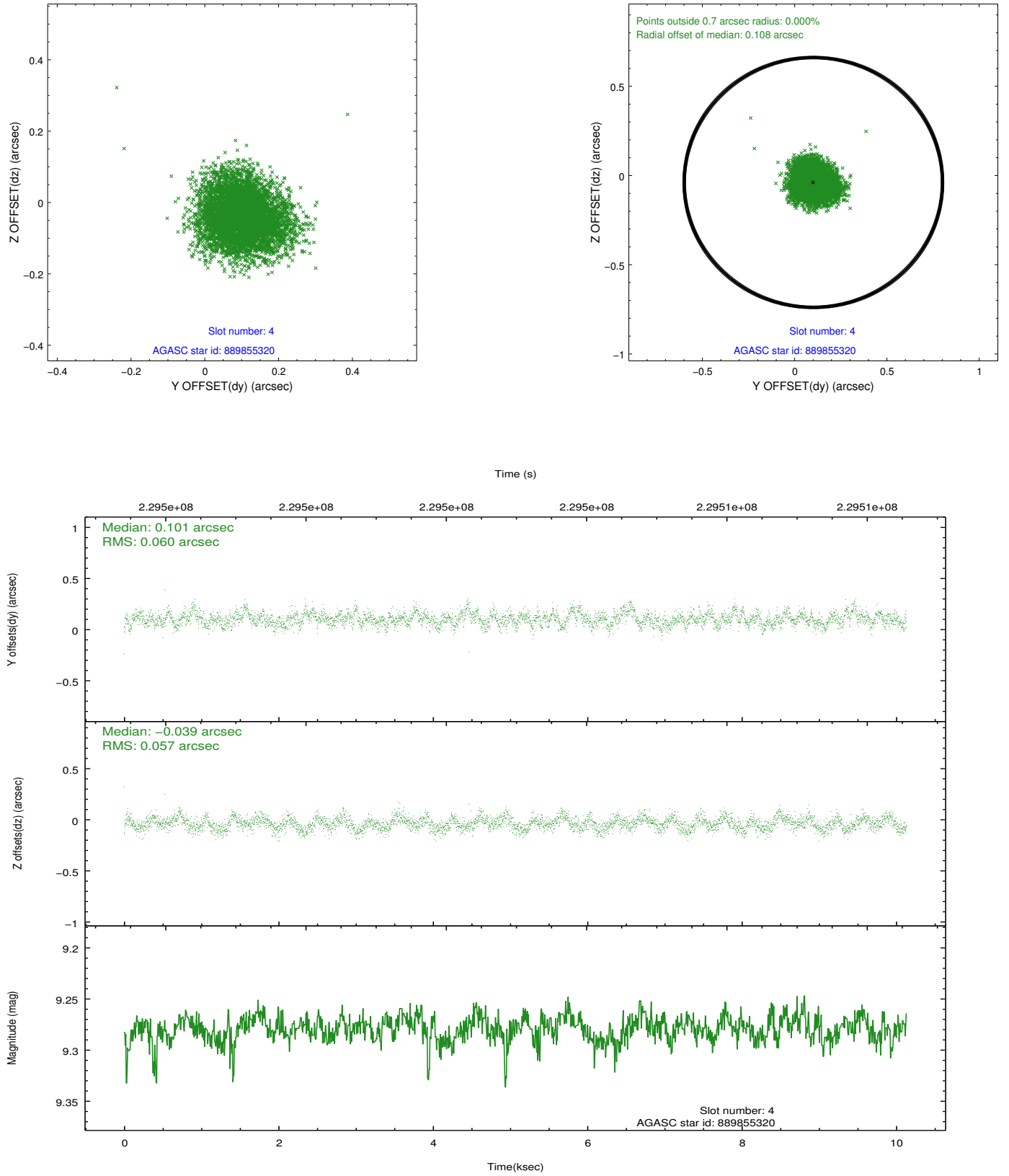
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.25	2472	-0.010	-0.046	0.015	0.025	0.000000	0.000000	933.25	-918.88
1	FID	ACIS-I-2	7.16	2472	-0.138	-0.006	0.009	0.014	0.000000	0.000000	-760.89	-925.10
2	FID	ACIS-I-4	7.15	2472	0.049	0.119	0.010	0.017	0.000000	0.000000	2152.65	981.36
3	GUIDE	889854856	8.45	4944	0.081	0.017	0.062	0.100	235.149556	-29.324698	-667.74	982.22
4	GUIDE	889855320	9.28	4939	0.101	-0.039	0.089	0.142	235.175576	-29.648595	-1694.70	423.94
5	GUIDE	889857064	8.57	4944	-0.090	0.034	0.069	0.113	235.145891	-29.077300	137.13	1362.77
6	GUIDE	889858448	9.50	4940	-0.219	-0.051	0.108	0.170	235.209214	-28.619746	1718.86	1865.11
7	GUIDE	889860280	8.40	4943	0.128	0.043	0.082	0.139	234.589463	-29.596256	-2289.07	2169.79

## 2.4 Star Slots

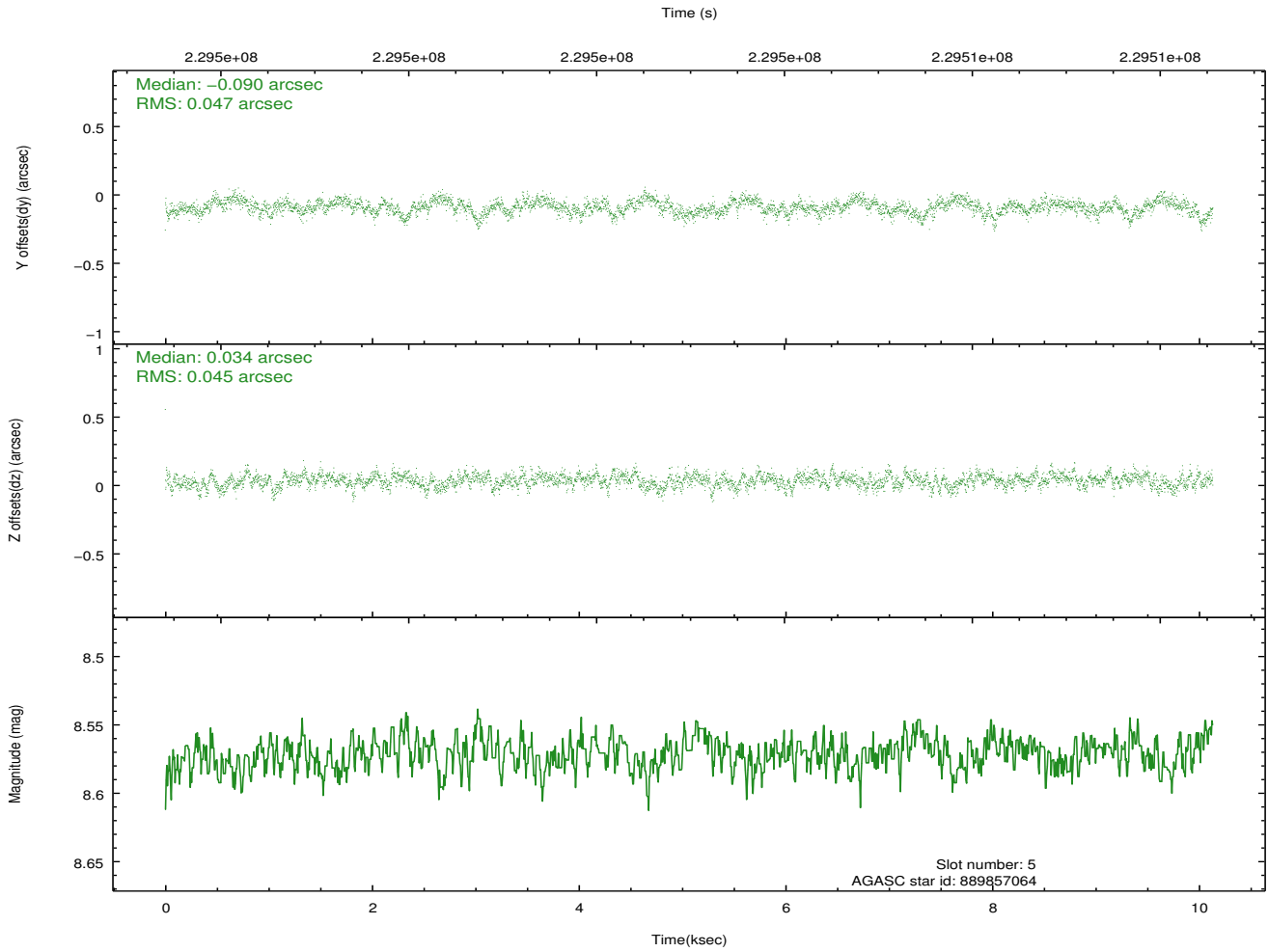
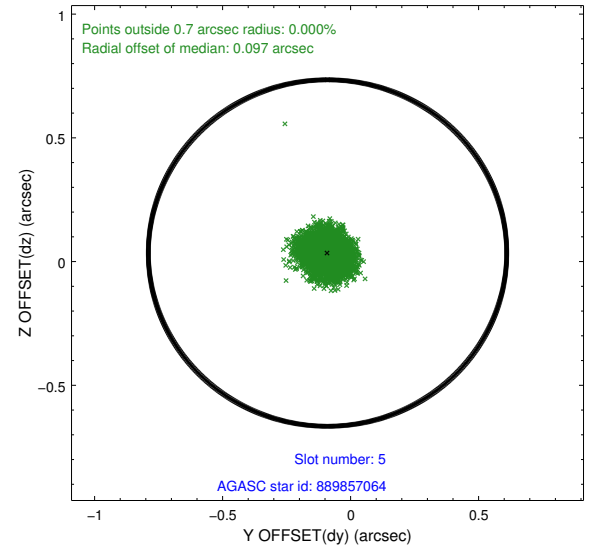
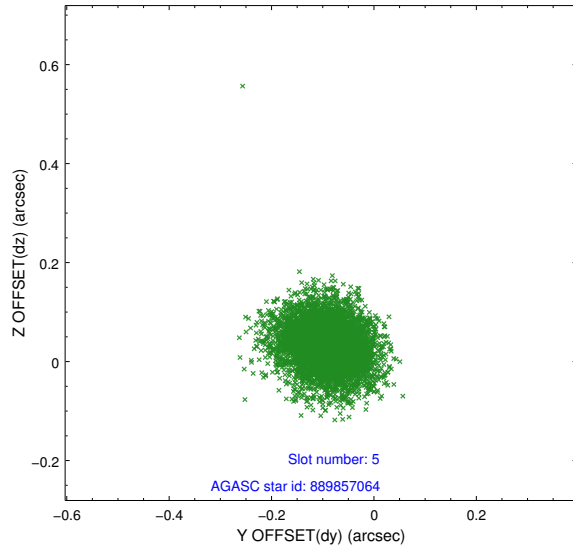
### 2.4.1 Slot 3



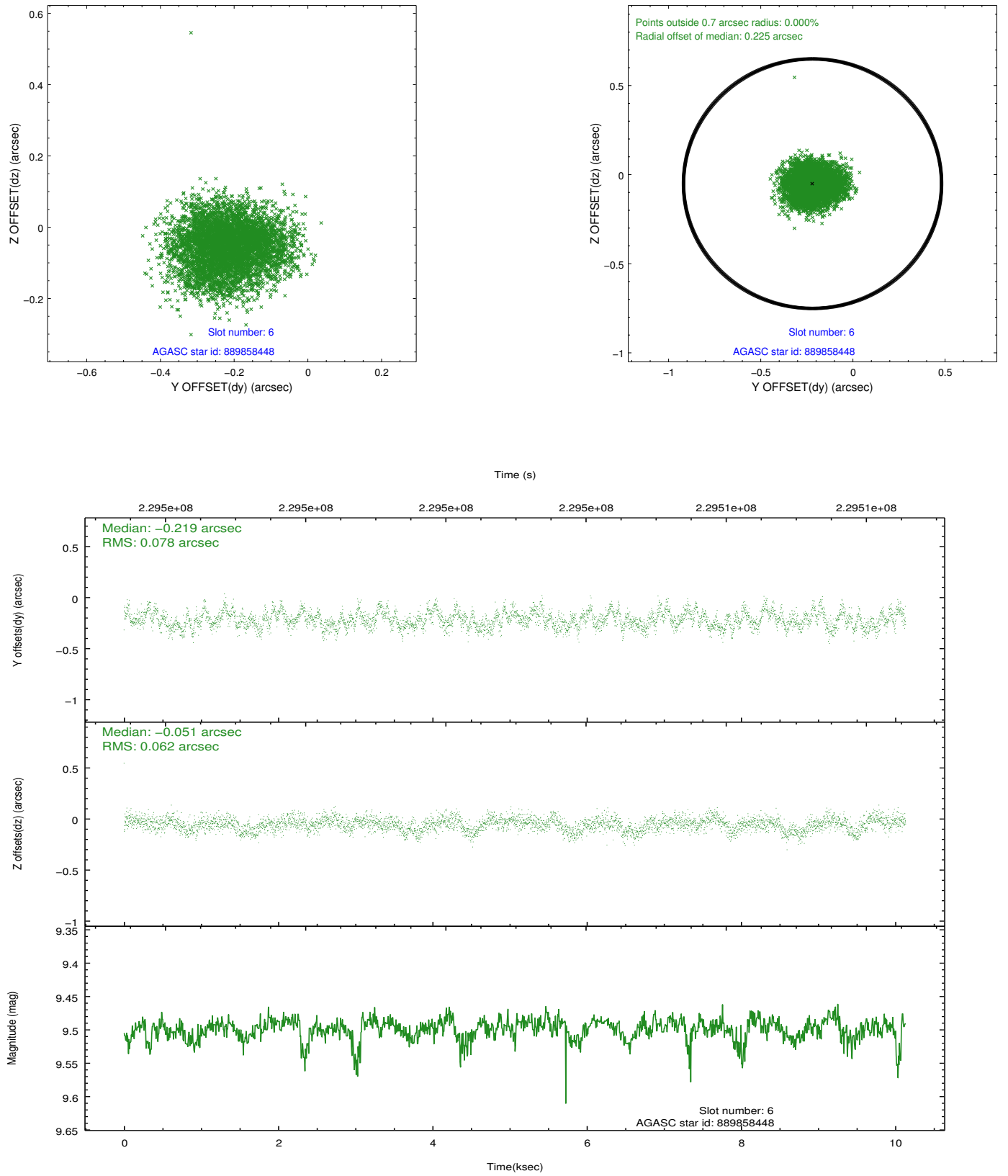
## 2.4.2 Slot 4



### 2.4.3 Slot 5

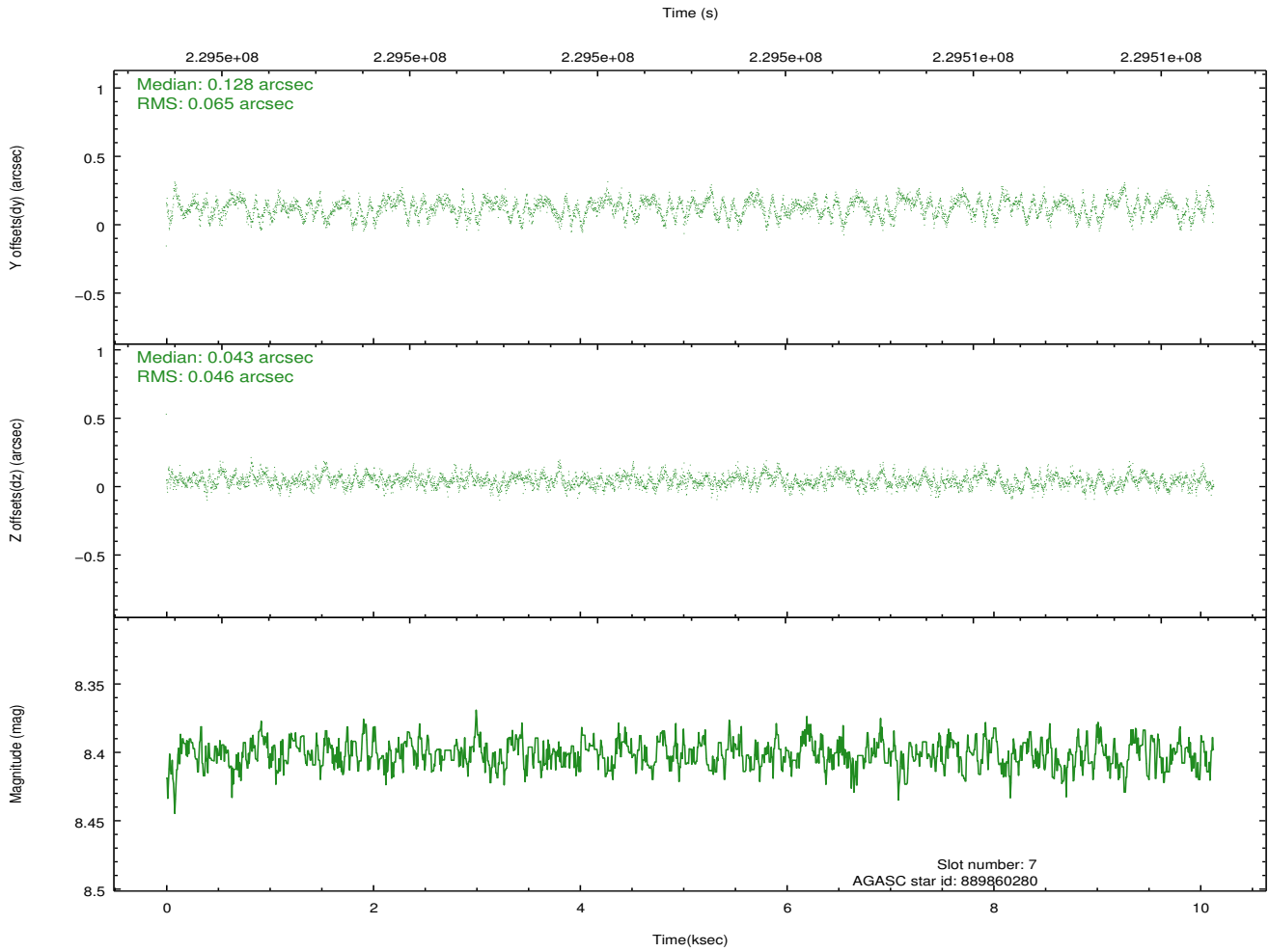
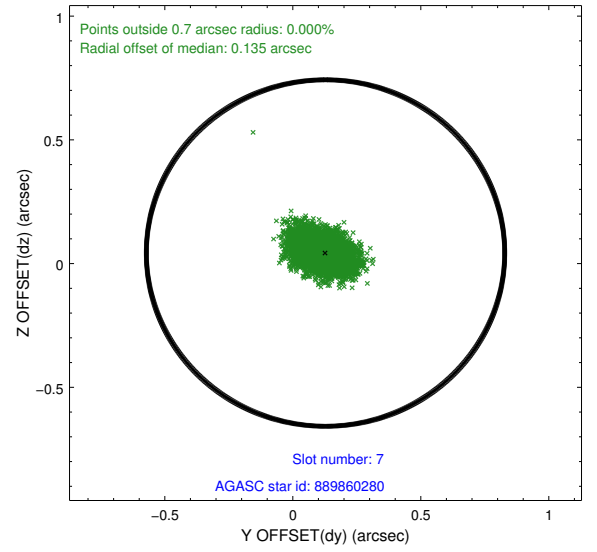
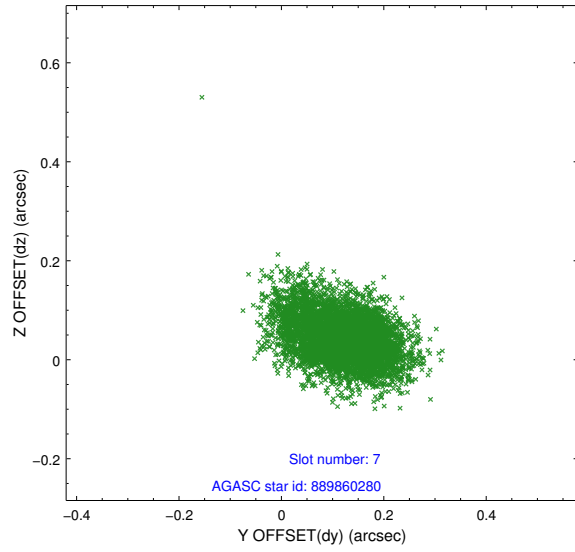


## 2.4.4 Slot 6



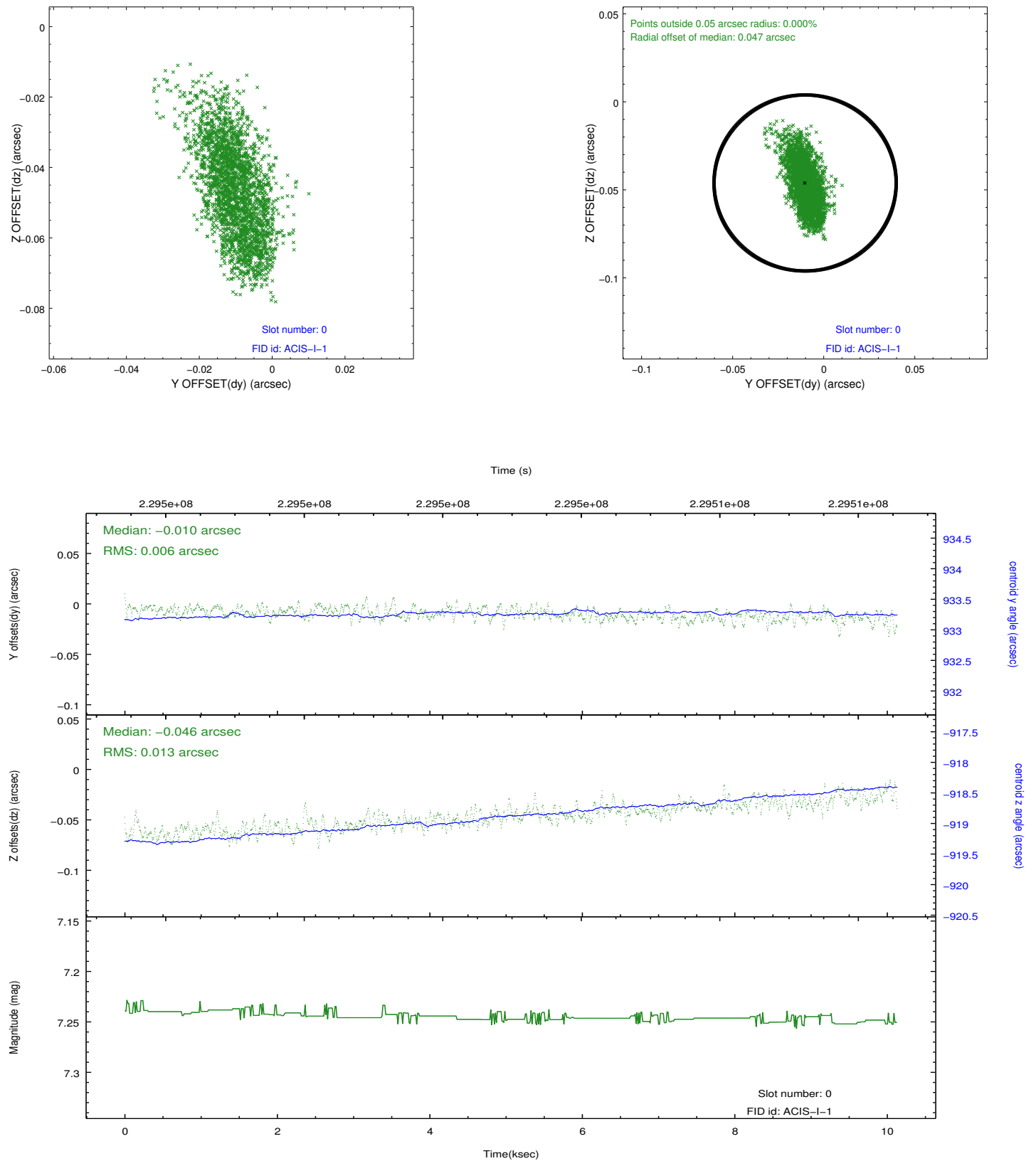


## 2.4.5 Slot 7

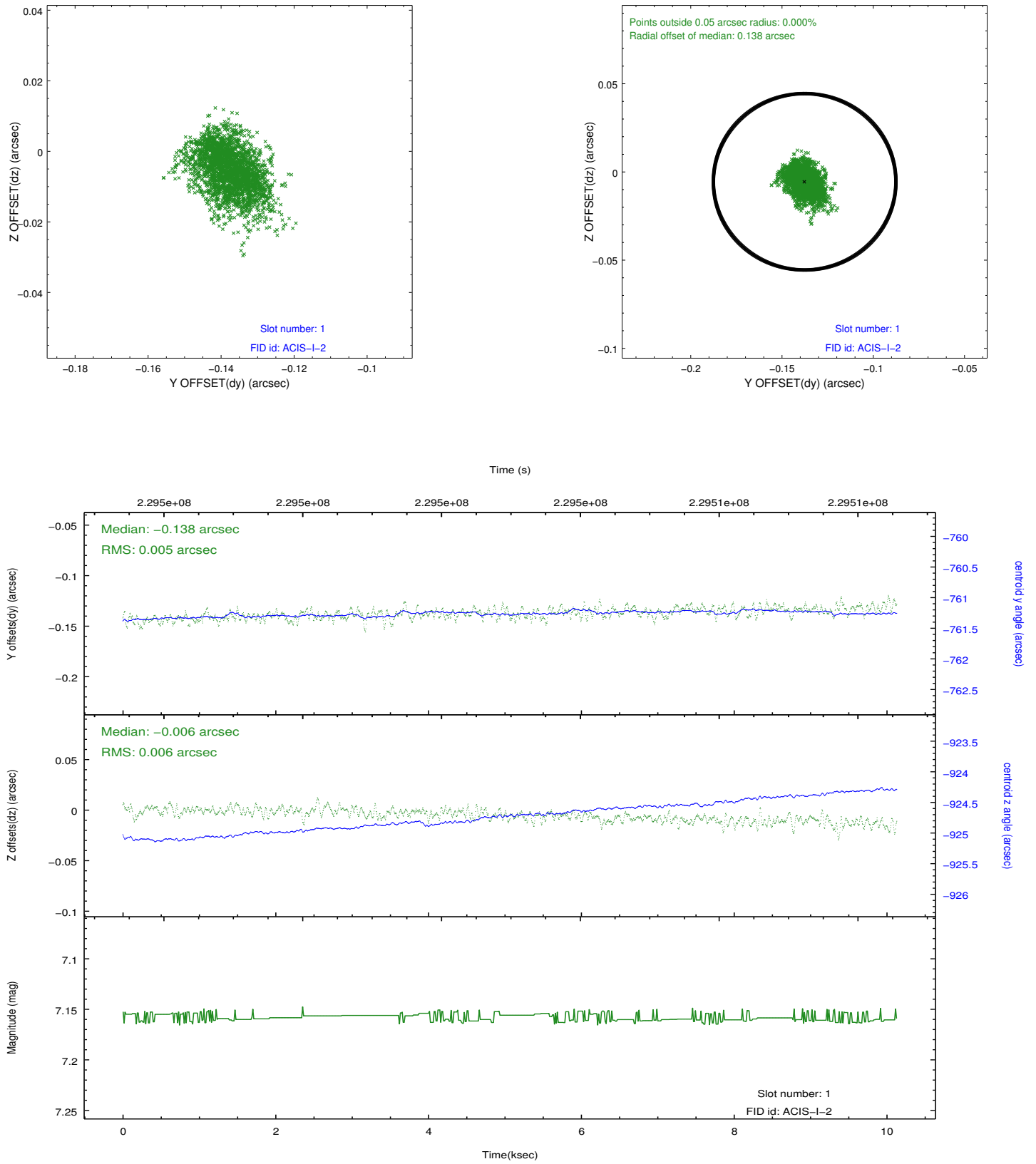


## 2.5 FID Slots

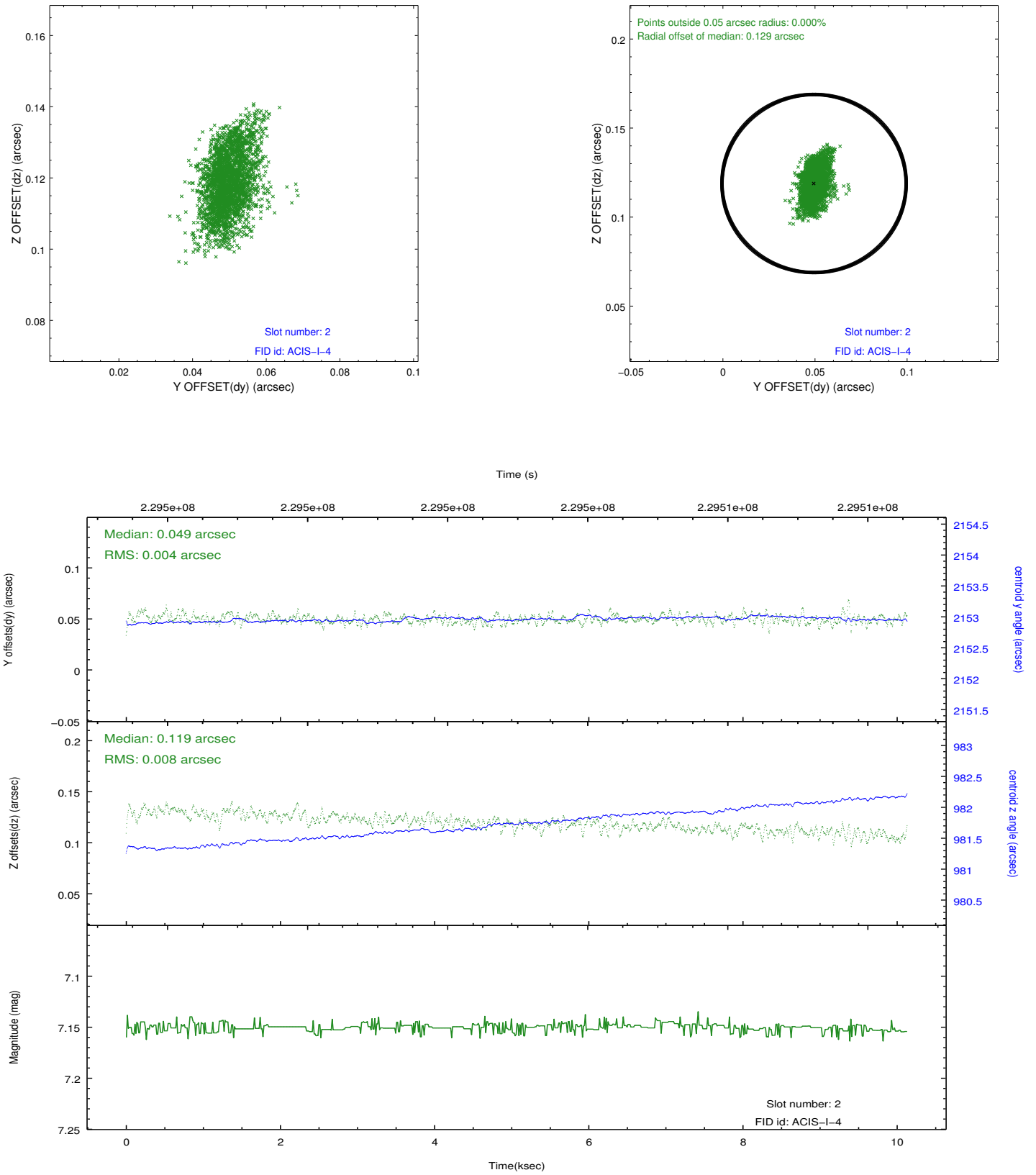
### 2.5.1 Slot 0



## 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)	2013.01.14
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.12769

### A.2 Comments