

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 3087 - L2 Version 3  
Chandra X-Ray Center

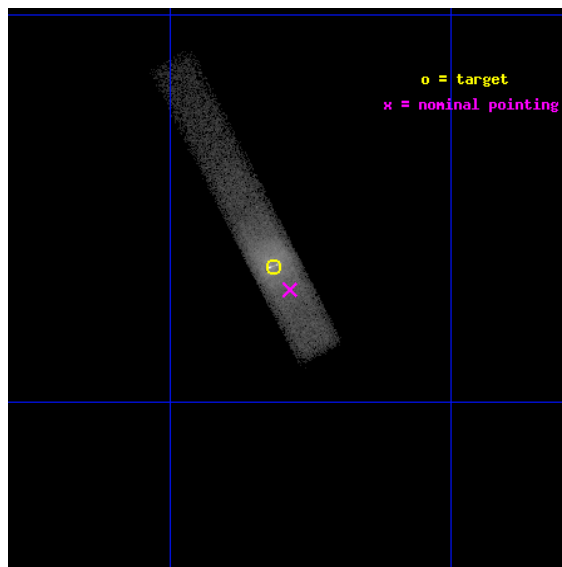
L2 Processing Date : Oct 8 2012

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# 1 Front

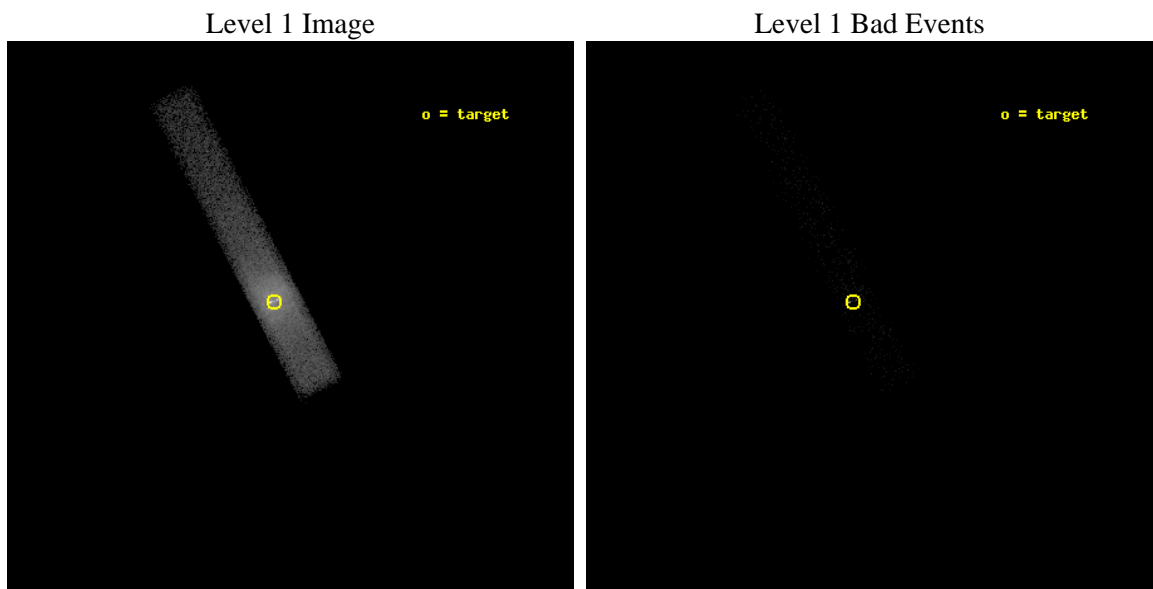
seq_num	700526	Sequence number
obs_id	3087	Observation id
title	X-RAY VARIABILITY IN THE JET AND CORE OF M87	Proposal title
observer	Dr. Daniel Harris	Principal investigator
object	M87	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	187.704167	Observer's specified target RA [deg]
dec_targ	12.391667	Observer's specified target Dec [deg]
ra_nom	187.69681018172	Nominal RA [deg]
dec_nom	12.38149719204	Nominal Dec [deg]
roll_nom	242.56515506462	Nominal Roll [deg]
revision	3	Processing version of data
ontime	5483.2000816762	Sum of GTIs [s]
livetime	4972.973047049	Livetime [s]
ontime7	5483.2000816762	Sum of GTIs [s]
l2events	60899	Number of level 2 events



## 2 OBI

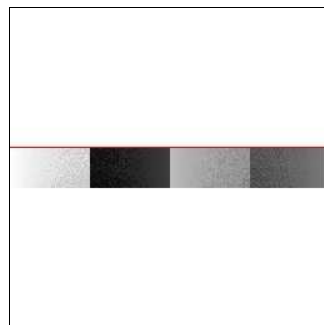
### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias

Chip 7



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	5483.2000816762	Sum of GTIs [s]
caldsver	4.5.2	&#160	ontime7	5483.2000816762	Sum of GTIs [s]
date	2012-10-09T02:17:15	Date and time of file creation	l1events	67639	Number of level 1 events
revision	3	Processing version of data			

### 2.1.4 Events

	<b>ccd 7</b>
level 1 events	67639
rejected events	6145
rejected %	9%

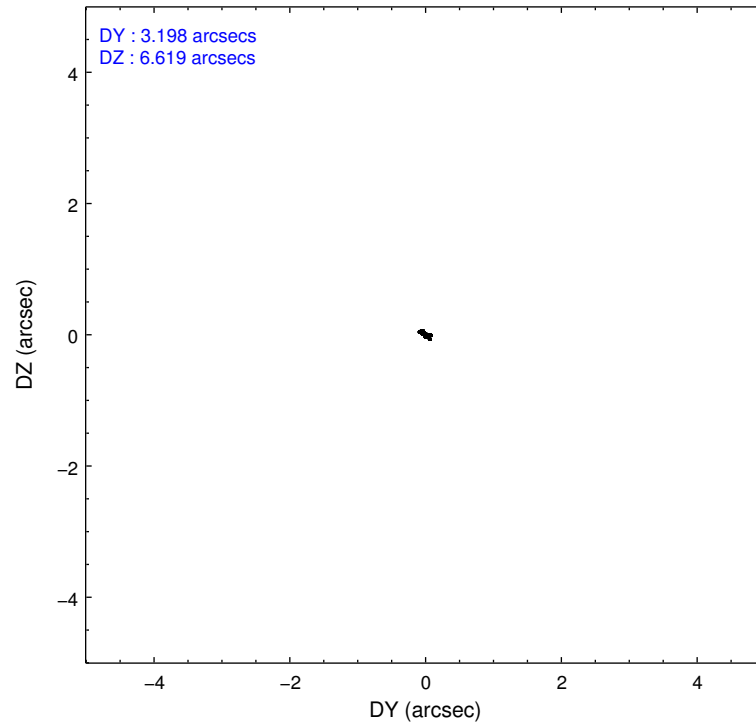
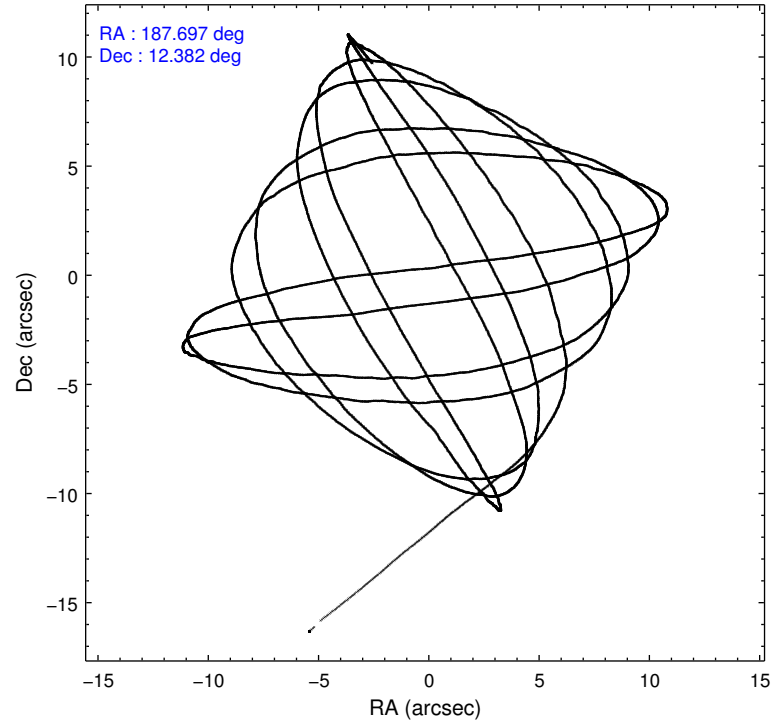
	<b>ccd 7</b>
grade 0 events	20991
	31%
grade 1 events	80
	0%
grade 2 events	16582
	24%
grade 3 events	7348
	10%
grade 4 events	7295
	10%
grade 5 events	1086
	1%
grade 6 events	11304
	16%
grade 7 events	2953
	4%

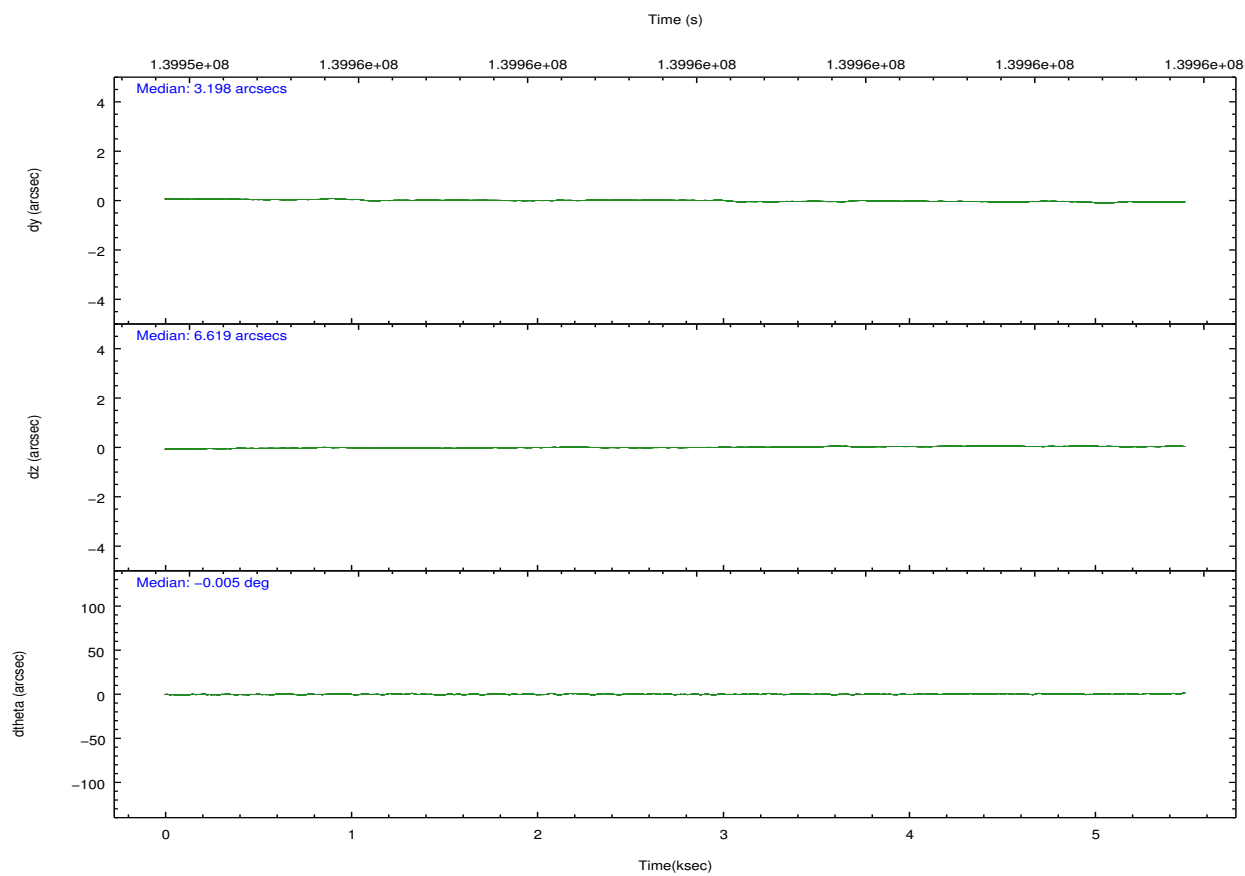
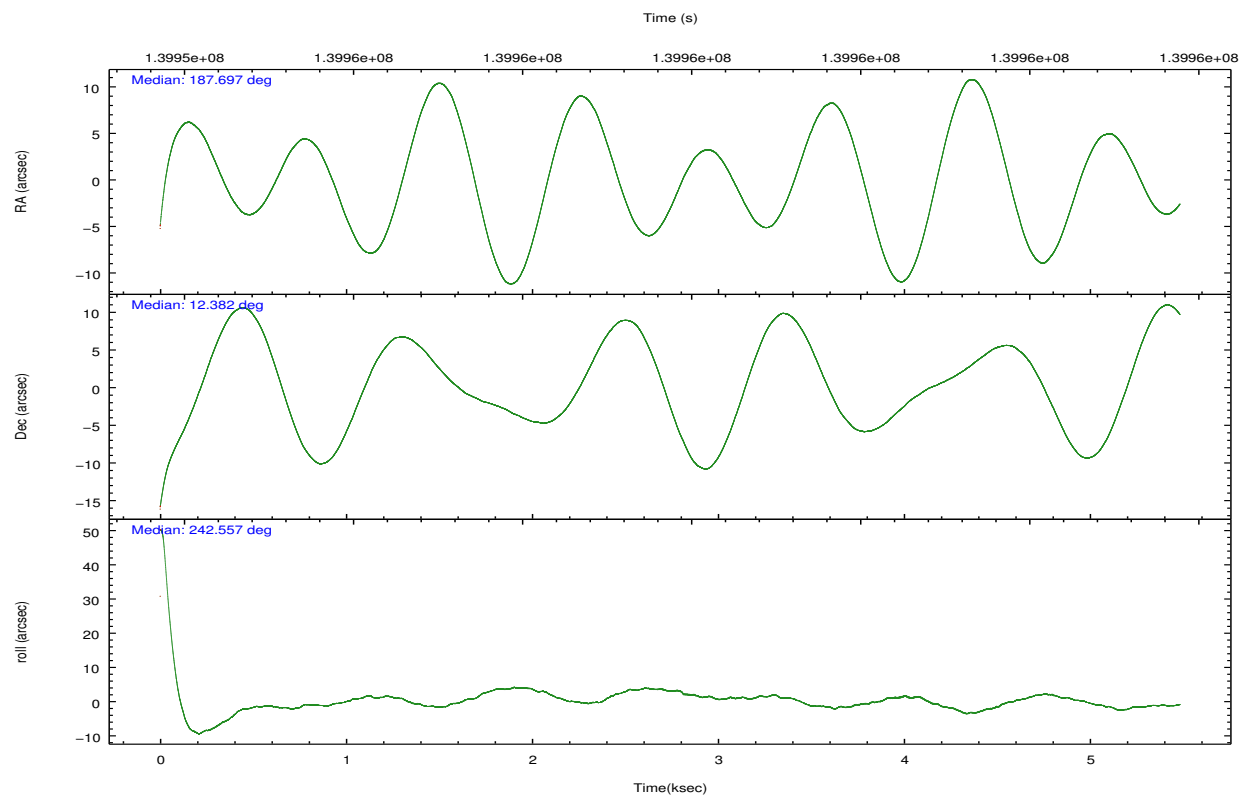


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-7	ACIS-7	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	187.695169	187.6968101817152	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	12.408668	12.38149719203989	Subarray start row	449	449
[deg] Pointing Roll	242.408747	242.5651550646212	Subarray row count	128	128
[mm] SIM focus pos	-0.684267	-0.6828225247311905	Alternating exposures requested	N	N
[mm] SIM defocus	0	0.001444936568705701	[s] Primary exposure time	0.000000	0.4
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	139954610.184000	139953485.59305			
Observation start date	2002-06-08T20:15:46	2002-06-08T19:58:05			
[s] Observation end time (MET)	139959610.184000	139960038.41832			
Observation end date	2002-06-08T21:39:06	2002-06-08T21:47:18			
Read mode	TIMED	TIMED			

## 2.3 Aspect



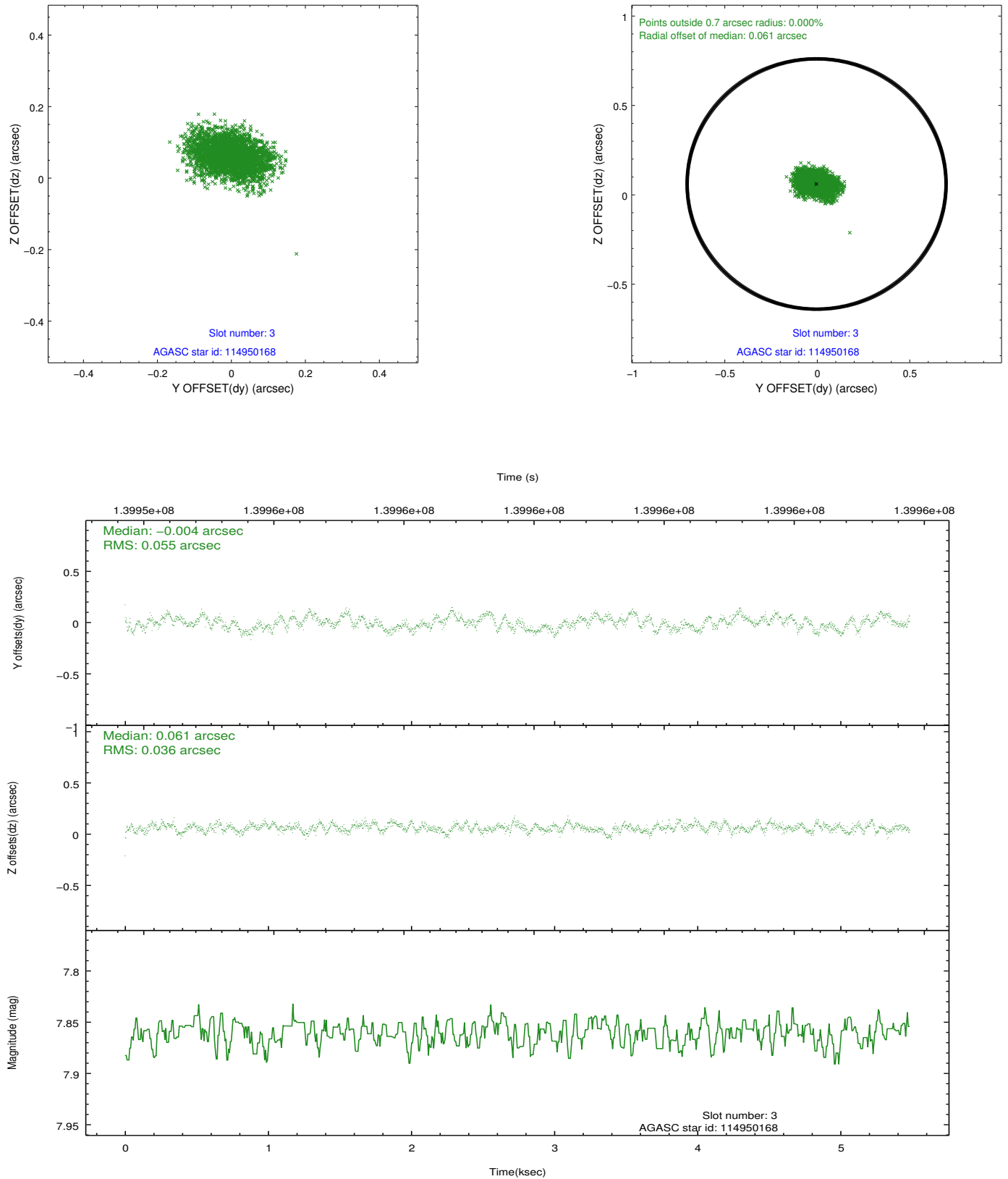


### Slot Statistics

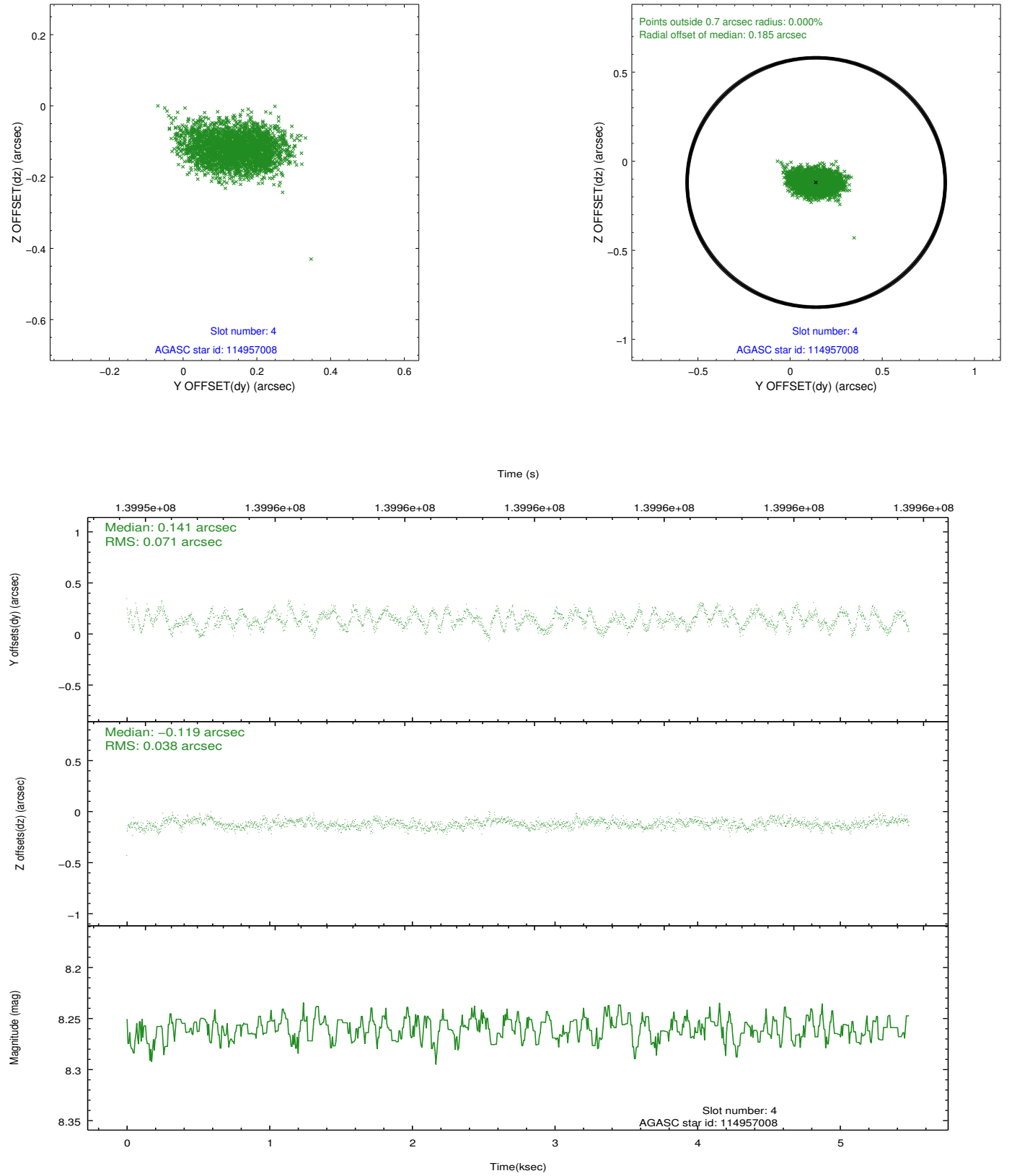
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	1338	-0.025	0.008	0.006	0.009	0.000000	0.000000	-755.84	-1727.78
1	FID	ACIS-S-4	7.20	1338	-0.004	0.010	0.005	0.010	0.000000	0.000000	2156.94	179.61
2	FID	ACIS-S-5	7.24	1338	-0.002	-0.009	0.006	0.011	0.000000	0.000000	-1807.27	174.46
3	GUIDE	114950168	7.86	2674	-0.004	0.061	0.070	0.114	187.143398	12.117441	1827.64	-1235.87
4	GUIDE	114957008	8.26	2675	0.141	-0.119	0.086	0.139	186.894794	12.099160	2290.43	-1982.88
5	GUIDE	114955056	8.32	2674	-0.059	0.038	0.070	0.109	187.914001	12.127854	540.07	1150.45
6	GUIDE	114952824	8.58	2676	-0.033	0.100	0.064	0.100	187.703904	12.486727	-262.56	-102.13
7	GUIDE	114952792	9.50	2669	-0.038	-0.079	0.086	0.140	187.070263	12.344747	1220.34	-1842.05

## 2.4 Star Slots

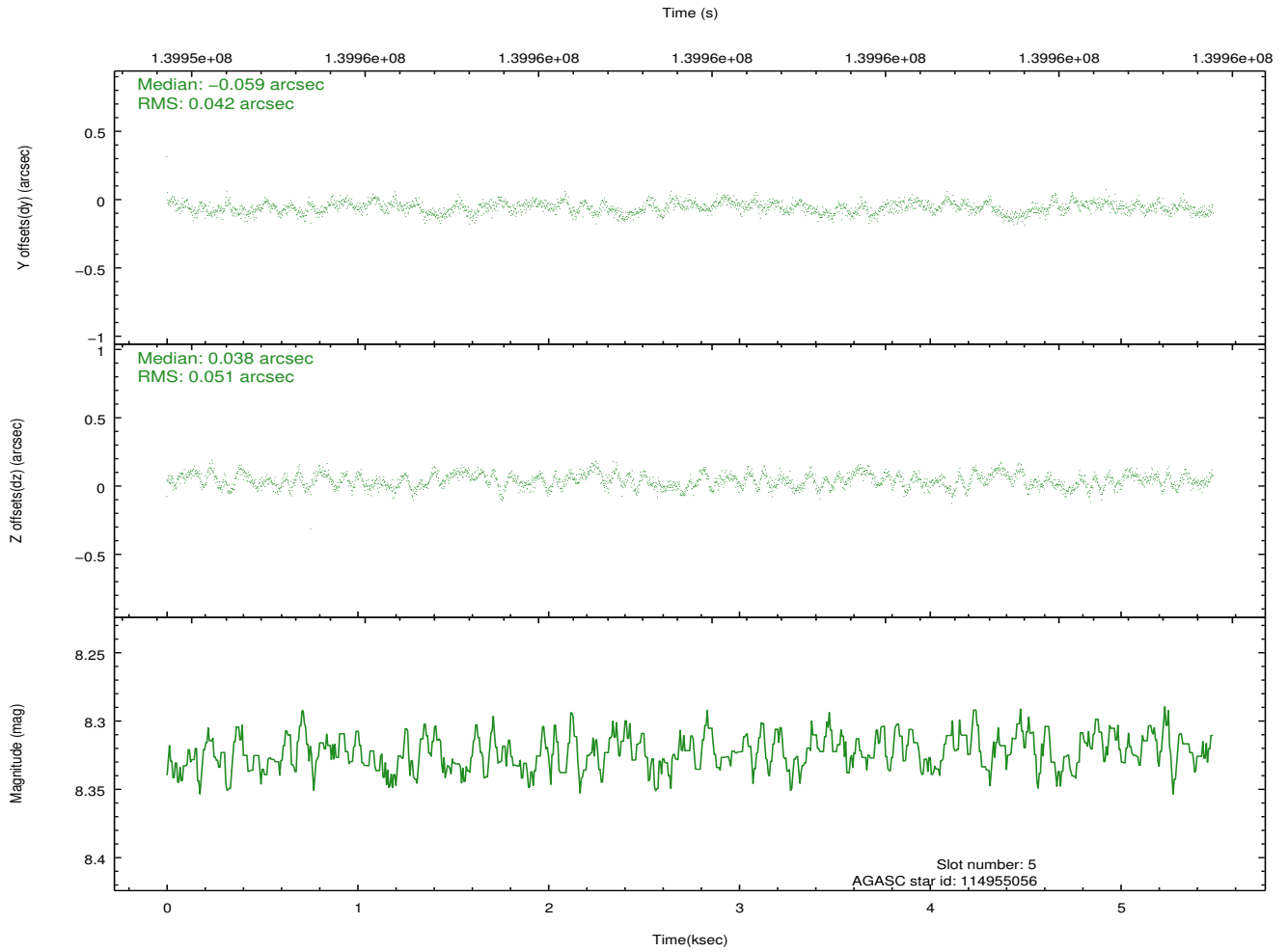
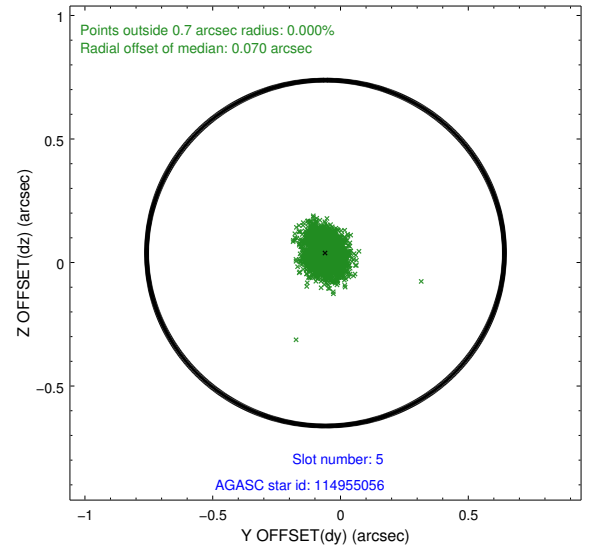
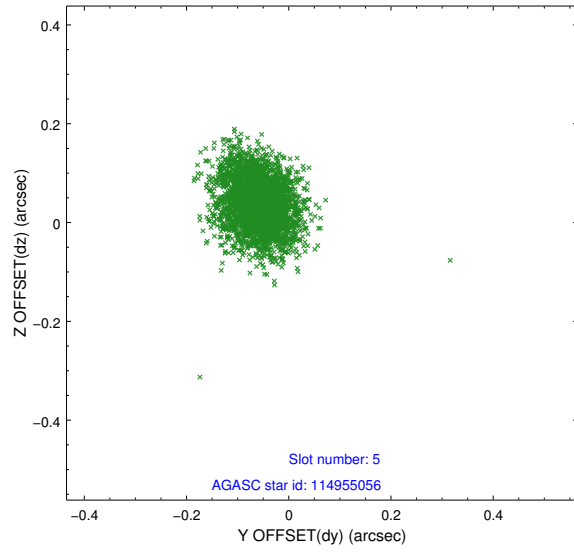
### 2.4.1 Slot 3



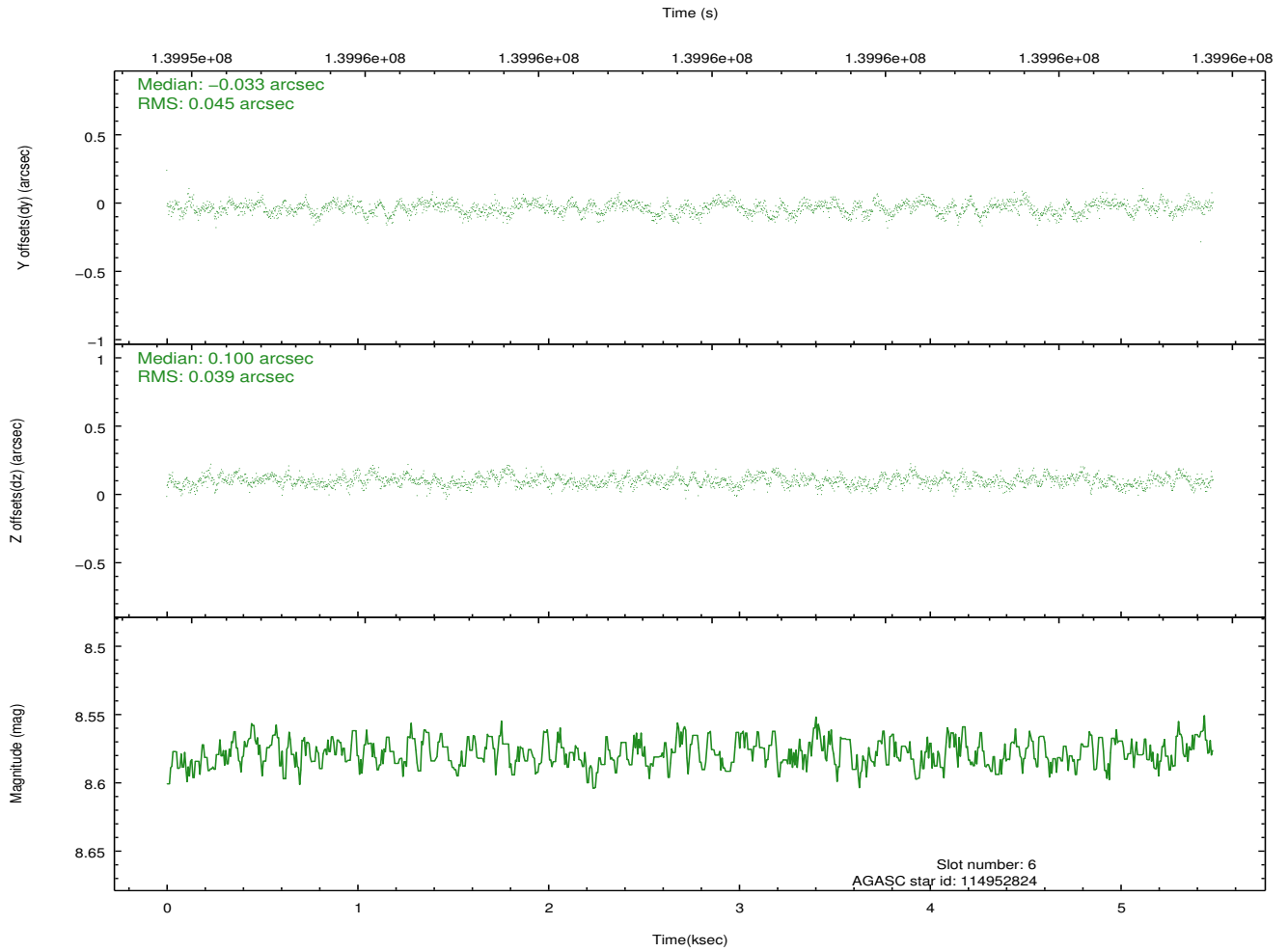
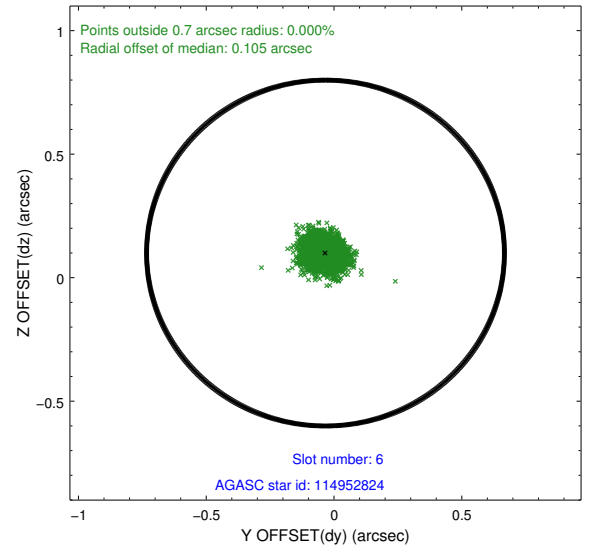
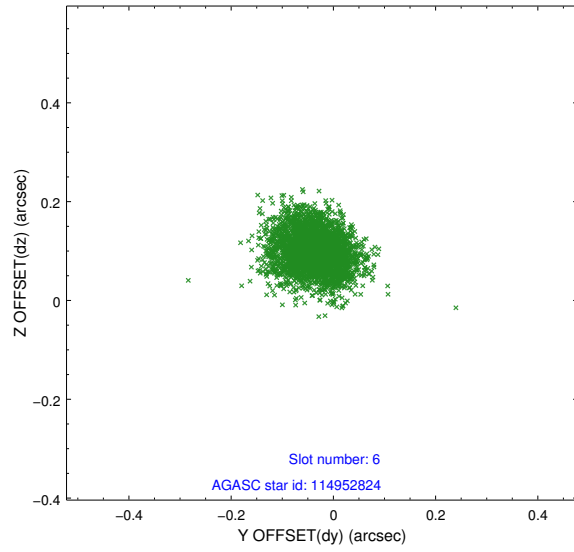
## 2.4.2 Slot 4



### 2.4.3 Slot 5

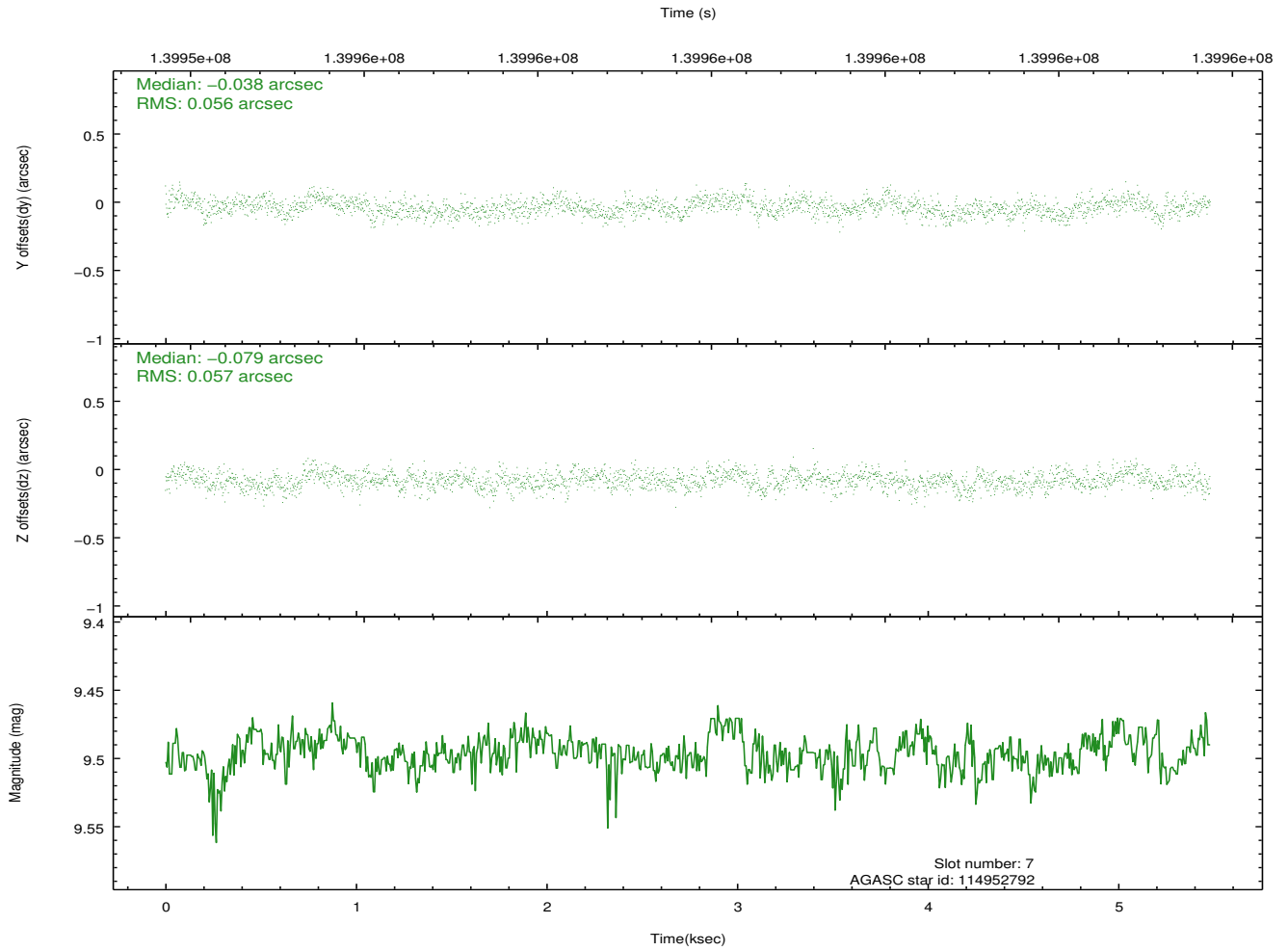
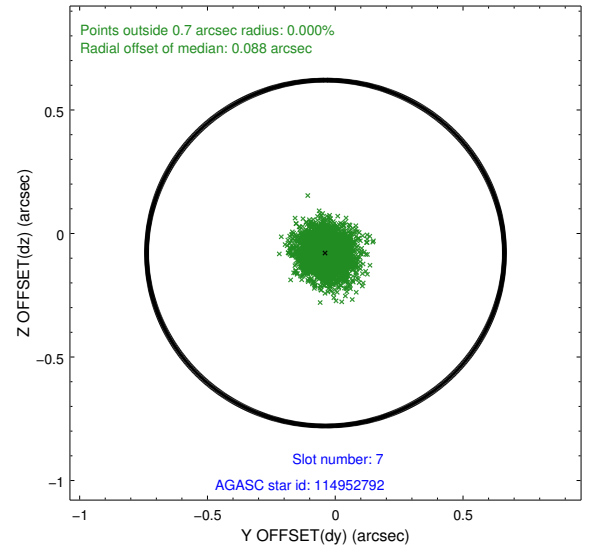
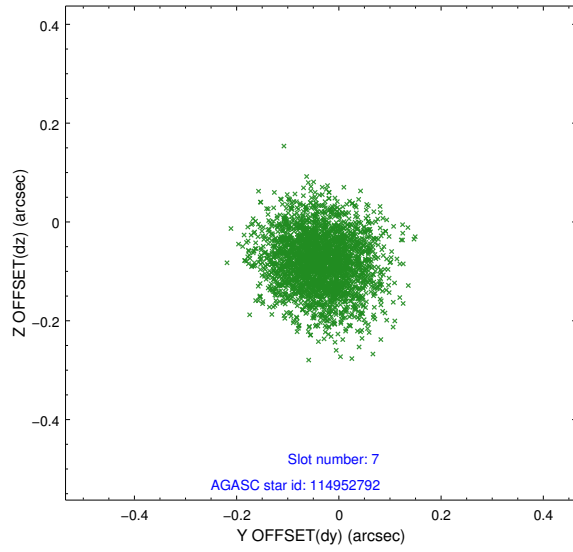


## 2.4.4 Slot 6



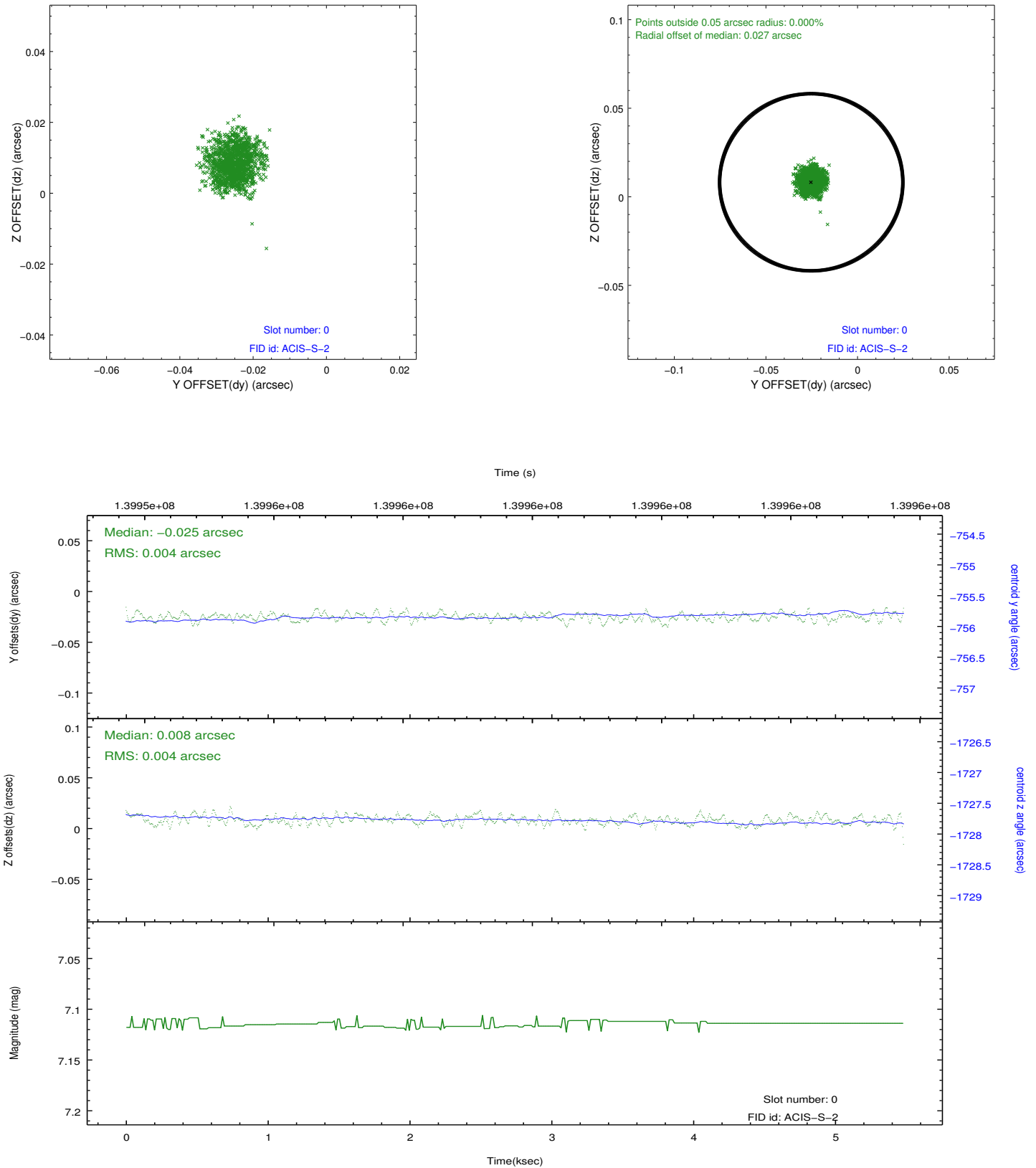


## 2.4.5 Slot 7

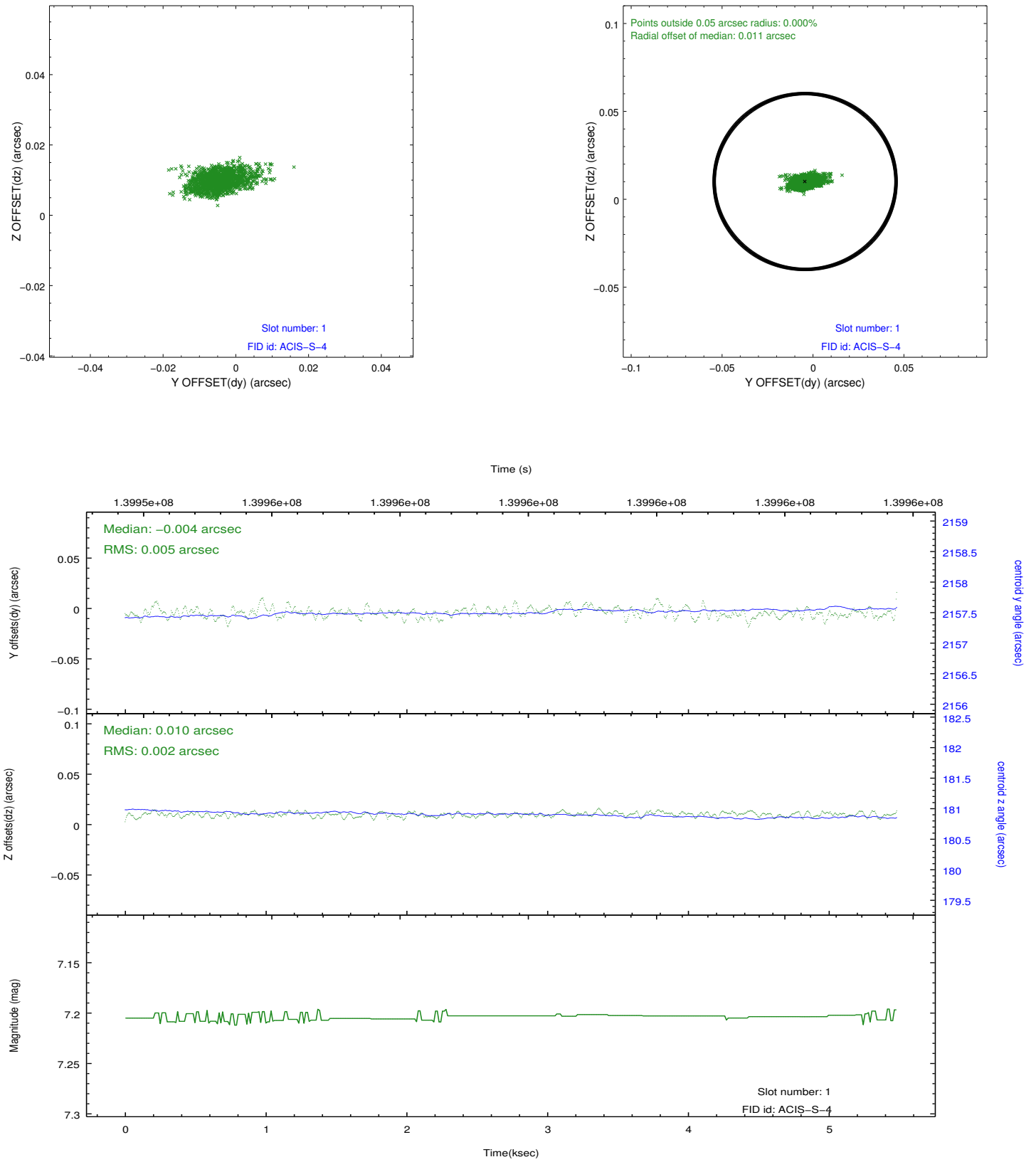


## 2.5 FID Slots

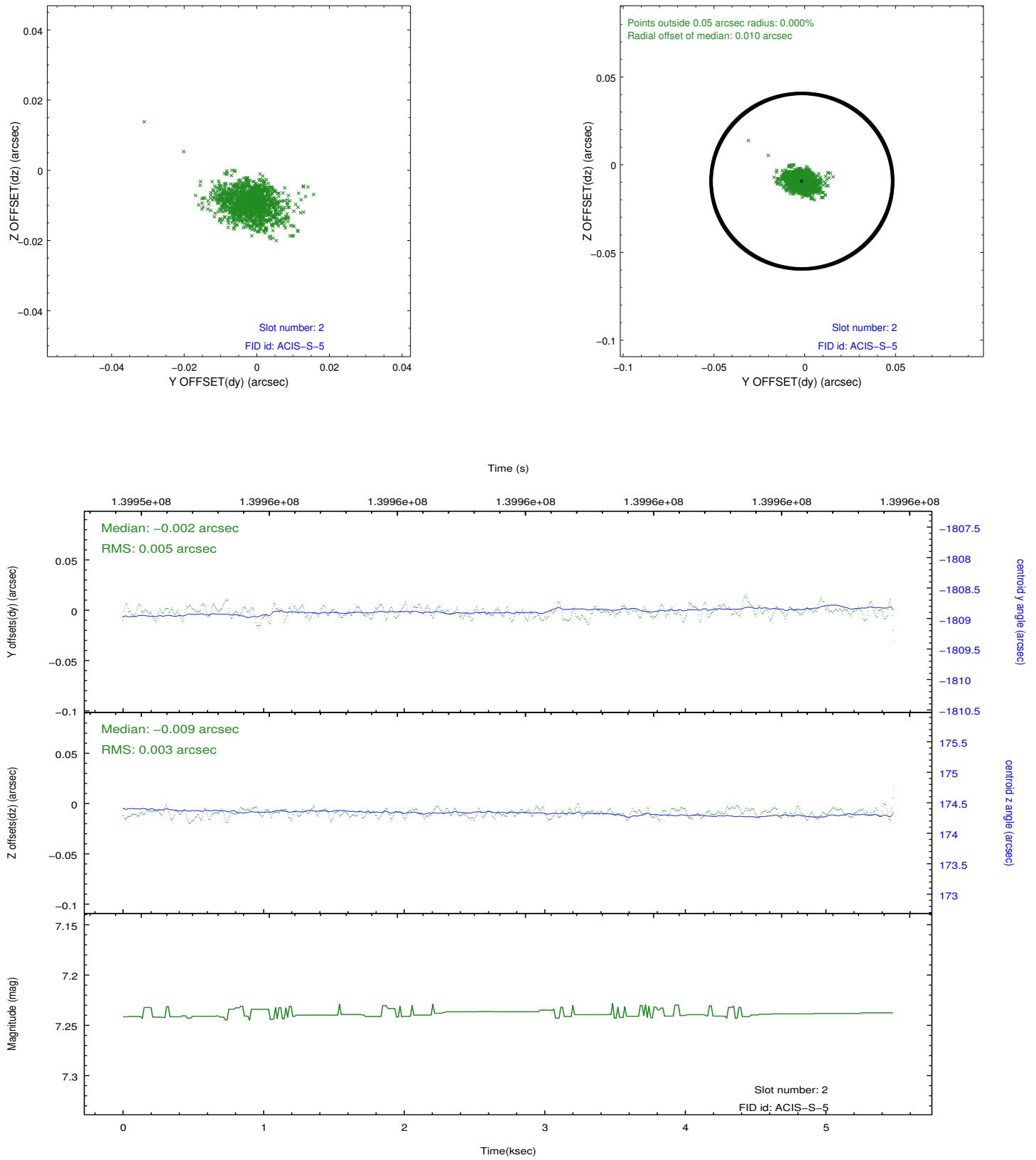
### 2.5.1 Slot 0



## 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)	2012.10.18
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.483

### A.2 Comments