

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 3085 - L2 Version 3  
Chandra X-Ray Center

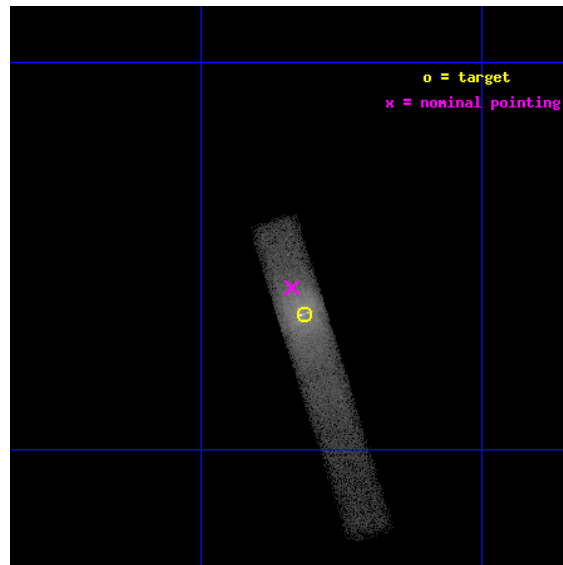
L2 Processing Date : Sep 30 2012

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# 1 Front

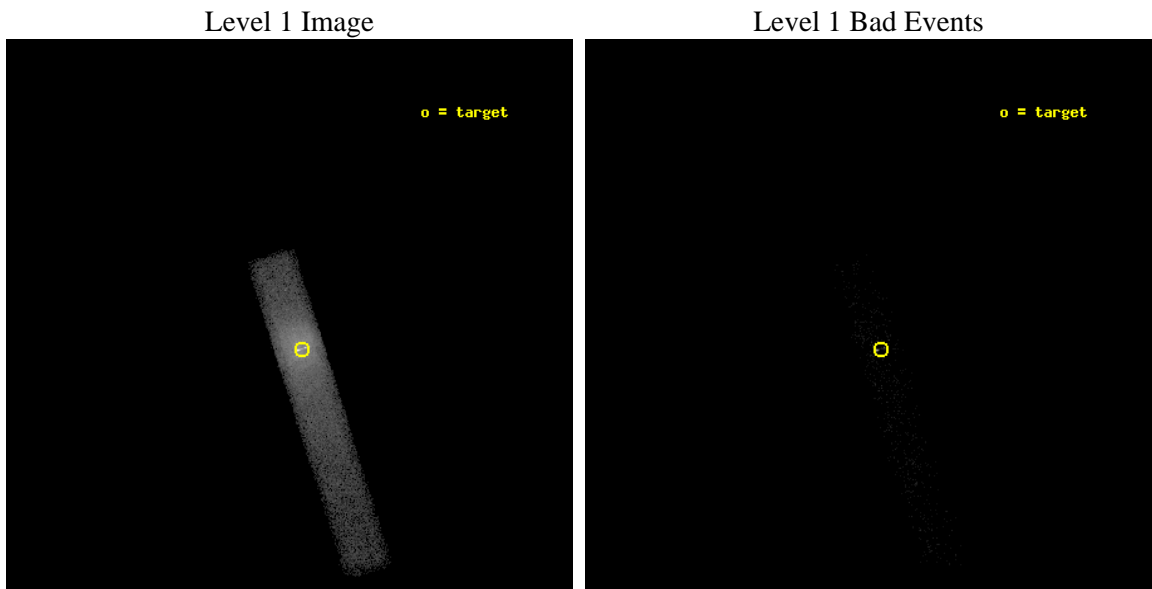
seq_num	700524	Sequence number
obs_id	3085	Observation id
title	X-RAY VARIABILITY IN THE JET AND CORE OF M87	Proposal title
observer	Dr. Daniel Harris	Principal investigator
object	M87	Source name
dtycycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	187.704167	Observer's specified target RA [deg]
dec_targ	12.391667	Observer's specified target Dec [deg]
ra_nom	187.70971468087	Nominal RA [deg]
dec_nom	12.402897014001	Nominal Dec [deg]
roll_nom	72.33929439792	Nominal Roll [deg]
revision	3	Processing version of data
ontime	5390.4000803232	Sum of GTIs [s]
livetime	4888.8083442075	Livetime [s]
ontime7	5390.4000803232	Sum of GTIs [s]
l2events	63634	Number of level 2 events



## 2 OBI

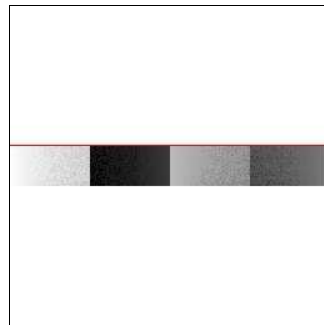
### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias

Chip 7



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	4700.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	5390.4000803232	Sum of GTIs [s]
caldbver	4.5.2	&#160	ontime7	5390.4000803232	Sum of GTIs [s]
date	2012-09-30T04:13:43	Date and time of file creation	l1events	69822	Number of level 1 events
revision	3	Processing version of data			

### 2.1.4 Events

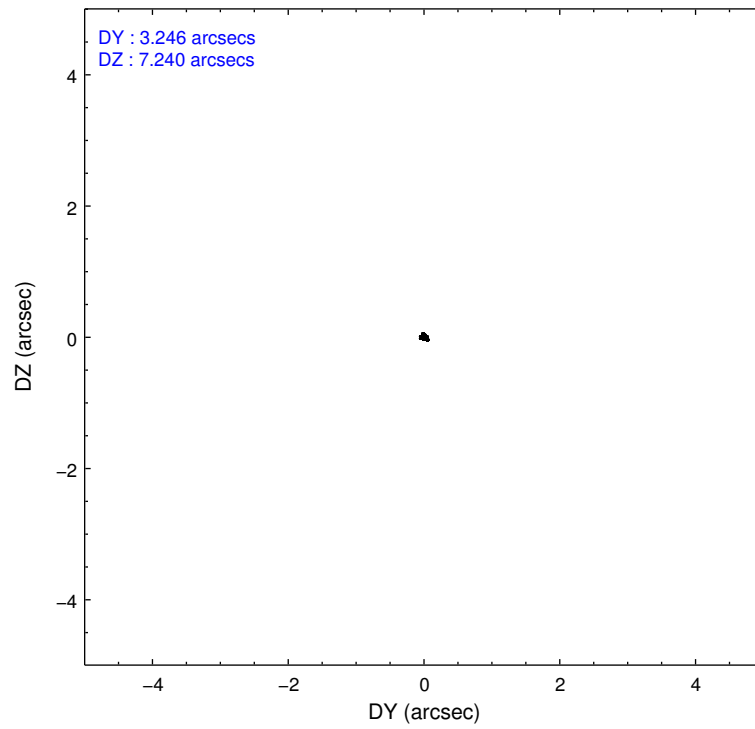
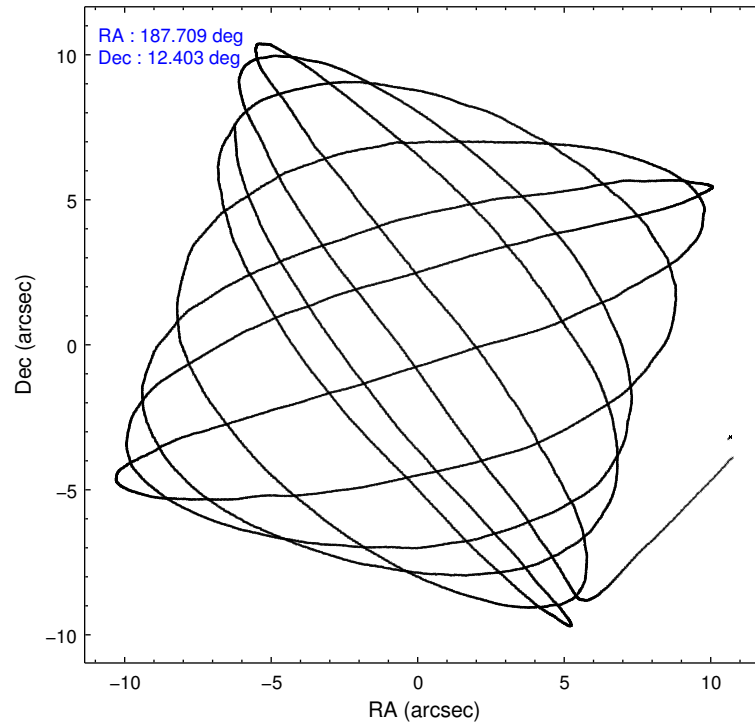
	<b>ccd 7</b>
level 1 events	69822
rejected events	5414
rejected %	7%

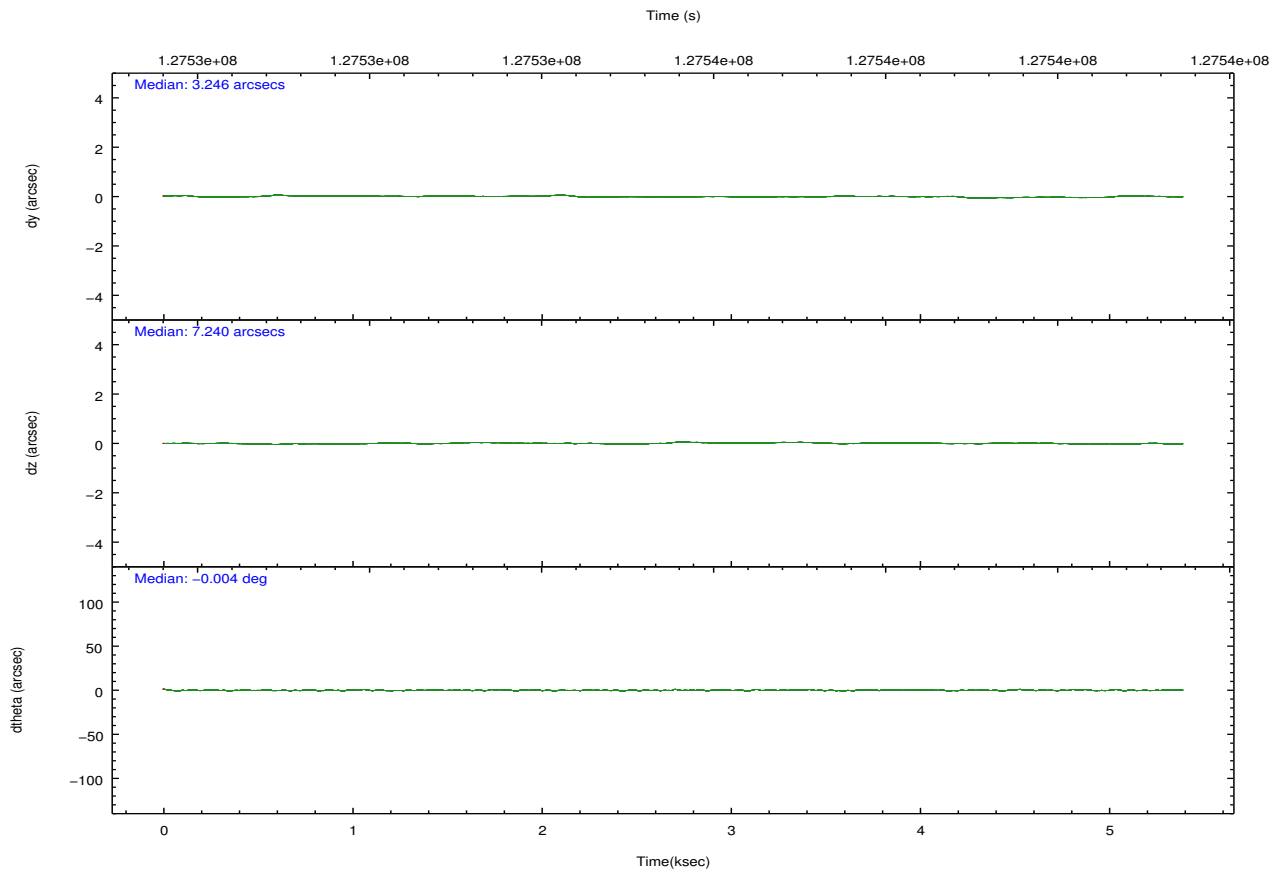
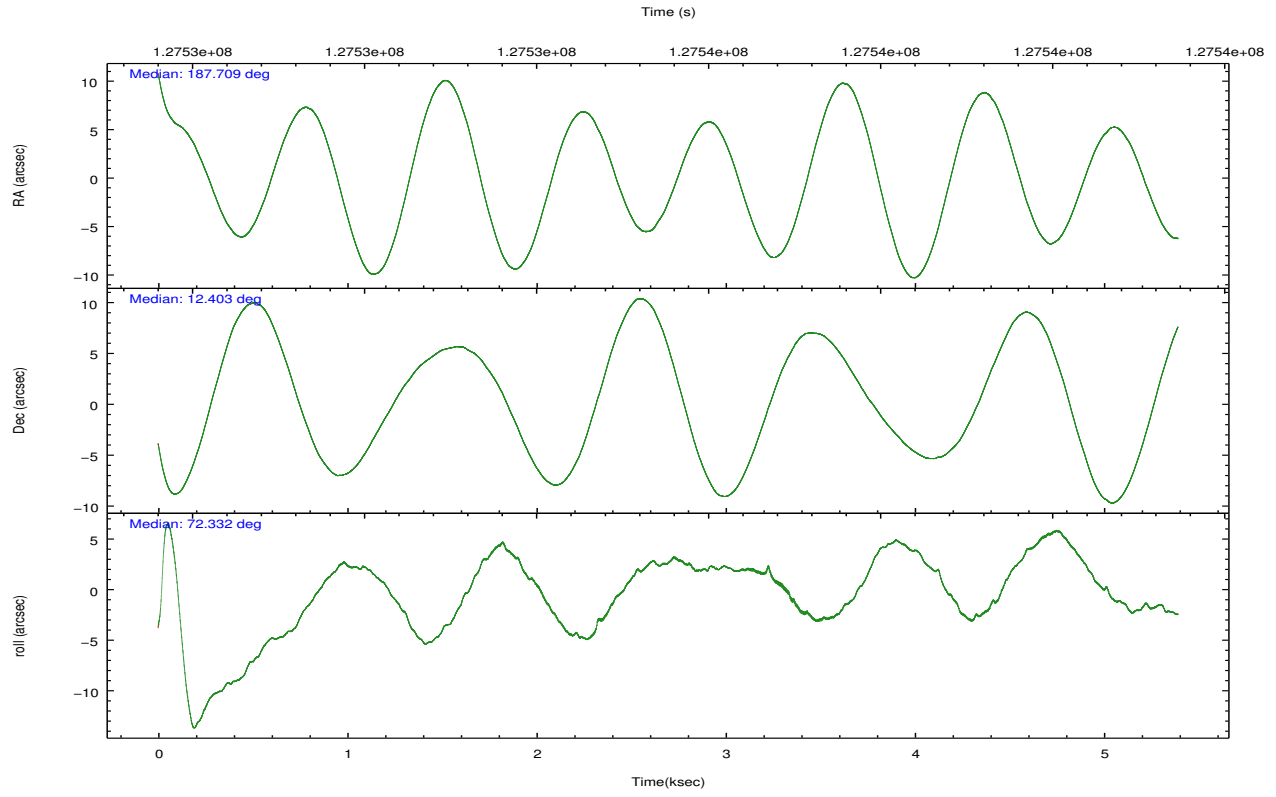
	<b>ccd 7</b>
grade 0 events	21481
	30%
grade 1 events	96
	0%
grade 2 events	16846
	24%
grade 3 events	7749
	11%
grade 4 events	7632
	10%
grade 5 events	1067
	1%
grade 6 events	12155
	17%
grade 7 events	2796
	4%

## 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	187.715989	187.7097146808654	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	12.376398	12.40289701400086	Subarray start row	449	449
[deg] Pointing Roll	72.181324	72.33929439791955	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)	127532760.184000	127531551.08915			
Observation start date	2002-01-16T01:44:56	2002-01-16T01:25:51			
[s] Observation end time (MET)	127537460.184000	127538211.53941			
Observation end date	2002-01-16T03:03:16	2002-01-16T03:16:51			
Read mode	TIMED	TIMED			

## 2.3 Aspect



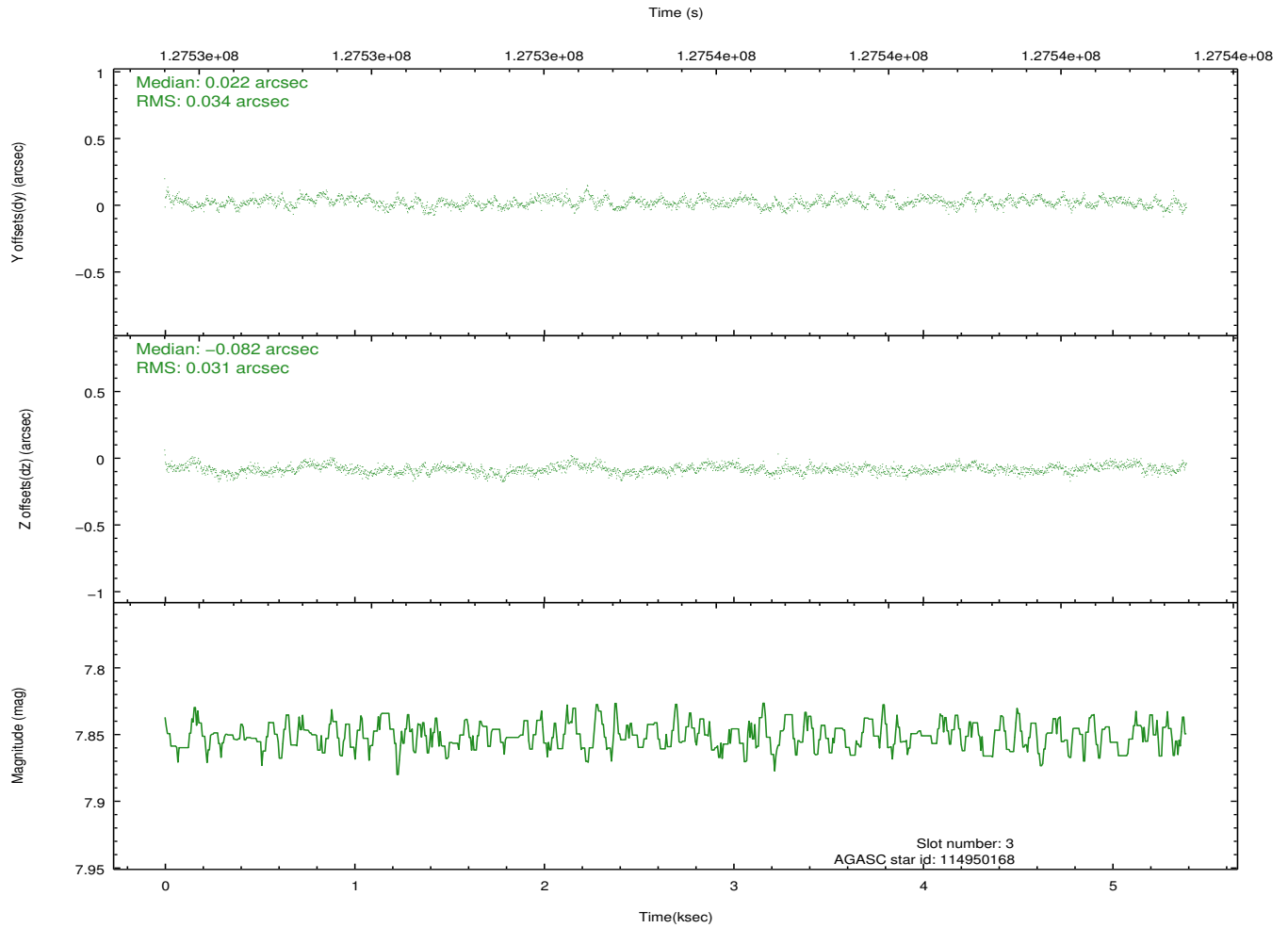
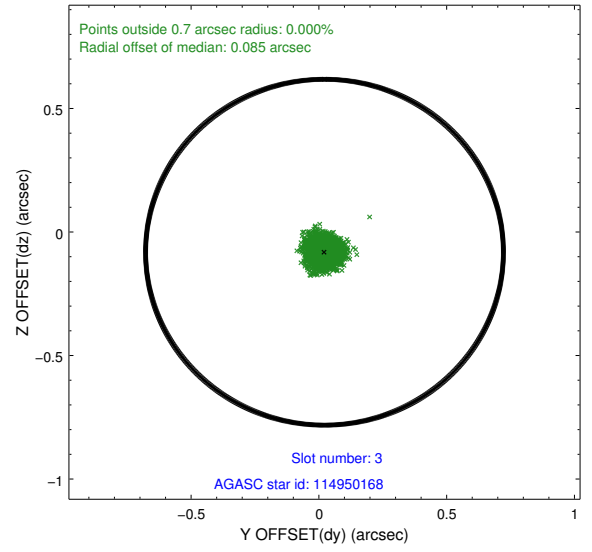
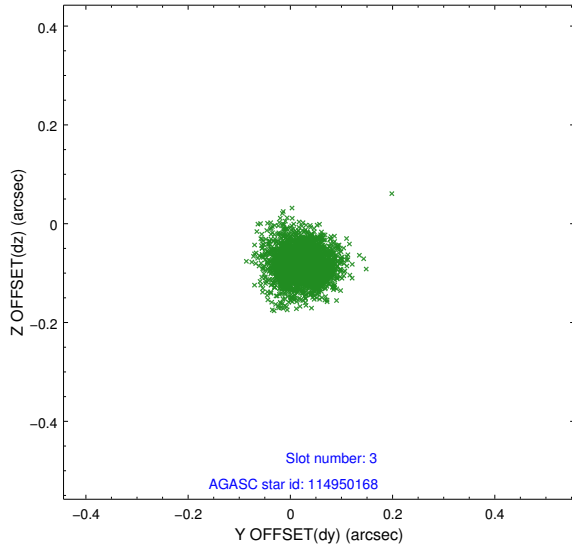


### Slot Statistics

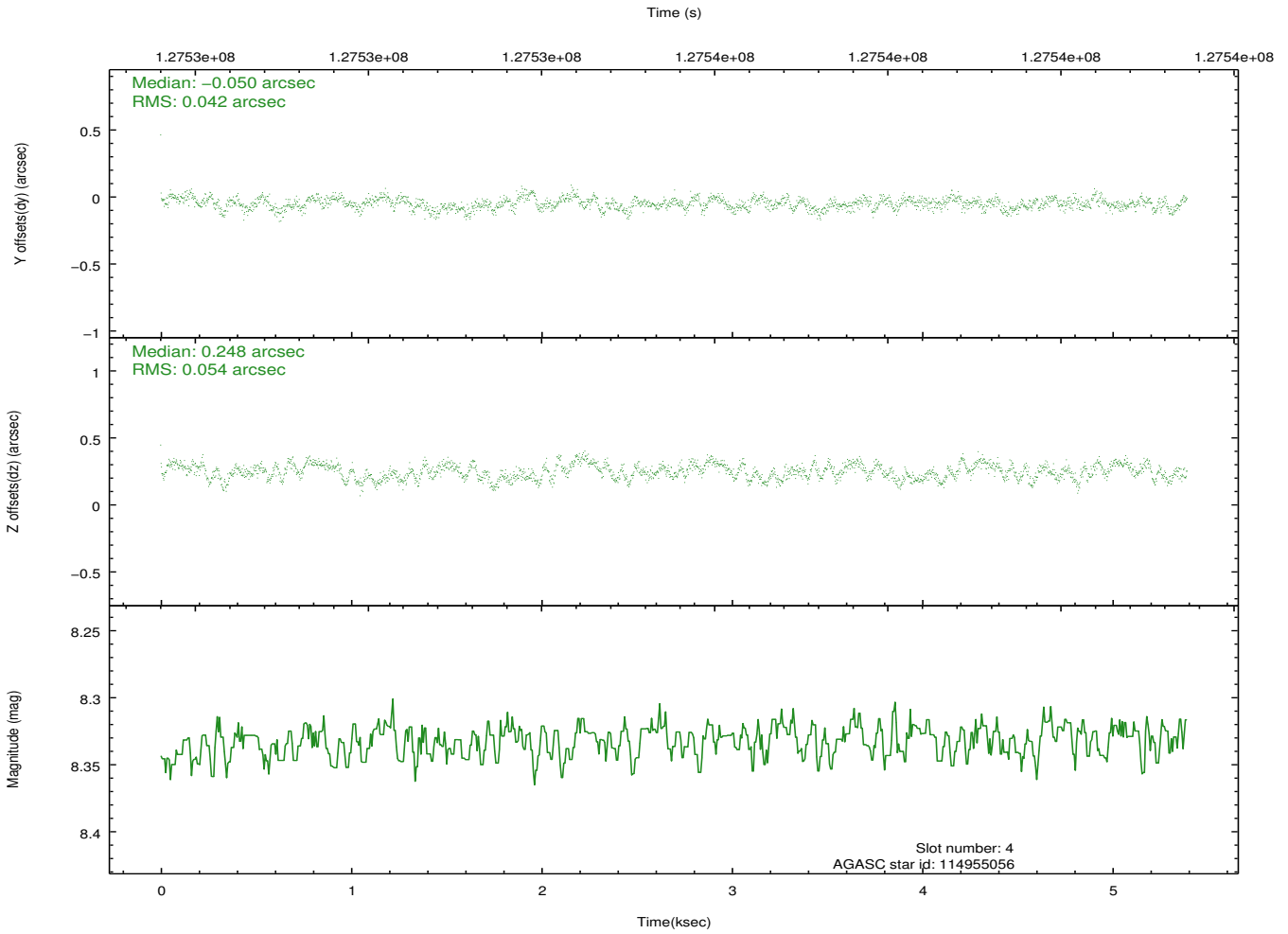
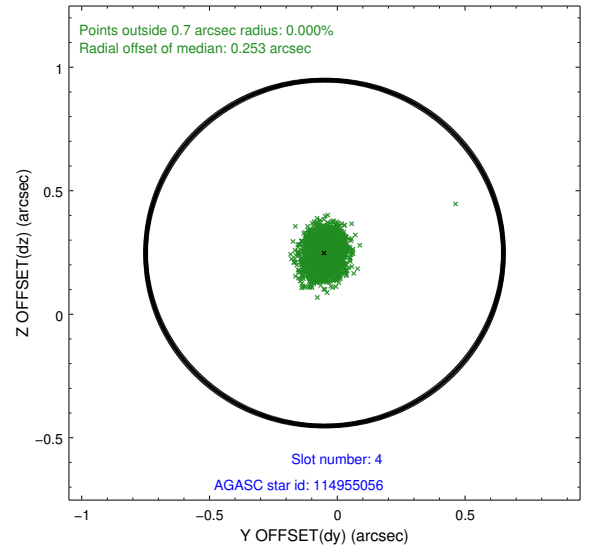
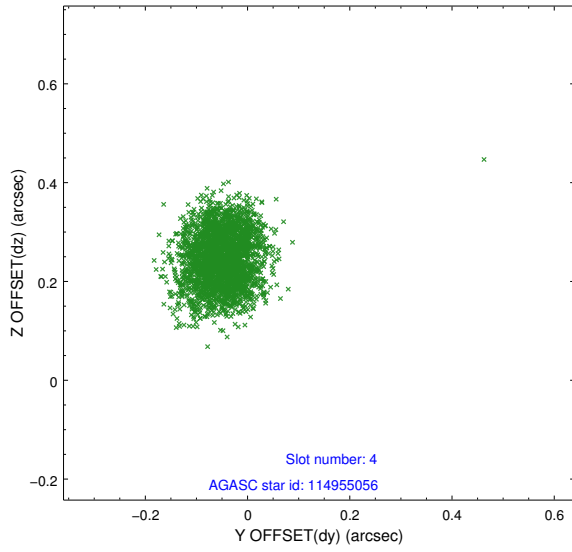
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	1316	-0.009	0.005	0.006	0.010	0.000000	0.000000	-755.90	-1728.41
1	FID	ACIS-S-4	7.20	1316	-0.024	0.003	0.005	0.010	0.000000	0.000000	2156.85	178.92
2	FID	ACIS-S-5	7.24	1316	0.002	0.001	0.006	0.011	0.000000	0.000000	-1807.30	173.86
3	GUIDE	114950168	7.85	2631	0.022	-0.082	0.049	0.079	187.143398	12.117441	-1500.98	1633.10
4	GUIDE	114955056	8.33	2631	-0.050	0.248	0.074	0.113	187.914001	12.127854	-637.35	-937.16
5	GUIDE	114952824	8.56	2629	-0.130	-0.023	0.065	0.110	187.703904	12.486727	366.19	160.98
6	GUIDE	114950584	9.19	2630	0.197	0.043	0.111	0.171	187.487323	11.827248	-2126.58	161.38
7	GUIDE	114952792	9.52	2625	-0.036	-0.186	0.083	0.133	187.070263	12.344747	-800.57	2127.09

## 2.4 Star Slots

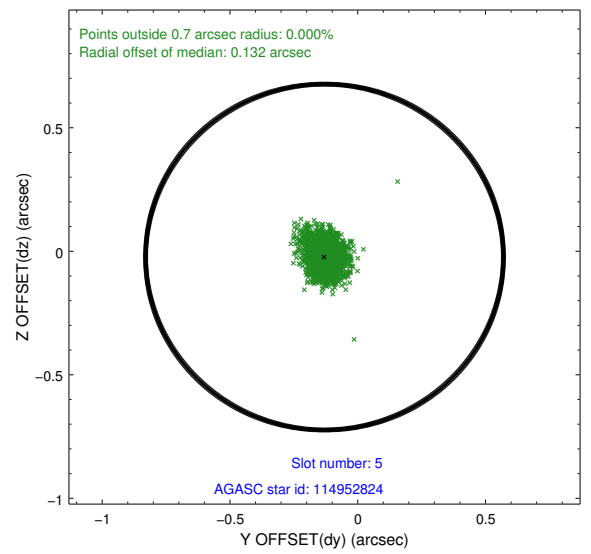
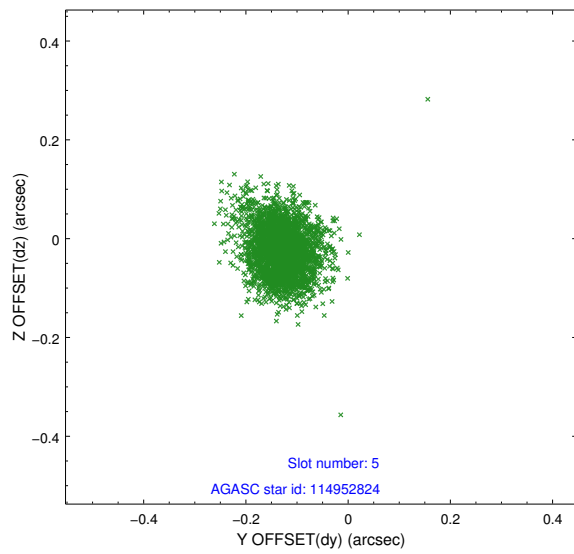
### 2.4.1 Slot 3



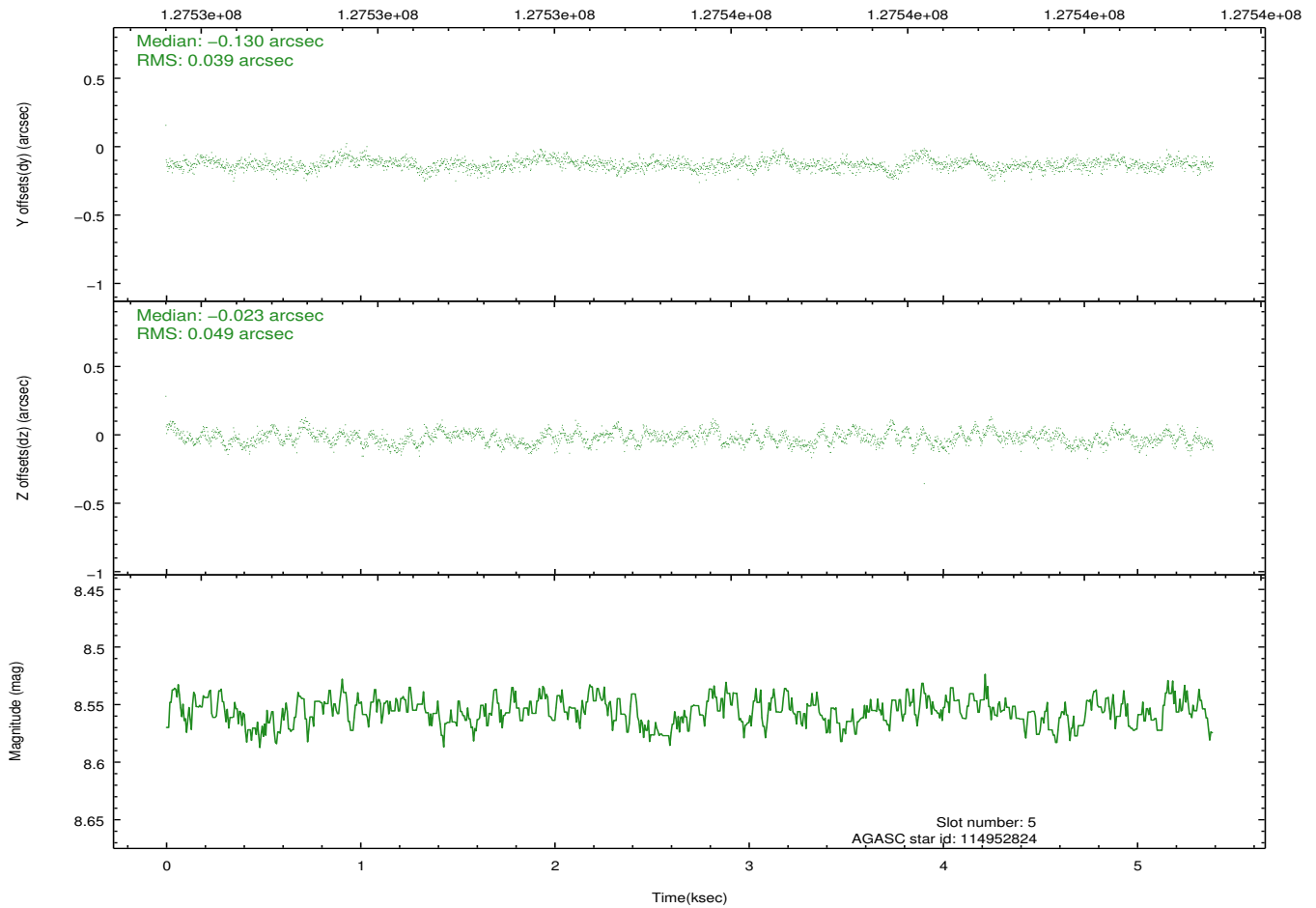
### 2.4.2 Slot 4



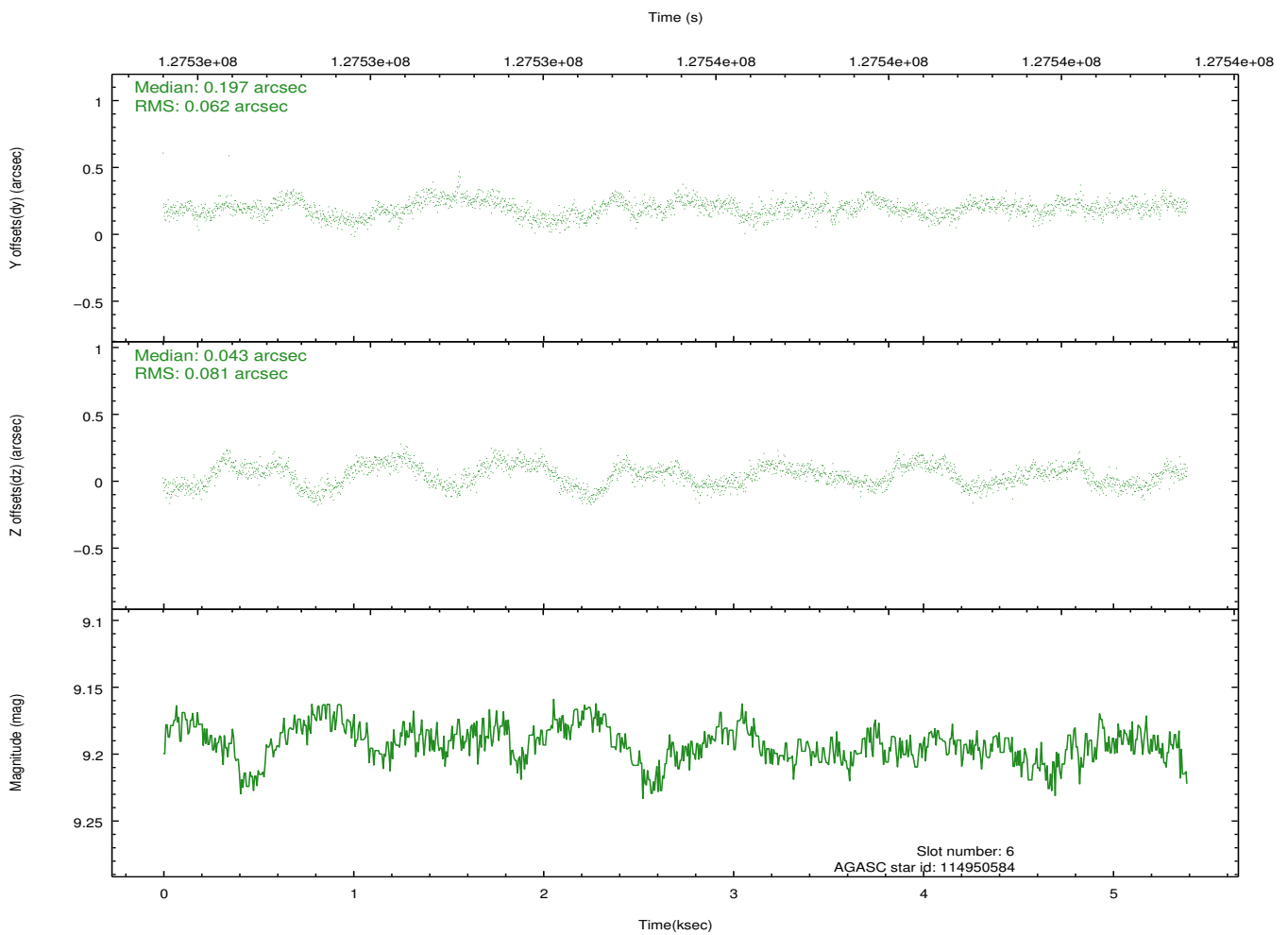
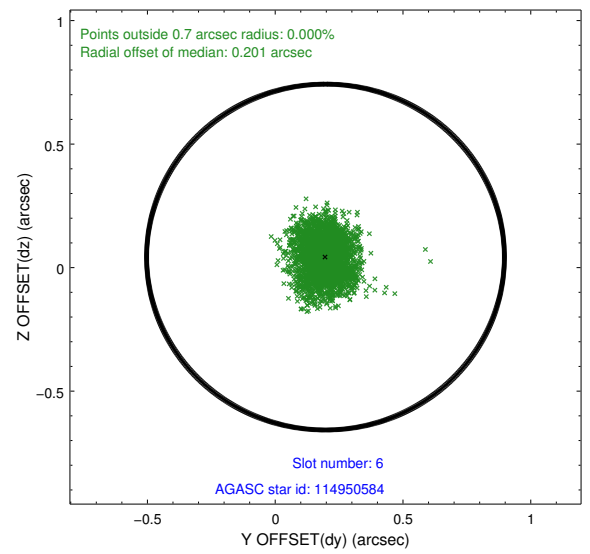
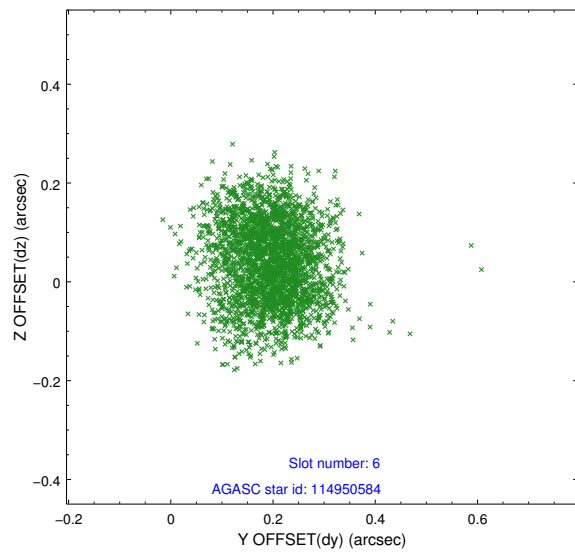
### 2.4.3 Slot 5



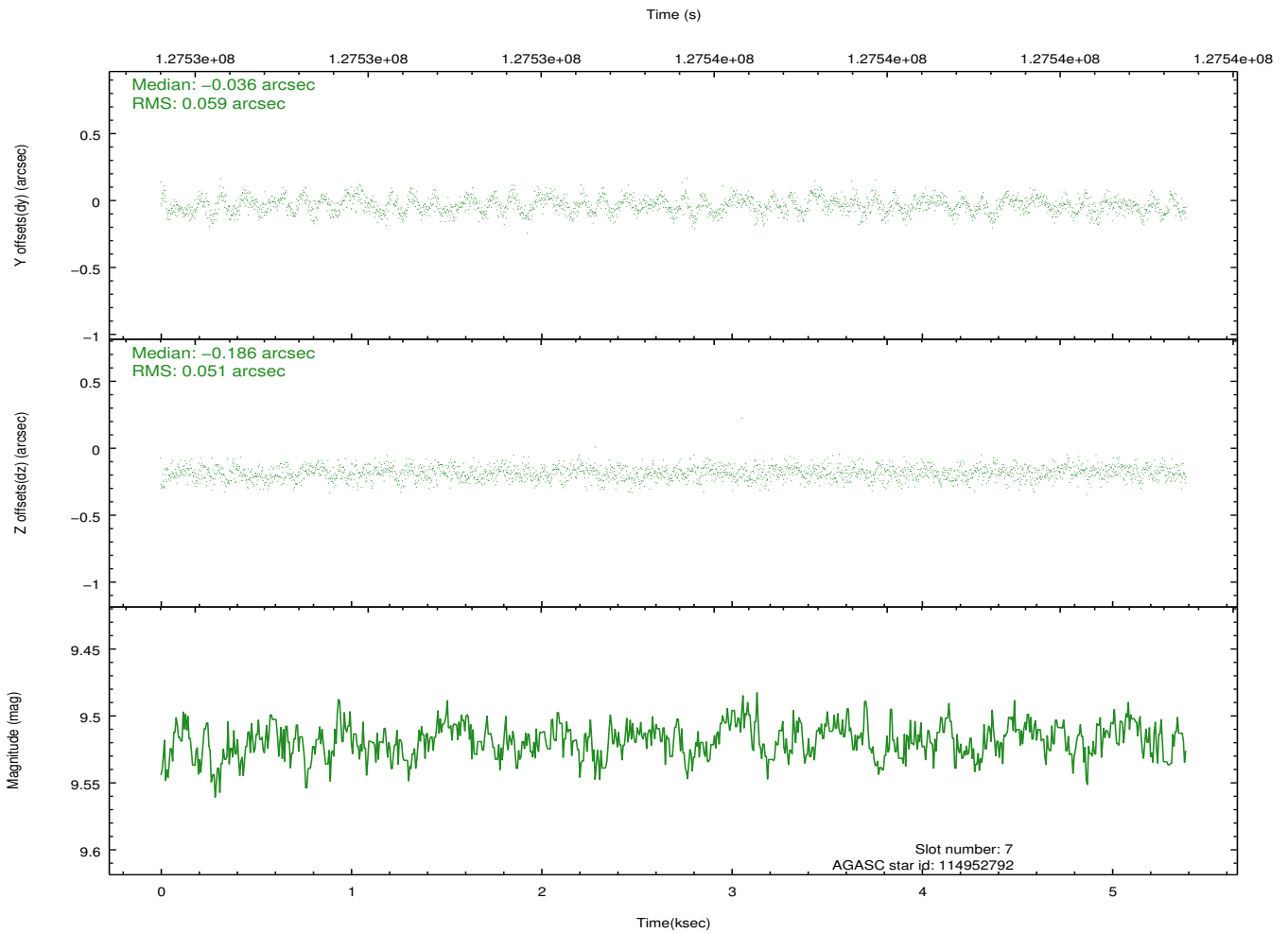
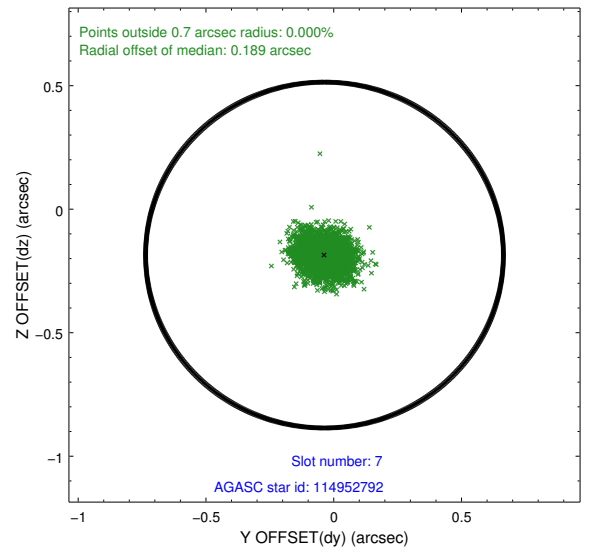
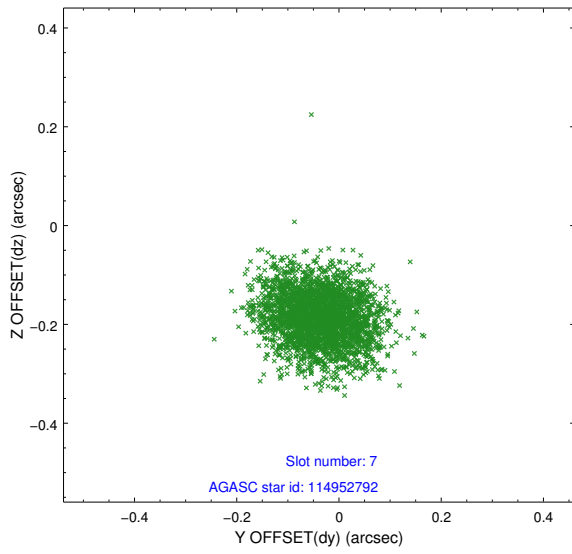
Time (s)



## 2.4.4 Slot 6

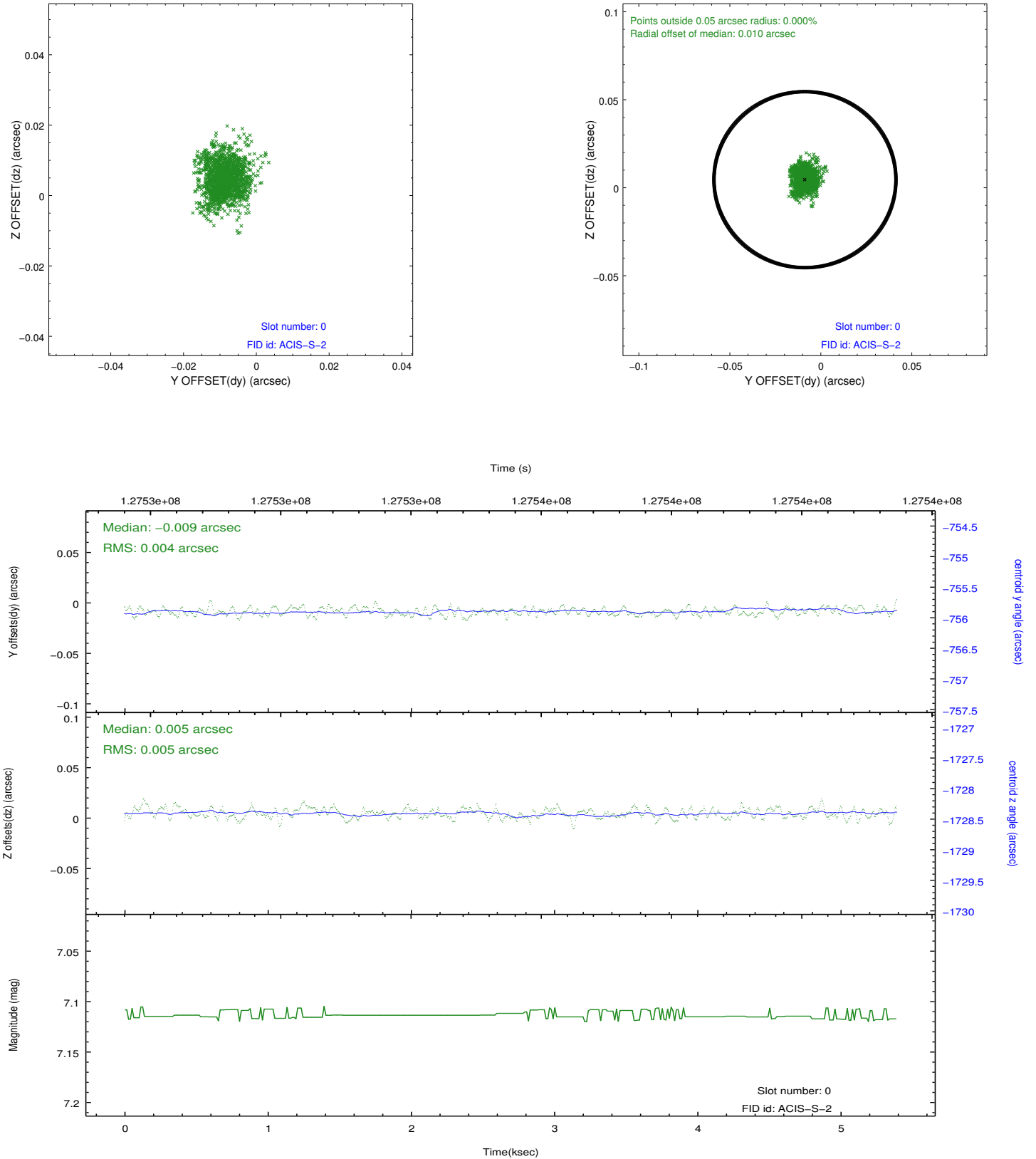


### 2.4.5 Slot 7

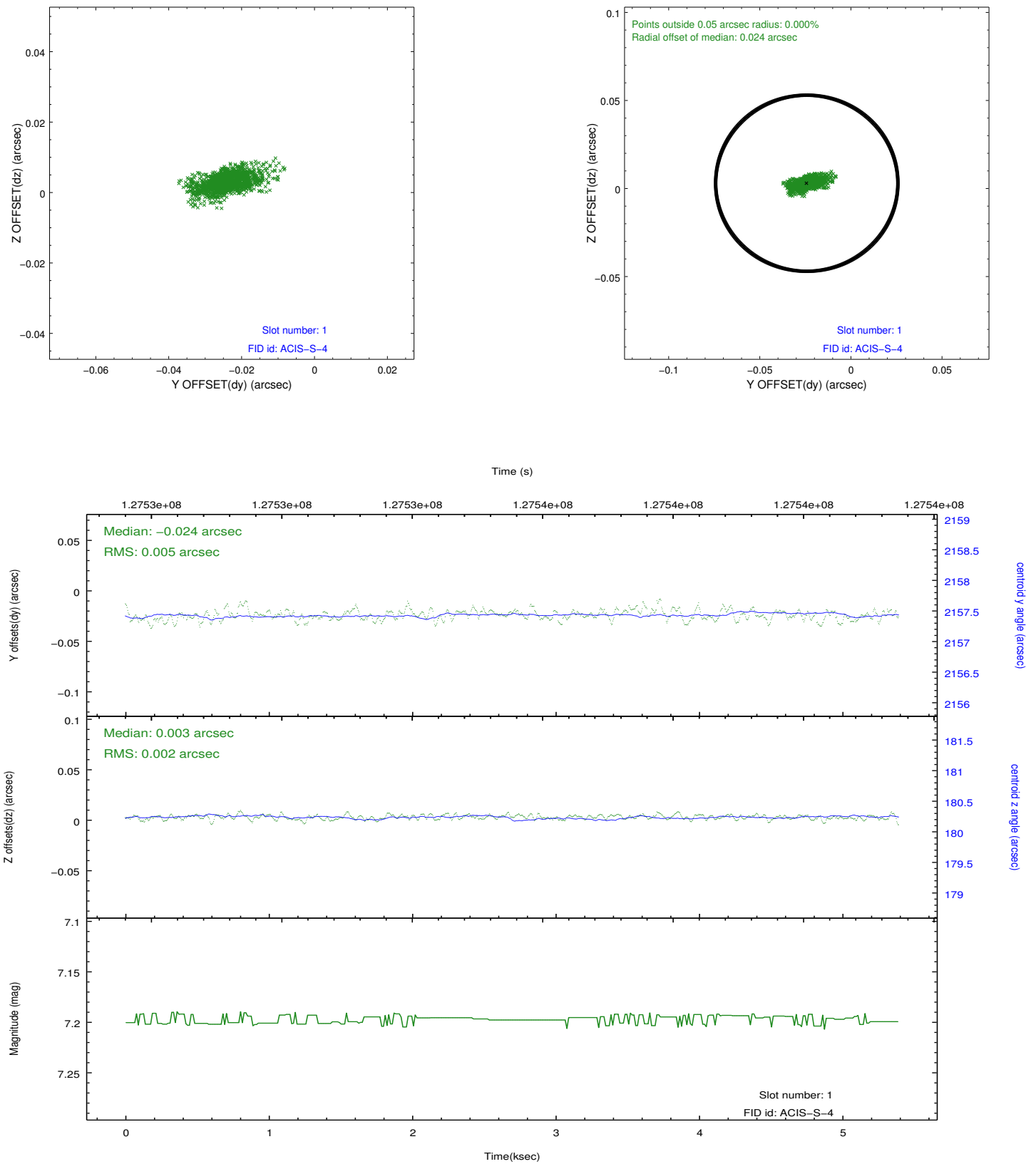


## 2.5 FID Slots

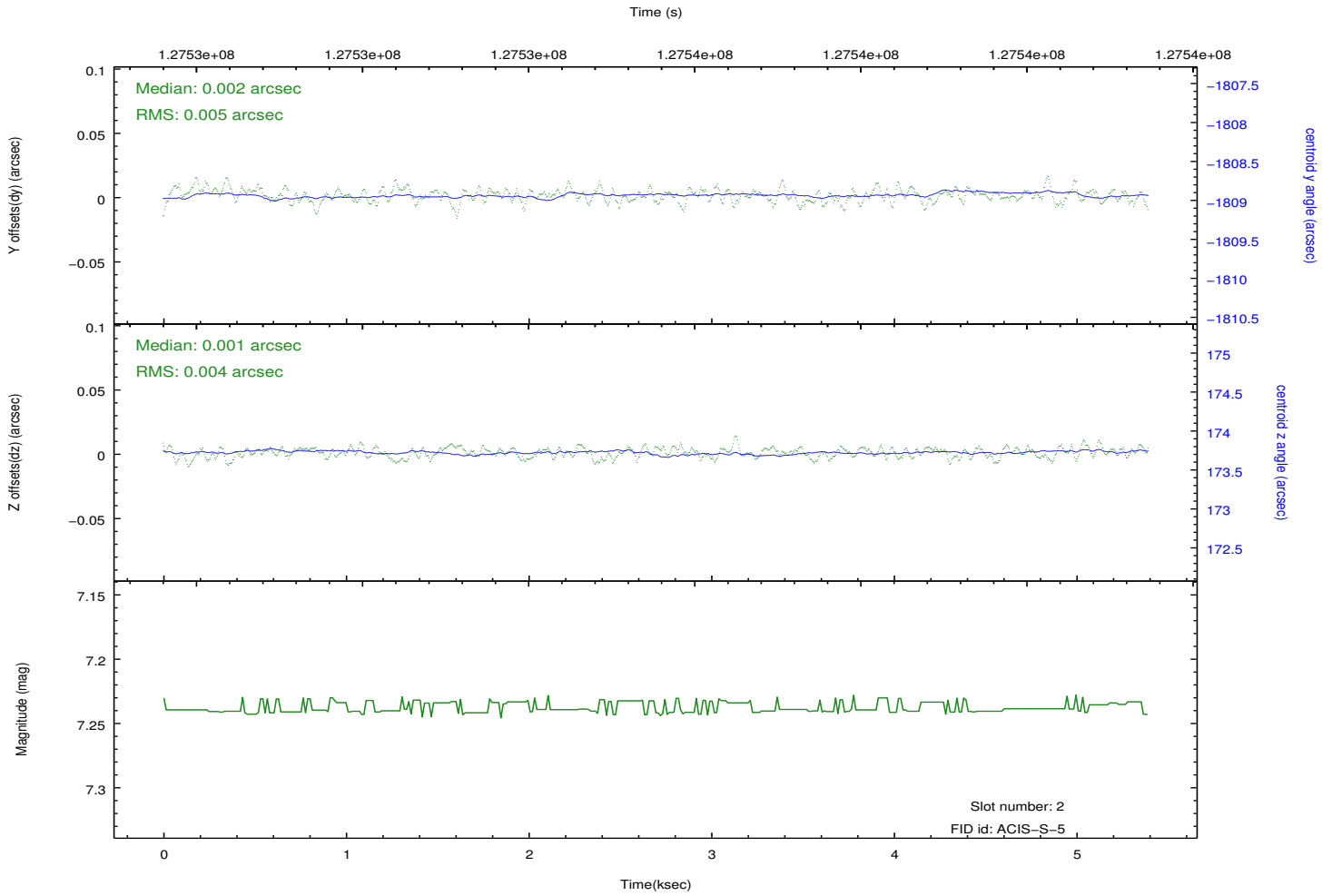
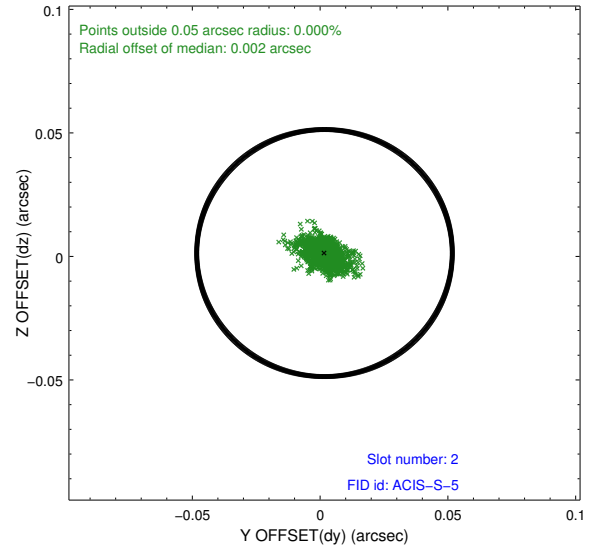
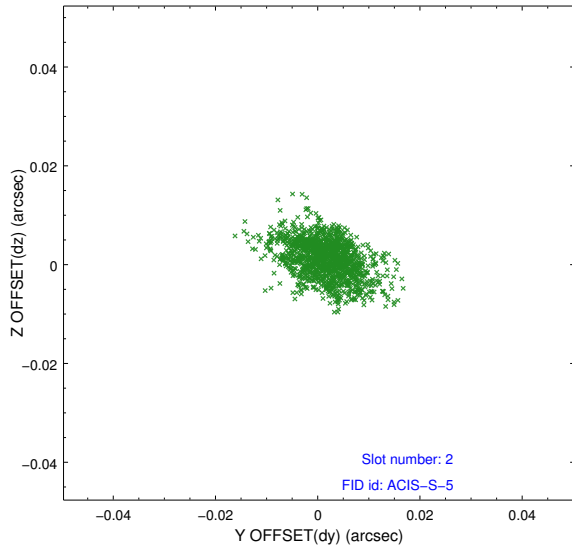
### 2.5.1 Slot 0



## 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)	2012.10.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.39

## A.2 Comments