

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 11512 - L2 Version 2  
Chandra X-Ray Center

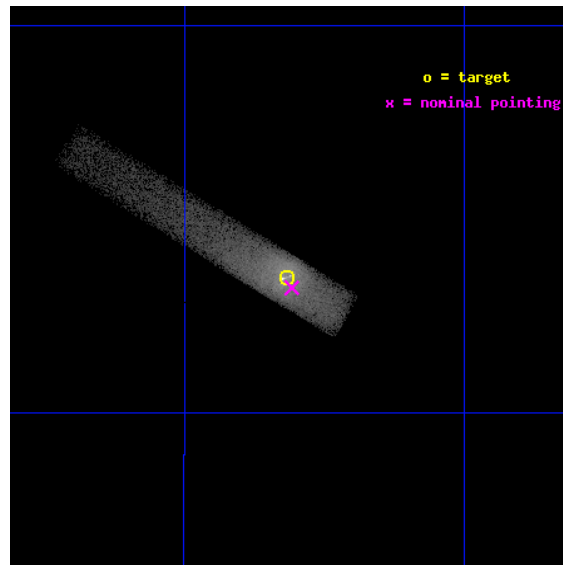
L2 Processing Date : Jun 24 2012

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# 1 Front

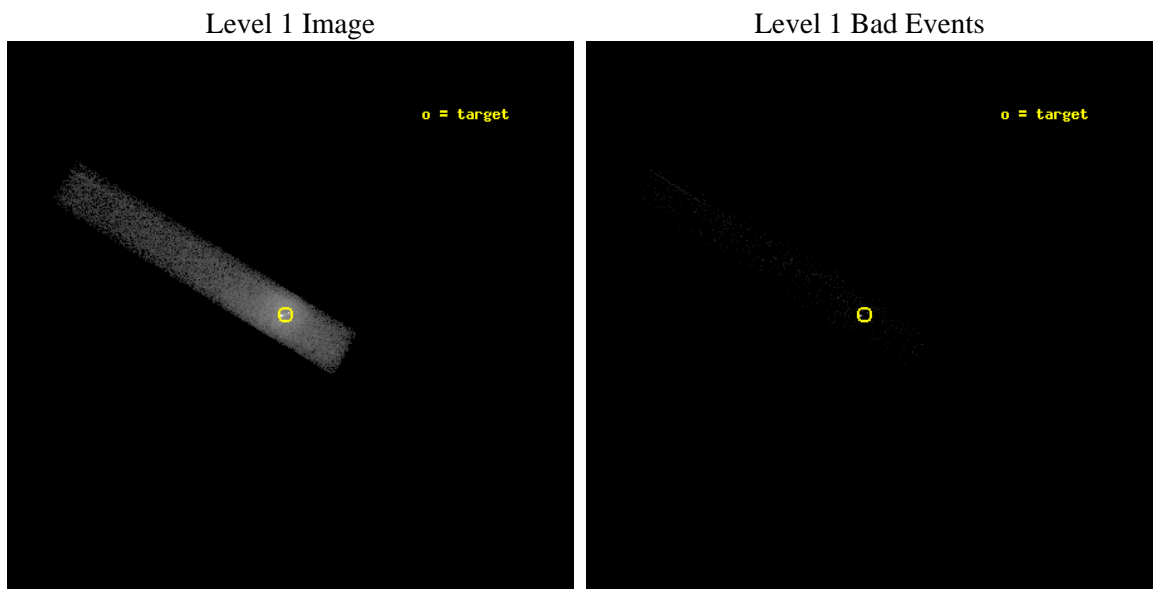
seq_num	702098	Sequence number
obs_id	11512	Observation id
title	The X-ray - TeV Connection in M87	Proposal title
observer	Dr. Daniel Harris	Principal investigator
object	M87	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	187.704167	Observer's specified target RA [deg]
dec_targ	12.391667	Observer's specified target Dec [deg]
ra_nom	187.7019394848	Nominal RA [deg]
dec_nom	12.387276578911	Nominal Dec [deg]
roll_nom	211.26178255272	Nominal Roll [deg]
revision	2	Processing version of data
ontime	5181.5996911526	Sum of GTIs [s]
livetime	4699.437412618	Livetime [s]
ontime7	5181.5996911526	Sum of GTIs [s]
l2events	51521	Number of level 2 events



## 2 OBI

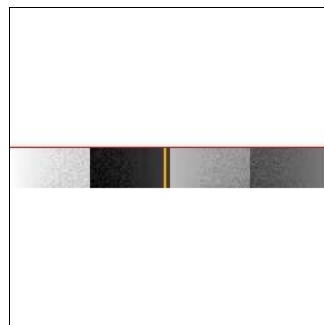
### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias

Chip 7



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	5181.5996911526	Sum of GTIs [s]
caldsver	4.4.10	&#160	ontime7	5181.5996911526	Sum of GTIs [s]
date	2012-06-24T08:04:55	Date and time of file creation	l1events	59543	Number of level 1 events
revision	2	Processing version of data			

### 2.1.4 Events

	<b>ccd 7</b>
level 1 events	59543
rejected events	7474
rejected %	12%

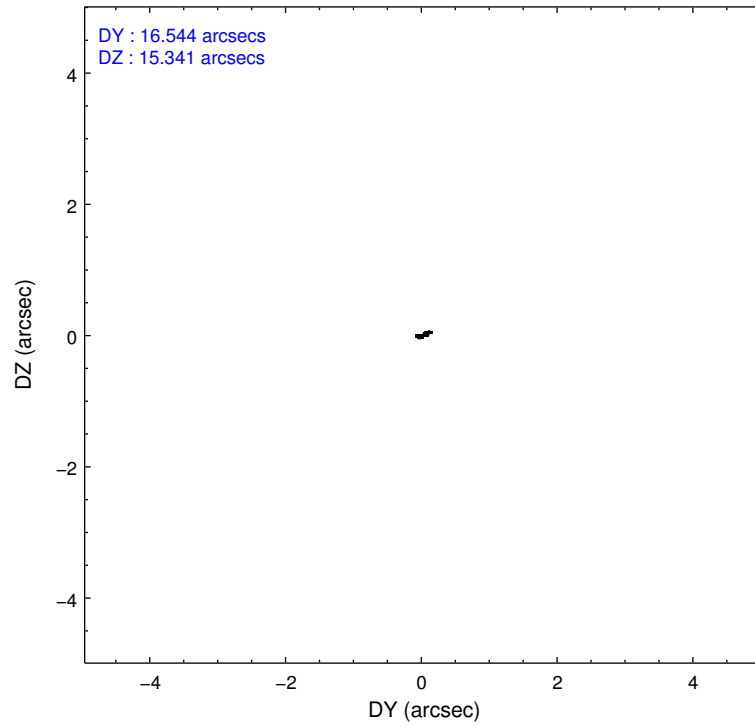
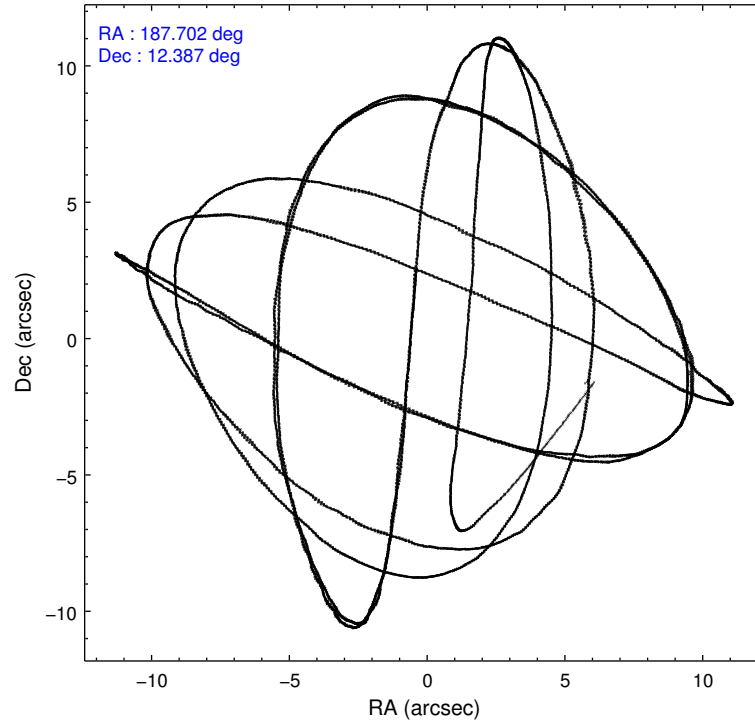
	<b>ccd 7</b>
grade 0 events	16444
	27%
grade 1 events	101
	0%
grade 2 events	14165
	23%
grade 3 events	6420
	10%
grade 4 events	6323
	10%
grade 5 events	1343
	2%
grade 6 events	11321
	19%
grade 7 events	3426
	5%

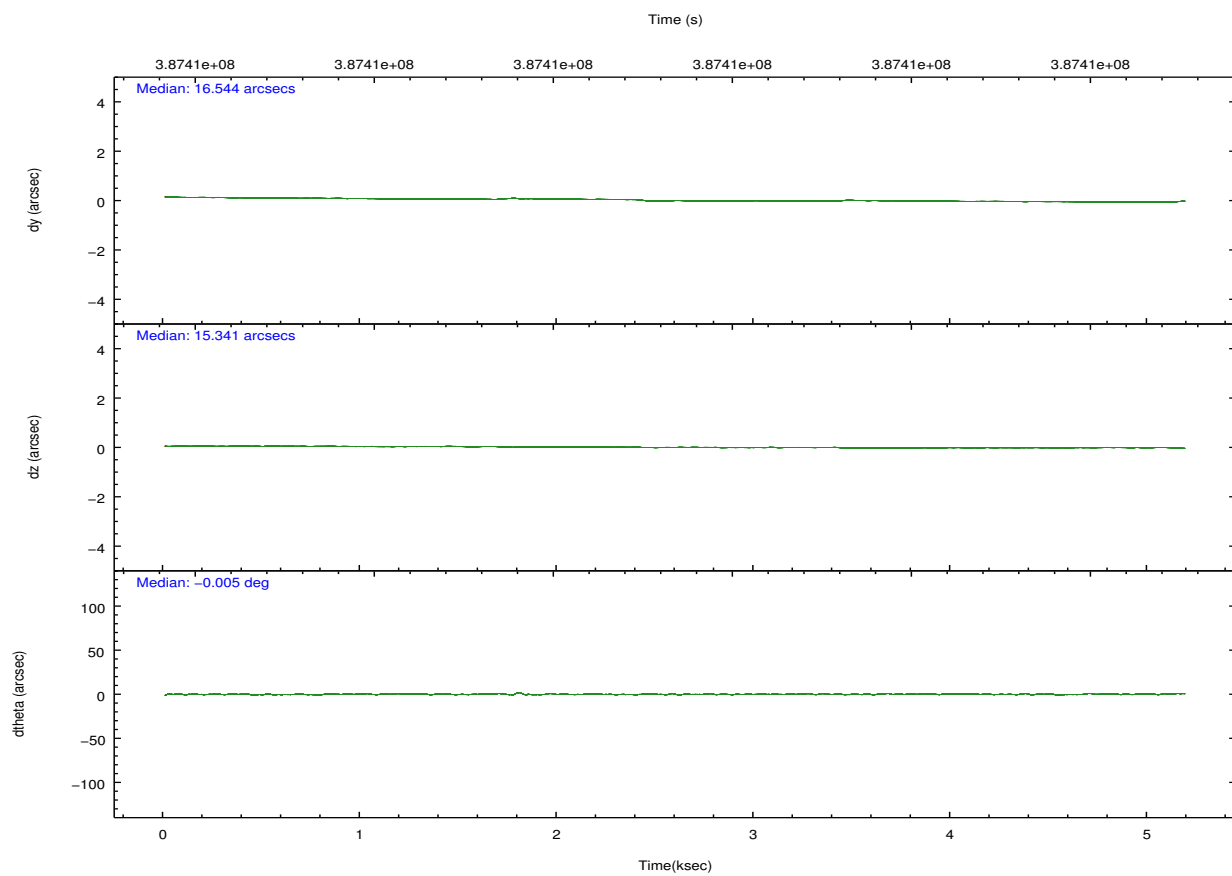
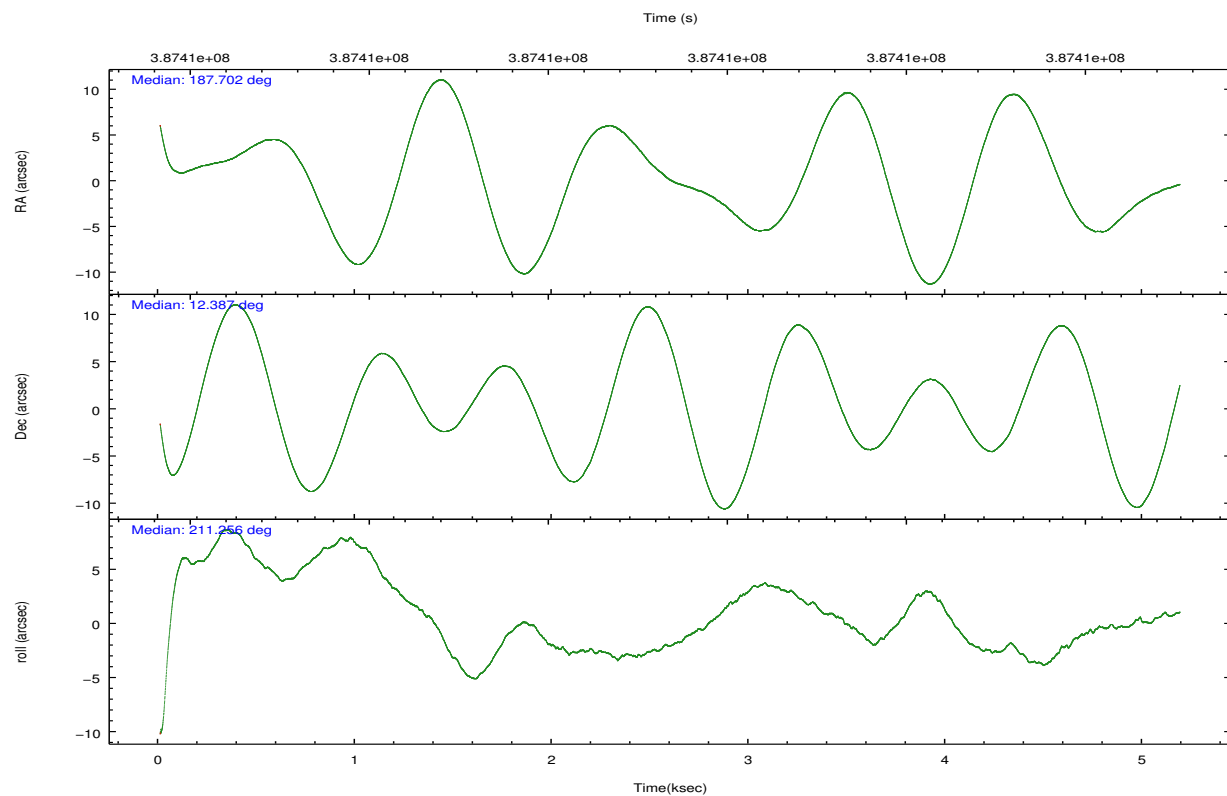


## 2.2 Compared Parameters

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	187.715034	187.7019394848014	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	12.411502	12.38727657891058	Subarray start row	449	449
[deg] Pointing Roll	211.102387	211.2617825527212	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	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	387409285.184000	387407679.71609			
Observation start date	2010-04-11T21:40:19	2010-04-11T21:14:39			
[s] Observation end time (MET)	387414285.184000	387415658.31649			
Observation end date	2010-04-11T23:03:39	2010-04-11T23:27:38			
Read mode	TIMED	TIMED			

## 2.3 Aspect



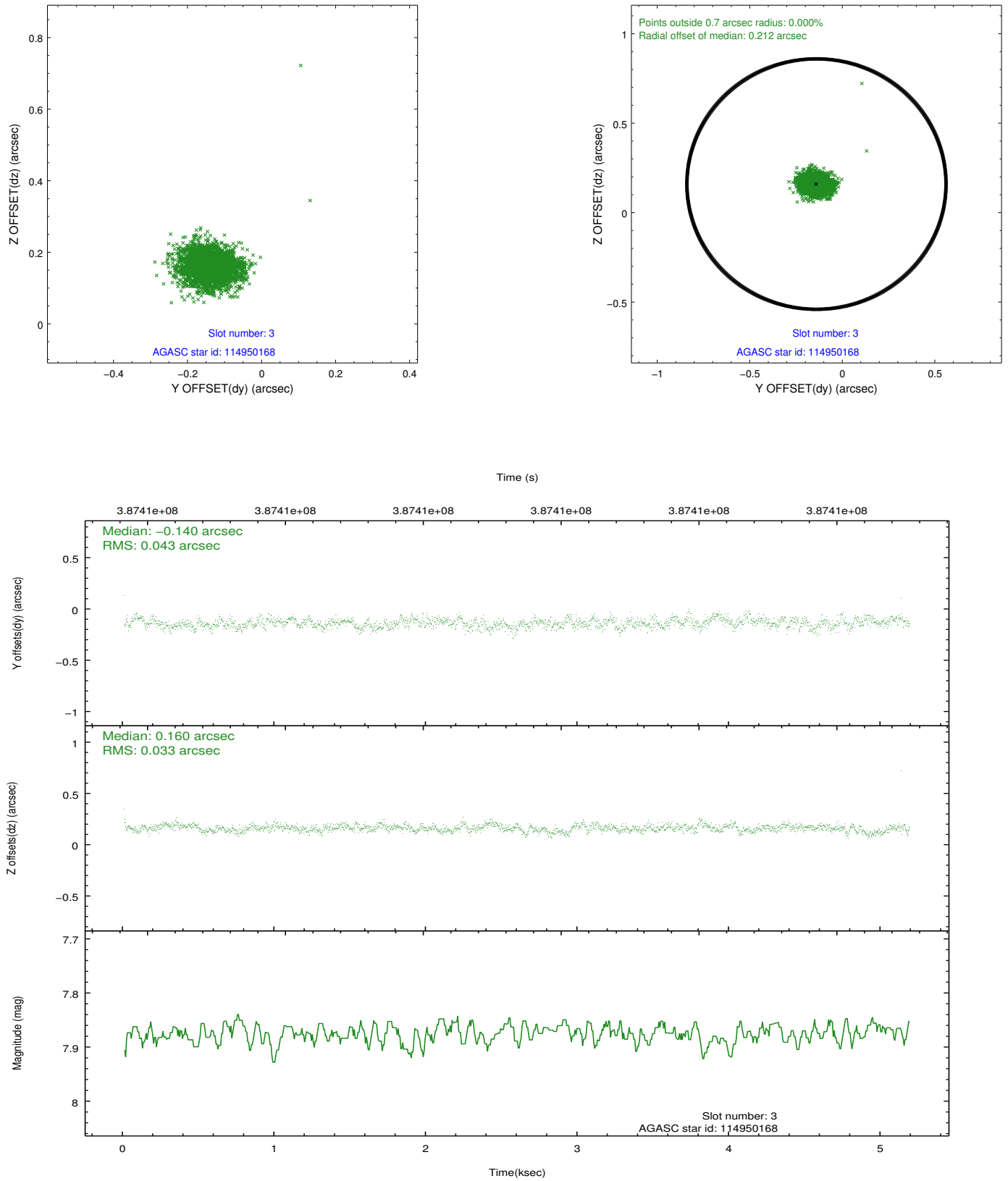


### Slot Statistics

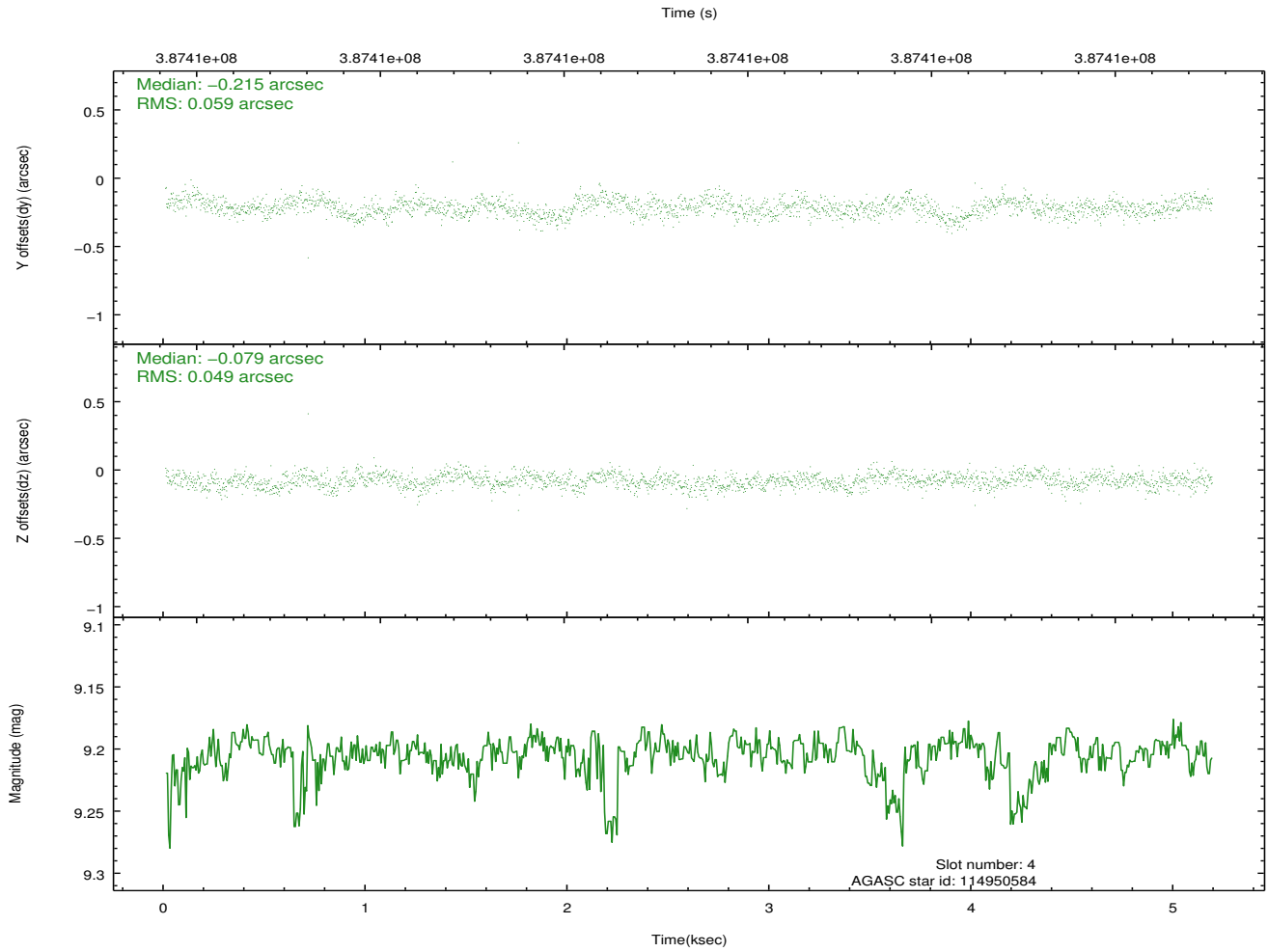
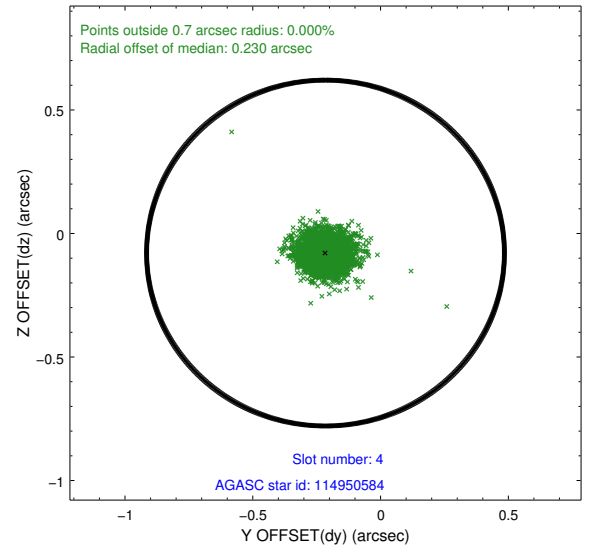
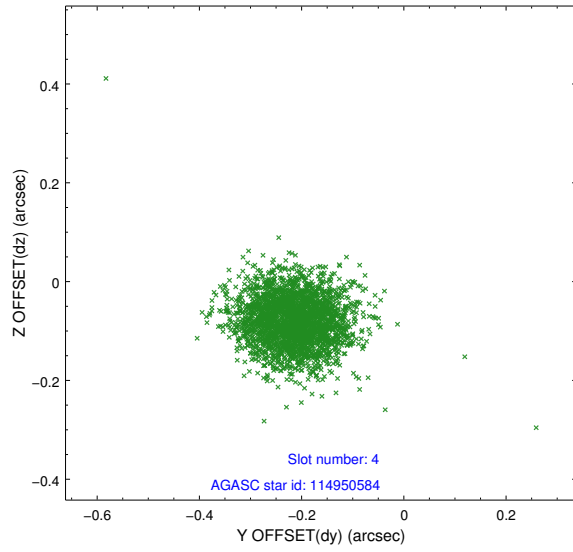
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.99	1265	-0.101	-0.028	0.007	0.012	0.000000	0.000000	-769.66	-1736.72
1	FID	ACIS-S-4	7.07	1265	0.194	0.056	0.006	0.013	0.000000	0.000000	2143.35	170.66
2	FID	ACIS-S-5	7.10	1265	-0.124	-0.019	0.007	0.013	0.000000	0.000000	-1821.05	165.55
3	GUIDE	114950168	7.87	2528	-0.140	0.160	0.055	0.092	187.143398	12.117441	2268.75	-134.39
4	GUIDE	114950584	9.20	2523	-0.215	-0.079	0.080	0.127	187.487323	11.827248	1774.53	1385.94
5	GUIDE	114952792	9.50	2508	-0.077	0.023	0.129	0.205	187.070263	12.344747	2066.30	-967.47
6	GUIDE	114952824	8.59	2527	0.045	0.159	0.070	0.109	187.703904	12.486727	-104.88	-252.66
7	GUIDE	114955056	8.33	2528	0.387	-0.261	0.076	0.124	187.914001	12.127854	-71.68	1235.23

## 2.4 Star Slots

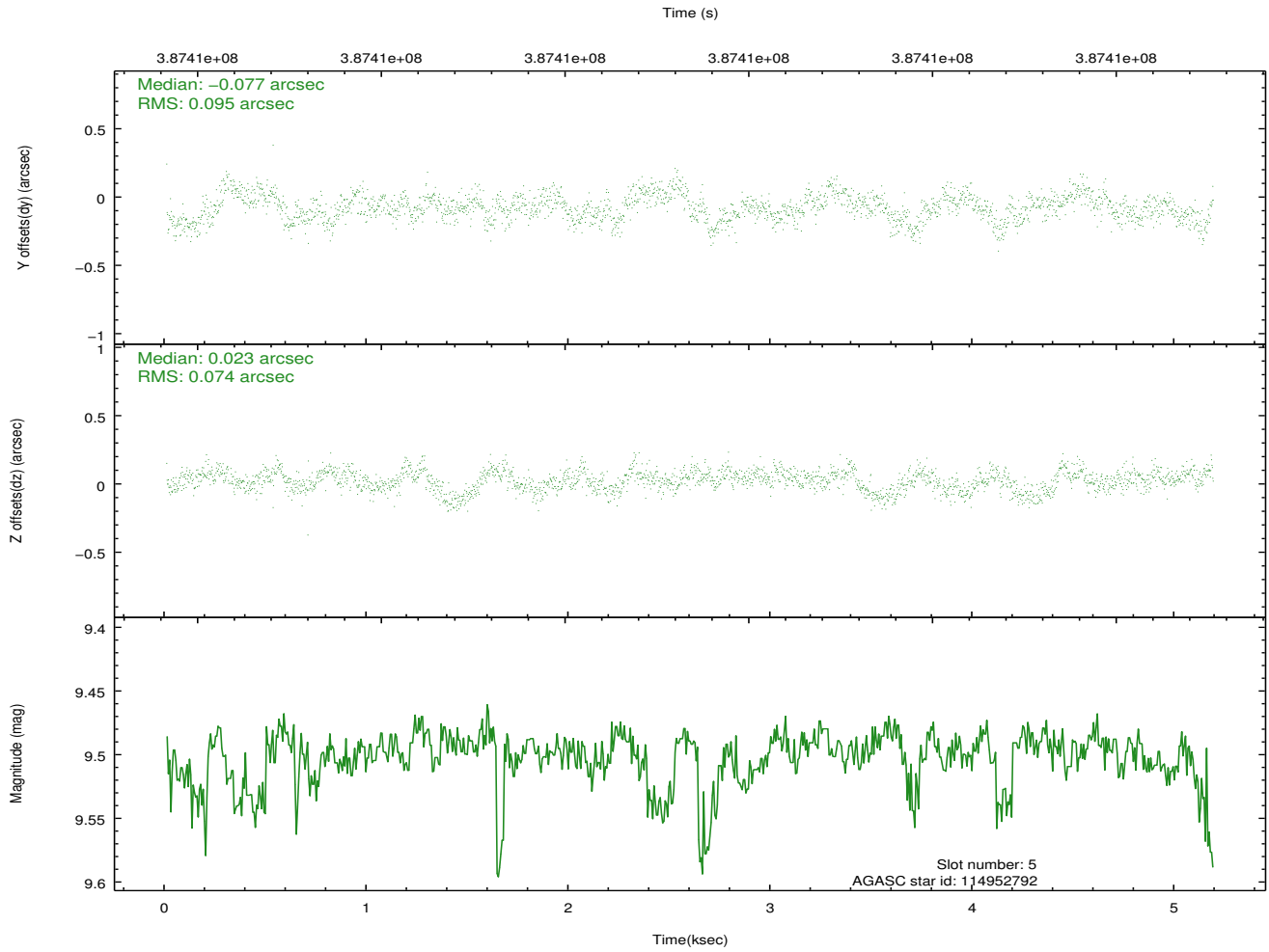
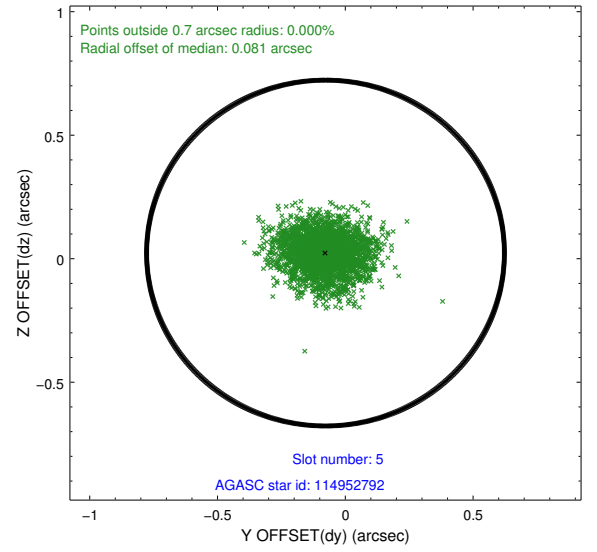
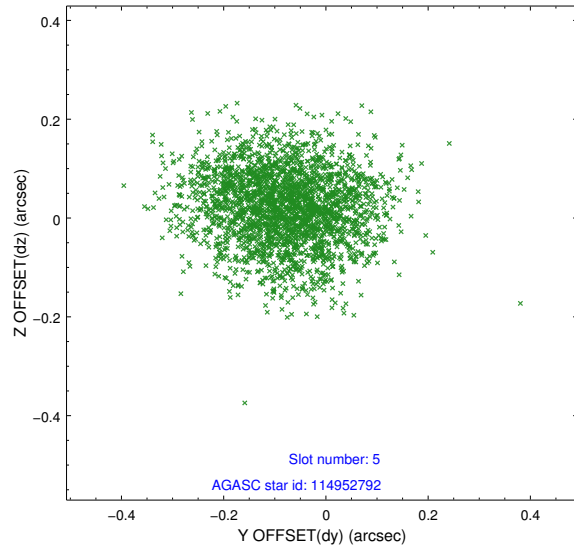
### 2.4.1 Slot 3



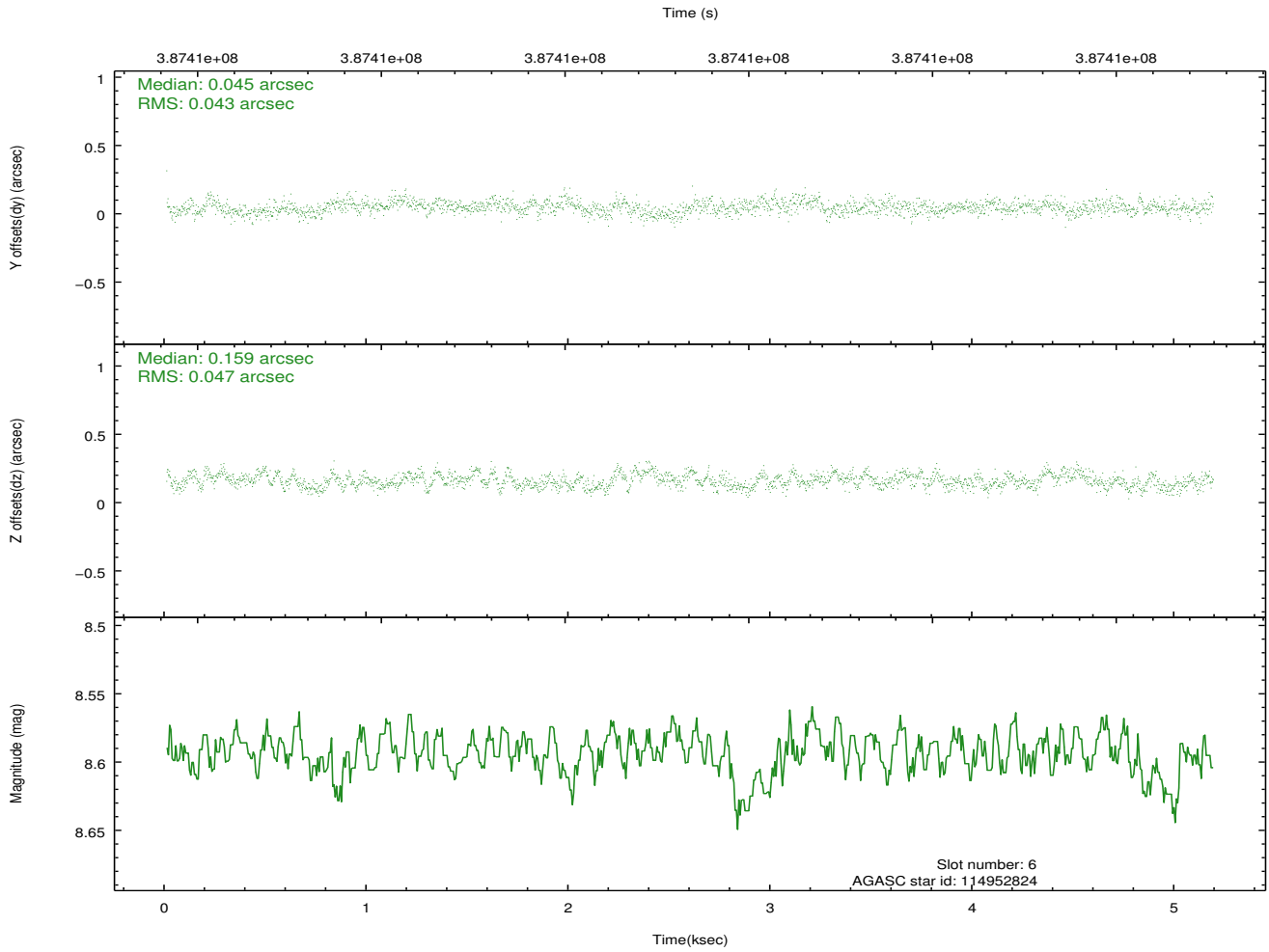
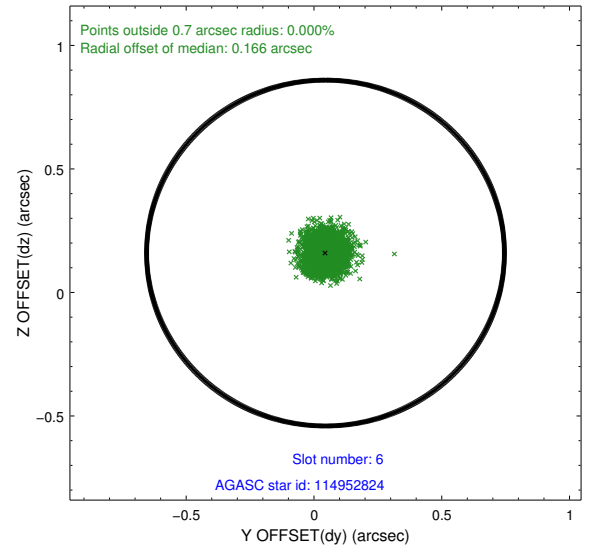
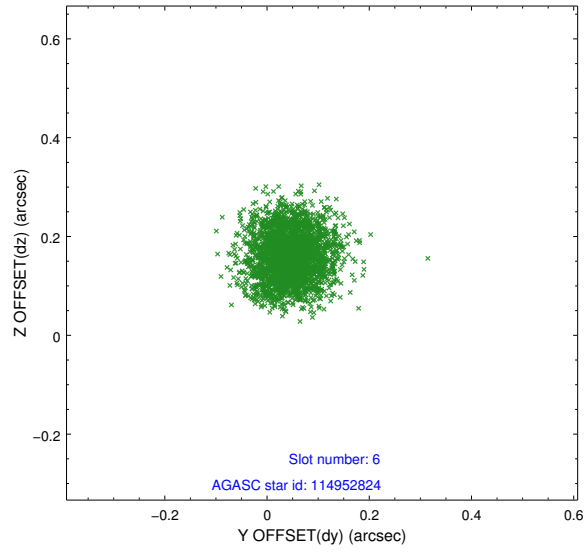
## 2.4.2 Slot 4



### 2.4.3 Slot 5

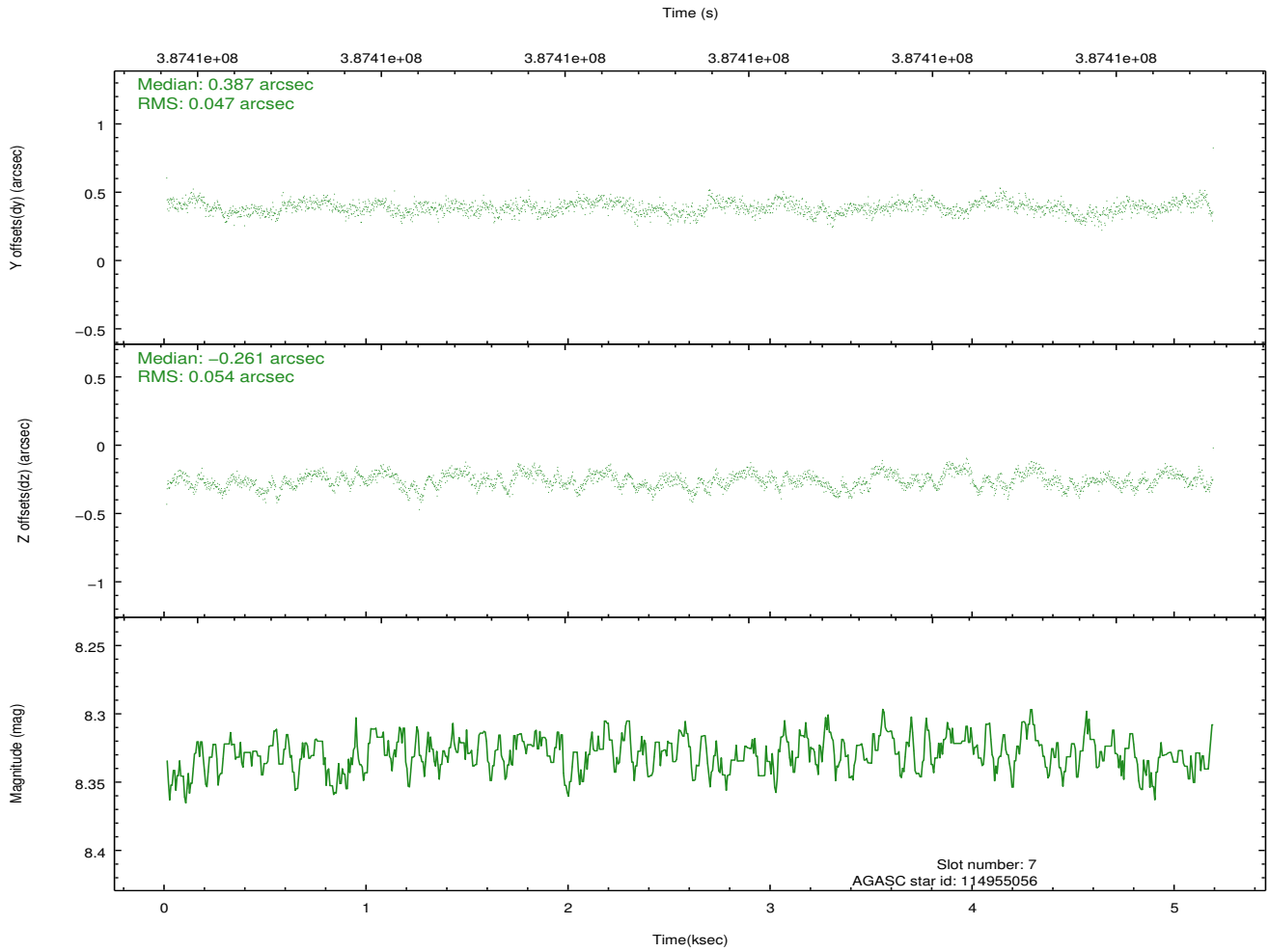
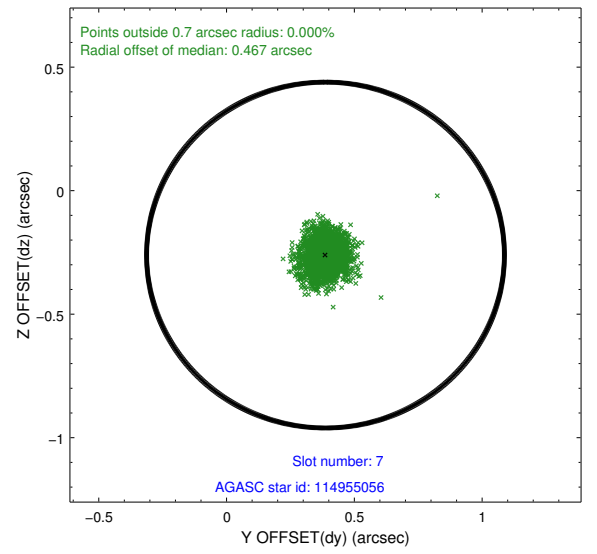
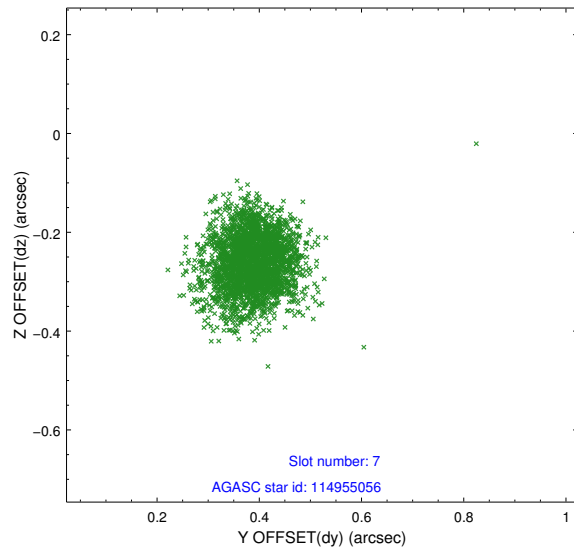


## 2.4.4 Slot 6



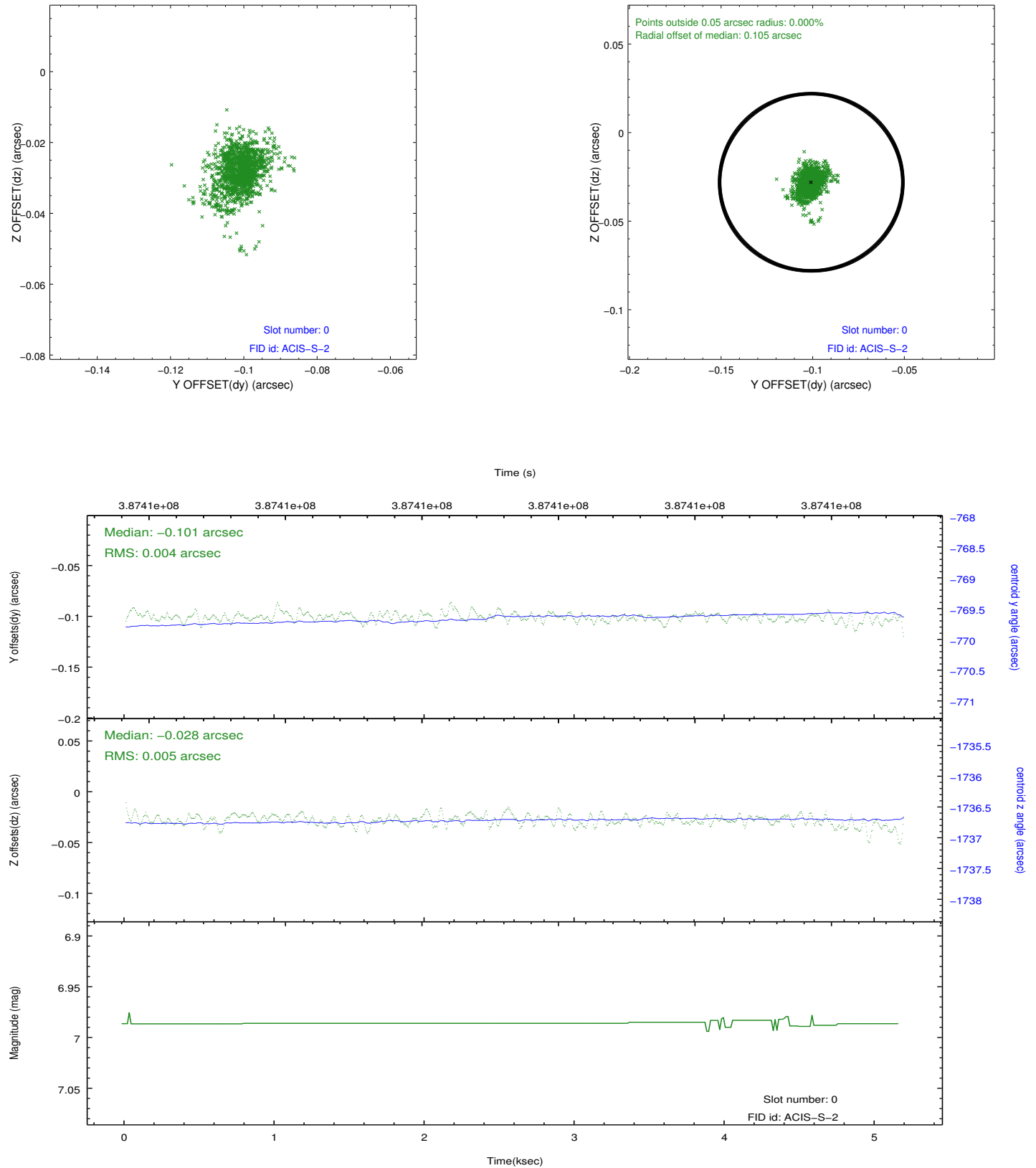


## 2.4.5 Slot 7

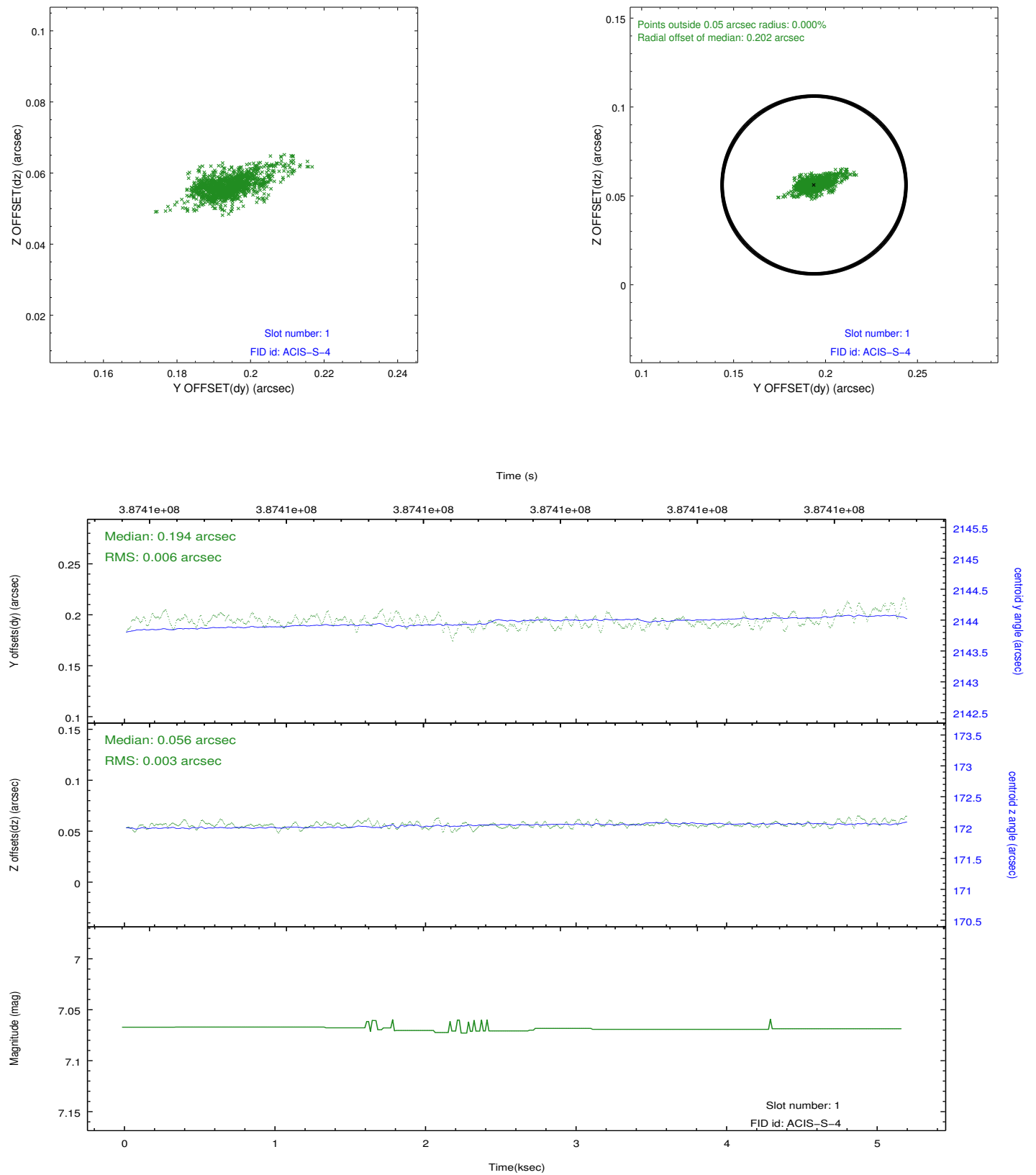


## 2.5 FID Slots

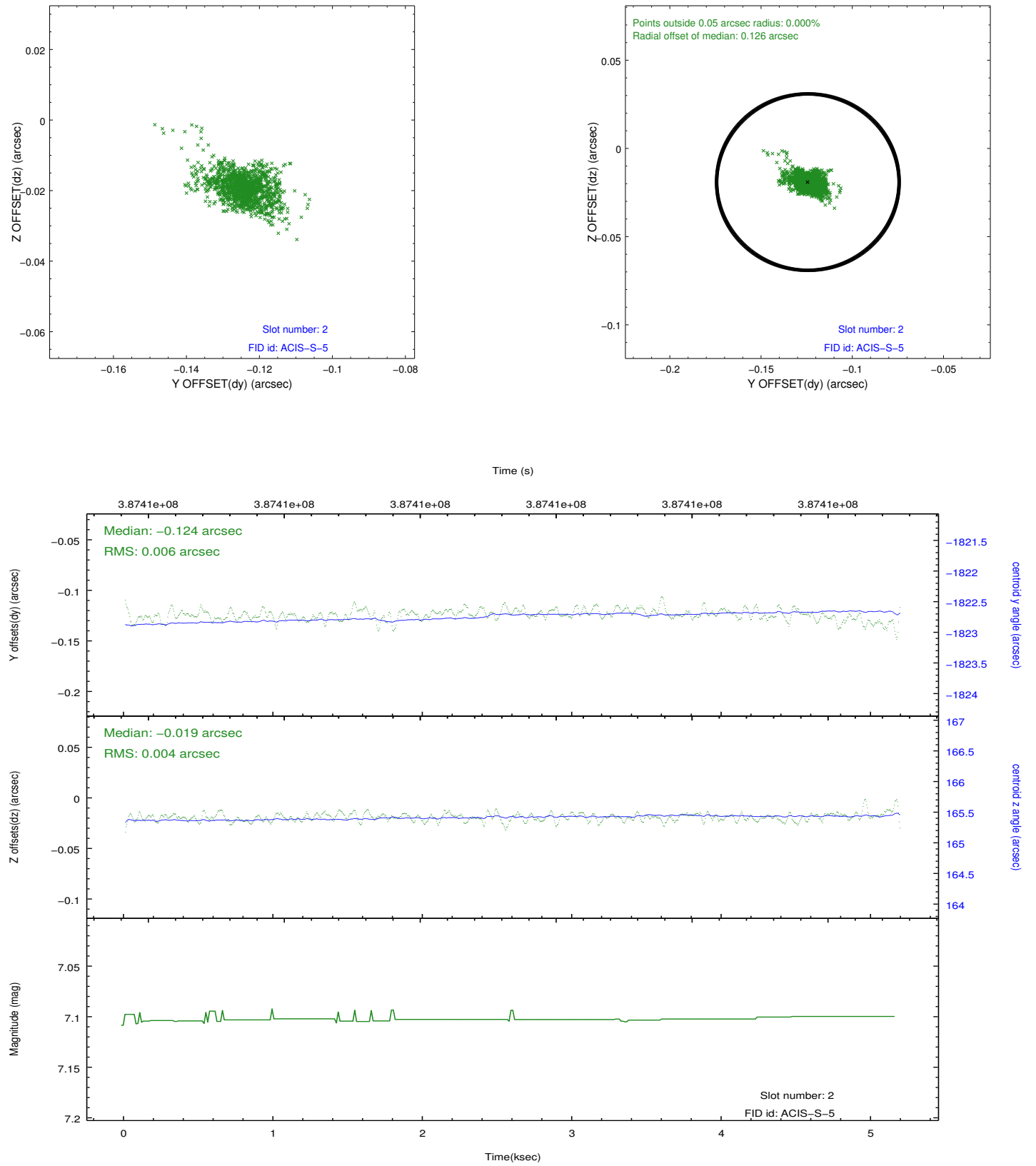
### 2.5.1 Slot 0



## 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)	2012.06.29
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.1815996911526

### A.2 Comments