

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 11519 - L2 Version 2  
Chandra X-Ray Center

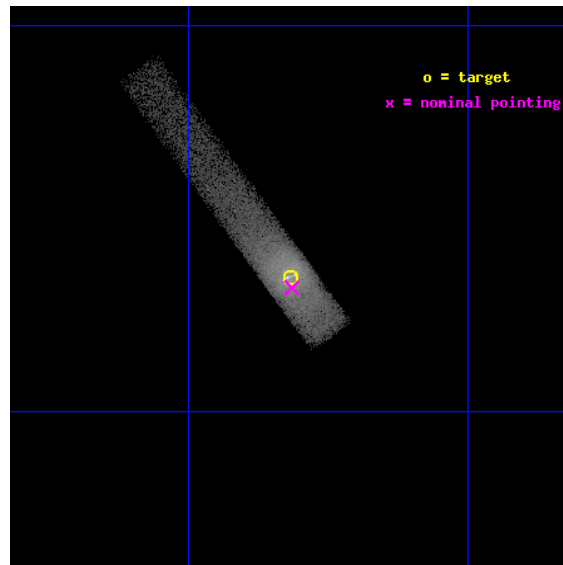
L2 Processing Date : Jun 25 2012

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# 1 Front

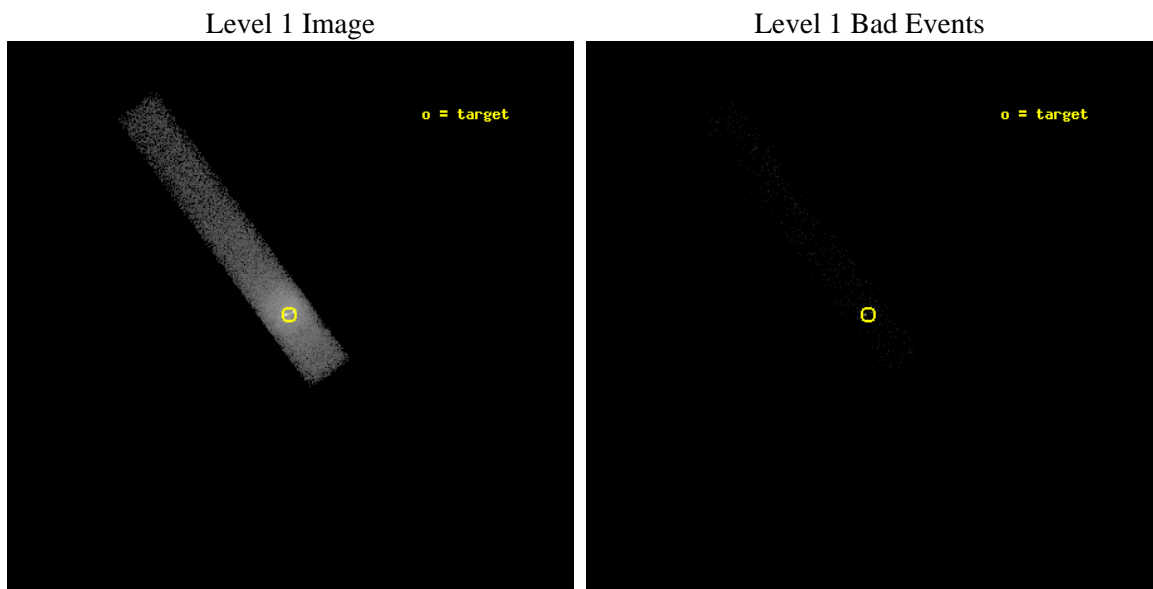
seq_num	702105	Sequence number
obs_id	11519	Observation id
title	The X-ray - TeV Connection in M87	Proposal title
observer	Dr. Daniel Harris	Principal investigator
object	M87	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	187.704167	Observer's specified target RA [deg]
dec_targ	12.391667	Observer's specified target Dec [deg]
ra_nom	187.70390490189	Nominal RA [deg]
dec_nom	12.386824849942	Nominal Dec [deg]
roll_nom	233.71978550345	Nominal Roll [deg]
revision	2	Processing version of data
ontime	5189.1996906996	Sum of GTIs [s]
livetime	4706.3302110462	Livetime [s]
ontime7	5189.1996906996	Sum of GTIs [s]
l2events	47028	Number of level 2 events



## 2 OBI

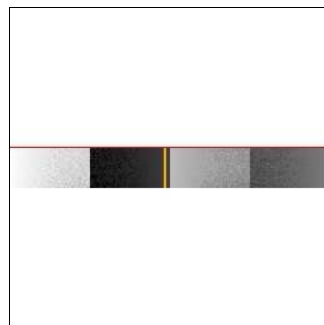
### 2.1 OBI

#### 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	5189.1996906996	Sum of GTIs [s]
caldsver	4.4.10	&#160	ontime7	5189.1996906996	Sum of GTIs [s]
date	2012-06-25T10:17:33	Date and time of file creation	l1events	52239	Number of level 1 events
revision	2	Processing version of data			

### 2.1.4 Events

	<b>ccd 7</b>
level 1 events	52239
rejected events	4691
rejected %	8%

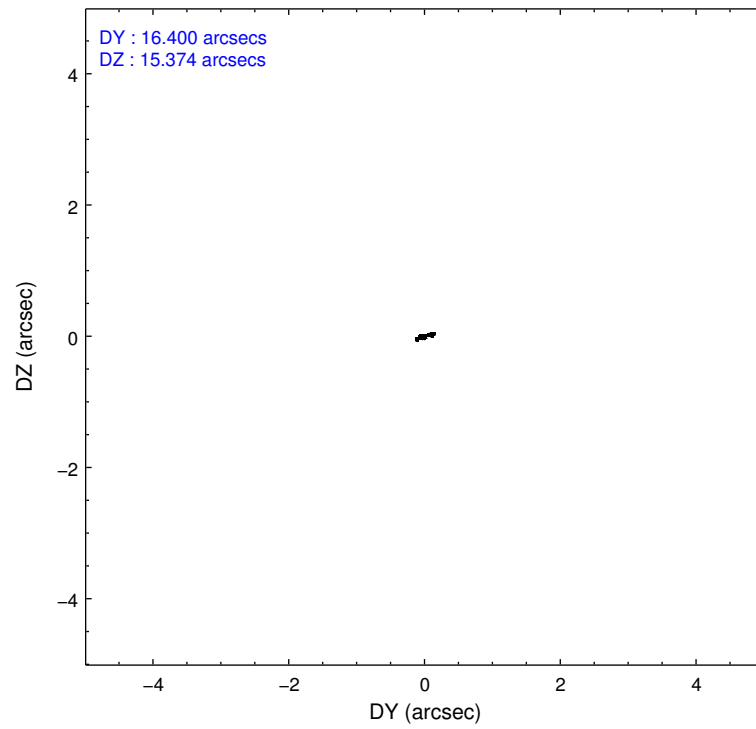
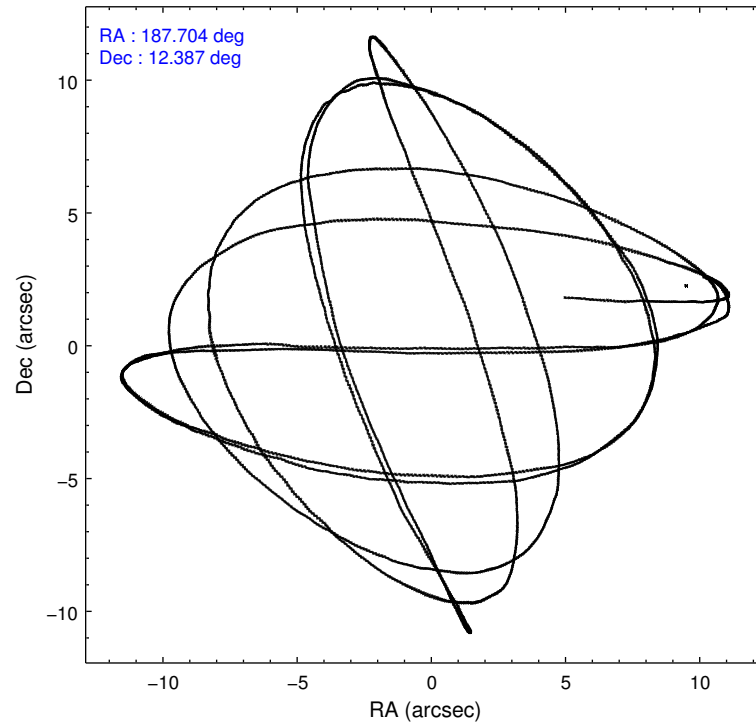
	<b>ccd 7</b>
grade 0 events	14767
	28%
grade 1 events	39
	0%
grade 2 events	12627
	24%
grade 3 events	5728
	10%
grade 4 events	5674
	10%
grade 5 events	1039
	1%
grade 6 events	9790
	18%
grade 7 events	2575
	4%

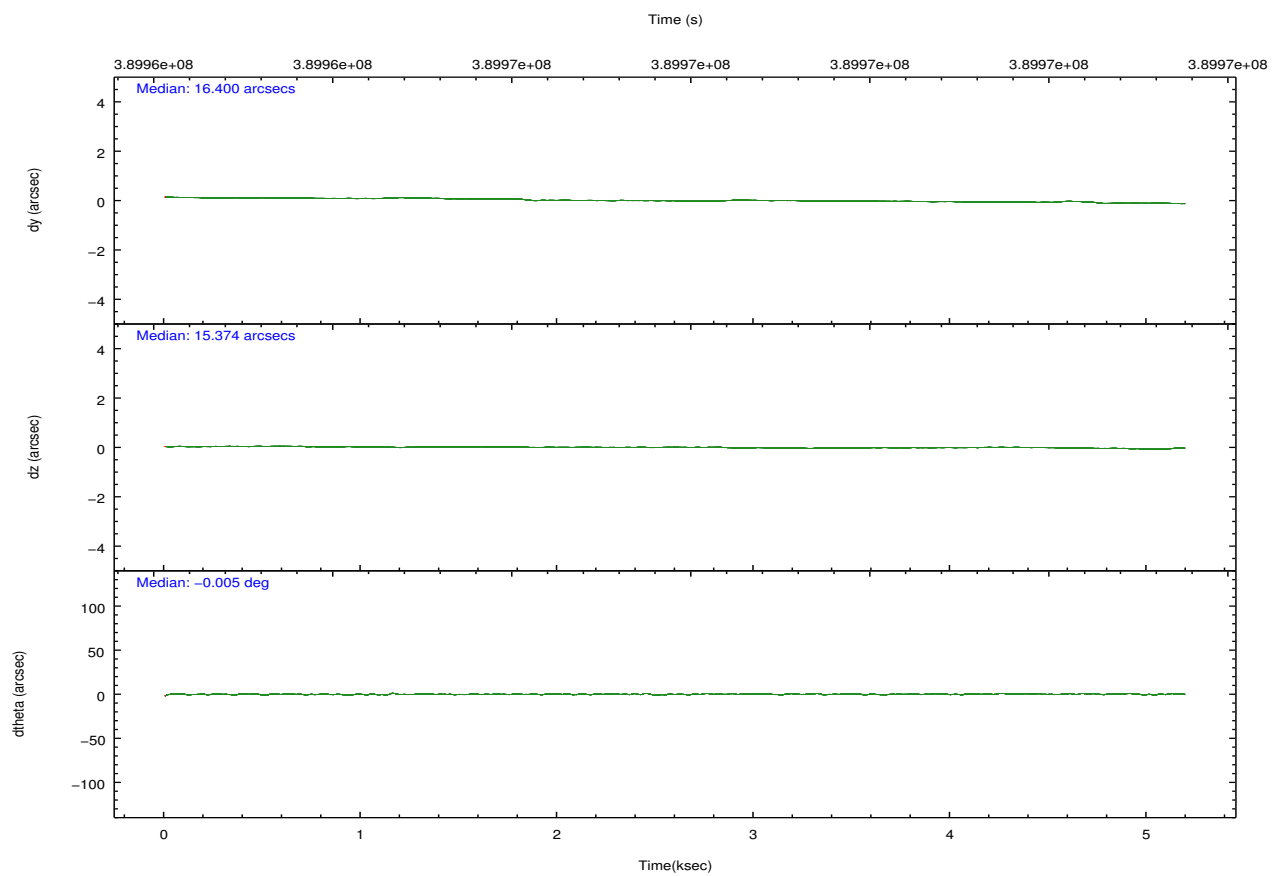
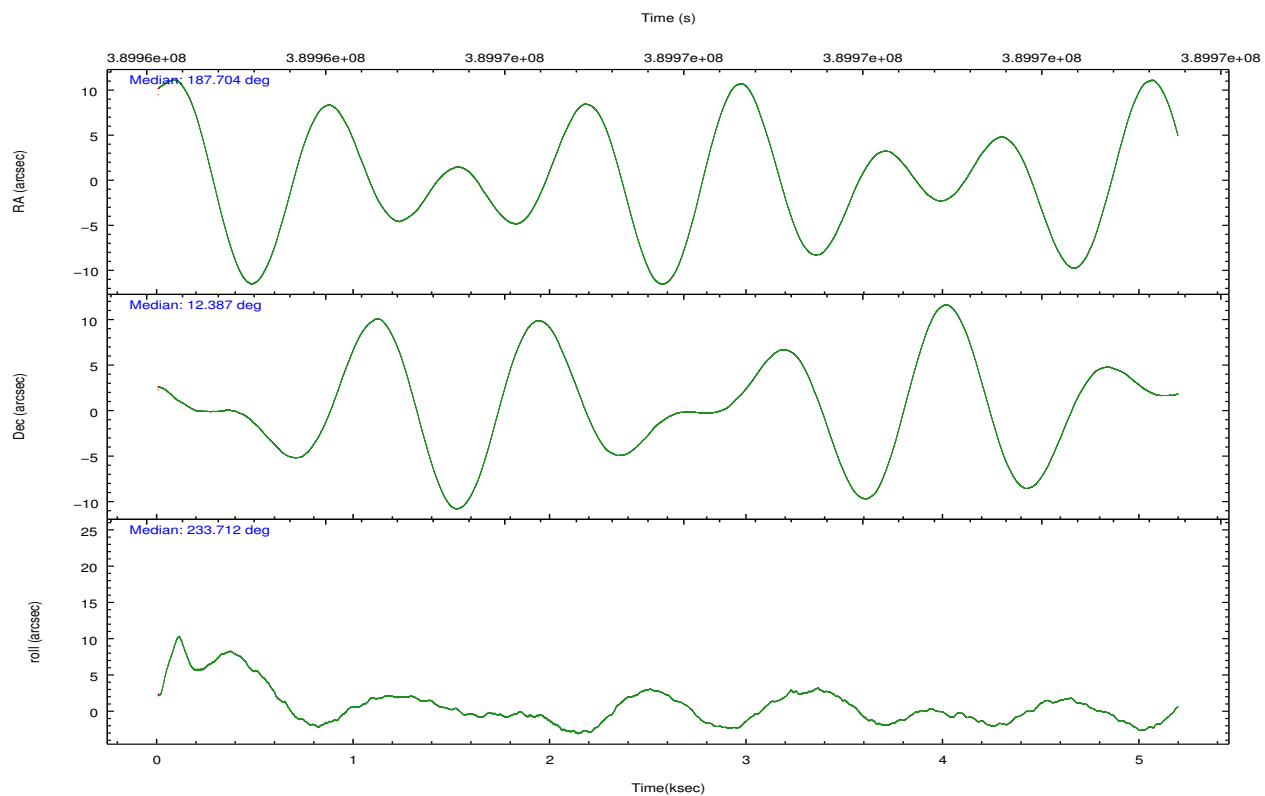


## 2.2 Compared Parameters

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	187.706450	187.7039049018925	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	12.414056	12.38682484994213	Subarray start row	449	449
[deg] Pointing Roll	233.562615	233.7197855034496	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	-190.145094680475			
[mm] SIM translation stage offset	0	0.01257209746719923			
[s] Observation start time (MET)	389964518.184000	389963823.82106			
Observation start date	2010-05-11T11:27:32	2010-05-11T11:17:03			
[s] Observation end time (MET)	389969518.184000	389970996.77142			
Observation end date	2010-05-11T12:50:52	2010-05-11T13:16:36			
Read mode	TIMED	TIMED			

## 2.3 Aspect



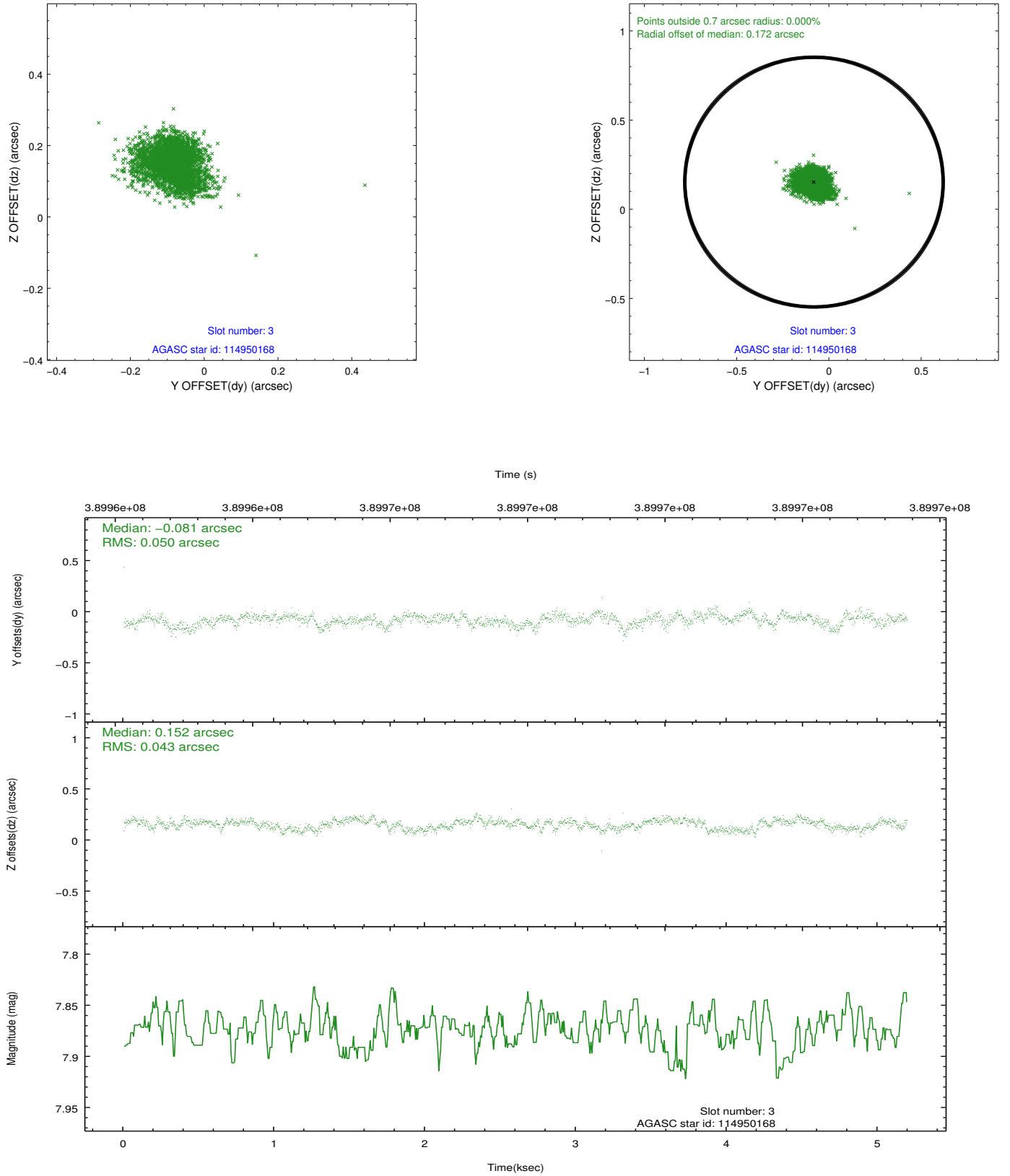


### Slot Statistics

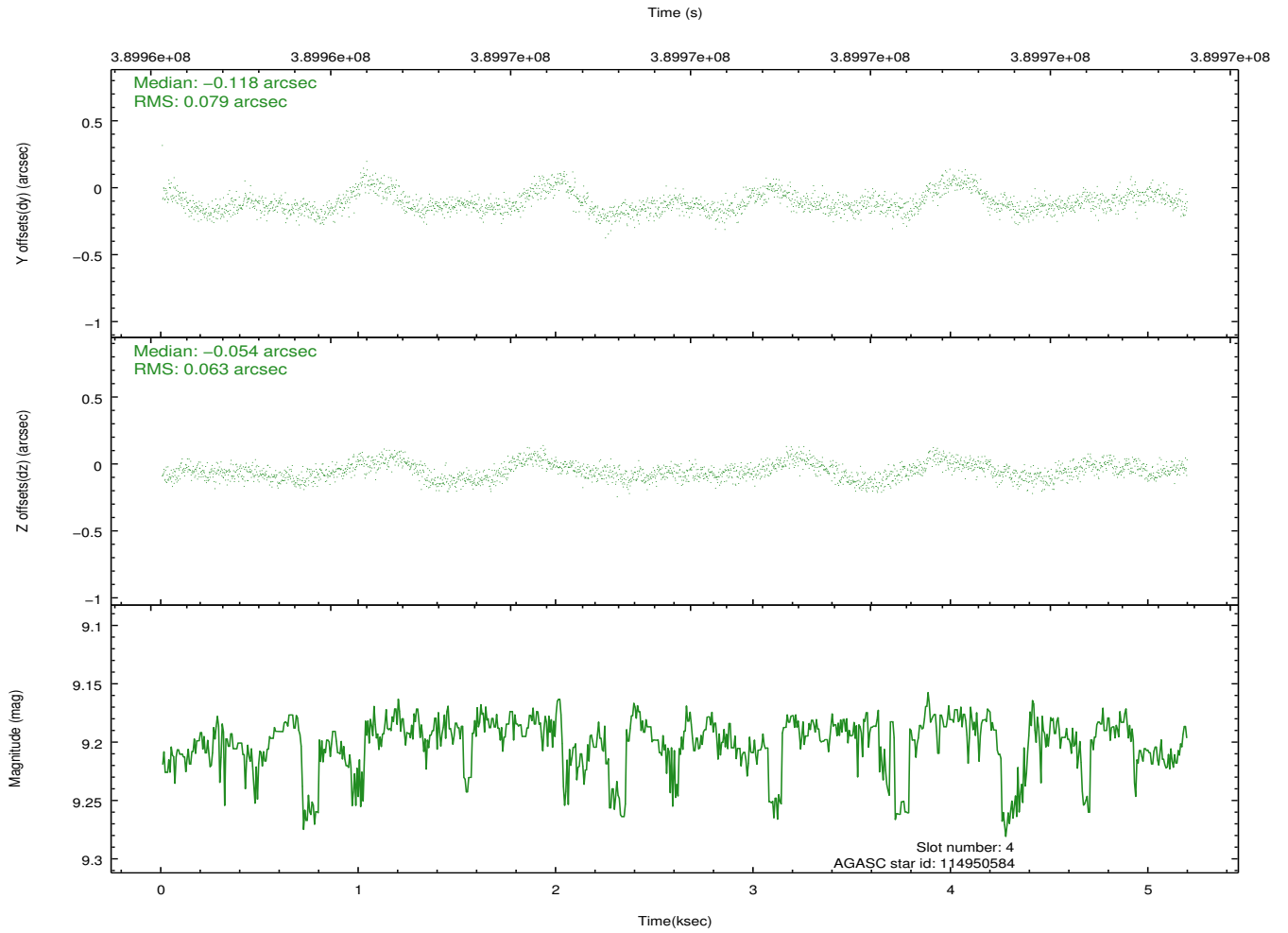
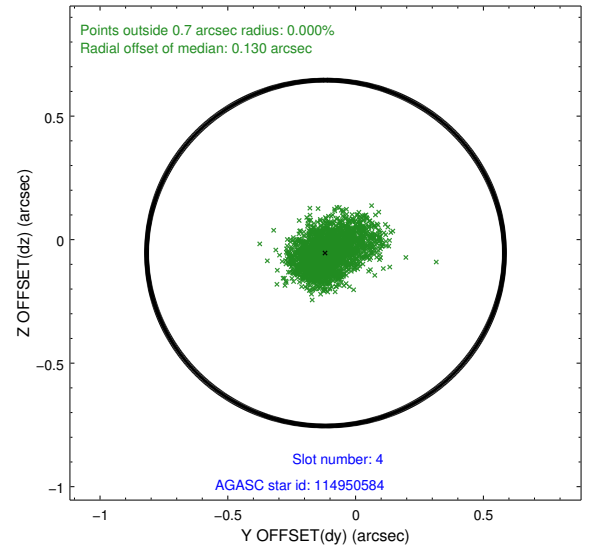
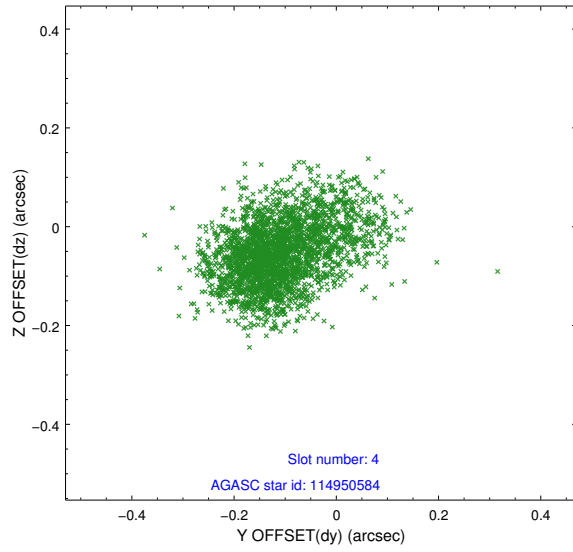
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.94	1267	-0.097	-0.015	0.010	0.017	0.000000	0.000000	-769.50	-1736.68
1	FID	ACIS-S-4	7.02	1267	0.175	0.051	0.011	0.020	0.000000	0.000000	2143.50	170.69
2	FID	ACIS-S-5	7.06	1267	-0.110	-0.027	0.010	0.018	0.000000	0.000000	-1820.88	165.56
3	GUIDE	114950168	7.87	2533	-0.081	0.152	0.069	0.112	187.143398	12.117441	2035.29	-961.25
4	GUIDE	114950584	9.20	2529	-0.118	-0.054	0.104	0.184	187.487323	11.827248	2159.36	632.60
5	GUIDE	114952824	8.58	2531	-0.018	0.208	0.068	0.111	187.703904	12.486727	-203.40	-162.81
6	GUIDE	114954440	9.20	2527	0.079	0.003	0.105	0.173	186.915066	12.219118	2215.60	-1825.03
7	GUIDE	114955056	8.31	2531	0.137	-0.306	0.073	0.128	187.914001	12.127854	396.32	1198.02

## 2.4 Star Slots

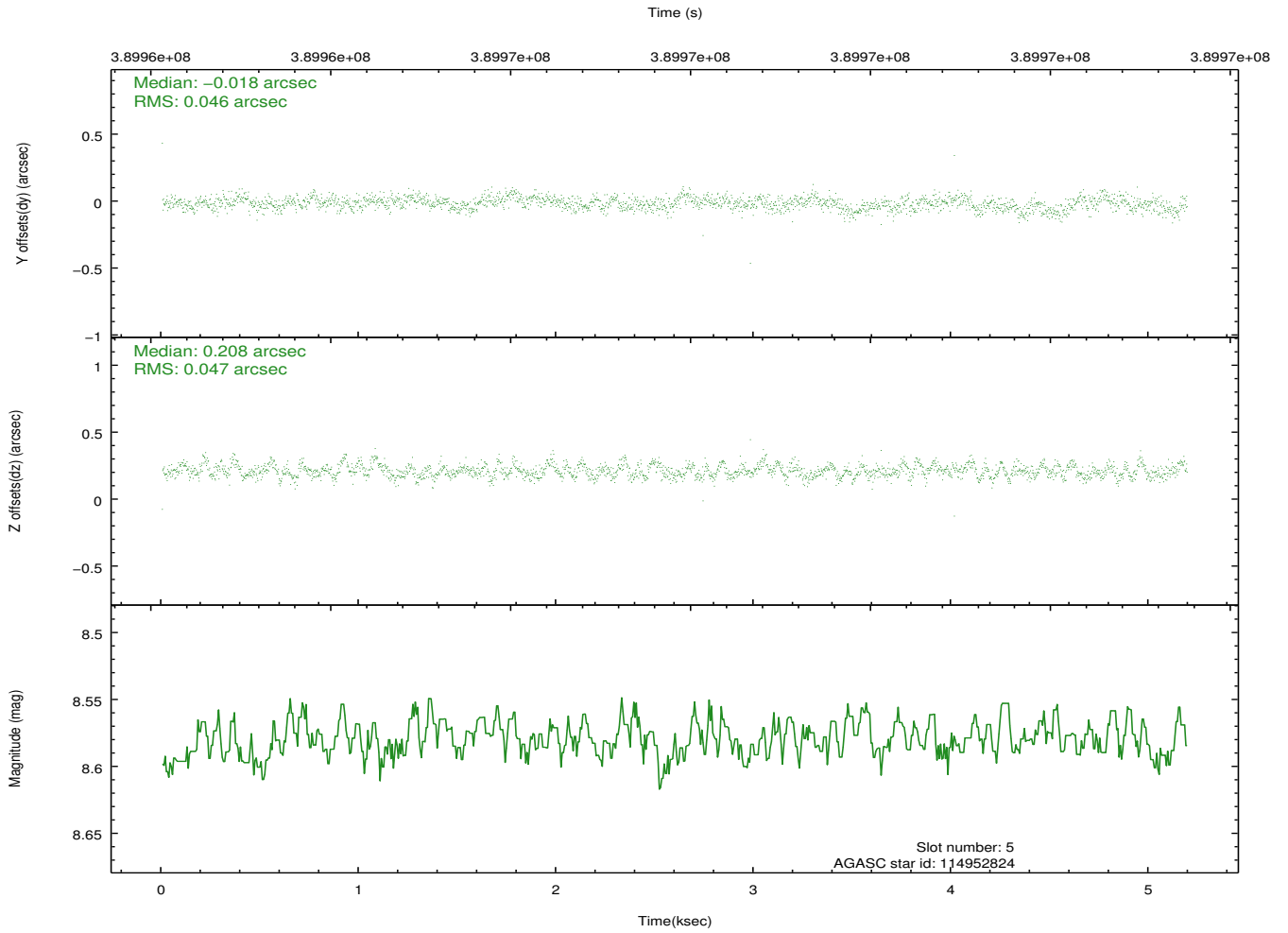
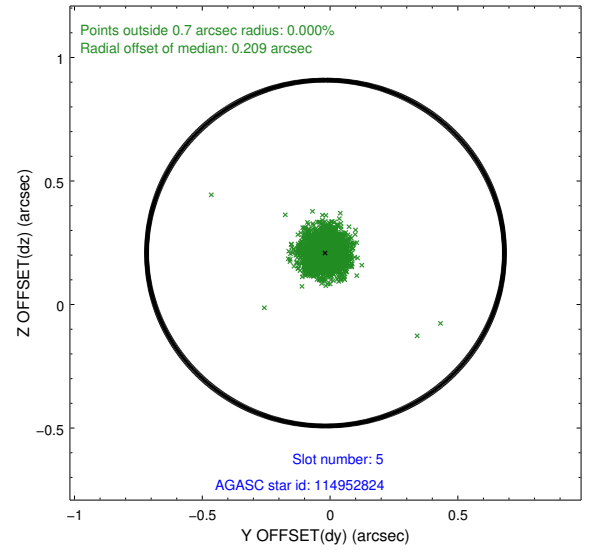
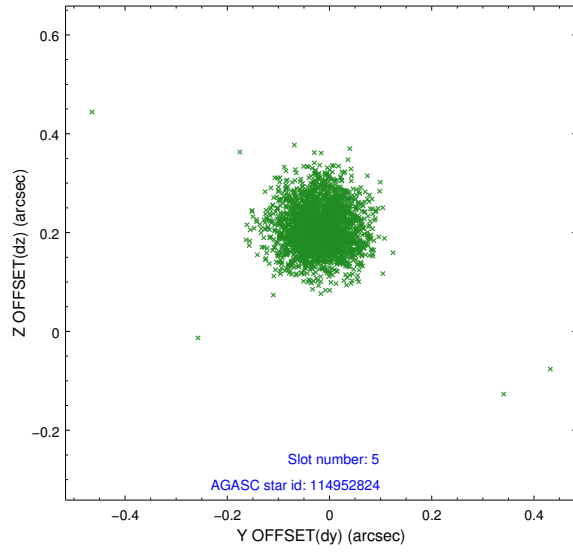
### 2.4.1 Slot 3



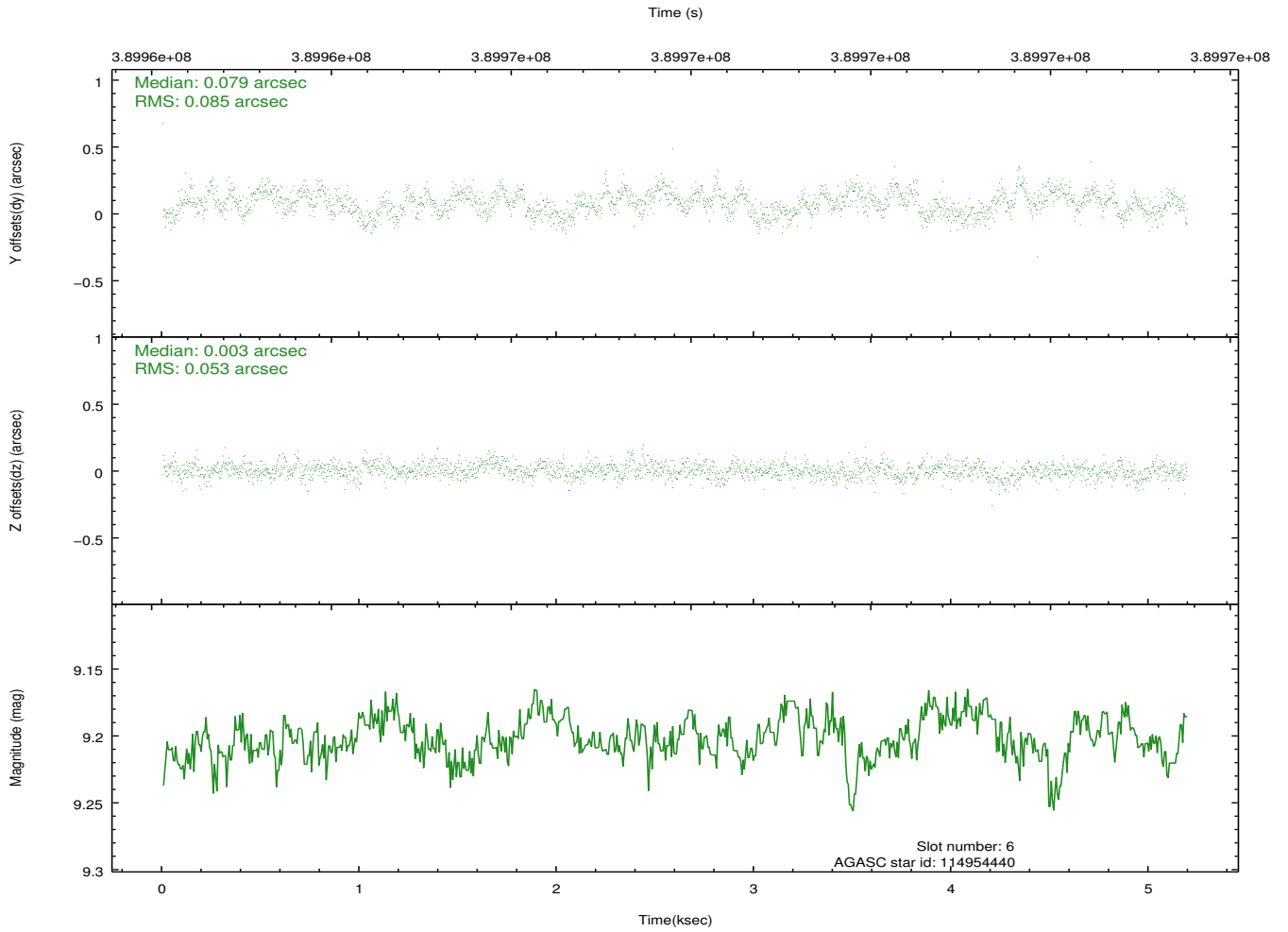
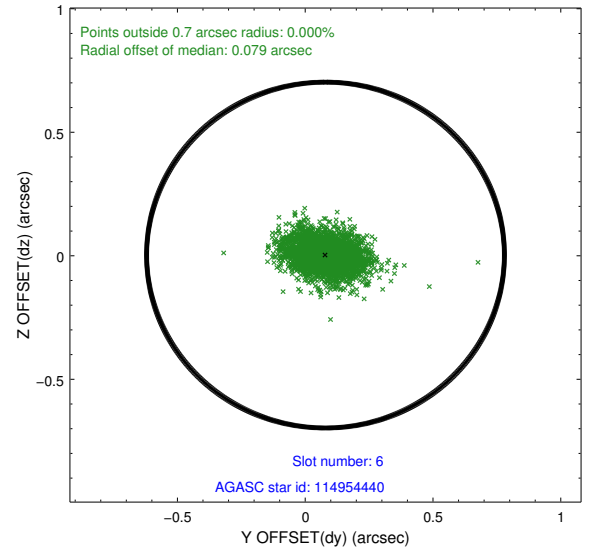
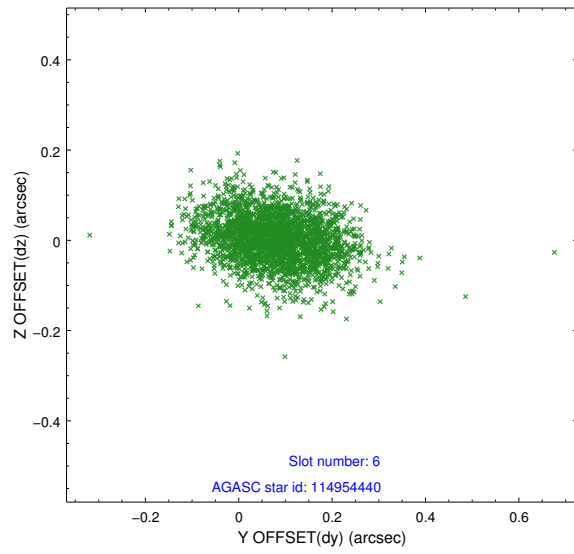
## 2.4.2 Slot 4



### 2.4.3 Slot 5

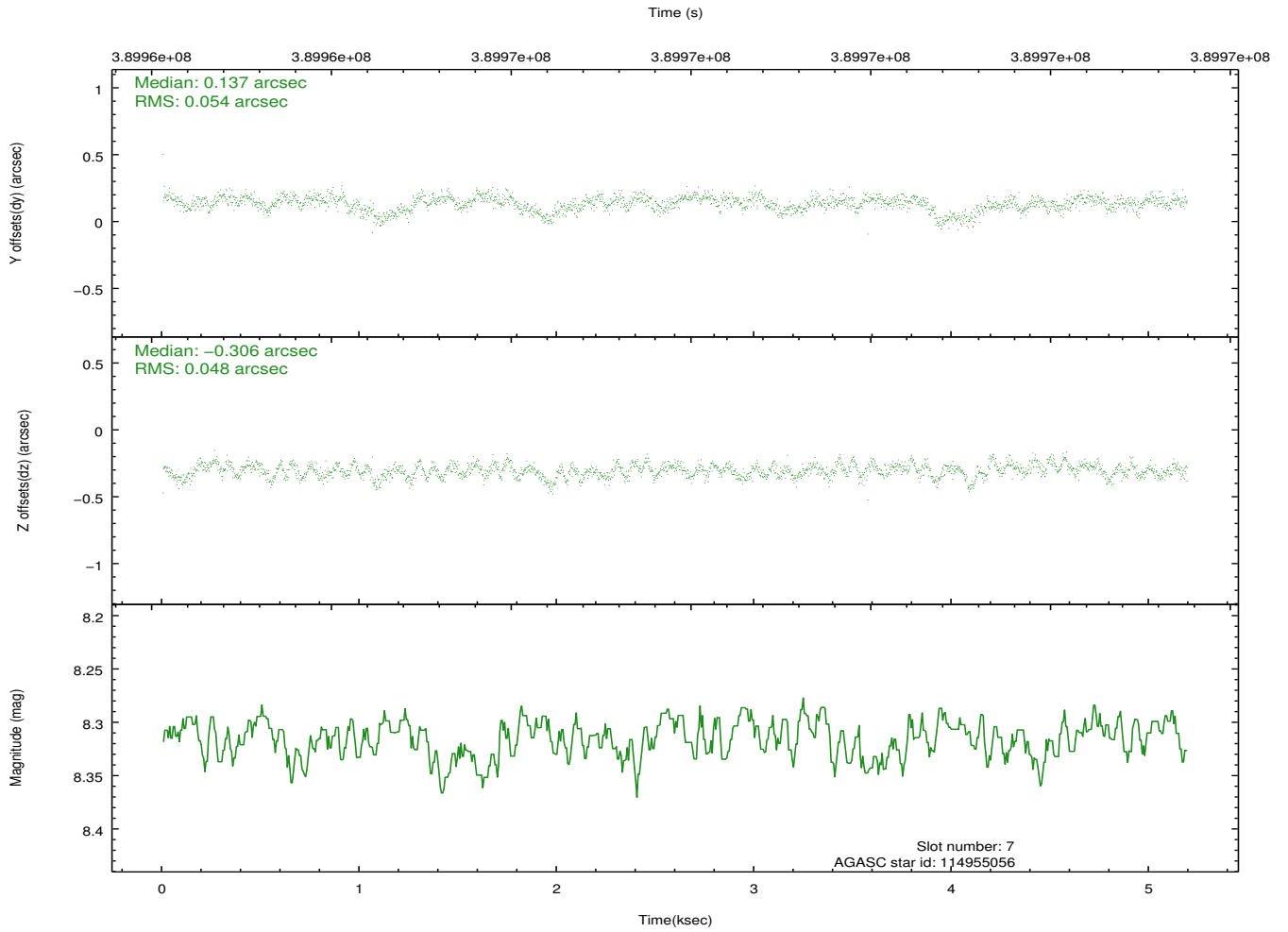
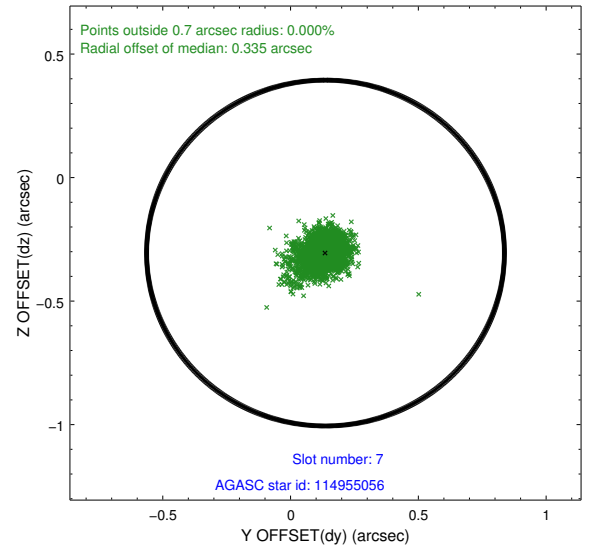
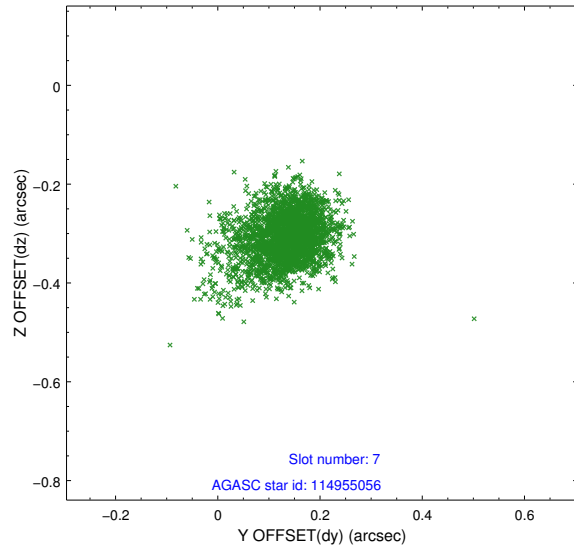


## 2.4.4 Slot 6



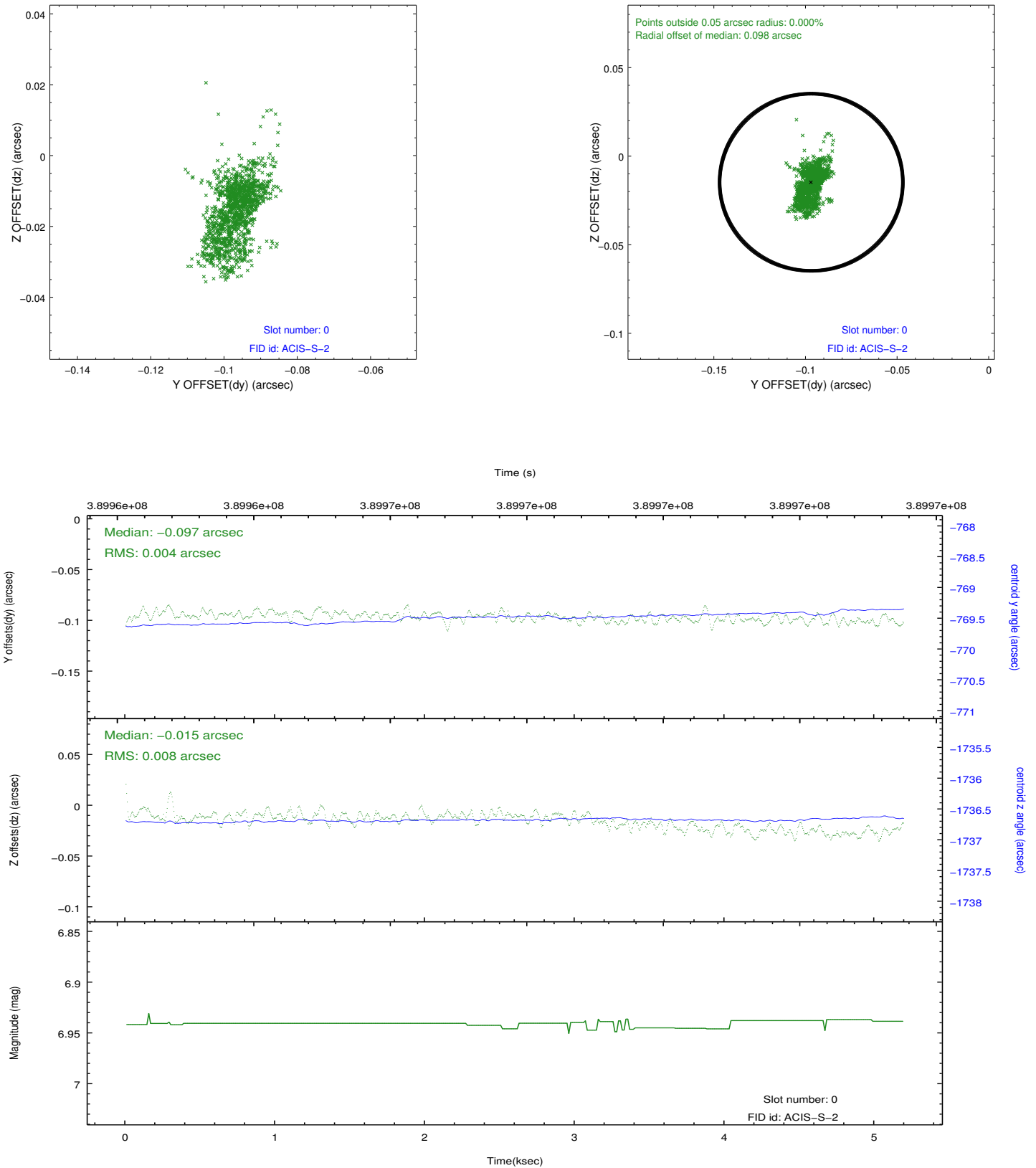


## 2.4.5 Slot 7

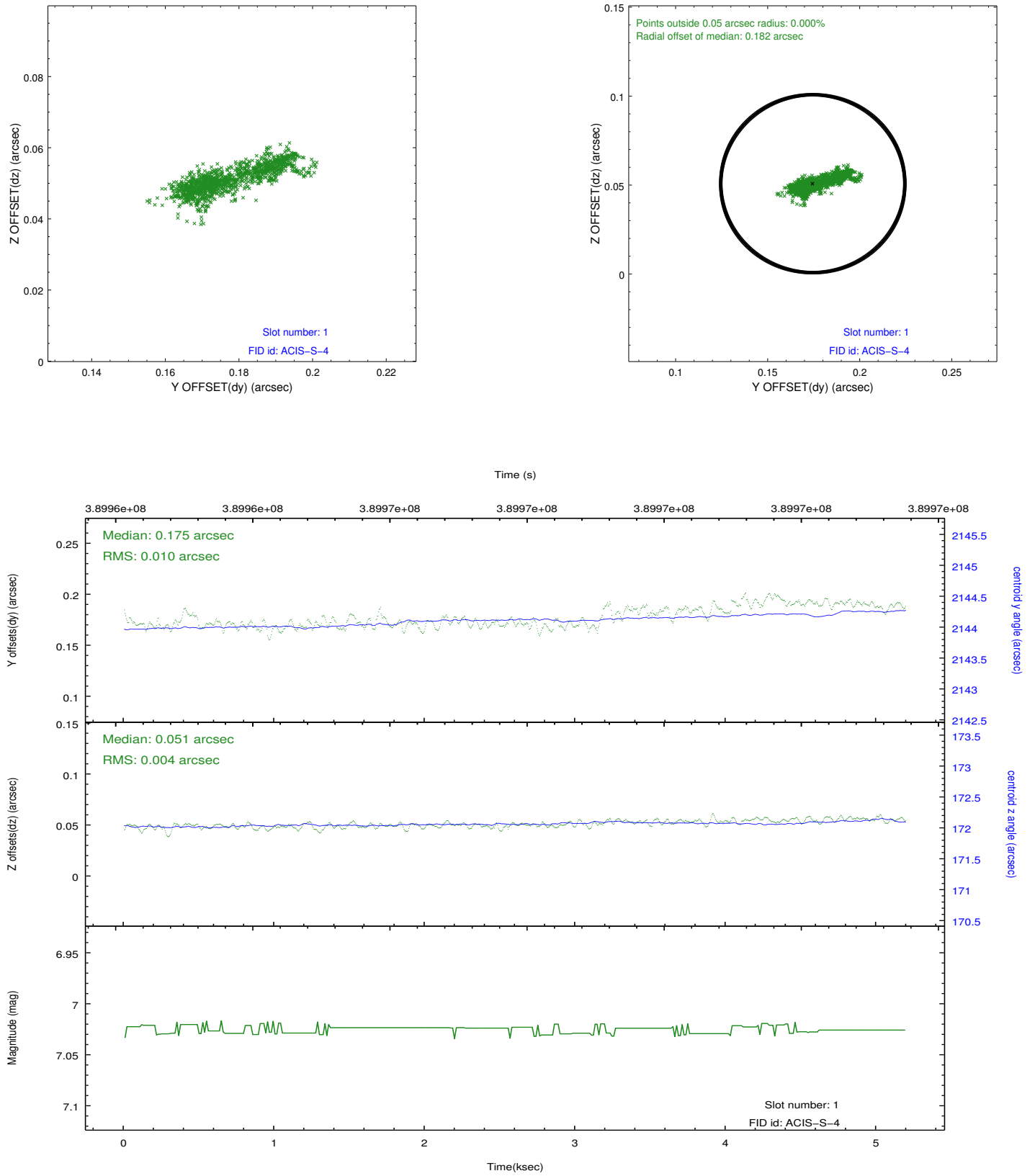


## 2.5 FID Slots

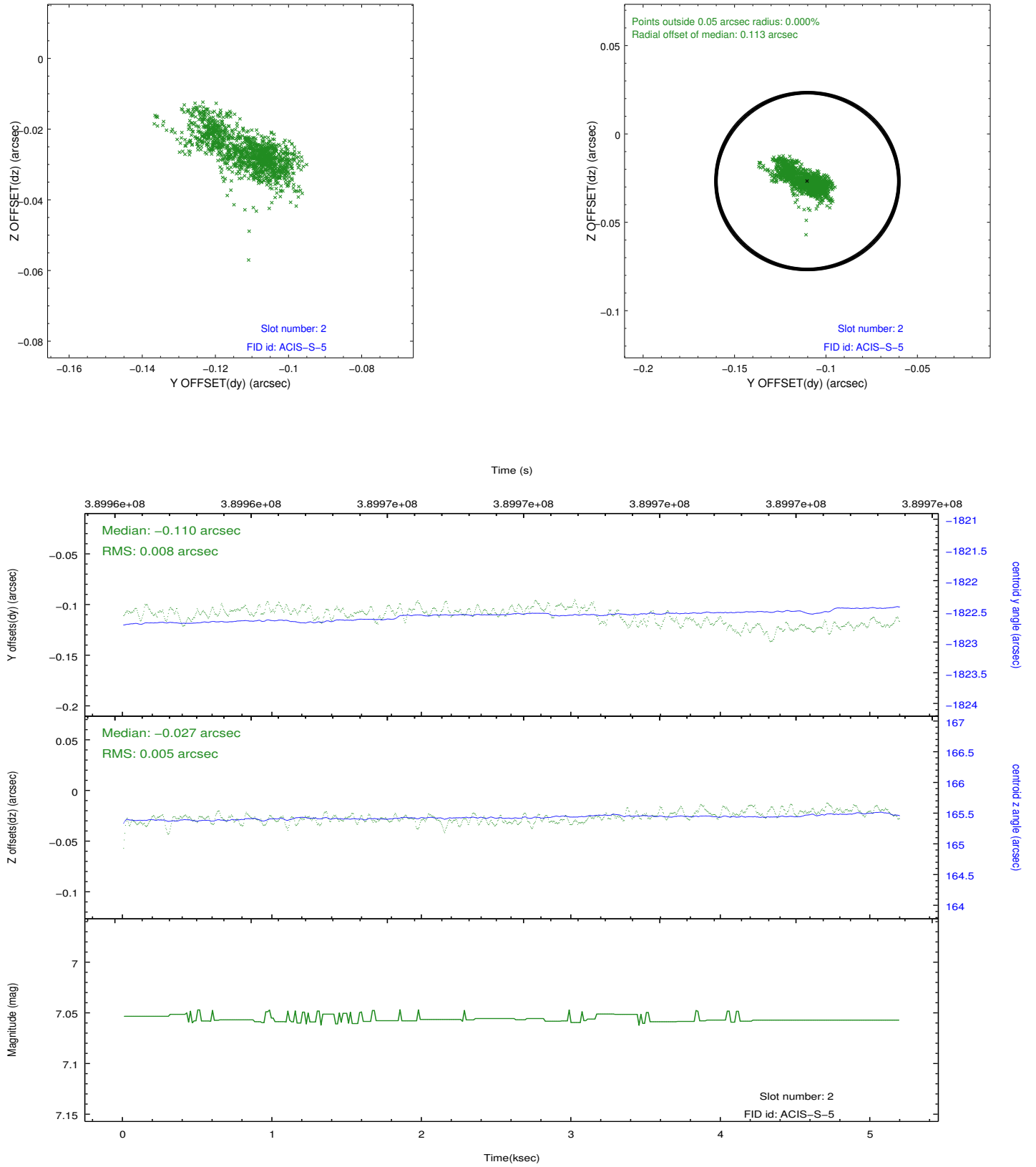
### 2.5.1 Slot 0



## 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)	2012.07.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.1891996906996

### **A.2 Comments**