

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 1551 - L2 Version 3  
Chandra X-Ray Center

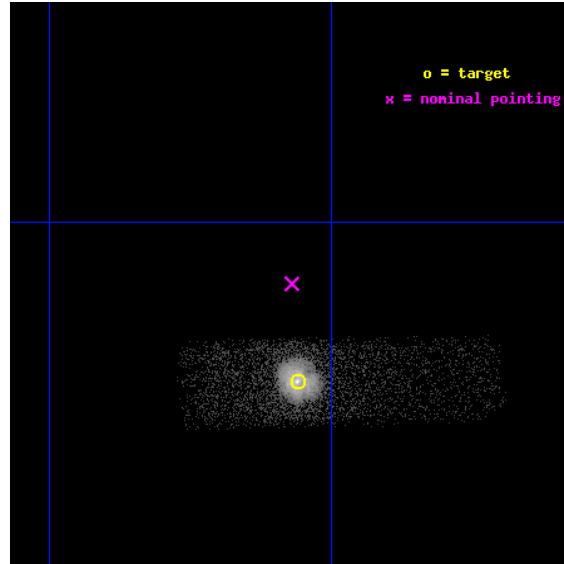
L2 Processing Date : Sep 11 2012

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# 1 Front

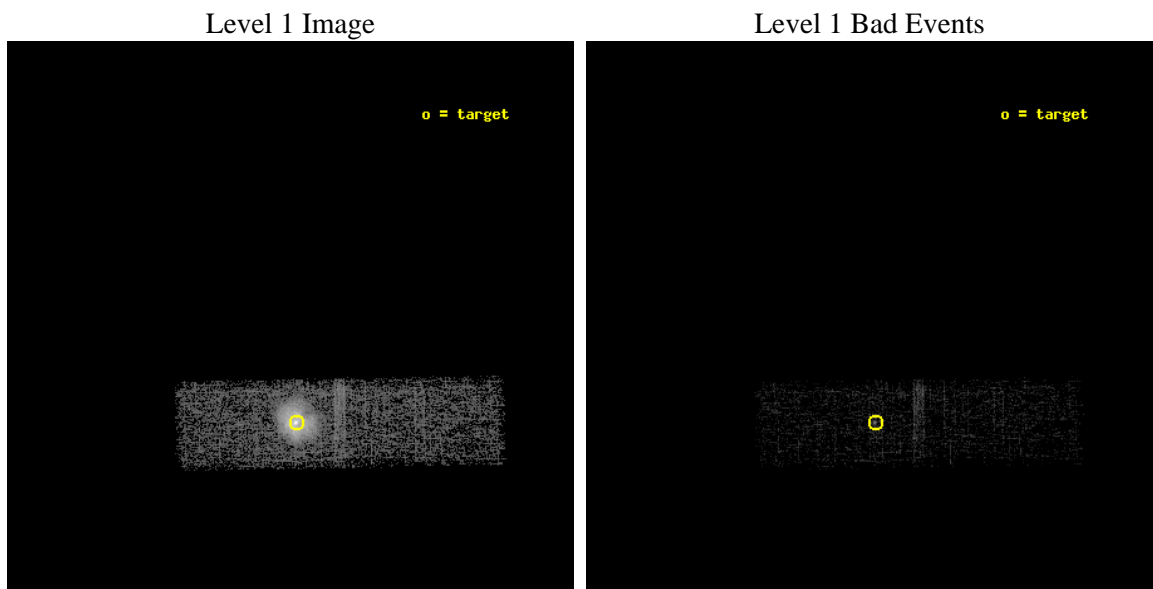
seq_num	590160	Sequence number
obs_id	1551	Observation id
title	CALIBRATION OBSERVATIONS OF THE STANDARD CANDLE G21.5-09	Proposal
observer	Dr. CXC Calibration	Principal investigator
object	G21.5-0.9 [Chip I3, T=120, Offsets=-2,0,2]	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	278.389583	Observer's specified target RA [deg]
dec_targ	-10.568528	Observer's specified target Dec [deg]
ra_nom	278.39235001812	Nominal RA [deg]
dec_nom	-10.526655527392	Nominal Dec [deg]
roll_nom	89.014132792312	Nominal Roll [deg]
revision	3	Processing version of data
ontime	9185.5589556843	Sum of GTIs [s]
livetime	8737.333735075	Livetime [s]
ontime3	9185.5589556843	Sum of GTIs [s]
l2events	25872	Number of level 2 events



## 2 OBI

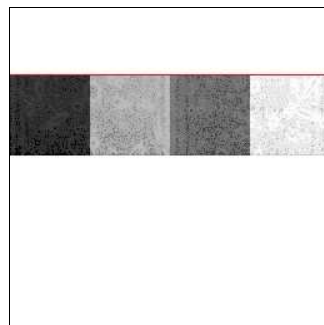
### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias

Chip 3



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	9000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	9185.5589556843	Sum of GTIs [s]
caldsver	4.5.1.1	&#160	ontime3	9185.5589556843	Sum of GTIs [s]
date	2012-09-11T23:54:22	Date and time of file creation	l1events	49473	Number of level 1 events
revision	3	Processing version of data			

### 2.1.4 Events

	<b>ccd 3</b>
level 1 events	49473
rejected events	21765
rejected %	43%

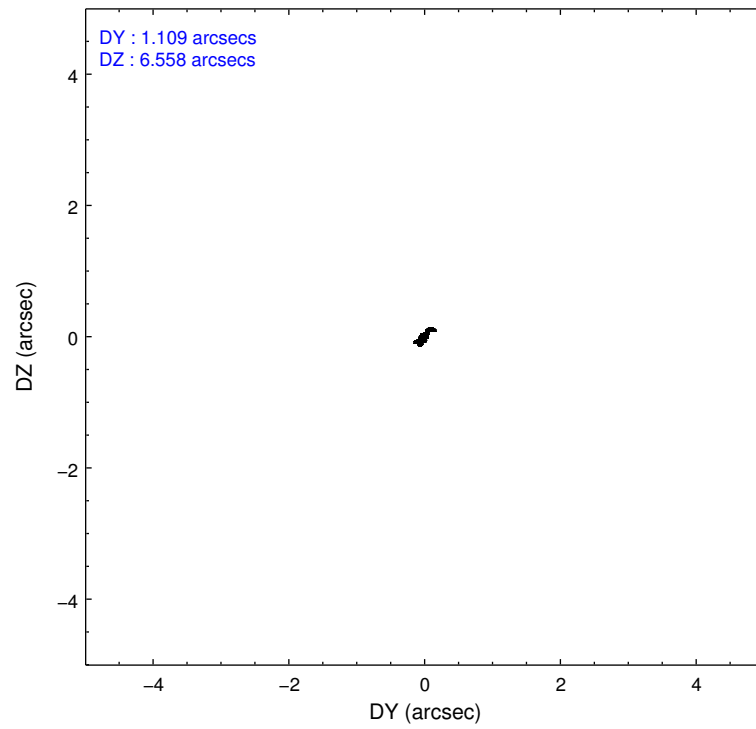
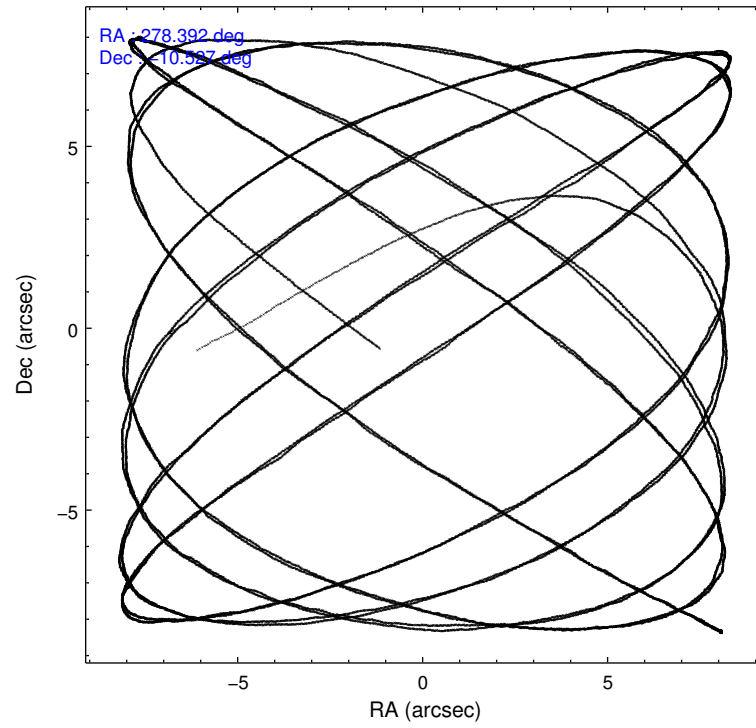
	<b>ccd 3</b>
grade 0 events	20084
	40%
grade 1 events	79
	0%
grade 2 events	3710
	7%
grade 3 events	1460
	2%
grade 4 events	1420
	2%
grade 5 events	759
	1%
grade 6 events	1576
	3%
grade 7 events	20385
	41%

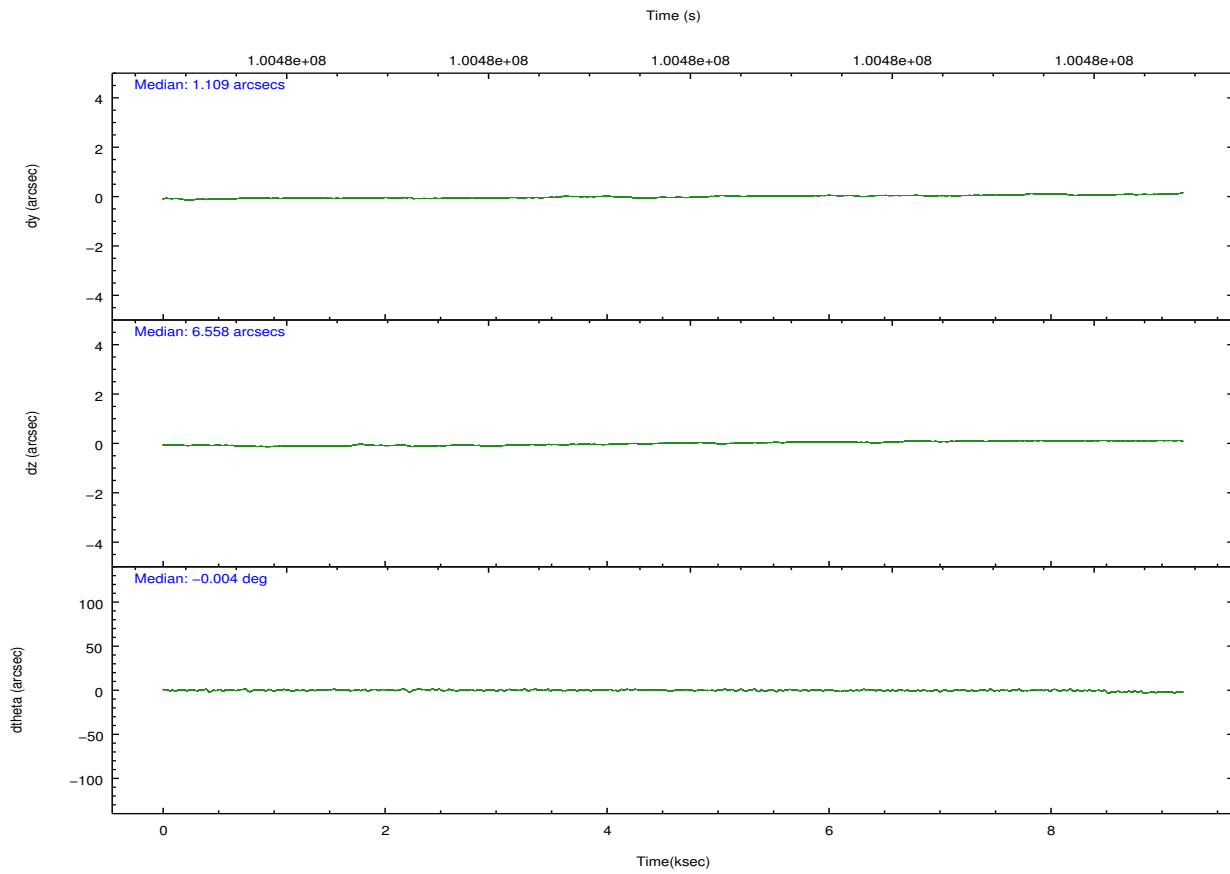
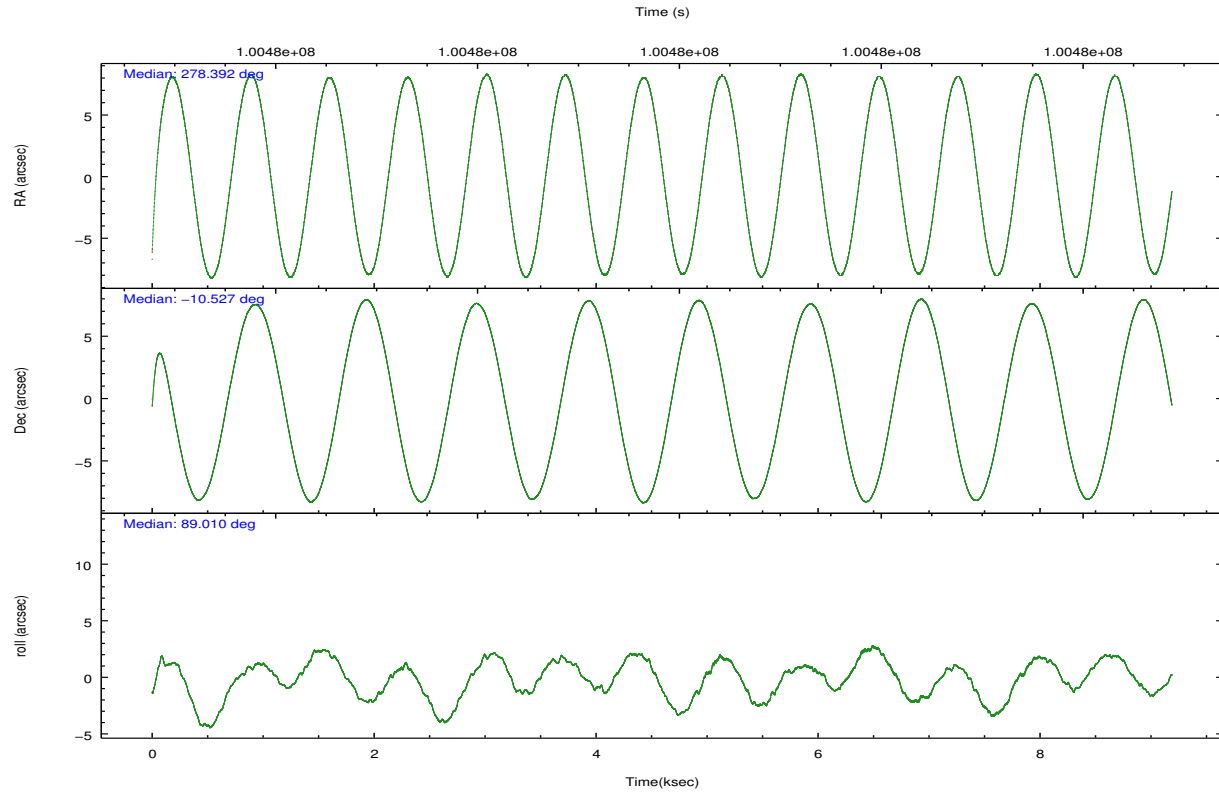


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-3	ACIS-3	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	278.405902	278.3923500181181	Subarray requested	CUSTOM	1/4
[deg] Pointing Dec	-10.550694	-10.52665552739169	Subarray start row	555	555
[deg] Pointing Roll	88.807936	89.01413279231198	Subarray row count	256	256
[s] Window start time (MET)	98582464.184000	98582464.184000	Alternating exposures requested	N	N
[s] Window stop time (MET)	101001664.184000	101001664.184000	[s] Primary exposure time	0.000000	0.8
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-226.272463	-226.265748302686			
[mm] SIM translation stage offset	-7.32	-7.32670470024371			
[s] Observation start time (MET)	100475421.184000	100474285.74878			
Observation start date	2001-03-08T21:49:17	2001-03-08T21:31:25			
[s] Observation end time (MET)	100484421.184000	100484626.46168			
Observation end date	2001-03-09T00:19:17	2001-03-09T00:23:46			
Read mode	TIMED	TIMED			

## 2.3 Aspect



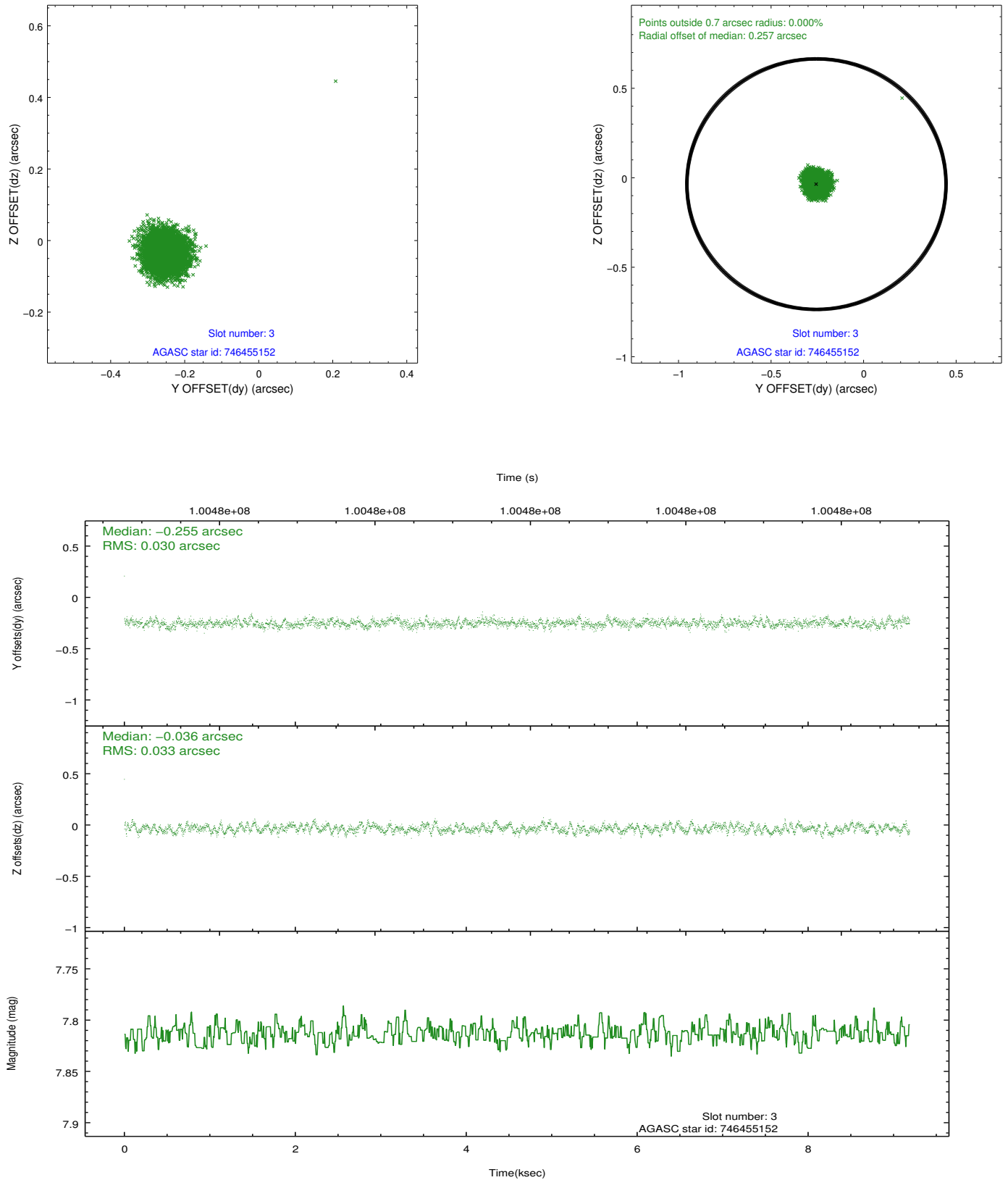


### Slot Statistics

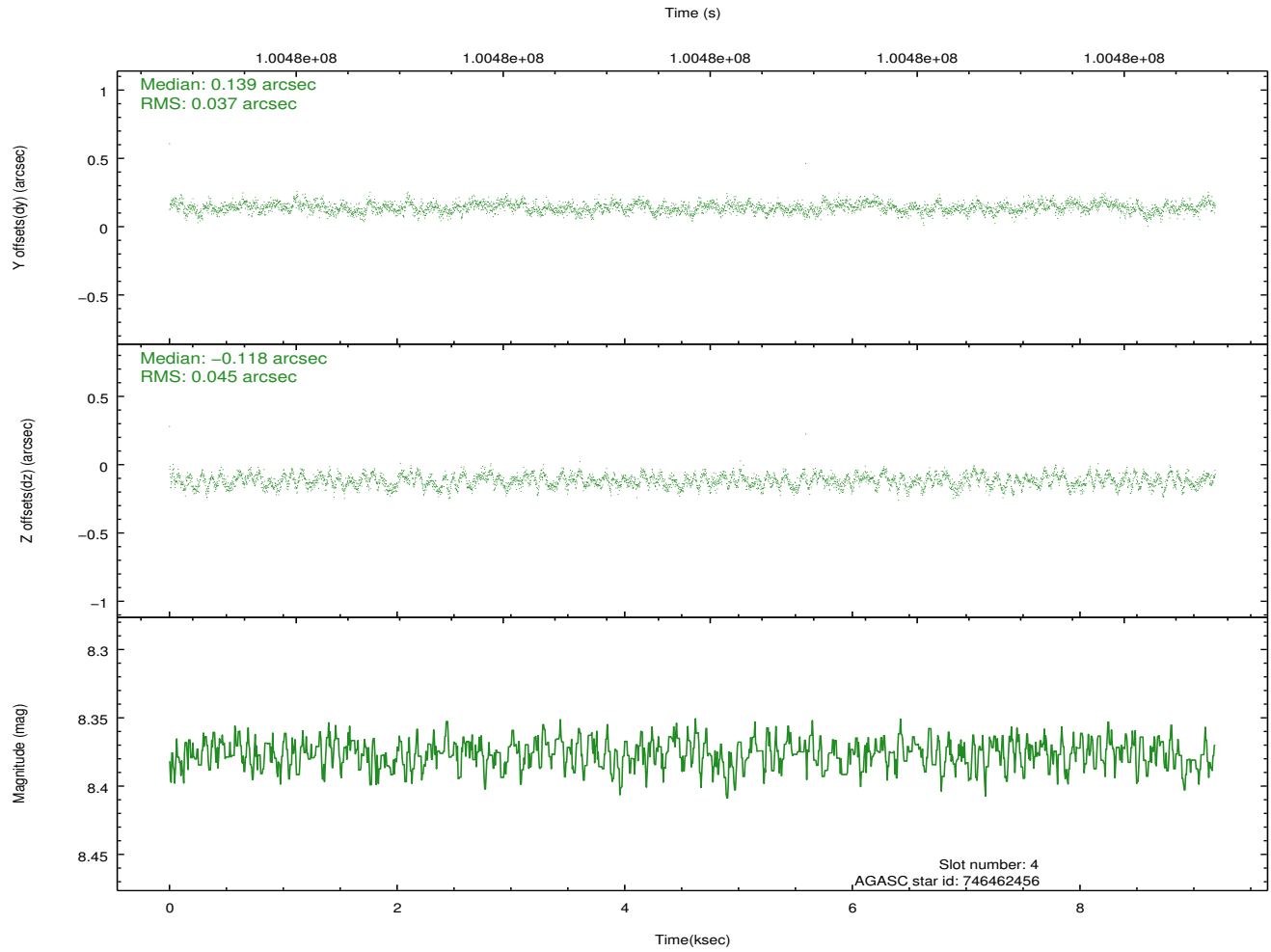
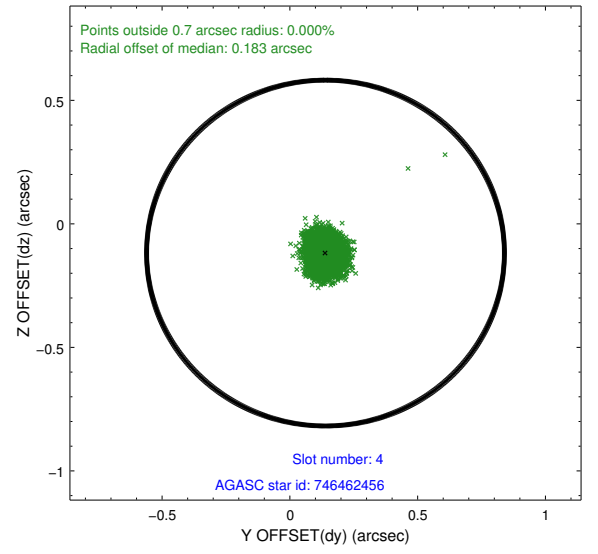
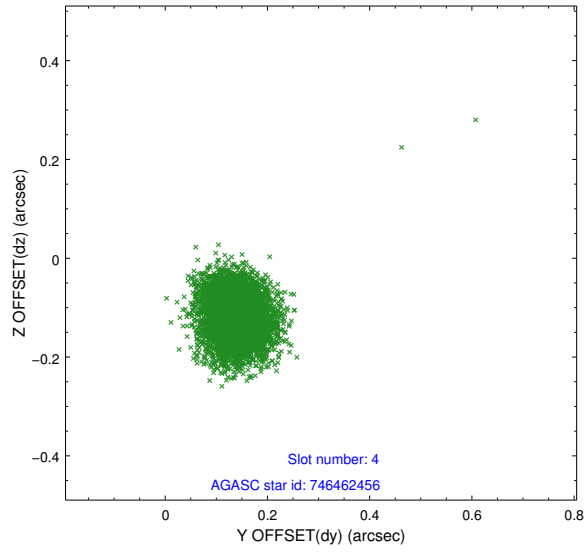
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-3	7.42	2242	0.011	0.127	0.008	0.014	0.000000	0.000000	56.07	-1113.44
1	FID	ACIS-I-4	7.15	2240	-0.054	-0.049	0.008	0.014	0.000000	0.000000	2158.09	919.99
2	FID	ACIS-I-5	7.22	2240	-0.056	-0.009	0.009	0.018	0.000000	0.000000	-1808.71	917.56
3	GUIDE	746455152	7.81	4479	-0.255	-0.036	0.048	0.074	278.447893	-9.976732	2068.42	-106.17
4	GUIDE	746462456	8.38	4482	0.139	-0.118	0.062	0.096	278.652171	-10.530173	91.91	-870.50
5	GUIDE	746462392	8.53	4481	0.130	0.127	0.083	0.137	279.038421	-10.890715	-1179.79	-2261.84
6	GUIDE	746455112	8.93	4479	0.095	0.003	0.079	0.126	278.266531	-10.703234	-559.80	480.46
7	GUIDE	746460272	8.93	4481	-0.110	0.033	0.070	0.114	278.847488	-10.152127	1465.65	-1534.85

## 2.4 Star Slots

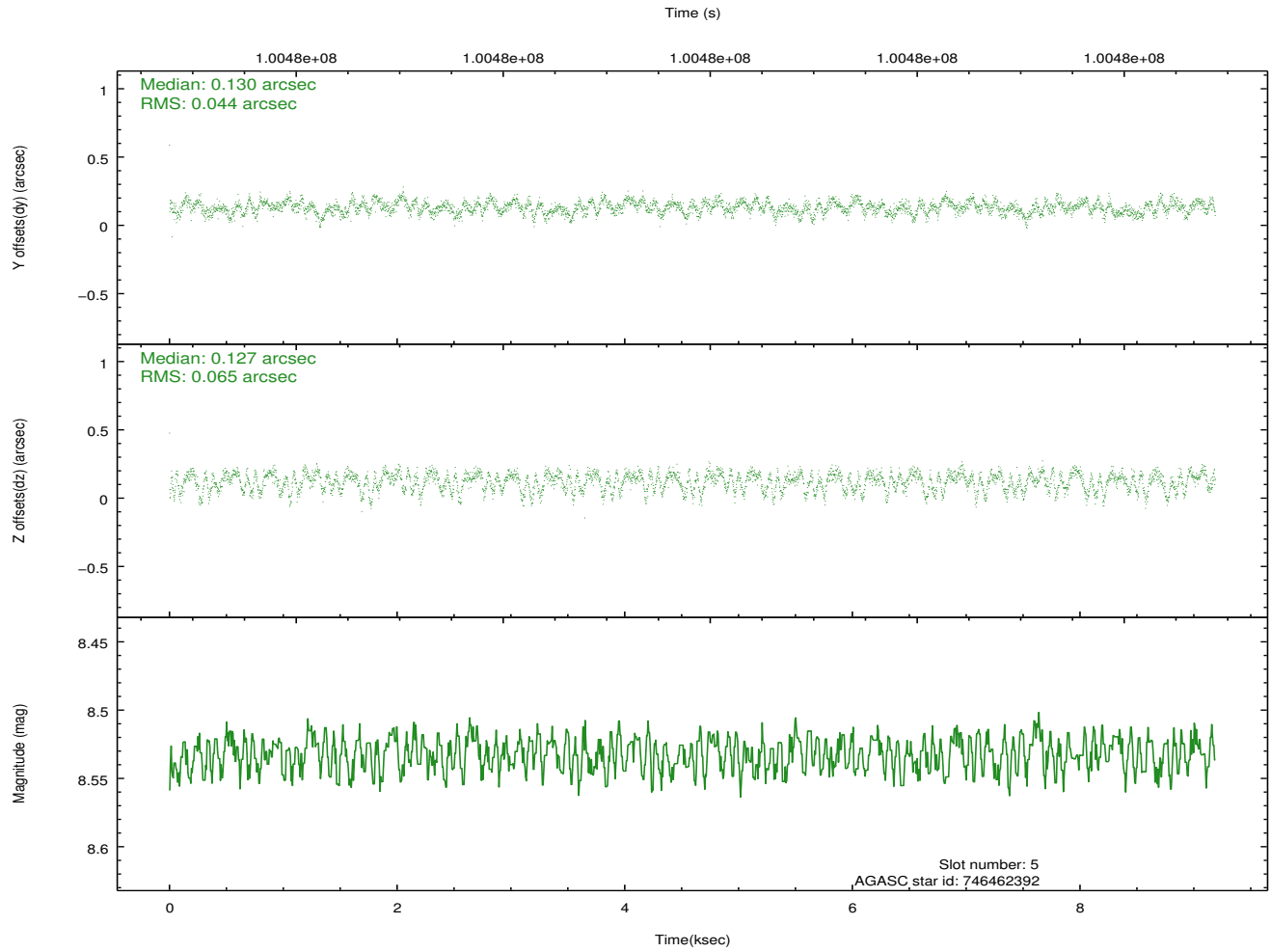
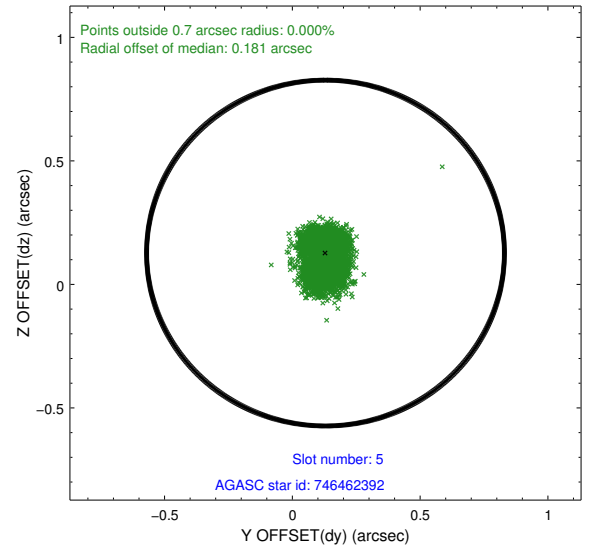
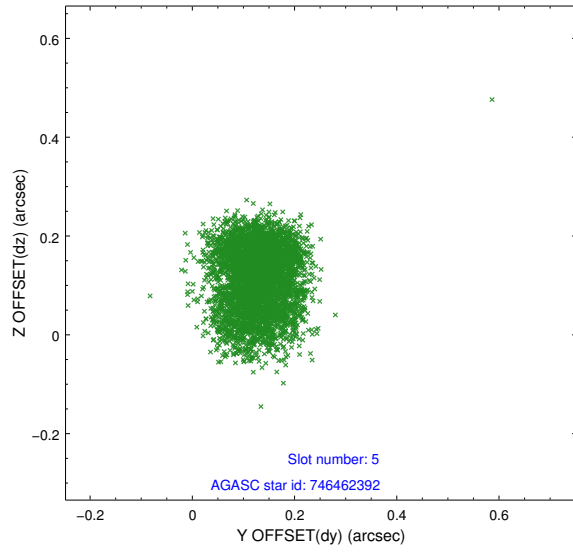
### 2.4.1 Slot 3



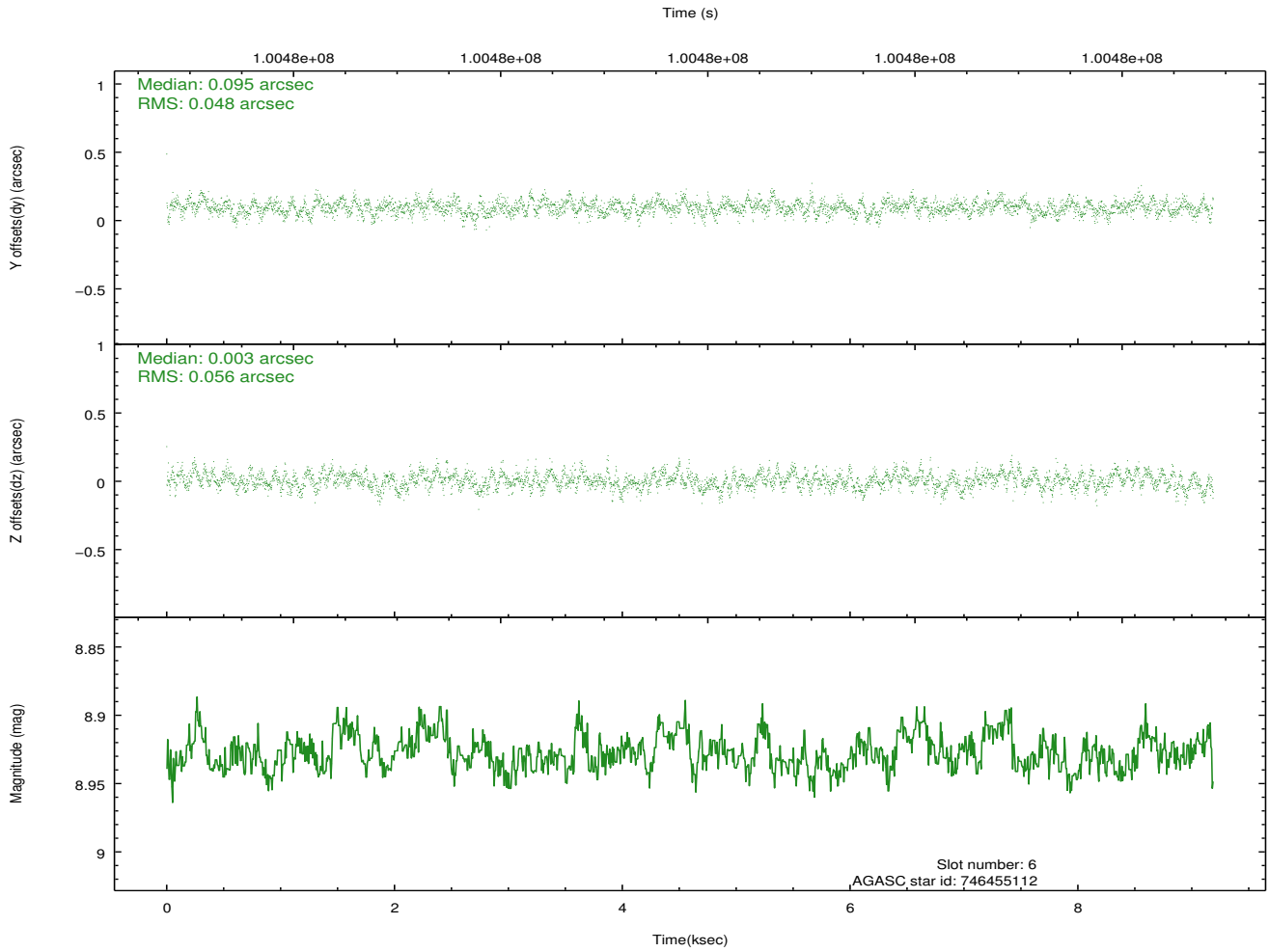
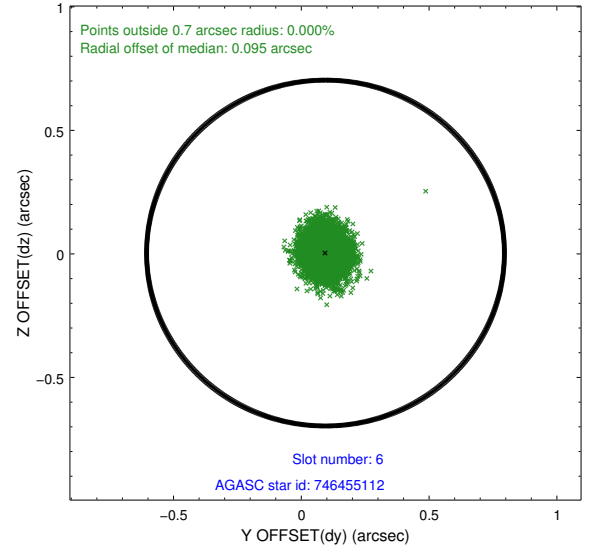
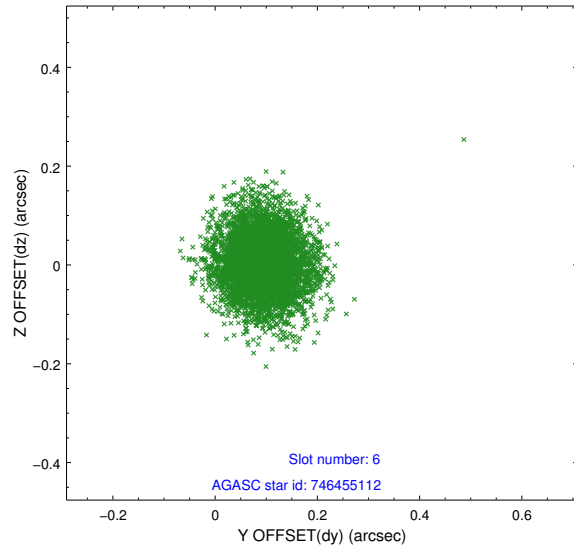
## 2.4.2 Slot 4



### 2.4.3 Slot 5

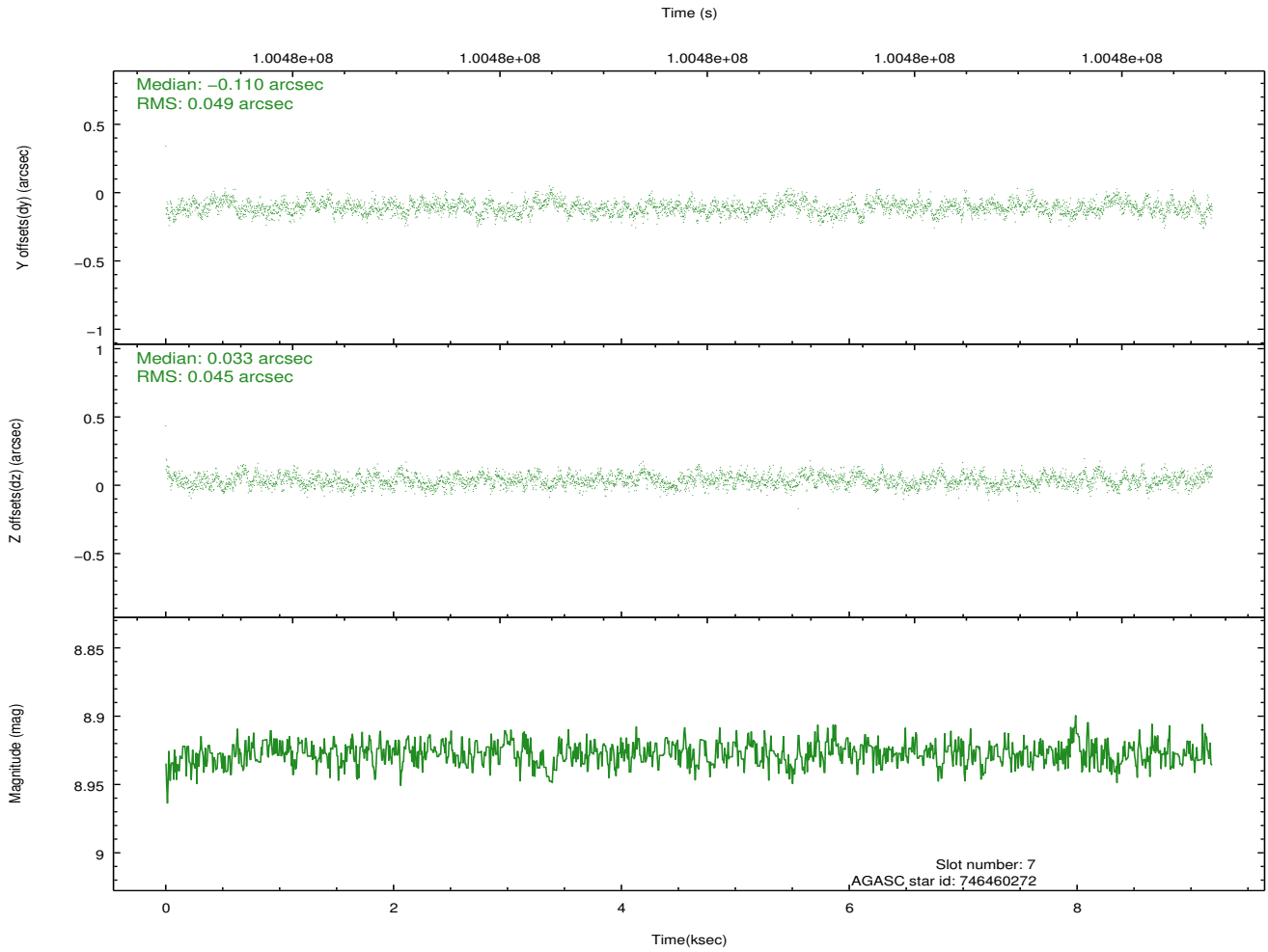
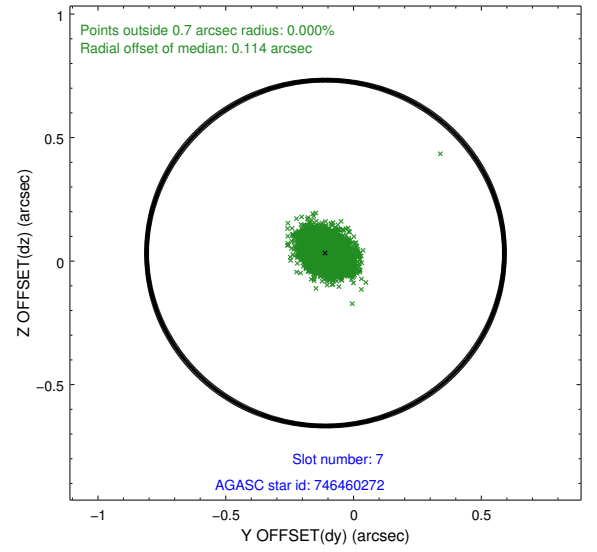
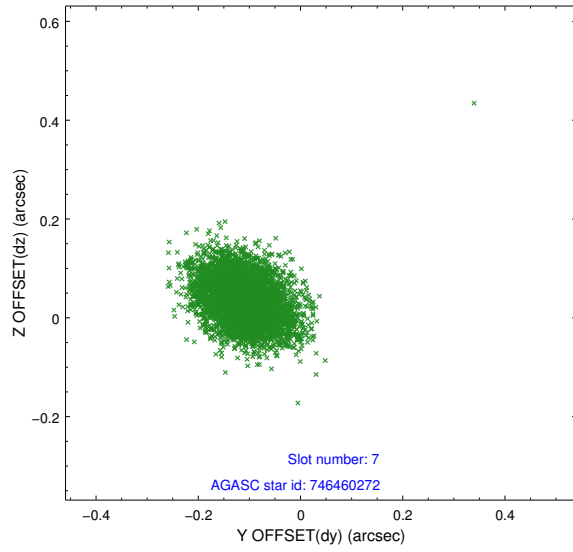


## 2.4.4 Slot 6



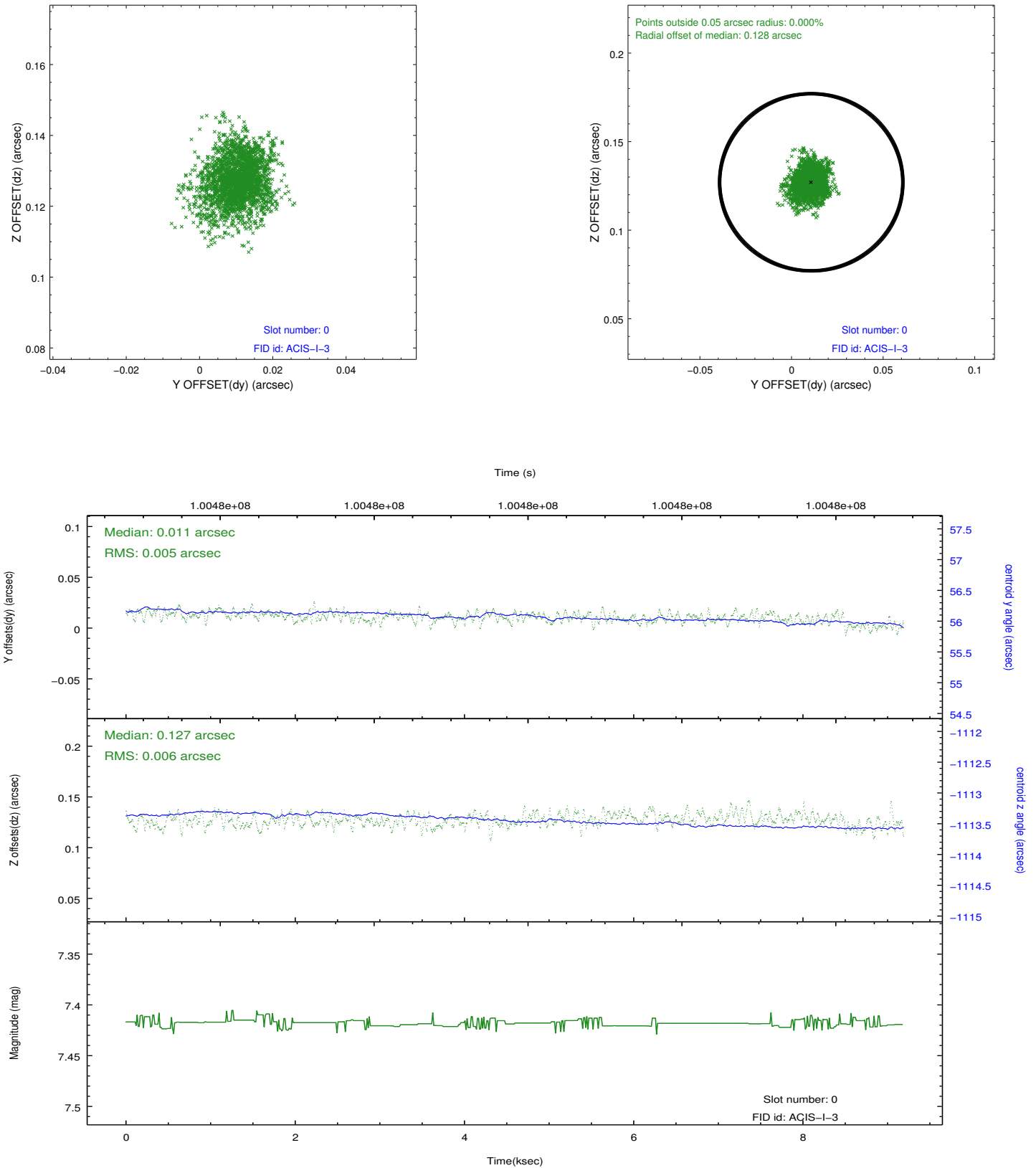


## 2.4.5 Slot 7

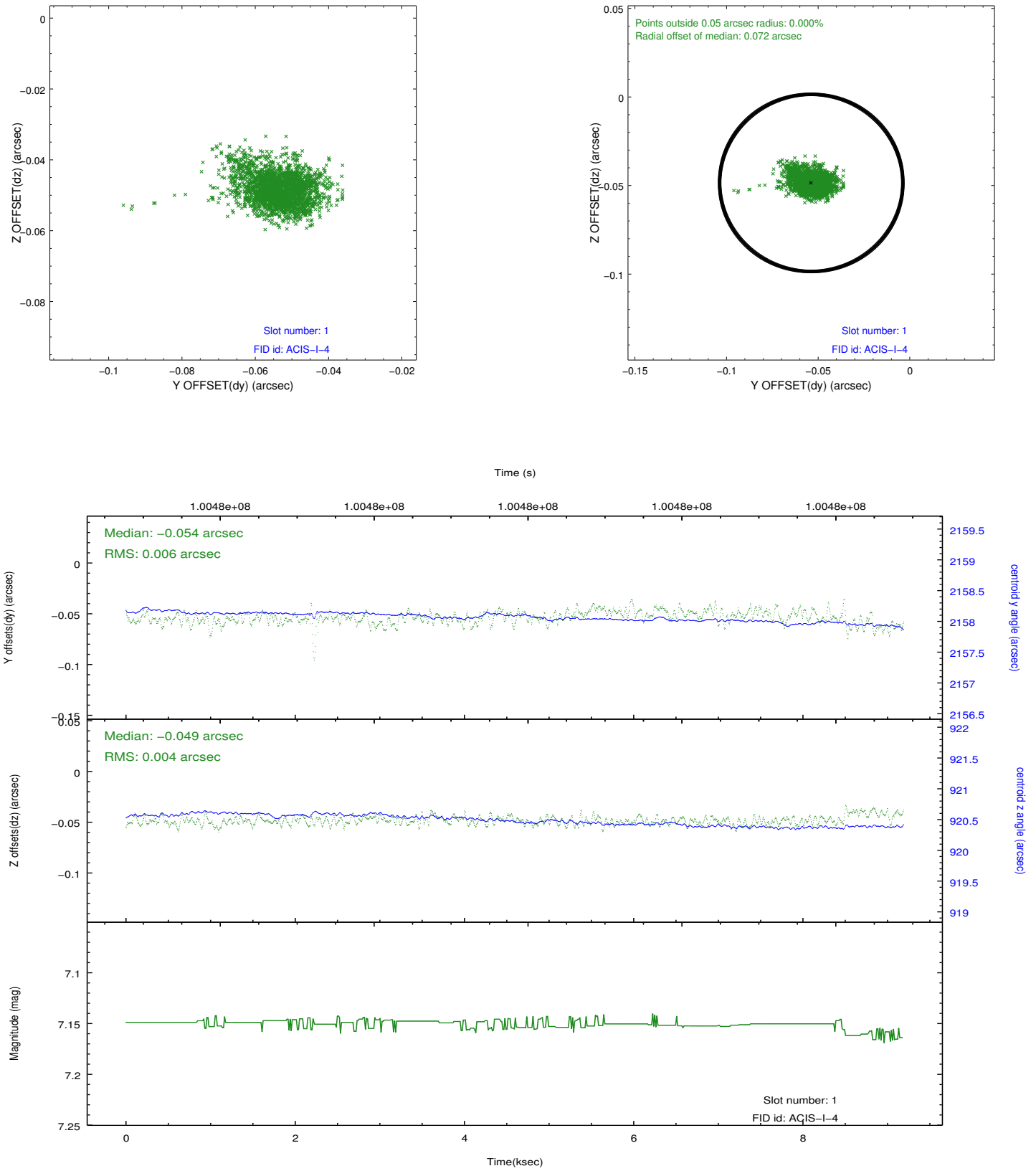


## 2.5 FID Slots

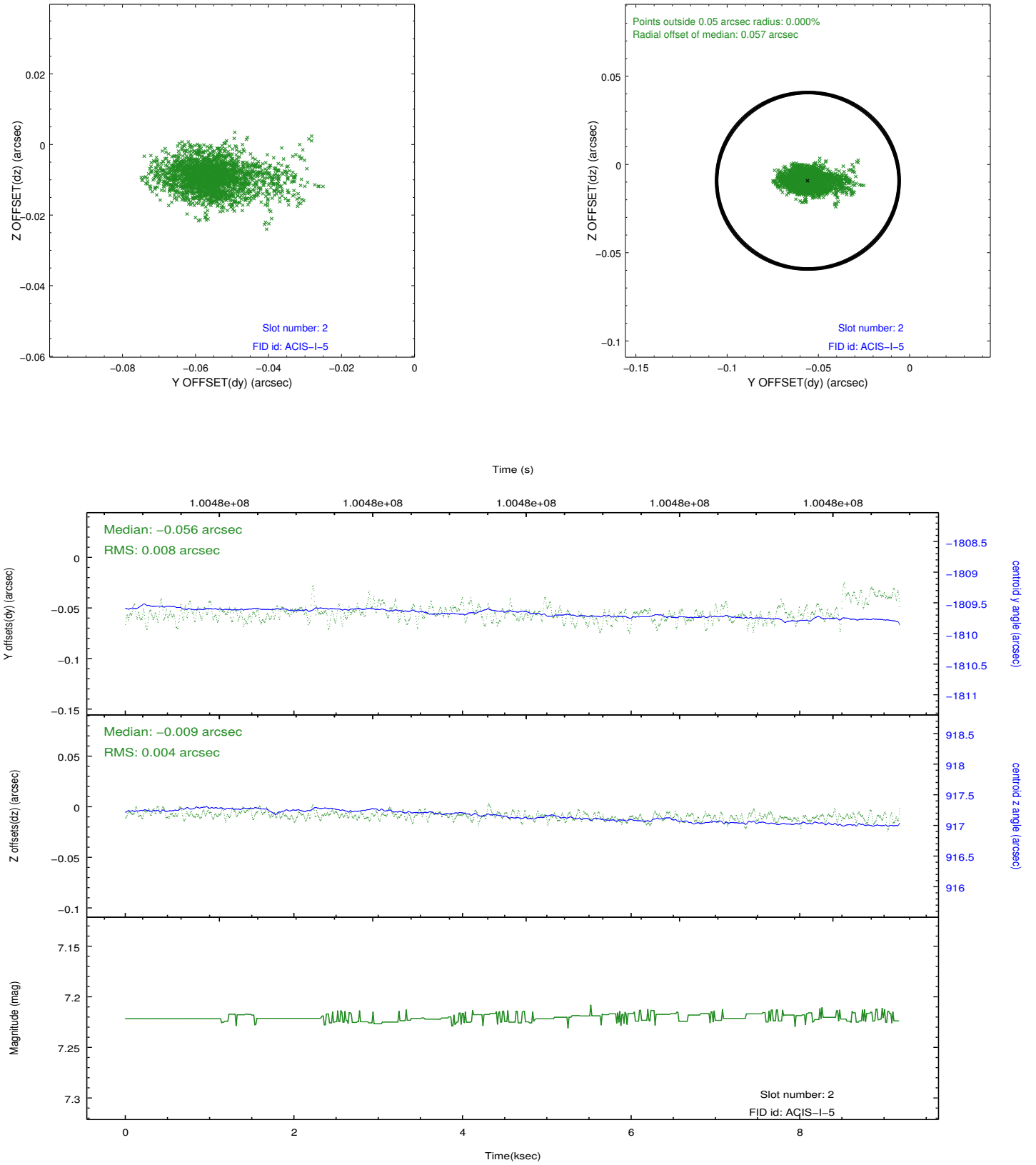
### 2.5.1 Slot 0



## 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)	2012.09.17
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.185

### A.2 Comments

Window constraint met. Aim point off of the chip.