

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 773 - L2 Version 5  
Chandra X-Ray Center

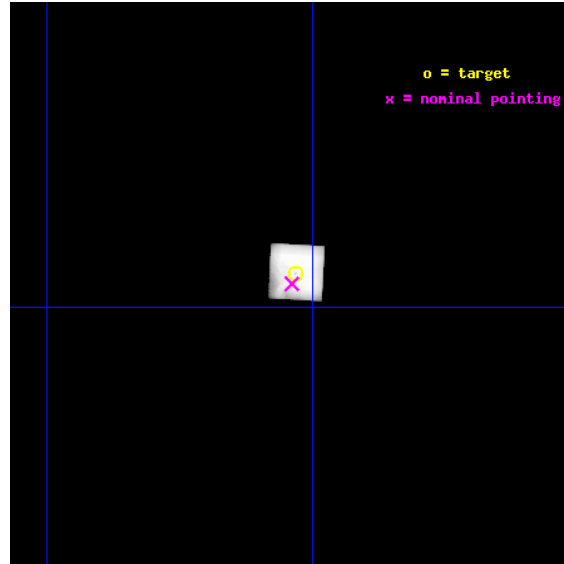
L2 Processing Date : Aug 23 2012

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# 1 Front

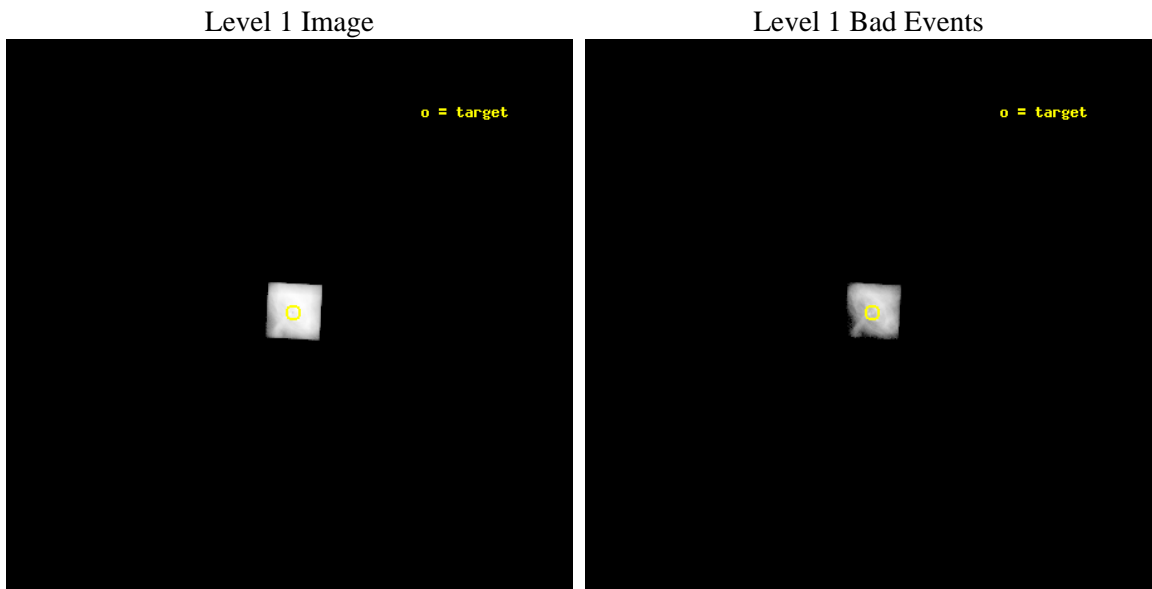
seq_num	500069	Sequence number
obs_id	773	Observation id
title	ACIS/HST OBSERVATIONS OF RELATIVISTIC WISPS IN THE CRAB NEBULA	Pro
observer	PROF. JEFF HESTER	Principal investigator
object	CRAB NEBULA	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	83.632917	Observer's specified target RA [deg]
dec_targ	22.014472	Observer's specified target Dec [deg]
ra_nom	83.634871368448	Nominal RA [deg]
dec_nom	22.010038184167	Nominal Dec [deg]
roll_nom	273.10418119239	Nominal Roll [deg]
revision	5	Processing version of data
ontime	1566.1692698002	Sum of GTIs [s]
livetime	1447.3692054194	Livetime [s]
ontime7	1566.1692698002	Sum of GTIs [s]
l2events	1729967	Number of level 2 events



## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



### 2.1.2 Parameters

obi_num	0	Obi number	sched_exp_time	6000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	1566.1692698002	Sum of GTIs [s]
caldsver	4.5.1.1	&#160	ontime7	1566.1692698002	Sum of GTIs [s]
date	2012-08-23T14:09:36	Date and time of file creation	l1events	2459543	Number of level 1 events
revision	5	Processing version of data			

### 2.1.3 Events

	<b>ccd 7</b>
level 1 events	2459543
rejected events	704175
rejected %	28%

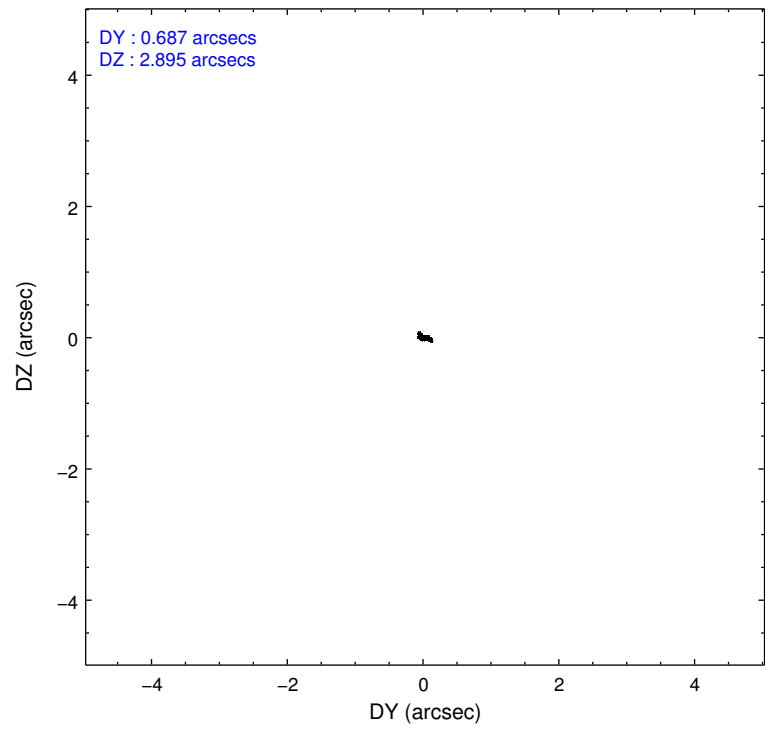
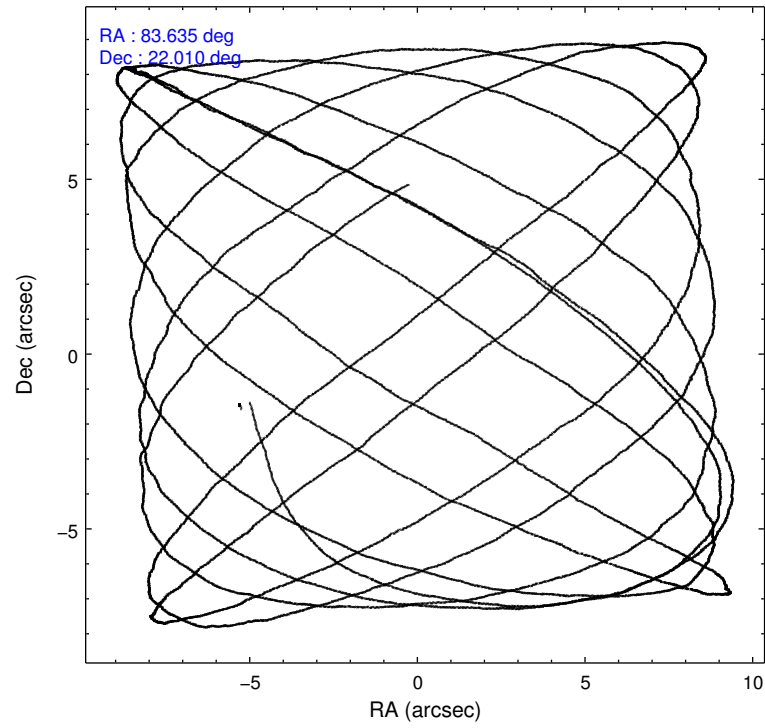
	<b>ccd 7</b>
grade 0 events	299461
	12%
grade 1 events	66911
	2%
grade 2 events	443826
	18%
grade 3 events	194192
	7%
grade 4 events	192039
	7%
grade 5 events	196840
	8%
grade 6 events	626471
	25%
grade 7 events	439803
	17%

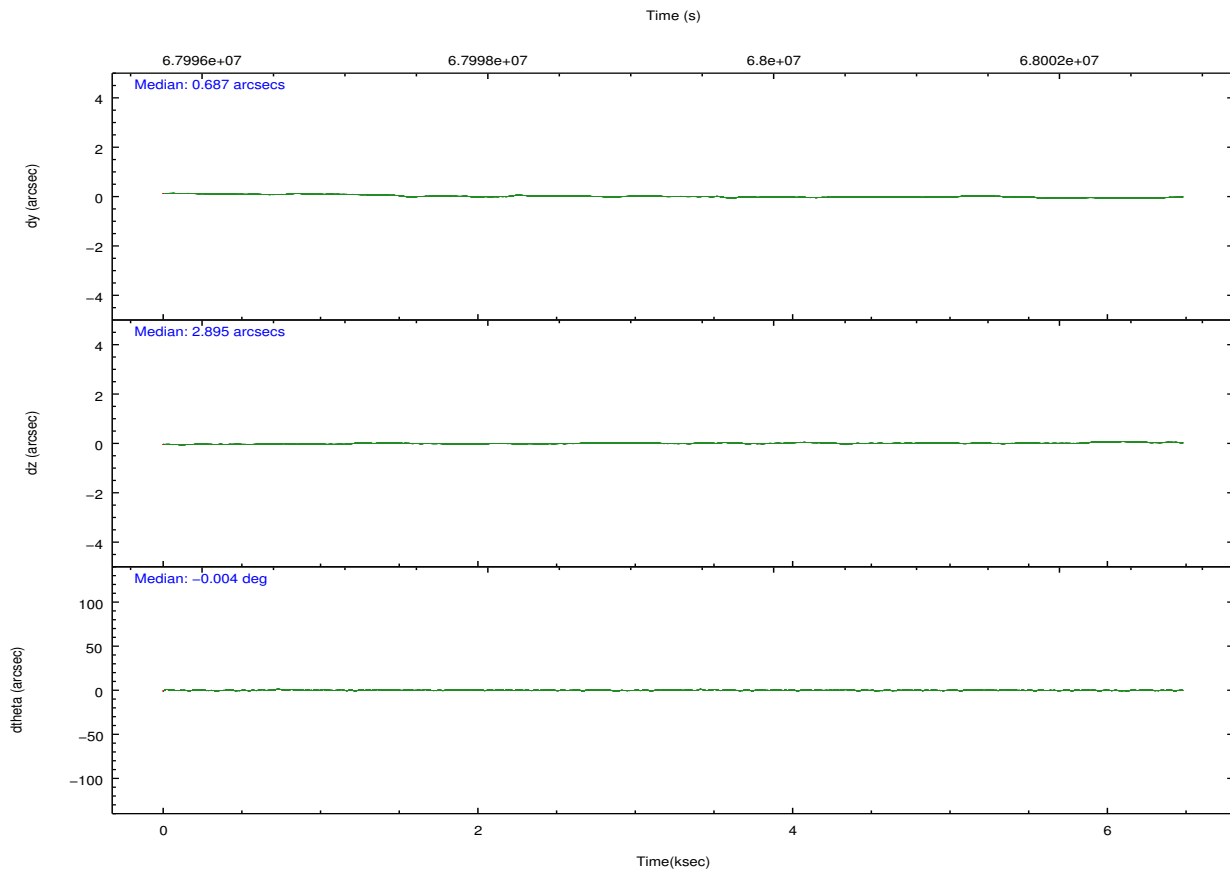
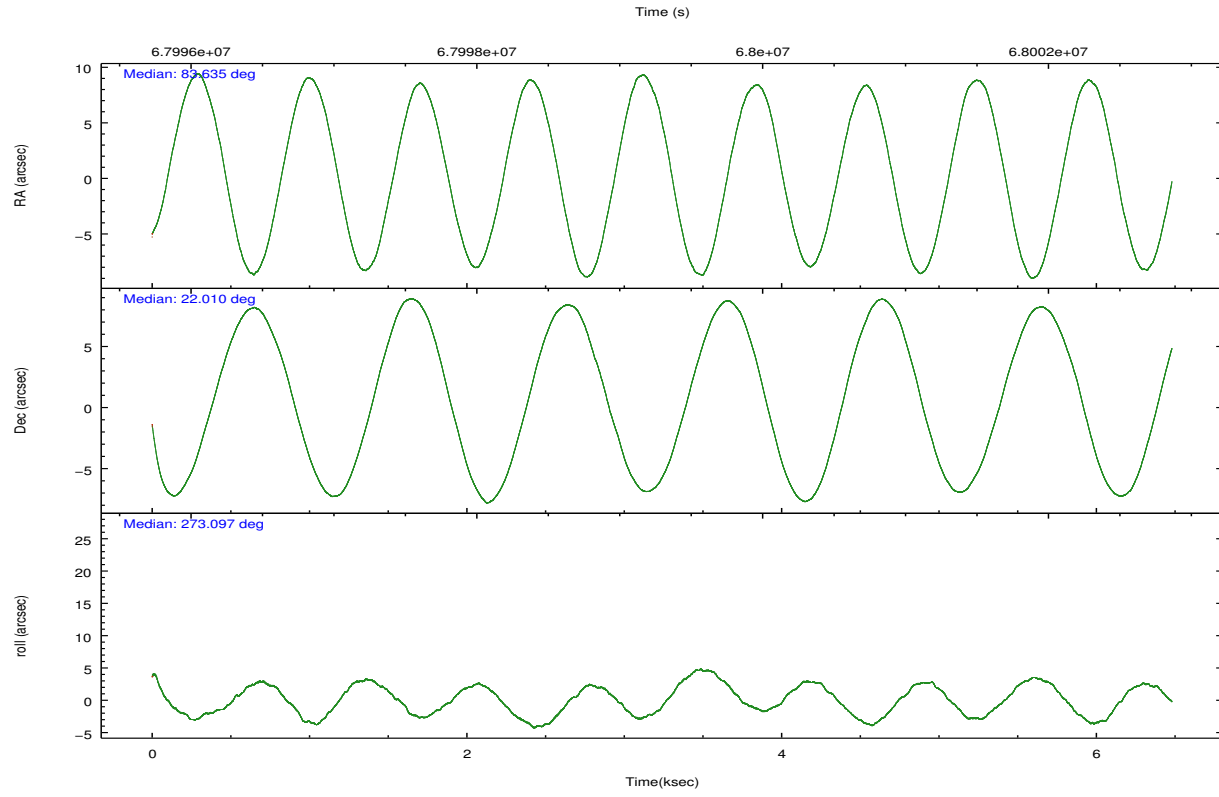


## 2.2 Compared Parameters

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	GRADED	GRADED	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	83.618666	83.63487136844762	Subarray requested	CUSTOM	CUSTOM
[deg] Pointing Dec	22.033146	22.0100381841668	Subarray start row	11	11
[deg] Pointing Roll	272.953624	273.1041811923897	Subarray row count	140	140
[s] Window start time (MET)	67867264.184000	67867264.184000	Alternating exposures requested	N	N
[s] Window stop time (MET)	68004064.184000	68004064.184000	[s] Primary exposure time	0.000000	0.5
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-179.132523	-179.1424509208485			
[mm] SIM translation stage offset	-11	-10.99007166215935			
[s] Observation start time (MET)	67996537.184000	67995290.95591			
Observation start date	2000-02-26T23:54:33	2000-02-26T23:34:50			
[s] Observation end time (MET)	68002537.184000	68003426.89370701			
Observation end date	2000-02-27T01:34:33	2000-02-27T01:50:26			
Read mode	TIMED	TIMED			

## 2.3 Aspect



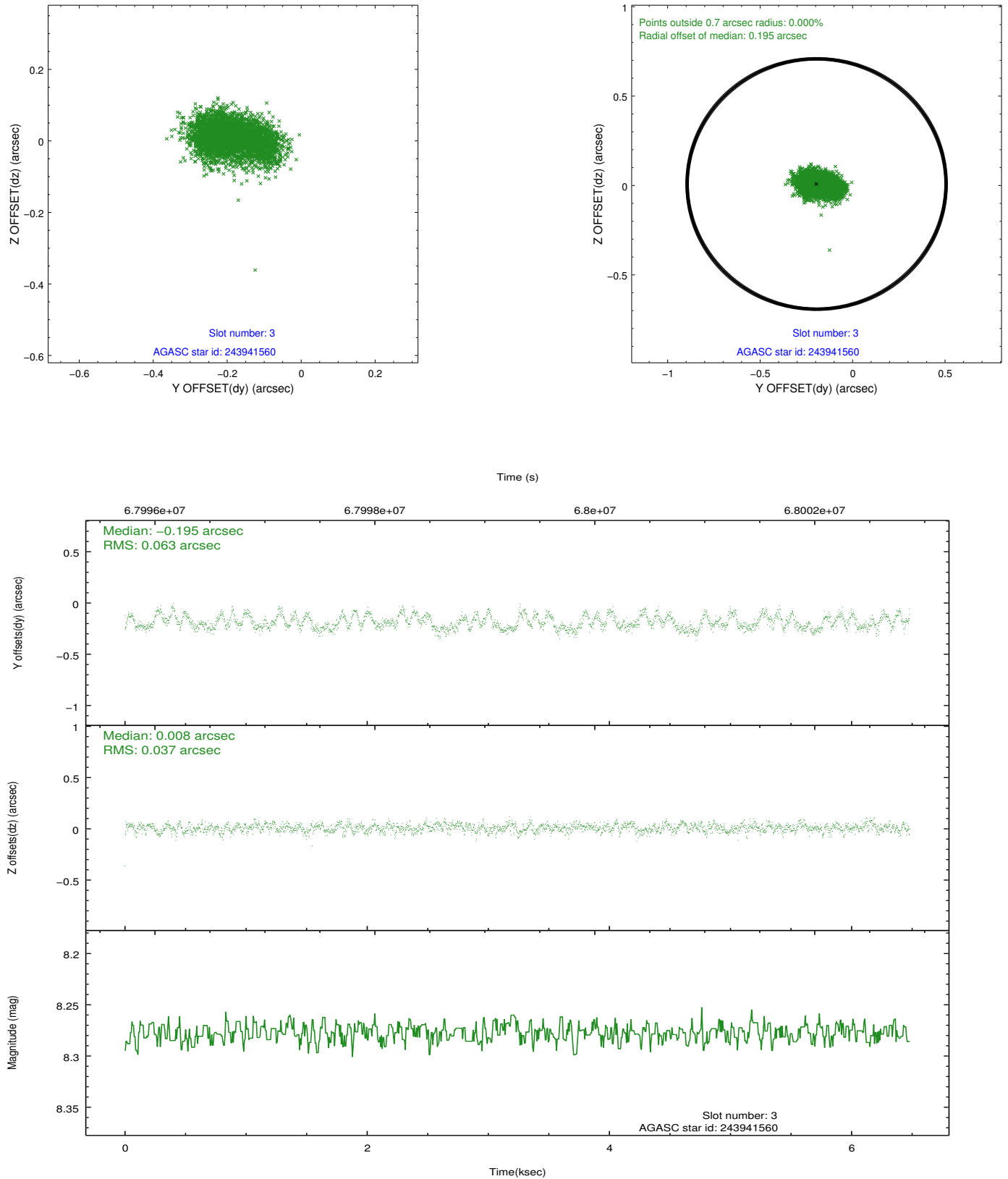


### Slot Statistics

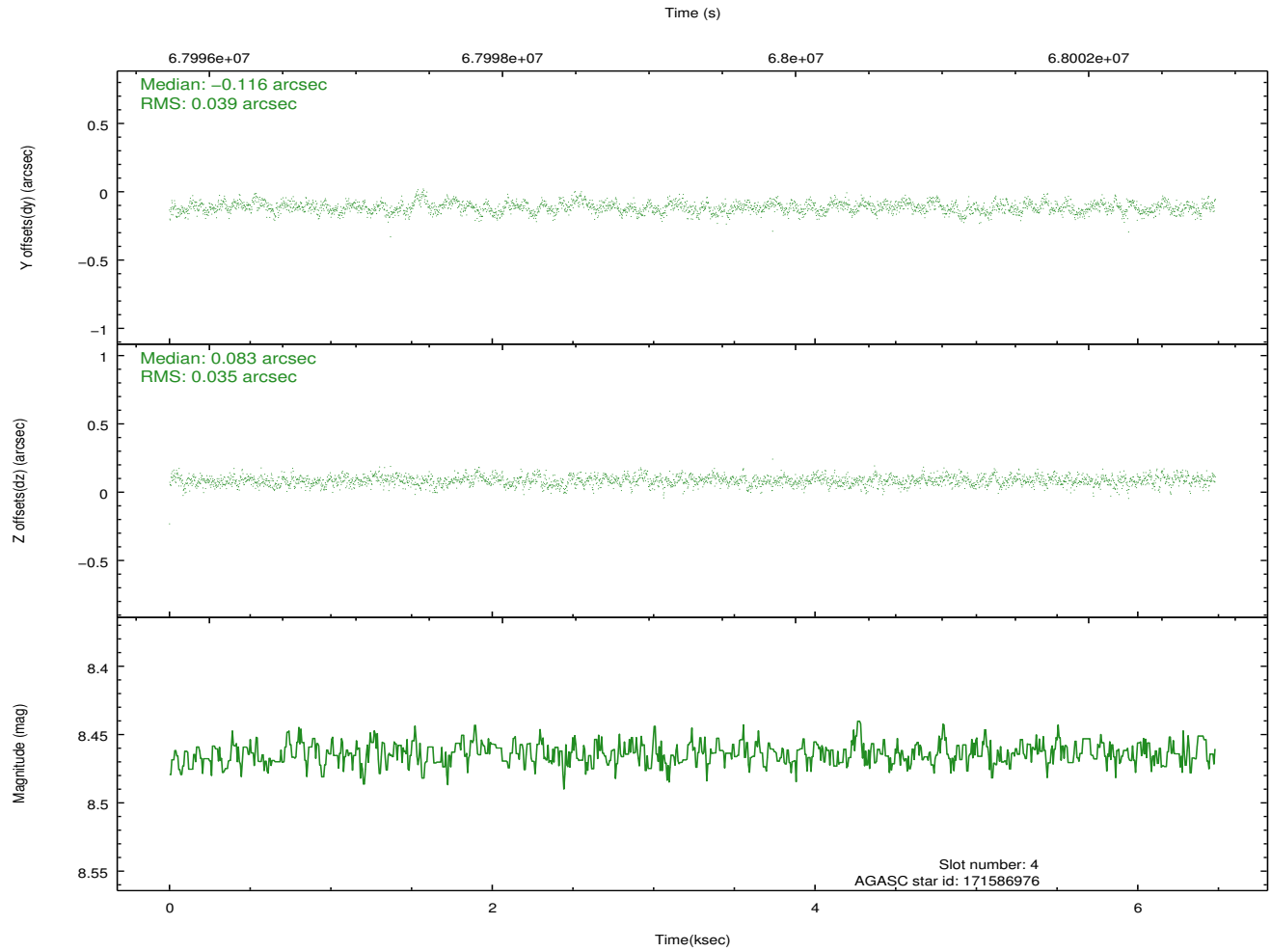
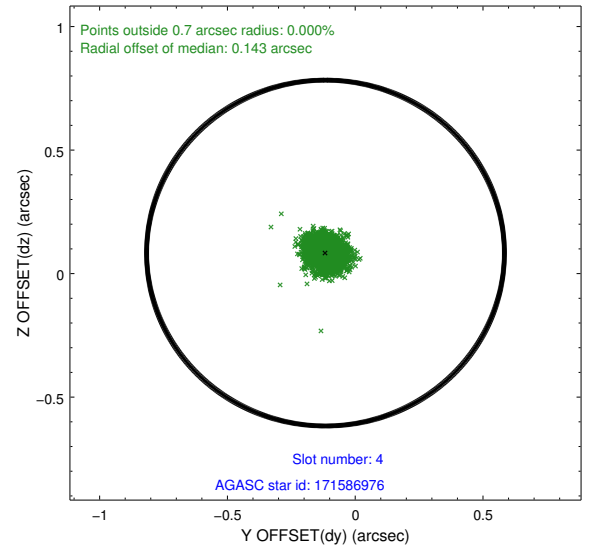
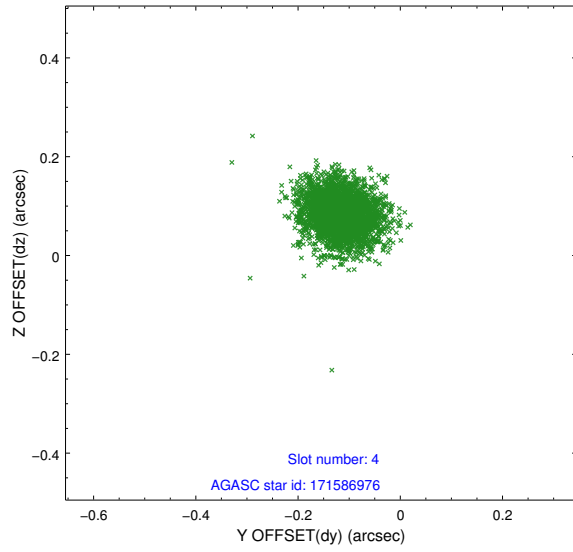
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.09	1581	-0.085	-0.294	0.008	0.013	0.000000	0.000000	-752.55	-1950.50
1	FID	ACIS-S-4	7.18	1581	0.093	0.119	0.008	0.016	0.000000	0.000000	2160.50	-42.69
2	FID	ACIS-S-5	7.23	1581	-0.040	0.183	0.008	0.014	0.000000	0.000000	-1804.18	-47.93
3	GUIDE	243941560	8.28	3162	-0.195	0.008	0.077	0.127	83.733264	22.568598	-1905.69	479.36
4	GUIDE	171586976	8.46	3162	-0.116	0.083	0.055	0.090	83.857953	22.438065	-1416.07	870.17
5	GUIDE	171597832	9.17	3159	0.175	-0.074	0.086	0.137	83.183230	21.366702	2318.85	-1581.21
6	GUIDE	171721904	9.21	3162	0.048	0.161	0.088	0.148	84.272676	22.116922	-192.84	2193.50
7	GUIDE	171598712	9.40	3158	0.083	-0.178	0.083	0.136	82.978369	21.681417	1150.20	-2203.74

## 2.4 Star Slots

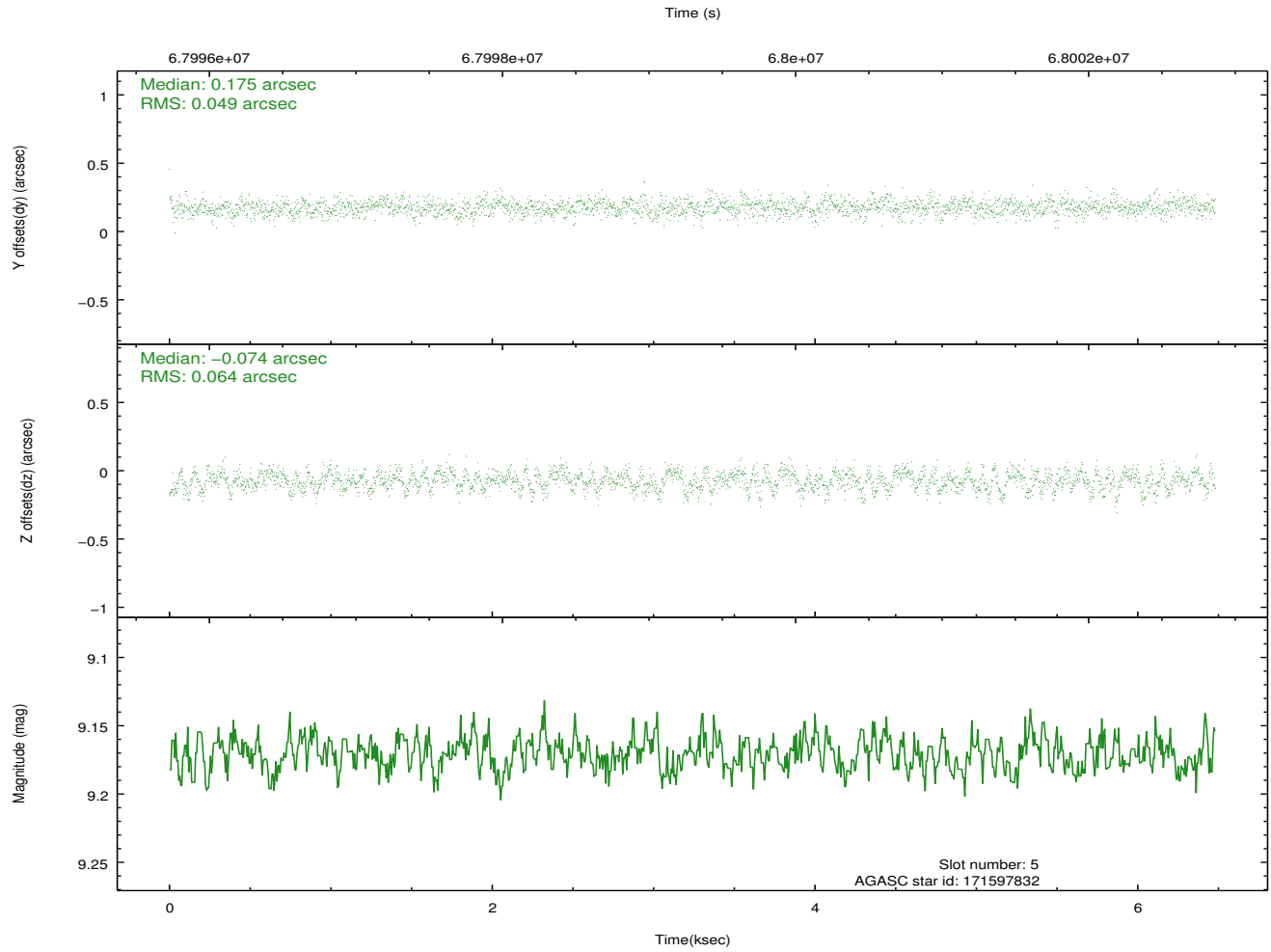
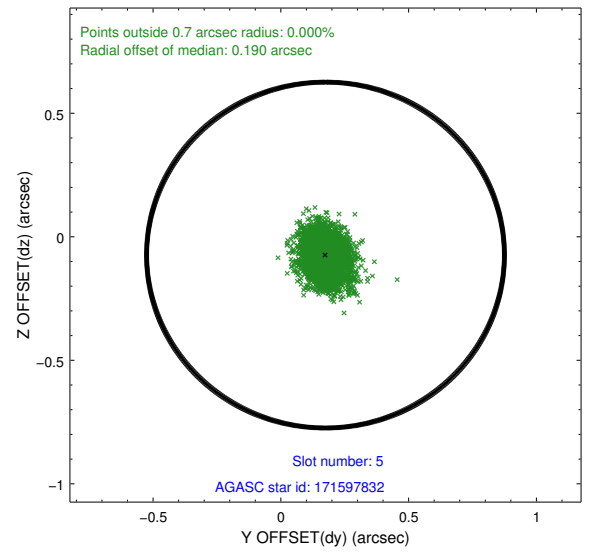
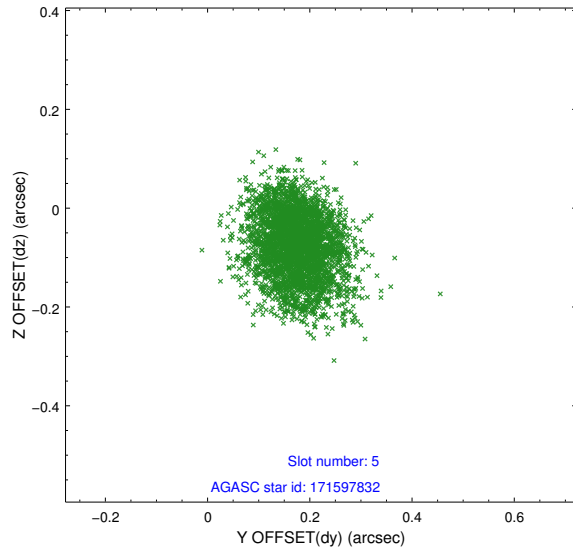
### 2.4.1 Slot 3



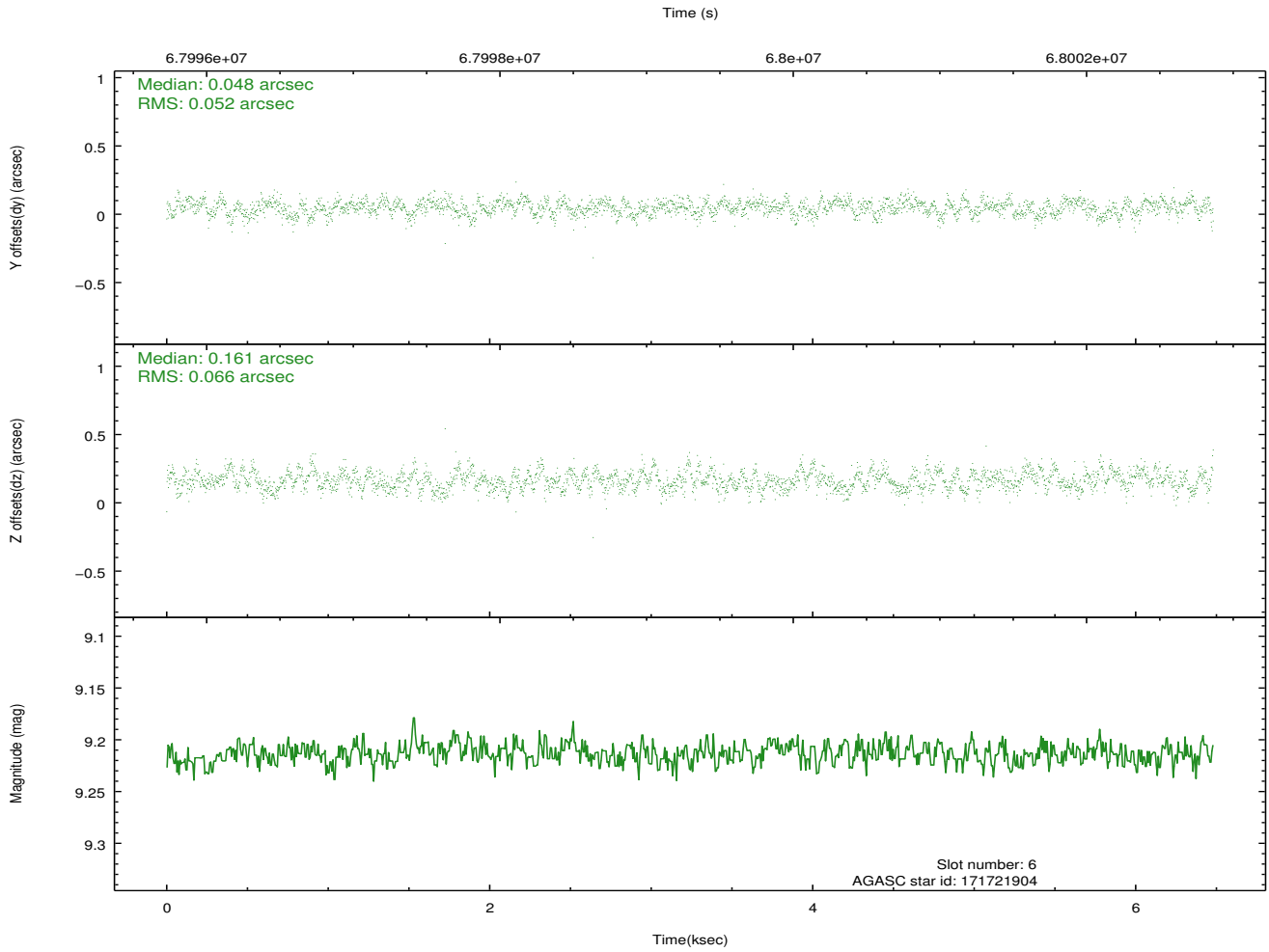
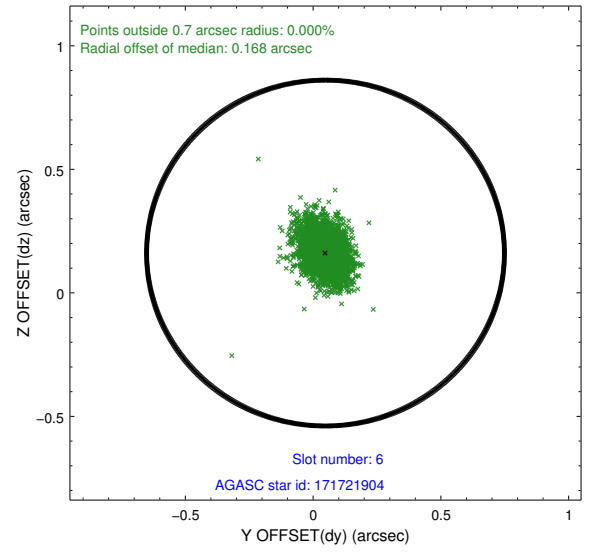
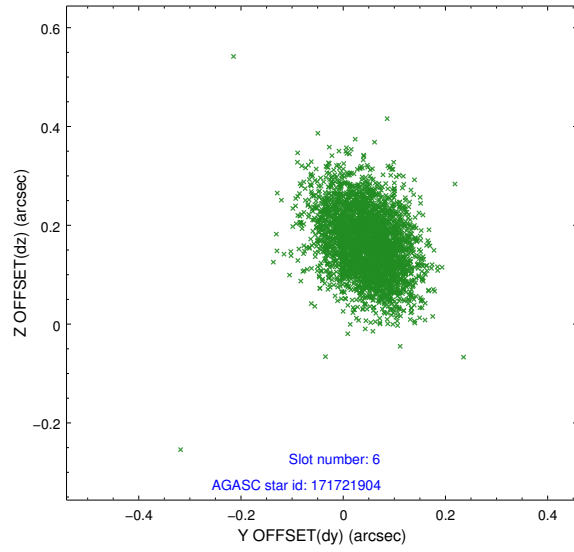
## 2.4.2 Slot 4



### 2.4.3 Slot 5

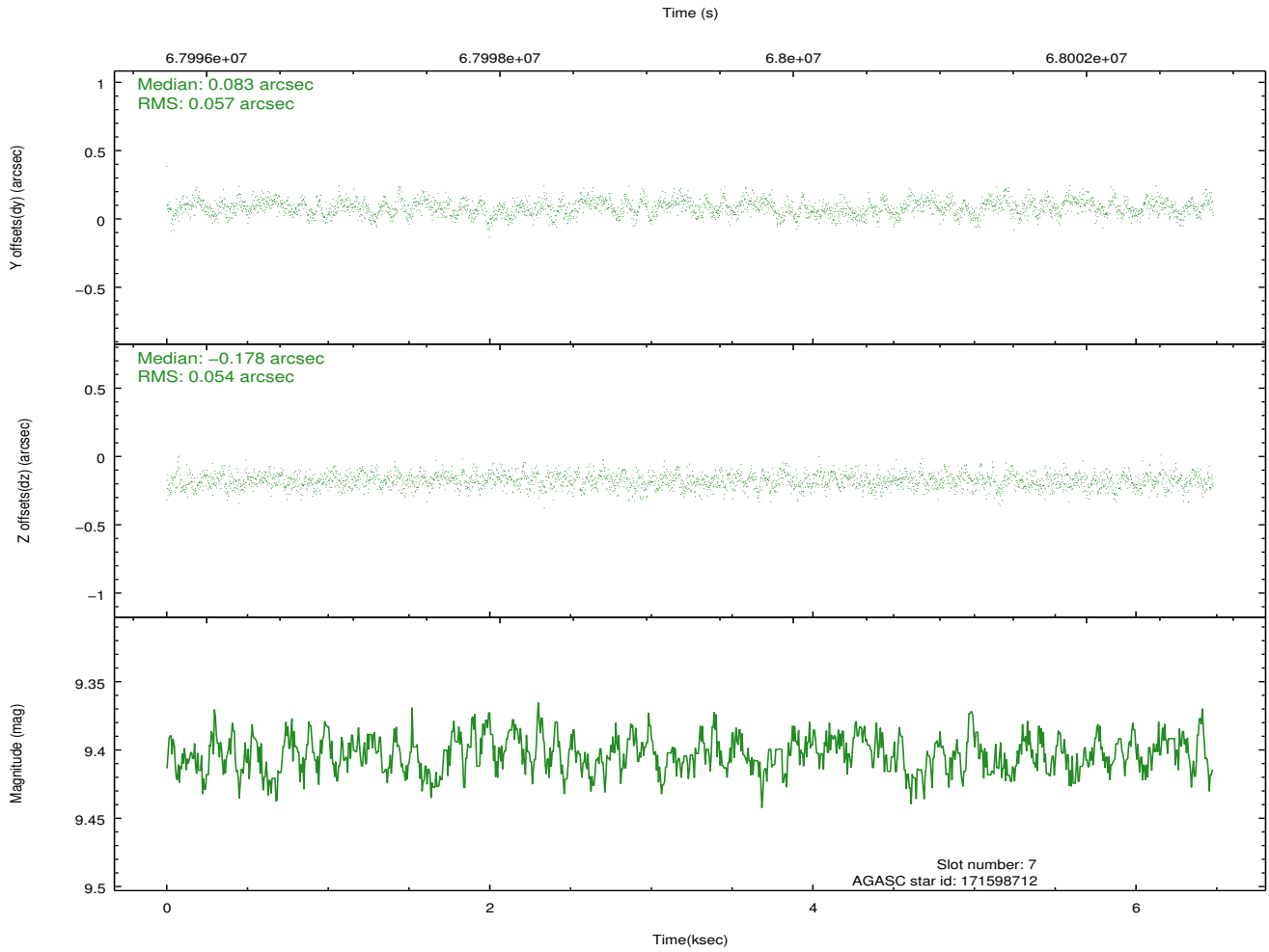
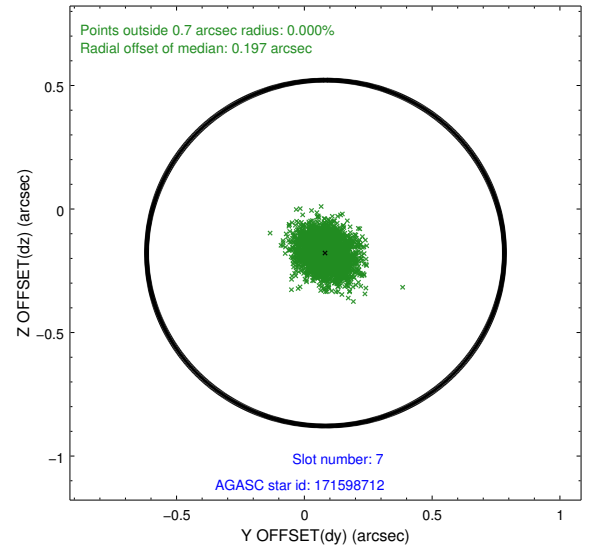
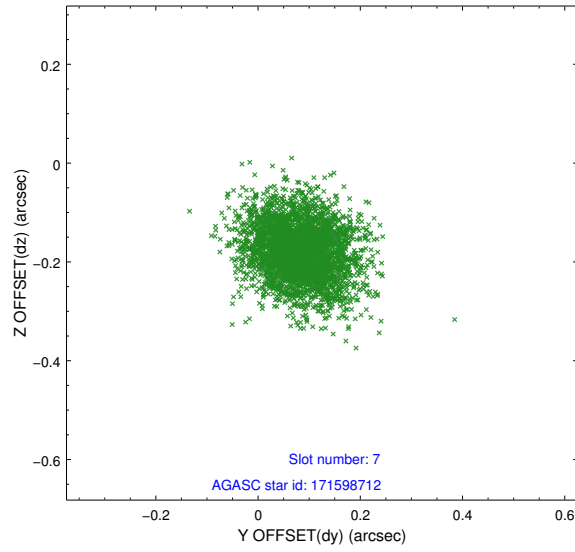


## 2.4.4 Slot 6



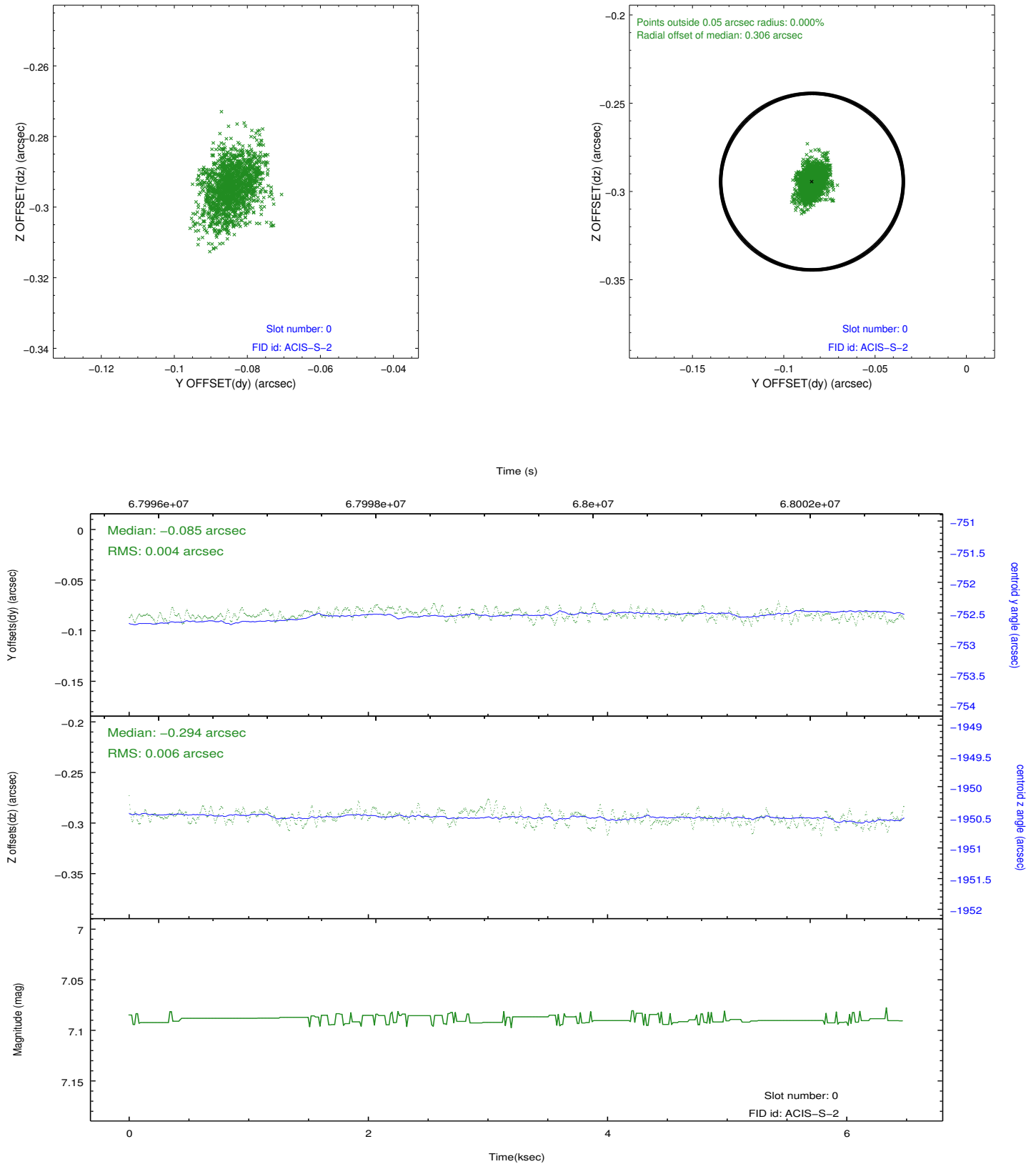


## 2.4.5 Slot 7

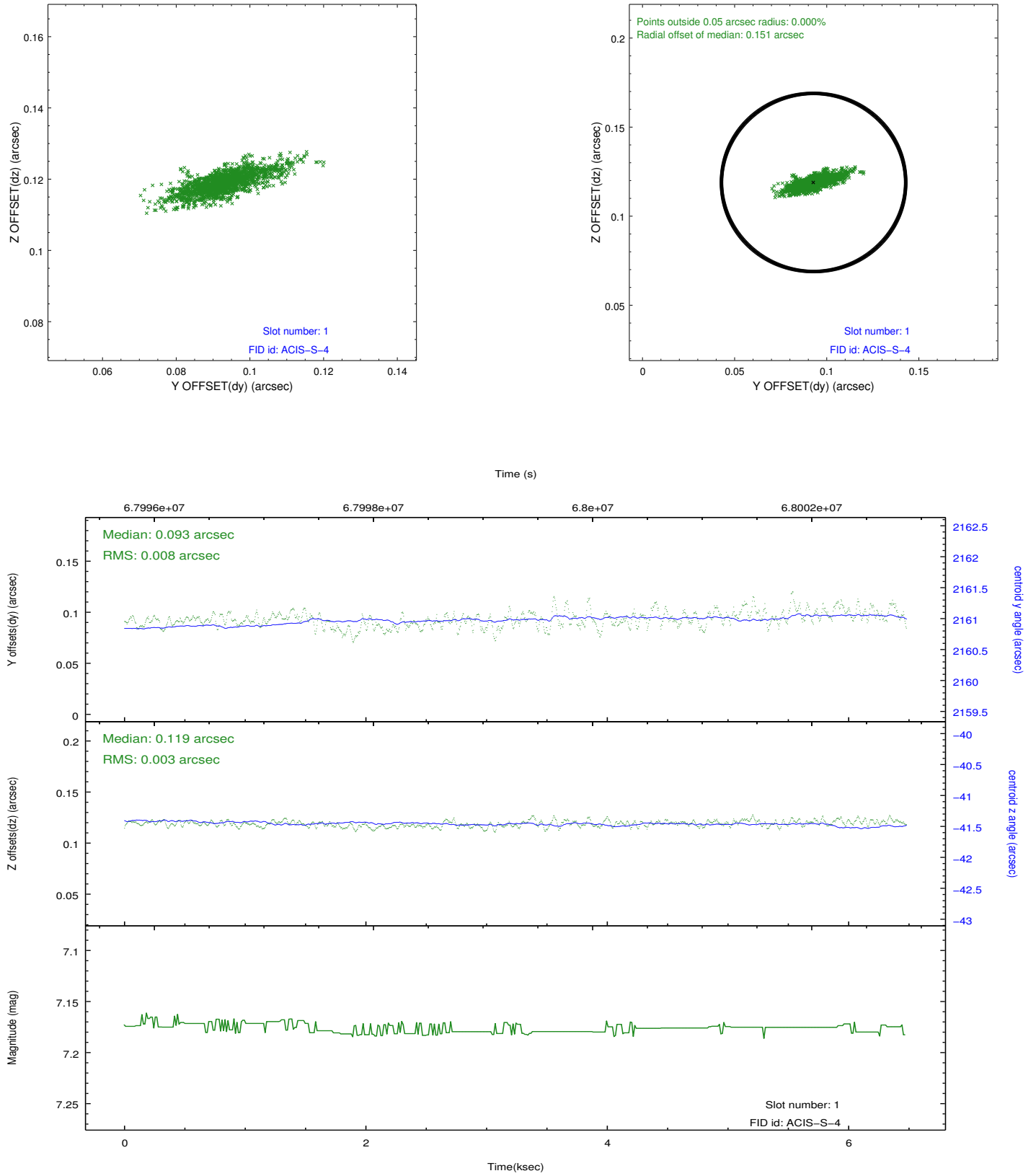


## 2.5 FID Slots

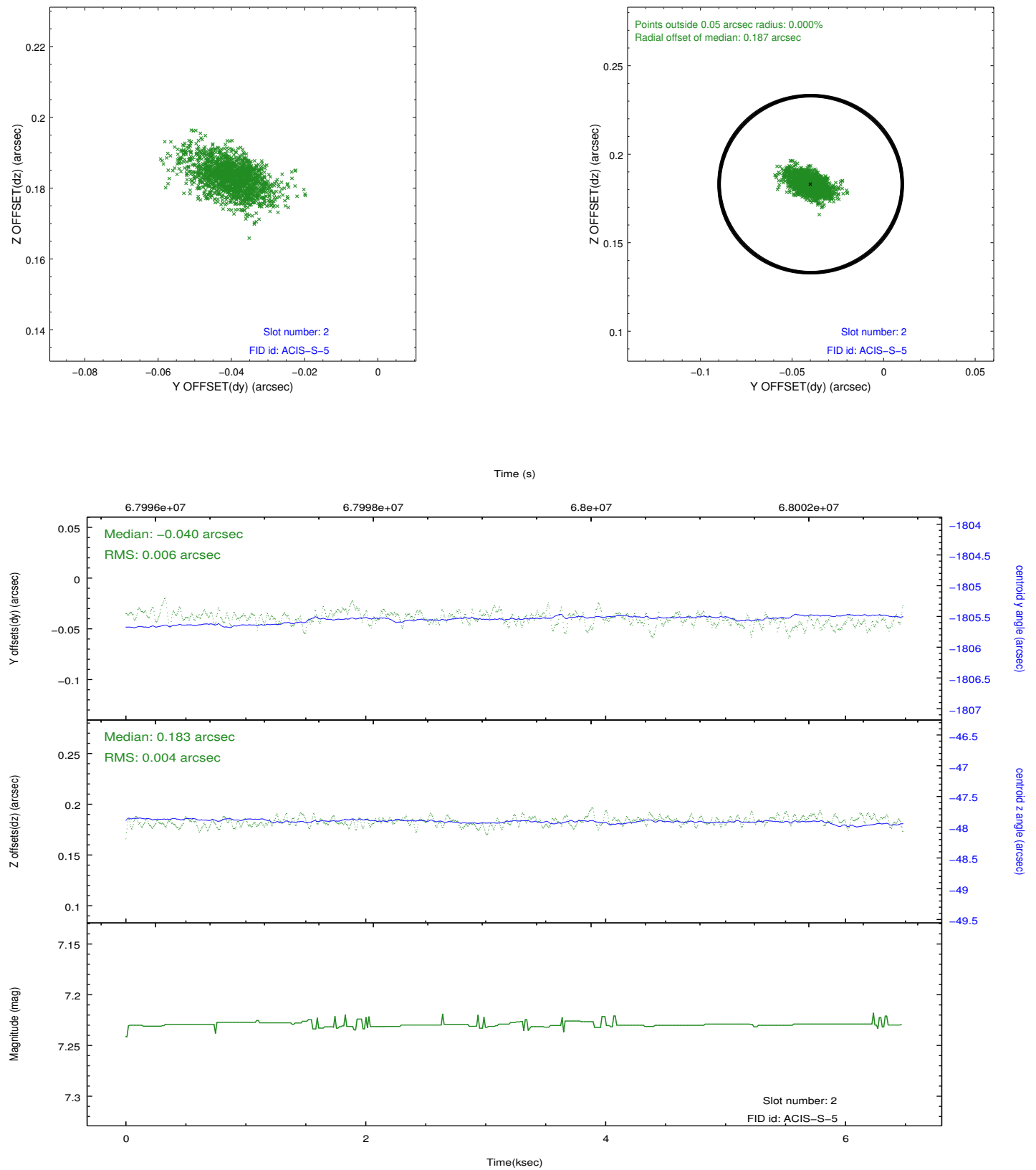
### 2.5.1 Slot 0



## 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)	2012.08.24
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.89

## A.2 Comments

ONTIME of 1566.1692698002 seconds is less than 85% of expected scheduled time of 6000 seconds. Charge time is set to the previous value of 1.89 ksec for this observation, although the ontime is 1.566 ksec, due to telemetry saturation.

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Window constraint met. Coordinated with HST.