

# V&V Reference Report

## L2 ASCDS Version : 8.4.3

Observation 14416 - L2 Version 1  
Chandra X-Ray Center

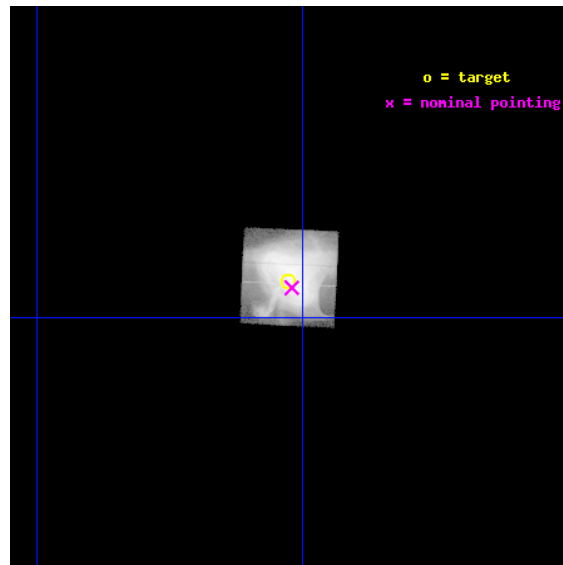
L2 Processing Date : Mar 19 2012

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# 1 Front

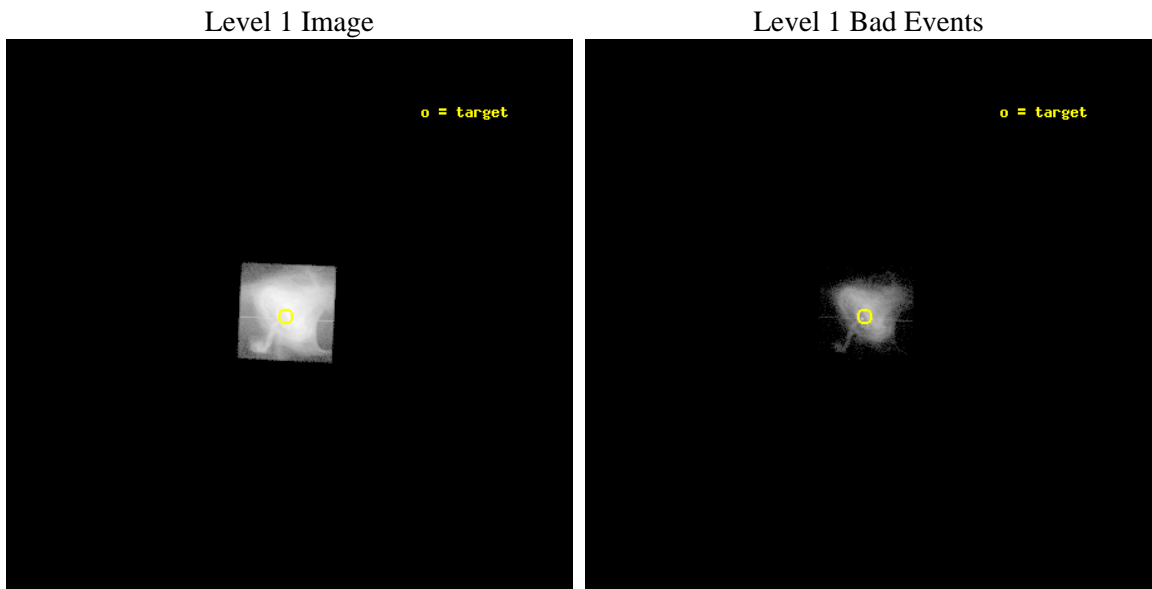
seq_num	501586	Sequence number
obs_id	14416	Observation id
title	Joint Chandra and HST Monitoring of the Crab Nebula	Proposal title
observer	Dr. Martin Weisskopf	Principal investigator
object	Crab	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	83.631667	Observer's specified target RA [deg]
dec_targ	22.015667	Observer's specified target Dec [deg]
ra_nom	83.63008130635	Nominal RA [deg]
dec_nom	22.012807629358	Nominal Dec [deg]
roll_nom	272.59766741664	Nominal Roll [deg]
revision	1	Processing version of data
ontime	3403.2972496152	Sum of GTIs [s]
livetime	591.81602782581	Livetime [s]
ontime7	3403.2972496152	Sum of GTIs [s]
l2events	1703259	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	5000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	3403.2972496152	Sum of GTIs [s]
caldsver	4.4.8	&#160	ontime7	3403.2972496152	Sum of GTIs [s]
date	2012-03-19T16:10:49	Date and time of file creation	l1events	1893285	Number of level 1 events
revision	1	Processing version of data			

### 2.1.3 Events

	<b>ccd 7</b>
level 1 events	1893285
rejected events	165560
rejected %	8%

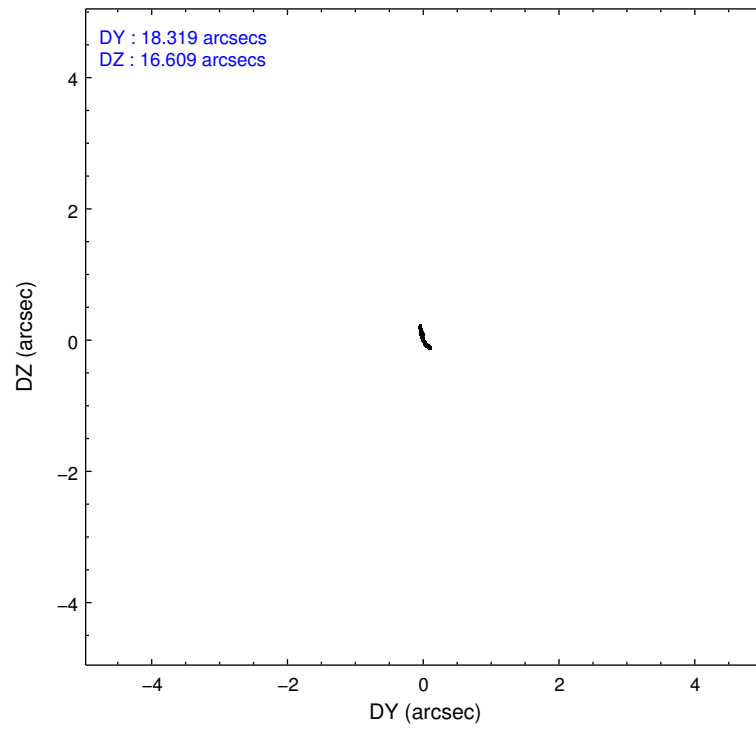
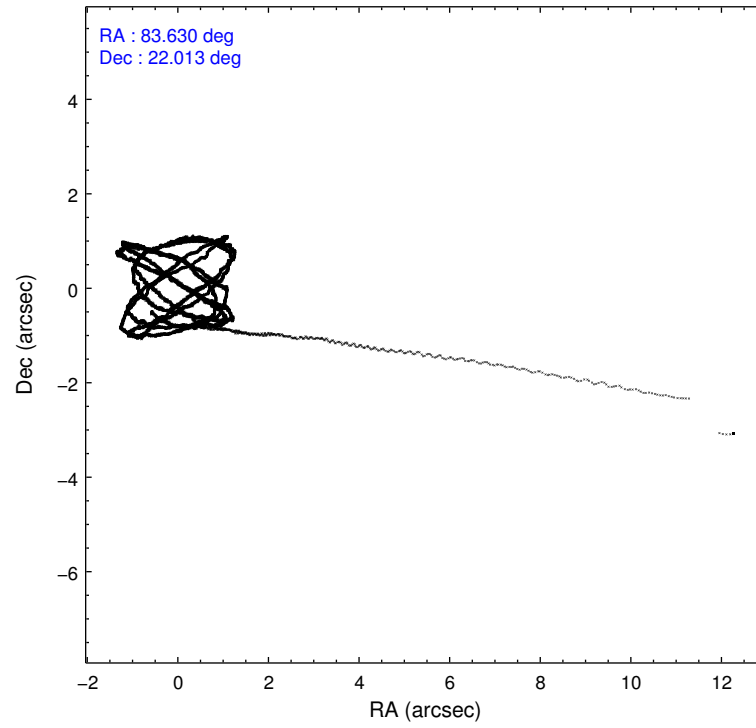
	<b>ccd 7</b>
grade 0 events	396193
	20%
grade 1 events	21280
	1%
grade 2 events	471997
	24%
grade 3 events	194822
	10%
grade 4 events	191965
	10%
grade 5 events	60933
	3%
grade 6 events	473328
	25%
grade 7 events	82767
	4%

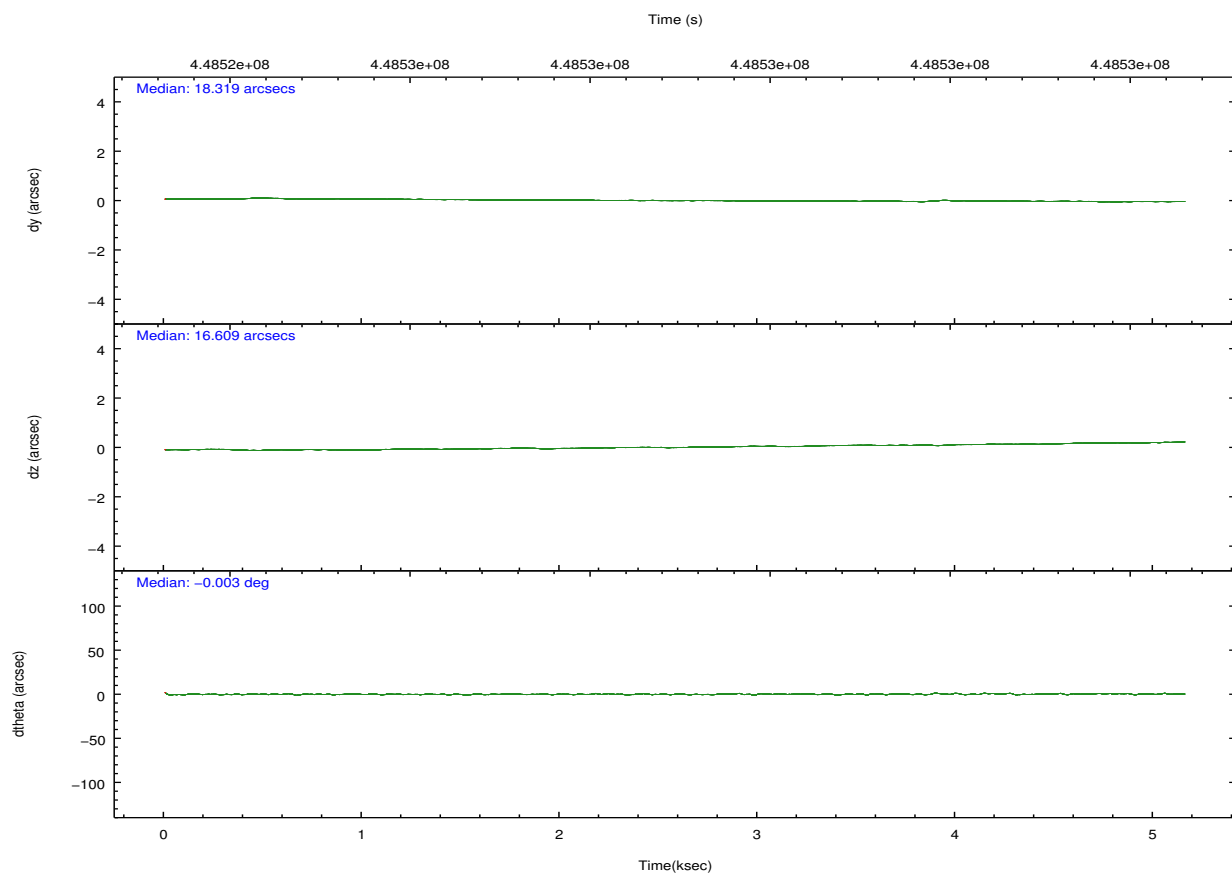
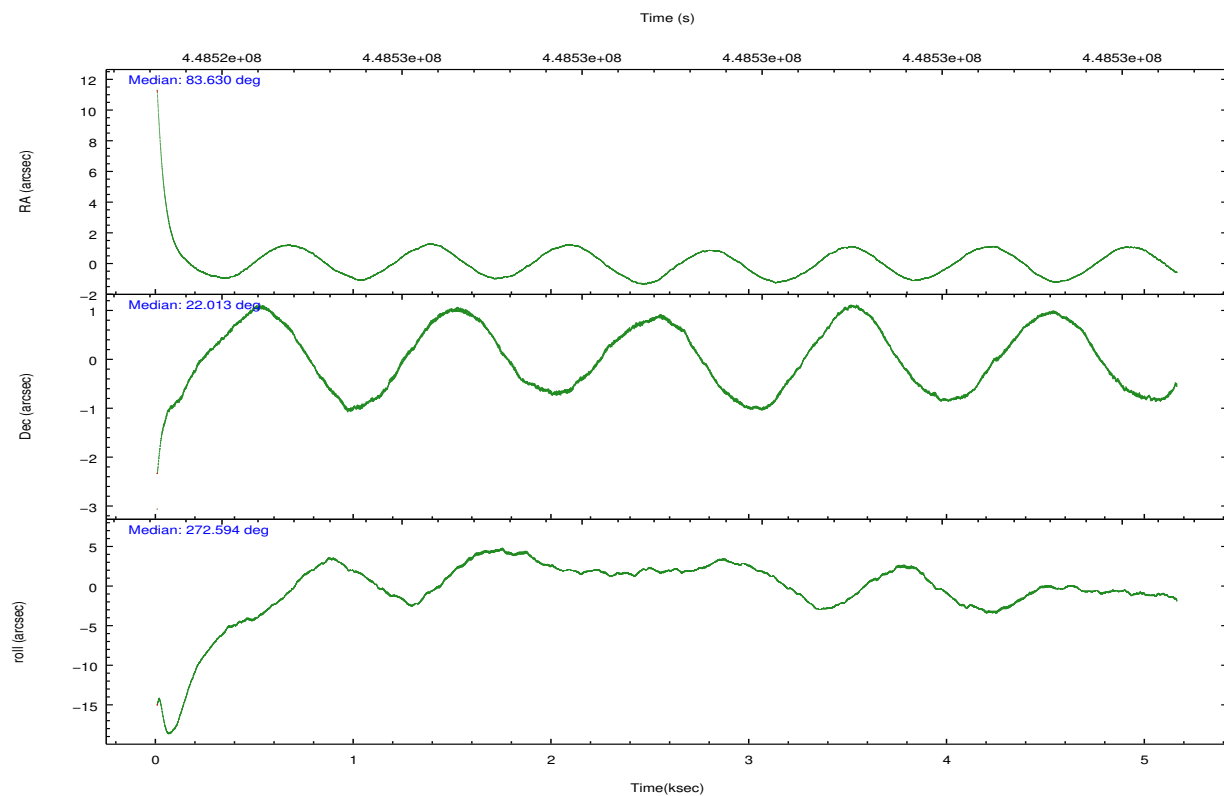


## 2.2 Compared Parameters

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	GRADED	GRADED	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	83.613833	83.63008130634981	Subarray requested	CUSTOM	CUSTOM
[deg] Pointing Dec	22.035644	22.01280762935813	Subarray start row	195	195
[deg] Pointing Roll	272.447112	272.5976674166354	Subarray row count	300	300
[s] Window start time (MET)	447724866.184000	447724866.184000	Alternating exposures requested	N	N
[s] Window stop time (MET)	448675265.184000	448675265.184000	[s] Primary exposure time	0.000000	0.2
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-186.716523	-186.7205972397503			
[mm] SIM translation stage offset	-3.416	-3.411925343257536			
[s] Observation start time (MET)	448525060.184000	448524011.47867			
Observation start date	2012-03-19T06:16:34	2012-03-19T06:00:11			
[s] Observation end time (MET)	448530060.184000	448530871.29153			
Observation end date	2012-03-19T07:39:54	2012-03-19T07:54:31			
Read mode	TIMED	TIMED			

## 2.3 Aspect



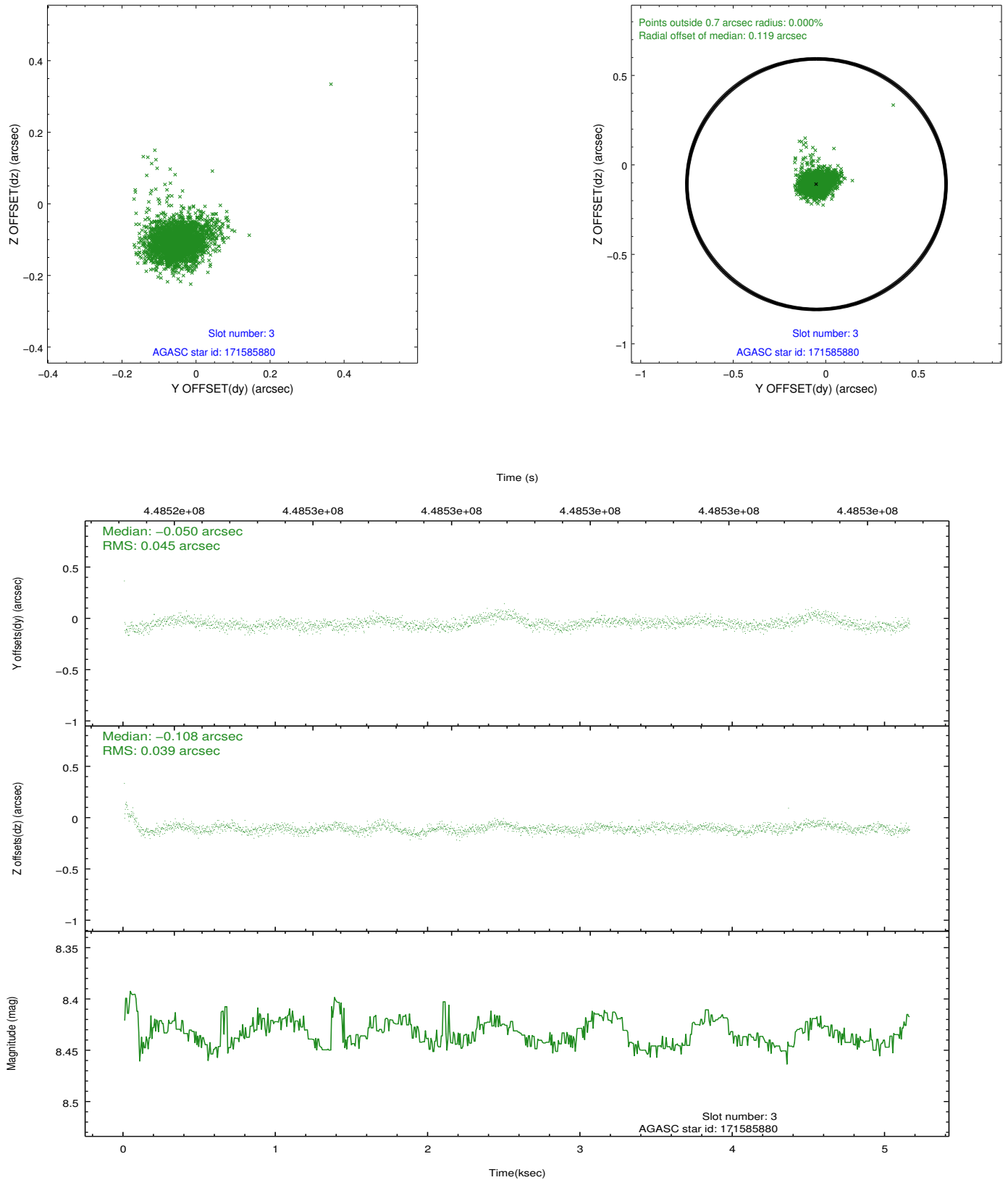


### Slot Statistics

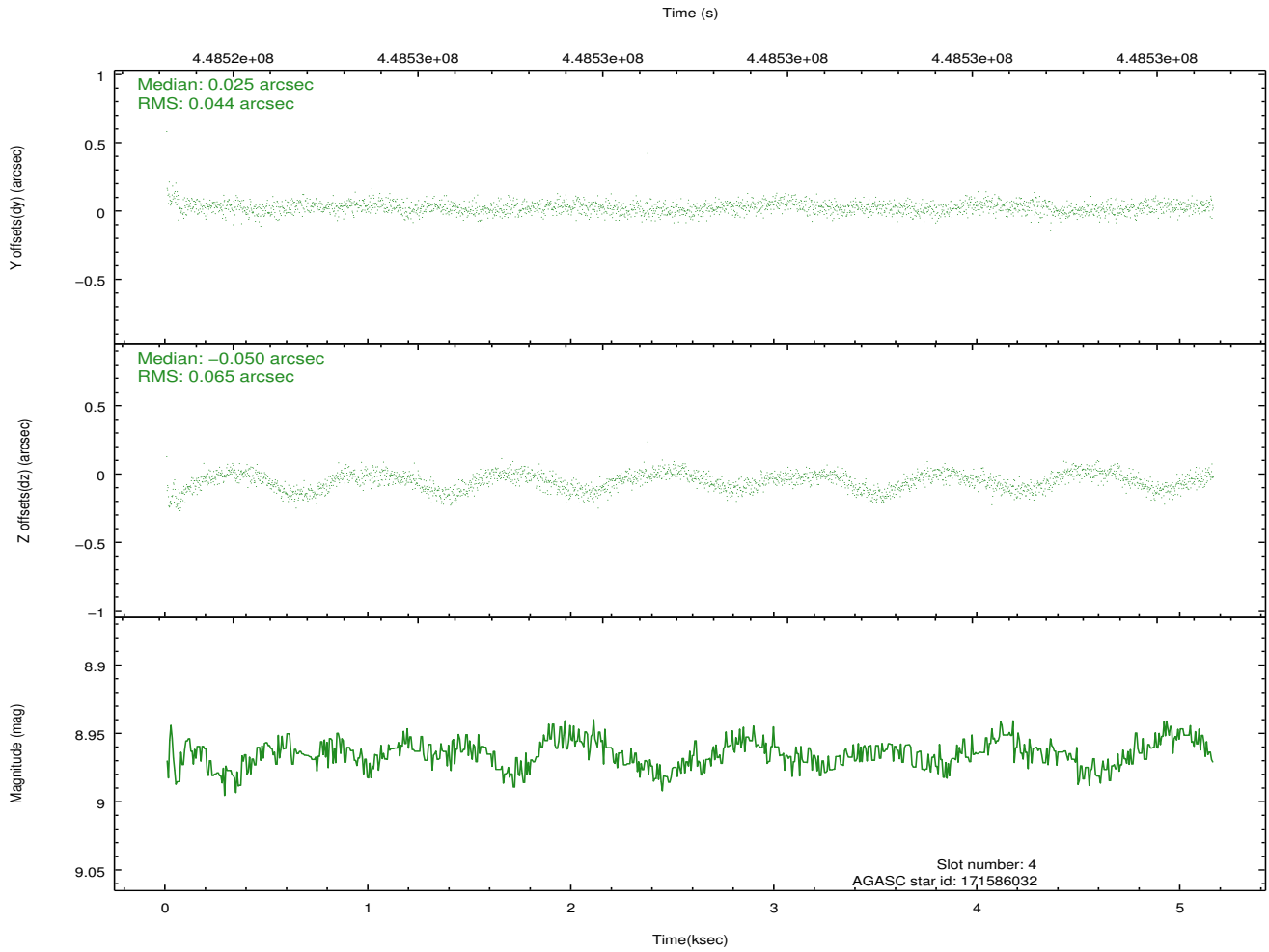
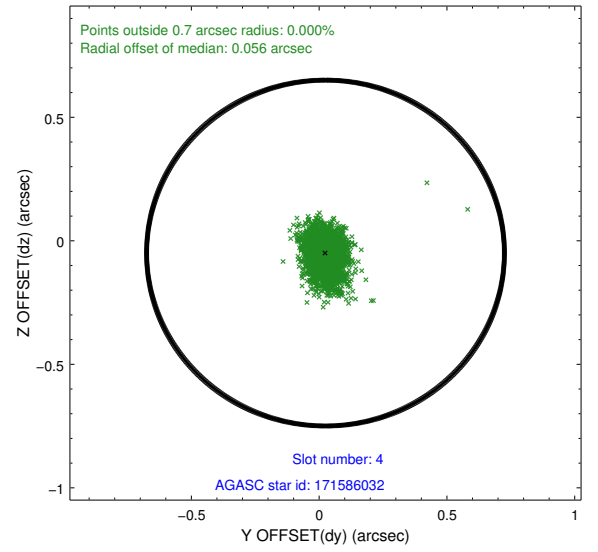
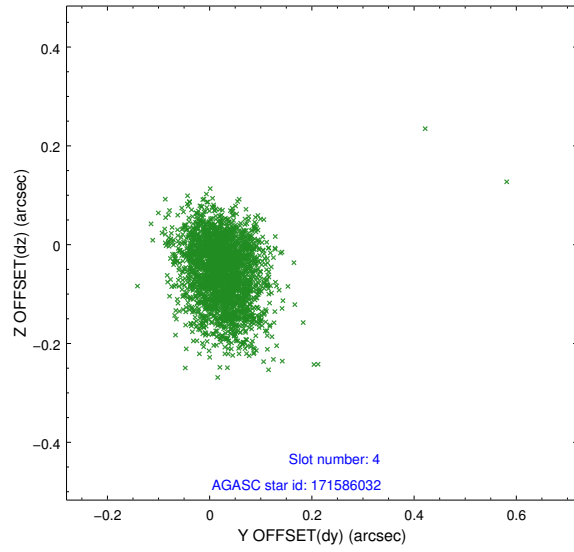
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.94	1258	-0.096	-0.065	0.008	0.014	0.000000	0.000000	-771.27	-1808.52
1	FID	ACIS-S-4	7.00	1258	0.247	0.064	0.005	0.010	0.000000	0.000000	2141.83	98.77
2	FID	ACIS-S-5	7.04	1258	-0.181	0.009	0.008	0.013	0.000000	0.000000	-1822.67	93.77
3	GUIDE	171585880	8.43	2516	-0.050	-0.108	0.058	0.105	83.676260	22.176319	-496.89	229.62
4	GUIDE	171586032	8.97	2514	0.025	-0.050	0.080	0.135	83.950197	22.083225	-124.40	1128.66
5	GUIDE	171721904	9.19	2513	-0.175	0.305	0.107	0.173	84.272676	22.116922	-203.33	2208.94
6	GUIDE	243941560	8.30	2516	-0.234	0.200	0.078	0.126	83.733264	22.568598	-1899.94	479.62
7	GUIDE	171597832	9.22	2512	0.437	-0.335	0.131	0.201	83.183230	21.366702	2342.46	-1544.93

## 2.4 Star Slots

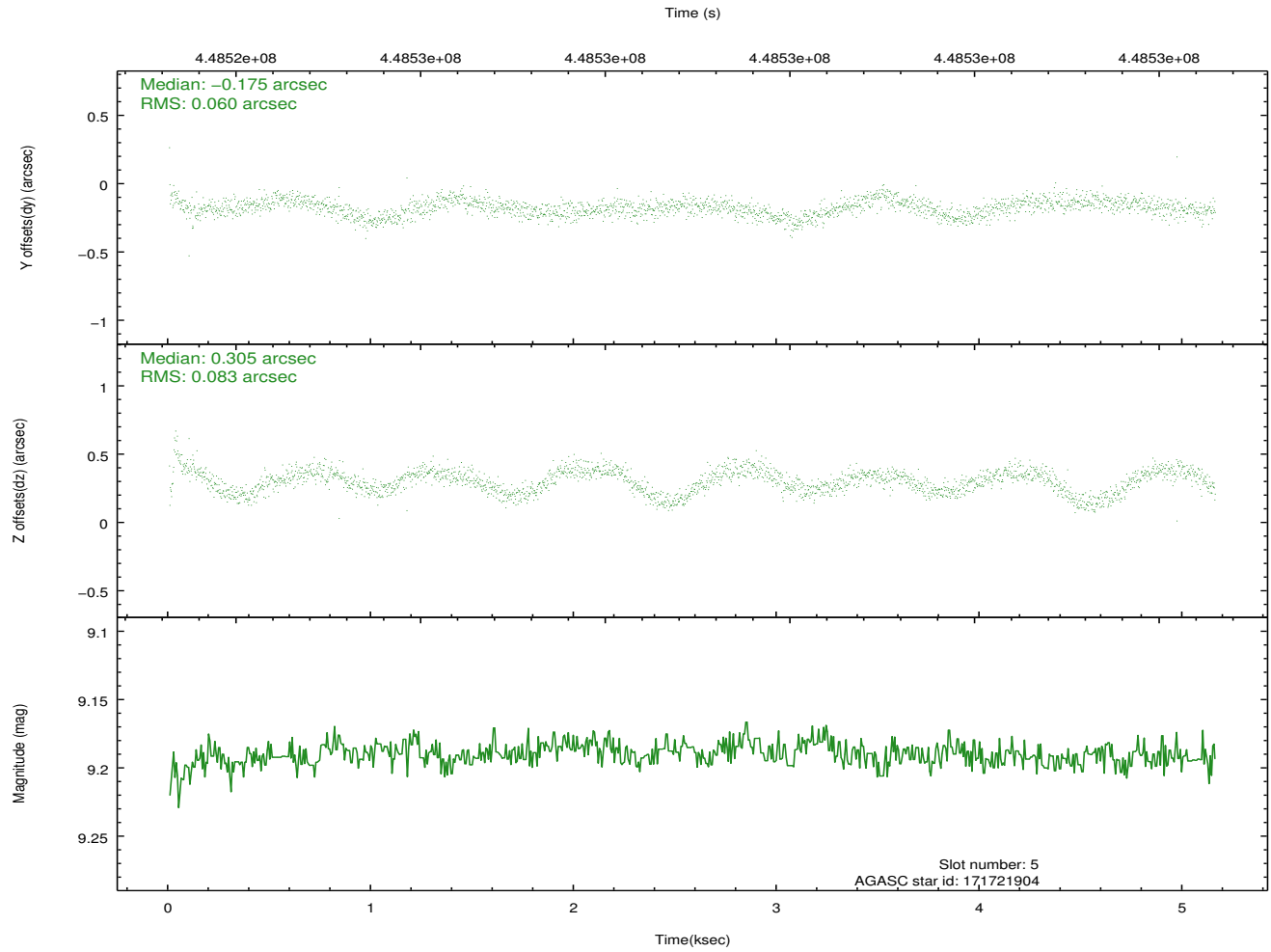
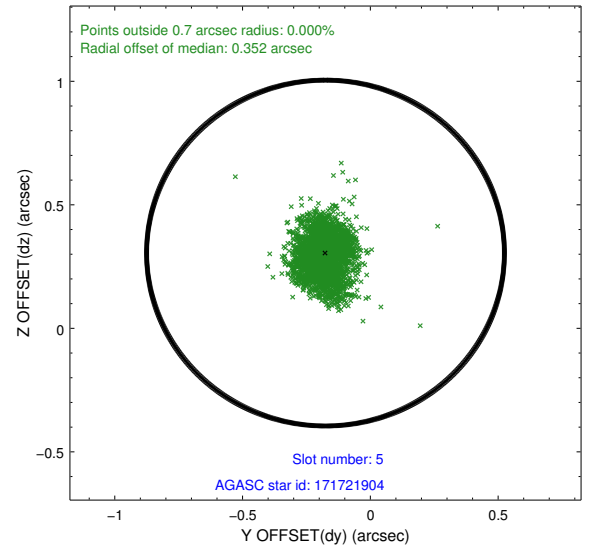
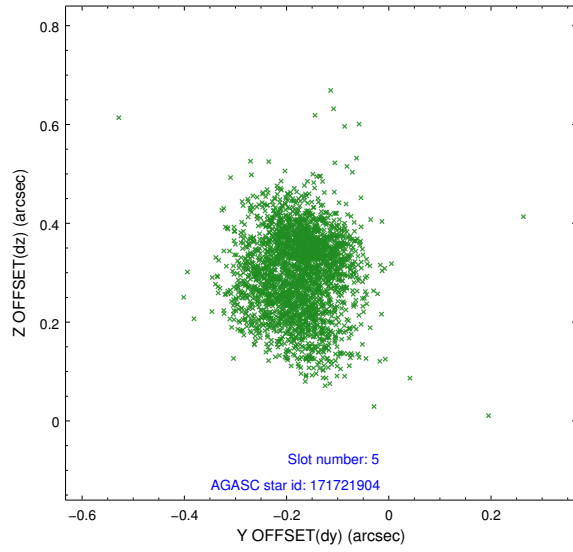
### 2.4.1 Slot 3



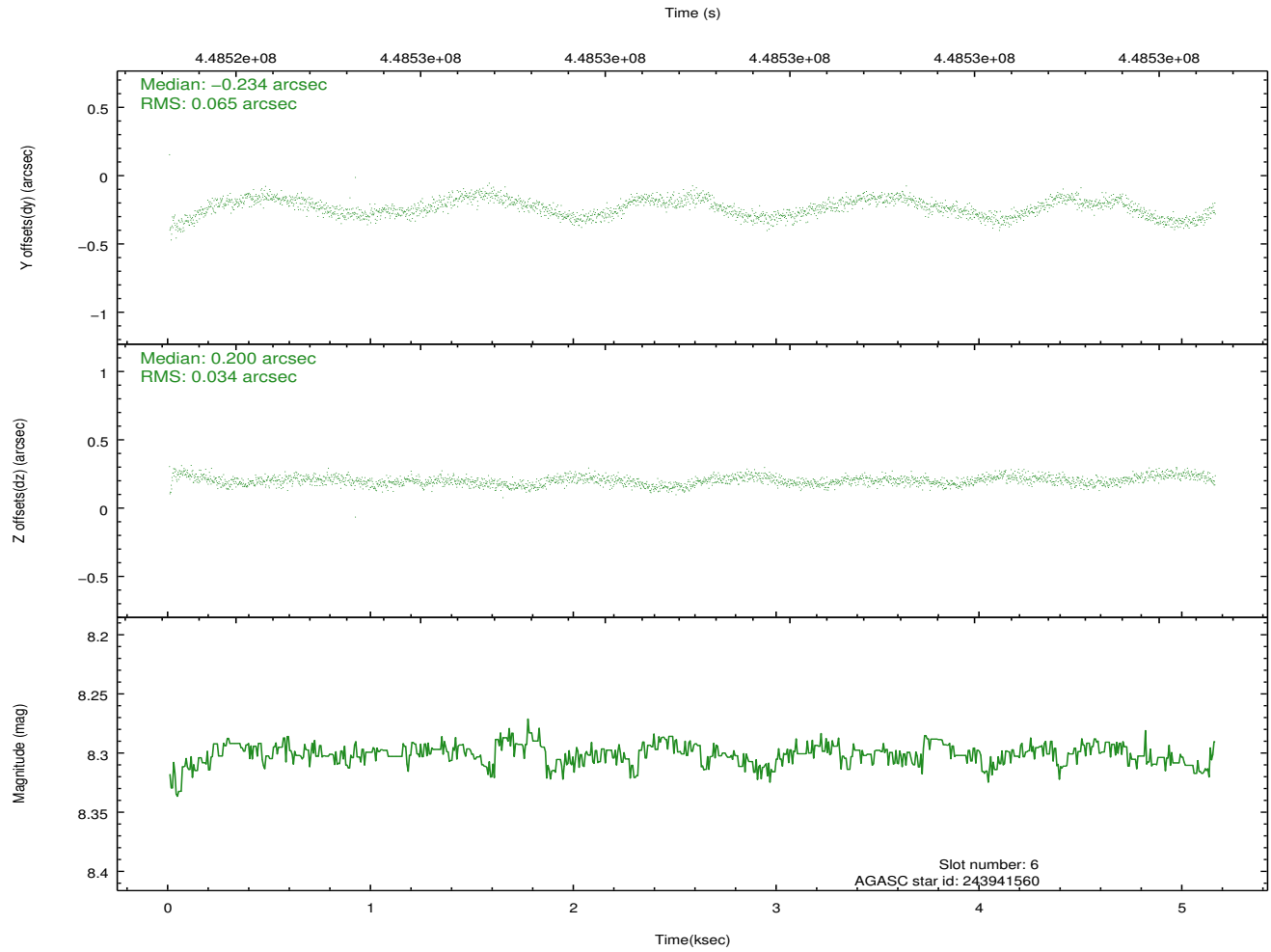
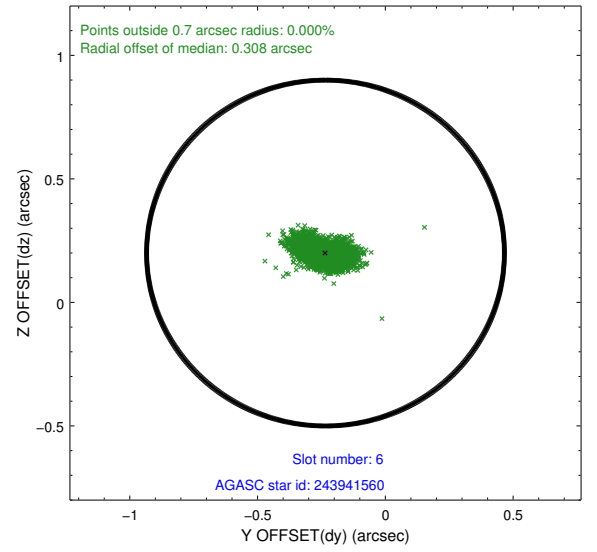
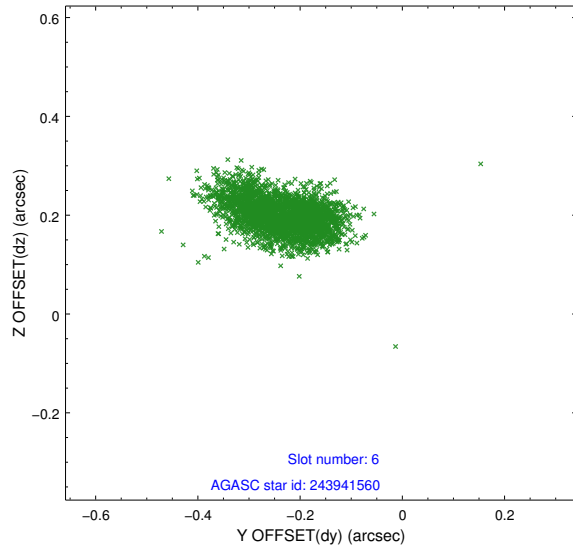
## 2.4.2 Slot 4



### 2.4.3 Slot 5

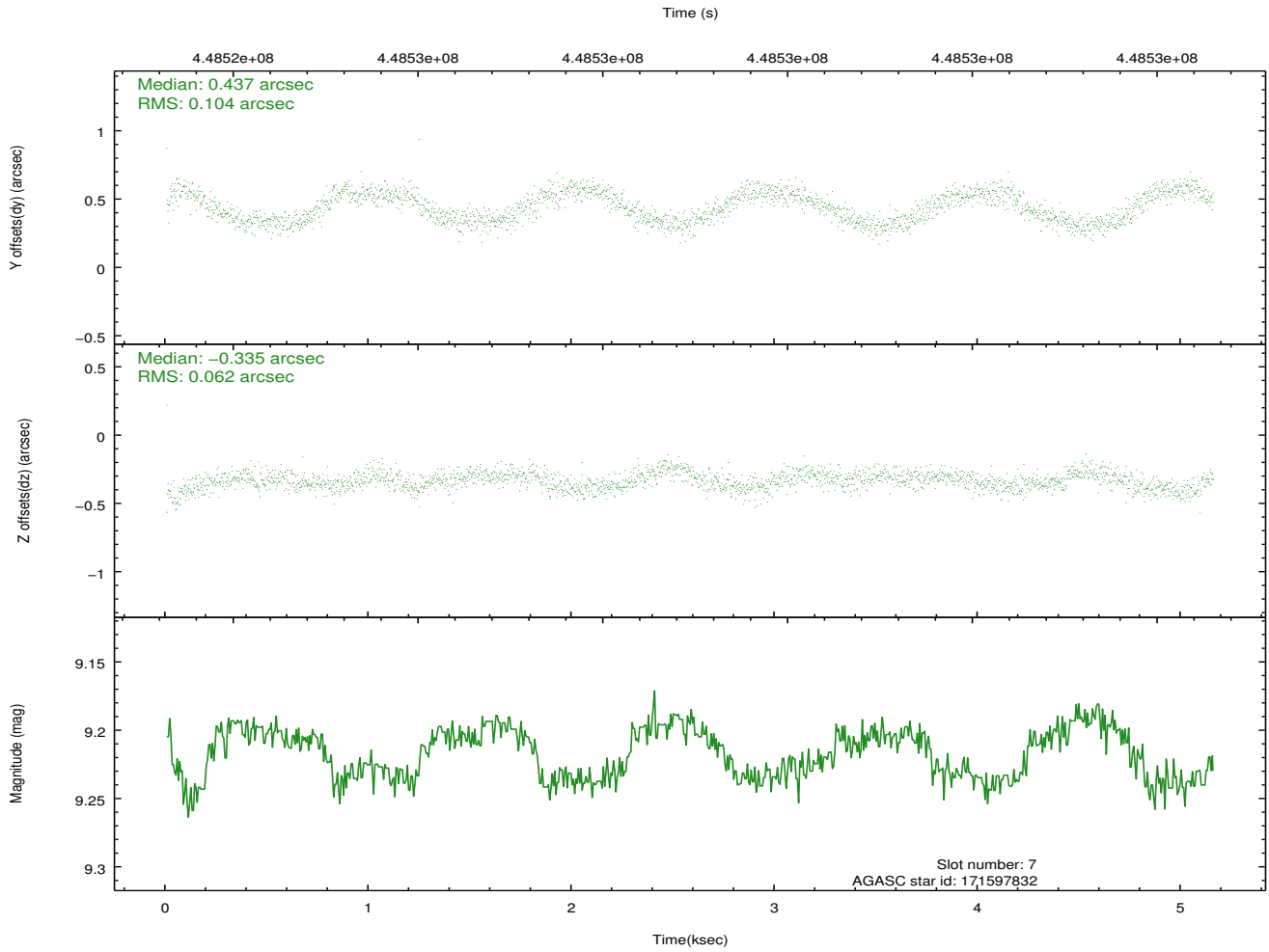
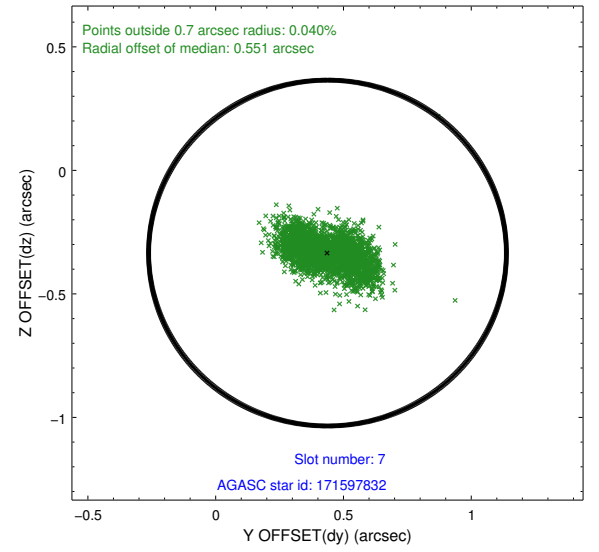
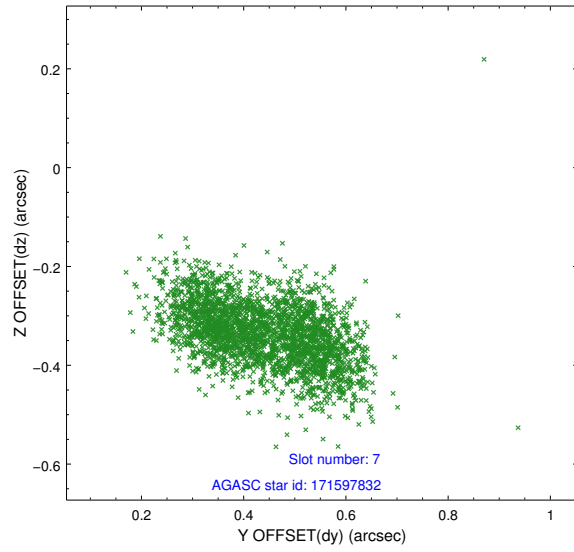


## 2.4.4 Slot 6



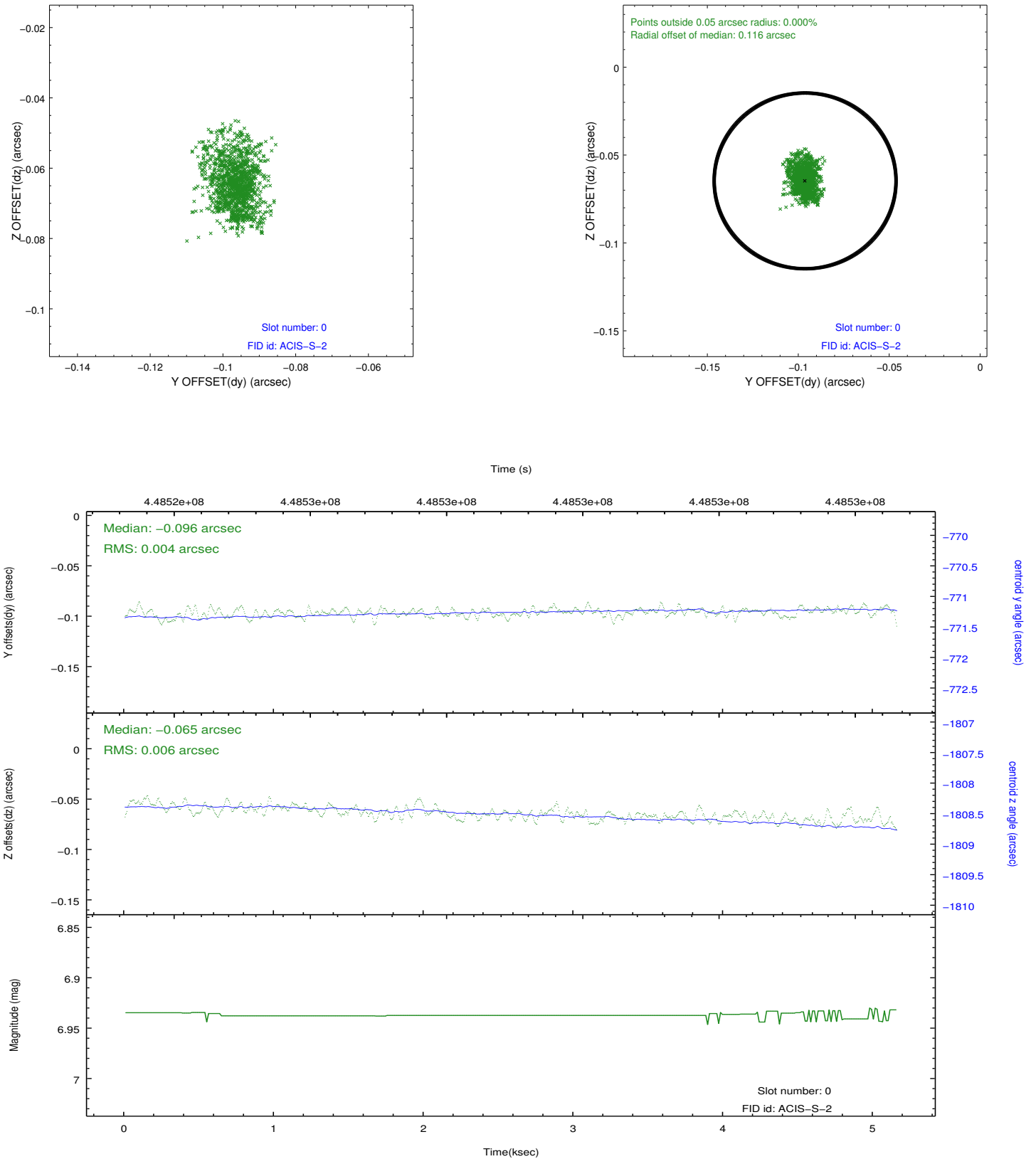


## 2.4.5 Slot 7

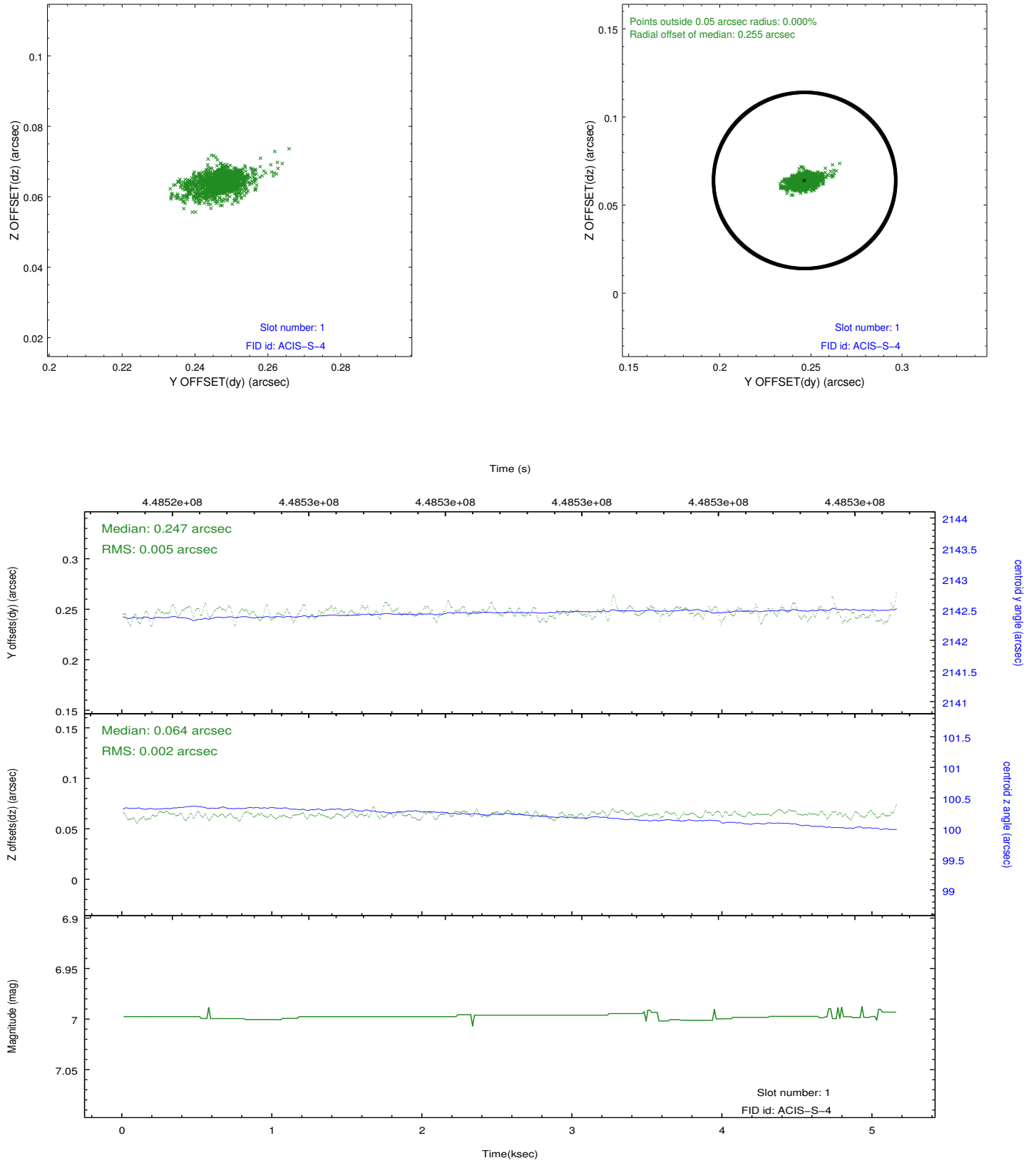


## 2.5 FID Slots

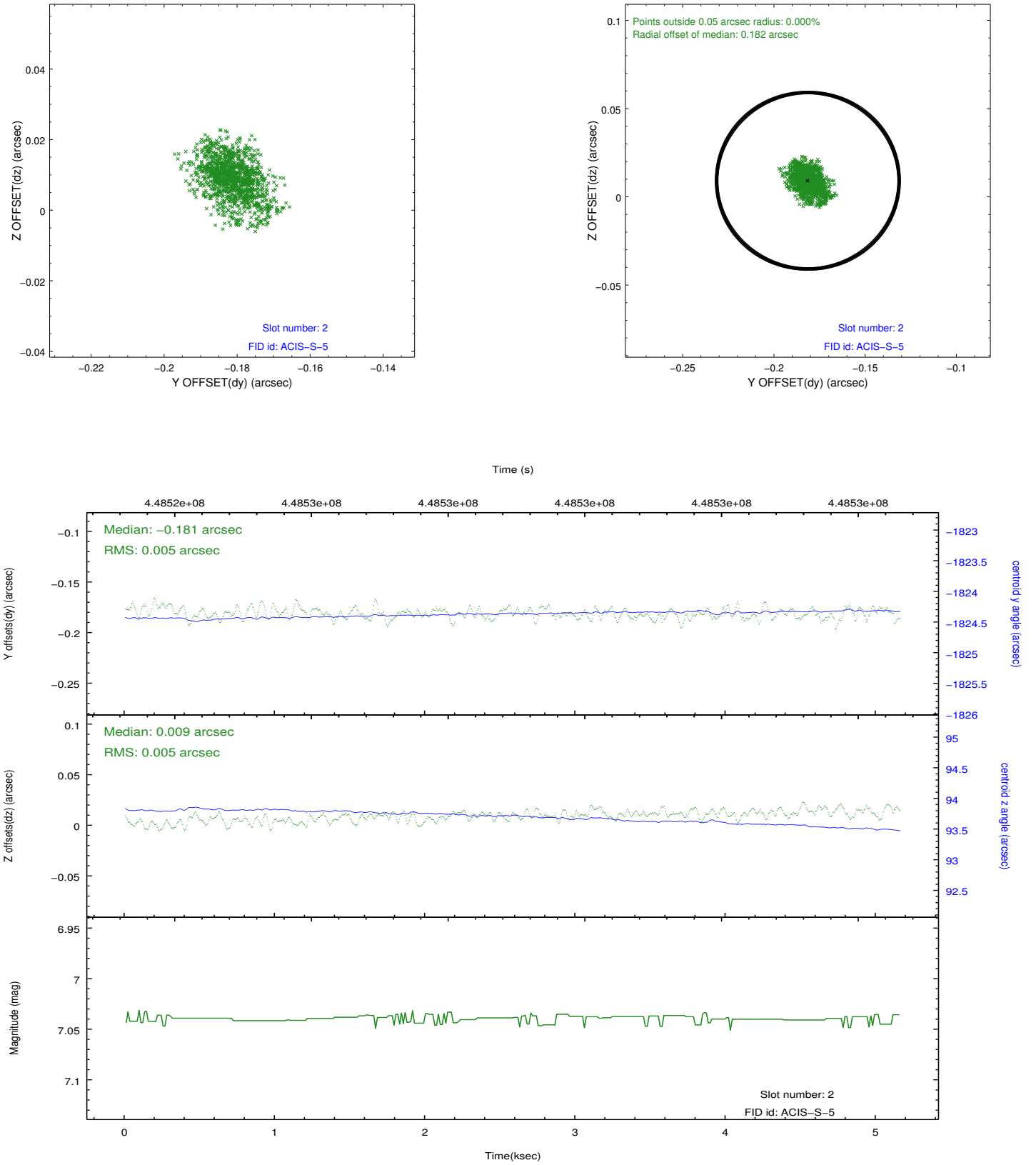
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



# A Summary

## A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.03.22
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5

## A.2 Comments

Special dither pattern of 1 arcsec used. == The high count rate resulted in telemetry saturation and a large number of dropped exposures. The ONTIME value reflects the lost exposure time.T

==

Window preference met.