

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 13754 - L2 Version 1  
Chandra X-Ray Center

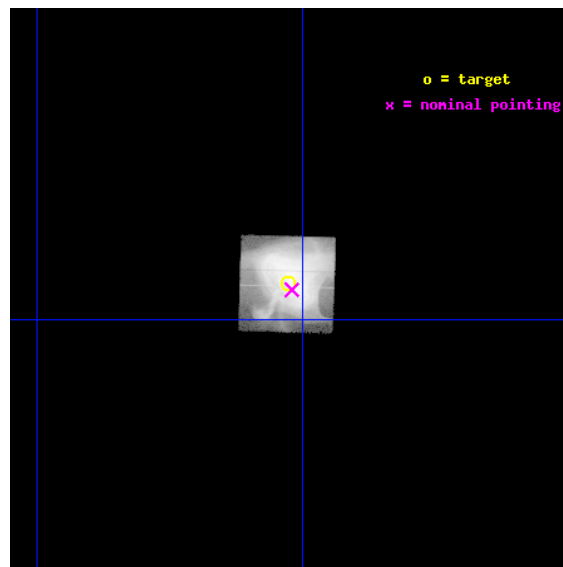
L2 Processing Date : Apr 22 2012

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# 1 Front

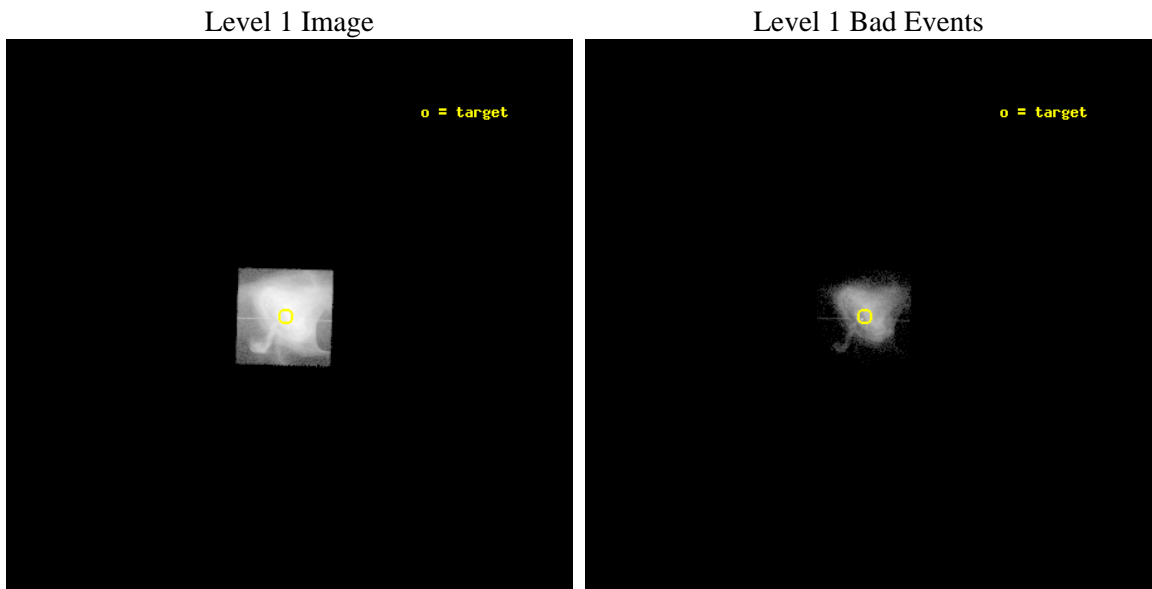
seq_num	501587	Sequence number
obs_id	13754	Observation id
title	Joint Chandra and HST Monitoring of the Crab Nebula	Proposal title
observer	Dr. Martin Weisskopf	Principal investigator
object	Crab	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	83.631667	Observer's specified target RA [deg]
dec_targ	22.015667	Observer's specified target Dec [deg]
ra_nom	83.630041666527	Nominal RA [deg]
dec_nom	22.012843545501	Nominal Dec [deg]
roll_nom	271.71235194044	Nominal Roll [deg]
revision	1	Processing version of data
ontime	3412.6086260676	Sum of GTIs [s]
livetime	593.22890972215	Livetime [s]
ontime7	3412.6086260676	Sum of GTIs [s]
l2events	1706370	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	5000.486000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	3412.6086260676	Sum of GTIs [s]
caldsver	4.4.9	&#160	ontime7	3412.6086260676	Sum of GTIs [s]
date	2012-04-22T17:19:25	Date and time of file creation	l1events	1893410	Number of level 1 events
revision	1	Processing version of data			

### 2.1.3 Events

	<b>ccd 7</b>
level 1 events	1893410
rejected events	163298
rejected %	8%

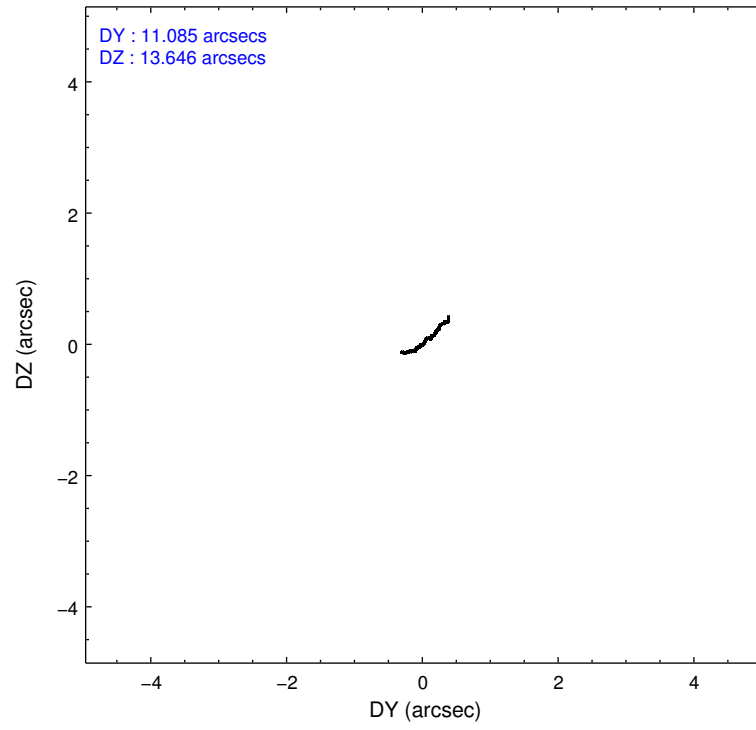
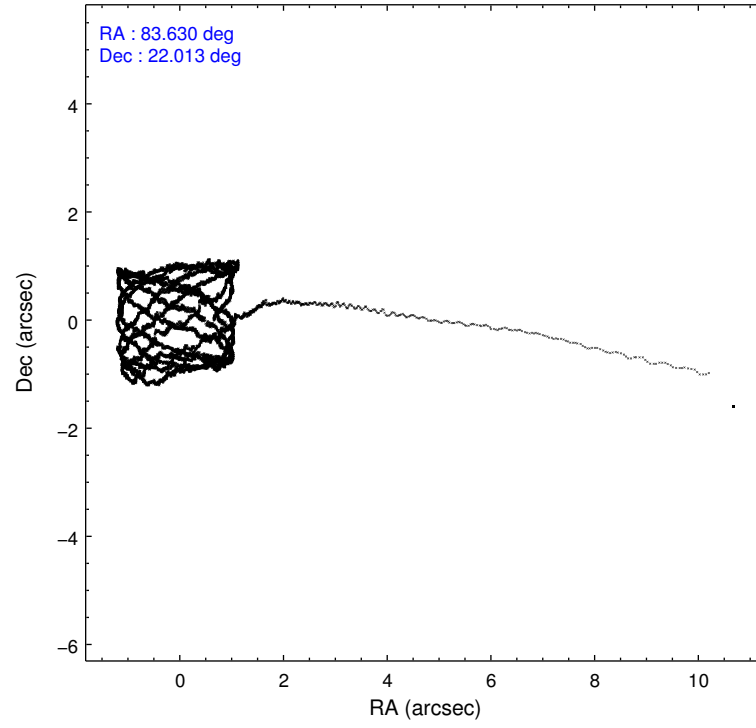
	<b>ccd 7</b>
grade 0 events	407697
	21%
grade 1 events	22519
	1%
grade 2 events	469775
	24%
grade 3 events	197646
	10%
grade 4 events	192878
	10%
grade 5 events	61312
	3%
grade 6 events	462694
	24%
grade 7 events	78889
	4%

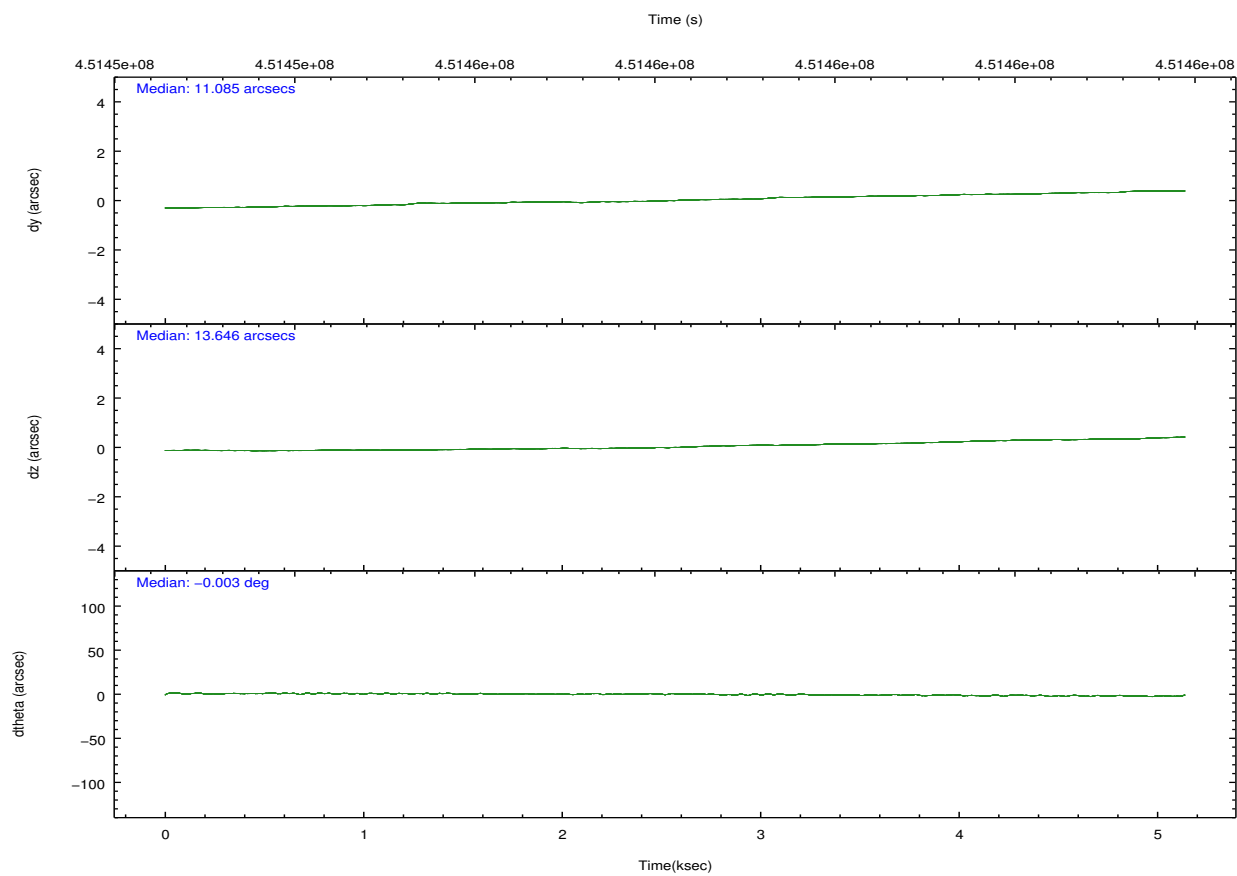
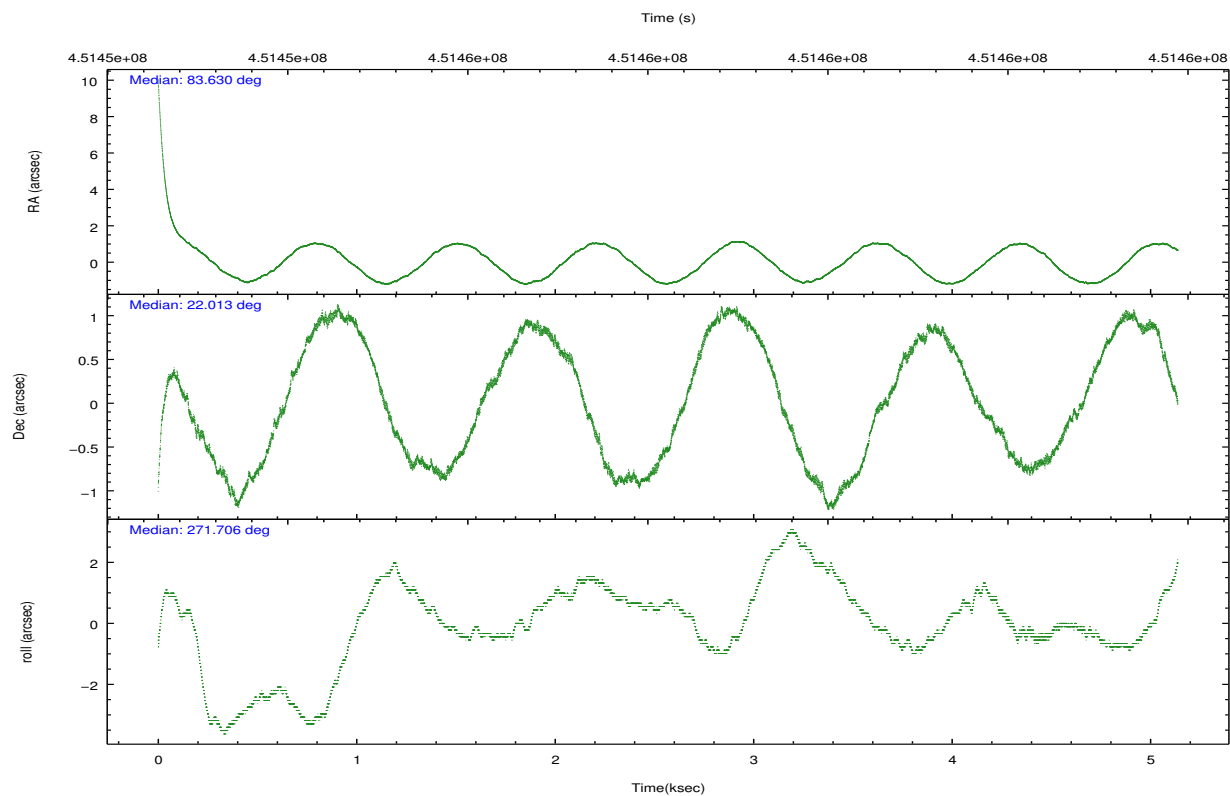


## 2.2 Compared Parameters

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	83.614169	83.63004166652732	Subarray requested	CUSTOM	CUSTOM
[deg] Pointing Dec	22.035899	22.01284354550084	Subarray start row	205	205
[deg] Pointing Roll	271.561684	271.7123519404418	Subarray row count	300	300
[s] Window start time (MET)	450576066.184000	450576066.184000	Alternating exposures requested	N	N
[s] Window stop time (MET)	451526465.184000	451526465.184000	[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	-186.956523	-186.9644858240016			
[mm] SIM translation stage offset	-3.176	-3.168036759006213			
[s] Observation start time (MET)	451453674.184000	451452664.69646			
Observation start date	2012-04-22T03:46:48	2012-04-22T03:31:04			
[s] Observation end time (MET)	451458674.184000	451458899.25929			
Observation end date	2012-04-22T05:10:08	2012-04-22T05:14:59			
Read mode	TIMED	TIMED			

## 2.3 Aspect



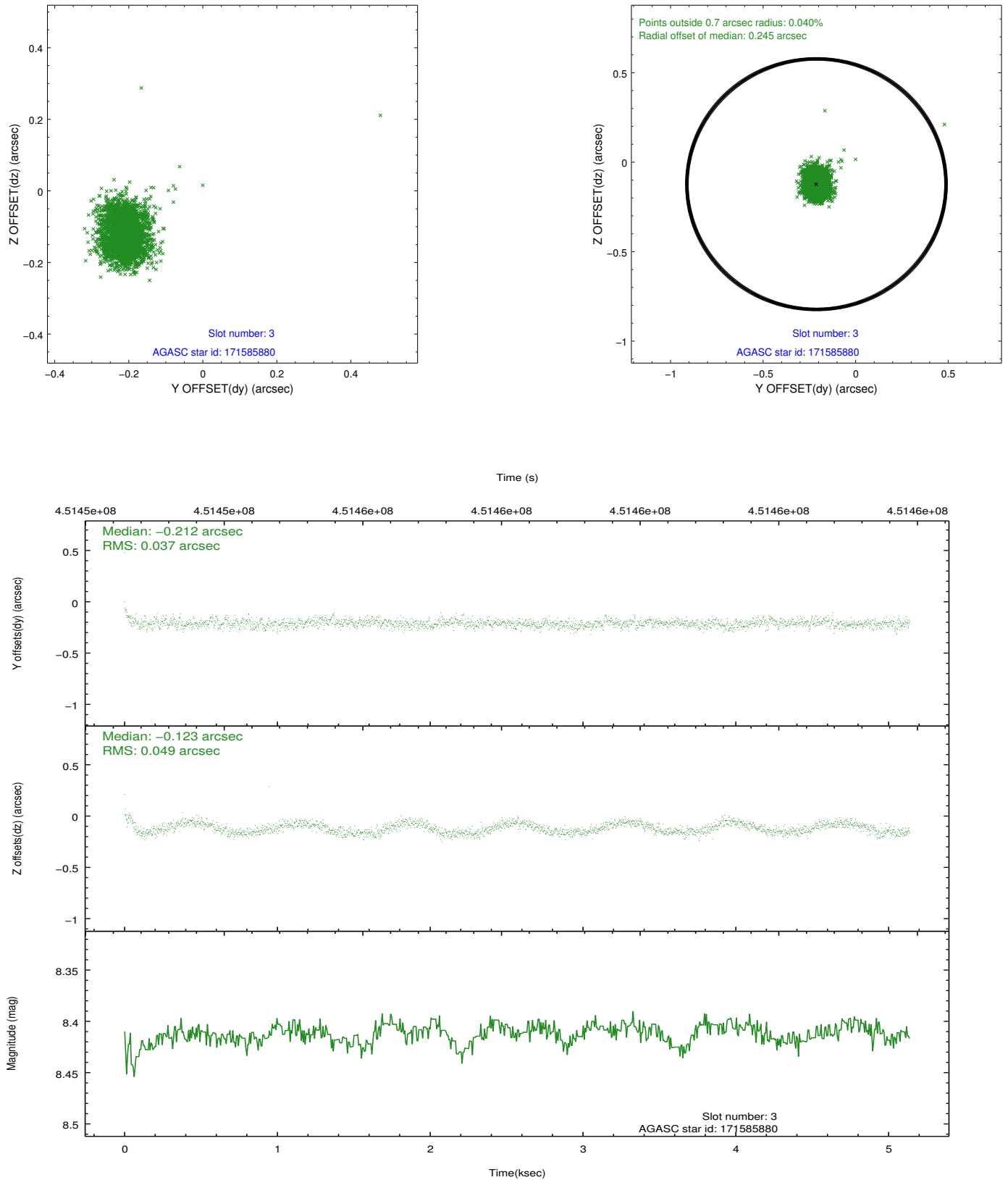


### Slot Statistics

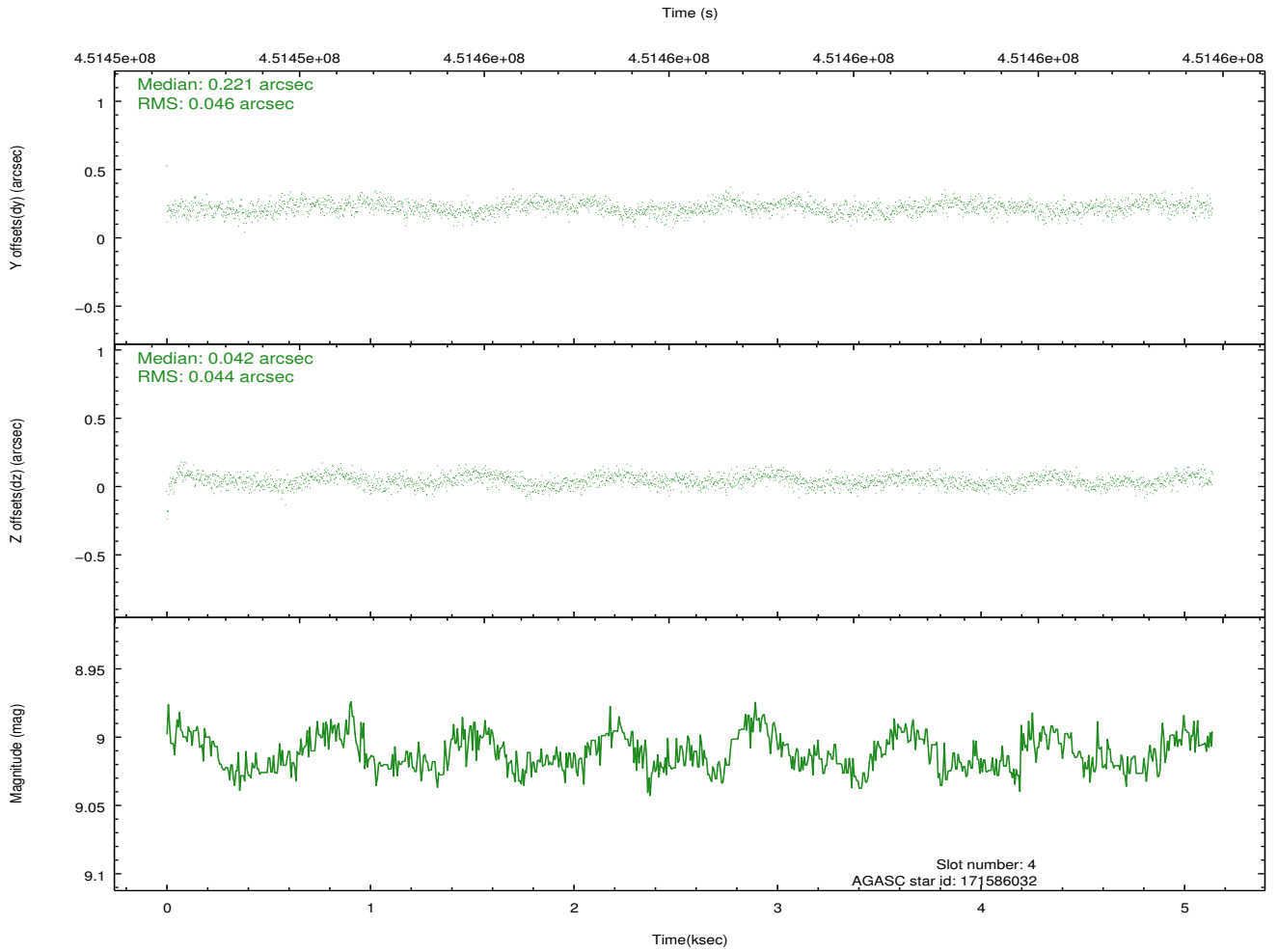
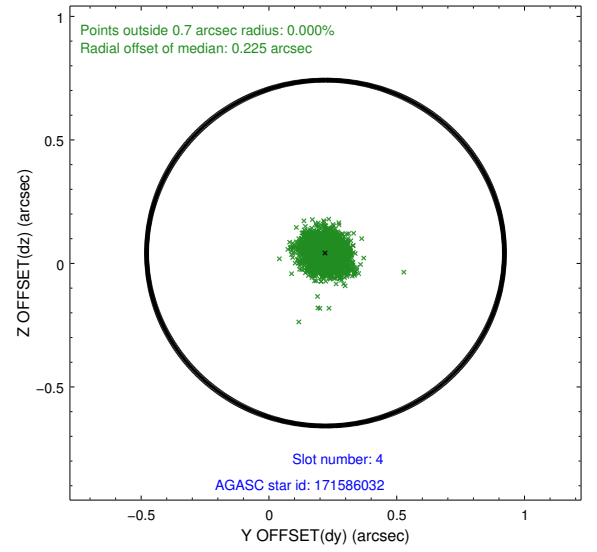
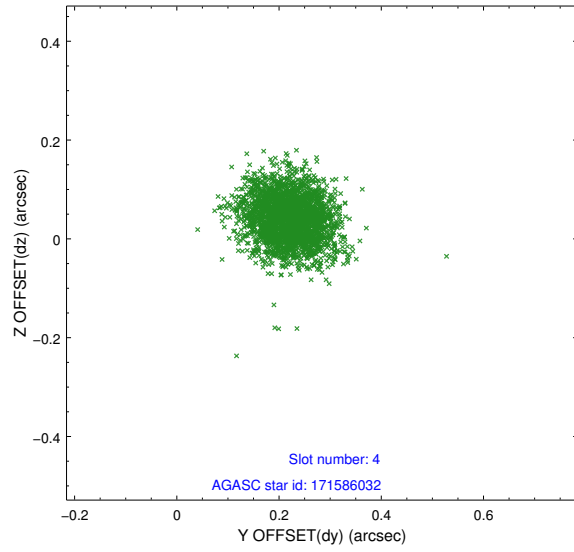
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.91	1254	-0.103	-0.066	0.015	0.028	0.000000	0.000000	-763.88	-1800.50
1	FID	ACIS-S-4	6.99	1254	0.202	0.067	0.015	0.028	0.000000	0.000000	2149.18	106.80
2	FID	ACIS-S-5	7.03	1254	-0.130	0.007	0.018	0.035	0.000000	0.000000	-1815.21	101.79
3	GUIDE	171585880	8.41	2505	-0.212	-0.123	0.063	0.098	83.676260	22.176319	-499.60	220.67
4	GUIDE	171586032	9.01	2507	0.221	0.042	0.067	0.110	83.950197	22.083225	-140.75	1125.49
5	GUIDE	171721904	9.25	2508	0.006	0.519	0.097	0.158	84.272676	22.116922	-236.42	2204.54
6	GUIDE	243941560	8.30	2508	-0.428	-0.117	0.051	0.090	83.733264	22.568598	-1906.38	448.58
7	GUIDE	171597832	9.28	2490	0.416	-0.320	0.099	0.161	83.183230	21.366702	2367.05	-1509.61

## 2.4 Star Slots

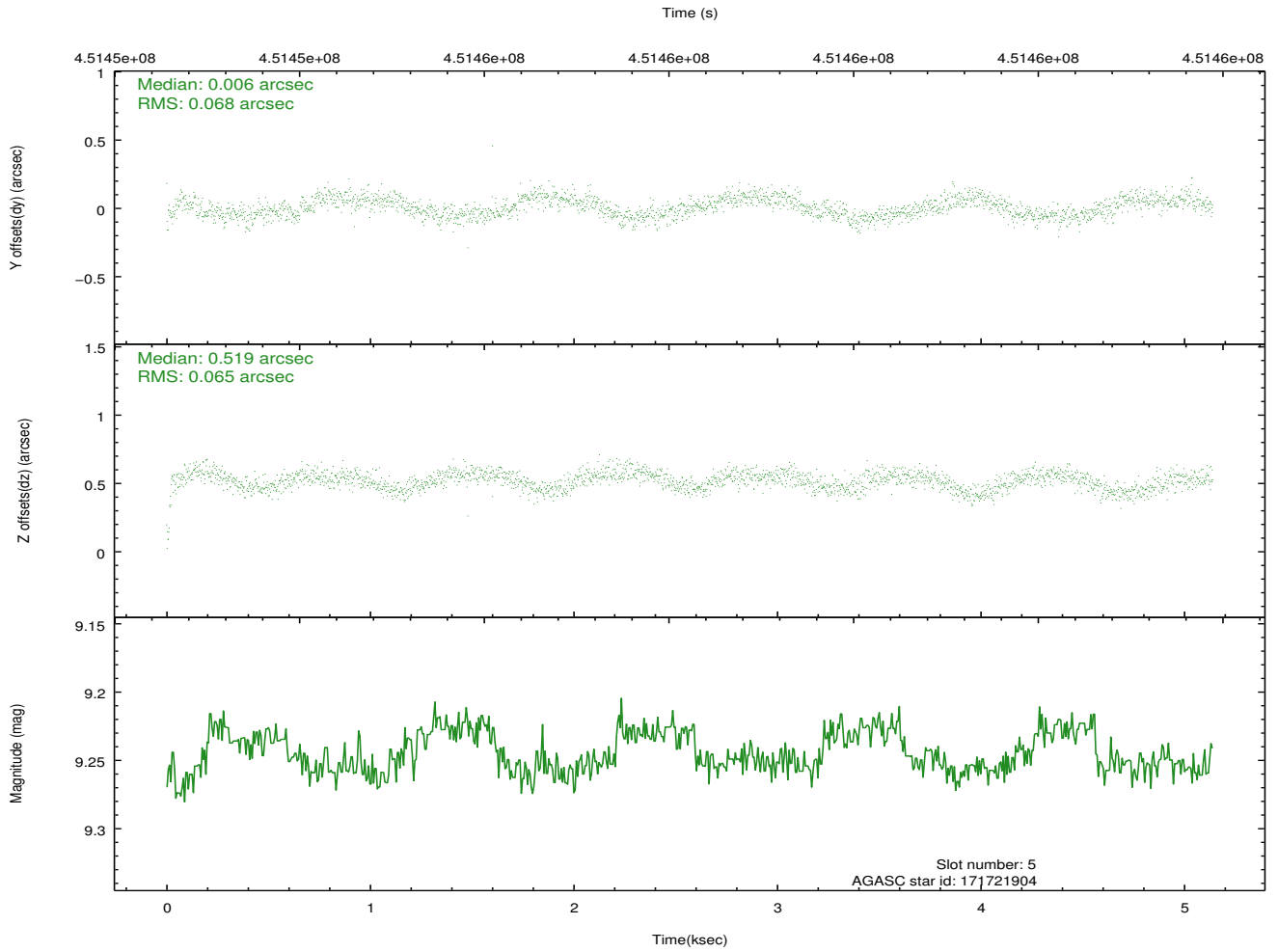
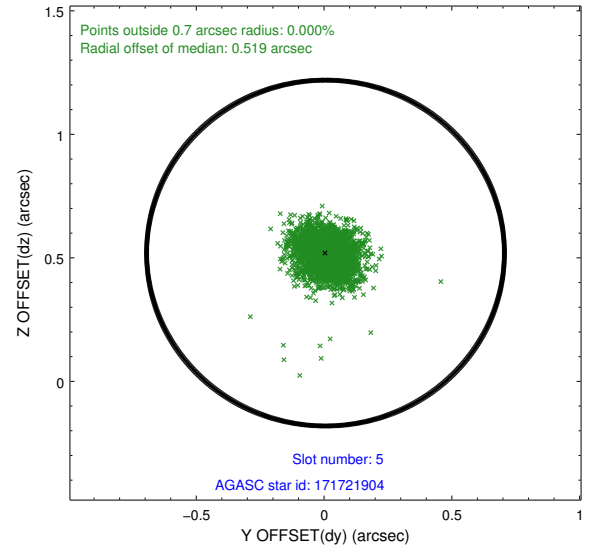
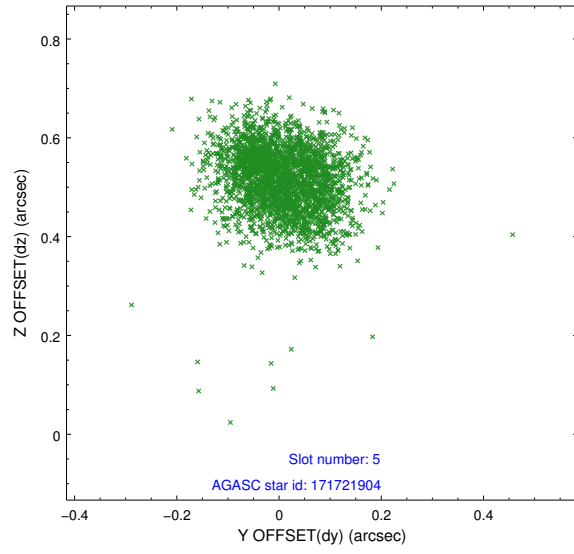
### 2.4.1 Slot 3



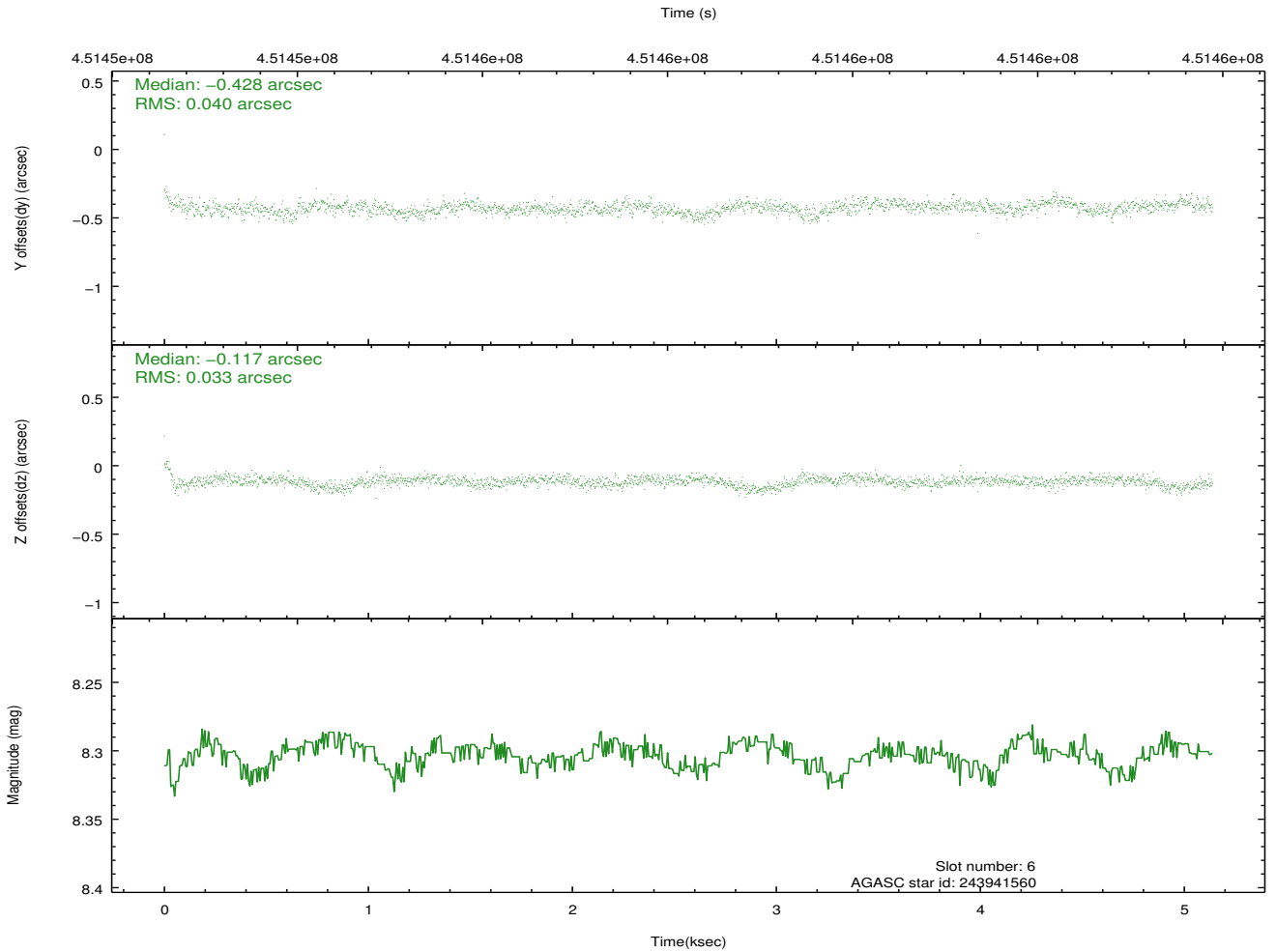
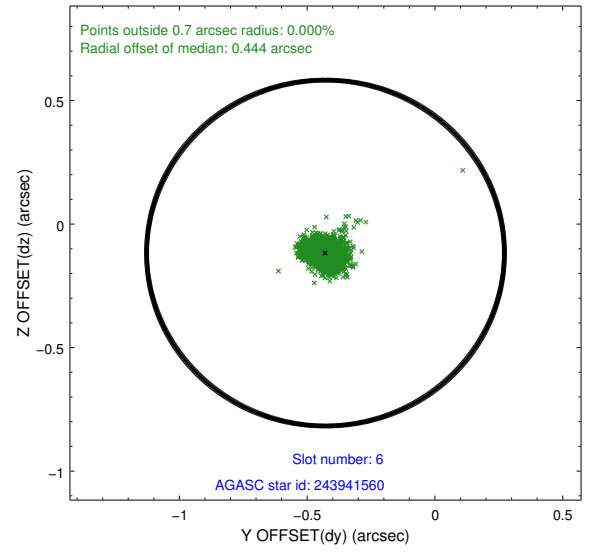
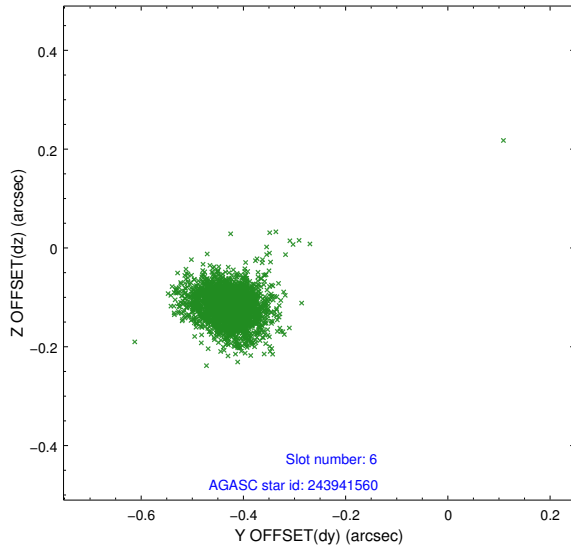
## 2.4.2 Slot 4



### 2.4.3 Slot 5

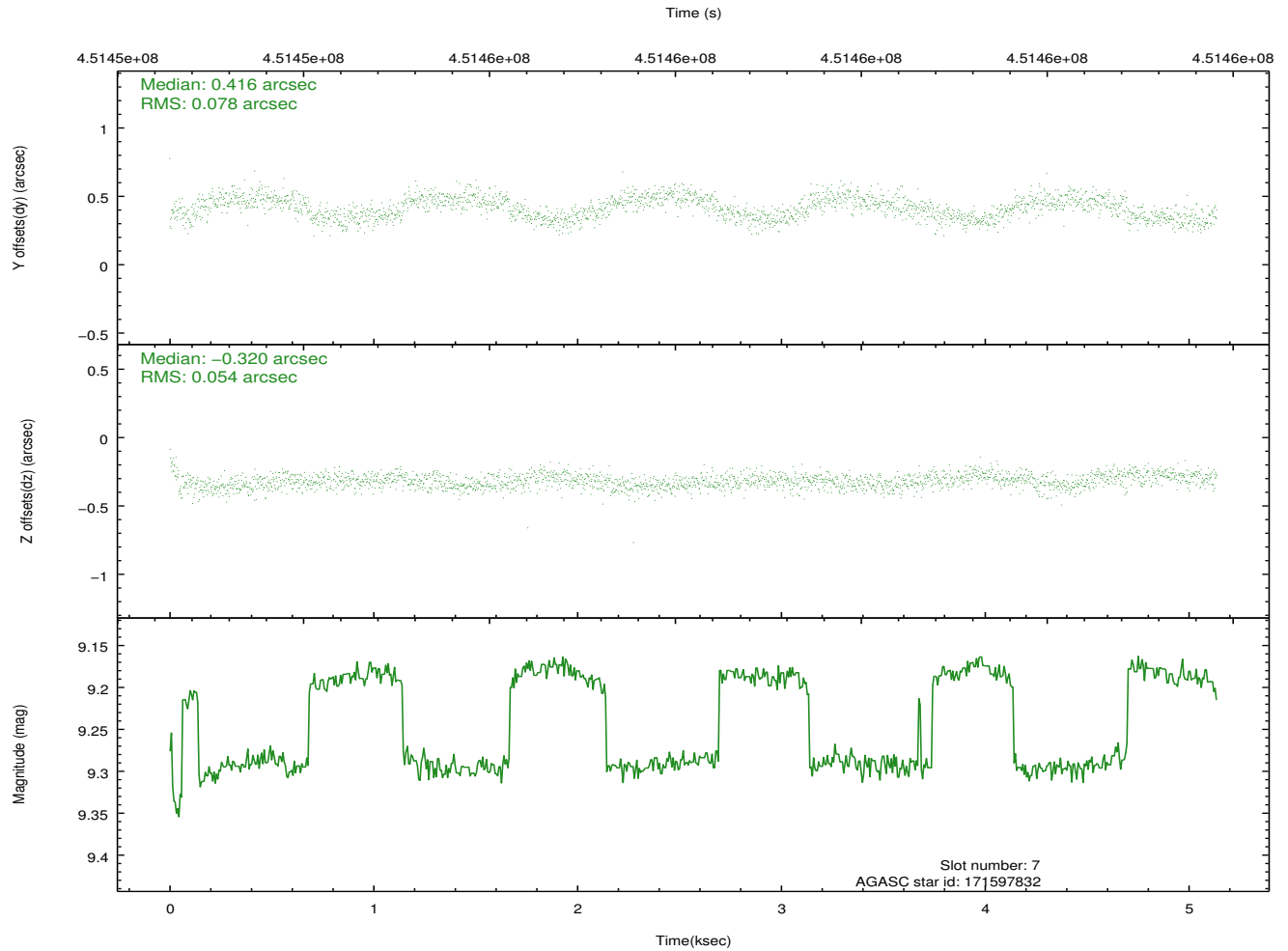
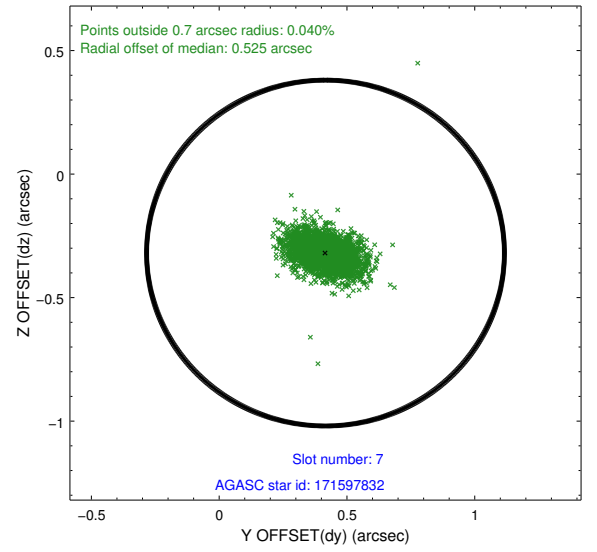
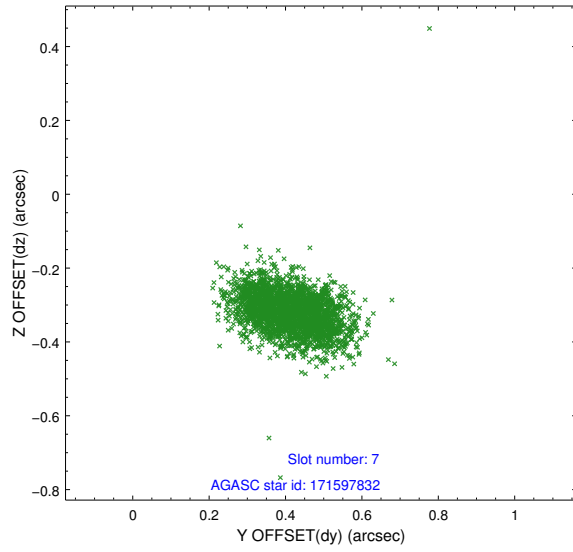


## 2.4.4 Slot 6



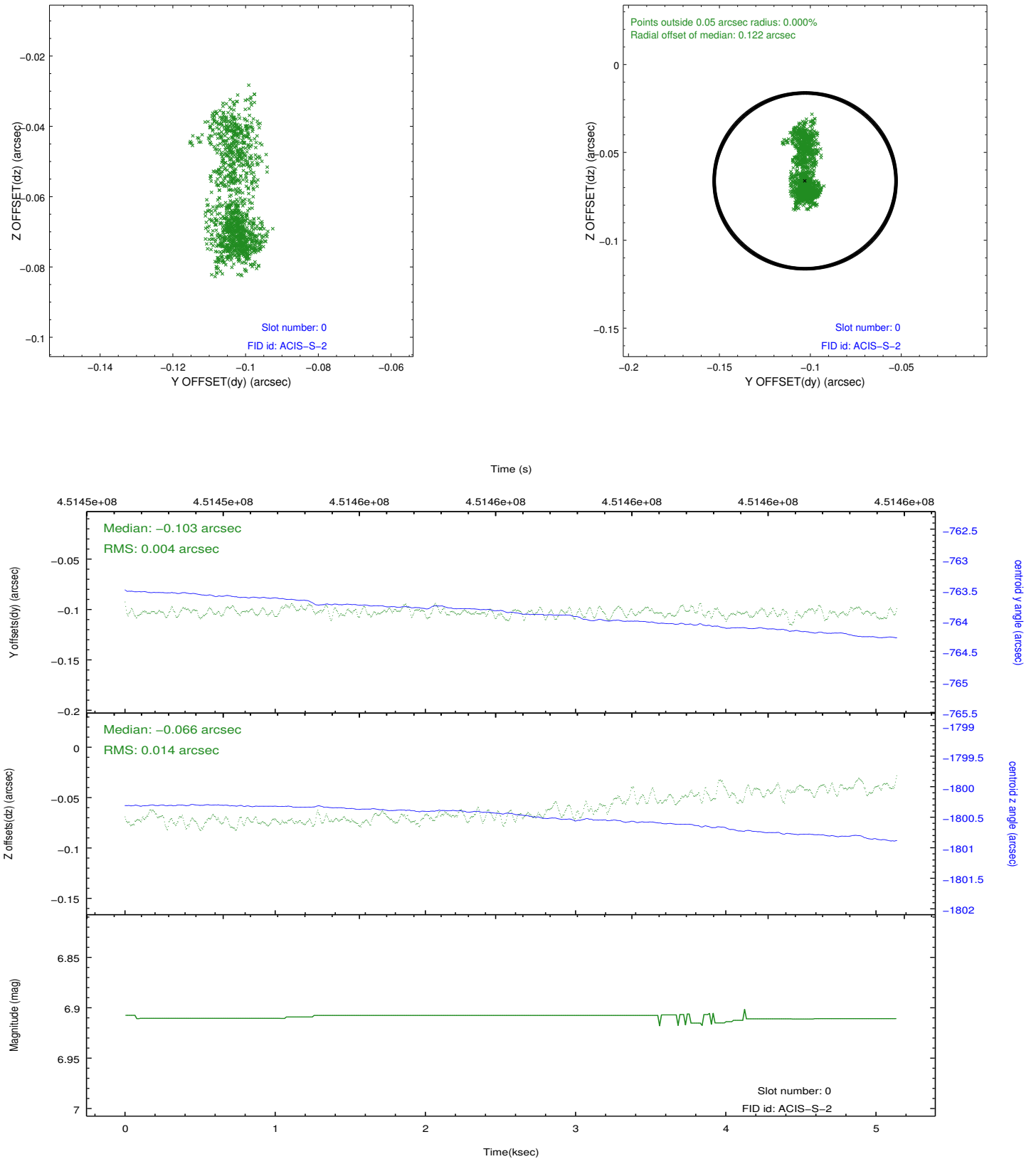


## 2.4.5 Slot 7

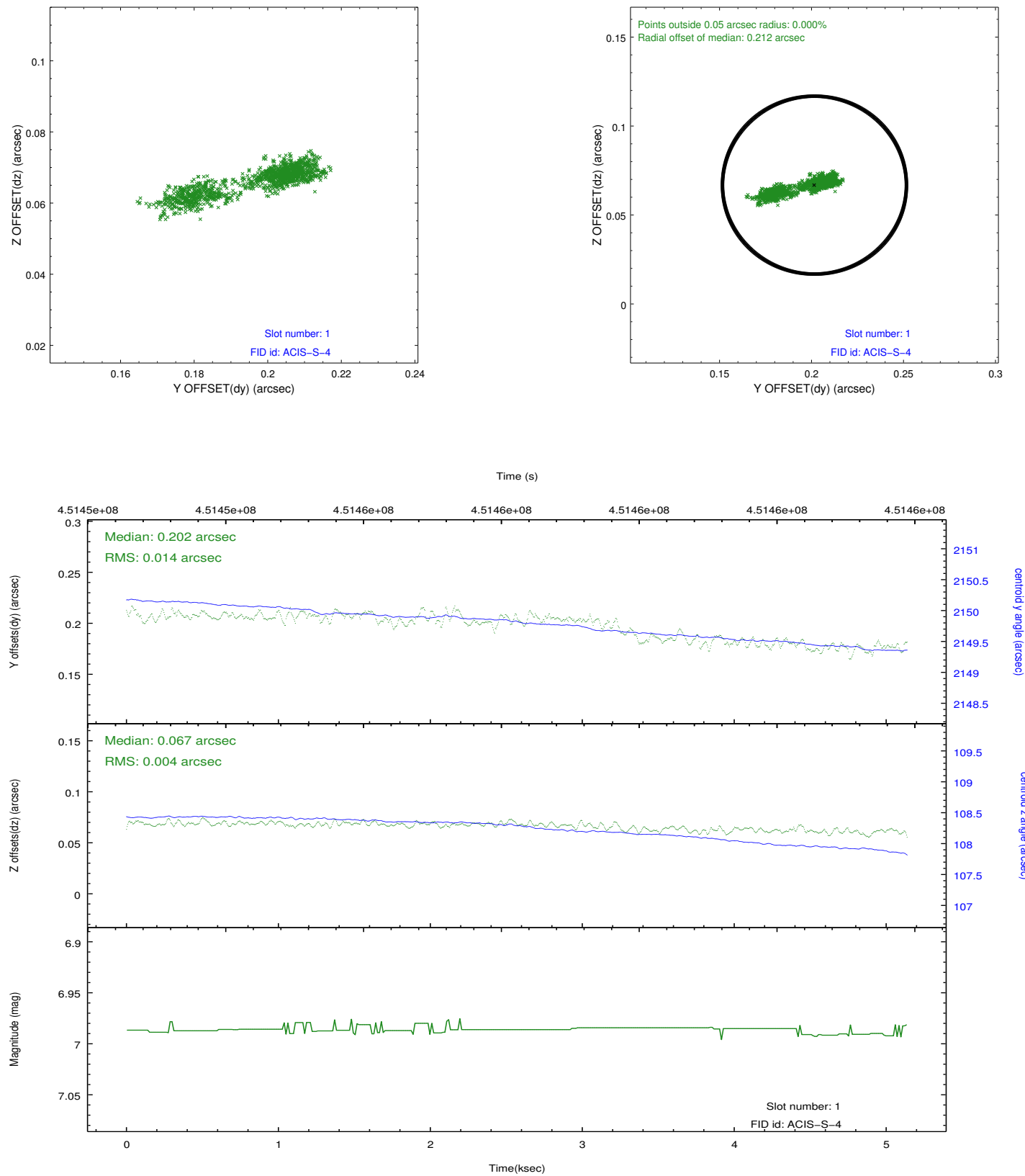


## 2.5 FID Slots

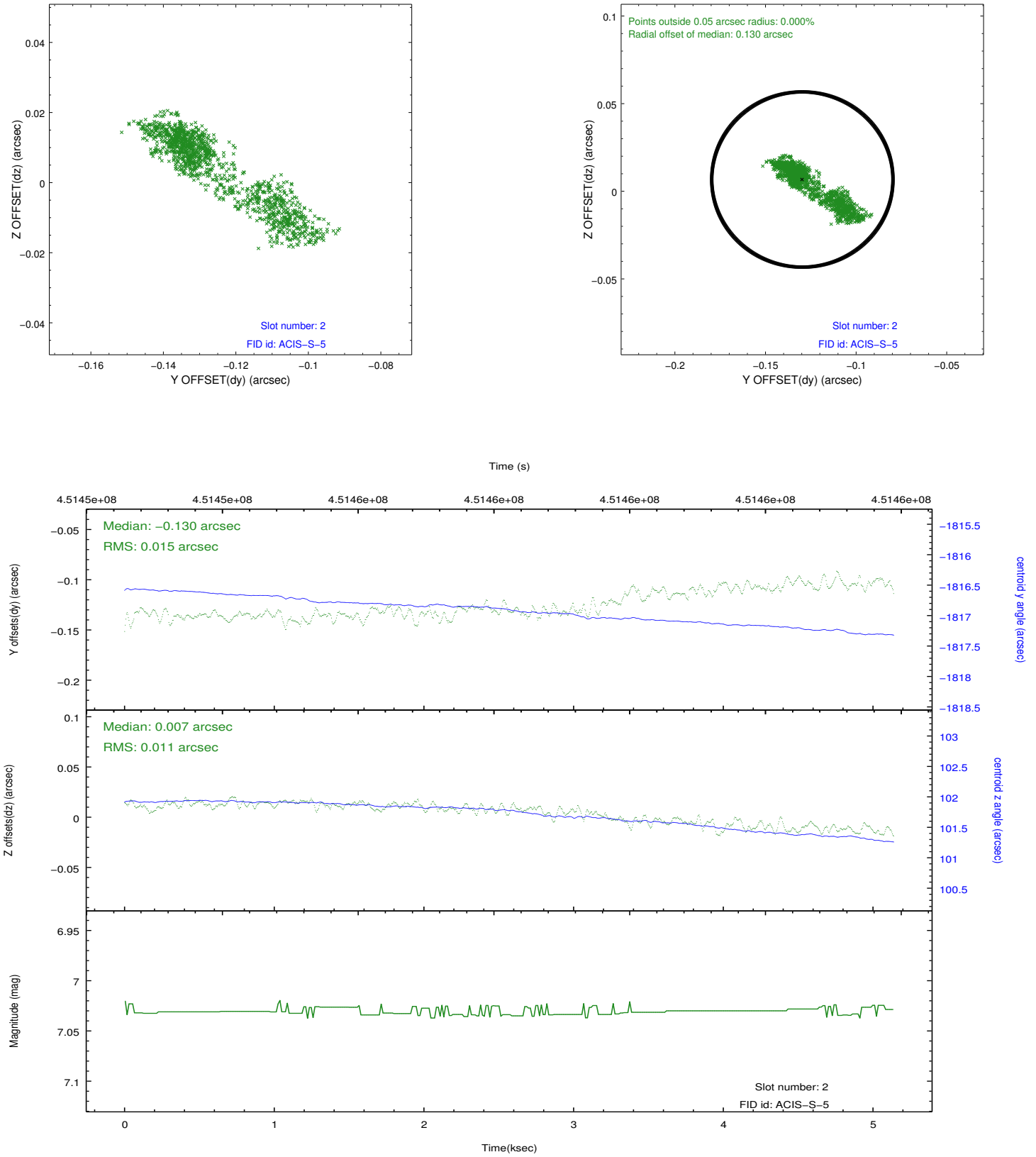
### 2.5.1 Slot 0



## 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)	2012.04.23
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.