

# V&V Reference Report

## L2 ASCDS Version : 8.5

Observation 4946 - L2 Version 3  
Chandra X-Ray Center

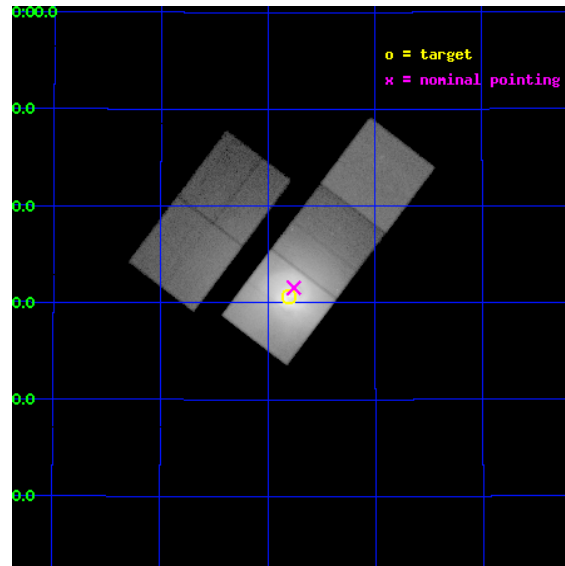
L2 Processing Date : Dec 10 2012

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# 1 Front

seq_num	800397	Sequence number
obs_id	4946	Observation id
title	A Megasecond Image of the Core of the Perseus Cluster	Proposal tit
observer	Professor Andrew Fabian	Principal investigator
object	Abell 426	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	49.950833	Observer's specified target RA [deg]
dec_targ	41.511722	Observer's specified target Dec [deg]
ra_nom	49.939305901017	Nominal RA [deg]
dec_nom	41.525923892418	Nominal Dec [deg]
roll_nom	127.16949068466	Nominal Roll [deg]
revision	3	Processing version of data
ontime	23975.399953872	Sum of GTIs [s]
livetime	23662.143703042	Livetime [s]
ontime2	23975.399953872	Sum of GTIs [s]
ontime3	23975.399953872	Sum of GTIs [s]
ontime5	23975.399953872	Sum of GTIs [s]
ontime6	23972.258973628	Sum of GTIs [s]
ontime7	23975.399953872	Sum of GTIs [s]
l2events	2367871	Number of level 2 events

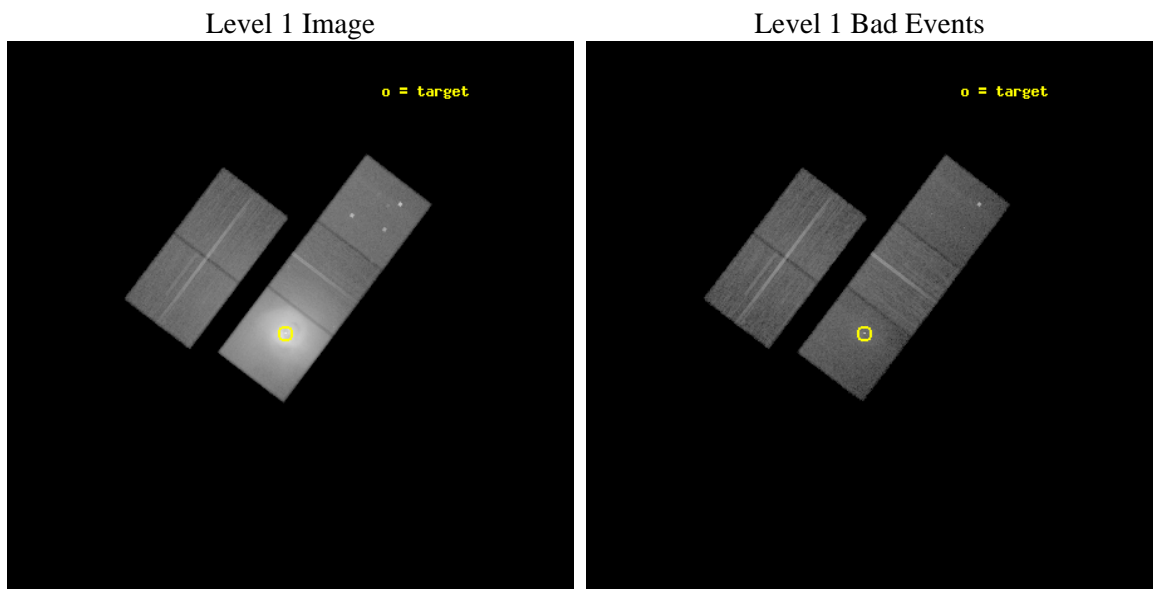




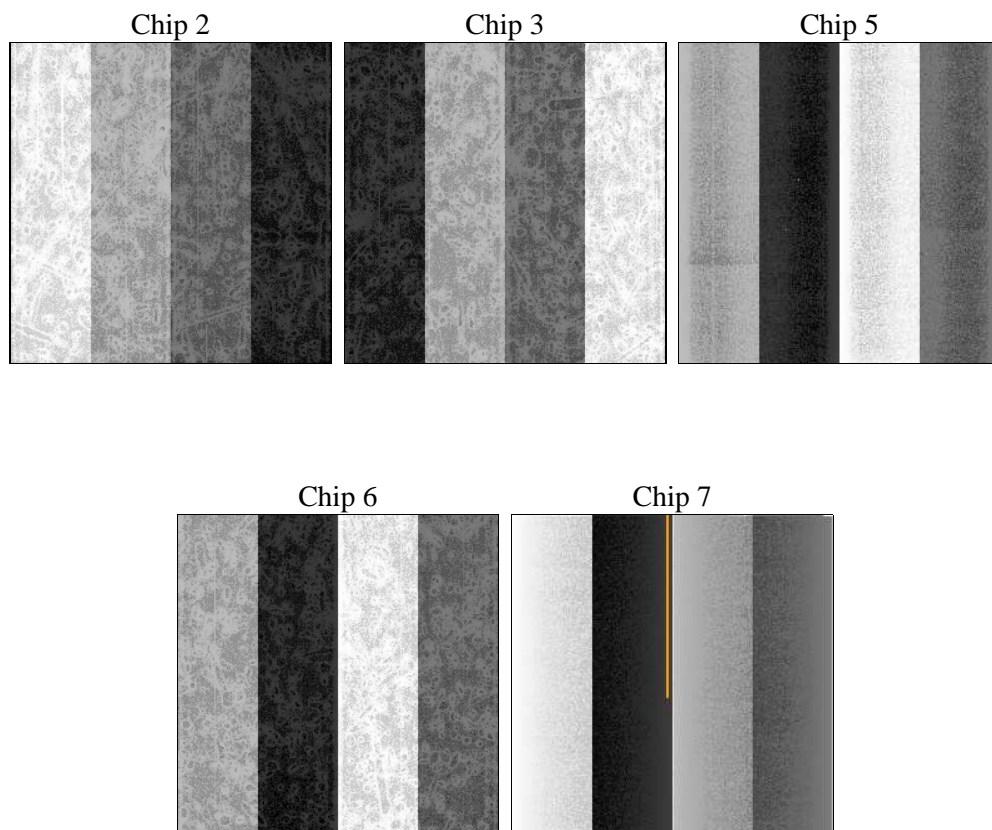
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	119108.290000	[s] Scheduled observation exposure time
ascdsver	8.5	Processing system revision	ontime	23975.399953872	Sum of GTIs [s]
caldbver	4.5.4	&#160	ontime2	23975.399953872	Sum of GTIs [s]
date	2012-12-09T18:40:41	Date and time of file creation	ontime3	23975.399953872	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	23975.399953872	Sum of GTIs [s]
			ontime6	23972.258973628	Sum of GTIs [s]
			ontime7	23975.399953872	Sum of GTIs [s]
			l1events	3187656	Number of level 1 events

### 2.1.4 Events

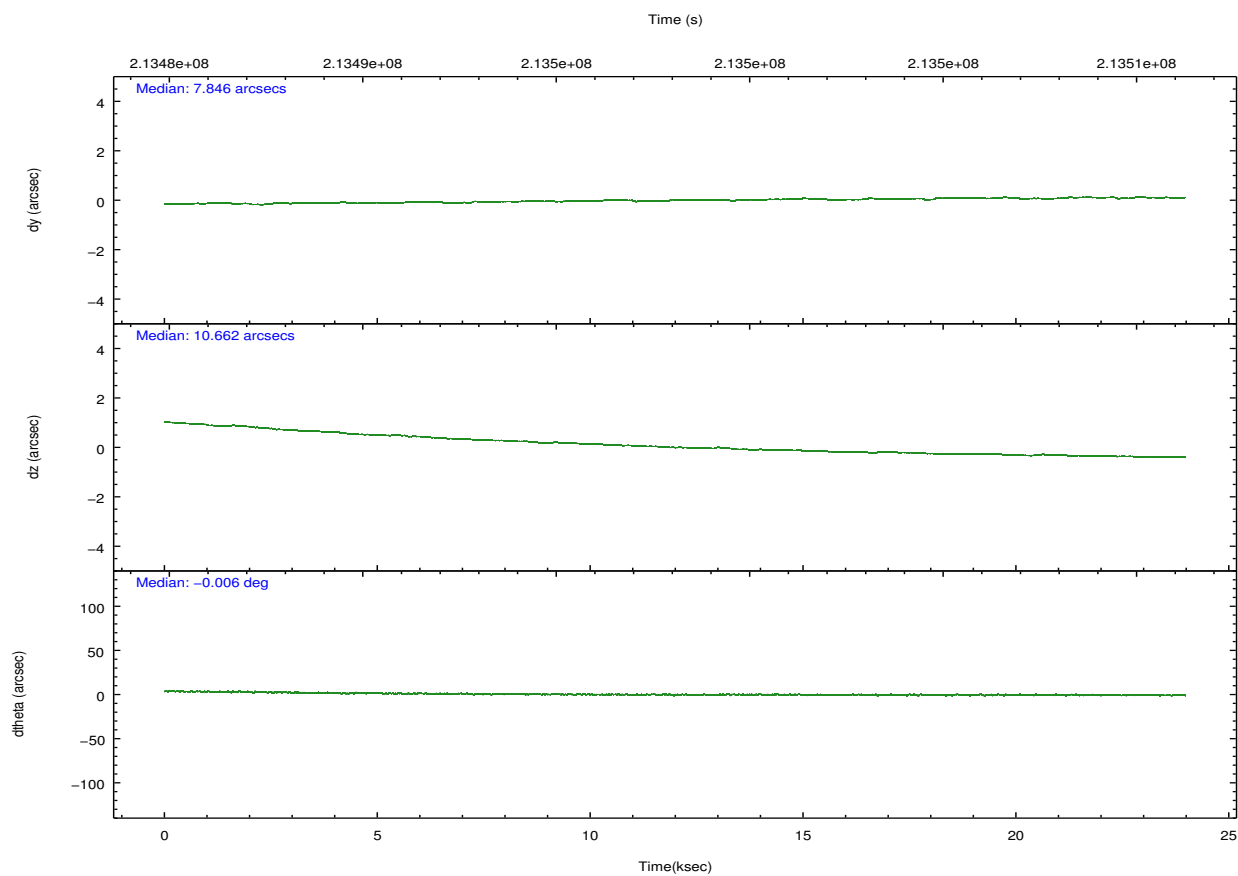
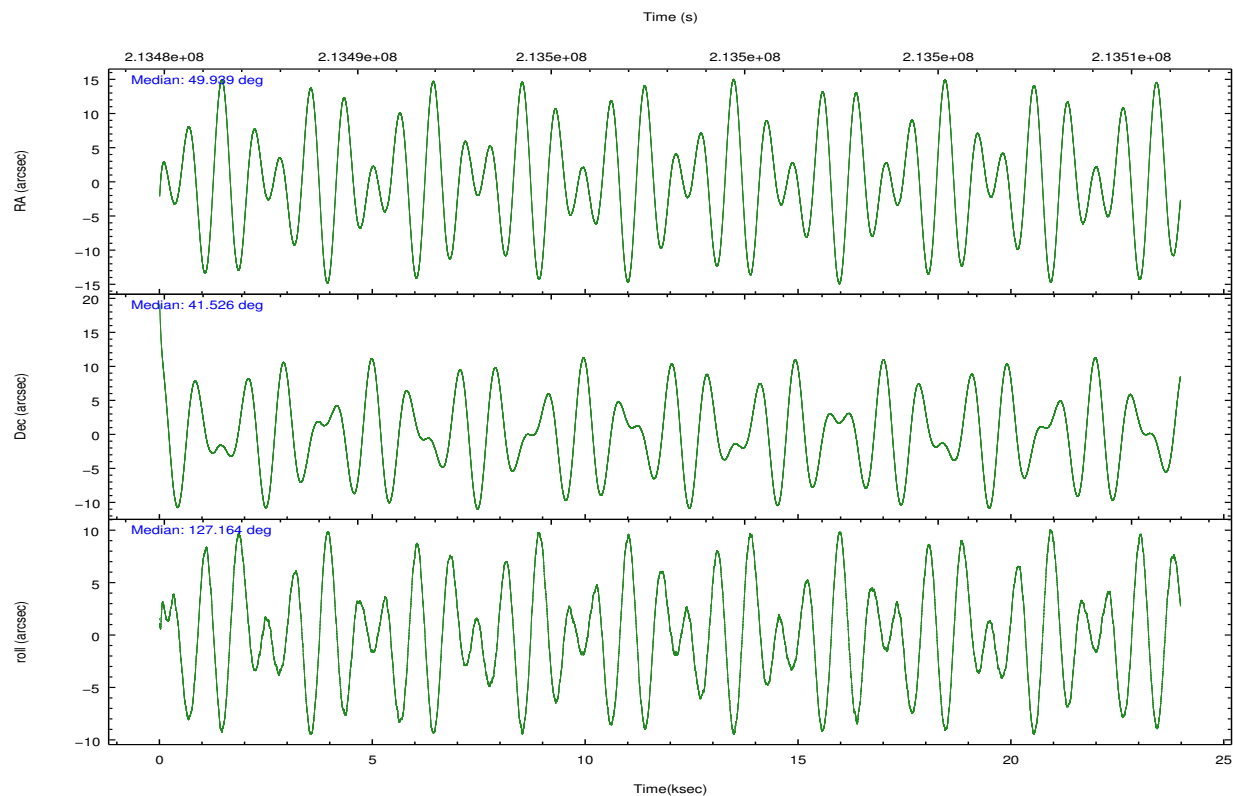
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	232303	263615	276750	417406	1997582
rejected events	163840	155825	128889	167109	150354
rejected %	70%	59%	46%	40%	7%

	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	50459	82255	29638	196467	507923
	21%	31%	10%	47%	25%
grade 1 events	354	498	474	902	1441
	0%	0%	0%	0%	0%
grade 2 events	9299	12870	46708	28209	491872
	4%	4%	16%	6%	24%
grade 3 events	3567	5071	8254	9324	219590
	1%	1%	2%	2%	10%
grade 4 events	3496	4844	8356	9389	215967
	1%	1%	3%	2%	10%
grade 5 events	5592	6758	19714	7629	32621
	2%	2%	7%	1%	1%
grade 6 events	4465	5463	65018	10621	438217
	1%	2%	23%	2%	21%
grade 7 events	155071	145856	98588	154865	89951
	66%	55%	35%	37%	4%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23567	ACIS-23567	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	49.973039	49.93930590101678	Subarray requested	NONE	NONE
[deg] Pointing Dec	41.515694	41.52592389241816	Alternating exposures requested	N	N
[deg] Pointing Roll	126.990499	127.1694906846558	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	213486231.184000	213484566.153			
Observation start date	2004-10-06T21:42:47	2004-10-06T21:16:06			
[s] Observation end time (MET)	213605339.184000	213510706.21667			
Observation end date	2004-10-08T06:47:55	2004-10-07T04:31:46			
Read mode	TIMED	TIMED			

## 2.3 Aspect

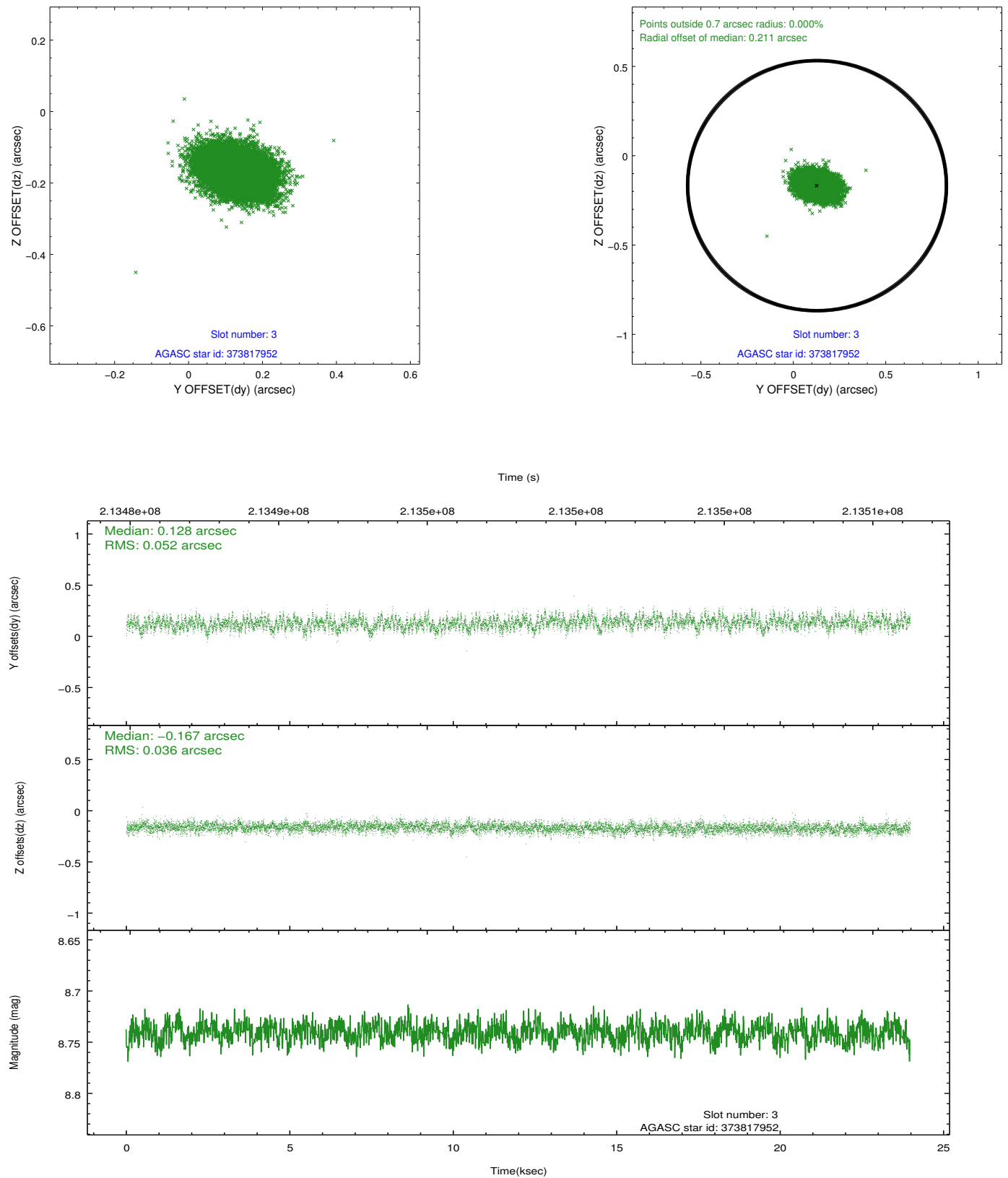


### Slot Statistics

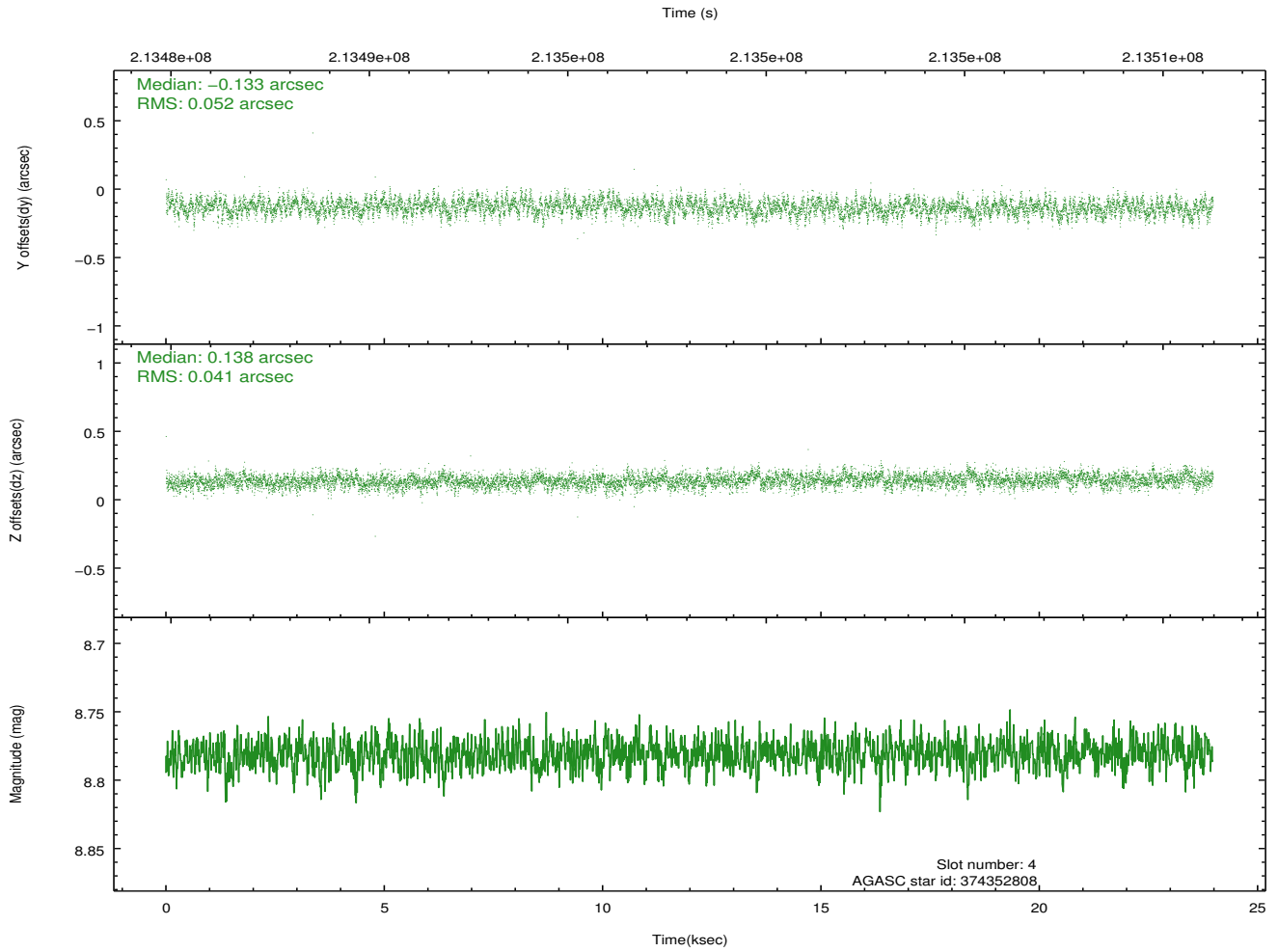
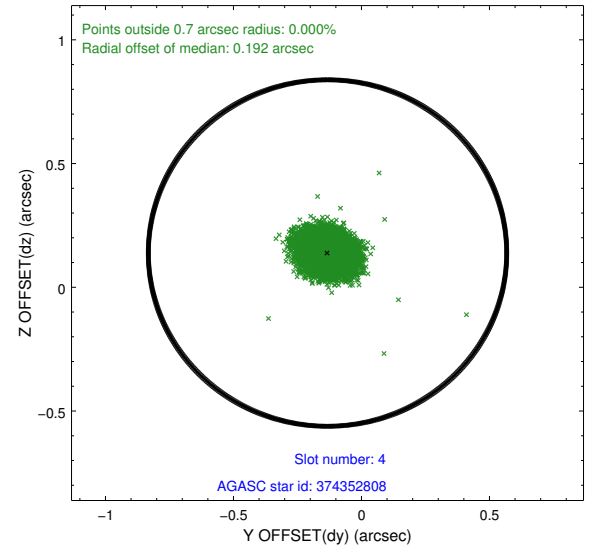
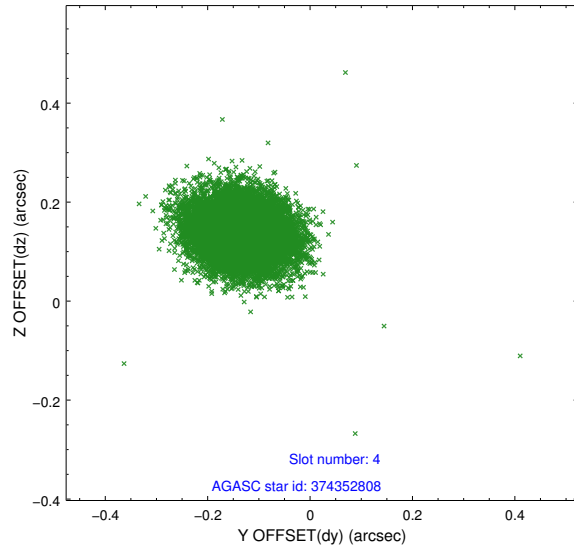
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.19	5848	0.010	-0.062	0.027	0.039	0.000000	0.000000	935.44	-1727.74
1	FID	ACIS-S-4	7.21	5847	0.072	0.044	0.016	0.021	0.000000	0.000000	2152.97	176.40
2	FID	ACIS-S-5	7.23	5849	-0.111	0.031	0.016	0.023	0.000000	0.000000	-1813.39	170.11
3	GUIDE	373817952	8.74	11690	0.128	-0.167	0.066	0.110	49.913424	40.978510	-1447.02	1292.82
4	GUIDE	374352808	8.78	11690	-0.133	0.138	0.069	0.113	49.969955	42.208621	1997.45	-1493.83
5	GUIDE	374357808	8.68	11693	-0.181	0.120	0.072	0.116	49.921429	42.176083	1982.02	-1320.26
6	GUIDE	374345008	9.37	11683	0.080	-0.069	0.090	0.143	48.768668	41.619367	2266.31	2350.94
7	GUIDE	375534552	8.20	11692	0.109	-0.021	0.062	0.100	50.877490	41.206927	-2351.09	-1295.39

## 2.4 Star Slots

### 2.4.1 Slot 3

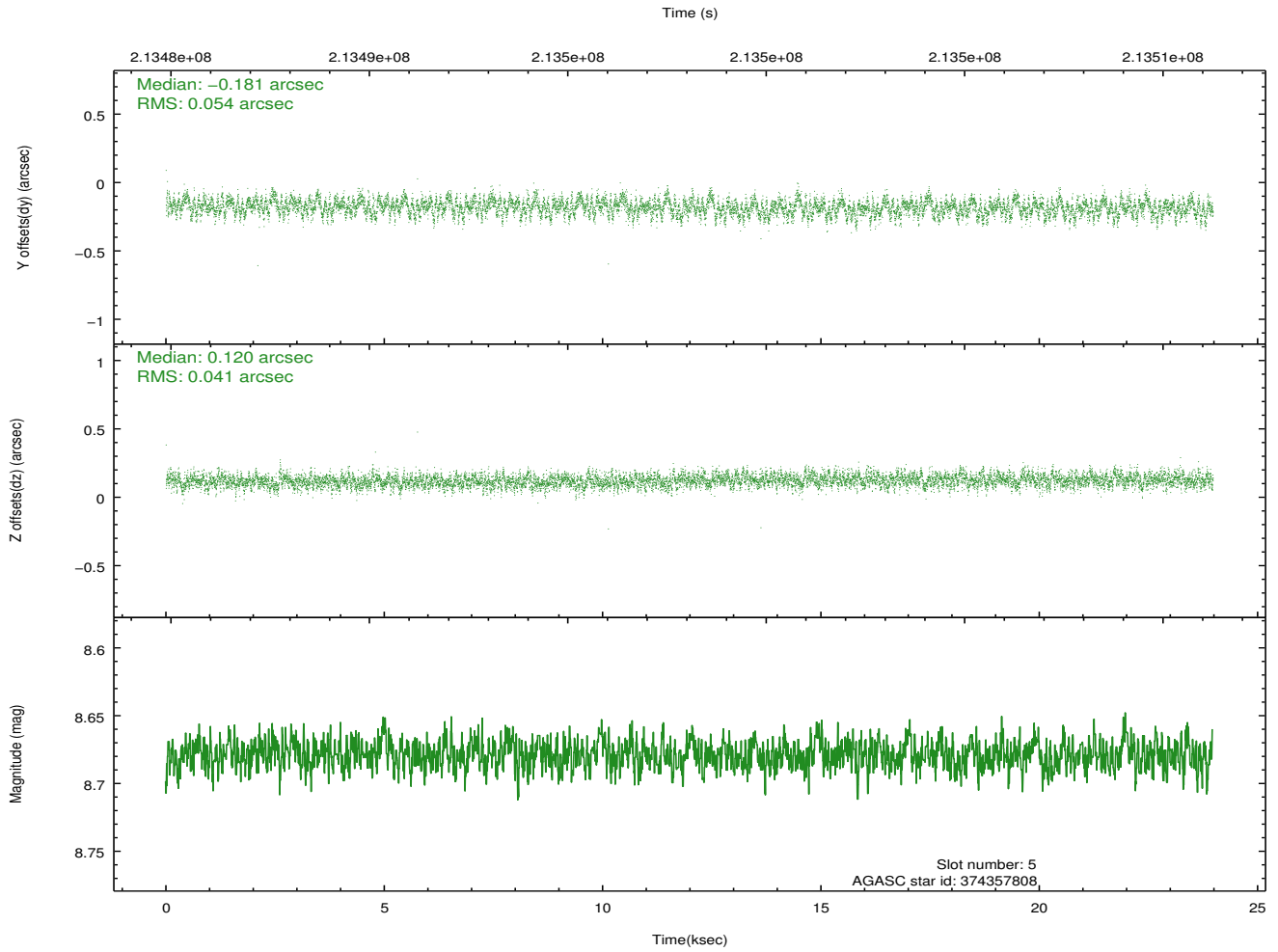
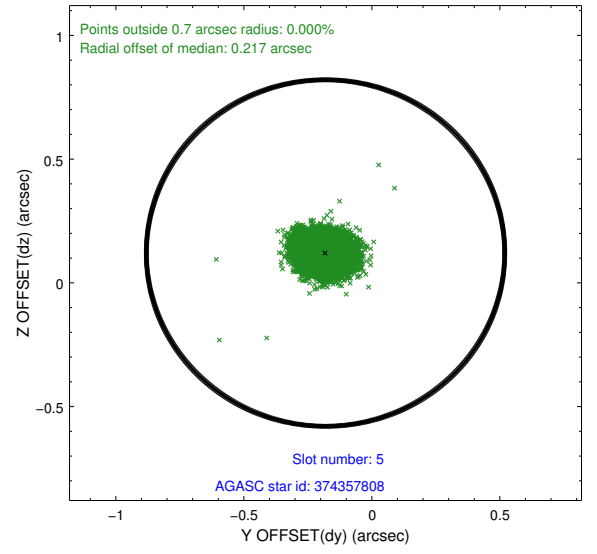
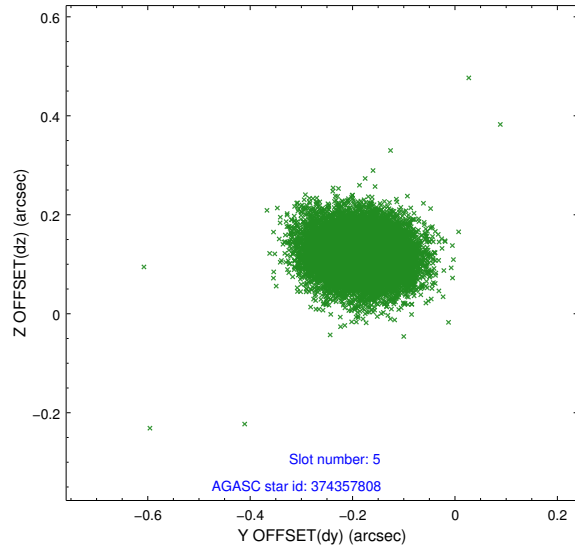


## 2.4.2 Slot 4

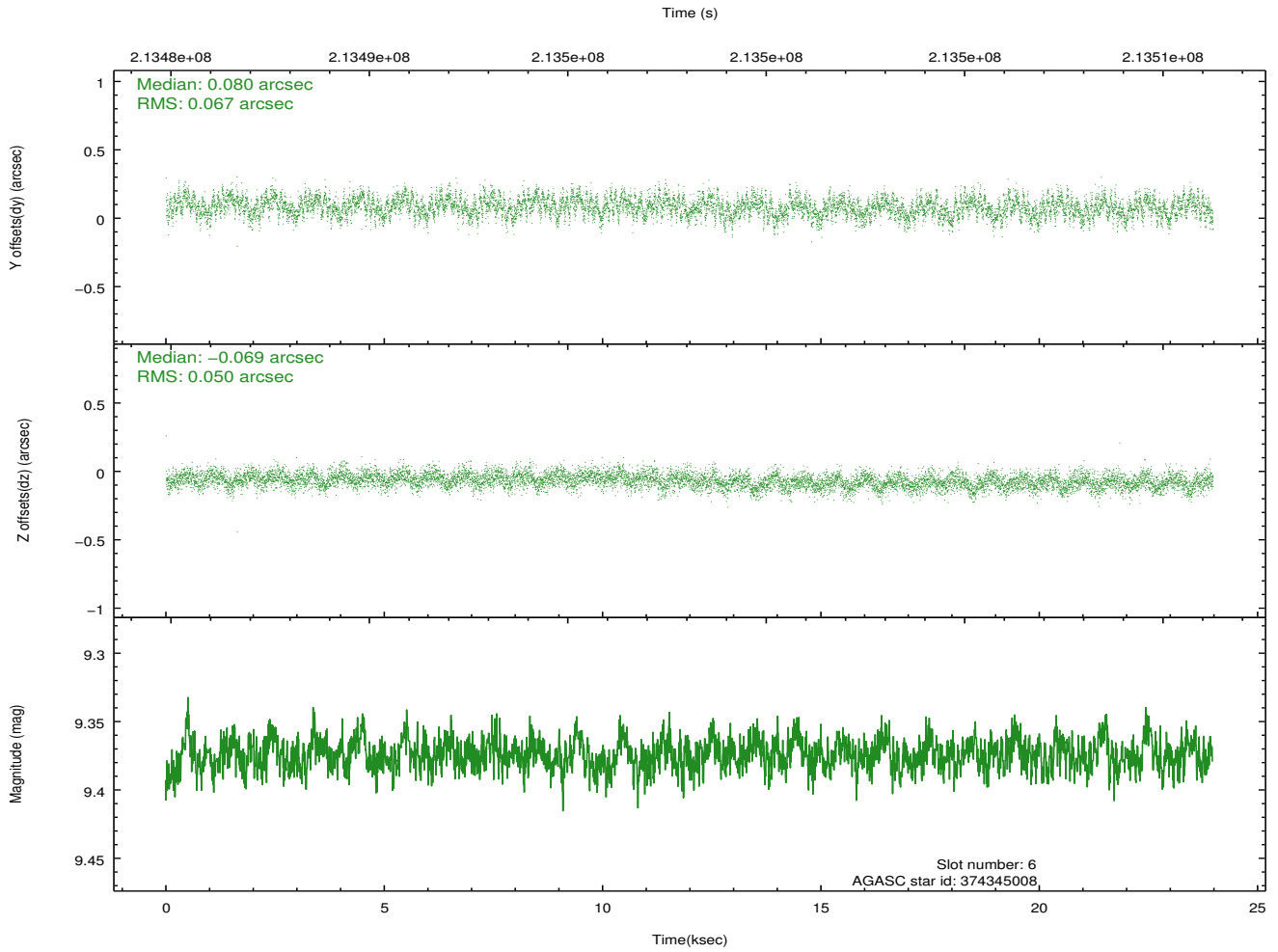
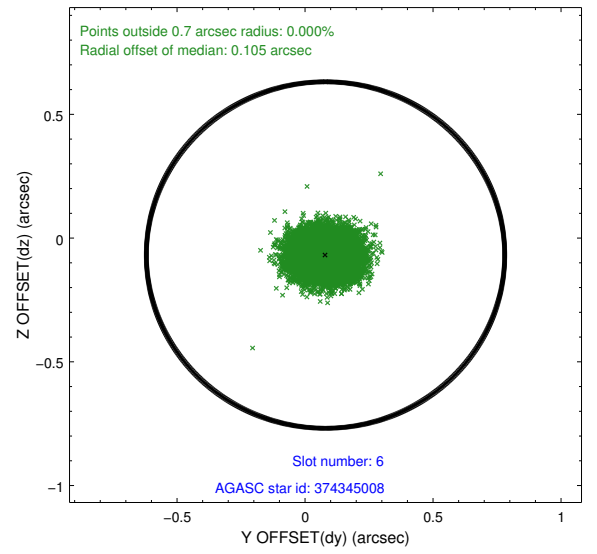
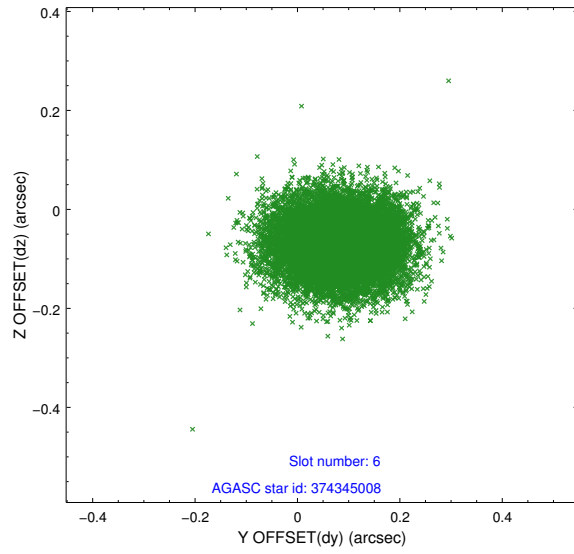




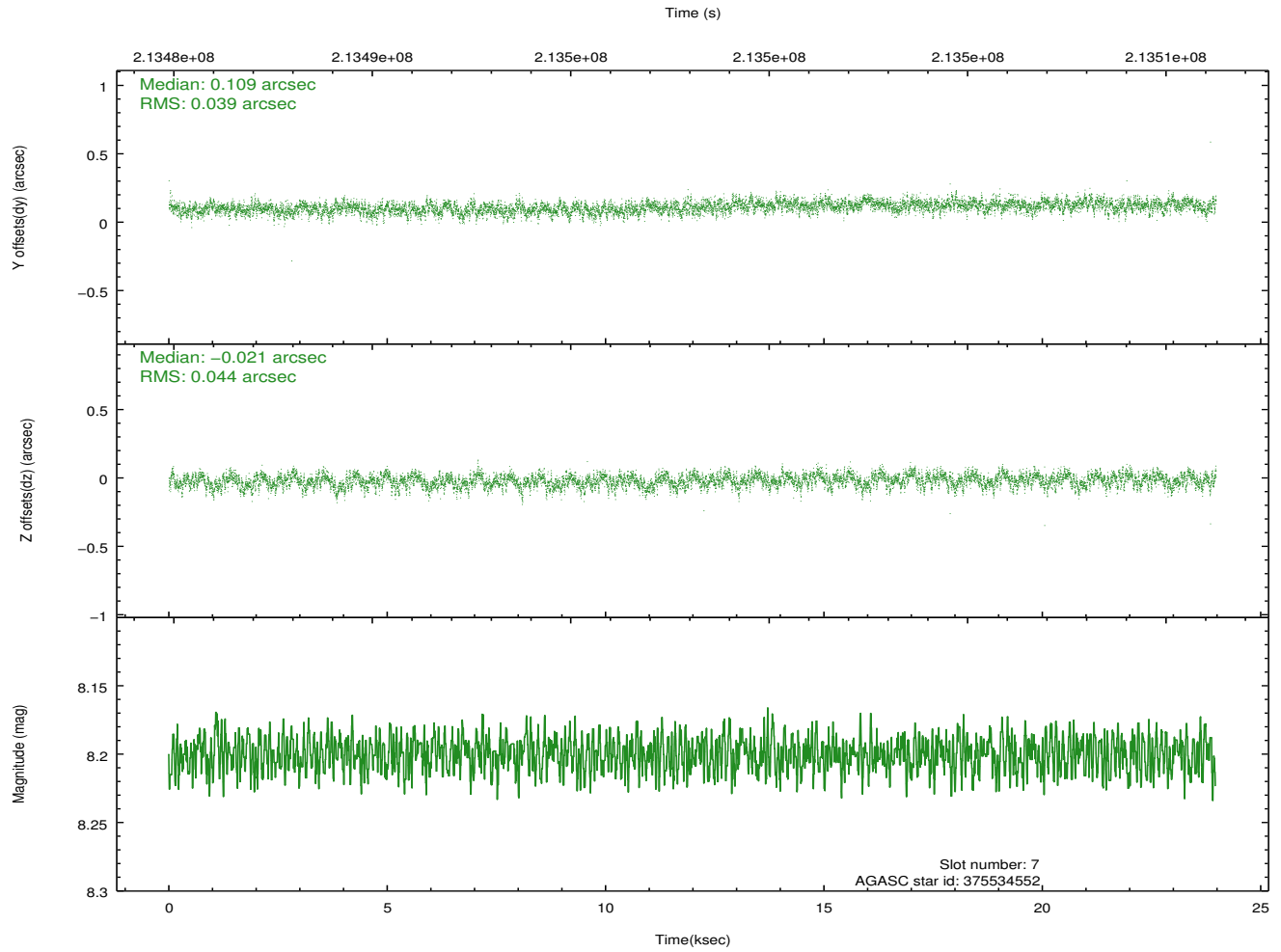
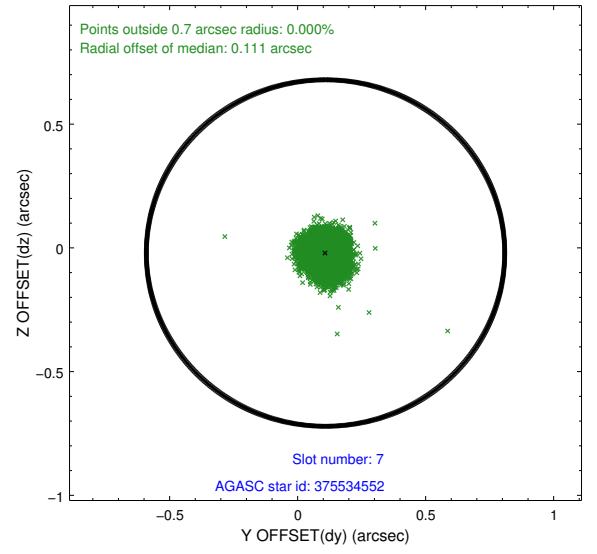
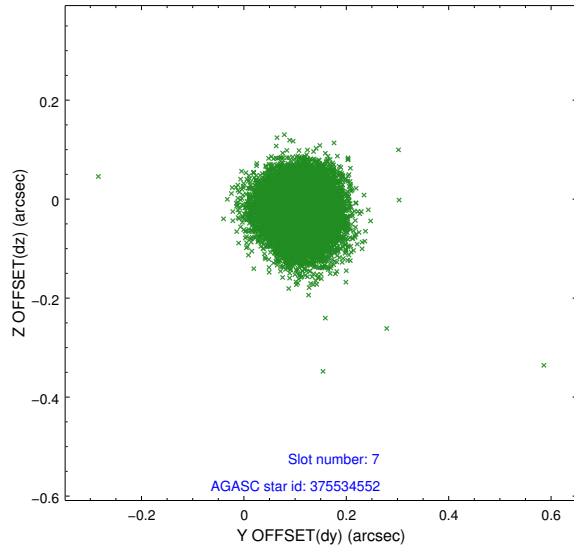
### 2.4.3 Slot 5



## 2.4.4 Slot 6

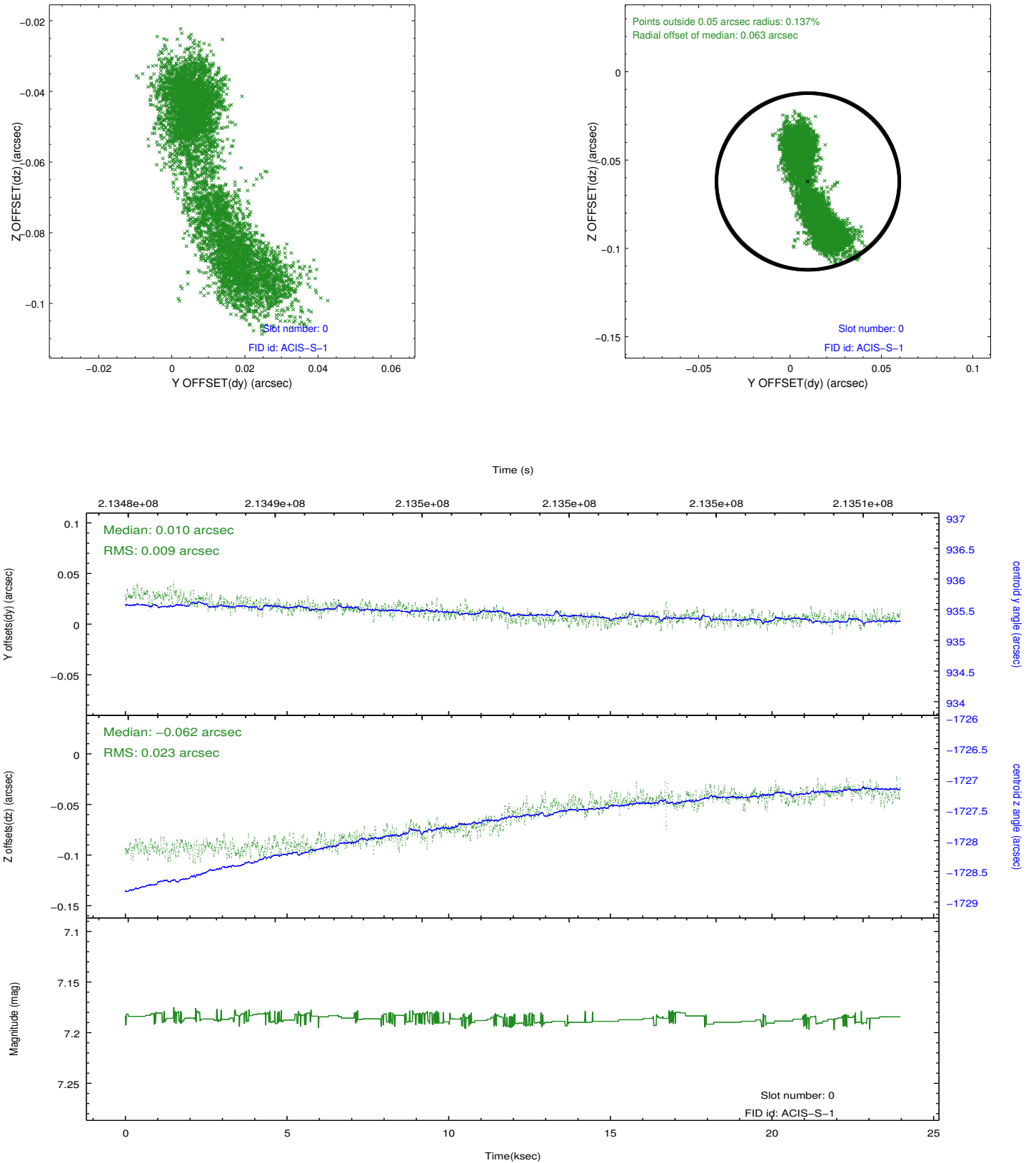


## 2.4.5 Slot 7

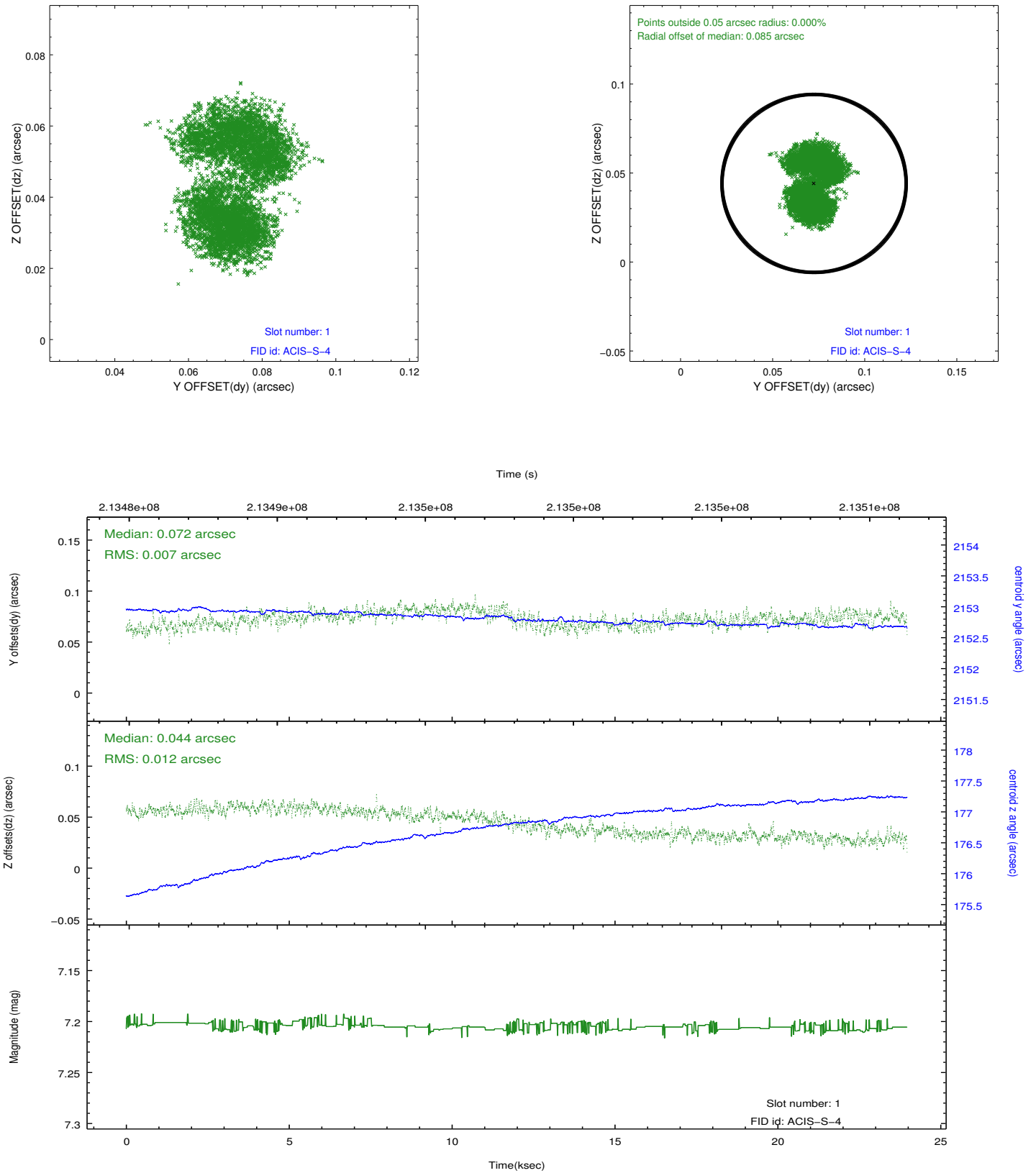


## 2.5 FID Slots

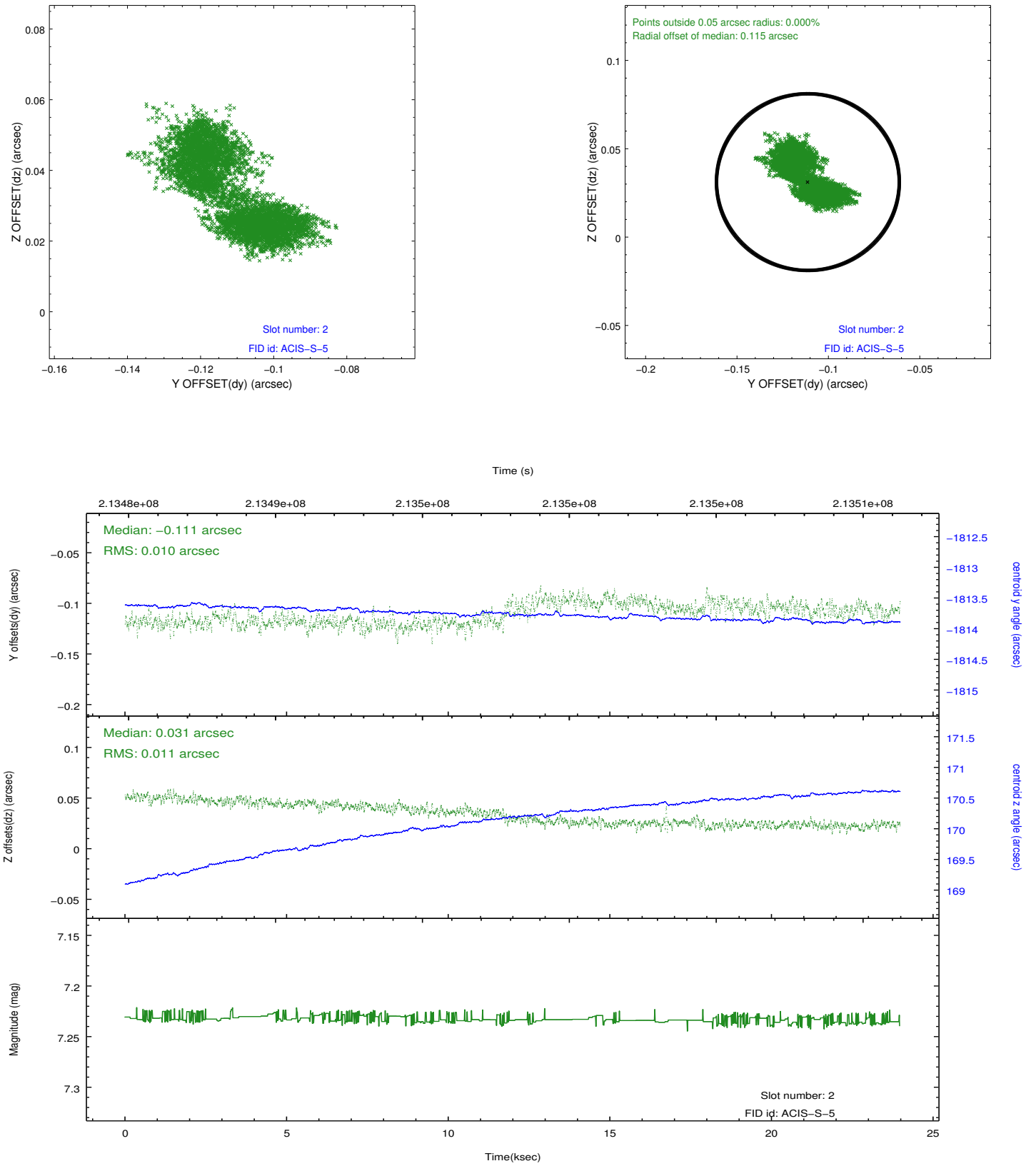
### 2.5.1 Slot 0



## 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)	2013.01.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	23.975

### A.2 Comments