

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 3591 - L2 Version 3  
Chandra X-Ray Center

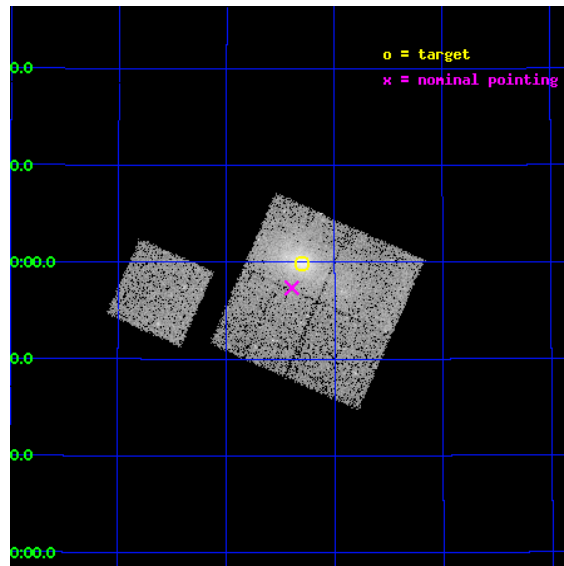
L2 Processing Date : Nov 2 2012

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# 1 Front

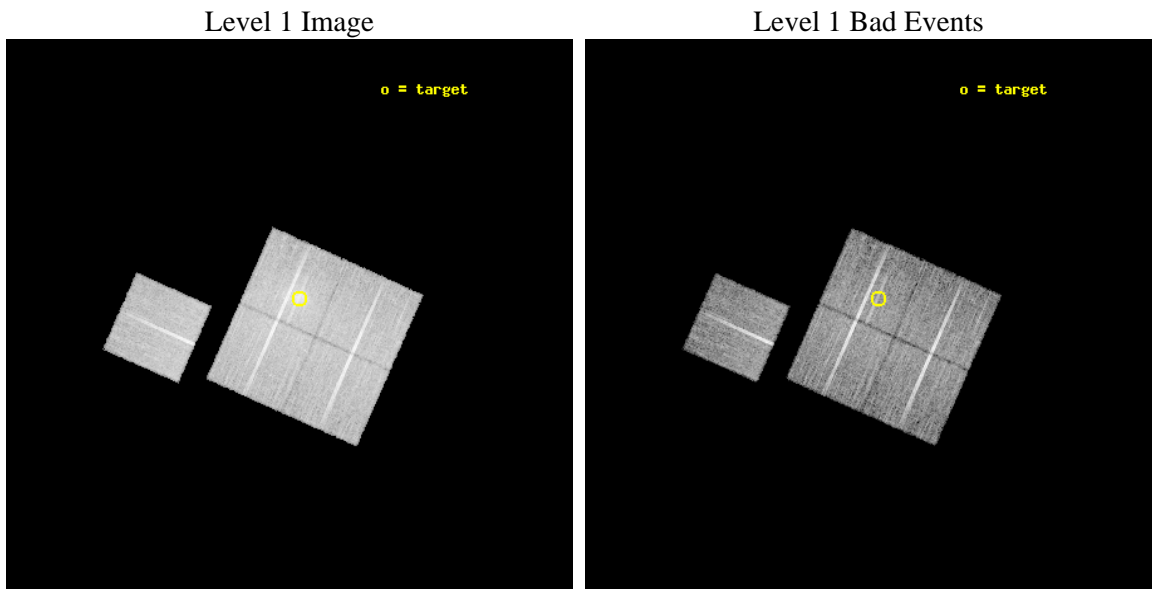
seq_num	800312	Sequence number
obs_id	3591	Observation id
title	X-RAY/SZ DETERMINATION OF COSMOLOGICAL PARAMETERS	Proposal title
observer	DR. LEON VANSPEYBROECK	Principal investigator
object	A1763	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	203.82629	Observer's specified target RA [deg]
dec_targ	40.99889	Observer's specified target Dec [deg]
ra_nom	203.84864811035	Nominal RA [deg]
dec_nom	40.956104710383	Nominal Dec [deg]
roll_nom	293.96947977746	Nominal Roll [deg]
revision	3	Processing version of data
ontime	19855.377101004	Sum of GTIs [s]
livetime	19595.951981864	Livetime [s]
ontime0	19864.799961776	Sum of GTIs [s]
ontime1	19864.799961776	Sum of GTIs [s]
ontime2	19861.659001559	Sum of GTIs [s]
ontime3	19855.377101004	Sum of GTIs [s]
ontime6	19864.799961776	Sum of GTIs [s]
l2events	63193	Number of level 2 events



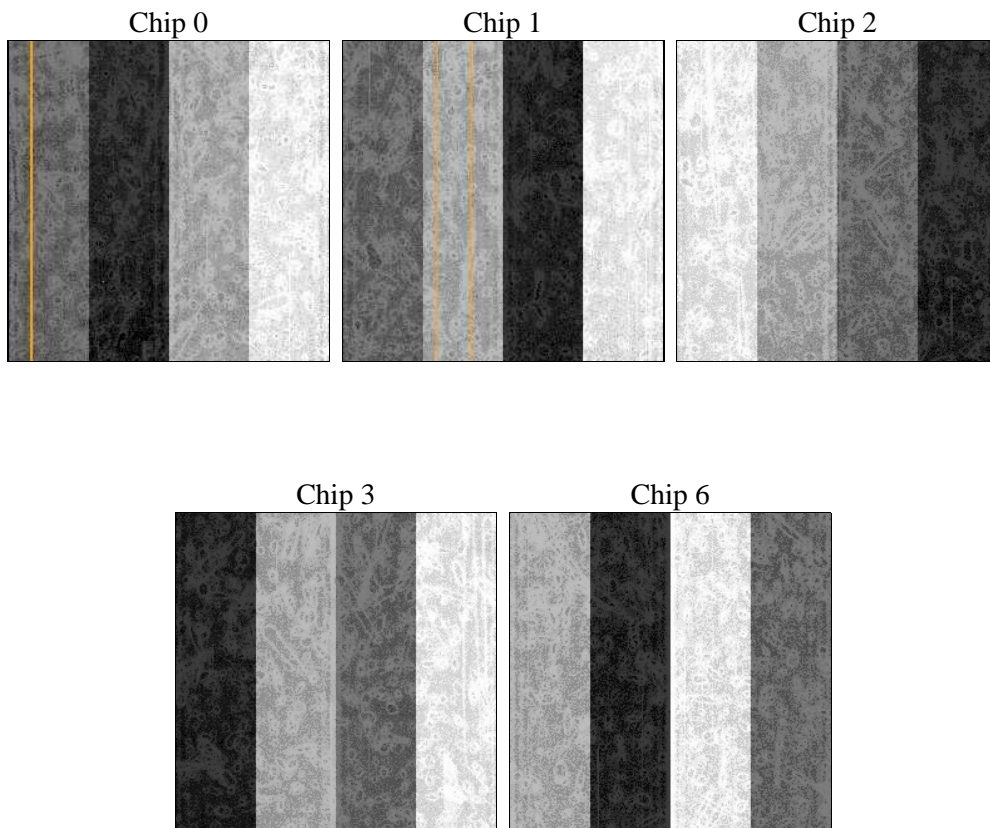
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	19746.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	19855.377101004	Sum of GTIs [s]
caldbver	4.5.2	&#160	ontime0	19864.799961776	Sum of GTIs [s]
date	2012-11-02T16:41:45	Date and time of file creation	ontime1	19864.799961776	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	19861.659001559	Sum of GTIs [s]
			ontime3	19855.377101004	Sum of GTIs [s]
			ontime6	19864.799961776	Sum of GTIs [s]
			l1events	560548	Number of level 1 events

### 2.1.4 Events

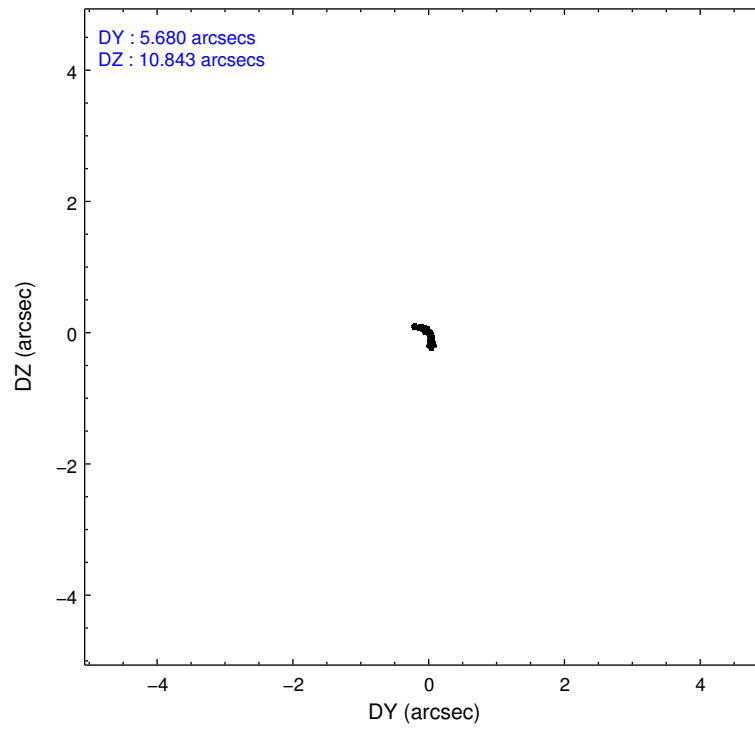
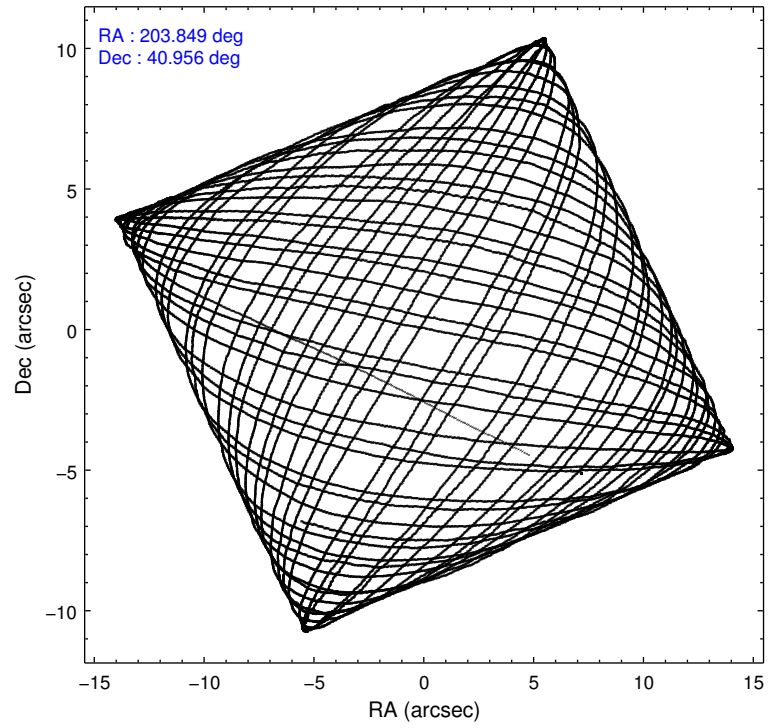
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	102932	107254	115254	126446	108662
rejected events	92683	93192	104072	99585	97951
rejected %	90%	86%	90%	78%	90%

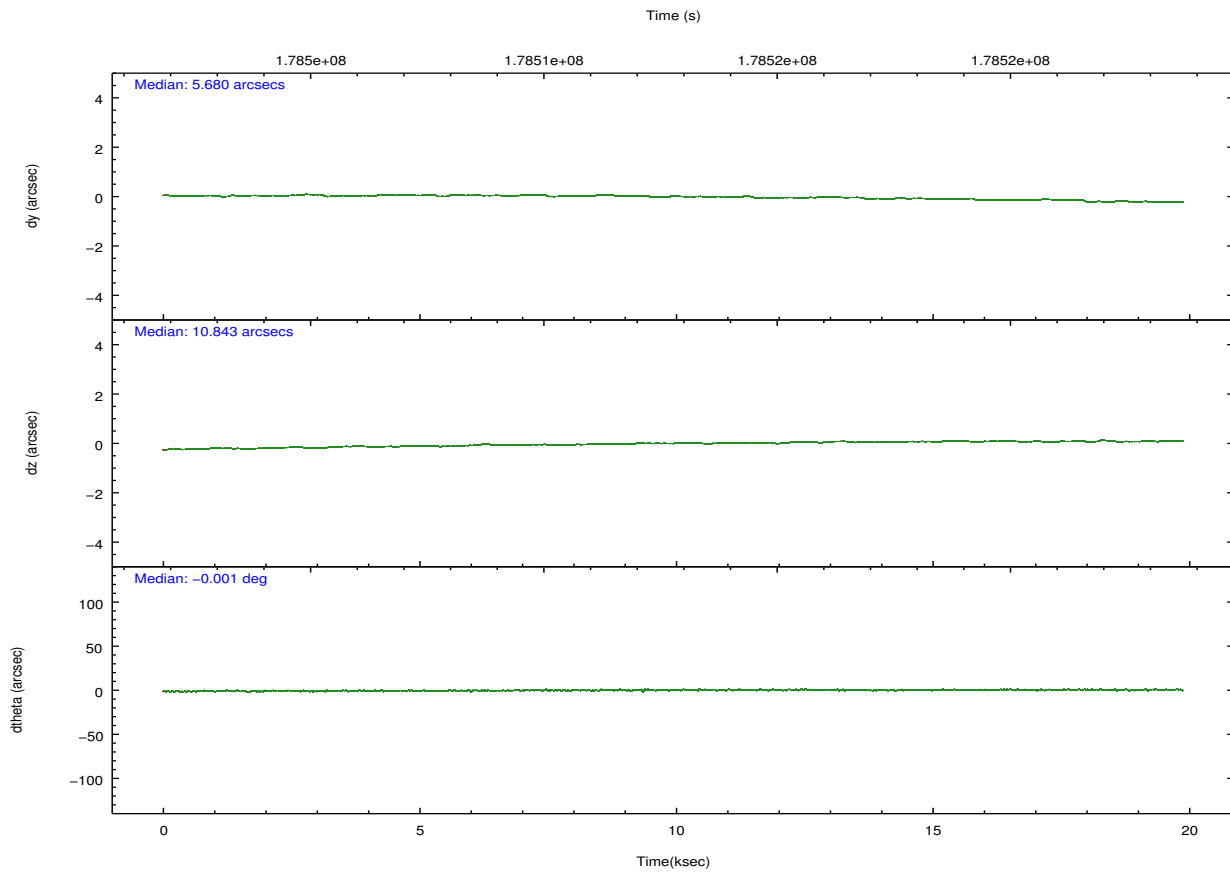
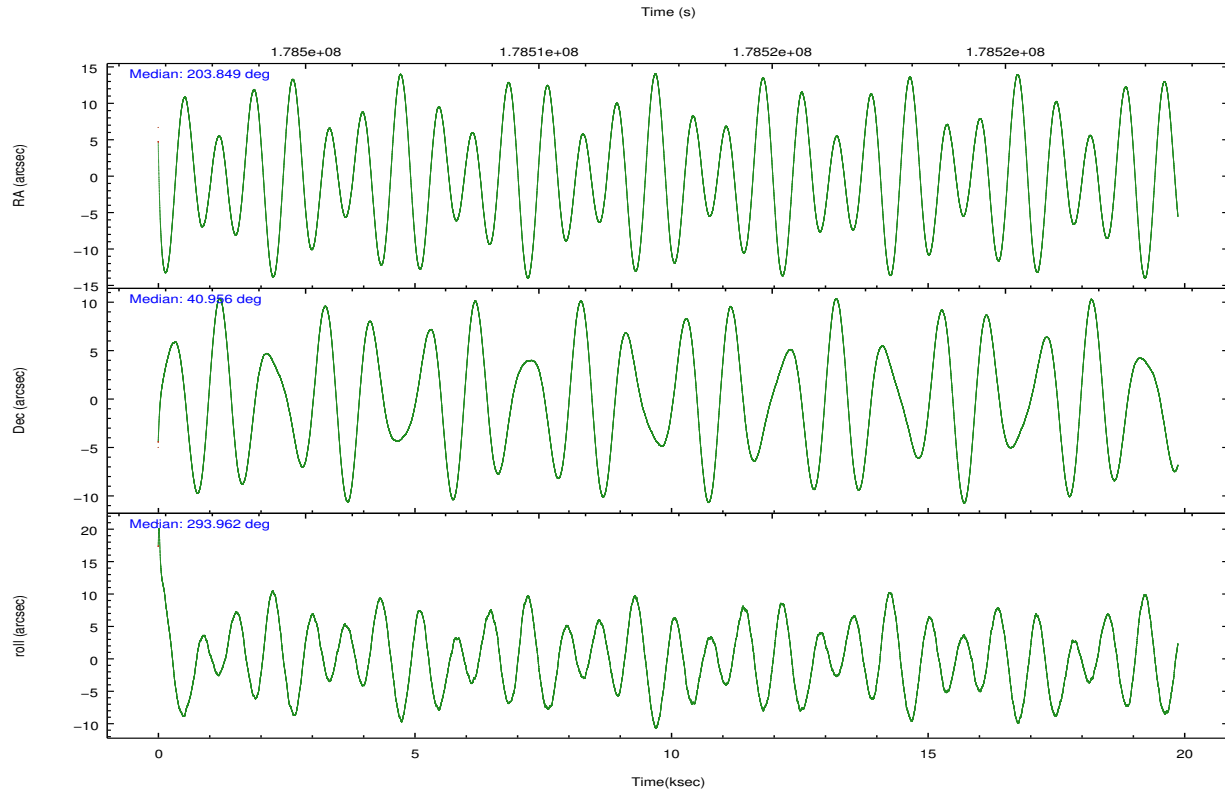
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	3904	6375	4700	17879	4008
	3%	5%	4%	14%	3%
grade 1 events	64	49	61	93	50
	0%	0%	0%	0%	0%
grade 2 events	2374	2870	2581	3802	2383
	2%	2%	2%	3%	2%
grade 3 events	1256	1436	1244	1724	1328
	1%	1%	1%	1%	1%
grade 4 events	1180	1452	1227	1745	1226
	1%	1%	1%	1%	1%
grade 5 events	3883	4015	3574	4467	4345
	3%	3%	3%	3%	3%
grade 6 events	2036	2609	1984	2418	2349
	1%	2%	1%	1%	2%
grade 7 events	88235	88448	99883	94318	92973
	85%	82%	86%	74%	85%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	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	203.819218	203.8486481103456	Subarray requested	NONE	NONE
[deg] Pointing Dec	40.972132	40.95610471038259	Alternating exposures requested	N	N
[deg] Pointing Roll	293.780083	293.9694797774583	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-226.592463	-226.5875806612856			
[mm] SIM translation stage offset	-7	-7.004872341644045			
[s] Observation start time (MET)	178502955.184000	178501478.10686			
Observation start date	2003-08-29T00:08:11	2003-08-28T23:44:38			
[s] Observation end time (MET)	178522701.184000	178523415.6703			
Observation end date	2003-08-29T05:37:17	2003-08-29T05:50:15			
Read mode	TIMED	TIMED			

## 2.3 Aspect



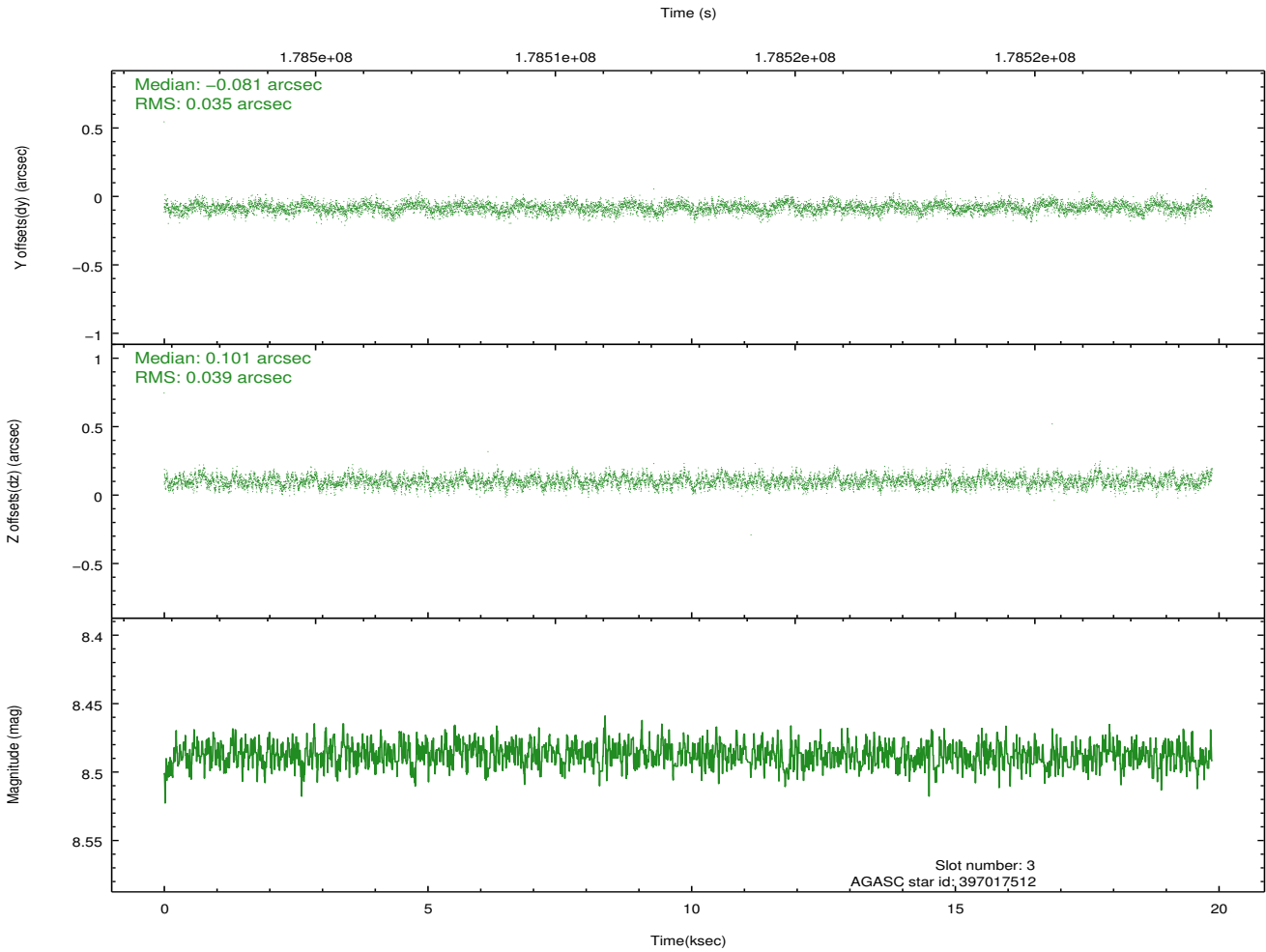
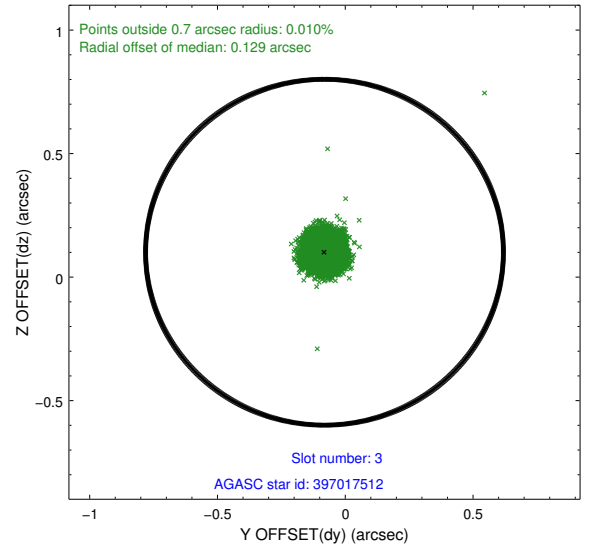
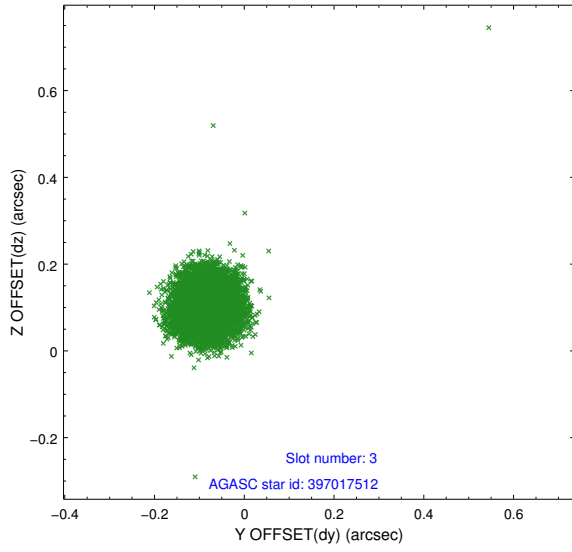


### Slot Statistics

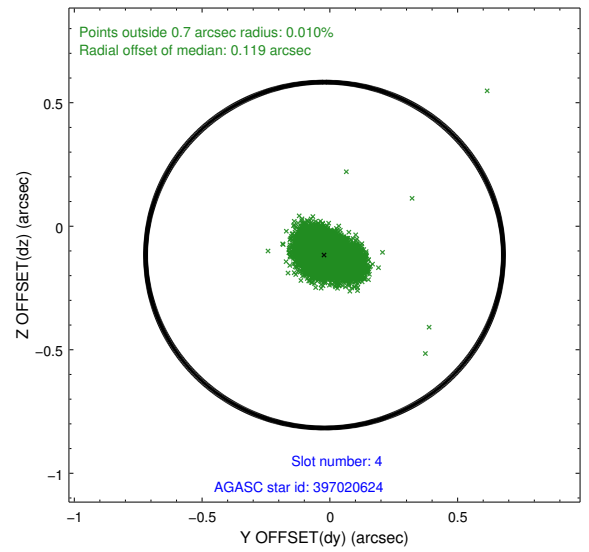
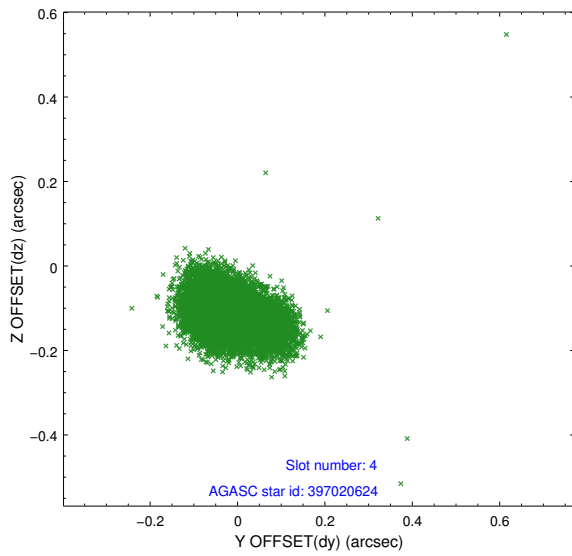
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.23	4848	0.098	-0.051	0.007	0.012	0.000000	0.000000	934.02	-978.17
1	FID	ACIS-I-5	7.22	4846	-0.236	0.094	0.007	0.012	0.000000	0.000000	-1814.29	919.38
2	FID	ACIS-I-6	7.25	4848	0.047	0.028	0.008	0.012	0.000000	0.000000	399.35	1564.01
3	GUIDE	397017512	8.49	9691	-0.081	0.101	0.055	0.088	203.541204	41.269966	-1285.42	-255.51
4	GUIDE	397020624	8.55	9692	-0.021	-0.117	0.081	0.130	204.395156	41.434823	-902.08	2095.76
5	GUIDE	397020968	9.29	9686	0.022	0.007	0.097	0.154	204.498416	41.216332	-69.48	2040.91
6	GUIDE	397024152	8.87	9692	0.062	0.023	0.076	0.127	203.568845	40.711407	583.07	-1002.81
7	GUIDE	397024944	9.65	9685	0.011	-0.012	0.109	0.174	204.333652	41.529745	-1281.67	2079.61

## 2.4 Star Slots

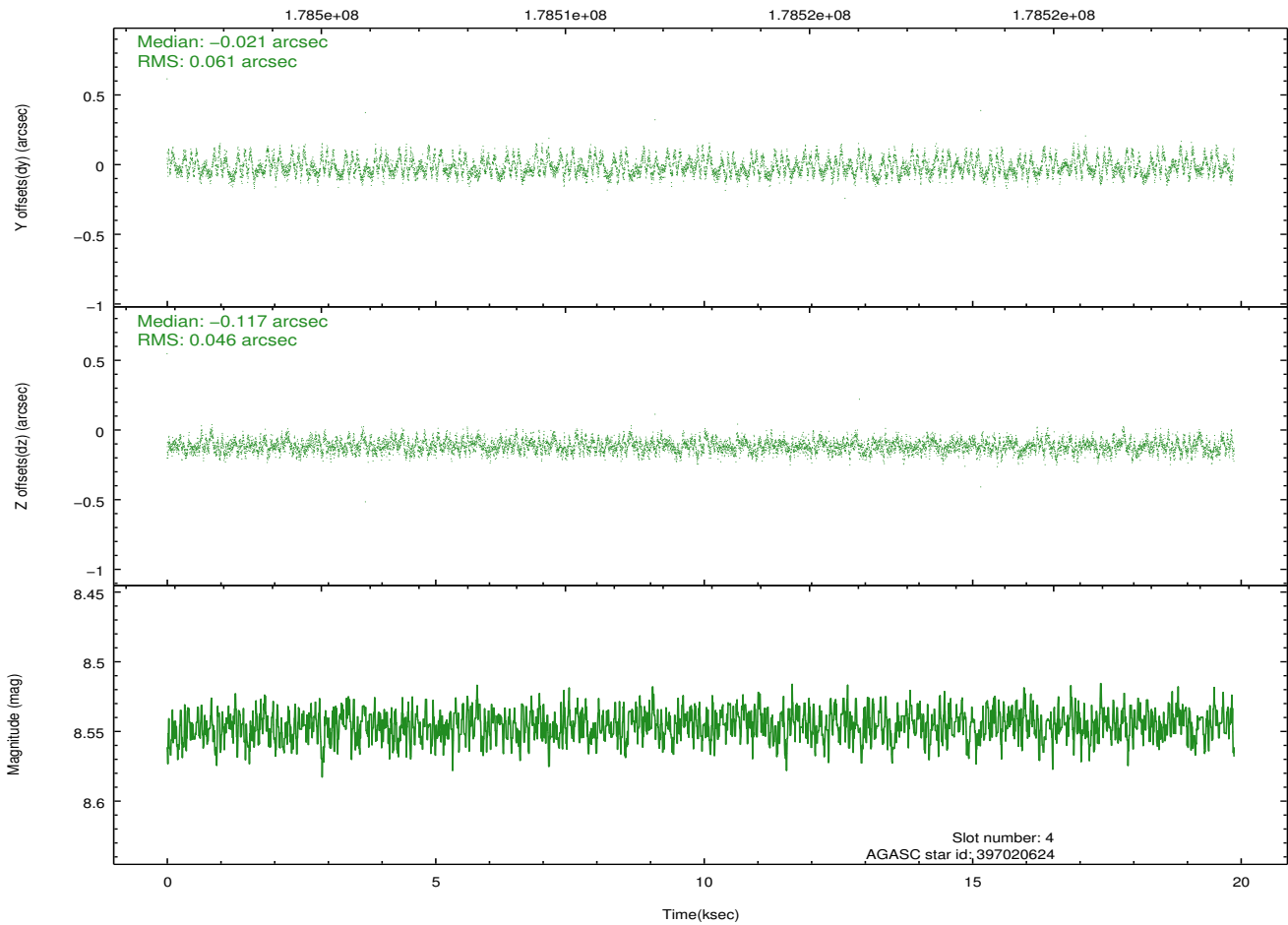
### 2.4.1 Slot 3



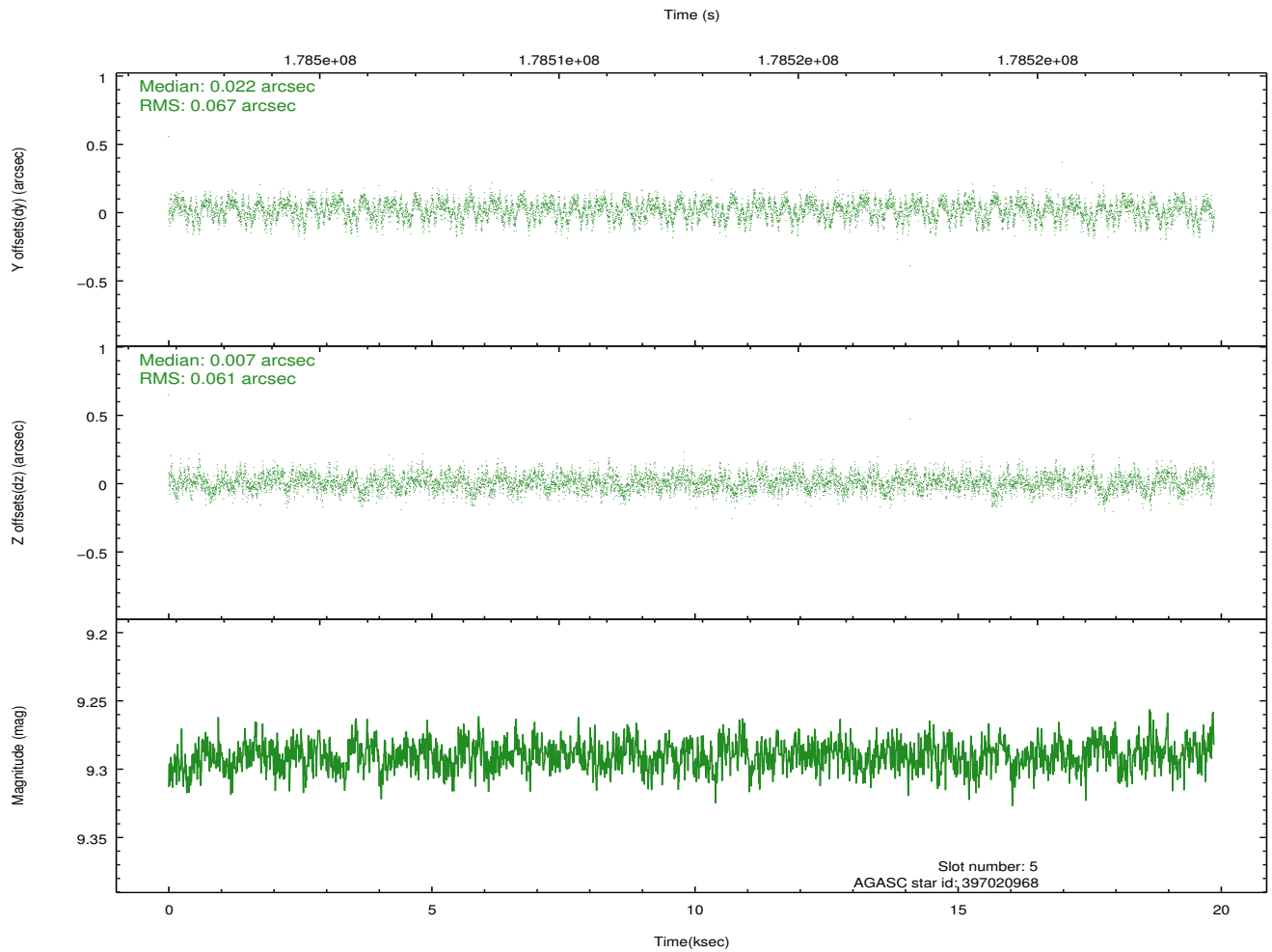
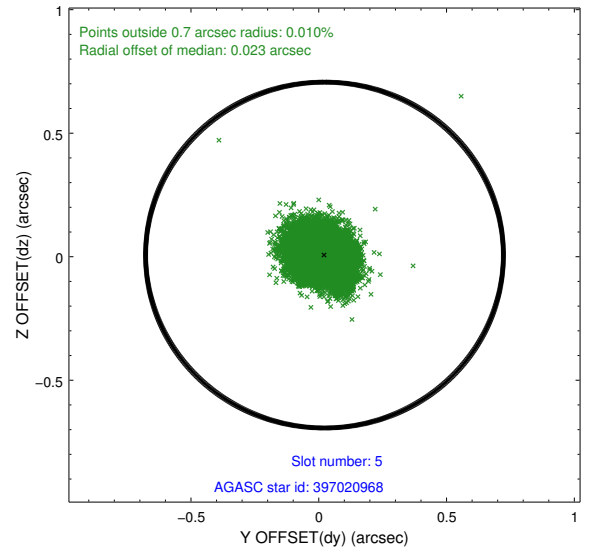
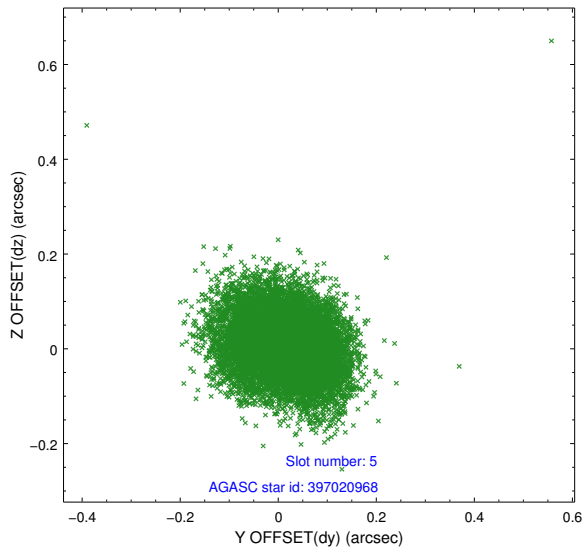
## 2.4.2 Slot 4



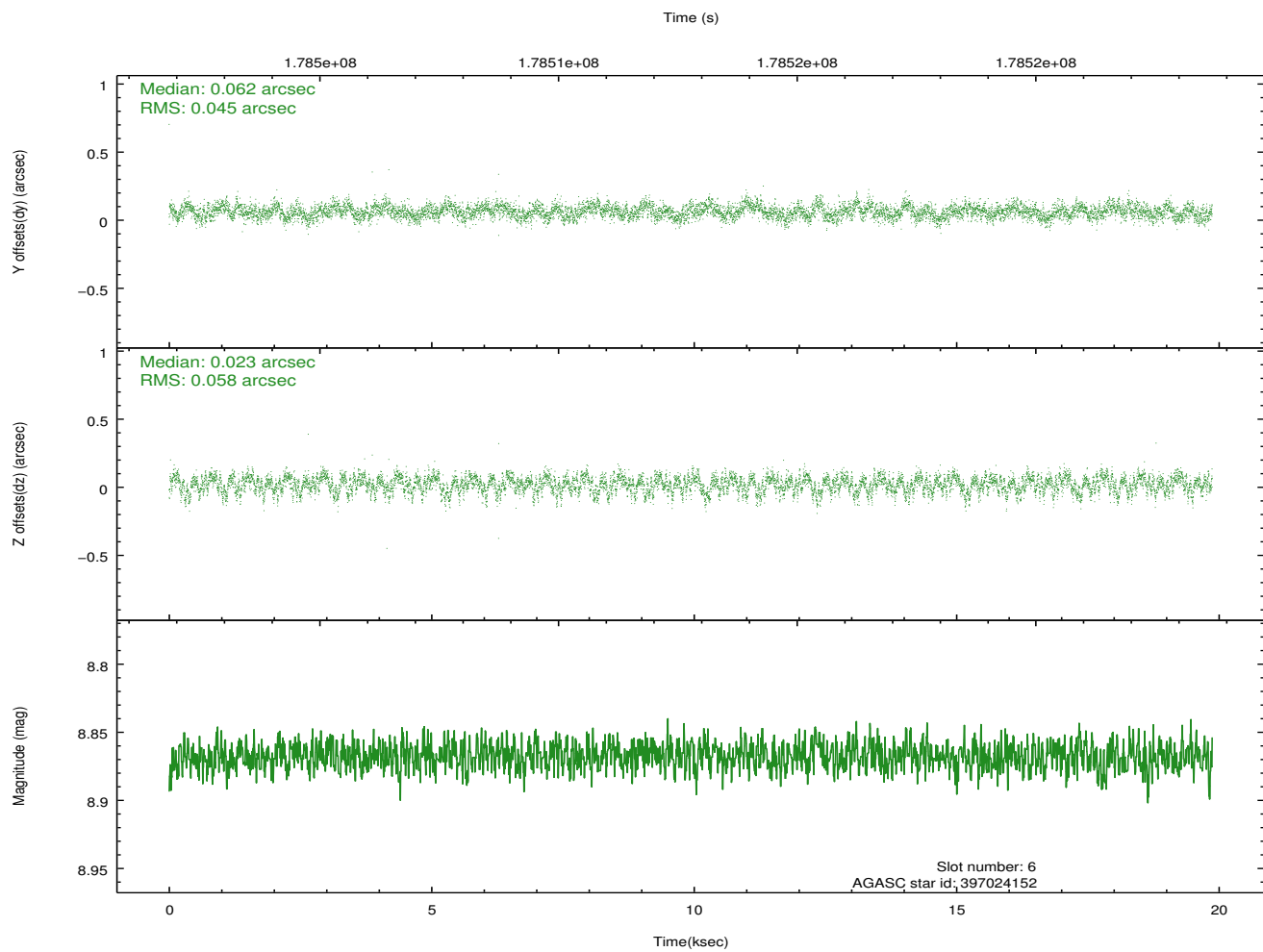
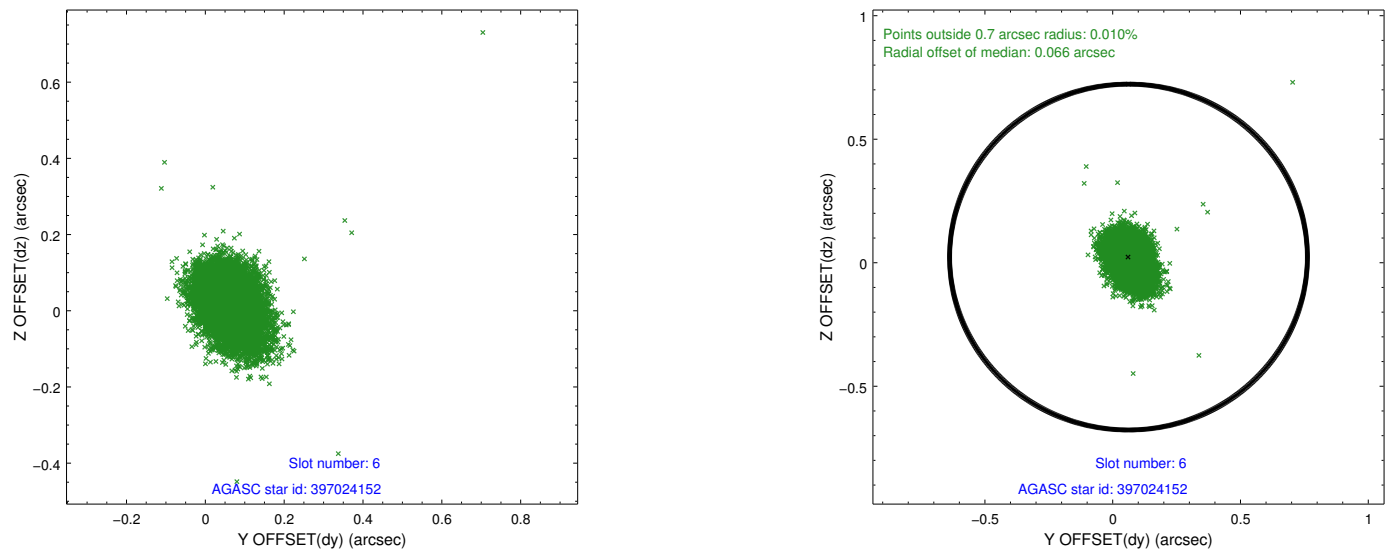
Time (s)



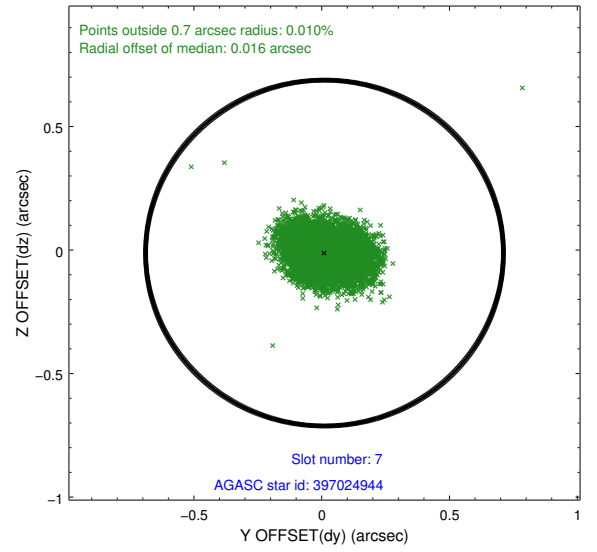
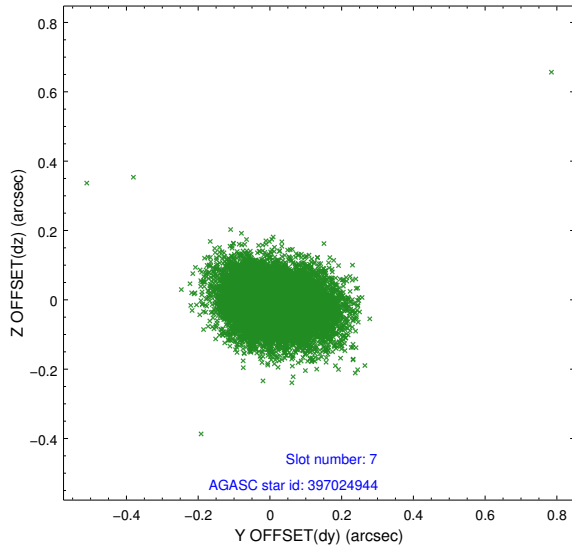
### 2.4.3 Slot 5



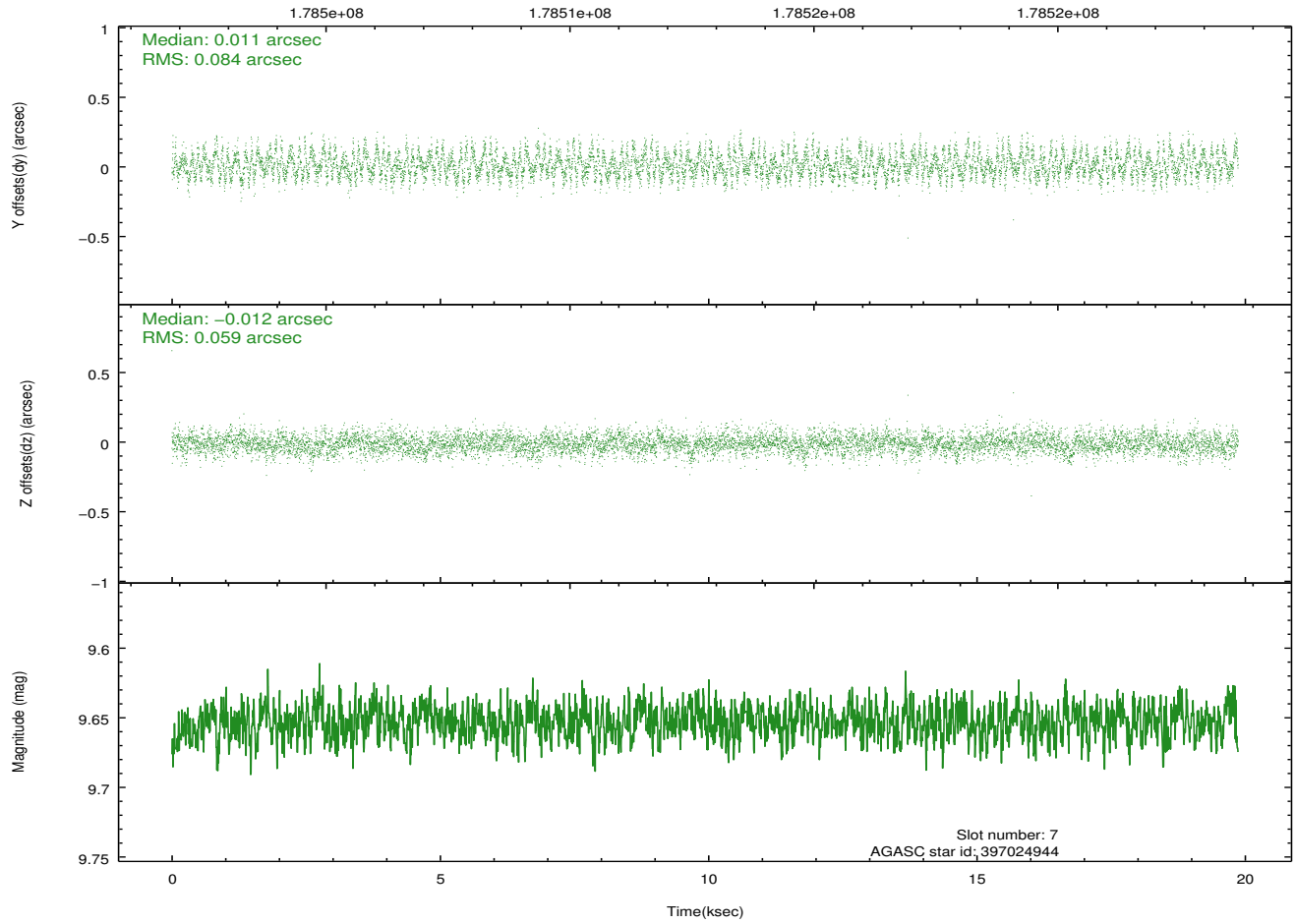
## 2.4.4 Slot 6



### 2.4.5 Slot 7

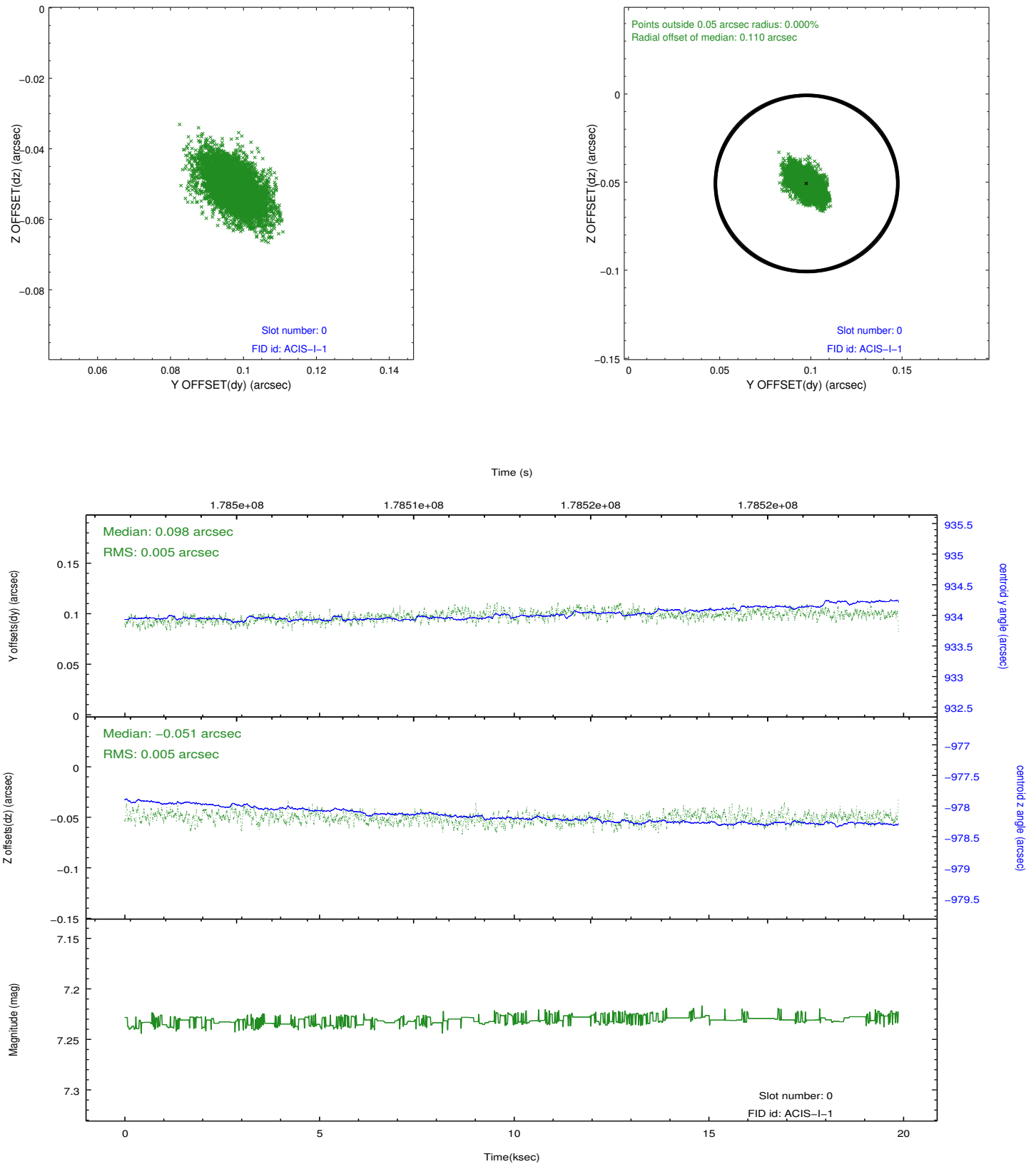


Time (s)

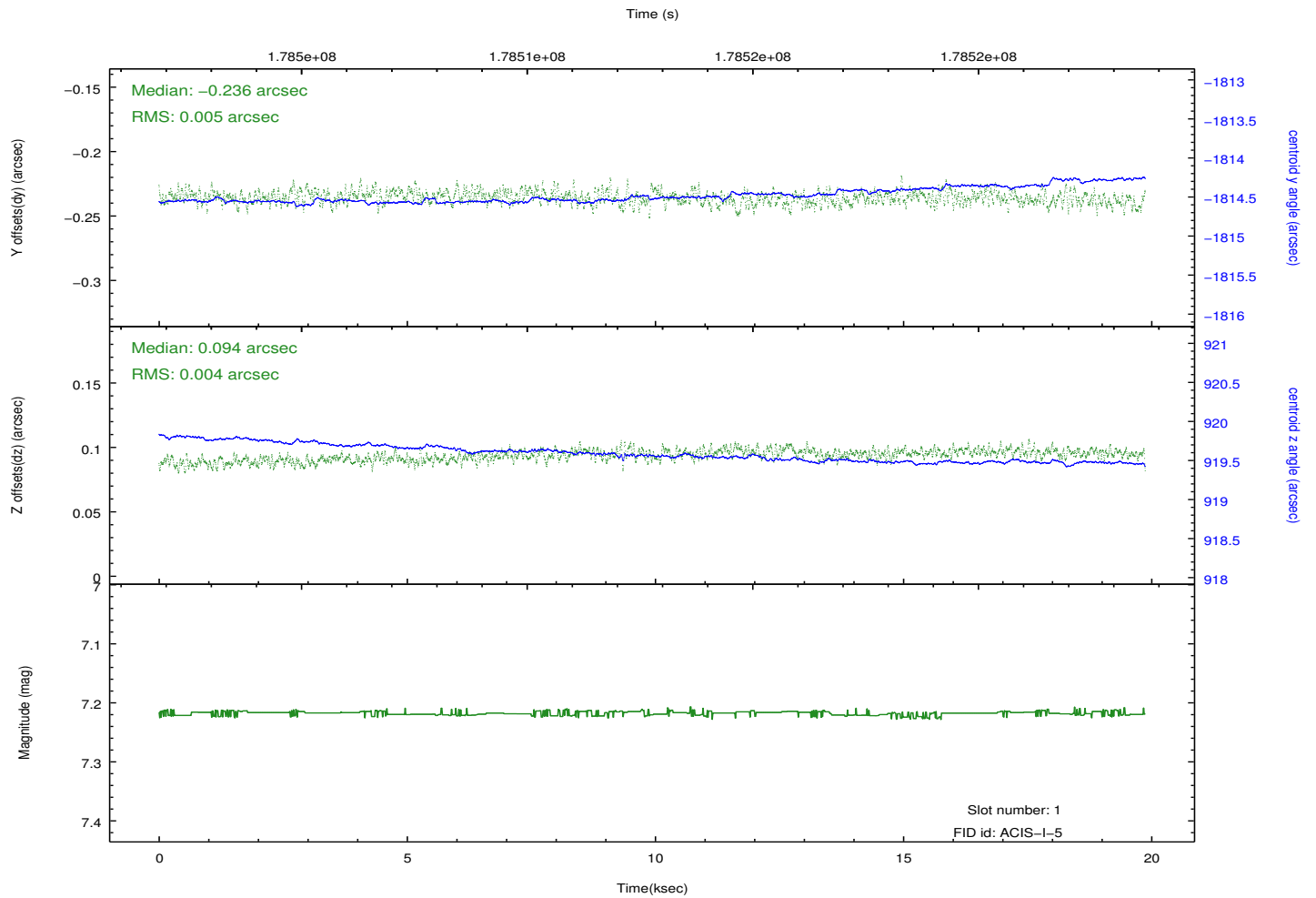
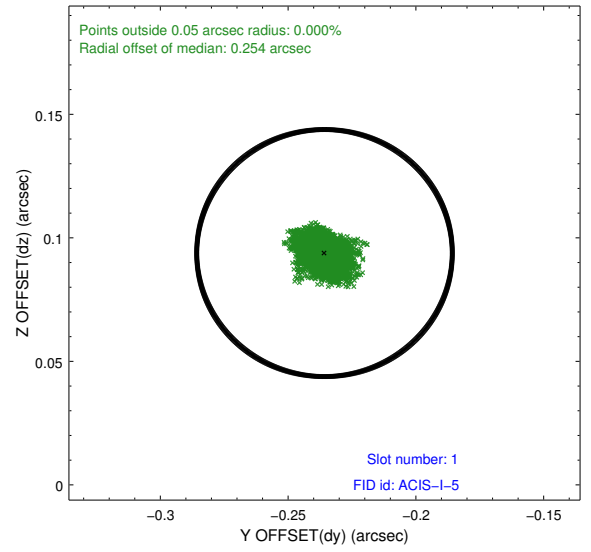
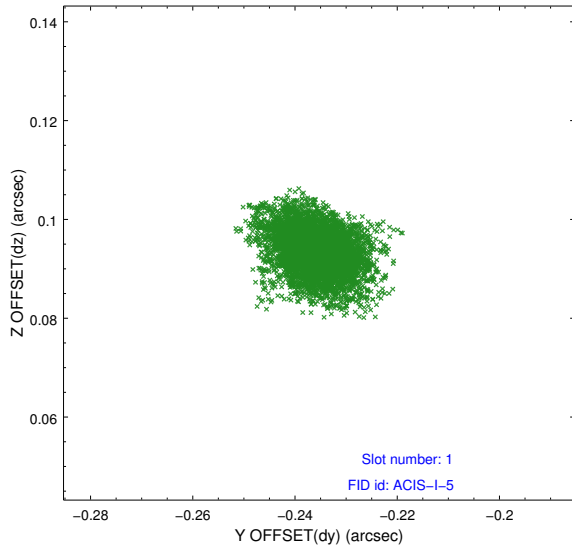


## 2.5 FID Slots

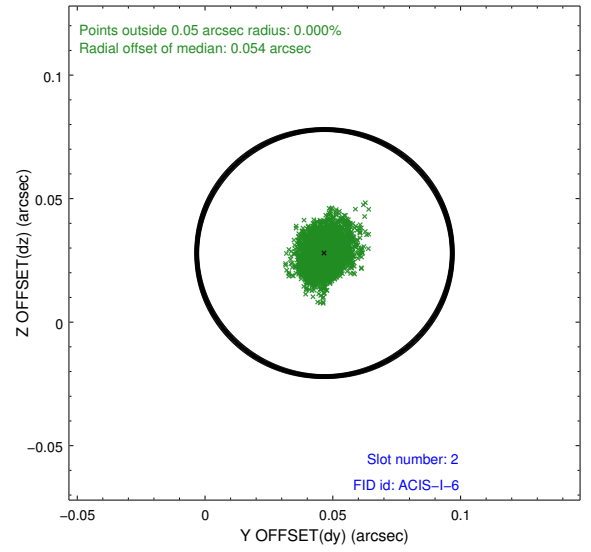
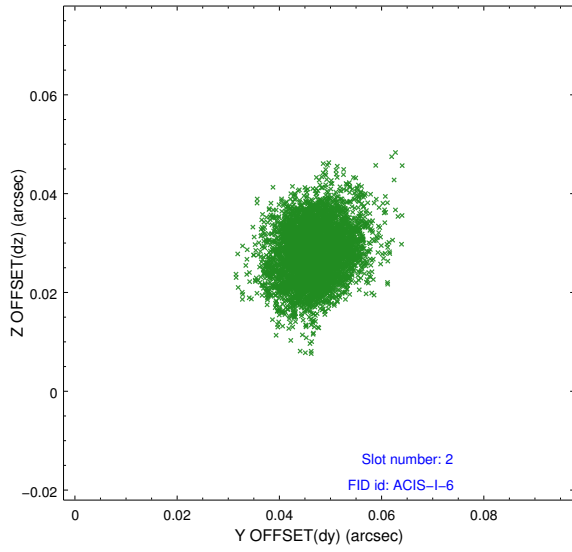
### 2.5.1 Slot 0



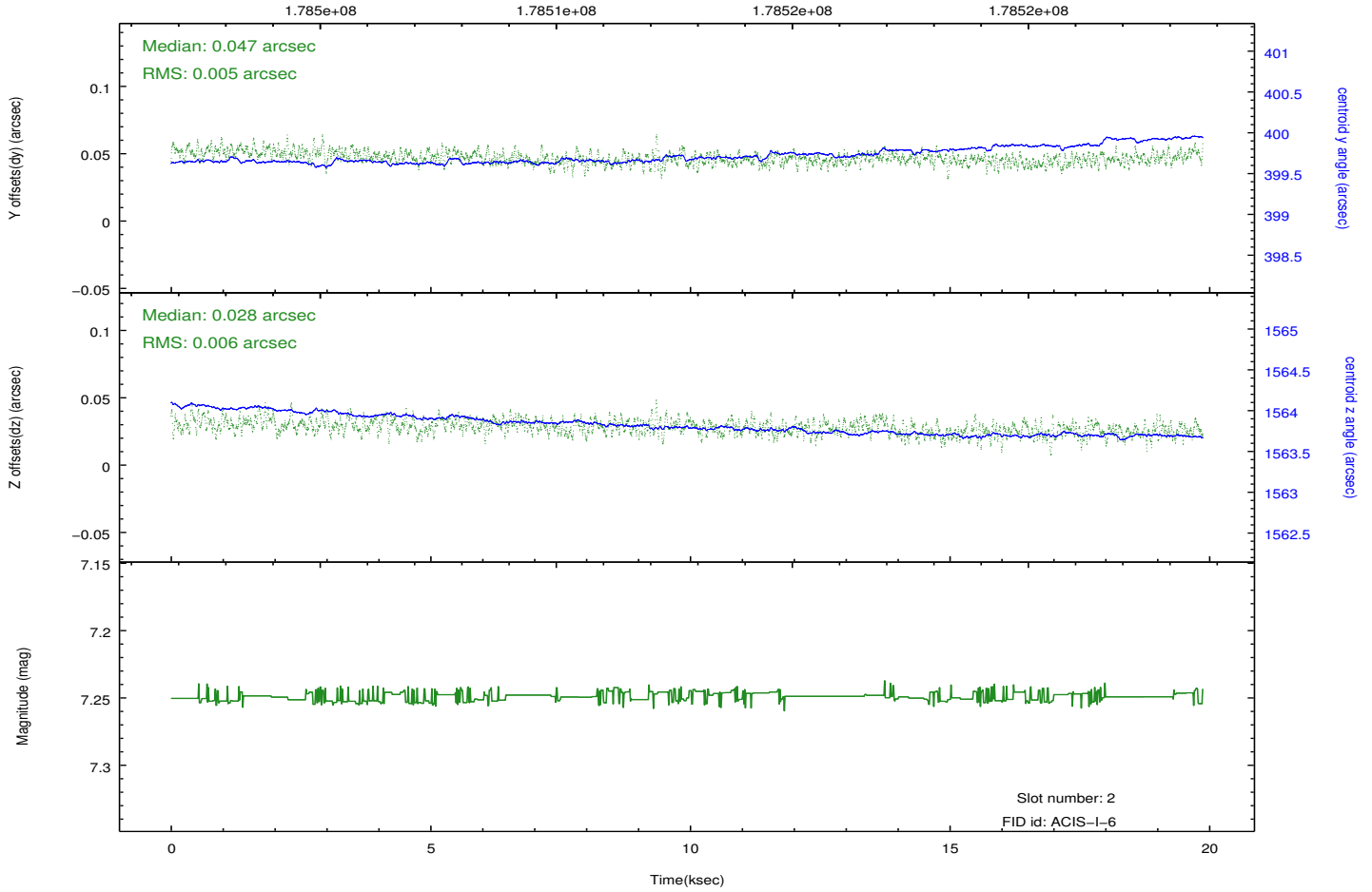
## 2.5.2 Slot 1



### 2.5.3 Slot 2



Time (s)



# A Summary

## A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.11.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	19.864

## A.2 Comments