

# V&V Reference Report

## L2 ASCDS Version : 8.5.1

Observation 5603 - L2 Version 3  
Chandra X-Ray Center

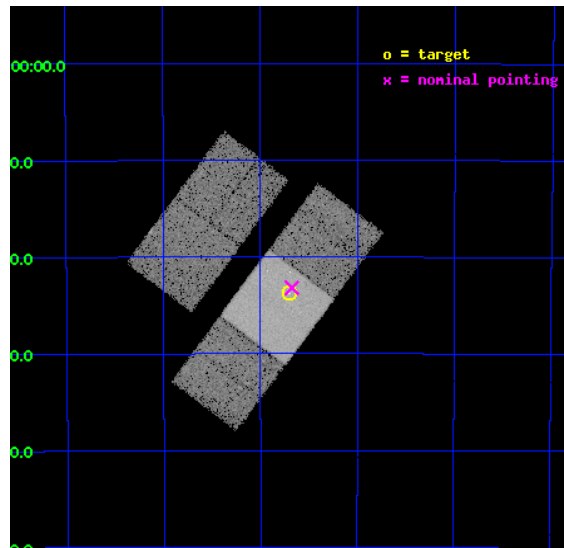
L2 Processing Date : Dec 18 2012

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# 1 Front

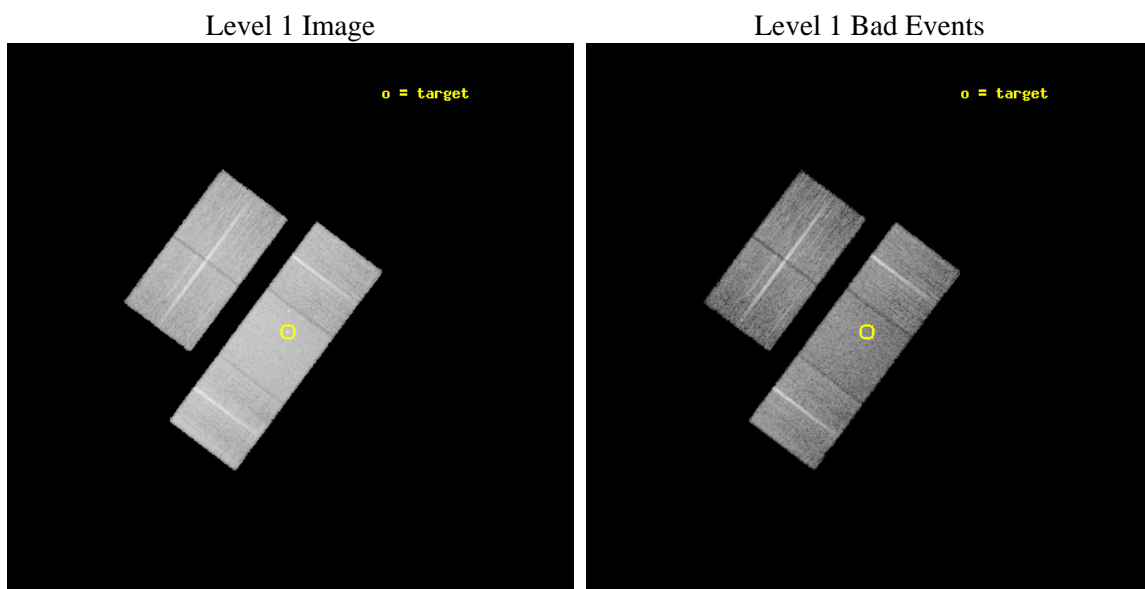
seq_num	701026	Sequence number
obs_id	5603	Observation id
title	A Study of Quasar Evolution With The Aid Of Lensing	Proposal title
observer	Professor Gordon Garmire	Principal investigator
object	WFI J2033-4723	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	308.425417	Observer's specified target RA [deg]
dec_targ	-47.395278	Observer's specified target Dec [deg]
ra_nom	308.41900161377	Nominal RA [deg]
dec_nom	-47.386648881082	Nominal Dec [deg]
roll_nom	126.79362433191	Nominal Roll [deg]
revision	3	Processing version of data
ontime	15623.999969929	Sum of GTIs [s]
livetime	15419.860908101	Livetime [s]
ontime2	15620.859009683	Sum of GTIs [s]
ontime3	15623.999969929	Sum of GTIs [s]
ontime6	15623.999969929	Sum of GTIs [s]
ontime7	15623.999969929	Sum of GTIs [s]
ontime8	15623.999969929	Sum of GTIs [s]
l2events	115984	Number of level 2 events



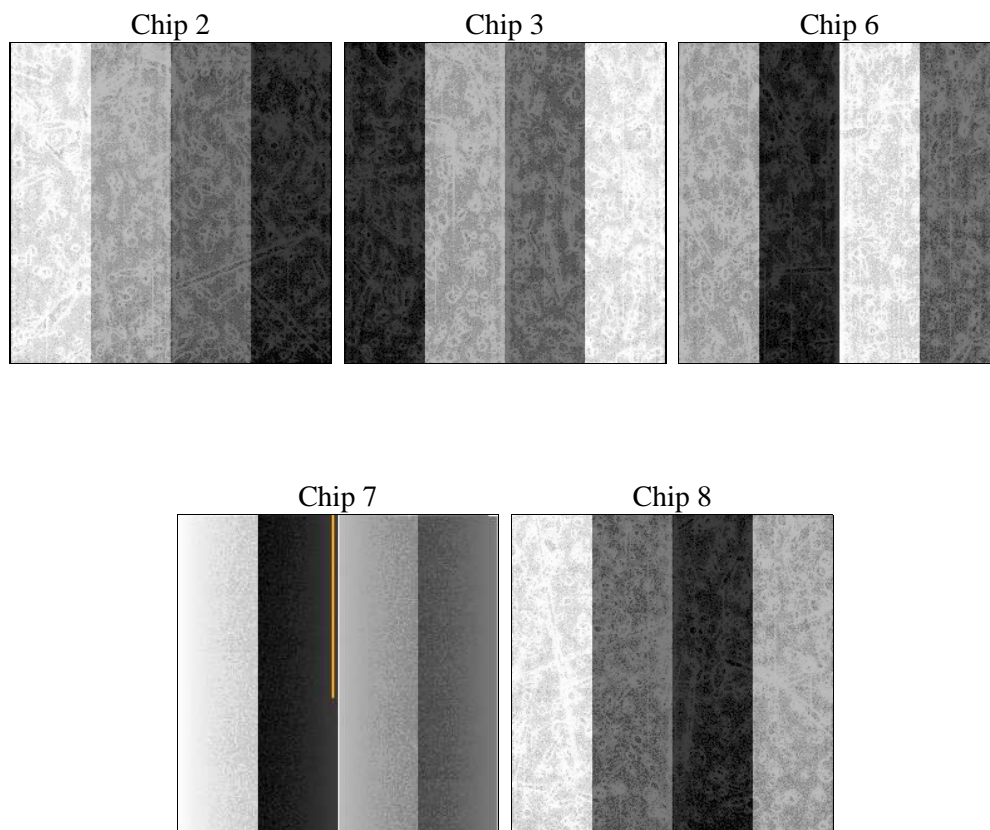
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	15500.000000	[s] Scheduled observation exposure time
ascdsver	8.5.1	Processing system revision	ontime	15623.999969929	Sum of GTIs [s]
caldsver	4.5.5	&#160	ontime2	15620.859009683	Sum of GTIs [s]
date	2012-12-18T07:22:54	Date and time of file creation	ontime3	15623.999969929	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	15623.999969929	Sum of GTIs [s]
			ontime7	15623.999969929	Sum of GTIs [s]
			ontime8	15623.999969929	Sum of GTIs [s]
			l1events	676569	Number of level 1 events

### 2.1.4 Events

	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	117691	113301	125194	166472	153911
rejected events	103863	99684	110634	98949	121555
rejected %	88%	87%	88%	59%	78%

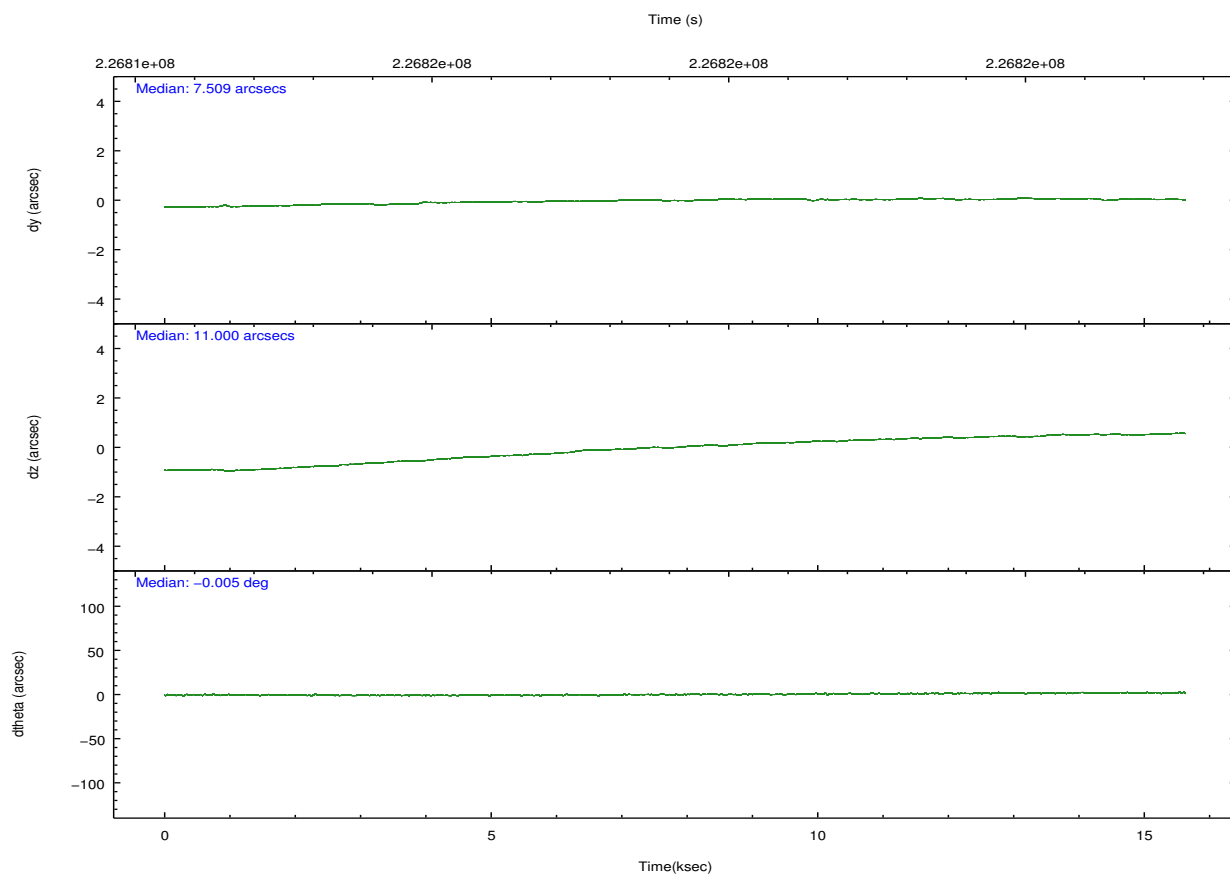
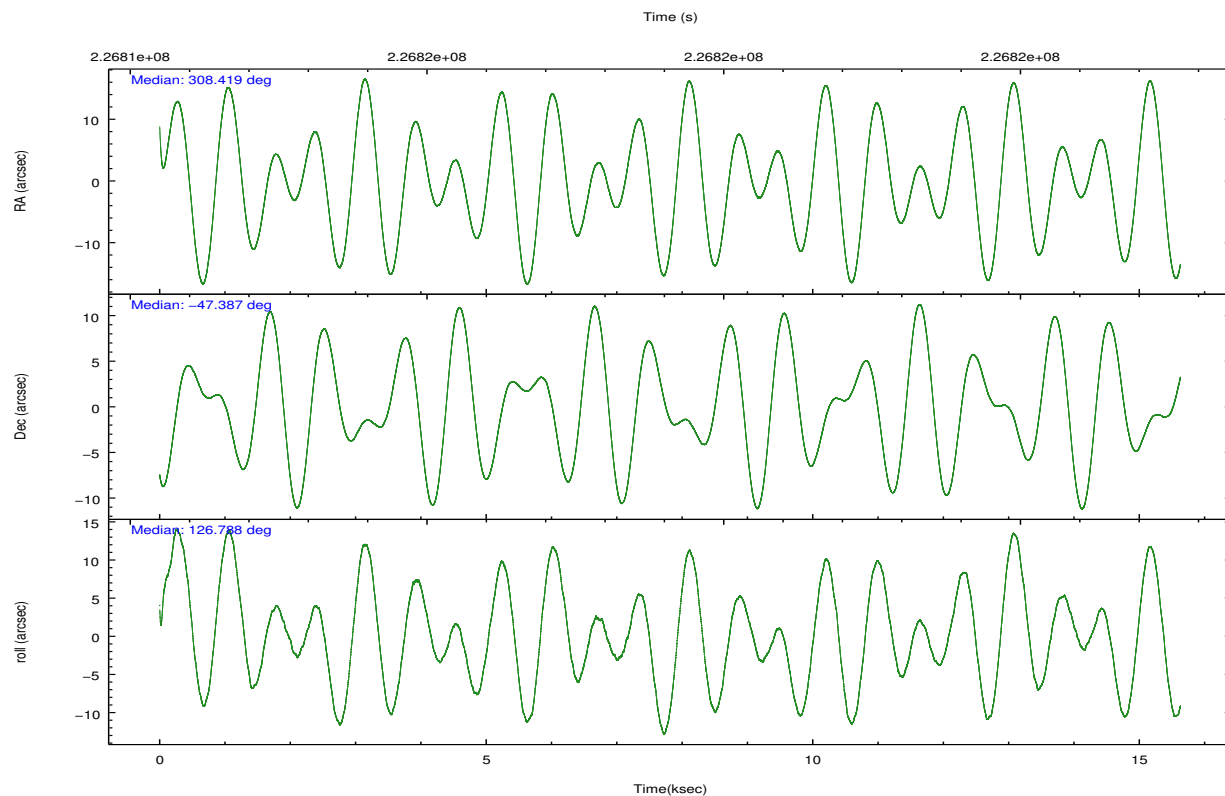
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	6448	6225	6055	6575	10474
	5%	5%	4%	3%	6%
grade 1 events	77	80	57	157	101
	0%	0%	0%	0%	0%
grade 2 events	2941	2763	3177	13760	7227
	2%	2%	2%	8%	4%
grade 3 events	1339	1367	1464	6015	3609
	1%	1%	1%	3%	2%
grade 4 events	1347	1389	1413	6184	3317
	1%	1%	1%	3%	2%
grade 5 events	4670	5361	5523	15479	7380
	3%	4%	4%	9%	4%
grade 6 events	2233	2348	2945	37224	8595
	1%	2%	2%	22%	5%
grade 7 events	98636	93768	104560	81078	113208
	83%	82%	83%	48%	73%



## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23678	ACIS-23678	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	308.456176	308.4190016137669	Subarray requested	NONE	NONE
[deg] Pointing Dec	-47.397028	-47.38664888108168	Alternating exposures requested	N	N
[deg] Pointing Roll	126.664371	126.793624331915	[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)	226811411.184000	226810170.478			
Observation start date	2005-03-10T03:09:07	2005-03-10T02:49:30			
[s] Observation end time (MET)	226826911.184000	226827604.19129			
Observation end date	2005-03-10T07:27:27	2005-03-10T07:40:04			
Read mode	TIMED	TIMED			

## 2.3 Aspect

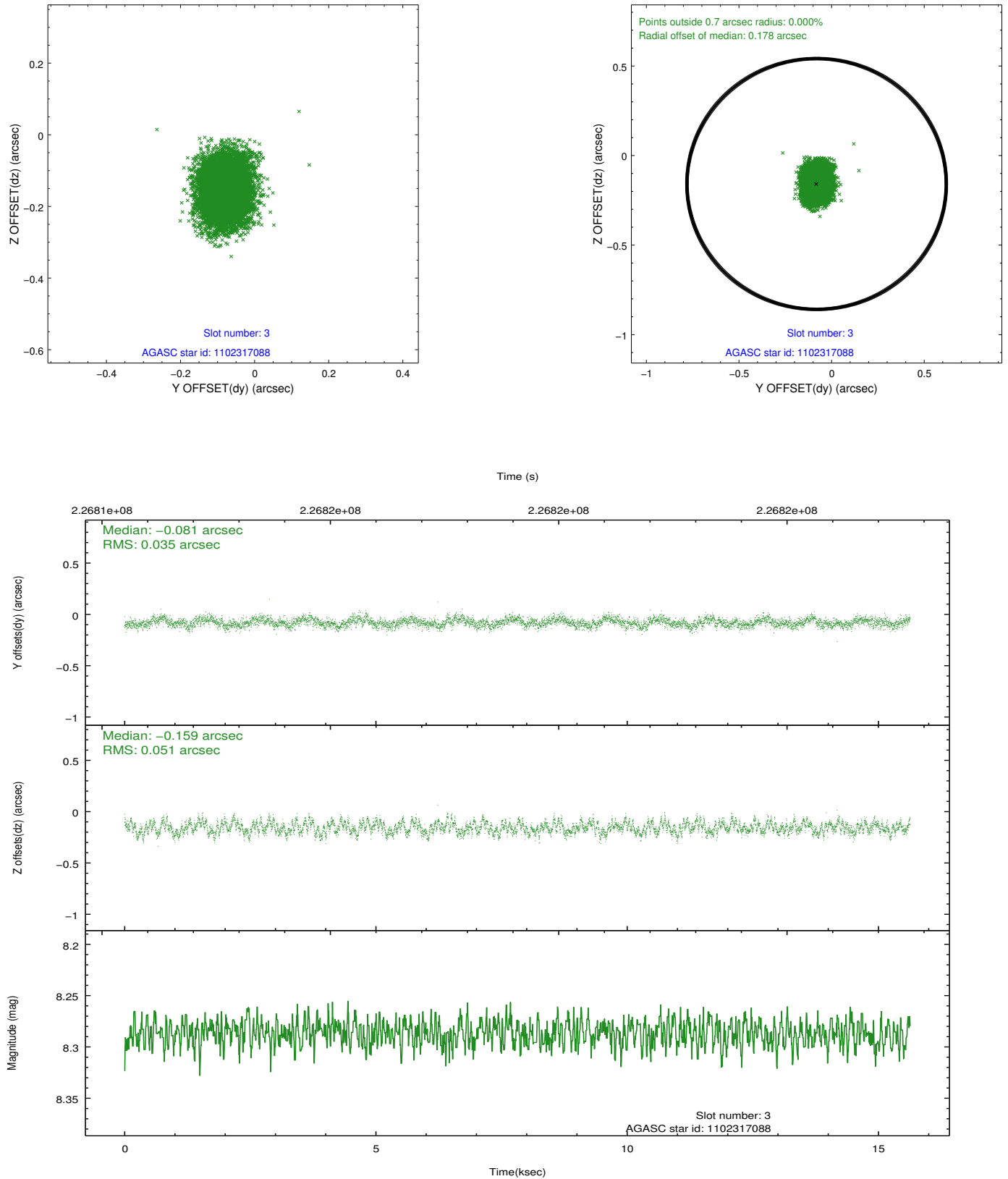


### Slot Statistics

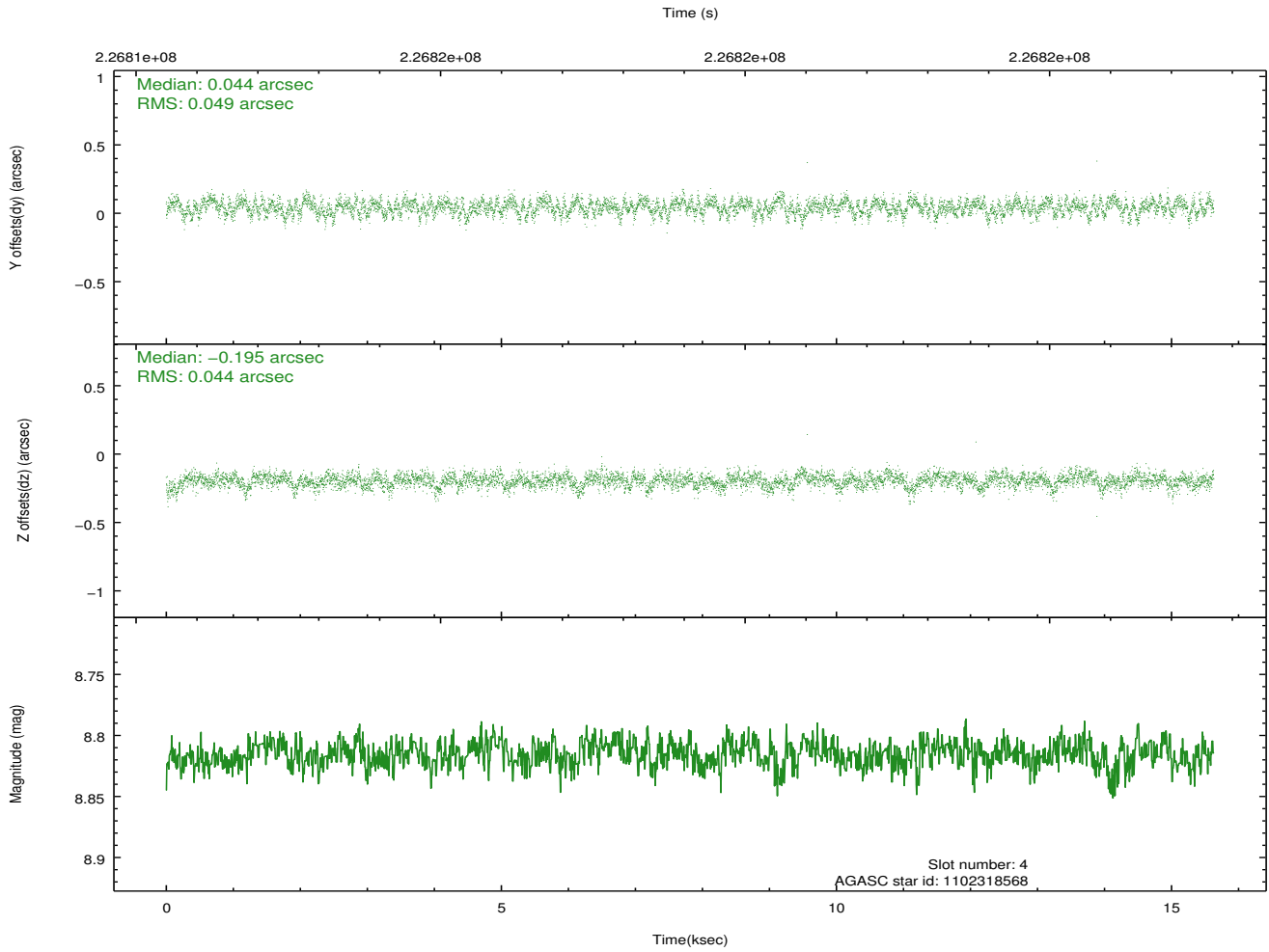
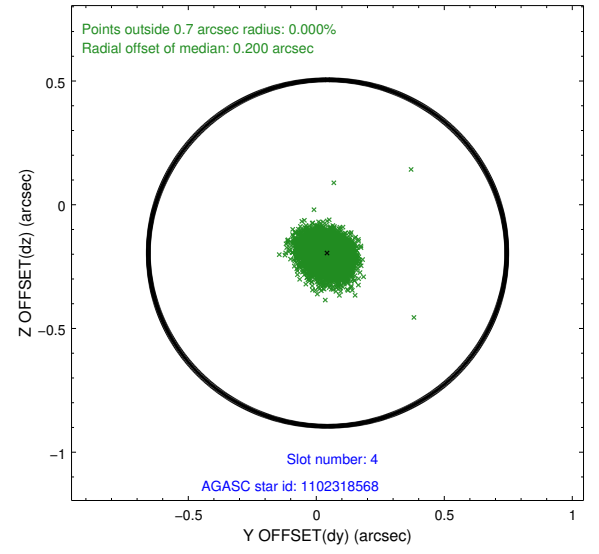
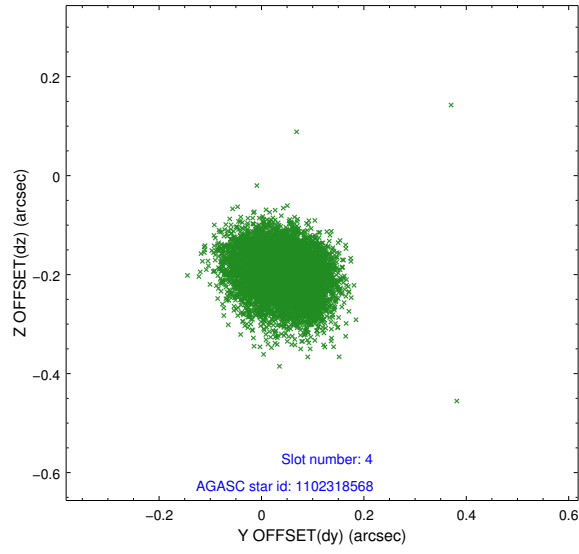
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	3813	-0.043	-0.022	0.011	0.016	0.000000	0.000000	-760.24	-1732.22
1	FID	ACIS-S-4	7.20	3813	0.098	0.026	0.008	0.015	0.000000	0.000000	2153.02	176.07
2	FID	ACIS-S-5	7.23	3813	-0.086	0.004	0.009	0.013	0.000000	0.000000	-1812.79	169.97
3	GUIDE	1102317088	8.29	7623	-0.081	-0.159	0.067	0.107	308.152391	-47.242863	887.49	265.25
4	GUIDE	1102318568	8.82	7621	0.044	-0.195	0.069	0.113	308.543219	-47.837250	-1396.52	777.66
5	GUIDE	1102455768	8.48	7624	0.128	0.035	0.066	0.109	309.500211	-47.570620	-2028.72	-1650.46
6	GUIDE	1101792952	9.15	7618	-0.085	0.187	0.100	0.161	308.915812	-46.689291	1363.31	-2429.55
7	GUIDE	1102455208	9.14	7625	-0.008	0.136	0.081	0.132	309.768261	-47.528259	-2304.31	-2260.35

## 2.4 Star Slots

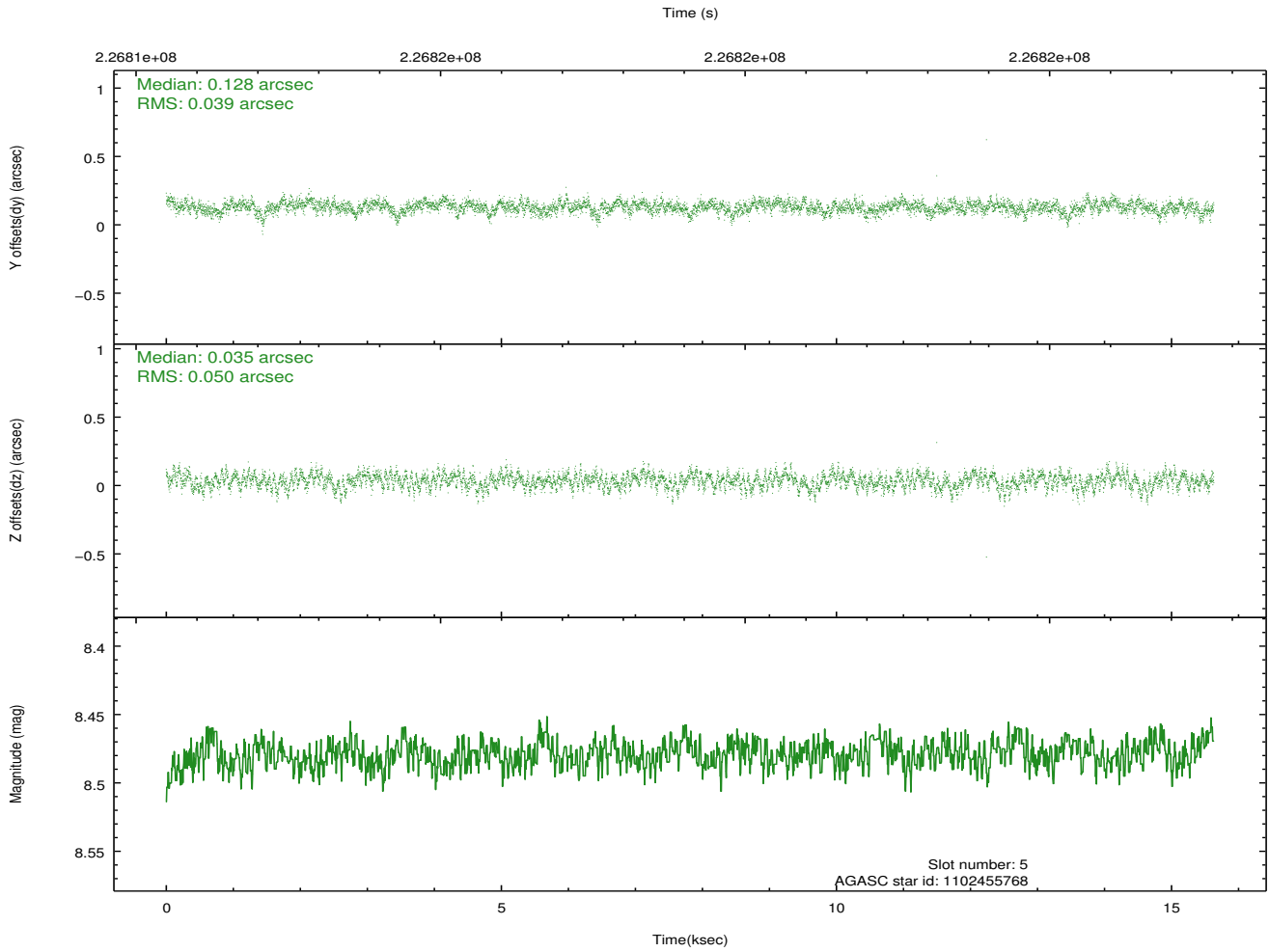
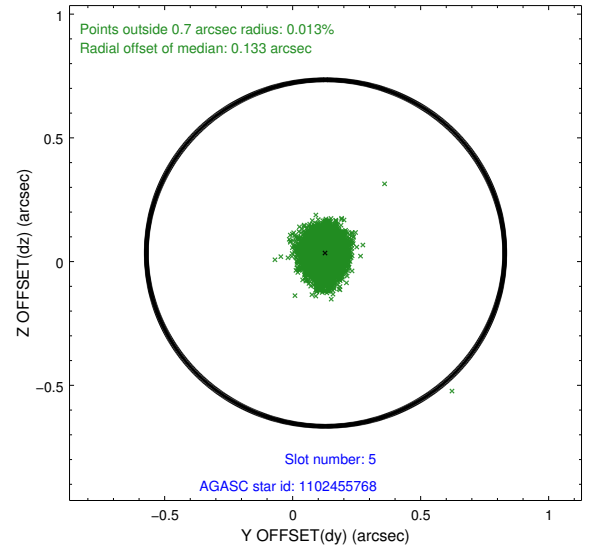
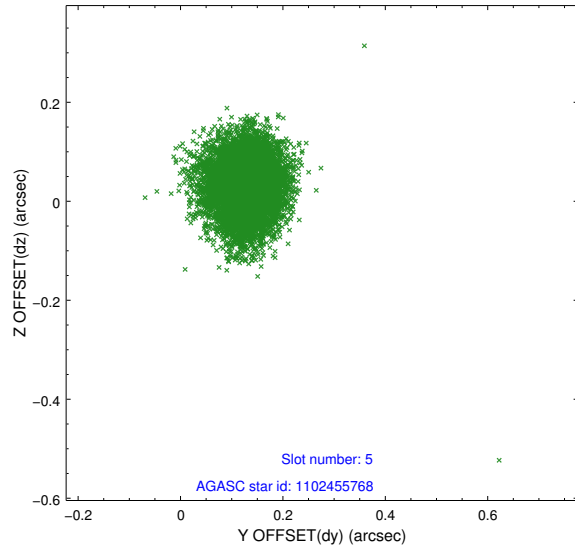
### 2.4.1 Slot 3



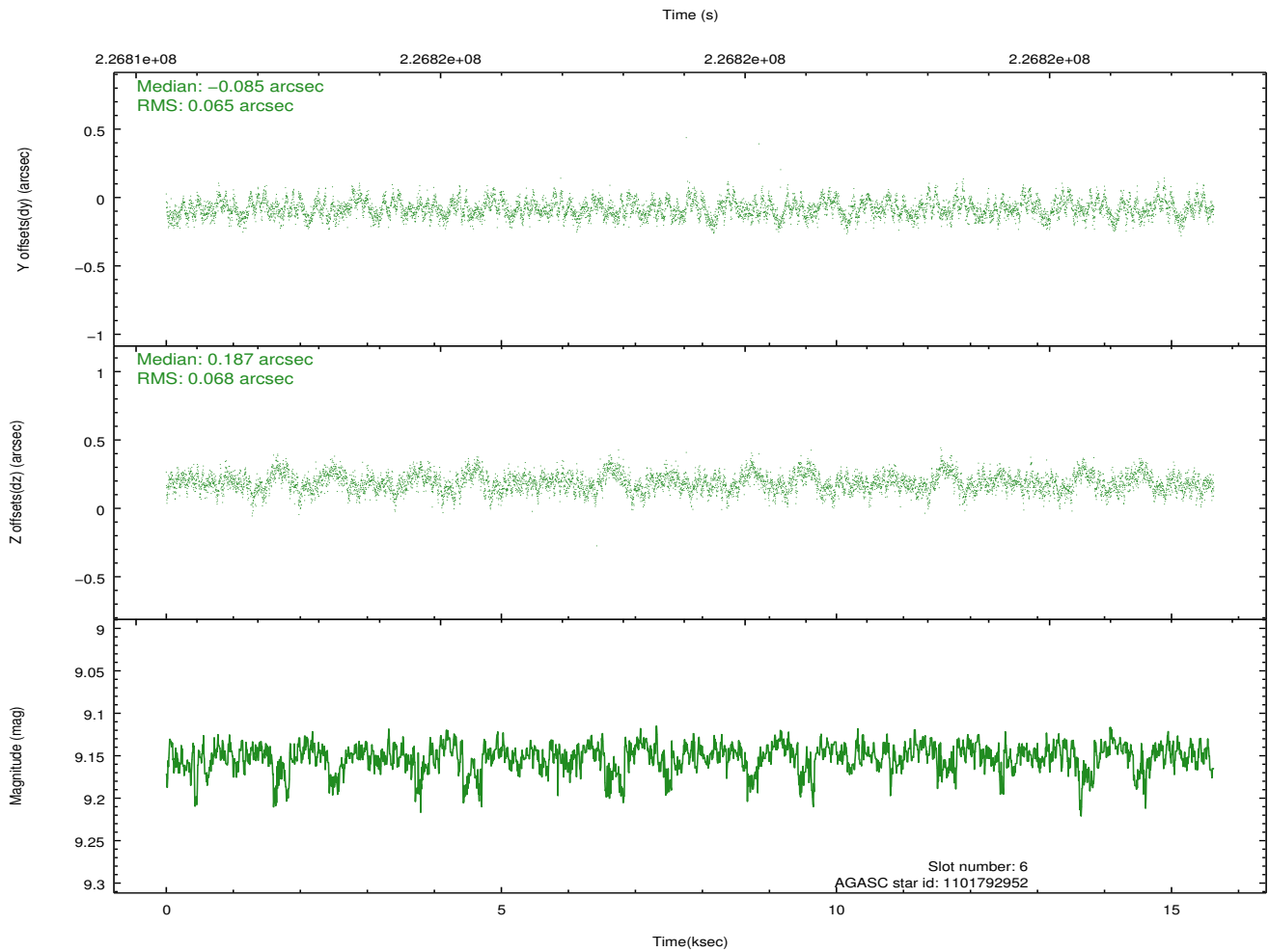
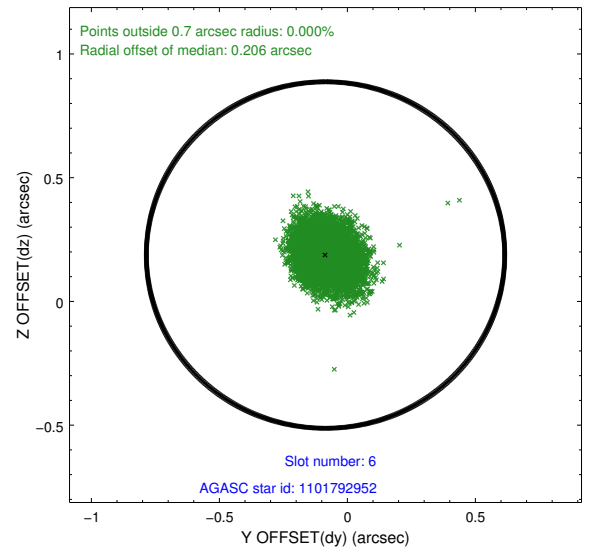
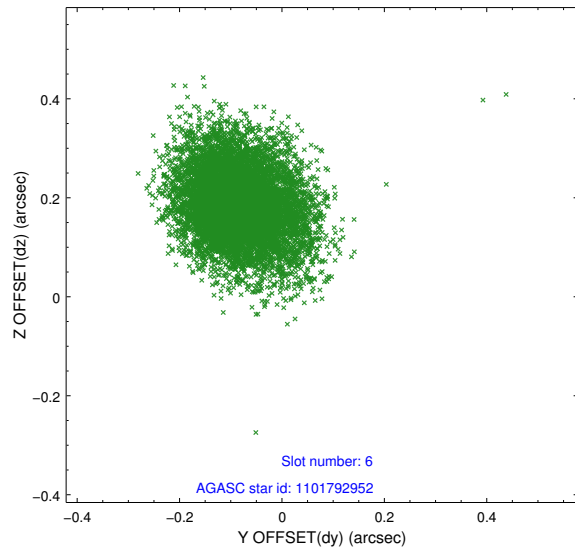
## 2.4.2 Slot 4



### 2.4.3 Slot 5

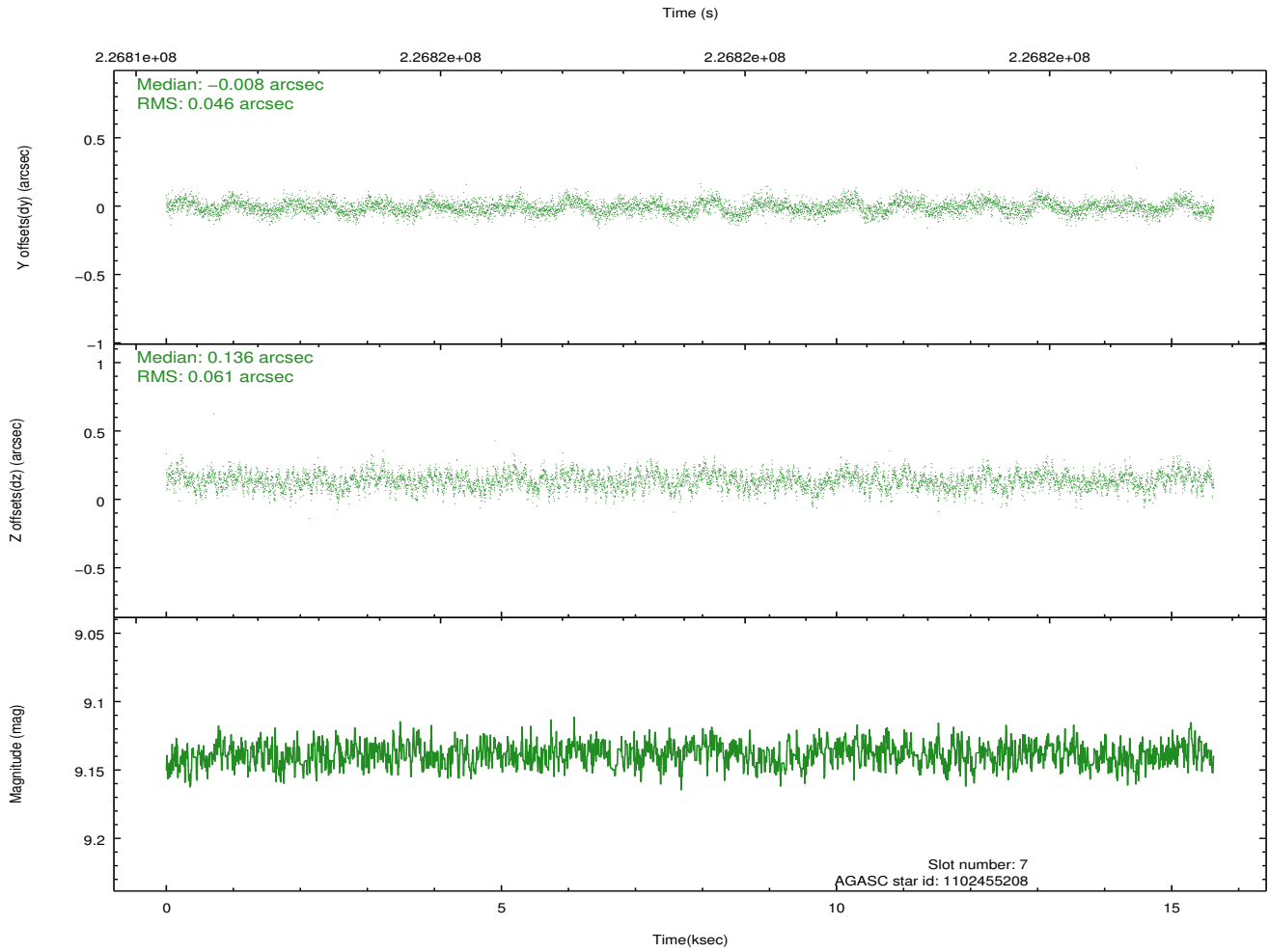
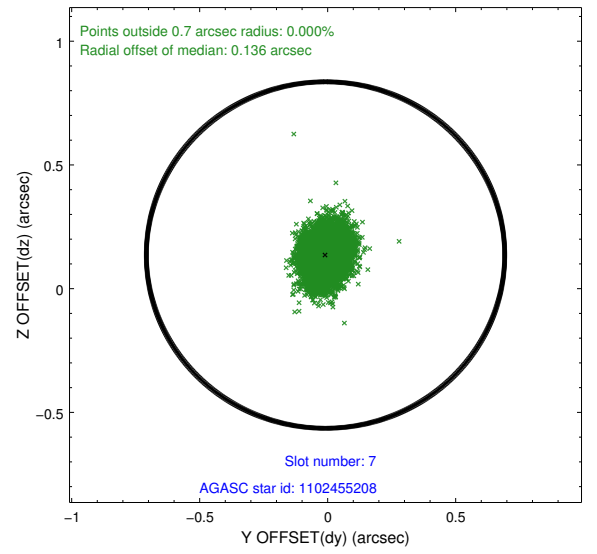
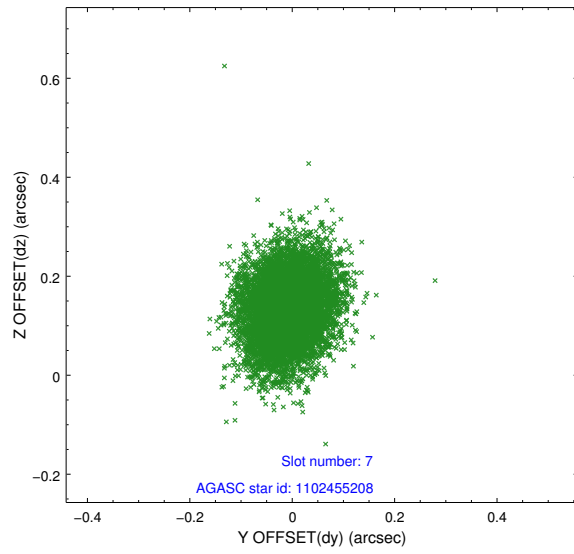


## 2.4.4 Slot 6



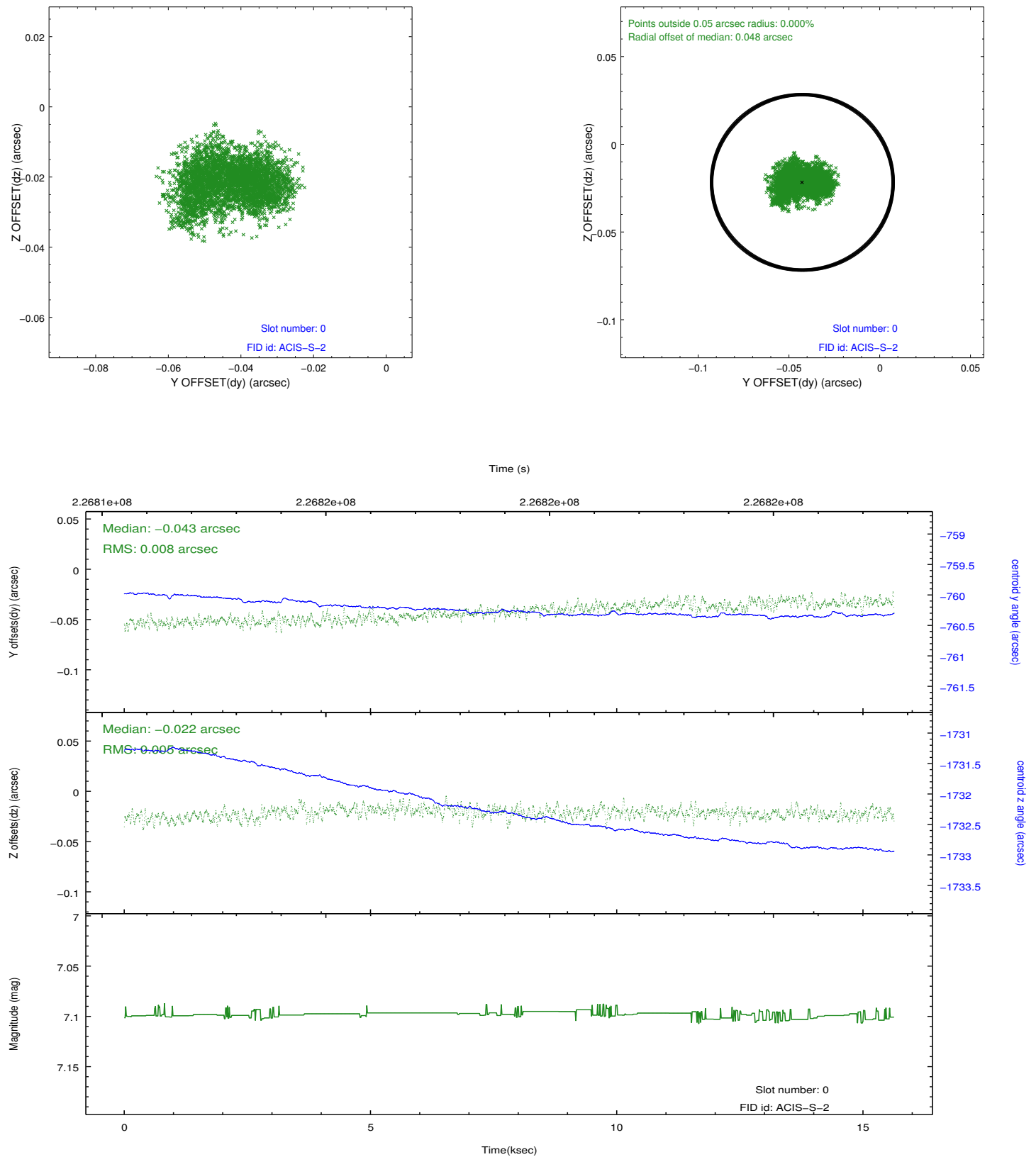


## 2.4.5 Slot 7

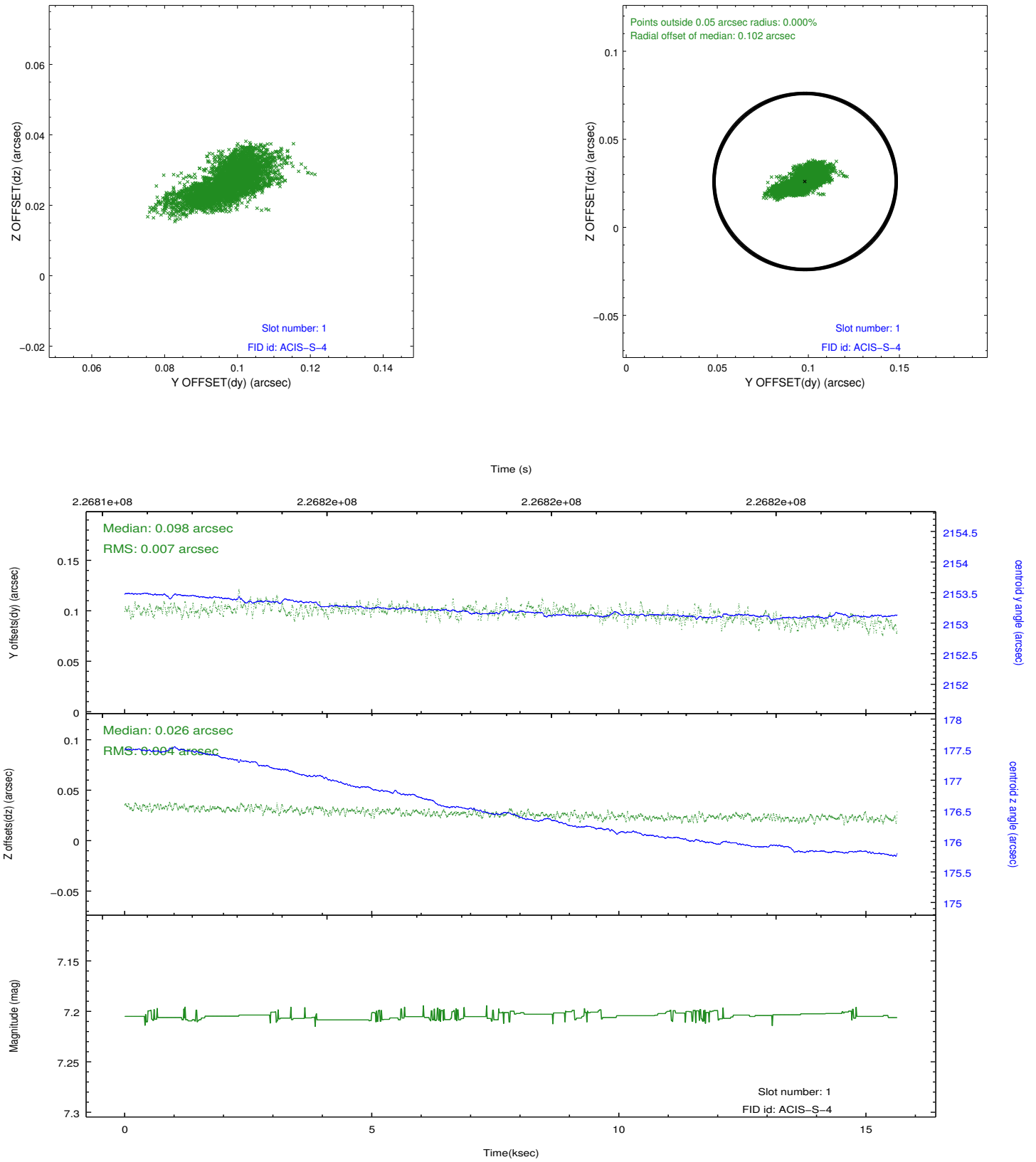


## 2.5 FID Slots

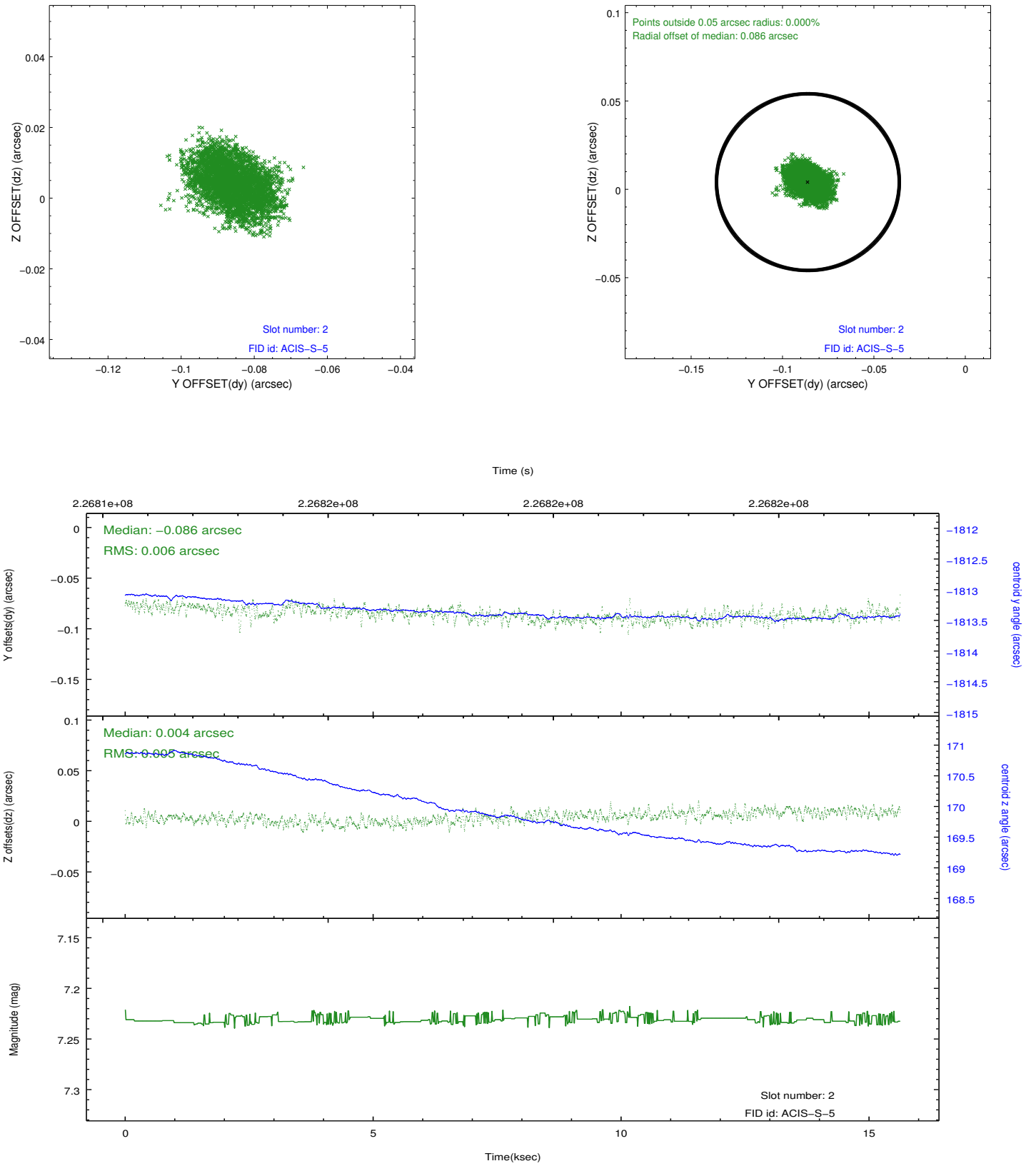
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2013.01.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	15.62399

### A.2 Comments