

# V&V Reference Report

## L2 ASCDS Version : 8.4.3

Observation 13705 - L2 Version 2  
Chandra X-Ray Center

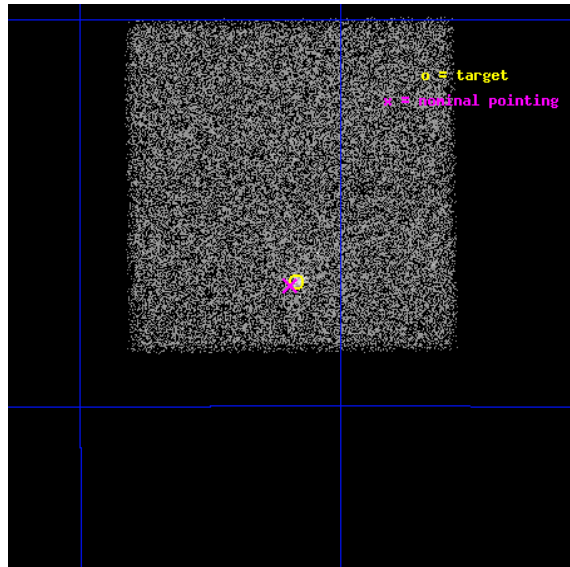
L2 Processing Date : Feb 22 2012

## Contents

<b>1</b>	<b>Front</b>	<b>2</b>
<b>2</b>	<b>OBI</b>	<b>3</b>
2.1	OBI . . . . .	3
2.1.1	Images . . . . .	3
2.1.2	Bias . . . . .	3
2.1.3	Parameters . . . . .	4
2.1.4	Events . . . . .	4
2.2	Compared Parameters . . . . .	5
2.3	Aspect . . . . .	6
2.4	Star Slots . . . . .	9
2.4.1	Slot 3 . . . . .	9
2.4.2	Slot 4 . . . . .	10
2.4.3	Slot 5 . . . . .	11
2.4.4	Slot 6 . . . . .	12
2.4.5	Slot 7 . . . . .	13
2.5	FID Slots . . . . .	14
2.5.1	Slot 0 . . . . .	14
2.5.2	Slot 1 . . . . .	15
2.5.3	Slot 2 . . . . .	16
<b>A</b>	<b>Summary</b>	<b>17</b>
A.1	Status . . . . .	17
A.2	Comments . . . . .	17

# 1 Front

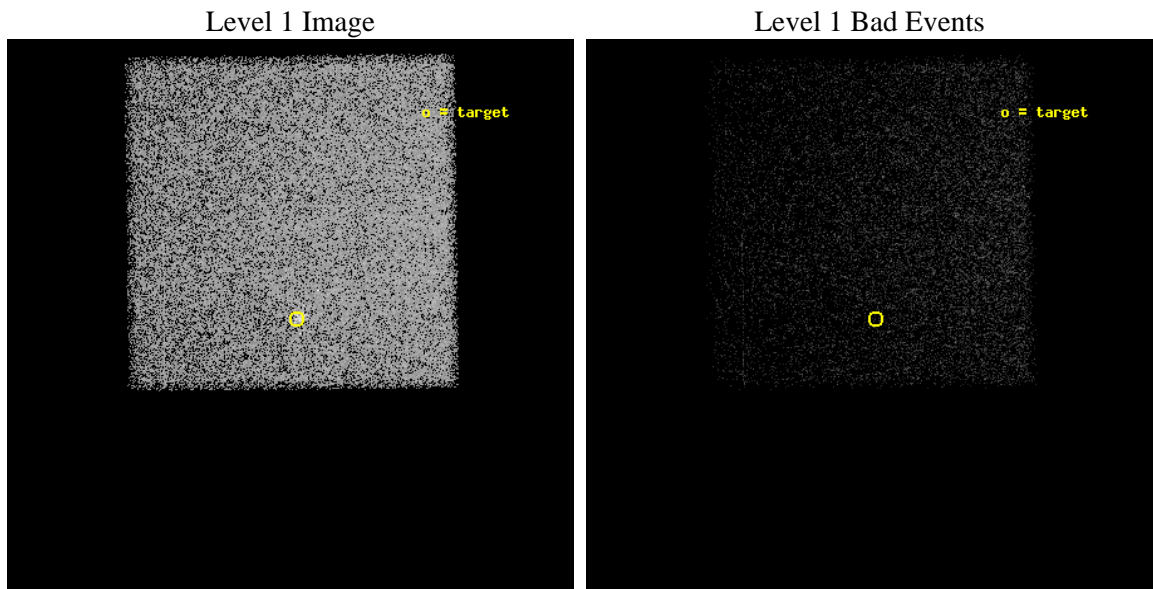
seq_num	401391	Sequence number
obs_id	13705	Observation id
title	Quiescent monitoring of the 11 Hz pulsar in Terzan 5	Proposal titl
observer	Nathalie Degenaar	Principal investigator
object	Terzan 5	Source name
dtycycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	267.021667	Observer's specified target RA [deg]
dec_targ	-24.779806	Observer's specified target Dec [deg]
ra_nom	267.02445657316	Nominal RA [deg]
dec_nom	-24.781482482802	Nominal Dec [deg]
roll_nom	269.30778744873	Nominal Roll [deg]
revision	2	Processing version of data
ontime	14064.0	Sum of GTIs [s]
livetime	13874.20093126	Livetime [s]
ontime7	14064.0	Sum of GTIs [s]
l2events	52531	Number of level 2 events



## 2 OBI

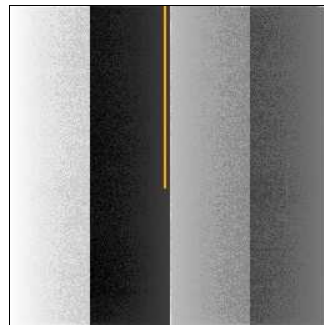
### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias

Chip 7



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	13985.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	14064.0	Sum of GTIs [s]
caldbver	4.4.8	&#160	ontime7	14064.0	Sum of GTIs [s]
date	2012-02-22T06:51:31	Date and time of file creation	l1events	115246	Number of level 1 events
revision	2	Processing version of data			

### 2.1.4 Events

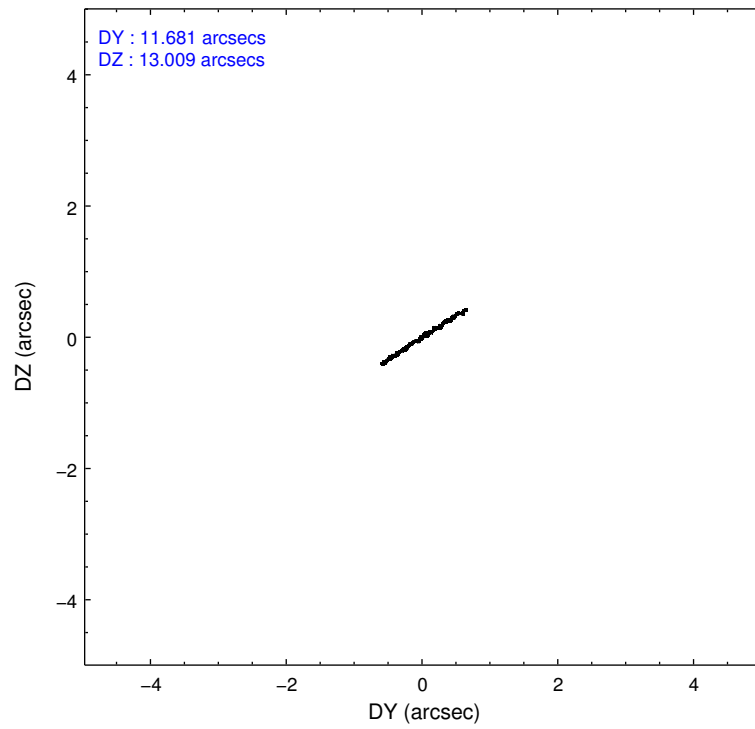
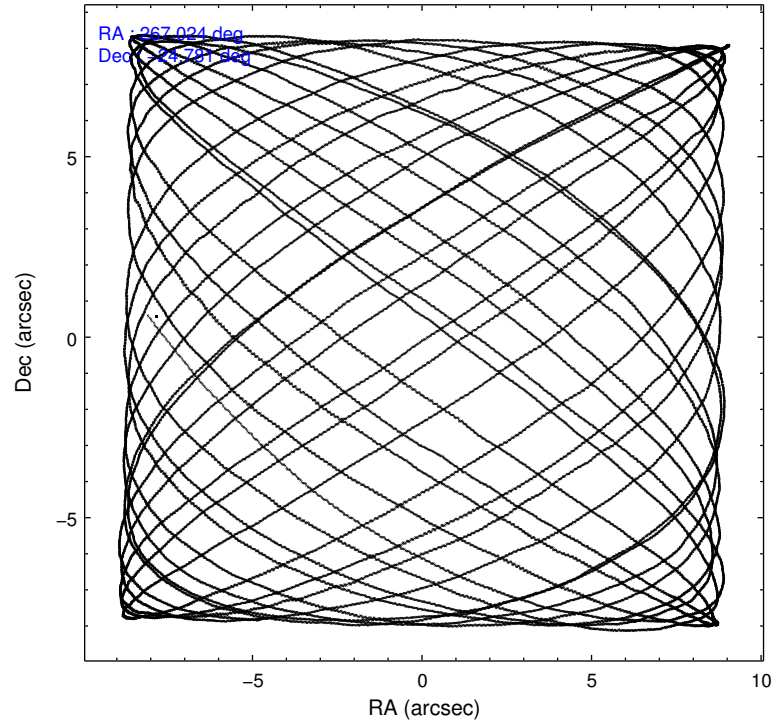
	<b>ccd 7</b>
level 1 events	115246
rejected events	61360
rejected %	<b>53%</b>

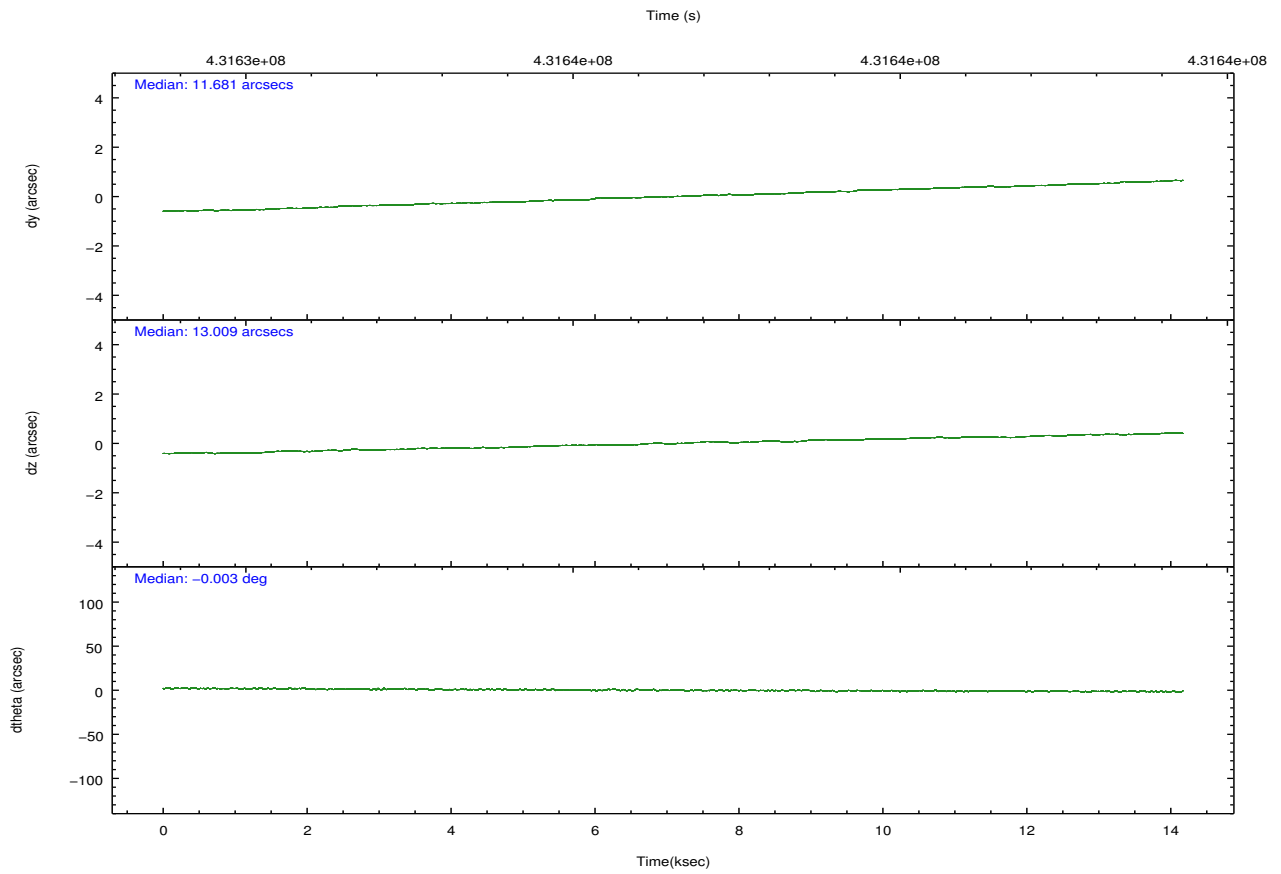
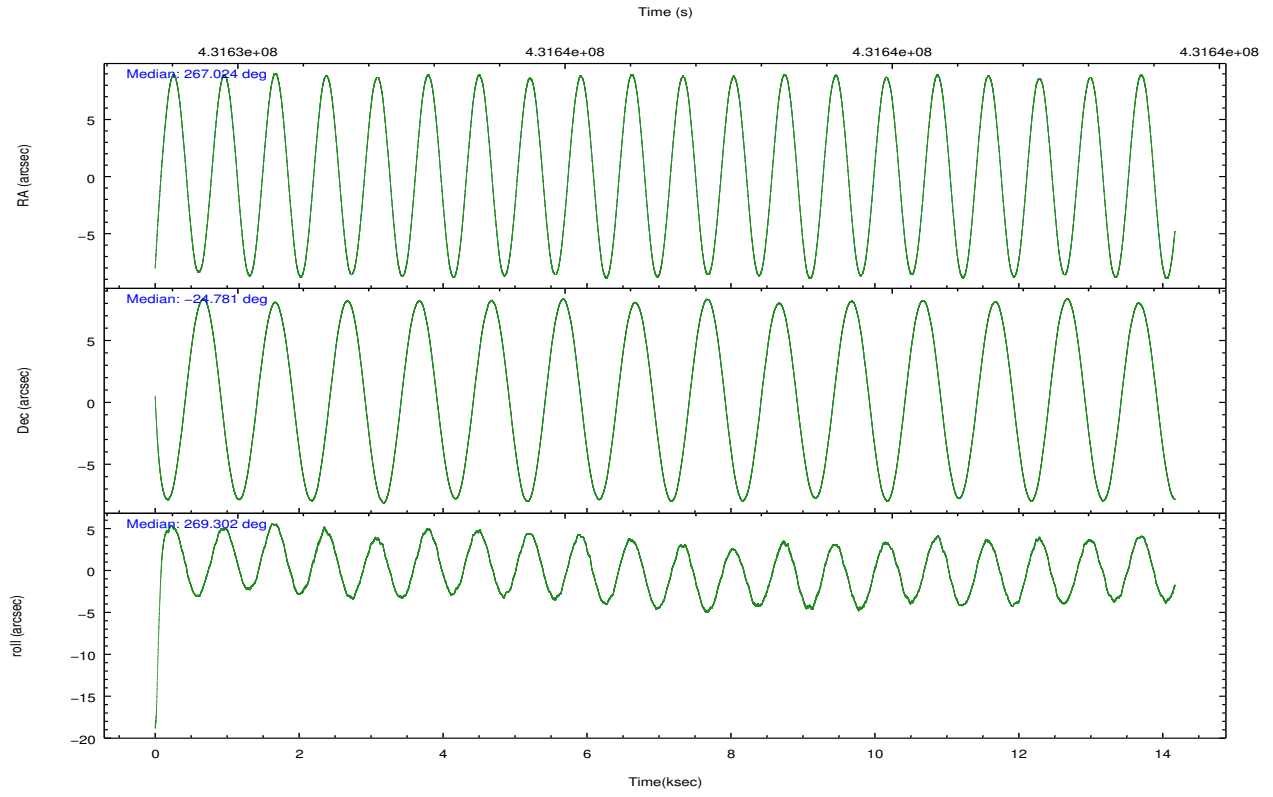
	<b>ccd 7</b>
grade 0 events	5273
	4%
grade 1 events	130
	0%
grade 2 events	11071
	9%
grade 3 events	4825
	4%
grade 4 events	4872
	4%
grade 5 events	11872
	10%
grade 6 events	27858
	24%
grade 7 events	49345
	42%

## 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	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	267.009361	267.0244565731612	Subarray requested	NONE	NONE
[deg] Pointing Dec	-24.757809	-24.78148248280202	Alternating exposures requested	N	N
[deg] Pointing Roll	269.144845	269.3077874487342	[s] Primary exposure time	0.000000	3
[s] Window start time (MET)	428544066.184000	428544066.184000			
[s] Window stop time (MET)	433814466.184000	433814466.184000			
[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)	431629625.184000	431628933.75035			
Observation start date	2011-09-05T17:05:59	2011-09-05T16:55:33			
[s] Observation end time (MET)	431643610.184000	431644335.40116			
Observation end date	2011-09-05T20:59:04	2011-09-05T21:12:15			
Read mode	TIMED	TIMED			

## 2.3 Aspect



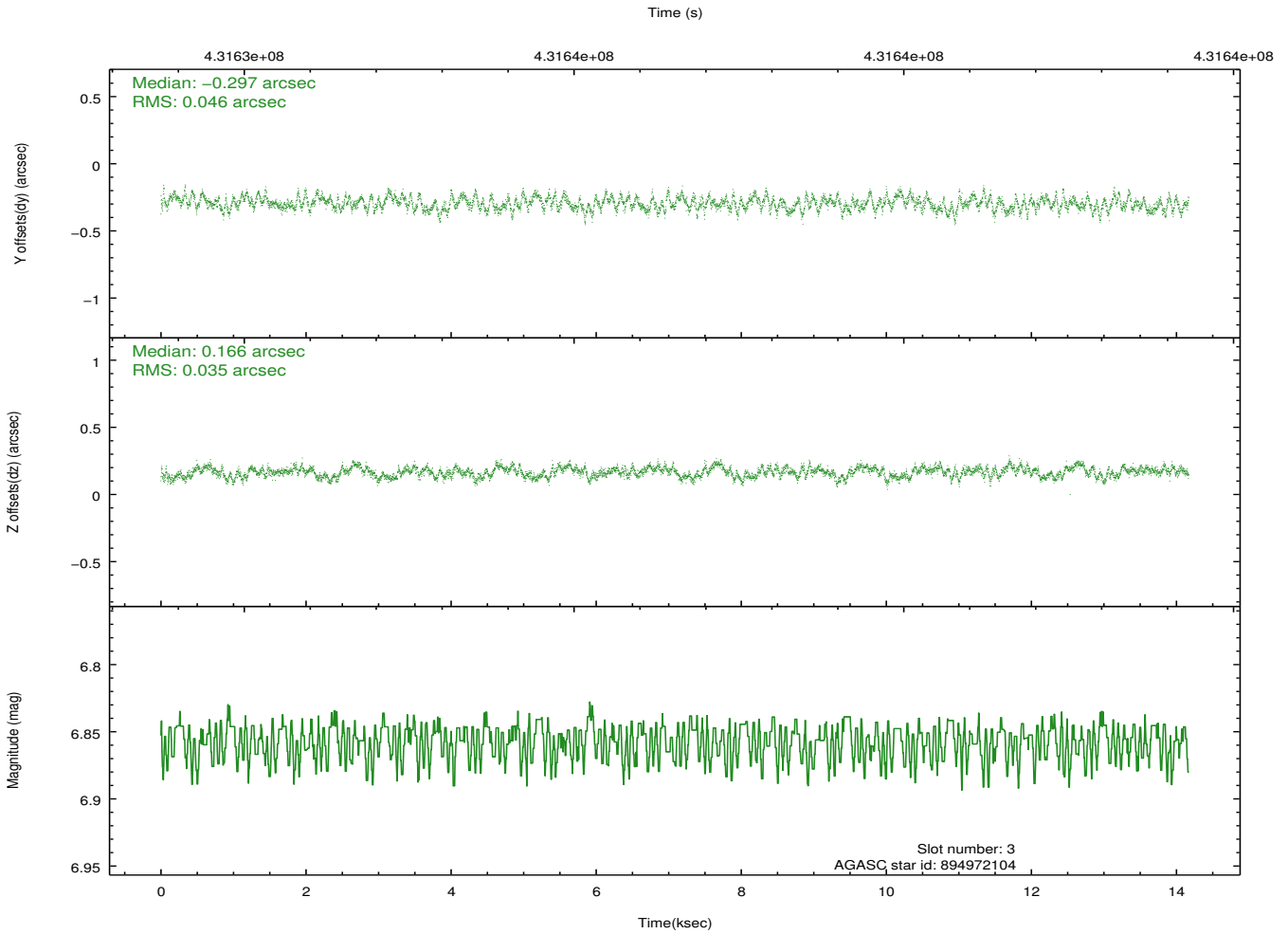
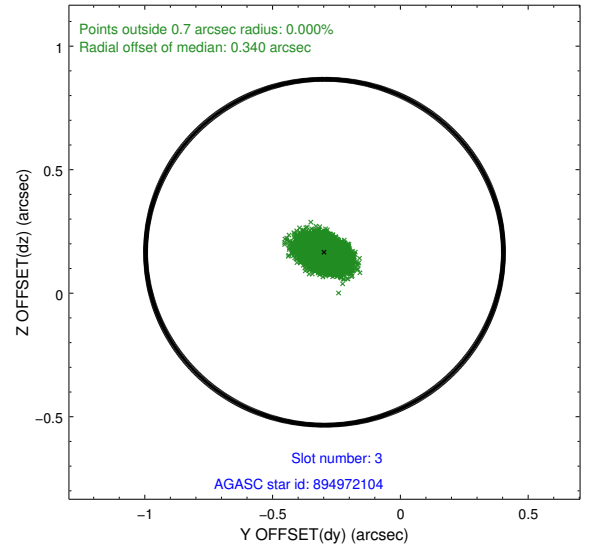
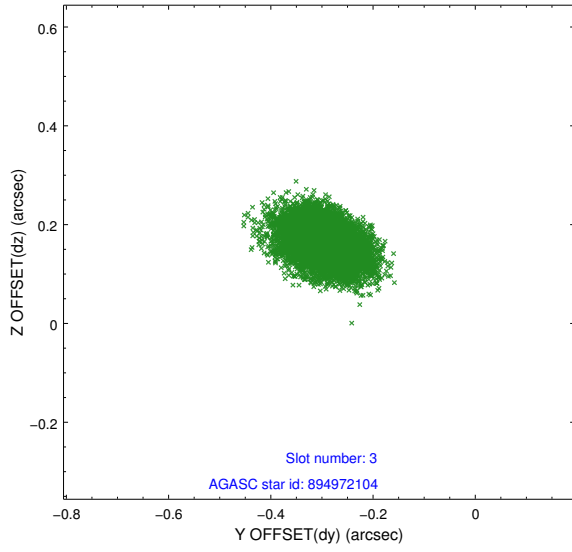


### Slot Statistics

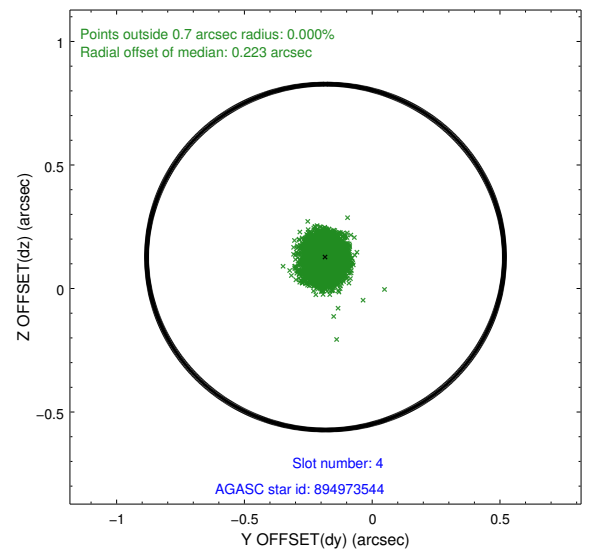
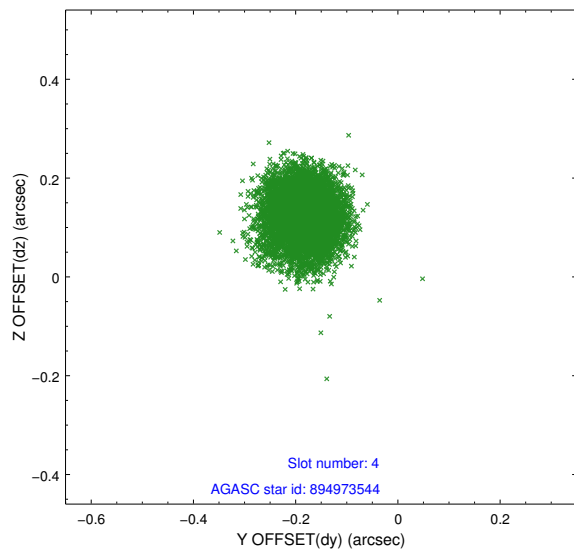
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.89	3456	-0.087	-0.052	0.006	0.011	0.000000	0.000000	-764.68	-1734.37
1	FID	ACIS-S-4	6.98	3456	0.133	0.031	0.011	0.018	0.000000	0.000000	2148.70	173.81
2	FID	ACIS-S-6	7.12	3455	-0.075	0.029	0.011	0.017	0.000000	0.000000	397.78	811.60
3	GUIDE	894972104	6.86	6913	-0.297	0.166	0.062	0.099	267.489380	-24.207054	-2003.09	1546.00
4	GUIDE	894973544	8.05	6912	-0.183	0.127	0.063	0.103	266.605572	-24.141151	-2197.85	-1359.40
5	GUIDE	895488888	8.53	6911	0.185	-0.090	0.080	0.129	266.751949	-24.913497	573.96	-832.01
6	GUIDE	895489704	8.78	6907	0.330	-0.293	0.098	0.171	266.328076	-25.361339	2212.92	-2183.39
7	GUIDE	895486672	9.01	6909	-0.042	0.092	0.108	0.173	267.522168	-25.216127	1628.85	1694.61

## 2.4 Star Slots

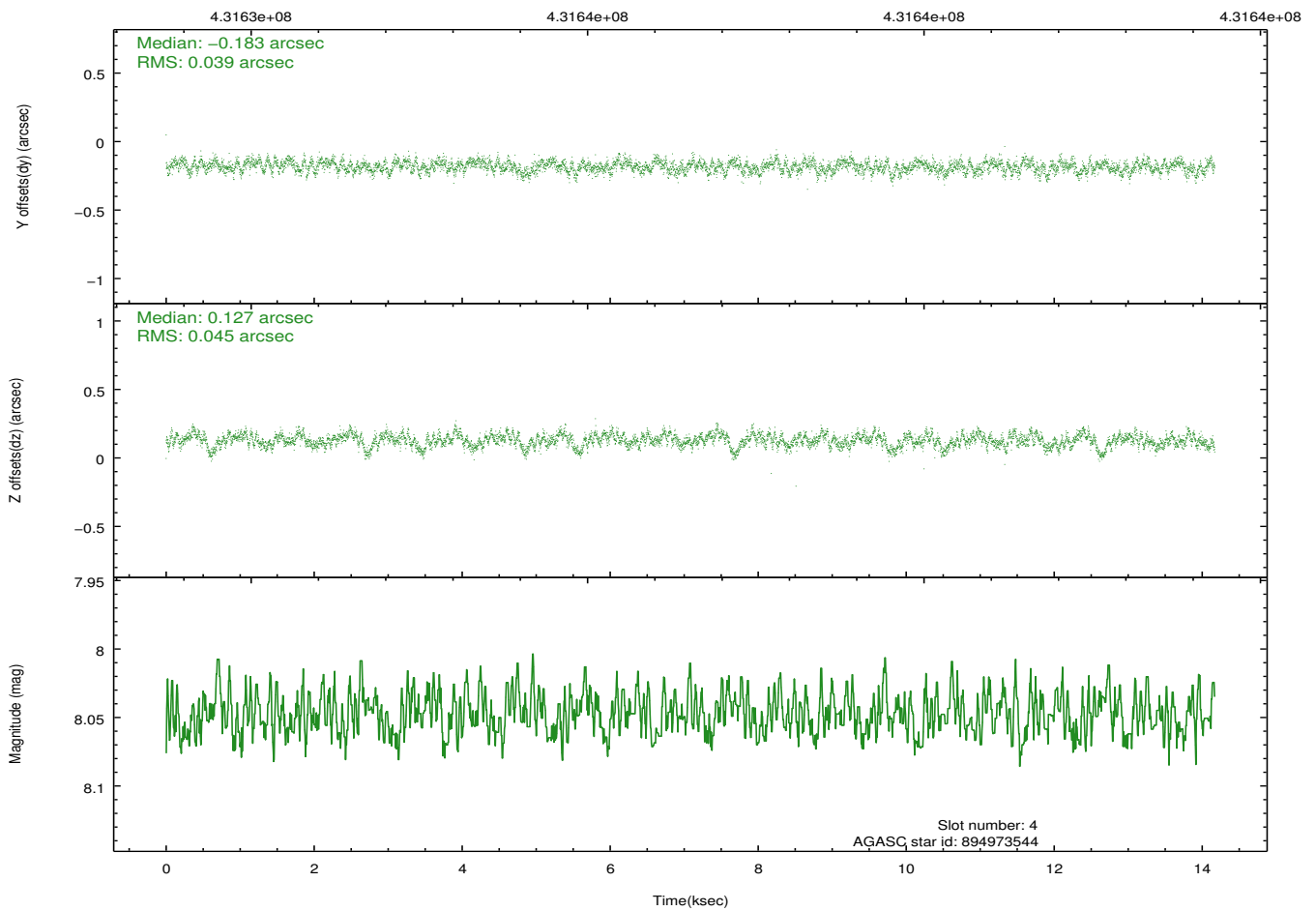
### 2.4.1 Slot 3



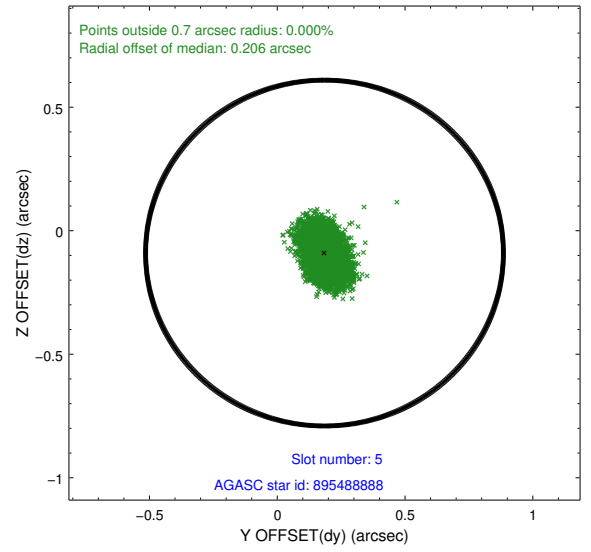
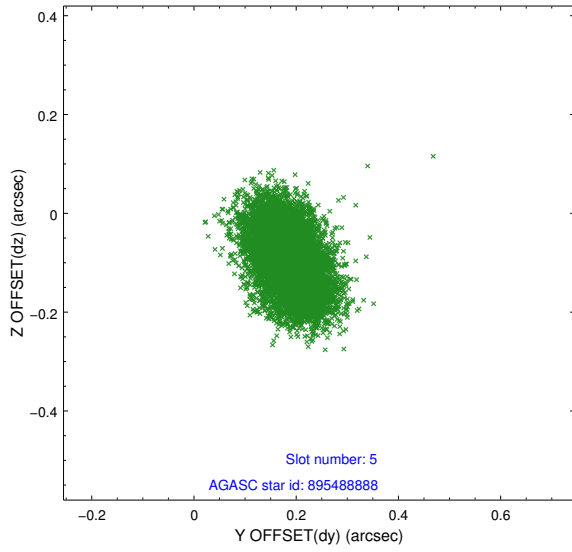
## 2.4.2 Slot 4



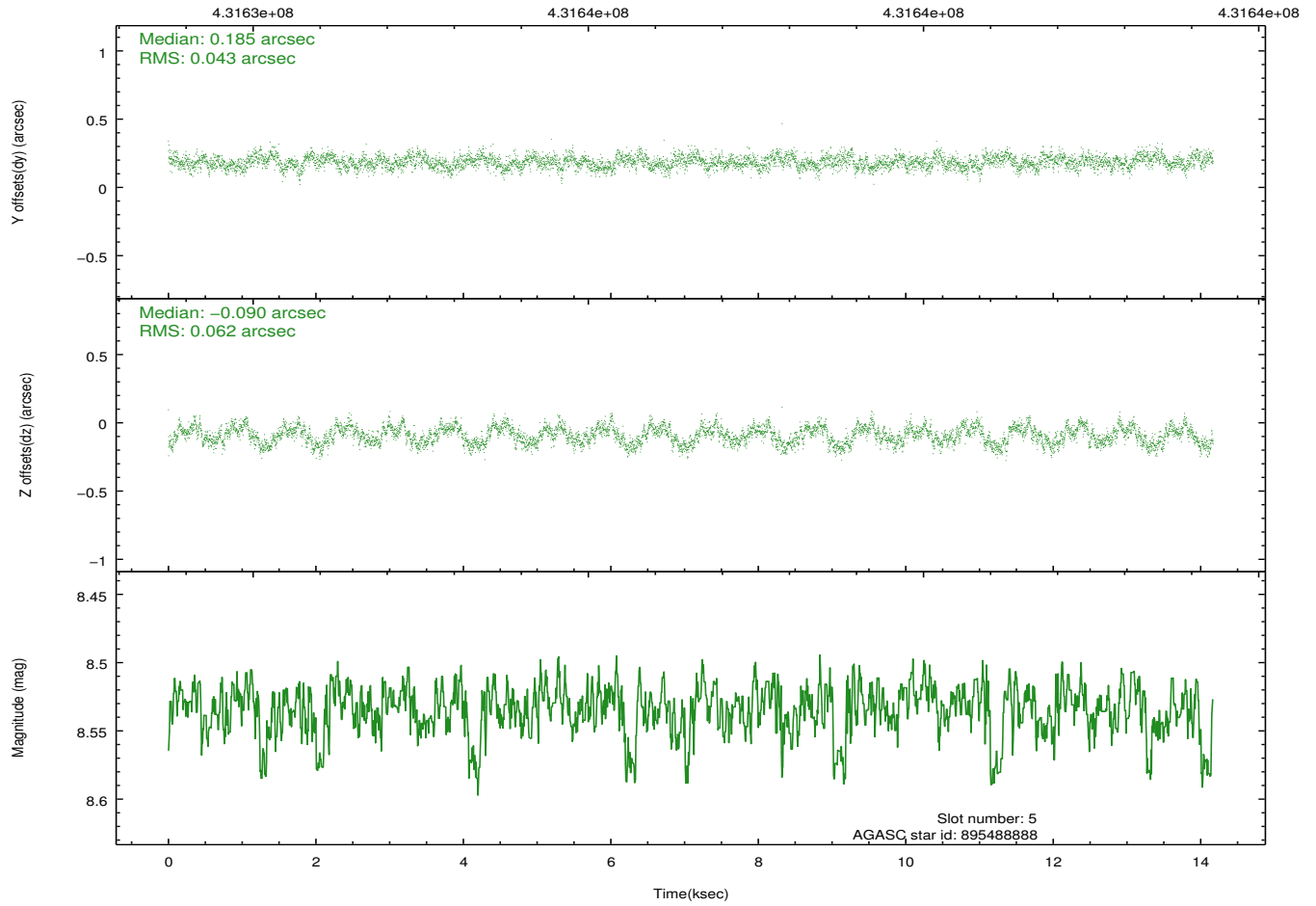
Time (s)



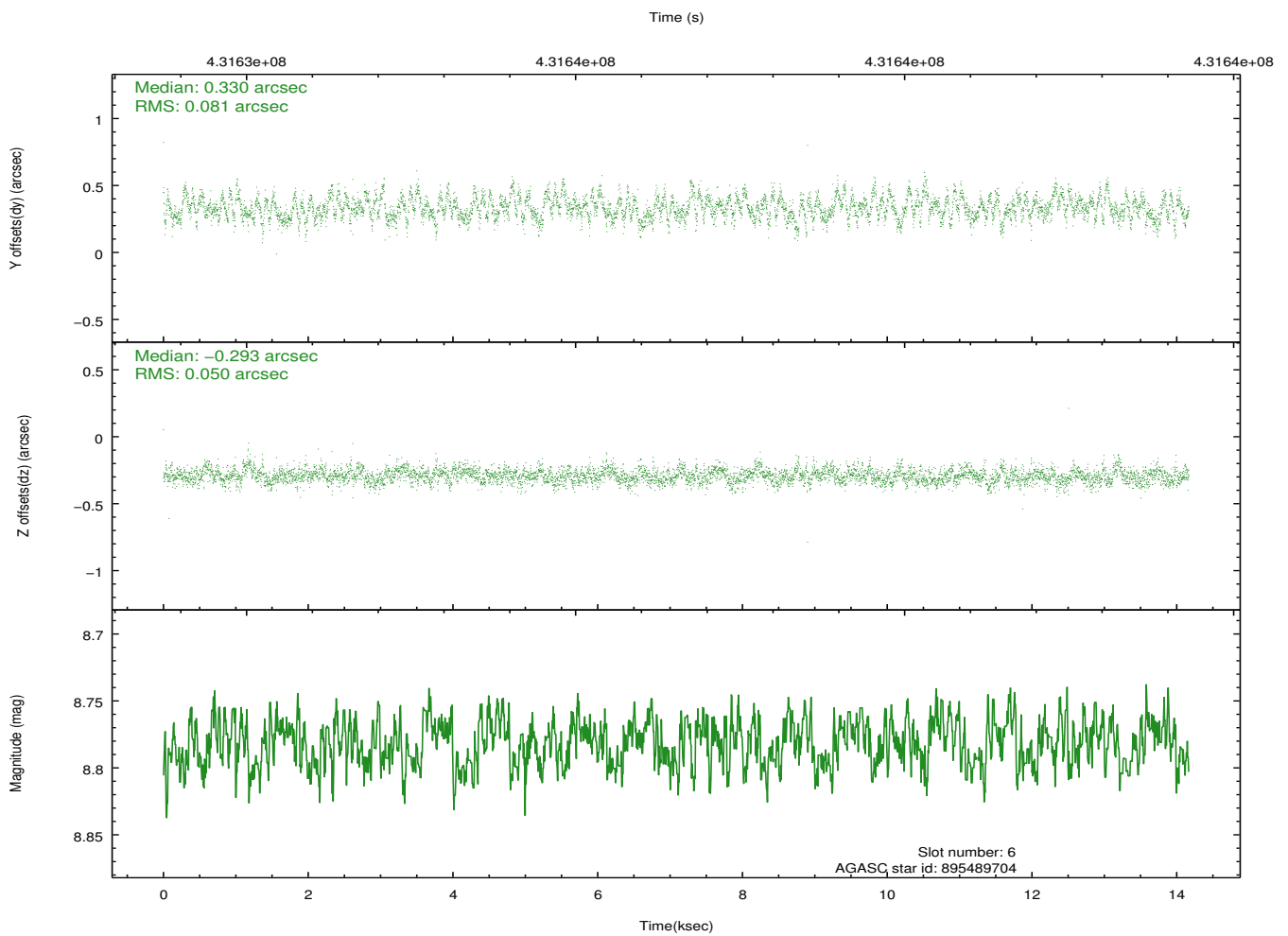
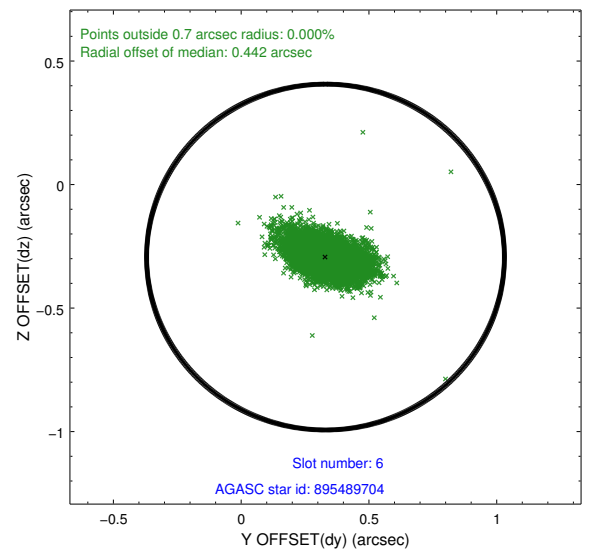
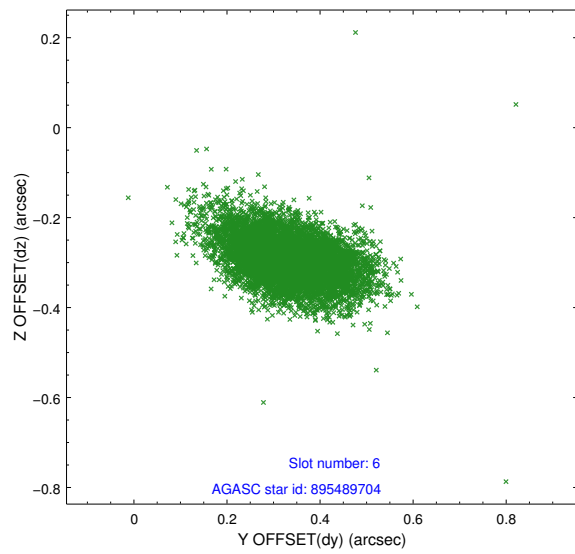
### 2.4.3 Slot 5



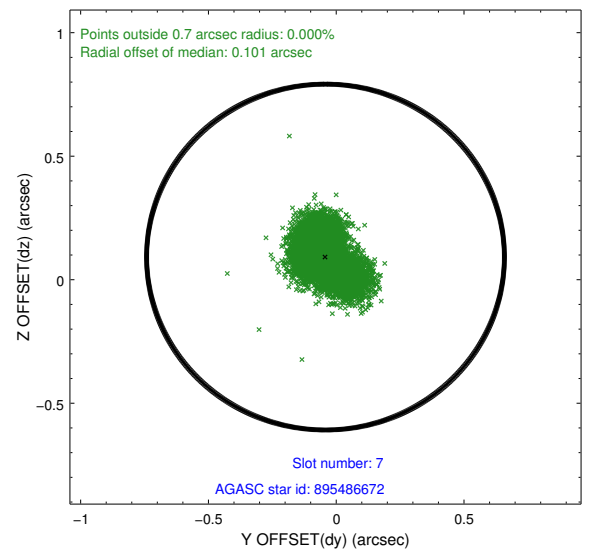
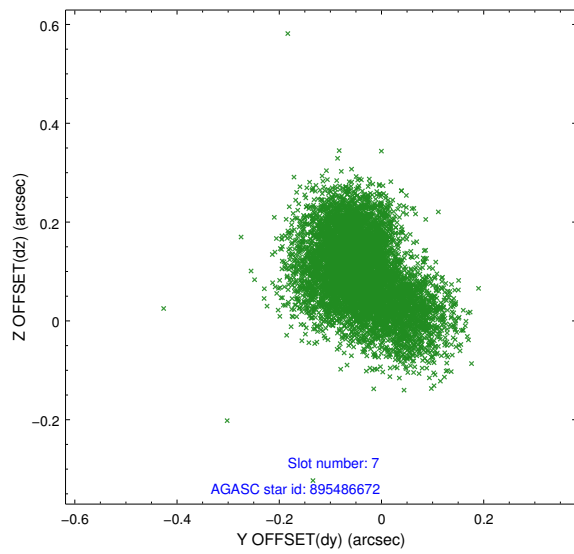
Time (s)



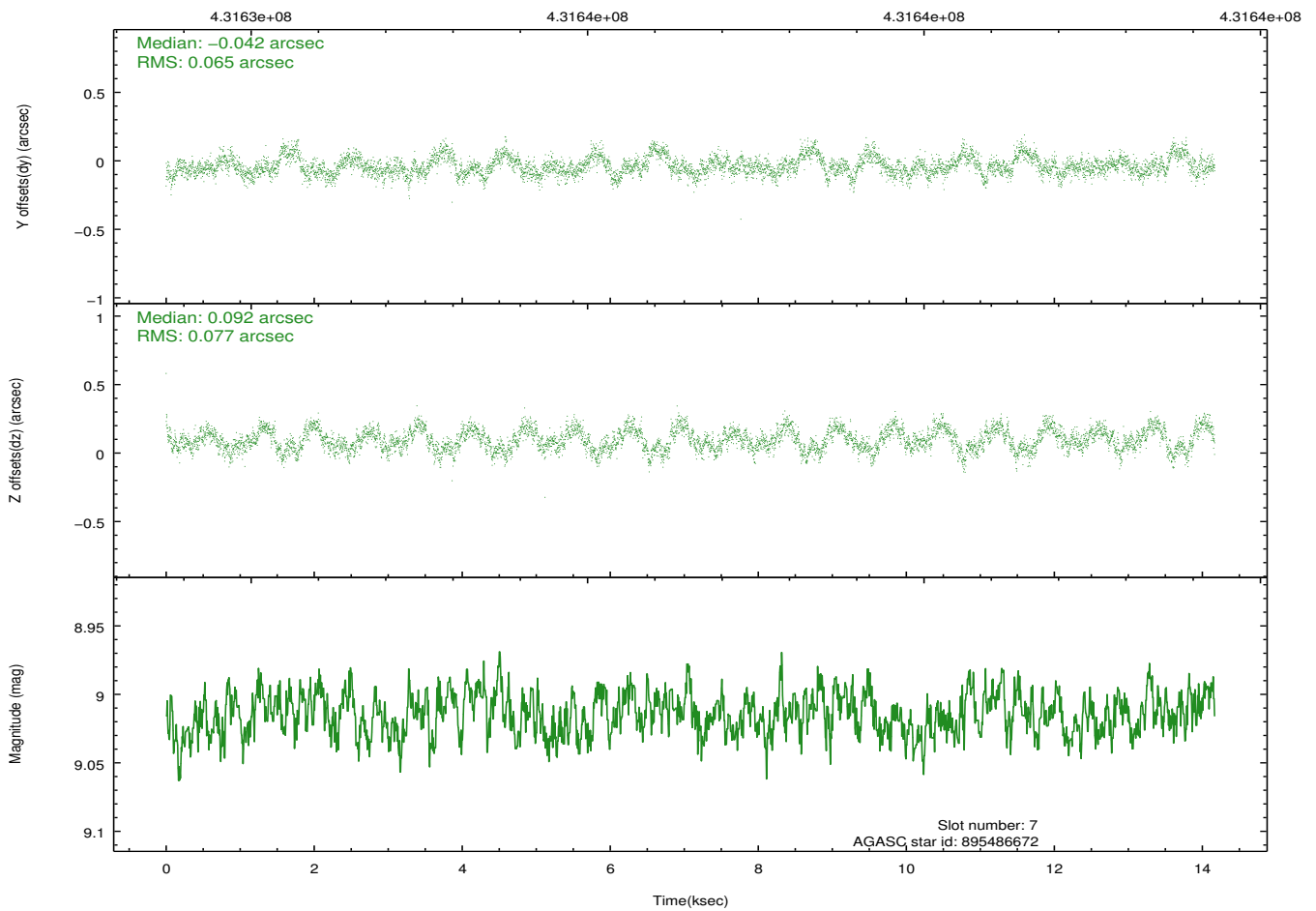
## 2.4.4 Slot 6



## 2.4.5 Slot 7

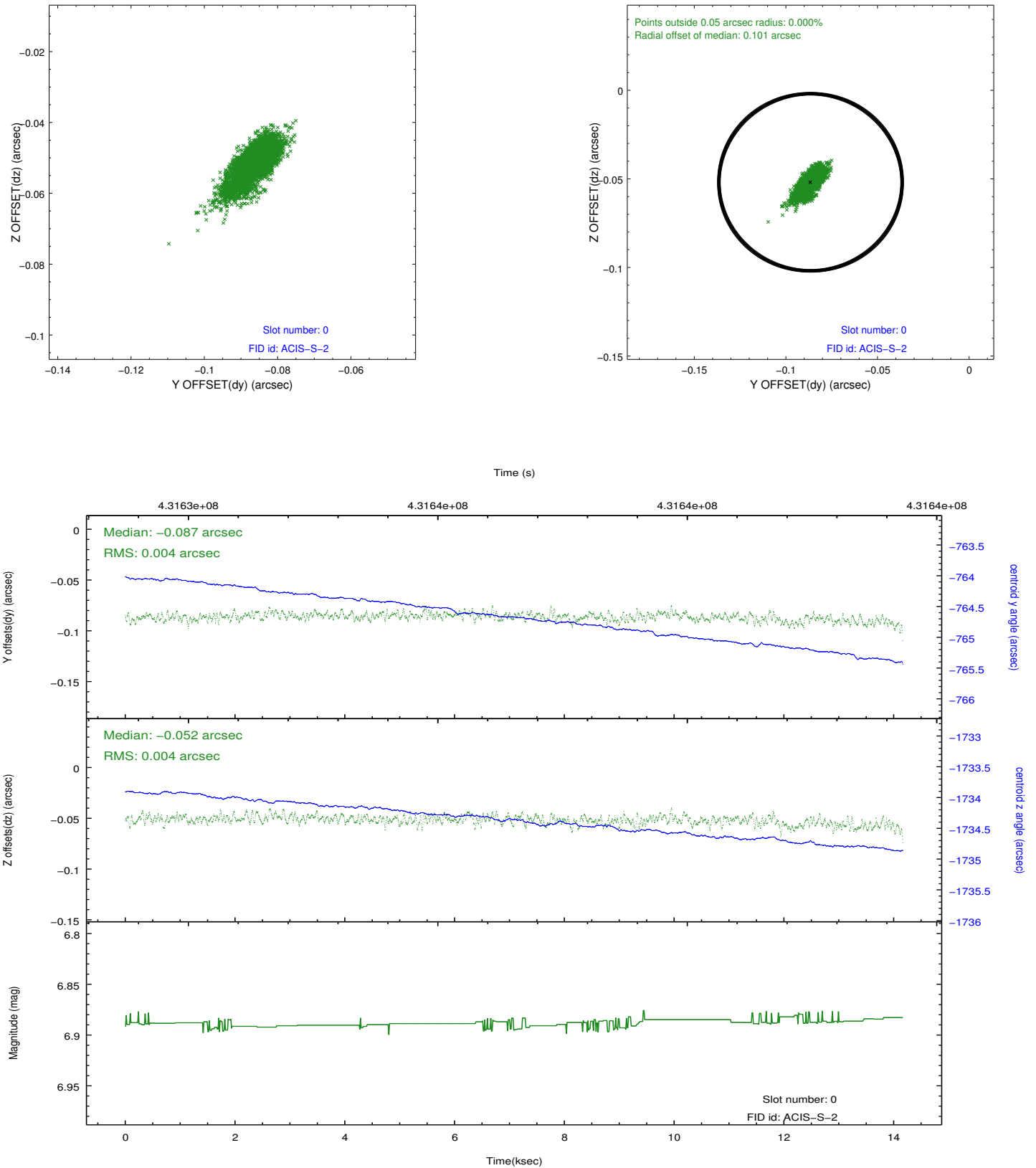


Time (s)

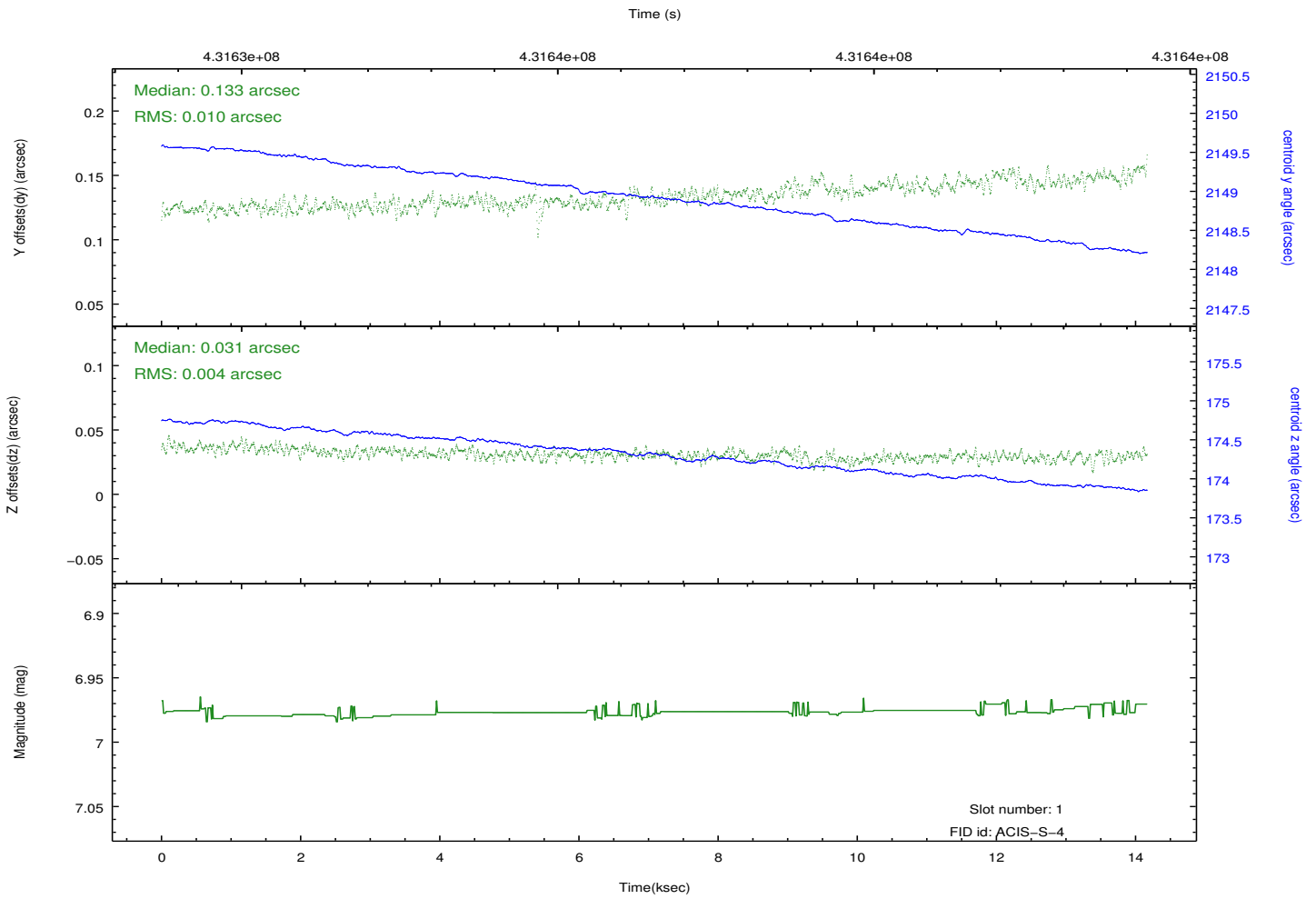
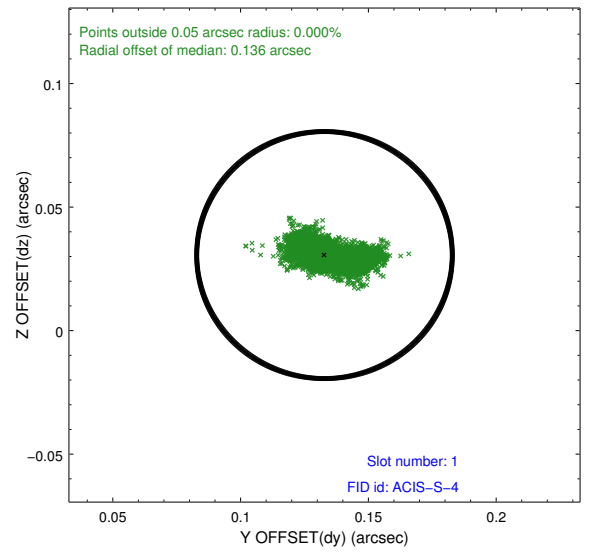
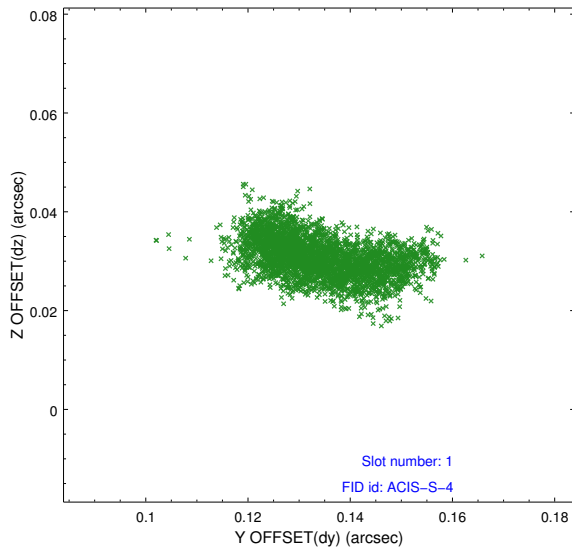


## 2.5 FID Slots

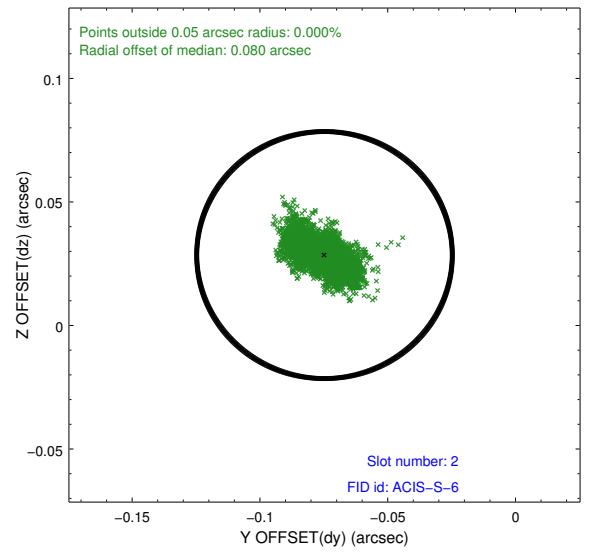
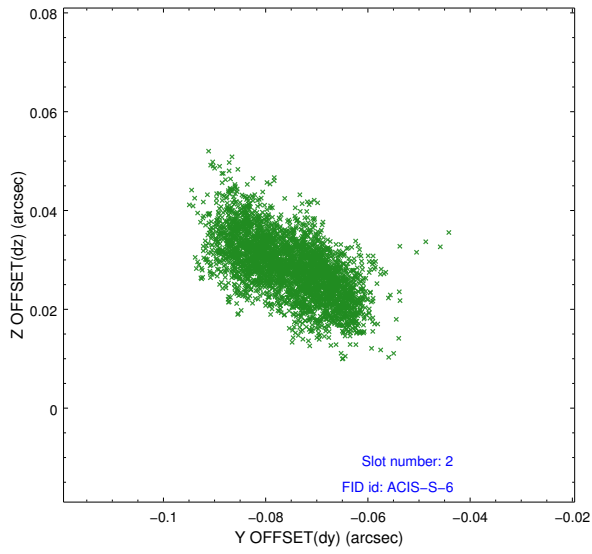
### 2.5.1 Slot 0



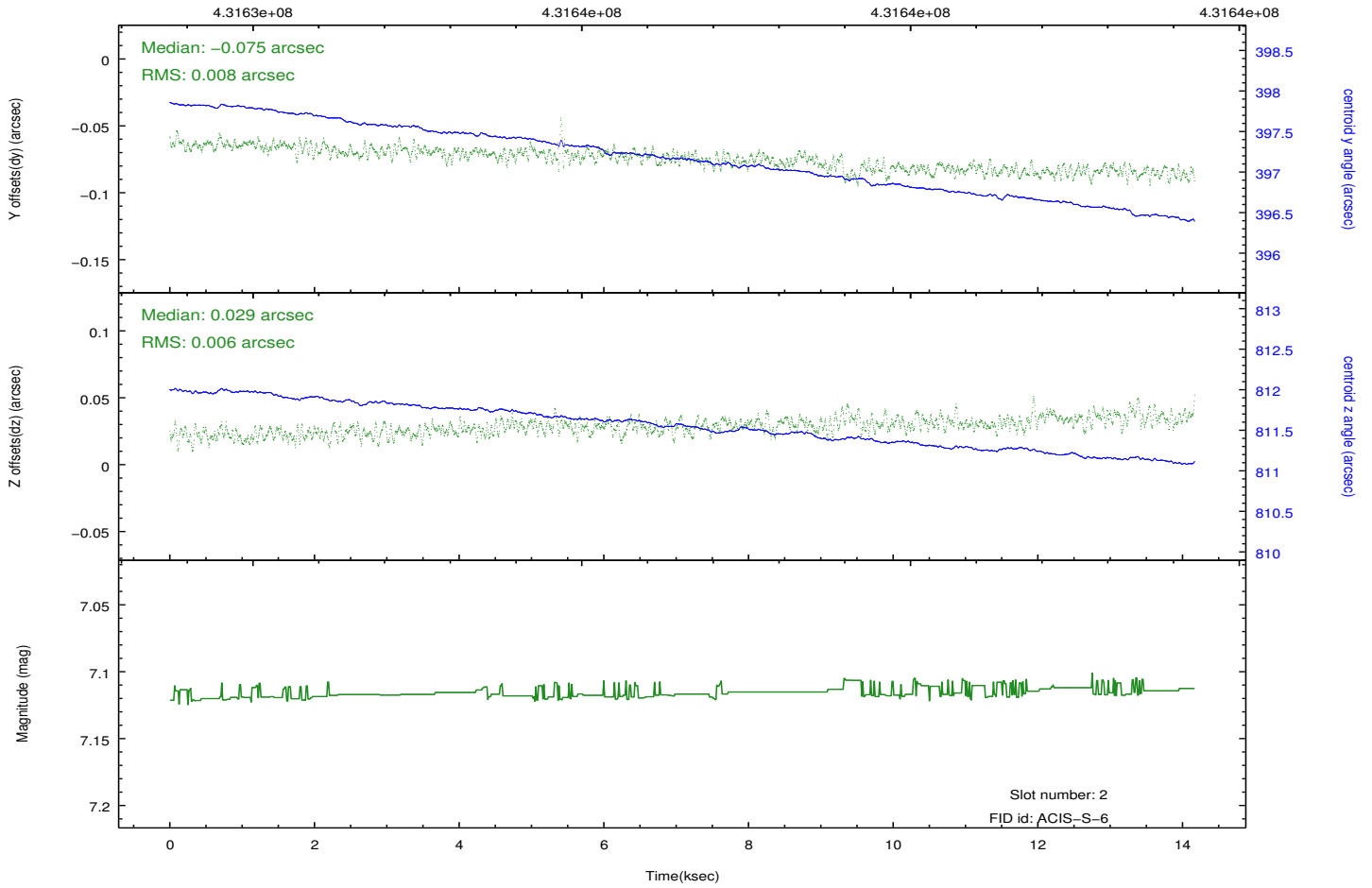
## 2.5.2 Slot 1



### 2.5.3 Slot 2



Time (s)



# A Summary

## A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.02.22
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	14.064

## A.2 Comments

Window preference met.