

V&V Reference Report

L2 ASCDS Version : 10.5

Observation 18073 - L2 Version 1
Chandra X-Ray Center

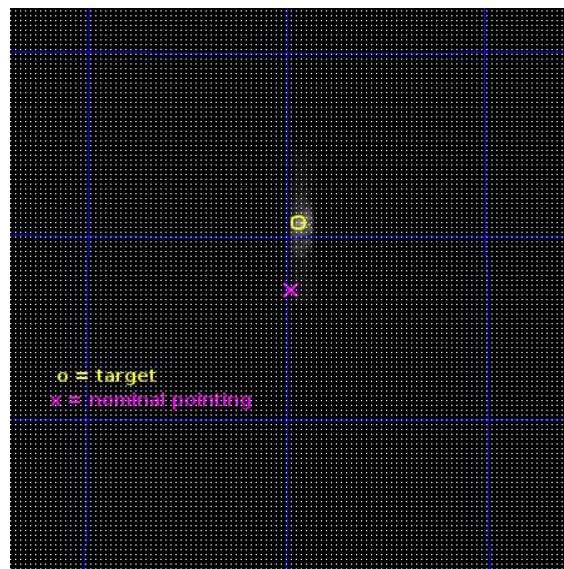
L2 Processing Date : Aug 20 2016

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1 Front

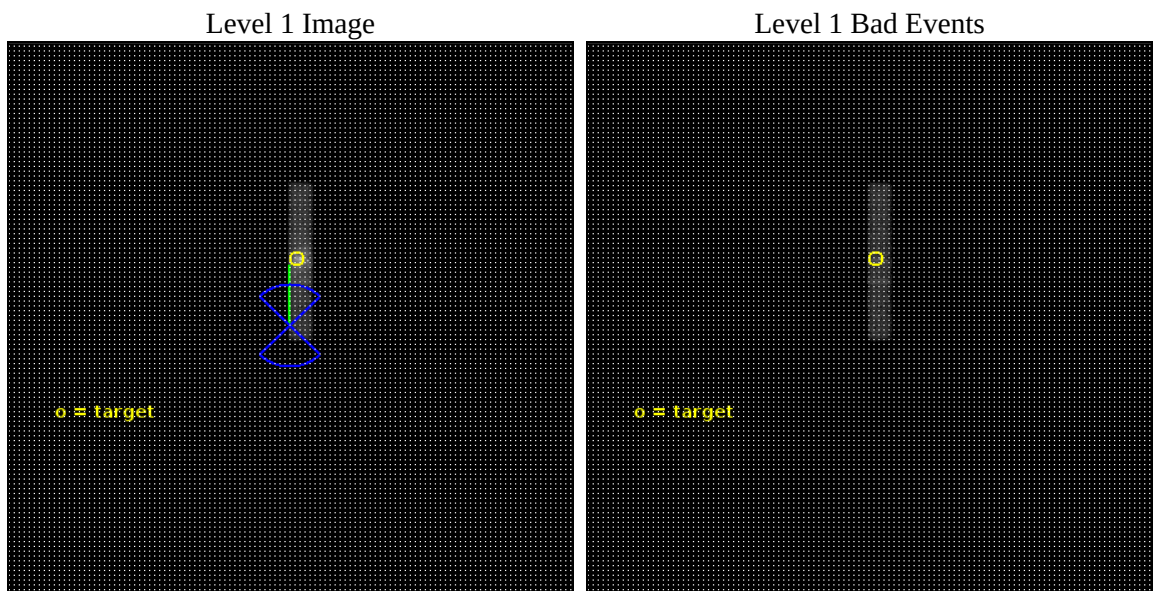
seq_num	601255	Sequence number
obs_id	18073	Observation id
title	Timing and Spectral Studies of the Extreme Binary Population in M82	
observer	Professor Fiona Harrison	Principal investigator
object	M82 NuSTAR	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	148.969583	Observer's specified target RA [deg]
dec_targ	69.679444	Observer's specified target Dec [deg]
ra_nom	148.98760502907	Nominal RA [deg]
dec_nom	69.618675317426	Nominal Dec [deg]
roll_nom	0.19180394203875	Nominal Roll [deg]
revision	1	Processing version of data
ontime	40100.5	Sum of GTIs [s]
livetime	37058.720242496	Livetime [s]
ontime3	40100.5	Sum of GTIs [s]
l2events	88330	Number of level 2 events



2 OBI

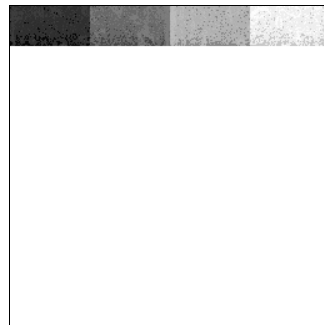
2.1 OBI

2.1.1 Images



2.1.2 Bias

Chip 3



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	40000.000000	[s] Scheduled observation exposure time
ascdsver	10.5	Processing system revision	ontime	40100.5	Sum of GTIs [s]
caldsver	4.7.2	 	ontime3	40100.5	Sum of GTIs [s]
date	2016-08-20T11:50:29	Date and time of file creation	l1events	139898	Number of level 1 events
revision	1	Processing version of data			

2.1.4 Events

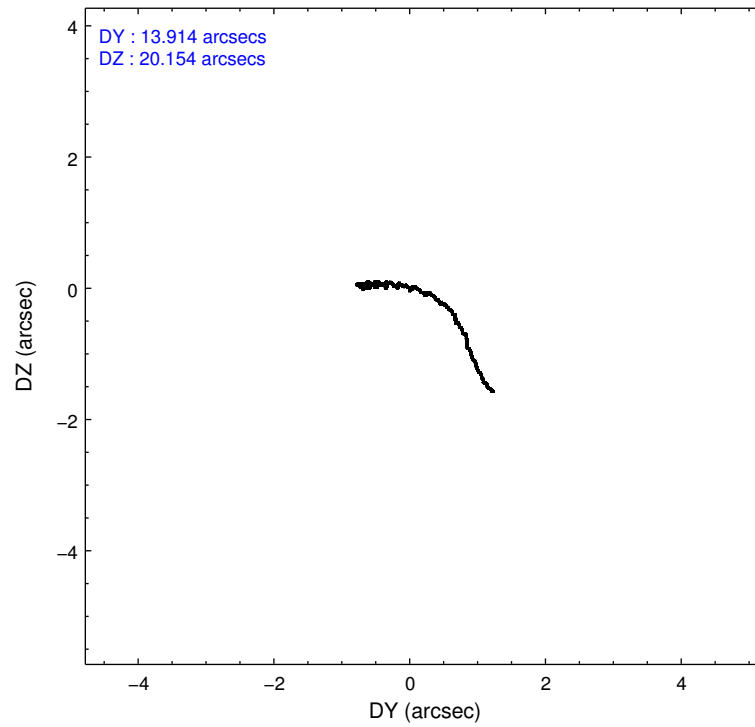
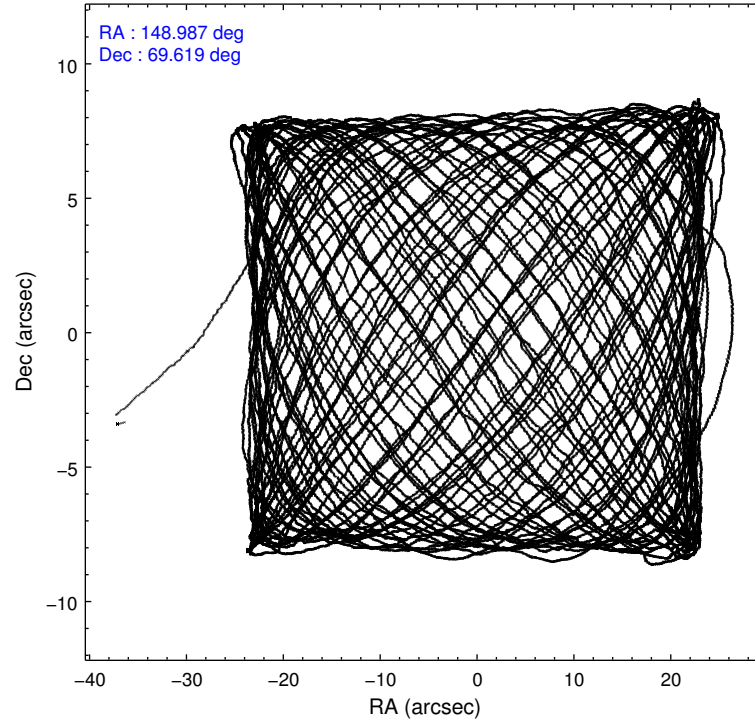
	ccd 3
level 1 events	139898
rejected events	41728
rejected %	29%

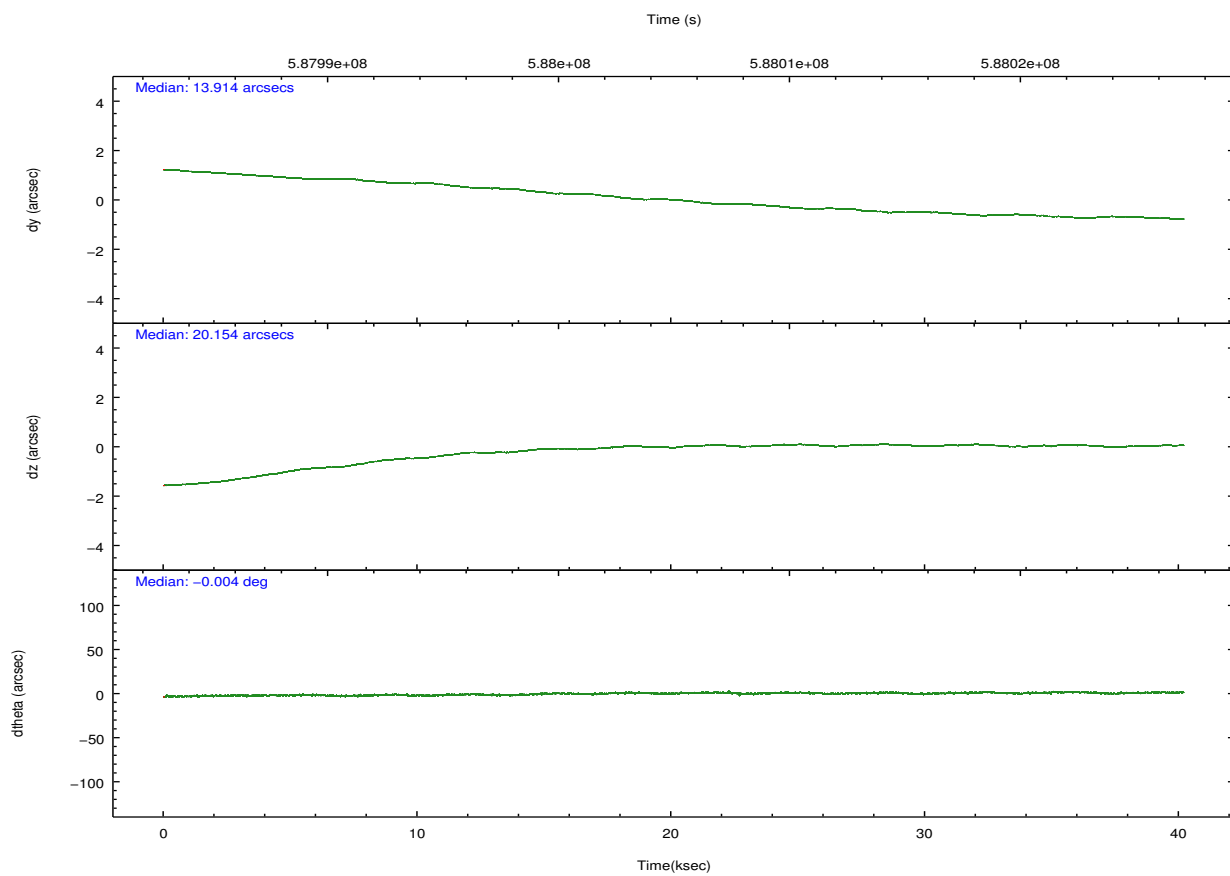
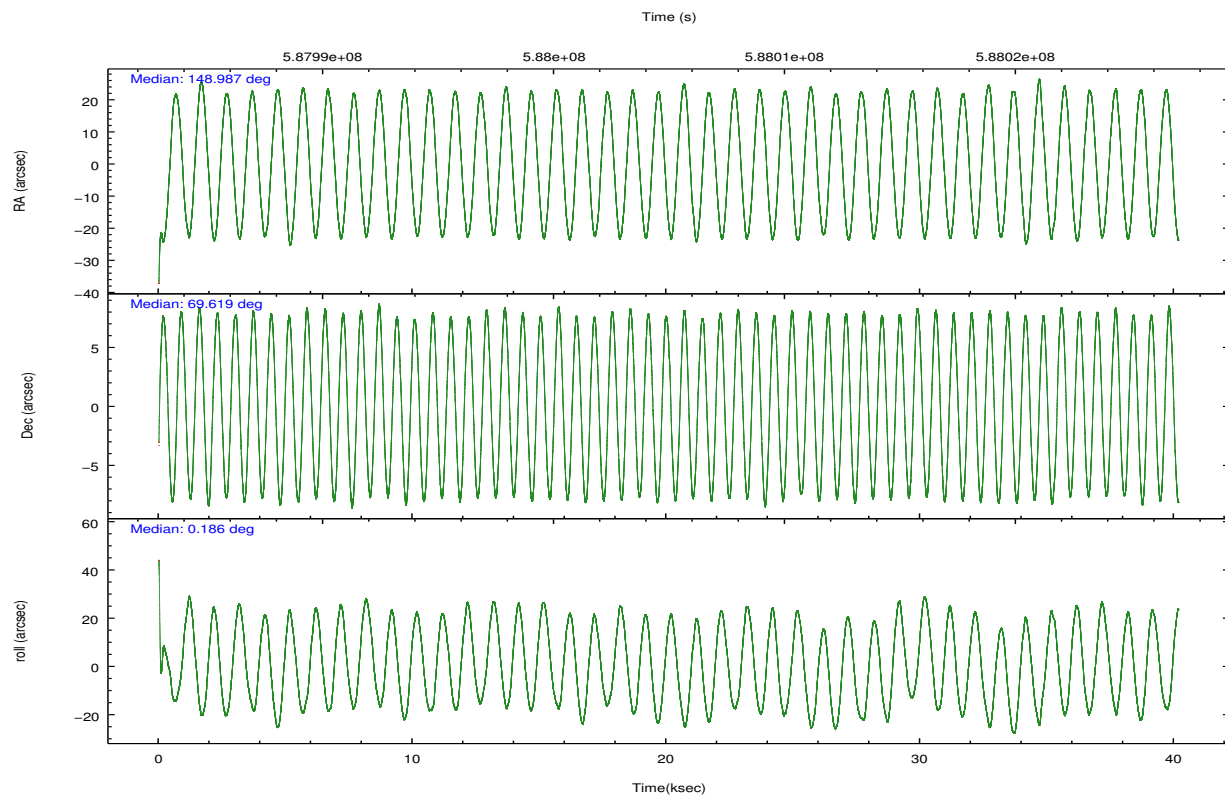
	ccd 3
grade 0 events	76781
	54%
grade 1 events	1799
	1%
grade 2 events	10079
	7%
grade 3 events	3935
	2%
grade 4 events	4001
	2%
grade 5 events	2574
	1%
grade 6 events	3376
	2%
grade 7 events	37353
	26%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-3	ACIS-3	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	148.919325	148.9876050290737	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	69.604686	69.61867531742598	Subarray start row	897	897
[deg] Pointing Roll	0.047104	0.1918039420387452	Subarray row count	128	128
[deg] Roll angle	180.000000	180.000000	Alternating exposures requested	N	N
[deg] Roll tolerance	45.000000	45.000000	[s] Primary exposure time	0.000000	0.5
Roll constraint allows 180D rotation	Y	Y			
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	587985106.184000	587983867.60511			
Observation start date	2016-08-19T09:10:38	2016-08-19T08:51:07			
[s] Observation end time (MET)	588025106.184000	588026314.90755			
Observation end date	2016-08-19T20:17:18	2016-08-19T20:38:34			
Read mode	TIMED	TIMED			

2.3 Aspect



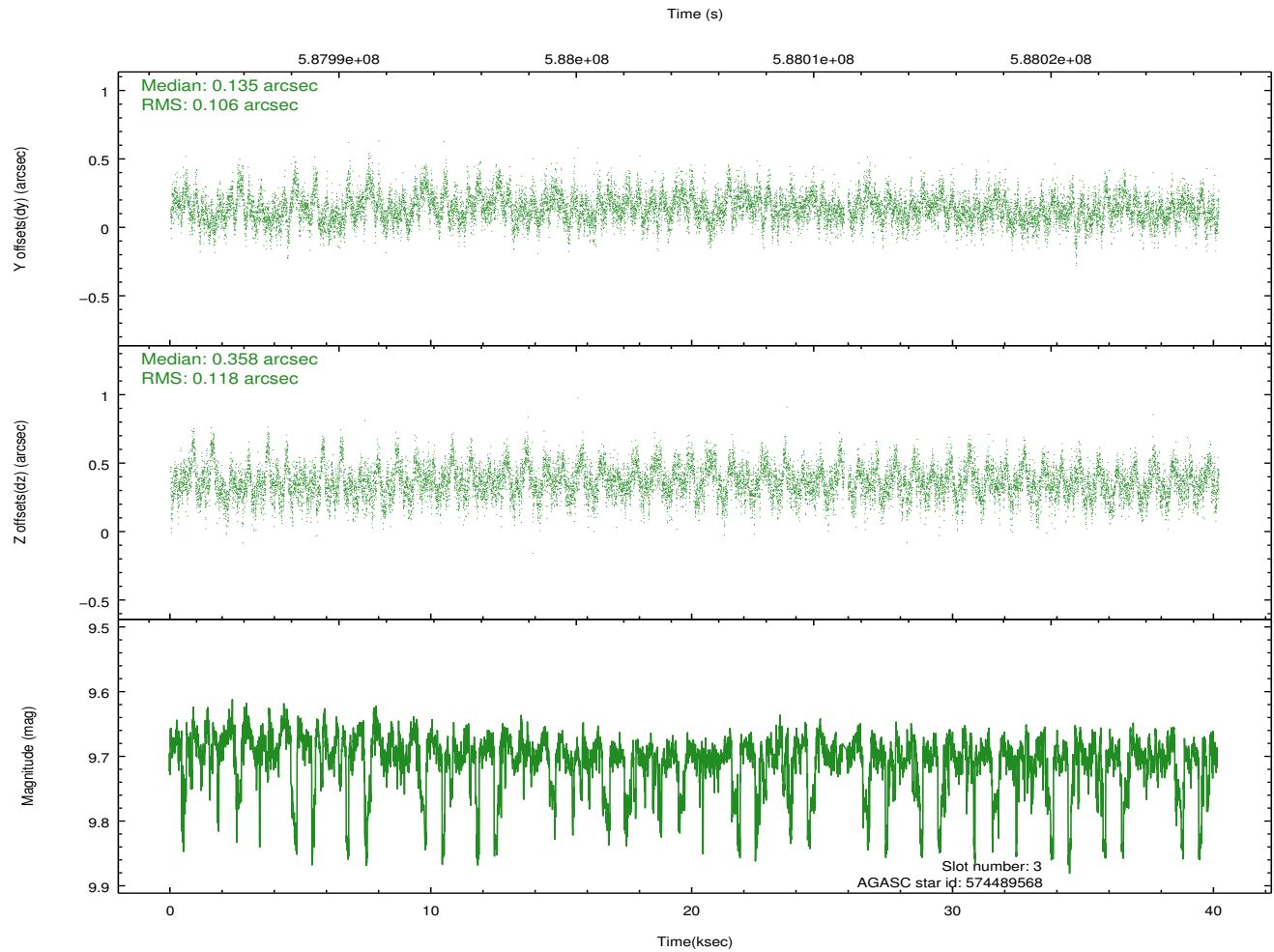
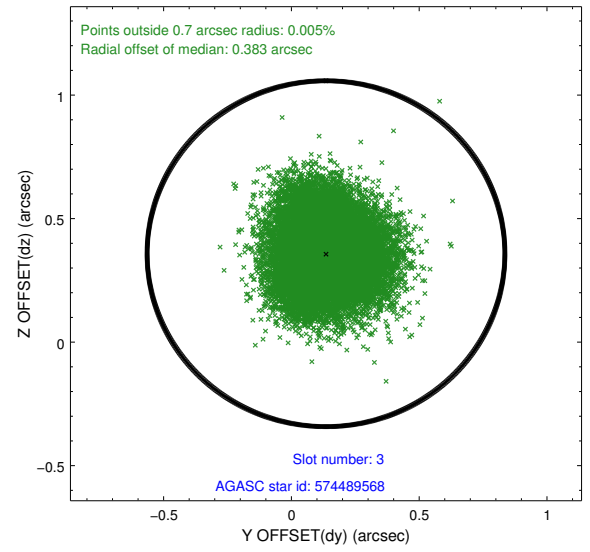
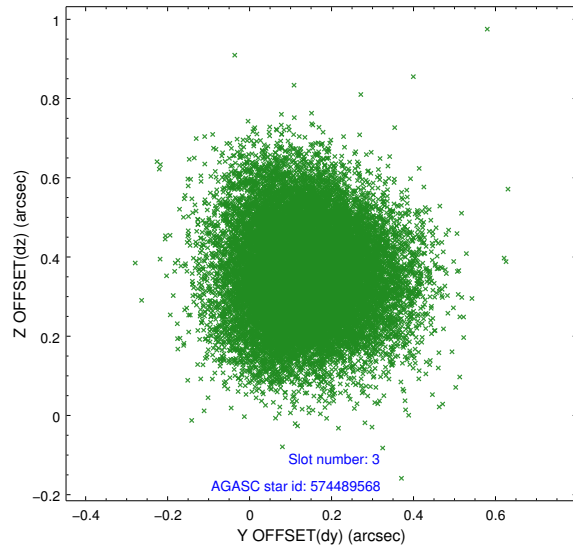


Slot Statistics

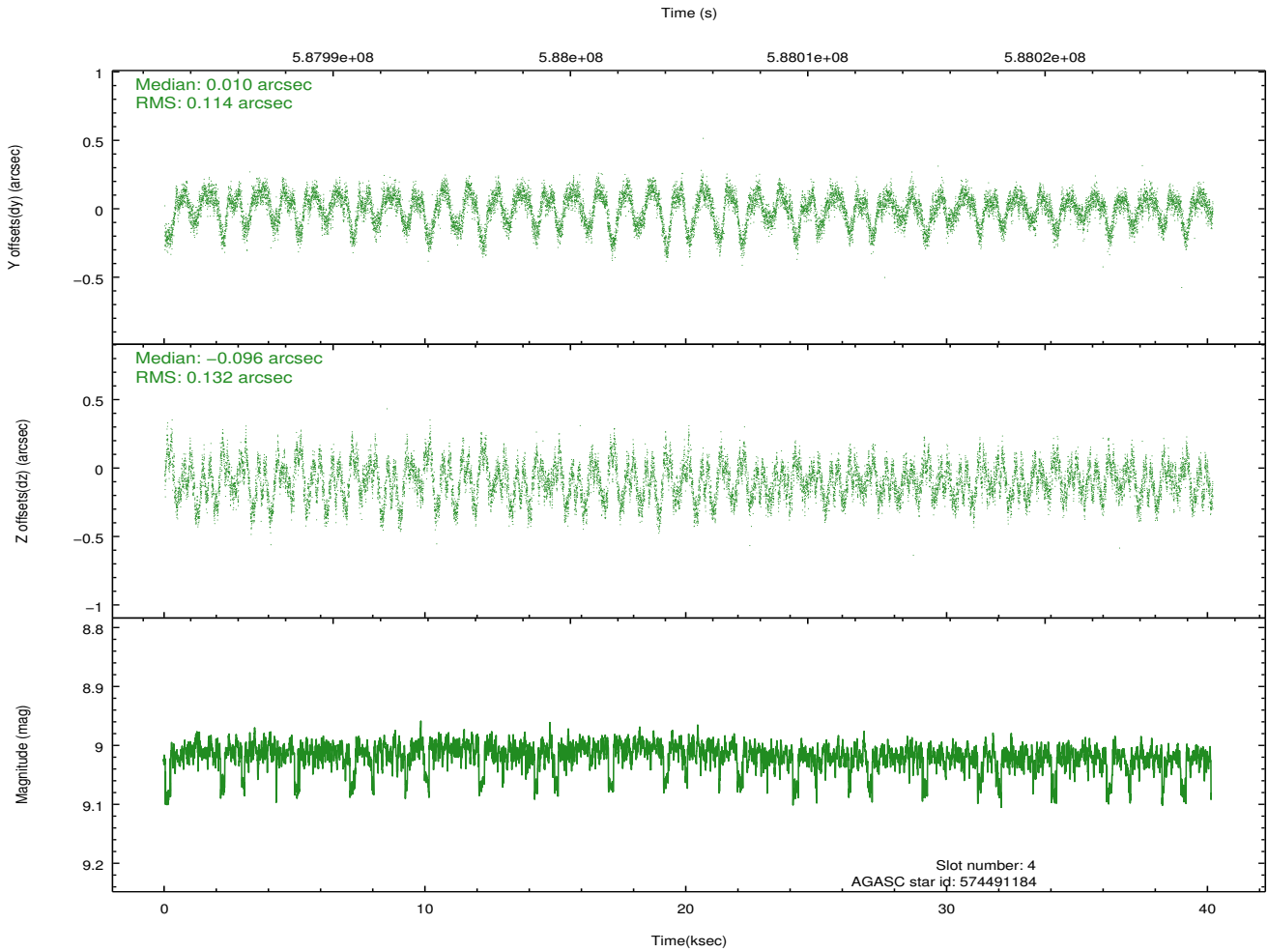
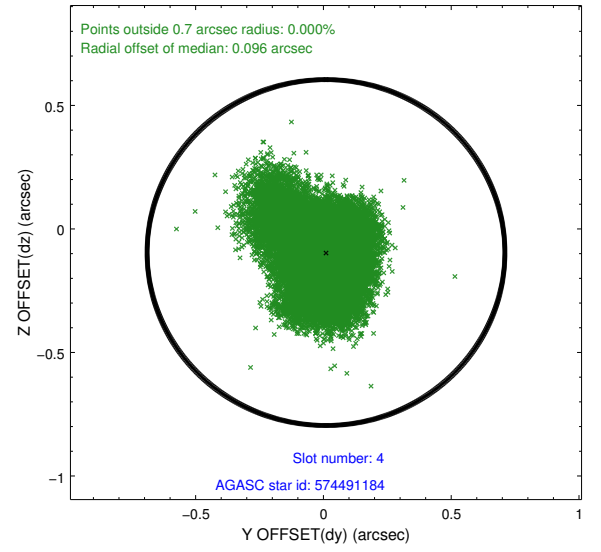
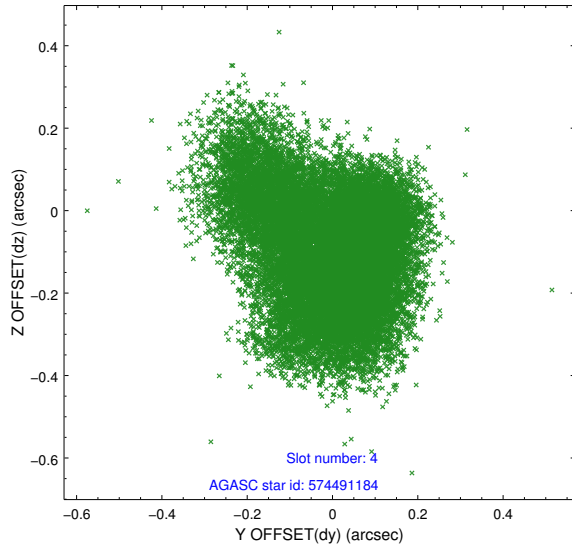
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.14	9800	0.055	-0.029	0.021	0.044	0.000000	0.000000	925.58	-843.60
1	FID		ACIS-I-5	7.14	9801	-0.306	0.030	0.015	0.021	0.000000	0.000000	-1822.95	1053.82
2	FID		ACIS-I-6	7.15	9800	0.157	0.066	0.019	0.044	0.000000	0.000000	391.12	1698.46
3	GUIDE	used	574489568	9.70	19503	0.135	0.358	0.169	0.276	147.223974	69.438157	-2142.80	-567.56
4	GUIDE	used	574491184	9.02	19581	0.010	-0.096	0.184	0.304	148.582453	69.768699	-418.30	592.16
5	GUIDE	used	574491280	9.34	19578	0.213	0.171	0.180	0.277	148.611567	69.450135	-390.38	-556.22
6	GUIDE	used	574491872	9.23	19582	0.108	-0.045	0.154	0.234	147.207613	69.765453	-2130.31	605.05
7	GUIDE	used	574886464	9.74	19568	-0.472	-0.382	0.177	0.280	149.898674	70.203982	1195.79	2166.24

2.4 Star Slots

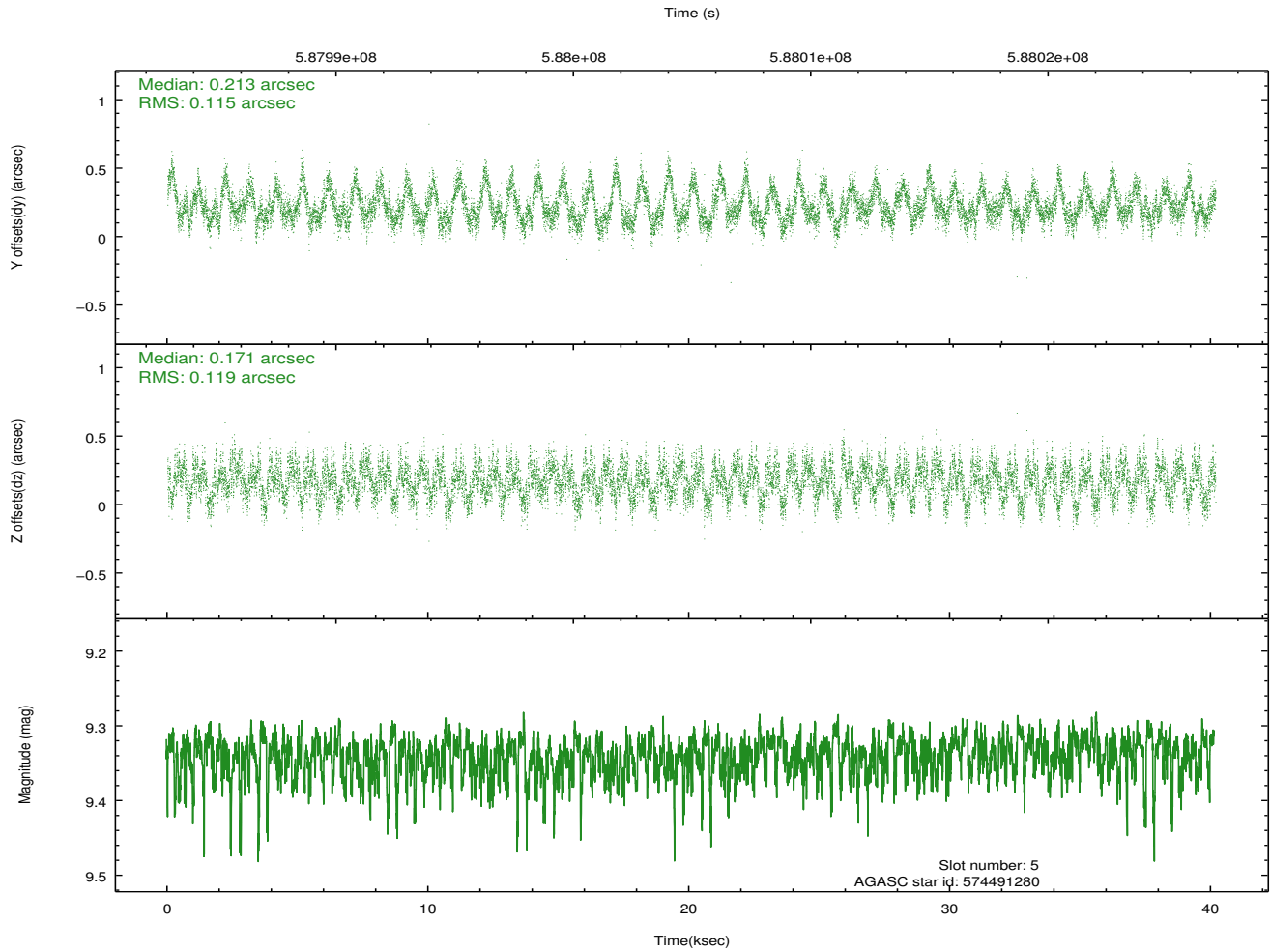
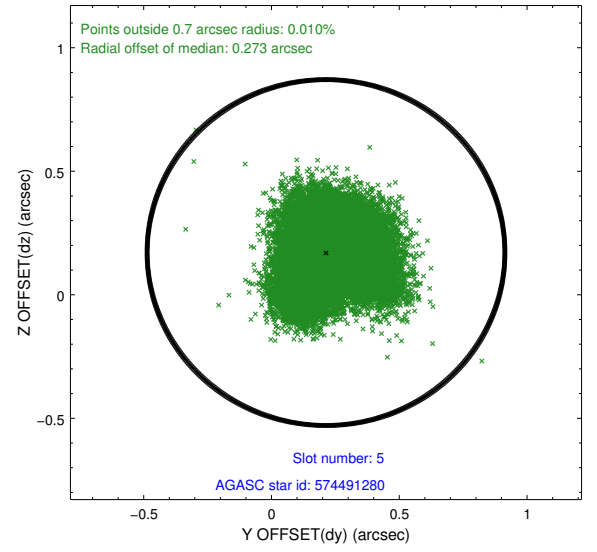
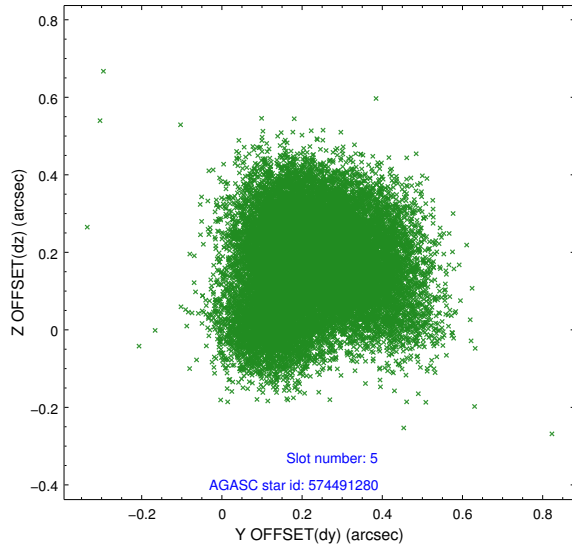
2.4.1 Slot 3



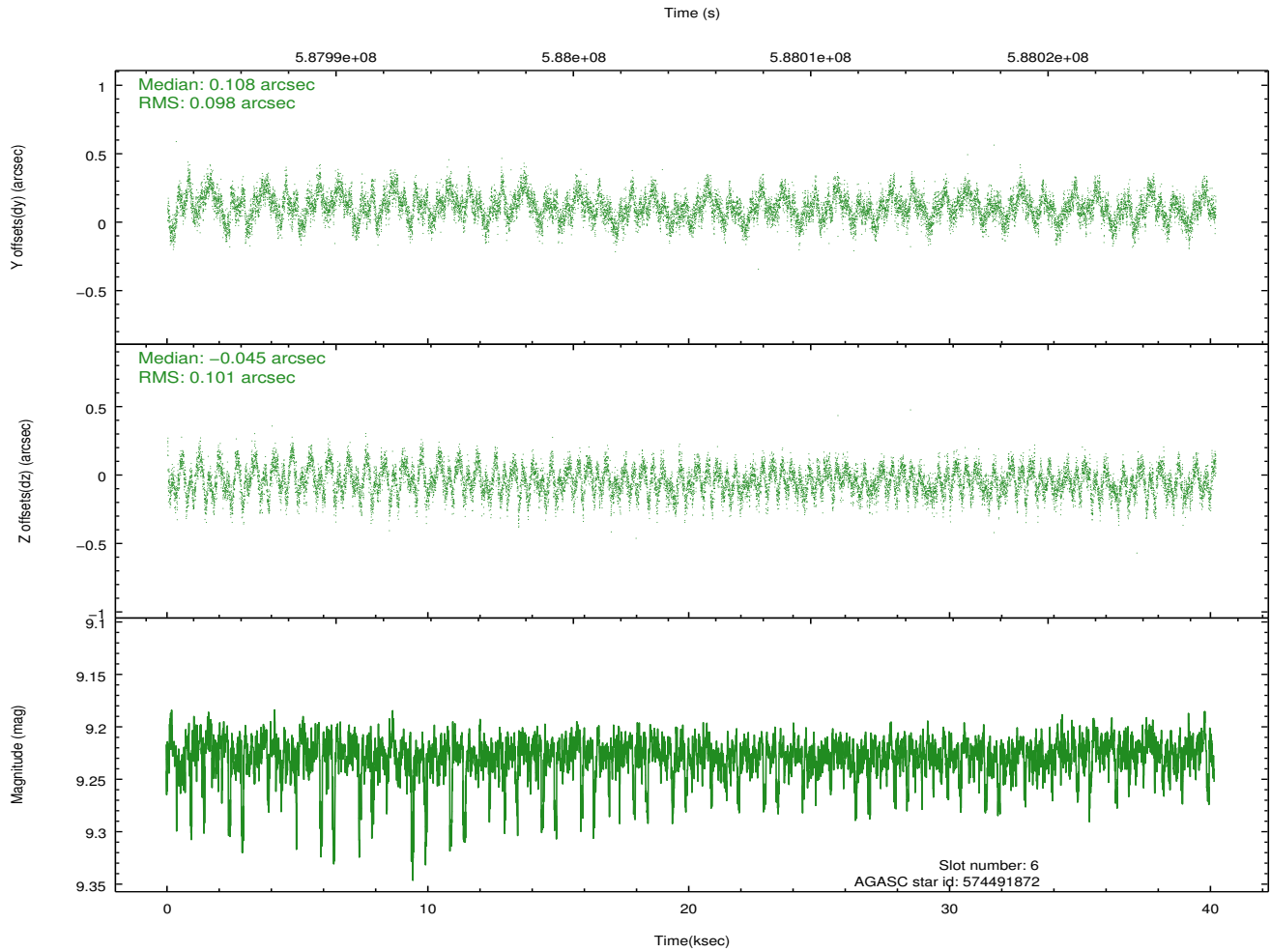
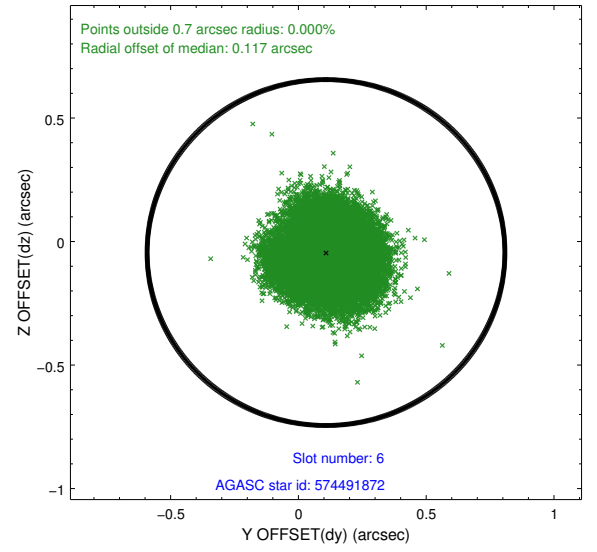
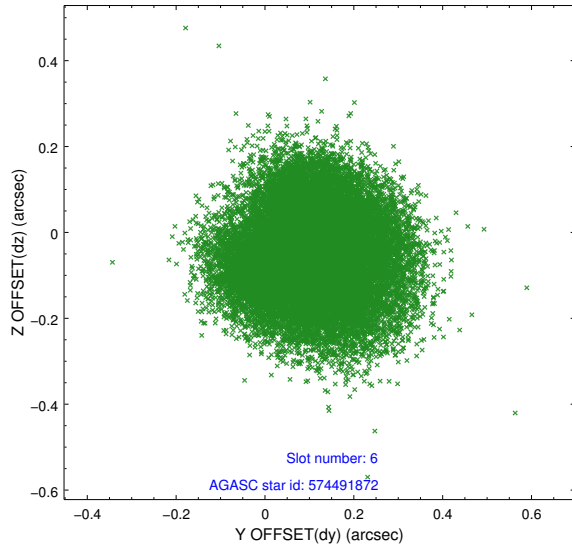
2.4.2 Slot 4



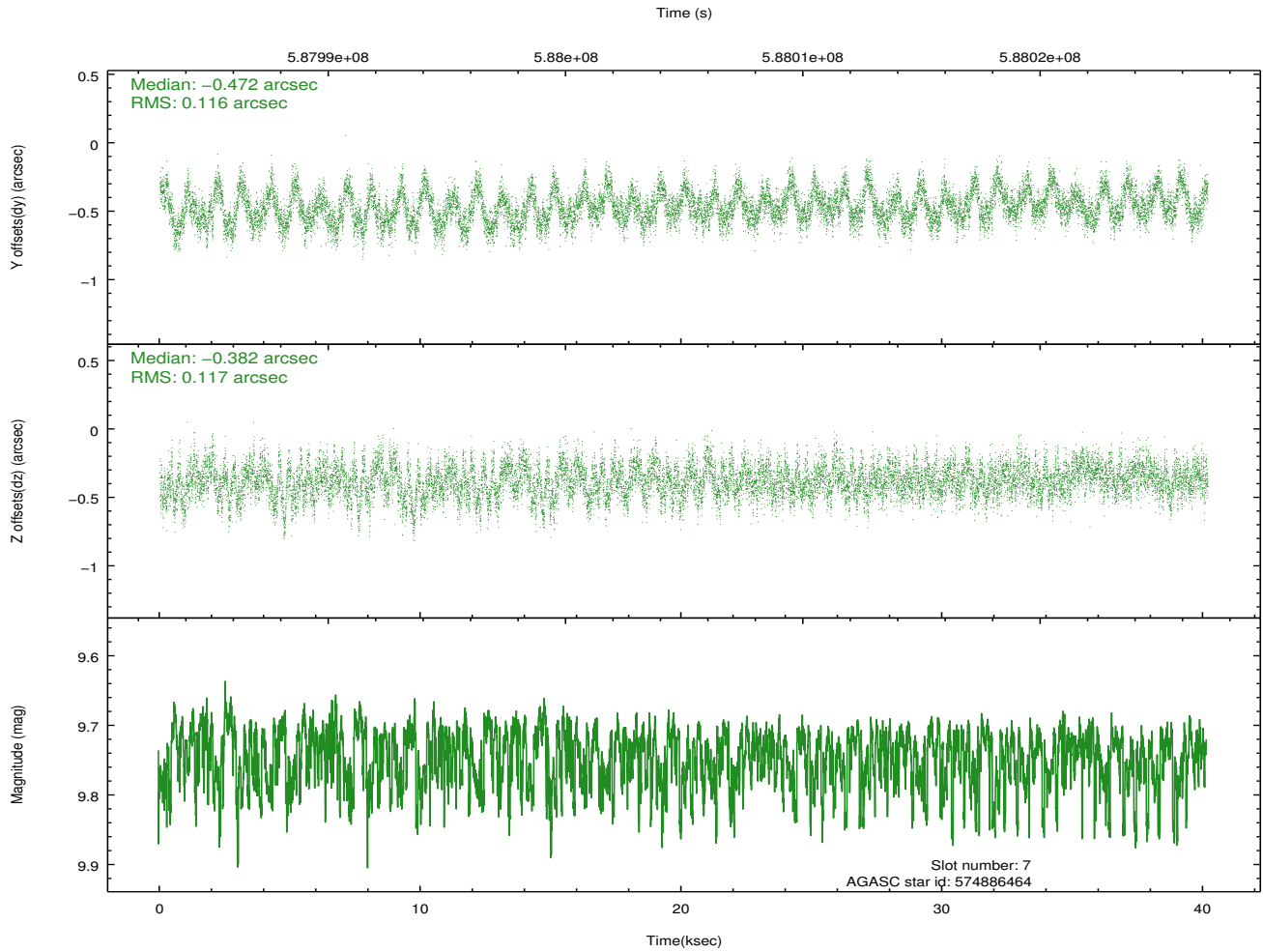
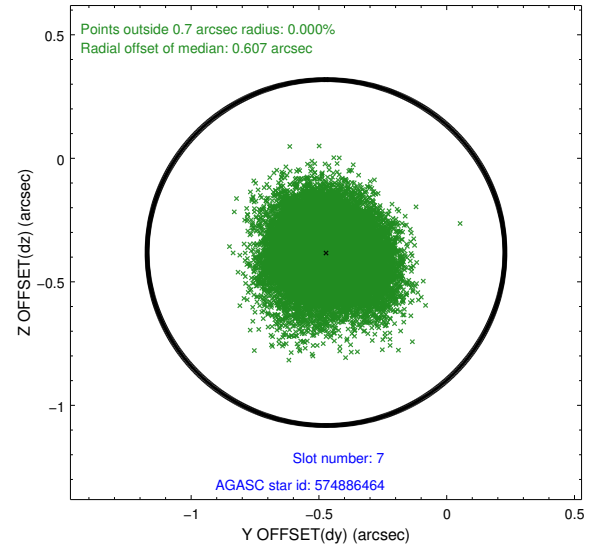
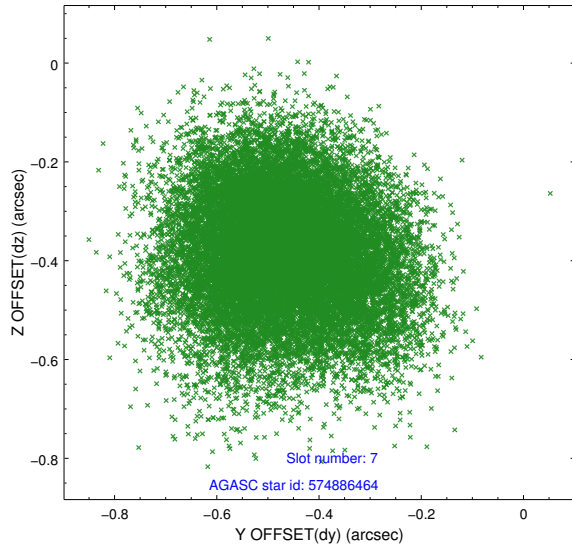
2.4.3 Slot 5



2.4.4 Slot 6

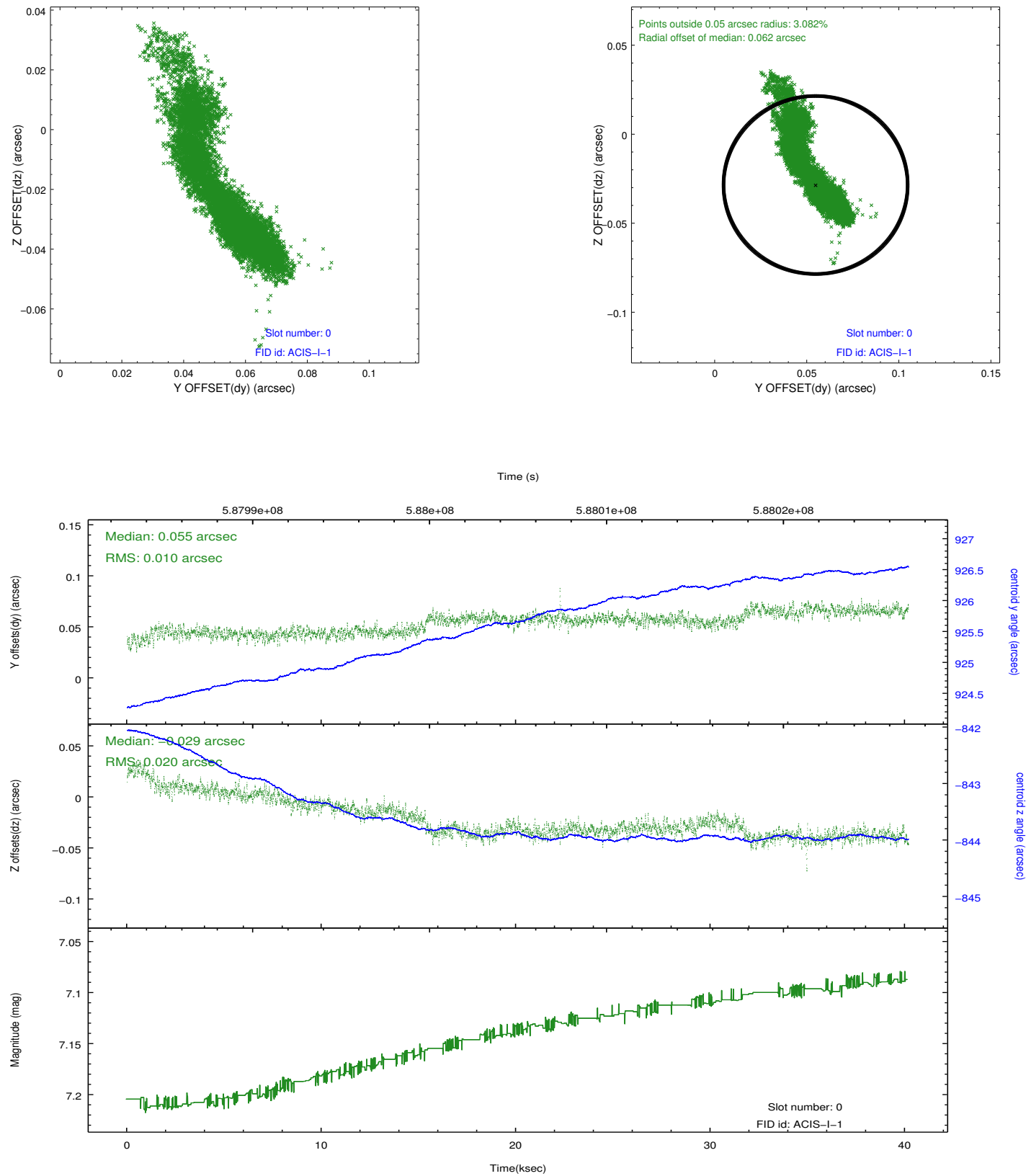


2.4.5 Slot 7

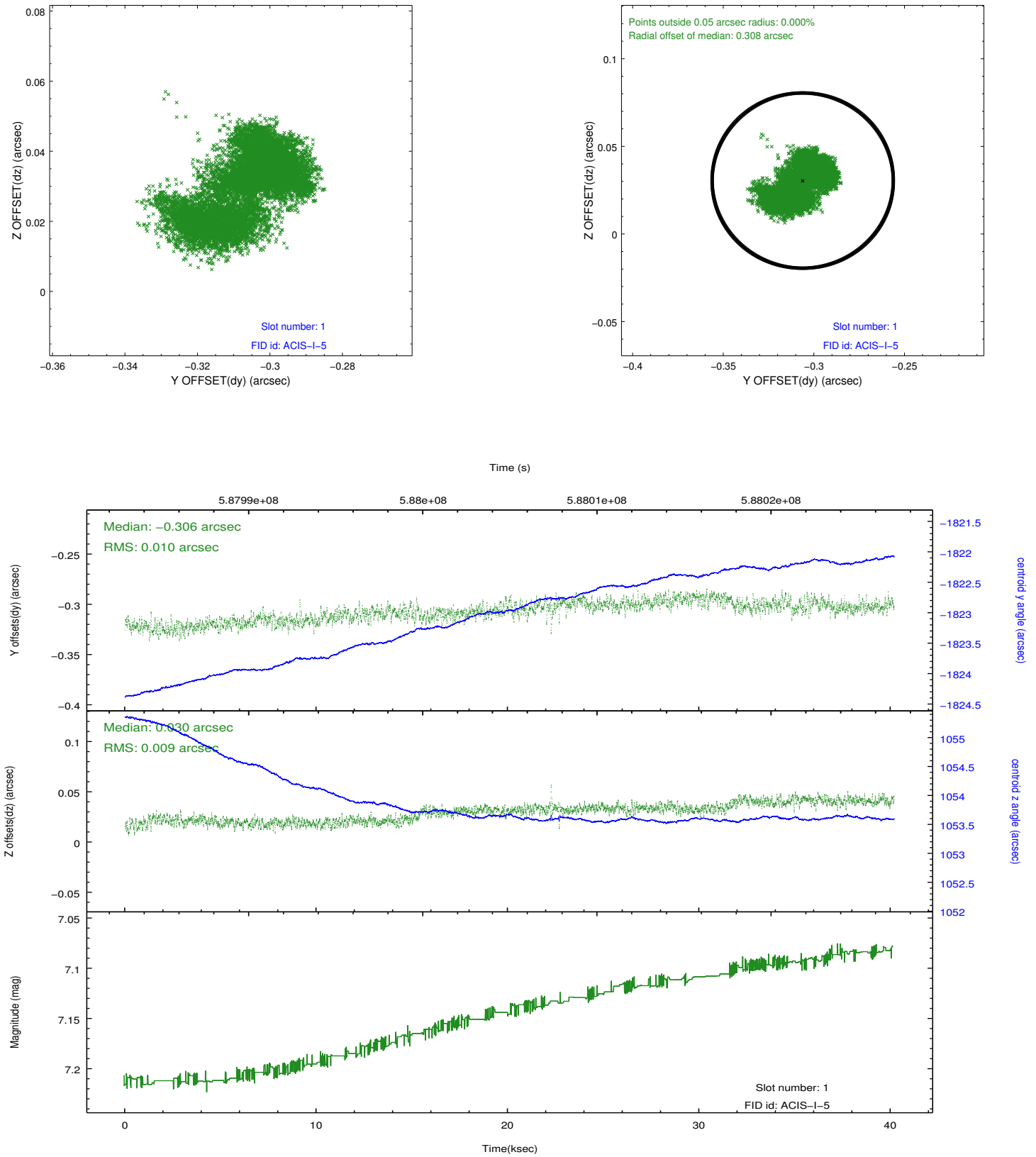


2.5 FID Slots

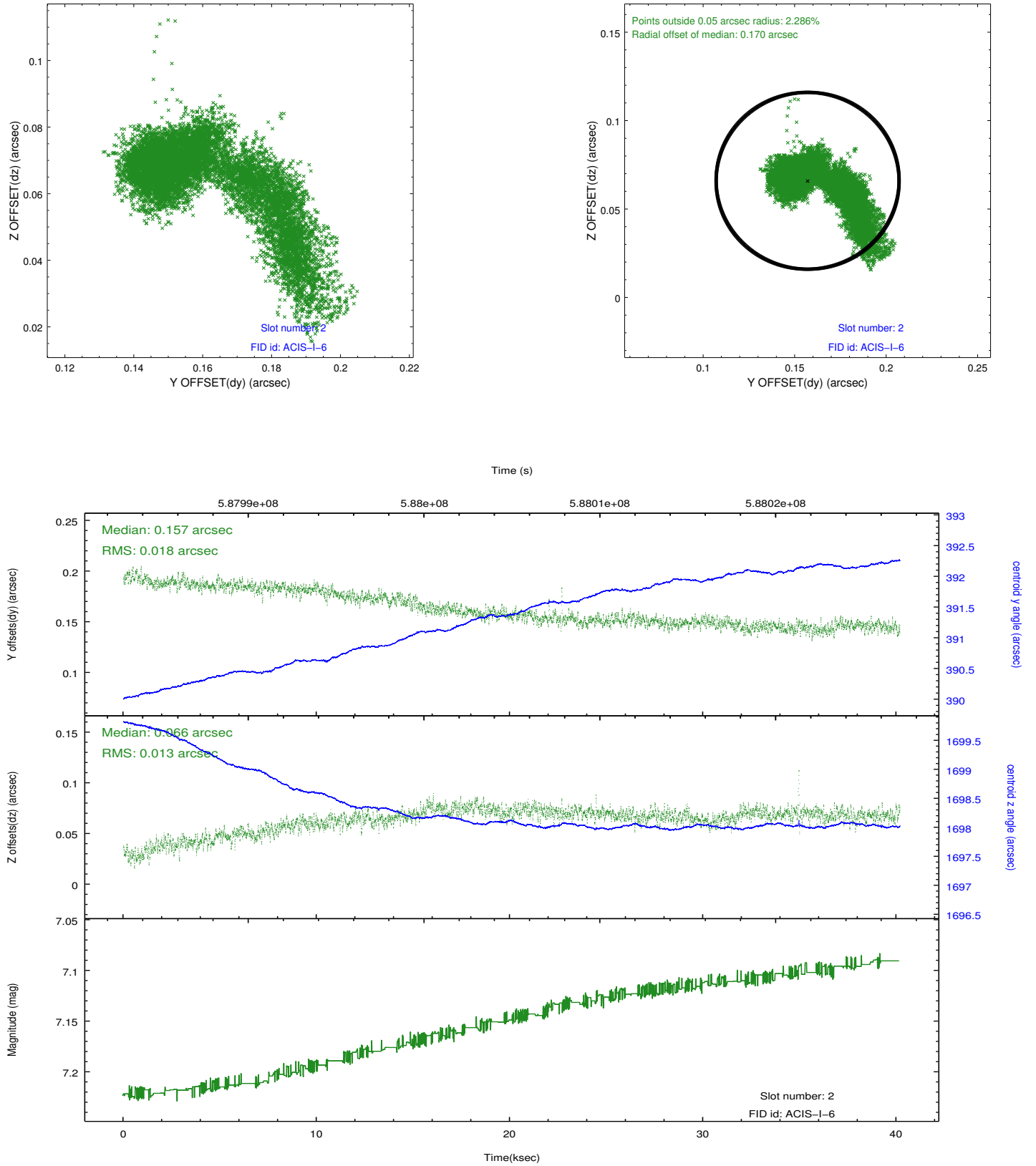
2.5.1 Slot 0



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)	2016.08.22
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	40.1005

A.2 Comments