

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 1478 - L2 Version 3  
Chandra X-Ray Center

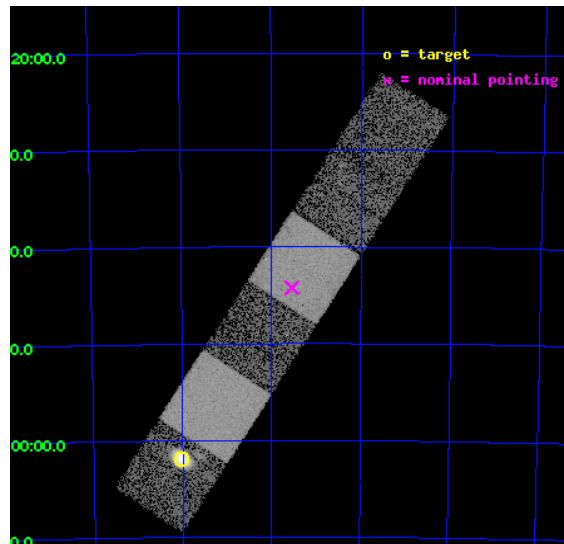
L2 Processing Date : Sep 4 2012

## 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

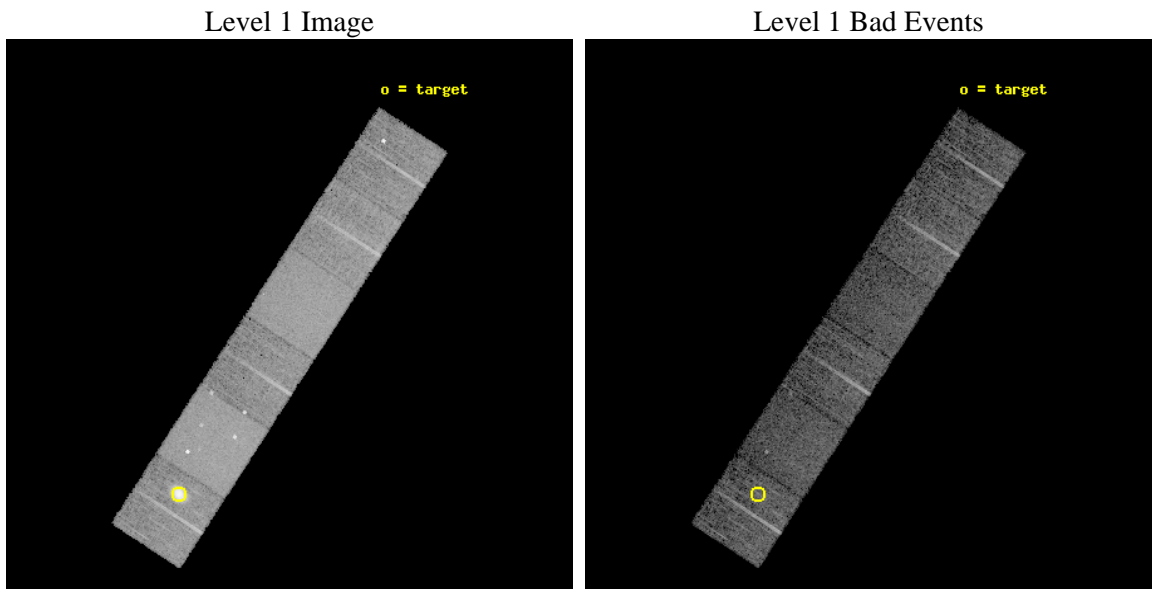
seq_num	590132	Sequence number
obs_id	1478	Observation id
title	ACIS CALIBRATION OBSERVATION OF THE SUPERNOVA REMNANT E0102-72 (DEC 2000)	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	E0102-72.3 [Chip S0, T=120, Offsets=21,0,0]	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	16.01	Observer's specified target RA [deg]
dec_targ	-72.032028	Observer's specified target Dec [deg]
ra_nom	15.384083583134	Nominal RA [deg]
dec_nom	-71.737342074567	Nominal Dec [deg]
roll_nom	303.0134551976	Nominal Roll [deg]
revision	3	Processing version of data
ontime	7947.6235378981	Sum of GTIs [s]
livetime	7846.9859431768	Livetime [s]
ontime4	7947.6235378981	Sum of GTIs [s]
ontime5	7947.5414578915	Sum of GTIs [s]
ontime6	7947.5004179031	Sum of GTIs [s]
ontime7	7947.5824978948	Sum of GTIs [s]
ontime8	7947.4593778998	Sum of GTIs [s]
ontime9	7947.4183378965	Sum of GTIs [s]
l2events	113581	Number of level 2 events



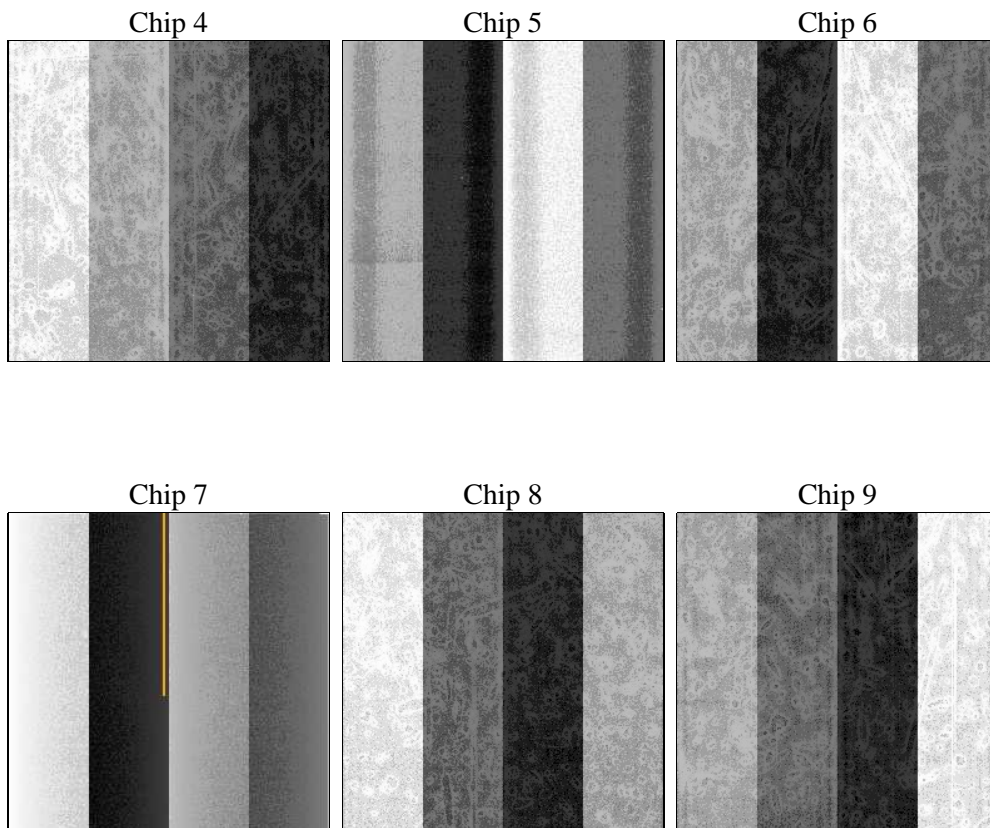
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	8000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	7947.6235378981	Sum of GTIs [s]
caldsver	4.5.1.1	&#160	ontime4	7947.6235378981	Sum of GTIs [s]
date	2012-09-04T06:05:01	Date and time of file creation	ontime5	7947.5414578915	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	7947.5004179031	Sum of GTIs [s]
			ontime7	7947.5824978948	Sum of GTIs [s]
			ontime8	7947.4593778998	Sum of GTIs [s]
			ontime9	7947.4183378965	Sum of GTIs [s]
			l1events	380543	Number of level 1 events

### 2.1.4 Events

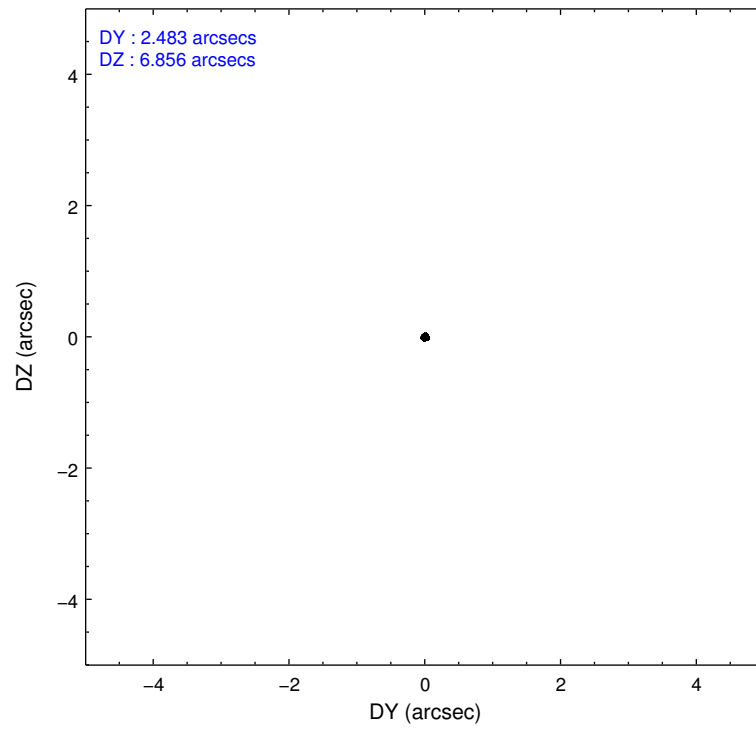
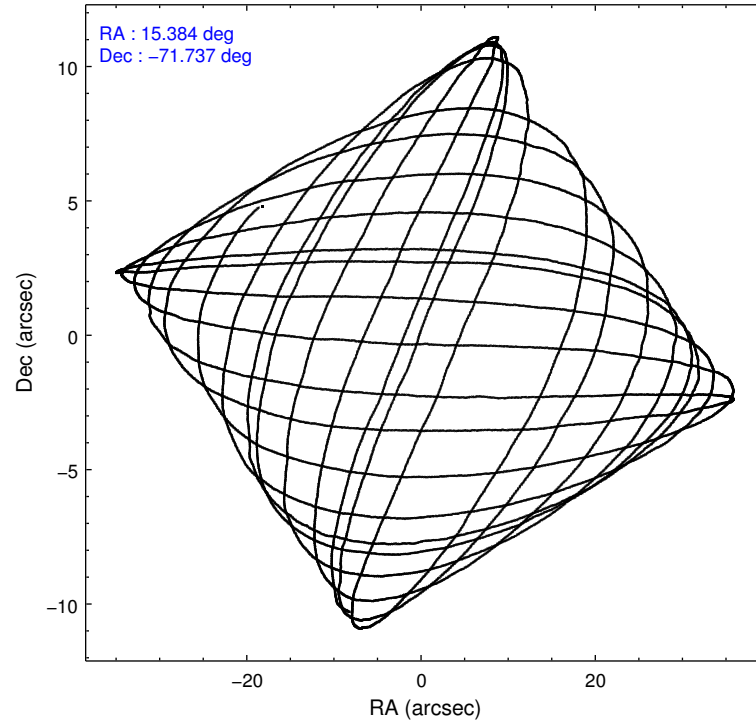
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	73184	79978	48386	70967	60002	48026	grade 0 events	21907	7132	3358	4305	3686	4555
rejected events	45836	36168	41825	34925	48050	40144		29%	8%	6%	6%	6%	9%
rejected %	62%	45%	86%	49%	80%	83%	grade 1 events	103	324	29	50	24	30
								0%	0%	0%	0%	0%	0%
							grade 2 events	2850	12989	1095	7051	2608	1129
								3%	16%	2%	9%	4%	2%
							grade 3 events	795	2239	536	3199	1324	566
								1%	2%	1%	4%	2%	1%
							grade 4 events	794	2144	547	3120	1221	526
								1%	2%	1%	4%	2%	1%
							grade 5 events	1690	5225	1996	5762	2485	1994
								2%	6%	4%	8%	4%	4%
							grade 6 events	1027	19341	1027	18396	3124	1116
								1%	24%	2%	25%	5%	2%
							grade 7 events	44018	30584	39798	29084	45530	38110
								60%	38%	82%	40%	75%	79%

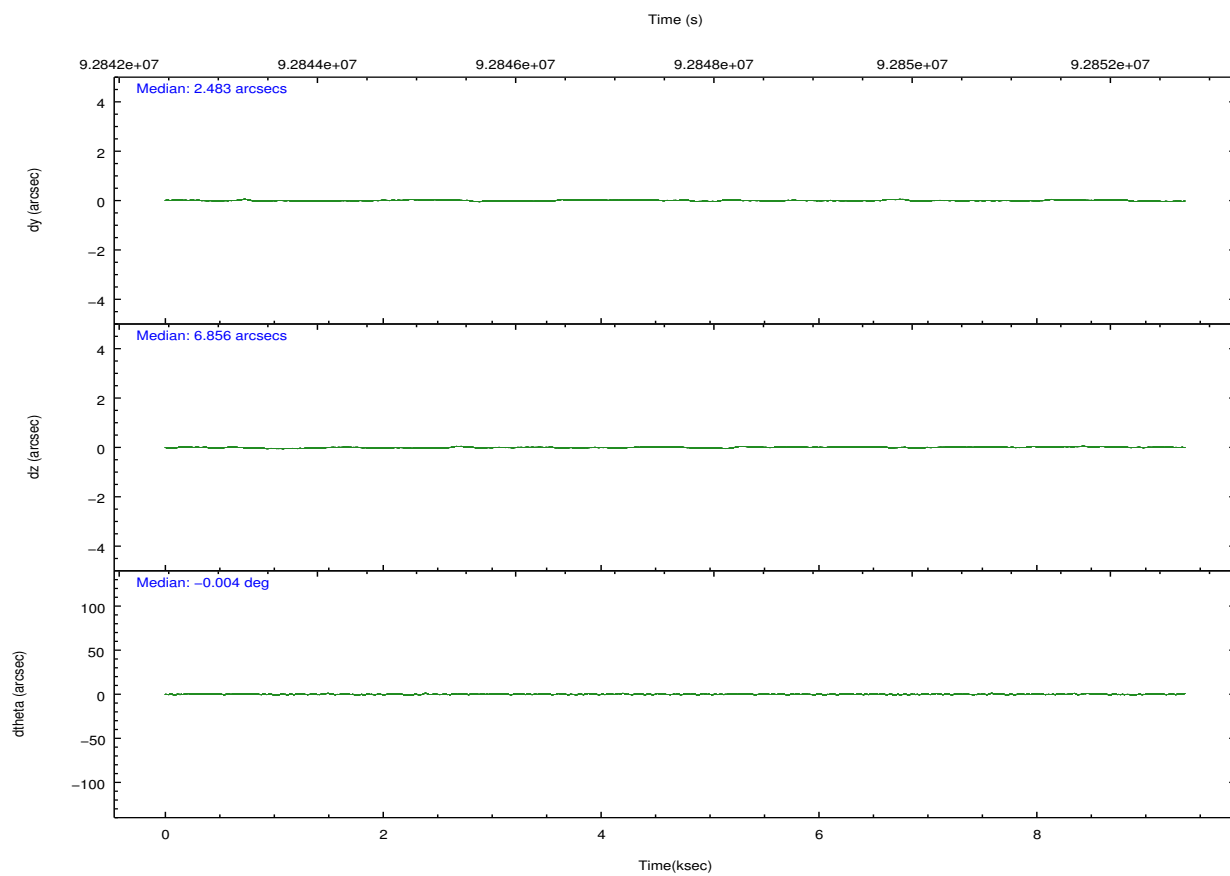
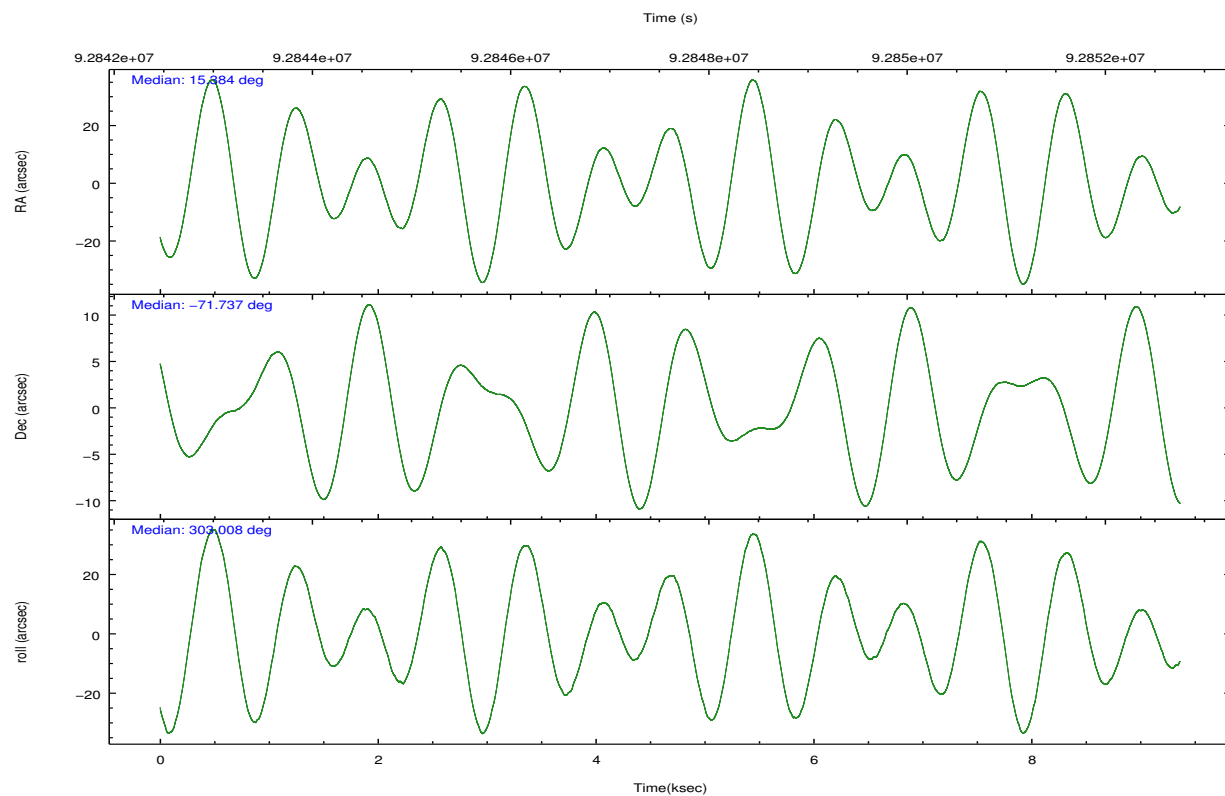


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-456789	ACIS-456789	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	15.306162	15.38408358313356	Subarray requested	NONE	NONE
[deg] Pointing Dec	-71.725111	-71.73734207456683	Alternating exposures requested	N	N
[deg] Pointing Roll	302.782831	303.0134551976016	[s] Primary exposure time	0.000000	3.2
[s] Window start time (MET)	92016064.184000	92016064.184000			
[s] Window stop time (MET)	94608064.184000	94608064.184000			
[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)	92844288.184000	92842742.255427			
Observation start date	2000-12-10T14:03:44	2000-12-10T13:39:02			
[s] Observation end time (MET)	92852288.184000	92852422.35579699			
Observation end date	2000-12-10T16:17:04	2000-12-10T16:20:22			
Read mode	TIMED	TIMED			

## 2.3 Aspect



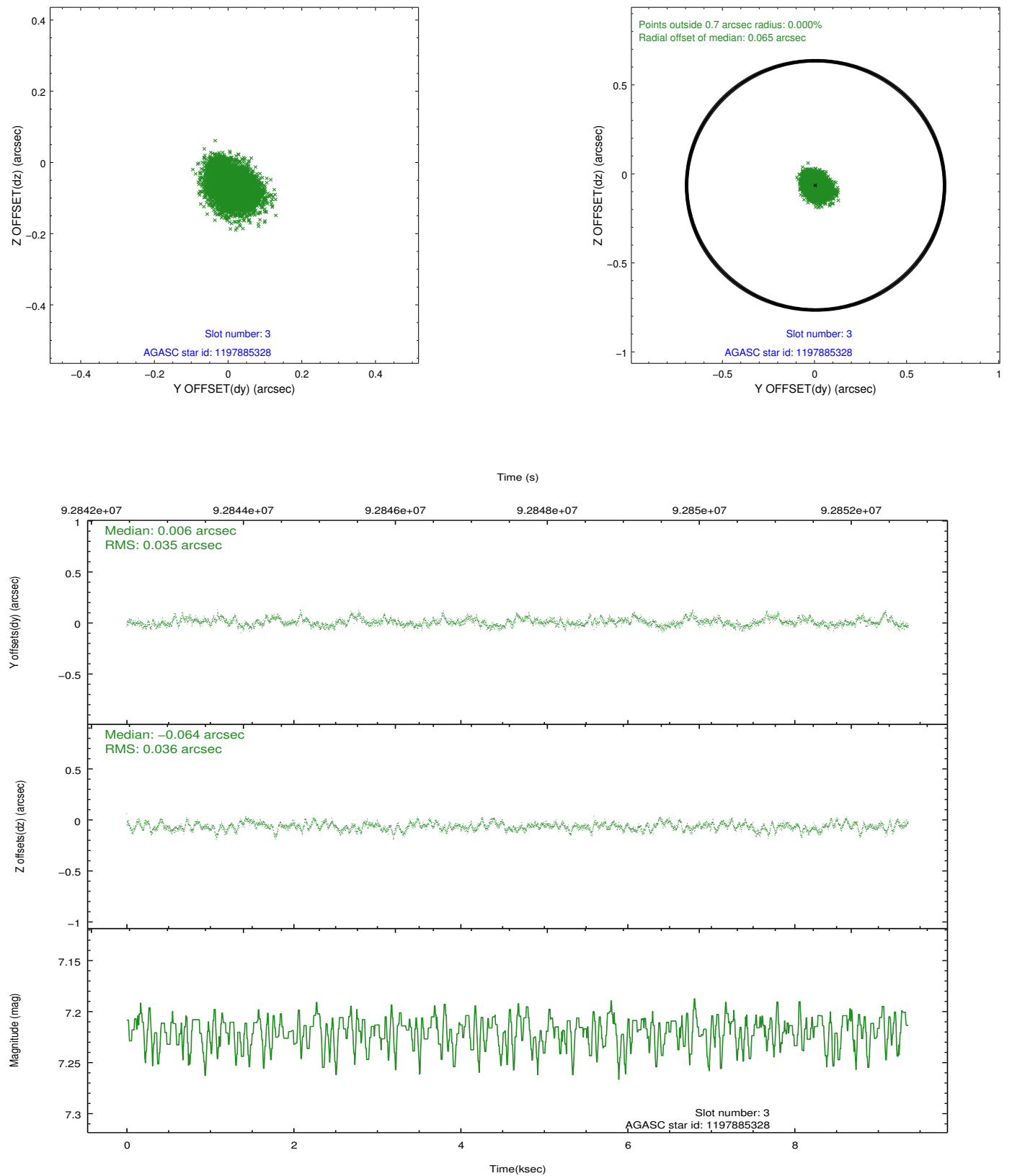


### Slot Statistics

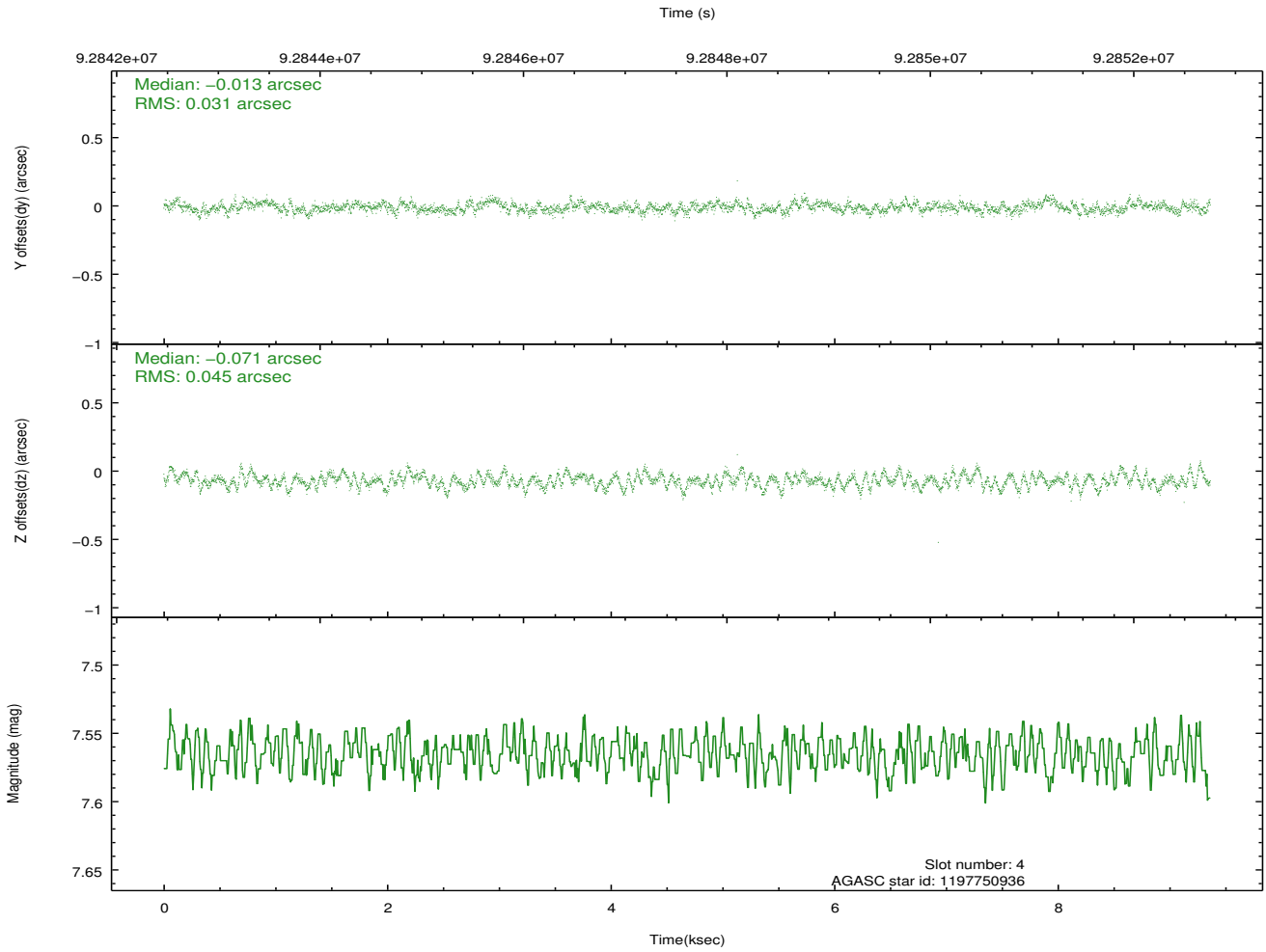
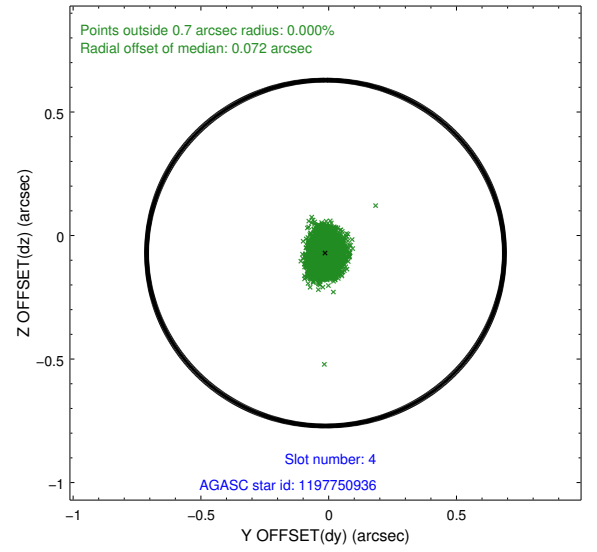
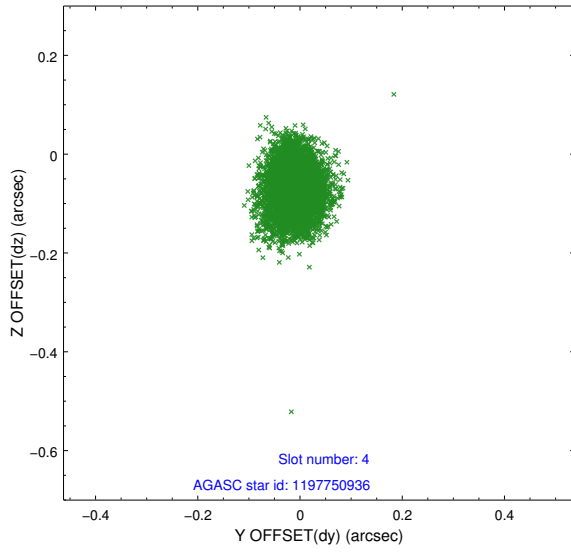
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	2284	-0.019	0.003	0.006	0.010	0.000000	0.000000	-755.14	-1728.01
1	FID	ACIS-S-4	7.20	2284	-0.023	0.008	0.005	0.010	0.000000	0.000000	2157.88	179.87
2	FID	ACIS-S-5	7.24	2284	0.010	-0.002	0.006	0.011	0.000000	0.000000	-1807.20	174.20
3	GUIDE	1197885328	7.22	4568	0.006	-0.064	0.054	0.087	16.283090	-71.733943	630.66	904.57
4	GUIDE	1197750936	7.57	4568	-0.013	-0.071	0.057	0.095	15.387940	-71.549550	-481.07	420.39
5	GUIDE	1197884536	8.50	4567	0.032	0.032	0.071	0.113	17.160729	-71.835289	1486.62	1517.62
6	GUIDE	1197884712	8.31	4566	0.049	0.095	0.056	0.089	16.087398	-72.252690	2065.70	-310.21
7	GUIDE	1197750160	10.25	4501	-0.084	0.009	0.173	0.270	12.997994	-71.773722	-1217.62	-2306.44

## 2.4 Star Slots

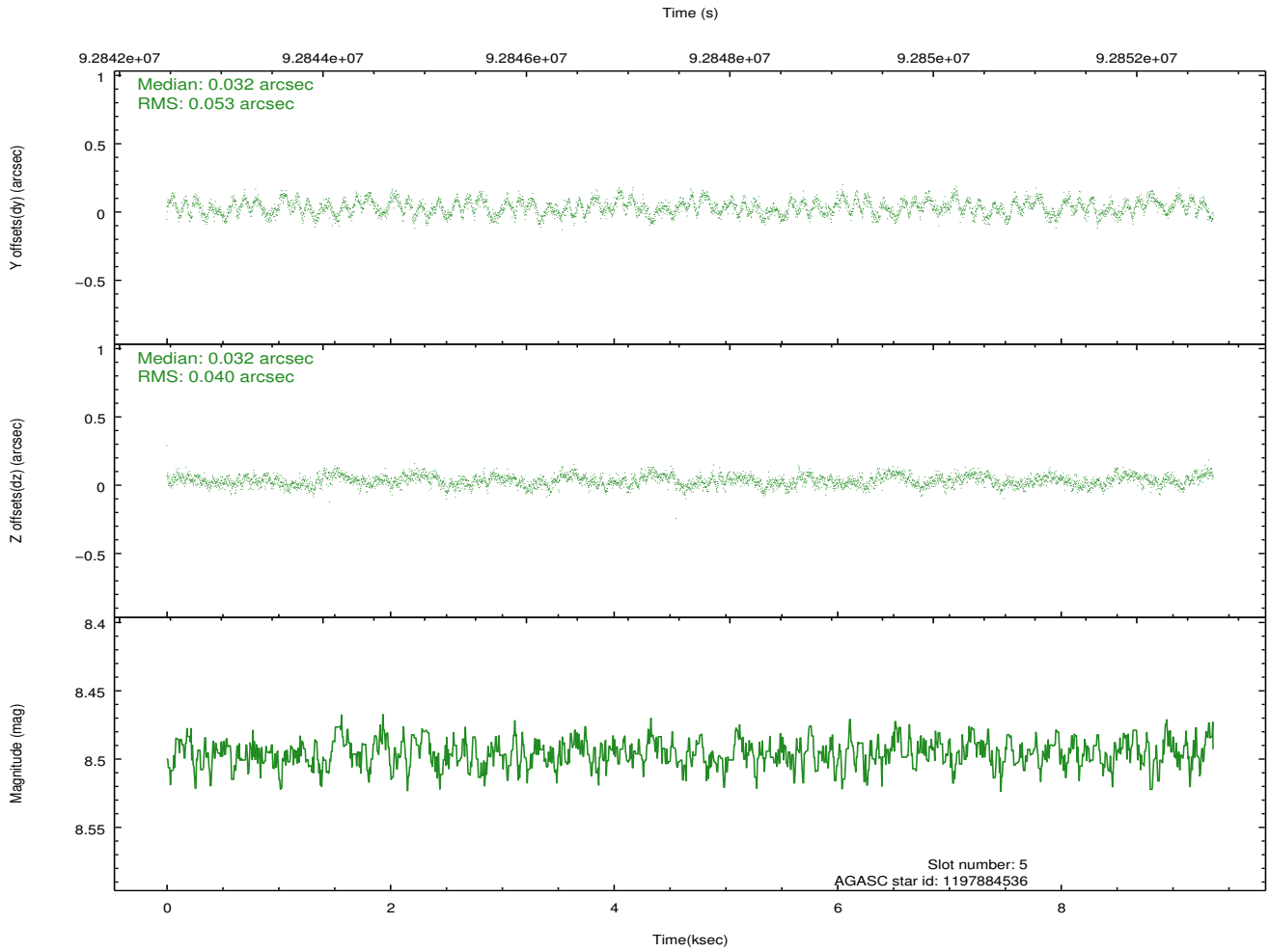
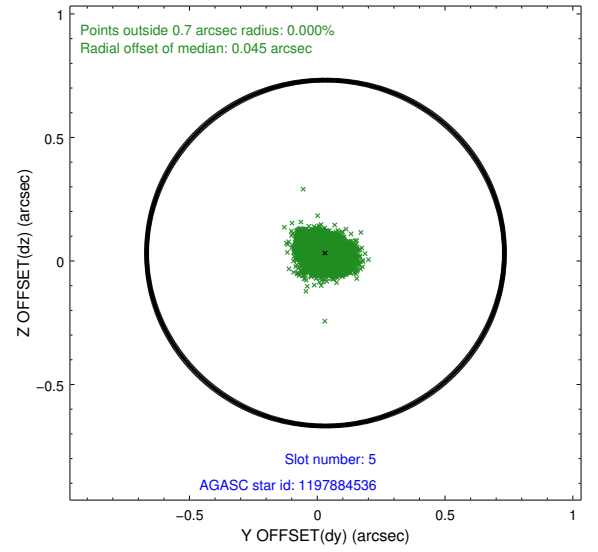
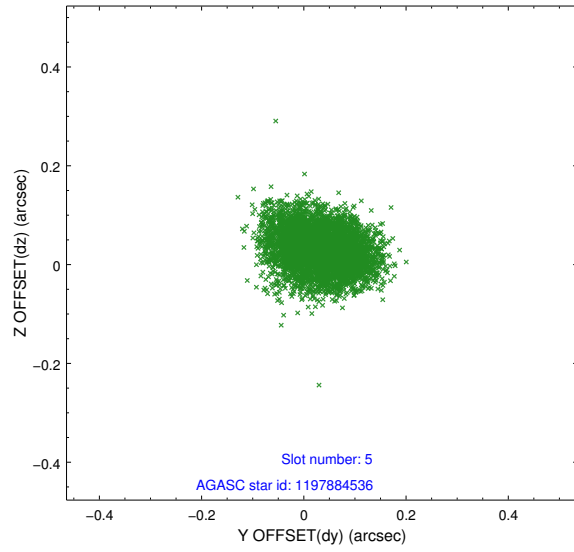
### 2.4.1 Slot 3



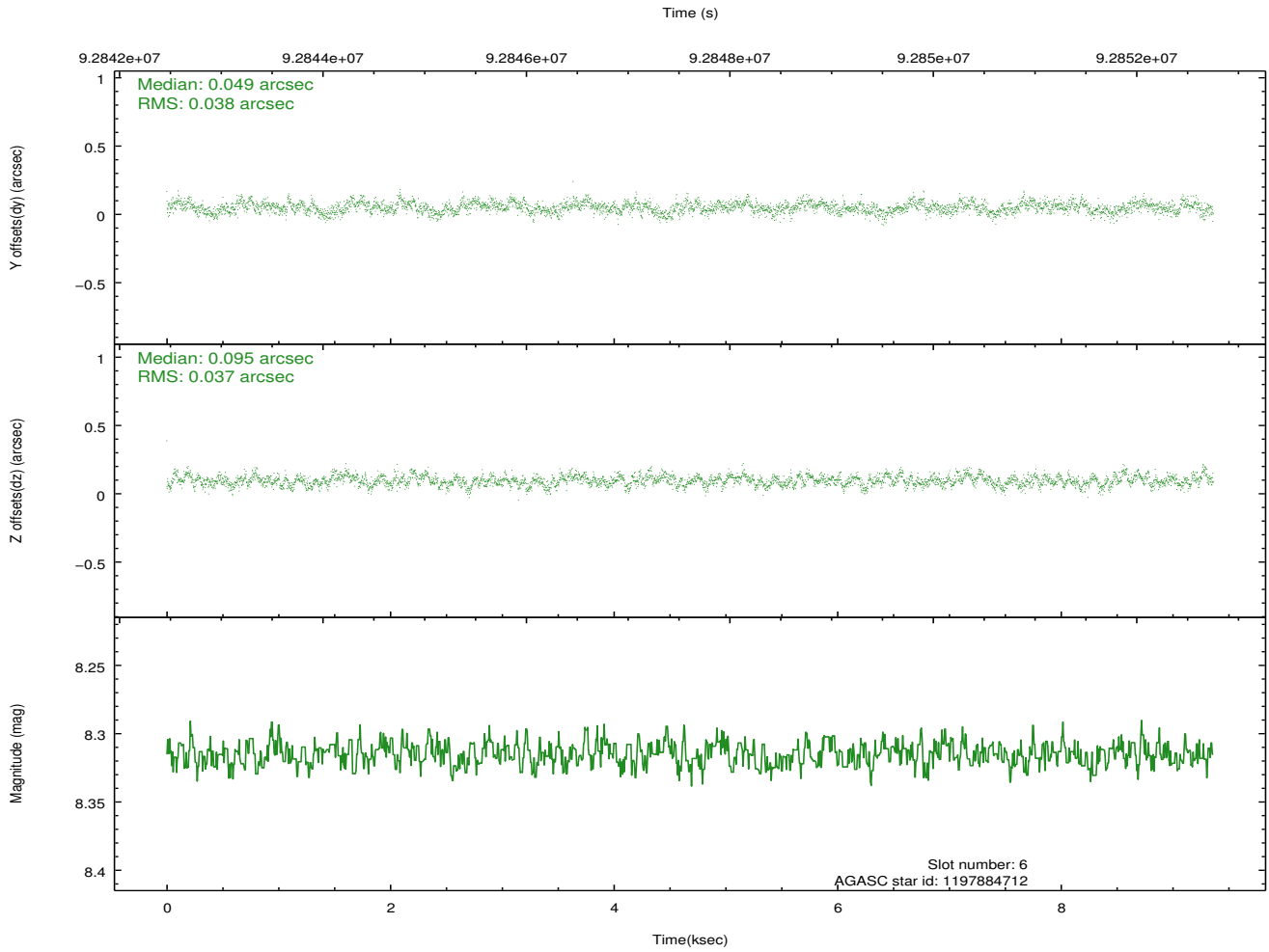
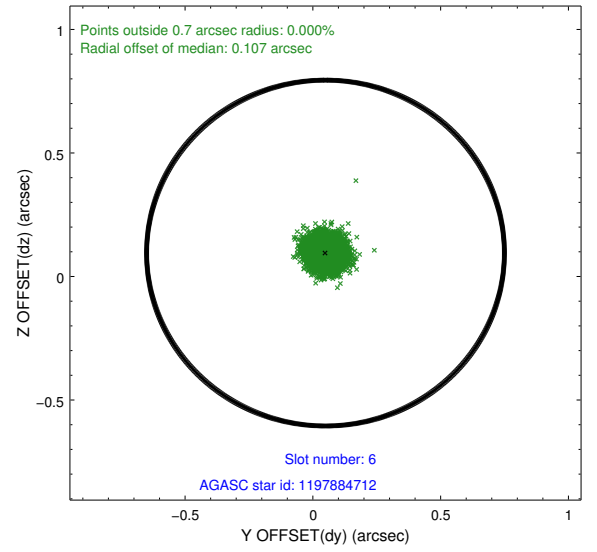
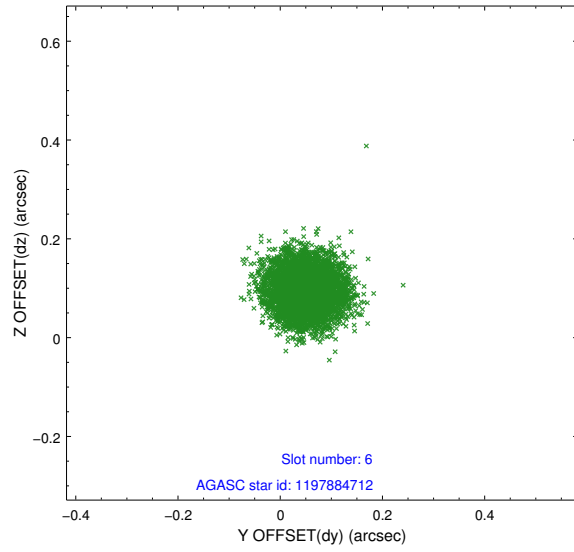
## 2.4.2 Slot 4



### 2.4.3 Slot 5

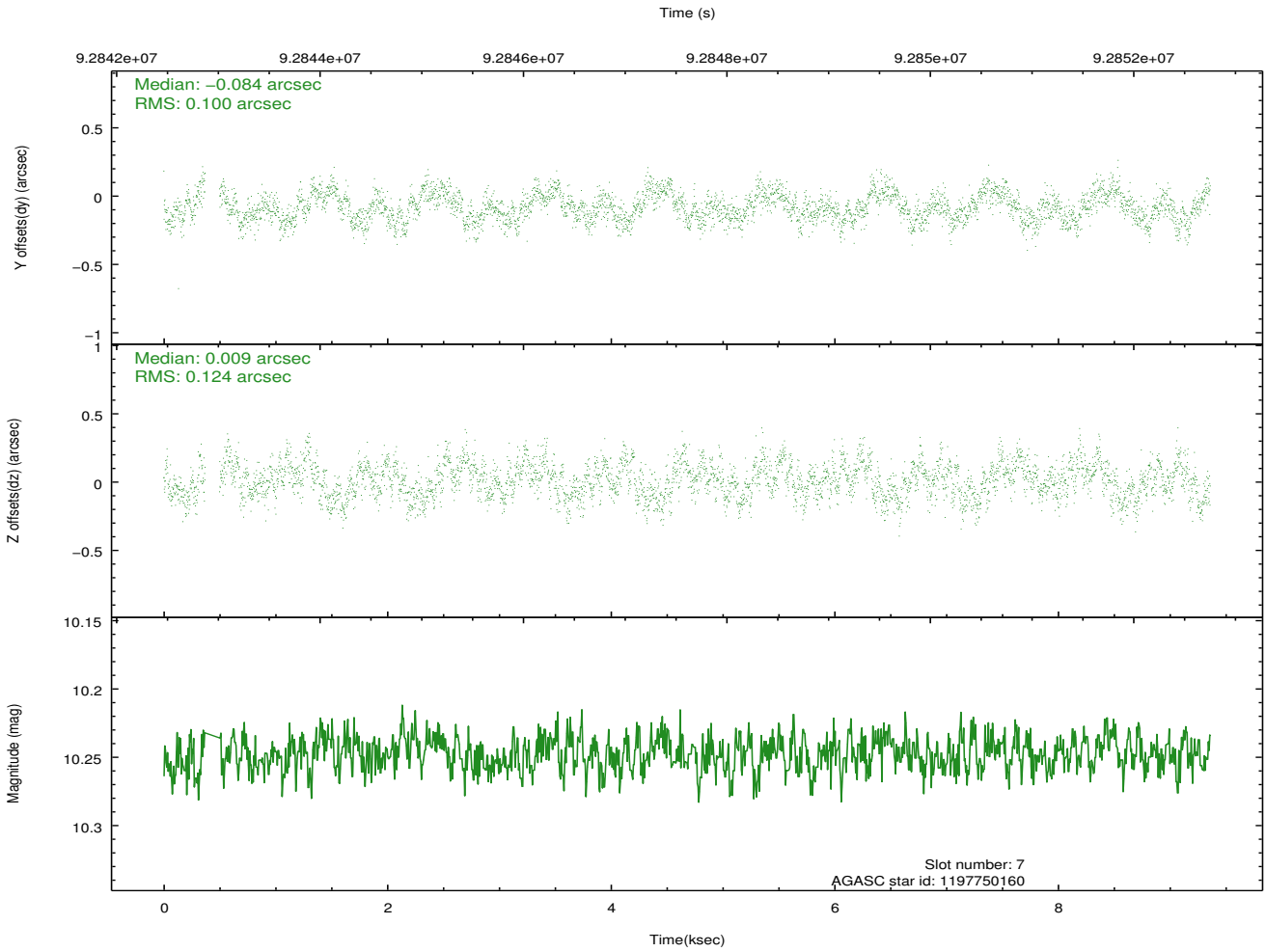
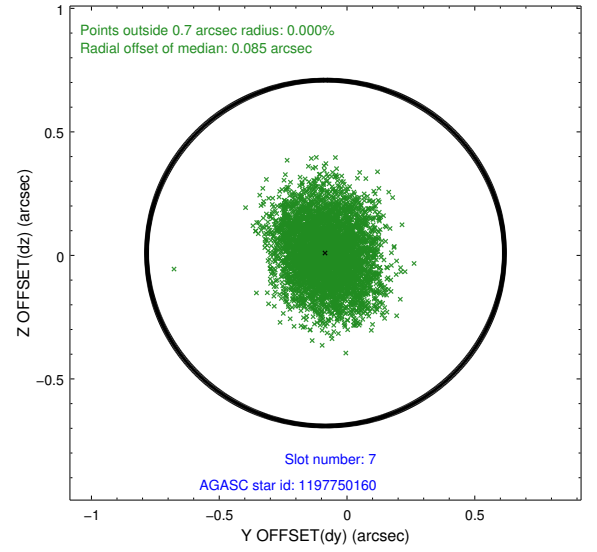
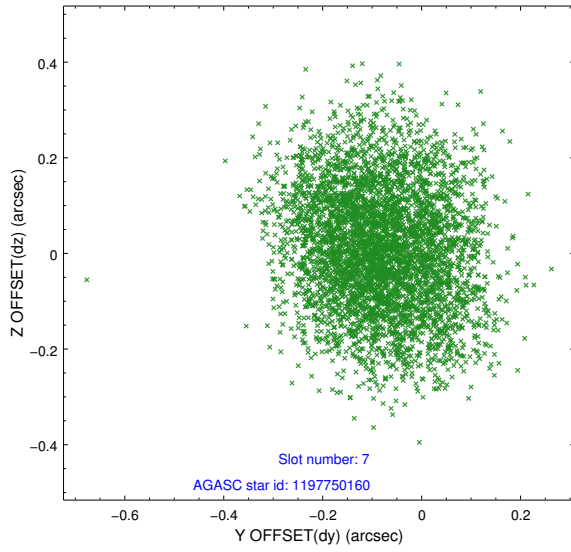


## 2.4.4 Slot 6



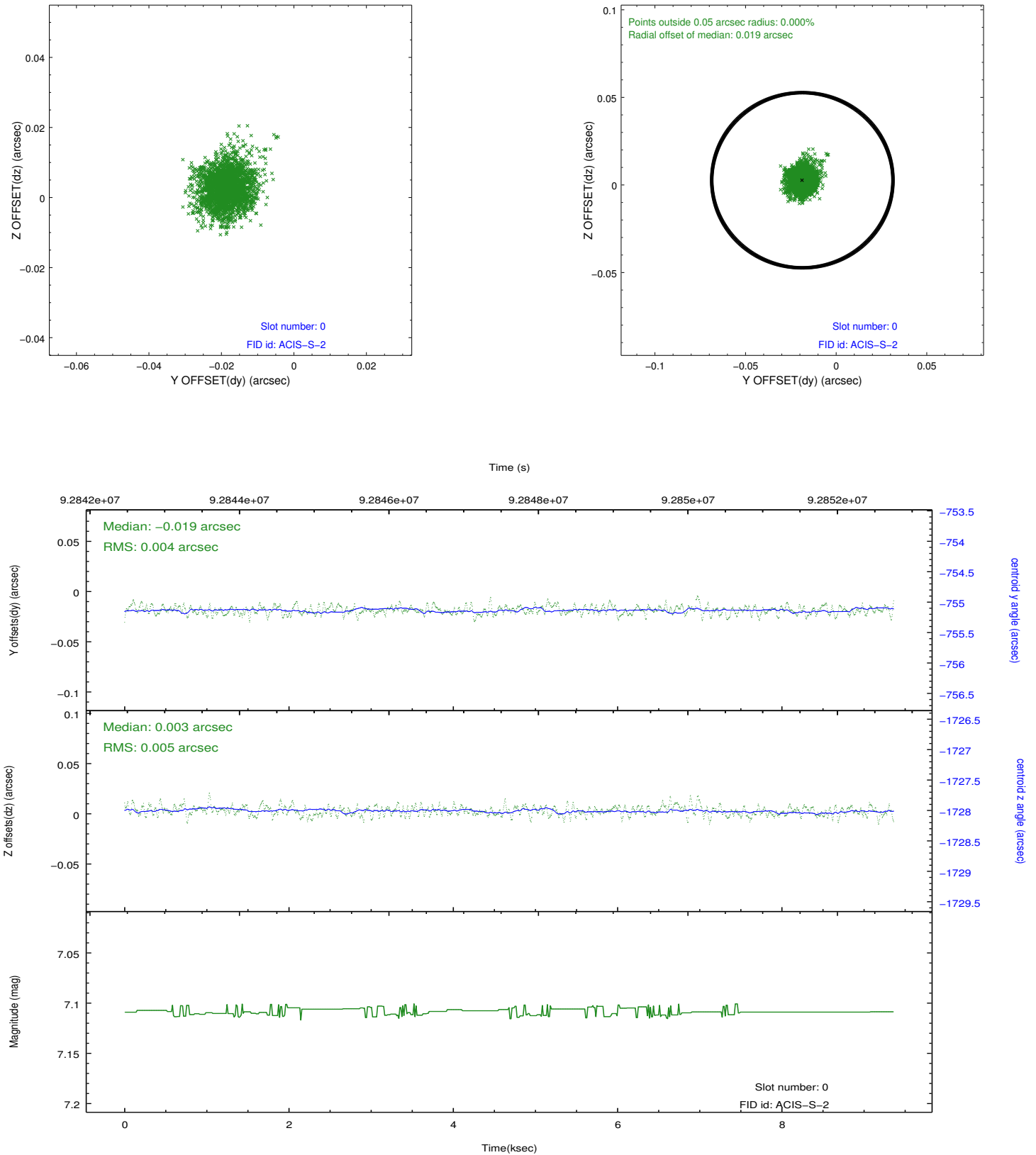


## 2.4.5 Slot 7

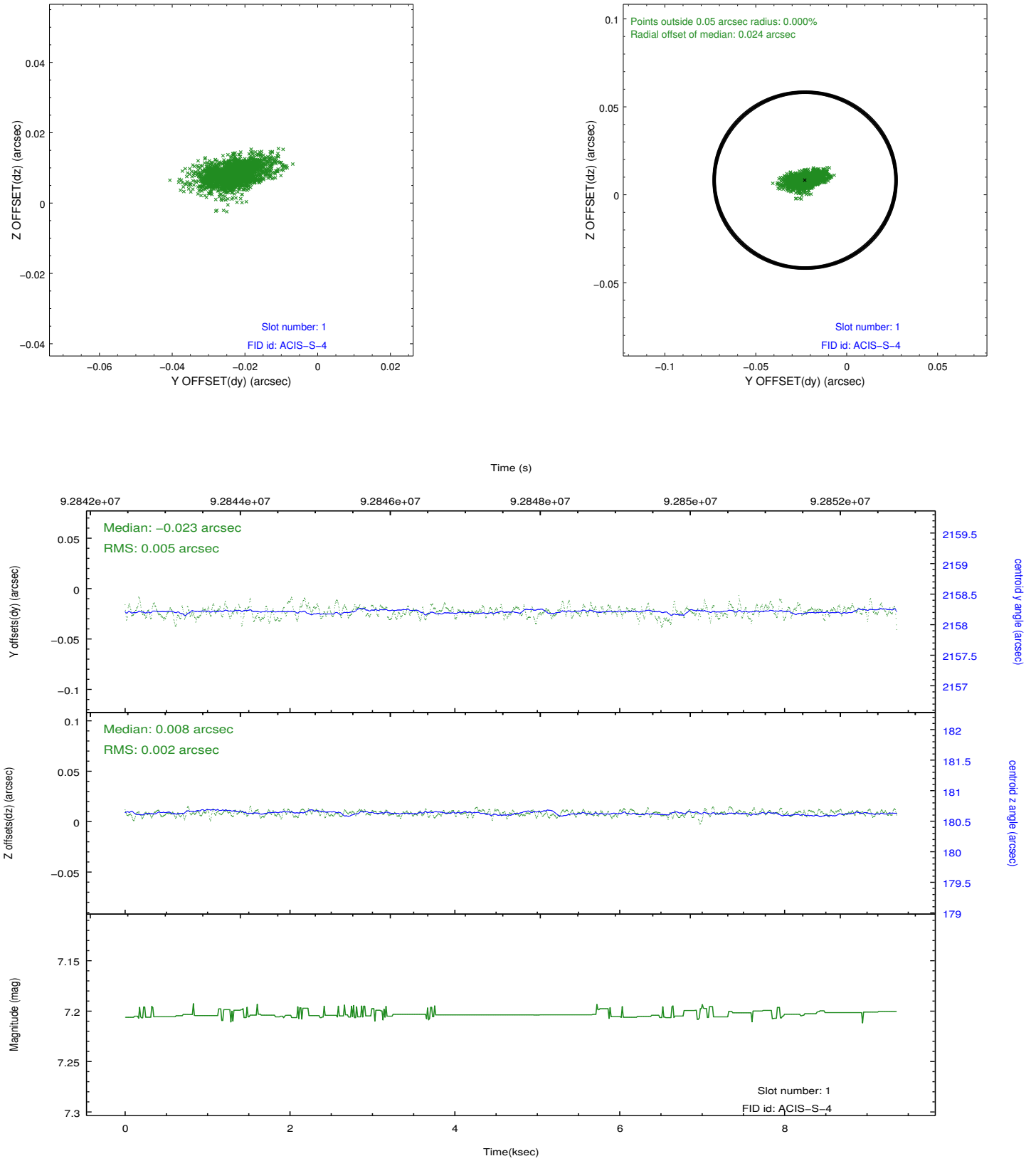


## 2.5 FID Slots

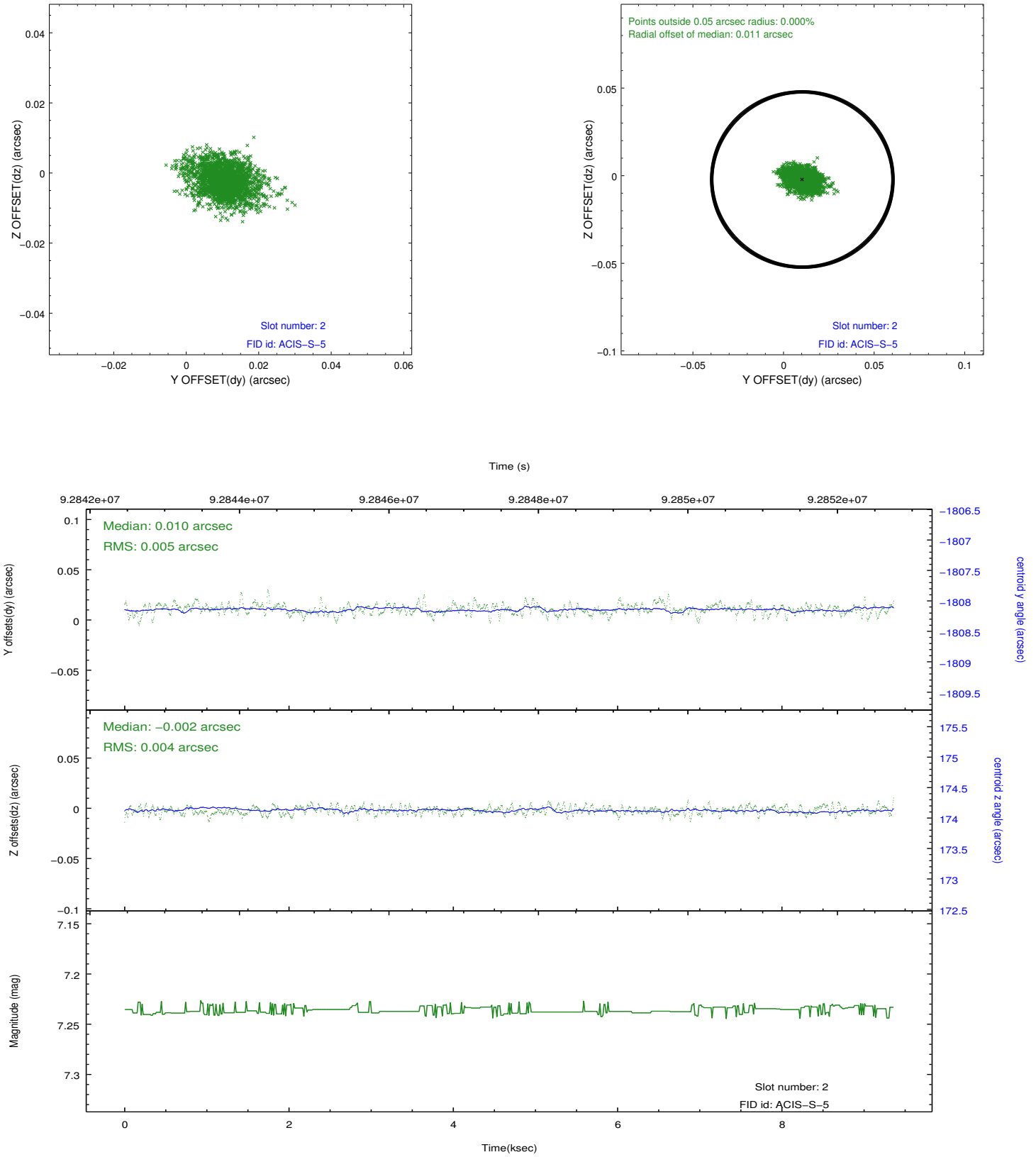
### 2.5.1 Slot 0



## 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)	2012.09.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	7.948

### A.2 Comments

Window preference met.