

# V&V Reference Report

## L2 ASCDS Version : 8.4.3

Observation 6762 - L2 Version 2  
Chandra X-Ray Center

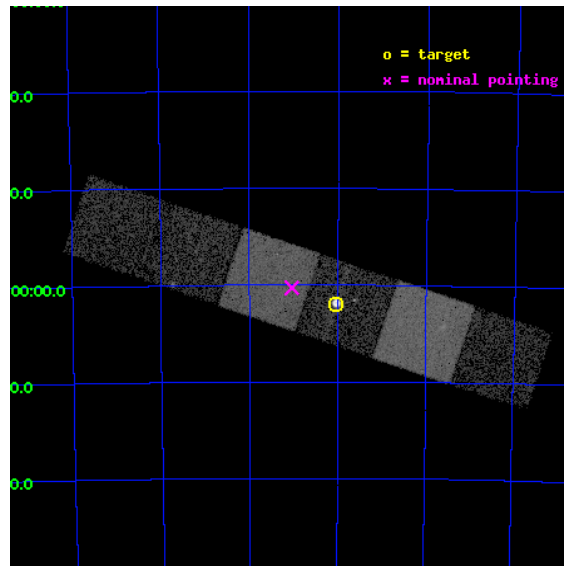
L2 Processing Date : Mar 28 2012

## 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

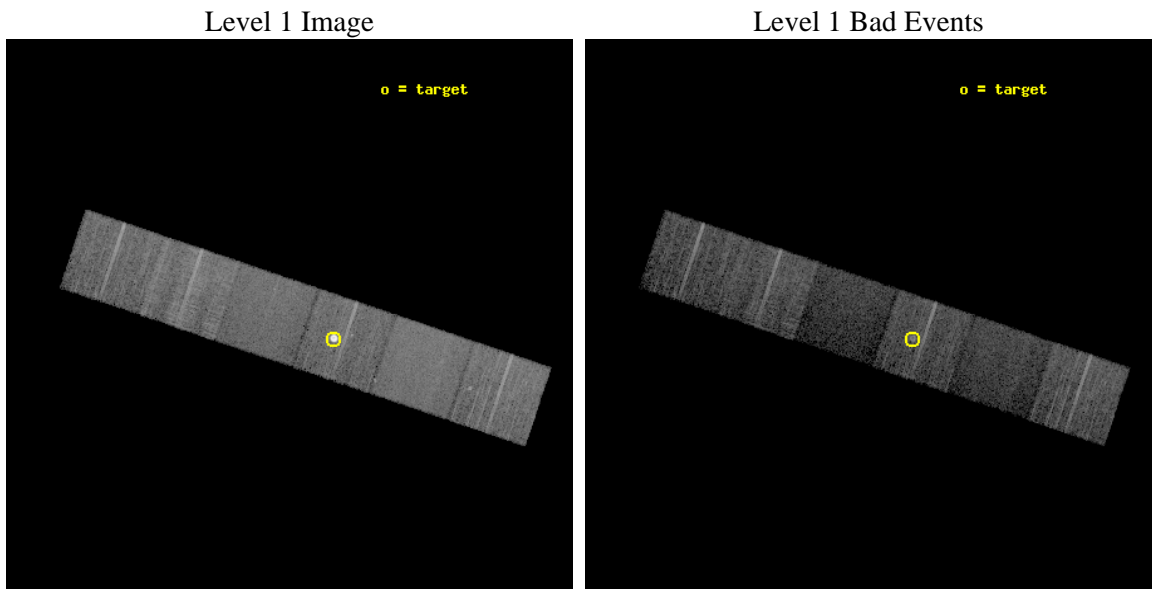
seq_num	590445	Sequence number
obs_id	6762	Observation id
title	AO7 ACIS-S Calibration Observations of E0102-72	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	E0102-72[S2,-120,5.15,0,0]	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	16.01	Observer's specified target RA [deg]
dec_targ	-72.032028	Observer's specified target Dec [deg]
ra_nom	16.259904116777	Nominal RA [deg]
dec_nom	-72.004833970254	Nominal Dec [deg]
roll_nom	198.56885907886	Nominal Roll [deg]
revision	2	Processing version of data
ontime	7756.7999711037	Sum of GTIs [s]
livetime	7658.5786992854	Livetime [s]
ontime4	7756.7999711037	Sum of GTIs [s]
ontime5	7756.7999711037	Sum of GTIs [s]
ontime6	7756.7999711037	Sum of GTIs [s]
ontime7	7756.7999711037	Sum of GTIs [s]
ontime8	7753.5590008199	Sum of GTIs [s]
ontime9	7756.7999711037	Sum of GTIs [s]
l2events	101243	Number of level 2 events



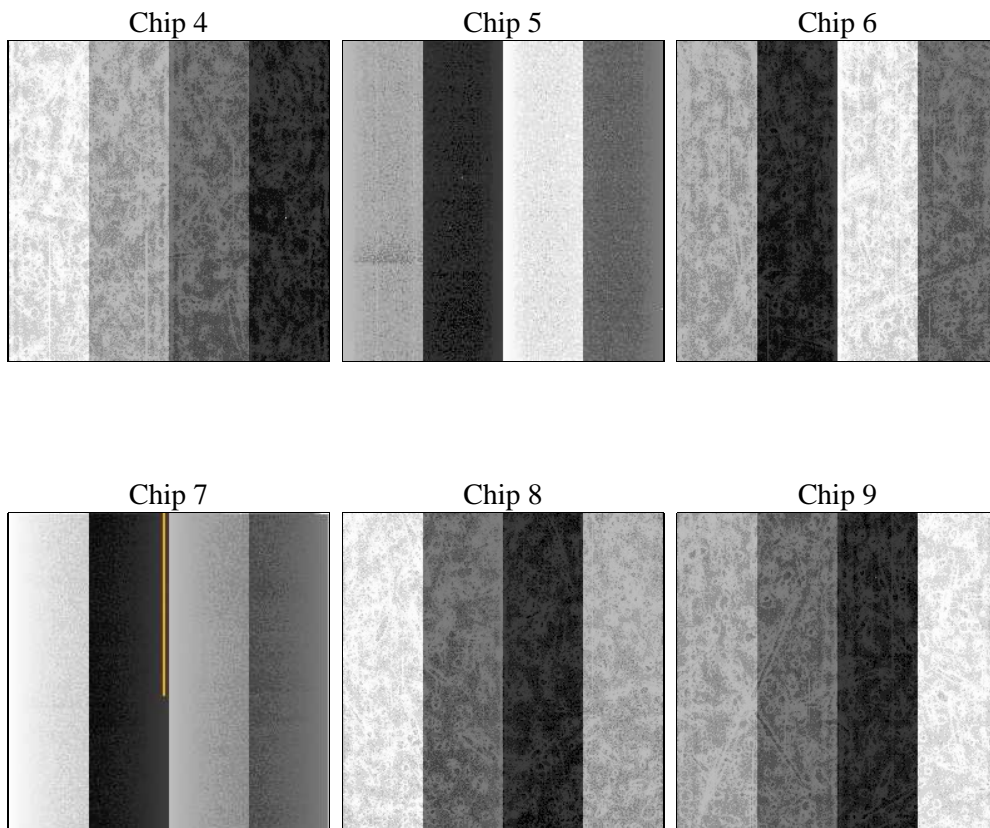
## 2 OBI

### 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	8.4.3	Processing system revision	ontime	7756.7999711037	Sum of GTIs [s]
caldsver	4.4.8	&#160	ontime4	7756.7999711037	Sum of GTIs [s]
date	2012-03-28T05:43:14	Date and time of file creation	ontime5	7756.7999711037	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	7756.7999711037	Sum of GTIs [s]
			ontime7	7756.7999711037	Sum of GTIs [s]
			ontime8	7753.5590008199	Sum of GTIs [s]
			ontime9	7756.7999711037	Sum of GTIs [s]
			l1events	378572	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	64447	63425	79648	50129	70265	50658	grade 0 events	2418	2431	26691	2497	4582	1810
rejected events	58528	30399	46577	25175	54057	45550		3%	3%	33%	4%	6%	3%
rejected %	90%	47%	58%	50%	76%	89%	grade 1 events	51	77	284	49	70	40
								0%	0%	0%	0%	0%	0%
							grade 2 events	1394	10092	3092	5405	3737	1065
								2%	15%	3%	10%	5%	2%
							grade 3 events	640	1645	1065	2423	1940	631
								0%	2%	1%	4%	2%	1%
							grade 4 events	567	1580	1032	2419	1678	554
								0%	2%	1%	4%	2%	1%
							grade 5 events	1788	5333	1889	5458	2584	2049
								2%	8%	2%	10%	3%	4%
							grade 6 events	903	17293	1201	12215	4274	1052
								1%	27%	1%	24%	6%	2%
							grade 7 events	56686	24974	44394	19663	51400	43457
								87%	39%	55%	39%	73%	85%

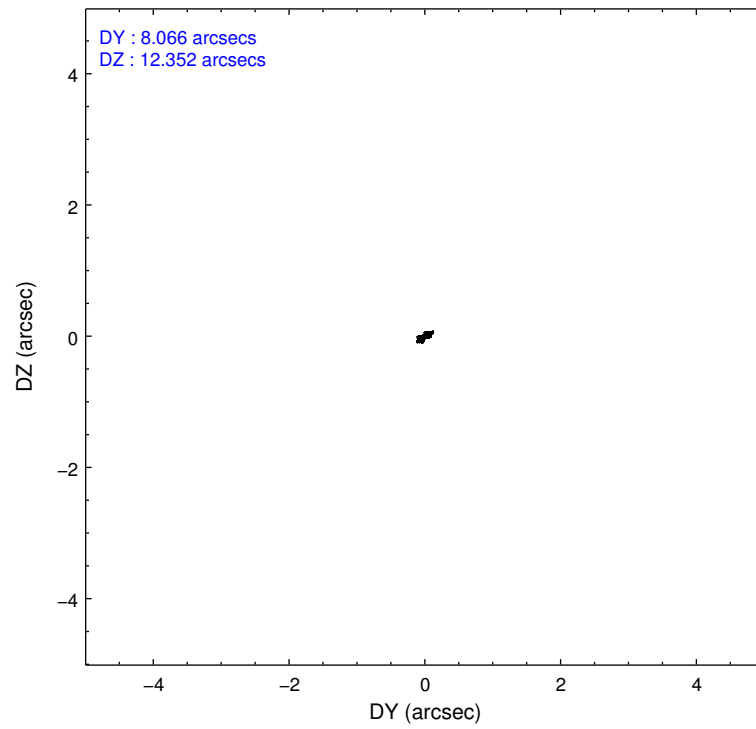
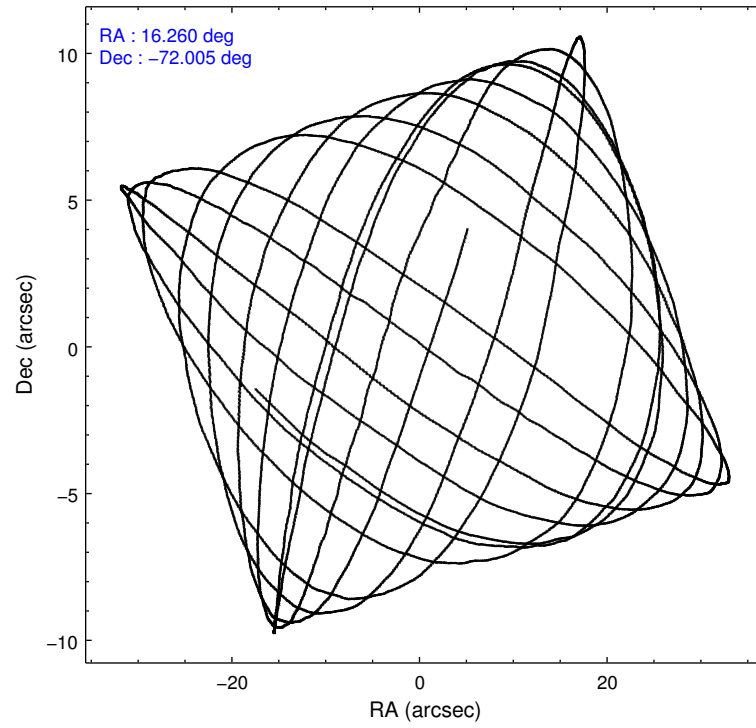


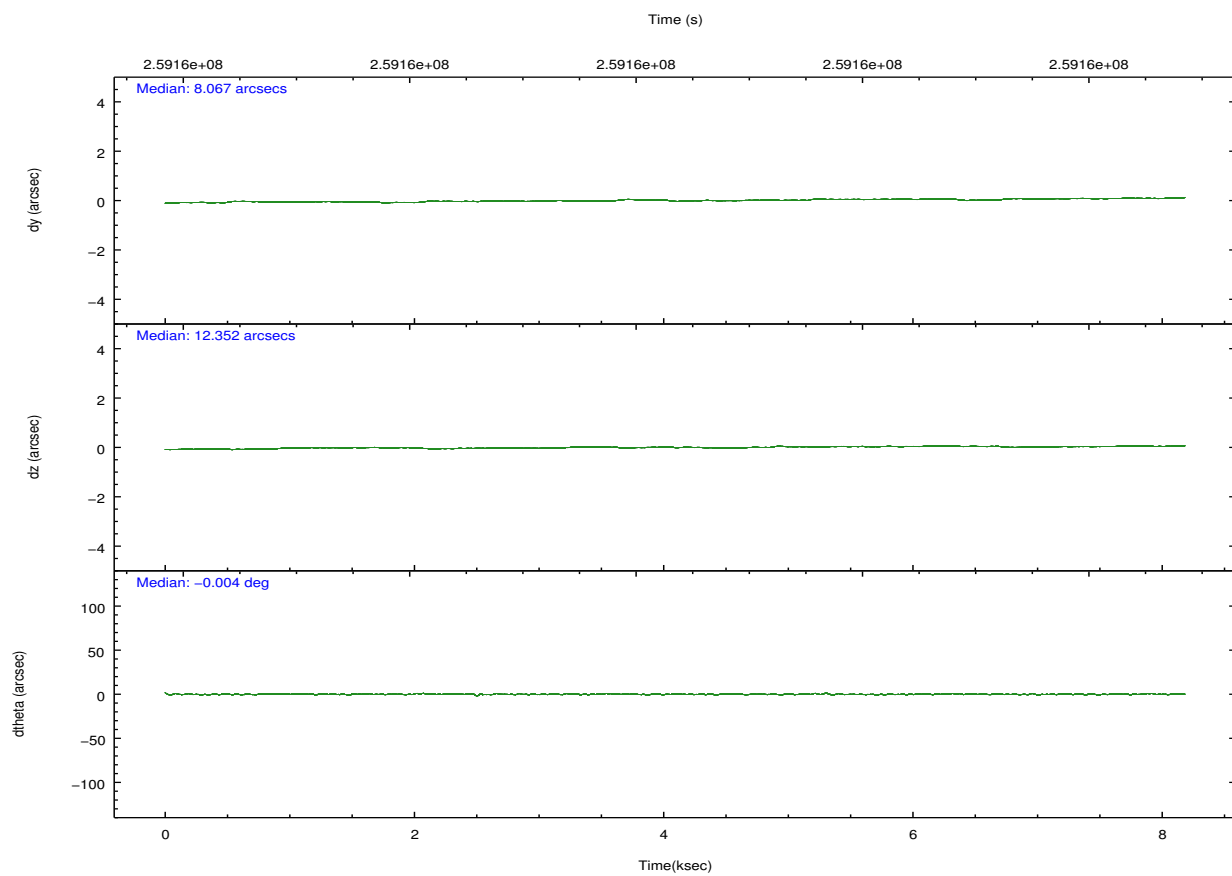
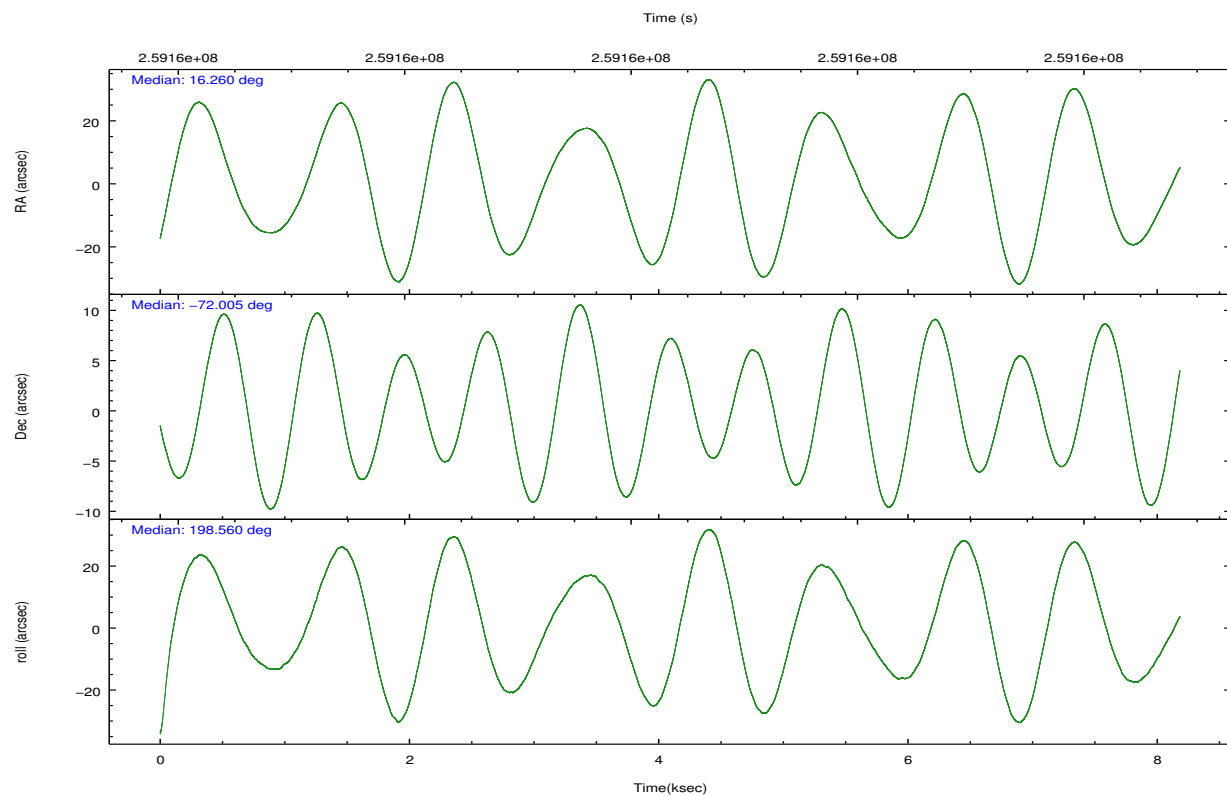
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-456789	ACIS-456789
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	16.317273	16.25990411677657
[deg] Pointing Dec	-71.984099	-72.00483397025396
[deg] Pointing Roll	198.466797	198.5688590788581
[s] Window start time (MET)	247190464.184000	247190464.184000
[s] Window stop time (MET)	260150465.184000	260150465.184000
[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)	259156438.184000	259156062.62674
Observation start date	2006-03-19T11:52:53	2006-03-19T11:47:42
[s] Observation end time (MET)	259164438.184000	259164572.68964
Observation end date	2006-03-19T14:06:13	2006-03-19T14:09:32
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



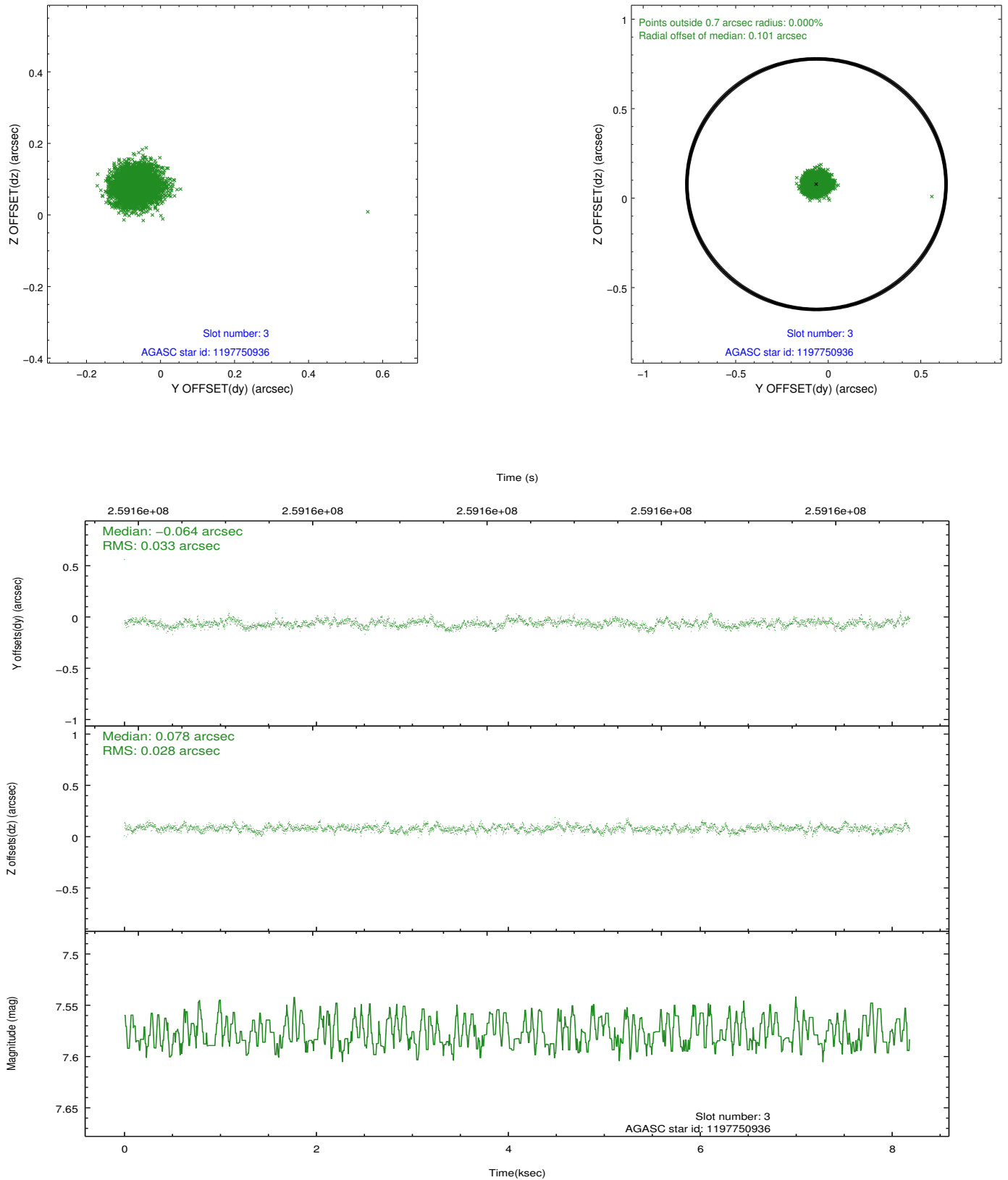


### Slot Statistics

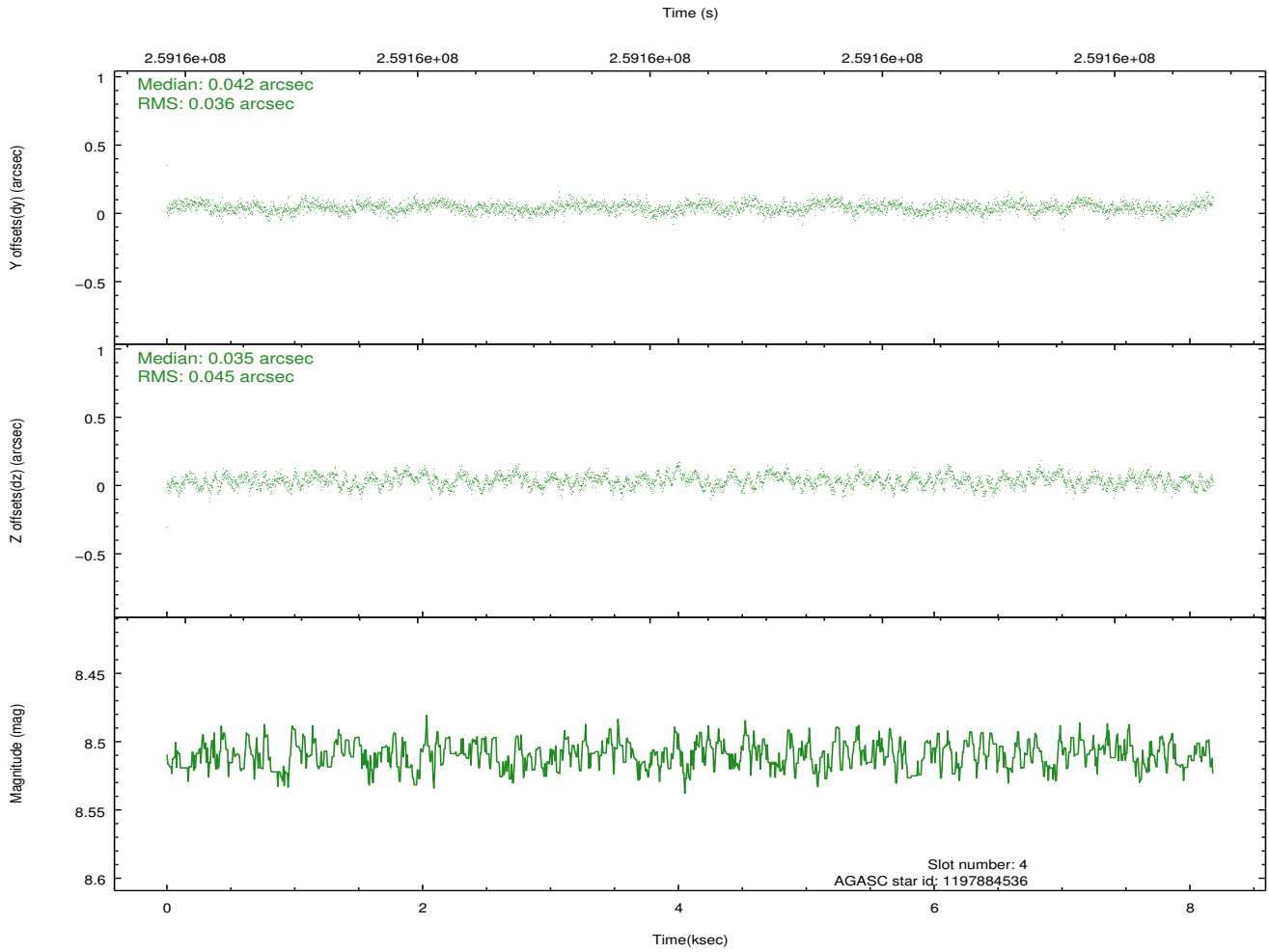
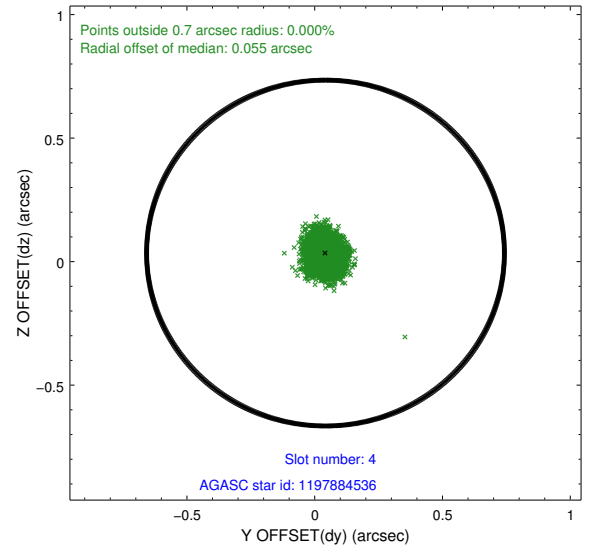
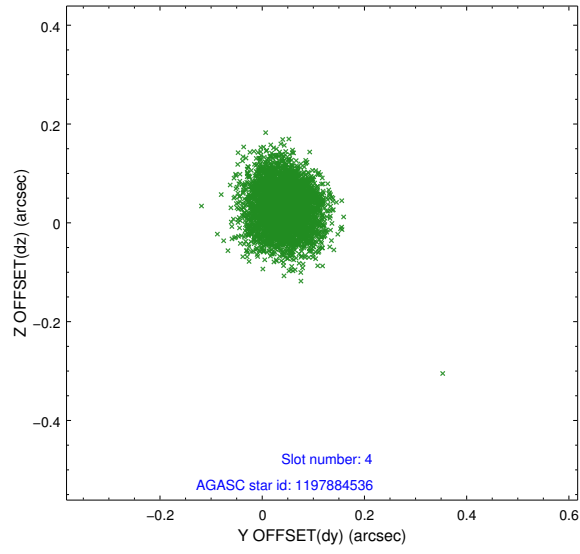
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	1996	-0.008	-0.035	0.007	0.012	0.000000	0.000000	-760.87	-1733.69
1	FID	ACIS-S-4	7.20	1995	0.098	0.013	0.006	0.011	0.000000	0.000000	2152.21	174.12
2	FID	ACIS-S-5	7.23	1996	-0.121	0.030	0.007	0.012	0.000000	0.000000	-1812.94	168.60
3	GUIDE	1197750936	7.58	3989	-0.064	0.078	0.045	0.073	15.387940	-71.549550	511.82	-1811.02
4	GUIDE	1197884536	8.51	3991	0.042	0.035	0.062	0.098	17.160729	-71.835289	-1064.98	-202.58
5	GUIDE	1197885104	9.36	3990	0.109	-0.004	0.095	0.150	17.845067	-72.189368	-1354.46	1254.05
6	GUIDE	1197885328	7.25	3993	0.102	0.022	0.052	0.082	16.283090	-71.733943	-249.24	-866.16
7	GUIDE	1198189696	7.35	3992	-0.189	-0.125	0.051	0.083	15.223750	-72.697522	1927.07	2075.43

## 2.4 Star Slots

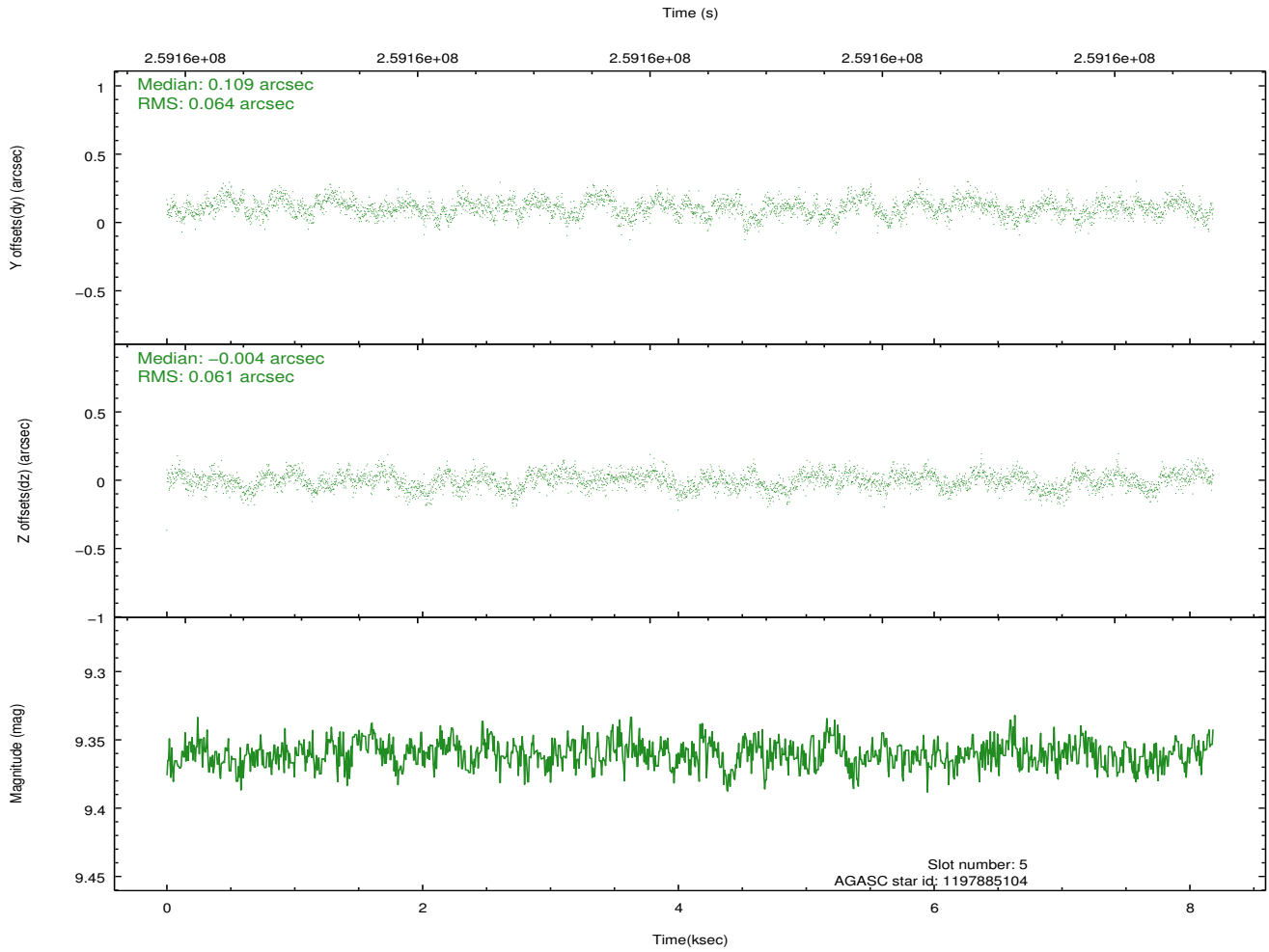
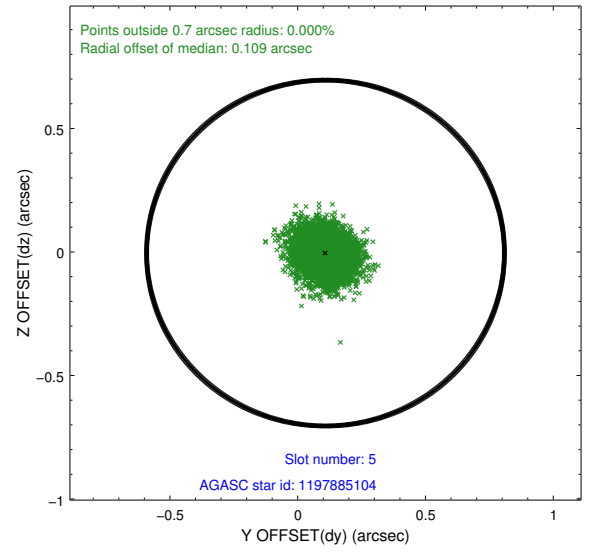
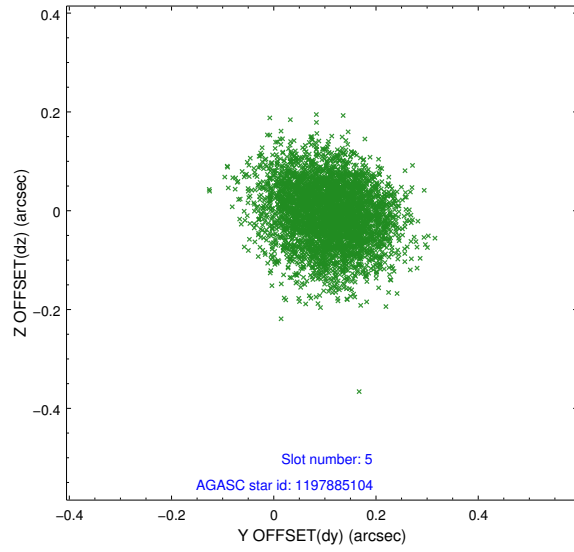
### 2.4.1 Slot 3



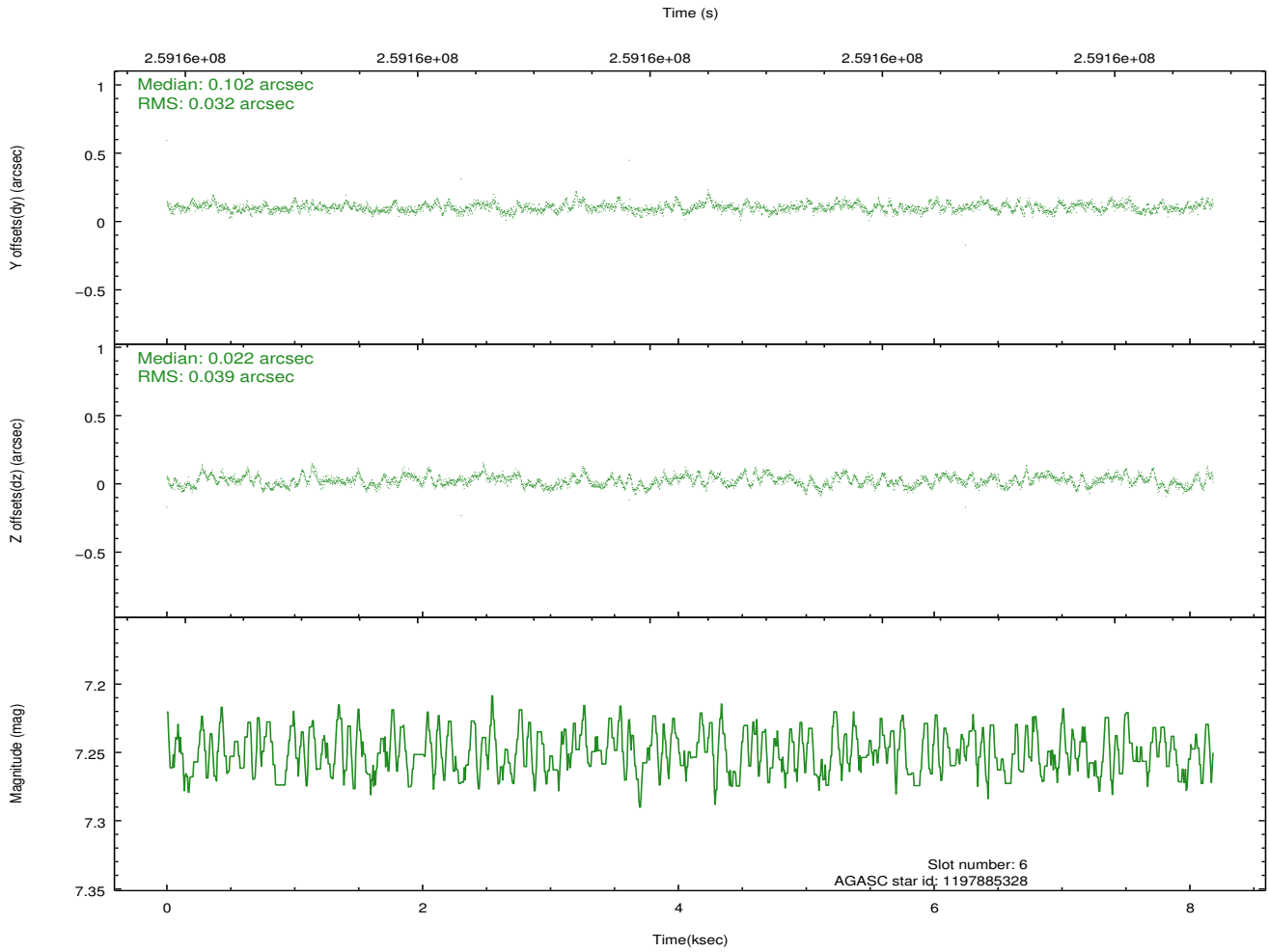
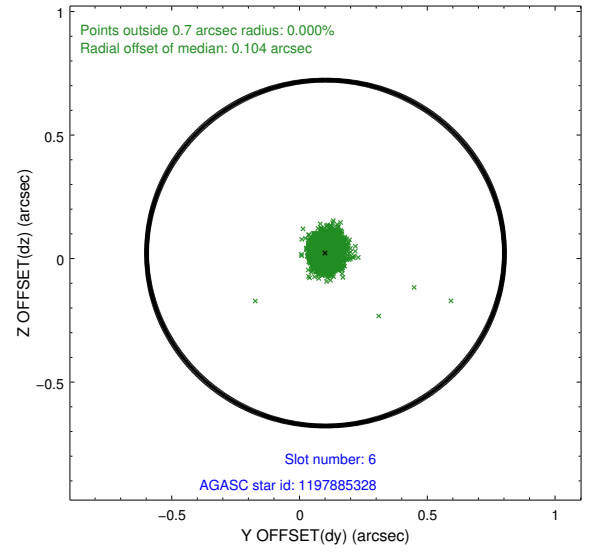
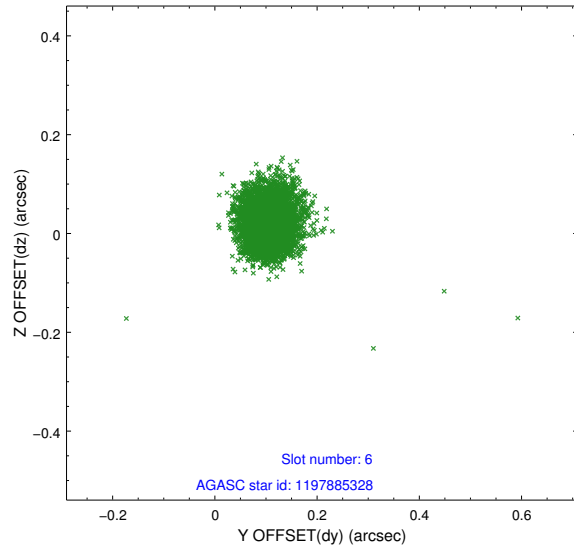
## 2.4.2 Slot 4



### 2.4.3 Slot 5

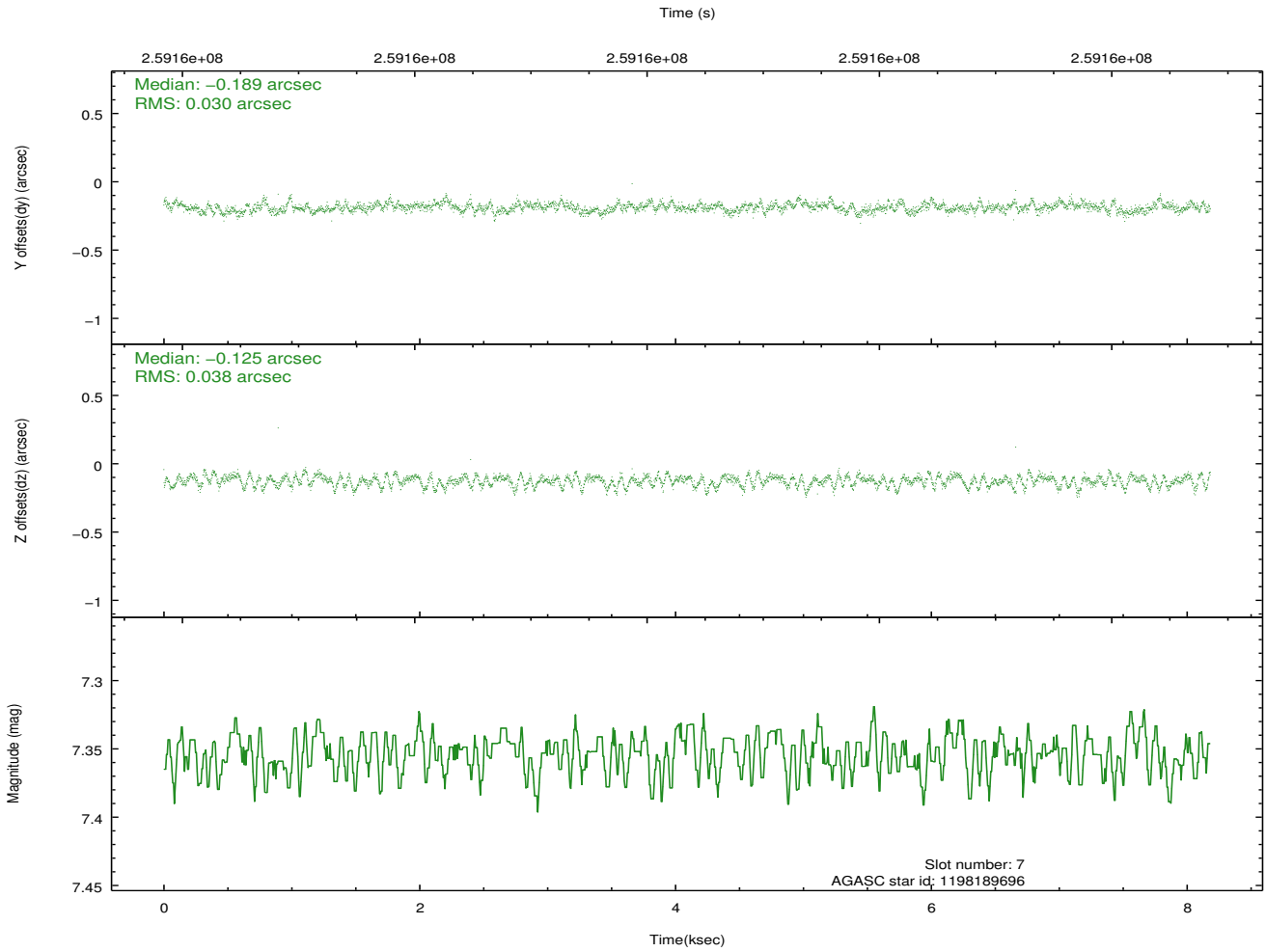
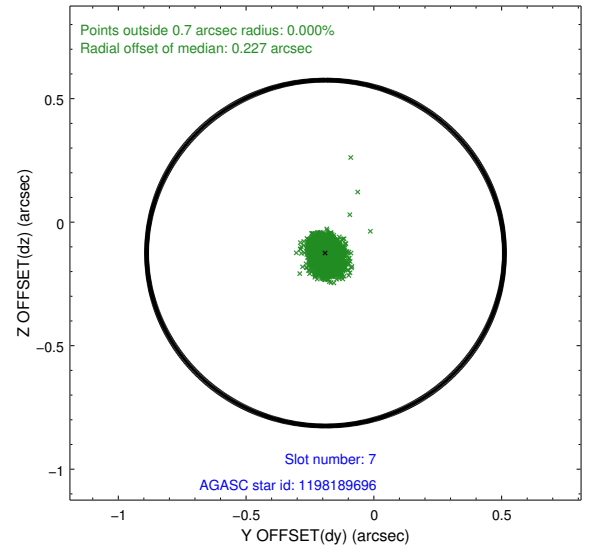
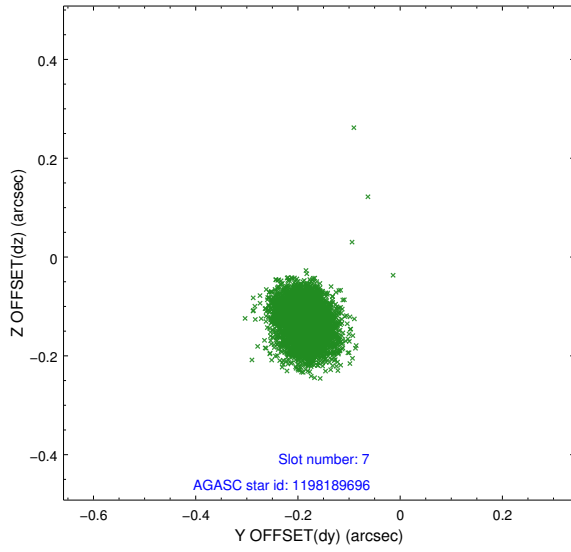


## 2.4.4 Slot 6



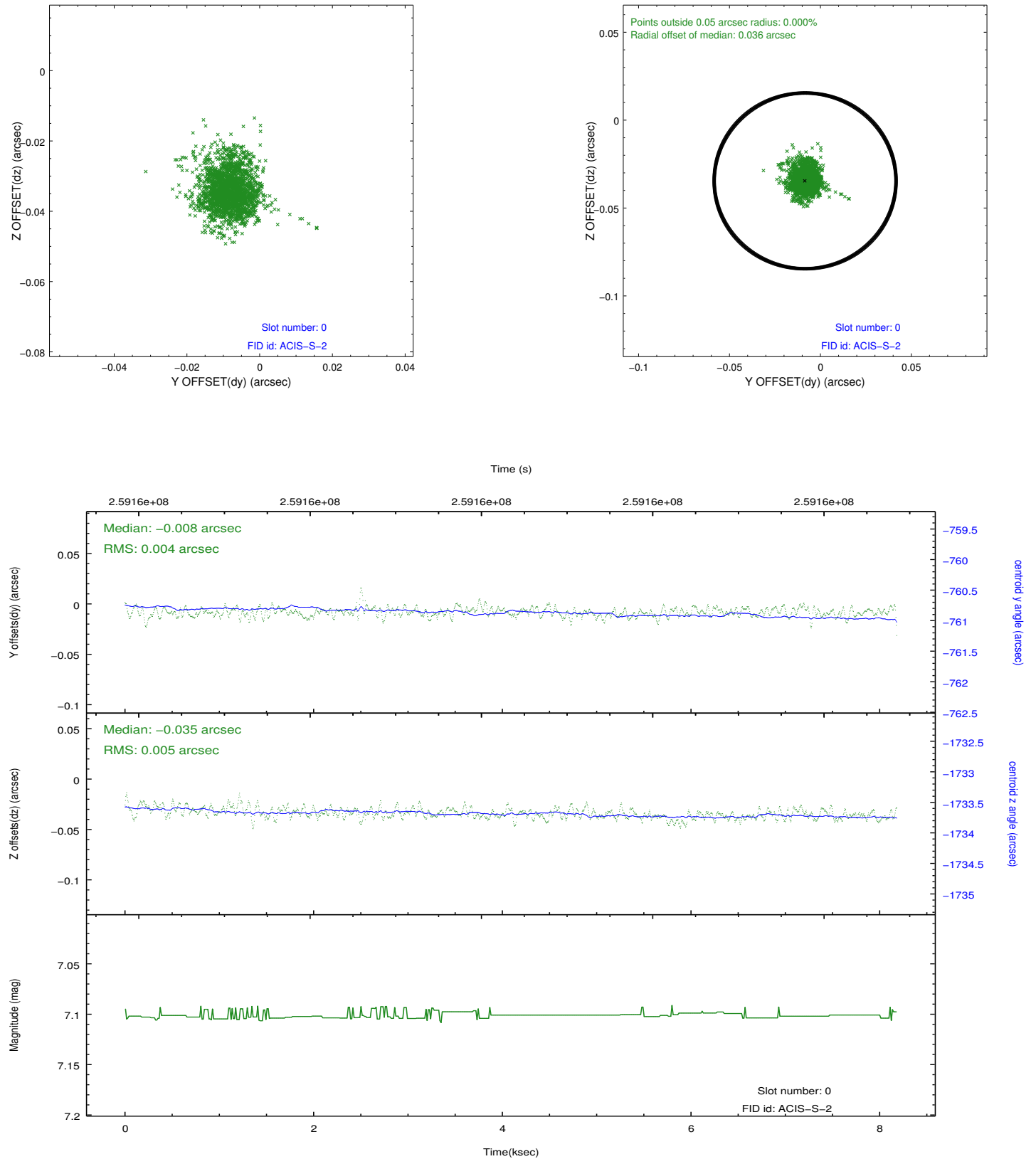


## 2.4.5 Slot 7

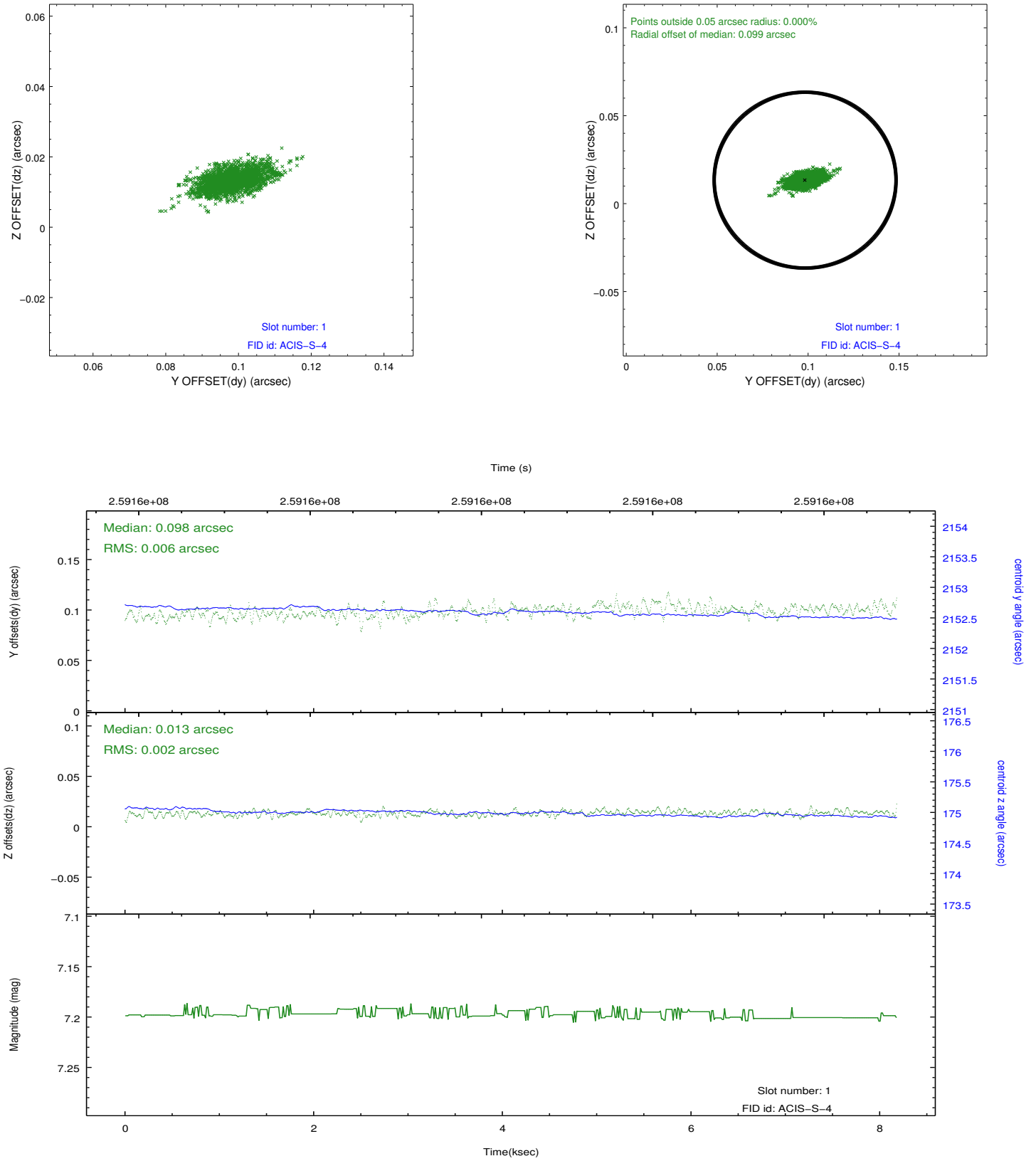


## 2.5 FID Slots

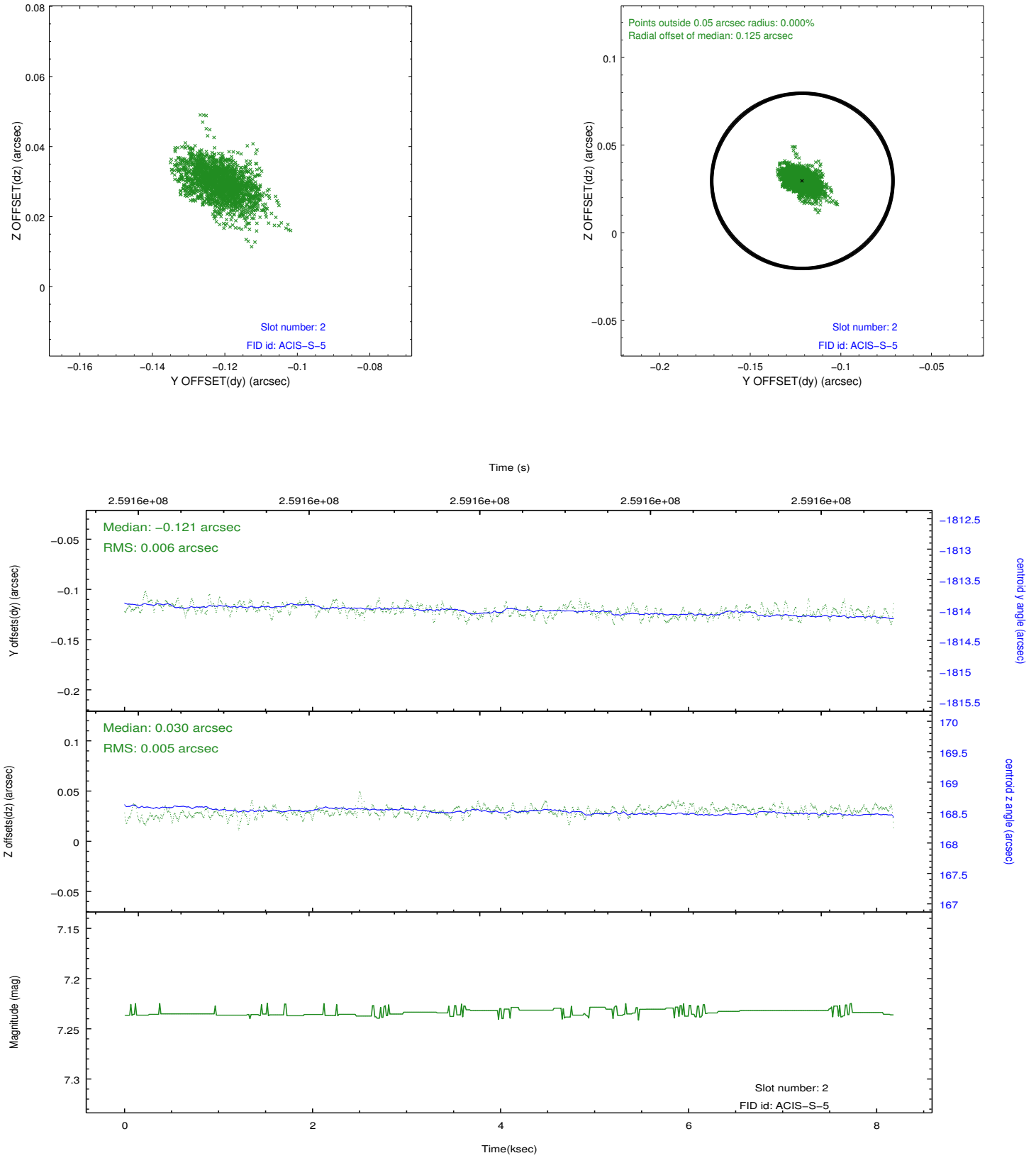
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.03.29
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	7.75679997

### A.2 Comments

Window constraint met.