

# V&V Reference Report

## L2 ASCDS Version : 8.4.3

Observation 6763 - L2 Version 2  
Chandra X-Ray Center

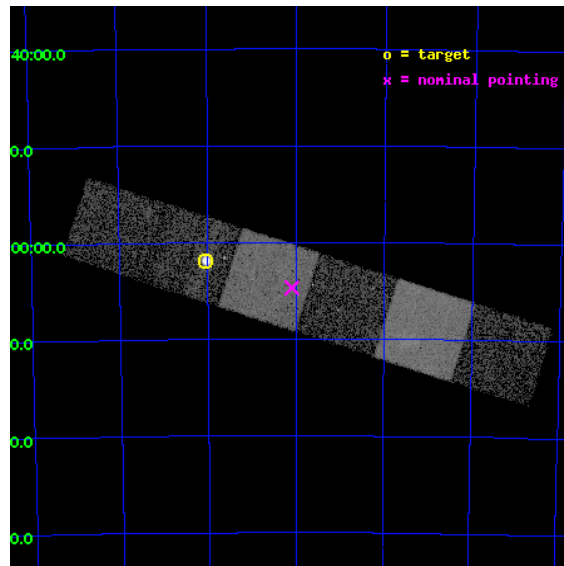
L2 Processing Date : Mar 28 2012

## 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

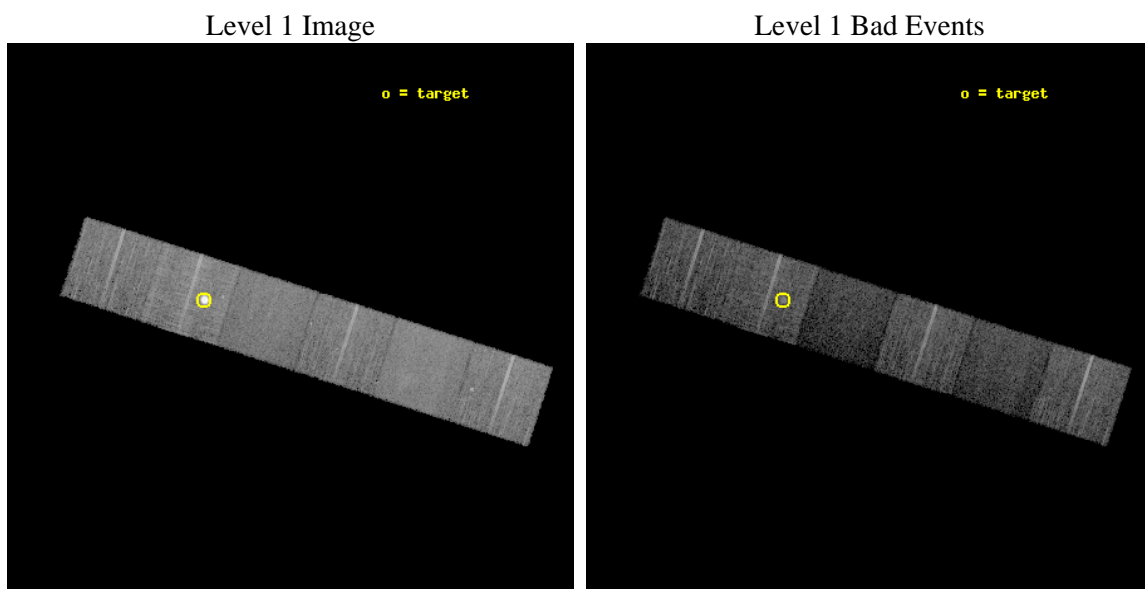
seq_num	590446	Sequence number
obs_id	6763	Observation id
title	AO7 ACIS-S Calibration Observations of E0102-72	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	E0102-72[S4,-120,-9.15,0,0]	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	16.01	Observer's specified target RA [deg]
dec_targ	-72.032028	Observer's specified target Dec [deg]
ra_nom	15.524603934382	Nominal RA [deg]
dec_nom	-72.078257230245	Nominal Dec [deg]
roll_nom	197.69149239048	Nominal Roll [deg]
revision	2	Processing version of data
ontime	7753.5590307117	Sum of GTIs [s]
livetime	7655.378797632	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	7753.5590307117	Sum of GTIs [s]
ontime9	7756.7999711037	Sum of GTIs [s]
l2events	98774	Number of level 2 events



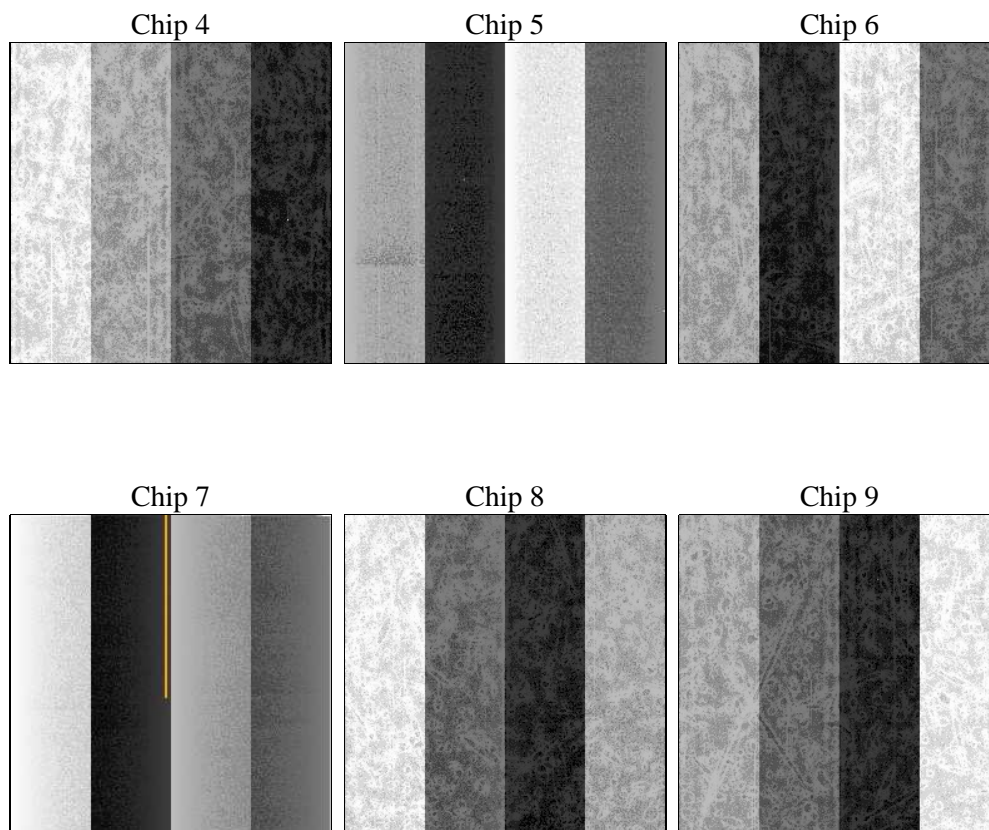
## 2 OBI

### 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	7753.5590307117	Sum of GTIs [s]
caldsver	4.4.8	&#160	ontime4	7756.7999711037	Sum of GTIs [s]
date	2012-03-28T05:43:08	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	7753.5590307117	Sum of GTIs [s]
			ontime9	7756.7999711037	Sum of GTIs [s]
			l1events	371964	Number of level 1 events

### 2.1.4 Events

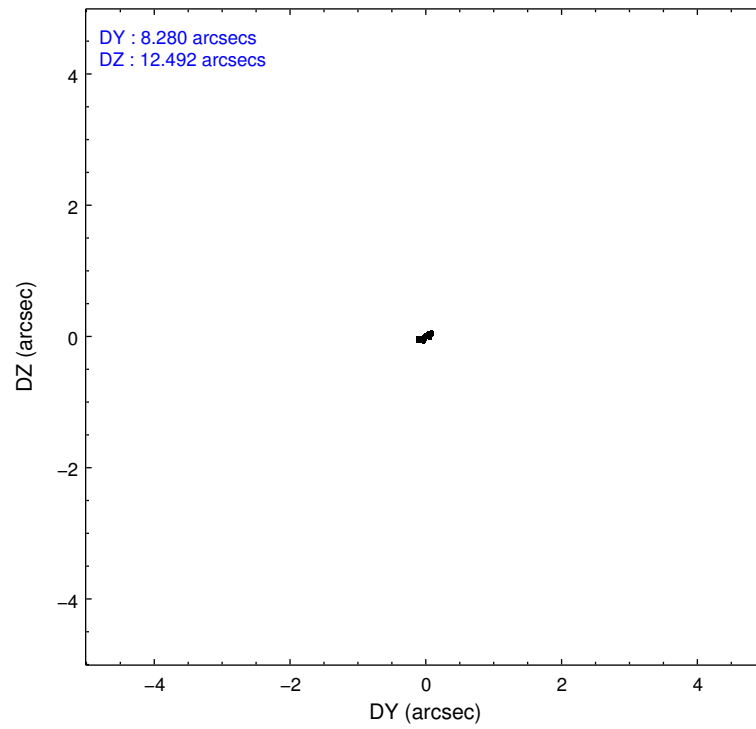
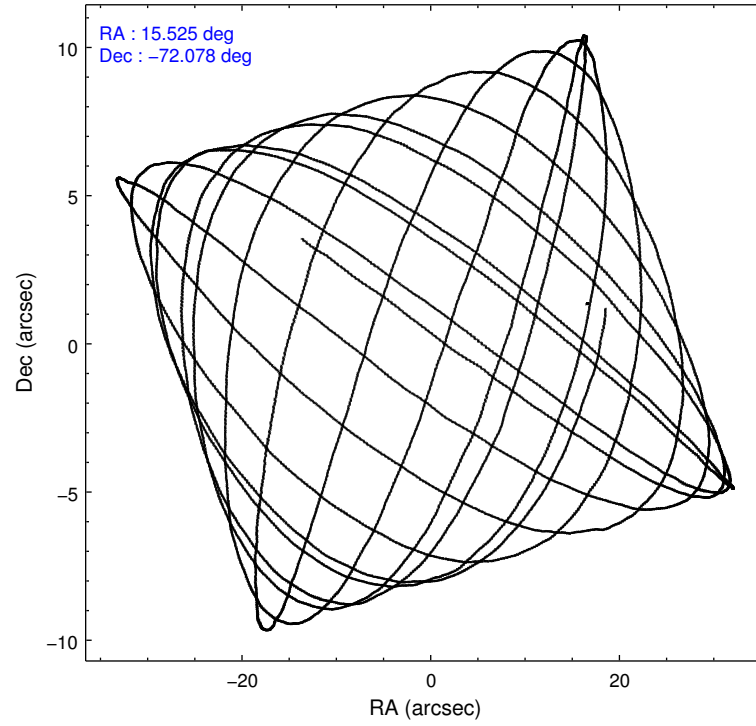
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	61233	64004	54598	49787	92160	50182	grade 0 events	2414	2764	2270	2485	25473	1962
rejected events	55494	30388	48827	25226	52907	44921		3%	4%	4%	4%	27%	3%
rejected %	90%	47%	89%	50%	57%	89%	grade 1 events	63	86	28	52	235	27
								0%	0%	0%	0%	0%	0%
							grade 2 events	1297	10315	1211	5299	5322	1137
								2%	16%	2%	10%	5%	2%
							grade 3 events	577	1675	623	2358	2072	566
								0%	2%	1%	4%	2%	1%
							grade 4 events	575	1663	576	2401	1955	596
								0%	2%	1%	4%	2%	1%
							grade 5 events	1748	5377	1774	5371	2667	1933
								2%	8%	3%	10%	2%	3%
							grade 6 events	877	17206	1093	12033	4453	1003
								1%	26%	2%	24%	4%	1%
							grade 7 events	53682	24918	47023	19788	49983	42958
								87%	38%	86%	39%	54%	85%

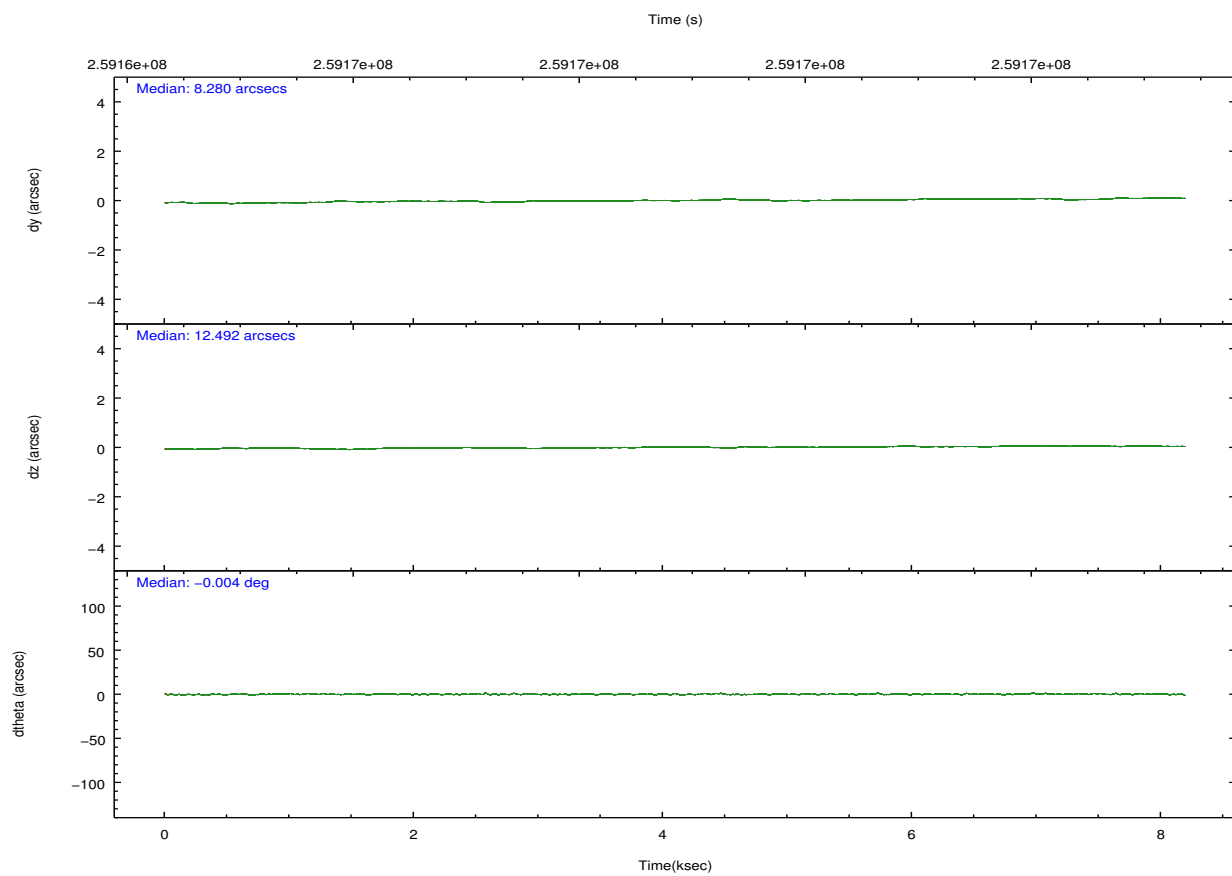
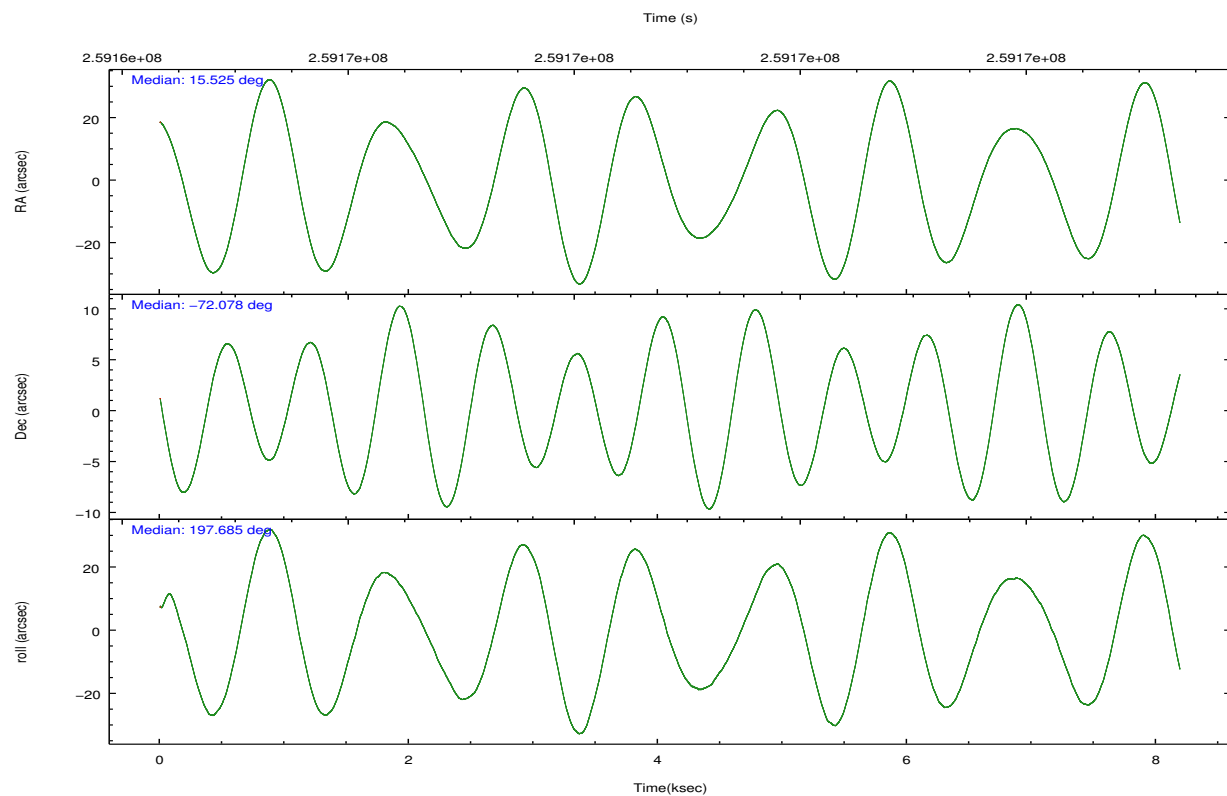


## 2.2 Compared Parameters

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	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	15.583161	15.52460393438203	Subarray requested	NONE	NONE
[deg] Pointing Dec	-72.057799	-72.07825723024456	Alternating exposures requested	N	N
[deg] Pointing Roll	197.590586	197.691492390485	[s] Primary exposure time	0.000000	3.2
[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)	259164948.184000	259164572.68964			
Observation start date	2006-03-19T14:14:43	2006-03-19T14:09:32			
[s] Observation end time (MET)	259172948.184000	259173082.75253			
Observation end date	2006-03-19T16:28:03	2006-03-19T16:31:22			
Read mode	TIMED	TIMED			

## 2.3 Aspect



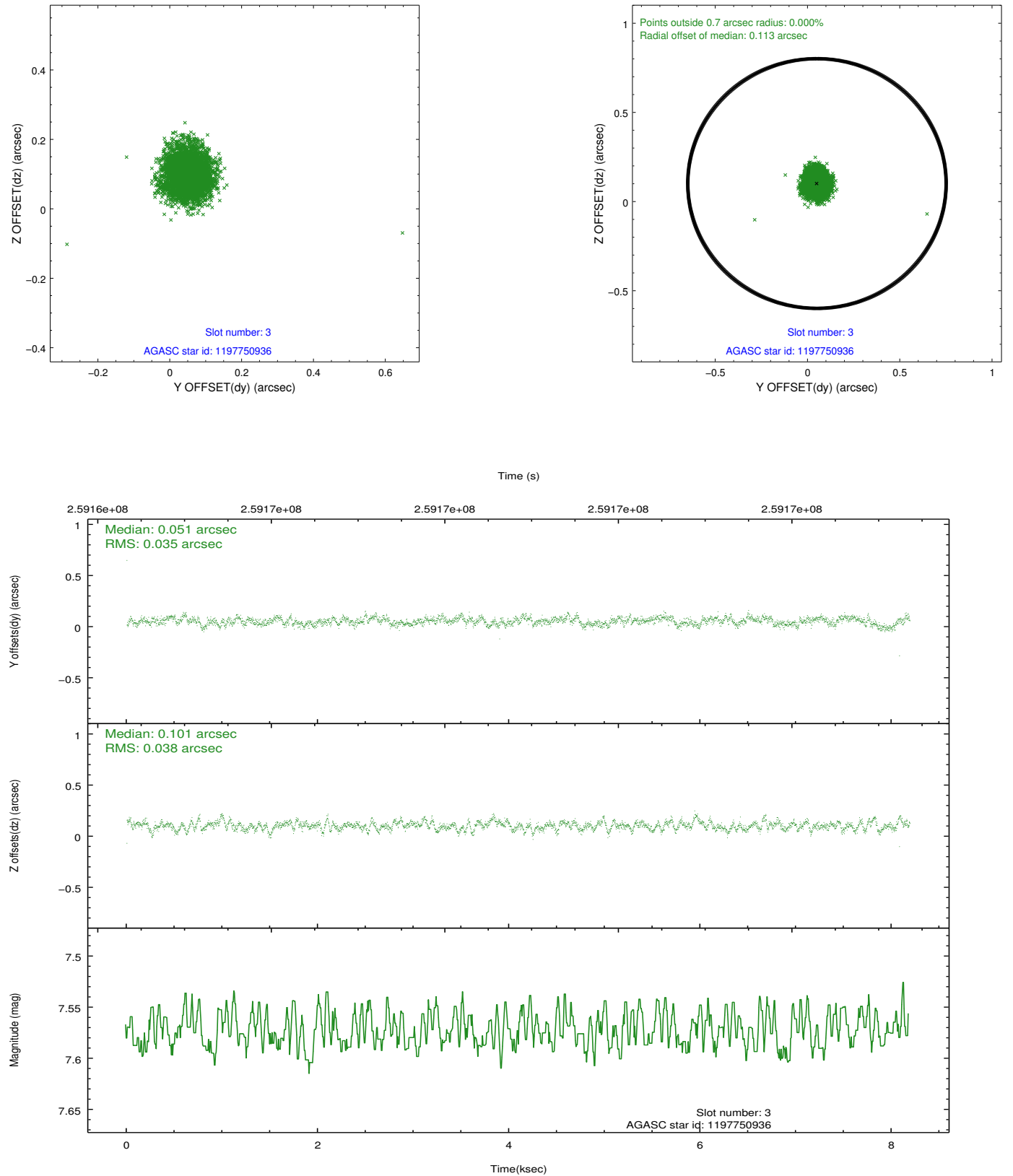


### Slot Statistics

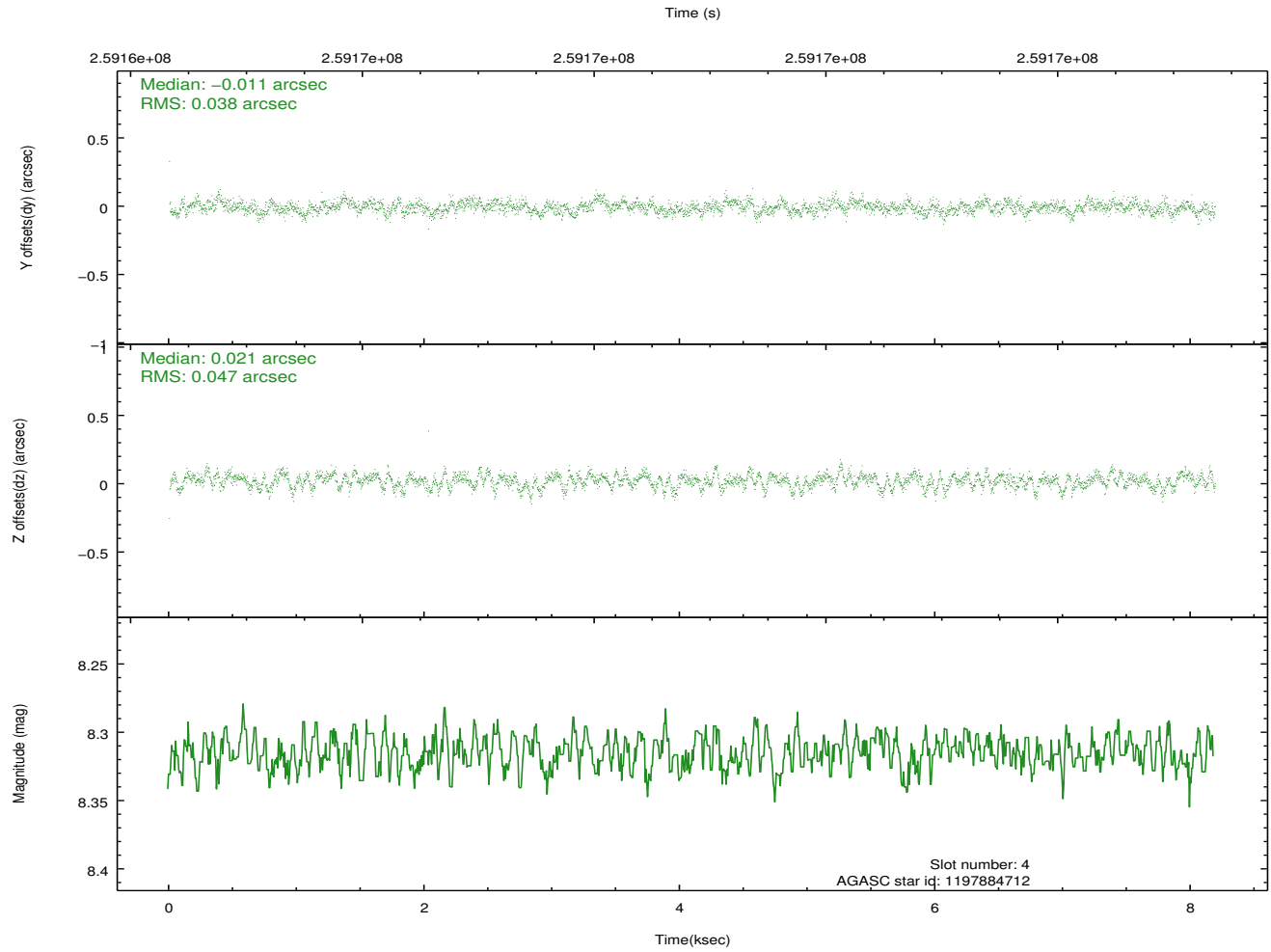
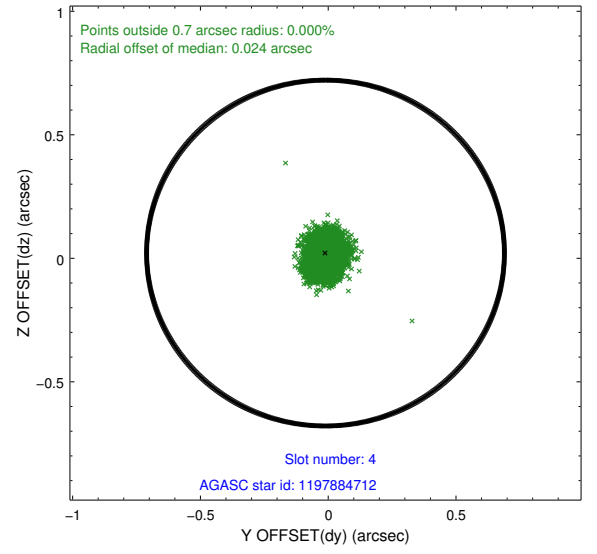
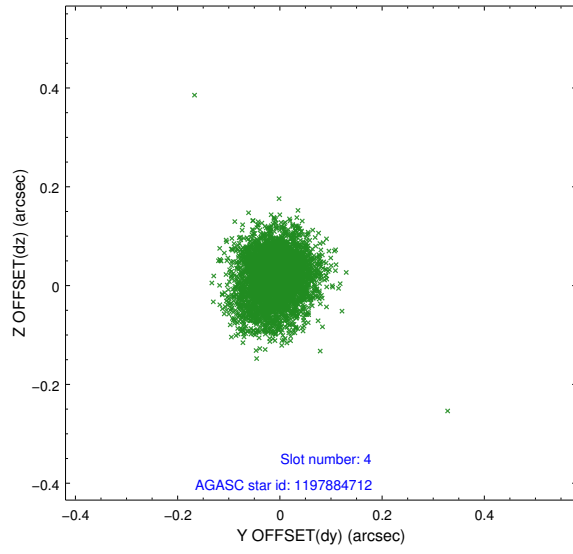
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	1998	-0.009	-0.040	0.006	0.011	0.000000	0.000000	-761.08	-1733.84
1	FID	ACIS-S-4	7.20	1998	0.109	0.015	0.006	0.011	0.000000	0.000000	2152.01	173.97
2	FID	ACIS-S-5	7.23	1998	-0.131	0.034	0.007	0.011	0.000000	0.000000	-1813.16	168.47
3	GUIDE	1197750936	7.57	3996	0.051	0.101	0.054	0.088	15.387940	-71.549550	-340.31	-1810.52
4	GUIDE	1197884712	8.32	3995	-0.011	0.021	0.064	0.106	16.087398	-72.252690	-314.66	837.96
5	GUIDE	1197885104	9.35	3992	0.090	0.017	0.083	0.139	17.845067	-72.189368	-2215.91	1249.12
6	GUIDE	1197885328	7.23	3996	0.032	0.065	0.063	0.096	16.283090	-71.733943	-1104.66	-867.99
7	GUIDE	1198189696	7.36	3995	-0.166	-0.203	0.059	0.094	15.223750	-72.697522	1062.72	2080.10

## 2.4 Star Slots

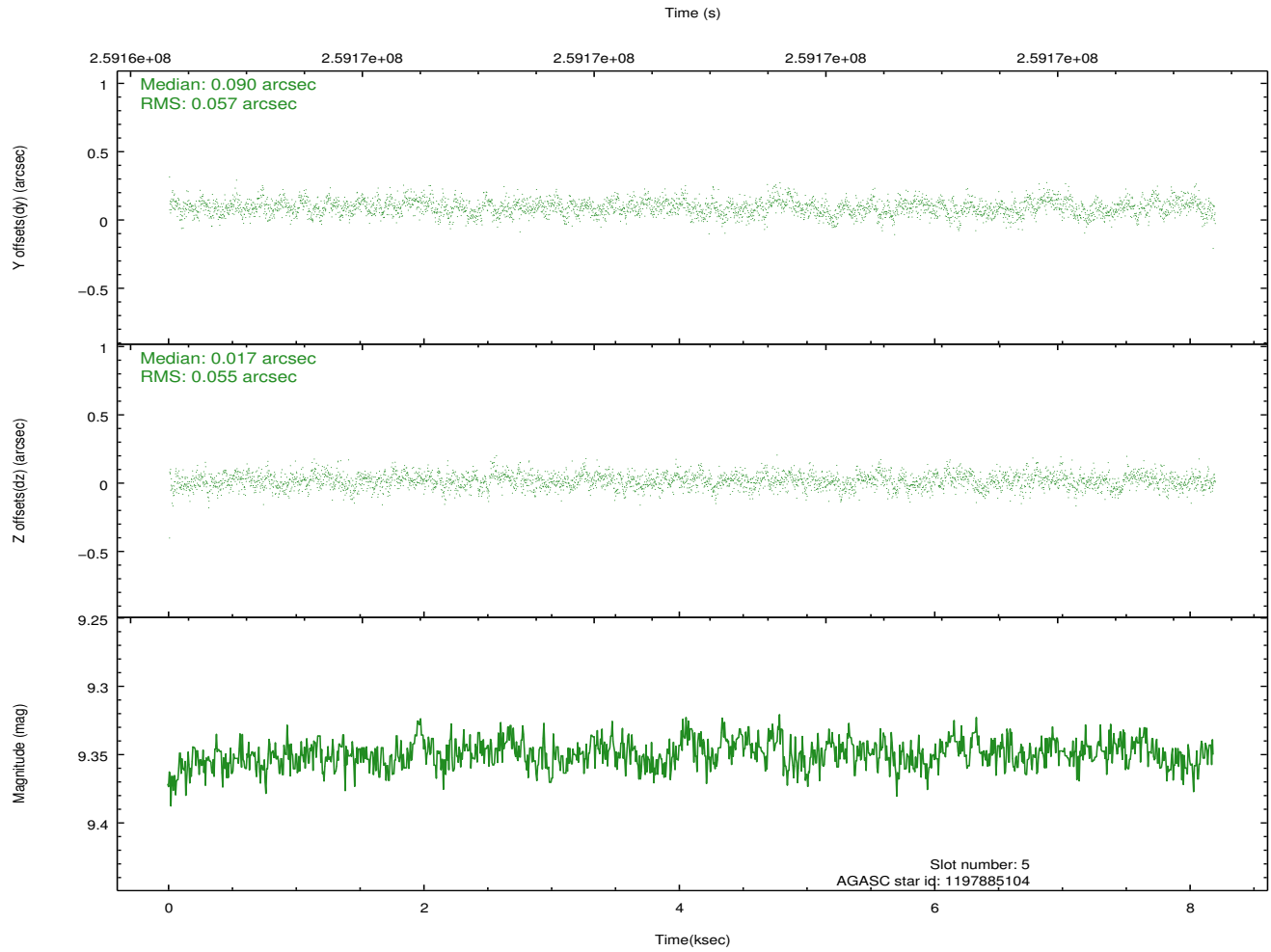
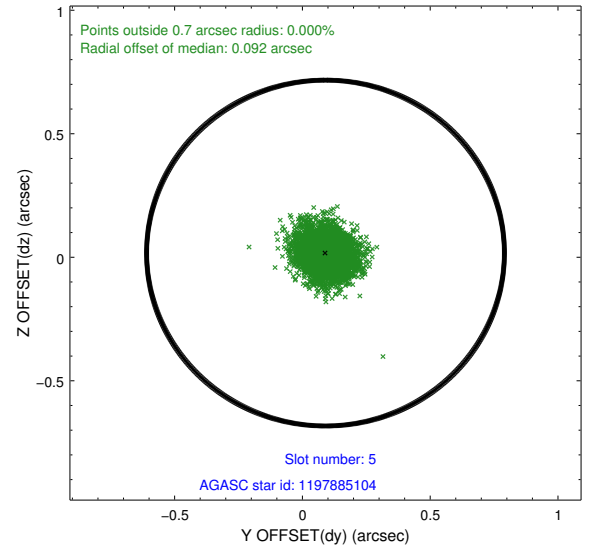
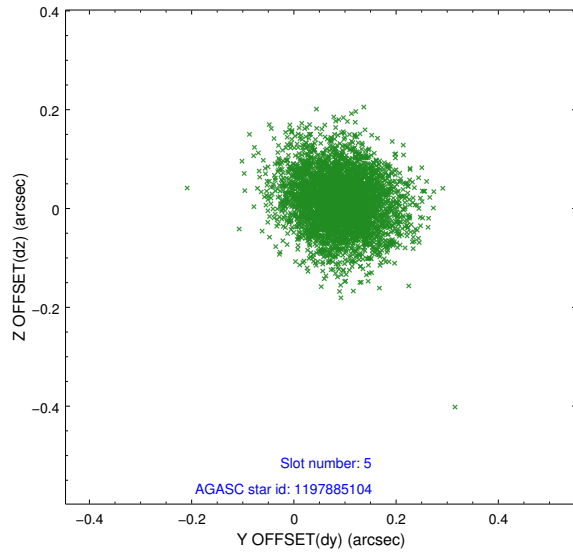
### 2.4.1 Slot 3



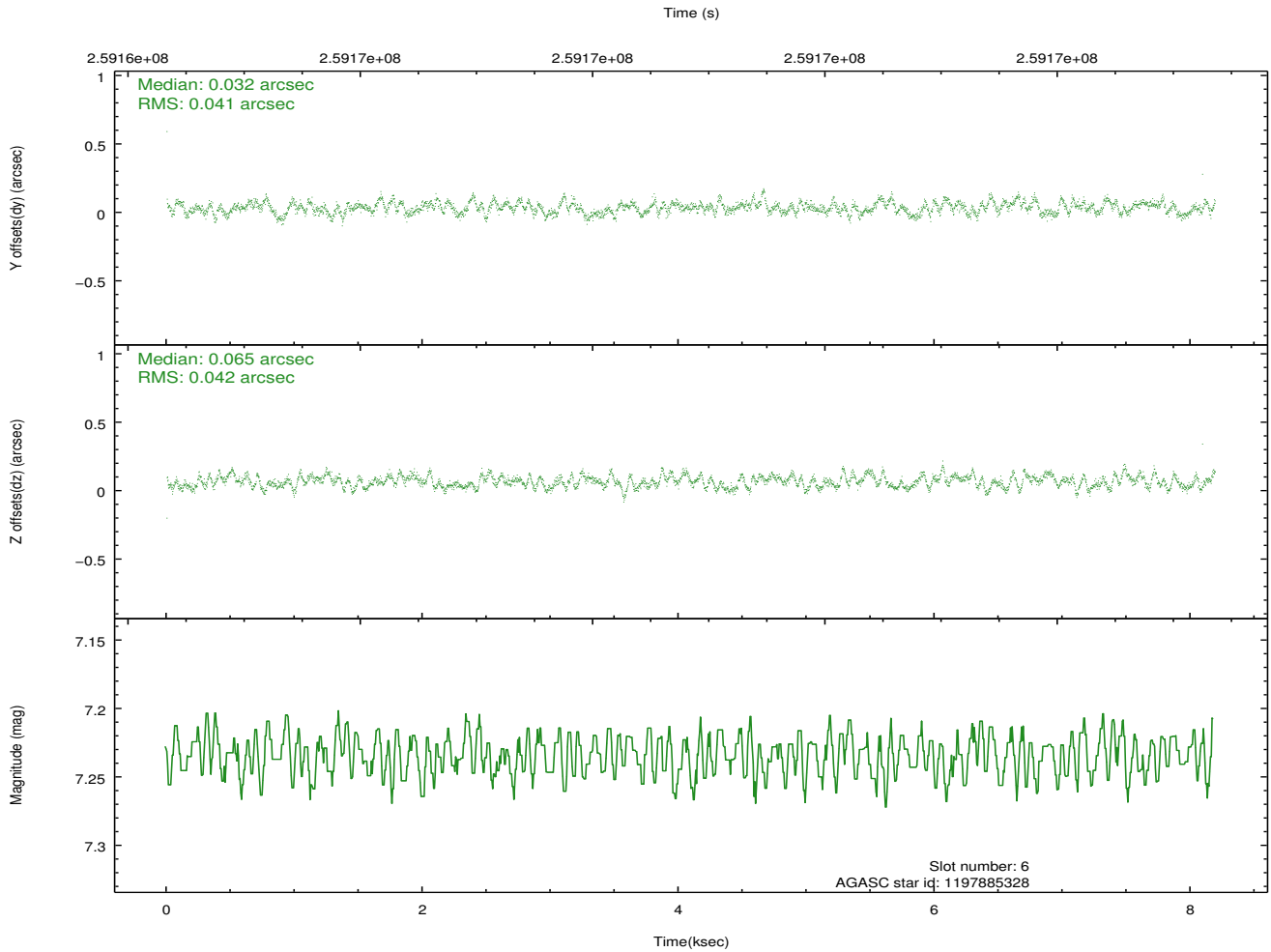
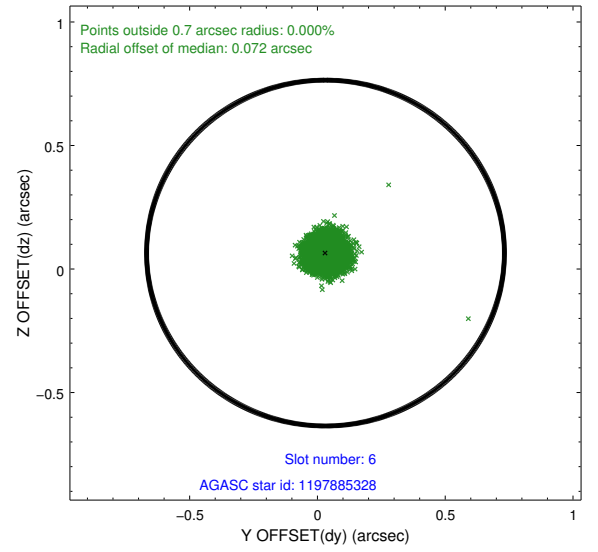
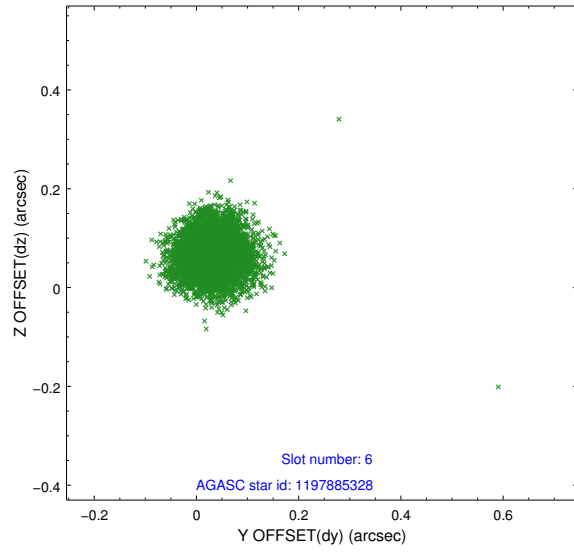
## 2.4.2 Slot 4



### 2.4.3 Slot 5

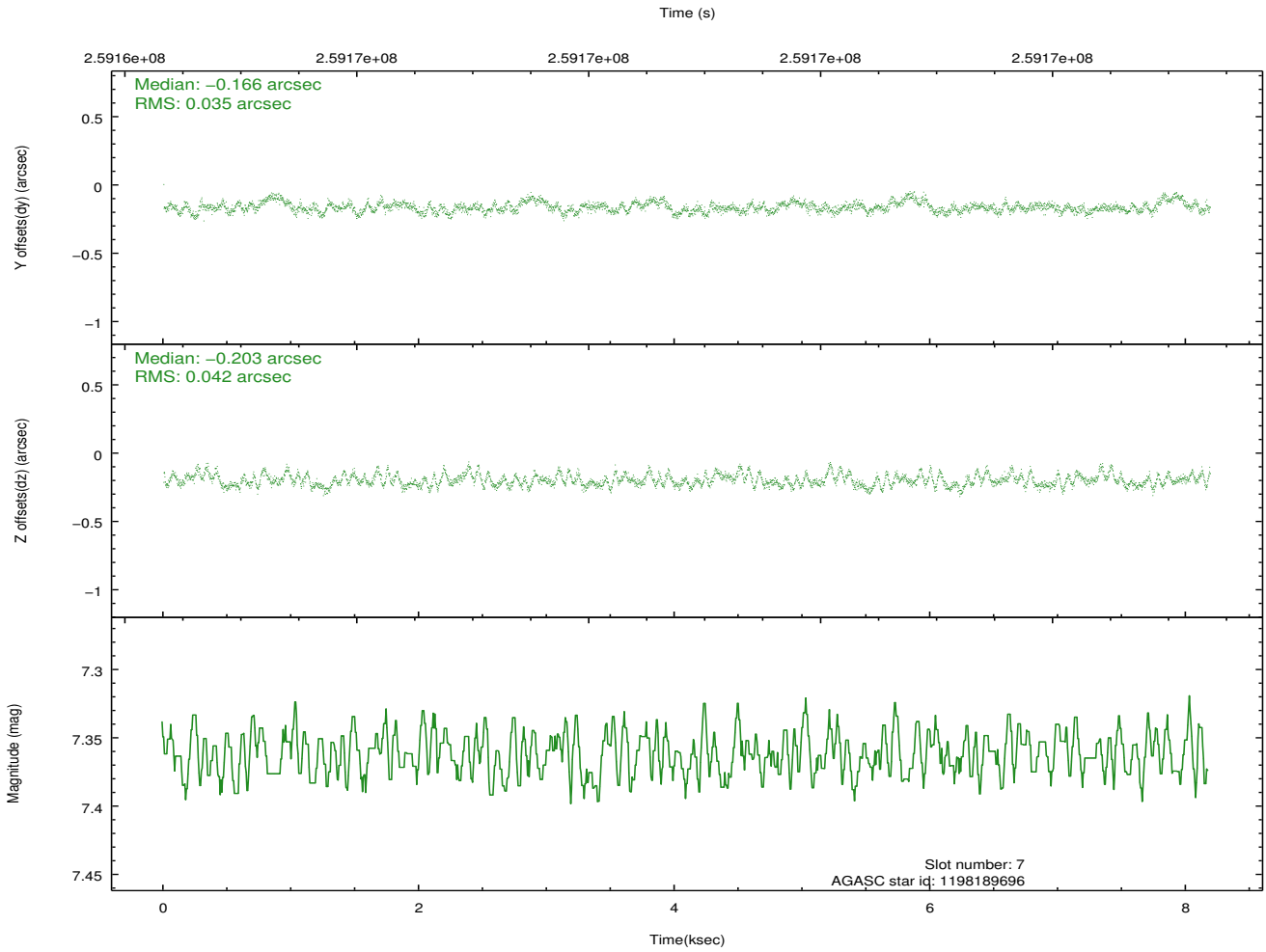
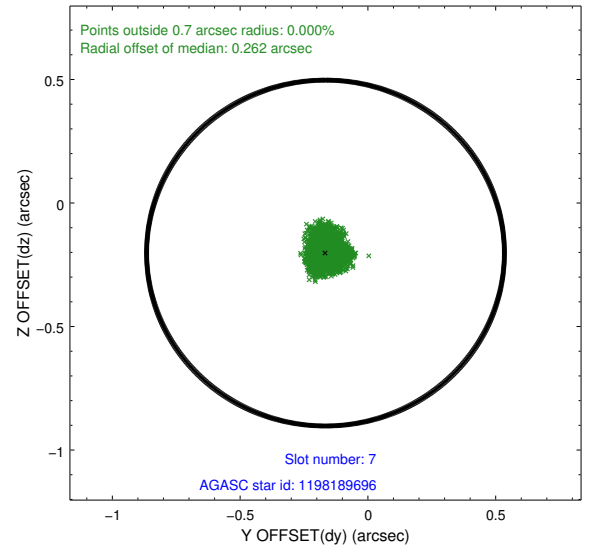
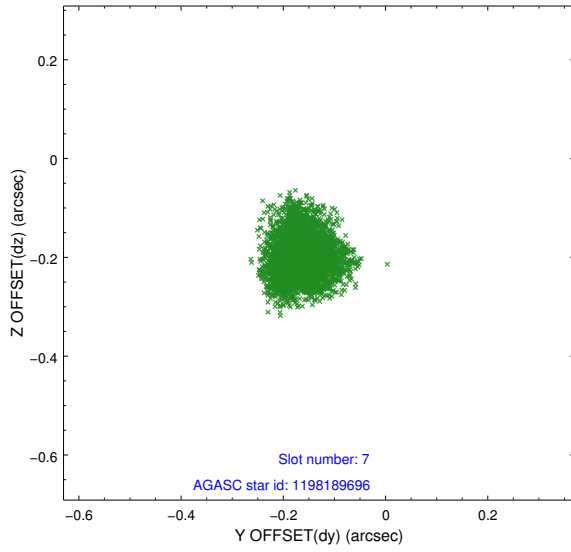


## 2.4.4 Slot 6



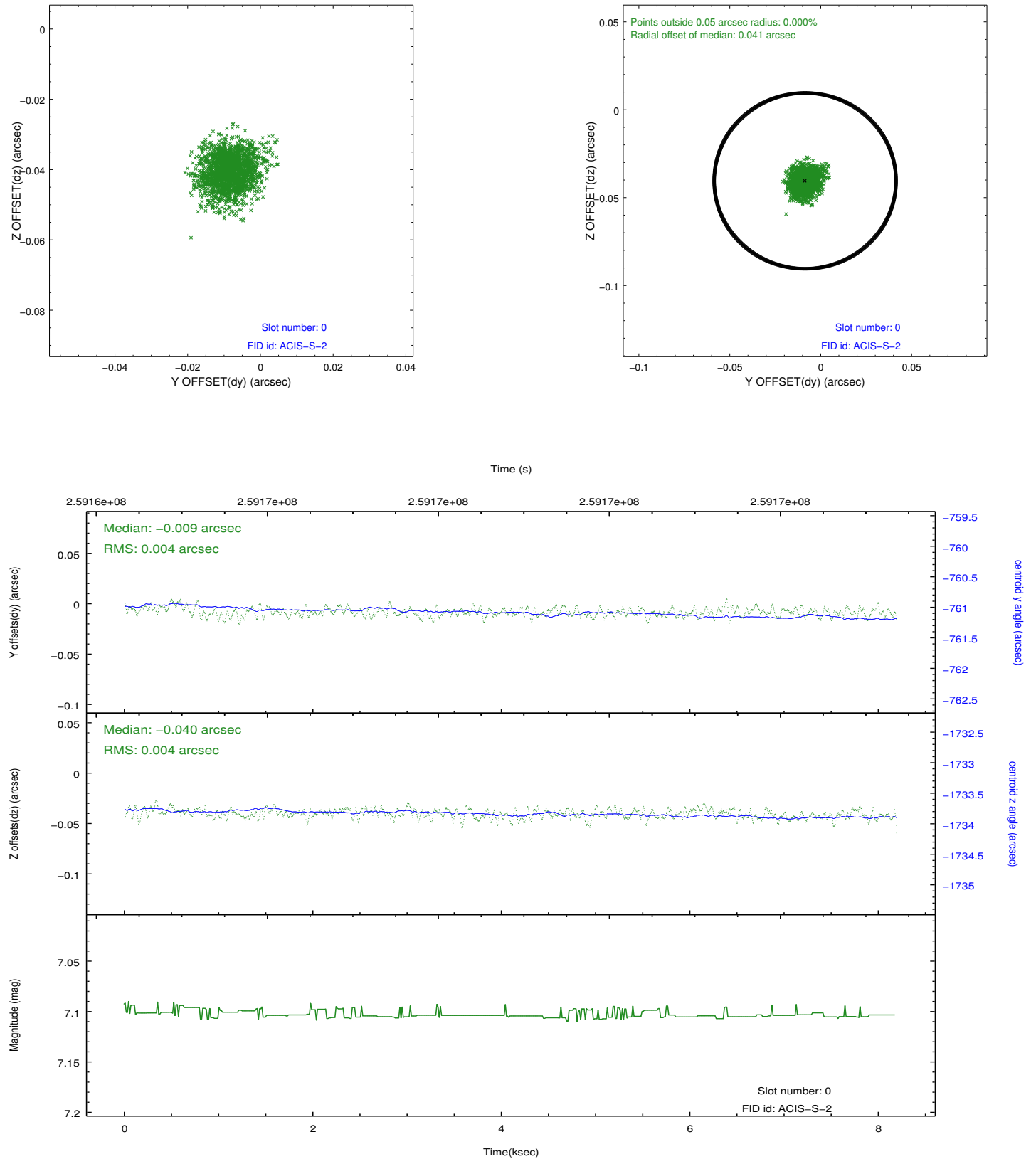


### 2.4.5 Slot 7

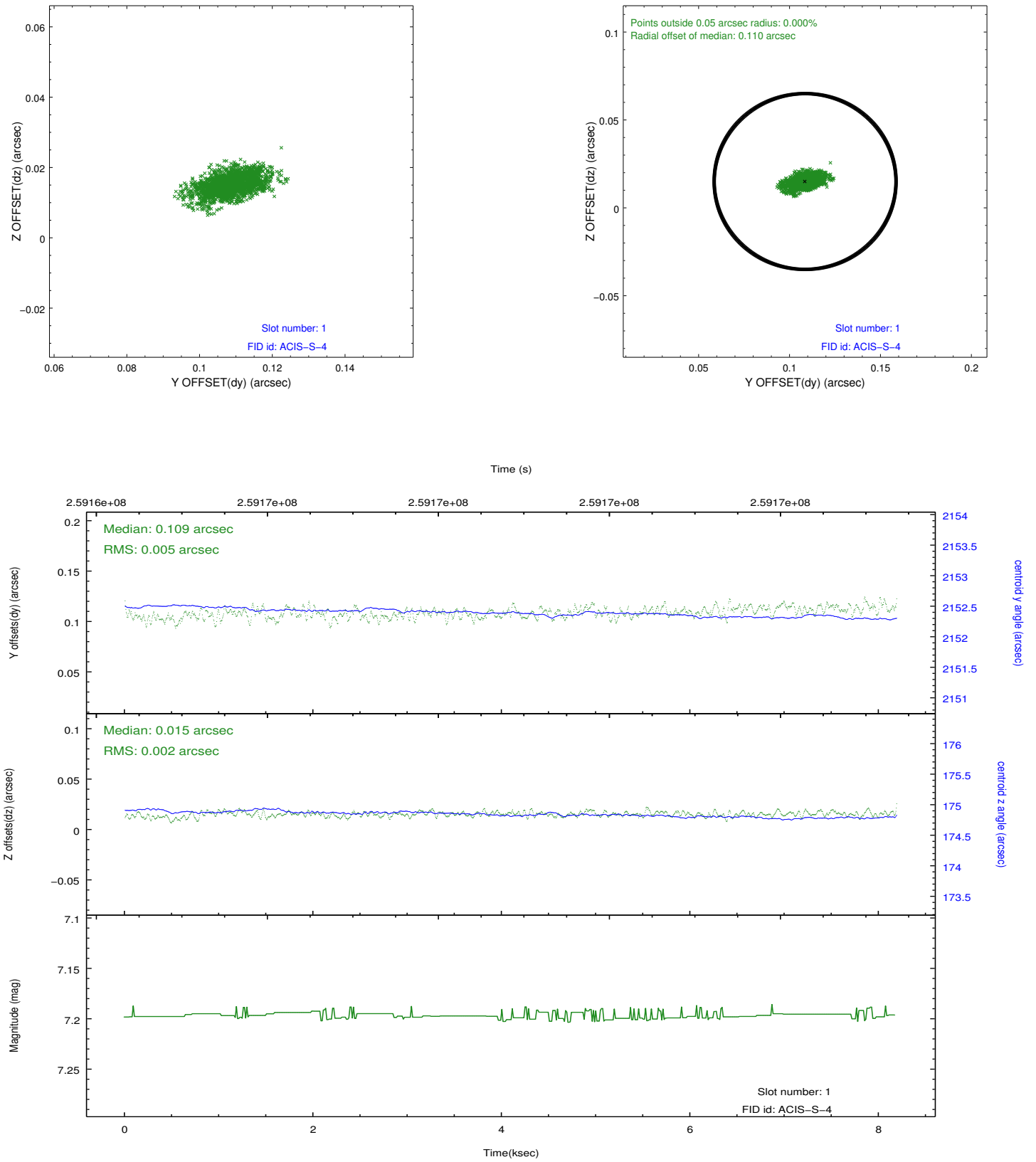


## 2.5 FID Slots

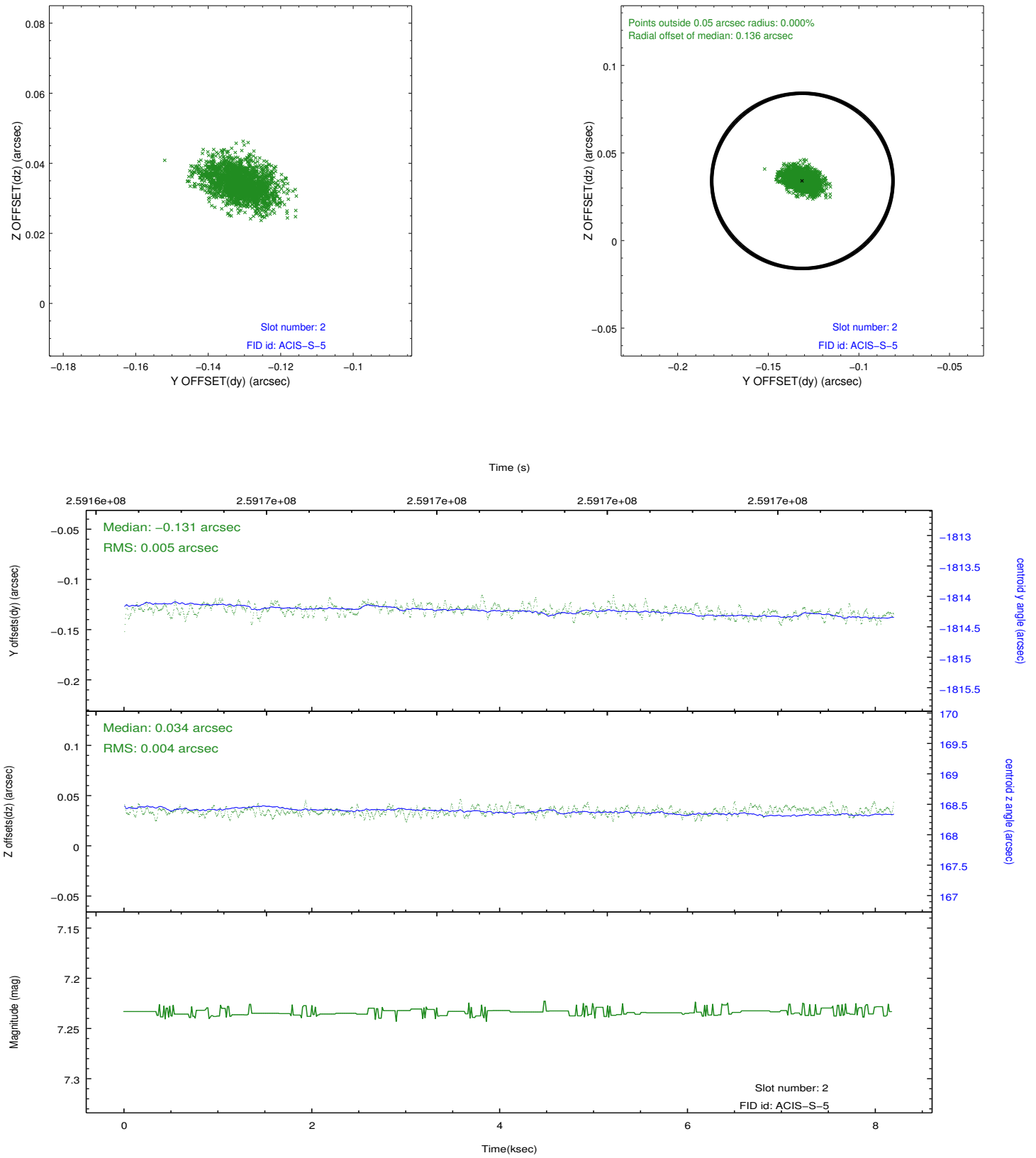
### 2.5.1 Slot 0



## 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	7.75355903

### A.2 Comments

Window constraint met.