

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 1702 - L2 Version 4  
Chandra X-Ray Center

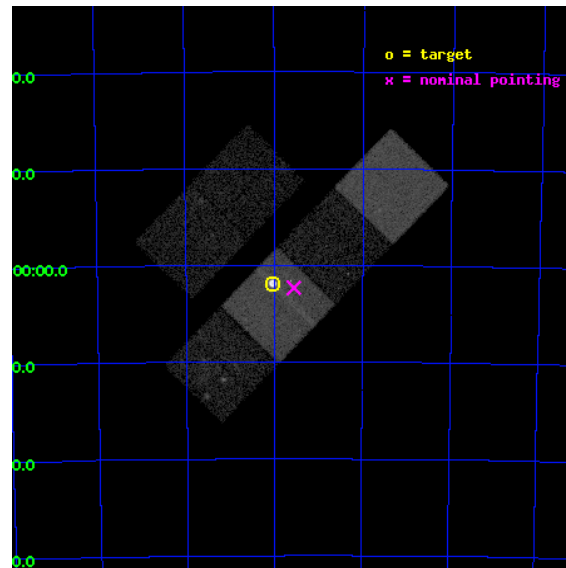
L2 Processing Date : Aug 28 2012

## 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

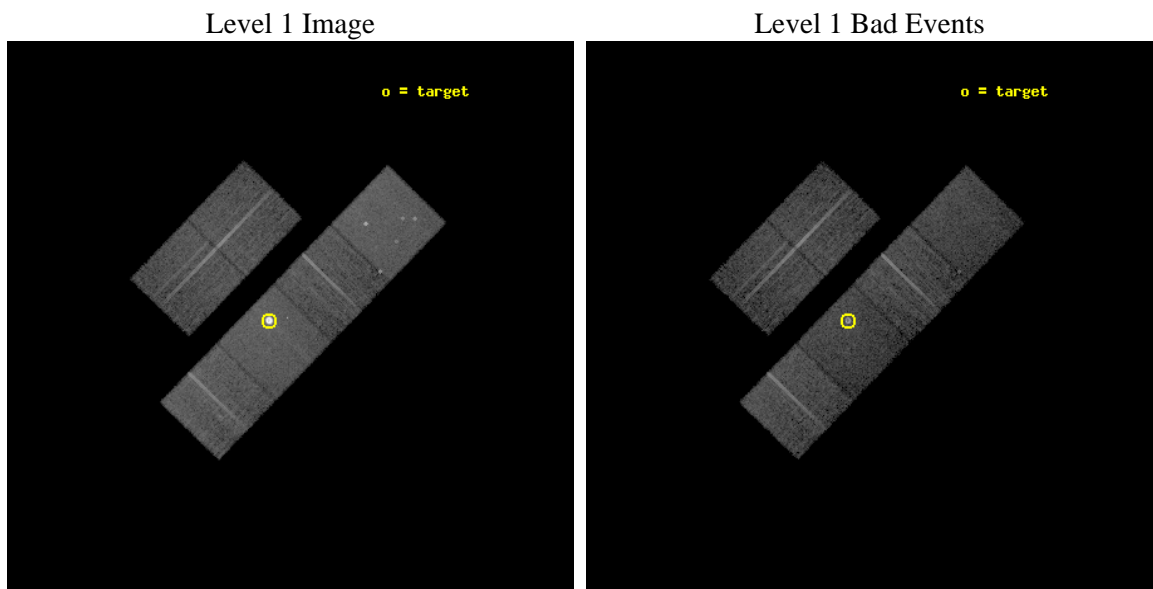
seq_num	590168	Sequence number
obs_id	1702	Observation id
title	ACIS CHIP RESPONSE TO LINES WITH E=0.6-1.5 KEV	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	E0102-72.3 [Chip S3, T=120, Offsets=-1,-2,0]	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	16.01	Observer's specified target RA [deg]
dec_targ	-72.032028	Observer's specified target Dec [deg]
ra_nom	15.88902371421	Nominal RA [deg]
dec_nom	-72.038828969398	Nominal Dec [deg]
roll_nom	134.1057398069	Nominal Roll [deg]
revision	4	Processing version of data
ontime	9632.0000089556	Sum of GTIs [s]
livetime	9510.0338251481	Livetime [s]
ontime2	9632.0000089556	Sum of GTIs [s]
ontime3	9632.0000089556	Sum of GTIs [s]
ontime5	9632.0000089556	Sum of GTIs [s]
ontime6	9632.0000089556	Sum of GTIs [s]
ontime7	9632.0000089556	Sum of GTIs [s]
ontime8	9628.7590487152	Sum of GTIs [s]
l2events	178230	Number of level 2 events



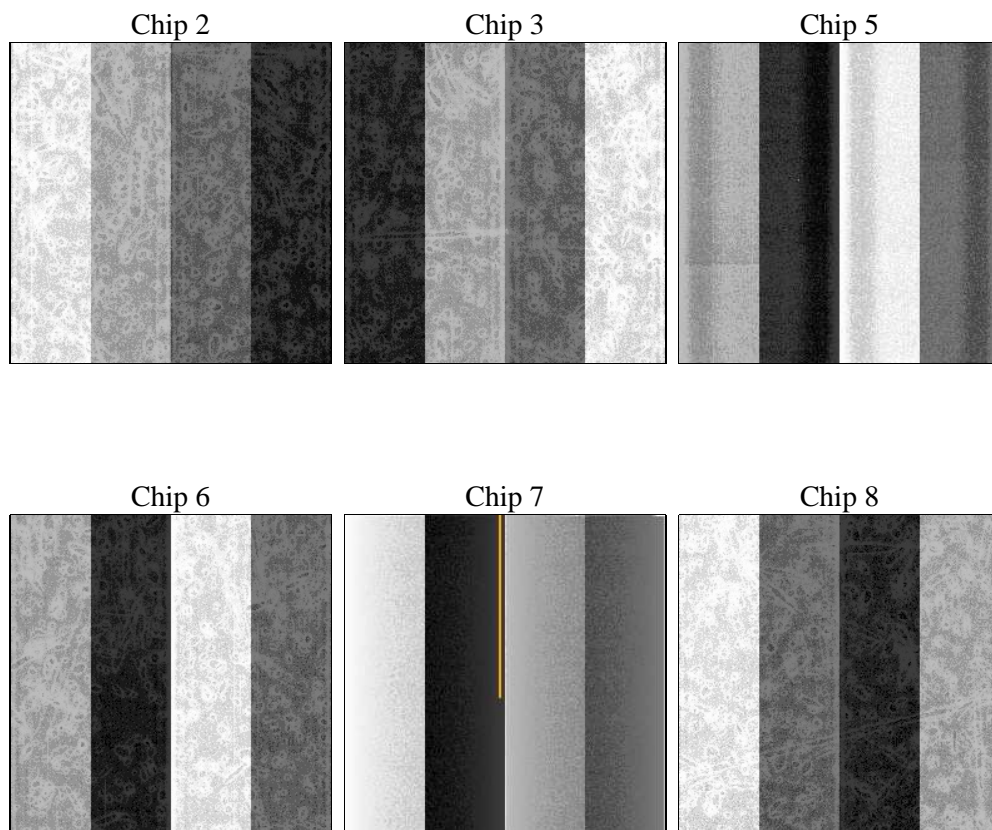
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	9632.0000089556	Sum of GTIs [s]
caldbver	4.5.1.1	&#160	ontime2	9632.0000089556	Sum of GTIs [s]
date	2012-08-28T05:22:23	Date and time of file creation	ontime3	9632.0000089556	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	9632.0000089556	Sum of GTIs [s]
			ontime6	9632.0000089556	Sum of GTIs [s]
			ontime7	9632.0000089556	Sum of GTIs [s]
			ontime8	9628.7590487152	Sum of GTIs [s]
			l1events	524161	Number of level 1 events

### 2.1.4 Events

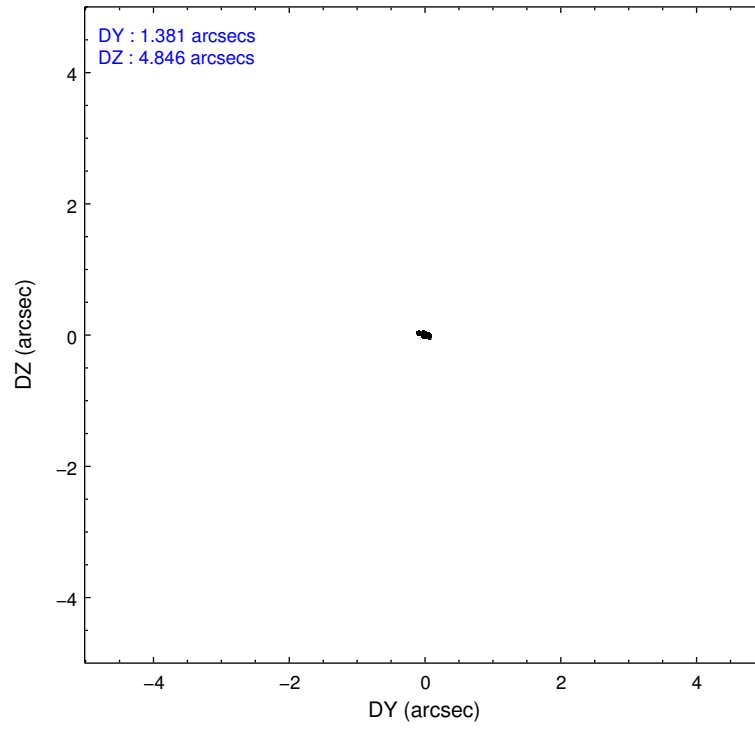
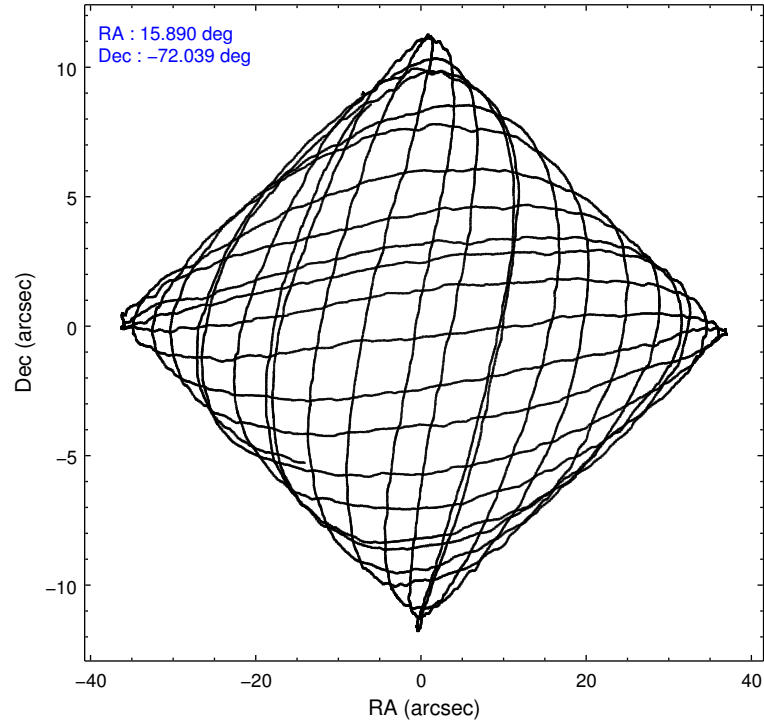
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	65364	62269	86338	65882	163185	81123	grade 0 events	2781	3051	6781	3136	34856	5598
rejected events	58722	55362	44708	58580	46234	65573		4%	4%	7%	4%	21%	6%
rejected %	89%	88%	51%	88%	28%	80%	grade 1 events	28	35	178	23	841	60
								0%	0%	0%	0%	0%	0%
							grade 2 events	1366	1279	11107	1407	28926	3221
								2%	2%	12%	2%	17%	3%
							grade 3 events	626	686	1830	705	13034	1501
								0%	1%	2%	1%	7%	1%
							grade 4 events	656	716	1754	695	12989	1415
								1%	1%	2%	1%	7%	1%
							grade 5 events	1992	2102	6525	2373	8809	3070
								3%	3%	7%	3%	5%	3%
							grade 6 events	1217	1184	20183	1367	27227	3821
								1%	1%	23%	2%	16%	4%
							grade 7 events	56698	53216	37980	56176	36503	62437
								86%	85%	43%	85%	22%	76%

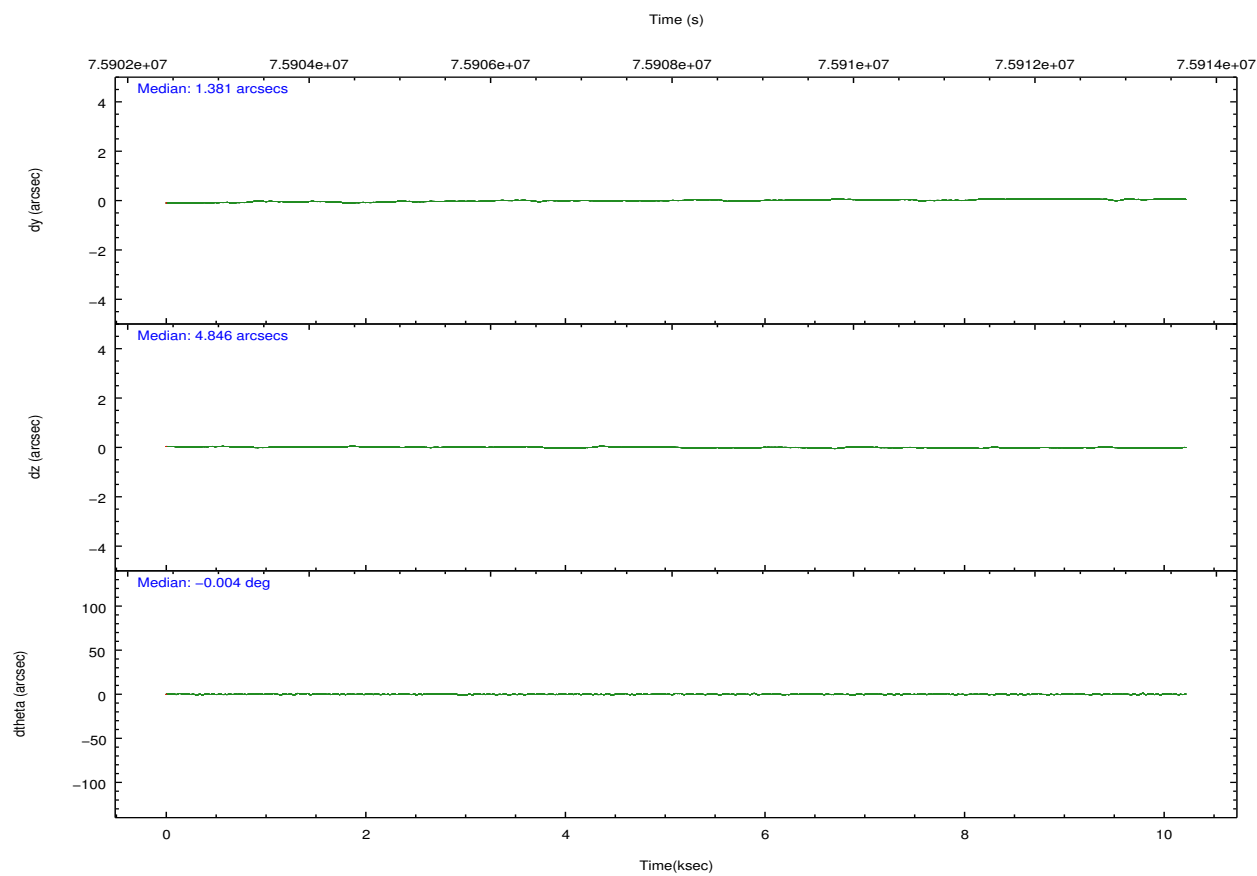
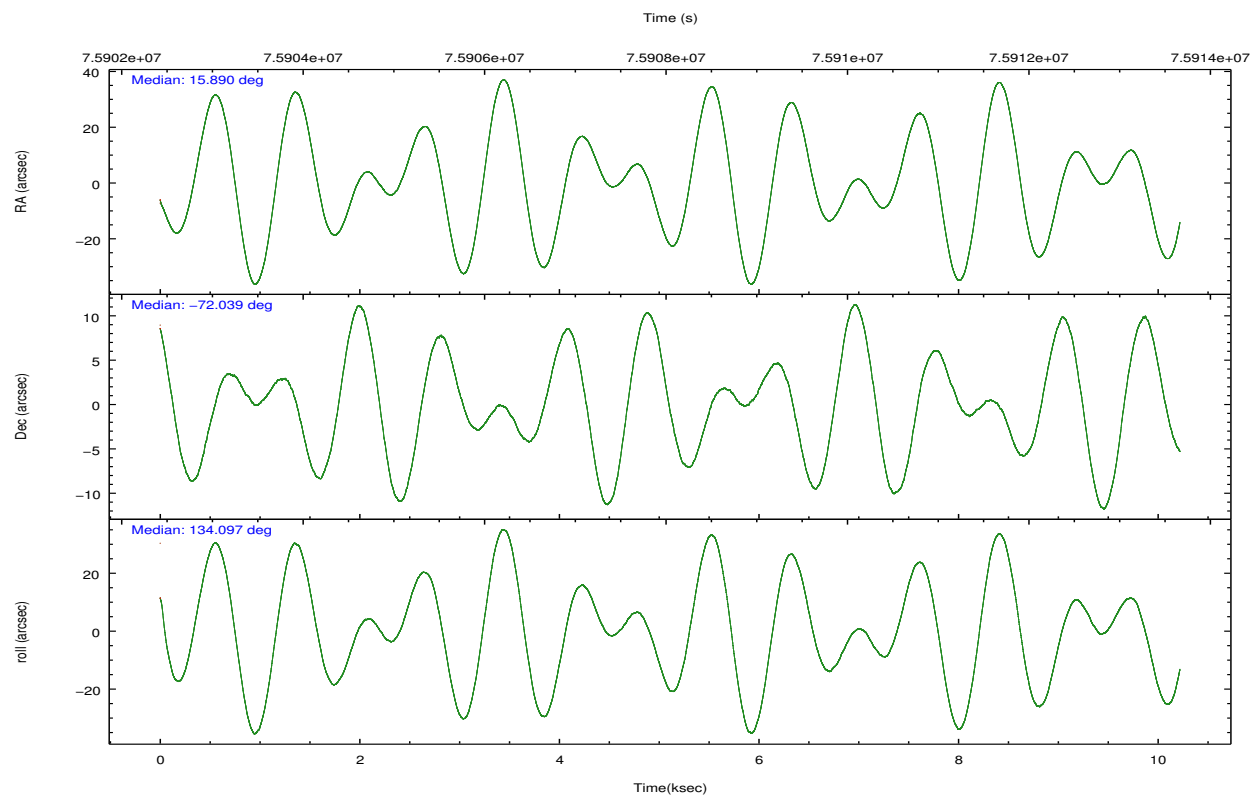


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	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	15.974841	15.8890237142102	Subarray requested	NONE	NONE
[deg] Pointing Dec	-72.046235	-72.0388289693976	Alternating exposures requested	N	N
[deg] Pointing Roll	134.030730	134.1057398068968	[s] Primary exposure time	0.000000	3.2
[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)	75903155.184000	75902759.32064			
Observation start date	2000-05-28T12:11:31	2000-05-28T12:05:59			
[s] Observation end time (MET)	75913155.184000	75914139.38355801			
Observation end date	2000-05-28T14:58:11	2000-05-28T15:15:39			
Read mode	TIMED	TIMED			

## 2.3 Aspect



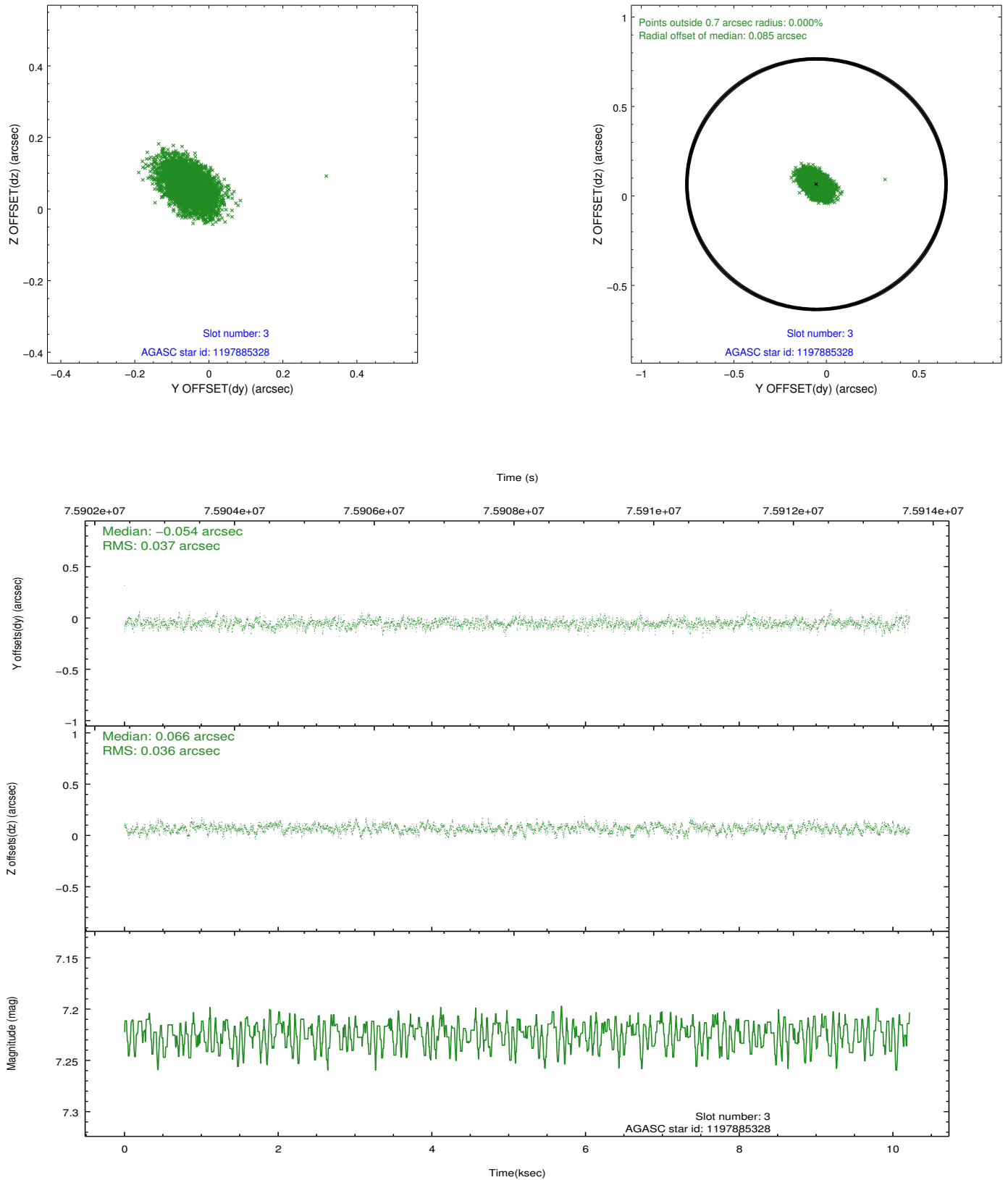


### Slot Statistics

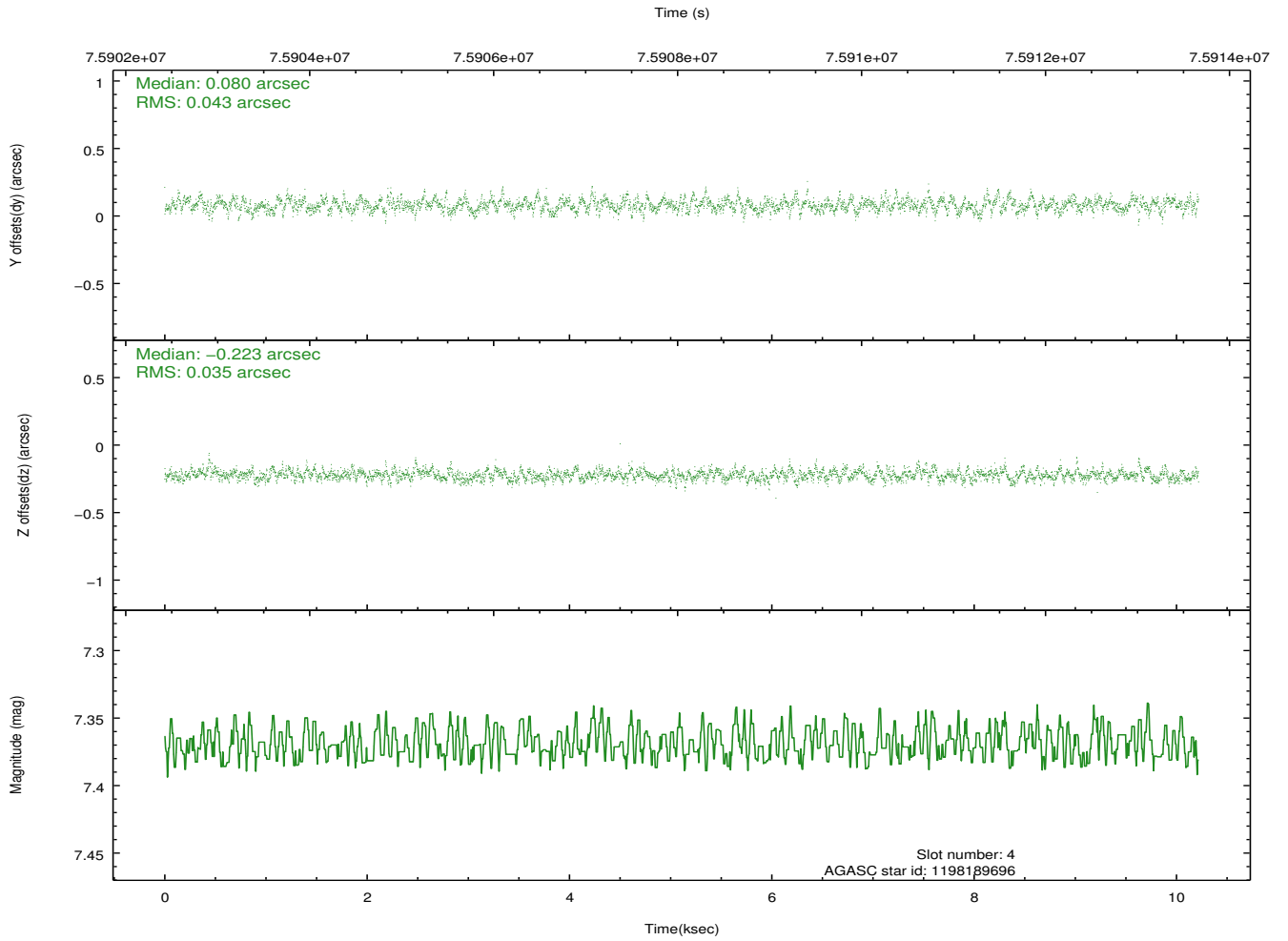
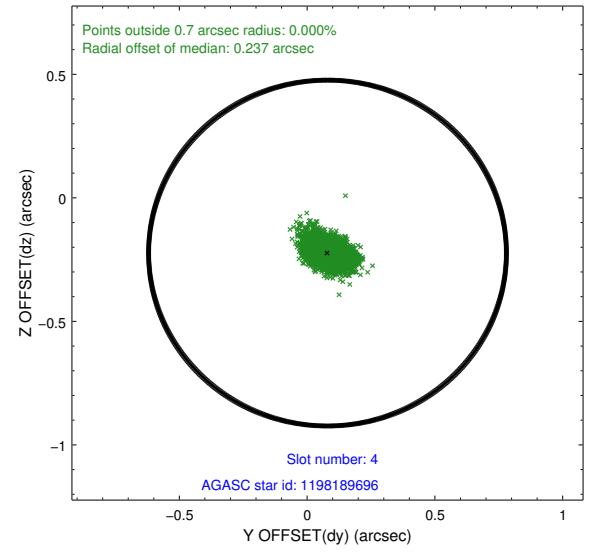
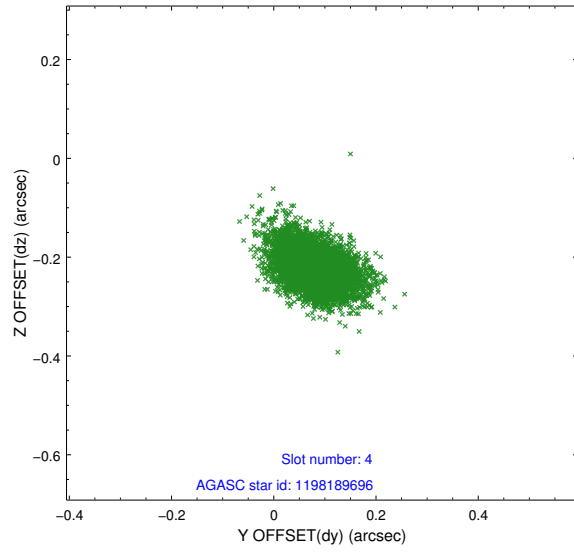
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	2493	-0.032	-0.005	0.007	0.011	0.000000	0.000000	-754.01	-1725.96
1	FID	ACIS-S-4	7.21	2493	-0.000	0.017	0.006	0.012	0.000000	0.000000	2159.07	182.02
2	FID	ACIS-S-5	7.23	2493	0.001	-0.003	0.007	0.012	0.000000	0.000000	-1806.15	176.26
3	GUIDE	1197885328	7.22	4986	-0.054	0.066	0.054	0.091	16.283090	-71.733943	567.09	-1030.20
4	GUIDE	1198189696	7.37	4986	0.080	-0.223	0.058	0.099	15.223750	-72.697522	-1129.58	2211.21
5	GUIDE	1197750936	7.57	4985	-0.130	0.101	0.061	0.105	15.387940	-71.549550	1748.80	-758.38
6	GUIDE	1197884536	8.50	4985	-0.004	0.055	0.067	0.111	17.160729	-71.835289	-386.76	-1475.19
7	GUIDE	1197749664	9.57	4979	0.109	0.002	0.088	0.145	15.809015	-72.366369	-702.18	931.32

## 2.4 Star Slots

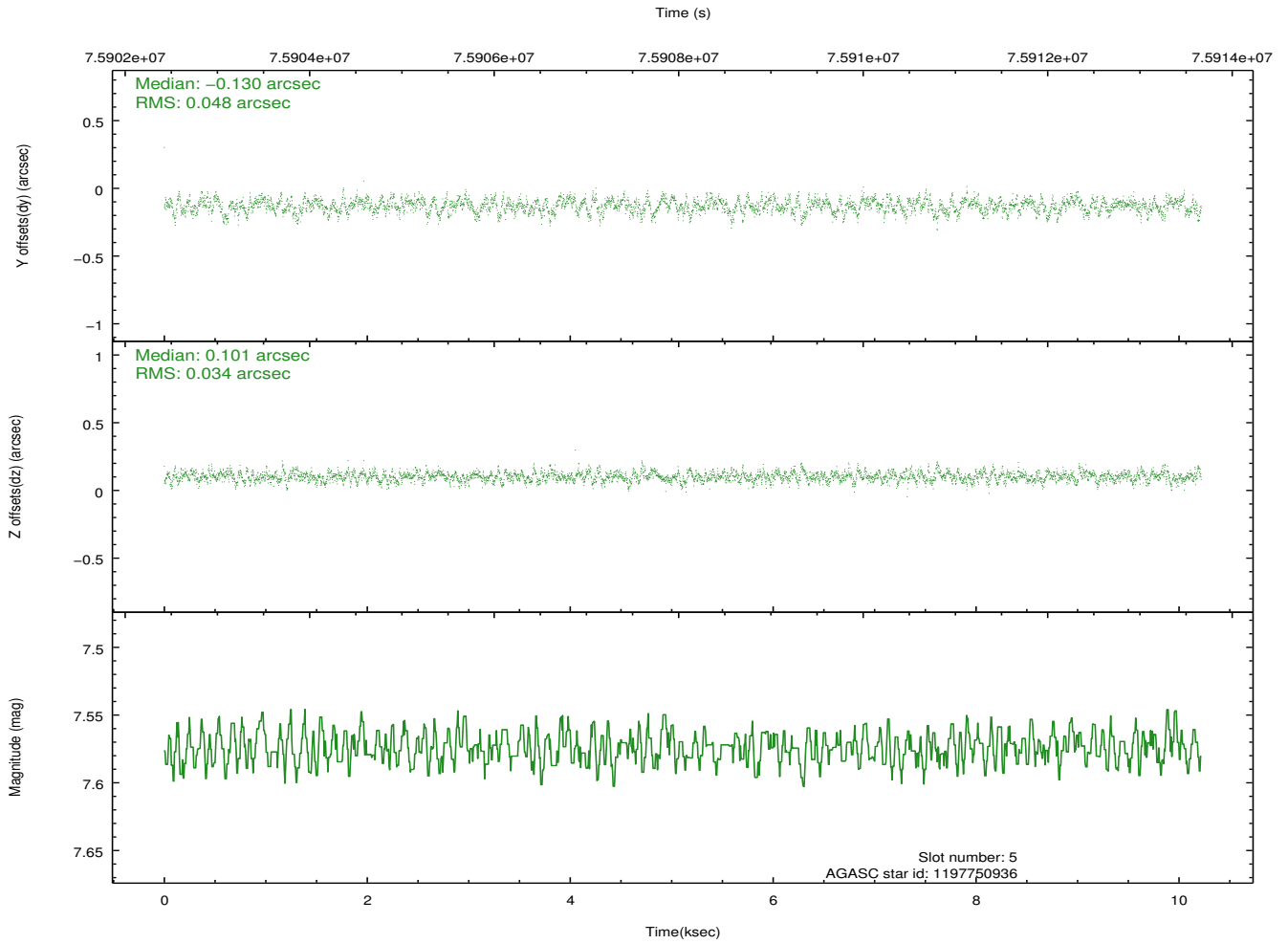
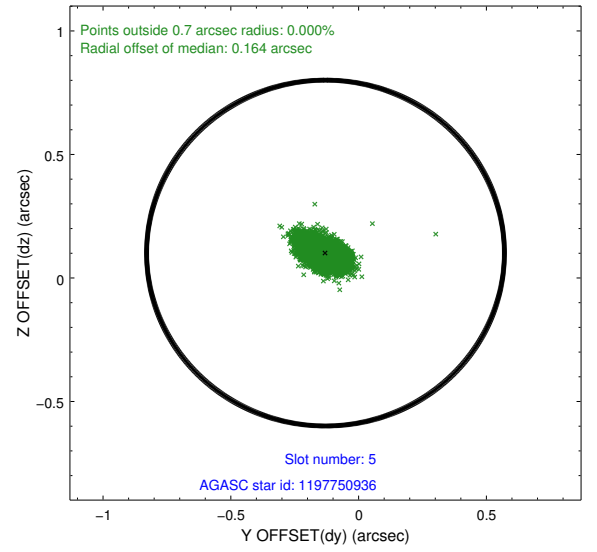
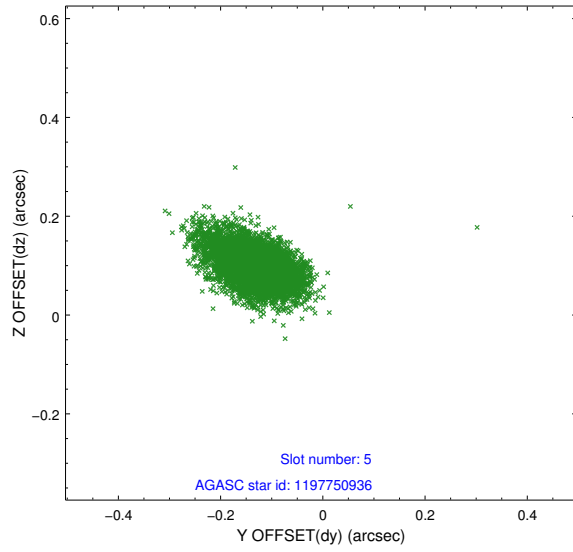
### 2.4.1 Slot 3



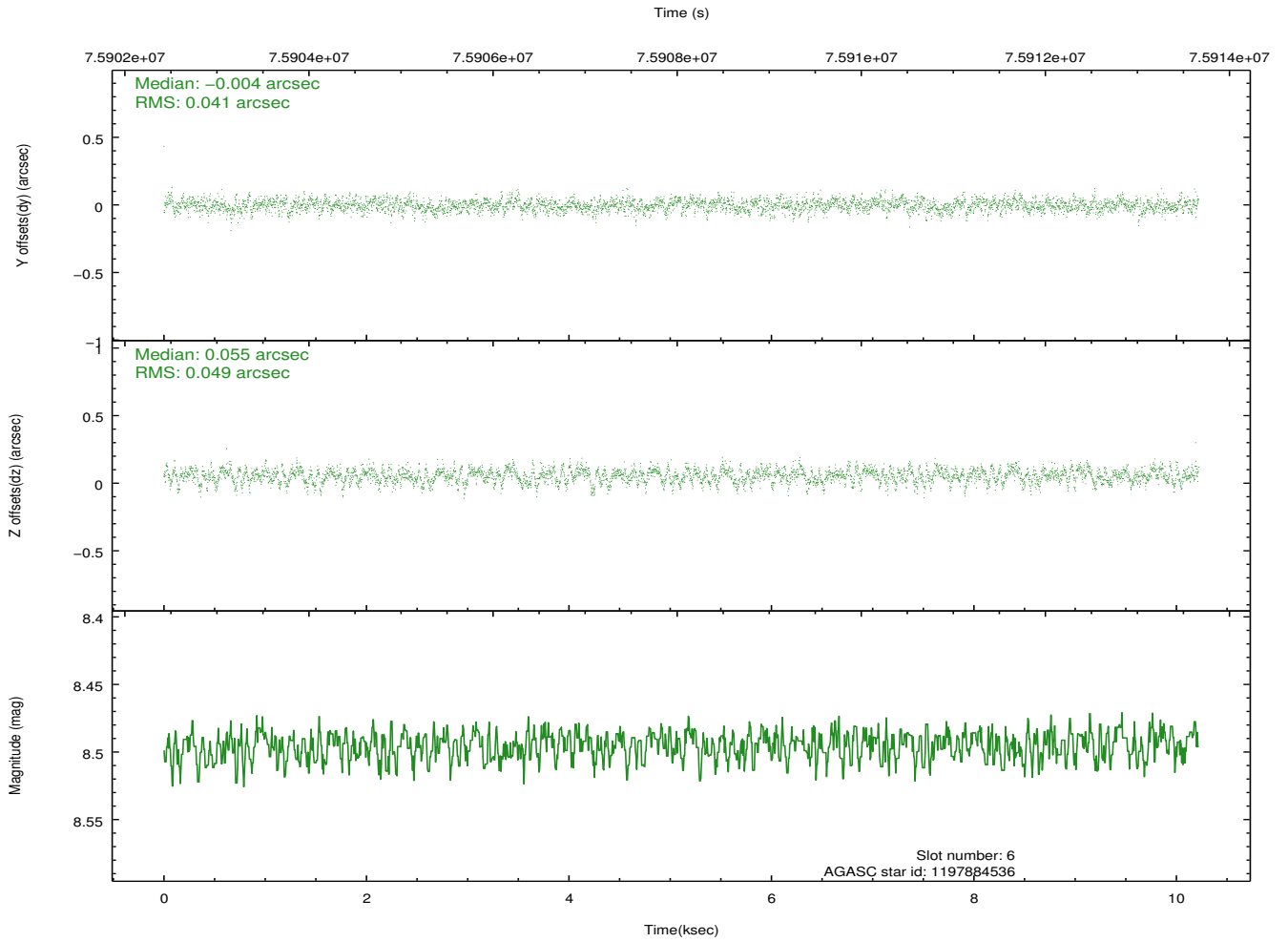
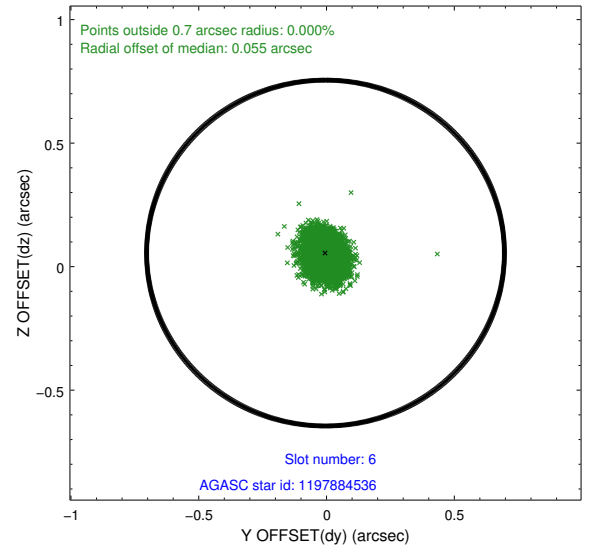
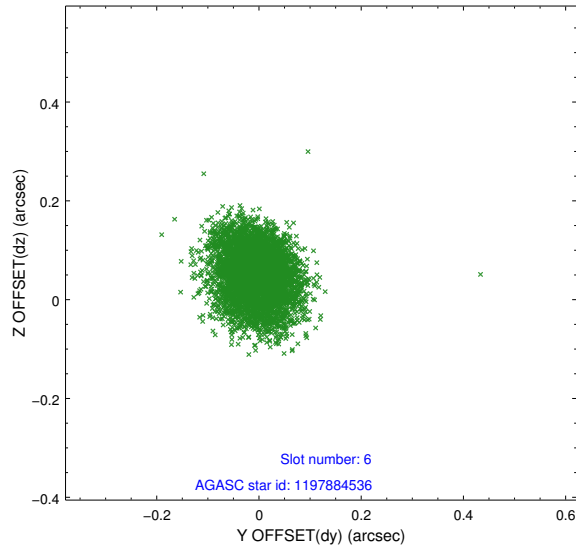
## 2.4.2 Slot 4



### 2.4.3 Slot 5

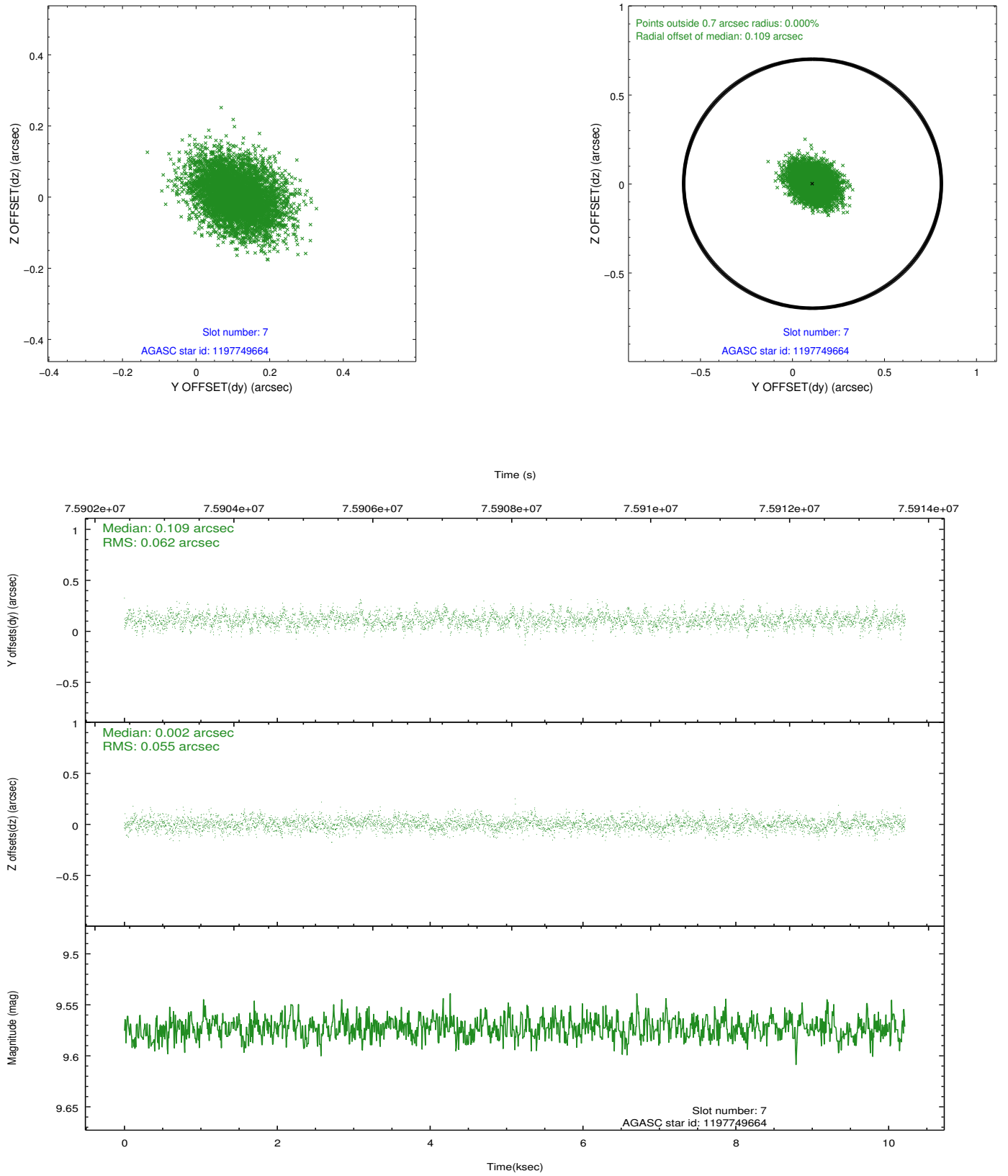


## 2.4.4 Slot 6



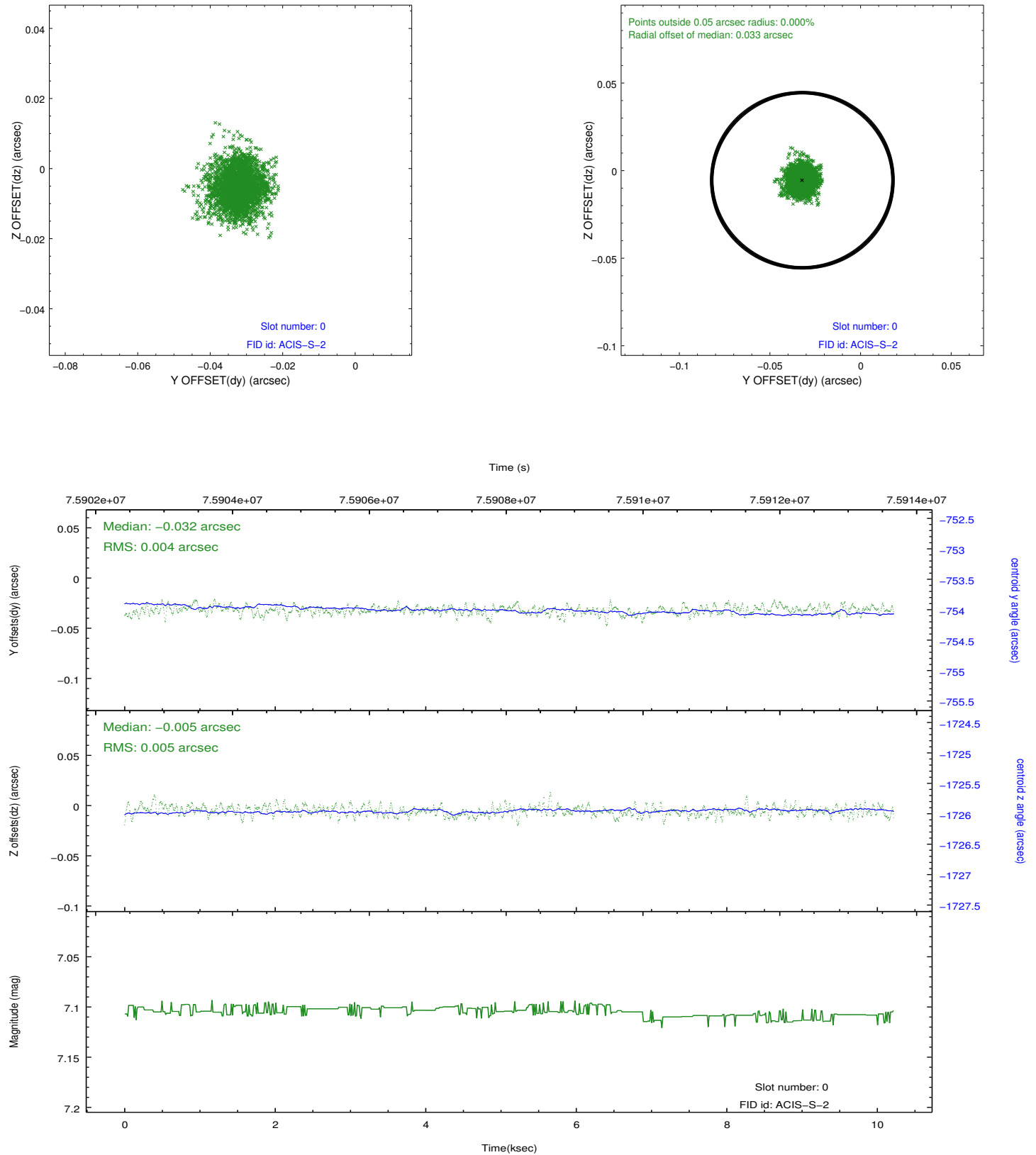


## 2.4.5 Slot 7

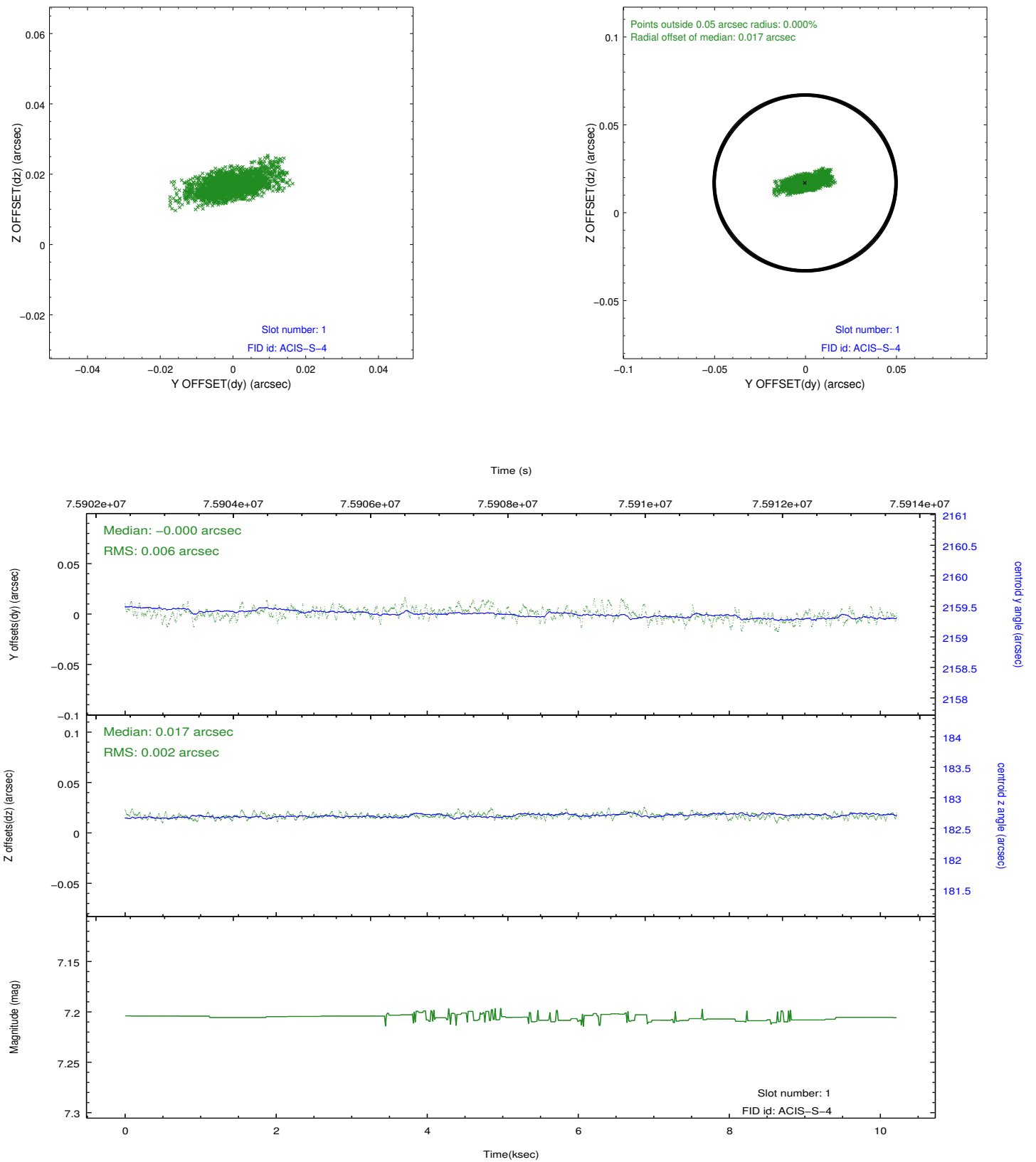


## 2.5 FID Slots

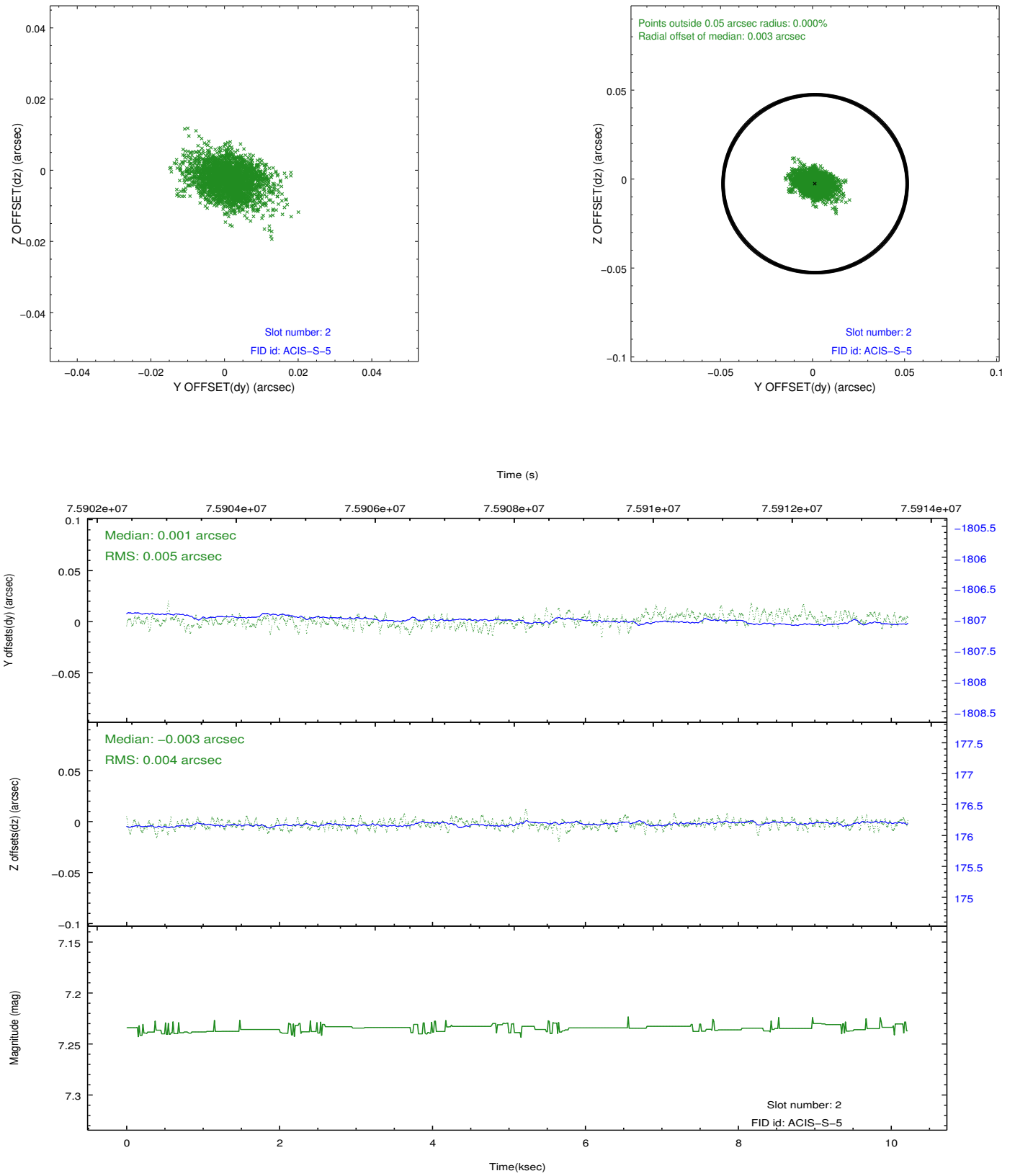
### 2.5.1 Slot 0



## 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)	2012.08.30
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.635

### A.2 Comments

Monitor constraint not met, but CDO judged original constraint to be too tight