

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 497 - L2 Version 4  
Chandra X-Ray Center

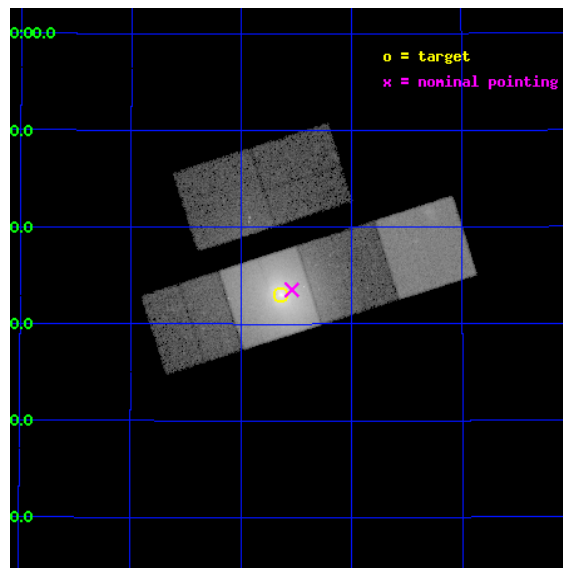
L2 Processing Date : Aug 28 2012

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# 1 Front

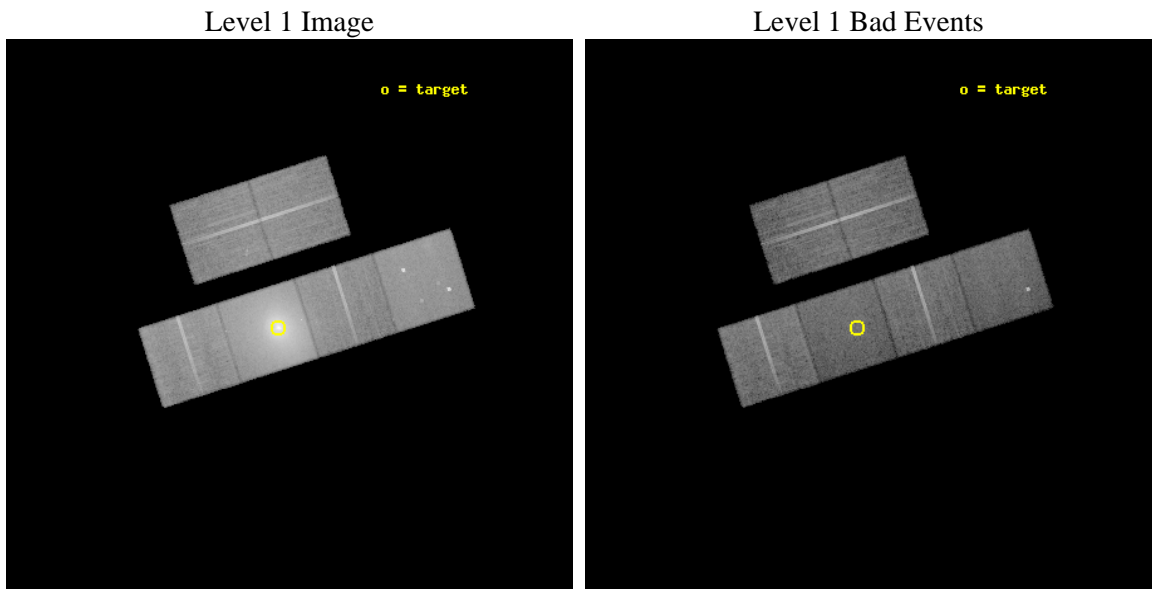
seq_num	800005	Sequence number
obs_id	497	Observation id
title	THE COOLING FLOW IN A2199	Proposal title
observer	Professor Andrew Fabian	Principal investigator
object	A2199	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	247.160417	Observer's specified target RA [deg]
dec_targ	39.550833	Observer's specified target Dec [deg]
ra_nom	247.13518315383	Nominal RA [deg]
dec_nom	39.559003604574	Nominal Dec [deg]
roll_nom	162.32860813027	Nominal Roll [deg]
revision	4	Processing version of data
ontime	19720.092486322	Sum of GTIs [s]
livetime	19470.384801246	Livetime [s]
ontime2	19713.651575938	Sum of GTIs [s]
ontime3	19716.728386149	Sum of GTIs [s]
ontime5	19720.051446319	Sum of GTIs [s]
ontime6	19720.01040633	Sum of GTIs [s]
ontime7	19720.092486322	Sum of GTIs [s]
ontime8	19719.928326324	Sum of GTIs [s]
l2events	608407	Number of level 2 events



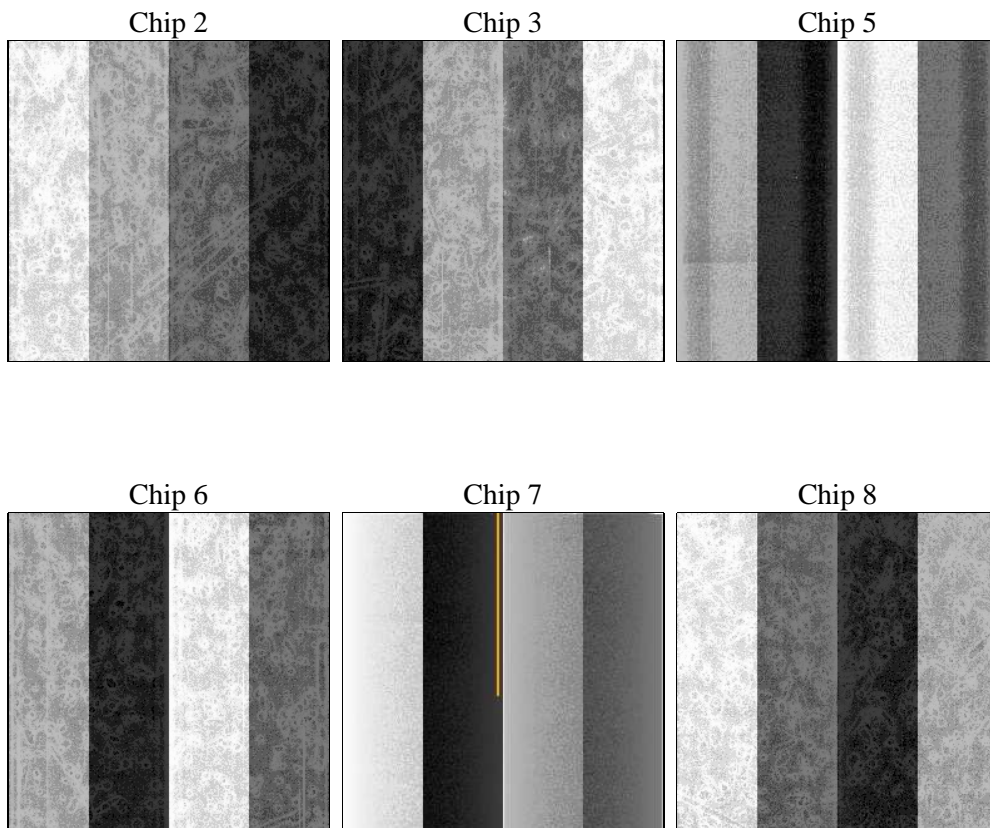
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	19875.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	19720.092486322	Sum of GTIs [s]
caldsver	4.5.1.1	&#160	ontime2	19713.651575938	Sum of GTIs [s]
date	2012-08-27T18:59:09	Date and time of file creation	ontime3	19716.728386149	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	19720.051446319	Sum of GTIs [s]
			ontime6	19720.01040633	Sum of GTIs [s]
			ontime7	19720.092486322	Sum of GTIs [s]
			ontime8	19719.928326324	Sum of GTIs [s]
			l1events	1371000	Number of level 1 events

### 2.1.4 Events

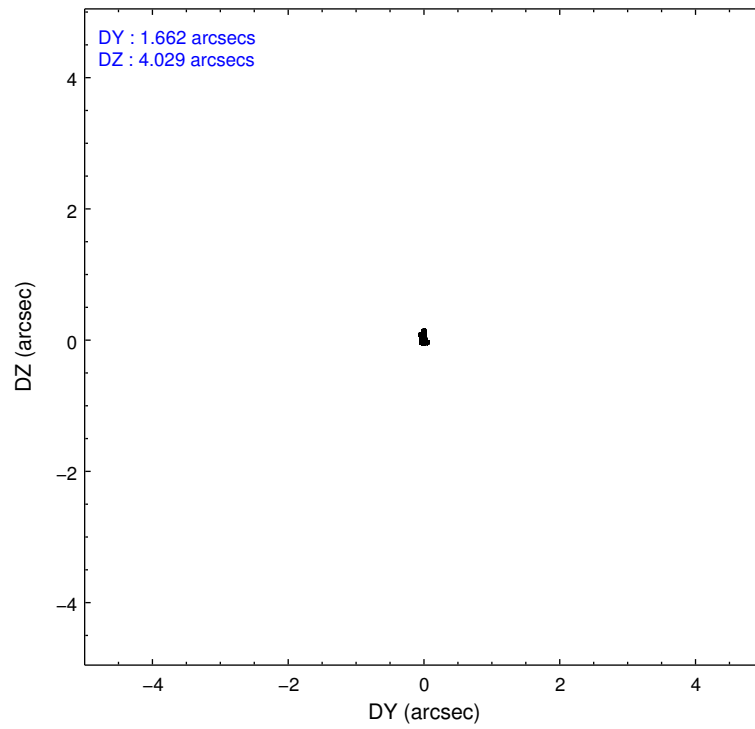
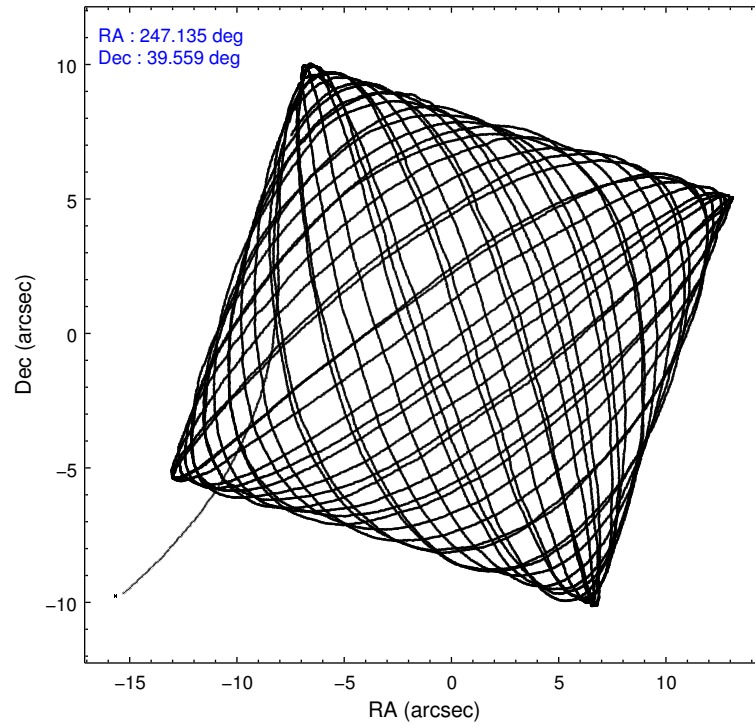
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	151532	148588	194855	166469	524007	185549	grade 0 events	9623	12973	14436	27847	131683	19440
rejected events	132812	126027	98619	125415	96046	141492		6%	8%	7%	16%	25%	10%
rejected %	87%	84%	50%	75%	18%	76%	grade 1 events	80	89	192	125	295	149
								0%	0%	0%	0%	0%	0%
							grade 2 events	3419	3586	28017	5351	104611	8086
								2%	2%	14%	3%	19%	4%
							grade 3 events	1466	1614	4601	2228	47053	4064
								0%	1%	2%	1%	8%	2%
							grade 4 events	1517	1675	4290	2260	46635	3753
								1%	1%	2%	1%	8%	2%
							grade 5 events	4313	4696	14879	5348	17837	6604
								2%	3%	7%	3%	3%	3%
							grade 6 events	2702	2720	44903	3373	98057	8737
								1%	1%	23%	2%	18%	4%
							grade 7 events	128412	121235	83537	119937	77836	134716
								84%	81%	42%	72%	14%	72%

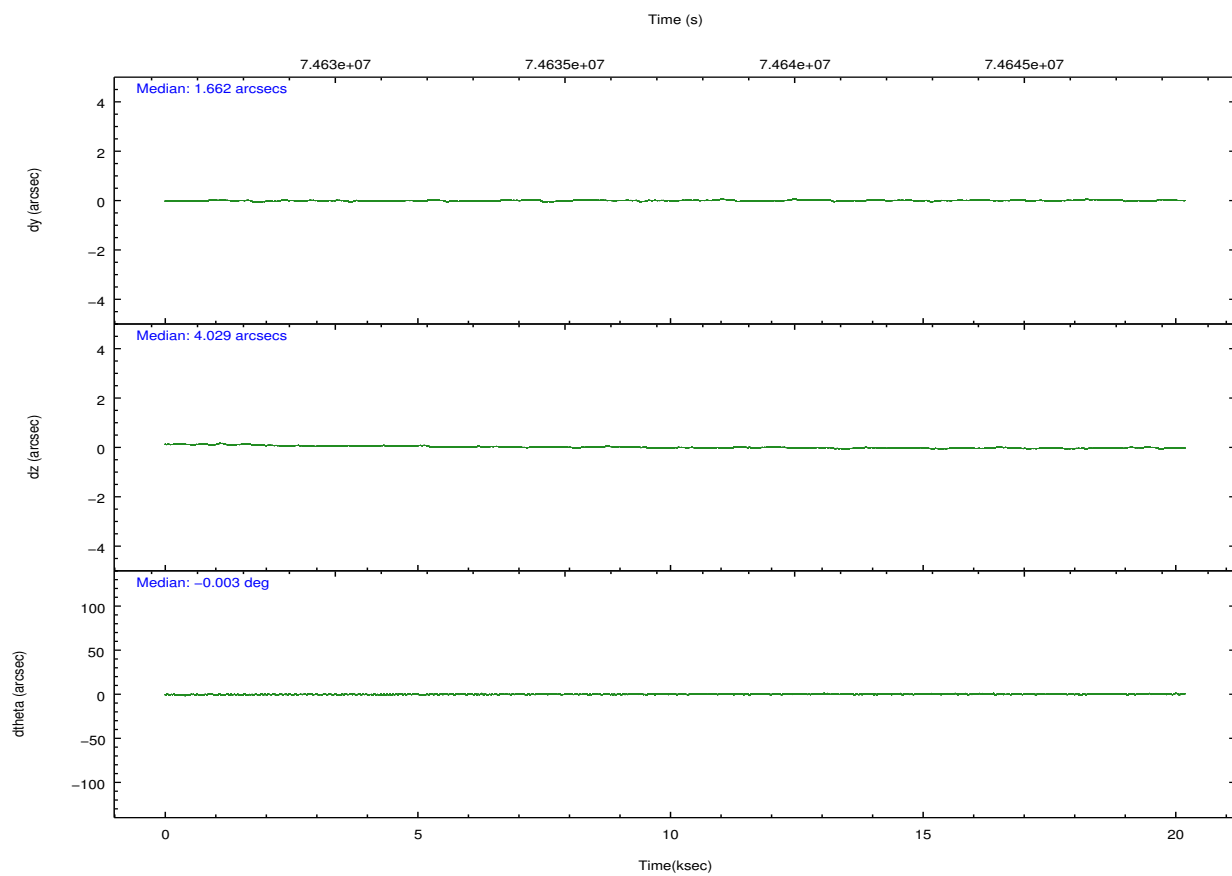
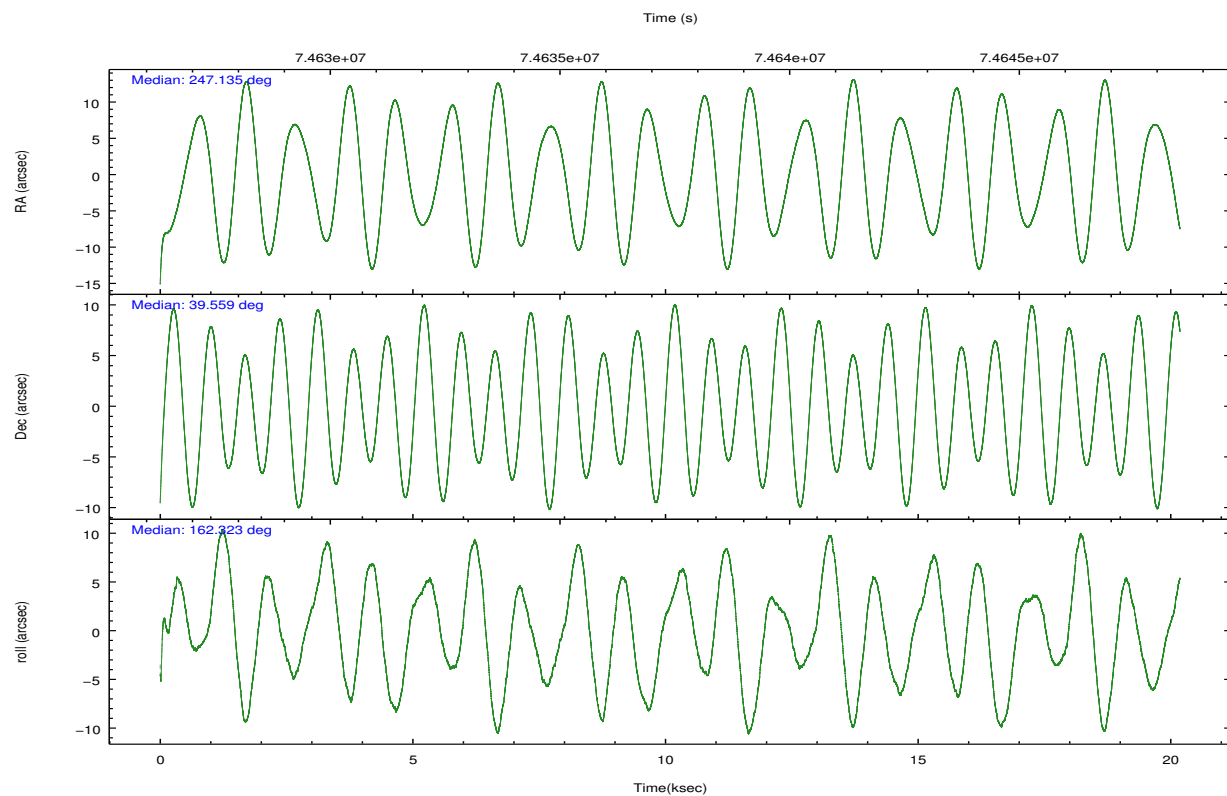
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-235678	ACIS-235678
Grating	NONE	NONE
Data mode	FAINT	FAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	247.169937	247.135183153835
[deg] Pointing Dec	39.564924	39.55900360457405
[deg] Pointing Roll	162.149850	162.3286081302713
[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)	74627610.184000	74626575.33624899
Observation start date	2000-05-13T17:52:26	2000-05-13T17:36:15
[s] Observation end time (MET)	74647485.184000	74648364.787049
Observation end date	2000-05-13T23:23:41	2000-05-13T23:39:24
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



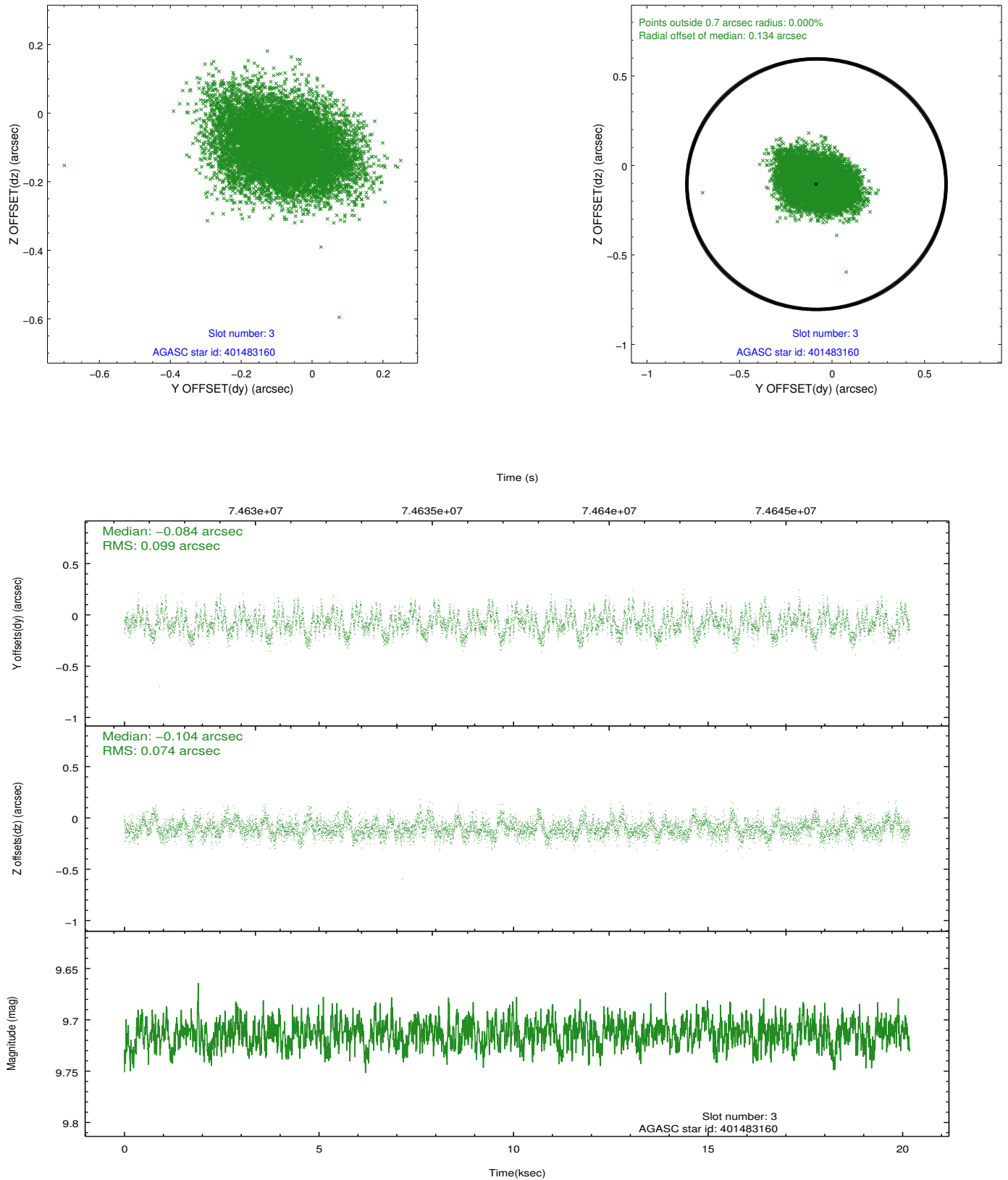


### Slot Statistics

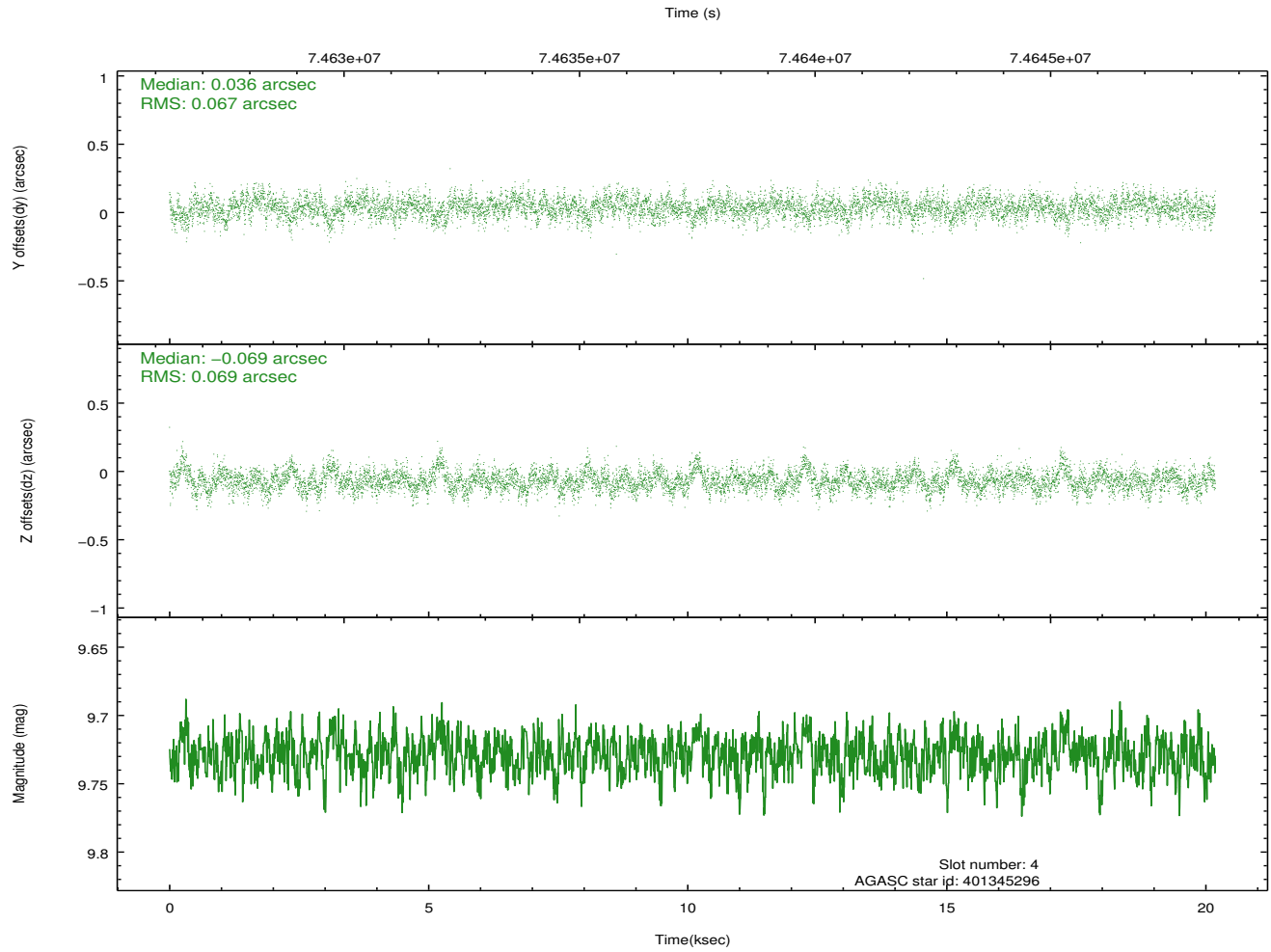
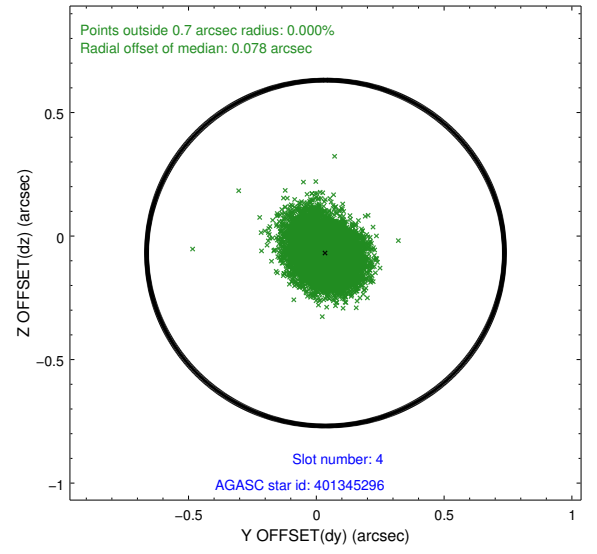
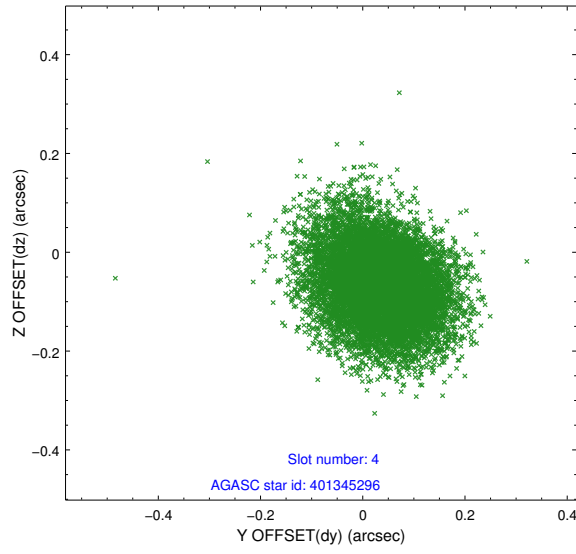
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	4923	-0.013	-0.013	0.007	0.011	0.000000	0.000000	-754.30	-1725.13
1	FID	ACIS-S-4	7.21	4923	-0.011	0.010	0.005	0.010	0.000000	0.000000	2158.92	183.15
2	FID	ACIS-S-5	7.24	4924	-0.007	0.012	0.007	0.011	0.000000	0.000000	-1806.88	177.08
3	GUIDE	401483160	9.71	9840	-0.084	-0.104	0.132	0.213	247.172429	38.956724	-678.11	2081.92
4	GUIDE	401345296	9.73	9834	0.036	-0.069	0.102	0.169	246.414533	39.580805	2015.17	580.14
5	GUIDE	401479168	9.84	9836	0.016	-0.005	0.090	0.146	248.051525	39.792234	-2066.31	-1537.95
6	GUIDE	401477576	10.10	9832	-0.048	0.161	0.106	0.174	247.618928	39.550611	-1201.38	-335.98
7	GUIDE	401359608	9.98	9831	0.079	0.016	0.117	0.191	246.605613	39.978868	1940.18	-945.68

## 2.4 Star Slots

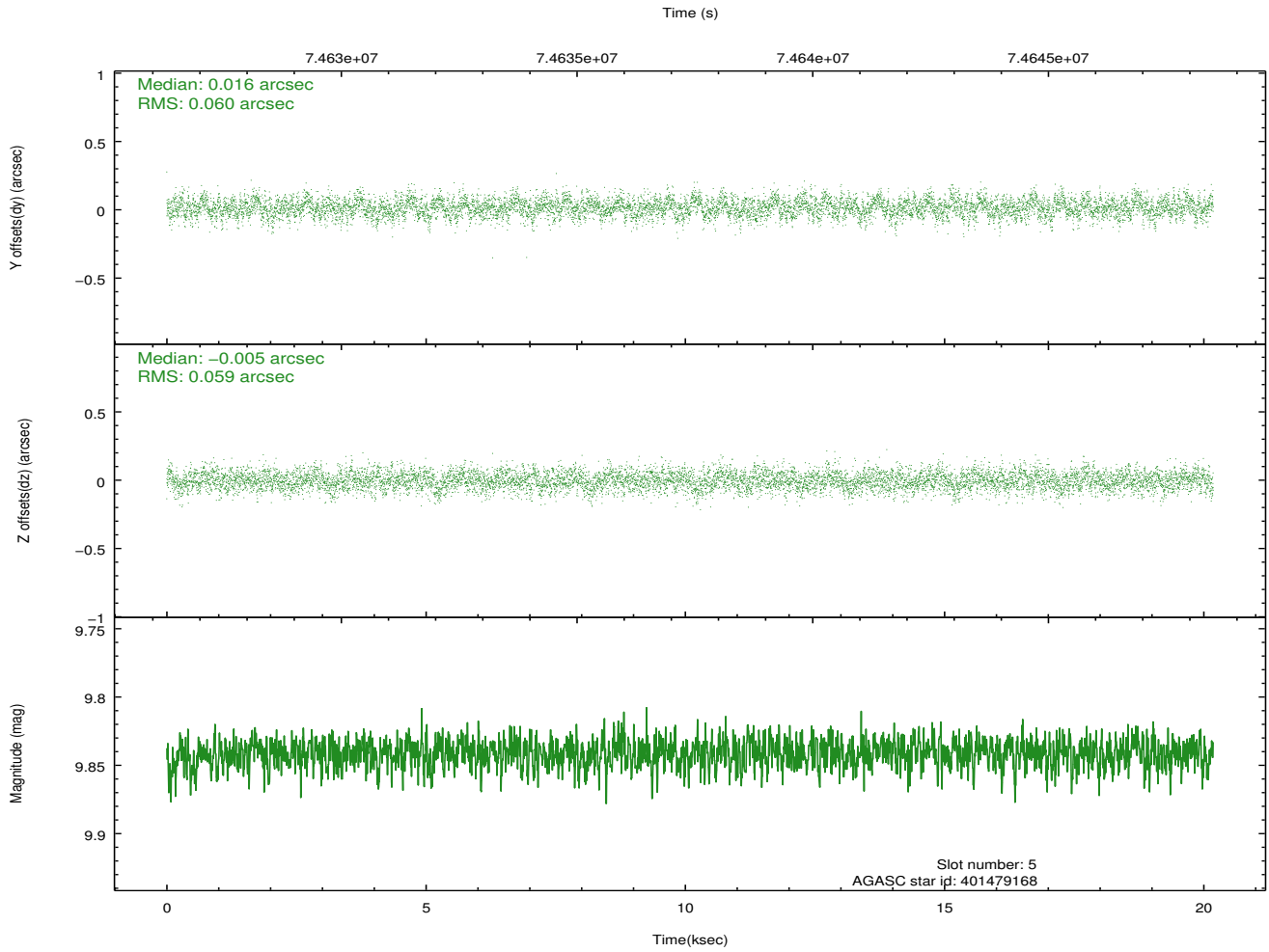
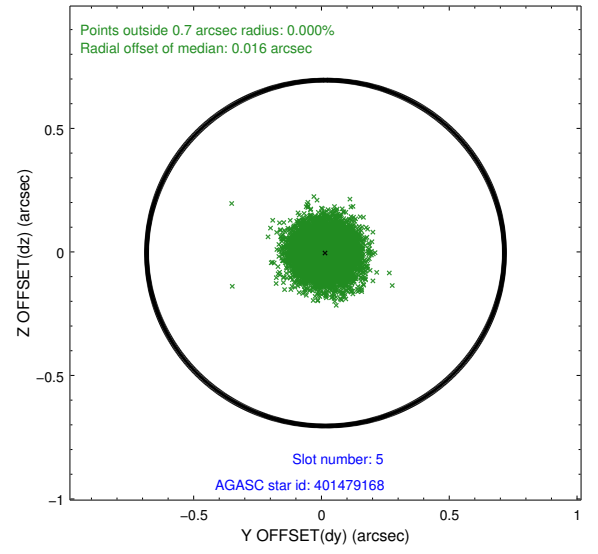
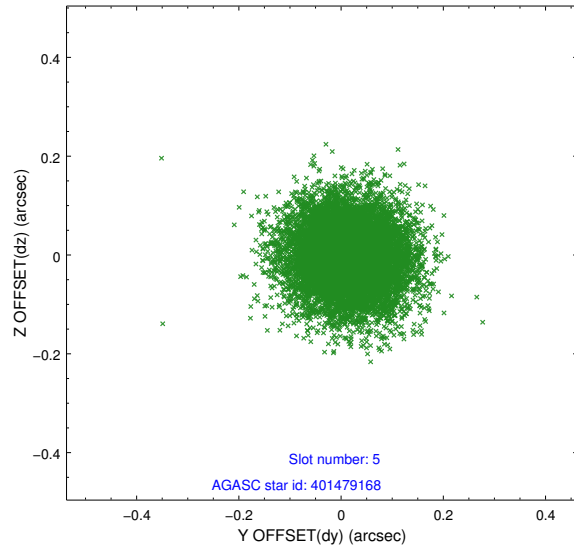
### 2.4.1 Slot 3



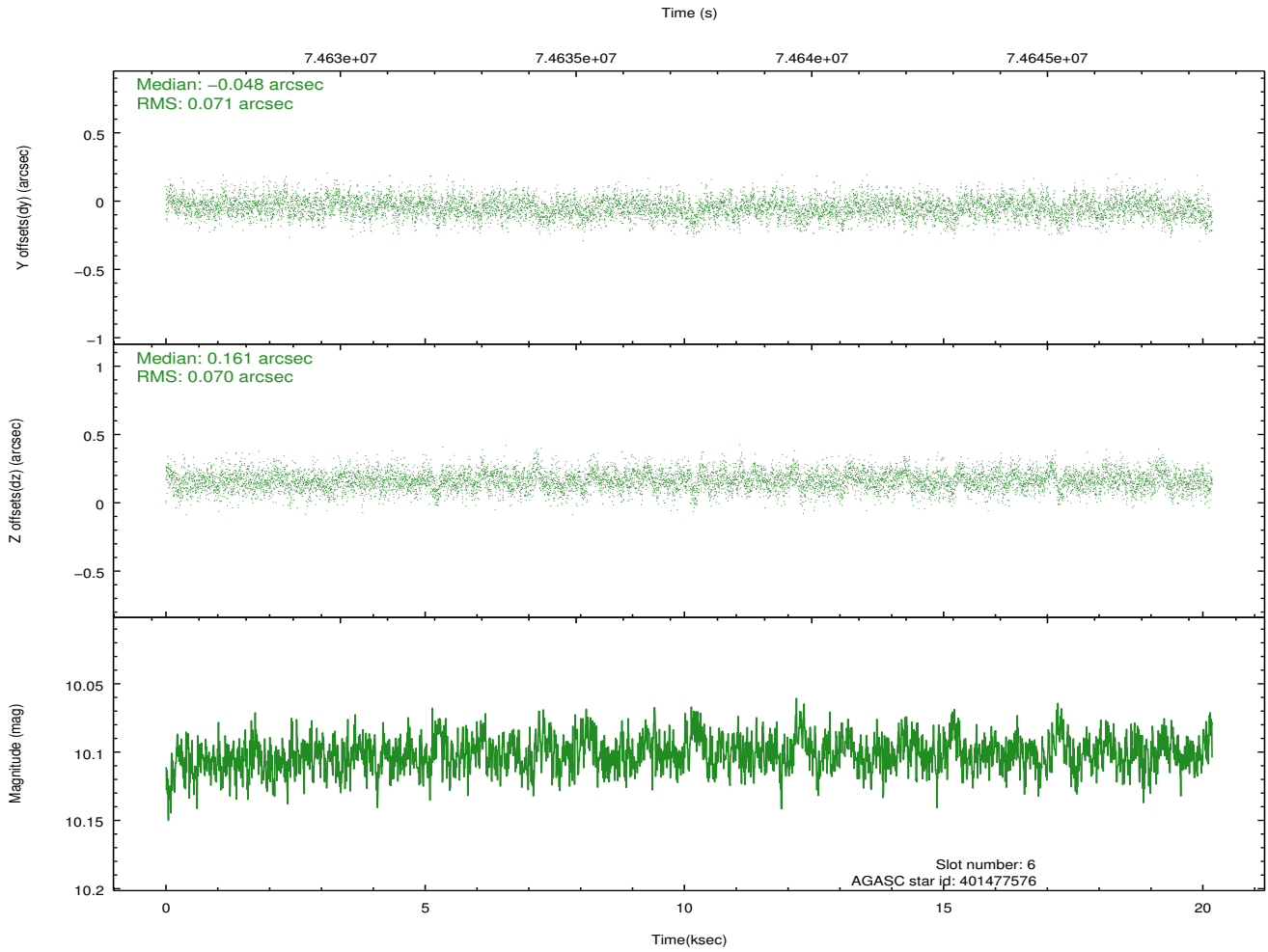
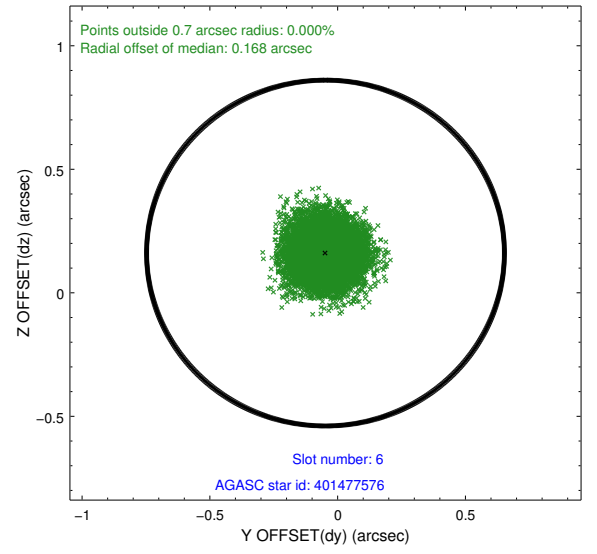
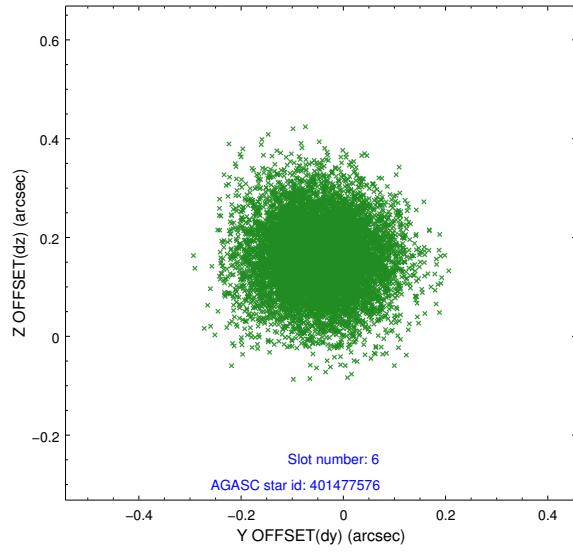
## 2.4.2 Slot 4



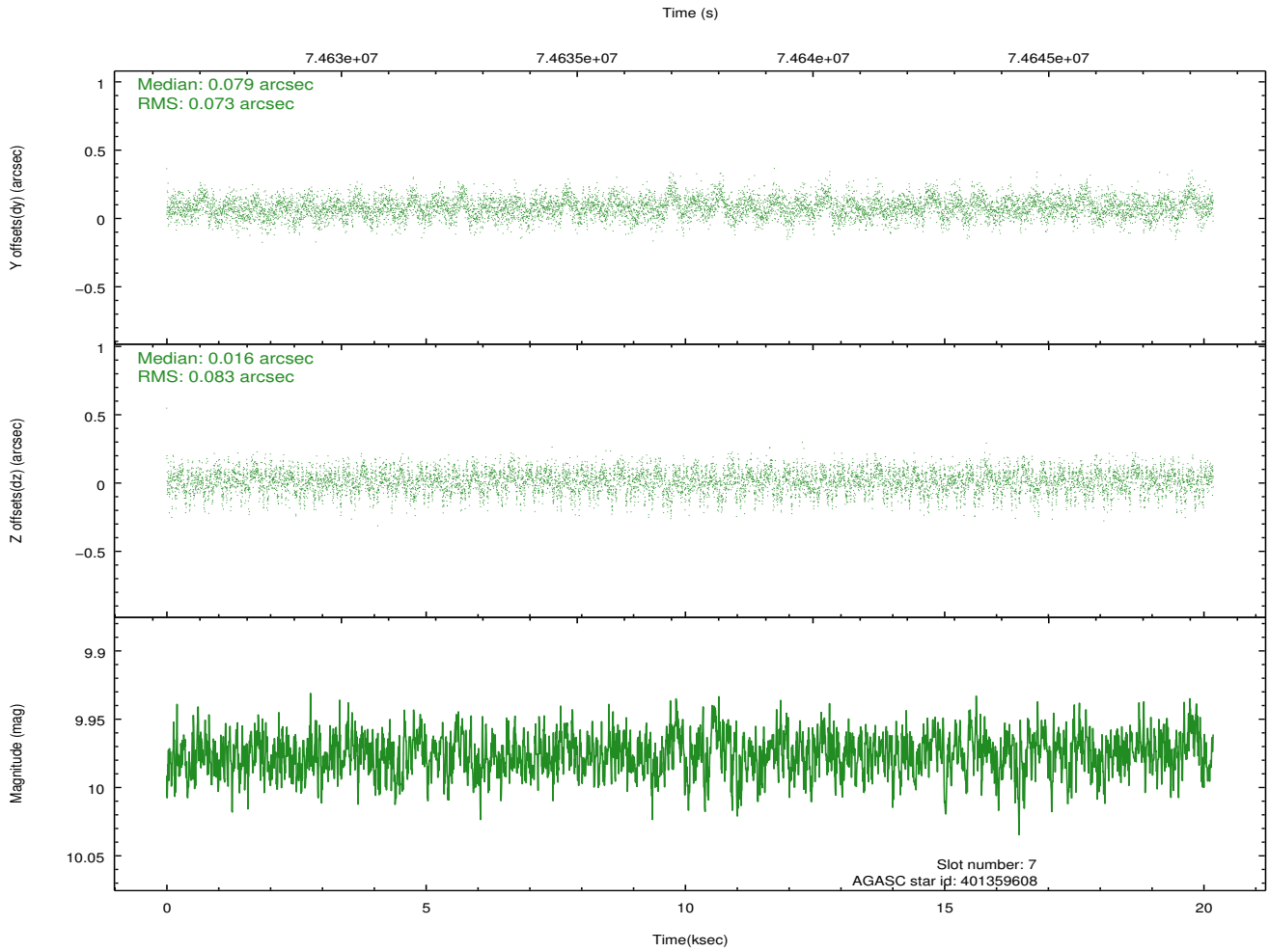
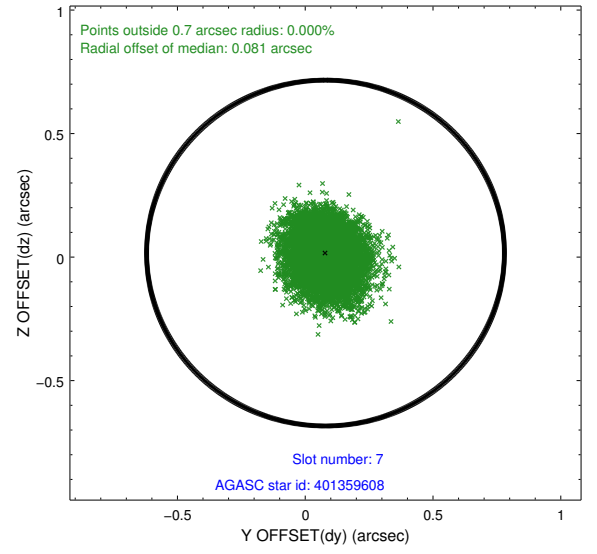
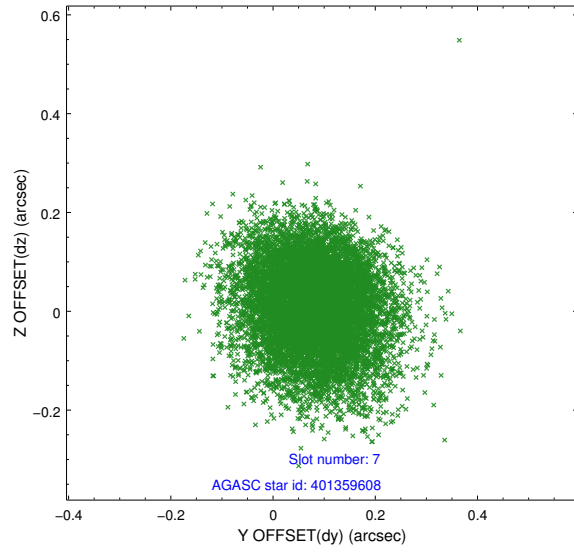
### 2.4.3 Slot 5



## 2.4.4 Slot 6

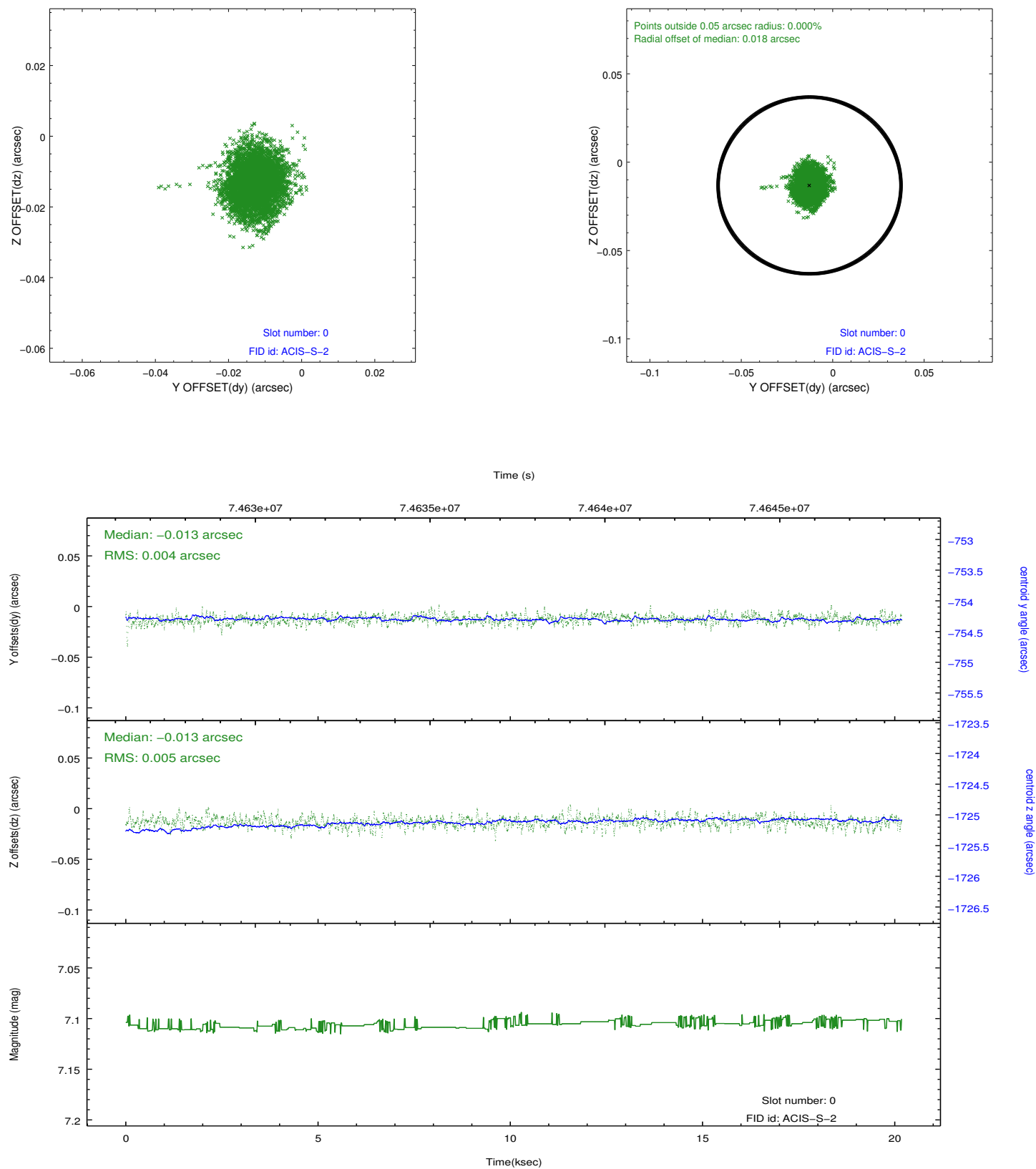


## 2.4.5 Slot 7

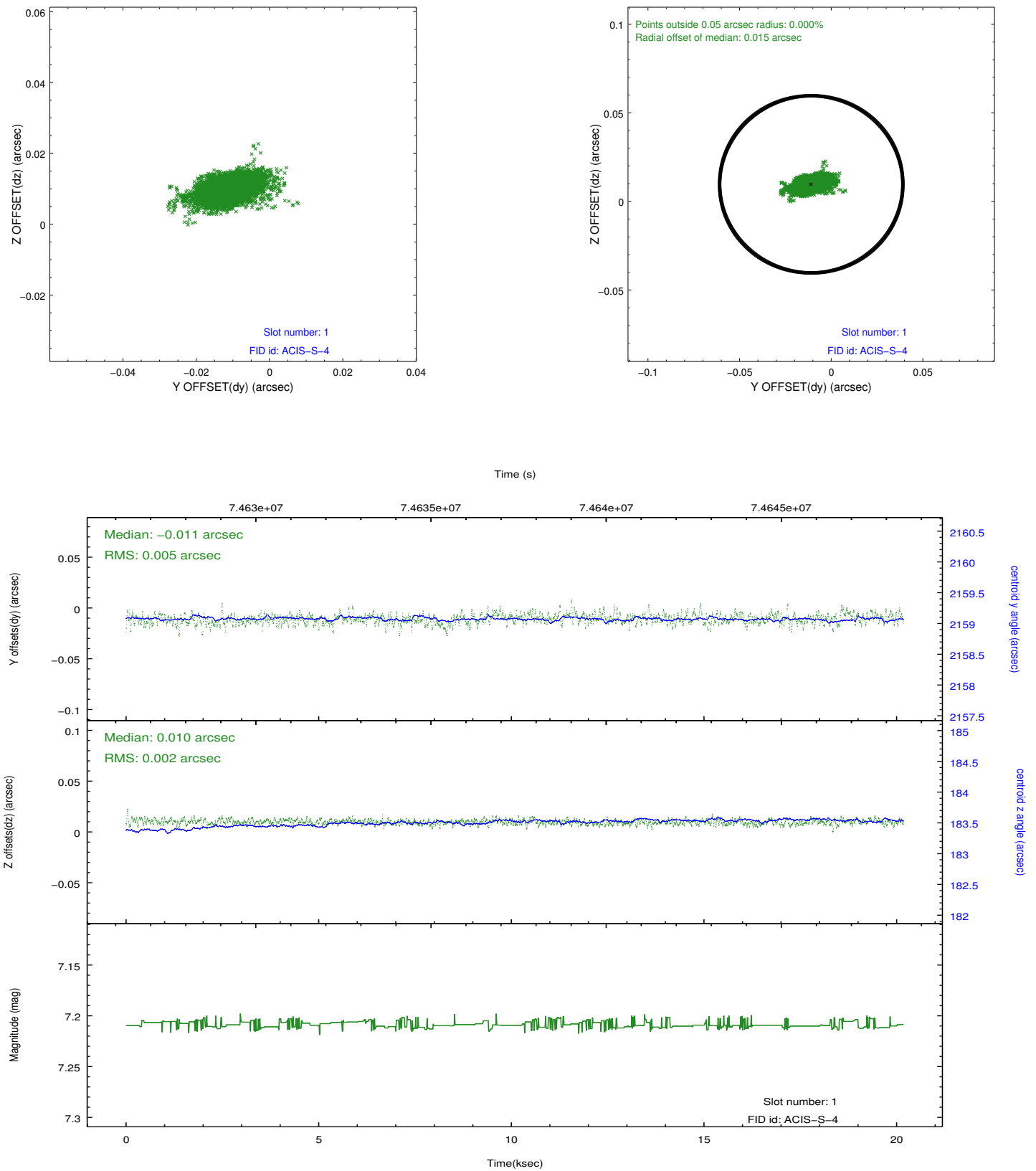


## 2.5 FID Slots

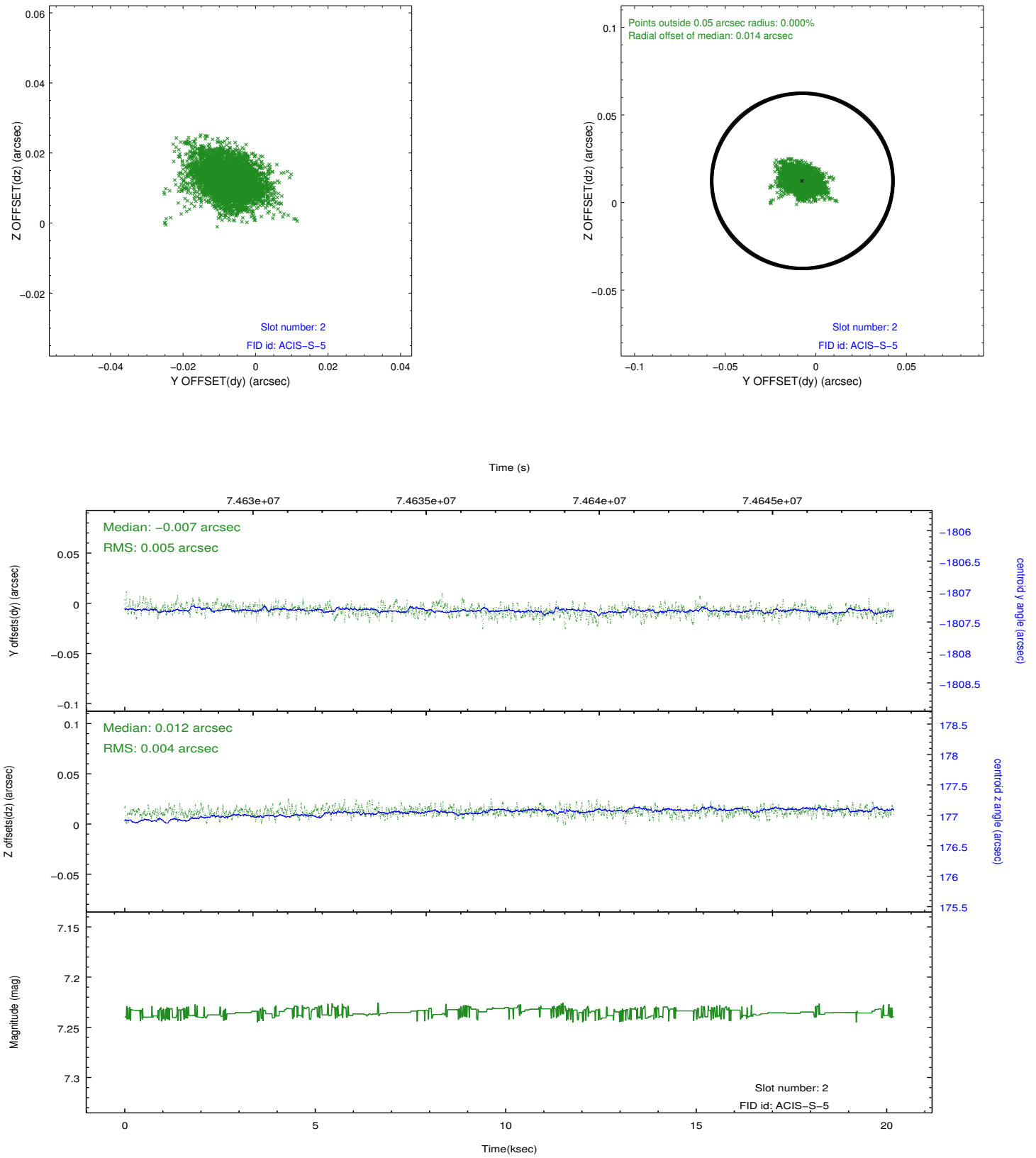
### 2.5.1 Slot 0



## 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	19.721

### A.2 Comments