

# V&V Reference Report

## L2 ASCDS Version : 8.1.1

Observation 503 - L2 Version 4

Chandra X-Ray Center

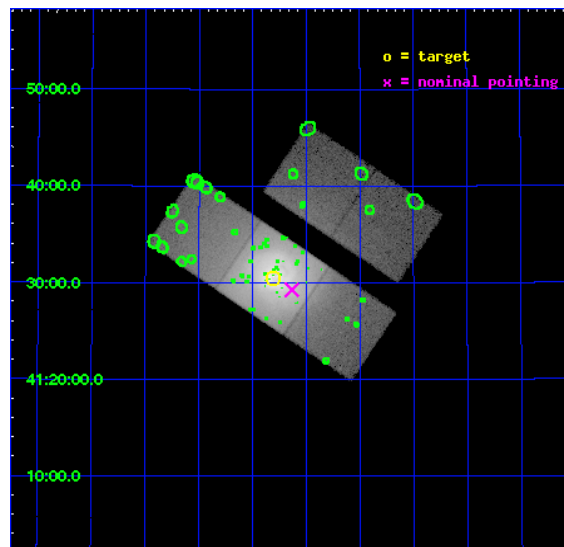
L2 Processing Date : Nov 24 2009

## 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>3</b>	<b>Point Sources</b>	<b>17</b>
<b>A</b>	<b>Summary</b>	<b>18</b>
A.1	Status . . . . .	18
A.2	Comments . . . . .	18

# 1 Front

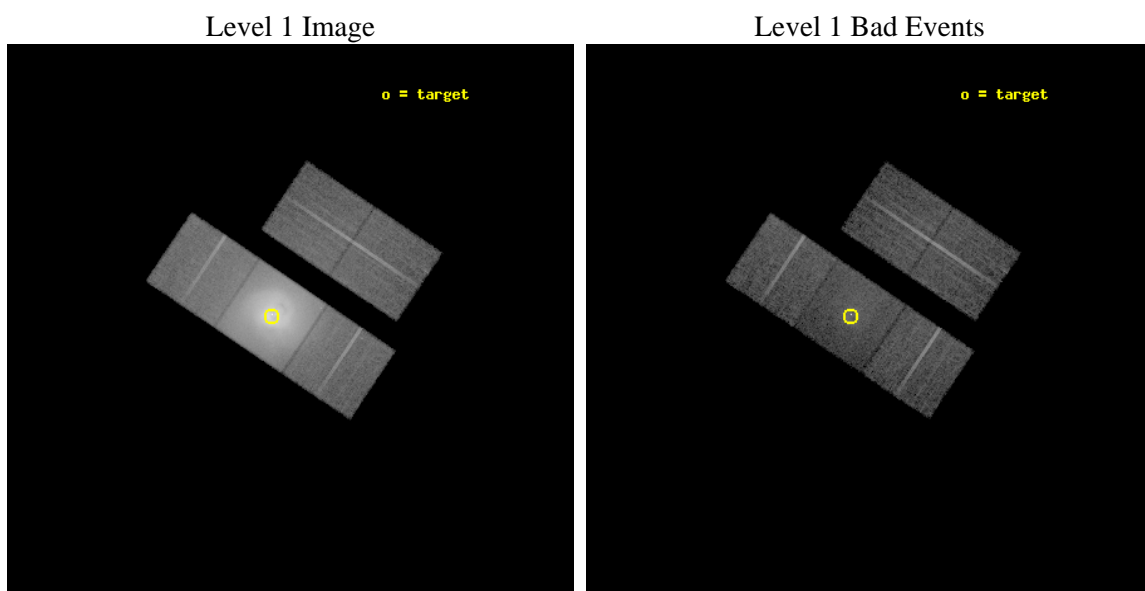
seq_num	800011	Sequence number
obs_id	503	Observation id
title	THE COOLING FLOW IN THE PERSEUS CLUSTER	Proposal title
observer	Professor Andrew Fabian	Principal investigator
object	A426	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	49.952083	Observer's specified target RA
dec_targ	41.5075	Observer's specified target Dec
ra_nom	49.908506390809	Nominal RA
dec_nom	41.488029206521	Nominal Dec
roll_nom	213.87580000869	Nominal Roll
revision	4	Processing version of data
ontime	9132.4797174484	Sum of GTIs [s]
livetime	9016.8387603469	Livetime [s]
ontime2	9132.4386774451	Sum of GTIs [s]
ontime3	9132.3565974459	Sum of GTIs [s]
ontime6	9132.3976374492	Sum of GTIs [s]
ontime7	9132.4797174484	Sum of GTIs [s]
ontime8	9132.3155574501	Sum of GTIs [s]
l2events	1026676	Number of level 2 events



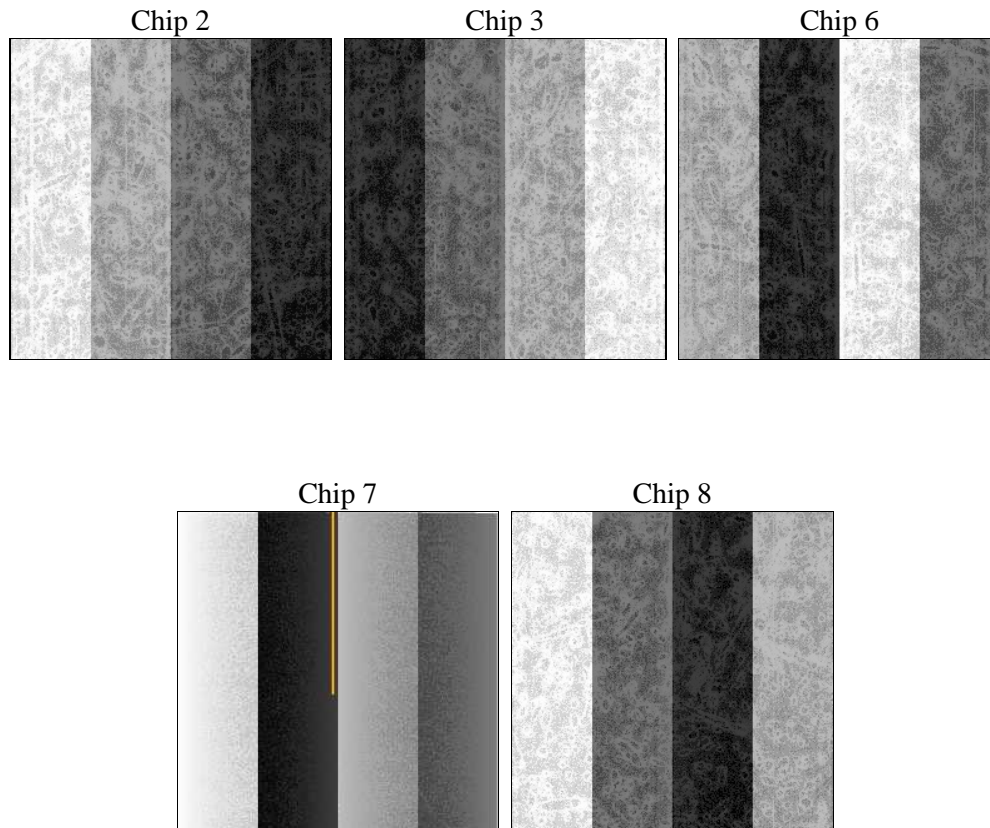
## 2 OBI

### 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	Scheduled observation exposure time
ascdsver	8.1.1	ASCDS version number	ontime	9132.4797174484	Sum of GTIs [s]
caldsver	4.1.4	&#160	ontime2	9132.4386774451	Sum of GTIs [s]
date	2009-11-24T15:39:00	Date and time of file creation	ontime3	9132.3565974459	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	9132.3976374492	Sum of GTIs [s]
			ontime7	9132.4797174484	Sum of GTIs [s]
			ontime8	9132.3155574501	Sum of GTIs [s]
			l1events	1415769	Number of level 1 events

### 2.1.4 Events

	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	99973	102762	132033	916341	164660
rejected events	74789	71477	73137	67916	80310
rejected %	74%	69%	55%	7%	48%

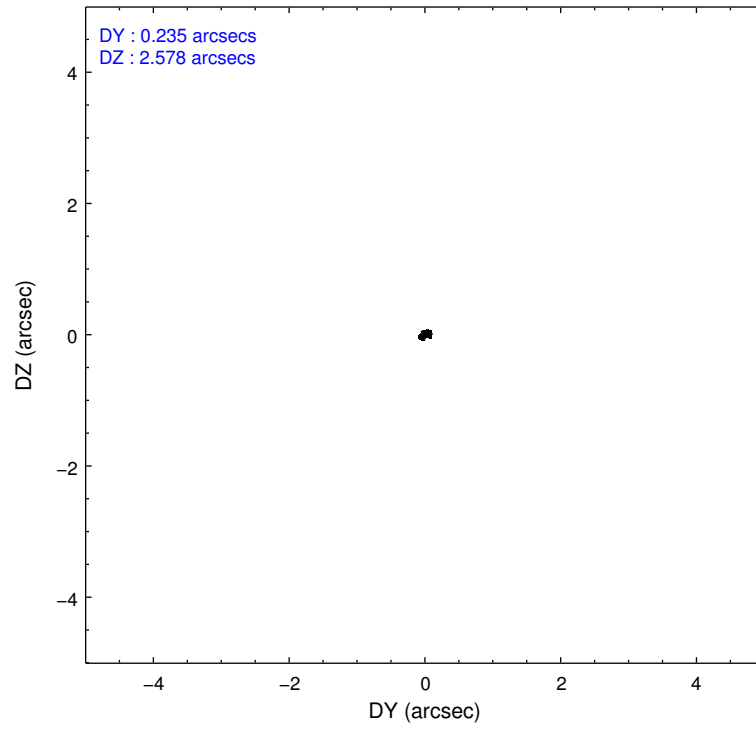
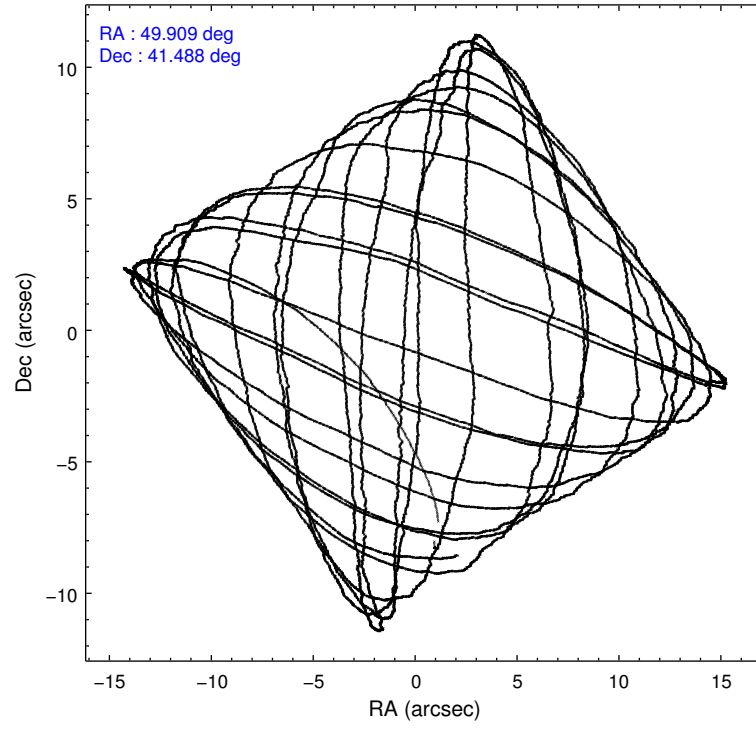
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	12593	17066	31339	219054	52308
	12%	16%	23%	23%	31%
grade 1 events	42	47	78	640	165
	0%	0%	0%	0%	0%
grade 2 events	8330	9495	20354	234032	19263
	8%	9%	15%	25%	11%
grade 3 events	882	1086	1537	95200	3040
	0%	1%	1%	10%	1%
grade 4 events	882	1018	1503	92704	2924
	0%	0%	1%	10%	1%
grade 5 events	1430	1623	1914	12417	2382
	1%	1%	1%	1%	1%
grade 6 events	2506	2644	4208	207709	6871
	2%	2%	3%	22%	4%
grade 7 events	73308	69783	71100	54585	77707
	73%	67%	53%	5%	47%

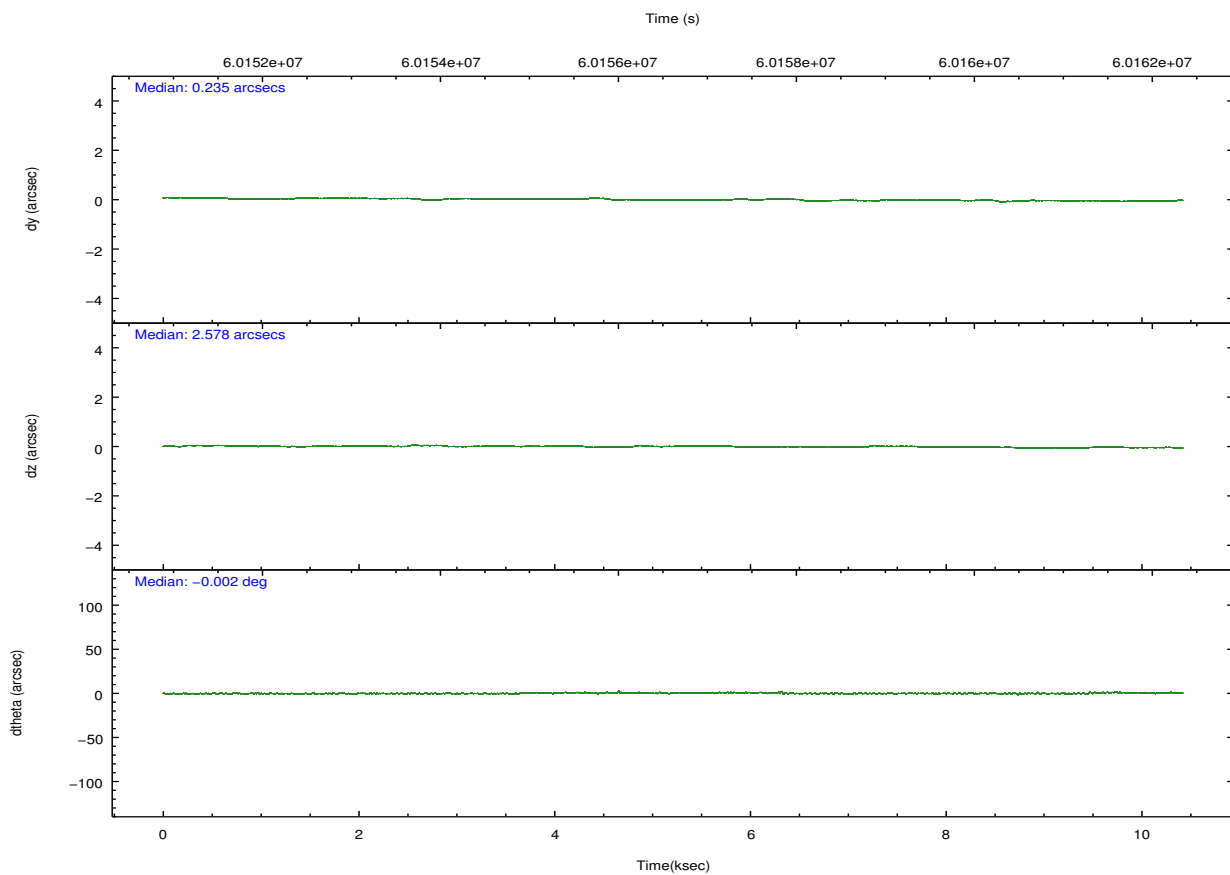
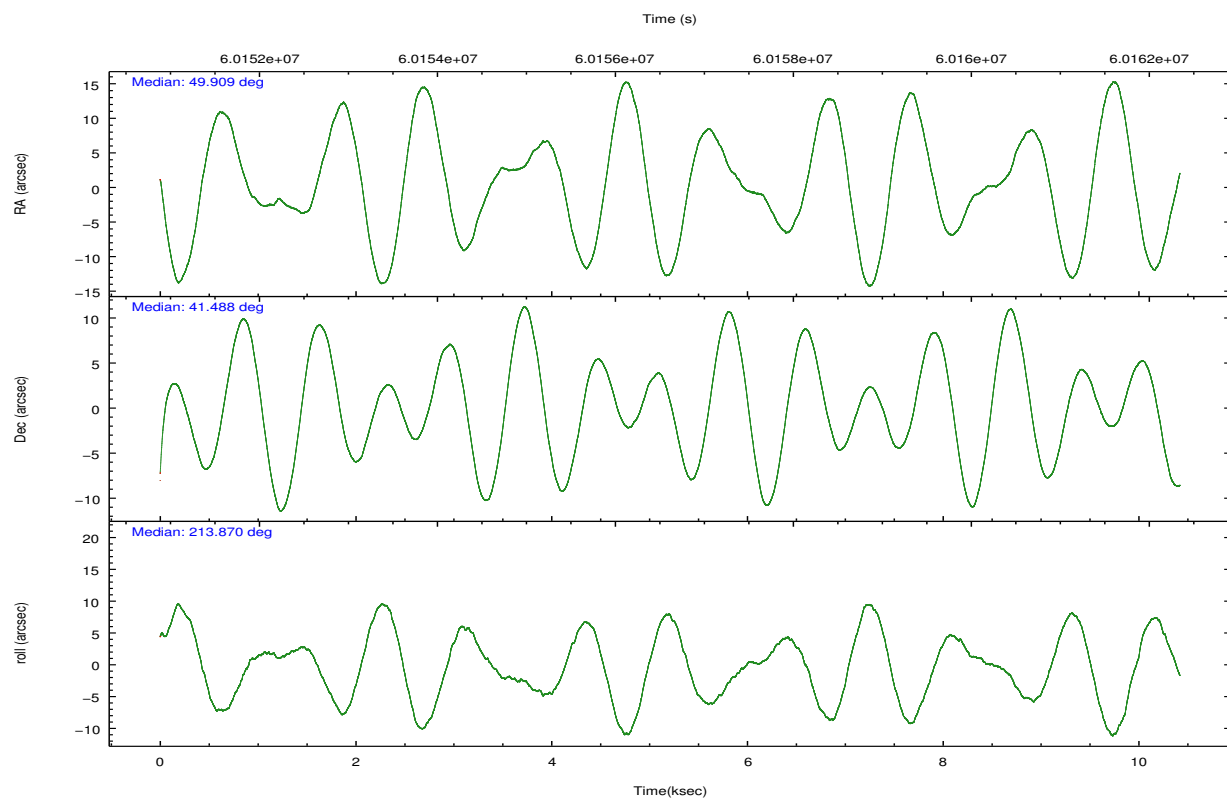


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-23678	ACIS-23678	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
Pointing RA	49.924924	49.90850639080914	Subarray requested	NONE	NONE
Pointing Dec	41.512760	41.48802920652073	Alternating exposures requested	N	N
Pointing Roll	213.708285	213.8758000086917	Primary exposure time	0.000000	3.2
SIM focus pos (mm)	-0.684267	-0.6828225247311905			
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-190.132523	-190.1400660498719			
SIM translation stage offset (mm)	0	0.00754346686406393			
Observation start time	60151824.184000	60150091.804605			
Observation start date	1999-11-28T04:49:20	1999-11-28T04:21:31			
Observation end time	60161824.184000	60162464.580052			
Observation end date	1999-11-28T07:36:00	1999-11-28T07:47:44			
Read mode	TIMED	TIMED			

## 2.3 Aspect



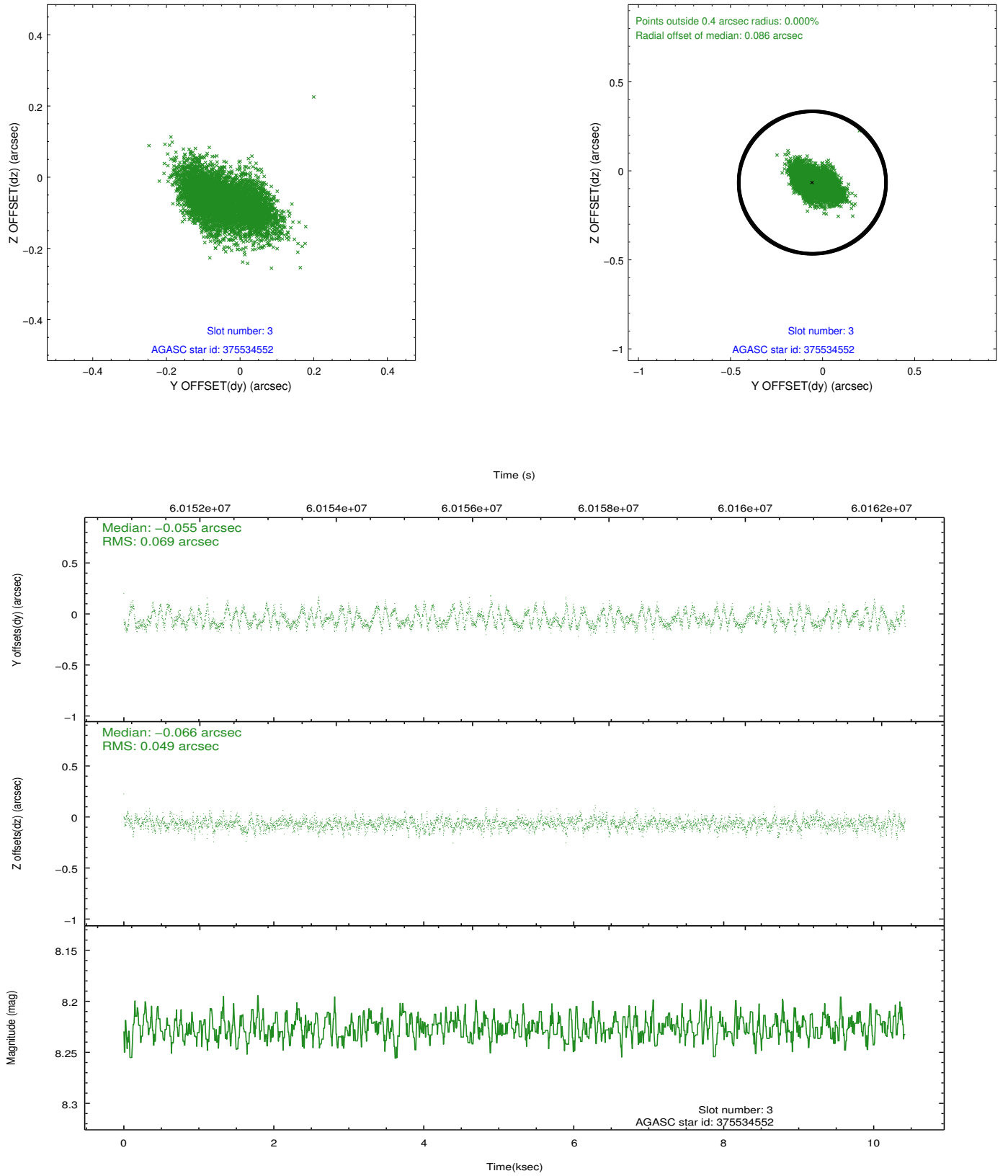


Slot Statistics

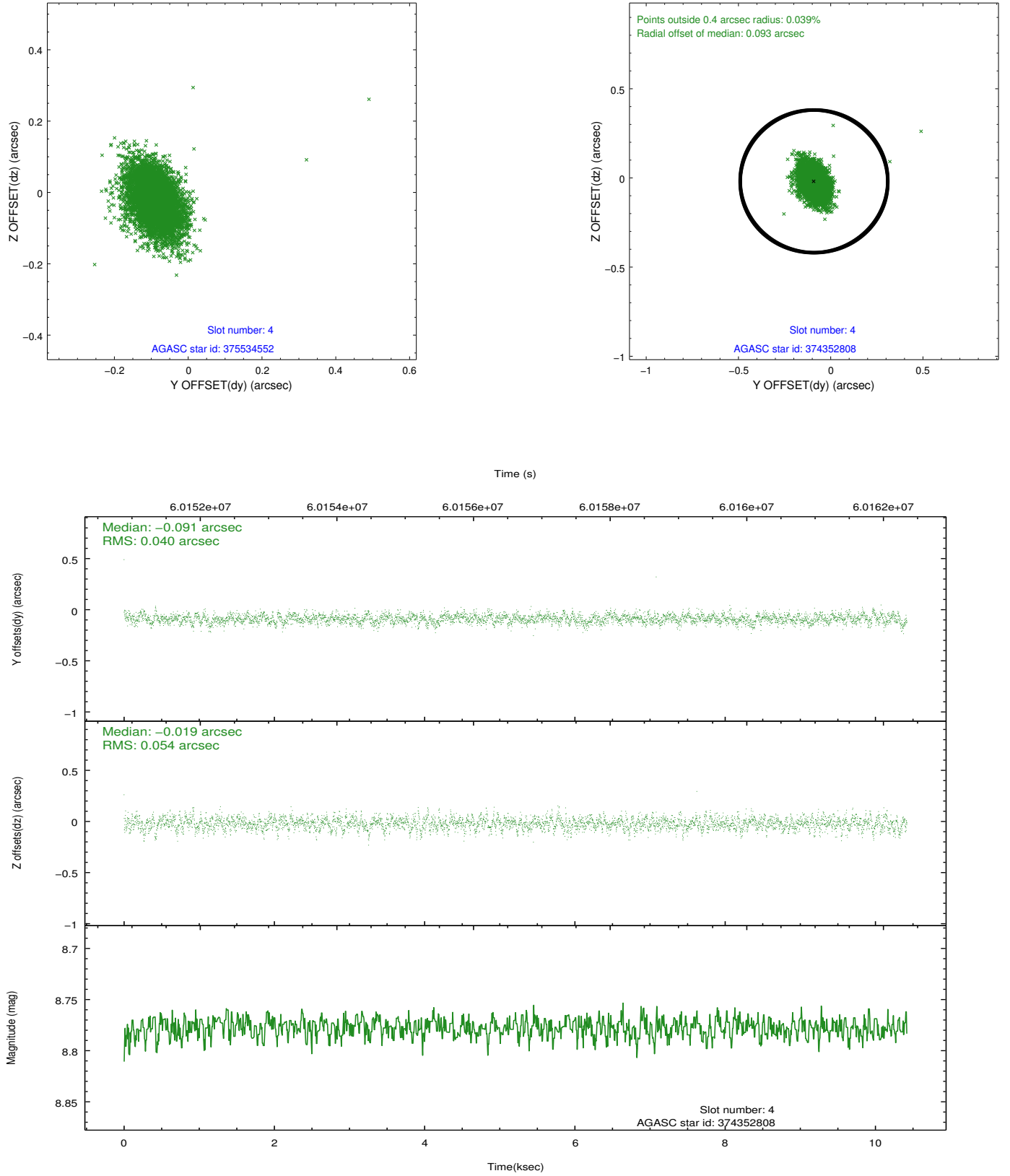
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.12	5084	-0.003	-0.011	0.007	0.012	0.000000	0.000000	-752.86	-1723.61
1	FID	ACIS-S-4	7.22	5084	0.052	0.005	0.006	0.011	0.000000	0.000000	2160.45	184.63
2	FID	ACIS-S-5	7.24	5084	-0.080	0.015	0.007	0.011	0.000000	0.000000	-1805.50	178.62
3	GUIDE	375534552	8.23	5082	-0.055	-0.066	0.089	0.146	50.877490	41.206927	-1542.91	2335.06
4	GUIDE	374352808	8.78	5082	-0.091	-0.019	0.069	0.121	49.969955	42.208621	-1489.94	-2017.67
5	GUIDE	373826120	8.90	5083	0.086	-0.084	0.079	0.131	49.738165	41.186341	1072.92	695.32
6	GUIDE	374356920	9.47	5081	-0.046	0.010	0.085	0.143	49.733740	42.091452	-730.79	-2017.50
7	GUIDE	373823728	9.69	5082	0.100	0.162	0.101	0.167	49.603565	40.676740	2399.54	2014.88

## 2.4 Star Slots

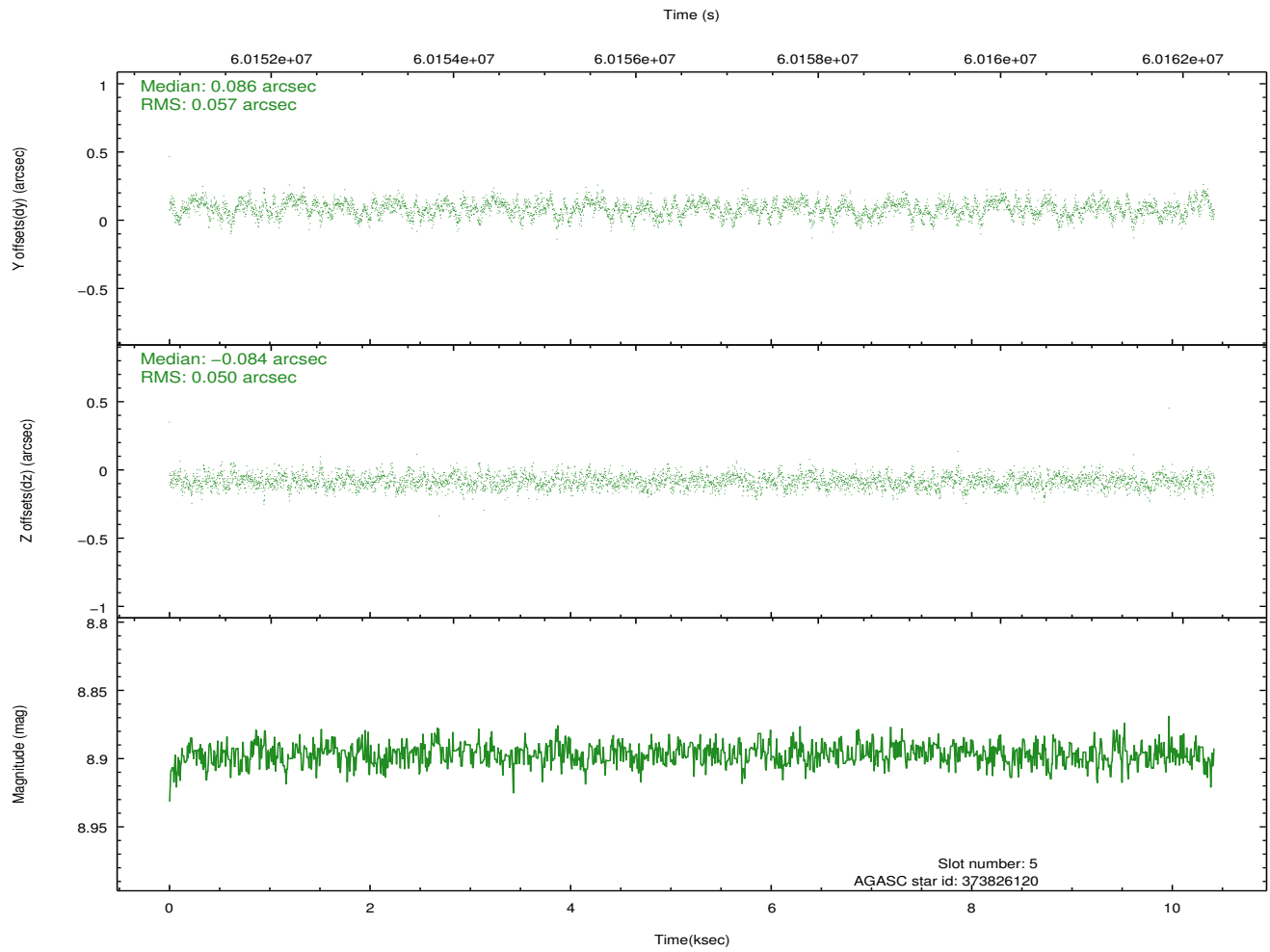
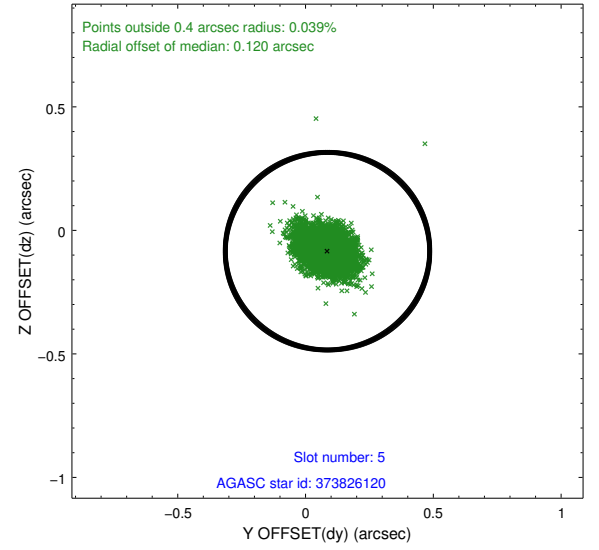
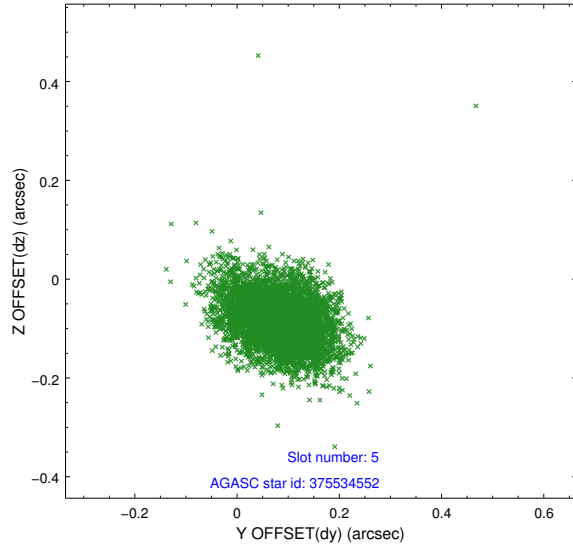
### 2.4.1 Slot 3



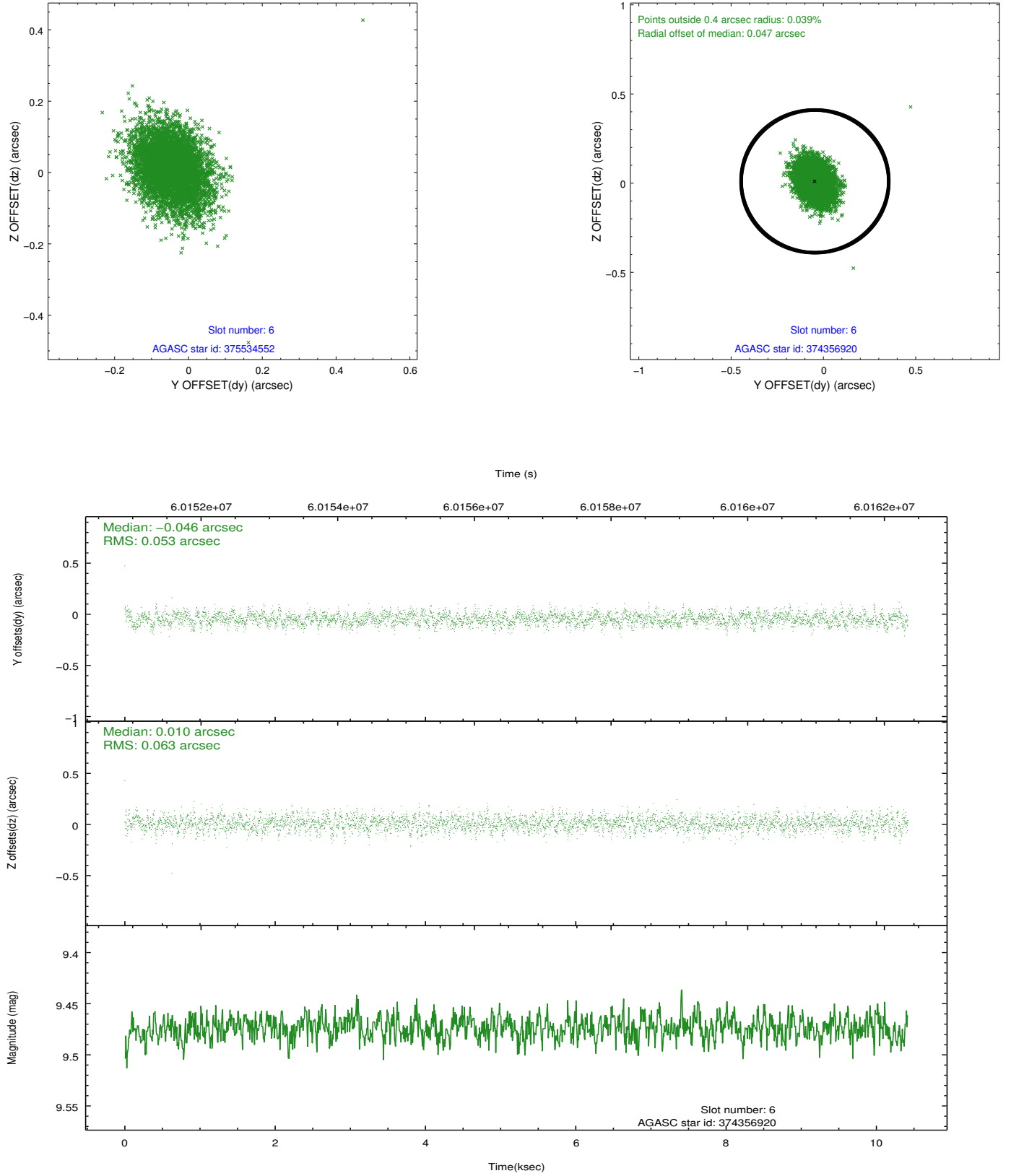
## 2.4.2 Slot 4



### 2.4.3 Slot 5

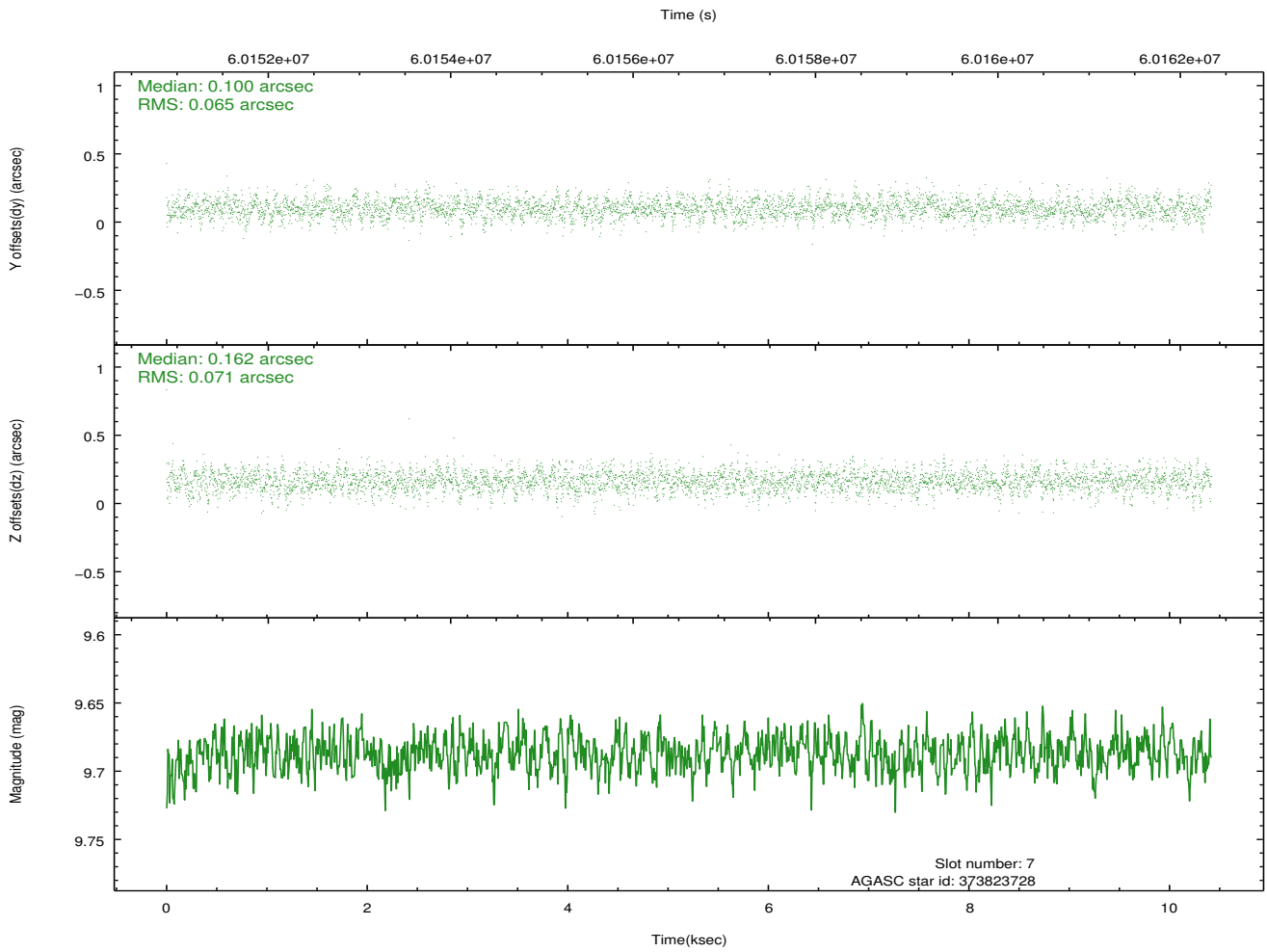
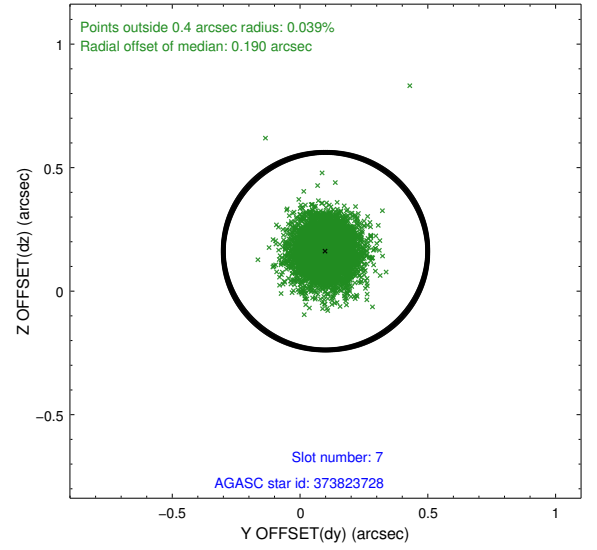
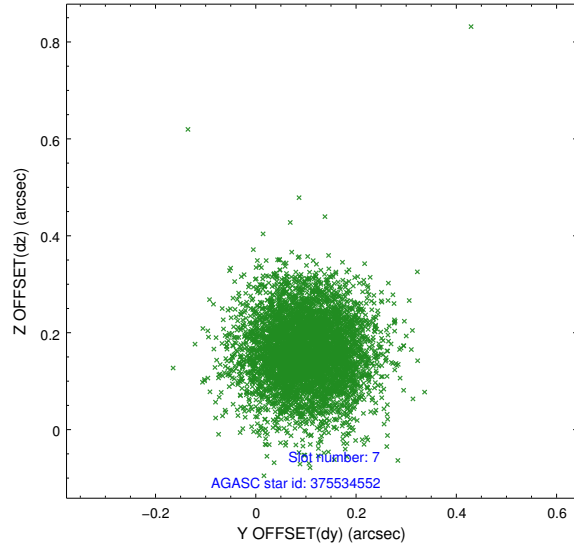


## 2.4.4 Slot 6



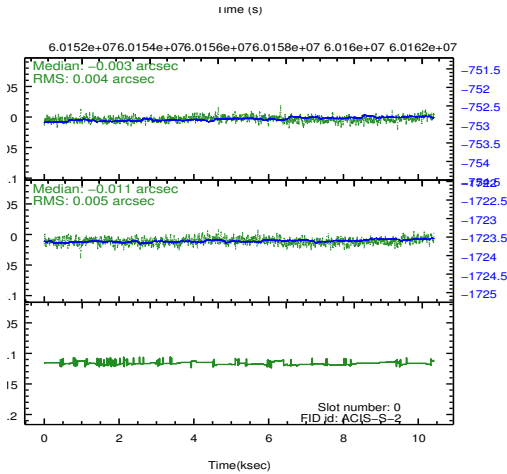
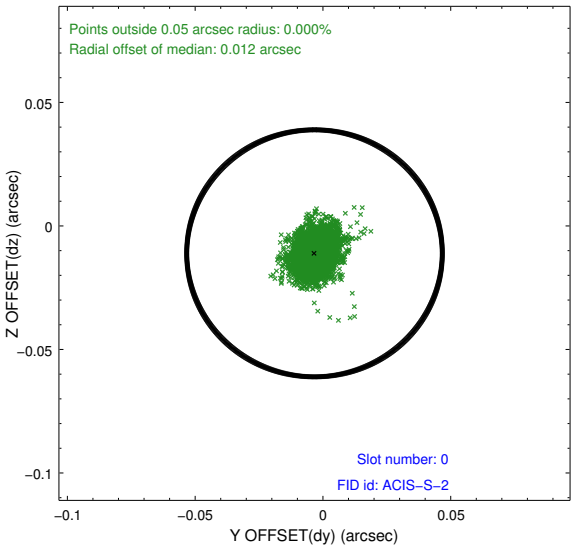
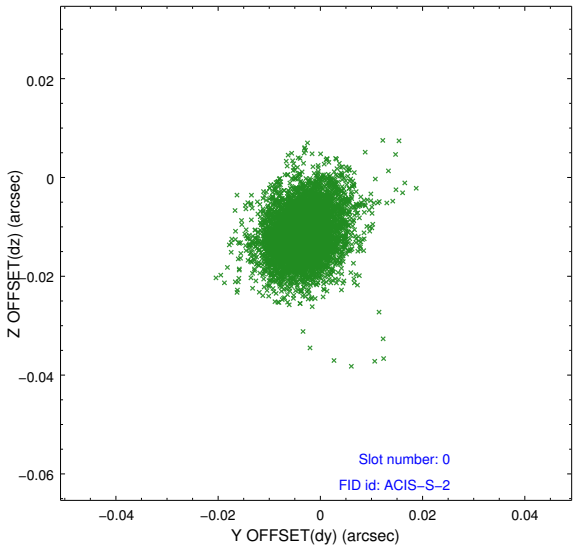


## 2.4.5 Slot 7

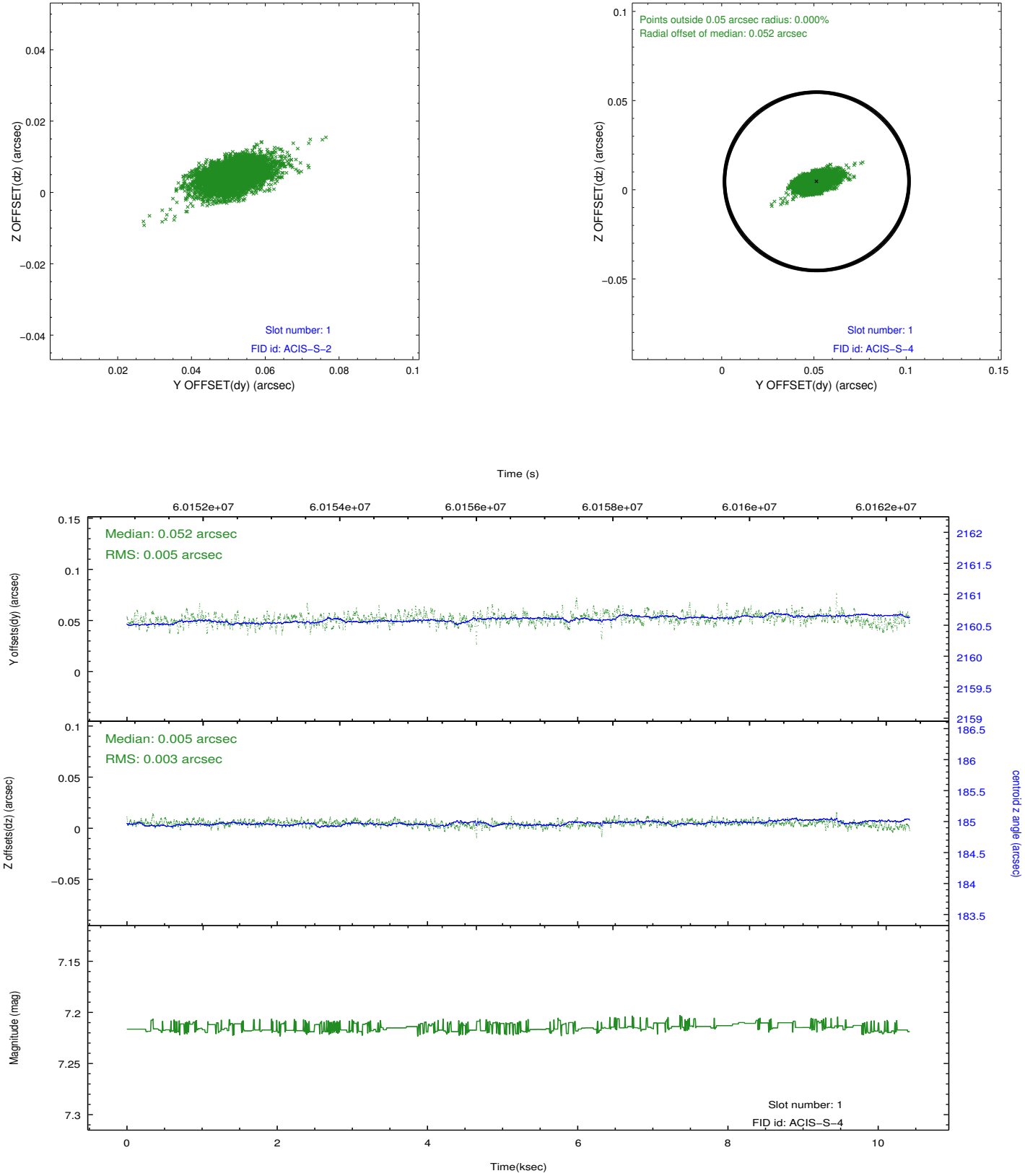


# 2.5 FID Slots

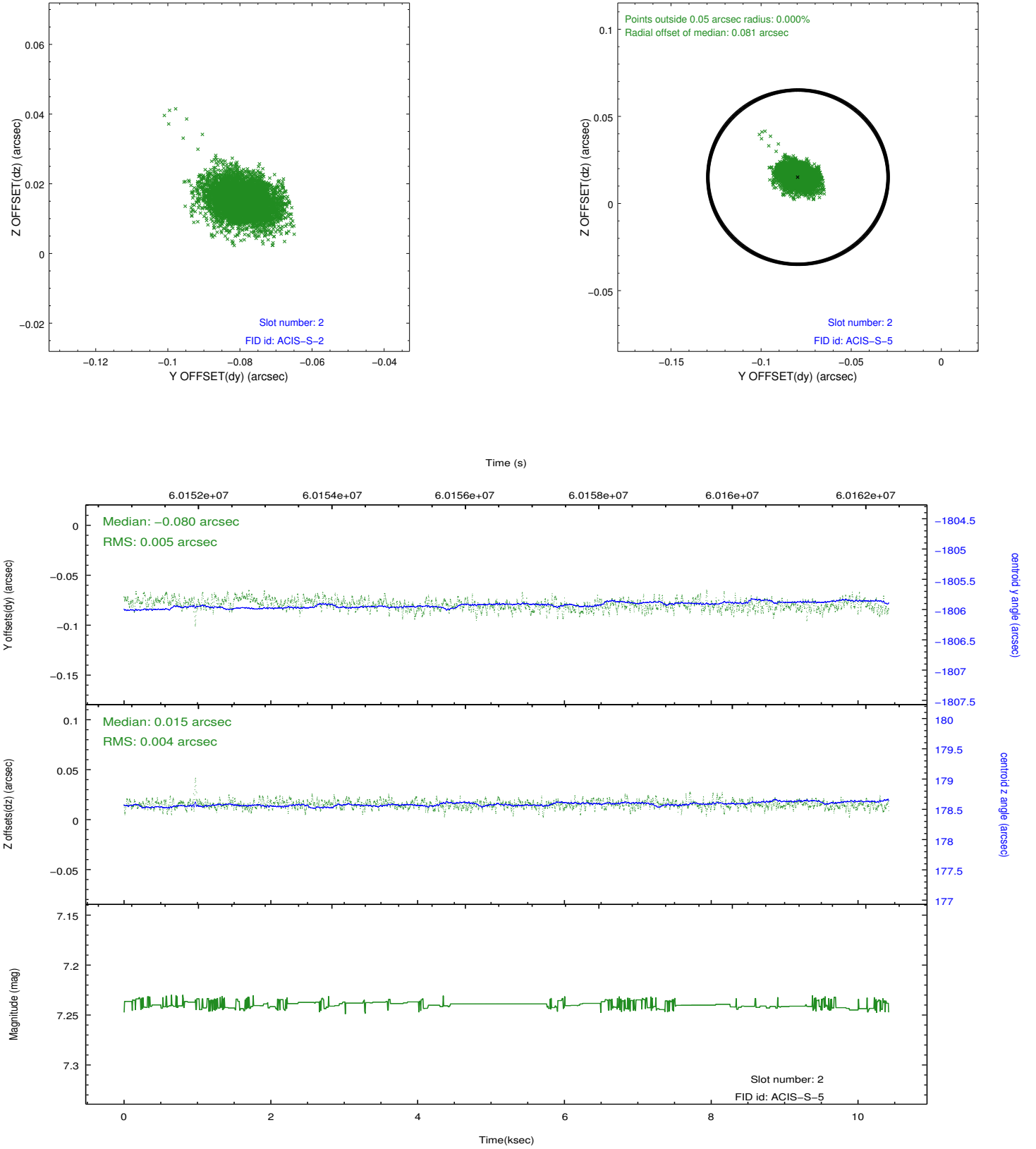
## 2.5.1 Slot 0



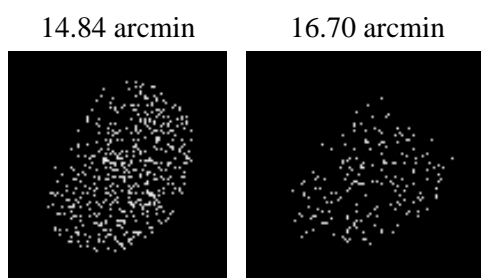
## 2.5.2 Slot 1



### 2.5.3 Slot 2



### 3 Point Sources



# A Summary

## A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2009.12.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.129

## A.2 Comments

This observation was acquired with the focal plane temperature raised from -120C to -110C, for attempted recalibration of ACIS for the 1999-09-16 through 2000-01-28 period. This reprocessing of the data applies no CTI correction because none is available for that temperature.