

# V&V Reference Report

## L2 ASCDS Version : 8.5.1.1

Observation 5618 - L2 Version 3  
Chandra X-Ray Center

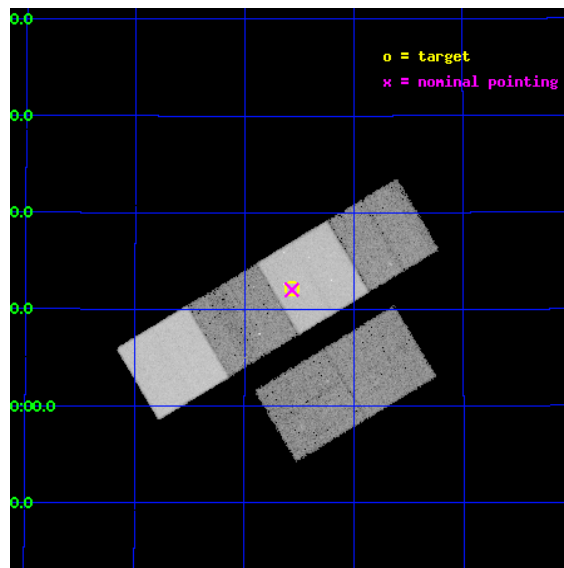
L2 Processing Date : Dec 31 2012

## 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

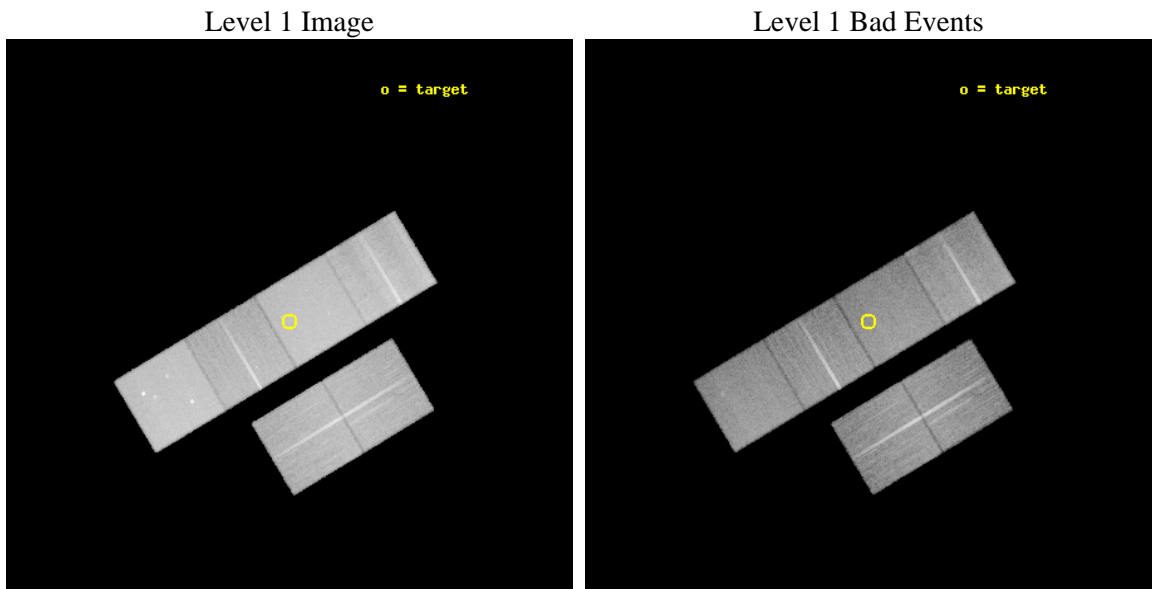
seq_num	701041	Sequence number
obs_id	5618	Observation id
title	A Chandra Survey of the Most Distant Quasars: X-raying the First Massive Black Holes	Proposal title
observer	Prof. William Brandt	Principal investigator
object	SDSS J1630+4012	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	247.64125	Observer's specified target RA [deg]
dec_targ	40.202667	Observer's specified target Dec [deg]
ra_nom	247.64152452127	Nominal RA [deg]
dec_nom	40.200589170075	Nominal Dec [deg]
roll_nom	329.01942640079	Nominal Roll [deg]
revision	3	Processing version of data
ontime	27737.599896669	Sum of GTIs [s]
livetime	27386.3697052	Livetime [s]
ontime2	27737.599896669	Sum of GTIs [s]
ontime3	27737.599896669	Sum of GTIs [s]
ontime5	27737.599896669	Sum of GTIs [s]
ontime6	27737.599896669	Sum of GTIs [s]
ontime7	27737.599896669	Sum of GTIs [s]
ontime8	27737.599896669	Sum of GTIs [s]
l2events	360718	Number of level 2 events



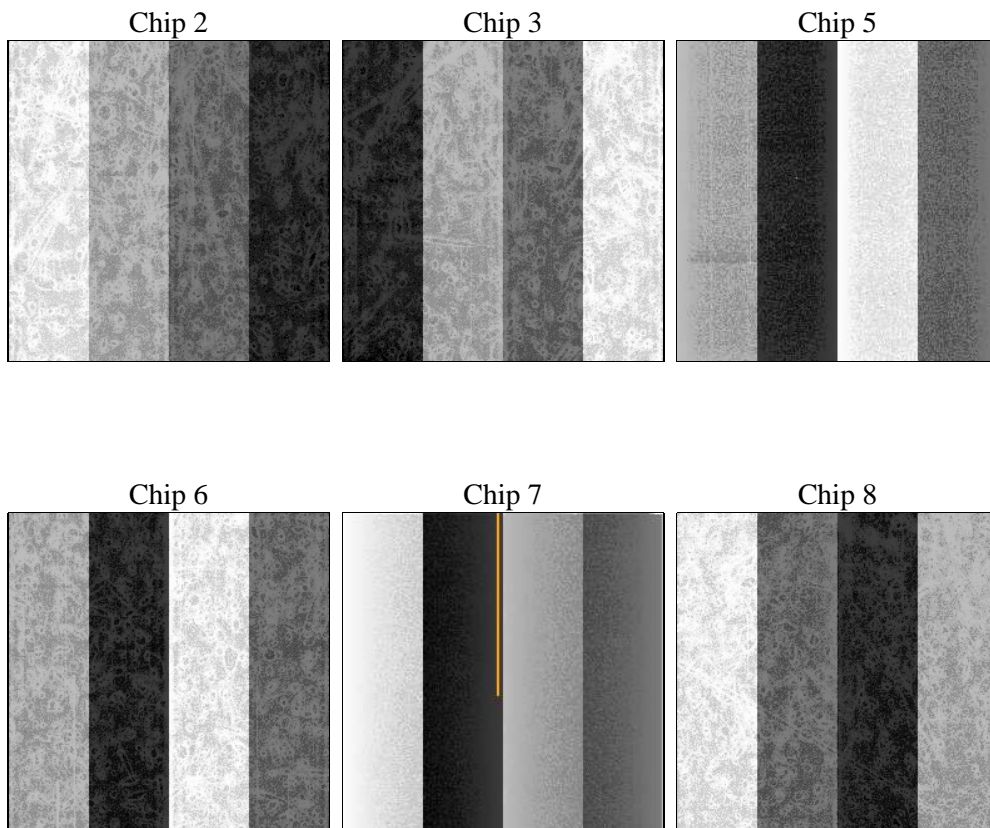
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	27600.000000	[s] Scheduled observation exposure time
ascdsver	8.5.1.1	Processing system revision	ontime	27737.599896669	Sum of GTIs [s]
caldbver	4.5.5	&#160	ontime2	27737.599896669	Sum of GTIs [s]
date	2012-12-31T09:49:32	Date and time of file creation	ontime3	27737.599896669	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	27737.599896669	Sum of GTIs [s]
			ontime6	27737.599896669	Sum of GTIs [s]
			ontime7	27737.599896669	Sum of GTIs [s]
			ontime8	27737.599896669	Sum of GTIs [s]
			l1events	1572201	Number of level 1 events

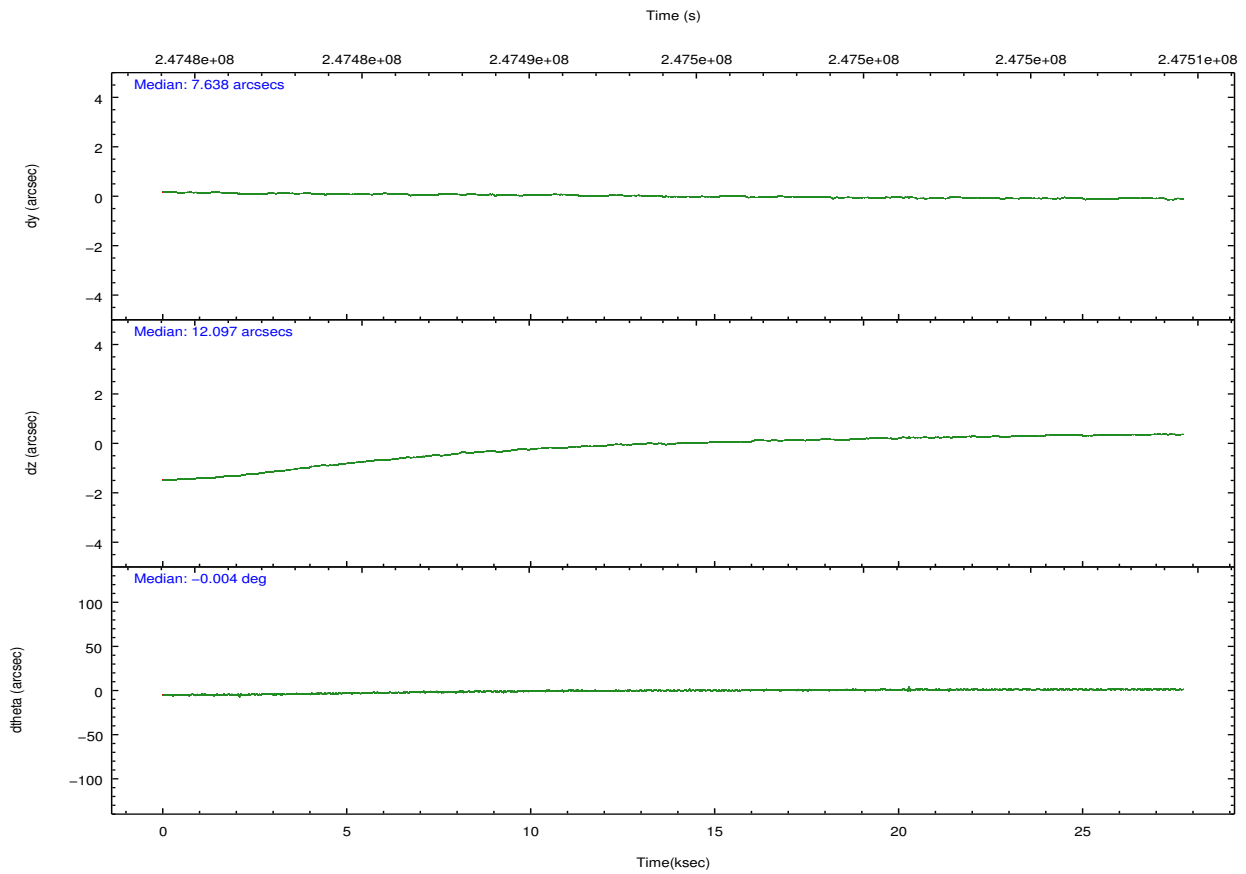
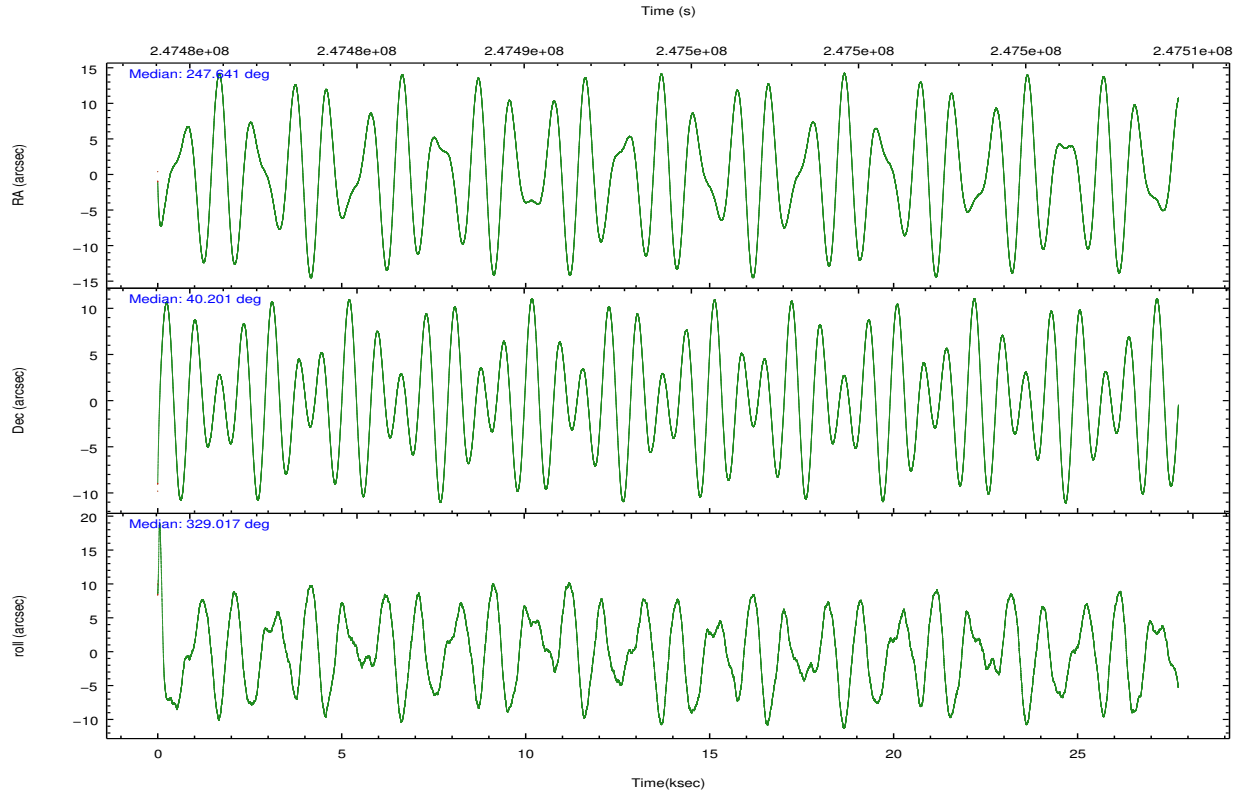
### 2.1.4 Events

	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	225663	215080	332694	217969	300877	279918	grade 0 events	12126	11222	15502	11090	11611	19854
rejected events	198973	189145	180517	190775	175619	217811		5%	5%	4%	5%	3%	7%
rejected %	88%	87%	54%	87%	58%	77%	grade 1 events	141	137	645	114	298	217
								0%	0%	0%	0%	0%	0%
							grade 2 events	5619	5171	45048	5840	24981	13953
								2%	2%	13%	2%	8%	4%
							grade 3 events	2443	2567	5935	2596	10920	6417
								1%	1%	1%	1%	3%	2%
							grade 4 events	2359	2519	5825	2547	10942	5986
								1%	1%	1%	1%	3%	2%
							grade 5 events	8633	9828	24850	10206	28979	13702
								3%	4%	7%	4%	9%	4%
							grade 6 events	4280	4603	80654	5245	67470	16288
								1%	2%	24%	2%	22%	5%
							grade 7 events	190062	179033	154235	180331	145676	203501
								84%	83%	46%	82%	48%	72%

## 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	247.605871	247.6415245212695	Subarray requested	NONE	NONE
[deg] Pointing Dec	40.200684	40.20058917007496	Alternating exposures requested	N	N
[deg] Pointing Roll	328.885821	329.0194264007929	[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)	247480574.184000	247479401.99818			
Observation start date	2005-11-04T08:35:10	2005-11-04T08:16:41			
[s] Observation end time (MET)	247508174.184000	247508693.93703			
Observation end date	2005-11-04T16:15:10	2005-11-04T16:24:53			
Read mode	TIMED	TIMED			

## 2.3 Aspect

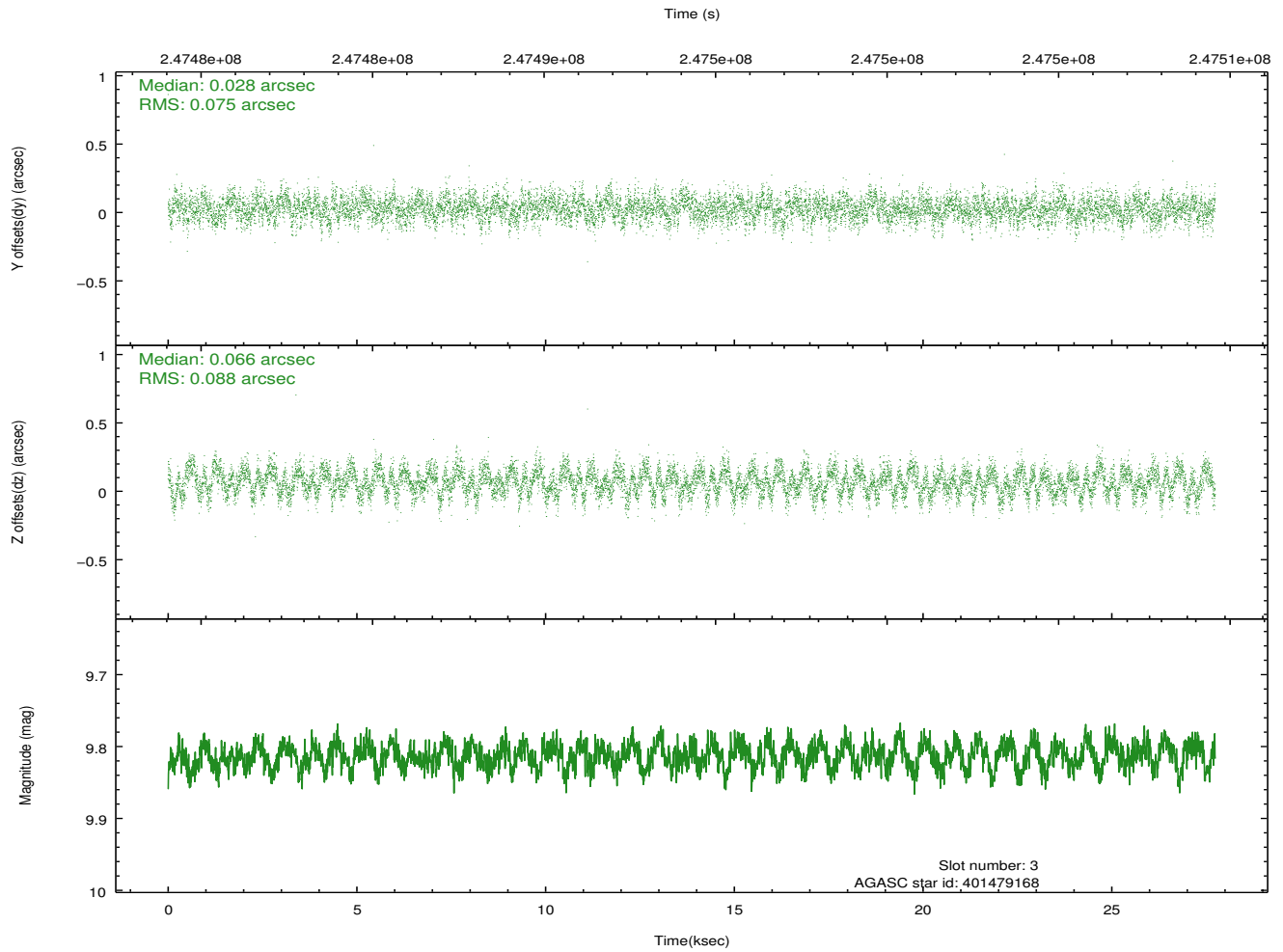
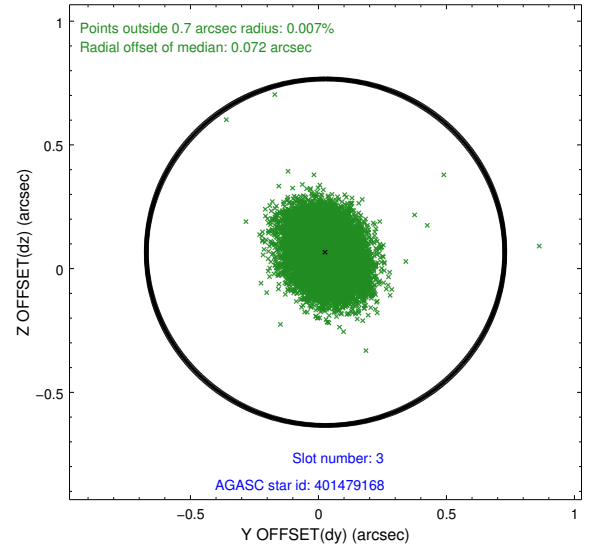
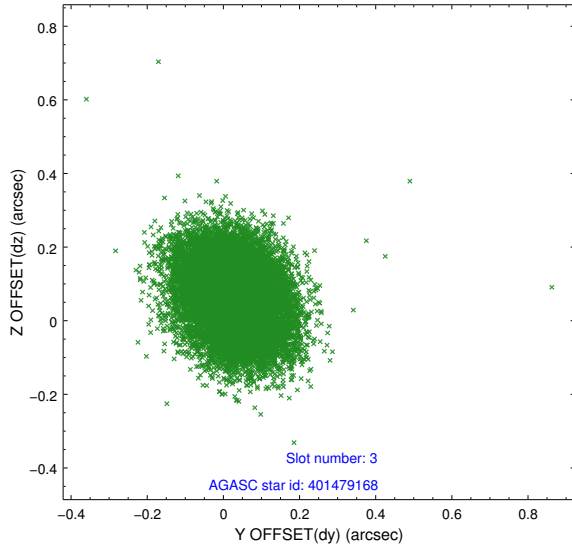


### Slot Statistics

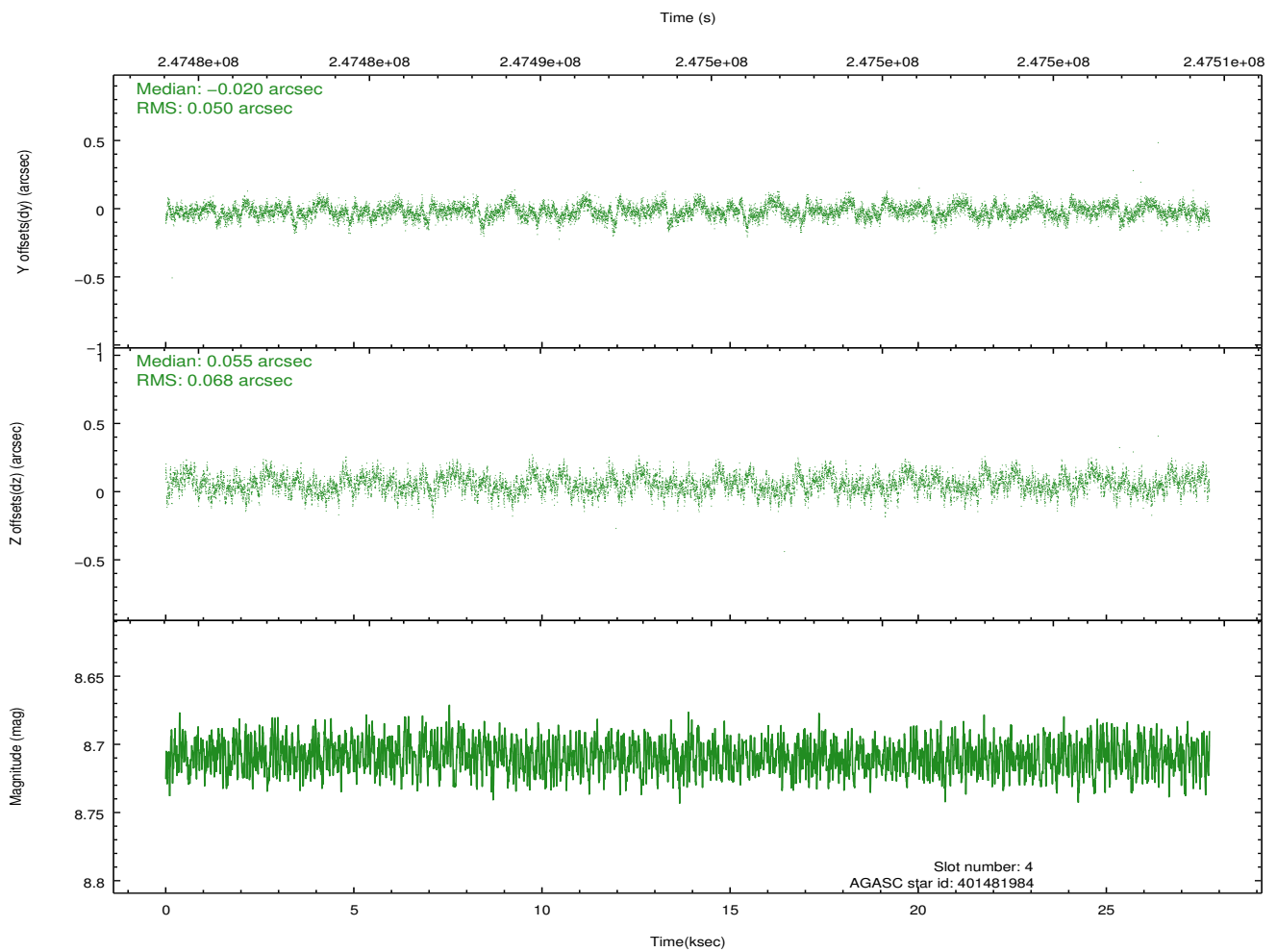
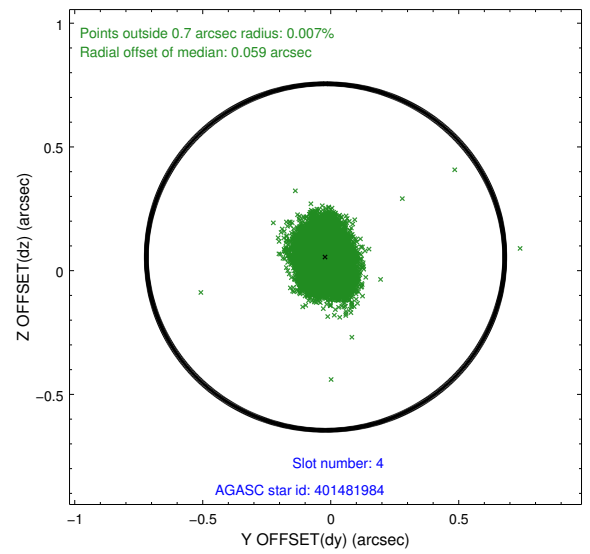
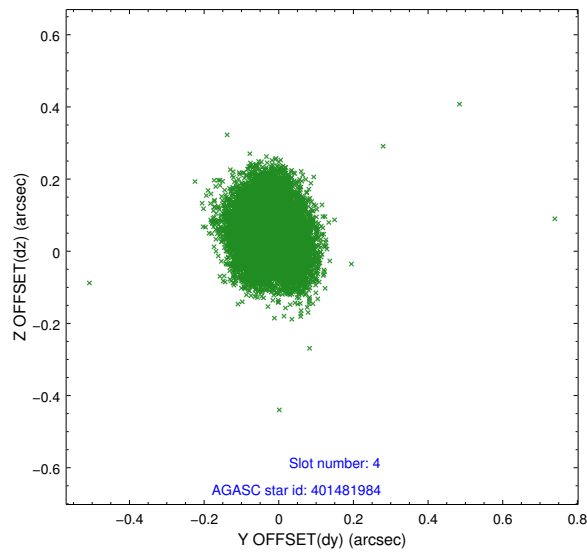
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	6767	-0.012	-0.022	0.014	0.034	0.000000	0.000000	-760.42	-1733.21
1	FID	ACIS-S-4	7.20	6767	0.079	0.013	0.016	0.036	0.000000	0.000000	2152.90	175.23
2	FID	ACIS-S-5	7.23	6766	-0.096	0.019	0.012	0.023	0.000000	0.000000	-1813.23	168.99
3	GUIDE	401479168	9.81	13509	0.028	0.066	0.123	0.197	248.051525	39.792234	1813.95	-618.41
4	GUIDE	401481984	8.71	13529	-0.020	0.055	0.089	0.146	247.136950	39.776672	-323.13	-1974.04
5	GUIDE	401882056	9.14	13528	-0.054	-0.092	0.081	0.134	248.472543	40.010094	2394.77	657.72
6	GUIDE	401480560	9.77	13521	-0.068	0.194	0.167	0.281	246.896626	39.730877	-810.48	-2455.50
7	GUIDE	401881872	10.04	13511	0.118	-0.210	0.123	0.199	246.976416	40.551930	-2130.10	197.93

## 2.4 Star Slots

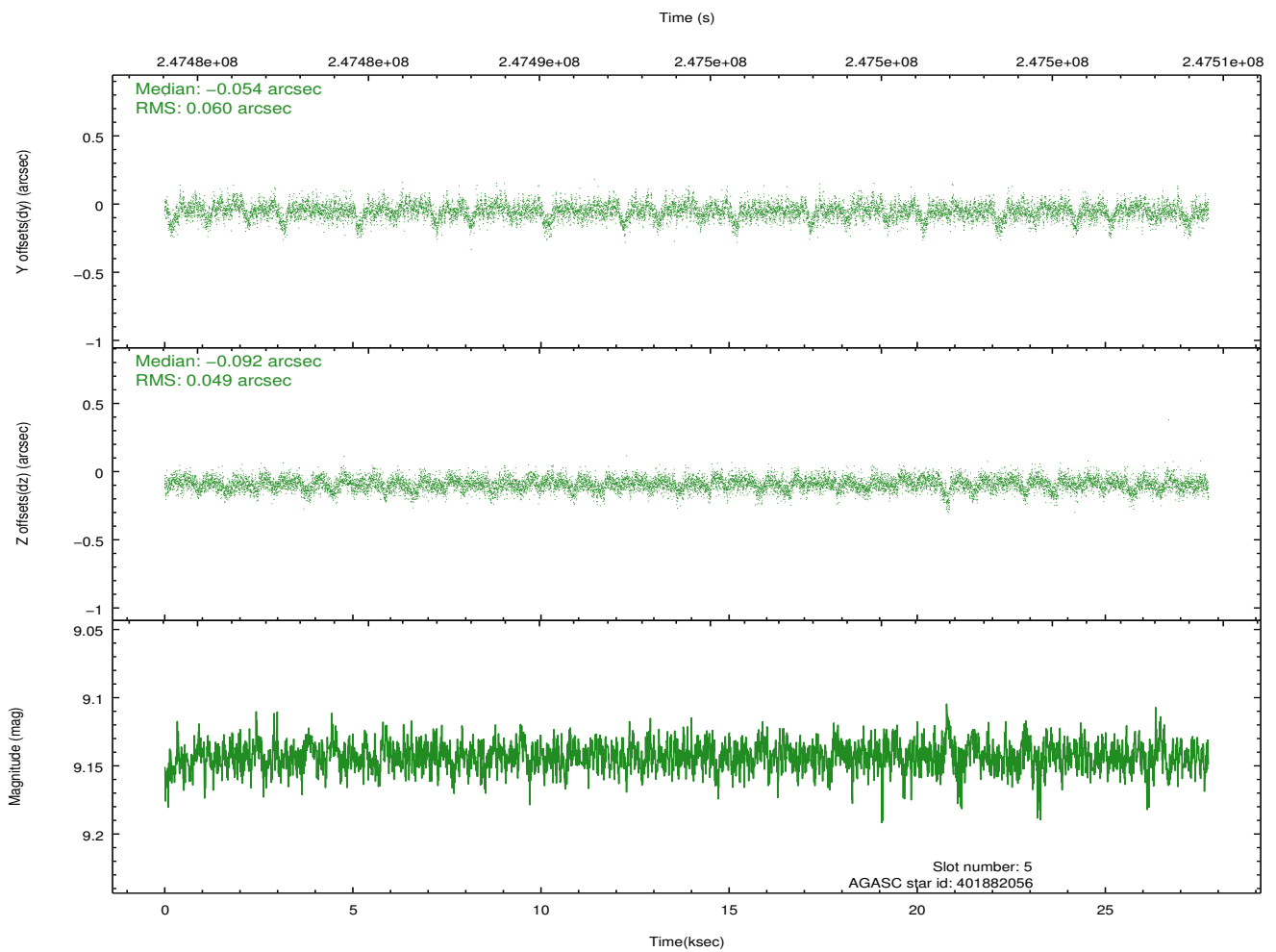
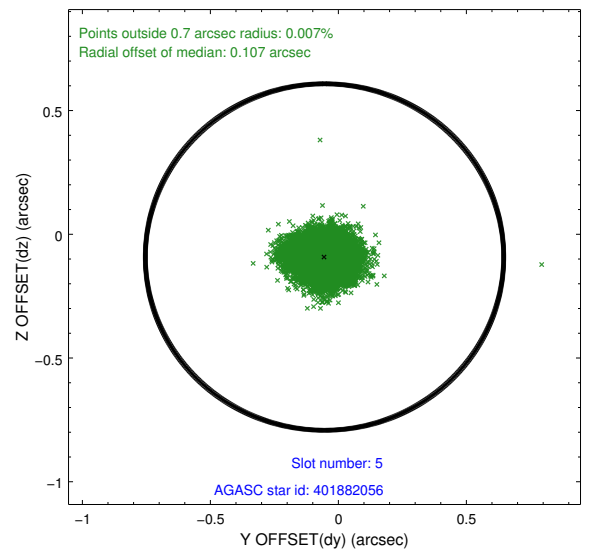
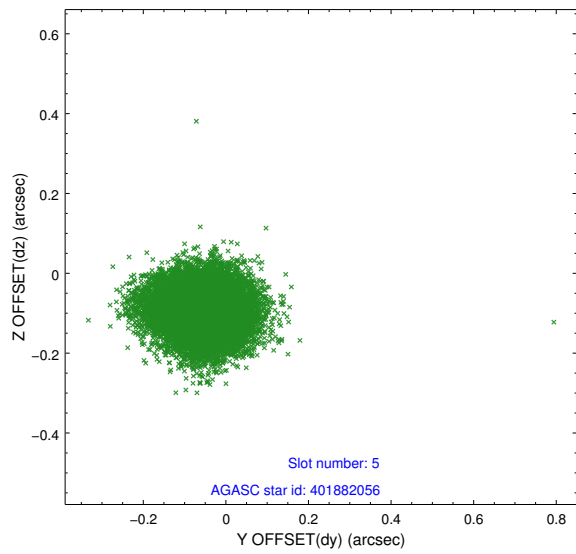
### 2.4.1 Slot 3



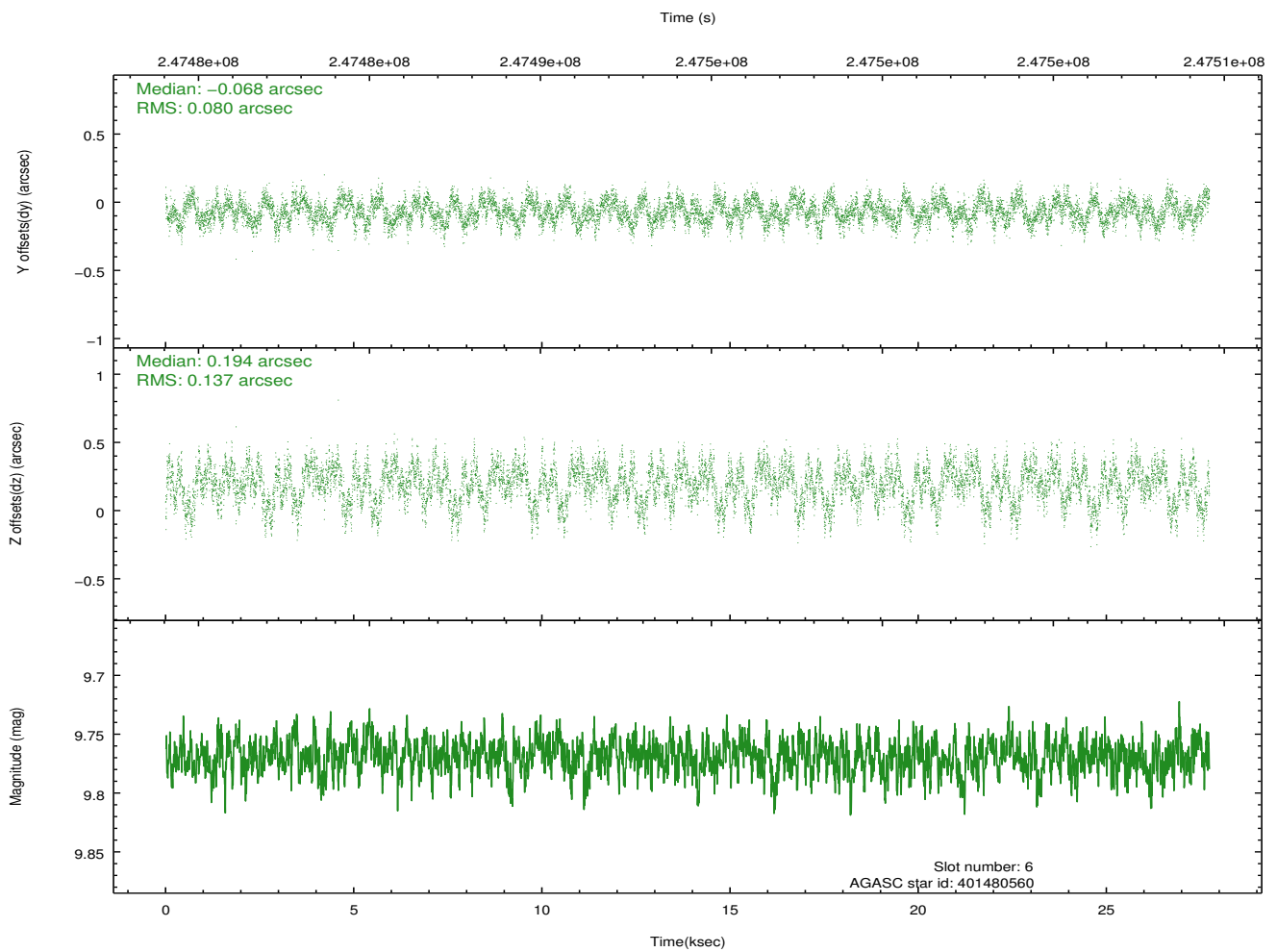
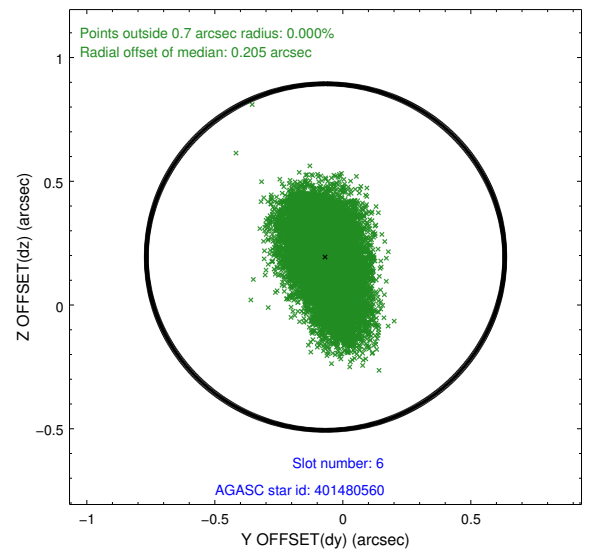
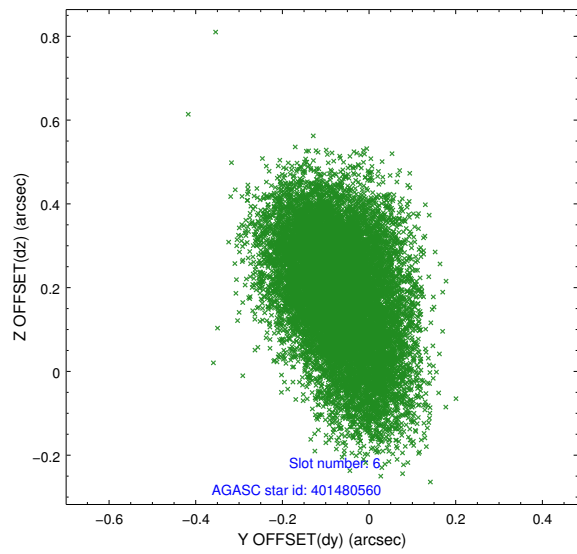
## 2.4.2 Slot 4



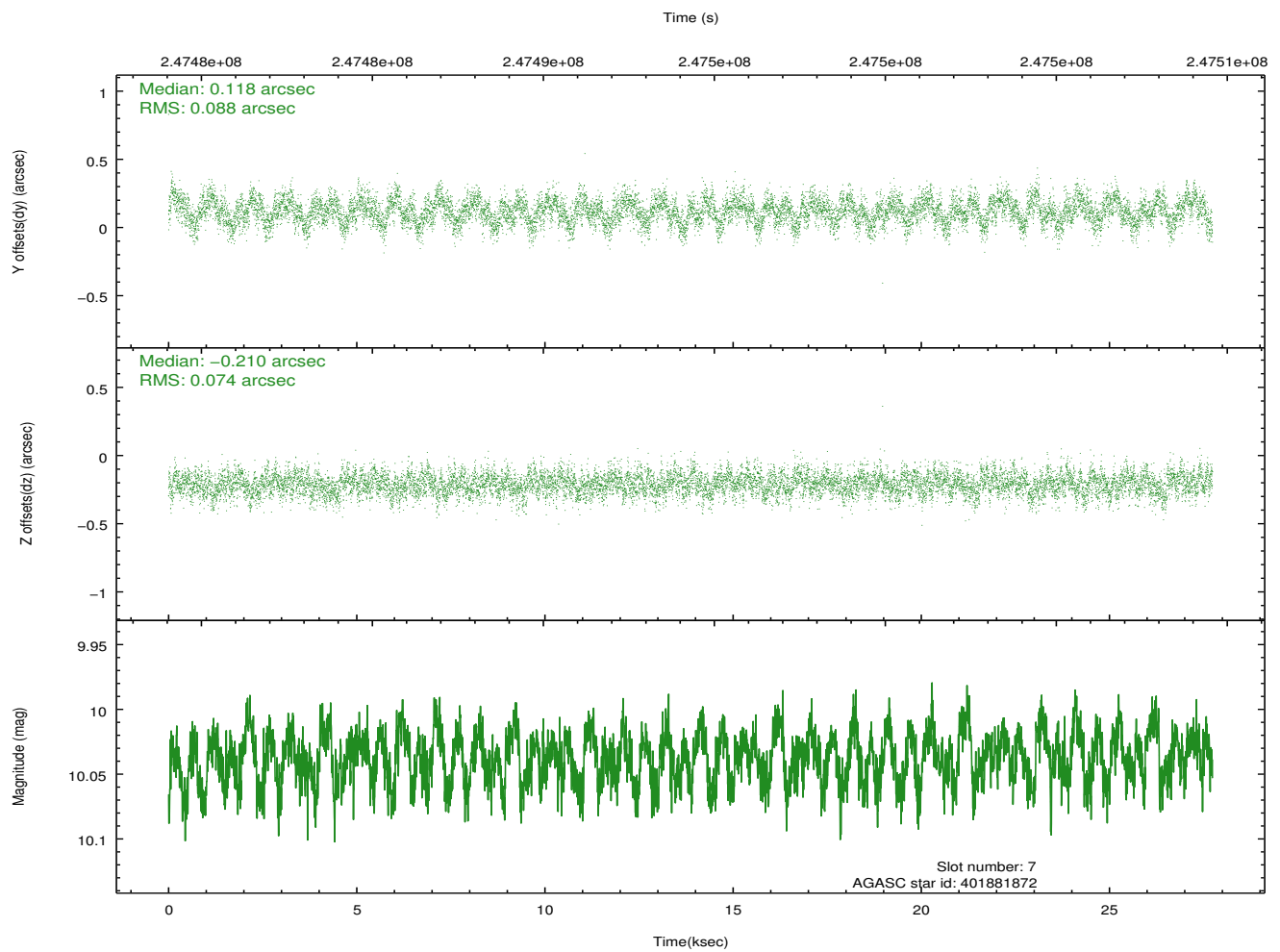
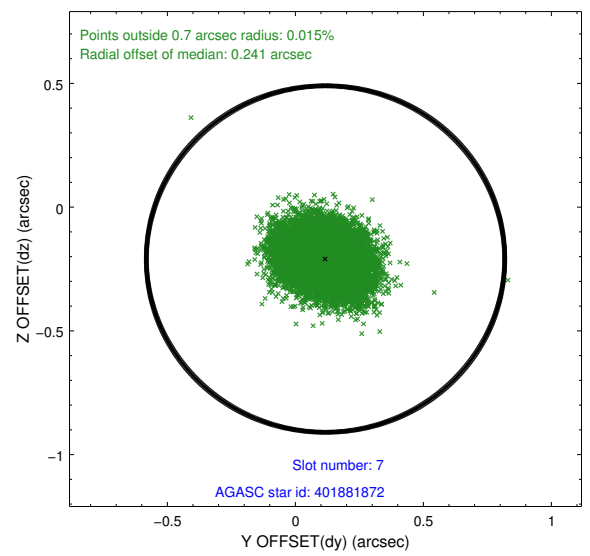
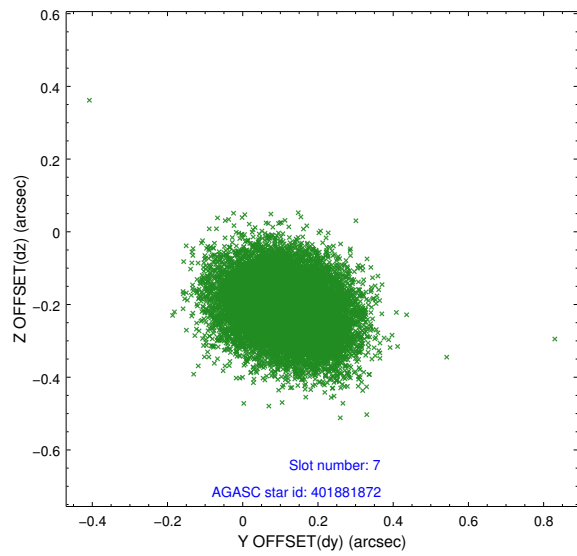
### 2.4.3 Slot 5



## 2.4.4 Slot 6

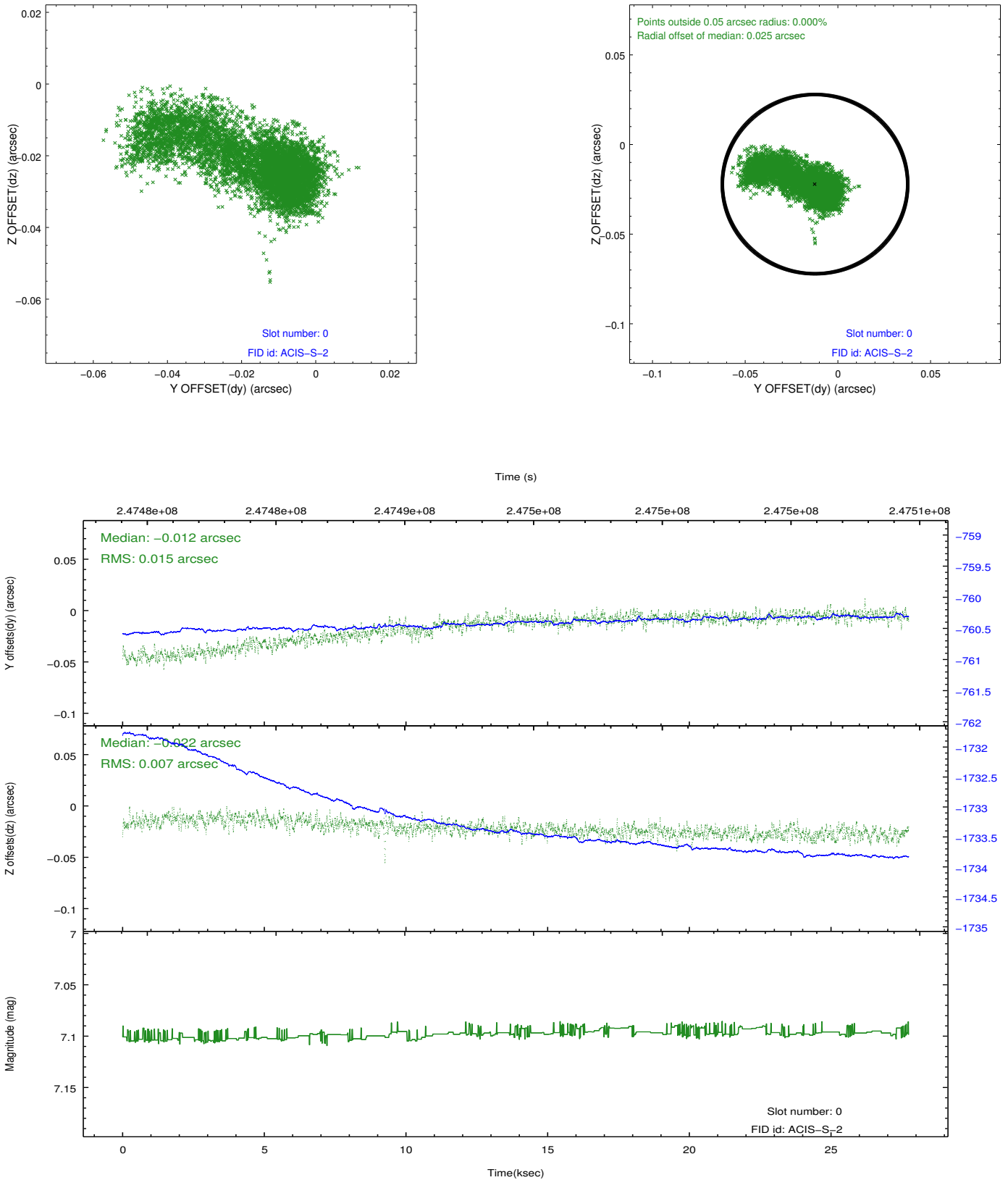


## 2.4.5 Slot 7

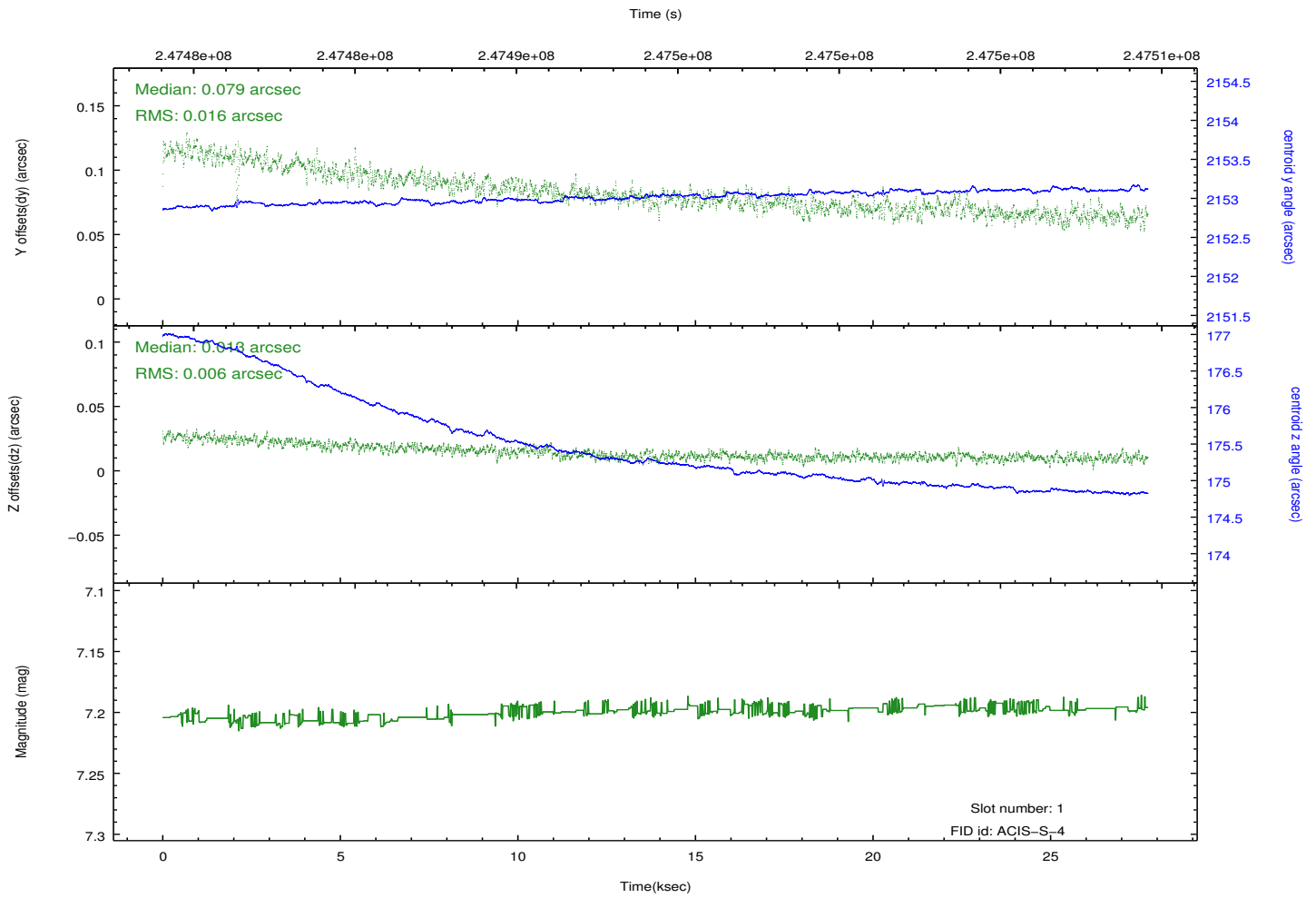
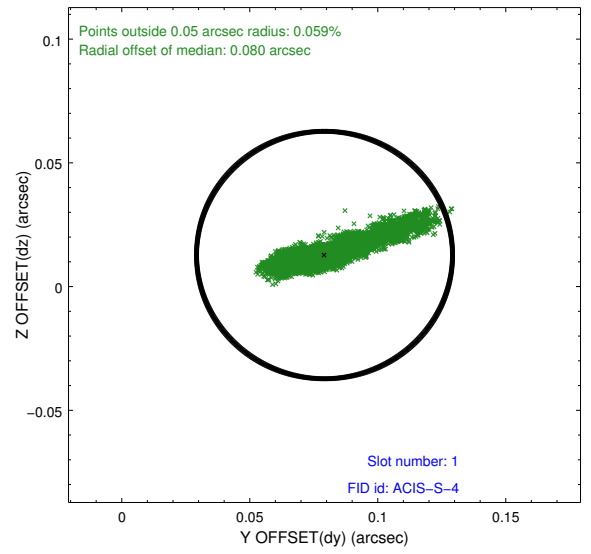
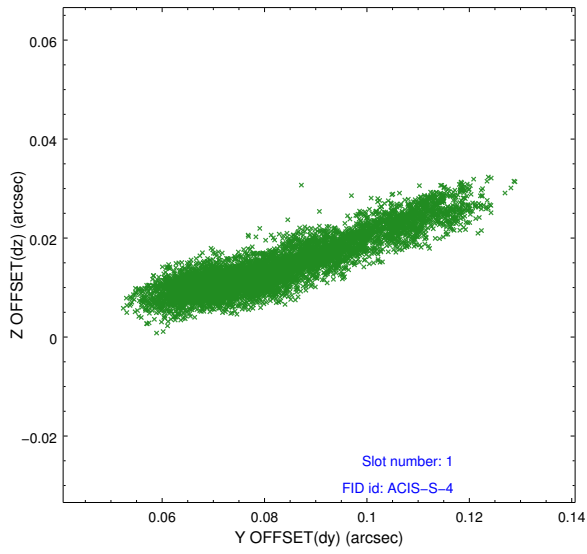


## 2.5 FID Slots

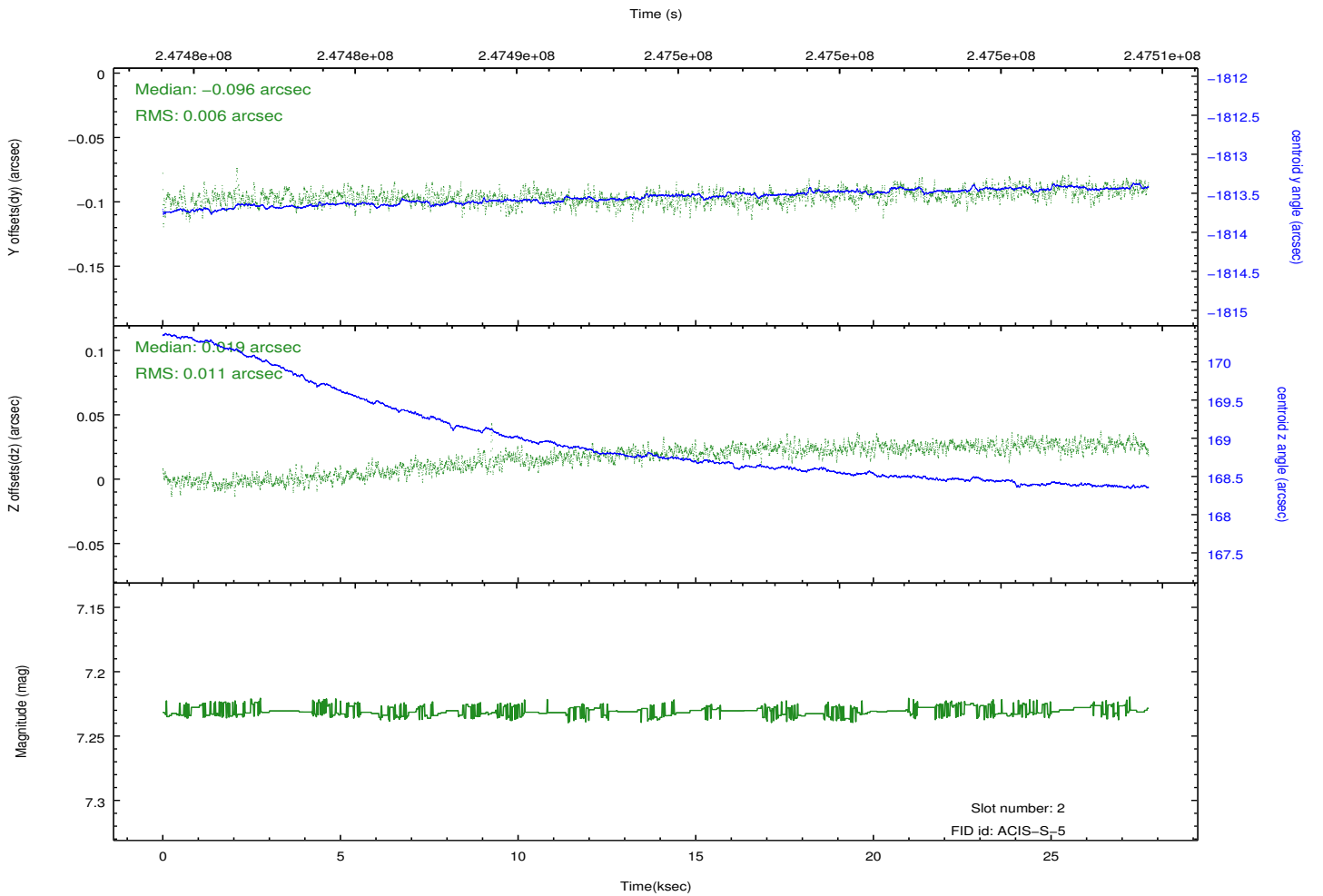
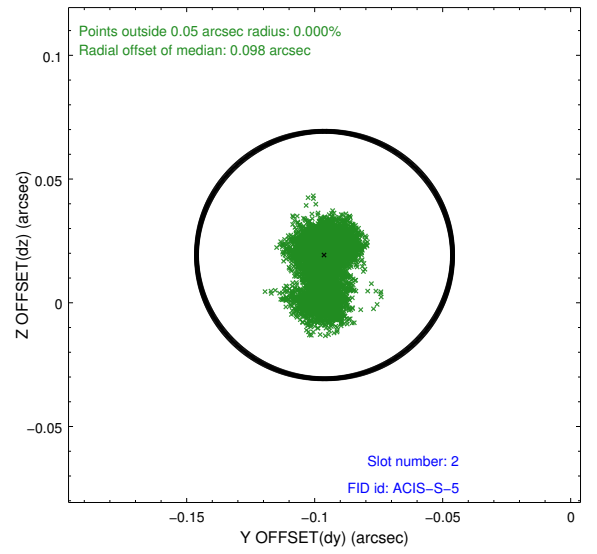
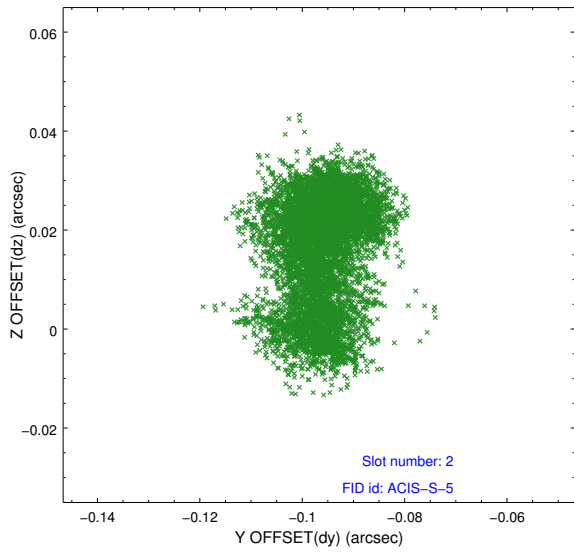
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



# A Summary

## A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2013.01.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	27.73759

## A.2 Comments