

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 11316 - L2 Version 2  
Chandra X-Ray Center

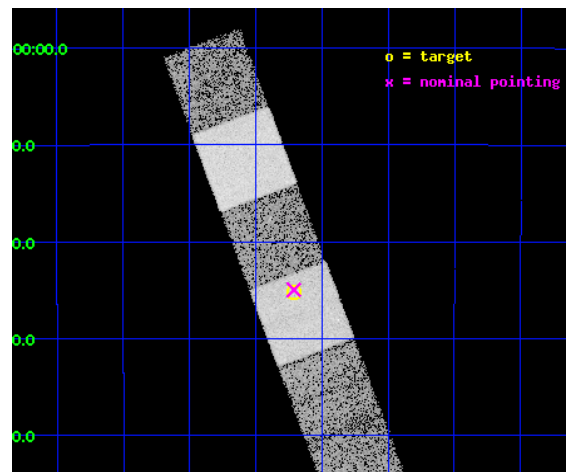
L2 Processing Date : Jun 19 2012

## 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

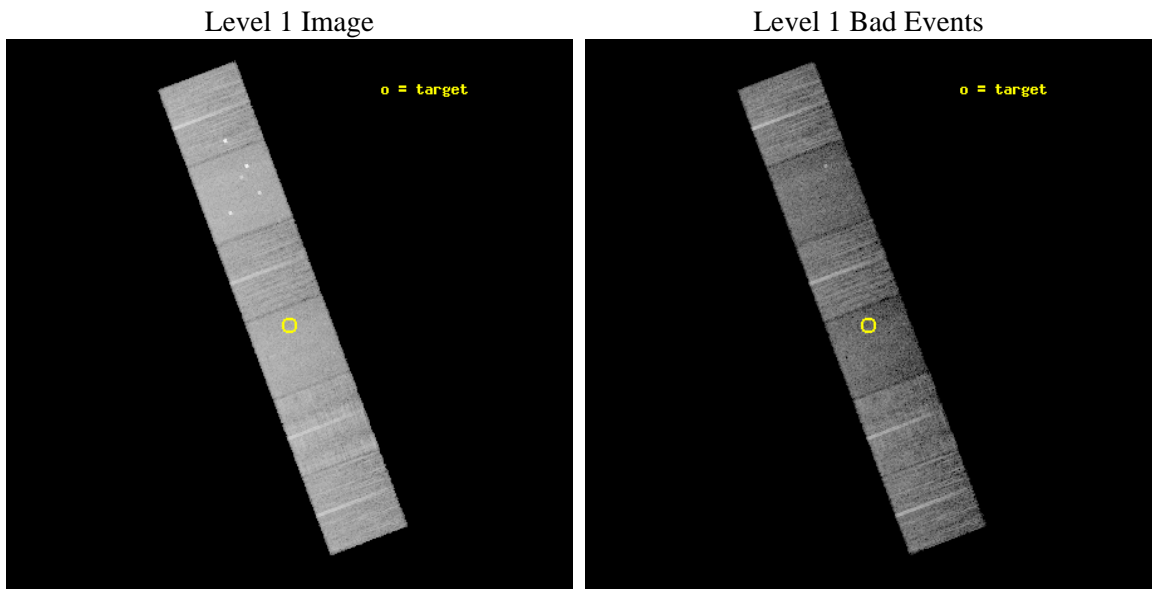
seq_num	600835	Sequence number
obs_id	11316	Observation id
title	Accretion onto nuclear black holes in early type galaxies: comparing field vs. clusters	Proposal title
observer	Elena Gallo	Principal investigator
object	ESO576-076	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	202.679	Observer's specified target RA [deg]
dec_targ	-22.42109	Observer's specified target Dec [deg]
ra_nom	202.67801426055	Nominal RA [deg]
dec_nom	-22.416337402778	Nominal Dec [deg]
roll_nom	69.389900849284	Nominal Roll [deg]
revision	2	Processing version of data
ontime	8860.7999670506	Sum of GTIs [s]
livetime	8748.5991825346	Livetime [s]
ontime4	8857.5590062141	Sum of GTIs [s]
ontime5	8860.7999670506	Sum of GTIs [s]
ontime6	8860.7999670506	Sum of GTIs [s]
ontime7	8860.7999670506	Sum of GTIs [s]
ontime8	8860.7999670506	Sum of GTIs [s]
ontime9	8857.5589568615	Sum of GTIs [s]
l2events	119073	Number of level 2 events



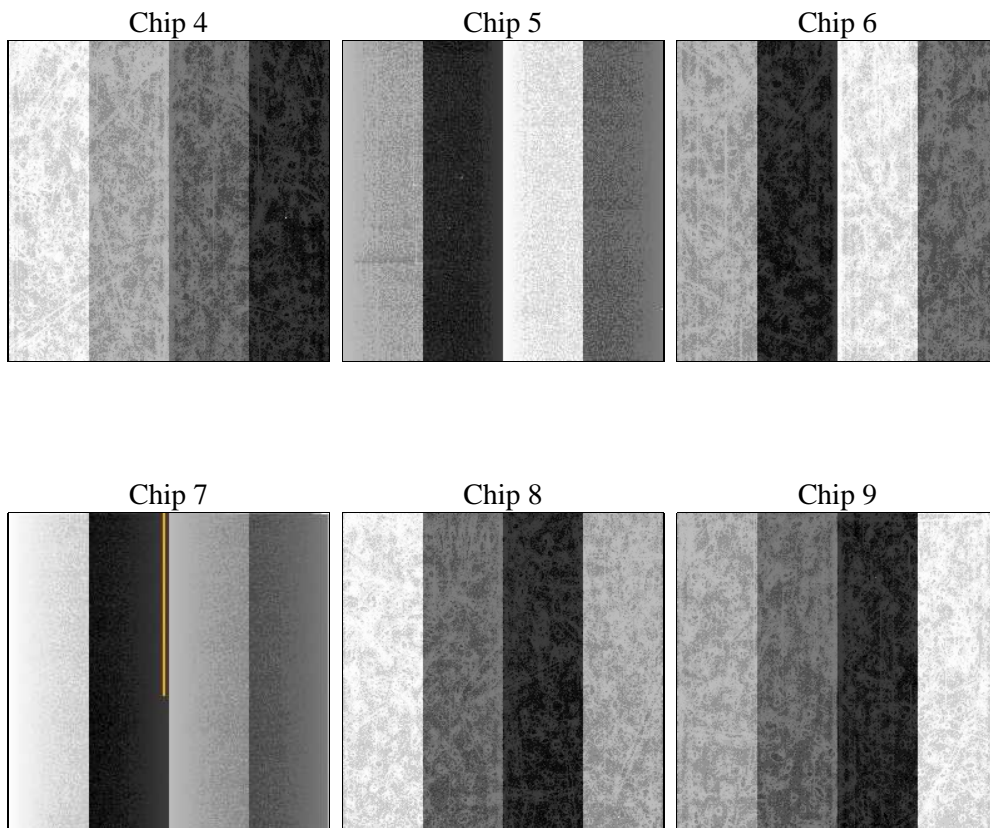
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	8800.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	8860.7999670506	Sum of GTIs [s]
caldsver	4.4.10	&#160	ontime4	8857.5590062141	Sum of GTIs [s]
date	2012-06-19T21:44:58	Date and time of file creation	ontime5	8860.7999670506	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	8860.7999670506	Sum of GTIs [s]
			ontime7	8860.7999670506	Sum of GTIs [s]
			ontime8	8860.7999670506	Sum of GTIs [s]
			ontime9	8857.5589568615	Sum of GTIs [s]
			l1events	548614	Number of level 1 events

### 2.1.4 Events

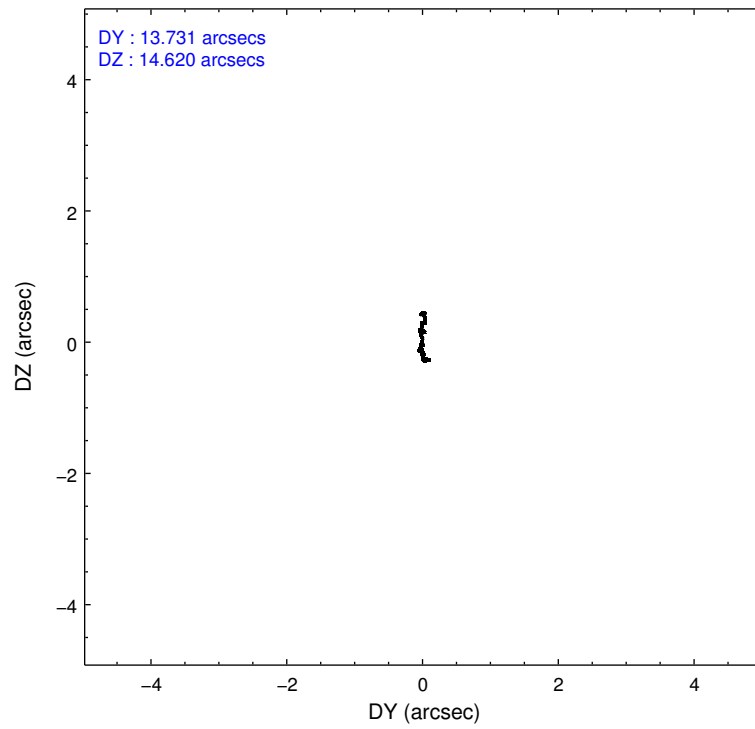
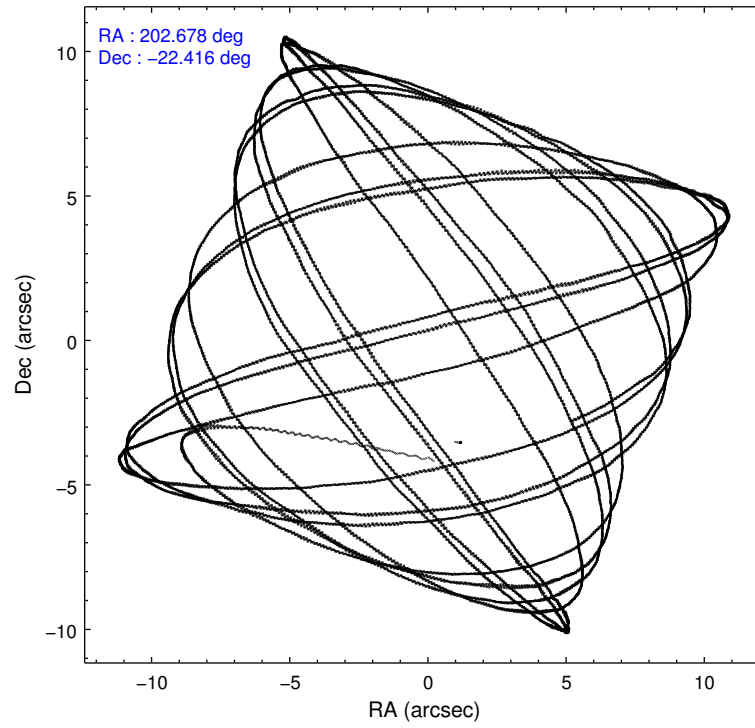
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	94787	112539	77993	89131	97862	76302	grade 0 events	5006	7134	2847	3758	7404	3274
rejected events	84465	56039	69849	48731	73445	67548		5%	6%	3%	4%	7%	4%
rejected %	89%	49%	89%	54%	75%	88%	grade 1 events	92	419	35	120	77	54
								0%	0%	0%	0%	0%	0%
							grade 2 events	2030	17004	1857	8469	5545	1909
								2%	15%	2%	9%	5%	2%
							grade 3 events	958	2039	826	3481	2666	912
								1%	1%	1%	3%	2%	1%
							grade 4 events	860	1936	841	3581	2493	865
								0%	1%	1%	4%	2%	1%
							grade 5 events	3173	8448	3216	9316	4645	3618
								3%	7%	4%	10%	4%	4%
							grade 6 events	1474	28431	1776	21136	6324	1806
								1%	25%	2%	23%	6%	2%
							grade 7 events	81194	47128	66595	39270	68708	63864
								85%	41%	85%	44%	70%	83%

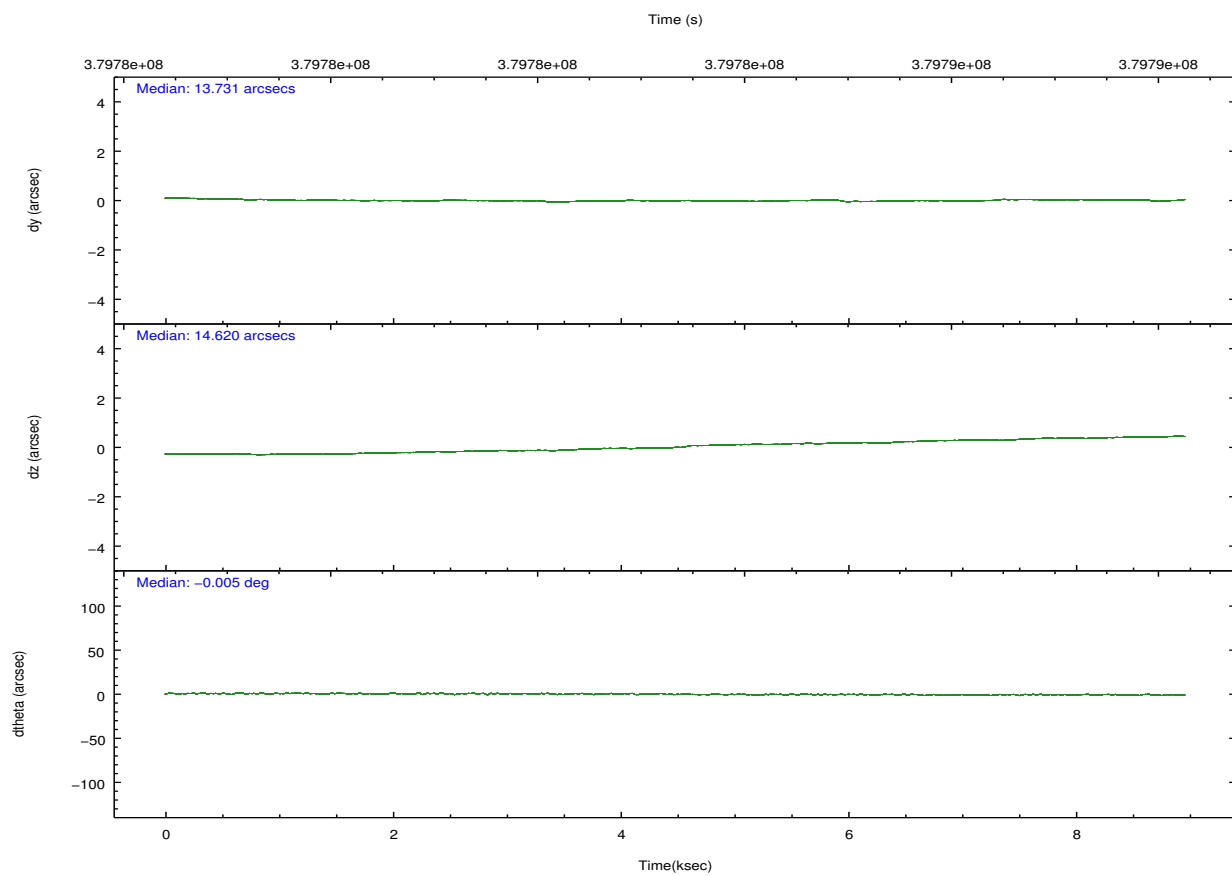
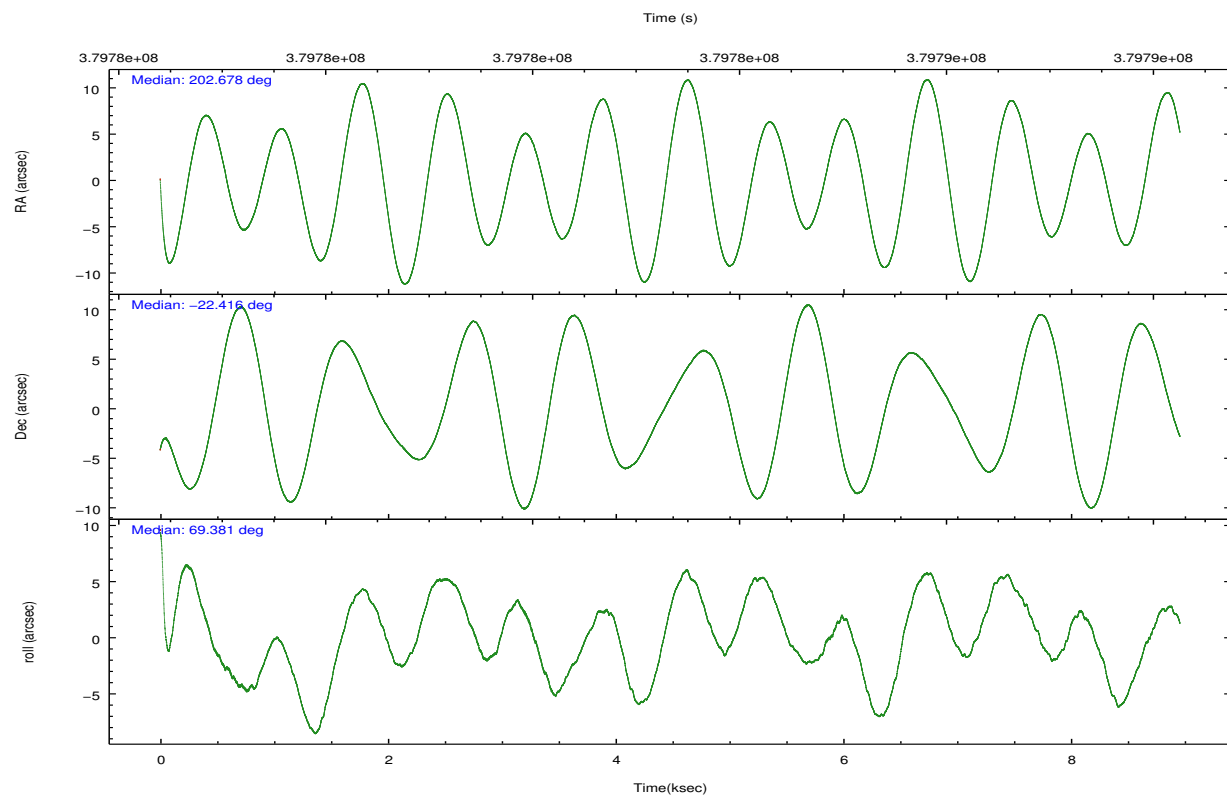


## 2.2 Compared Parameters

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	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	202.683221	202.6780142605536	CCD I2 on	N	N
[deg] Pointing Dec	-22.443247	-22.41633740277762	CCD I3 on	N	N
[deg] Pointing Roll	69.235257	69.38990084928429	CCD S0 on	O1	Y
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	Y	Y
[s] Observation start time (MET)	379779000.184000	379777981.12915	CCD S5 on	O2	Y
Observation start date	2010-01-13T14:08:54	2010-01-13T13:53:01	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	379787800.184000	379788616.52969	On-chip summing requested	N	N
Observation end date	2010-01-13T16:35:34	2010-01-13T16:50:16	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



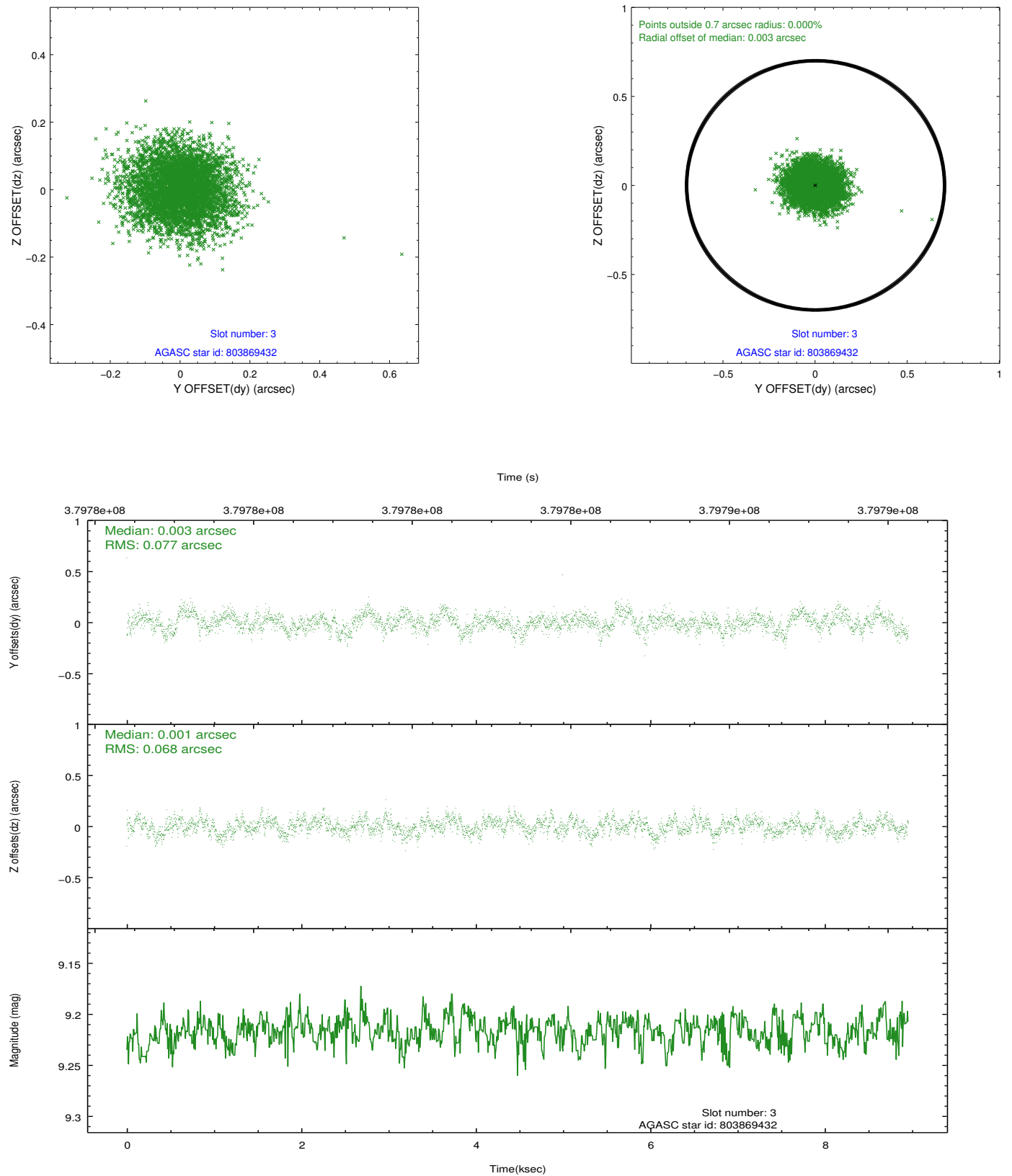


### Slot Statistics

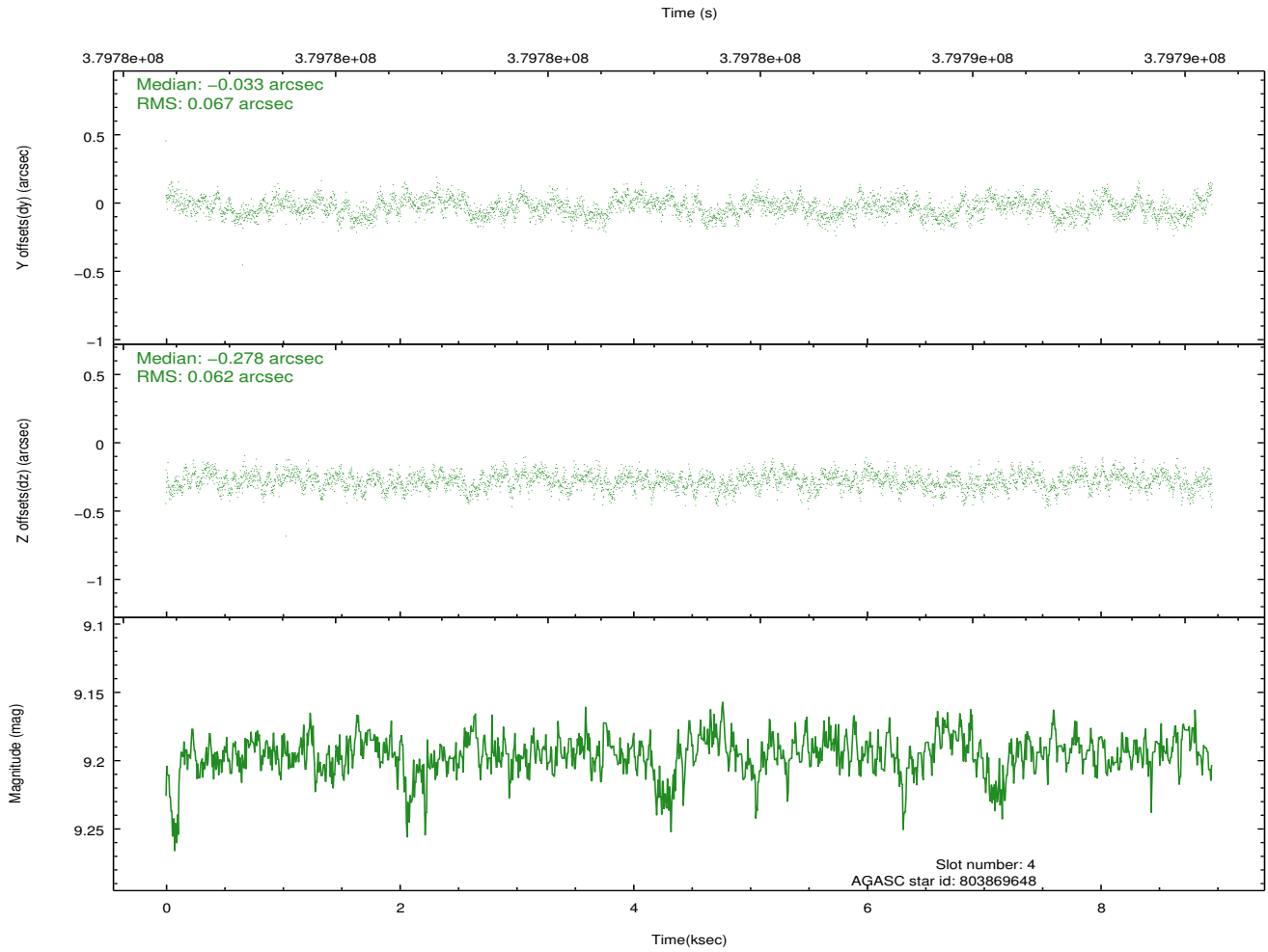
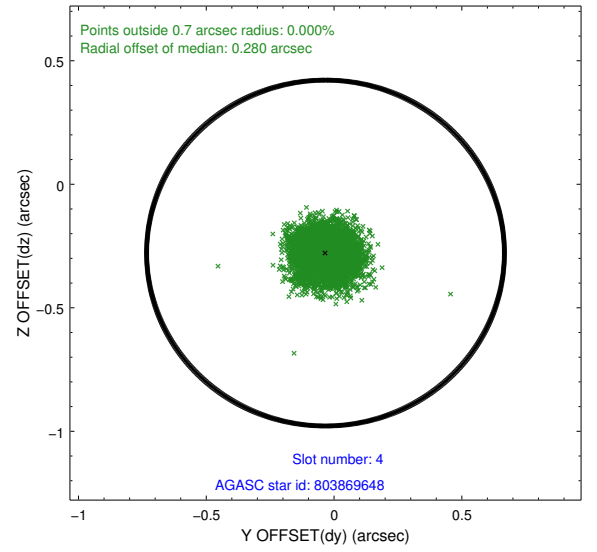
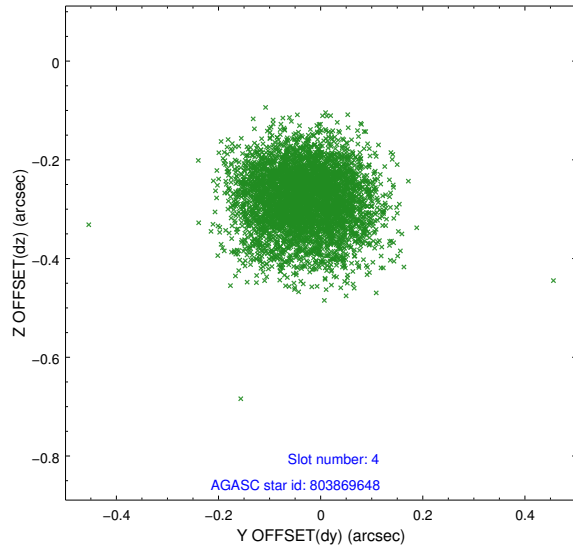
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.93	2186	-0.061	-0.029	0.009	0.015	0.000000	0.000000	-766.70	-1736.07
1	FID	ACIS-S-4	7.01	2186	0.183	0.037	0.006	0.011	0.000000	0.000000	2146.51	171.89
2	FID	ACIS-S-5	7.04	2186	-0.154	0.001	0.009	0.014	0.000000	0.000000	-1818.89	166.16
3	GUIDE	803869432	9.22	4369	0.003	0.001	0.109	0.174	203.198068	-22.179501	1494.14	-1268.20
4	GUIDE	803869648	9.20	4367	-0.033	-0.278	0.098	0.154	202.248482	-22.149162	474.40	1729.78
5	GUIDE	803869944	9.05	4369	-0.246	0.174	0.073	0.119	203.254899	-22.257041	1299.10	-1543.61
6	GUIDE	803871688	8.22	4369	0.032	0.040	0.080	0.122	202.137418	-22.426681	-590.92	1718.13
7	GUIDE	879887000	8.96	4368	0.244	0.065	0.089	0.145	203.009658	-22.893827	-1134.25	-1585.95

## 2.4 Star Slots

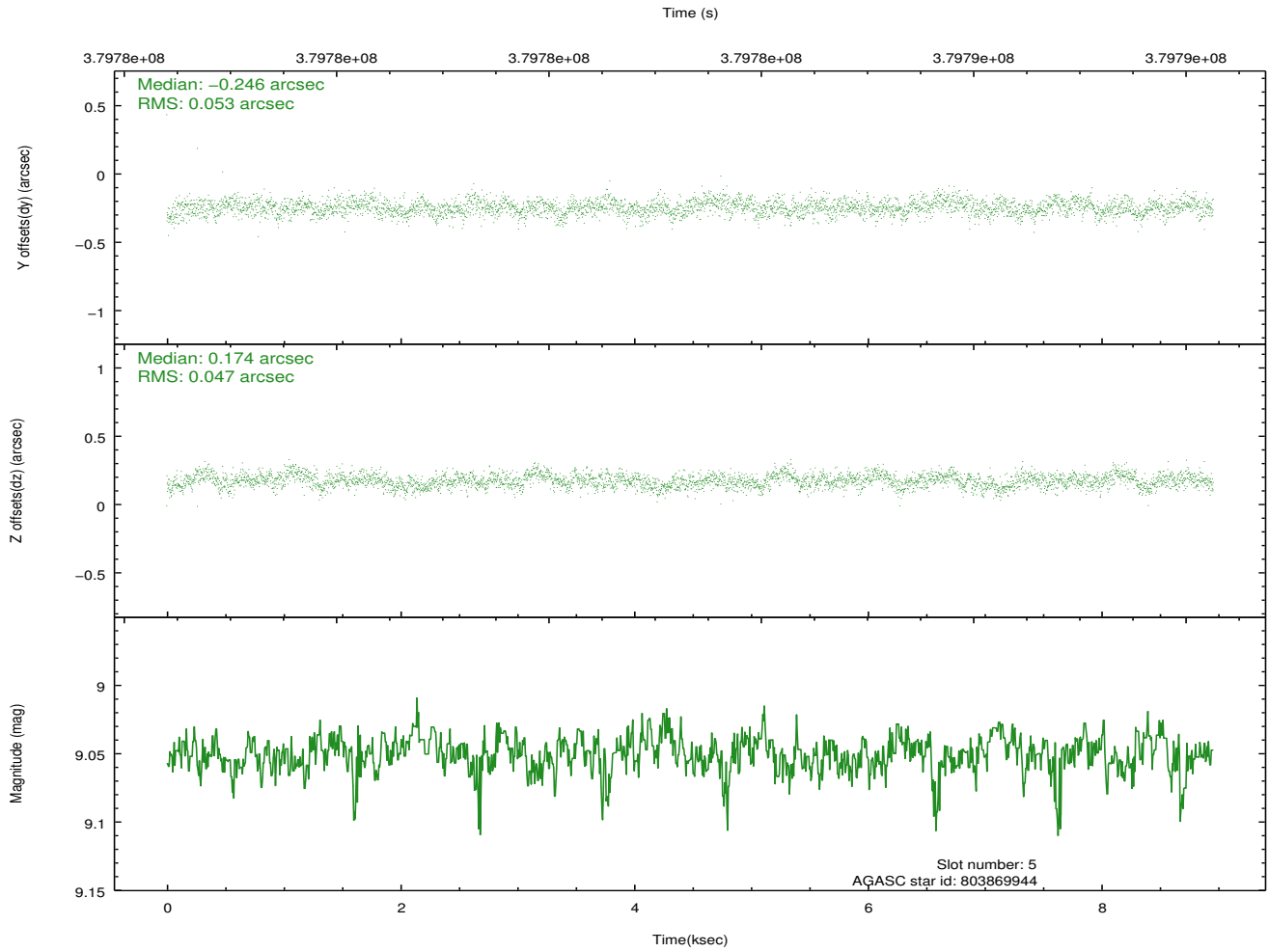
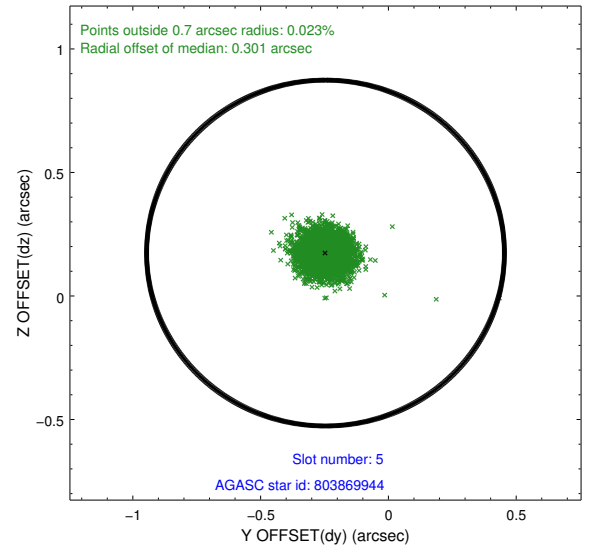
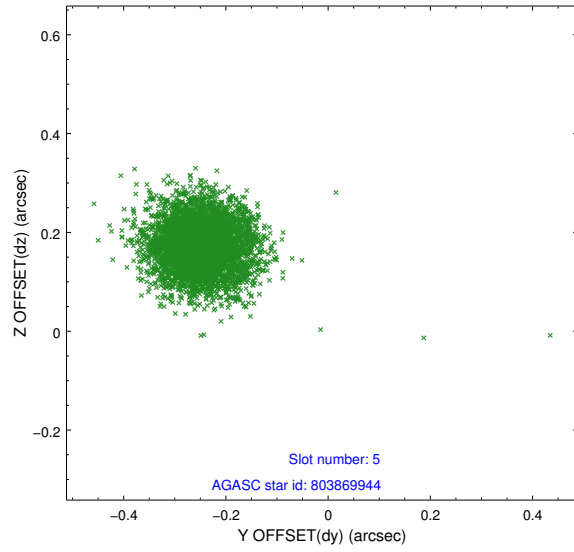
### 2.4.1 Slot 3



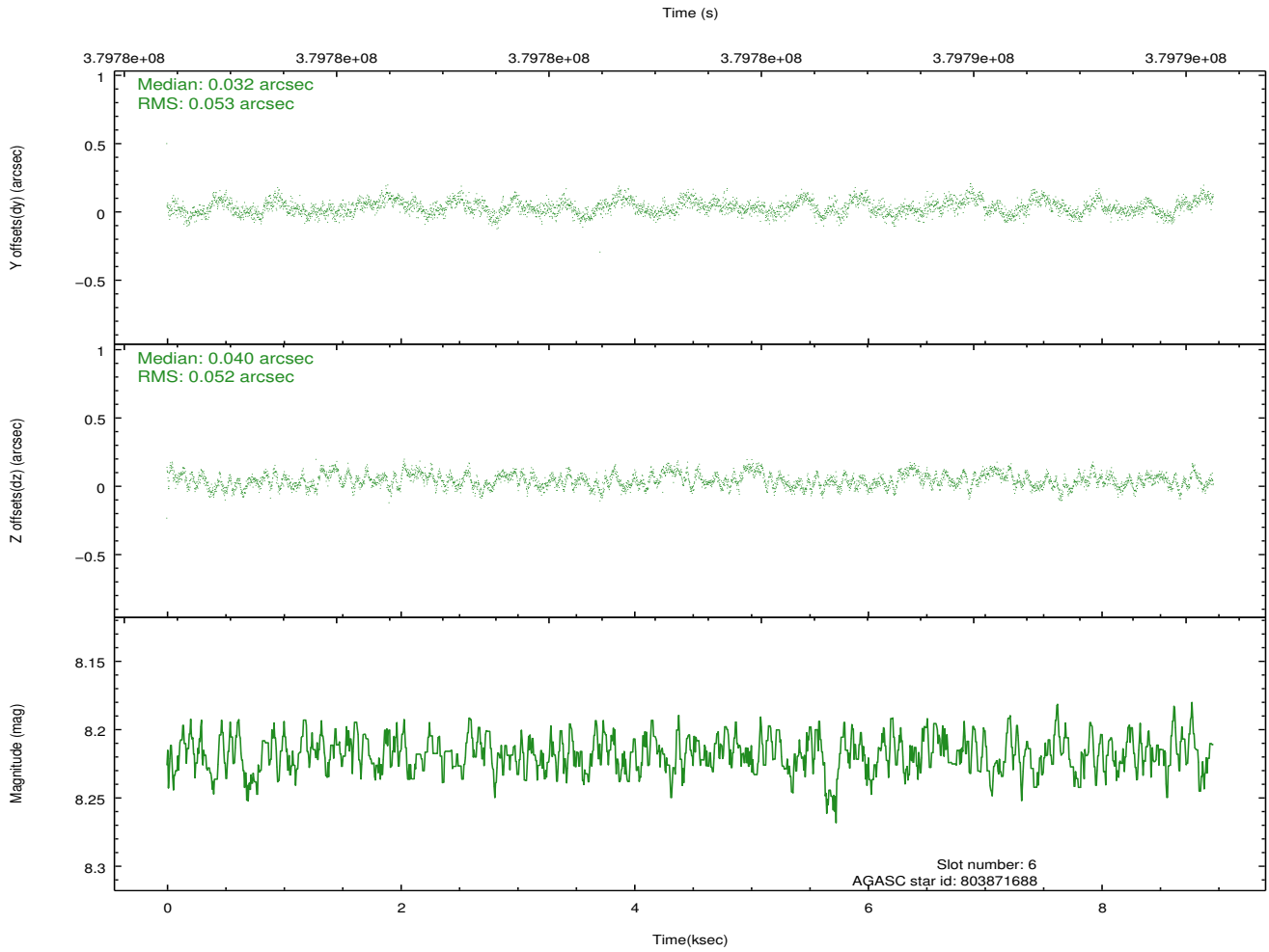
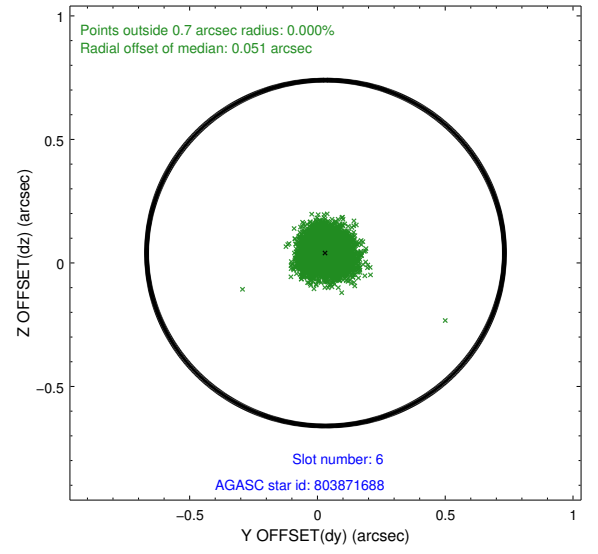
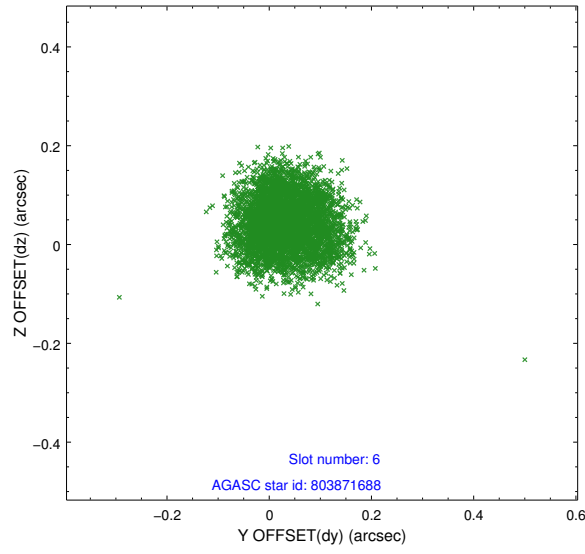
## 2.4.2 Slot 4



### 2.4.3 Slot 5

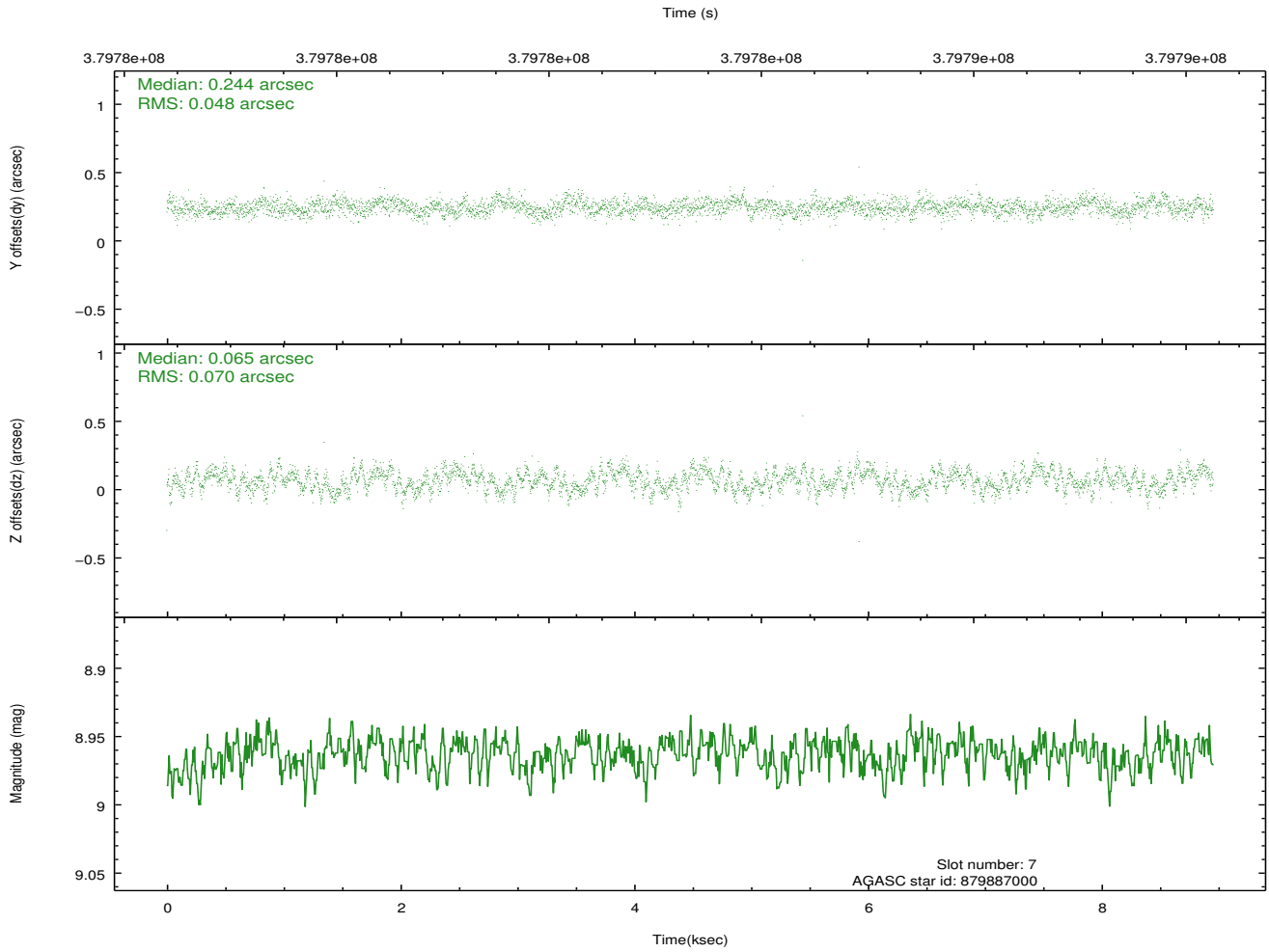
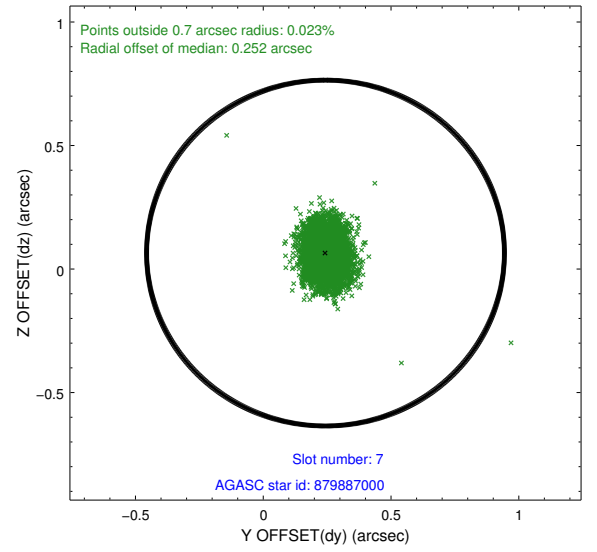
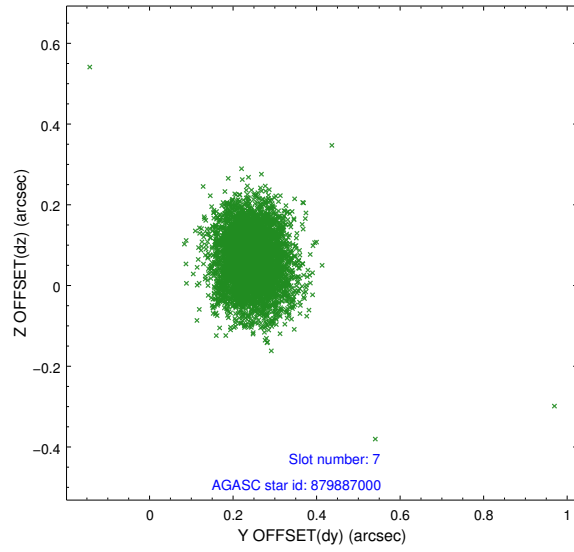


## 2.4.4 Slot 6



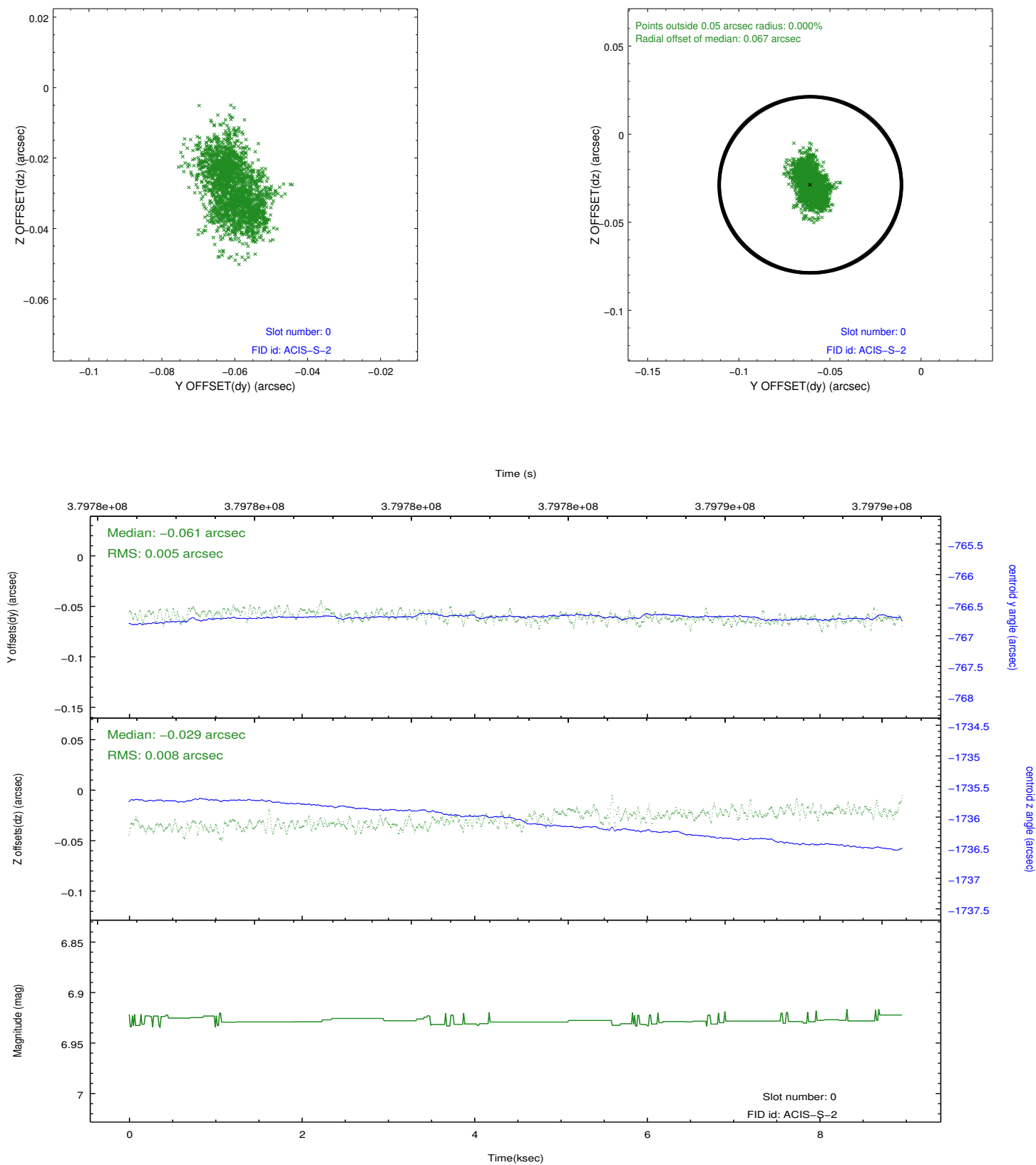


## 2.4.5 Slot 7

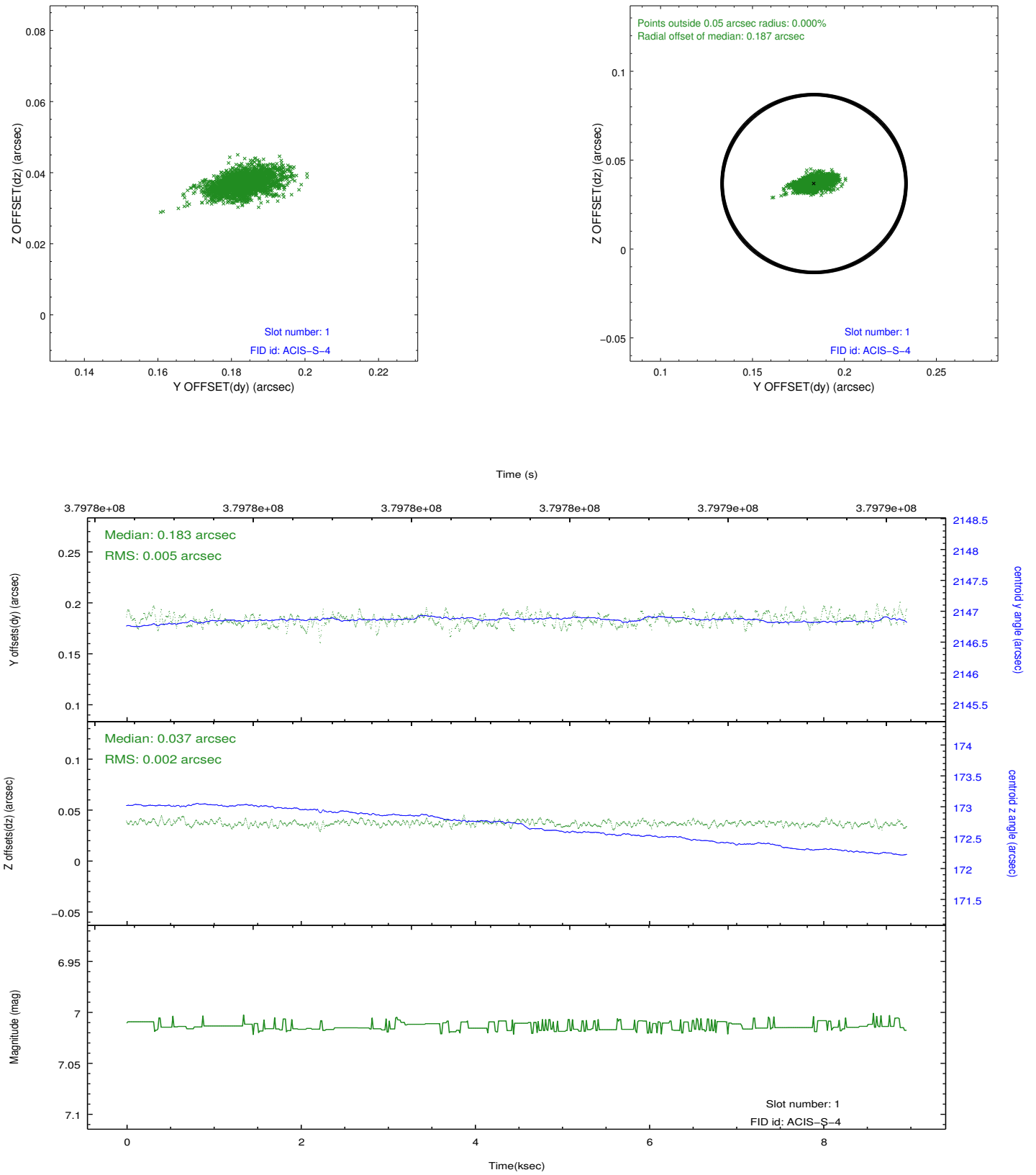


## 2.5 FID Slots

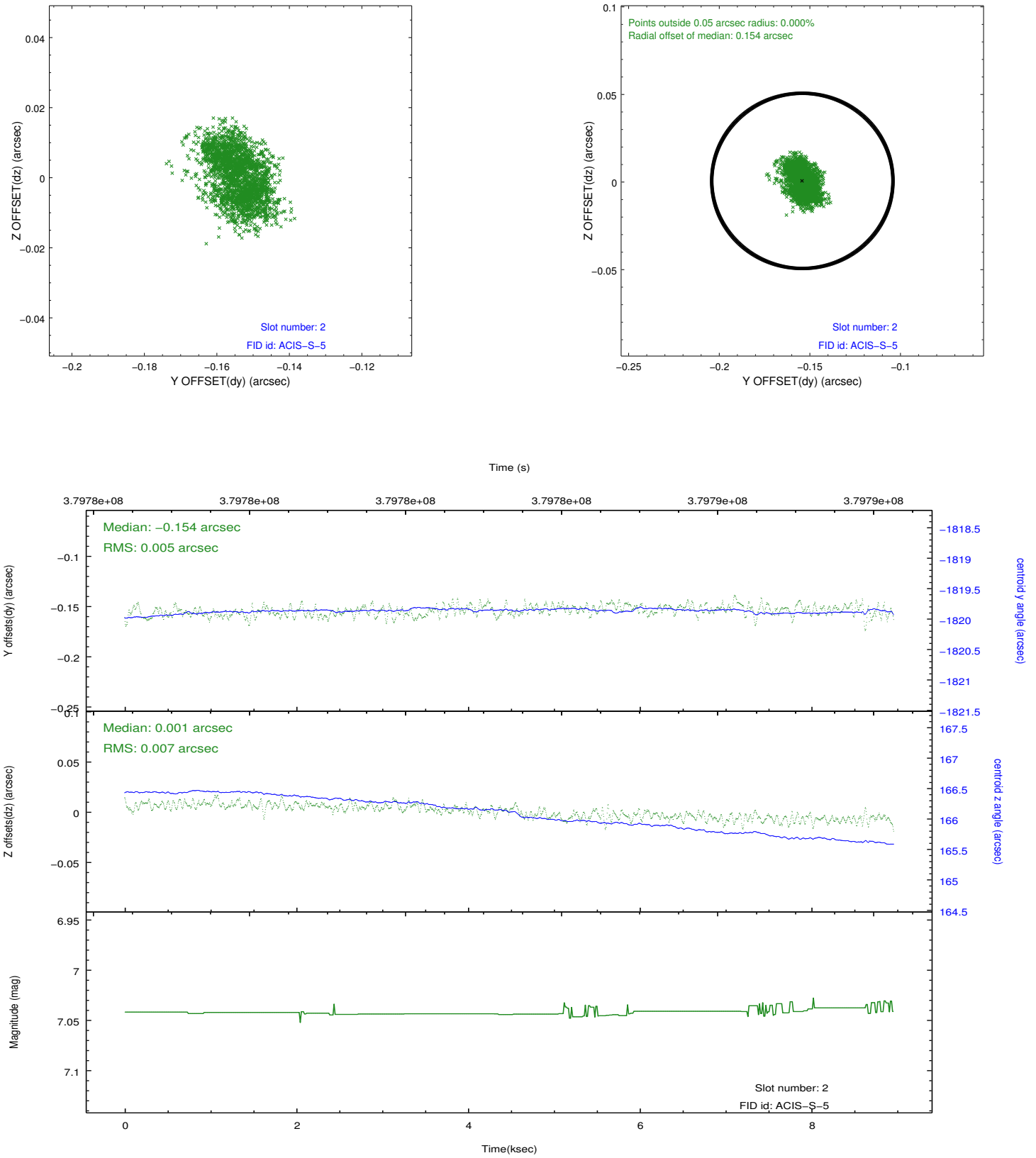
### 2.5.1 Slot 0



## 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)	2012.06.26
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.8607999670506

### A.2 Comments