

# V&V Reference Report

## L2 ASCDS Version : 10.7.1

Observation 22137 - L2 Version 1  
Chandra X-Ray Center

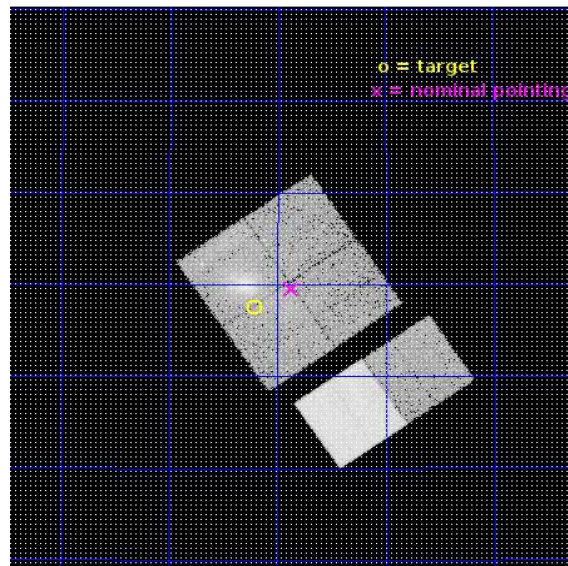
L2 Processing Date : Mar 21 2019

## 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	801786	Sequence number
obs_id	22137	Observation id
title	Abell 1763: A Giant Gas Sloshing Spiral But No Cool Core	Proposal
observer	Edmund Douglass	Principal investigator
object	Abell 1763	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	203.804167	Observer's specified target RA [deg]
dec_targ	40.96	Observer's specified target Dec [deg]
ra_nom	203.71804202881	Nominal RA [deg]
dec_nom	40.992953031368	Nominal Dec [deg]
roll_nom	145.68050236509	Nominal Roll [deg]
revision	1	Processing version of data
ontime	19952.000297308	Sum of GTIs [s]
livetime	19699.356055891	Livetime [s]
ontime0	19952.000297308	Sum of GTIs [s]
ontime1	19952.000297308	Sum of GTIs [s]
ontime2	19952.000297308	Sum of GTIs [s]
ontime3	19948.759327054	Sum of GTIs [s]
ontime6	19952.000297308	Sum of GTIs [s]
ontime7	19952.000297308	Sum of GTIs [s]
l2events	169513	Number of level 2 events

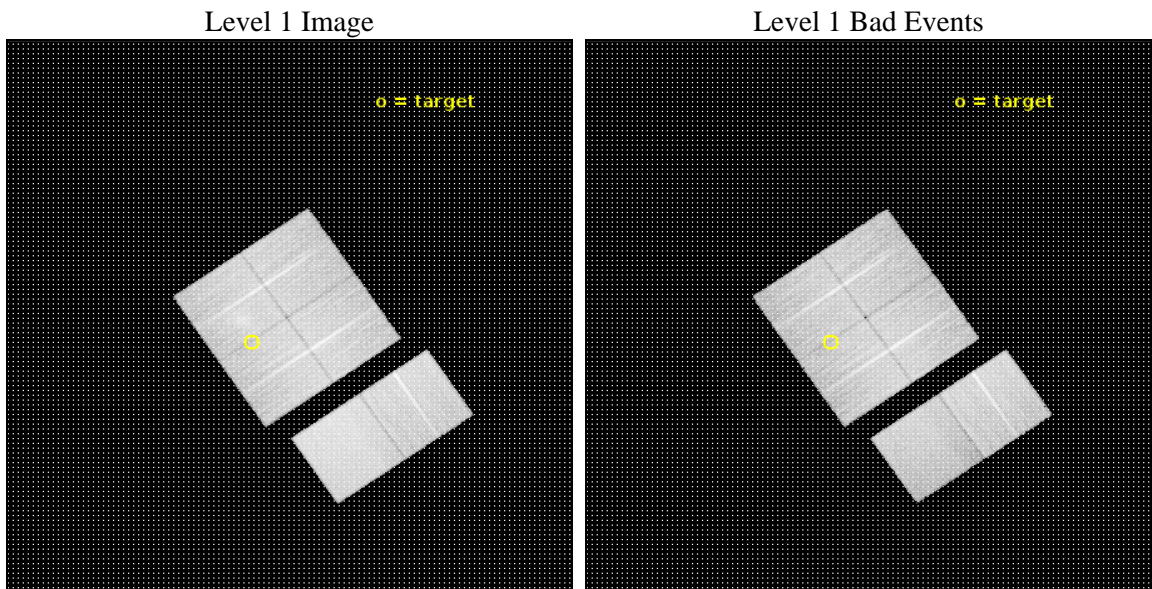




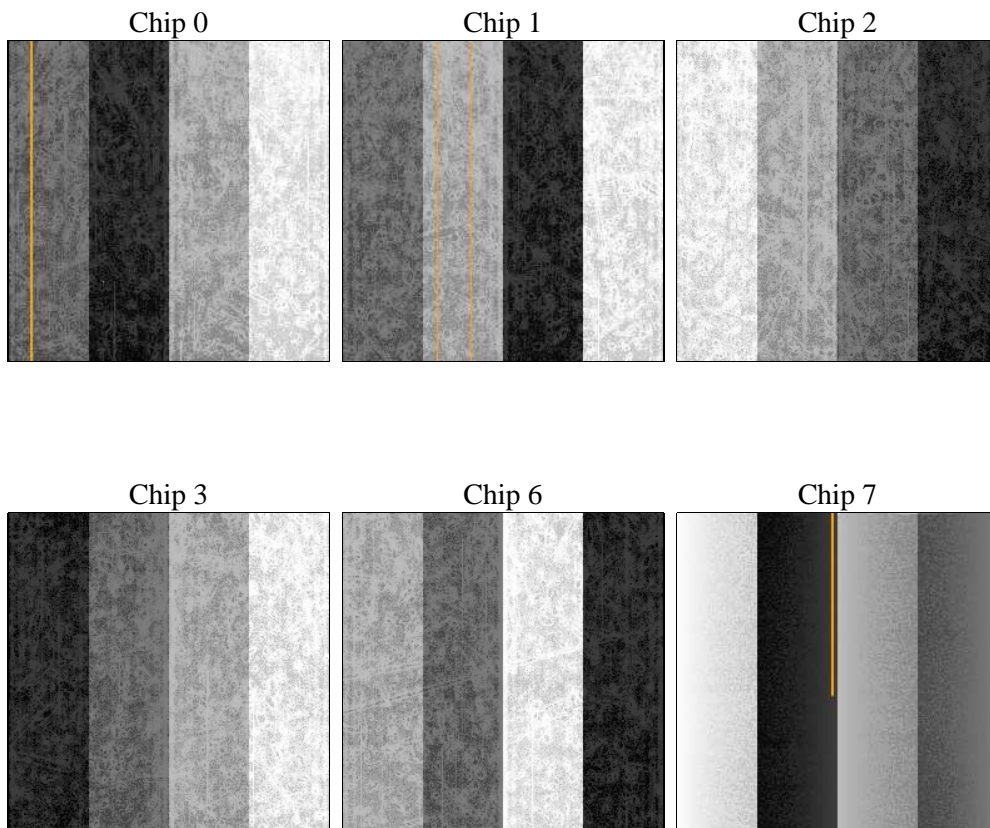
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	20000.000000	[s] Scheduled observation exposure time
ascdsver	10.7.1	Processing system revision	ontime	19952.000297308	Sum of GTIs [s]
caldsver	4.8.2	&#160	ontime0	19952.000297308	Sum of GTIs [s]
date	2019-03-21T06:37:28	Date and time of file creation	ontime1	19952.000297308	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	19952.000297308	Sum of GTIs [s]
			ontime3	19948.759327054	Sum of GTIs [s]
			ontime6	19952.000297308	Sum of GTIs [s]
			ontime7	19952.000297308	Sum of GTIs [s]
			l1events	963845	Number of level 1 events

### 2.1.4 Events

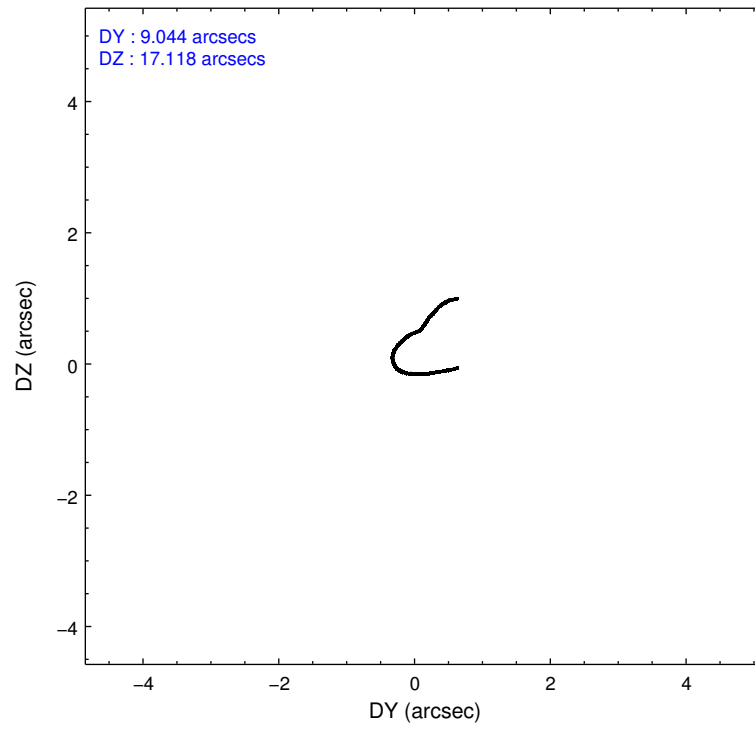
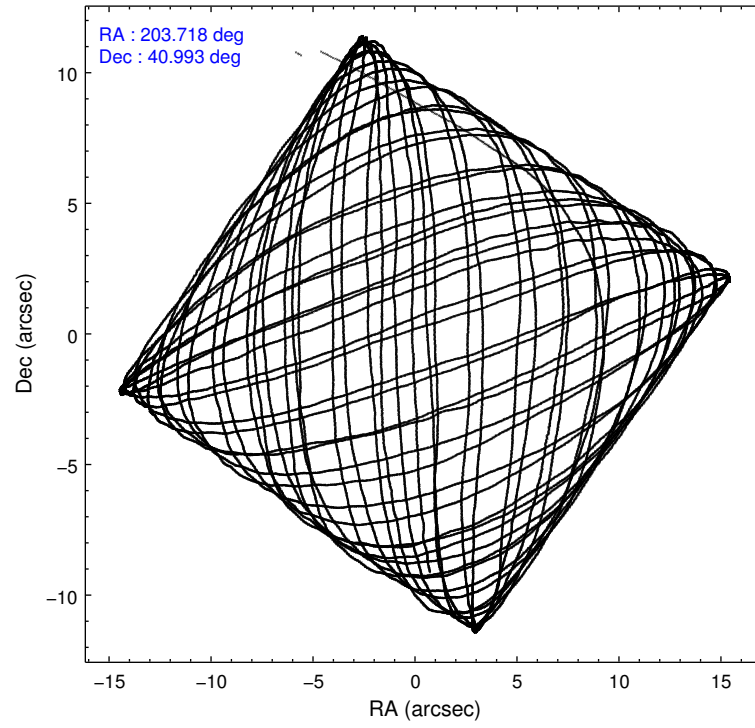
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	139972	153734	154144	153702	165609	196684	grade 0 events	6449	13918	6261	7178	5697	7335
rejected events	122087	124496	137406	135960	147742	110844		4%	9%	4%	4%	3%	3%
rejected %	87%	80%	89%	88%	89%	56%	grade 1 events	75	108	102	79	81	264
								0%	0%	0%	0%	0%	0%
							grade 2 events	4392	6402	3966	3574	4471	18143
								3%	4%	2%	2%	2%	9%
							grade 3 events	1723	2108	1576	1739	1569	6800
								1%	1%	1%	1%	0%	3%
							grade 4 events	1640	2100	1626	1684	1621	6666
								1%	1%	1%	1%	0%	3%
							grade 5 events	6256	6549	6094	7000	7107	19437
								4%	4%	3%	4%	4%	9%
							grade 6 events	3687	4723	3311	3572	4512	46922
								2%	3%	2%	2%	2%	23%
							grade 7 events	115750	117826	131208	128876	140551	91117
								82%	76%	85%	83%	84%	46%

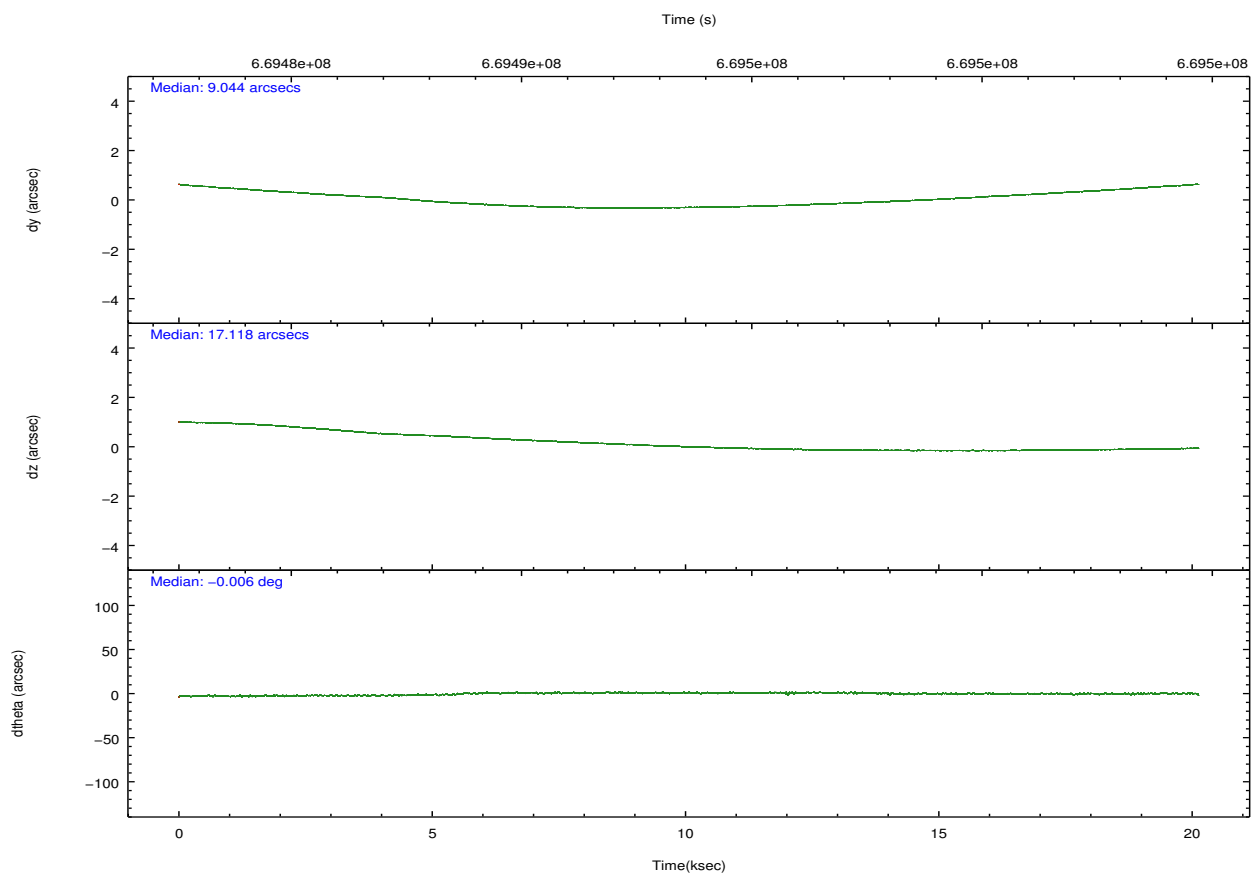
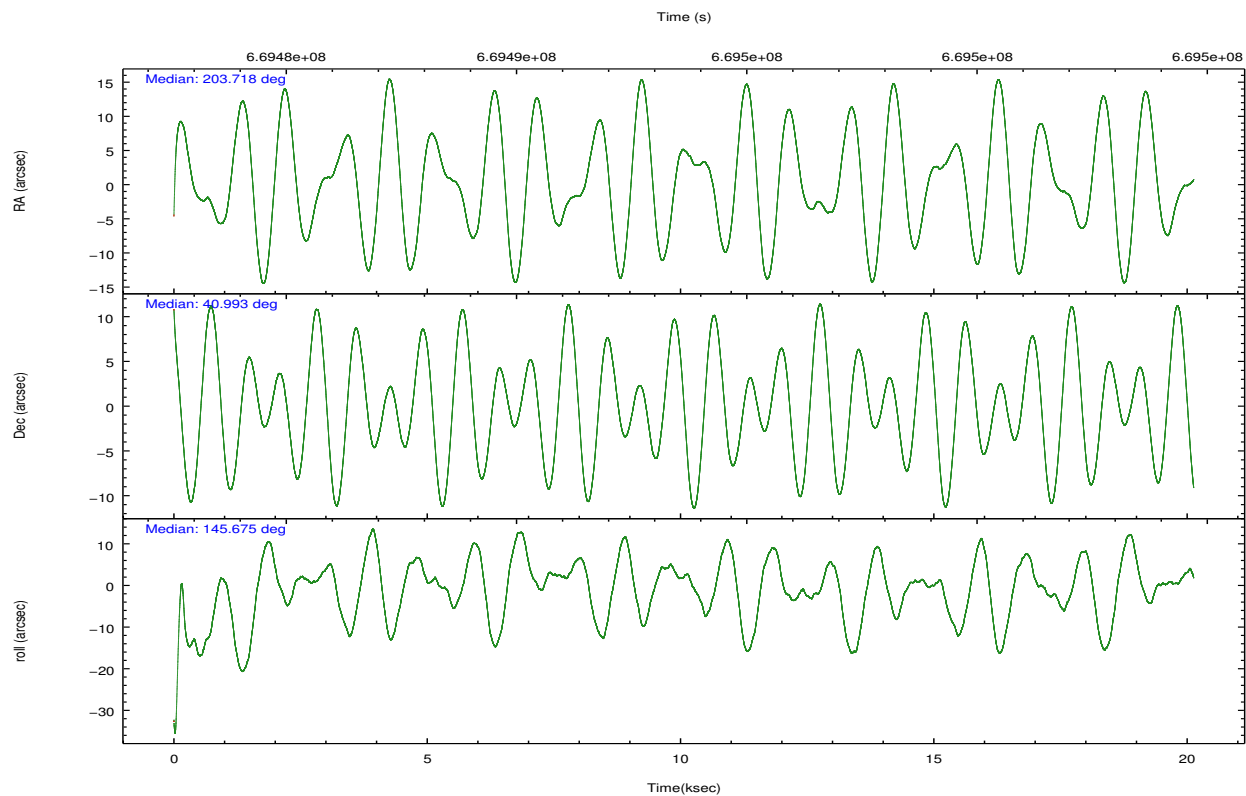
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-012367	ACIS-012367
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	203.754510	203.7180420288144
[deg] Pointing Dec	40.990969	40.99295303136779
[deg] Pointing Roll	145.447924	145.6805023650911
[mm] SIM focus pos	-0.782348	-0.7809083437167272
[mm] SIM defocus	0	0.001439871863259334
[mm] SIM translation stage pos	-233.592463	-233.5874344608287
[mm] SIM translation stage offset	0	-0.005018542100998502
[s] Observation start time (MET)	669483697.184000	669482547.0181201
Observation start date	2019-03-20T15:40:28	2019-03-20T15:22:27
[s] Observation end time (MET)	669503697.184000	669505207.71948
Observation end date	2019-03-20T21:13:48	2019-03-20T21:40:07
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
CCD I0 on	Y	Y
CCD I1 on	Y	Y
CCD I2 on	Y	Y
CCD I3 on	Y	Y
CCD S0 on	N	N
CCD S1 on	N	N
CCD S2 on	O2	Y
CCD S3 on	O1	Y
CCD S4 on	N	N
CCD S5 on	N	N
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



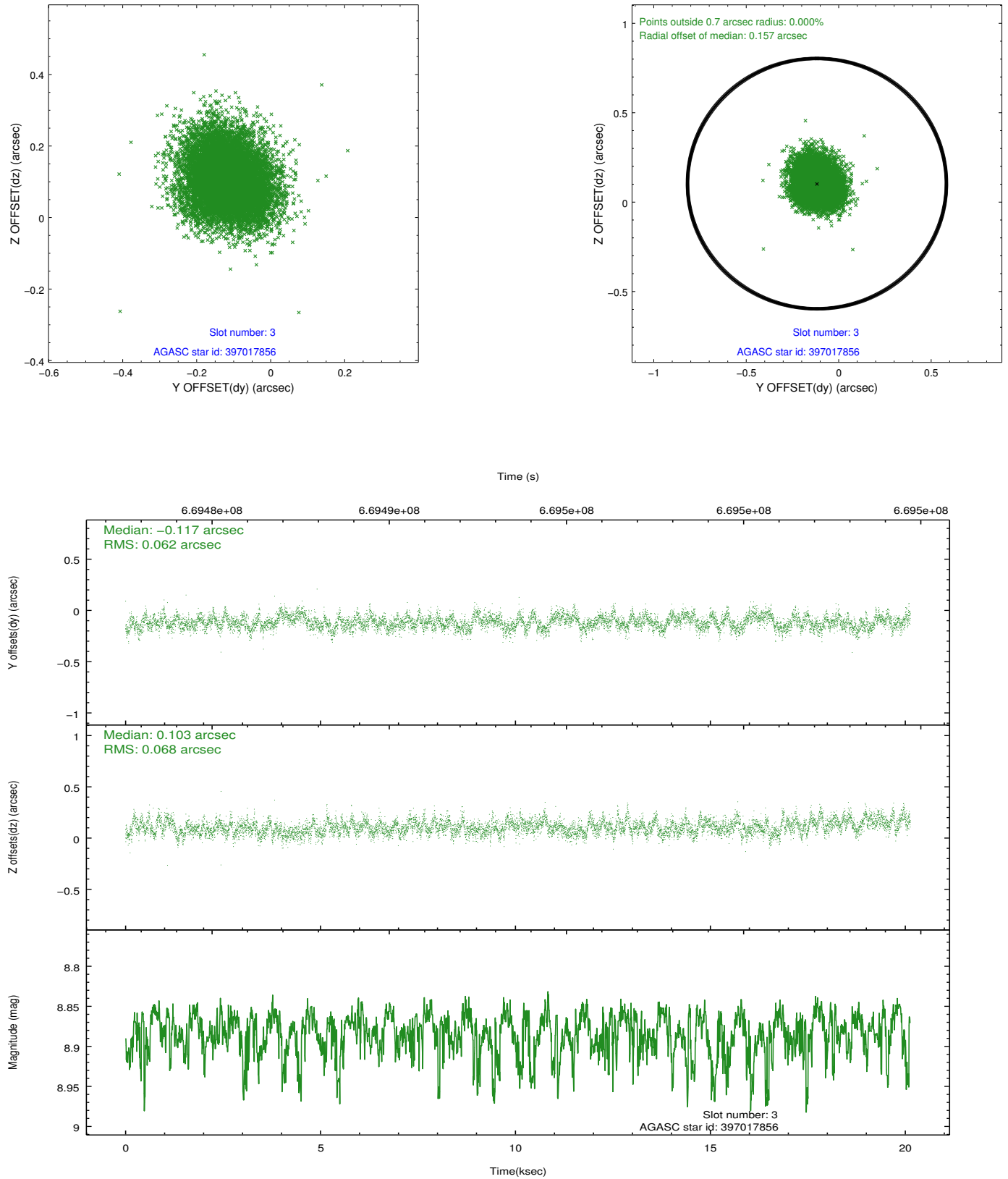


Slot Statistics

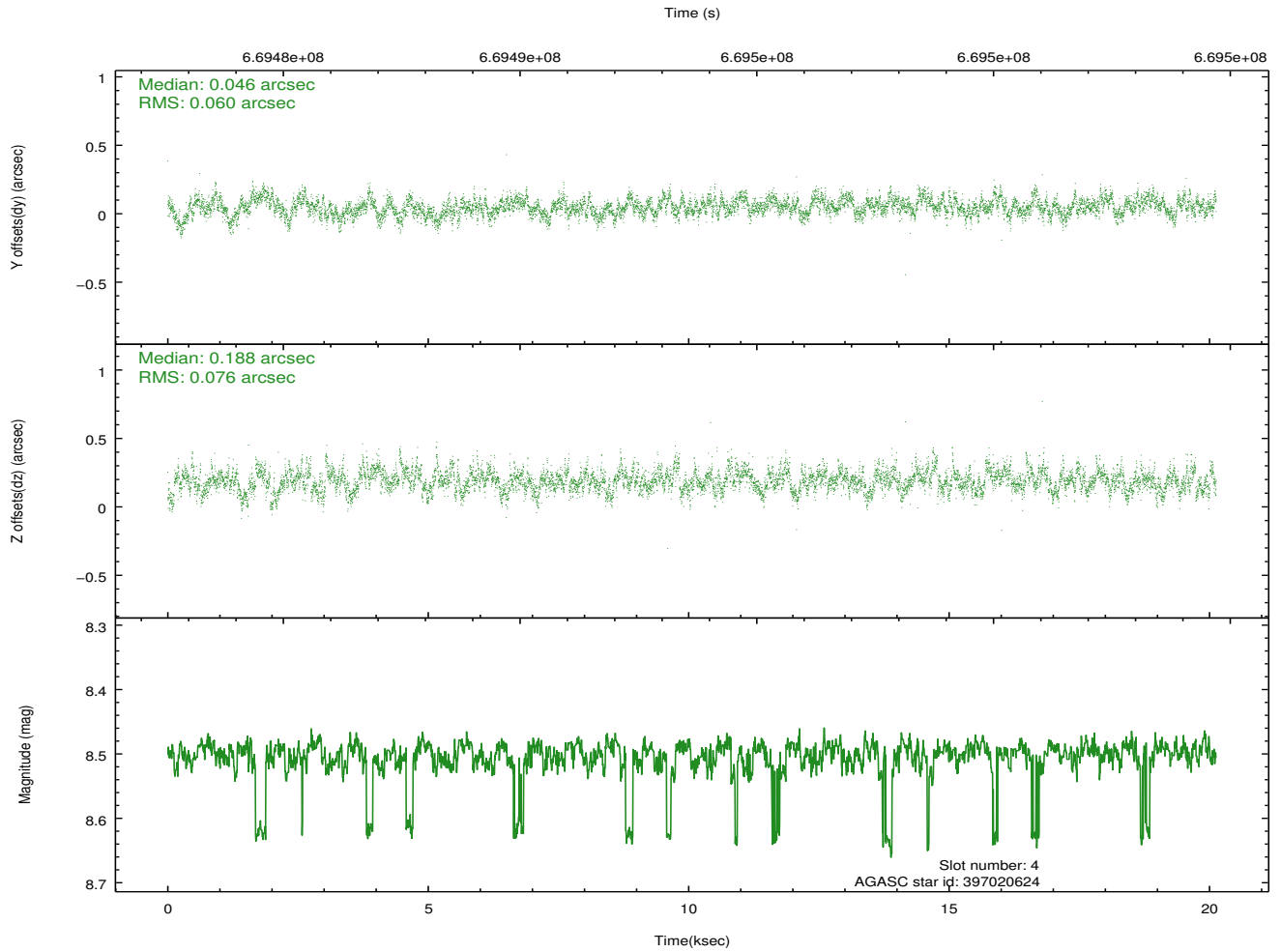
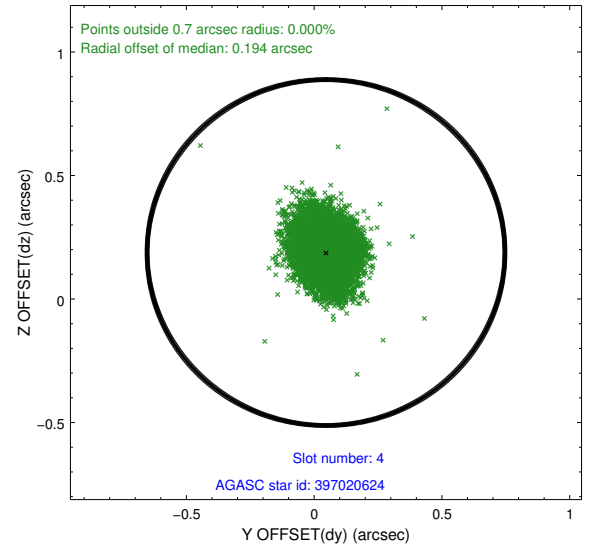
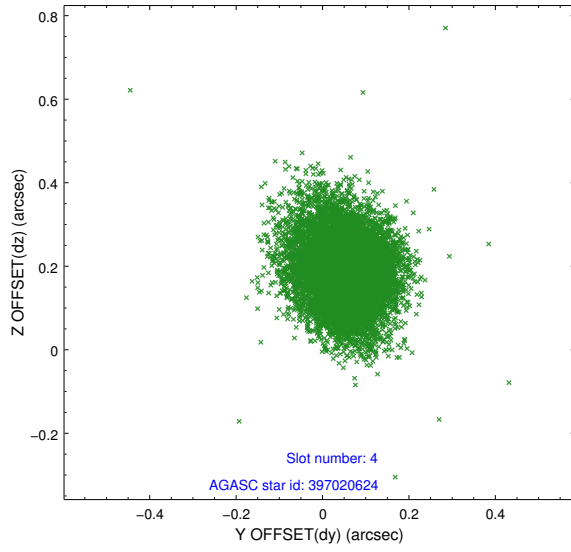
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.18	4908	1.000	0.111	-0.131	0.027	0.066	0.000000	0.000000	930.71	-841
1	FID		ACIS-I-5	7.16	4910	1.000	-0.462	0.028	0.010	0.014	0.000000	0.000000	-1818.02	1056
2	FID		ACIS-I-6	7.14	4909	1.000	0.259	0.175	0.027	0.066	0.000000	0.000000	396.00	1701
3	GUIDE	used	397017856	8.88	9812	1.000	-0.117	0.103	0.097	0.159	204.301076	41.001312	-1198.82	-876
4	GUIDE	used	397020624	8.50	9805	1.000	0.046	0.188	0.101	0.168	204.395156	41.434823	-514.09	-2298
5	GUIDE	used	397020968	9.20	9811	1.000	0.054	0.280	0.200	0.291	204.498416	41.216332	-1193.90	-1817
6	GUIDE	used	397024152	8.88	9812	1.000	-0.094	-0.509	0.152	0.237	203.568845	40.711407	-153.65	1116
7	GUIDE	used	397024944	9.54	9789	1.000	0.087	-0.041	0.227	0.372	204.333652	41.529745	-181.53	-2485

## 2.4 Star Slots

### 2.4.1 Slot 3

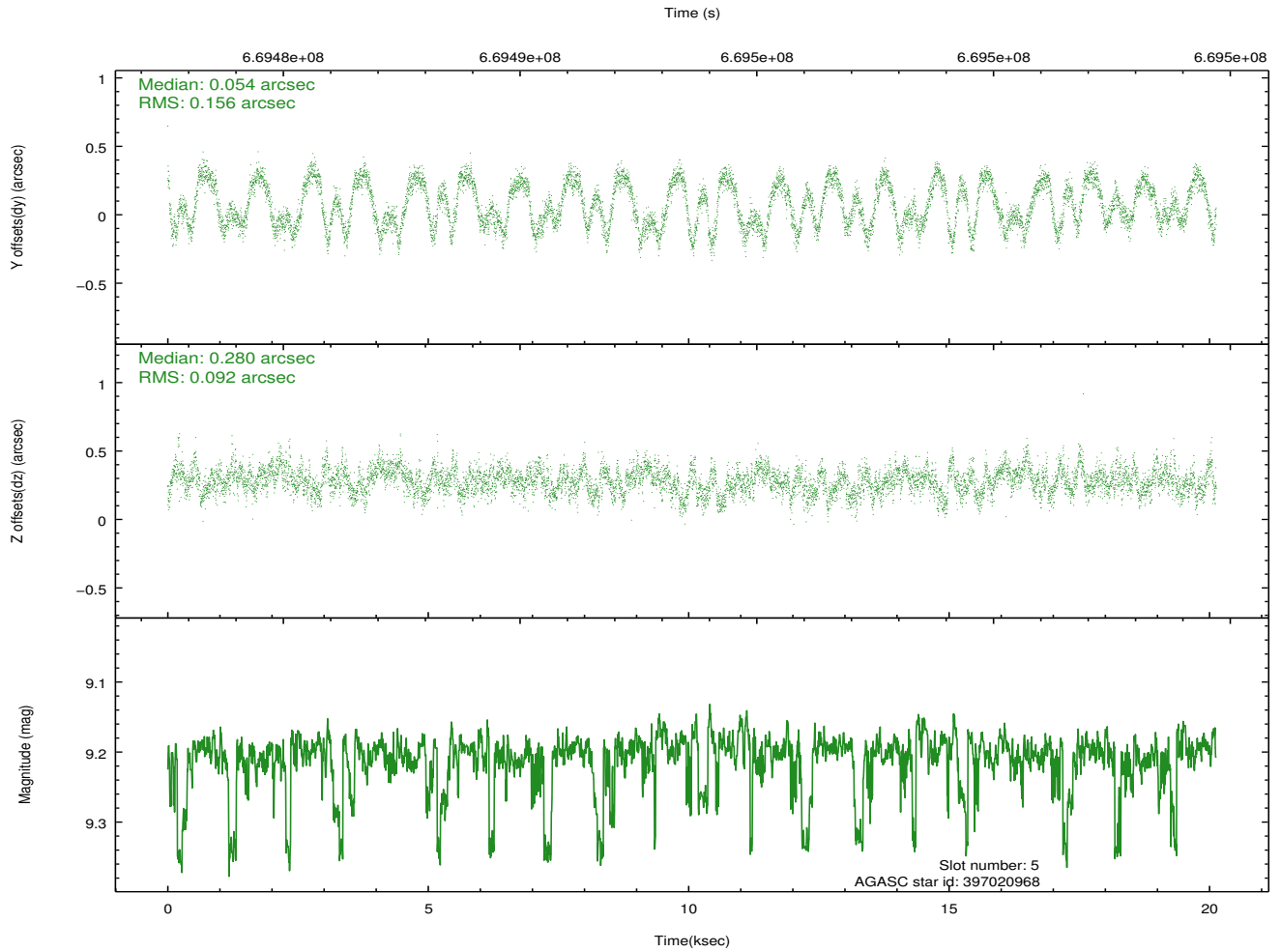
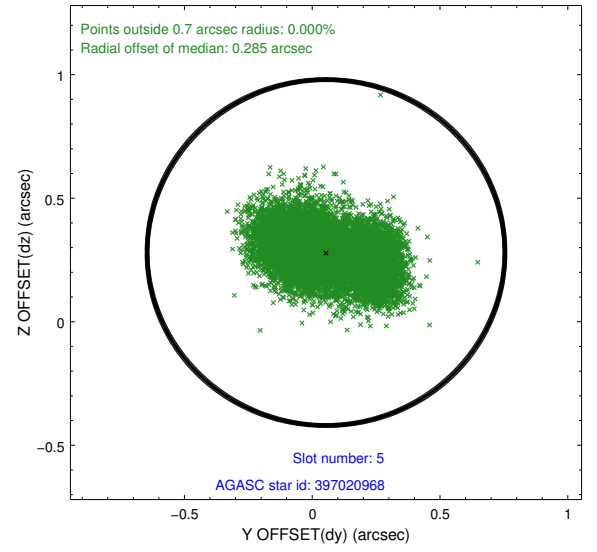
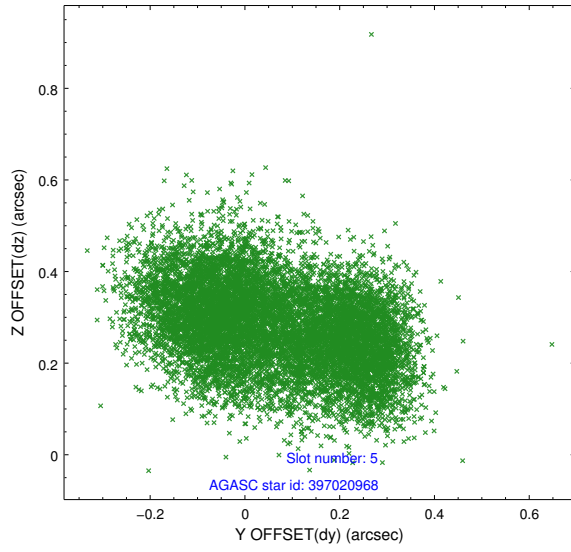


## 2.4.2 Slot 4

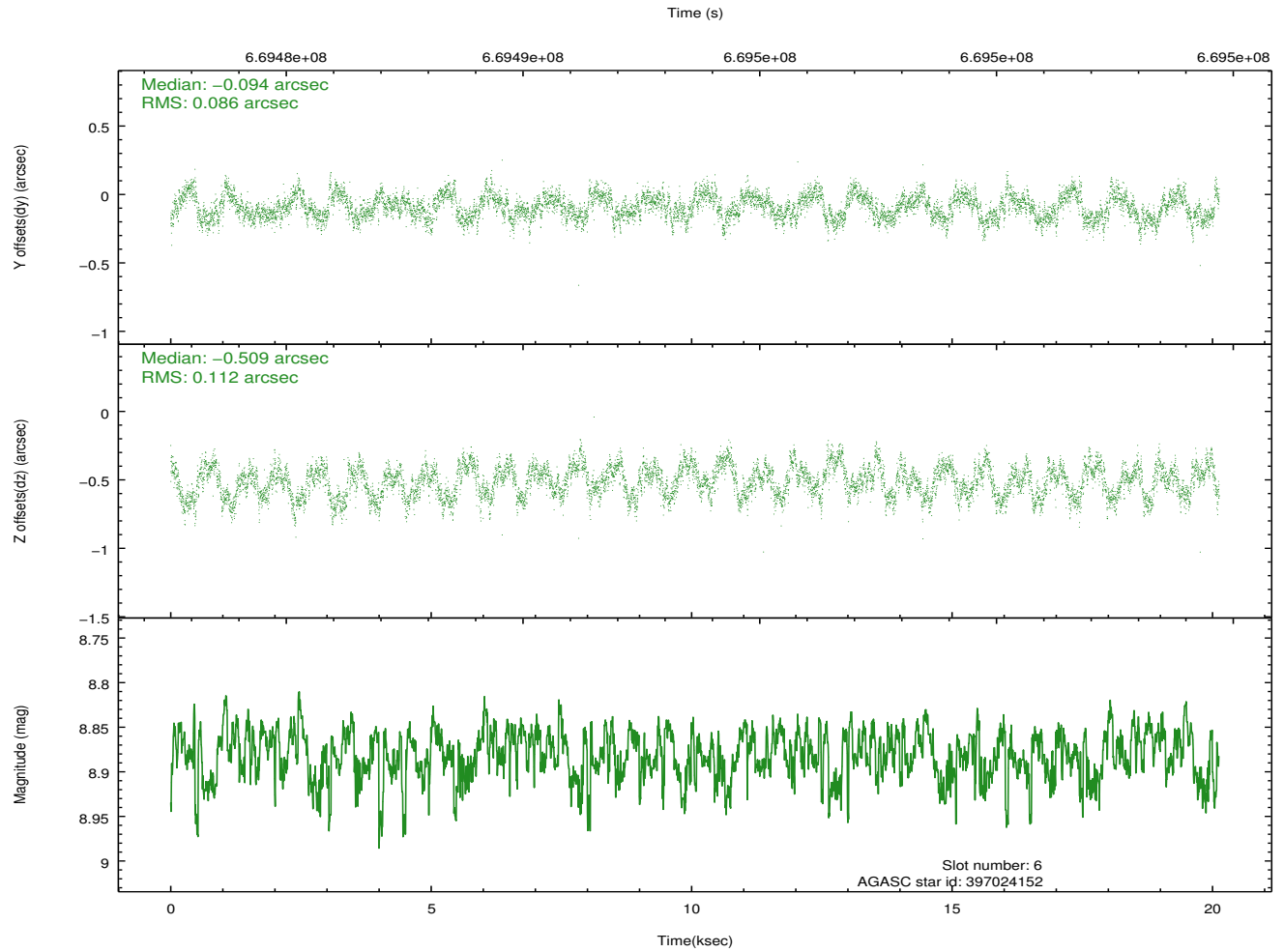
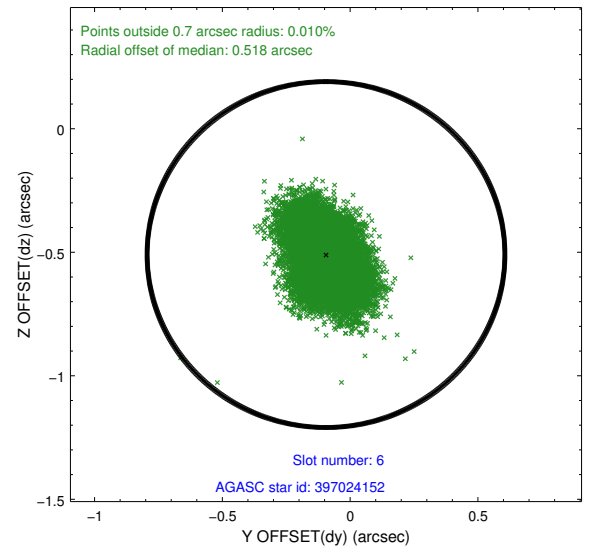
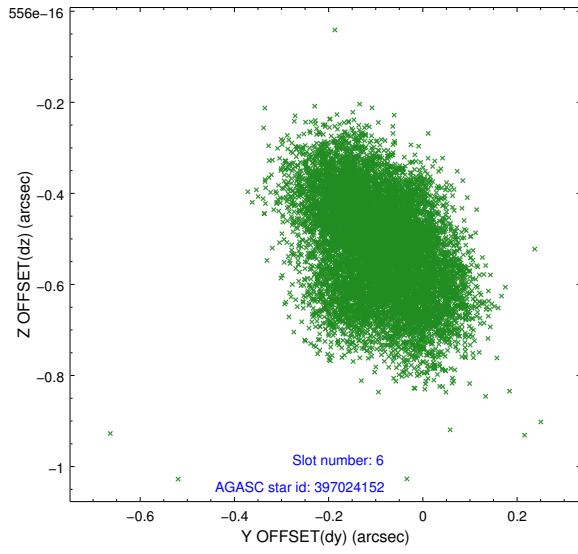




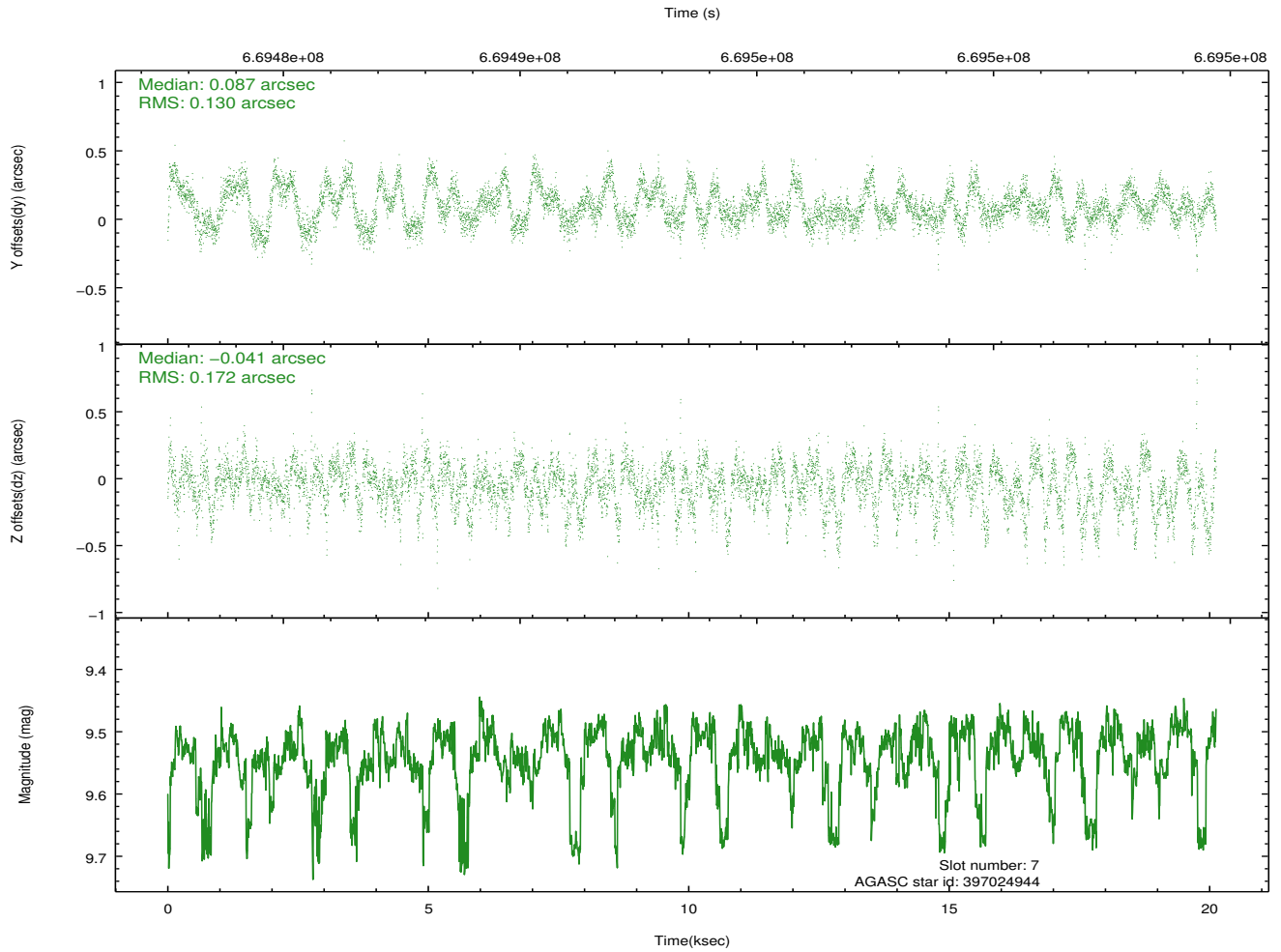
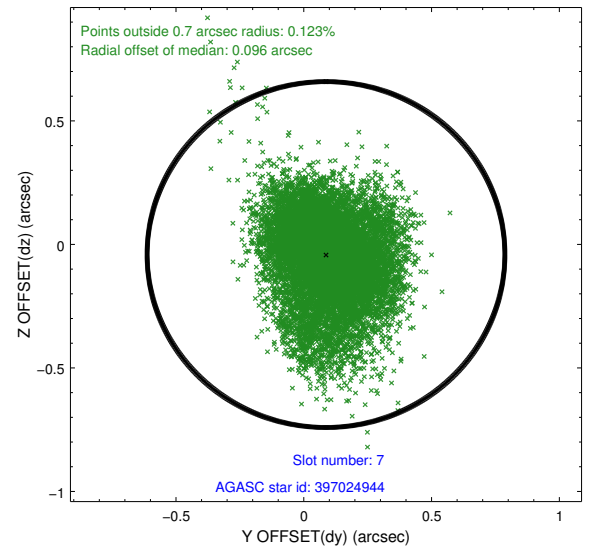
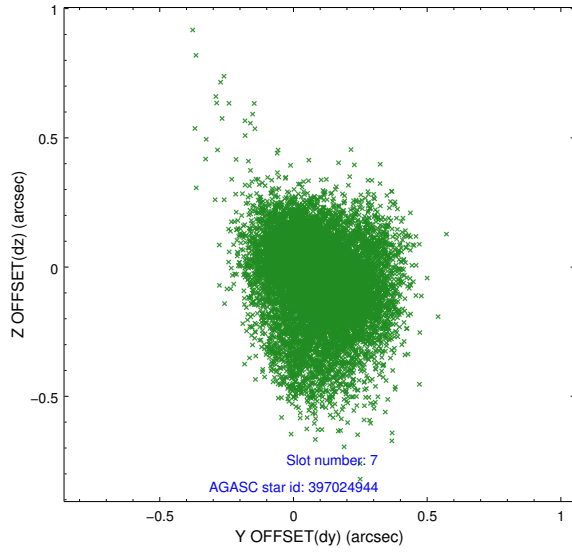
### 2.4.3 Slot 5



## 2.4.4 Slot 6

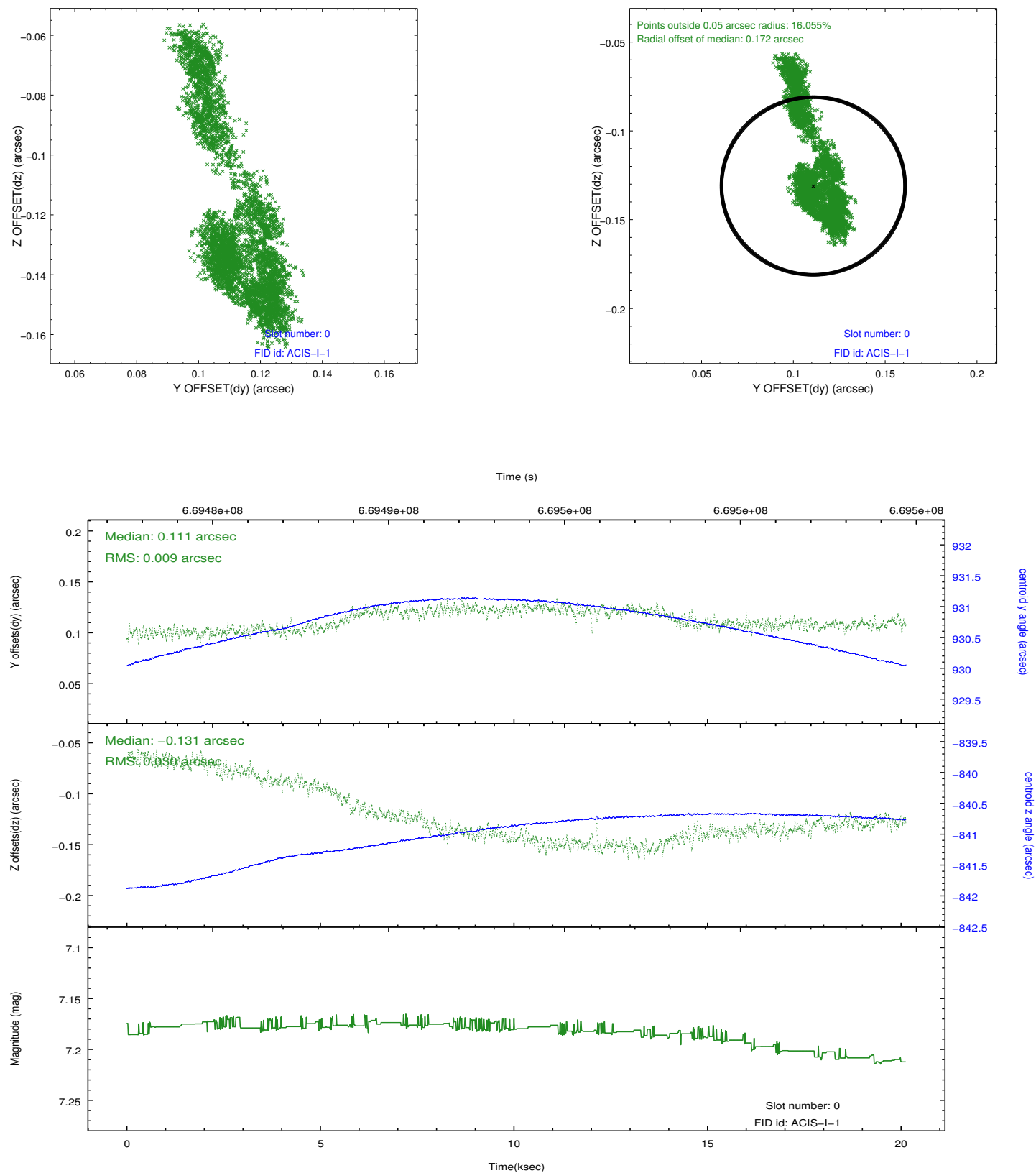


## 2.4.5 Slot 7

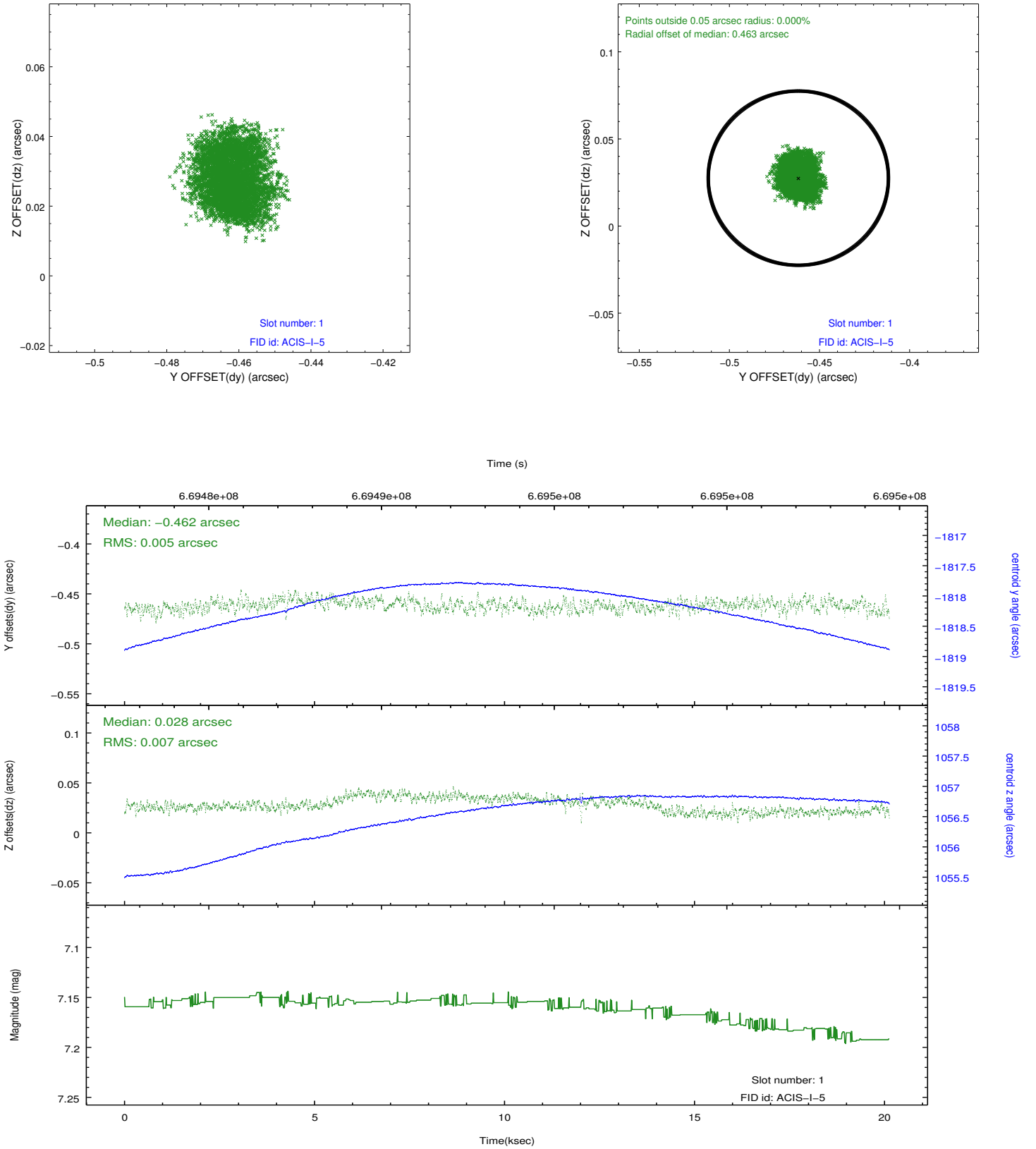


## 2.5 FID Slots

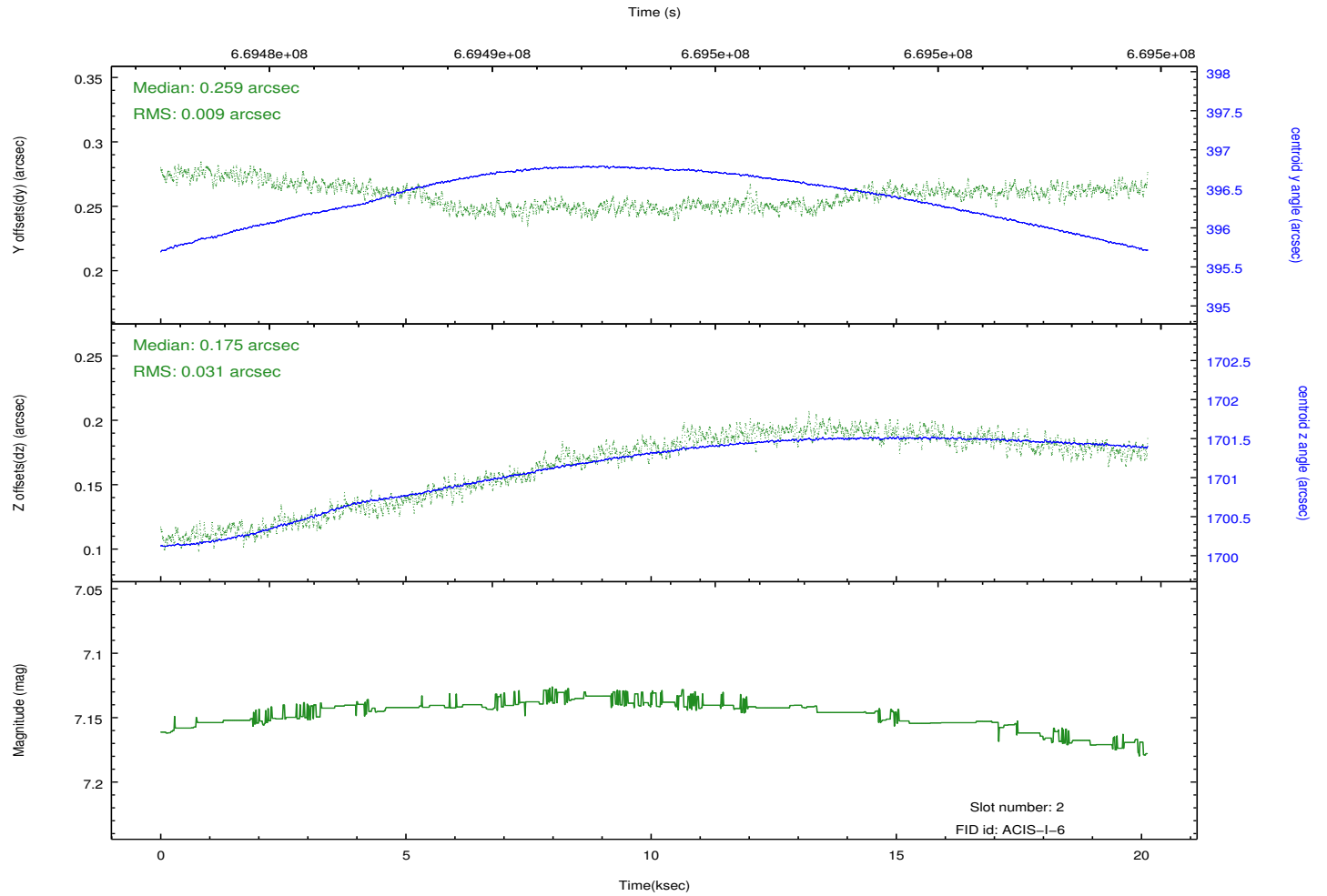
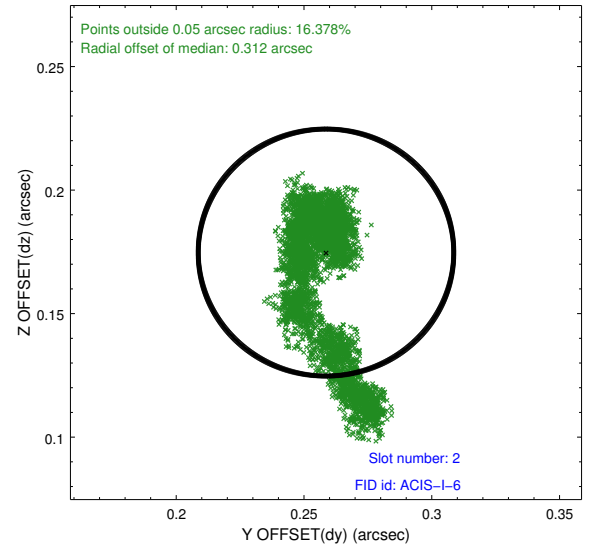
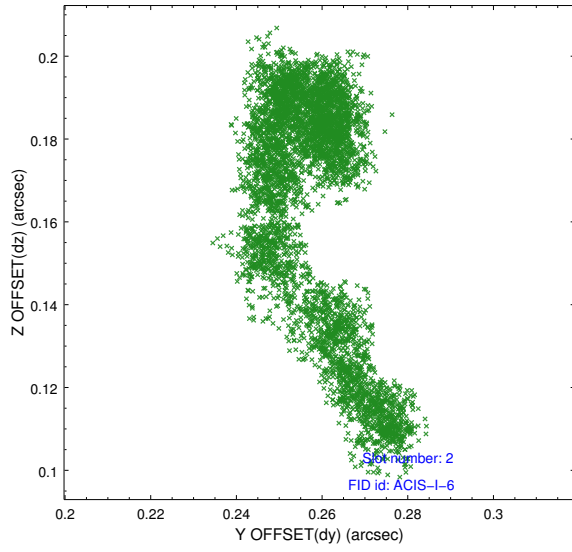
### 2.5.1 Slot 0



## 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)	2019.03.21
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	19.952000297308

### A.2 Comments