

# V&V Reference Report

## L2 ASCDS Version : 8.4.3

Observation 12544 - L2 Version 2  
Chandra X-Ray Center

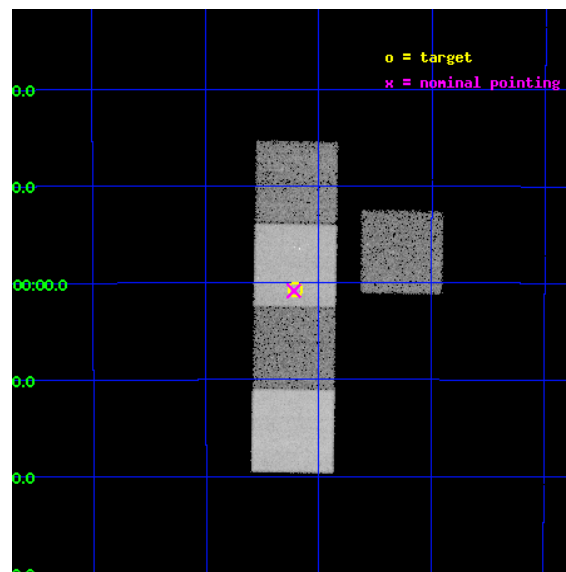
L2 Processing Date : Mar 2 2012

## 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	501377	Sequence number
obs_id	12544	Observation id
title	Rapid Observations of Short Gamma-Ray Bursts: Accurate Positions Hold the Key to the Progenitor Population	Proposal title
observer	Prof. Edo Berger	Principal investigator
object	GRB111020A	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	287.051708	Observer's specified target RA [deg]
dec_targ	-38.012361	Observer's specified target Dec [deg]
ra_nom	287.0549833184	Nominal RA [deg]
dec_nom	-38.013951901319	Nominal Dec [deg]
roll_nom	270.84515638558	Nominal Roll [deg]
revision	2	Processing version of data
ontime	20041.500154138	Sum of GTIs [s]
livetime	19779.643200286	Livetime [s]
ontime3	20041.500154138	Sum of GTIs [s]
ontime5	20041.500154138	Sum of GTIs [s]
ontime6	20035.218163431	Sum of GTIs [s]
ontime7	20041.500154138	Sum of GTIs [s]
ontime8	20038.359183788	Sum of GTIs [s]
l2events	203218	Number of level 2 events

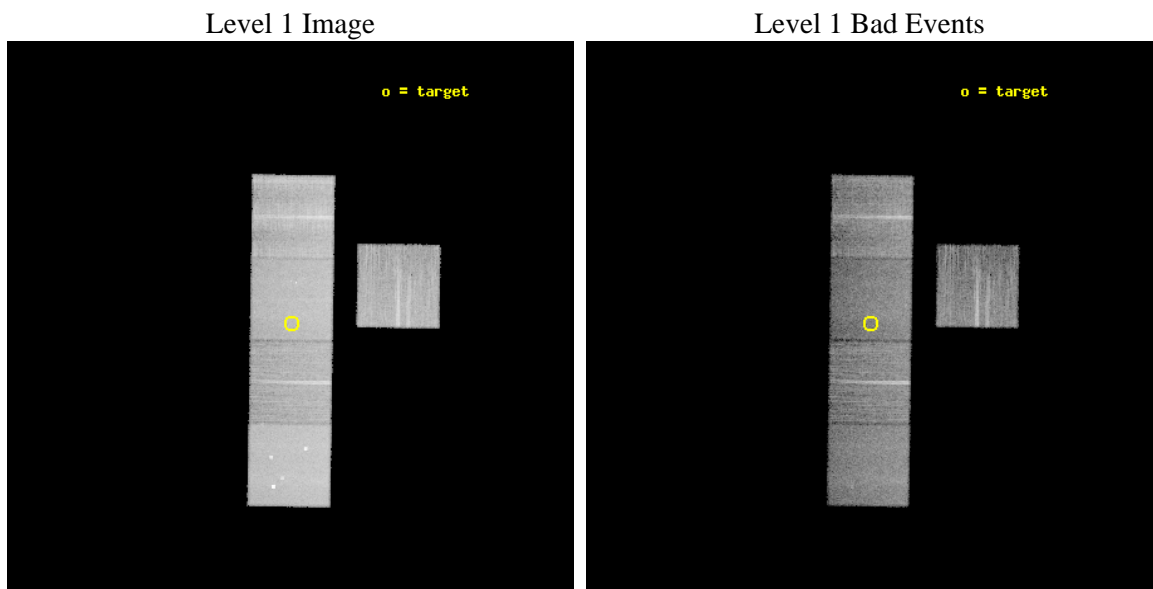




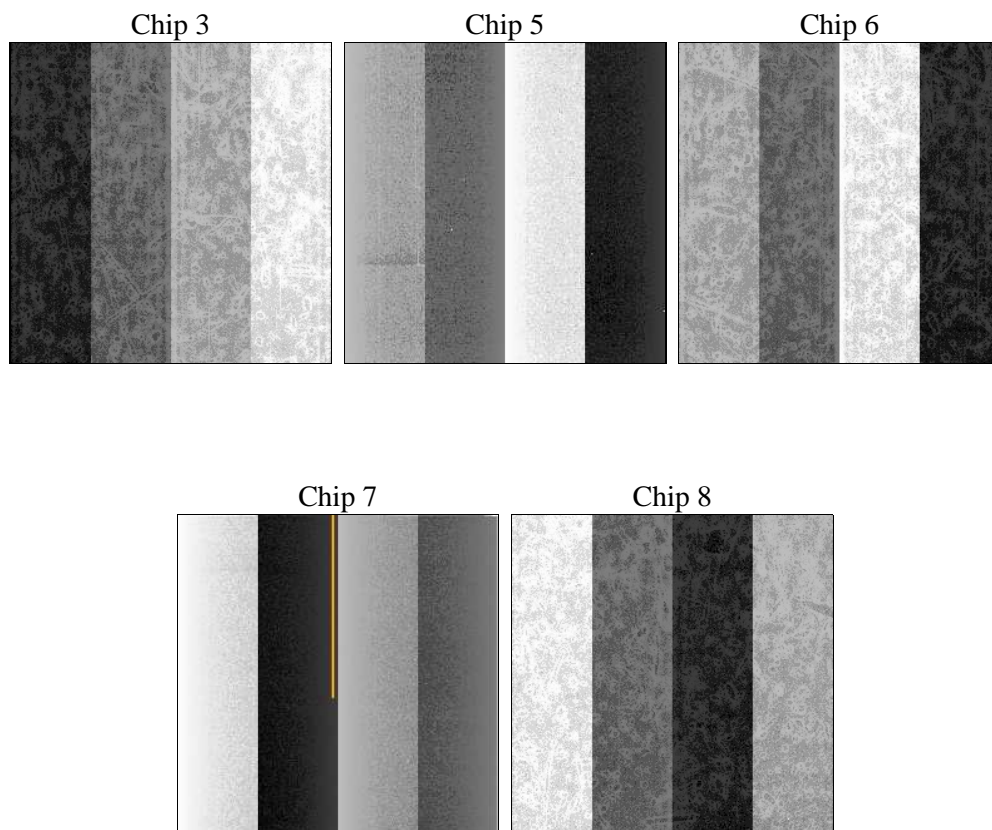
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	20000.655000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	20041.500154138	Sum of GTIs [s]
caldsver	4.4.8	&#160	ontime3	20041.500154138	Sum of GTIs [s]
date	2012-03-02T14:57:14	Date and time of file creation	ontime5	20041.500154138	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	20035.218163431	Sum of GTIs [s]
			ontime7	20041.500154138	Sum of GTIs [s]
			ontime8	20038.359183788	Sum of GTIs [s]
			l1events	775185	Number of level 1 events

### 2.1.4 Events

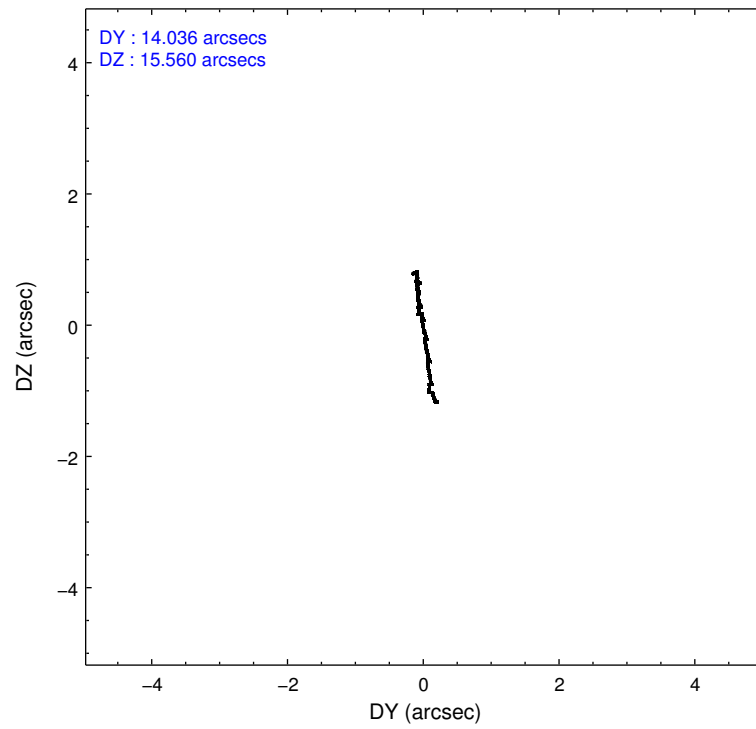
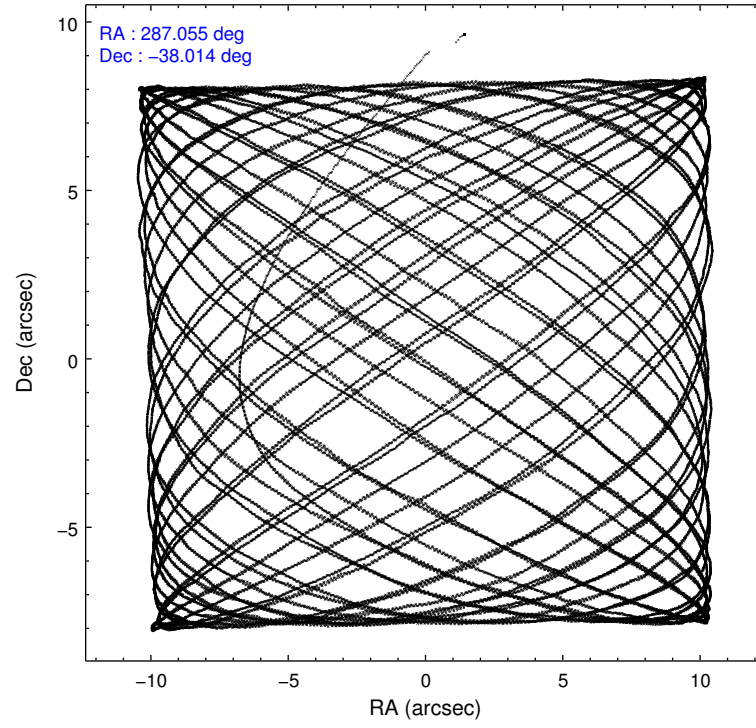
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	121354	201437	122422	163530	166442
rejected events	108152	101063	107696	90645	121721
rejected %	89%	50%	87%	55%	73%

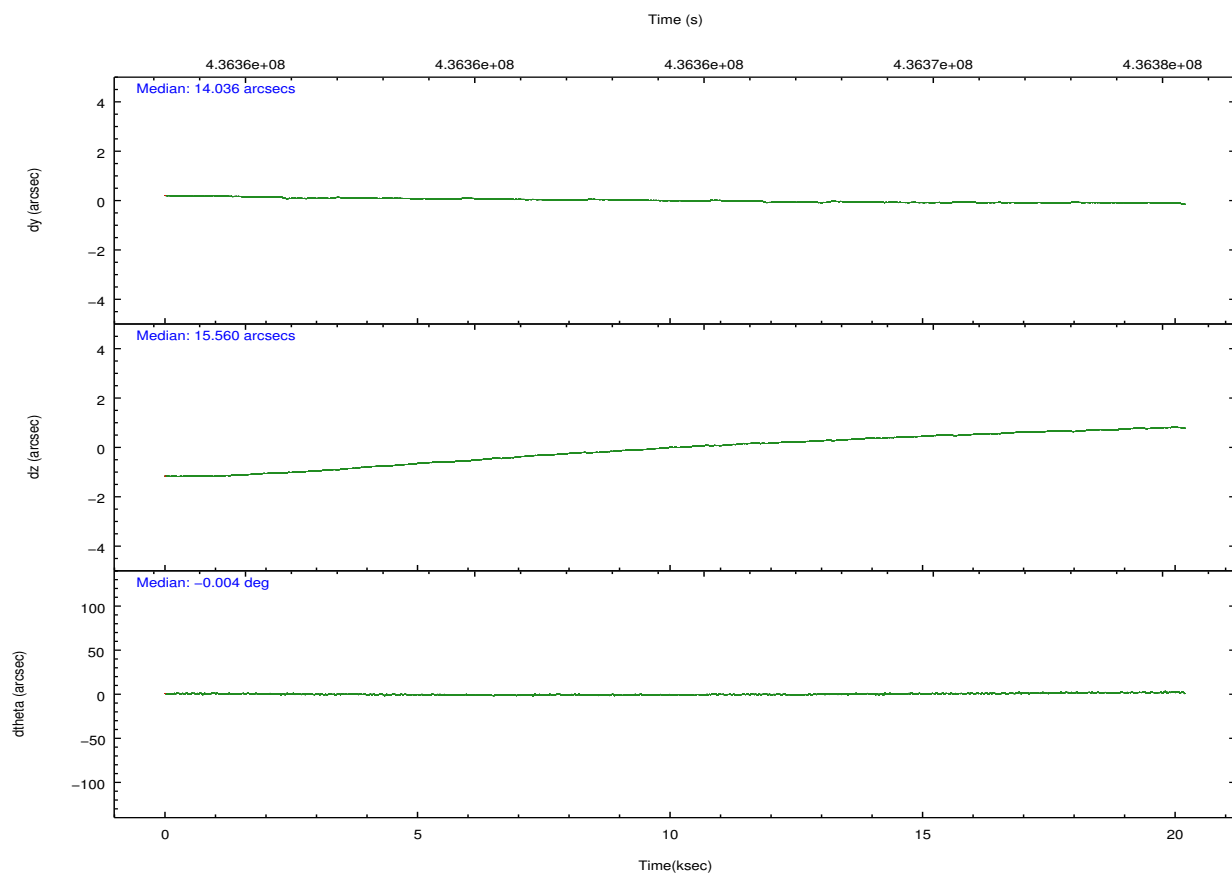
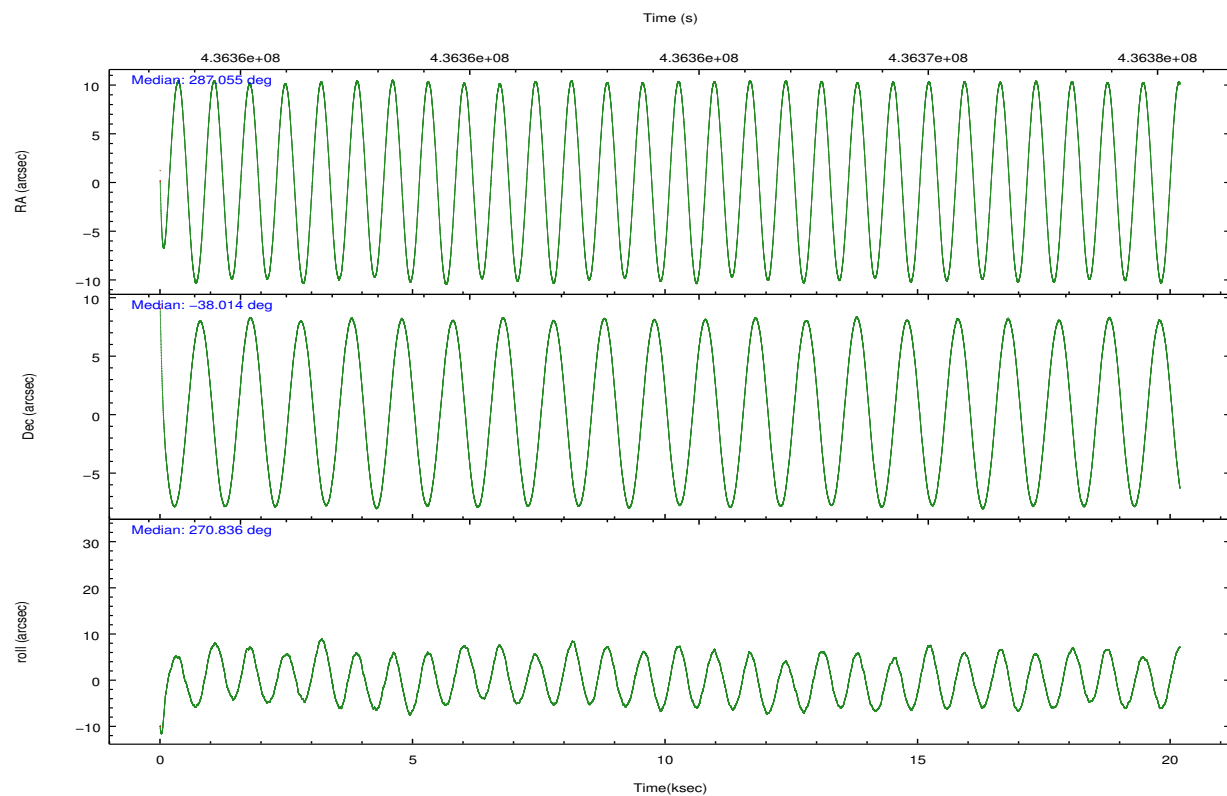
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	4616	11364	5338	6651	13189
	3%	5%	4%	4%	7%
grade 1 events	88	444	59	184	131
	0%	0%	0%	0%	0%
grade 2 events	2991	29931	3243	14957	10569
	2%	14%	2%	9%	6%
grade 3 events	1501	3801	1466	6491	4714
	1%	1%	1%	3%	2%
grade 4 events	1452	3669	1494	6143	4451
	1%	1%	1%	3%	2%
grade 5 events	6086	15031	5904	16742	8913
	5%	7%	4%	10%	5%
grade 6 events	2642	51619	3187	38652	11802
	2%	25%	2%	23%	7%
grade 7 events	101978	85578	101731	73710	112673
	84%	42%	83%	45%	67%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-35678	ACIS-35678	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	287.036787	287.0549833183991	CCD I2 on	N	N
[deg] Pointing Dec	-37.990665	-38.013951901319	CCD I3 on	O1	Y
[deg] Pointing Roll	270.677342	270.8451563855763	CCD S0 on	N	N
[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)	436354466.184000	436353386.84809	CCD S5 on	N	N
Observation start date	2011-10-30T09:33:20	2011-10-30T09:16:26	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	436374466.184000	436374695.06171	On-chip summing requested	N	N
Observation end date	2011-10-30T15:06:40	2011-10-30T15:11:35	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



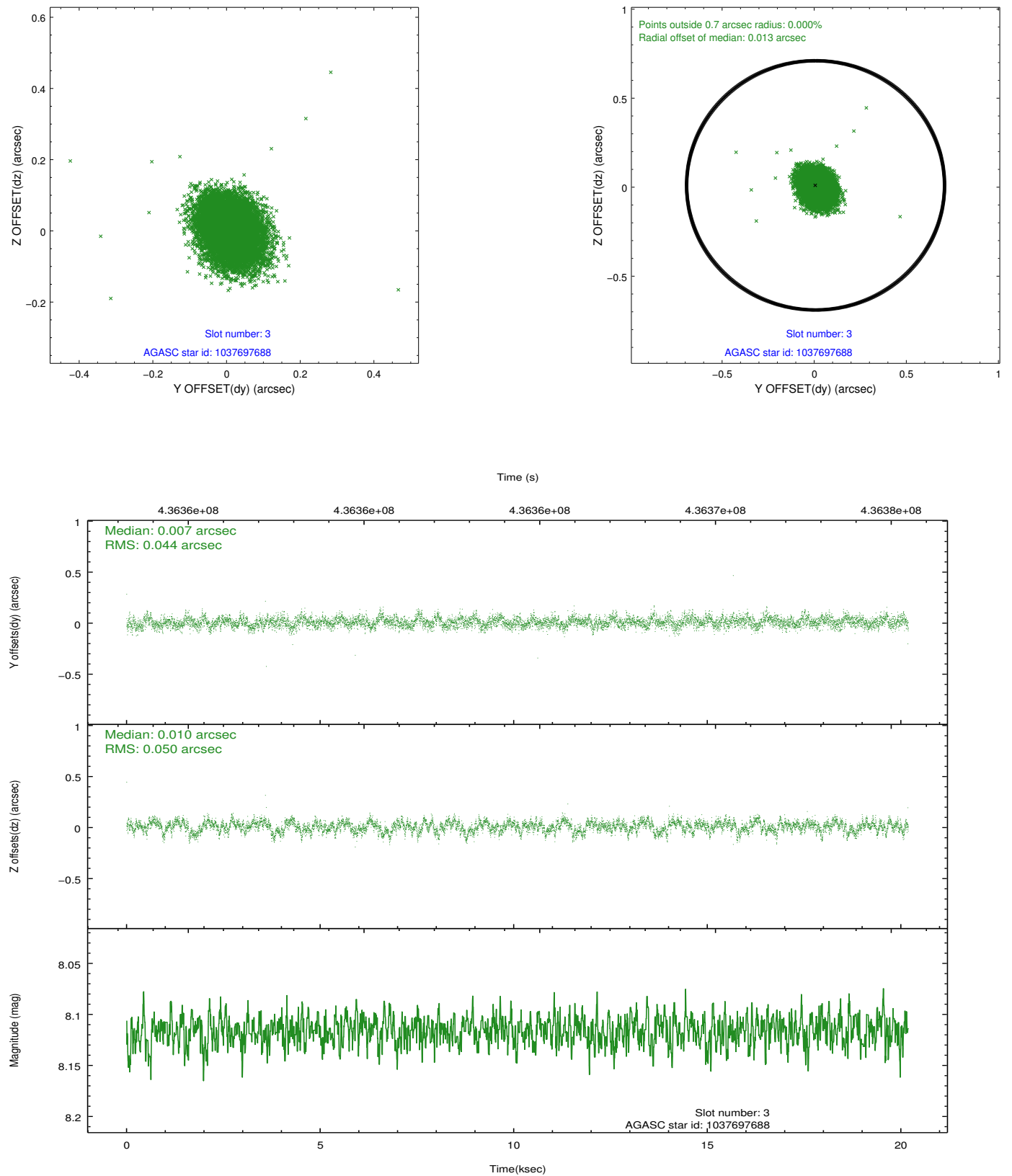


### Slot Statistics

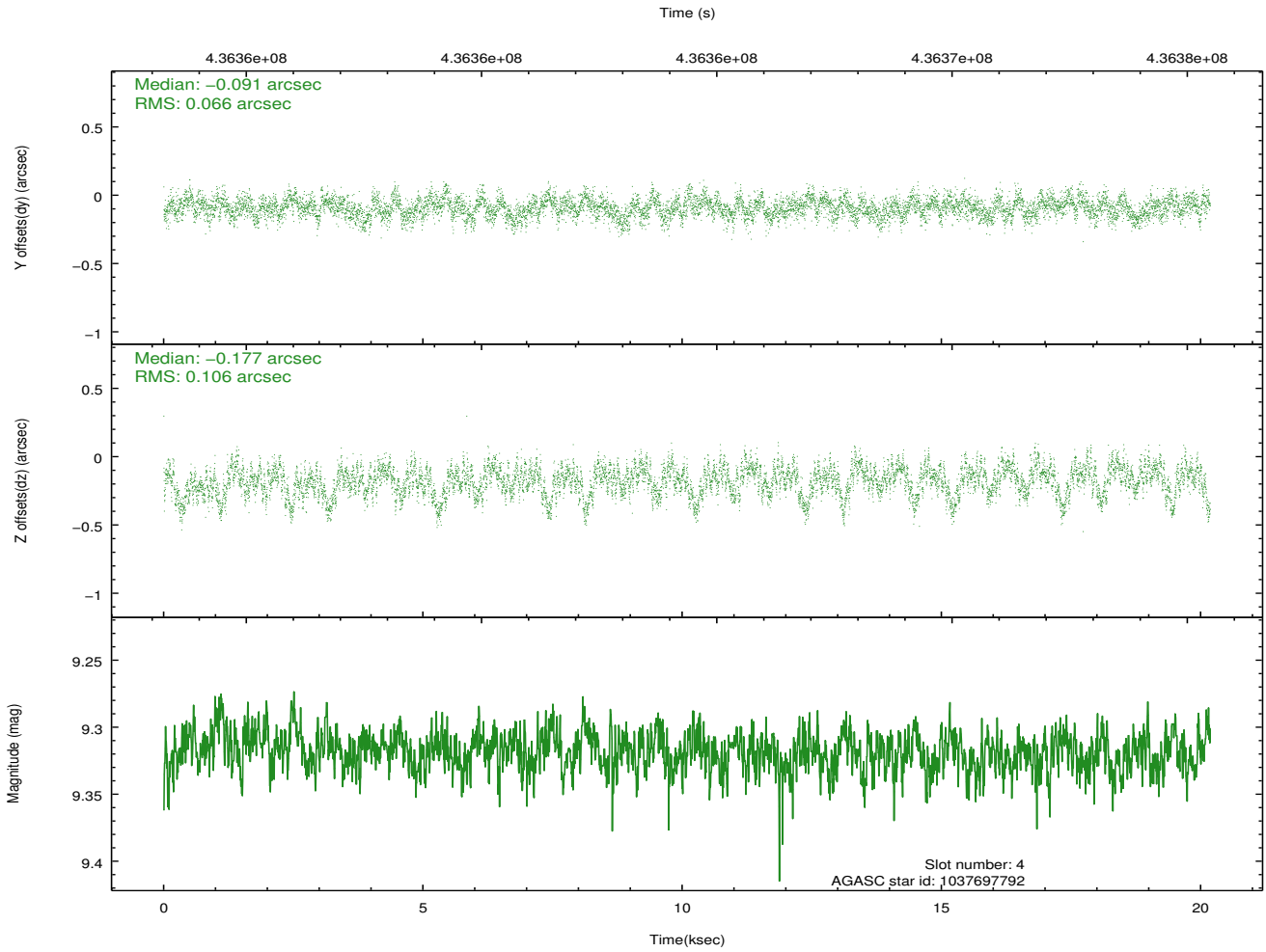
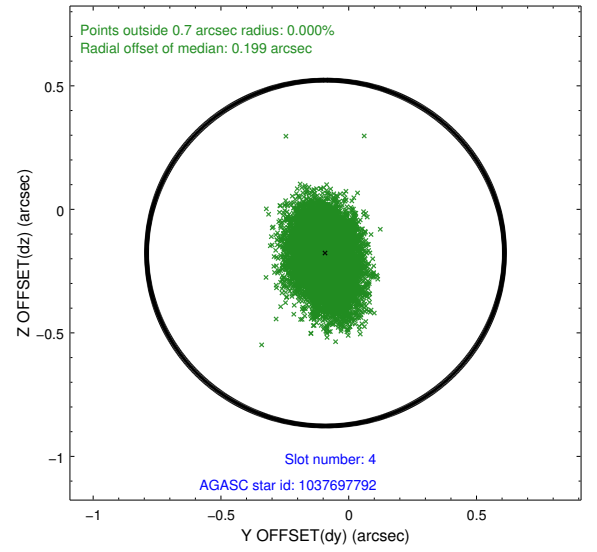
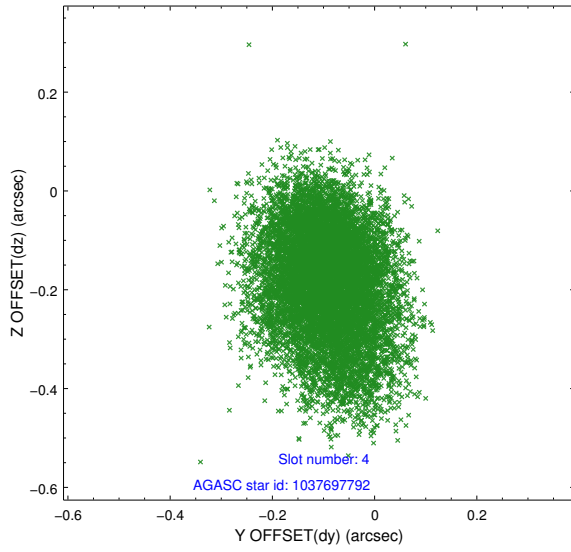
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.98	4925	-0.105	-0.044	0.016	0.026	0.000000	0.000000	-767.09	-1736.89
1	FID	ACIS-S-4	7.07	4925	0.298	0.062	0.012	0.018	0.000000	0.000000	2146.50	171.50
2	FID	ACIS-S-5	7.10	4925	-0.225	-0.008	0.010	0.016	0.000000	0.000000	-1819.82	165.32
3	GUIDE	1037697688	8.12	9845	0.007	0.010	0.070	0.115	286.249349	-37.961332	-121.70	-2233.52
4	GUIDE	1037697792	9.32	9834	-0.091	-0.177	0.132	0.221	286.411240	-37.897993	-348.16	-1773.39
5	GUIDE	1037706008	9.21	9841	-0.010	0.011	0.116	0.183	286.532417	-38.133000	500.10	-1434.02
6	GUIDE	1037833536	8.81	9809	0.074	0.174	0.097	0.149	287.675522	-38.433308	1621.09	1782.62
7	GUIDE	1037835640	8.98	9821	0.019	-0.002	0.089	0.142	287.861941	-38.242921	946.18	2322.46

## 2.4 Star Slots

### 2.4.1 Slot 3

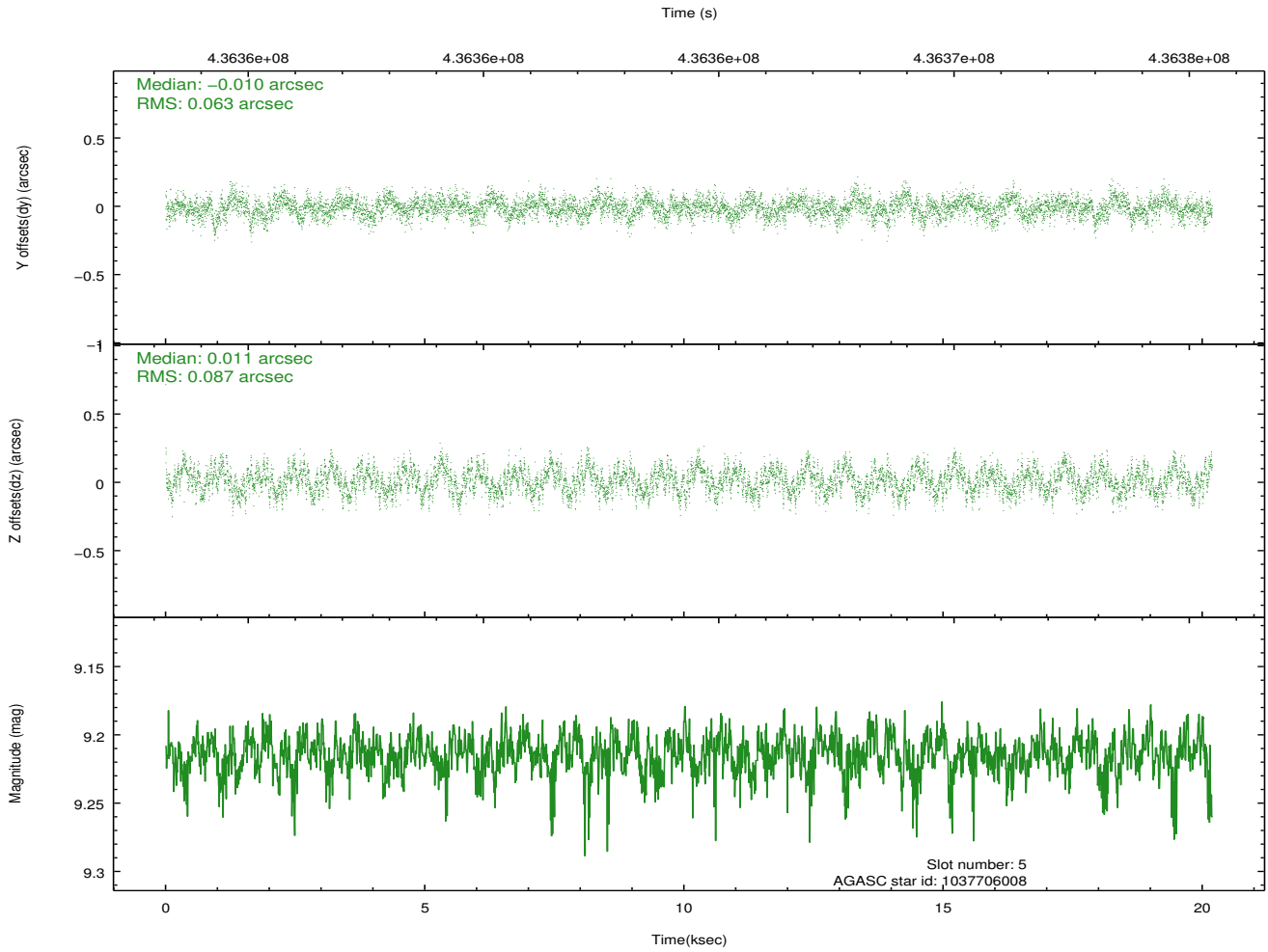
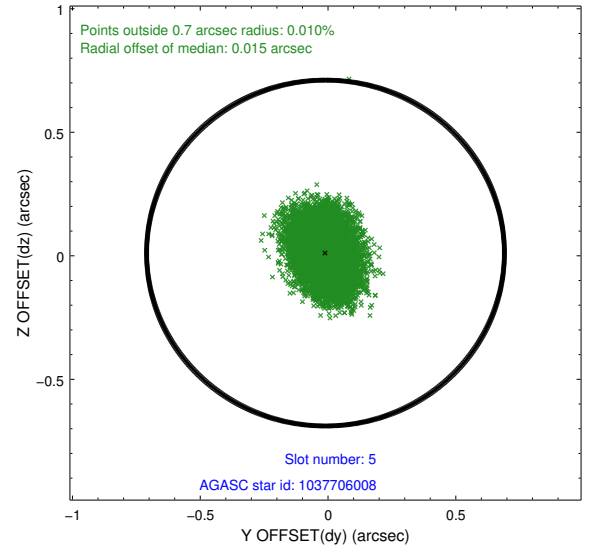
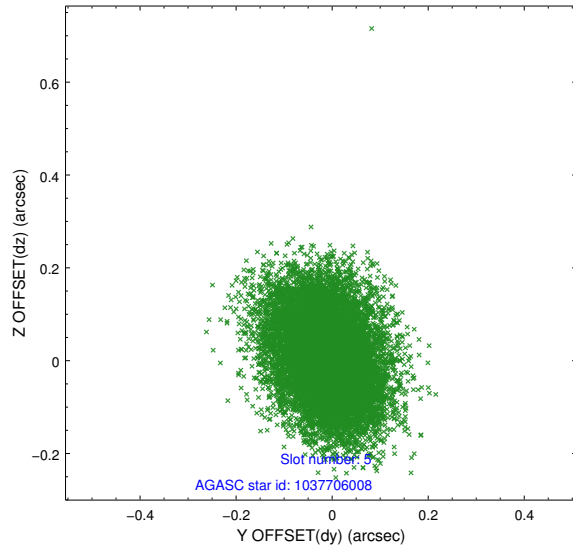


## 2.4.2 Slot 4

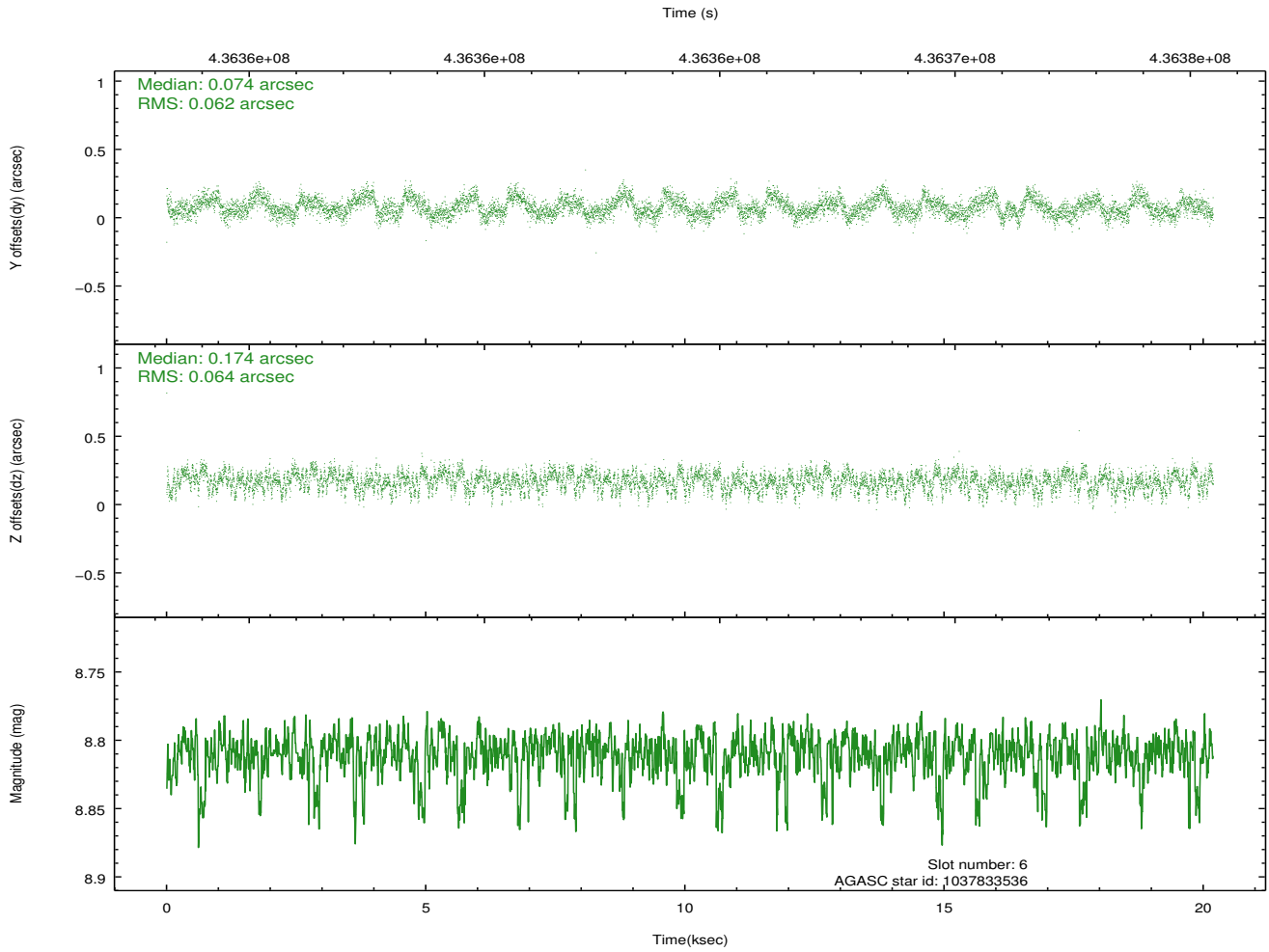
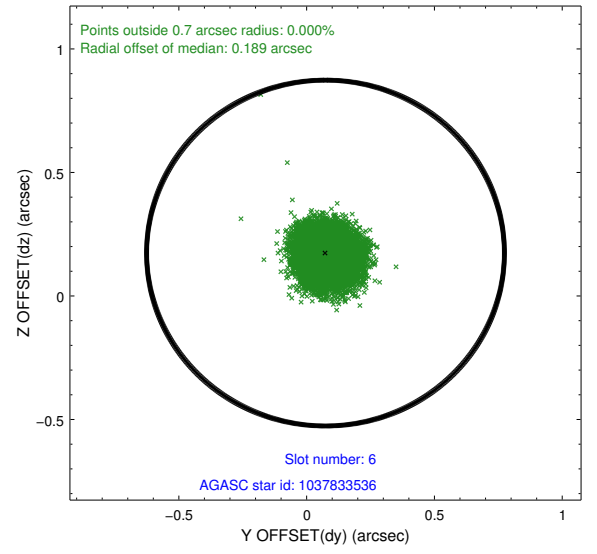
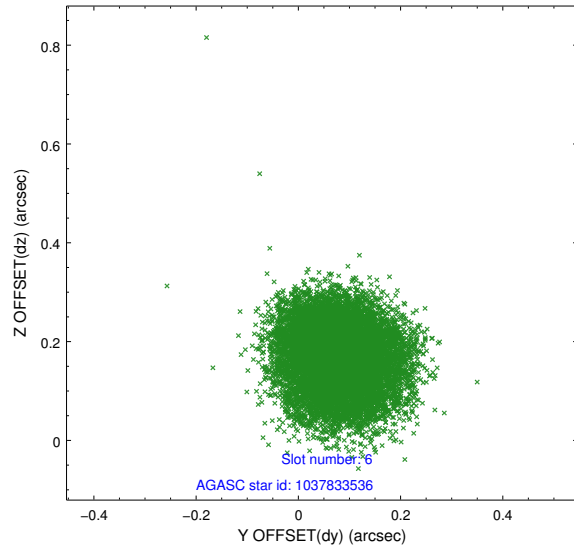




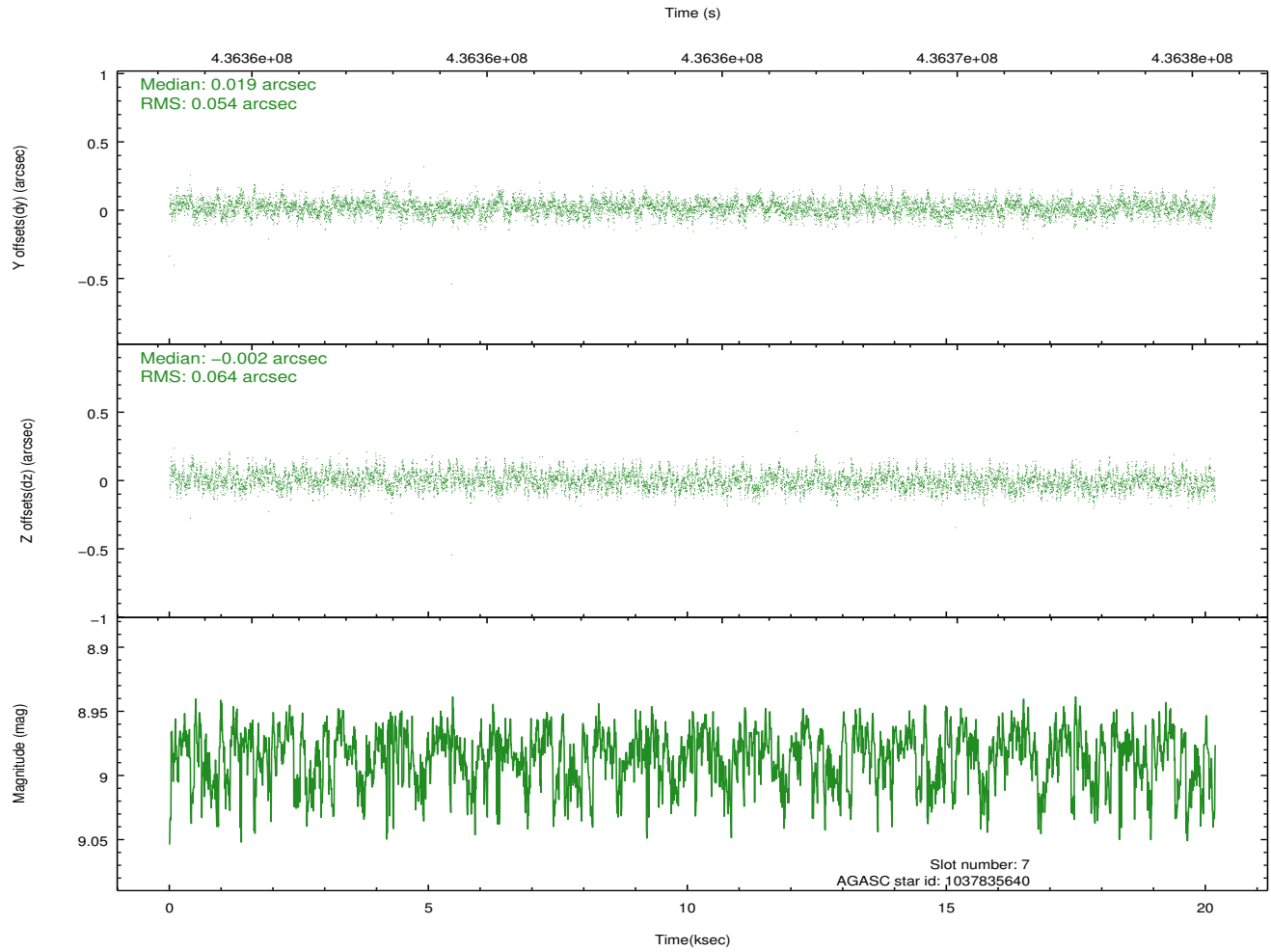
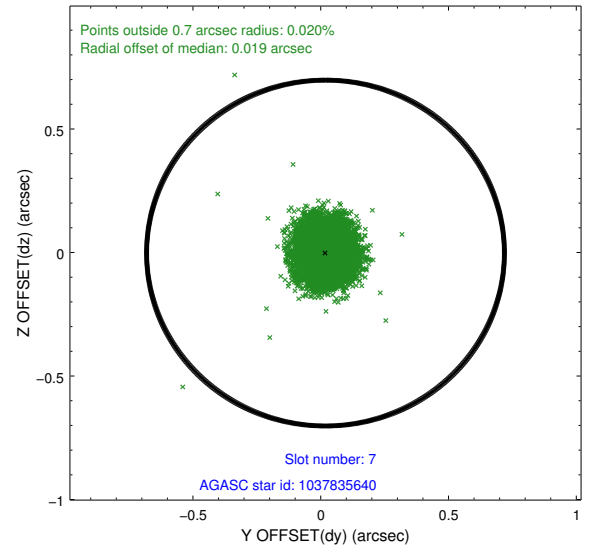
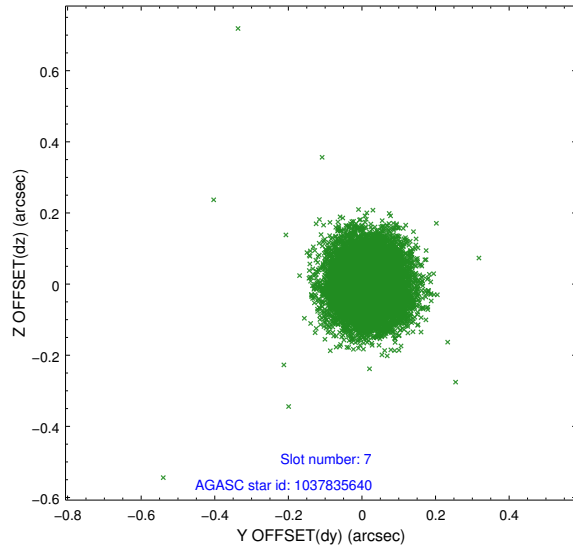
### 2.4.3 Slot 5



## 2.4.4 Slot 6

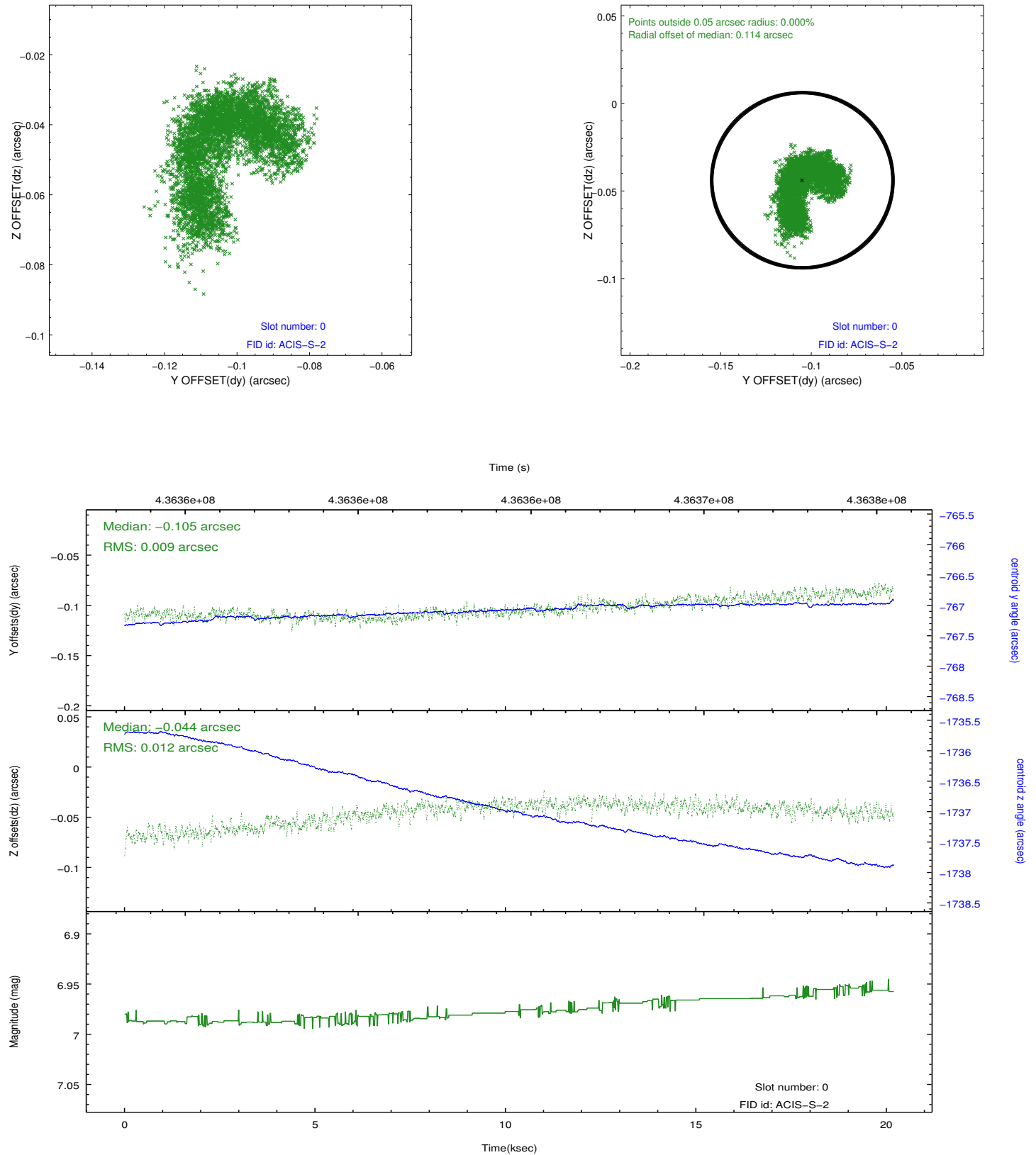


## 2.4.5 Slot 7

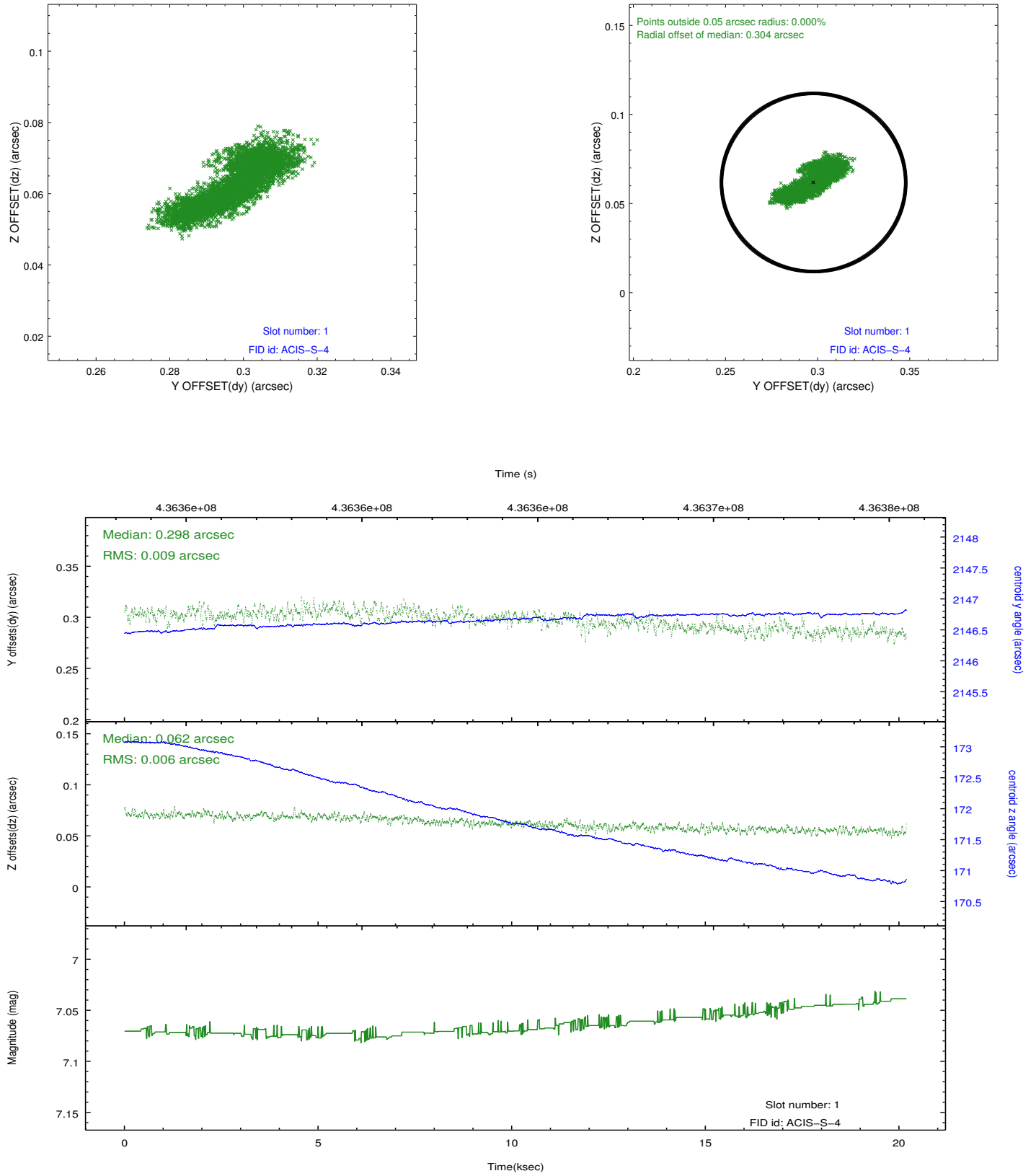


## 2.5 FID Slots

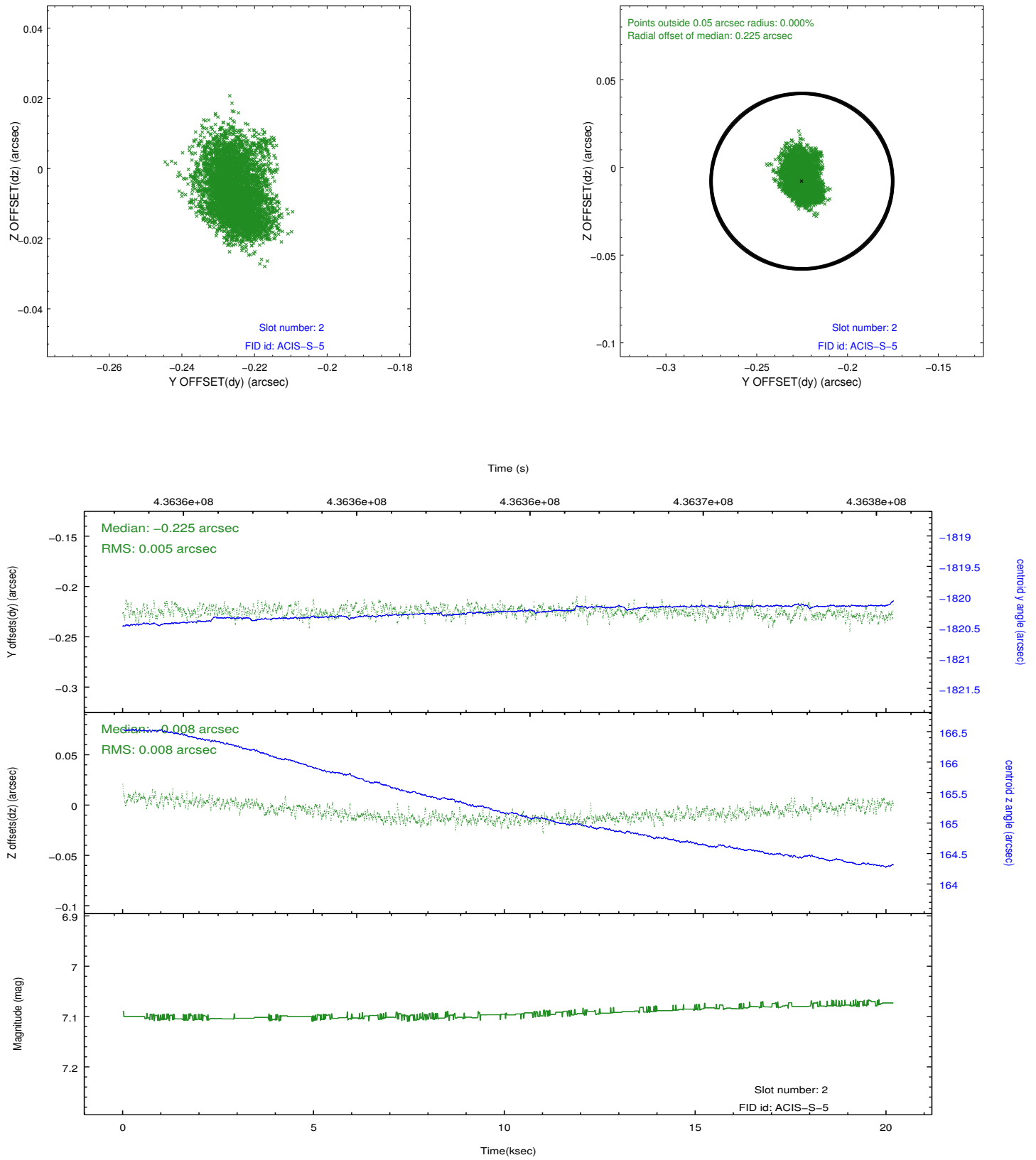
### 2.5.1 Slot 0



## 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)	2012.03.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.041500154138

### A.2 Comments