

# V&V Reference Report

## L2 ASCDS Version : 8.5.1.1

Observation 80 - L2 Version 5  
Chandra X-Ray Center

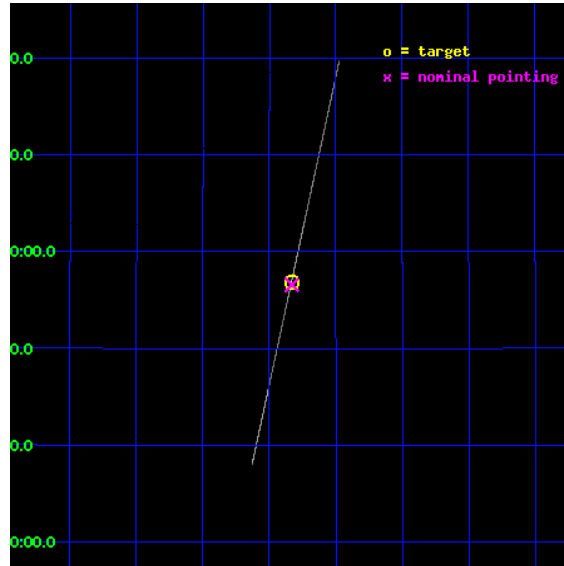
L2 Processing Date : Jan 25 2013

## 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

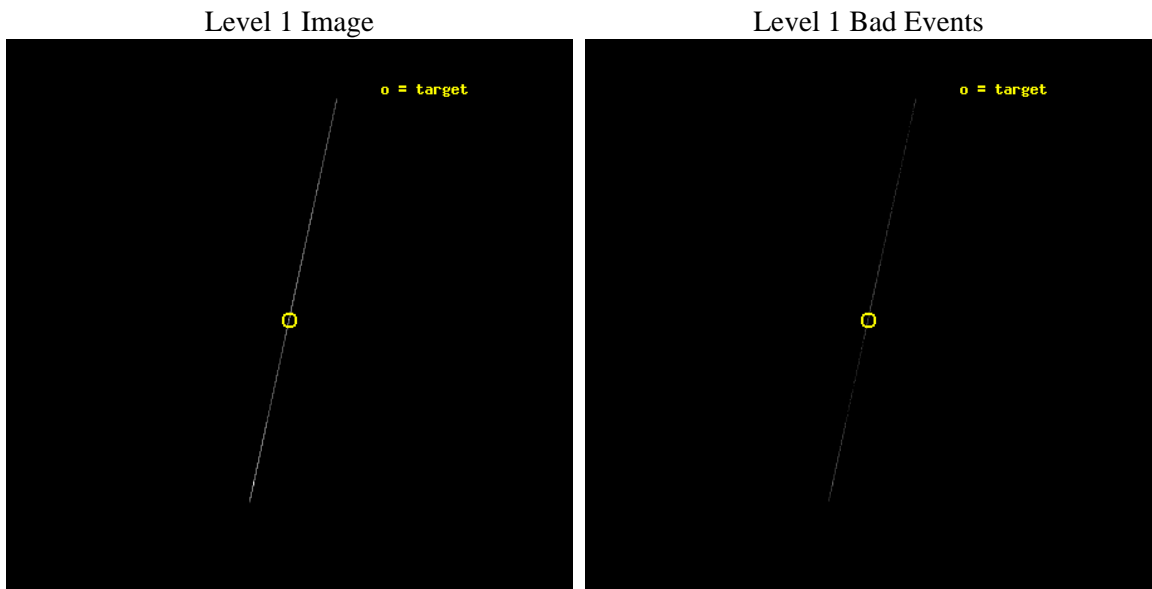
seq_num	300005	Sequence number
obs_id	80	Observation id
title	SUPER-SOFT X-RAY SOURCES	Proposal title
observer	Dr. Stephen Murray	Principal investigator
object	RX J0019.8+2156	Source name
ra_targ	4.958333	Observer's specified target RA [deg]
dec_targ	21.948333	Observer's specified target Dec [deg]
ra_nom	4.9575441311302	Nominal RA [deg]
dec_nom	21.942980478027	Nominal Dec [deg]
roll_nom	282.30826960186	Nominal Roll [deg]
revision	5	Processing version of data
ontime	1145.5	Sum of GTIs [s]
livetime	1141.025390625	Livetime [s]
ontime5	1145.5	Sum of GTIs [s]
ontime6	1145.5	Sum of GTIs [s]
ontime7	1145.5	Sum of GTIs [s]
ontime8	1144.0405980423	Sum of GTIs [s]
ontime9	1142.5832965001	Sum of GTIs [s]
l2events	12880	Number of level 2 events



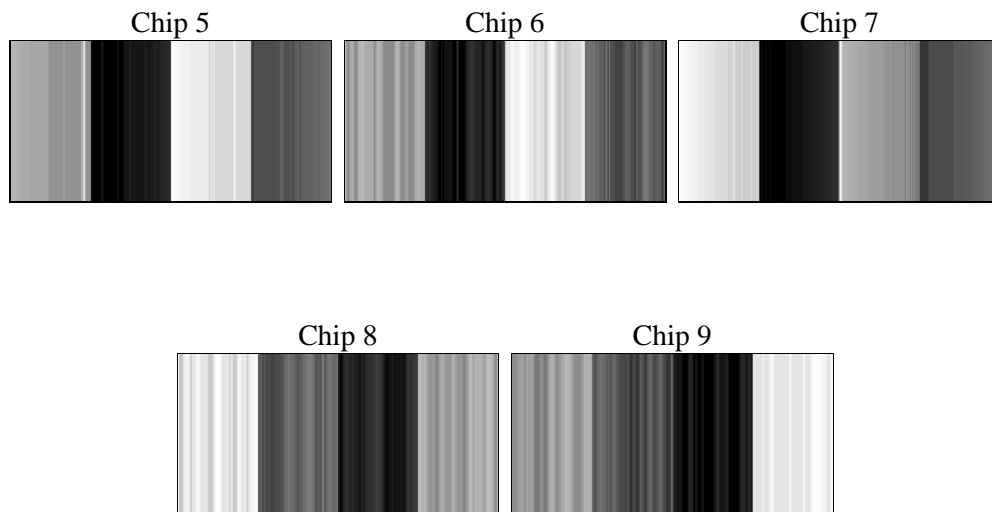
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	1000.000000	[s] Scheduled observation exposure time
ascdsver	8.5.1.1	Processing system revision	ontime	1145.5	Sum of GTIs [s]
caldsver	4.5.5	&#160	ontime5	1145.5	Sum of GTIs [s]
date	2013-01-25T22:13:42	Date and time of file creation	ontime6	1145.5	Sum of GTIs [s]
revision	5	Processing version of data	ontime7	1145.5	Sum of GTIs [s]
			ontime8	1144.0405980423	Sum of GTIs [s]
			ontime9	1142.5832965001	Sum of GTIs [s]
			l1events	41397	Number of level 1 events

### 2.1.4 Events

	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	29336	1448	5932	3226	1455
rejected events	557	191	584	325	222
rejected %	1%	13%	9%	10%	15%

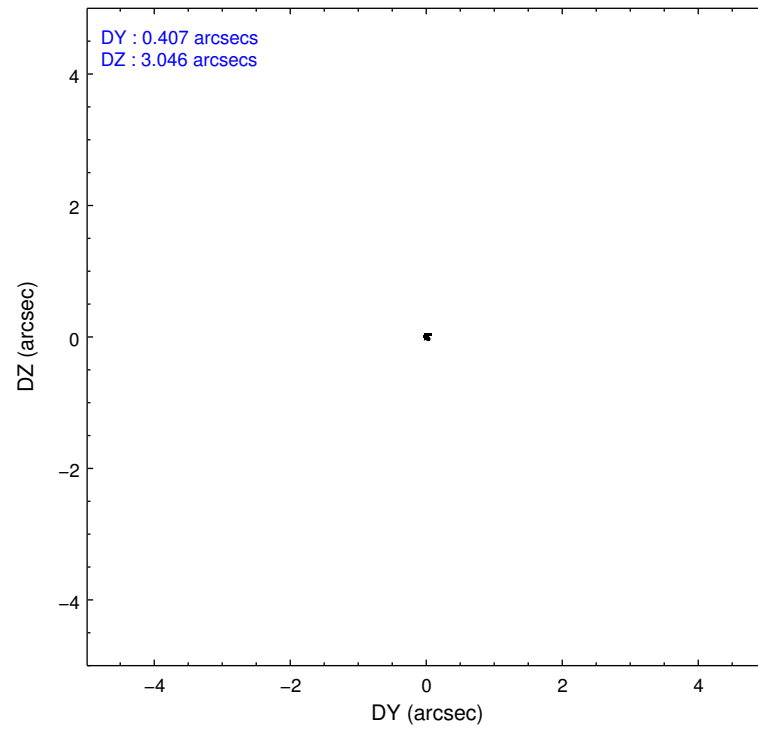
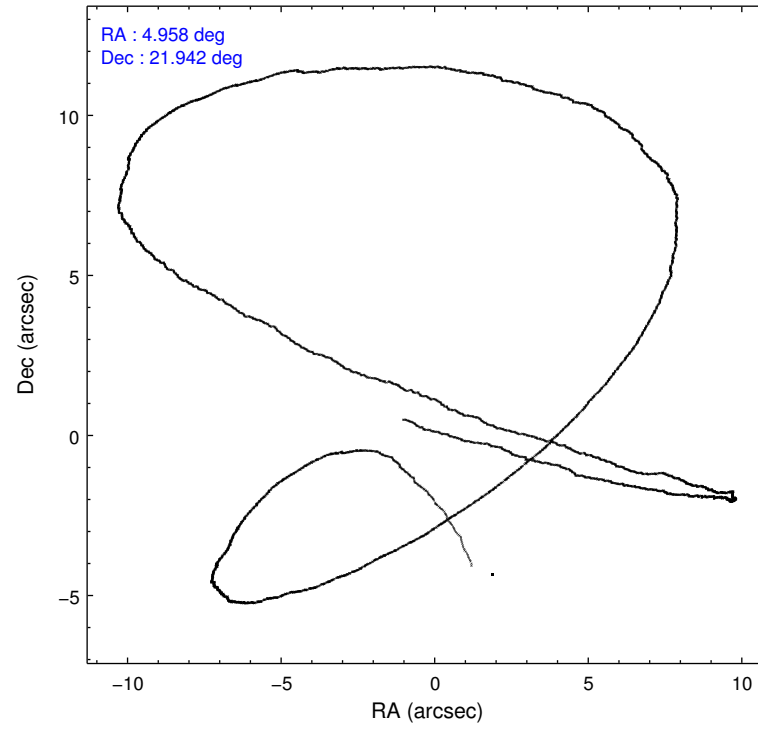
	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	17621	145	1724	786	160
	60%	10%	29%	24%	10%
grade 1 events	45	6	13	17	4
	0%	0%	0%	0%	0%
grade 2 events	8038	396	1068	713	377
	27%	27%	18%	22%	25%
grade 3 events	277	274	395	439	235
	0%	18%	6%	13%	16%
grade 4 events	256	249	395	426	246
	0%	17%	6%	13%	16%
grade 5 events	454	178	557	301	210
	1%	12%	9%	9%	14%
grade 6 events	2645	200	1780	544	223
	9%	13%	30%	16%	15%
grade 7 events	0	0	0	0	0
	0%	0%	0%	0%	0%

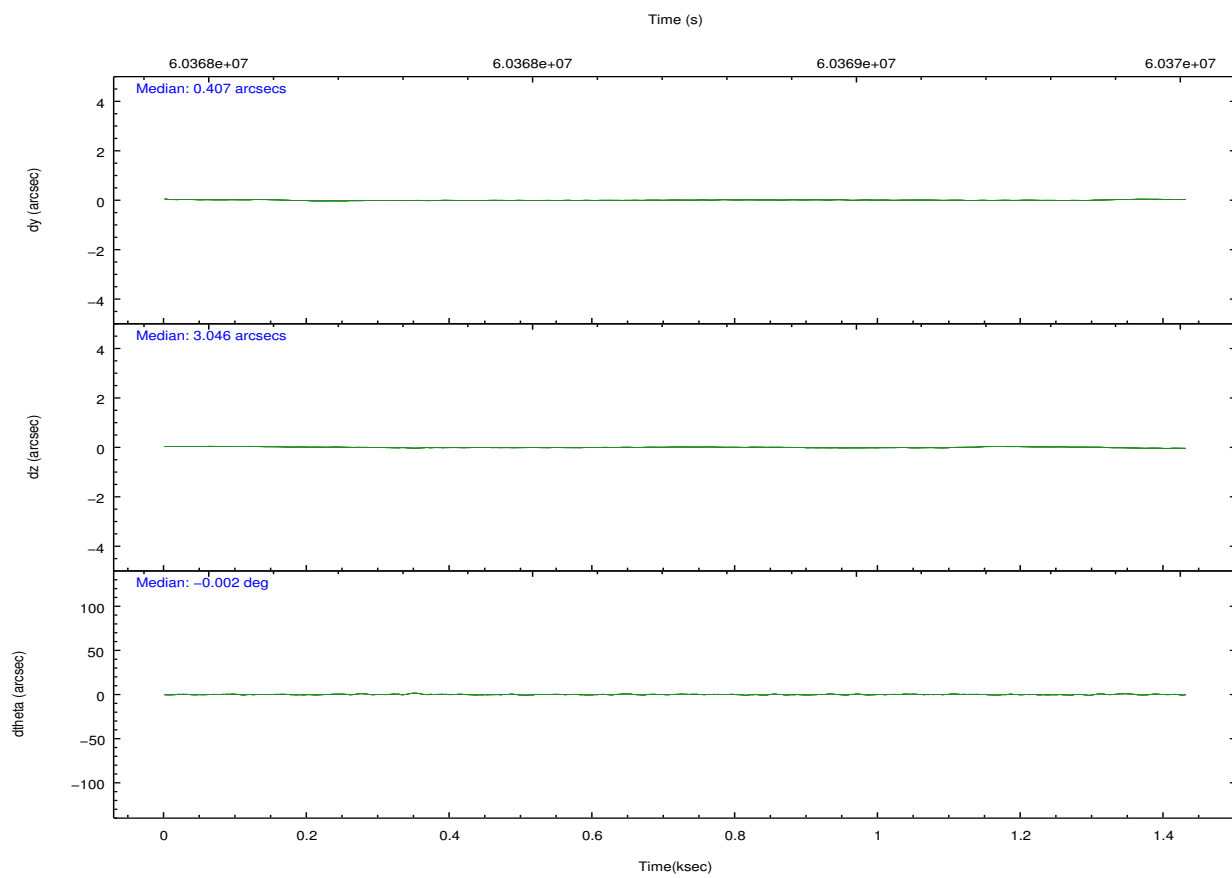
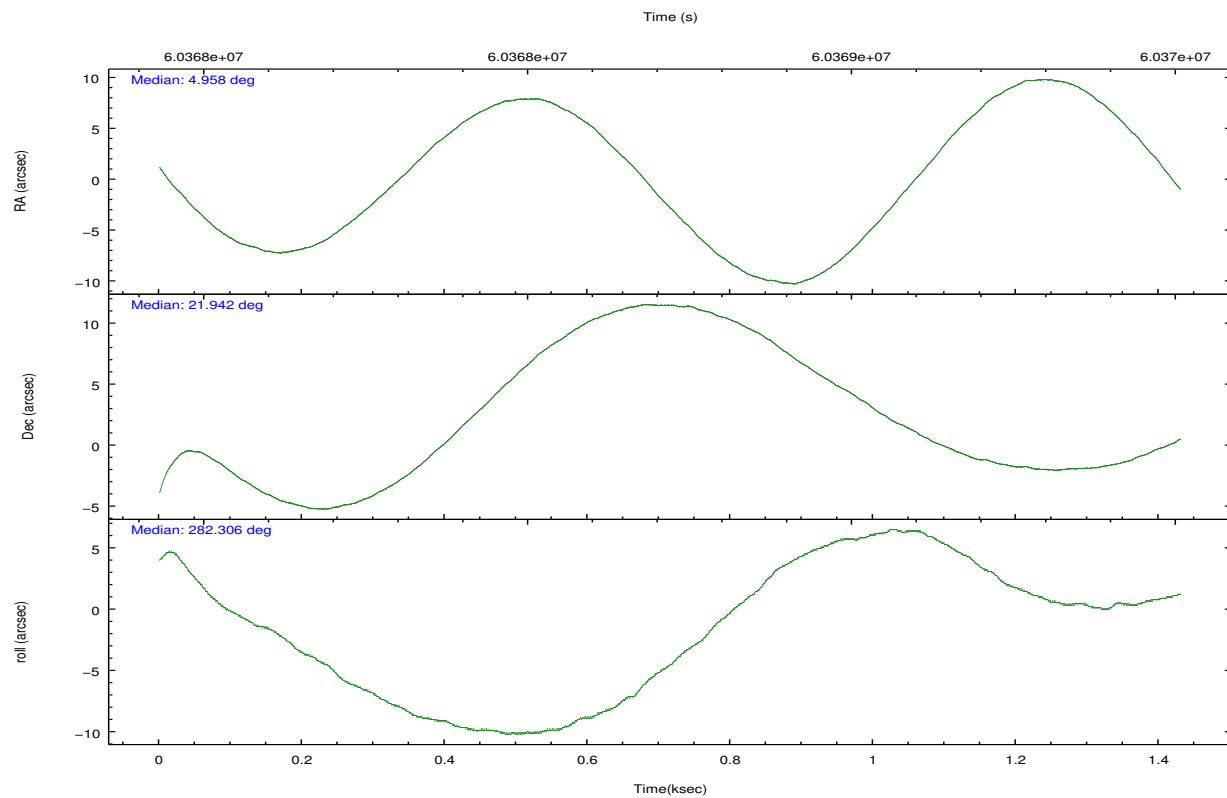
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-56789	ACIS-56789
Grating	NONE	NONE
Data mode	CC33_FAINT	CC33_FAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	4.937436	4.957544131130244
[deg] Pointing Dec	21.963932	21.94298047802654
[deg] Pointing Roll	282.159089	282.3082696018556
[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)	60368435.184000	60367117.112449
Observation start date	1999-11-30T16:59:31	1999-11-30T16:38:37
[s] Observation end time (MET)	60369435.184000	60369942.525051
Observation end date	1999-11-30T17:16:11	1999-11-30T17:25:42
Read mode	CONTINUOUS	CONTINUOUS

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
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	0

## 2.3 Aspect





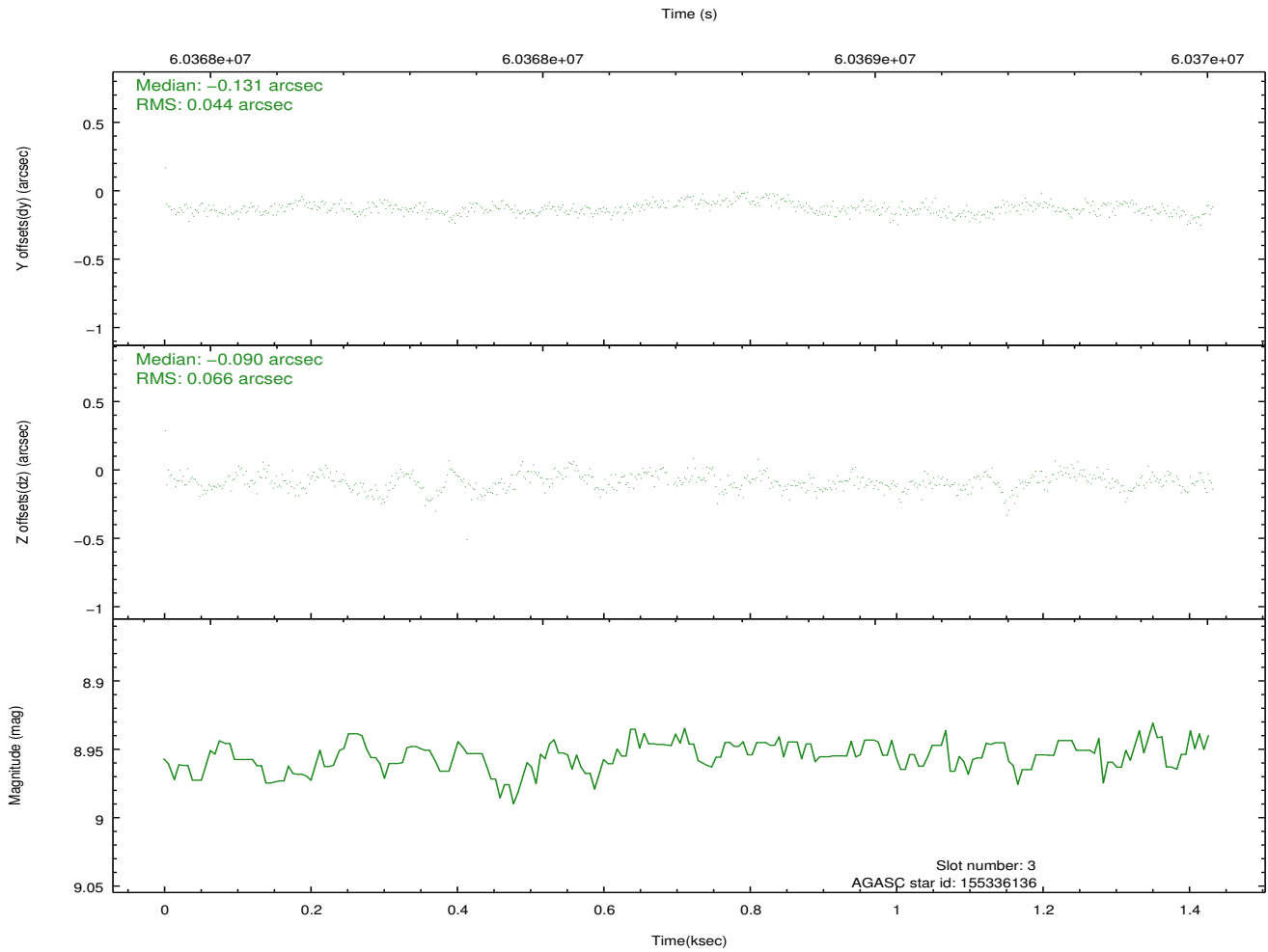
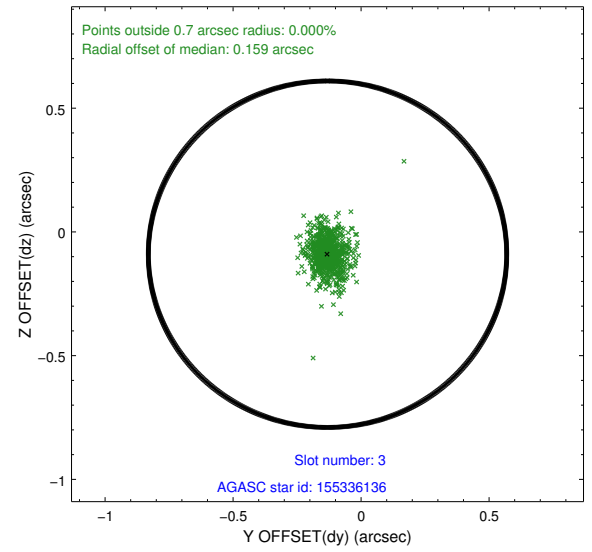
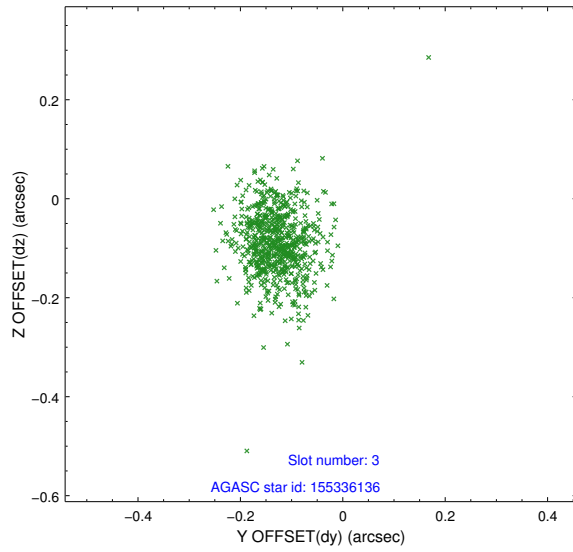
### Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	697	-0.000	-0.017	0.006	0.011	0.000000	0.000000	-753.04	-1724.09
1	FID	ACIS-S-4	7.21	694	0.046	0.005	0.006	0.010	0.000000	0.000000	2159.33	181.99
2	FID	ACIS-S-5	7.24	694	-0.077	0.021	0.006	0.011	0.000000	0.000000	-1802.98	178.38
3	GUIDE	155336136	8.95	690	-0.131	-0.090	0.079	0.137	4.177235	22.173118	-1278.43	-2318.72
4	GUIDE	155331408	8.88	697	-0.130	0.011	0.082	0.129	5.115014	22.479794	-1695.59	964.31
5	GUIDE	155331936	9.28	694	0.053	0.020	0.080	0.139	5.163761	21.833166	614.36	640.76
6	GUIDE	155455080	9.52	694	0.091	0.127	0.090	0.149	5.389517	21.590742	1628.67	1197.05
7	GUIDE	155320904	9.65	694	0.120	-0.066	0.087	0.149	4.856782	21.638106	1090.03	-510.16

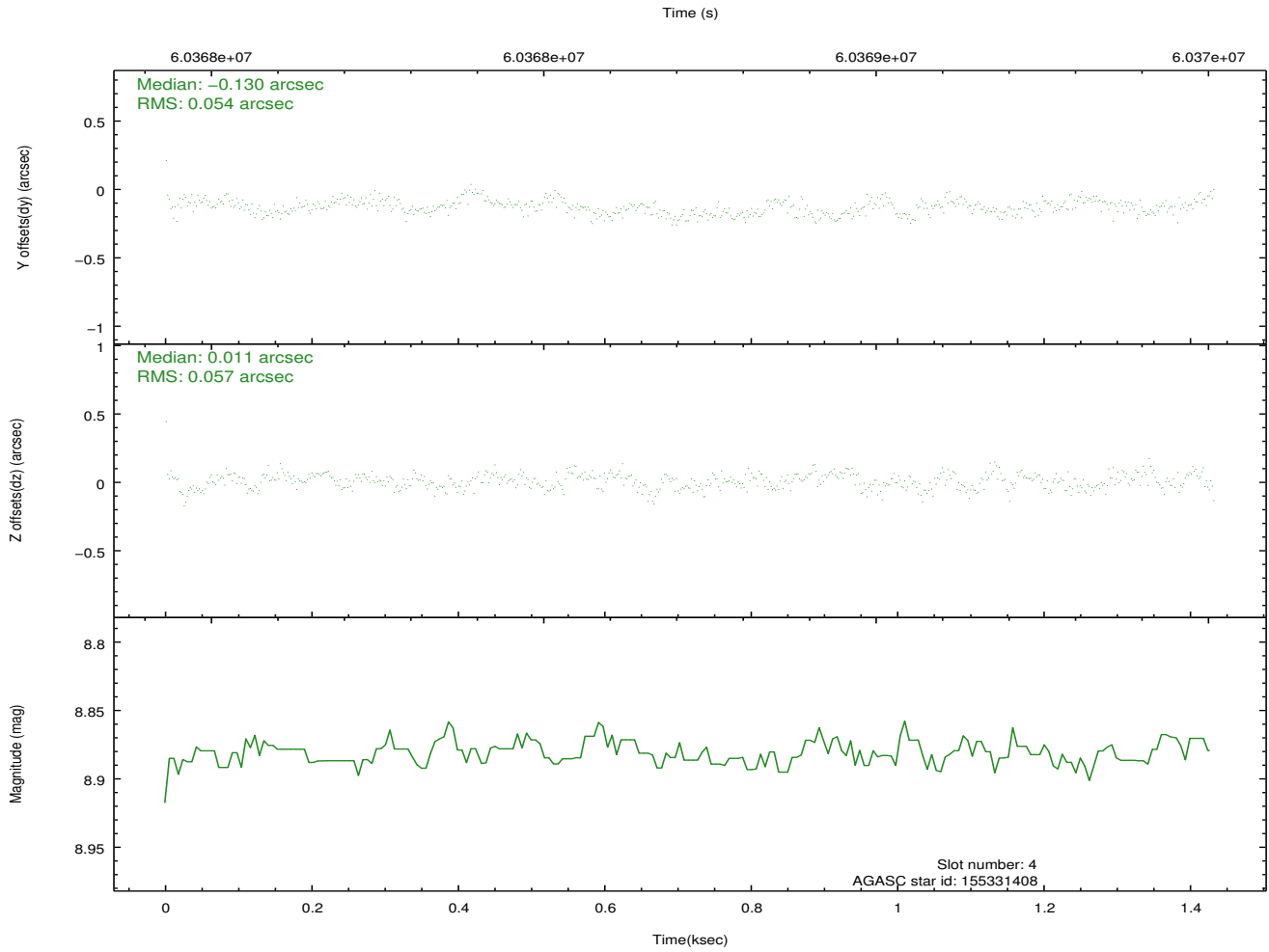
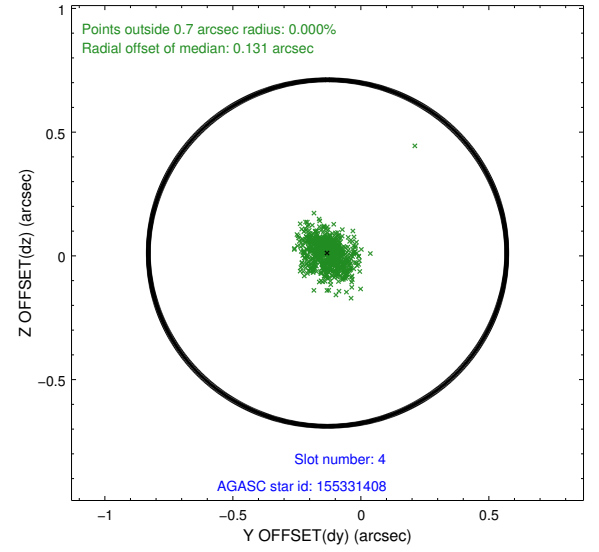
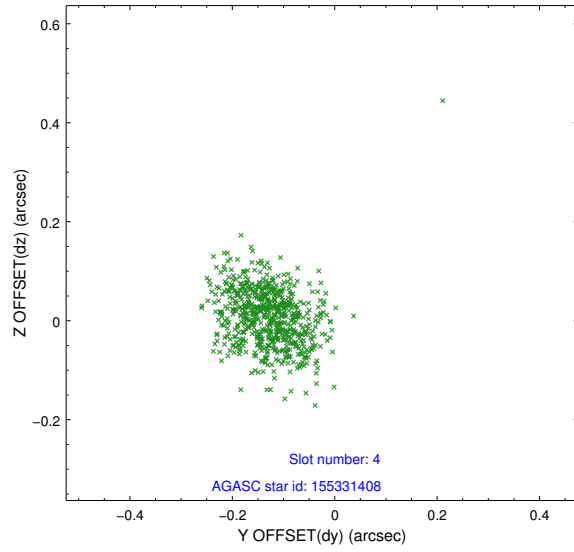


## 2.4 Star Slots

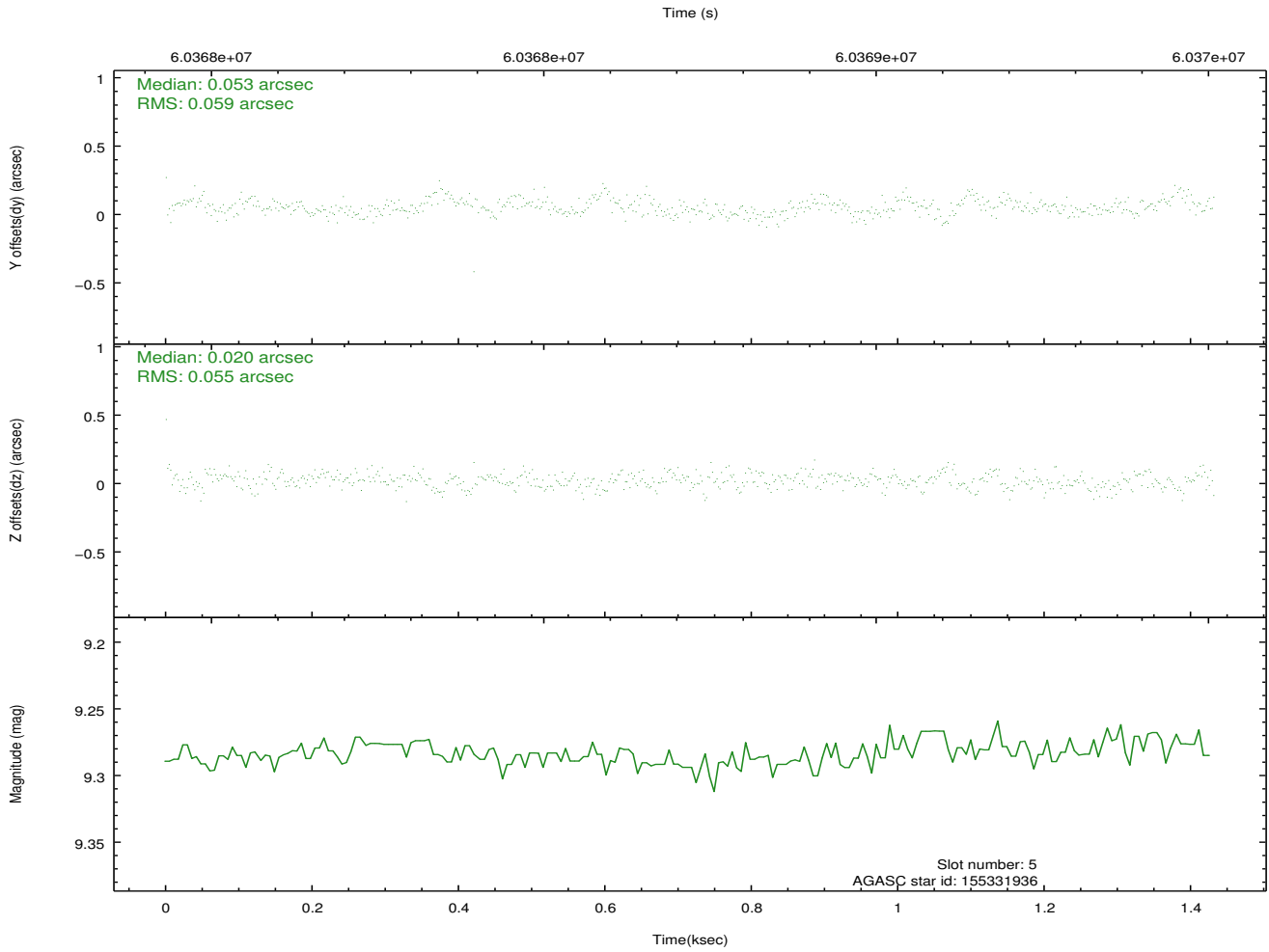
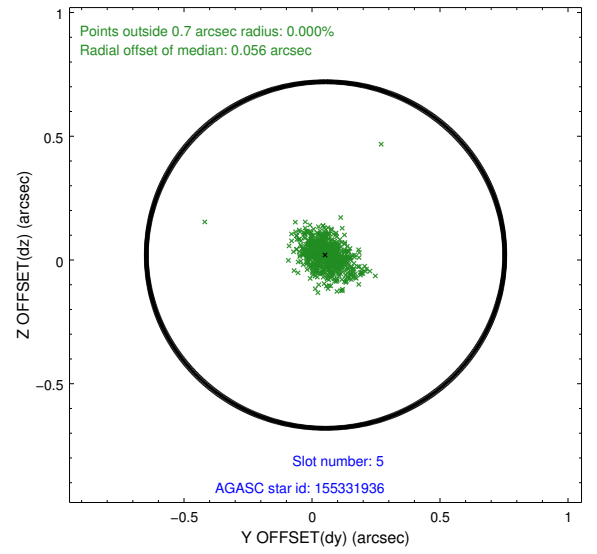
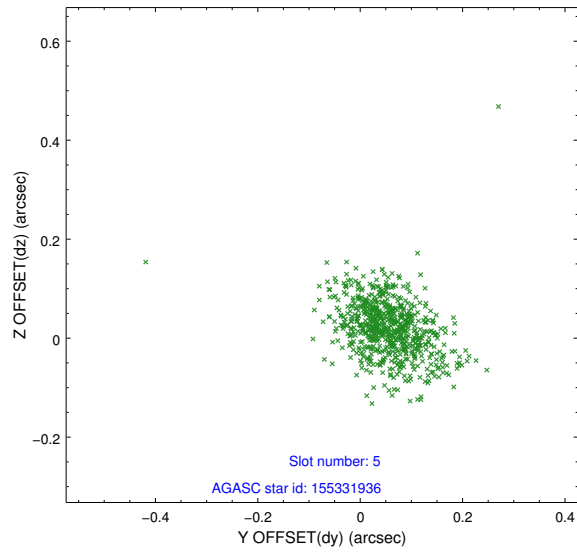
### 2.4.1 Slot 3



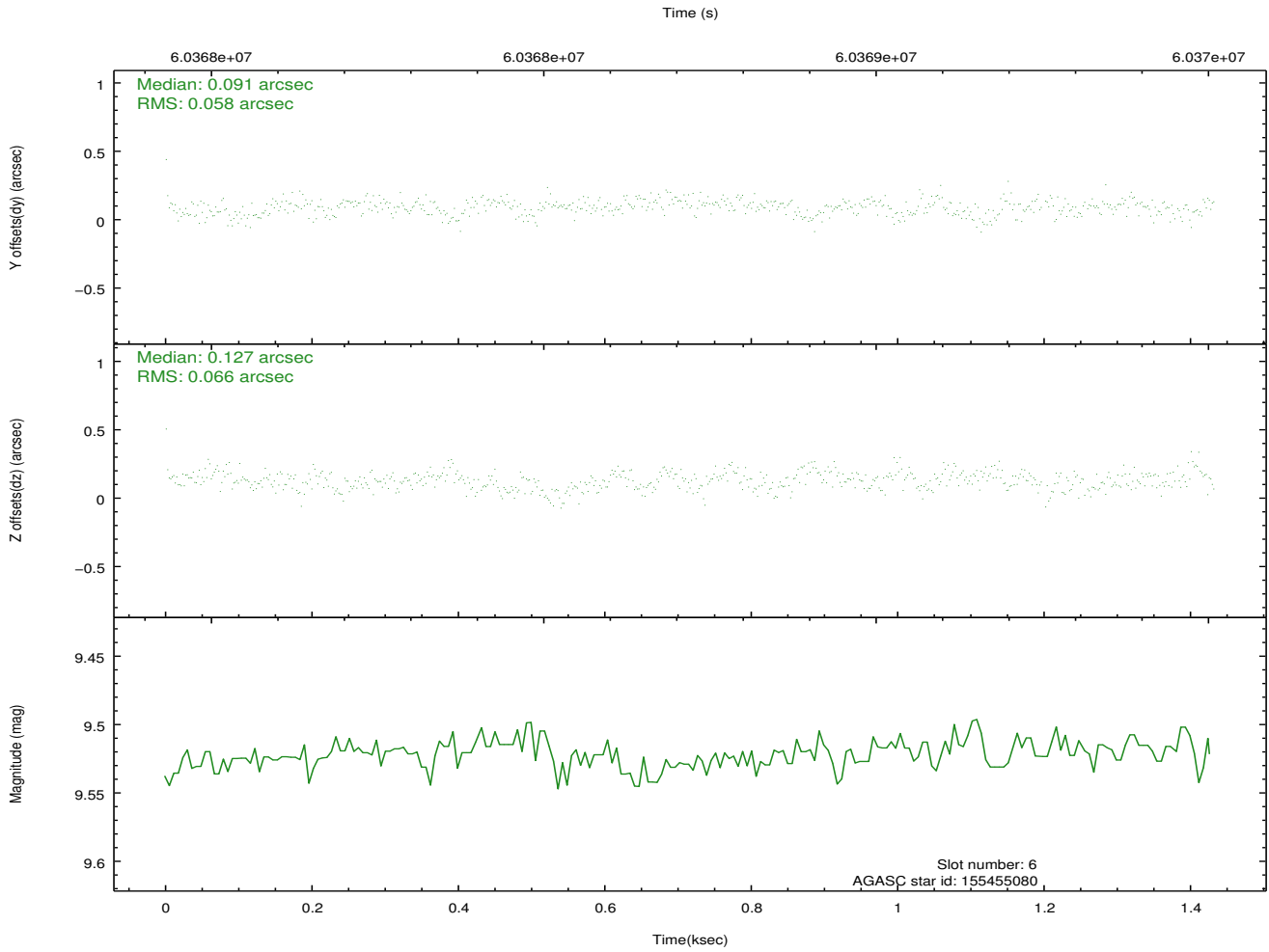
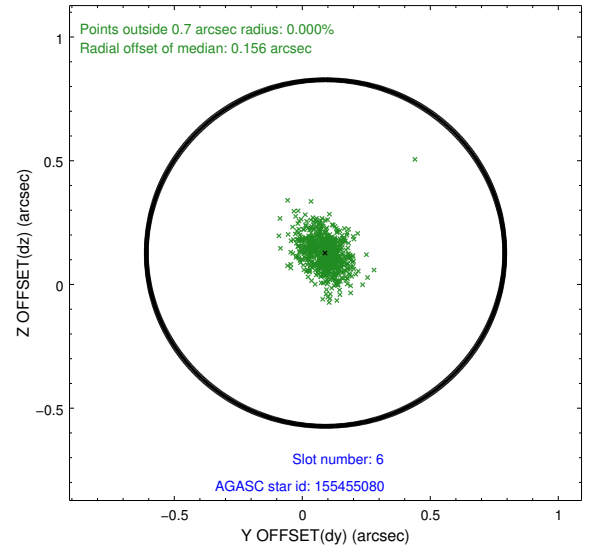
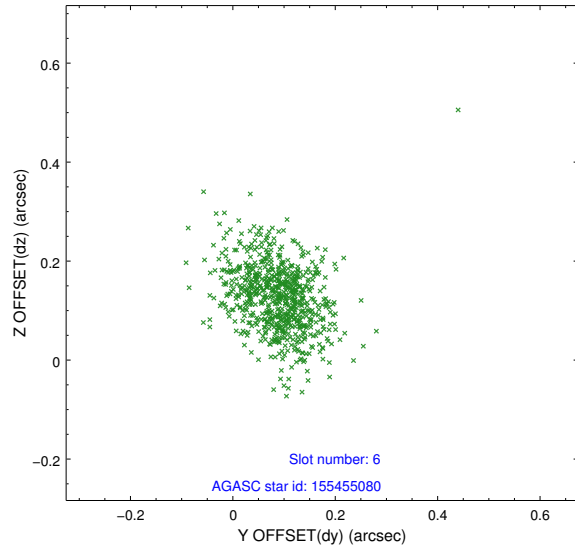
## 2.4.2 Slot 4



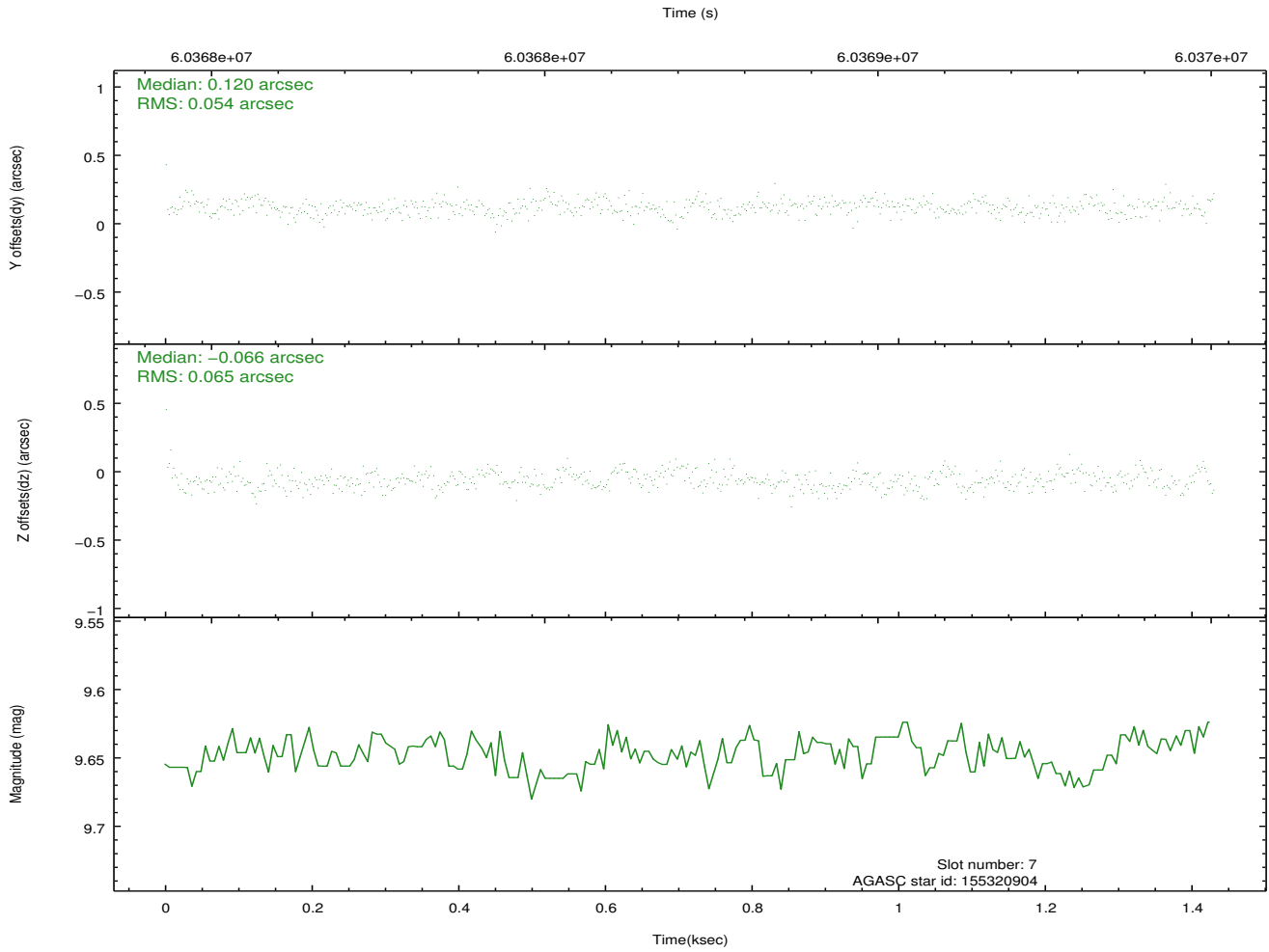
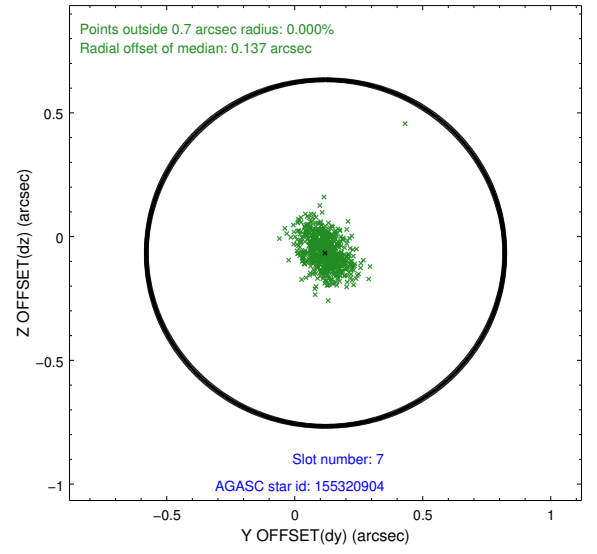
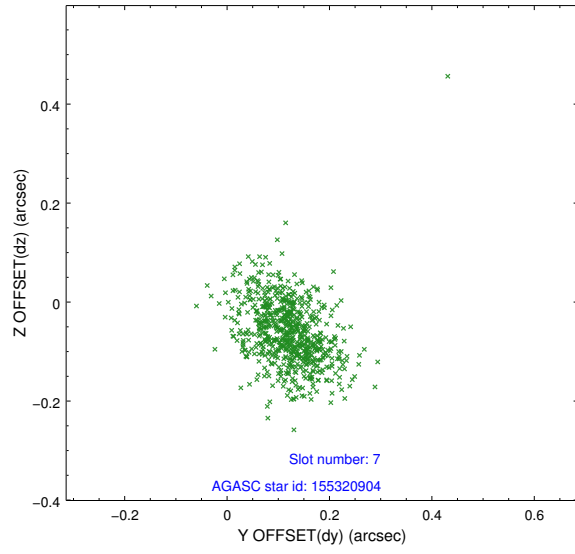
### 2.4.3 Slot 5



## 2.4.4 Slot 6

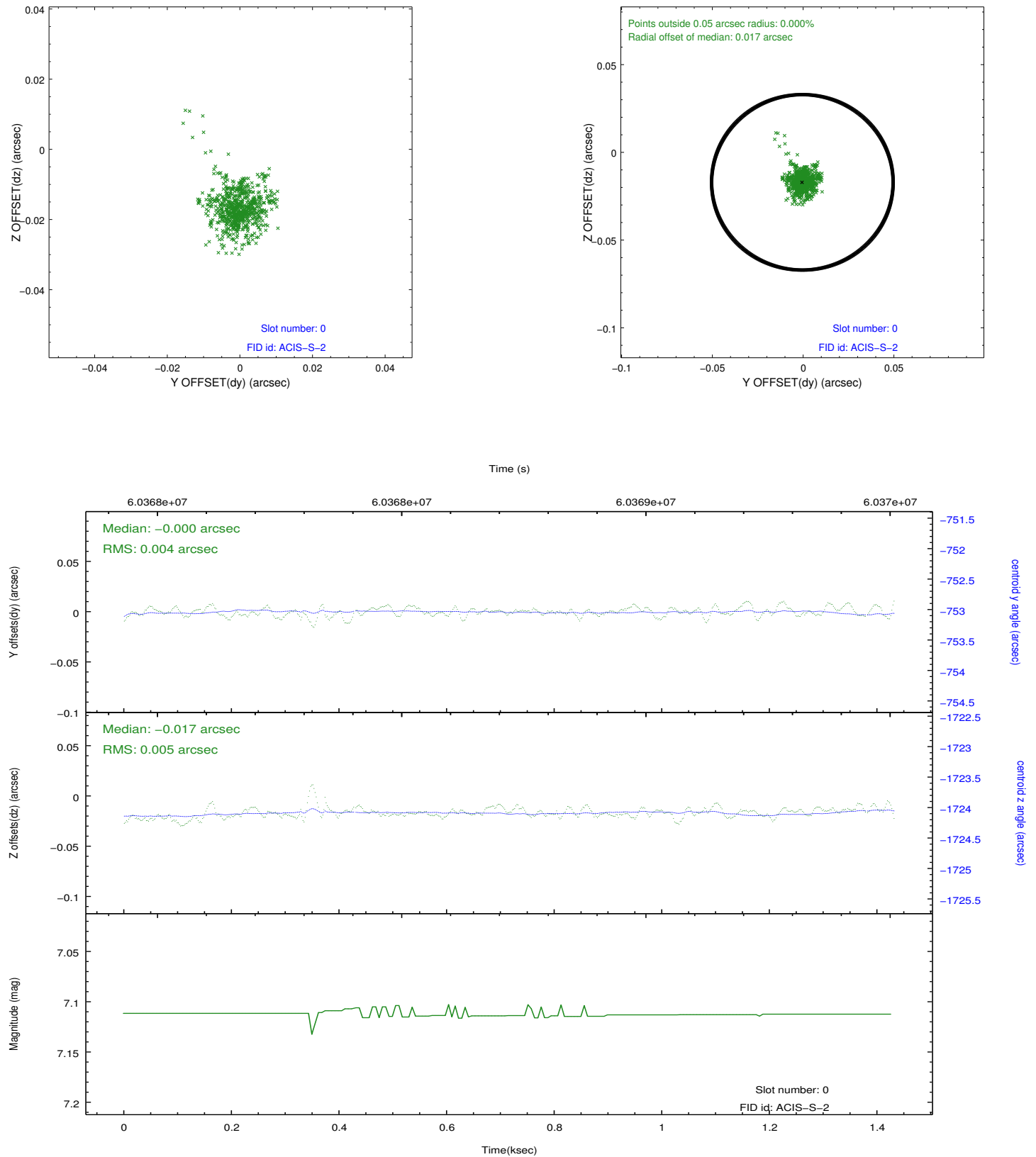


## 2.4.5 Slot 7

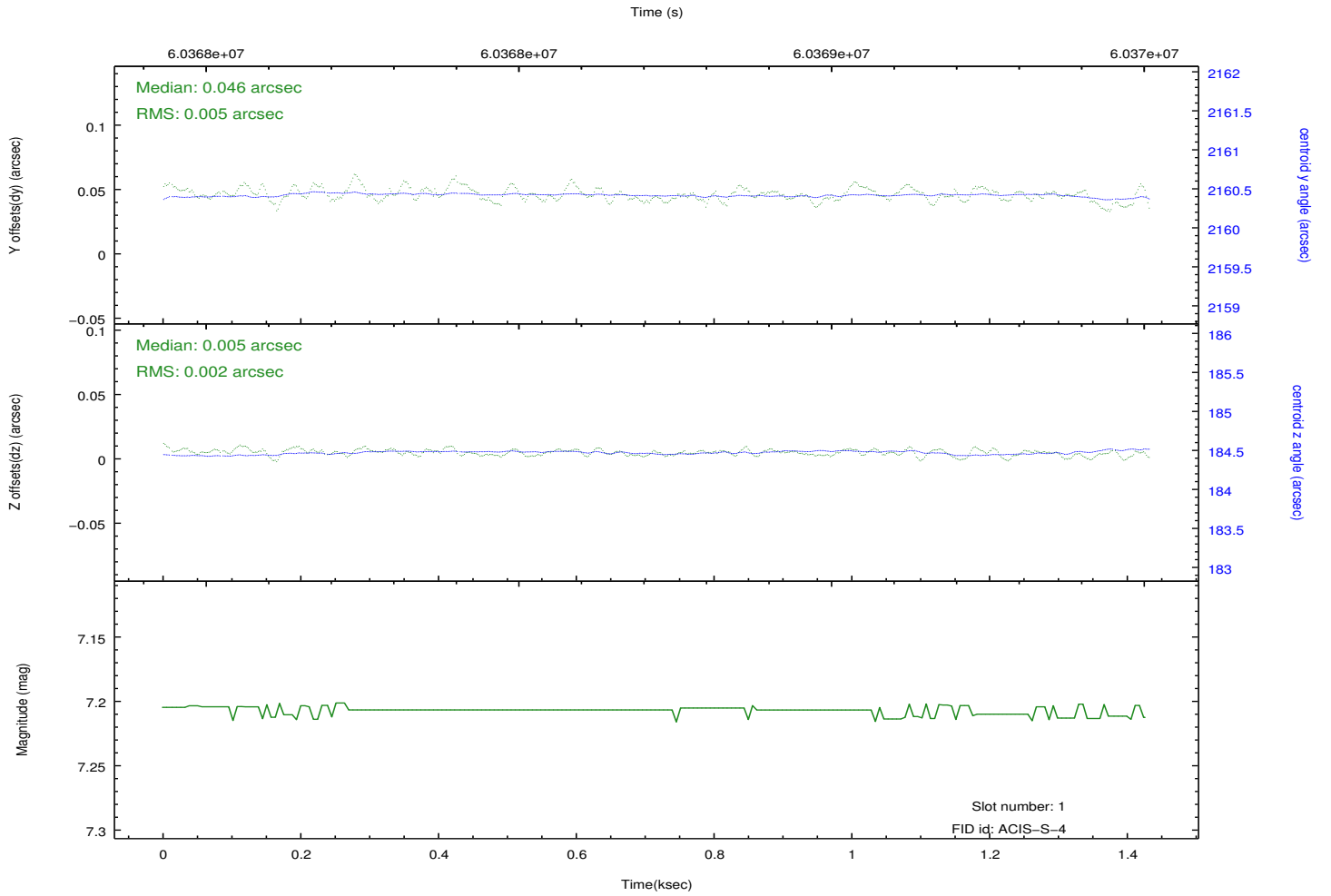
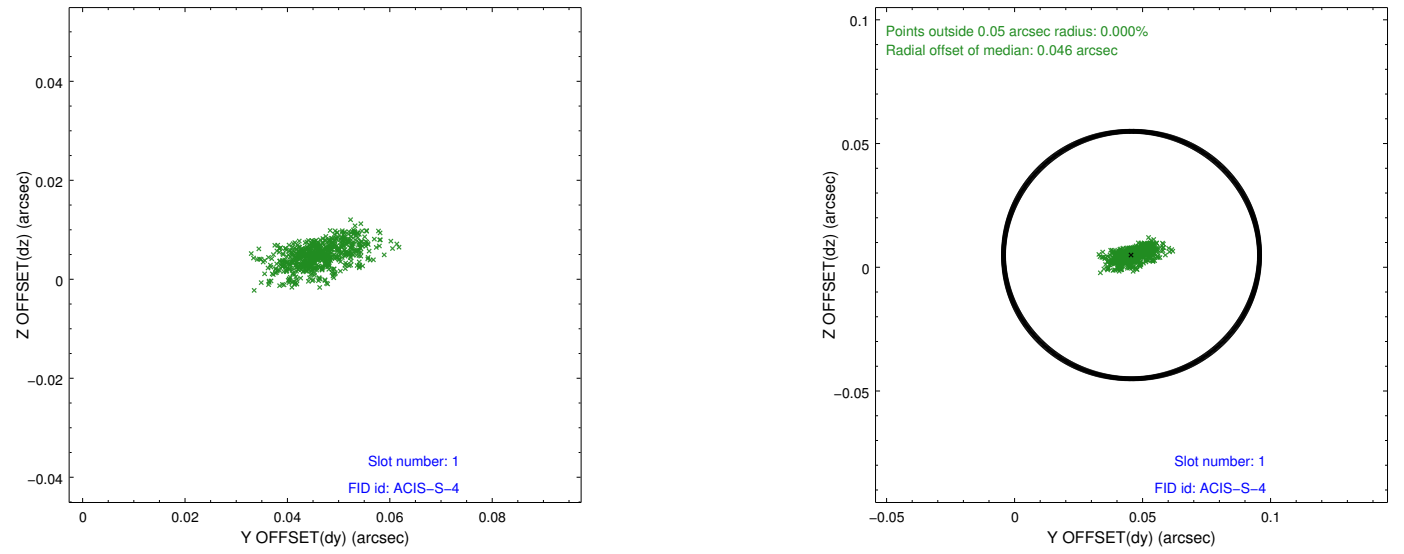


## 2.5 FID Slots

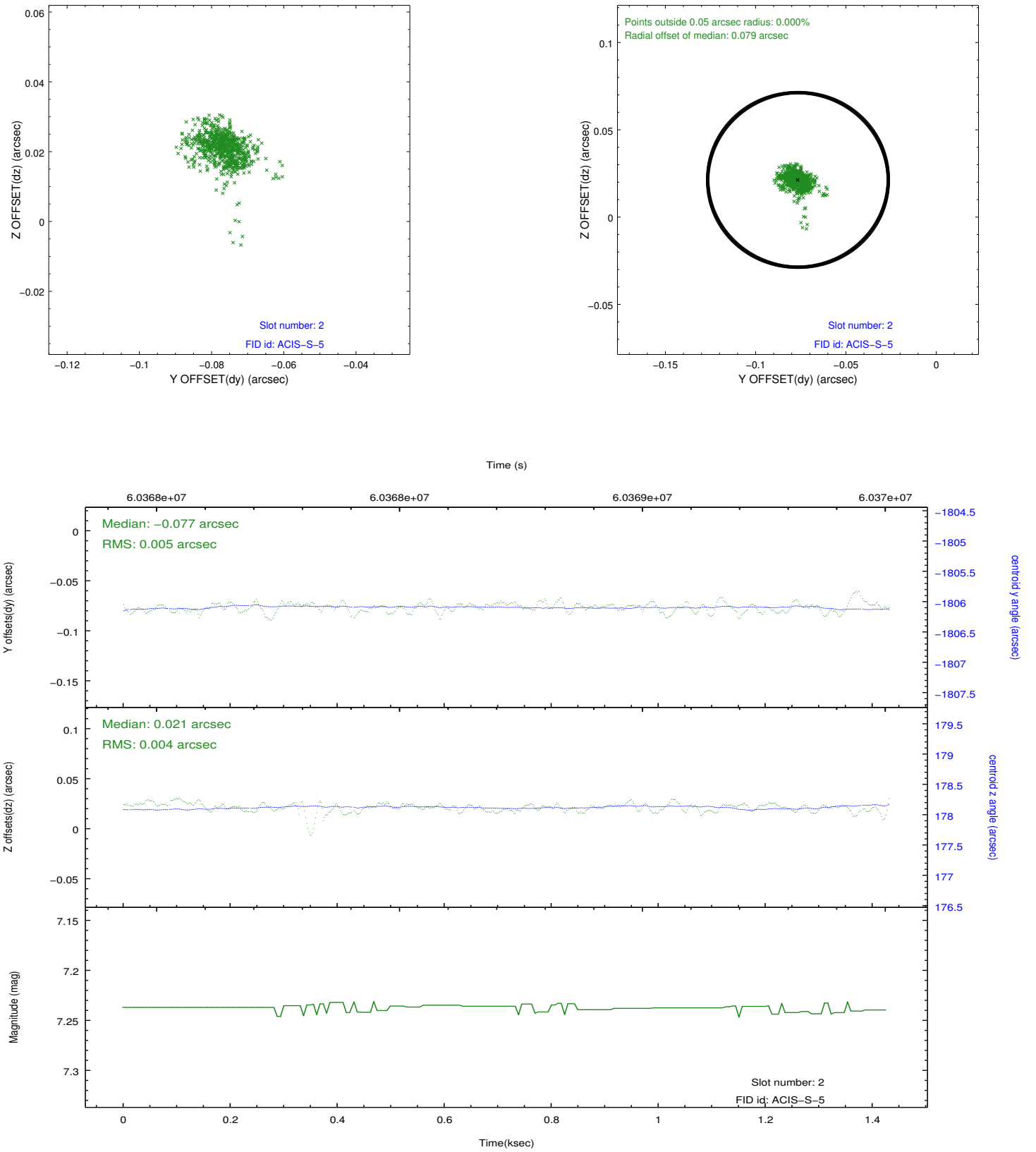
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2





# A Summary

## A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2013.01.29
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.148

## A.2 Comments

This observation was taken at a focal plane temperature of about -110 C.  
There is no CTI calibration for this temperature so none was applied.

===

Charge time for this ObsId remains at previous value of 1.148 ks,  
although with the current processing the charge time would be 1.1455  
ks.