

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 4517 - L2 Version 3  
Chandra X-Ray Center

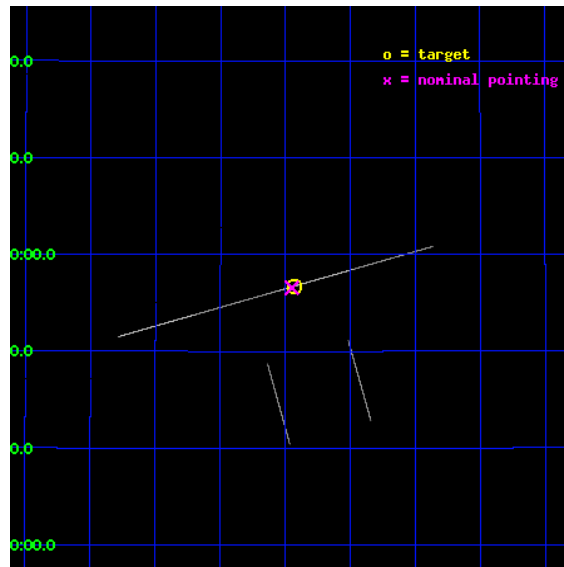
L2 Processing Date : Nov 9 2012

## 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	Parameters . . . . .	4
2.1.3	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	300111	Sequence number
obs_id	4517	Observation id
title	Continued Monitoring of the Orbital Evolution of RX J1914.4+2456	P
observer	Dr. Tod Strohmayer	Principal investigator
object	RX J1914.4+2456	Source name
ra_targ	288.60875	Observer's specified target RA [deg]
dec_targ	24.945444	Observer's specified target Dec [deg]
ra_nom	288.61253820668	Nominal RA [deg]
dec_nom	24.942711912974	Nominal Dec [deg]
roll_nom	344.15223309002	Nominal Roll [deg]
revision	3	Processing version of data
ontime	15641.5	Sum of GTIs [s]
livetime	15580.400390625	Livetime [s]
ontime2	15641.5	Sum of GTIs [s]
ontime3	15641.5	Sum of GTIs [s]
ontime5	15641.5	Sum of GTIs [s]
ontime6	15641.5	Sum of GTIs [s]
ontime7	15641.5	Sum of GTIs [s]
ontime8	15641.5	Sum of GTIs [s]
l2events	183093	Number of level 2 events

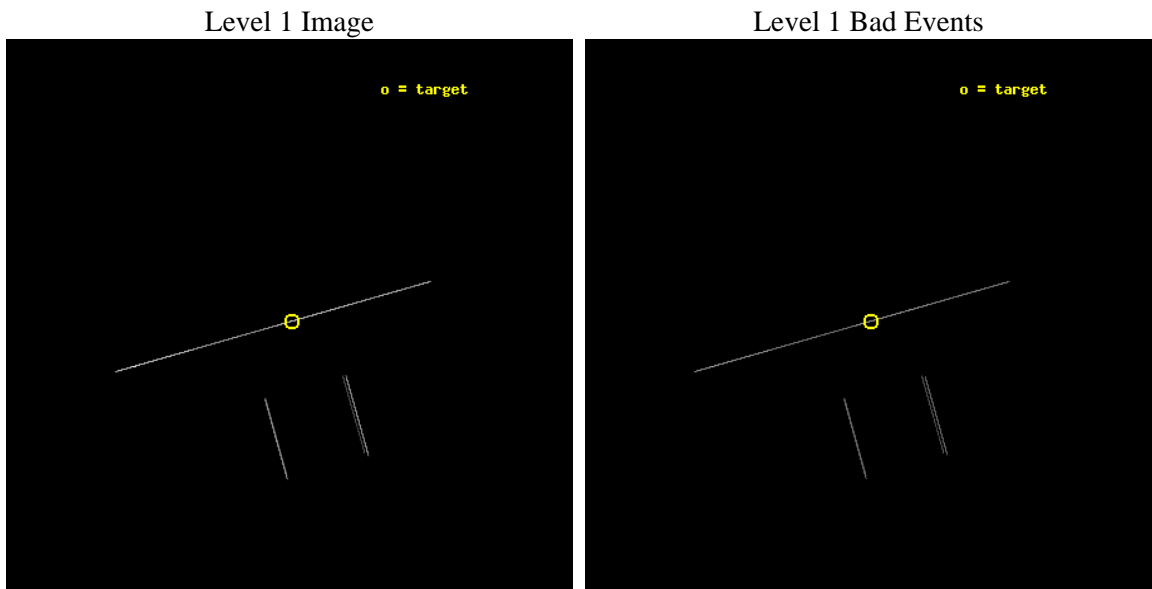




## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



### 2.1.2 Parameters

obi_num	1	Obi number	sched_exp_time	15500.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	15641.5	Sum of GTIs [s]
caldsver	4.5.2	&#160	ontime2	15641.5	Sum of GTIs [s]
date	2012-11-09T15:10:05	Date and time of file creation	ontime3	15641.5	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	15641.5	Sum of GTIs [s]
			ontime6	15641.5	Sum of GTIs [s]
			ontime7	15641.5	Sum of GTIs [s]
			ontime8	15641.5	Sum of GTIs [s]
			l1events	293544	Number of level 1 events

### 2.1.3 Events

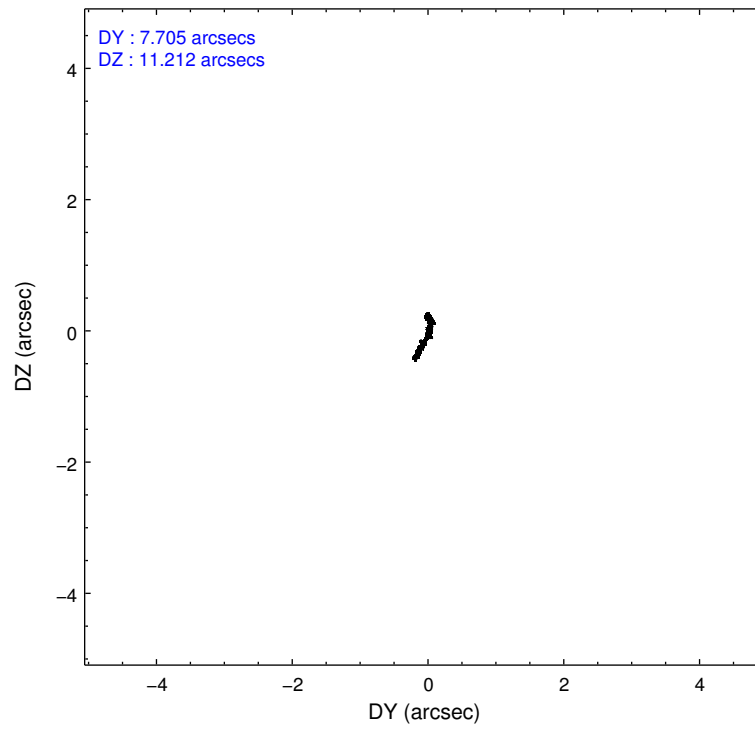
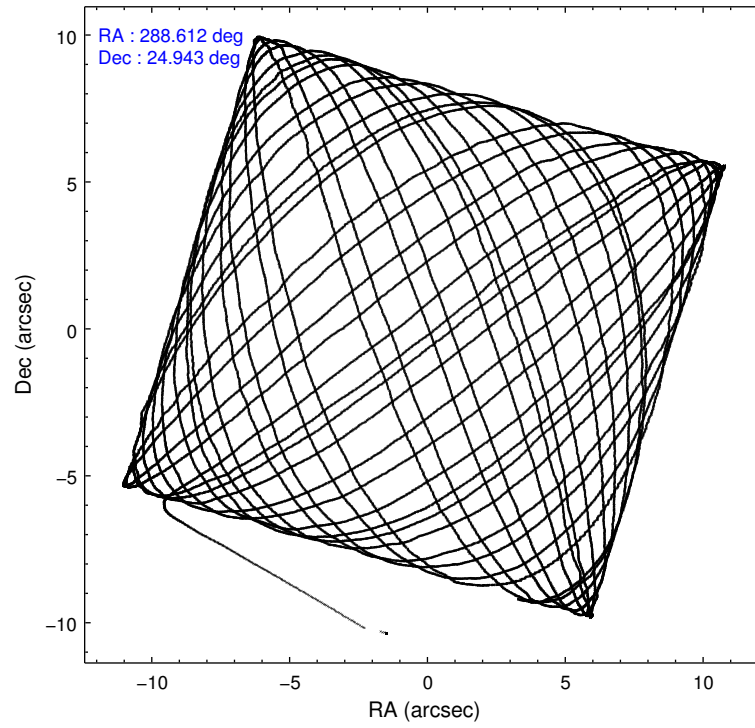
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	20437	22102	107969	22613	77830	42593
rejected events	4856	5187	15308	5612	14507	8370
rejected %	23%	23%	14%	24%	18%	19%

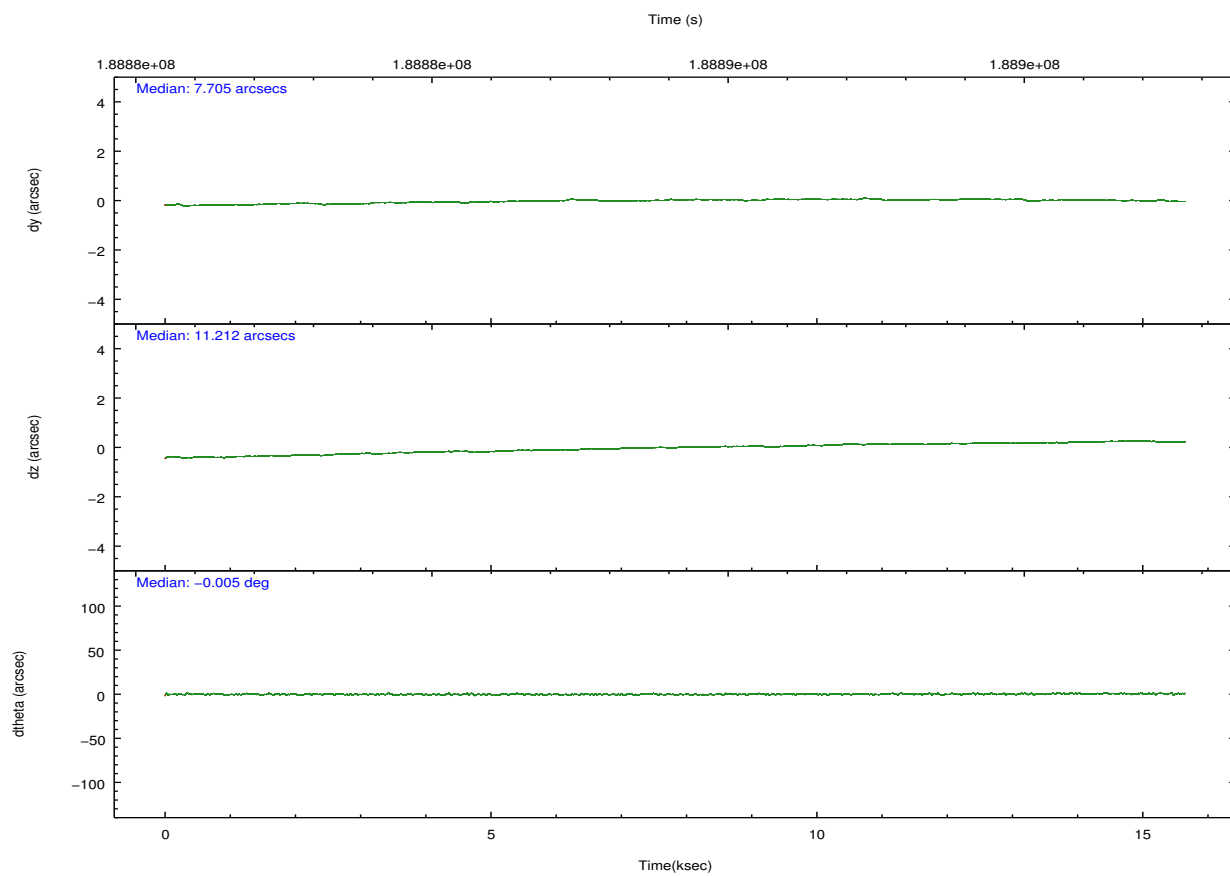
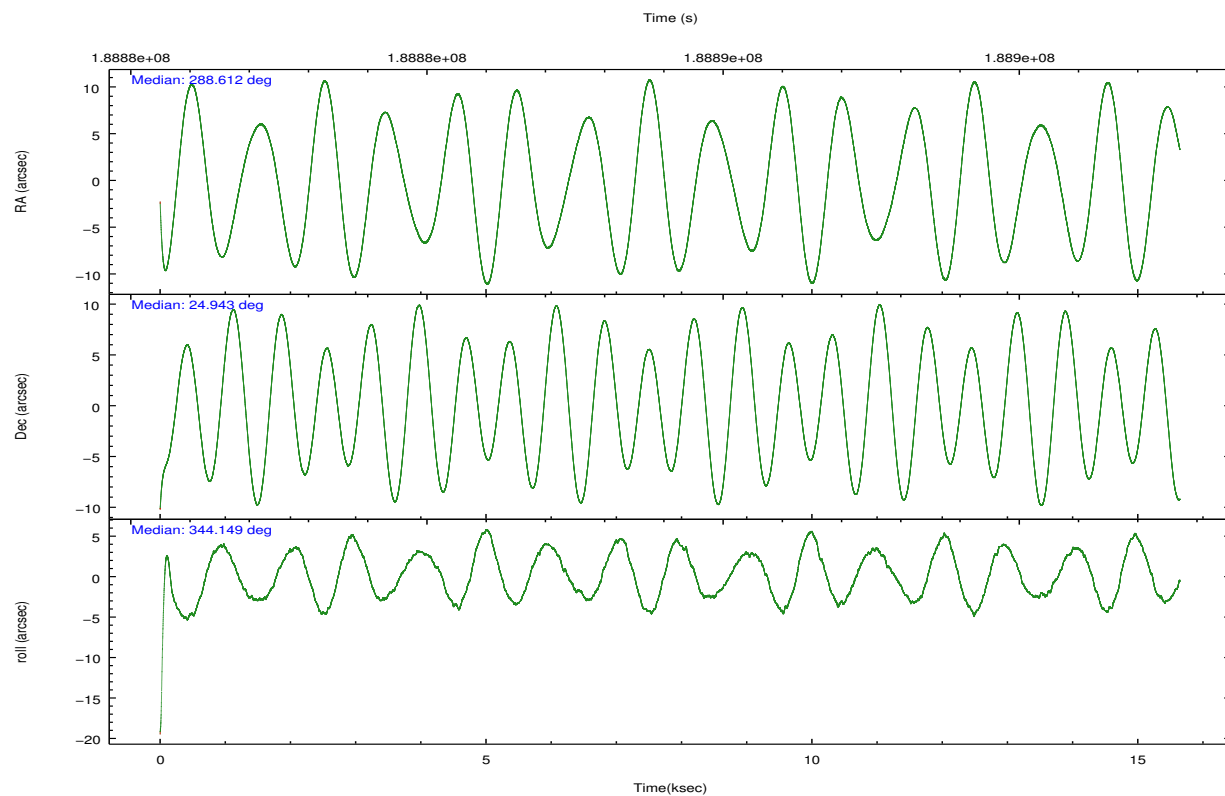
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	2045	2004	26795	1958	6797	6309
	10%	9%	24%	8%	8%	14%
grade 1 events	69	89	101	69	101	111
	0%	0%	0%	0%	0%	0%
grade 2 events	6731	7292	25748	7131	17541	11389
	32%	32%	23%	31%	22%	26%
grade 3 events	2029	2479	1581	2241	3553	4277
	9%	11%	1%	9%	4%	10%
grade 4 events	2079	2045	1495	2214	3462	4291
	10%	9%	1%	9%	4%	10%
grade 5 events	3596	3853	8059	4269	10352	5790
	17%	17%	7%	18%	13%	13%
grade 6 events	3888	4340	44190	4731	36024	10426
	19%	19%	40%	20%	46%	24%
grade 7 events	0	0	0	0	0	0
	0%	0%	0%	0%	0%	0%

## 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	CC33_GRADED	CC33_GRADED	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	288.583495	288.6125382066768	Subarray requested	NONE	NONE
[deg] Pointing Dec	24.935718	24.94271191297379	Alternating exposures requested	N	N
[deg] Pointing Roll	344.007871	344.1522330900211	[s] Primary exposure time	0.000000	0
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	188881427.184000	188880098.62959			
Observation start date	2003-12-27T03:02:43	2003-12-27T02:41:38			
[s] Observation end time (MET)	188896927.184000	188897728.63036			
Observation end date	2003-12-27T07:21:03	2003-12-27T07:35:28			
Read mode	CONTINUOUS	CONTINUOUS			

## 2.3 Aspect



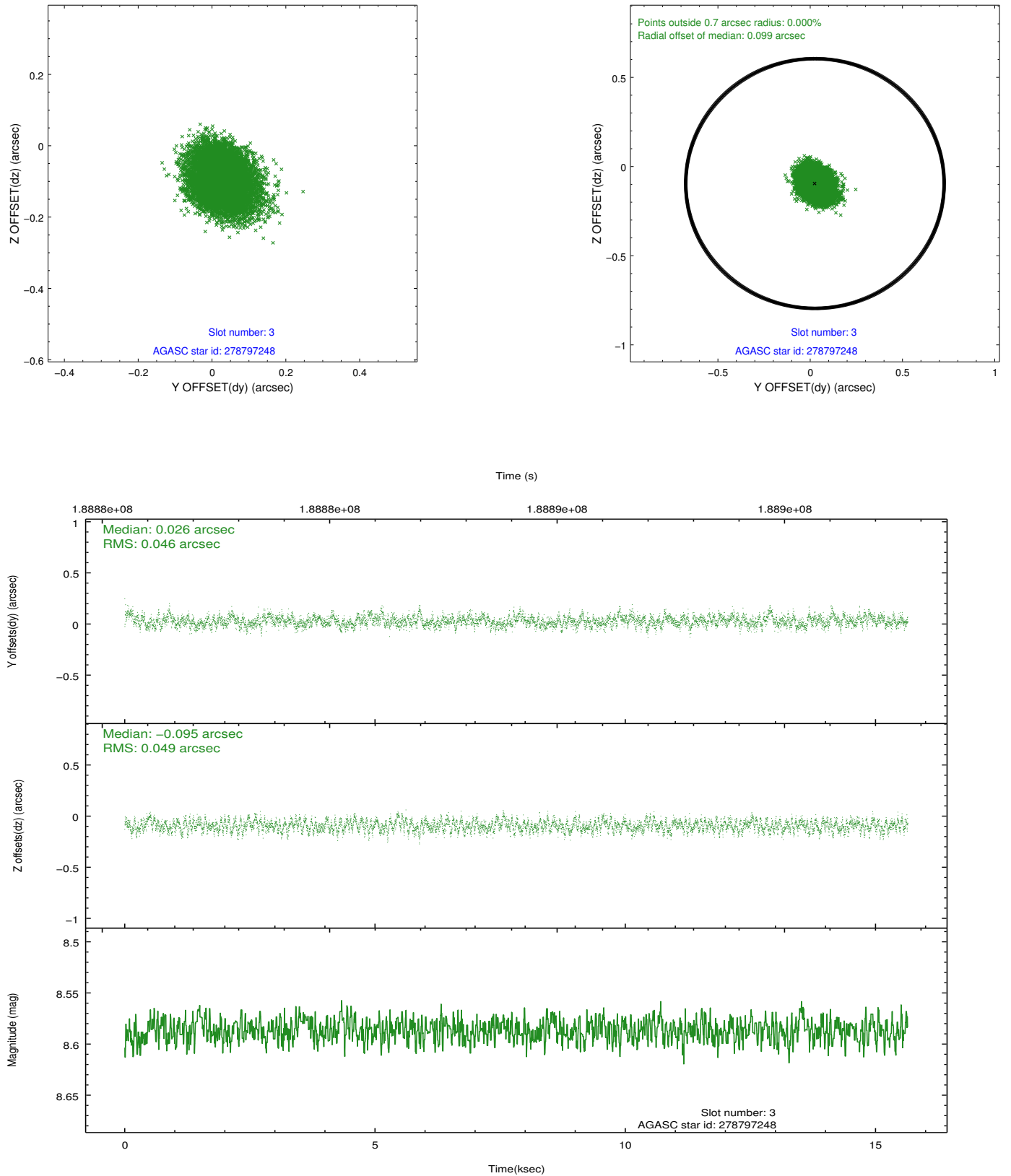


### Slot Statistics

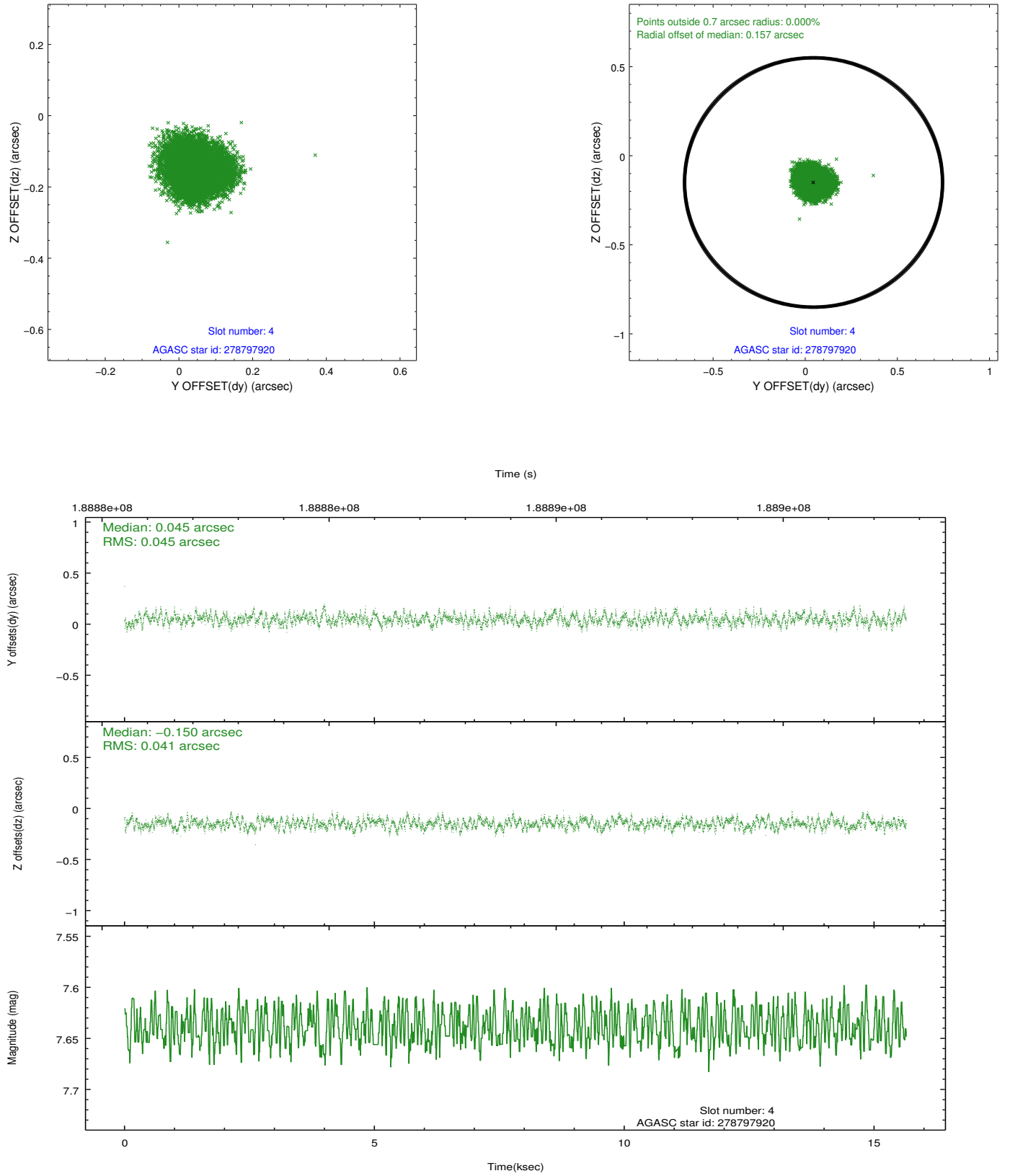
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	3817	-0.010	-0.015	0.007	0.011	0.000000	0.000000	-760.41	-1732.43
1	FID	ACIS-S-5	7.23	3816	-0.028	0.006	0.008	0.012	0.000000	0.000000	-1813.72	169.24
2	FID	ACIS-S-6	7.34	3817	0.013	0.017	0.007	0.012	0.000000	0.000000	400.85	813.53
3	GUIDE	278797248	8.59	7628	0.026	-0.095	0.073	0.114	288.405544	25.027631	-649.07	158.60
4	GUIDE	278797920	7.64	7633	0.045	-0.150	0.066	0.101	288.580174	25.013203	-87.13	265.23
5	GUIDE	278953272	8.38	7631	-0.092	0.086	0.058	0.093	289.216166	24.729034	2192.42	-140.34
6	GUIDE	278954448	7.74	7631	-0.008	0.046	0.055	0.086	289.033961	24.779147	1570.35	-134.29
7	GUIDE	278809640	9.16	7627	0.027	0.111	0.097	0.157	288.103077	25.750193	-2305.91	2392.41

## 2.4 Star Slots

### 2.4.1 Slot 3

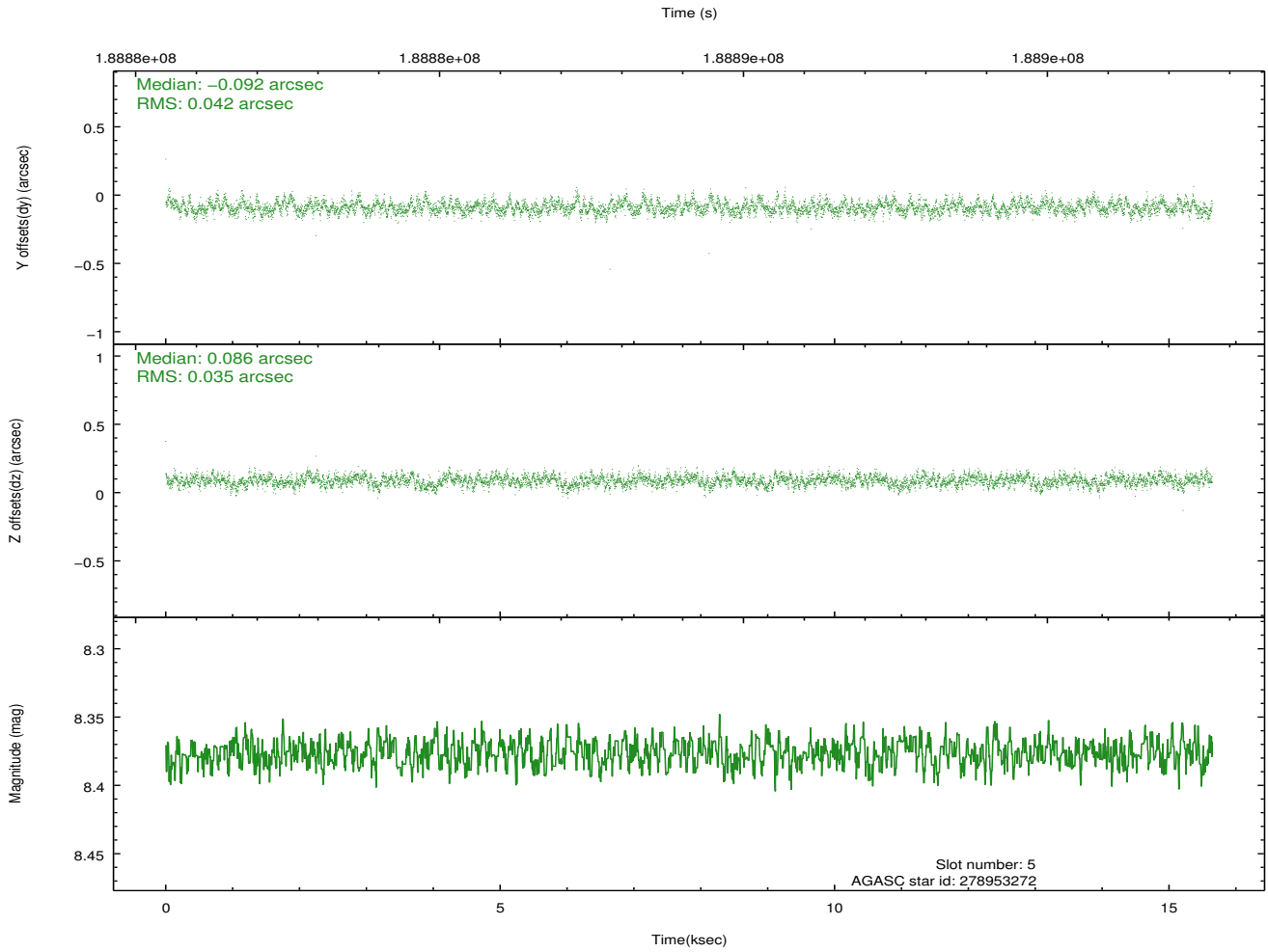
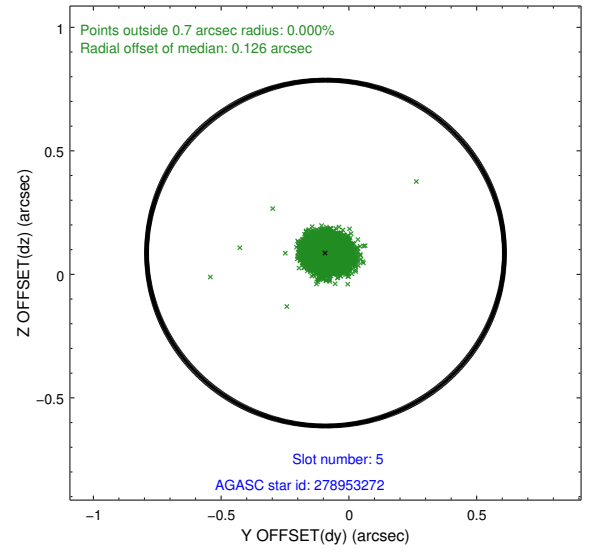
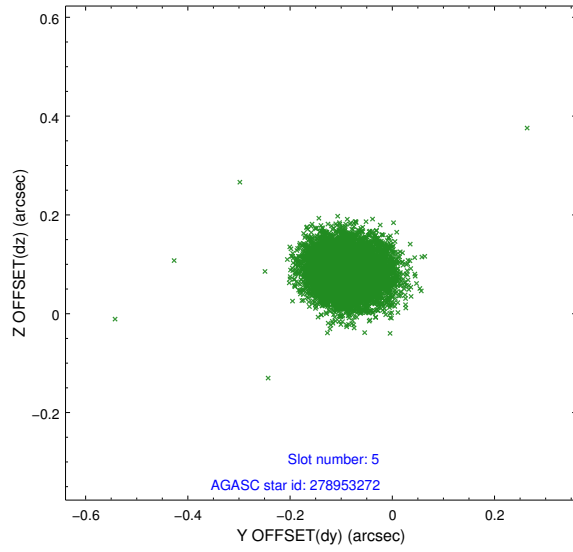


## 2.4.2 Slot 4

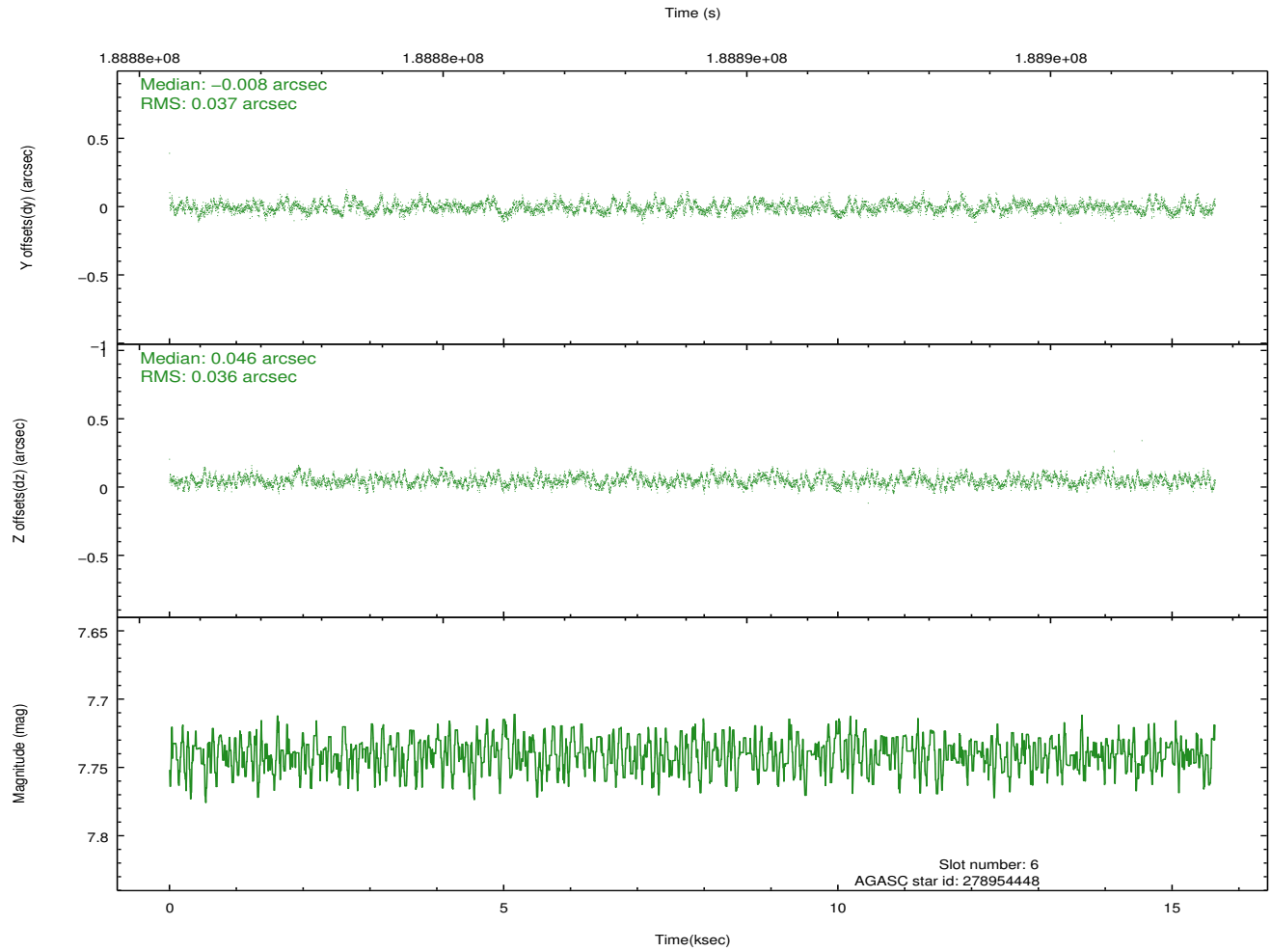
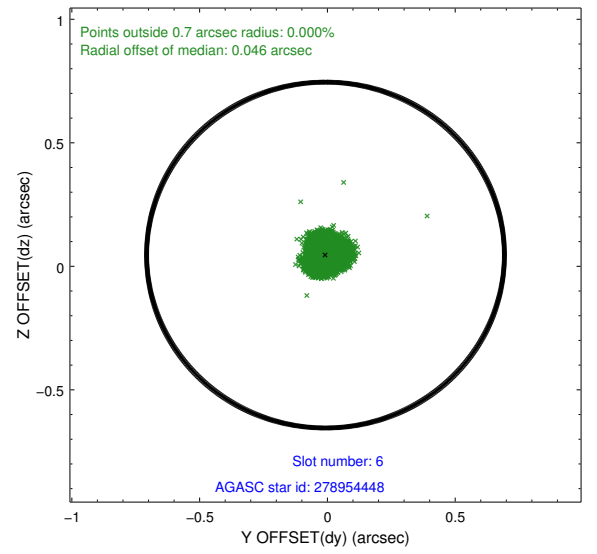
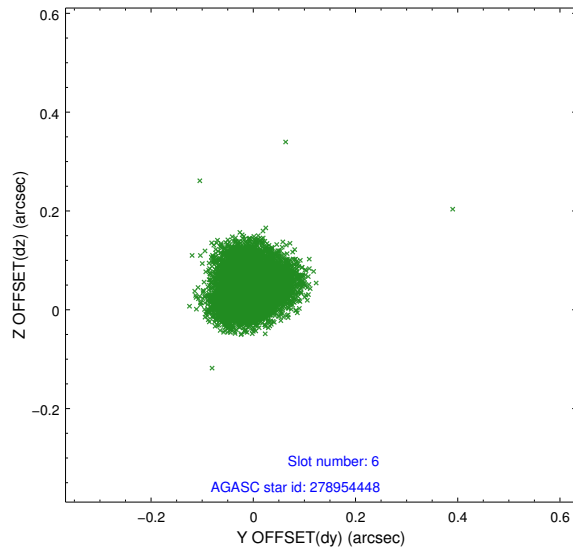




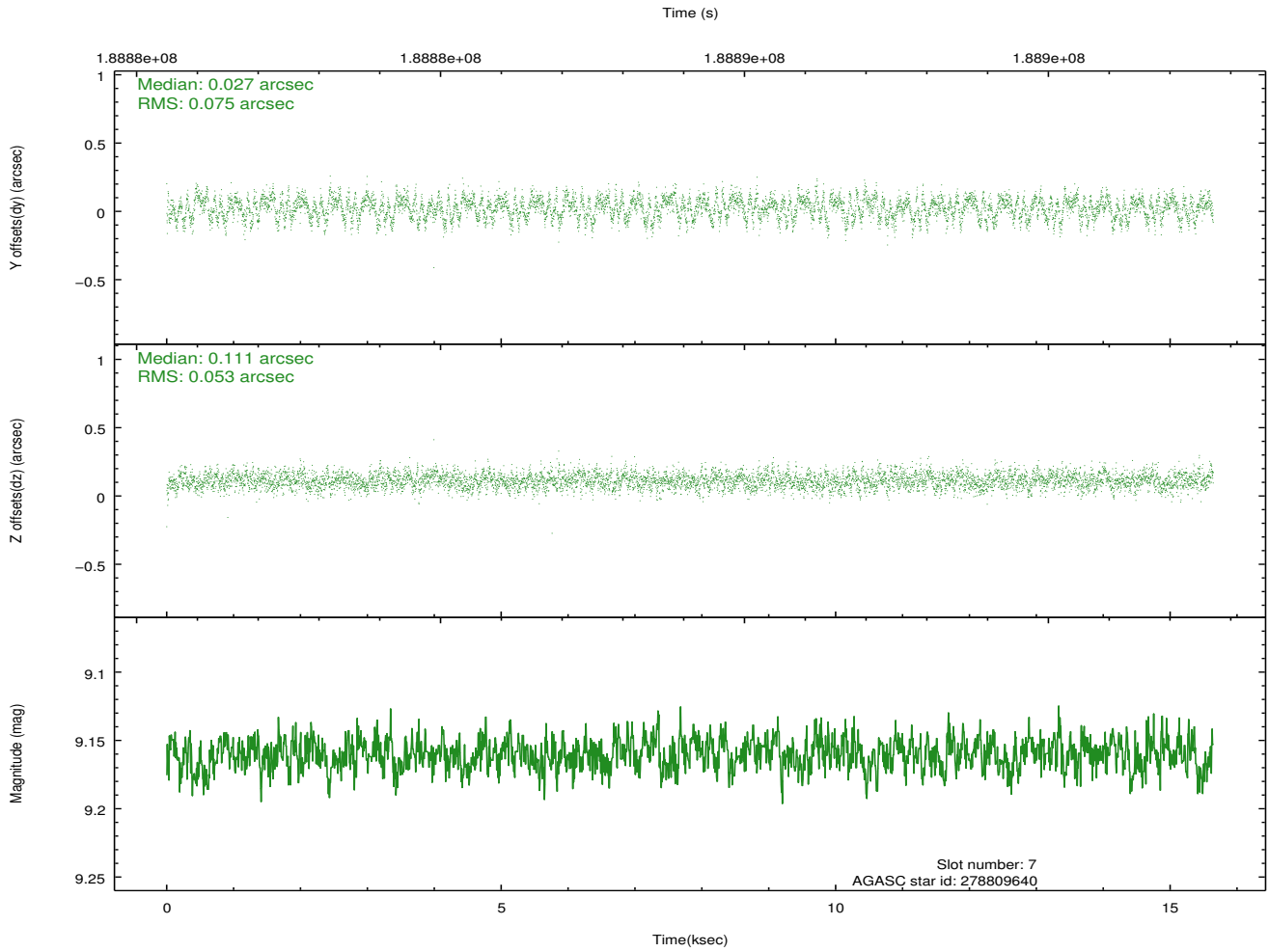
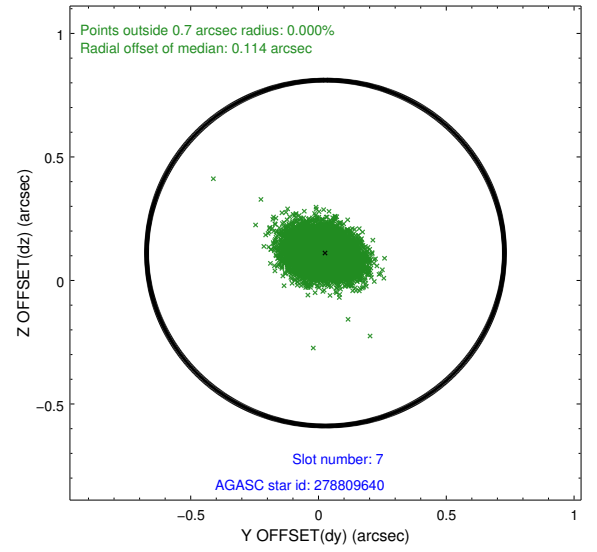
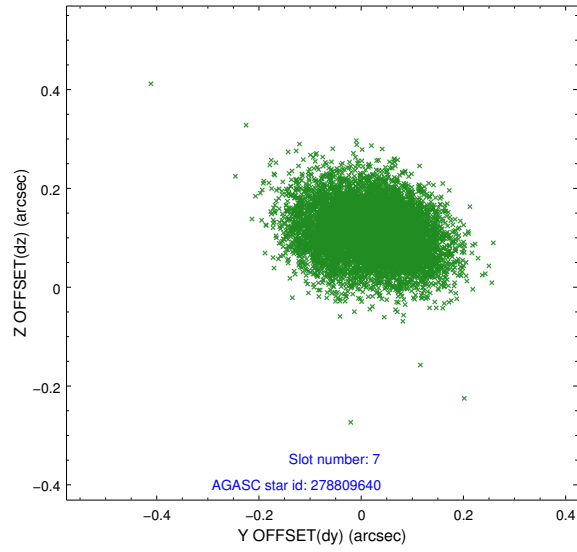
### 2.4.3 Slot 5



## 2.4.4 Slot 6

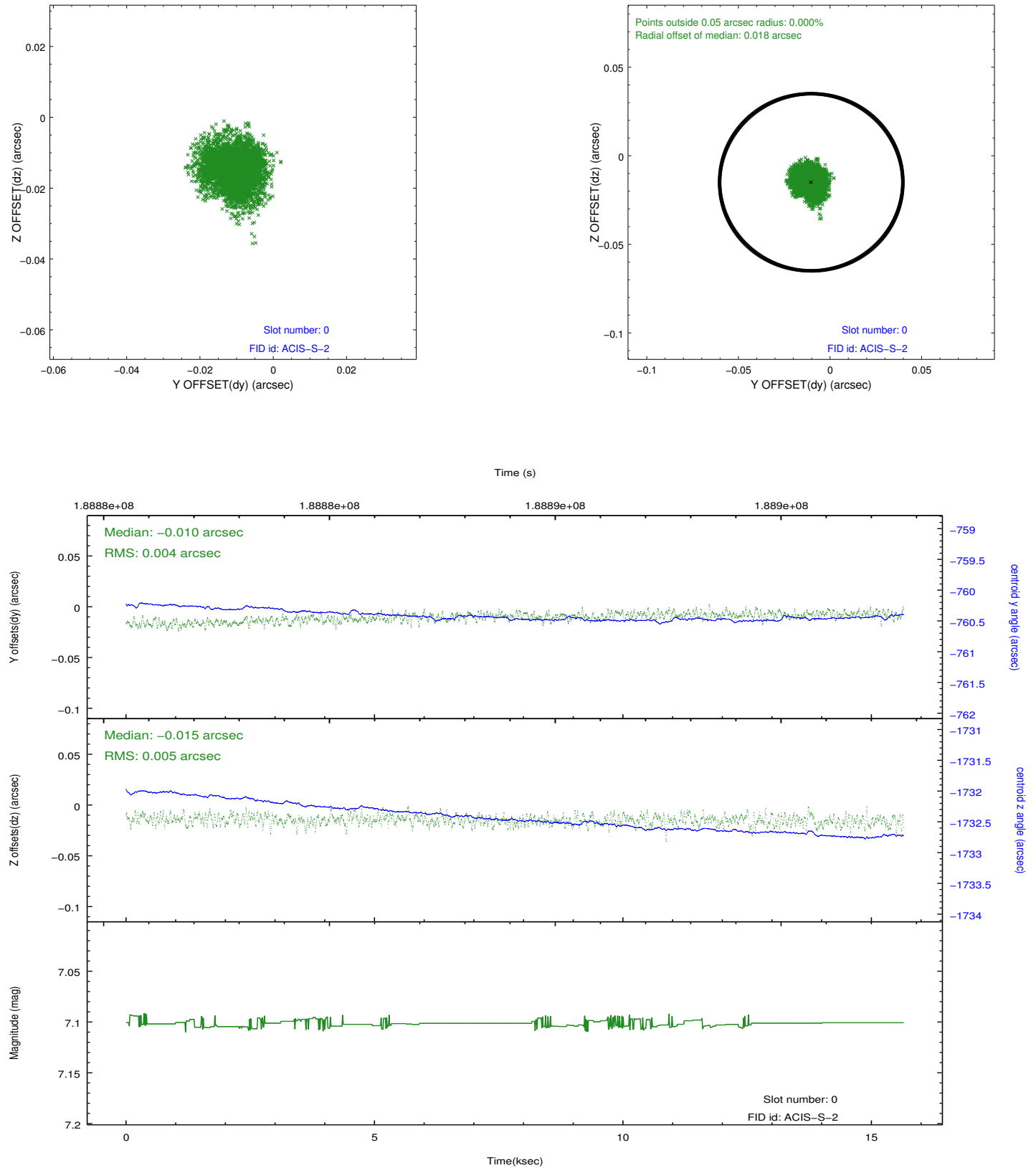


## 2.4.5 Slot 7

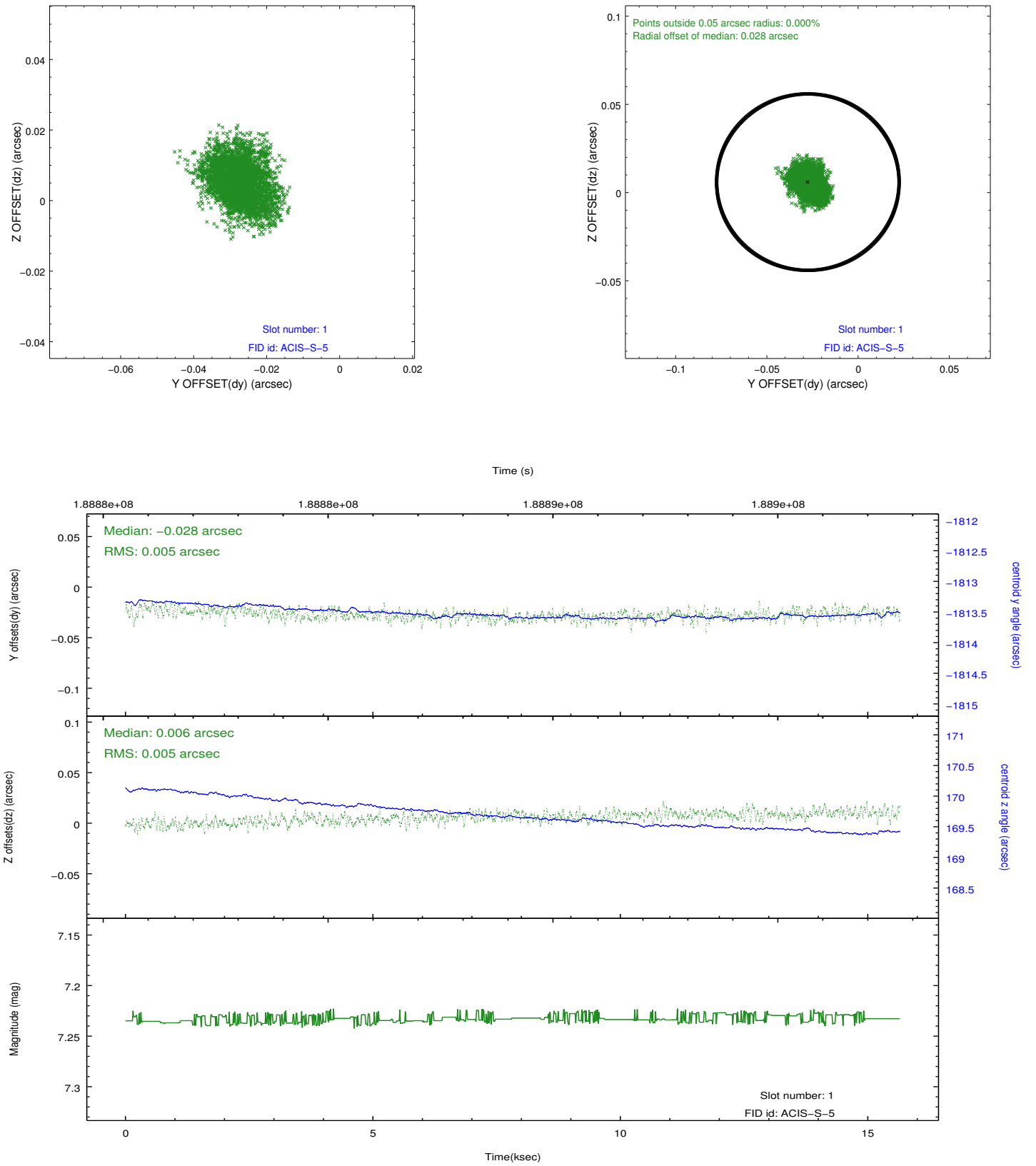


## 2.5 FID Slots

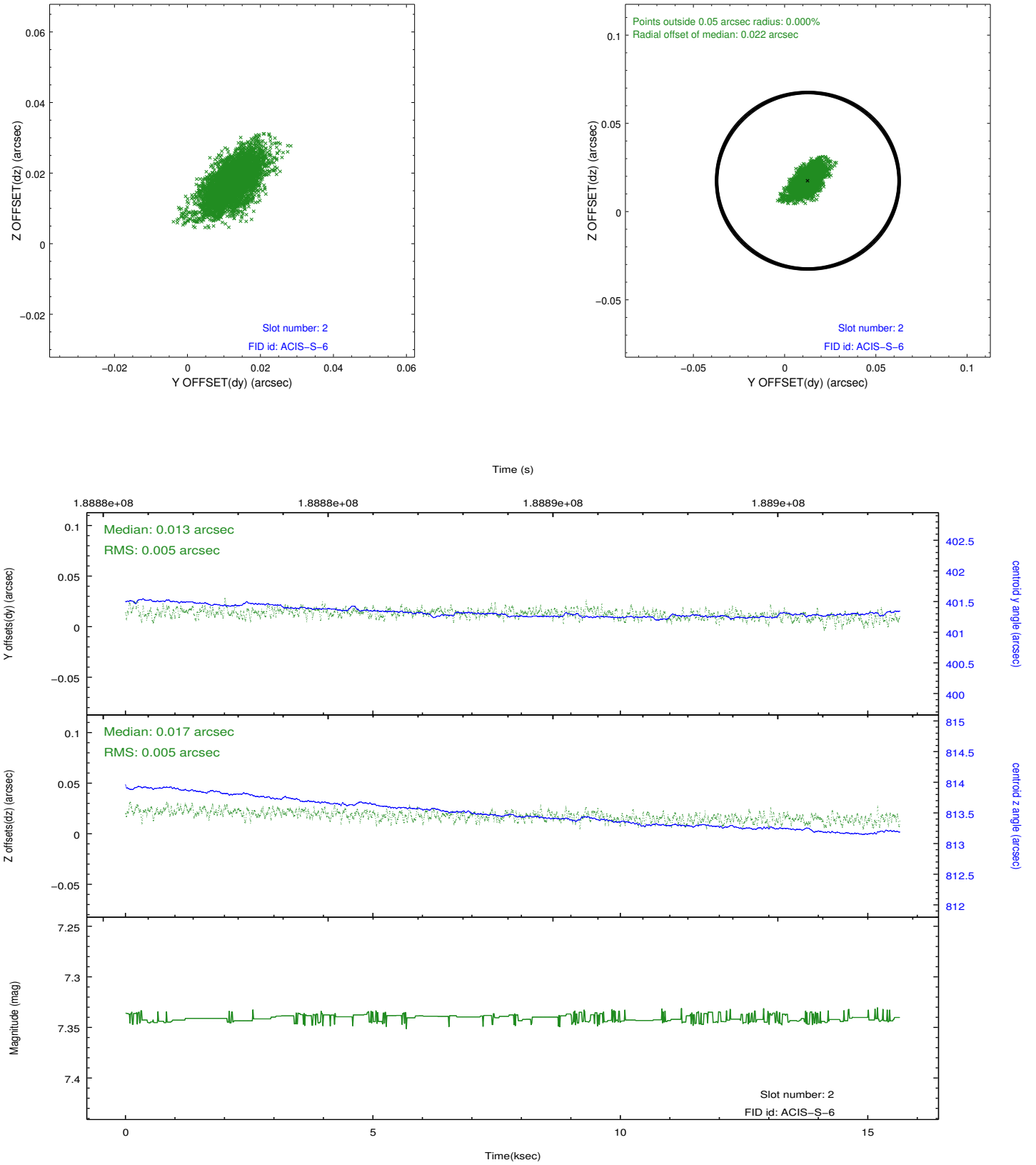
### 2.5.1 Slot 0



## 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)	2012.12.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	15.644

## A.2 Comments

On day 356 at about 00:30, the OBA heater stuck in the 'on' position. This situation affected obsid 4901 and all subsequent observations to this point. The result of this anomaly could be a displacement of the target on the chip in the z direction. The displacement will be small because everything is still within spec, but the target may be spatially displaced, have a different point spread function, or trail across the chip.