

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 3151 - L2 Version 3  
Chandra X-Ray Center

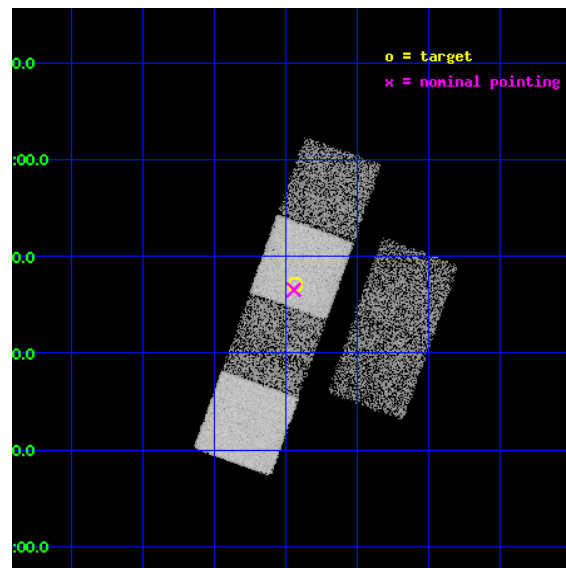
L2 Processing Date : Oct 2 2012

## 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

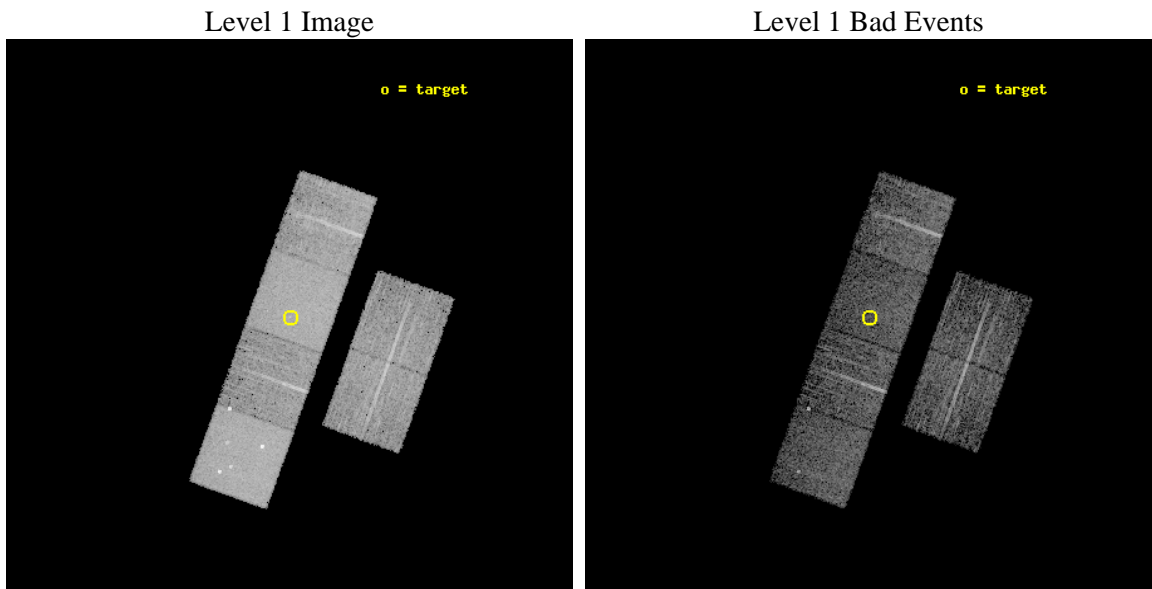
seq_num	700590	Sequence number
obs_id	3151	Observation id
title	A CHANDRA SURVEY OF THE MOST LUMINOUS QUASARS AT $Z > 4$	Proposal ti
observer	Professor Gordon Garmire	Principal investigator
object	PSS0121+0347	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	20.359167	Observer's specified target RA [deg]
dec_targ	3.785278	Observer's specified target Dec [deg]
ra_nom	20.36087234749	Nominal RA [deg]
dec_nom	3.7756665463068	Nominal Dec [deg]
roll_nom	289.82087154208	Nominal Roll [deg]
revision	3	Processing version of data
ontime	5756.8000053465	Sum of GTIs [s]
livetime	5683.90393735	Livetime [s]
ontime2	5756.8000053465	Sum of GTIs [s]
ontime3	5756.8000053465	Sum of GTIs [s]
ontime5	5756.8000053465	Sum of GTIs [s]
ontime6	5756.8000053465	Sum of GTIs [s]
ontime7	5756.8000053465	Sum of GTIs [s]
ontime8	5753.5590350926	Sum of GTIs [s]
l2events	87460	Number of level 2 events



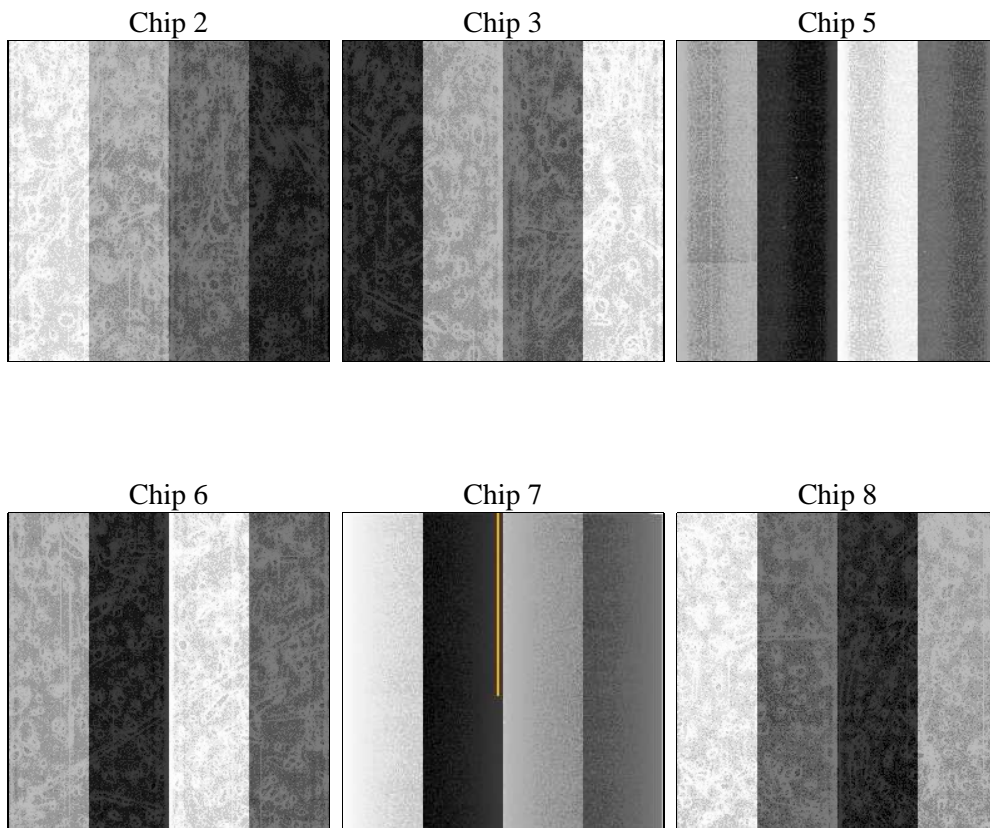
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	2	Obi number	sched_exp_time	6000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	5756.8000053465	Sum of GTIs [s]
caldsver	4.5.2	&#160	ontime2	5756.8000053465	Sum of GTIs [s]
date	2012-10-02T05:10:22	Date and time of file creation	ontime3	5756.8000053465	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	5756.8000053465	Sum of GTIs [s]
			ontime6	5756.8000053465	Sum of GTIs [s]
			ontime7	5756.8000053465	Sum of GTIs [s]
			ontime8	5753.5590350926	Sum of GTIs [s]
			l1events	299781	Number of level 1 events

### 2.1.4 Events

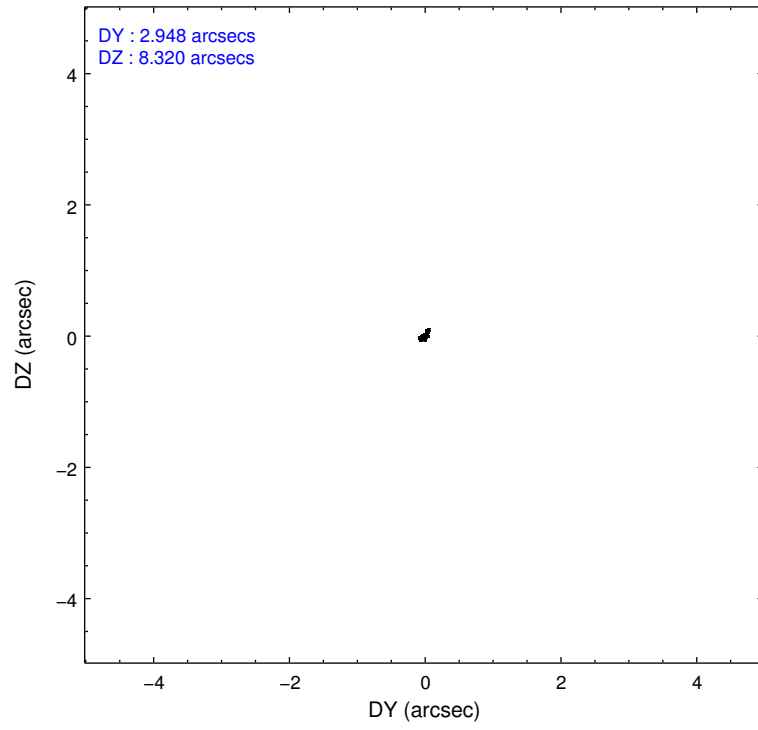
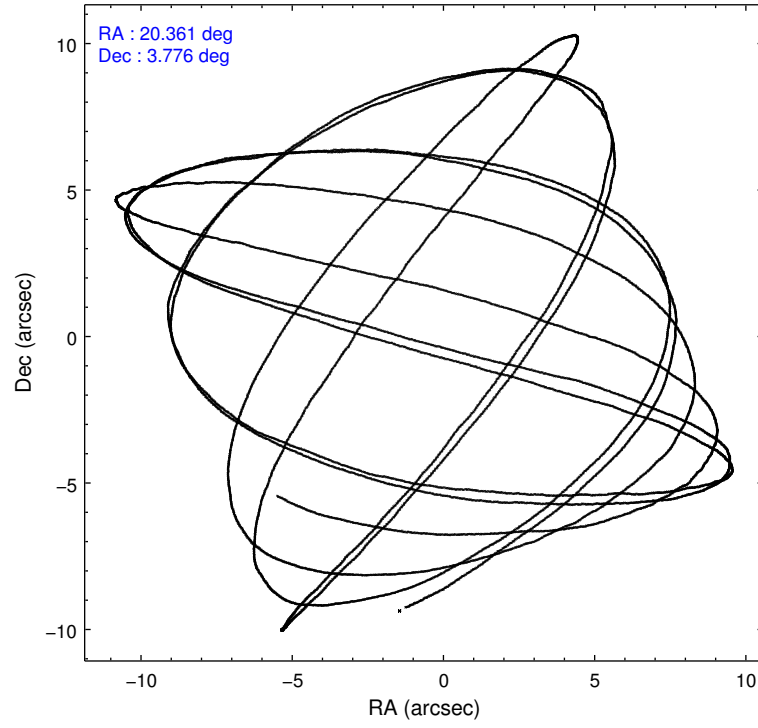
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	39420	36685	71200	38373	63333	50770	grade 0 events	2141	2136	6770	2772	3365	3690
rejected events	34669	32027	31129	32809	29334	40487		5%	5%	9%	7%	5%	7%
rejected %	87%	87%	43%	85%	46%	79%	grade 1 events	19	20	374	22	42	43
								0%	0%	0%	0%	0%	0%
							grade 2 events	1045	910	11012	1056	6328	2163
								2%	2%	15%	2%	9%	4%
							grade 3 events	384	415	1891	419	2821	1007
								0%	1%	2%	1%	4%	1%
							grade 4 events	403	416	1832	432	2767	966
								1%	1%	2%	1%	4%	1%
							grade 5 events	1396	1477	4414	1602	4777	2026
								3%	4%	6%	4%	7%	3%
							grade 6 events	780	785	18584	886	18737	2459
								1%	2%	26%	2%	29%	4%
							grade 7 events	33252	30526	26323	31184	24496	38416
								84%	83%	36%	81%	38%	75%

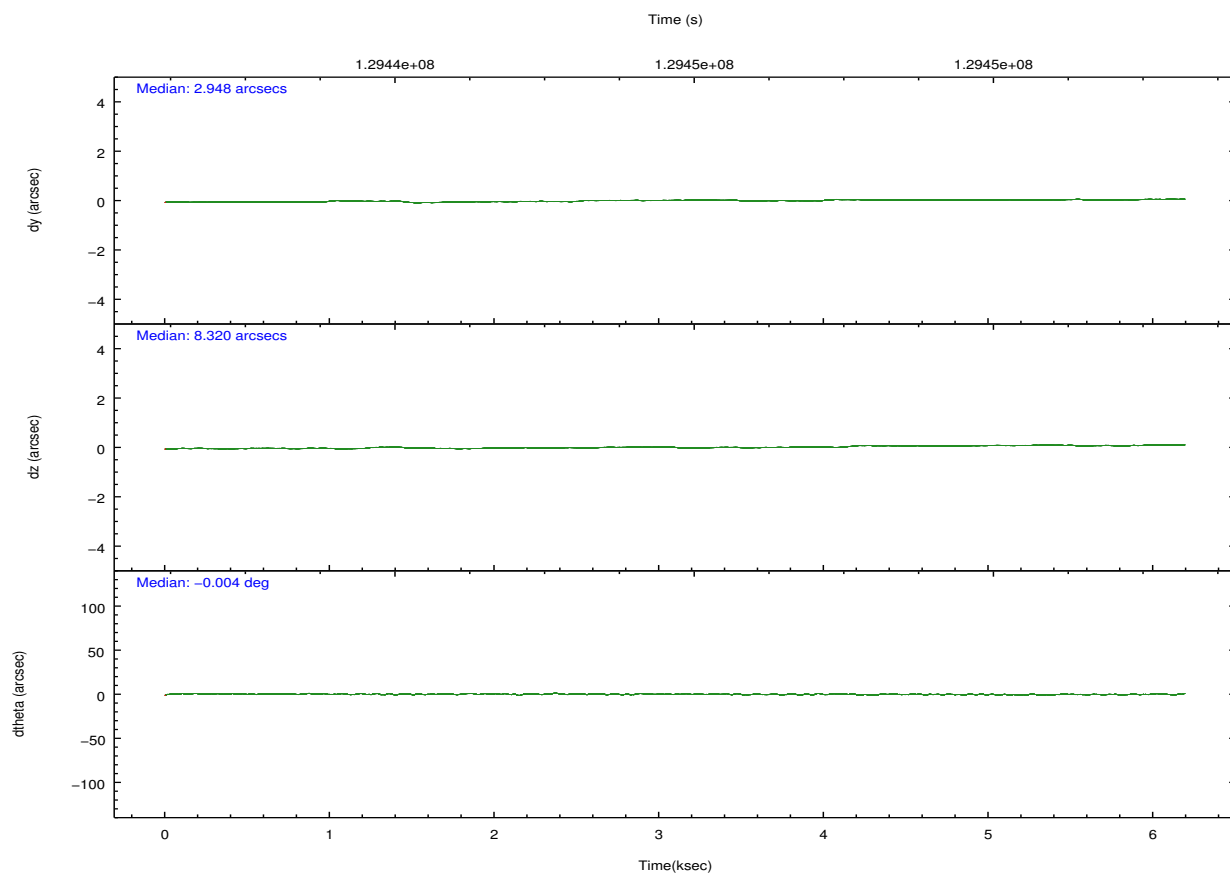
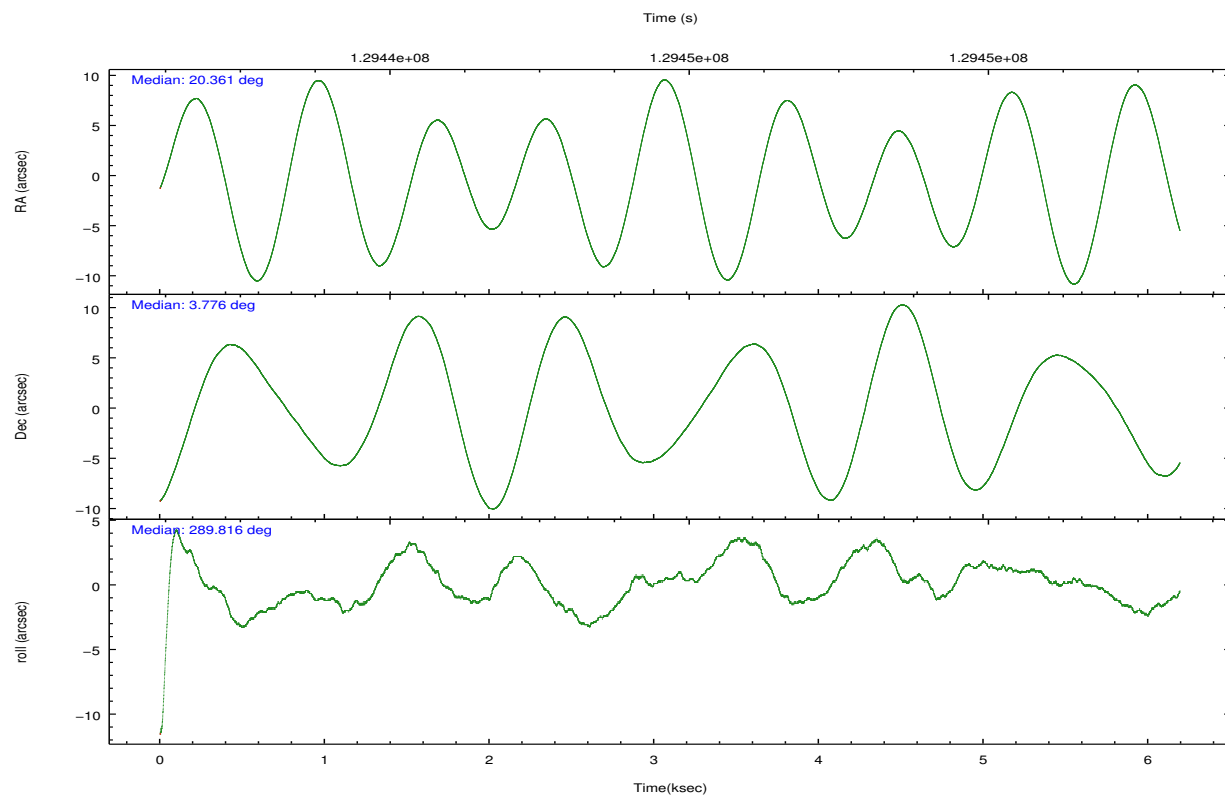


## 2.2 Compared Parameters

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	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	20.339715	20.36087234748981	Subarray requested	NONE	NONE
[deg] Pointing Dec	3.793034	3.77566654630678	Alternating exposures requested	N	N
[deg] Pointing Roll	289.665671	289.8208715420778	[s] Primary exposure time	0.000000	3.2
[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)	129442971.184000	129442295.17863			
Observation start date	2002-02-07T04:21:47	2002-02-07T04:11:35			
[s] Observation end time (MET)	129448971.184000	129449225.20391			
Observation end date	2002-02-07T06:01:47	2002-02-07T06:07:05			
Read mode	TIMED	TIMED			

## 2.3 Aspect



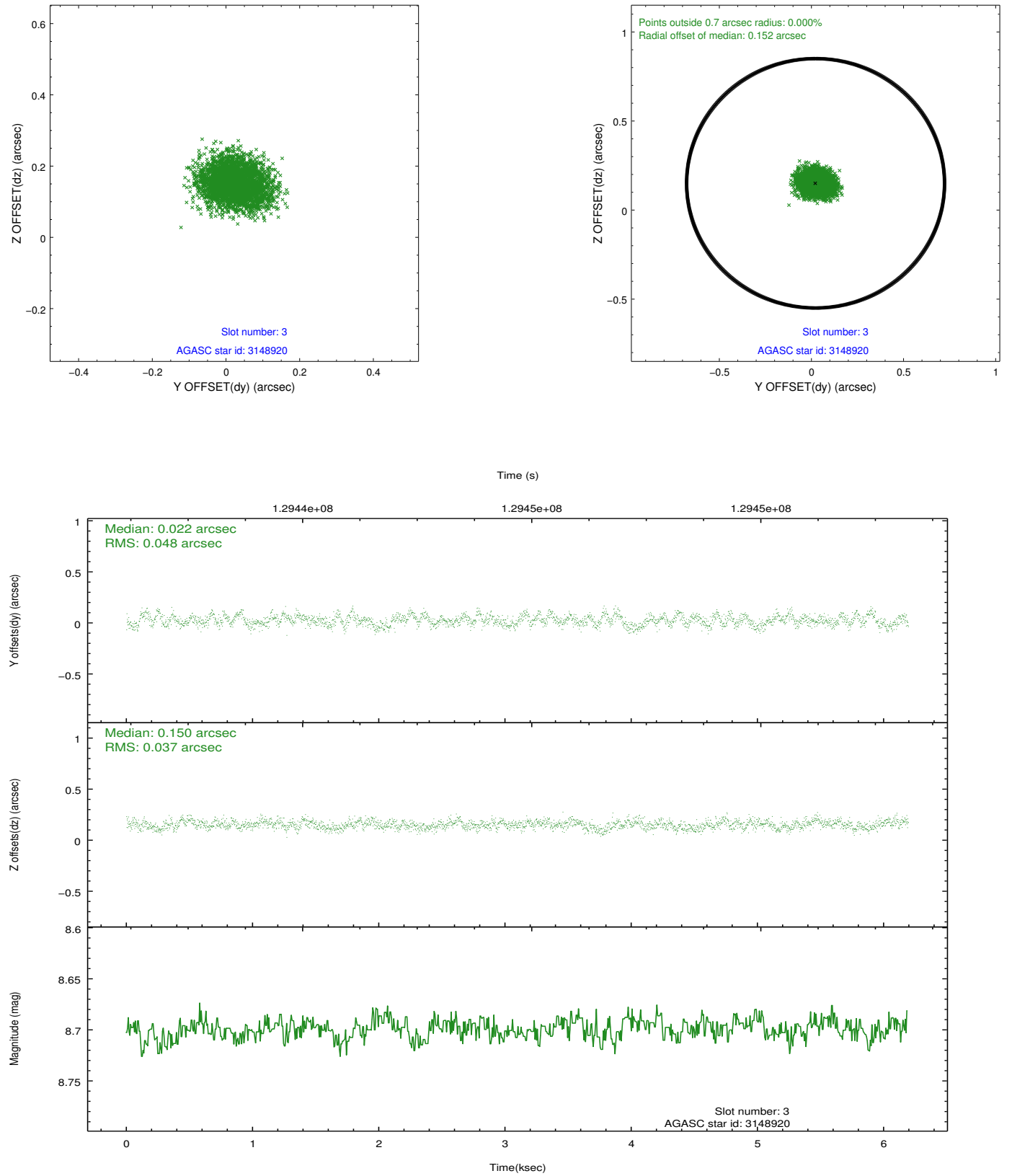


### Slot Statistics

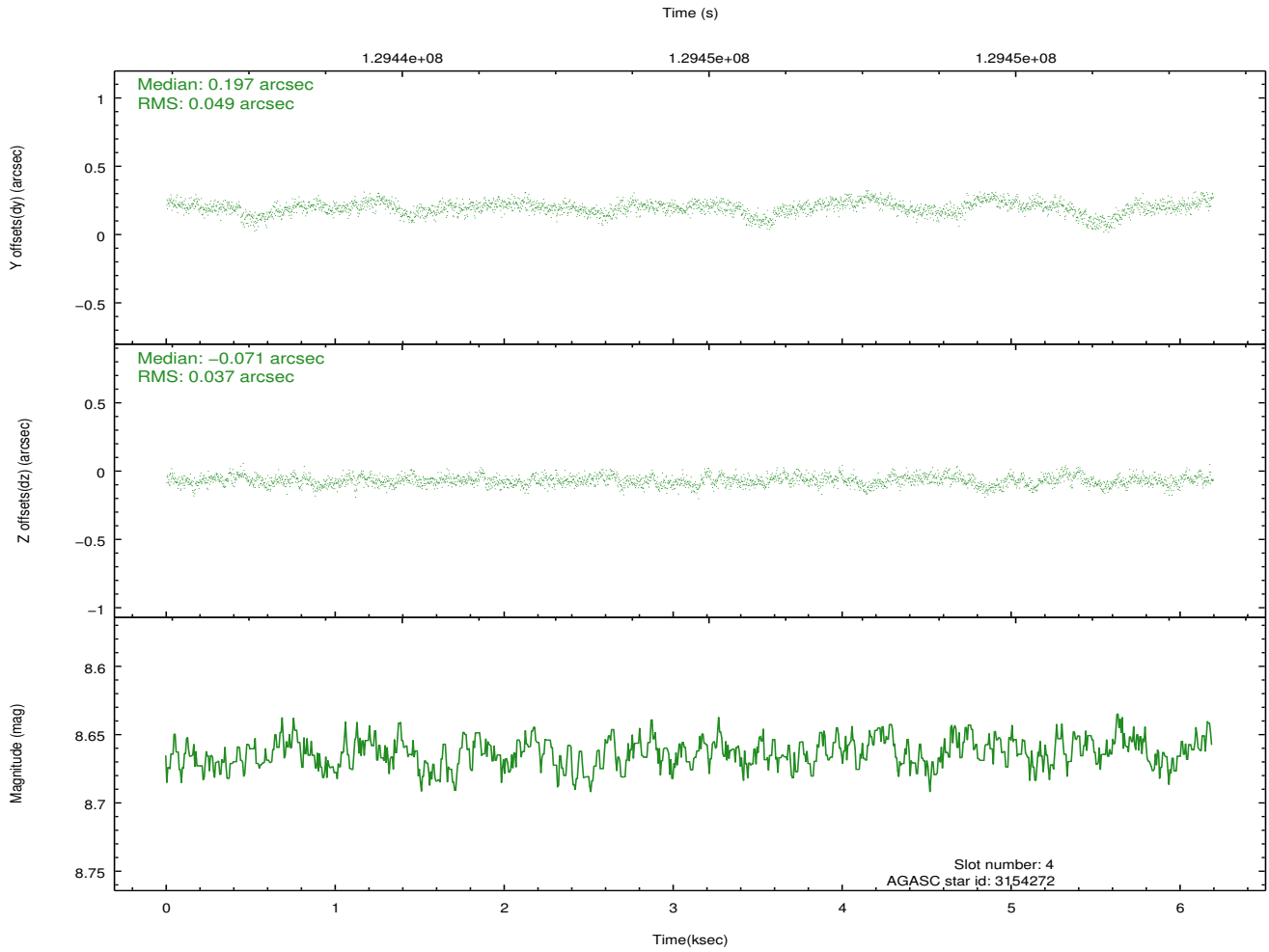
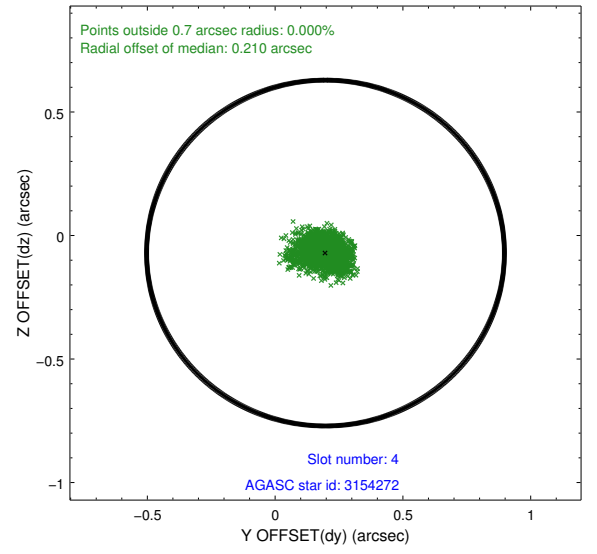
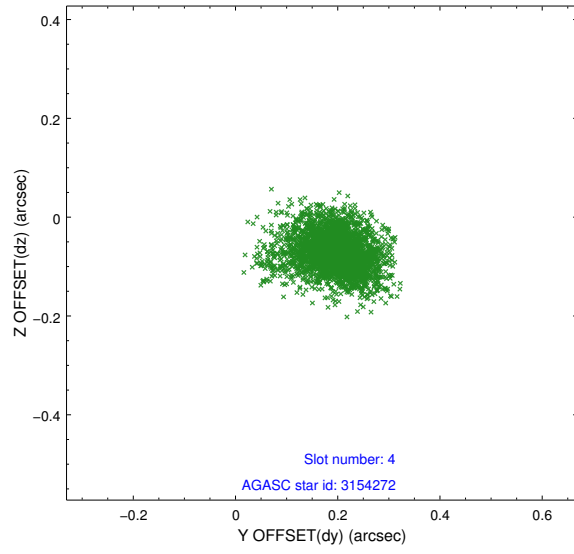
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	1511	0.001	-0.000	0.007	0.011	0.000000	0.000000	-755.59	-1729.48
1	FID	ACIS-S-4	7.20	1509	-0.045	-0.000	0.005	0.009	0.000000	0.000000	2157.22	178.01
2	FID	ACIS-S-5	7.24	1511	0.013	0.009	0.006	0.011	0.000000	0.000000	-1807.18	172.79
3	GUIDE	3148920	8.70	3022	0.022	0.150	0.066	0.105	20.922532	3.314729	2325.70	1393.16
4	GUIDE	3154272	8.66	3021	0.197	-0.071	0.064	0.112	20.578009	3.513105	1238.27	467.24
5	GUIDE	3150624	8.87	3022	-0.081	-0.016	0.062	0.100	20.408334	4.257468	-1491.26	794.25
6	GUIDE	3154680	9.65	3019	0.078	0.058	0.101	0.168	20.686228	3.787445	437.08	1165.35
7	GUIDE	3023784	9.46	3019	-0.216	-0.122	0.086	0.144	19.615973	4.176850	-2176.69	-1982.05

## 2.4 Star Slots

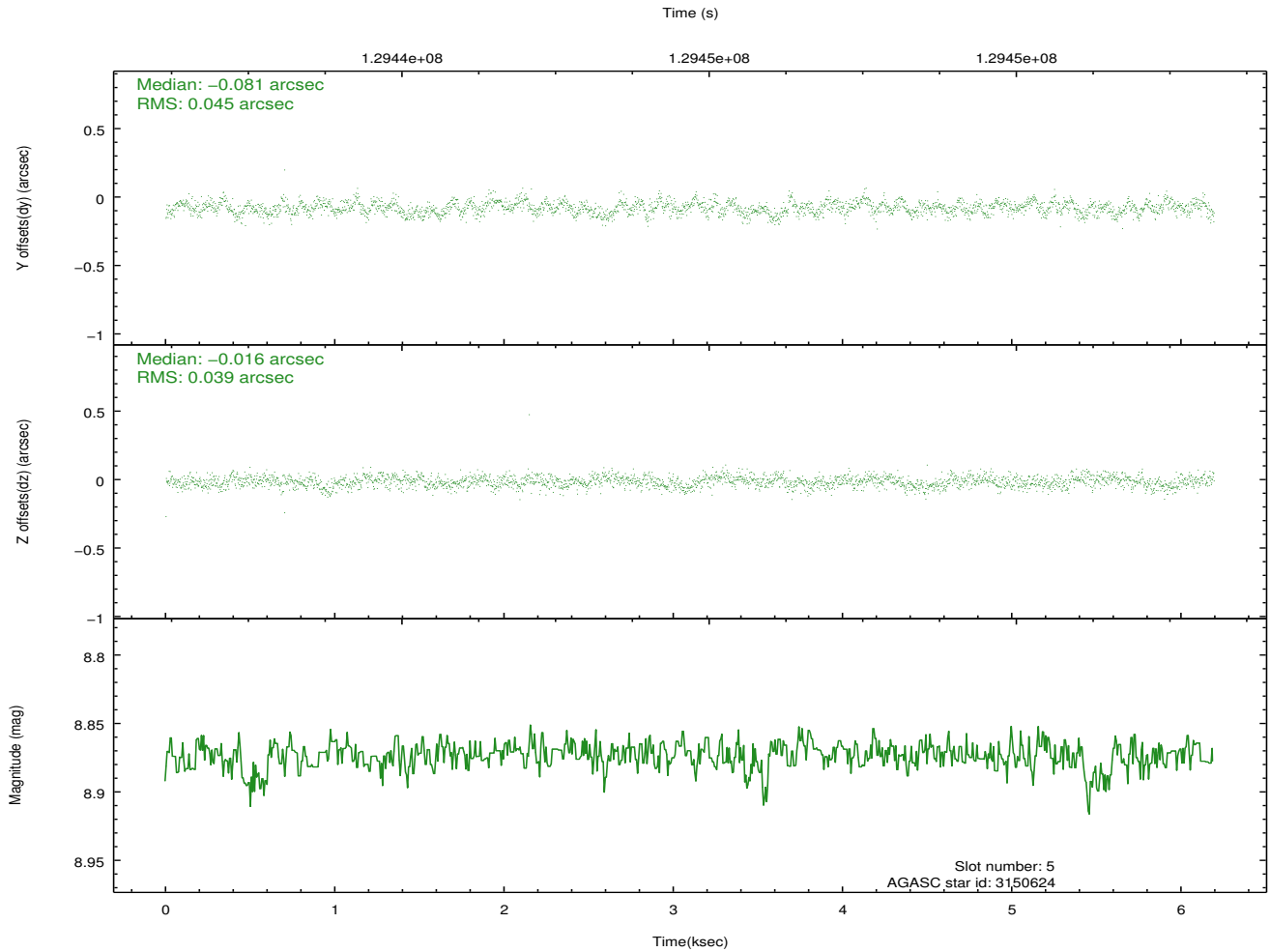
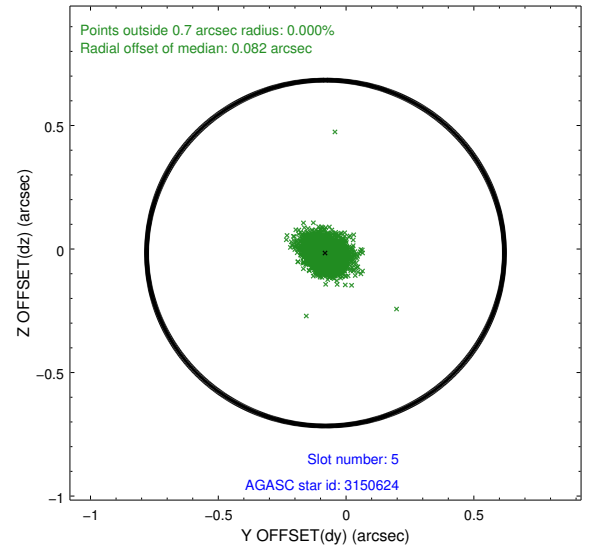
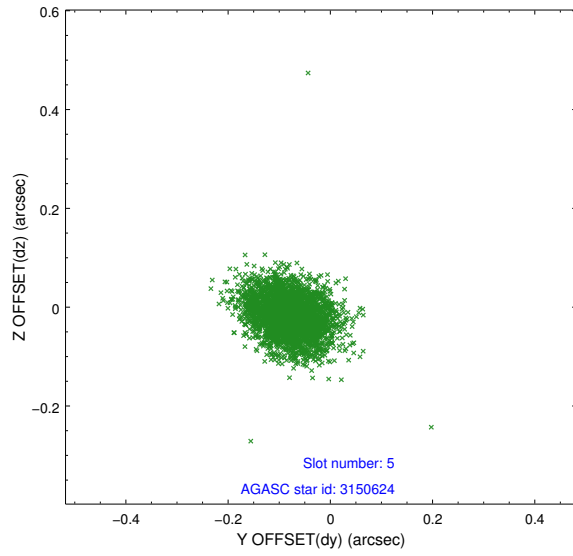
### 2.4.1 Slot 3



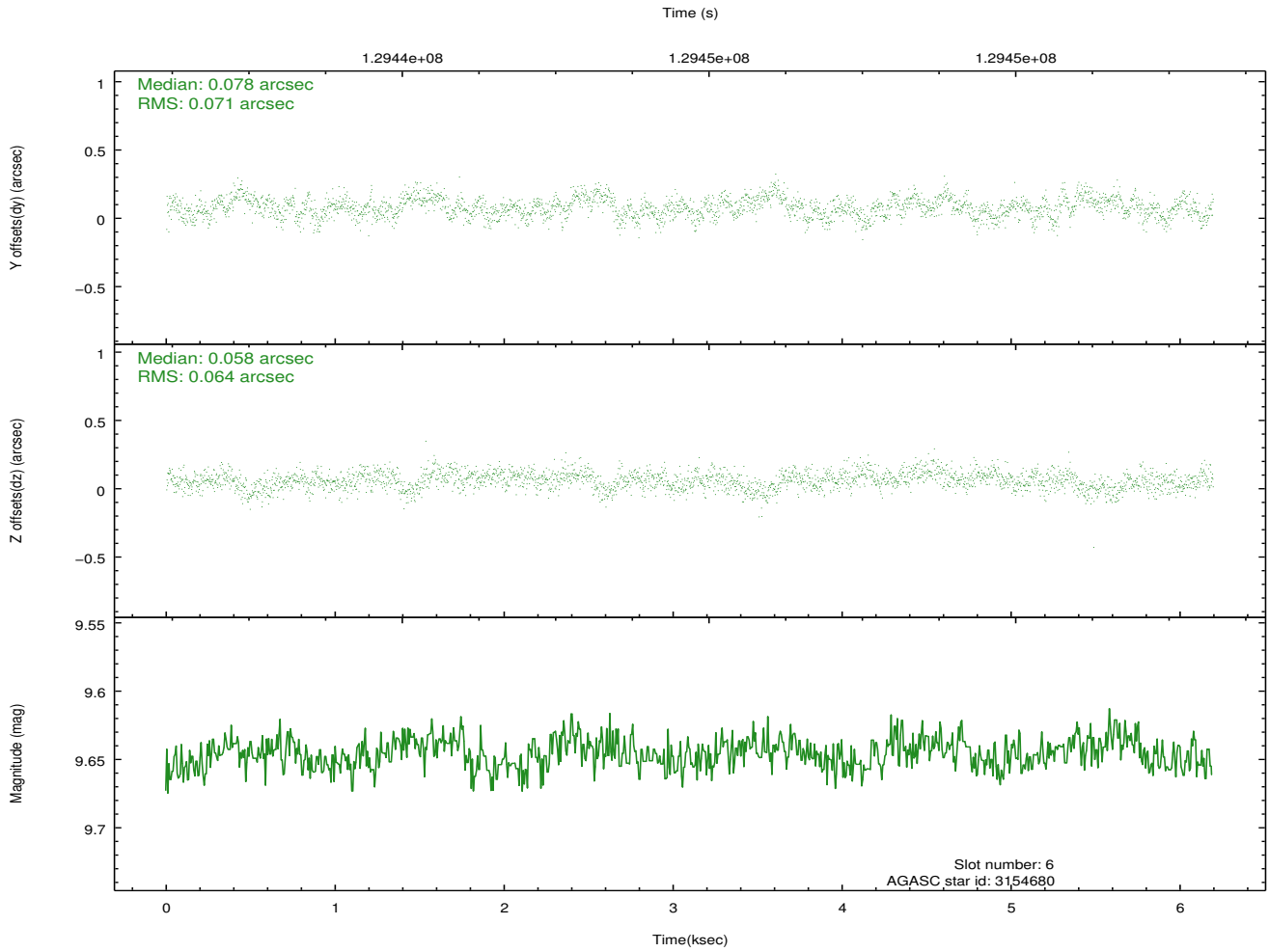
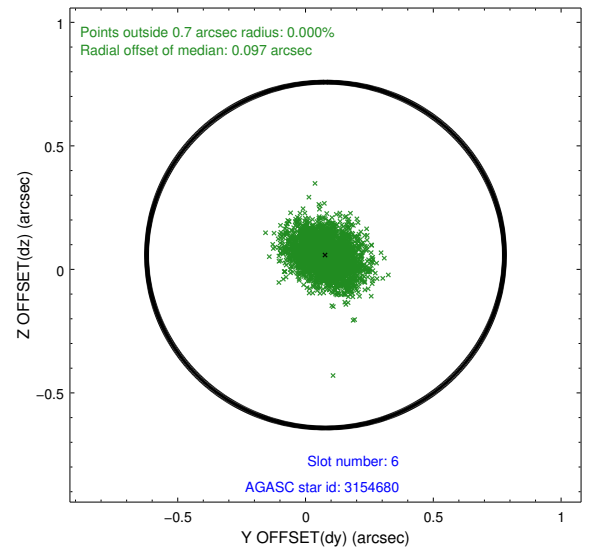
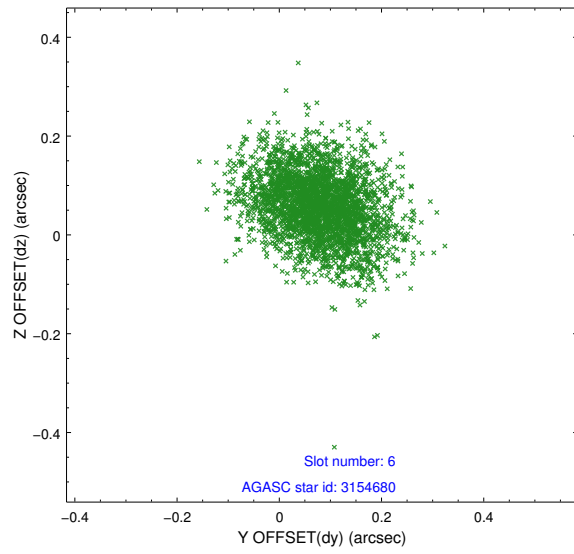
## 2.4.2 Slot 4



### 2.4.3 Slot 5

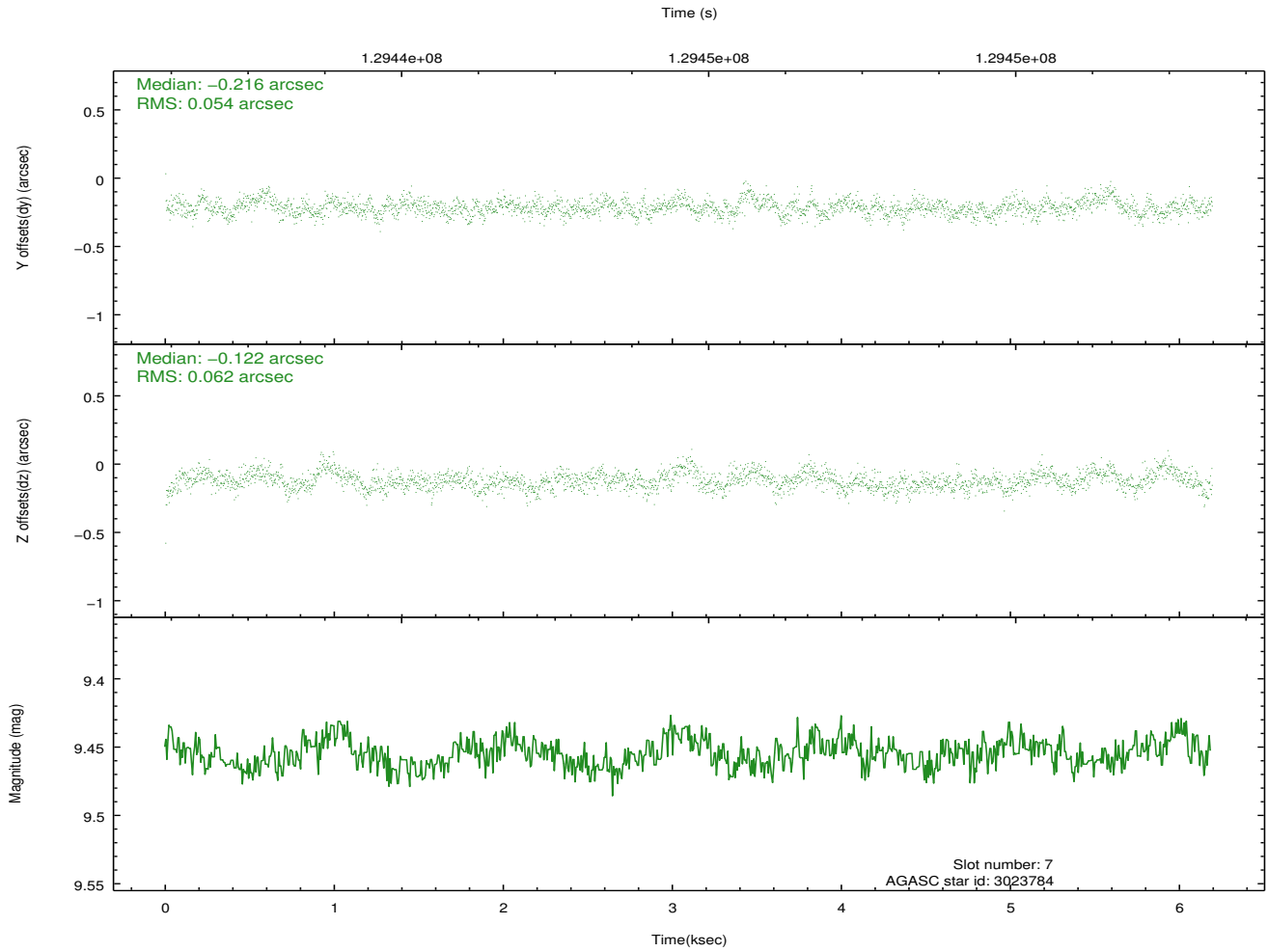
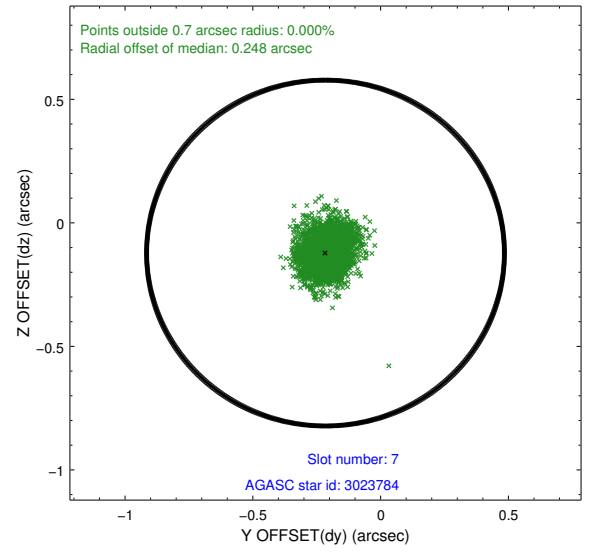
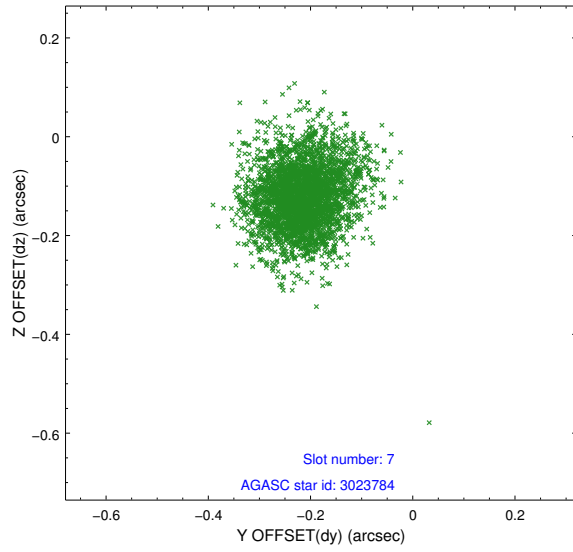


## 2.4.4 Slot 6



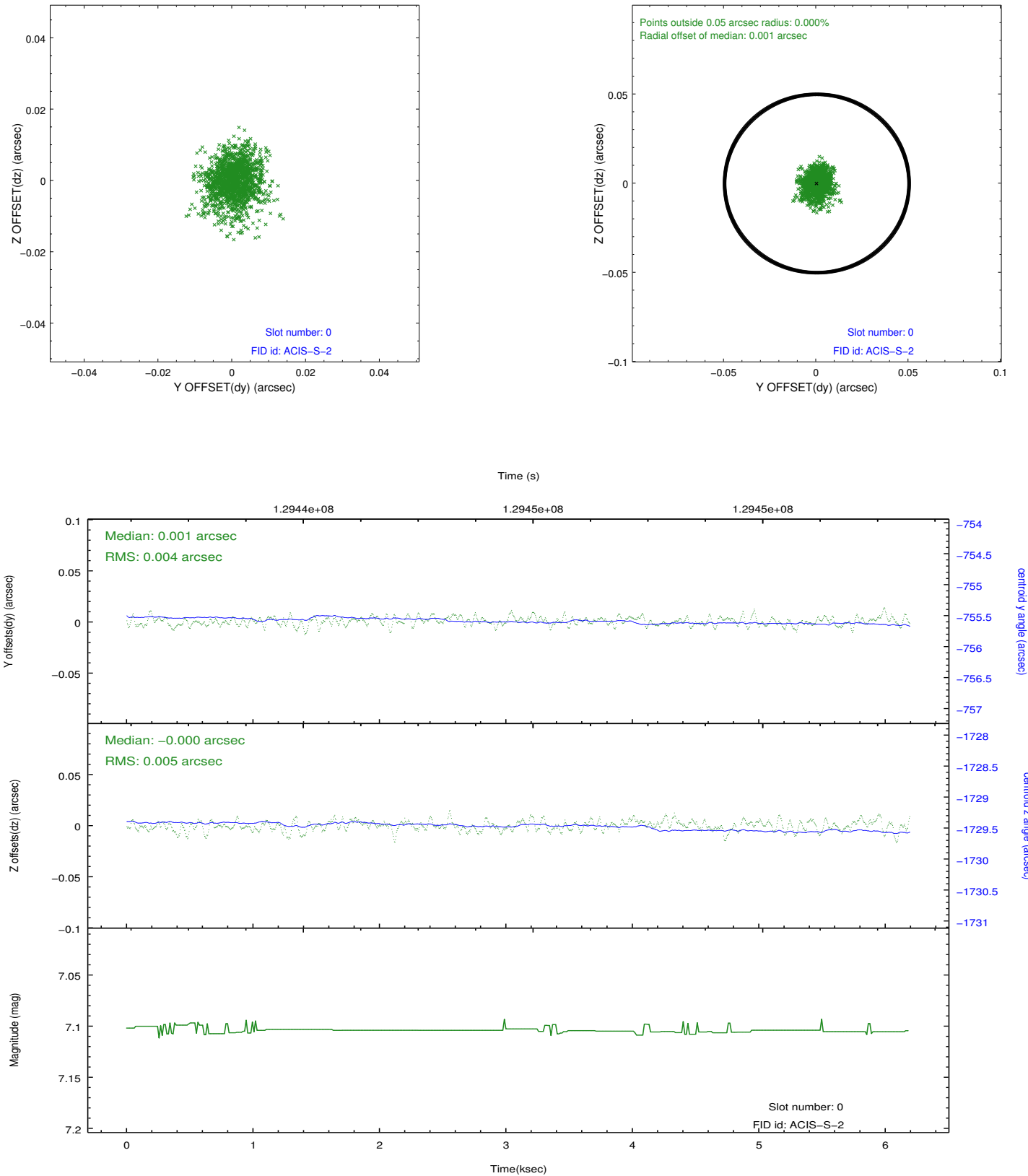


## 2.4.5 Slot 7

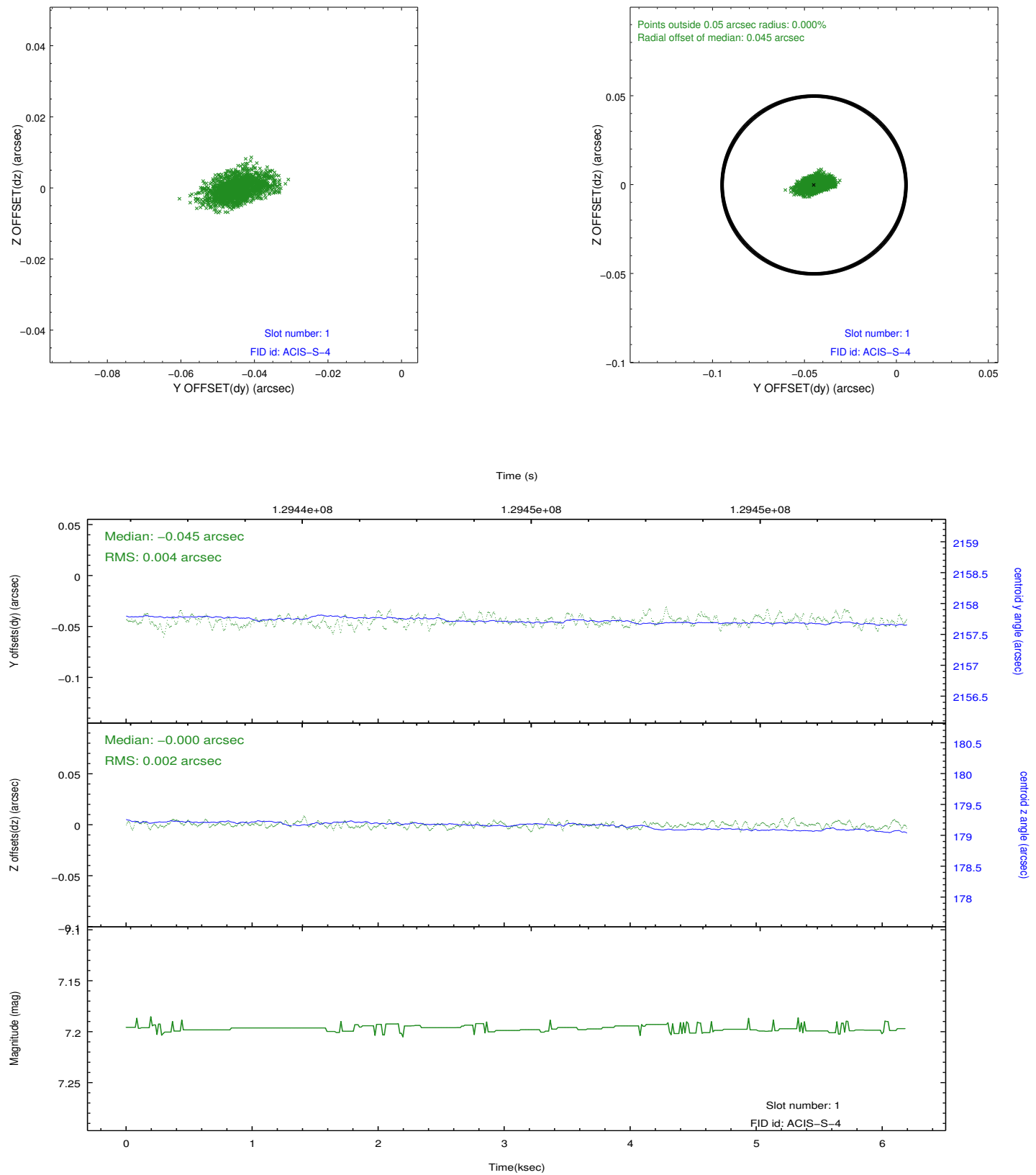


## 2.5 FID Slots

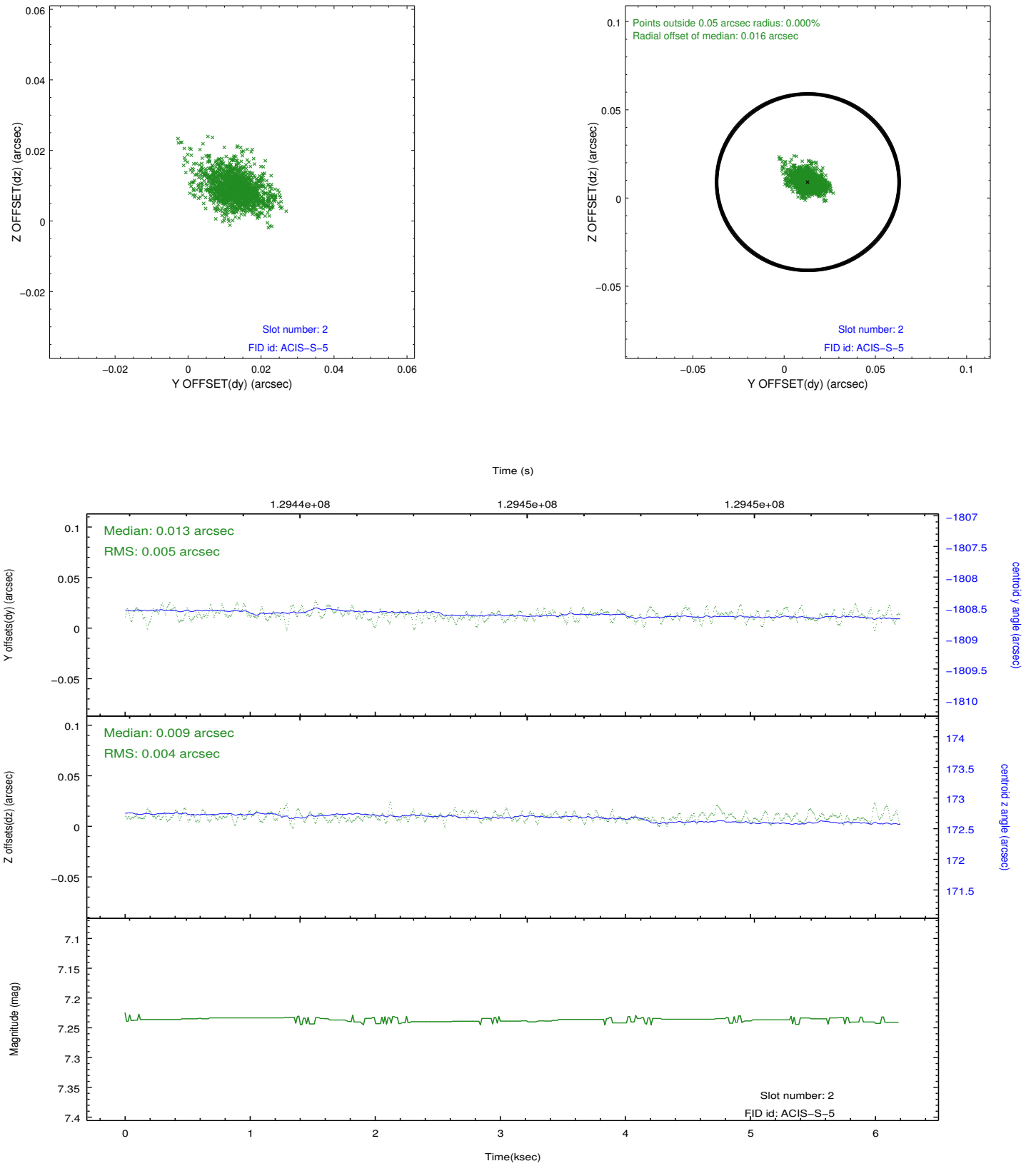
### 2.5.1 Slot 0



## 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)	2012.10.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.76

### A.2 Comments