

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 1687 - L2 Version 3  
Chandra X-Ray Center

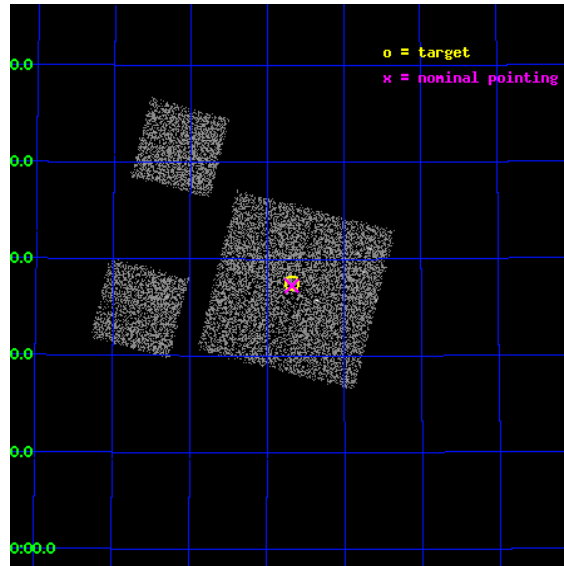
L2 Processing Date : Sep 20 2012

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# 1 Front

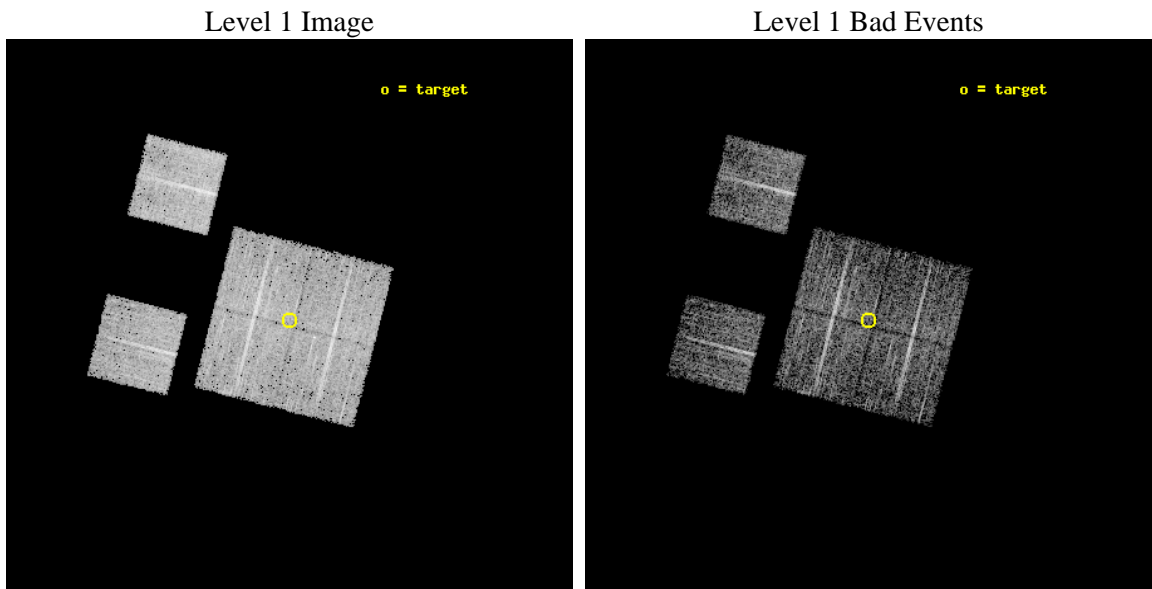
seq_num	900046	Sequence number
obs_id	1687	Observation id
title	LOCKMAN HOLE SHALLOW SURVEY	Proposal title
observer	Dr. Stephen Murray	Principal investigator
object	LOCKMAN HOLE #12	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	163.670833	Observer's specified target RA [deg]
dec_targ	57.458889	Observer's specified target Dec [deg]
ra_nom	163.6696494423	Nominal RA [deg]
dec_nom	57.454209446329	Nominal Dec [deg]
roll_nom	284.2983660099	Nominal Roll [deg]
revision	3	Processing version of data
ontime	4758.4000044167	Sum of GTIs [s]
livetime	4698.1462783963	Livetime [s]
ontime0	4758.4000044167	Sum of GTIs [s]
ontime1	4755.159054175	Sum of GTIs [s]
ontime2	4758.4000044167	Sum of GTIs [s]
ontime3	4758.4000044167	Sum of GTIs [s]
ontime6	4758.4000044167	Sum of GTIs [s]
ontime8	4758.4000044167	Sum of GTIs [s]
l2events	17987	Number of level 2 events



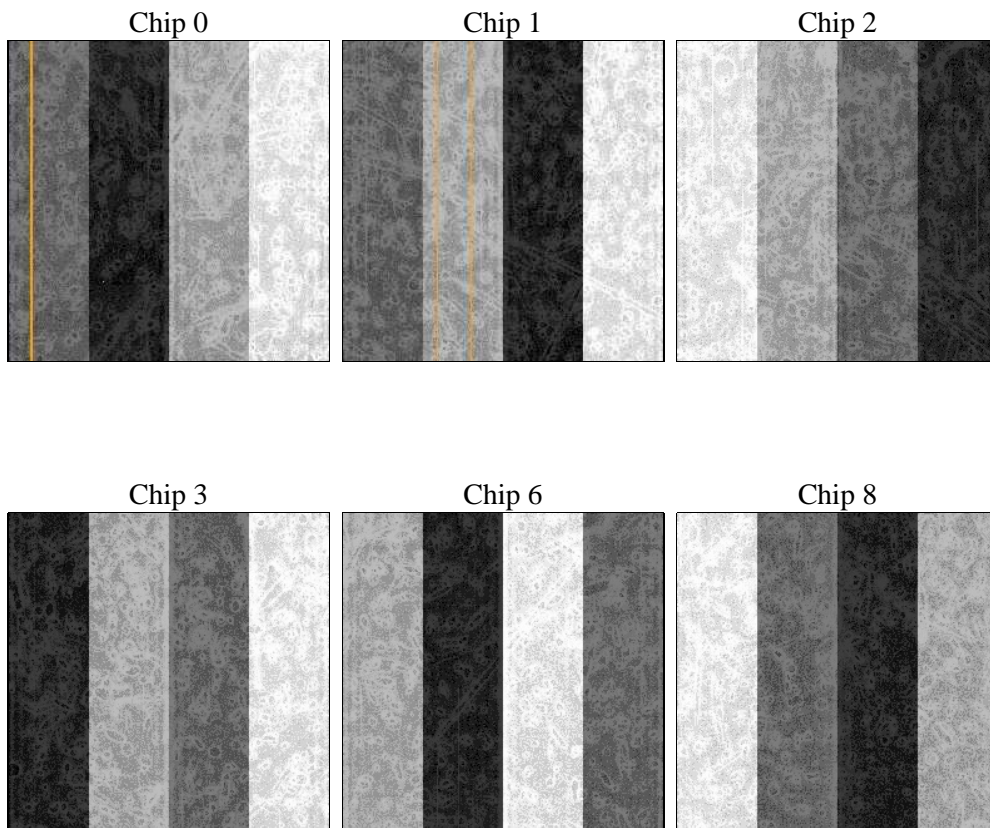
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	4758.4000044167	Sum of GTIs [s]
caldsver	4.5.1.1	&#160	ontime0	4758.4000044167	Sum of GTIs [s]
date	2012-09-20T12:44:23	Date and time of file creation	ontime1	4755.159054175	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	4758.4000044167	Sum of GTIs [s]
			ontime3	4758.4000044167	Sum of GTIs [s]
			ontime6	4758.4000044167	Sum of GTIs [s]
			ontime8	4758.4000044167	Sum of GTIs [s]
			l1events	191713	Number of level 1 events

### 2.1.4 Events

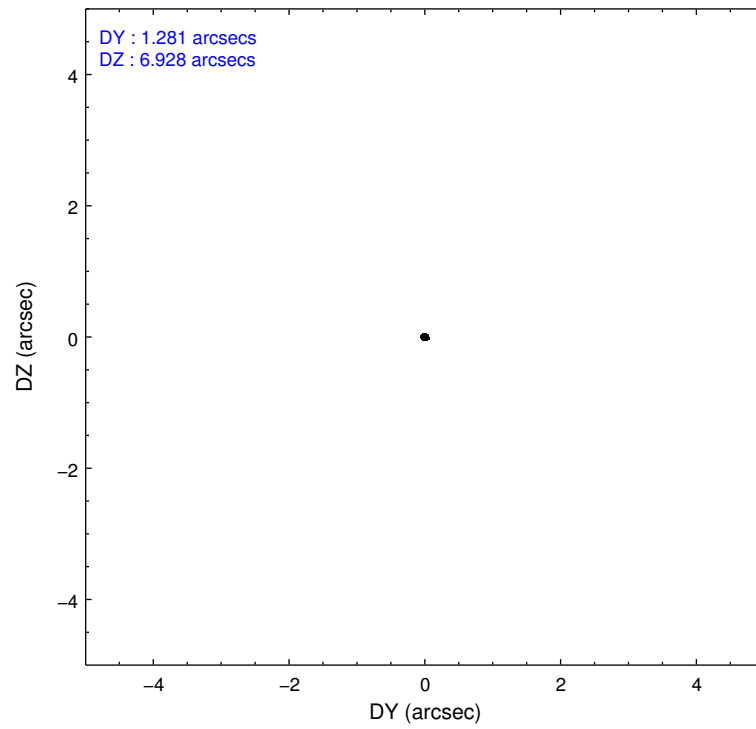
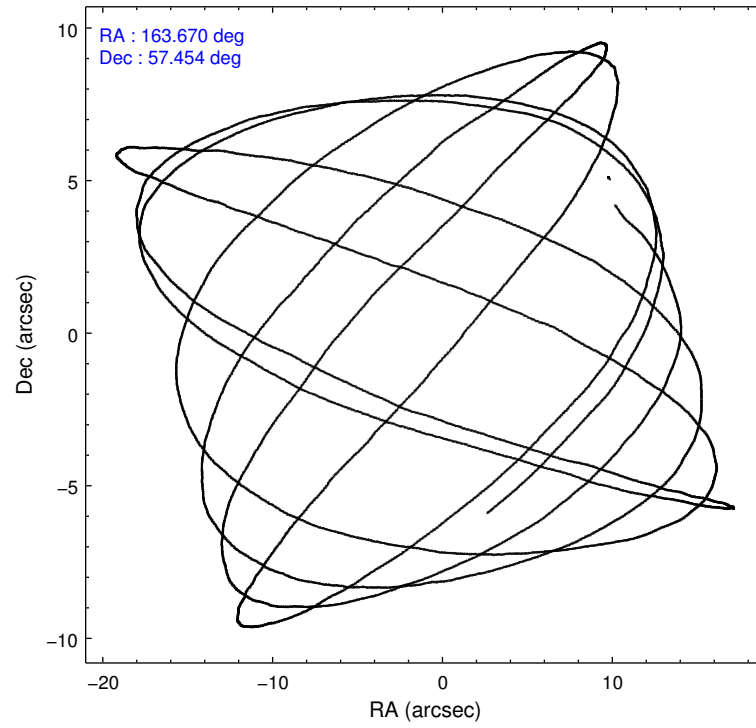
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 8		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 8
level 1 events	28403	28461	31157	31697	30147	41848	grade 0 events	1527	1539	1485	1424	1303	2289
rejected events	24845	24632	27819	28293	26871	34209		5%	5%	4%	4%	4%	5%
rejected %	87%	86%	89%	89%	89%	81%	grade 1 events	15	14	8	12	15	23
								0%	0%	0%	0%	0%	0%
							grade 2 events	744	766	681	618	669	1713
								2%	2%	2%	1%	2%	4%
							grade 3 events	377	401	297	353	318	746
								1%	1%	0%	1%	1%	1%
							grade 4 events	318	402	323	345	326	720
								1%	1%	1%	1%	1%	1%
							grade 5 events	1151	1170	1055	1165	1263	1569
								4%	4%	3%	3%	4%	3%
							grade 6 events	594	725	555	666	664	2175
								2%	2%	1%	2%	2%	5%
							grade 7 events	23677	23444	26753	27114	25589	32613
								83%	82%	85%	85%	84%	77%

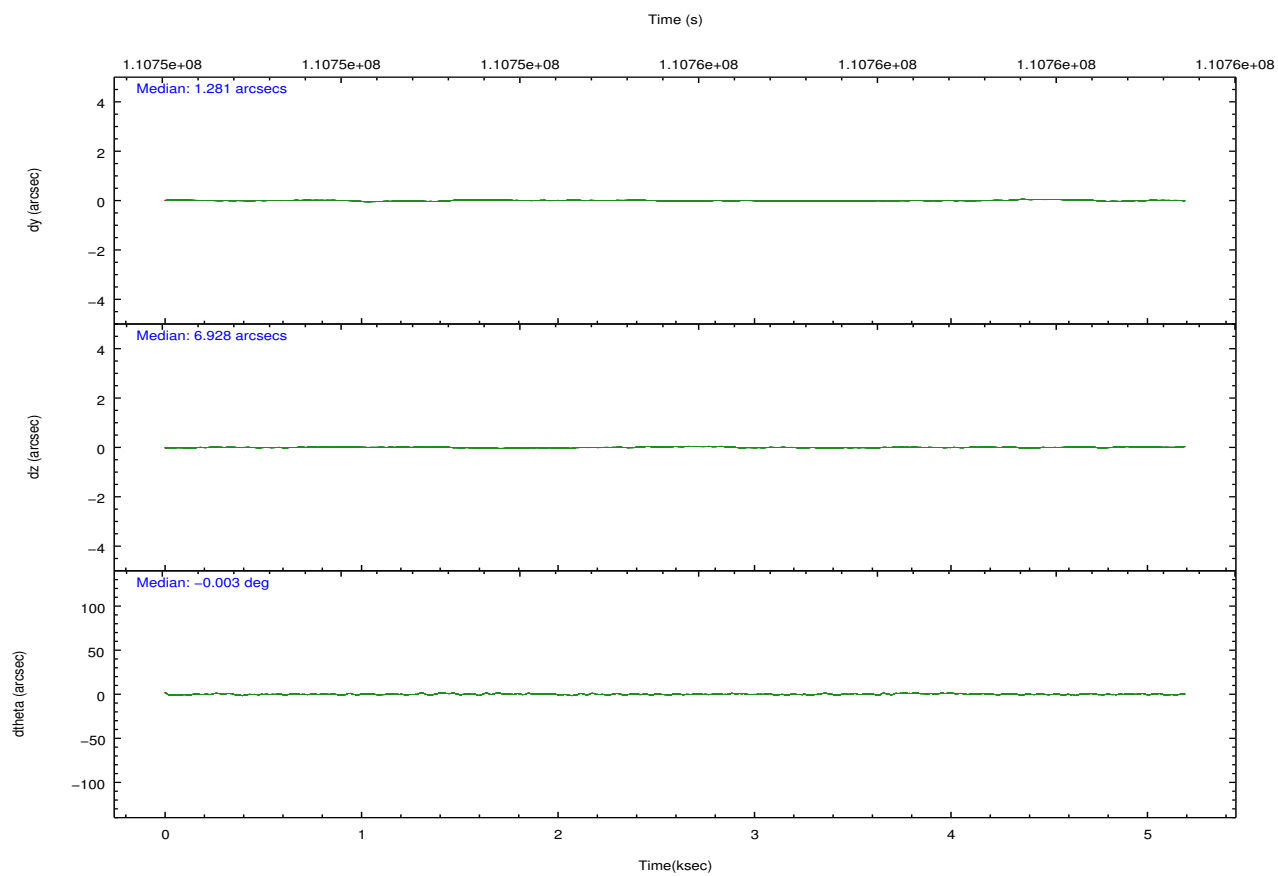
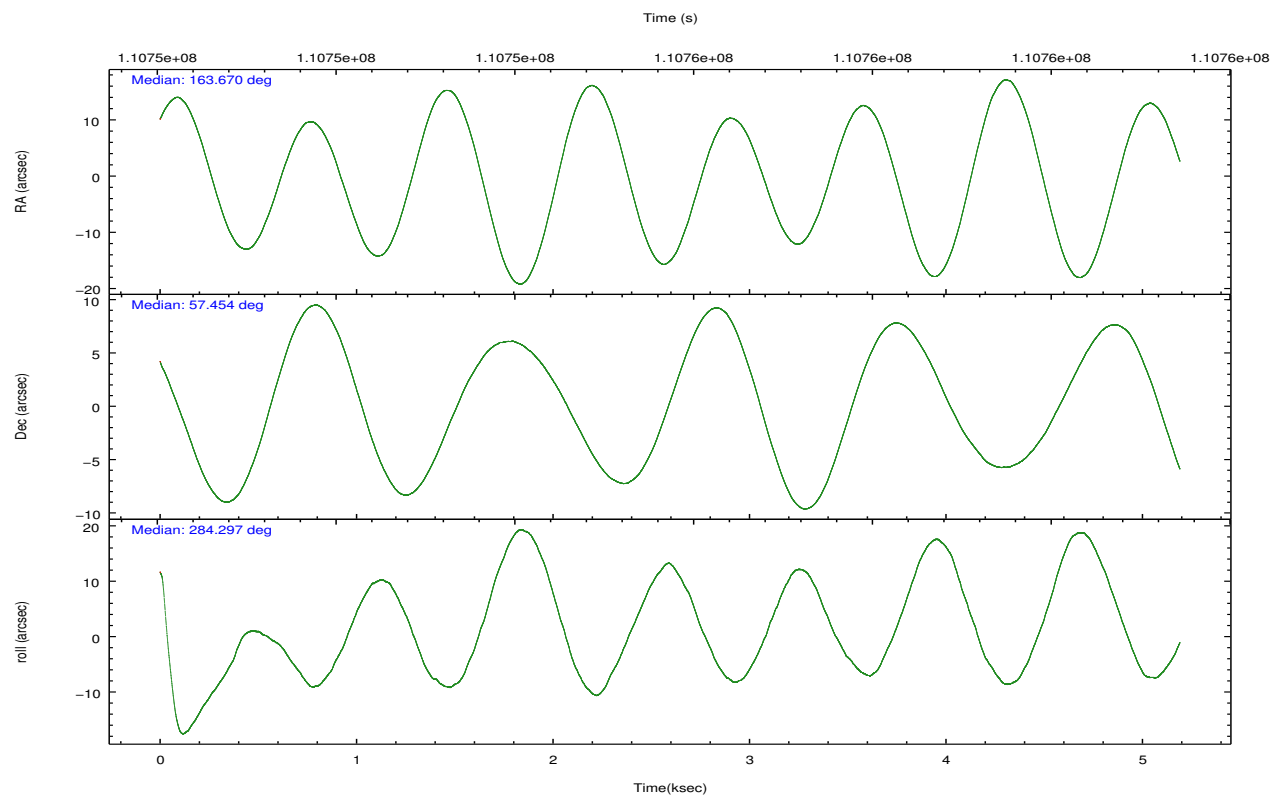


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012368	ACIS-012368	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	163.633819	163.6696494422968	Subarray requested	NONE	NONE
[deg] Pointing Dec	57.473822	57.45420944632865	Alternating exposures requested	N	N
[deg] Pointing Roll	284.119825	284.2983660098976	[s] Primary exposure time	0.000000	3.2
[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)	110752463.184000	110752087.22305			
Observation start date	2001-07-05T20:33:19	2001-07-05T20:28:07			
[s] Observation end time (MET)	110757463.184000	110757596.59827			
Observation end date	2001-07-05T21:56:39	2001-07-05T21:59:56			
Read mode	TIMED	TIMED			

## 2.3 Aspect



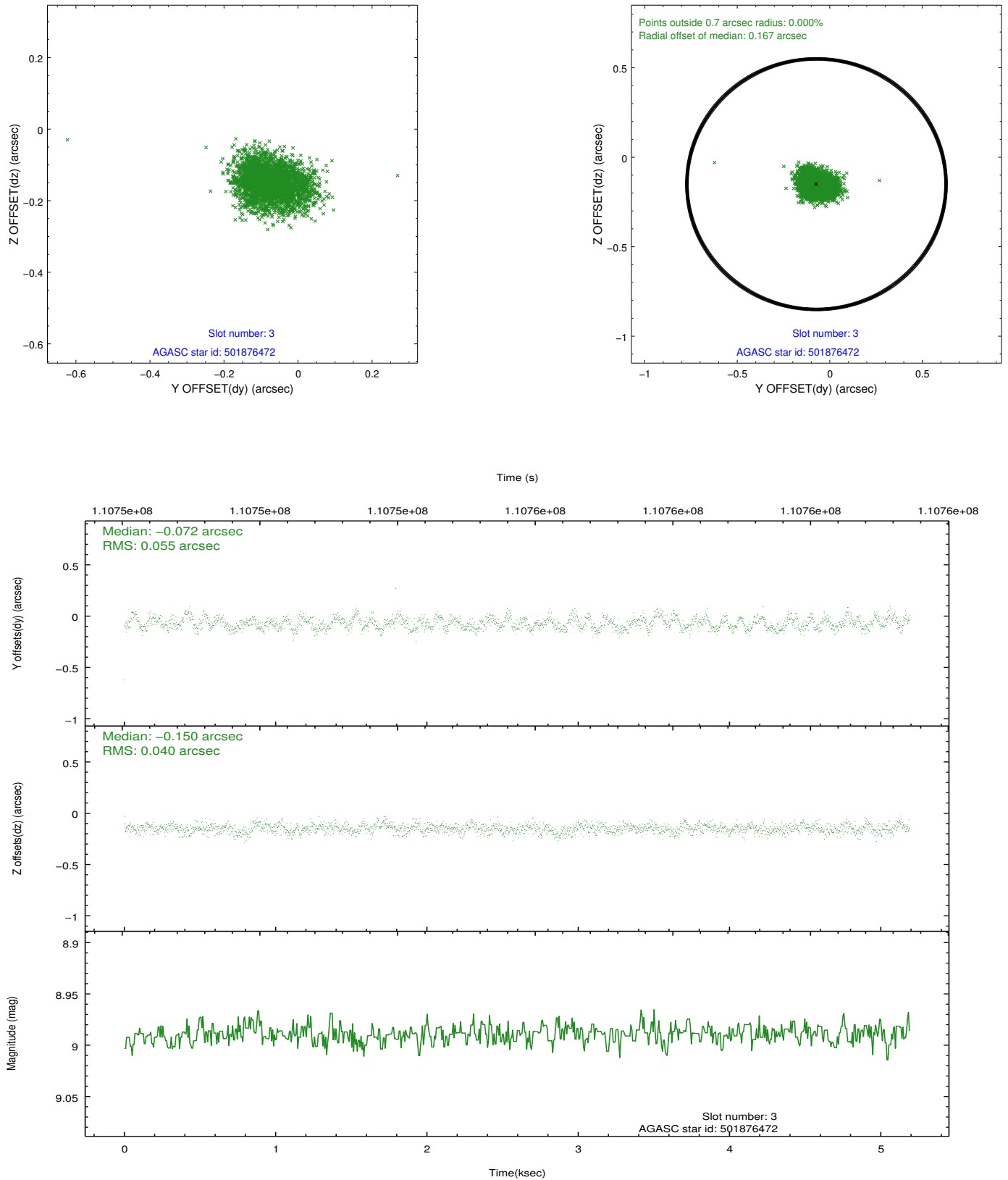


### Slot Statistics

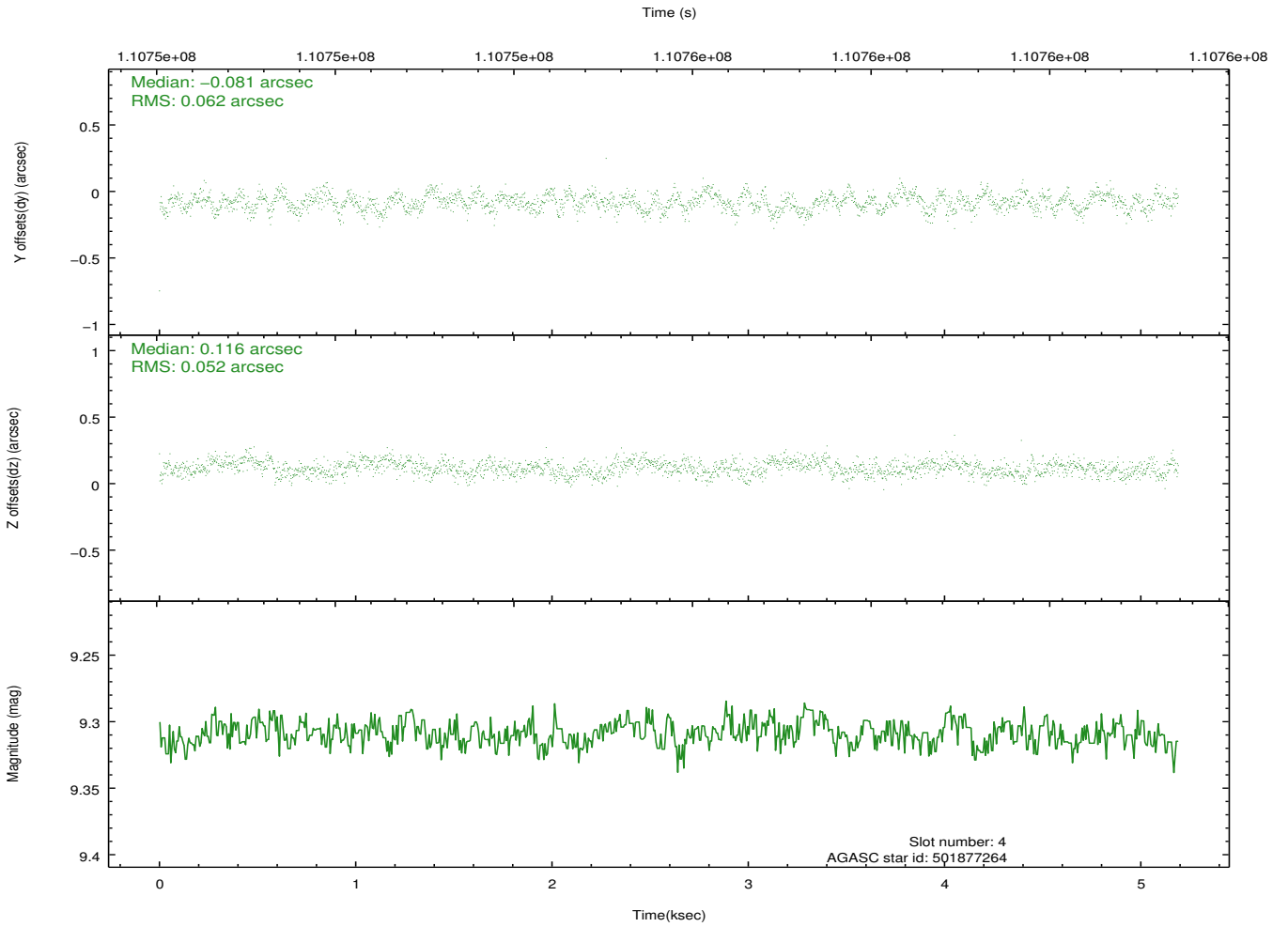
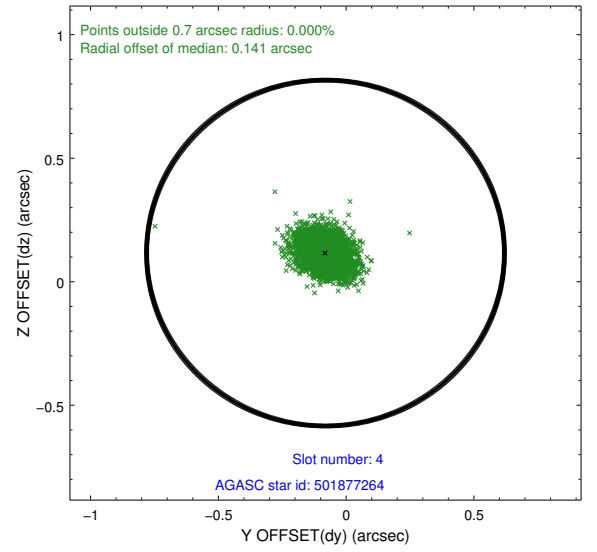
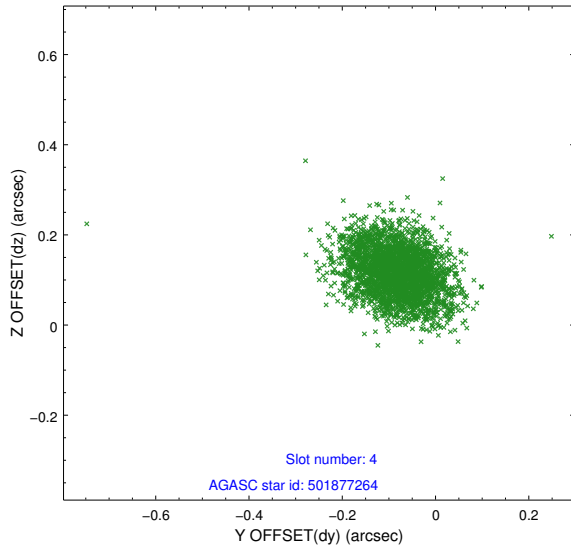
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.16	1267	-0.036	-0.071	0.009	0.017	0.000000	0.000000	-755.64	-836.76
1	FID	ACIS-I-4	7.18	1267	-0.051	0.047	0.006	0.012	0.000000	0.000000	2157.86	1068.98
2	FID	ACIS-I-5	7.23	1266	-0.015	0.092	0.009	0.016	0.000000	0.000000	-1807.96	1068.15
3	GUIDE	501876472	8.99	2532	-0.072	-0.150	0.073	0.115	163.621724	57.867447	-1380.02	322.11
4	GUIDE	501877264	9.31	2533	-0.081	0.116	0.085	0.140	163.254394	57.702218	-978.12	-507.24
5	GUIDE	501875376	6.70	2533	-0.065	-0.094	0.056	0.088	164.111621	57.502963	120.04	921.45
6	GUIDE	501619448	9.61	2529	0.248	0.146	0.091	0.154	165.050075	56.997105	2314.06	2281.09
7	GUIDE	501877056	9.71	2531	-0.034	-0.022	0.116	0.186	164.433826	58.166965	-2057.33	2084.17

## 2.4 Star Slots

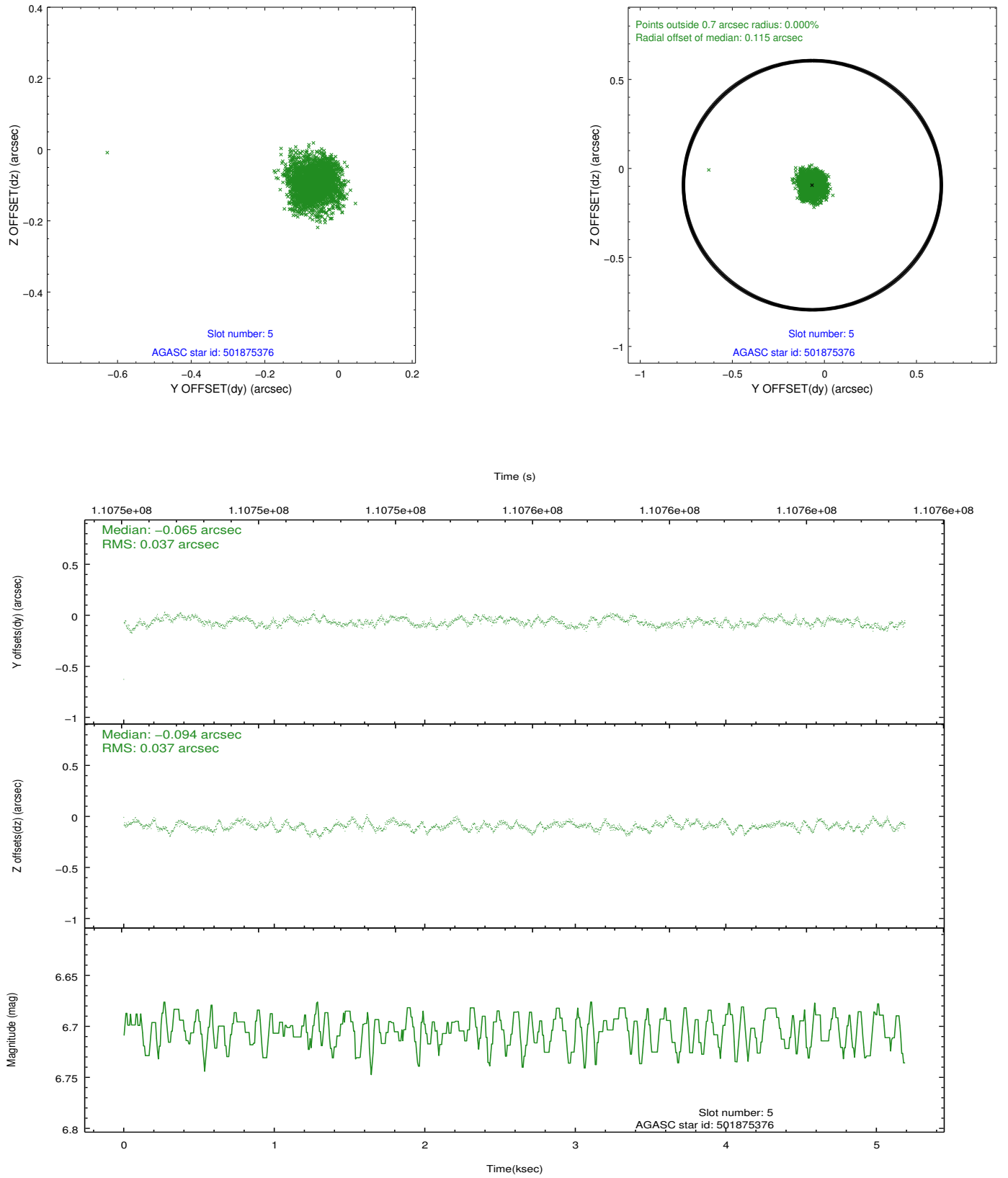
### 2.4.1 Slot 3



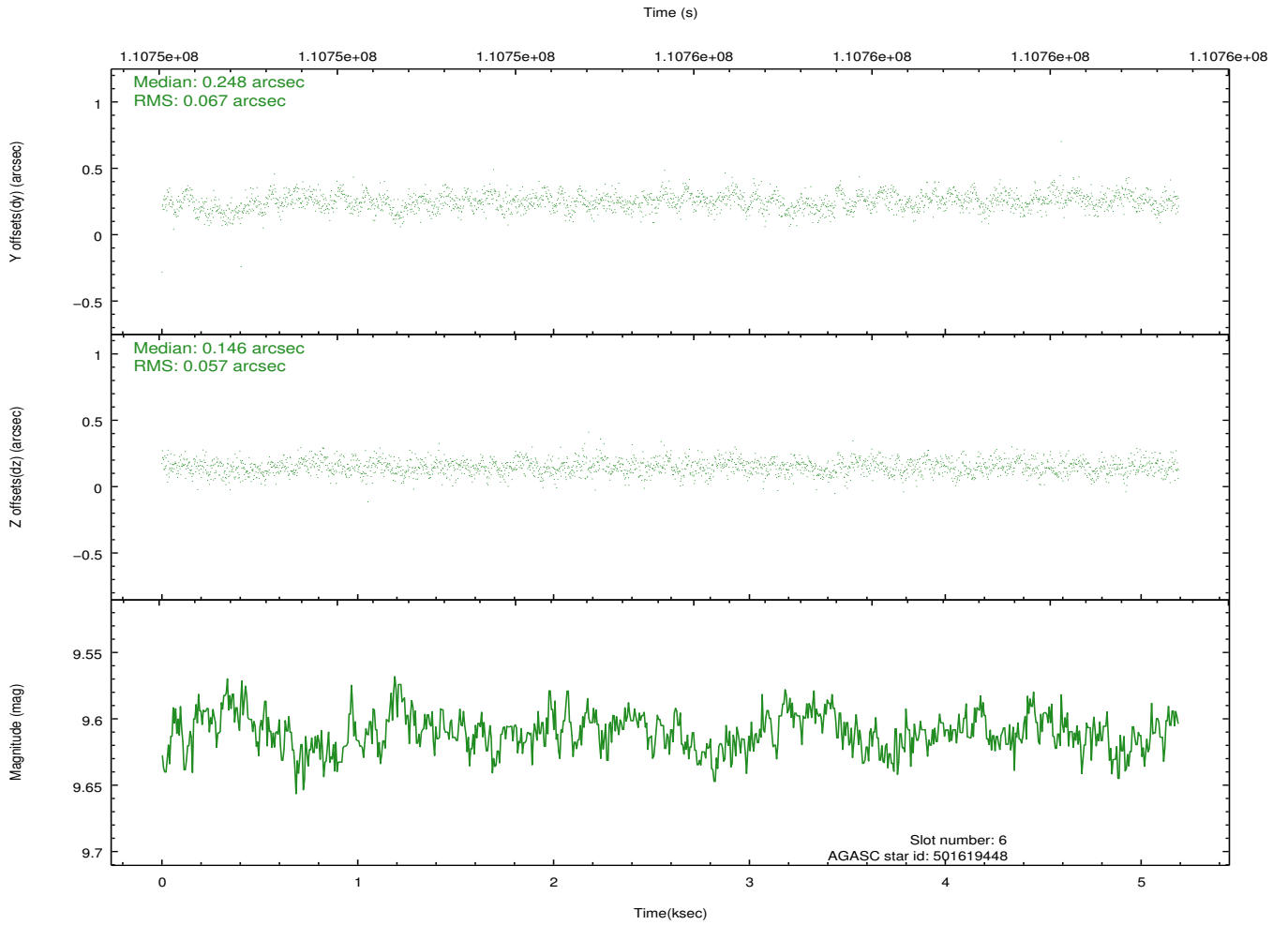
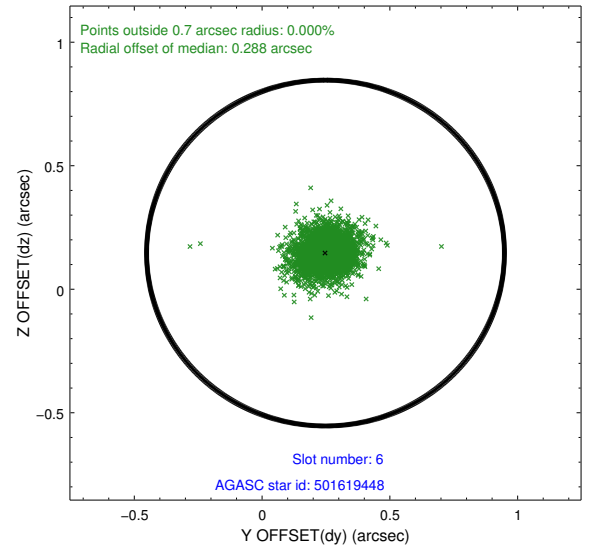
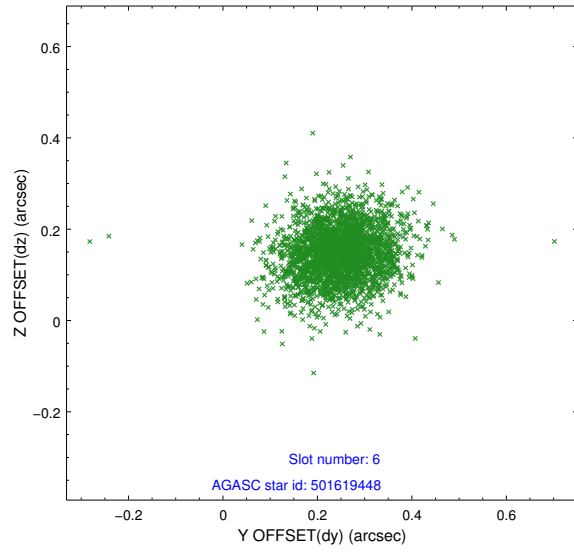
## 2.4.2 Slot 4



### 2.4.3 Slot 5

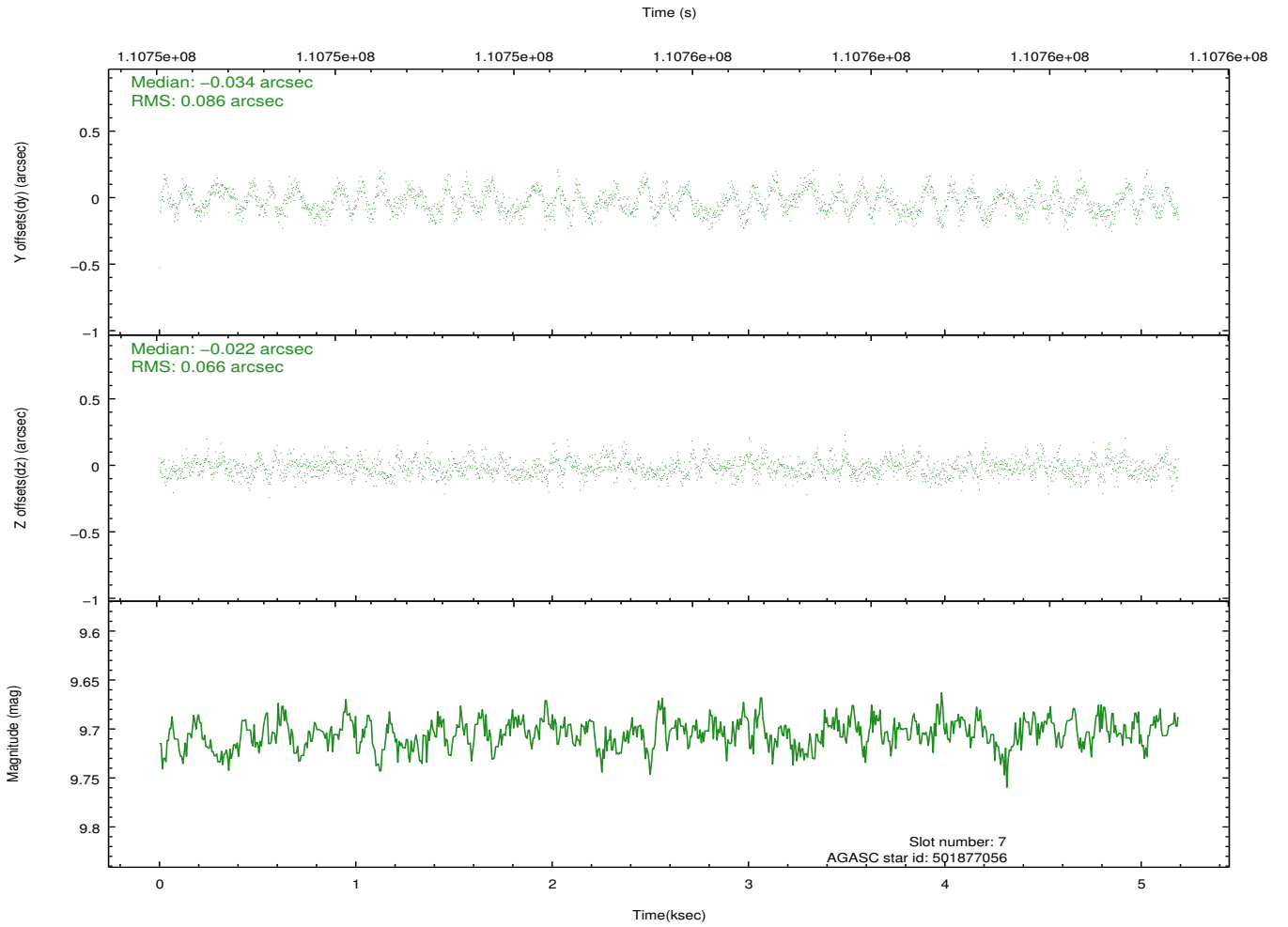
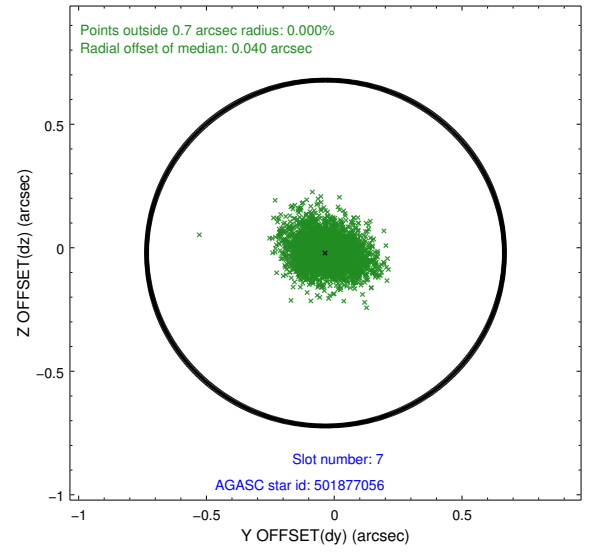
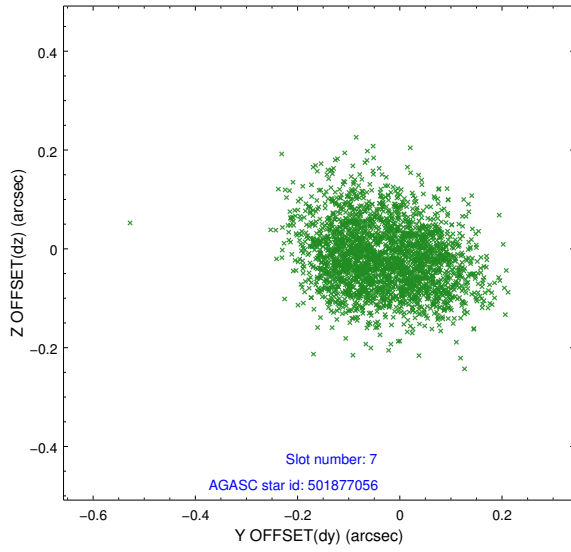


## 2.4.4 Slot 6



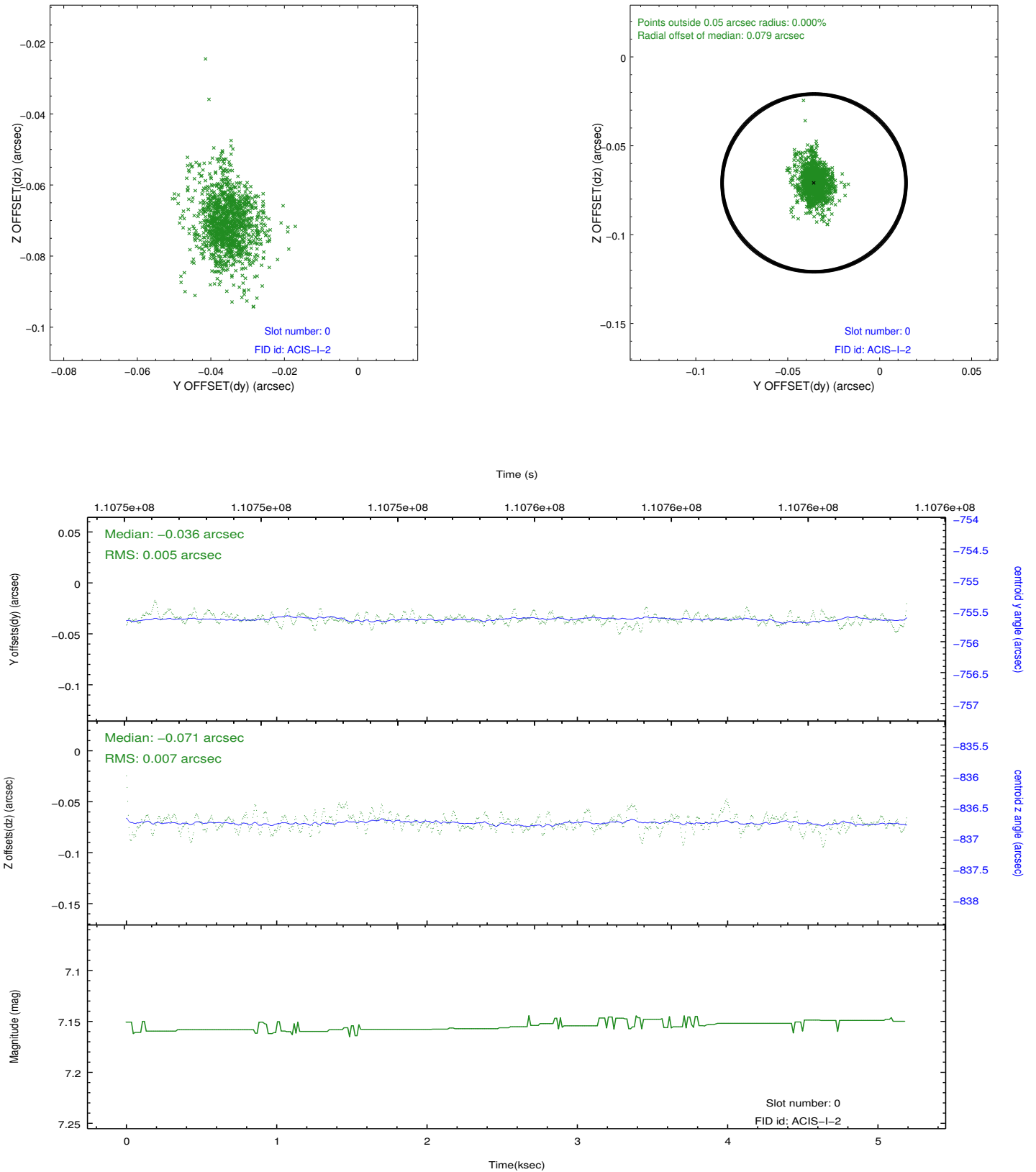


## 2.4.5 Slot 7

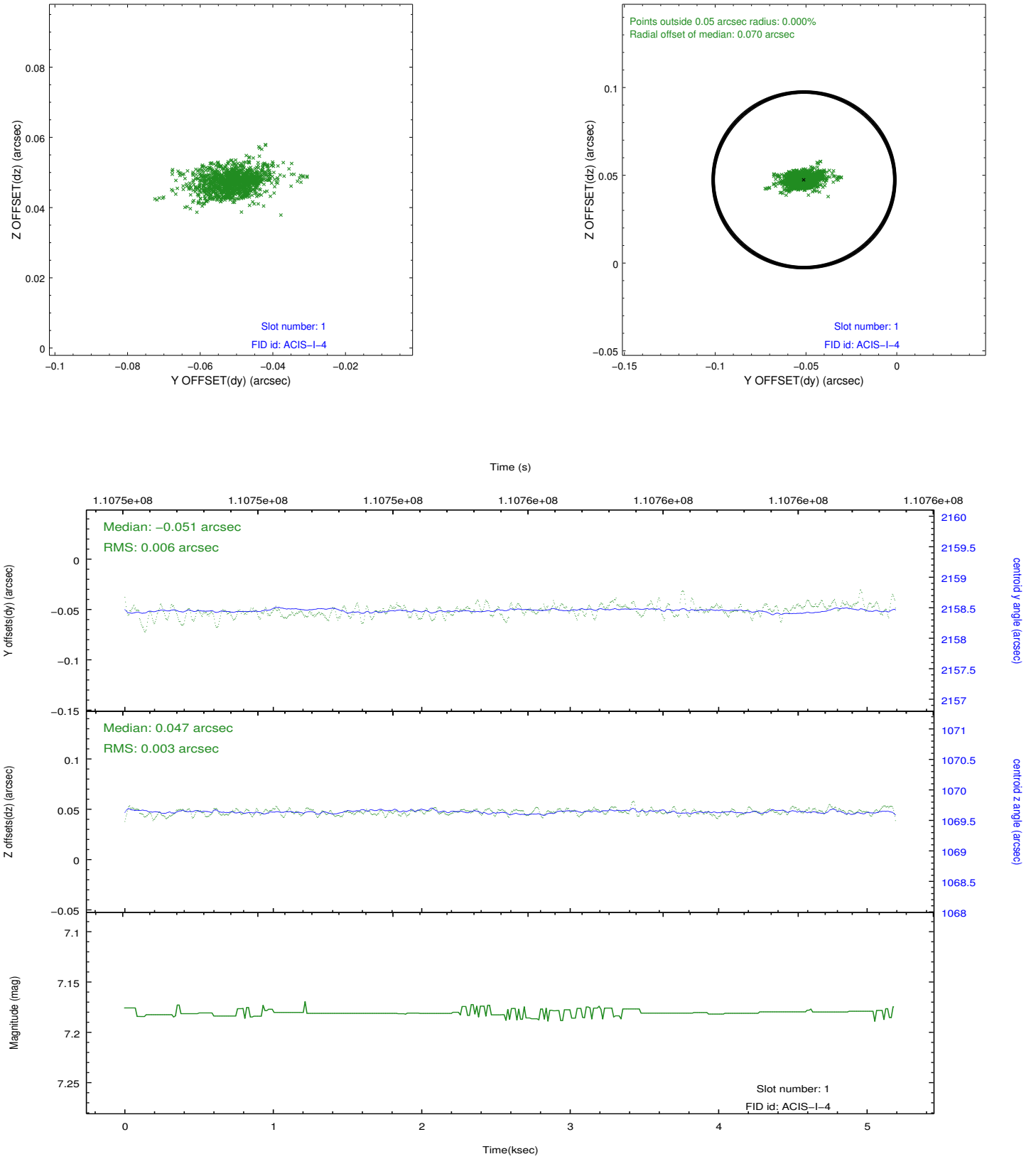


## 2.5 FID Slots

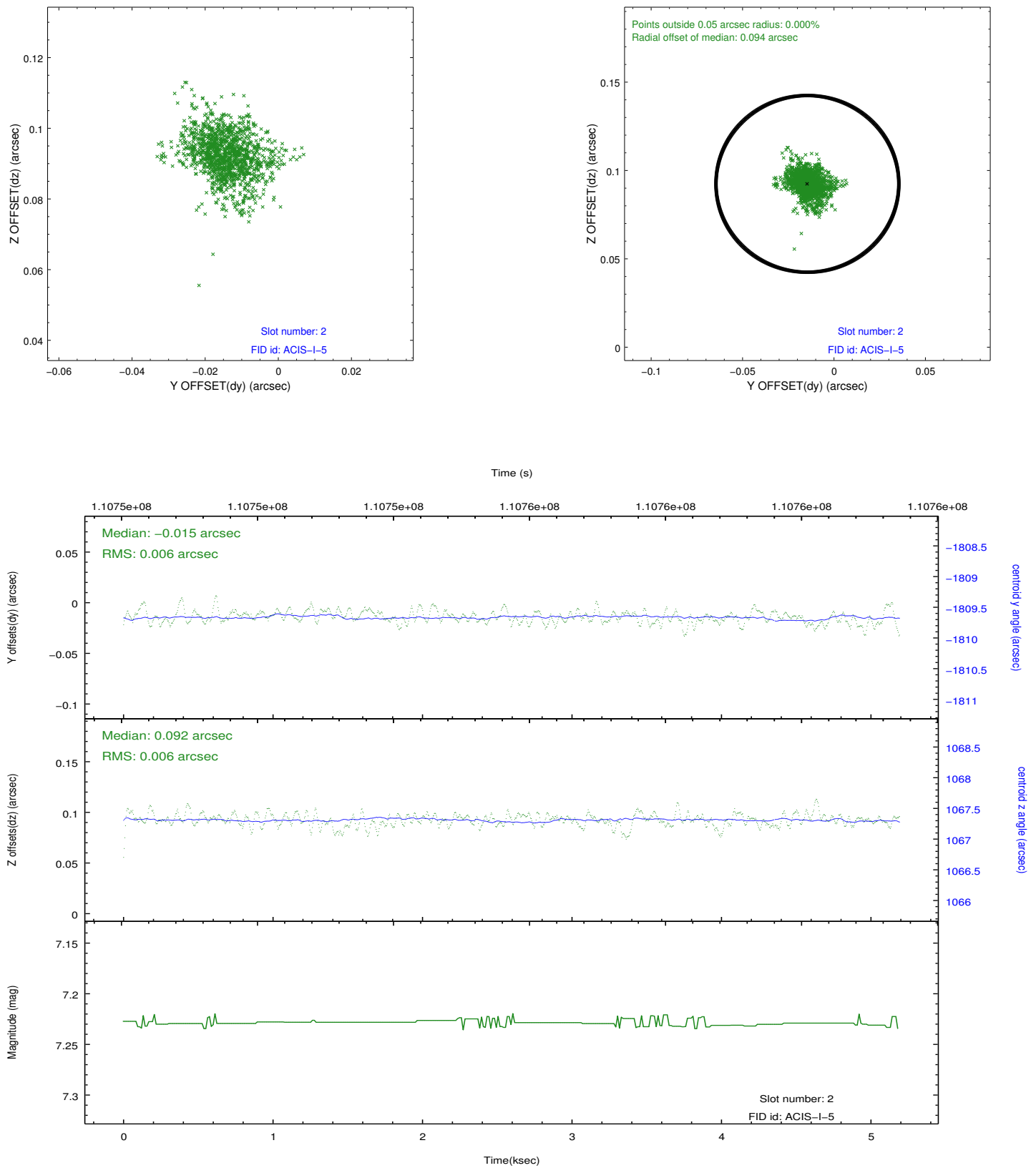
### 2.5.1 Slot 0



## 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)	2012.09.21
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.761

### A.2 Comments