

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 1693 - L2 Version 3  
Chandra X-Ray Center

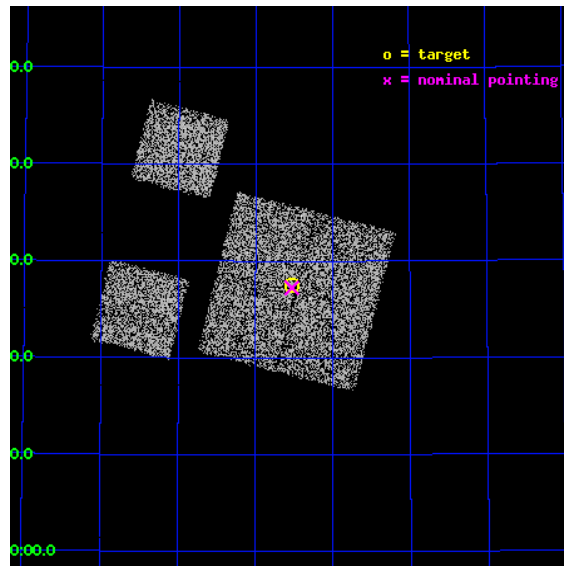
L2 Processing Date : Sep 20 2012

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# 1 Front

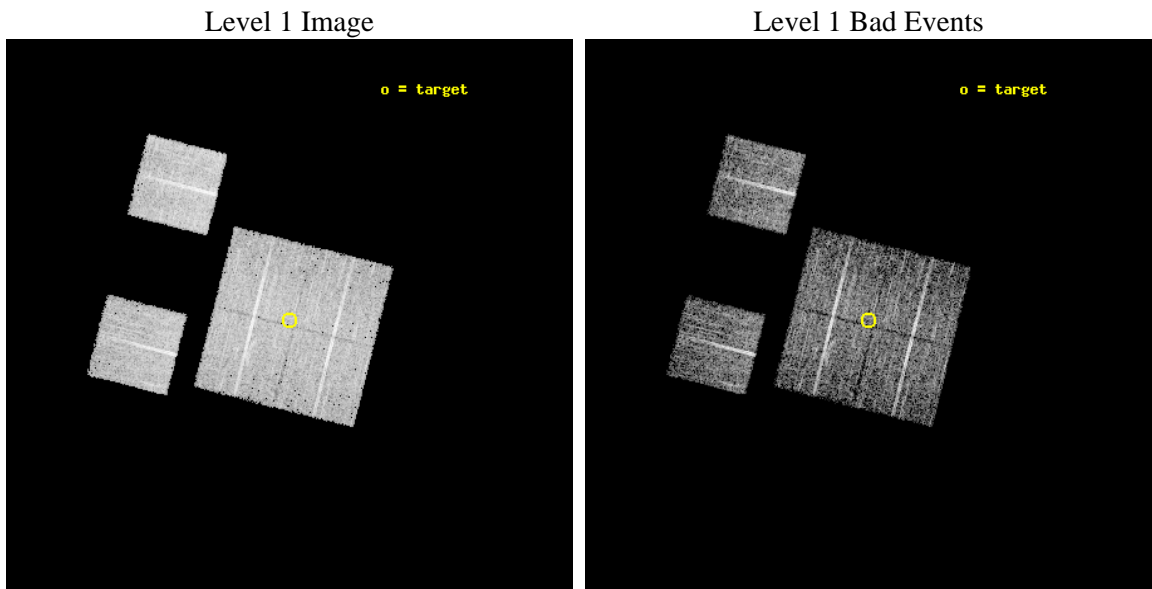
seq_num	900052	Sequence number
obs_id	1693	Observation id
title	LOCKMAN HOLE SHALLOW SURVEY	Proposal title
observer	Dr. Stephen Murray	Principal investigator
object	LOCKMAN HOLE #13	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	164.133333	Observer's specified target RA [deg]
dec_targ	57.458889	Observer's specified target Dec [deg]
ra_nom	164.13203082399	Nominal RA [deg]
dec_nom	57.45410290155	Nominal Dec [deg]
roll_nom	284.25781694352	Nominal Roll [deg]
revision	3	Processing version of data
ontime	5756.8000053465	Sum of GTIs [s]
livetime	5683.90393735	Livetime [s]
ontime0	5756.8000053465	Sum of GTIs [s]
ontime1	5756.8000053465	Sum of GTIs [s]
ontime2	5756.8000053465	Sum of GTIs [s]
ontime3	5756.8000053465	Sum of GTIs [s]
ontime6	5756.8000053465	Sum of GTIs [s]
ontime8	5756.8000053465	Sum of GTIs [s]
l2events	22947	Number of level 2 events



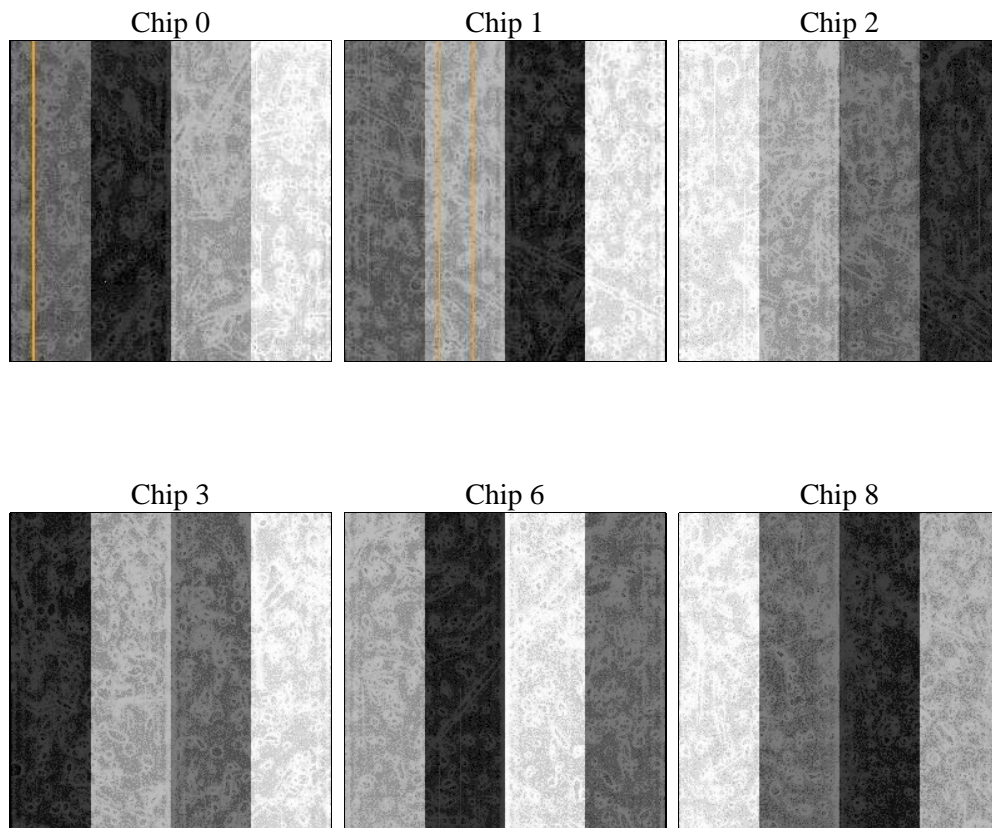
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	6000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	5756.8000053465	Sum of GTIs [s]
caldsver	4.5.1.1	&#160	ontime0	5756.8000053465	Sum of GTIs [s]
date	2012-09-20T12:46:58	Date and time of file creation	ontime1	5756.8000053465	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	5756.8000053465	Sum of GTIs [s]
			ontime3	5756.8000053465	Sum of GTIs [s]
			ontime6	5756.8000053465	Sum of GTIs [s]
			ontime8	5756.8000053465	Sum of GTIs [s]
			l1events	232168	Number of level 1 events

### 2.1.4 Events

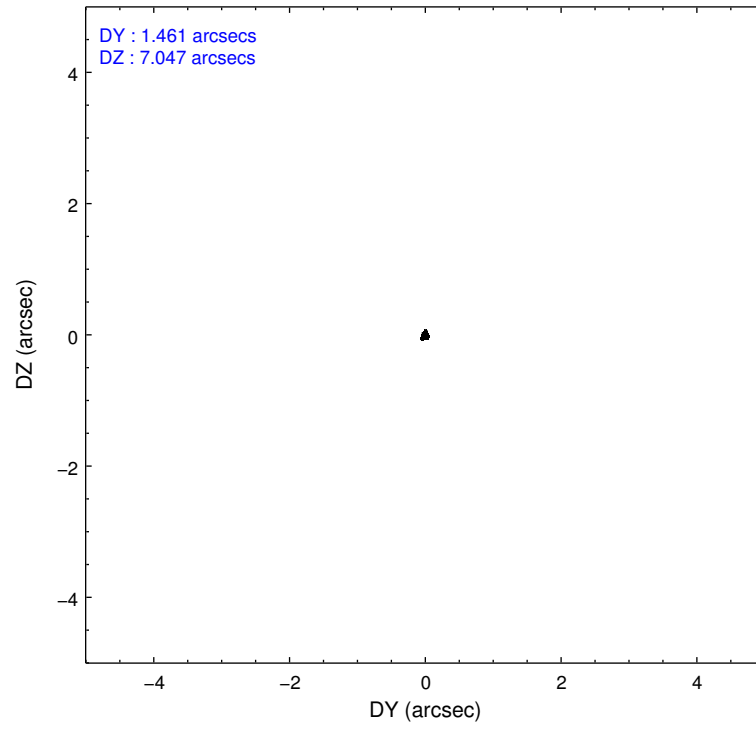
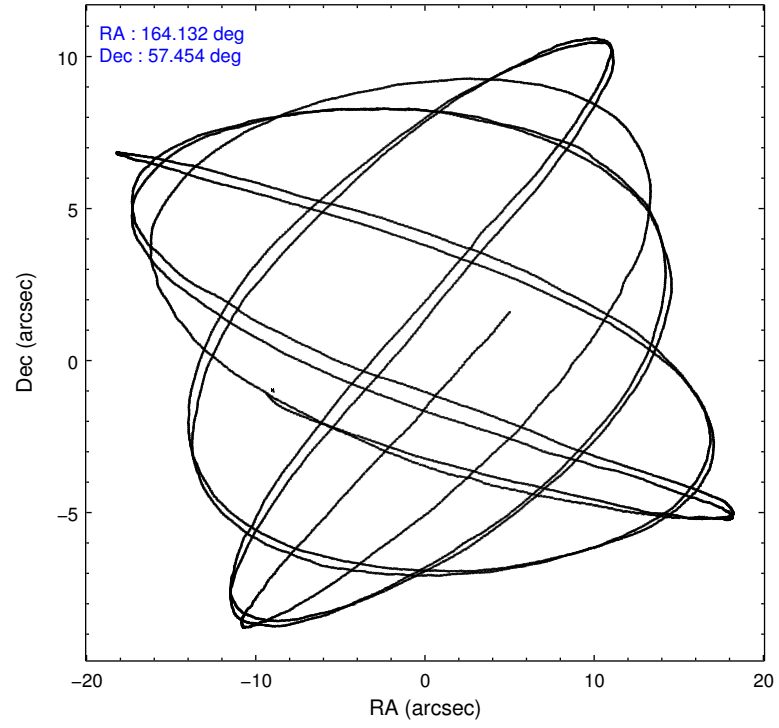
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 8		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 8
level 1 events	34501	35362	36949	37259	37583	50514	grade 0 events	1870	1890	2014	1840	1928	3114
rejected events	30229	30856	32614	33041	33049	40774		5%	5%	5%	4%	5%	6%
rejected %	87%	87%	88%	88%	87%	80%	grade 1 events	18	19	15	25	20	34
								0%	0%	0%	0%	0%	0%
							grade 2 events	873	894	895	782	883	2067
								2%	2%	2%	2%	2%	4%
							grade 3 events	432	462	375	444	436	1041
								1%	1%	1%	1%	1%	2%
							grade 4 events	357	461	394	378	434	994
								1%	1%	1%	1%	1%	1%
							grade 5 events	1356	1403	1255	1371	1503	1990
								3%	3%	3%	3%	3%	3%
							grade 6 events	746	804	664	778	857	2531
								2%	2%	1%	2%	2%	5%
							grade 7 events	28849	29429	31337	31641	31522	38743
								83%	83%	84%	84%	83%	76%

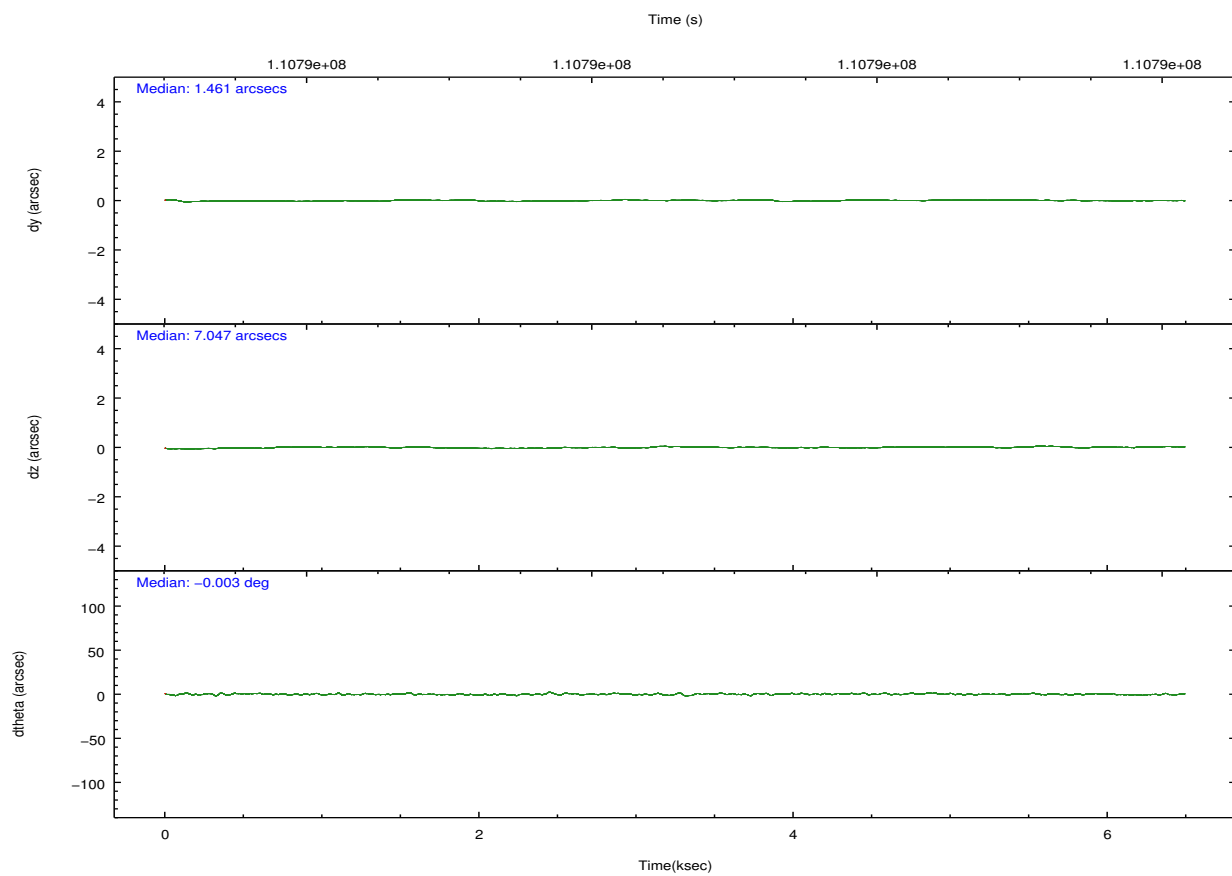
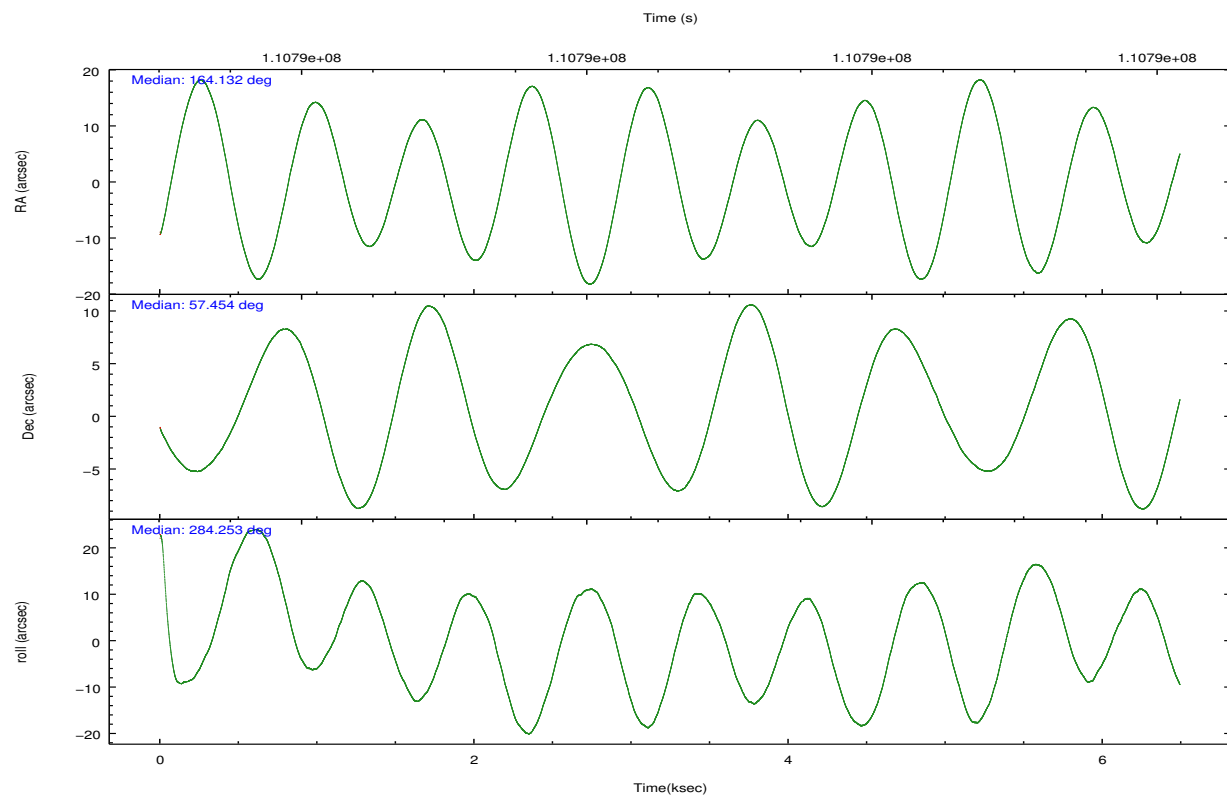


## 2.2 Compared Parameters

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	164.096331	164.1320308239885	Subarray requested	NONE	NONE
[deg] Pointing Dec	57.473832	57.45410290155012	Alternating exposures requested	N	N
[deg] Pointing Roll	284.079190	284.2578169435247	[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)	110785523.184000	110785146.54934			
Observation start date	2001-07-06T05:44:19	2001-07-06T05:39:06			
[s] Observation end time (MET)	110791523.184000	110792145.24962			
Observation end date	2001-07-06T07:24:19	2001-07-06T07:35:45			
Read mode	TIMED	TIMED			

## 2.3 Aspect



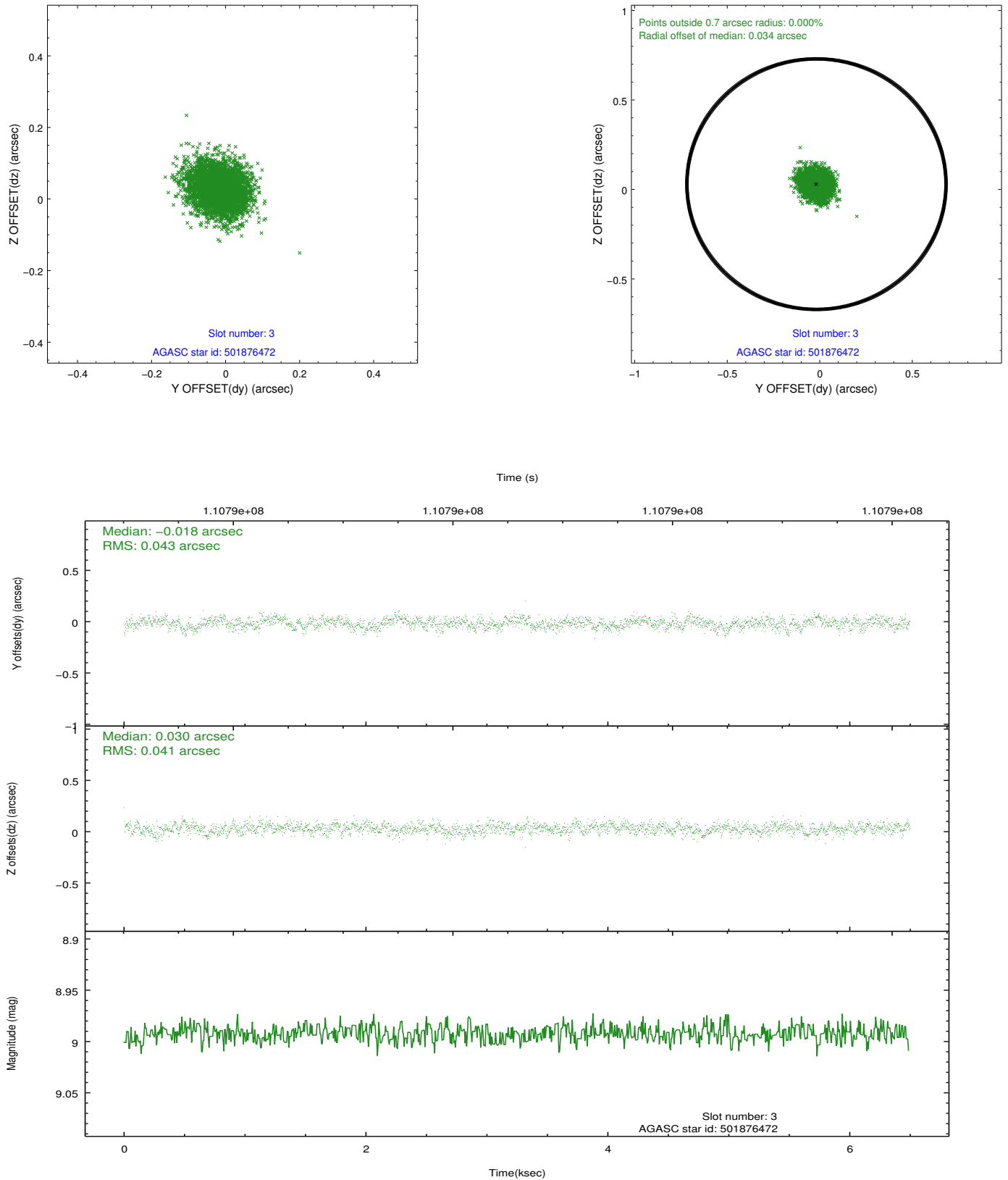


### Slot Statistics

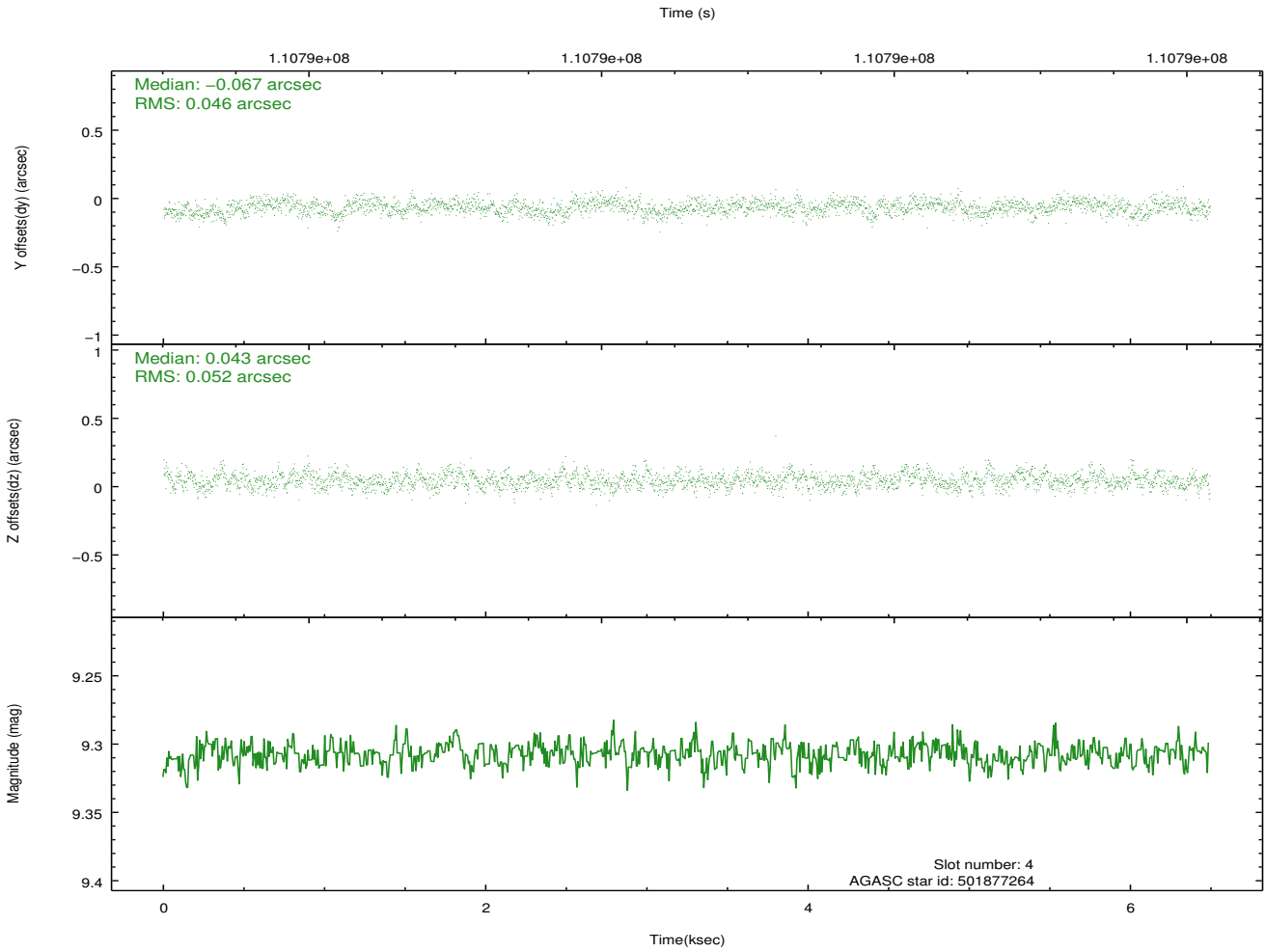
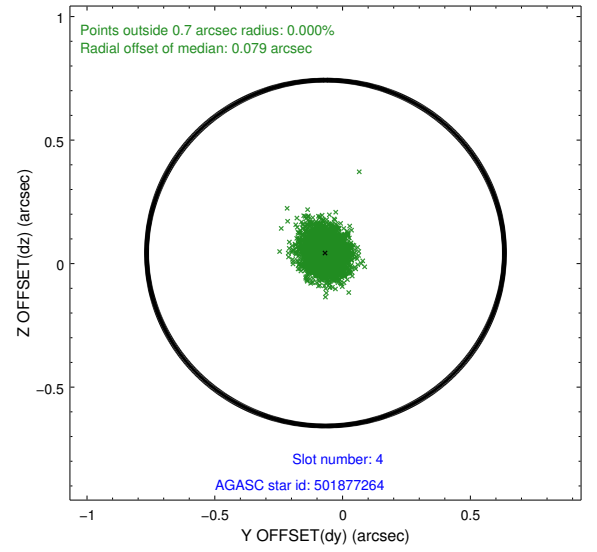
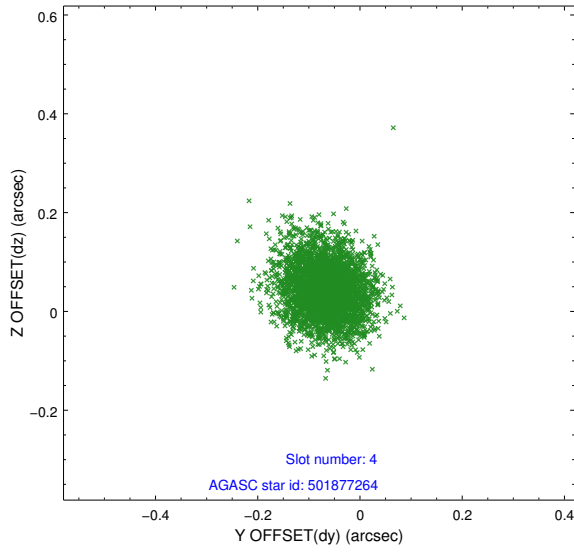
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.16	1584	-0.038	-0.066	0.009	0.015	0.000000	0.000000	-755.82	-836.88
1	FID	ACIS-I-4	7.18	1584	-0.046	0.047	0.005	0.010	0.000000	0.000000	2157.80	1068.99
2	FID	ACIS-I-5	7.23	1584	-0.017	0.087	0.009	0.015	0.000000	0.000000	-1808.49	1067.86
3	GUIDE	501876472	8.99	3165	-0.018	0.030	0.064	0.101	163.621724	57.867447	-1598.27	-537.21
4	GUIDE	501877264	9.31	3166	-0.067	0.043	0.074	0.118	163.254394	57.702218	-1201.40	-1369.53
5	GUIDE	501619448	9.61	3165	0.049	0.130	0.101	0.165	165.050075	56.997105	2106.81	1398.42
6	GUIDE	501875376	6.71	3168	-0.023	-0.199	0.057	0.088	164.111621	57.502963	-93.57	53.42
7	GUIDE	501488296	9.75	3166	0.055	-0.008	0.097	0.158	164.354320	57.421227	304.70	438.22

## 2.4 Star Slots

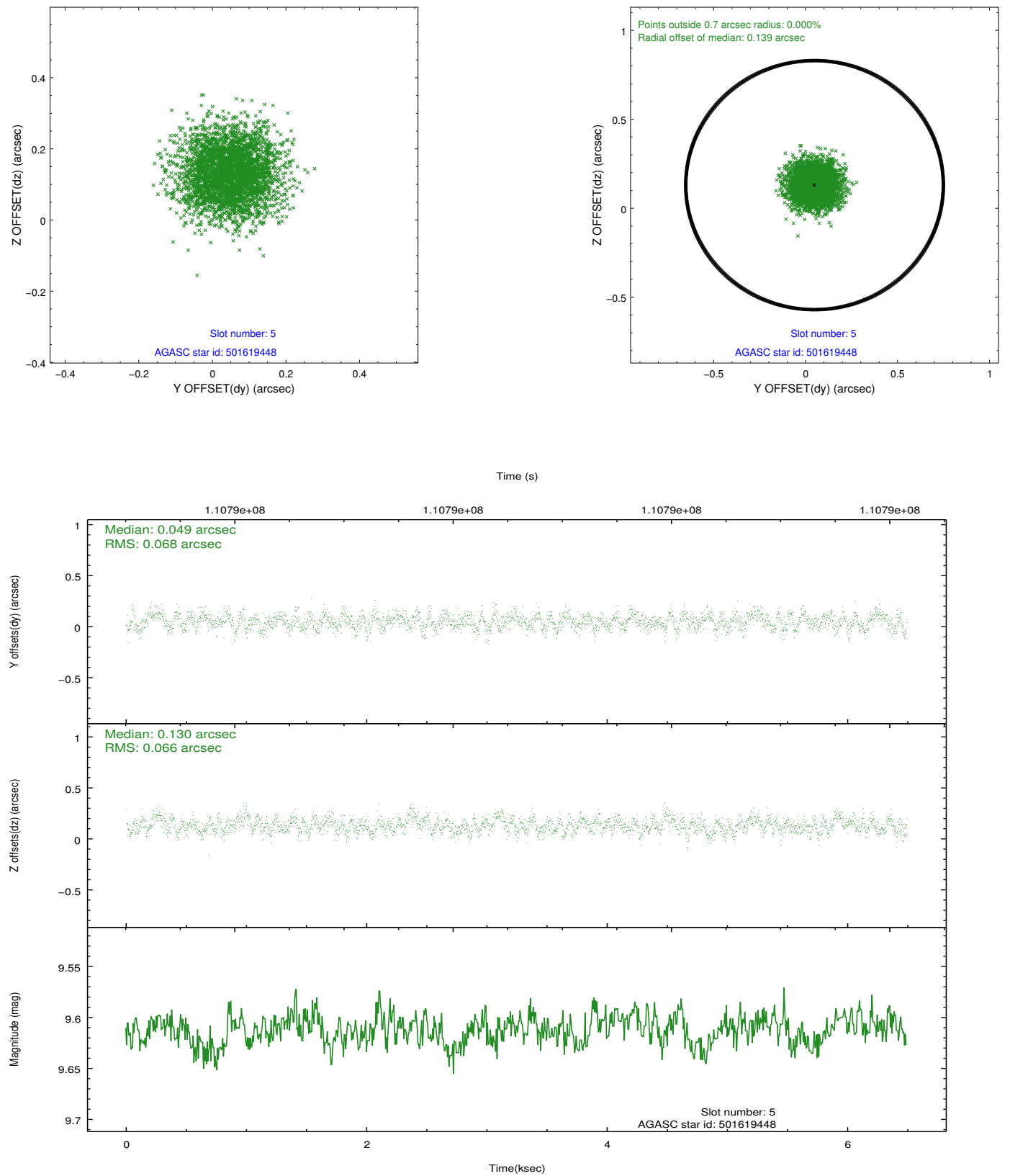
### 2.4.1 Slot 3



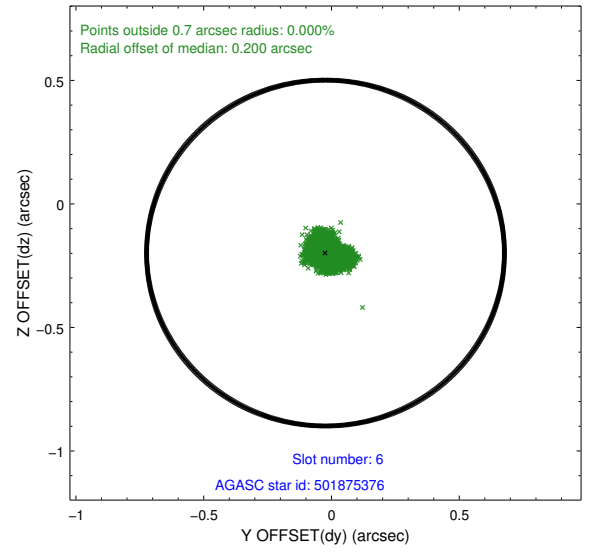
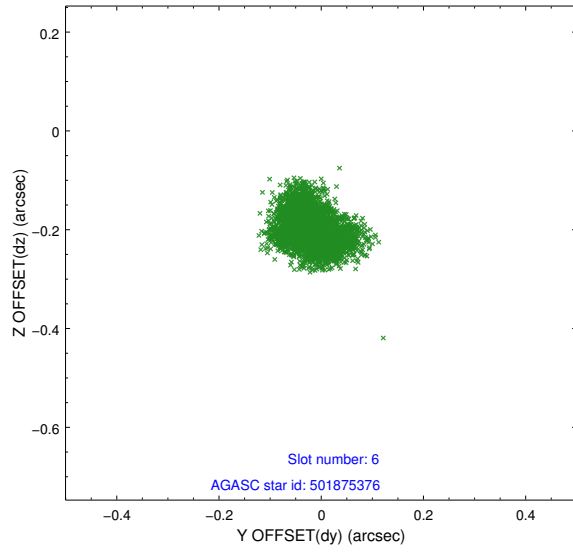
## 2.4.2 Slot 4



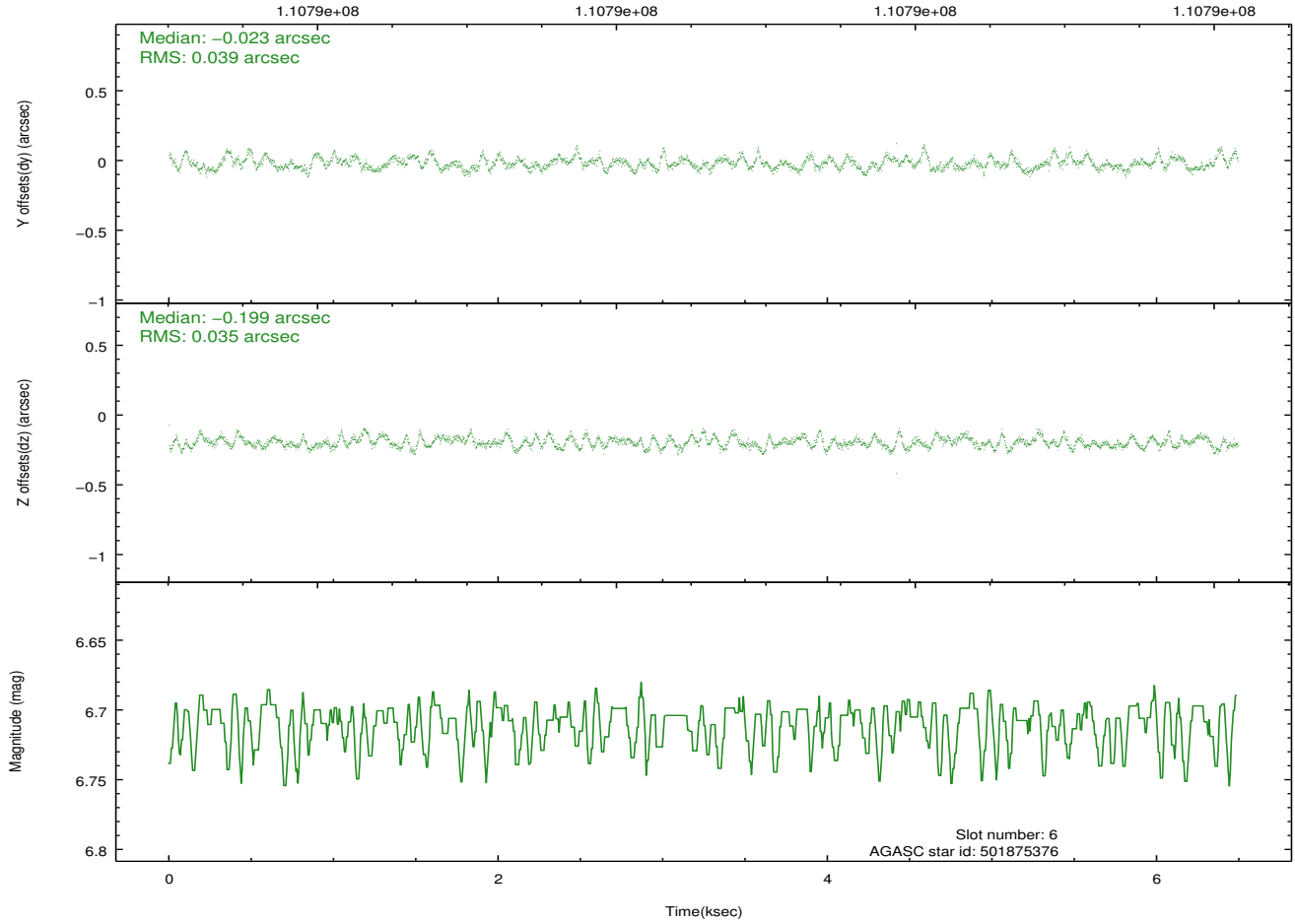
### 2.4.3 Slot 5



## 2.4.4 Slot 6

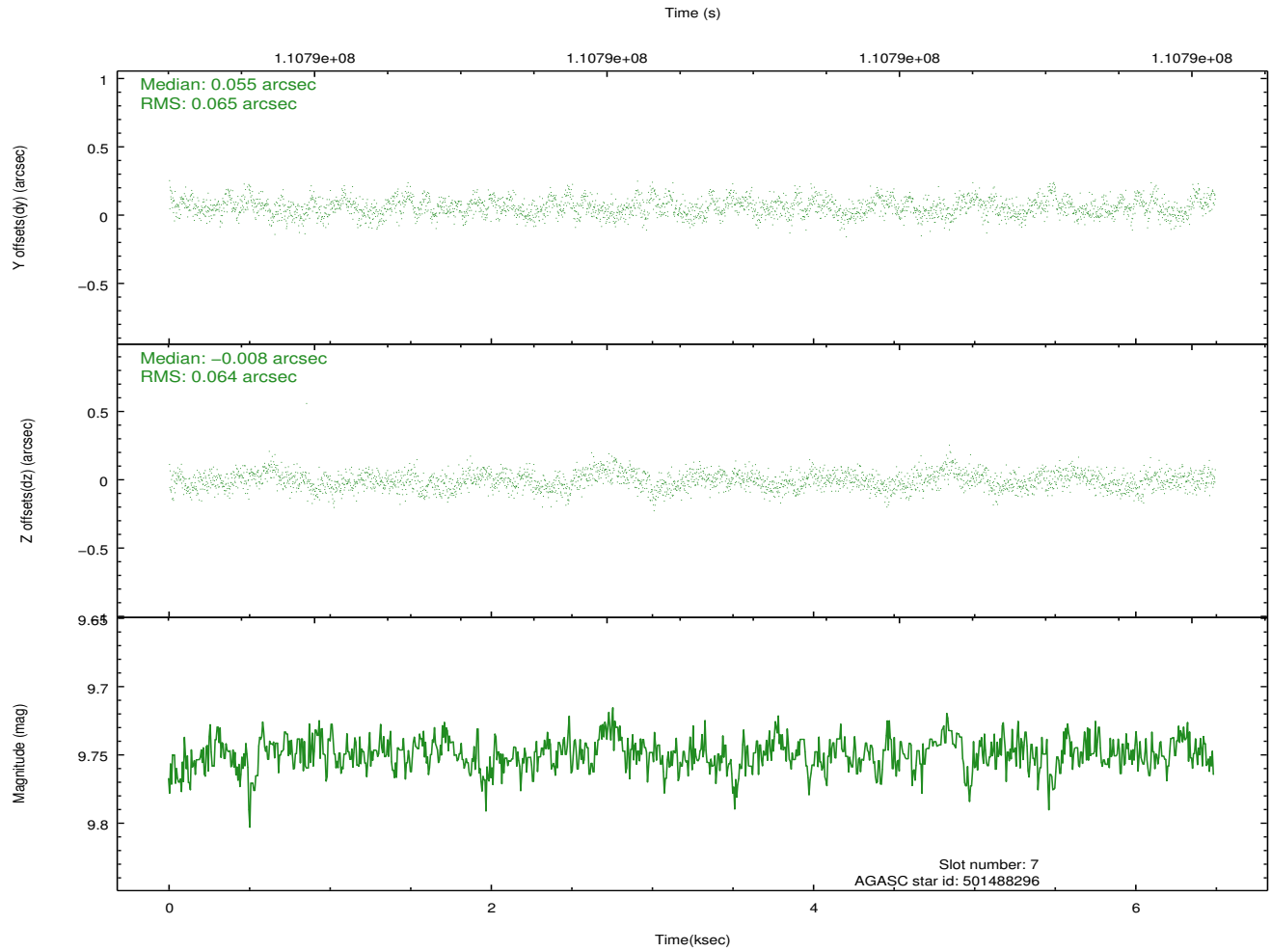
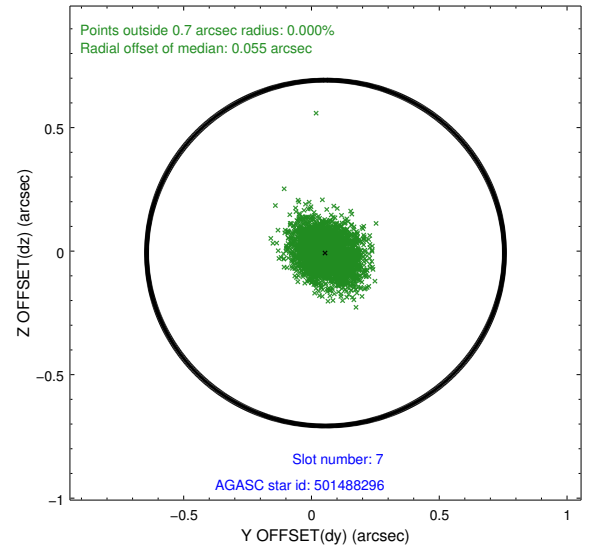
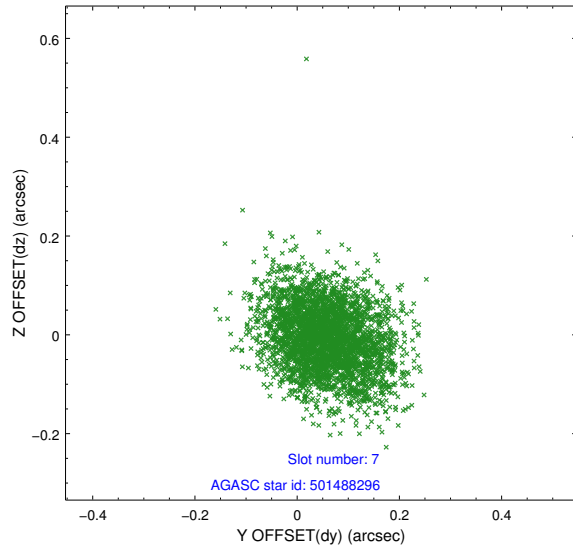


Time (s)



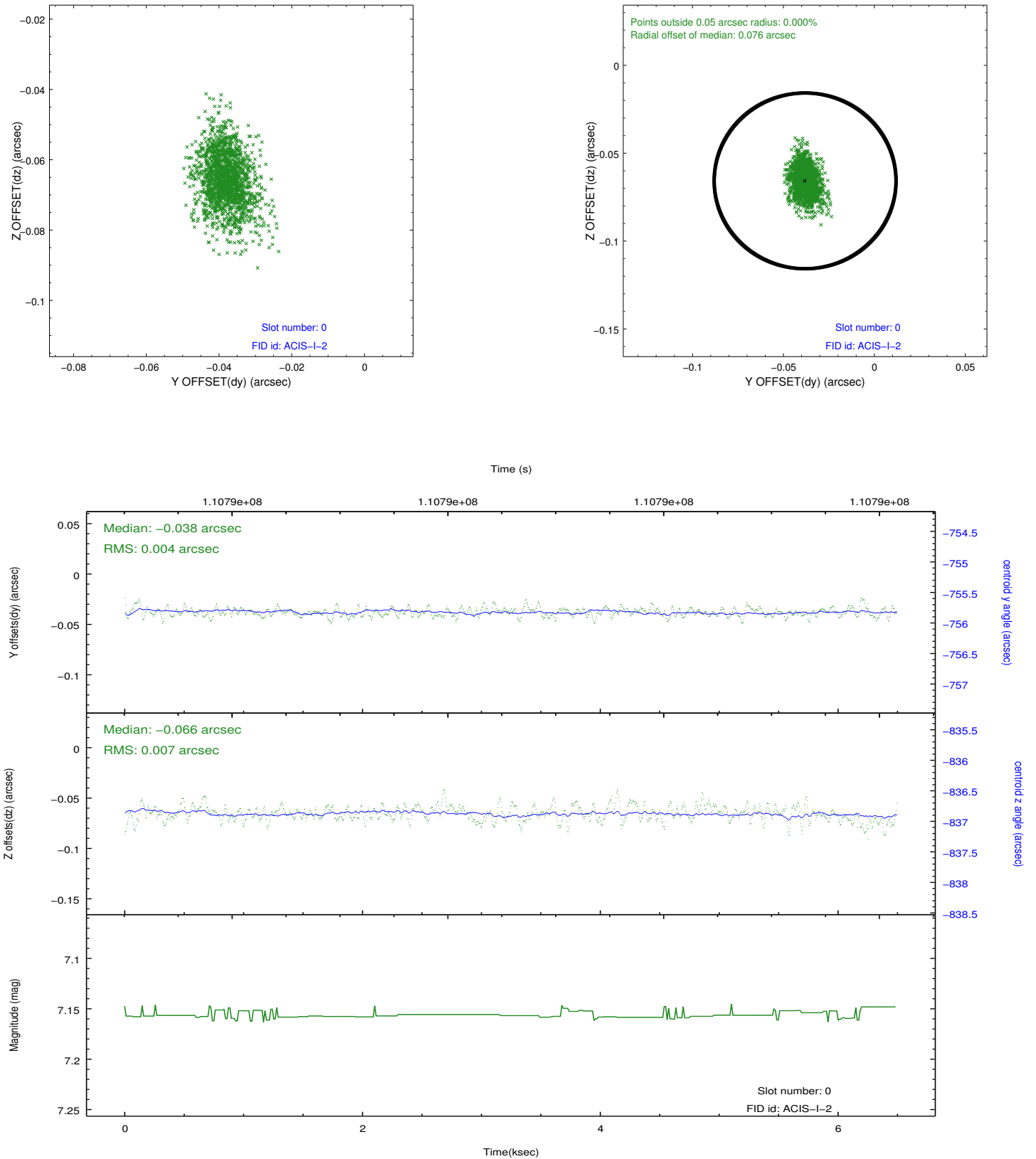


## 2.4.5 Slot 7

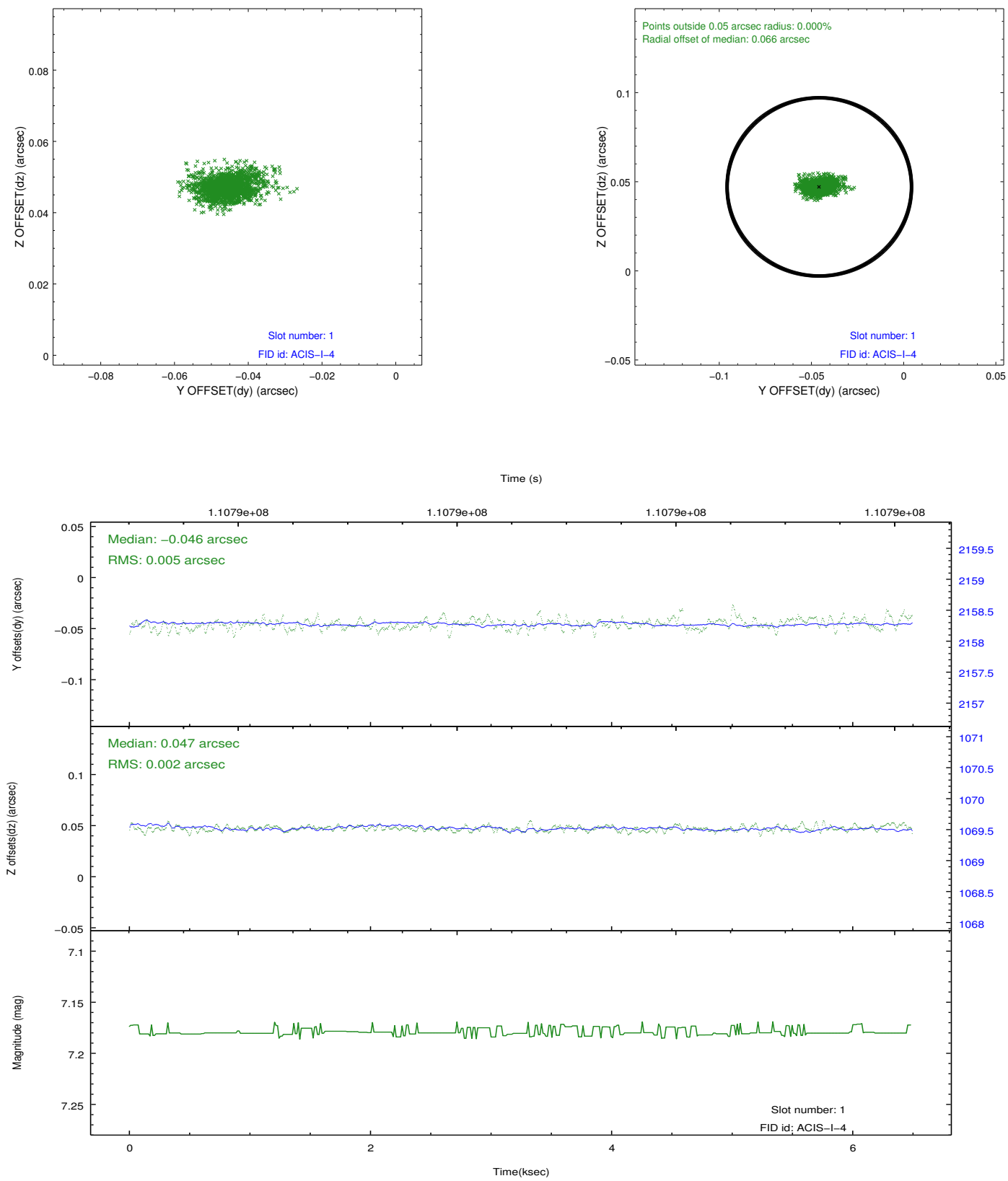


## 2.5 FID Slots

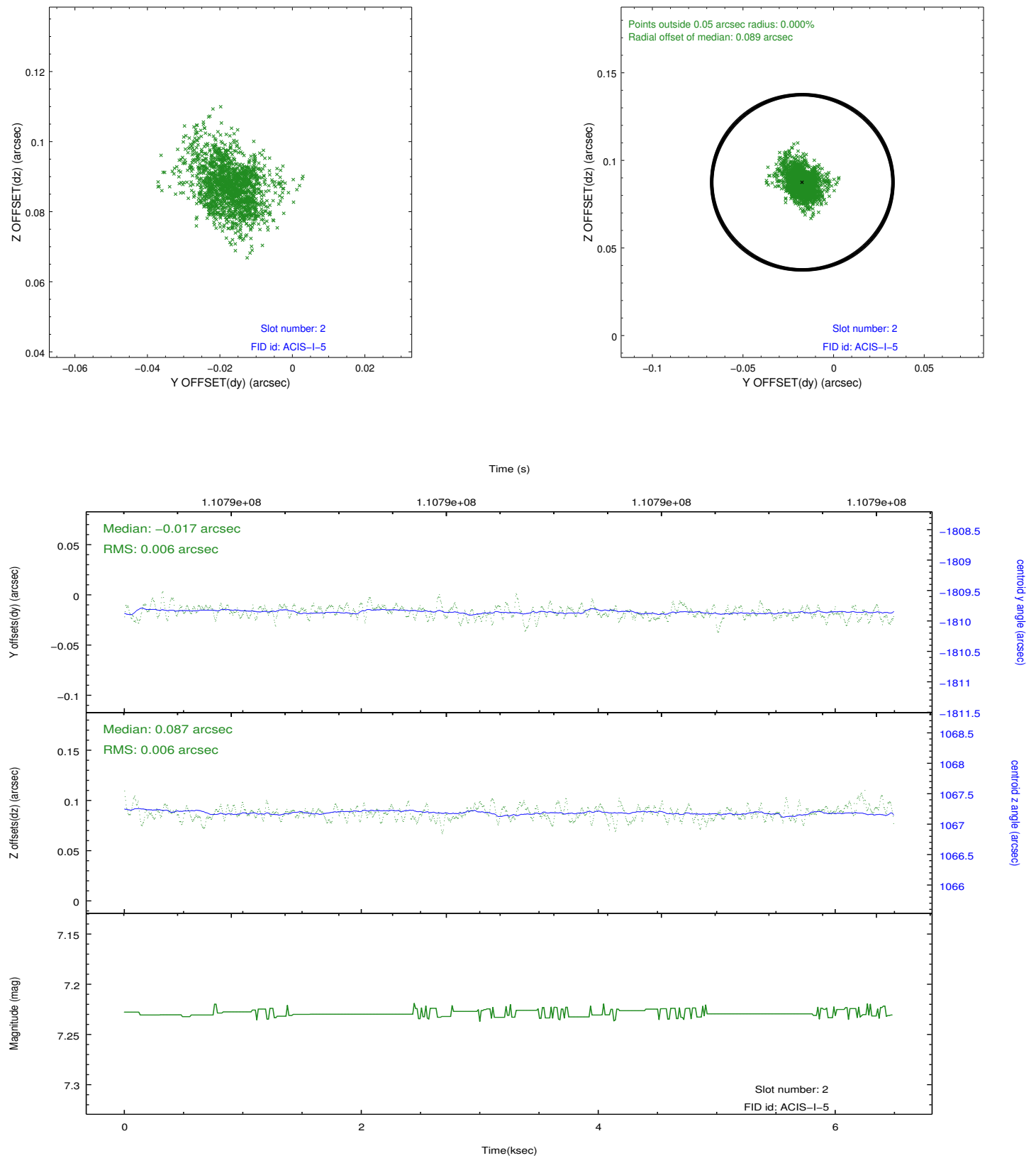
### 2.5.1 Slot 0



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	5.8

### **A.2 Comments**