

# V&V Reference Report

## L2 ASCDS Version : 10.5

Observation 18470 - L2 Version 1  
Chandra X-Ray Center

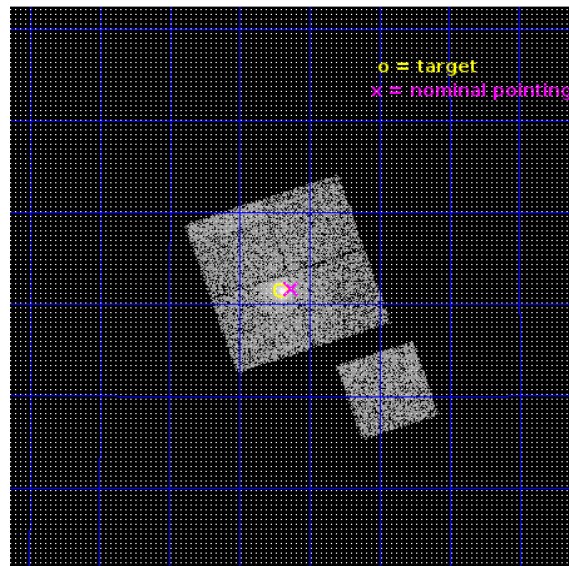
L2 Processing Date : Aug 9 2016

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# 1 Front

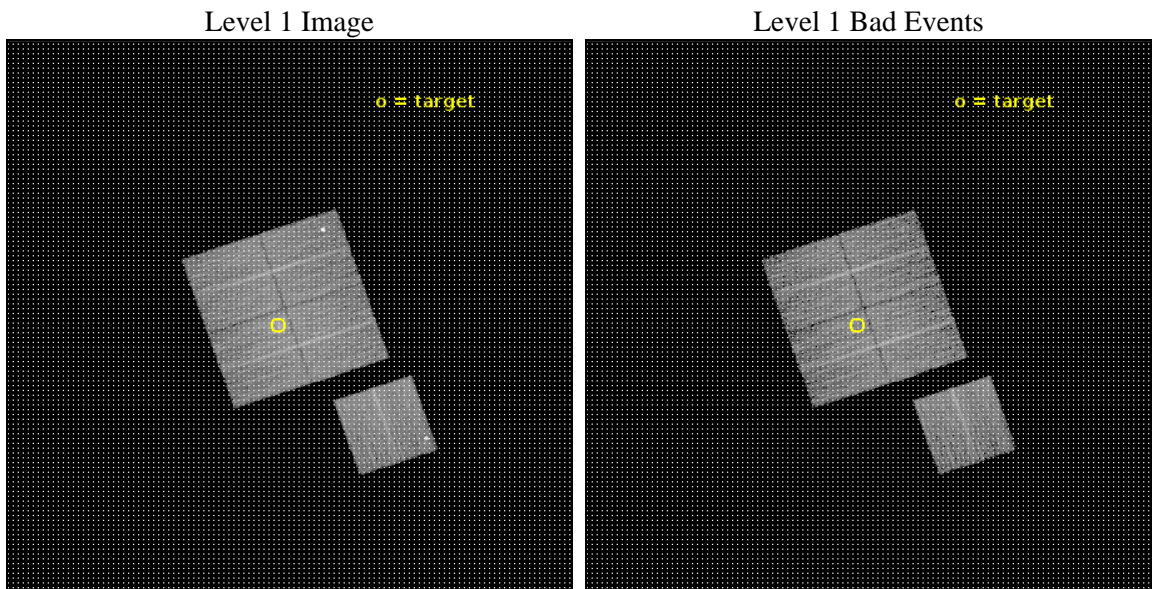
seq_num	801629	Sequence number
obs_id	18470	Observation id
title	Powerful radio galaxies in clusters: completing the sample	Proposa
observer	Ralph Kraft	Principal investigator
object	RXC J2155.6+1232	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	328.925833	Observer's specified target RA [deg]
dec_targ	12.524722	Observer's specified target Dec [deg]
ra_nom	328.90761079759	Nominal RA [deg]
dec_nom	12.528178417762	Nominal Dec [deg]
roll_nom	161.16891814464	Nominal Roll [deg]
revision	1	Processing version of data
ontime	9773.2960472107	Sum of GTIs [s]
livetime	9645.600739358	Livetime [s]
ontime0	9773.1729272604	Sum of GTIs [s]
ontime1	9773.2139672041	Sum of GTIs [s]
ontime2	9770.1139671803	Sum of GTIs [s]
ontime3	9773.2960472107	Sum of GTIs [s]
ontime6	9773.1318871975	Sum of GTIs [s]
l2events	33996	Number of level 2 events



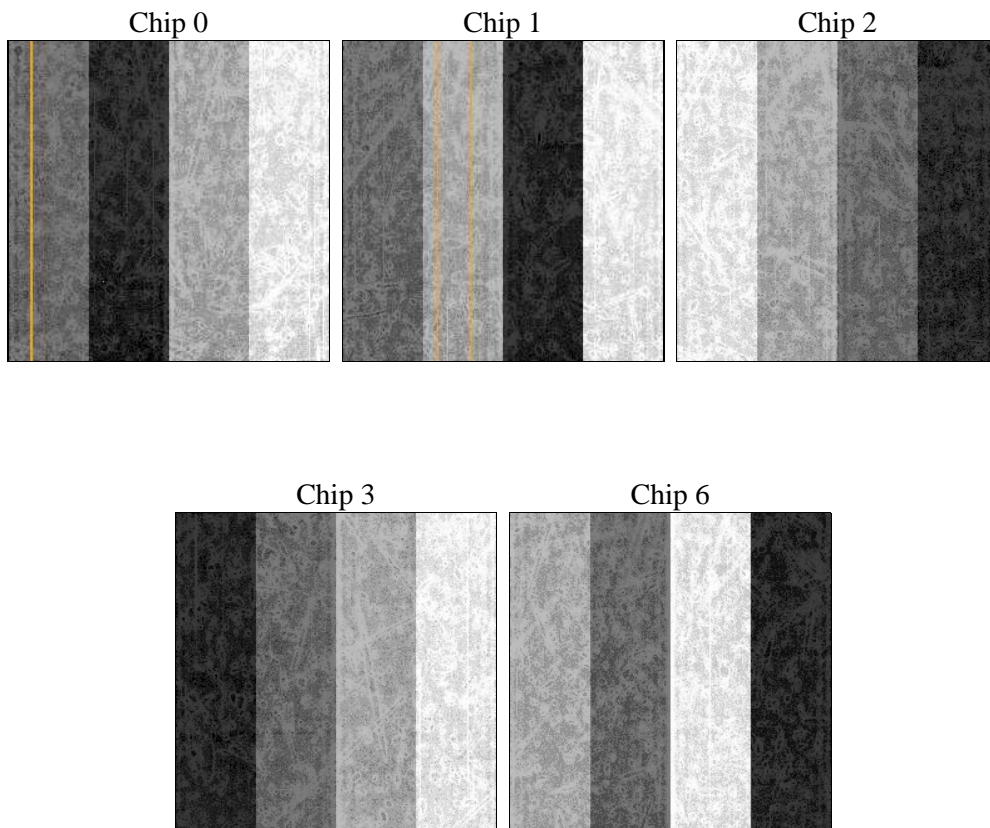
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	10.5	Processing system revision	ontime	9773.2960472107	Sum of GTIs [s]
caldbver	4.7.2	&#160	ontime0	9773.1729272604	Sum of GTIs [s]
date	2016-08-09T14:30:57	Date and time of file creation	ontime1	9773.2139672041	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	9770.1139671803	Sum of GTIs [s]
			ontime3	9773.2960472107	Sum of GTIs [s]
			ontime6	9773.1318871975	Sum of GTIs [s]
			l1events	309273	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	61847	59319	64035	62308	61764
rejected events	48840	51369	56762	51768	52138
rejected %	78%	86%	88%	83%	84%

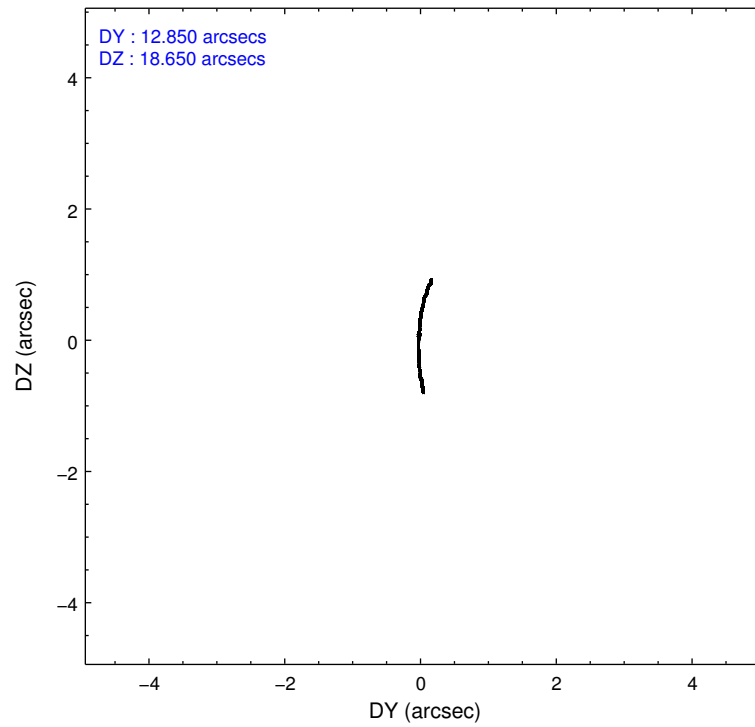
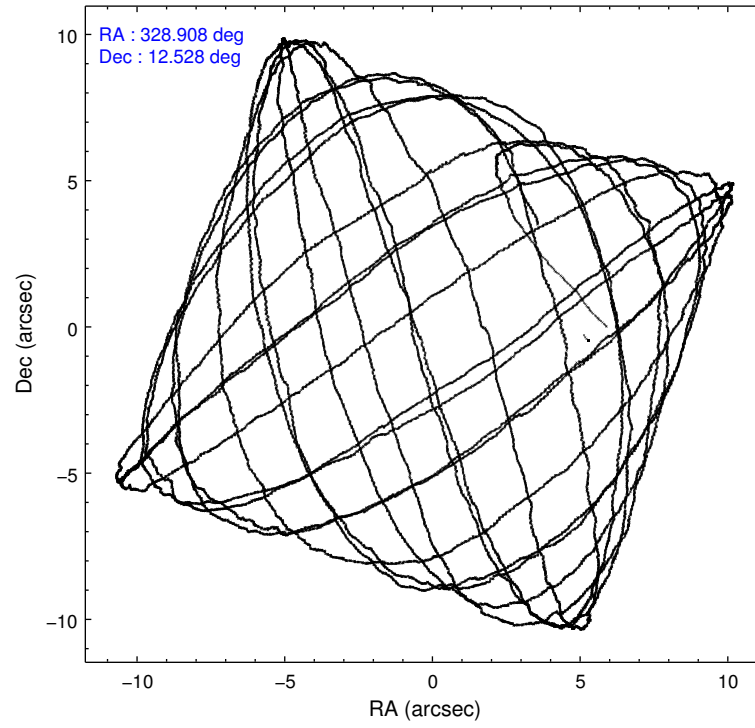
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	8382	2926	2830	5575	4913
	13%	4%	4%	8%	7%
grade 1 events	67	41	49	49	37
	0%	0%	0%	0%	0%
grade 2 events	1741	1949	1737	1862	1600
	2%	3%	2%	2%	2%
grade 3 events	738	727	693	797	724
	1%	1%	1%	1%	1%
grade 4 events	658	745	702	794	728
	1%	1%	1%	1%	1%
grade 5 events	2613	2850	2455	3137	3117
	4%	4%	3%	5%	5%
grade 6 events	1493	1607	1312	1516	1667
	2%	2%	2%	2%	2%
grade 7 events	46155	48474	54257	48578	48978
	74%	81%	84%	77%	79%

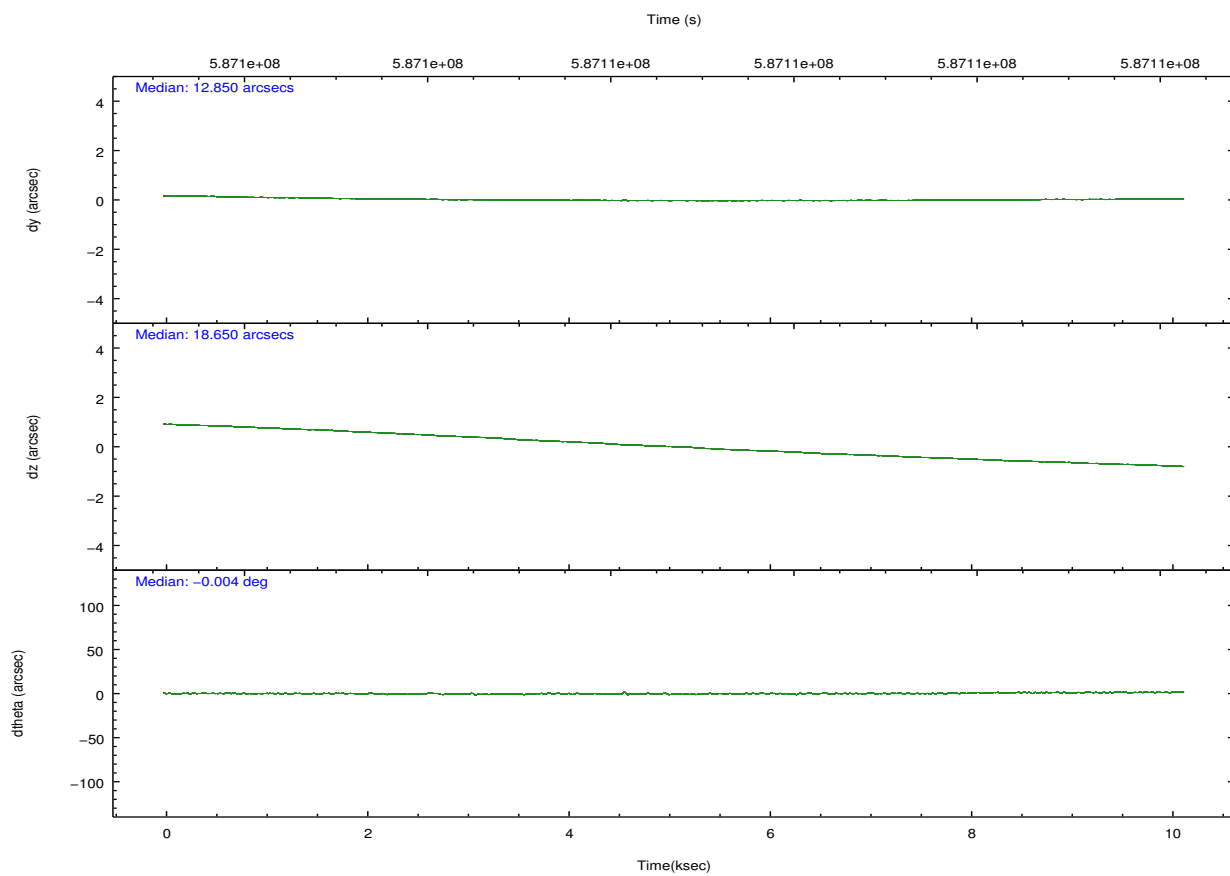
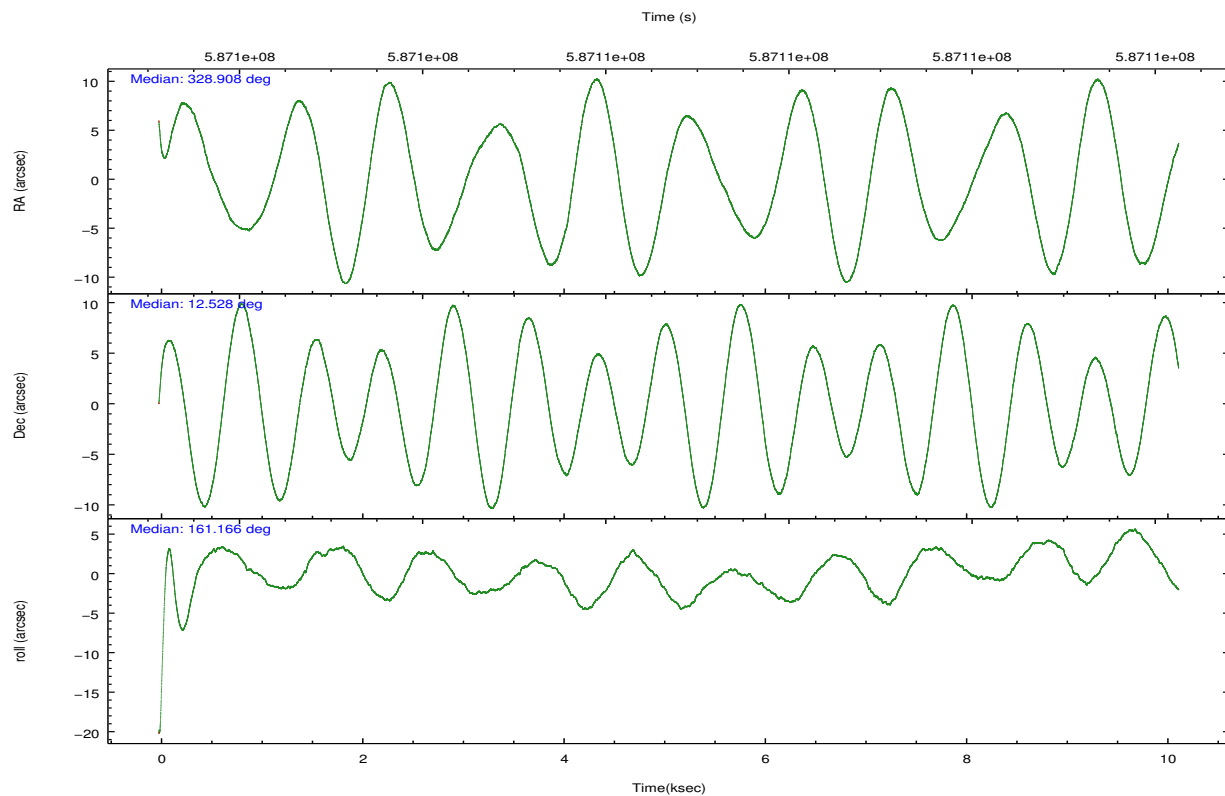


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	328.935315	328.9076107975935	CCD I2 on	Y	Y
[deg] Pointing Dec	12.533602	12.52817841776235	CCD I3 on	Y	Y
[deg] Pointing Roll	160.954250	161.1689181446425	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	O1	Y
[mm] SIM translation stage pos	-230.667463	-230.6733430263207	CCD S3 on	N	N
[mm] SIM translation stage offset	-2.925	-2.919109976609036	CCD S4 on	N	N
[s] Observation start time (MET)	587101739.184000	587100495.39184	CCD S5 on	N	N
Observation start date	2016-08-09T03:47:51	2016-08-09T03:28:15	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	587111739.184000	587112156.81751	On-chip summing requested	N	N
Observation end date	2016-08-09T06:34:31	2016-08-09T06:42:36	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



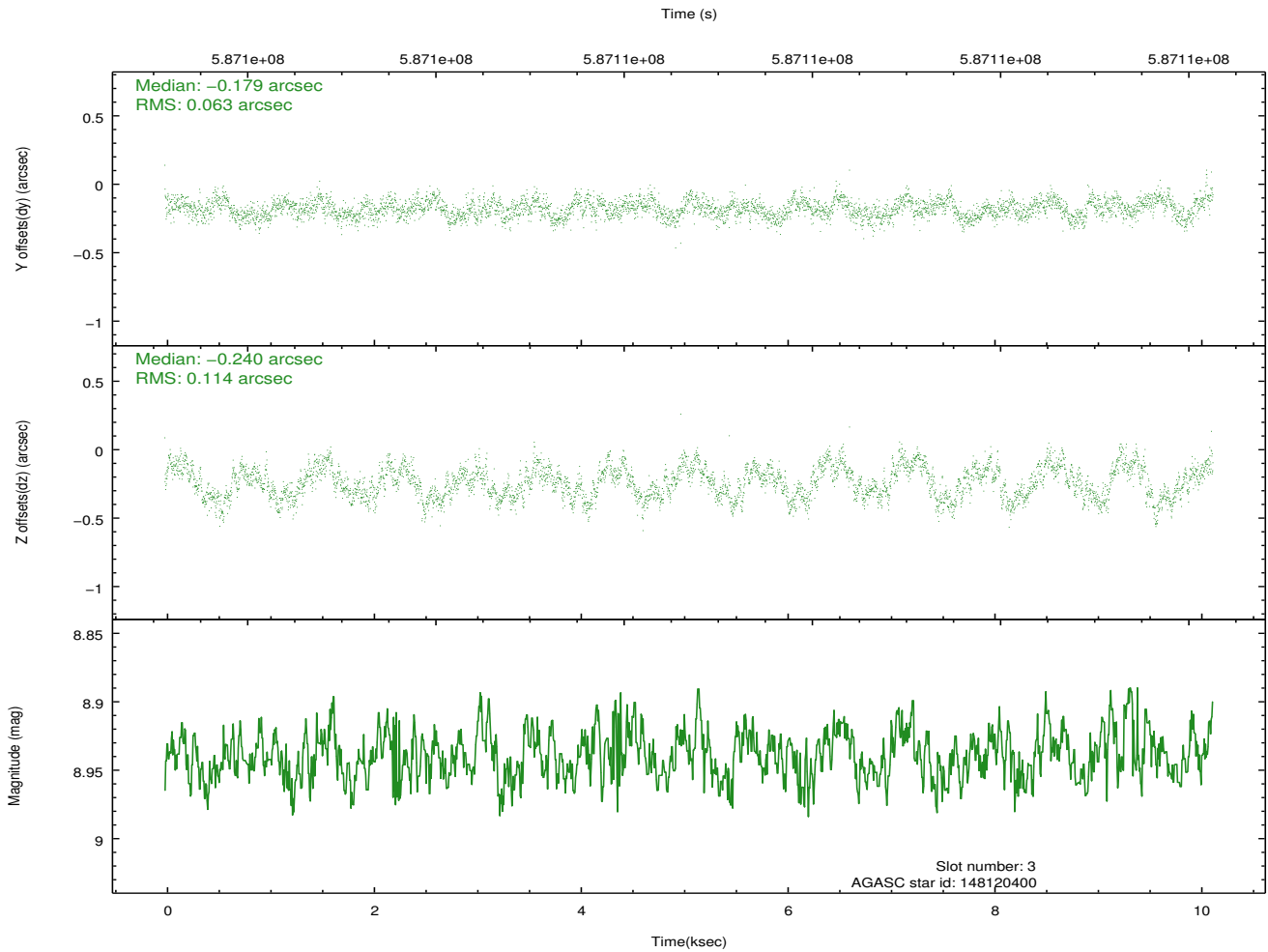
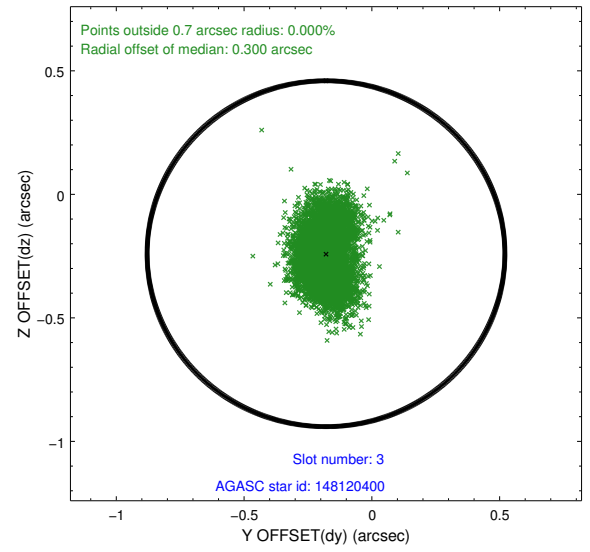
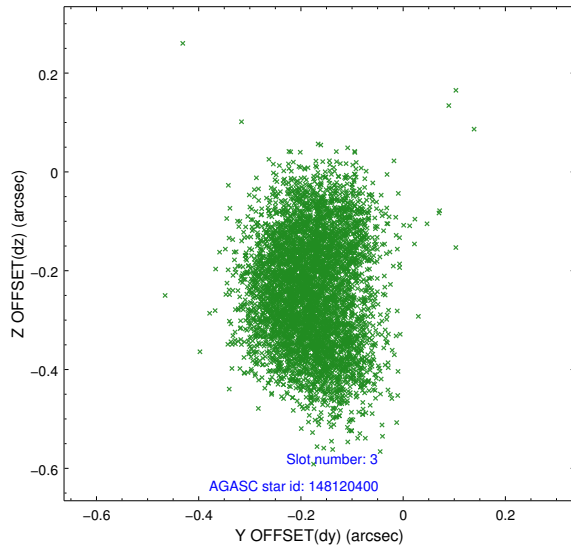


### Slot Statistics

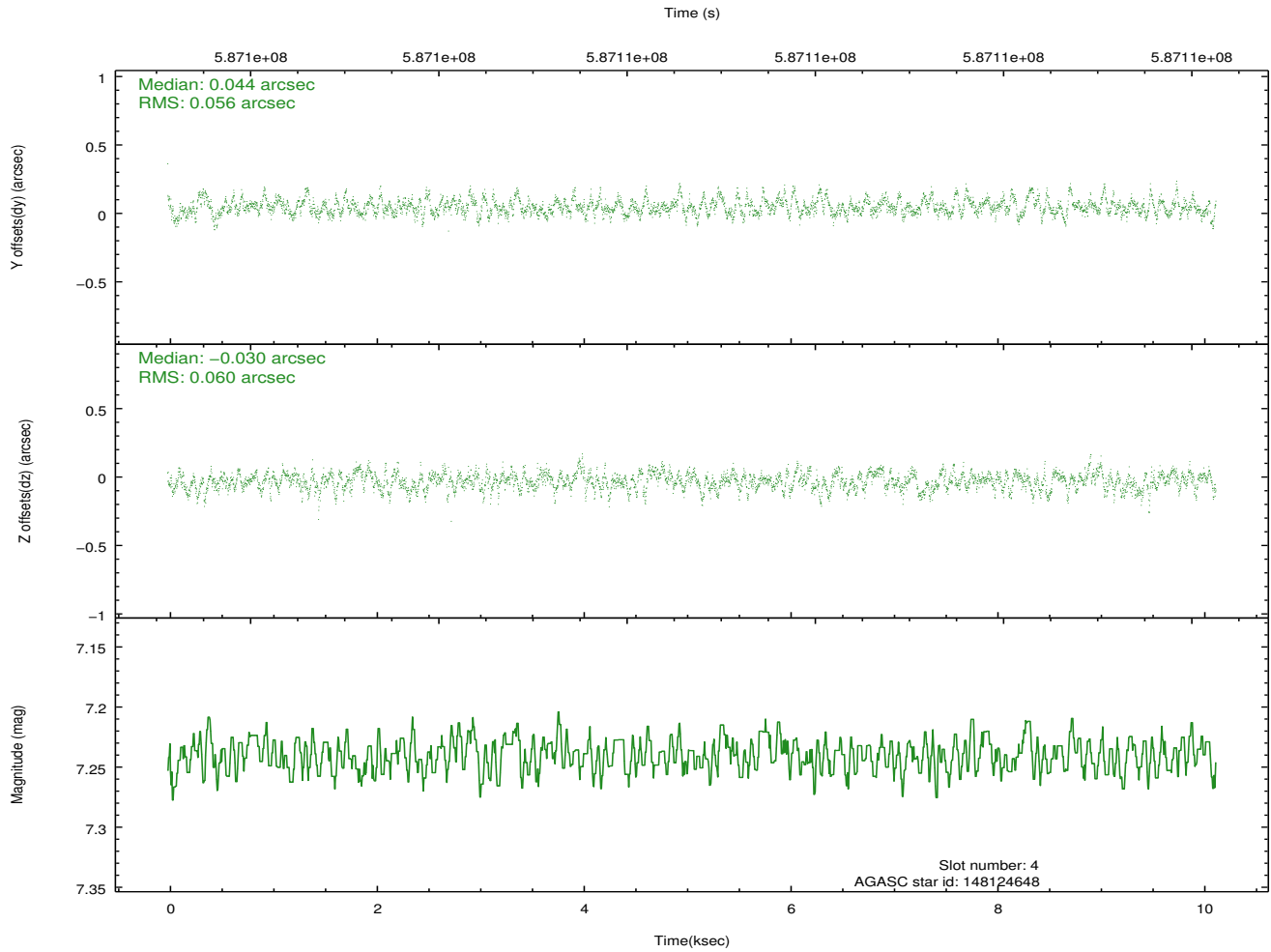
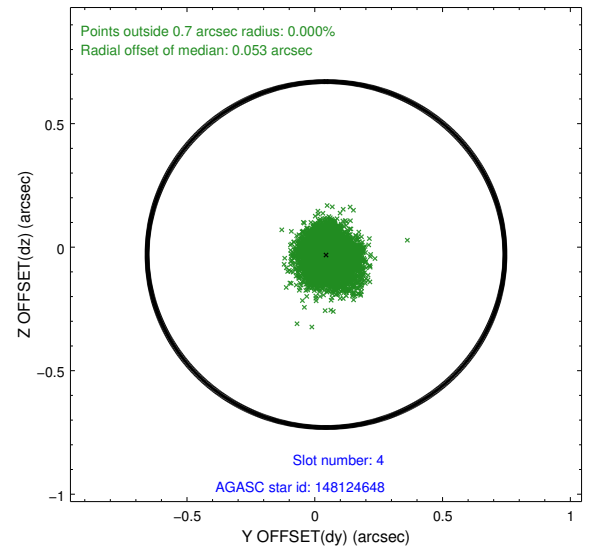
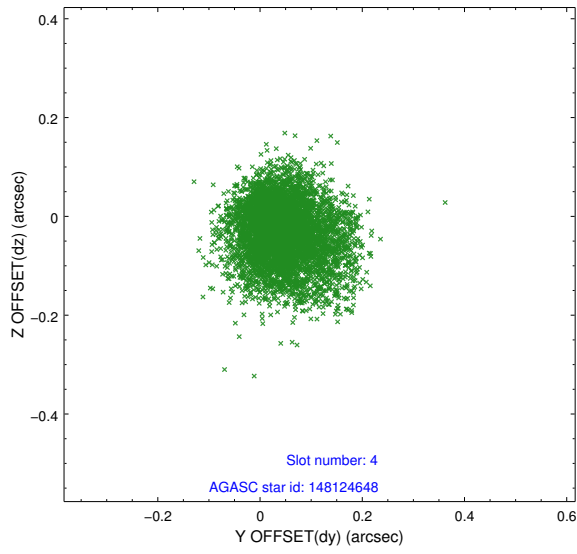
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.08	2472	0.073	-0.012	0.012	0.028	0.000000	0.000000	926.70	-902.22
1	FID		ACIS-I-5	7.07	2472	-0.313	0.051	0.011	0.017	0.000000	0.000000	-1821.58	994.94
2	FID		ACIS-I-6	7.08	2472	0.151	0.029	0.017	0.033	0.000000	0.000000	391.65	1640.11
3	GUIDE	used	148120400	8.94	4939	-0.179	-0.240	0.139	0.220	328.656487	12.253007	597.70	1274.66
4	GUIDE	used	148124648	7.24	4943	0.044	-0.030	0.087	0.143	329.126515	12.658784	-487.45	-644.56
5	GUIDE	used	148125808	8.69	4943	0.044	0.283	0.086	0.138	329.285517	12.553826	-1139.06	-470.63
6	GUIDE	used	149816008	8.86	4942	0.088	0.126	0.102	0.164	329.570399	12.682296	-1932.80	-1236.07
7	GUIDE	used	149826176	7.90	4943	-0.000	-0.139	0.095	0.156	329.405983	11.947282	-2255.61	1452.88

## 2.4 Star Slots

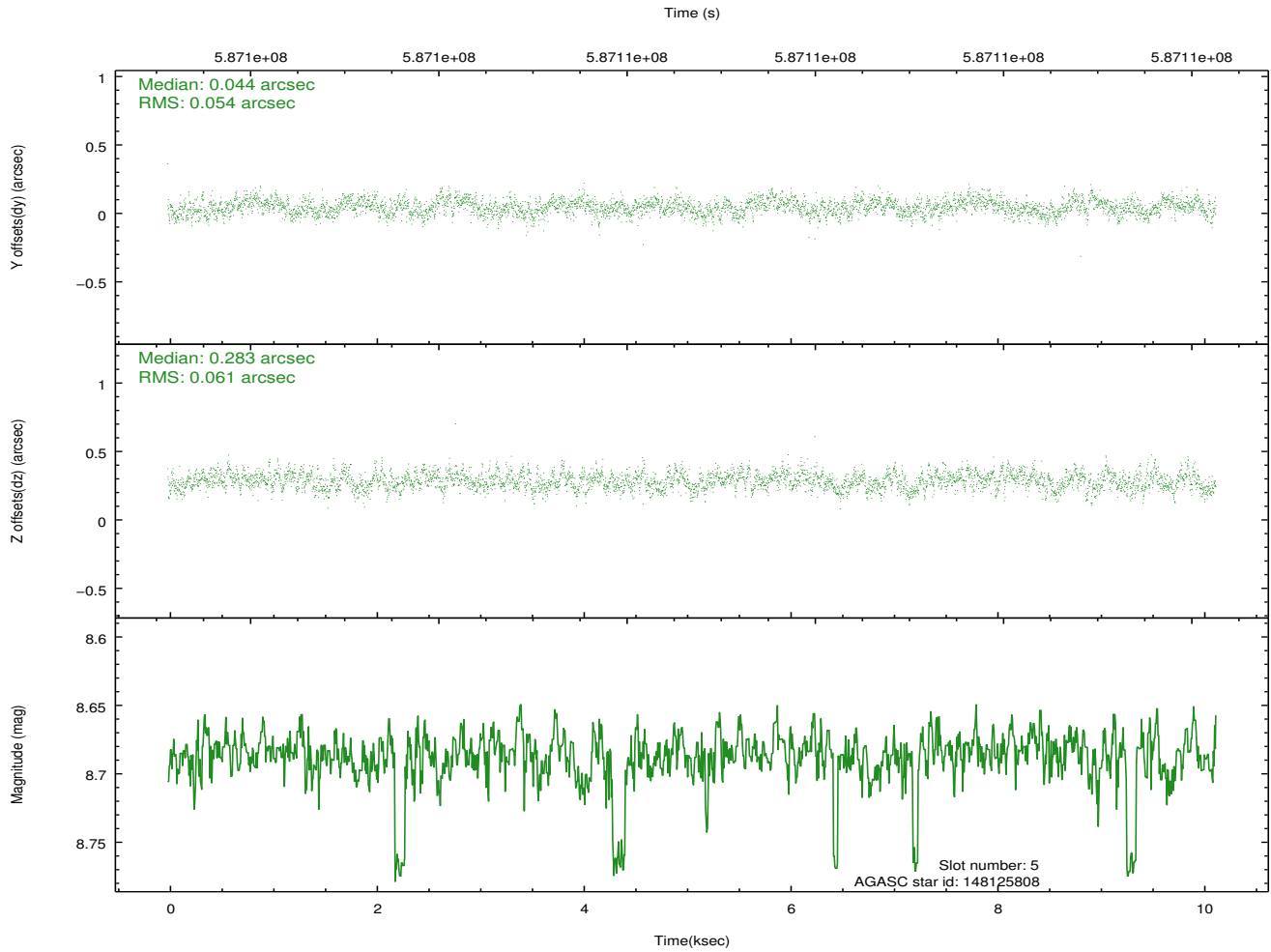
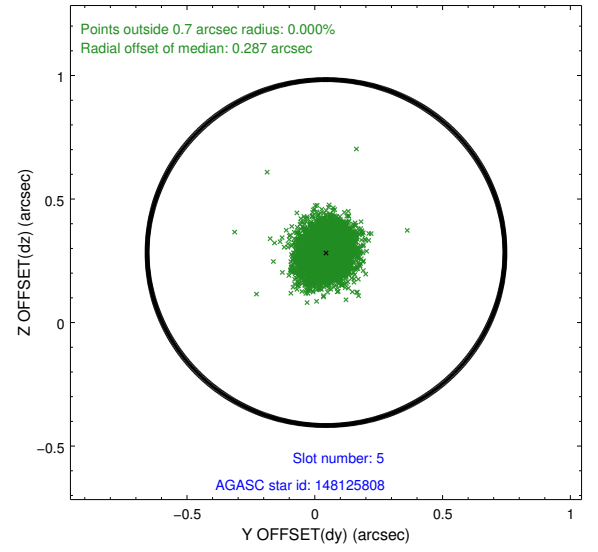
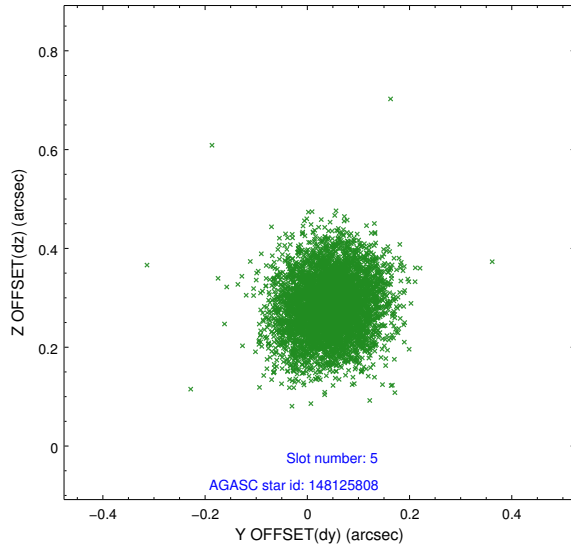
### 2.4.1 Slot 3



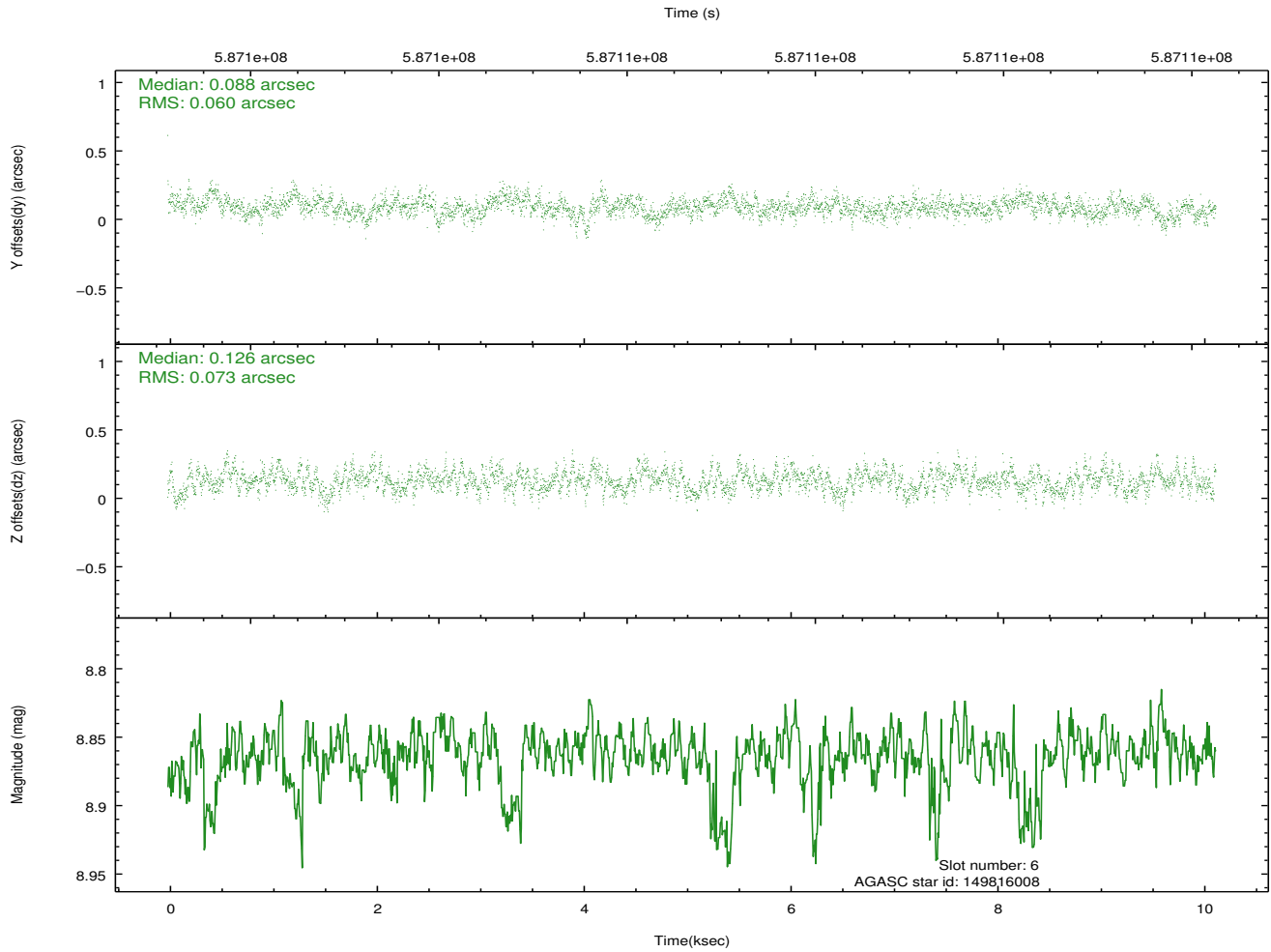
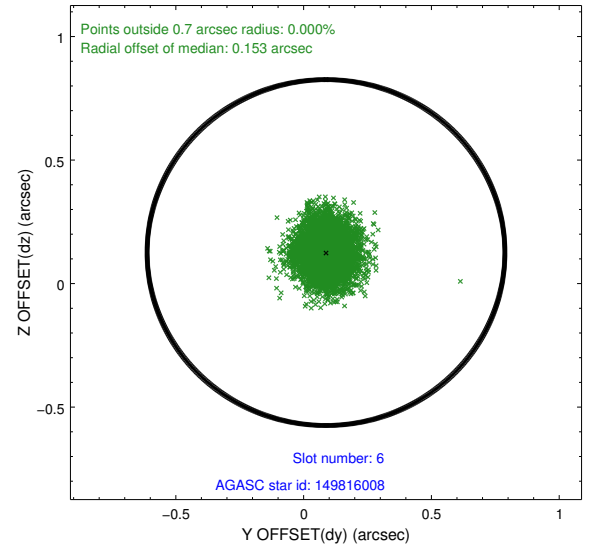
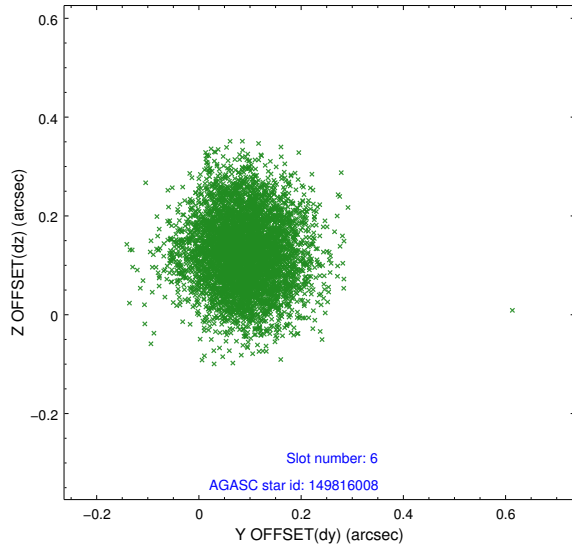
## 2.4.2 Slot 4



### 2.4.3 Slot 5

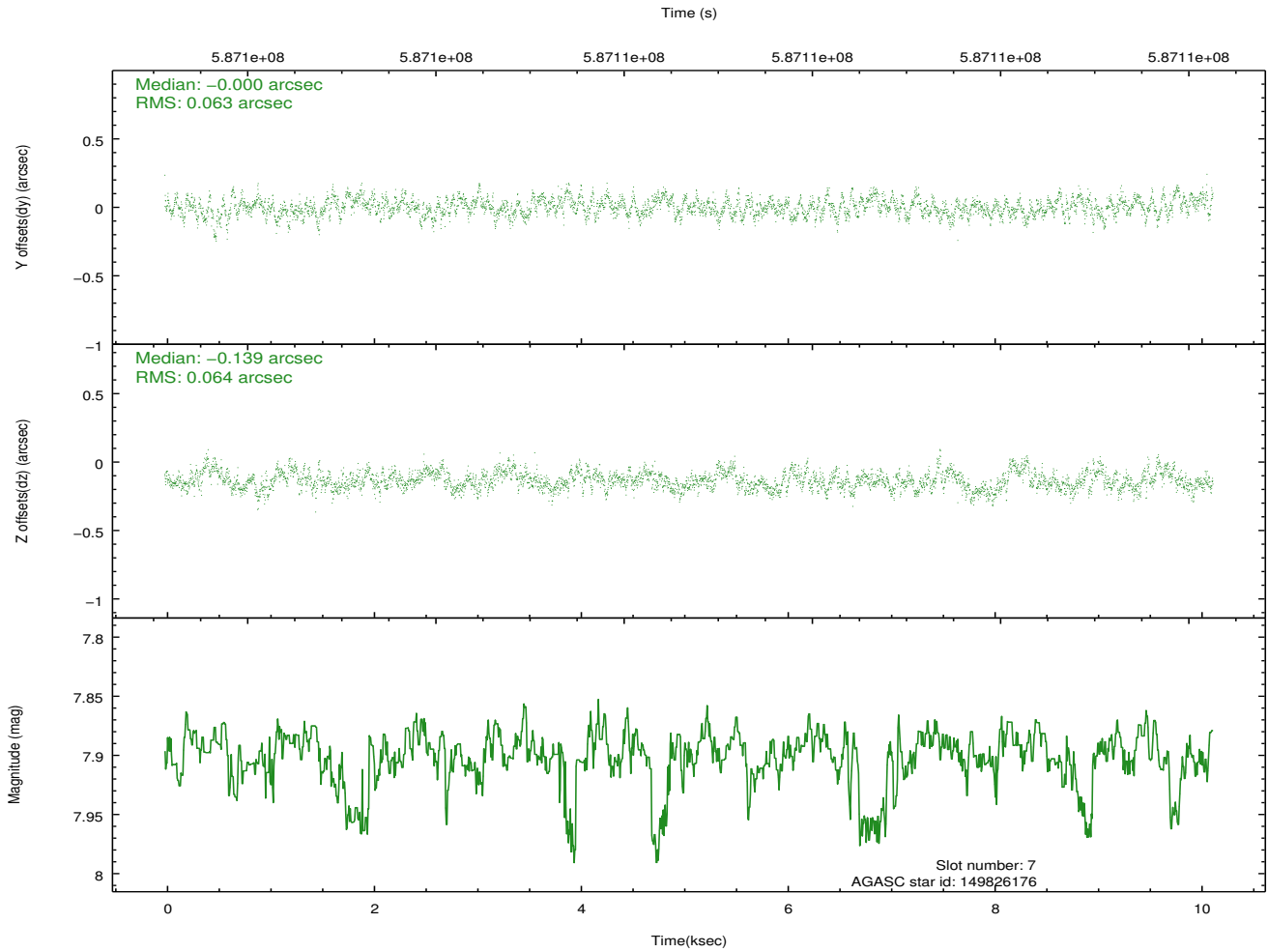
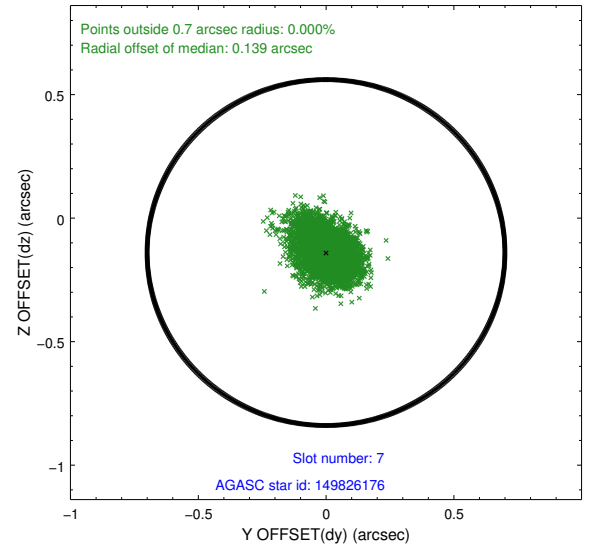
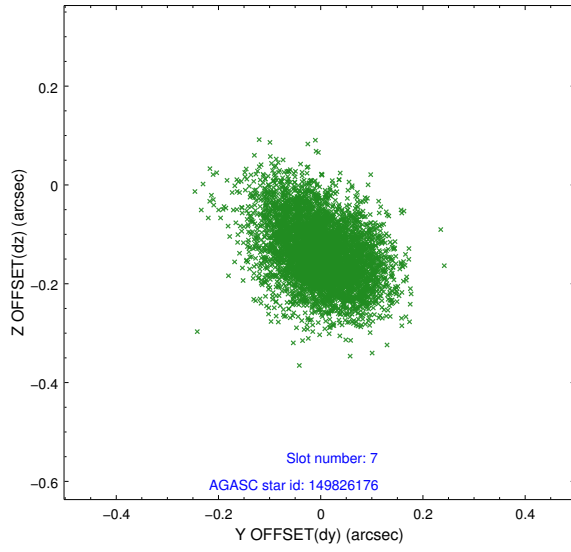


## 2.4.4 Slot 6



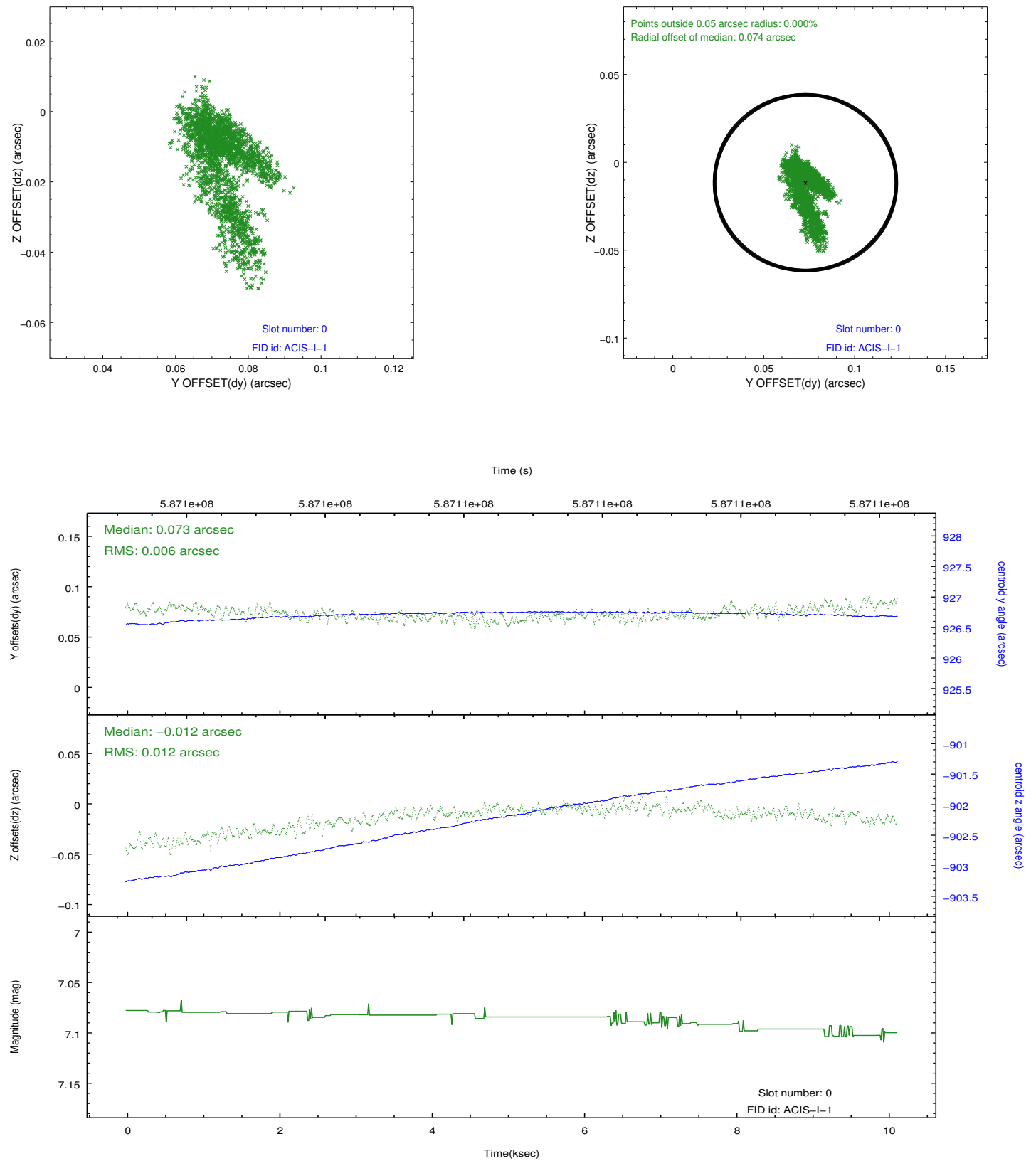


## 2.4.5 Slot 7

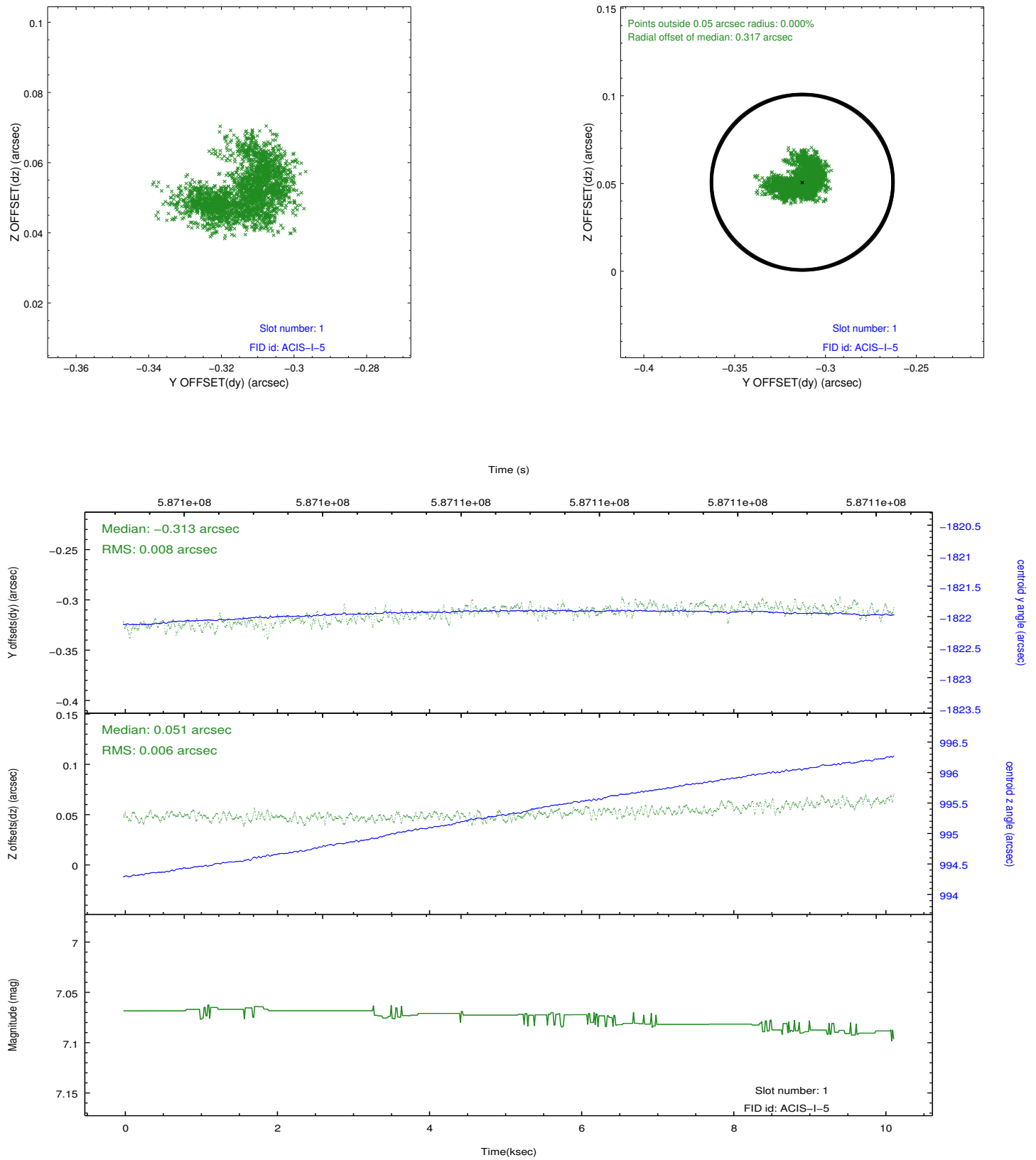


## 2.5 FID Slots

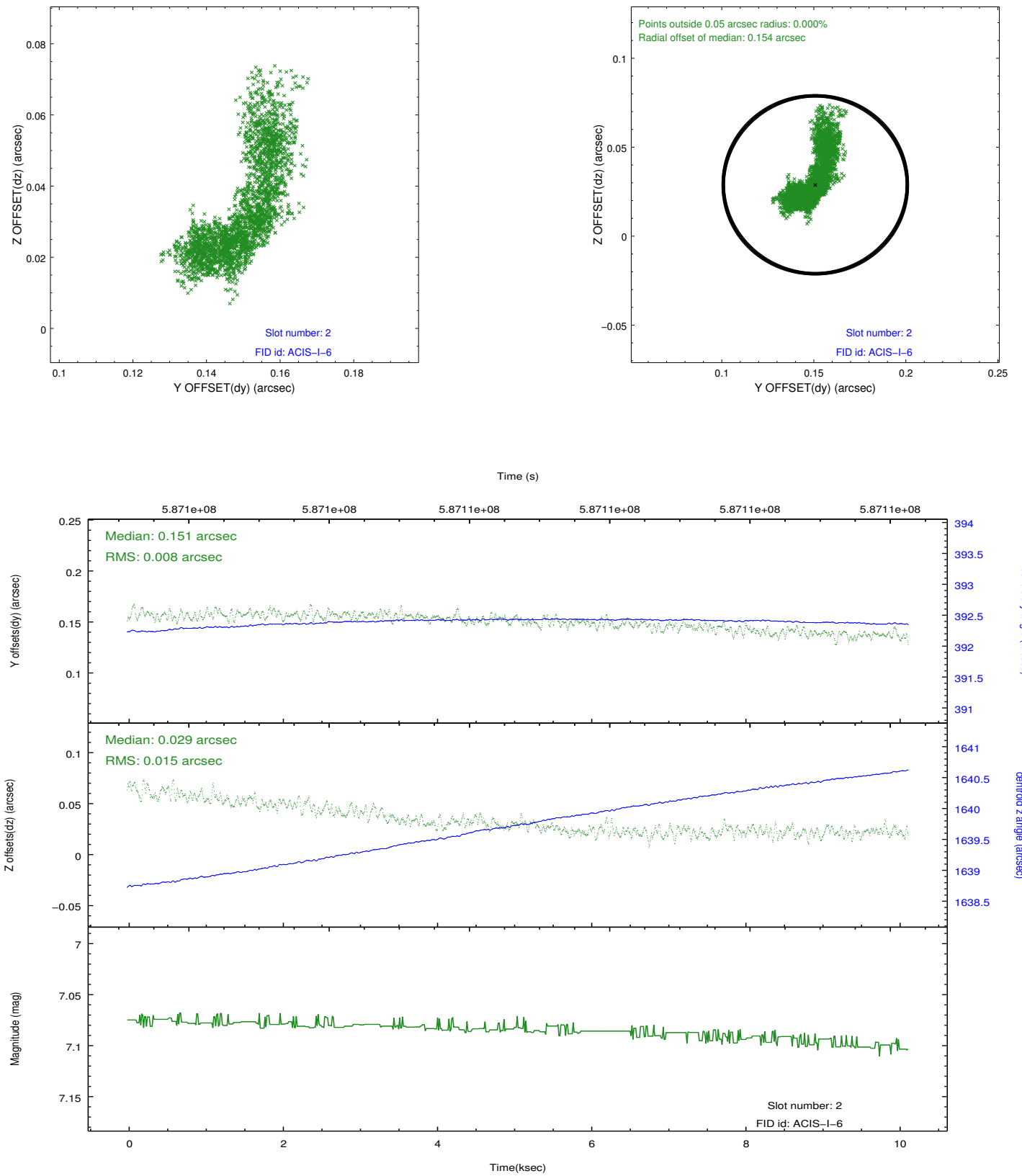
### 2.5.1 Slot 0



## 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)	2016.08.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.7732960472107

### A.2 Comments