

# V&V Reference Report

## L2 ASCDS Version : 10.2.2

Observation 16057 - L2 Version 2  
Chandra X-Ray Center

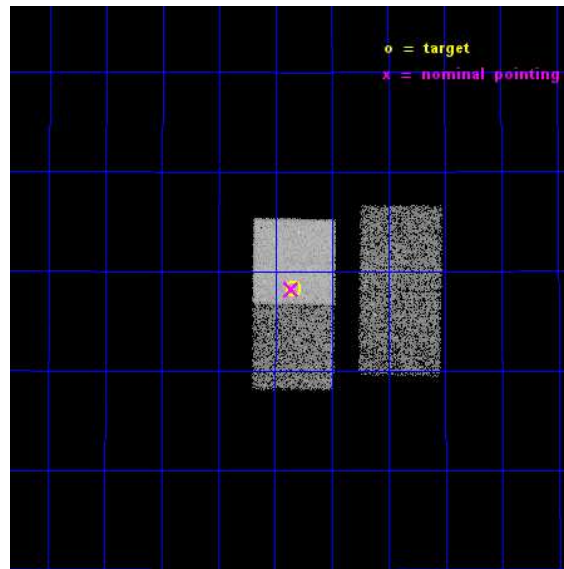
L2 Processing Date : Dec 11 2014

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# 1 Front

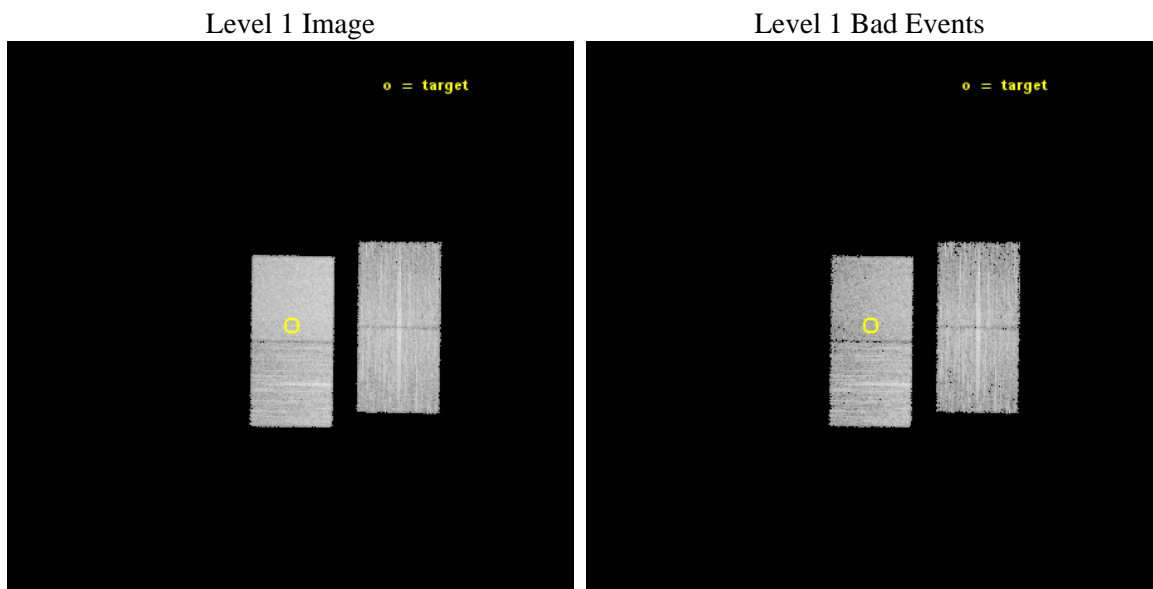
seq_num	702951	Sequence number
obs_id	16057	Observation id
title	Continuing the Chandra 3CR Snapshot Survey: 23 Radio Sources with 0.5	Proposal title
observer	Dr. Francesco Massaro	Principal investigator
object	3C217	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	137.210833	Observer's specified target RA [deg]
dec_targ	37.805333	Observer's specified target Dec [deg]
ra_nom	137.21410601362	Nominal RA [deg]
dec_nom	37.803713930862	Nominal Dec [deg]
roll_nom	270.69407440534	Nominal Roll [deg]
revision	2	Processing version of data
ontime	12077.600092888	Sum of GTIs [s]
livetime	11919.797356274	Livetime [s]
ontime2	12074.459122539	Sum of GTIs [s]
ontime3	12074.459112465	Sum of GTIs [s]
ontime6	12077.600092888	Sum of GTIs [s]
ontime7	12077.600092888	Sum of GTIs [s]
l2events	52740	Number of level 2 events



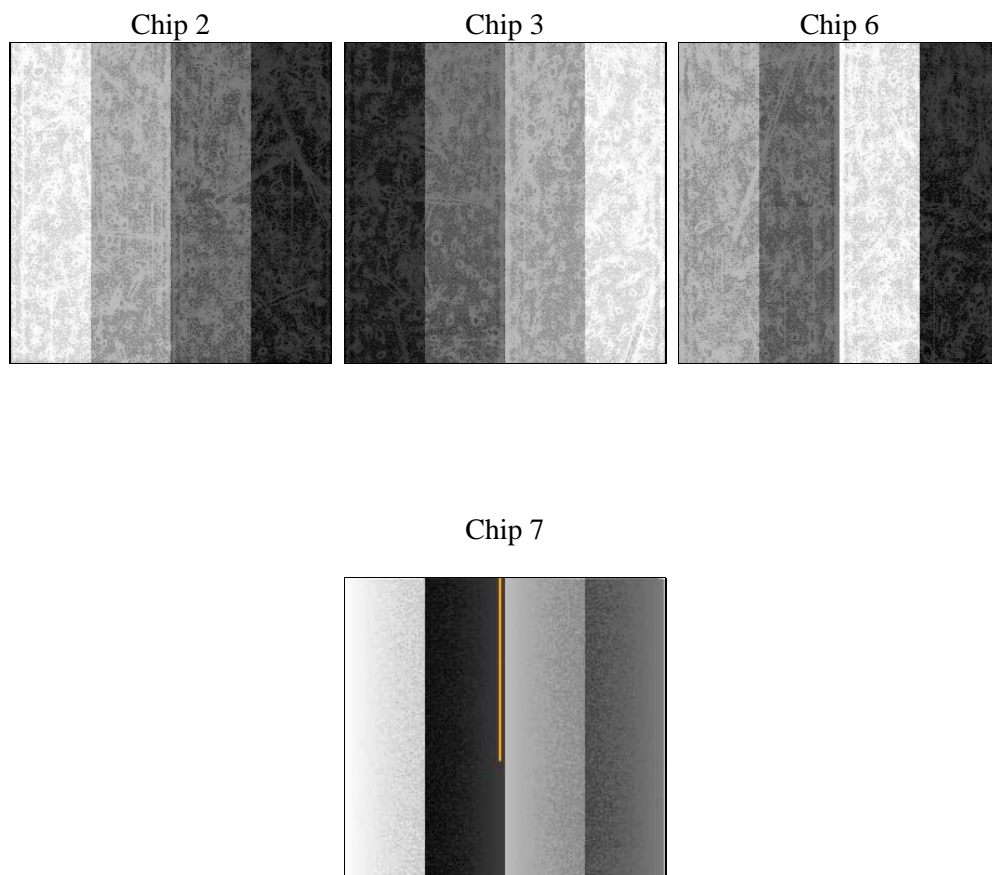
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	12000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	12077.600092888	Sum of GTIs [s]
caldsver	4.6.4	&#160	ontime2	12074.459122539	Sum of GTIs [s]
date	2014-12-12T02:45:50	Date and time of file creation	ontime3	12074.459112465	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	12077.600092888	Sum of GTIs [s]
			ontime7	12077.600092888	Sum of GTIs [s]
			l1events	255341	Number of level 1 events

### 2.1.4 Events

	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	58323	54522	60711	81785
rejected events	51392	47913	53387	46129
rejected %	88%	87%	87%	56%

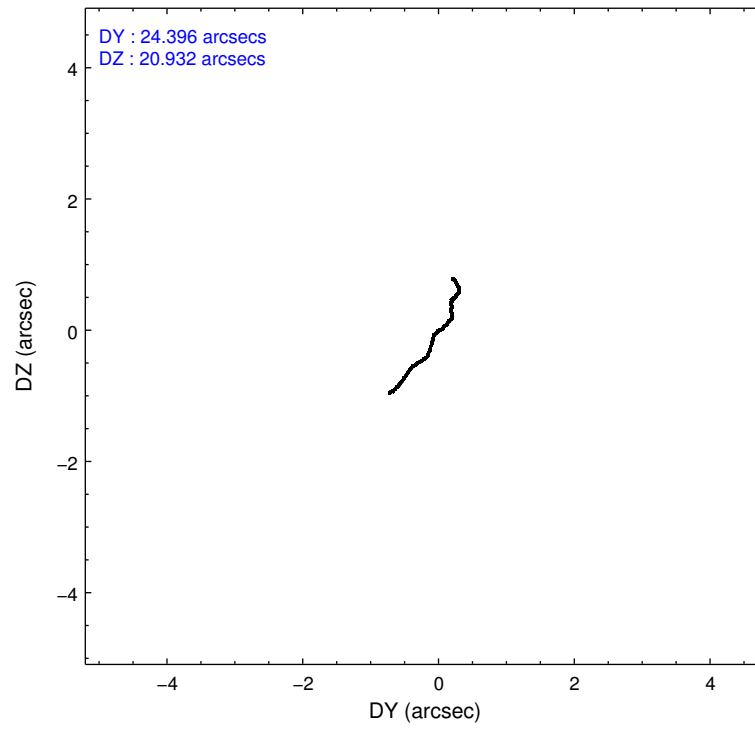
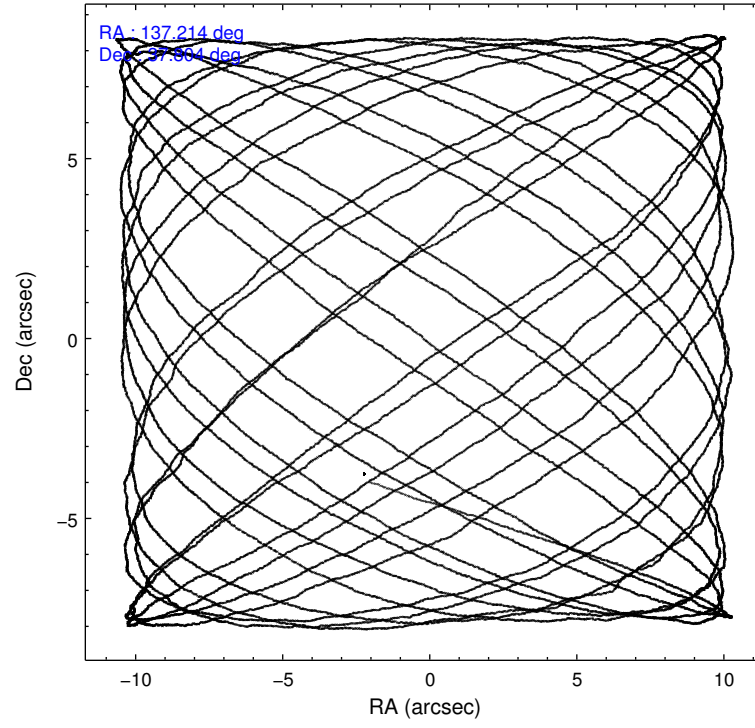
	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	2408	2246	2589	3217
	4%	4%	4%	3%
grade 1 events	36	30	24	103
	0%	0%	0%	0%
grade 2 events	1821	1477	1658	7356
	3%	2%	2%	8%
grade 3 events	660	721	707	3060
	1%	1%	1%	3%
grade 4 events	667	745	721	2958
	1%	1%	1%	3%
grade 5 events	2503	3116	3185	8469
	4%	5%	5%	10%
grade 6 events	1377	1427	1654	19082
	2%	2%	2%	23%
grade 7 events	48851	44760	50173	37540
	83%	82%	82%	45%

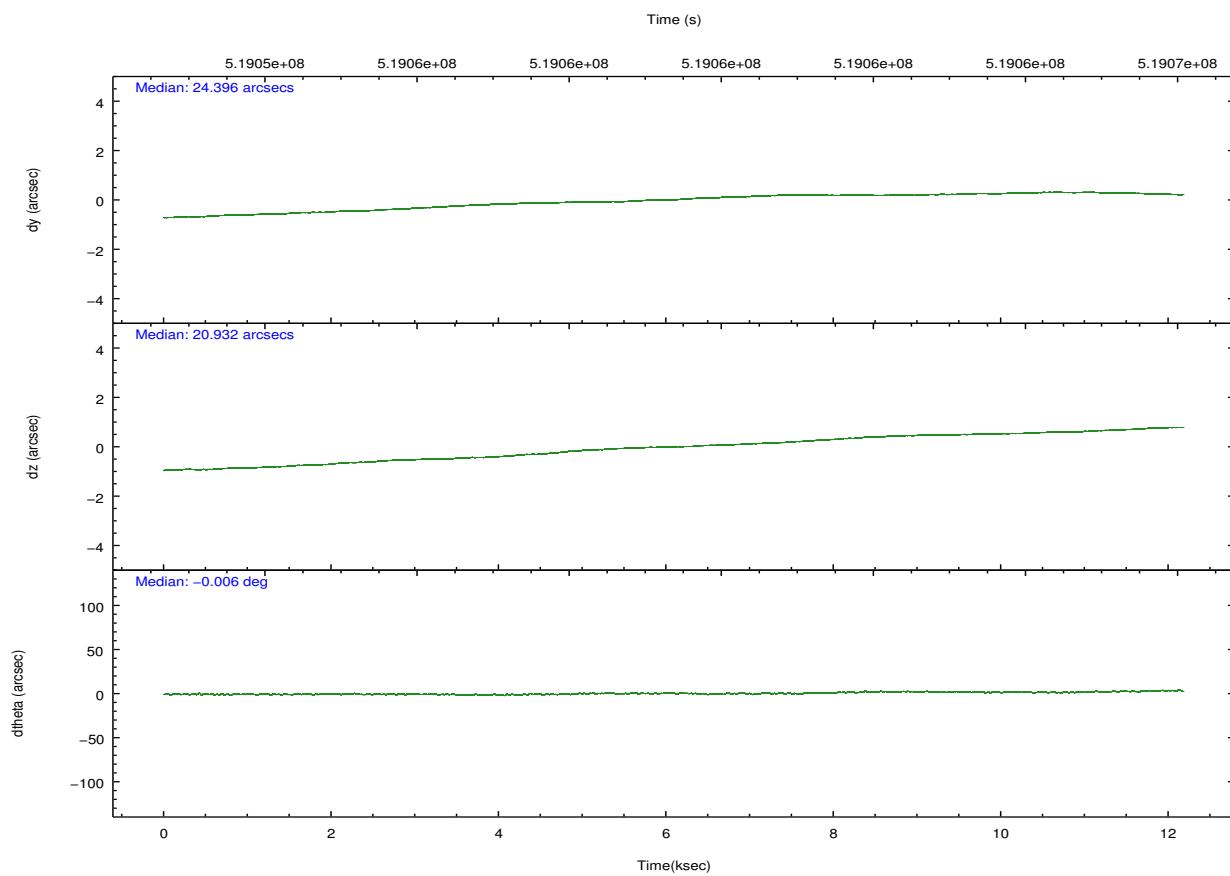
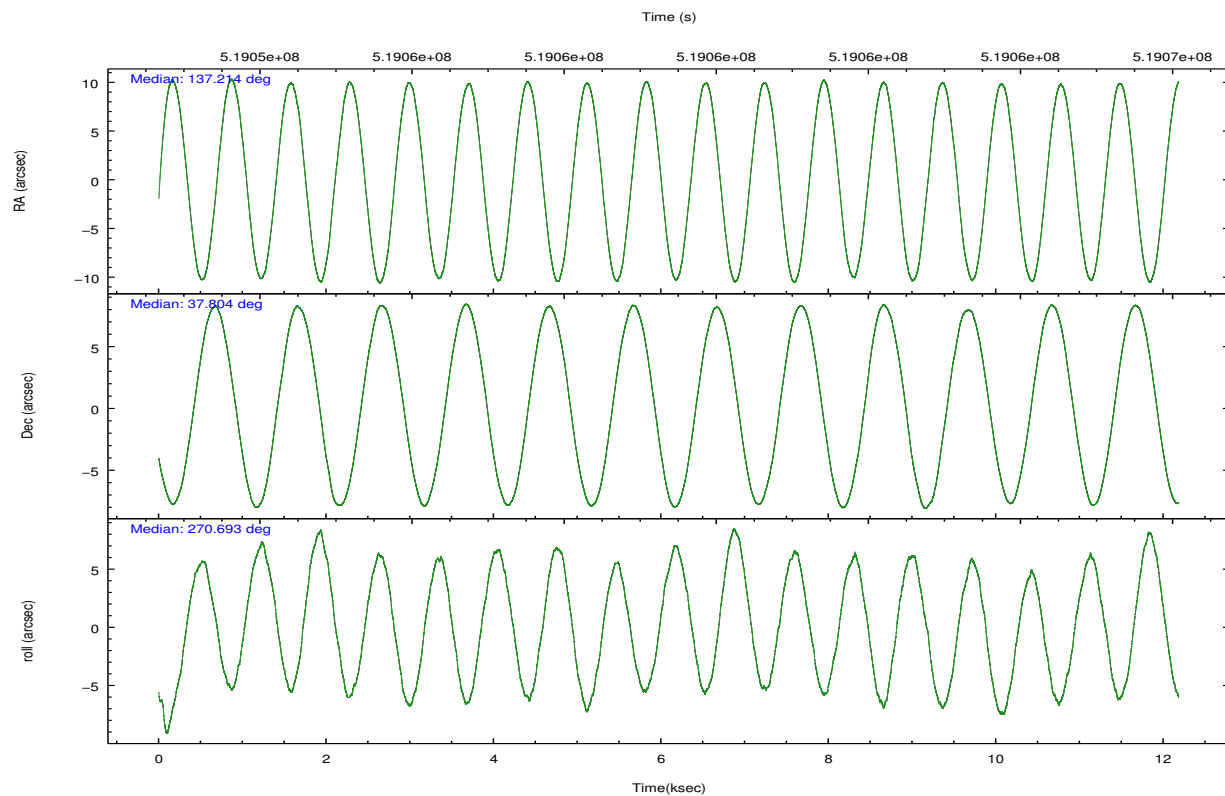


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-2367	ACIS-2367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	137.196015	137.2141060136165	CCD I2 on	O1	Y
[deg] Pointing Dec	37.827050	37.803713930862	CCD I3 on	O2	Y
[deg] Pointing Roll	270.548542	270.6940744053376	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	N	N
[s] Observation start time (MET)	519053466.184000	519052392.62282	CCD S5 on	N	N
Observation start date	2014-06-13T13:29:59	2014-06-13T13:13:12	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	519065466.184000	519066223.46109	On-chip summing requested	N	N
Observation end date	2014-06-13T16:49:59	2014-06-13T17:03:43	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



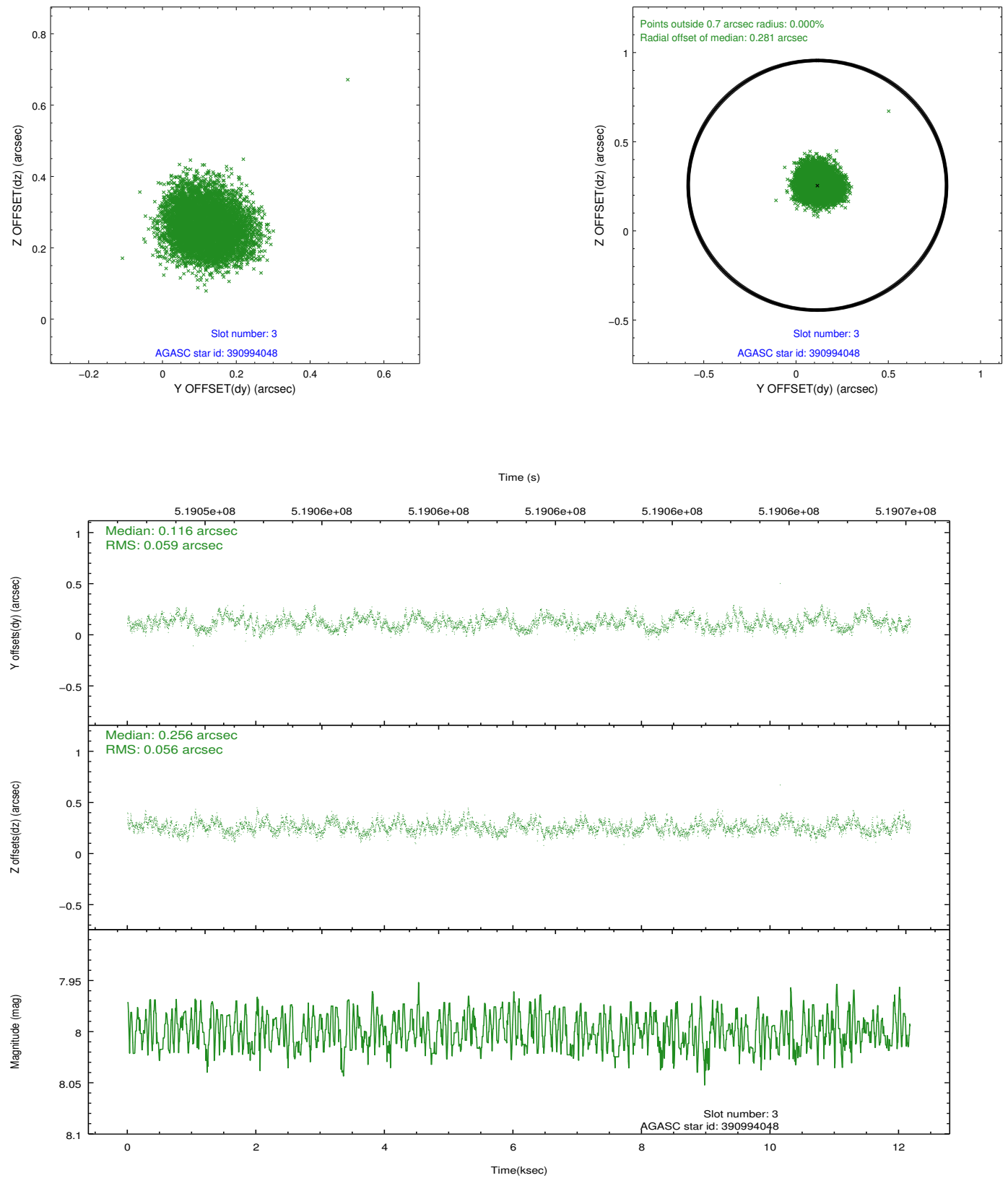


### Slot Statistics

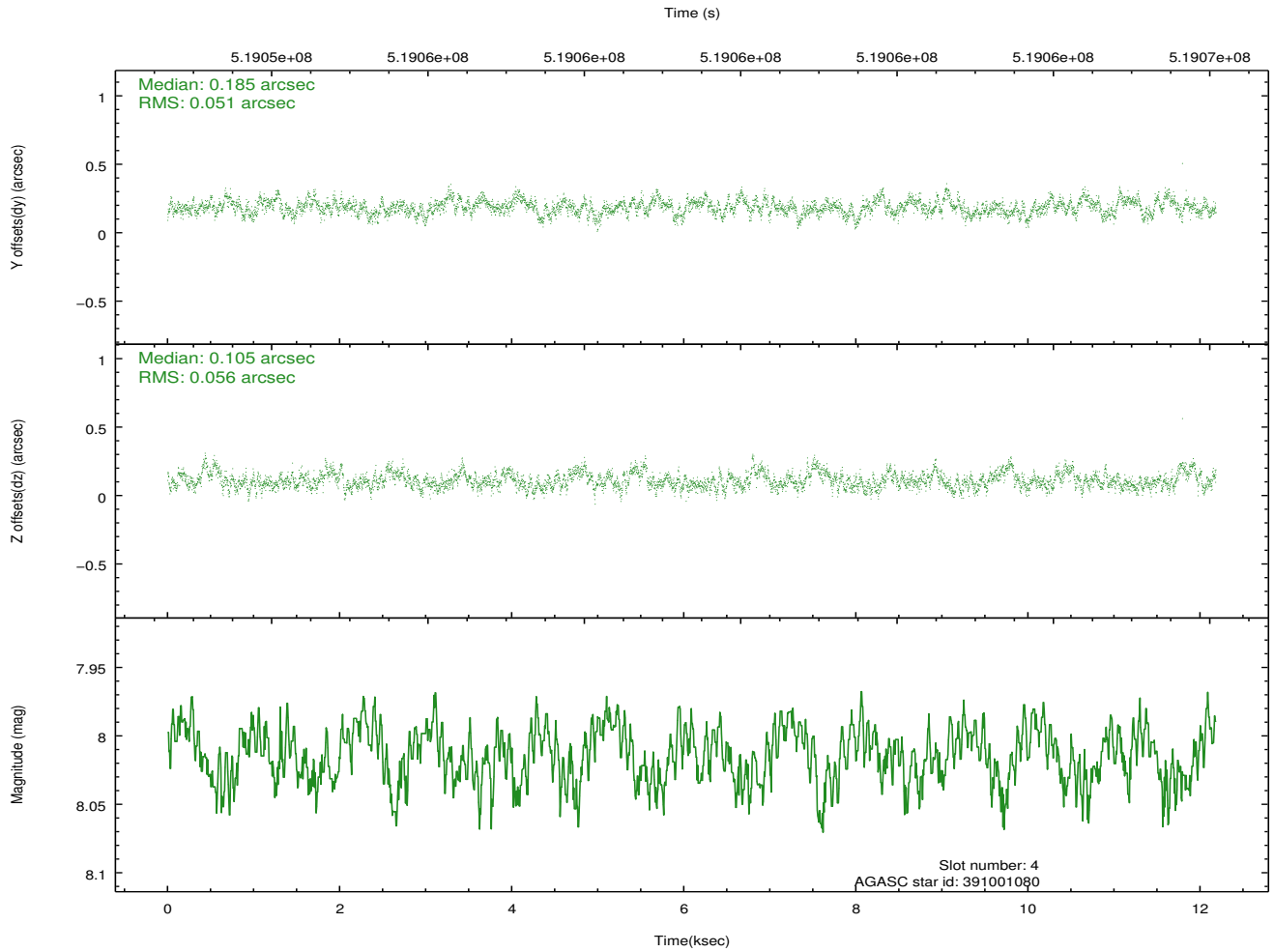
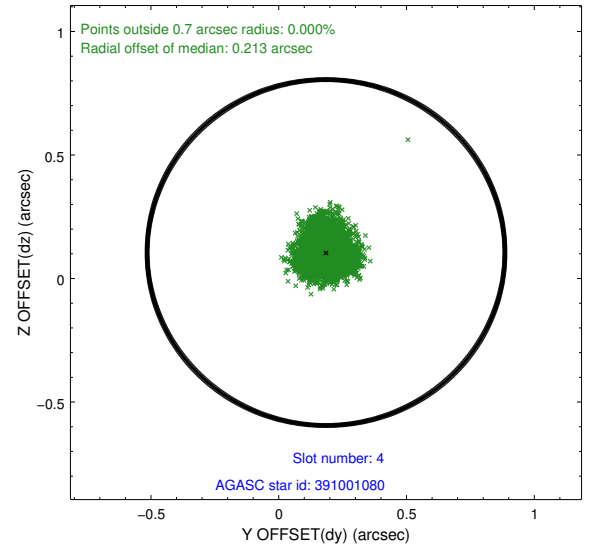
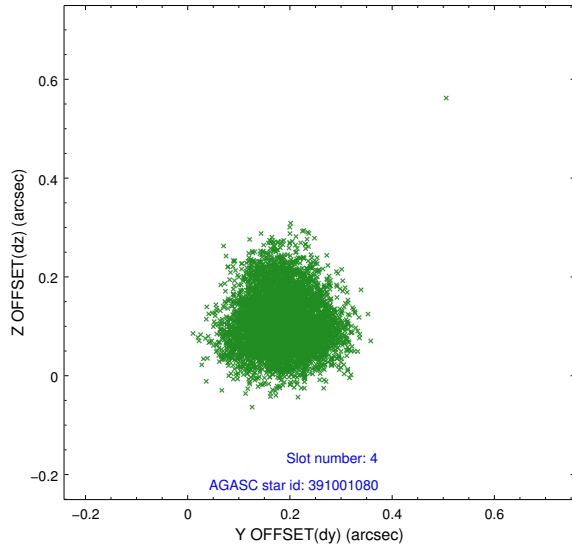
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-1	7.07	2972	-0.005	-0.048	0.011	0.025	0.000000	0.000000	918.48	-1738.04
1	FID		ACIS-S-4	7.09	2972	0.285	0.041	0.014	0.022	0.000000	0.000000	2136.38	165.79
2	FID		ACIS-S-5	7.11	2972	-0.305	0.019	0.011	0.019	0.000000	0.000000	-1830.19	159.79
3	GUIDE	used	390994048	8.00	5942	0.116	0.256	0.088	0.134	136.462352	38.438930	-2229.85	-2049.19
4	GUIDE	used	391001080	8.01	5944	0.185	0.105	0.081	0.129	136.639153	38.088619	-961.17	-1571.01
5	GUIDE	used	391121840	7.95	5943	-0.047	-0.014	0.089	0.148	137.690264	38.345514	-1856.65	1413.30
6	GUIDE	used	391128992	8.25	5941	-0.211	-0.133	0.066	0.106	137.658959	37.633702	705.01	1313.65
7	GUIDE	used	391129232	9.26	5932	-0.042	-0.211	0.137	0.215	138.004774	37.530659	1079.54	2298.85

## 2.4 Star Slots

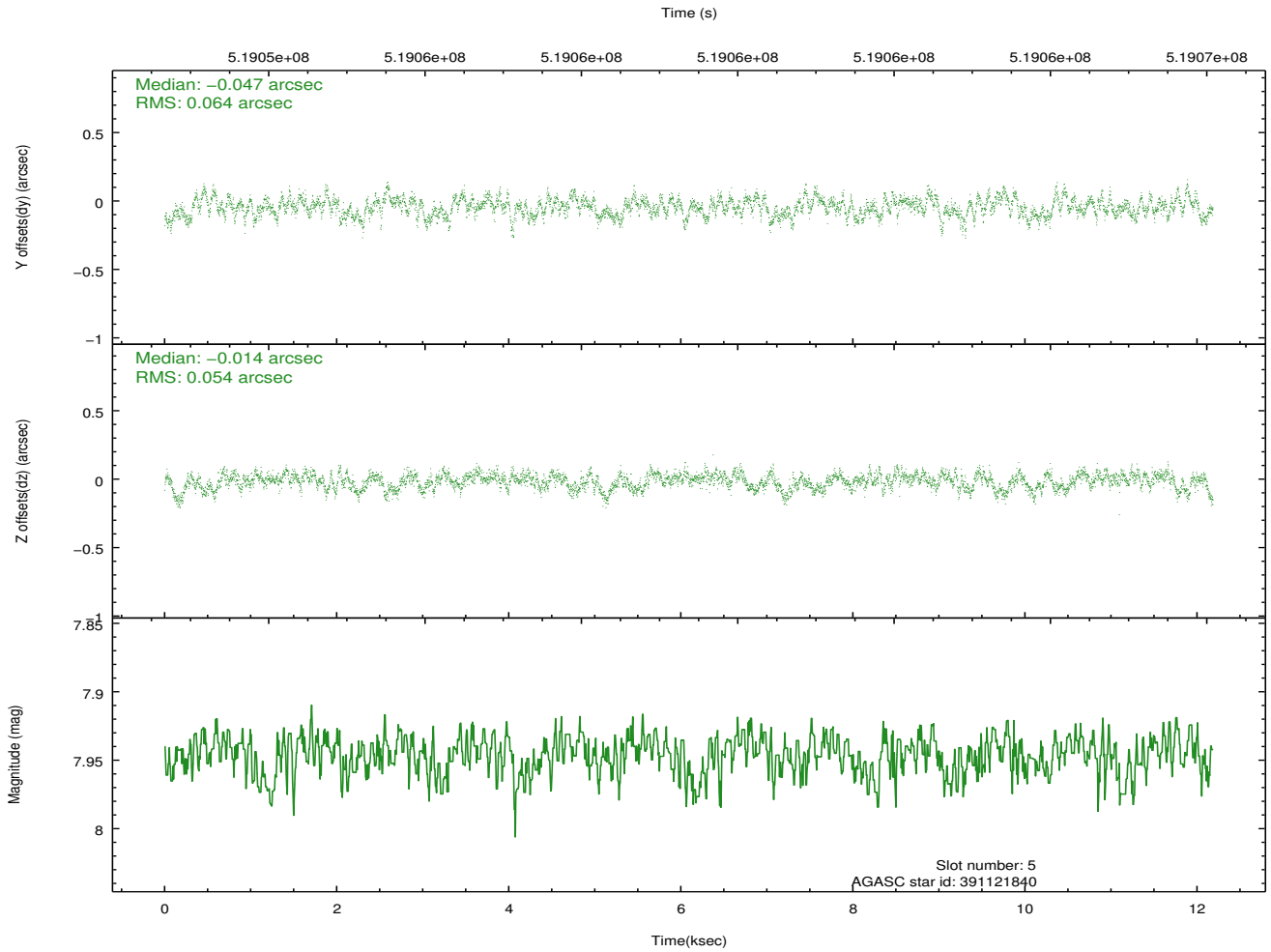
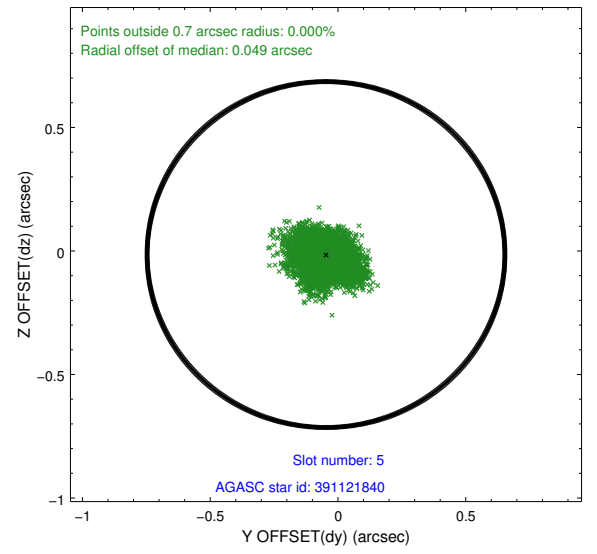
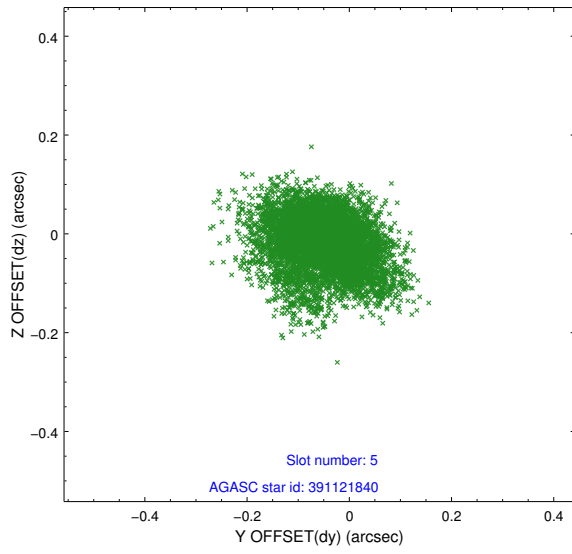
### 2.4.1 Slot 3



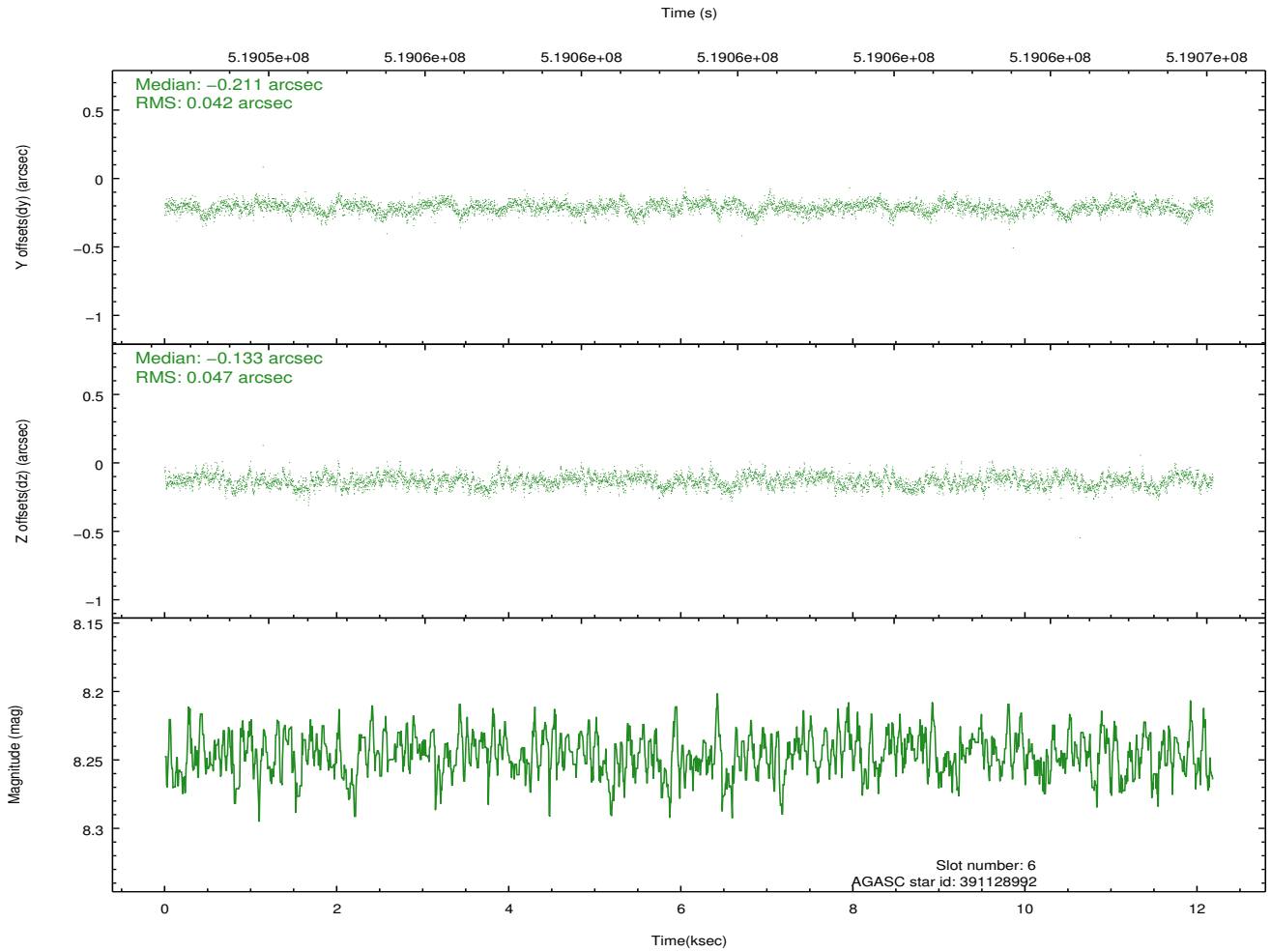
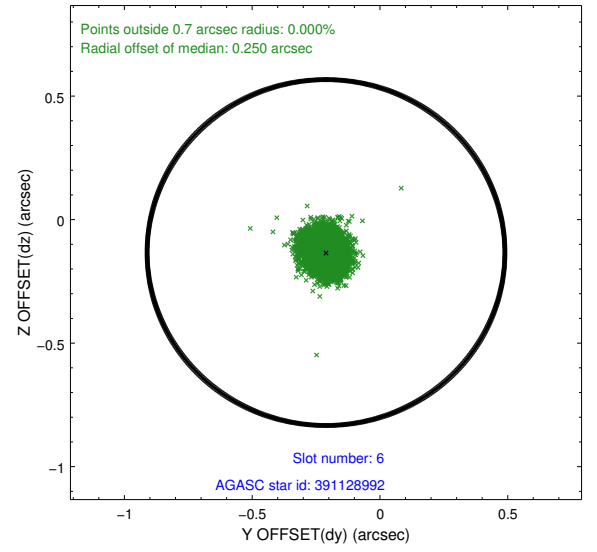
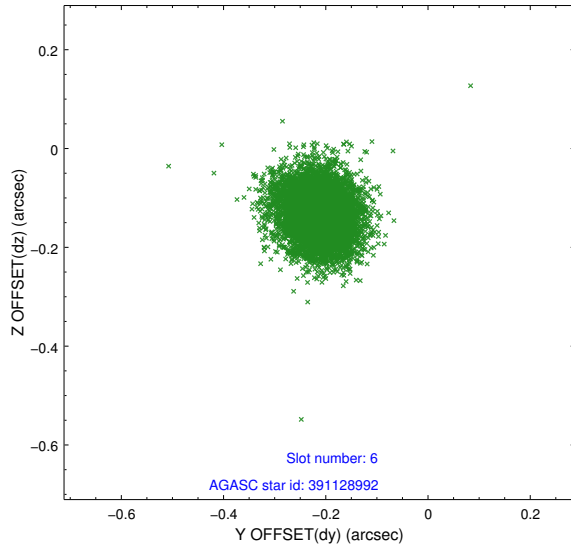
## 2.4.2 Slot 4



### 2.4.3 Slot 5

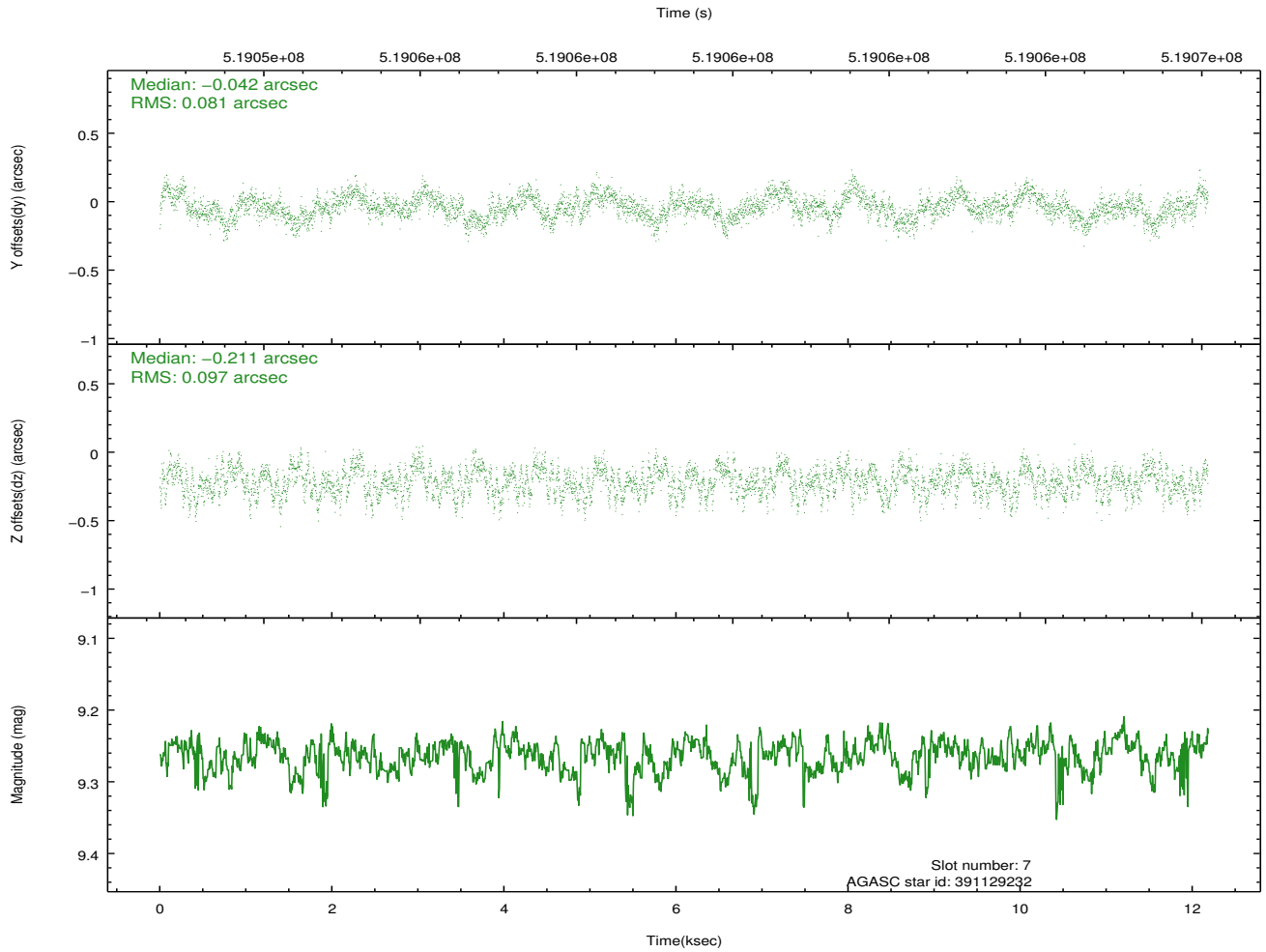
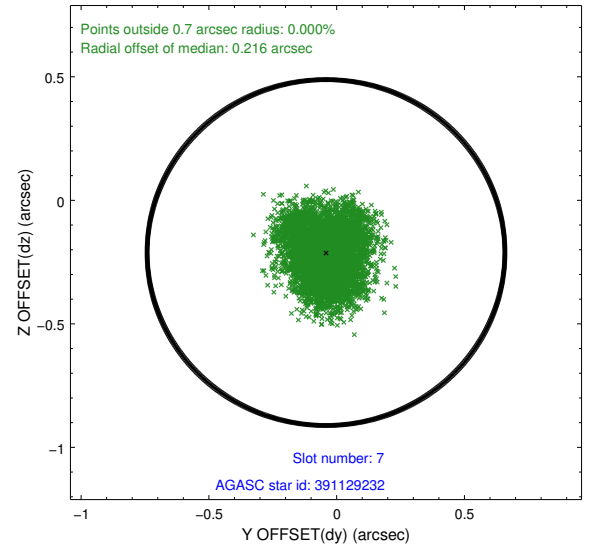
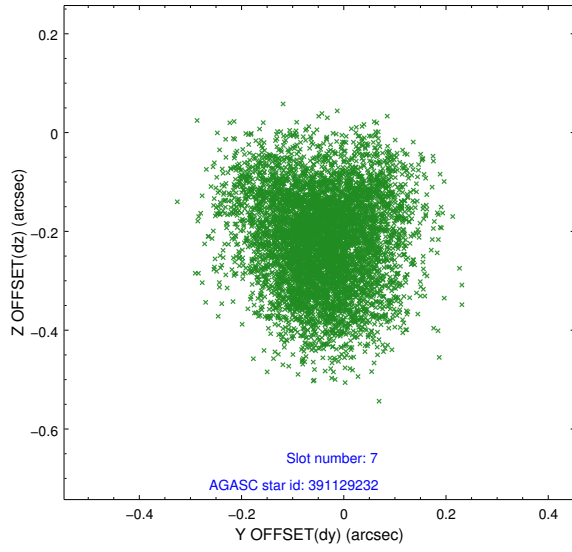


## 2.4.4 Slot 6



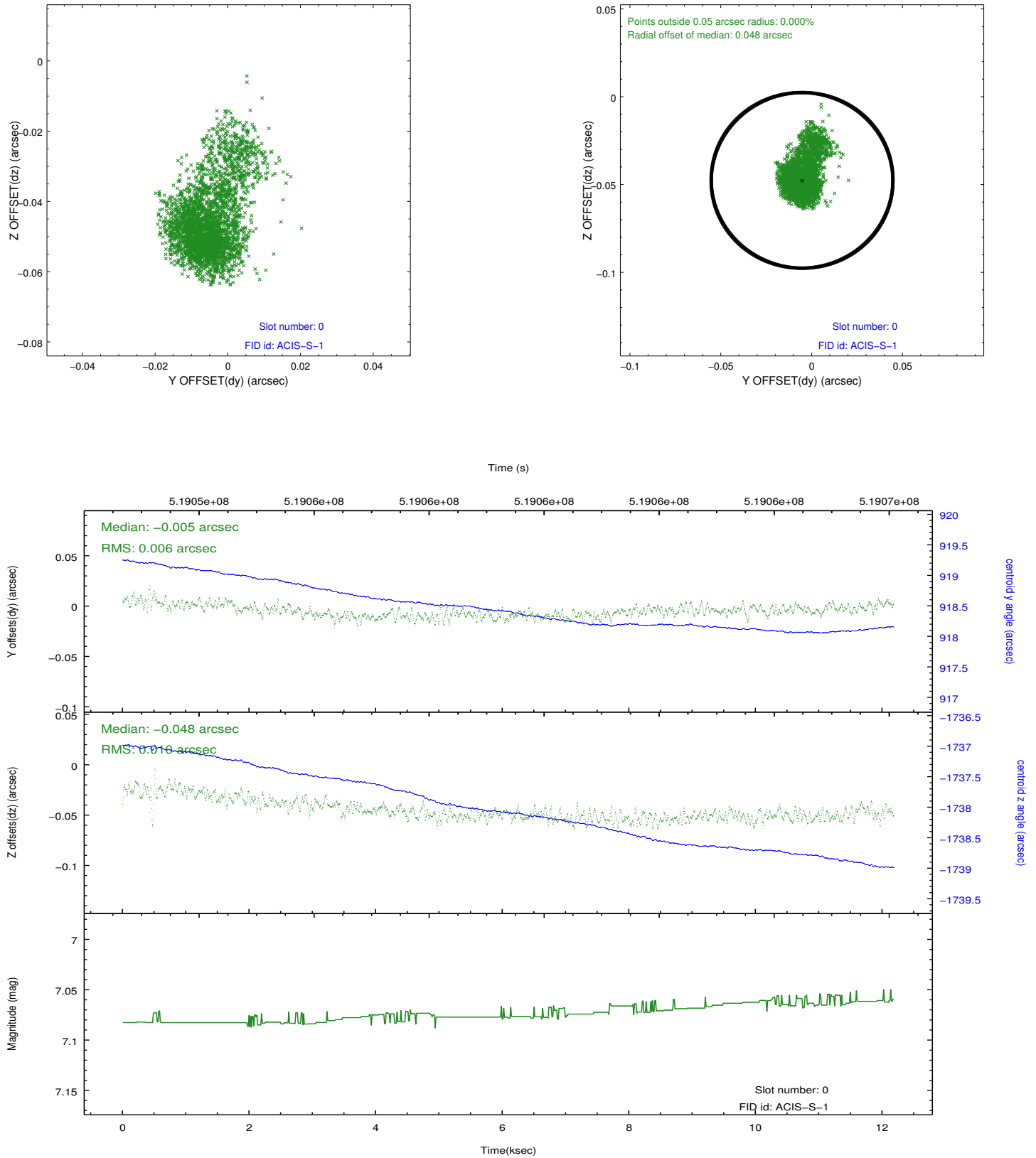


## 2.4.5 Slot 7

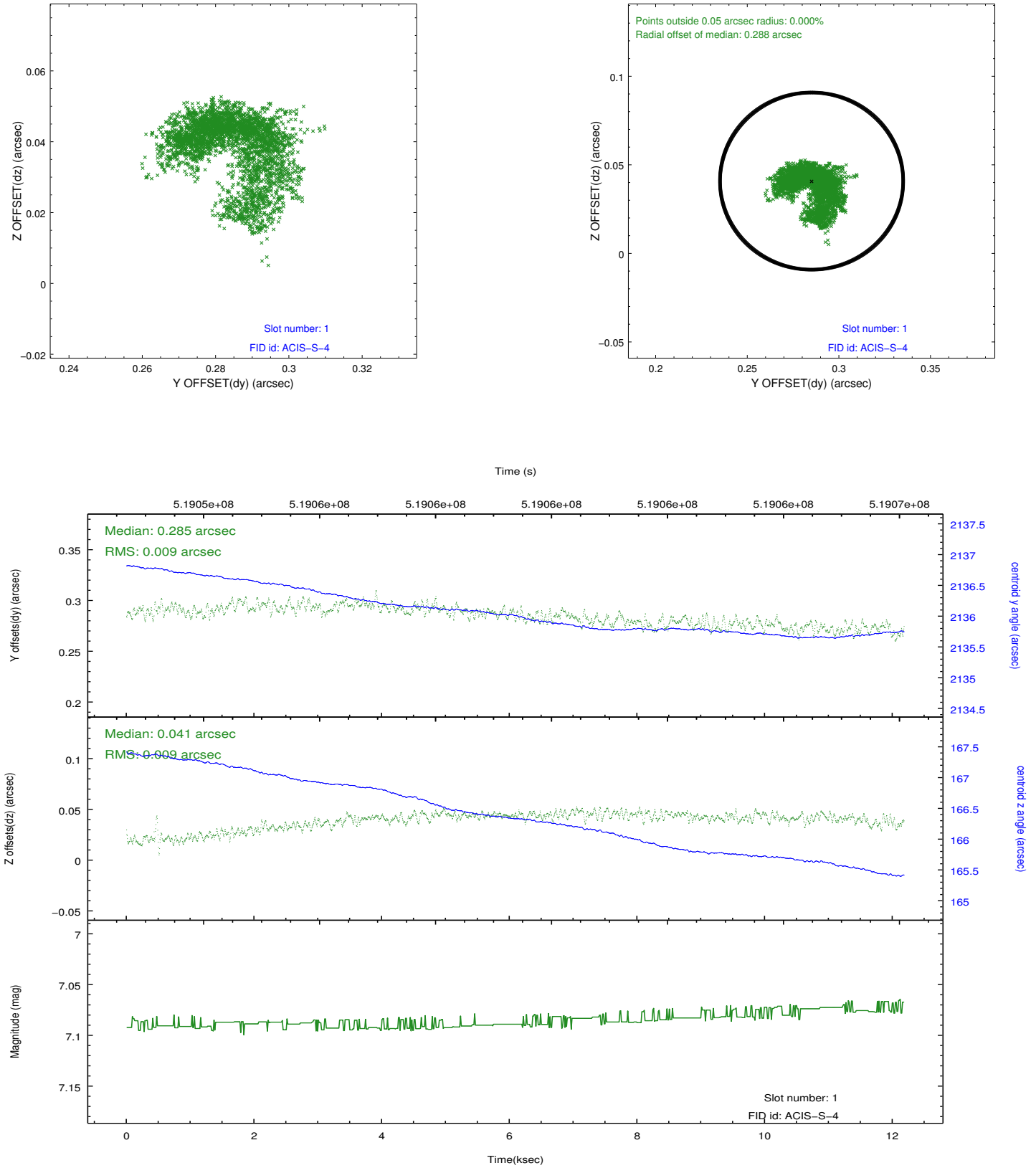


## 2.5 FID Slots

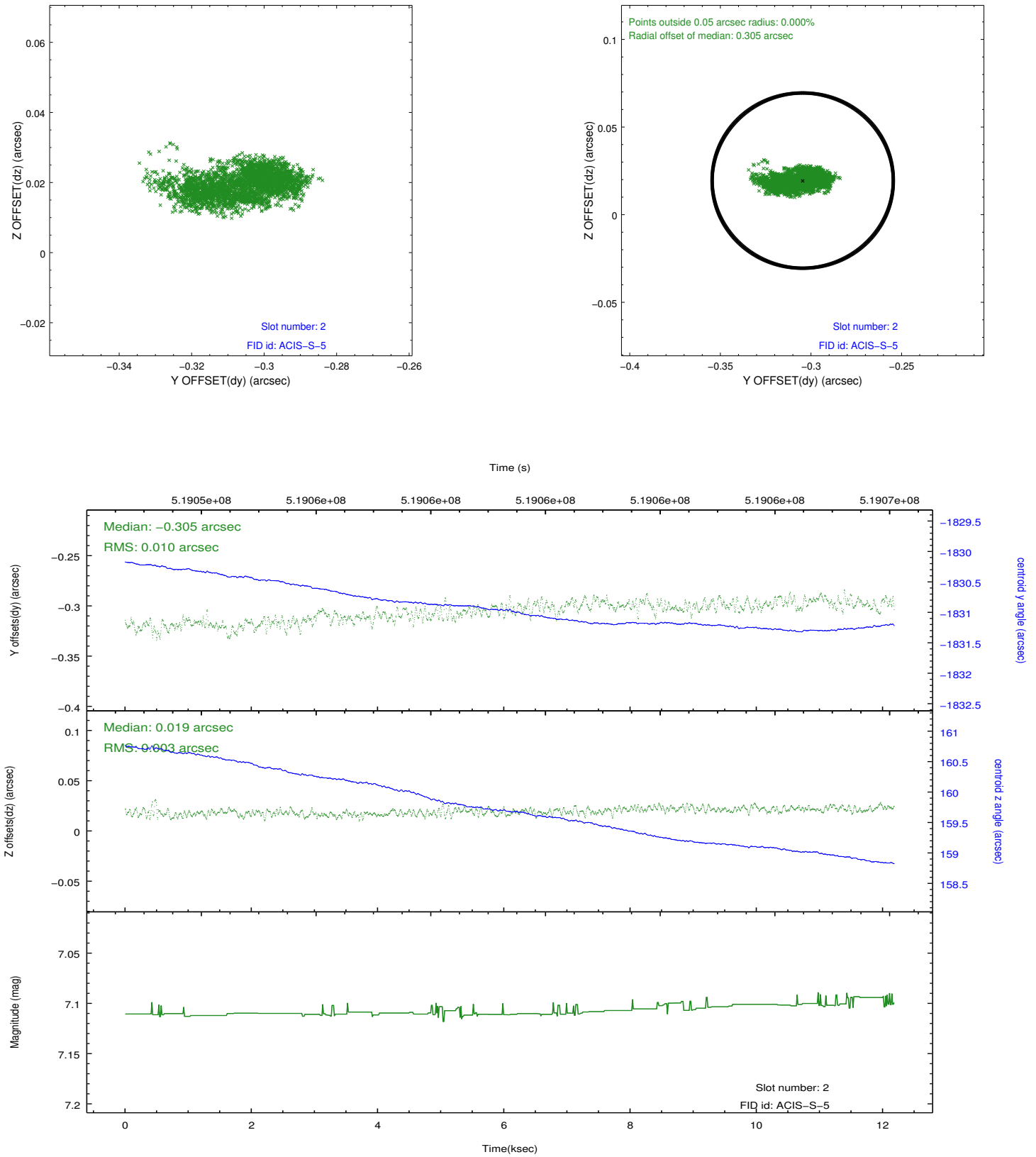
### 2.5.1 Slot 0



## 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)	2014.12.19
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	12.077600092888

## A.2 Comments

These data have been reprocessed with new aspect alignment calibration files that correct small mean offsets (up to 0.4 arcsecs) and improve overall astrometric accuracy. The new calibration was determined using data from the time period being reprocessed and was performed using cross-correlation of X-ray sources with radio and optical counterparts.