

# V&V Reference Report

## L2 ASCDS Version : 10.4.1

Observation 16948 - L2 Version 1  
Chandra X-Ray Center

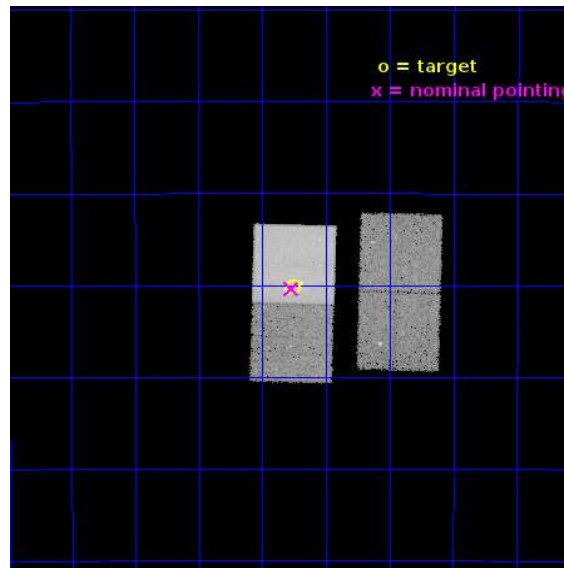
L2 Processing Date : Jul 15 2015

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# 1 Front

seq_num	502465	Sequence number
obs_id	16948	Observation id
title	Nonuniform expansion and brightening of the youngest Galactic SNR G1.9+0.3	Proposal title
observer	Dr. Kazimierz Borkowski	Principal investigator
object	G1.9+0.3	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	267.189167	Observer's specified target RA [deg]
dec_targ	-27.168889	Observer's specified target Dec [deg]
ra_nom	267.19313019132	Nominal RA [deg]
dec_nom	-27.173012024949	Nominal Dec [deg]
roll_nom	271.55844296045	Nominal Roll [deg]
revision	1	Processing version of data
ontime	40073.646129131	Sum of GTIs [s]
livetime	39550.054440665	Livetime [s]
ontime2	40067.240949035	Sum of GTIs [s]
ontime3	40073.564049125	Sum of GTIs [s]
ontime6	40073.605089188	Sum of GTIs [s]
ontime7	40073.646129131	Sum of GTIs [s]
l2events	174639	Number of level 2 events

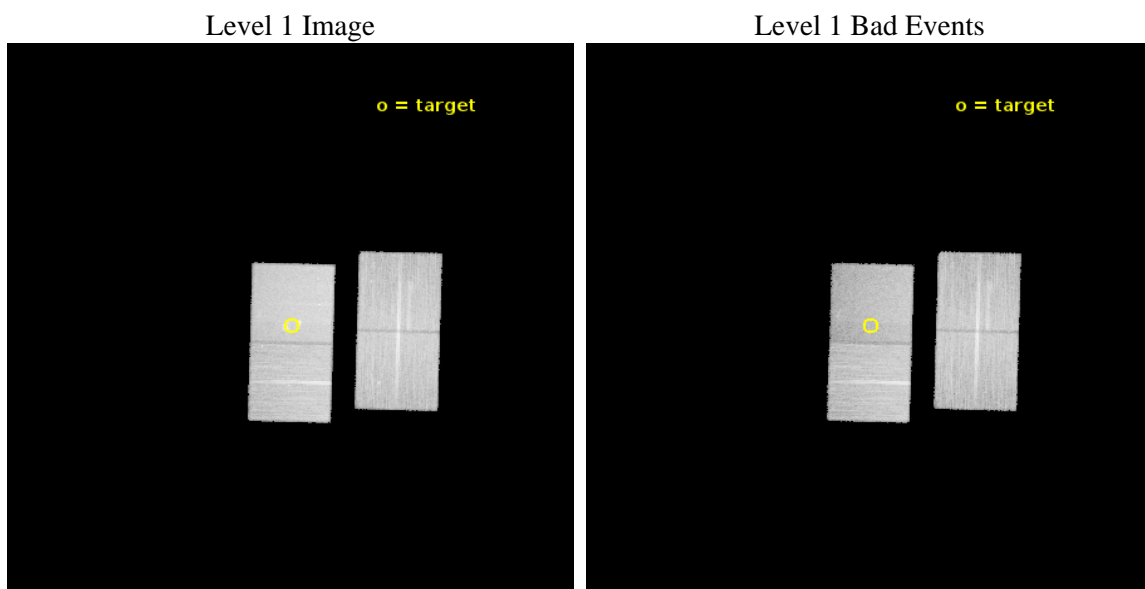




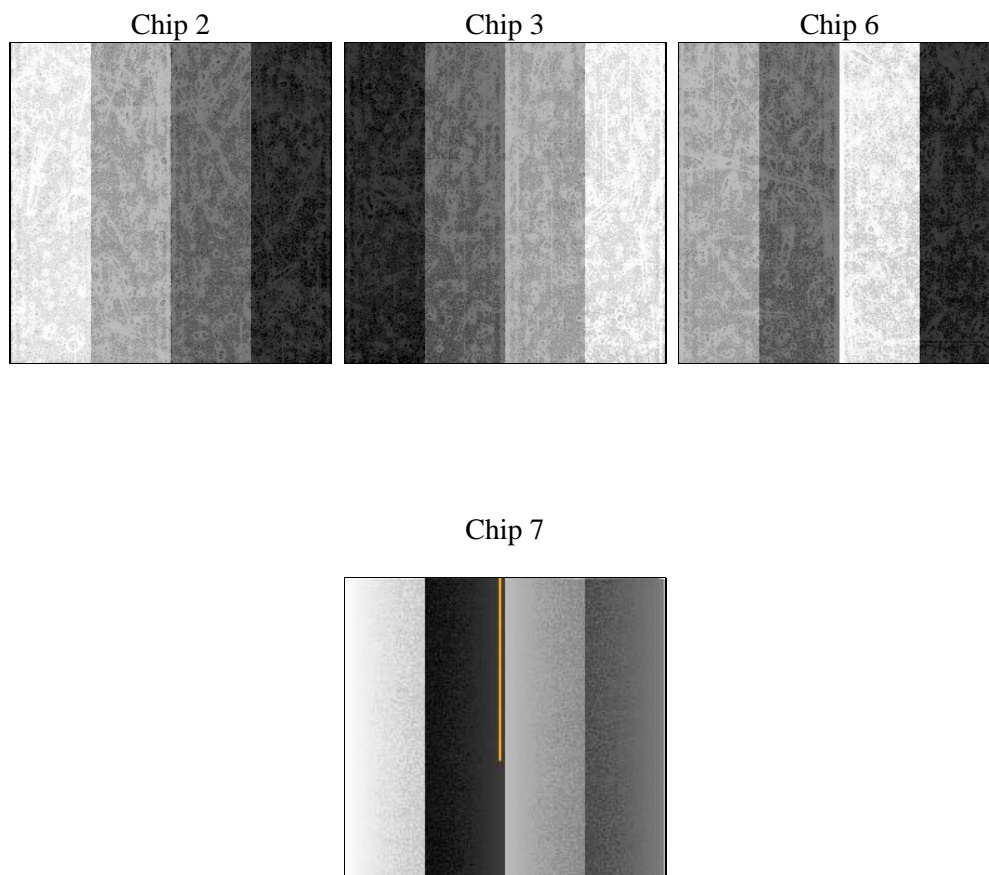
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	40000.000000	[s] Scheduled observation exposure time
ascdsver	10.4.1	Processing system revision	ontime	40073.646129131	Sum of GTIs [s]
caldsver	4.6.8	&#160	ontime2	40067.240949035	Sum of GTIs [s]
date	2015-07-15T17:48:29	Date and time of file creation	ontime3	40073.564049125	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	40073.605089188	Sum of GTIs [s]
			ontime7	40073.646129131	Sum of GTIs [s]
			l1events	794756	Number of level 1 events

### 2.1.4 Events

	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	186510	184762	192806	230678
rejected events	163217	161360	167040	116369
rejected %	87%	87%	86%	50%

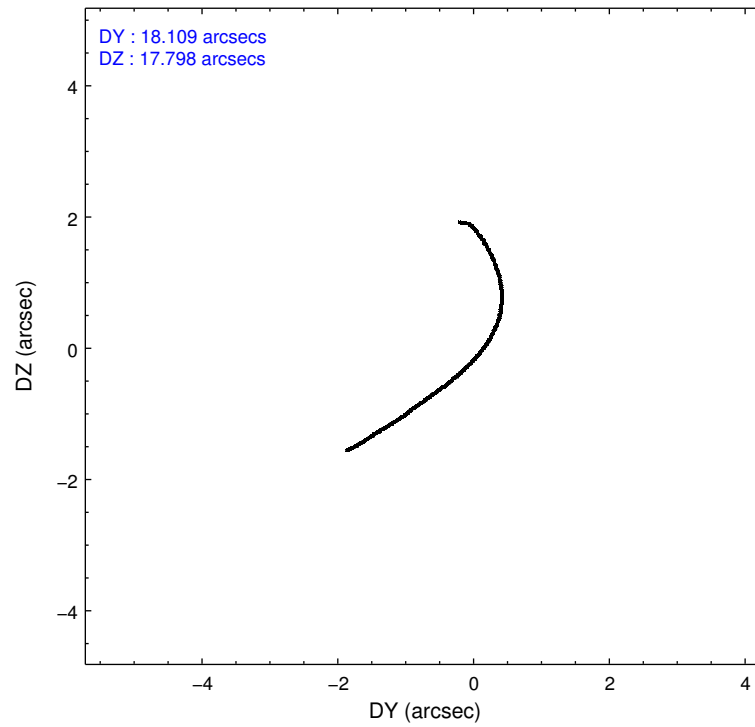
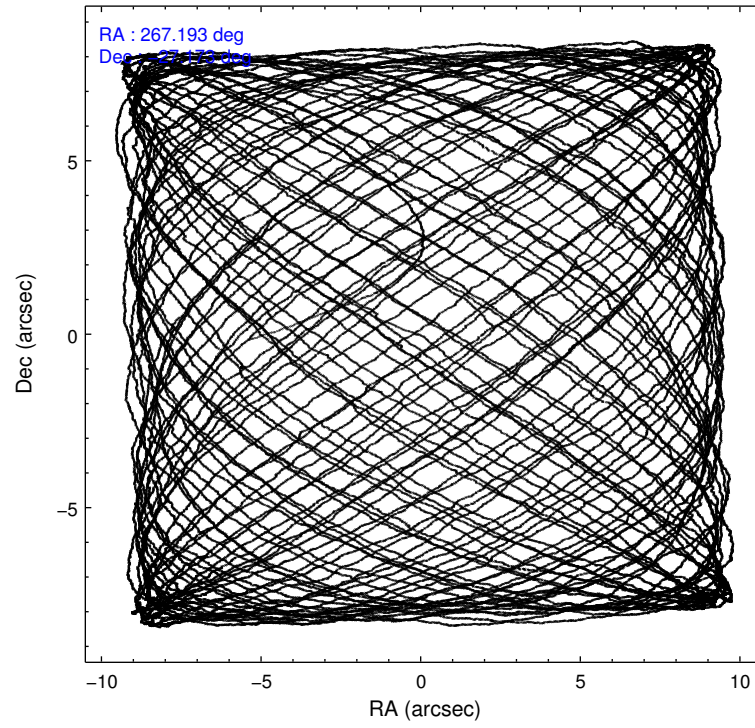
	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	9715	9747	10381	11915
	5%	5%	5%	5%
grade 1 events	87	129	110	374
	0%	0%	0%	0%
grade 2 events	5214	4897	5640	25524
	2%	2%	2%	11%
grade 3 events	2154	2304	2375	9990
	1%	1%	1%	4%
grade 4 events	2264	2259	2359	9918
	1%	1%	1%	4%
grade 5 events	6714	8260	8476	22813
	3%	4%	4%	9%
grade 6 events	3948	4198	5011	56980
	2%	2%	2%	24%
grade 7 events	156414	152968	158454	93164
	83%	82%	82%	40%

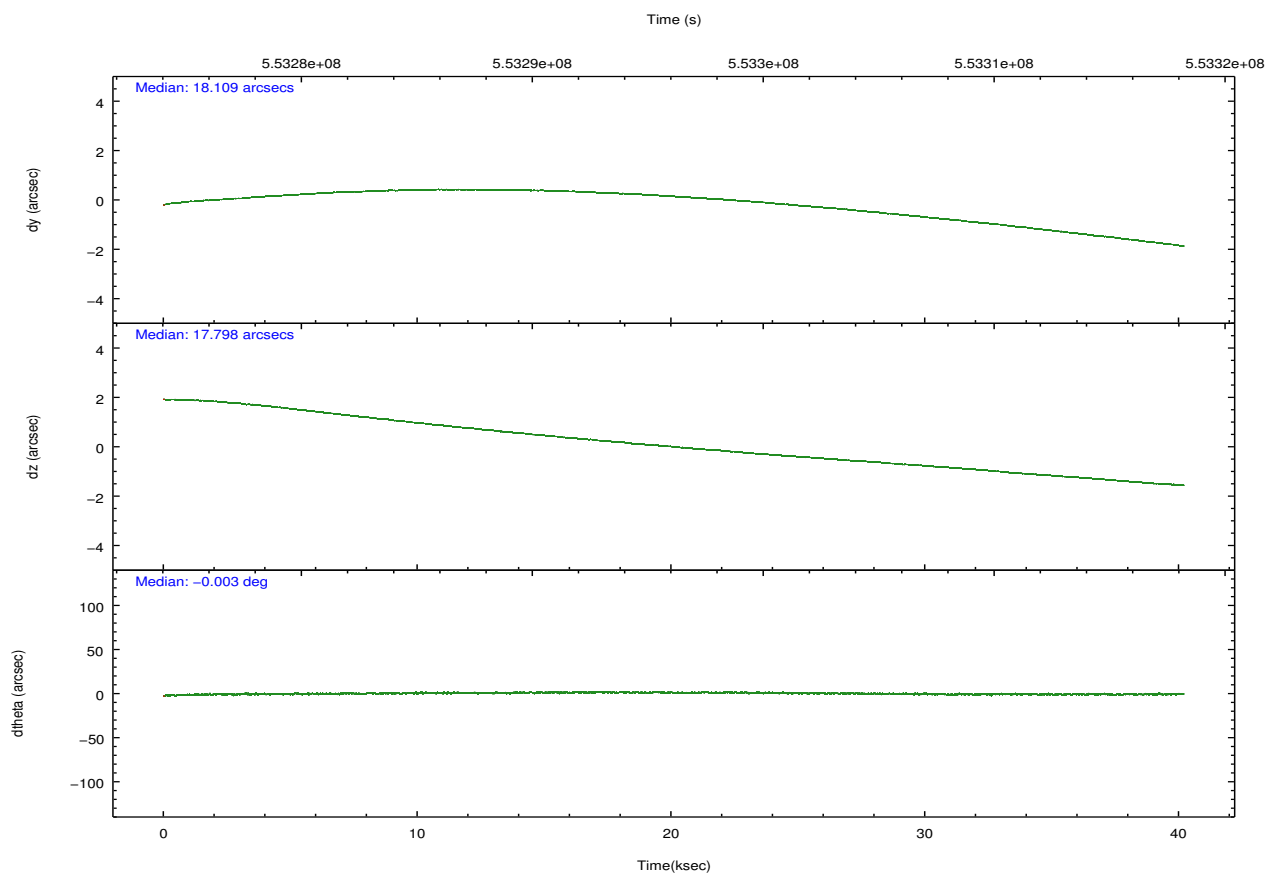
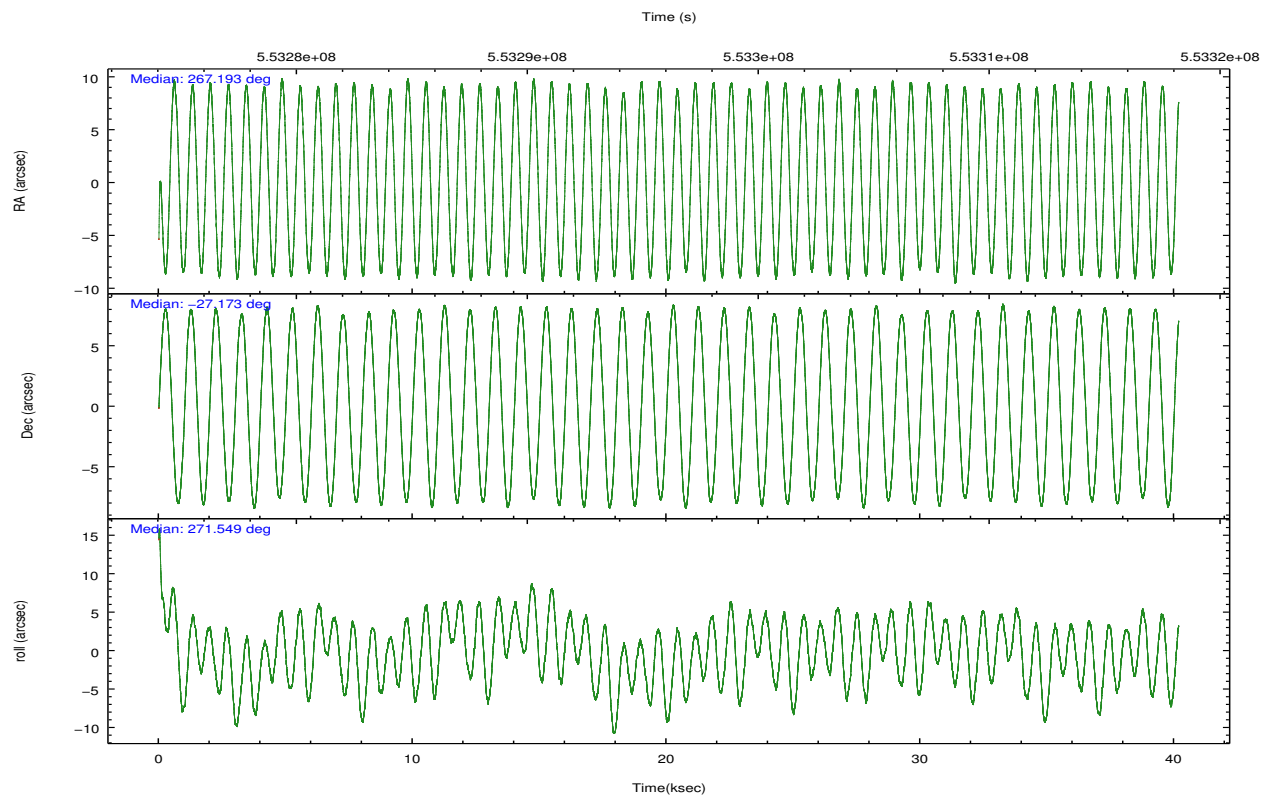
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-2367	ACIS-2367
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	267.176656	267.1931301913172
[deg] Pointing Dec	-27.149823	-27.17301202494944
[deg] Pointing Roll	271.394291	271.5584429604536
[mm] SIM focus pos	-0.684267	-0.6828225247311905
[mm] SIM defocus	0	0.001444936568705701
[mm] SIM translation stage pos	-190.132523	-190.1400660498719
[mm] SIM translation stage offset	0	0.00754346686406393
[s] Observation start time (MET)	553276237.184000	553275099.1440001
Observation start date	2015-07-14T15:49:29	2015-07-14T15:31:39
[s] Observation end time (MET)	553316237.184000	553317453.68388
Observation end date	2015-07-15T02:56:09	2015-07-15T03:17:33
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
CCD I0 on	N	N
CCD I1 on	N	N
CCD I2 on	O1	Y
CCD I3 on	O2	Y
CCD S0 on	N	N
CCD S1 on	N	N
CCD S2 on	Y	Y
CCD S3 on	Y	Y
CCD S4 on	N	N
CCD S5 on	N	N
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



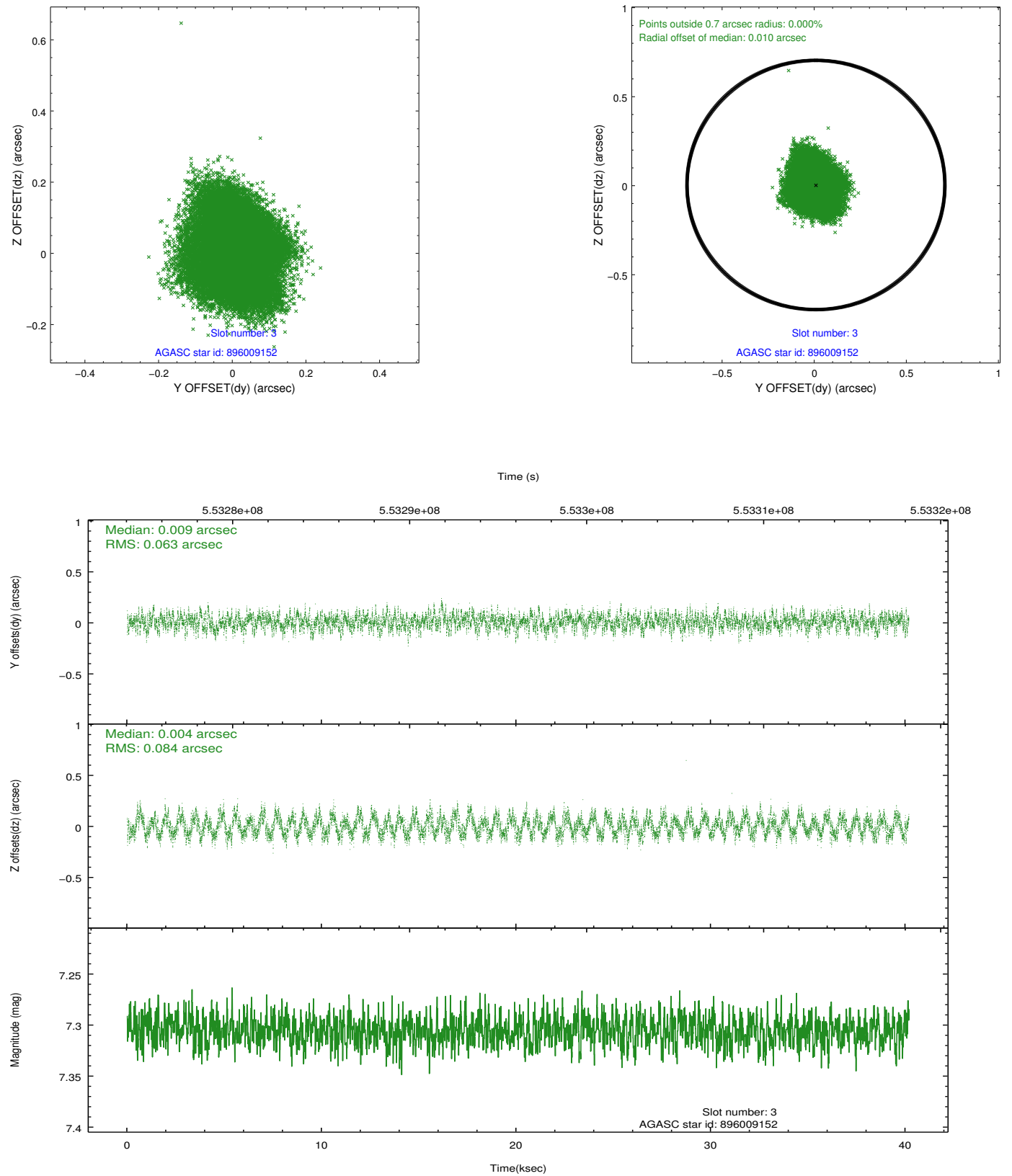


### Slot Statistics

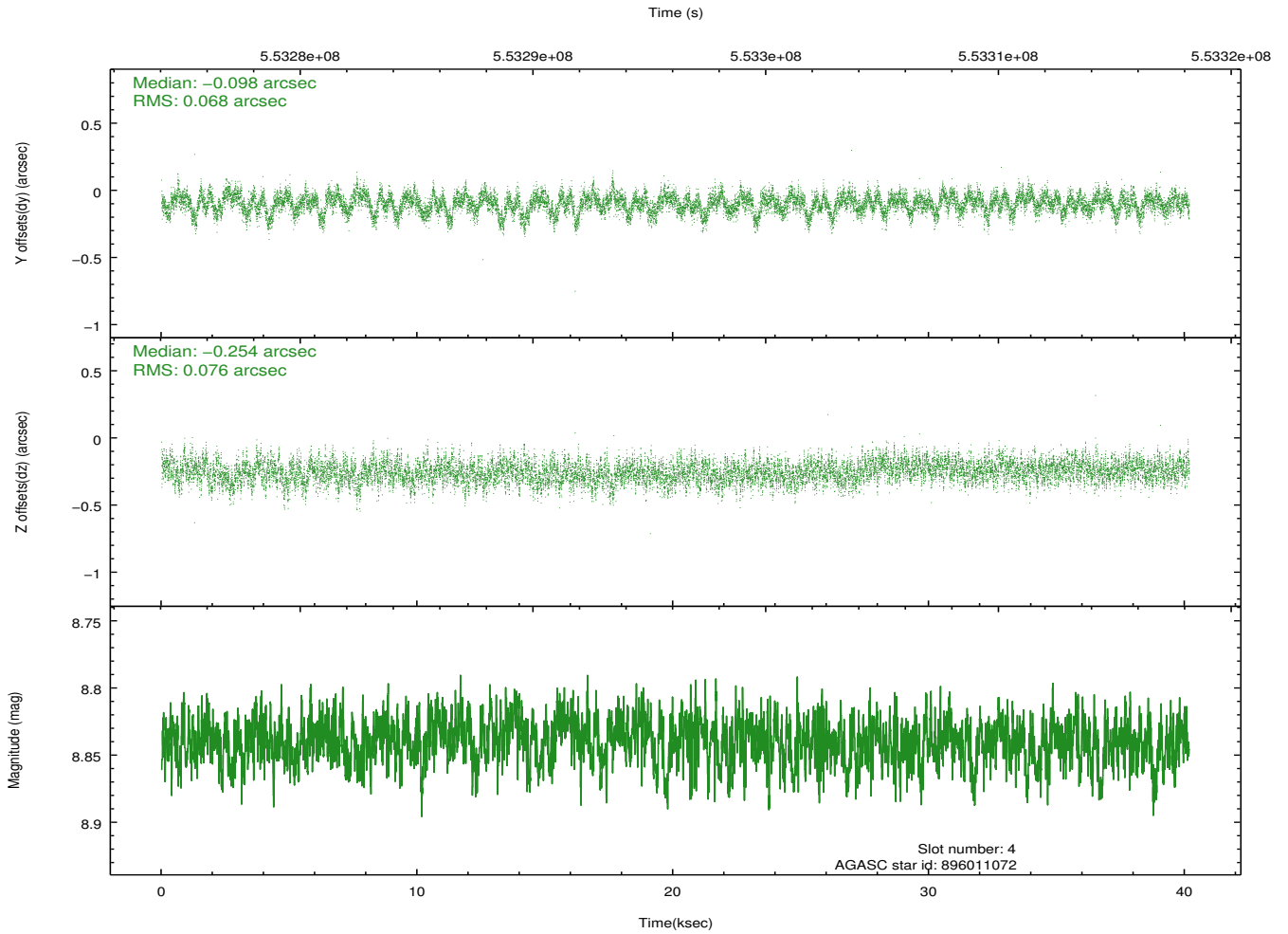
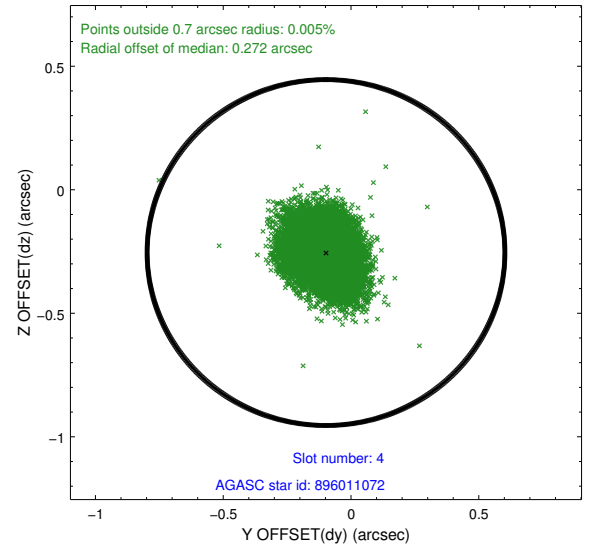
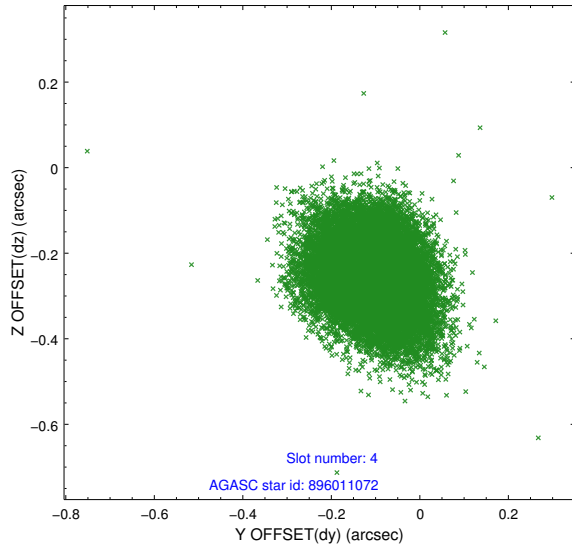
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.02	9801	-0.190	-0.116	0.019	0.029	0.000000	0.000000	-771.14	-1739.45
1	FID		ACIS-S-4	7.11	9800	0.226	0.104	0.020	0.027	0.000000	0.000000	2142.59	169.16
2	FID		ACIS-S-6	7.24	9801	-0.066	0.018	0.017	0.025	0.000000	0.000000	391.05	806.54
3	GUIDE	used	896009152	7.30	19599	0.009	0.004	0.115	0.172	267.588100	-27.061669	-282.20	1326.14
4	GUIDE	used	896011072	8.84	19589	-0.098	-0.254	0.108	0.177	267.780553	-27.396374	940.53	1907.16
5	GUIDE	used	896012968	8.67	19590	-0.073	-0.095	0.108	0.169	266.634547	-27.600471	1584.18	-1768.17
6	GUIDE	used	896013040	7.35	19601	0.150	0.214	0.081	0.128	266.506589	-26.972299	-684.57	-2133.64
7	GUIDE	used	896014528	7.68	19598	0.018	0.129	0.073	0.118	266.628858	-27.438607	1001.21	-1774.77

## 2.4 Star Slots

### 2.4.1 Slot 3

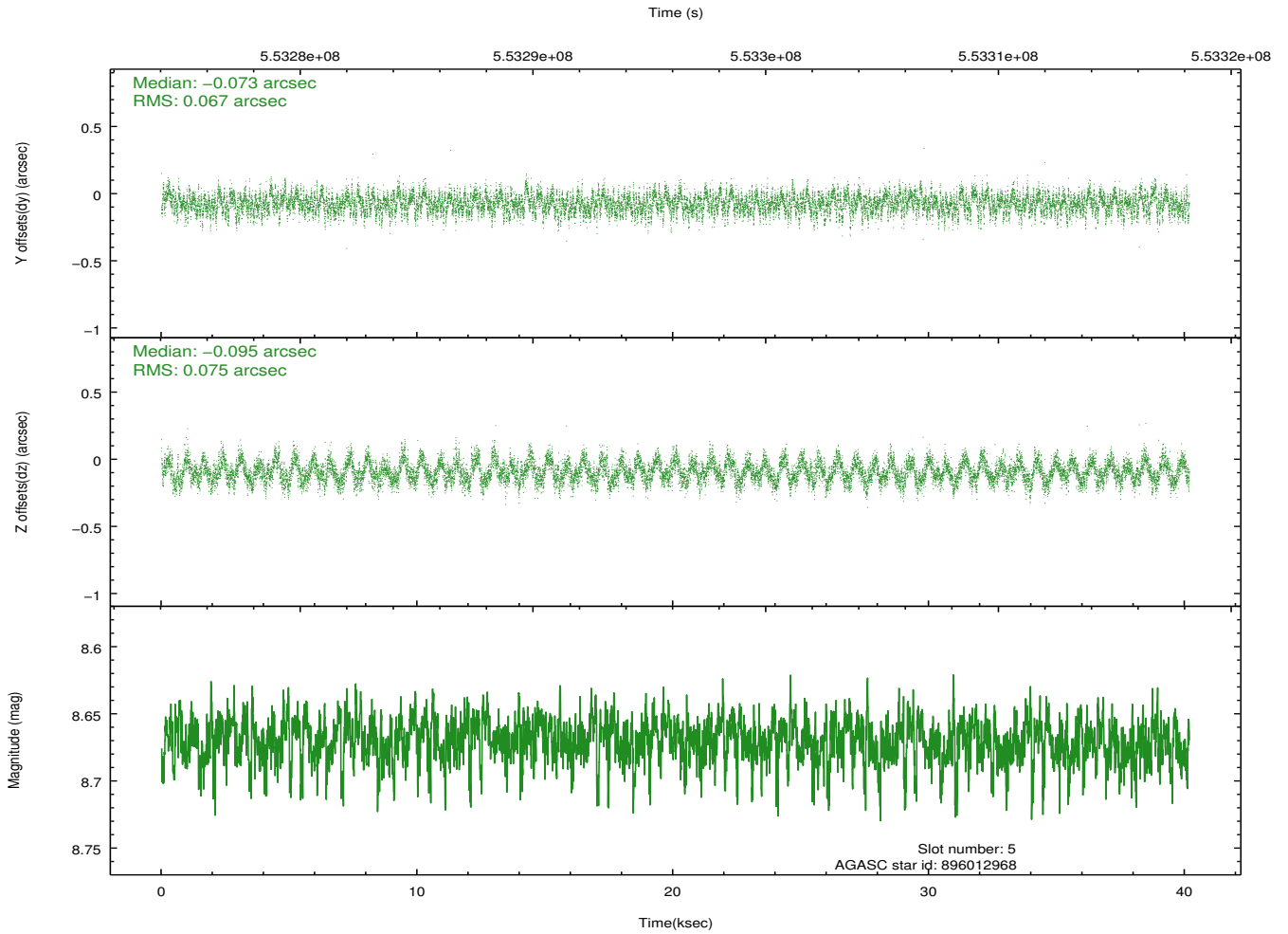
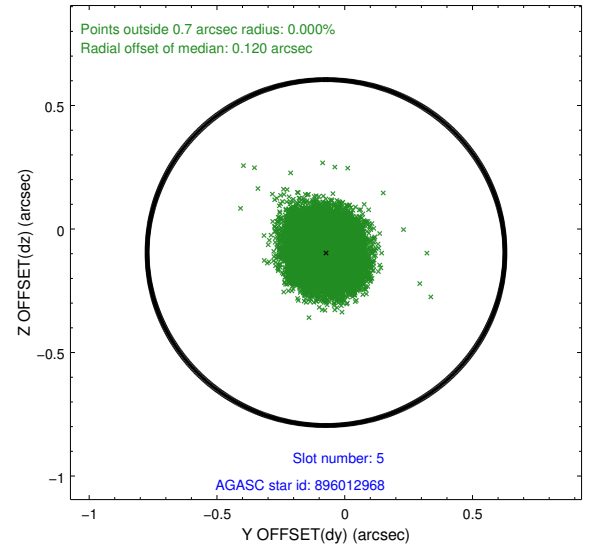
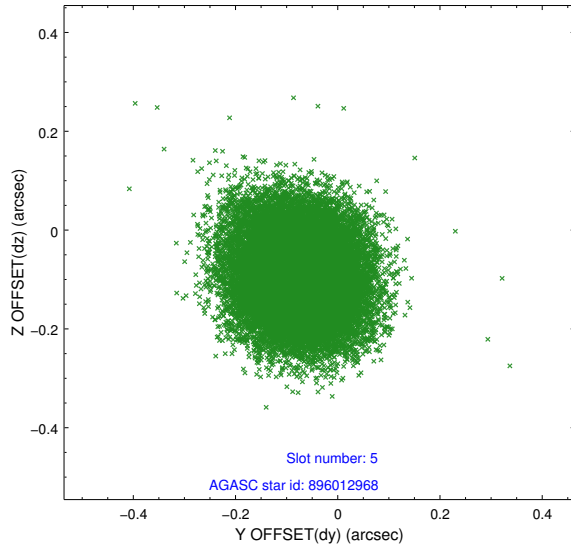


## 2.4.2 Slot 4

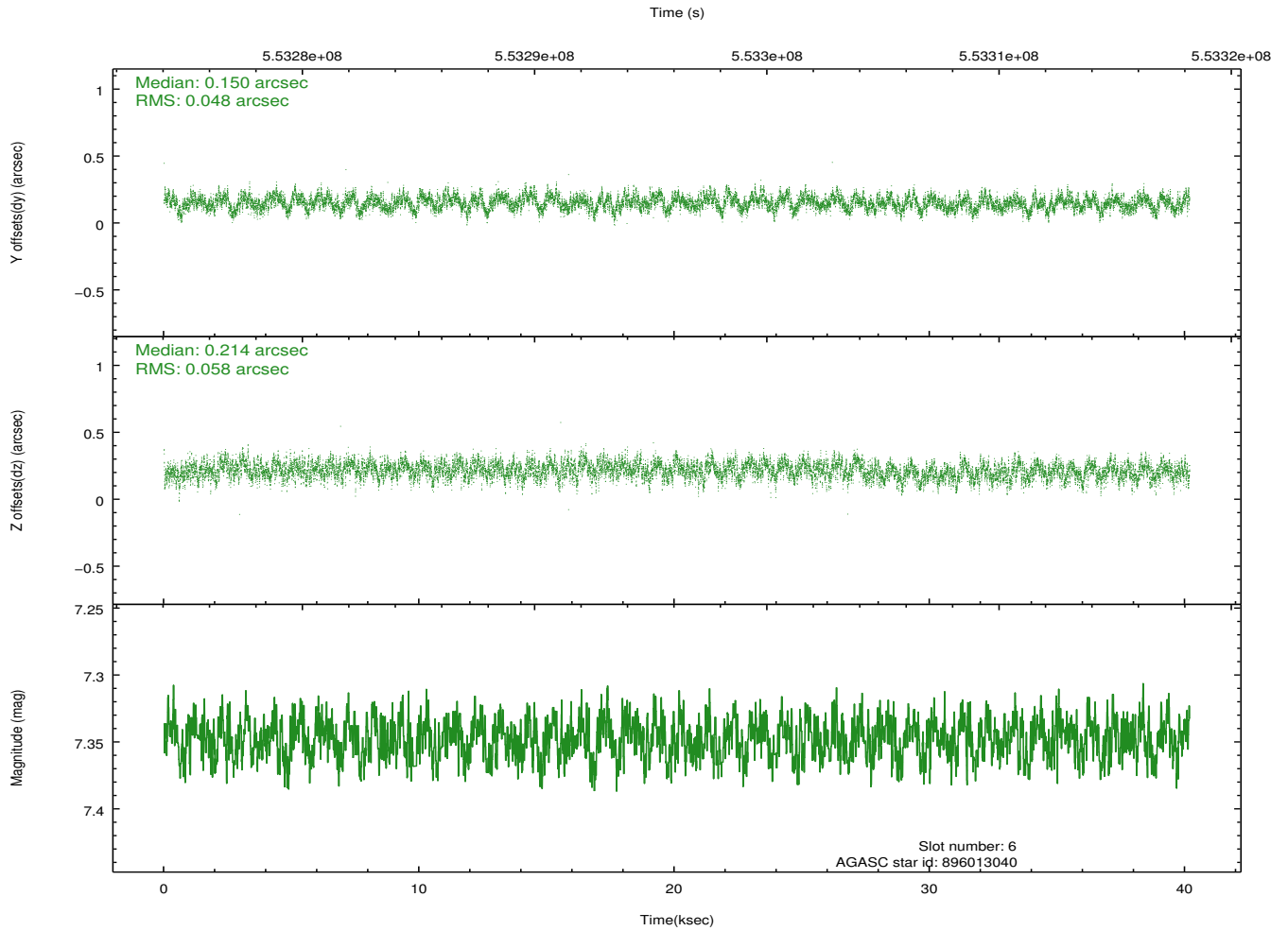
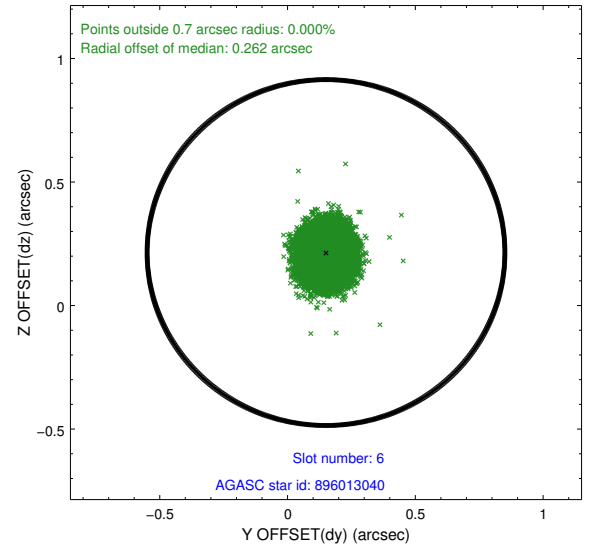
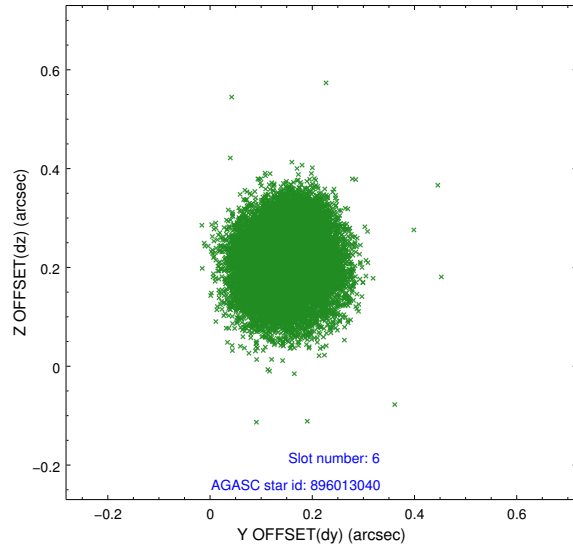




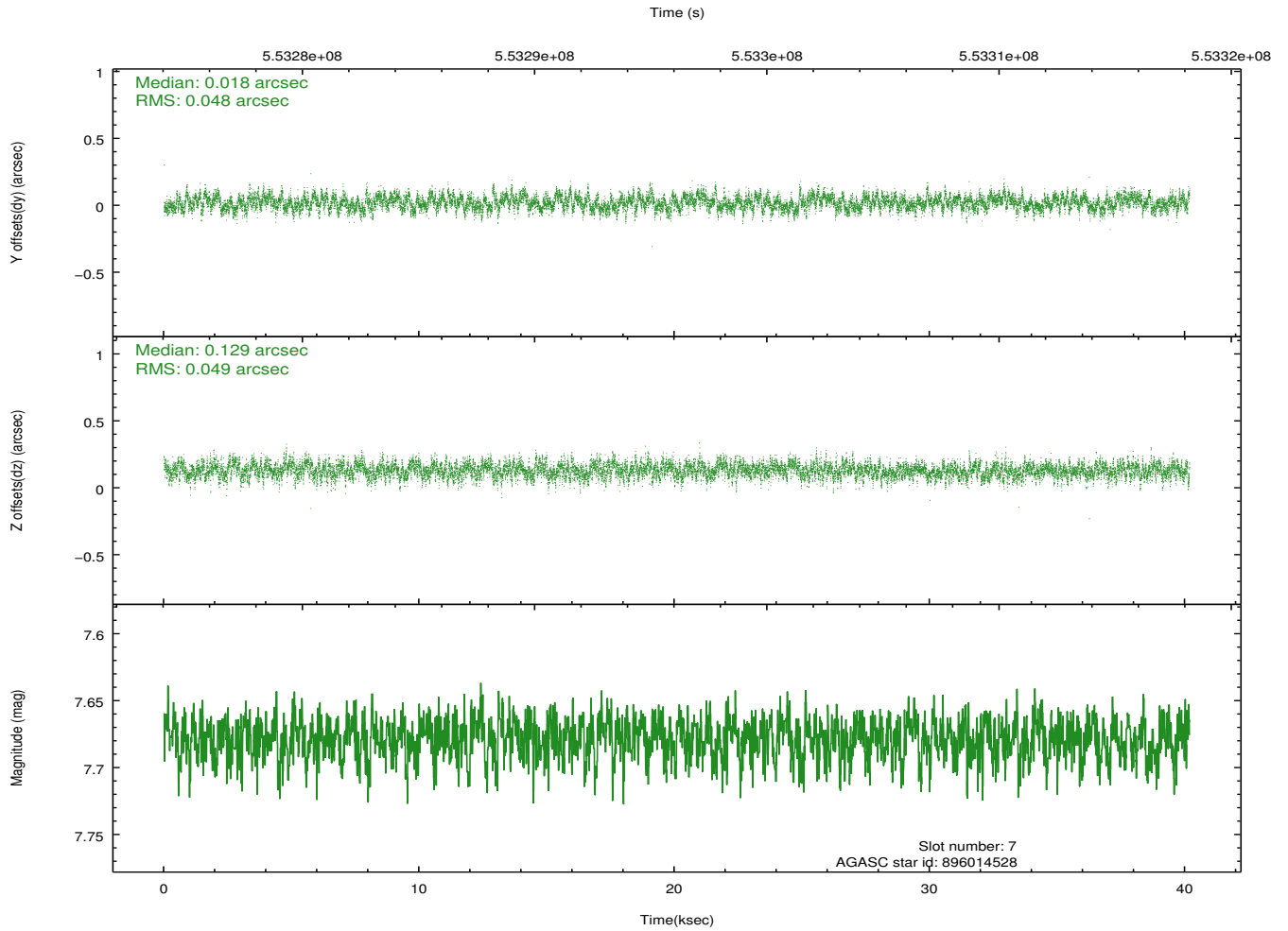
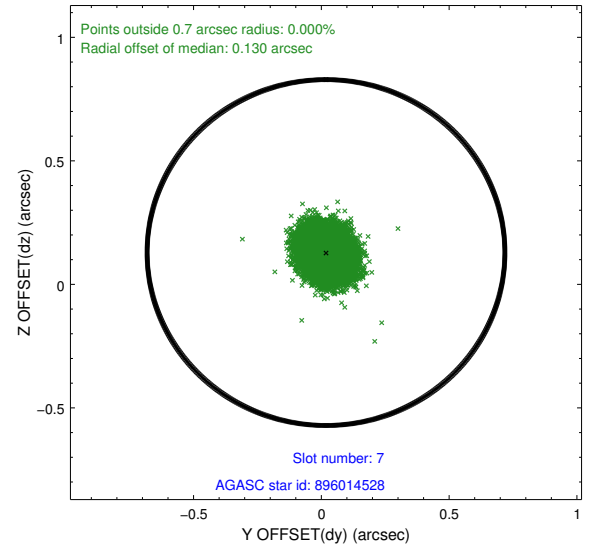
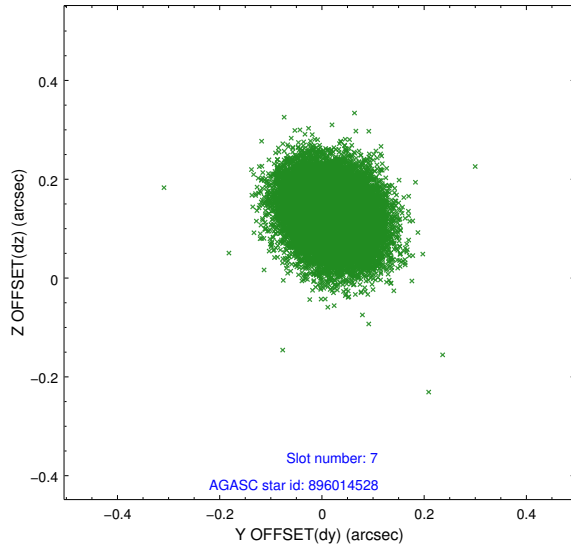
### 2.4.3 Slot 5



## 2.4.4 Slot 6

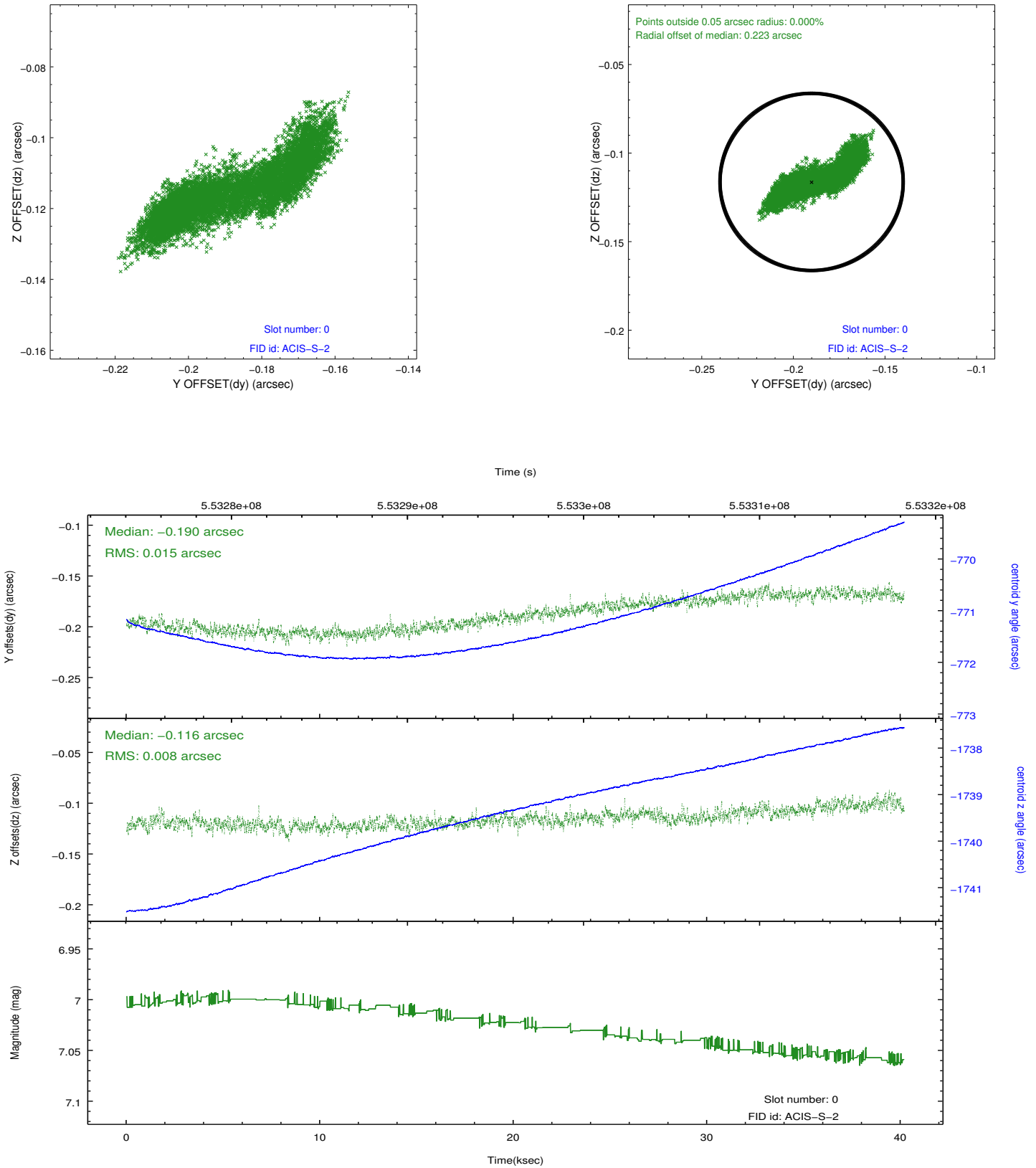


## 2.4.5 Slot 7

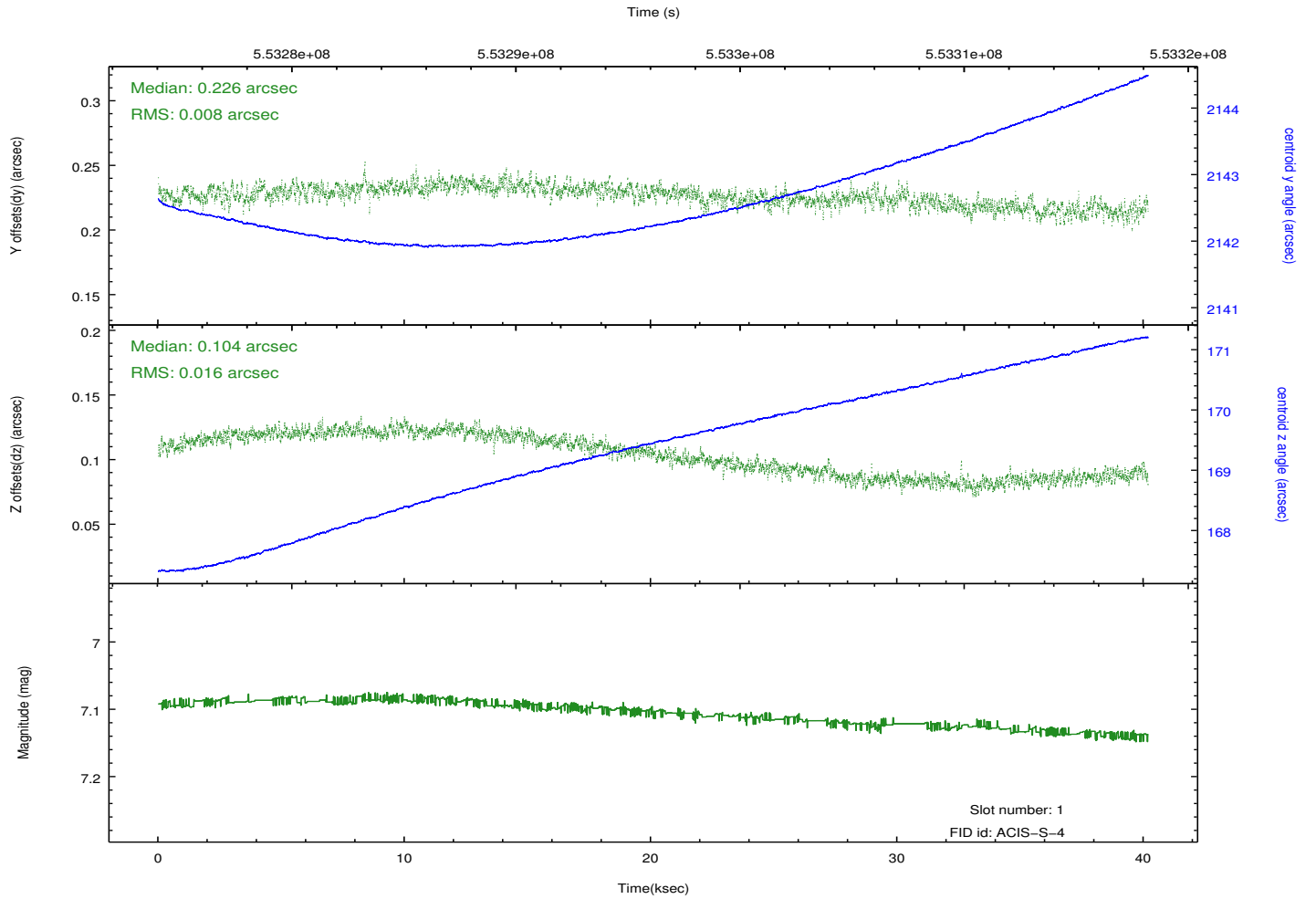
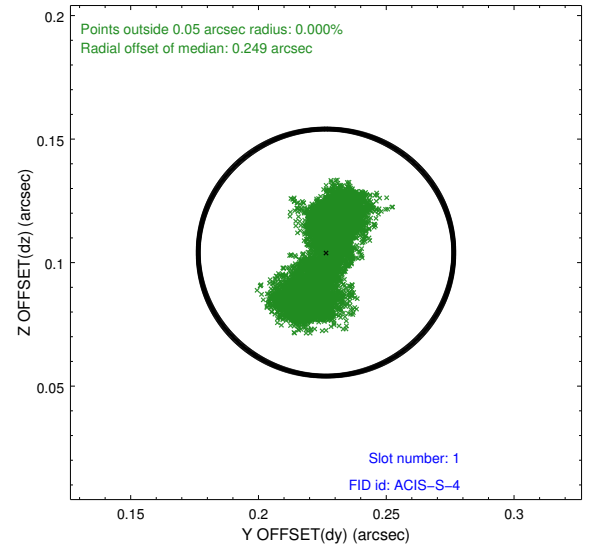
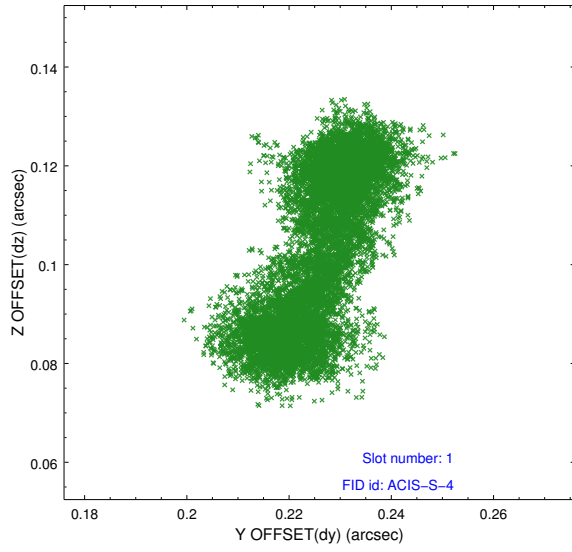


## 2.5 FID Slots

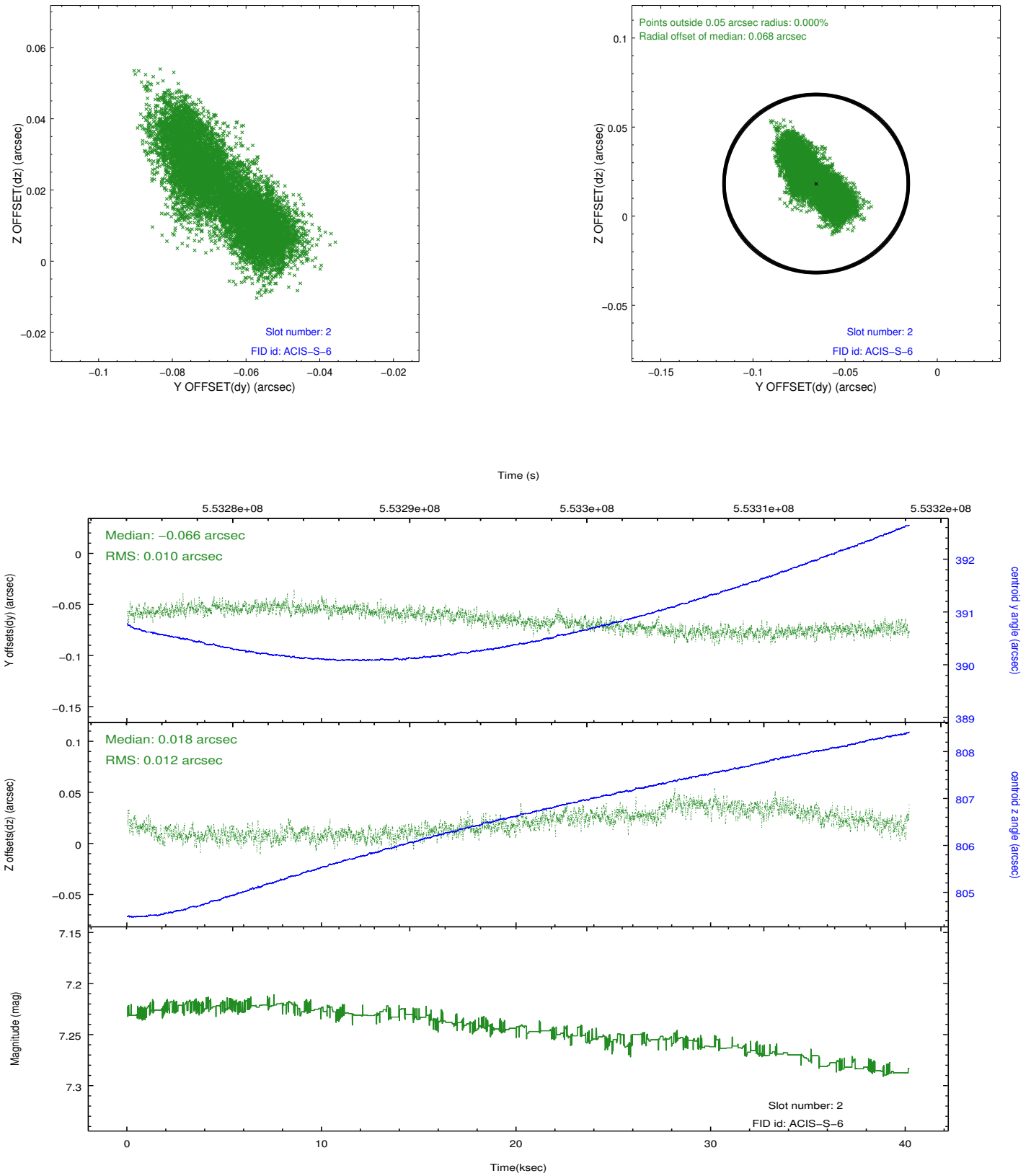
### 2.5.1 Slot 0



## 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)	2015.07.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	40.073646129131

### A.2 Comments