

# V&V Reference Report

## L2 ASCDS Version : 10.5.4

Observation 19317 - L2 Version 1  
Chandra X-Ray Center

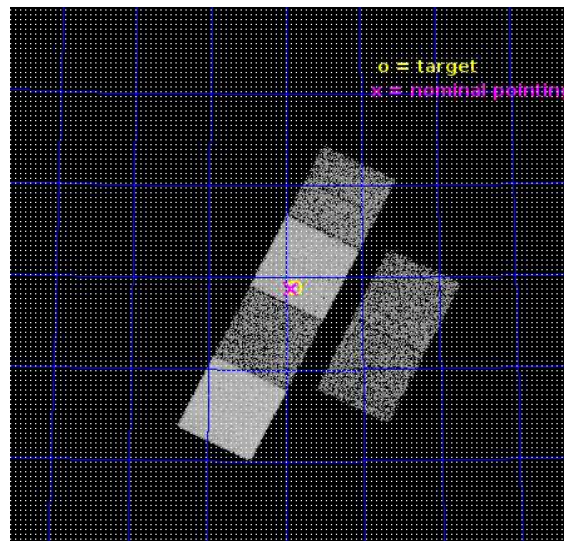
L2 Processing Date : May 6 2017

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# 1 Front

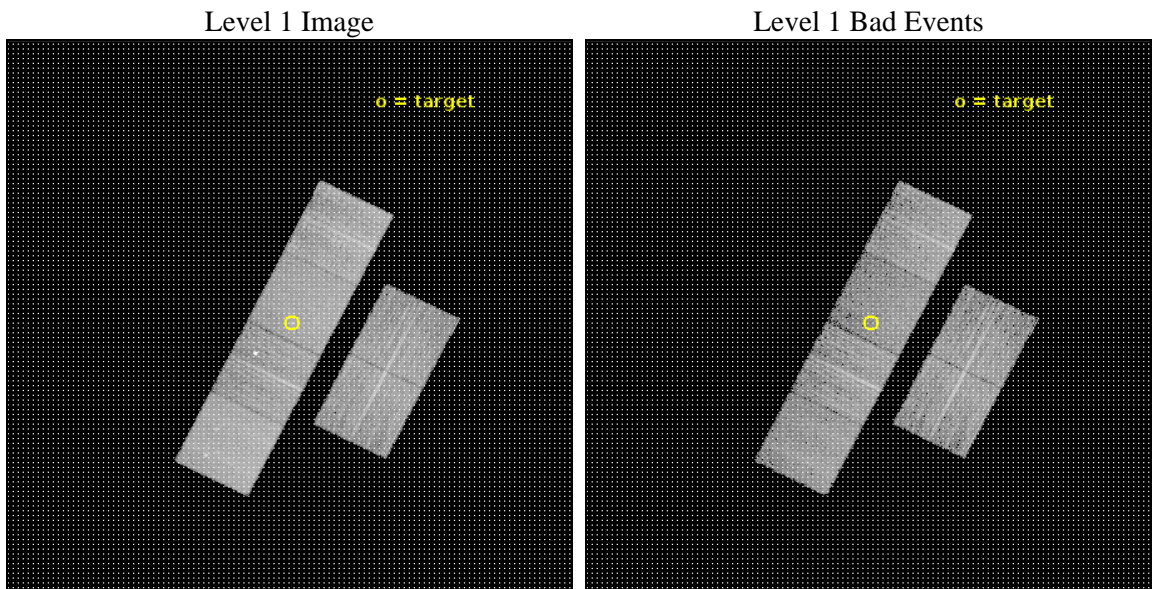
seq_num	601274	Sequence number
obs_id	19317	Observation id
title	A homogeneous view of X-ray halos in massive early-type galaxies	P
observer	Andy Goulding	Principal investigator
object	NGC2258	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	101.940833	Observer's specified target RA [deg]
dec_targ	74.481667	Observer's specified target Dec [deg]
ra_nom	101.96204489471	Nominal RA [deg]
dec_nom	74.480129494915	Nominal Dec [deg]
roll_nom	296.50092673229	Nominal Roll [deg]
revision	1	Processing version of data
ontime	7755.2981244326	Sum of GTIs [s]
livetime	7657.0958699011	Livetime [s]
ontime2	7755.3391549587	Sum of GTIs [s]
ontime3	7755.1749949455	Sum of GTIs [s]
ontime5	7755.2570749521	Sum of GTIs [s]
ontime6	7755.2160350084	Sum of GTIs [s]
ontime7	7755.2981244326	Sum of GTIs [s]
ontime8	7745.410844326	Sum of GTIs [s]
l2events	89877	Number of level 2 events



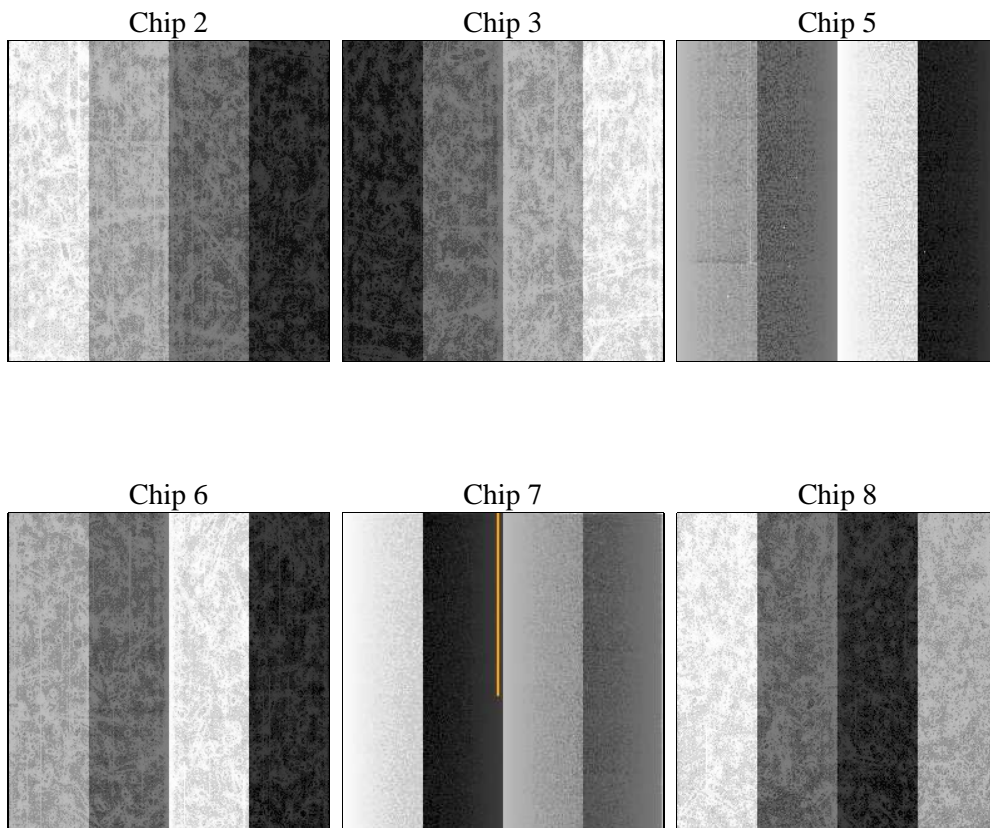
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	8000.000000	[s] Scheduled observation exposure time
ascdsver	10.5.4	Processing system revision	ontime	7755.2981244326	Sum of GTIs [s]
caldsver	4.7.4	&#160	ontime2	7755.3391549587	Sum of GTIs [s]
date	2017-05-06T20:43:41	Date and time of file creation	ontime3	7755.1749949455	Sum of GTIs [s]
revision	1	Processing version of data	ontime5	7755.2570749521	Sum of GTIs [s]
			ontime6	7755.2160350084	Sum of GTIs [s]
			ontime7	7755.2981244326	Sum of GTIs [s]
			ontime8	7745.410844326	Sum of GTIs [s]
			l1events	404470	Number of level 1 events

### 2.1.4 Events

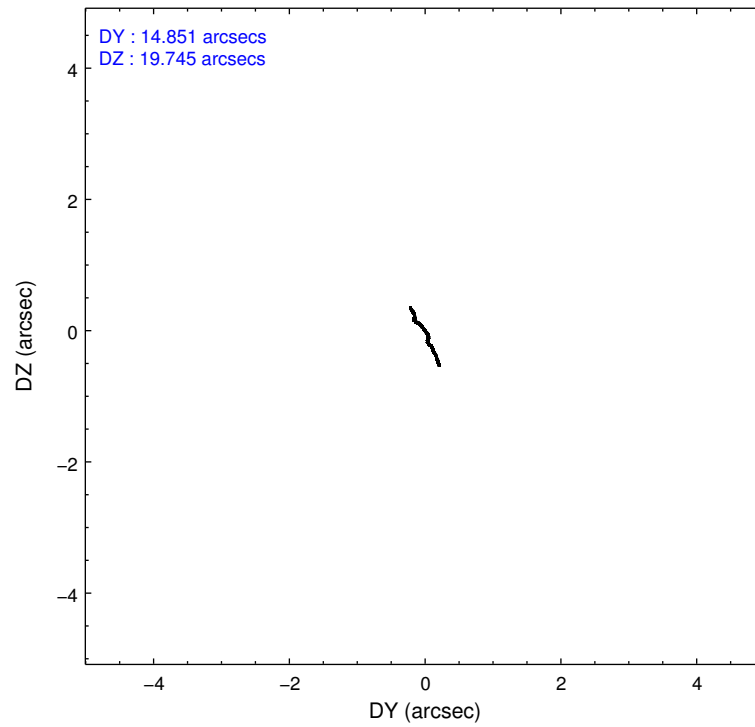
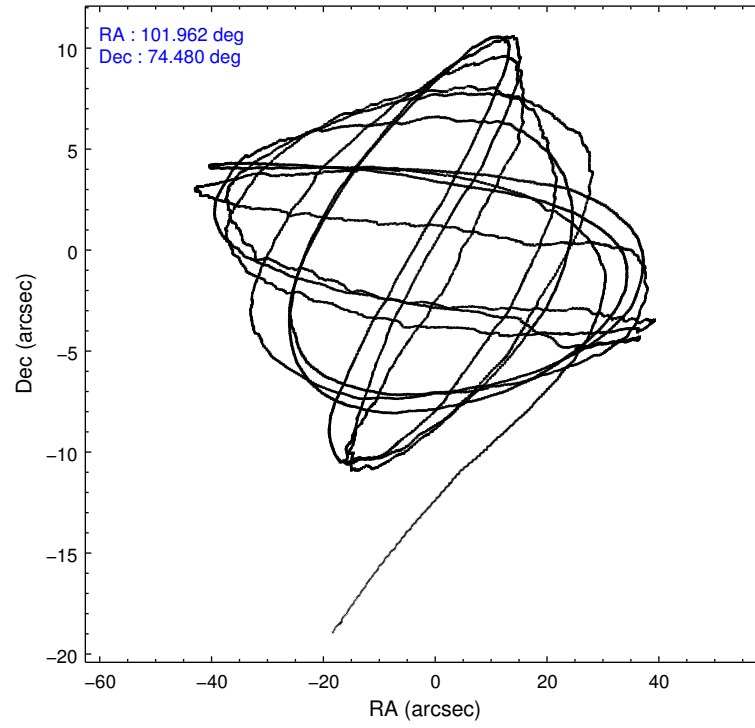
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	59591	53133	85214	60706	70050	75776	grade 0 events	1950	1824	2633	4267	2620	5178
rejected events	53991	47664	44718	52268	39310	57349		3%	3%	3%	7%	3%	6%
rejected %	90%	89%	52%	86%	56%	75%	grade 1 events	34	39	215	26	103	63
								0%	0%	0%	0%	0%	0%
							grade 2 events	1415	1176	12423	1528	6691	4424
								2%	2%	14%	2%	9%	5%
							grade 3 events	561	628	1277	518	2312	2052
								0%	1%	1%	0%	3%	2%
							grade 4 events	566	610	1158	565	2273	1909
								0%	1%	1%	0%	3%	2%
							grade 5 events	2100	2505	5651	2348	6423	3737
								3%	4%	6%	3%	9%	4%
							grade 6 events	1110	1233	23018	1563	16858	4873
								1%	2%	27%	2%	24%	6%
							grade 7 events	51855	45118	38839	49891	32770	53540
								87%	84%	45%	82%	46%	70%

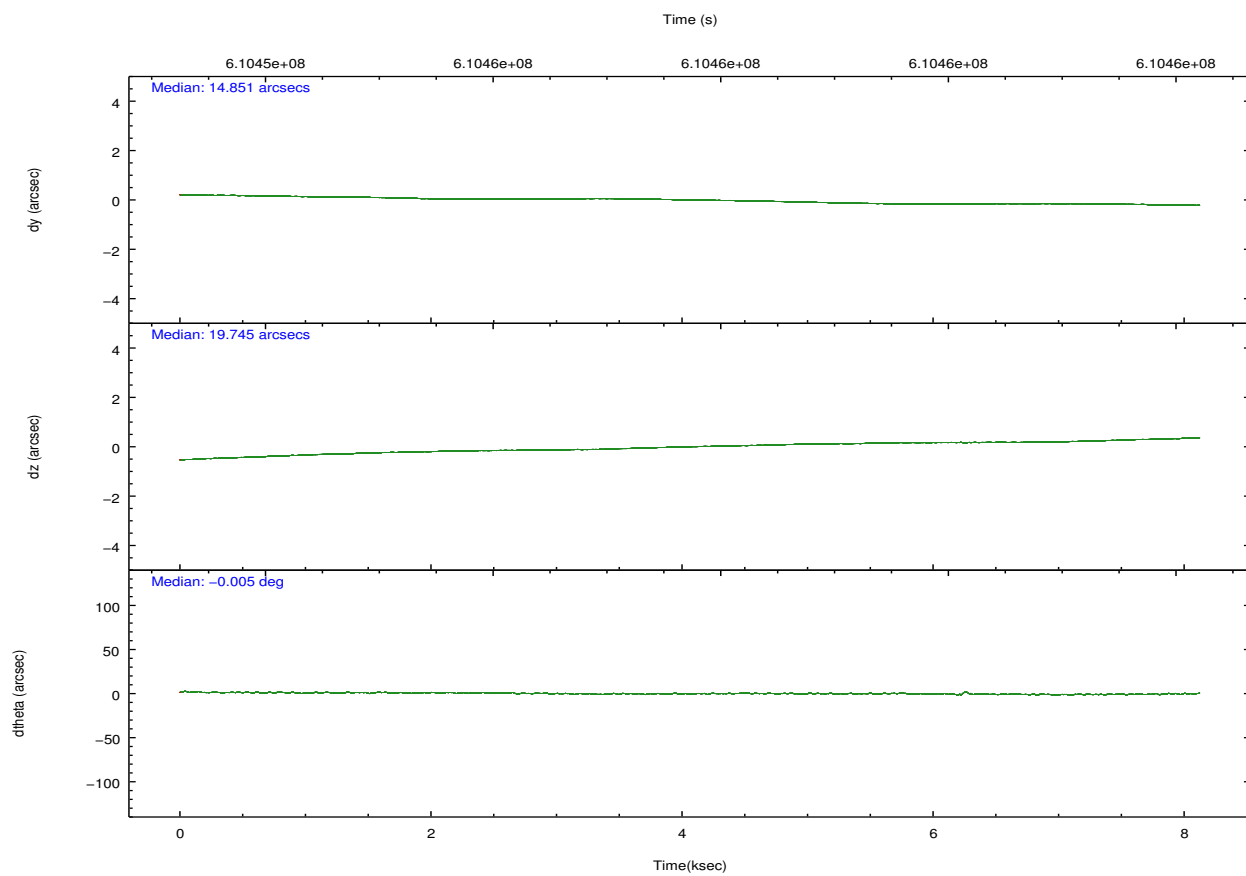
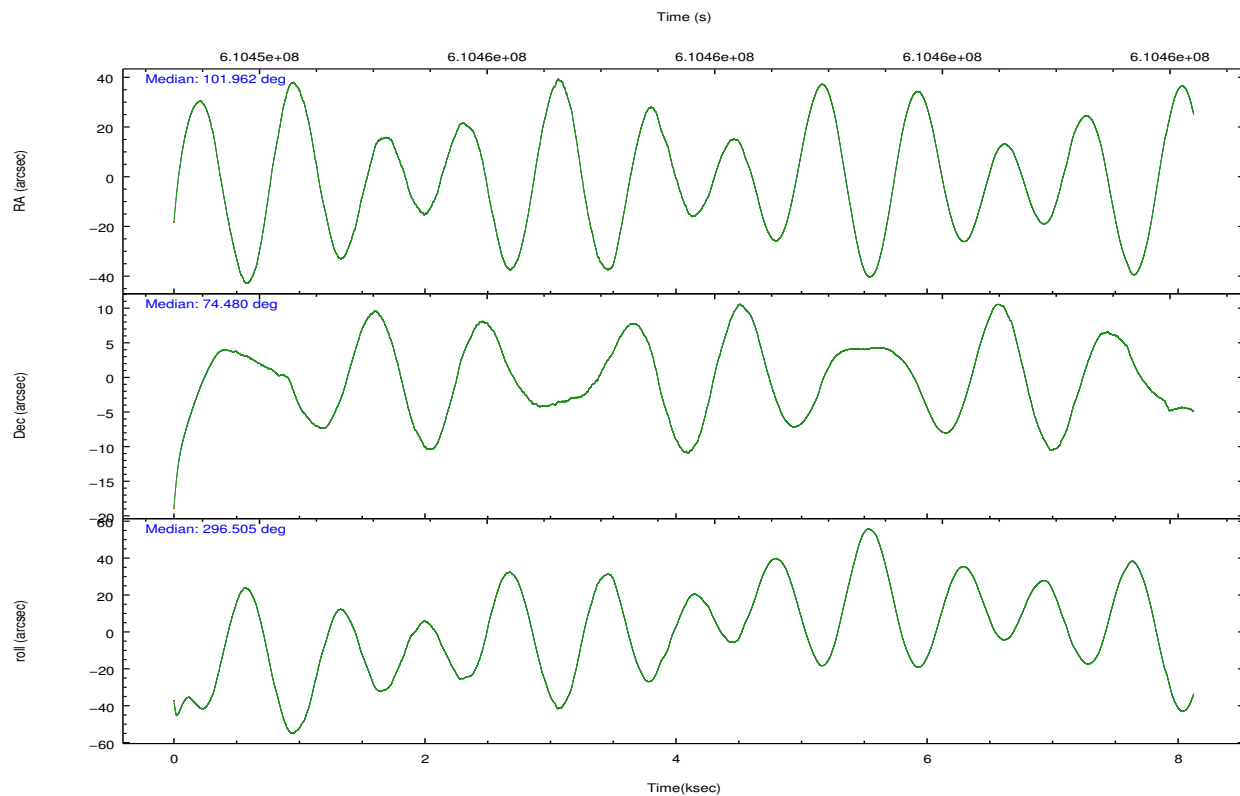


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	101.875412	101.9620448947114	CCD I2 on	O1	Y
[deg] Pointing Dec	74.494920	74.48012949491468	CCD I3 on	O2	Y
[deg] Pointing Roll	296.427816	296.5009267322851	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	Y
[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	Y	Y
[s] Observation start time (MET)	610453779.184000	610452383.4543	CCD S5 on	N	N
Observation start date	2017-05-06T10:28:30	2017-05-06T10:06:23	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	610461779.184000	610462407.95488	On-chip summing requested	N	N
Observation end date	2017-05-06T12:41:50	2017-05-06T12:53:27	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



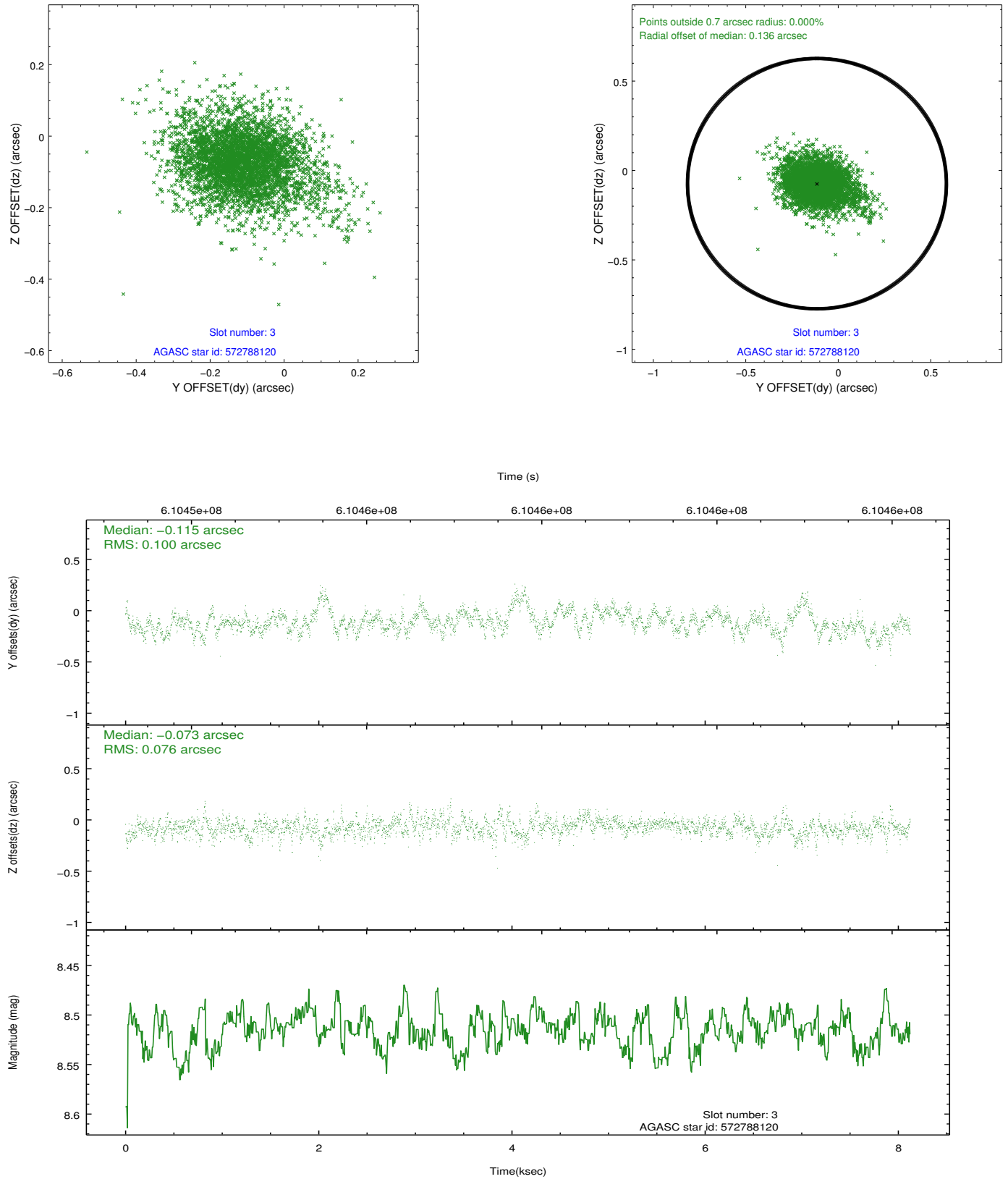


### Slot Statistics

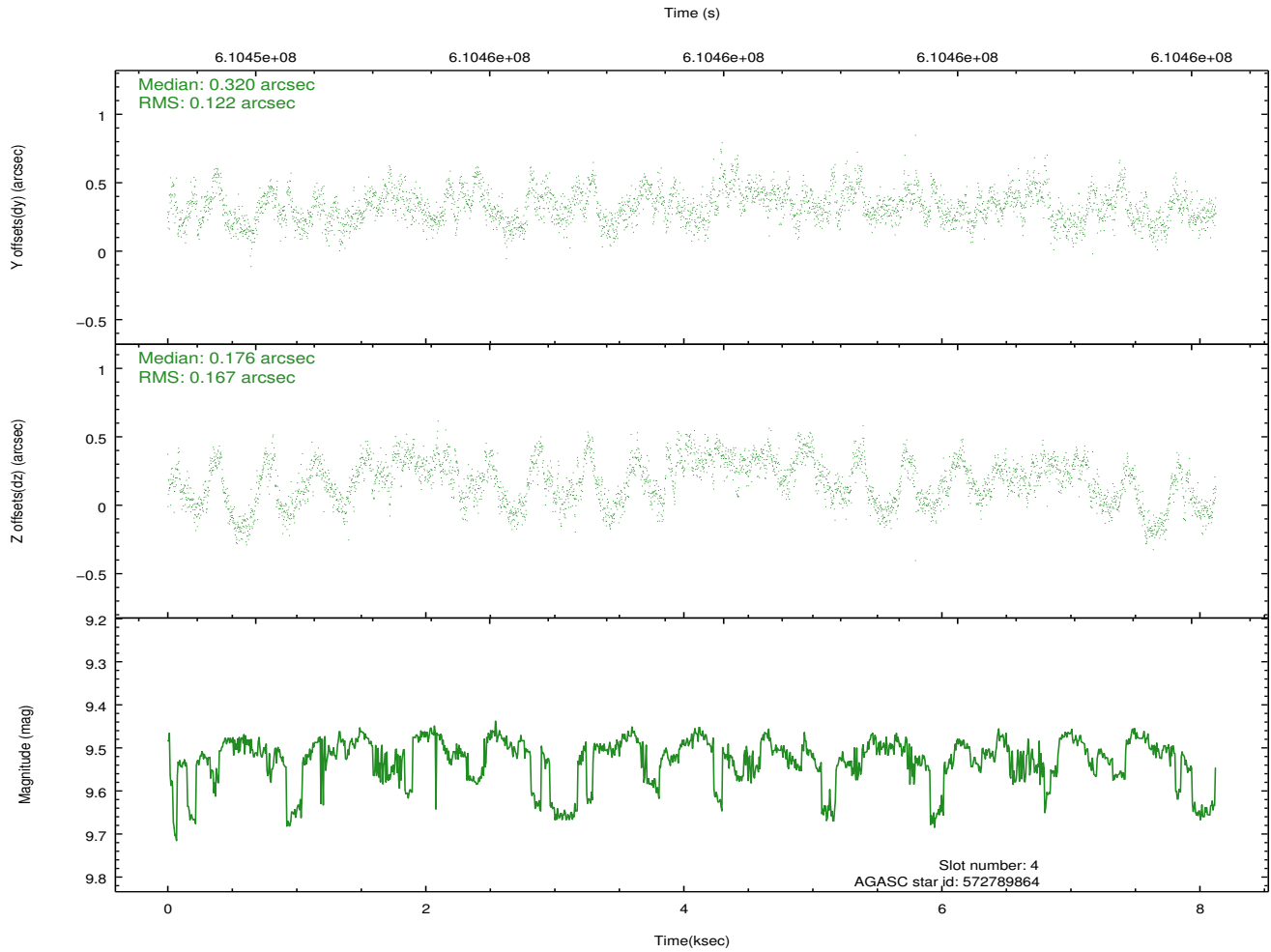
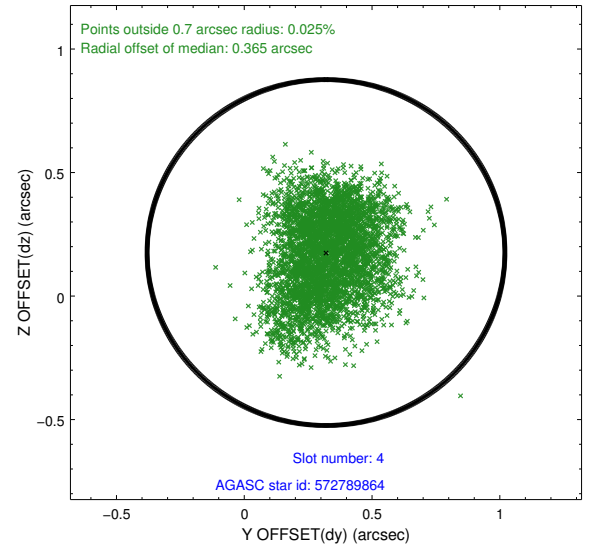
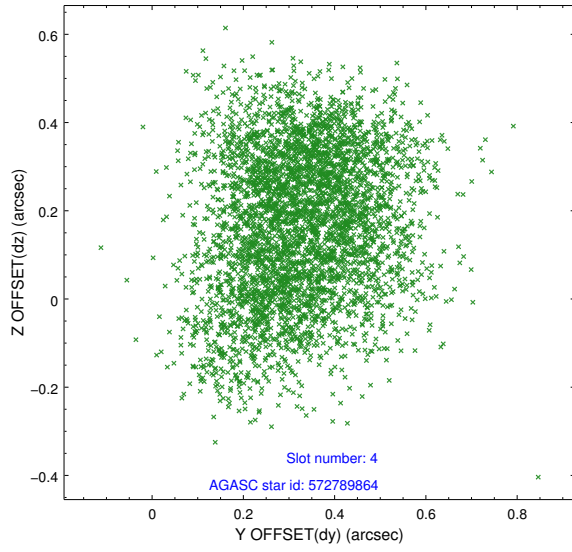
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.11	1982	-0.225	-0.093	0.014	0.024	0.000000	0.000000	-767.99	-1741.28
1	FID		ACIS-S-4	7.24	1982	0.504	0.134	0.008	0.013	0.000000	0.000000	2145.67	166.76
2	FID		ACIS-S-5	7.23	1982	-0.310	-0.032	0.012	0.021	0.000000	0.000000	-1820.06	160.99
3	GUIDE	used	572788120	8.51	3962	-0.115	-0.073	0.125	0.225	100.256998	74.050496	701.15	-2136.23
4	GUIDE	used	572789864	9.52	3960	0.320	0.176	0.222	0.349	101.739653	73.787111	2222.02	-1256.95
5	GUIDE	used	572920376	7.40	3960	-0.291	-0.181	0.131	0.219	103.261500	74.136922	1747.79	654.01
6	GUIDE	used	572924768	8.82	3961	0.156	-0.064	0.144	0.229	102.102134	74.925244	-1291.91	879.76
7	GUIDE	used	593242888	8.19	3963	-0.087	0.144	0.142	0.220	100.822236	75.068538	-2291.18	47.93

## 2.4 Star Slots

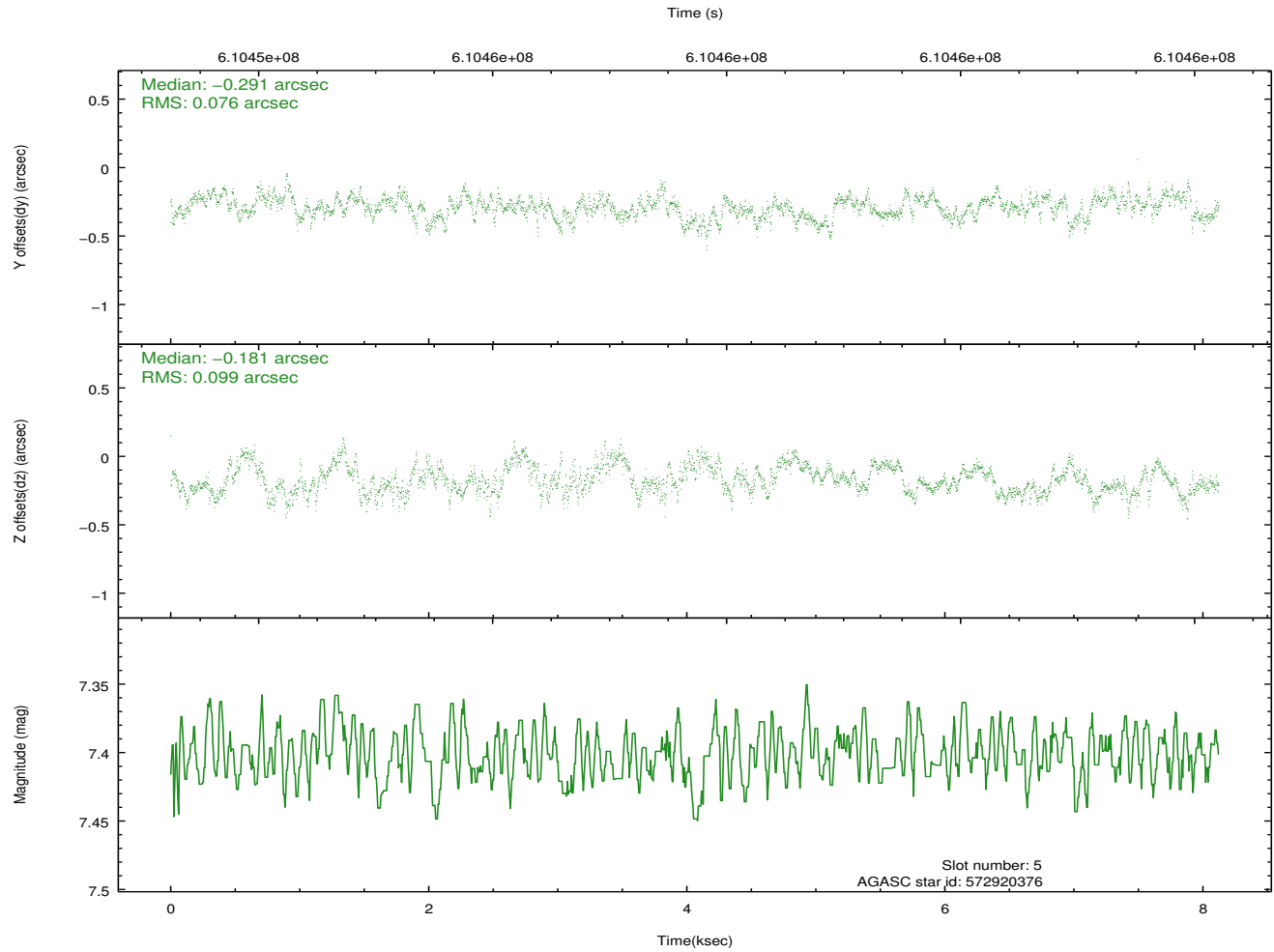
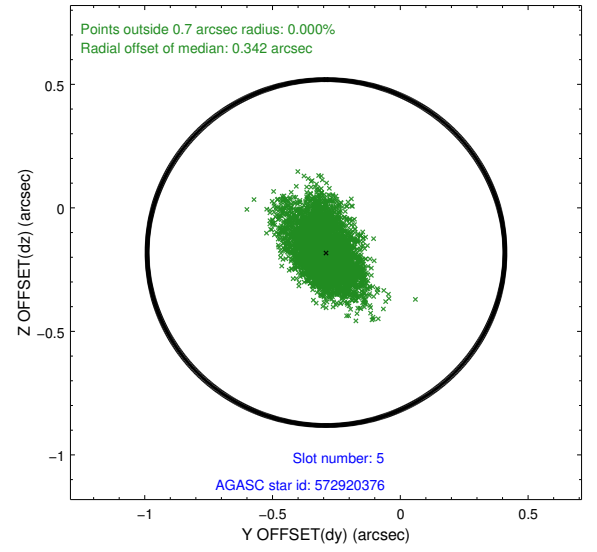
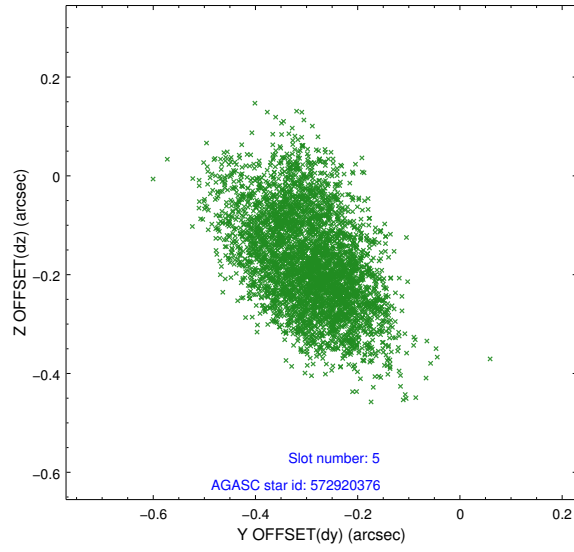
### 2.4.1 Slot 3



## 2.4.2 Slot 4

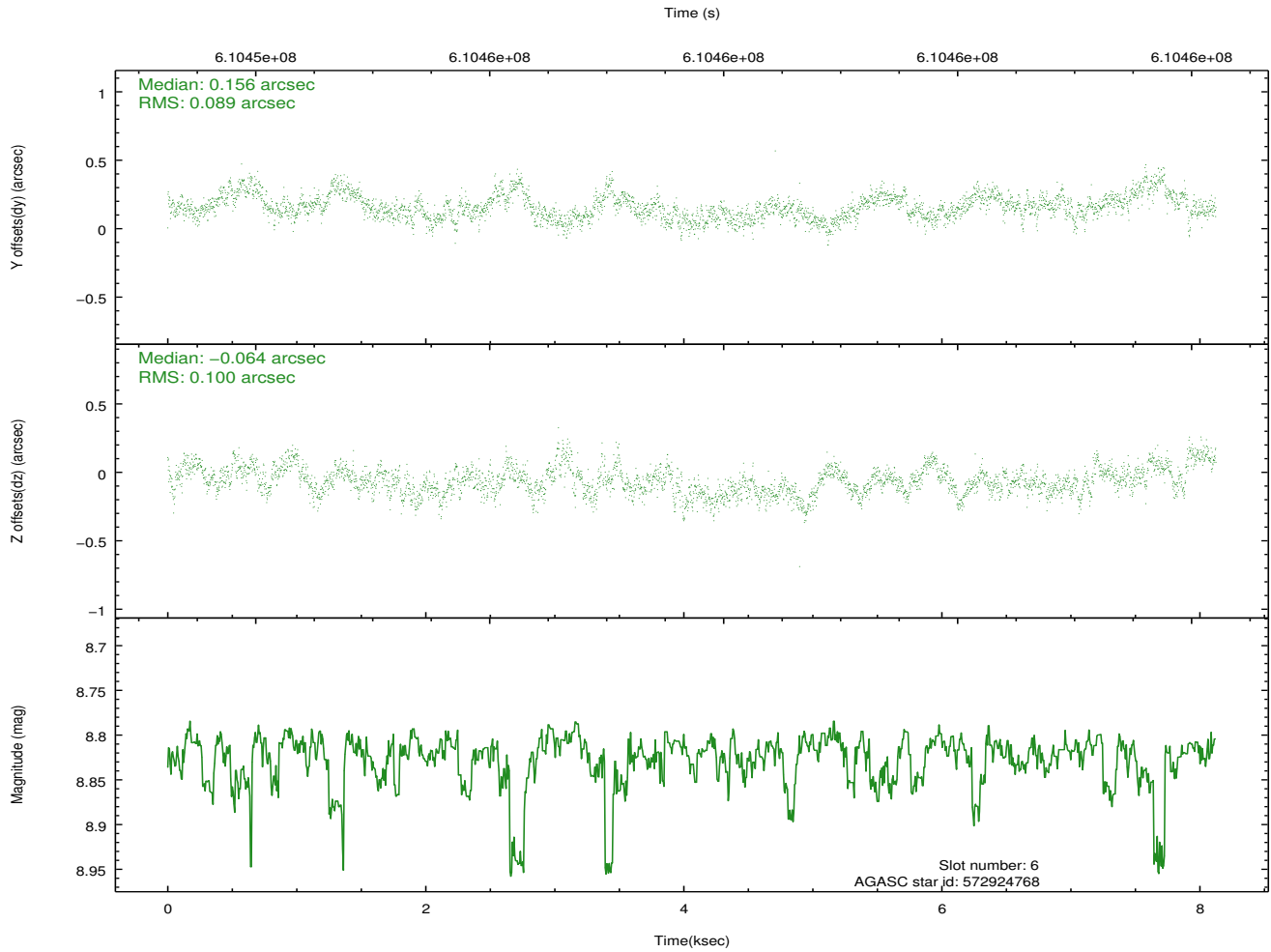
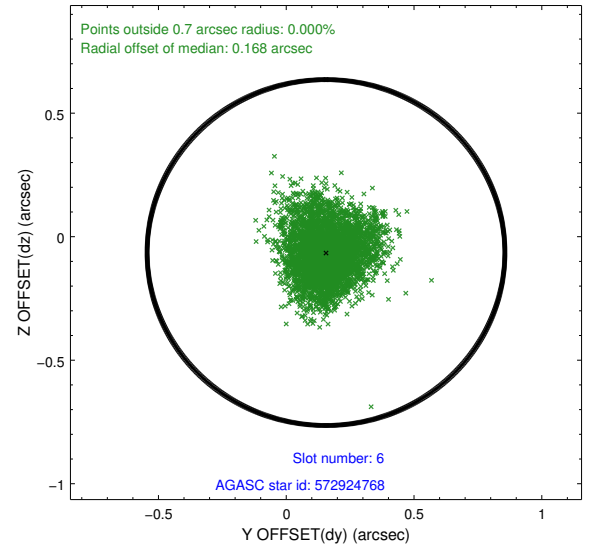
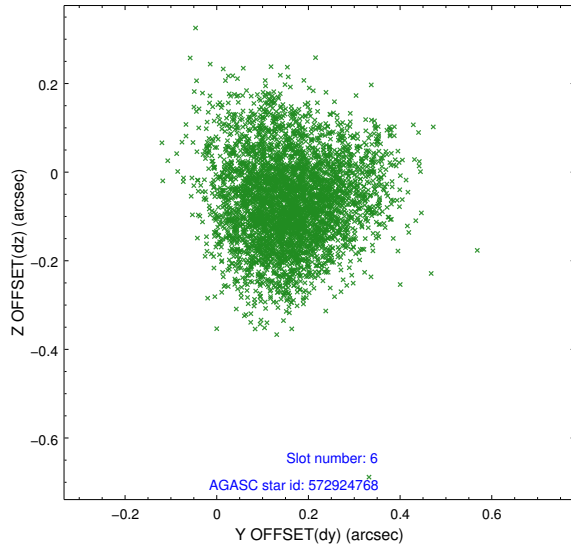


### 2.4.3 Slot 5

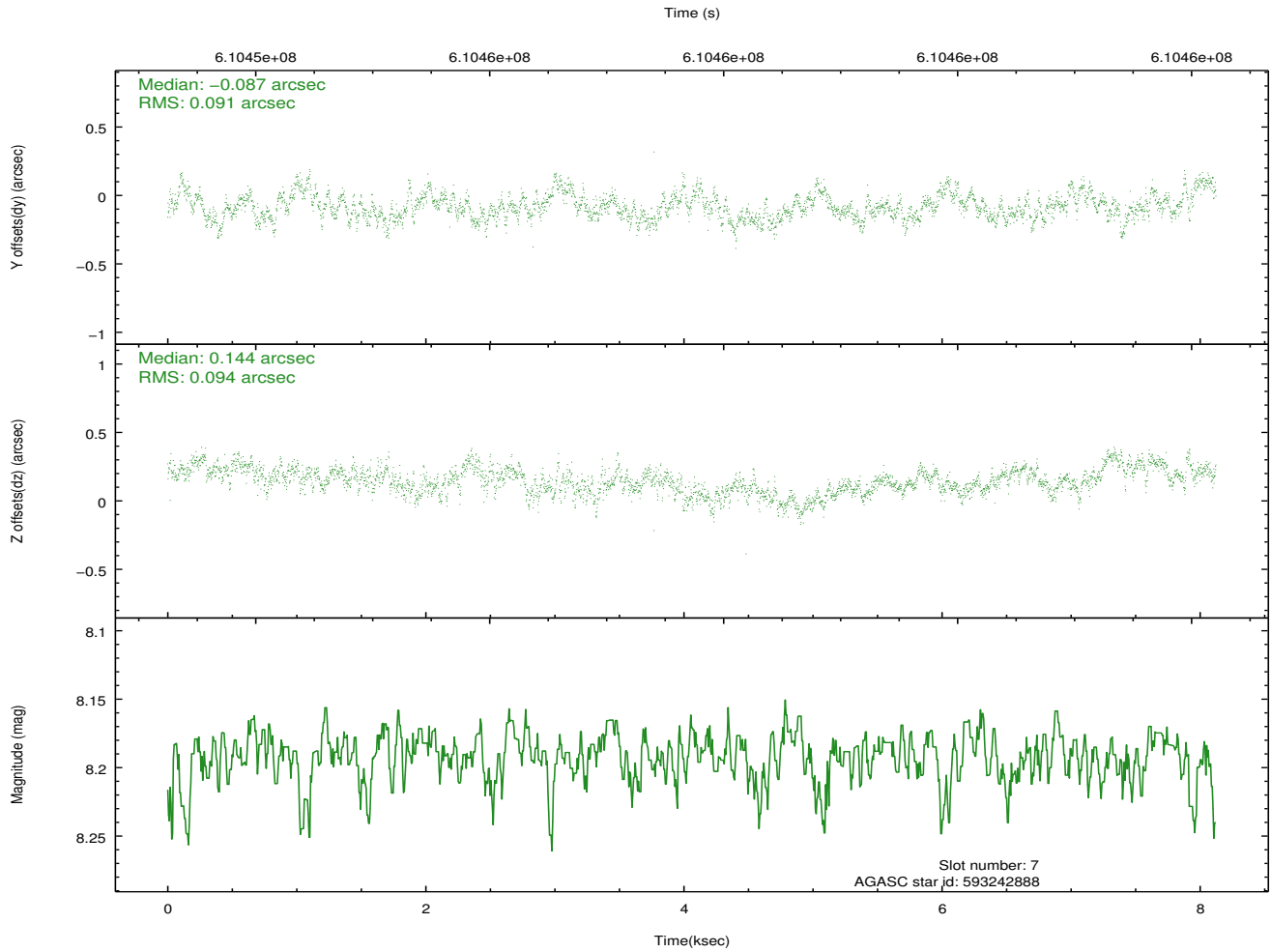
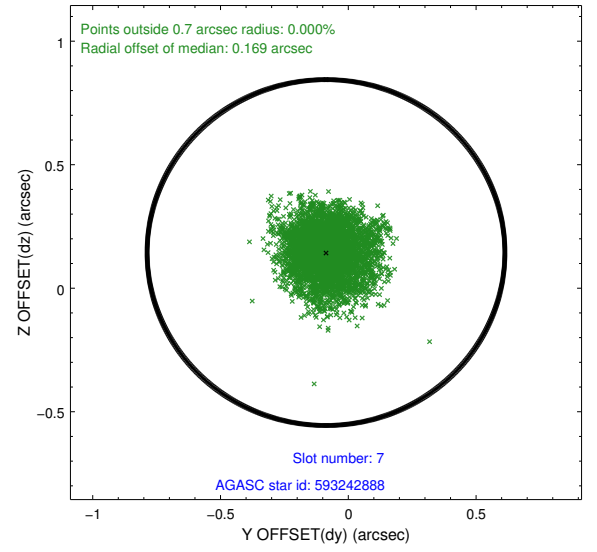
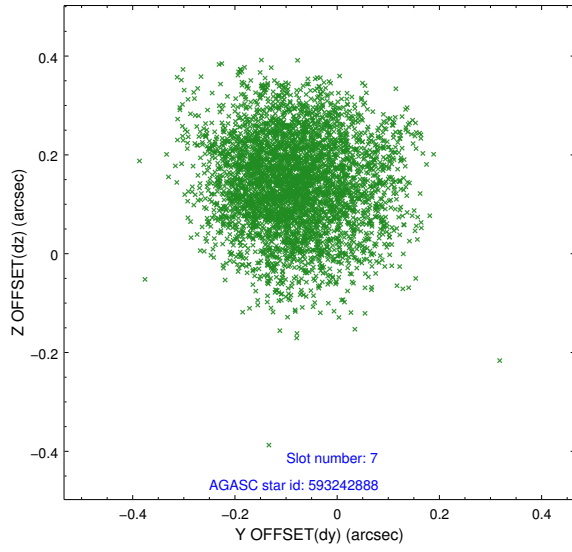




## 2.4.4 Slot 6

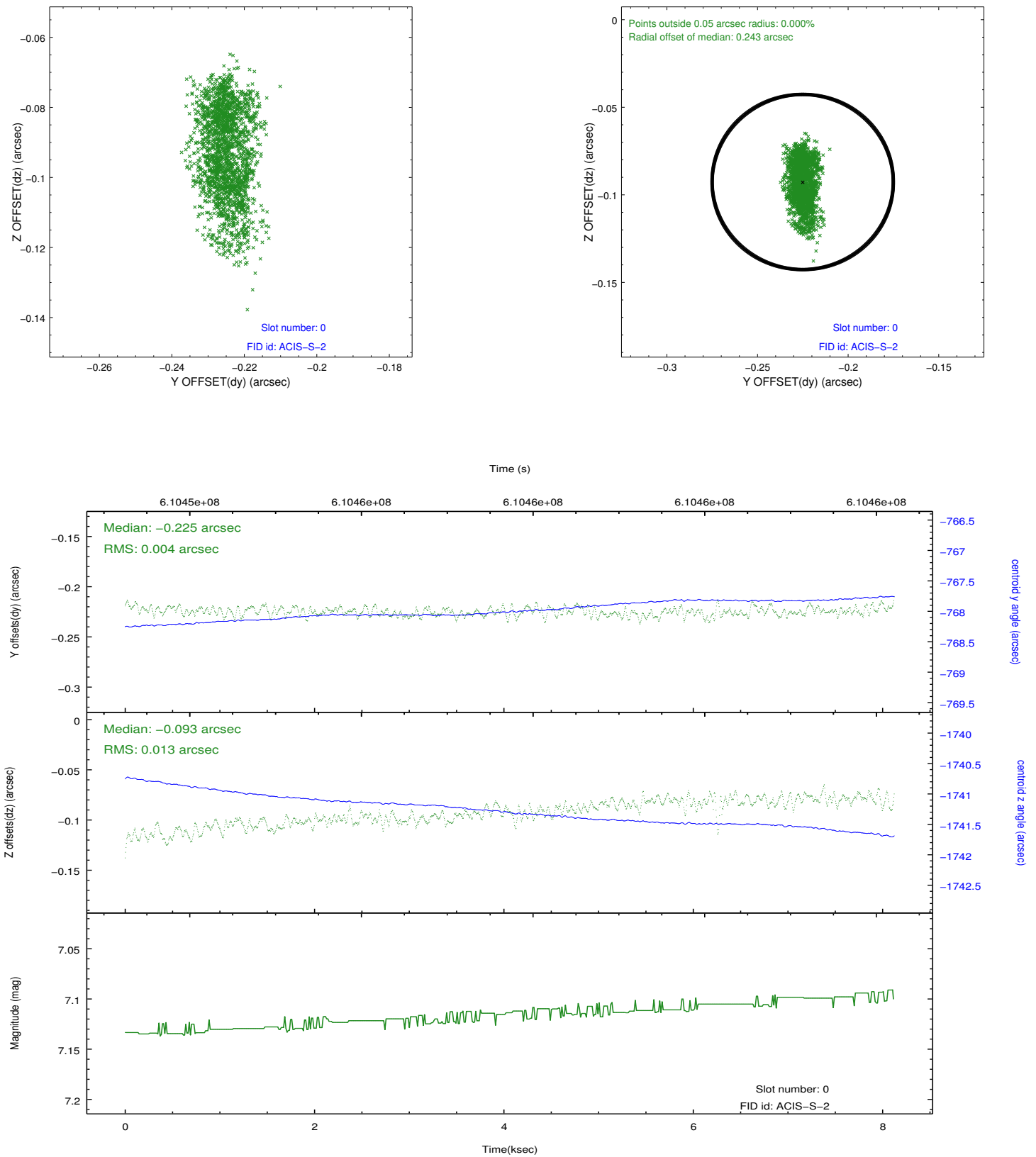


## 2.4.5 Slot 7

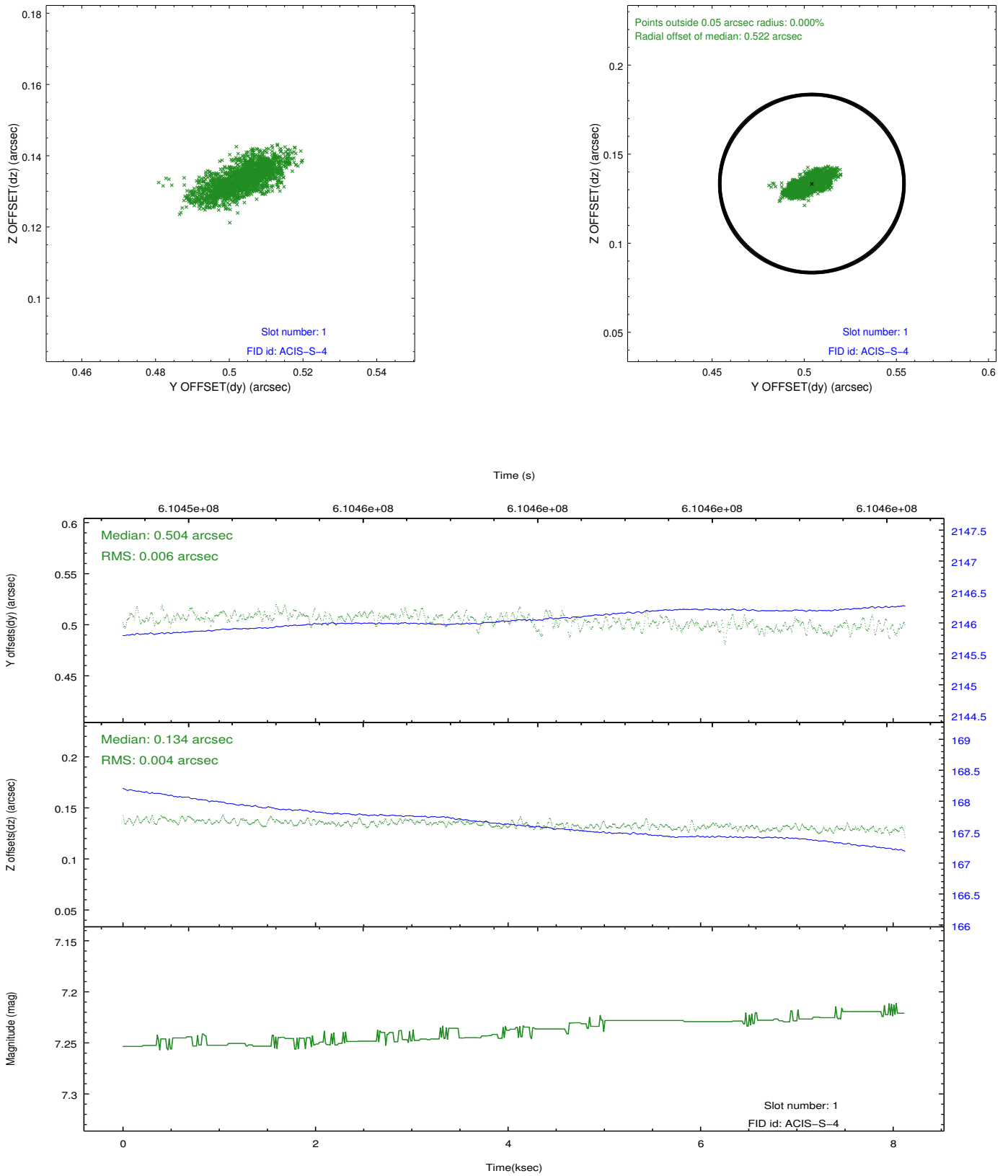


## 2.5 FID Slots

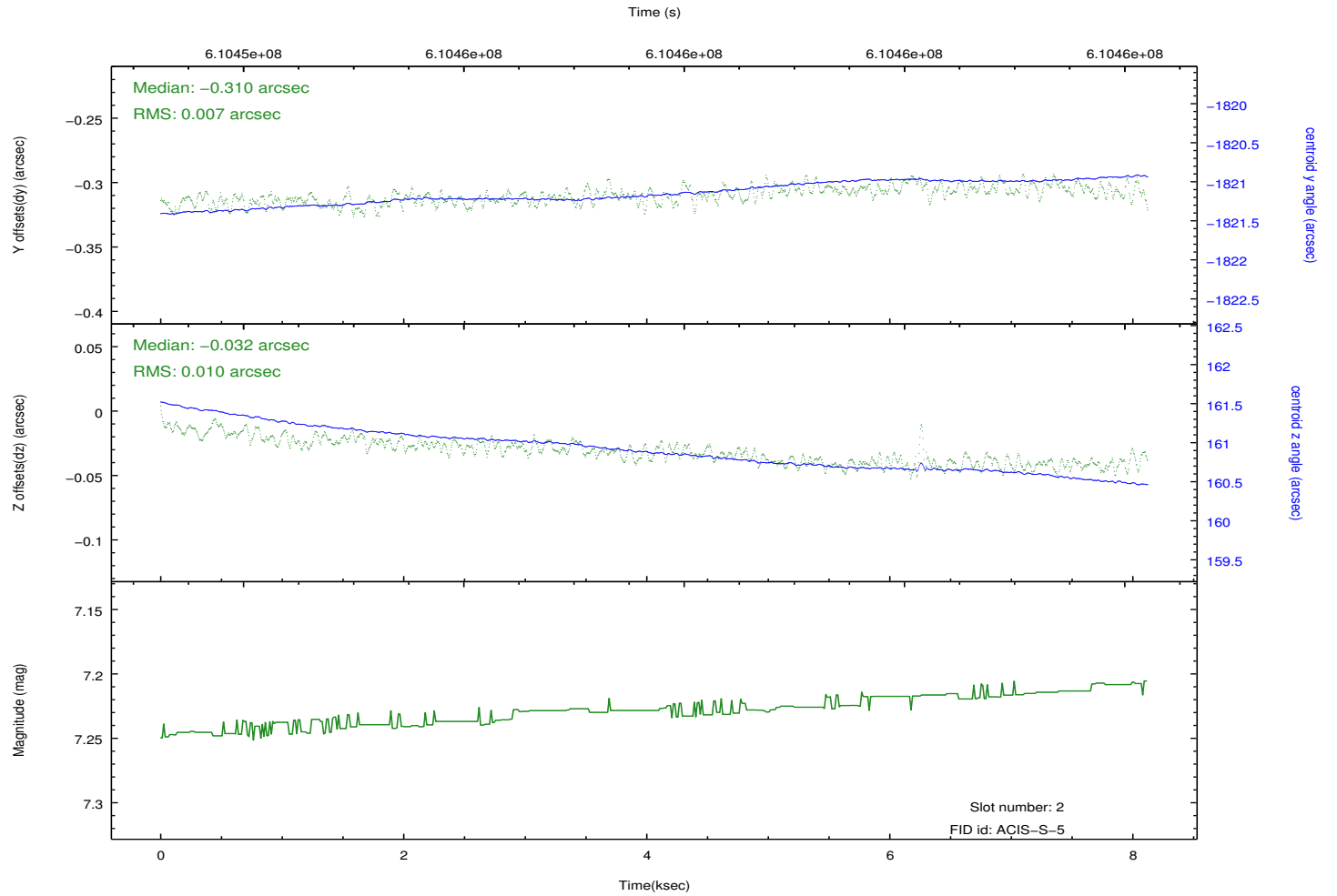
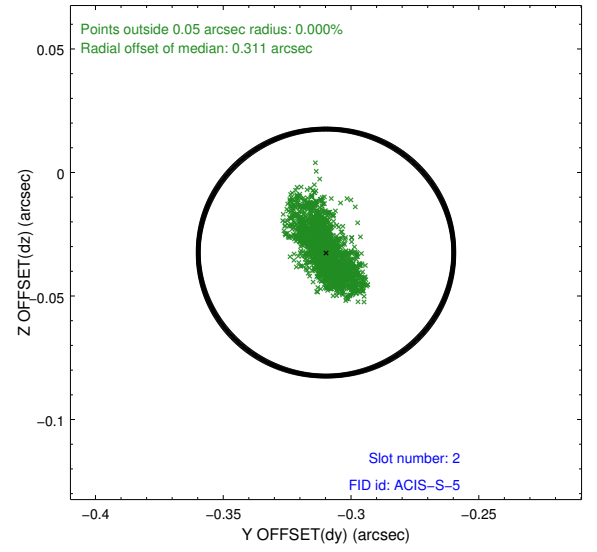
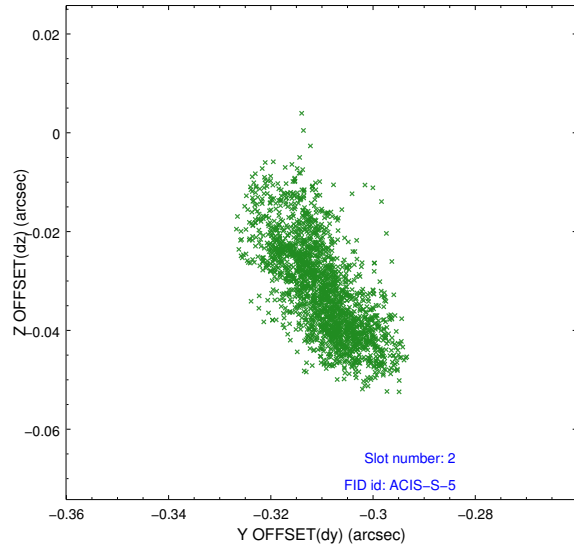
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2017.05.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	7.7552981244326

### A.2 Comments