

# V&V Reference Report

## L2 ASCDS Version : 10.6.4.1

Observation 20848 - L2 Version 1  
Chandra X-Ray Center

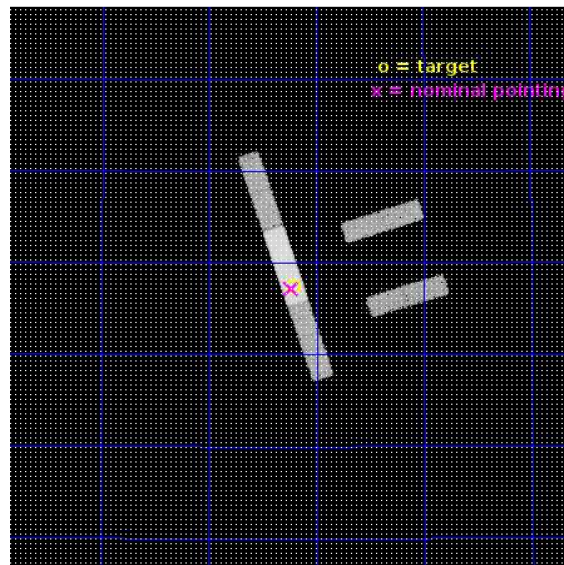
L2 Processing Date : Oct 2 2018

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# 1 Front

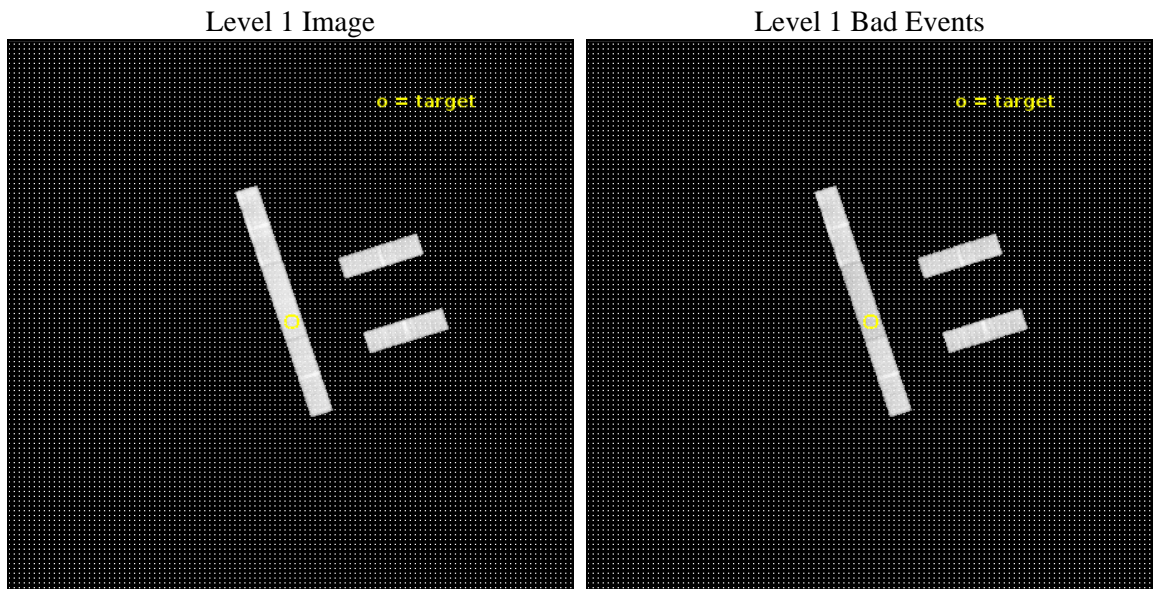
seq_num	402005	Sequence number
obs_id	20848	Observation id
title	Post-periastron behavior of PSR J2032+4127/MT91 213: Outburst, jet, and winds	Proposal title
observer	Wynn Ho	Principal investigator
object	PSR J2032+4127	Source name
dtycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	308.054583	Observer's specified target RA [deg]
dec_targ	41.456778	Observer's specified target Dec [deg]
ra_nom	308.05831587728	Nominal RA [deg]
dec_nom	41.453267249847	Nominal Dec [deg]
roll_nom	252.06048353872	Nominal Roll [deg]
revision	1	Processing version of data
ontime	27421.0	Sum of GTIs [s]
liveltime	26340.006147699	Livetime [s]
ontime2	27421.0	Sum of GTIs [s]
ontime3	27421.0	Sum of GTIs [s]
ontime6	27421.0	Sum of GTIs [s]
ontime7	27421.0	Sum of GTIs [s]
ontime8	27421.0	Sum of GTIs [s]
l2events	58375	Number of level 2 events



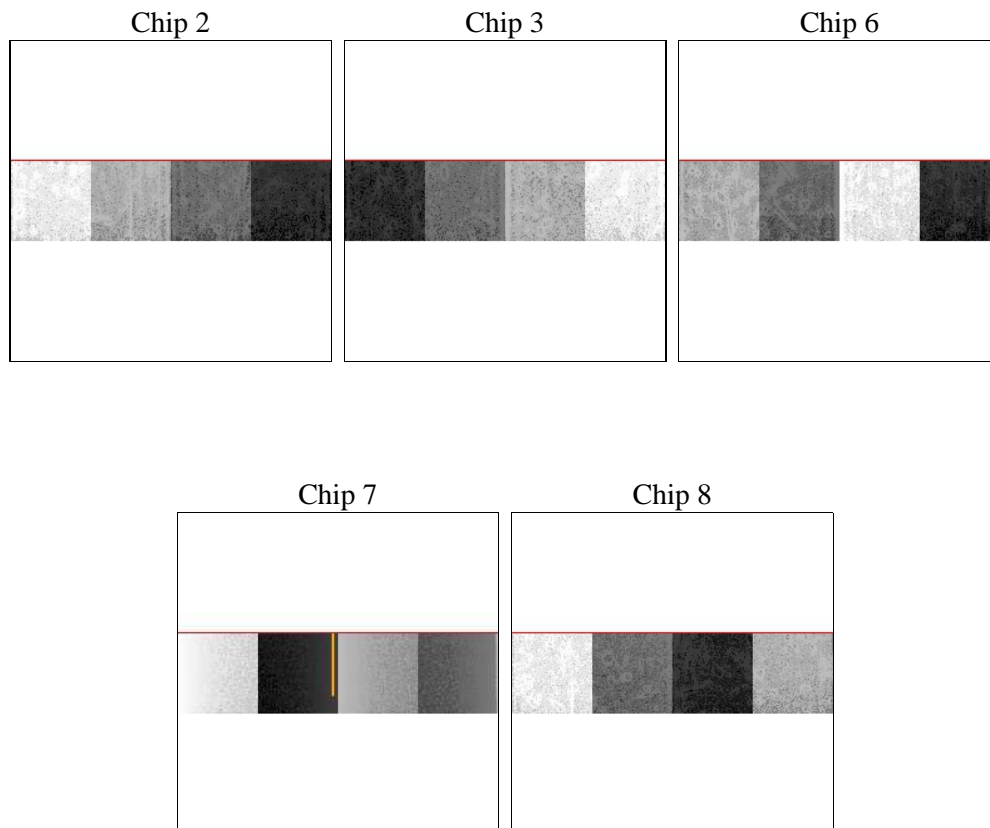
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	27350.000000	[s] Scheduled observation exposure time
ascdsver	10.6.4.1	Processing system revision	ontime	27421.0	Sum of GTIs [s]
caldbver	4.8.0	&#160	ontime2	27421.0	Sum of GTIs [s]
date	2018-10-03T03:08:33	Date and time of file creation	ontime3	27421.0	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	27421.0	Sum of GTIs [s]
			ontime7	27421.0	Sum of GTIs [s]
			ontime8	27421.0	Sum of GTIs [s]
			l1events	349818	Number of level 1 events

### 2.1.4 Events

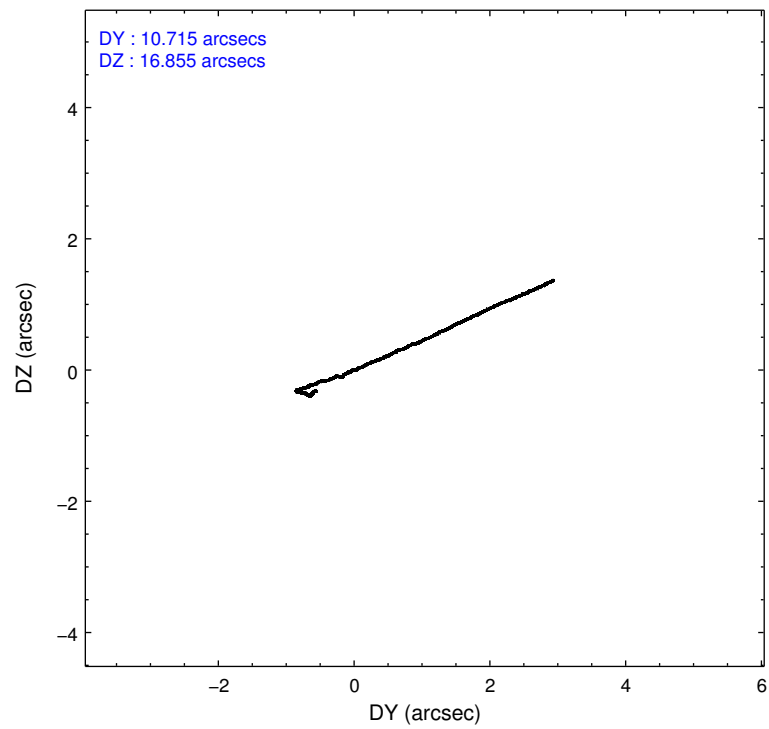
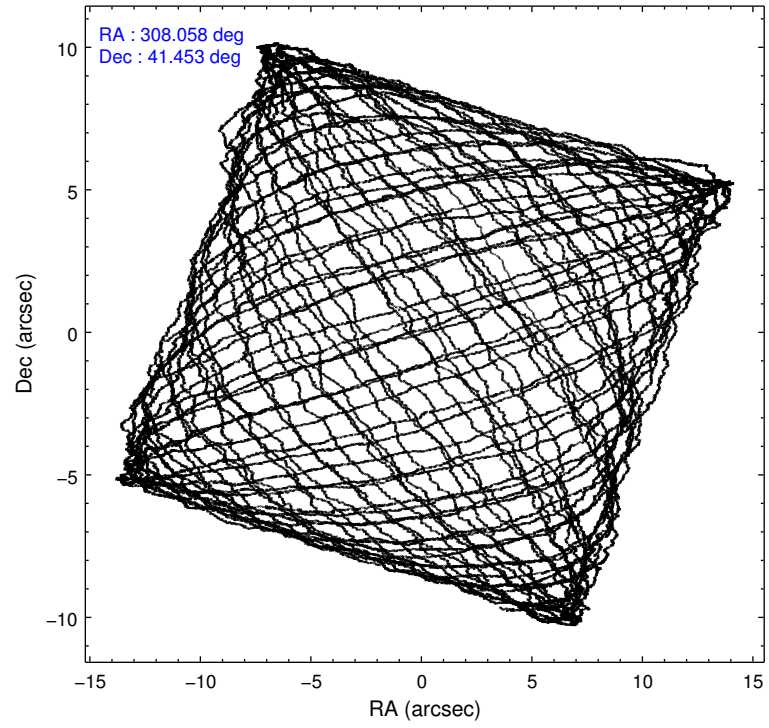
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	61669	60303	68345	75436	84065
rejected events	54998	53584	60033	40643	64289
rejected %	89%	88%	87%	53%	76%

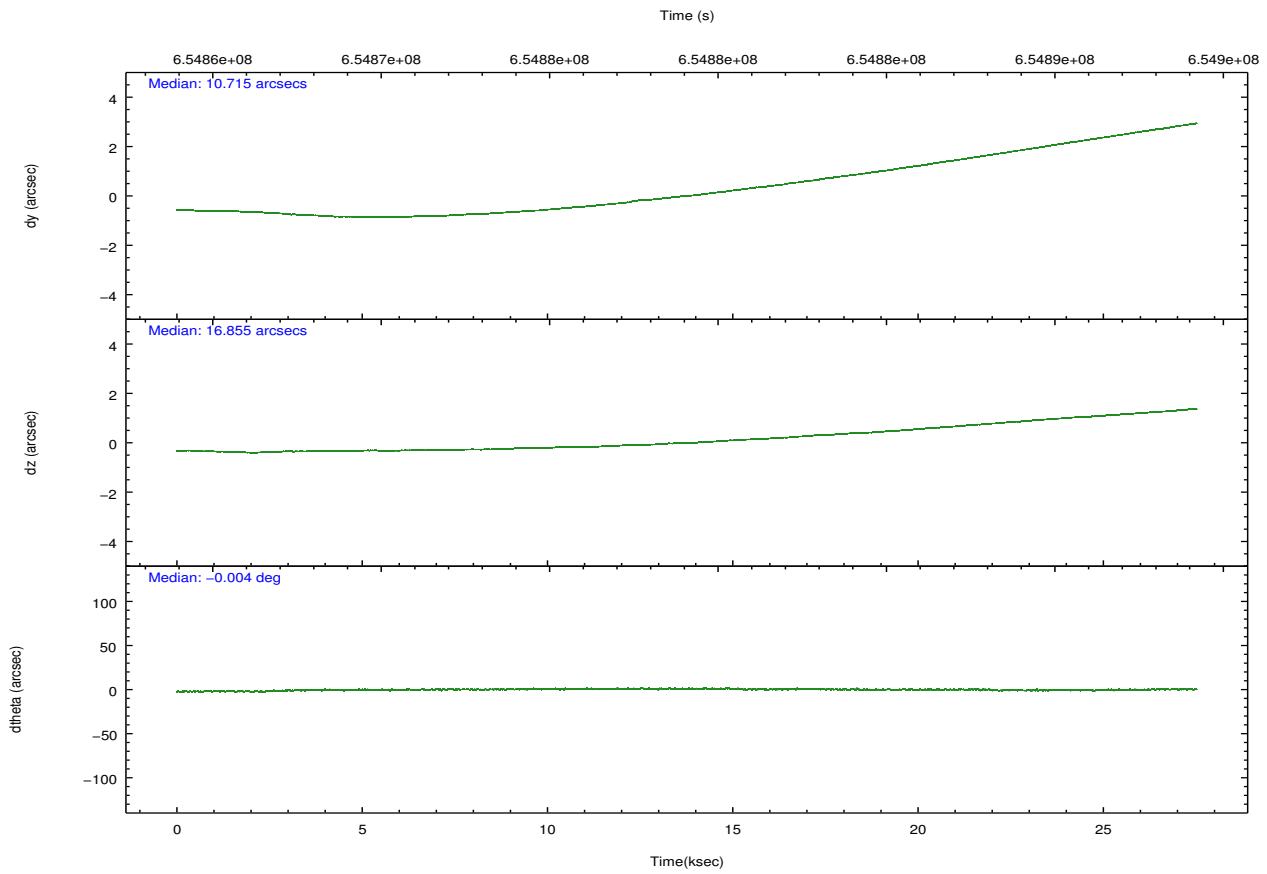
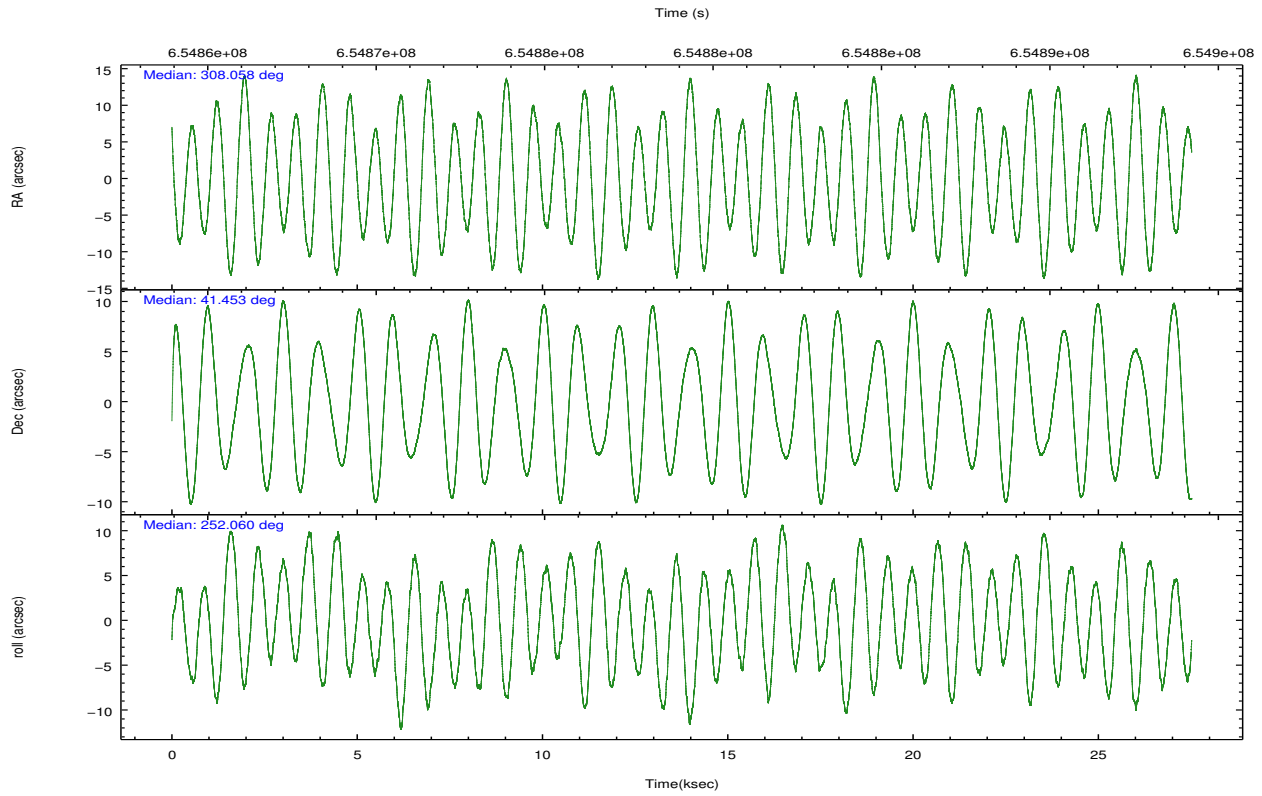
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	2203	2249	2998	3604	5145
	3%	3%	4%	4%	6%
grade 1 events	17	19	28	137	40
	0%	0%	0%	0%	0%
grade 2 events	1277	1297	1601	7242	4576
	2%	2%	2%	9%	5%
grade 3 events	983	968	1028	3725	2079
	1%	1%	1%	4%	2%
grade 4 events	1019	913	1015	3462	1871
	1%	1%	1%	4%	2%
grade 5 events	2112	2630	2641	7414	4007
	3%	4%	3%	9%	4%
grade 6 events	1189	1293	1671	16765	6106
	1%	2%	2%	22%	7%
grade 7 events	52869	50934	57363	33087	60241
	85%	84%	83%	43%	71%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23678	ACIS-23678	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	308.050195	308.0583158772751	CCD I2 on	O1	Y
[deg] Pointing Dec	41.480026	41.45326724984696	CCD I3 on	O2	Y
[deg] Pointing Roll	251.909237	252.0604835387208	CCD S0 on	N	N
[s] Window start time (MET)	654566469.184000	654566469.184000	CCD S1 on	N	N
[s] Window stop time (MET)	659750469.184000	659750469.184000	CCD S2 on	Y	Y
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S3 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S4 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S5 on	N	N
[mm] SIM translation stage offset	0	0.00754346686406393	Number of optional ACIS chips dropped	0	0
[s] Observation start time (MET)	654865488.184000	654864432.20388	On-chip summing requested	N	N
Observation start date	2018-10-02T11:03:39	2018-10-02T10:47:12	Subarray requested	CUSTOM	1/4
[s] Observation end time (MET)	654892838.184000	654893455.08061	Subarray start row	385	385
Observation end date	2018-10-02T18:39:29	2018-10-02T18:50:55	Subarray row count	256	256
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	1

## 2.3 Aspect





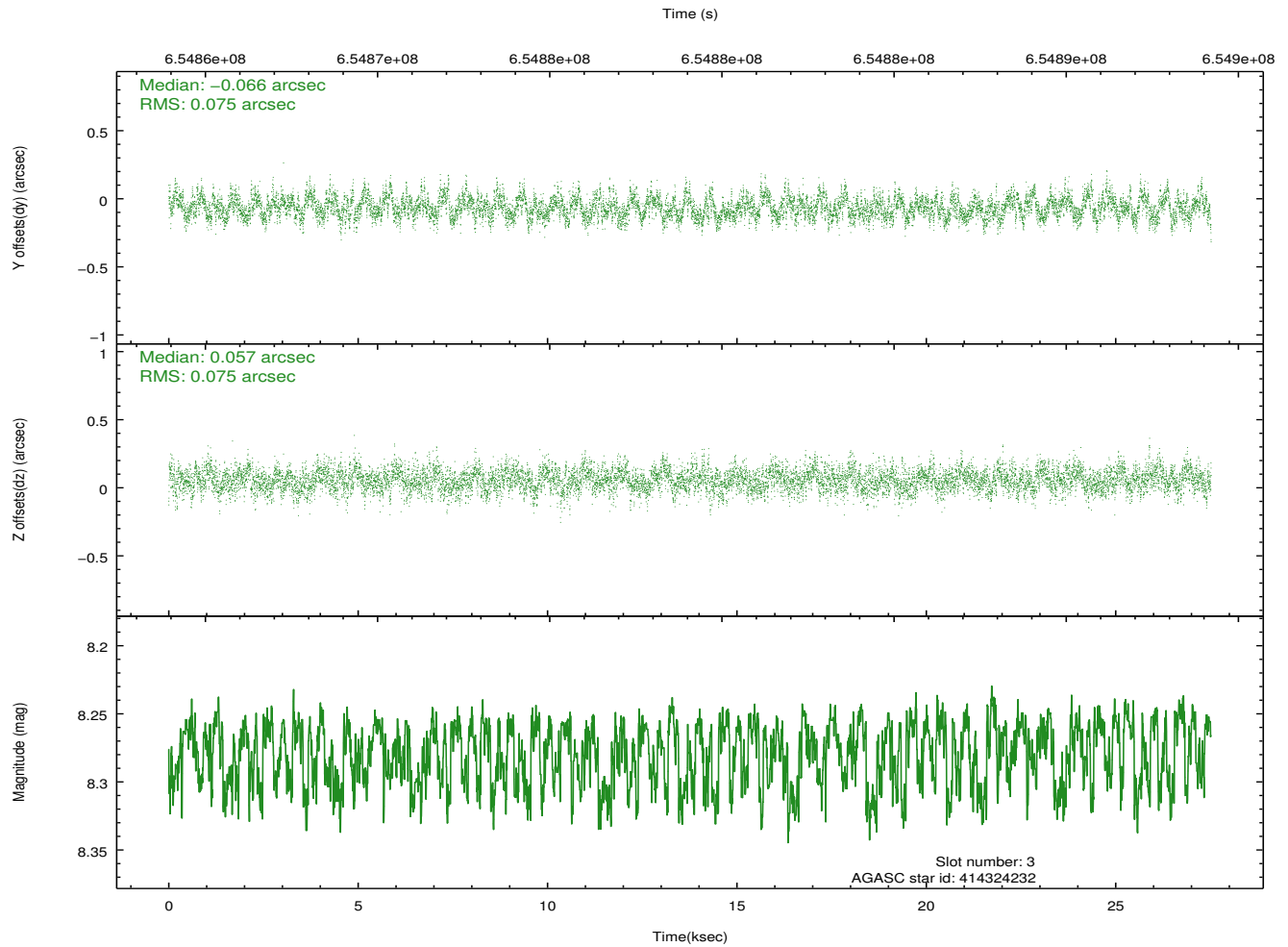
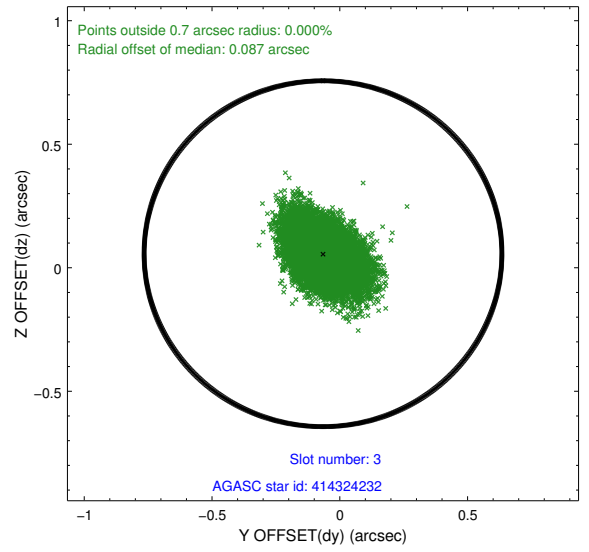
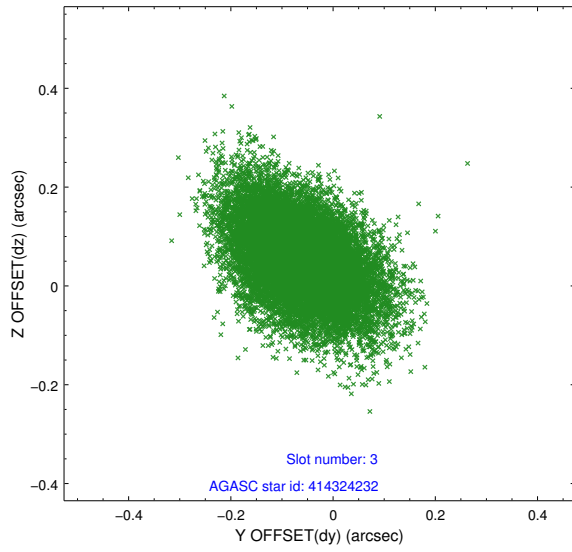
### Slot Statistics

pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.05	6713	1.000	-0.129	-0.081	0.032	0.042	0.000000	0.000000	-764.11	-1738
1	FID		ACIS-S-4	7.18	6711	1.000	0.385	0.086	0.013	0.059	0.000000	0.000000	2149.65	169
2	FID		ACIS-S-5	7.16	6711	1.000	-0.289	0.008	0.042	0.073	0.000000	0.000000	-1816.99	163
3	GUIDE	used	414324232	8.28	13418	1.000	-0.066	0.057	0.111	0.185	308.637806	41.996627	-2260.81	915
4	GUIDE	used	413805792	7.33	13421	1.000	-0.030	-0.155	0.106	0.185	307.778748	40.858024	2356.17	-7
5	GUIDE	used	413803744	8.80	13420	1.000	-0.360	-0.188	0.109	0.182	308.586342	40.704904	2193.53	2256
6	GUIDE	used	414322472	8.47	13415	1.000	0.430	0.345	0.112	0.185	307.661586	42.199898	-2142.94	-1789
7	GUIDE	used	414326136	7.35	13422	1.000	0.026	-0.059	0.110	0.192	308.256176	41.473642	-151.93	535

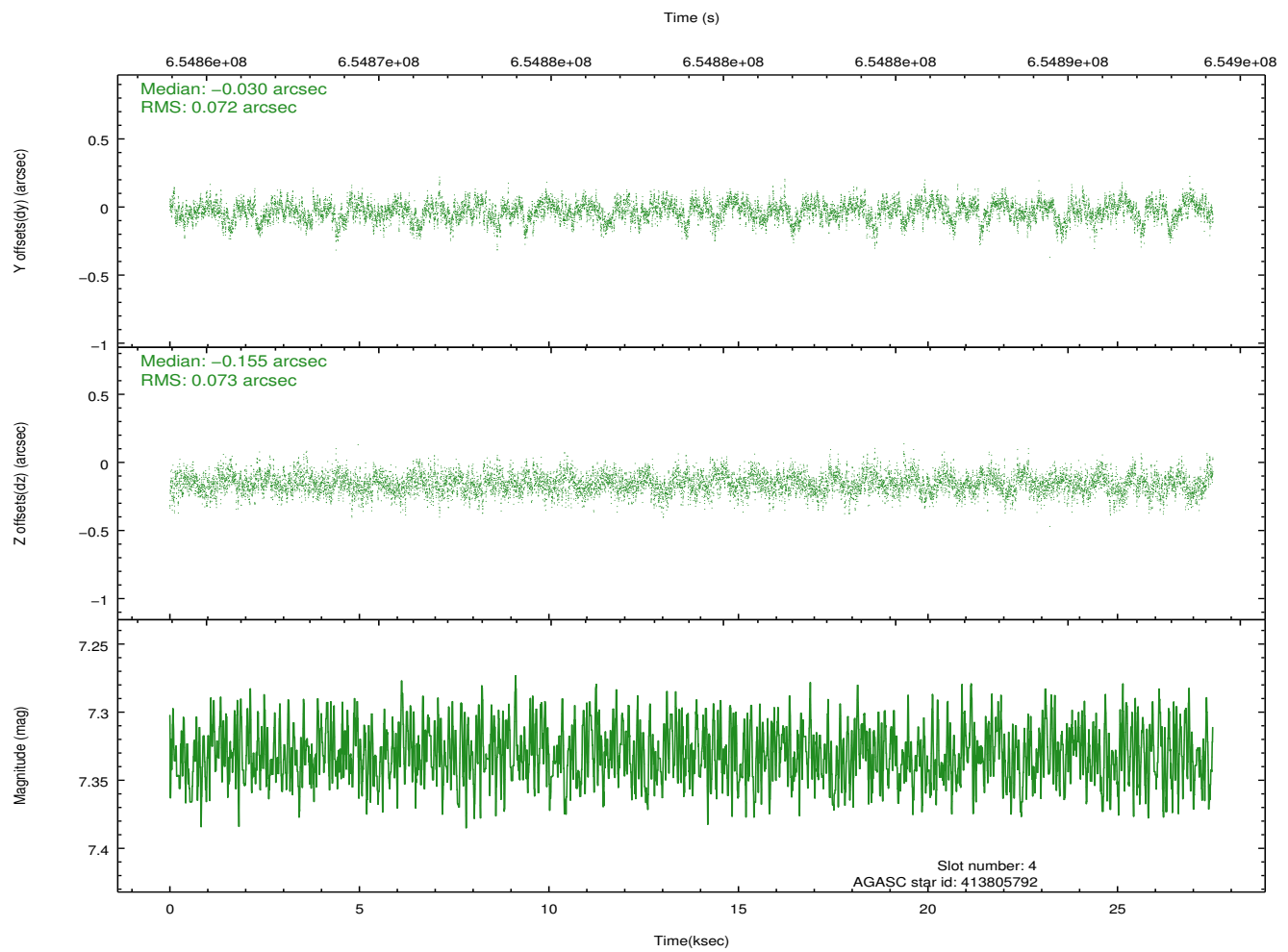
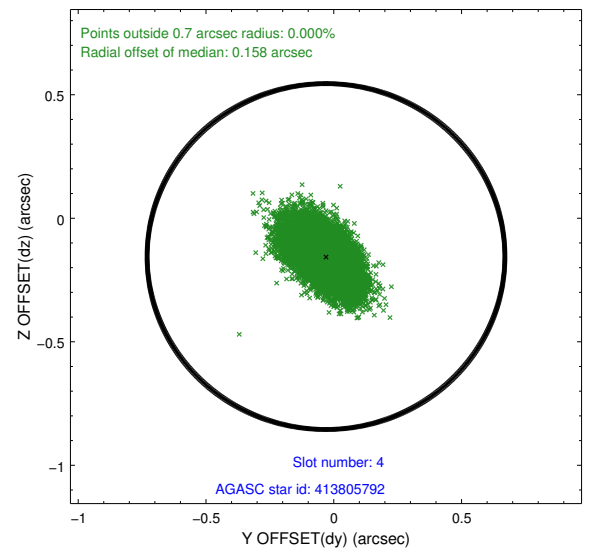
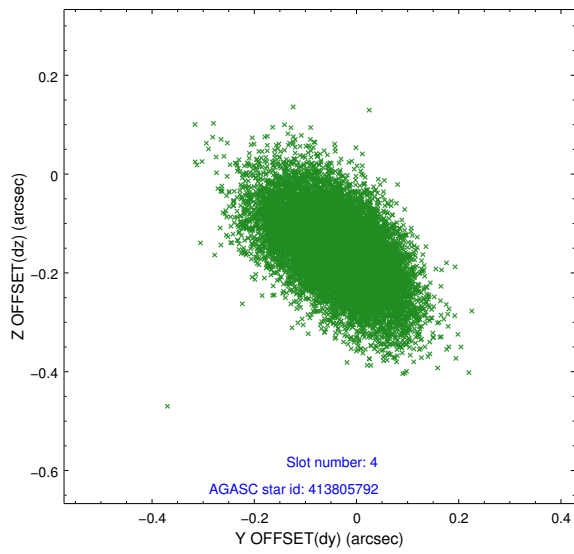
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## 2.4 Star Slots

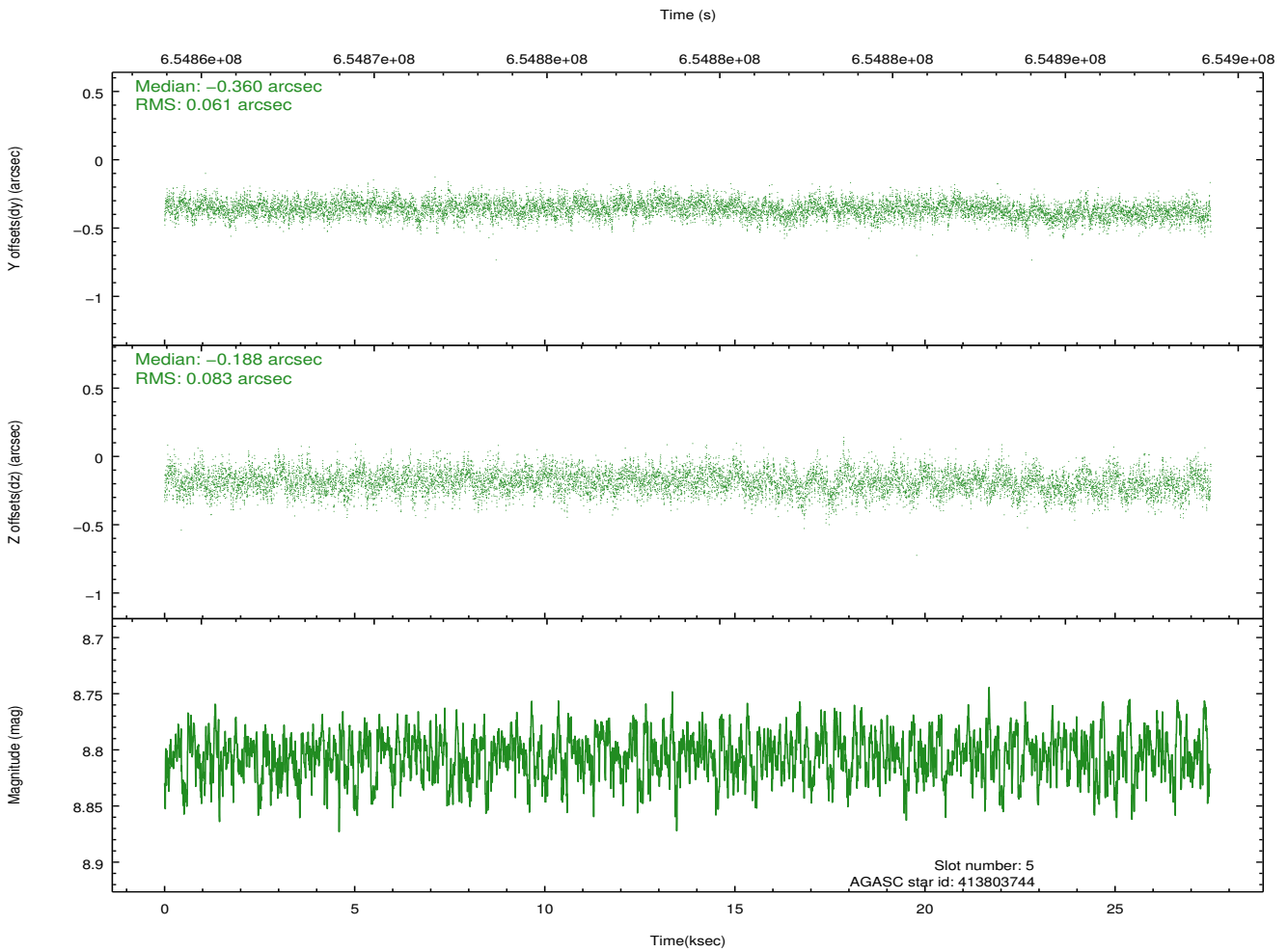
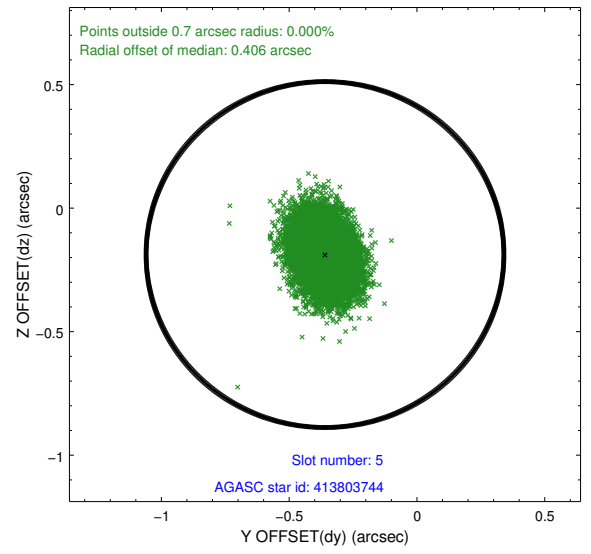
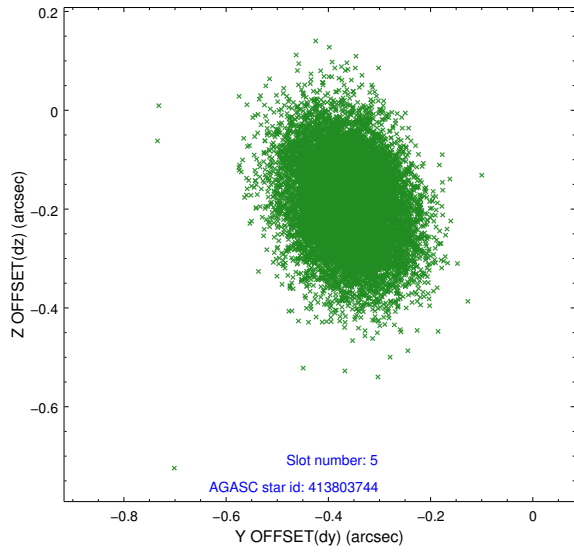
### 2.4.1 Slot 3



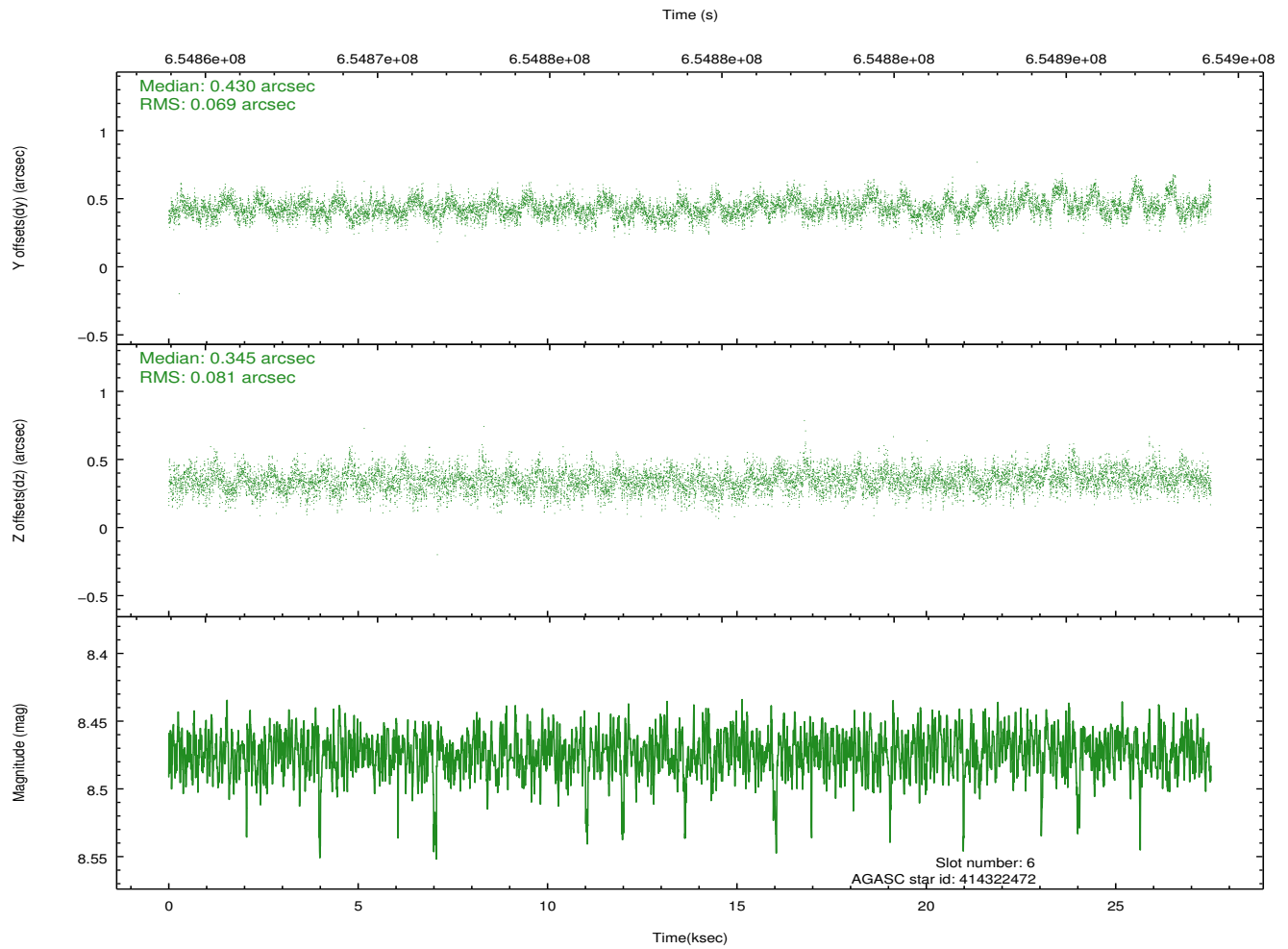
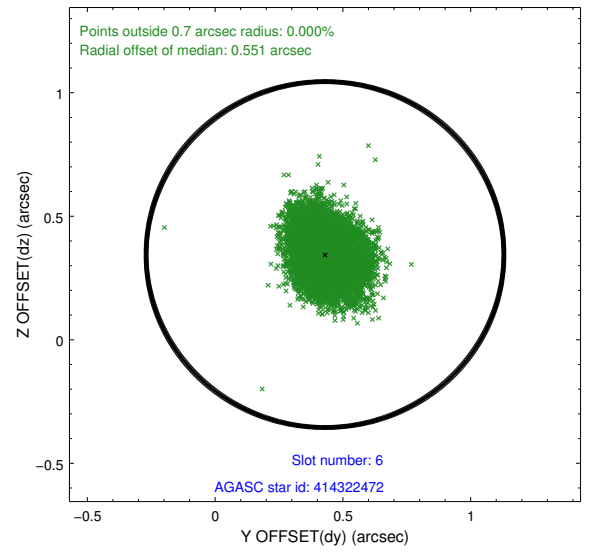
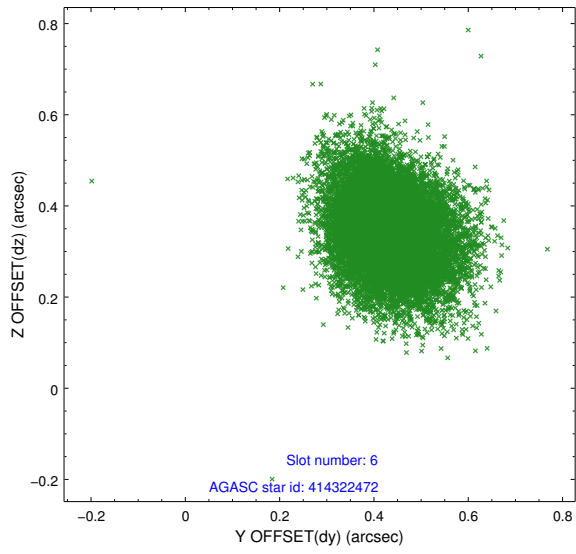
## 2.4.2 Slot 4



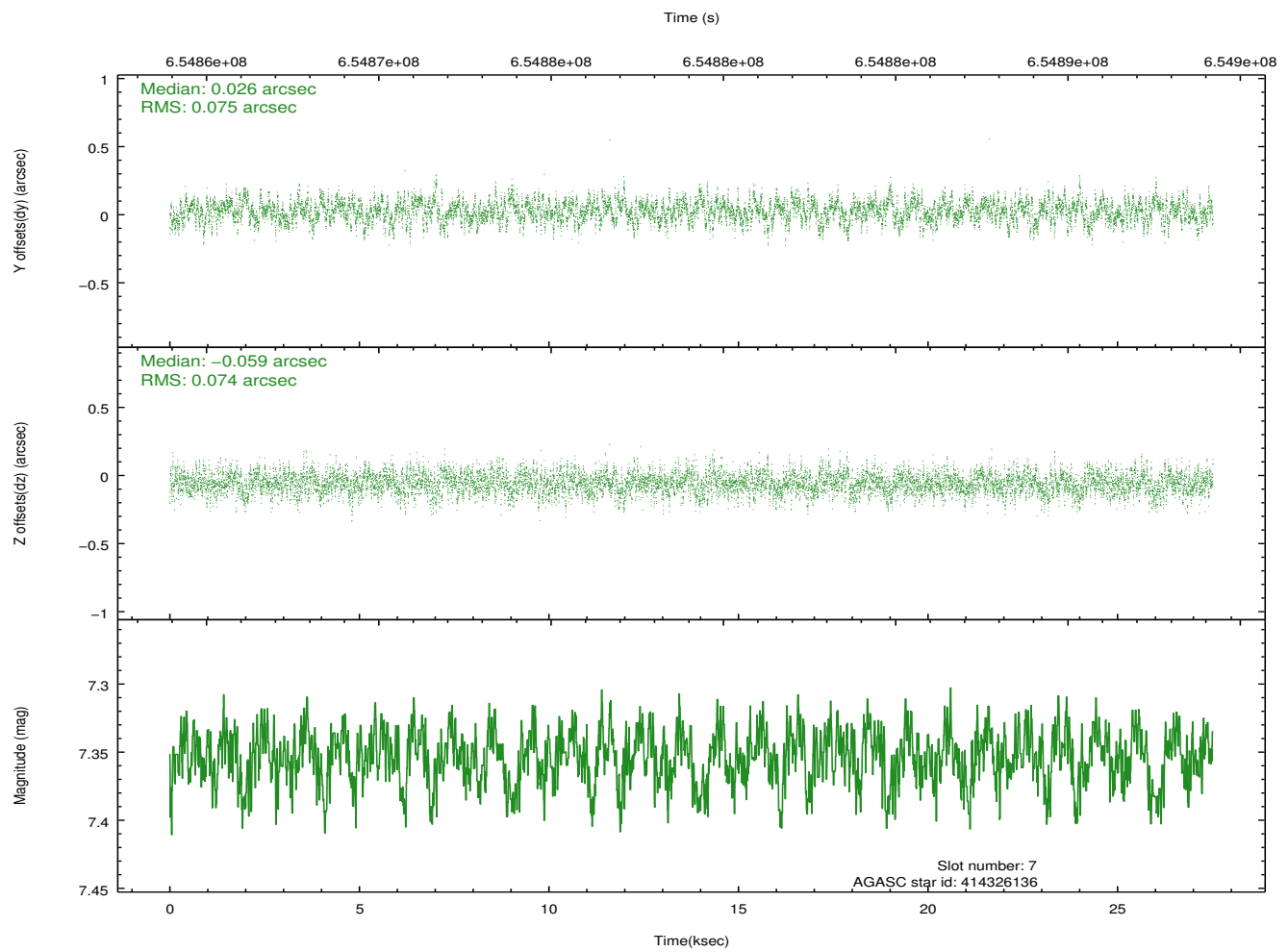
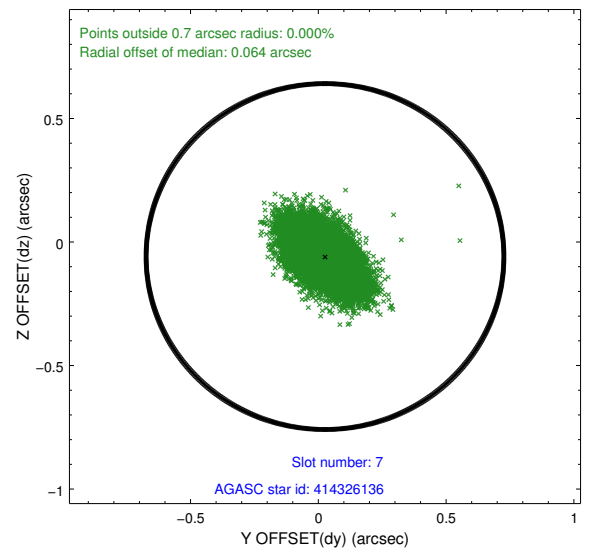
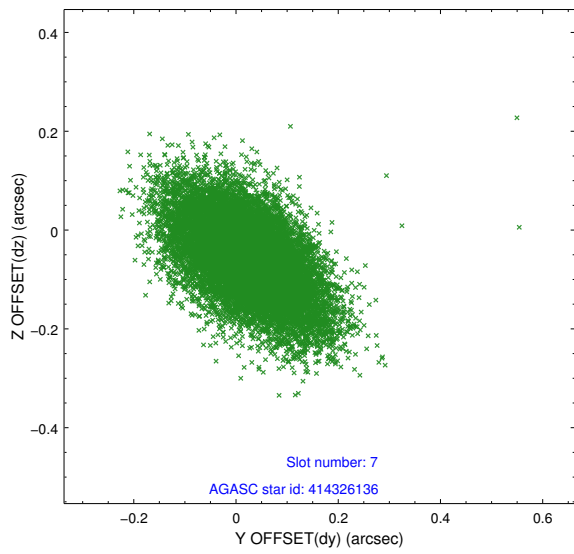
### 2.4.3 Slot 5



## 2.4.4 Slot 6

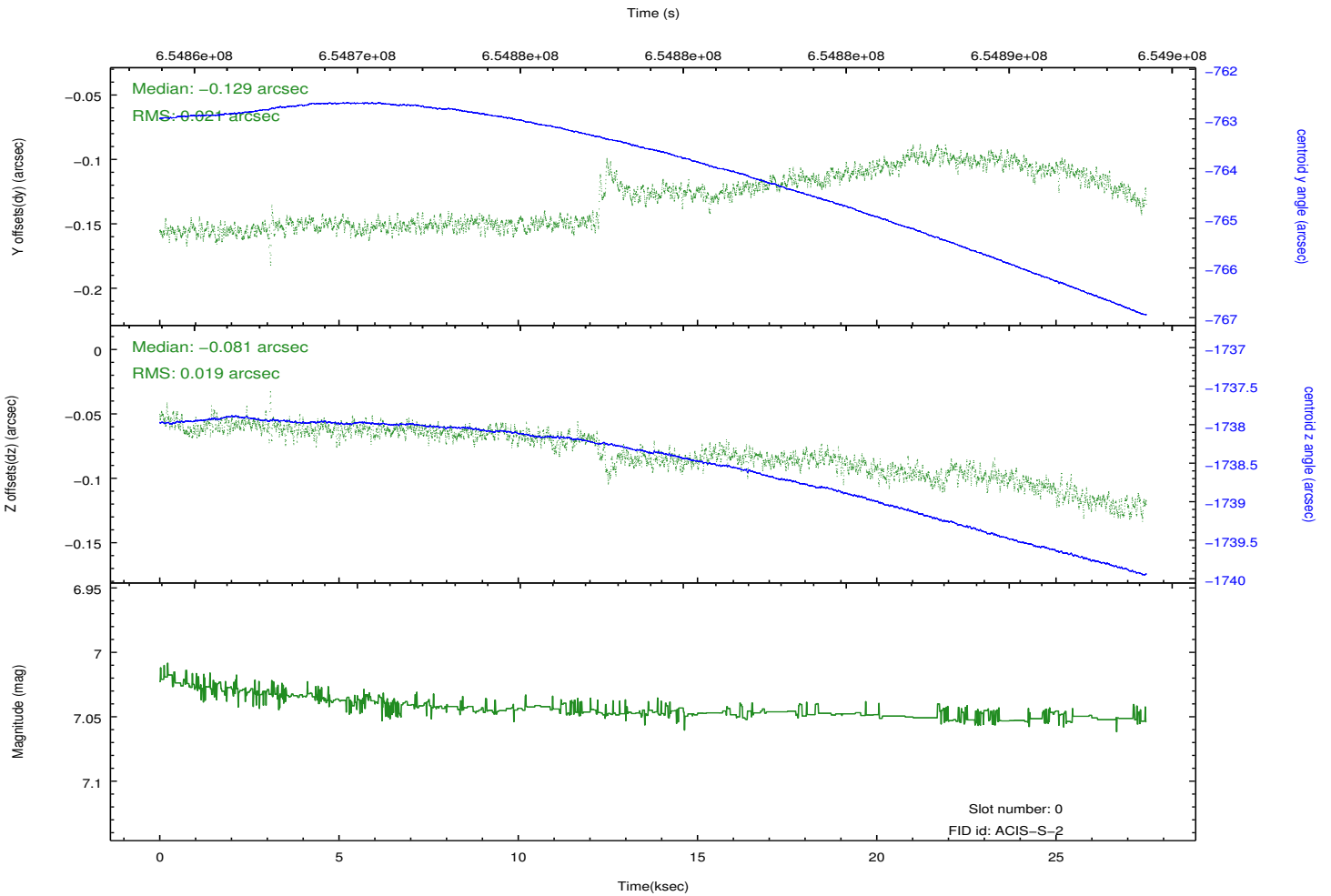
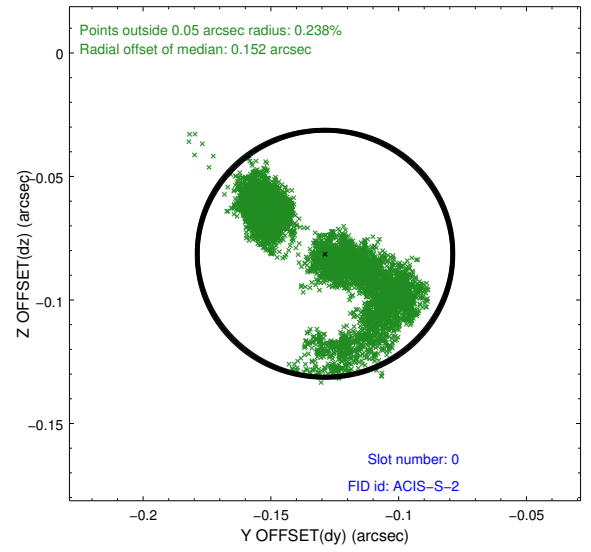
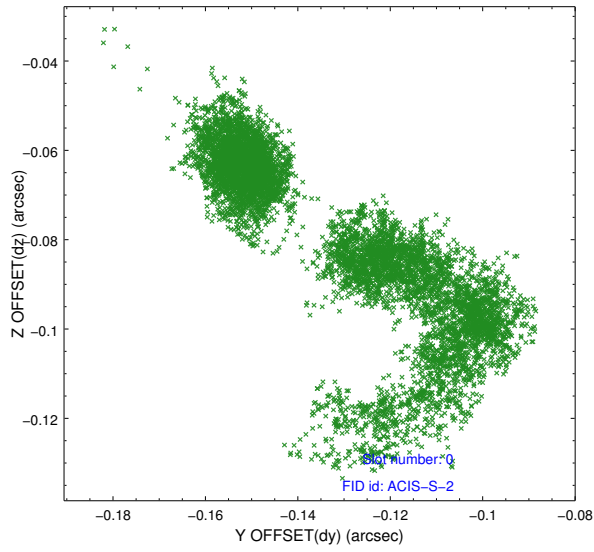


## 2.4.5 Slot 7

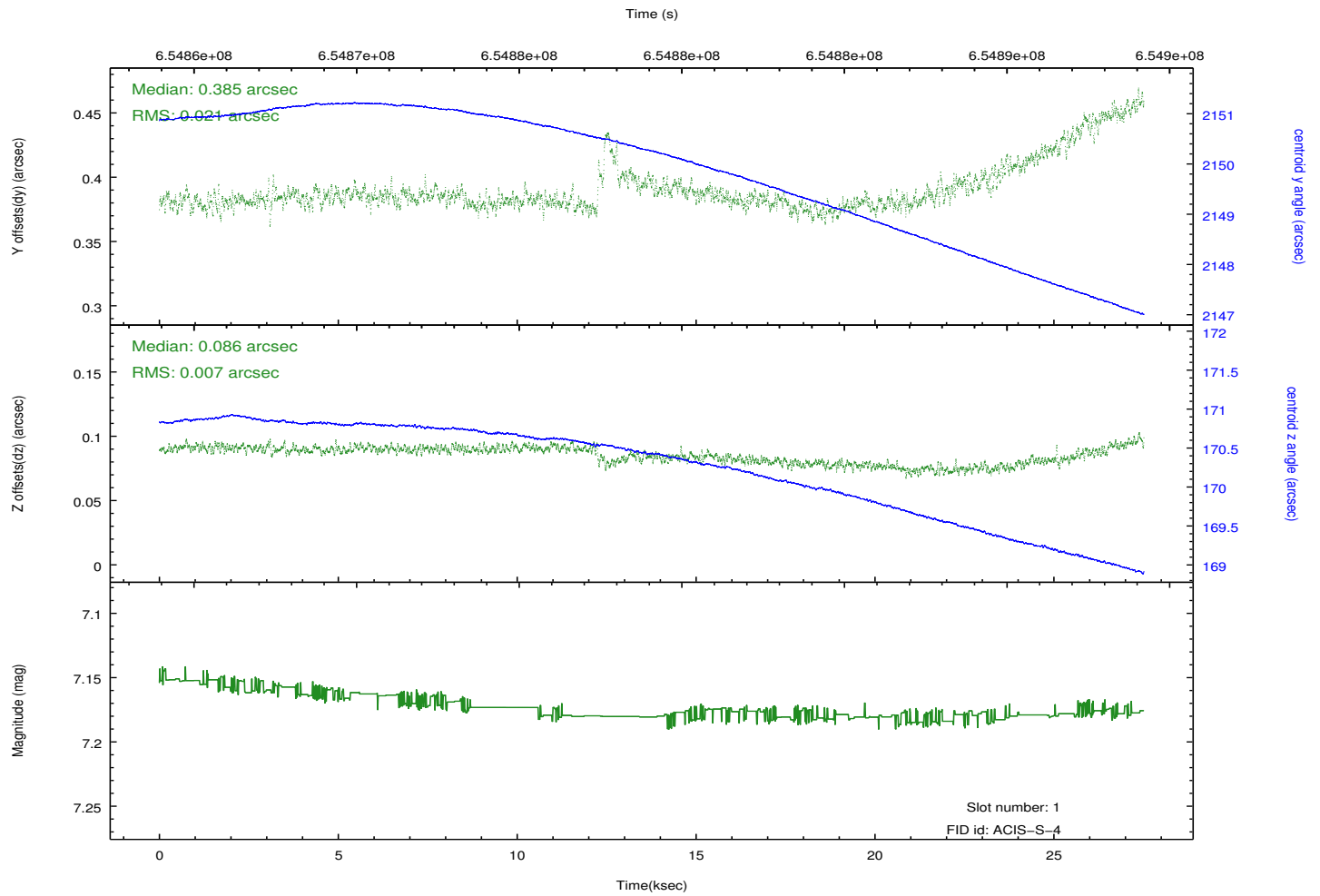
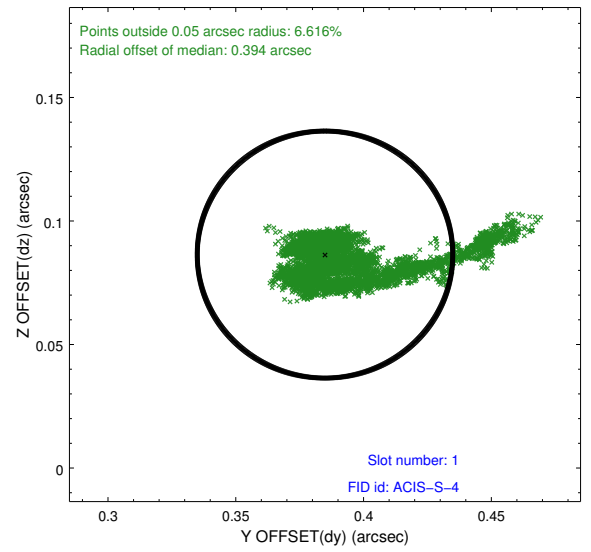
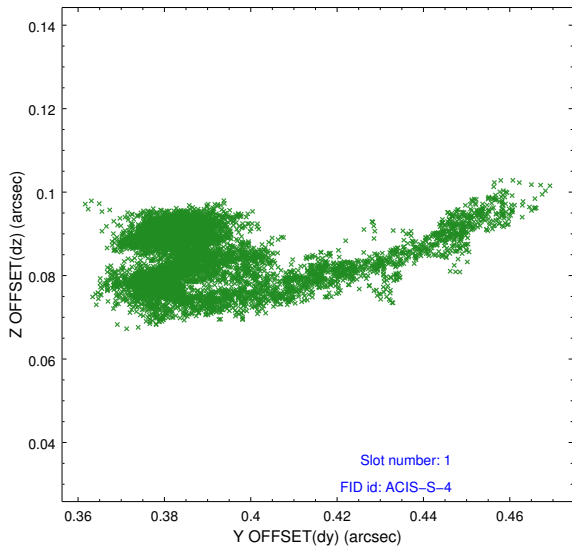


## 2.5 FID Slots

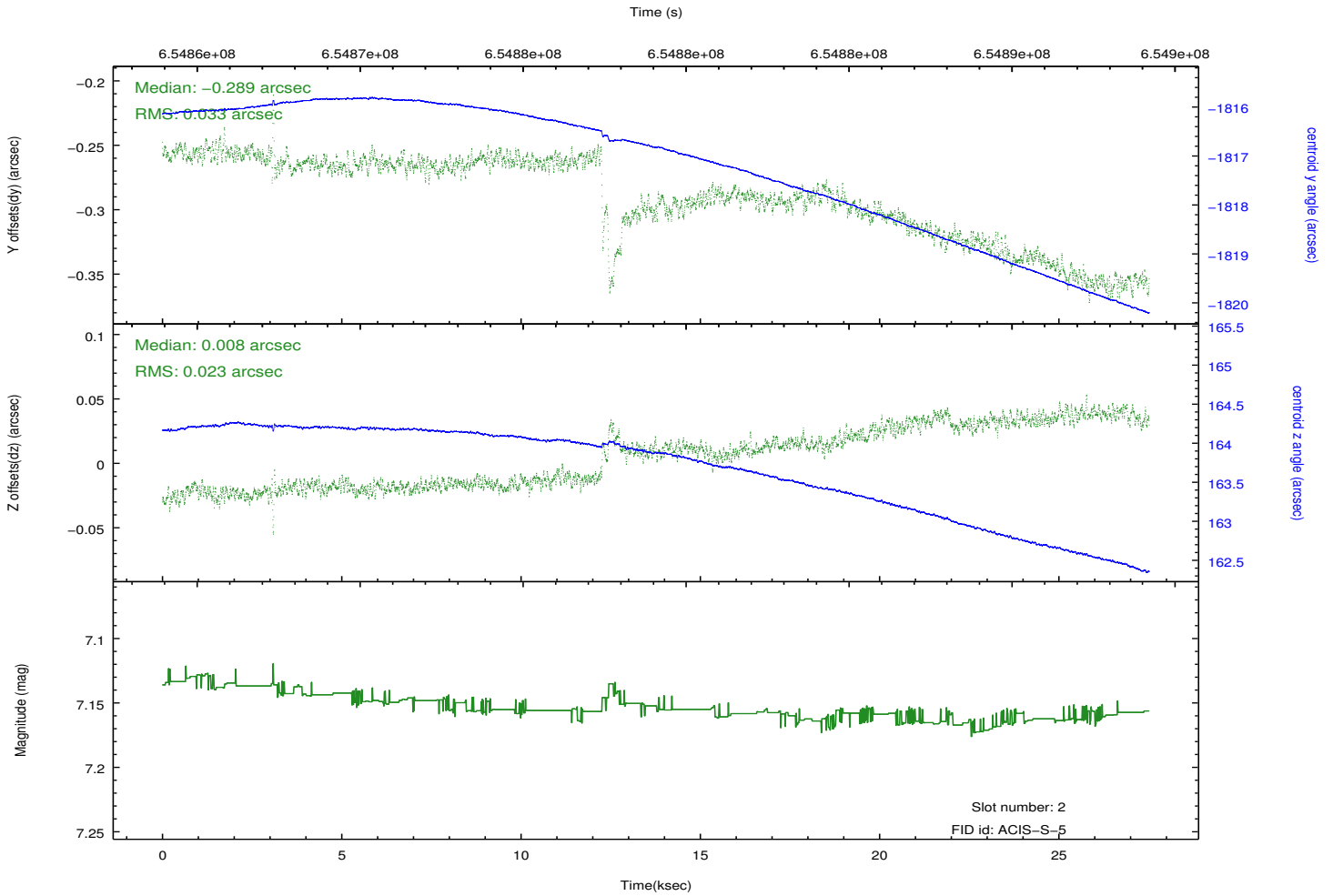
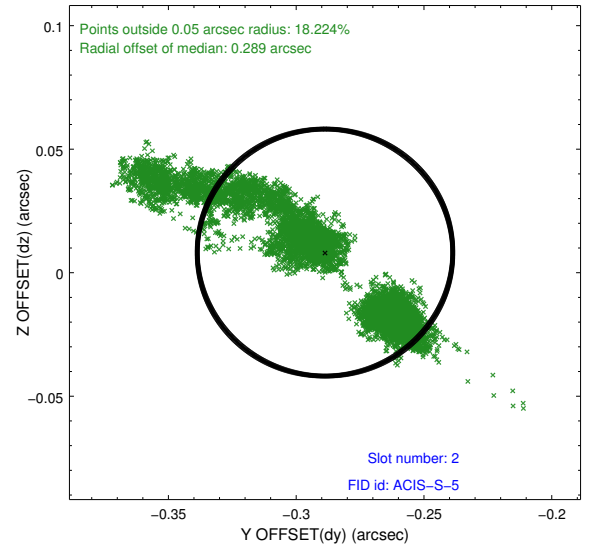
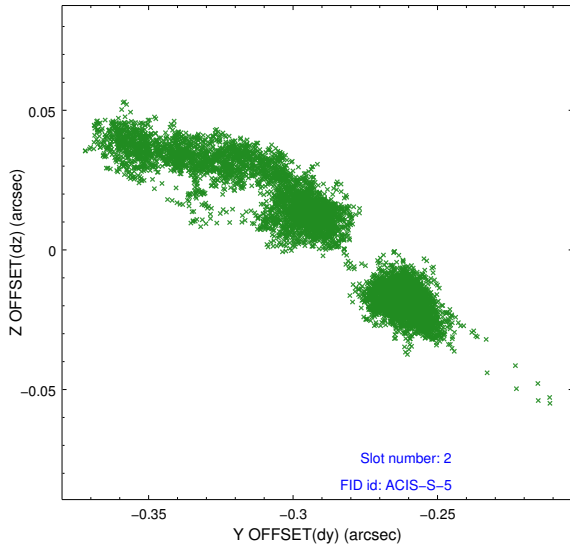
### 2.5.1 Slot 0



## 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)	2018.10.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	27.421

## A.2 Comments