

V&V Reference Report

L2 ASCDS Version : 10.5.2

Observation 20013 - L2 Version 1
Chandra X-Ray Center

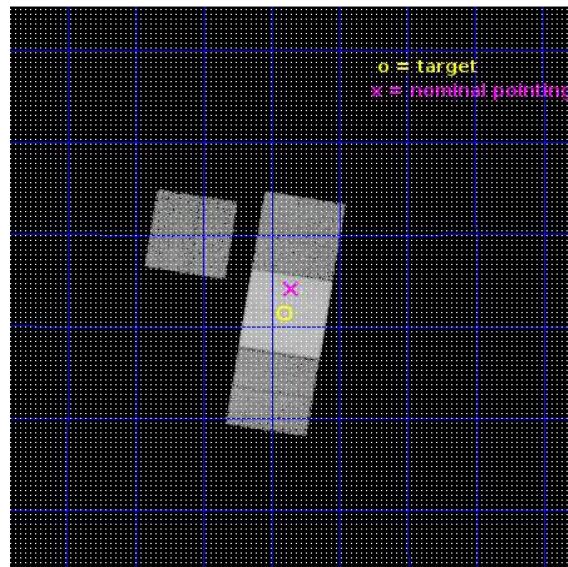
L2 Processing Date : Feb 24 2017

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1 Front

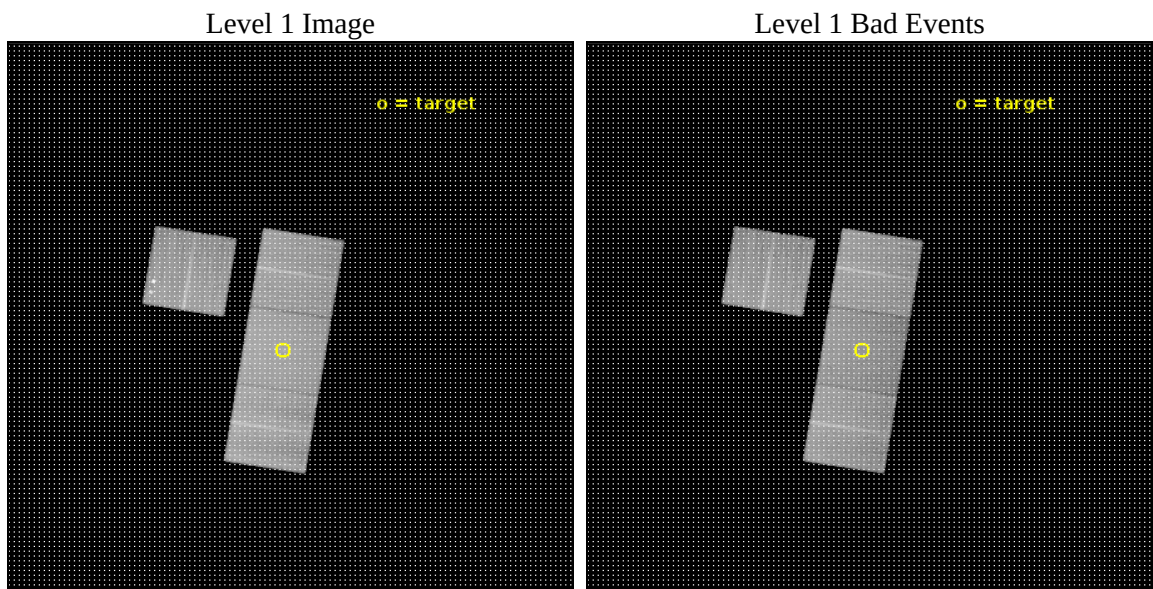
seq_num	601288	Sequence number
obs_id	20013	Observation id
title	A Statistically Robust Constraint on the Evolution of Field LMXBs	
observer	Bret Lehmer	Principal investigator
object	NGC 4382	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	186.350417	Observer's specified target RA [deg]
dec_targ	18.191083	Observer's specified target Dec [deg]
ra_nom	186.33857200374	Nominal RA [deg]
dec_nom	18.235156868812	Nominal Dec [deg]
roll_nom	99.160343275956	Nominal Roll [deg]
revision	1	Processing version of data
ontime	32112.875499845	Sum of GTIs [s]
livetime	31693.297140284	Livetime [s]
ontime2	32112.752379894	Sum of GTIs [s]
ontime6	32112.834459901	Sum of GTIs [s]
ontime7	32112.875499845	Sum of GTIs [s]
ontime8	32106.511279702	Sum of GTIs [s]
l2events	190046	Number of level 2 events



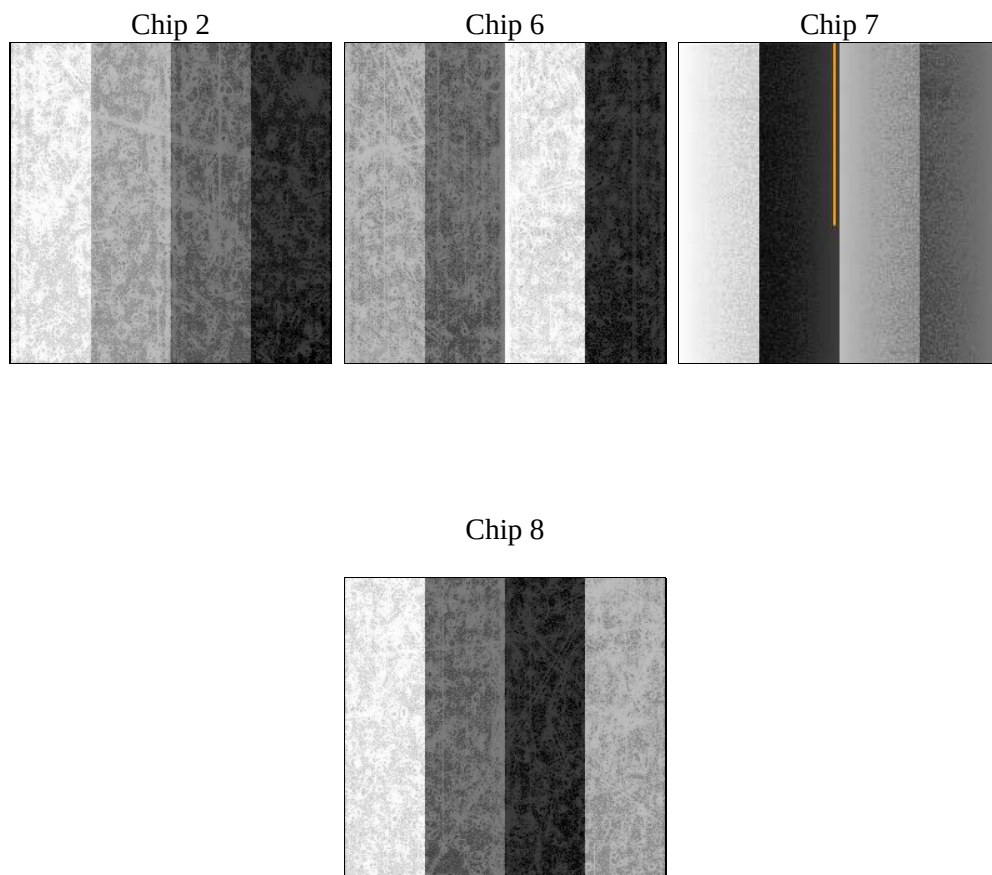
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	32000.000000	[s] Scheduled observation exposure time
ascdsver	10.5.2	Processing system revision	ontime	32112.875499845	Sum of GTIs [s]
caldsver	4.7.3	 	ontime2	32112.752379894	Sum of GTIs [s]
date	2017-02-24T14:46:13	Date and time of file creation	ontime6	32112.834459901	Sum of GTIs [s]
revision	1	Processing version of data	ontime7	32112.875499845	Sum of GTIs [s]
			ontime8	32106.511279702	Sum of GTIs [s]
			l1events	1088430	Number of level 1 events

2.1.4 Events

	ccd 2	ccd 6	ccd 7	ccd 8
level 1 events	246813	247005	294433	300179
rejected events	211235	221393	167417	226171
rejected %	85%	89%	56%	75%

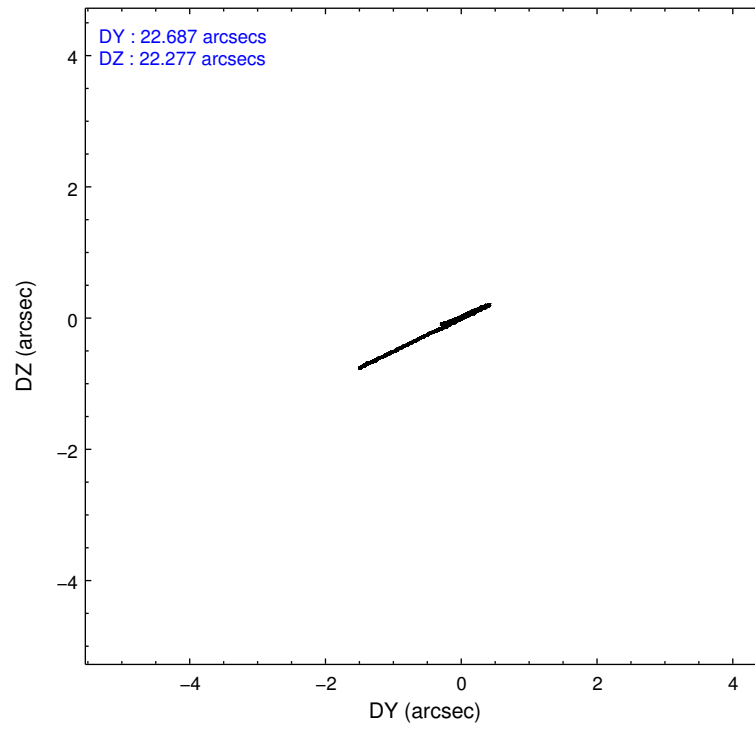
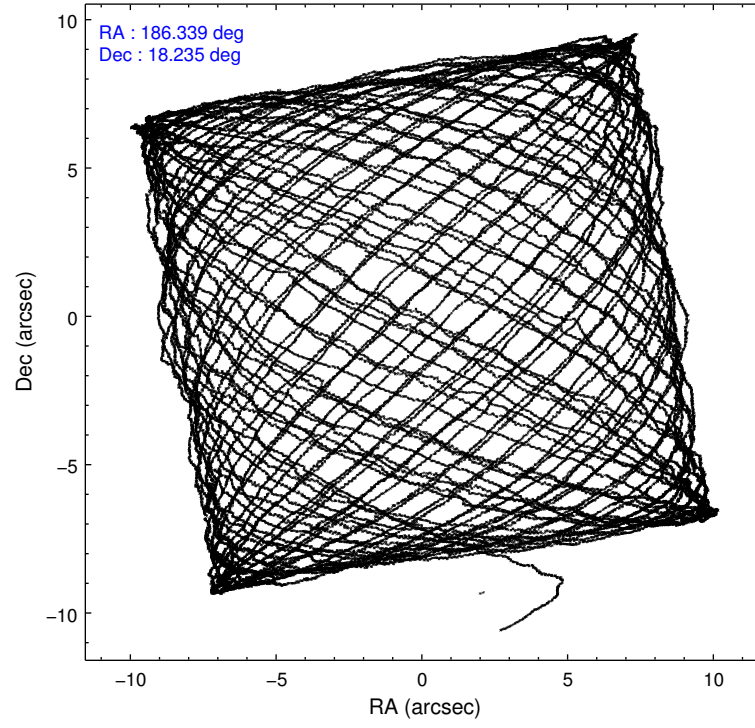
	ccd 2	ccd 6	ccd 7	ccd 8
grade 0 events	20563	7996	10521	20307
	8%	3%	3%	6%
grade 1 events	220	107	379	230
	0%	0%	0%	0%
grade 2 events	5390	6424	27120	18702
	2%	2%	9%	6%
grade 3 events	2446	2288	9354	7417
	0%	0%	3%	2%
grade 4 events	2484	2316	9256	6911
	1%	0%	3%	2%
grade 5 events	8396	10022	26909	16110
	3%	4%	9%	5%
grade 6 events	4696	6589	70784	20672
	1%	2%	24%	6%
grade 7 events	202618	211263	140110	209830
	82%	85%	47%	69%

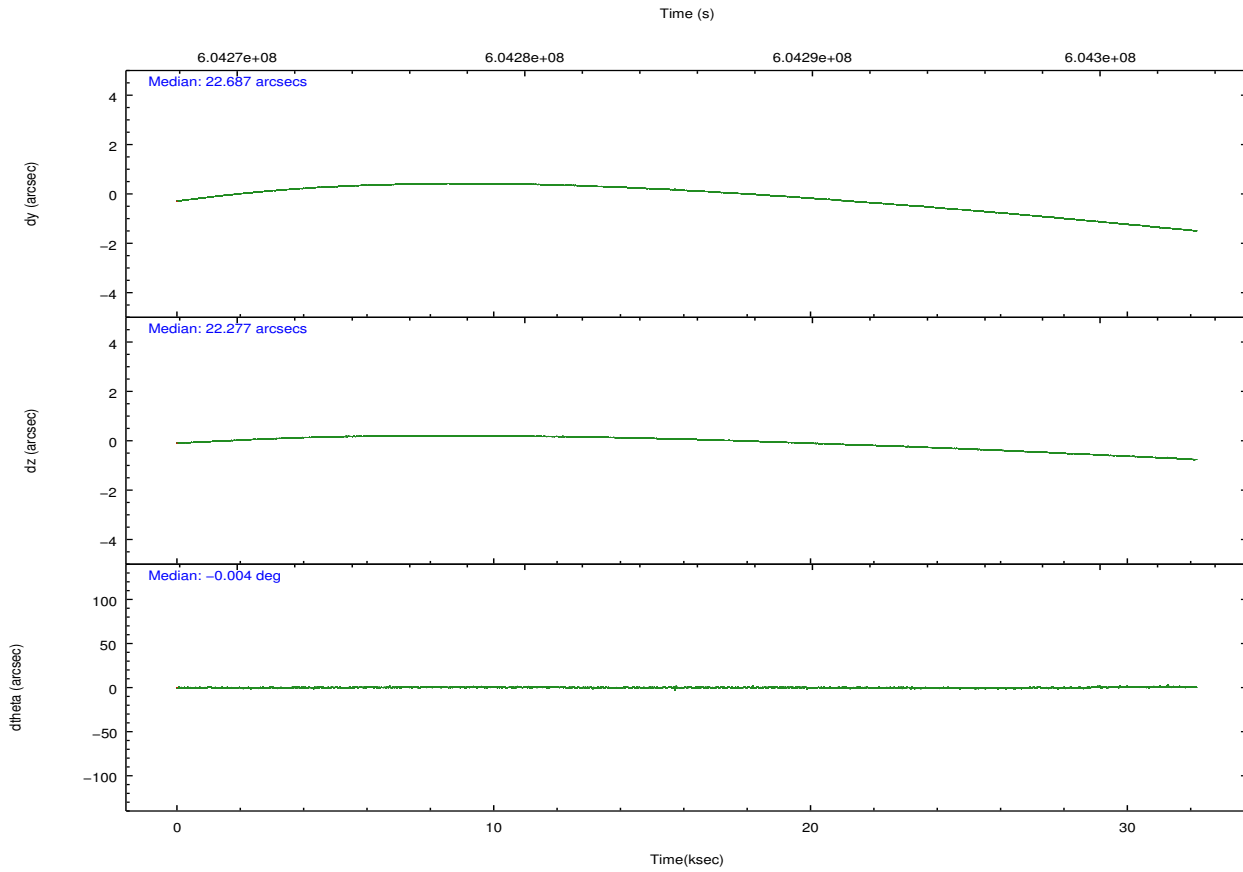
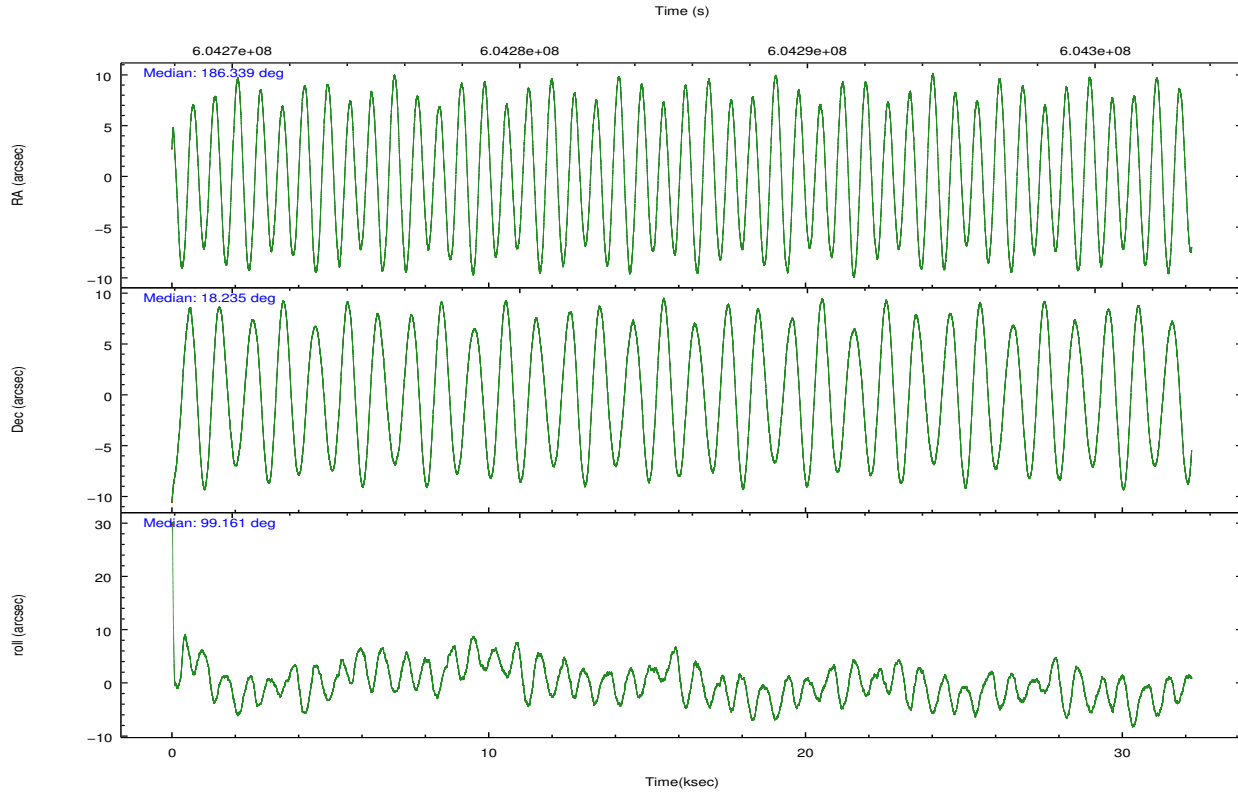
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-2678	ACIS-2678
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	186.357120	186.3385720037412
[deg] Pointing Dec	18.214127	18.23515686881153
[deg] Pointing Roll	98.997901	99.1603432759558
[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)	604269727.184000	604268252.13281
Observation start date	2017-02-23T20:40:58	2017-02-23T20:17:32
[s] Observation end time (MET)	604301727.184000	604302741.8473099
Observation end date	2017-02-24T05:34:18	2017-02-24T05:52:21
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	O2	Y
CCD I3 on	O1	N
CCD S0 on	N	N
CCD S1 on	N	N
CCD S2 on	Y	Y
CCD S3 on	Y	Y
CCD S4 on	Y	Y
CCD S5 on	N	N
Number of optional ACIS chips dropped	1	1
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



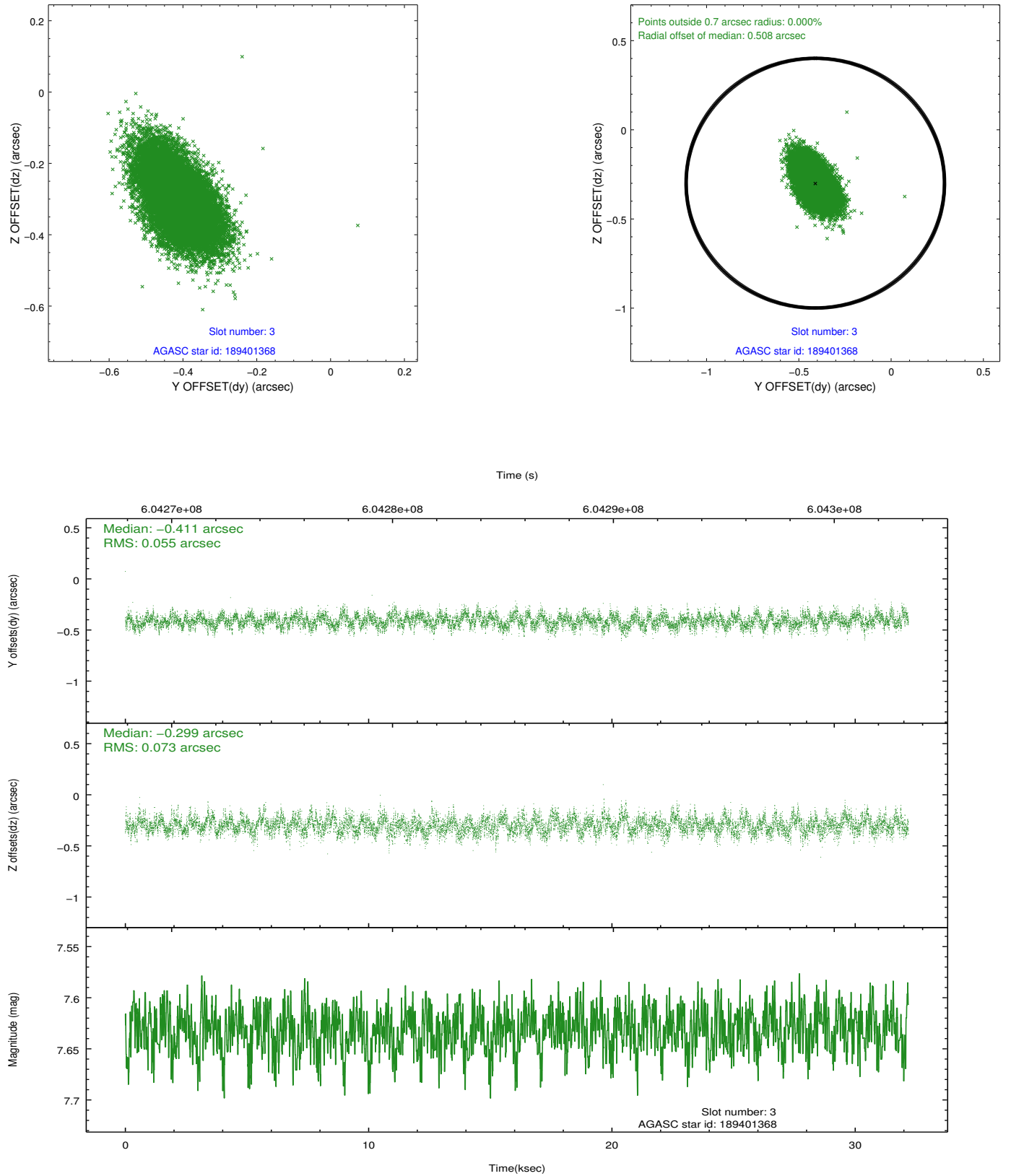


Slot Statistics

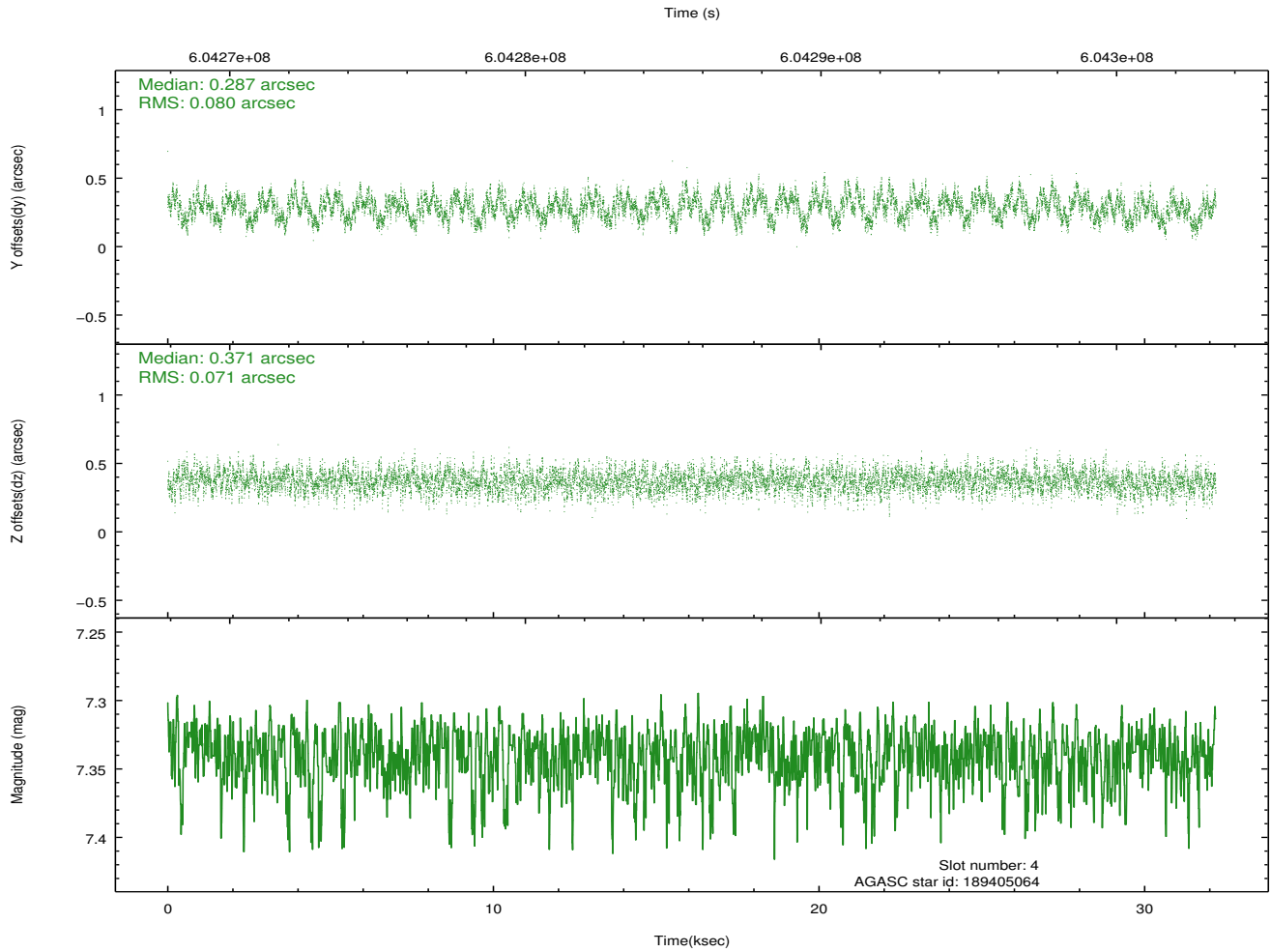
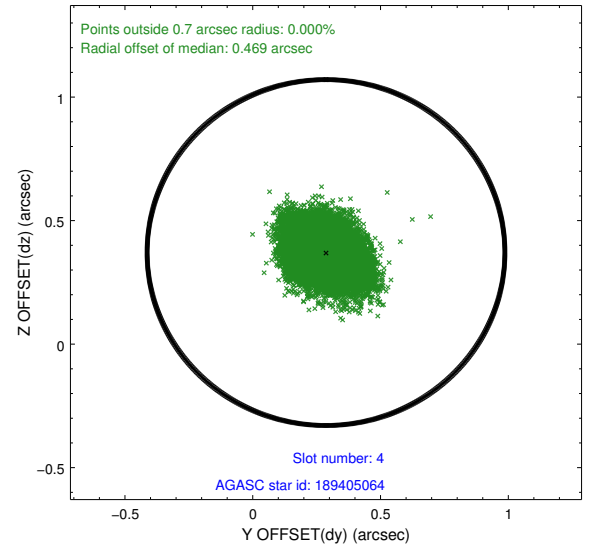
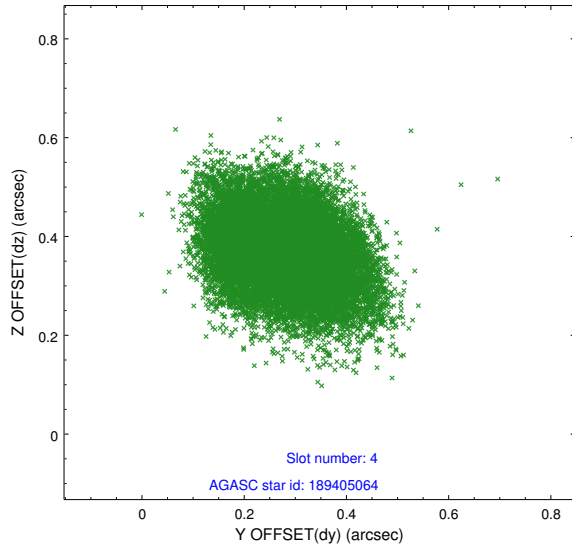
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.17	7852	-0.220	-0.180	0.010	0.018	0.000000	0.000000	-775.89	-1743.94
1	FID		ACIS-S-4	7.27	7852	0.534	0.154	0.018	0.028	0.000000	0.000000	2138.10	164.83
2	FID		ACIS-S-5	7.29	7852	-0.350	0.035	0.015	0.041	0.000000	0.000000	-1828.79	158.43
3	GUIDE	used	189401368	7.63	15700	-0.411	-0.299	0.094	0.164	186.150770	18.668355	1725.70	439.05
4	GUIDE	used	189405064	7.34	15700	0.287	0.371	0.116	0.182	186.887888	17.834342	-1631.74	-1582.03
5	GUIDE	used	189411056	8.67	15684	0.029	-0.107	0.115	0.191	186.168211	17.852769	-1184.62	842.61
6	GUIDE	used	189665040	8.43	15689	-0.230	-0.054	0.129	0.215	186.390146	18.867028	2303.67	-478.43
7	GUIDE	used	189683448	9.08	15687	0.332	0.097	0.220	0.350	186.626682	18.890381	2262.66	-1287.71

2.4 Star Slots

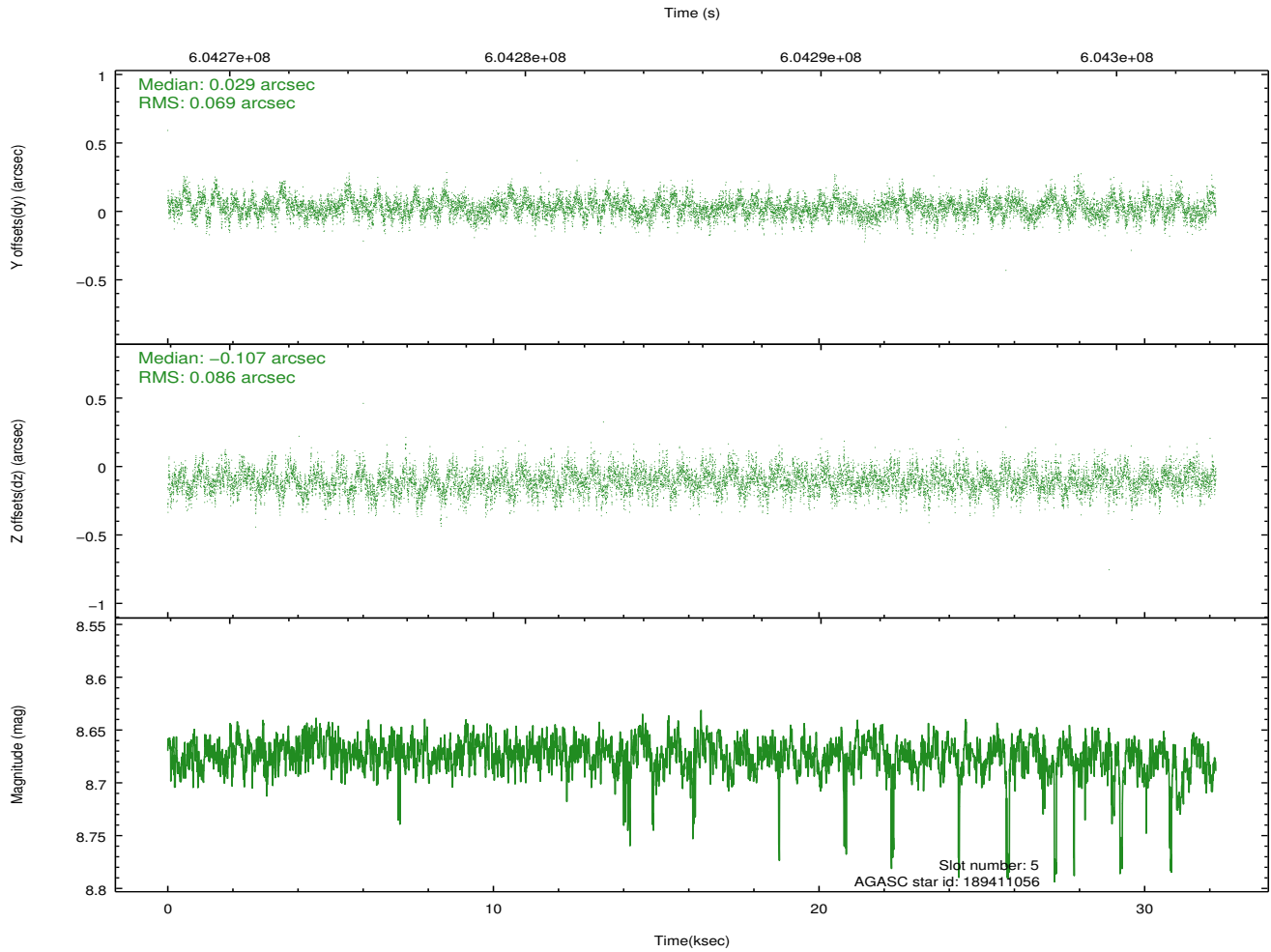
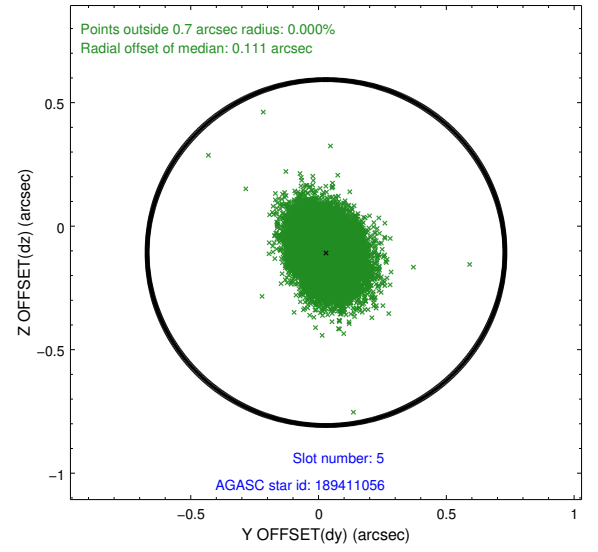
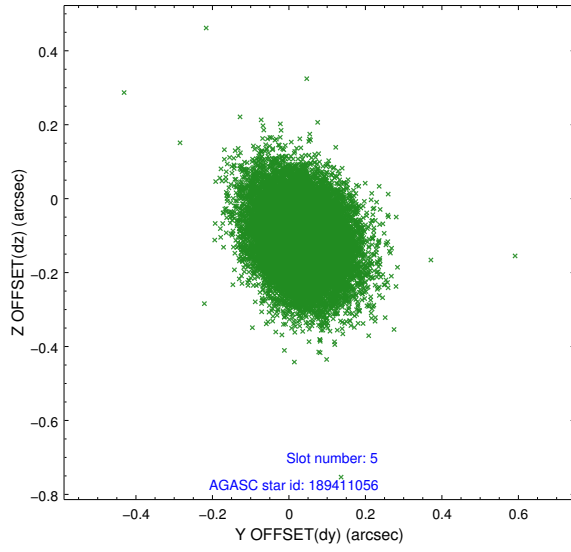
2.4.1 Slot 3



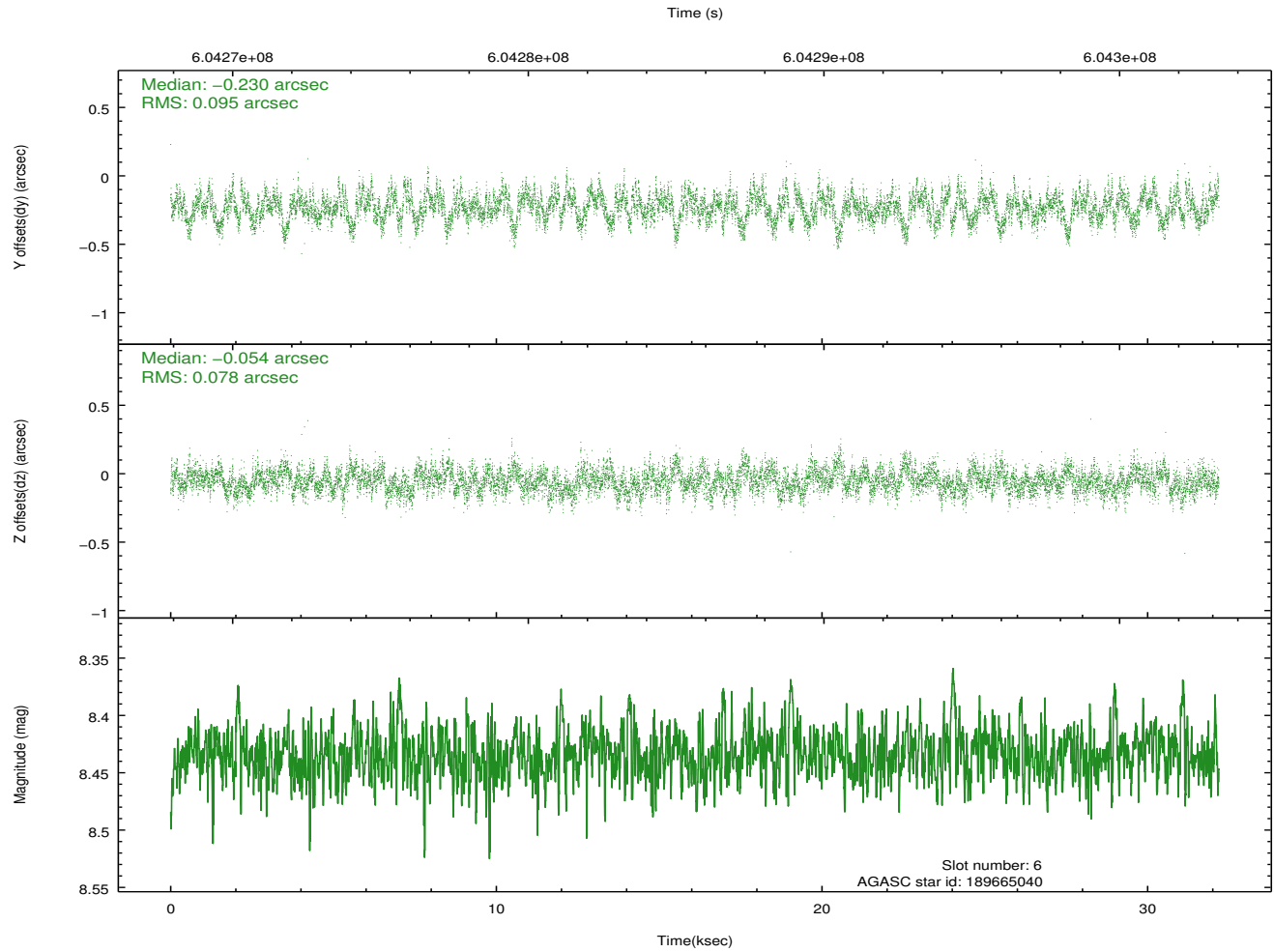
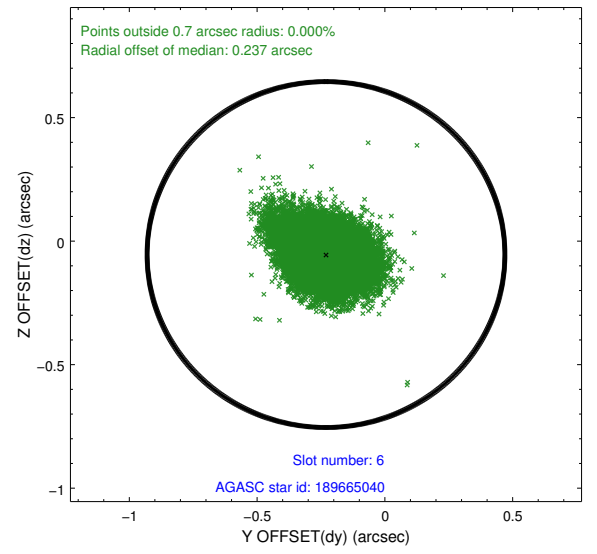
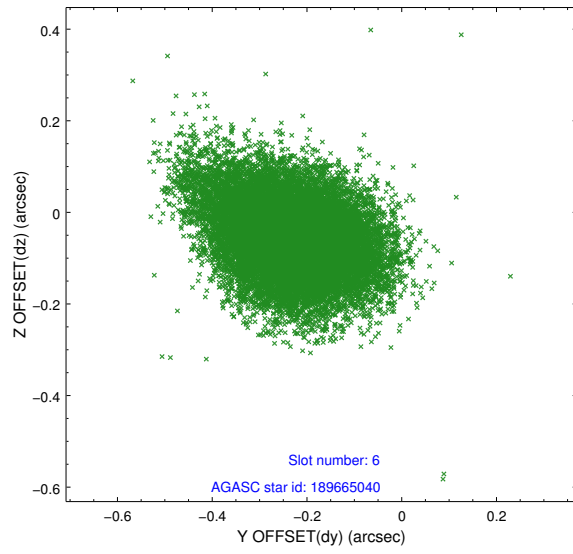
2.4.2 Slot 4



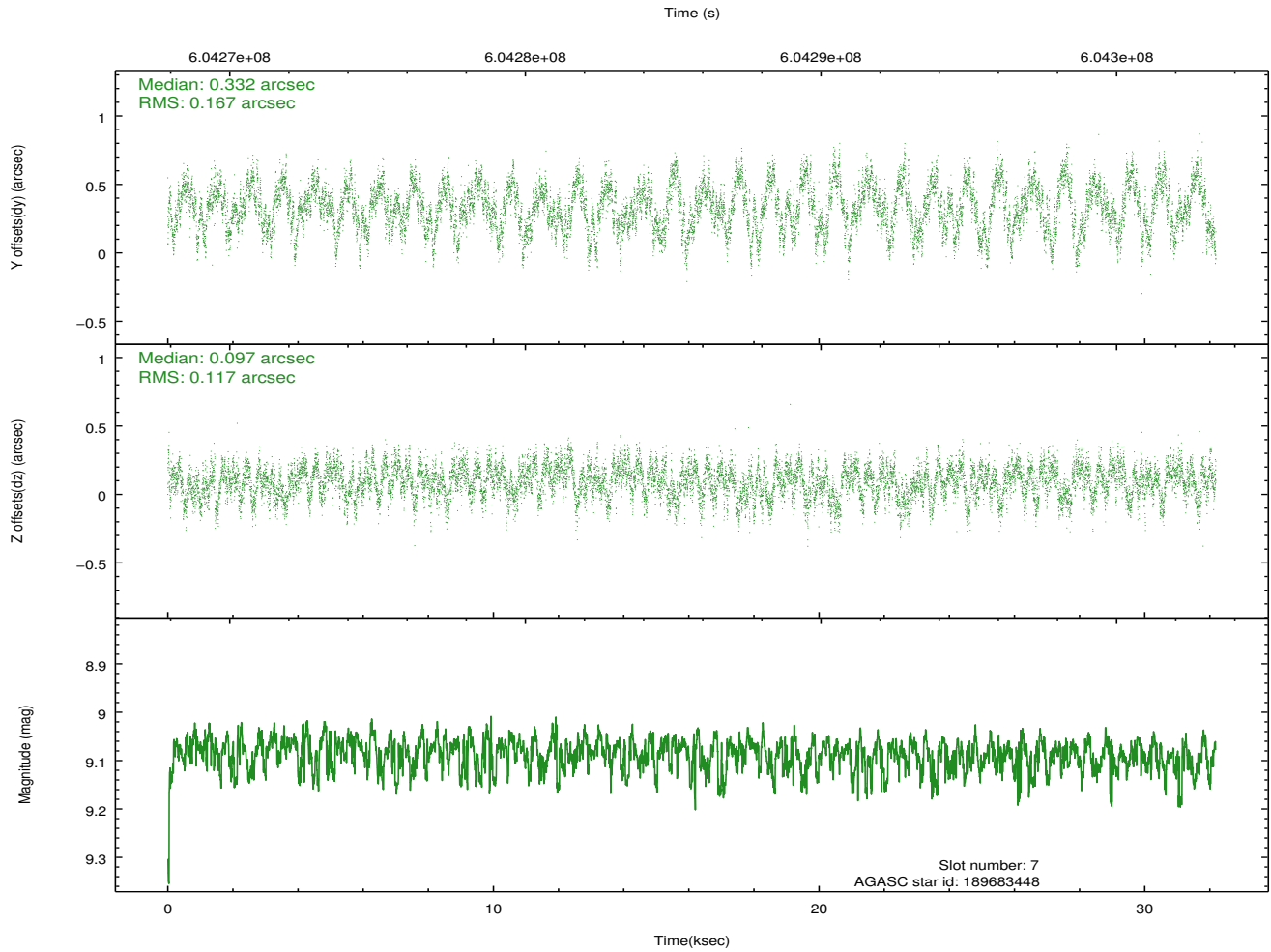
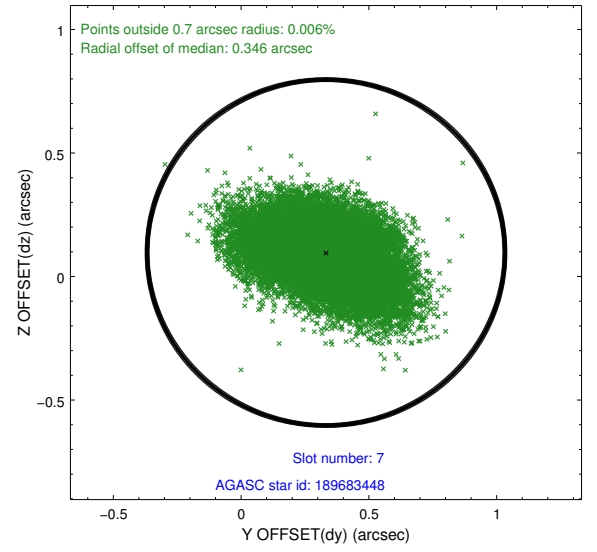
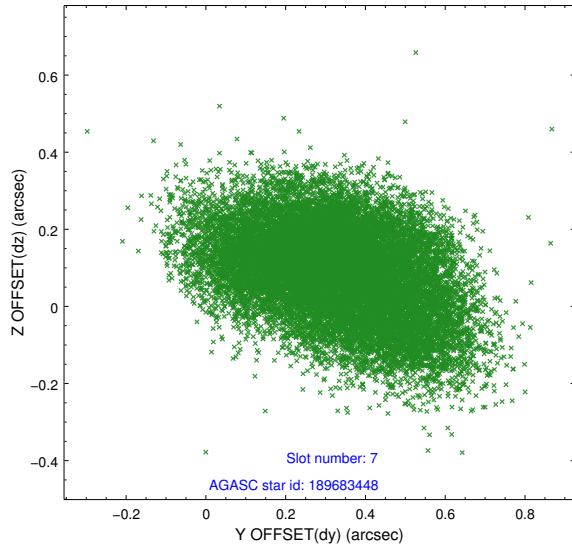
2.4.3 Slot 5



2.4.4 Slot 6

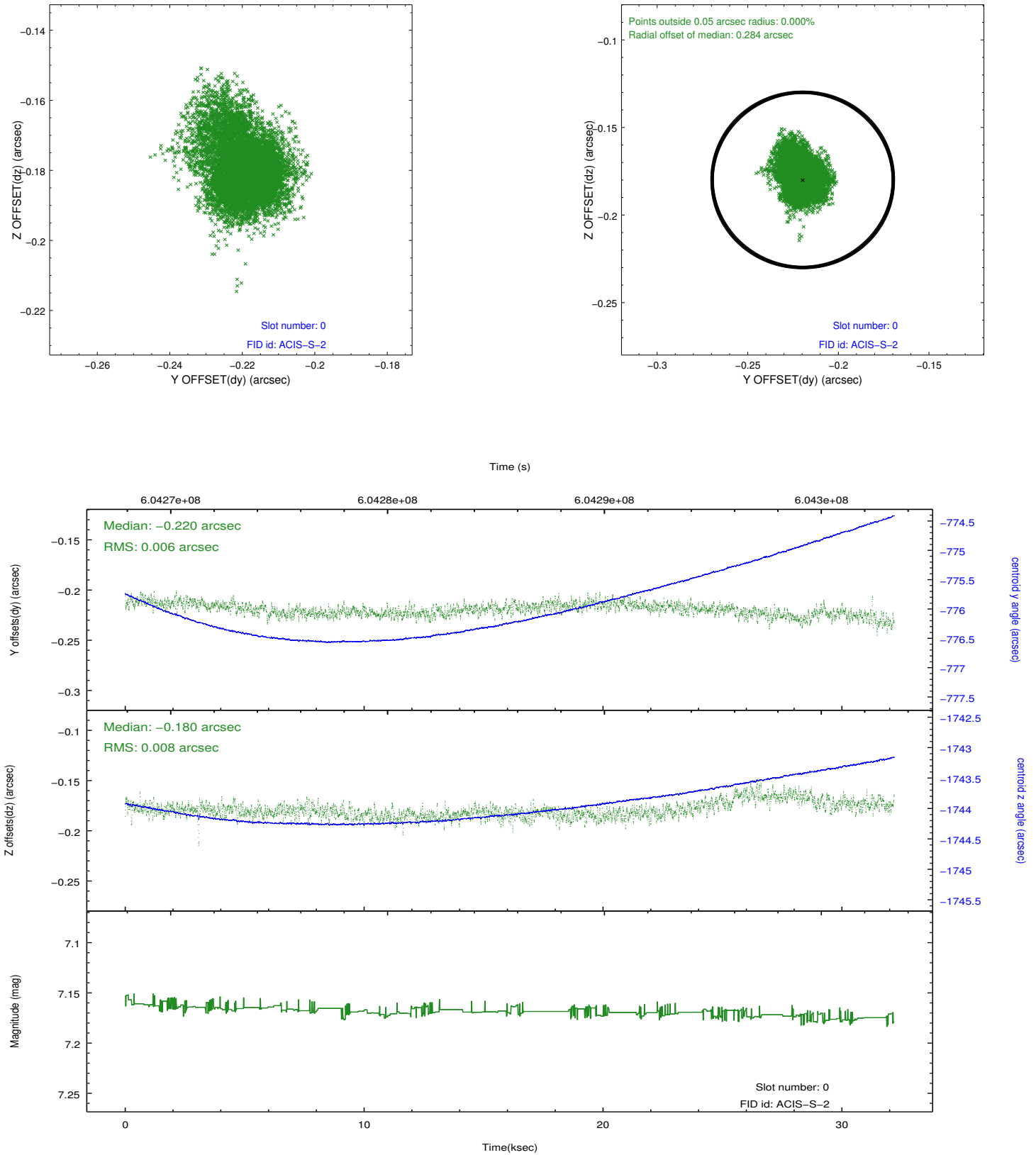


2.4.5 Slot 7

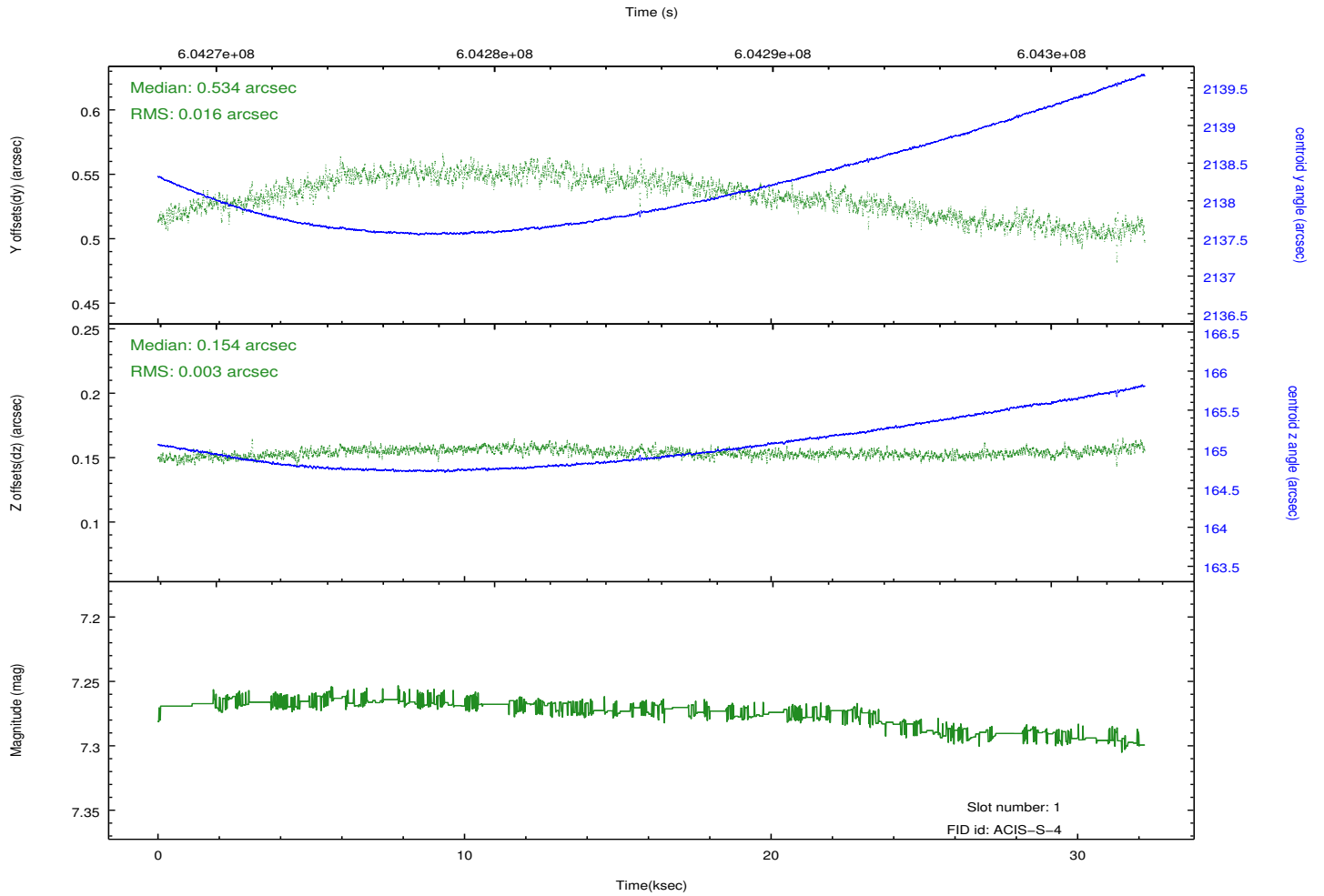
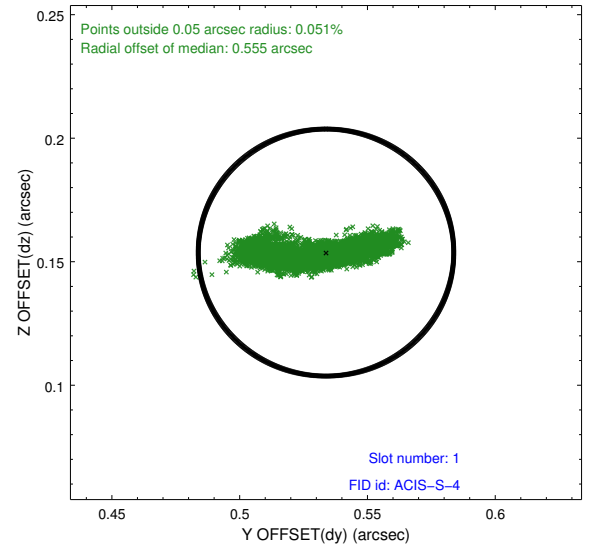
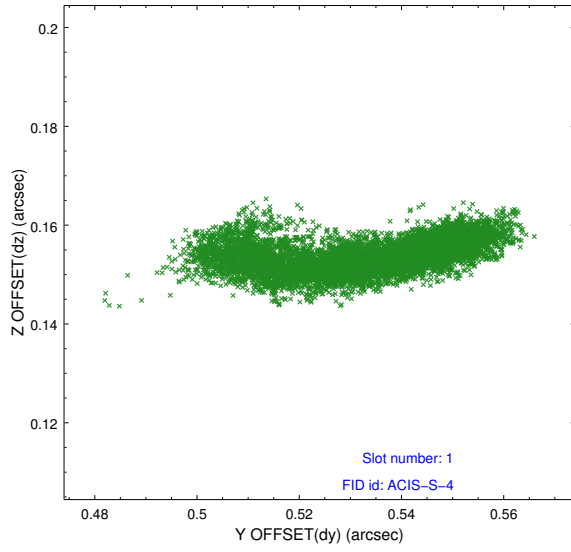


2.5 FID Slots

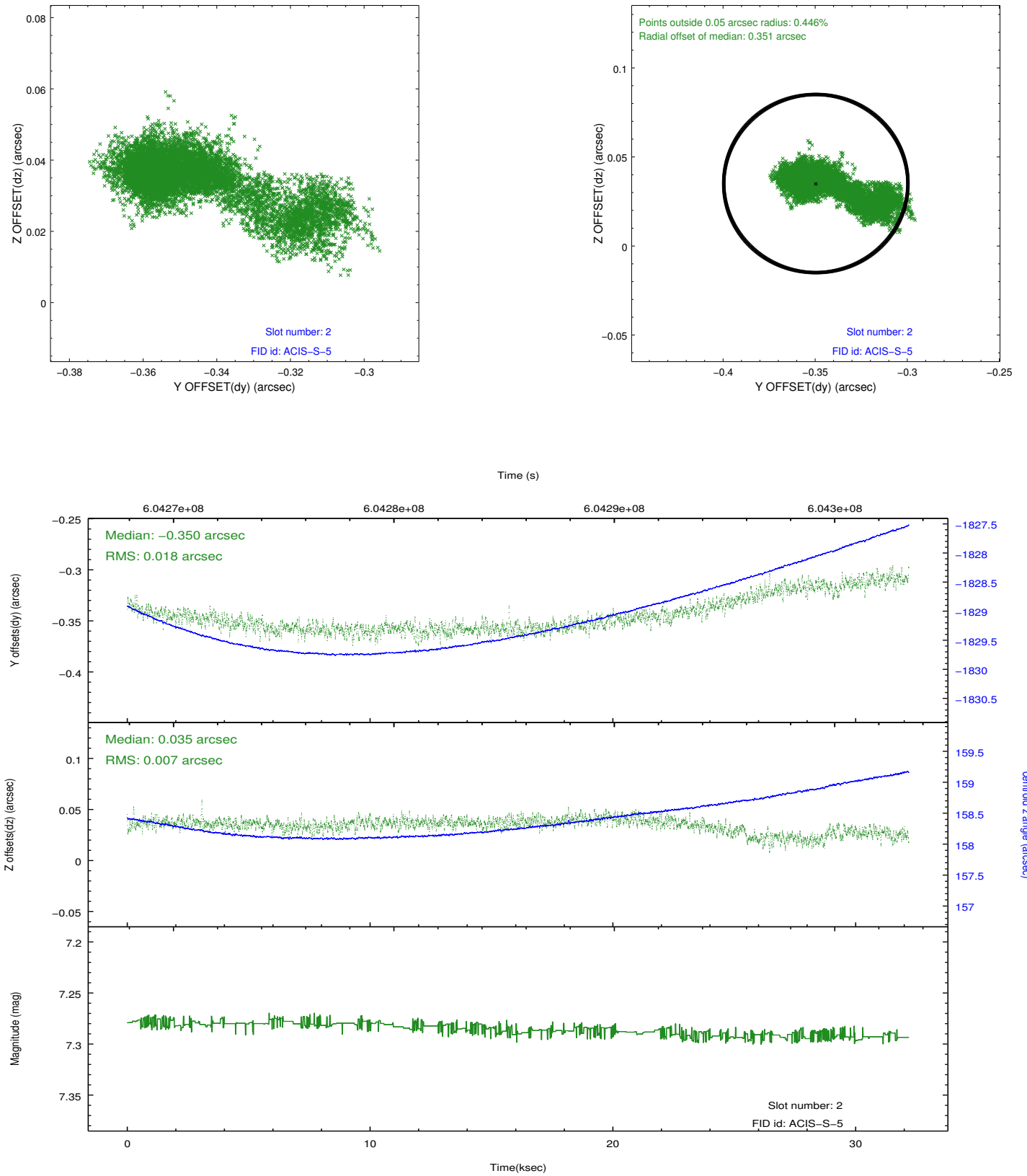
2.5.1 Slot 0



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)	2017.02.24
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	32.112875499845

A.2 Comments

Joint proposal with HST.
One optional chip was dropped.