

V&V Reference Report

L2 ASCDS Version : 10.7.1

Observation 22153 - L2 Version 1
Chandra X-Ray Center

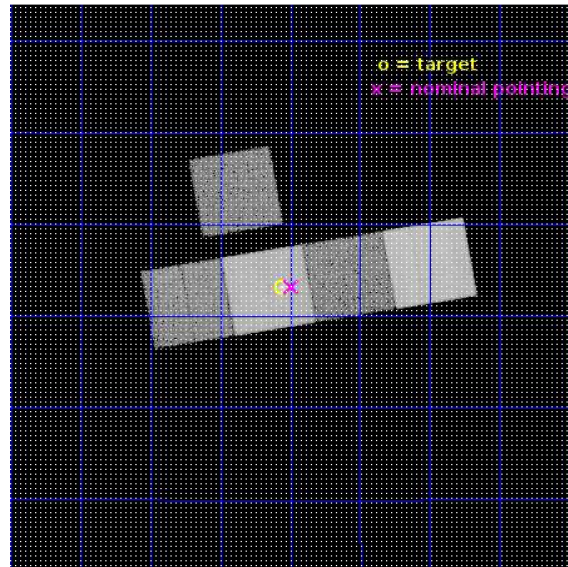
L2 Processing Date : Mar 23 2019

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1 Front

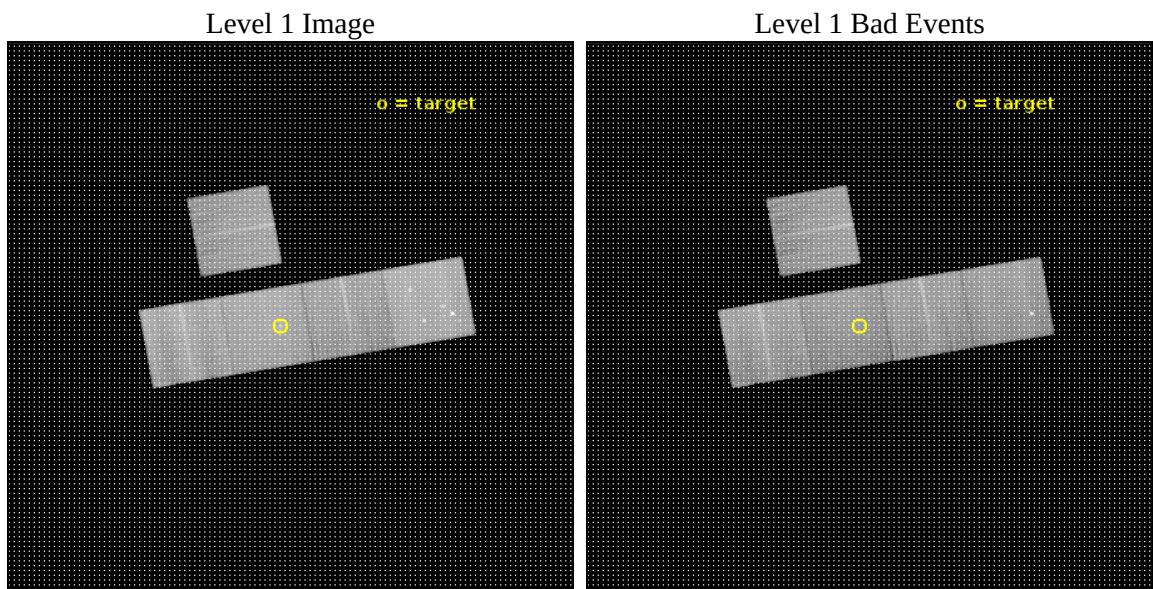
seq_num	801753	Sequence number
obs_id	22153	Observation id
title	Fuelling and self-regulation of AGN feedback at the Bondi radius of M84	Proposal title
observer	Helen Russell	Principal investigator
object	M84	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	186.265833	Observer's specified target RA [deg]
dec_targ	12.886944	Observer's specified target Dec [deg]
ra_nom	186.24814148398	Nominal RA [deg]
dec_nom	12.887110299856	Nominal Dec [deg]
roll_nom	170.16059539645	Nominal Roll [deg]
revision	1	Processing version of data
ontime	21361.96900177	Sum of GTIs [s]
livetime	21082.859150309	Livetime [s]
ontime3	21355.563831449	Sum of GTIs [s]
ontime5	21361.927961826	Sum of GTIs [s]
ontime6	21361.886921763	Sum of GTIs [s]
ontime7	21361.96900177	Sum of GTIs [s]
ontime8	21361.804841757	Sum of GTIs [s]
l2events	279535	Number of level 2 events



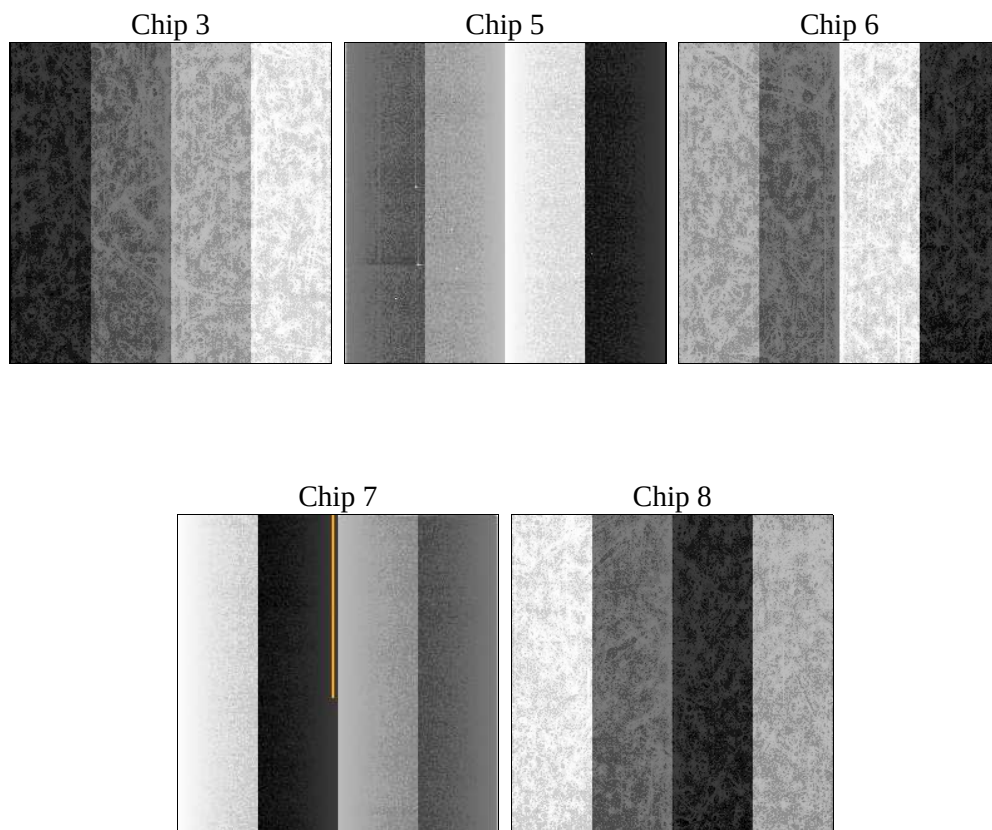
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	21310.000000	[s] Scheduled observation exposure time
ascdsver	10.7.1	Processing system revision	ontime	21361.96900177	Sum of GTIs [s]
caldsver	4.8.2	 	ontime3	21355.563831449	Sum of GTIs [s]
date	2019-03-23T22:06:57	Date and time of file creation	ontime5	21361.927961826	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	21361.886921763	Sum of GTIs [s]
			ontime7	21361.96900177	Sum of GTIs [s]
			ontime8	21361.804841757	Sum of GTIs [s]
			l1events	1062747	Number of level 1 events

2.1.4 Events

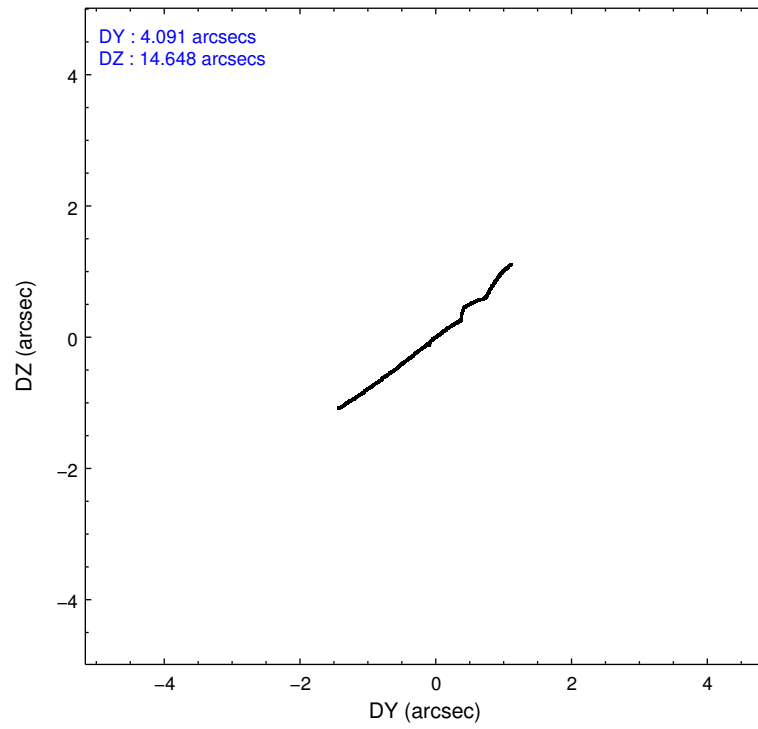
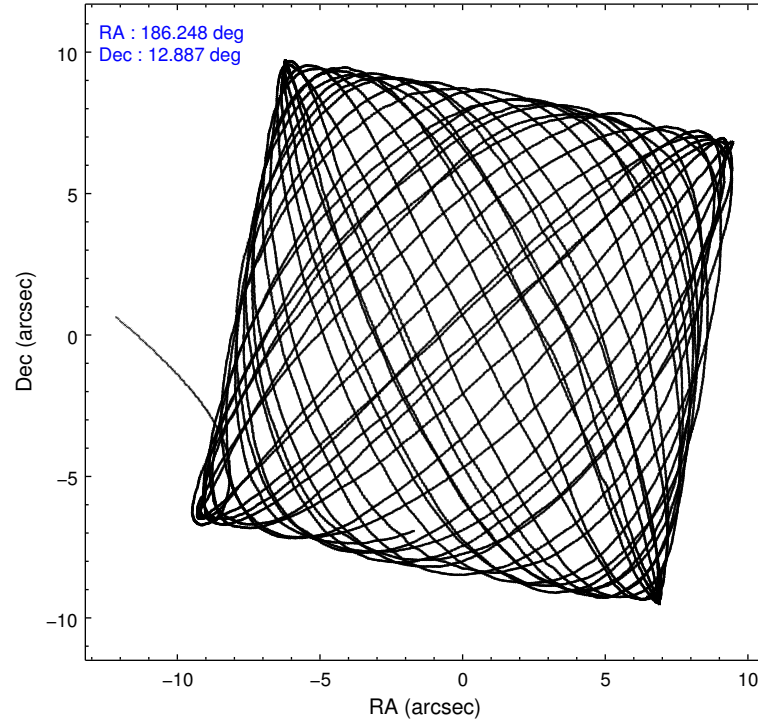
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	168987	277437	173979	222633	219711
rejected events	148808	141705	153762	122416	160214
rejected %	88%	51%	88%	54%	72%

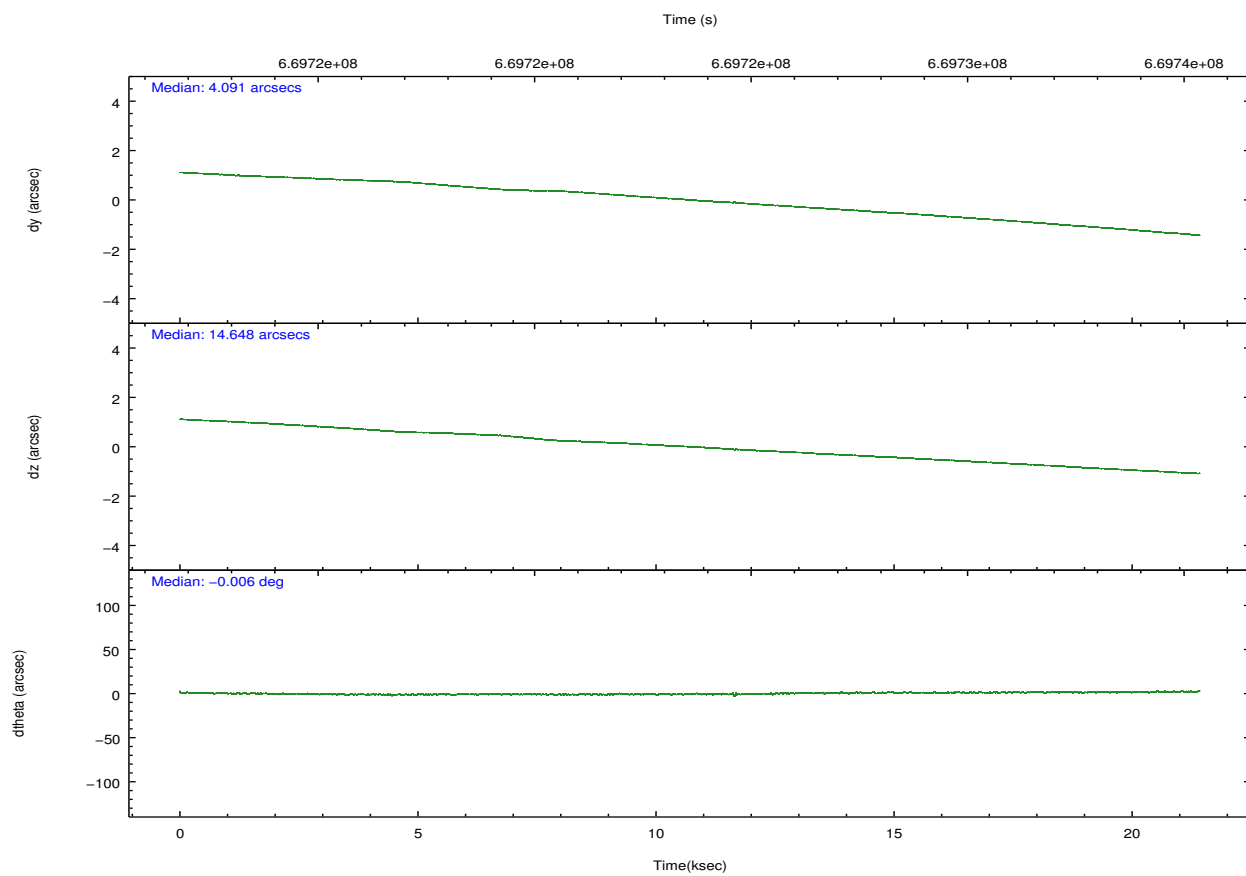
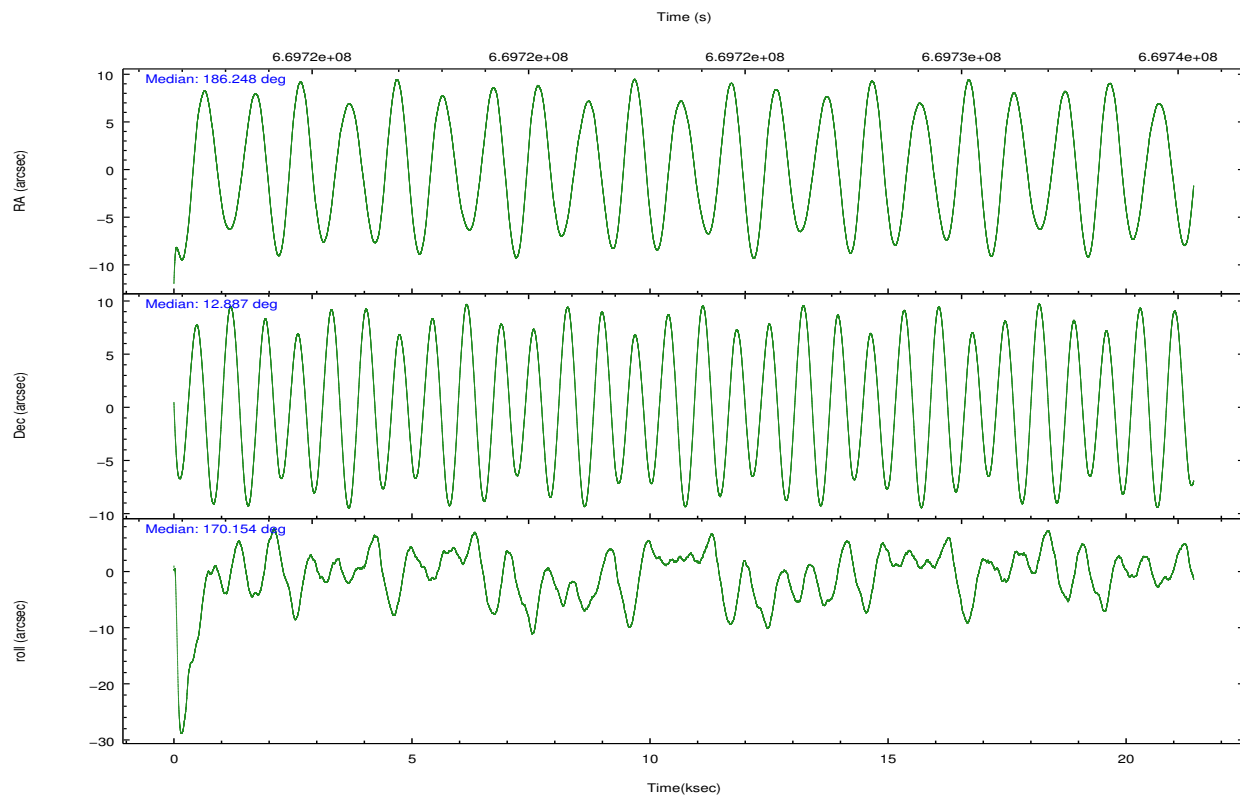
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	8616	14357	6938	10029	19246
	5%	5%	3%	4%	8%
grade 1 events	112	636	80	291	160
	0%	0%	0%	0%	0%
grade 2 events	3922	42671	4954	21380	14083
	2%	15%	2%	9%	6%
grade 3 events	1913	3840	1703	8158	5763
	1%	1%	0%	3%	2%
grade 4 events	1919	3671	1742	7880	5365
	1%	1%	1%	3%	2%
grade 5 events	7568	17338	7376	21213	11579
	4%	6%	4%	9%	5%
grade 6 events	3812	71225	4883	52787	15051
	2%	25%	2%	23%	6%
grade 7 events	141125	123699	146303	100895	148464
	83%	44%	84%	45%	67%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-35678	ACIS-35678	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	186.274477	186.2481414839758	CCD I2 on	O1	N
[deg] Pointing Dec	12.896924	12.88711029985634	CCD I3 on	Y	Y
[deg] Pointing Roll	169.998075	170.1605953964485	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	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	O2	Y
[s] Observation start time (MET)	669713008.184000	669711641.70682	CCD S5 on	N	N
Observation start date	2019-03-23T07:22:19	2019-03-23T07:00:41	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	669734318.184000	669735790.19577	On-chip summing requested	N	N
Observation end date	2019-03-23T13:17:29	2019-03-23T13:43:10	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



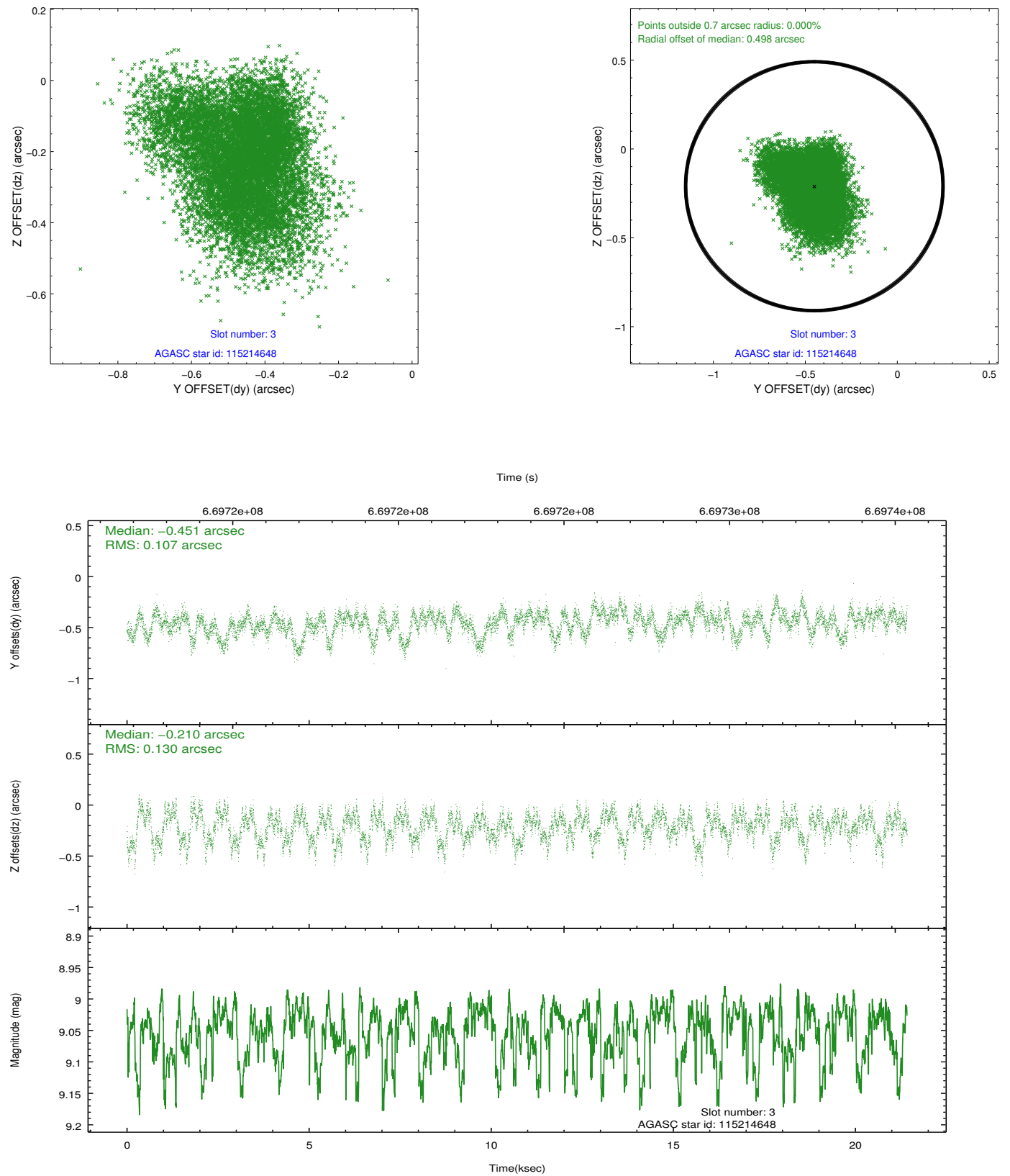


Slot Statistics

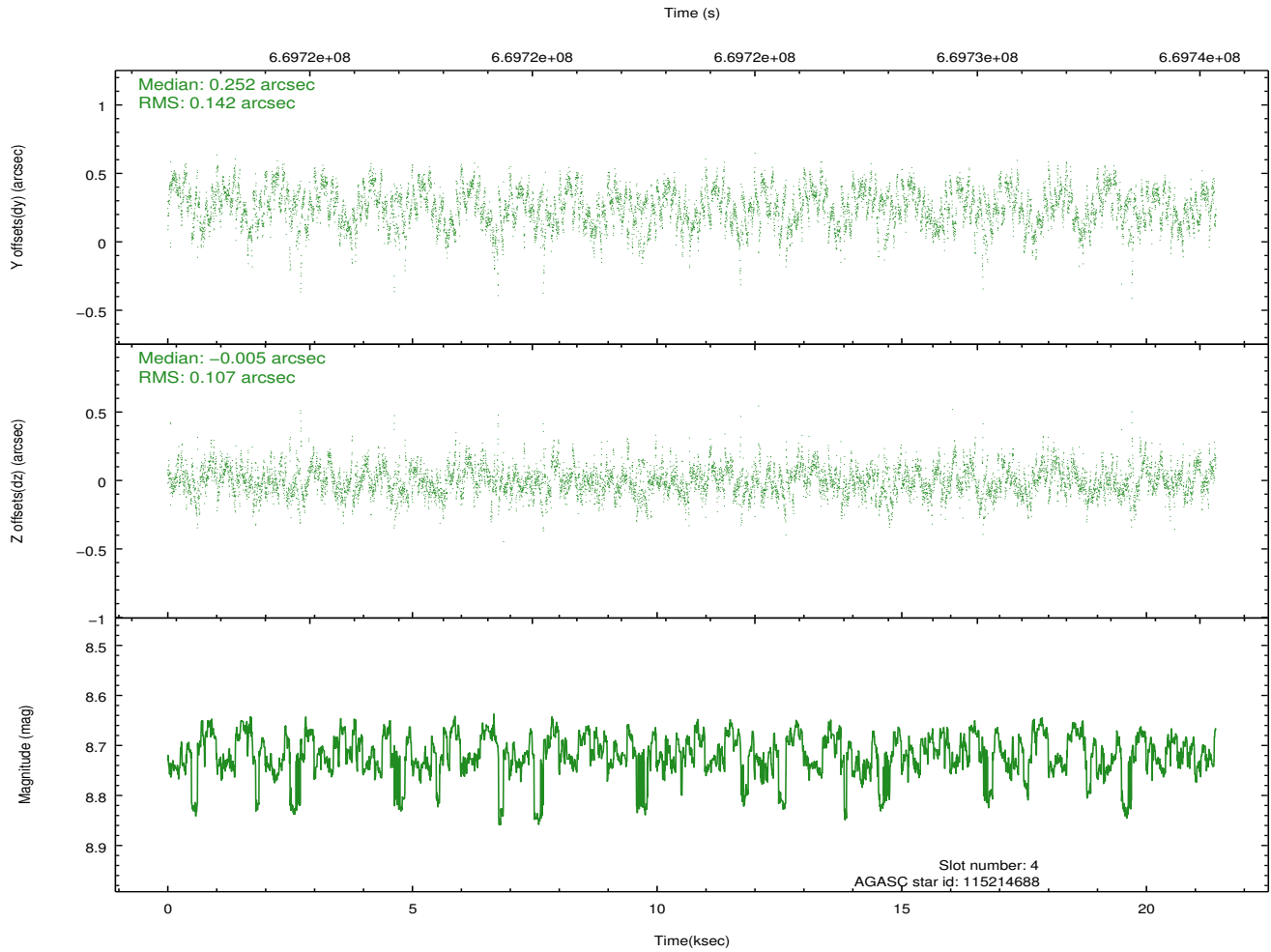
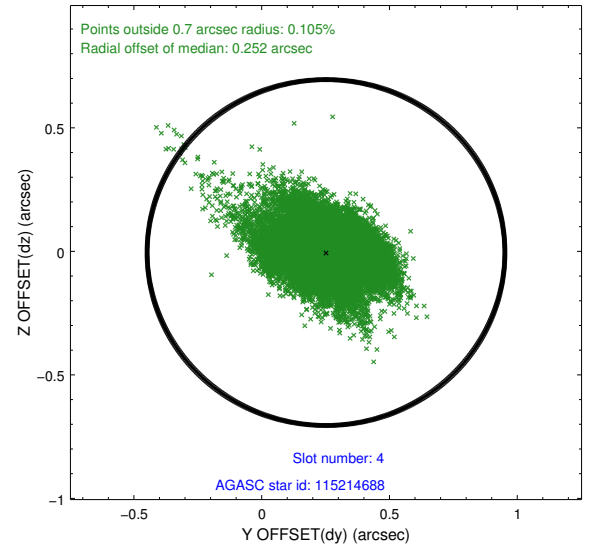
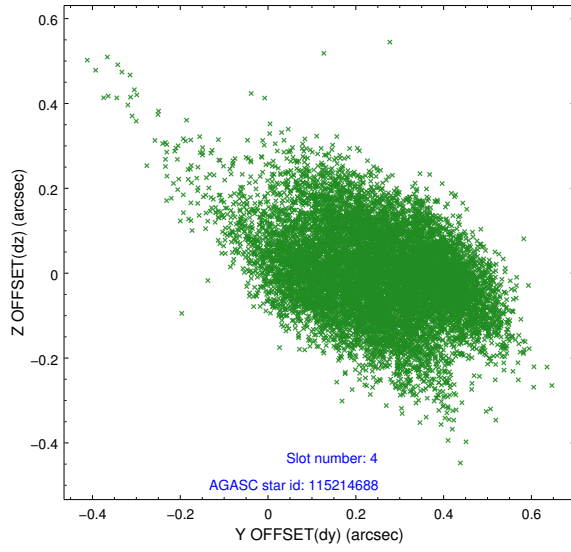
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.03	5225	1.000	-0.260	-0.110	0.039	0.061	0.000000	0.000000	-756.92	-1736
1	FID		ACIS-S-4	7.15	5225	1.000	0.563	0.154	0.038	0.062	0.000000	0.000000	2157.03	172
2	FID		ACIS-S-5	7.14	5224	1.000	-0.334	-0.039	0.029	0.048	0.000000	0.000000	-1809.69	166
3	GUIDE	used	115214648	9.05	10437	1.000	-0.451	-0.210	0.179	0.291	185.771147	12.685188	1609.40	1056
4	GUIDE	used	115214688	8.72	10433	1.000	0.252	-0.005	0.185	0.296	185.816167	13.622157	2033.56	-2293
5	GUIDE	used	115215984	9.91	10418	1.000	-0.166	-0.518	0.287	0.565	186.134733	12.875031	469.65	162
6	GUIDE	used	115347400	10.12	10417	1.000	0.236	0.440	0.379	0.558	186.994146	13.445598	-2136.52	-2385
7	GUIDE	used	115347480	9.24	10444	1.000	0.144	0.271	0.194	0.293	186.668576	13.310410	-1100.40	-1706

2.4 Star Slots

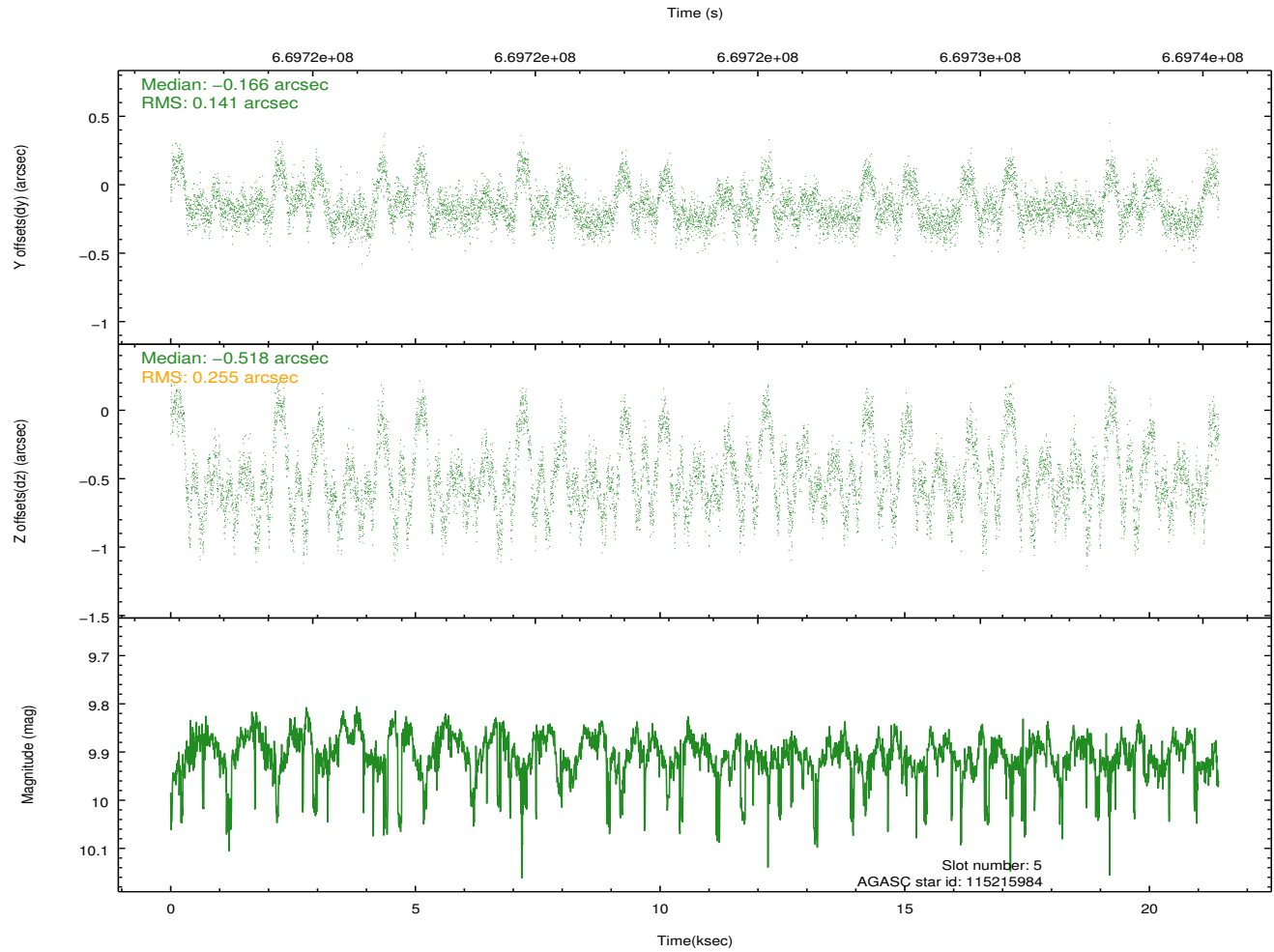
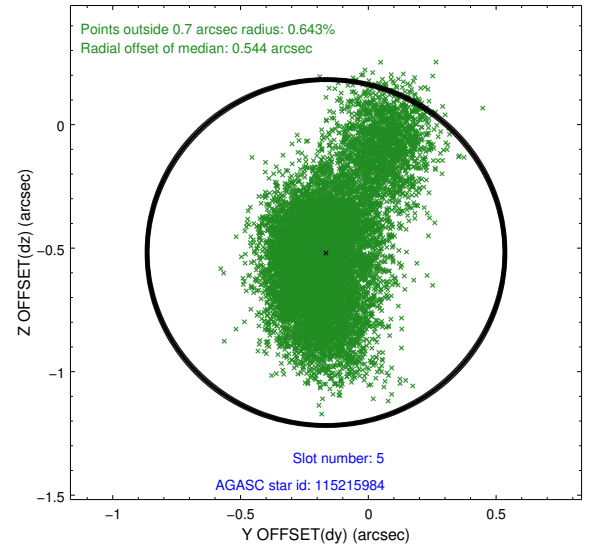
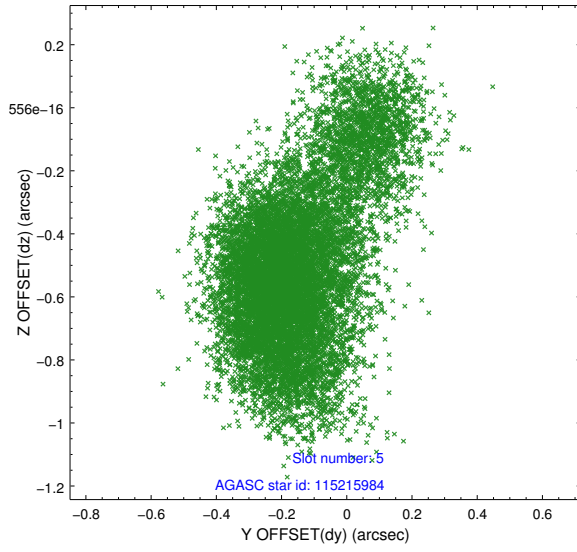
2.4.1 Slot 3



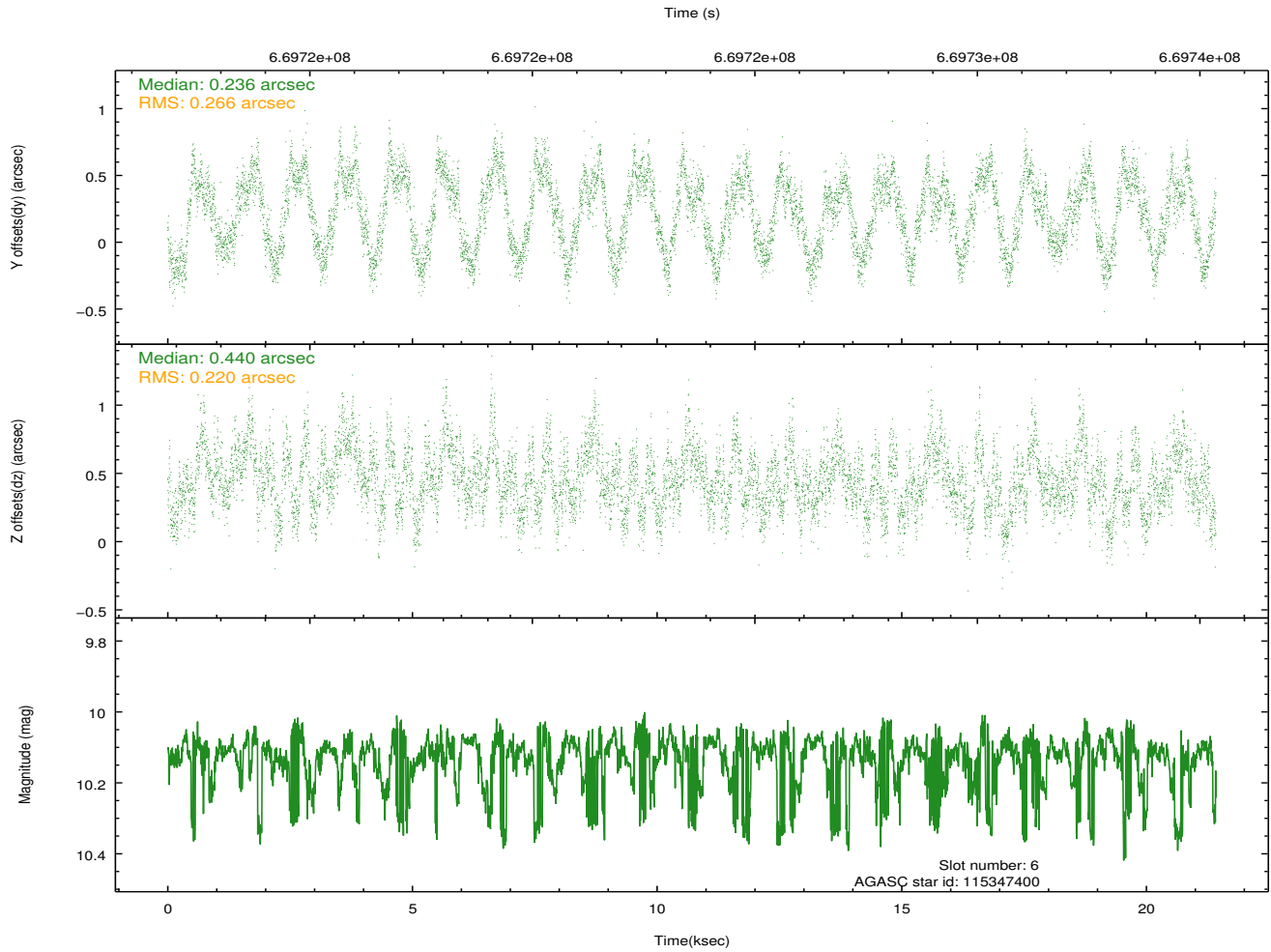
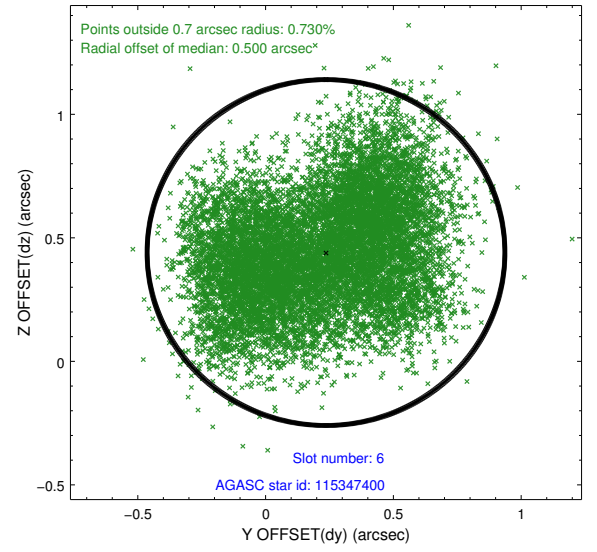
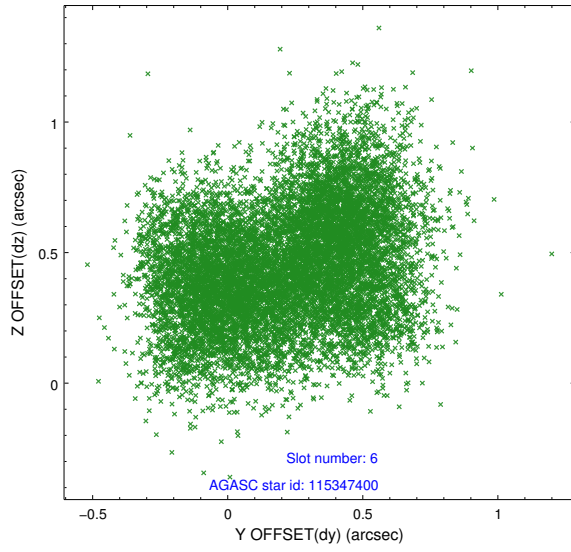
2.4.2 Slot 4



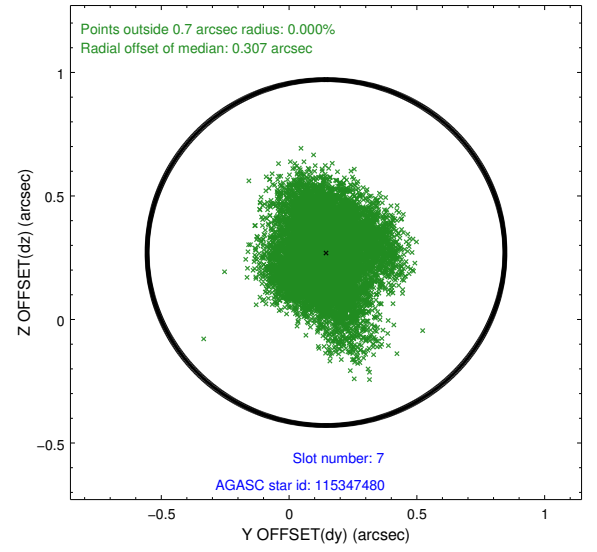
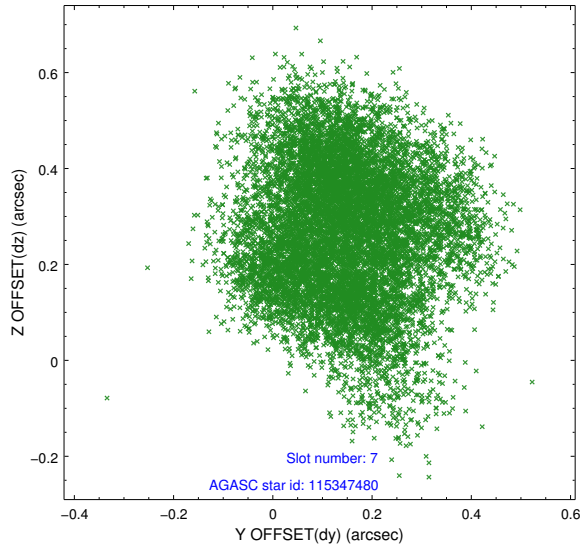
2.4.3 Slot 5



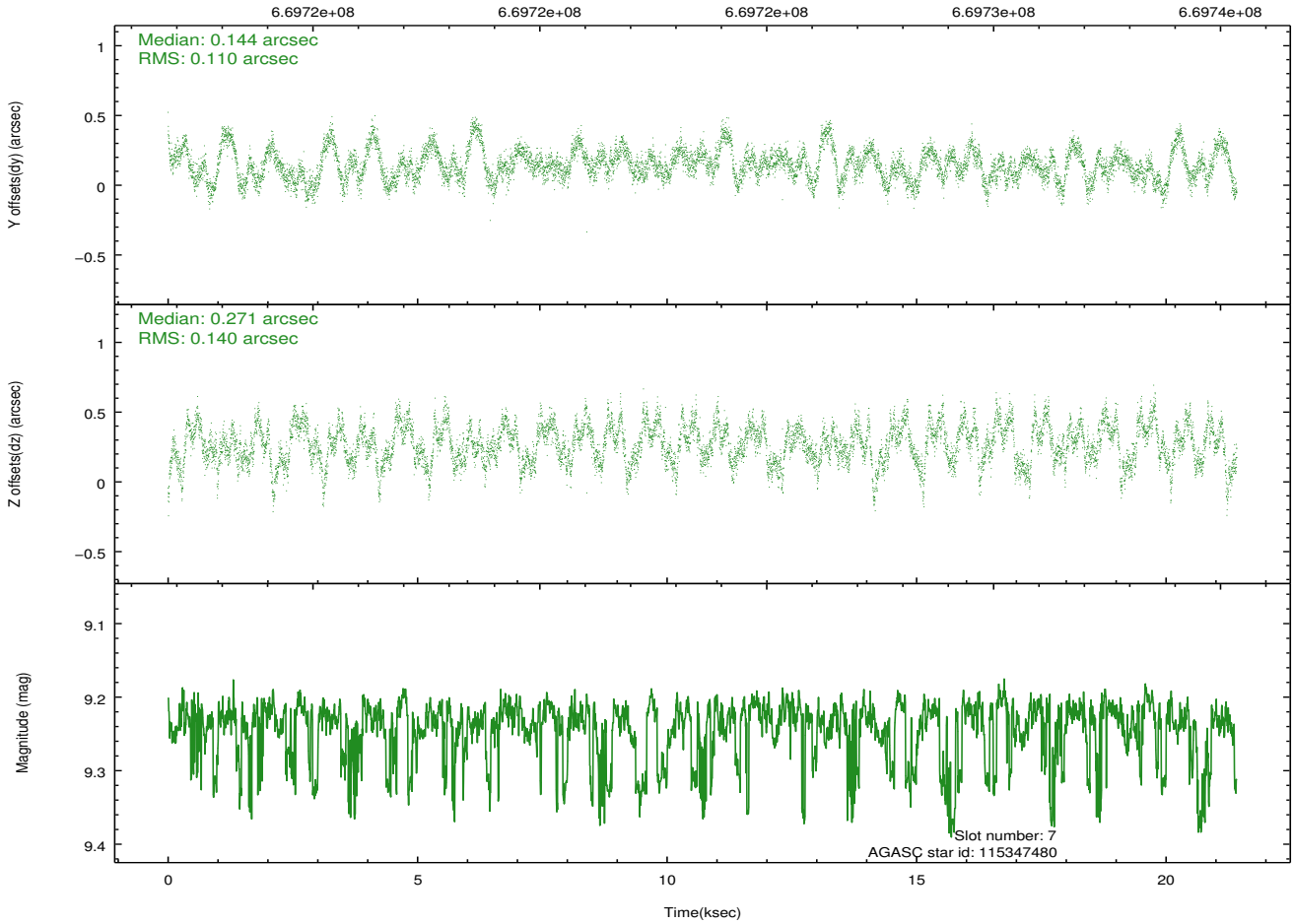
2.4.4 Slot 6



2.4.5 Slot 7

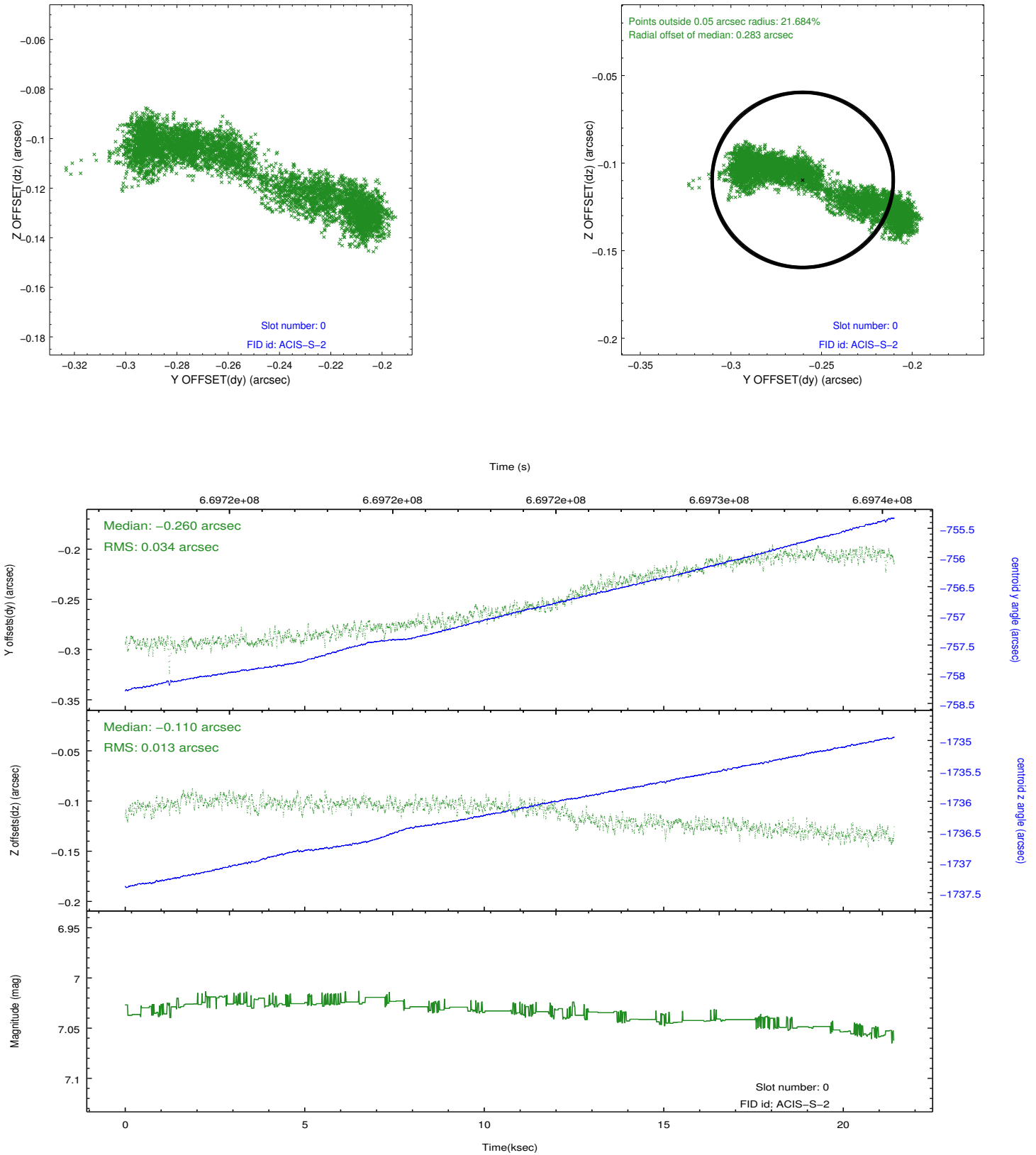


Time (s)

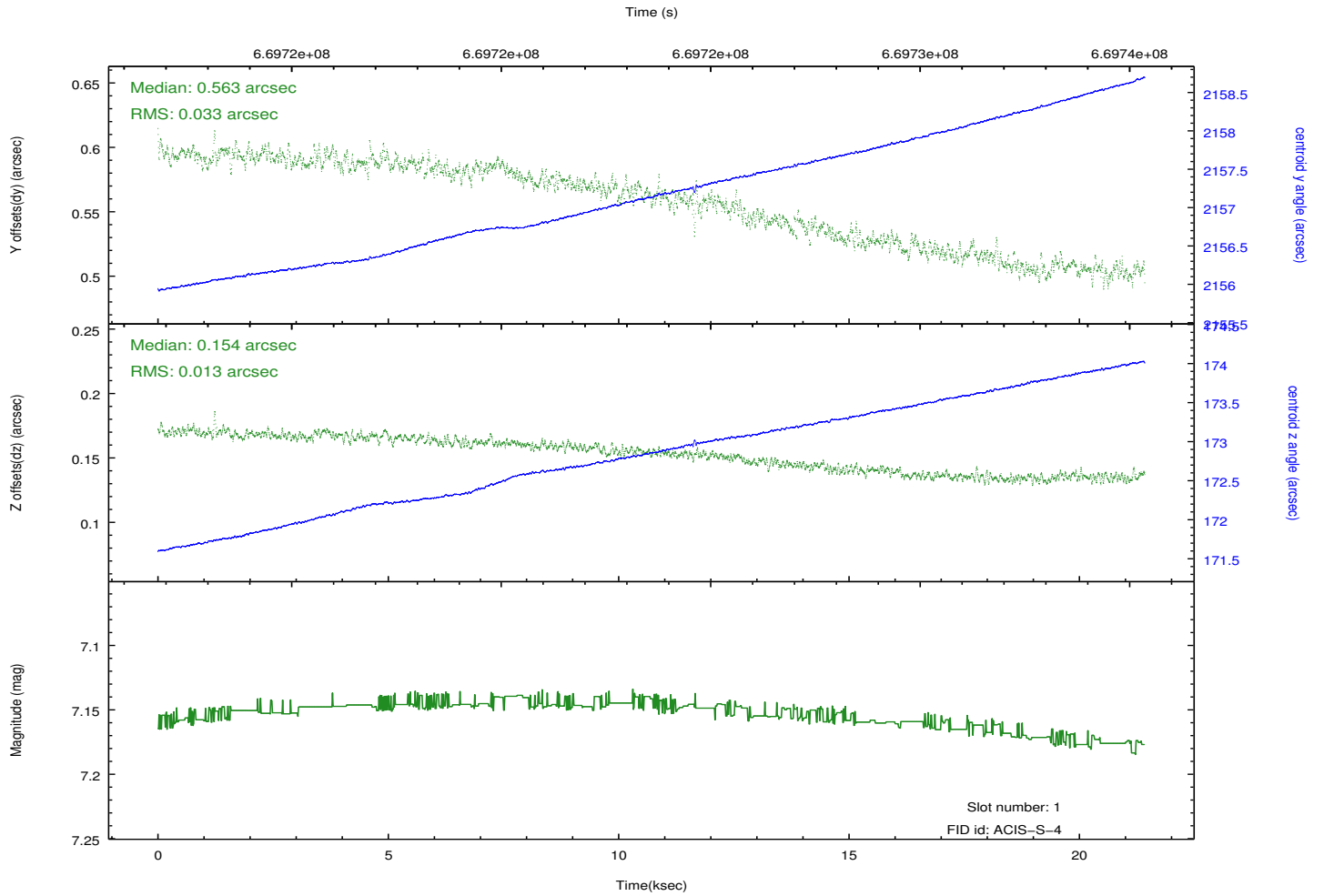
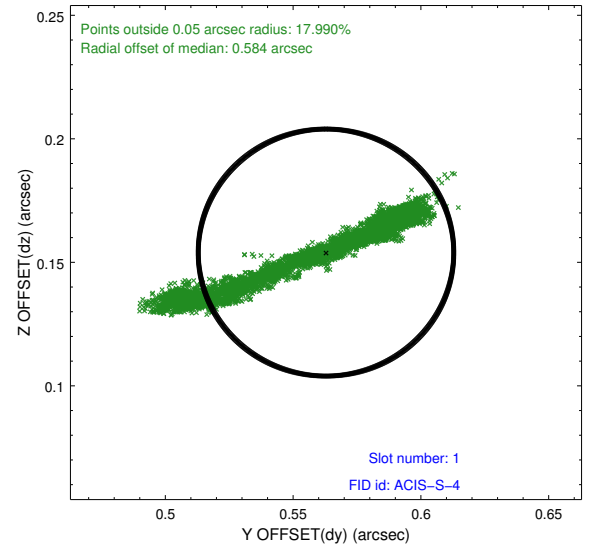
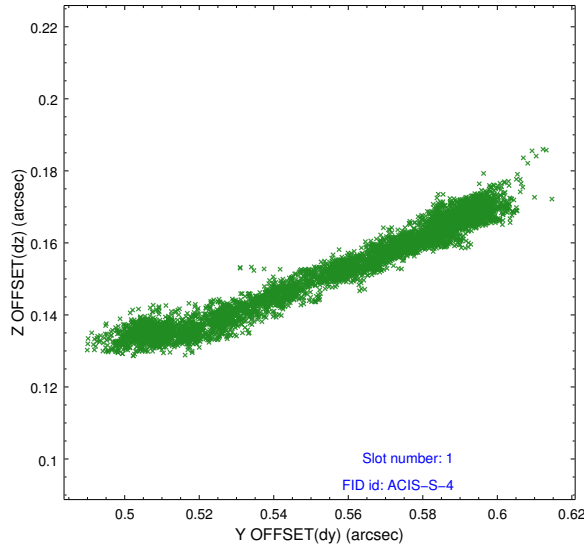


2.5 FID Slots

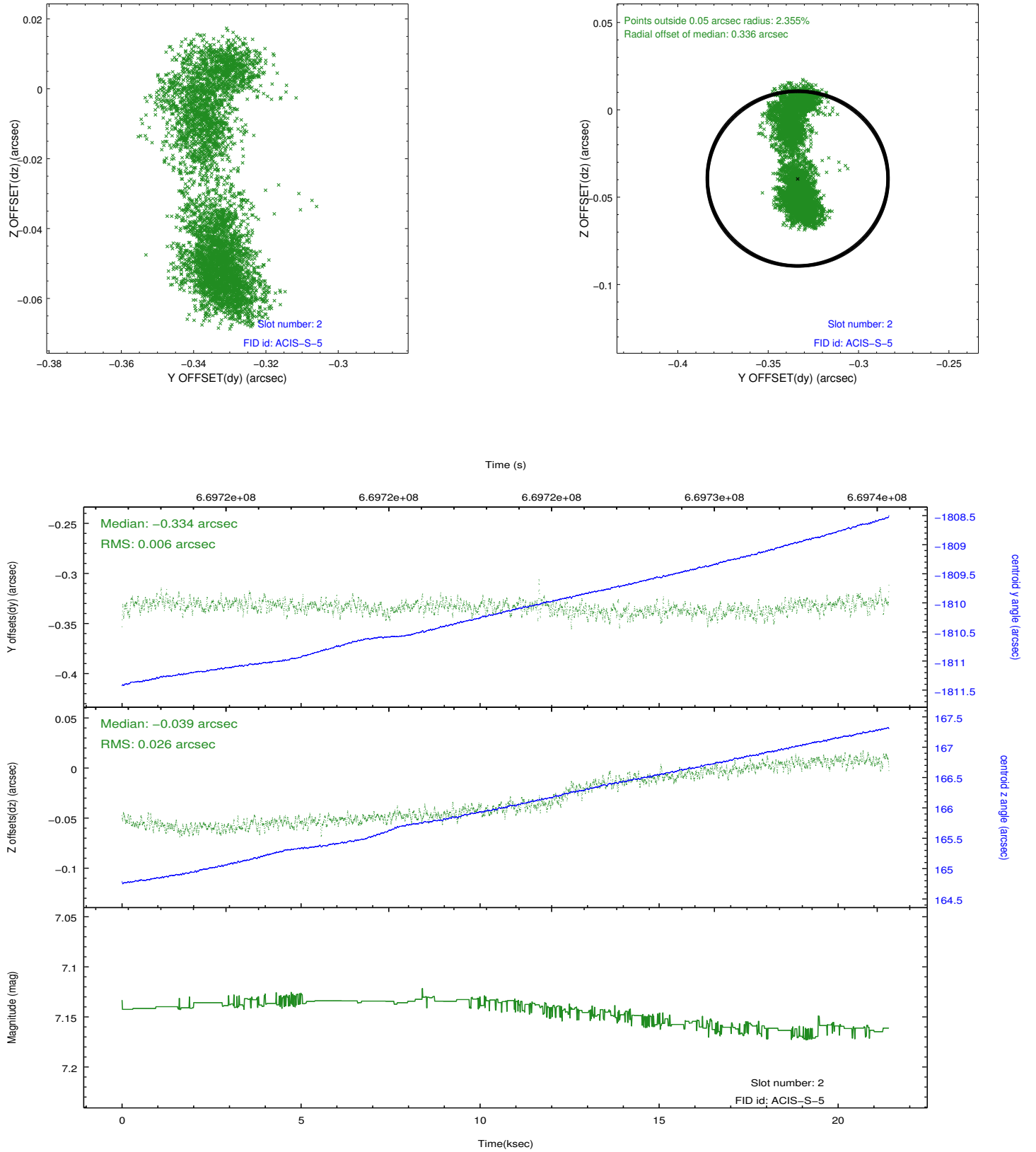
2.5.1 Slot 0



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)	2019.03.26
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	21.36196900177

A.2 Comments

One optional chip was dropped.