

V&V Reference Report

L2 ASCDS Version : 10.7.1

Observation 22196 - L2 Version 1
Chandra X-Ray Center

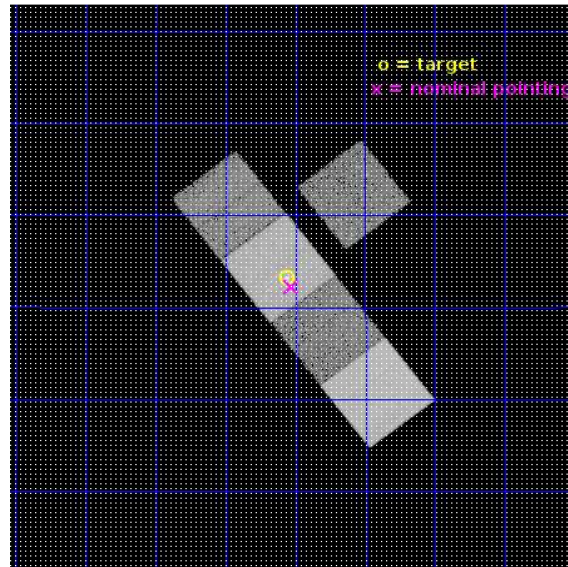
L2 Processing Date : May 7 2019

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
A	Summary	17
A.1	Status	17
A.2	Comments	17

1 Front

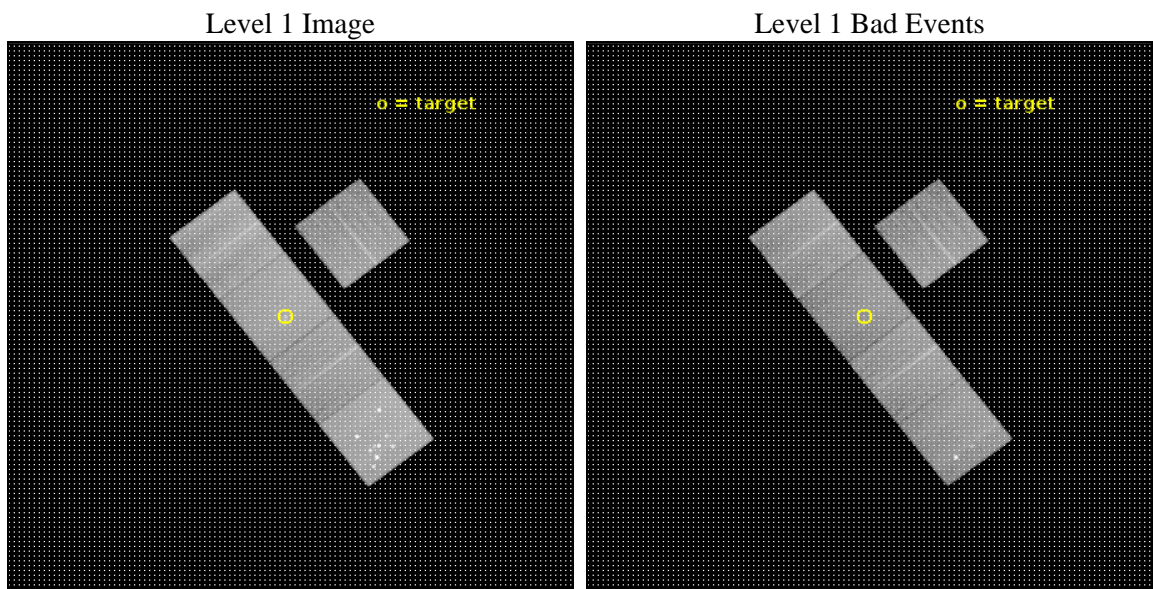
seq_num	801753	Sequence number
obs_id	22196	Observation id
title	Fuelling and self-regulation of AGN feedback at the Bondi radius of M84	Proposal title
observer	Helen Russell	Principal investigator
object	M84	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	186.265833	Observer's specified target RA [deg]
dec_targ	12.886944	Observer's specified target Dec [deg]
ra_nom	186.25726965518	Nominal RA [deg]
dec_nom	12.870848179511	Nominal Dec [deg]
roll_nom	232.52222855314	Nominal Roll [deg]
revision	1	Processing version of data
ontime	20852.446333766	Sum of GTIs [s]
livetime	20579.993771068	Livetime [s]
ontime3	20849.18217361	Sum of GTIs [s]
ontime5	20852.405293822	Sum of GTIs [s]
ontime6	20852.364253759	Sum of GTIs [s]
ontime7	20852.446333766	Sum of GTIs [s]
ontime8	20849.141133547	Sum of GTIs [s]
l2events	264648	Number of level 2 events



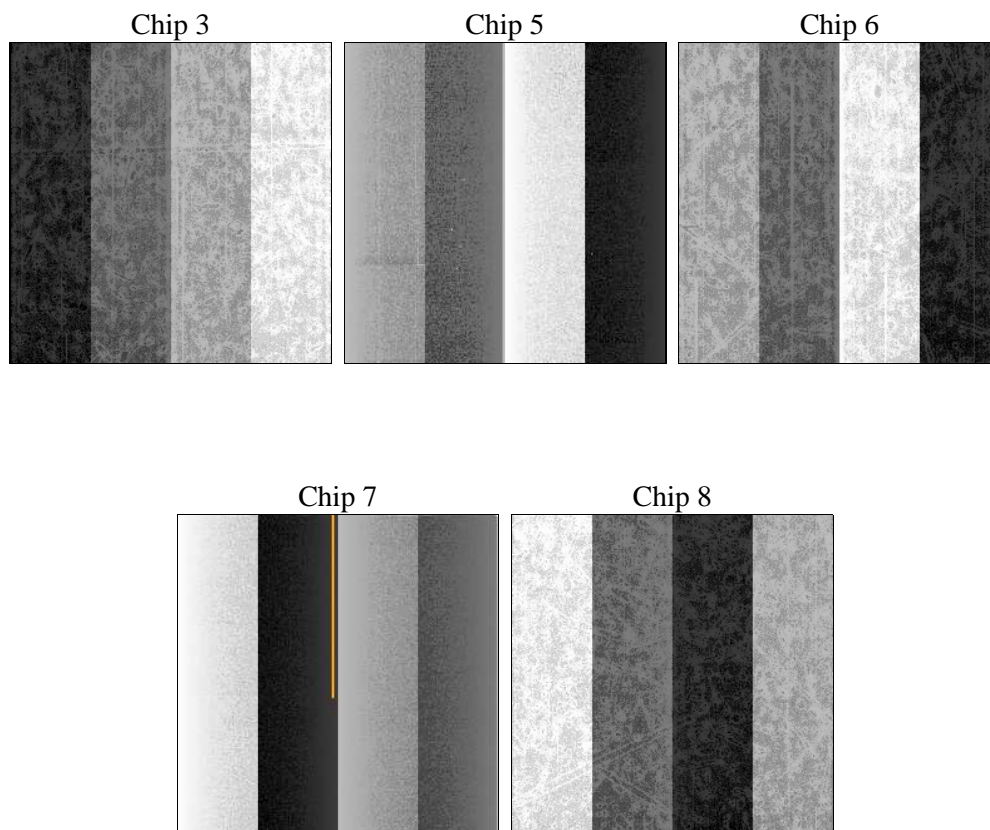
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	20800.000000	[s] Scheduled observation exposure time
ascdsver	10.7.1	Processing system revision	ontime	20852.446333766	Sum of GTIs [s]
caldsver	4.8.2	 	ontime3	20849.18217361	Sum of GTIs [s]
date	2019-05-08T00:20:20	Date and time of file creation	ontime5	20852.405293822	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	20852.364253759	Sum of GTIs [s]
			ontime7	20852.446333766	Sum of GTIs [s]
			ontime8	20849.141133547	Sum of GTIs [s]
			l1events	1041817	Number of level 1 events

2.1.4 Events

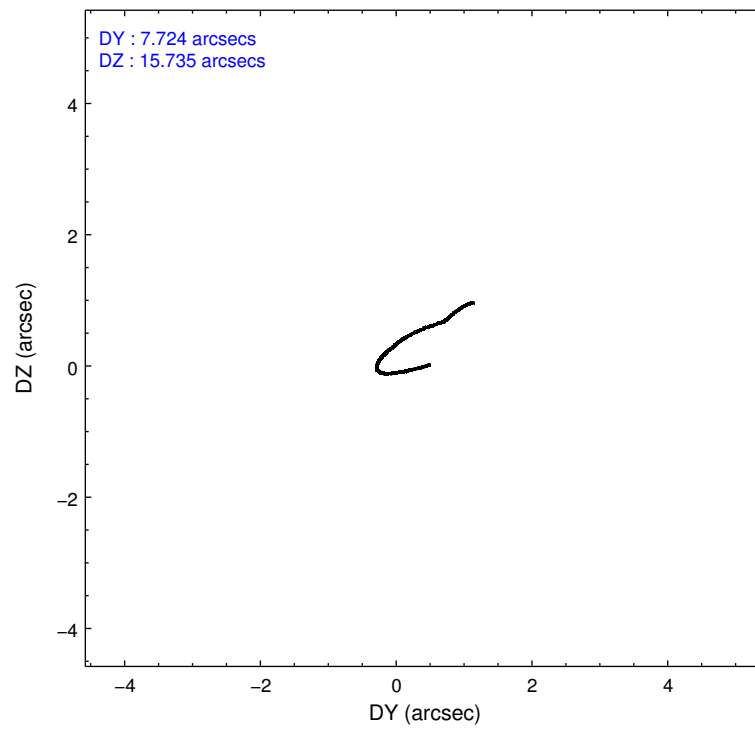
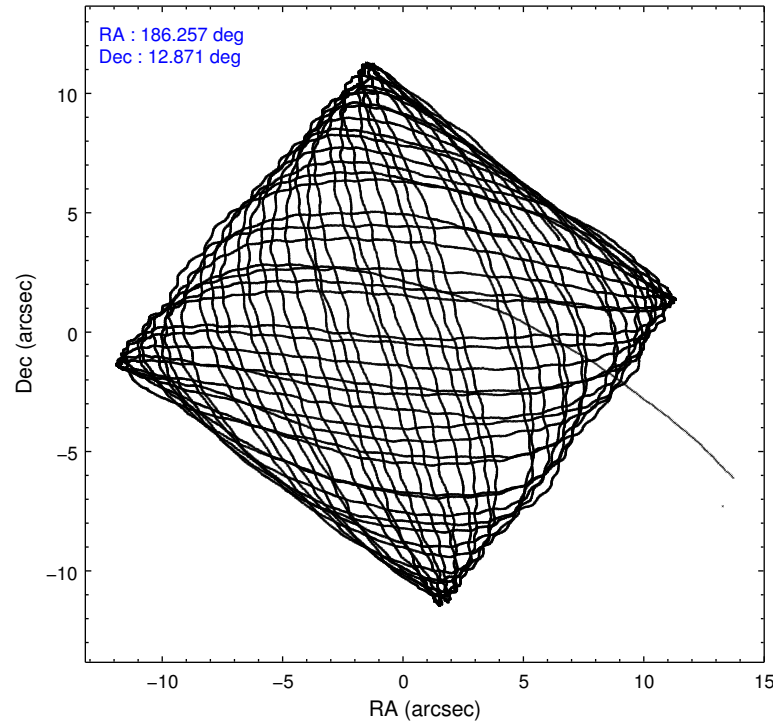
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	154645	291547	167784	213348	214493
rejected events	137271	139263	148394	117318	154426
rejected %	88%	47%	88%	54%	71%

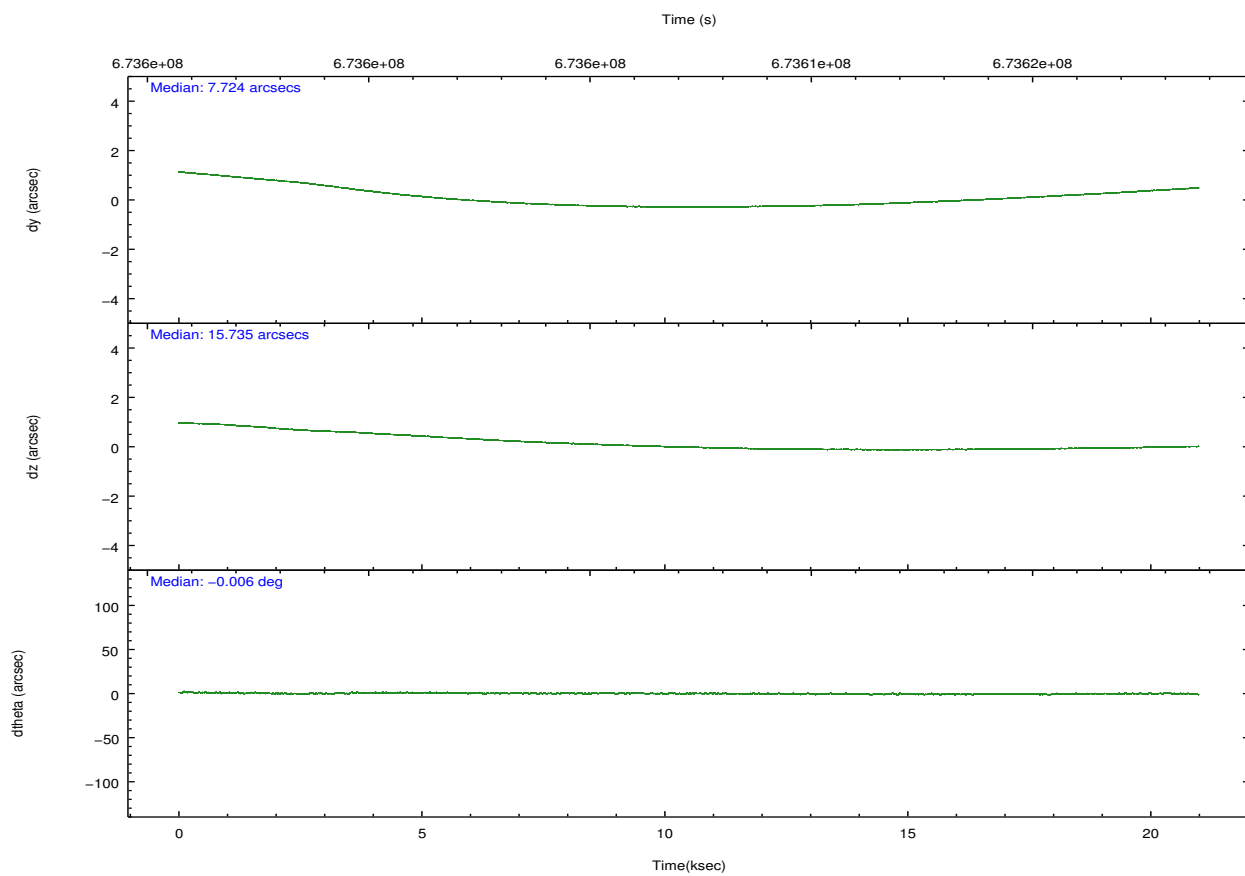
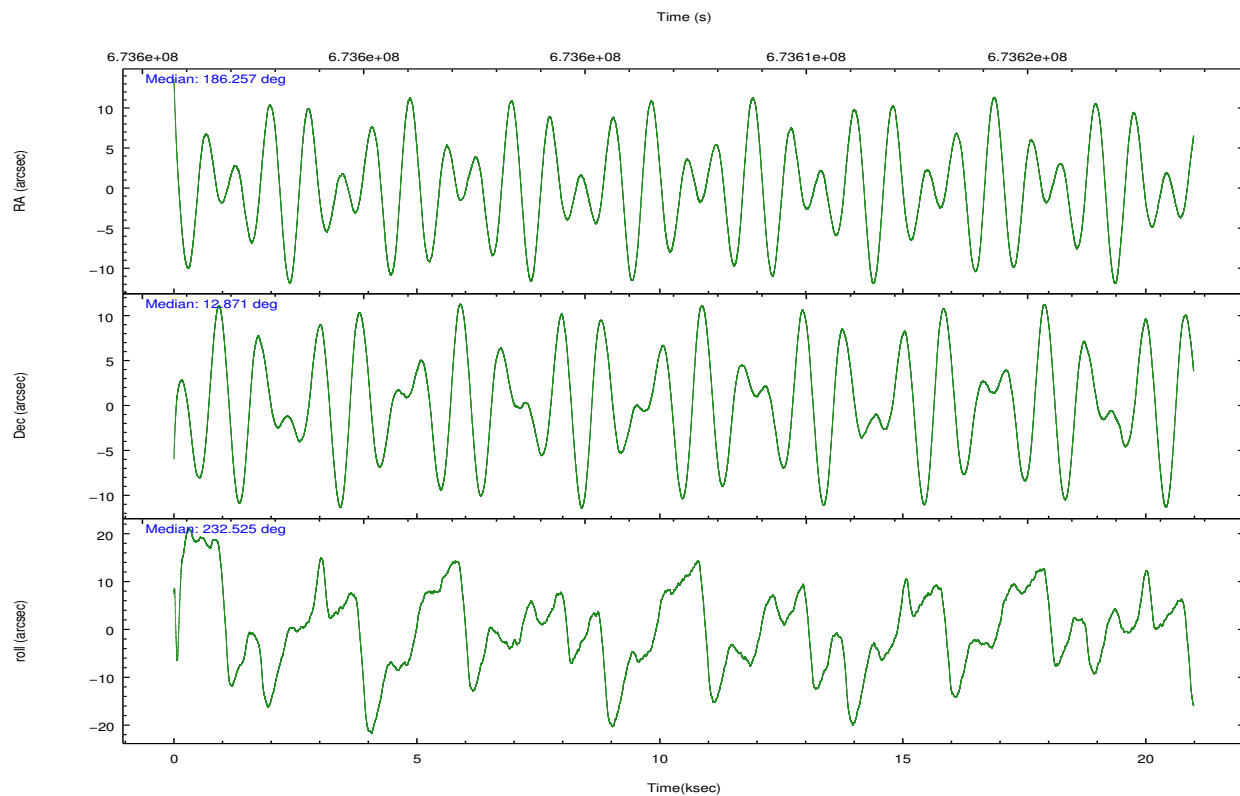
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	6524	32285	6937	9361	19380
	4%	11%	4%	4%	9%
grade 1 events	79	674	88	288	176
	0%	0%	0%	0%	0%
grade 2 events	3724	44211	4517	20822	14113
	2%	15%	2%	9%	6%
grade 3 events	1780	4455	1720	7745	5801
	1%	1%	1%	3%	2%
grade 4 events	1832	3534	1675	7578	5438
	1%	1%	0%	3%	2%
grade 5 events	7413	17463	7324	20133	11179
	4%	5%	4%	9%	5%
grade 6 events	3518	67827	4543	50532	15340
	2%	23%	2%	23%	7%
grade 7 events	129775	121098	140980	96889	143066
	83%	41%	84%	45%	66%

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	186.260574	186.2572696551846	CCD I2 on	O1	N
[deg] Pointing Dec	12.898101	12.87084817951132	CCD I3 on	Y	Y
[deg] Pointing Roll	232.364856	232.5222285531397	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)	673596926.184000	673596044.46437	CCD S5 on	N	N
Observation start date	2019-05-07T06:14:17	2019-05-07T06:00:44	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	673617726.184000	673619121.31576	On-chip summing requested	N	N
Observation end date	2019-05-07T12:00:57	2019-05-07T12:25:21	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



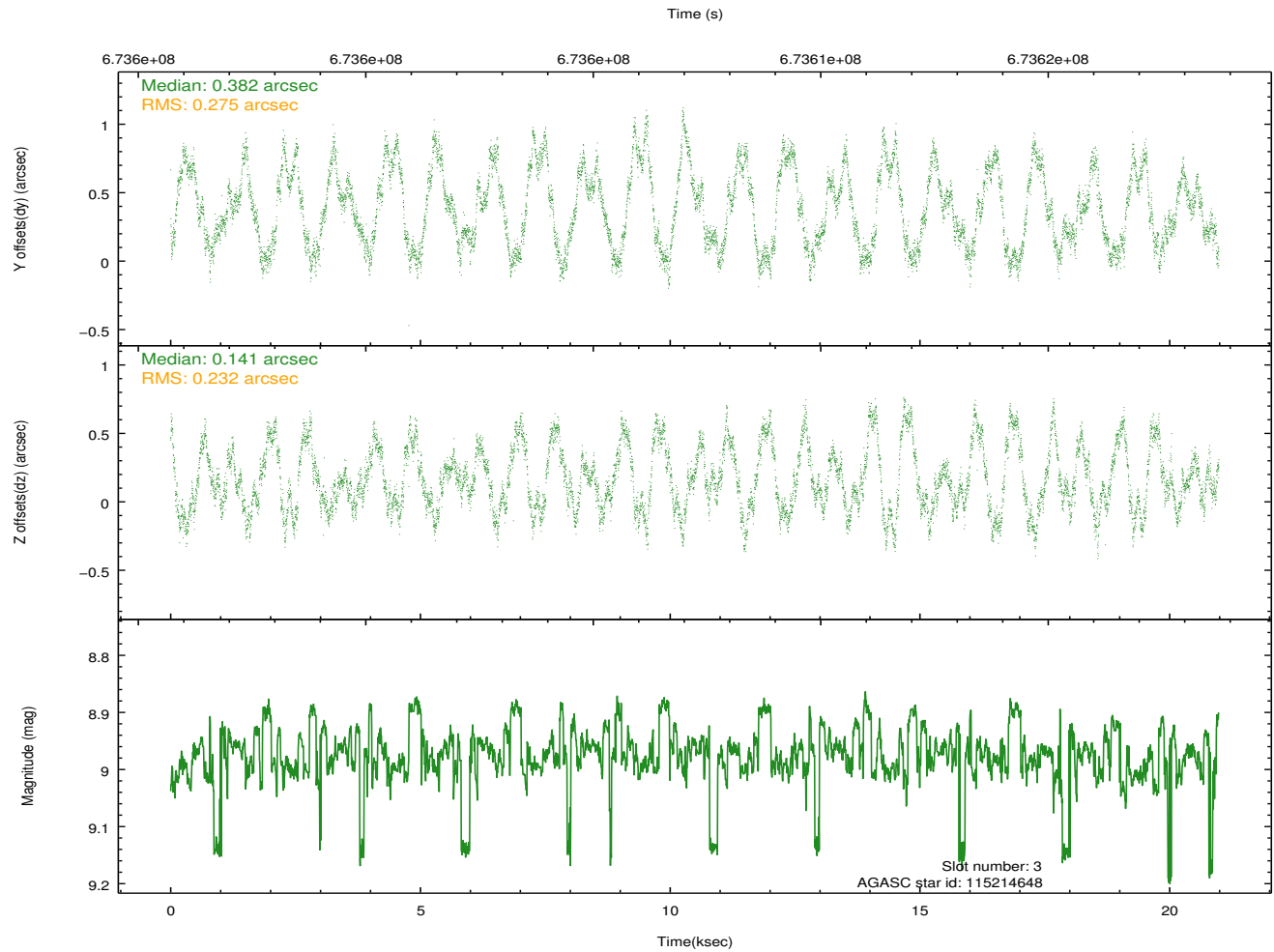
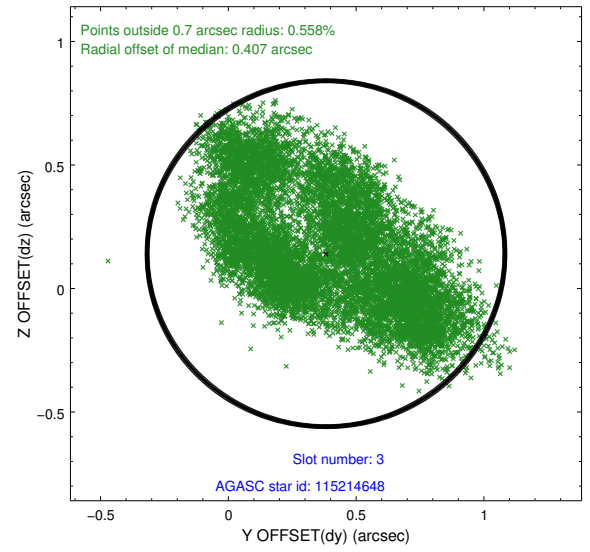
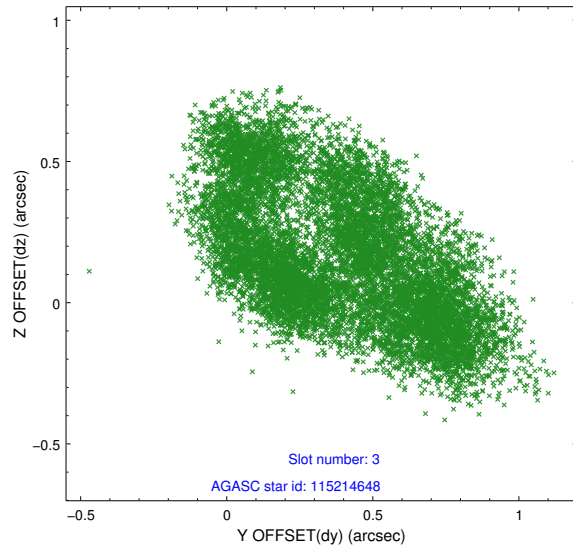


Slot Statistics

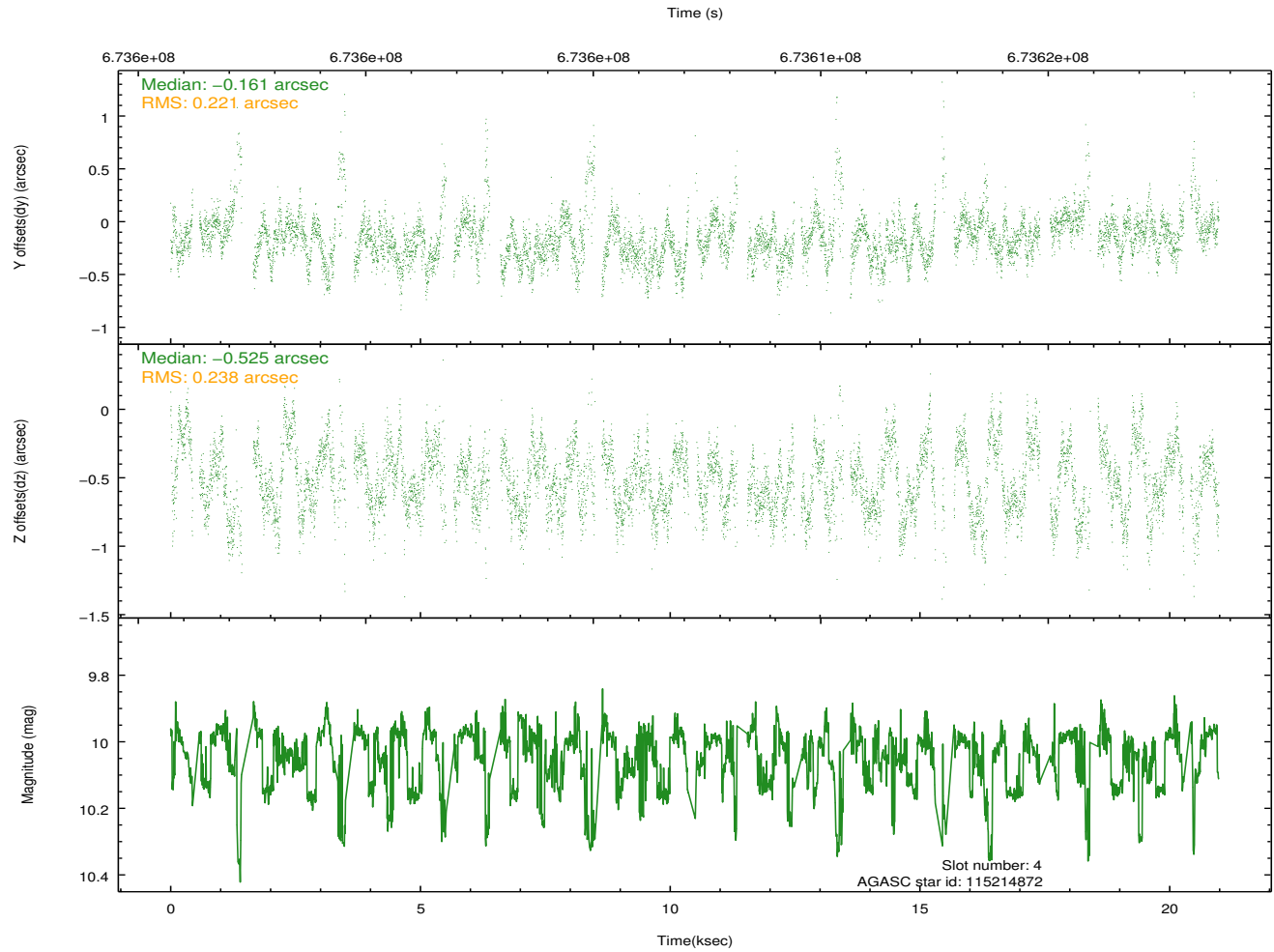
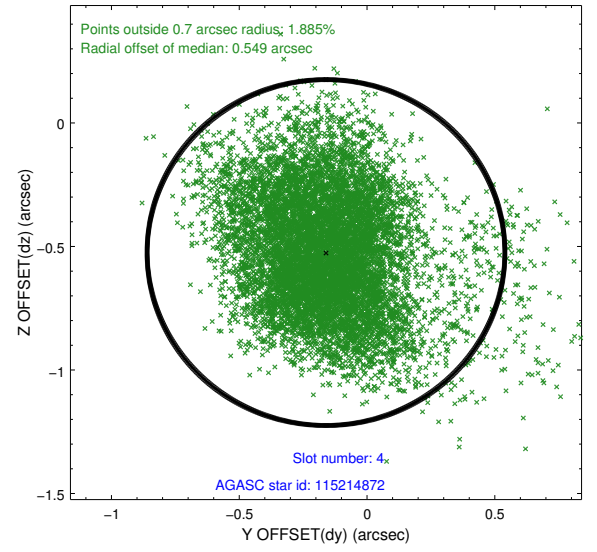
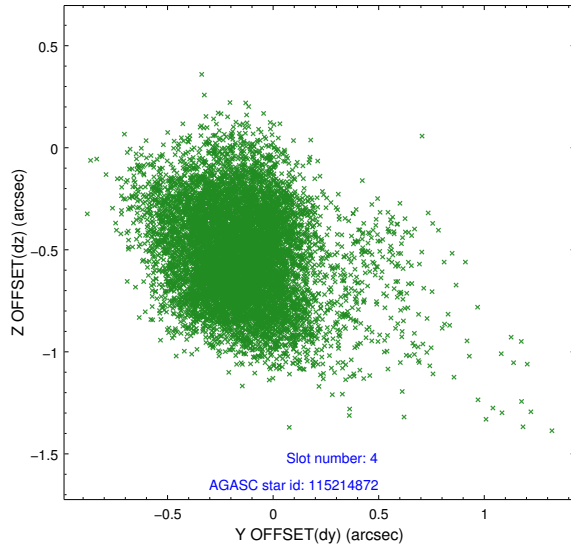
	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	m
	FID		ACIS-S-2	7.01	5119	1.000	-0.259	-0.100	0.011	0.023	0.000000	0.000000	-760.80	-17
	FID		ACIS-S-4	7.15	5119	1.000	0.580	0.152	0.012	0.040	0.000000	0.000000	2153.16	1
	FID		ACIS-S-5	7.12	5119	1.000	-0.354	-0.042	0.020	0.040	0.000000	0.000000	-1813.60	1
	GUIDE	used	115214648	8.98	10214	1.000	0.382	0.141	0.400	0.582	185.771147	12.685188	1657.00	-8
	BAD	used	115214872	10.03	8701	1.000	-0.161	-0.525	0.330	0.568	185.840719	12.668185	1556.94	-6
	GUIDE	used	115215984	9.96	10214	1.000	-0.139	0.249	0.388	0.562	186.134733	12.875031	336.52	-2
	GUIDE	used	115216184	9.62	10213	1.000	0.044	0.046	0.195	0.301	185.973150	12.580247	1525.26	-
	GUIDE	used	115347480	9.33	10213	1.000	-0.135	-0.019	0.171	0.268	186.668576	13.310410	-2048.31	2

2.4 Star Slots

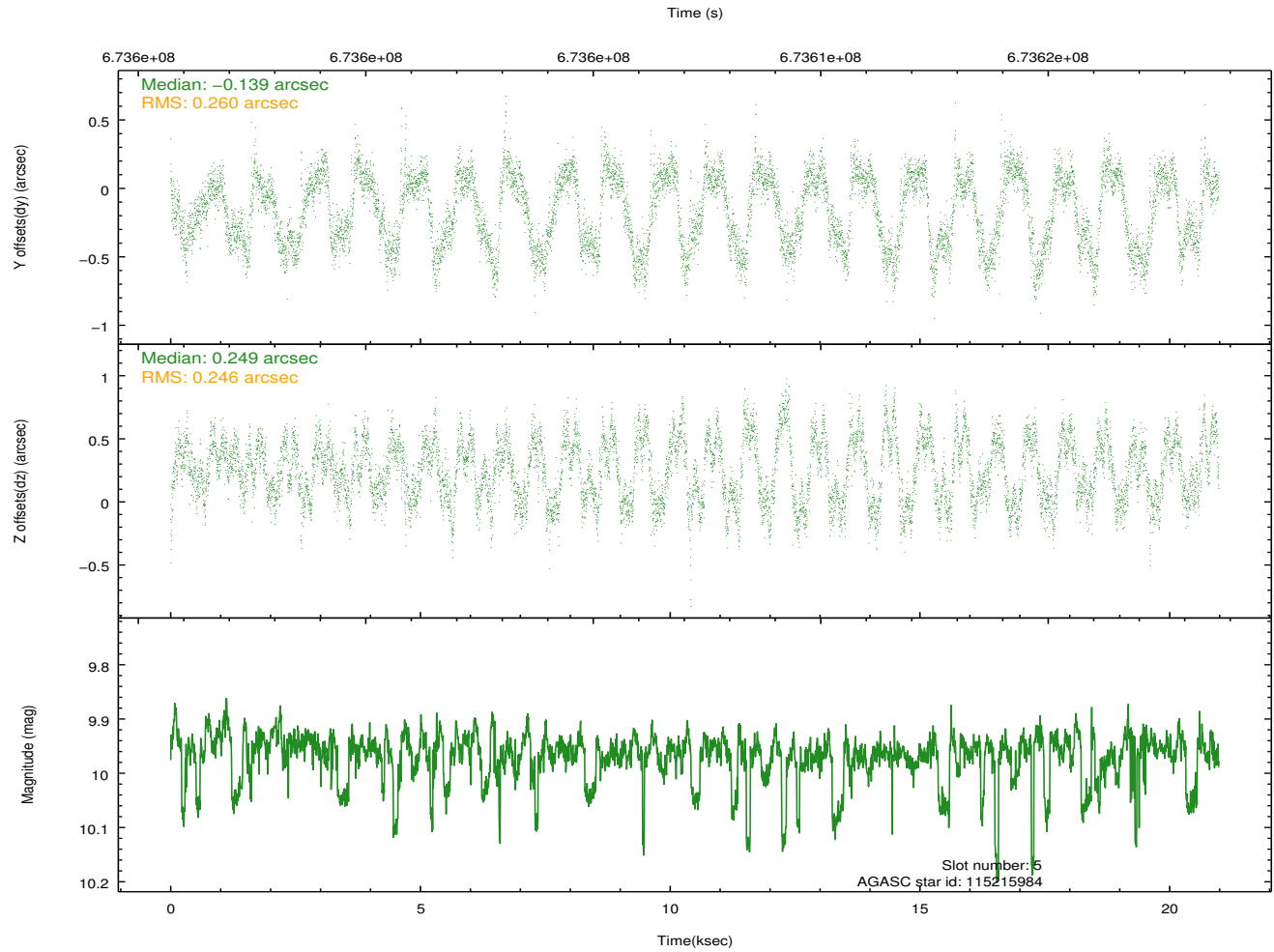
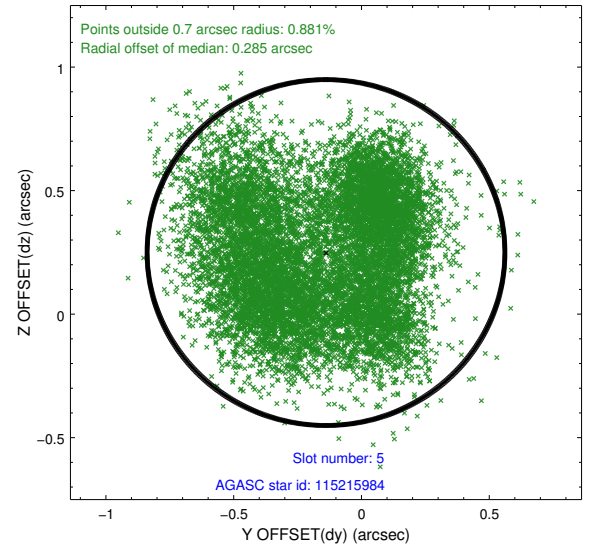
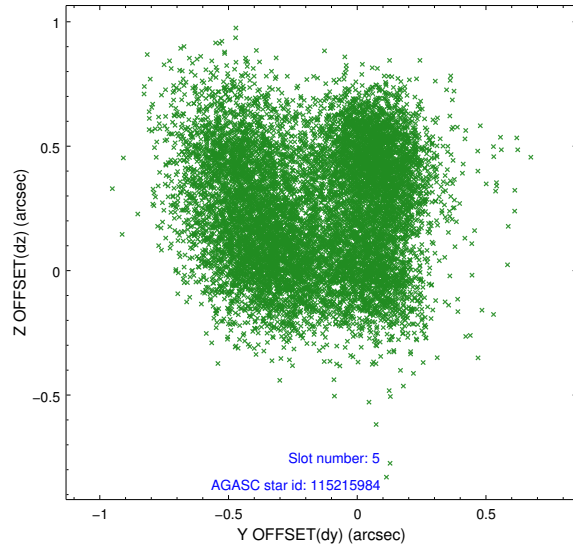
2.4.1 Slot 3



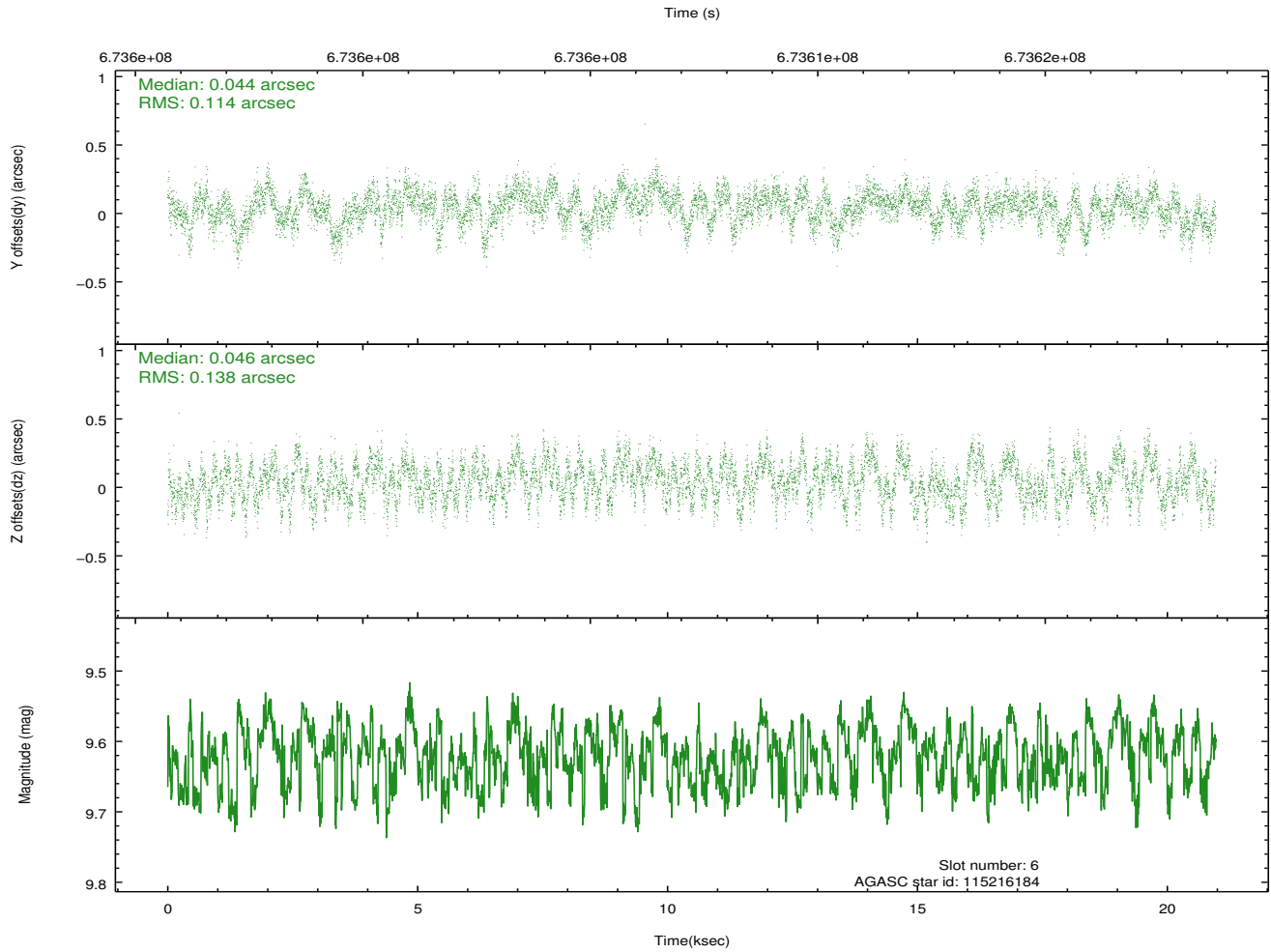
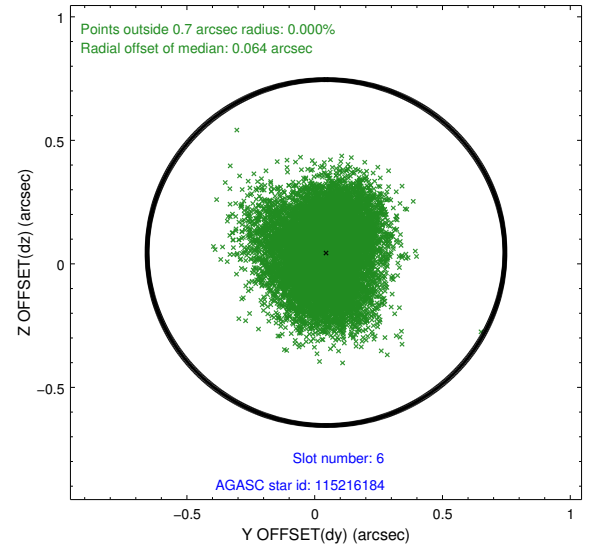
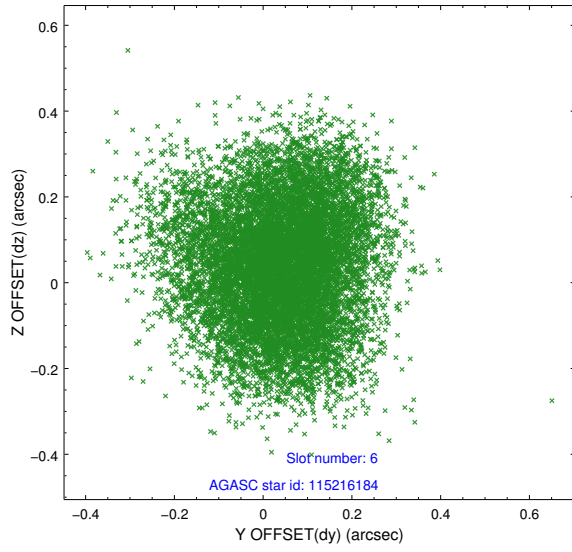
2.4.2 Slot 4



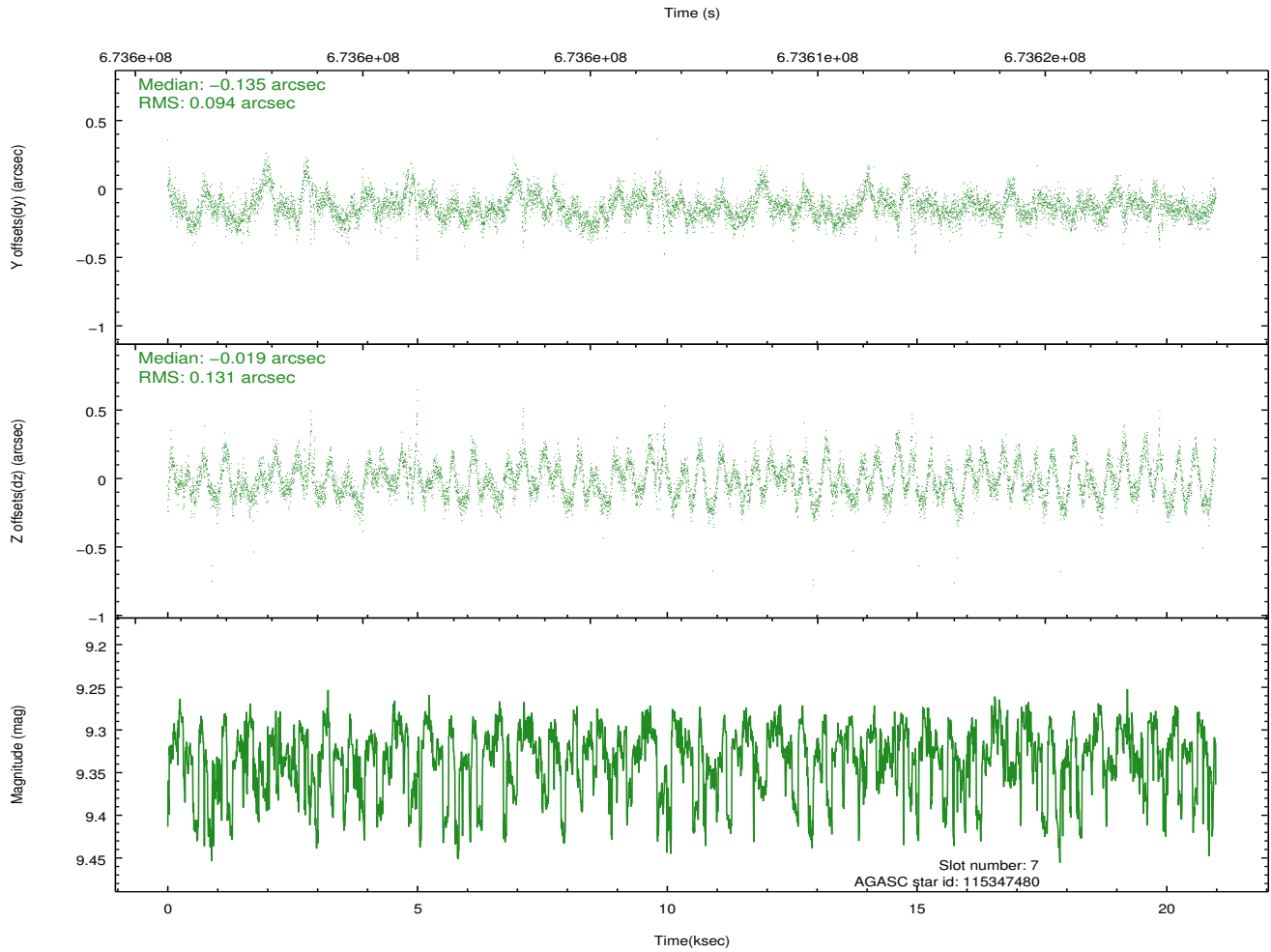
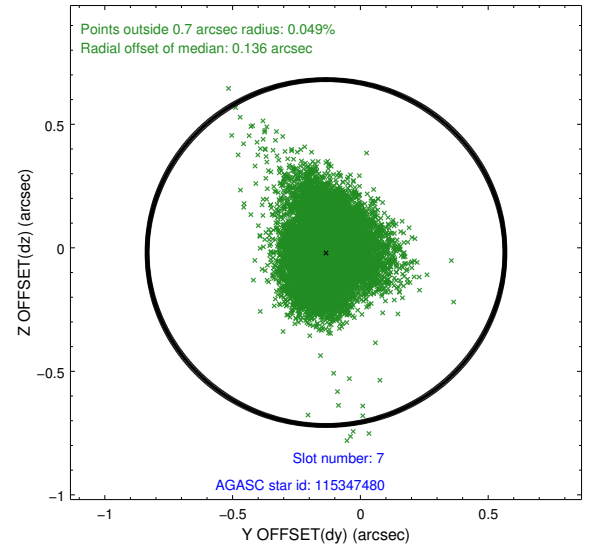
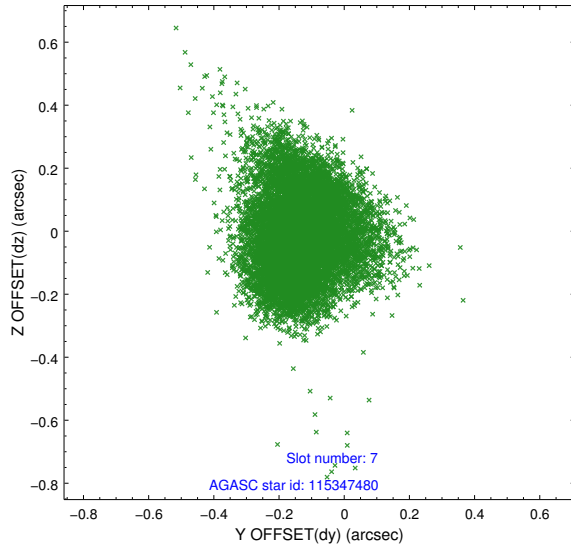
2.4.3 Slot 5



2.4.4 Slot 6

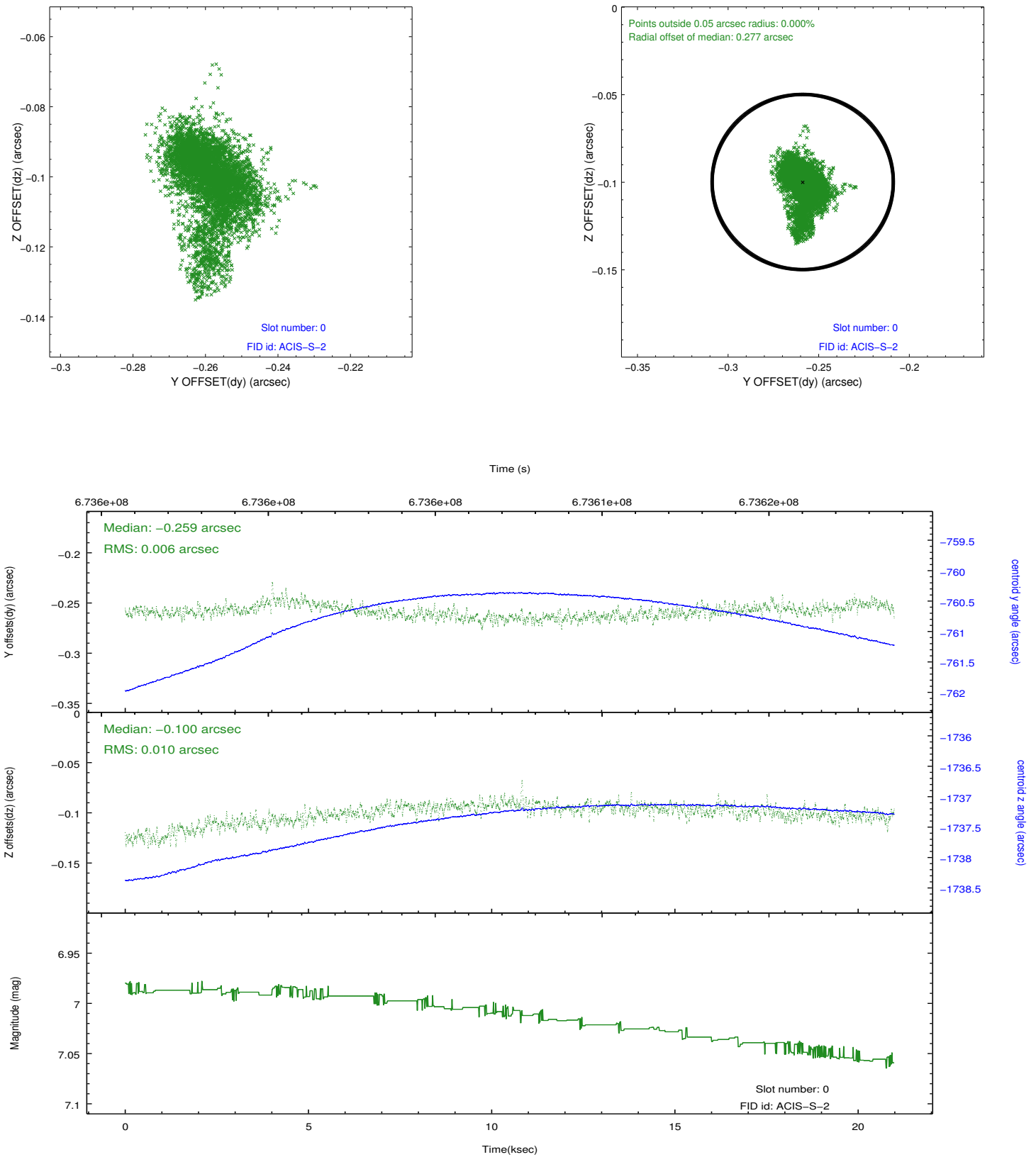


2.4.5 Slot 7

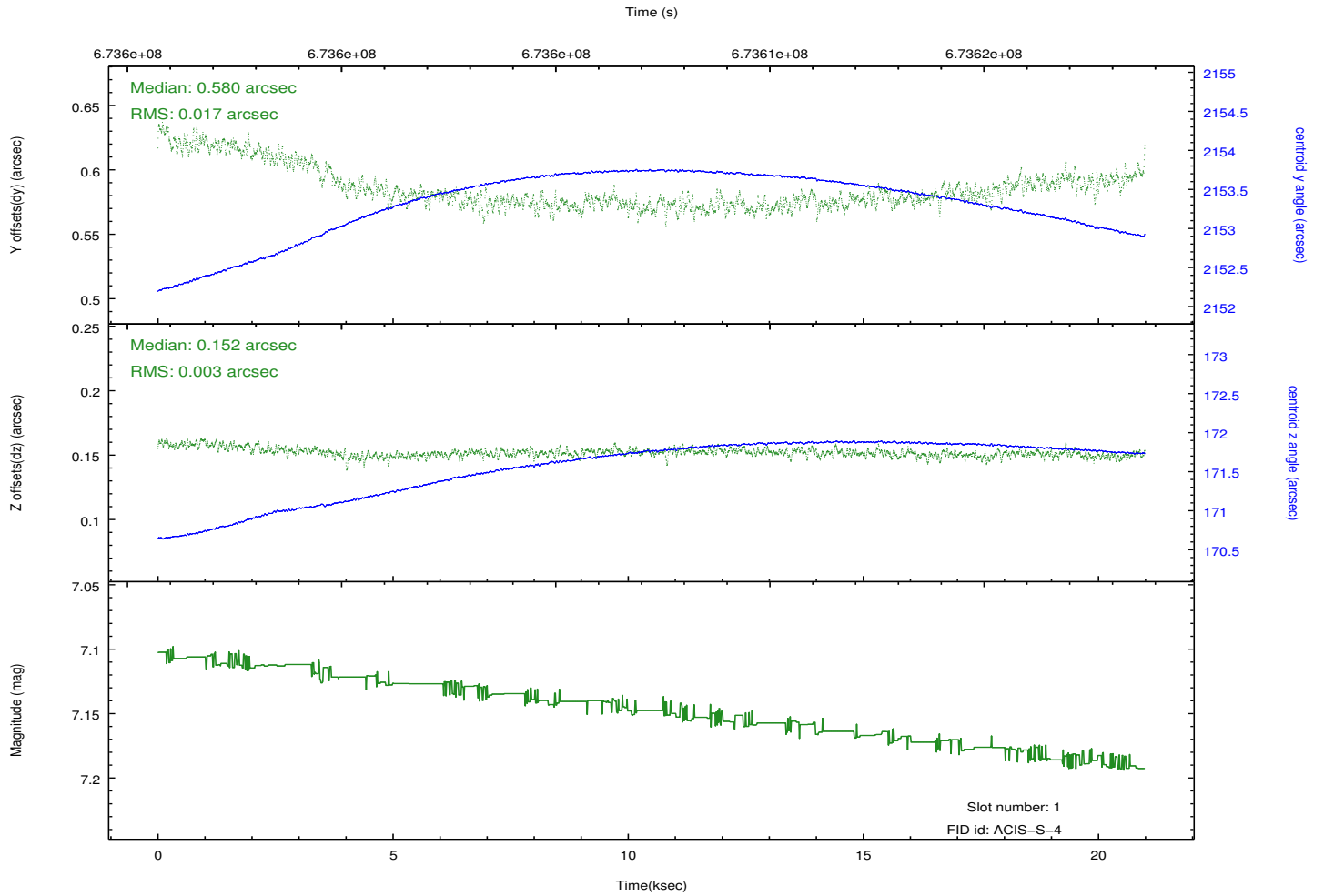
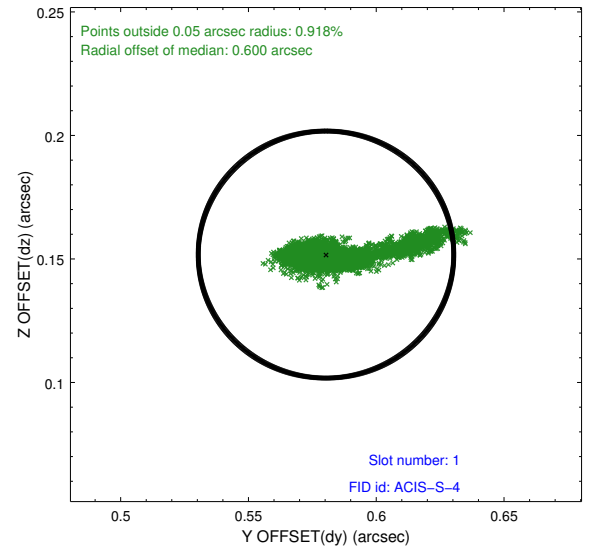
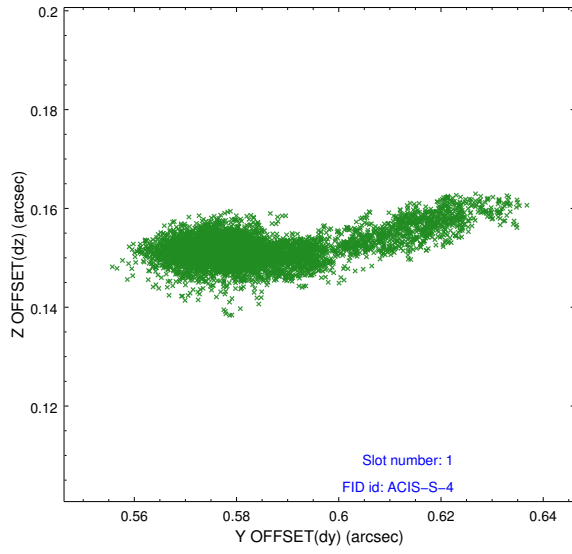


2.5 FID Slots

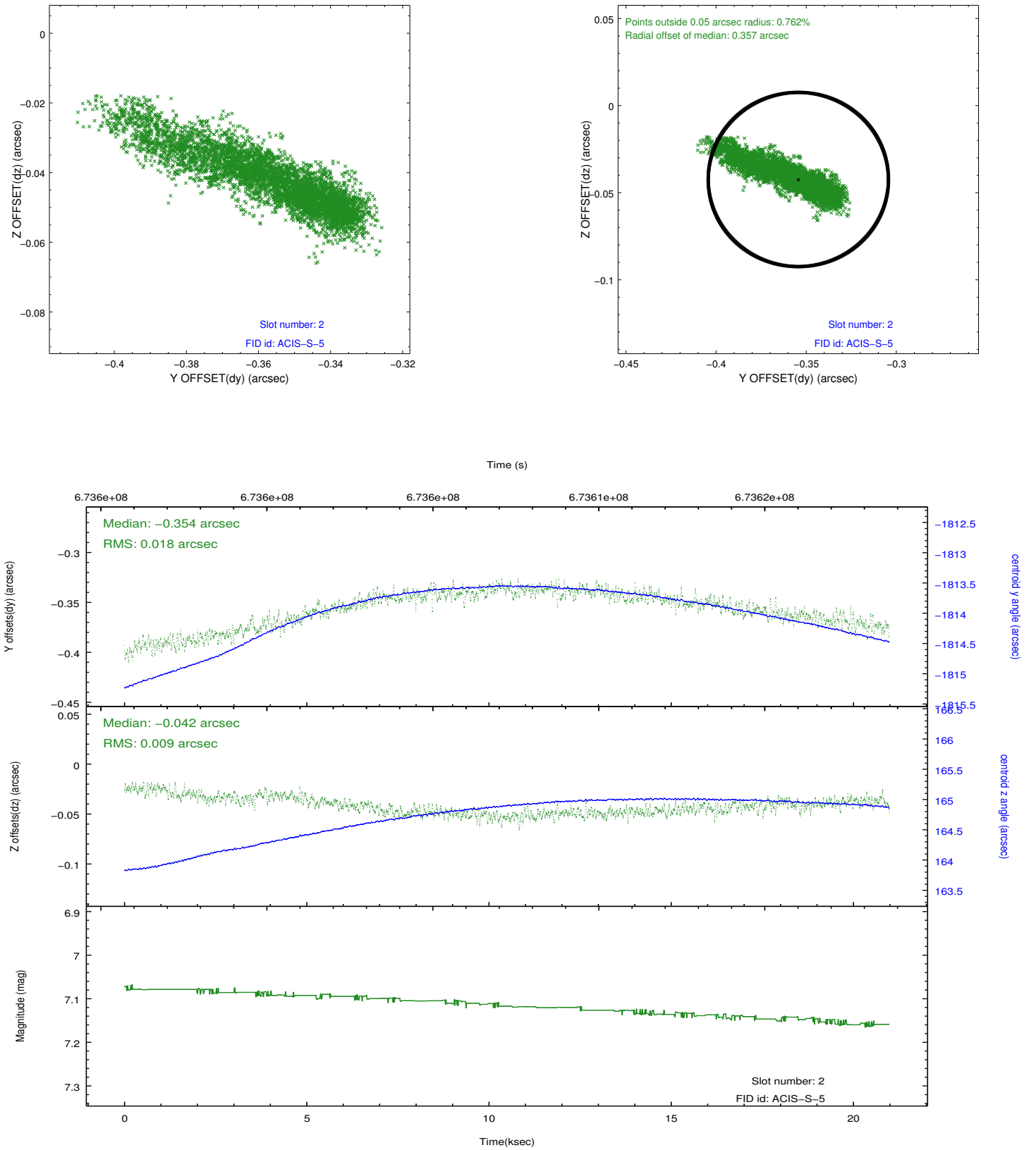
2.5.1 Slot 0



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)	2019.05.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.852446333766

A.2 Comments

One optional chip was dropped.