

V&V Reference Report

L2 ASCDS Version : 10.7.1

Observation 22113 - L2 Version 1
Chandra X-Ray Center

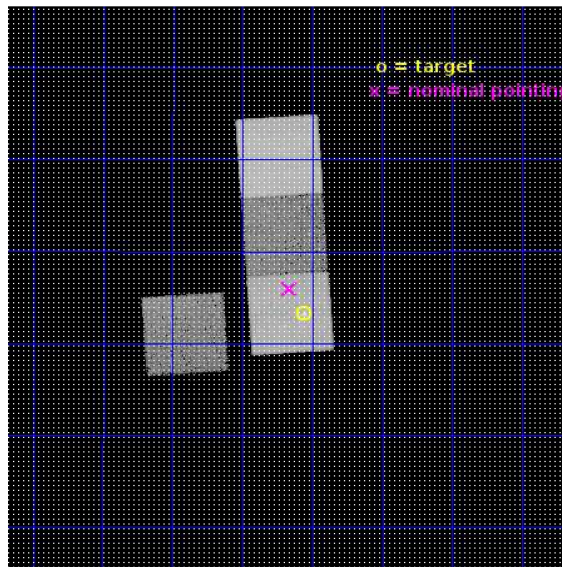
L2 Processing Date : Feb 21 2019

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1 Front

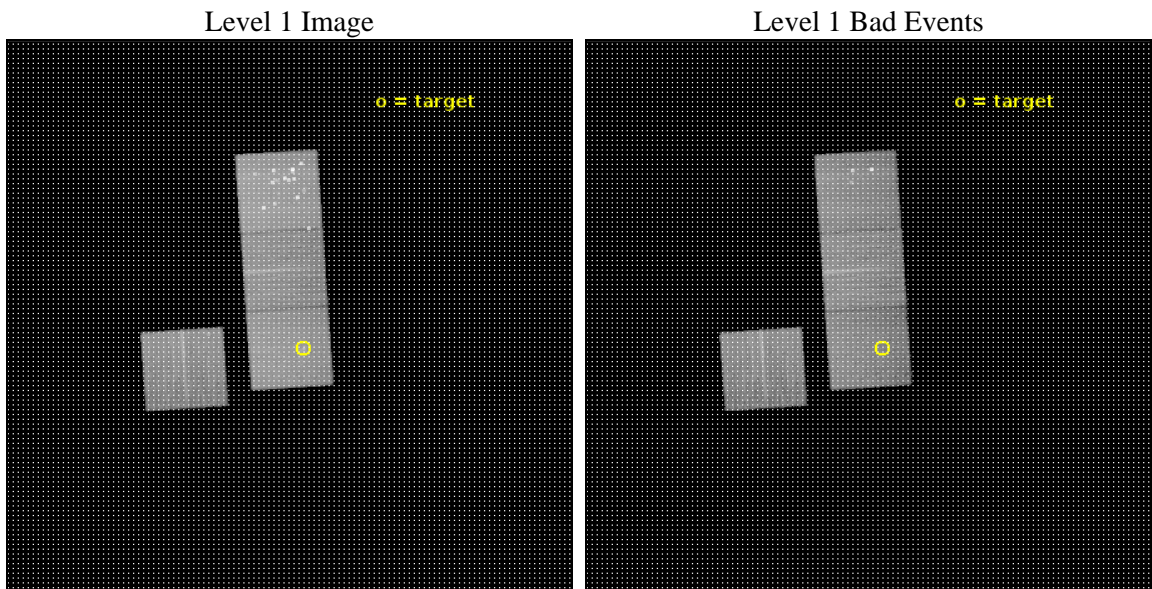
seq_num	801753	Sequence number
obs_id	22113	Observation id
title	Fuelling and self-regulation of AGN feedback at the Bondi radius of M84	Proposal title
observer	Helen Russell	Principal investigator
object	M84	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	186.265833	Observer's specified target RA [deg]
dec_targ	12.886944	Observer's specified target Dec [deg]
ra_nom	186.29106742163	Nominal RA [deg]
dec_nom	12.932346621262	Nominal Dec [deg]
roll_nom	86.150996680106	Nominal Roll [deg]
revision	1	Processing version of data
ontime	22106.100170135	Sum of GTIs [s]
livetime	21817.267697138	Livetime [s]
ontime3	22106.100170135	Sum of GTIs [s]
ontime5	22106.100170135	Sum of GTIs [s]
ontime6	22106.100170135	Sum of GTIs [s]
ontime7	22106.100170135	Sum of GTIs [s]
l2events	265421	Number of level 2 events



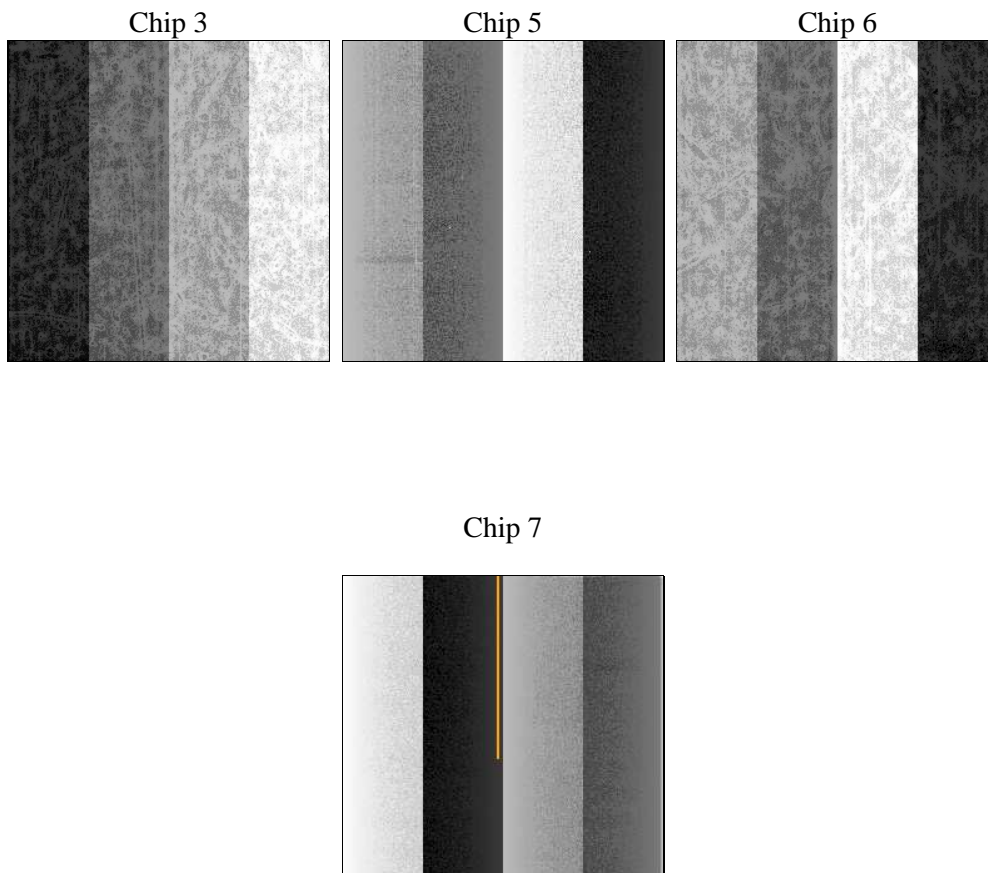
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	22043.000000	[s] Scheduled observation exposure time
ascdsver	10.7.1	Processing system revision	ontime	22106.100170135	Sum of GTIs [s]
caldsver	4.8.2	 	ontime3	22106.100170135	Sum of GTIs [s]
date	2019-02-21T07:23:33	Date and time of file creation	ontime5	22106.100170135	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	22106.100170135	Sum of GTIs [s]
			ontime7	22106.100170135	Sum of GTIs [s]
			l1events	931841	Number of level 1 events

2.1.4 Events

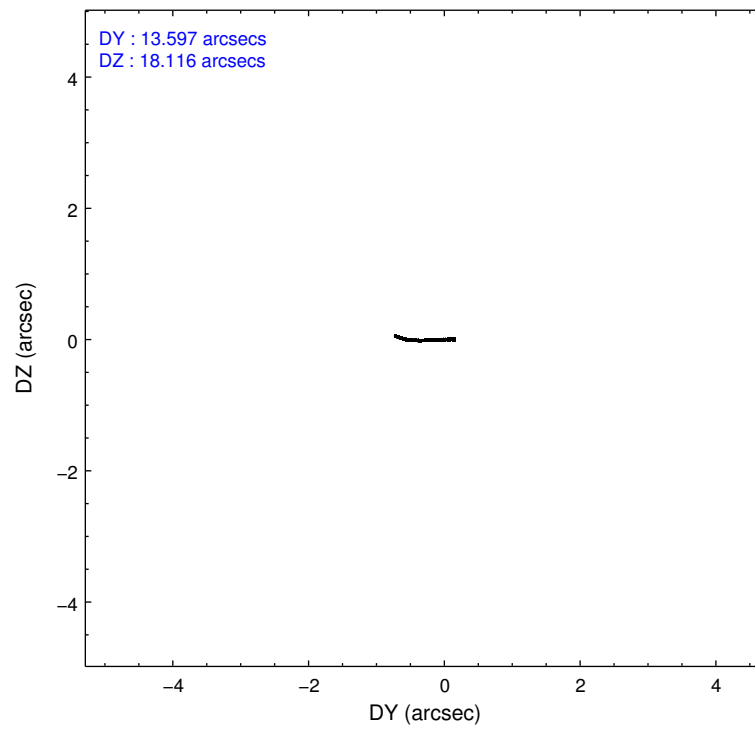
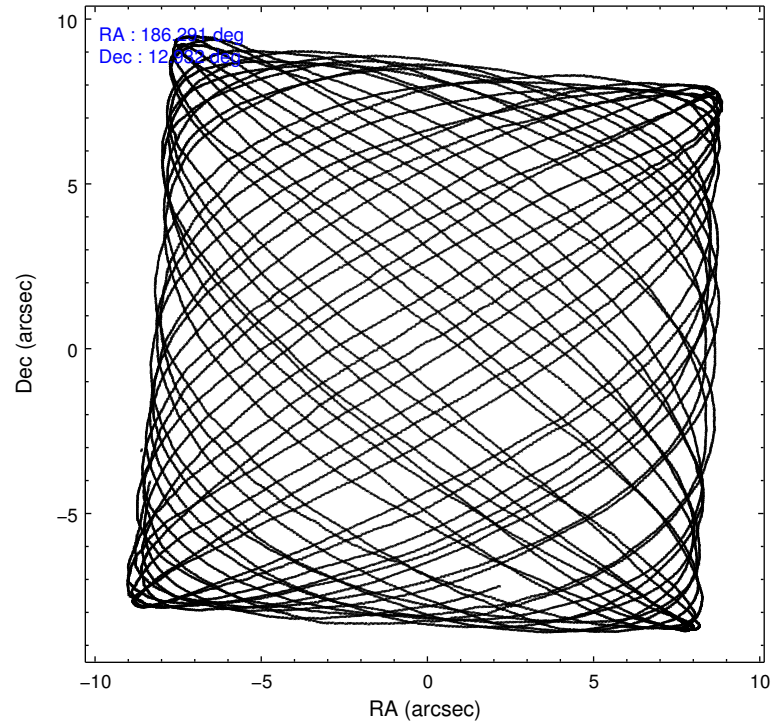
	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	172294	344070	186676	228801
rejected events	150858	156237	163838	127214
rejected %	87%	45%	87%	55%

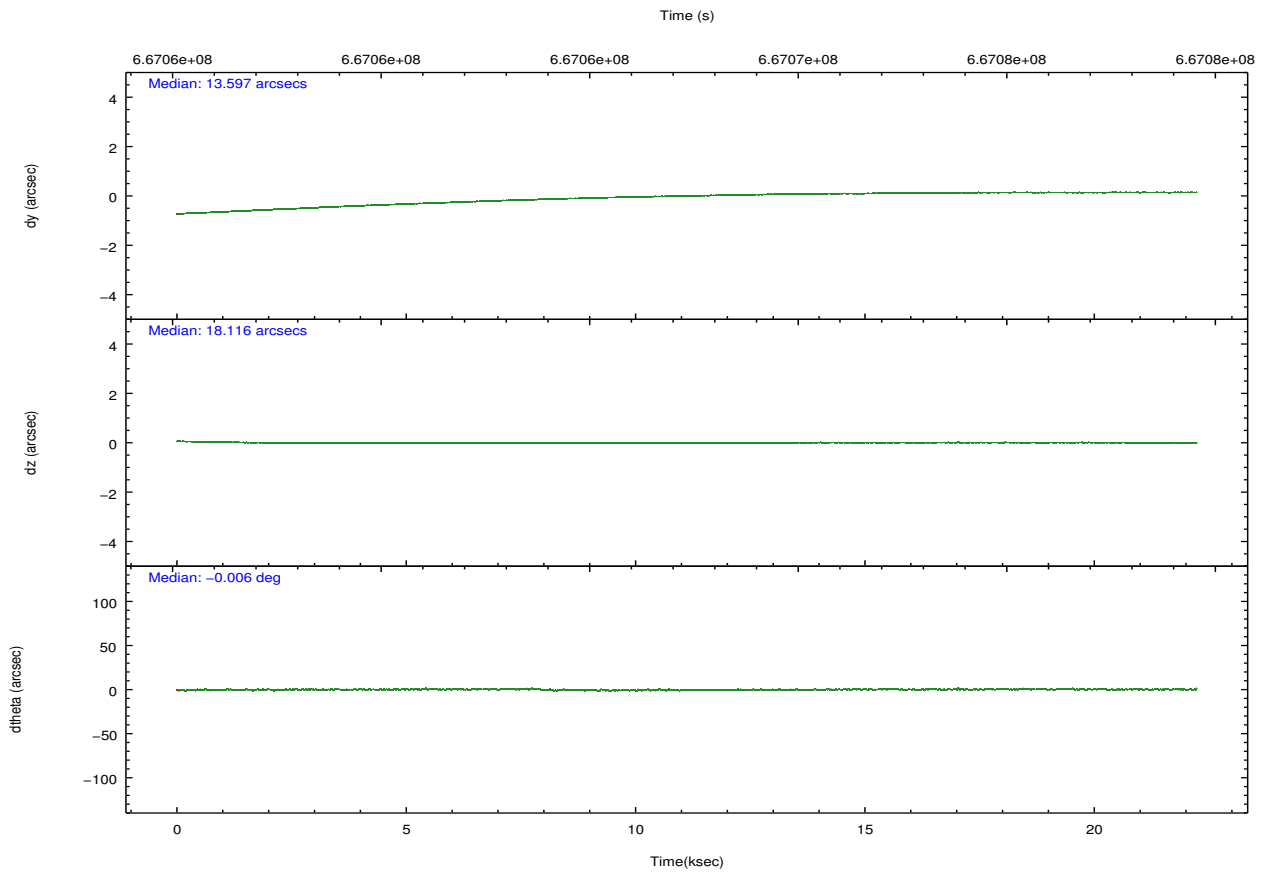
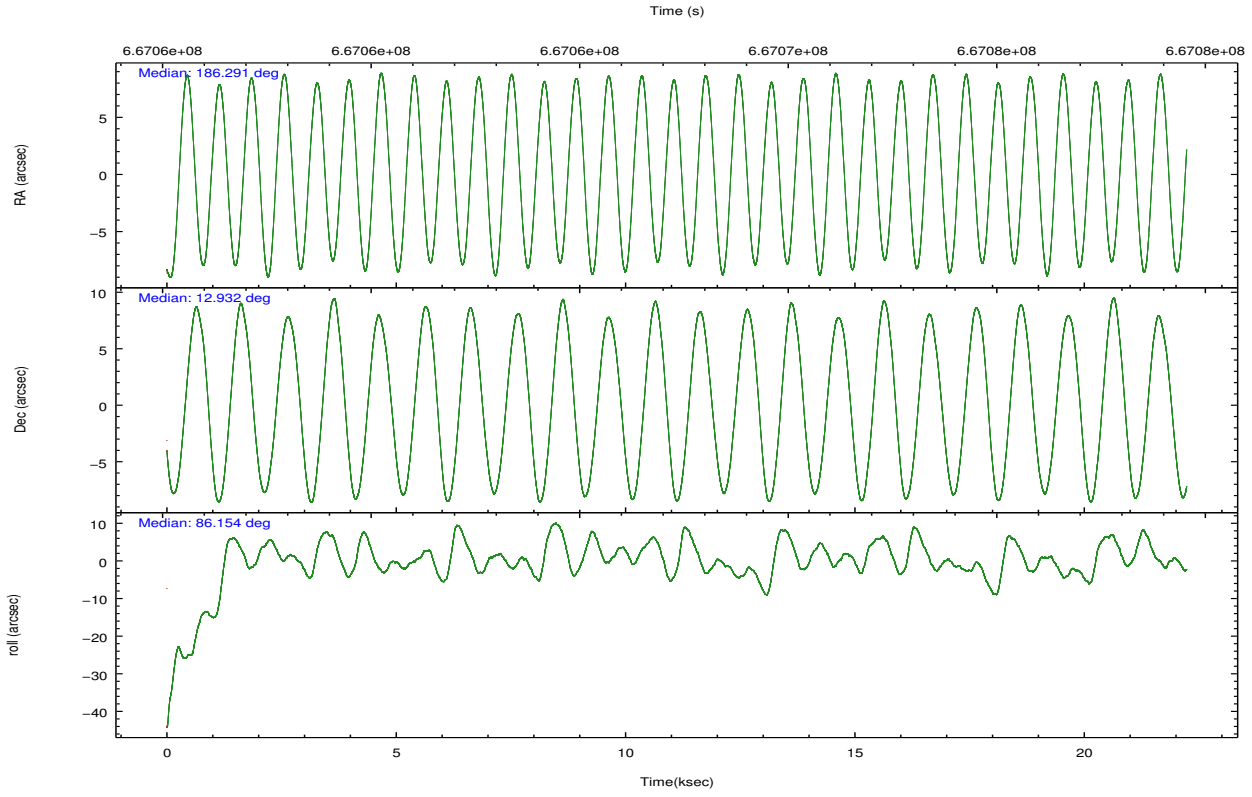
	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	9621	51322	8589	9841
	5%	14%	4%	4%
grade 1 events	122	752	94	336
	0%	0%	0%	0%
grade 2 events	4071	50702	5450	22085
	2%	14%	2%	9%
grade 3 events	1826	5739	1725	8080
	1%	1%	0%	3%
grade 4 events	1965	5772	1829	7890
	1%	1%	0%	3%
grade 5 events	7625	19503	7354	21404
	4%	5%	3%	9%
grade 6 events	3957	74324	5247	53705
	2%	21%	2%	23%
grade 7 events	143107	135956	156388	105460
	83%	39%	83%	46%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-3567	ACIS-3567	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	186.303838	186.2910674216276	CCD I2 on	O1	N
[deg] Pointing Dec	12.907898	12.93234662126181	CCD I3 on	Y	Y
[deg] Pointing Roll	85.991517	86.15099668010578	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	O2	N
[s] Observation start time (MET)	667056386.184000	667055230.5355	CCD S5 on	N	N
Observation start date	2019-02-20T13:25:17	2019-02-20T13:07:10	Number of optional ACIS chips dropped	2	2
[s] Observation end time (MET)	667078429.184000	667079421.56194	On-chip summing requested	N	N
Observation end date	2019-02-20T19:32:40	2019-02-20T19:50:21	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





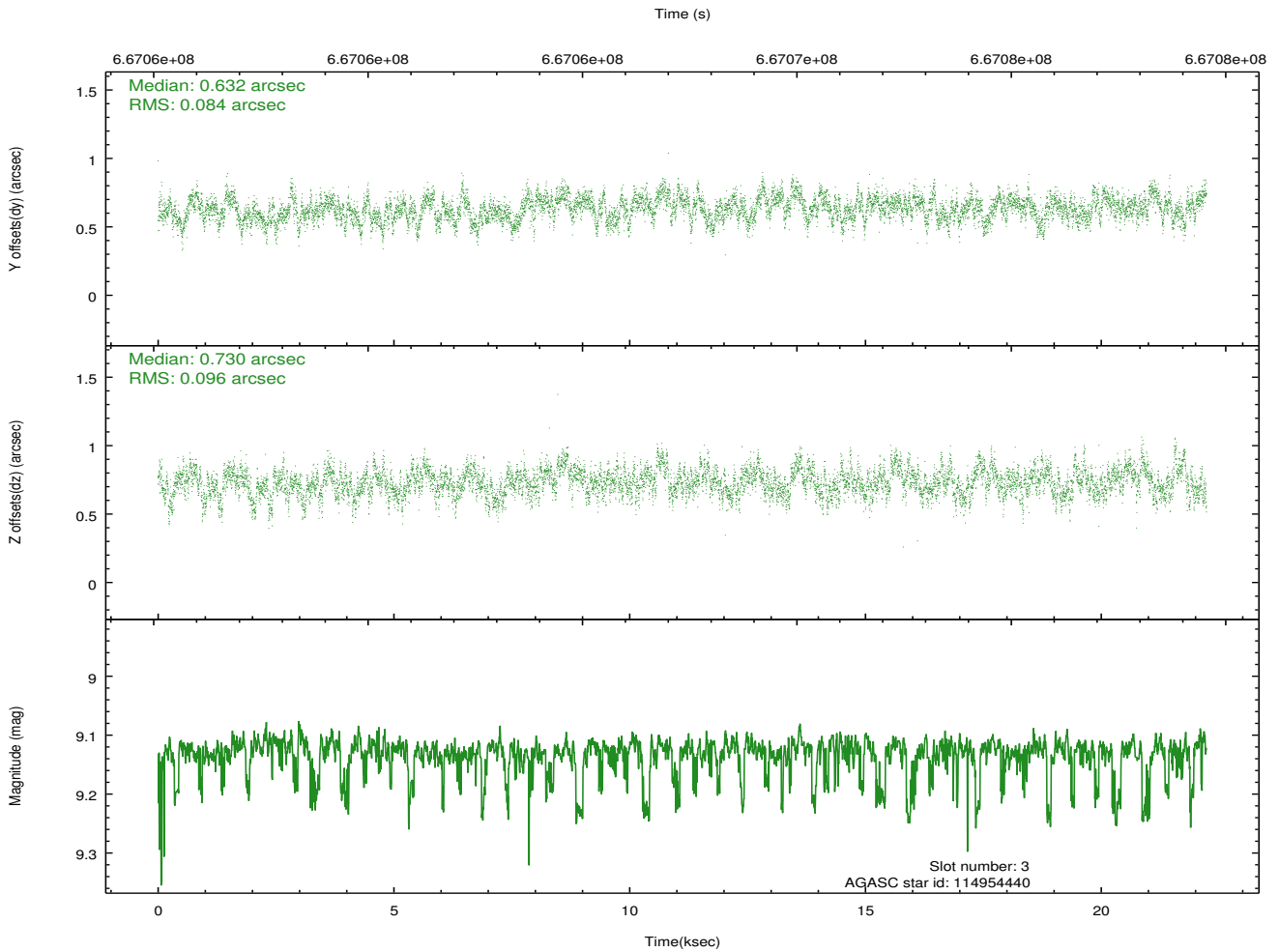
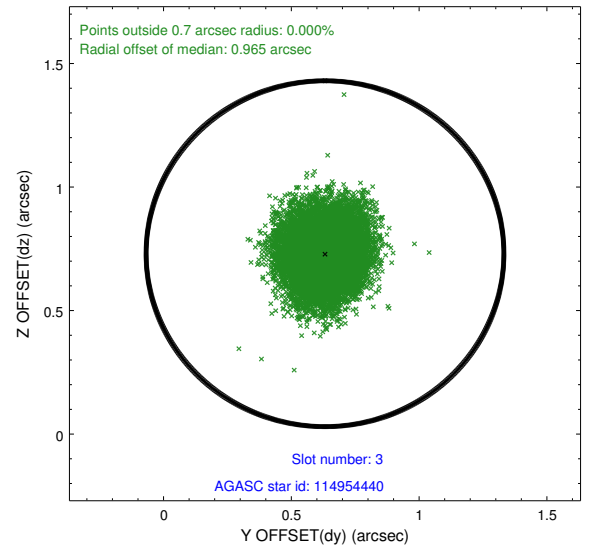
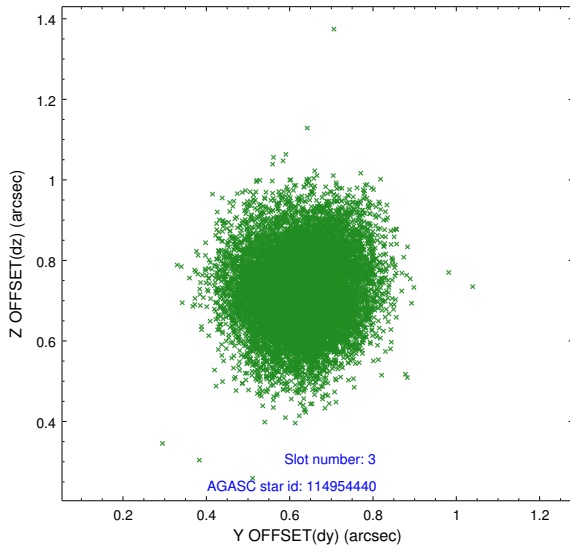
Slot Statistics

slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_x
0	FID		ACIS-S-2	7.10	5423	1.000	-0.267	-0.224	0.023	0.035	0.000000	0.000000	-766.63	-1739
1	FID		ACIS-S-4	7.23	5423	1.000	0.757	0.189	0.029	0.059	0.000000	0.000000	2147.53	169
2	FID		ACIS-S-5	7.20	5423	1.000	-0.520	0.048	0.014	0.026	0.000000	0.000000	-1819.59	162
3	GUIDE	used	114954440	9.13	10830	1.000	0.632	0.730	0.137	0.217	186.915066	12.219118	-2320.41	-2319
4	GUIDE	used	115214648	9.01	10825	1.000	-0.118	-0.338	0.154	0.260	185.771147	12.685188	-928.82	1811
5	GUIDE	used	115214688	8.69	10835	1.000	-0.458	-0.543	0.113	0.190	185.816167	13.622157	2447.13	1881
6	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0
7	GUIDE	used	115347480	9.64	10755	1.000	-0.060	0.154	0.167	0.270	186.668576	13.310410	1536.06	-1172

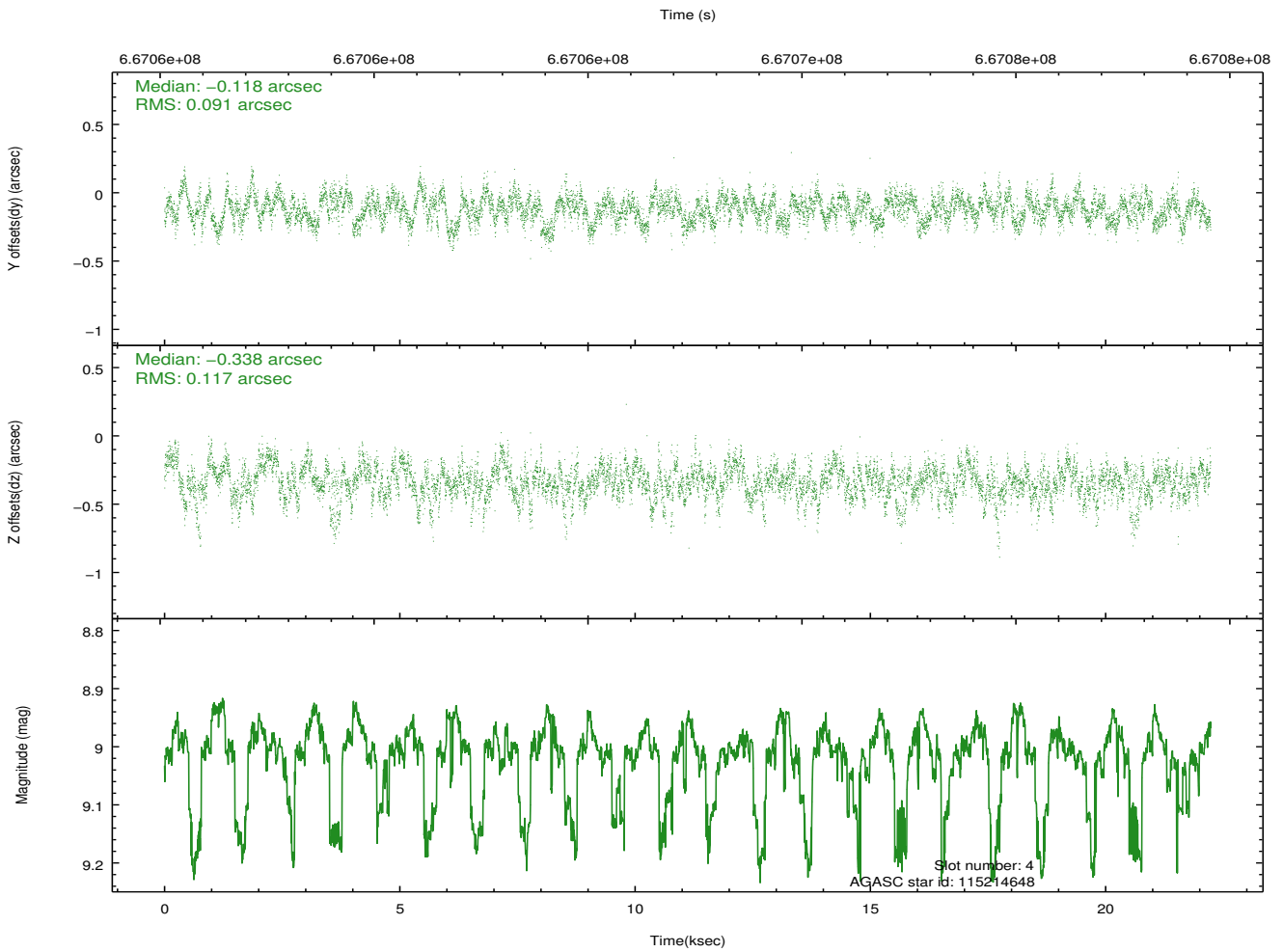
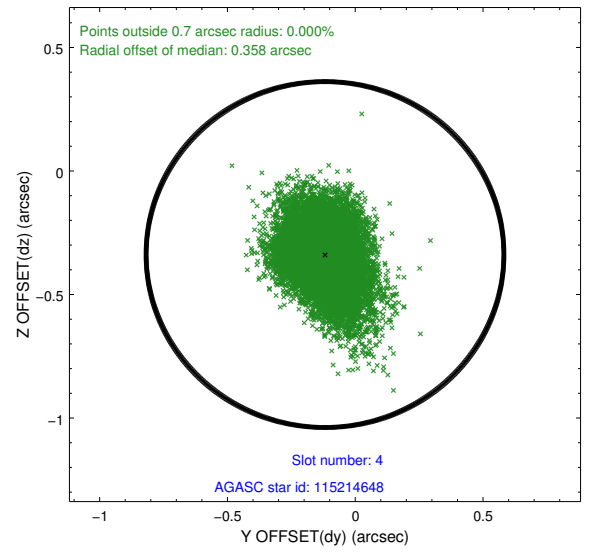
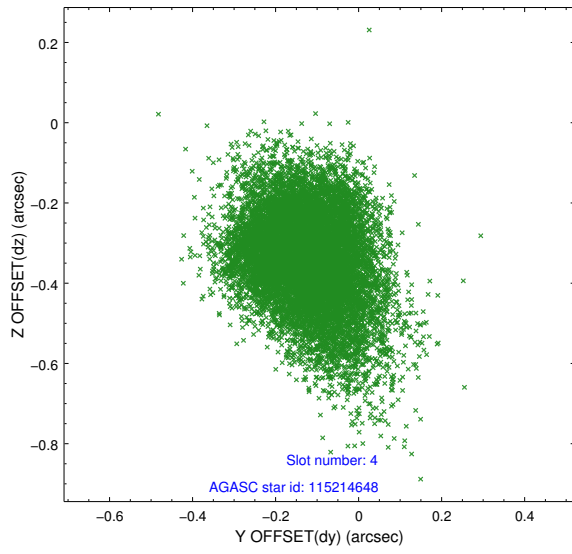
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2.4 Star Slots

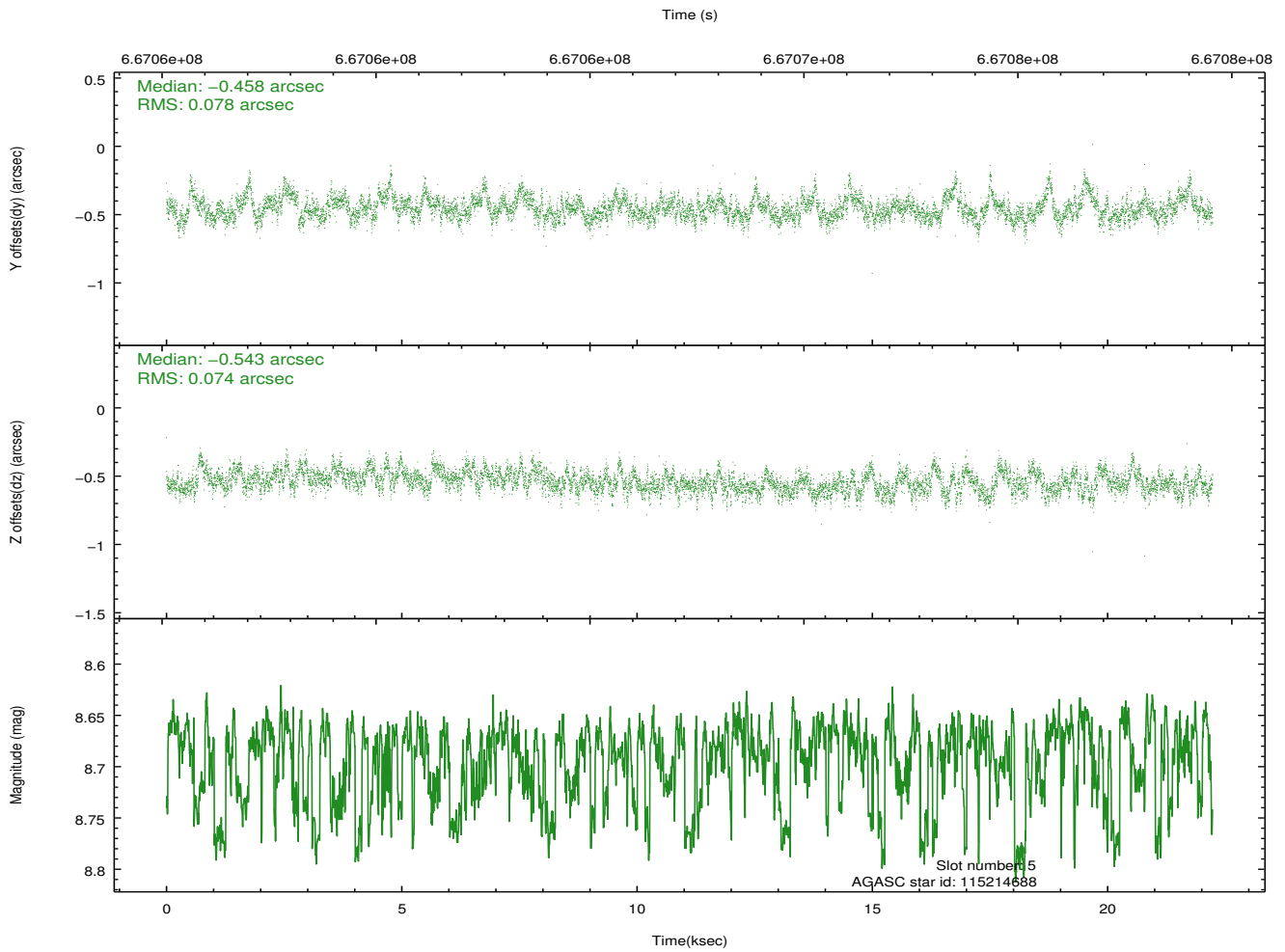
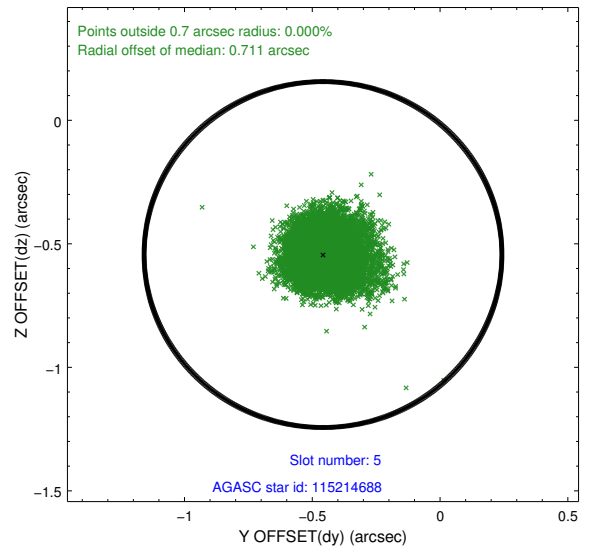
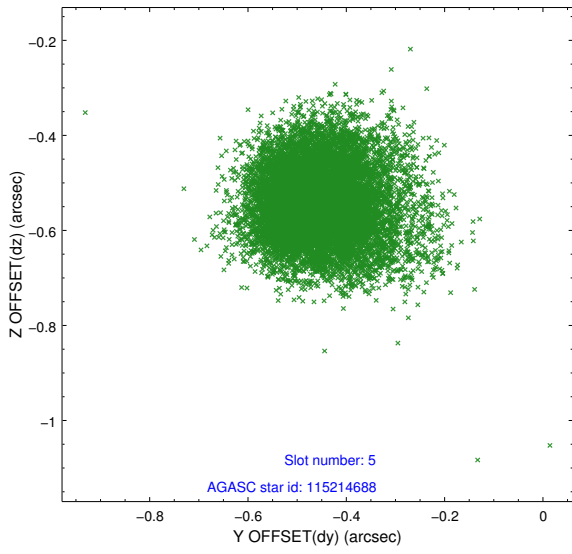
2.4.1 Slot 3



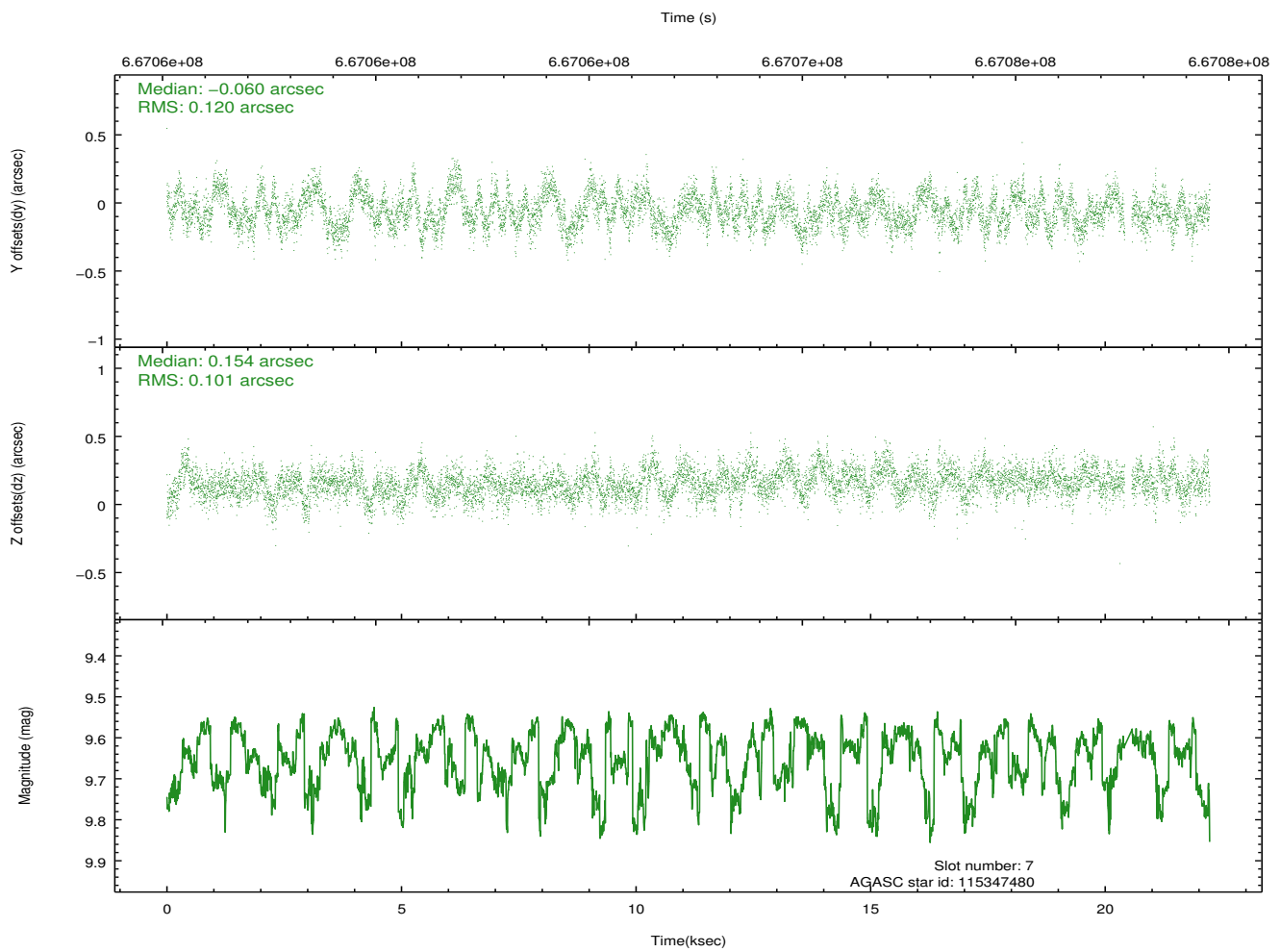
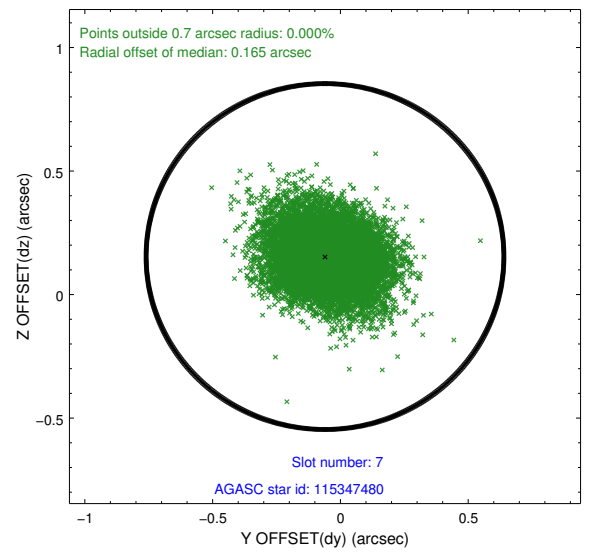
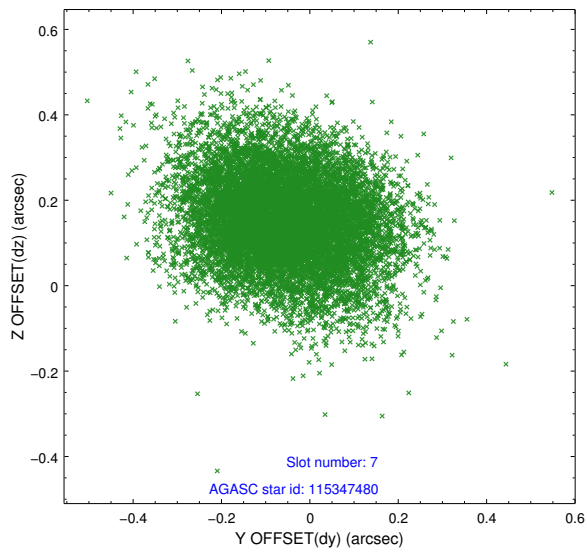
2.4.2 Slot 4



2.4.3 Slot 5

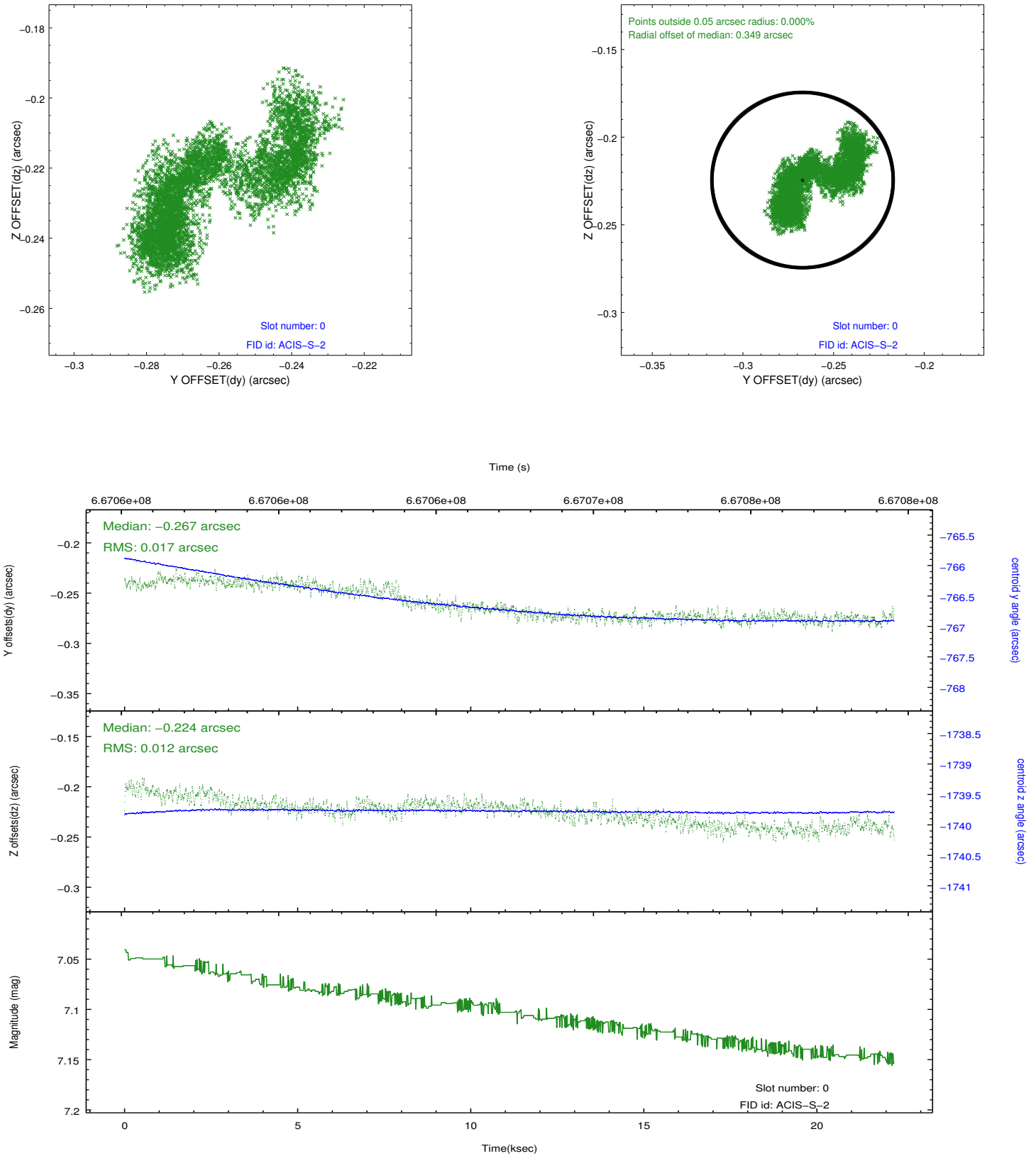


2.4.4 Slot 7

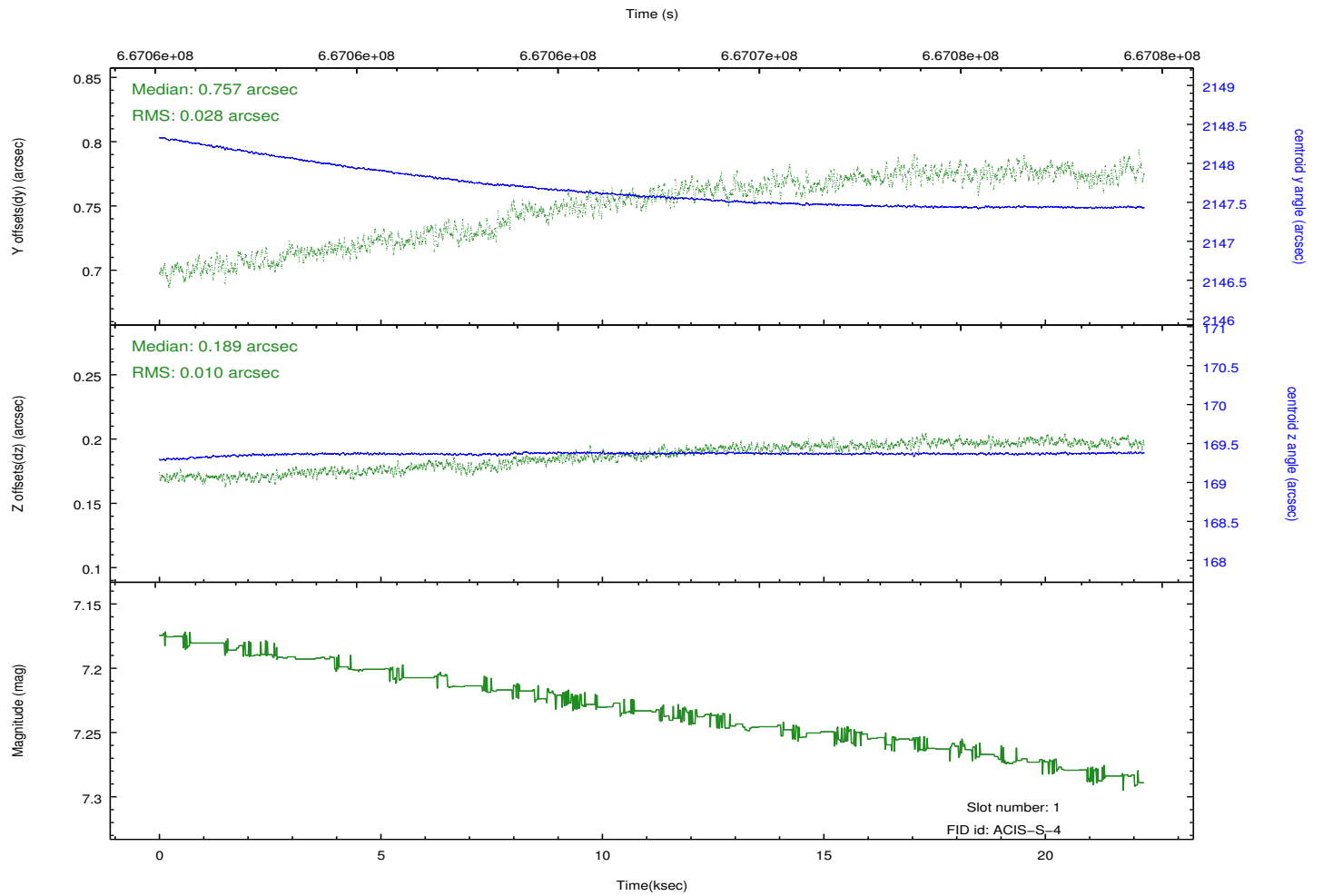
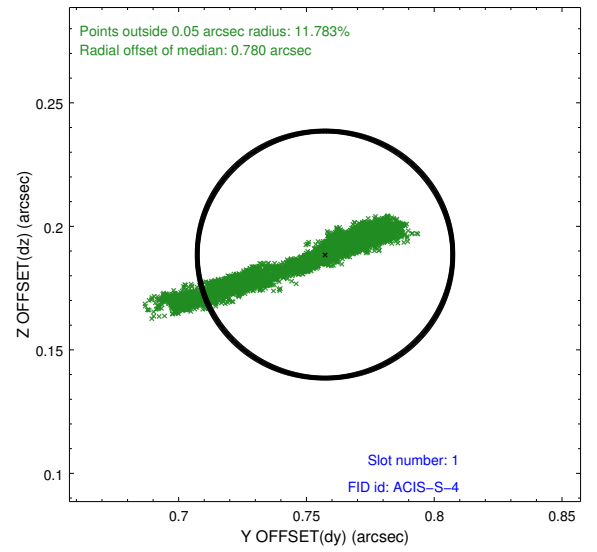
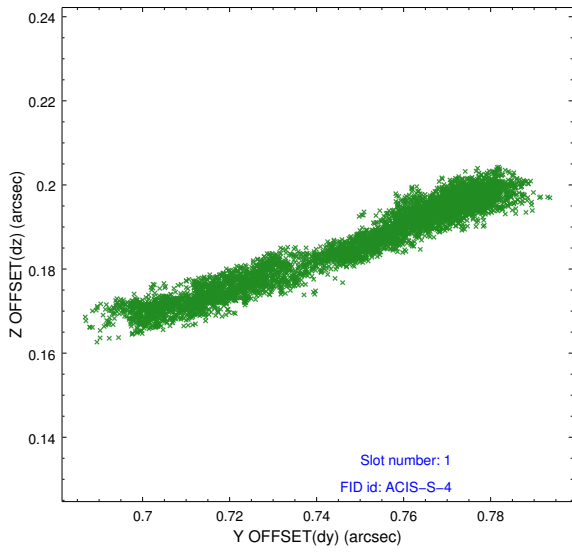


2.5 FID Slots

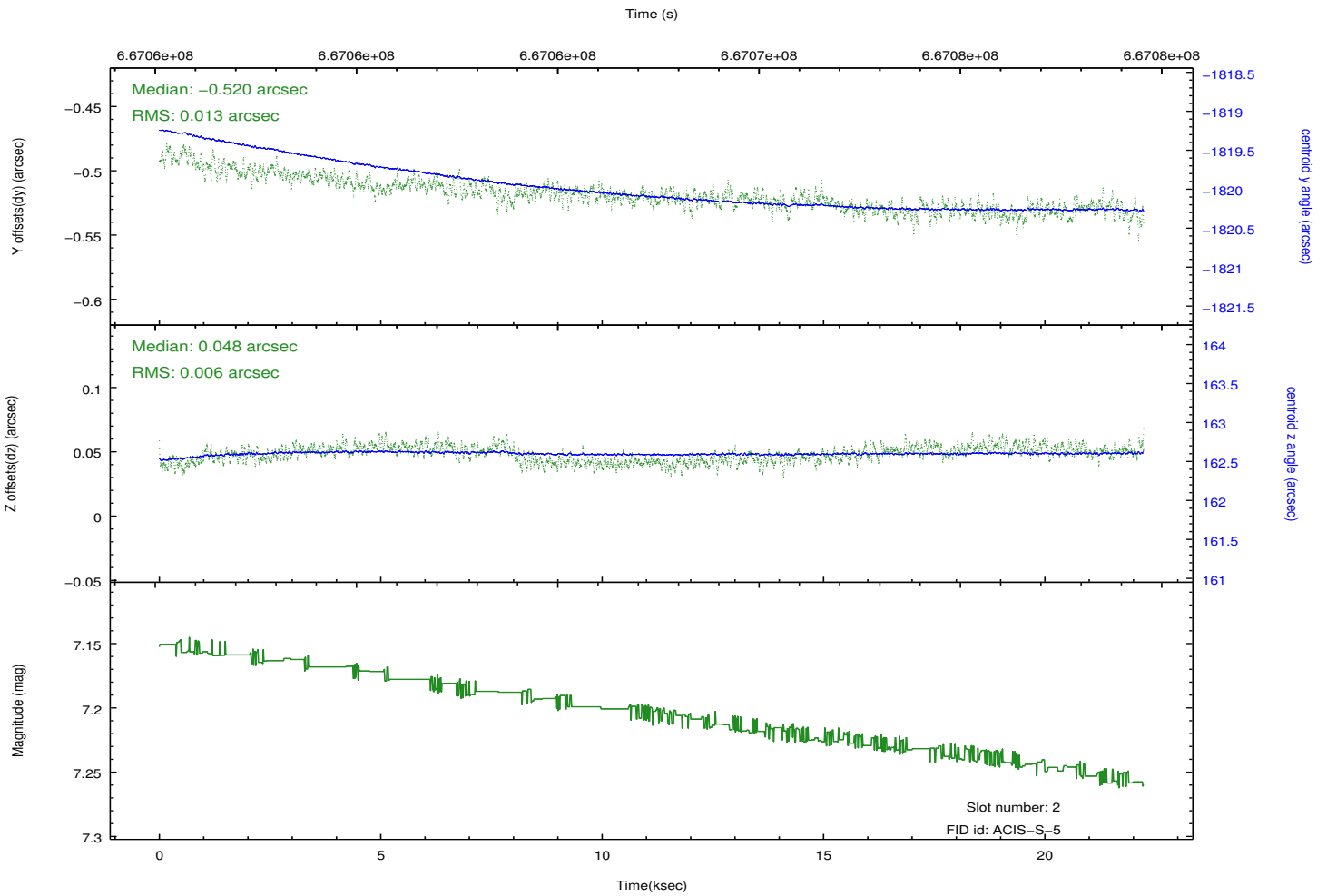
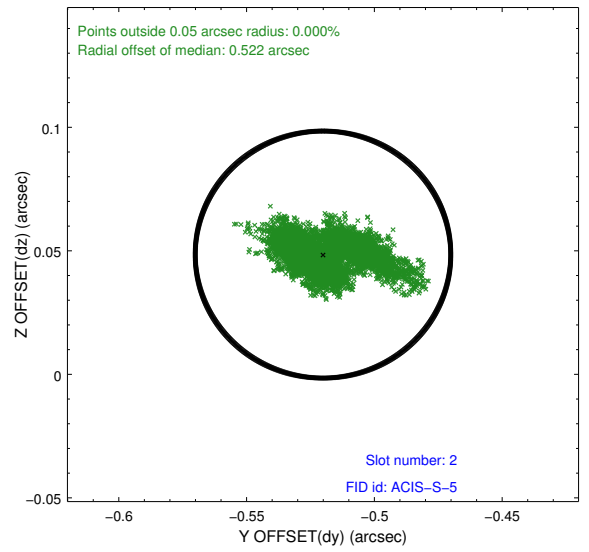
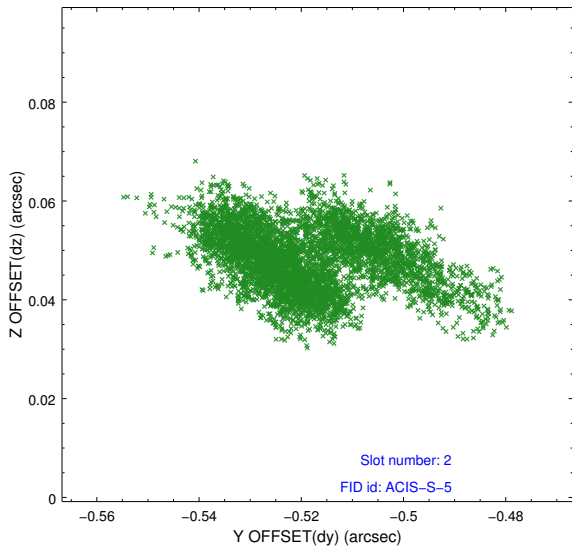
2.5.1 Slot 0



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)	2019.02.21
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	22.106100170135

A.2 Comments

The guide star in slot 6 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this guide star from the solution.