

V&V Reference Report

L2 ASCDS Version : 10.7.1

Observation 22128 - L2 Version 2
Chandra X-Ray Center

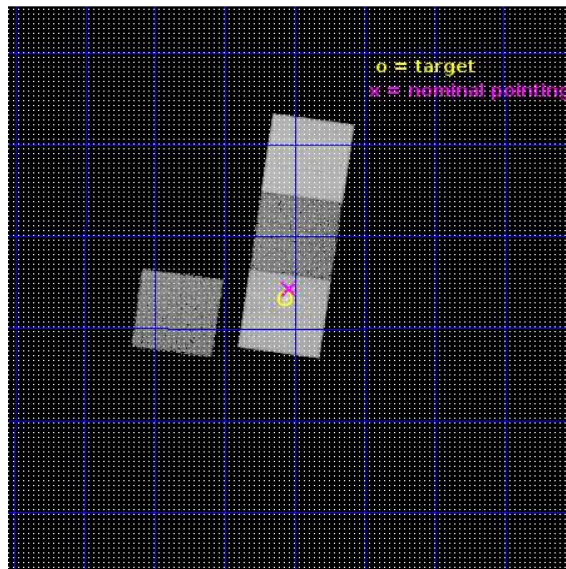
L2 Processing Date : Mar 6 2019

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1 Front

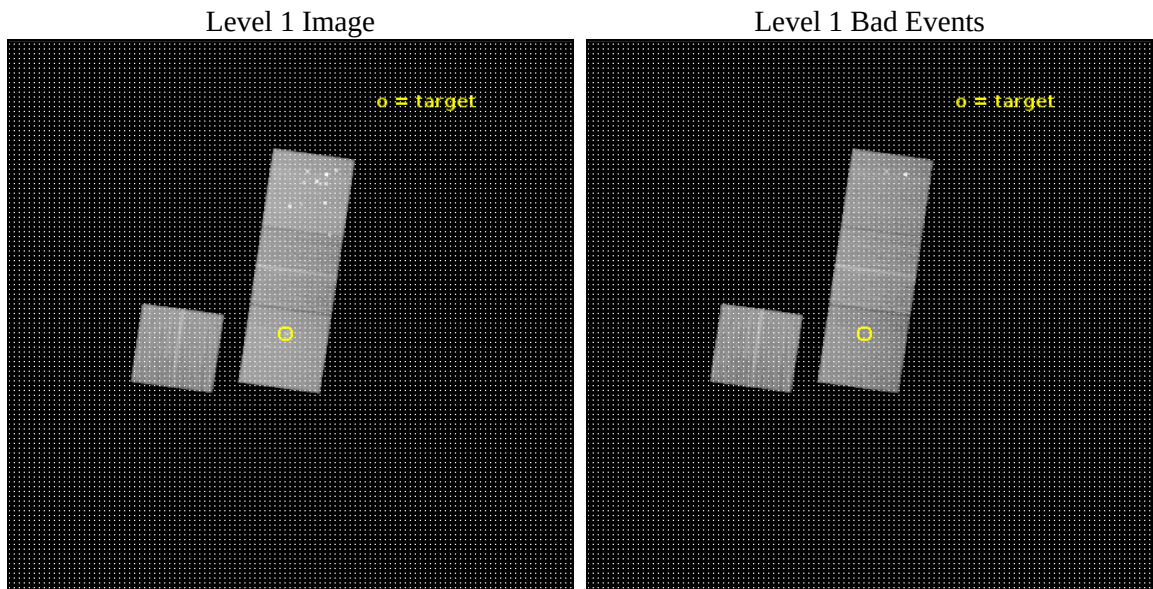
seq_num	801753	Sequence number
obs_id	22128	Observation id
title	Fuelling and self-regulation of AGN feedback at the Bondi radius of M84	Proposal title
observer	Helen Russell	Principal investigator
object	M84	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	186.265833	Observer's specified target RA [deg]
dec_targ	12.886944	Observer's specified target Dec [deg]
ra_nom	186.25910362215	Nominal RA [deg]
dec_nom	12.905549705109	Nominal Dec [deg]
roll_nom	98.158140053531	Nominal Roll [deg]
revision	2	Processing version of data
ontime	24065.300185204	Sum of GTIs [s]
livetime	23750.869321668	Livetime [s]
ontime3	24065.300185204	Sum of GTIs [s]
ontime5	24065.300185204	Sum of GTIs [s]
ontime6	24062.159144998	Sum of GTIs [s]
ontime7	24065.300185204	Sum of GTIs [s]
l2events	283549	Number of level 2 events



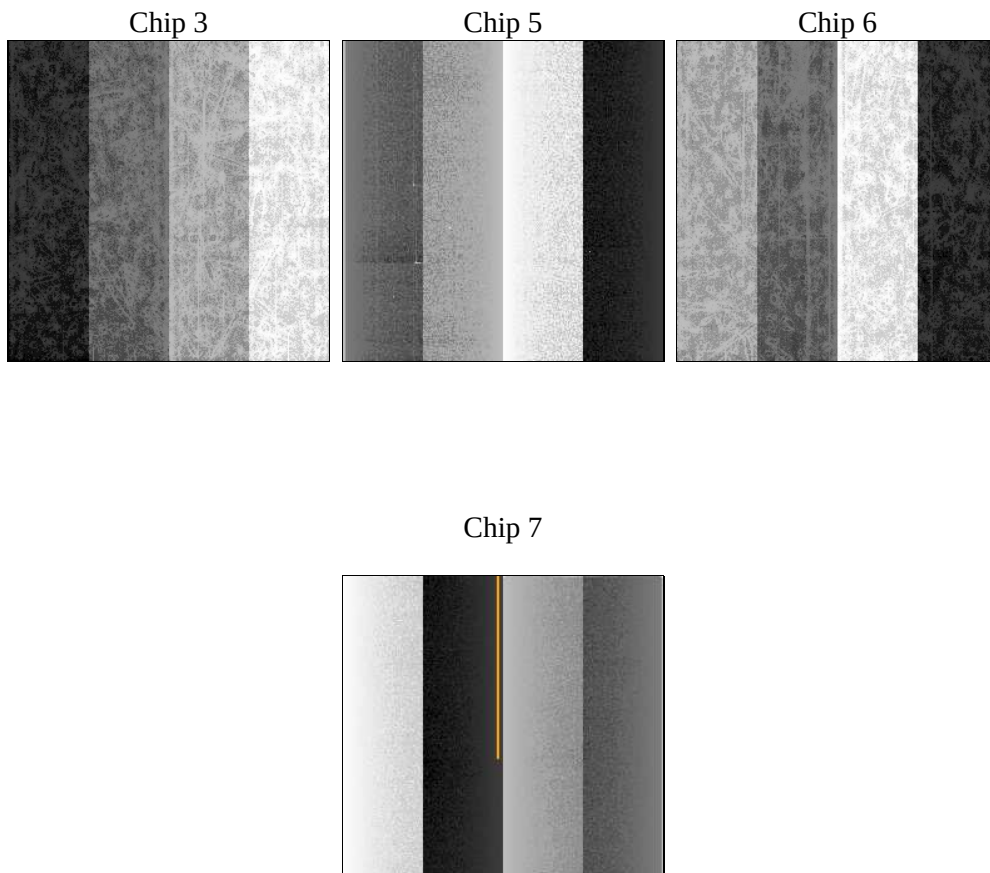
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	24000.000000	[s] Scheduled observation exposure time
ascdsver	10.7.1	Processing system revision	ontime	24065.300185204	Sum of GTIs [s]
caldsver	4.8.2	 	ontime3	24065.300185204	Sum of GTIs [s]
date	2019-03-06T23:37:59	Date and time of file creation	ontime5	24065.300185204	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	24062.159144998	Sum of GTIs [s]
			ontime7	24065.300185204	Sum of GTIs [s]
			l1events	949838	Number of level 1 events

2.1.4 Events

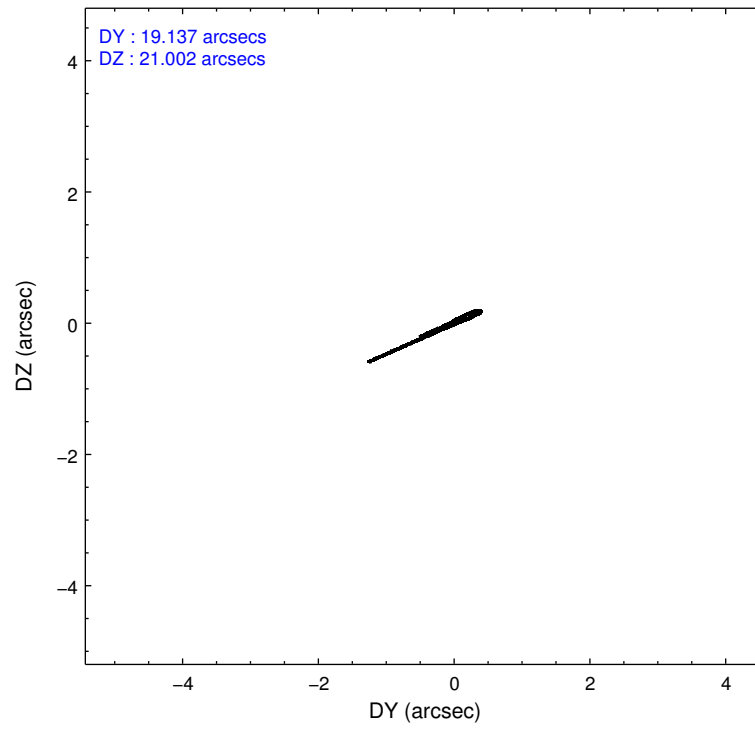
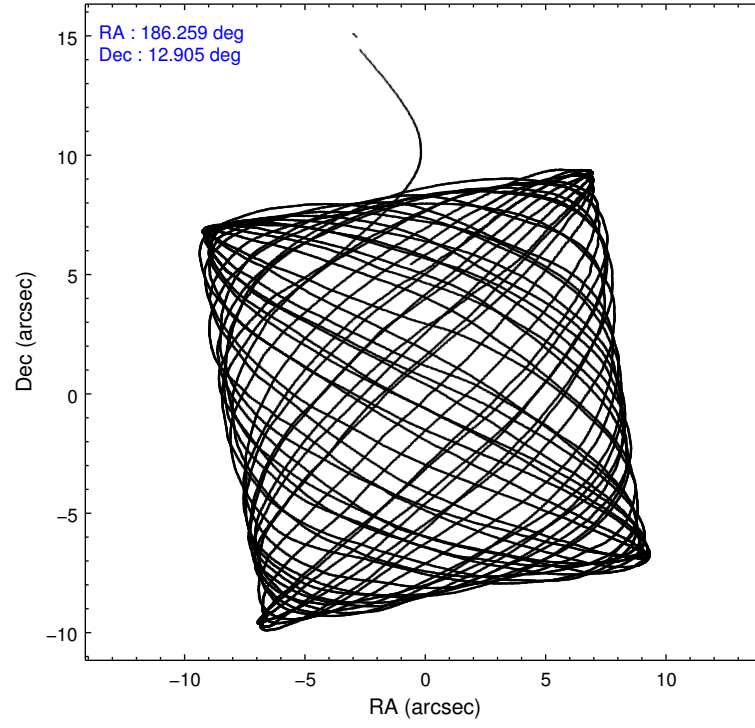
	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	180967	329281	195867	243723
rejected events	158093	160334	172377	134605
rejected %	87%	48%	88%	55%

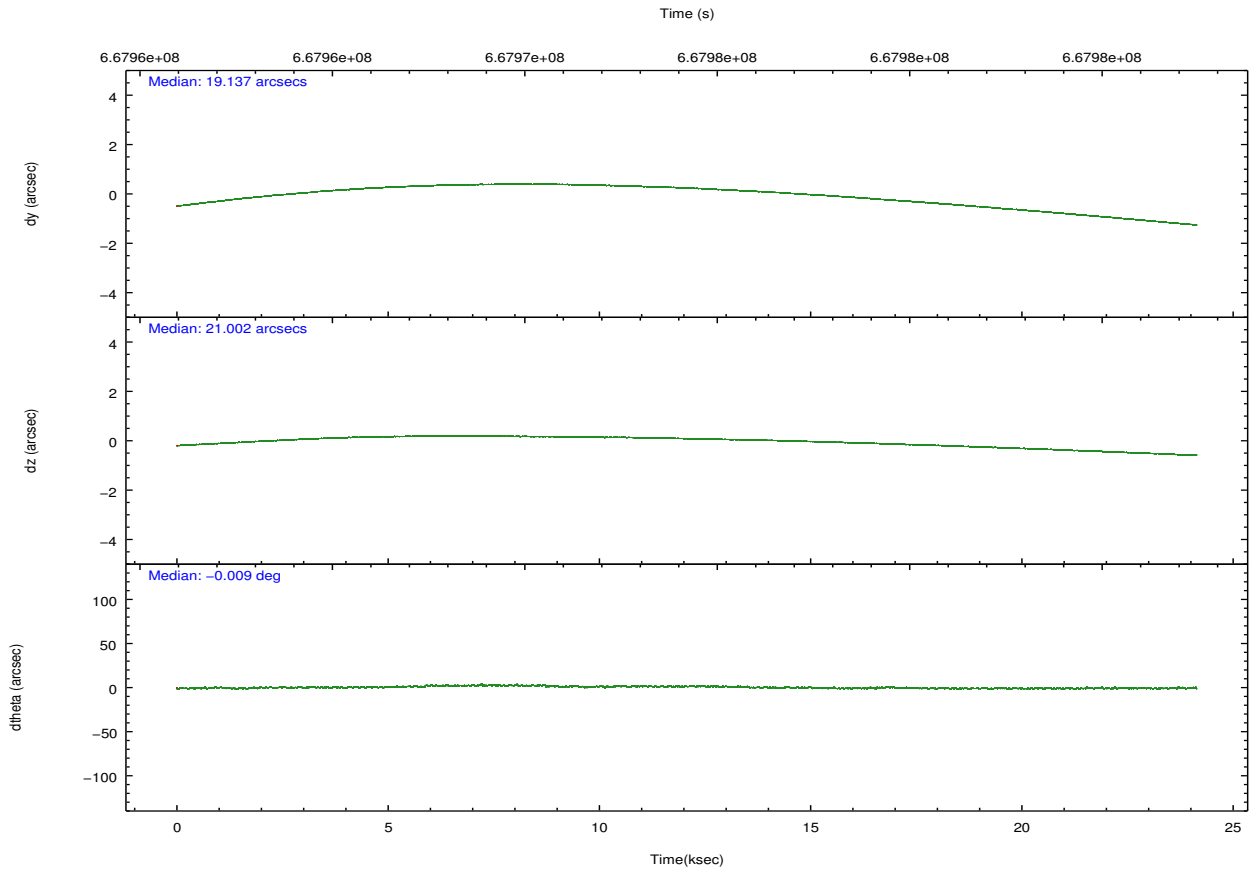
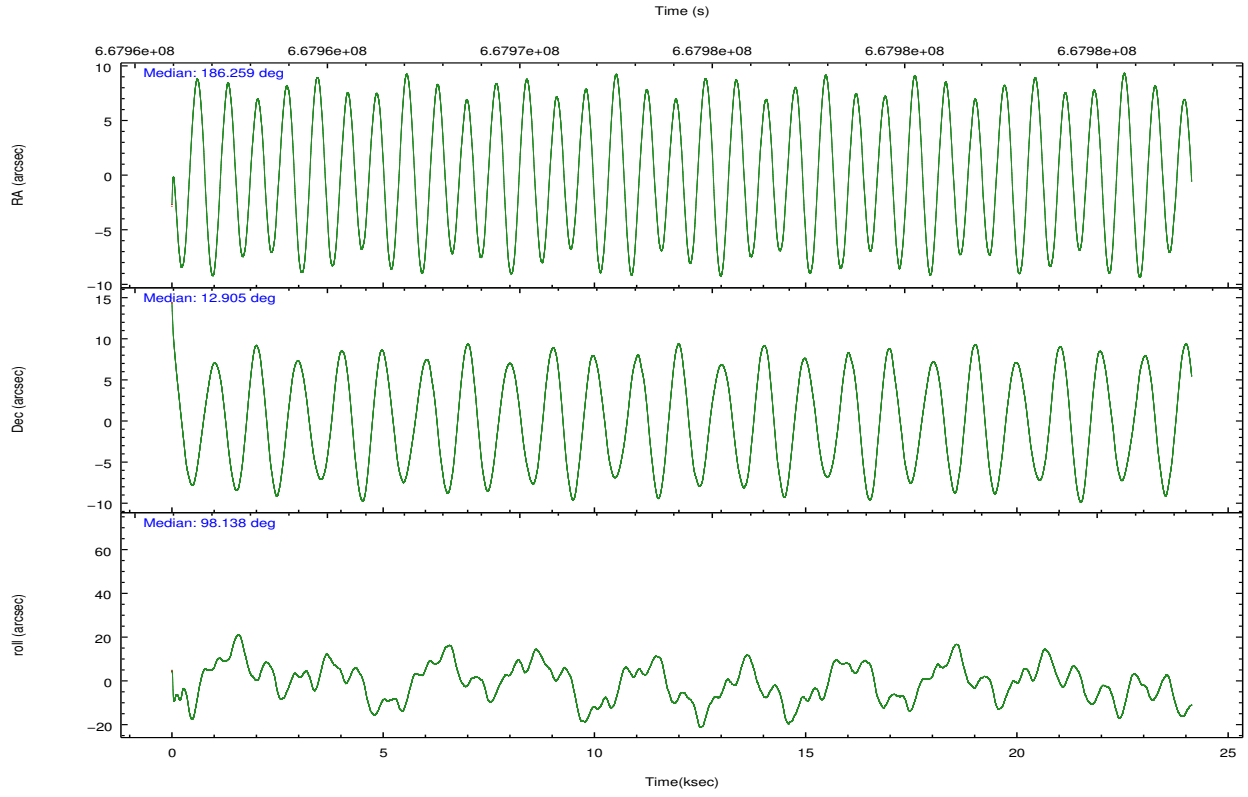
	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	10089	30679	8726	10814
	5%	9%	4%	4%
grade 1 events	126	763	103	314
	0%	0%	0%	0%
grade 2 events	4464	50714	5330	23499
	2%	15%	2%	9%
grade 3 events	2079	4740	2043	8787
	1%	1%	1%	3%
grade 4 events	2170	4391	2061	8587
	1%	1%	1%	3%
grade 5 events	8299	20075	8085	23104
	4%	6%	4%	9%
grade 6 events	4075	78453	5334	57436
	2%	23%	2%	23%
grade 7 events	149665	139466	164185	111182
	82%	42%	83%	45%

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	186.276788	186.2591036221493	CCD I2 on	O1	N
[deg] Pointing Dec	12.884181	12.90554970510914	CCD I3 on	Y	Y
[deg] Pointing Roll	97.997559	98.15814005353073	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)	667962277.184000	667961161.46465	CCD S5 on	N	N
Observation start date	2019-03-03T01:03:28	2019-03-03T00:46:01	Number of optional ACIS chips dropped	2	2
[s] Observation end time (MET)	667986277.184000	667987393.26622	On-chip summing requested	N	N
Observation end date	2019-03-03T07:43:28	2019-03-03T08:03:13	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



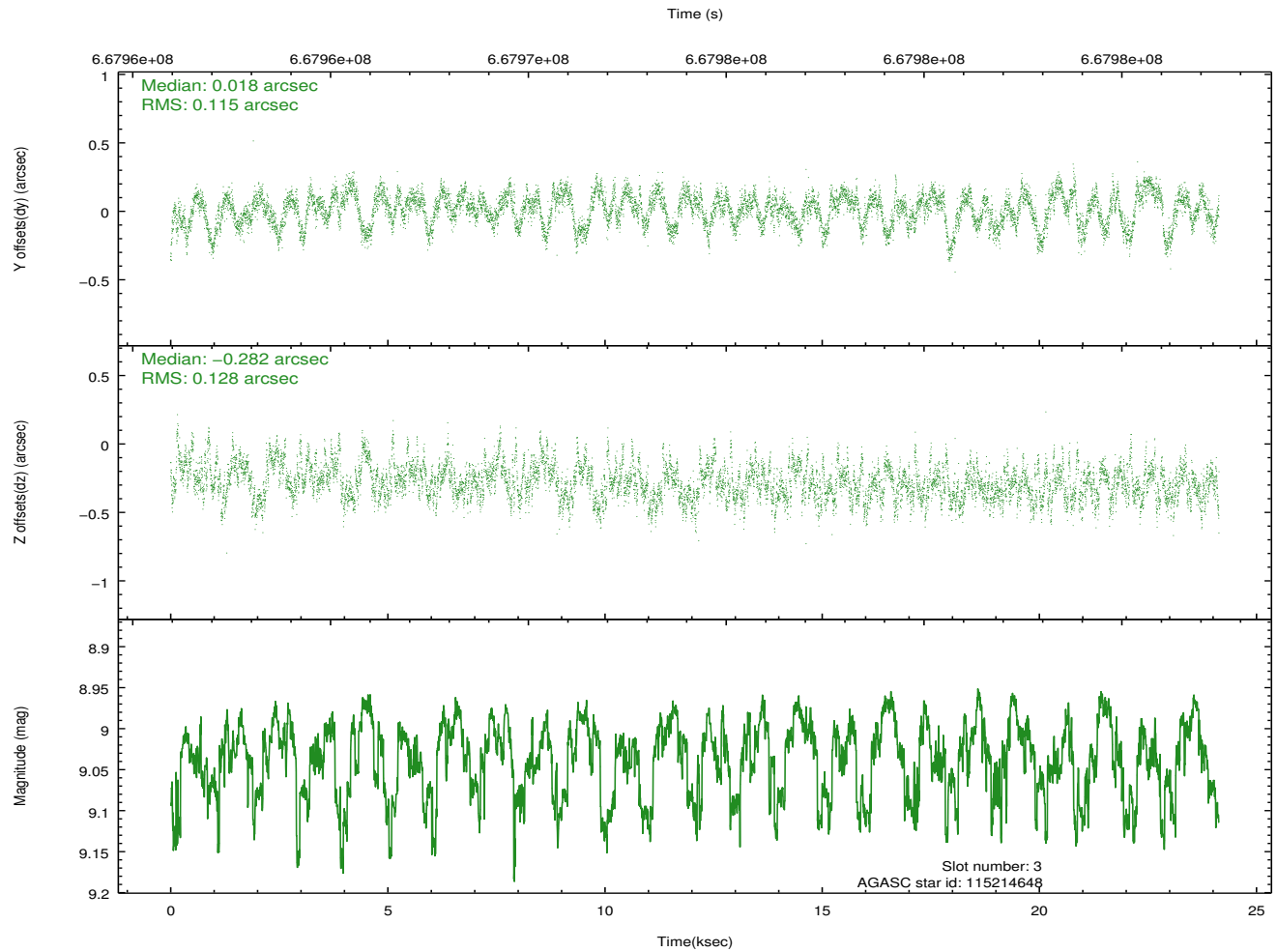
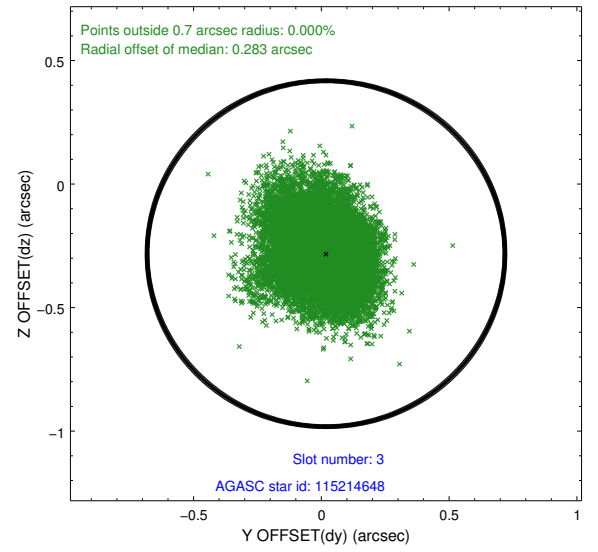
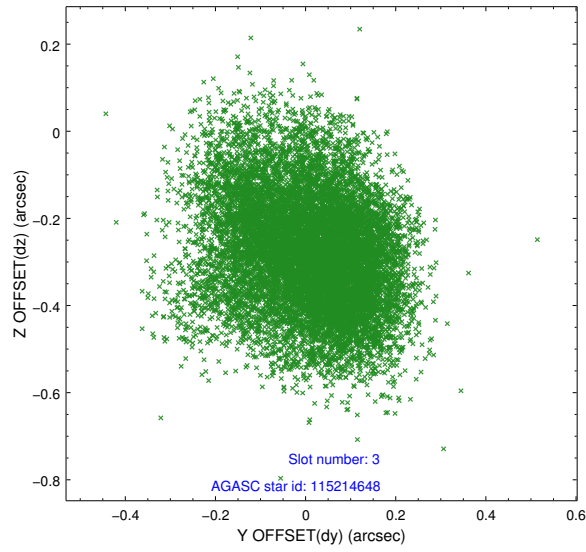


Slot Statistics

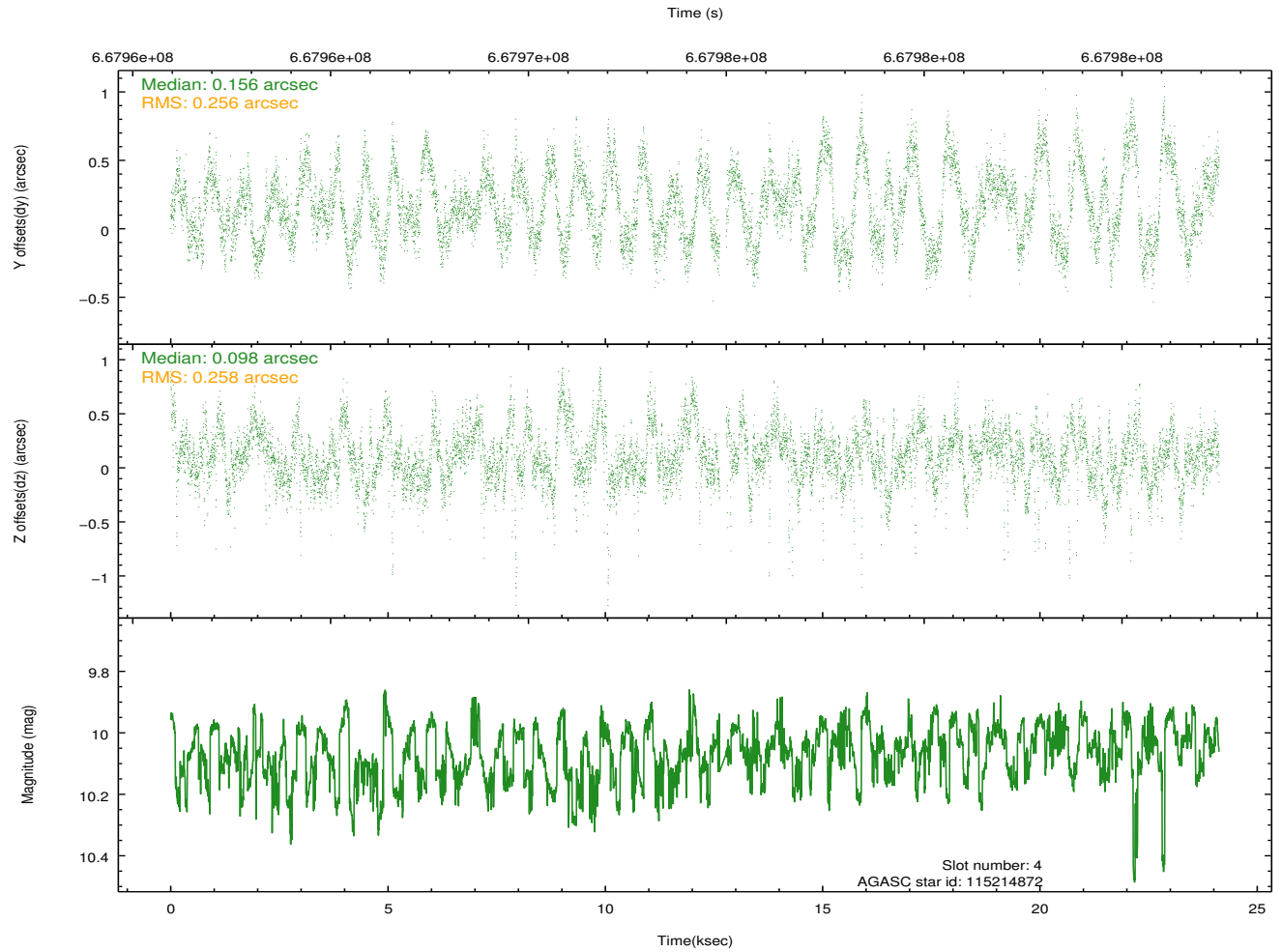
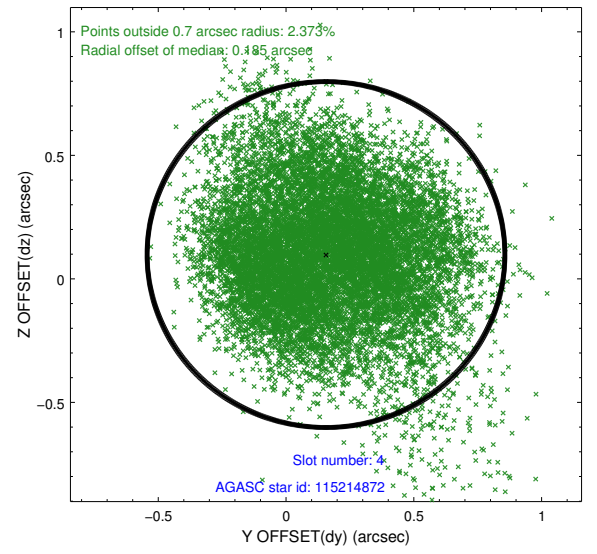
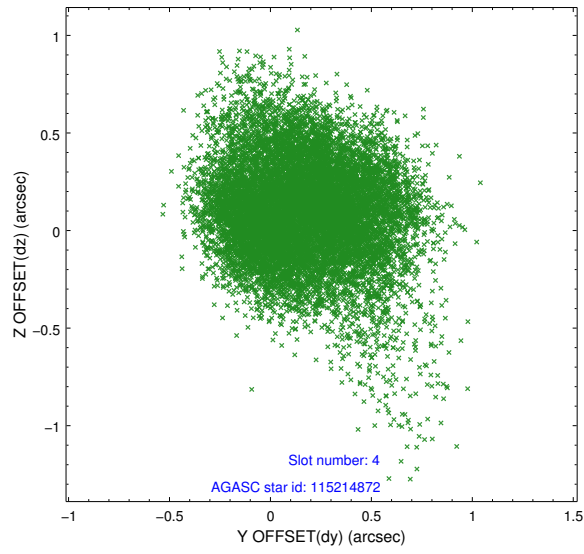
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-1	7.15	5888	1.000	0.205	-0.151	0.020	0.036	0.000000	0.000000	924.25	-1738
1	FID		ACIS-S-5	7.17	5888	1.000	-0.529	0.061	0.020	0.033	0.000000	0.000000	-1825.51	159
2	FID		ACIS-S-6	7.34	5885	1.000	0.304	0.106	0.017	0.029	0.000000	0.000000	389.63	803
3	GUIDE	used	115214648	9.03	11764	1.000	0.018	-0.282	0.184	0.297	185.771147	12.685188	-460.52	1858
4	GUIDE	used	115214872	10.06	11588	1.000	0.156	0.098	0.382	0.603	185.840719	12.668185	-555.46	1624
5	GUIDE	used	115215984	9.96	11713	1.000	-0.088	-0.030	0.359	0.581	186.134733	12.875031	36.74	498
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	9.29	11757	1.000	-0.061	0.217	0.319	0.481	186.668576	13.310410	1330.73	-1572

2.4 Star Slots

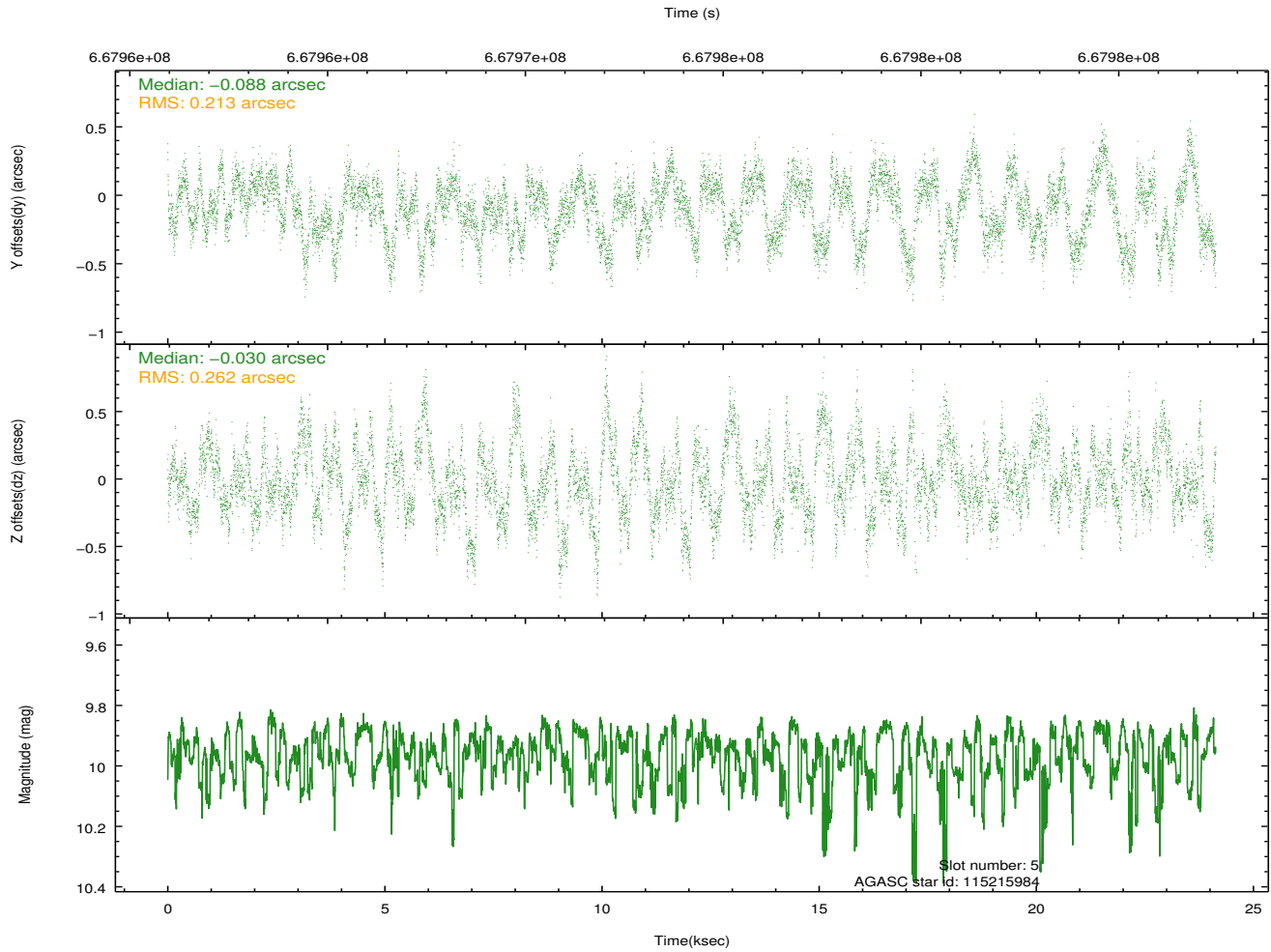
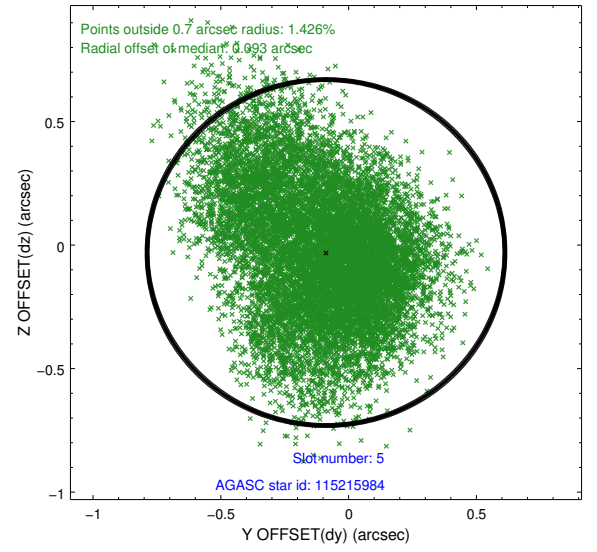
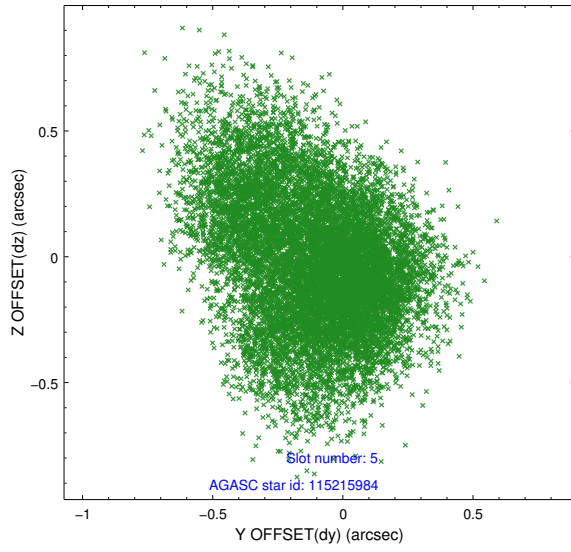
2.4.1 Slot 3



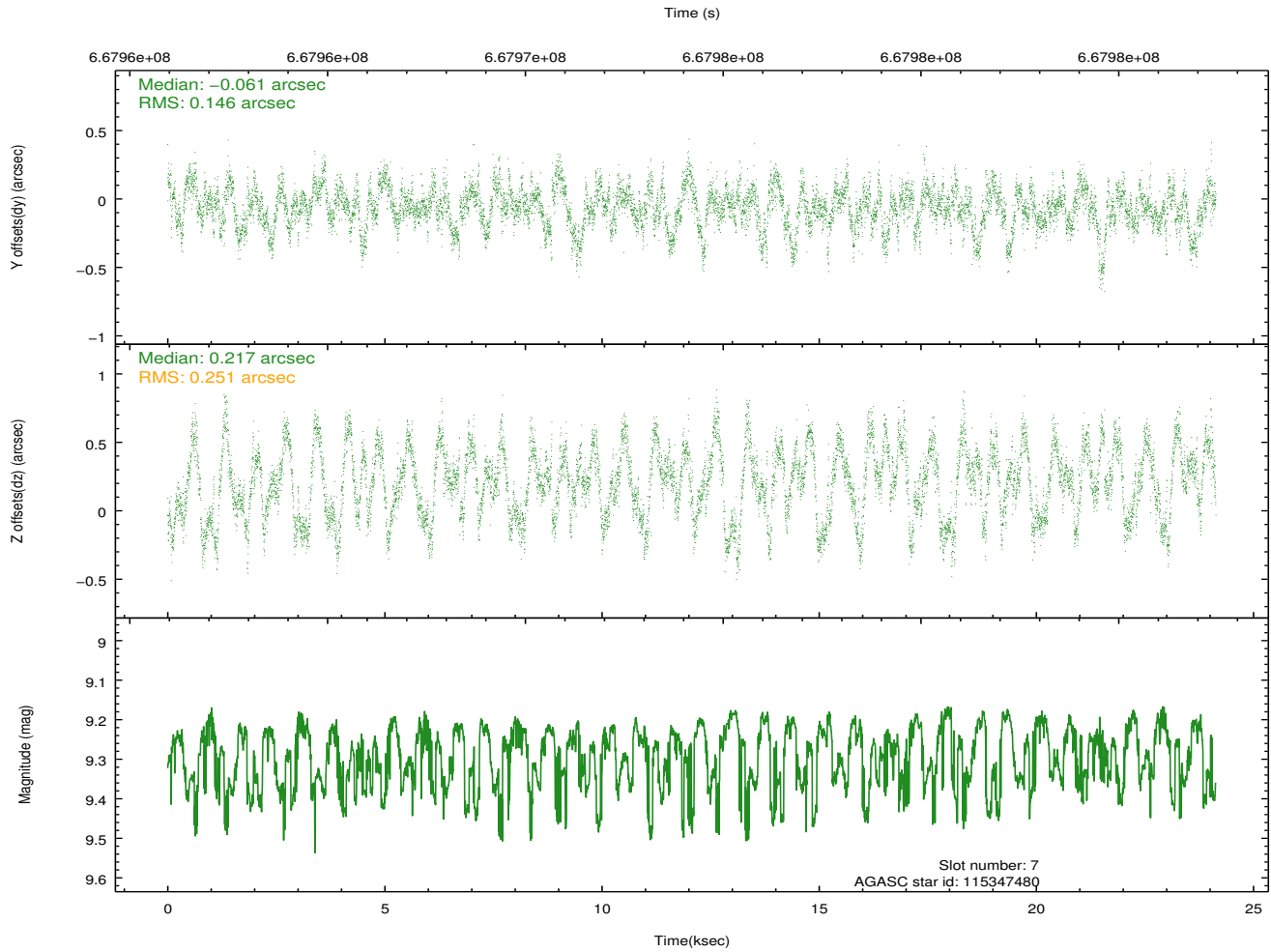
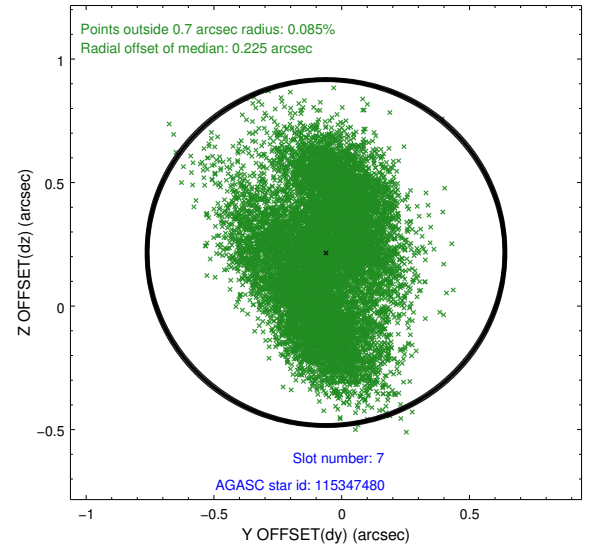
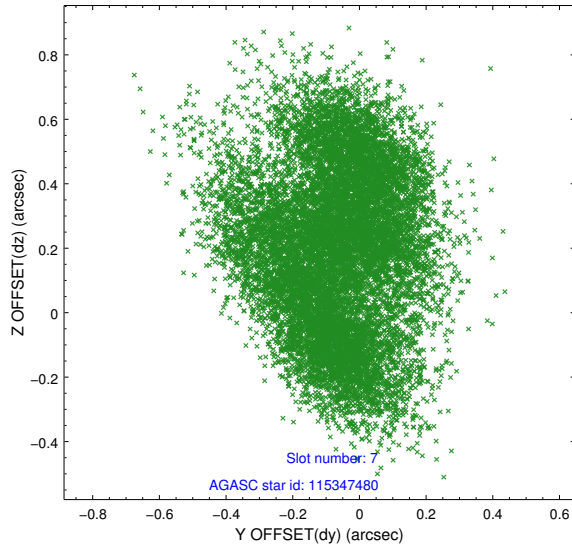
2.4.2 Slot 4



2.4.3 Slot 5

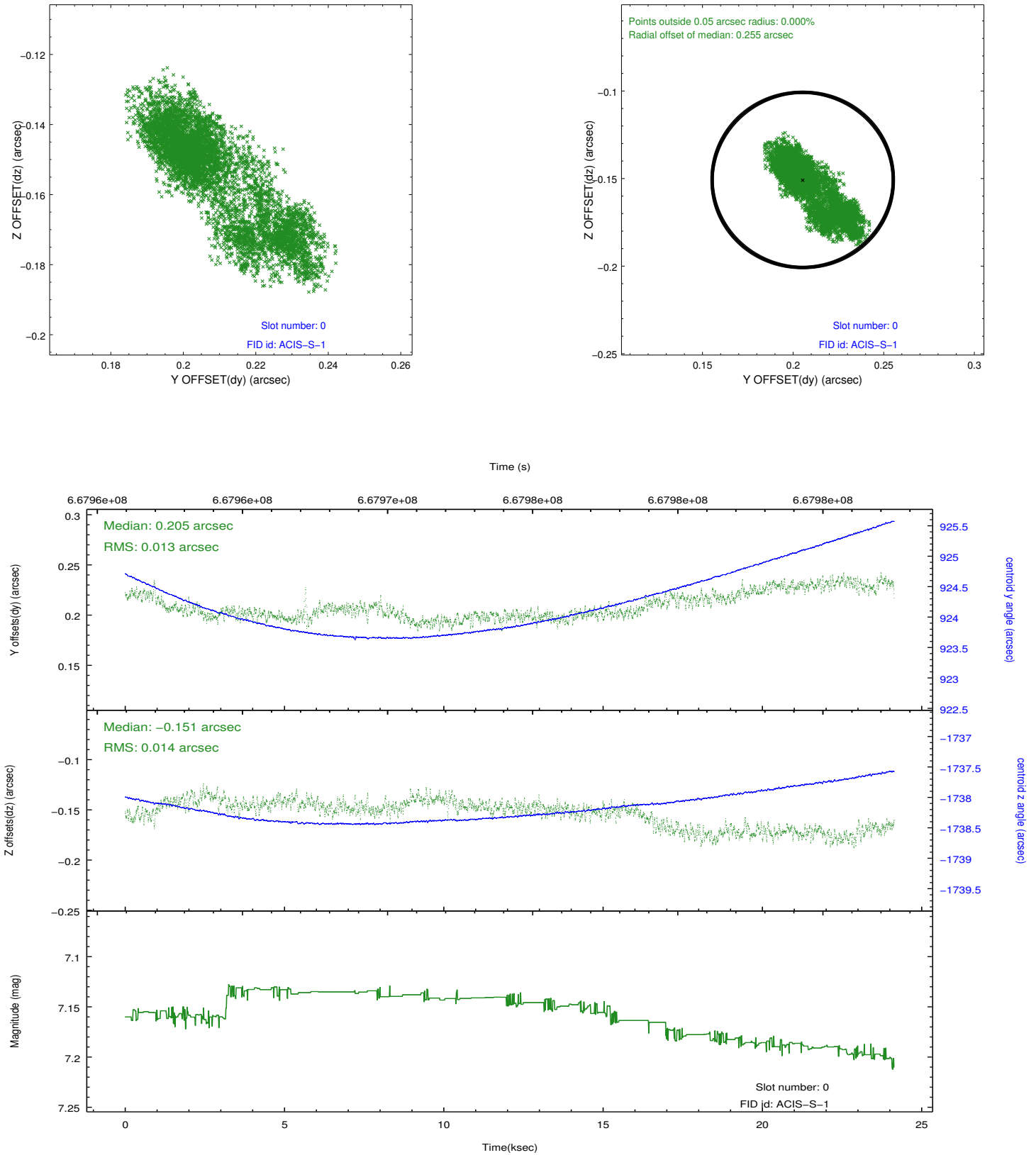


2.4.4 Slot 7

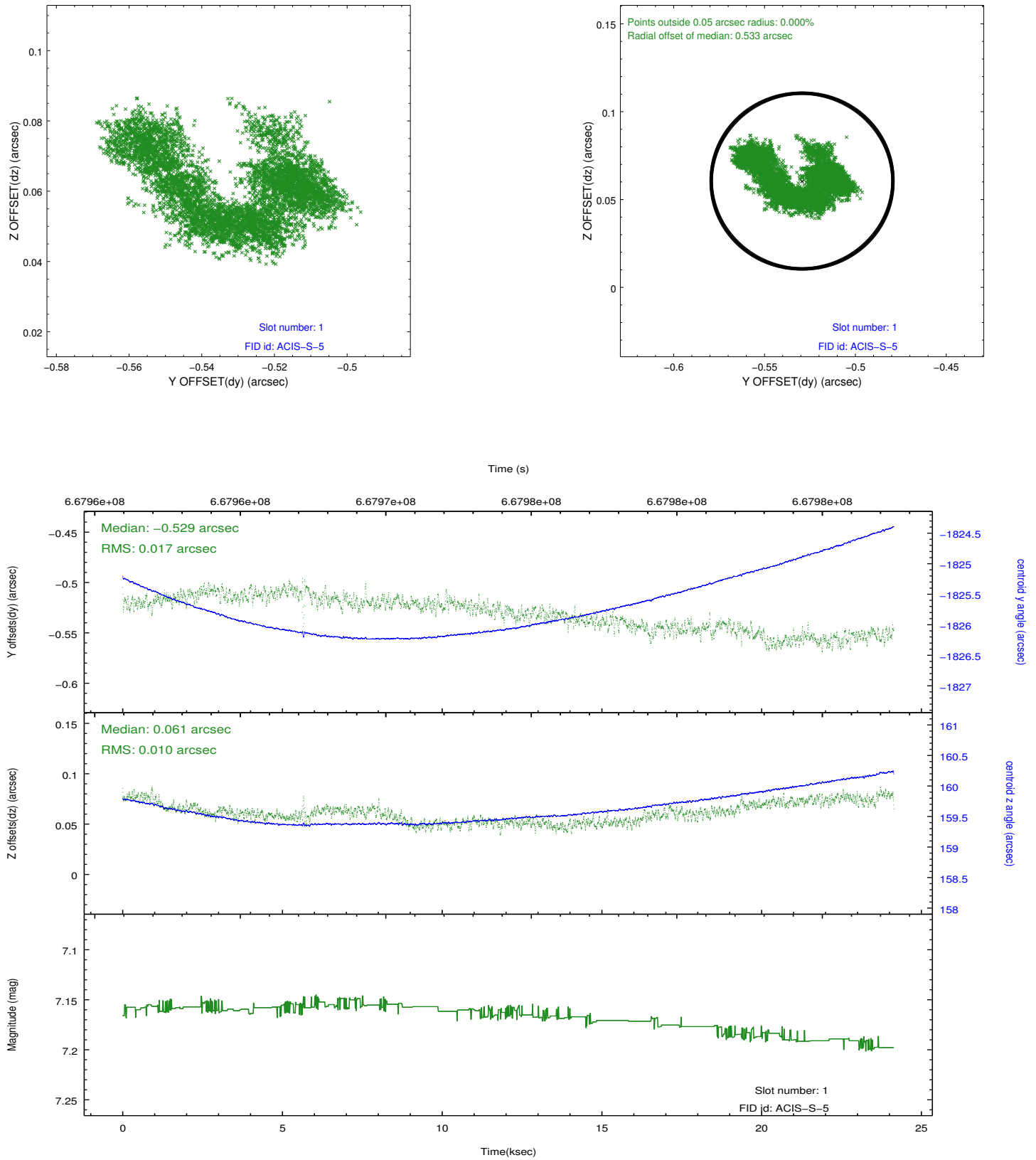


2.5 FID Slots

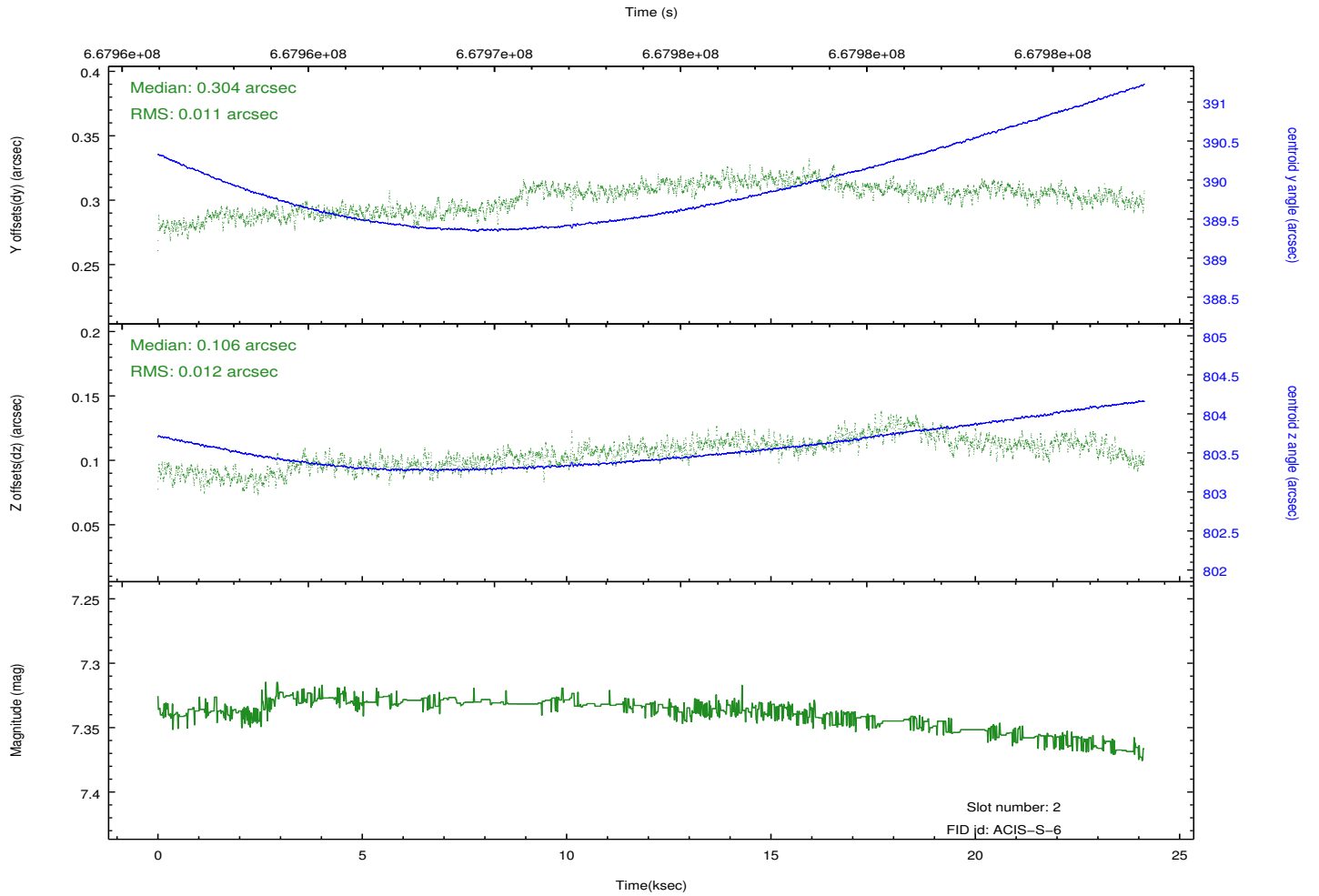
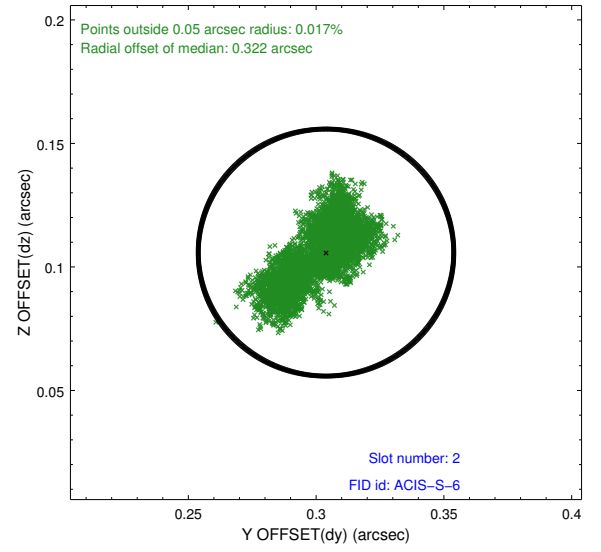
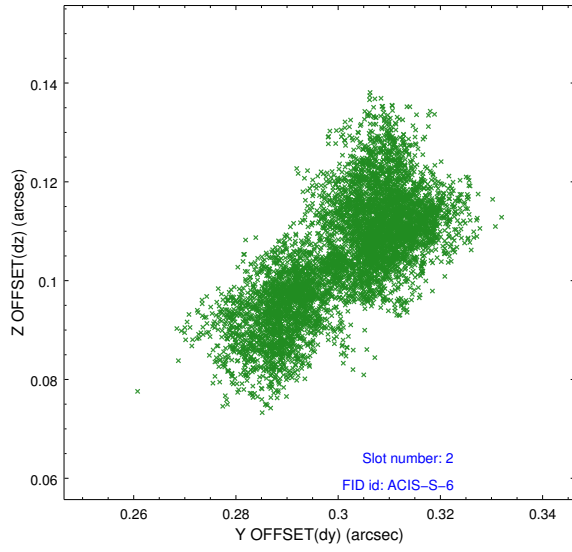
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2019.03.07
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	24.065300185204

A.2 Comments

Optional chips I2 and S4 not included.

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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.