

V&V Reference Report

L2 ASCDS Version : 10.8.1

Observation 23106 - L2 Version 2
Chandra X-Ray Center

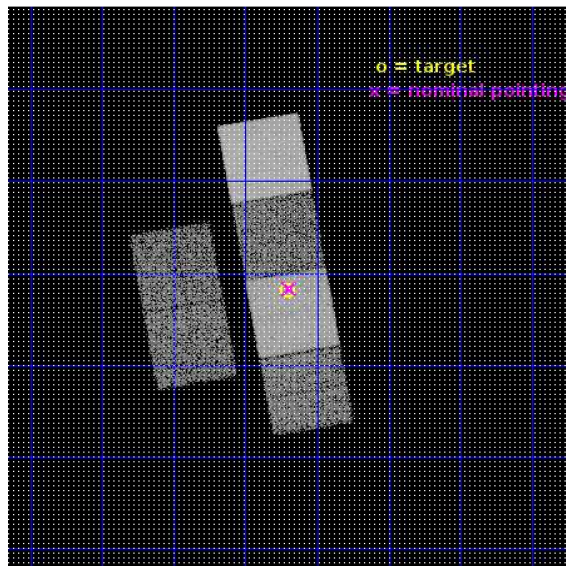
L2 Processing Date : Jan 21 2020

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

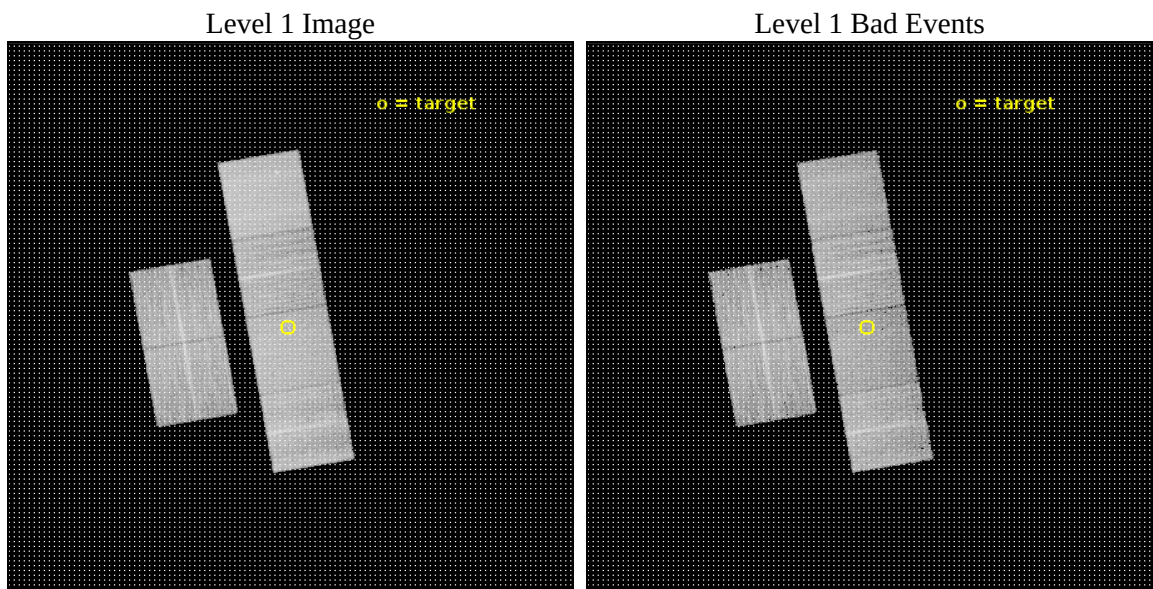
seq_num	402195	Sequence number
obs_id	23106	Observation id
title	An accurate position of a new ULX in NGC 4045	Proposal title
observer	Murray Brightman	Principal investigator
object	NGC 4045 XT-1	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	180.676667	Observer's specified target RA [deg]
dec_targ	1.969028	Observer's specified target Dec [deg]
ra_nom	180.67338643488	Nominal RA [deg]
dec_nom	1.9716754119481	Nominal Dec [deg]
roll_nom	80.156722284551	Nominal Roll [deg]
revision	2	Processing version of data
ontime	9945.600148201	Sum of GTIs [s]
livetime	9819.662970603	Livetime [s]
ontime2	9945.600148201	Sum of GTIs [s]
ontime3	9945.600148201	Sum of GTIs [s]
ontime5	9945.600148201	Sum of GTIs [s]
ontime6	9945.600148201	Sum of GTIs [s]
ontime7	9945.600148201	Sum of GTIs [s]
ontime8	9945.600148201	Sum of GTIs [s]
l2events	129083	Number of level 2 events



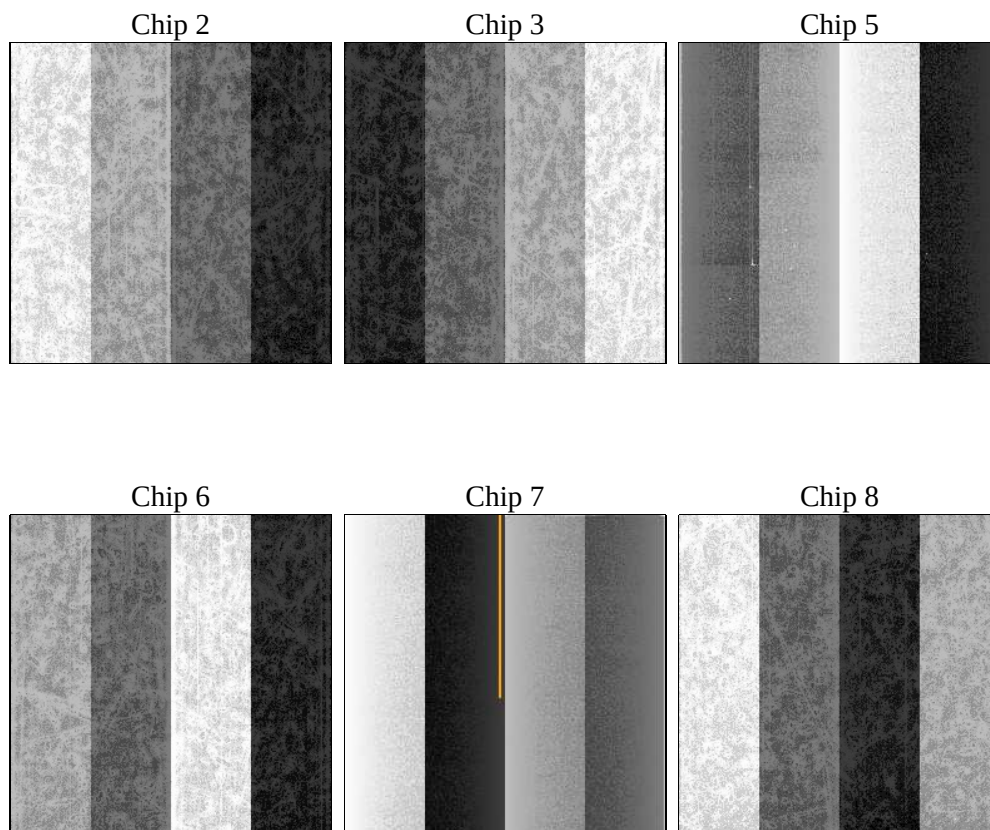
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	10.8.1	Processing system revision	ontime	9945.600148201	Sum of GTIs [s]
caldbver	4.8.4.2	 	ontime2	9945.600148201	Sum of GTIs [s]
date	2020-01-21T19:51:19	Date and time of file creation	ontime3	9945.600148201	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	9945.600148201	Sum of GTIs [s]
			ontime6	9945.600148201	Sum of GTIs [s]
			ontime7	9945.600148201	Sum of GTIs [s]
			ontime8	9945.600148201	Sum of GTIs [s]
			l1events	560750	Number of level 1 events

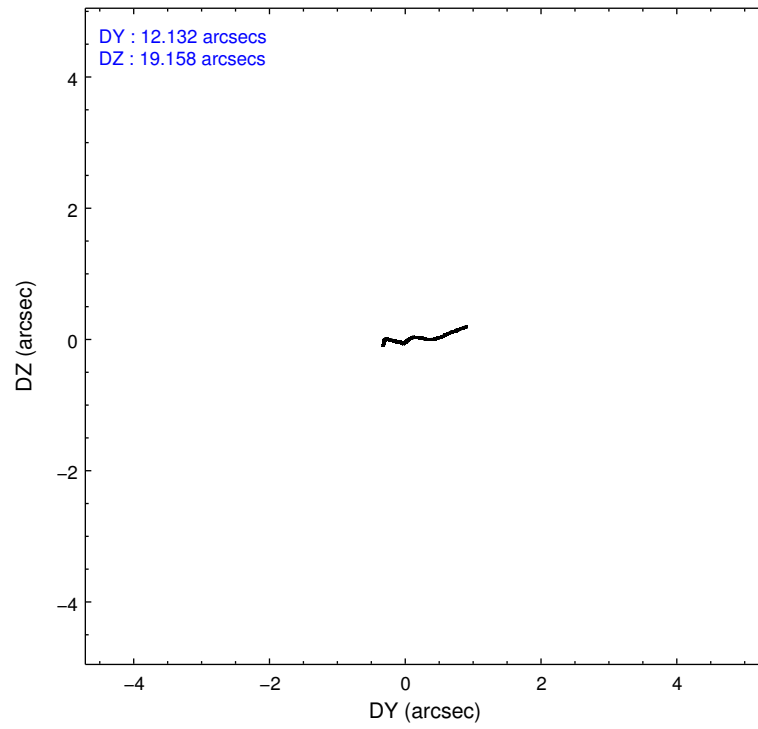
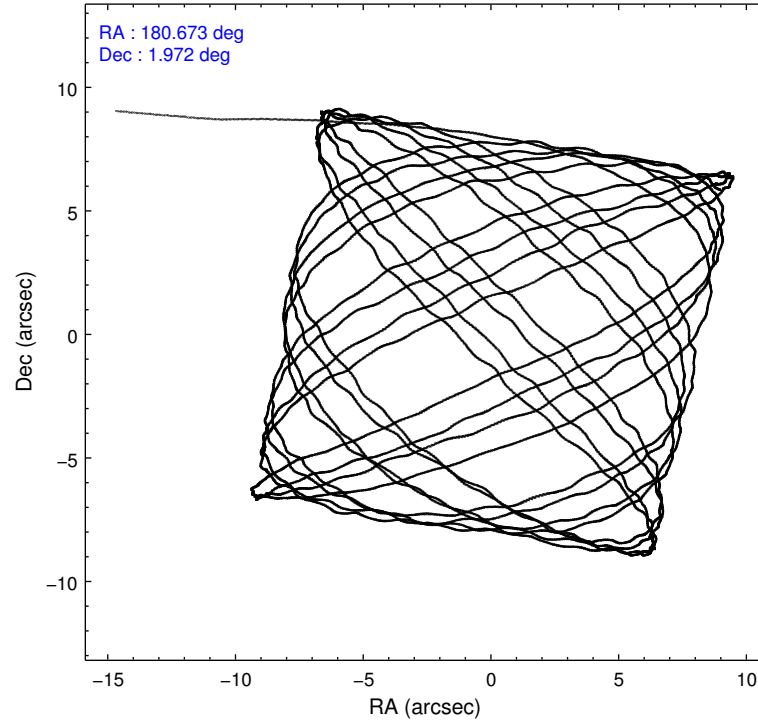
2.1.4 Events

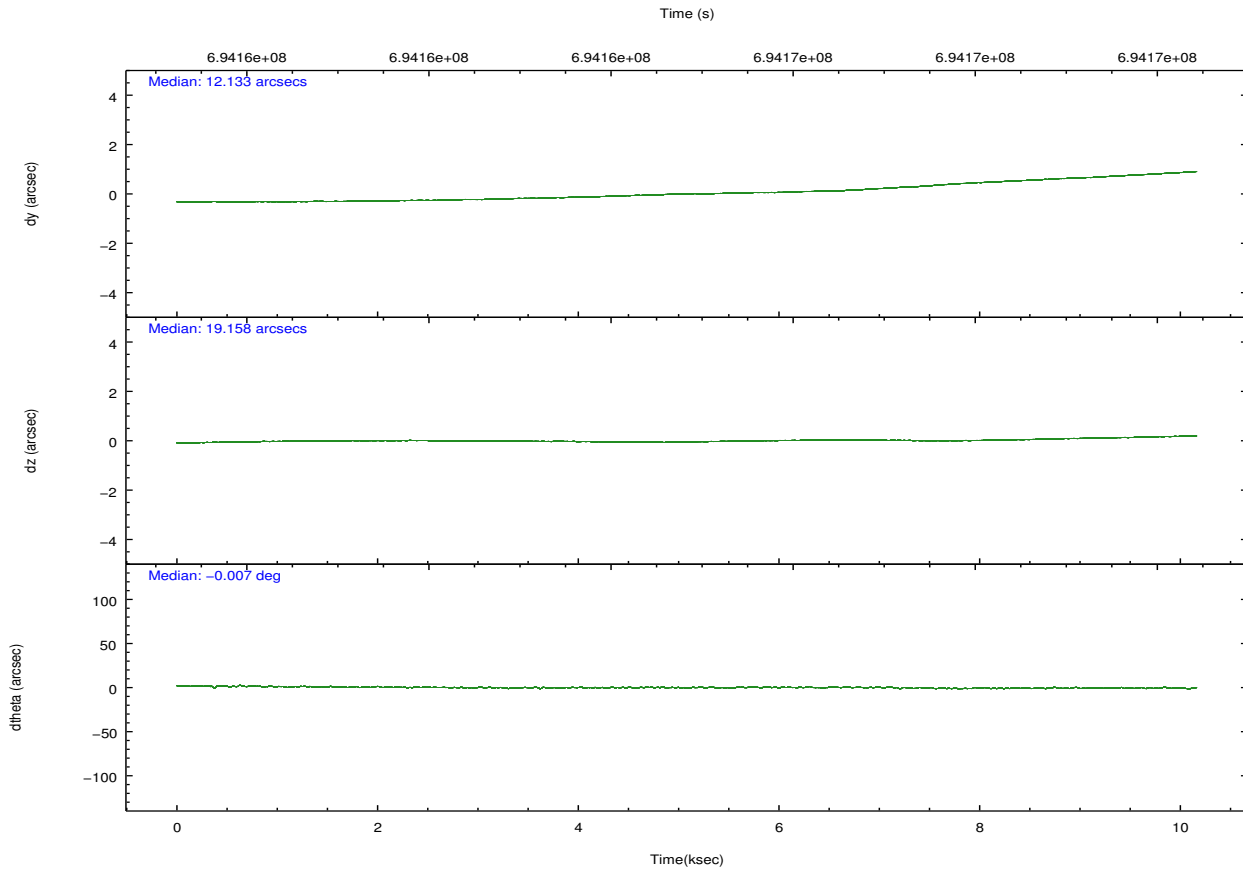
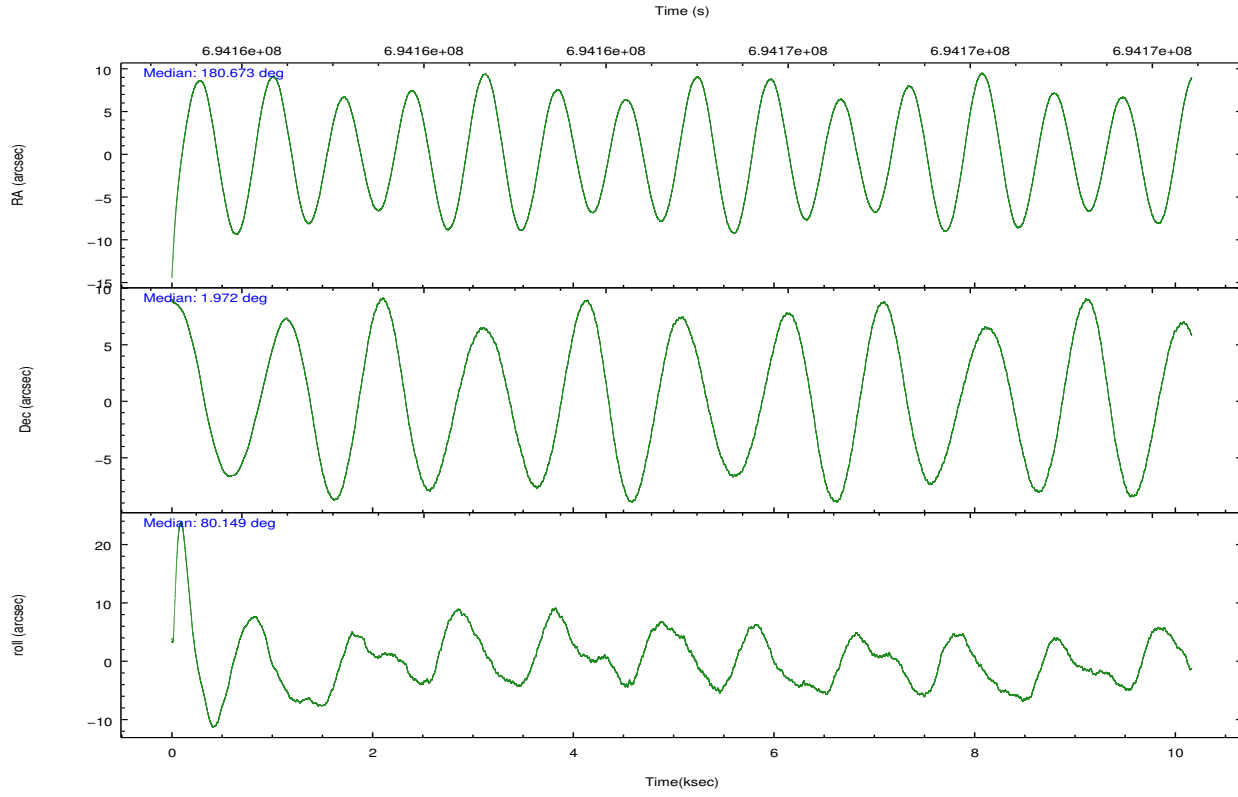
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	81137	77089	122845	81731	99126	98822	grade 0 events	2856	2897	3103	2436	3609	7236
rejected events	73076	69081	65028	73192	56263	73627		3%	3%	2%	2%	3%	7%
rejected %	90%	89%	52%	89%	56%	74%	grade 1 events	54	36	350	35	133	90
								0%	0%	0%	0%	0%	0%
							grade 2 events	1990	1736	17775	2336	9029	6385
								2%	2%	14%	2%	9%	6%
							grade 3 events	759	800	1719	666	3336	2344
								0%	1%	1%	0%	3%	2%
							grade 4 events	775	779	1747	703	3356	2217
								0%	1%	1%	0%	3%	2%
							grade 5 events	2861	3309	7810	3070	9613	4993
								3%	4%	6%	3%	9%	5%
							grade 6 events	1690	1799	33498	2407	23564	7019
								2%	2%	27%	2%	23%	7%
							grade 7 events	70152	65733	56843	70078	46486	68538
								86%	85%	46%	85%	46%	69%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	180.683193	180.6733864348778	CCD I2 on	O3	Y
[deg] Pointing Dec	1.946005	1.97167541194809	CCD I3 on	O4	Y
[deg] Pointing Roll	79.999783	80.15672228455125	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O1	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	O5	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)	694159935.184000	694159053.47663	CCD S5 on	N	N
Observation start date	2019-12-31T06:11:06	2019-12-31T05:57:33	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	694169935.184000	694171140.27736	On-chip summing requested	N	N
Observation end date	2019-12-31T08:57:46	2019-12-31T09:19:00	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



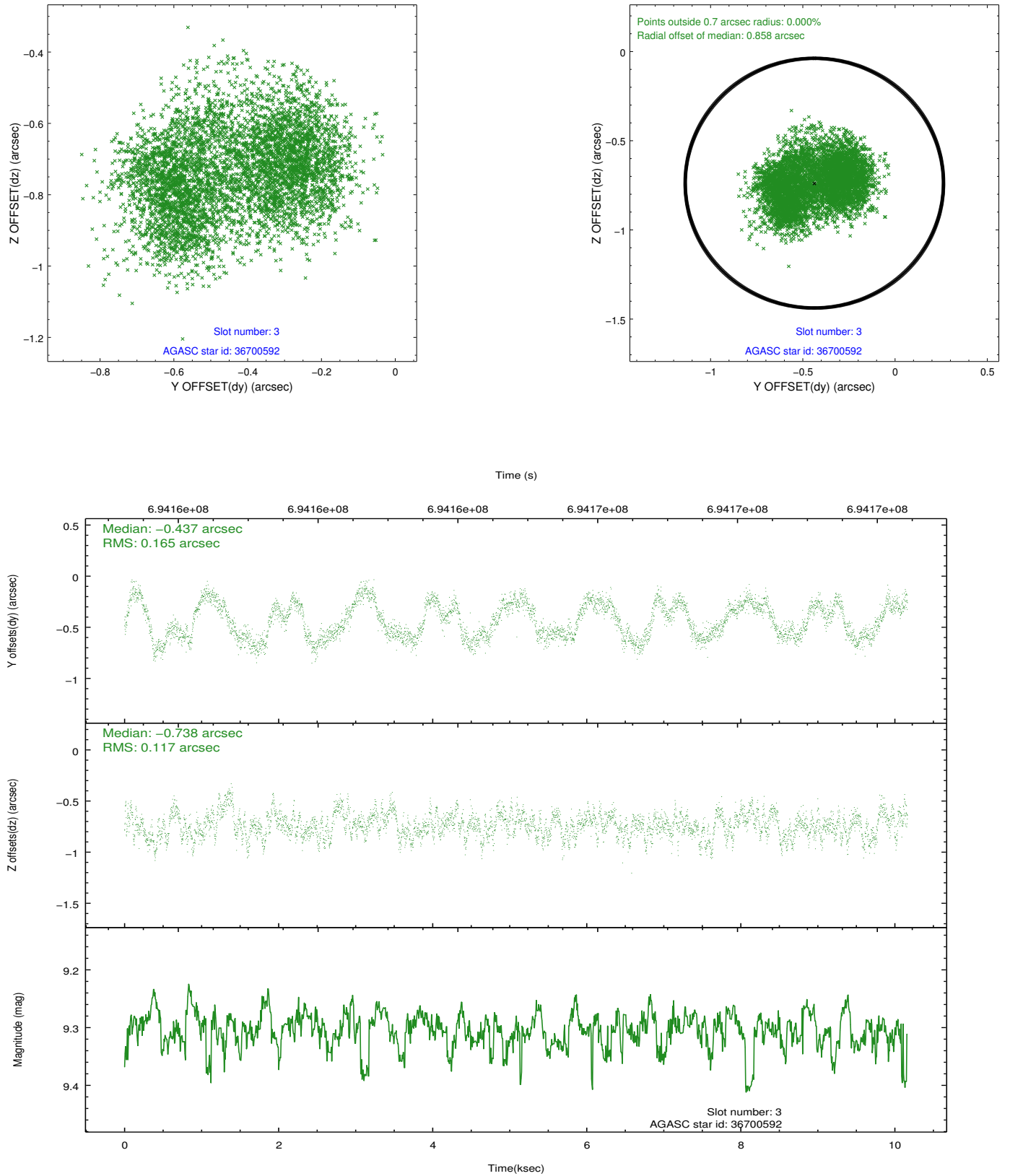


Slot Statistics

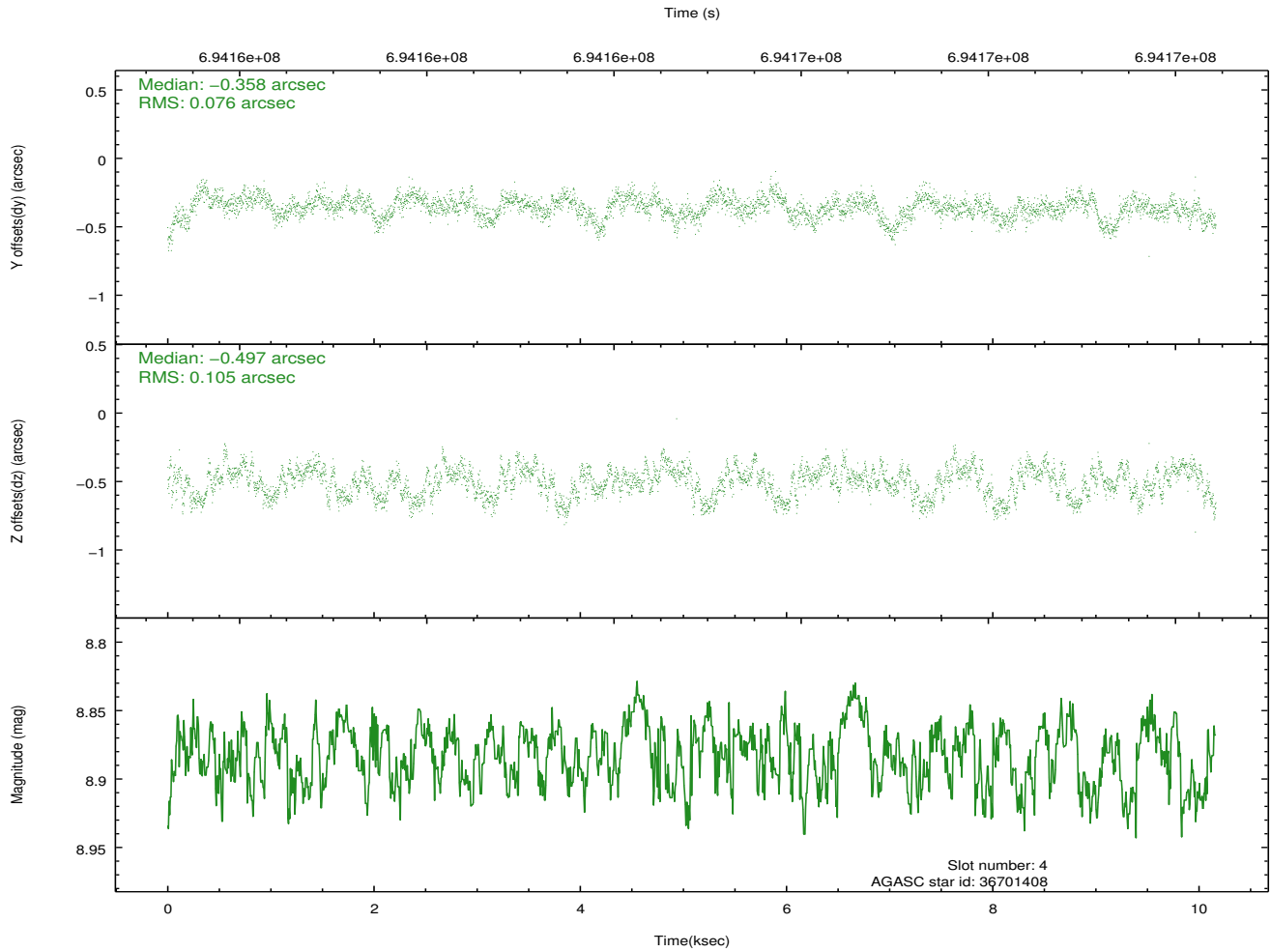
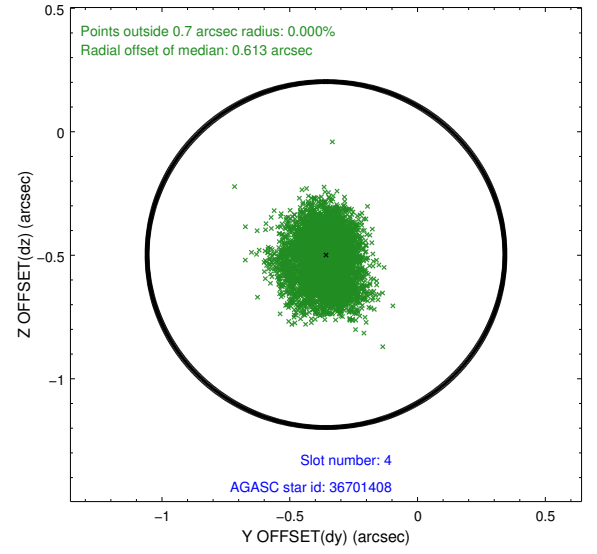
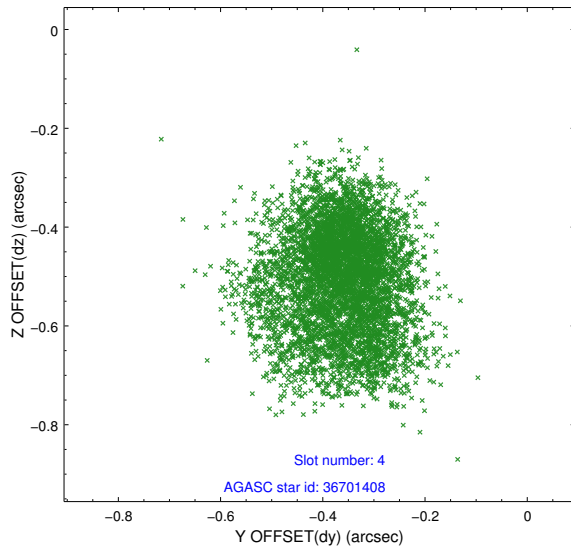
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.08	2477	1.000	-0.255	-0.168	0.013	0.020	0.000000	0.000000	-765.28	-1740
1	FID		ACIS-S-4	7.22	2479	1.000	0.710	0.168	0.009	0.017	0.000000	0.000000	2148.64	167
2	FID		ACIS-S-5	7.19	2479	1.000	-0.482	0.009	0.016	0.033	0.000000	0.000000	-1817.77	161
3	GUIDE	used	36700592	9.30	4952	1.000	-0.437	-0.738	0.222	0.314	180.165964	2.414503	1337.72	2124
4	GUIDE	used	36701408	8.88	4951	1.000	-0.358	-0.497	0.141	0.220	180.372891	2.362363	1281.58	1357
5	GUIDE	used	36702304	9.42	4958	1.000	0.016	-0.213	0.245	0.375	180.247074	1.873627	-527.20	1502
6	GUIDE	used	36703344	8.00	4955	1.000	0.267	0.739	0.184	0.285	181.053552	1.462035	-1484.47	-1611
7	GUIDE	used	36706960	9.81	4923	1.000	0.453	0.737	0.292	0.435	181.319374	1.706880	-449.87	-2401

2.4 Star Slots

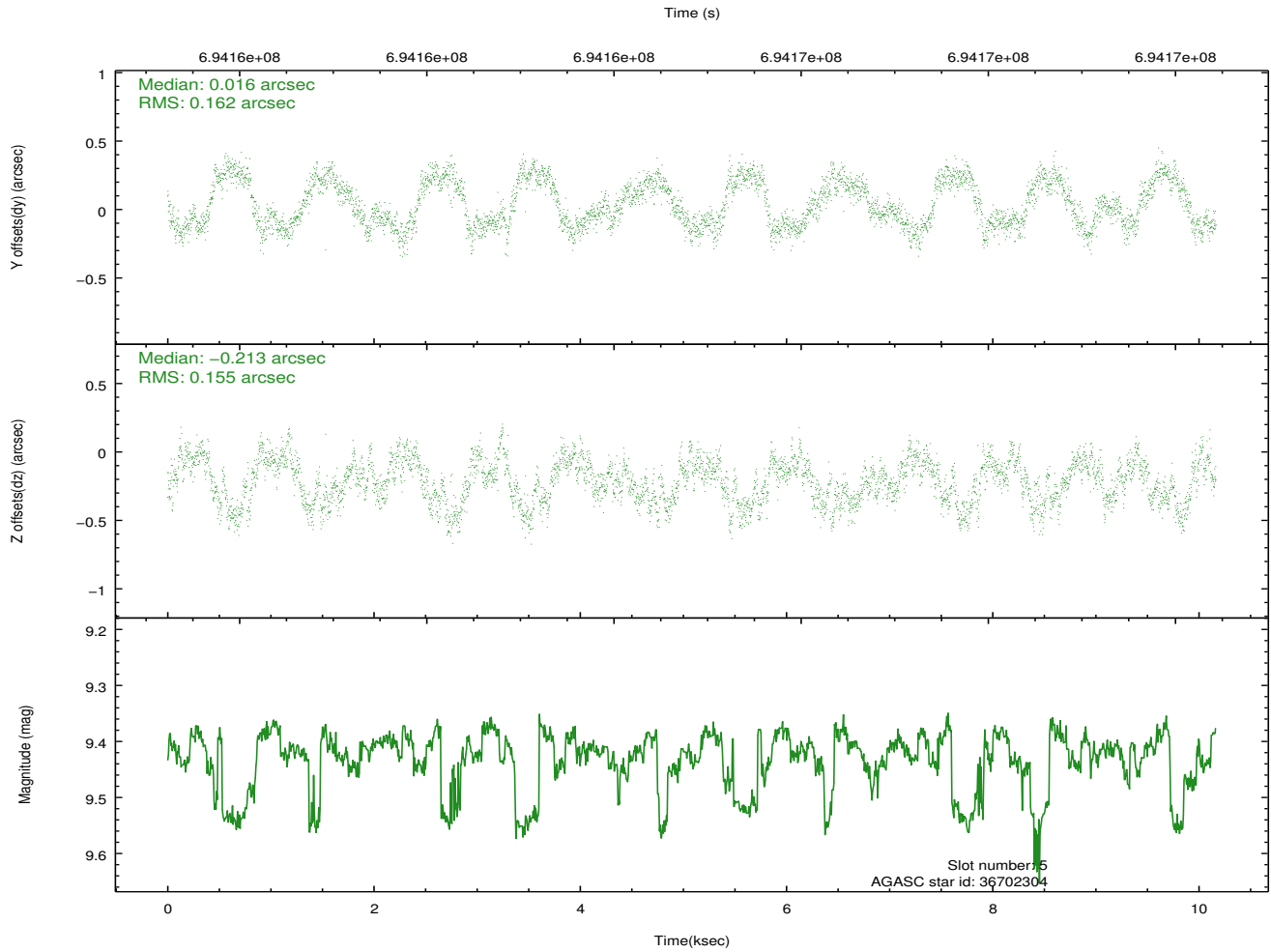
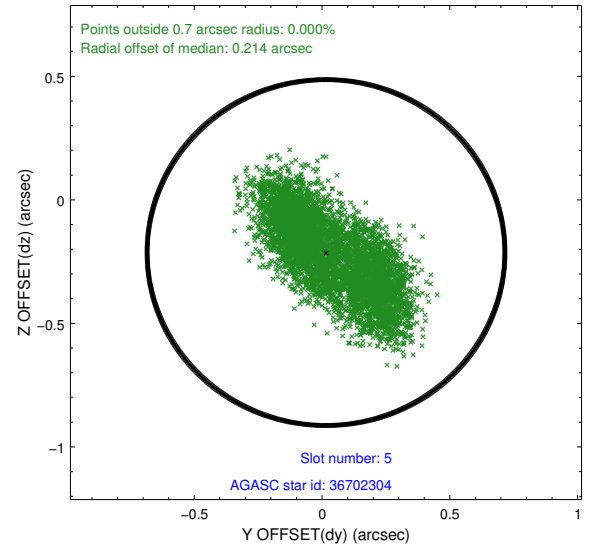
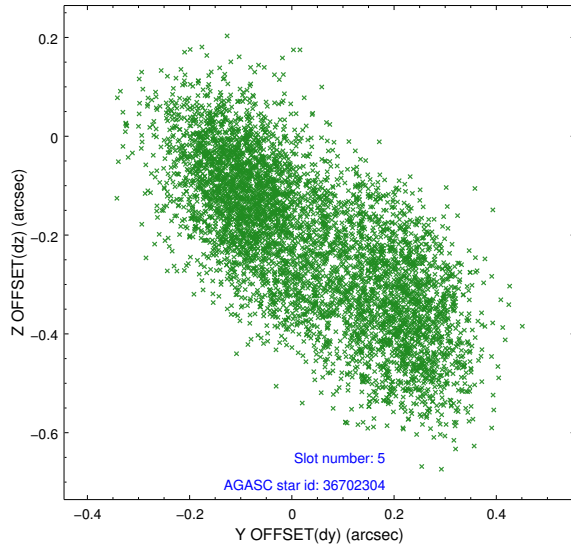
2.4.1 Slot 3



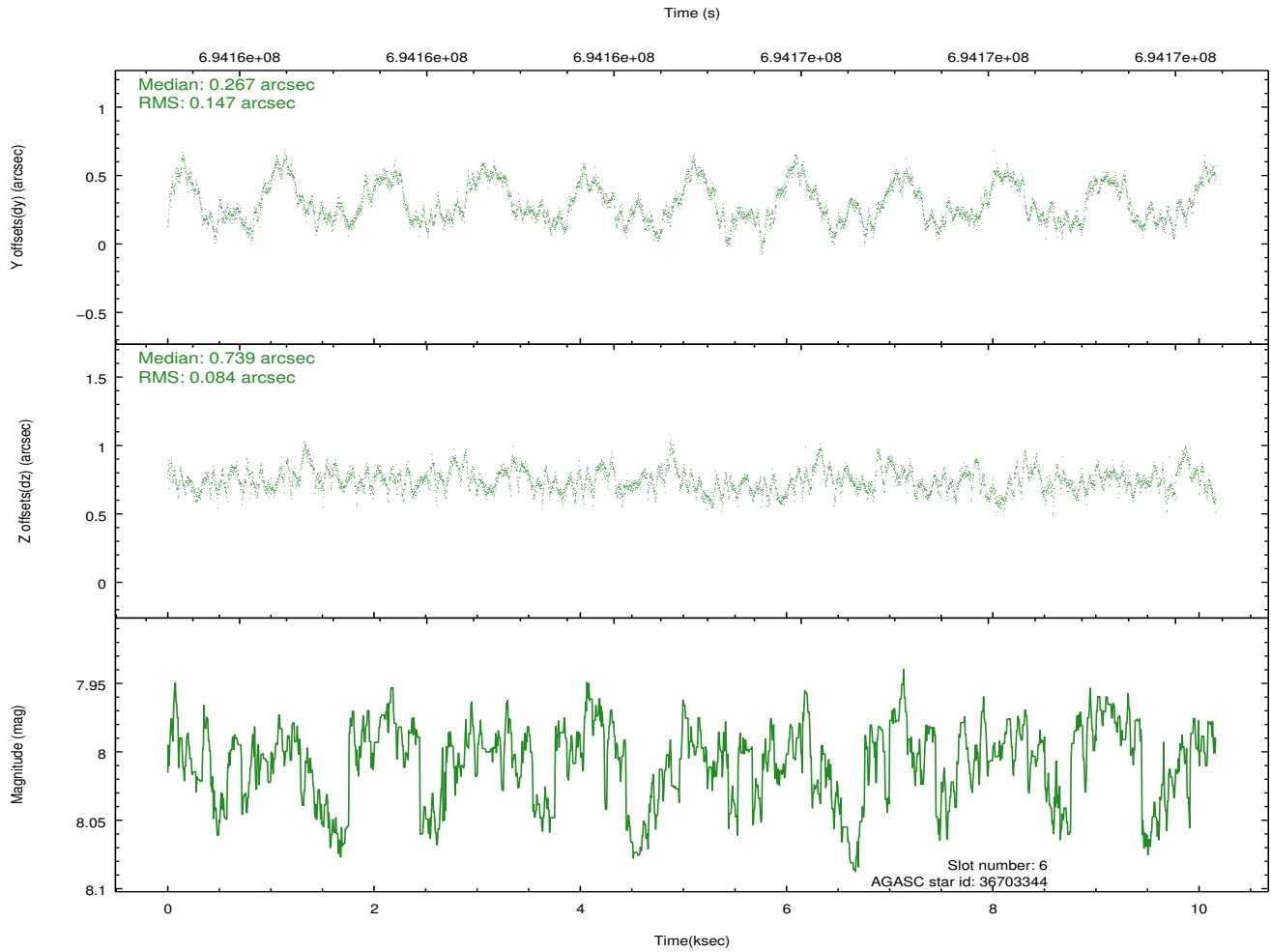
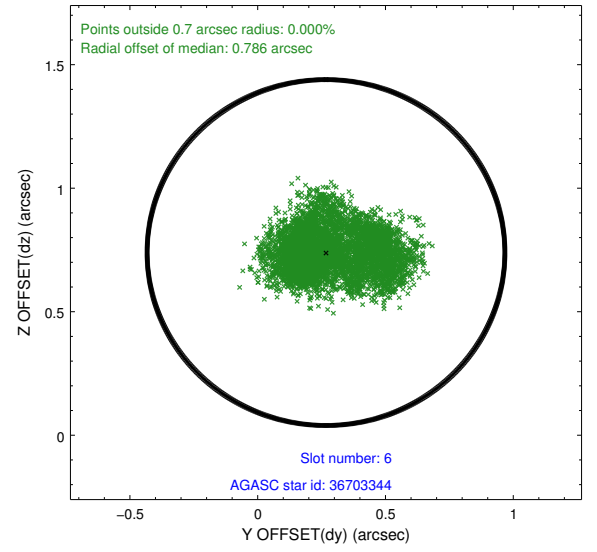
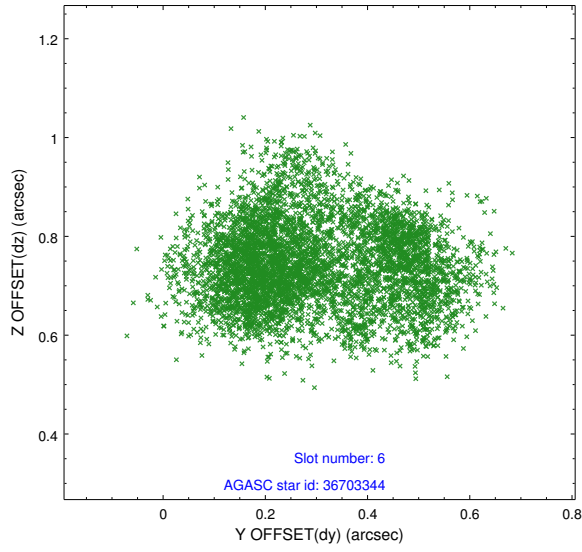
2.4.2 Slot 4



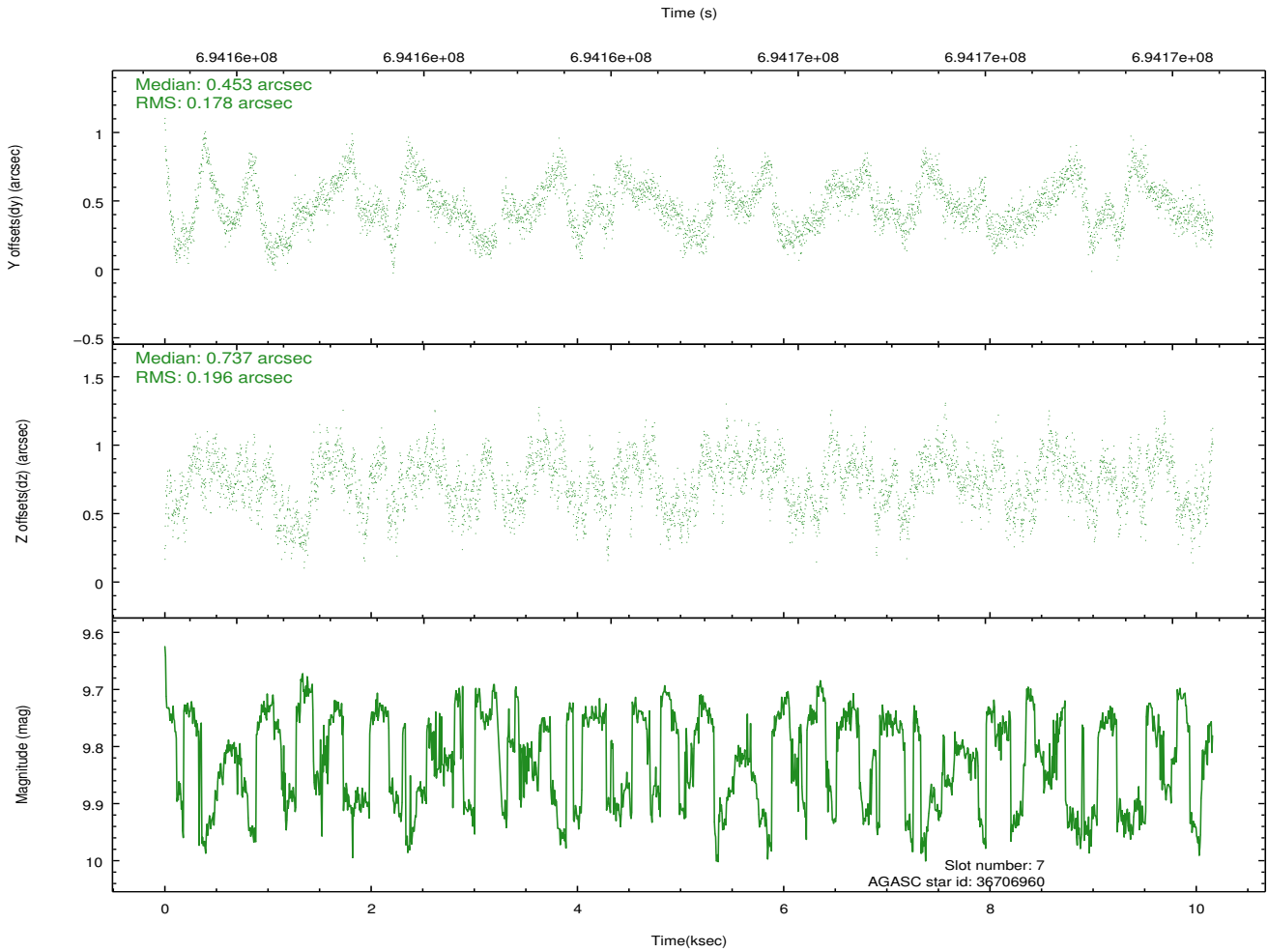
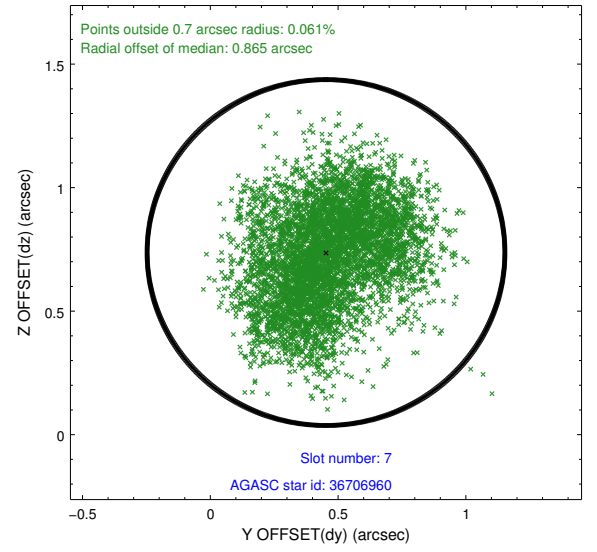
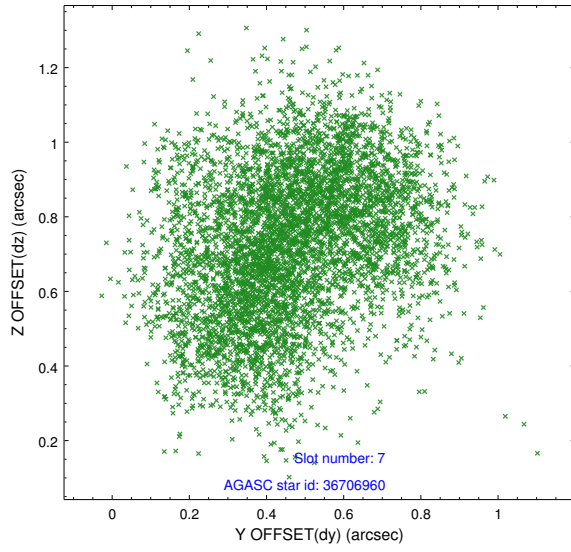
2.4.3 Slot 5



2.4.4 Slot 6

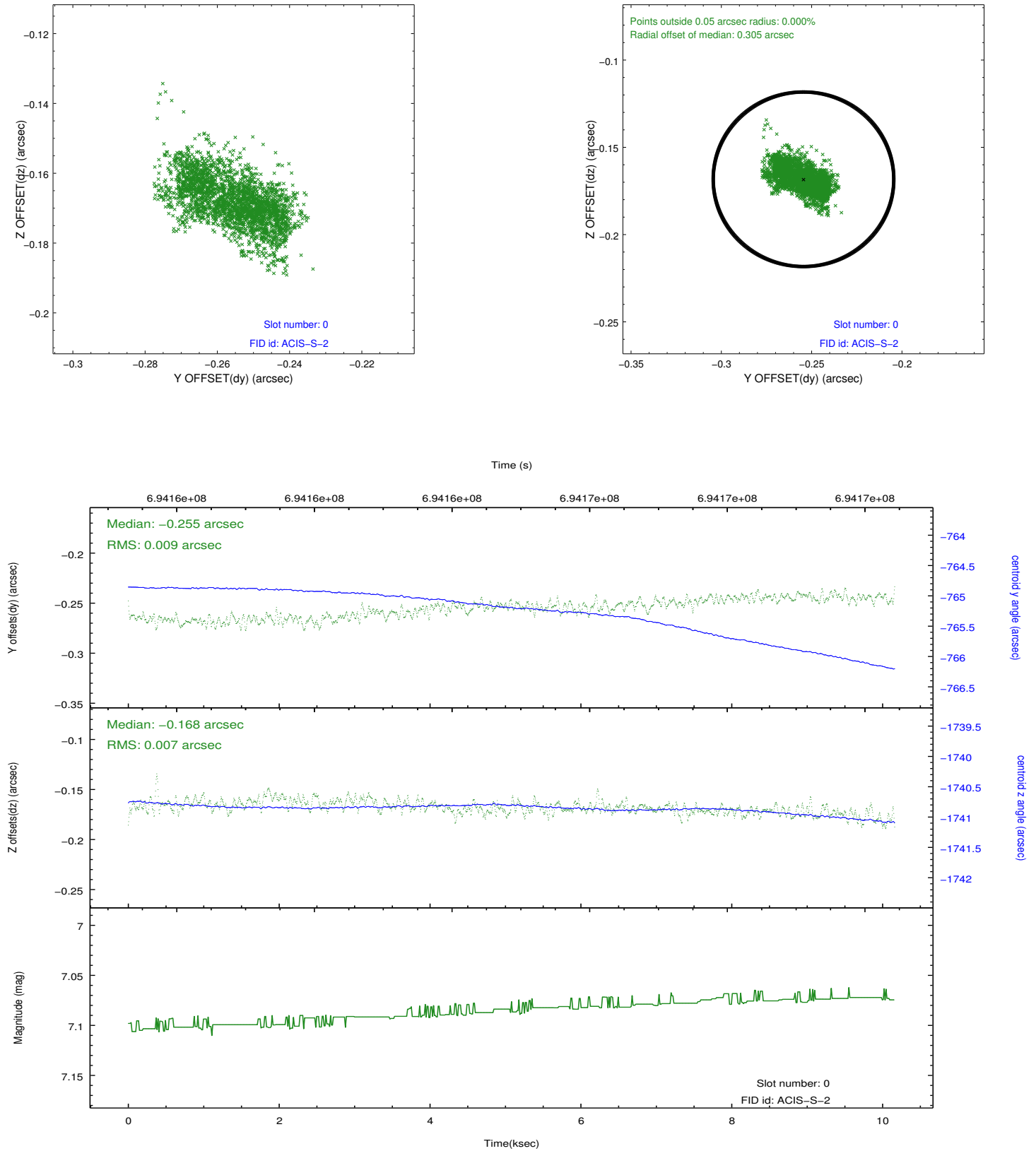


2.4.5 Slot 7

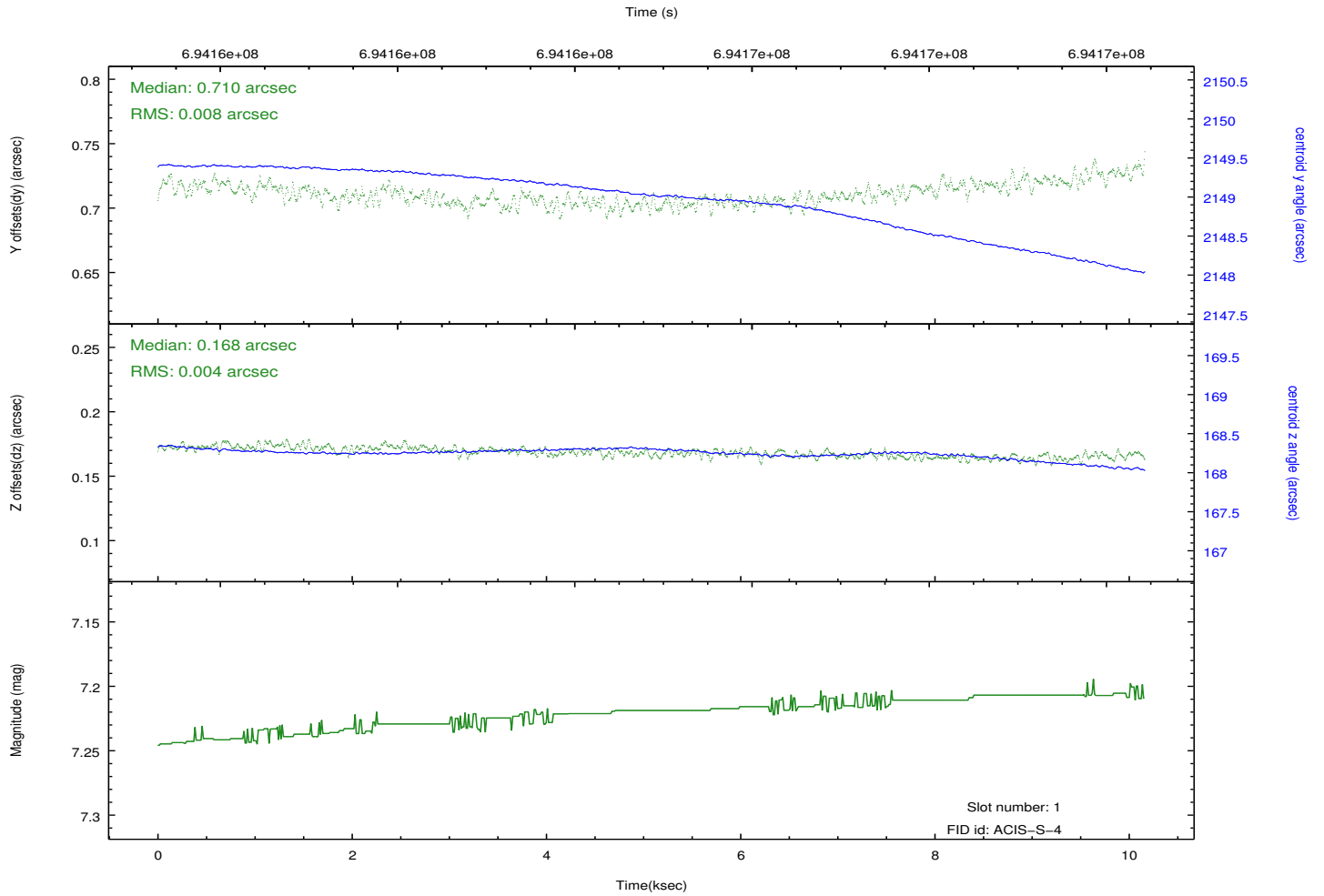
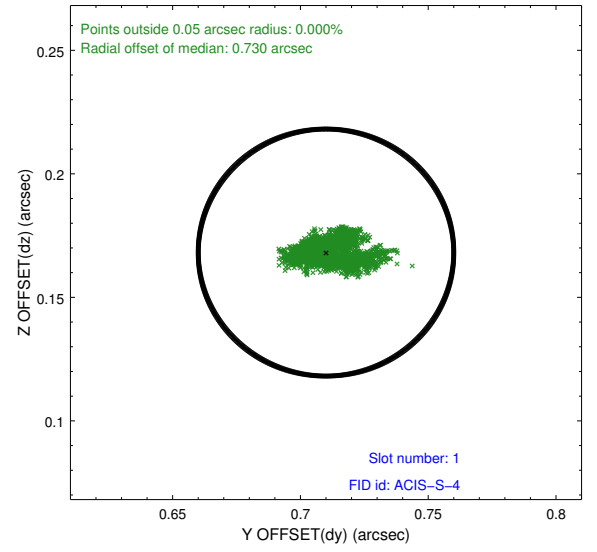
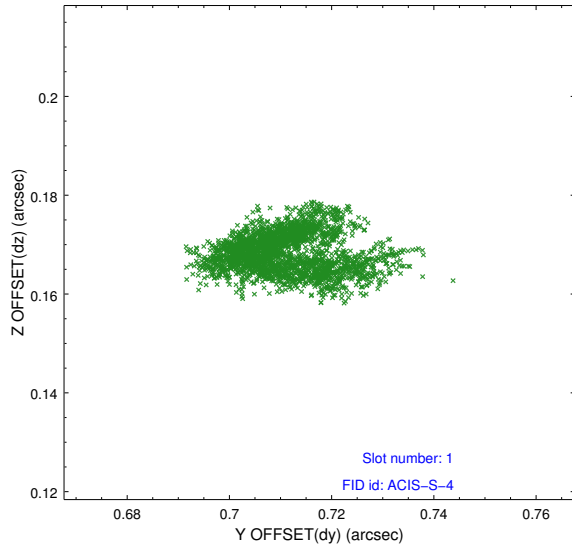


2.5 FID Slots

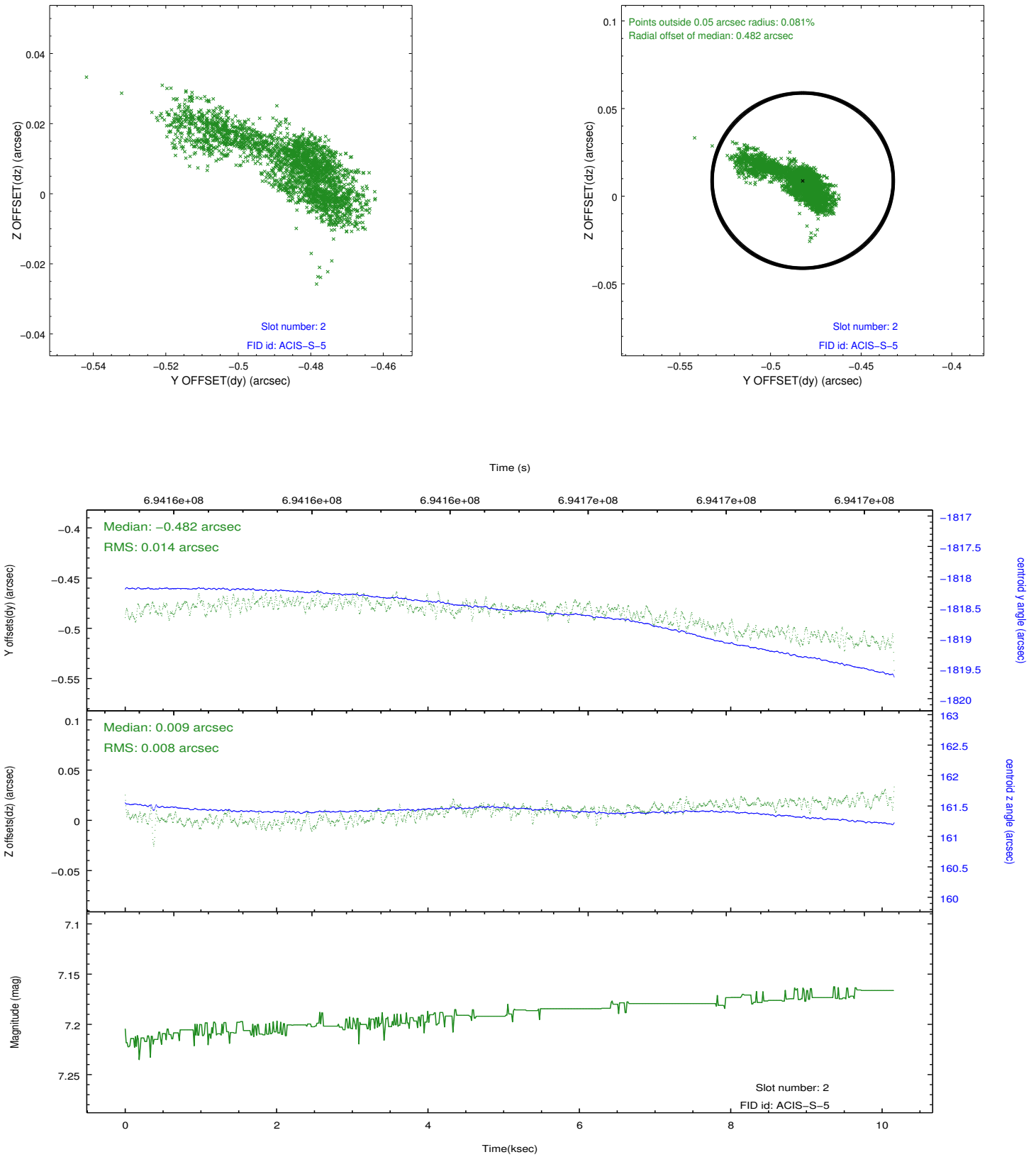
2.5.1 Slot 0



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)	2020.01.23
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.945600148201

A.2 Comments

Telemetry corruption resulted in incorrect bias map values for seven rows in

CCD = 7. The telemetry was recovered and this observation has been reprocessed to obtain the correct bias values for these pixels.