

V&V Reference Report

L2 ASCDS Version : 10.3.3

Observation 16714 - L2 Version 1
Chandra X-Ray Center

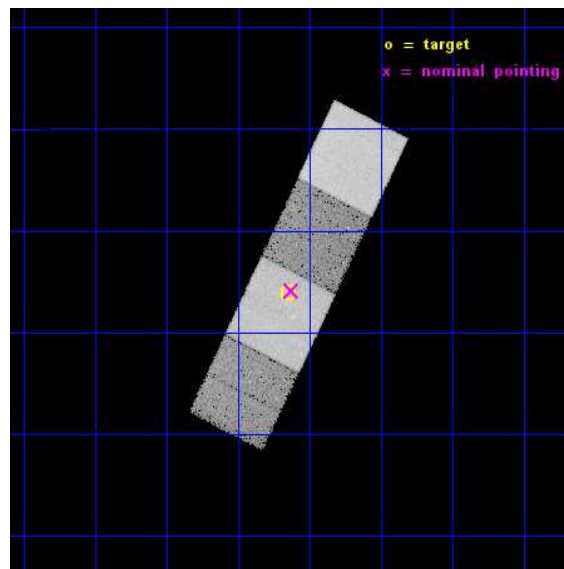
L2 Processing Date : May 9 2015

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1 Front

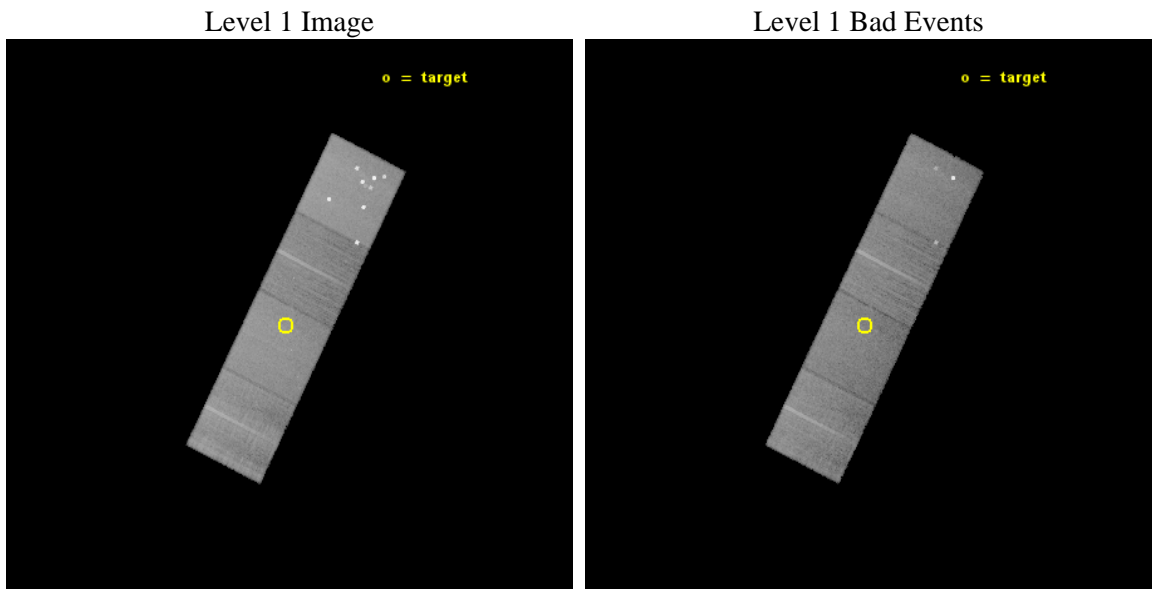
seq_num	401636	Sequence number
obs_id	16714	Observation id
title	A Black Hole in the Galactic Globular Cluster M10	Proposal title
observer	Prof. Jay Strader	Principal investigator
object	M10	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	254.2875	Observer's specified target RA [deg]
dec_targ	-4.100306	Observer's specified target Dec [deg]
ra_nom	254.28252765454	Nominal RA [deg]
dec_nom	-4.0980408185822	Nominal Dec [deg]
roll_nom	116.39214308607	Nominal Roll [deg]
revision	1	Processing version of data
ontime	33061.500254393	Sum of GTIs [s]
livetime	32629.527414047	Livetime [s]
ontime5	33061.500254393	Sum of GTIs [s]
ontime6	33058.3592242	Sum of GTIs [s]
ontime7	33061.500254393	Sum of GTIs [s]
ontime8	33061.500254393	Sum of GTIs [s]
l2events	237871	Number of level 2 events



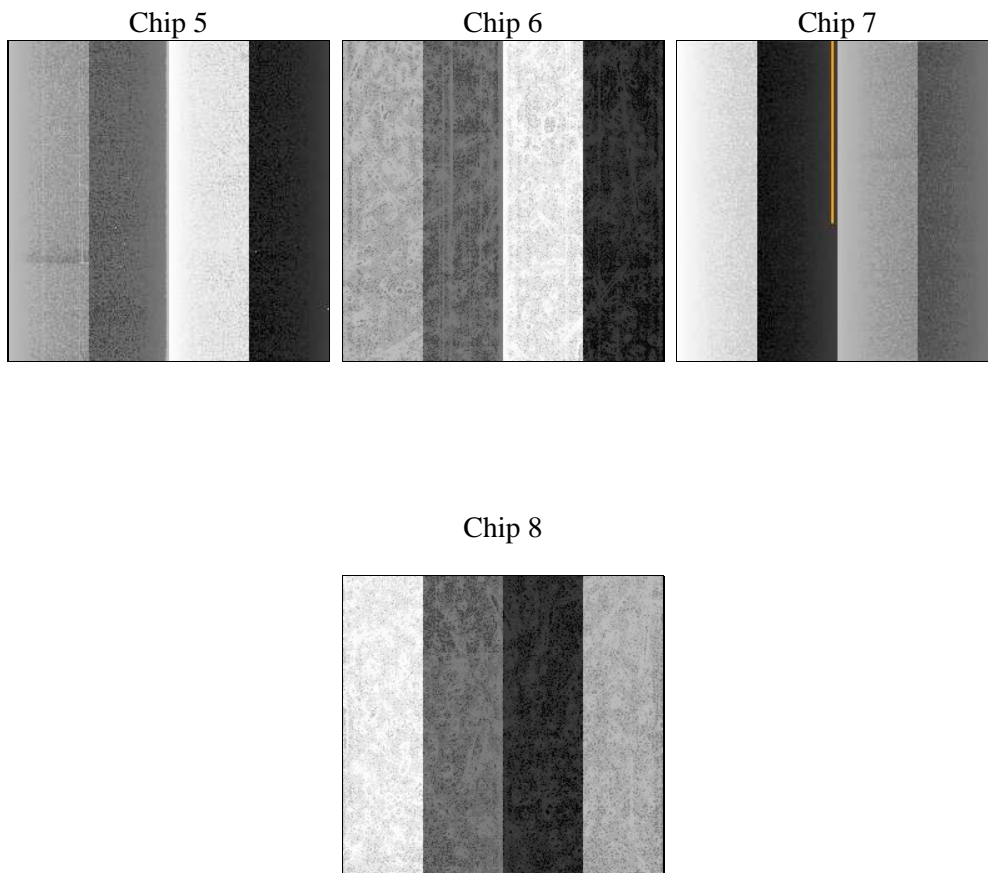
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	33000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.3	Processing system revision	ontime	33061.500254393	Sum of GTIs [s]
caldbver	4.6.7	 	ontime5	33061.500254393	Sum of GTIs [s]
date	2015-05-09T10:41:07	Date and time of file creation	ontime6	33058.3592242	Sum of GTIs [s]
revision	1	Processing version of data	ontime7	33061.500254393	Sum of GTIs [s]
			ontime8	33061.500254393	Sum of GTIs [s]
			l1events	877376	Number of level 1 events

2.1.4 Events

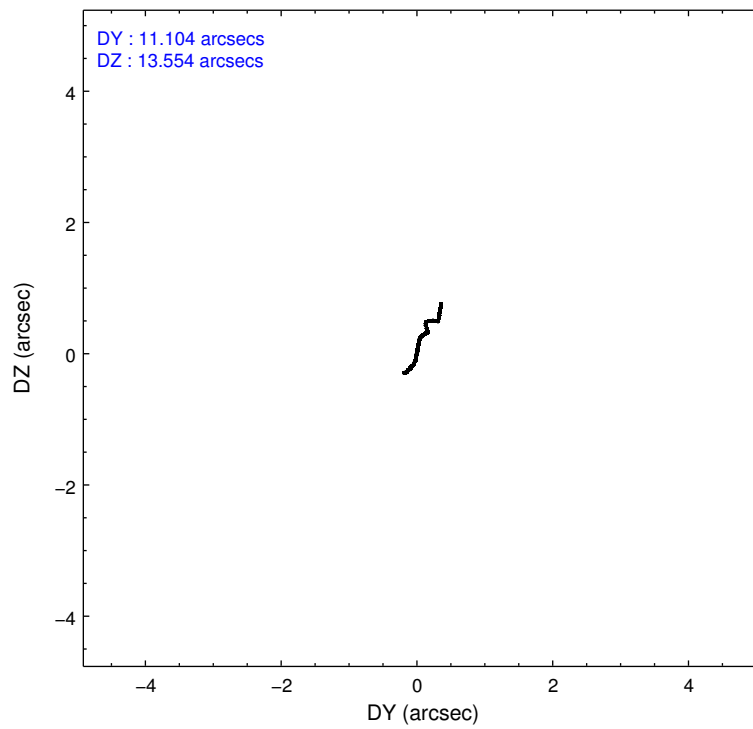
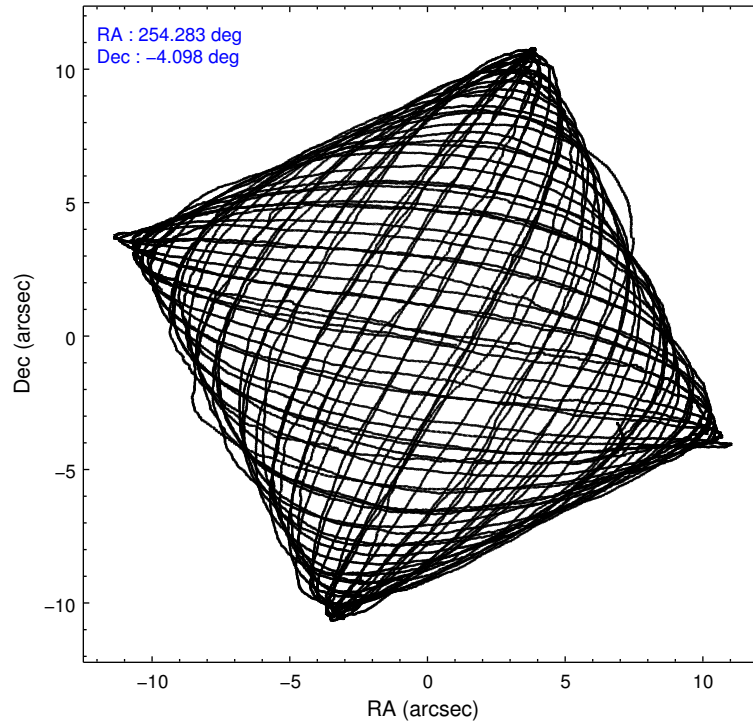
	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	312852	153108	208607	202809
rejected events	142750	134218	118091	149491
rejected %	45%	87%	56%	73%

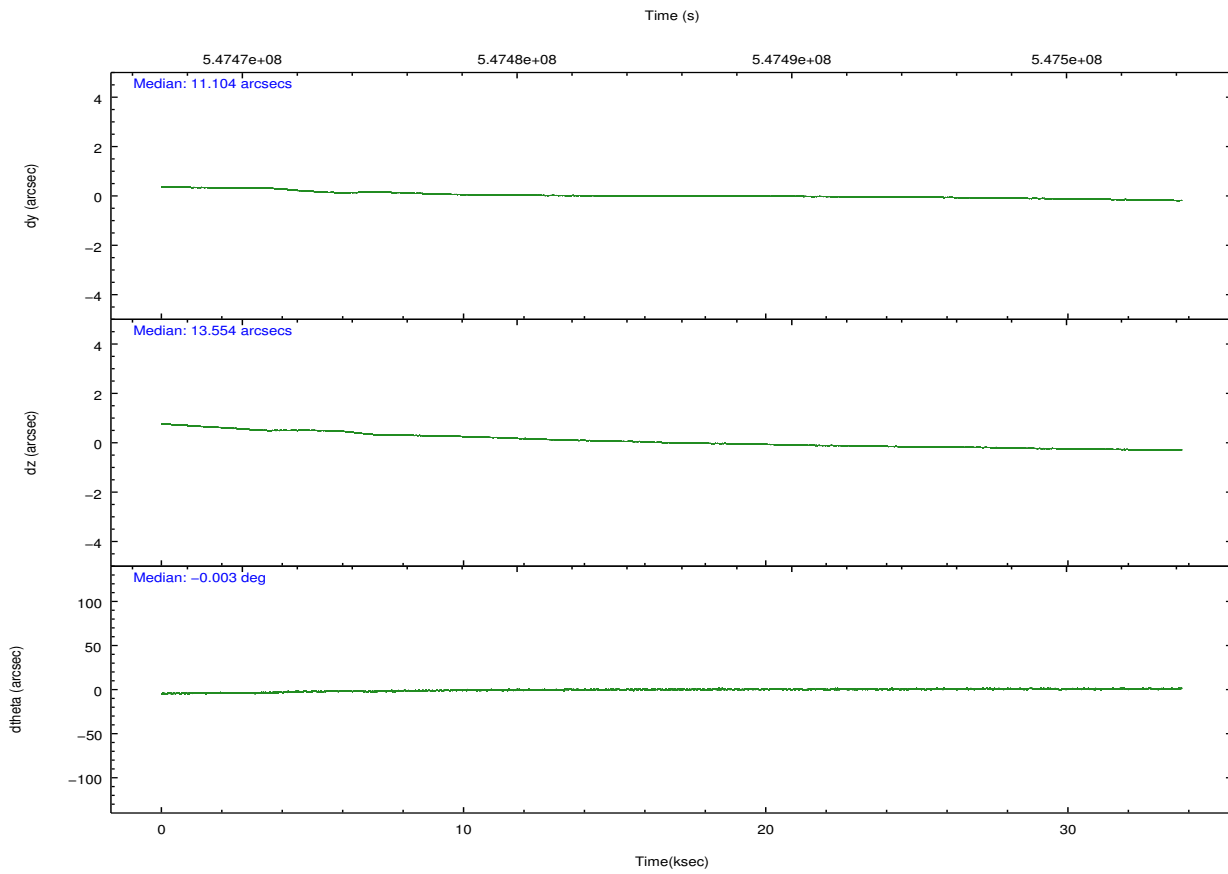
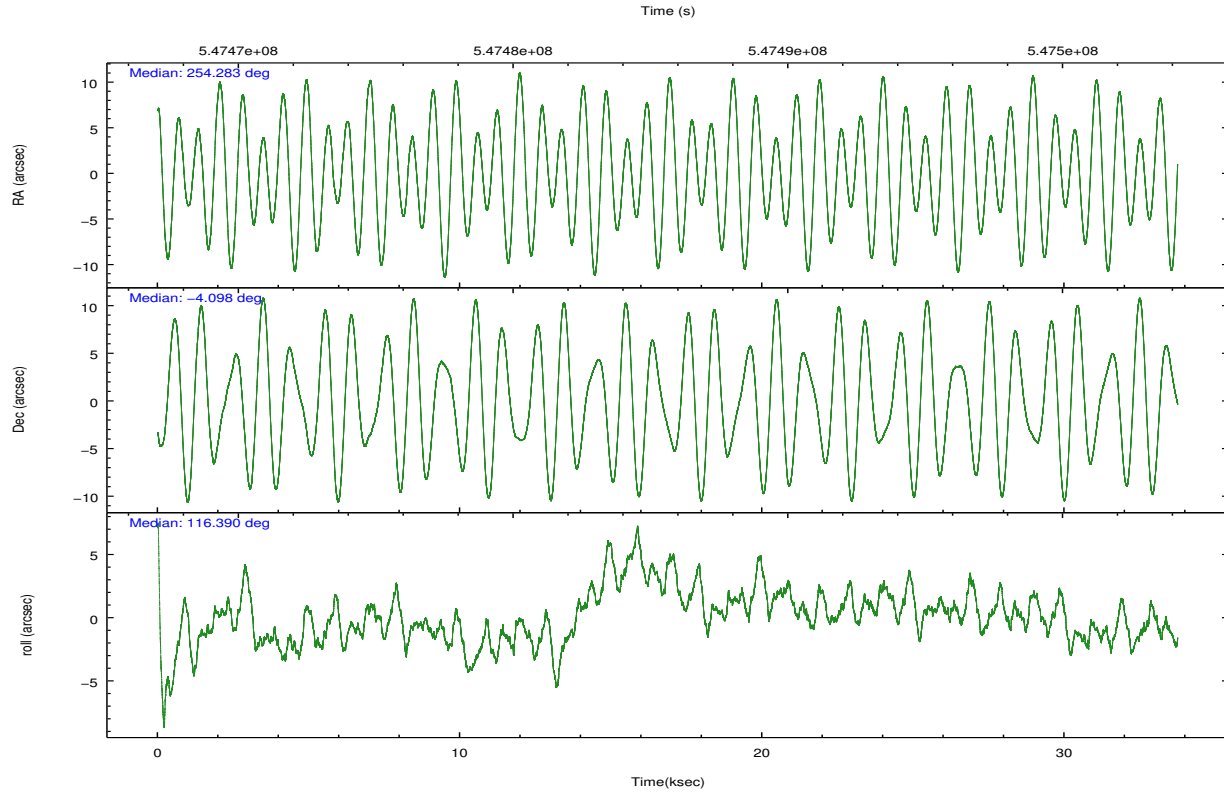
	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	44302	6715	7800	15055
	14%	4%	3%	7%
grade 1 events	694	69	233	124
	0%	0%	0%	0%
grade 2 events	43563	4205	18748	12744
	13%	2%	8%	6%
grade 3 events	7563	1817	7360	5628
	2%	1%	3%	2%
grade 4 events	6319	1824	7385	5324
	2%	1%	3%	2%
grade 5 events	19311	7657	20500	11596
	6%	5%	9%	5%
grade 6 events	68369	4333	49233	14593
	21%	2%	23%	7%
grade 7 events	122731	126488	97348	137745
	39%	82%	46%	67%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-5678	ACIS-5678	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	254.305655	254.2825276545443	CCD I2 on	N	N
[deg] Pointing Dec	-4.112928	-4.098040818582235	CCD I3 on	N	N
[deg] Pointing Roll	116.237175	116.3921430860694	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O2	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	O1	Y
[s] Observation start time (MET)	547469500.184000	547467218.70523	CCD S5 on	N	N
Observation start date	2015-05-08T10:50:33	2015-05-08T10:13:38	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	547502500.184000	547503449.38226	On-chip summing requested	N	N
Observation end date	2015-05-08T20:00:33	2015-05-08T20:17:29	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





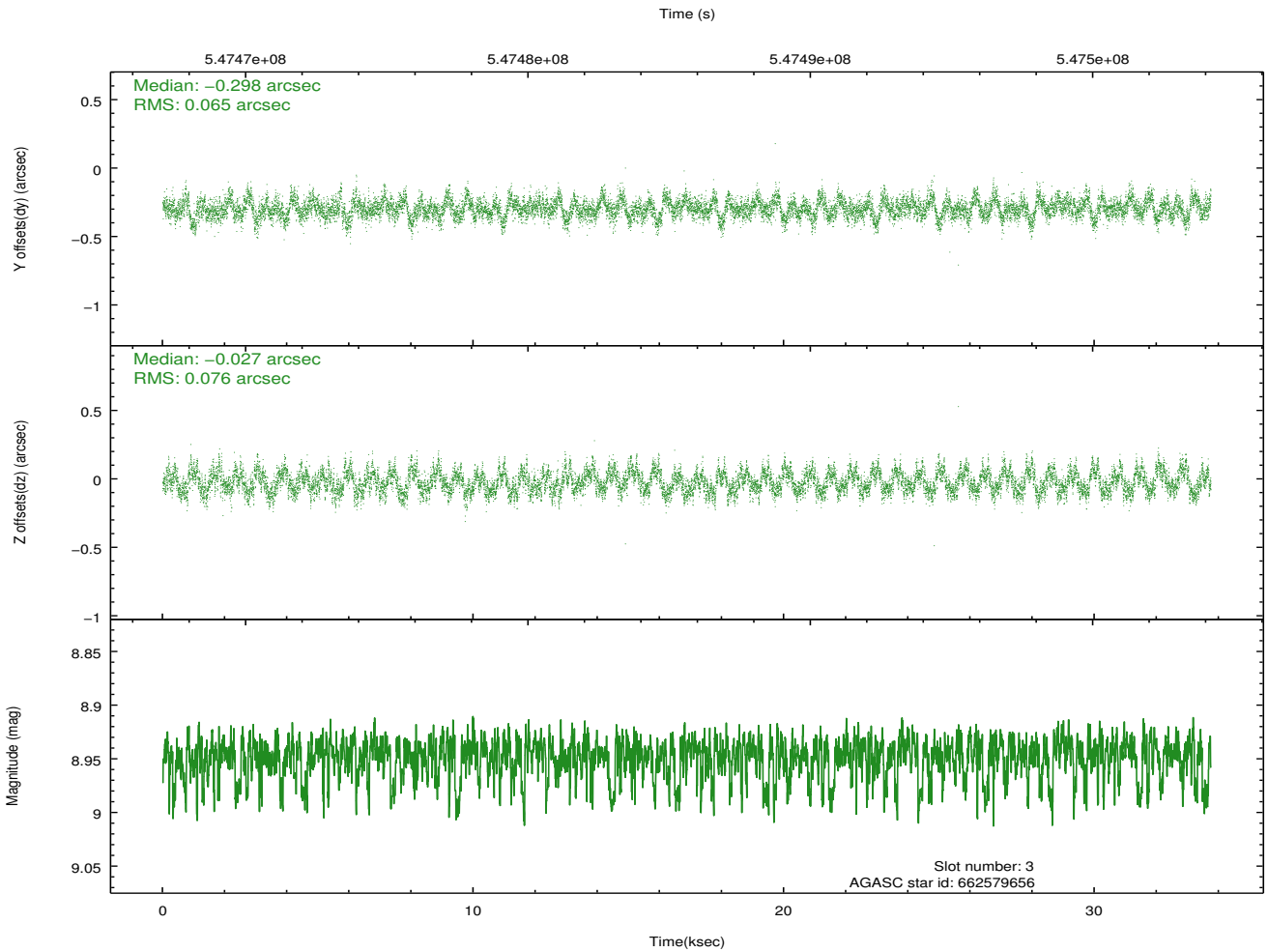
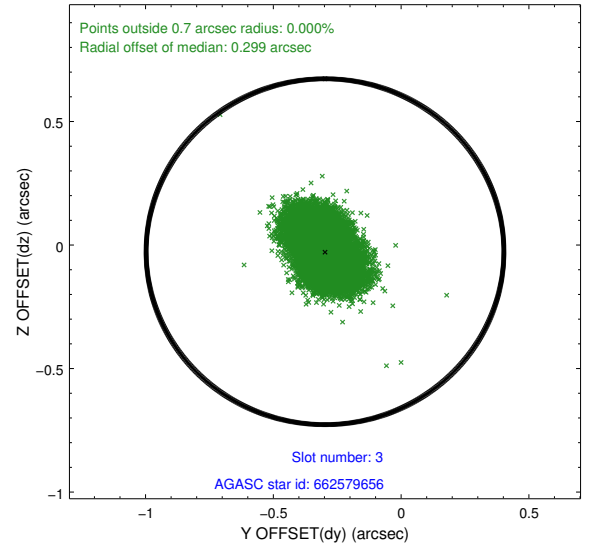
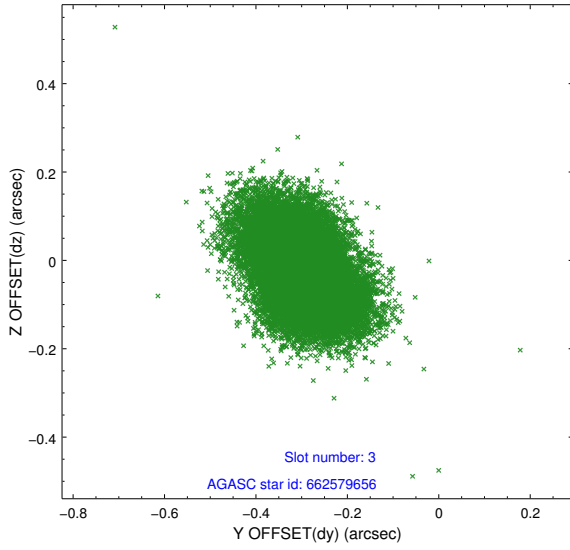
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.00	8231	-0.078	-0.064	0.008	0.016	0.000000	0.000000	-764.09	-1735.04
1	FID		ACIS-S-4	7.09	8231	0.229	0.054	0.006	0.011	0.000000	0.000000	2149.48	173.49
2	FID		ACIS-S-5	7.12	8231	-0.183	0.018	0.008	0.015	0.000000	0.000000	-1816.96	167.21
3	GUIDE	used	662579656	8.95	16449	-0.298	-0.027	0.106	0.174	254.094204	-3.624957	1911.51	-94.78
4	GUIDE	used	663093568	9.33	16453	0.097	-0.266	0.118	0.195	253.988464	-4.855009	-1893.49	2202.15
5	GUIDE	used	663100408	8.56	16458	0.057	0.186	0.136	0.203	254.990764	-4.349173	-1851.31	-1828.90
6	GUIDE	used	663100504	8.48	16461	0.063	0.071	0.222	0.301	254.578952	-4.343505	-1178.28	-512.02
7	GUIDE	used	663101768	6.83	16462	0.060	0.017	0.077	0.118	254.955768	-4.221209	-1382.01	-1920.63

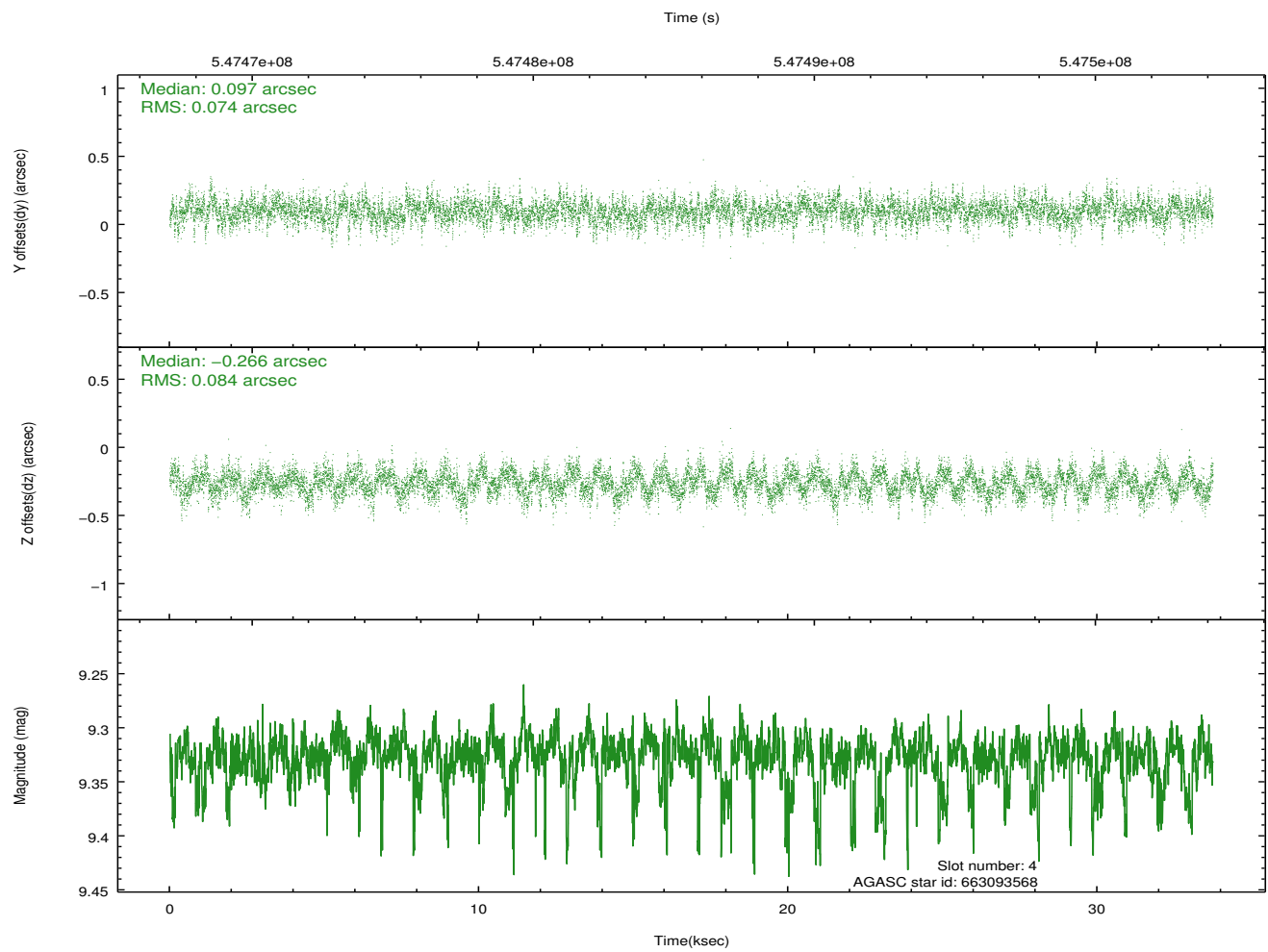
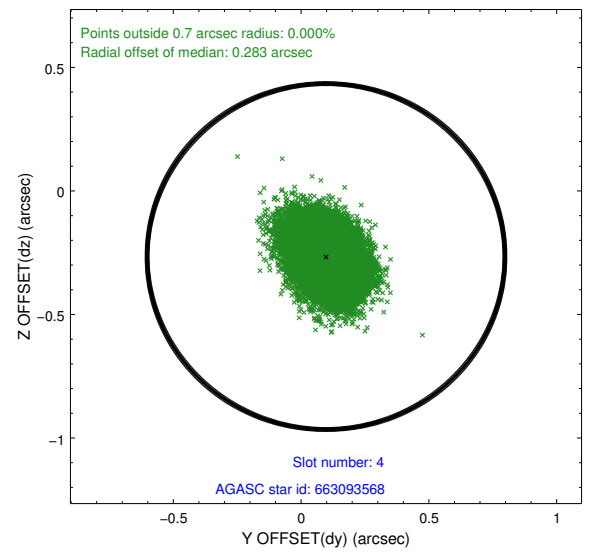
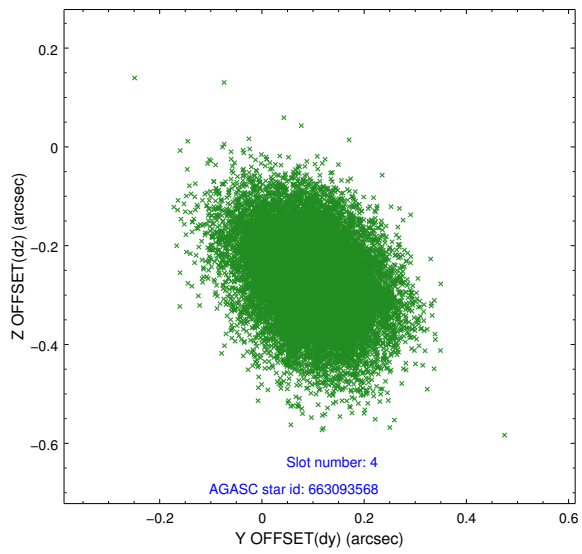
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2.4 Star Slots

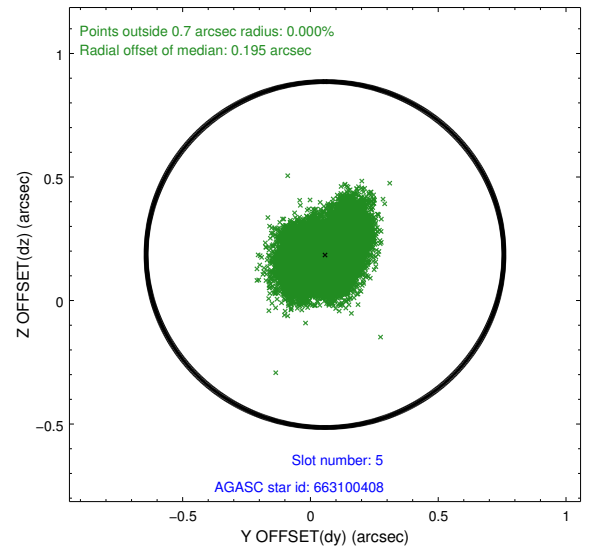
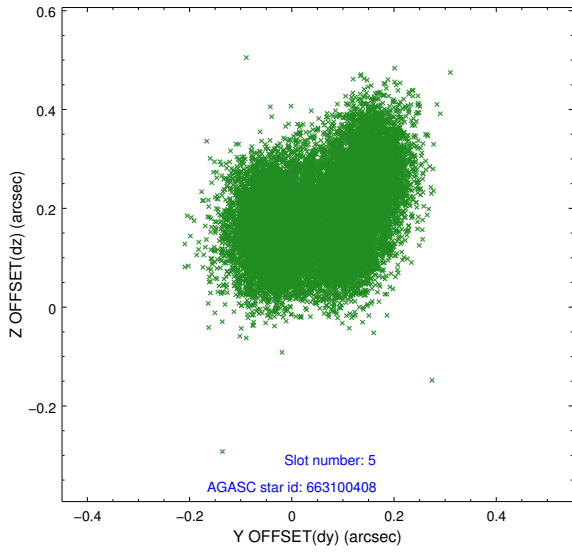
2.4.1 Slot 3



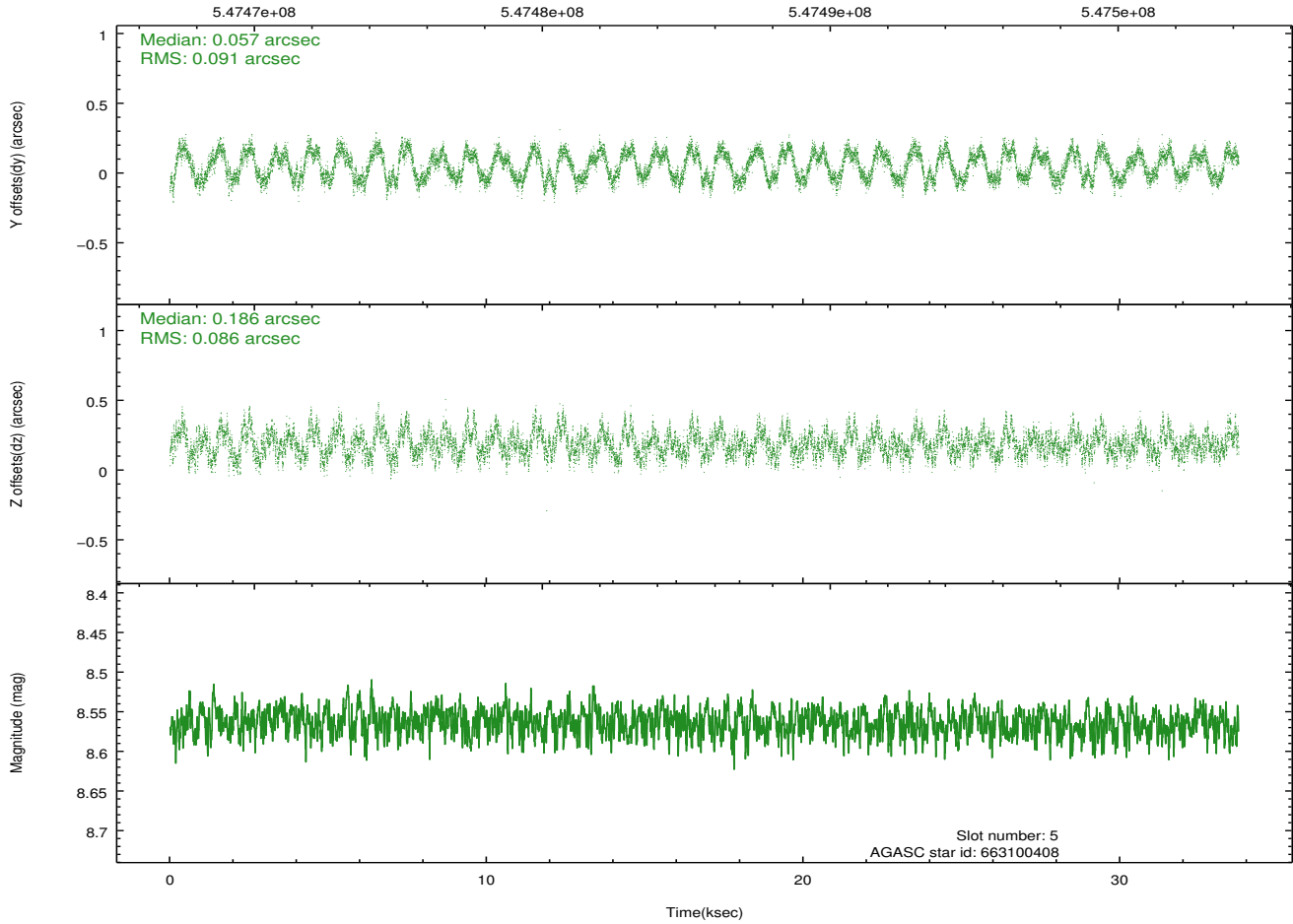
2.4.2 Slot 4



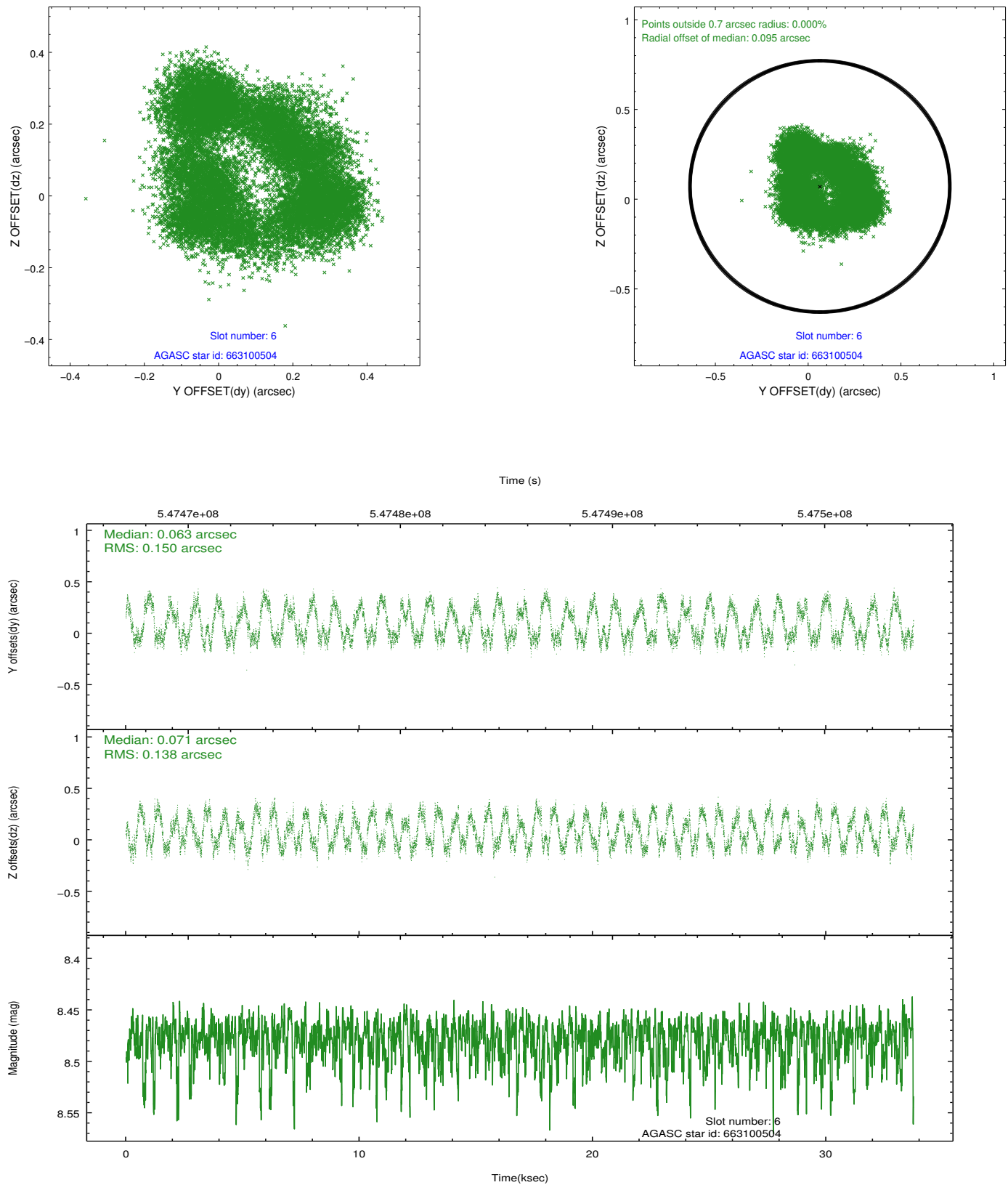
2.4.3 Slot 5



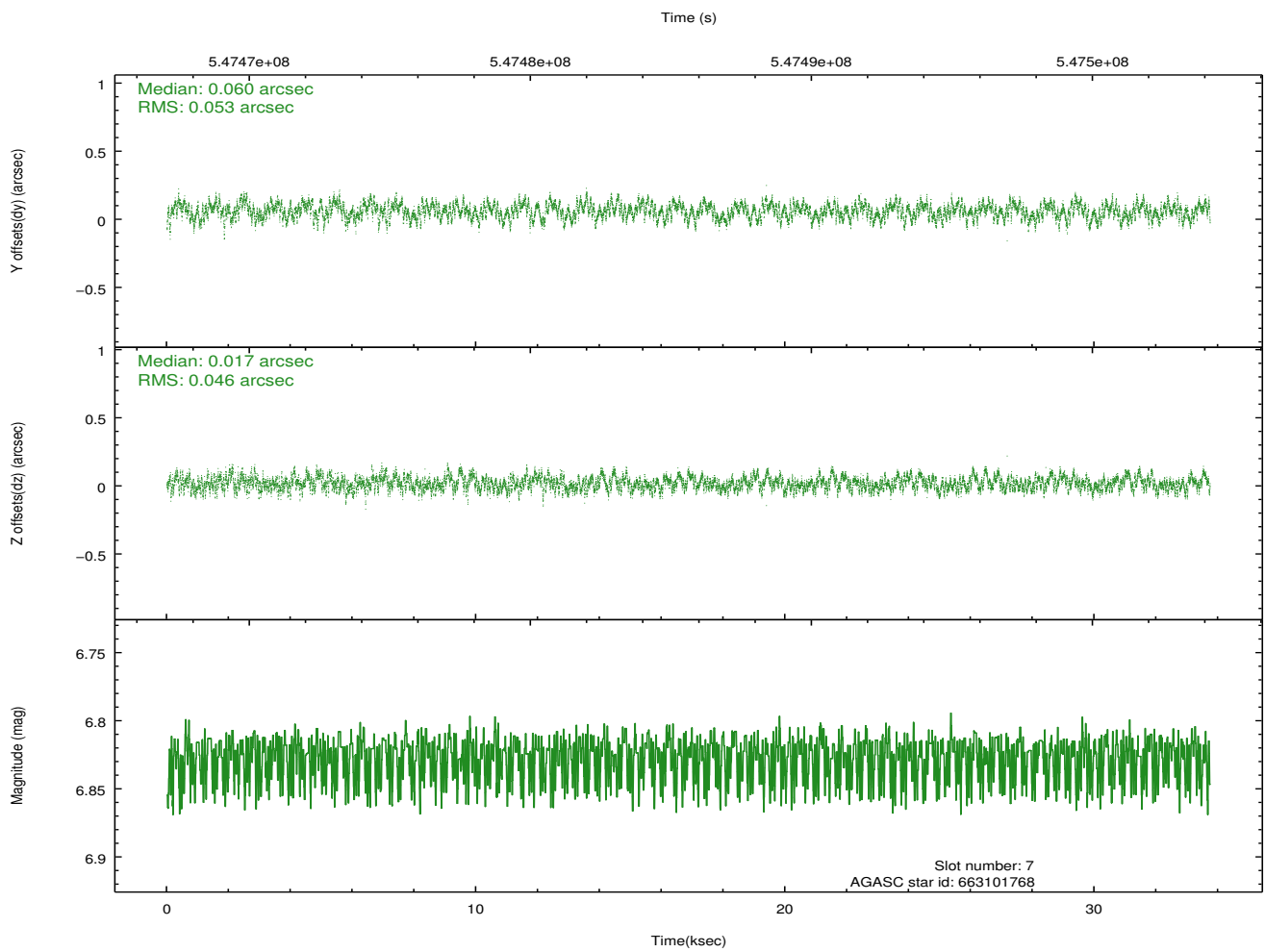
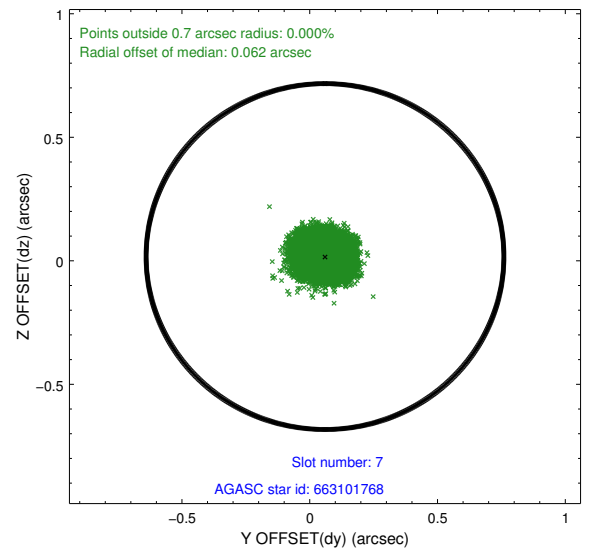
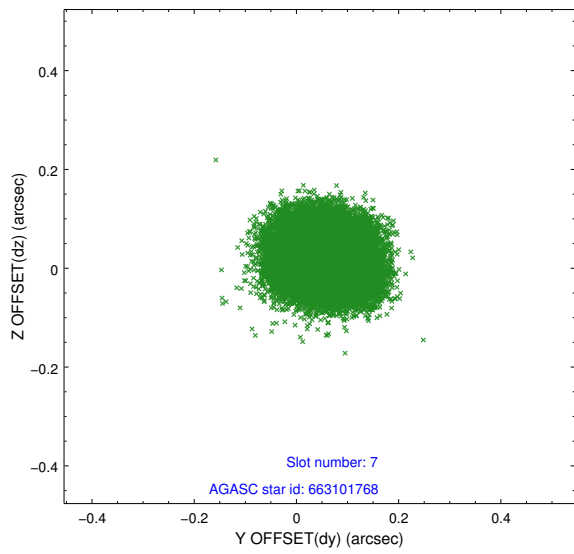
Time (s)



2.4.4 Slot 6

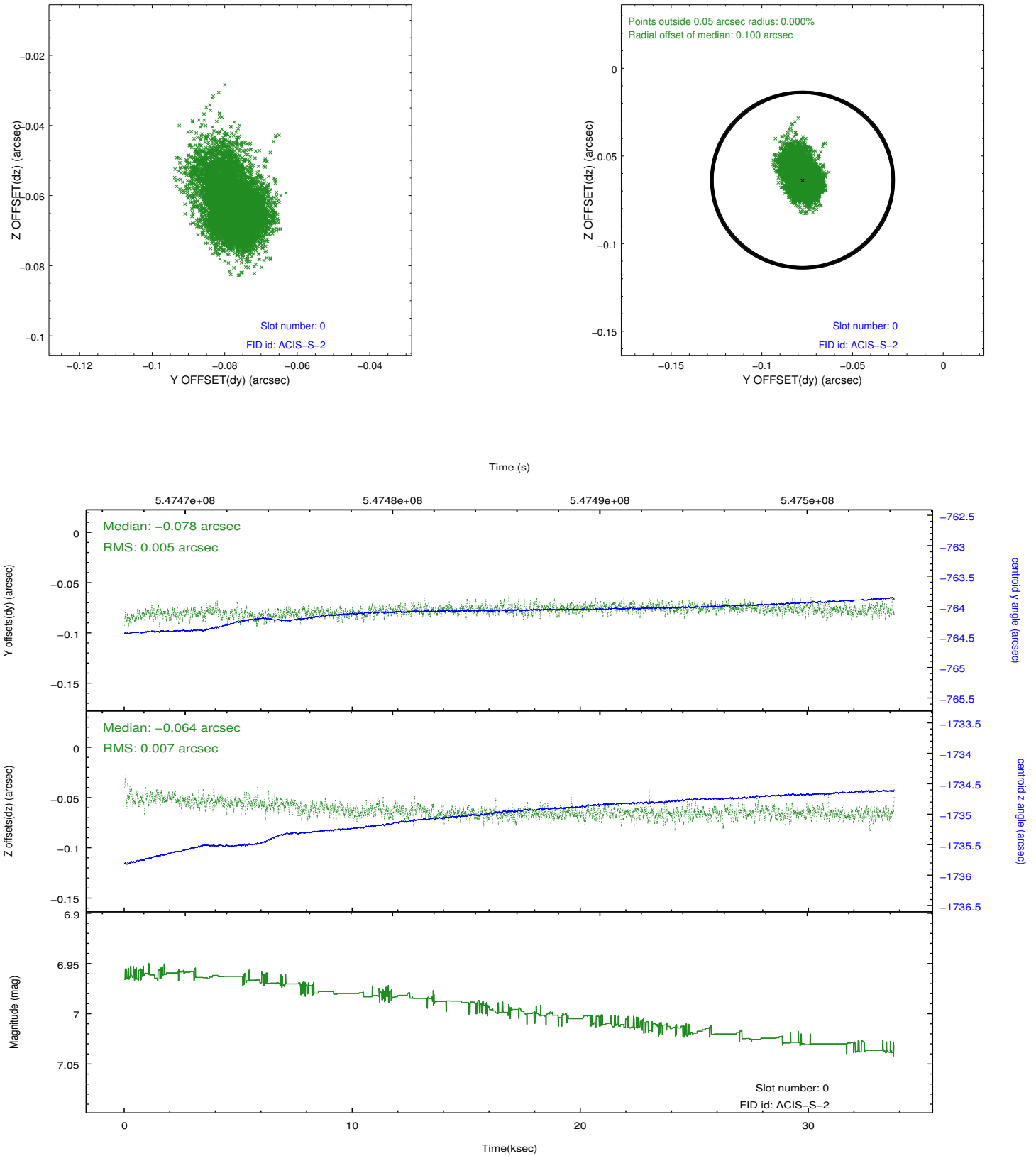


2.4.5 Slot 7

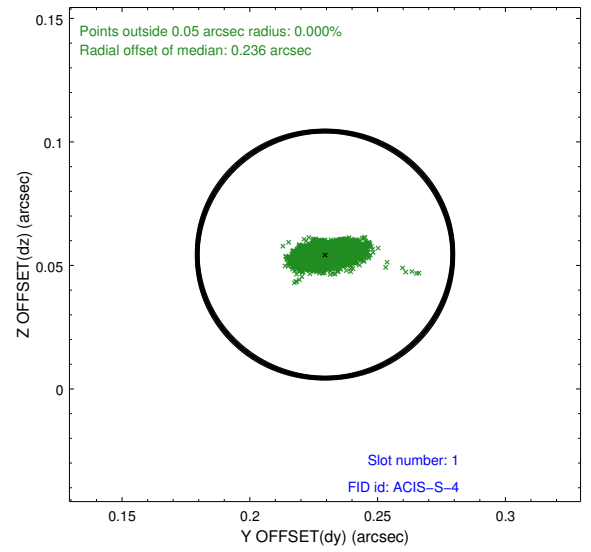
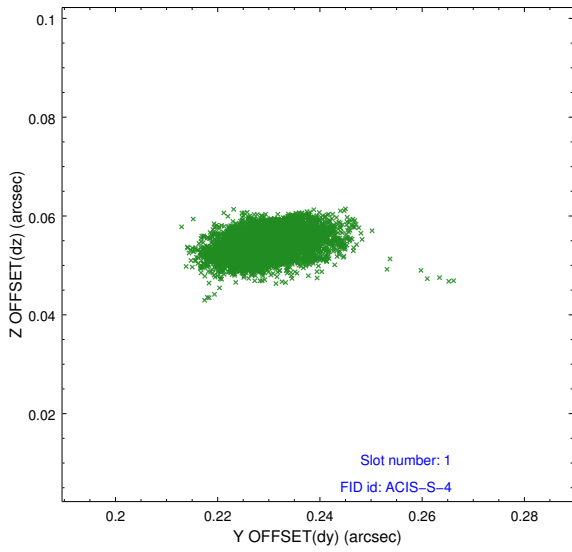


2.5 FID Slots

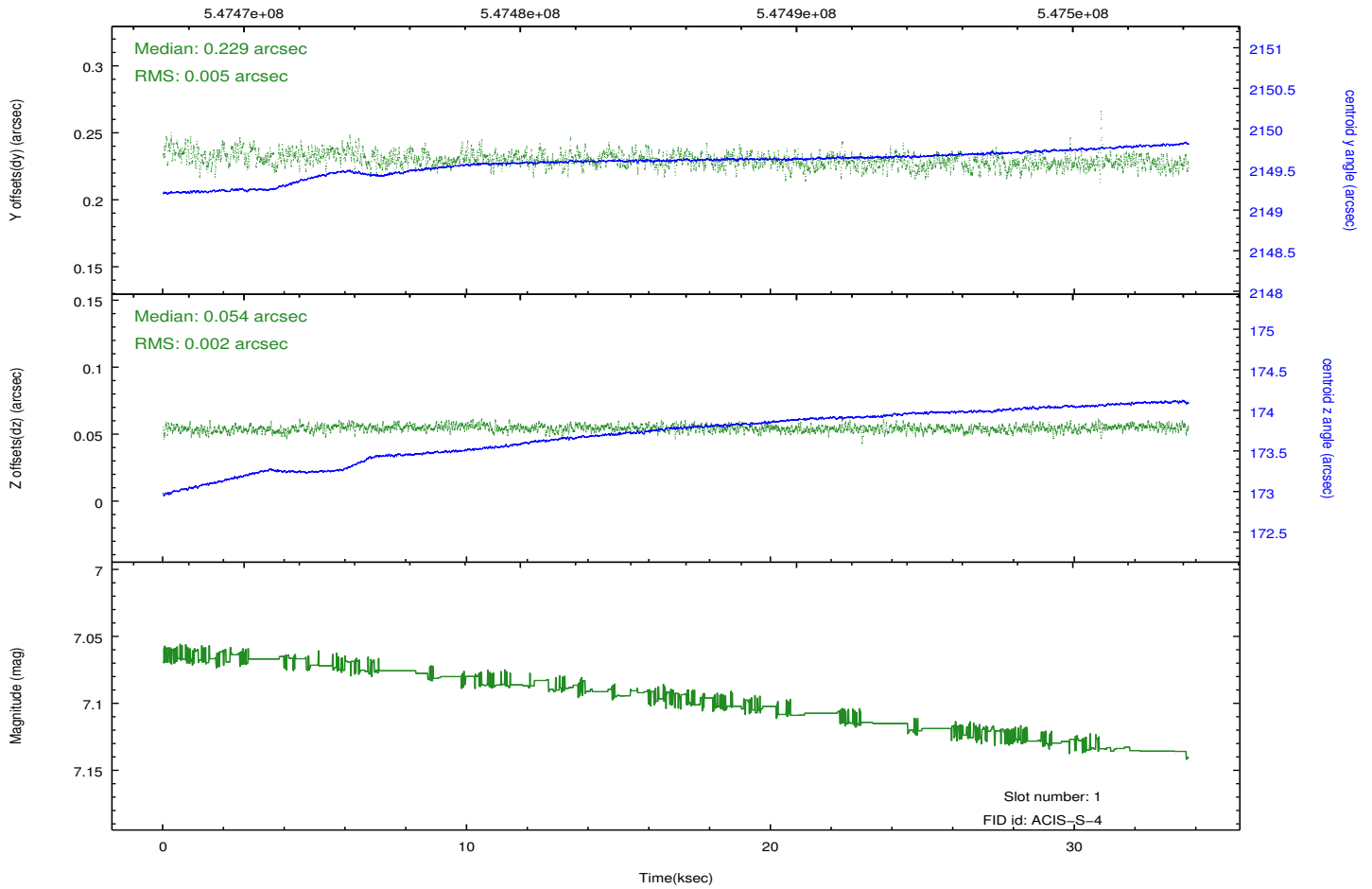
2.5.1 Slot 0



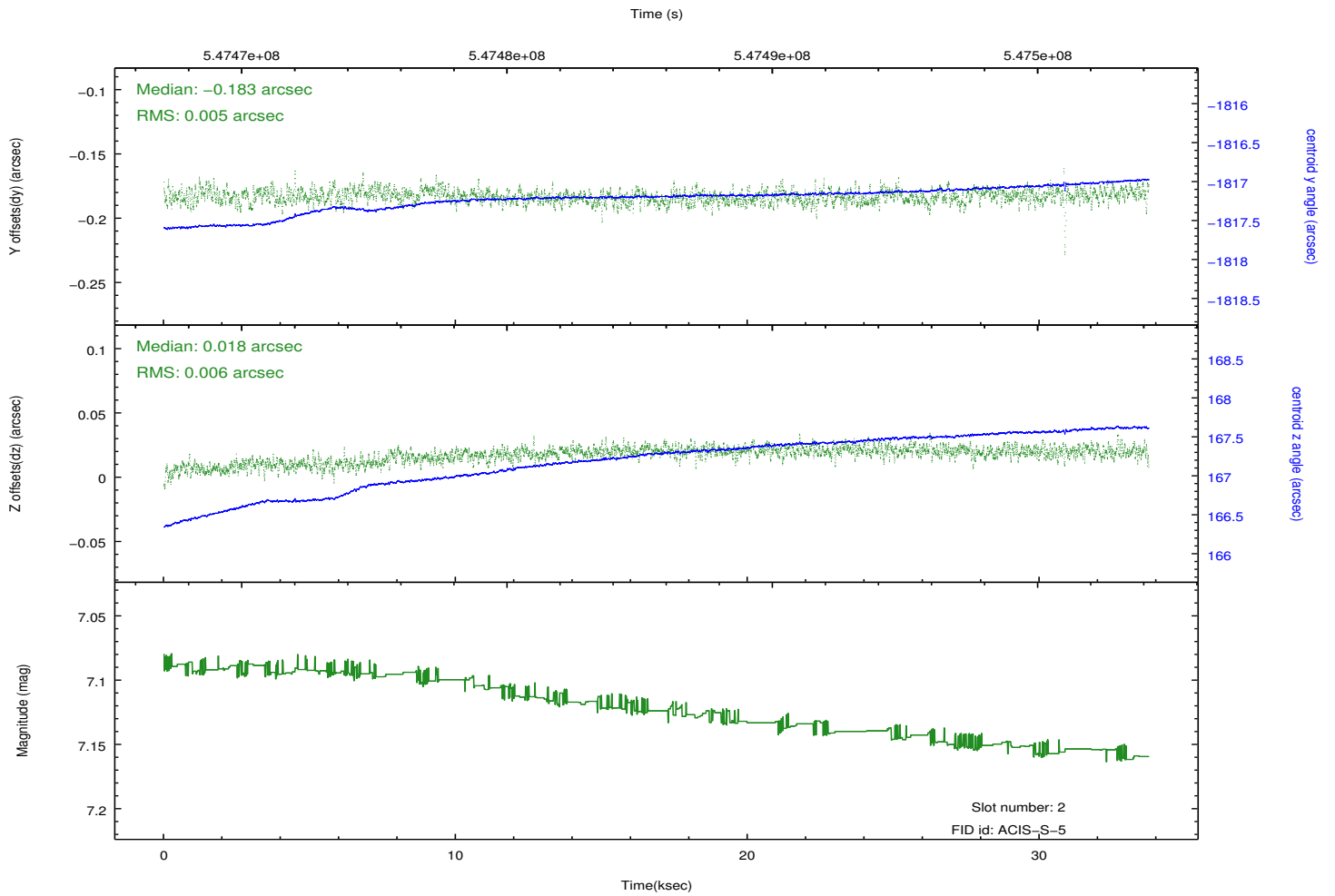
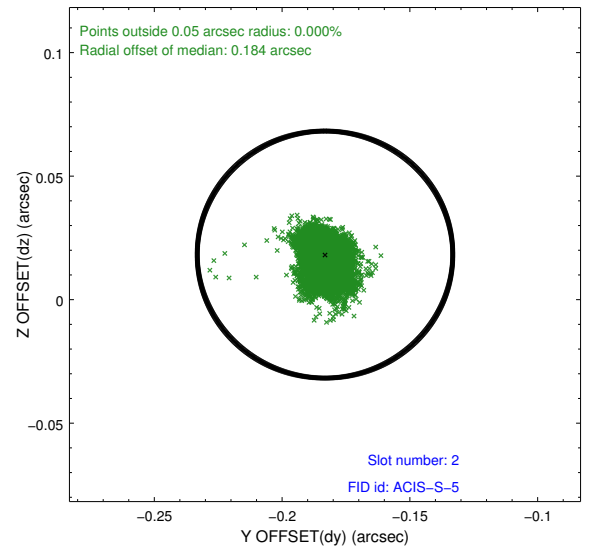
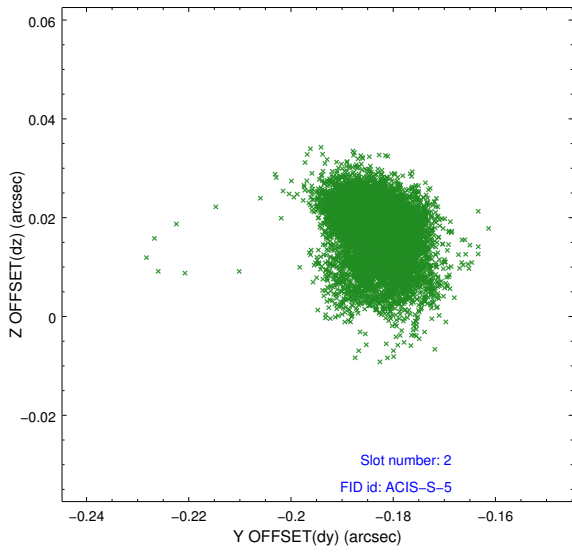
2.5.2 Slot 1



Time (s)



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2015.05.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	33.061500254393

A.2 Comments