

V&V Reference Report

L2 ASCDS Version : 10.4.2.1

Observation 17273 - L2 Version 1
Chandra X-Ray Center

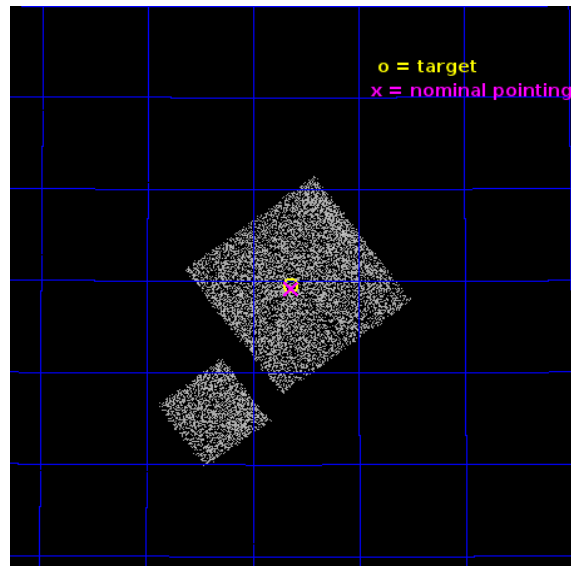
L2 Processing Date : Dec 11 2015

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

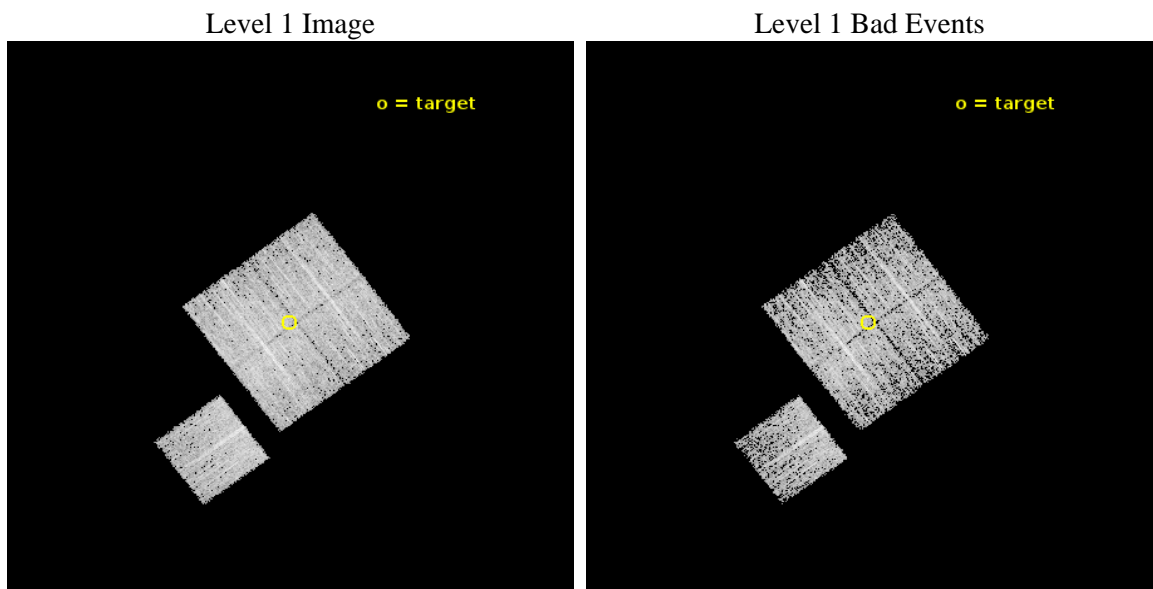
seq_num	801518	Sequence number
obs_id	17273	Observation id
title	Perseus: A New, Low-Redshift Anchor for Cluster Cosmology	Proposal
observer	Prof. Steven Allen	Principal investigator
object	Perseus cluster	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	50.66127	Observer's specified target RA [deg]
dec_targ	42.325589	Observer's specified target Dec [deg]
ra_nom	50.659099245619	Nominal RA [deg]
dec_nom	42.319345632527	Nominal Dec [deg]
roll_nom	233.21019501928	Nominal Roll [deg]
revision	1	Processing version of data
ontime	5077.8000391722	Sum of GTIs [s]
livetime	5011.4548434384	Livetime [s]
ontime0	5077.8000391722	Sum of GTIs [s]
ontime1	5077.8000391722	Sum of GTIs [s]
ontime2	5077.8000391722	Sum of GTIs [s]
ontime3	5077.8000391722	Sum of GTIs [s]
ontime6	5077.8000391722	Sum of GTIs [s]
l2events	13963	Number of level 2 events



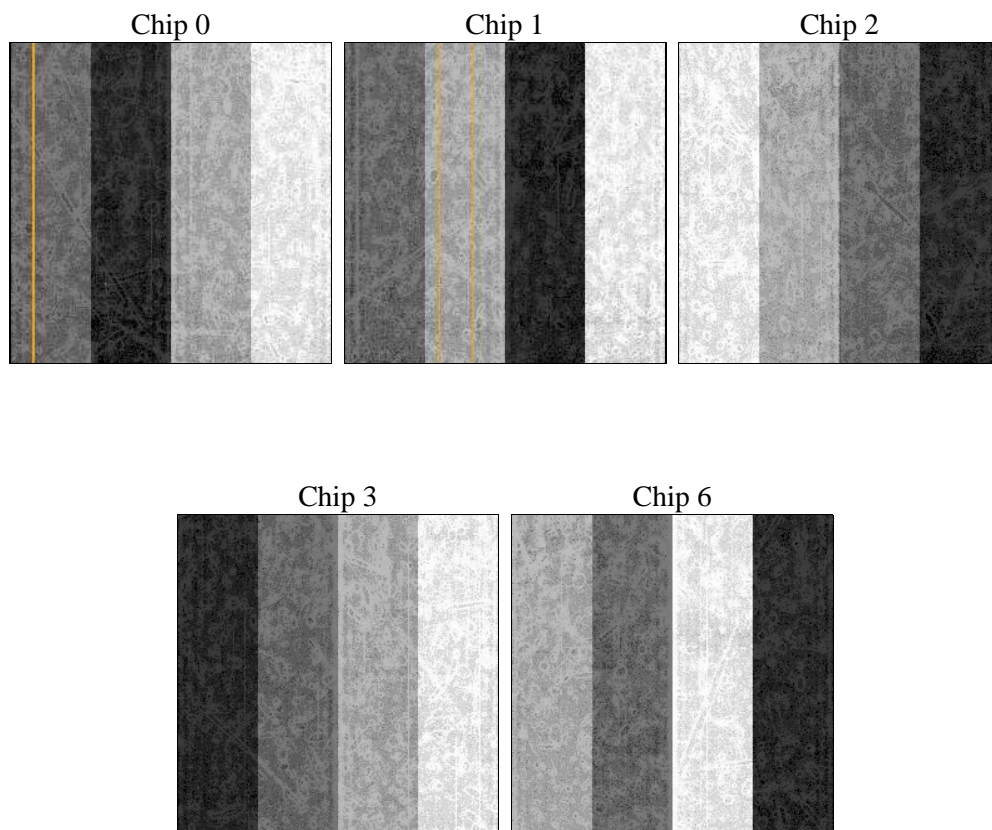
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	2	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	10.4.2.1	Processing system revision	ontime	5077.8000391722	Sum of GTIs [s]
caldsver	4.6.10a	 	ontime0	5077.8000391722	Sum of GTIs [s]
date	2015-12-12T03:05:37	Date and time of file creation	ontime1	5077.8000391722	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	5077.8000391722	Sum of GTIs [s]
			ontime3	5077.8000391722	Sum of GTIs [s]
			ontime6	5077.8000391722	Sum of GTIs [s]
			l1events	130544	Number of level 1 events

2.1.4 Events

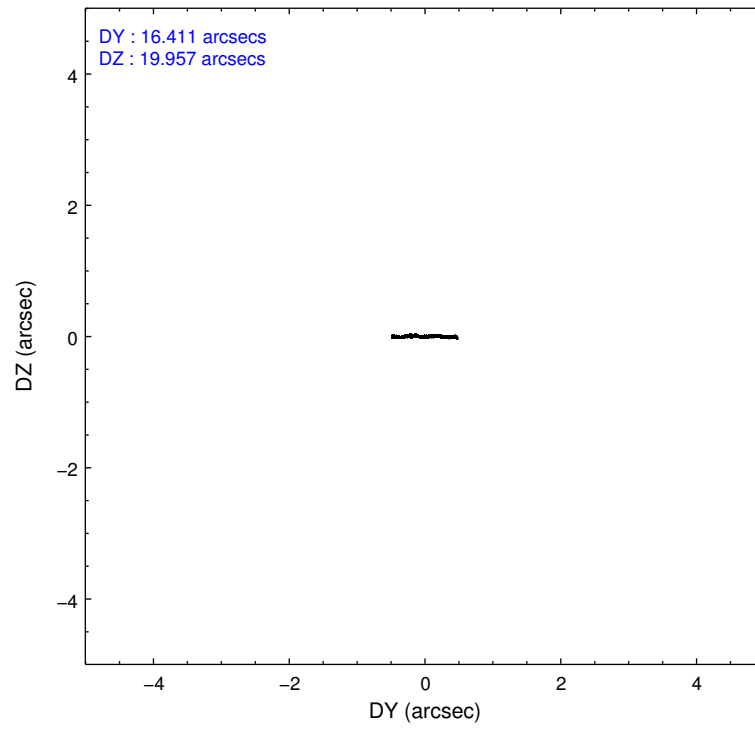
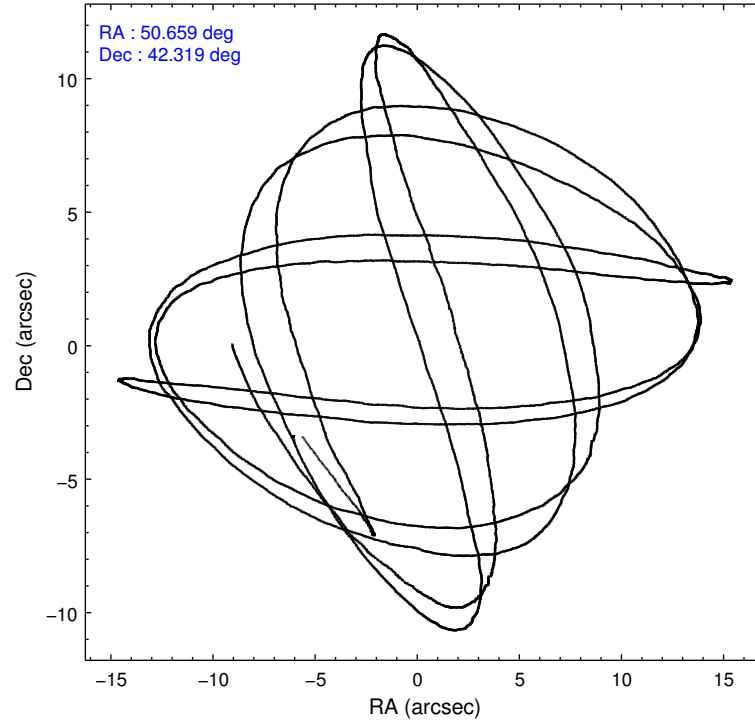
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	24730	24939	27107	27554	26214
rejected events	21419	21208	23816	24512	22975
rejected %	86%	85%	87%	88%	87%

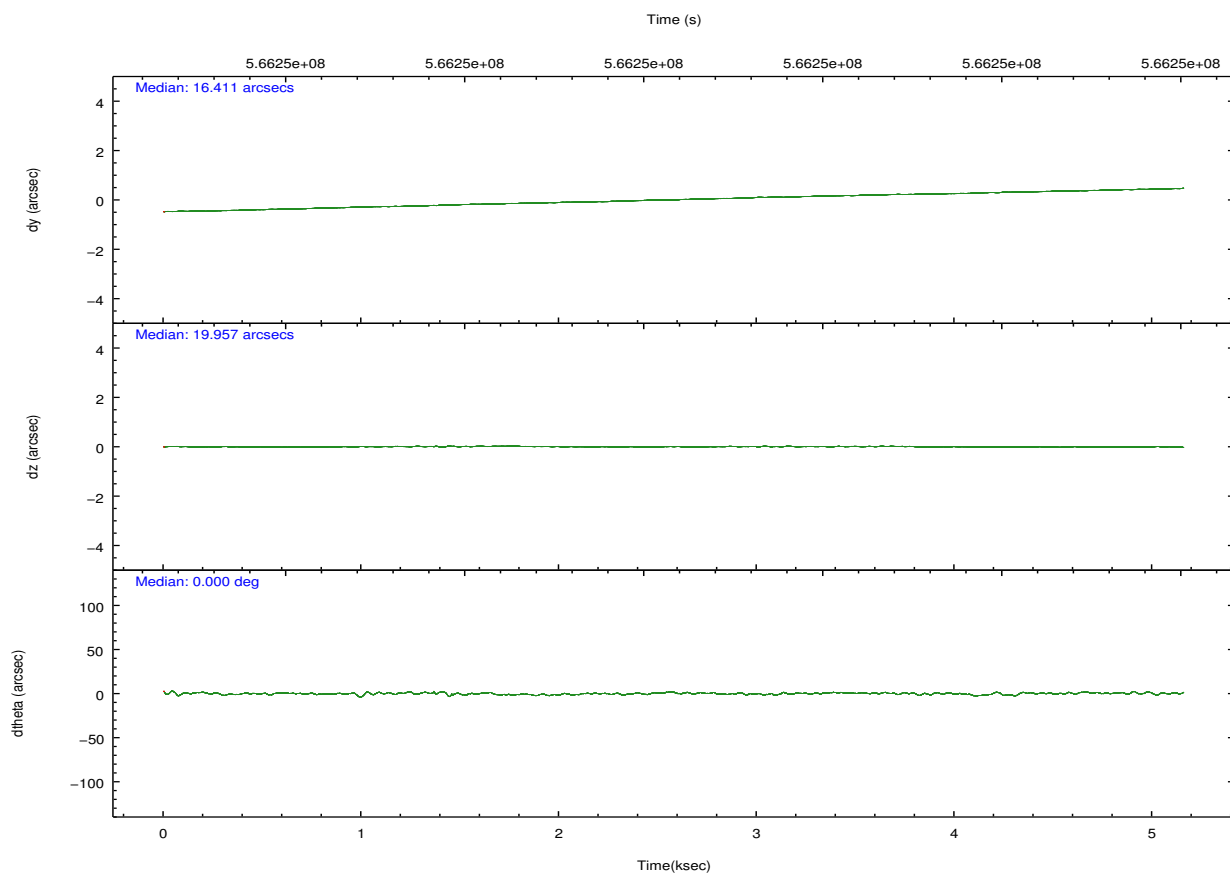
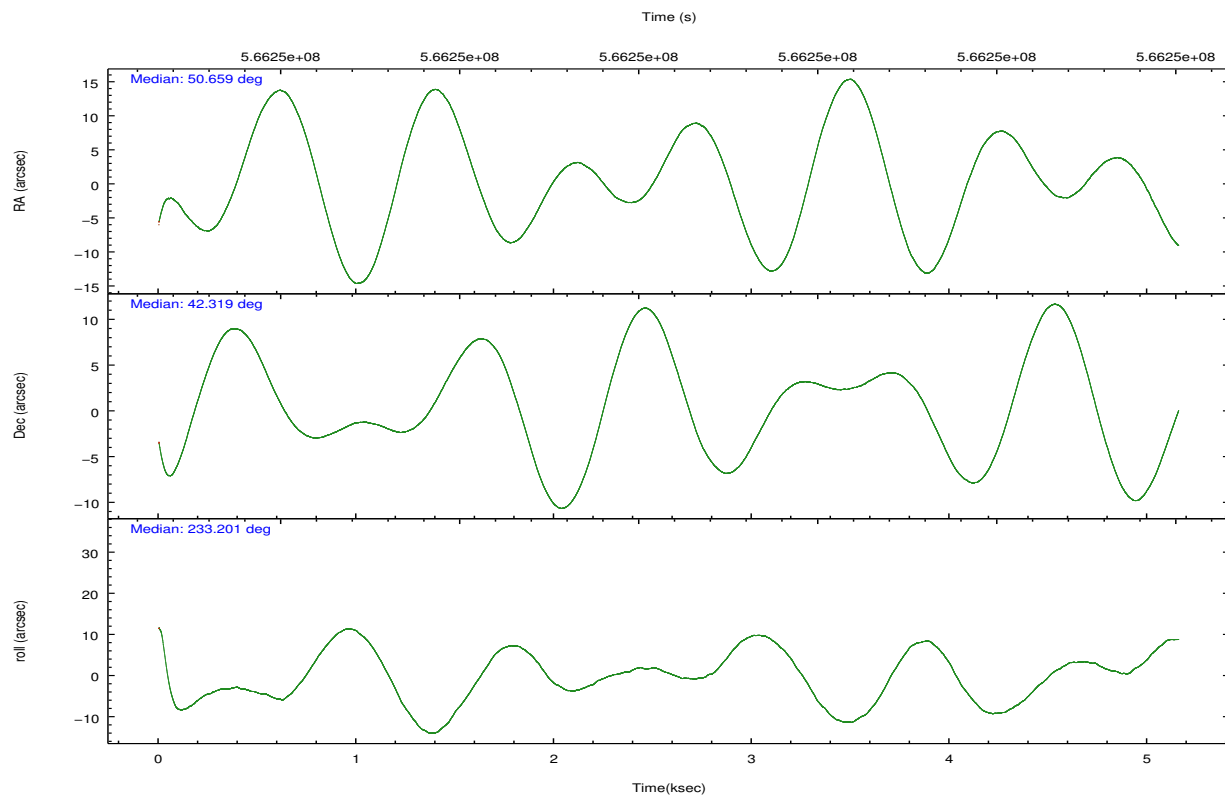
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	1165	1326	1308	1135	1135
	4%	5%	4%	4%	4%
grade 1 events	19	17	14	13	10
	0%	0%	0%	0%	0%
grade 2 events	849	941	754	681	735
	3%	3%	2%	2%	2%
grade 3 events	351	347	311	298	319
	1%	1%	1%	1%	1%
grade 4 events	306	361	319	289	306
	1%	1%	1%	1%	1%
grade 5 events	1221	1250	1138	1366	1288
	4%	5%	4%	4%	4%
grade 6 events	642	759	603	643	748
	2%	3%	2%	2%	2%
grade 7 events	20177	19938	22660	23129	21673
	81%	79%	83%	83%	82%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	50.663394	50.6590992456192	CCD I2 on	Y	Y
[deg] Pointing Dec	42.346825	42.31934563252653	CCD I3 on	Y	Y
[deg] Pointing Roll	232.998573	233.2101950192822	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	O1	Y
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	N	N
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	566248739.184000	566247327.95329	CCD S5 on	N	N
Observation start date	2015-12-11T19:17:51	2015-12-11T18:55:27	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	566253739.184000	566254043.75367	On-chip summing requested	N	N
Observation end date	2015-12-11T20:41:11	2015-12-11T20:47:23	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



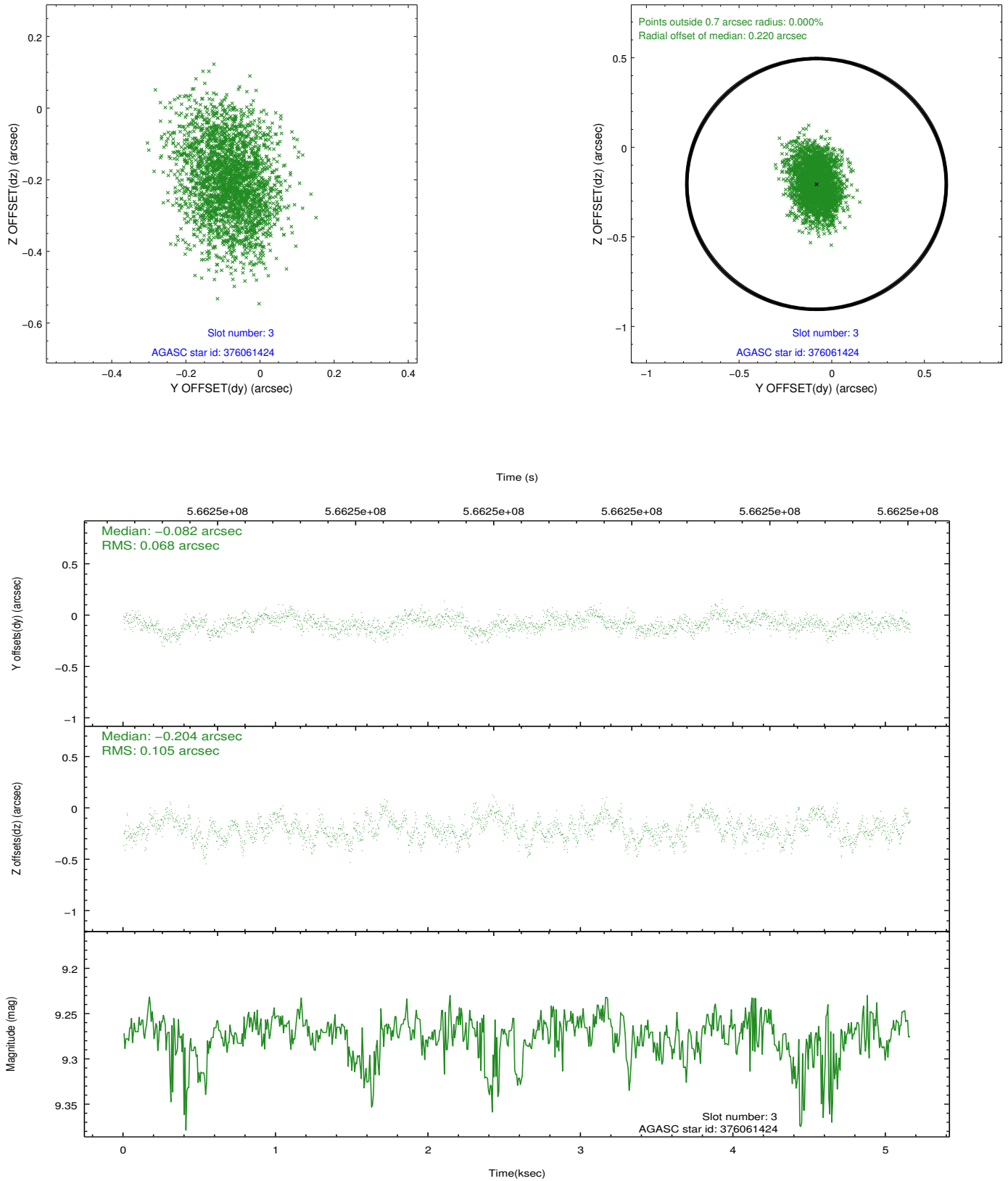


Slot Statistics

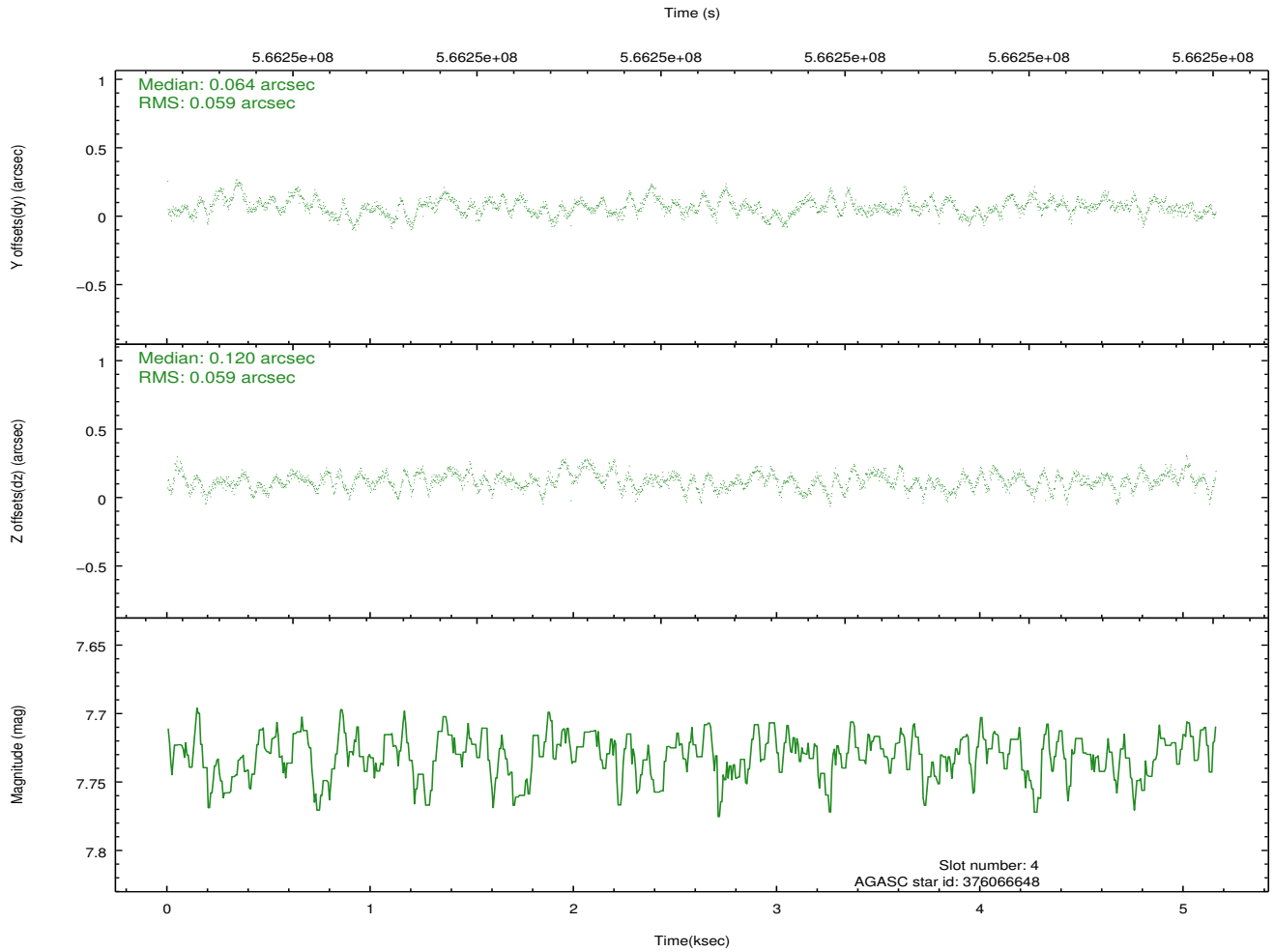
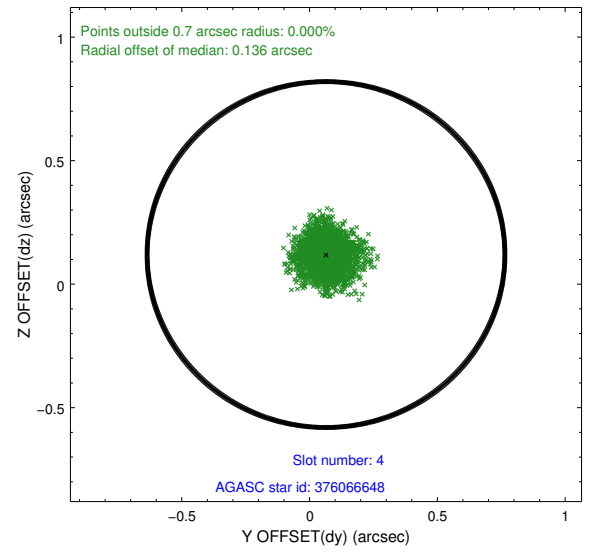
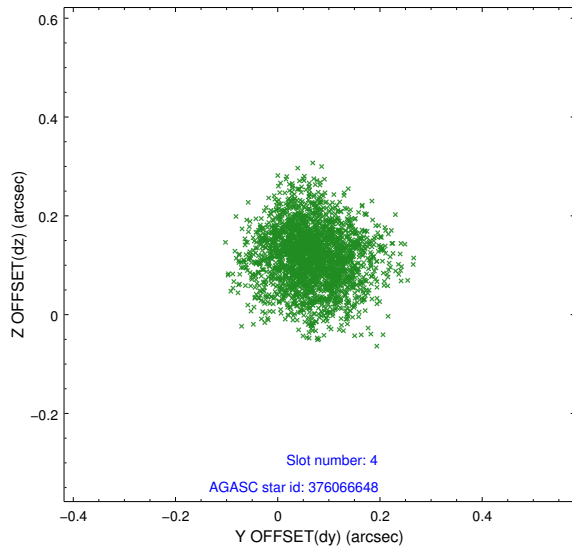
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.24	1259	-0.030	-0.051	0.012	0.019	0.000000	0.000000	922.94	-843.77
1	FID		ACIS-I-2	7.15	1259	-0.284	-0.112	0.008	0.014	0.000000	0.000000	-770.75	-850.80
2	FID		ACIS-I-4	7.17	1257	0.217	0.230	0.011	0.017	0.000000	0.000000	2142.61	1055.67
3	GUIDE	used	376061424	9.27	2515	-0.082	-0.204	0.136	0.217	51.403542	42.058446	-368.54	2199.37
4	GUIDE	used	376066648	7.73	2517	0.064	0.120	0.090	0.143	50.550240	42.822138	-1186.42	-1266.54
5	GUIDE	used	376070040	8.42	2517	0.021	-0.013	0.091	0.141	50.072031	41.897206	2241.82	-294.48
6	GUIDE	used	374350312	8.45	2516	0.008	-0.009	0.092	0.142	49.824622	42.610331	572.54	-2352.24
7	GUIDE	used	376050808	9.23	2511	-0.018	0.108	0.096	0.159	51.635981	42.512231	-2040.47	1692.62

2.4 Star Slots

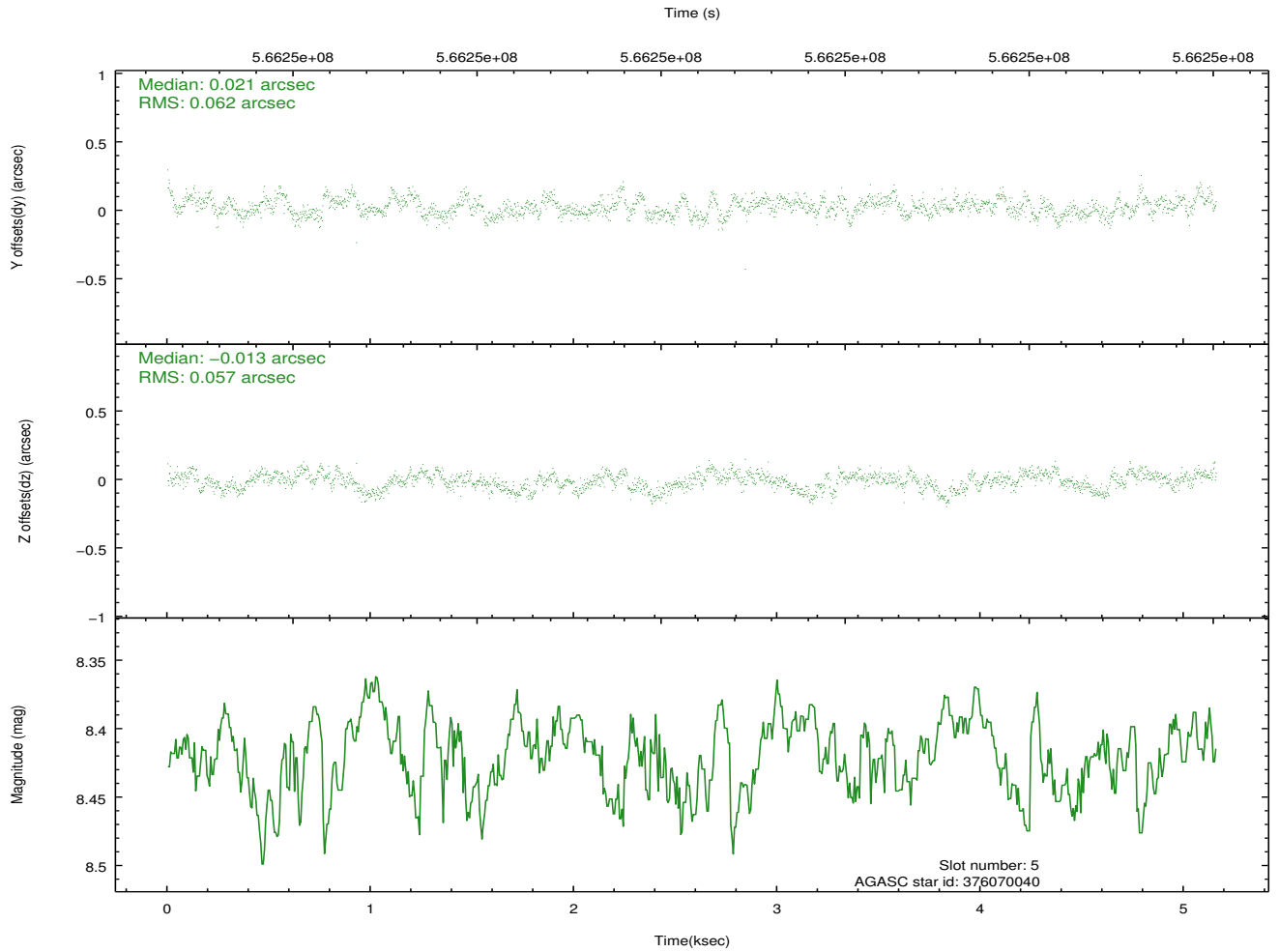
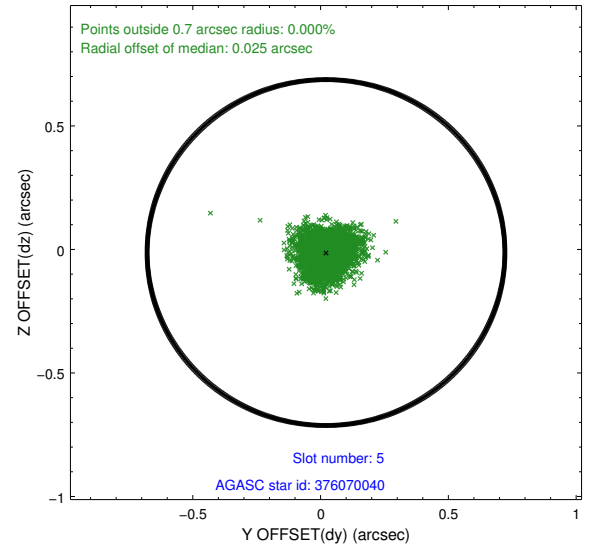
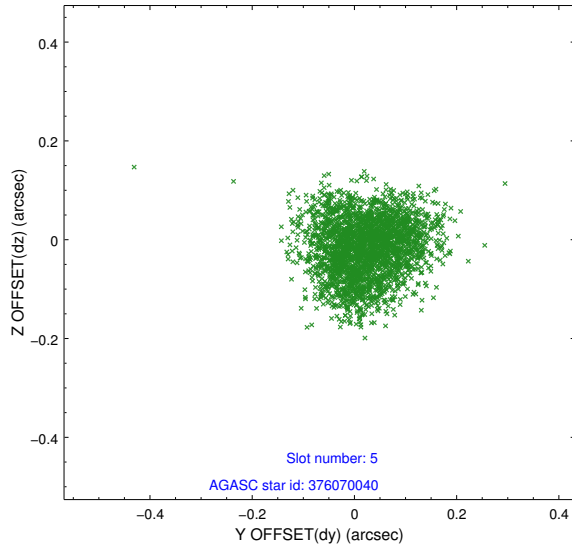
2.4.1 Slot 3



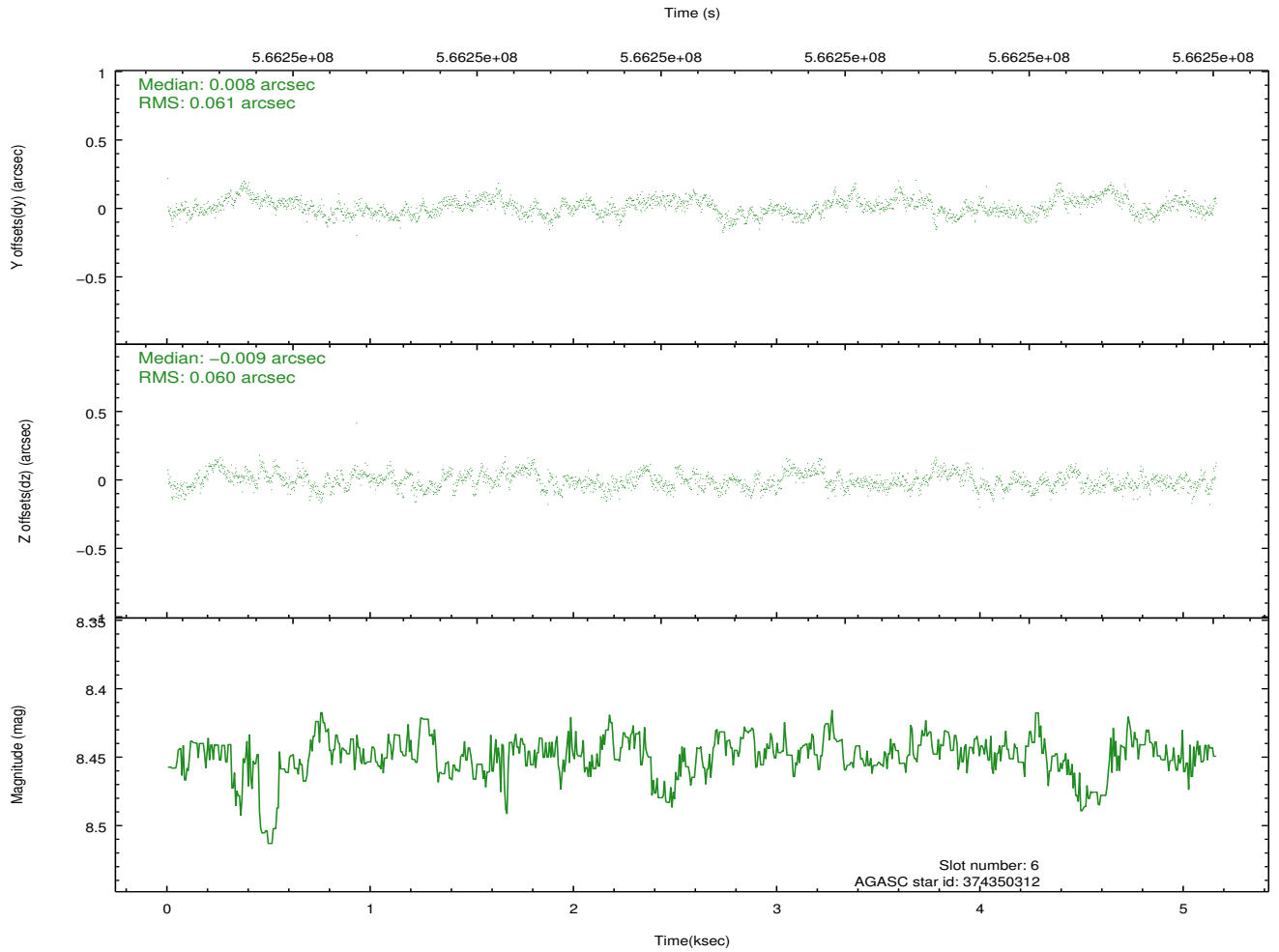
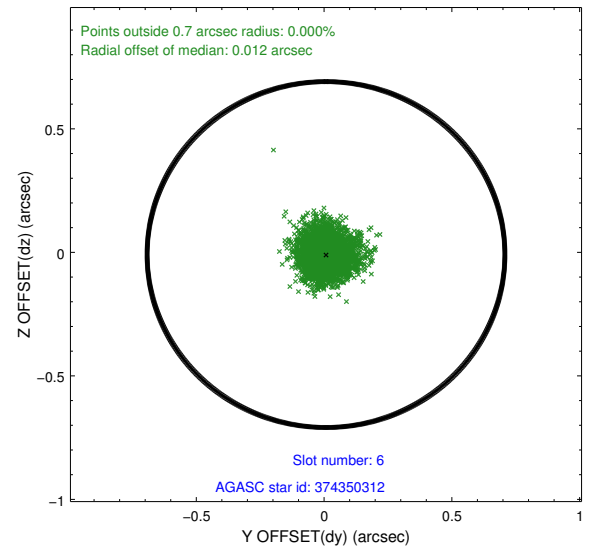
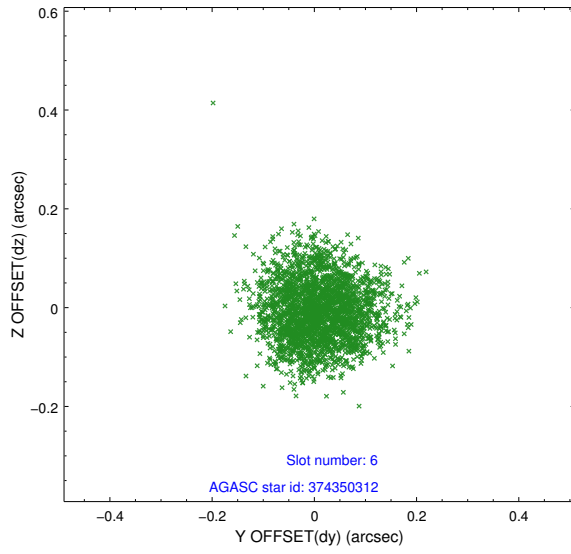
2.4.2 Slot 4



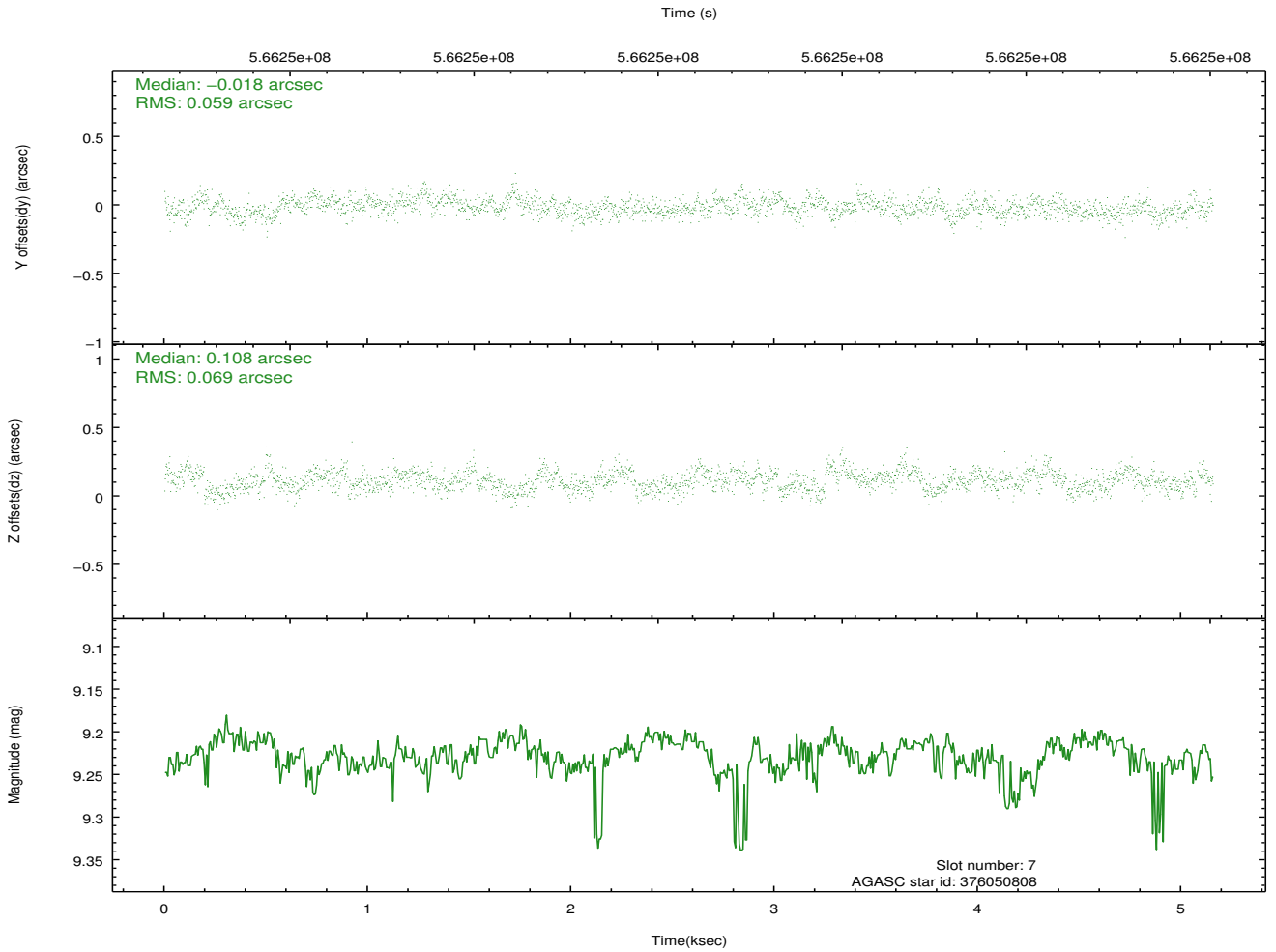
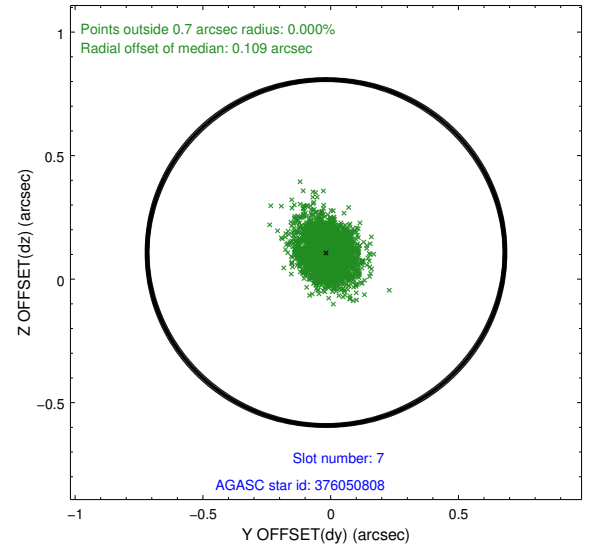
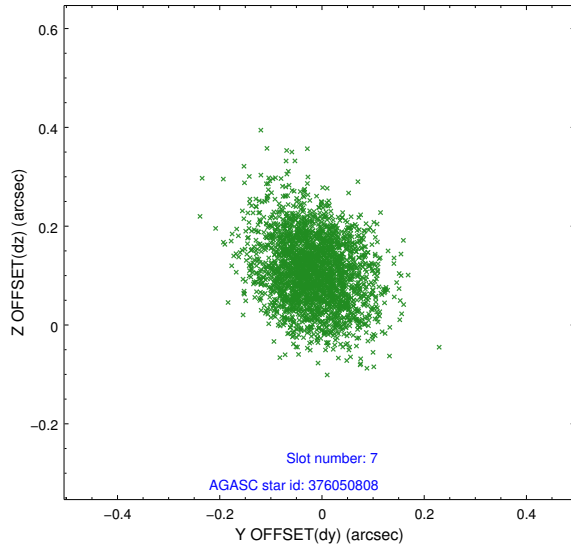
2.4.3 Slot 5



2.4.4 Slot 6

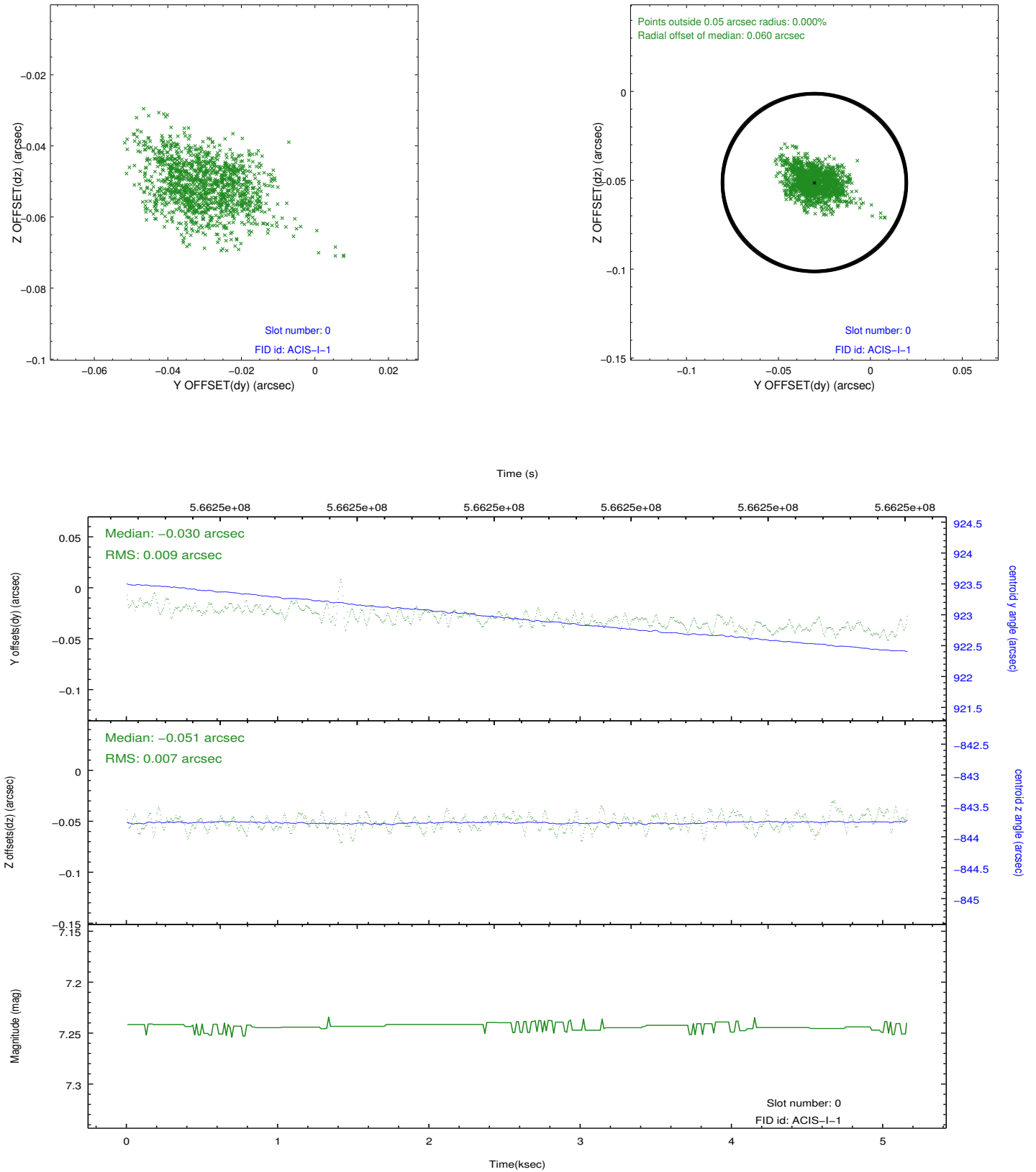


2.4.5 Slot 7

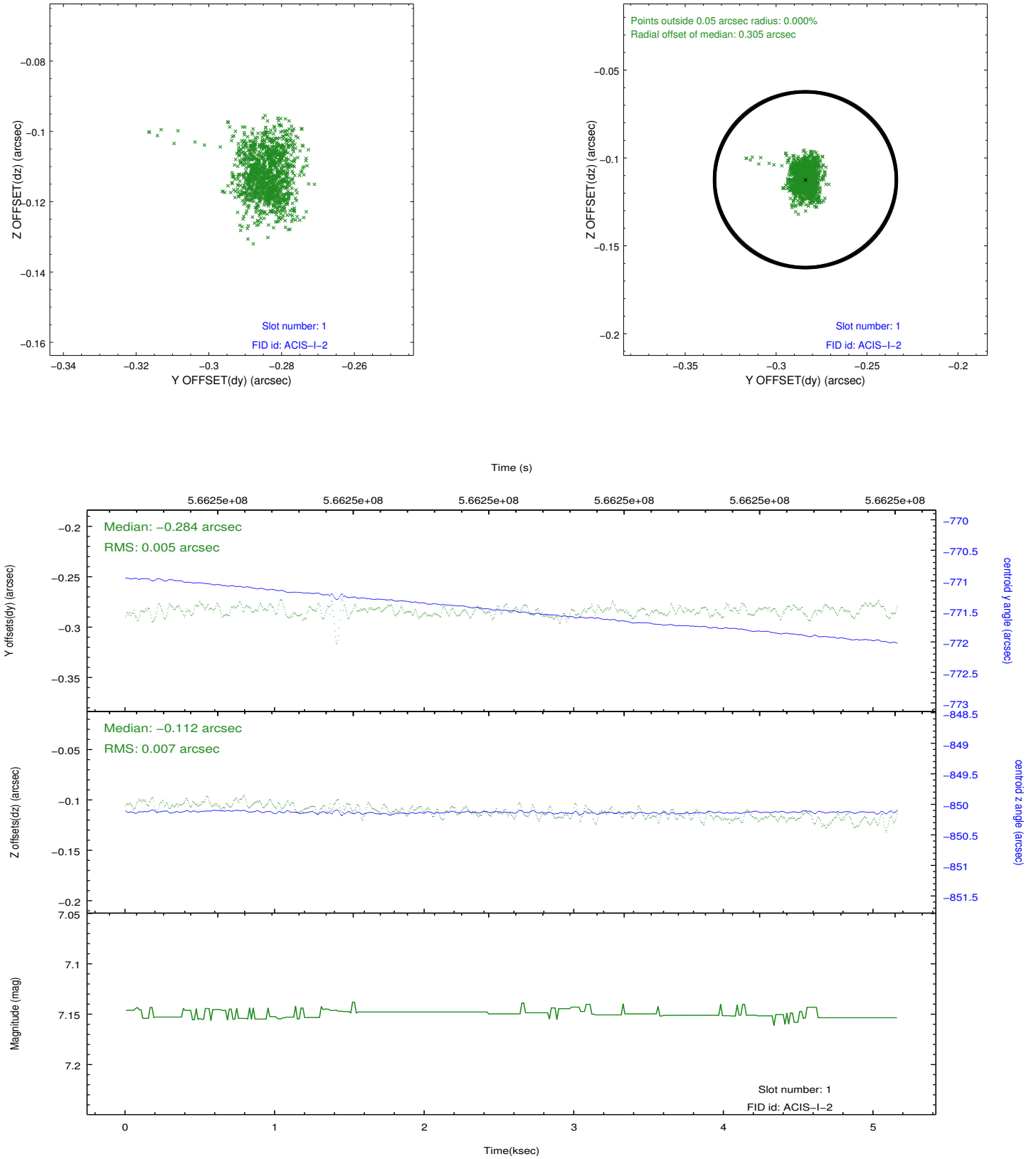


2.5 FID Slots

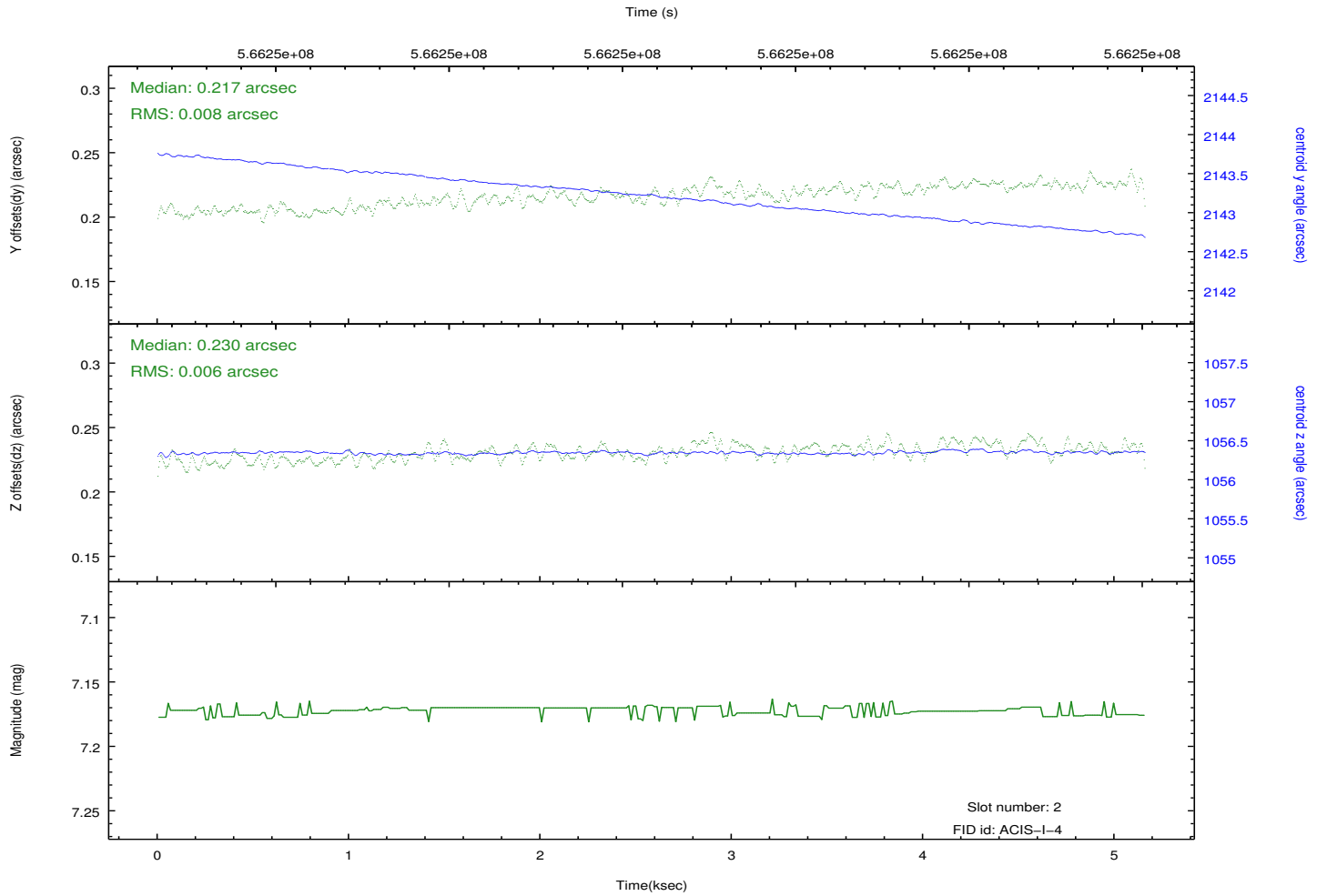
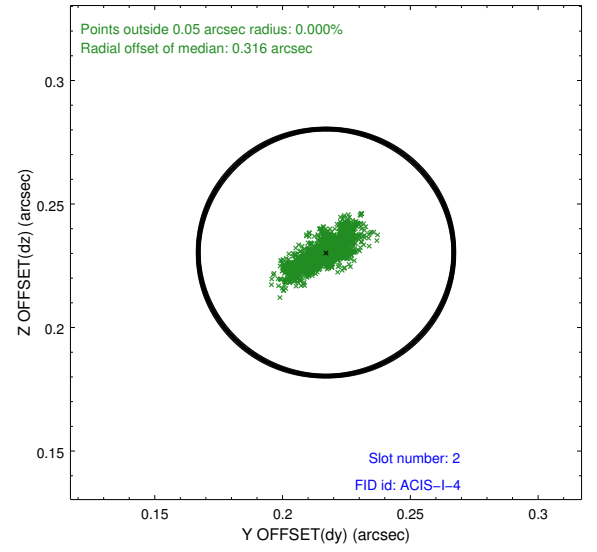
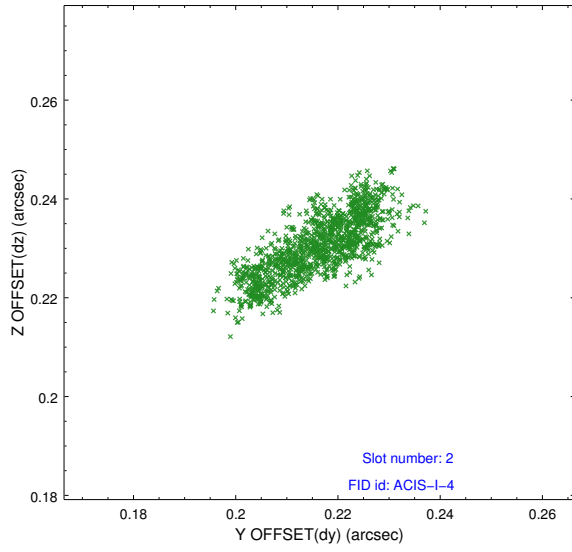
2.5.1 Slot 0



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)	2015.12.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.0778000391722

A.2 Comments