

V&V Reference Report

L2 ASCDS Version : 10.4.3.1

Observation 18825 - L2 Version 1
Chandra X-Ray Center

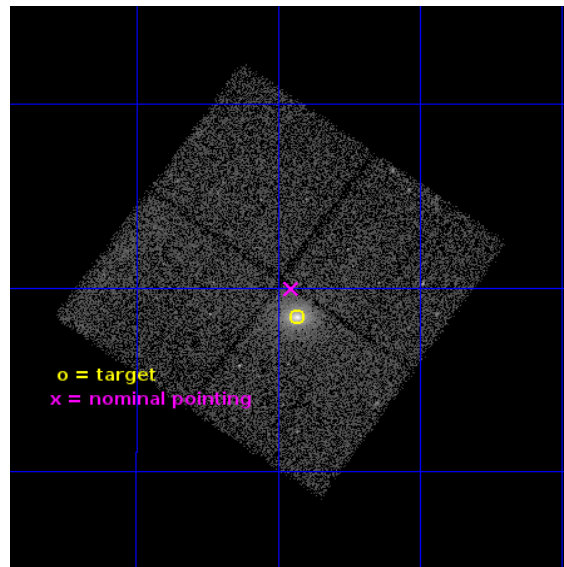
L2 Processing Date : Apr 7 2016

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1 Front

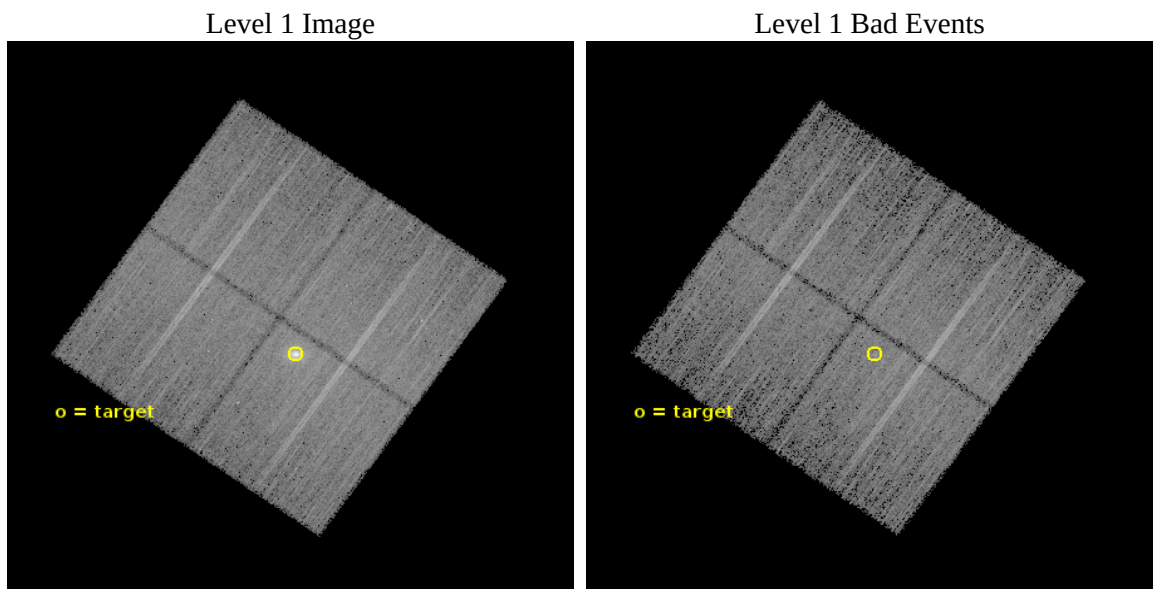
seq_num	801502	Sequence number
obs_id	18825	Observation id
title	Chandra observations of the massive galaxy cluster MACS J1447.4+0827 at z=0.3755	Proposal title
observer	Julie Hlavacek-Larrondo	Principal investigator
object	MACS J1447.4+0827	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	221.857917	Observer's specified target RA [deg]
dec_targ	8.473194	Observer's specified target Dec [deg]
ra_nom	221.86296583441	Nominal RA [deg]
dec_nom	8.4992226052089	Nominal Dec [deg]
roll_nom	125.20793639699	Nominal Roll [deg]
revision	1	Processing version of data
ontime	25077.736688018	Sum of GTIs [s]
livetime	24750.077596228	Livetime [s]
ontime0	25074.472487688	Sum of GTIs [s]
ontime1	25074.513557792	Sum of GTIs [s]
ontime2	25077.695648074	Sum of GTIs [s]
ontime3	25077.736688018	Sum of GTIs [s]
l2events	76227	Number of level 2 events



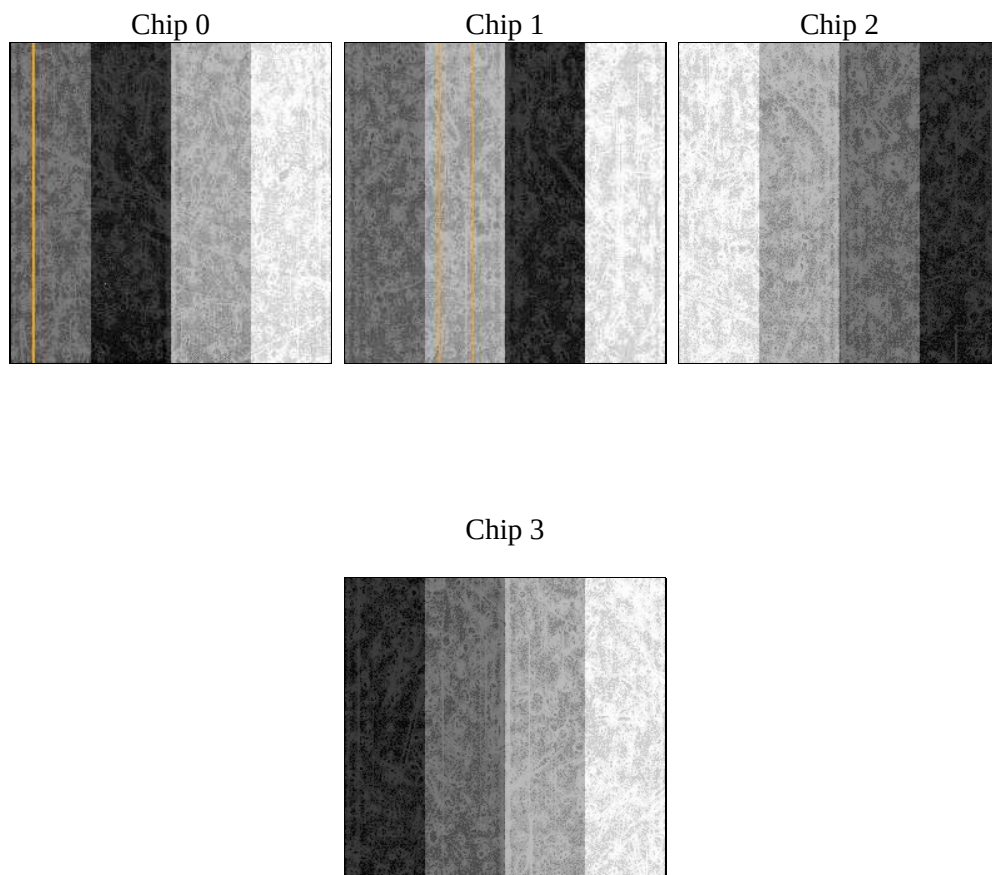
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	25000.000000	[s] Scheduled observation exposure time
ascdsver	10.4.3.1	Processing system revision	ontime	25077.736688018	Sum of GTIs [s]
caldsver	4.7.1	 	ontime0	25074.472487688	Sum of GTIs [s]
date	2016-04-07T13:57:06	Date and time of file creation	ontime1	25074.513557792	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	25077.695648074	Sum of GTIs [s]
			ontime3	25077.736688018	Sum of GTIs [s]
			l1events	631535	Number of level 1 events

2.1.4 Events

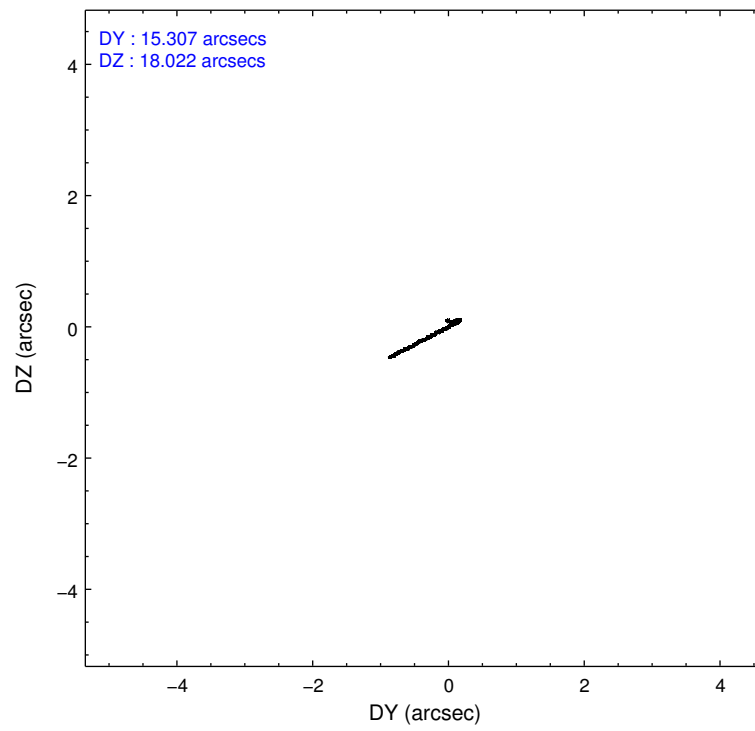
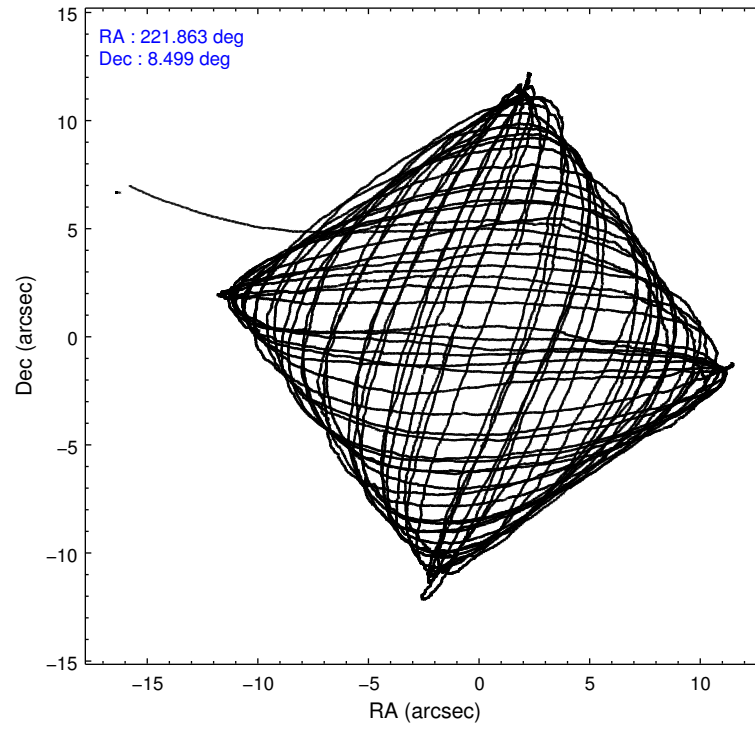
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	145135	147333	165734	173333
rejected events	127773	128195	147773	140362
rejected %	88%	87%	89%	80%

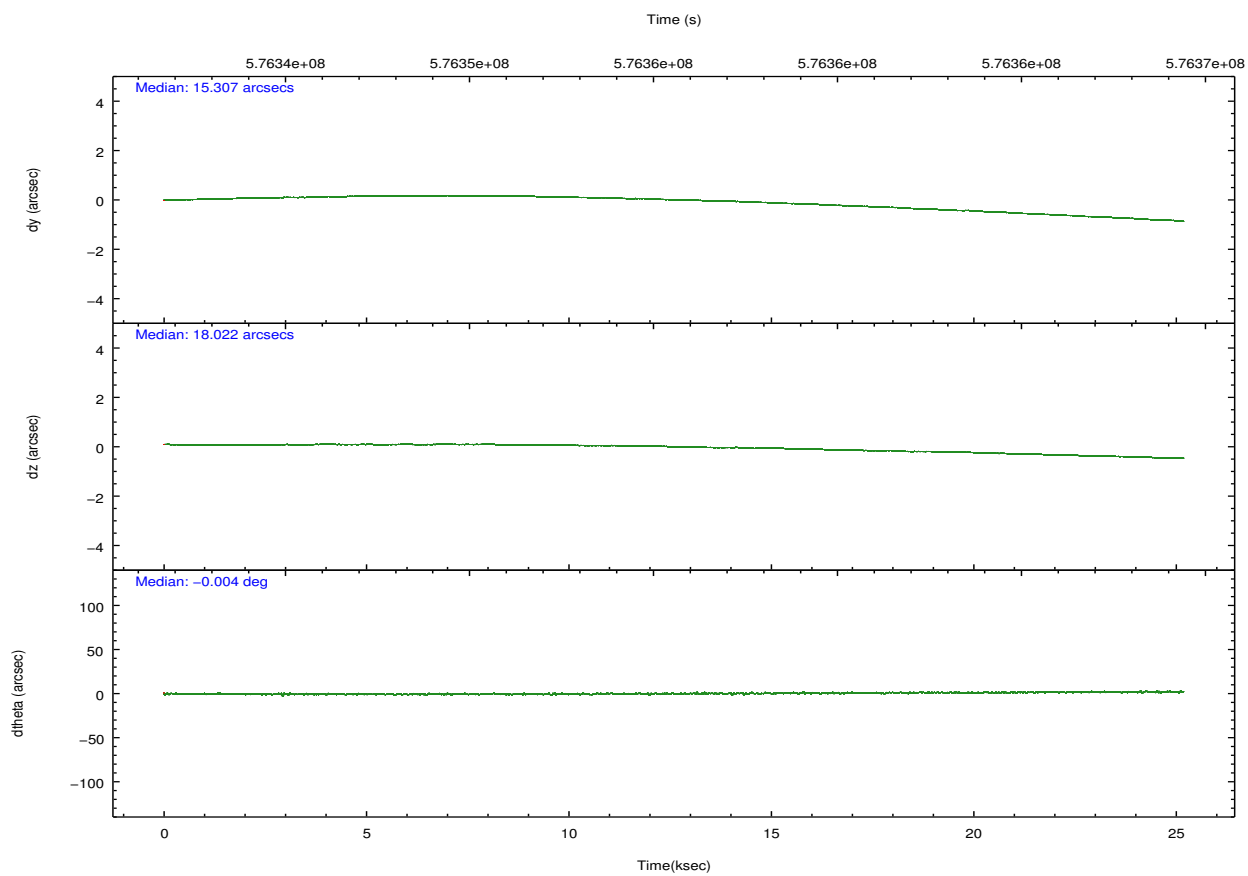
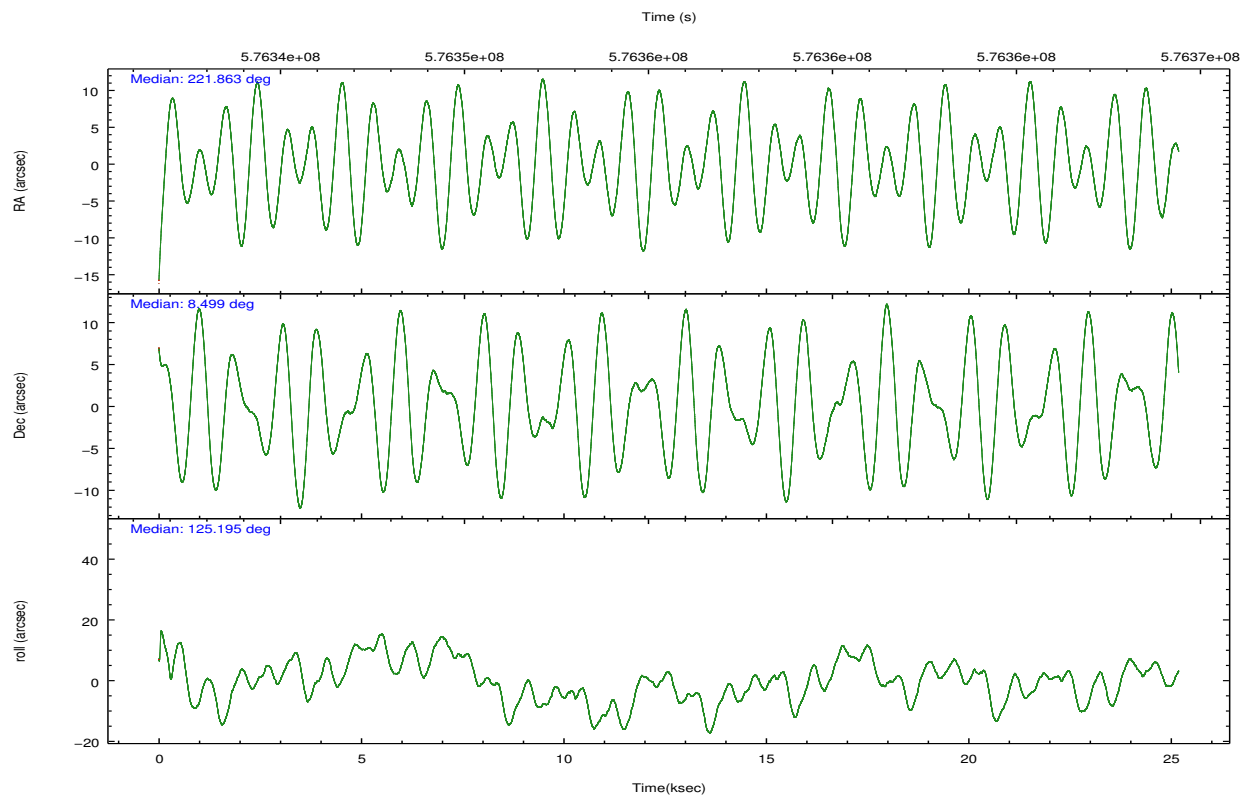
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	6016	6358	6821	19195
	4%	4%	4%	11%
grade 1 events	86	72	82	156
	0%	0%	0%	0%
grade 2 events	4281	4646	4218	5278
	2%	3%	2%	3%
grade 3 events	1722	1824	1734	2299
	1%	1%	1%	1%
grade 4 events	1647	1665	1767	2315
	1%	1%	1%	1%
grade 5 events	6743	6857	6124	7712
	4%	4%	3%	4%
grade 6 events	3700	4646	3423	3889
	2%	3%	2%	2%
grade 7 events	120940	121265	141565	132489
	83%	82%	85%	76%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-0123	ACIS-0123	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	221.888342	221.8629658344081	CCD I2 on	Y	Y
[deg] Pointing Dec	8.487721	8.499222605208852	CCD I3 on	Y	Y
[deg] Pointing Roll	124.995512	125.2079363969934	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	N
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	O2	N
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	576343158.184000	576341905.15066	CCD S5 on	N	N
Observation start date	2016-04-06T15:18:10	2016-04-06T14:58:25	Number of optional ACIS chips dropped	2	2
[s] Observation end time (MET)	576368158.184000	576368513.12718	On-chip summing requested	N	N
Observation end date	2016-04-06T22:14:50	2016-04-06T22:21:53	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



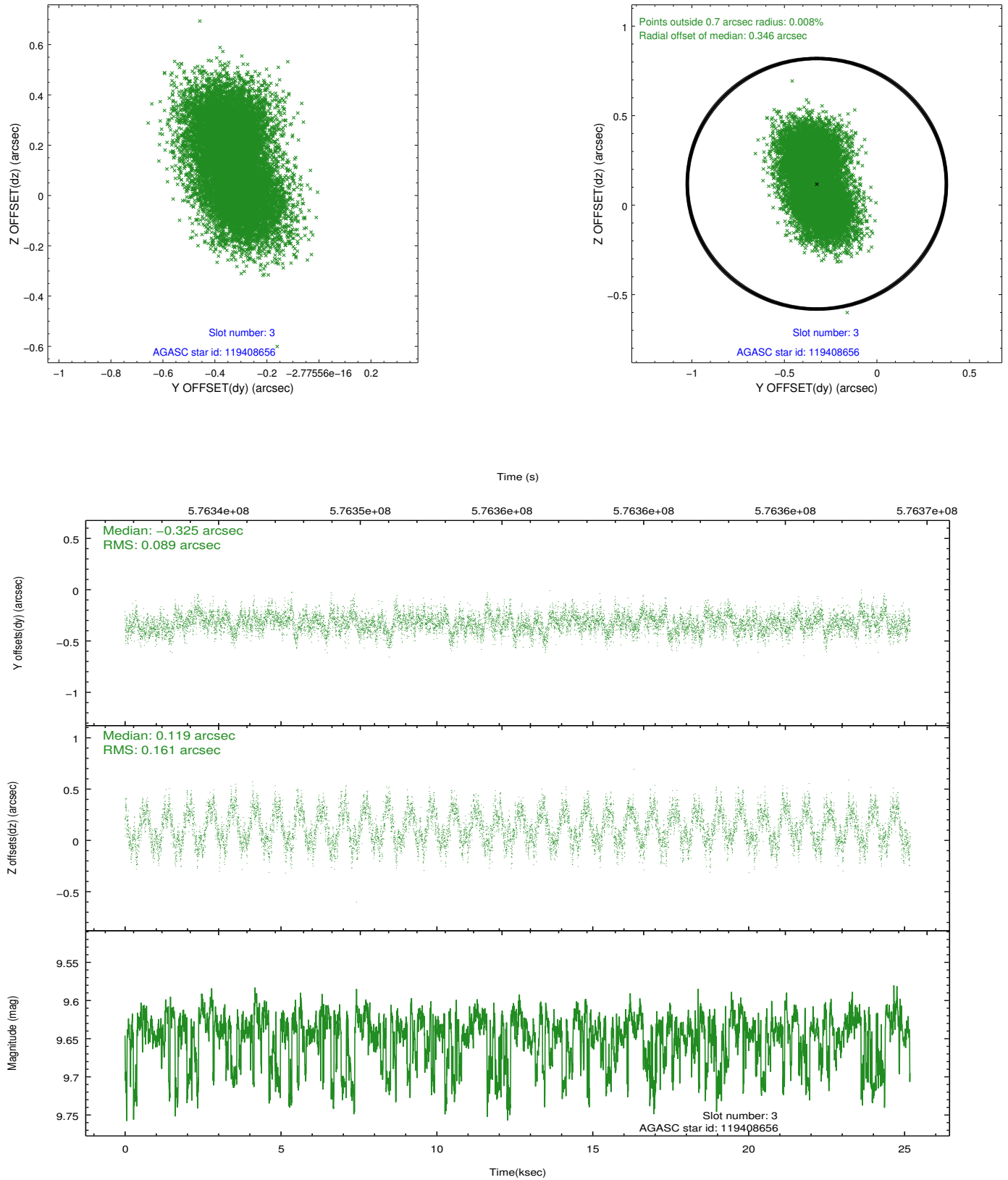


Slot Statistics

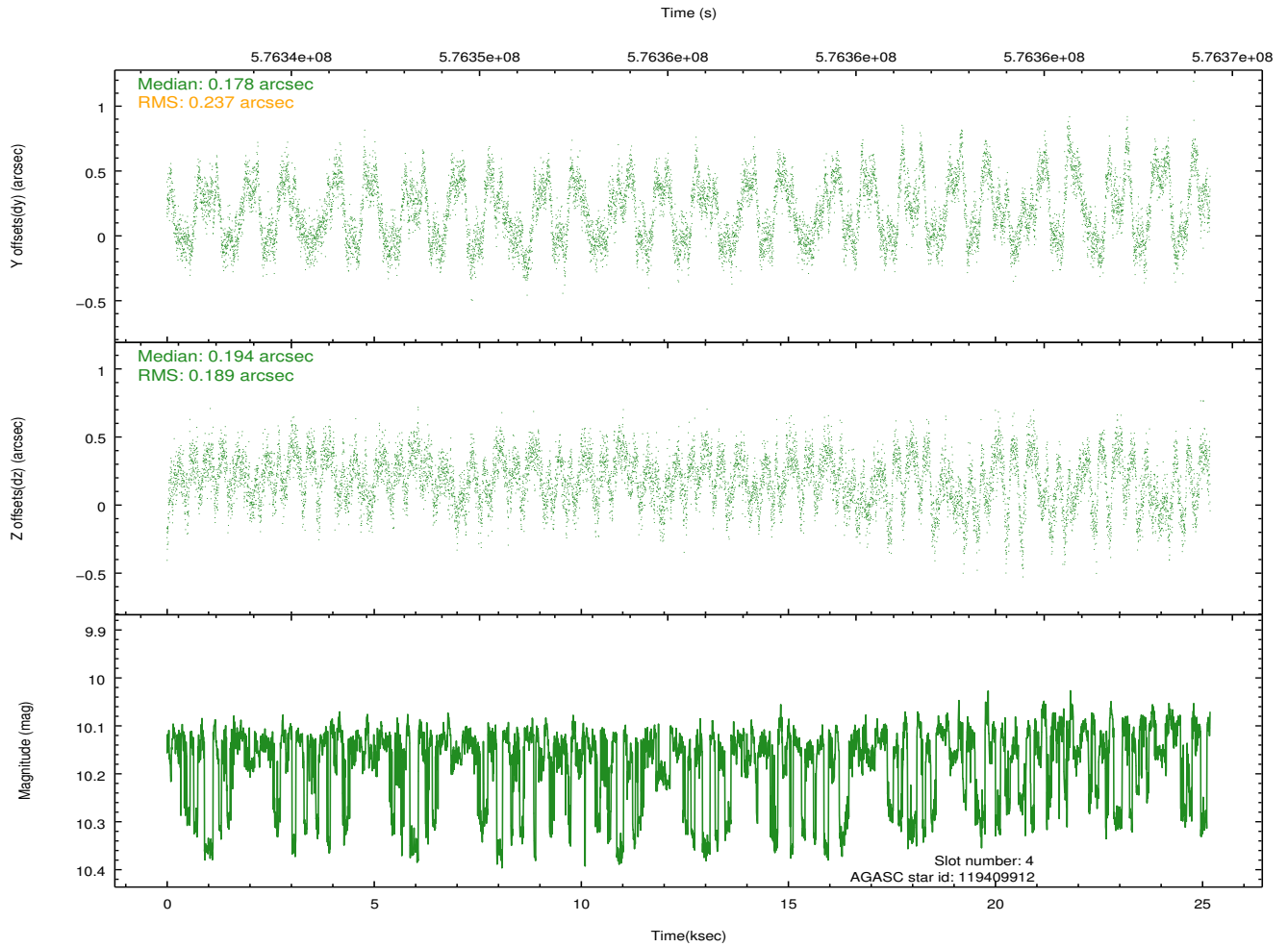
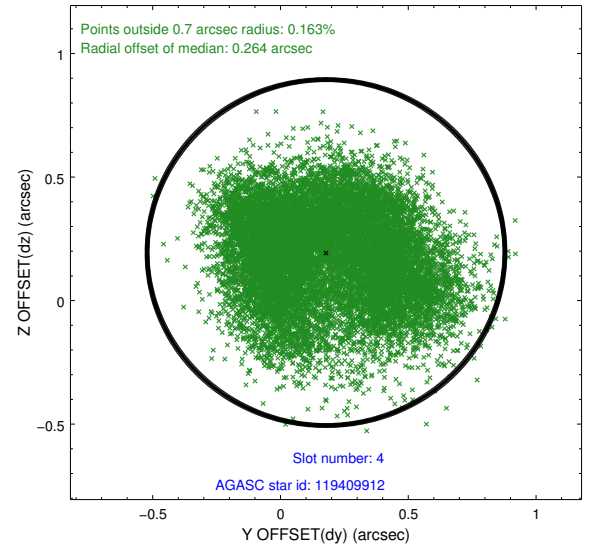
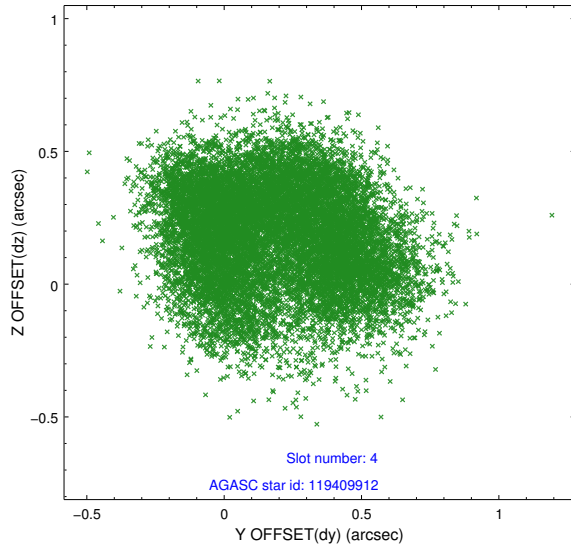
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.26	6144	0.074	-0.016	0.009	0.017	0.000000	0.000000	924.39	-841.61
1	FID		ACIS-I-5	7.27	6144	-0.345	0.043	0.009	0.016	0.000000	0.000000	-1824.14	1055.77
2	FID		ACIS-I-6	7.27	6144	0.181	0.045	0.011	0.020	0.000000	0.000000	389.82	1700.49
3	GUIDE	used	119408656	9.64	12282	-0.325	0.119	0.198	0.314	222.086631	8.778551	453.51	-1177.83
4	GUIDE	used	119409912	10.15	12264	0.178	0.194	0.330	0.488	221.948931	8.958726	1266.31	-1148.18
5	GUIDE	used	119410576	9.40	12261	-0.045	-0.292	0.218	0.337	221.814476	8.510828	219.80	168.30
6	GUIDE	used	119419488	7.82	12282	0.085	-0.252	0.133	0.192	221.772256	8.208674	-585.46	915.01
7	GUIDE	used	120327320	9.60	12271	0.102	0.224	0.192	0.309	222.306742	8.399268	-1114.44	-1038.08

2.4 Star Slots

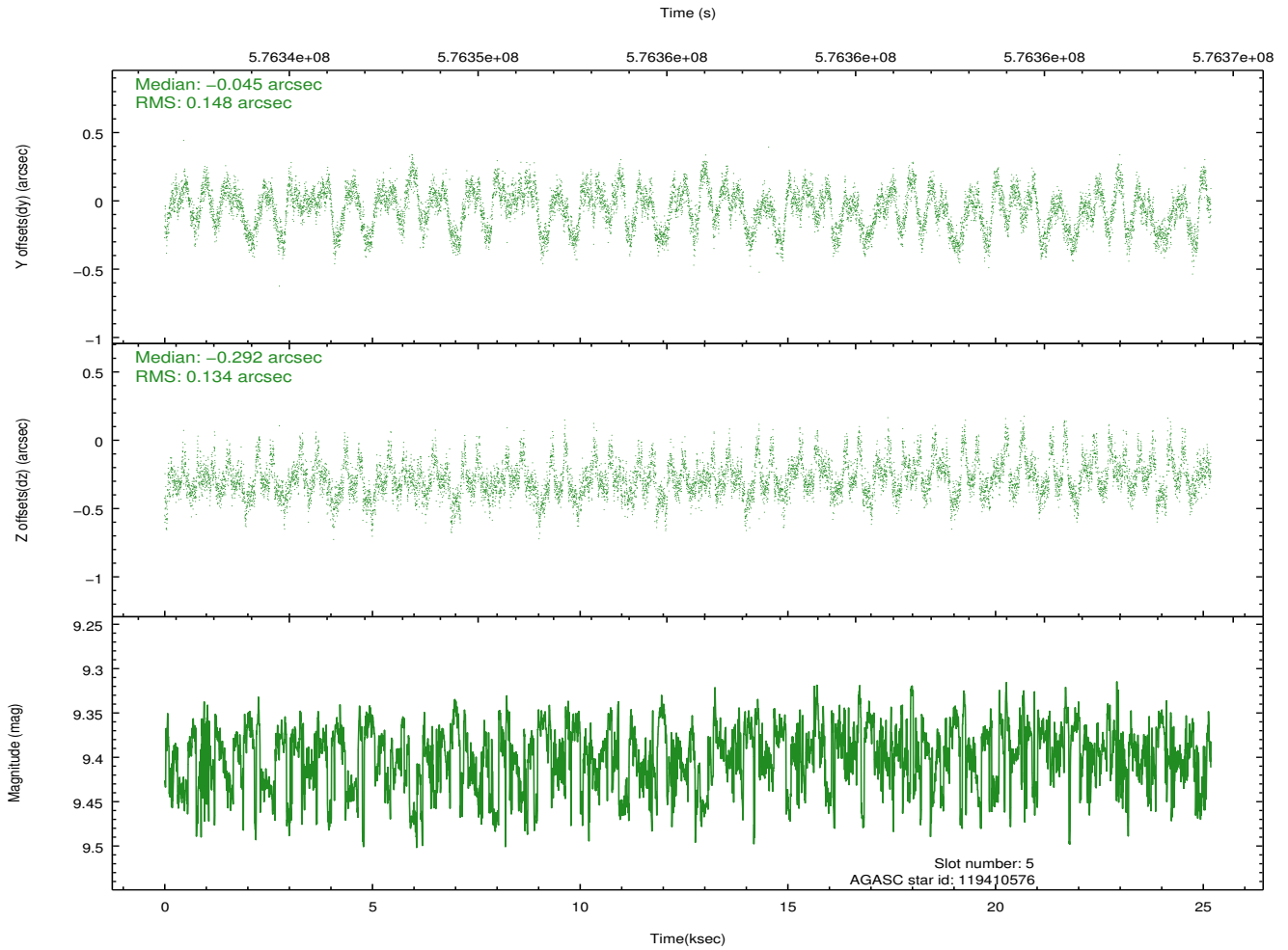
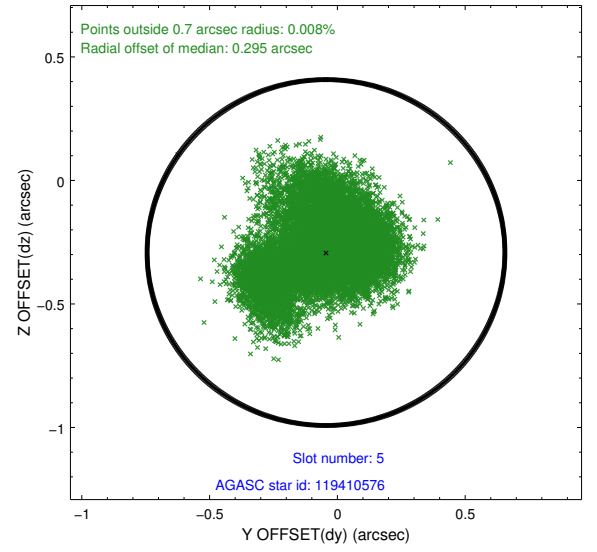
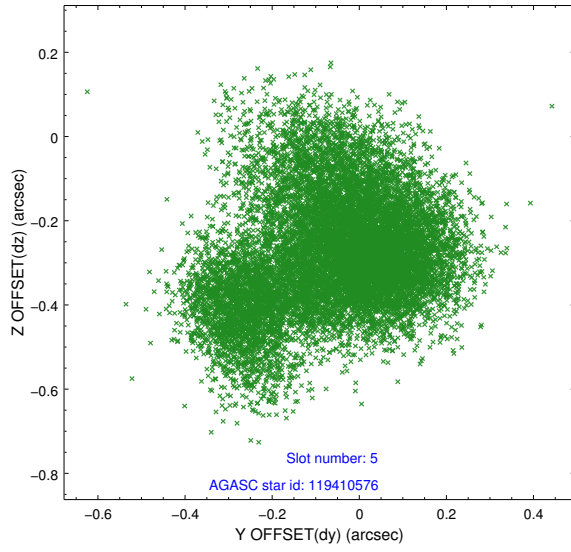
2.4.1 Slot 3



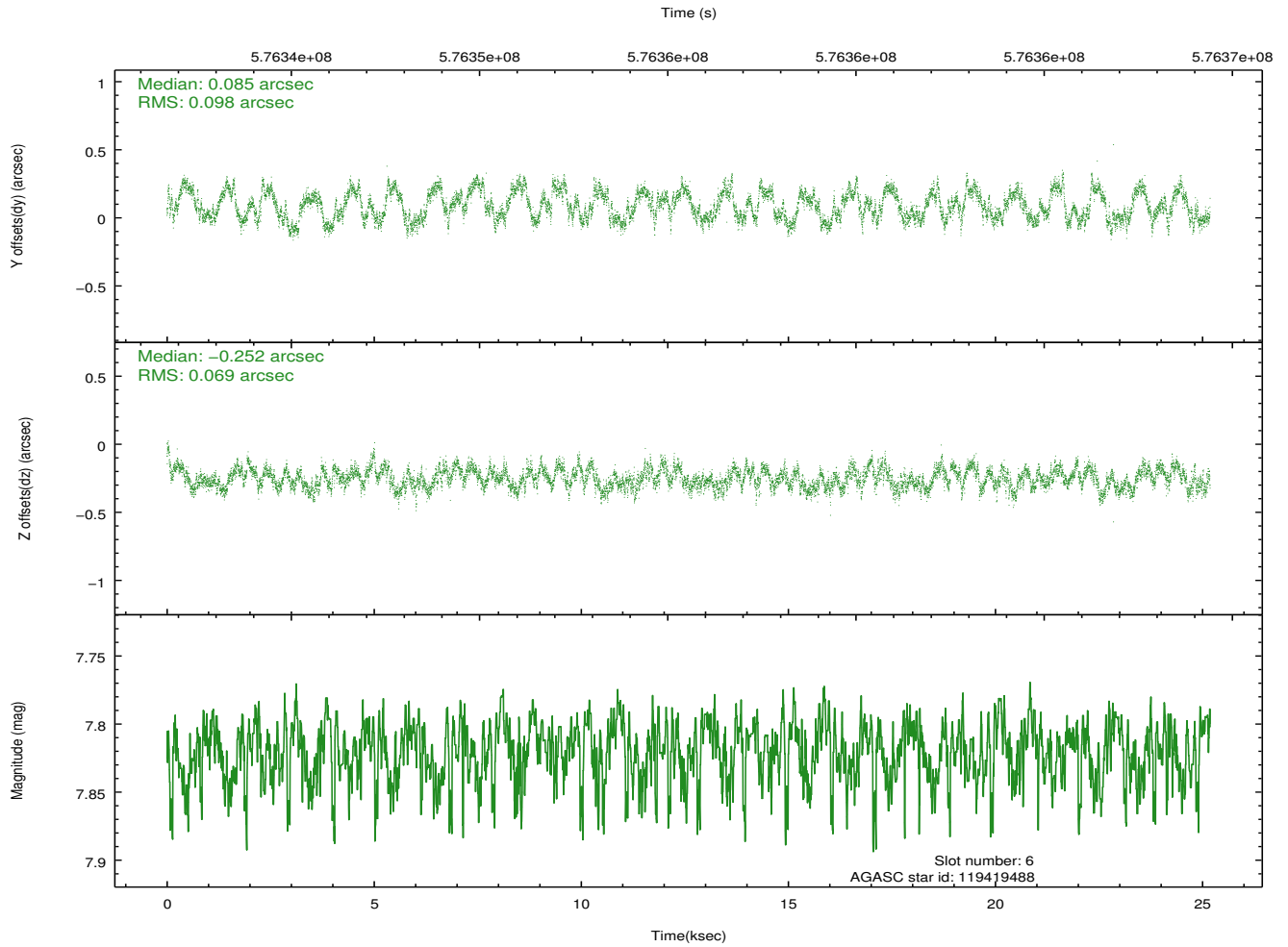
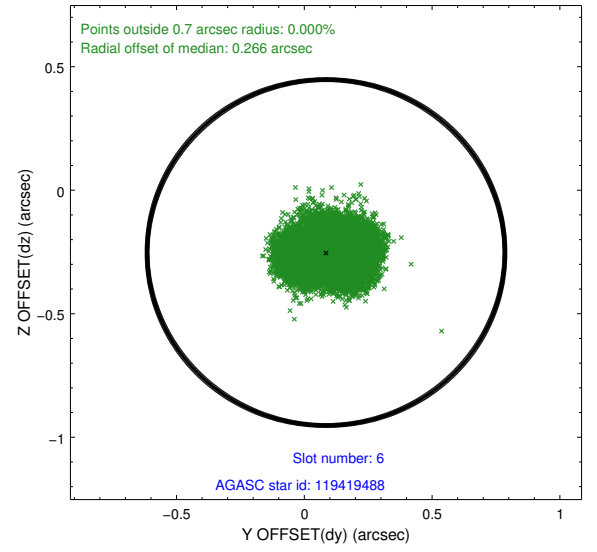
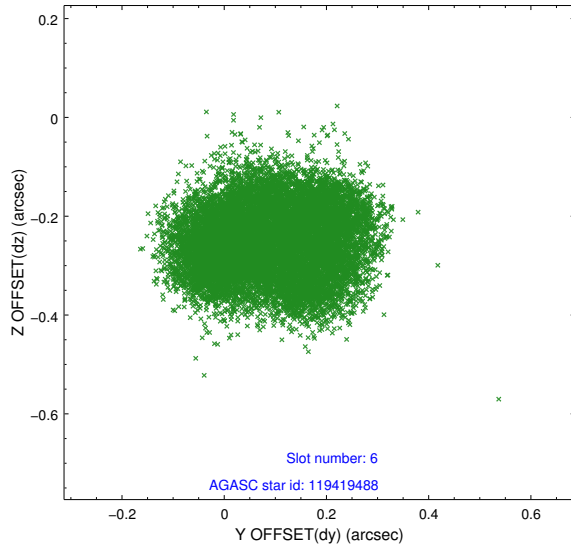
2.4.2 Slot 4



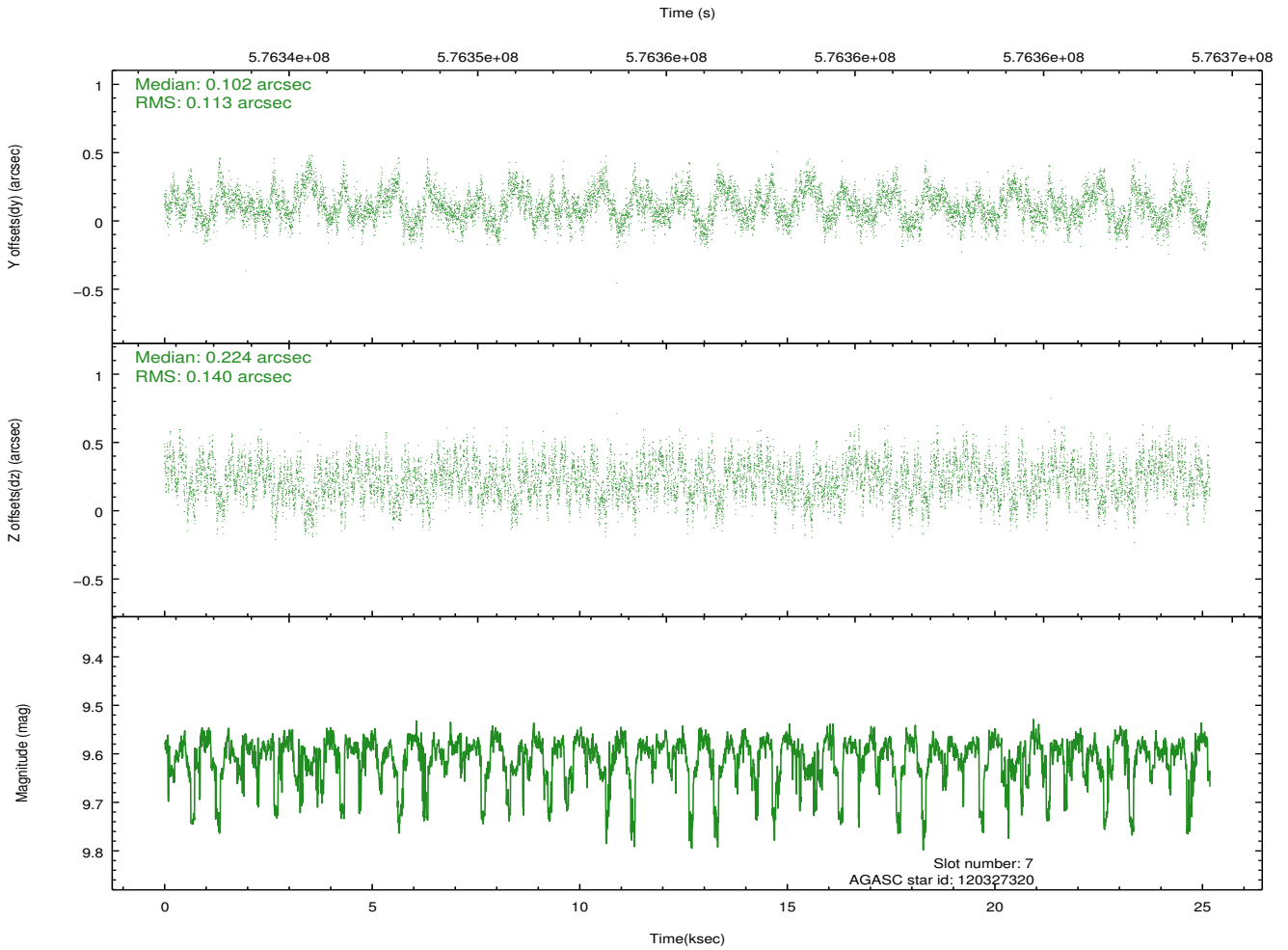
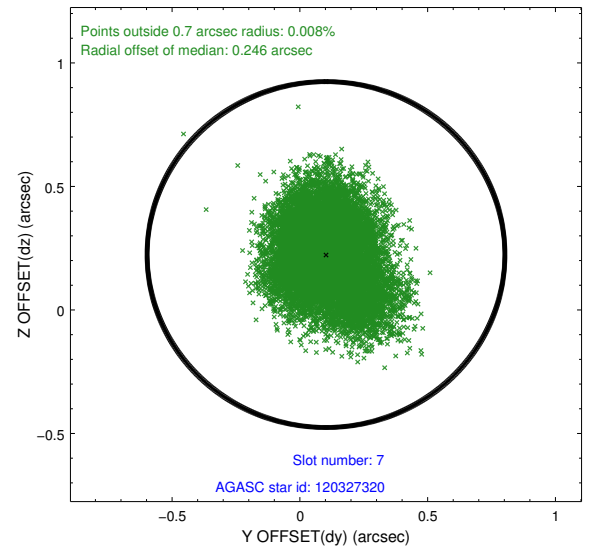
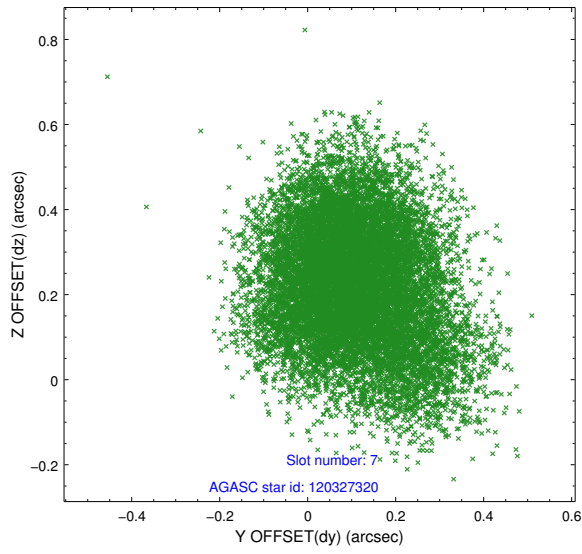
2.4.3 Slot 5



2.4.4 Slot 6

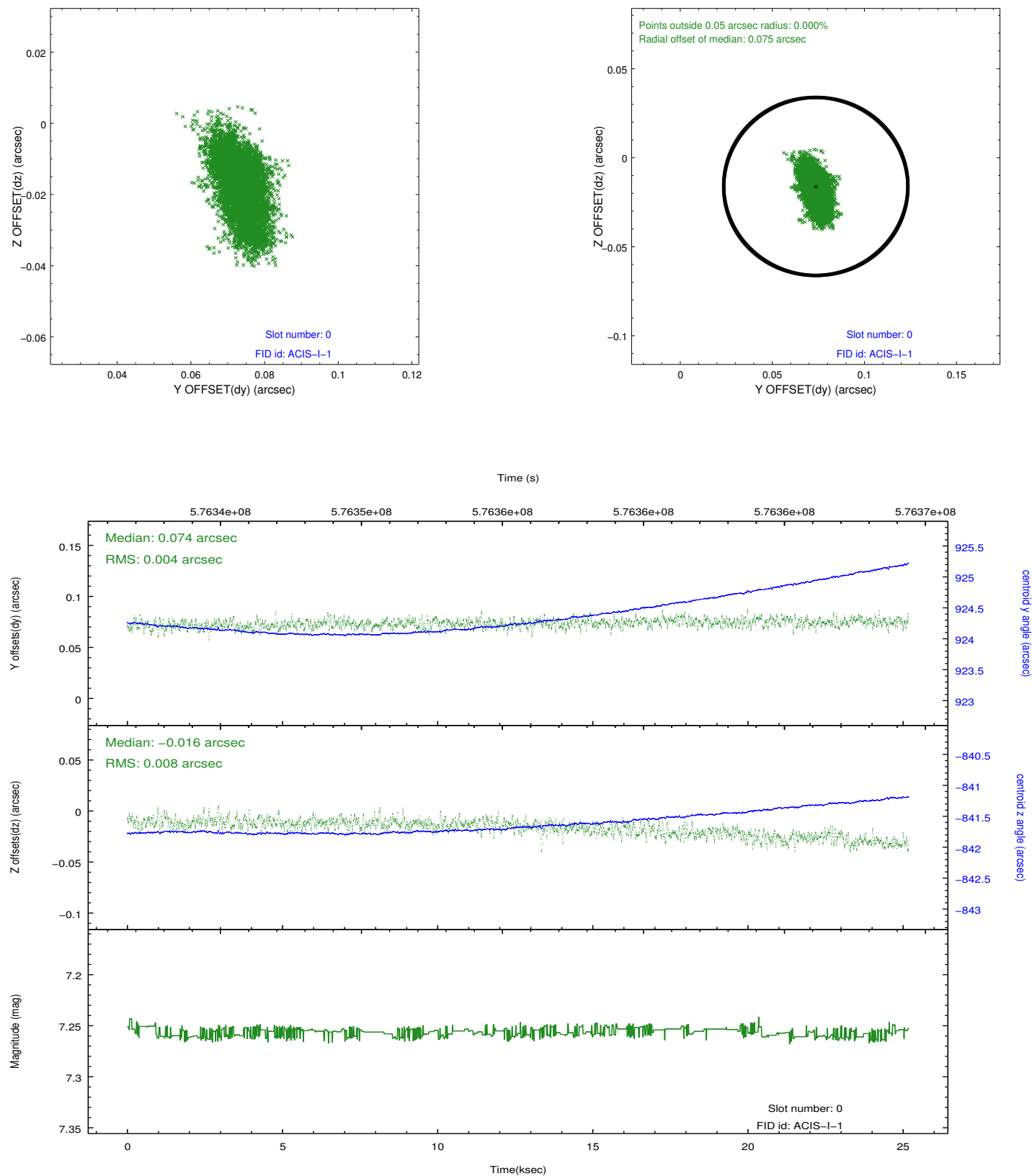


2.4.5 Slot 7

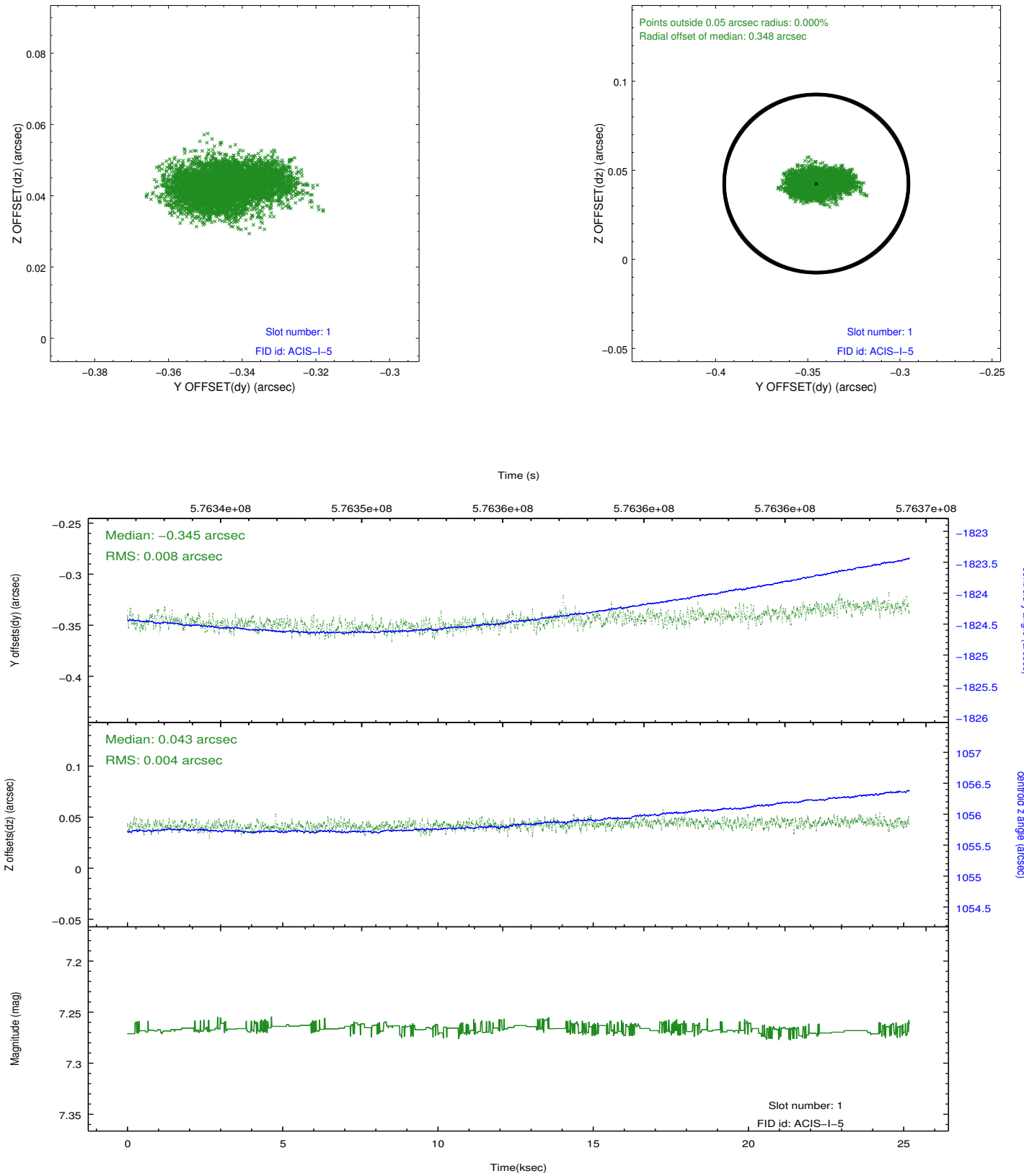


2.5 FID Slots

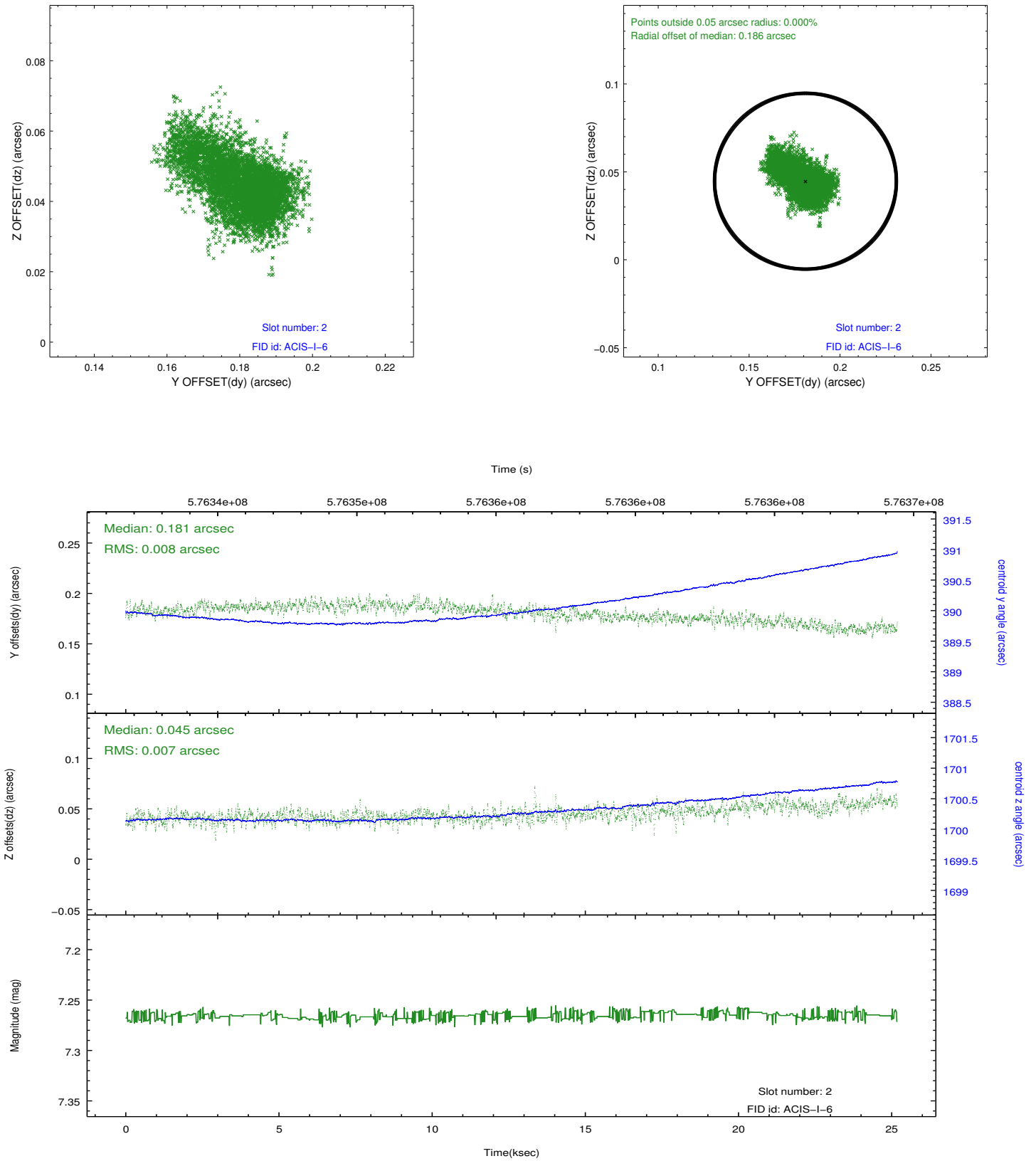
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2016.04.07
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	25.077736688018

A.2 Comments

Joint Proposal: NRAO. Optional chips S2 S3 were not included.