

V&V Reference Report

L2 ASCDS Version : 10.5

Observation 17845 - L2 Version 2
Chandra X-Ray Center

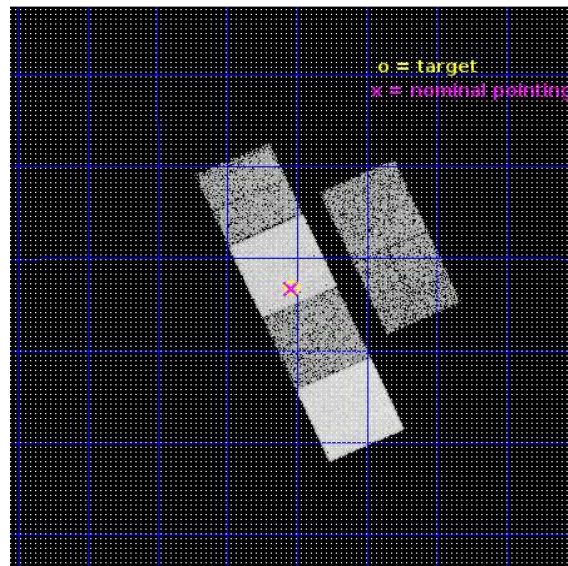
L2 Processing Date : Jun 30 2016

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1 Front

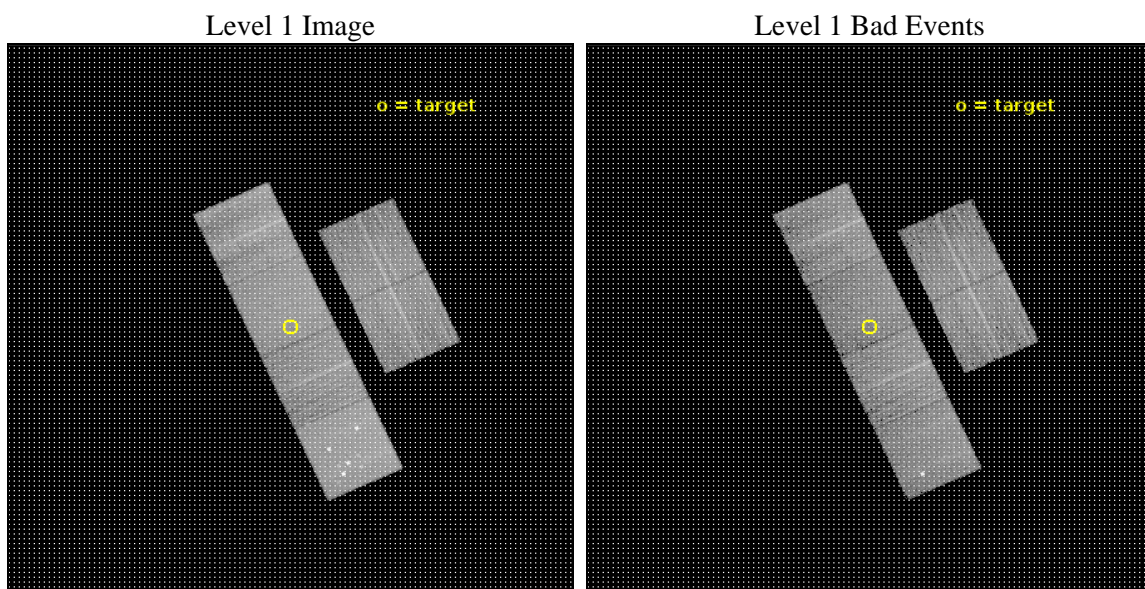
seq_num	401777	Sequence number
obs_id	17845	Observation id
title	The Black Hole Population in Galactic Globular Clusters	Proposal t
observer	Prof Laura Chomiuk	Principal investigator
object	M107	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	248.132917	Observer's specified target RA [deg]
dec_targ	-13.053778	Observer's specified target Dec [deg]
ra_nom	248.13509775964	Nominal RA [deg]
dec_nom	-13.055145130018	Nominal Dec [deg]
roll_nom	245.65835181182	Nominal Roll [deg]
revision	2	Processing version of data
ontime	11952.000178099	Sum of GTIs [s]
livetime	11800.656755213	Livetime [s]
ontime2	11952.000178099	Sum of GTIs [s]
ontime3	11952.000178099	Sum of GTIs [s]
ontime5	11952.000178099	Sum of GTIs [s]
ontime6	11952.000178099	Sum of GTIs [s]
ontime7	11952.000178099	Sum of GTIs [s]
ontime8	11952.000178099	Sum of GTIs [s]
l2events	123036	Number of level 2 events



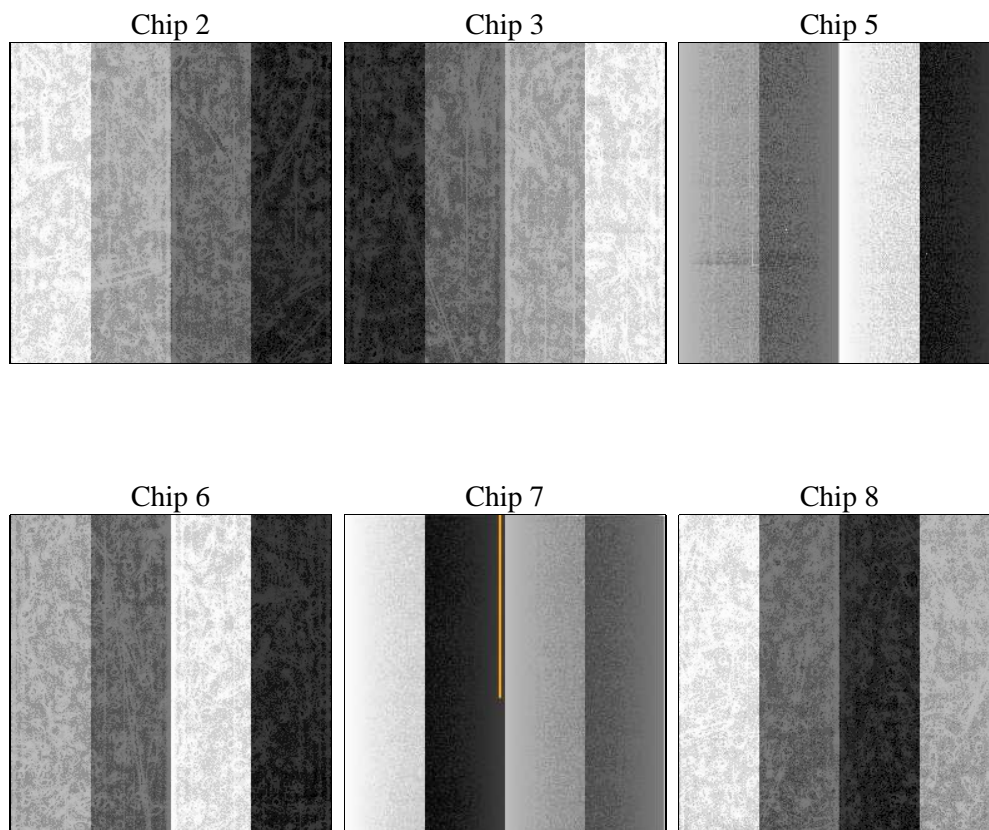
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	12000.000000	[s] Scheduled observation exposure time
ascdsver	10.5	Processing system revision	ontime	11952.000178099	Sum of GTIs [s]
caldbver	4.7.2	 	ontime2	11952.000178099	Sum of GTIs [s]
date	2016-06-30T19:07:32	Date and time of file creation	ontime3	11952.000178099	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	11952.000178099	Sum of GTIs [s]
			ontime6	11952.000178099	Sum of GTIs [s]
			ontime7	11952.000178099	Sum of GTIs [s]
			ontime8	11952.000178099	Sum of GTIs [s]
			l1events	562229	Number of level 1 events

2.1.4 Events

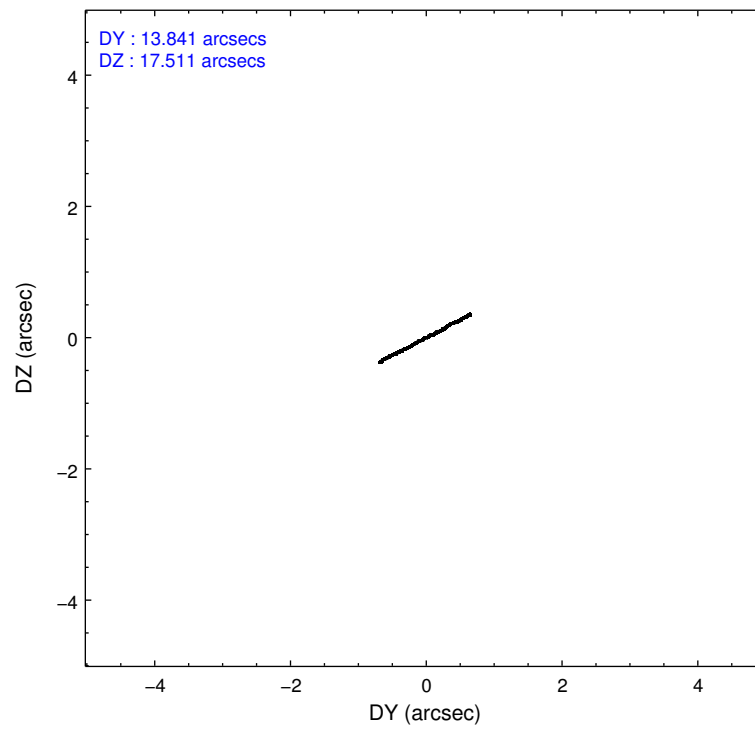
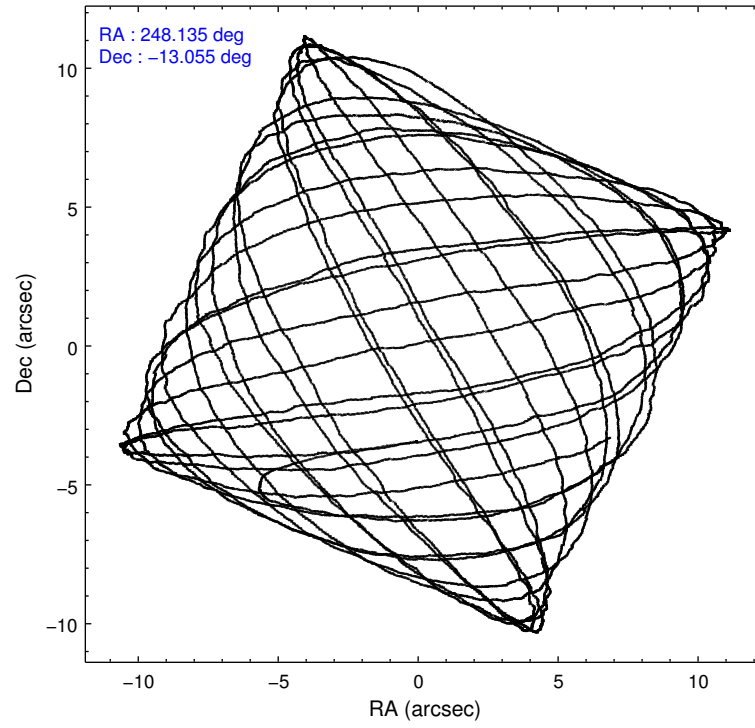
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	78504	73360	135383	80476	96734	97772	grade 0 events	2668	2770	14585	2876	3395	6722
rejected events	70775	65619	66652	71778	55450	72761		3%	3%	10%	3%	3%	6%
rejected %	90%	89%	49%	89%	57%	74%	grade 1 events	40	26	285	38	113	84
								0%	0%	0%	0%	0%	0%
							grade 2 events	1812	1653	18796	2064	8698	6128
								2%	2%	13%	2%	8%	6%
							grade 3 events	776	807	1743	827	3056	2575
								0%	1%	1%	1%	3%	2%
							grade 4 events	838	831	1530	838	3101	2480
								1%	1%	1%	1%	3%	2%
							grade 5 events	3031	3418	8009	3405	9254	5213
								3%	4%	5%	4%	9%	5%
							grade 6 events	1639	1684	32117	2098	23054	7116
								2%	2%	23%	2%	23%	7%
							grade 7 events	67700	62171	58318	68330	46063	67454
								86%	84%	43%	84%	47%	68%

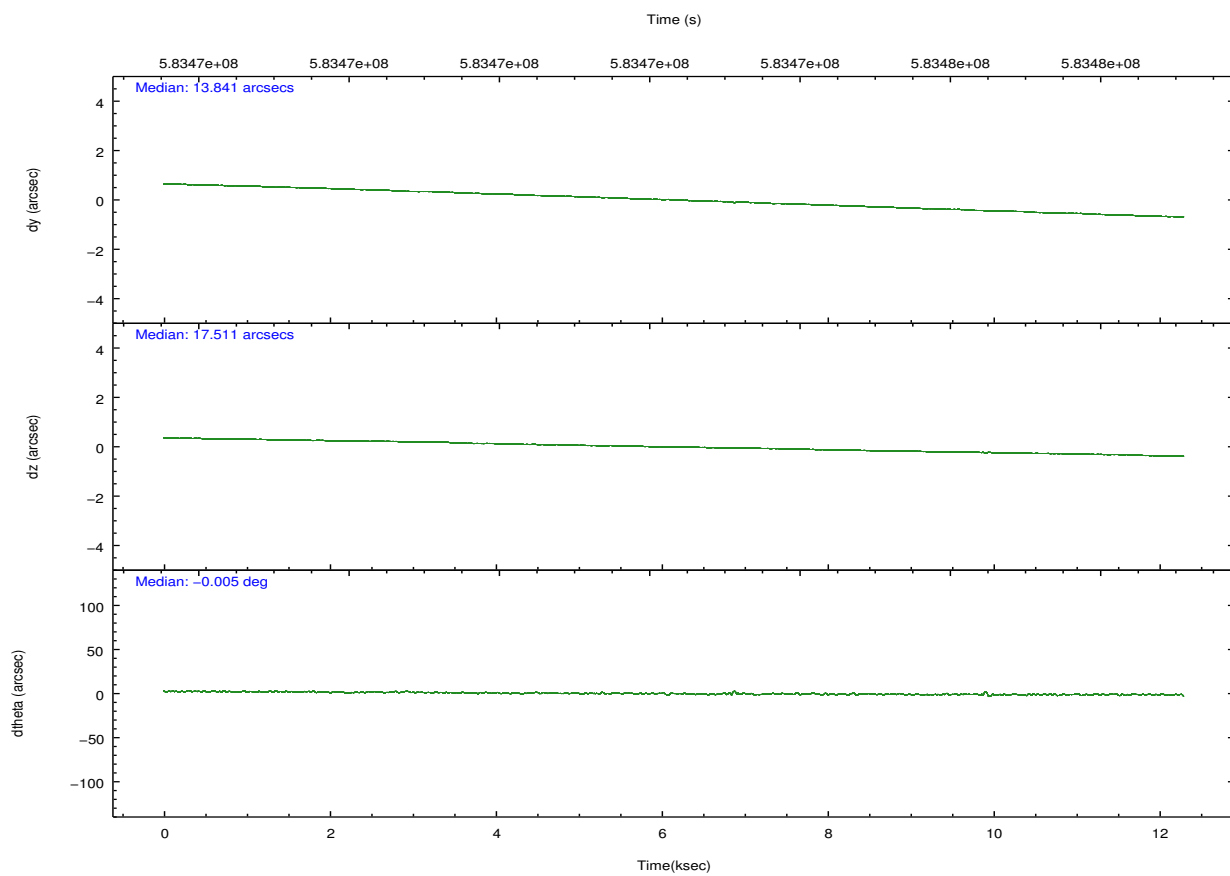
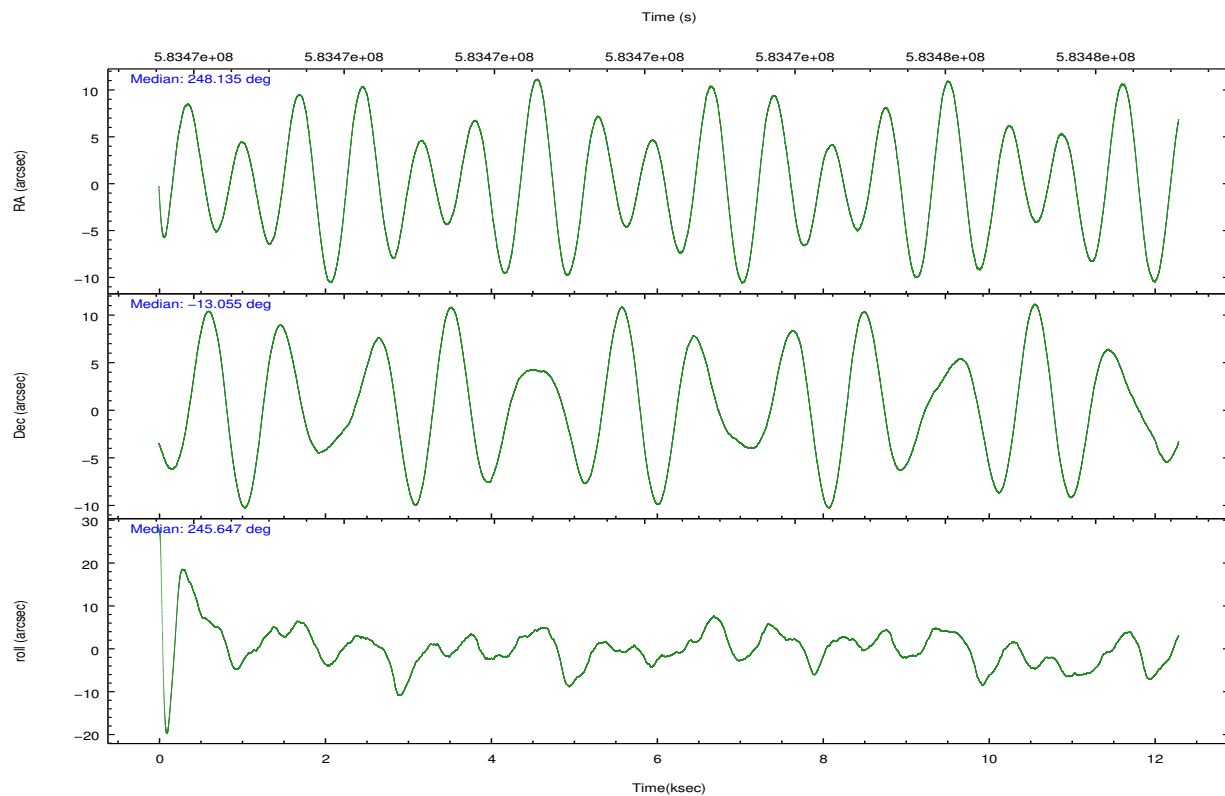
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-235678	ACIS-235678
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	248.131945	248.13509775964
[deg] Pointing Dec	-13.027835	-13.0551451300176
[deg] Pointing Roll	245.500957	245.6583518118235
[mm] SIM focus pos	-0.684267	-0.6828225247311905
[mm] SIM defocus	0	0.001444936568705701
[mm] SIM translation stage pos	-190.132523	-190.1425803651734
[mm] SIM translation stage offset	0	0.01005778216563158
[s] Observation start time (MET)	583466459.184000	583465292.1957
Observation start date	2016-06-28T01:59:51	2016-06-28T01:41:32
[s] Observation end time (MET)	583478459.184000	583479178.8965
Observation end date	2016-06-28T05:19:51	2016-06-28T05:32:58
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
CCD I0 on	N	N
CCD I1 on	N	N
CCD I2 on	O1	Y
CCD I3 on	O2	Y
CCD S0 on	N	N
CCD S1 on	O3	Y
CCD S2 on	Y	Y
CCD S3 on	Y	Y
CCD S4 on	O4	Y
CCD S5 on	N	N
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.2

2.3 Aspect



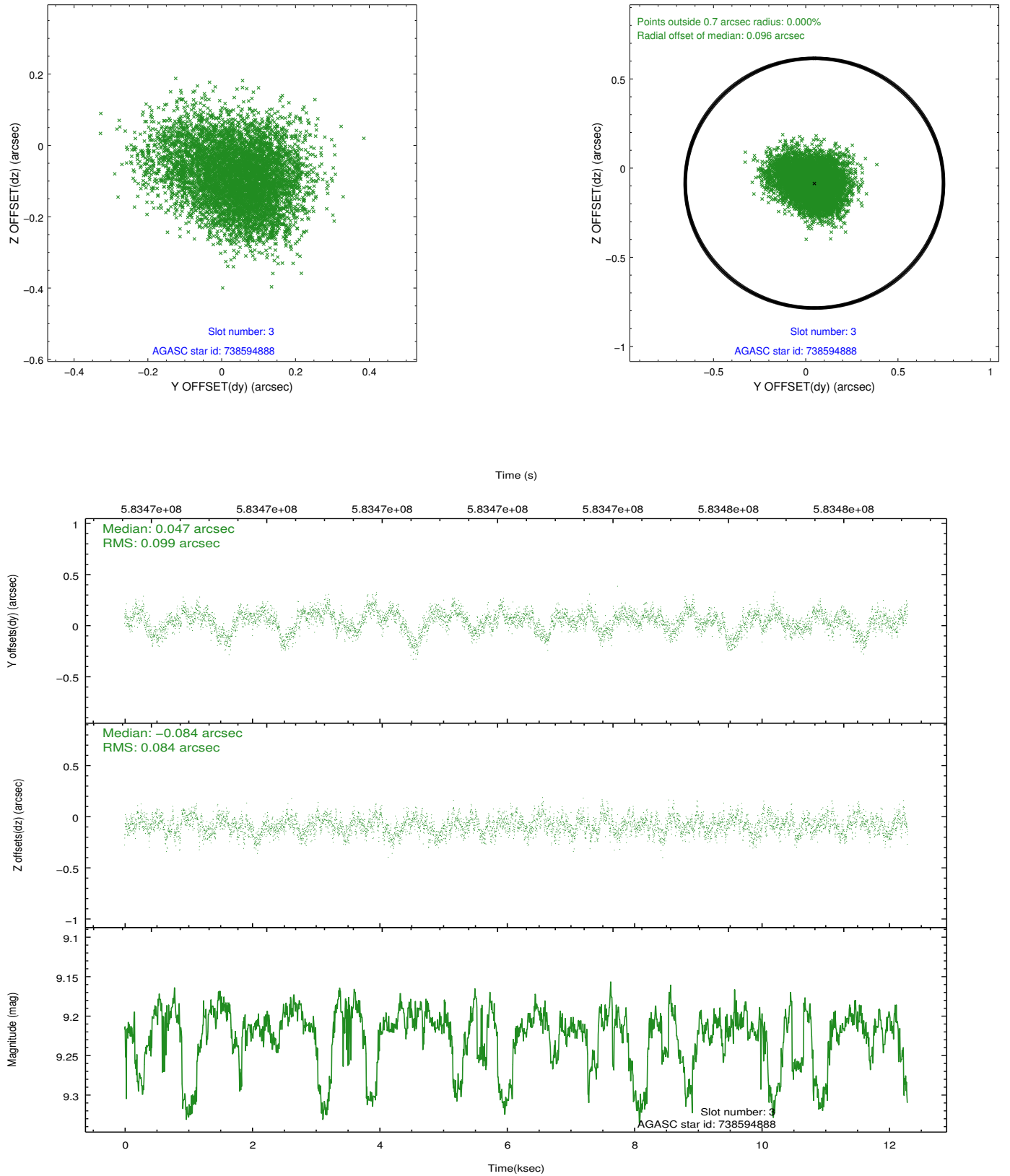


Slot Statistics

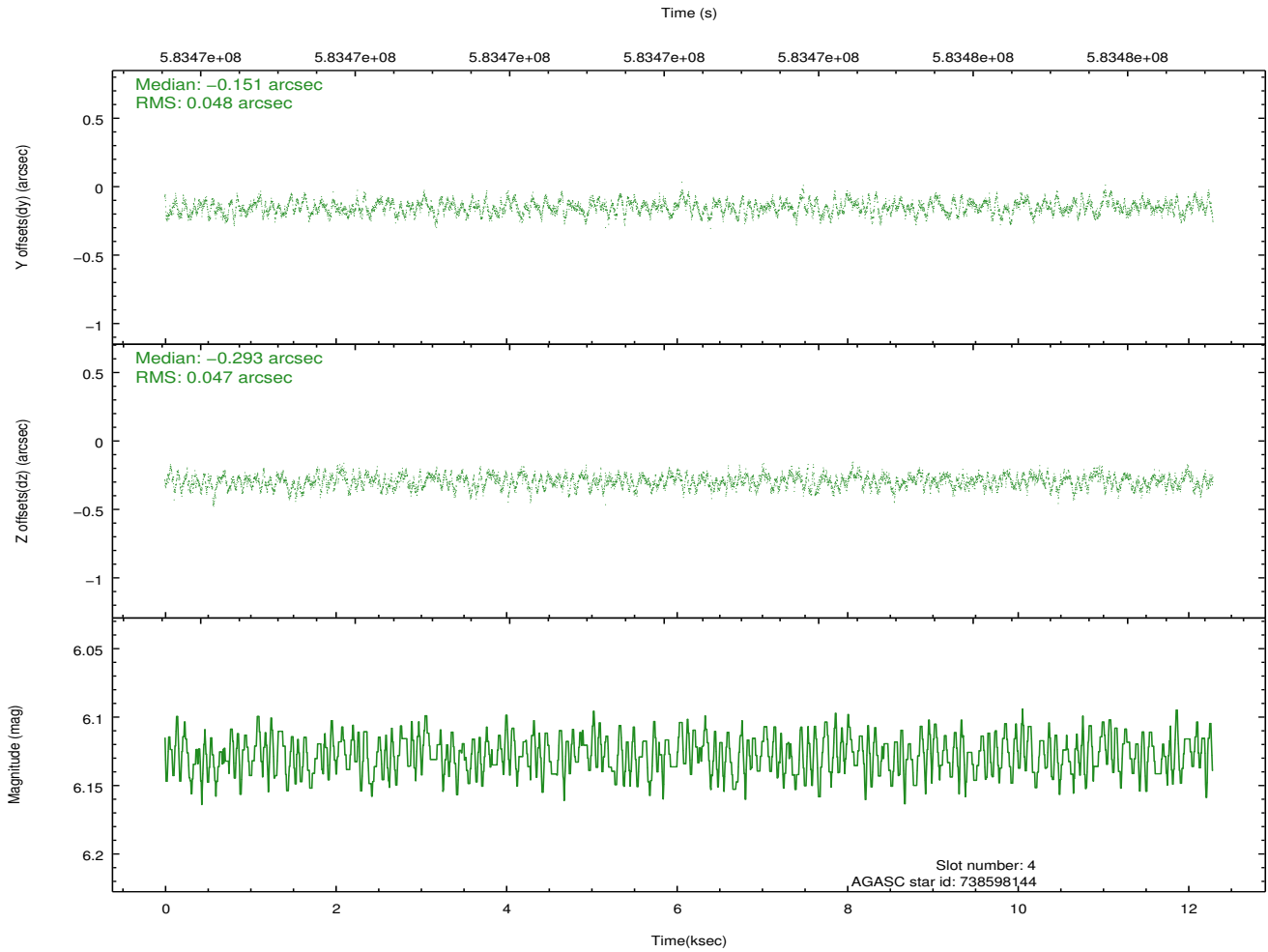
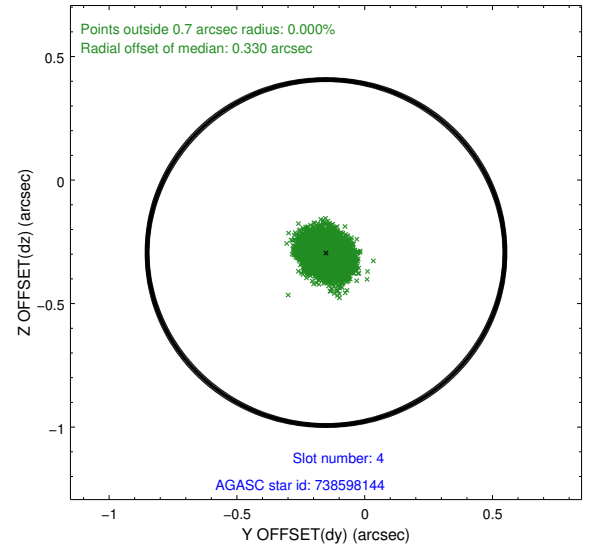
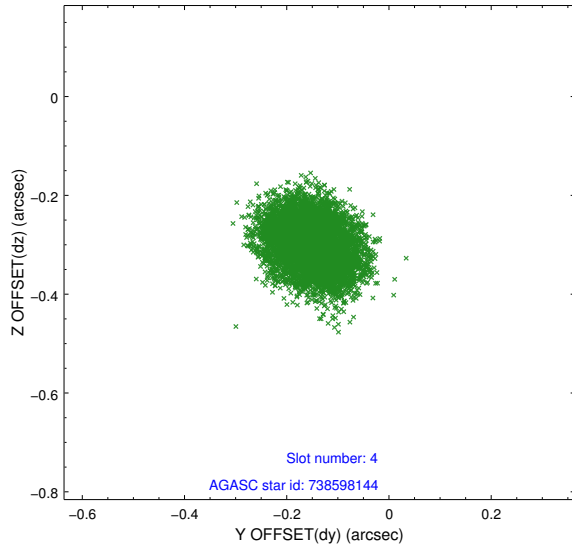
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-1	7.22	2998	0.169	0.022	0.022	0.039	0.000000	0.000000	929.40	-1734.52
1	FID		ACIS-S-2	7.12	2998	-0.224	-0.079	0.018	0.035	0.000000	0.000000	-766.67	-1739.56
2	FID		ACIS-S-6	7.36	2998	0.033	0.060	0.015	0.027	0.000000	0.000000	394.78	806.44
3	GUIDE	used	738594888	9.22	5989	0.047	-0.084	0.139	0.228	247.672384	-13.116334	961.46	-1333.72
4	GUIDE	used	738598144	6.13	5996	-0.151	-0.293	0.073	0.111	248.380024	-12.560238	-1892.74	94.68
5	GUIDE	used	738598360	7.36	5996	-0.022	0.215	0.122	0.189	248.033686	-12.431639	-1809.45	-1204.58
6	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
7	GUIDE	used	738599112	9.06	5990	0.133	0.175	0.103	0.166	248.162338	-12.688543	-1155.67	-409.43

2.4 Star Slots

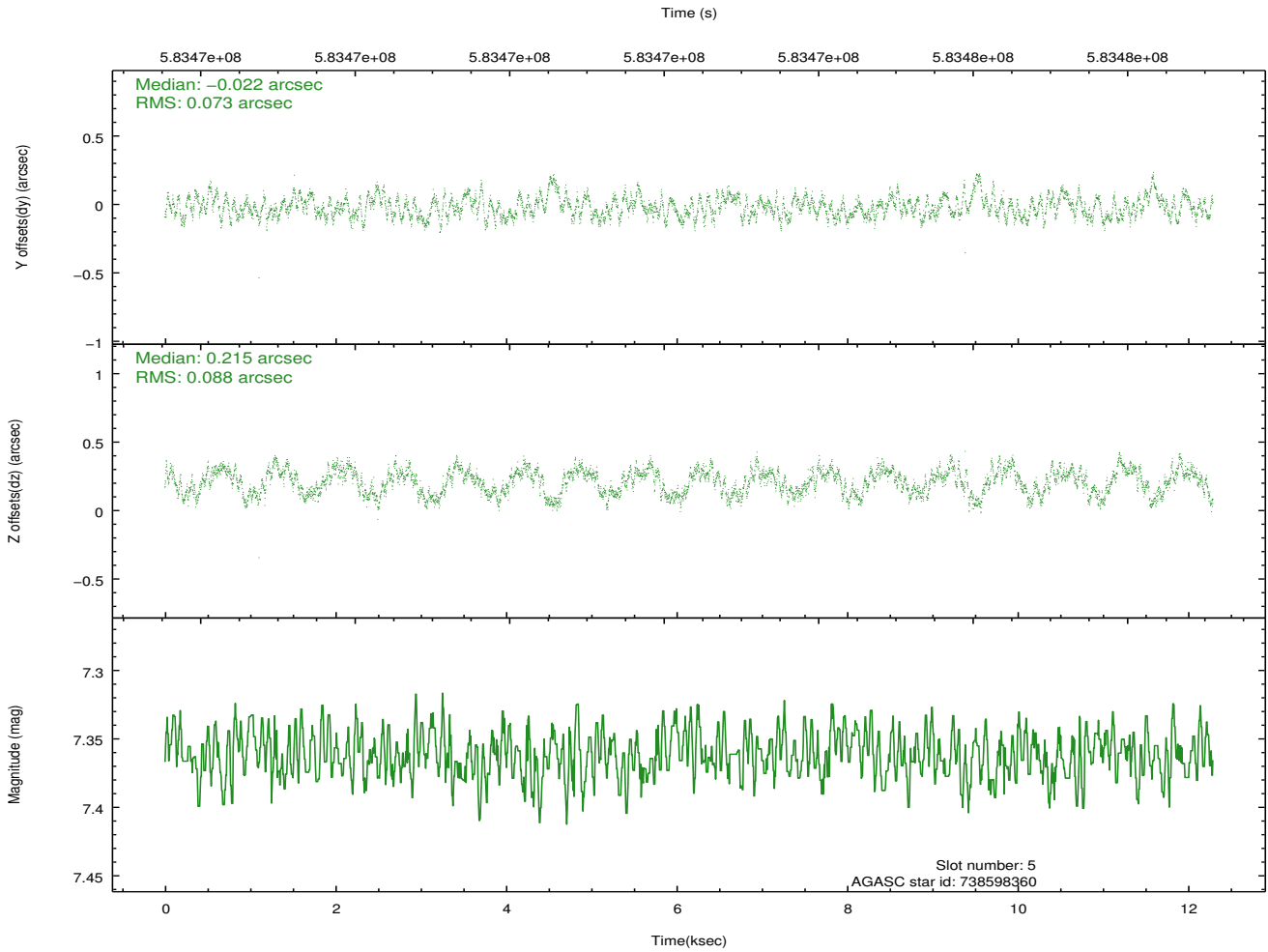
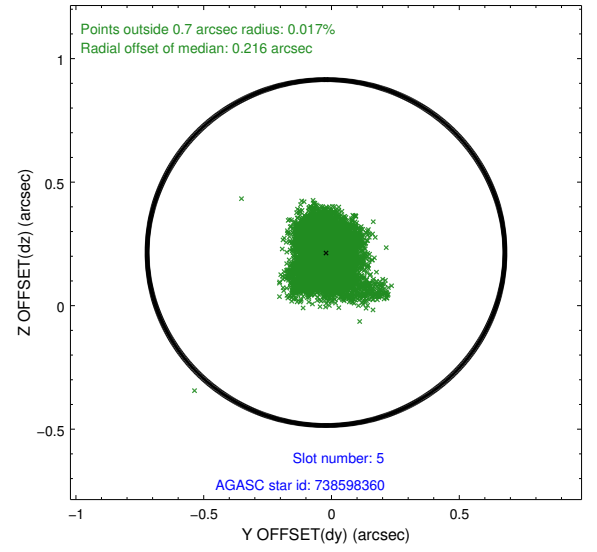
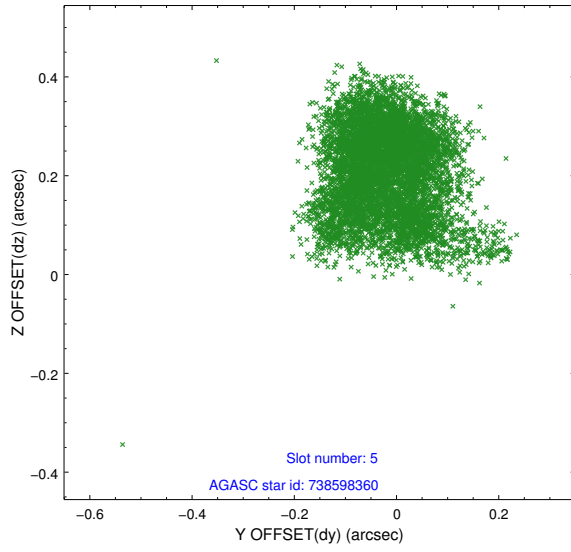
2.4.1 Slot 3



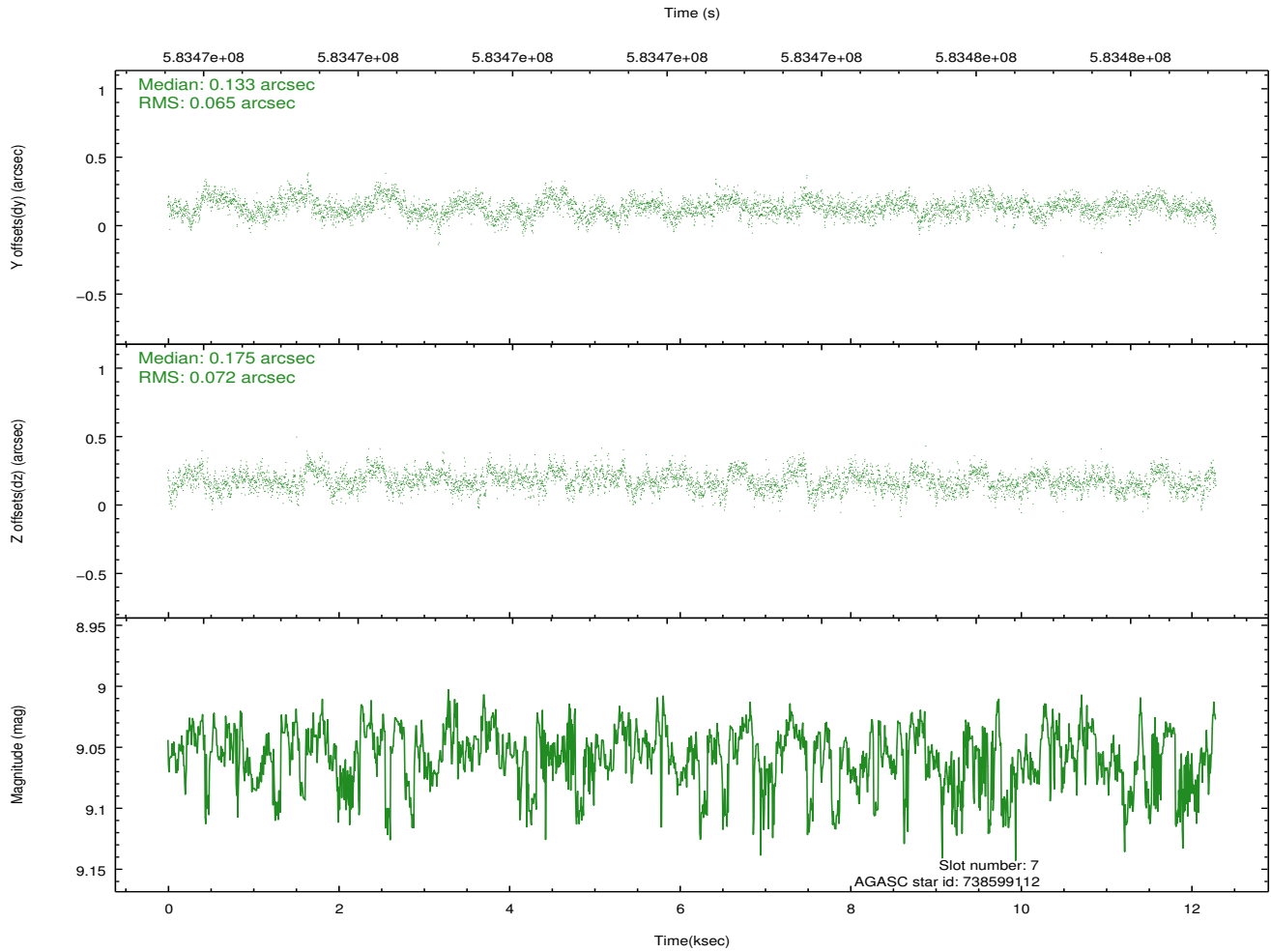
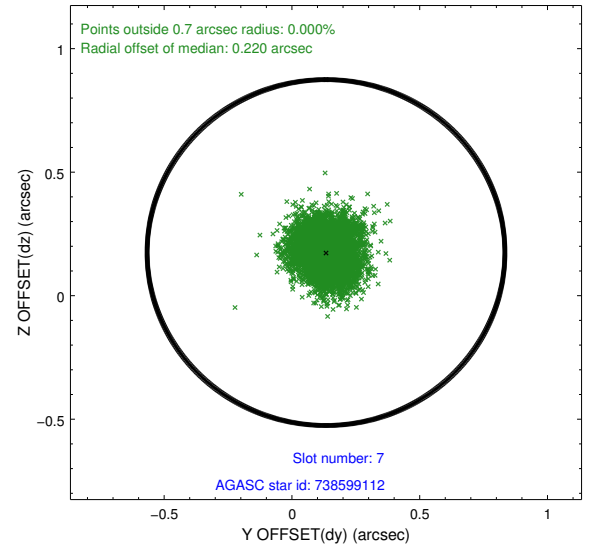
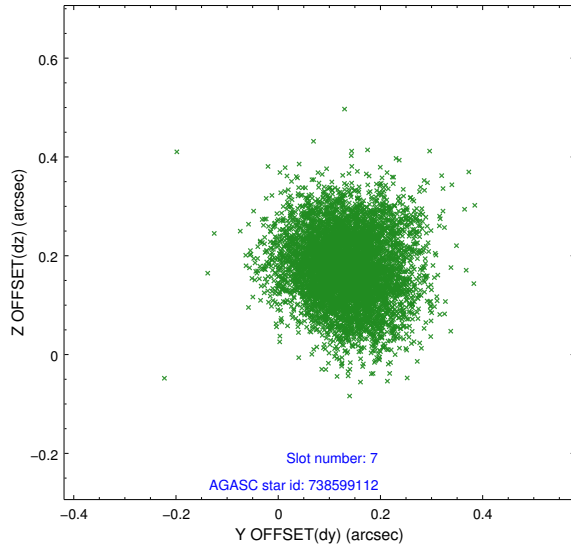
2.4.2 Slot 4



2.4.3 Slot 5

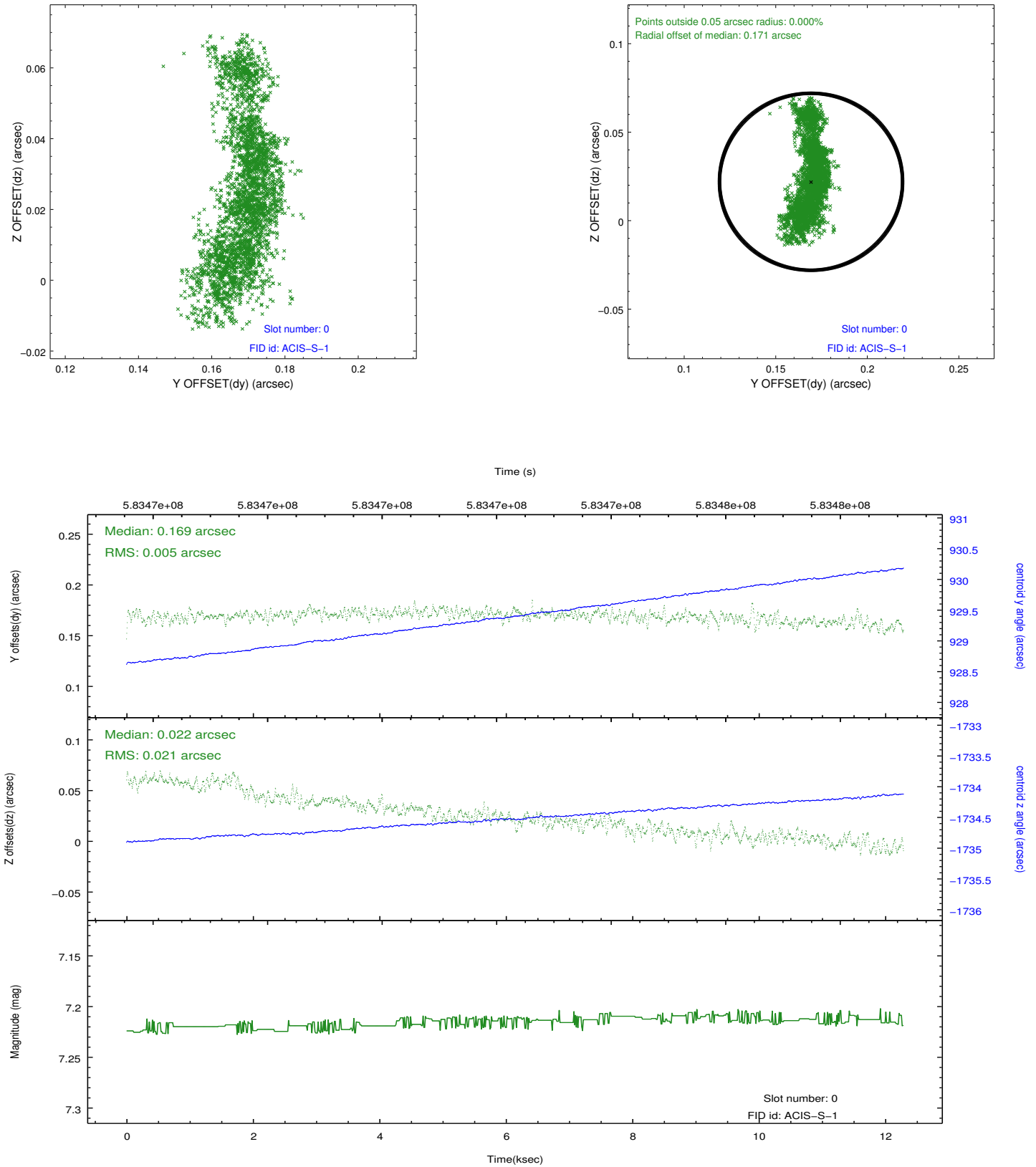


2.4.4 Slot 7

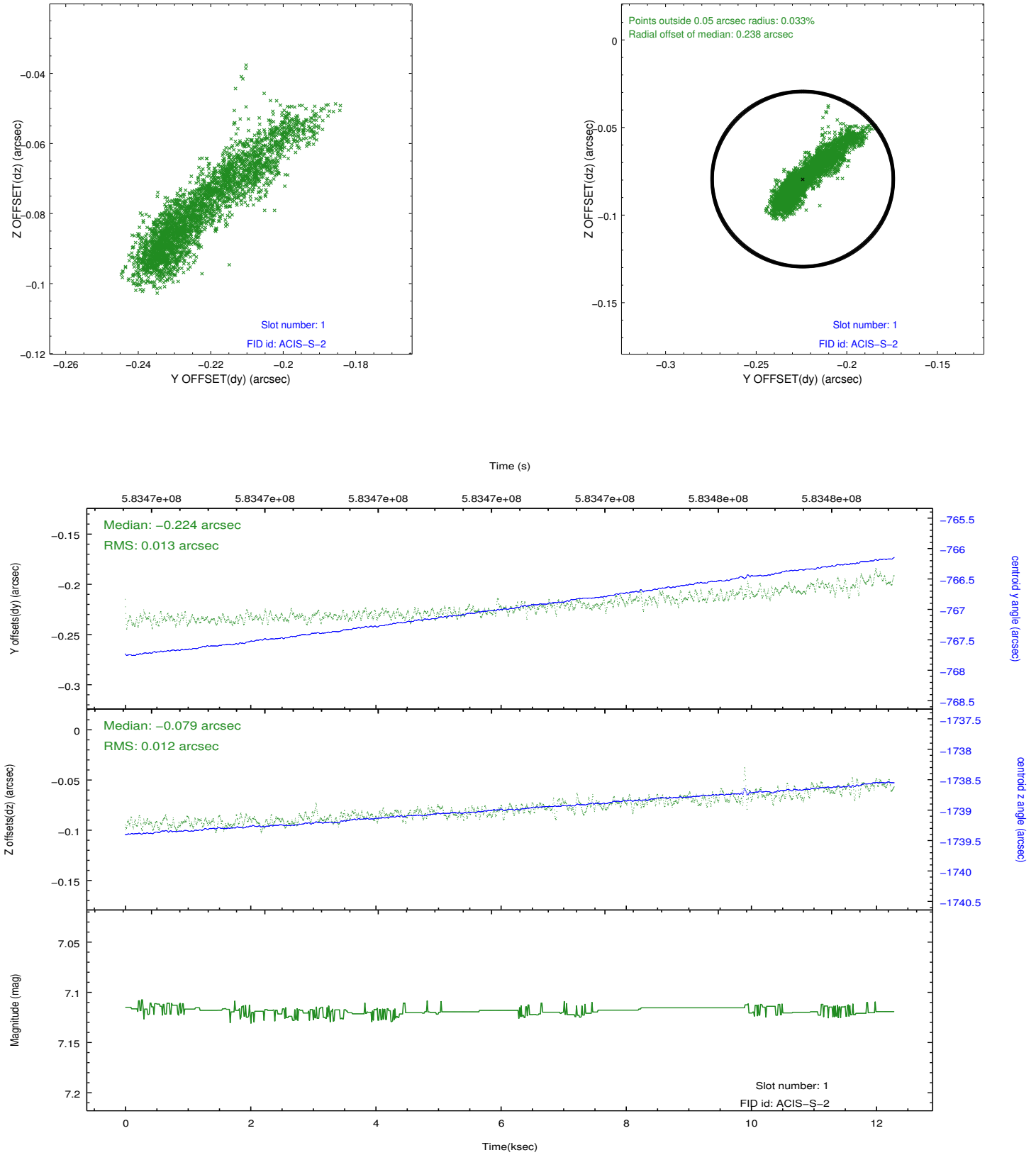


2.5 FID Slots

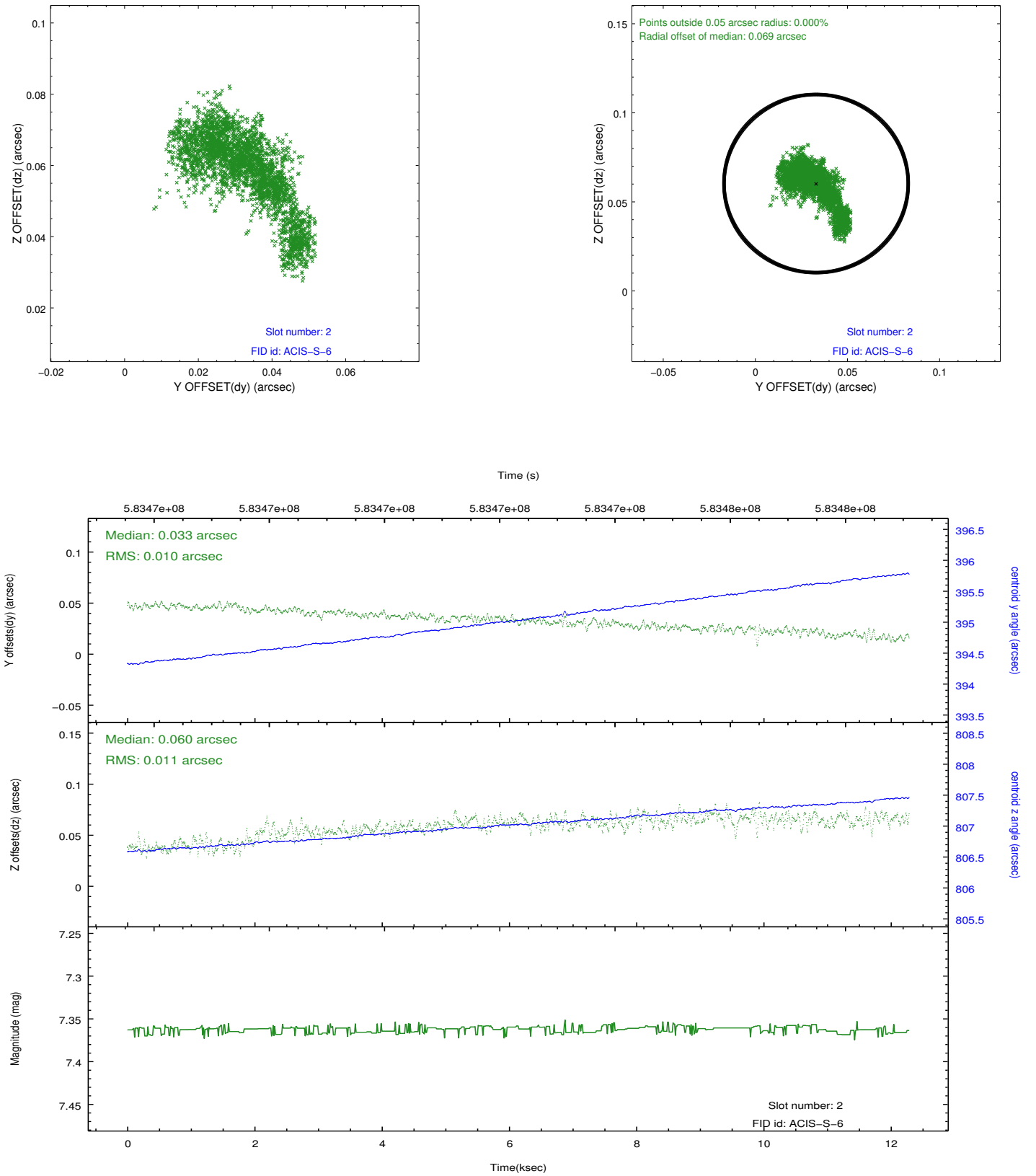
2.5.1 Slot 0



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)	2016.07.01
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	11.952000178099

A.2 Comments

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.

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Joint Proposal: HST