

V&V Reference Report

L2 ASCDS Version : 10.5.2

Observation 19548 - L2 Version 2
Chandra X-Ray Center

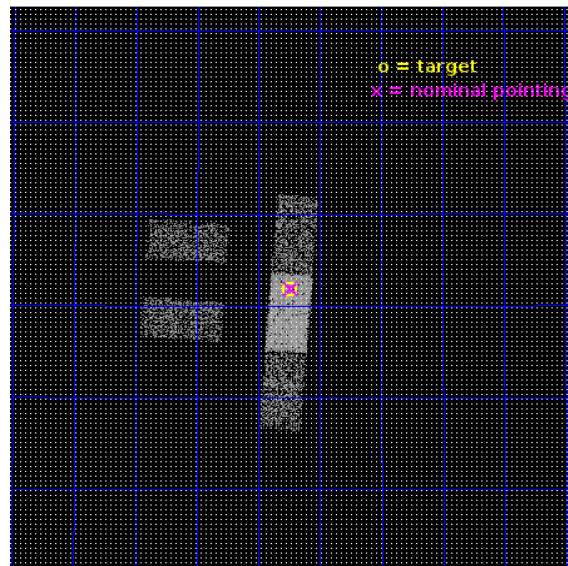
L2 Processing Date : Feb 2 2017

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1 Front

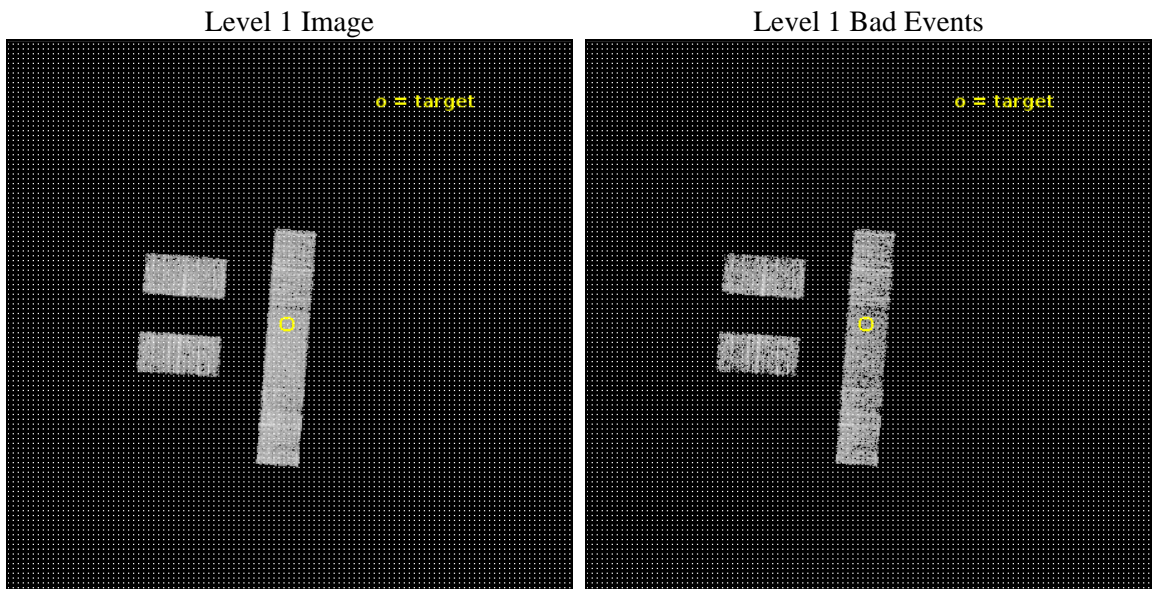
seq_num	703396	Sequence number
obs_id	19548	Observation id
title	Investigating X-ray Bias in Low-L, Low-z Quasars	Proposal title
observer	Gordon Richards	Principal investigator
object	SDSSJ112614.93+310146.6	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	171.562083	Observer's specified target RA [deg]
dec_targ	31.029639	Observer's specified target Dec [deg]
ra_nom	171.55811802152	Nominal RA [deg]
dec_nom	31.031337395532	Nominal Dec [deg]
roll_nom	94.314000547642	Nominal Roll [deg]
revision	2	Processing version of data
ontime	3581.9001004696	Sum of GTIs [s]
livetime	3497.467129301	Livetime [s]
ontime2	3581.8931181431	Sum of GTIs [s]
ontime3	3581.9001004696	Sum of GTIs [s]
ontime6	3581.9001004696	Sum of GTIs [s]
ontime7	3581.9001004696	Sum of GTIs [s]
ontime8	3581.9001004696	Sum of GTIs [s]
l2events	12260	Number of level 2 events



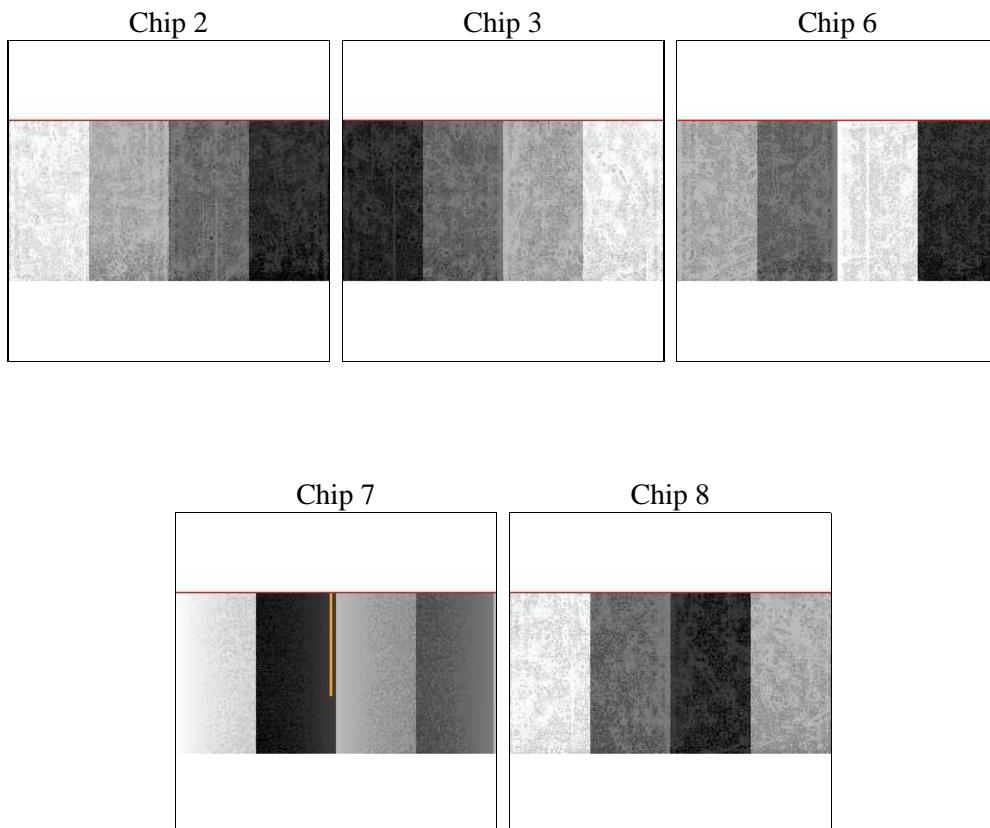
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	3500.000000	[s] Scheduled observation exposure time
ascdsver	10.5.2	Processing system revision	ontime	3581.9001004696	Sum of GTIs [s]
caldsver	4.7.3	 	ontime2	3581.8931181431	Sum of GTIs [s]
date	2017-02-02T20:05:17	Date and time of file creation	ontime3	3581.9001004696	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	3581.9001004696	Sum of GTIs [s]
			ontime7	3581.9001004696	Sum of GTIs [s]
			ontime8	3581.9001004696	Sum of GTIs [s]
			l1events	78010	Number of level 1 events

2.1.4 Events

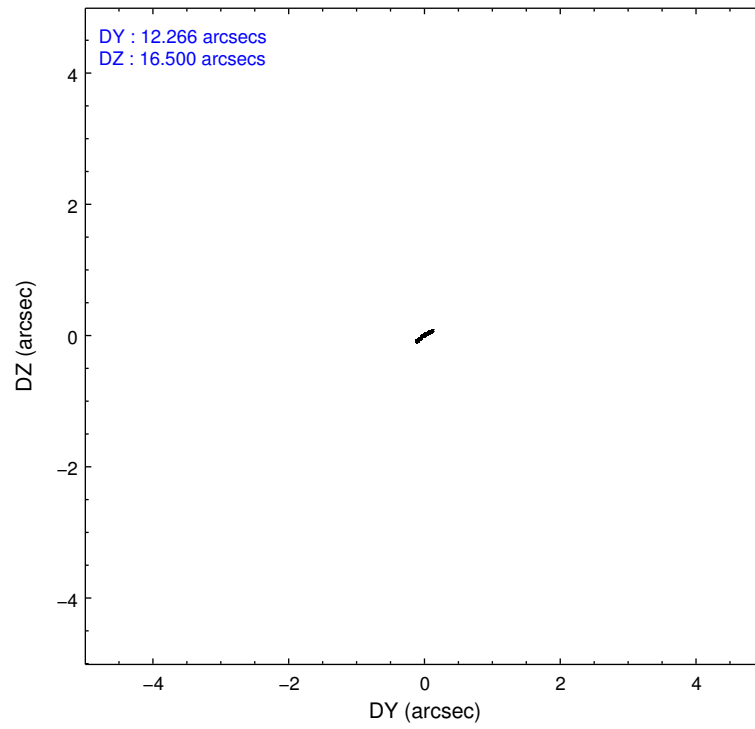
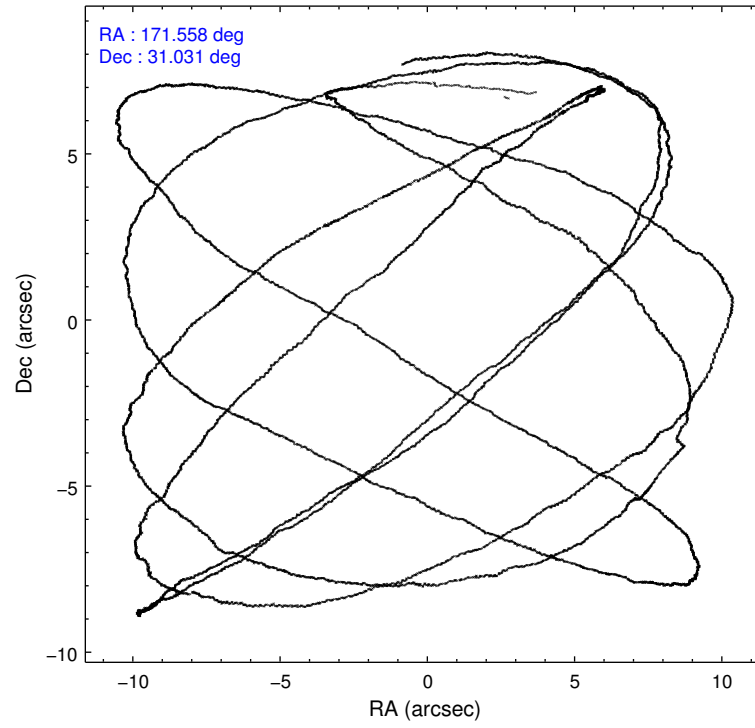
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	14608	13524	14685	16924	18269
rejected events	13071	12179	13127	9593	14093
rejected %	89%	90%	89%	56%	77%

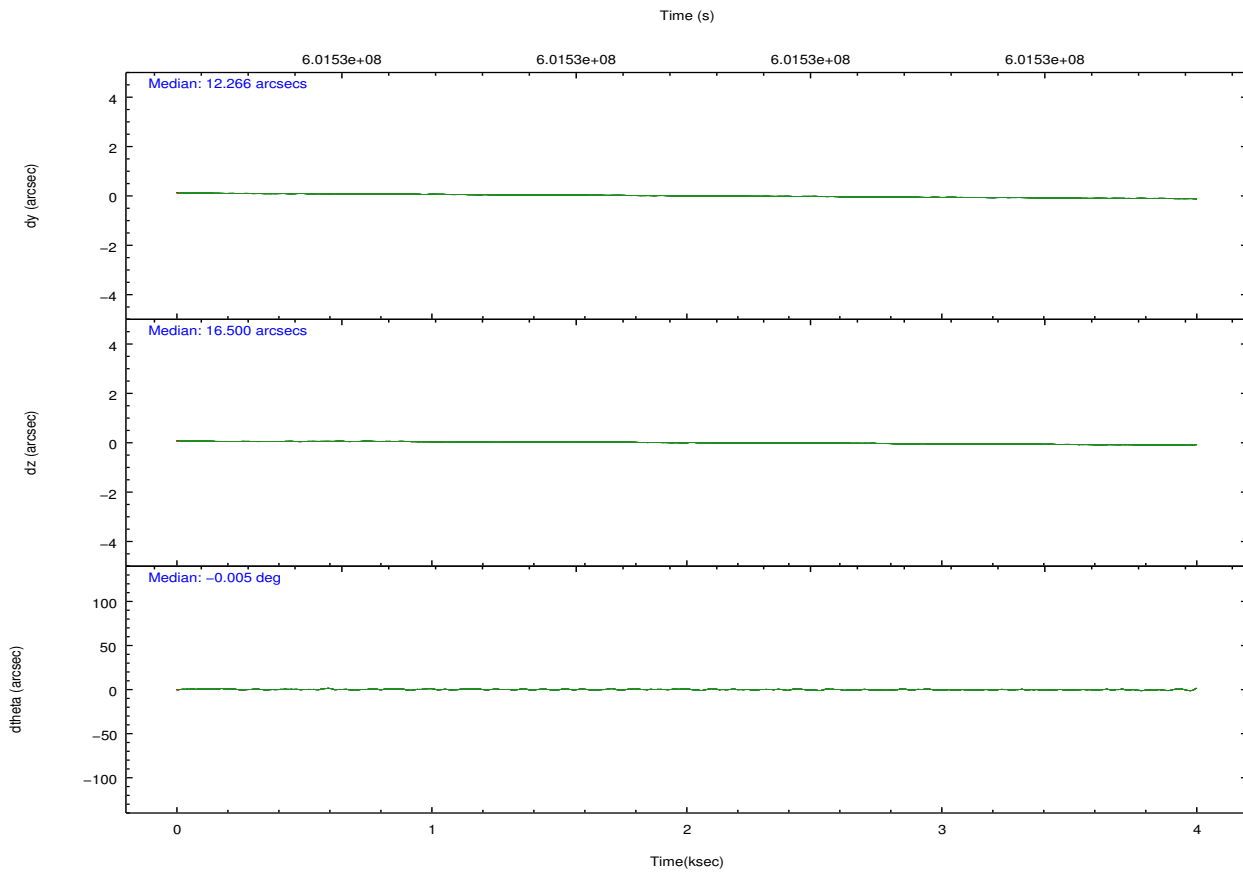
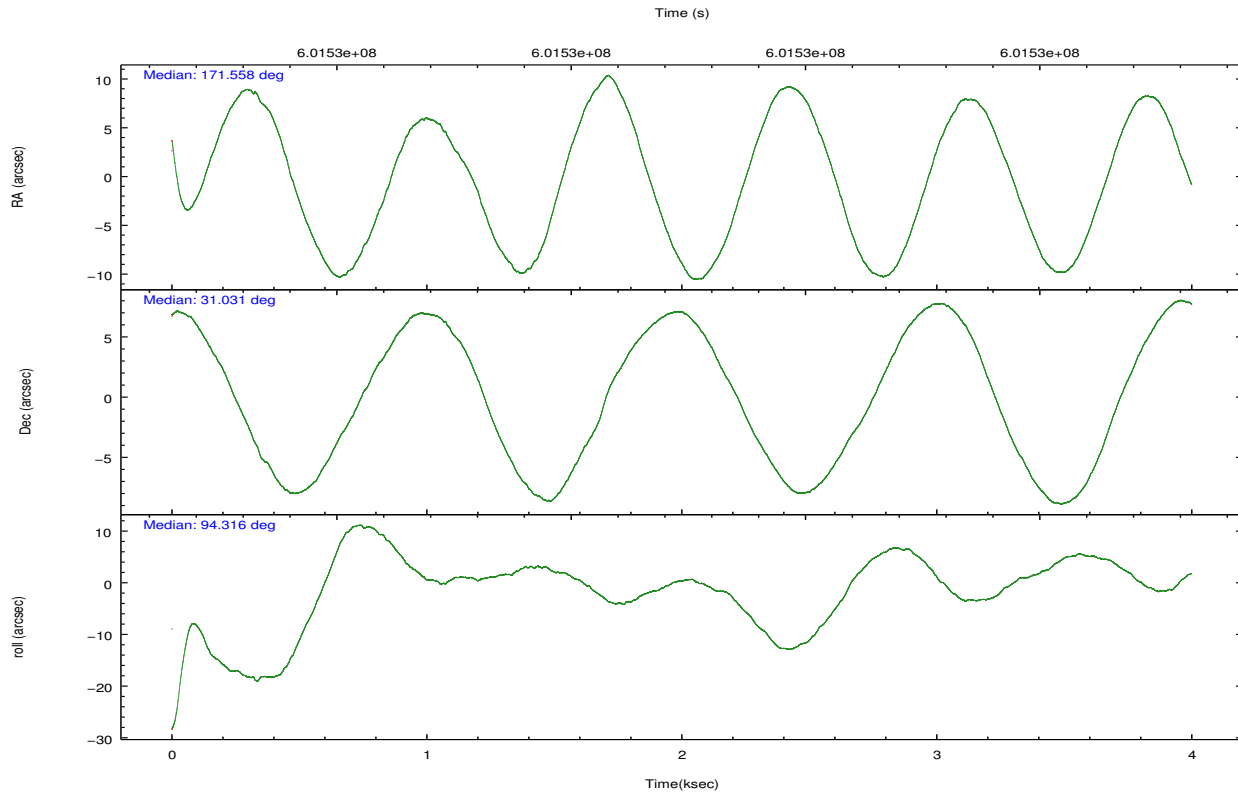
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	580	436	447	688	1141
	3%	3%	3%	4%	6%
grade 1 events	14	4	5	21	2
	0%	0%	0%	0%	0%
grade 2 events	310	285	381	1536	1008
	2%	2%	2%	9%	5%
grade 3 events	194	184	152	583	461
	1%	1%	1%	3%	2%
grade 4 events	180	159	160	617	405
	1%	1%	1%	3%	2%
grade 5 events	476	610	588	1619	855
	3%	4%	4%	9%	4%
grade 6 events	274	281	418	3915	1181
	1%	2%	2%	23%	6%
grade 7 events	12580	11565	12534	7945	13216
	86%	85%	85%	46%	72%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23678	ACIS-23678	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	171.576409	171.5581180215212	CCD I2 on	O1	Y
[deg] Pointing Dec	31.008851	31.03133739553169	CCD I3 on	Y	Y
[deg] Pointing Roll	94.148022	94.3140005476418	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[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	Y	Y
[s] Observation start time (MET)	601527977.184000	601526909.46149	CCD S5 on	N	N
Observation start date	2017-01-23T03:05:08	2017-01-23T02:48:29	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	601531477.184000	601531996.02429	On-chip summing requested	N	N
Observation end date	2017-01-23T04:03:28	2017-01-23T04:13:16	Subarray requested	CUSTOM	1/2
Read mode	TIMED	TIMED	Subarray start row	257	257
			Subarray row count	512	512
			Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	1.7

2.3 Aspect



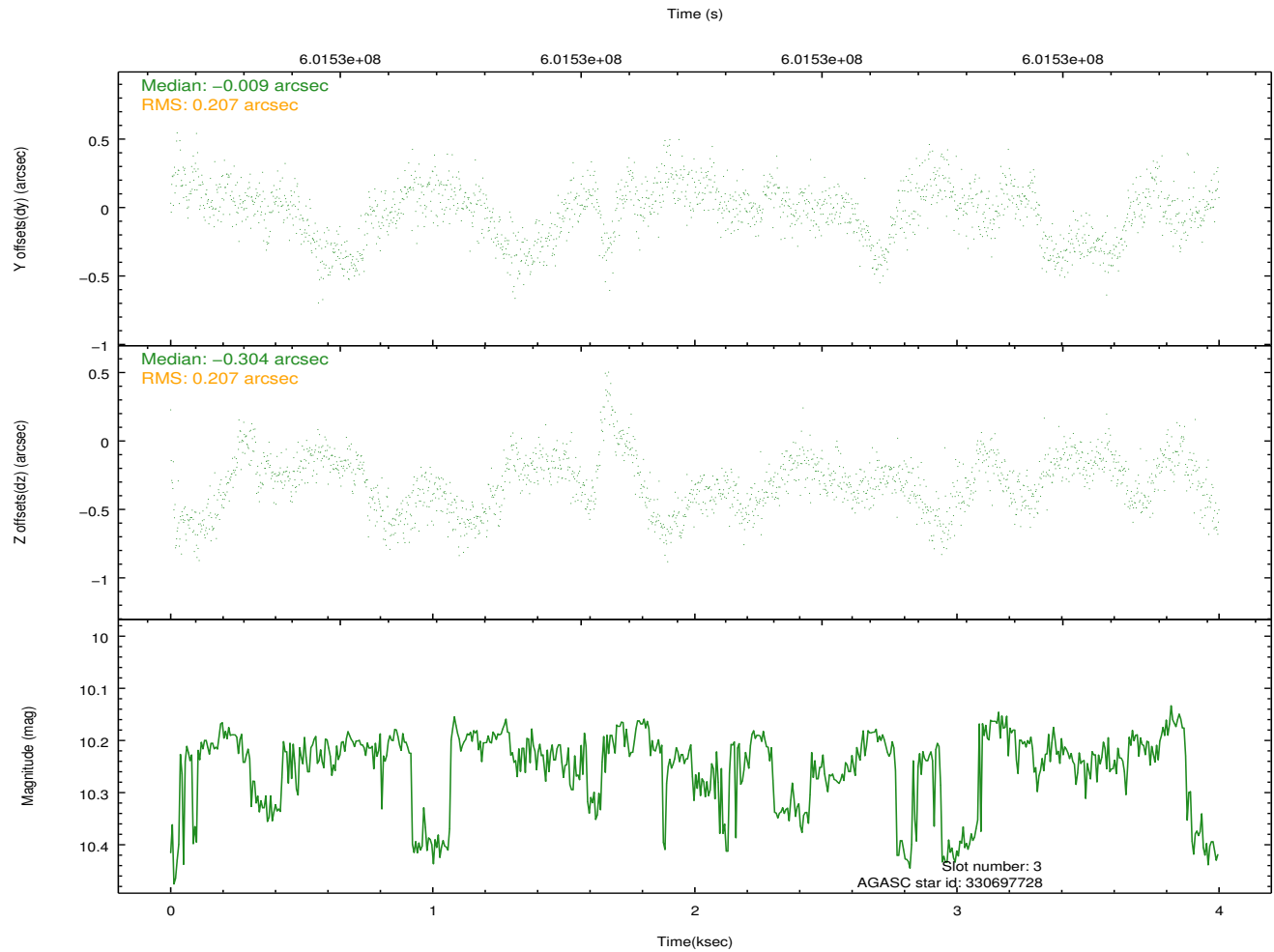
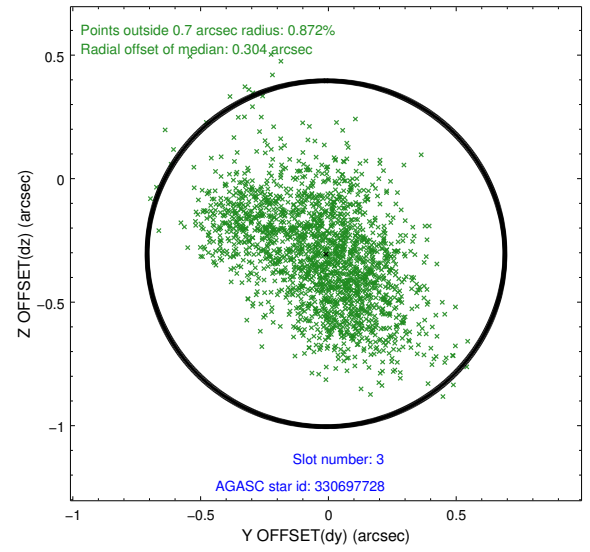
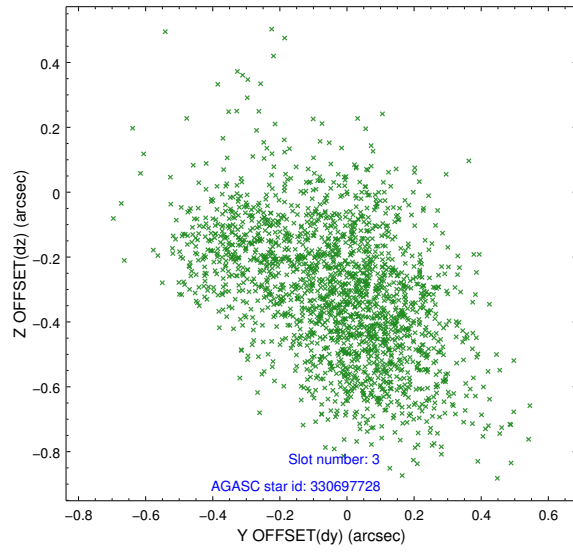


Slot Statistics

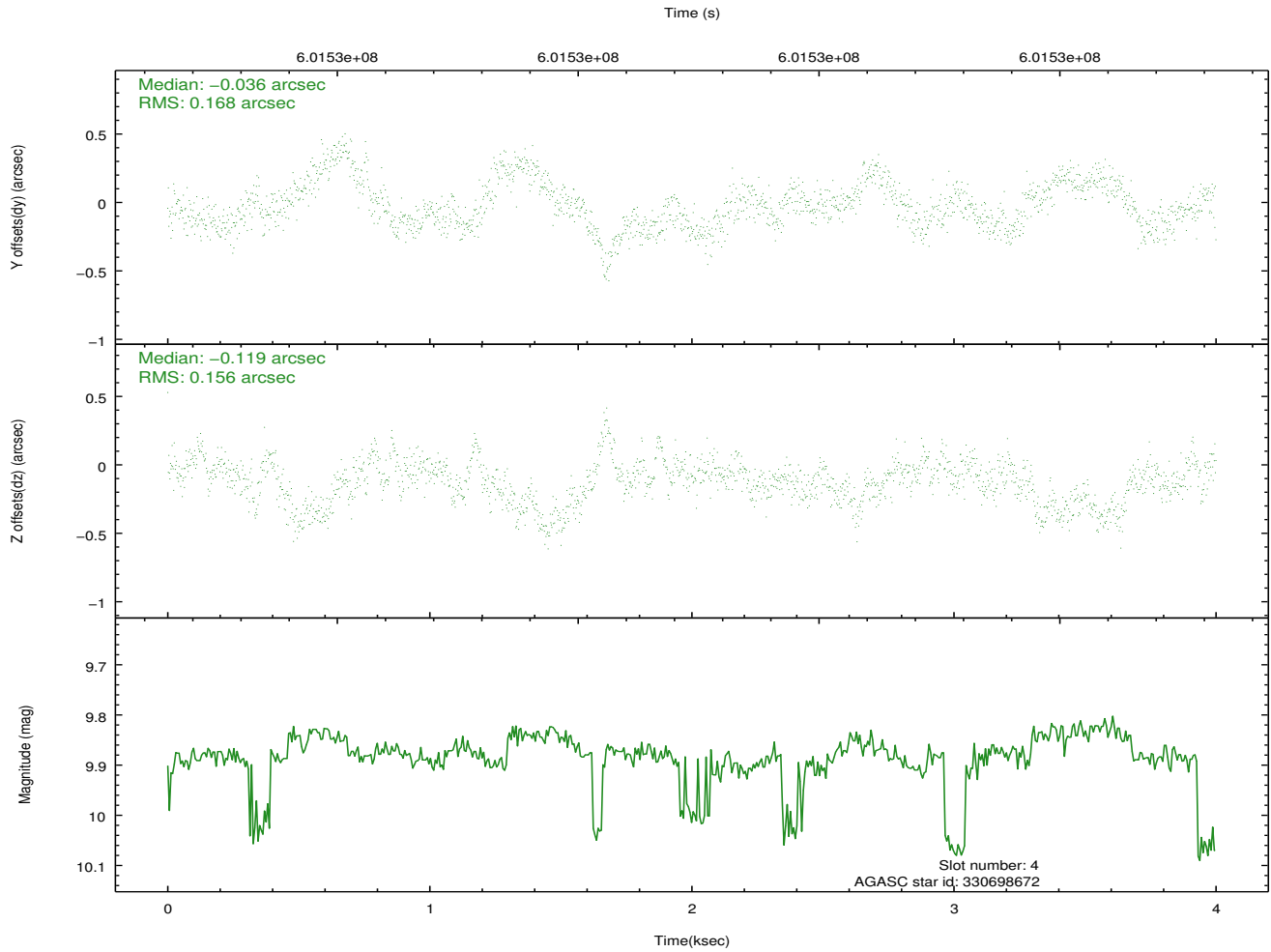
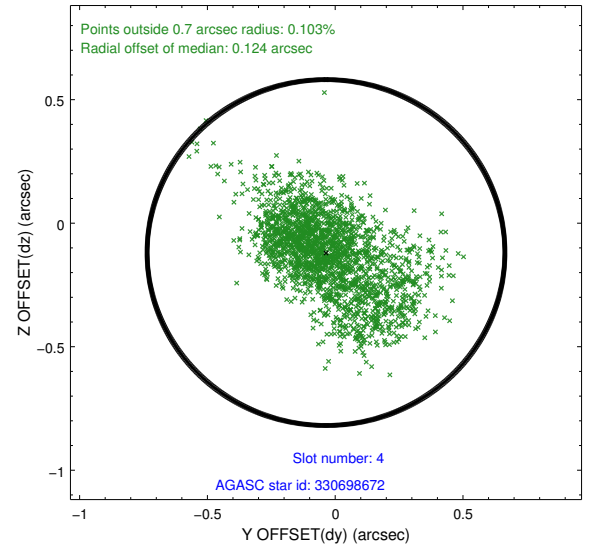
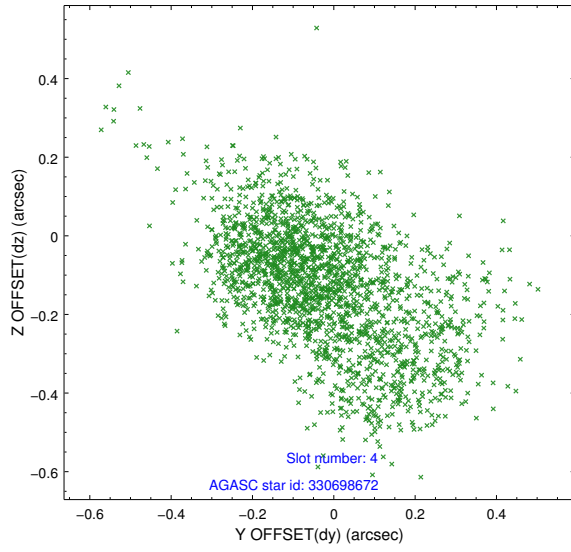
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.18	976	-0.129	-0.069	0.008	0.012	0.000000	0.000000	-765.26	-1738.00
1	FID		ACIS-S-4	7.30	976	0.384	0.081	0.006	0.011	0.000000	0.000000	2147.78	169.06
2	FID		ACIS-S-5	7.31	976	-0.286	-0.003	0.009	0.014	0.000000	0.000000	-1816.29	164.36
3	GUIDE	used	330697728	10.23	1950	-0.009	-0.304	0.315	0.496	171.511425	31.658630	2347.27	30.10
4	GUIDE	used	330698672	9.88	1948	-0.036	-0.119	0.237	0.407	171.694998	31.587422	2052.41	-513.17
5	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
6	GUIDE	used	330704408	9.55	1947	0.123	-0.103	0.180	0.299	171.355370	30.583940	-1474.18	794.13
7	GUIDE	used	330716504	9.98	1943	-0.071	0.570	0.213	0.359	171.942288	31.554615	1879.55	-1260.28

2.4 Star Slots

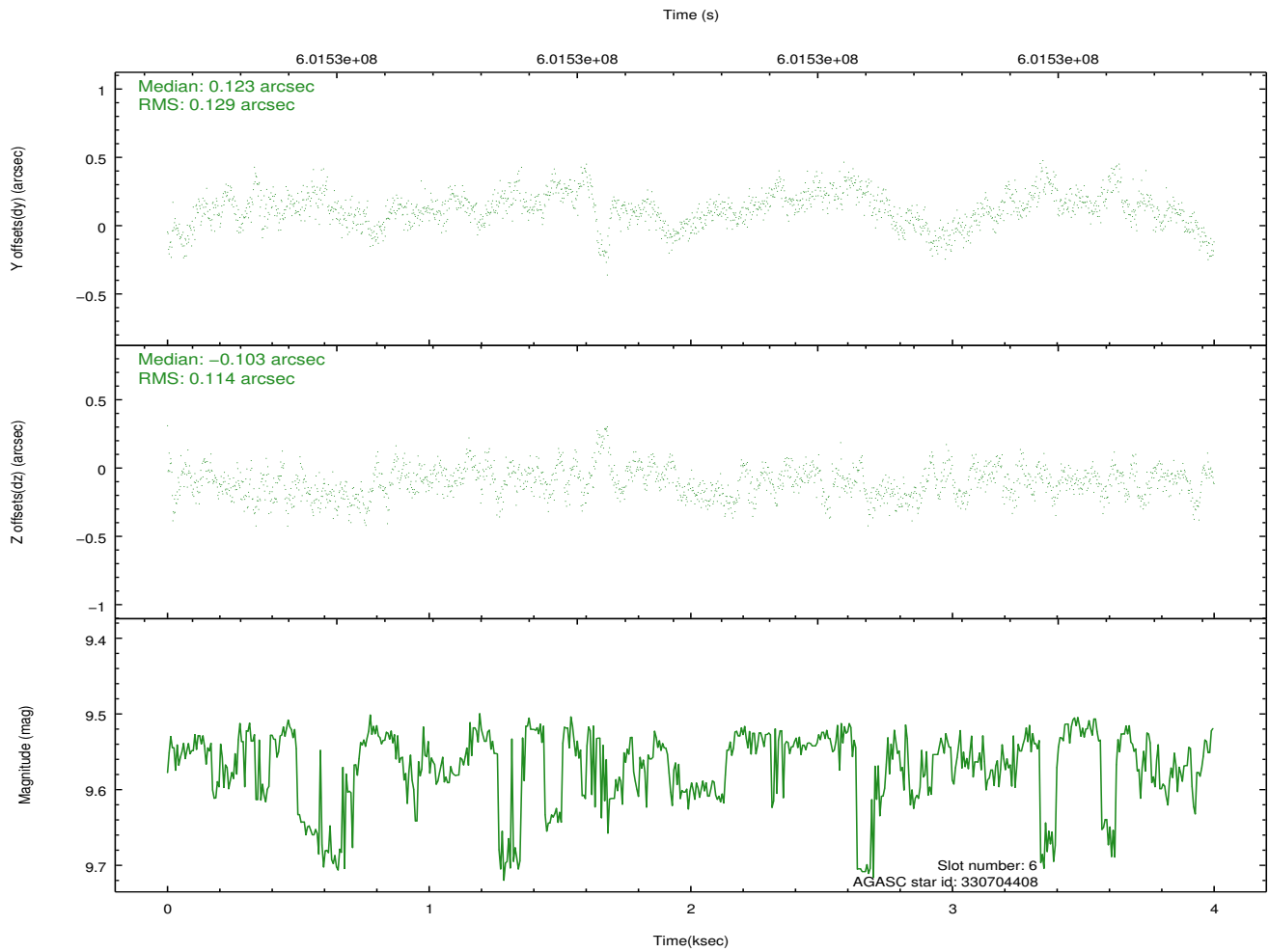
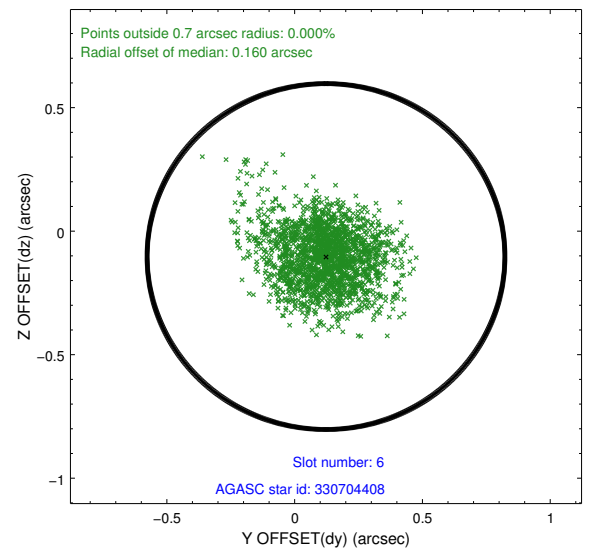
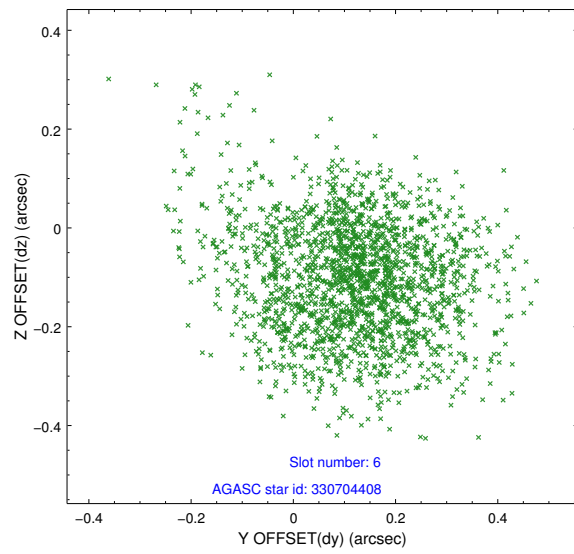
2.4.1 Slot 3



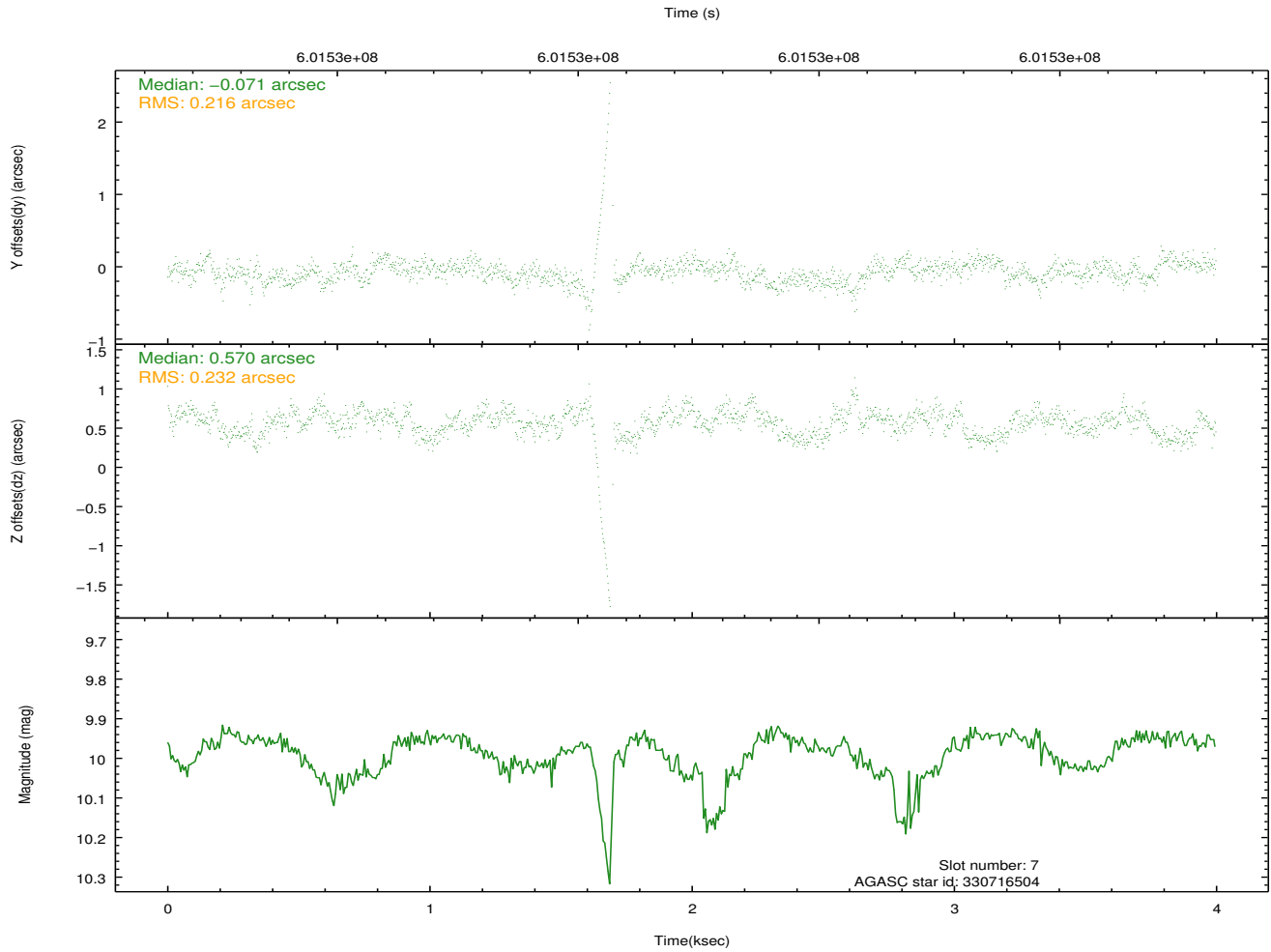
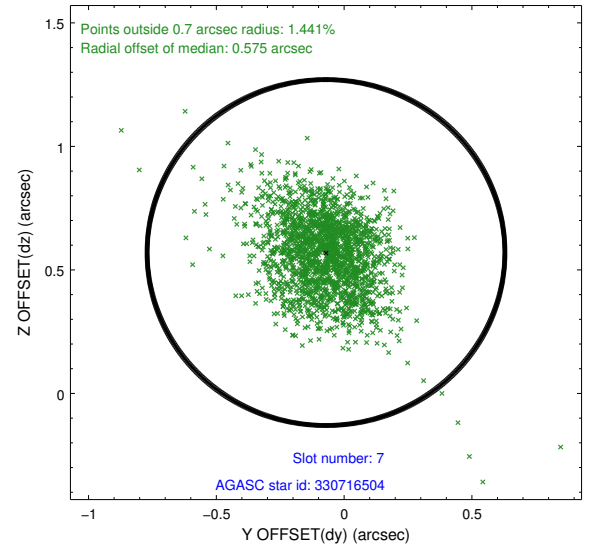
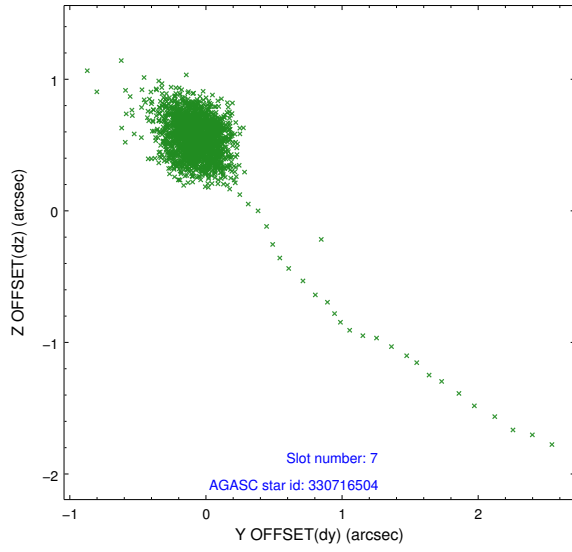
2.4.2 Slot 4



2.4.3 Slot 6

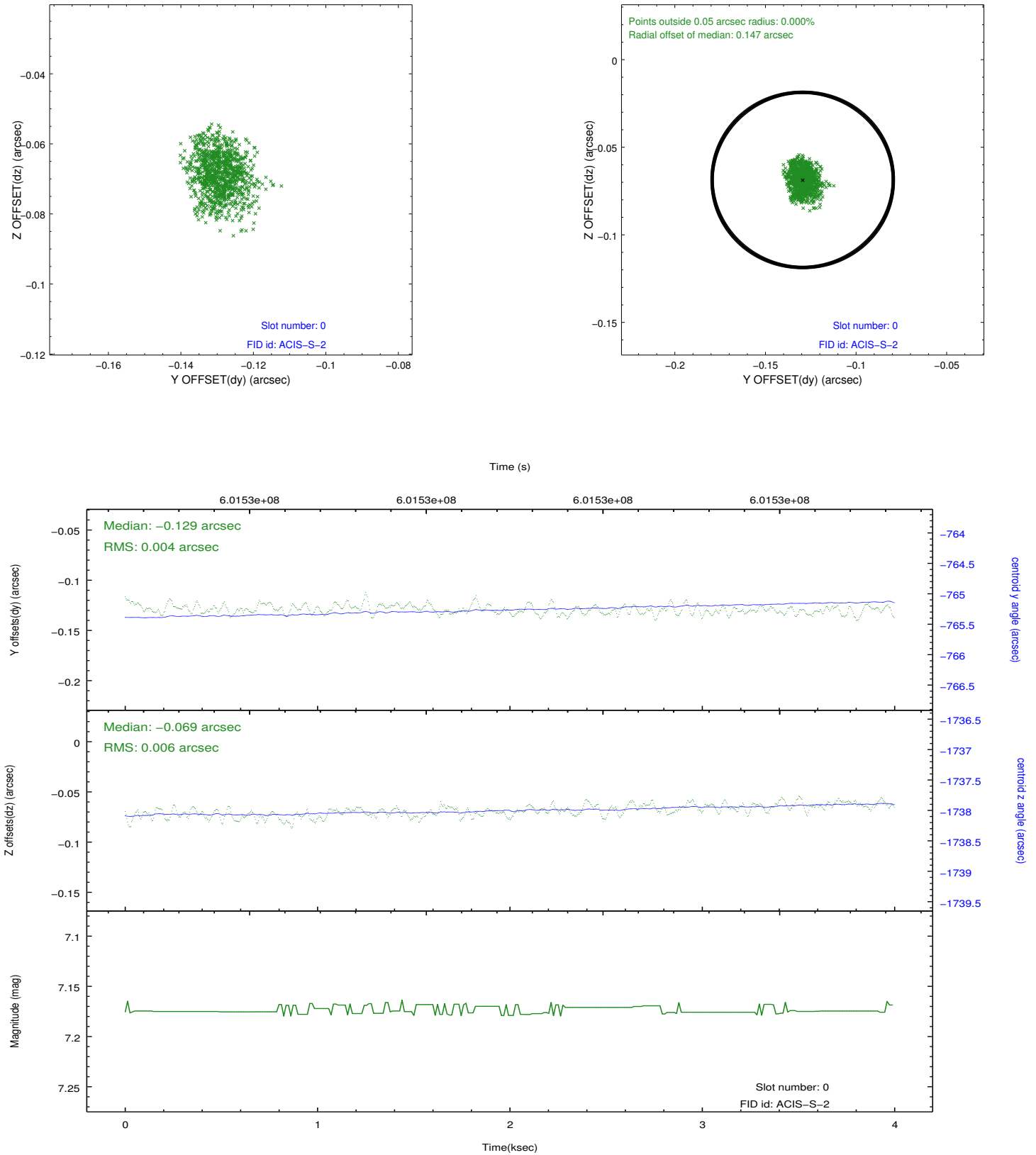


2.4.4 Slot 7

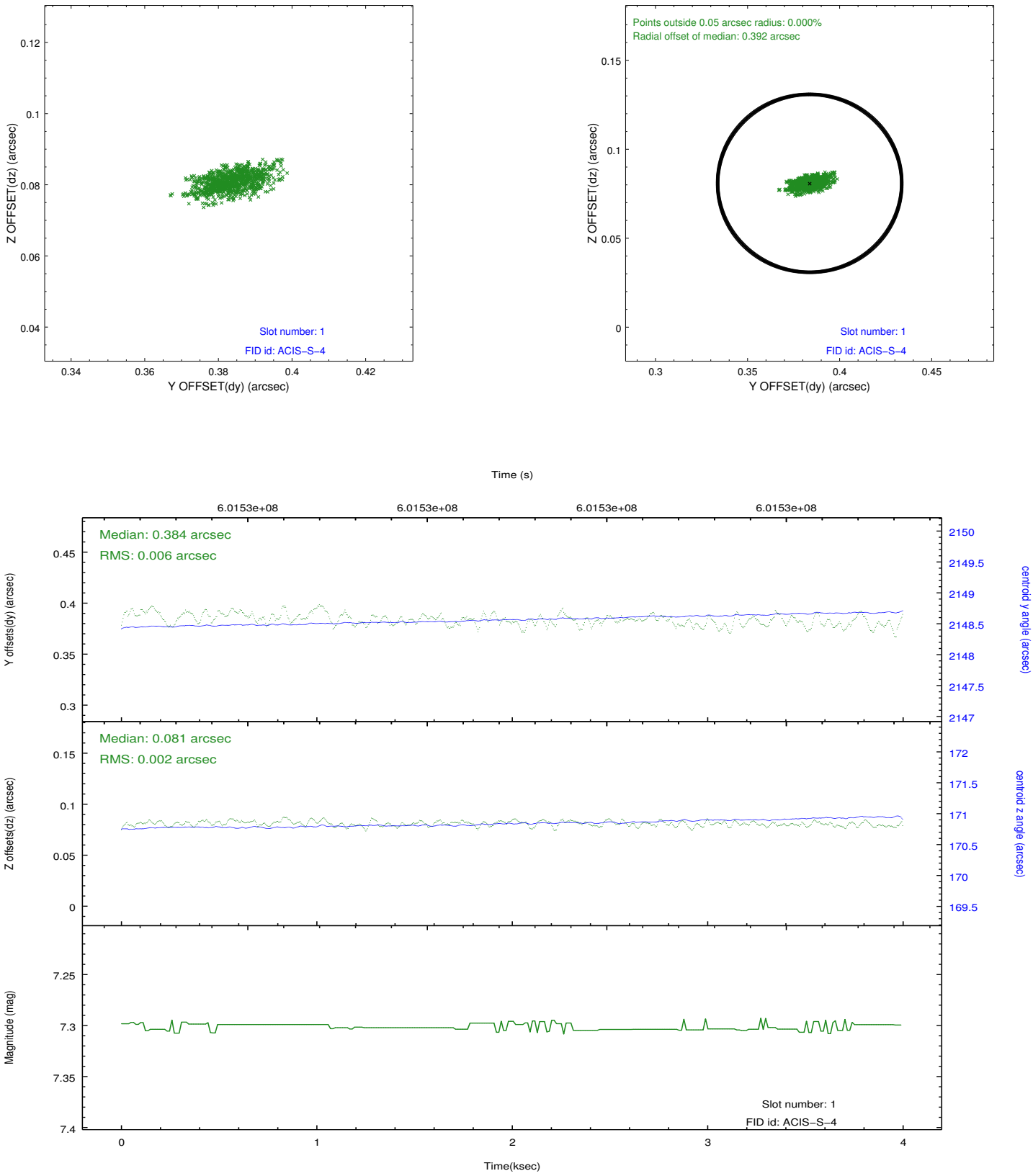


2.5 FID Slots

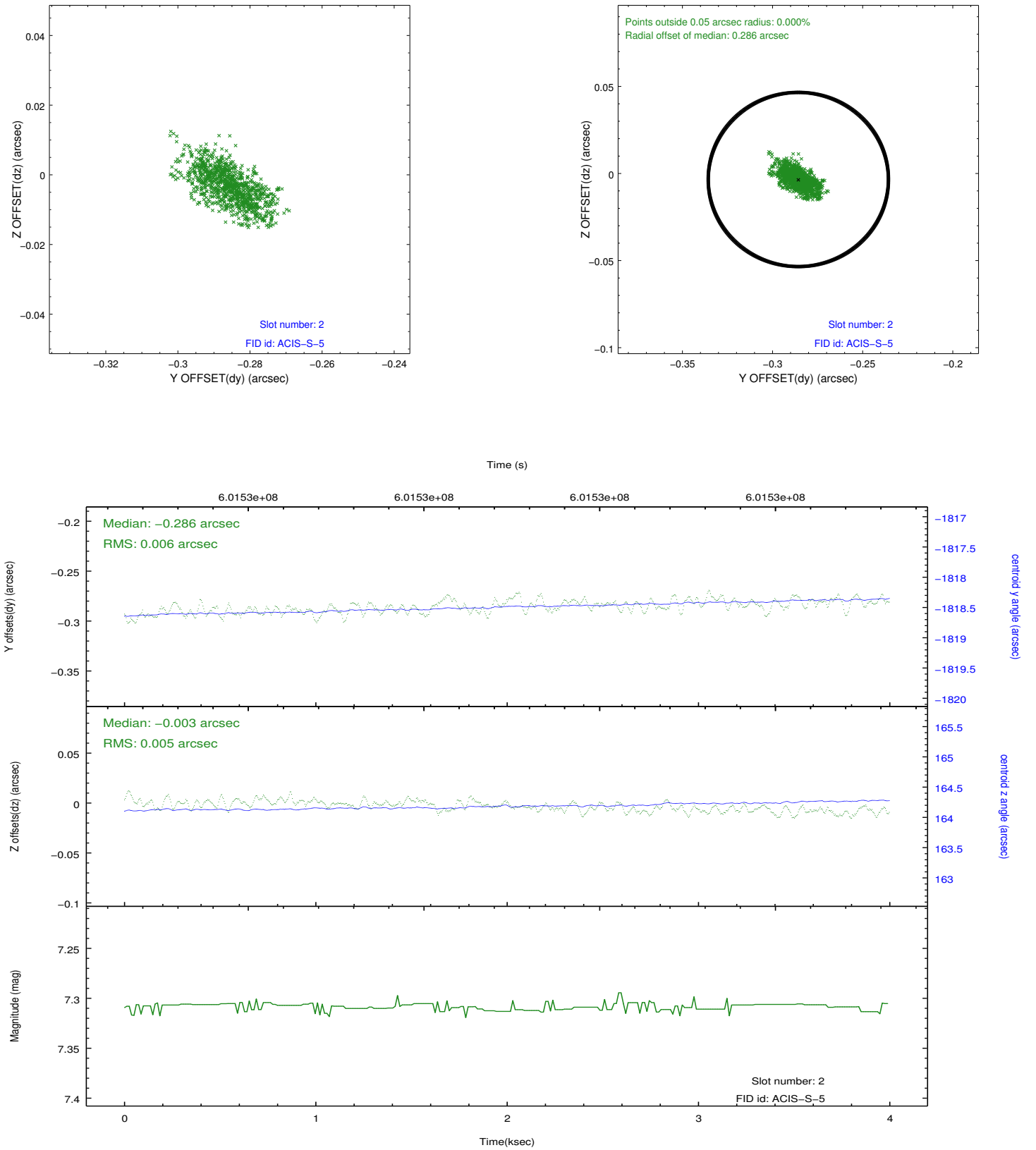
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2017.02.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	3.5819001004696

A.2 Comments

The very brief excursion for the star in slot 7 is acceptable for aspect. The guide star in slot 5 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.