

V&V Reference Report

L2 ASCDS Version : 10.3.3

Observation 16986 - L2 Version 2
Chandra X-Ray Center

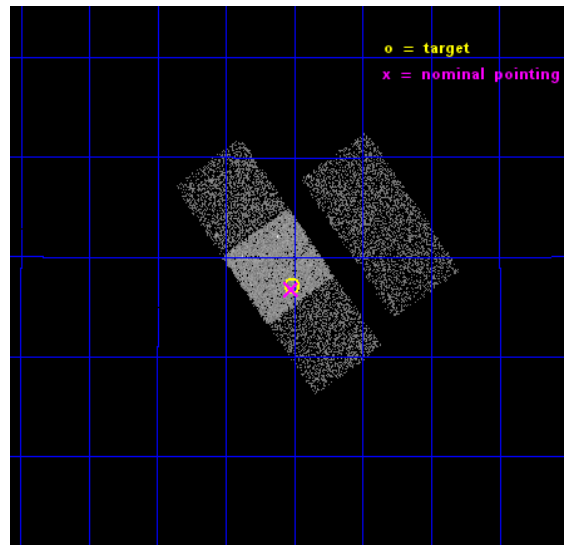
L2 Processing Date : Apr 6 2015

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1 Front

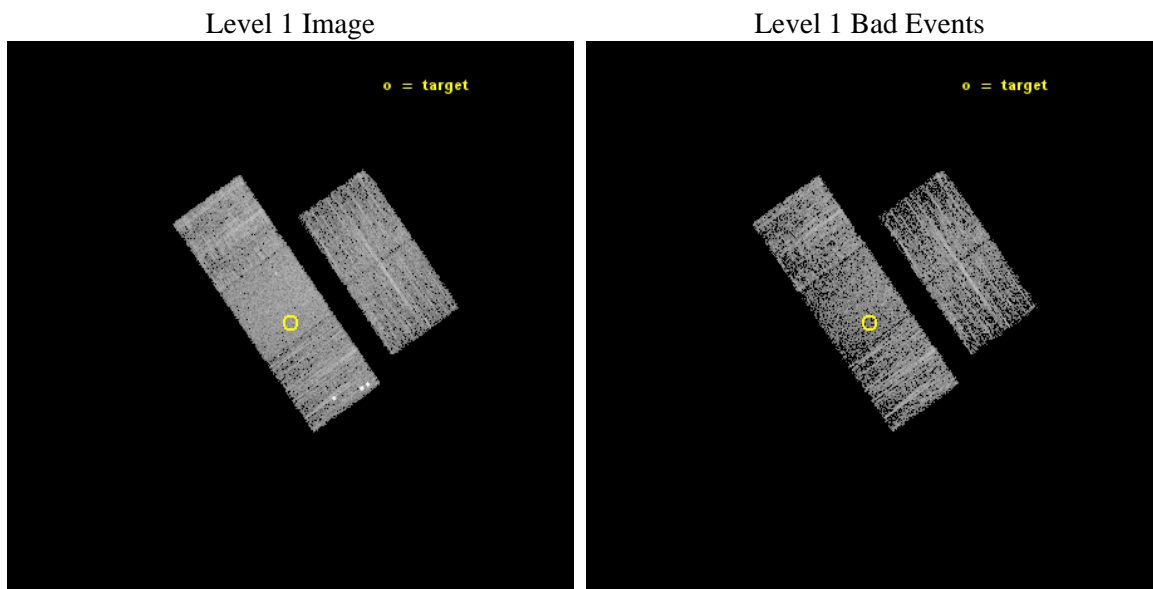
seq_num	601179	Sequence number
obs_id	16986	Observation id
title	Super-massive black holes and nuclear star clusters in late type galaxies	Proposal title
observer	Elena Gallo	Principal investigator
object	NGC3455	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	163.629583	Observer's specified target RA [deg]
dec_targ	17.284583	Observer's specified target Dec [deg]
ra_nom	163.63016935812	Nominal RA [deg]
dec_nom	17.279191329243	Nominal Dec [deg]
roll_nom	234.92424894631	Nominal Roll [deg]
revision	2	Processing version of data
ontime	4562.1005510092	Sum of GTIs [s]
livetime	4502.4933487407	Livetime [s]
ontime2	4561.936390996	Sum of GTIs [s]
ontime3	4558.8774106503	Sum of GTIs [s]
ontime6	4562.0595110655	Sum of GTIs [s]
ontime7	4562.1005510092	Sum of GTIs [s]
ontime8	4561.9774310589	Sum of GTIs [s]
l2events	21570	Number of level 2 events



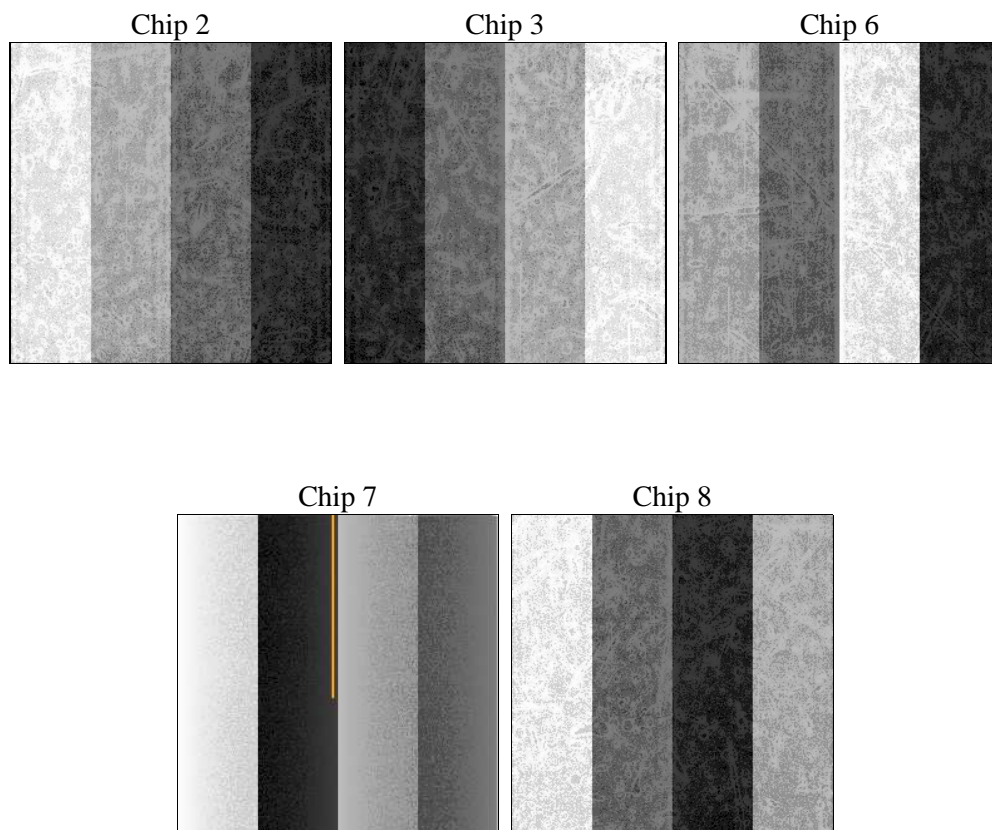
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	4500.000000	[s] Scheduled observation exposure time
ascdsver	10.3.3	Processing system revision	ontime	4562.1005510092	Sum of GTIs [s]
caldsver	4.6.7	 	ontime2	4561.936390996	Sum of GTIs [s]
date	2015-04-06T17:50:12	Date and time of file creation	ontime3	4558.8774106503	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	4562.0595110655	Sum of GTIs [s]
			ontime7	4562.1005510092	Sum of GTIs [s]
			ontime8	4561.9774310589	Sum of GTIs [s]
			l1events	130261	Number of level 1 events

2.1.4 Events

	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	21440	21937	27335	29716	29833
rejected events	19144	19537	20749	16730	22138
rejected %	89%	89%	75%	56%	74%

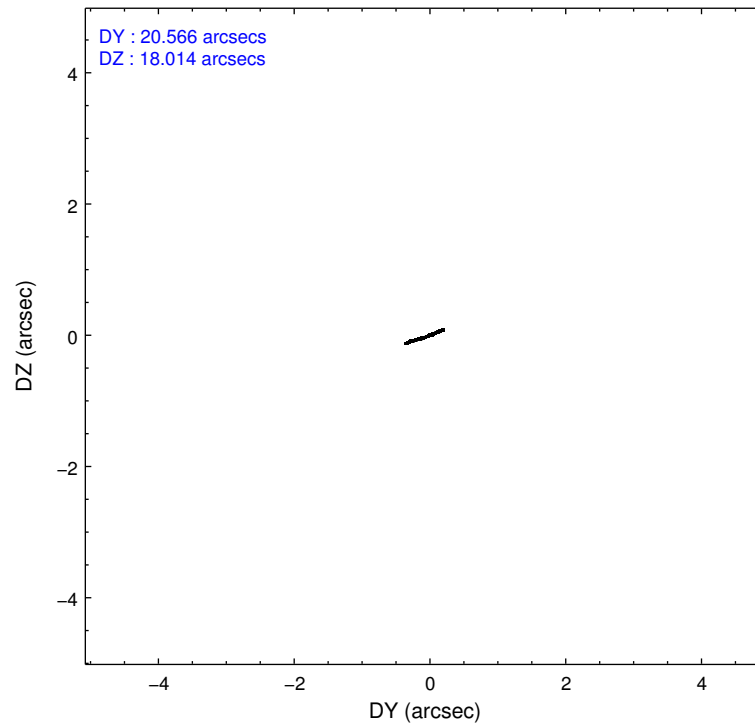
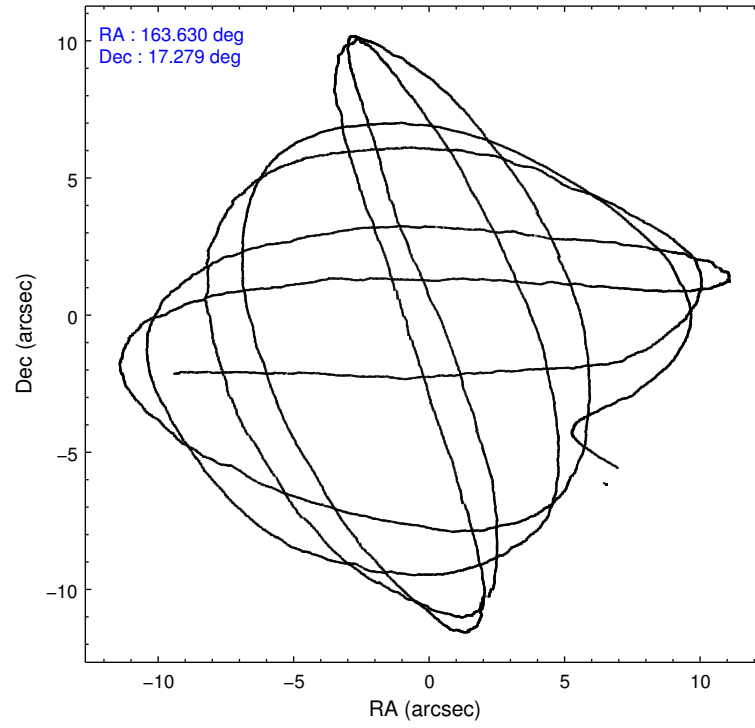
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	815	837	4848	1219	1986
	3%	3%	17%	4%	6%
grade 1 events	13	12	20	40	25
	0%	0%	0%	0%	0%
grade 2 events	546	518	614	2686	2032
	2%	2%	2%	9%	6%
grade 3 events	243	273	256	1095	709
	1%	1%	0%	3%	2%
grade 4 events	244	242	267	1128	653
	1%	1%	0%	3%	2%
grade 5 events	929	1147	1179	2959	1707
	4%	5%	4%	9%	5%
grade 6 events	454	531	611	6880	2322
	2%	2%	2%	23%	7%
grade 7 events	18196	18377	19540	13709	20399
	84%	83%	71%	46%	68%

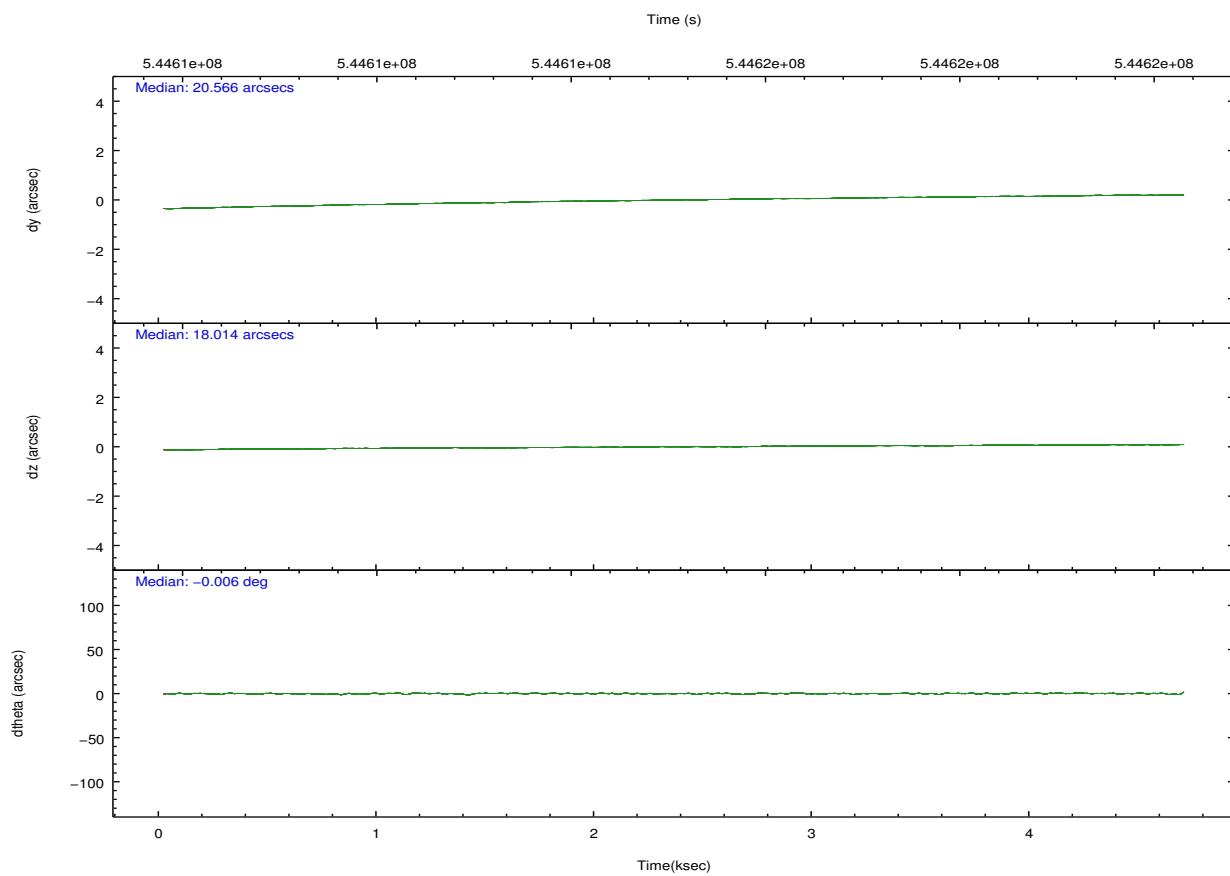
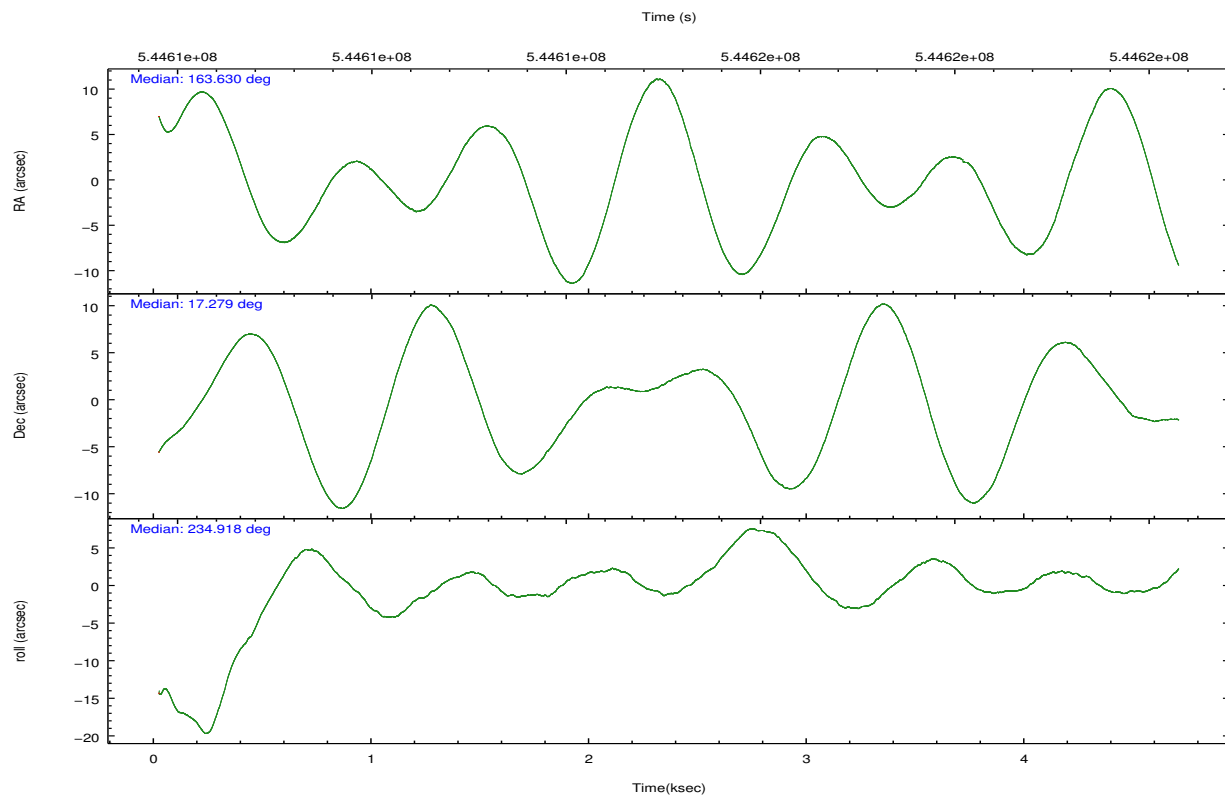
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-23678	ACIS-23678
Grating	NONE	NONE
Data mode	FAINT	FAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	163.632137	163.6301693581234
[deg] Pointing Dec	17.306530	17.27919132924281
[deg] Pointing Roll	234.767021	234.9242489463093
[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)	544612373.184000	544611096.0202399
Observation start date	2015-04-05T09:11:46	2015-04-05T08:51:36
[s] Observation end time (MET)	544616873.184000	544617725.72061
Observation end date	2015-04-05T10:26:46	2015-04-05T10:42:05
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	O2	Y
CCD I3 on	O1	Y
CCD S0 on	N	N
CCD S1 on	N	N
CCD S2 on	Y	Y
CCD S3 on	Y	Y
CCD S4 on	Y	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	3.1

2.3 Aspect



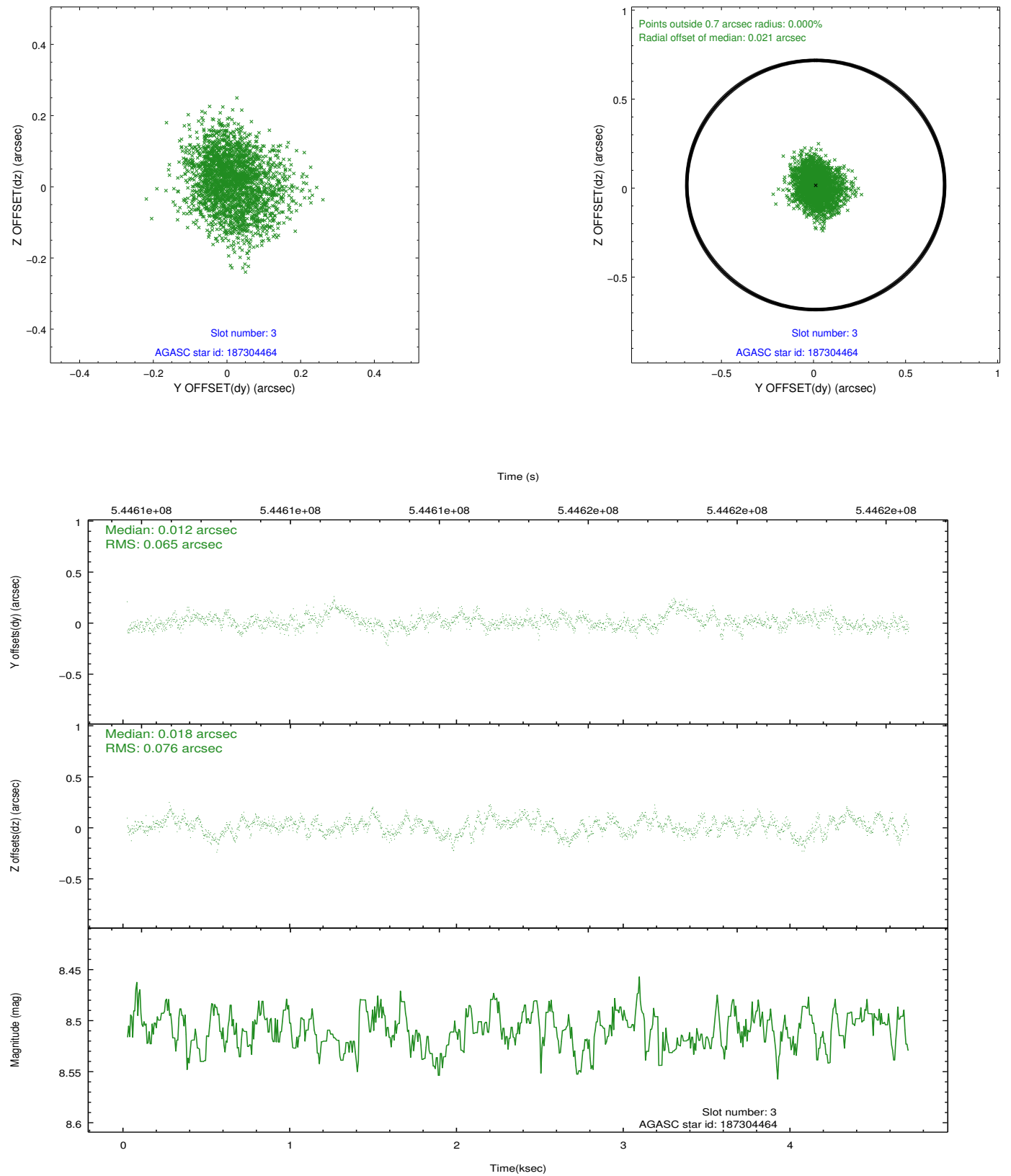


Slot Statistics

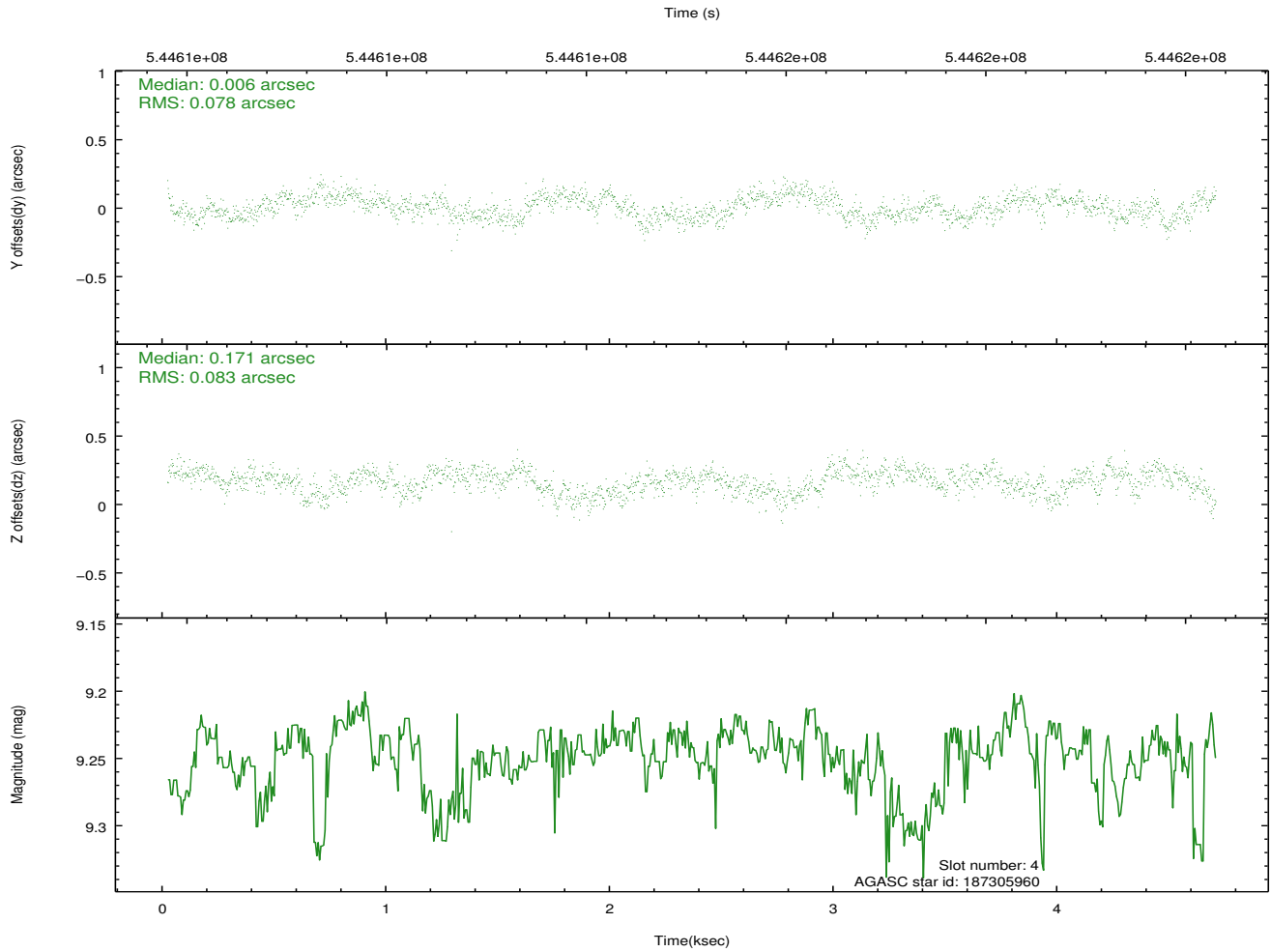
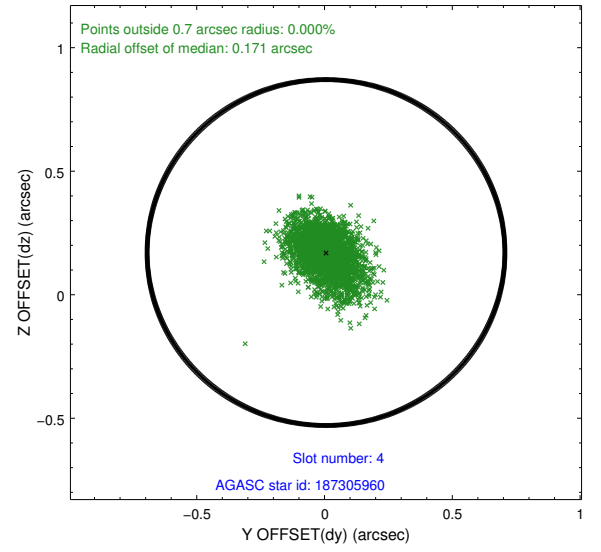
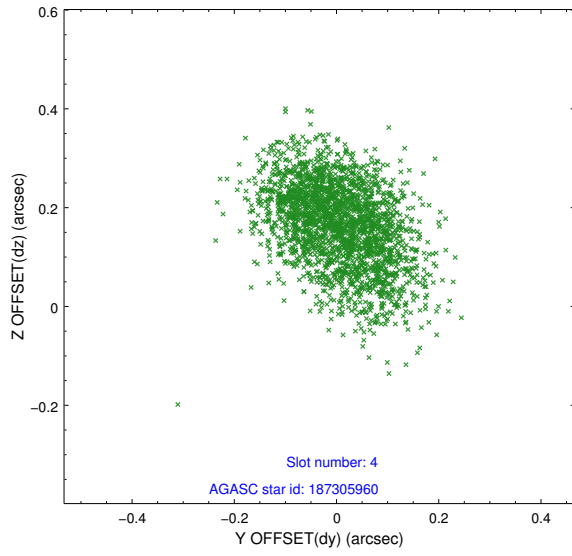
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-1	7.07	1144	0.103	-0.029	0.007	0.013	0.000000	0.000000	922.50	-1735.06
1	FID		ACIS-S-5	7.10	1144	-0.203	0.065	0.007	0.012	0.000000	0.000000	-1826.10	161.20
2	FID		ACIS-S-6	7.22	1144	0.079	-0.024	0.008	0.013	0.000000	0.000000	386.58	806.57
3	GUIDE	used	187304464	8.51	2287	0.012	0.018	0.107	0.171	163.305997	16.975469	1622.12	-230.09
4	GUIDE	used	187305960	9.25	2283	0.006	0.171	0.119	0.196	164.180611	17.346578	-1205.67	1454.27
5	GUIDE	used	187309176	8.76	2282	-0.189	-0.164	0.089	0.148	163.737499	16.842242	1155.84	1260.82
6	GUIDE	used	187309200	9.76	2283	0.169	-0.010	0.173	0.283	163.146074	17.075594	1644.32	-887.67
7	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00

2.4 Star Slots

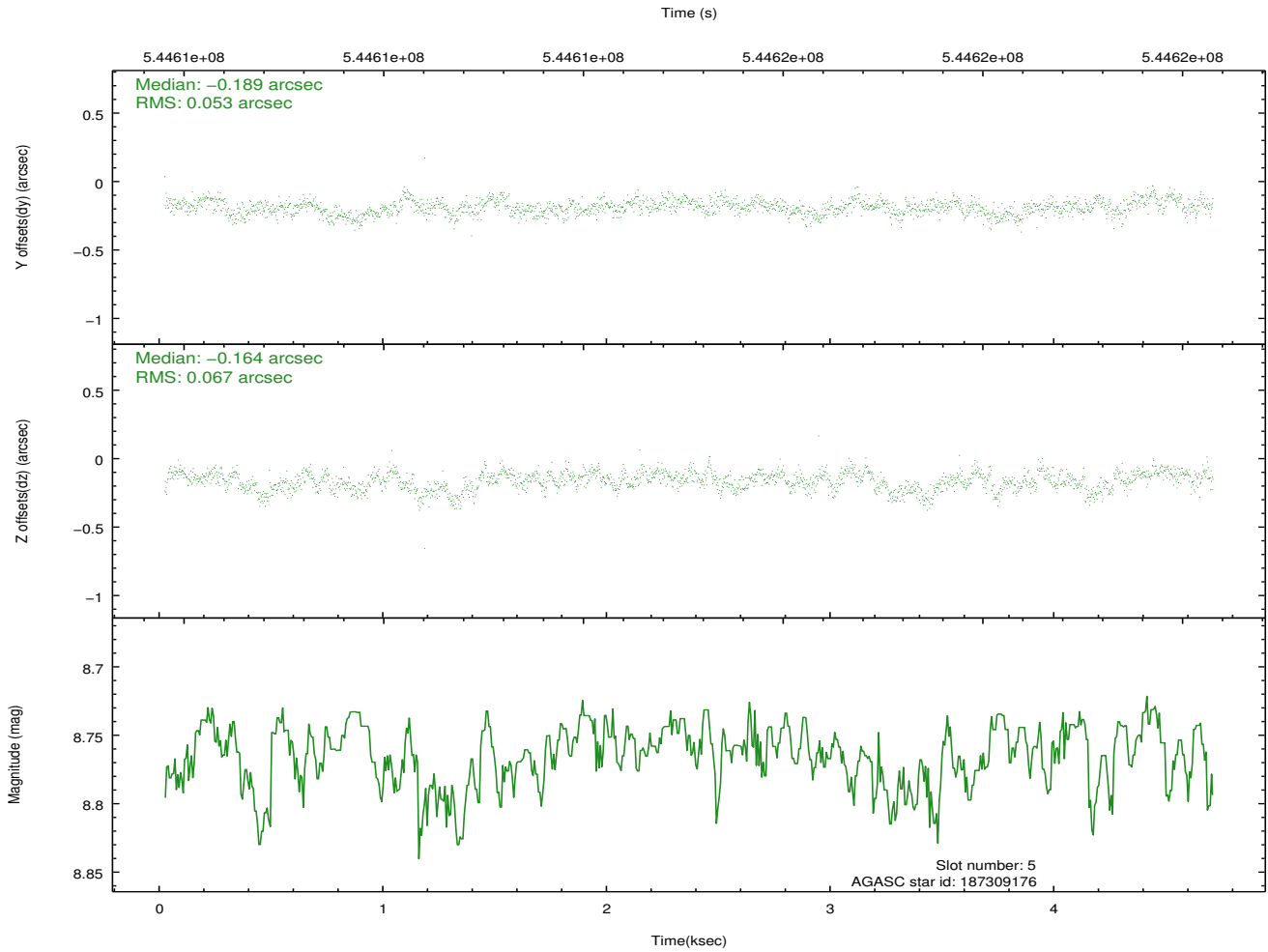
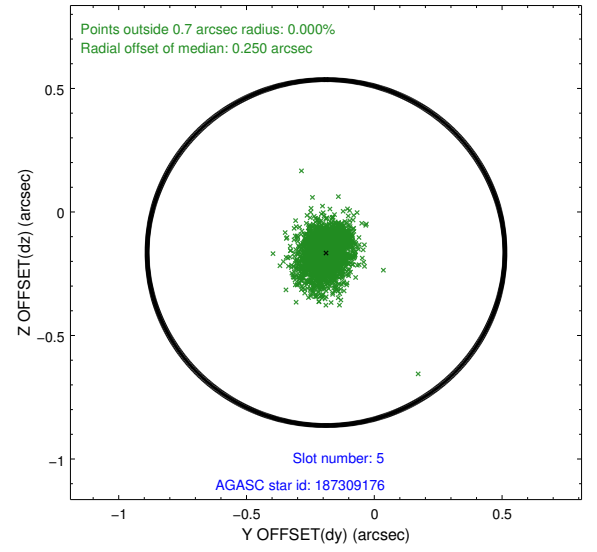
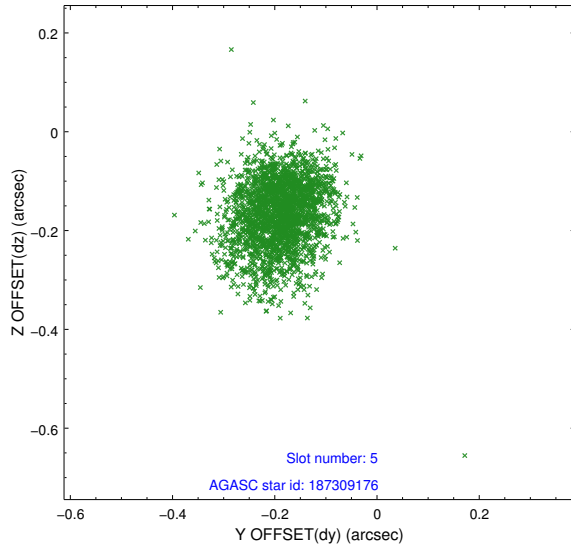
2.4.1 Slot 3



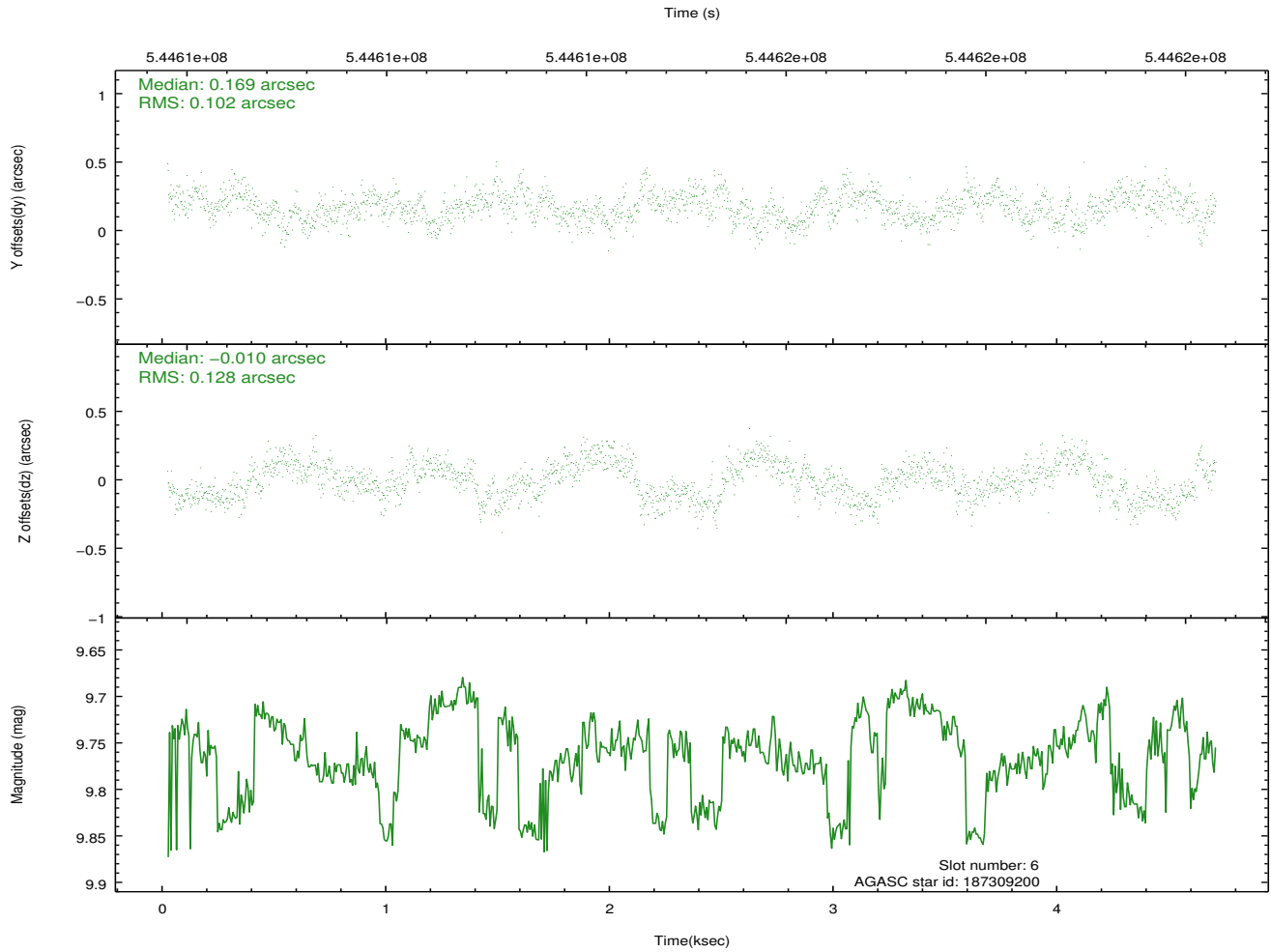
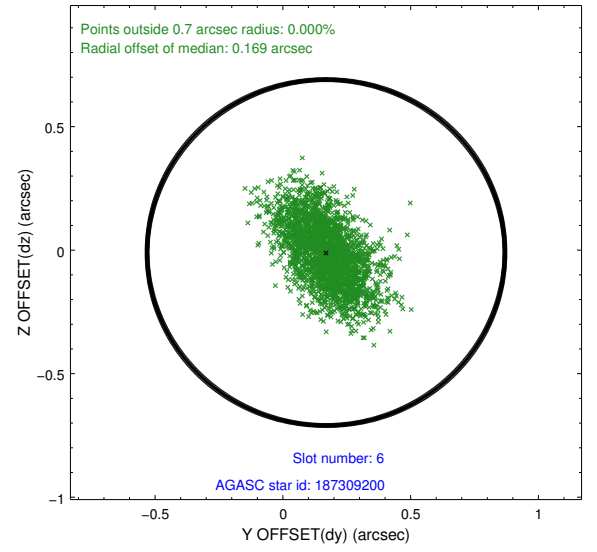
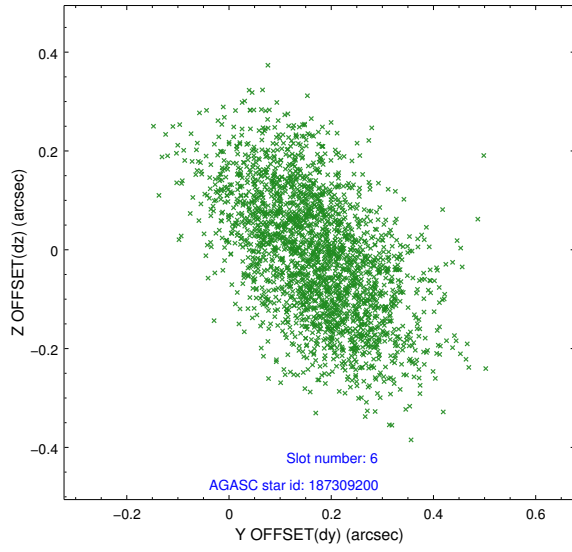
2.4.2 Slot 4



2.4.3 Slot 5

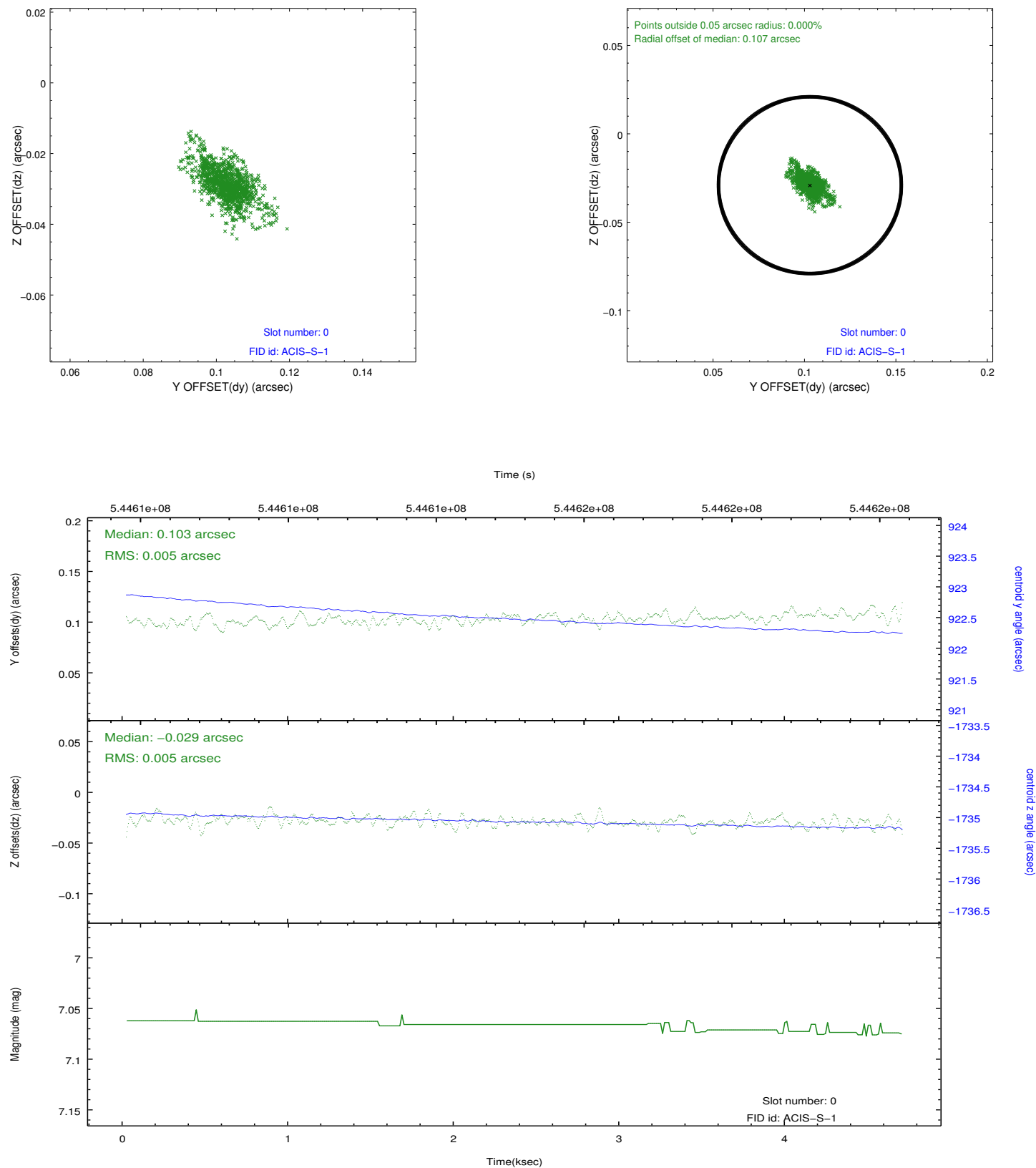


2.4.4 Slot 6

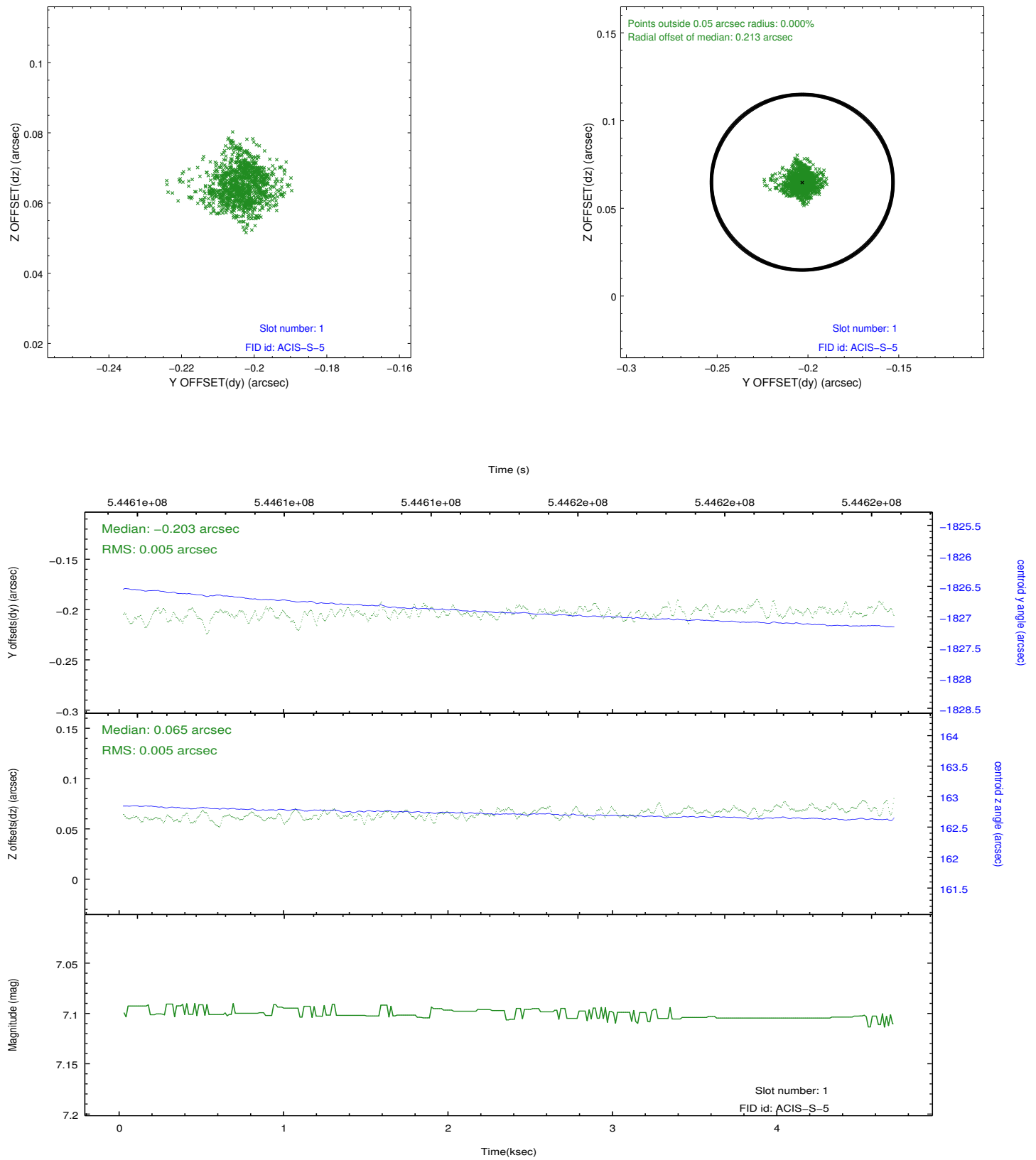


2.5 FID Slots

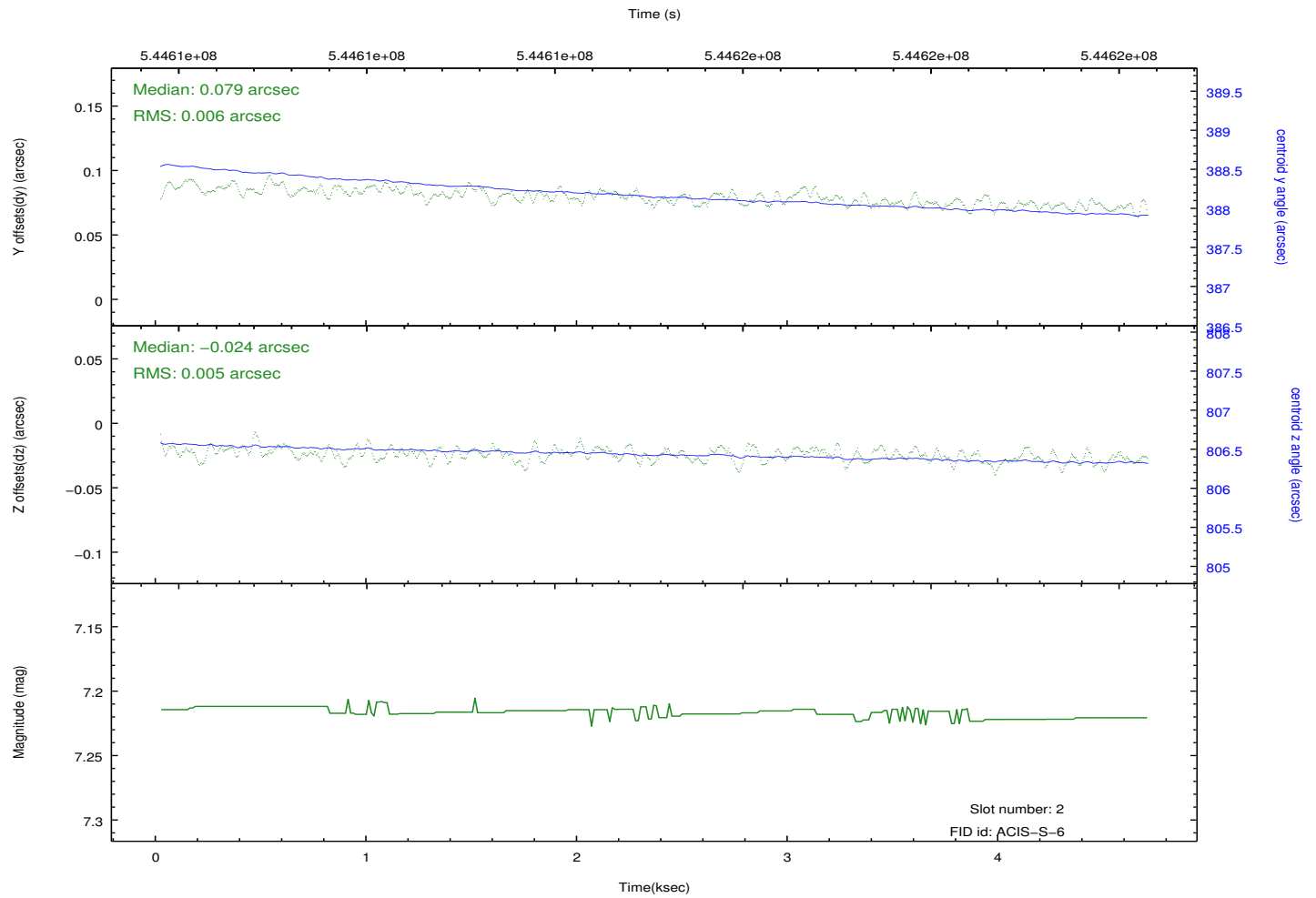
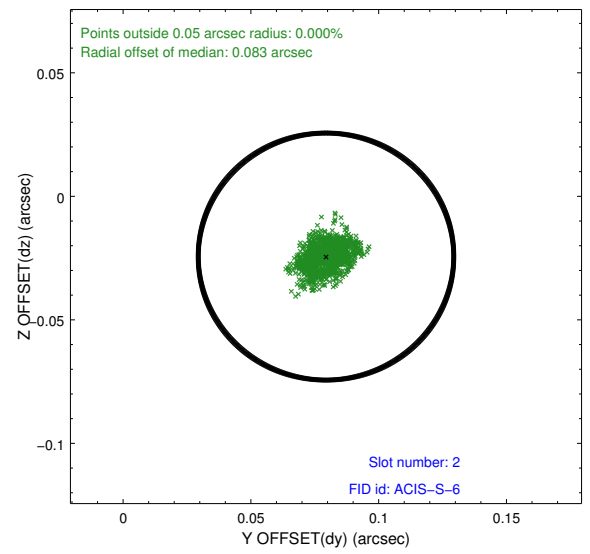
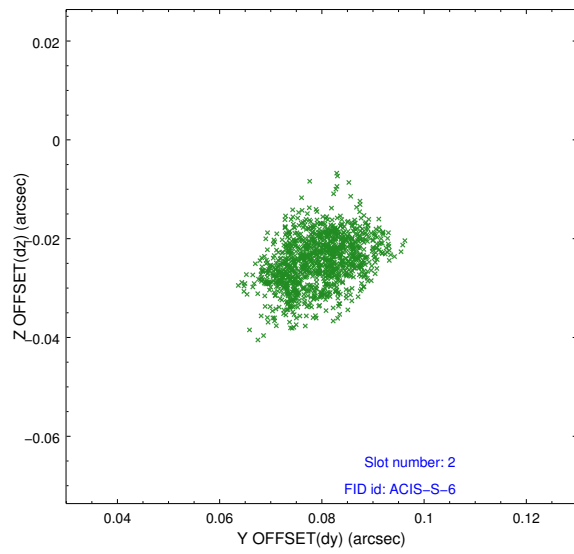
2.5.1 Slot 0



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)	2015.04.06
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.5621005510092

A.2 Comments

The guide star in slot 7 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this star from the solution.