

V&V Reference Report

L2 ASCDS Version : 10.5.2

Observation 18234 - L2 Version 2
Chandra X-Ray Center

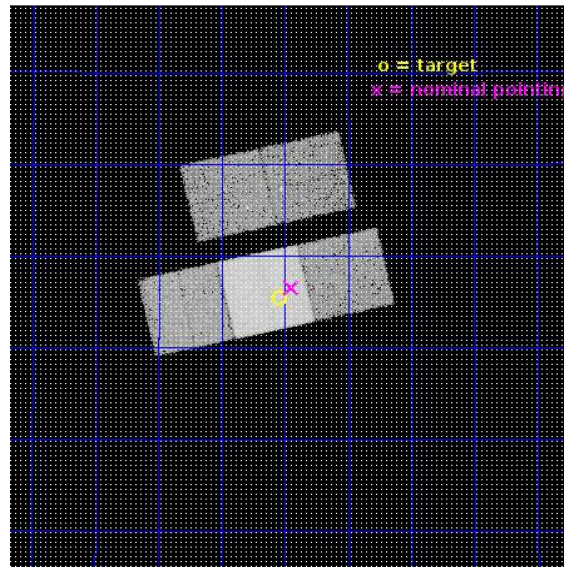
L2 Processing Date : Mar 31 2017

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1 Front

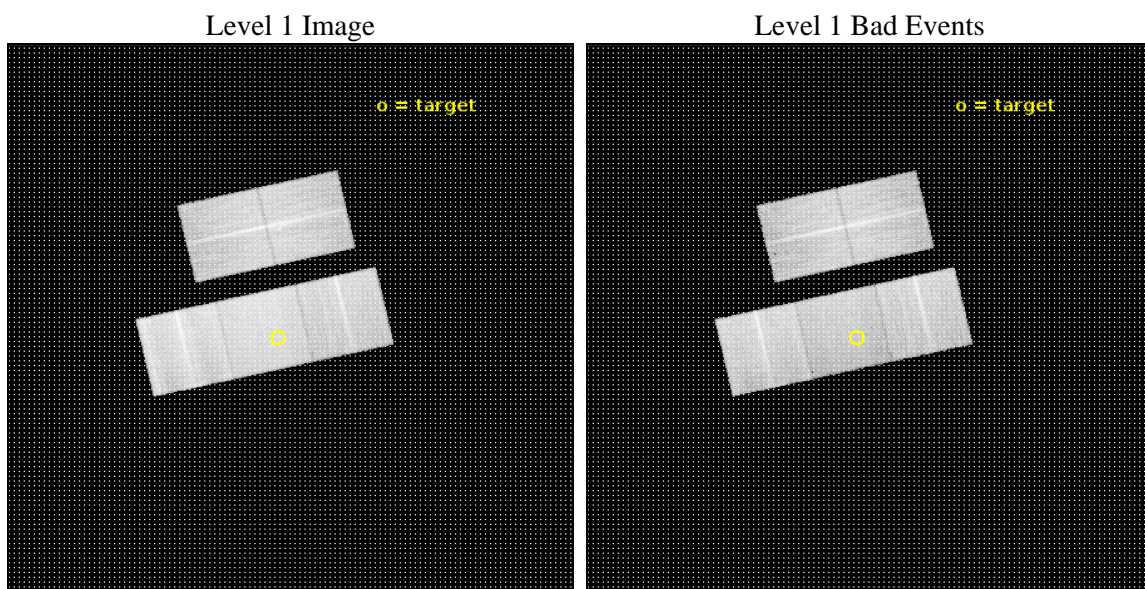
seq_num	801561	Sequence number
obs_id	18234	Observation id
title	Tales of tails: the Coma episodes	Proposal title
observer	Ming Sun	Principal investigator
object	NGC 4848	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	194.5111	Observer's specified target RA [deg]
dec_targ	28.2576	Observer's specified target Dec [deg]
ra_nom	194.48707208898	Nominal RA [deg]
dec_nom	28.275841874042	Nominal Dec [deg]
roll_nom	167.16801114395	Nominal Roll [deg]
revision	2	Processing version of data
ontime	20047.658911586	Sum of GTIs [s]
livetime	19785.721489034	Livetime [s]
ontime2	20038.071550369	Sum of GTIs [s]
ontime3	20047.576831579	Sum of GTIs [s]
ontime6	20044.476801395	Sum of GTIs [s]
ontime7	20047.658911586	Sum of GTIs [s]
ontime8	20047.535791636	Sum of GTIs [s]
l2events	146665	Number of level 2 events



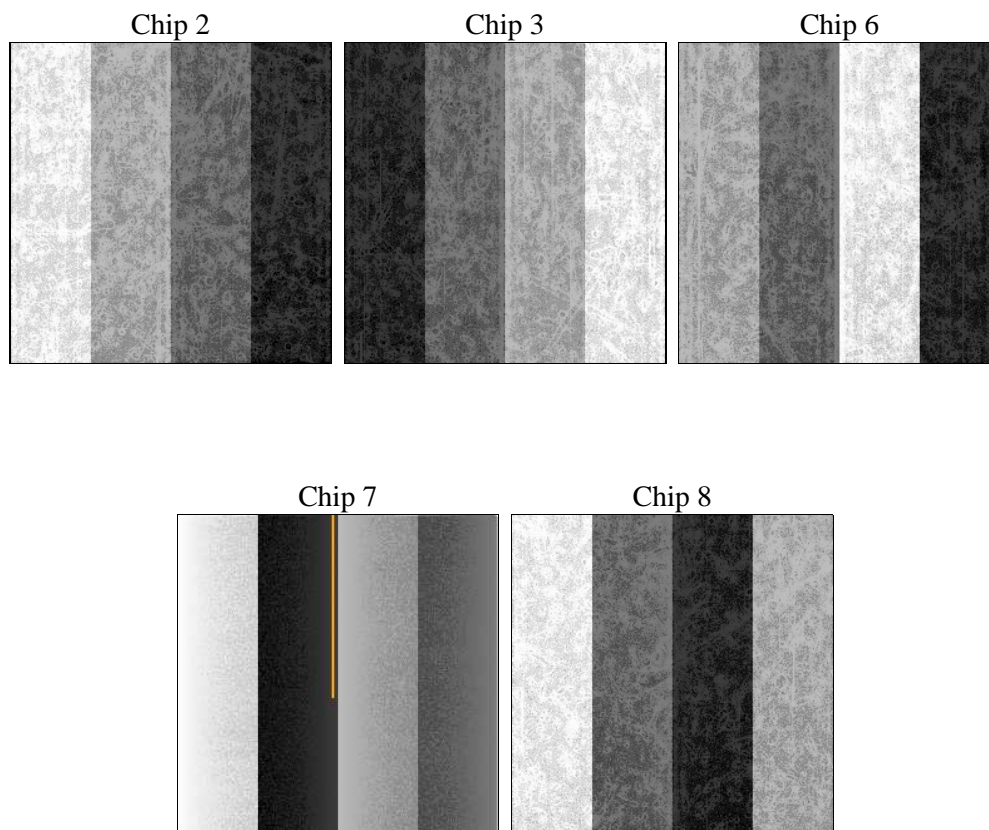
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	20000.000000	[s] Scheduled observation exposure time
ascdsver	10.5.2	Processing system revision	ontime	20047.658911586	Sum of GTIs [s]
caldbver	4.7.3	 	ontime2	20038.071550369	Sum of GTIs [s]
date	2017-03-31T14:54:22	Date and time of file creation	ontime3	20047.576831579	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	20044.476801395	Sum of GTIs [s]
			ontime7	20047.658911586	Sum of GTIs [s]
			ontime8	20047.535791636	Sum of GTIs [s]
			l1events	819804	Number of level 1 events

2.1.4 Events

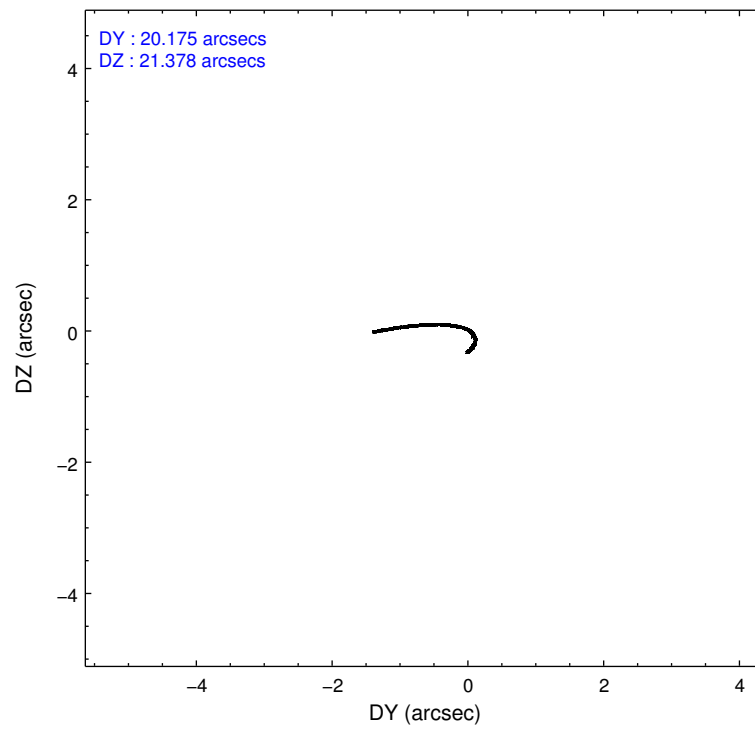
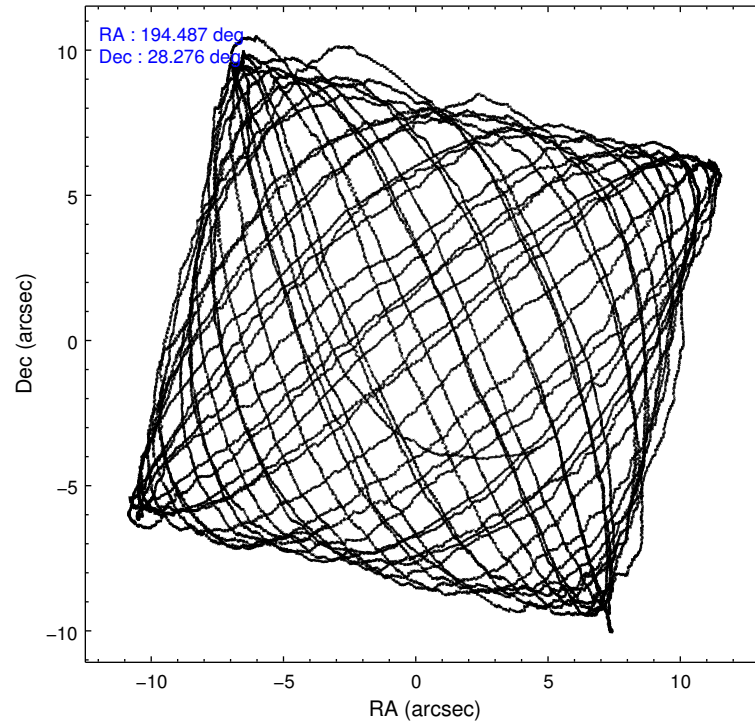
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	143721	141573	148386	189483	196641
rejected events	127996	125804	130546	105263	141244
rejected %	89%	88%	87%	55%	71%

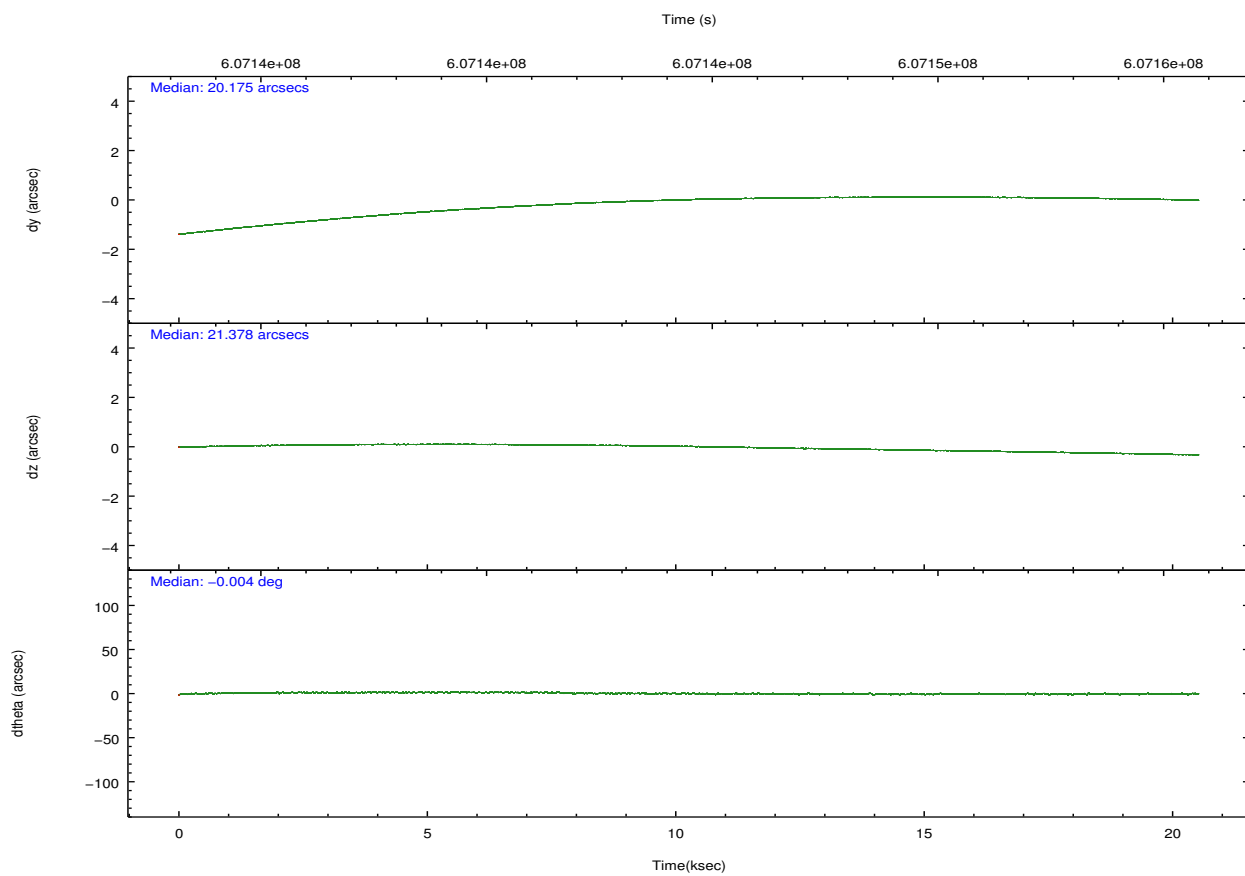
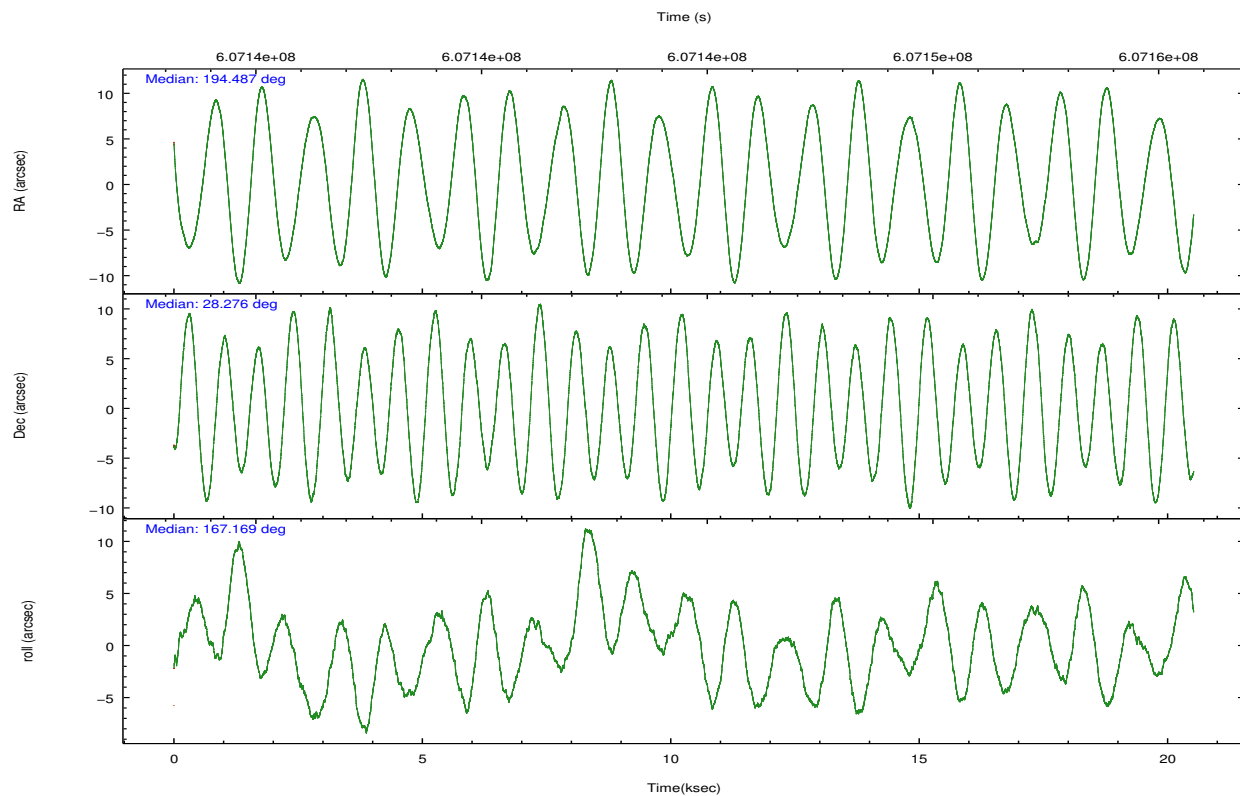
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	5919	6133	6523	7848	18484
	4%	4%	4%	4%	9%
grade 1 events	99	100	90	245	156
	0%	0%	0%	0%	0%
grade 2 events	3697	3151	3990	18274	13104
	2%	2%	2%	9%	6%
grade 3 events	1542	1653	1730	6636	5250
	1%	1%	1%	3%	2%
grade 4 events	1648	1633	1653	6654	4935
	1%	1%	1%	3%	2%
grade 5 events	5523	6721	6765	18143	10198
	3%	4%	4%	9%	5%
grade 6 events	2923	3203	3945	44834	13632
	2%	2%	2%	23%	6%
grade 7 events	122370	118979	123690	86849	130882
	85%	84%	83%	45%	66%

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	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	194.516763	194.4870720889772	CCD I2 on	O1	Y
[deg] Pointing Dec	28.284287	28.27584187404244	CCD I3 on	Y	Y
[deg] Pointing Roll	166.997317	167.1680111439493	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)	607134745.184000	607133488.09902	CCD S5 on	N	N
Observation start date	2017-03-29T00:31:16	2017-03-29T00:11:28	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	607154745.184000	607155415.92529	On-chip summing requested	N	N
Observation end date	2017-03-29T06:04:36	2017-03-29T06:16:55	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



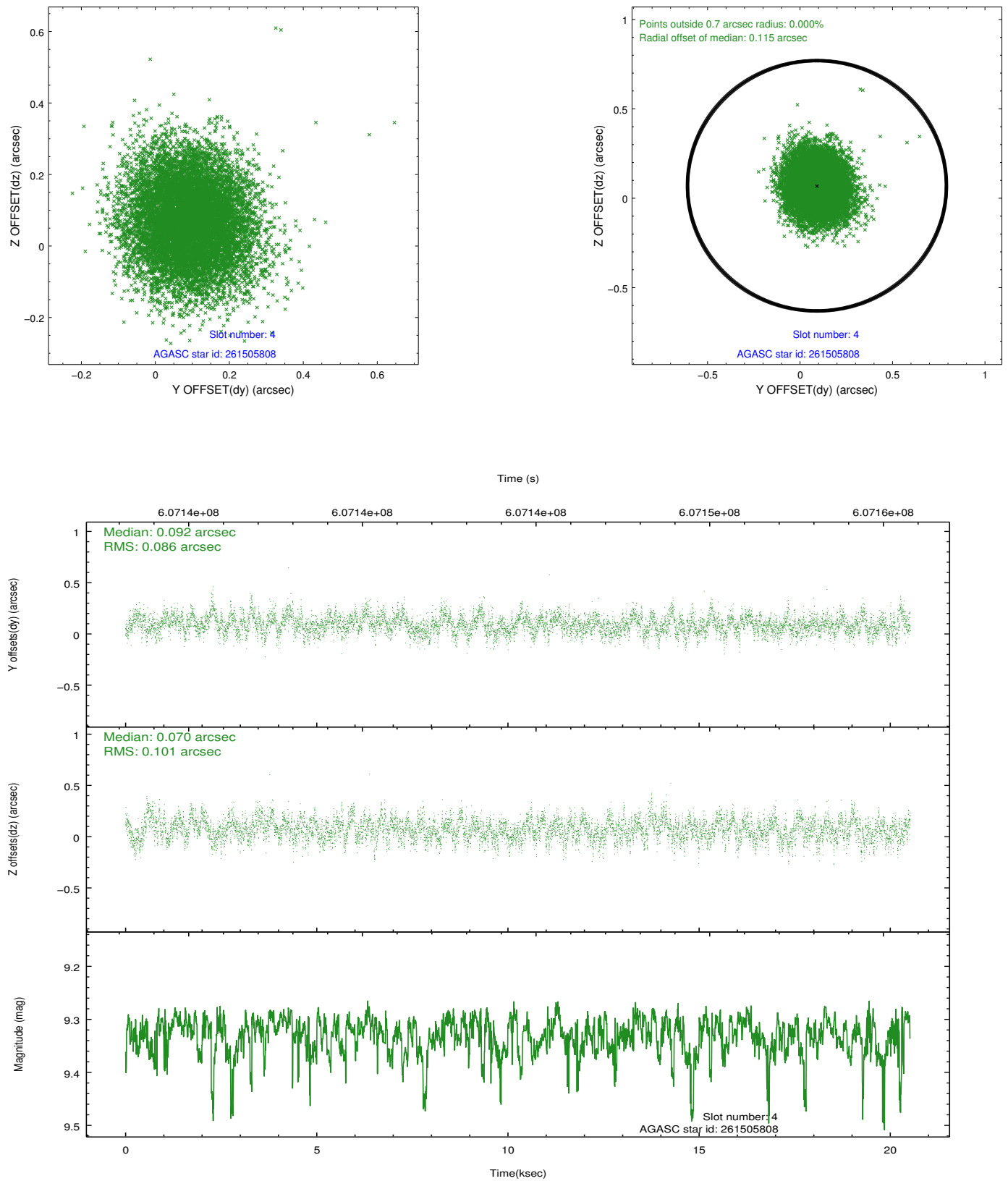


Slot Statistics

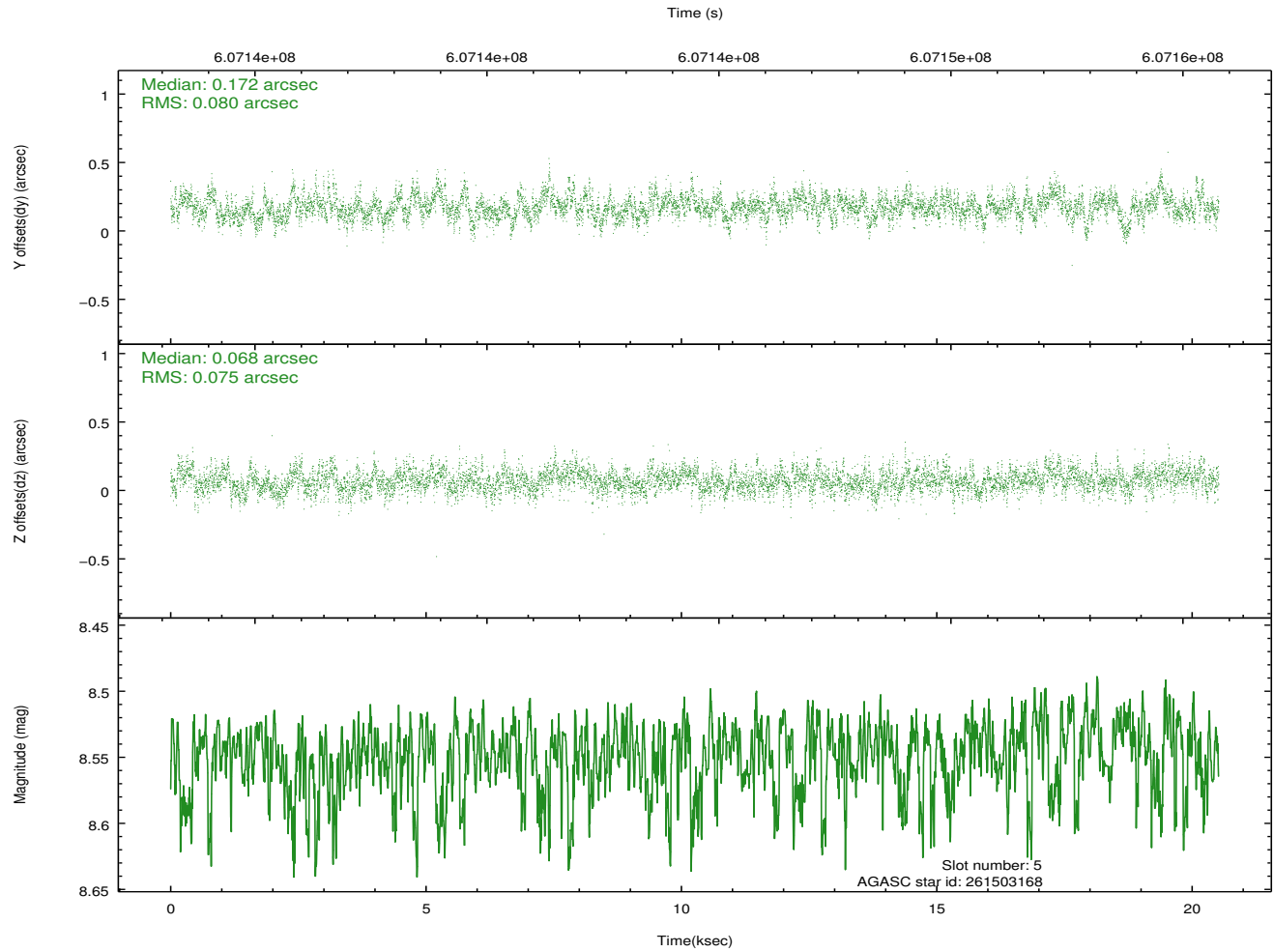
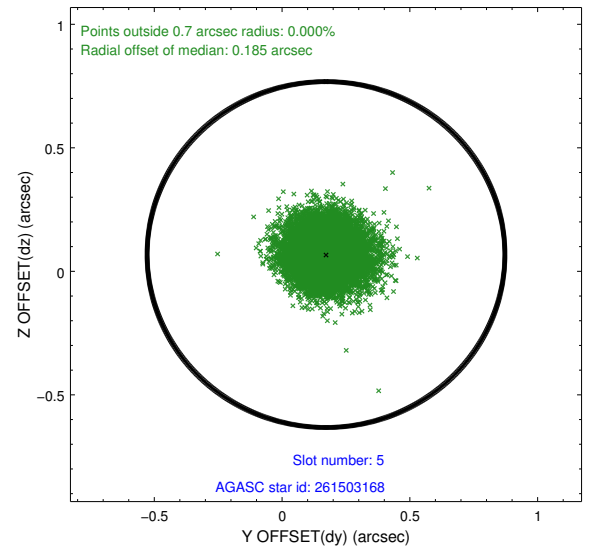
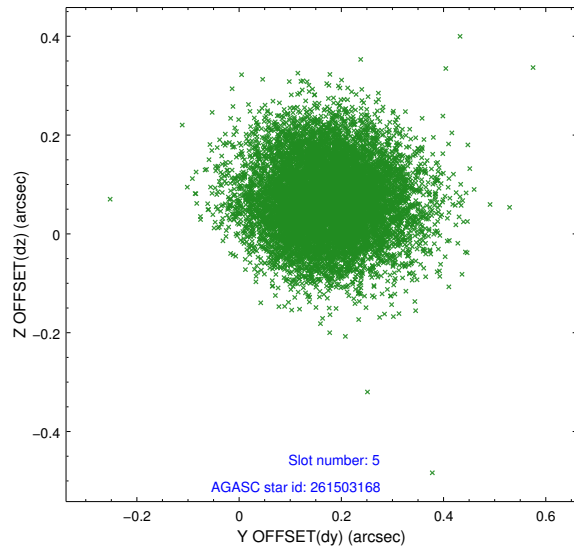
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.04	5007	-0.258	-0.147	0.013	0.022	0.000000	0.000000	-773.30	-1743.03
1	FID		ACIS-S-4	7.16	5007	0.532	0.164	0.008	0.015	0.000000	0.000000	2140.68	165.58
2	FID		ACIS-S-5	7.15	5005	-0.306	-0.008	0.012	0.020	0.000000	0.000000	-1825.97	159.28
3	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
4	GUIDE	used	261505808	9.33	10002	0.092	0.070	0.141	0.227	193.710324	27.913269	2201.07	1870.35
5	GUIDE	used	261503168	8.55	10004	0.172	0.068	0.116	0.190	193.765545	28.234101	2282.64	705.20
6	GUIDE	used	261503592	7.85	10012	-0.192	-0.216	0.107	0.169	193.784432	27.766358	1855.02	2335.87
7	GUIDE	used	261502496	7.34	10010	-0.081	0.079	0.125	0.216	194.887297	28.065668	-1323.59	500.52

2.4 Star Slots

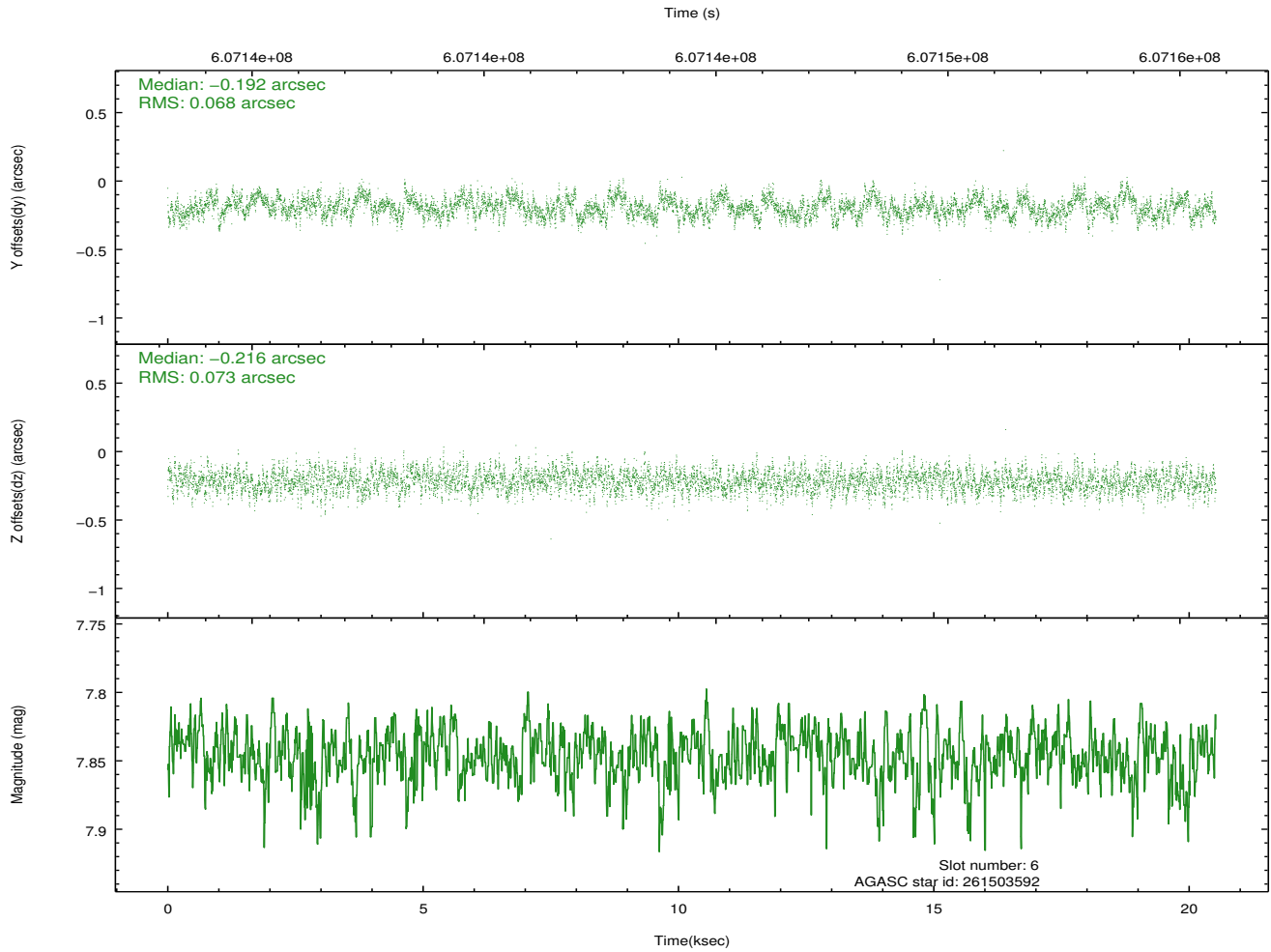
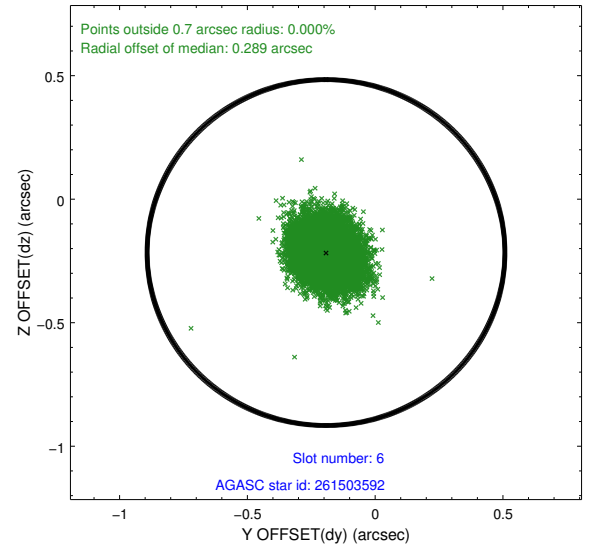
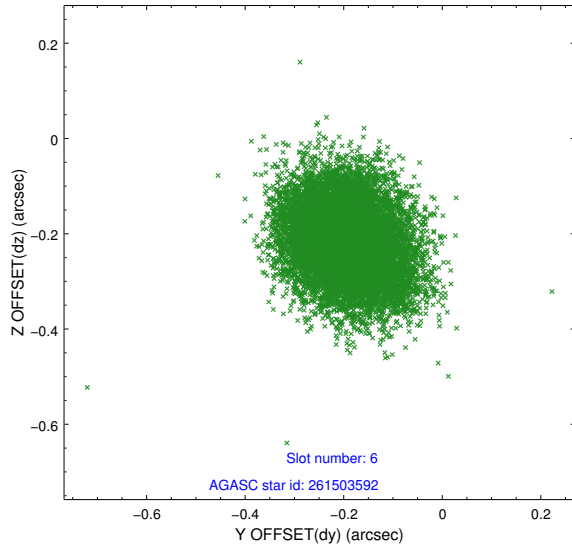
2.4.1 Slot 4



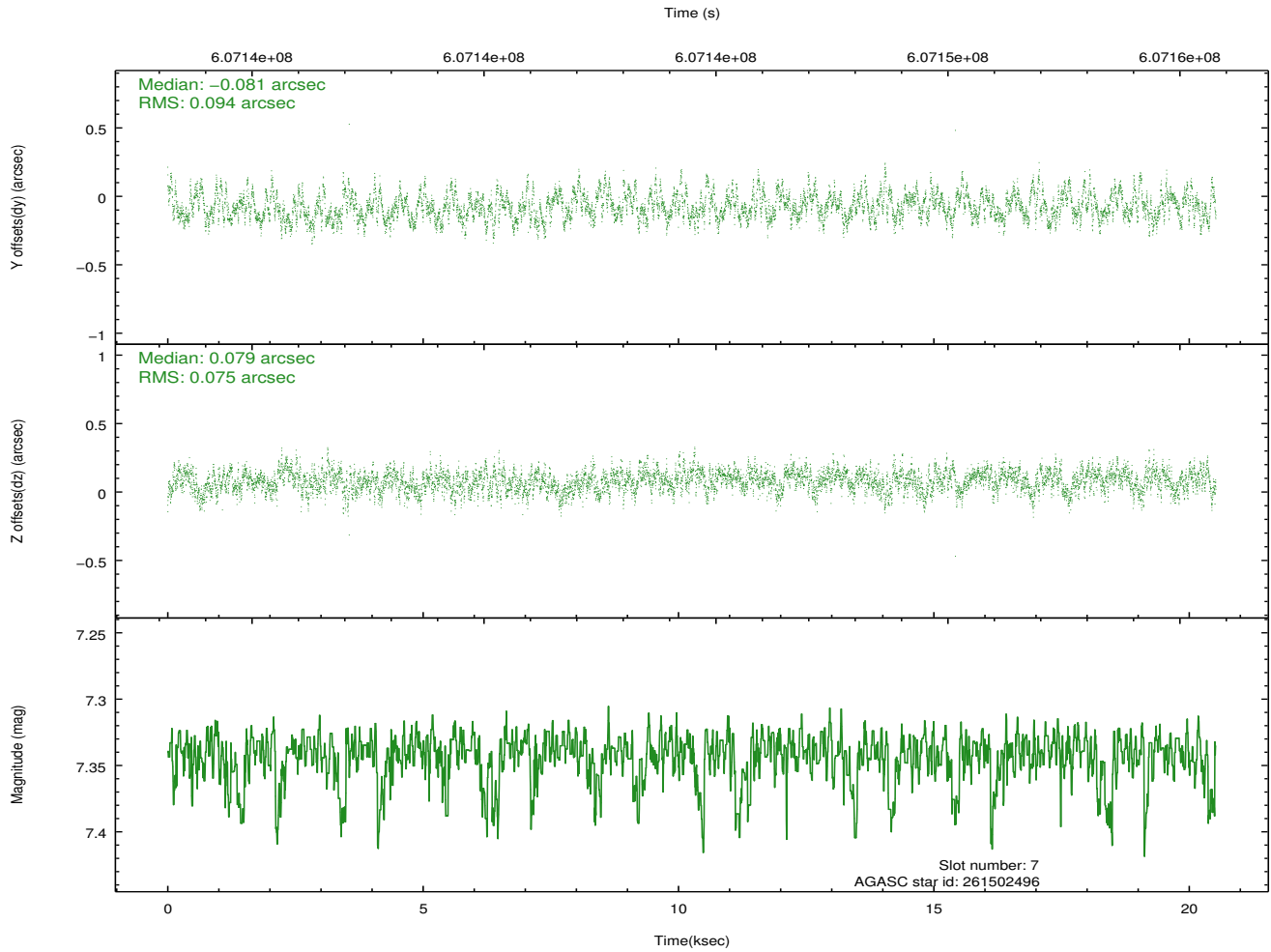
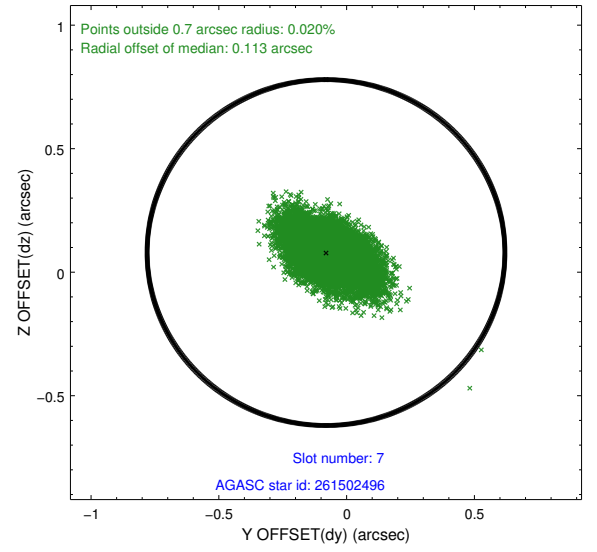
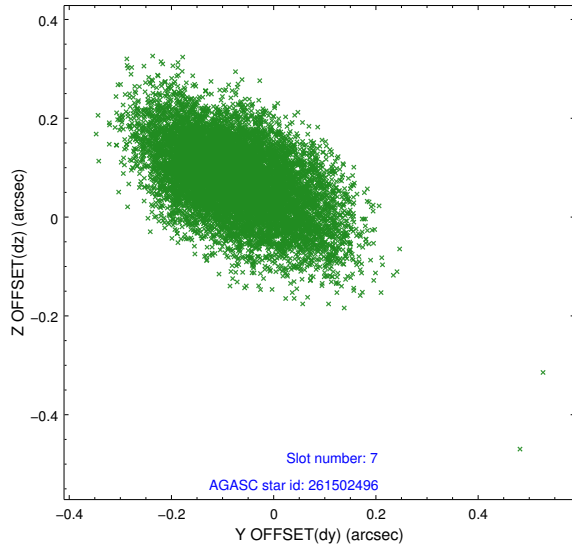
2.4.2 Slot 5



2.4.3 Slot 6

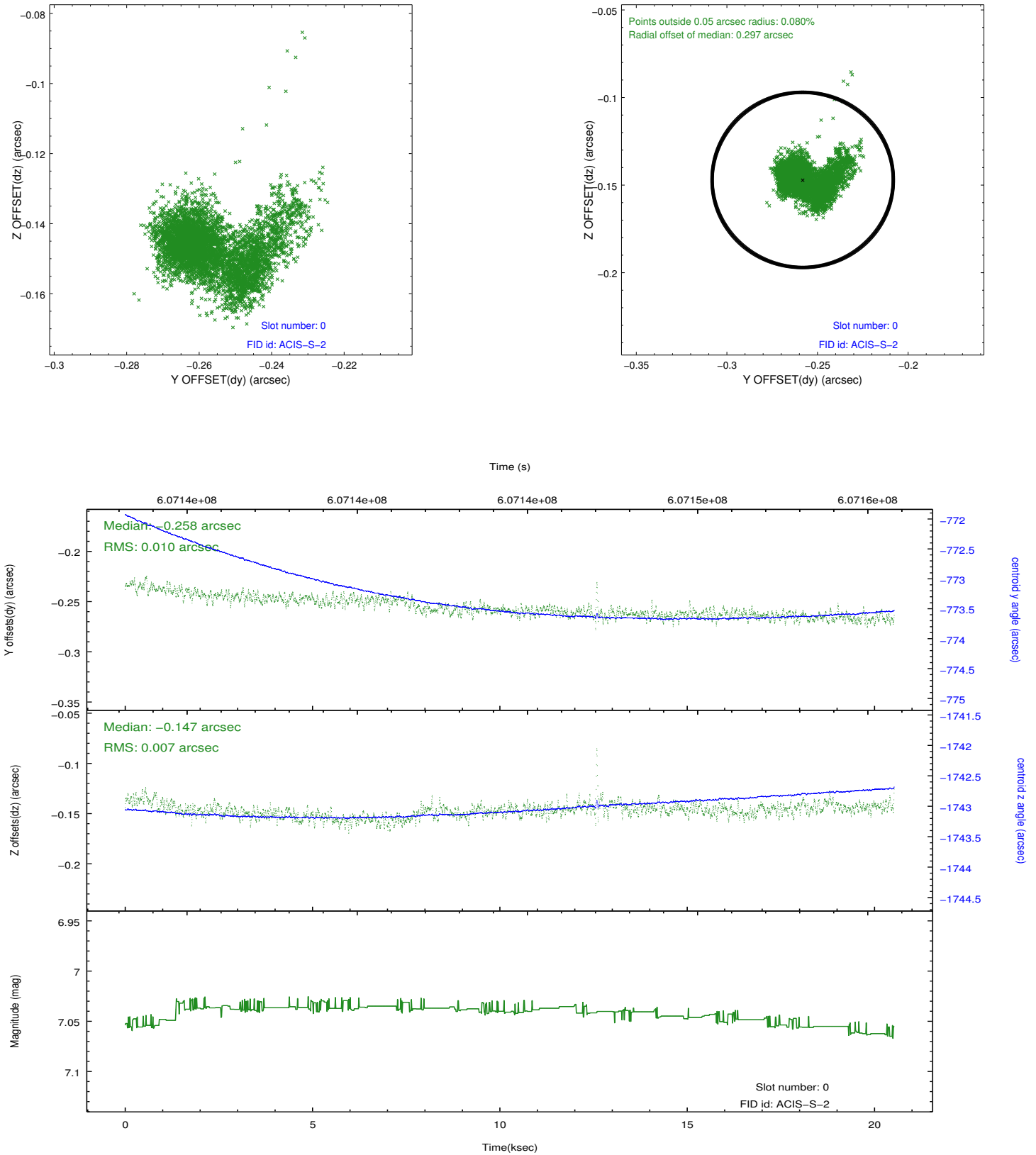


2.4.4 Slot 7

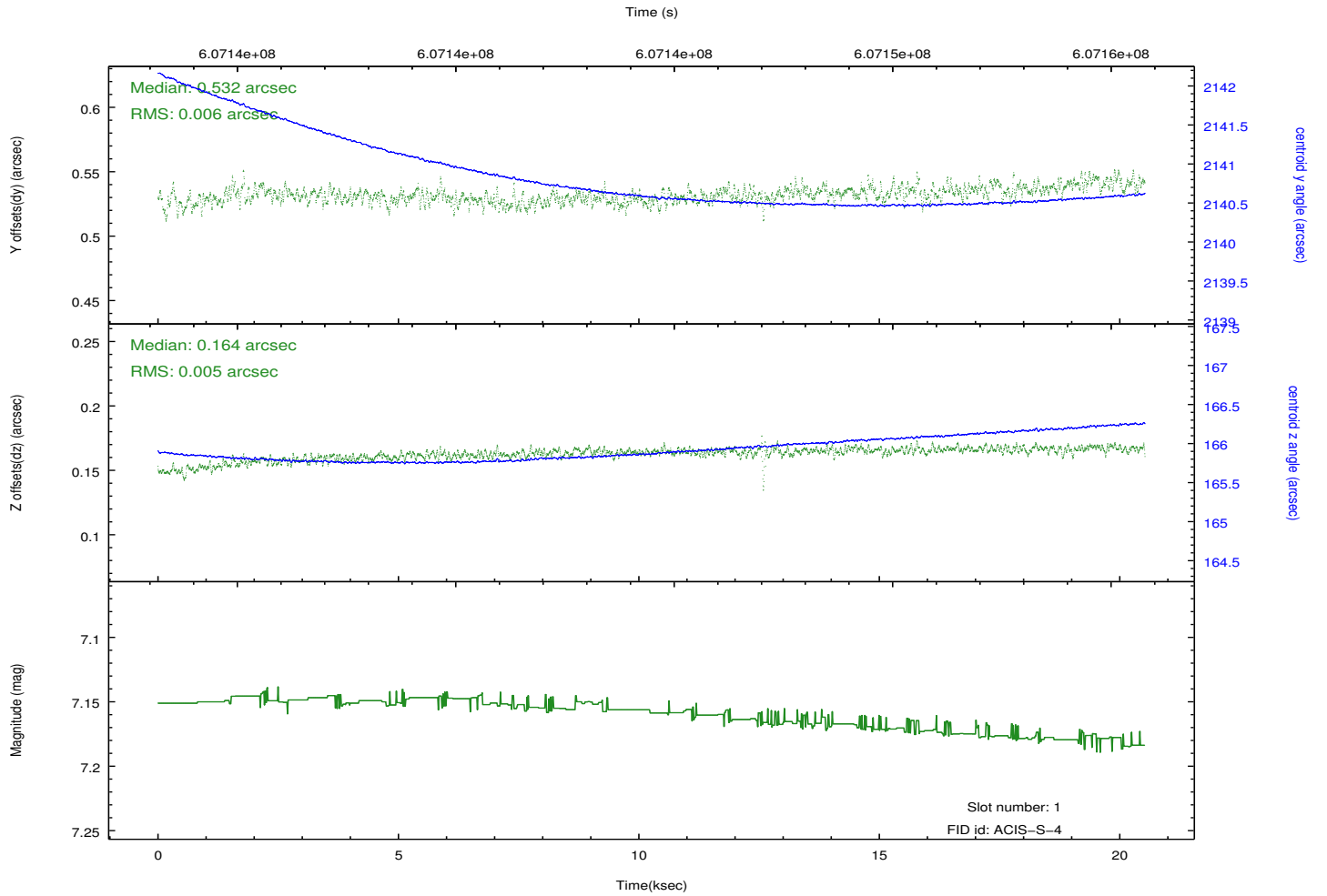
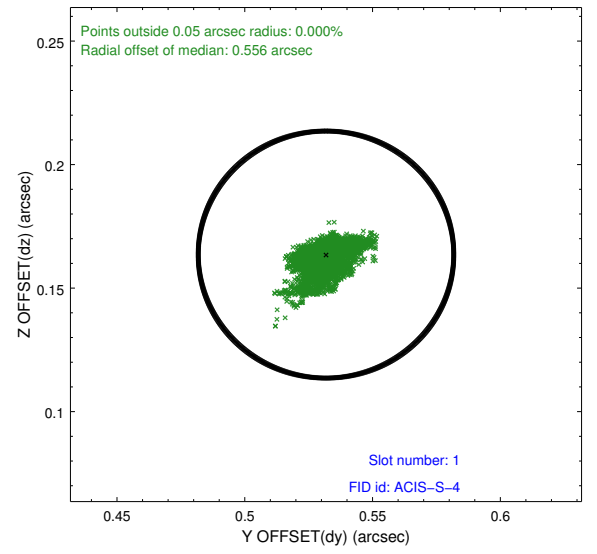
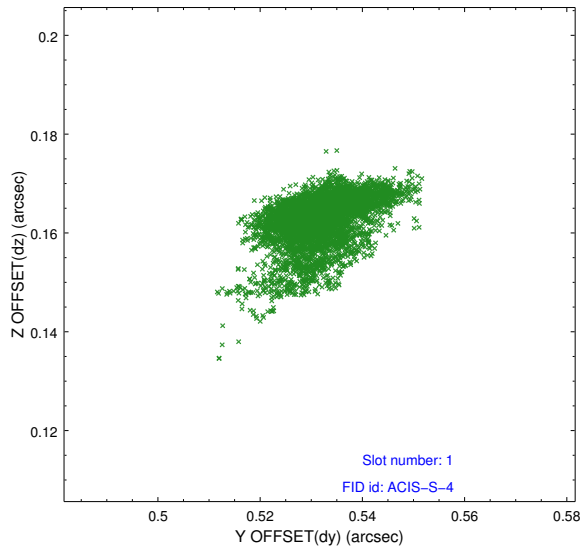


2.5 FID Slots

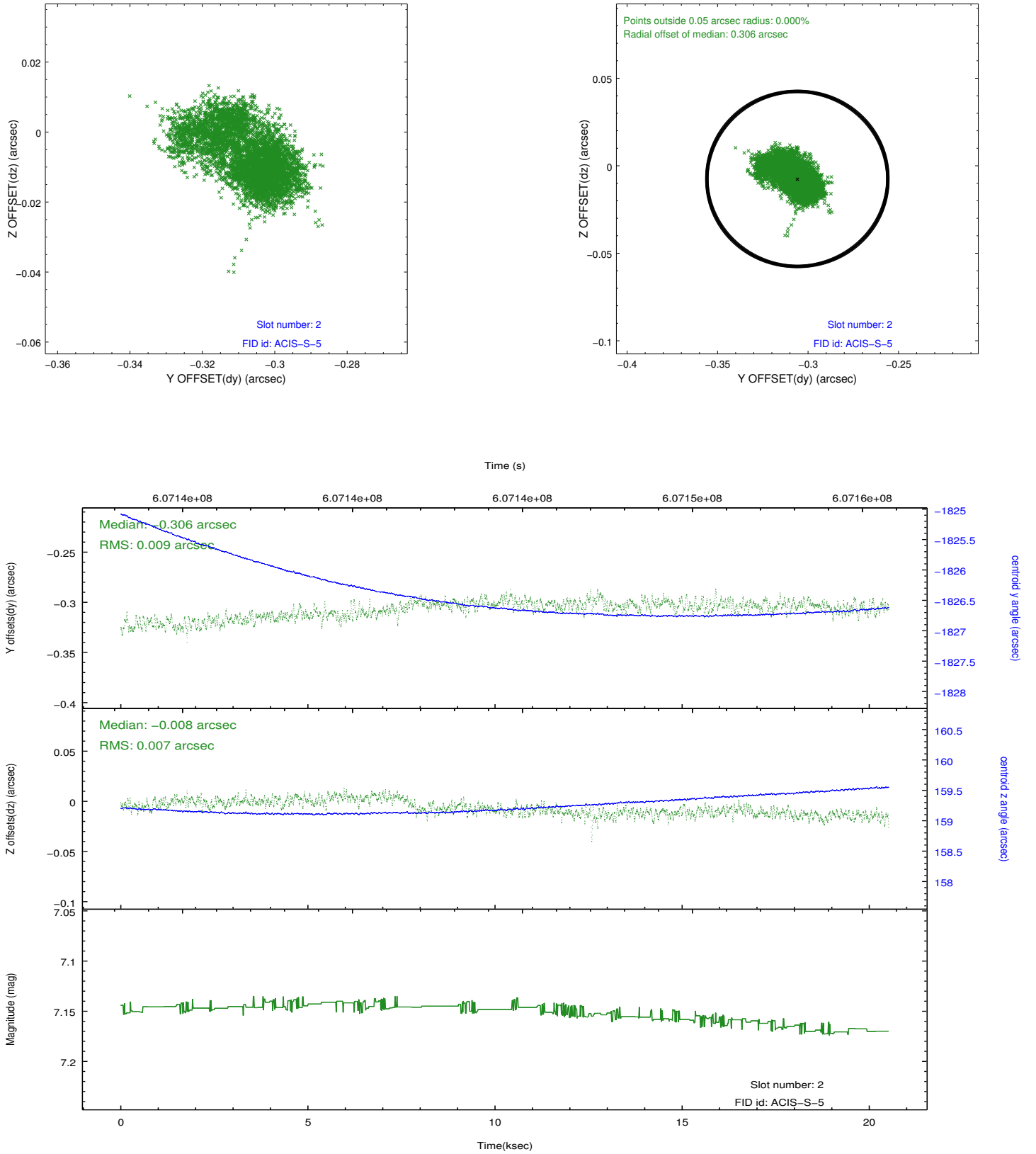
2.5.1 Slot 0



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)	2017.04.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.047658911586

A.2 Comments

The guide star in slot 3 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.