

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 4739 - L2 Version 5
Chandra X-Ray Center

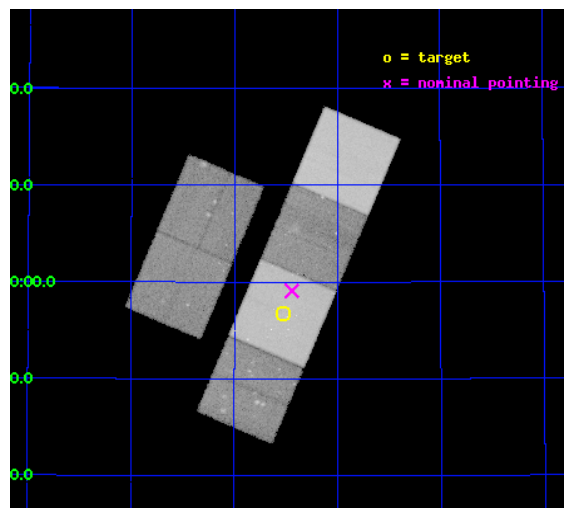
L2 Processing Date : Jan 29 2013

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.5	FID Slots	13
2.5.1	Slot 0	13
2.5.2	Slot 1	14
2.5.3	Slot 2	15
A	Summary	16
A.1	Status	16
A.2	Comments	16

1 Front

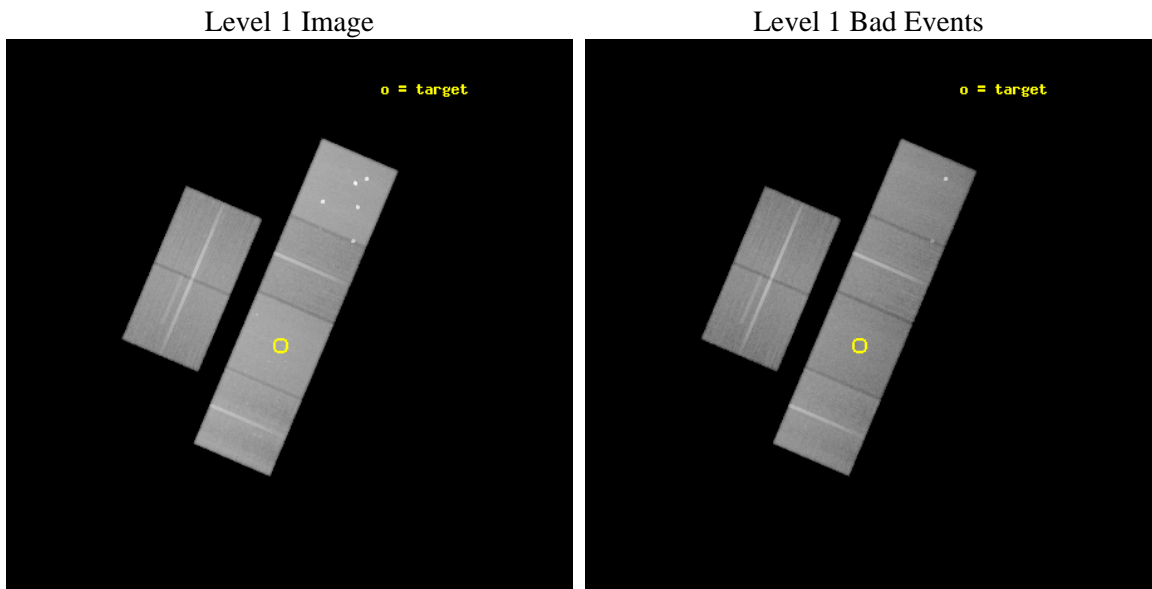
seq_num	600394	Sequence number
obs_id	4739	Observation id
title	Searching for hot gas in the halos of normal spiral galaxies	Propo
observer	Dr David Strickland	Principal investigator
object	NGC 4013	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	179.630417	Observer's specified target RA [deg]
dec_targ	43.946889	Observer's specified target Dec [deg]
ra_nom	179.61058530862	Nominal RA [deg]
dec_nom	43.985039910682	Nominal Dec [deg]
roll_nom	113.02389982528	Nominal Roll [deg]
revision	5	Processing version of data
ontime	80113.982055128	Sum of GTIs [s]
livetime	79099.530575497	Livetime [s]
ontime2	80114.023095131	Sum of GTIs [s]
ontime3	80110.617934912	Sum of GTIs [s]
ontime5	80113.941015124	Sum of GTIs [s]
ontime6	80113.899975121	Sum of GTIs [s]
ontime7	80113.982055128	Sum of GTIs [s]
ontime8	80113.817895144	Sum of GTIs [s]
l2events	785827	Number of level 2 events



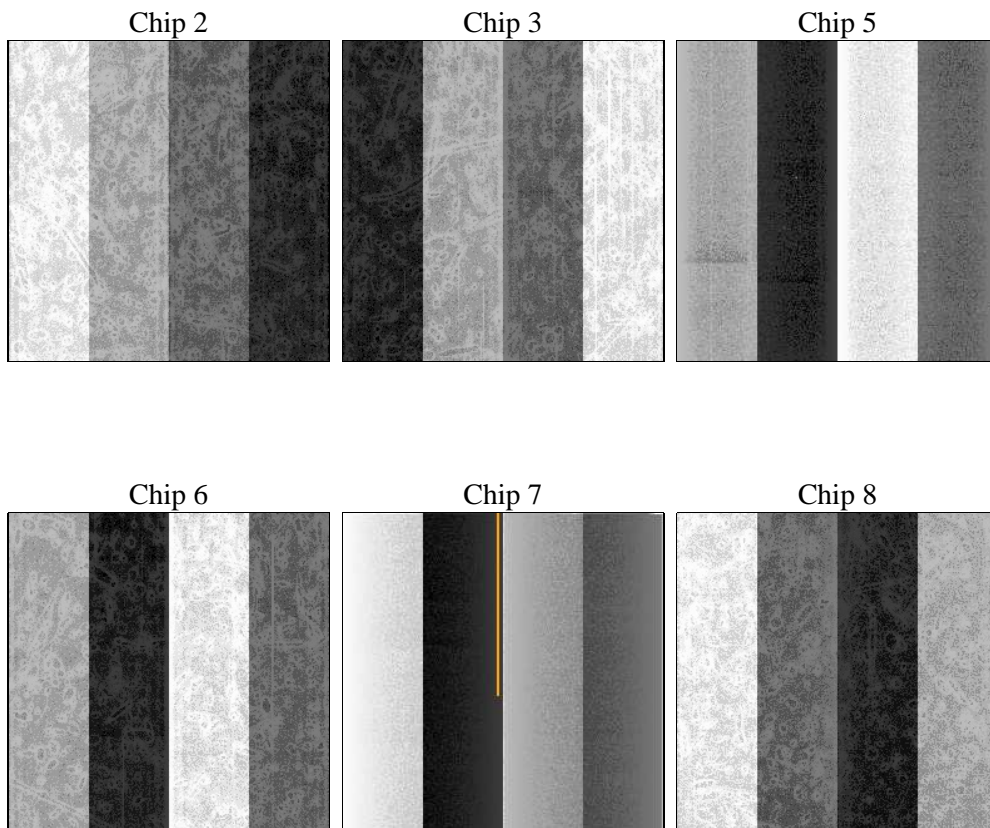
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	80000.000000	[s] Scheduled observation exposure time
ascdsver	8.5.1.1	Processing system revision	ontime	80113.982055128	Sum of GTIs [s]
caldsver	4.5.5	 	ontime2	80114.023095131	Sum of GTIs [s]
date	2013-01-29T20:06:15	Date and time of file creation	ontime3	80110.617934912	Sum of GTIs [s]
revision	5	Processing version of data	ontime5	80113.941015124	Sum of GTIs [s]
			ontime6	80113.899975121	Sum of GTIs [s]
			ontime7	80113.982055128	Sum of GTIs [s]
			ontime8	80113.817895144	Sum of GTIs [s]
			l1events	3488146	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	487158	464335	784399	481850	661009	609395	grade 0 events	26700	25065	79910	25142	25547	43383
rejected events	428277	407444	401094	421148	387750	480217		5%	5%	10%	5%	3%	7%
rejected %	87%	87%	51%	87%	58%	78%	grade 1 events	277	238	1548	269	598	378
								0%	0%	0%	0%	0%	0%
							grade 2 events	11749	10661	103236	12142	53856	27905
								2%	2%	13%	2%	8%	4%
							grade 3 events	5526	5511	13899	5898	23802	13336
								1%	1%	1%	1%	3%	2%
							grade 4 events	5372	5692	12647	5696	24090	12375
								1%	1%	1%	1%	3%	2%
							grade 5 events	19467	21458	57010	22903	63510	29967
								3%	4%	7%	4%	9%	4%
							grade 6 events	9534	9966	173624	11825	145982	32183
								1%	2%	22%	2%	22%	5%
							grade 7 events	408533	385744	342525	397975	323624	449868
								83%	83%	43%	82%	48%	73%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	179.641120	179.6105853086202	Subarray requested	NONE	NONE
[deg] Pointing Dec	43.968946	43.98503991068174	Alternating exposures requested	N	N
[deg] Pointing Roll	112.846068	113.0238998252765	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	192188978.184000	192187940.33626			
Observation start date	2004-02-03T09:48:34	2004-02-03T09:32:20			
[s] Observation end time (MET)	192268978.184000	192269596.96483			
Observation end date	2004-02-04T08:01:54	2004-02-04T08:13:16			
Read mode	TIMED	TIMED			

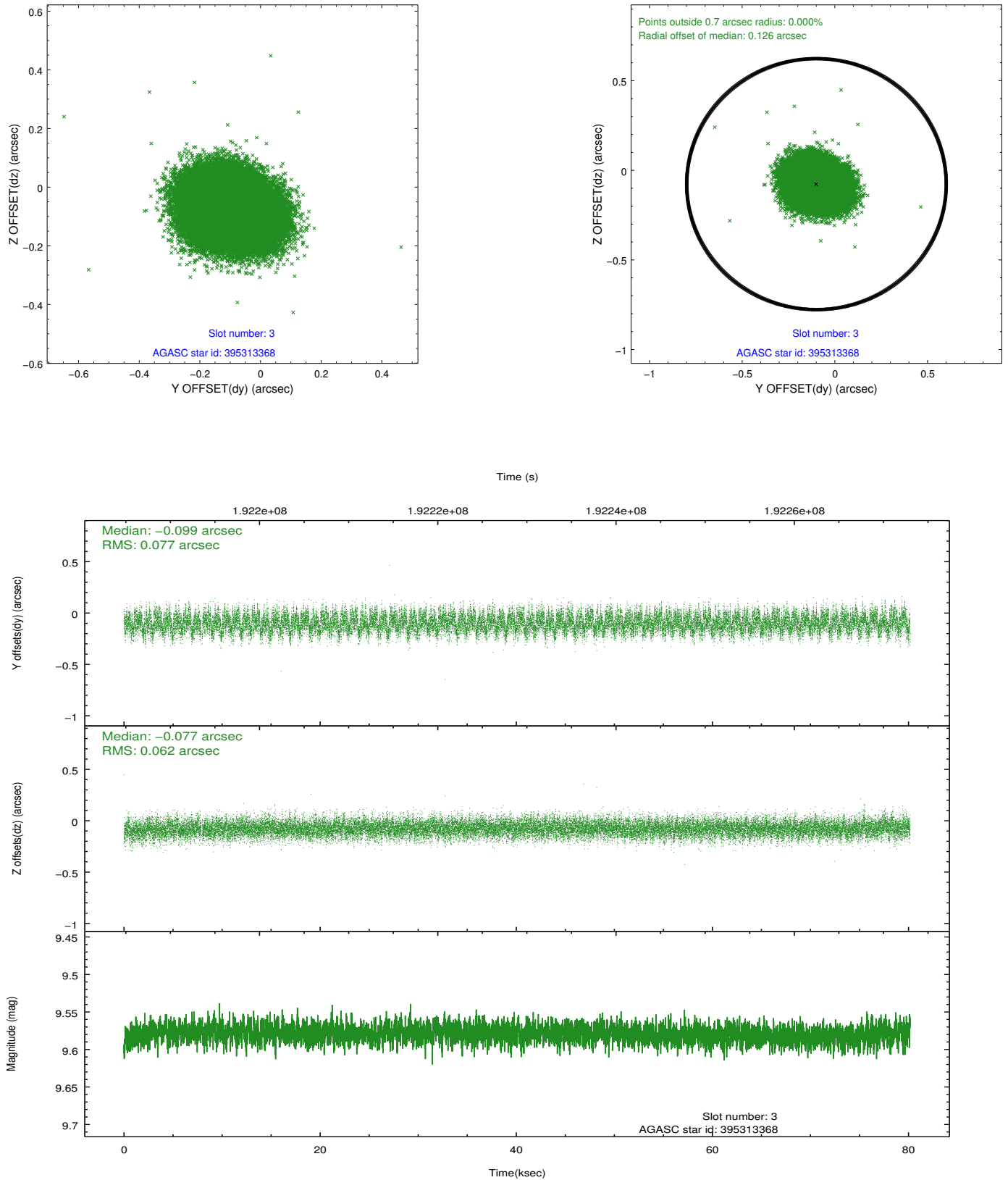
2.3 Aspect

Slot Statistics

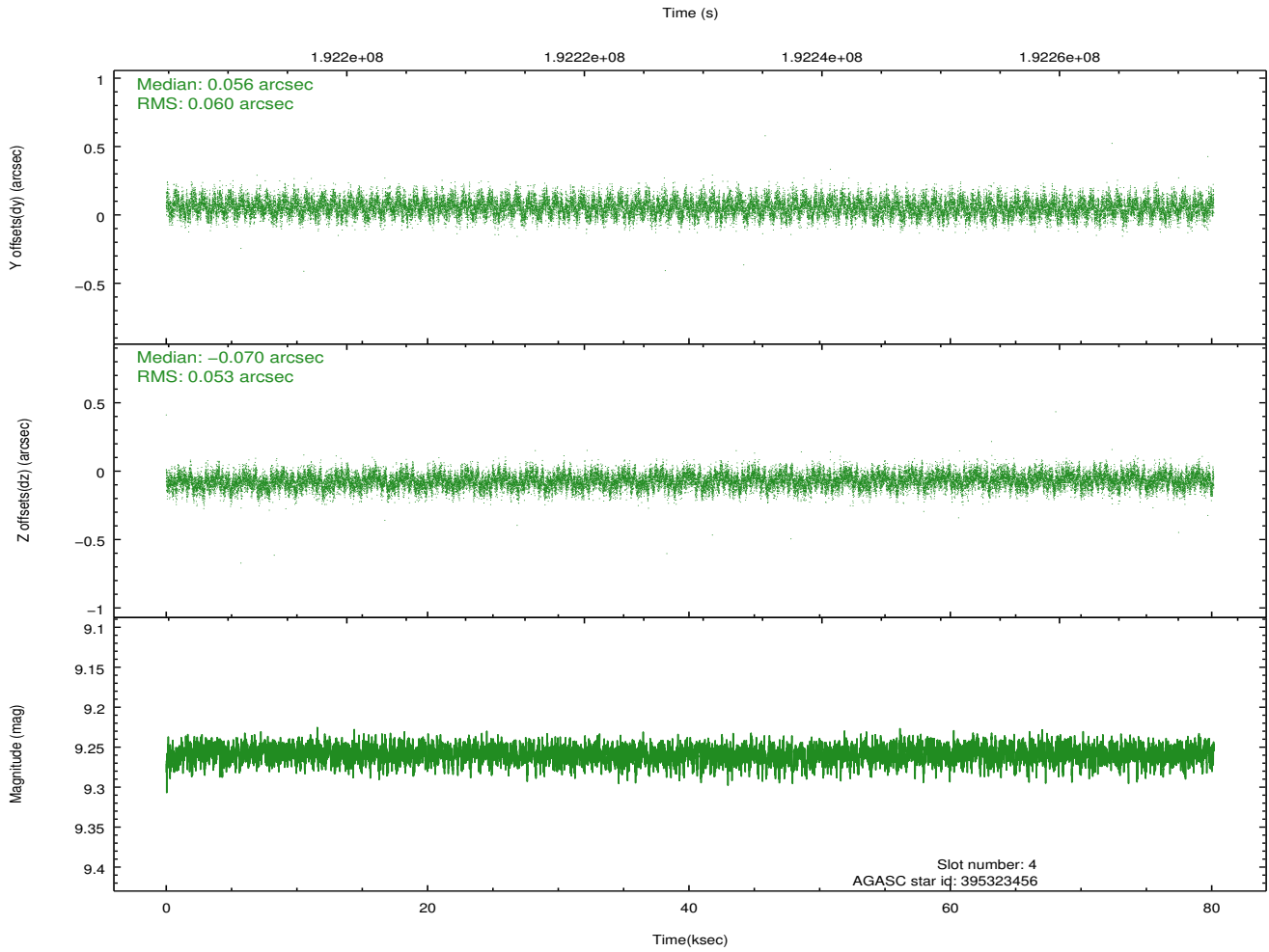
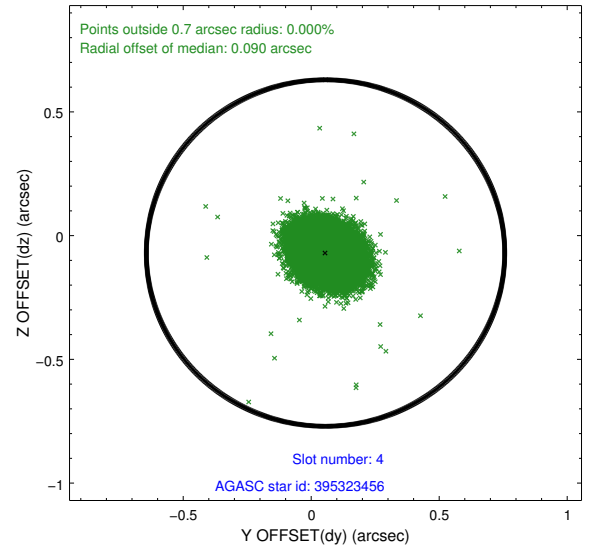
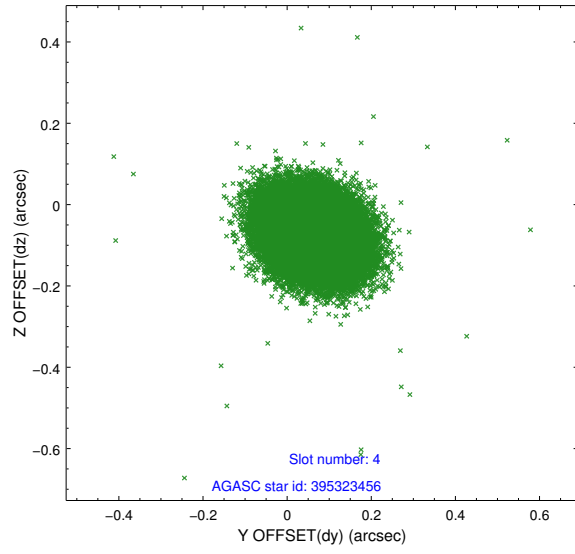
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	19551	-0.034	-0.028	0.009	0.018	0.000000	0.000000	-760.27	-1730.86
1	FID	ACIS-S-4	7.20	19550	0.080	0.024	0.007	0.012	0.000000	0.000000	2153.12	177.79
2	FID	ACIS-S-5	7.23	19550	-0.077	0.013	0.009	0.018	0.000000	0.000000	-1813.28	171.31
3	GUIDE	395313368	9.58	39023	-0.099	-0.077	0.106	0.169	178.813385	44.022889	1020.72	1895.41
4	GUIDE	395323456	9.26	39071	0.056	-0.070	0.085	0.137	179.317981	43.364369	-1675.77	1623.76
5	GUIDE	395708616	8.02	39094	-0.032	0.039	0.076	0.120	180.101872	44.630343	1739.63	-2013.03
6	GUIDE	395722432	9.53	39079	0.079	0.111	0.099	0.161	180.355077	43.582106	-1998.39	-1178.31
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

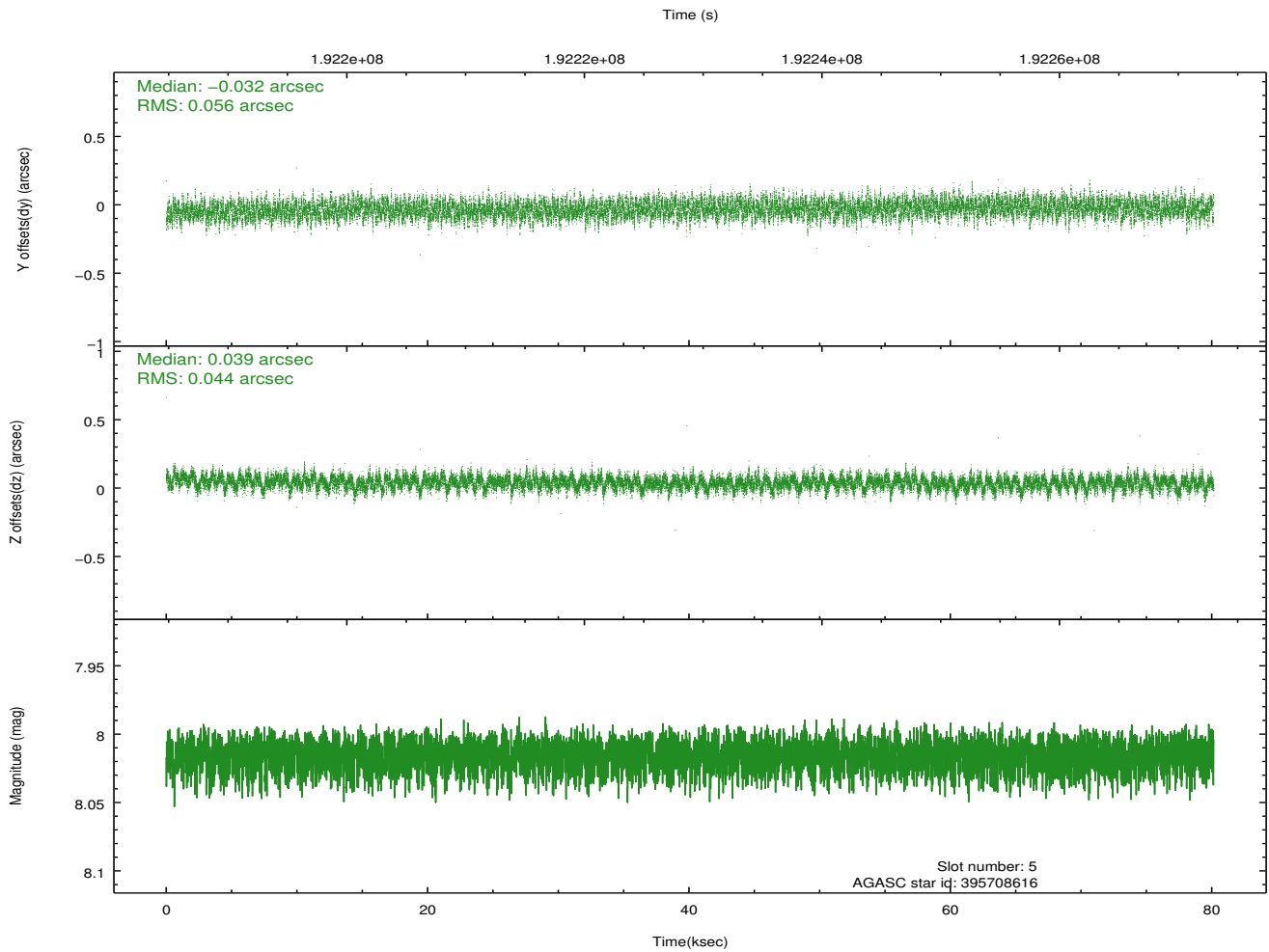
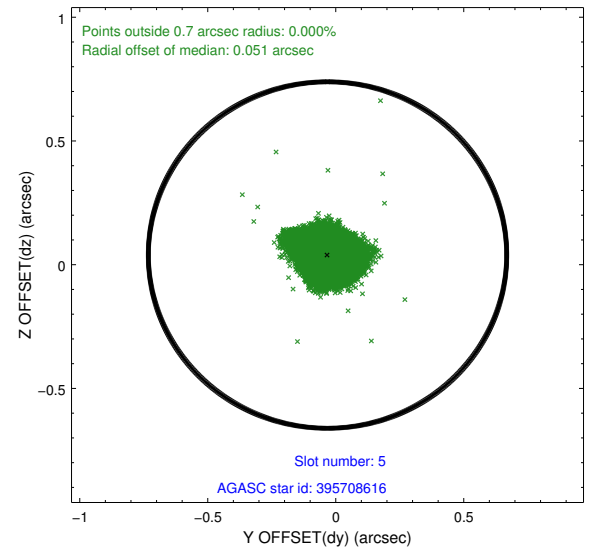
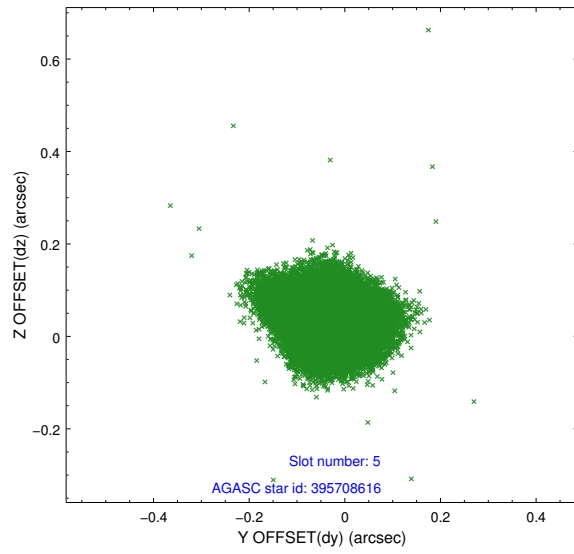
2.4.1 Slot 3



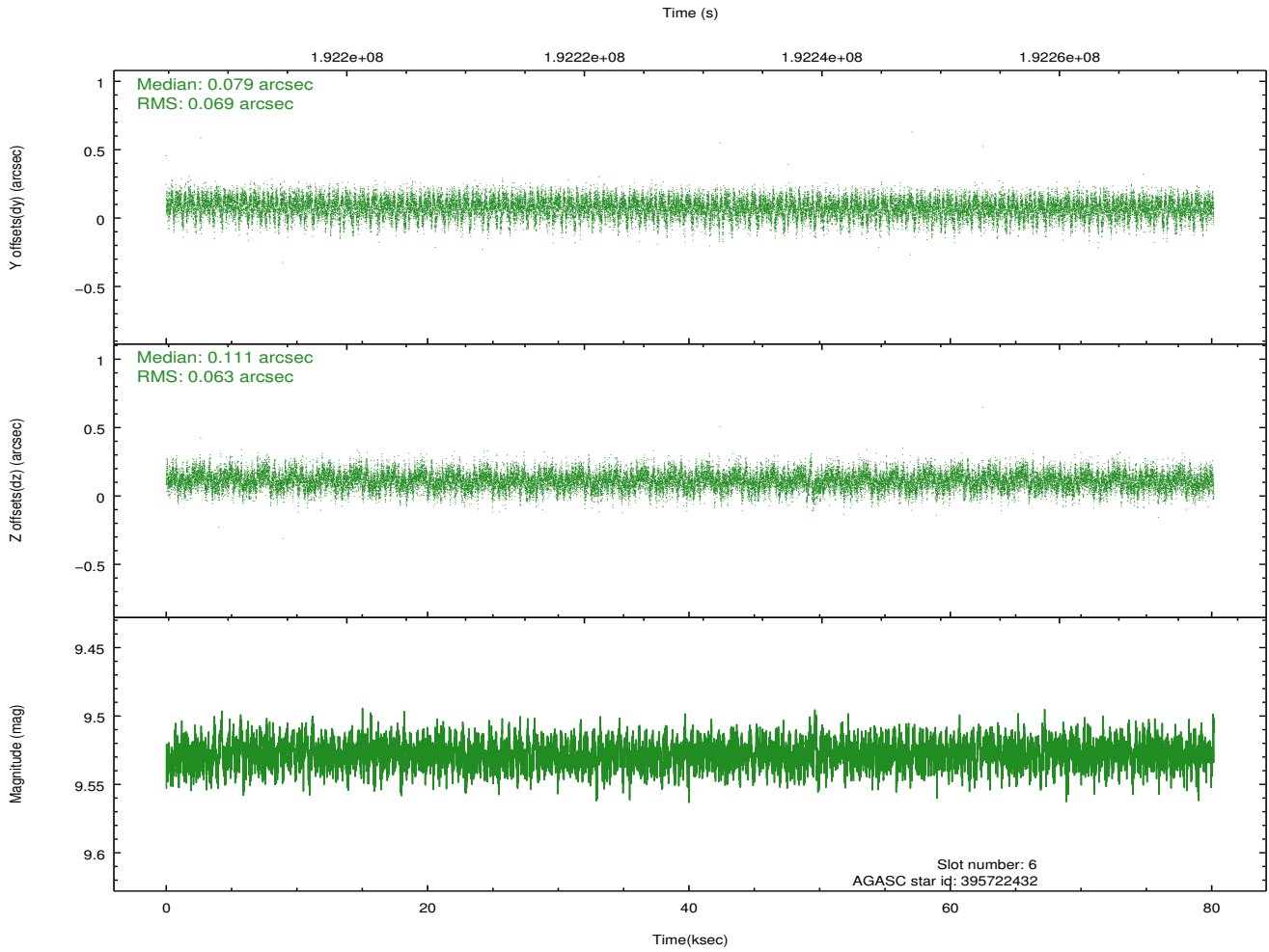
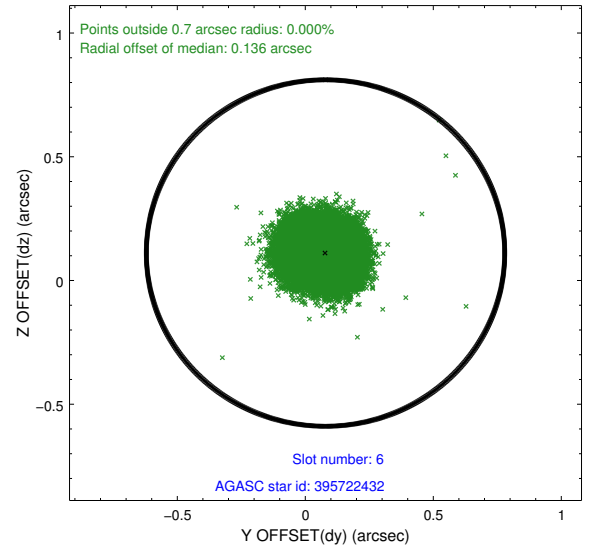
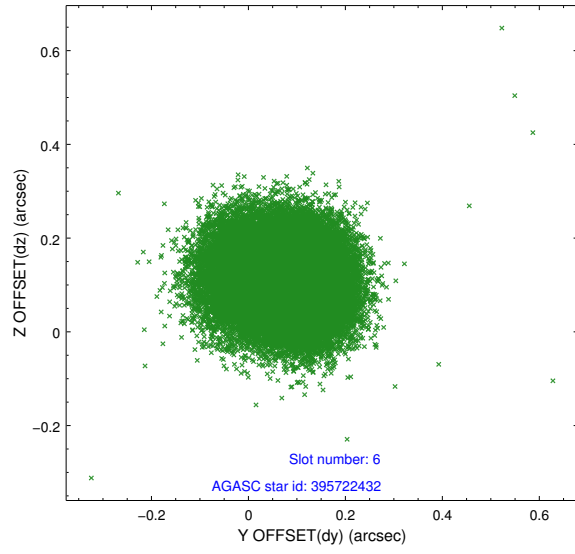
2.4.2 Slot 4



2.4.3 Slot 5

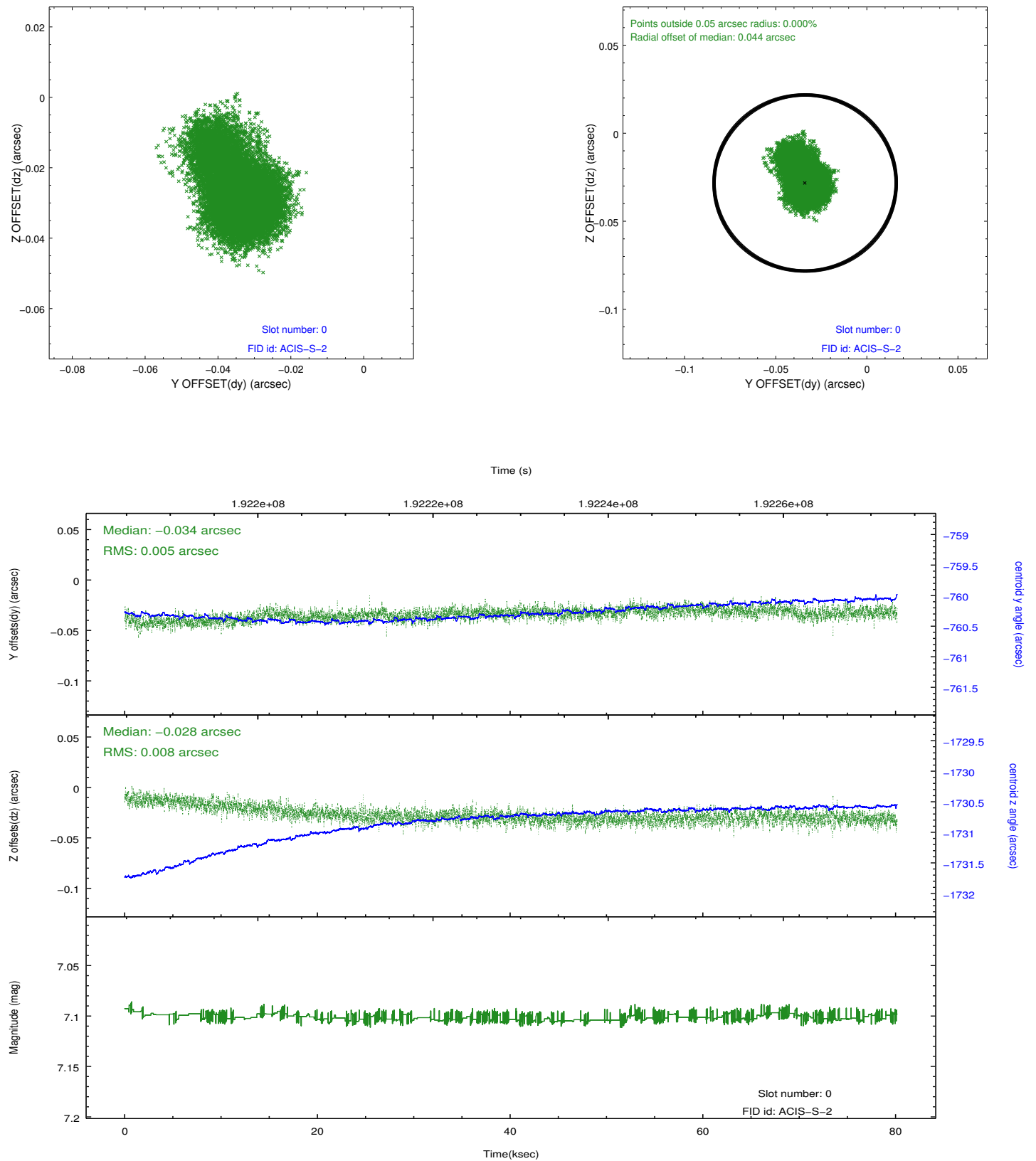


2.4.4 Slot 6

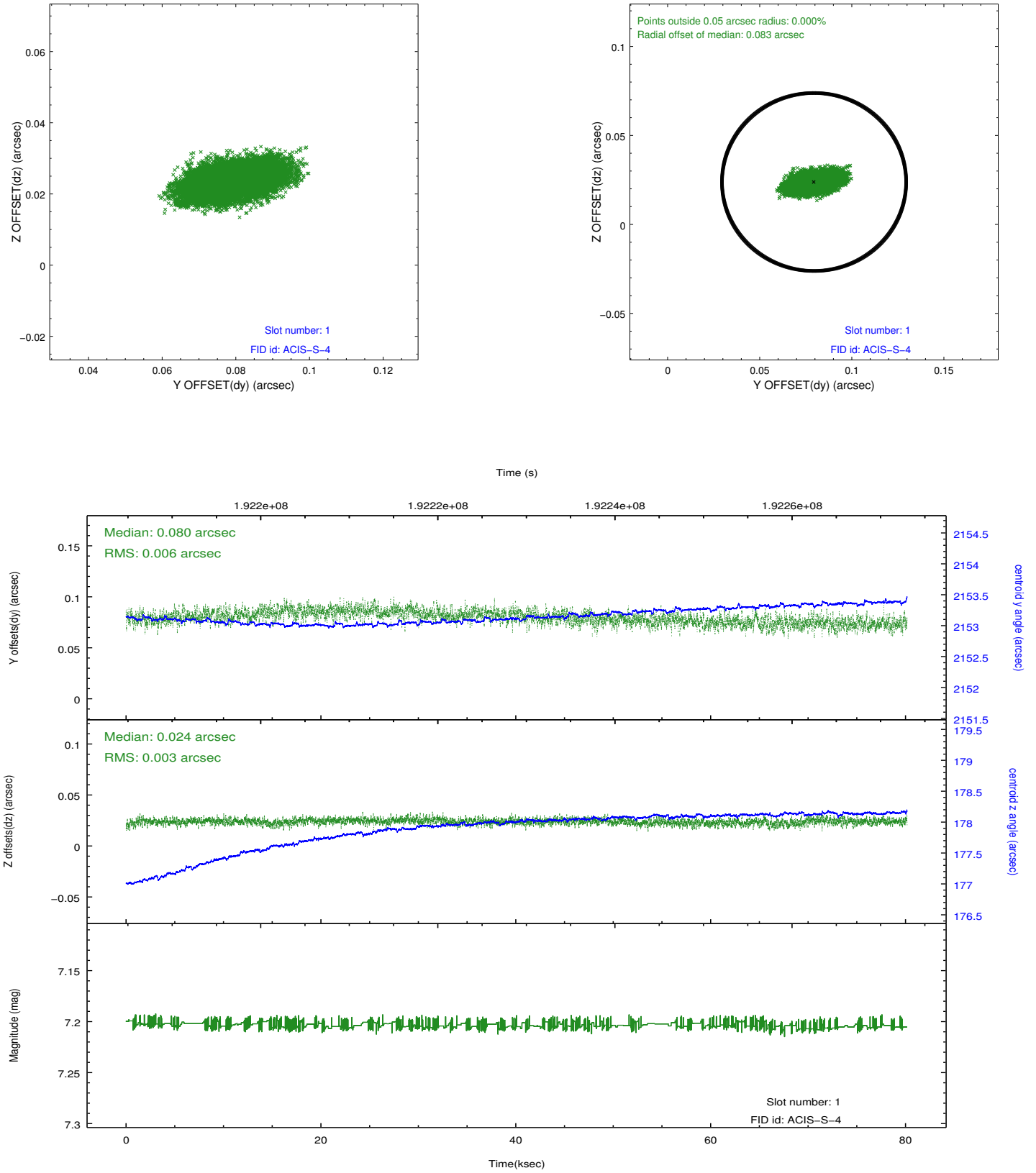


2.5 FID Slots

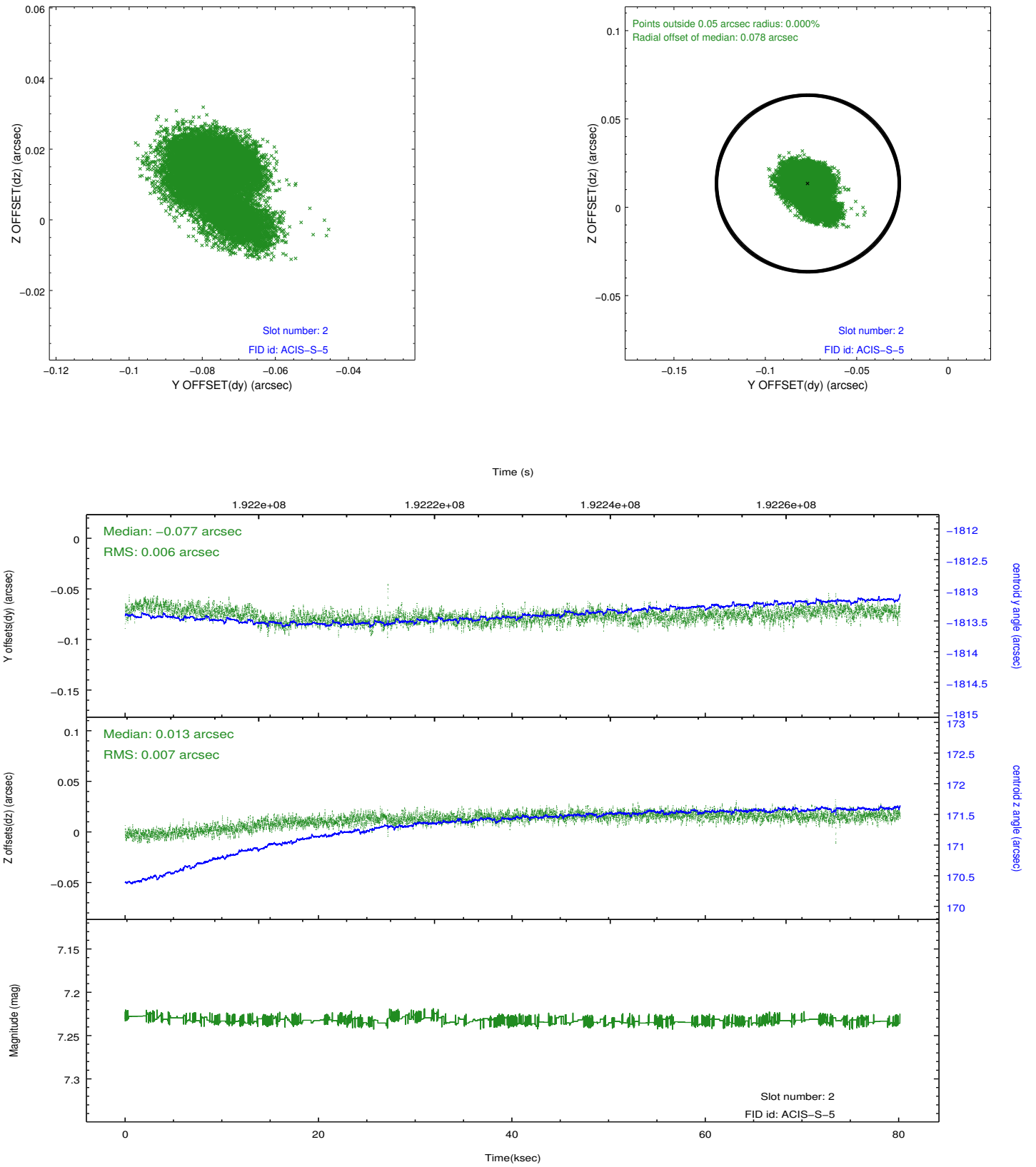
2.5.1 Slot 0



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)	2013.01.30
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	80.115

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.