

V&V Reference Report

L2 ASCDS Version : 10.4.1

Observation 17706 - L2 Version 2
Chandra X-Ray Center

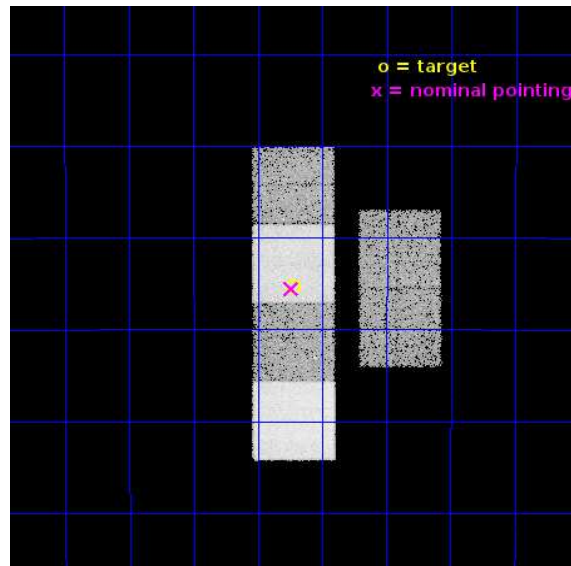
L2 Processing Date : Aug 10 2015

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 4	9
2.4.2	Slot 5	10
2.4.3	Slot 6	11
2.4.4	Slot 7	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

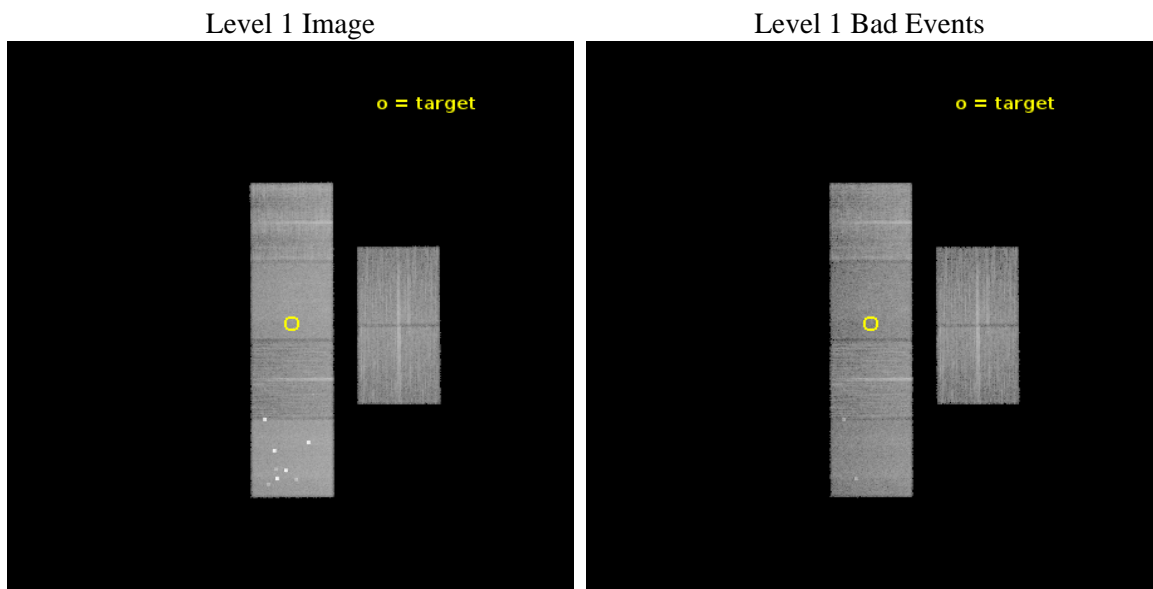
seq_num	401656	Sequence number
obs_id	17706	Observation id
title	Crustal cooling from KS 1731-260 14 years into quiescence	Proposal
observer	Dr. Edward Cackett	Principal investigator
object	KS 1731-260	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	263.55625	Observer's specified target RA [deg]
dec_targ	-26.0885	Observer's specified target Dec [deg]
ra_nom	263.56004082289	Nominal RA [deg]
dec_nom	-26.092728898153	Nominal Dec [deg]
roll_nom	269.82833074105	Nominal Roll [deg]
revision	2	Processing version of data
ontime	20044.240091324	Sum of GTIs [s]
livetime	19790.427854095	Livetime [s]
ontime2	20044.281131268	Sum of GTIs [s]
ontime3	20044.116971254	Sum of GTIs [s]
ontime5	20044.199051261	Sum of GTIs [s]
ontime6	20044.158011317	Sum of GTIs [s]
ontime7	20044.240091324	Sum of GTIs [s]
ontime8	20044.075931311	Sum of GTIs [s]
l2events	185394	Number of level 2 events



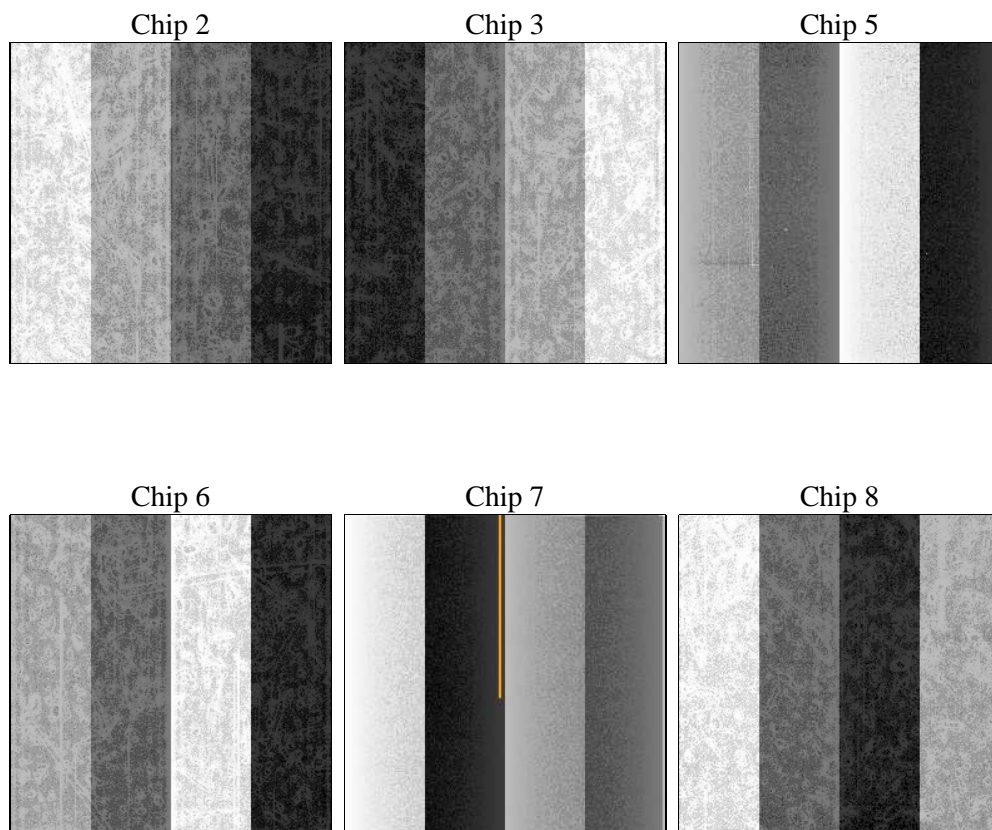
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	20084.951000	[s] Scheduled observation exposure time
ascdsver	10.4.1	Processing system revision	ontime	20044.240091324	Sum of GTIs [s]
caldsver	4.6.8	 	ontime2	20044.281131268	Sum of GTIs [s]
date	2015-08-10T20:13:01	Date and time of file creation	ontime3	20044.116971254	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	20044.199051261	Sum of GTIs [s]
			ontime6	20044.158011317	Sum of GTIs [s]
			ontime7	20044.240091324	Sum of GTIs [s]
			ontime8	20044.075931311	Sum of GTIs [s]
			l1events	813099	Number of level 1 events

2.1.4 Events

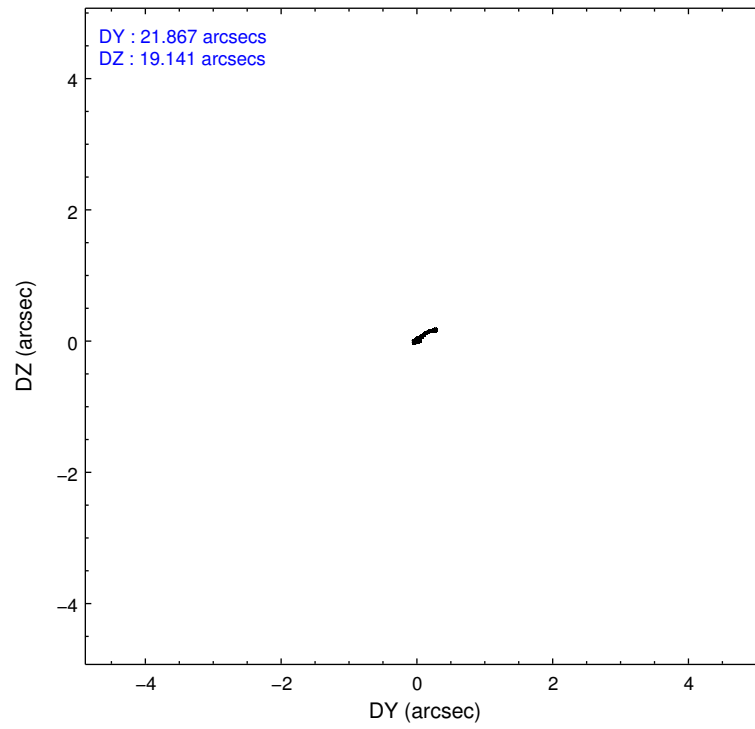
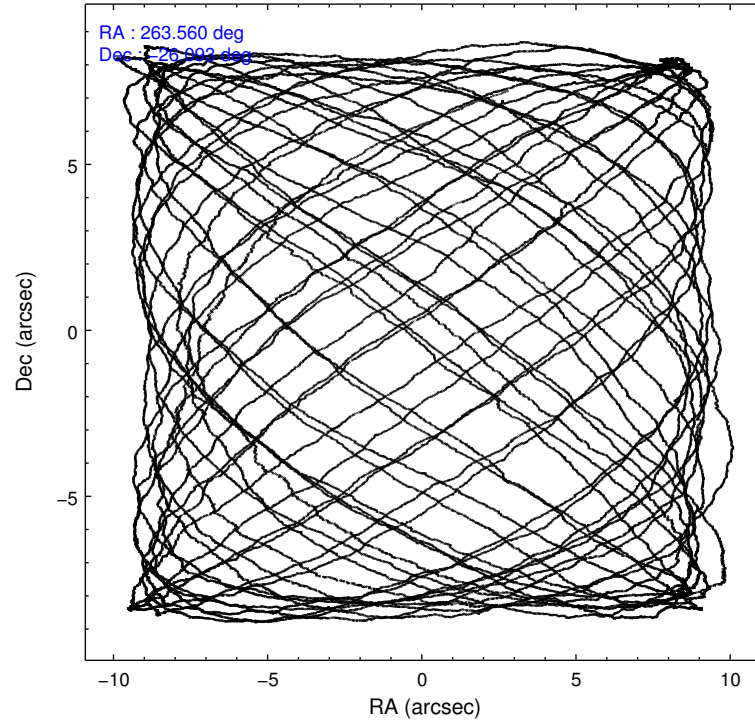
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	108964	103768	204174	109574	145640	140979	grade 0 events	4436	4068	25129	4886	5334	9980
rejected events	97090	92347	91820	96044	82897	105927		4%	3%	12%	4%	3%	7%
rejected %	89%	88%	44%	87%	56%	75%	grade 1 events	57	72	884	55	175	102
								0%	0%	0%	0%	0%	0%
							grade 2 events	2703	2421	32630	3016	13059	8499
								2%	2%	15%	2%	8%	6%
							grade 3 events	1181	1230	4396	1264	4944	3502
								1%	1%	2%	1%	3%	2%
							grade 4 events	1192	1255	3662	1279	4960	3369
								1%	1%	1%	1%	3%	2%
							grade 5 events	4584	5310	12176	5241	14221	7854
								4%	5%	5%	4%	9%	5%
							grade 6 events	2364	2454	46578	3089	34456	9706
								2%	2%	22%	2%	23%	6%
							grade 7 events	92447	86958	78719	90744	68491	97967
								84%	83%	38%	82%	47%	69%

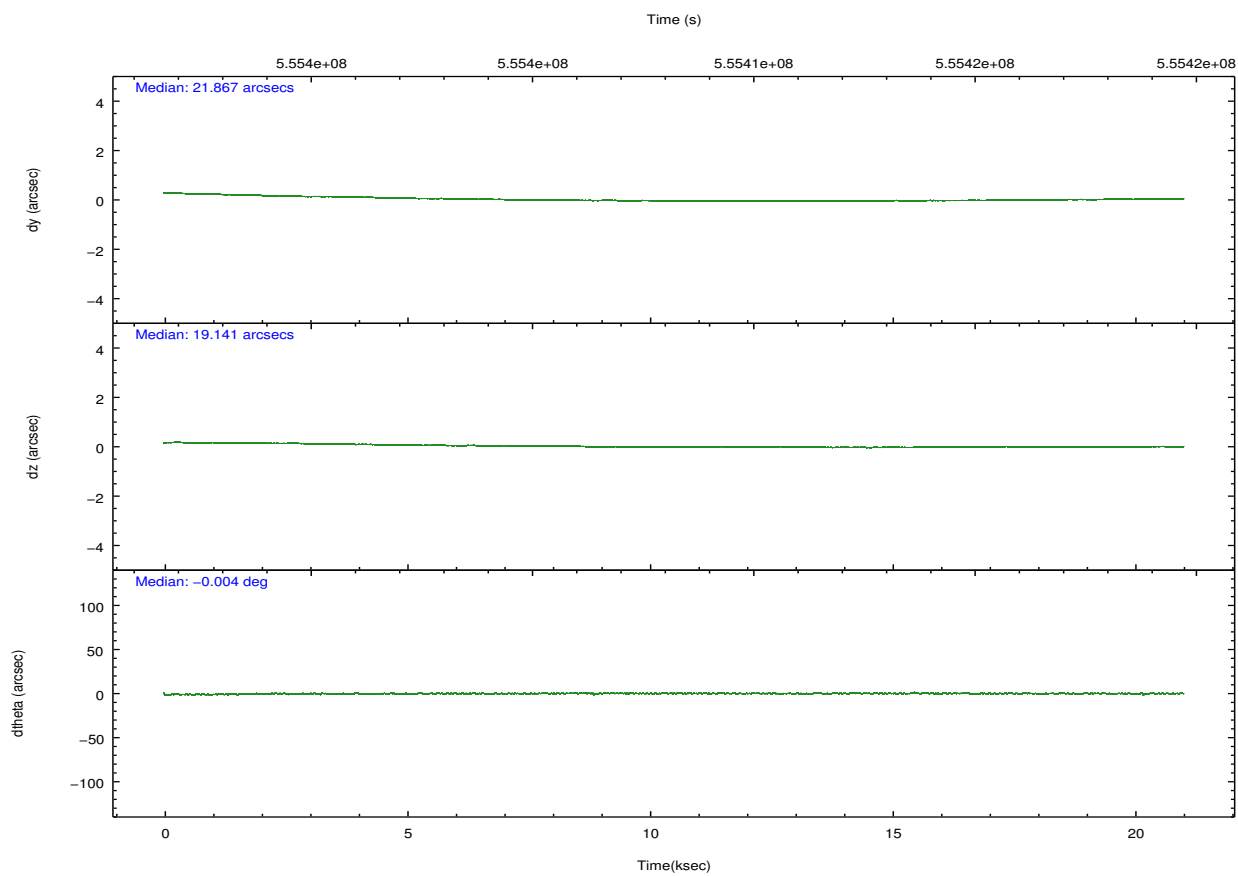
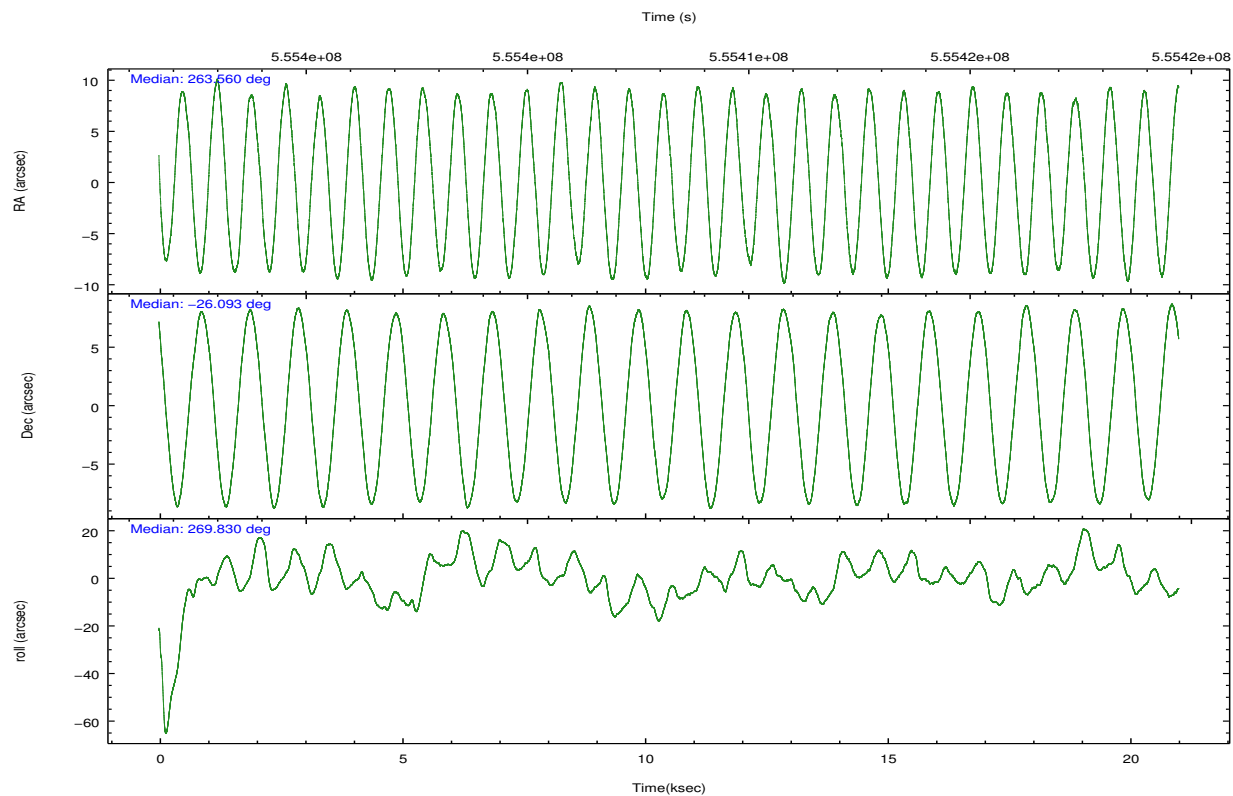
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-235678	ACIS-235678
Grating	NONE	NONE
Data mode	FAINT	FAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	263.544495	263.5600408228887
[deg] Pointing Dec	-26.069105	-26.09272889815323
[deg] Pointing Roll	269.664830	269.8283307410488
[mm] SIM focus pos	-0.684267	-0.6828225247311905
[mm] SIM defocus	0	0.001444936568705701
[mm] SIM translation stage pos	-190.132523	-190.145094680475
[mm] SIM translation stage offset	0	0.01257209746719923
[s] Observation start time (MET)	555398595.184000	555397262.8509001
Observation start date	2015-08-08T05:22:07	2015-08-08T05:01:02
[s] Observation end time (MET)	555418680.184000	555418899.06462
Observation end date	2015-08-08T10:56:52	2015-08-08T11:01:39
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	Y	Y
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	3.2

2.3 Aspect



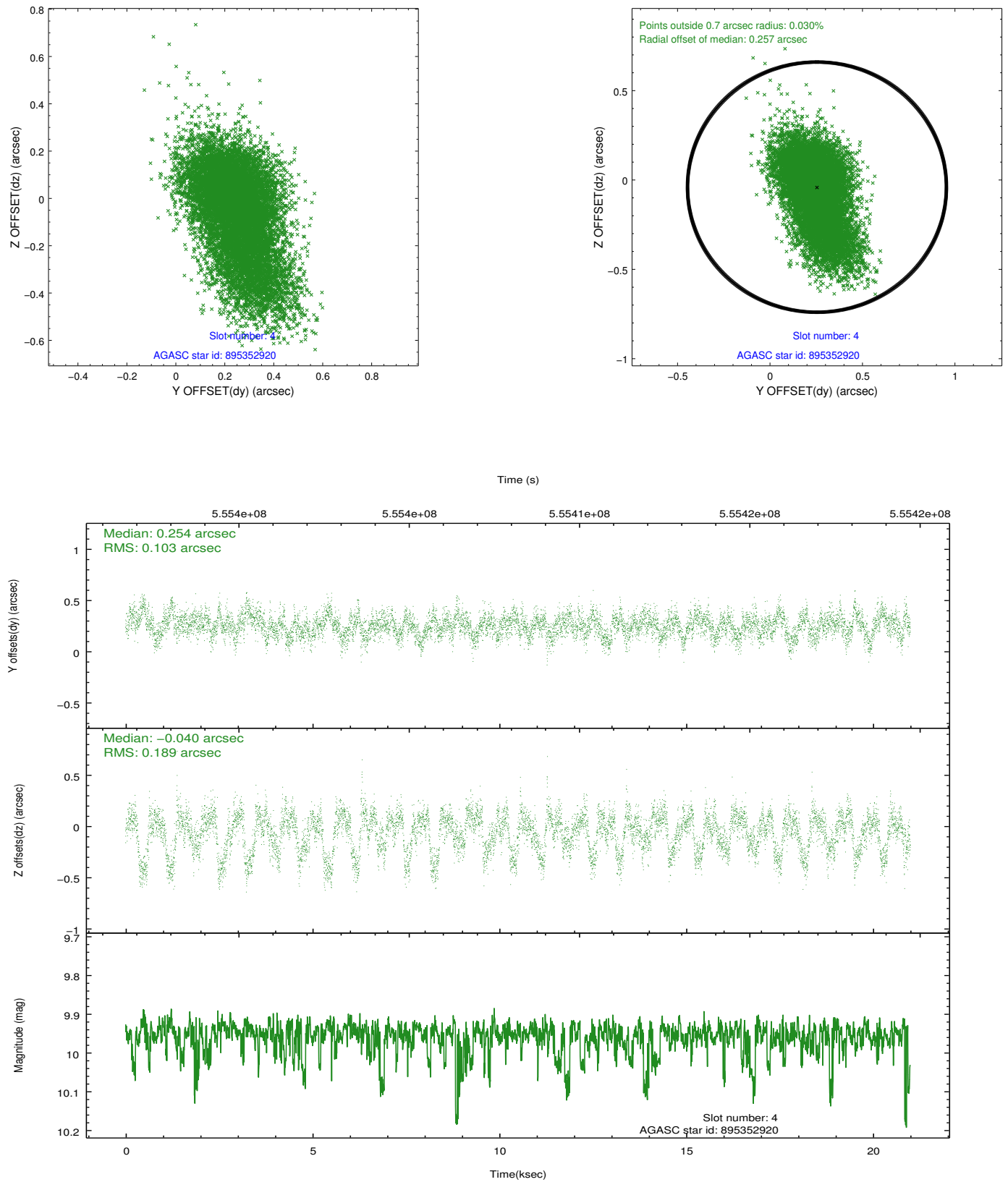


Slot Statistics

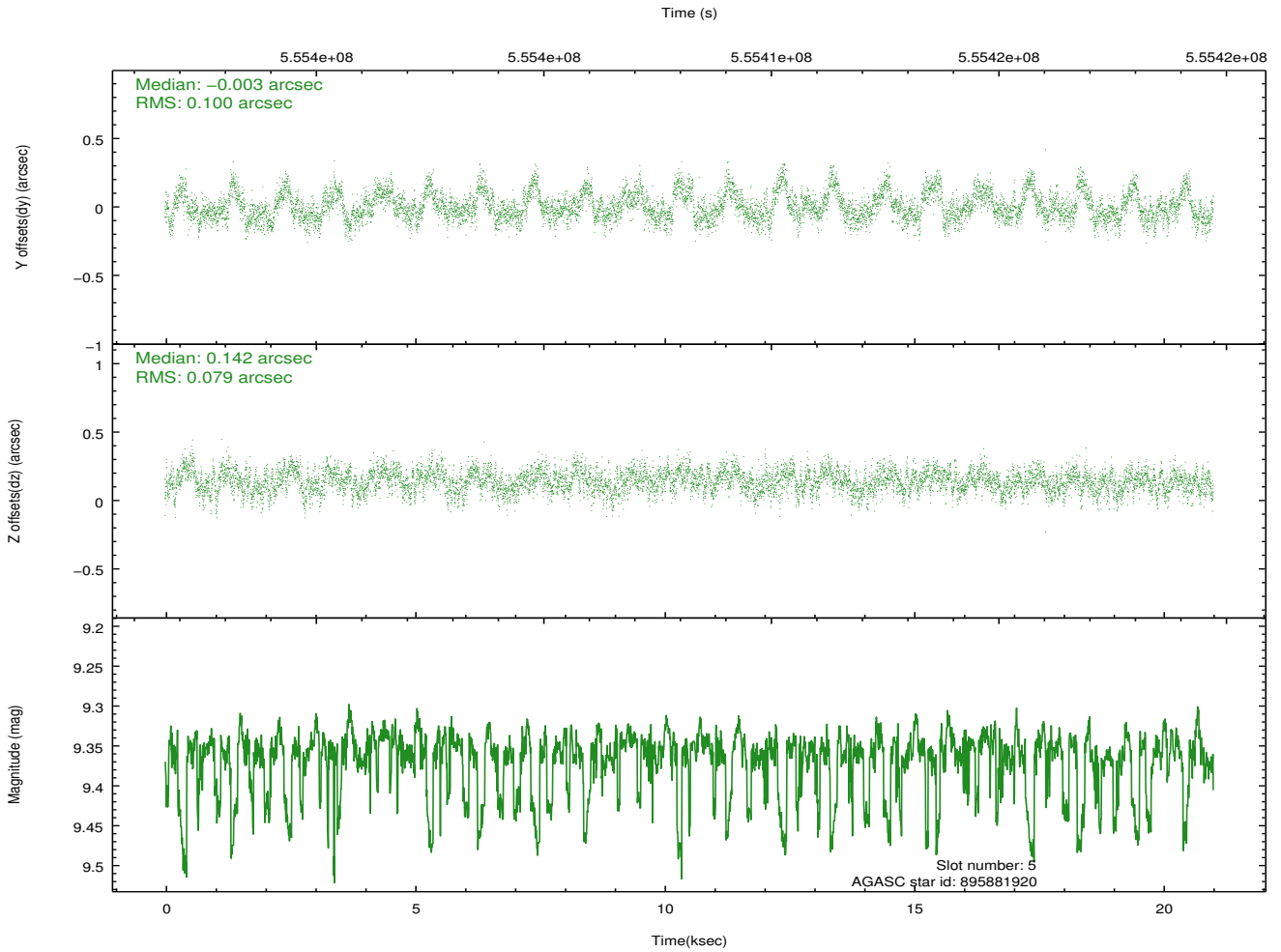
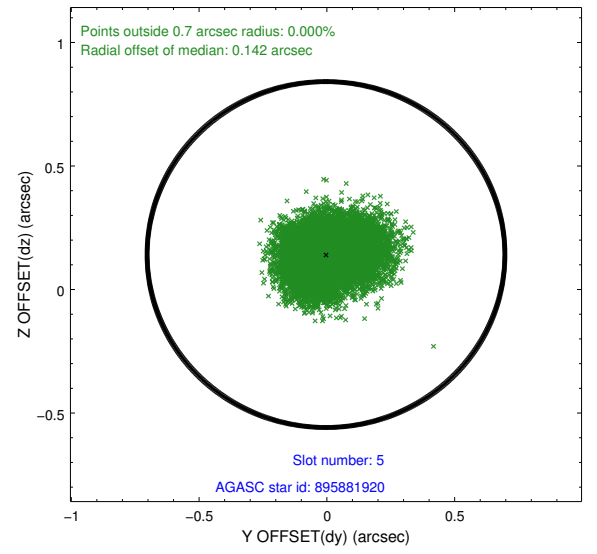
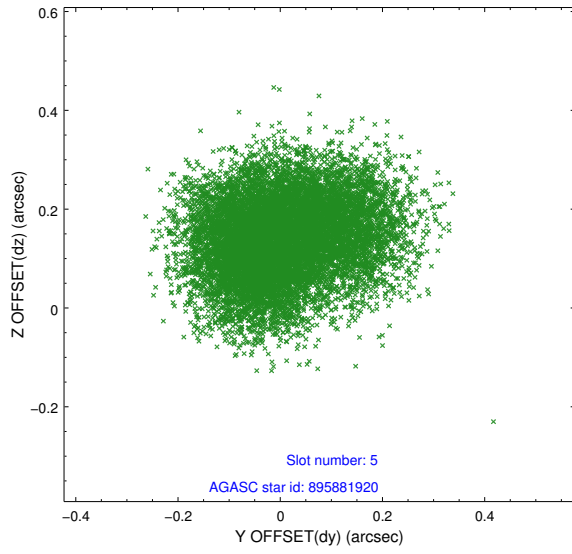
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.08	5126	-0.151	-0.108	0.007	0.015	0.000000	0.000000	-775.20	-1740.67
1	FID		ACIS-S-4	7.18	5126	0.366	0.102	0.006	0.011	0.000000	0.000000	2138.51	167.85
2	FID		ACIS-S-5	7.19	5125	-0.246	0.015	0.008	0.014	0.000000	0.000000	-1827.93	161.61
3	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
4	GUIDE	used	895352920	9.95	10155	0.254	-0.040	0.217	0.399	264.217496	-25.713600	-1286.38	2175.09
5	GUIDE	used	895881920	9.36	10242	-0.003	0.142	0.136	0.218	263.913988	-26.630022	2013.99	1201.31
6	GUIDE	used	895882536	9.55	10240	-0.224	0.037	0.155	0.252	264.066482	-26.424198	1271.95	1690.53
7	GUIDE	used	895748544	7.98	10250	-0.040	-0.110	0.152	0.228	263.692859	-26.739685	2411.69	491.22

2.4 Star Slots

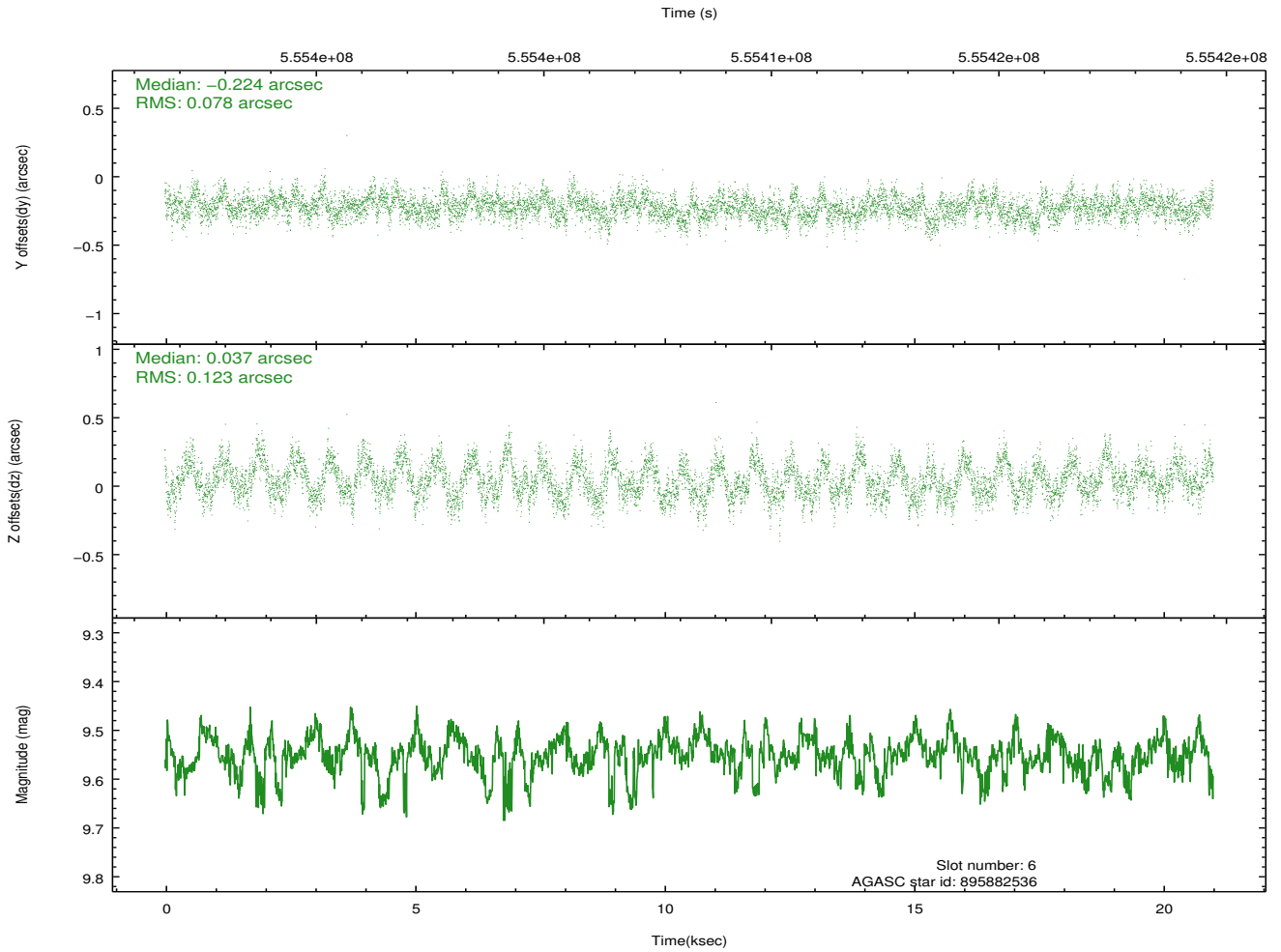
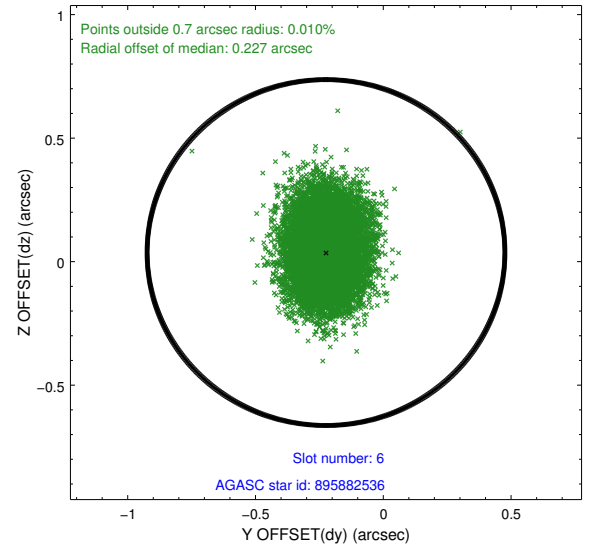
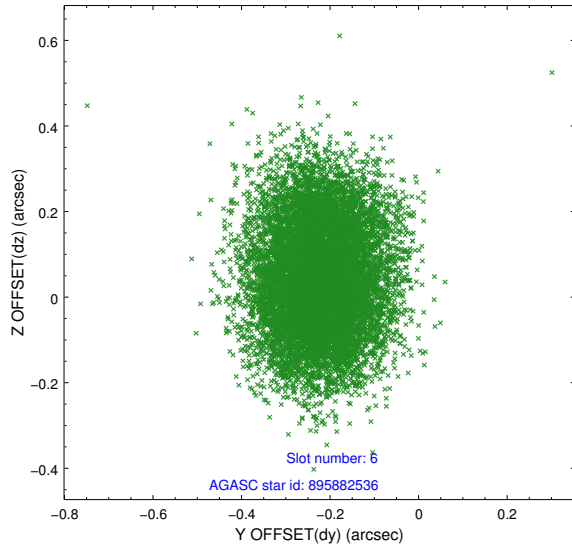
2.4.1 Slot 4



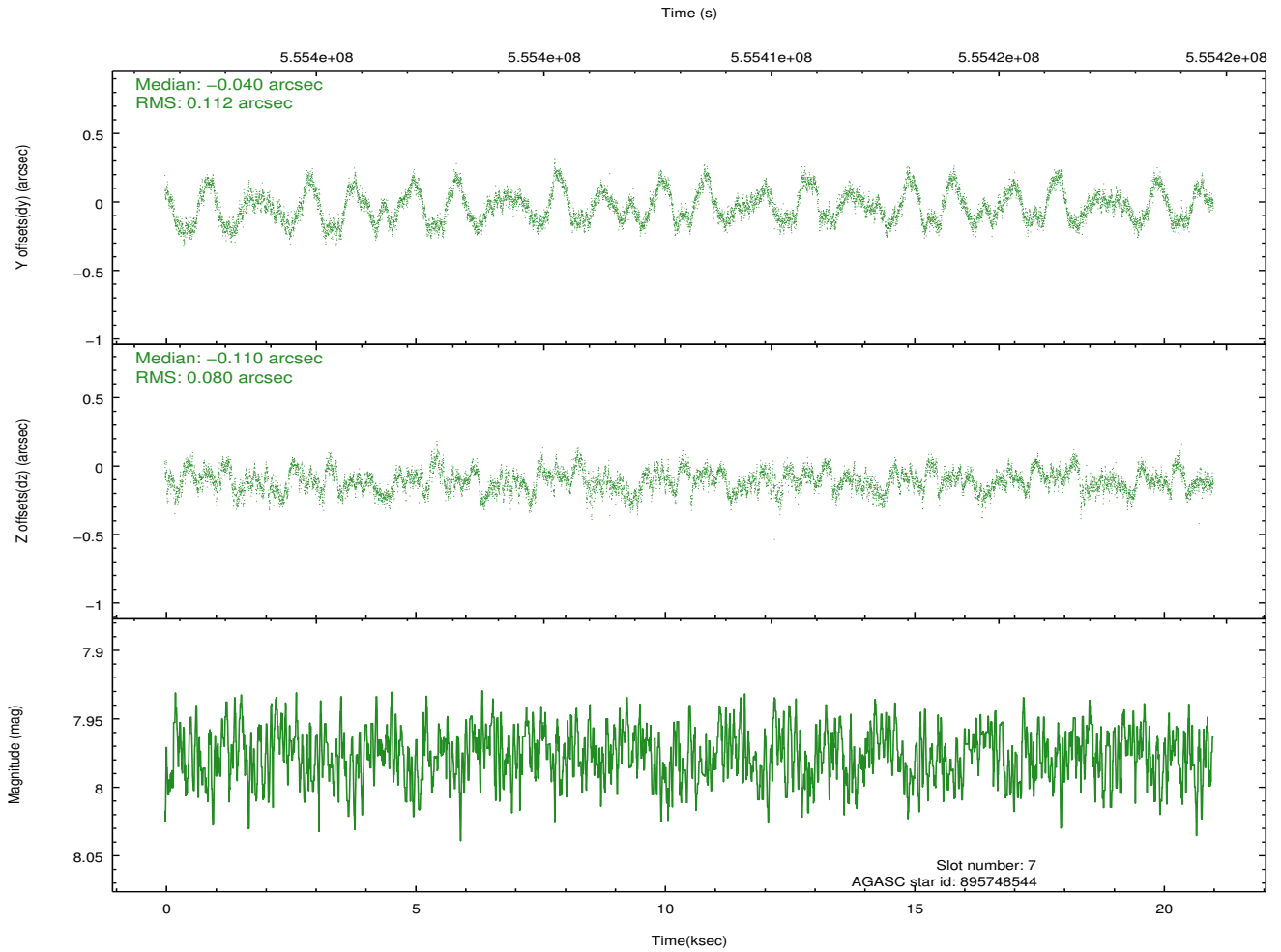
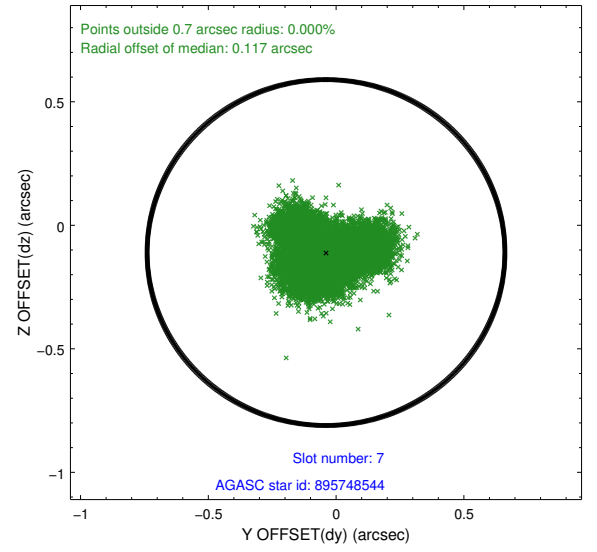
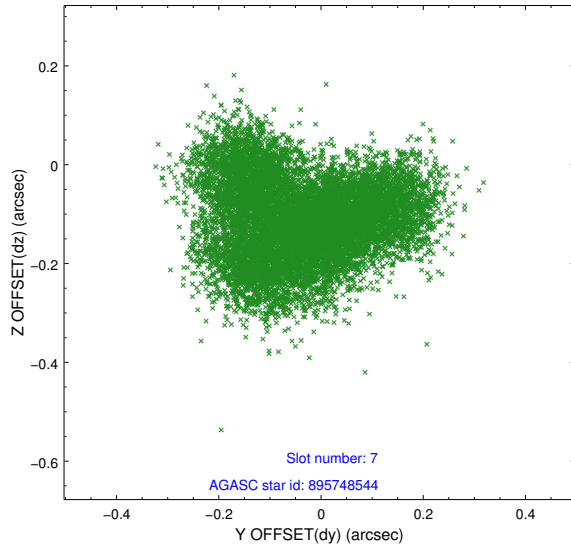
2.4.2 Slot 5



2.4.3 Slot 6

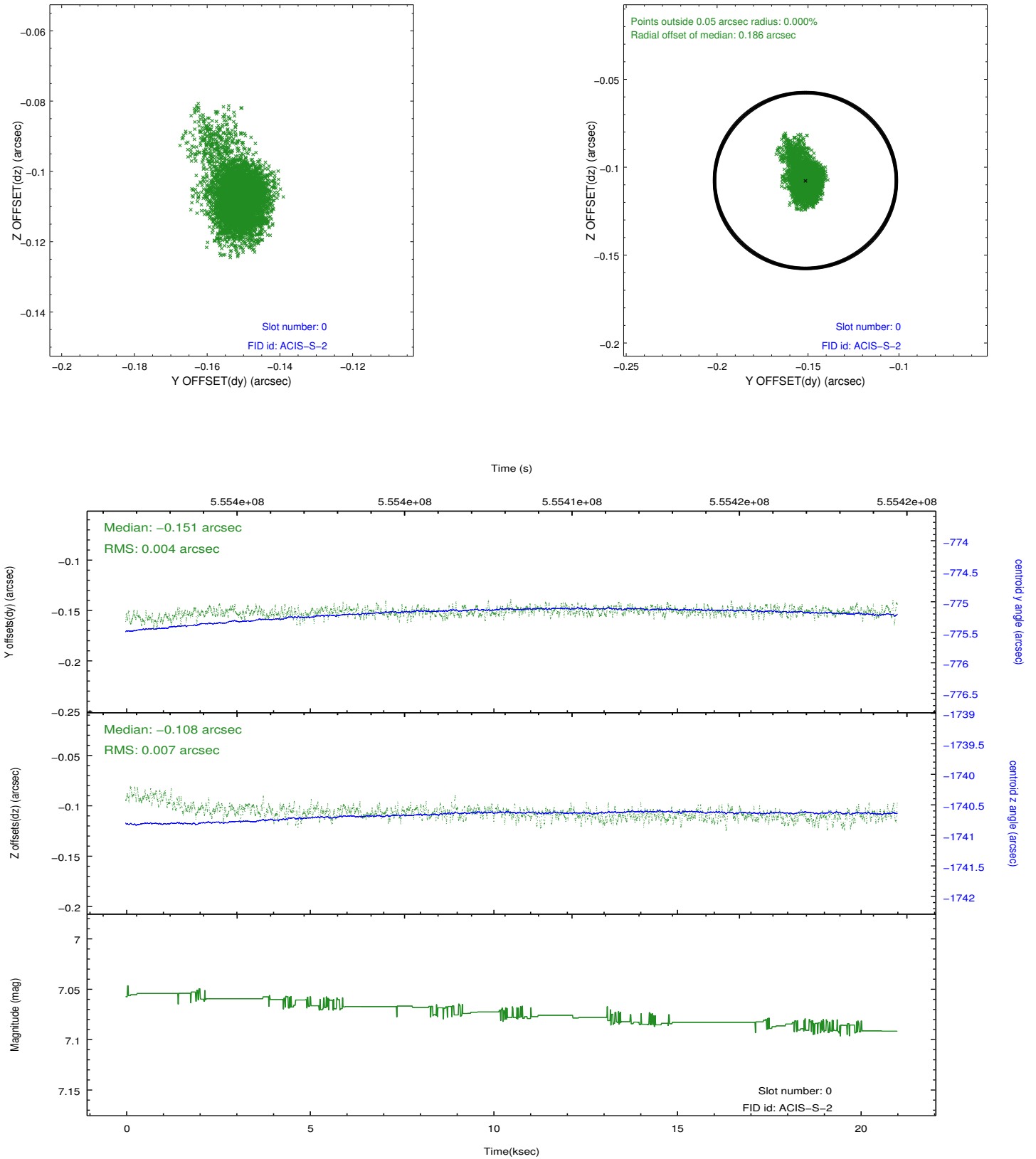


2.4.4 Slot 7

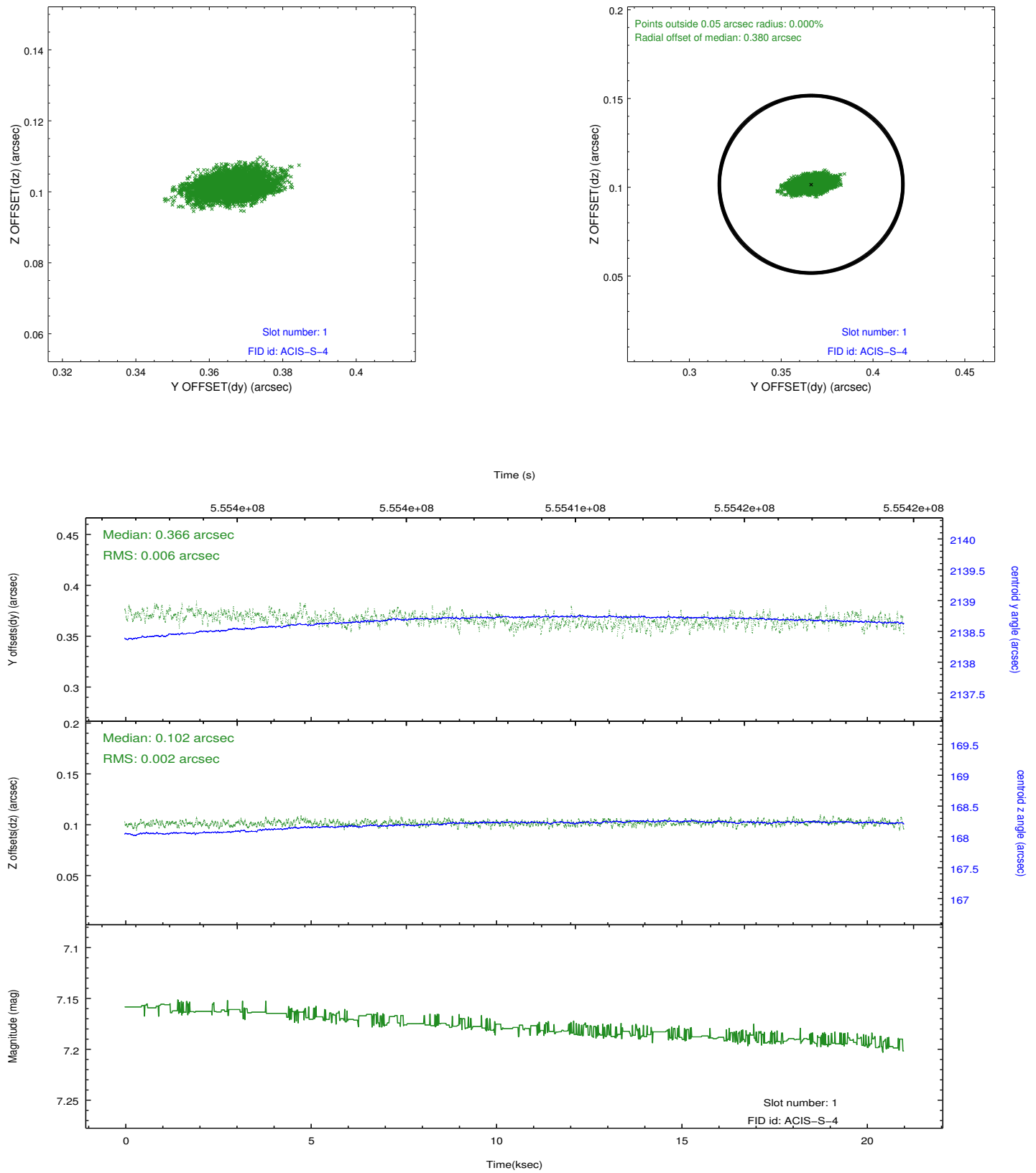


2.5 FID Slots

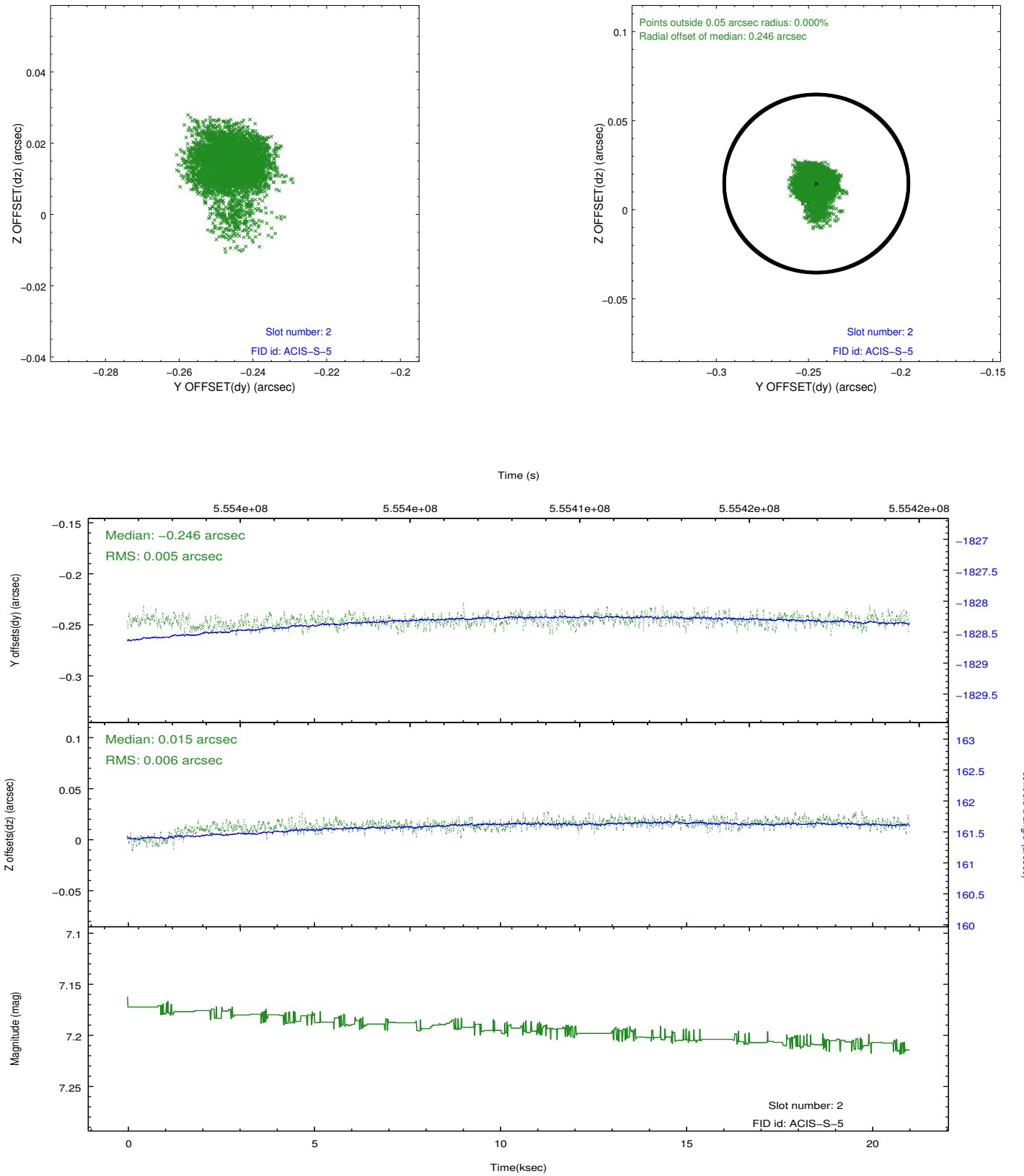
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2015.08.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.044240091324

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 star from the solution.