

V&V Reference Report

L2 ASCDS Version : 10.6

Observation 20856 - L2 Version 2
Chandra X-Ray Center

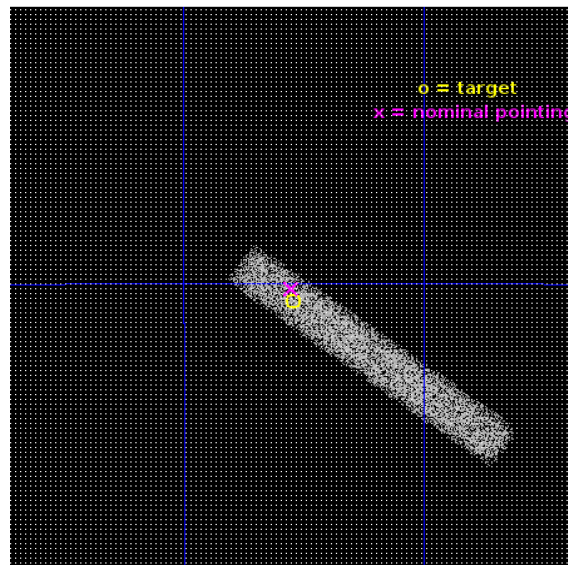
L2 Processing Date : Nov 21 2017

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1 Front

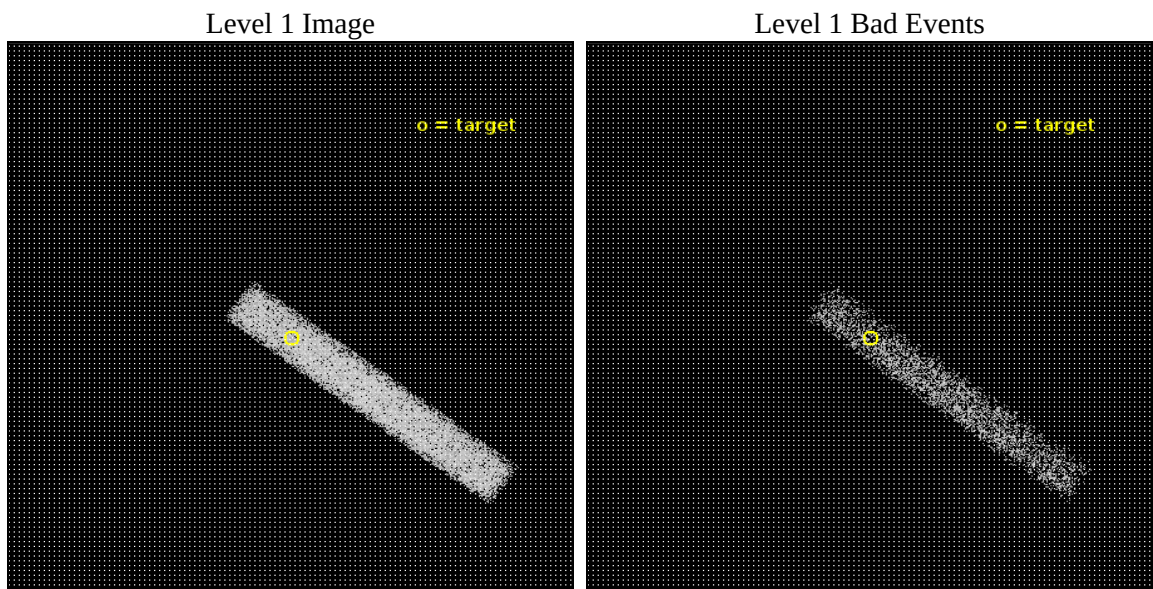
seq_num	401807	Sequence number
obs_id	20856	Observation id
title	Crust cooling of accretion-heated neutron stars	Proposal title
observer	Rudy Wijnands	Principal investigator
object	MAXI J0556-332	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	89.193	Observer's specified target RA [deg]
dec_targ	-33.1745	Observer's specified target Dec [deg]
ra_nom	89.193855794309	Nominal RA [deg]
dec_nom	-33.168884825288	Nominal Dec [deg]
roll_nom	36.157096534355	Nominal Roll [deg]
revision	2	Processing version of data
ontime	19069.198863268	Sum of GTIs [s]
livetime	17294.756814137	Livetime [s]
ontime7	19069.198863268	Sum of GTIs [s]
l2events	10887	Number of level 2 events



2 OBI

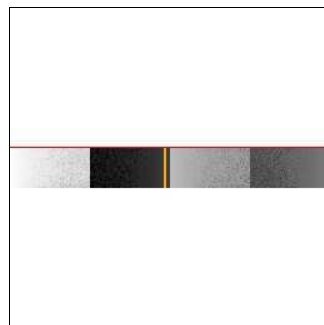
2.1 OBI

2.1.1 Images



2.1.2 Bias

Chip 7



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	19000.000000	[s] Scheduled observation exposure time
ascdsver	10.6	Processing system revision	ontime	19069.198863268	Sum of GTIs [s]
caldsver	4.7.6	 	ontime7	19069.198863268	Sum of GTIs [s]
date	2017-11-21T21:59:06	Date and time of file creation	l1events	23691	Number of level 1 events
revision	2	Processing version of data			

2.1.4 Events

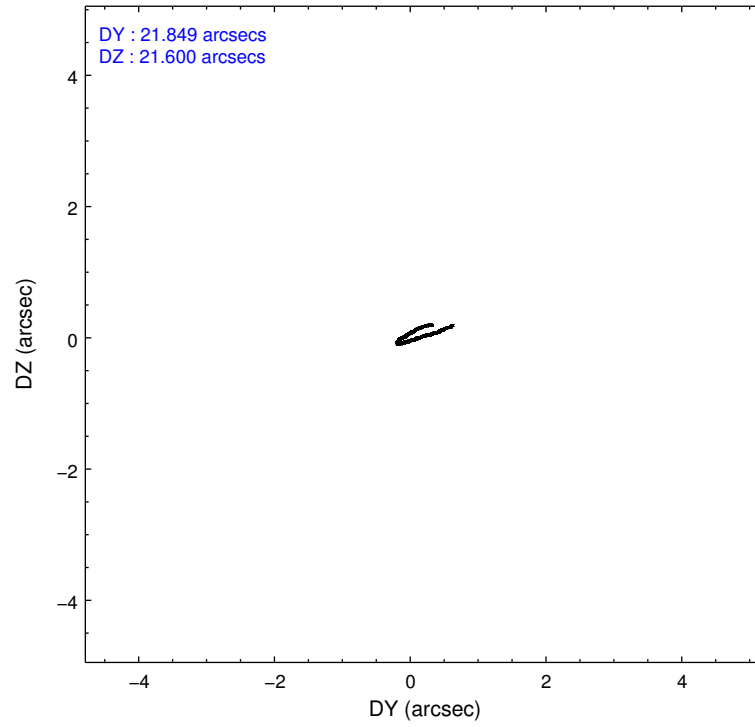
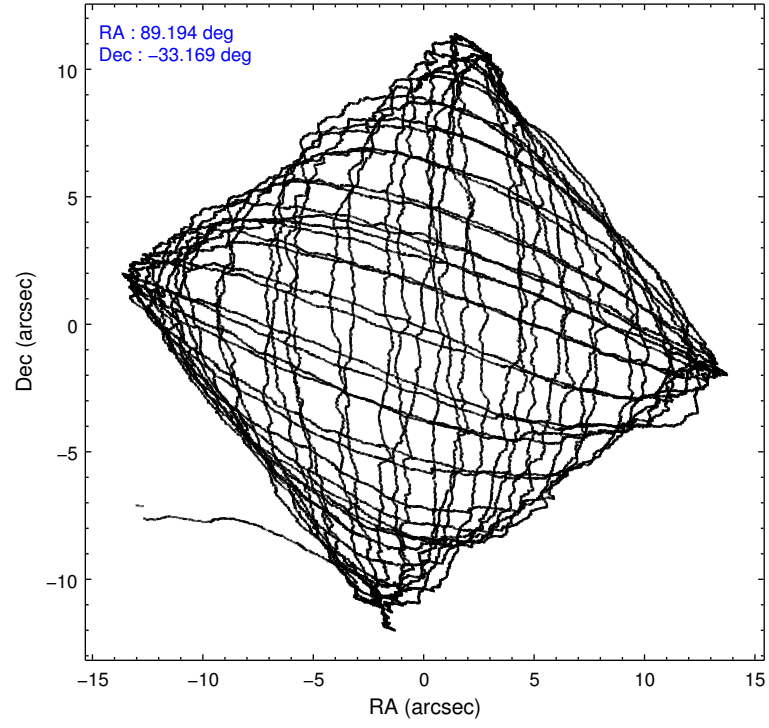
	ccd 7
level 1 events	23691
rejected events	12242
rejected %	51%

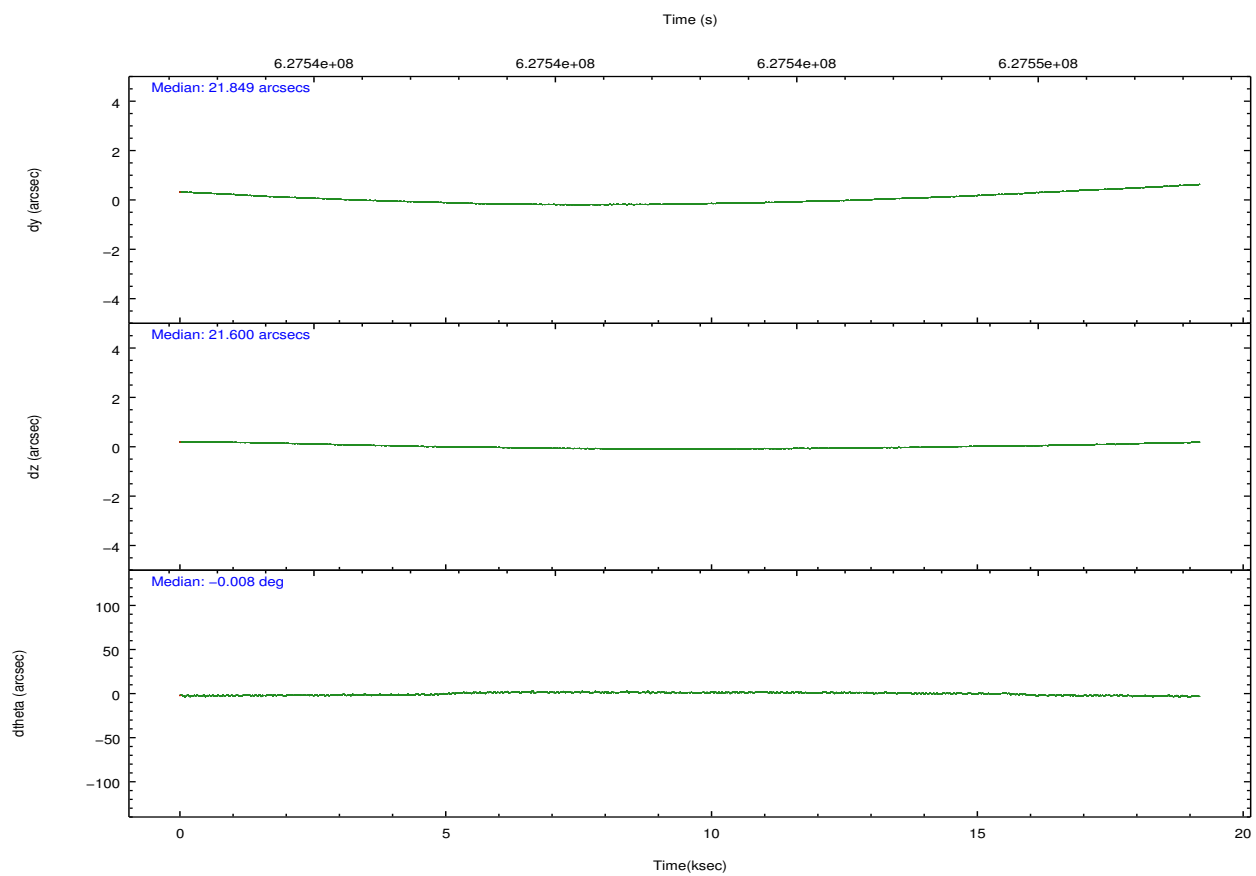
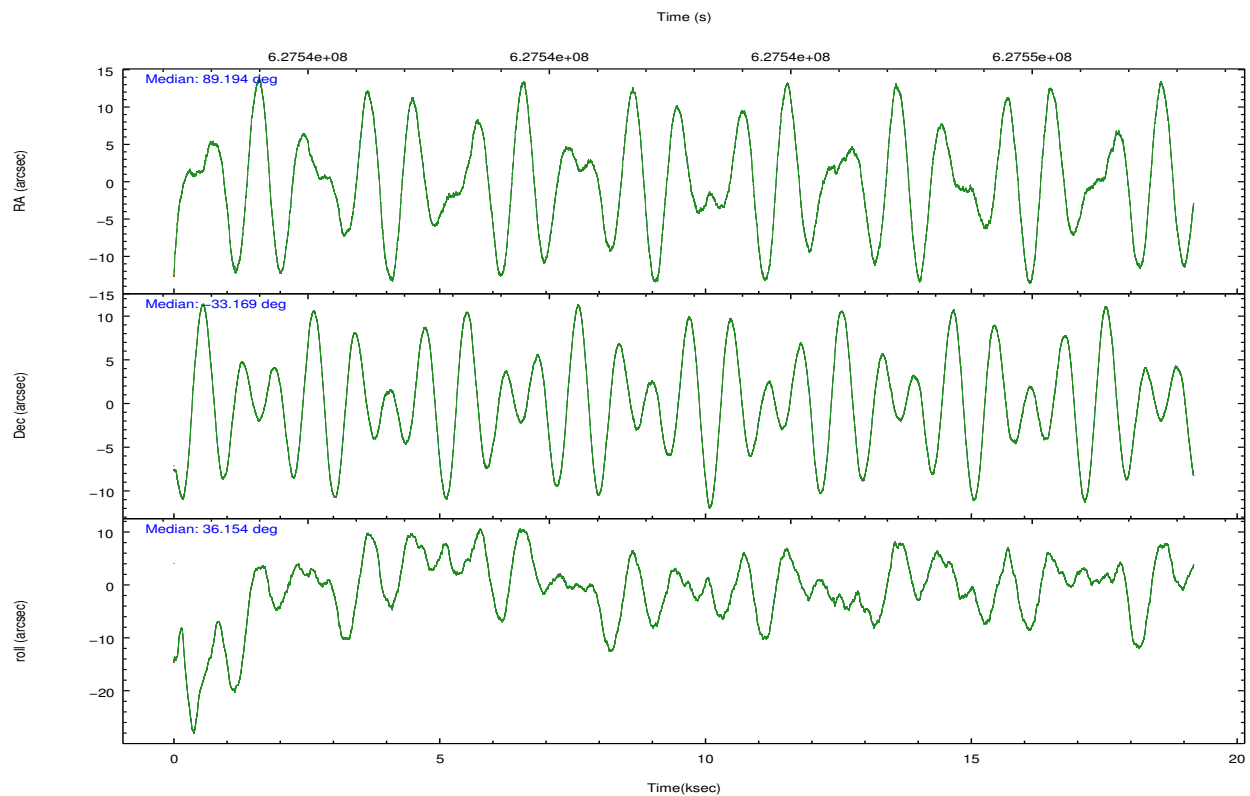
	ccd 7
grade 0 events	1075
	4%
grade 1 events	39
	0%
grade 2 events	2127
	8%
grade 3 events	1557
	6%
grade 4 events	1407
	5%
grade 5 events	2393
	10%
grade 6 events	5283
	22%
grade 7 events	9810
	41%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-7	ACIS-7	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	89.181017	89.19385579430939	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	-33.194118	-33.16888482528766	Subarray start row	449	449
[deg] Pointing Roll	35.993446	36.15709653435544	Subarray row count	128	128
[mm] SIM focus pos	-0.684267	-0.6828225247311905	Alternating exposures requested	N	N
[mm] SIM defocus	0	0.001444936568705701	[s] Primary exposure time	0.000000	0.4
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	627533358.184000	627532549.33943			
Observation start date	2017-11-20T02:48:09	2017-11-20T02:35:49			
[s] Observation end time (MET)	627552358.184000	627552925.82812			
Observation end date	2017-11-20T08:04:49	2017-11-20T08:15:25			
Read mode	TIMED	TIMED			

2.3 Aspect



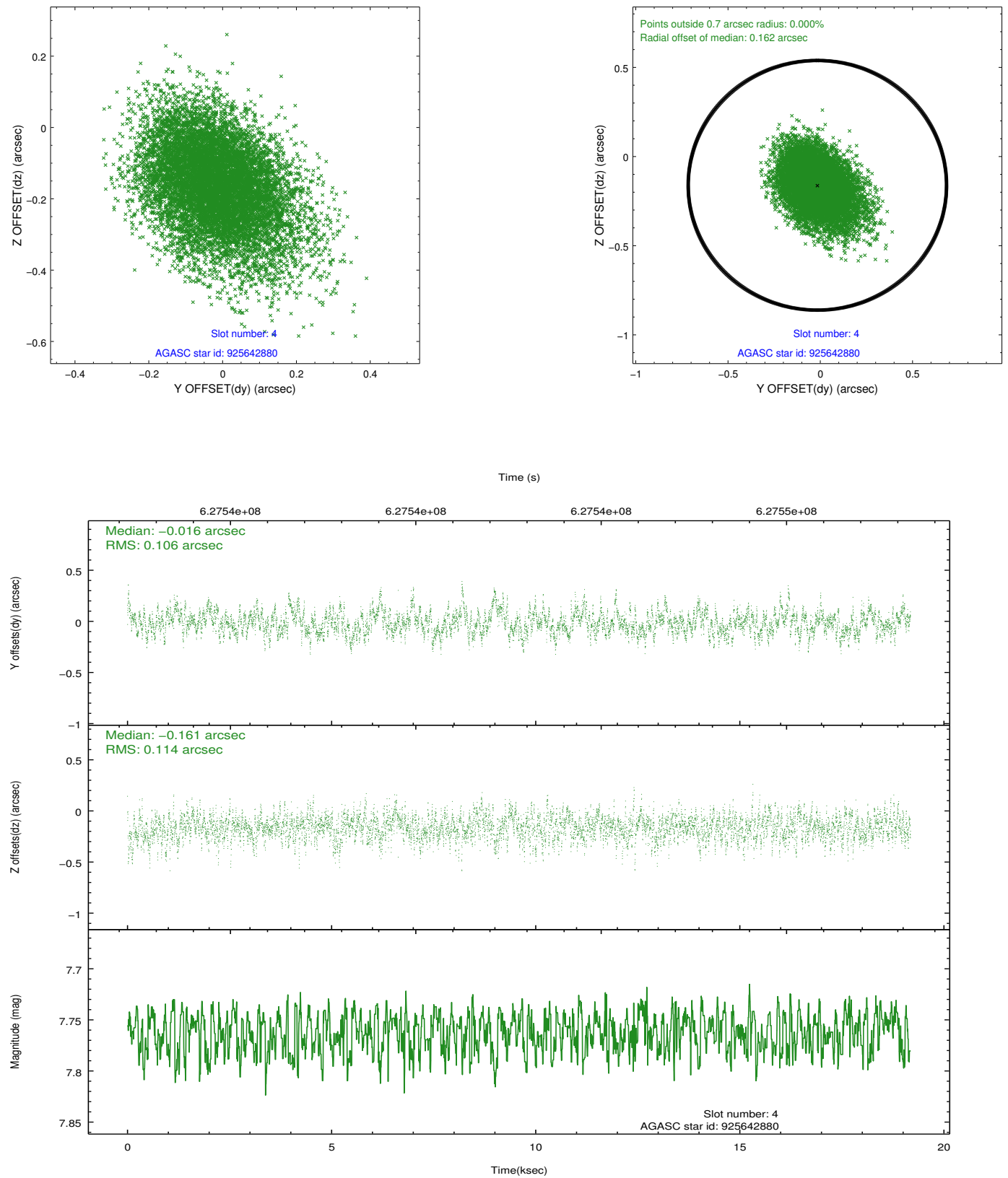


Slot Statistics

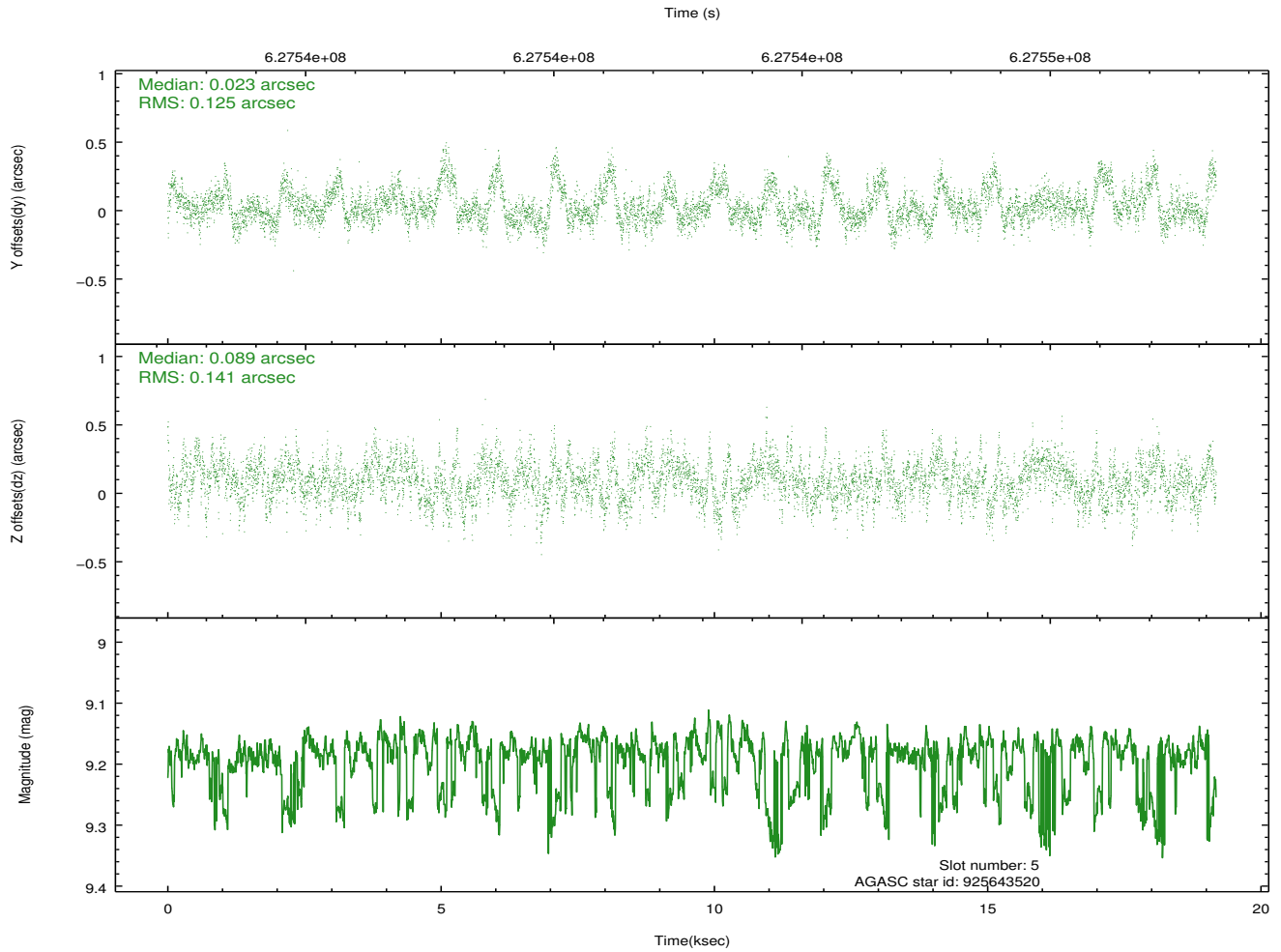
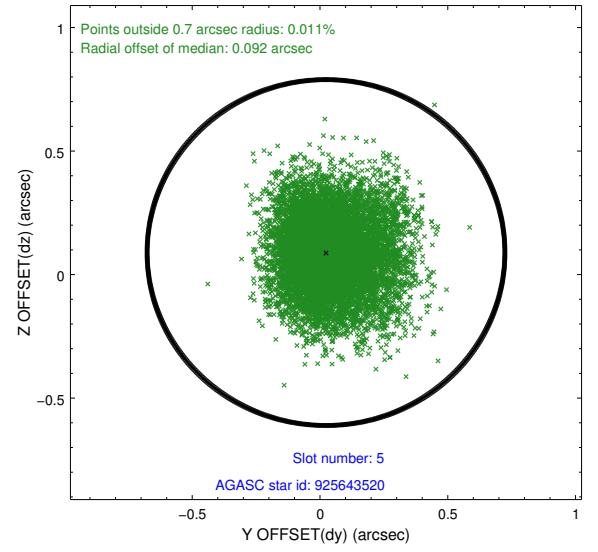
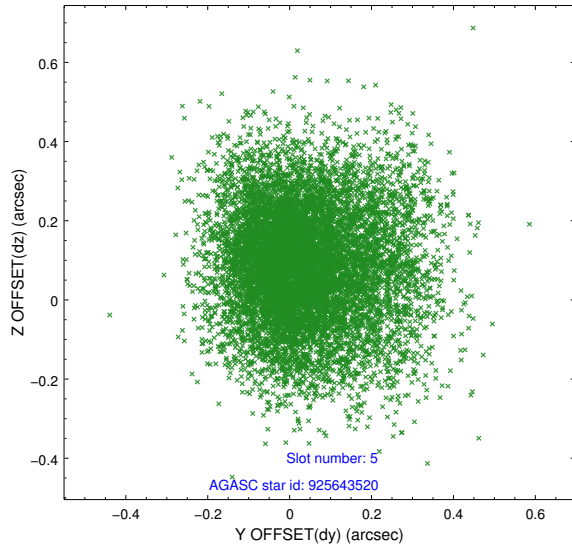
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-1	7.22	4678	0.307	-0.062	0.007	0.012	0.000000	0.000000	921.37	-1738.77
1	FID		ACIS-S-2	7.13	4678	-0.170	-0.104	0.010	0.015	0.000000	0.000000	-774.90	-1743.66
2	FID		ACIS-S-5	7.24	4679	-0.160	0.172	0.009	0.019	0.000000	0.000000	-1828.44	158.67
3	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
4	GUIDE	used	925642880	7.76	9353	-0.016	-0.161	0.162	0.273	89.133148	-33.434507	-624.05	-615.46
5	GUIDE	used	925643520	9.18	9340	0.023	0.089	0.199	0.333	88.970468	-33.727415	-1638.94	-1183.78
6	GUIDE	used	925645552	7.58	9354	-0.086	0.052	0.140	0.247	88.738097	-33.665766	-2072.82	-596.04
7	GUIDE	used	927349400	9.68	9262	0.067	0.027	0.294	0.482	90.150883	-33.356822	2008.03	-2198.47

2.4 Star Slots

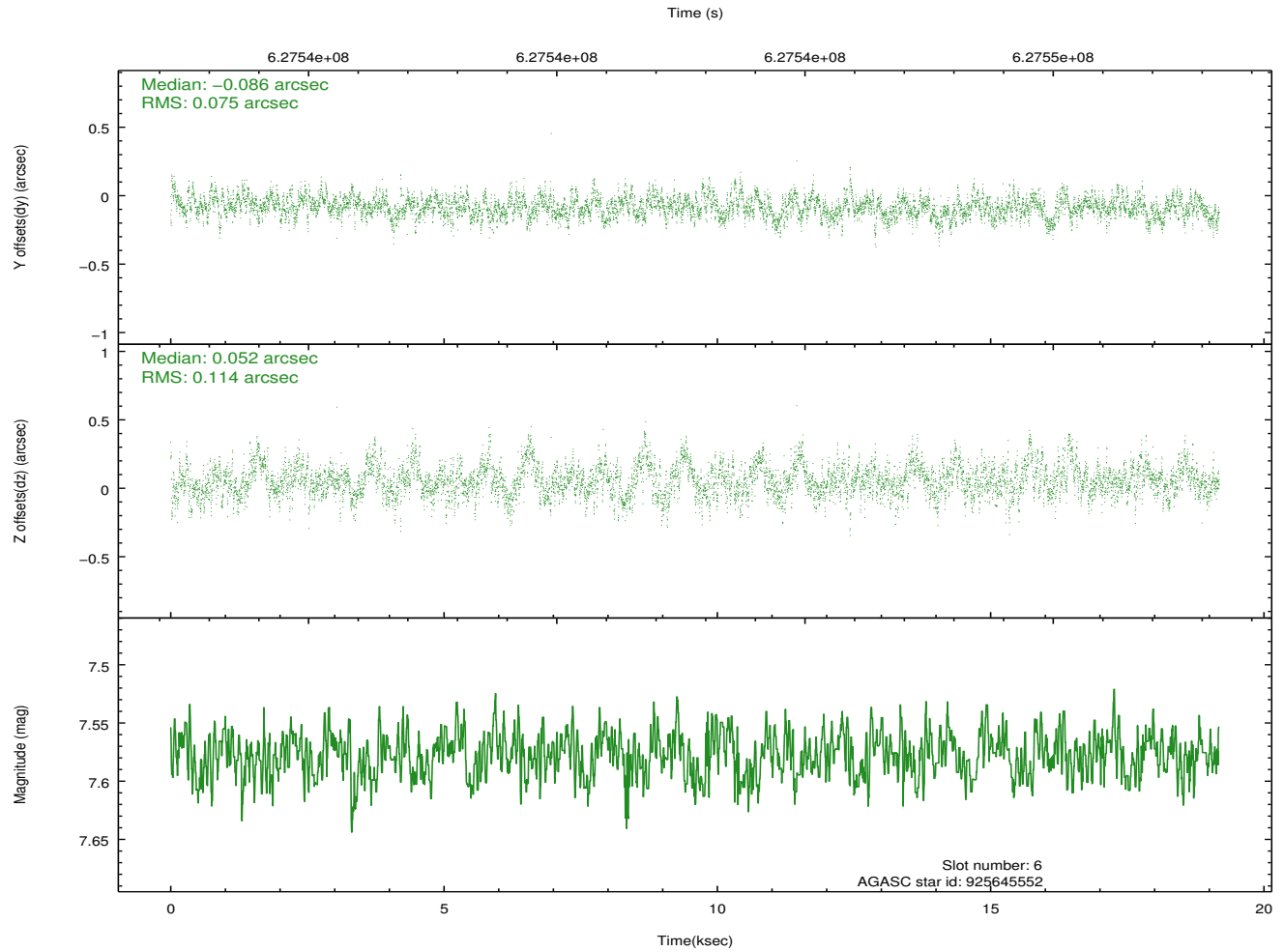
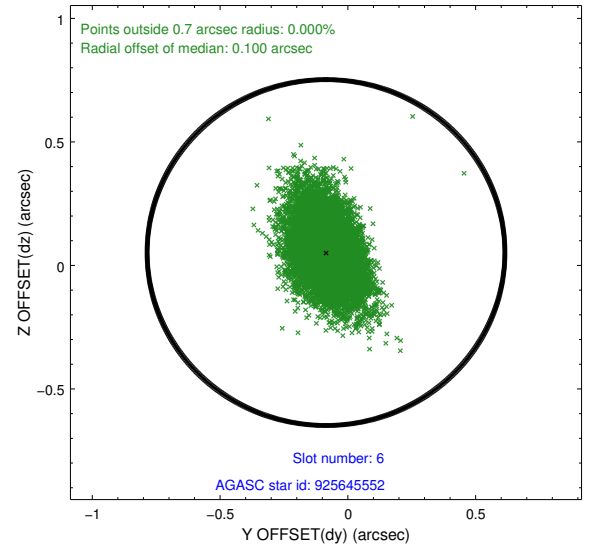
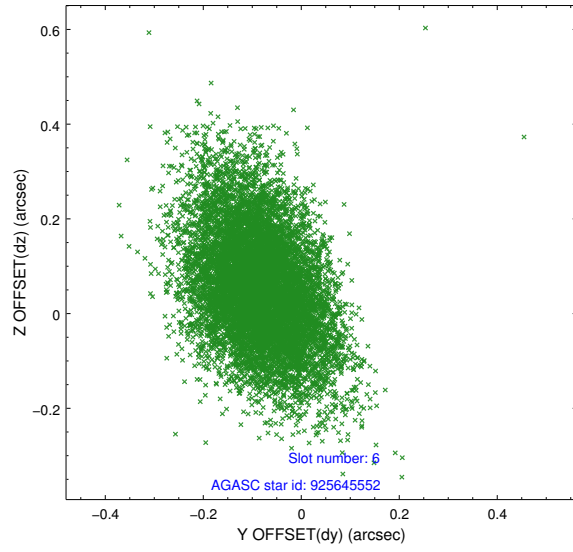
2.4.1 Slot 4



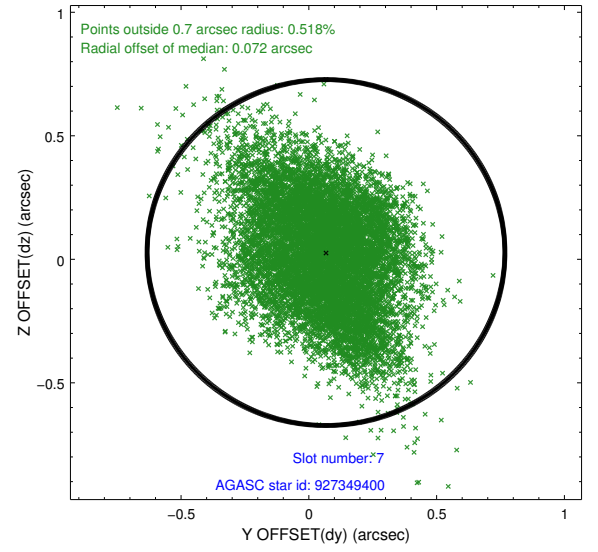
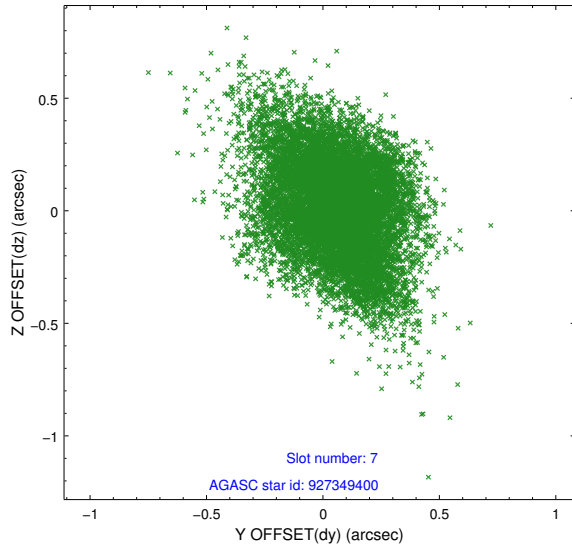
2.4.2 Slot 5



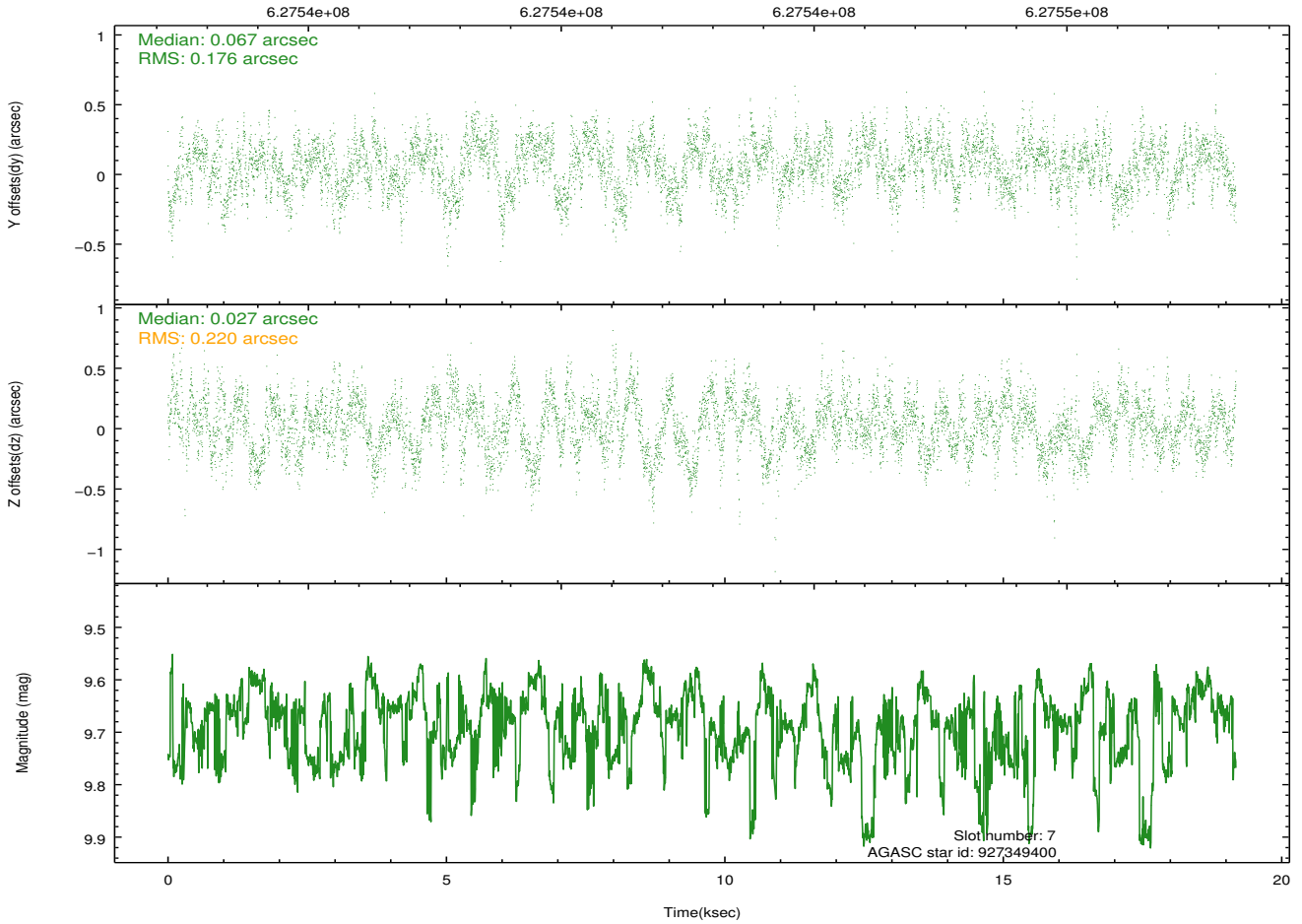
2.4.3 Slot 6



2.4.4 Slot 7

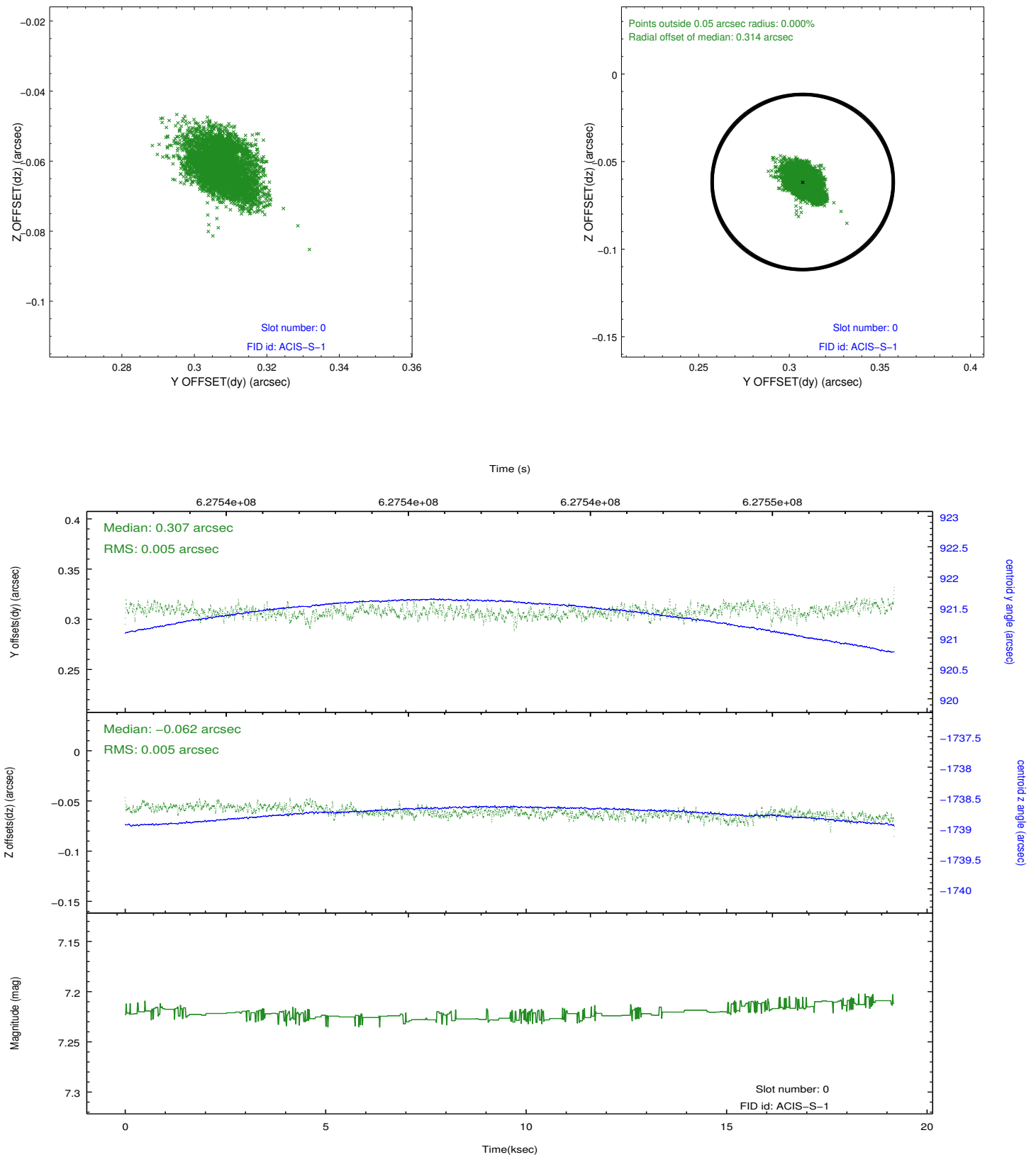


Time (s)

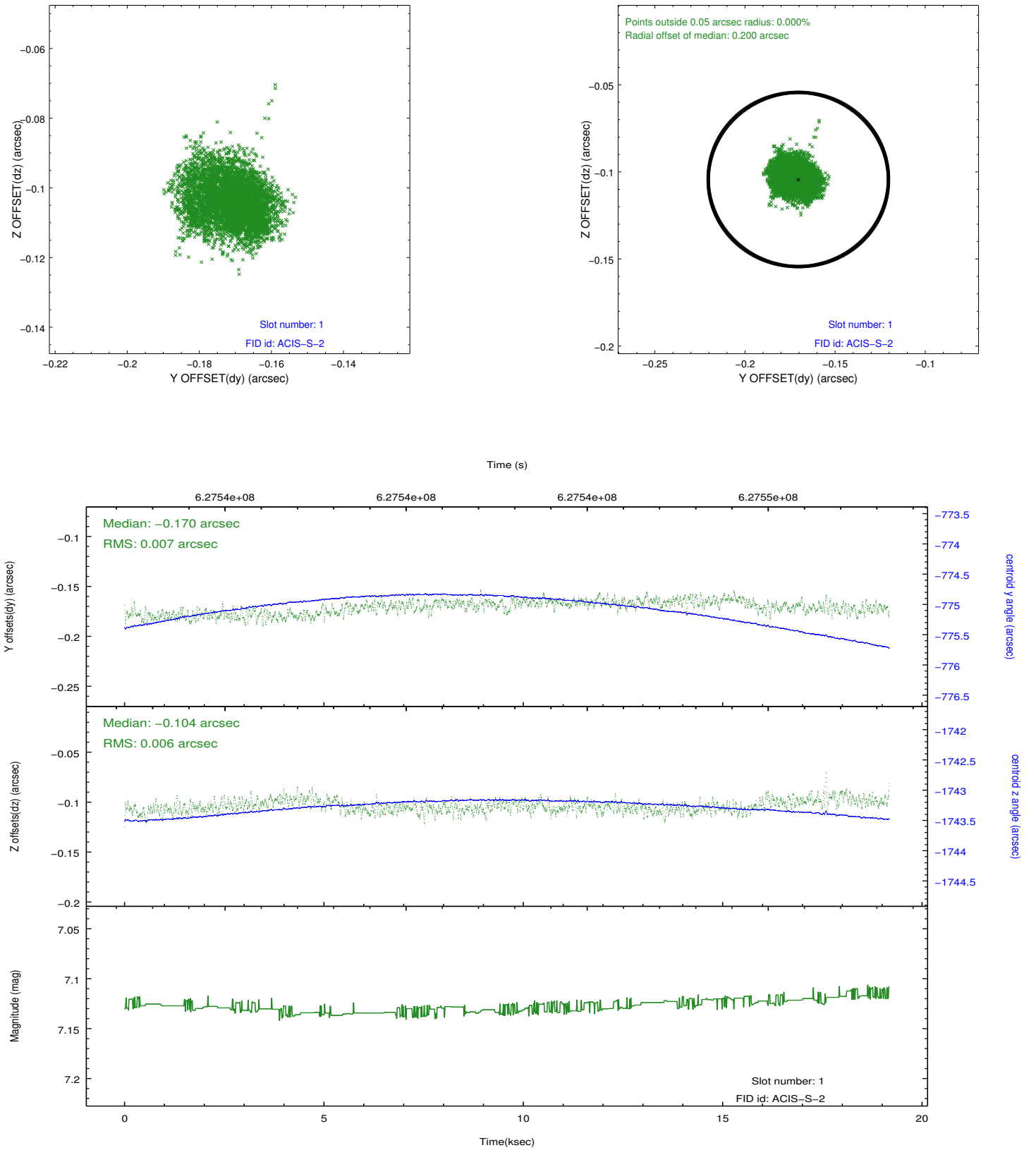


2.5 FID Slots

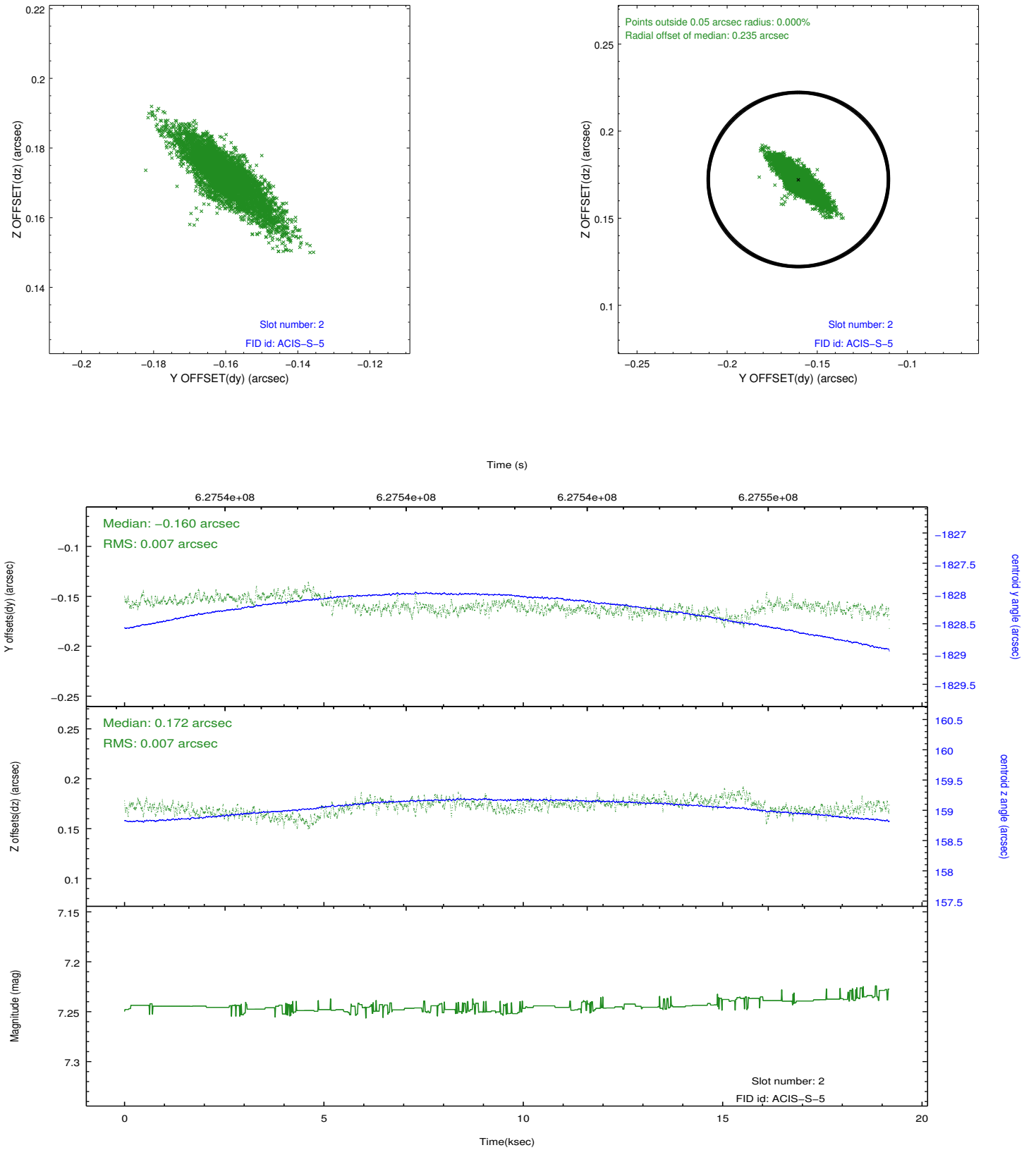
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2017.11.22
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	19.069198863268

A.2 Comments

Monitor constraint met.

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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.