

V&V Reference Report

L2 ASCDS Version : 10.8

Observation 21486 - L2 Version 1
Chandra X-Ray Center

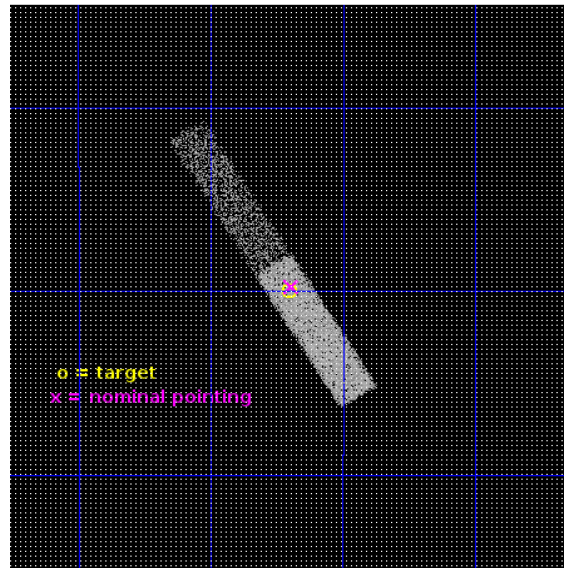
L2 Processing Date : Sep 10 2019

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 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

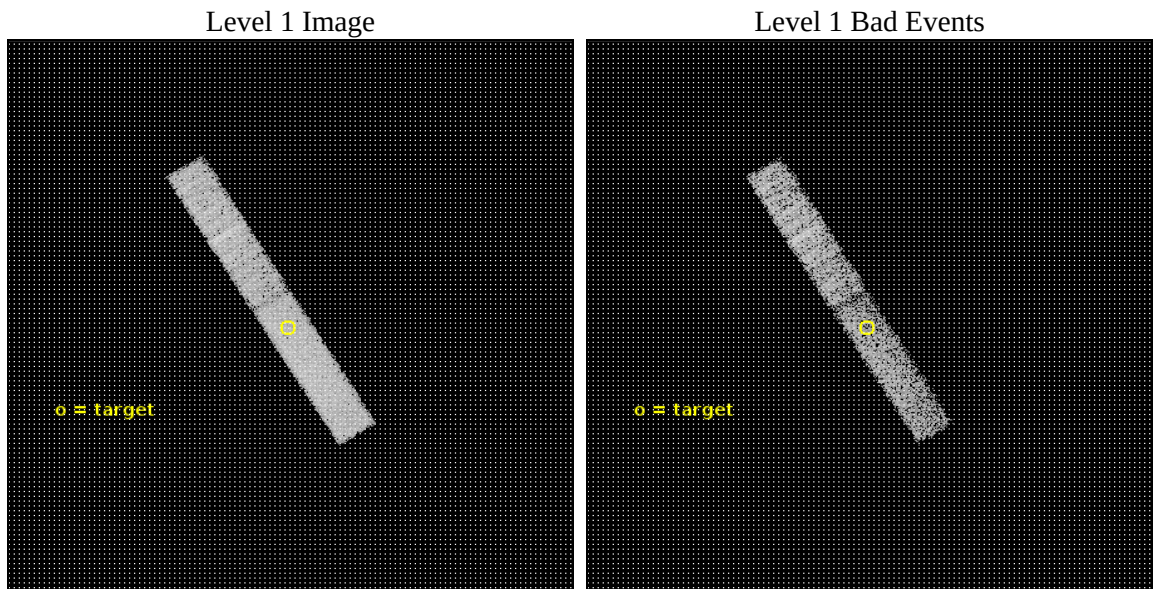
seq_num	703779	Sequence number
obs_id	21486	Observation id
title	Synchrotron emission in low-redshift quasars	Proposal title
observer	Mark Birkinshaw	Principal investigator
object	MRC0058-229	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	15.175833	Observer's specified target RA [deg]
dec_targ	-22.666694	Observer's specified target Dec [deg]
ra_nom	15.173641440124	Nominal RA [deg]
dec_nom	-22.662728732641	Nominal Dec [deg]
roll_nom	58.155827001413	Nominal Roll [deg]
revision	1	Processing version of data
ontime	10105.007550716	Sum of GTIs [s]
livetime	9664.314796018	Livetime [s]
ontime6	10104.966510773	Sum of GTIs [s]
ontime7	10105.007550716	Sum of GTIs [s]
l2events	14396	Number of level 2 events



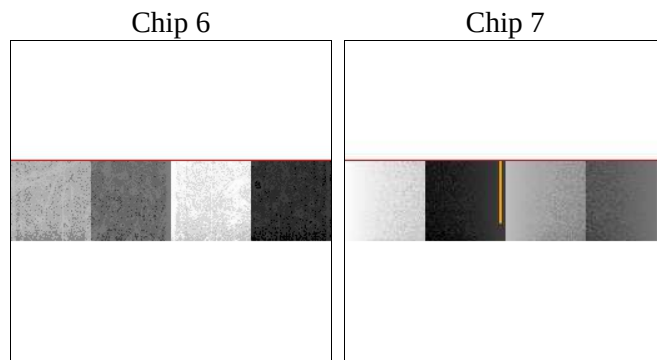
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.833000	[s] Scheduled observation exposure time
ascdsver	10.8	Processing system revision	ontime	10105.007550716	Sum of GTIs [s]
caldsver	4.8.4.1	 	ontime6	10104.966510773	Sum of GTIs [s]
date	2019-09-10T20:26:53	Date and time of file creation	ontime7	10105.007550716	Sum of GTIs [s]
revision	1	Processing version of data	l1events	48423	Number of level 1 events

2.1.4 Events

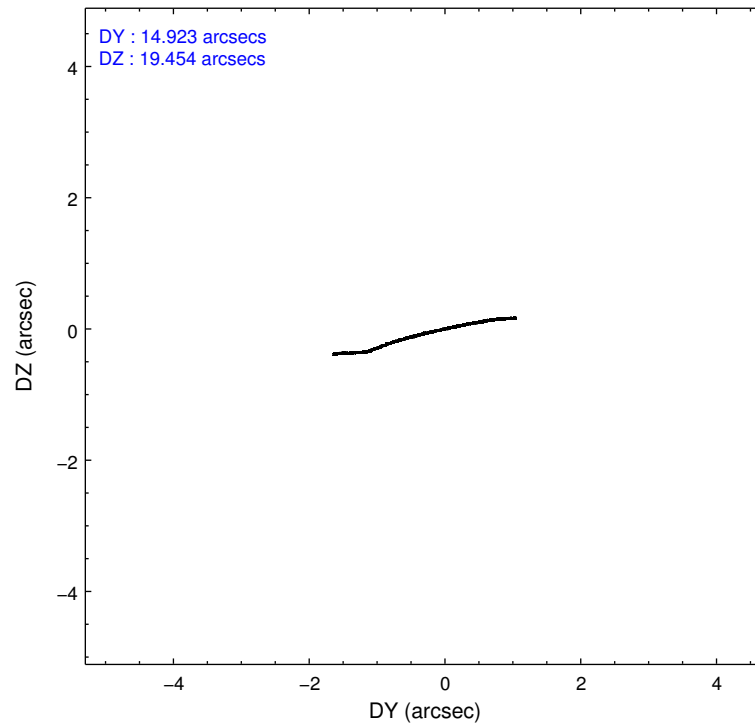
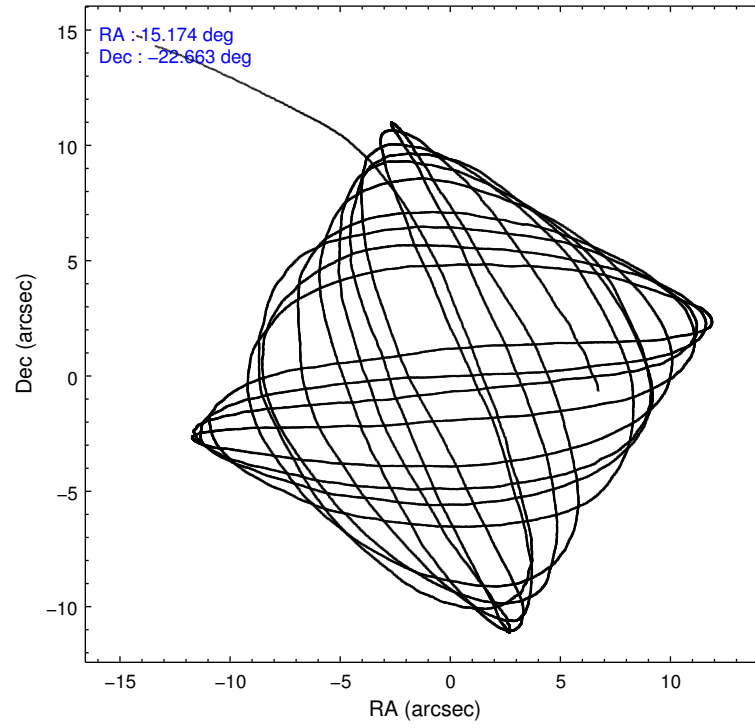
	ccd 6	ccd 7
level 1 events	21978	26445
rejected events	19417	13751
rejected %	88%	51%

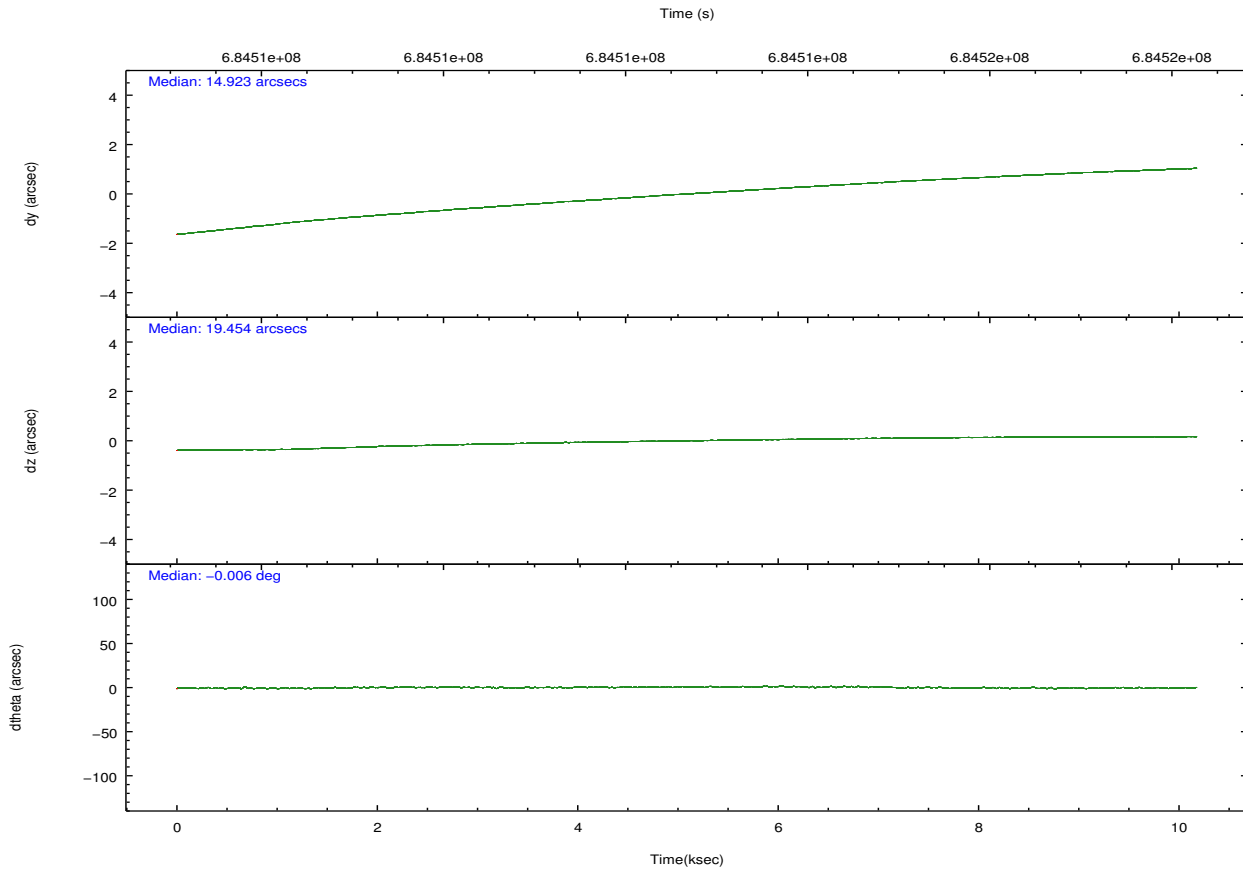
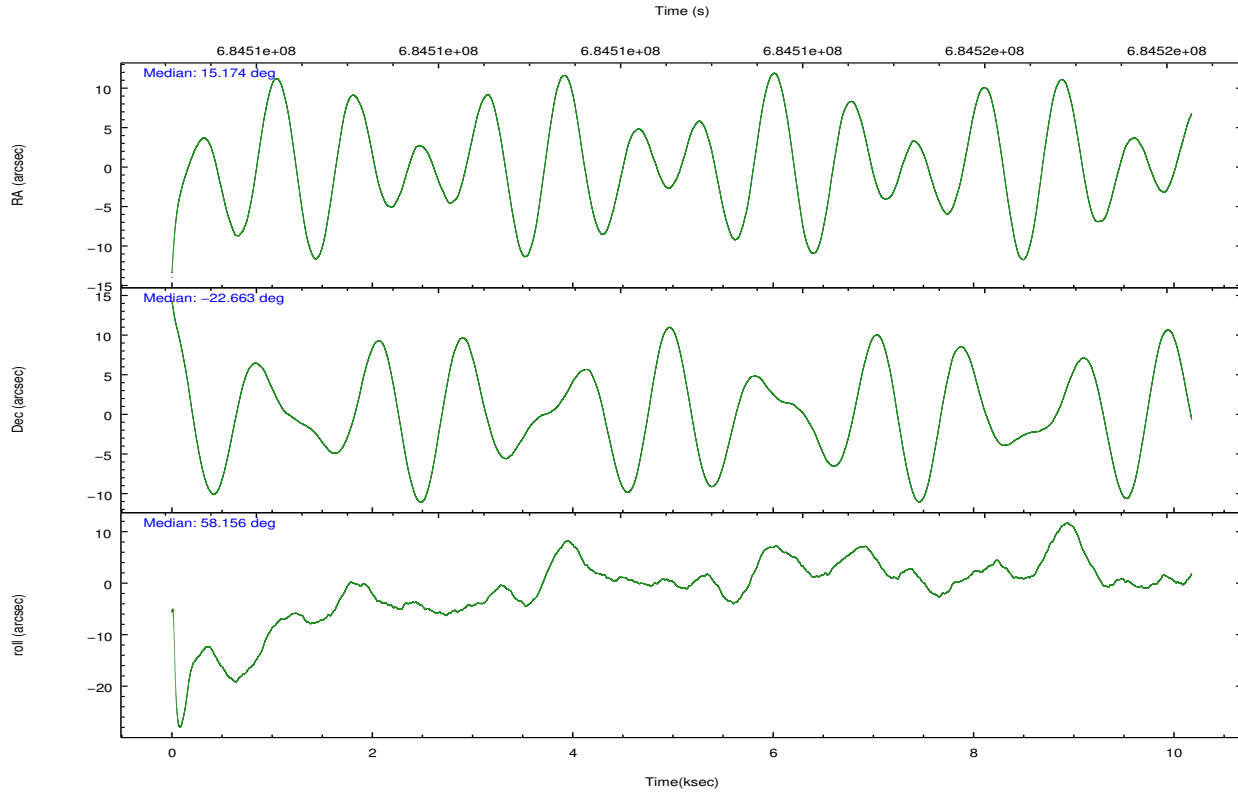
	ccd 6	ccd 7
grade 0 events	767	1254
	3%	4%
grade 1 events	5	51
	0%	0%
grade 2 events	500	2735
	2%	10%
grade 3 events	396	1396
	1%	5%
grade 4 events	383	1289
	1%	4%
grade 5 events	944	2743
	4%	10%
grade 6 events	515	6021
	2%	22%
grade 7 events	18468	10956
	84%	41%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-67	ACIS-67	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	15.173103	15.17364144012417	Subarray requested	CUSTOM	1/4
[deg] Pointing Dec	-22.690217	-22.66272873264075	Subarray start row	385	385
[deg] Pointing Roll	57.998950	58.15582700141333	Subarray row count	256	256
[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	0.9
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	684507744.184000	684506736.54454			
Observation start date	2019-09-10T13:01:15	2019-09-10T12:45:36			
[s] Observation end time (MET)	684517745.184000	684518730.0702699			
Observation end date	2019-09-10T15:47:56	2019-09-10T16:05:30			
Read mode	TIMED	TIMED			

2.3 Aspect



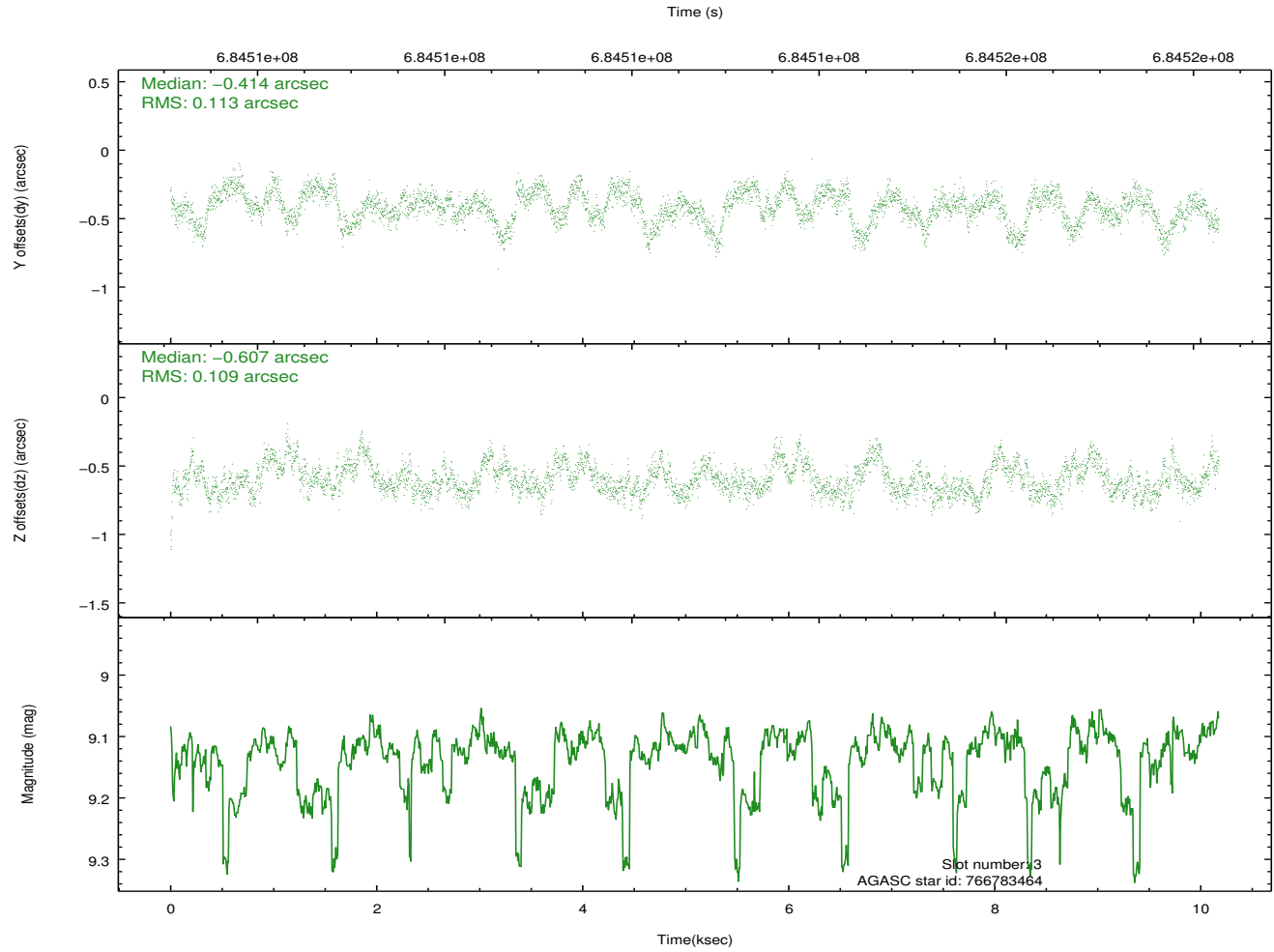
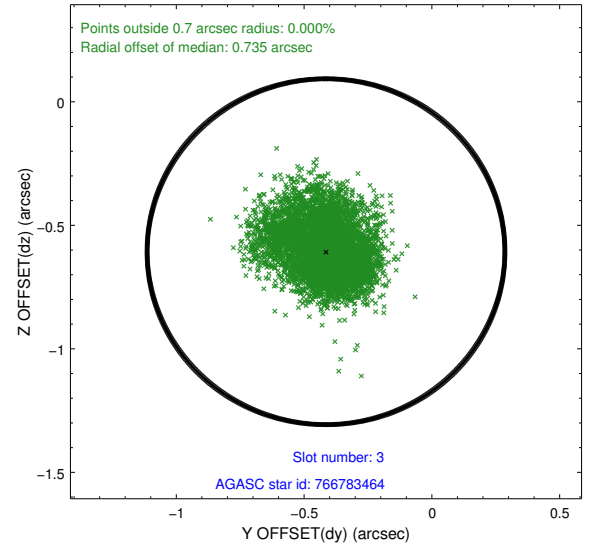
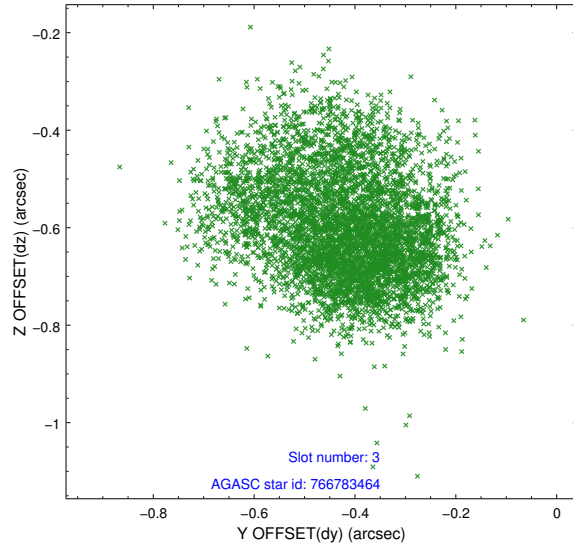


Slot Statistics

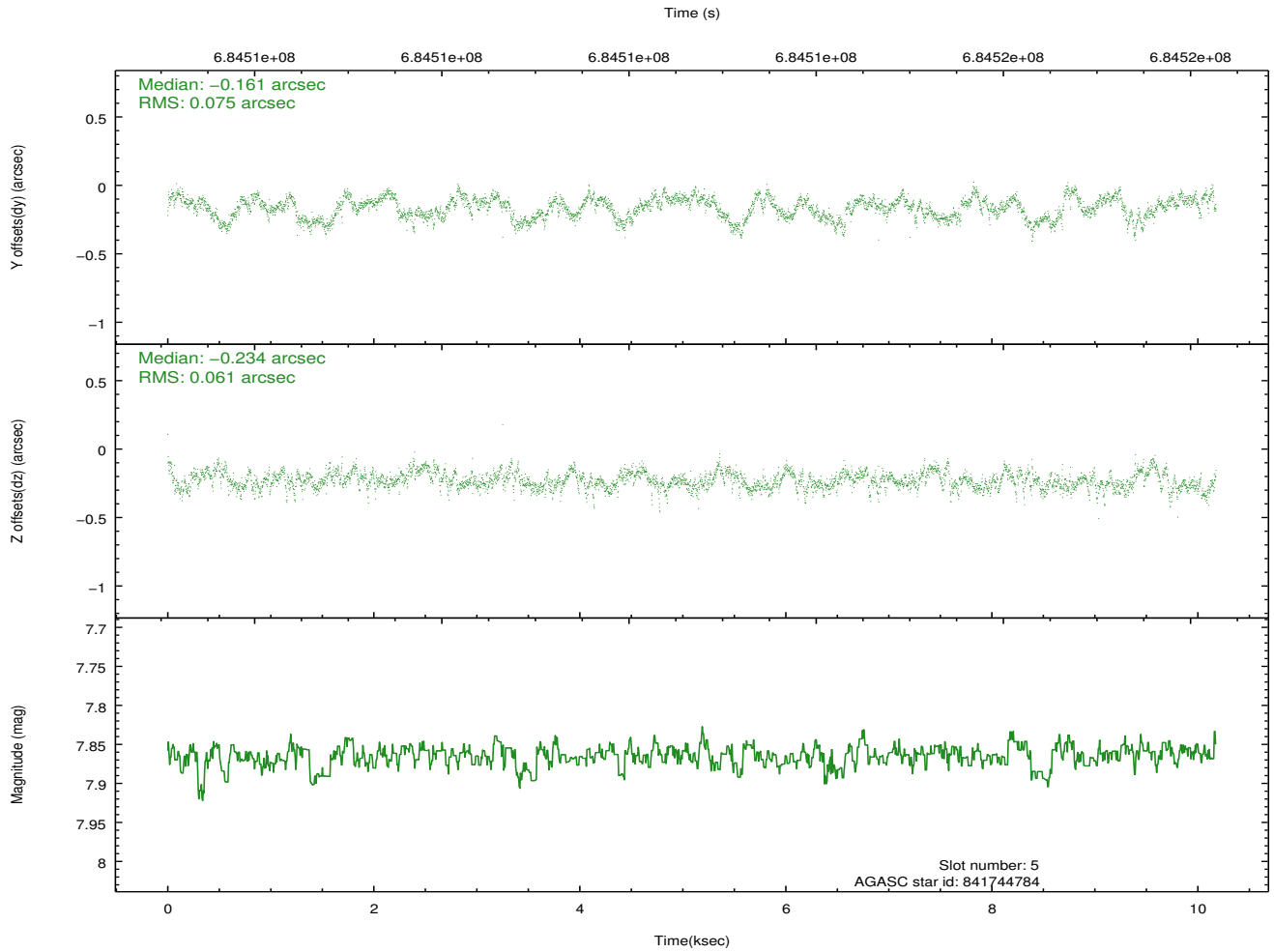
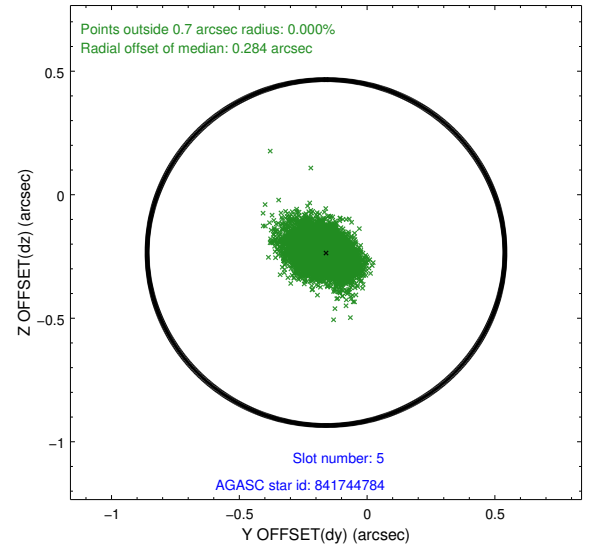
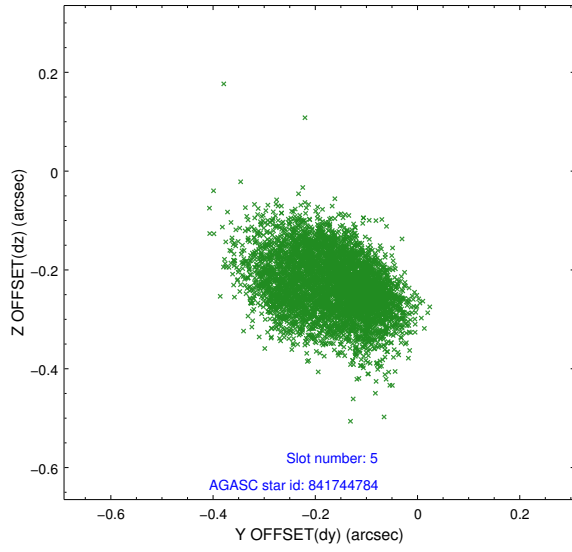
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	6.99	2482	1.000	-0.290	-0.194	0.022	0.060	0.000000	0.000000	-768.02	-1741
1	FID		ACIS-S-4	7.11	2483	1.000	0.762	0.193	0.017	0.068	0.000000	0.000000	2145.99	167
2	FID		ACIS-S-5	7.07	2483	1.000	-0.505	0.014	0.016	0.022	0.000000	0.000000	-1820.49	161
3	GUIDE	used	766783464	9.13	4955	1.000	-0.414	-0.607	0.168	0.268	15.041422	-22.197983	1269.34	1310
4	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0
5	GUIDE	used	841744784	7.86	4962	1.000	-0.161	-0.234	0.103	0.164	14.501703	-22.595682	-898.78	2070
6	GUIDE	used	841745408	8.64	4954	1.000	0.312	-0.090	0.184	0.367	16.162435	-22.504118	2302.74	-2440
7	GUIDE	used	841757712	7.87	4960	1.000	0.276	0.913	0.118	0.184	15.453243	-23.387740	-1640.85	-2115

2.4 Star Slots

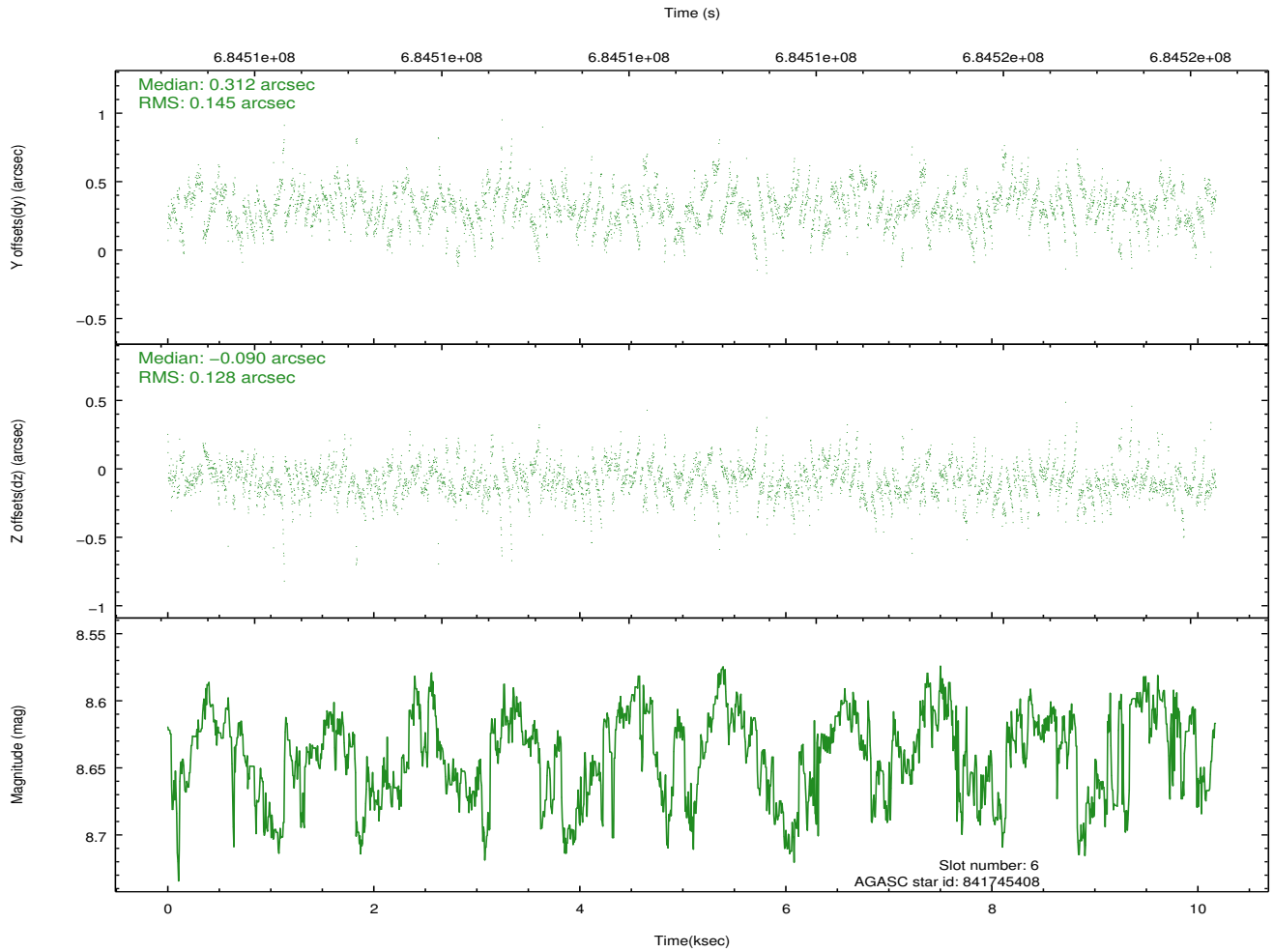
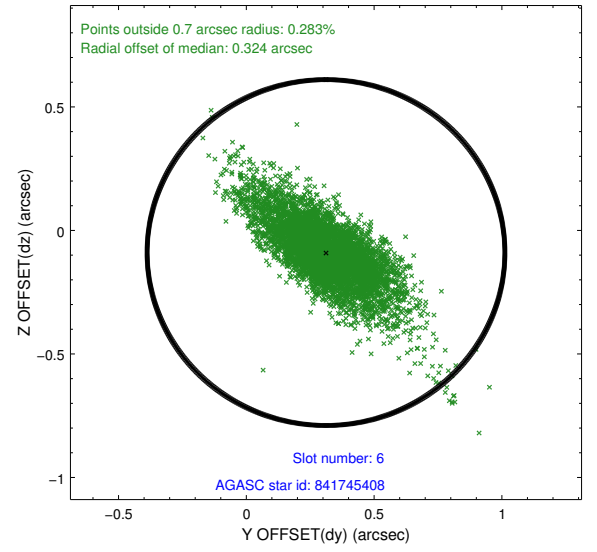
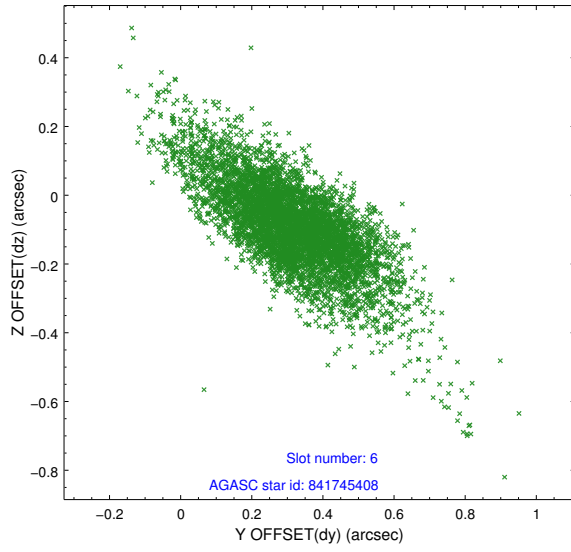
2.4.1 Slot 3



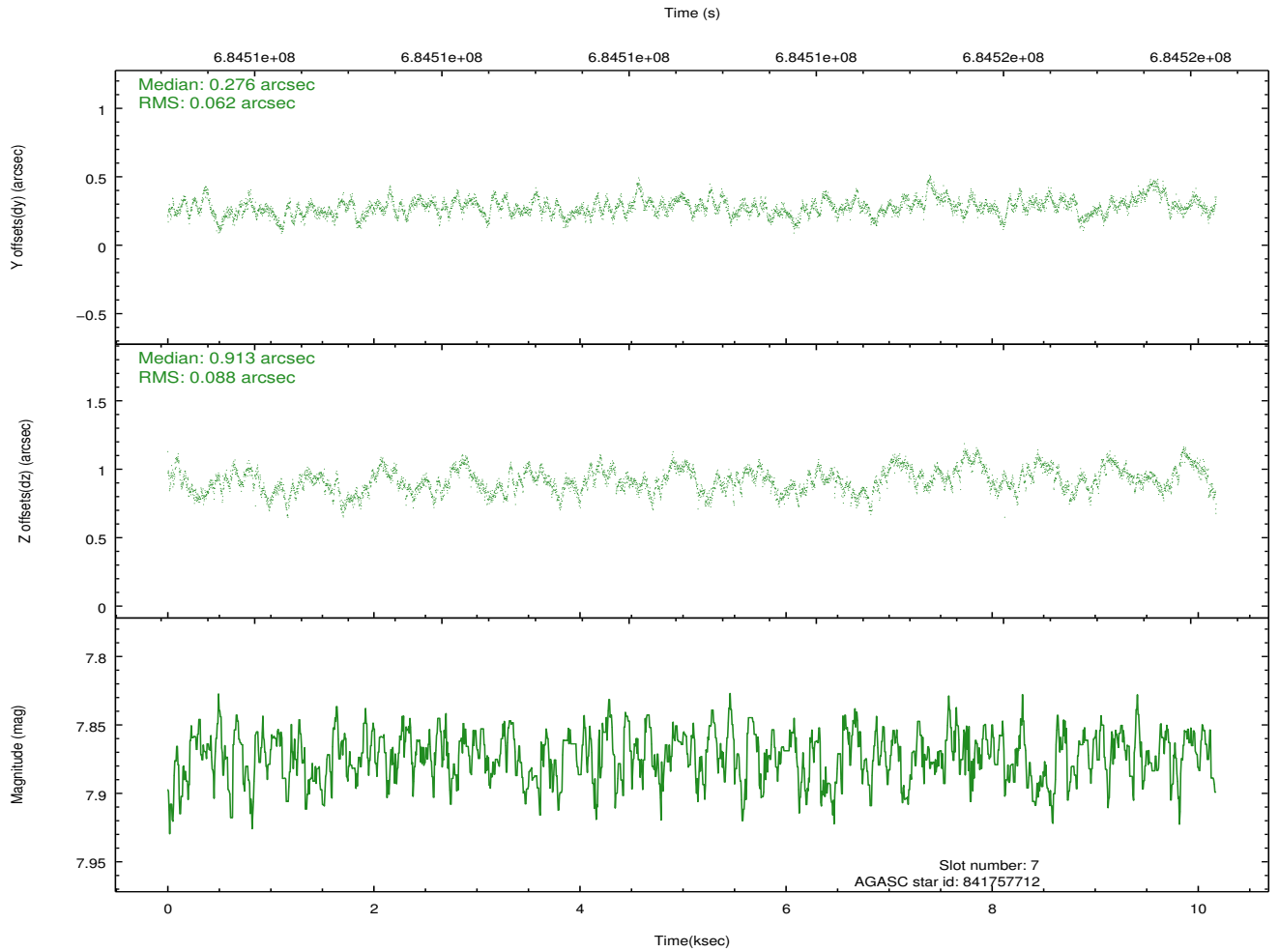
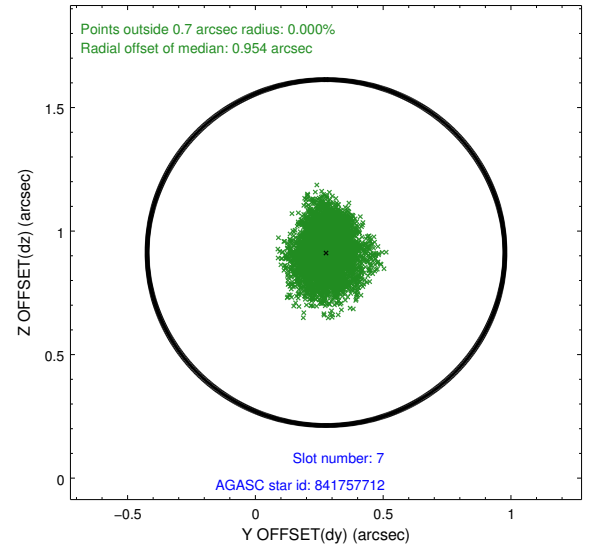
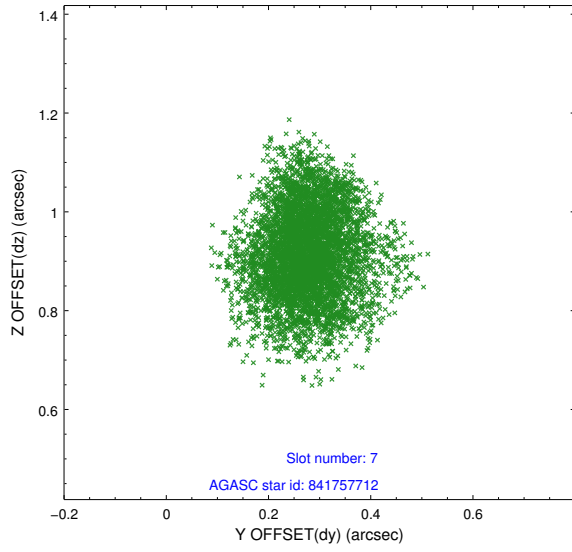
2.4.2 Slot 5



2.4.3 Slot 6

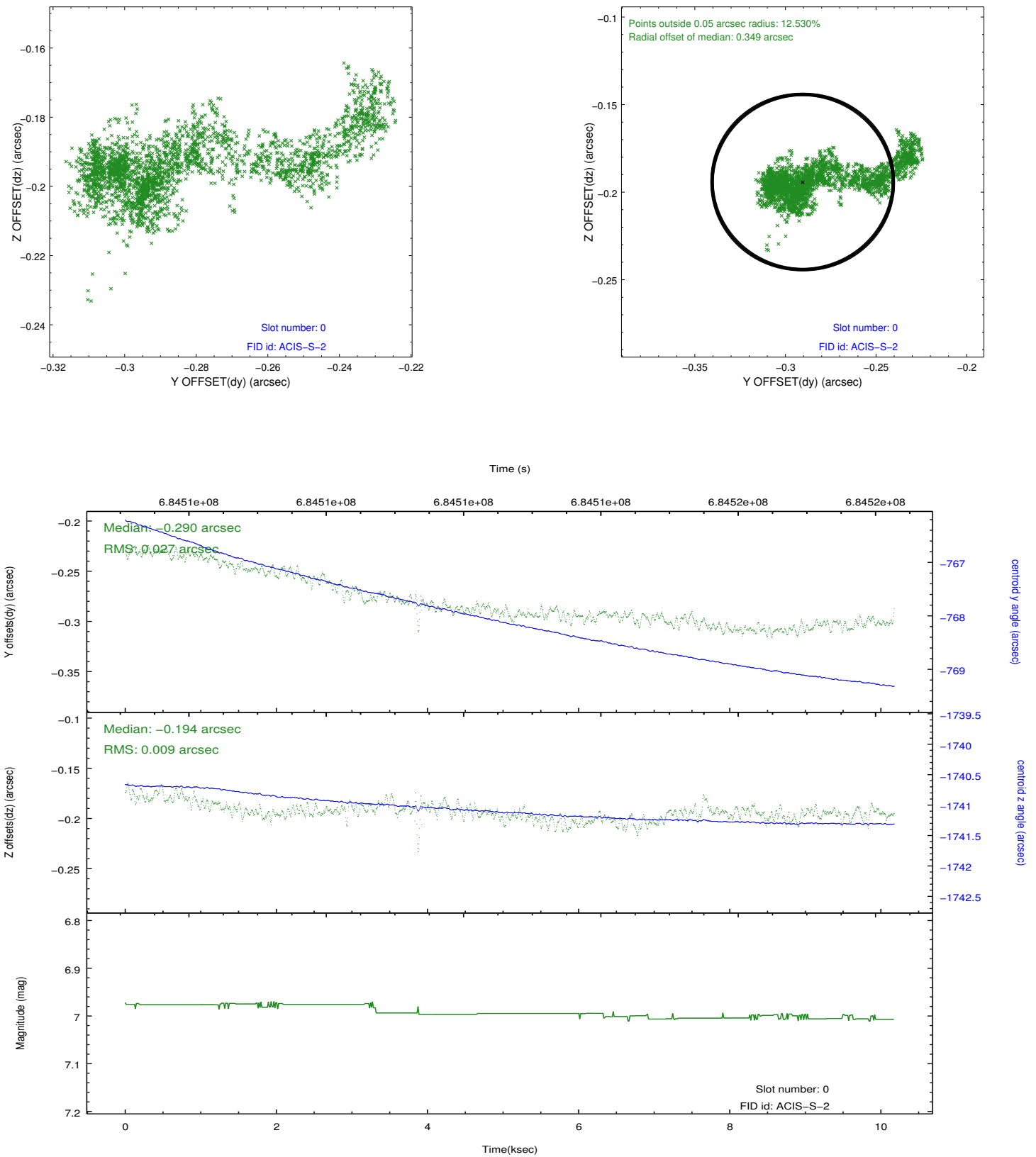


2.4.4 Slot 7

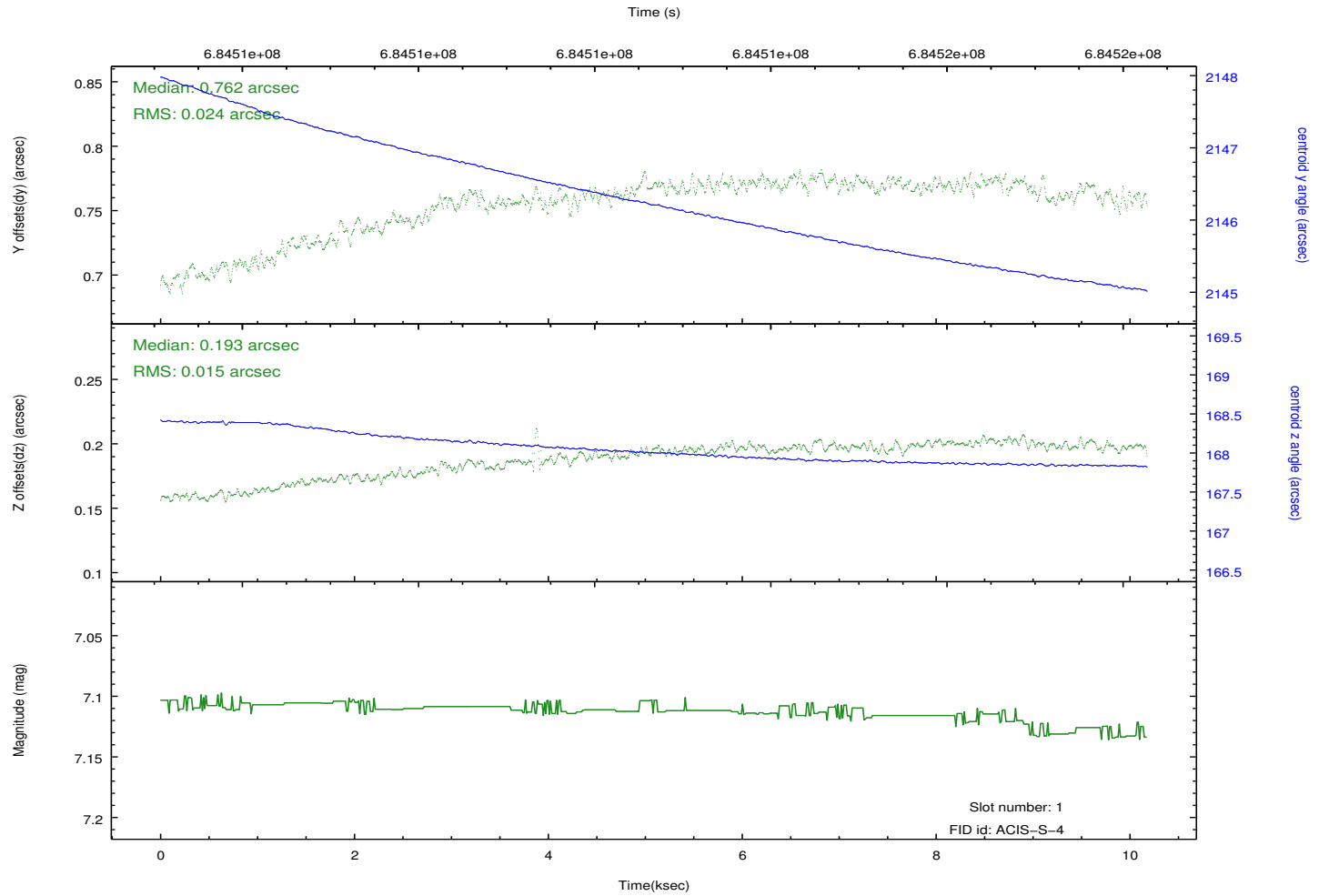
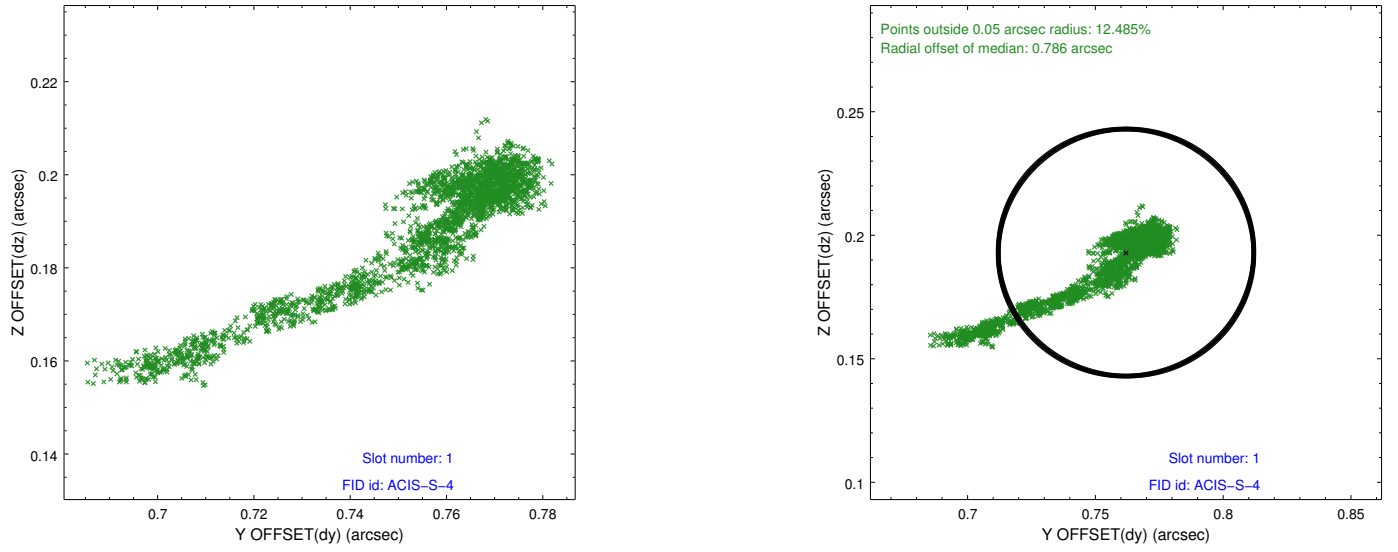


2.5 FID Slots

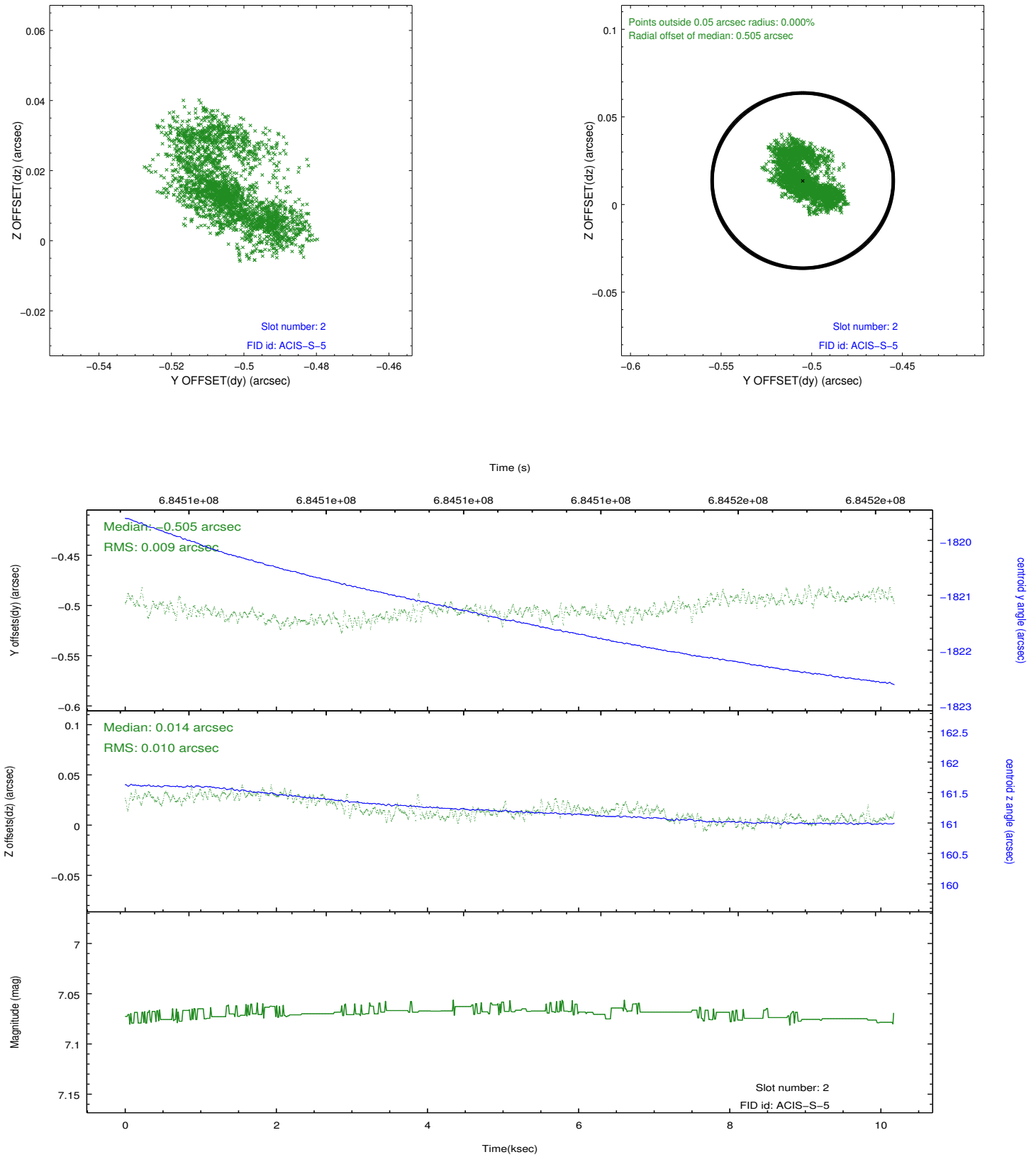
2.5.1 Slot 0



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)	2019.09.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.105007550716

A.2 Comments

The guide star in slot 4 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this slot from the solution.