

V&V Reference Report

L2 ASCDS Version : 10.8.1

Observation 23183 - L2 Version 1
Chandra X-Ray Center

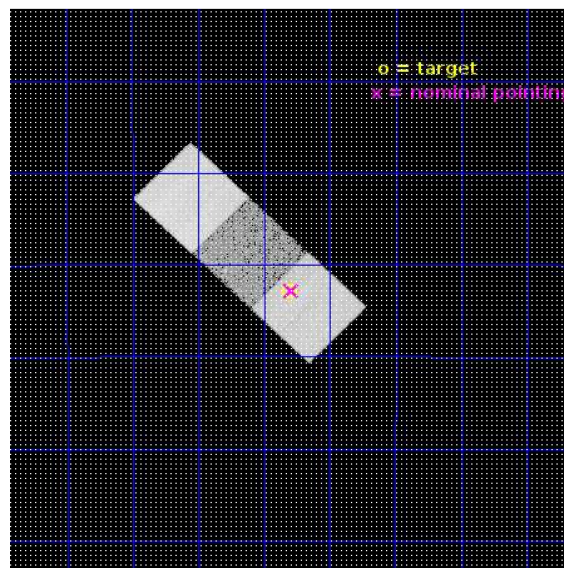
L2 Processing Date : Mar 13 2020

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1 Front

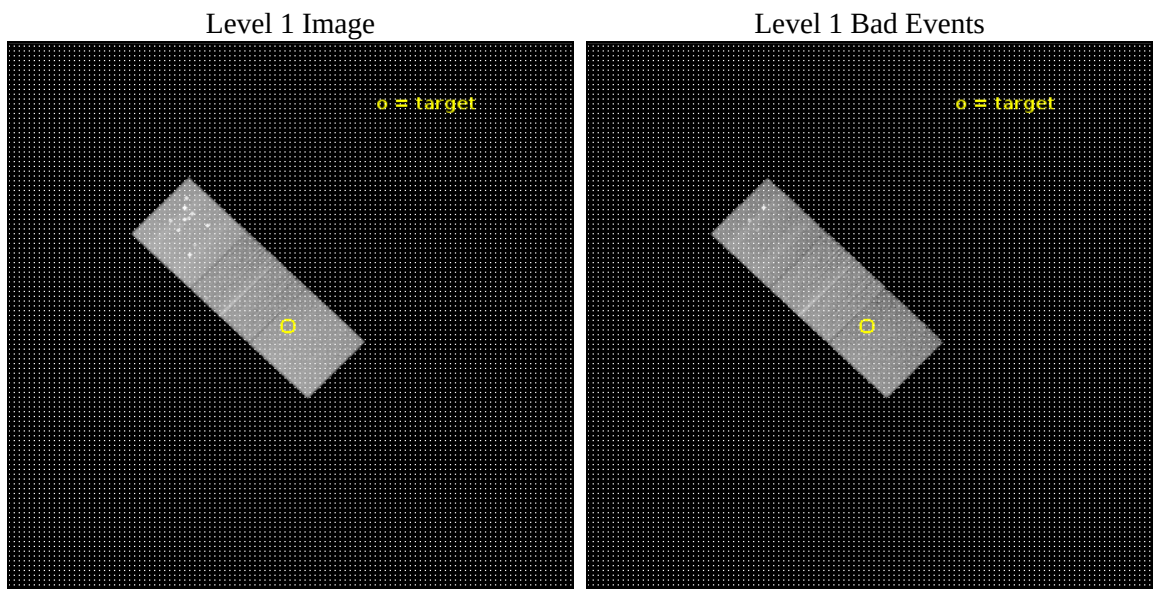
seq_num	503095	Sequence number
obs_id	23183	Observation id
title	Late-time monitoring of GW170817 across the electromagnetic spectrum	
observer	RAFFAELLA MARGUTTI	Principal investigator
object	GW170817	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	197.450417	Observer's specified target RA [deg]
dec_targ	-23.381472	Observer's specified target Dec [deg]
ra_nom	197.44804779818	Nominal RA [deg]
dec_nom	-23.380046962268	Nominal Dec [deg]
roll_nom	44.155663318465	Nominal Roll [deg]
revision	1	Processing version of data
ontime	16492.000126958	Sum of GTIs [s]
livetime	16276.520004065	Livetime [s]
ontime5	16492.000126958	Sum of GTIs [s]
ontime6	16492.000126958	Sum of GTIs [s]
ontime7	16492.000126958	Sum of GTIs [s]
l2events	176078	Number of level 2 events



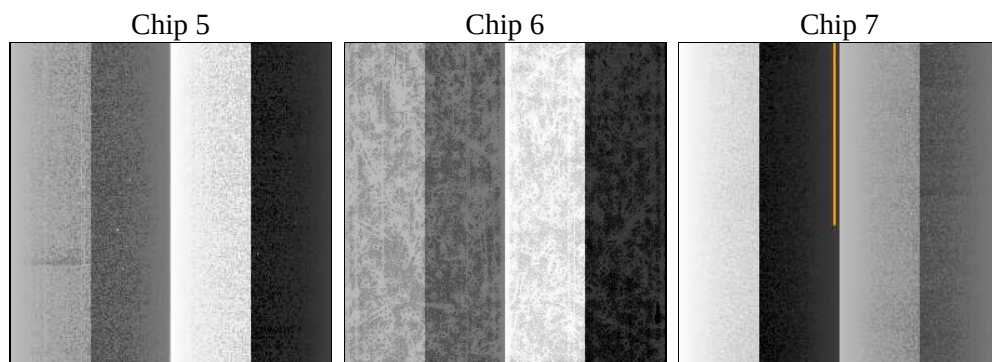
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	16381.552000	[s] Scheduled observation exposure time
ascdsver	10.8.1	Processing system revision	ontime	16492.000126958	Sum of GTIs [s]
caldbver	4.8.4.2	 	ontime5	16492.000126958	Sum of GTIs [s]
date	2020-03-13T21:17:11	Date and time of file creation	ontime6	16492.000126958	Sum of GTIs [s]
revision	1	Processing version of data	ontime7	16492.000126958	Sum of GTIs [s]
			l1events	550298	Number of level 1 events

2.1.4 Events

	ccd 5	ccd 6	ccd 7
level 1 events	247782	137154	165362
rejected events	116185	122368	94129
rejected %	46%	89%	56%

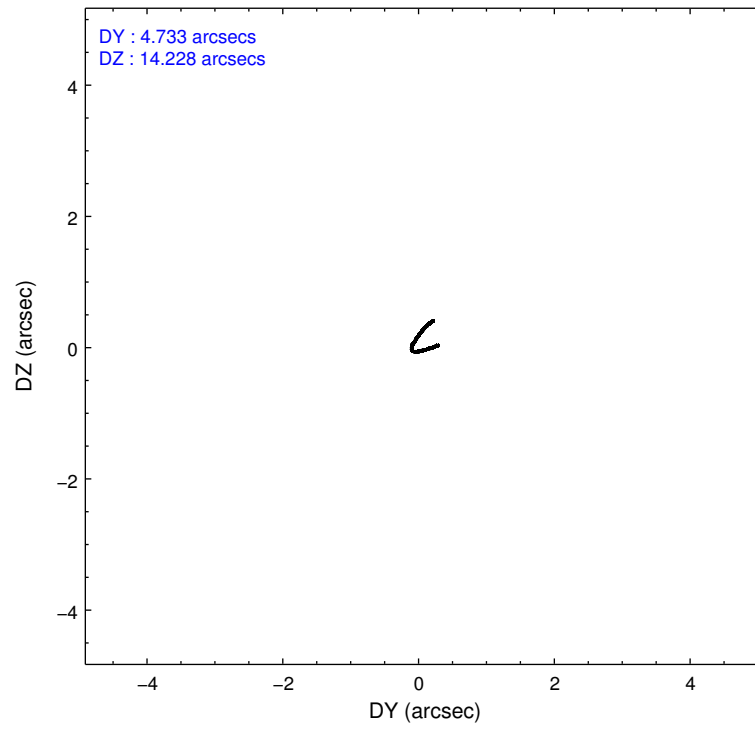
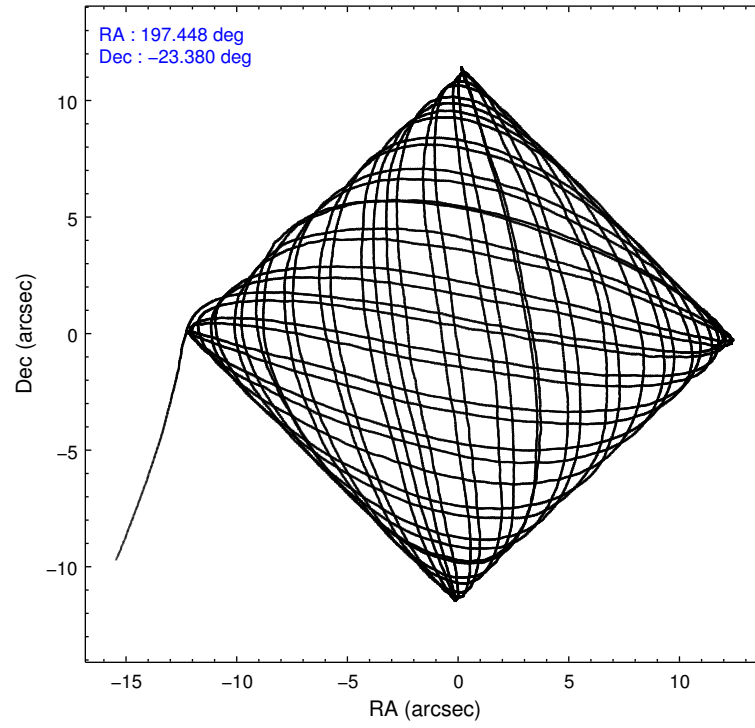
	ccd 5	ccd 6	ccd 7
grade 0 events	31665	4367	5732
	12%	3%	3%
grade 1 events	632	90	278
	0%	0%	0%
grade 2 events	38069	3963	15205
	15%	2%	9%
grade 3 events	3097	1234	5349
	1%	0%	3%
grade 4 events	2969	1183	5260
	1%	0%	3%
grade 5 events	13665	5200	15661
	5%	3%	9%
grade 6 events	55831	4040	39702
	22%	2%	24%
grade 7 events	101854	117077	78175
	41%	85%	47%

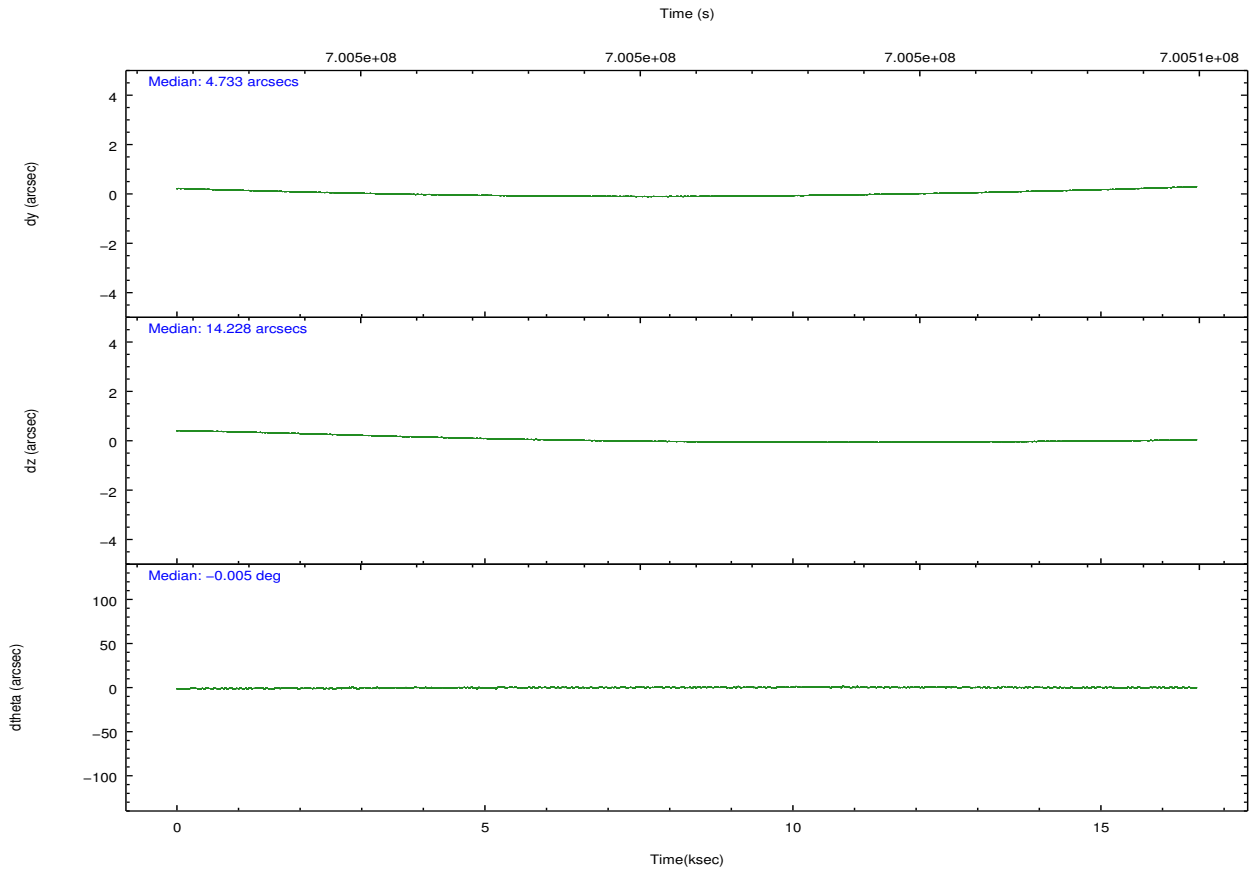
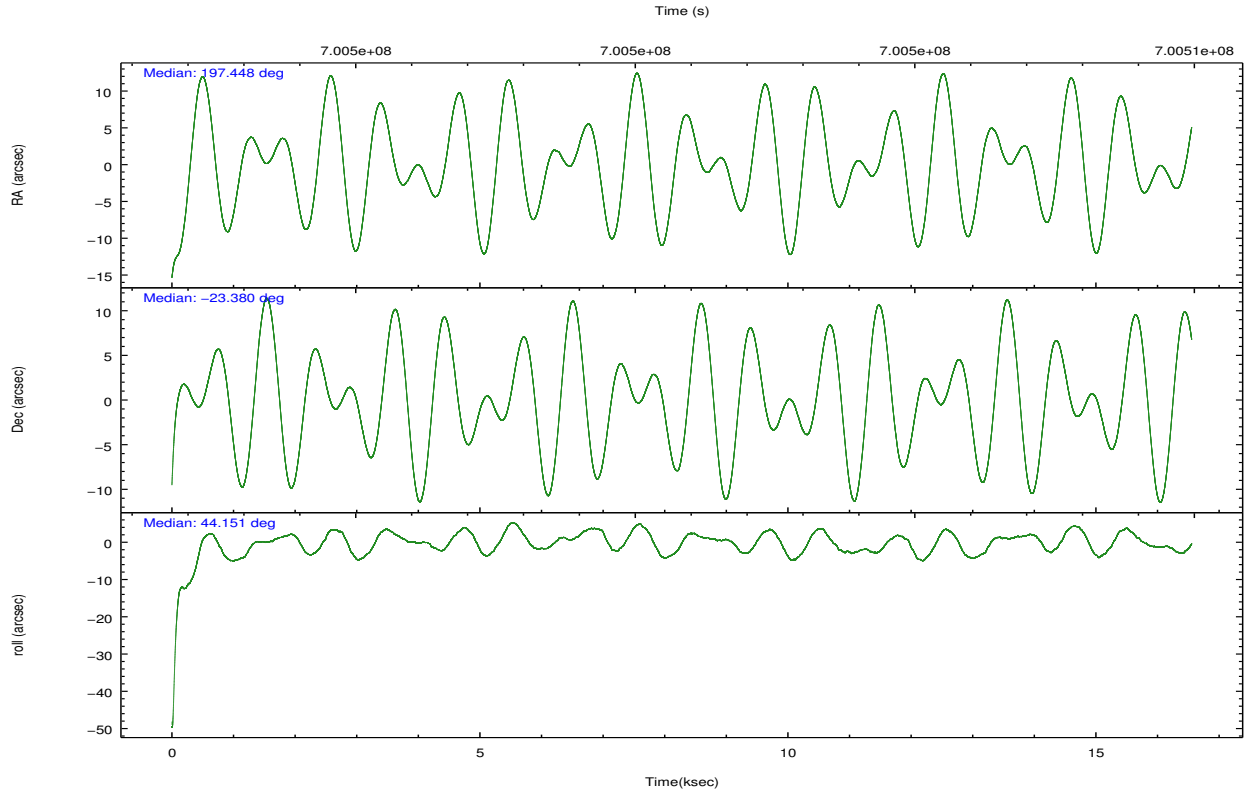
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-567	ACIS-567
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	197.440300	197.4480477981811
[deg] Pointing Dec	-23.406569	-23.38004696226817
[deg] Pointing Roll	43.995978	44.15566331846475
[mm] SIM focus pos	-0.684267	-0.6828225247311905
[mm] SIM defocus	0	0.001444936568705701
[mm] SIM translation stage pos	-190.132523	-190.1425803651734
[mm] SIM translation stage offset	0	0.01005778216563158
[s] Observation start time (MET)	700492736.184000	700491485.92242
Observation start date	2020-03-13T13:17:47	2020-03-13T12:58:05
[s] Observation end time (MET)	700509118.184000	700509825.2235301
Observation end date	2020-03-13T17:50:49	2020-03-13T18:03:45
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	N	N
CCD I3 on	N	N
CCD S0 on	N	N
CCD S1 on	Y	Y
CCD S2 on	Y	Y
CCD S3 on	Y	Y
CCD S4 on	O1	N
CCD S5 on	N	N
Number of optional ACIS chips dropped	1	1
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.1

2.3 Aspect



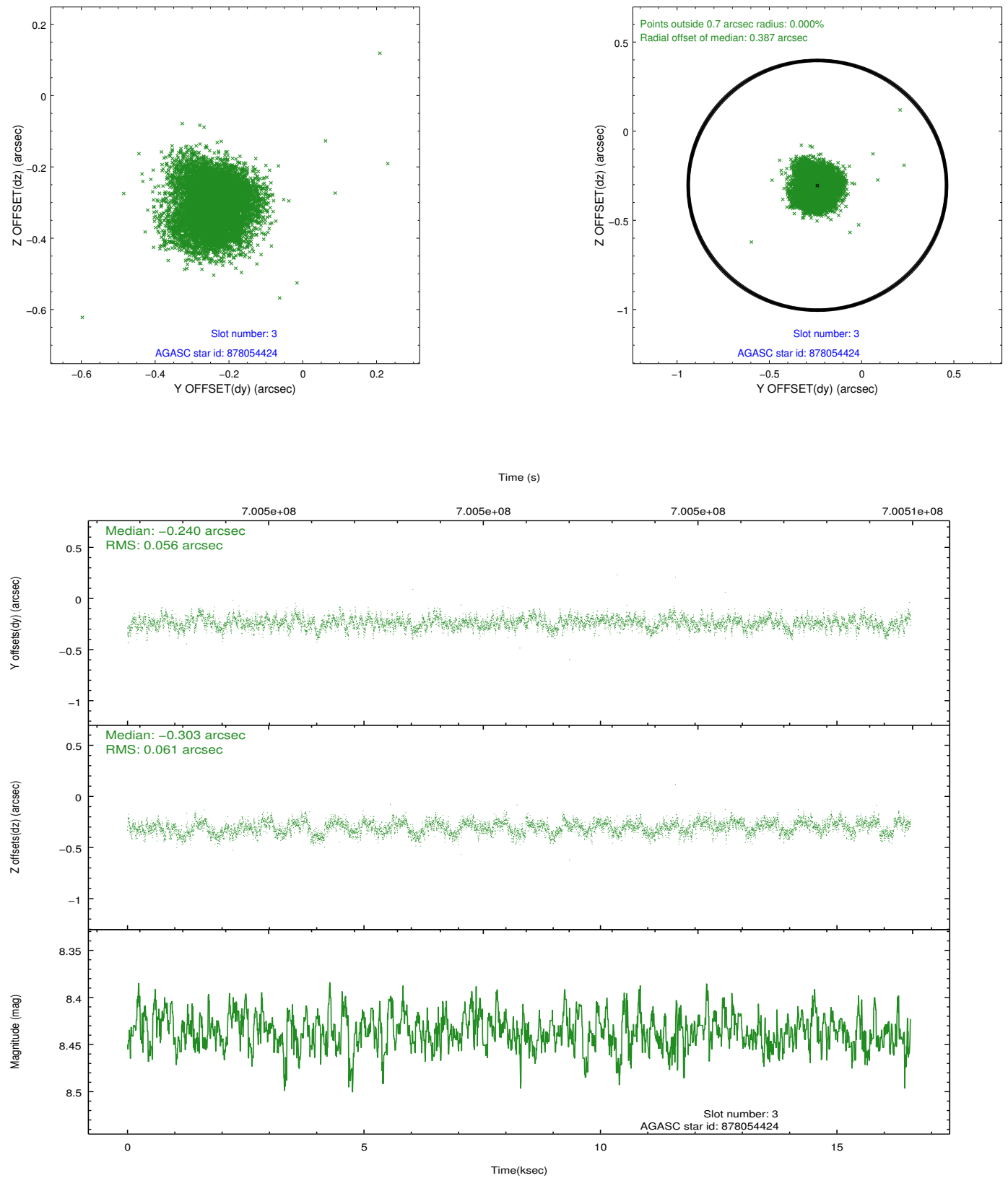


Slot Statistics

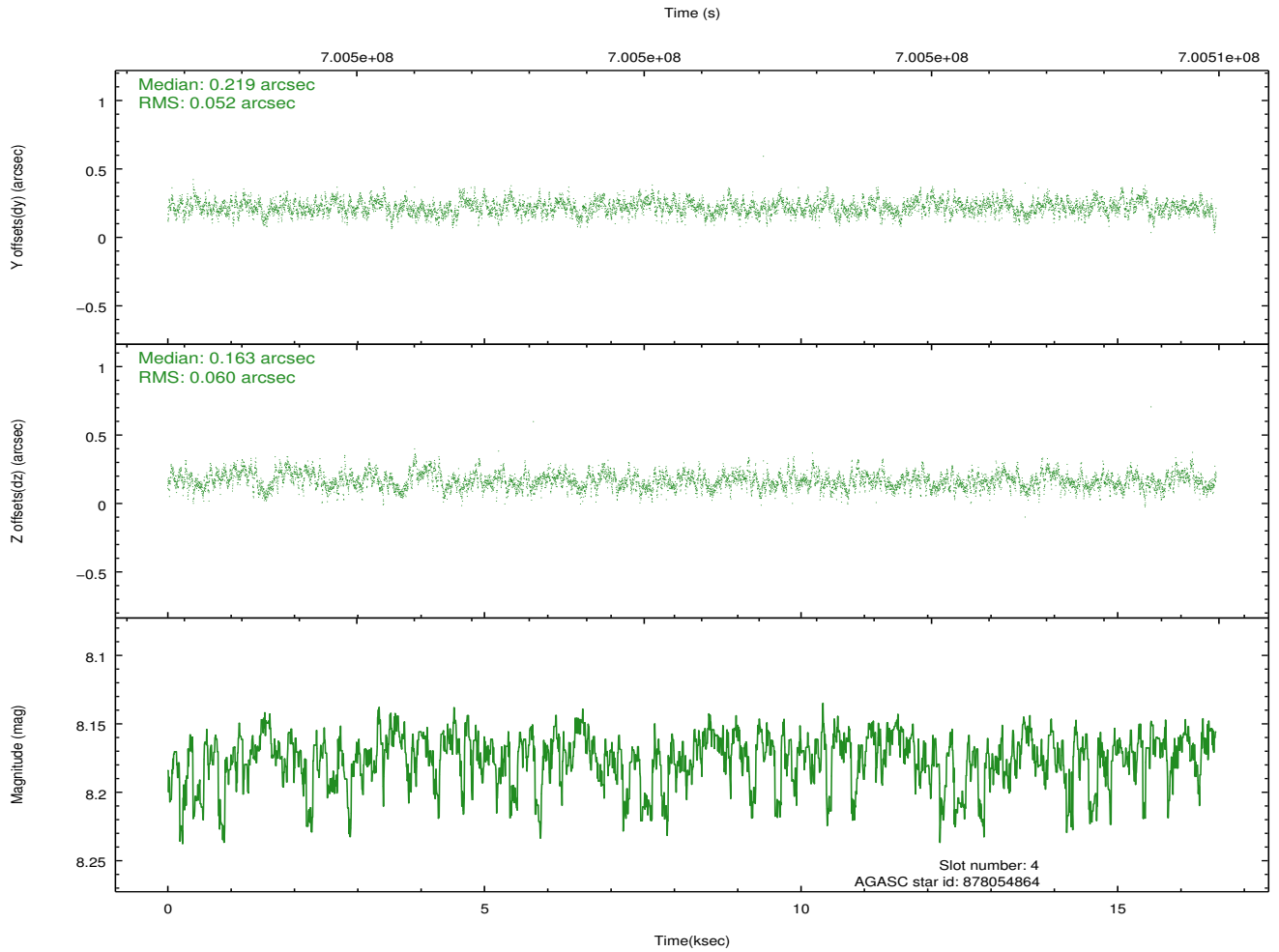
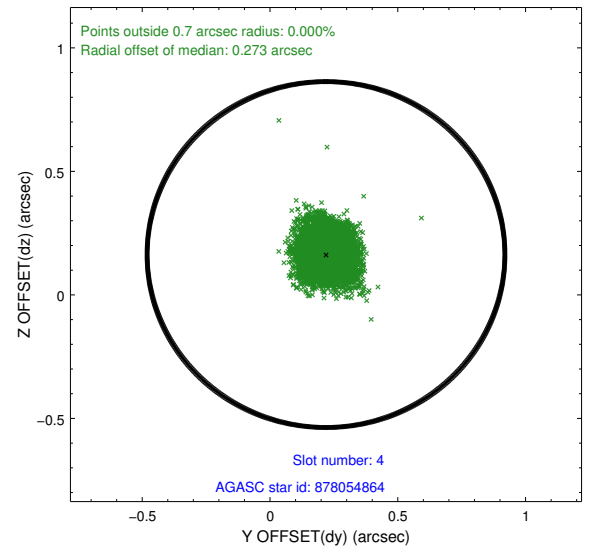
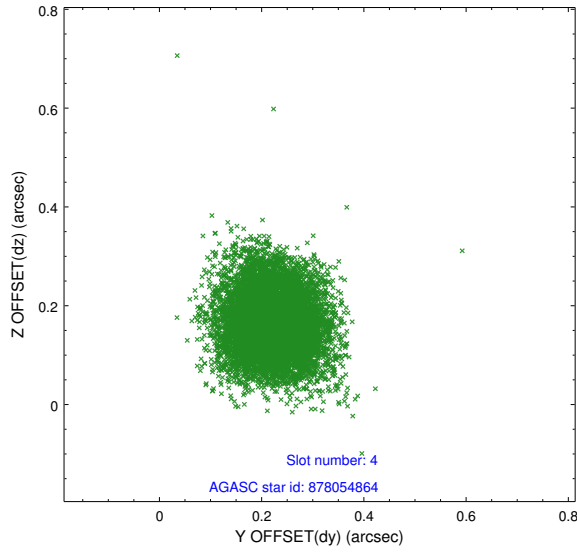
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-3	7.32	4038	1.000	-0.211	-0.154	0.010	0.015	0.000000	0.000000	55.56	-1864
1	FID		ACIS-S-4	7.20	4038	1.000	0.564	0.182	0.007	0.011	0.000000	0.000000	2156.47	172
2	FID		ACIS-S-5	7.20	4037	1.000	-0.382	-0.019	0.008	0.015	0.000000	0.000000	-1810.34	166
3	GUIDE	used	878054424	8.44	8070	1.000	-0.240	-0.303	0.088	0.142	197.311680	-23.210058	184.91	803
4	GUIDE	used	878054864	8.17	8071	1.000	0.219	0.163	0.084	0.136	197.588589	-23.624647	-192.83	-904
5	GUIDE	used	878055920	7.71	8077	1.000	0.228	0.488	0.074	0.125	197.166113	-23.822063	-1690.35	-447
6	GUIDE	used	878061480	7.96	8071	1.000	-0.482	-0.527	0.064	0.101	197.360027	-22.852260	1192.96	1620
7	GUIDE	used	878056592	8.76	8073	1.000	0.269	0.180	0.099	0.158	197.586702	-23.861101	-789.99	-1510

2.4 Star Slots

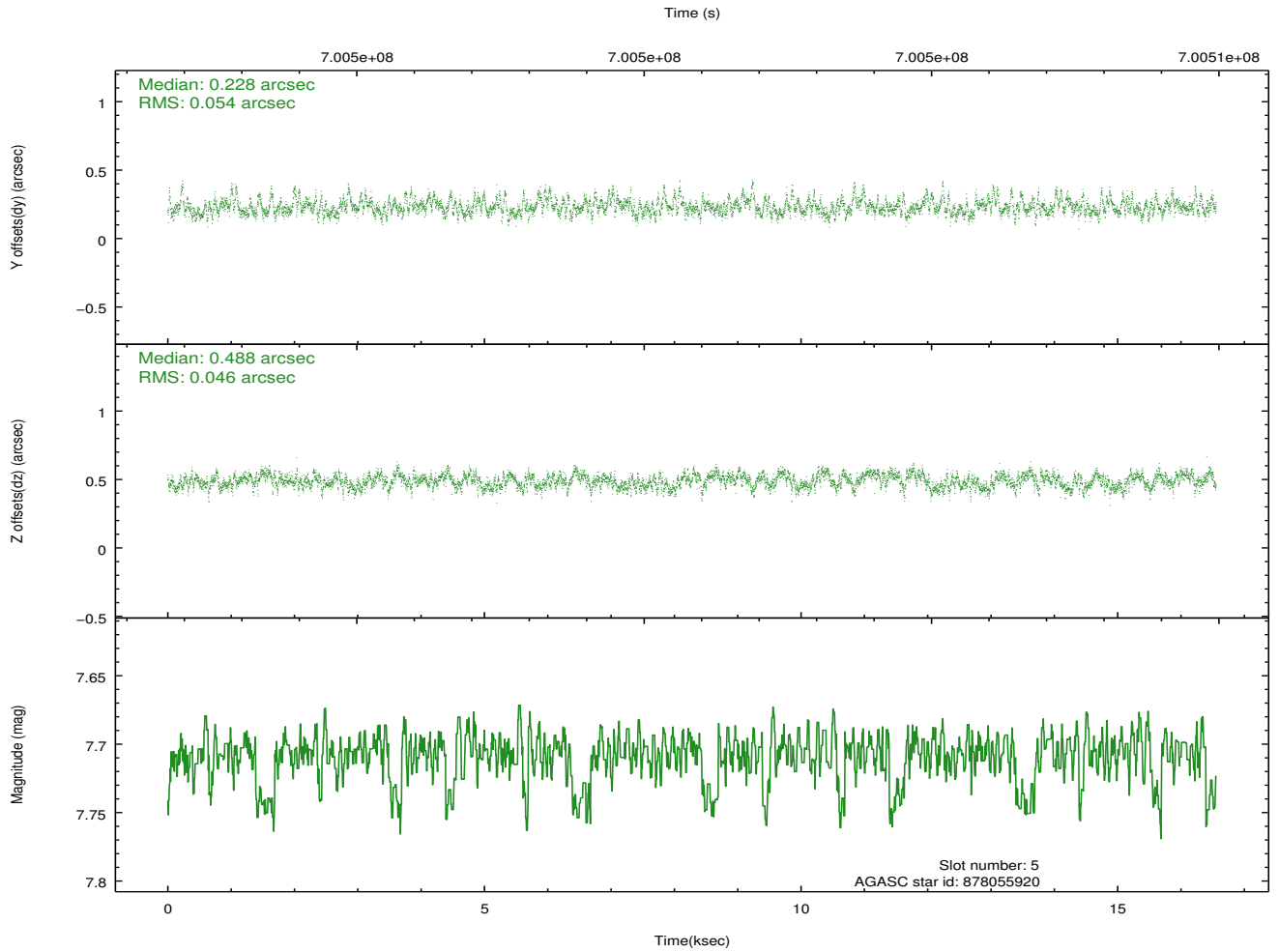
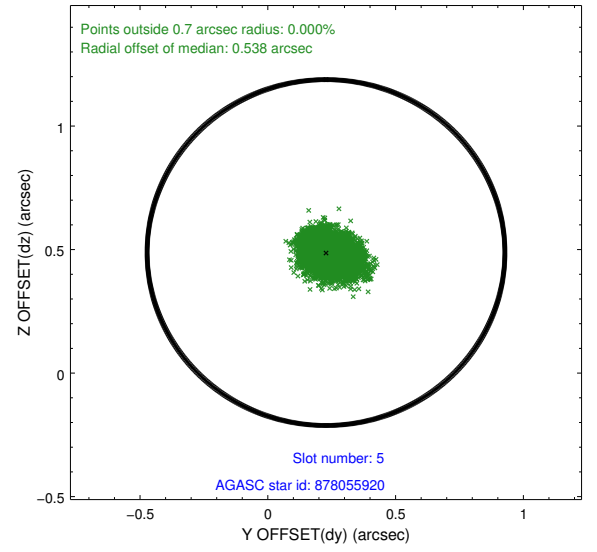
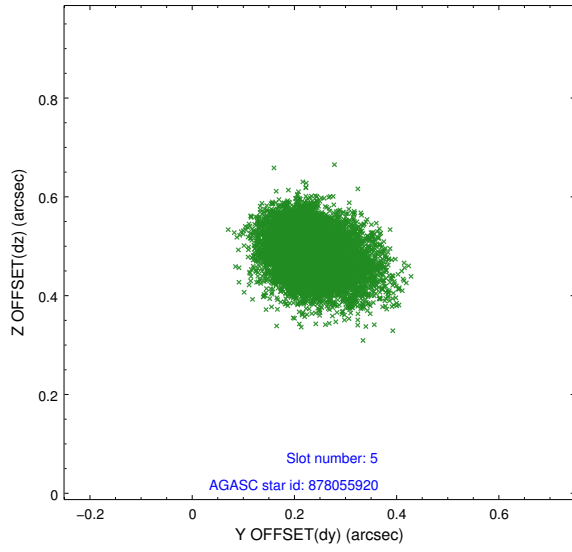
2.4.1 Slot 3



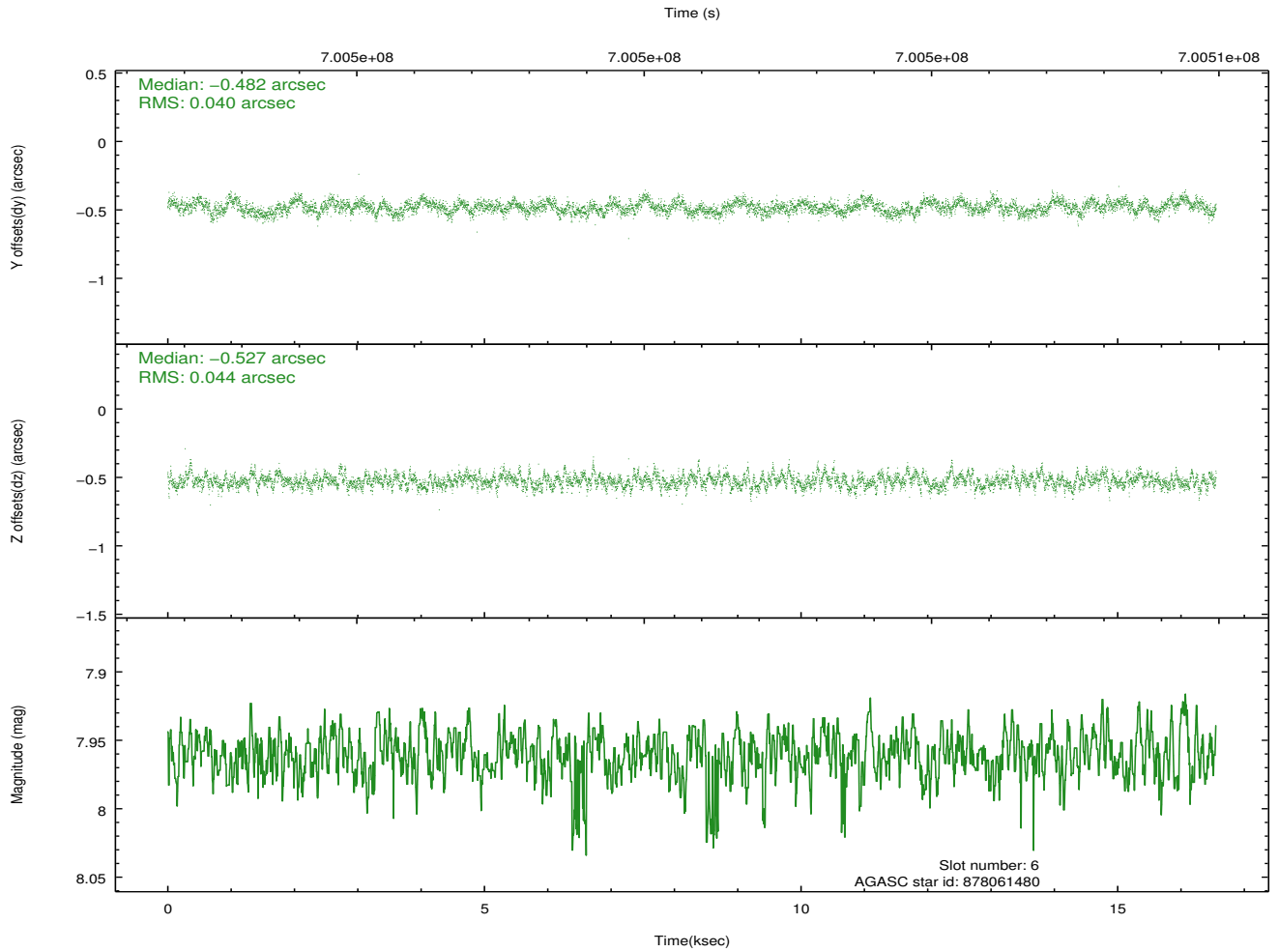
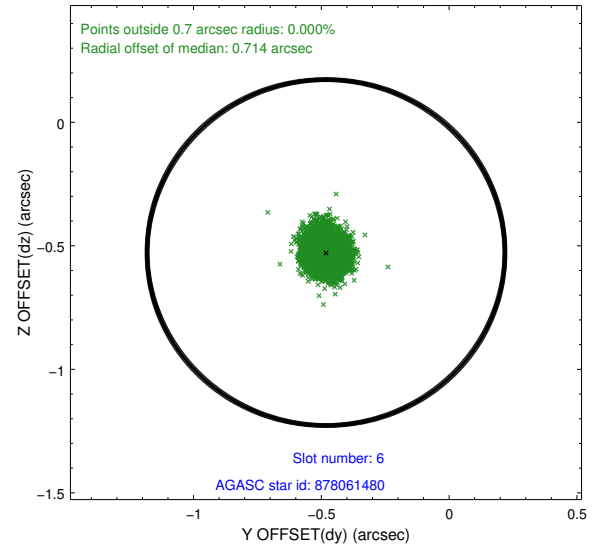
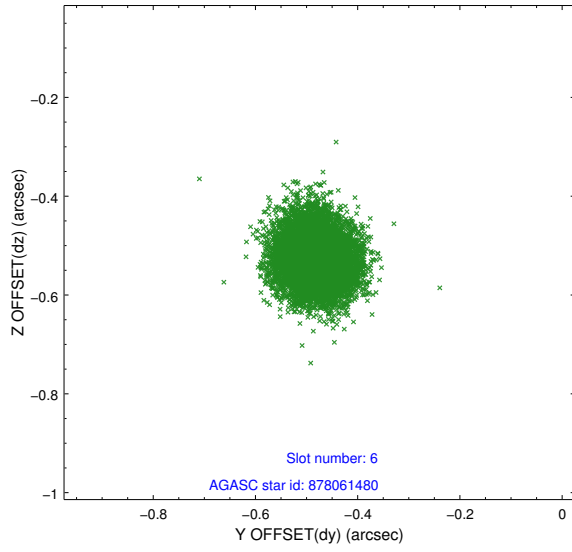
2.4.2 Slot 4



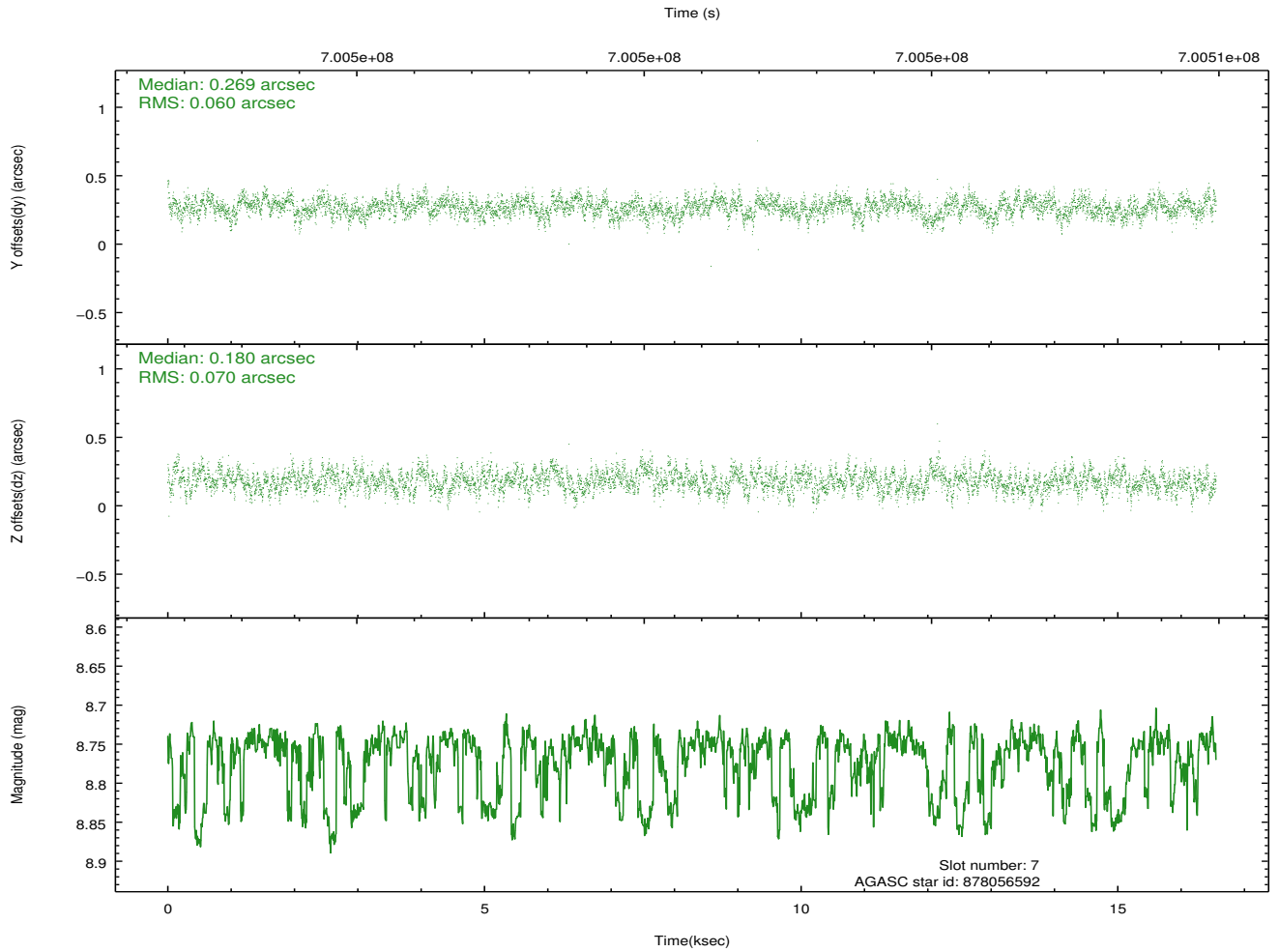
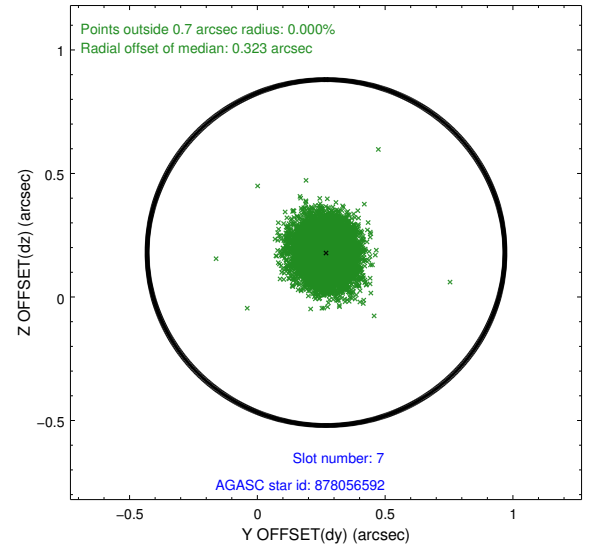
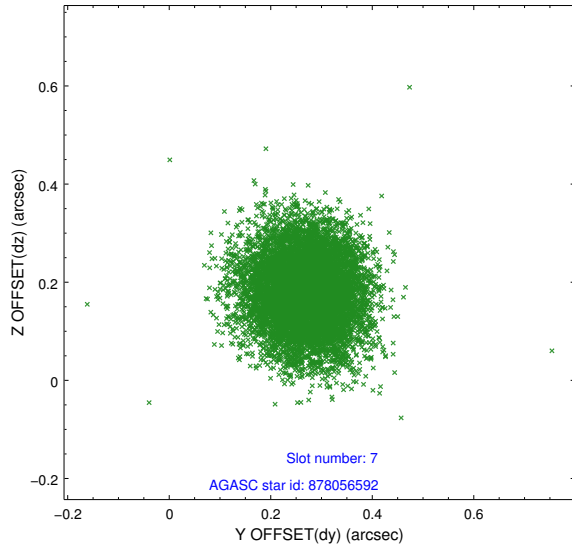
2.4.3 Slot 5



2.4.4 Slot 6

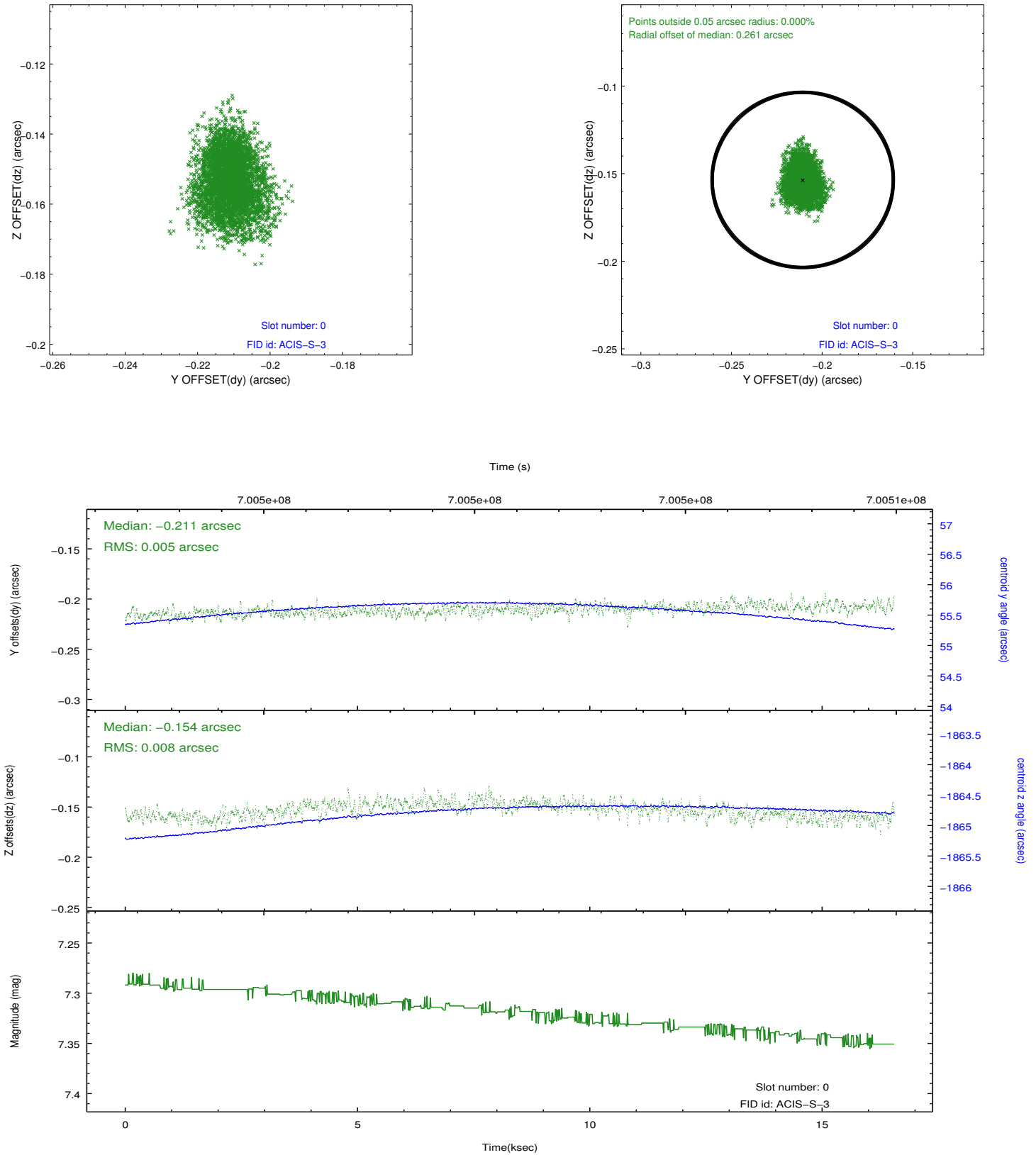


2.4.5 Slot 7

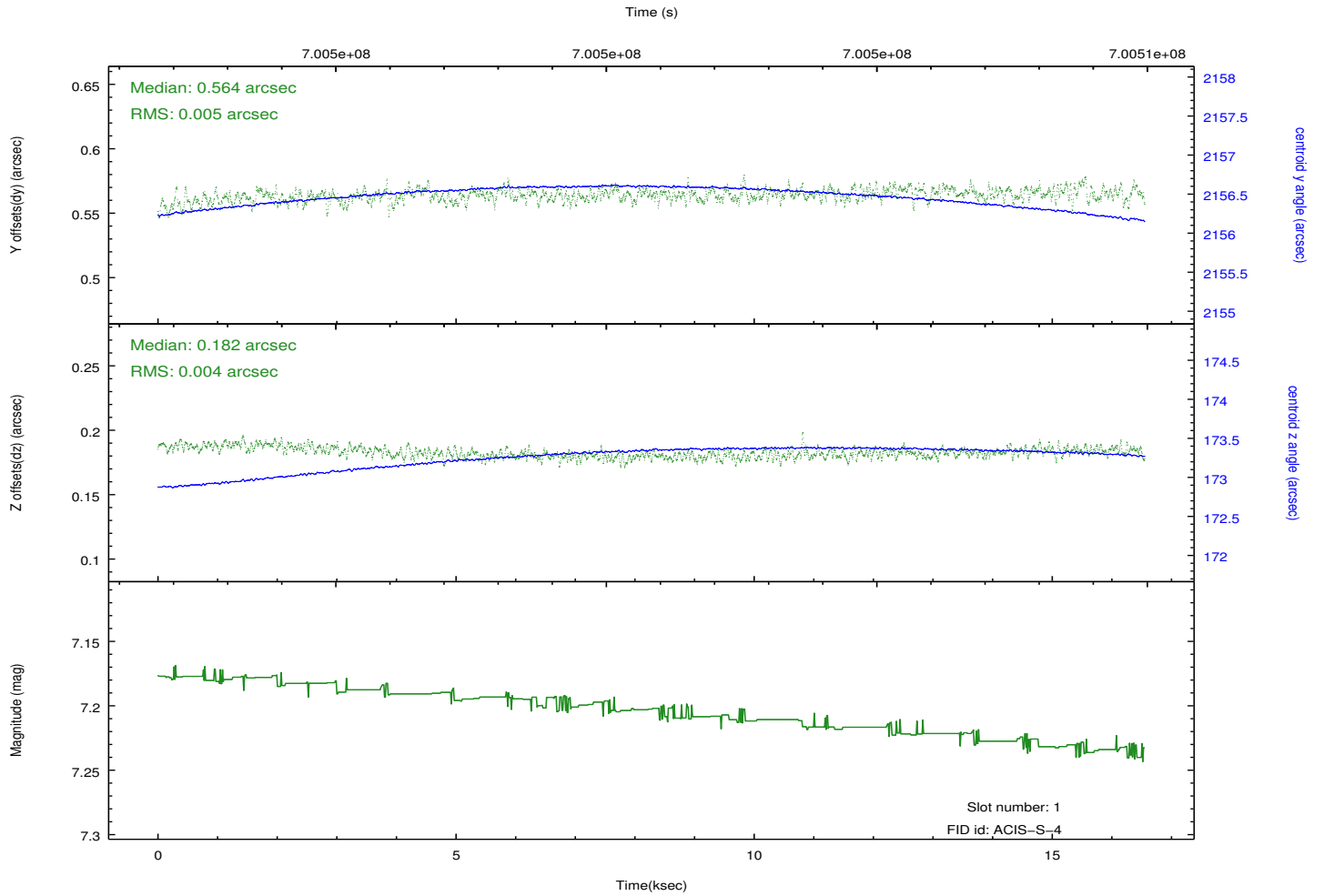
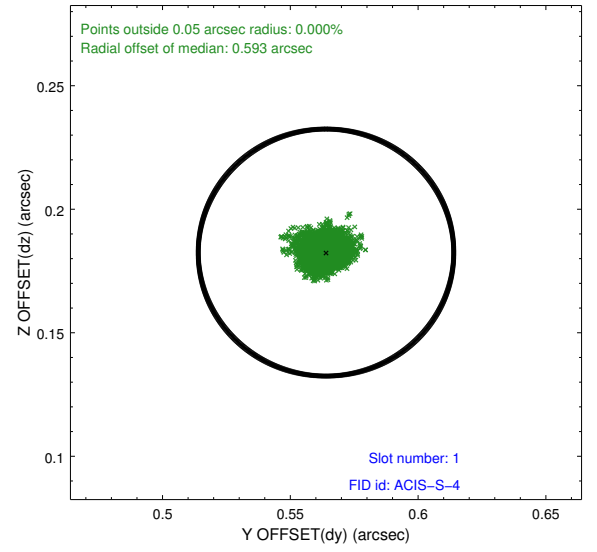
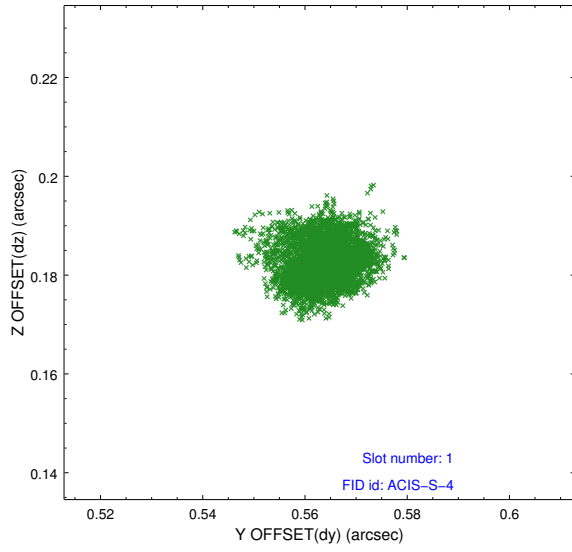


2.5 FID Slots

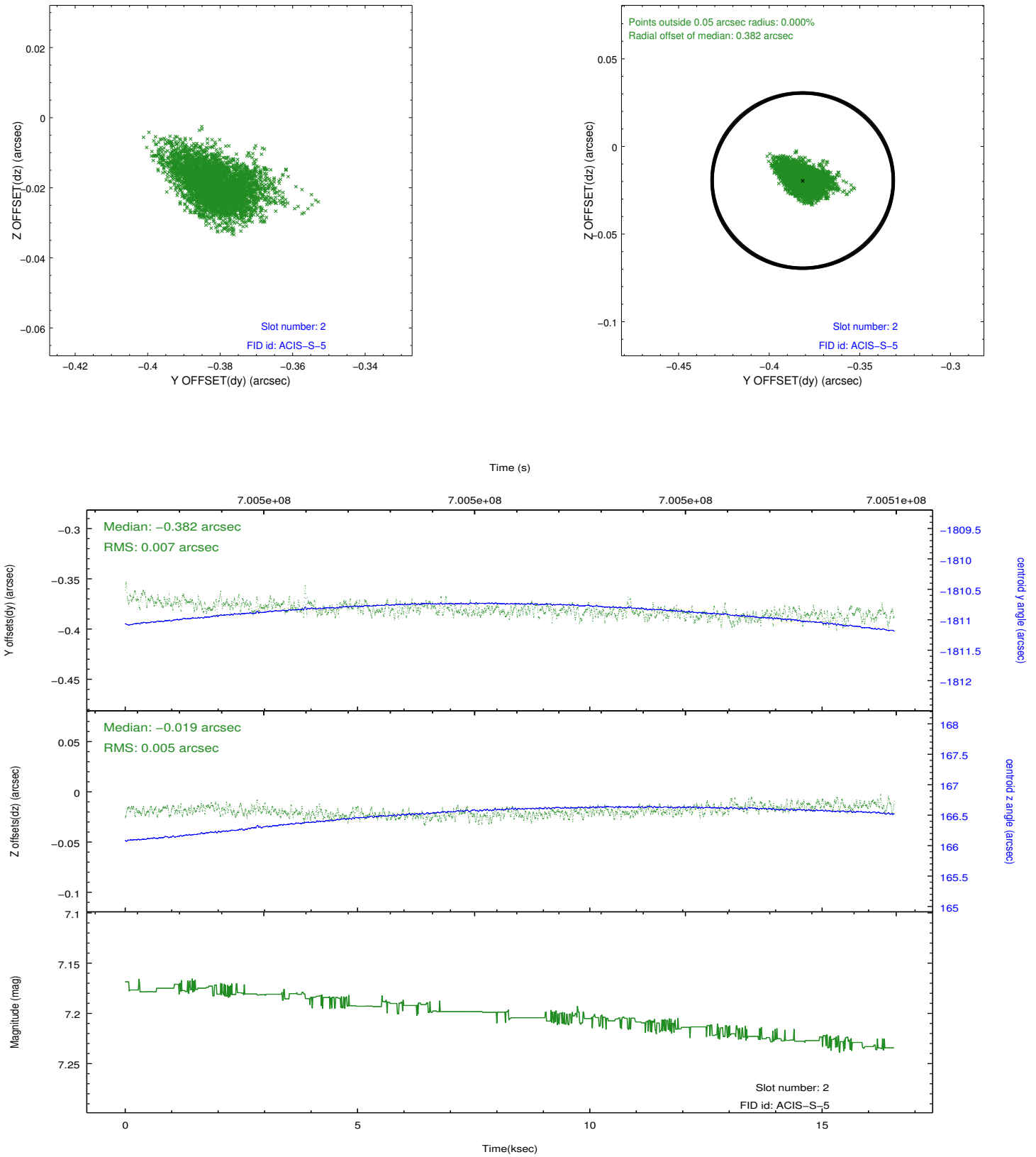
2.5.1 Slot 0



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)	2020.03.13
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	16.492000126958

A.2 Comments

Joint proposal with HST and NRAO.

One optional chip was dropped.