

V&V Reference Report

L2 ASCDS Version : 10.7.1

Observation 22158 - L2 Version 1
Chandra X-Ray Center

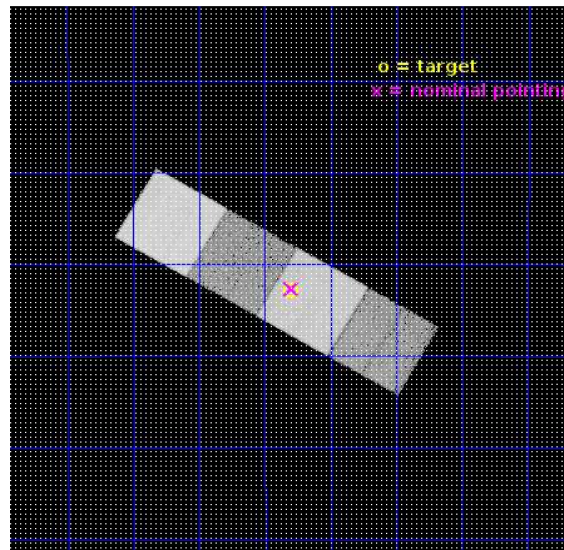
L2 Processing Date : Mar 24 2019

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1 Front

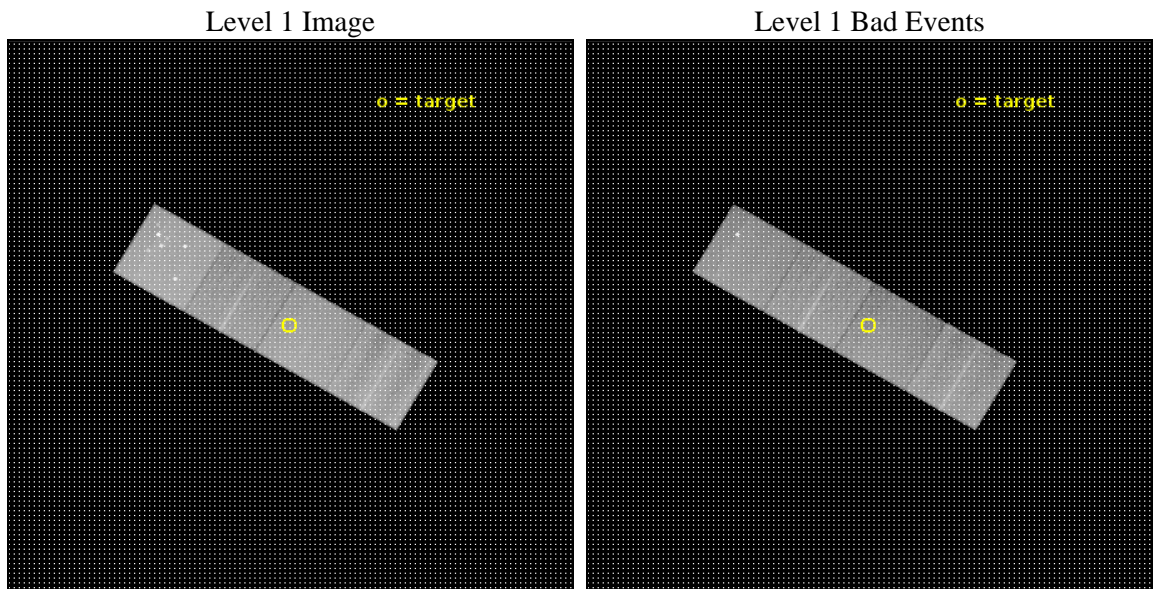
seq_num	503094	Sequence number
obs_id	22158	Observation id
title	Late-time monitoring of GW170817 across the electromagnetic spectrum	
observer	Raffaella Margutti	Principal investigator
object	GW170817	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	197.450417	Observer's specified target RA [deg]
dec_targ	-23.381472	Observer's specified target Dec [deg]
ra_nom	197.44980726619	Nominal RA [deg]
dec_nom	-23.378056063	Nominal Dec [deg]
roll_nom	30.156397251807	Nominal Roll [deg]
revision	1	Processing version of data
ontime	25261.722267866	Sum of GTIs [s]
livetime	24931.659269027	Livetime [s]
ontime5	25261.681227922	Sum of GTIs [s]
ontime6	25258.499167919	Sum of GTIs [s]
ontime7	25261.722267866	Sum of GTIs [s]
ontime8	25252.175997257	Sum of GTIs [s]
l2events	294477	Number of level 2 events



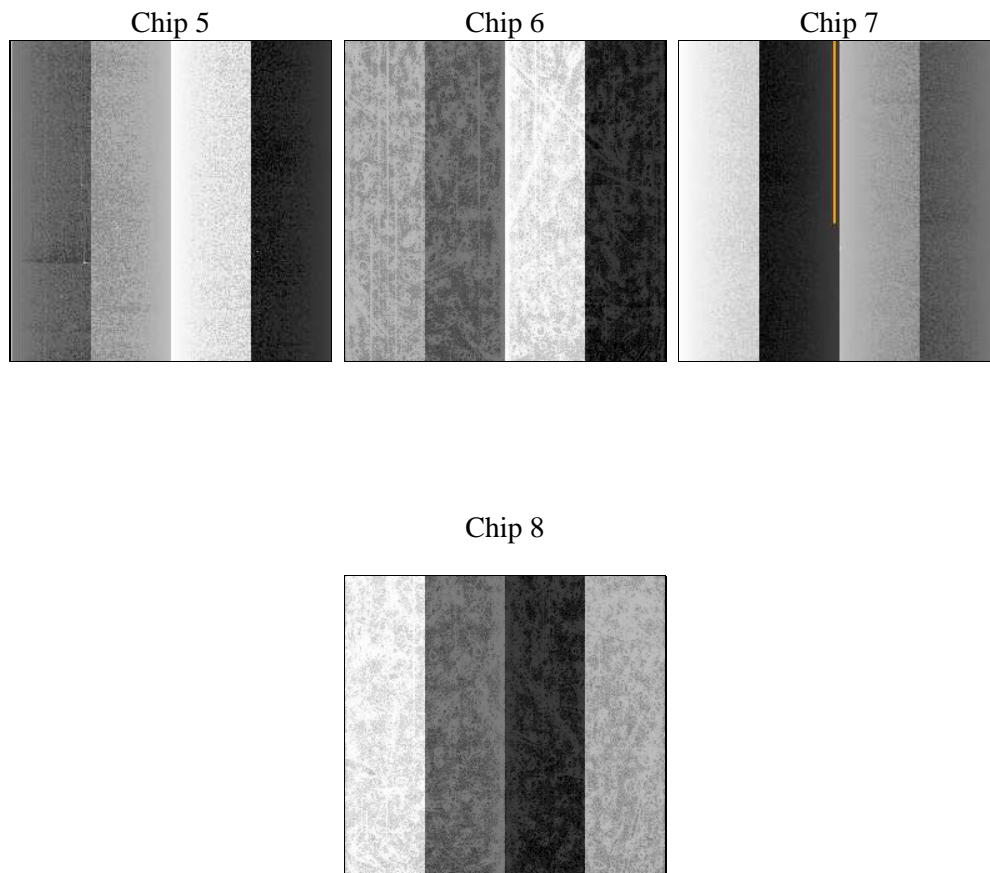
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	25200.000000	[s] Scheduled observation exposure time
ascdsver	10.7.1	Processing system revision	ontime	25261.722267866	Sum of GTIs [s]
caldbver	4.8.2	 	ontime5	25261.681227922	Sum of GTIs [s]
date	2019-03-24T13:47:09	Date and time of file creation	ontime6	25258.499167919	Sum of GTIs [s]
revision	1	Processing version of data	ontime7	25261.722267866	Sum of GTIs [s]
			ontime8	25252.175997257	Sum of GTIs [s]
			l1events	1062099	Number of level 1 events

2.1.4 Events

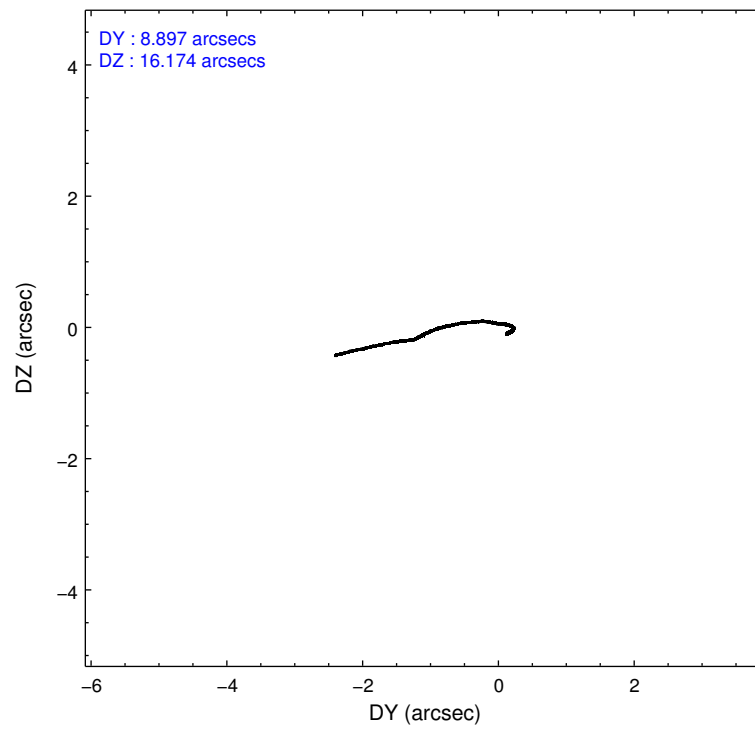
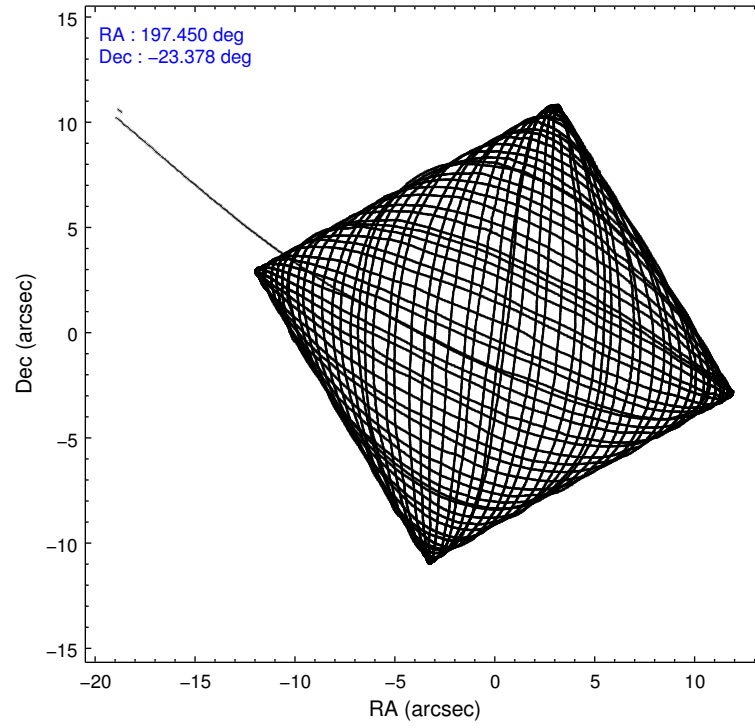
	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	343475	200968	254326	263330
rejected events	169544	178516	143898	189664
rejected %	49%	88%	56%	72%

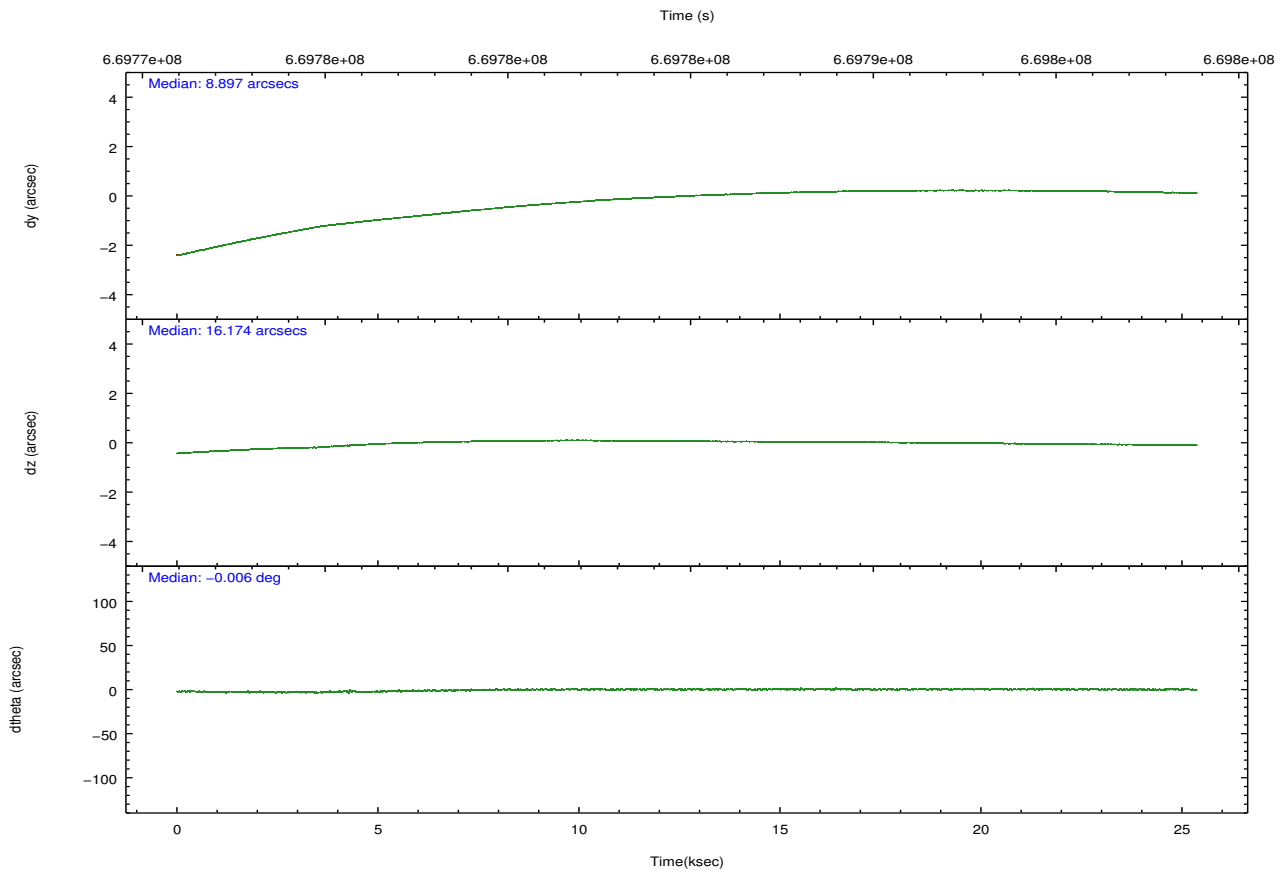
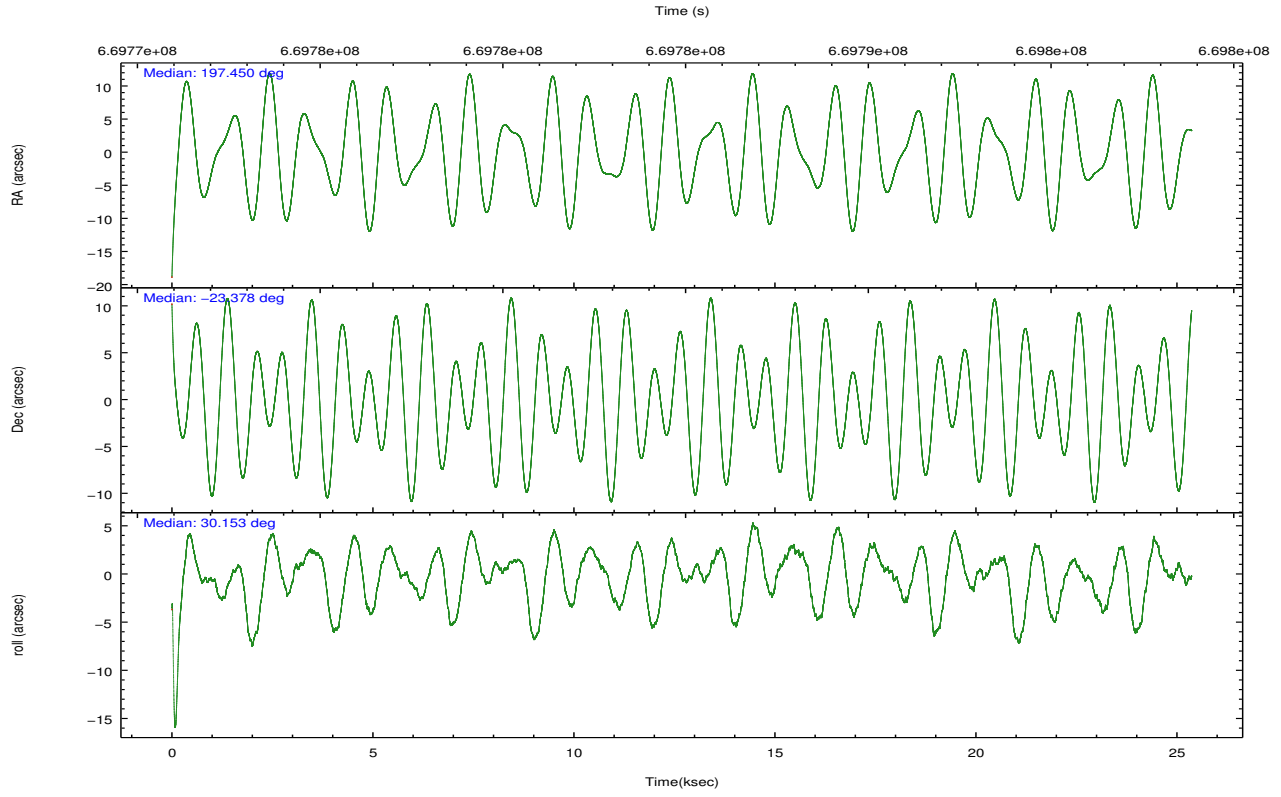
	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	28469	7369	9494	20869
	8%	3%	3%	7%
grade 1 events	726	89	382	205
	0%	0%	0%	0%
grade 2 events	52351	5396	23656	17475
	15%	2%	9%	6%
grade 3 events	5119	2129	8760	7973
	1%	1%	3%	3%
grade 4 events	4481	2313	8635	7537
	1%	1%	3%	2%
grade 5 events	21899	9227	24878	14196
	6%	4%	9%	5%
grade 6 events	83569	5254	59911	19837
	24%	2%	23%	7%
grade 7 events	146861	169191	118610	175238
	42%	84%	46%	66%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-5678	ACIS-5678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	197.435265	197.4498072661866	CCD I2 on	N	N
[deg] Pointing Dec	-23.402035	-23.37805606300041	CCD I3 on	N	N
[deg] Pointing Roll	29.993982	30.15639725180653	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	O1	Y
[s] Observation start time (MET)	669772400.184000	669771281.33539	CCD S5 on	N	N
Observation start date	2019-03-23T23:52:11	2019-03-23T23:34:41	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	669797600.184000	669798476.63702	On-chip summing requested	N	N
Observation end date	2019-03-24T06:52:11	2019-03-24T07:07:56	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





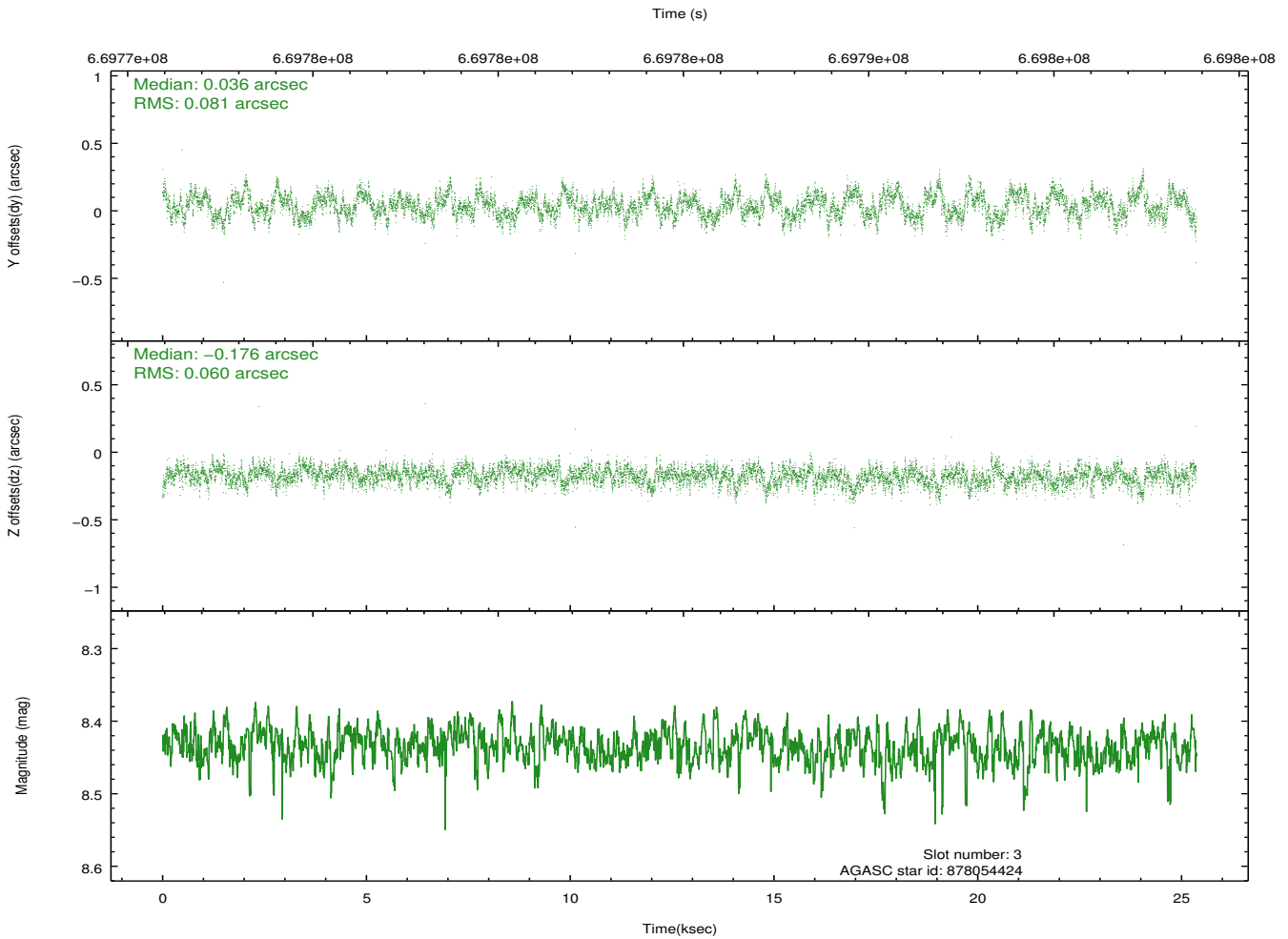
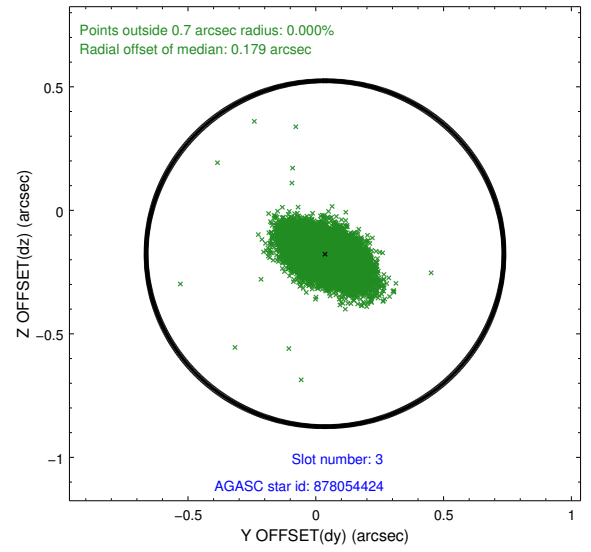
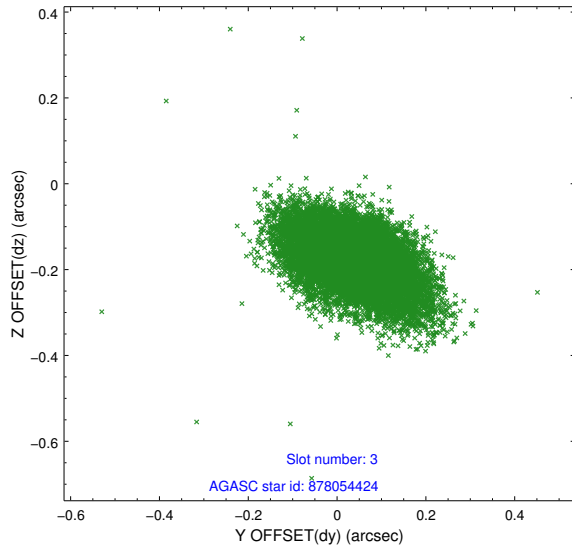
Slot Statistics

slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	6.98	6188	1.000	-0.260	-0.109	0.015	0.030	0.000000	0.000000	-761.53	-1737
1	FID		ACIS-S-4	7.10	6188	1.000	0.623	0.154	0.036	0.090	0.000000	0.000000	2152.49	171
2	FID		ACIS-S-5	7.07	6188	1.000	-0.393	-0.036	0.021	0.097	0.000000	0.000000	-1814.41	164
3	GUIDE	used	878054424	8.43	12370	1.000	0.036	-0.176	0.105	0.178	197.311680	-23.210058	-8.42	802
4	GUIDE	used	878054864	8.17	12368	1.000	0.016	0.064	0.125	0.191	197.588589	-23.624647	37.90	-947
5	GUIDE	used	878055920	7.69	12372	1.000	0.184	0.530	0.122	0.188	197.166113	-23.822063	-1525.38	-865
6	GUIDE	used	878056592	8.75	12369	1.000	0.226	0.220	0.106	0.178	197.586702	-23.861101	-394.89	-1679
7	GUIDE	used	878061480	7.96	12370	1.000	-0.471	-0.640	0.121	0.173	197.360027	-22.852260	771.97	1838

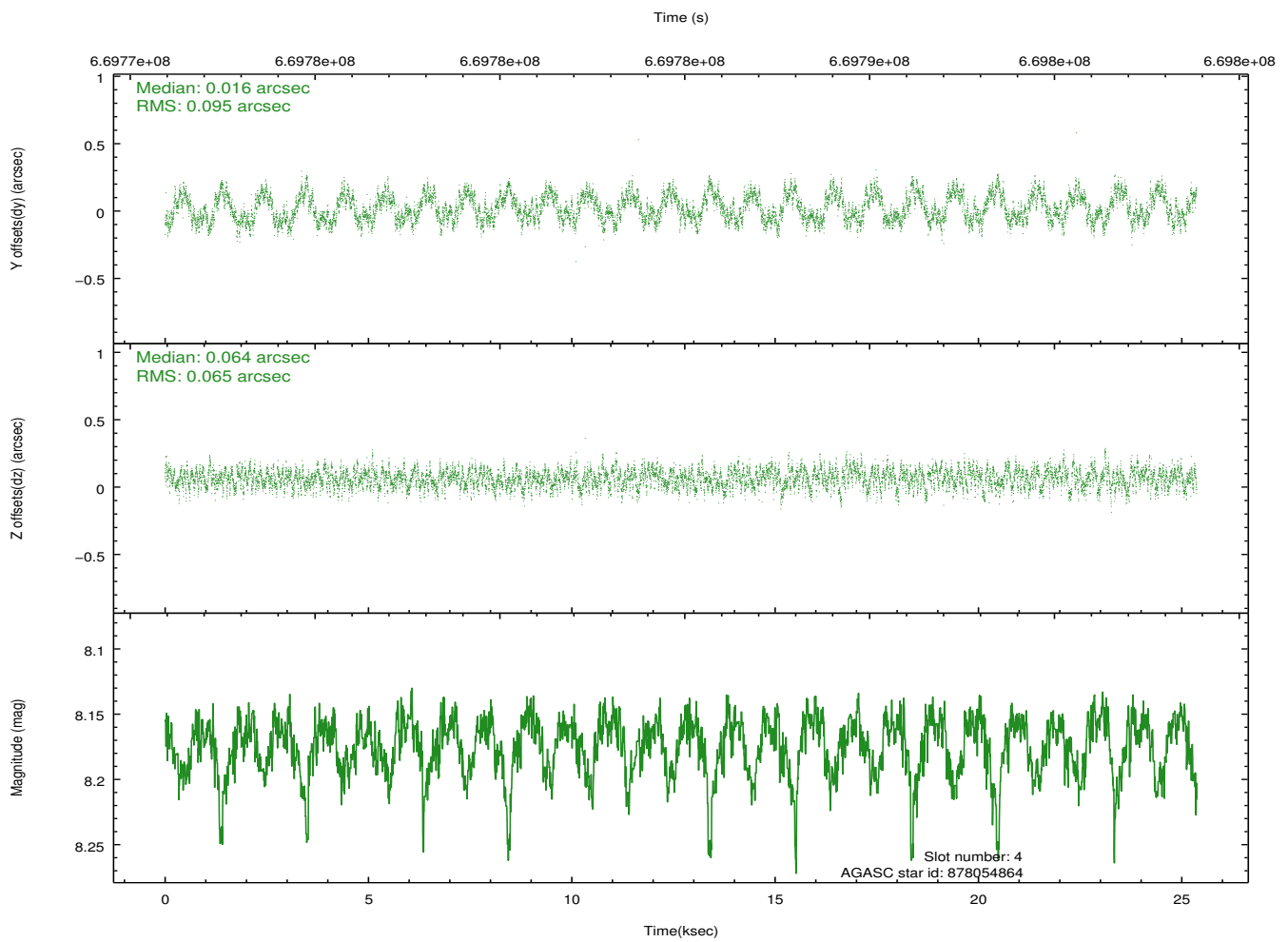
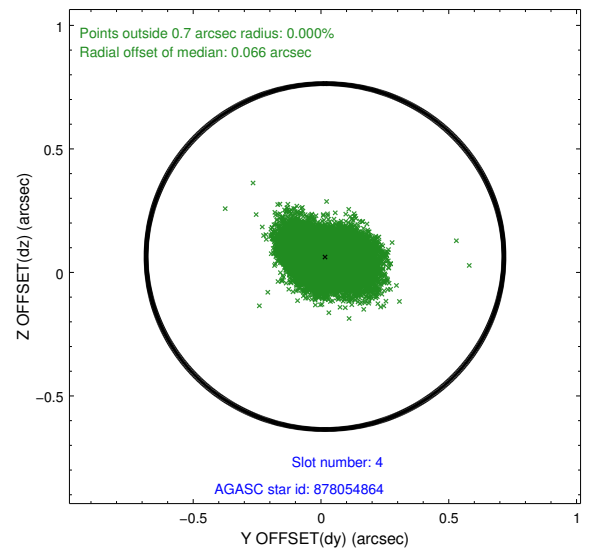
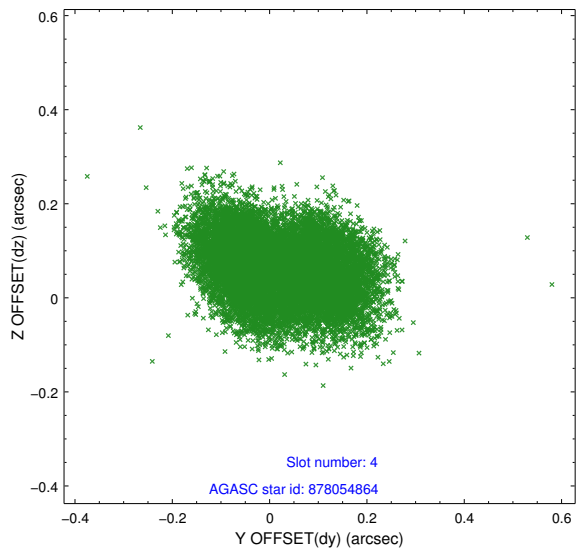
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2.4 Star Slots

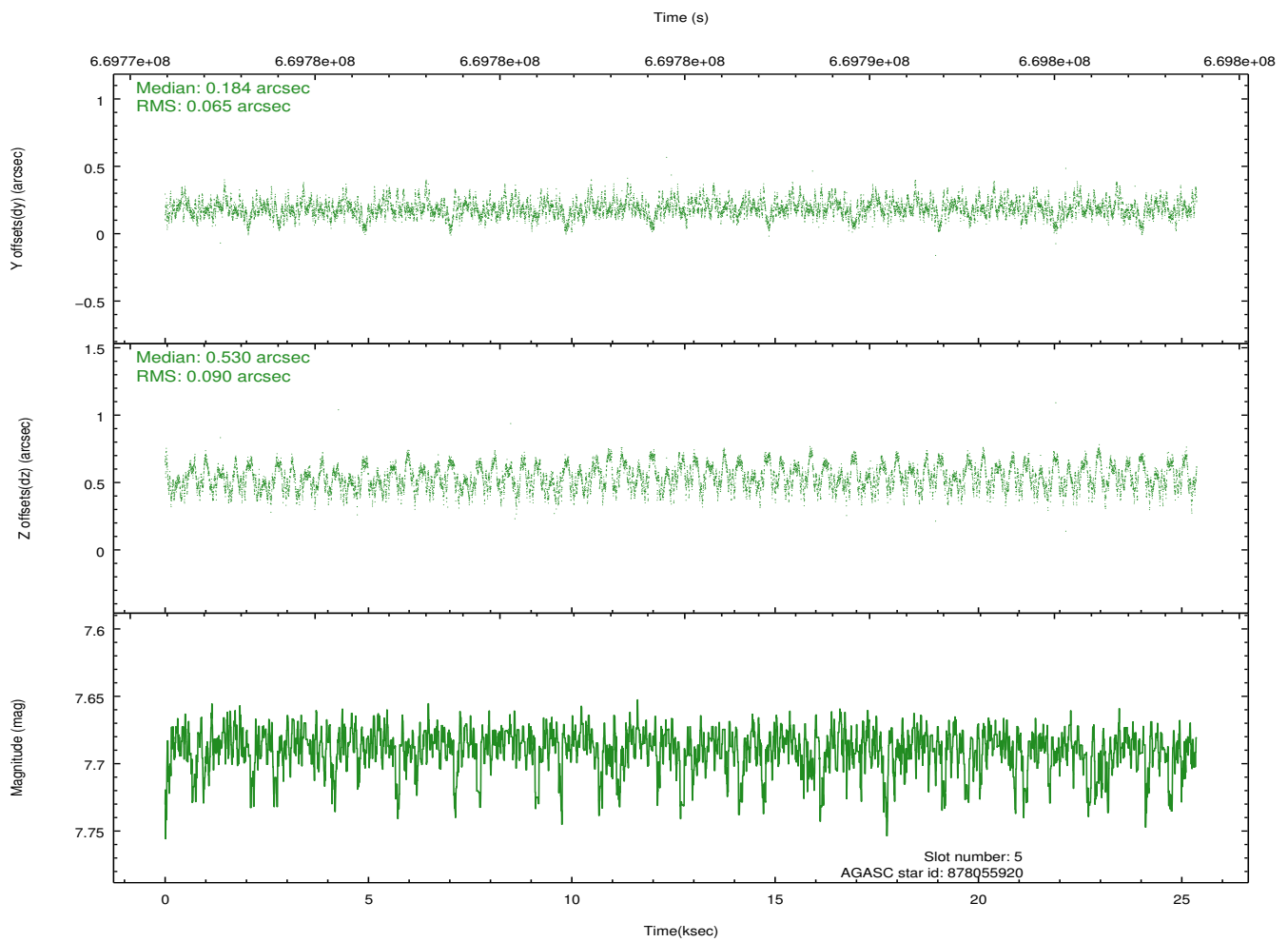
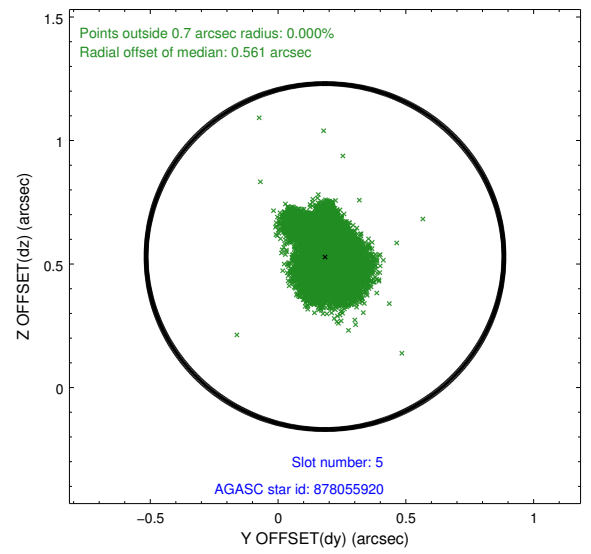
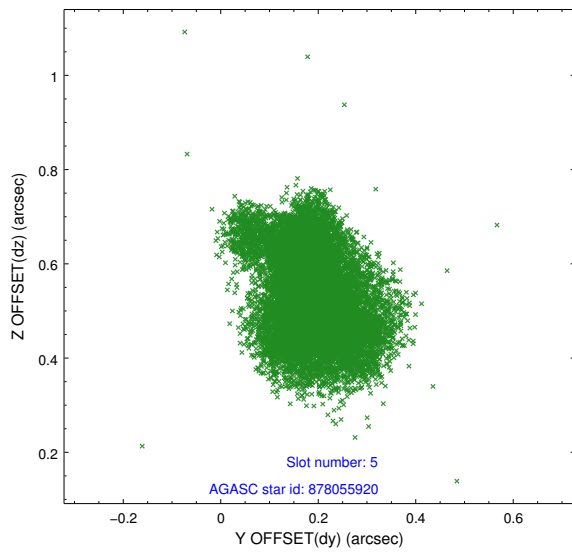
2.4.1 Slot 3



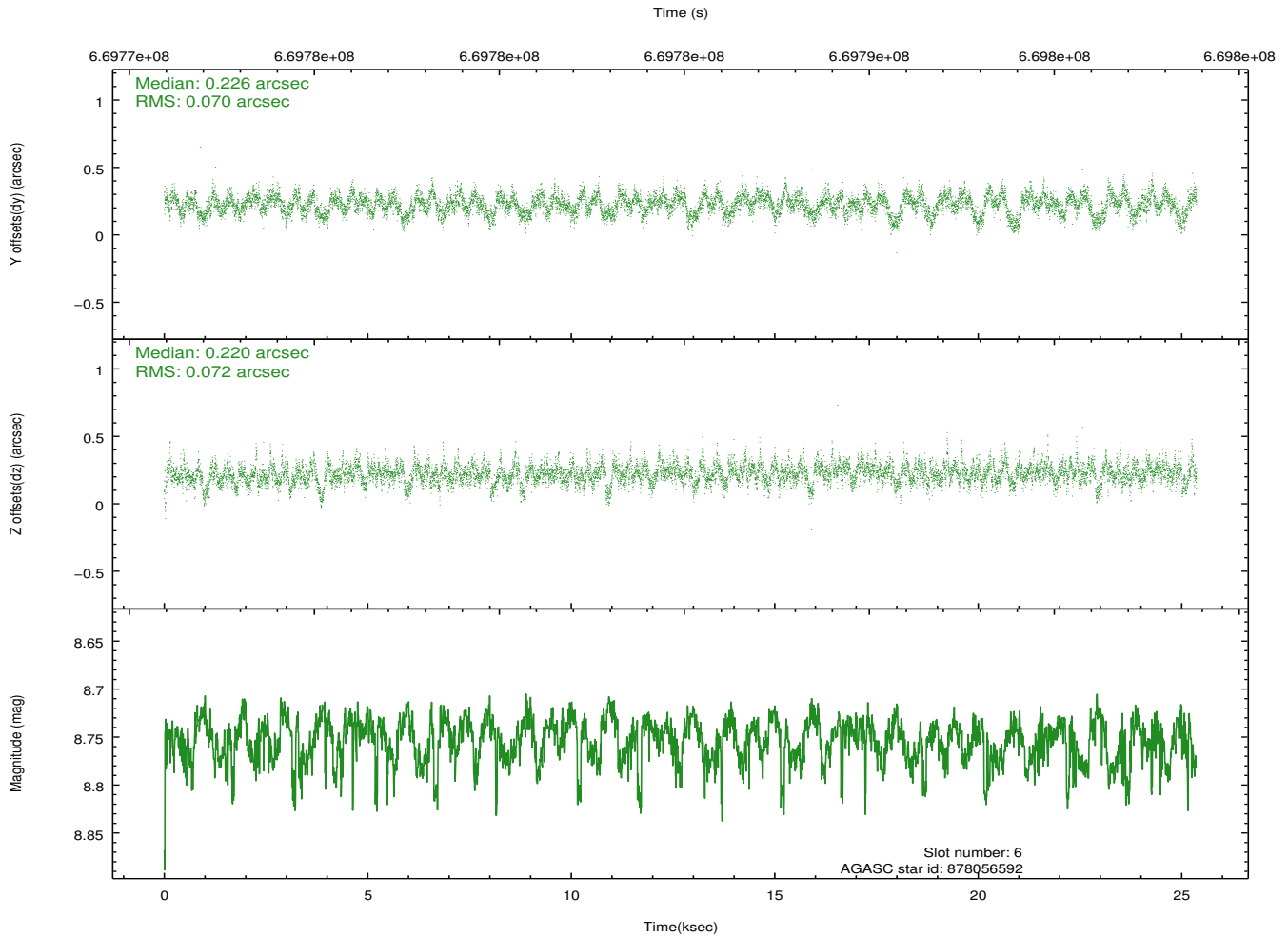
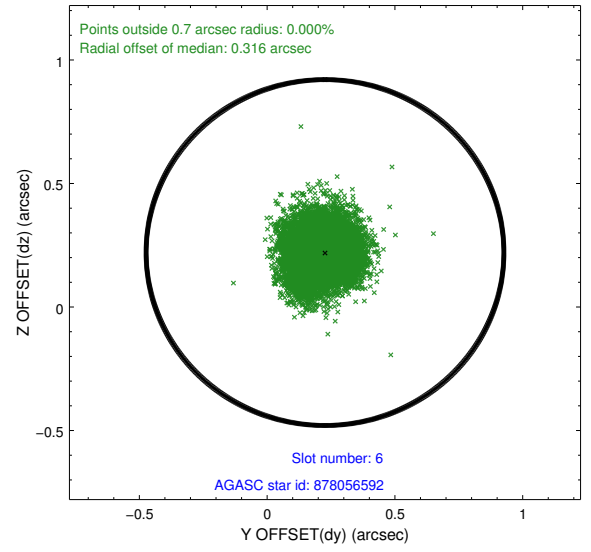
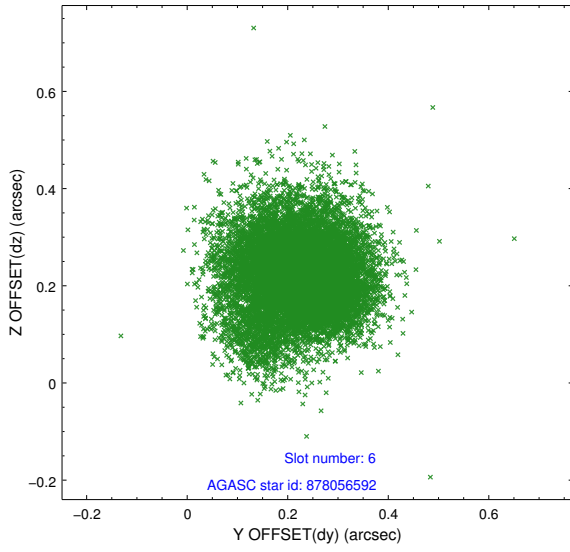
2.4.2 Slot 4



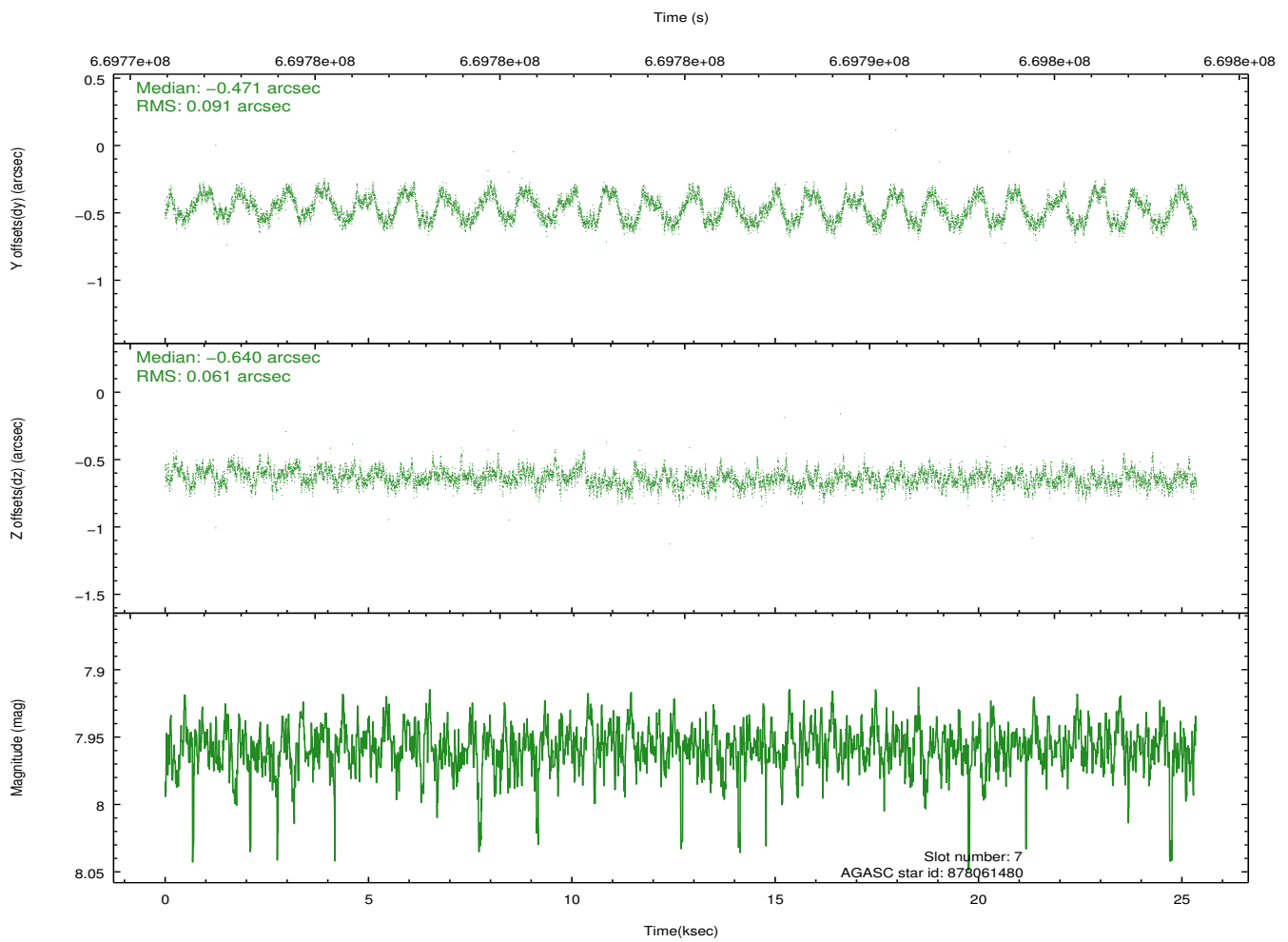
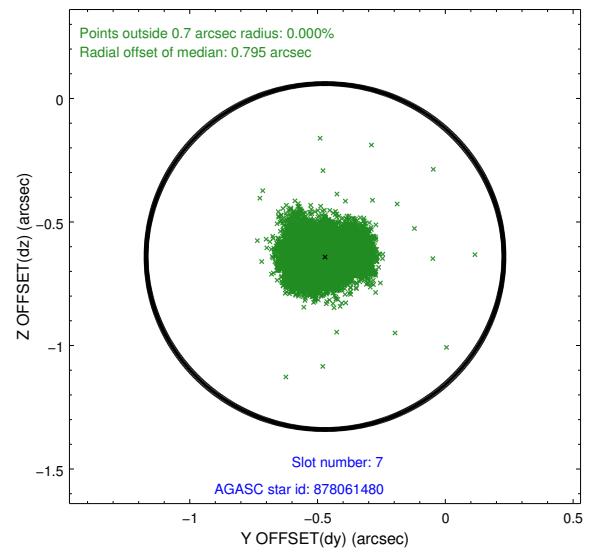
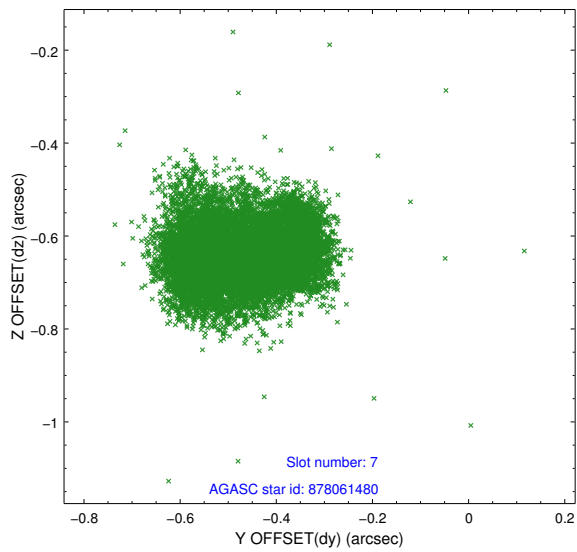
2.4.3 Slot 5



2.4.4 Slot 6

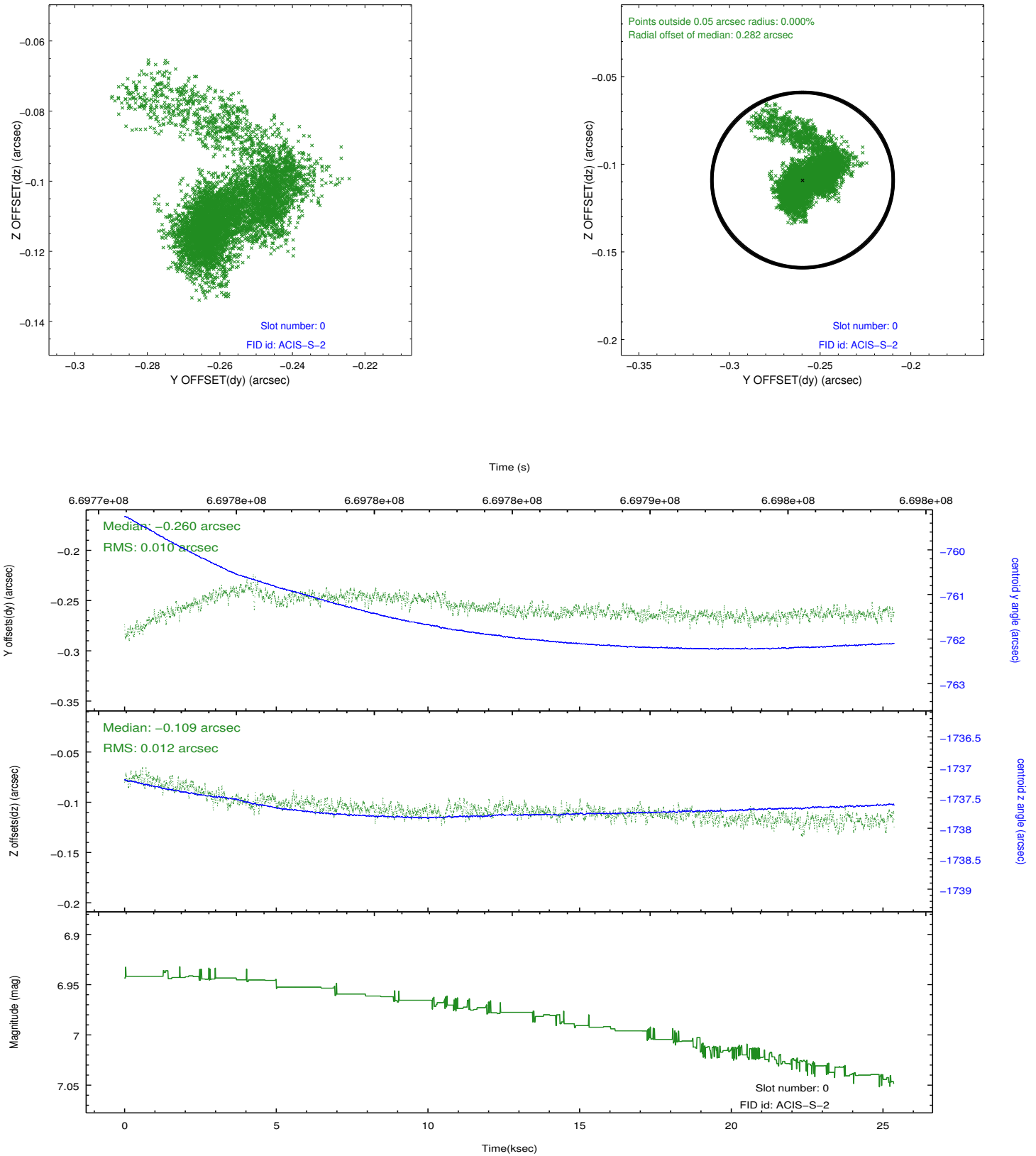


2.4.5 Slot 7

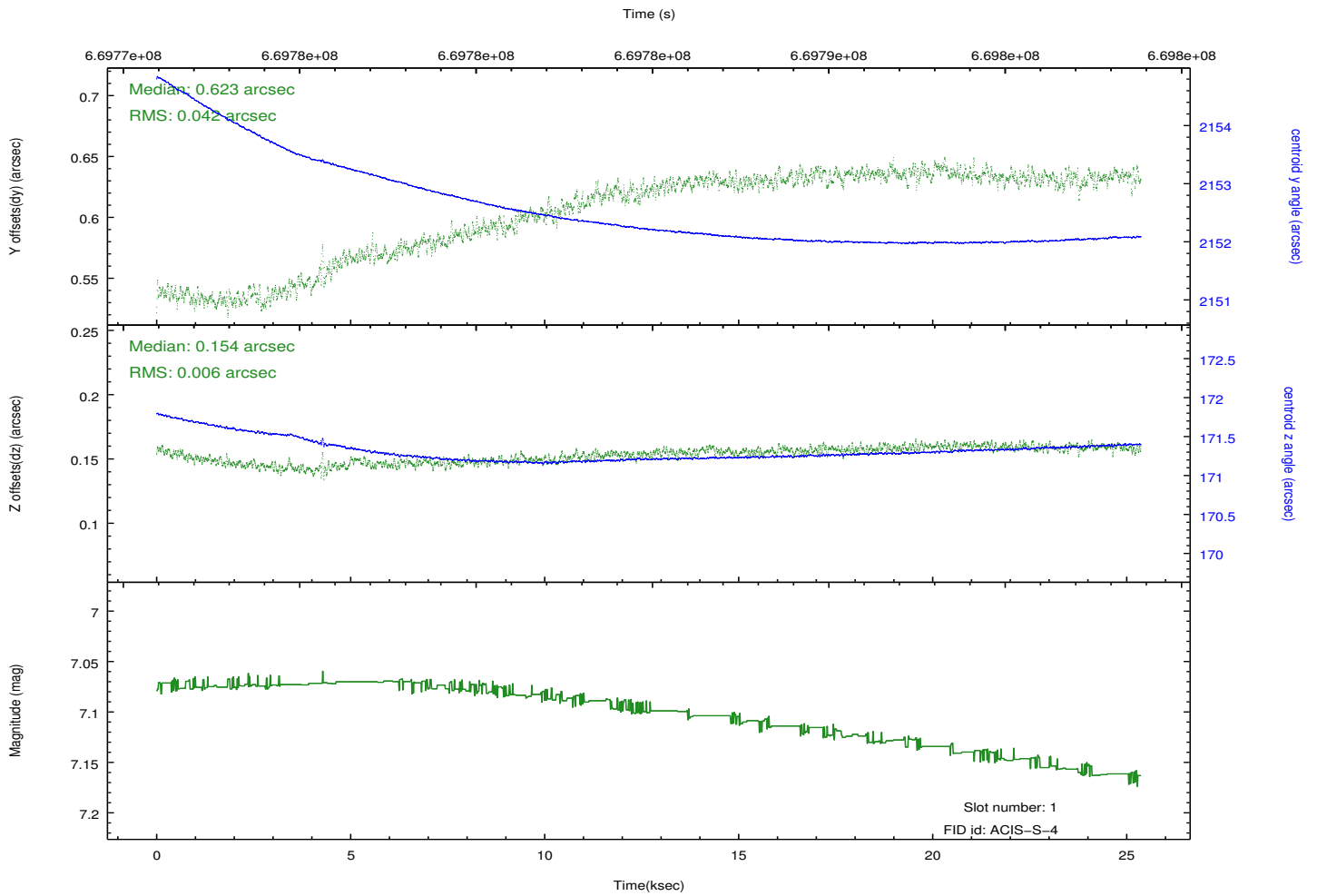
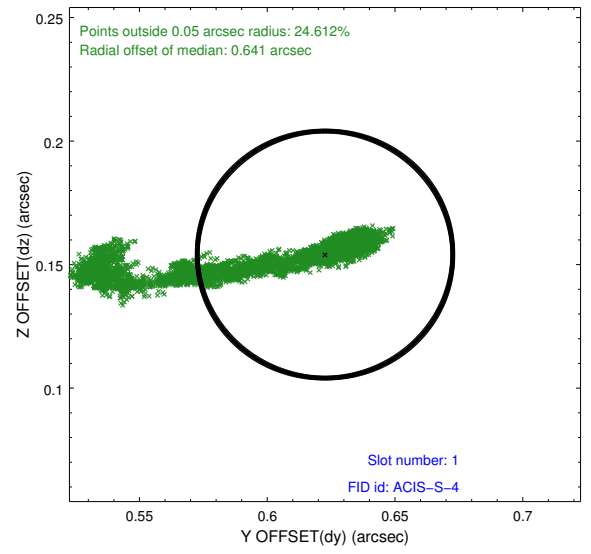
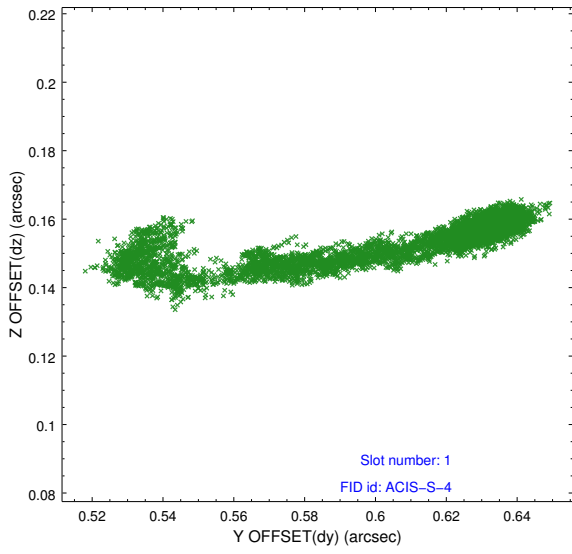


2.5 FID Slots

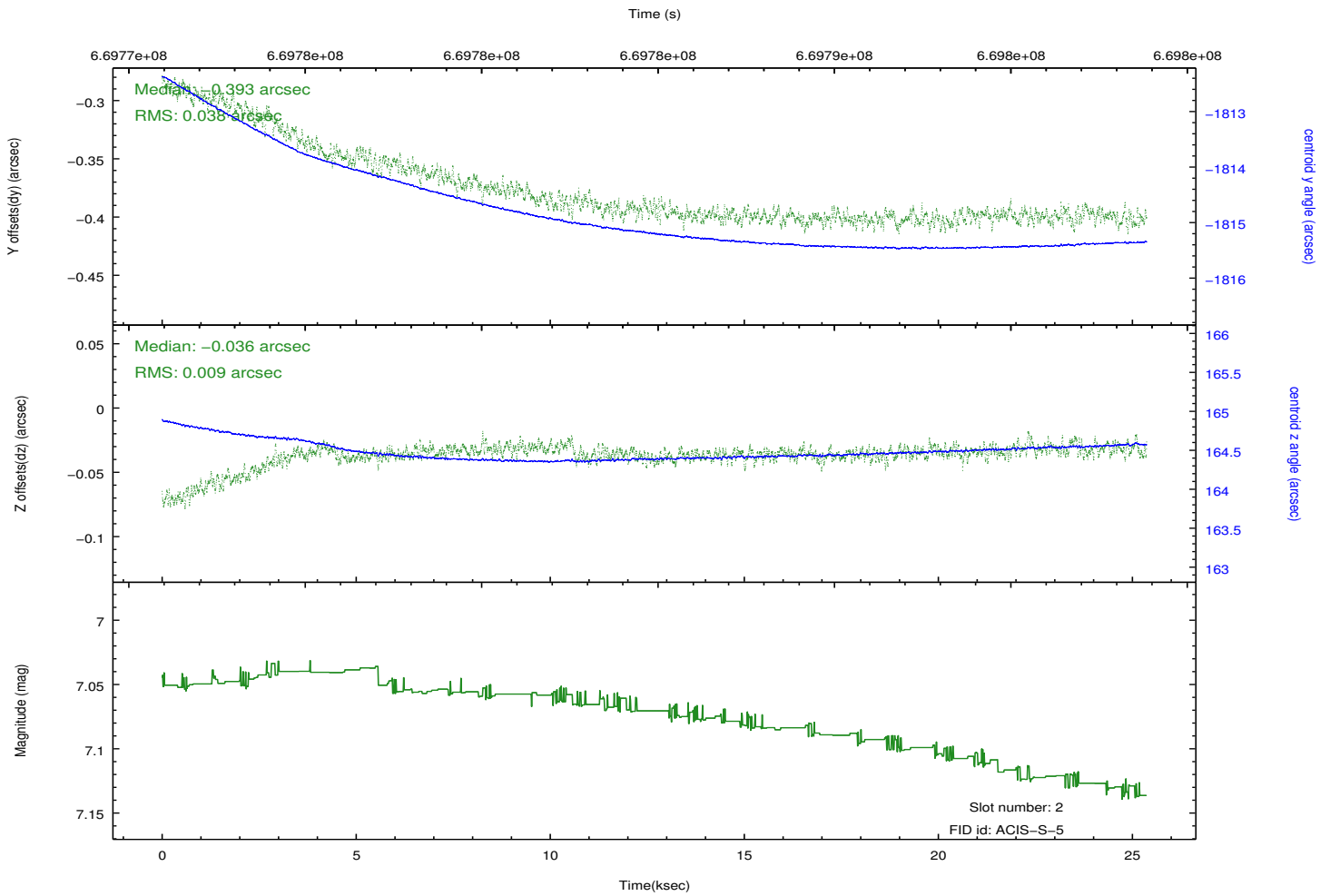
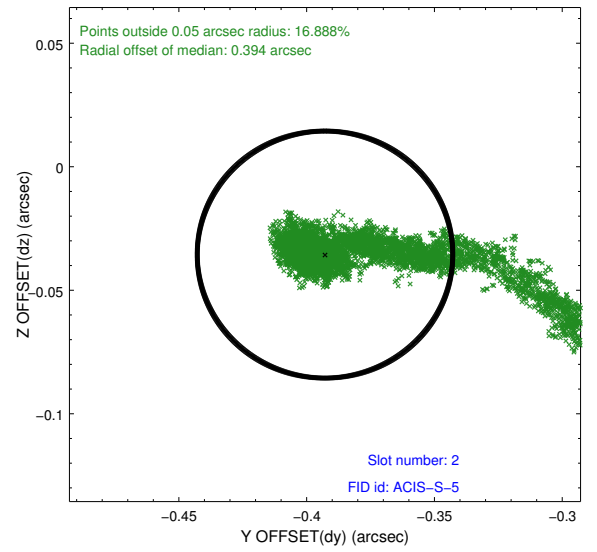
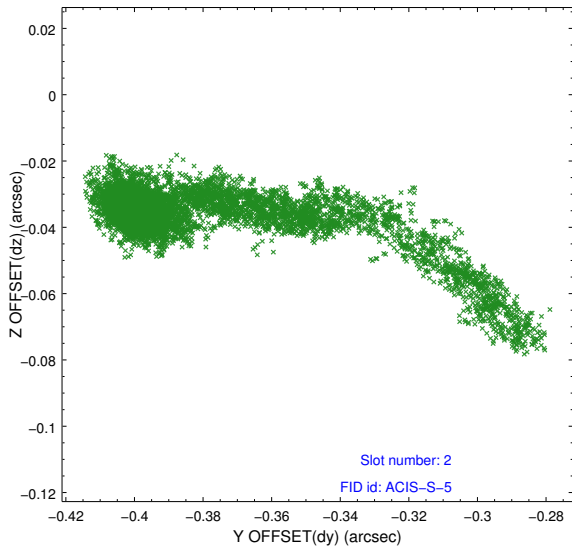
2.5.1 Slot 0



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)	2019.03.24
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	25.261722267866

A.2 Comments

Joint proposal with HST and NRAO.
Observation coordinated with VLA and HST.