

V&V Reference Report

L2 ASCDS Version : 10.8.1

Observation 23184 - L2 Version 1
Chandra X-Ray Center

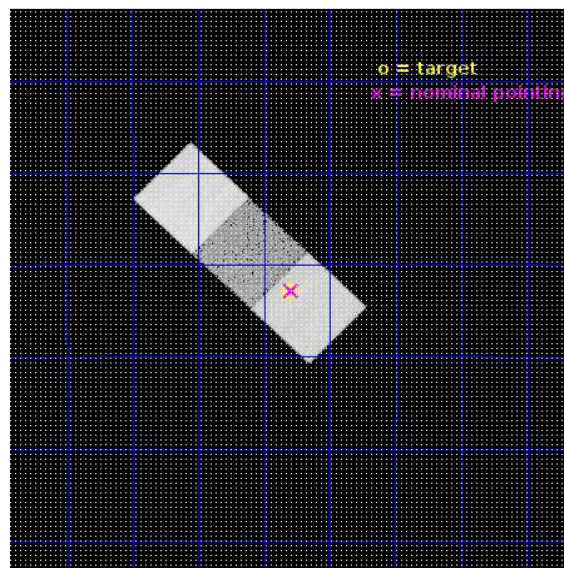
L2 Processing Date : Mar 15 2020

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1 Front

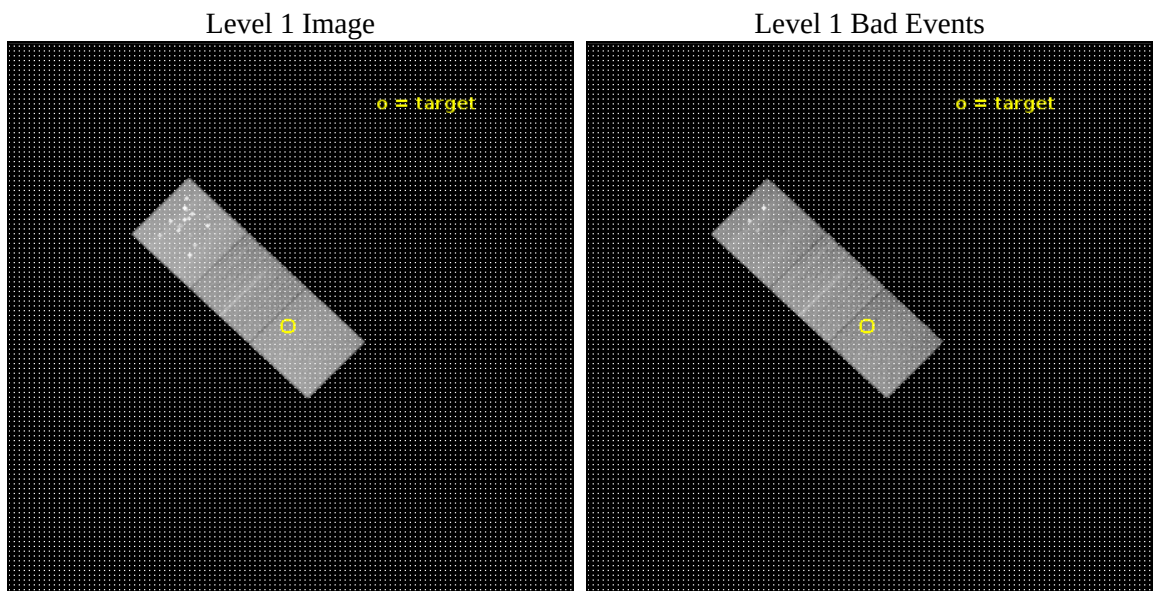
seq_num	503095	Sequence number
obs_id	23184	Observation id
title	Late-time monitoring of GW170817 across the electromagnetic spectrum	
observer	RAFFAELLA MARGUTTI	Principal investigator
object	GW170817	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	197.450417	Observer's specified target RA [deg]
dec_targ	-23.381472	Observer's specified target Dec [deg]
ra_nom	197.44805723766	Nominal RA [deg]
dec_nom	-23.380140104313	Nominal Dec [deg]
roll_nom	44.155710822875	Nominal Roll [deg]
revision	1	Processing version of data
ontime	20109.392265439	Sum of GTIs [s]
livetime	19846.648251172	Livetime [s]
ontime5	20109.351225495	Sum of GTIs [s]
ontime6	20109.310185432	Sum of GTIs [s]
ontime7	20109.392265439	Sum of GTIs [s]
l2events	217912	Number of level 2 events



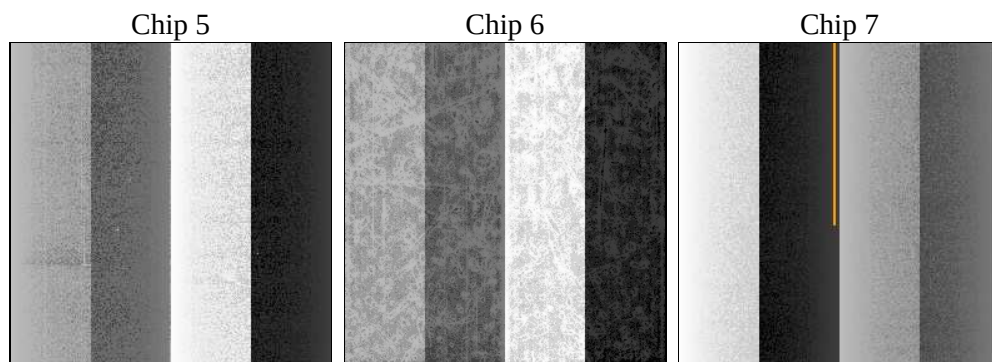
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	20000.000000	[s] Scheduled observation exposure time
ascdsver	10.8.1	Processing system revision	ontime	20109.392265439	Sum of GTIs [s]
caldsver	4.8.4.2	 	ontime5	20109.351225495	Sum of GTIs [s]
date	2020-03-15T13:09:40	Date and time of file creation	ontime6	20109.310185432	Sum of GTIs [s]
revision	1	Processing version of data	ontime7	20109.392265439	Sum of GTIs [s]
			l1events	687394	Number of level 1 events

2.1.4 Events

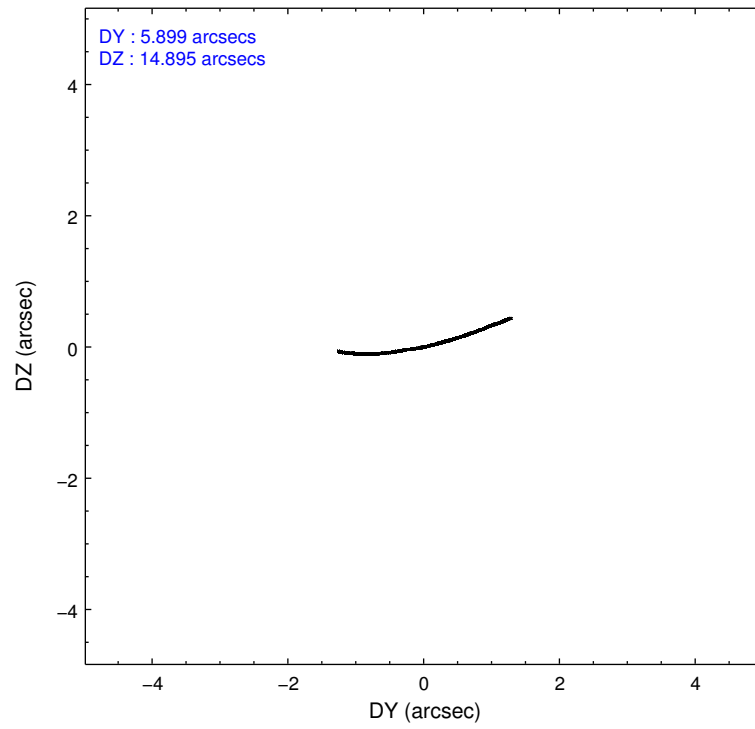
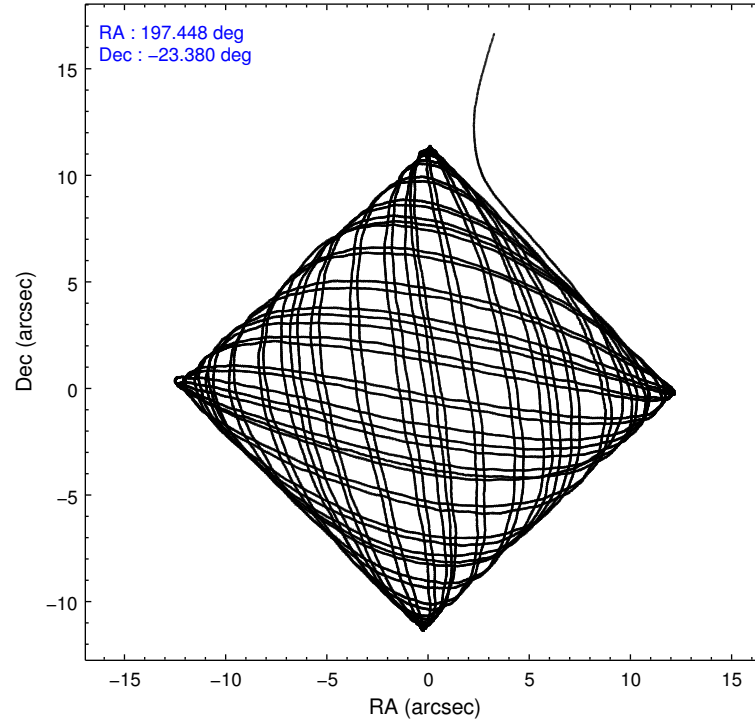
	ccd 5	ccd 6	ccd 7
level 1 events	314489	165802	207103
rejected events	144973	148175	118567
rejected %	46%	89%	57%

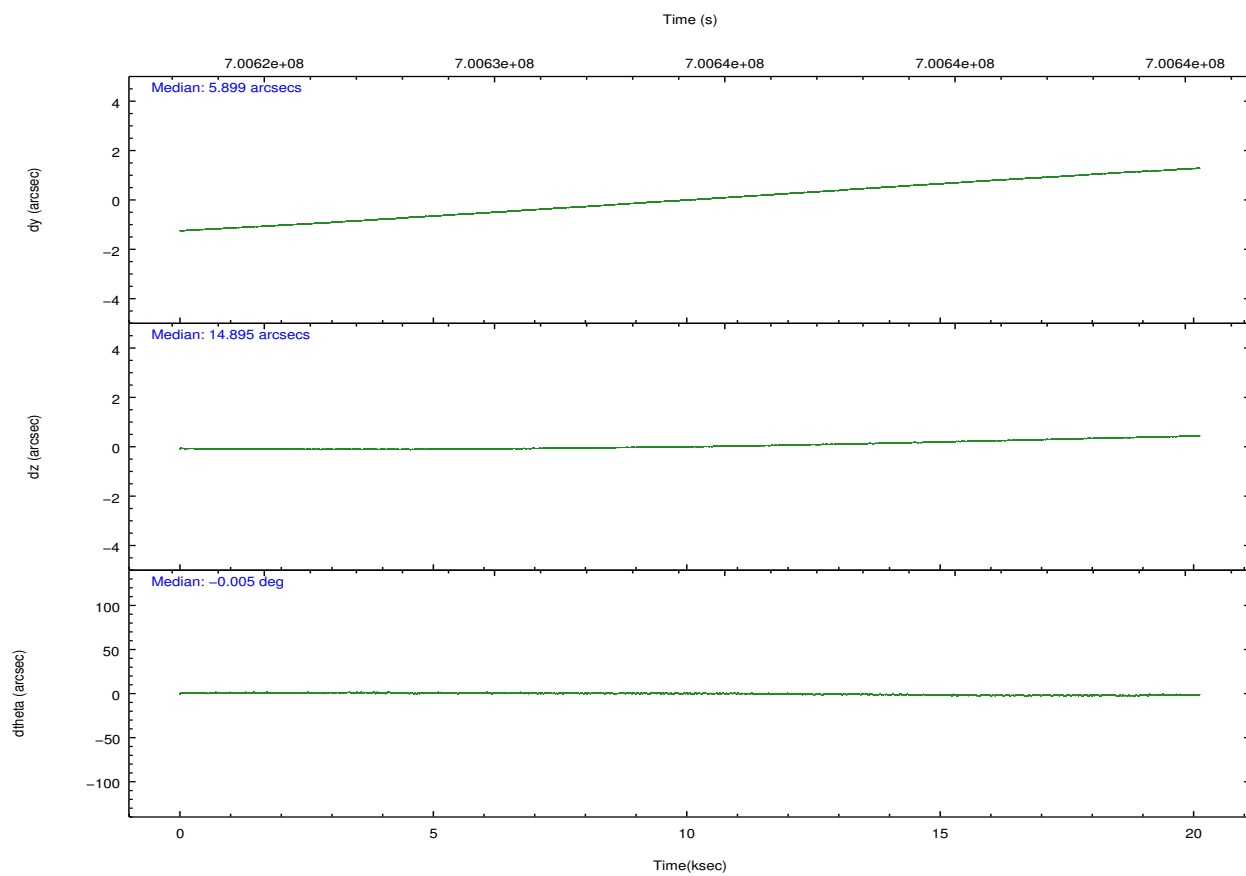
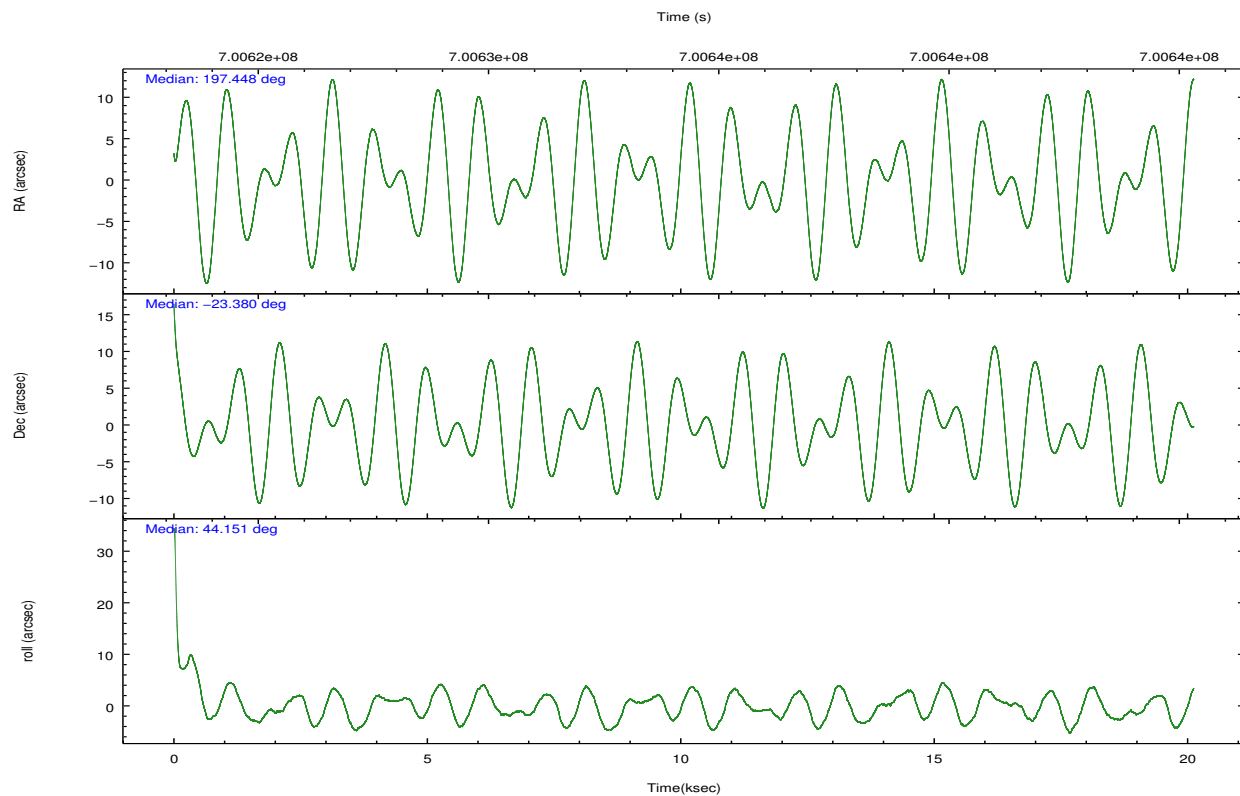
	ccd 5	ccd 6	ccd 7
grade 0 events	44387	5121	7173
	14%	3%	3%
grade 1 events	781	61	318
	0%	0%	0%
grade 2 events	48198	4655	18791
	15%	2%	9%
grade 3 events	4463	1503	6685
	1%	0%	3%
grade 4 events	3442	1568	6613
	1%	0%	3%
grade 5 events	18437	6753	19564
	5%	4%	9%
grade 6 events	69092	4784	49304
	21%	2%	23%
grade 7 events	125689	141357	98655
	39%	85%	47%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-567	ACIS-567	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	197.440259	197.448057237655	CCD I2 on	N	N
[deg] Pointing Dec	-23.406649	-23.38014010431313	CCD I3 on	N	N
[deg] Pointing Roll	43.995975	44.1557108228754	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	N
[s] Observation start time (MET)	700624320.184000	700622588.04286	CCD S5 on	N	N
Observation start date	2020-03-15T01:50:51	2020-03-15T01:23:08	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	700644320.184000	700645338.43174	On-chip summing requested	N	N
Observation end date	2020-03-15T07:24:11	2020-03-15T07:42:18	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



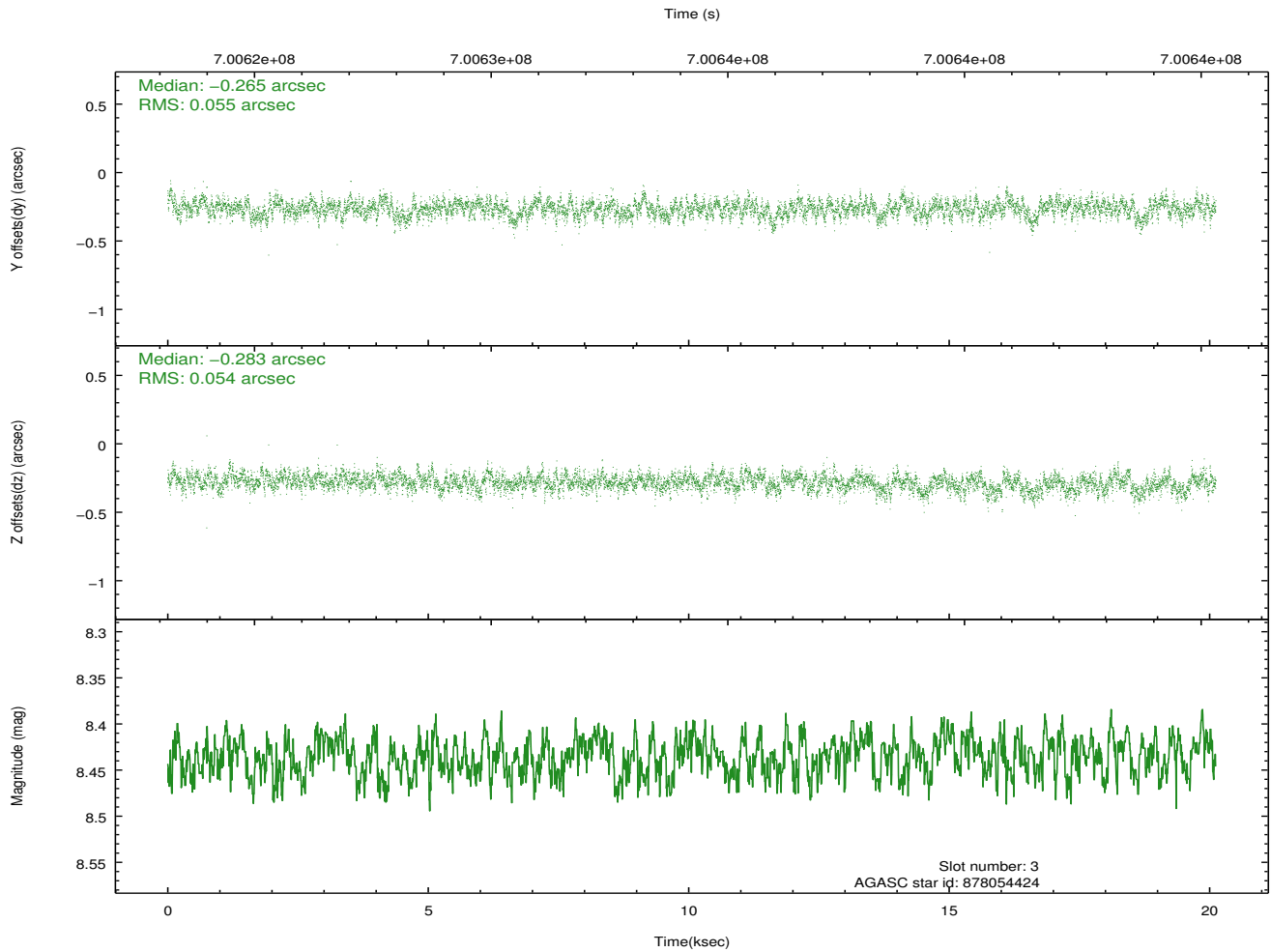
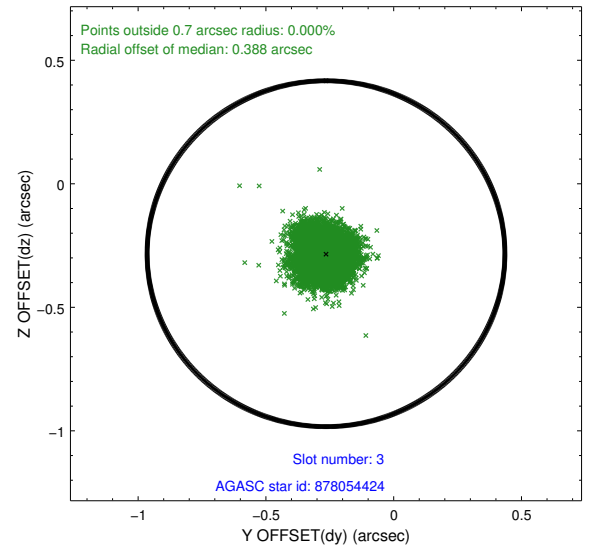
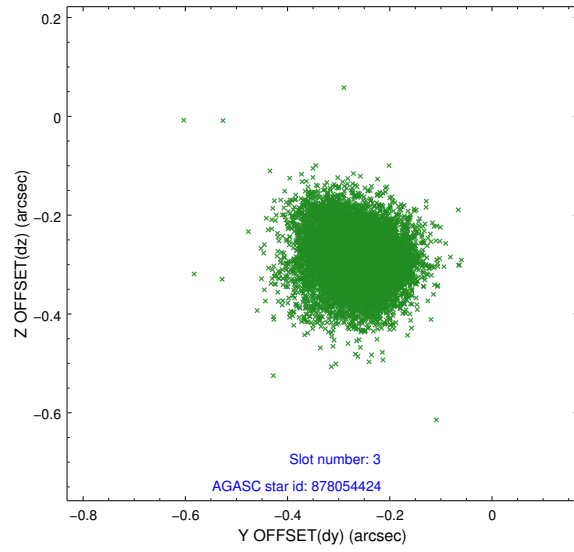


Slot Statistics

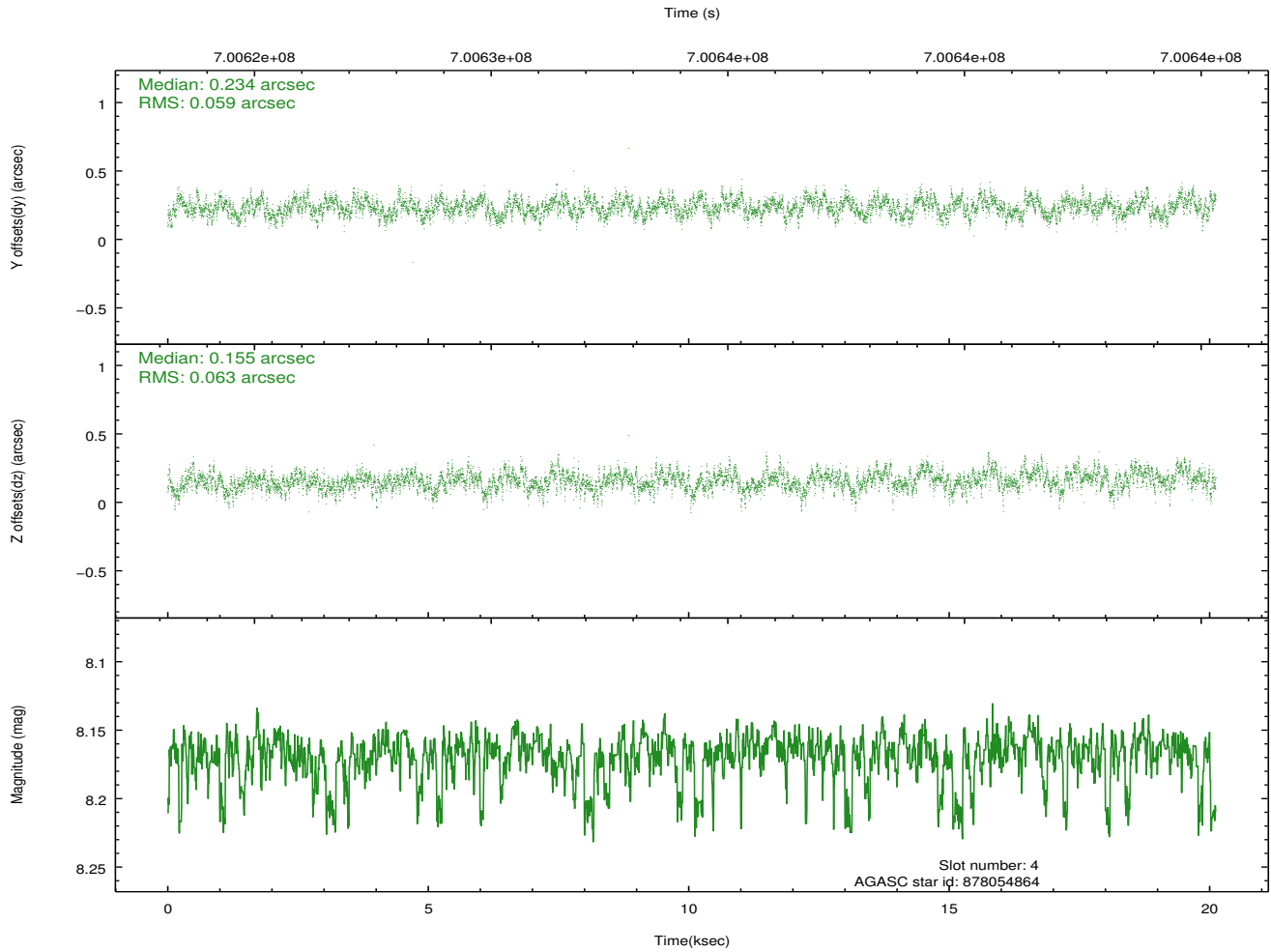
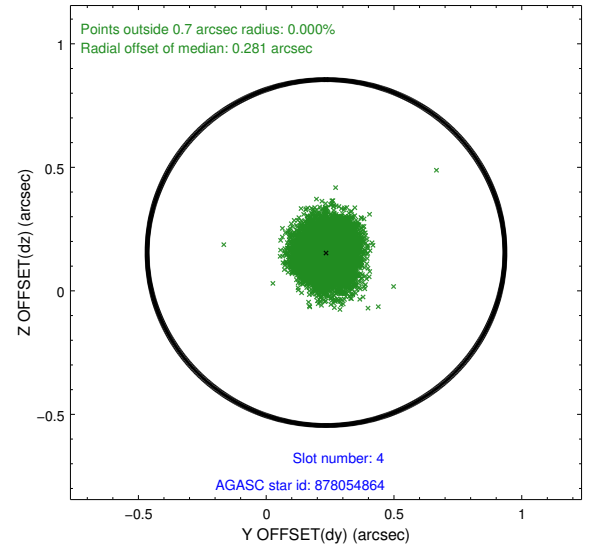
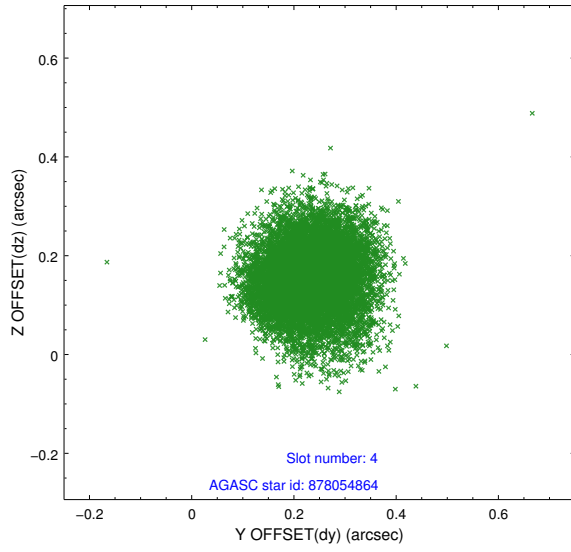
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.08	4908	1.000	-0.267	-0.082	0.014	0.023	0.000000	0.000000	-758.85	-1736
1	FID		ACIS-S-4	7.22	4907	1.000	0.563	0.150	0.012	0.019	0.000000	0.000000	2155.12	172
2	FID		ACIS-S-5	7.21	4908	1.000	-0.327	-0.061	0.010	0.021	0.000000	0.000000	-1811.56	165
3	GUIDE	used	878054424	8.44	9808	1.000	-0.265	-0.283	0.081	0.133	197.311680	-23.210058	185.11	803
4	GUIDE	used	878054864	8.17	9814	1.000	0.234	0.155	0.092	0.148	197.588589	-23.624647	-192.60	-904
5	GUIDE	used	878055920	7.71	9809	1.000	0.211	0.497	0.084	0.141	197.166113	-23.822063	-1690.15	-447
6	GUIDE	used	878056592	8.76	9810	1.000	0.286	0.163	0.138	0.219	197.586702	-23.861101	-790.08	-1510
7	GUIDE	used	878061480	7.96	9811	1.000	-0.456	-0.526	0.090	0.135	197.360027	-22.852260	1193.35	1620

2.4 Star Slots

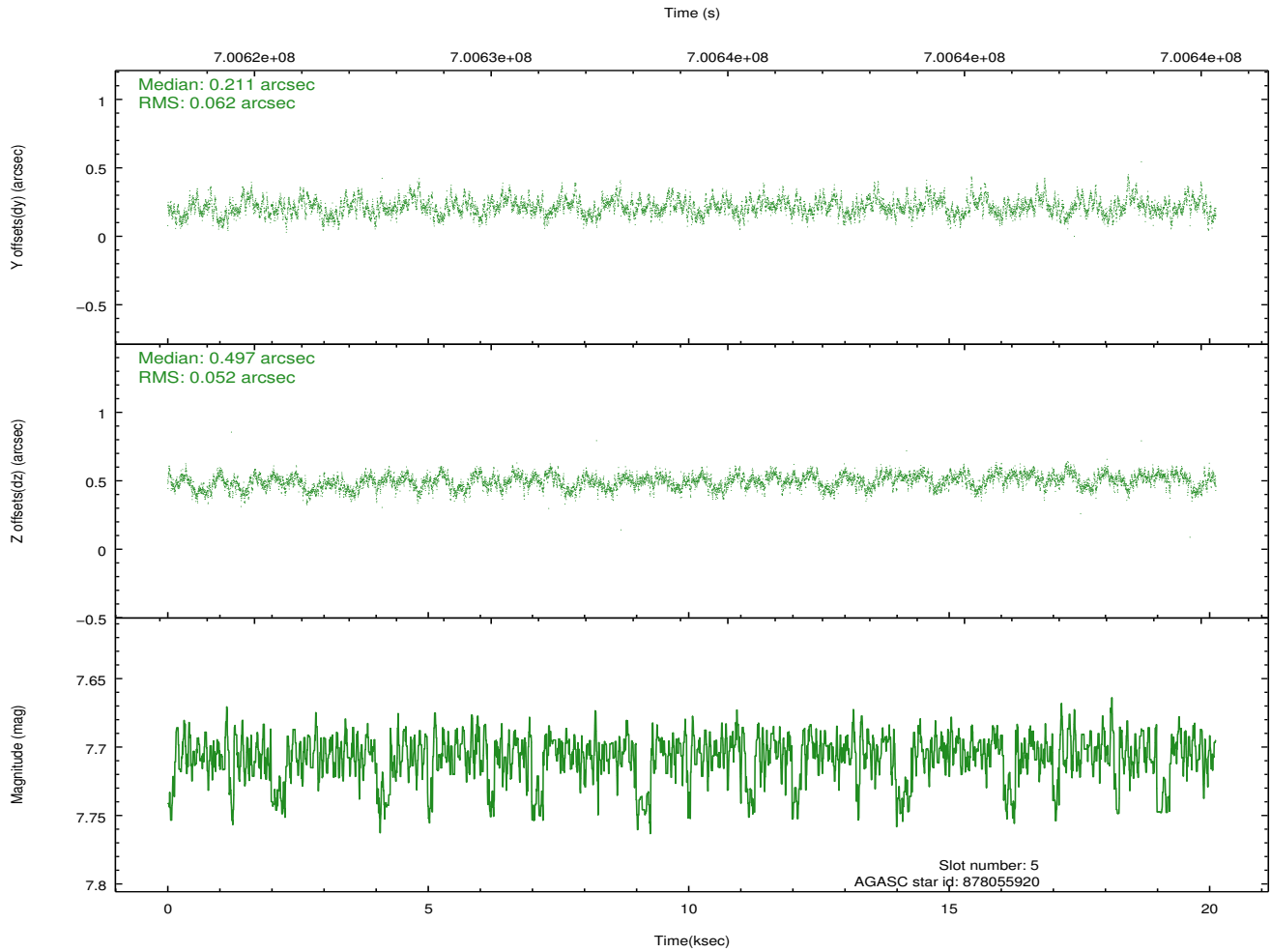
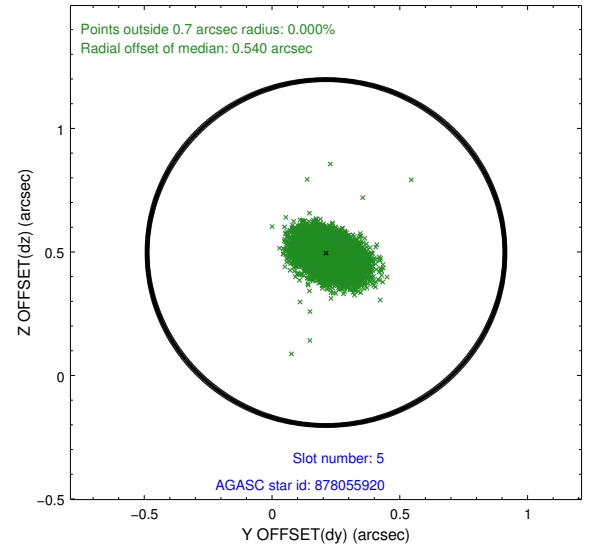
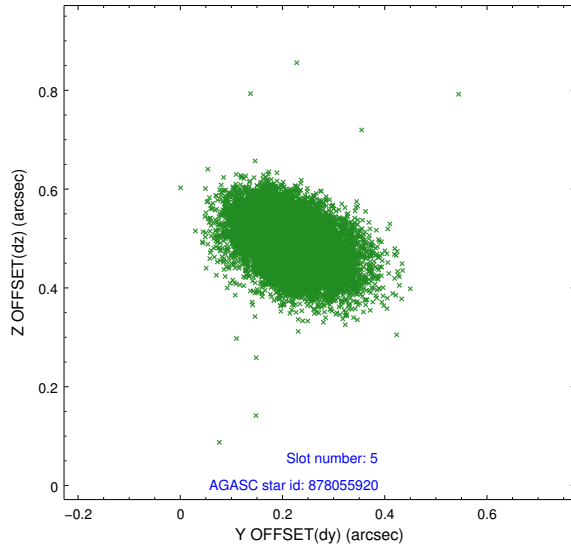
2.4.1 Slot 3



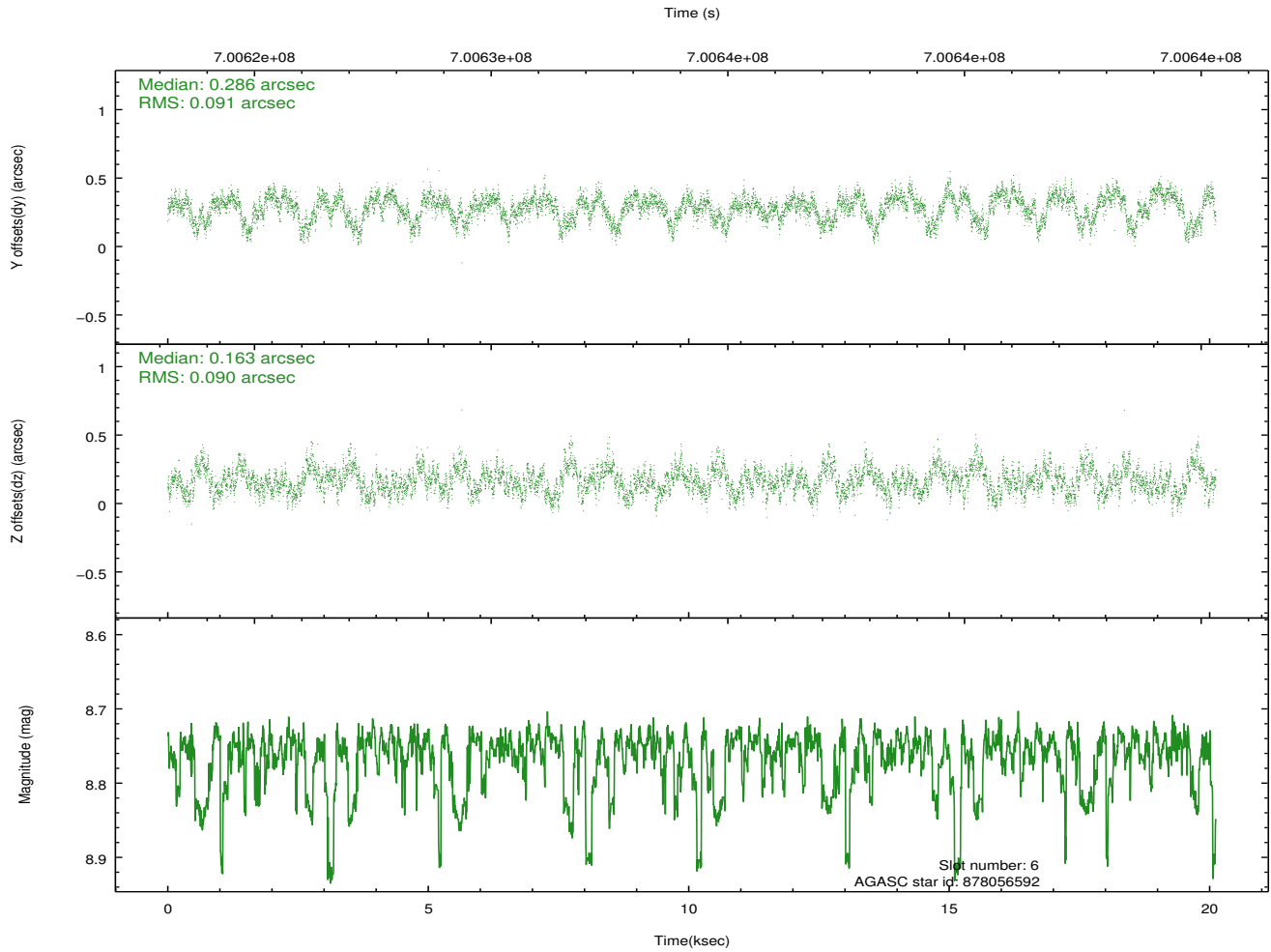
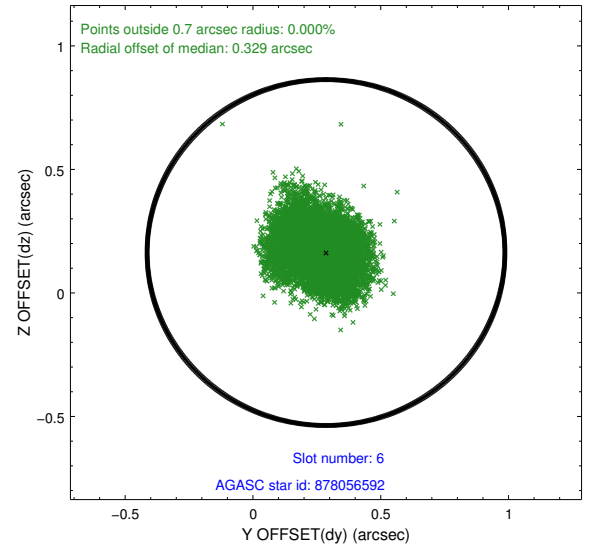
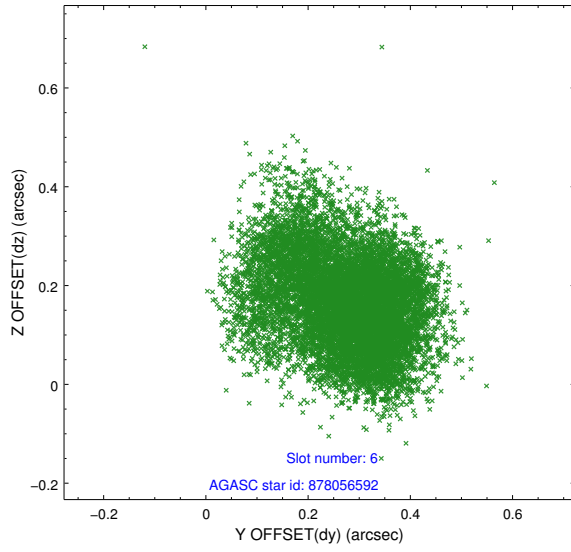
2.4.2 Slot 4



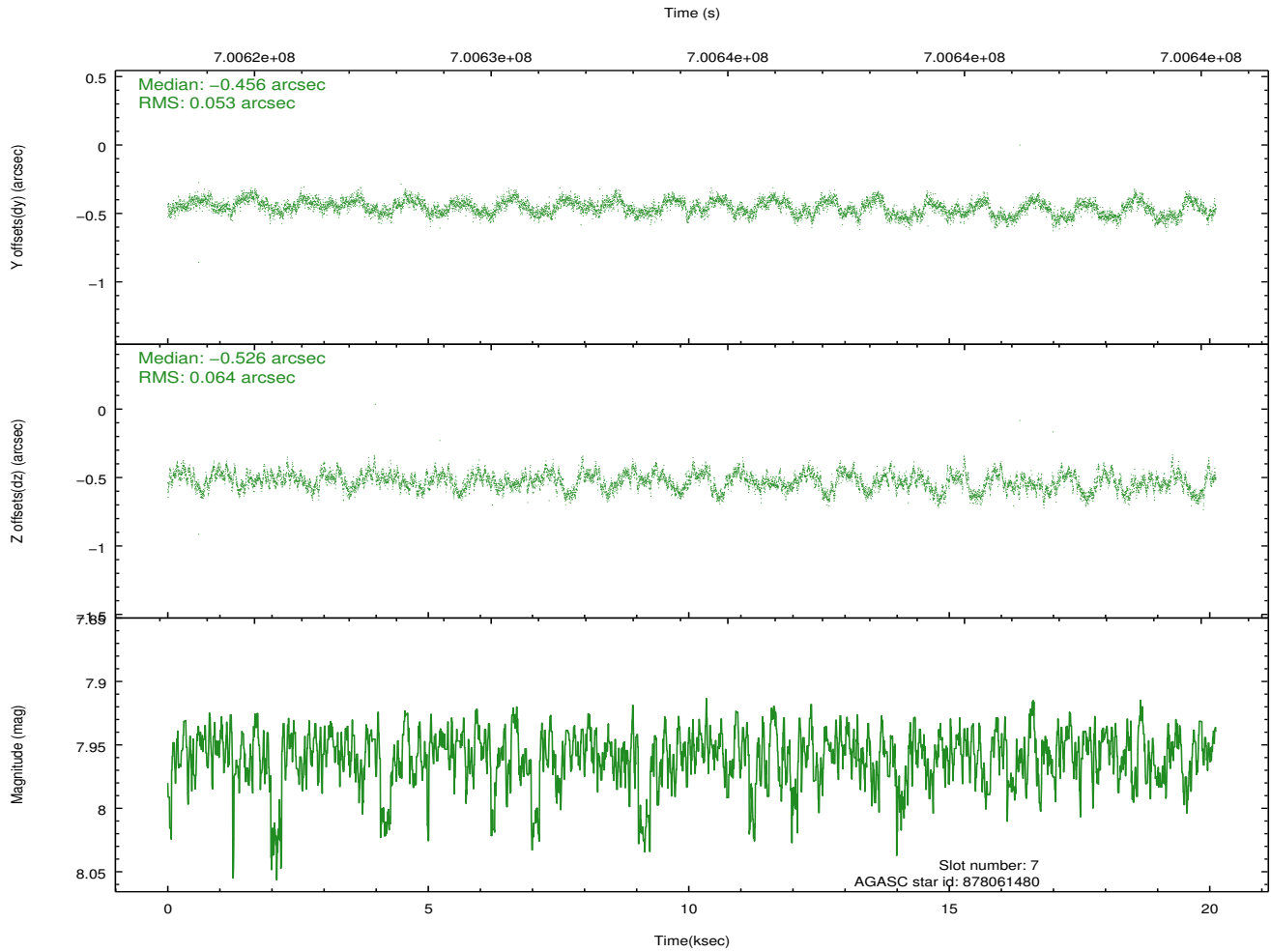
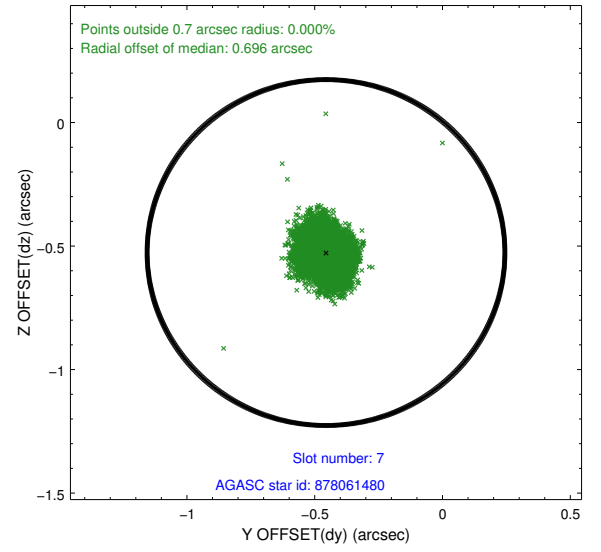
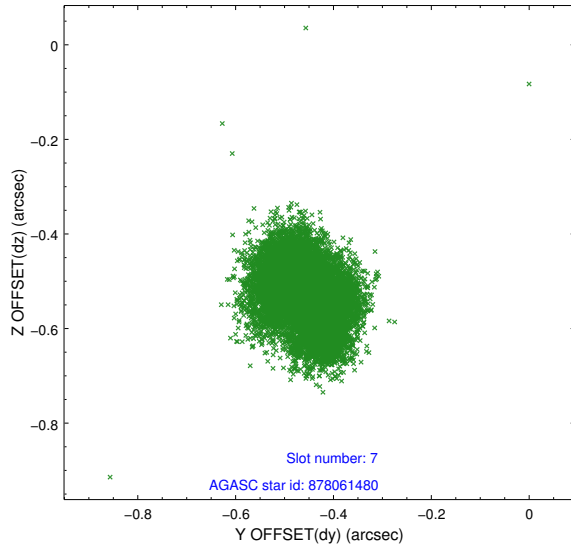
2.4.3 Slot 5



2.4.4 Slot 6

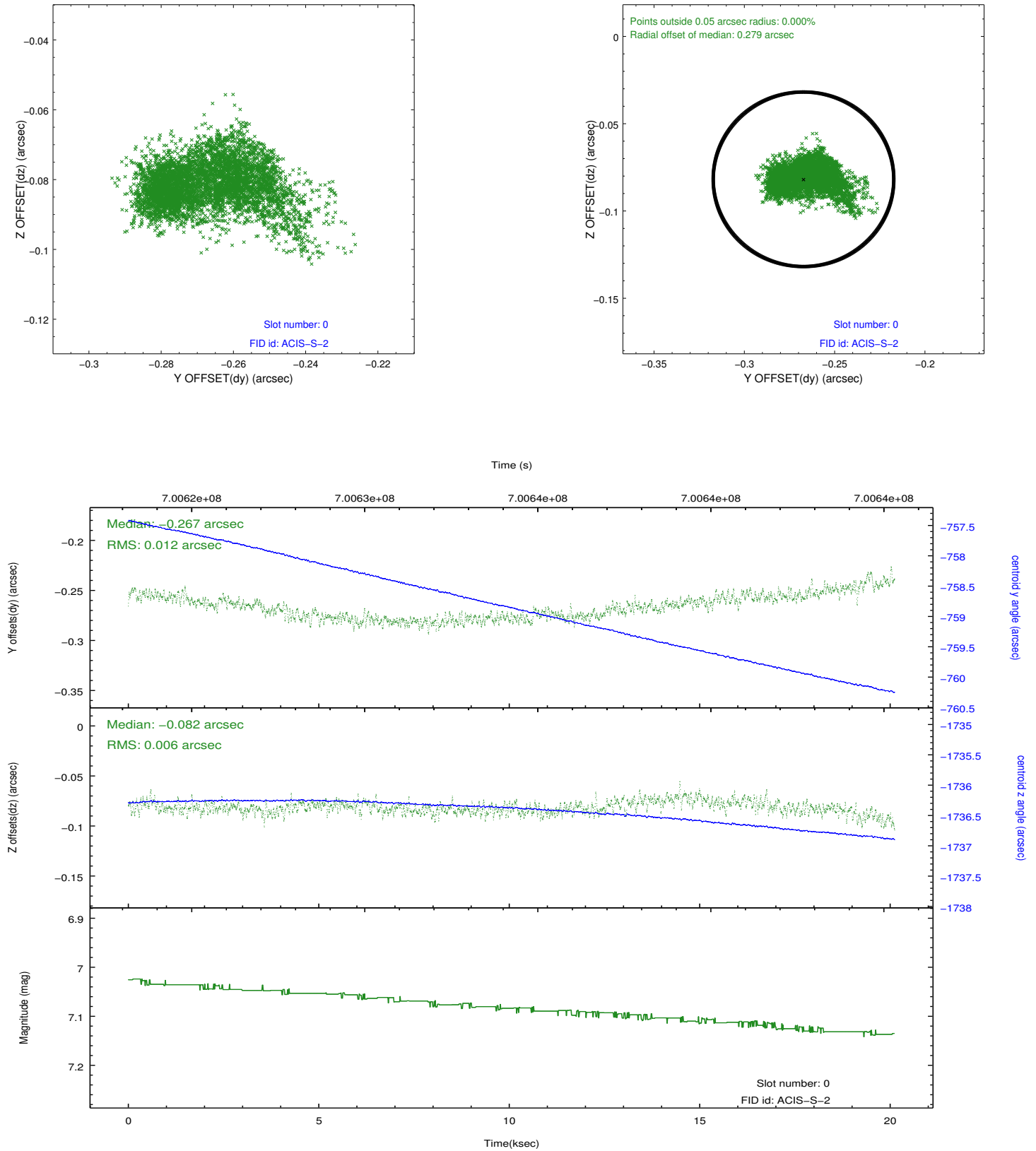


2.4.5 Slot 7

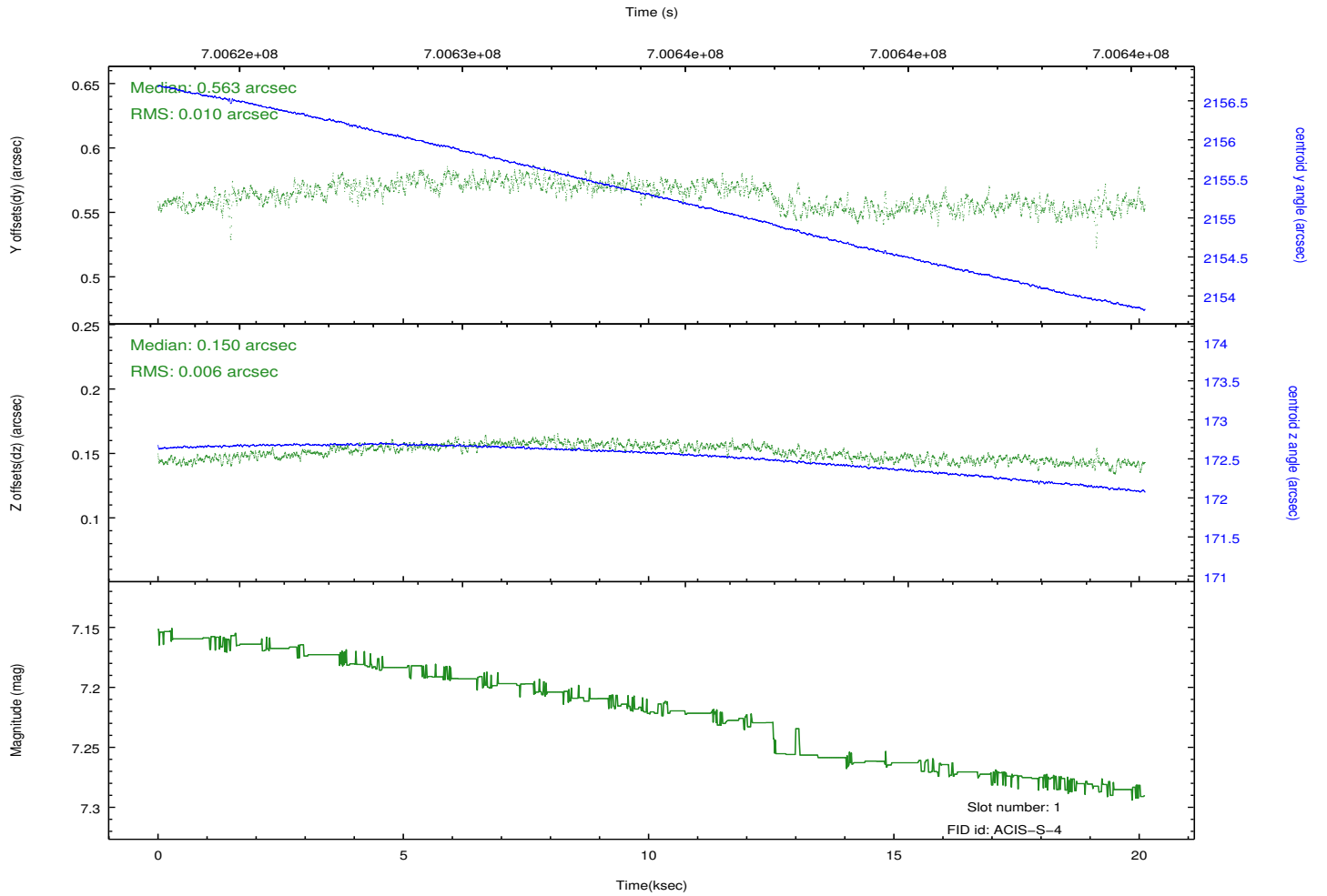
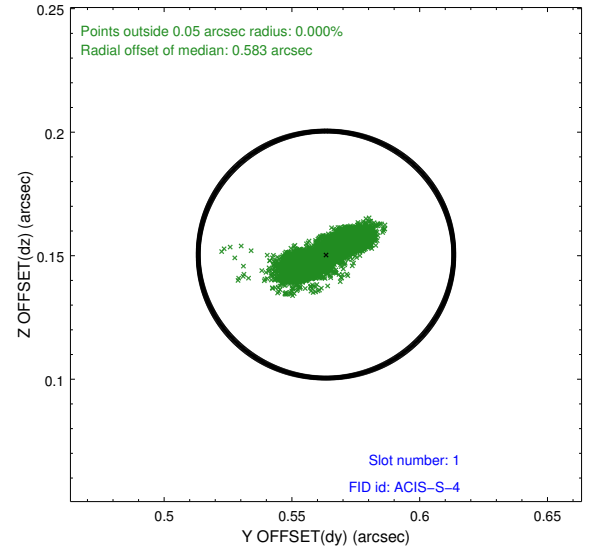
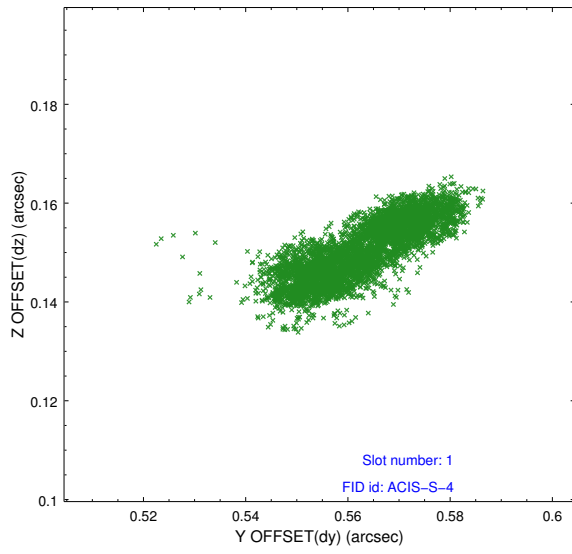


2.5 FID Slots

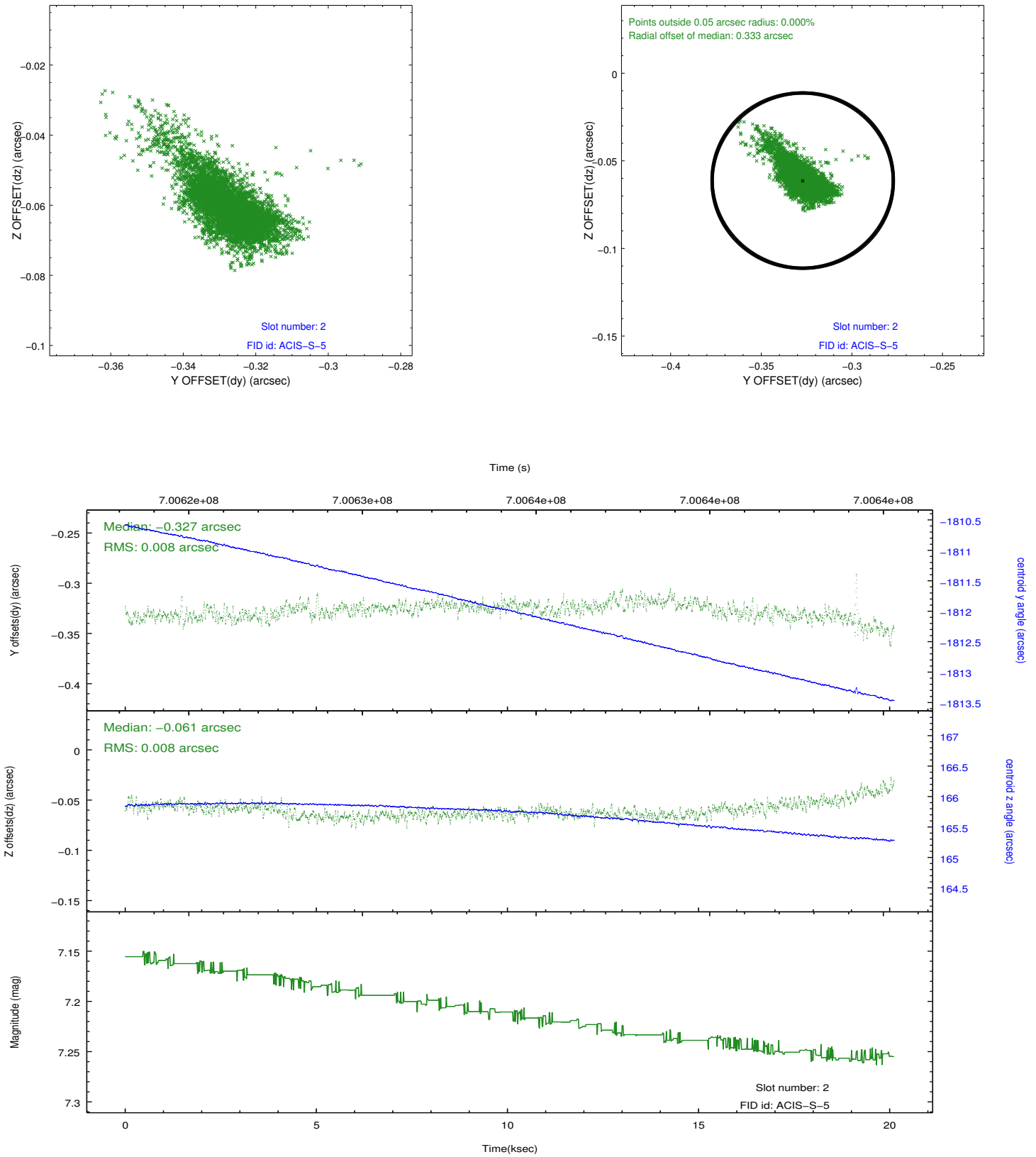
2.5.1 Slot 0



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)	2020.03.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.109392265439

A.2 Comments

Joint proposal with HST and NRAO.

One optional chip was dropped.