

V&V Reference Report

L2 ASCDS Version : 10.8.1

Observation 23116 - L2 Version 1
Chandra X-Ray Center

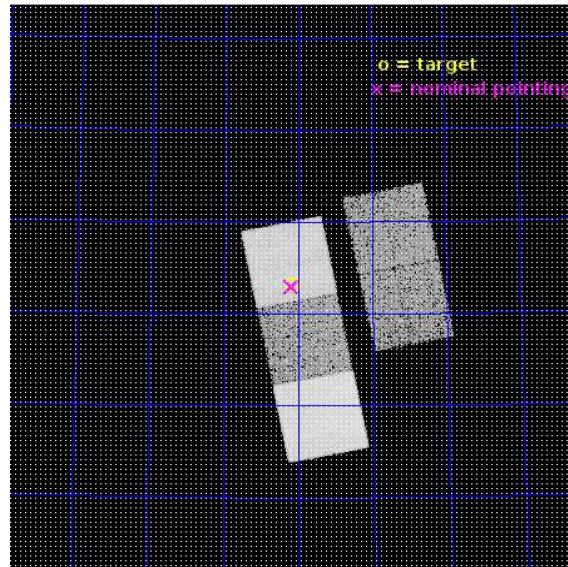
L2 Processing Date : Jan 25 2020

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1 Front

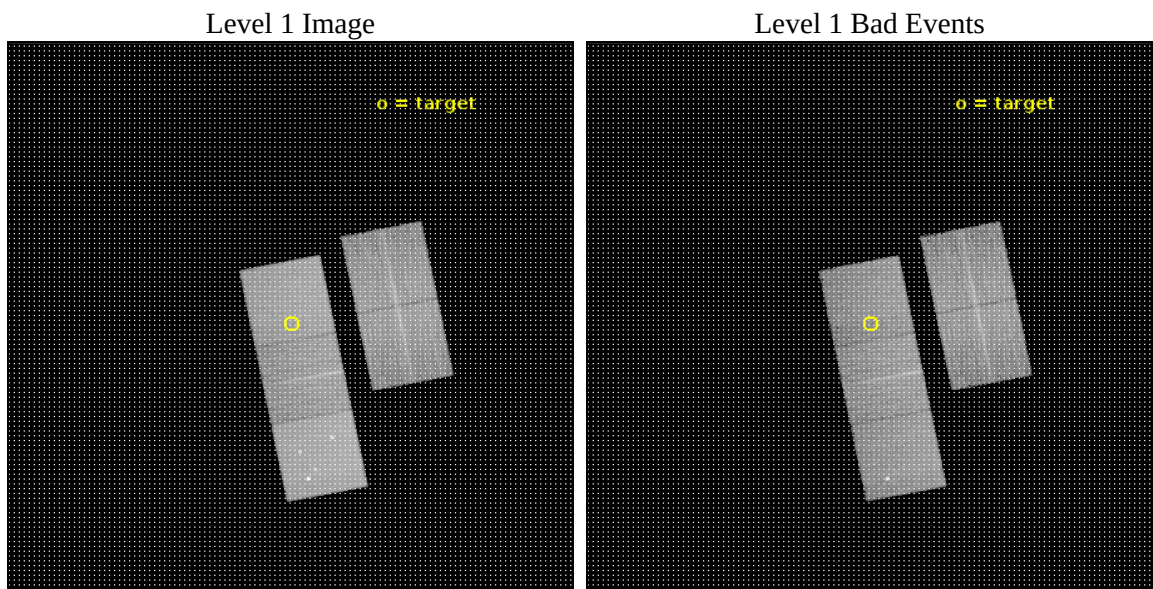
seq_num	402196	Sequence number
obs_id	23116	Observation id
title	Intrabinary shock emission of the black widow candidate 4FGL J0336.0+7502	Proposal title
observer	Kwan Lok Li	Principal investigator
object	4FGL J0336.0+7502	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	54.035833	Observer's specified target RA [deg]
dec_targ	75.053861	Observer's specified target Dec [deg]
ra_nom	54.049562675254	Nominal RA [deg]
dec_nom	75.049675537623	Nominal Dec [deg]
roll_nom	258.71926092135	Nominal Roll [deg]
revision	1	Processing version of data
ontime	15056.700115919	Sum of GTIs [s]
livetime	14859.973244323	Livetime [s]
ontime2	15056.700115919	Sum of GTIs [s]
ontime3	15056.700115919	Sum of GTIs [s]
ontime5	15056.700115919	Sum of GTIs [s]
ontime6	15056.700115919	Sum of GTIs [s]
ontime7	15056.700115919	Sum of GTIs [s]
l2events	184125	Number of level 2 events



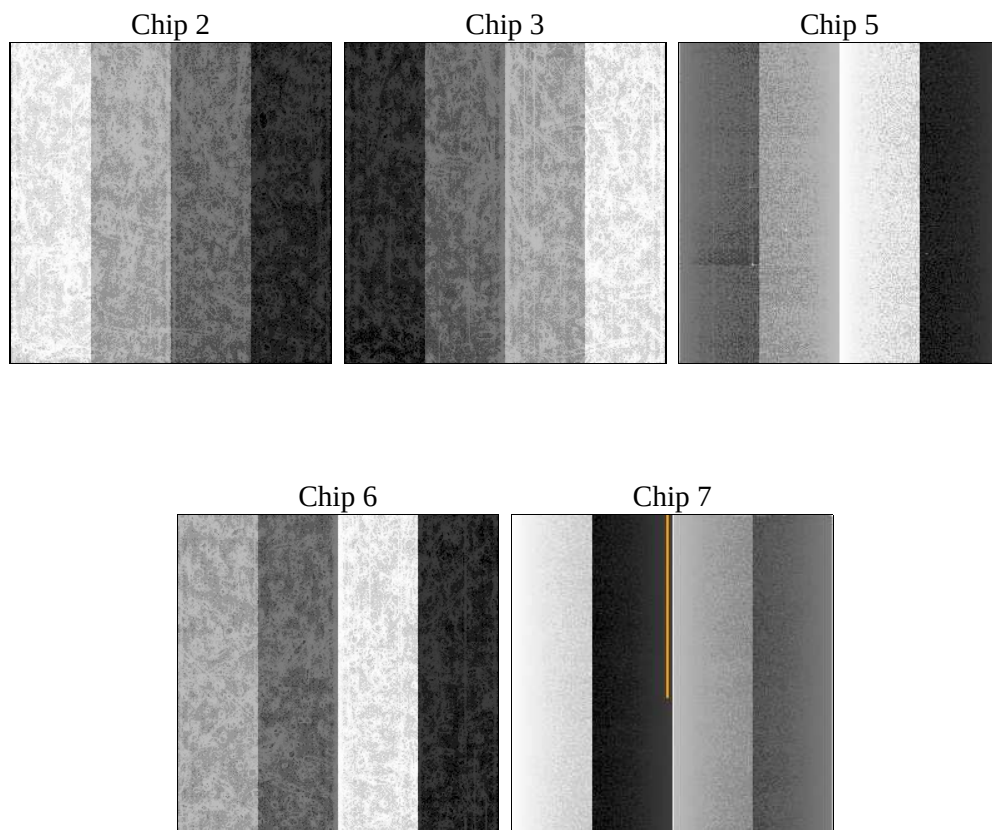
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	15000.000000	[s] Scheduled observation exposure time
ascdsver	10.8.1	Processing system revision	ontime	15056.700115919	Sum of GTIs [s]
caldsver	4.8.4.2	 	ontime2	15056.700115919	Sum of GTIs [s]
date	2020-01-25T22:46:56	Date and time of file creation	ontime3	15056.700115919	Sum of GTIs [s]
revision	1	Processing version of data	ontime5	15056.700115919	Sum of GTIs [s]
			ontime6	15056.700115919	Sum of GTIs [s]
			ontime7	15056.700115919	Sum of GTIs [s]
			l1events	688240	Number of level 1 events

2.1.4 Events

	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	112725	107453	197558	118860	151644
rejected events	99969	95116	102041	105400	86116
rejected %	88%	88%	51%	88%	56%

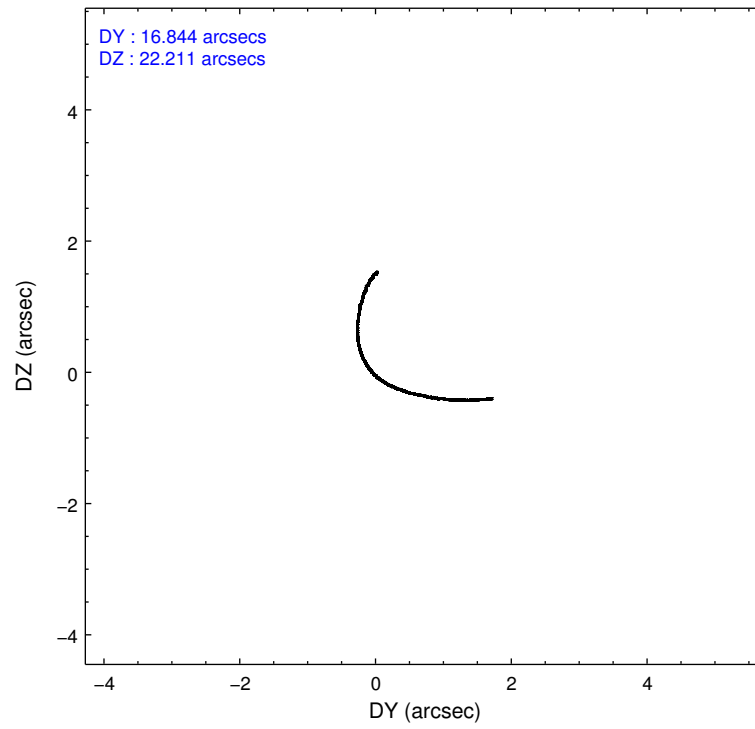
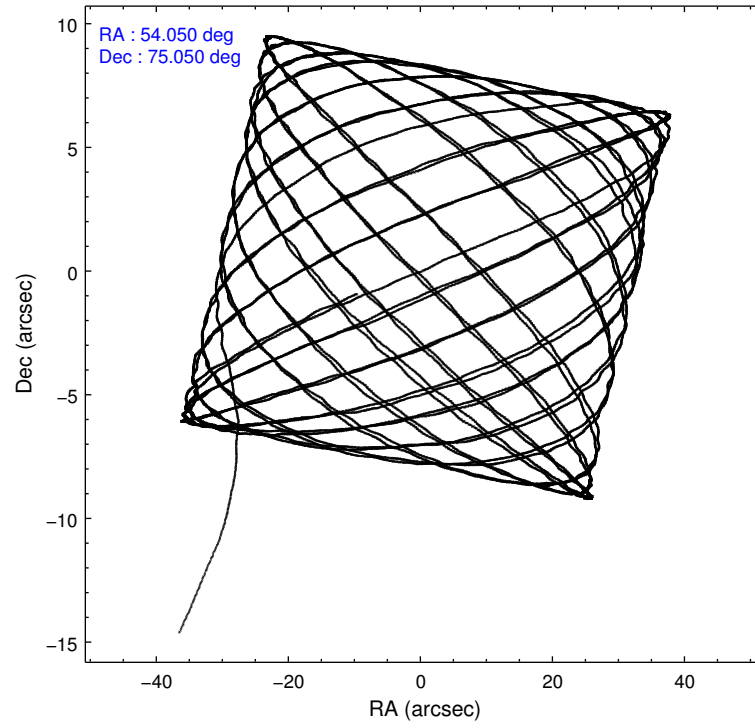
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	4577	4533	9849	4545	5447
	4%	4%	4%	3%	3%
grade 1 events	76	78	450	60	231
	0%	0%	0%	0%	0%
grade 2 events	3224	2772	30544	3148	14169
	2%	2%	15%	2%	9%
grade 3 events	1295	1238	2744	1346	5011
	1%	1%	1%	1%	3%
grade 4 events	1238	1321	2672	1258	5112
	1%	1%	1%	1%	3%
grade 5 events	4579	5475	13380	5548	15066
	4%	5%	6%	4%	9%
grade 6 events	2424	2477	49740	3164	35801
	2%	2%	25%	2%	23%
grade 7 events	95312	89559	88179	99791	70807
	84%	83%	44%	83%	46%

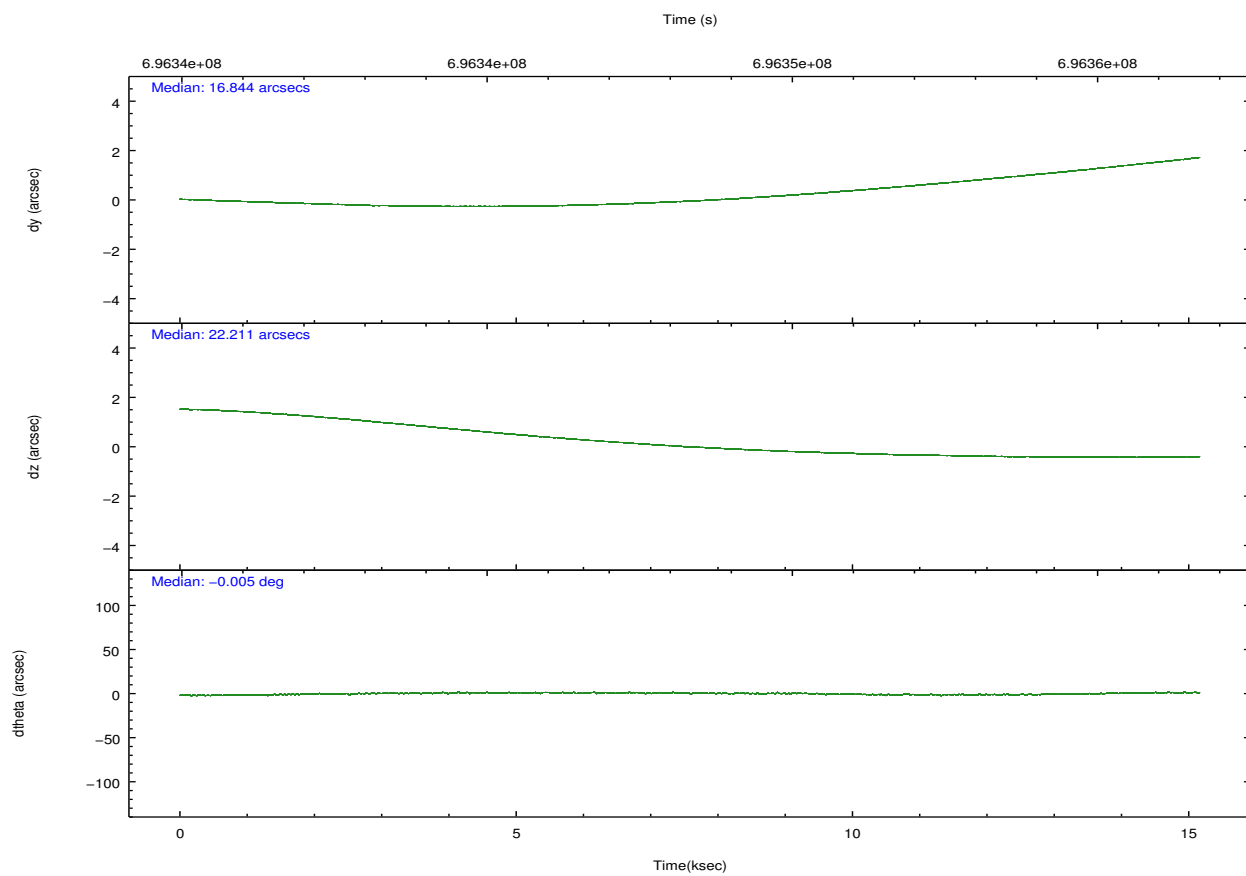
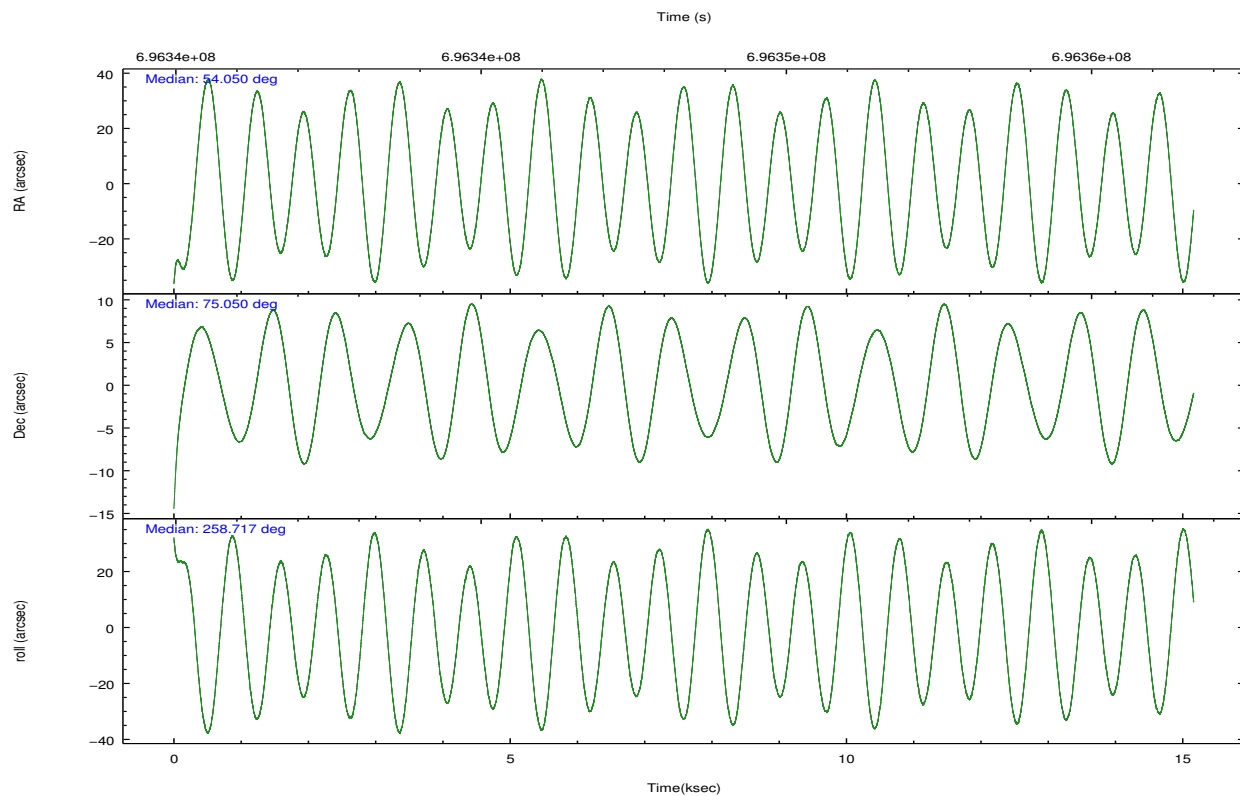
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-23567	ACIS-23567
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	54.014162	54.04956267525375
[deg] Pointing Dec	75.075588	75.04967553762265
[deg] Pointing Roll	258.596838	258.7192609213536
[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)	696340918.184000	696339906.6460201
Observation start date	2020-01-25T12:00:49	2020-01-25T11:45:06
[s] Observation end time (MET)	696355918.184000	696356739.1970299
Observation end date	2020-01-25T16:10:49	2020-01-25T16:25:39
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	O2	Y
CCD I3 on	Y	Y
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



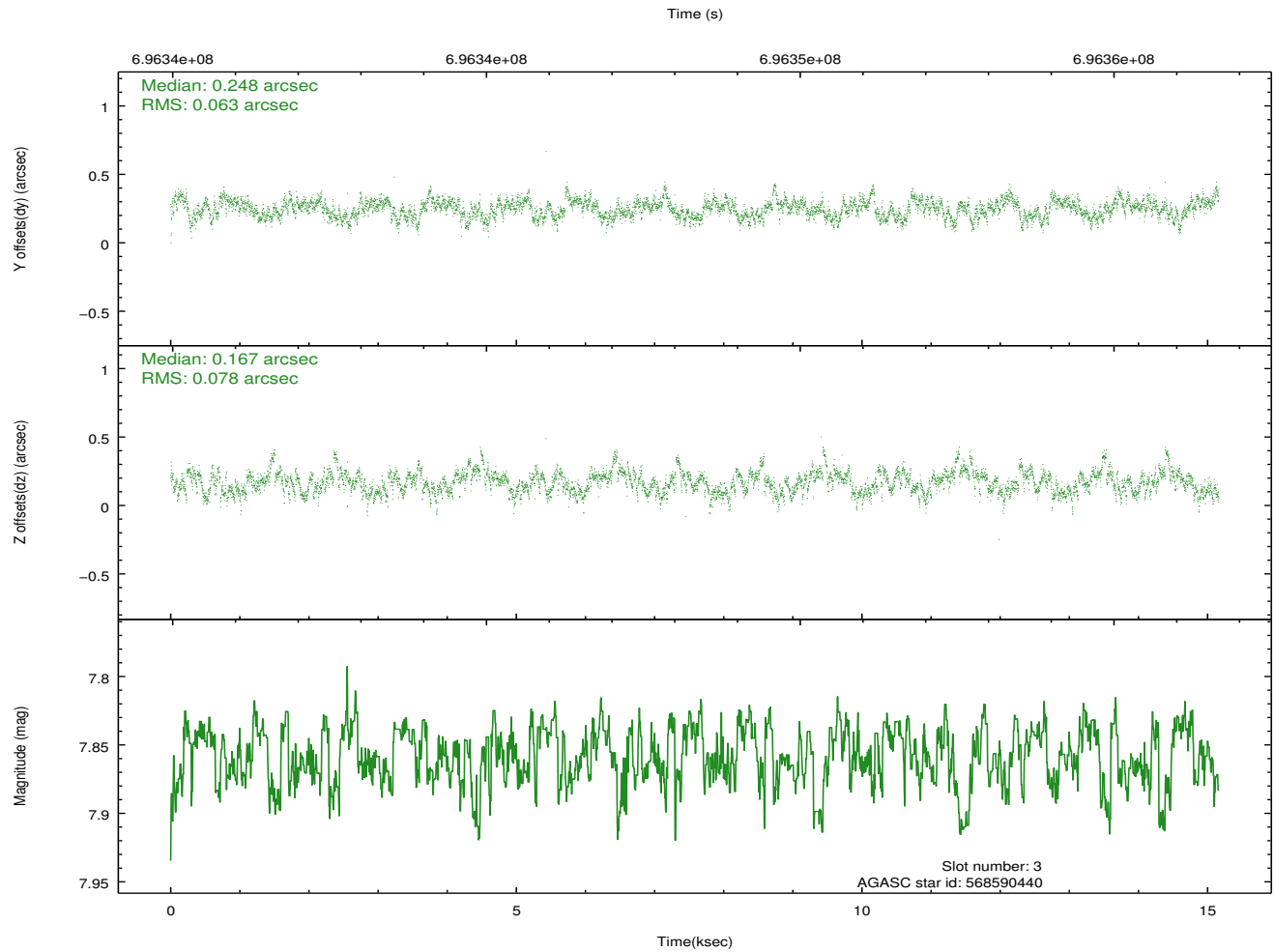
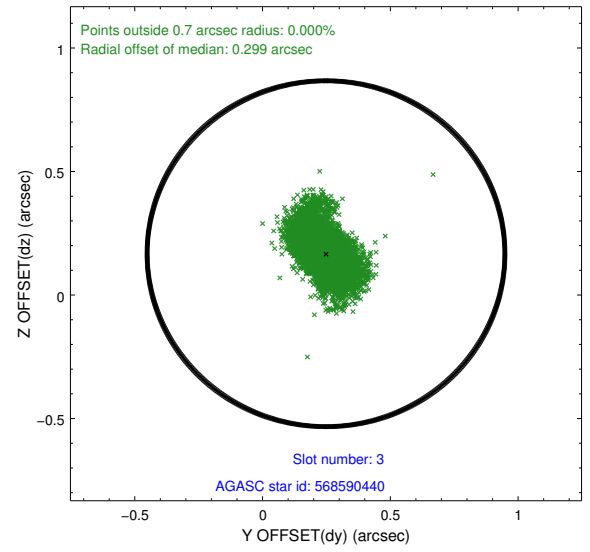
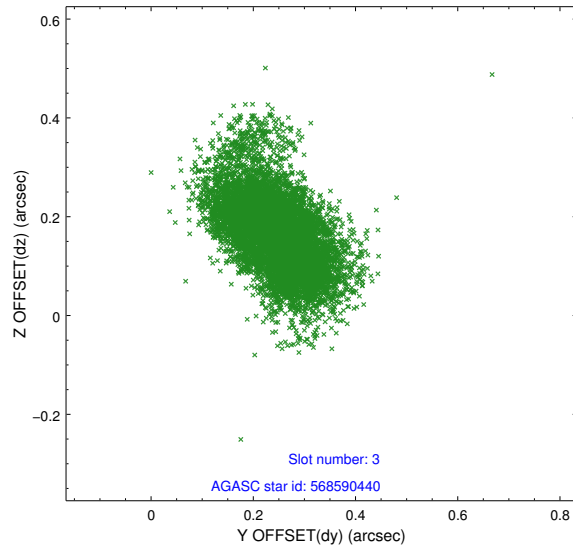


Slot Statistics

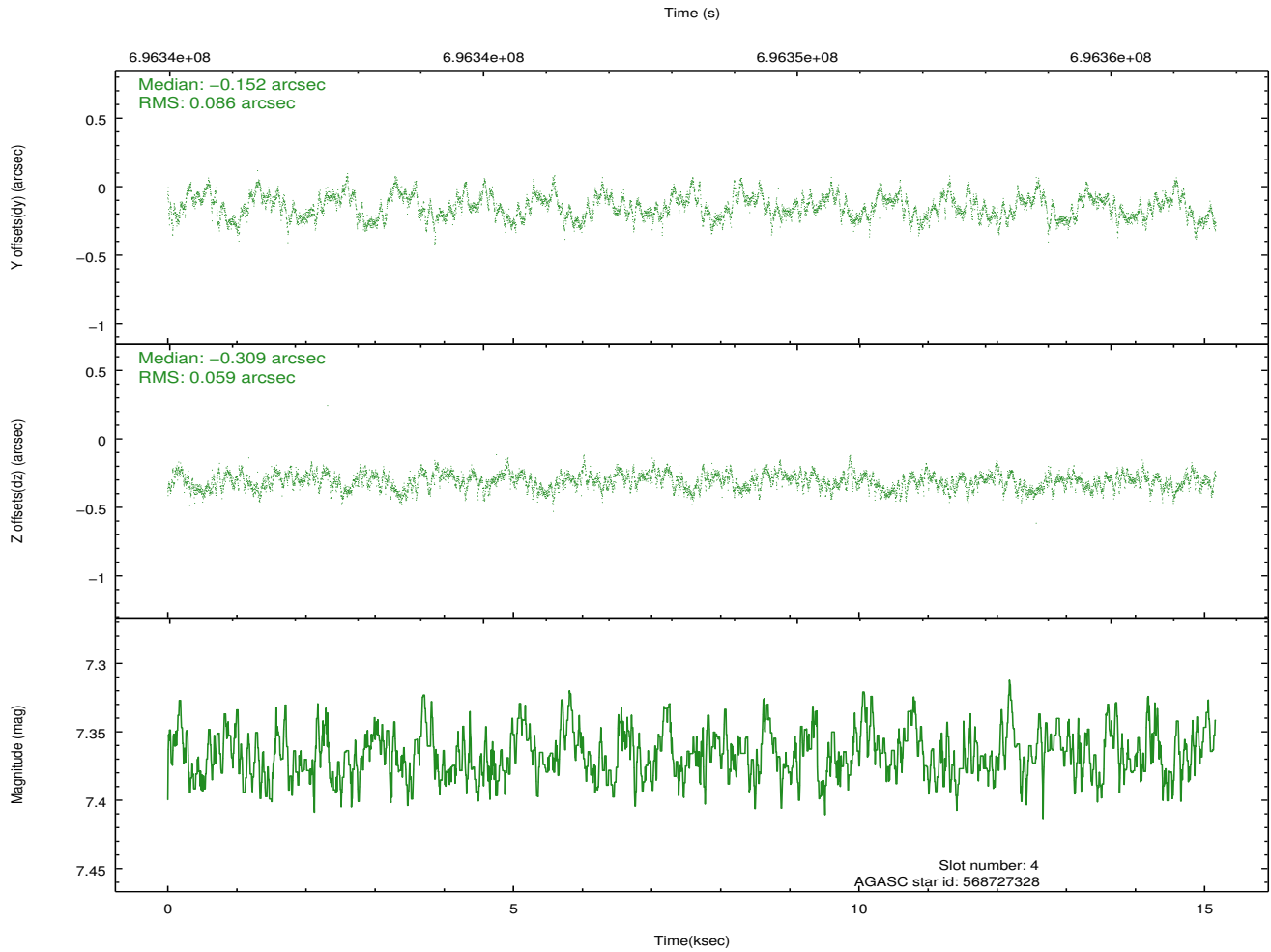
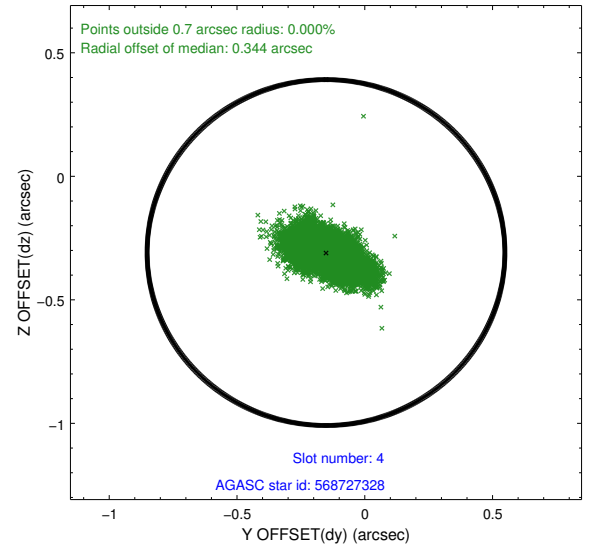
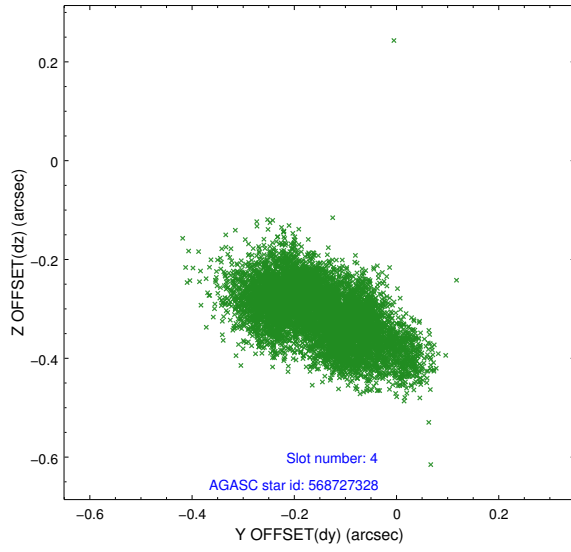
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.01	3698	1.000	-0.296	-0.242	0.014	0.026	0.000000	0.000000	-770.41	-1744
1	FID		ACIS-S-4	7.14	3699	1.000	0.727	0.206	0.012	0.032	0.000000	0.000000	2143.71	164
2	FID		ACIS-S-5	7.09	3699	1.000	-0.466	0.045	0.013	0.028	0.000000	0.000000	-1823.08	158
3	GUIDE	used	568590440	7.86	7396	1.000	0.248	0.167	0.103	0.180	52.105213	74.951845	761.98	-1666
4	GUIDE	used	568727328	7.37	7398	1.000	-0.152	-0.309	0.109	0.182	54.651615	74.737994	1067.99	831
5	GUIDE	used	591006736	7.16	7398	1.000	-0.092	-0.040	0.082	0.131	54.868228	75.294892	-933.39	607
6	GUIDE	used	591007552	8.06	7393	1.000	-0.261	-0.395	0.089	0.144	56.406896	75.181415	-852.58	2074
7	GUIDE	used	591029336	8.06	7392	1.000	0.257	0.581	0.095	0.148	54.174595	75.743429	-2384.67	-334

2.4 Star Slots

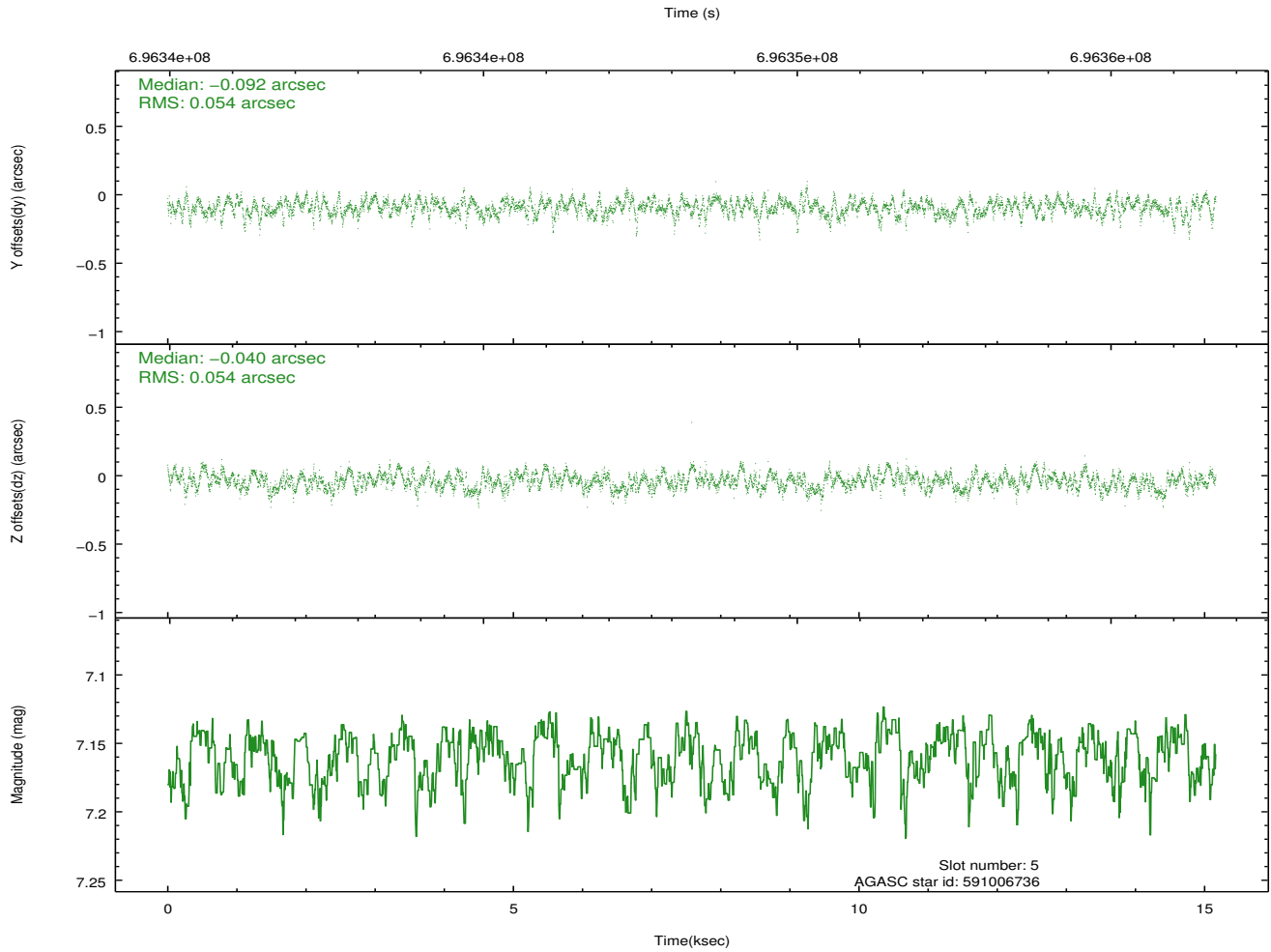
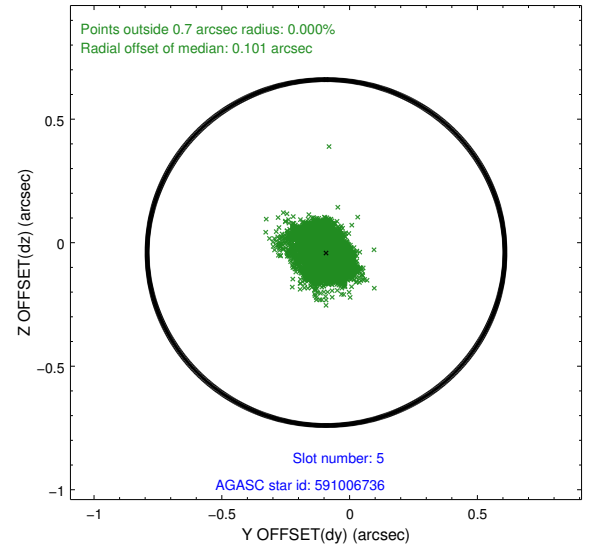
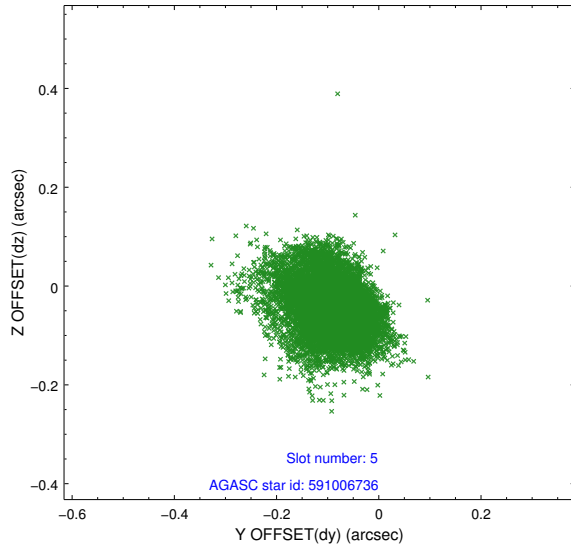
2.4.1 Slot 3



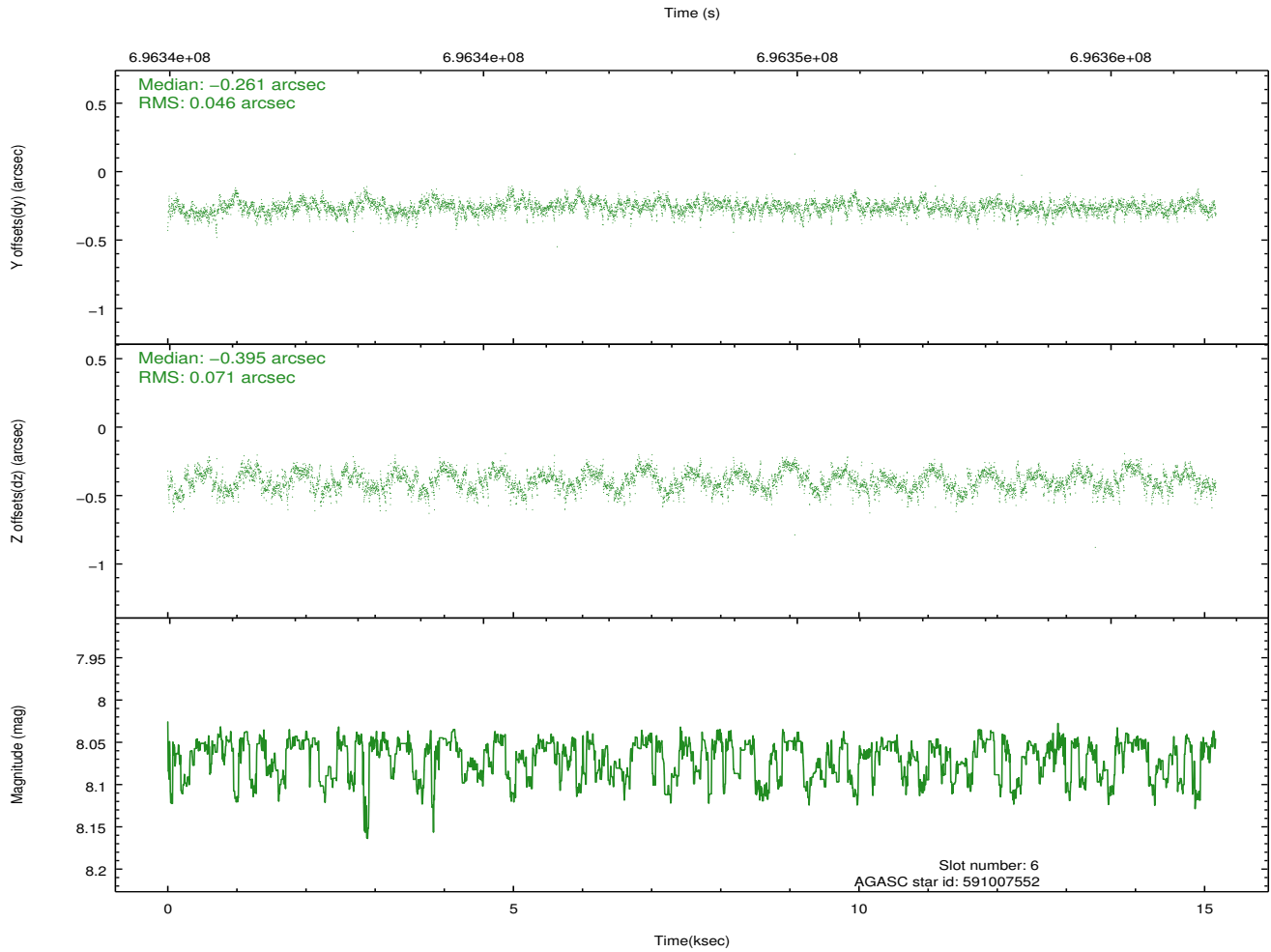
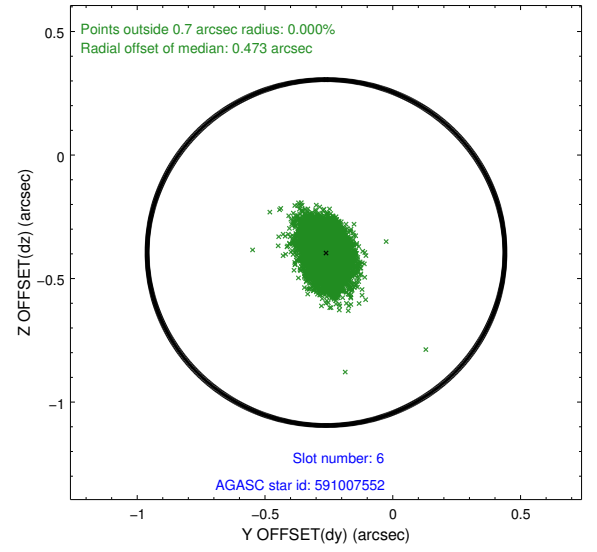
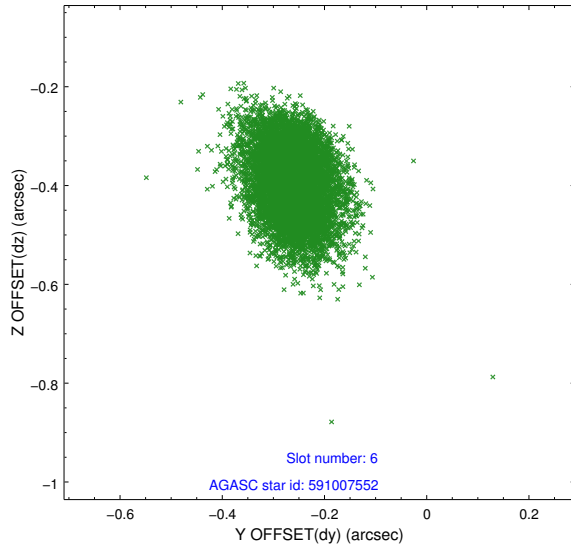
2.4.2 Slot 4



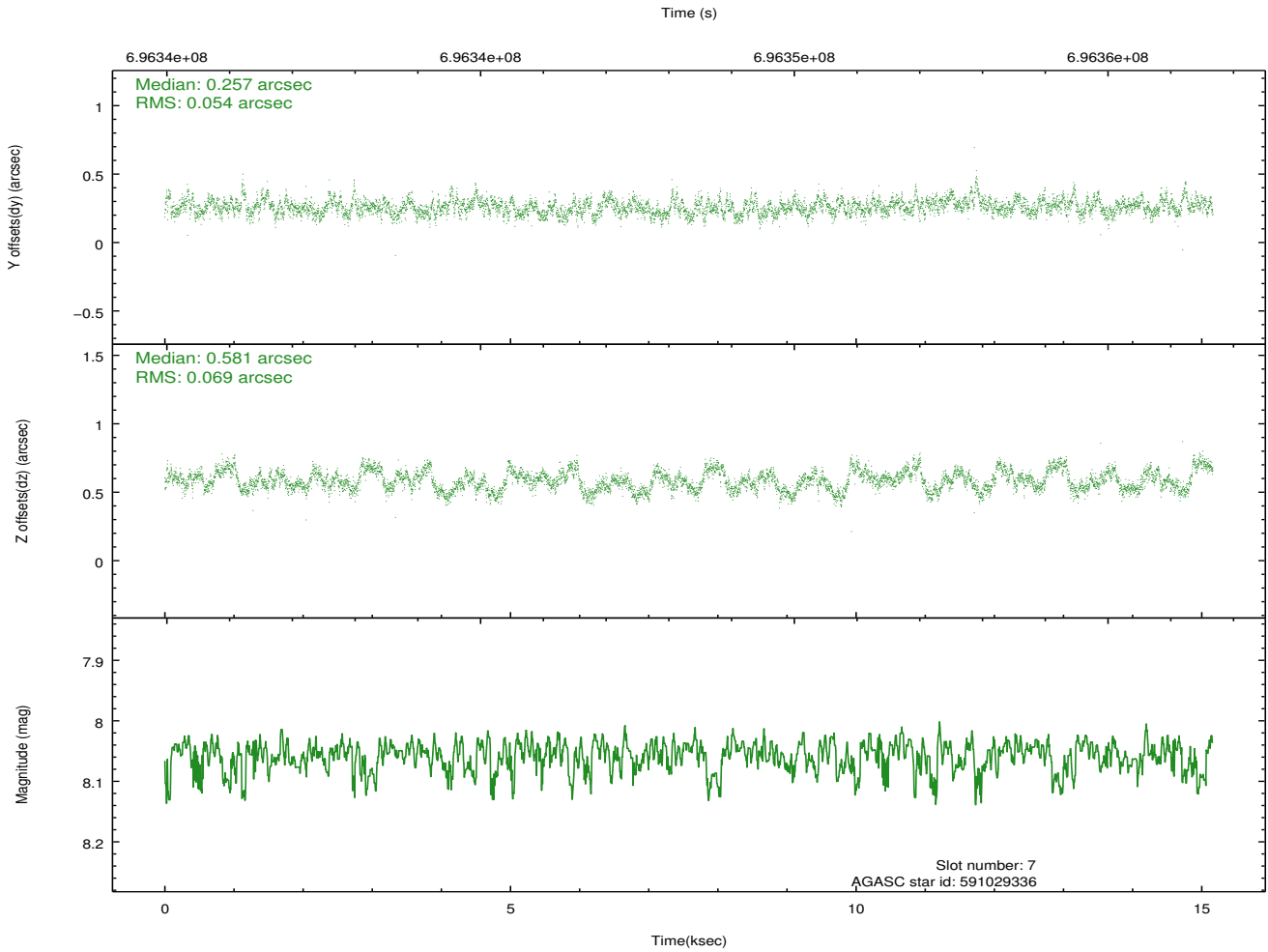
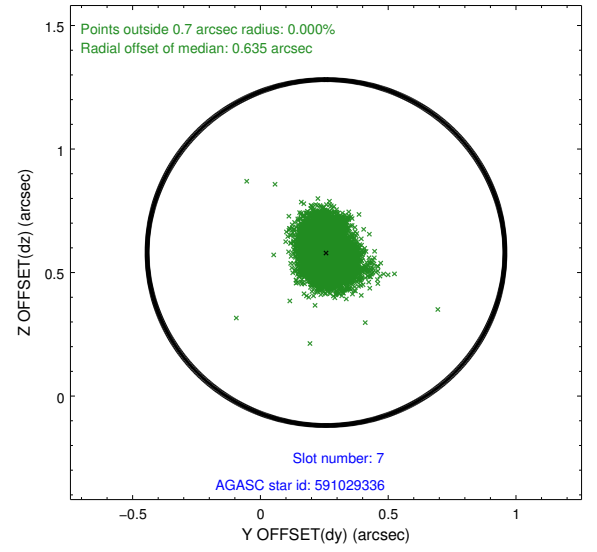
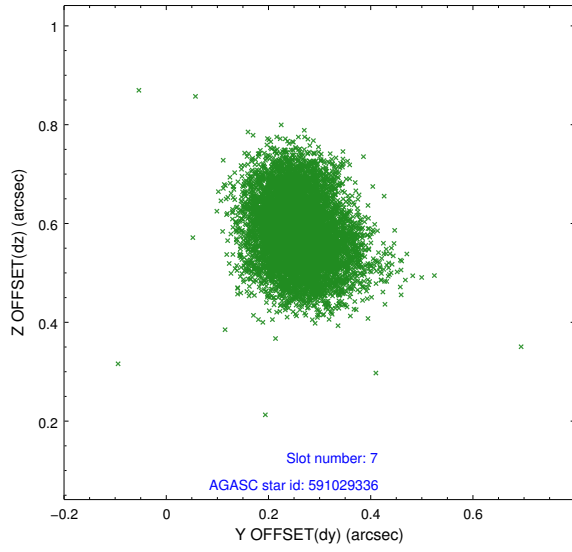
2.4.3 Slot 5



2.4.4 Slot 6

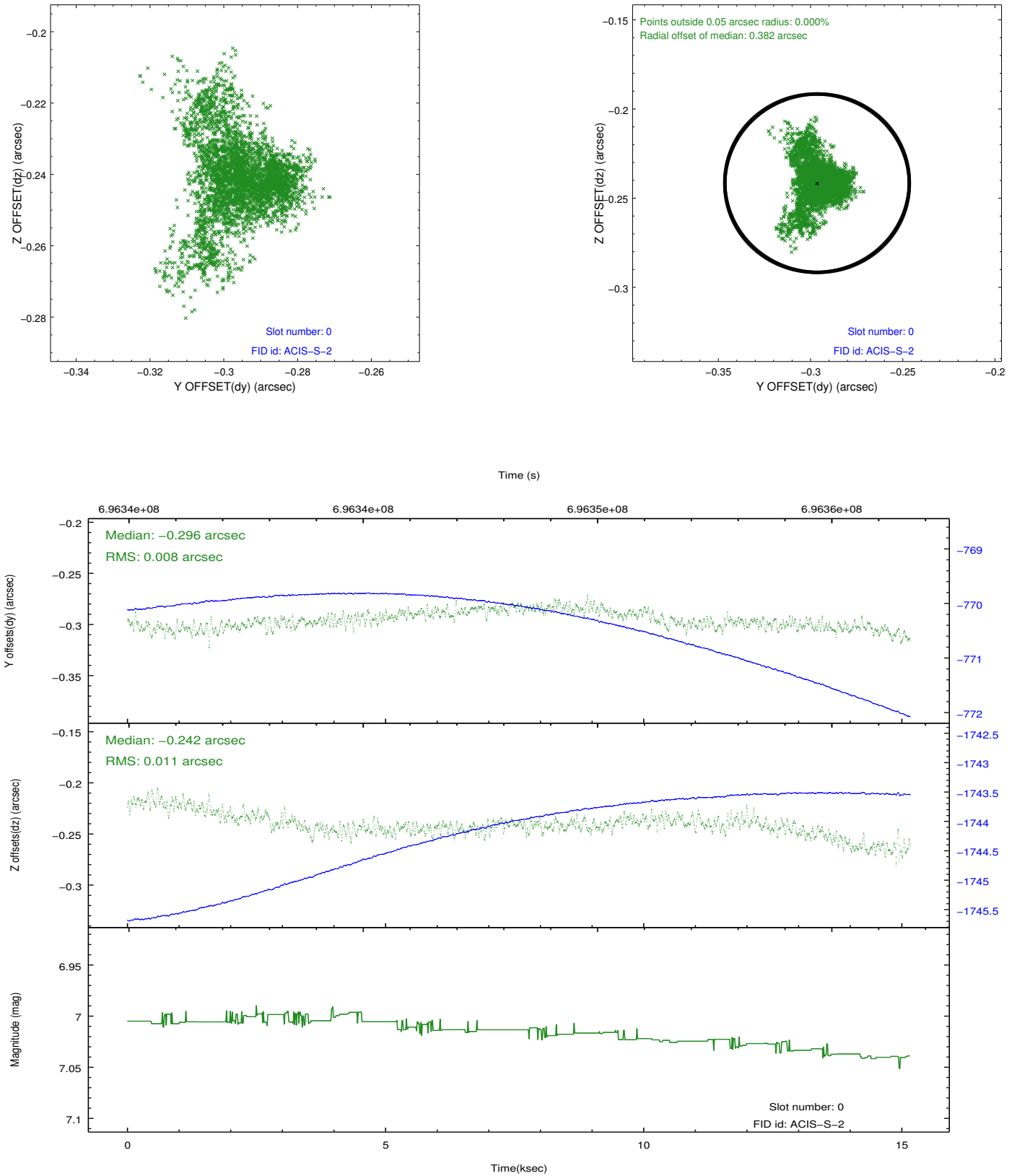


2.4.5 Slot 7

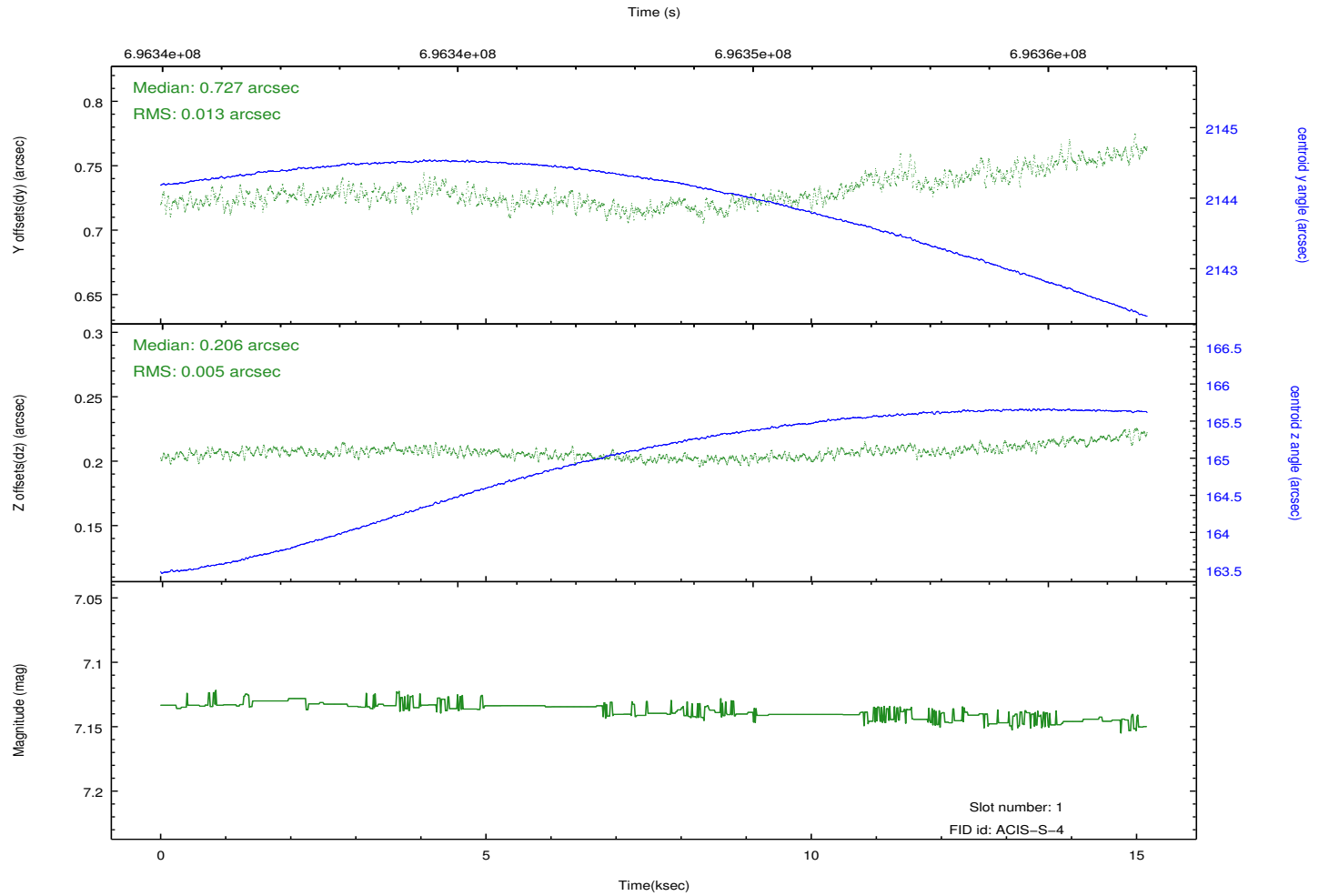
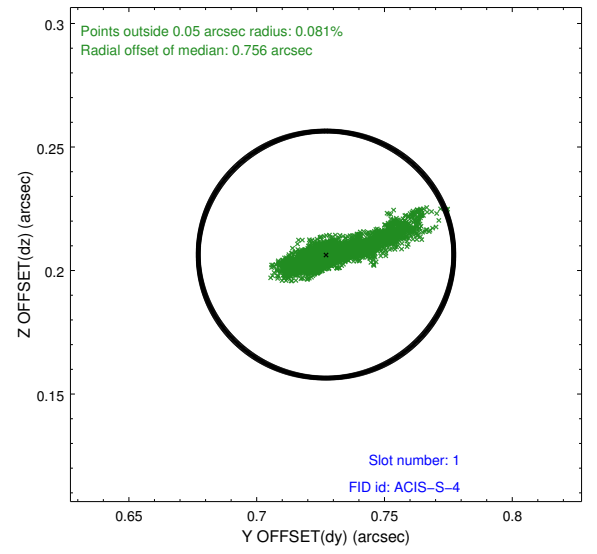
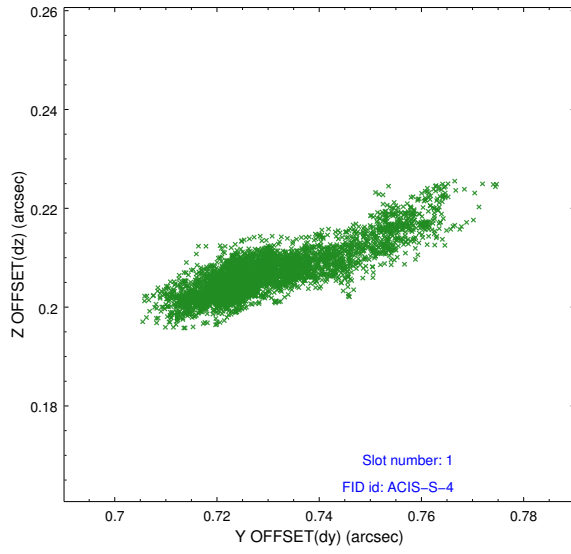


2.5 FID Slots

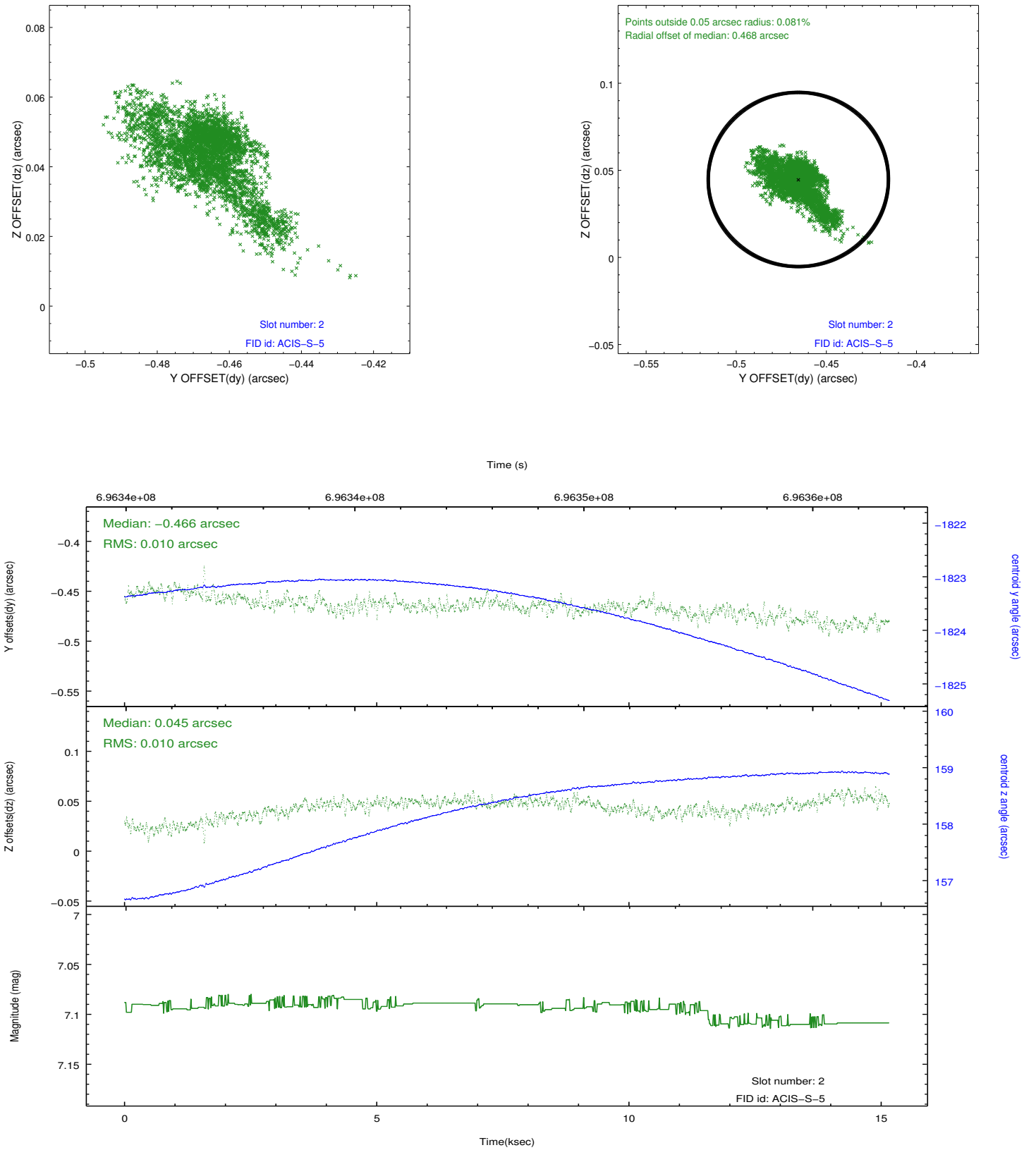
2.5.1 Slot 0



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)	2020.01.26
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	15.056700115919

A.2 Comments

One optional chip was dropped.