

V&V Reference Report

L2 ASCDS Version : 10.6

Observation 20137 - L2 Version 2
Chandra X-Ray Center

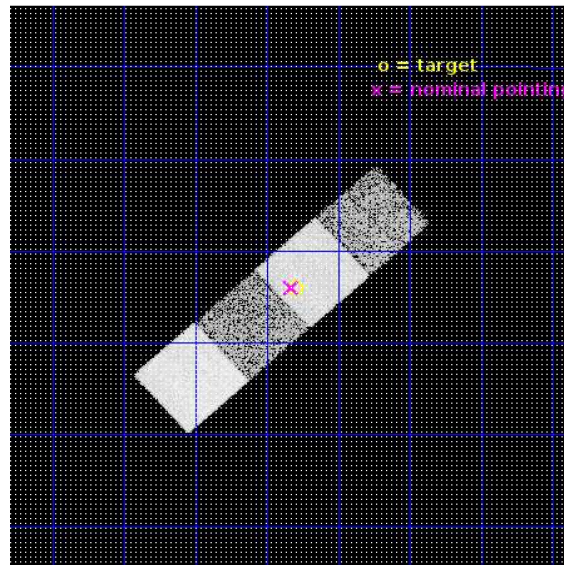
L2 Processing Date : Dec 28 2017

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1 Front

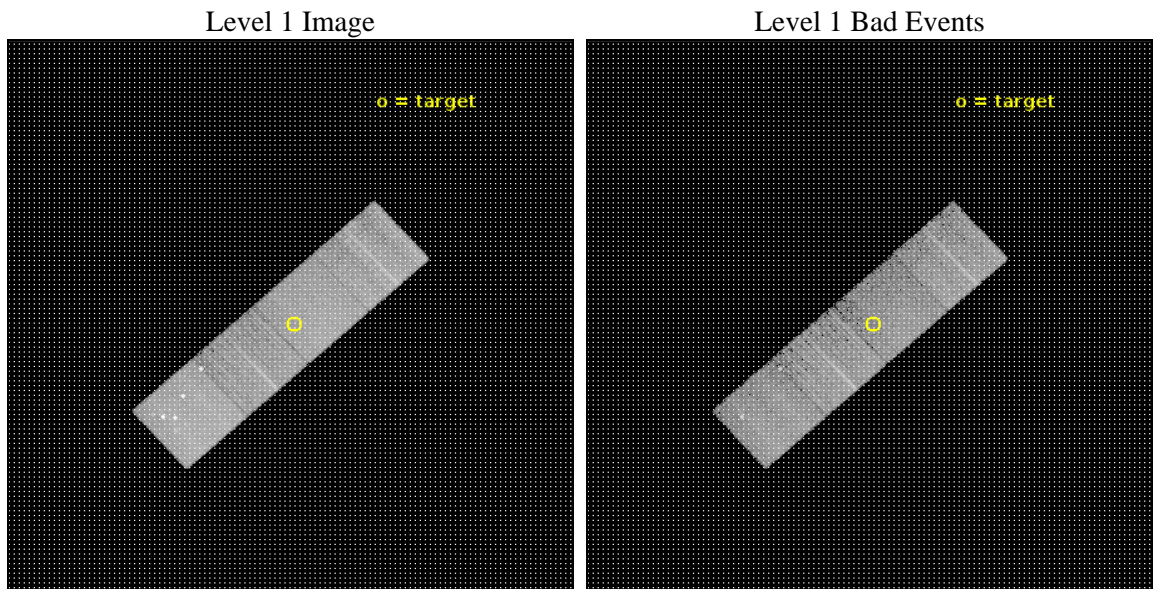
seq_num	201159	Sequence number
obs_id	20137	Observation id
title	A Comprehensive Search for X-ray Emission from the Coolest Magnetically Active Brown Dwarfs	Proposal title
observer	Peter Williams	Principal investigator
object	2MASS J0423485-041403	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	65.95	Observer's specified target RA [deg]
dec_targ	-4.233889	Observer's specified target Dec [deg]
ra_nom	65.957022493651	Nominal RA [deg]
dec_nom	-4.2336041864108	Nominal Dec [deg]
roll_nom	317.90149339105	Nominal Roll [deg]
revision	2	Processing version of data
ontime	8260.1002117395	Sum of GTIs [s]
livetime	8152.1759214759	Livetime [s]
ontime5	8260.0591717958	Sum of GTIs [s]
ontime6	8260.0181317329	Sum of GTIs [s]
ontime7	8260.1002117395	Sum of GTIs [s]
ontime8	8250.5537906885	Sum of GTIs [s]
l2events	88967	Number of level 2 events



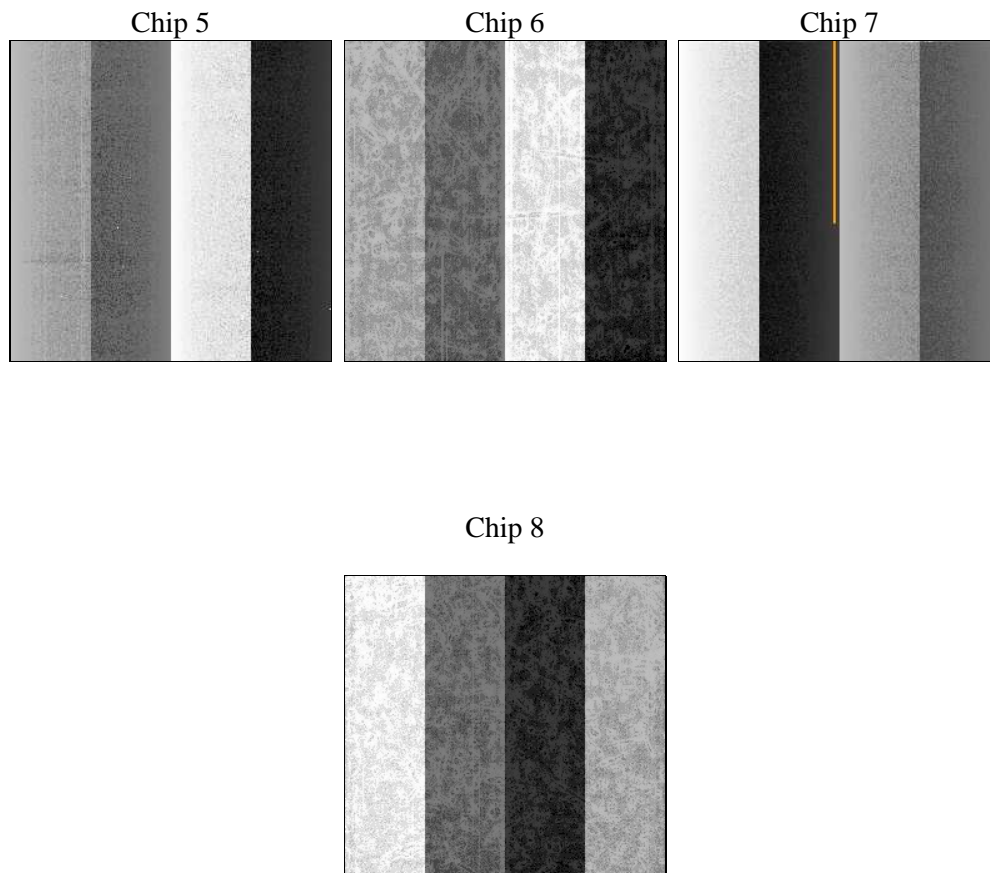
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	8200.000000	[s] Scheduled observation exposure time
ascdsver	10.6	Processing system revision	ontime	8260.1002117395	Sum of GTIs [s]
caldsver	4.7.7	 	ontime5	8260.0591717958	Sum of GTIs [s]
date	2017-12-28T20:47:07	Date and time of file creation	ontime6	8260.0181317329	Sum of GTIs [s]
revision	2	Processing version of data	ontime7	8260.1002117395	Sum of GTIs [s]
			ontime8	8250.5537906885	Sum of GTIs [s]
			l1events	329474	Number of level 1 events

2.1.4 Events

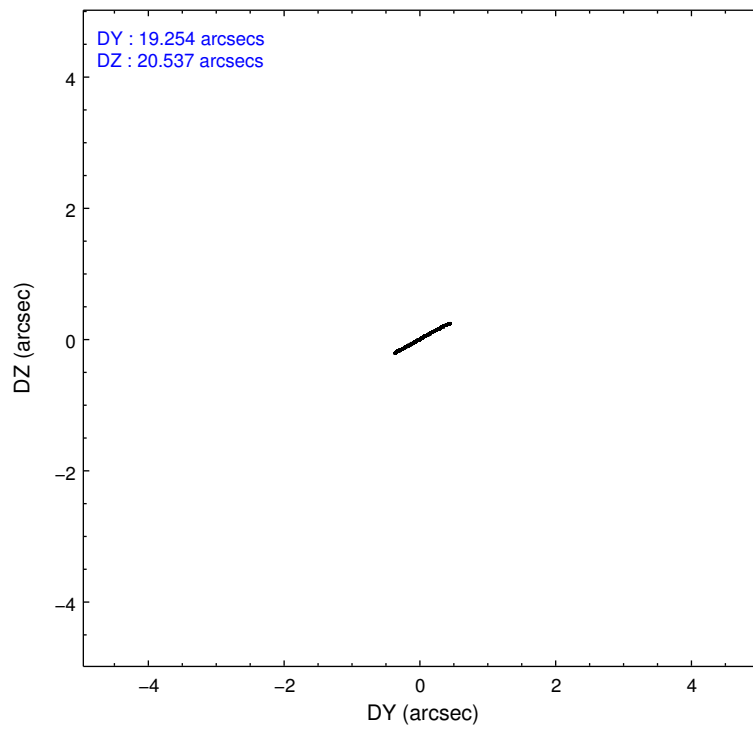
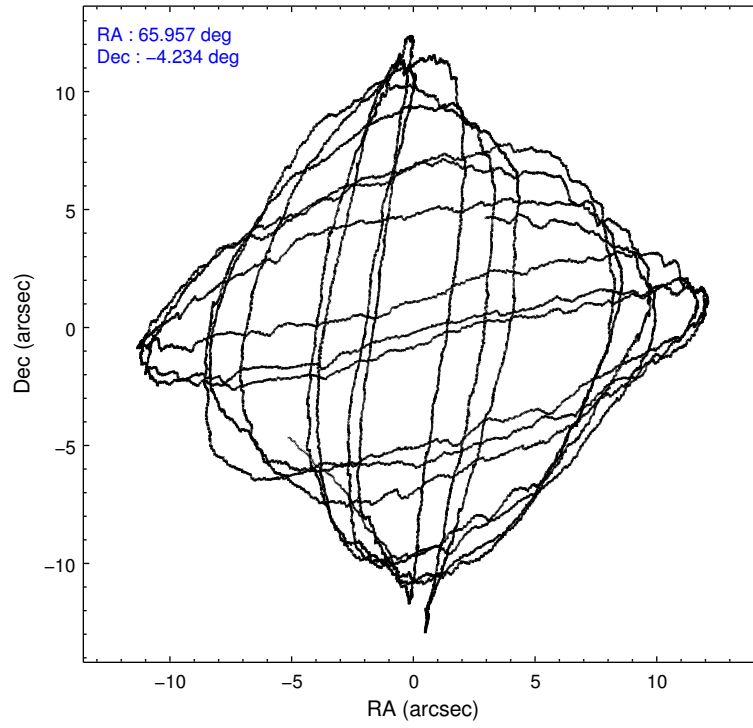
	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	107959	63915	78247	79353
rejected events	53136	57350	44659	58785
rejected %	49%	89%	57%	74%

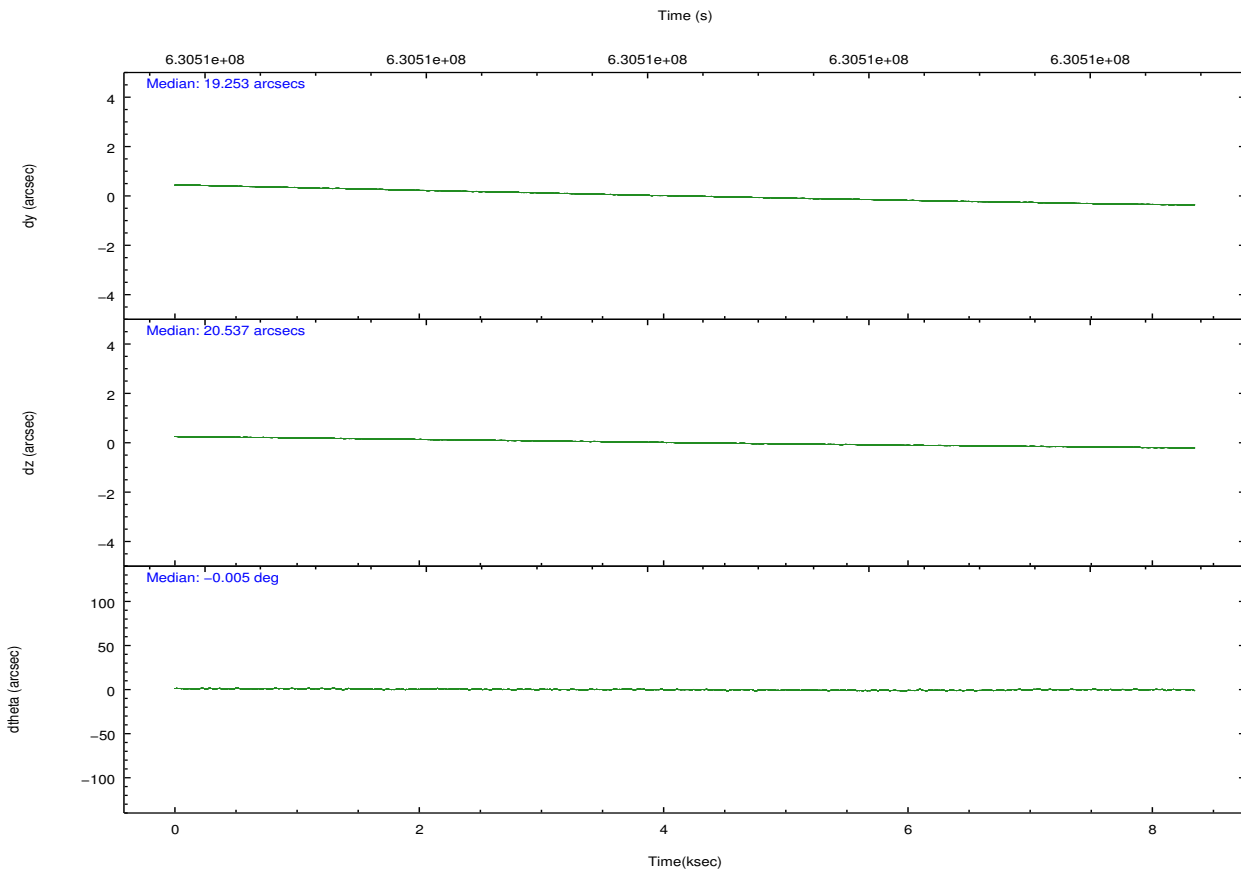
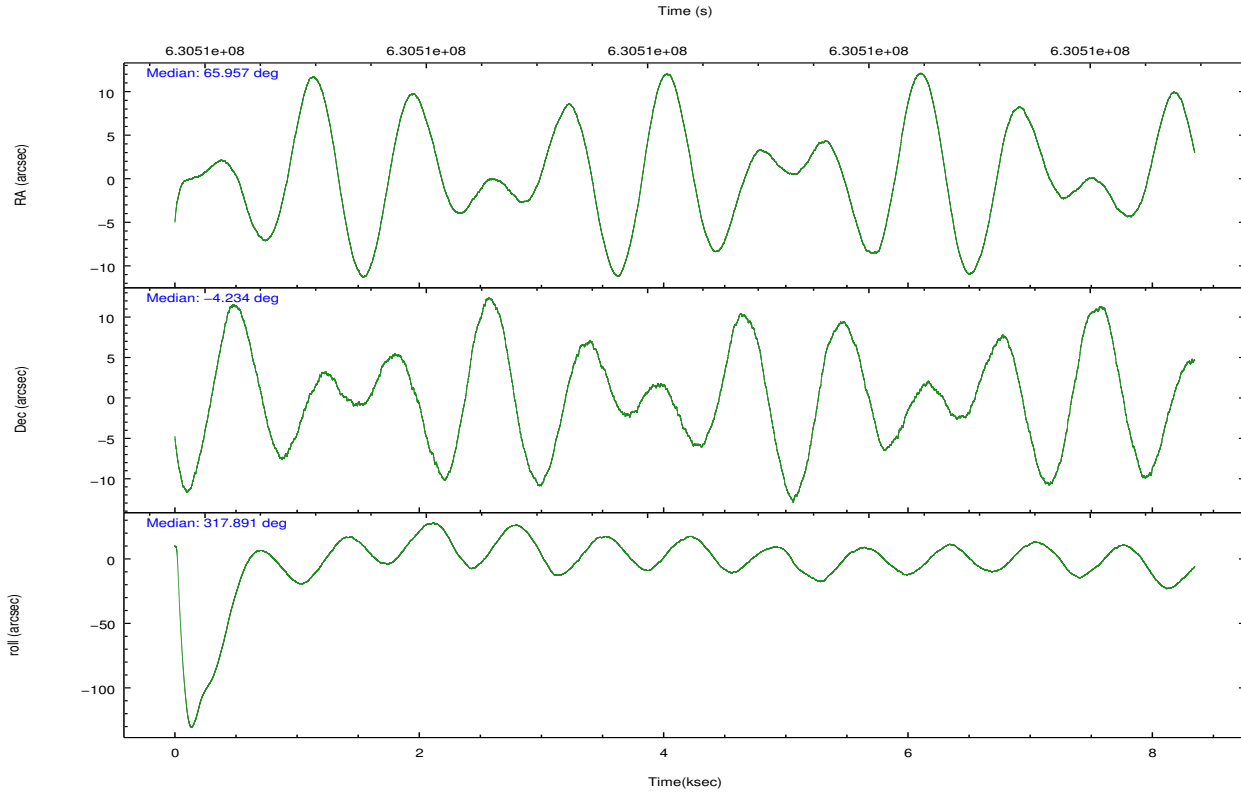
	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	9115	1853	2804	5677
	8%	2%	3%	7%
grade 1 events	683	20	120	53
	0%	0%	0%	0%
grade 2 events	15831	1832	6807	4967
	14%	2%	8%	6%
grade 3 events	1738	519	2613	2223
	1%	0%	3%	2%
grade 4 events	1606	540	2540	1973
	1%	0%	3%	2%
grade 5 events	6501	2552	7595	3897
	6%	3%	9%	4%
grade 6 events	26550	1824	18836	5729
	24%	2%	24%	7%
grade 7 events	45935	54775	36932	54834
	42%	85%	47%	69%

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	65.929992	65.95702249365057	CCD I2 on	O1	N
[deg] Pointing Dec	-4.228189	-4.233604186410805	CCD I3 on	N	N
[deg] Pointing Roll	317.742631	317.9014933910497	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O3	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	O5	Y
[mm] SIM translation stage pos	-190.132523	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	O4	Y
[s] Observation start time (MET)	630506306.184000	630504602.10147	CCD S5 on	O2	N
Observation start date	2017-12-24T12:37:17	2017-12-24T12:10:02	Number of optional ACIS chips dropped	2	2
[s] Observation end time (MET)	630514506.184000	630515285.1646	On-chip summing requested	N	N
Observation end date	2017-12-24T14:53:57	2017-12-24T15:08:05	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





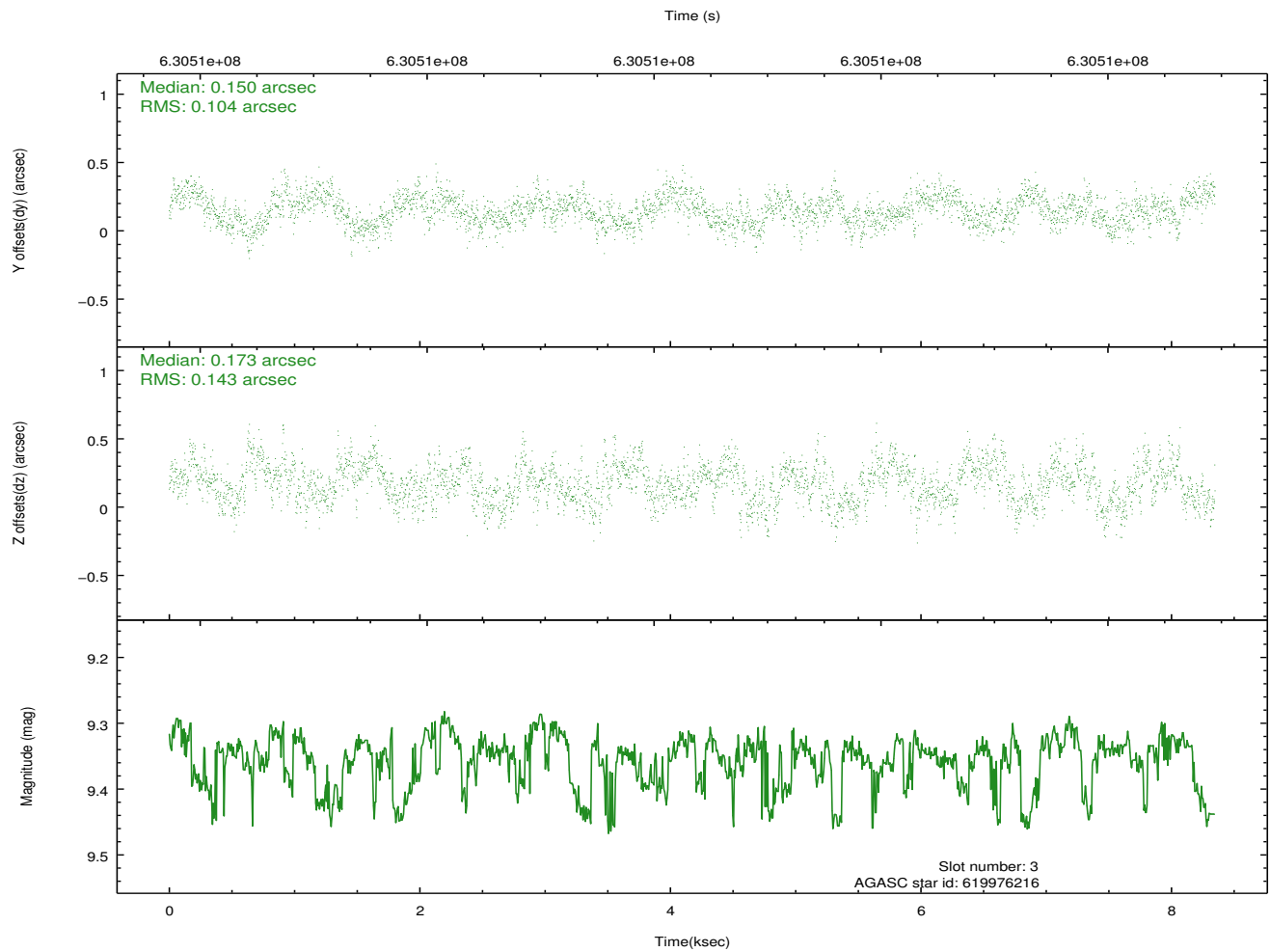
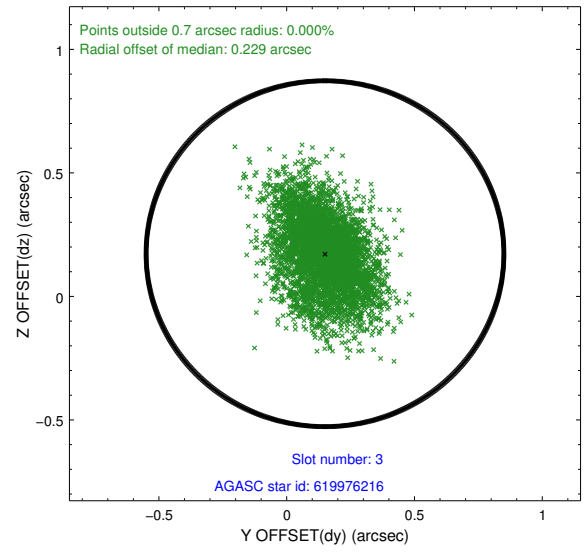
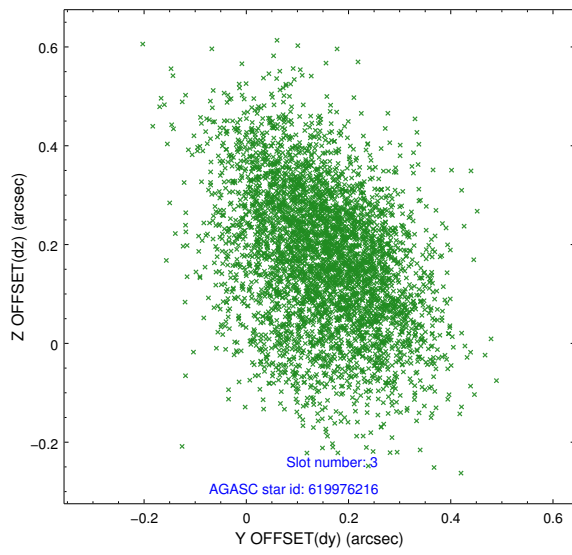
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.14	2036	-0.280	-0.162	0.011	0.021	0.000000	0.000000	-772.60	-1742.20
1	FID		ACIS-S-4	7.27	2036	0.617	0.178	0.008	0.017	0.000000	0.000000	2141.23	165.98
2	FID		ACIS-S-5	7.25	2036	-0.370	-0.007	0.010	0.016	0.000000	0.000000	-1824.71	160.16
3	GUIDE	used	619976216	9.35	4068	0.150	0.173	0.188	0.310	65.758012	-3.876307	-1308.61	522.50
4	GUIDE	used	619976360	9.28	4059	-0.231	0.040	0.179	0.303	65.856383	-3.498465	-1962.22	1767.86
5	GUIDE	used	619976680	9.16	4071	0.147	-0.113	0.145	0.253	66.010486	-4.017241	-296.86	757.13
6	GUIDE	used	619979976	8.35	4070	-0.062	-0.097	0.153	0.268	65.907254	-4.121018	-319.46	231.18
7	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00

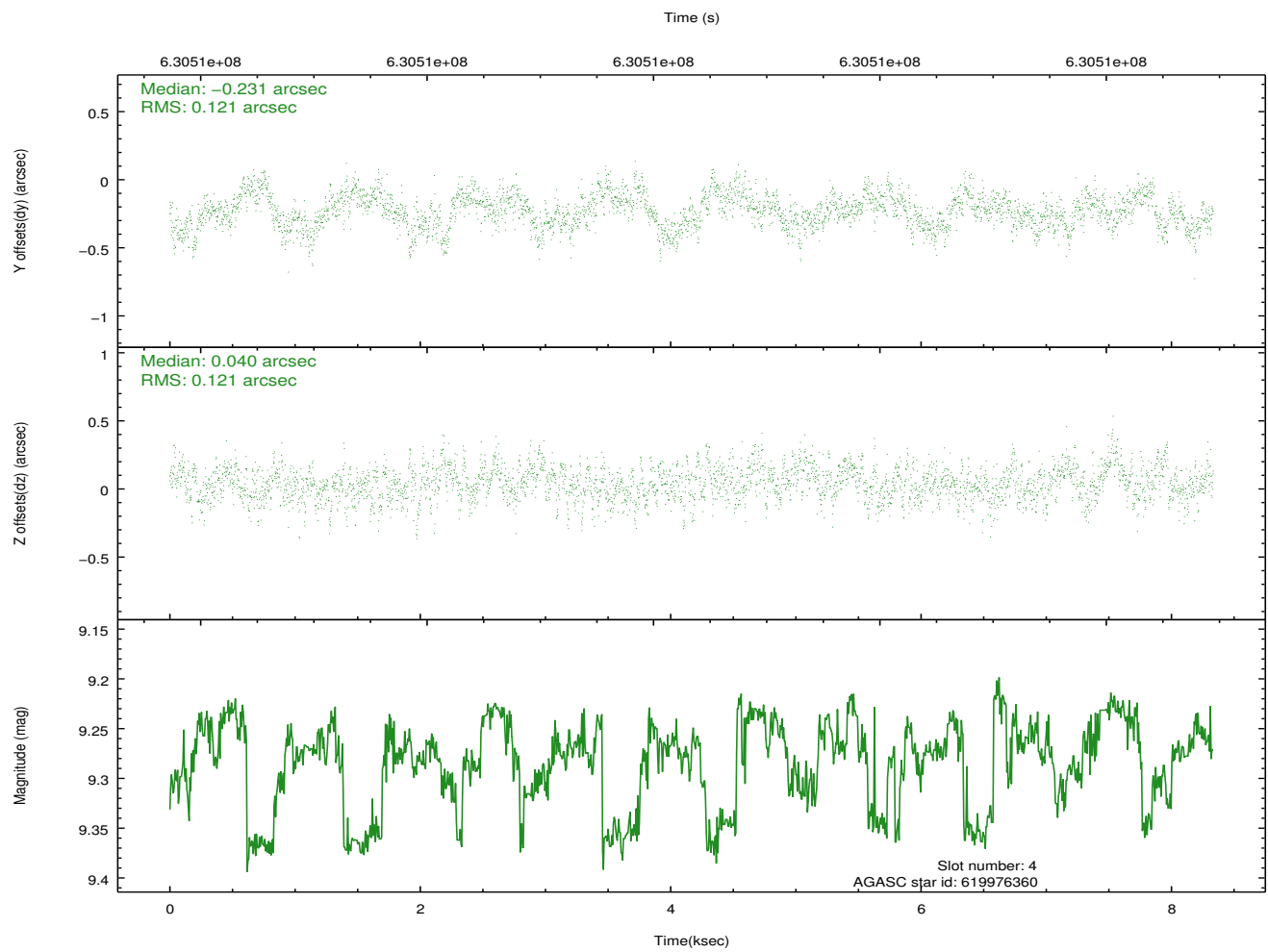
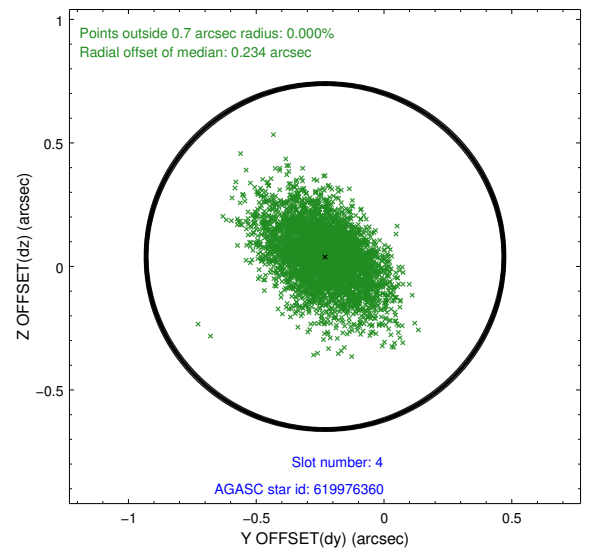
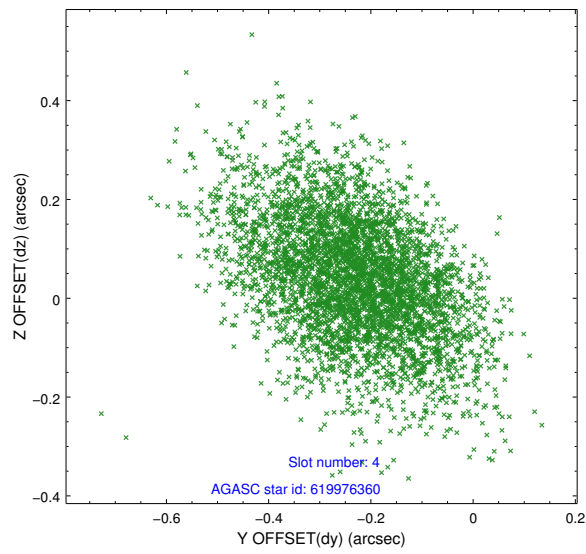
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2.4 Star Slots

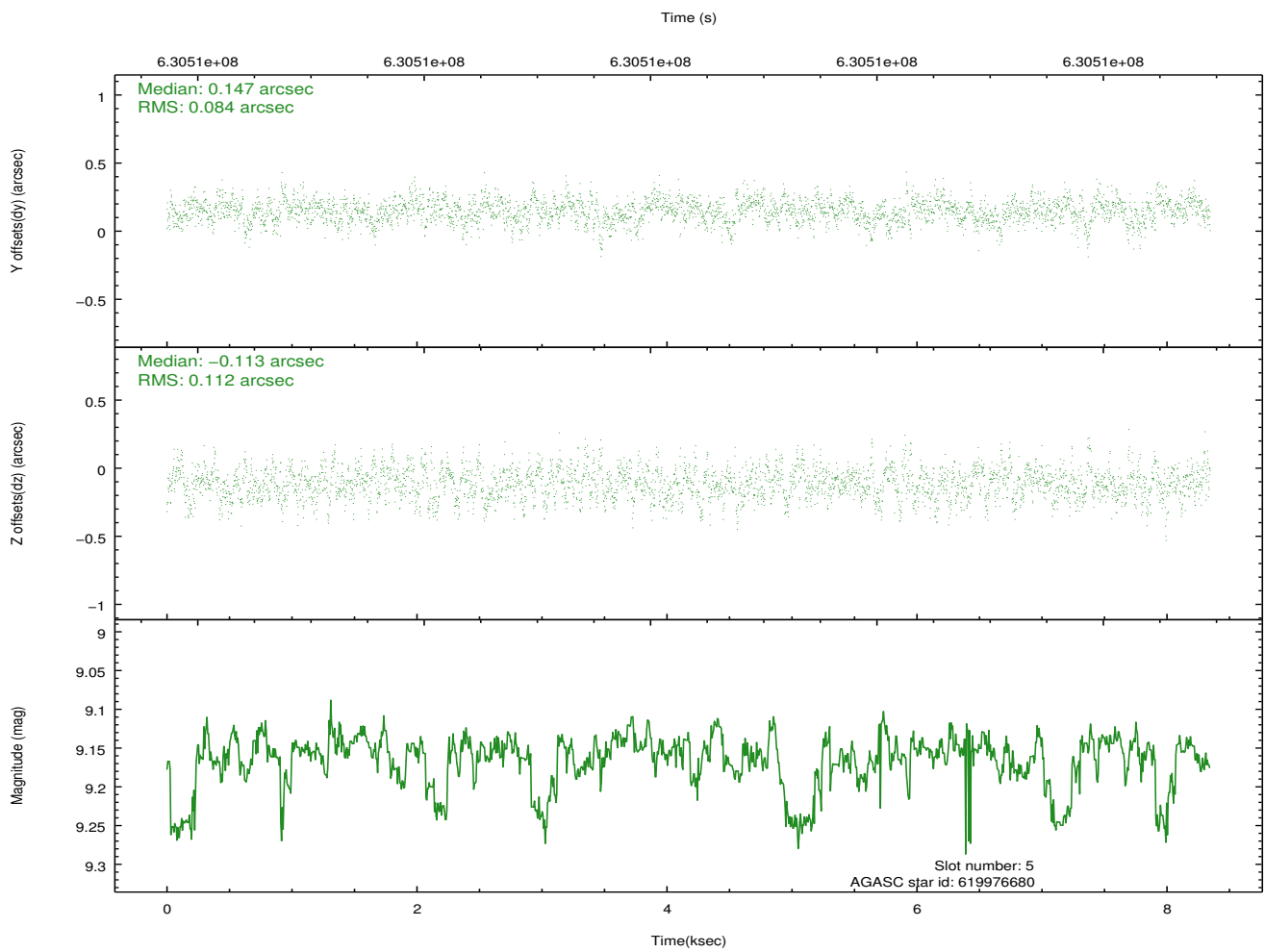
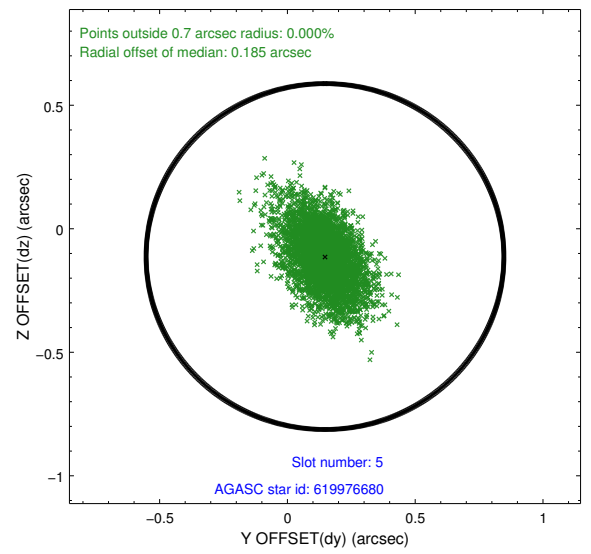
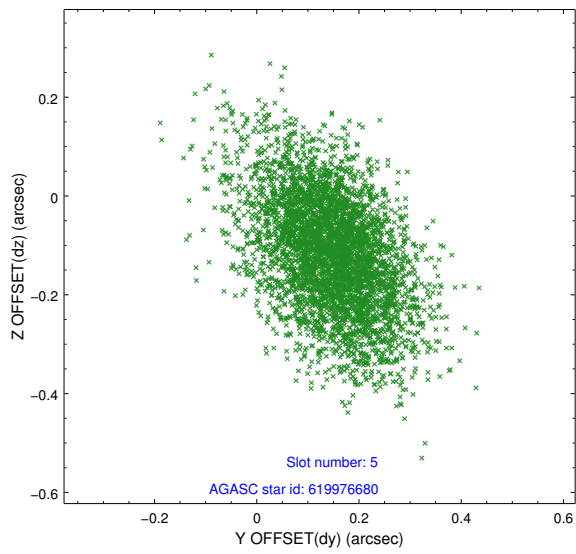
2.4.1 Slot 3



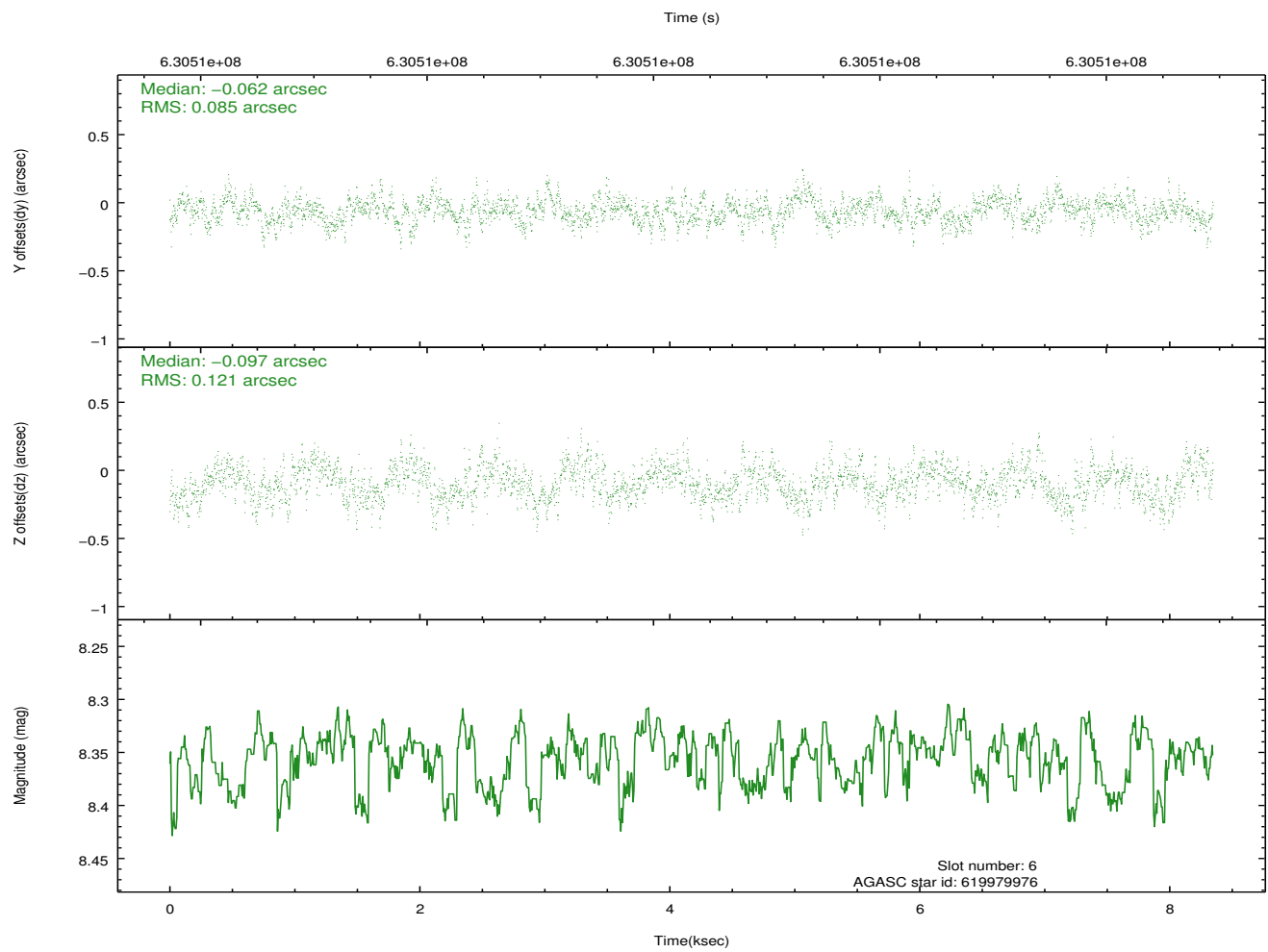
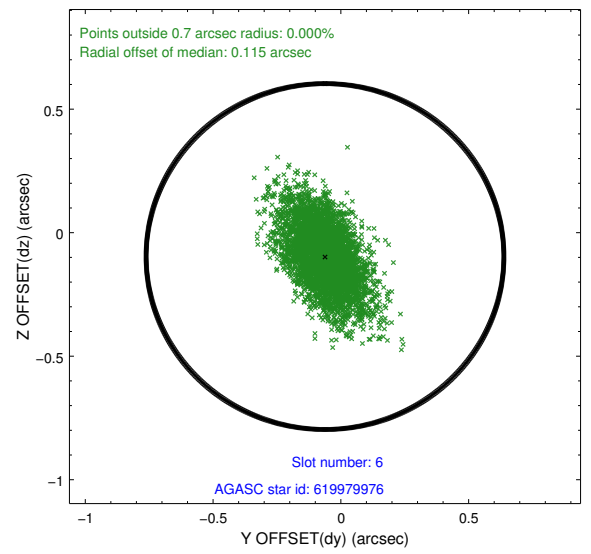
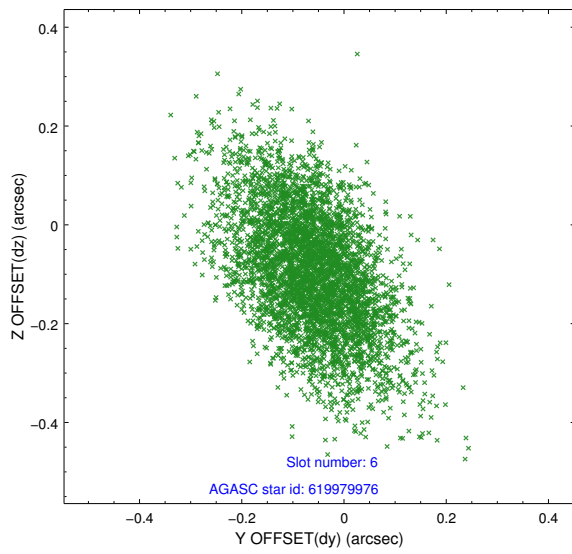
2.4.2 Slot 4



2.4.3 Slot 5

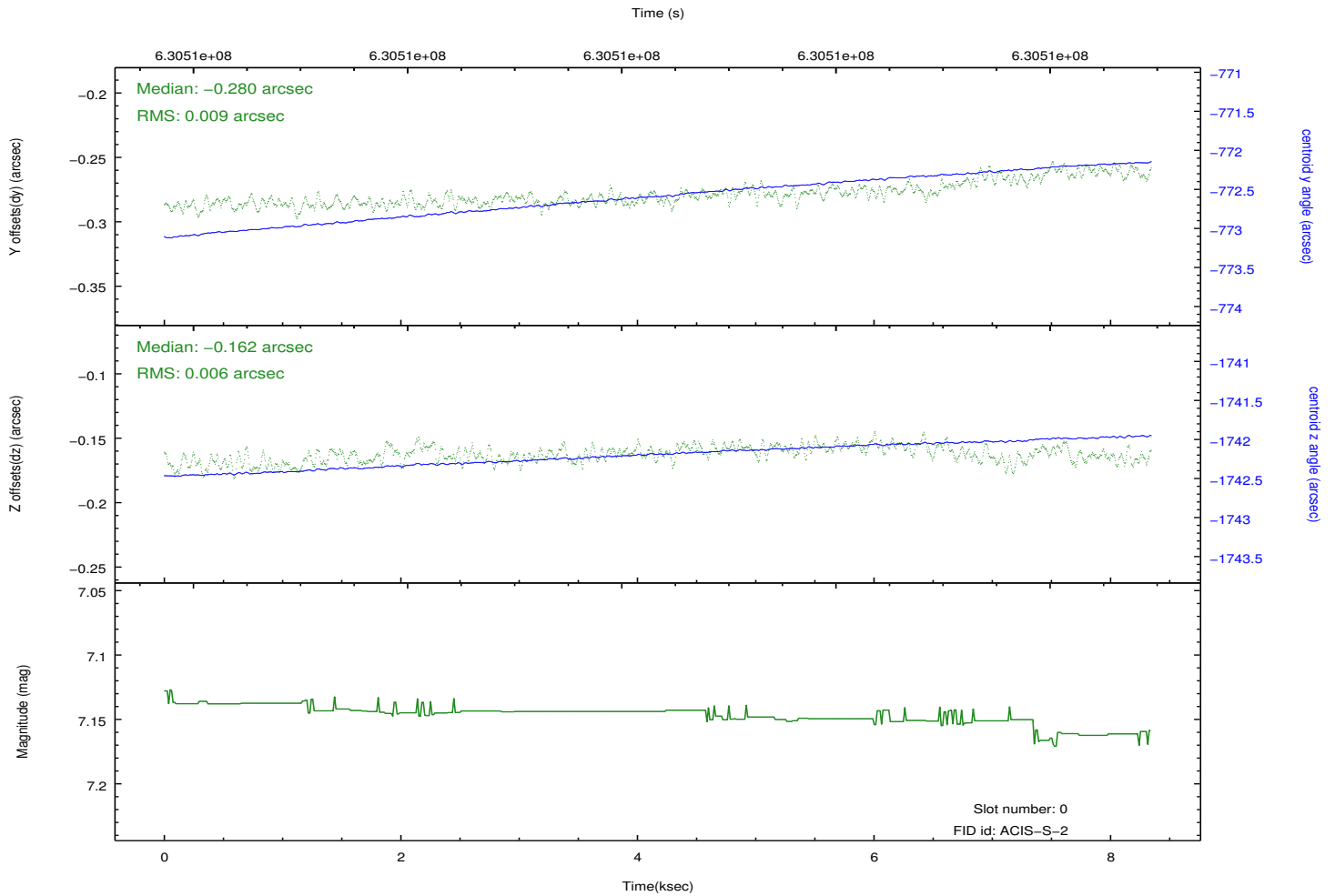
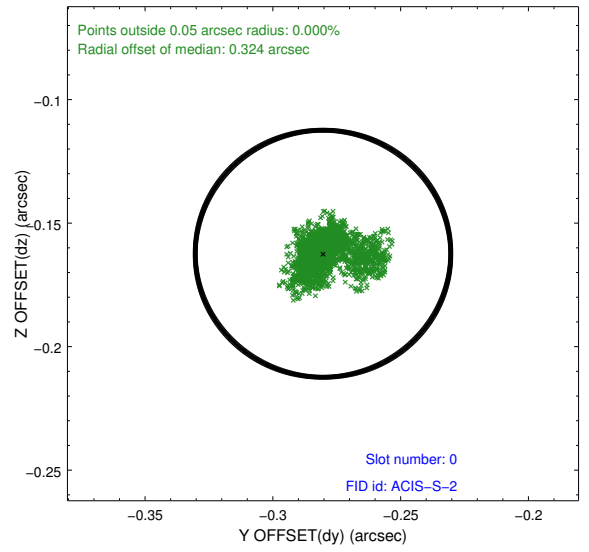
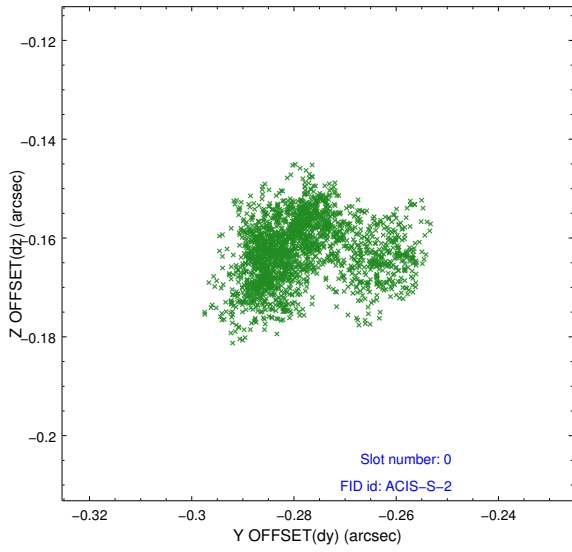


2.4.4 Slot 6

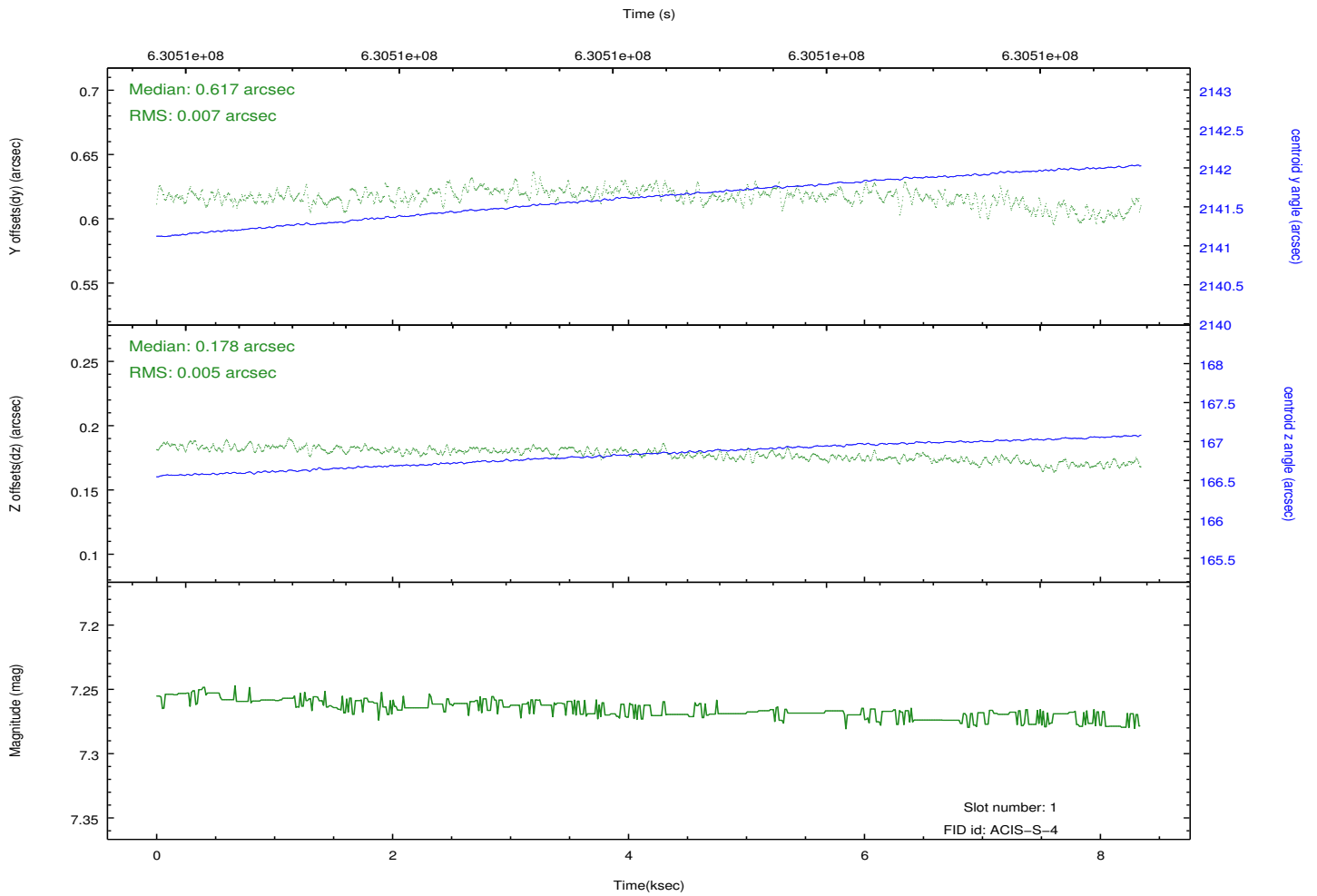
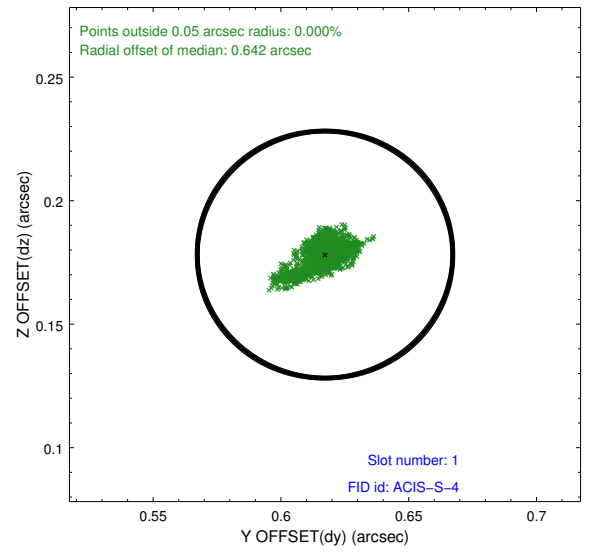
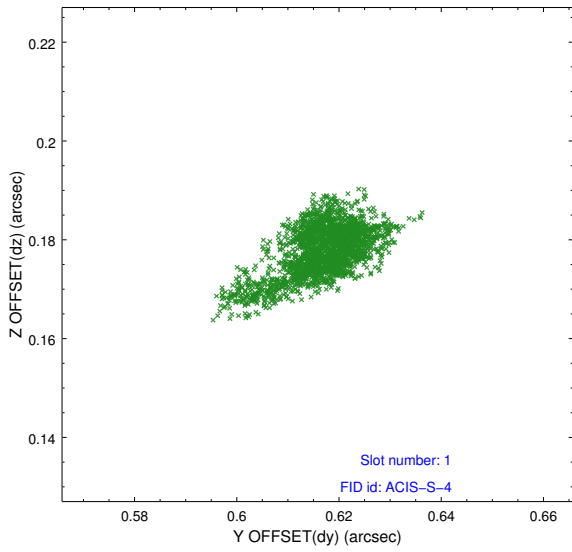


2.5 FID Slots

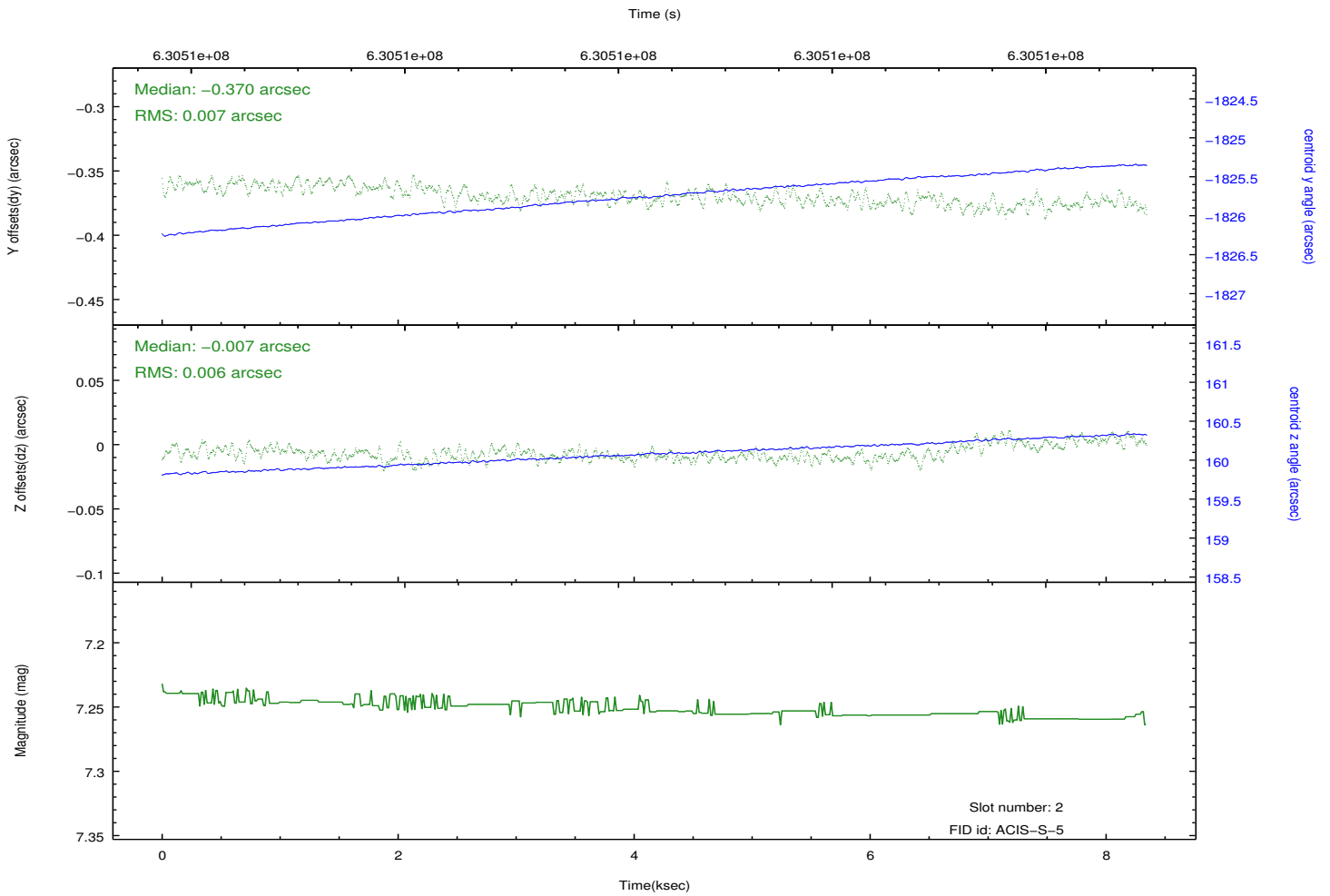
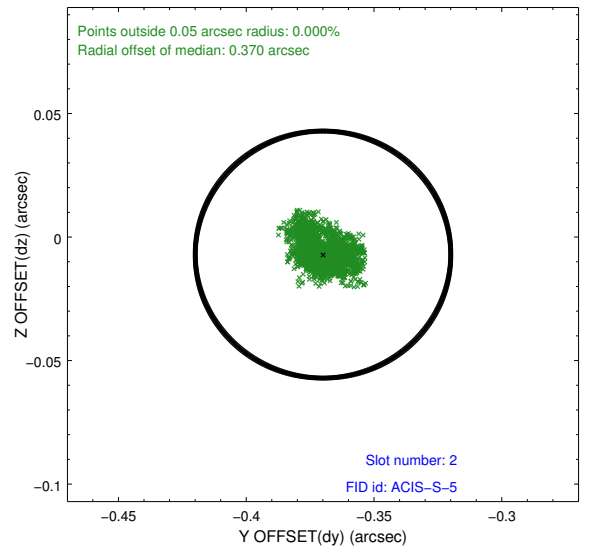
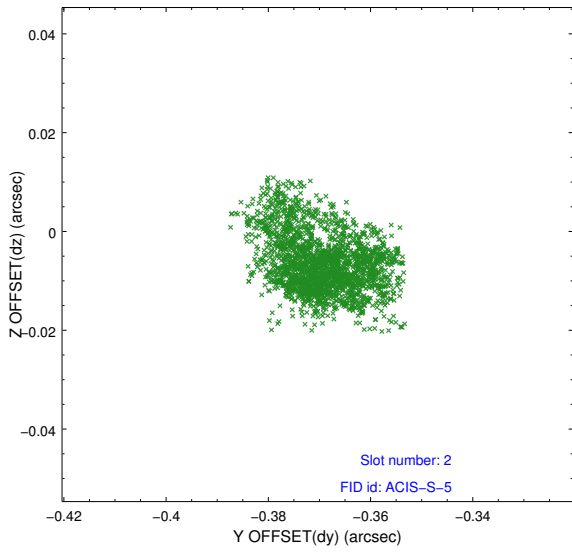
2.5.1 Slot 0



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)	2017.12.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.2601002117395

A.2 Comments

Two optional chips were dropped.

The guide star in slot 7 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.