

V&V Reference Report

L2 ASCDS Version : 10.4.1

Observation 17453 - L2 Version 2
Chandra X-Ray Center

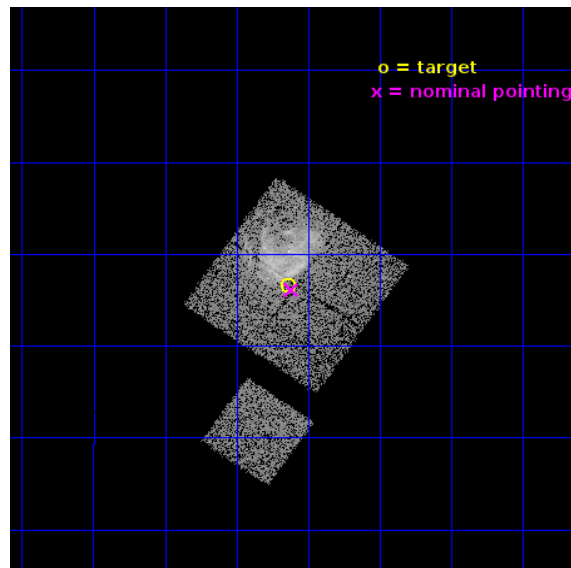
L2 Processing Date : Jul 22 2015

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1 Front

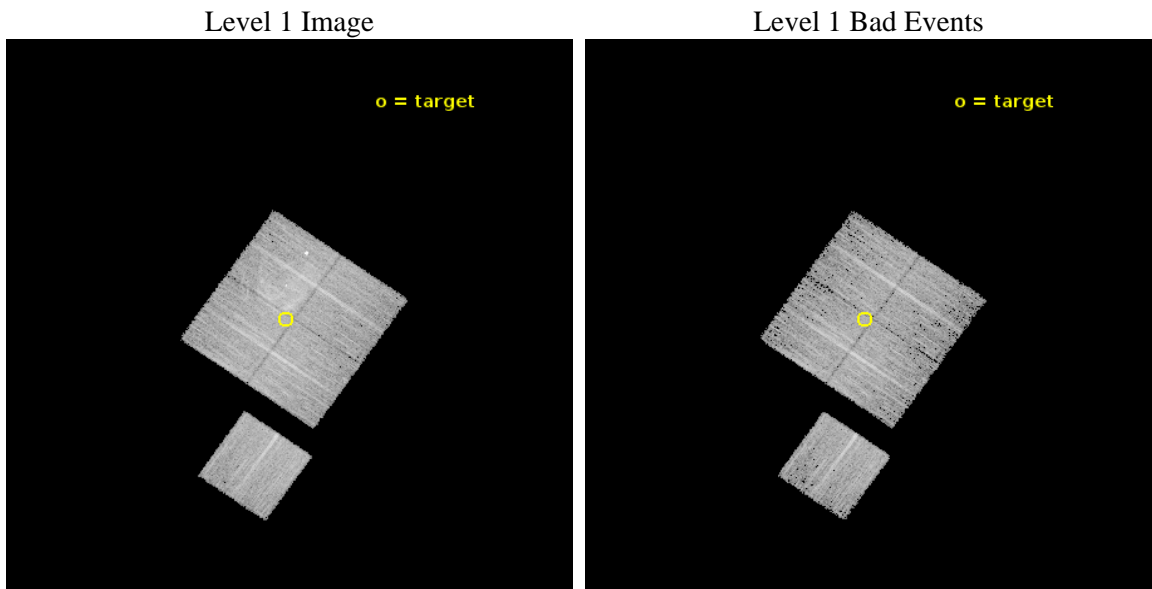
seq_num	502480	Sequence number
obs_id	17453	Observation id
title	Studying the transient magnetar 3XMMJ185246.6+003317 close to SNR Kes 79	Proposal title
observer	Dr. Stephen Murray	Principal investigator
object	Kes 79	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	283.160417	Observer's specified target RA [deg]
dec_targ	0.610083	Observer's specified target Dec [deg]
ra_nom	283.15450881561	Nominal RA [deg]
dec_nom	0.60194952559758	Nominal Dec [deg]
roll_nom	214.958556772	Nominal Roll [deg]
revision	2	Processing version of data
ontime	9773.2070416212	Sum of GTIs [s]
livetime	9645.5128966921	Livetime [s]
ontime0	9773.0839216709	Sum of GTIs [s]
ontime1	9773.1249616146	Sum of GTIs [s]
ontime2	9773.1660016775	Sum of GTIs [s]
ontime3	9773.2070416212	Sum of GTIs [s]
ontime6	9773.042881608	Sum of GTIs [s]
l2events	40241	Number of level 2 events



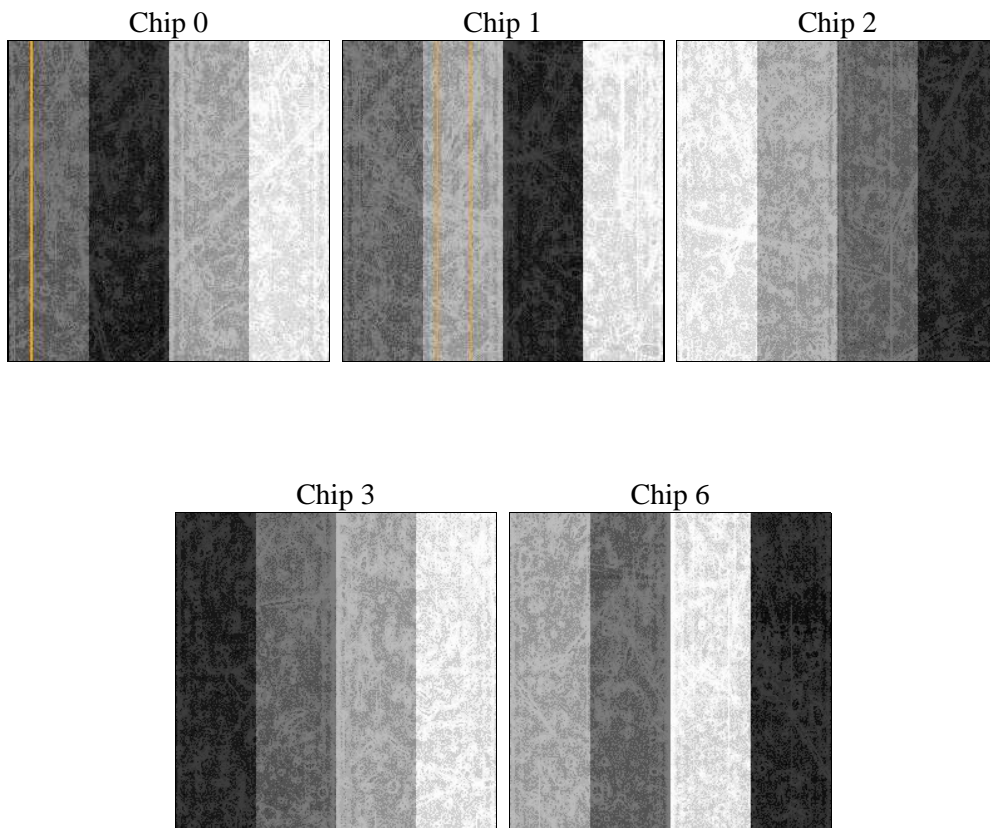
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	10.4.1	Processing system revision	ontime	9773.2070416212	Sum of GTIs [s]
caldbver	4.6.8	 	ontime0	9773.0839216709	Sum of GTIs [s]
date	2015-07-22T21:27:18	Date and time of file creation	ontime1	9773.1249616146	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	9773.1660016775	Sum of GTIs [s]
			ontime3	9773.2070416212	Sum of GTIs [s]
			ontime6	9773.042881608	Sum of GTIs [s]
			l1events	270250	Number of level 1 events

2.1.4 Events

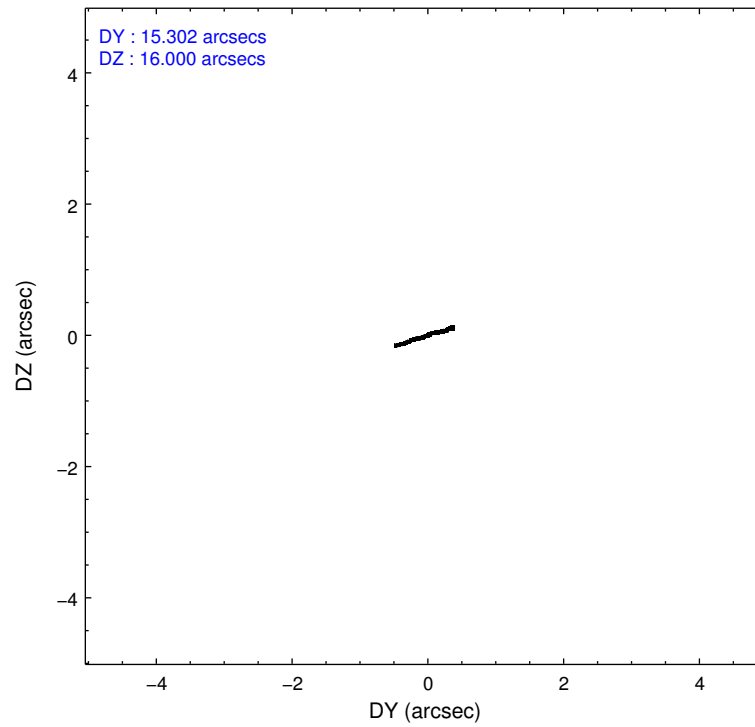
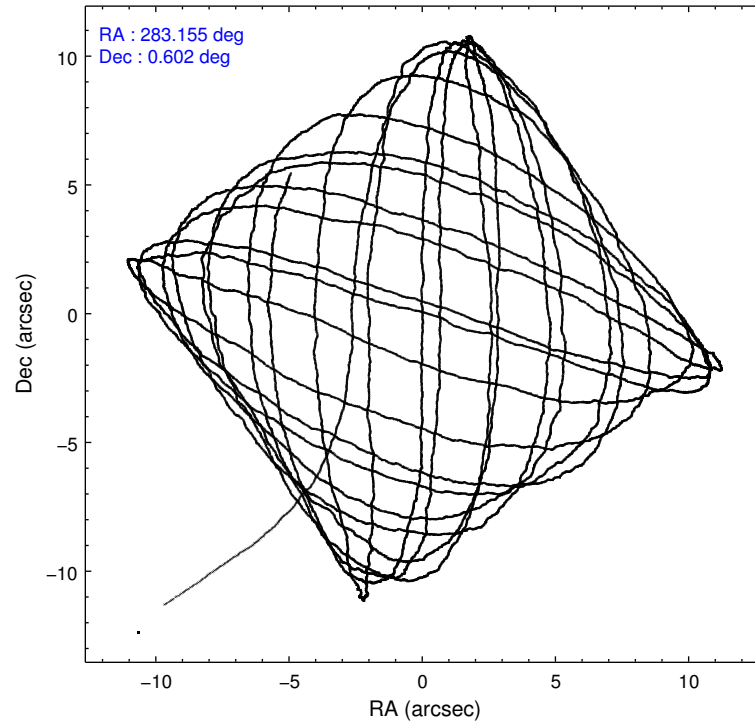
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	46093	62599	53989	54333	53236
rejected events	39449	43080	48030	46248	46999
rejected %	85%	68%	88%	85%	88%

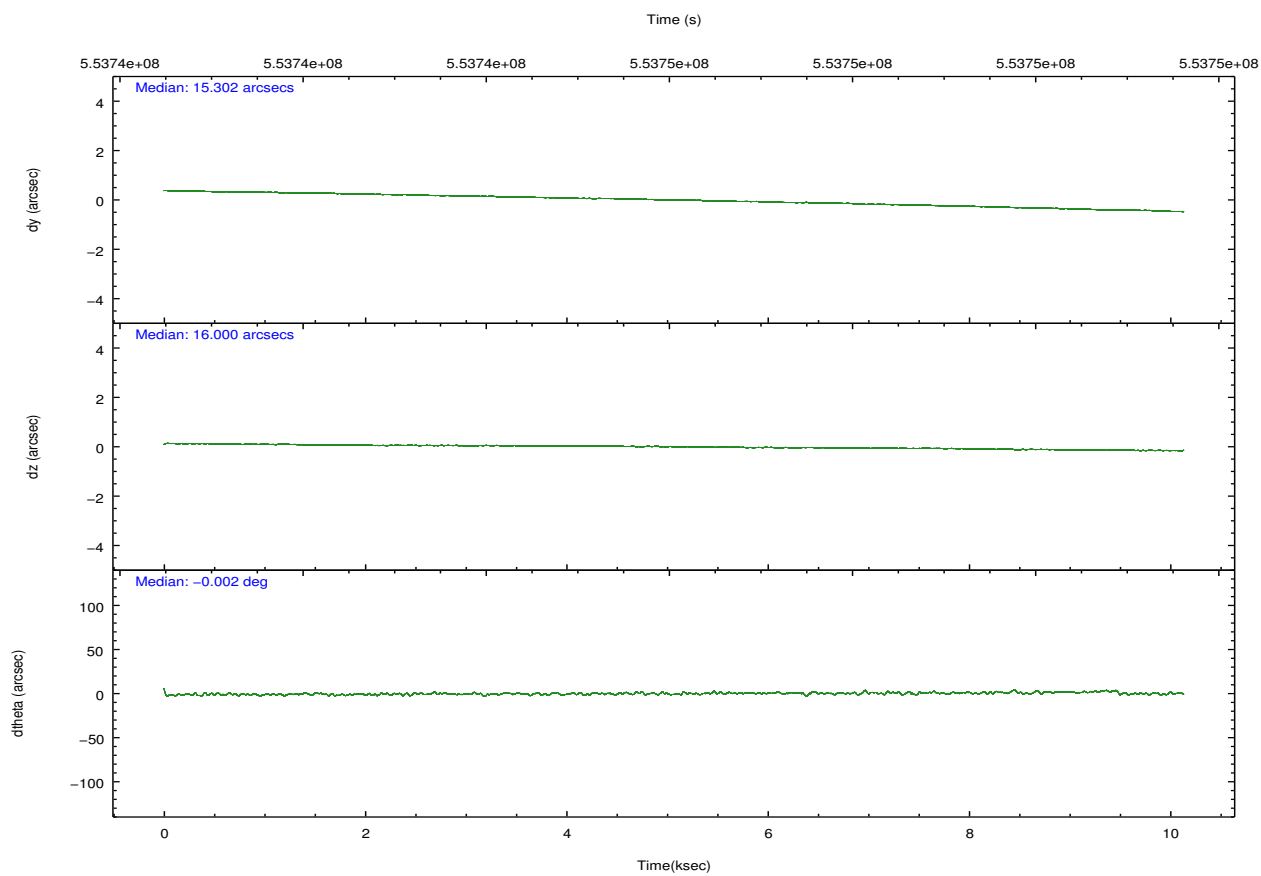
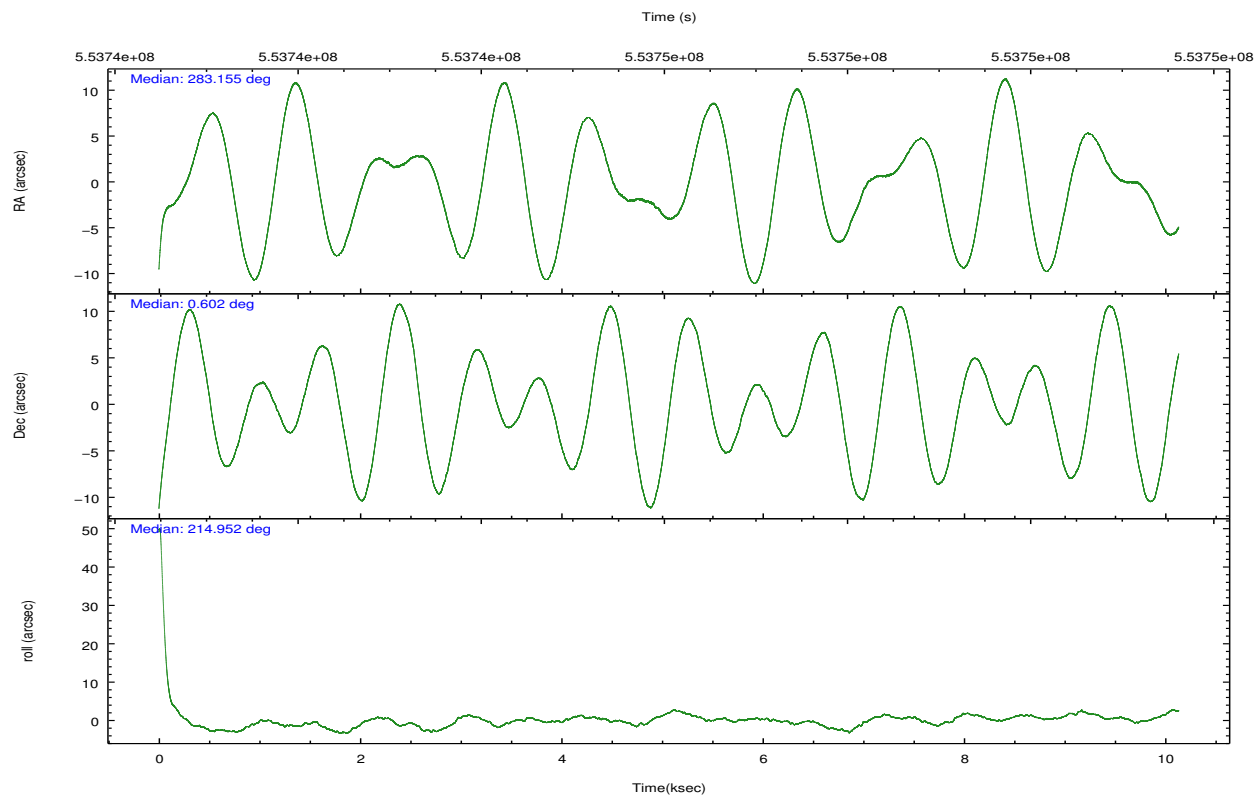
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	2631	13146	2391	4055	2081
	5%	21%	4%	7%	3%
grade 1 events	26	73	30	33	23
	0%	0%	0%	0%	0%
grade 2 events	1507	2791	1356	1482	1442
	3%	4%	2%	2%	2%
grade 3 events	665	957	565	644	575
	1%	1%	1%	1%	1%
grade 4 events	583	953	554	661	609
	1%	1%	1%	1%	1%
grade 5 events	2262	2406	2110	2497	2341
	4%	3%	3%	4%	4%
grade 6 events	1261	1689	1097	1249	1533
	2%	2%	2%	2%	2%
grade 7 events	37158	40584	45886	43712	44632
	80%	64%	84%	80%	83%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	283.166112	283.1545088156085	CCD I2 on	Y	Y
[deg] Pointing Dec	0.627015	0.6019495255975846	CCD I3 on	Y	Y
[deg] Pointing Roll	214.749686	214.9585567719987	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	O1	Y
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	N	N
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	553741122.184000	553739521.03264	CCD S5 on	N	N
Observation start date	2015-07-20T00:57:34	2015-07-20T00:32:01	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	553751122.184000	553751816.93334	On-chip summing requested	N	N
Observation end date	2015-07-20T03:44:14	2015-07-20T03:56:56	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



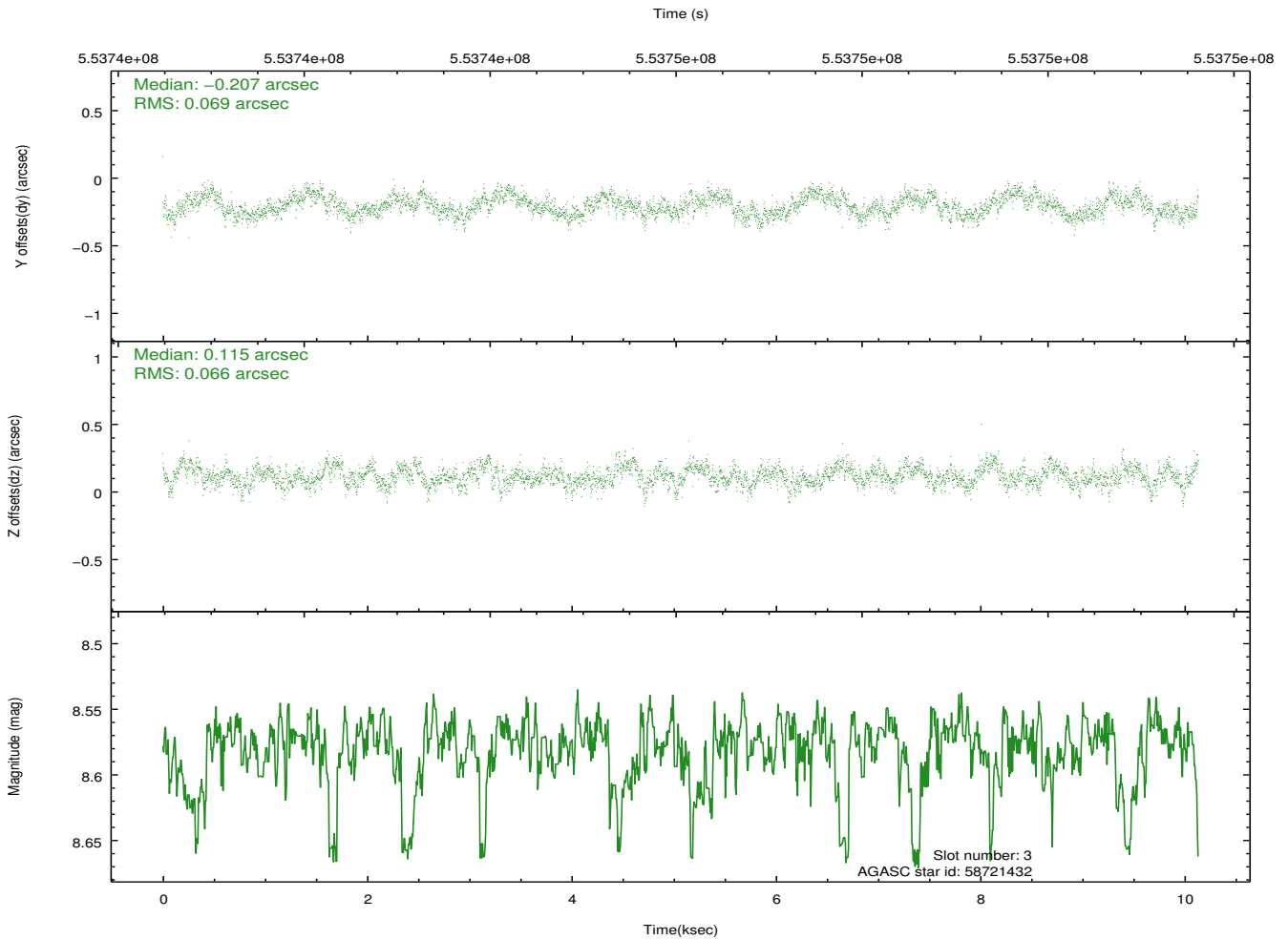
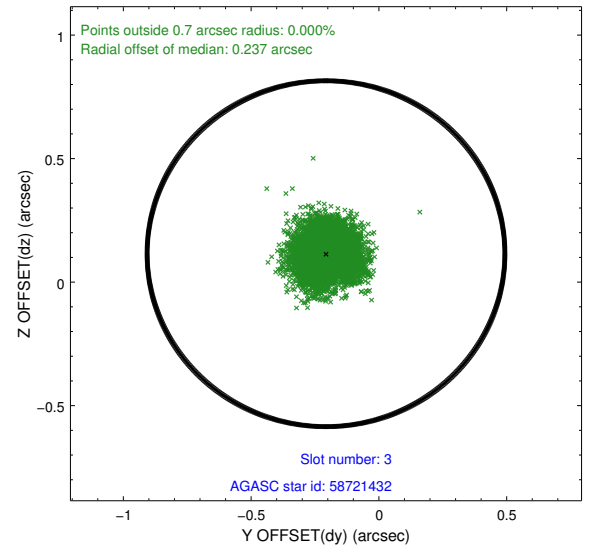
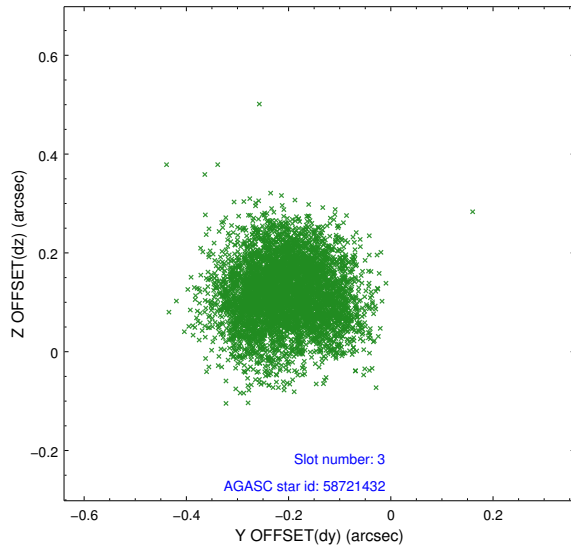


Slot Statistics

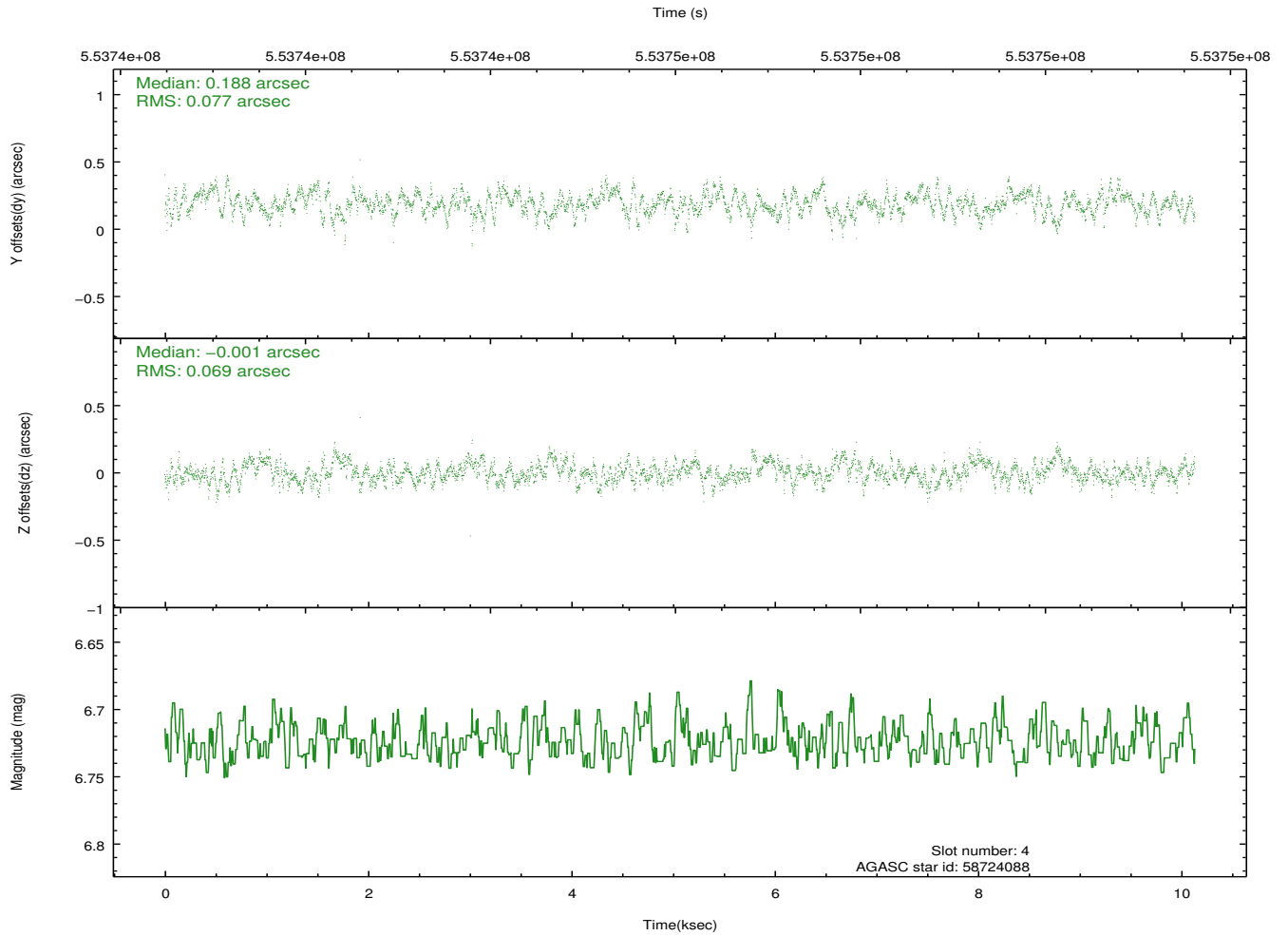
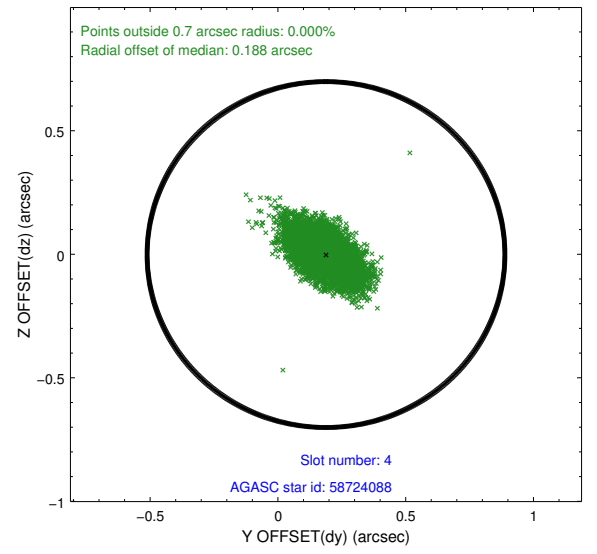
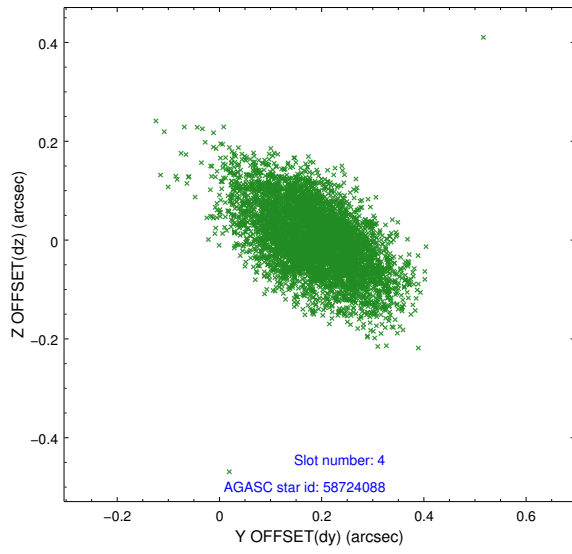
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.25	2472	-0.013	-0.022	0.010	0.017	0.000000	0.000000	924.15	-839.64
1	FID		ACIS-I-2	7.15	2472	-0.268	-0.103	0.008	0.014	0.000000	0.000000	-769.91	-846.41
2	FID		ACIS-I-4	7.16	2470	0.183	0.192	0.007	0.013	0.000000	0.000000	2144.01	1060.10
3	GUIDE	used	58721432	8.58	4941	-0.207	0.115	0.104	0.160	282.605647	0.791519	1320.29	-1636.19
4	GUIDE	used	58724088	6.72	4943	0.188	-0.001	0.107	0.184	282.404972	0.836197	1822.78	-2180.23
5	GUIDE	used	58852048	8.37	4944	0.137	0.190	0.097	0.155	283.366398	0.870285	-1090.77	-308.82
6	GUIDE	used	58857104	9.15	4940	-0.006	-0.080	0.120	0.191	283.814800	0.638238	-1941.78	1297.61
7	GUIDE	used	670303120	8.53	4942	-0.117	-0.230	0.098	0.152	283.028951	-0.220247	2143.86	2225.51

2.4 Star Slots

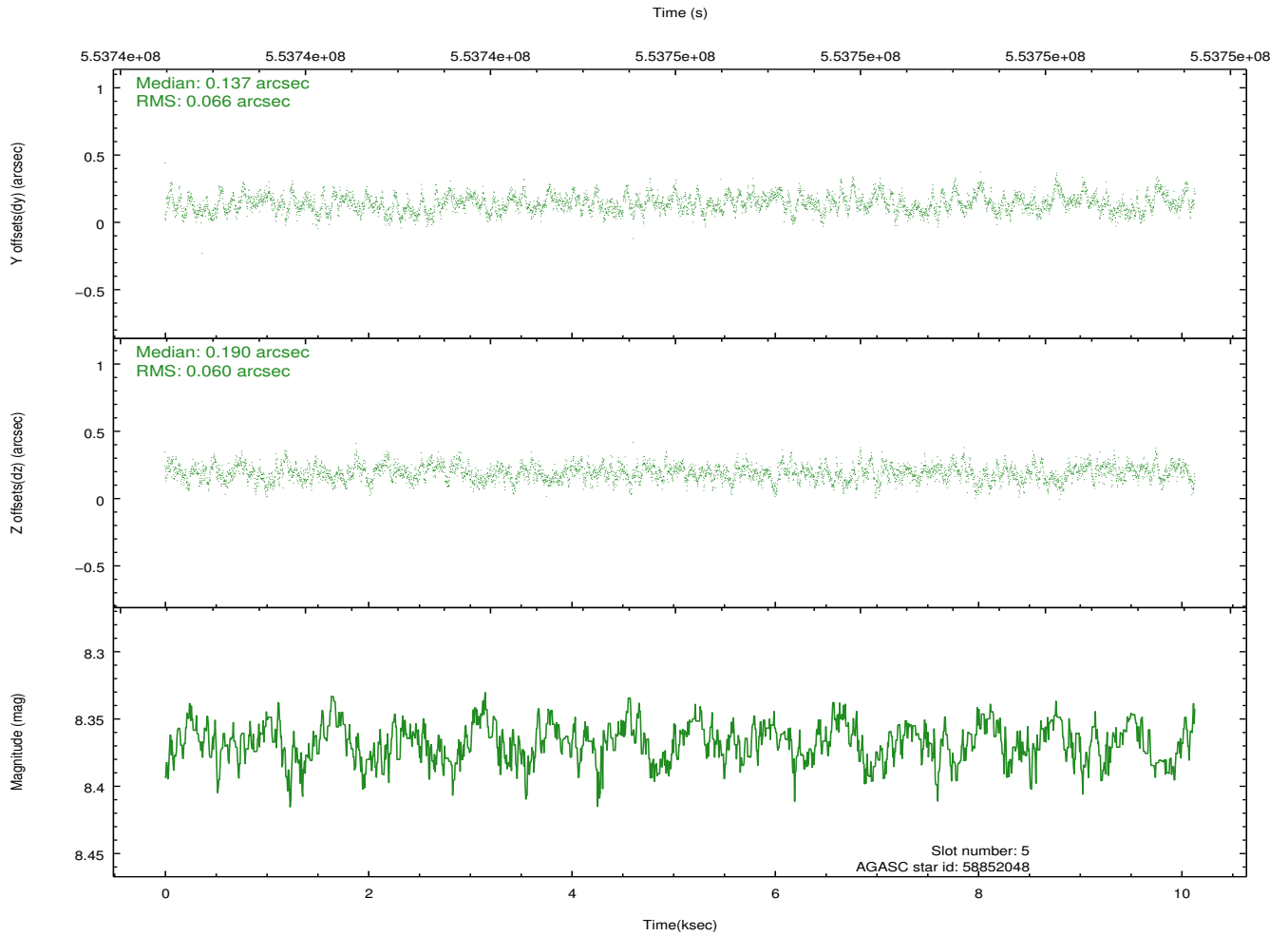
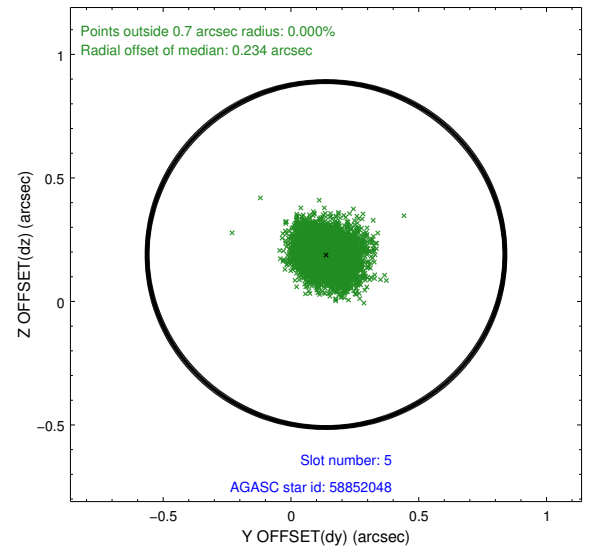
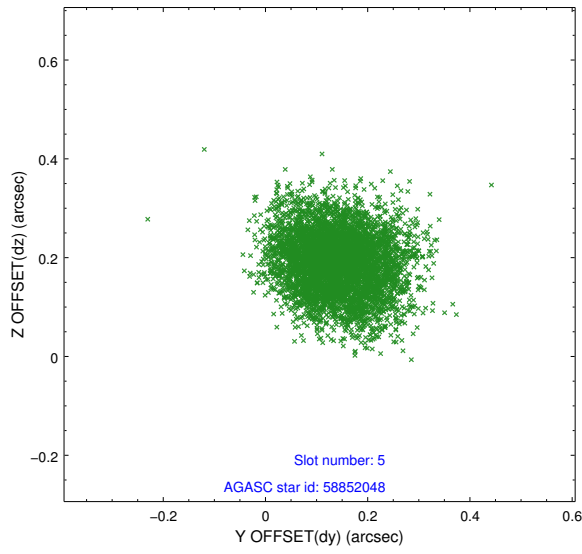
2.4.1 Slot 3



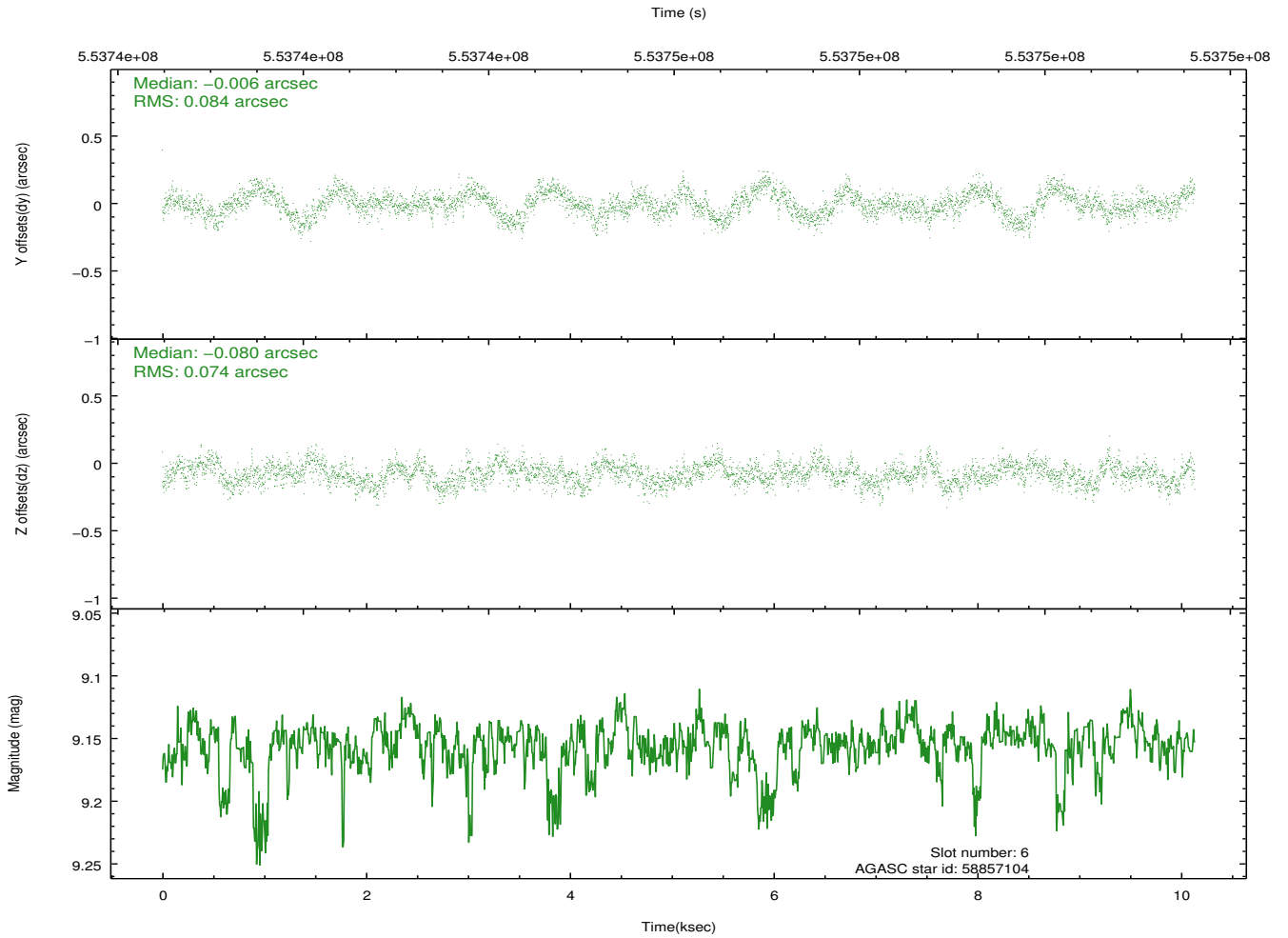
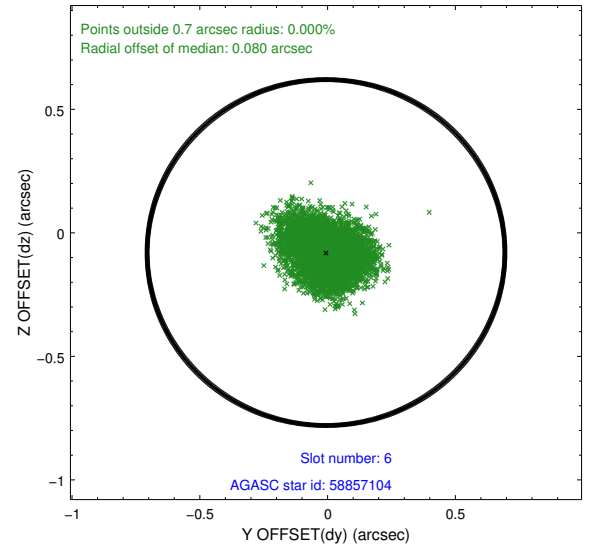
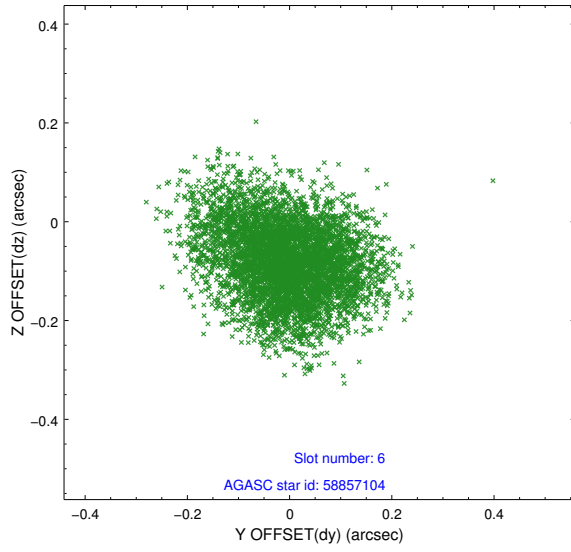
2.4.2 Slot 4



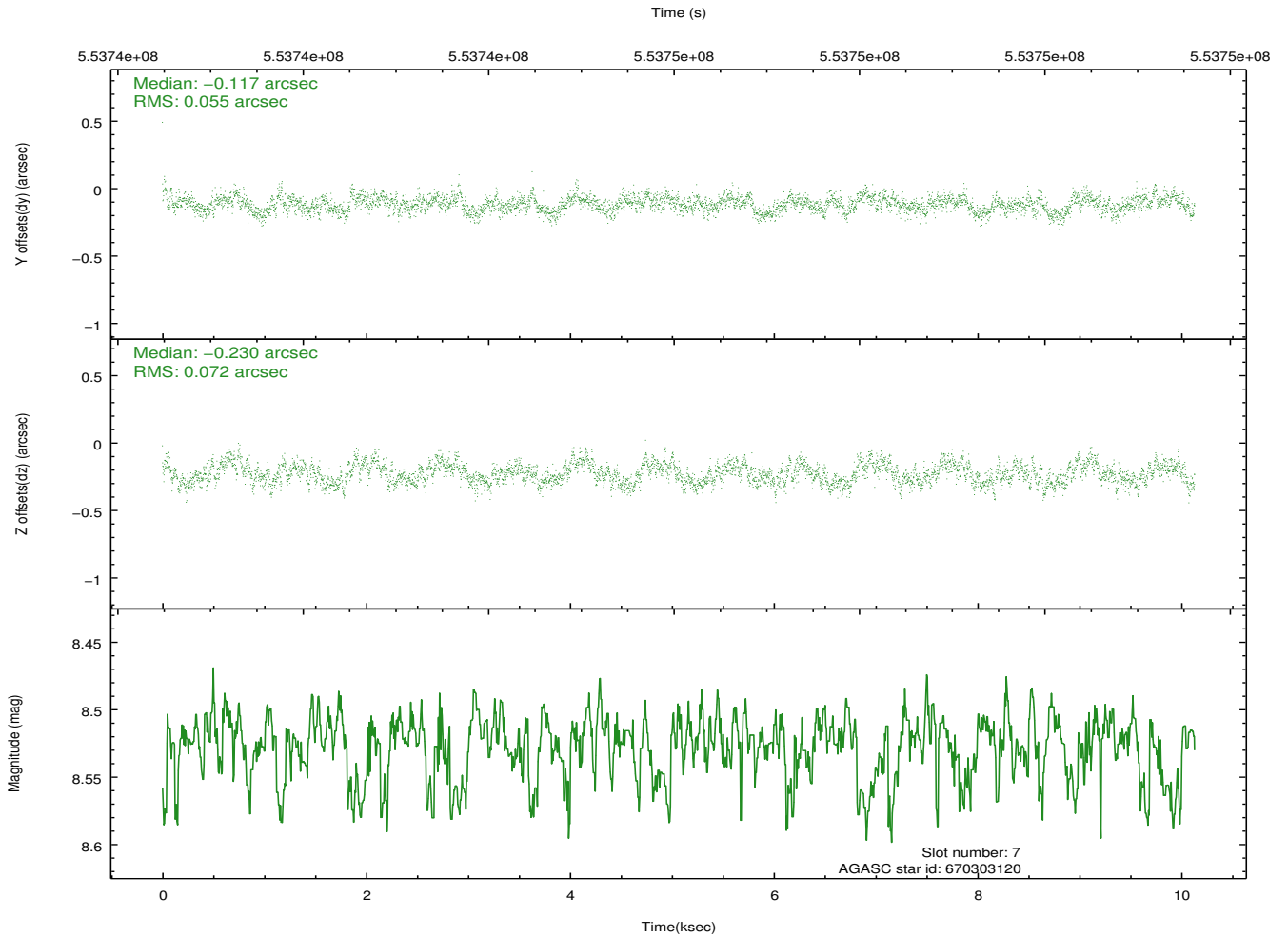
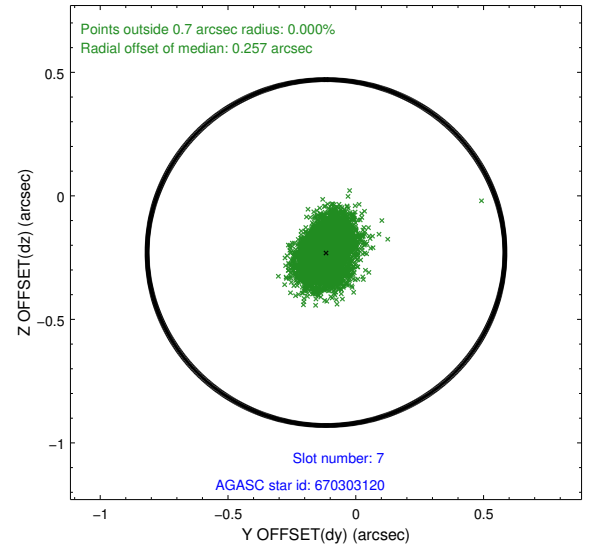
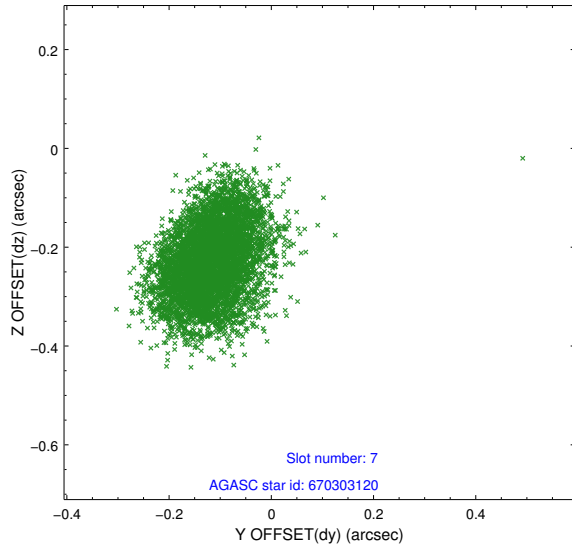
2.4.3 Slot 5



2.4.4 Slot 6

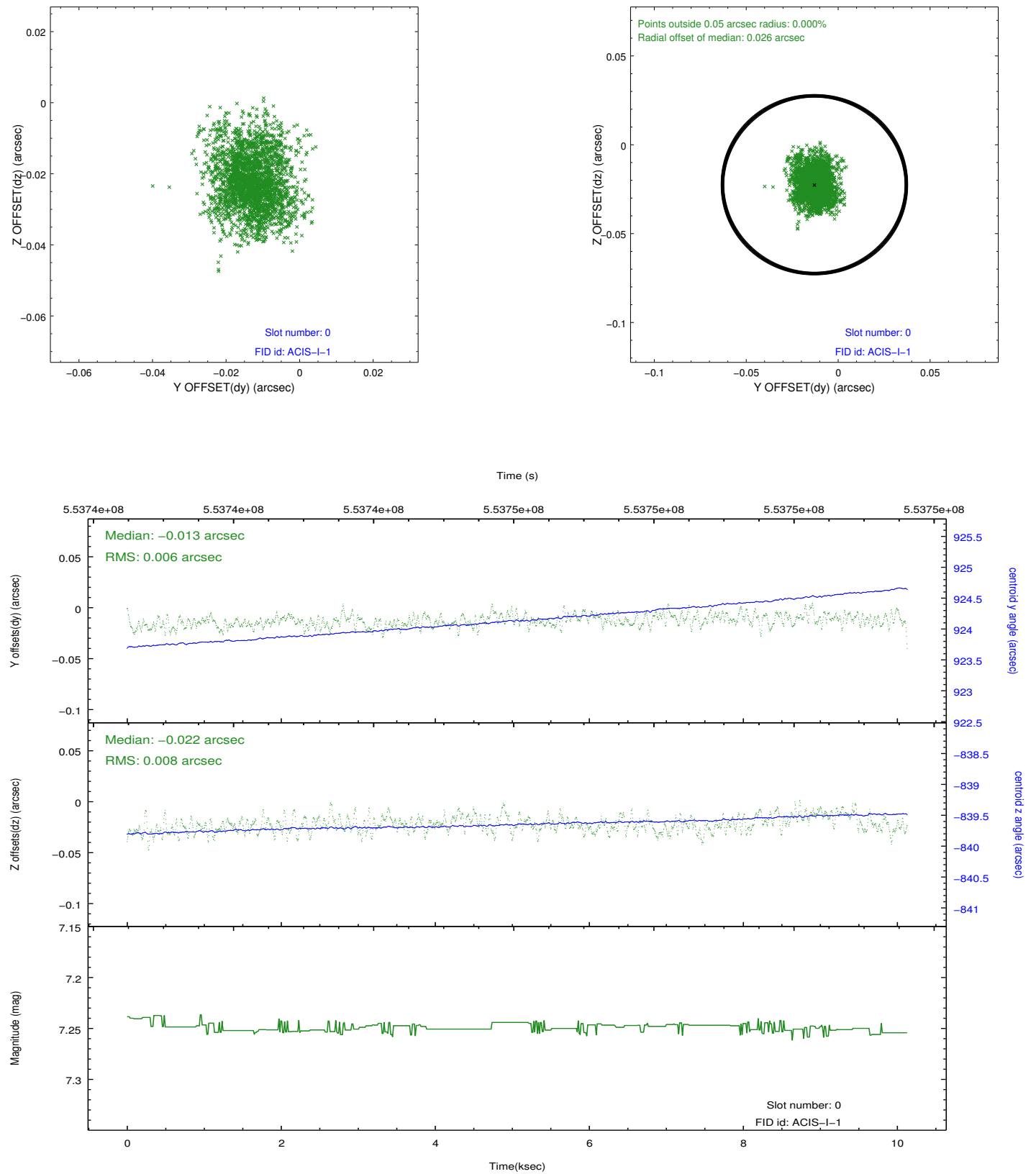


2.4.5 Slot 7

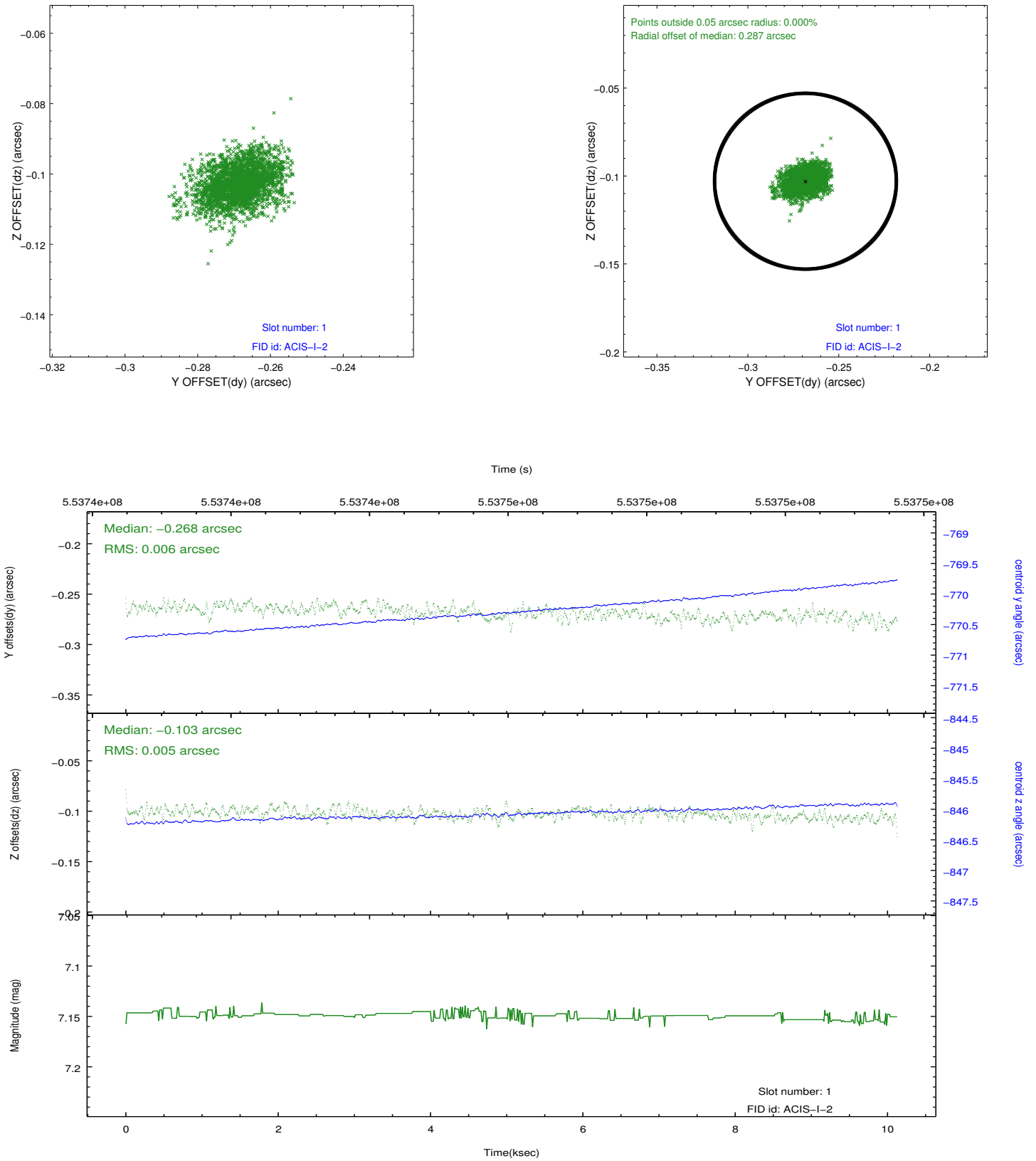


2.5 FID Slots

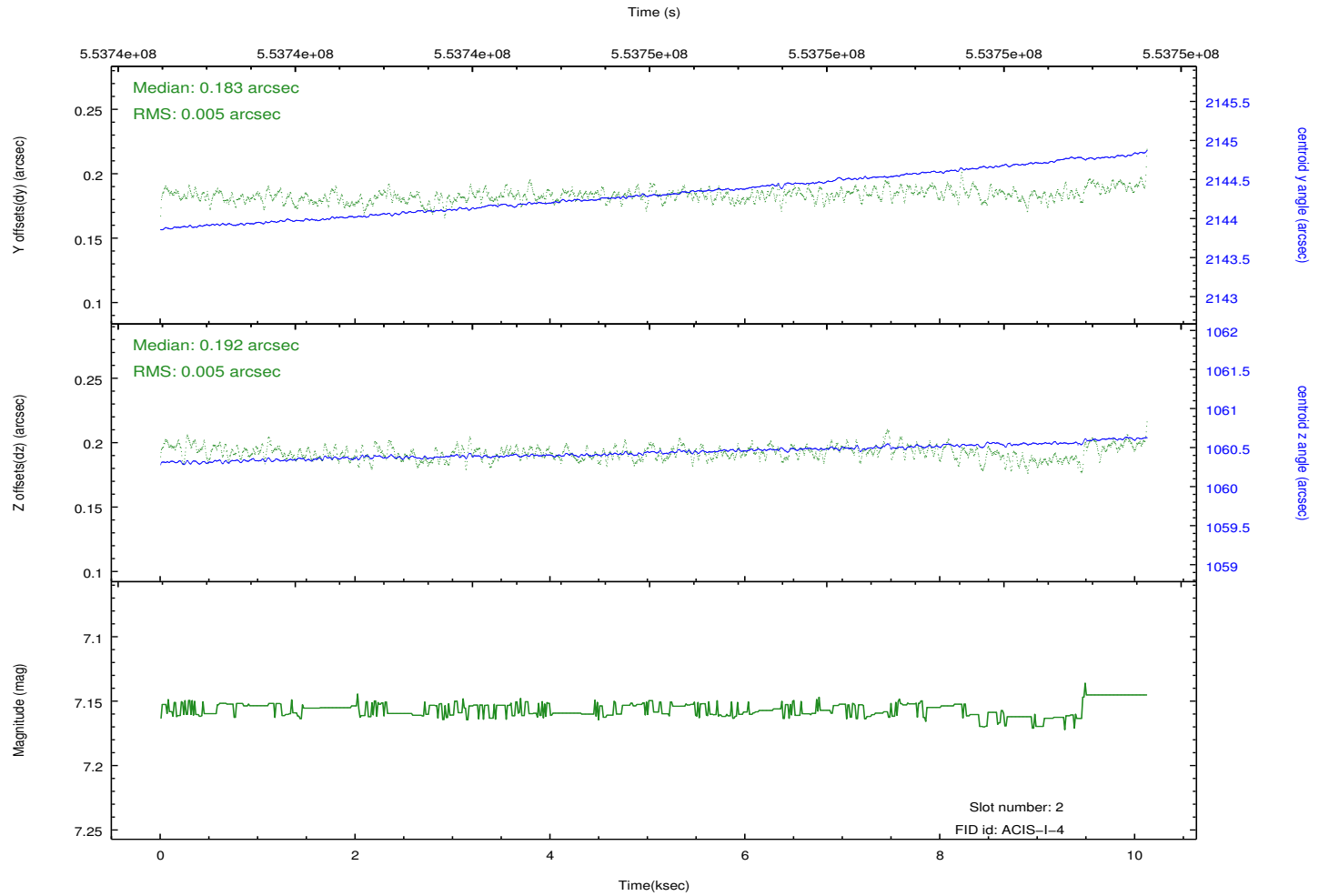
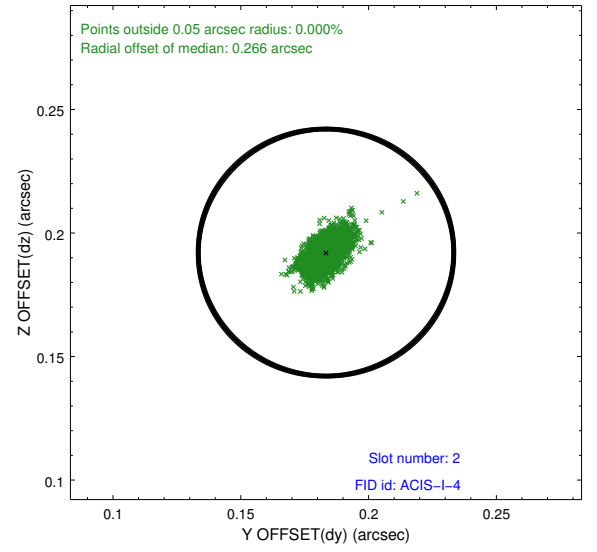
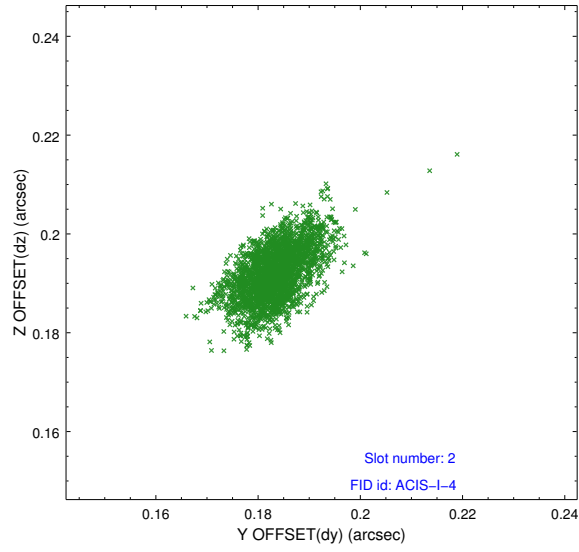
2.5.1 Slot 0



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)	2015.07.23
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.7732070416212

A.2 Comments

A spatial region of the original bias map for CCD = 3 suffered from anomalously high data values. Pixels in the event data that were bias-corrected by one of the original affected bias pixels may have an apparent energy shift. While the change in energy is expected to be small (~ 20 eV), it depends on many parameters that have not yet been fully explored for this bias anomaly. The bias map for CCD = 3 has been reconstructed for this processing to remove this anomaly using scaled data from a comparable bias map from another observation. The pixels affected by the anomaly are bounded by sky coords: (283.27150, 0.67862), (283.26947, 0.68153), (283.24478, 0.66426), (283.25060, 0.66401).