

V&V Reference Report

L2 ASCDS Version : 10.5.4

Observation 20085 - L2 Version 1
Chandra X-Ray Center

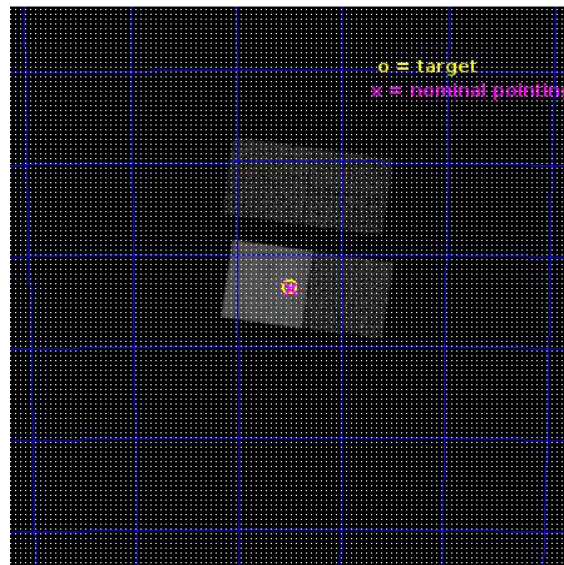
L2 Processing Date : May 31 2017

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1 Front

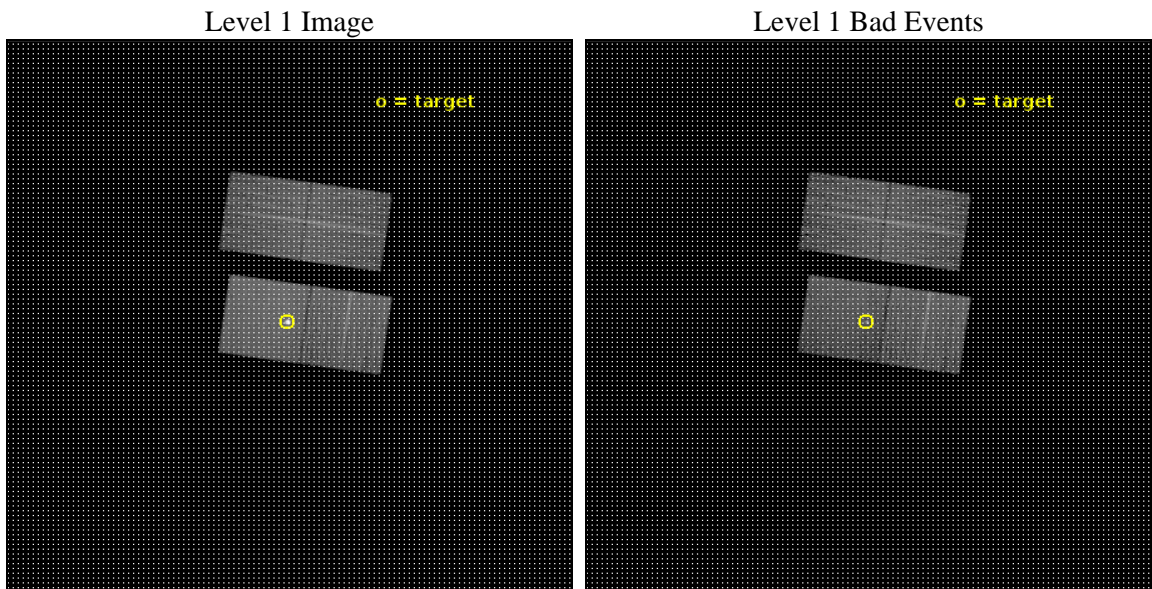
seq_num	502637	Sequence number
obs_id	20085	Observation id
title	N103B: A Type Ia Remnant with Circumstellar Interaction... Kepler's Older Cousin?	Proposal title
observer	Dr. Brian Williams	Principal investigator
object	SNR 0509-68.7	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	77.245833	Observer's specified target RA [deg]
dec_targ	-68.726111	Observer's specified target Dec [deg]
ra_nom	77.239713684691	Nominal RA [deg]
dec_nom	-68.729936479921	Nominal Dec [deg]
roll_nom	188.15088705028	Nominal Roll [deg]
revision	1	Processing version of data
ontime	15070.808747888	Sum of GTIs [s]
livetime	14873.897536628	Livetime [s]
ontime2	15067.544597626	Sum of GTIs [s]
ontime3	15070.726667881	Sum of GTIs [s]
ontime6	15070.767707944	Sum of GTIs [s]
ontime7	15070.808747888	Sum of GTIs [s]
l2events	135927	Number of level 2 events



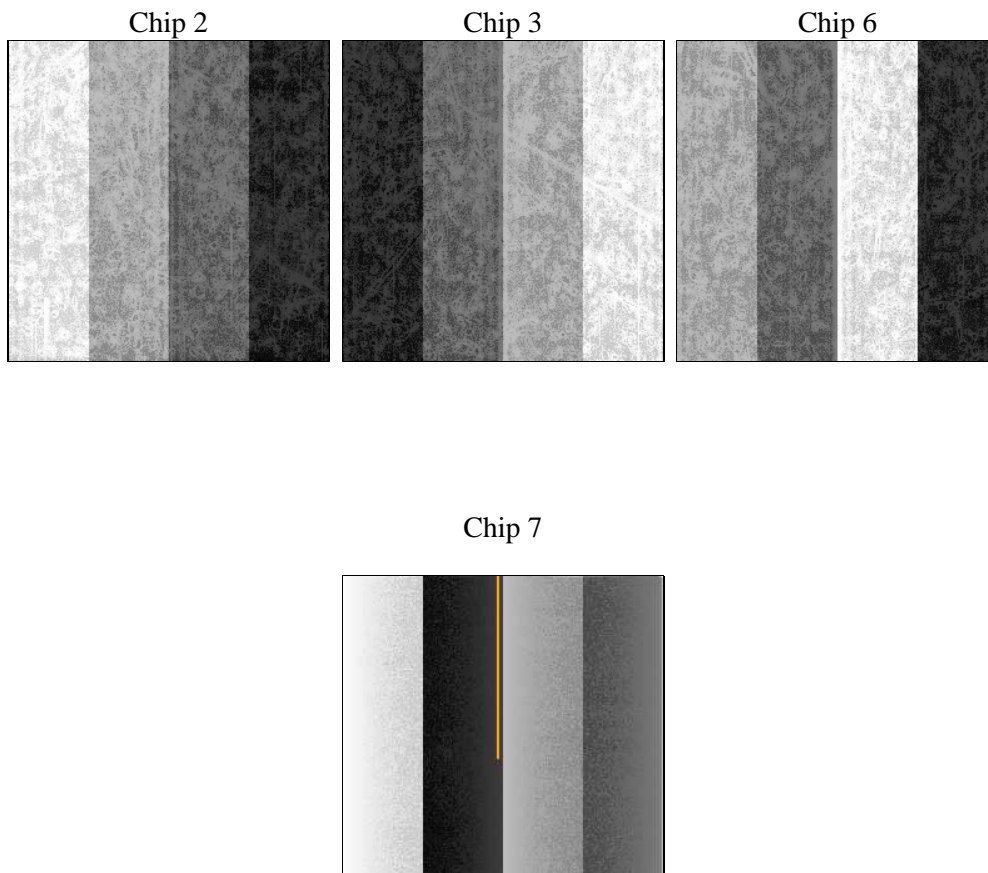
2 OBI

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	10.5.4	Processing system revision	ontime	15070.808747888	Sum of GTIs [s]
caldbver	4.7.4	 	ontime2	15067.544597626	Sum of GTIs [s]
date	2017-05-31T13:34:54	Date and time of file creation	ontime3	15070.726667881	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	15070.767707944	Sum of GTIs [s]
			ontime7	15070.808747888	Sum of GTIs [s]
			l1events	502938	Number of level 1 events

2.1.4 Events

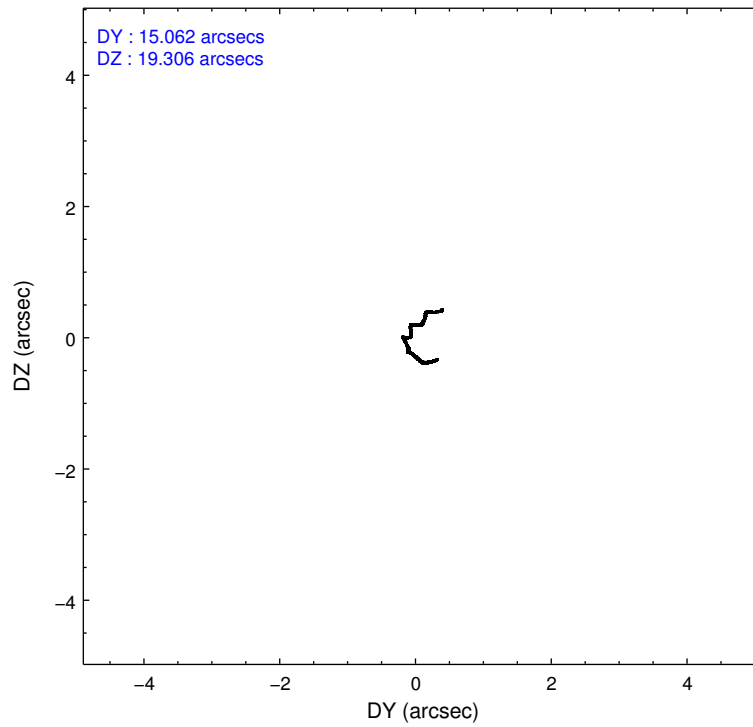
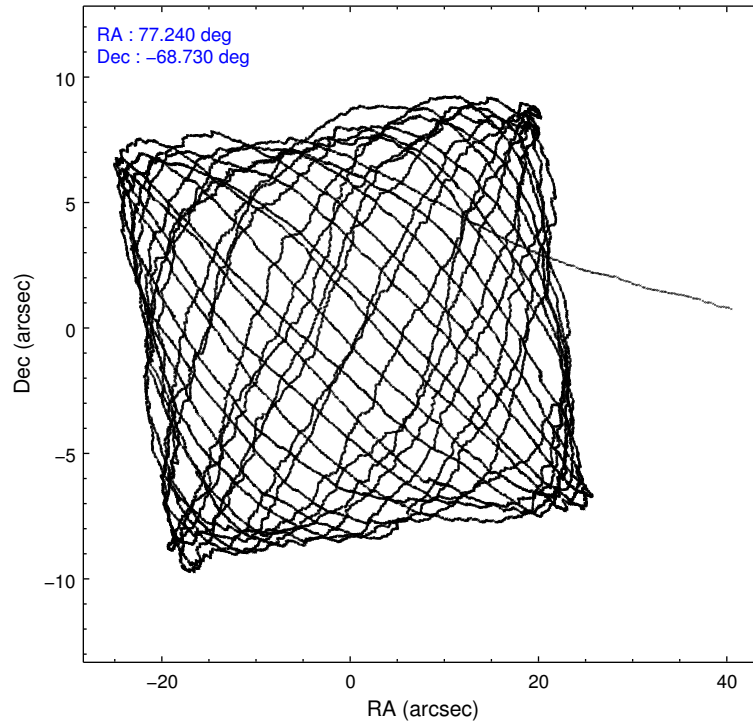
	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	107294	101029	110060	184555
rejected events	95543	89859	97074	78004
rejected %	89%	88%	88%	42%

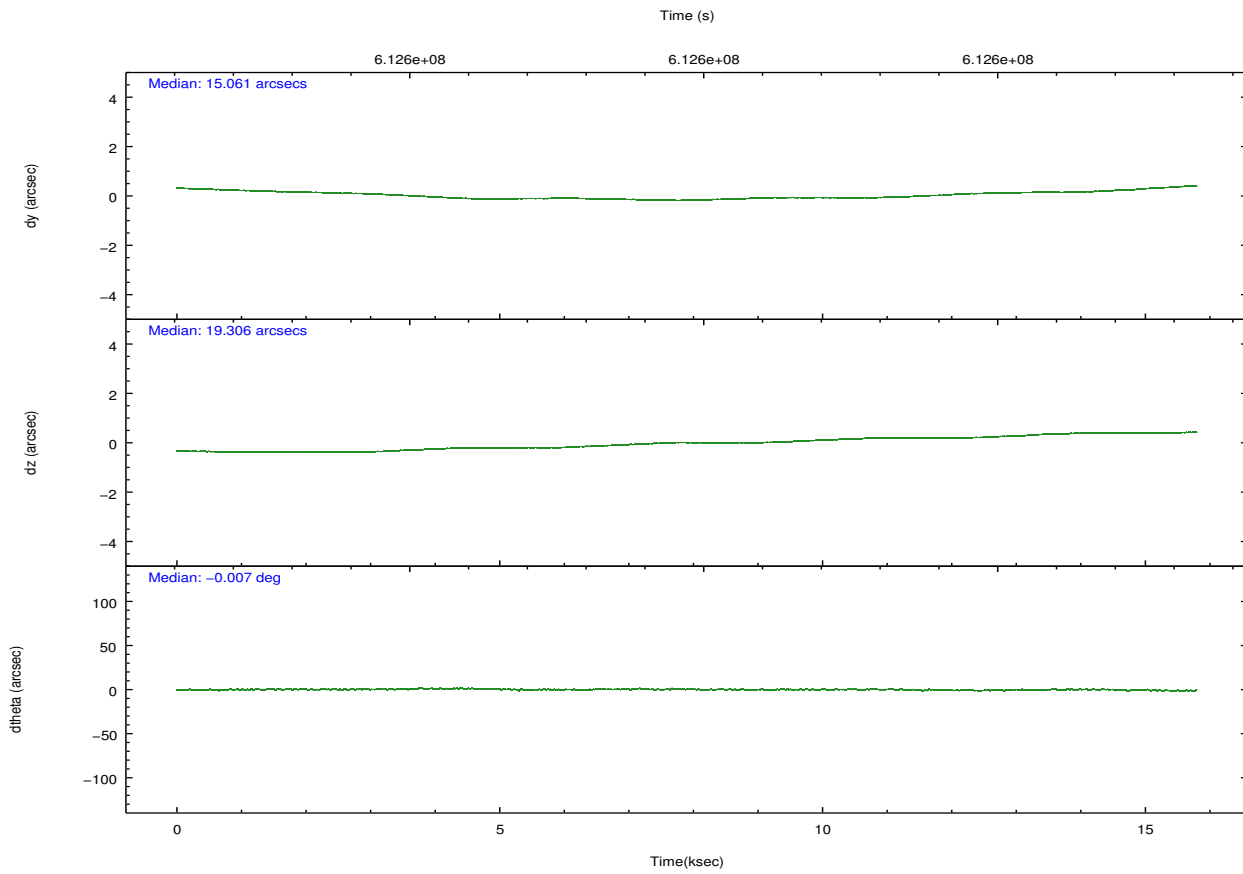
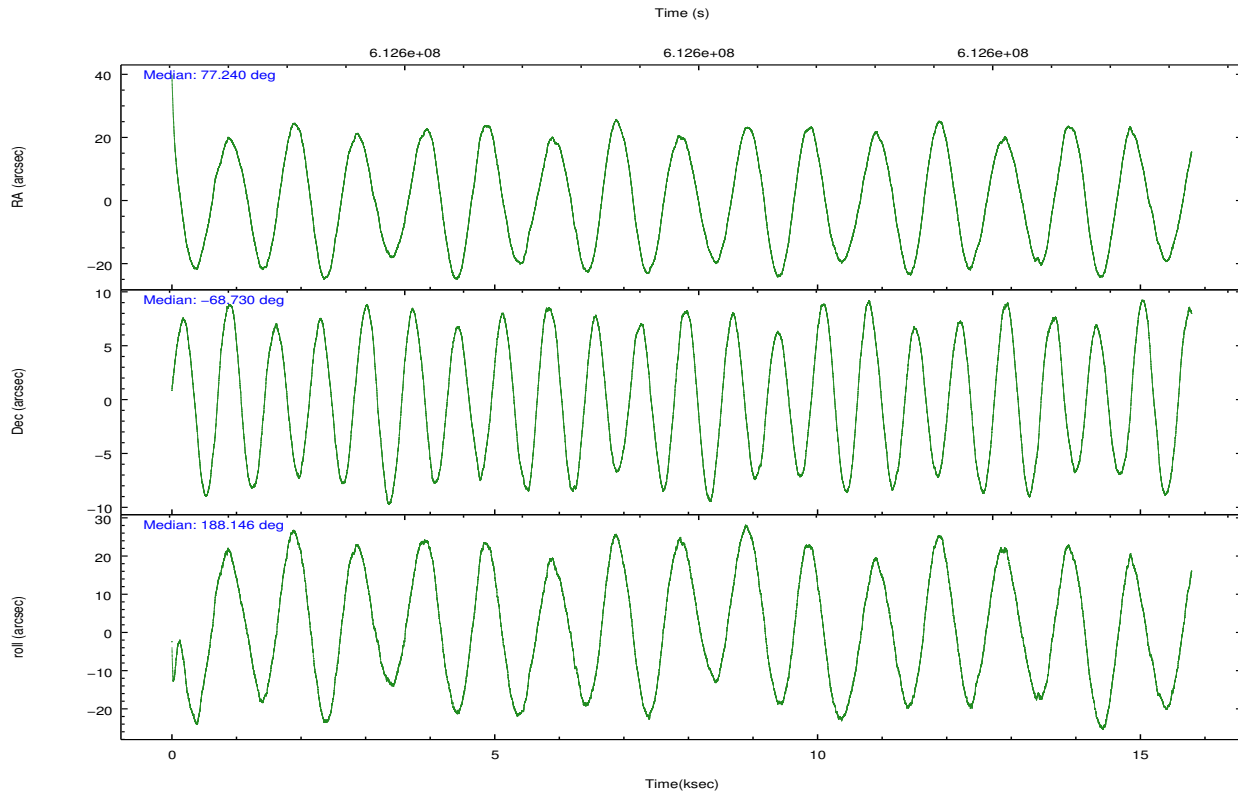
	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	4213	4099	4654	17892
	3%	4%	4%	9%
grade 1 events	66	57	59	409
	0%	0%	0%	0%
grade 2 events	2976	2433	2948	25762
	2%	2%	2%	13%
grade 3 events	1127	1209	1240	10687
	1%	1%	1%	5%
grade 4 events	1166	1147	1224	10542
	1%	1%	1%	5%
grade 5 events	4302	5098	5035	14632
	4%	5%	4%	7%
grade 6 events	2273	2284	2922	41714
	2%	2%	2%	22%
grade 7 events	91171	84702	91978	62917
	84%	83%	83%	34%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-2367	ACIS-2367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	77.298602	77.23971368469051	Subarray requested	NONE	NONE
[deg] Pointing Dec	-68.712727	-68.72993647992138	Alternating exposures requested	N	N
[deg] Pointing Roll	188.049175	188.1508870502822	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	612592595.184000	612590912.31617			
Observation start date	2017-05-31T04:35:26	2017-05-31T04:08:32			
[s] Observation end time (MET)	612607595.184000	612608999.4672199			
Observation end date	2017-05-31T08:45:26	2017-05-31T09:09:59			
Read mode	TIMED	TIMED			

2.3 Aspect





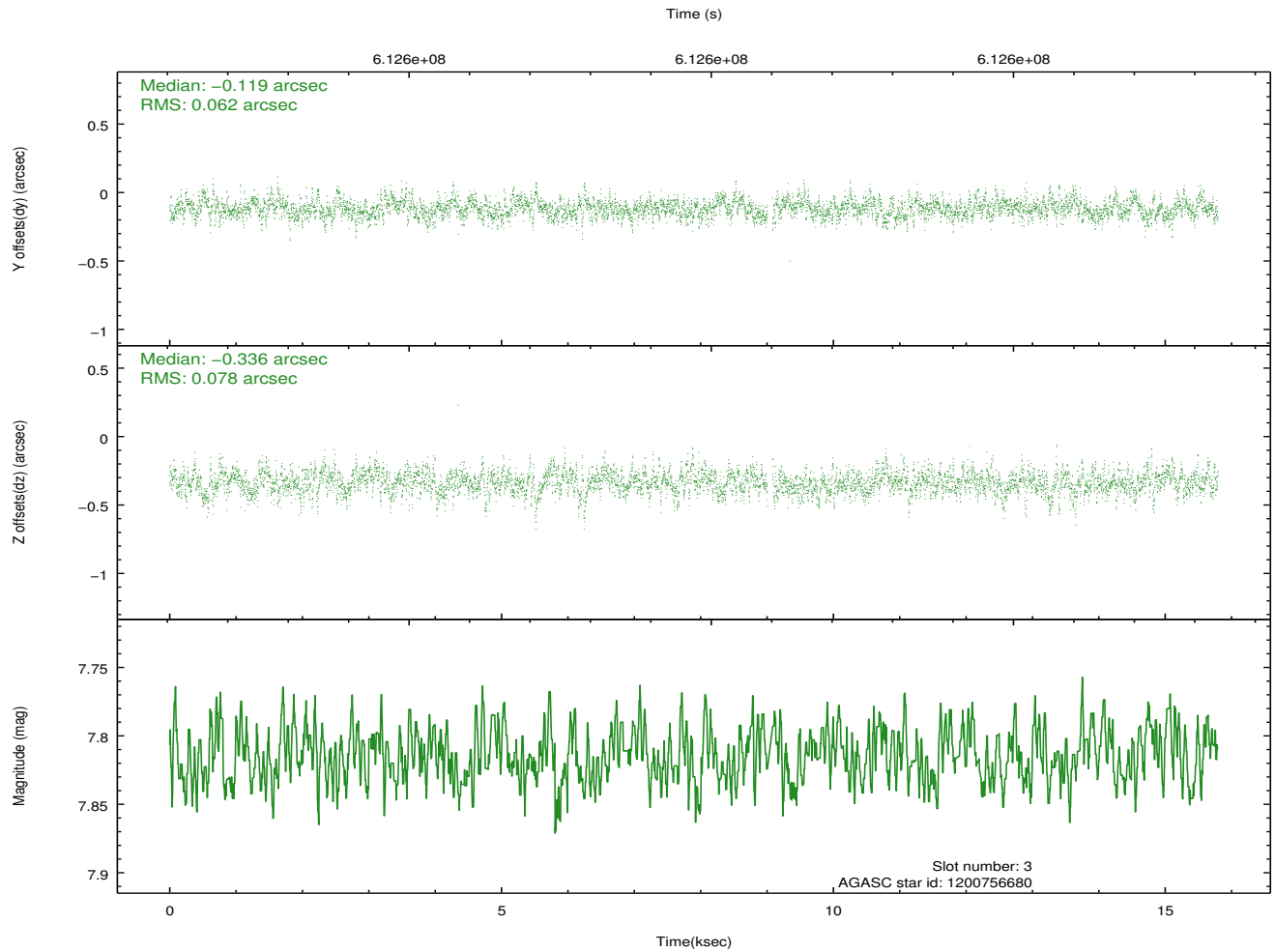
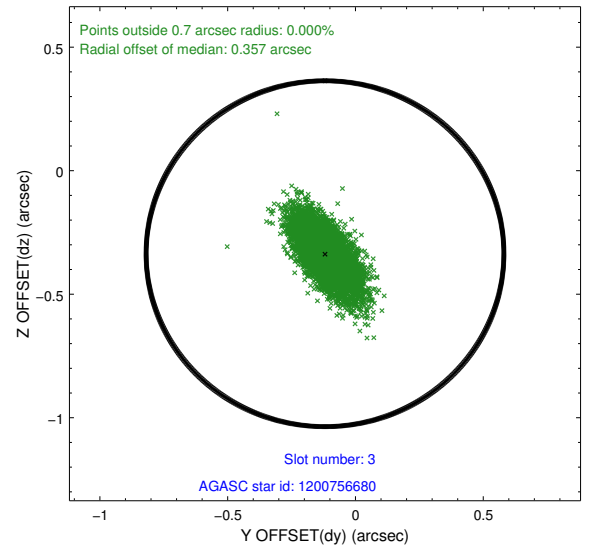
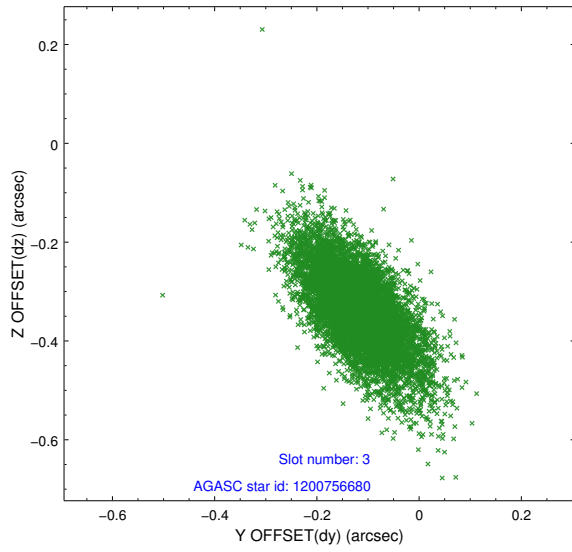
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-1	7.05	3853	0.015	-0.031	0.012	0.023	0.000000	0.000000	928.03	-1736.42
1	FID		ACIS-S-4	7.08	3853	0.382	0.018	0.011	0.020	0.000000	0.000000	2145.89	167.55
2	FID		ACIS-S-5	7.07	3853	-0.423	0.025	0.008	0.015	0.000000	0.000000	-1820.98	161.32
3	GUIDE	used	1200756680	7.81	7667	-0.119	-0.336	0.099	0.185	76.219475	-68.900351	1480.93	486.47
4	GUIDE	used	1200888000	8.59	7702	0.247	0.505	0.116	0.202	78.402273	-68.021569	-1817.65	-2241.15
5	GUIDE	used	1200758760	8.27	7698	0.038	0.191	0.146	0.234	76.277764	-68.086435	1044.29	-2412.90
6	GUIDE	used	1200760024	8.45	7702	-0.148	-0.248	0.126	0.211	77.625244	-69.320410	-104.83	2225.31
7	GUIDE	used	1200888464	9.43	7699	-0.032	-0.105	0.156	0.265	78.430687	-69.005633	-1295.95	1262.29

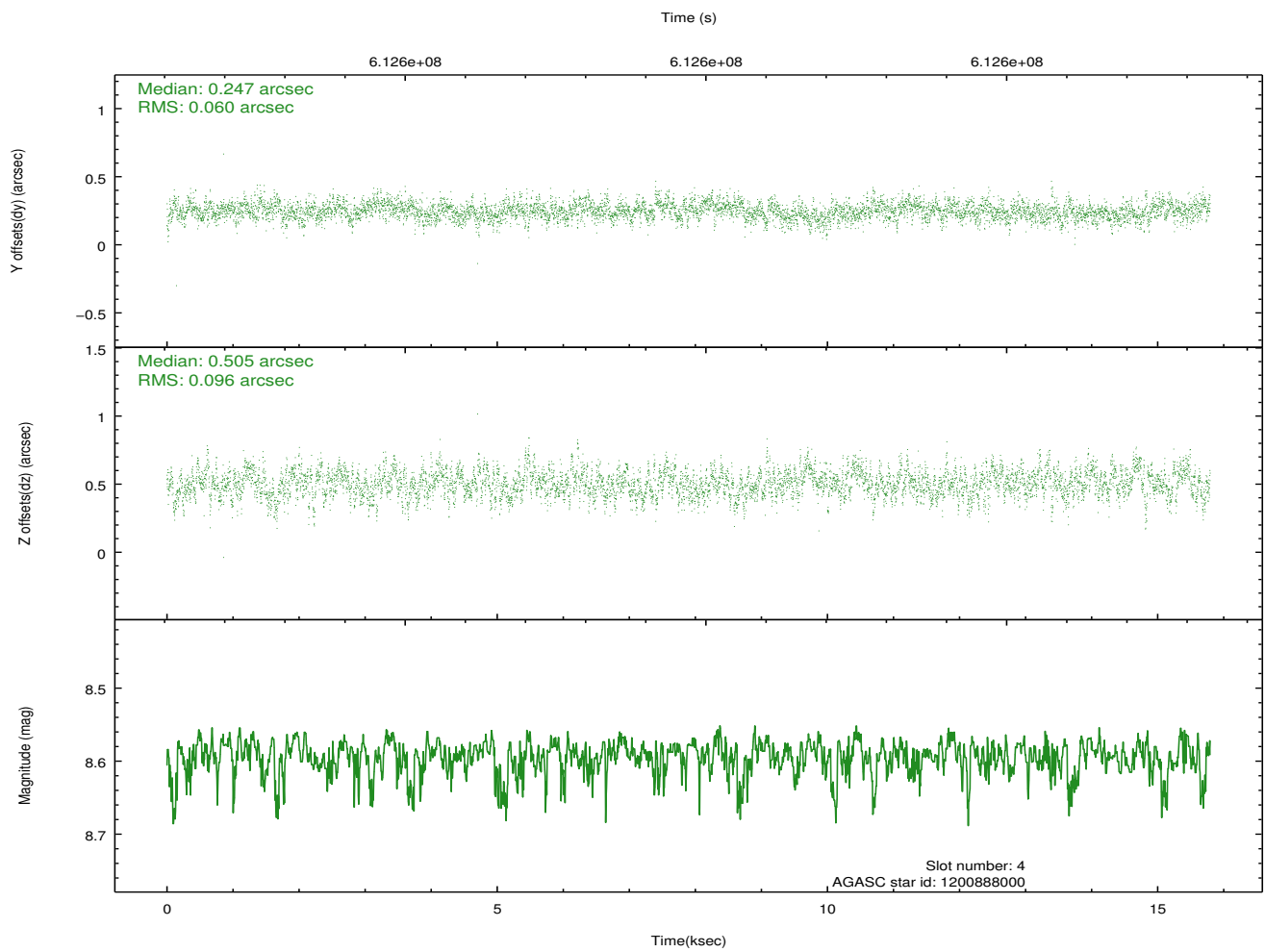
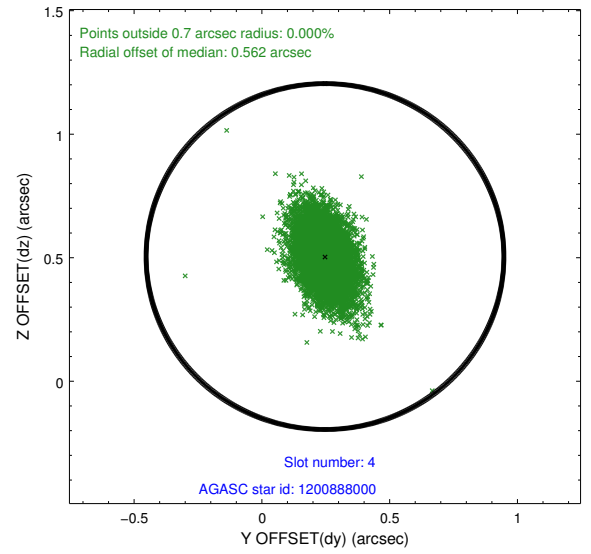
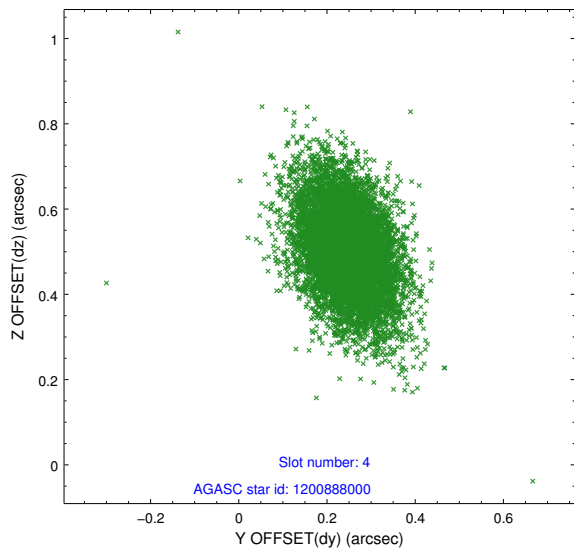
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2.4 Star Slots

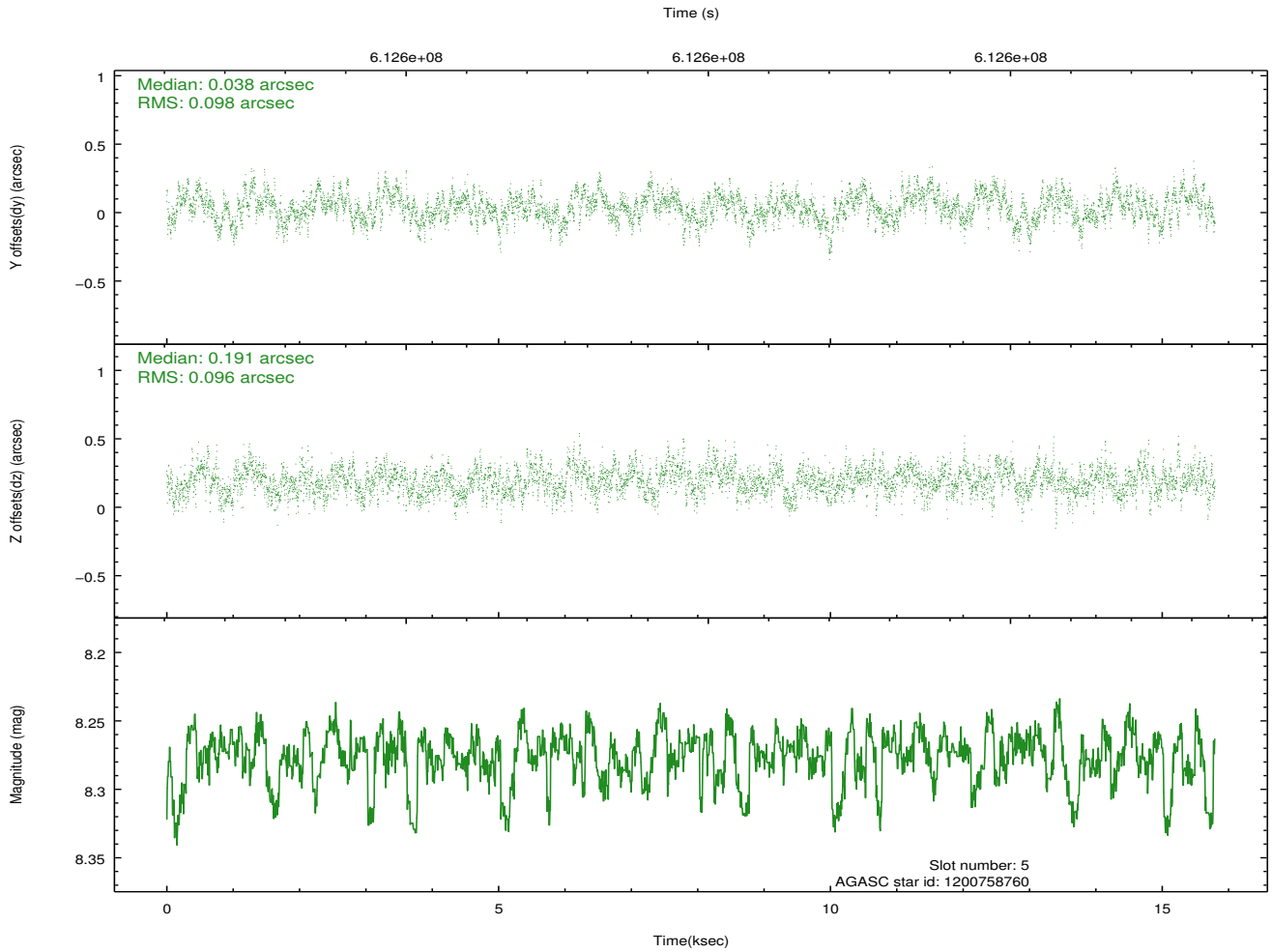
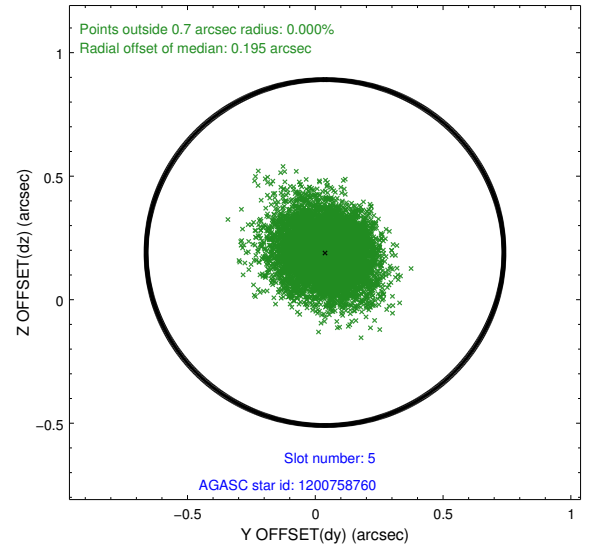
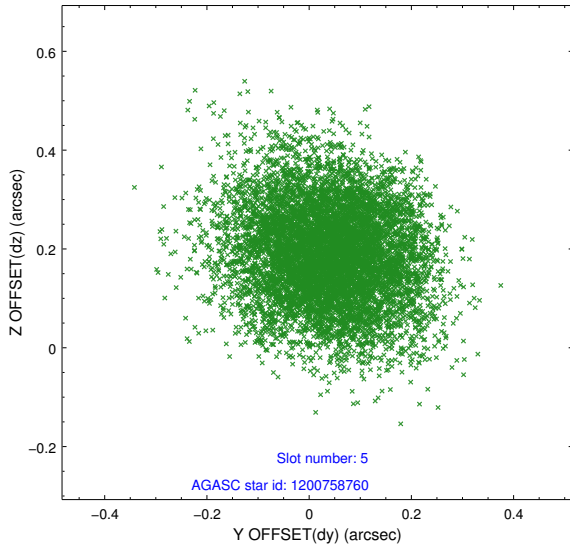
2.4.1 Slot 3



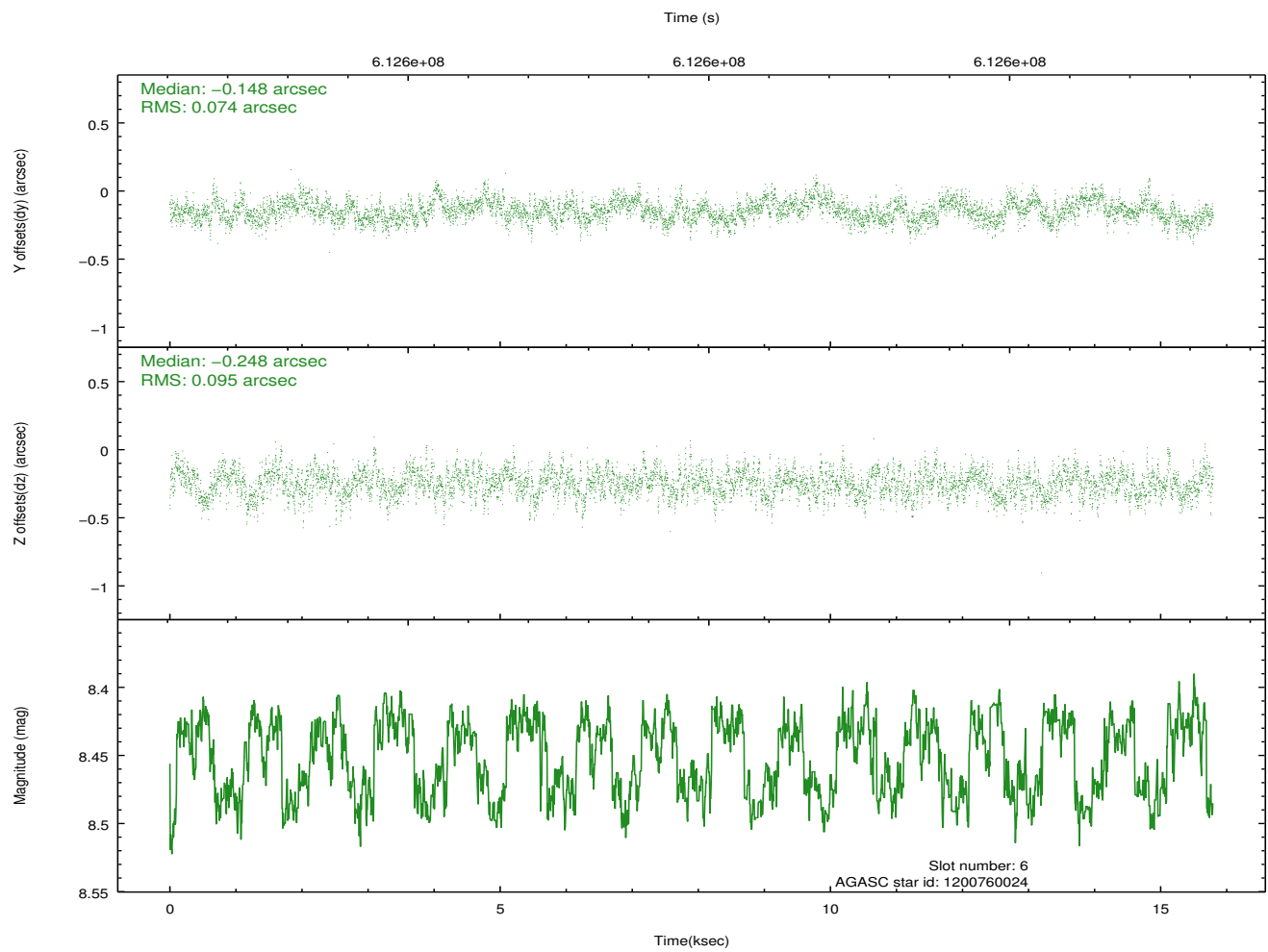
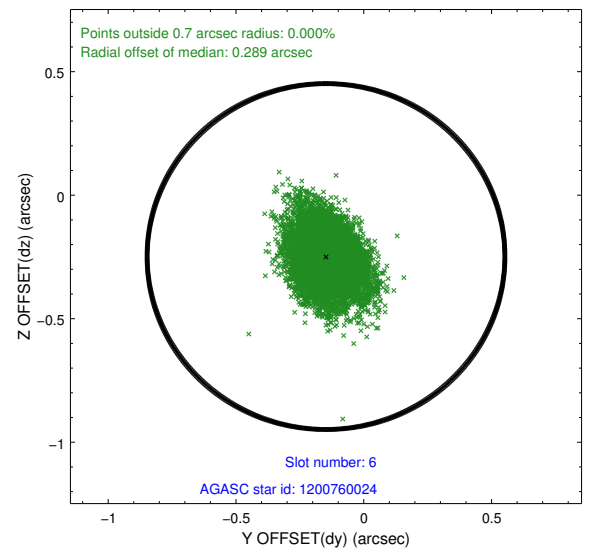
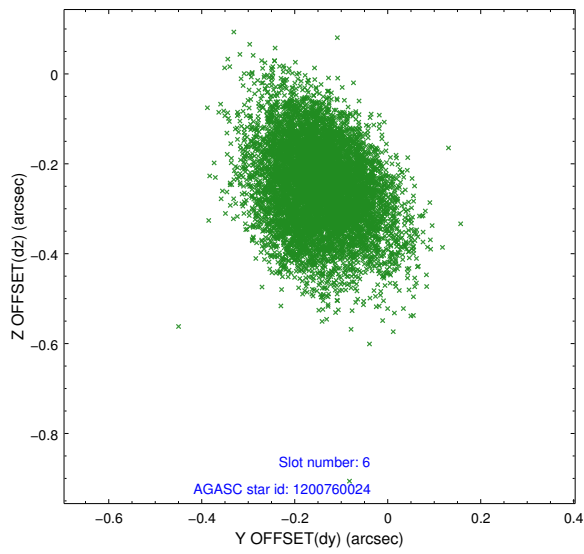
2.4.2 Slot 4



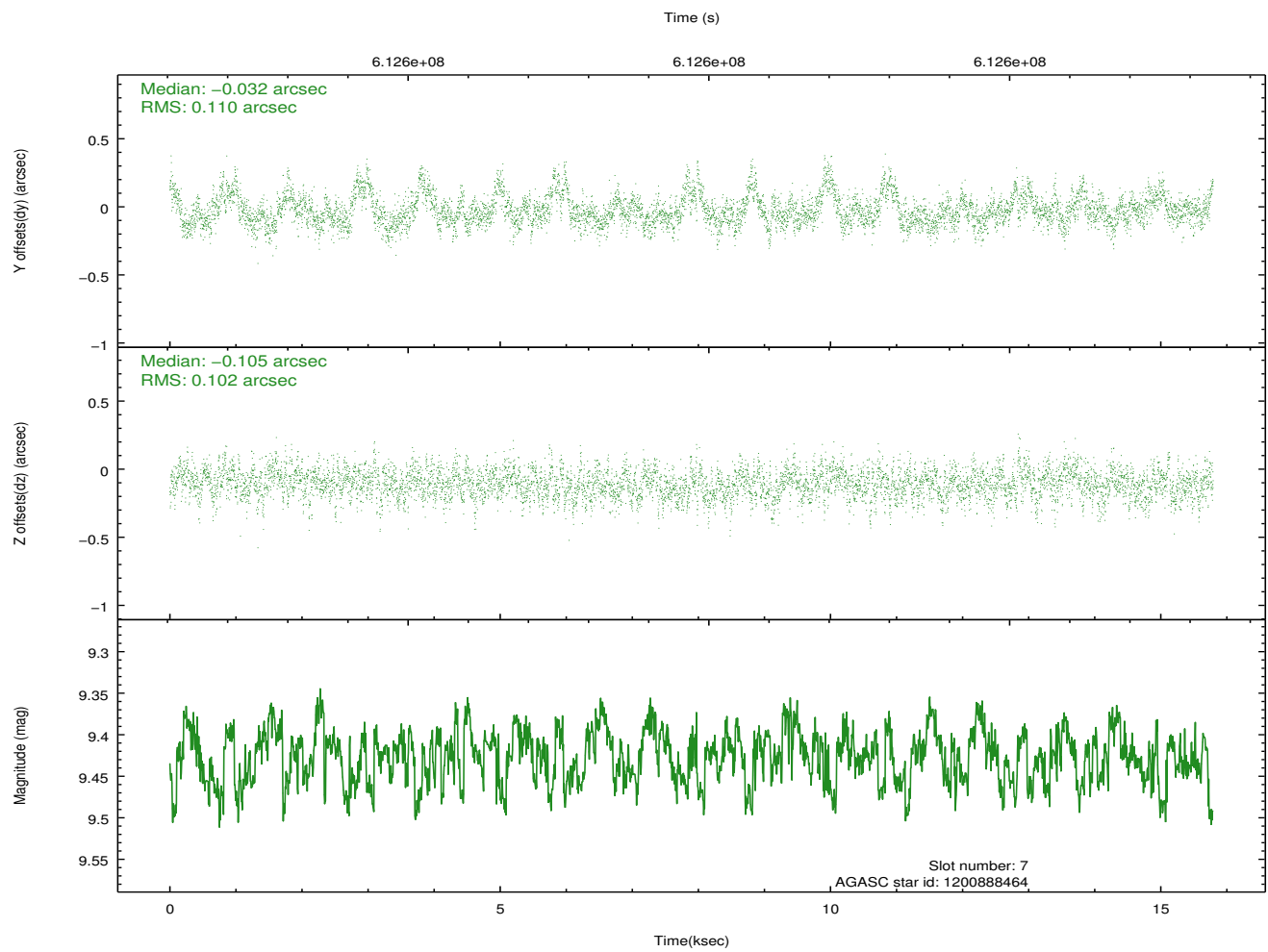
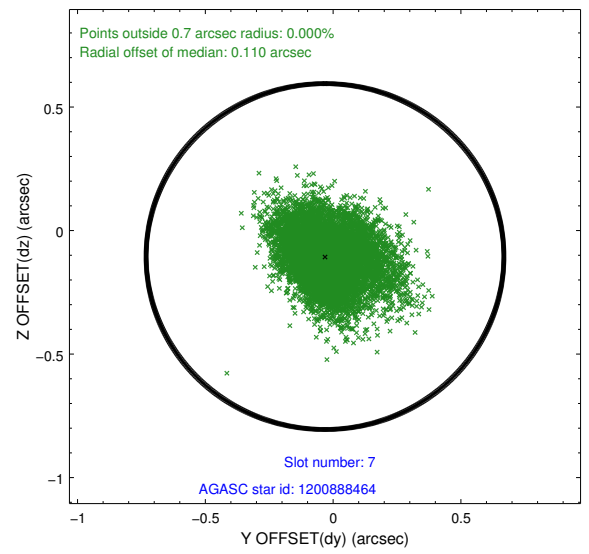
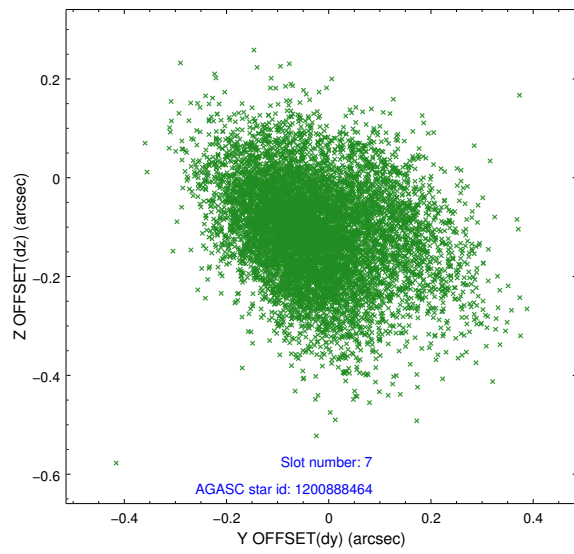
2.4.3 Slot 5



2.4.4 Slot 6

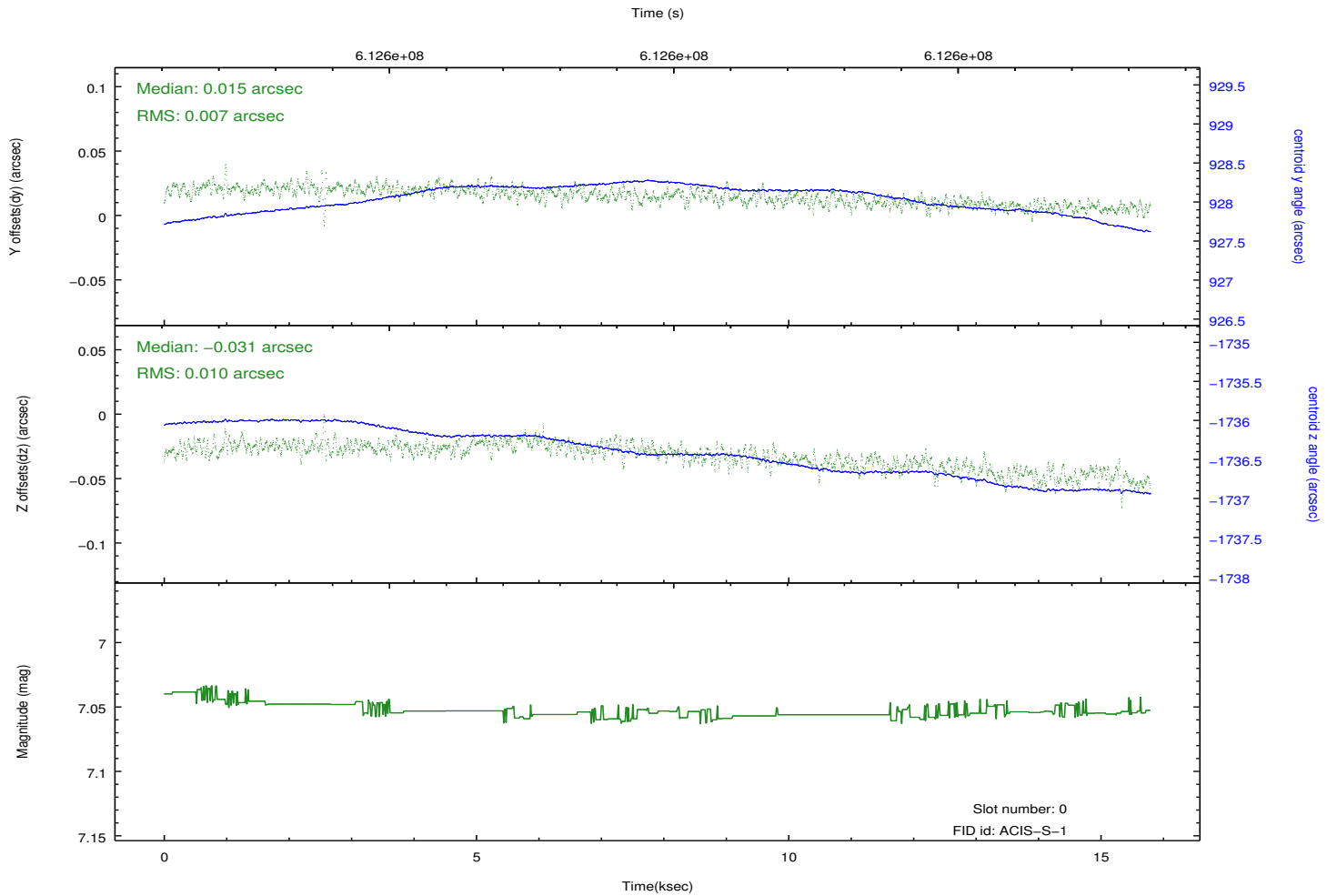
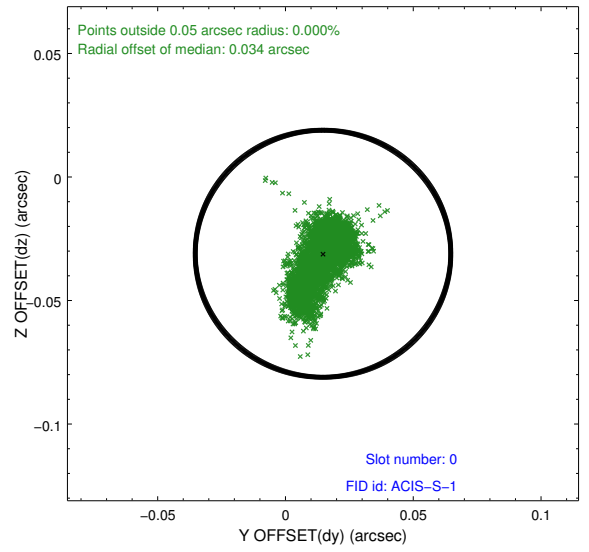
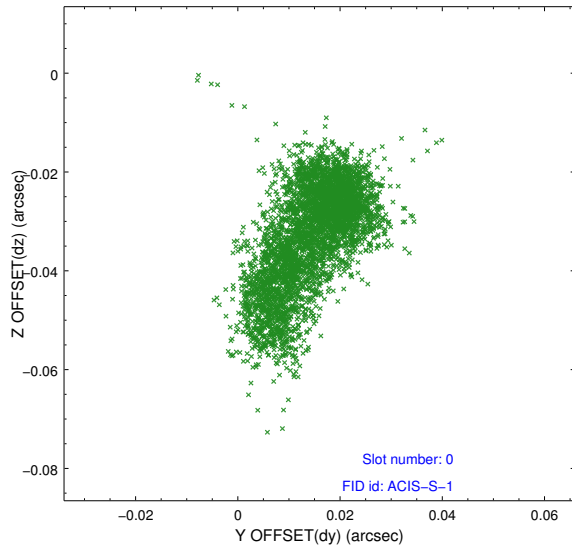


2.4.5 Slot 7

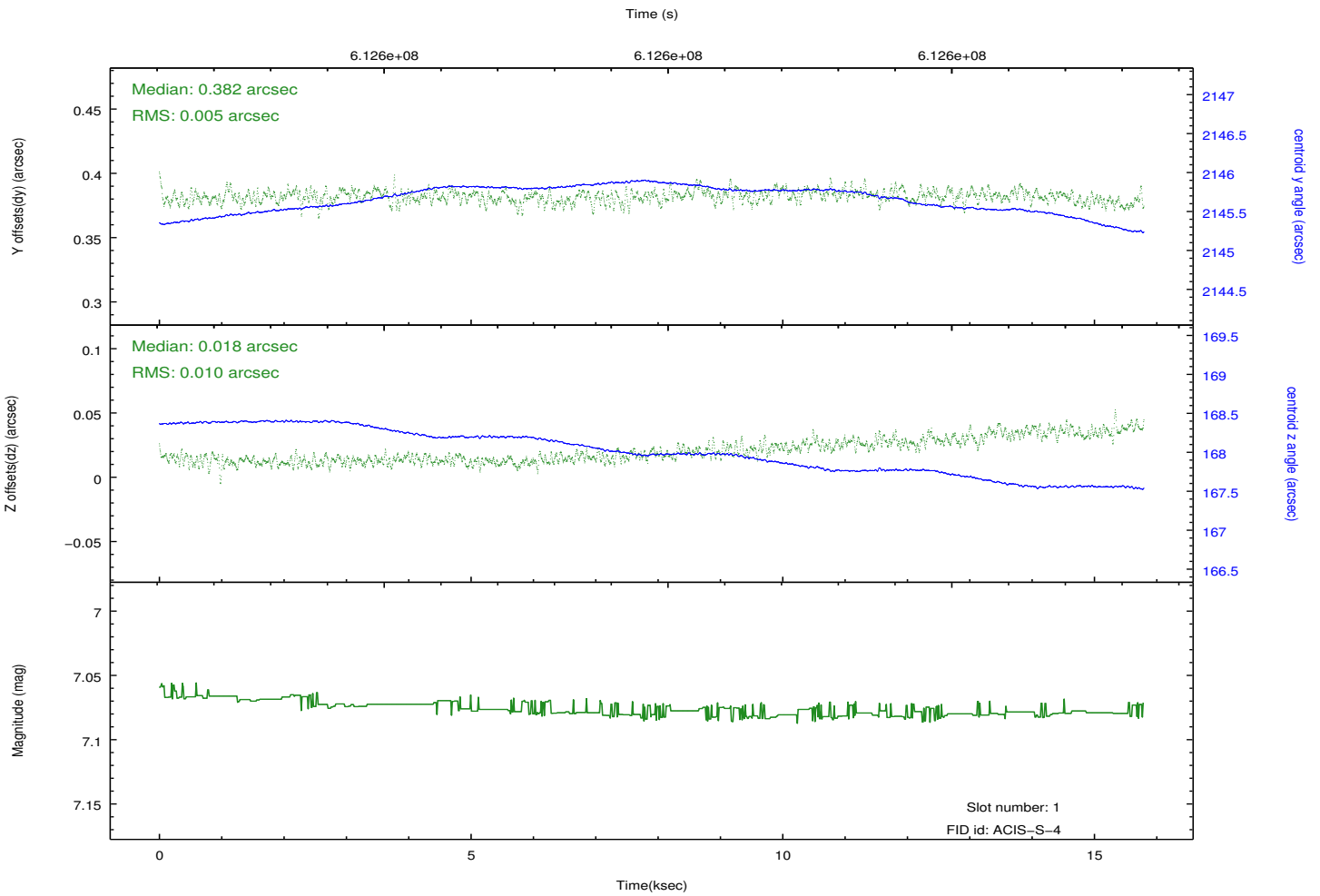
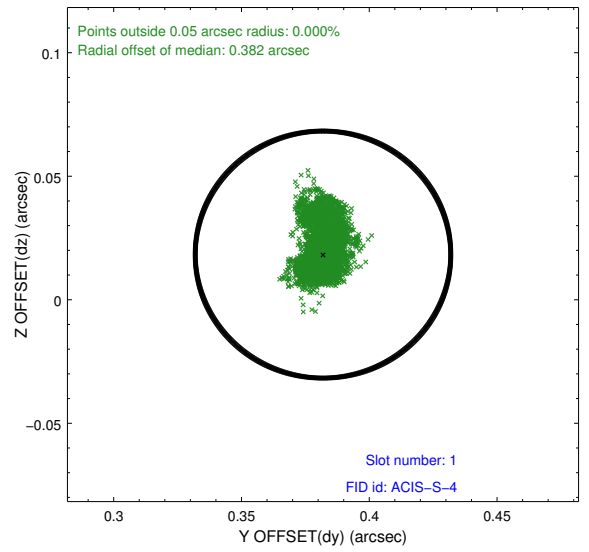
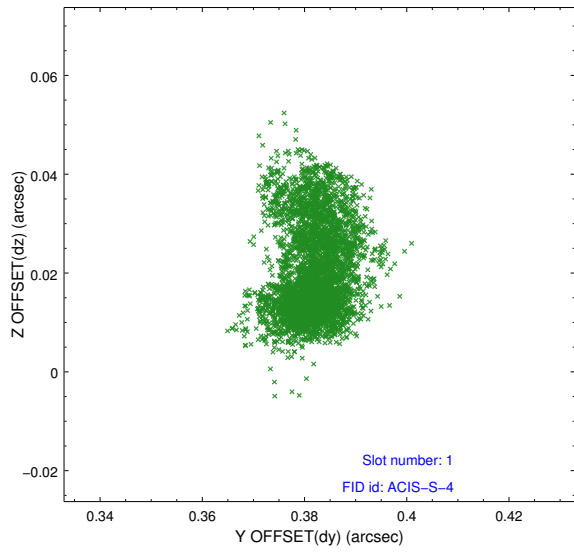


2.5 FID Slots

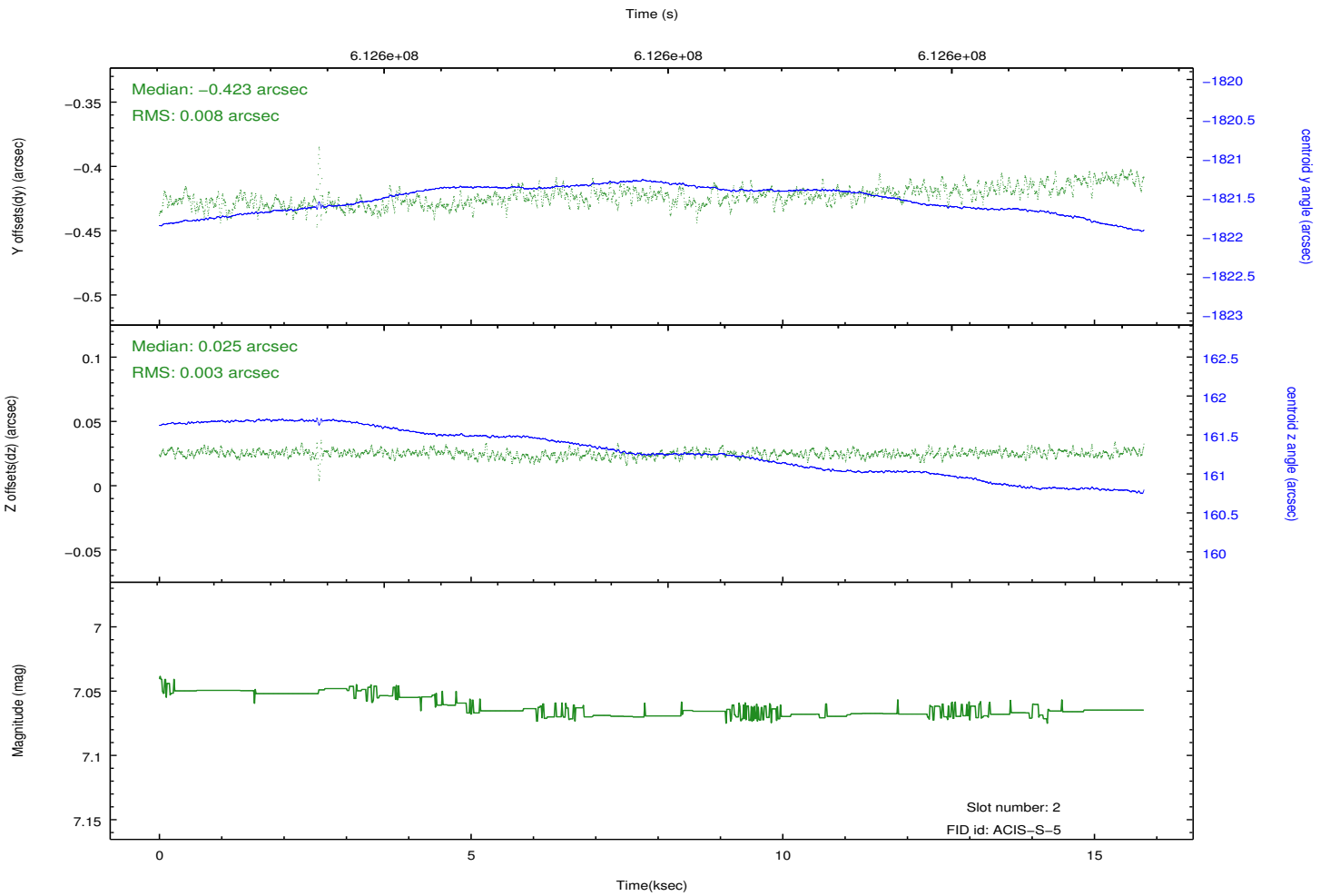
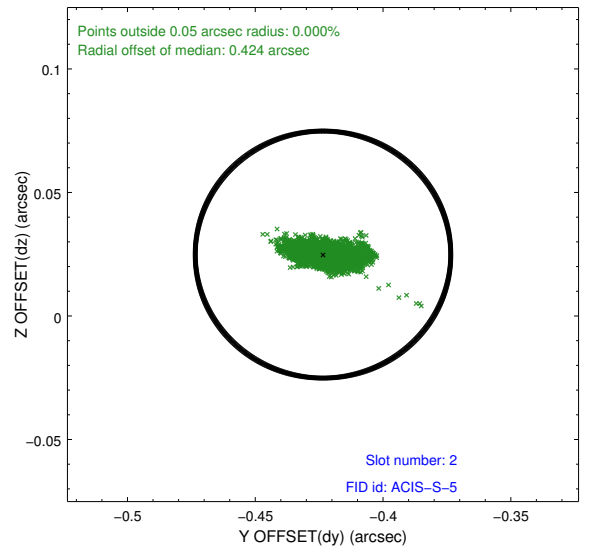
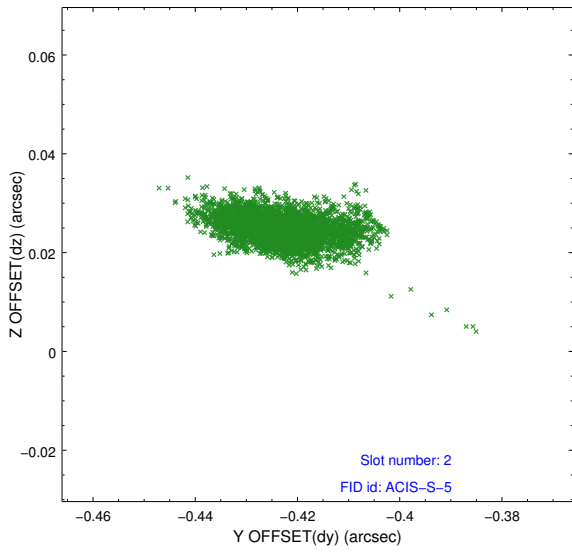
2.5.1 Slot 0



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)	2017.05.31
V&V Edition	2
V&V Disposition and Status	OK
V&V Charge Time	15.070808747888

A.2 Comments

Joint proposal with HST.

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A spatial region of the bias map for CCD = 2 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. In this case, the bias map for CCD = 2 could not be improved because no suitable data at a compatible temperature and time range are available to use as replacement values. The bias map used in this processing is the original bias map telemetered with the observation.