

V&V Reference Report

L2 ASCDS Version : 10.5

Observation 17762 - L2 Version 2
Chandra X-Ray Center

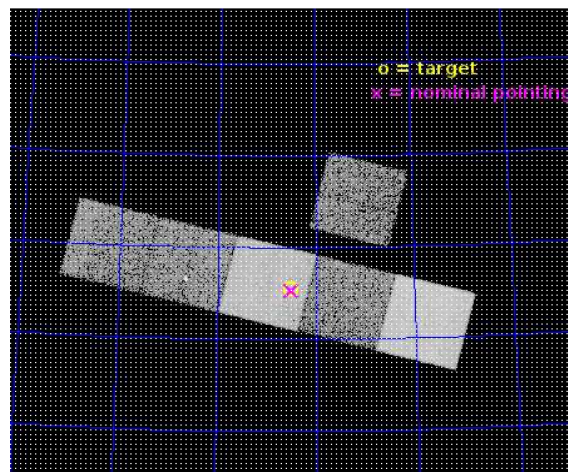
L2 Processing Date : Jun 23 2016

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1 Front

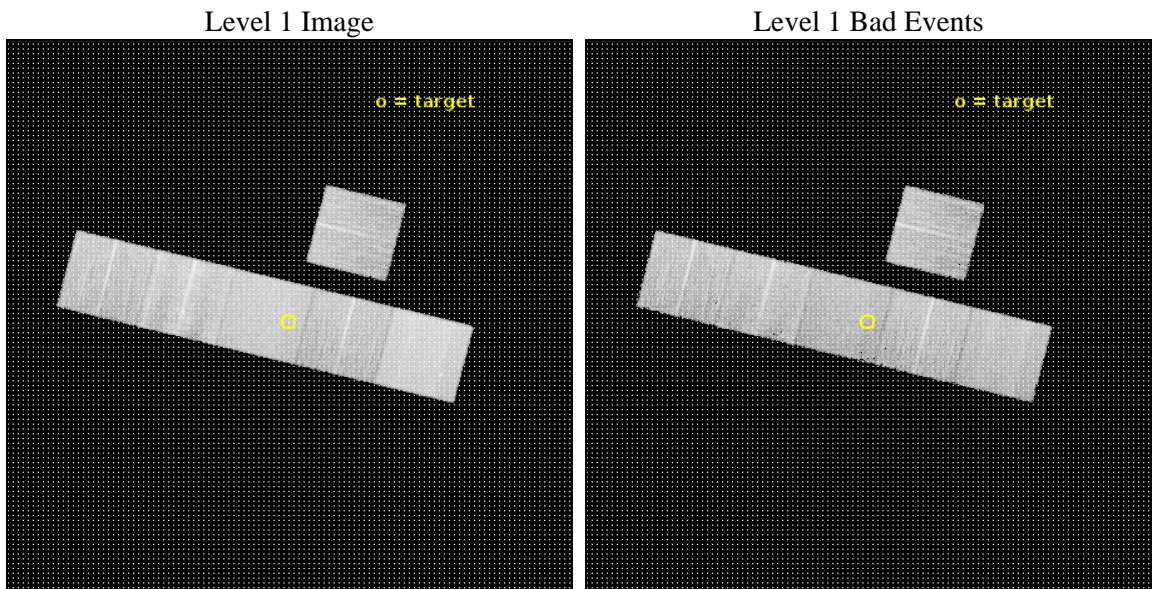
seq_num	201071	Sequence number
obs_id	17762	Observation id
title	Understanding the Rotation/Activity Relation: A New Low-Mass, Extreme-Spin Sample	Proposal title
observer	Peter Williams	Principal investigator
object	2MASS J17311725+8205198	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	262.811667	Observer's specified target RA [deg]
dec_targ	82.091111	Observer's specified target Dec [deg]
ra_nom	262.81004590545	Nominal RA [deg]
dec_nom	82.088481328916	Nominal Dec [deg]
roll_nom	194.15824005075	Nominal Roll [deg]
revision	2	Processing version of data
ontime	14371.200214148	Sum of GTIs [s]
livetime	14189.223423738	Livetime [s]
ontime2	14371.200214148	Sum of GTIs [s]
ontime5	14371.200214148	Sum of GTIs [s]
ontime6	14371.200214148	Sum of GTIs [s]
ontime7	14371.200214148	Sum of GTIs [s]
ontime8	14371.200214148	Sum of GTIs [s]
ontime9	14371.200214148	Sum of GTIs [s]
l2events	149019	Number of level 2 events



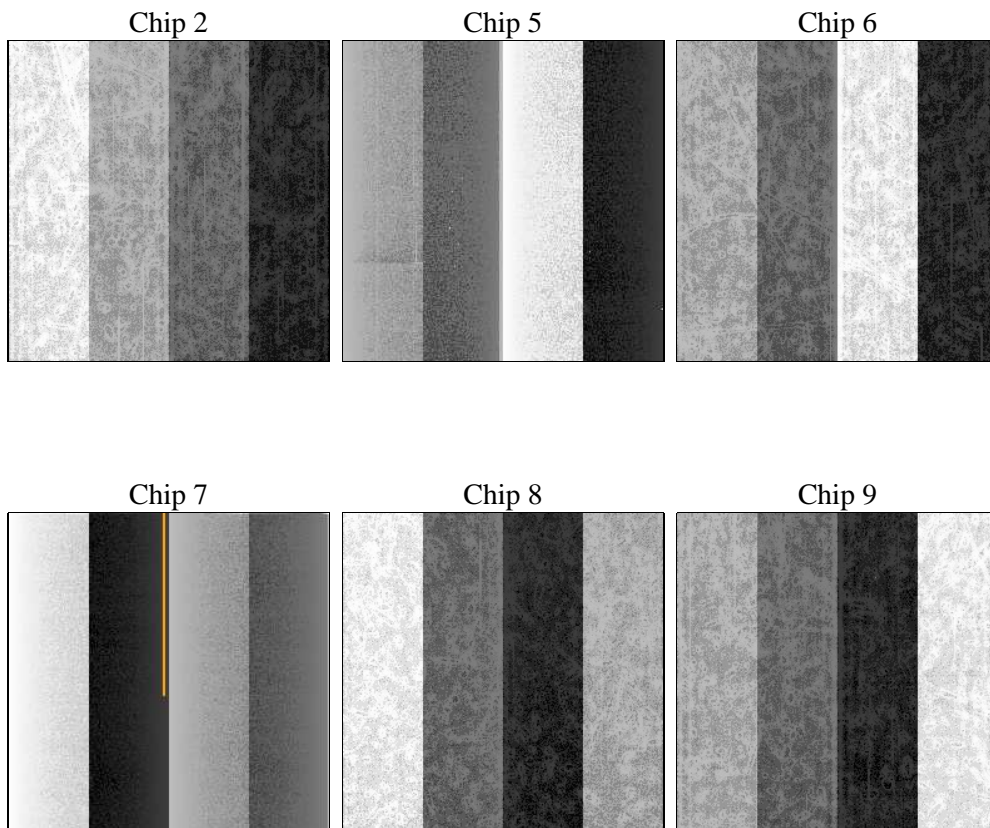
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	14430.000000	[s] Scheduled observation exposure time
ascdsver	10.5	Processing system revision	ontime	14371.200214148	Sum of GTIs [s]
caldsver	4.7.2	 	ontime2	14371.200214148	Sum of GTIs [s]
date	2016-06-23T18:25:17	Date and time of file creation	ontime5	14371.200214148	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	14371.200214148	Sum of GTIs [s]
			ontime7	14371.200214148	Sum of GTIs [s]
			ontime8	14371.200214148	Sum of GTIs [s]
			ontime9	14371.200214148	Sum of GTIs [s]
			l1events	633620	Number of level 1 events

2.1.4 Events

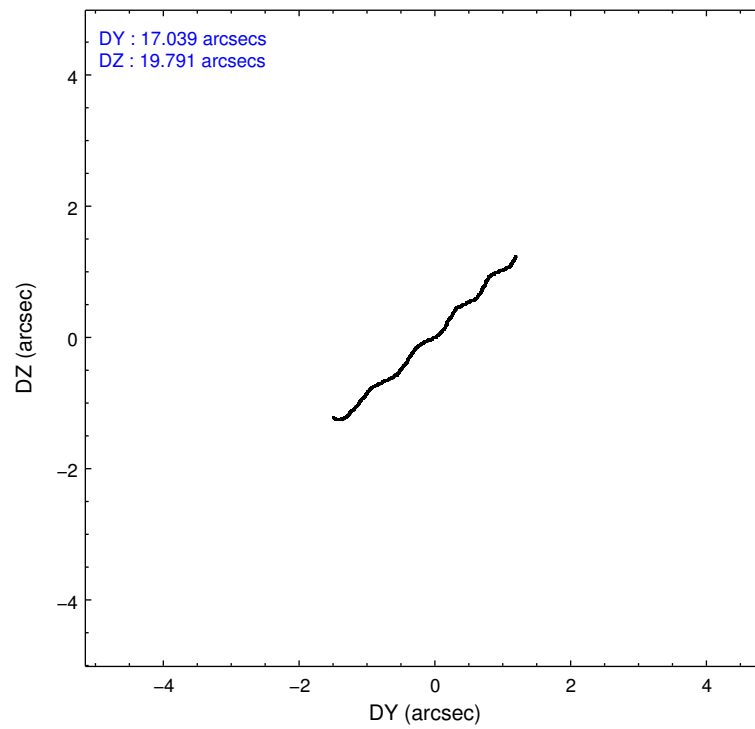
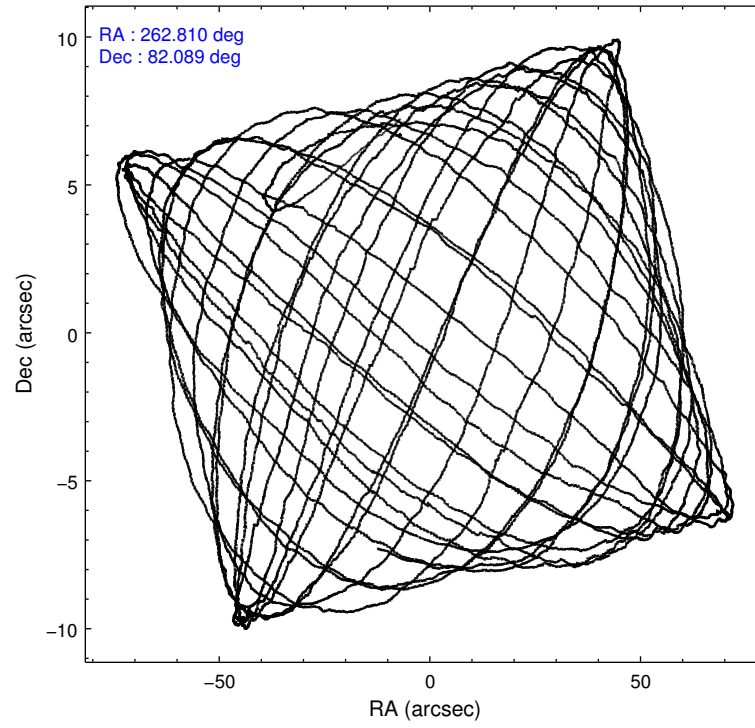
	ccd 2	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 2	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	83361	138568	86908	113441	118025	93317	grade 0 events	3252	4048	3310	4122	9623	3837
rejected events	73979	72356	76802	64178	84922	82478		3%	2%	3%	3%	8%	4%
rejected %	88%	52%	88%	56%	71%	88%	grade 1 events	41	299	40	156	107	59
								0%	0%	0%	0%	0%	0%
							grade 2 events	2431	20709	2343	10520	8014	2506
								2%	14%	2%	9%	6%	2%
							grade 3 events	915	2087	1046	3798	3308	1070
								1%	1%	1%	3%	2%	1%
							grade 4 events	966	2061	1009	3988	3054	1090
								1%	1%	1%	3%	2%	1%
							grade 5 events	3327	9973	4384	11155	6289	4973
								3%	7%	5%	9%	5%	5%
							grade 6 events	1820	37333	2401	26854	9112	2342
								2%	26%	2%	23%	7%	2%
							grade 7 events	70609	62058	72375	52848	78518	77440
								84%	44%	83%	46%	66%	82%

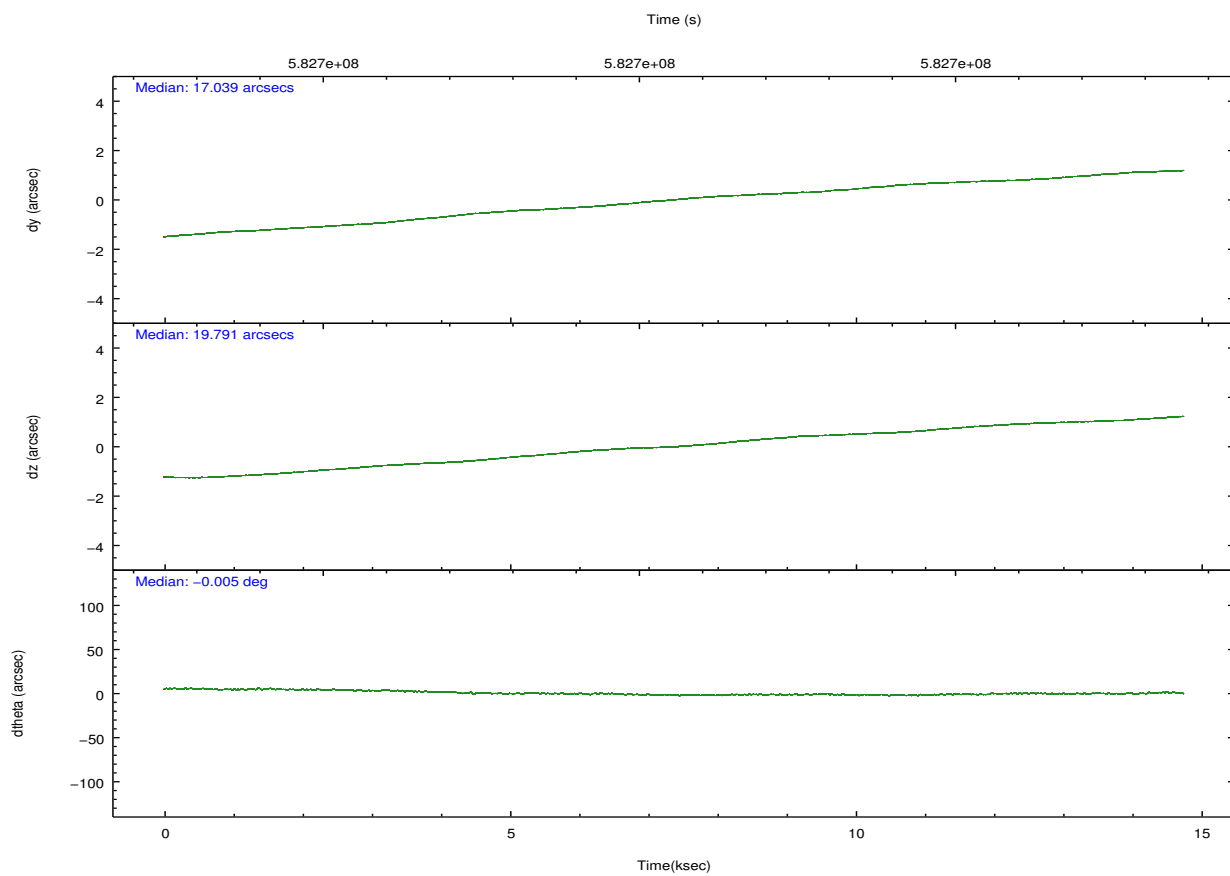
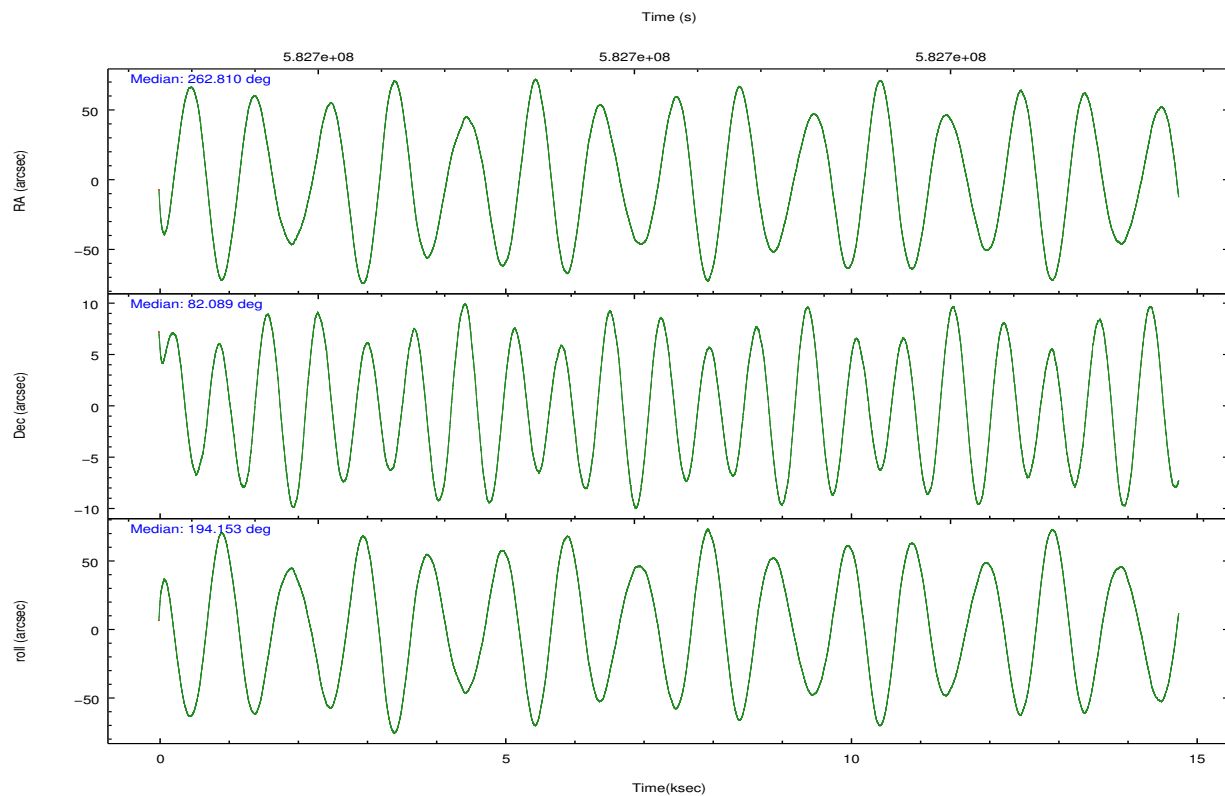
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-256789	ACIS-256789
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	262.951338	262.8100459054529
[deg] Pointing Dec	82.107794	82.08848132891646
[deg] Pointing Roll	193.861656	194.1582400507508
[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)	582693487.184000	582692451.8889199
Observation start date	2016-06-19T03:16:59	2016-06-19T03:00:51
[s] Observation end time (MET)	582707917.184000	582708859.06486
Observation end date	2016-06-19T07:17:29	2016-06-19T07:34:19
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	O1	Y
CCD I3 on	N	N
CCD S0 on	N	N
CCD S1 on	O3	Y
CCD S2 on	O5	Y
CCD S3 on	Y	Y
CCD S4 on	O4	Y
CCD S5 on	O2	Y
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.2

2.3 Aspect



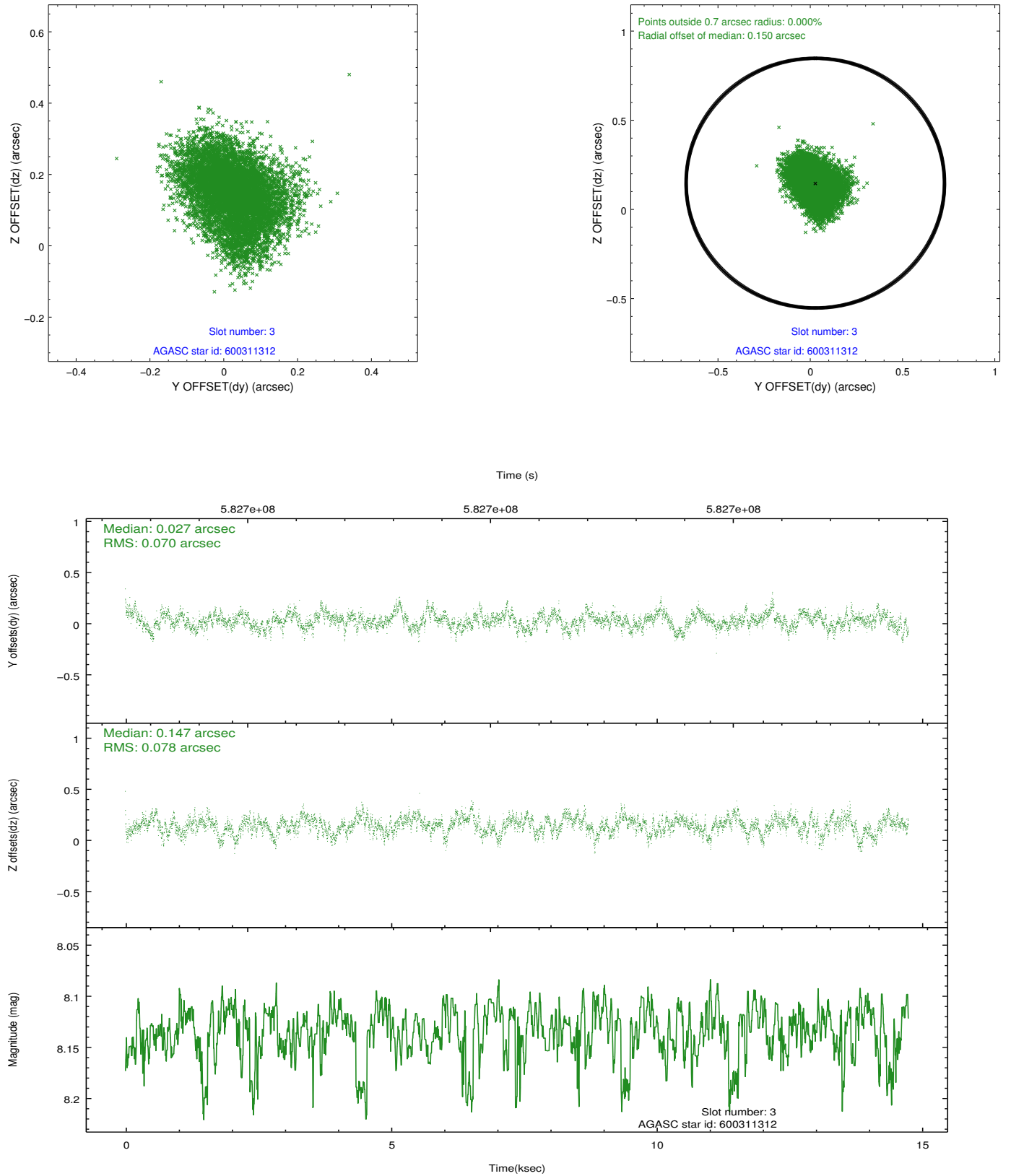


Slot Statistics

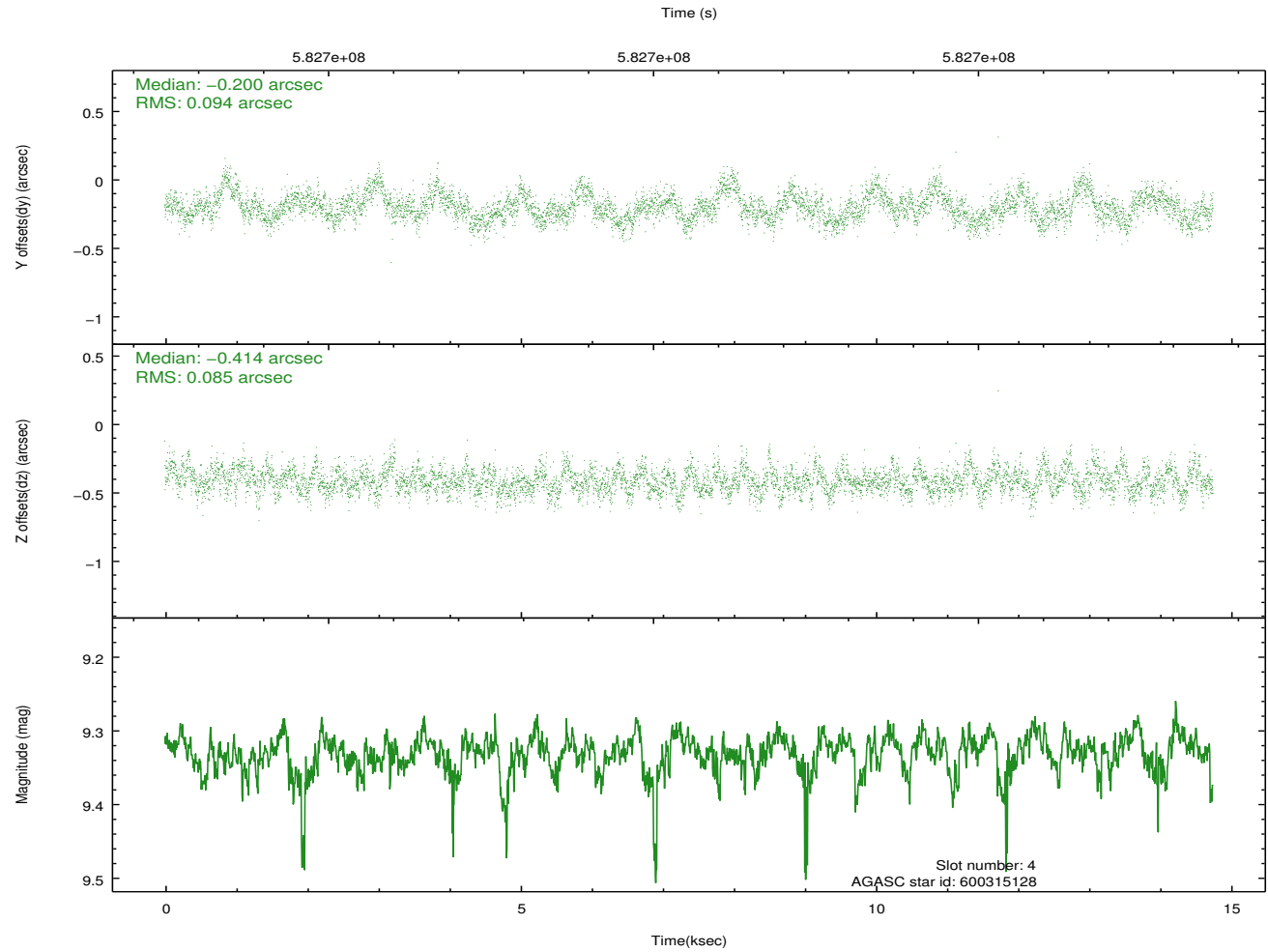
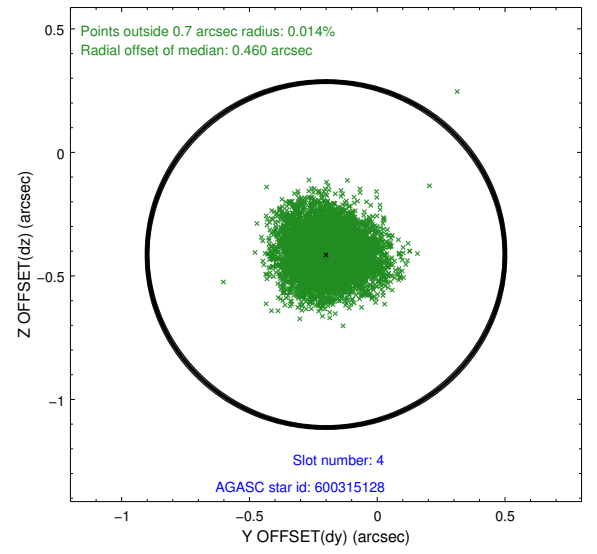
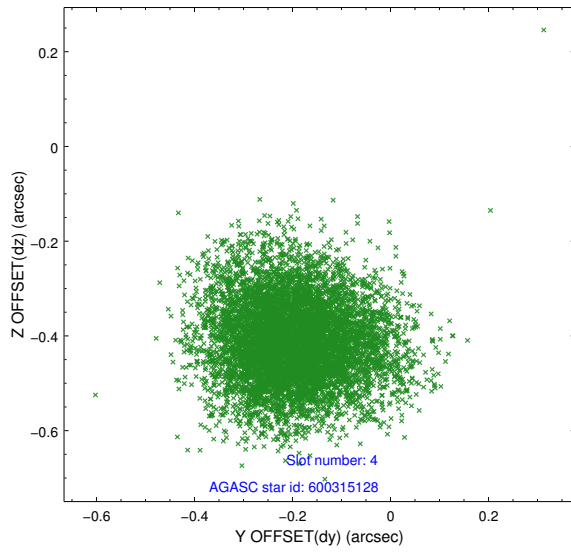
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.11	3598	-0.194	-0.124	0.015	0.030	0.000000	0.000000	-770.15	-1741.39
1	FID		ACIS-S-4	7.22	3598	0.471	0.128	0.009	0.015	0.000000	0.000000	2143.61	167.08
2	FID		ACIS-S-5	7.22	3598	-0.309	0.006	0.013	0.025	0.000000	0.000000	-1822.75	160.91
3	GUIDE	used	600311312	8.13	7189	0.027	0.147	0.114	0.181	258.675359	82.330777	1782.65	-1344.37
4	GUIDE	used	600315128	9.33	7188	-0.200	-0.414	0.135	0.220	259.746214	81.378642	2296.11	2087.67
5	GUIDE	used	600445384	9.00	7184	-0.004	-0.022	0.128	0.217	267.988952	81.662139	-2192.75	2074.38
6	GUIDE	used	609107064	9.26	7191	0.431	0.570	0.141	0.224	266.234612	82.875721	-2094.61	-2373.12
7	GUIDE	used	600444304	9.05	7191	-0.253	-0.281	0.125	0.204	262.395865	81.426936	876.48	2307.04

2.4 Star Slots

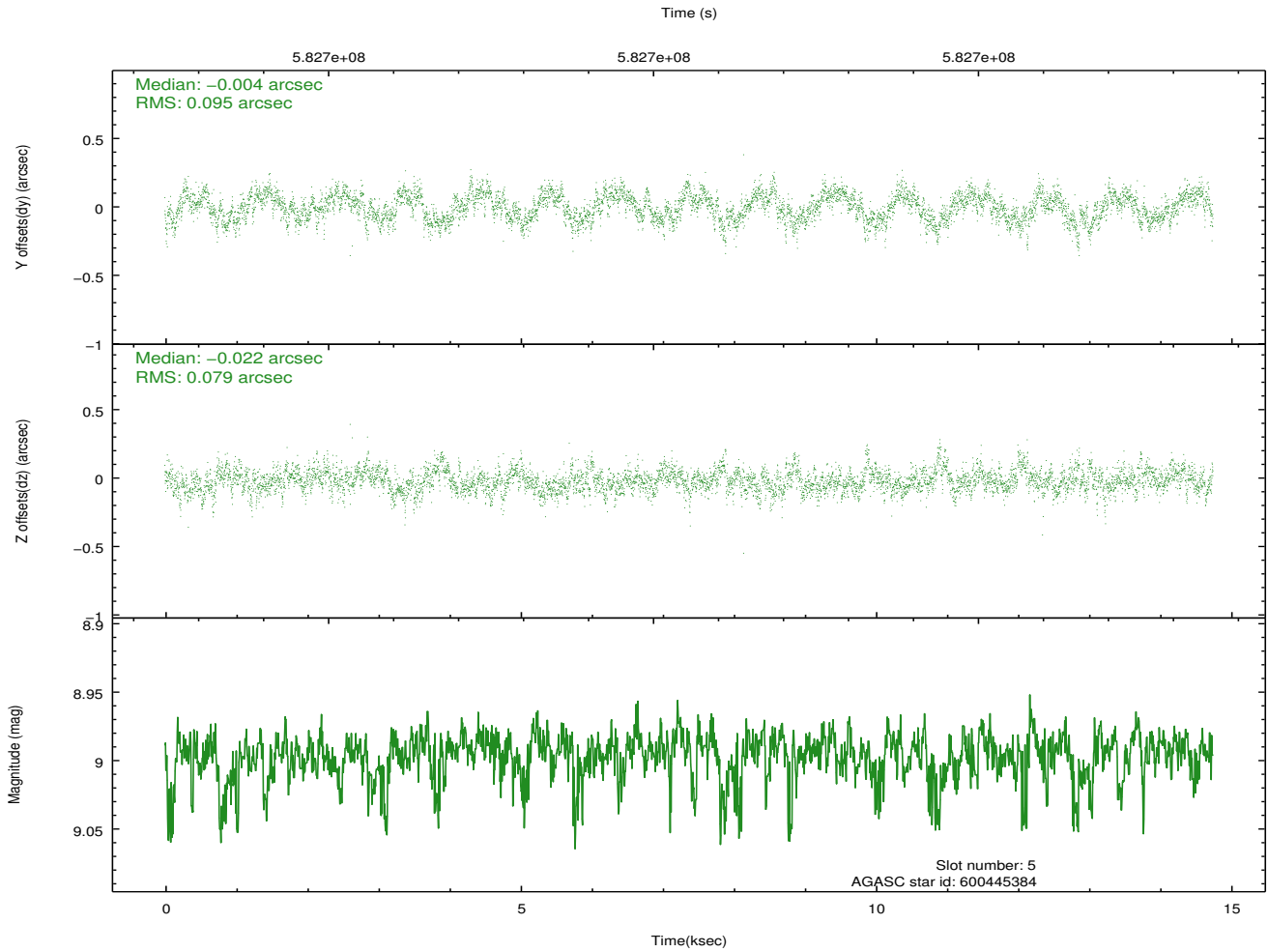
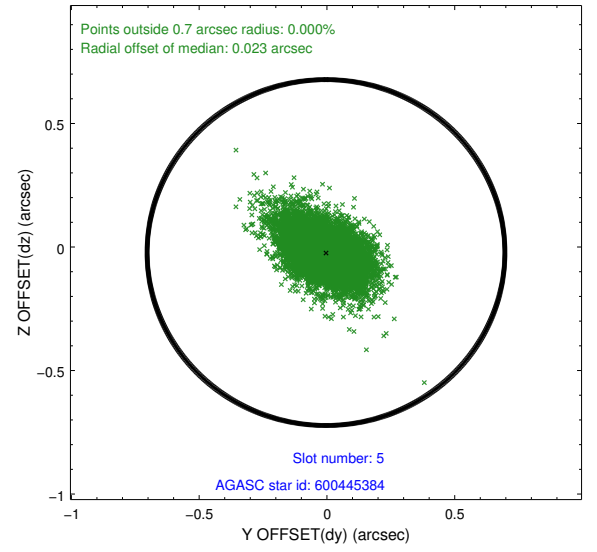
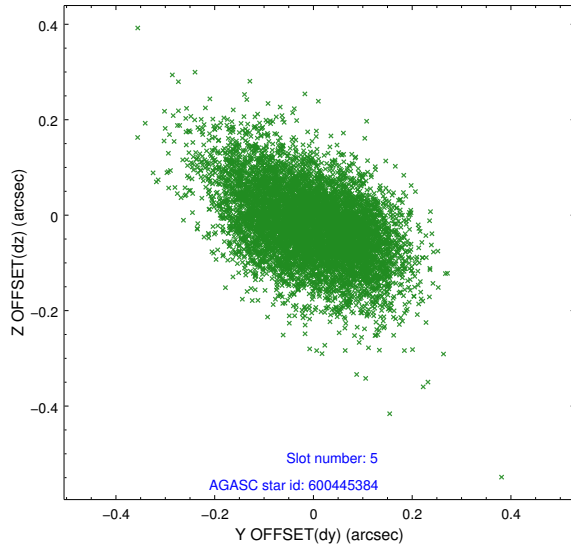
2.4.1 Slot 3



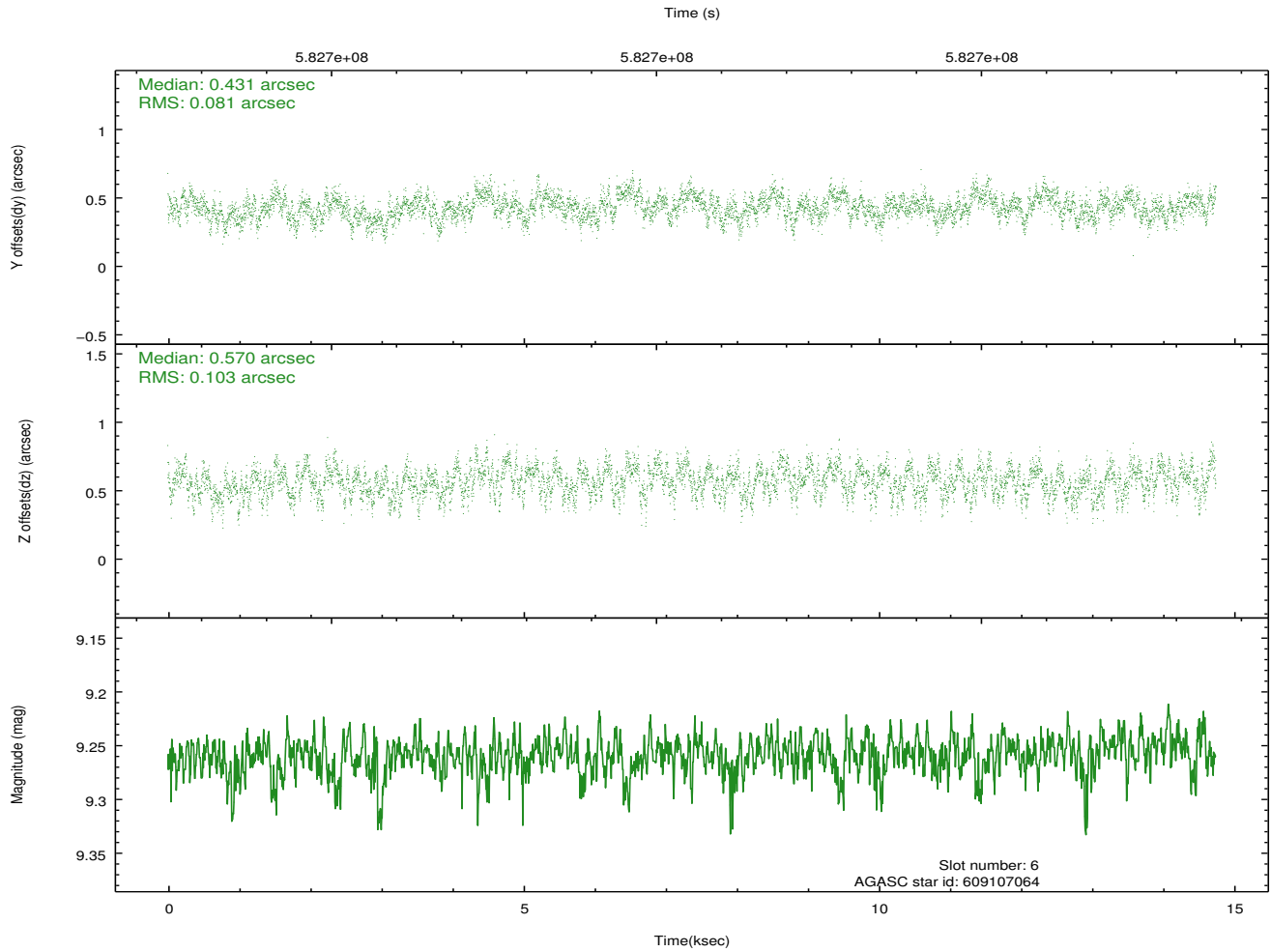
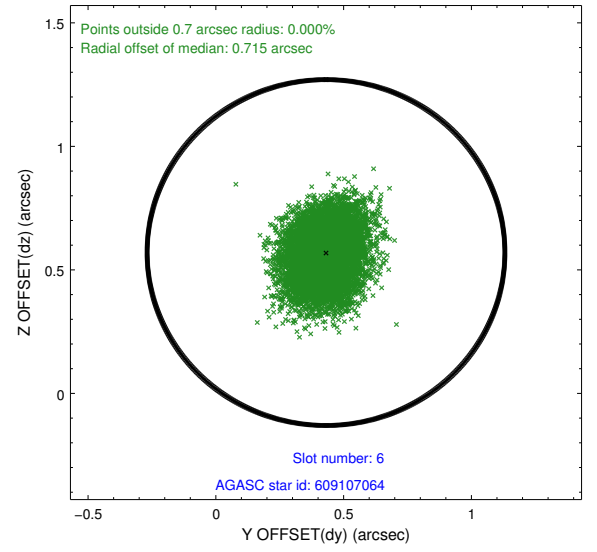
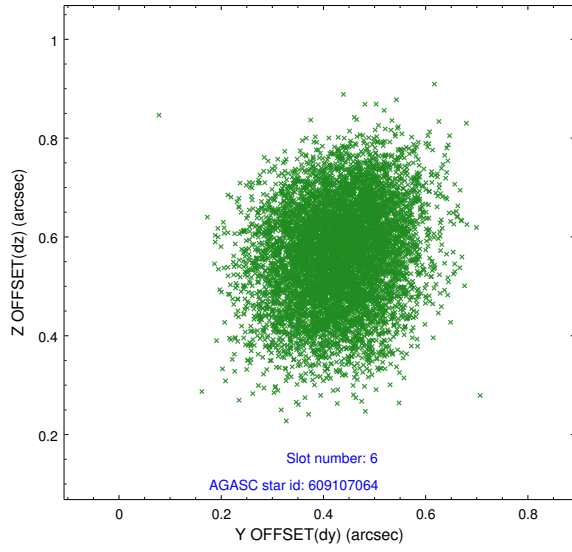
2.4.2 Slot 4



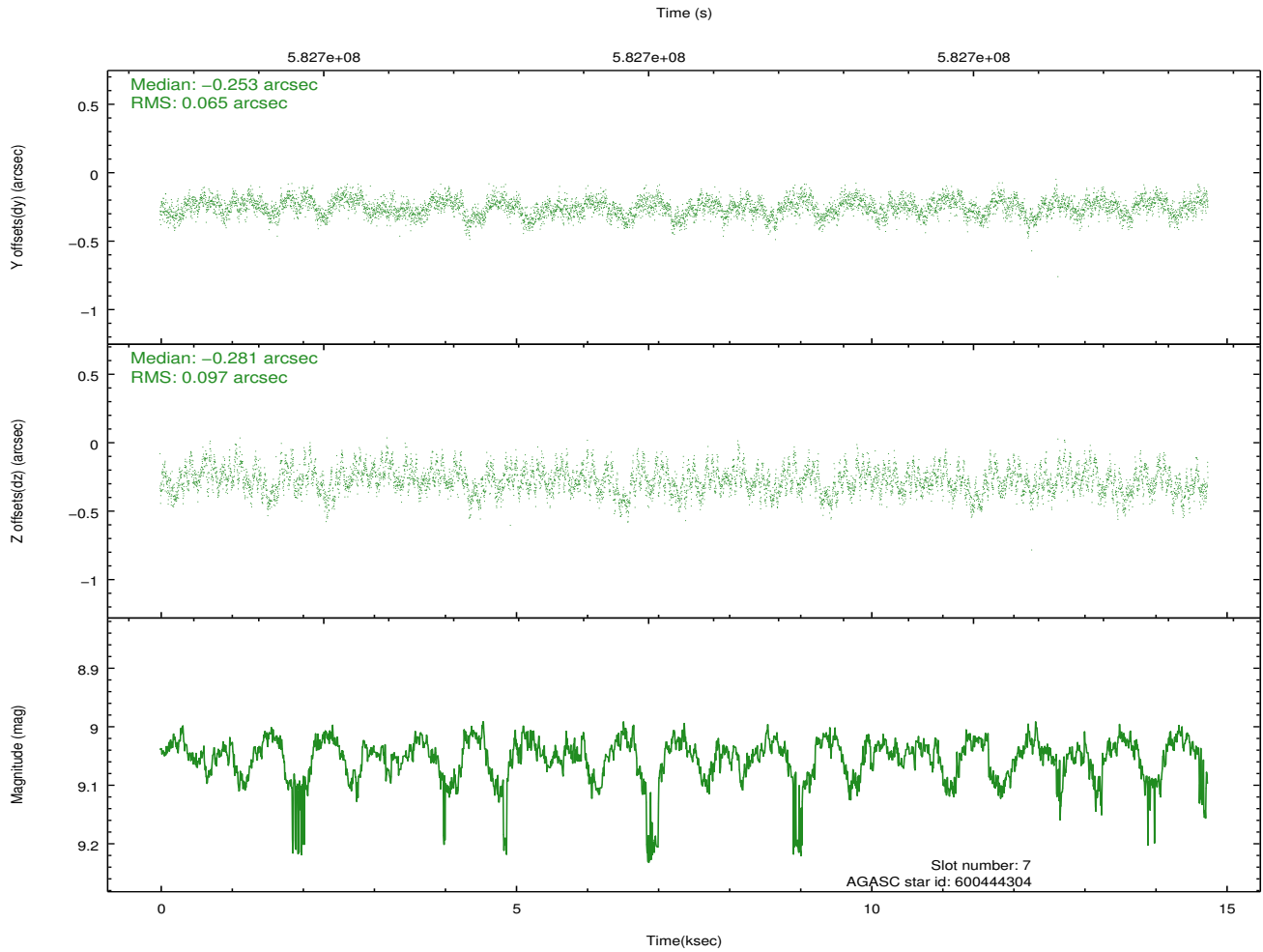
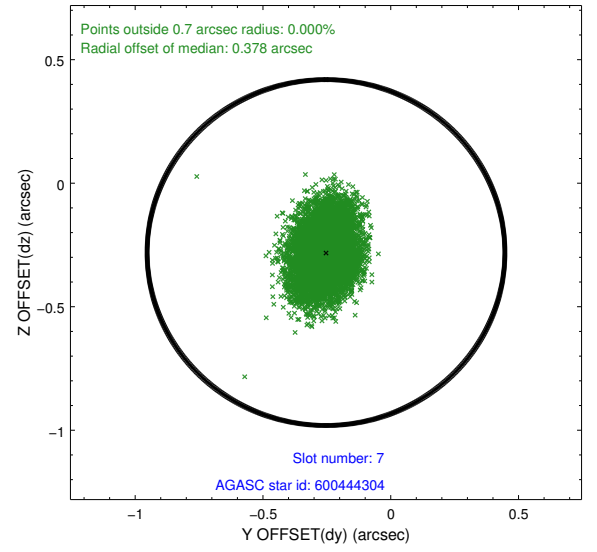
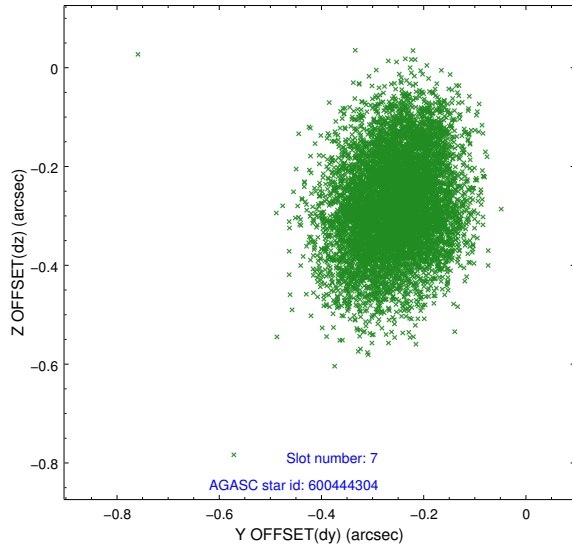
2.4.3 Slot 5



2.4.4 Slot 6

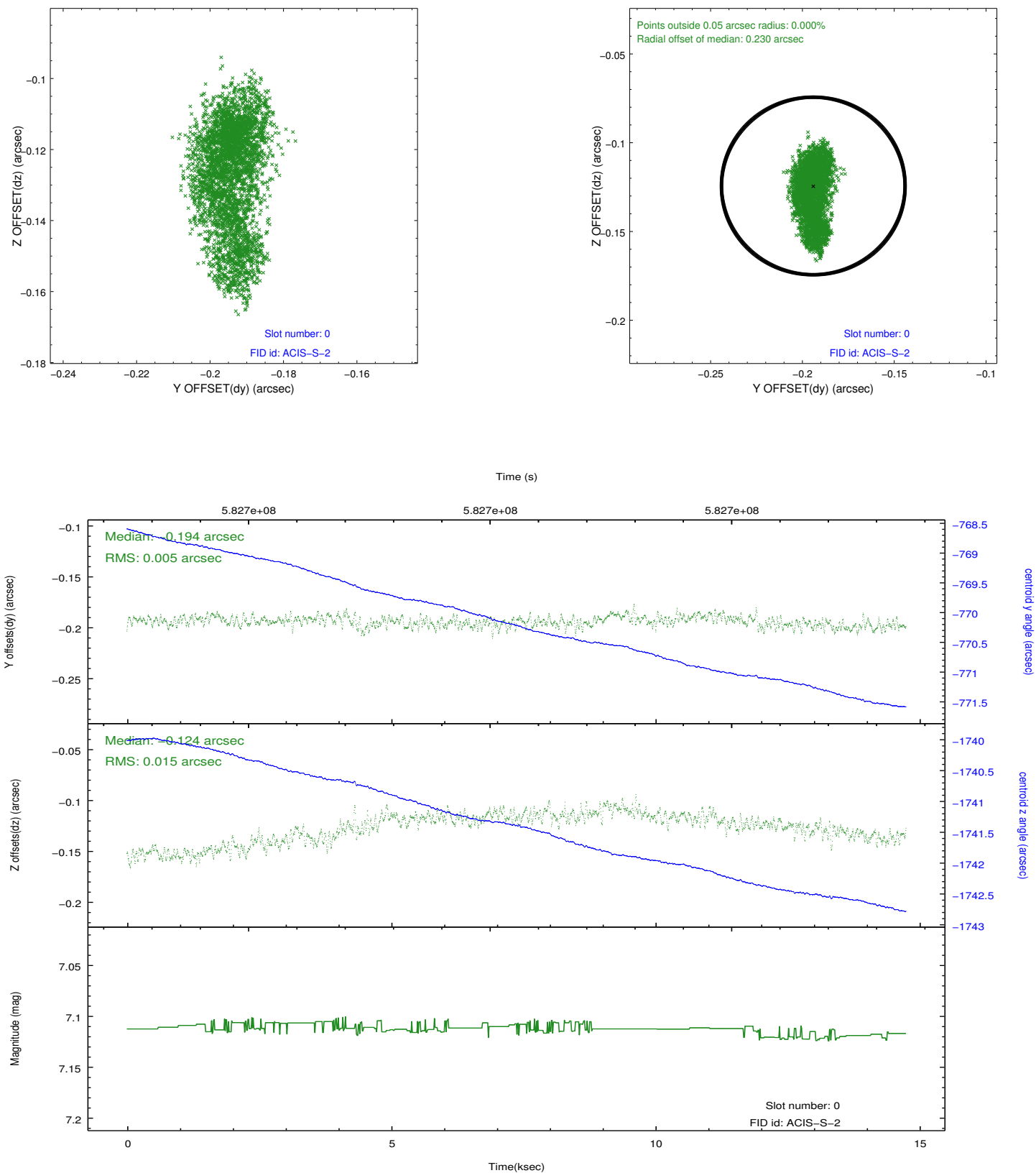


2.4.5 Slot 7

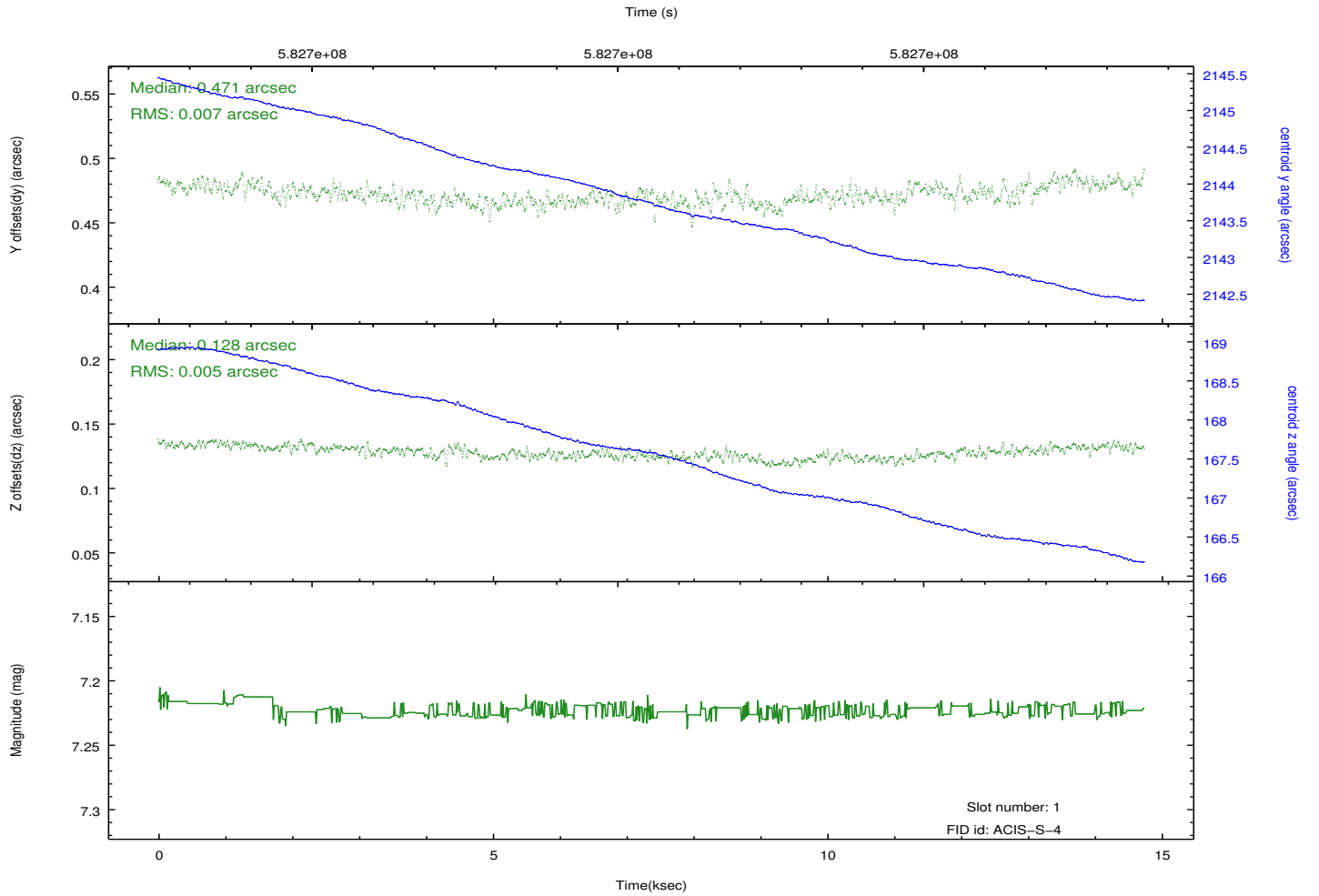
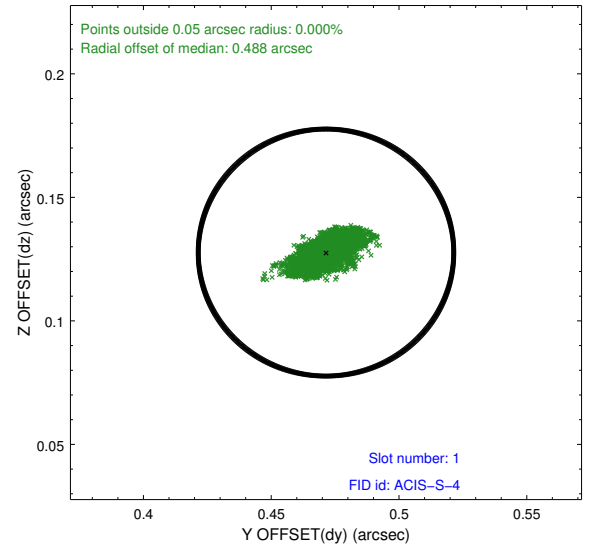
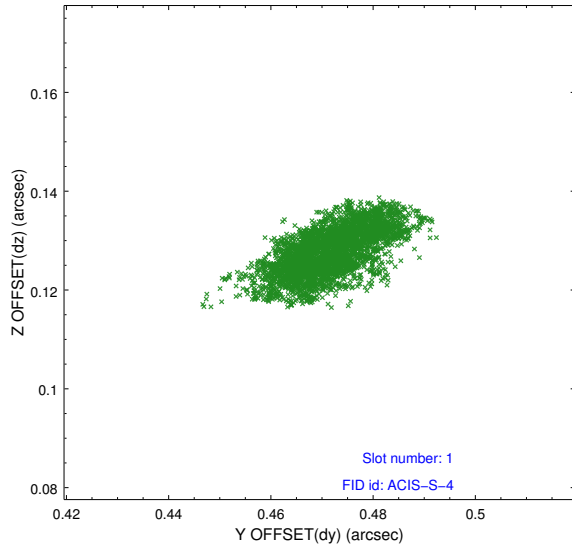


2.5 FID Slots

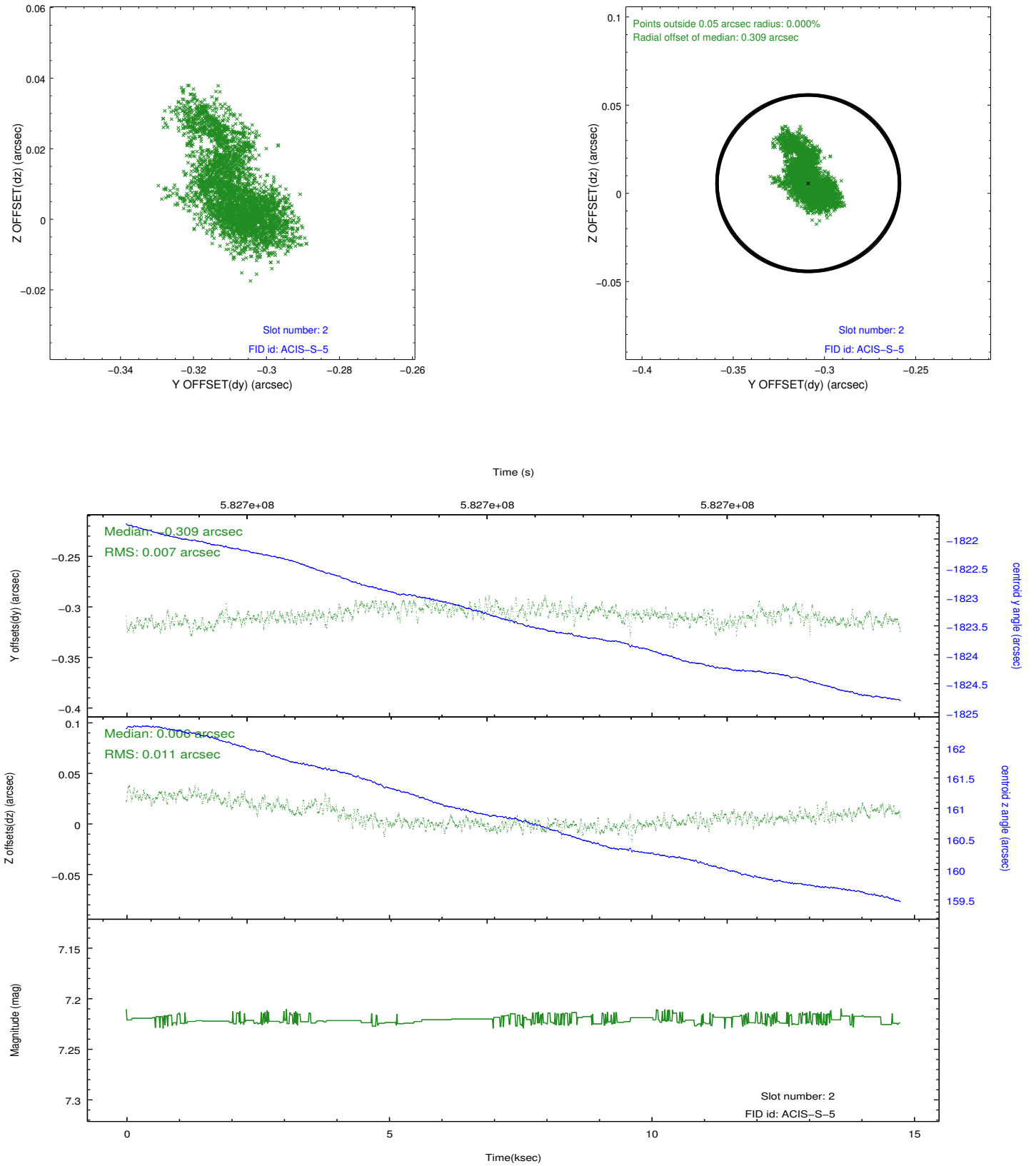
2.5.1 Slot 0



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)	2016.06.23
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	14.371200214148

A.2 Comments

A spatial region of the original bias map for CCD = 7 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 = 7 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: (299.70696,40.57559), (299.71354,40.57226), (299.72958,40.59055), (299.72299,40.59388).