

V&V Reference Report

L2 ASCDS Version : 10.4.2.1

Observation 17673 - L2 Version 2
Chandra X-Ray Center

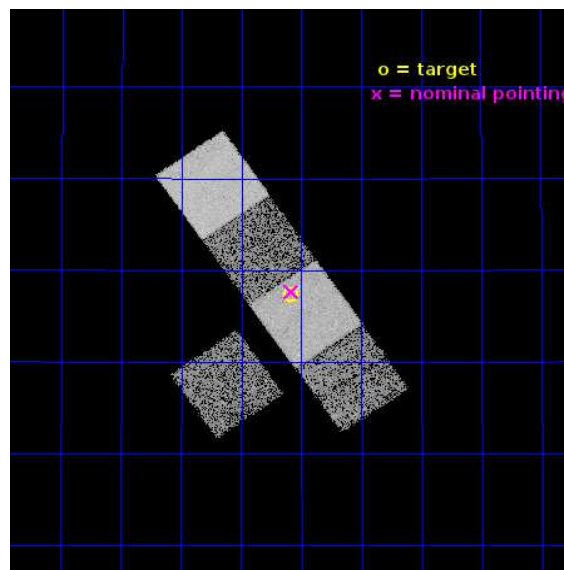
L2 Processing Date : Sep 30 2015

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
A	Summary	17
A.1	Status	17
A.2	Comments	17

1 Front

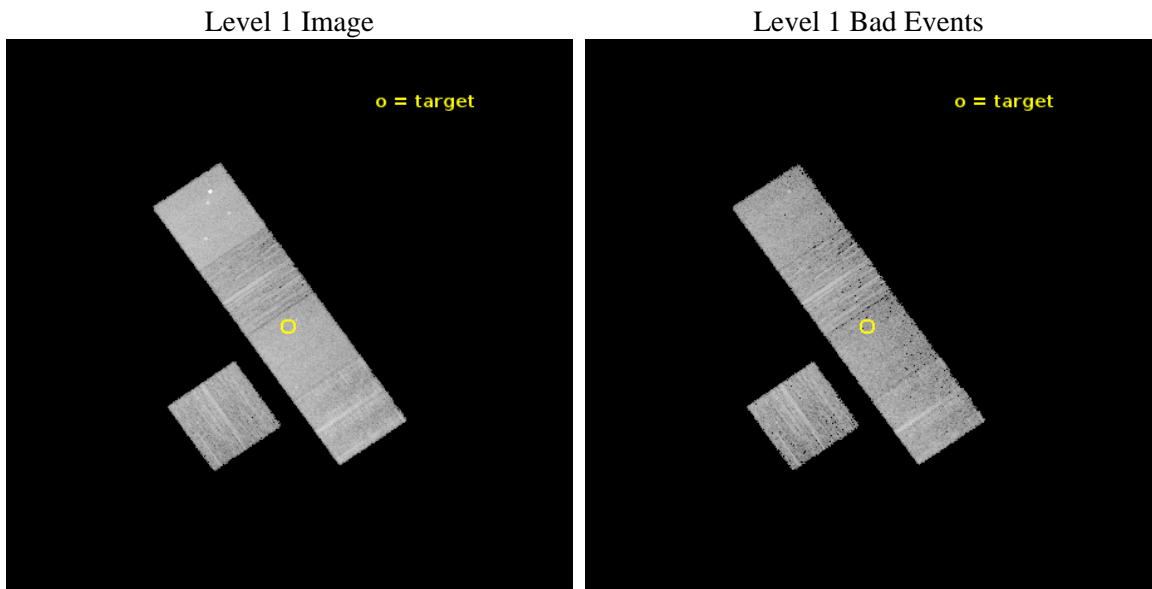
seq_num	502493	Sequence number
obs_id	17673	Observation id
title	Mapping the evolution of SNhunt275 to shed light onto the last evolutionary stages of Massive Stars	Proposal title
observer	Dr Raffaella Margutti	Principal investigator
object	SNhunt275	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	137.39625	Observer's specified target RA [deg]
dec_targ	33.122583	Observer's specified target Dec [deg]
ra_nom	137.39581371104	Nominal RA [deg]
dec_nom	33.127999641718	Nominal Dec [deg]
roll_nom	55.156907313867	Nominal Roll [deg]
revision	2	Processing version of data
ontime	10061.636155128	Sum of GTIs [s]
livetime	9930.1734714929	Livetime [s]
ontime3	10061.513035178	Sum of GTIs [s]
ontime5	10061.595115185	Sum of GTIs [s]
ontime6	10061.554075122	Sum of GTIs [s]
ontime7	10061.636155128	Sum of GTIs [s]
ontime8	10058.331004858	Sum of GTIs [s]
l2events	89626	Number of level 2 events



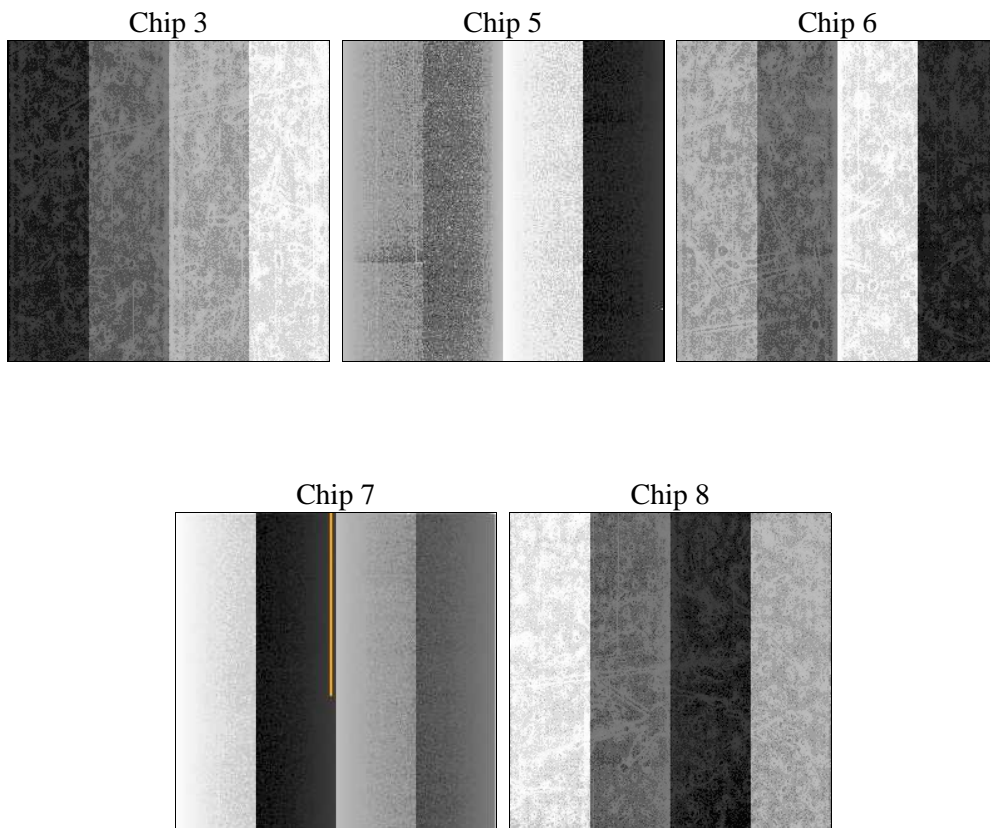
2 OBI

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	10.4.2.1	Processing system revision	ontime	10061.636155128	Sum of GTIs [s]
caldbver	4.6.10a	 	ontime3	10061.513035178	Sum of GTIs [s]
date	2015-09-30T22:13:41	Date and time of file creation	ontime5	10061.595115185	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	10061.554075122	Sum of GTIs [s]
			ontime7	10061.636155128	Sum of GTIs [s]
			ontime8	10058.331004858	Sum of GTIs [s]
			l1events	348584	Number of level 1 events

2.1.4 Events

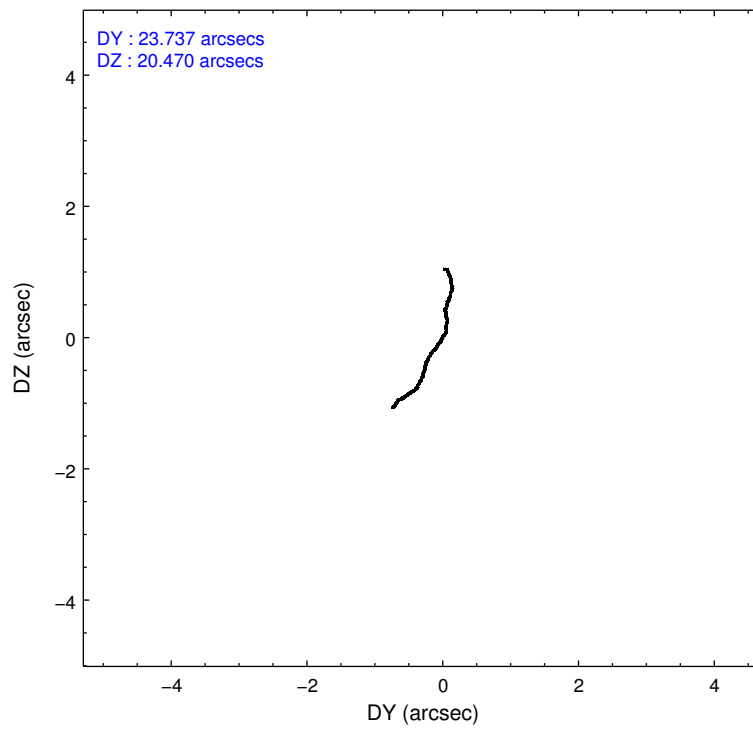
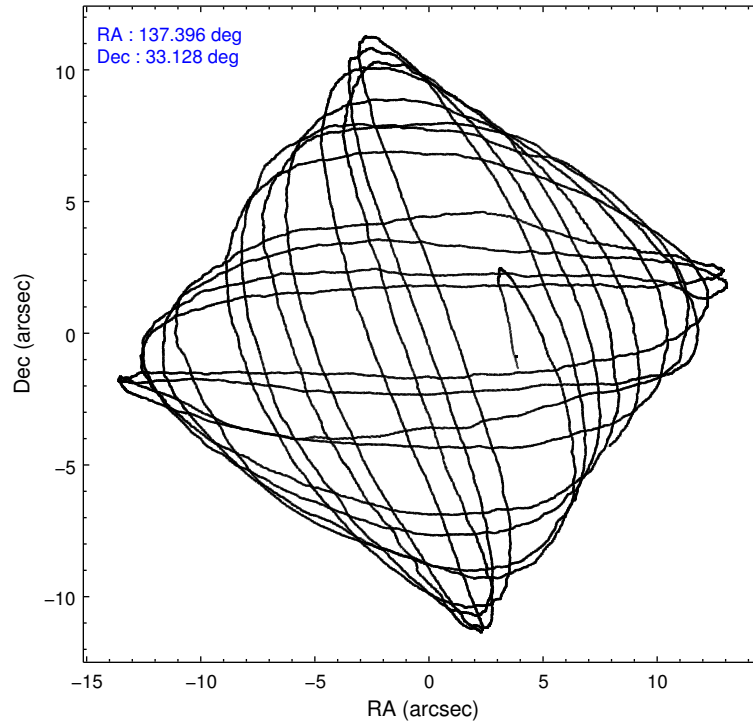
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	53526	90552	56166	73058	75282
rejected events	47358	46428	49602	41419	53559
rejected %	88%	51%	88%	56%	71%

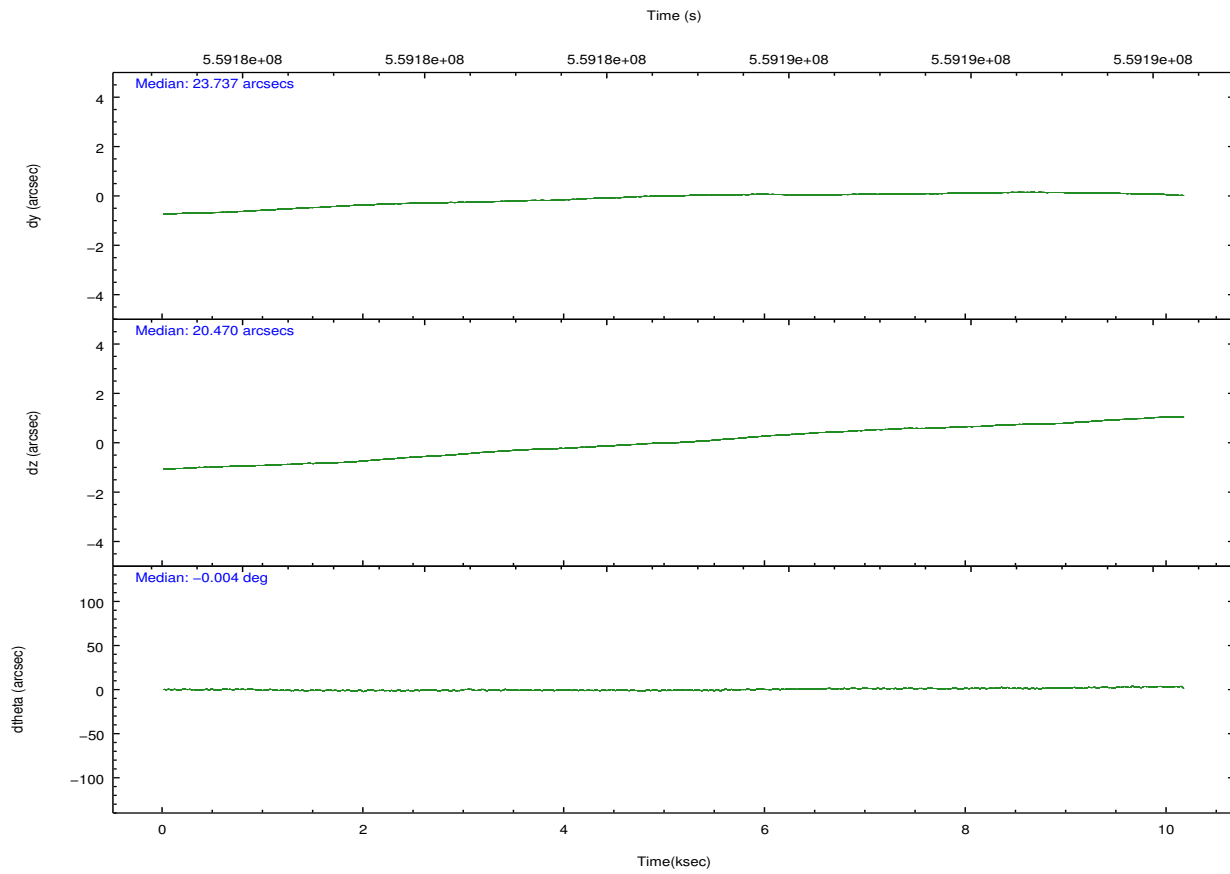
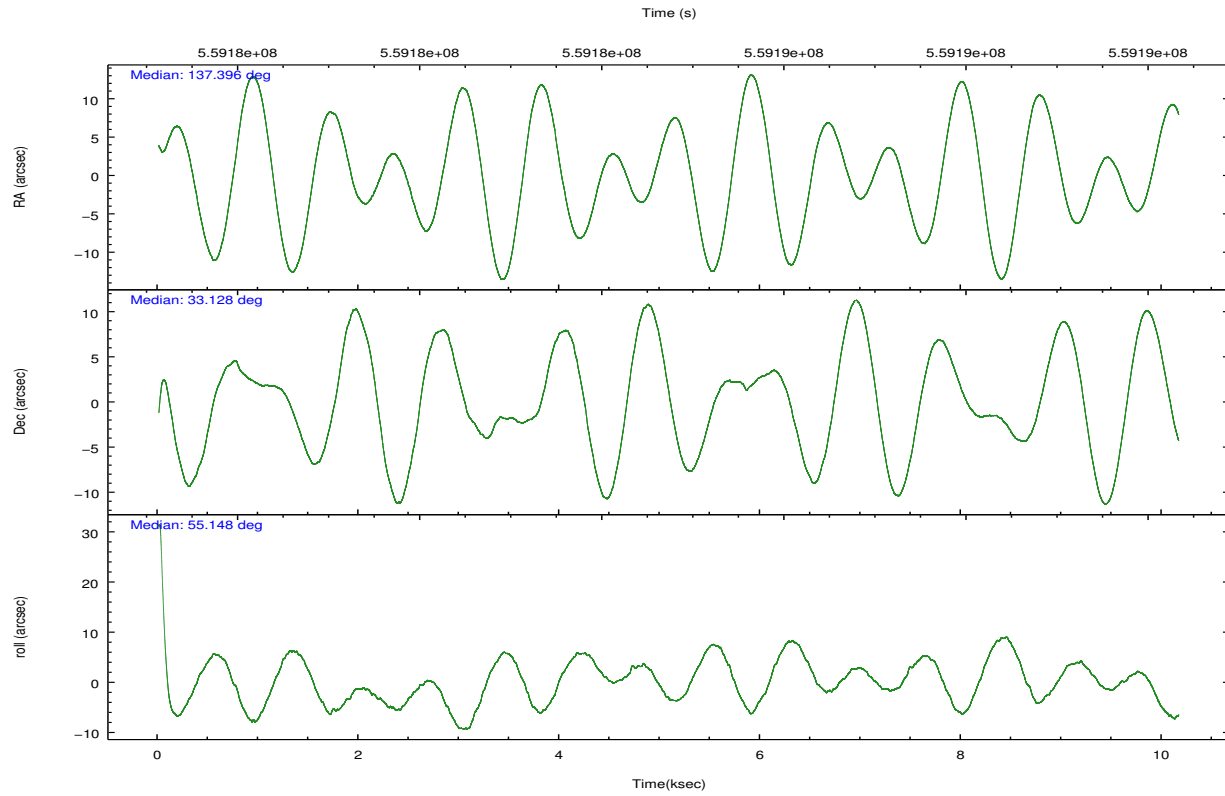
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	2390	4369	2228	2652	6465
	4%	4%	3%	3%	8%
grade 1 events	25	351	28	89	57
	0%	0%	0%	0%	0%
grade 2 events	1357	13360	1544	6704	4840
	2%	14%	2%	9%	6%
grade 3 events	608	1461	679	2597	2428
	1%	1%	1%	3%	3%
grade 4 events	586	1461	627	2602	2292
	1%	1%	1%	3%	3%
grade 5 events	2815	6456	2706	7432	4095
	5%	7%	4%	10%	5%
grade 6 events	1229	23501	1486	17099	5715
	2%	25%	2%	23%	7%
grade 7 events	44516	39593	46868	33883	49390
	83%	43%	83%	46%	65%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-35678	ACIS-35678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	137.393448	137.3958137110355	CCD I2 on	N	N
[deg] Pointing Dec	33.100637	33.12799964171754	CCD I3 on	O1	Y
[deg] Pointing Roll	55.001533	55.15690731386692	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	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	Y	Y
[s] Observation start time (MET)	559179824.184000	559178537.2642	CCD S5 on	N	N
Observation start date	2015-09-20T23:42:36	2015-09-20T23:22:17	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	559189824.184000	559191257.51492	On-chip summing requested	N	N
Observation end date	2015-09-21T02:29:16	2015-09-21T02:54:17	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





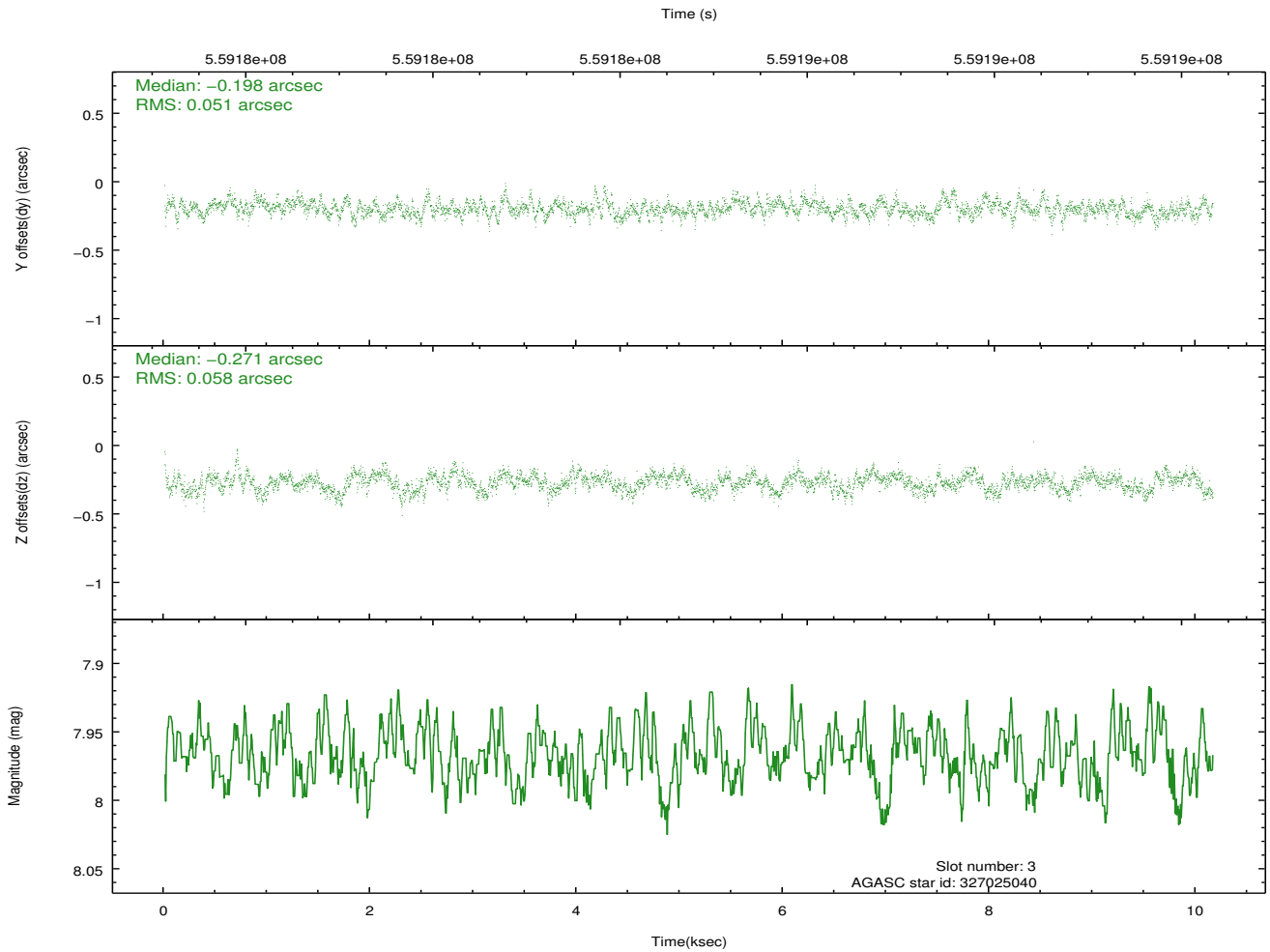
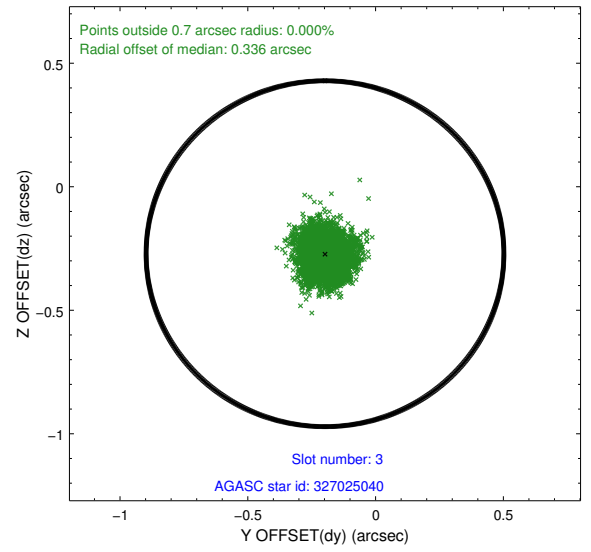
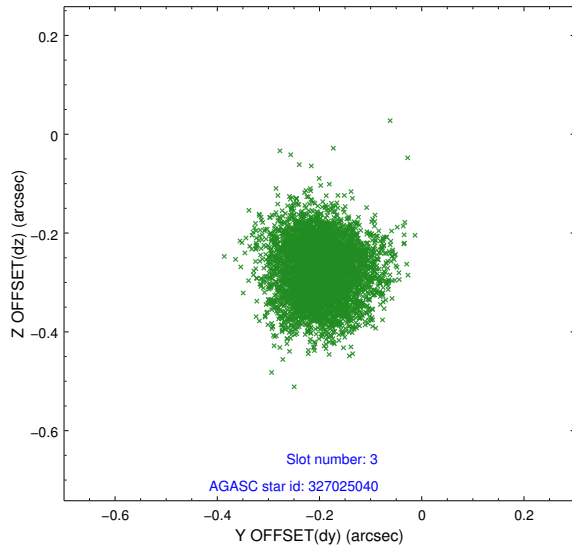
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.11	2478	-0.182	-0.102	0.014	0.022	0.000000	0.000000	-776.98	-1742.06
1	FID		ACIS-S-4	7.21	2477	0.461	0.115	0.009	0.022	0.000000	0.000000	2136.68	166.12
2	FID		ACIS-S-5	7.23	2478	-0.310	-0.004	0.012	0.019	0.000000	0.000000	-1829.30	160.24
3	GUIDE	used	327025040	7.97	4955	-0.198	-0.271	0.082	0.132	137.400069	33.404867	908.17	612.26
4	GUIDE	used	327030184	8.71	4951	0.051	0.227	0.082	0.133	137.815216	32.922904	209.39	-1408.91
5	GUIDE	used	327032632	7.95	4956	0.018	0.283	0.080	0.135	137.965658	33.084673	947.07	-1443.81
6	GUIDE	used	327031544	8.34	4955	-0.105	-0.610	0.095	0.157	136.661642	33.370521	-460.36	2363.34
7	GUIDE	used	327033440	6.72	4955	0.230	0.371	0.082	0.138	137.017314	32.540397	-2305.79	-219.04

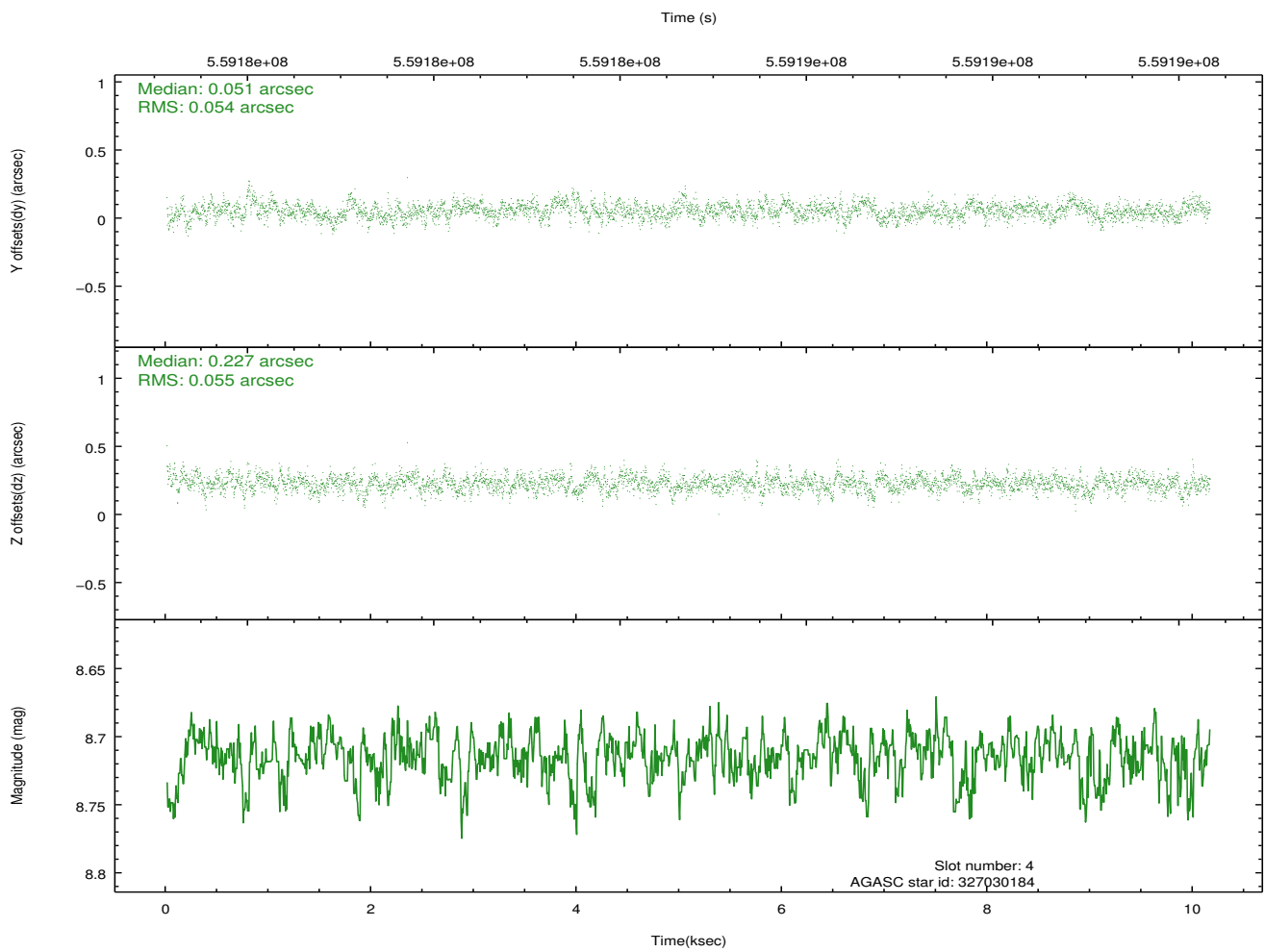
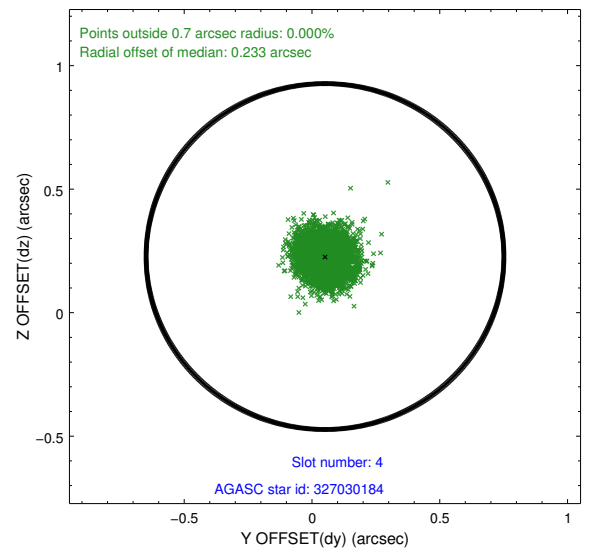
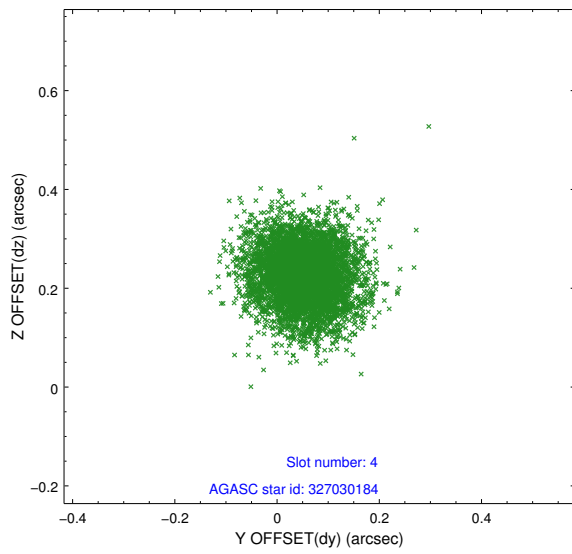
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2.4 Star Slots

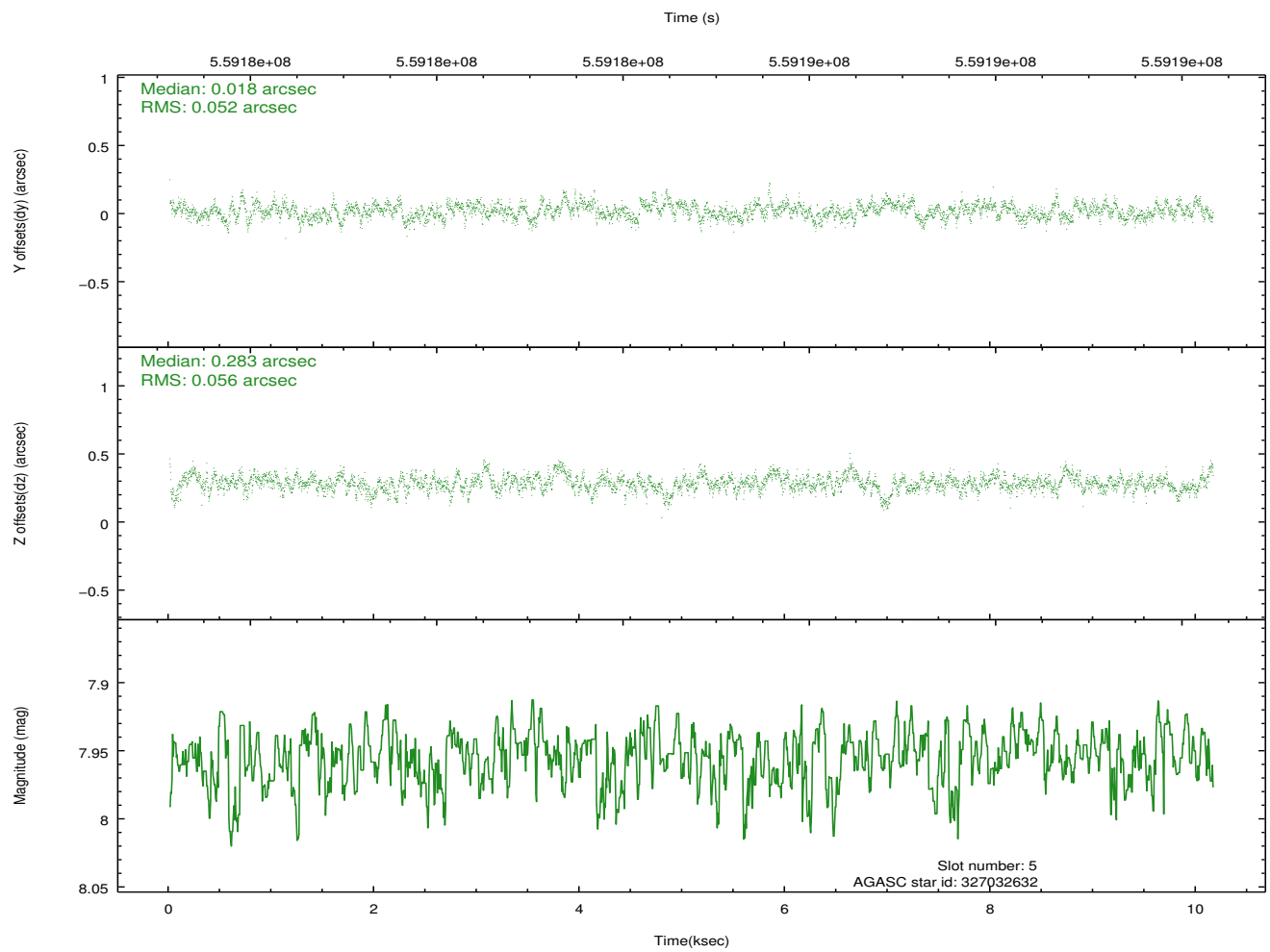
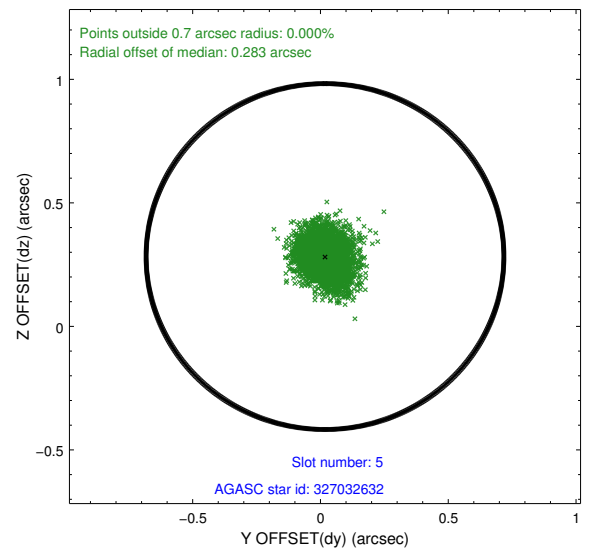
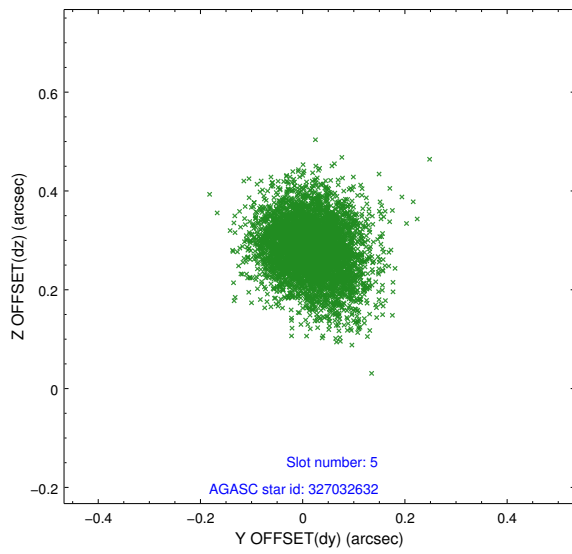
2.4.1 Slot 3



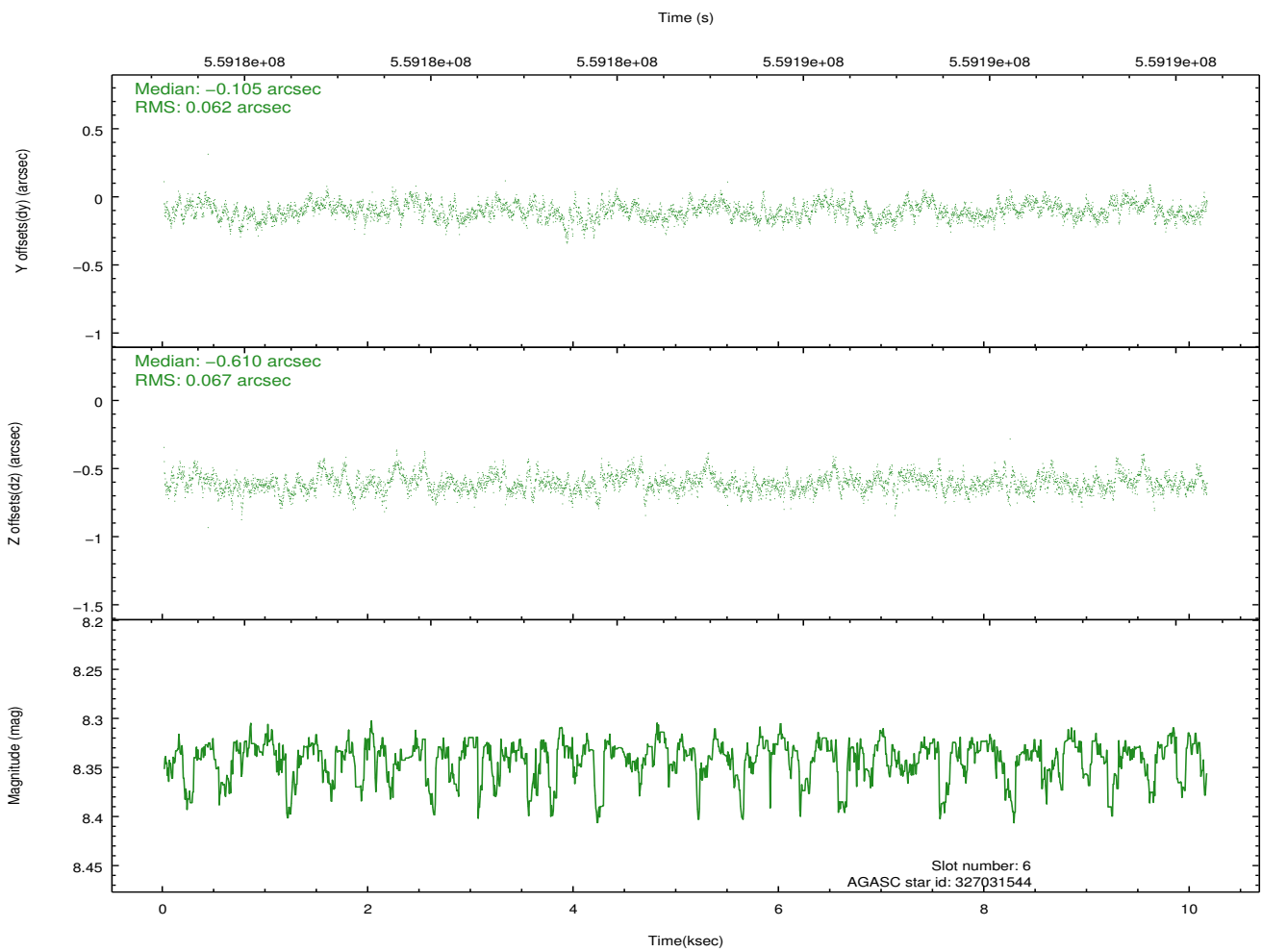
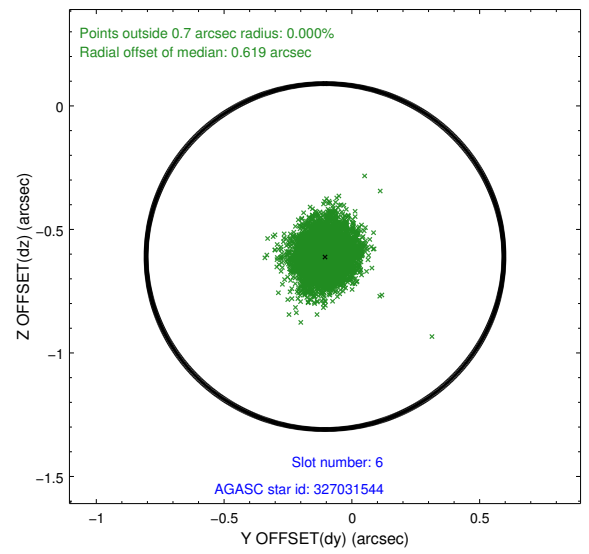
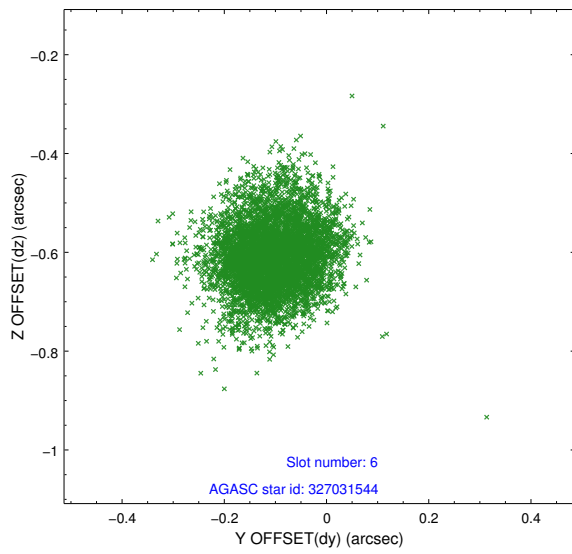
2.4.2 Slot 4



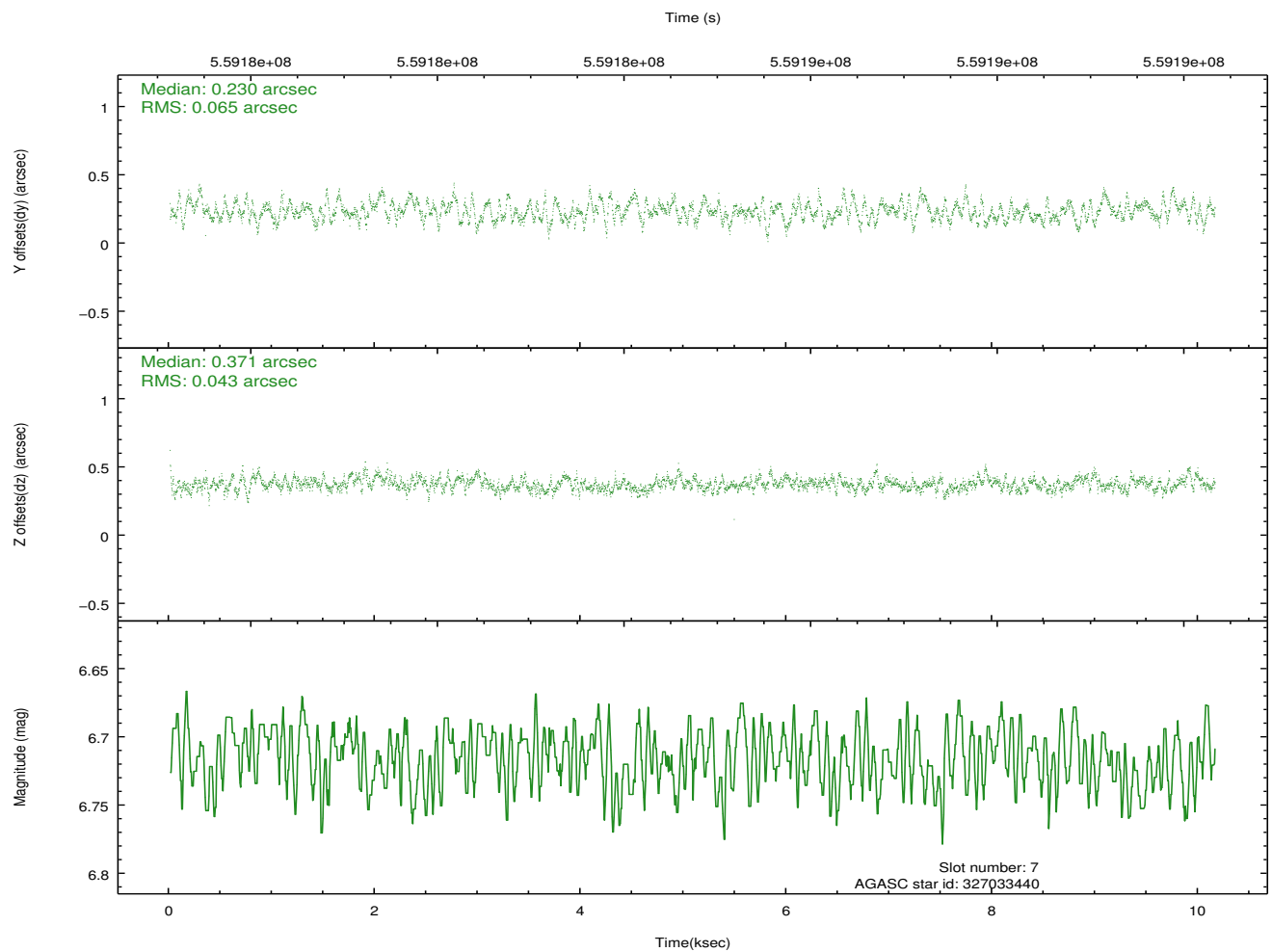
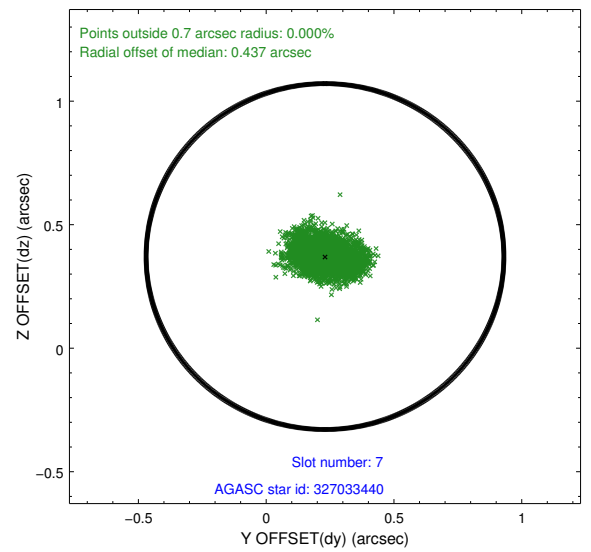
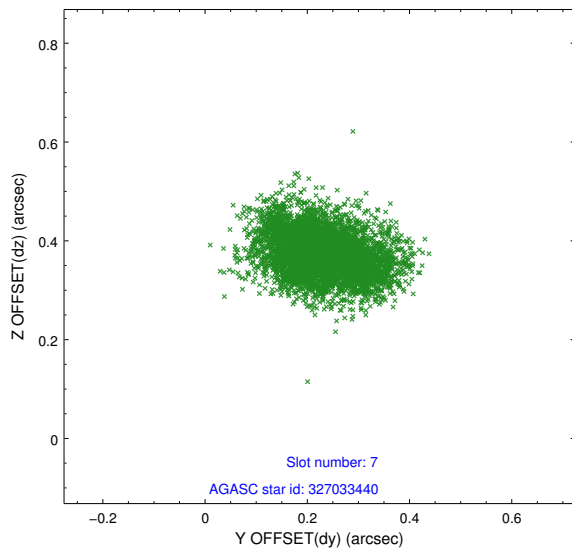
2.4.3 Slot 5



2.4.4 Slot 6

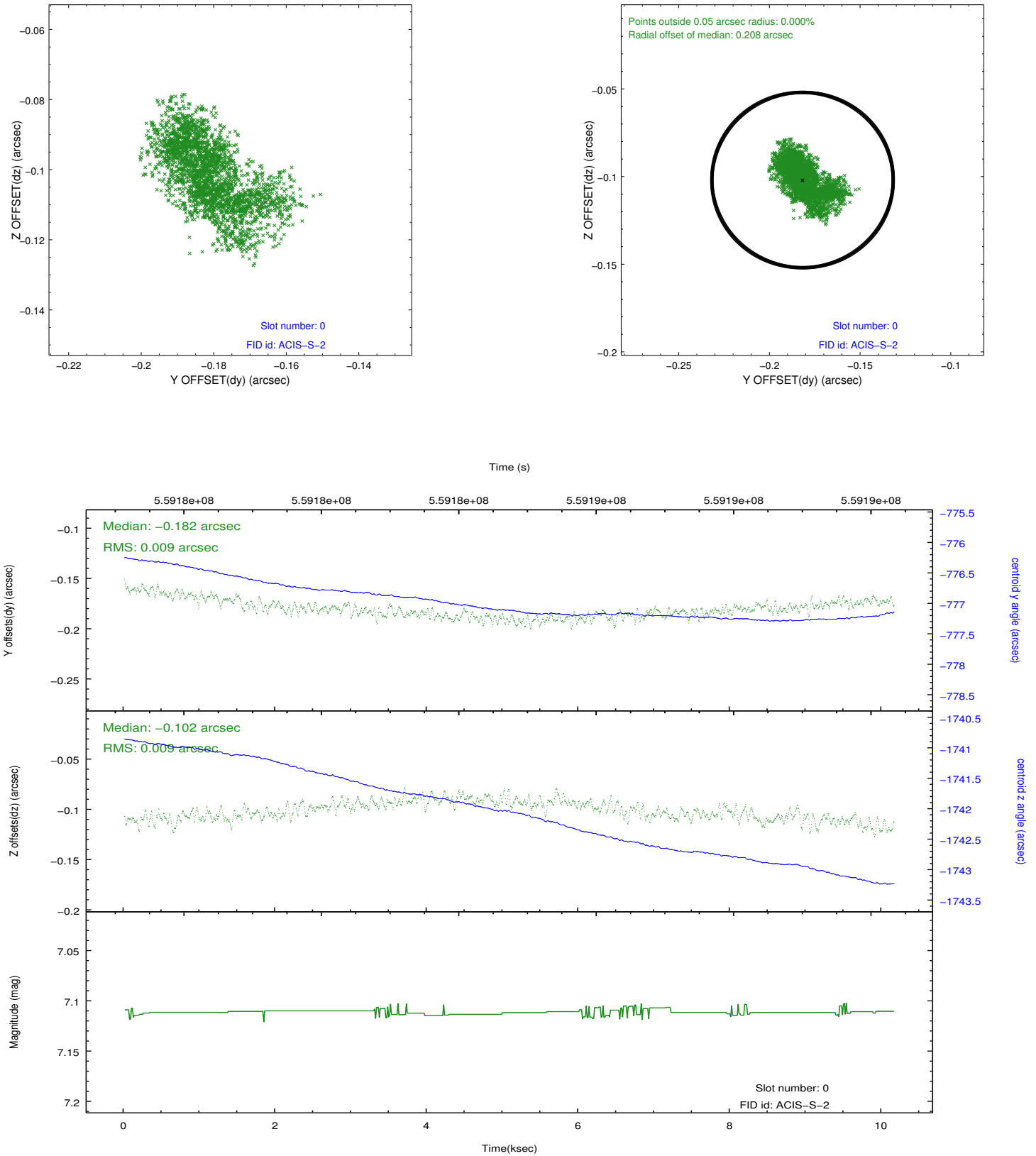


2.4.5 Slot 7

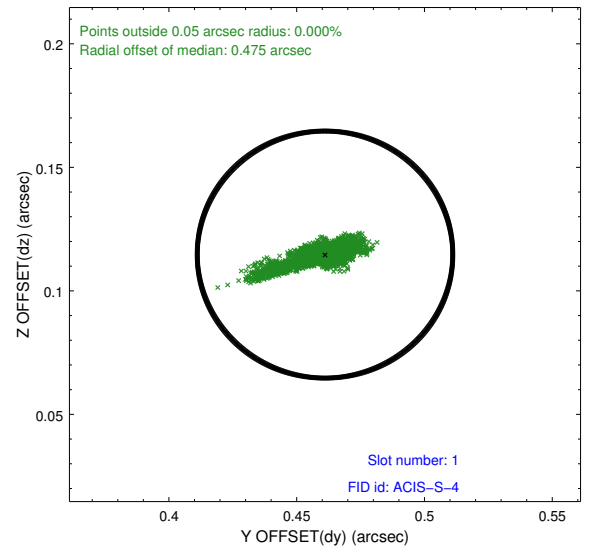
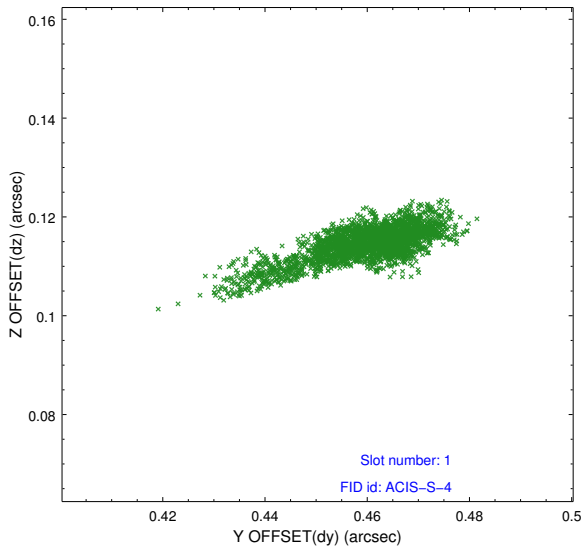


2.5 FID Slots

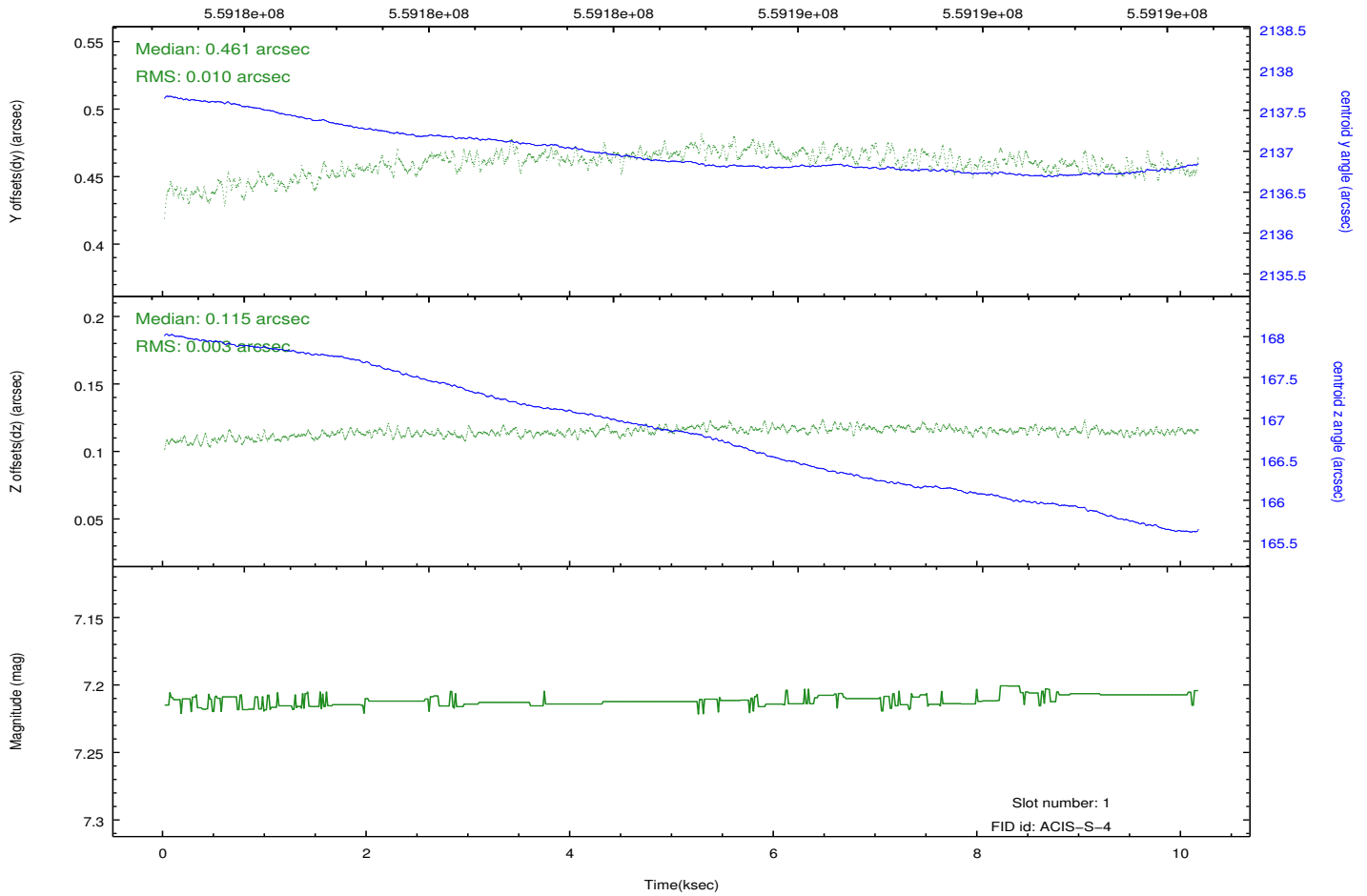
2.5.1 Slot 0



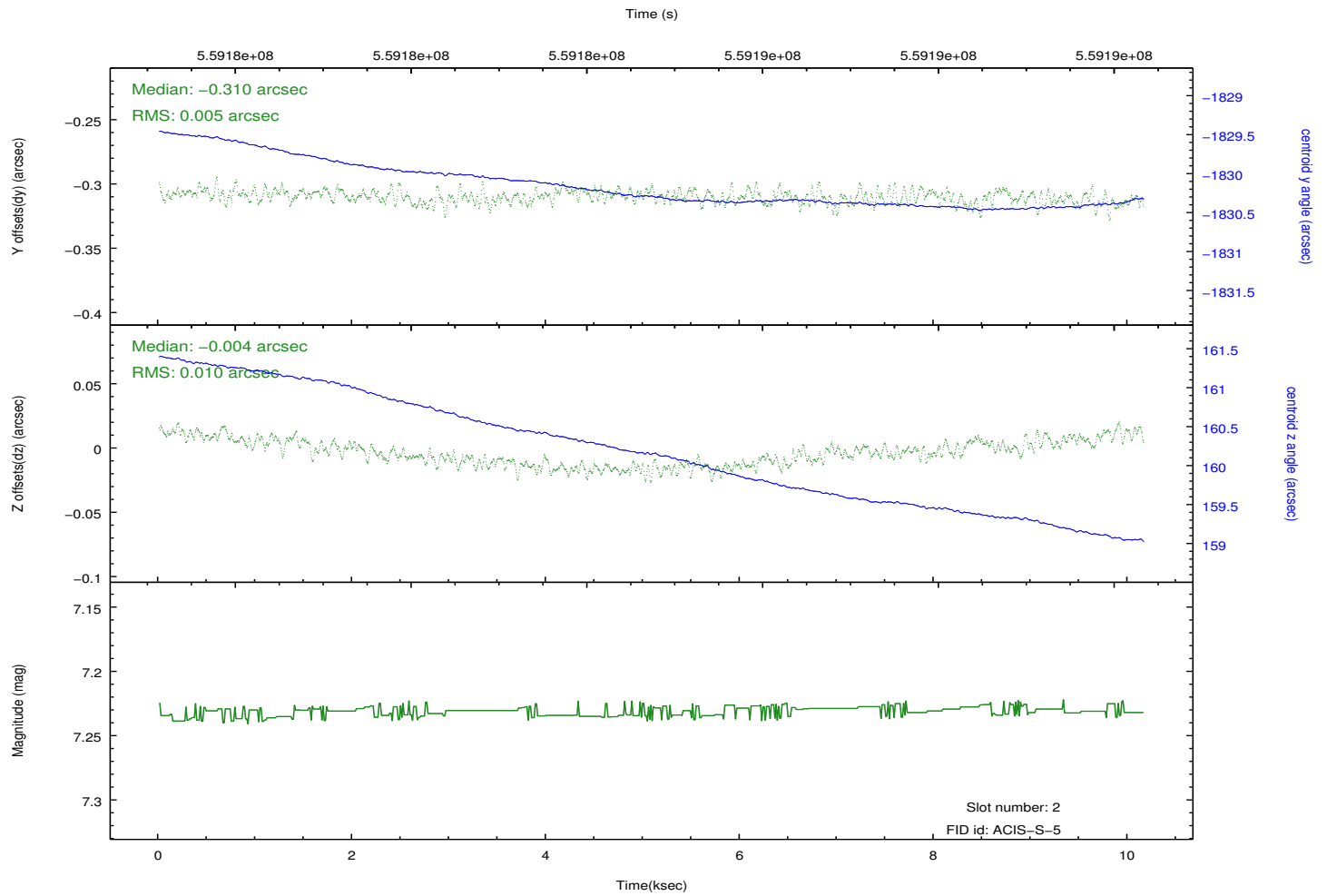
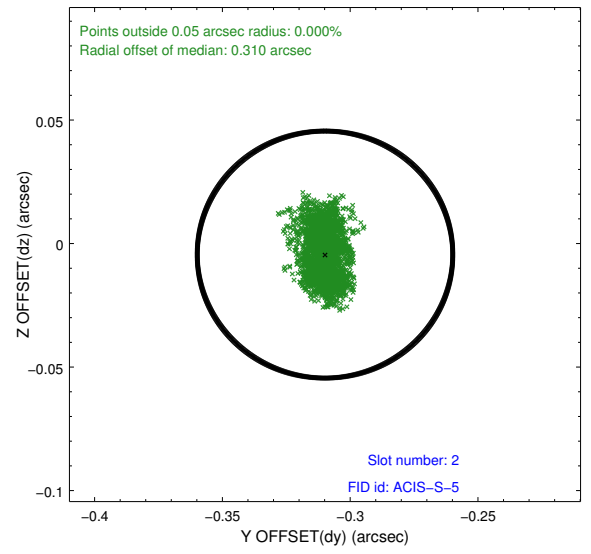
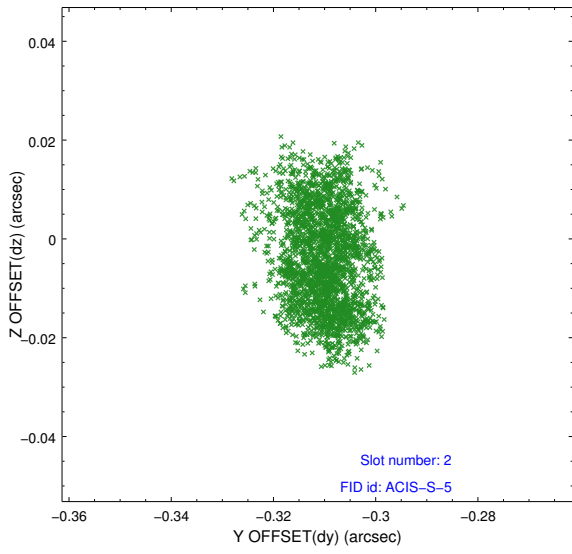
2.5.2 Slot 1



Time (s)



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2015.10.01
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.061636155128

A.2 Comments

A spatial region of the original bias map for CCD = 8 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 = 8 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: (137.19349, 33.00058), (137.19071, 32.99721), (137.20074, 32.99139), (137.20540, 32.99366).