

V&V Reference Report

L2 ASCDS Version : 10.2.4

Observation 16631 - L2 Version 2
Chandra X-Ray Center

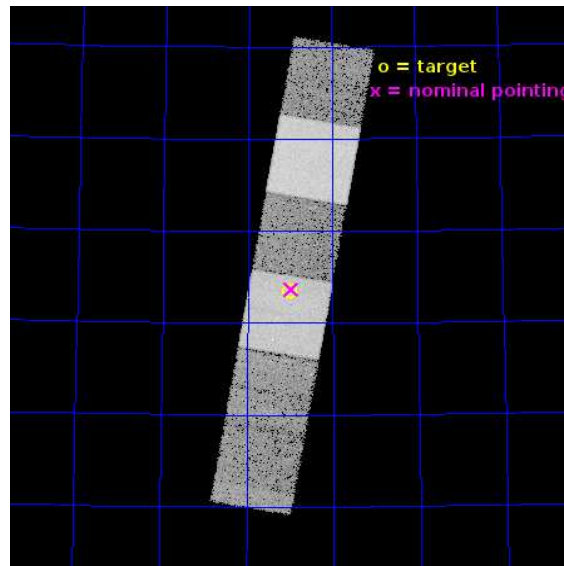
L2 Processing Date : Aug 4 2014

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1 Front

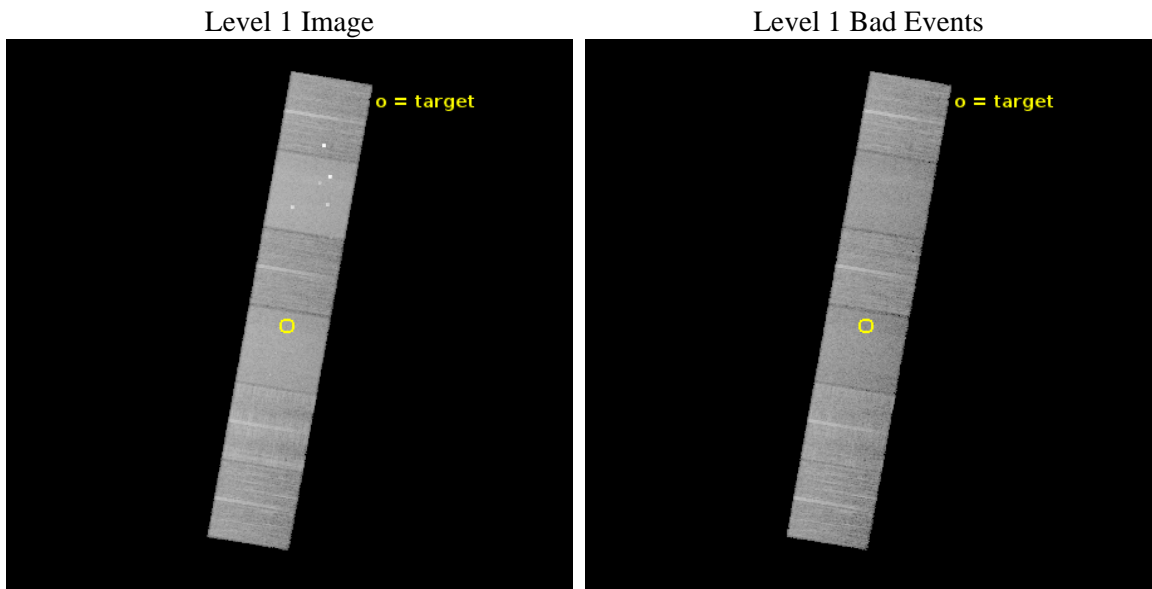
seq_num	200968	Sequence number
obs_id	16631	Observation id
title	The new outburst of the EXor V1180 Cas as observed at X and NIR wavelengths	Proposal title
observer	Dr. Achille Nucita	Principal investigator
object	V1180 Cas	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	38.25625	Observer's specified target RA [deg]
dec_targ	72.724139	Observer's specified target Dec [deg]
ra_nom	38.242447908893	Nominal RA [deg]
dec_nom	72.727728692655	Nominal Dec [deg]
roll_nom	99.823255359365	Nominal Roll [deg]
revision	2	Processing version of data
ontime	23011.037967205	Sum of GTIs [s]
livetime	22719.658348881	Livetime [s]
ontime4	23011.079007208	Sum of GTIs [s]
ontime5	23010.996927202	Sum of GTIs [s]
ontime6	23004.474006176	Sum of GTIs [s]
ontime7	23011.037967205	Sum of GTIs [s]
ontime8	23010.914847195	Sum of GTIs [s]
ontime9	23010.873807192	Sum of GTIs [s]
l2events	203414	Number of level 2 events



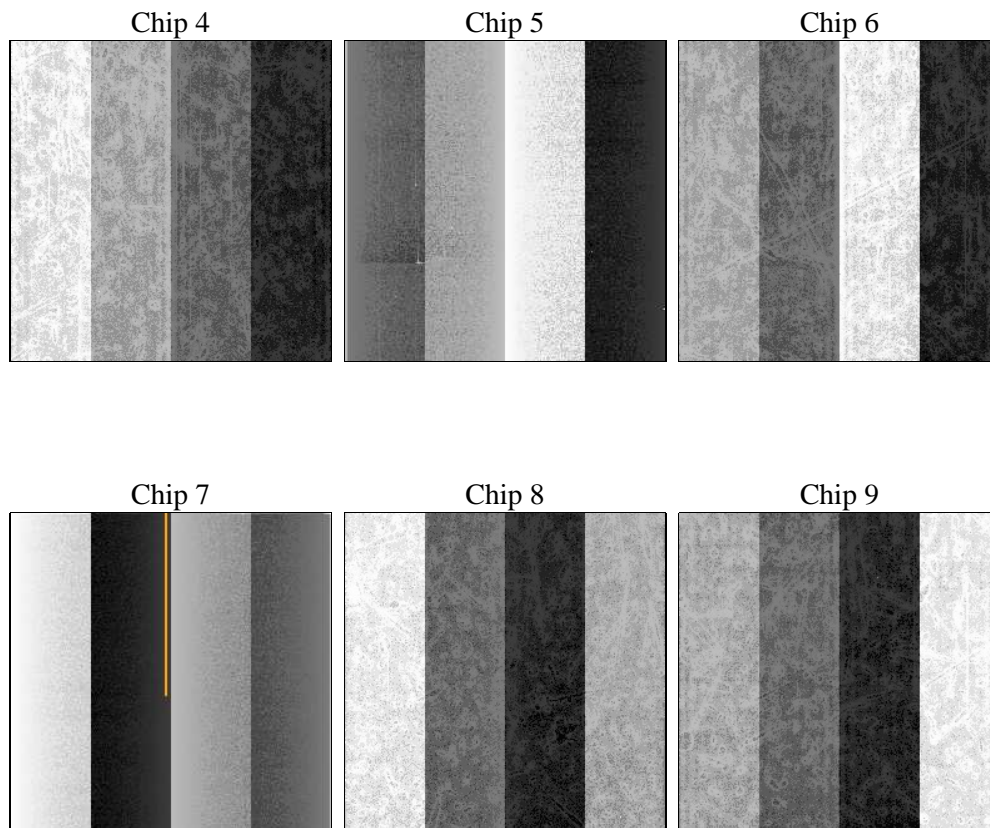
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	23050.318000	[s] Scheduled observation exposure time
ascdsver	10.2.4	Processing system revision	ontime	23011.037967205	Sum of GTIs [s]
caldsver	4.6.2	 	ontime4	23011.079007208	Sum of GTIs [s]
date	2014-08-04T17:00:08	Date and time of file creation	ontime5	23010.996927202	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	23004.474006176	Sum of GTIs [s]
			ontime7	23011.037967205	Sum of GTIs [s]
			ontime8	23010.914847195	Sum of GTIs [s]
			ontime9	23010.873807192	Sum of GTIs [s]
			l1events	874870	Number of level 1 events

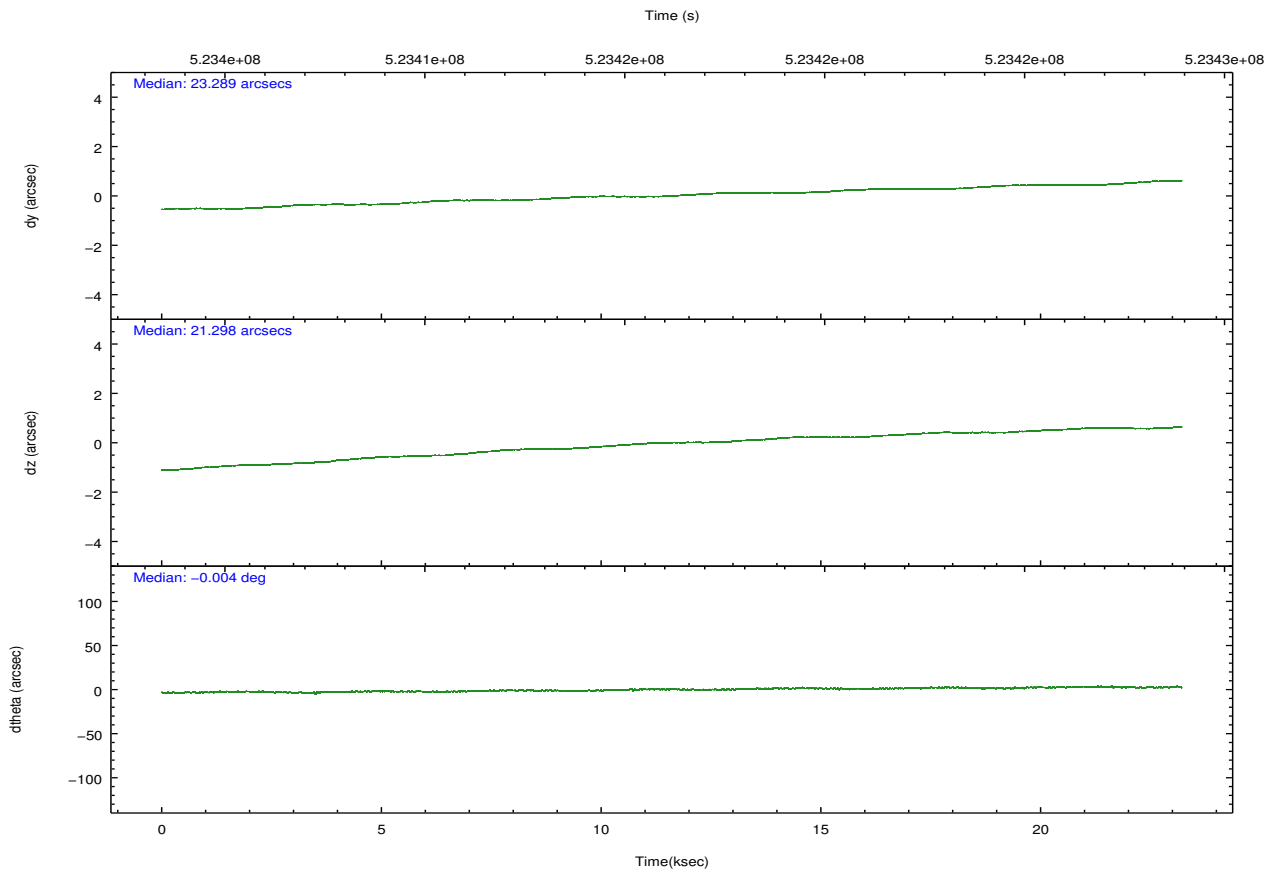
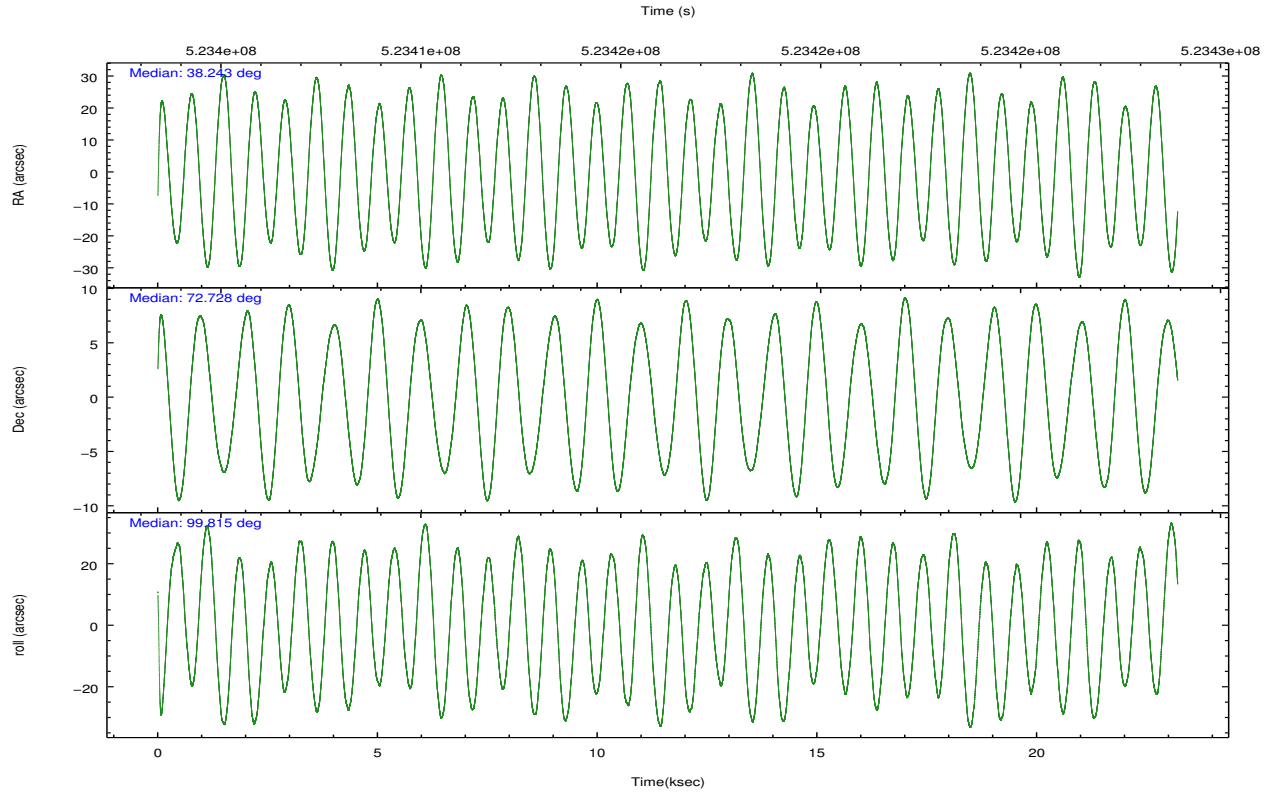
2.1.4 Events

	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	136614	194238	114142	156102	157519	116255	grade 0 events	12582	10761	4653	5850	12334	5252
rejected events	114764	97400	100338	88030	115804	101567		9%	5%	4%	3%	7%	4%
rejected %	84%	50%	87%	56%	73%	87%	grade 1 events	155	412	49	199	104	74
								0%	0%	0%	0%	0%	0%
							grade 2 events	3565	30380	3090	14078	9754	3255
								2%	15%	2%	9%	6%	2%
							grade 3 events	1571	3249	1388	5759	4395	1508
								1%	1%	1%	3%	2%	1%
							grade 4 events	1501	3134	1442	5693	4096	1466
								1%	1%	1%	3%	2%	1%
							grade 5 events	6104	14357	6075	16048	8861	6692
								4%	7%	5%	10%	5%	5%
							grade 6 events	2637	49329	3233	36694	11145	3208
								1%	25%	2%	23%	7%	2%
							grade 7 events	108499	82616	94212	71781	106830	94800
								79%	42%	82%	45%	67%	81%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-456789	ACIS-456789	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	38.302518	38.2424479088927	CCD I2 on	N	N
[deg] Pointing Dec	72.706880	72.72772869265523	CCD I3 on	N	N
[deg] Pointing Roll	99.609266	99.82325535936516	CCD S0 on	O1	Y
[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)	523404737.184000	523403559.37624	CCD S5 on	O2	Y
Observation start date	2014-08-02T22:11:10	2014-08-02T21:52:39	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	523427788.184000	523427921.57759	On-chip summing requested	N	N
Observation end date	2014-08-03T04:35:21	2014-08-03T04:38:41	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect

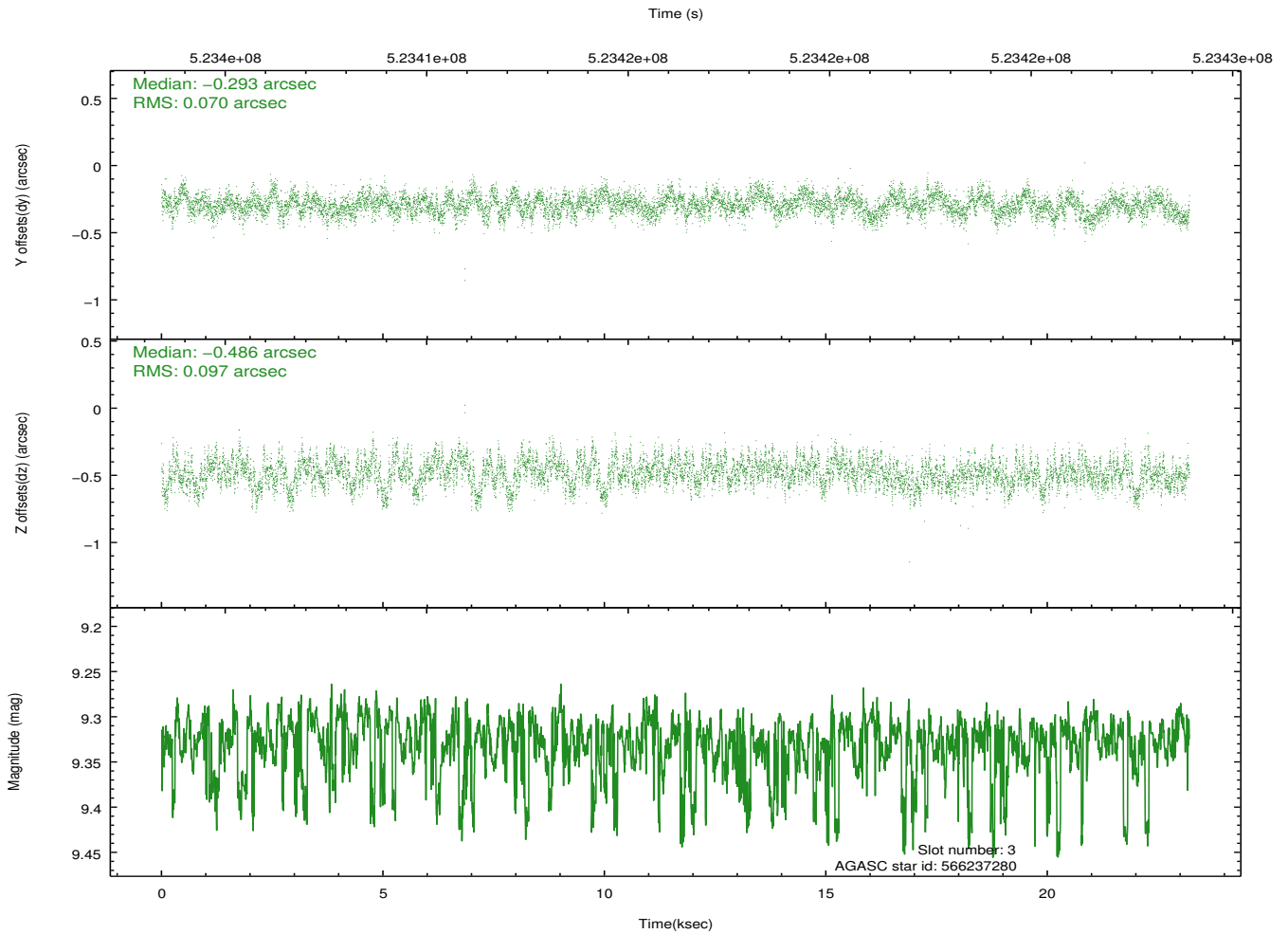
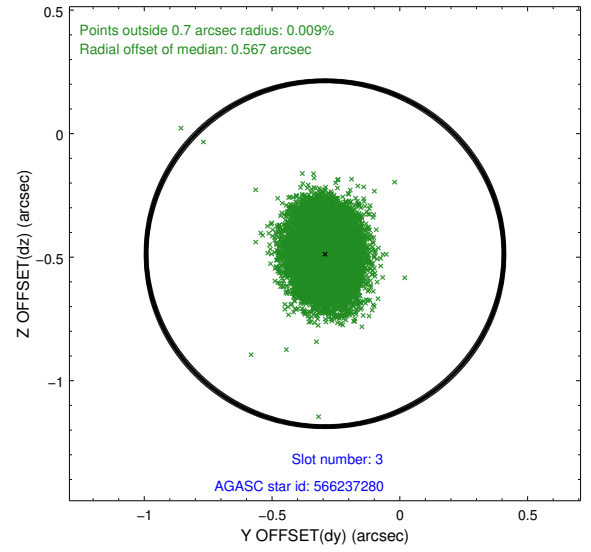
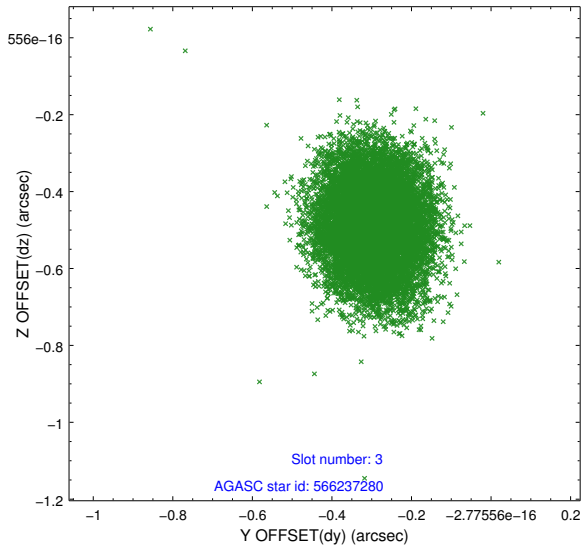


Slot Statistics

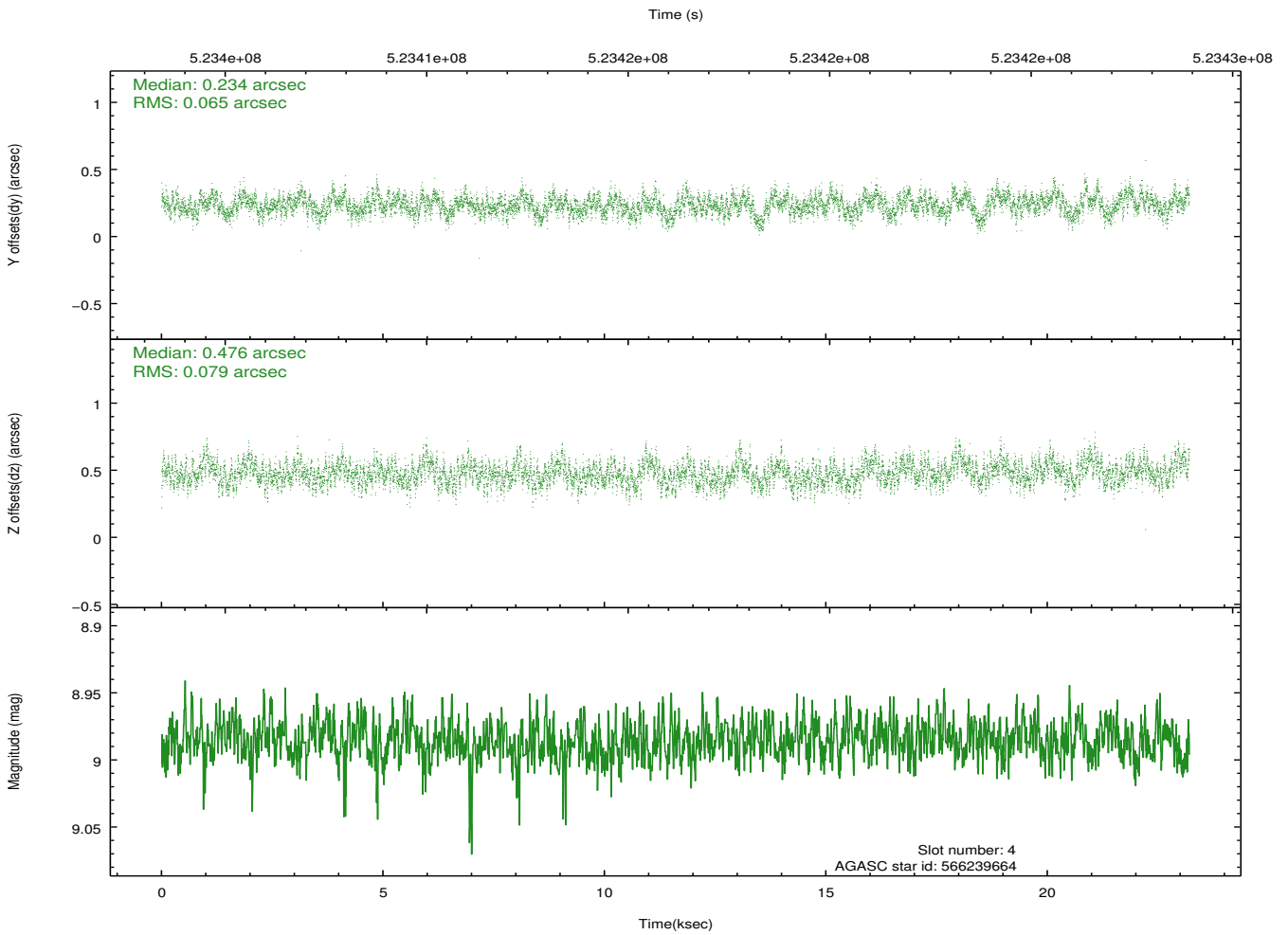
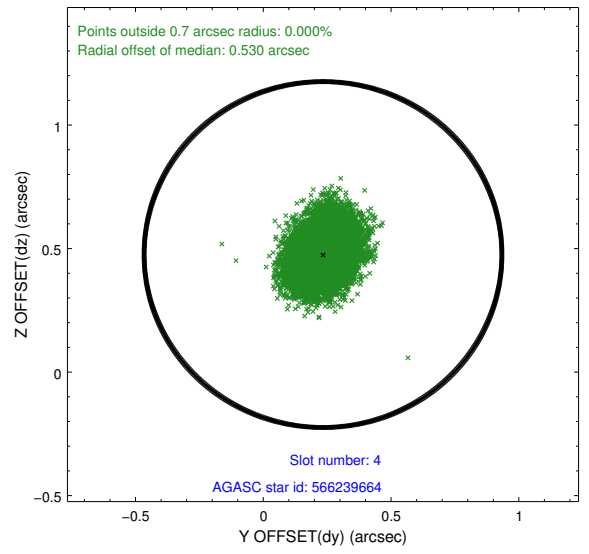
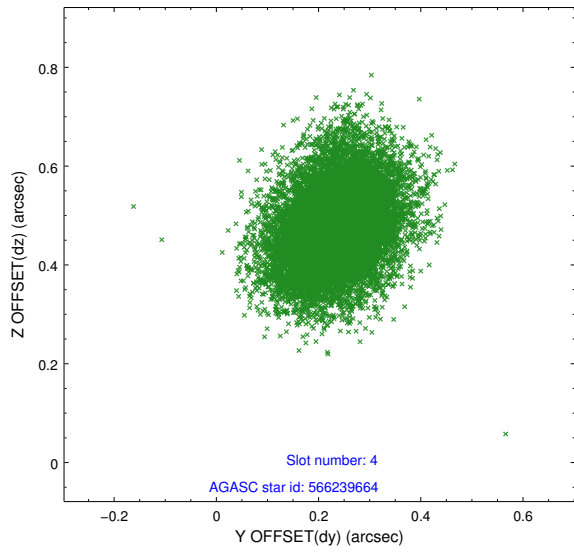
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.96	5660	-0.134	-0.018	0.010	0.016	0.000000	0.000000	-776.64	-1742.71
1	FID	ACIS-S-4	7.05	5658	0.325	0.069	0.009	0.016	0.000000	0.000000	2137.03	165.71
2	FID	ACIS-S-5	7.07	5659	-0.223	-0.043	0.011	0.018	0.000000	0.000000	-1829.39	159.43
3	GUIDE	566237280	9.33	11316	-0.293	-0.486	0.128	0.205	36.013544	73.001094	1491.43	2190.33
4	GUIDE	566239664	8.99	11316	0.234	0.476	0.109	0.178	40.069876	72.304278	-1722.94	-1668.61
5	GUIDE	566240064	8.20	11314	0.170	0.312	0.108	0.173	40.245264	72.787520	-25.91	-2093.46
6	GUIDE	566240328	9.39	11296	-0.198	-0.222	0.142	0.228	37.168581	72.795452	526.73	1135.17
7	GUIDE	566242208	6.83	11319	0.088	-0.090	0.067	0.105	37.654074	72.223769	-1591.77	992.54

2.4 Star Slots

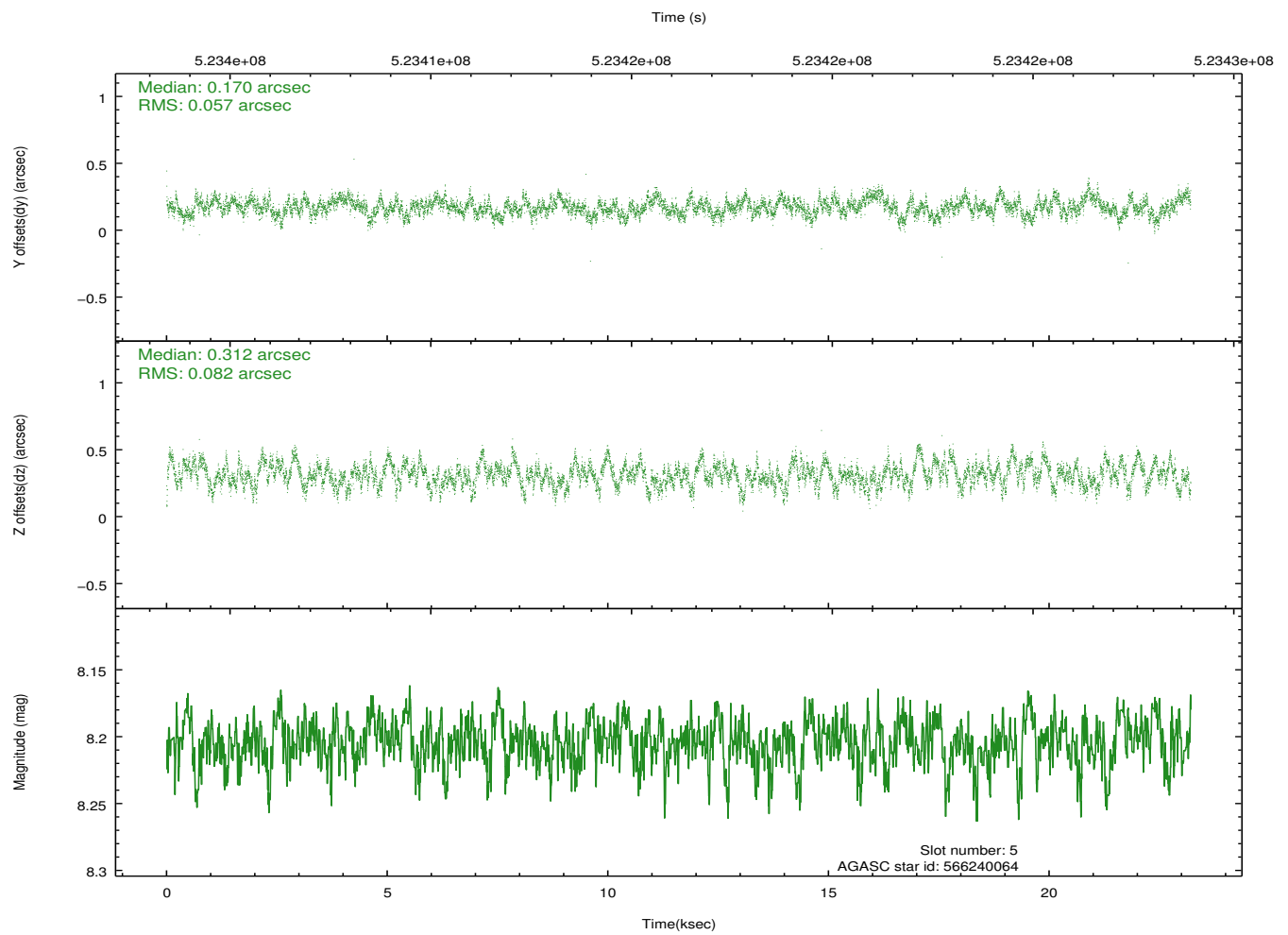
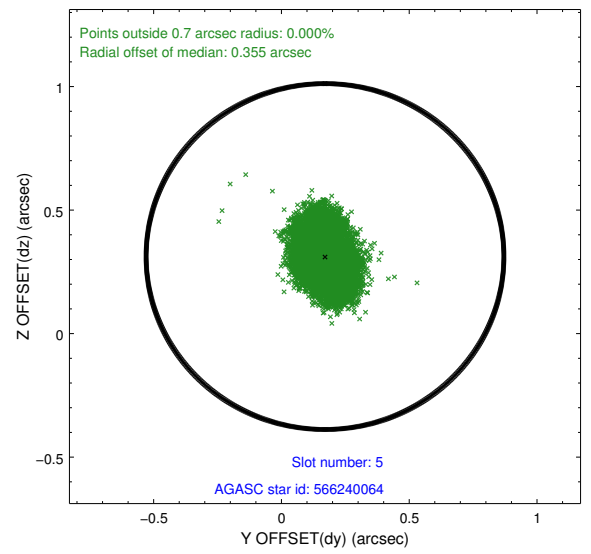
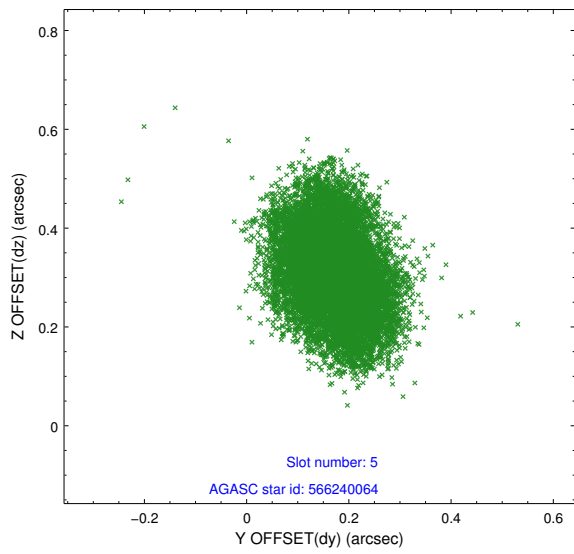
2.4.1 Slot 3



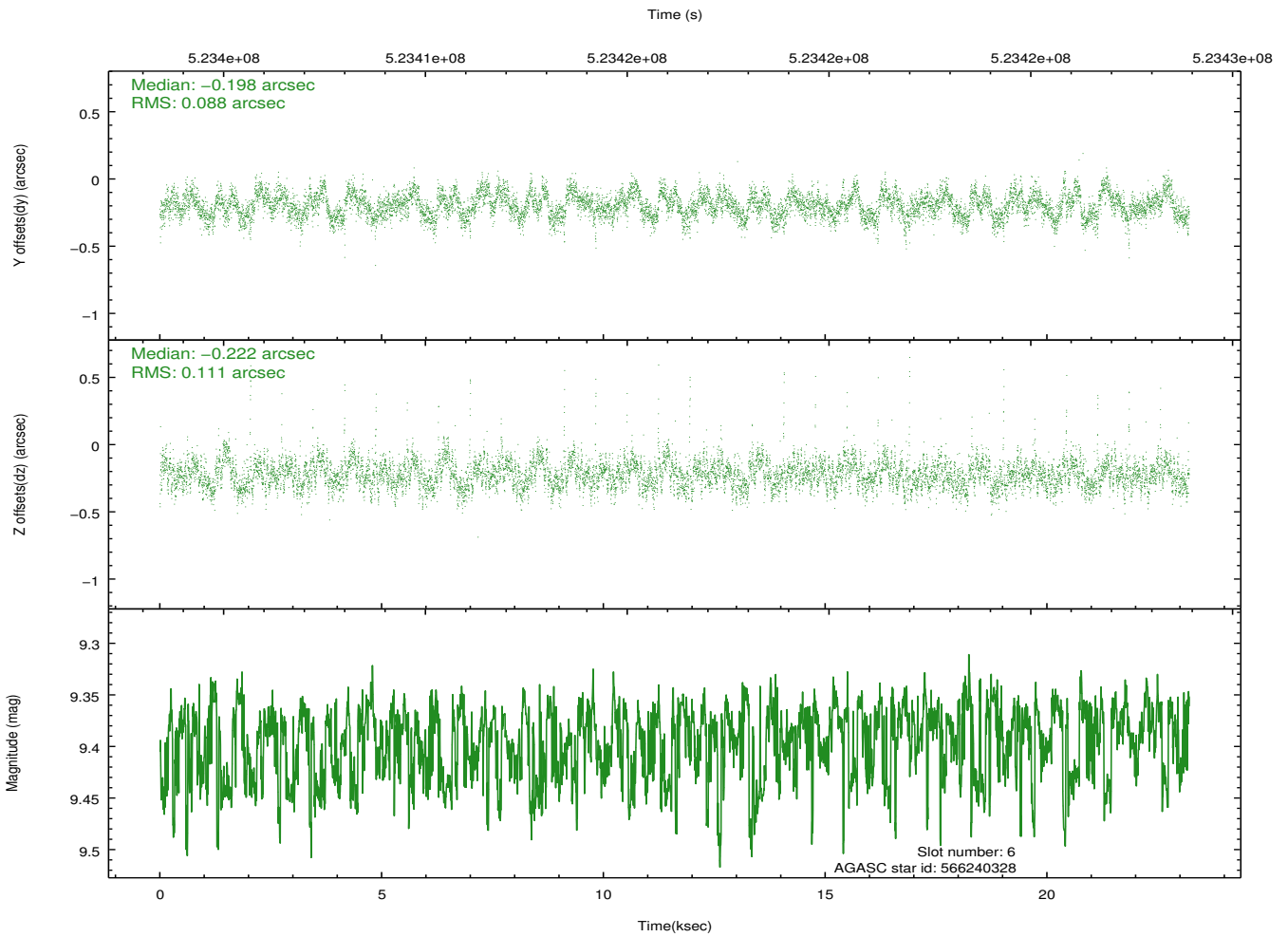
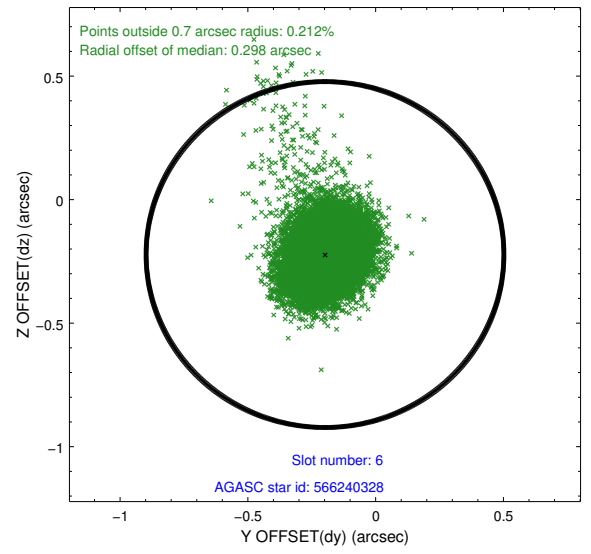
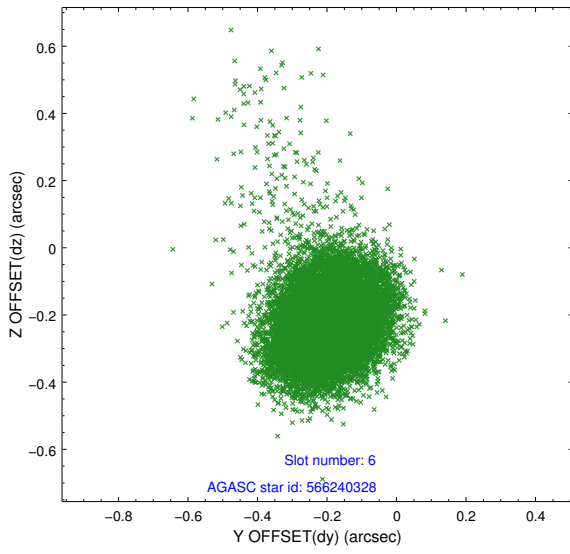
2.4.2 Slot 4



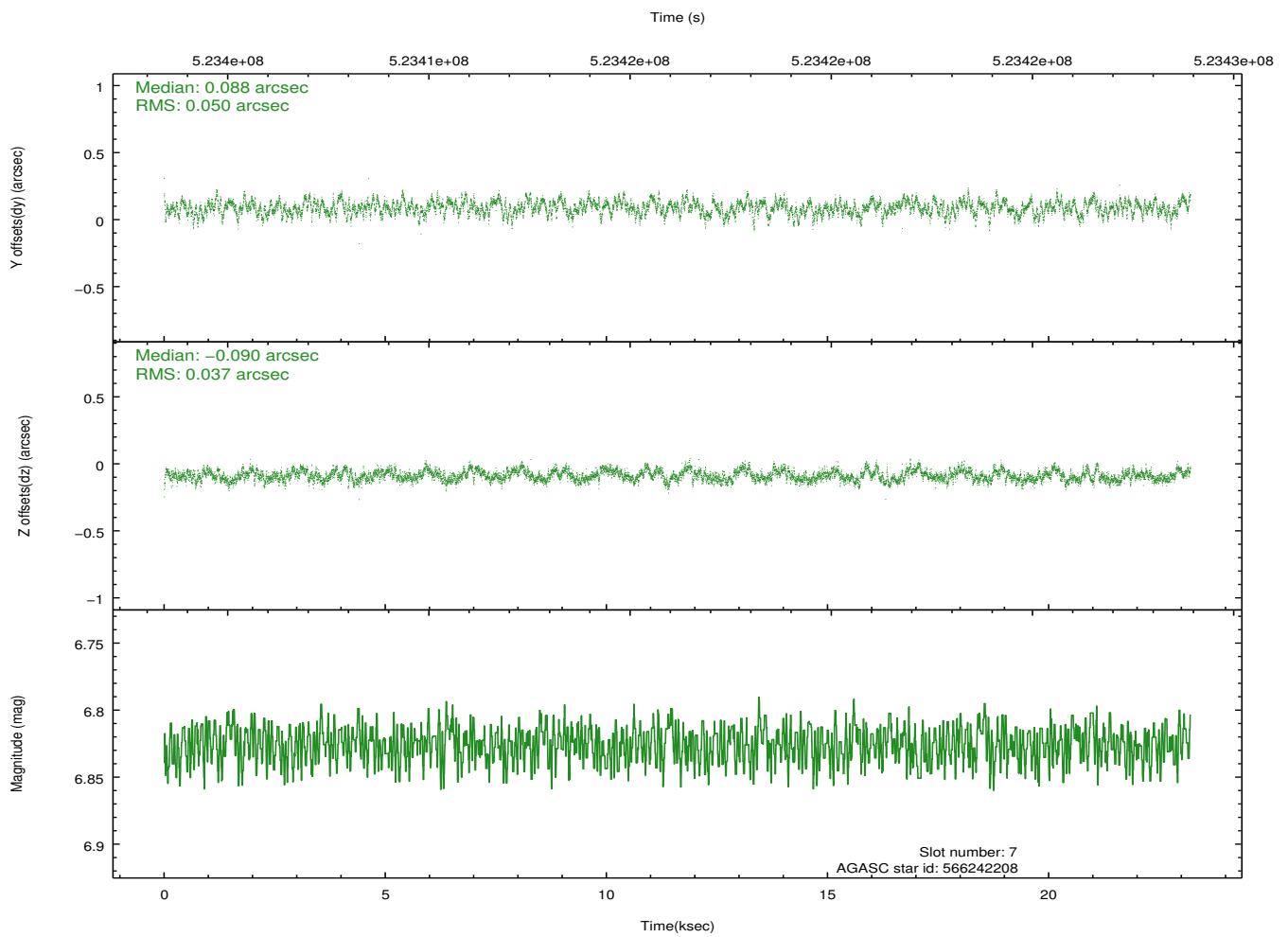
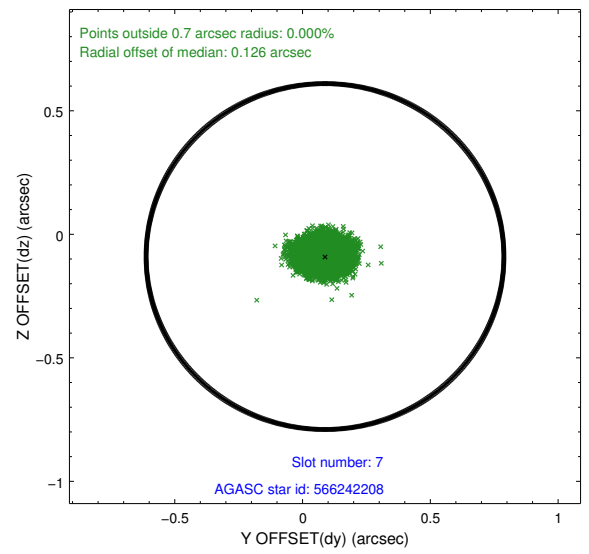
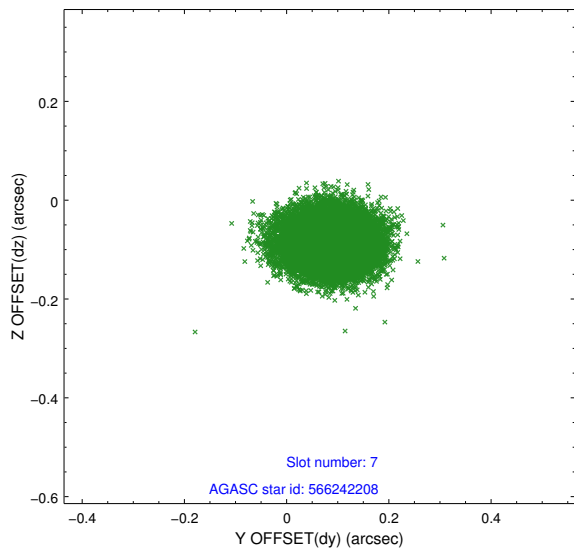
2.4.3 Slot 5



2.4.4 Slot 6

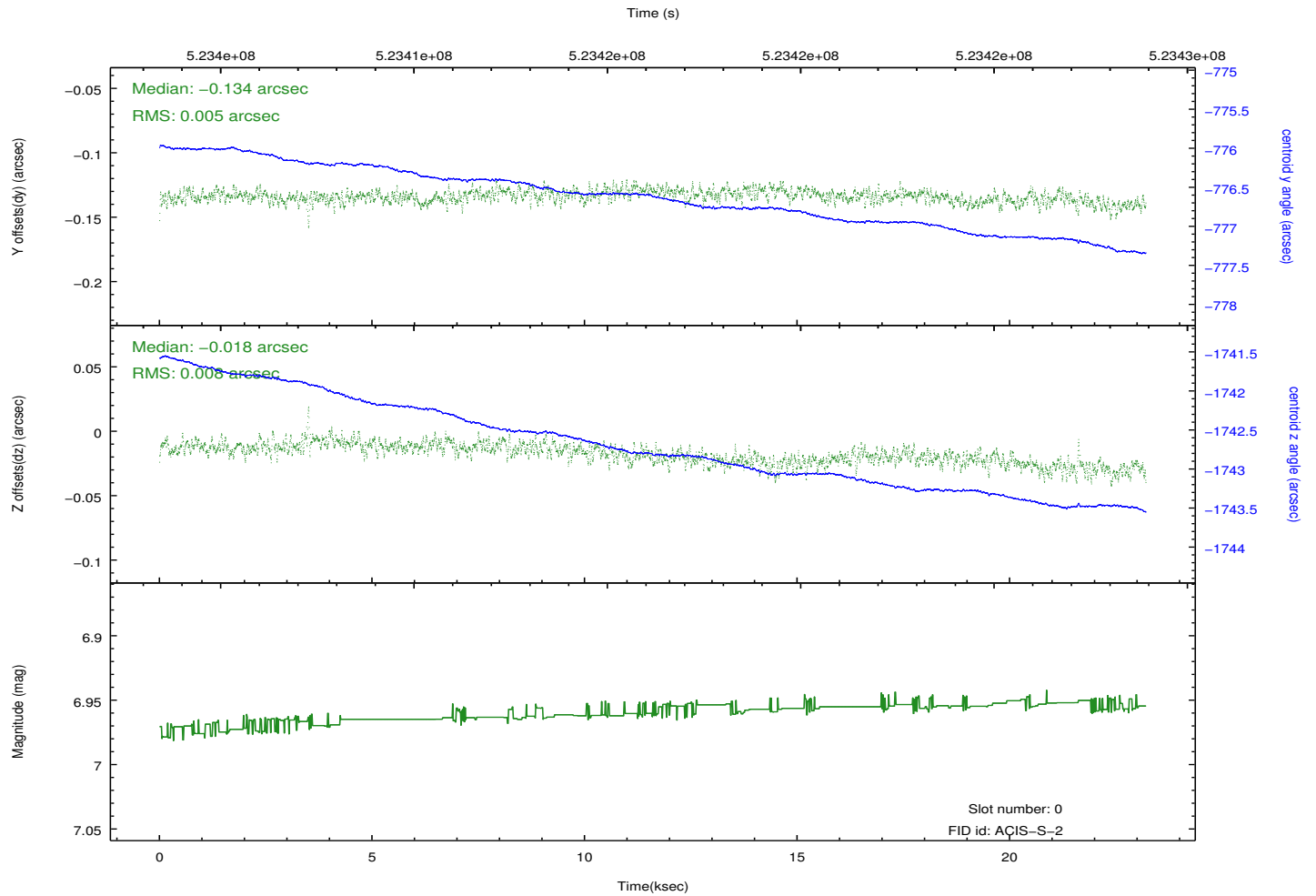
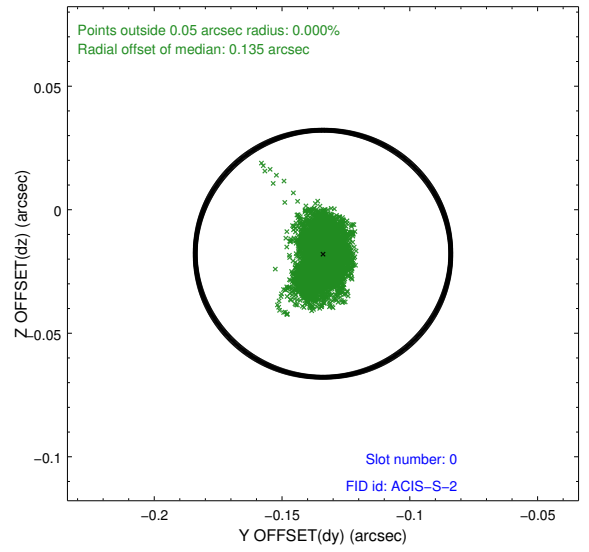
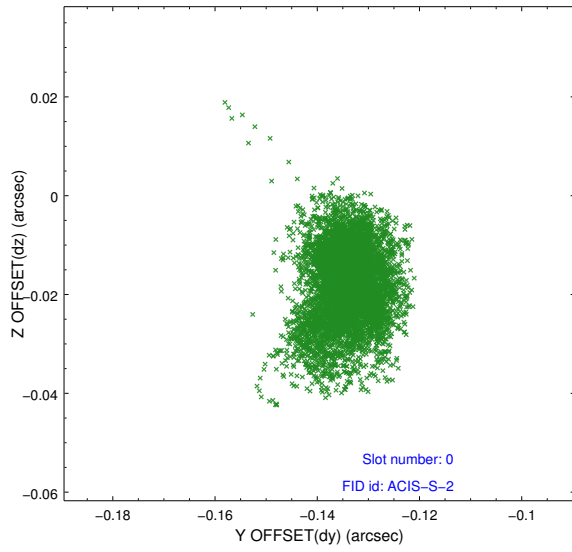


2.4.5 Slot 7

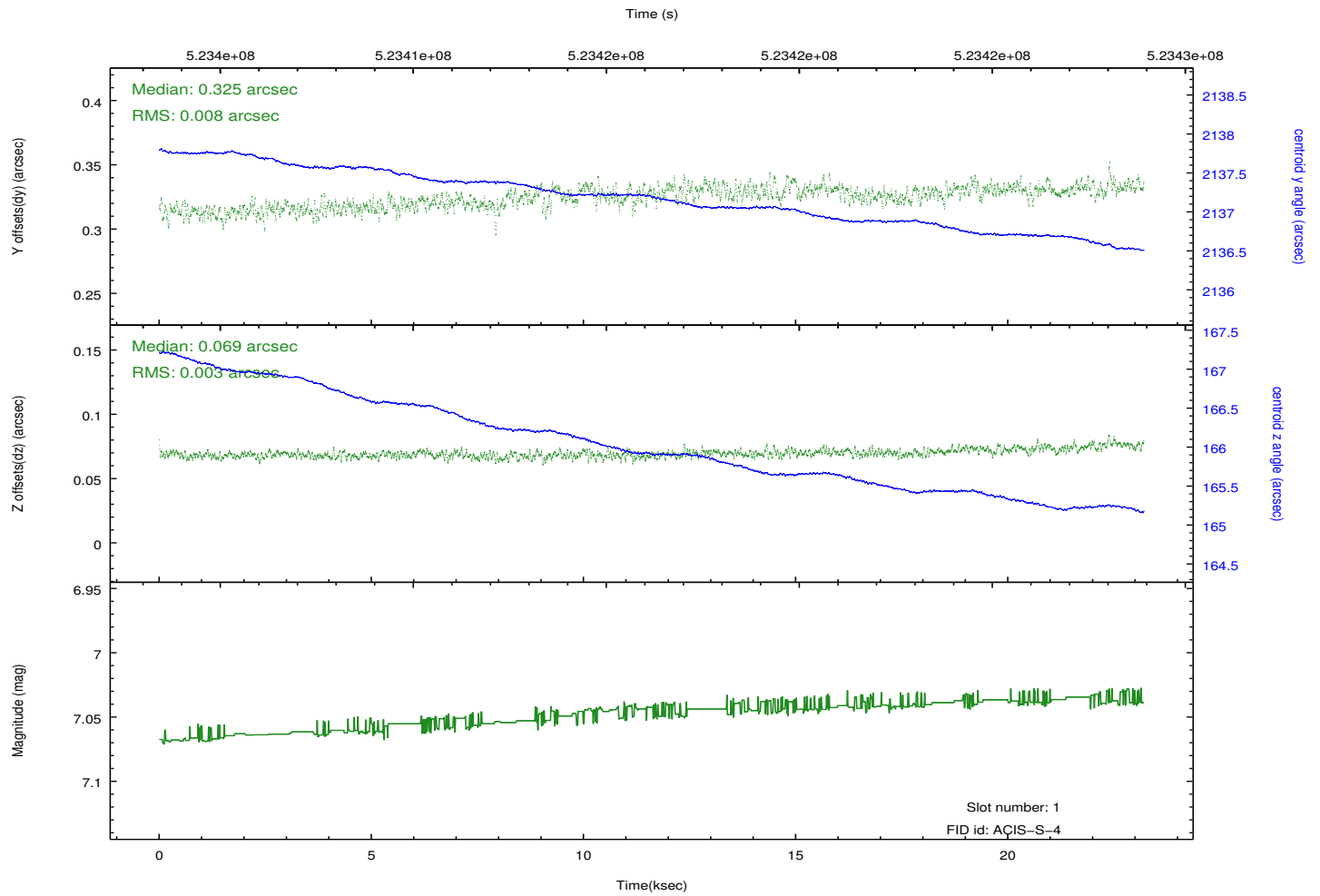
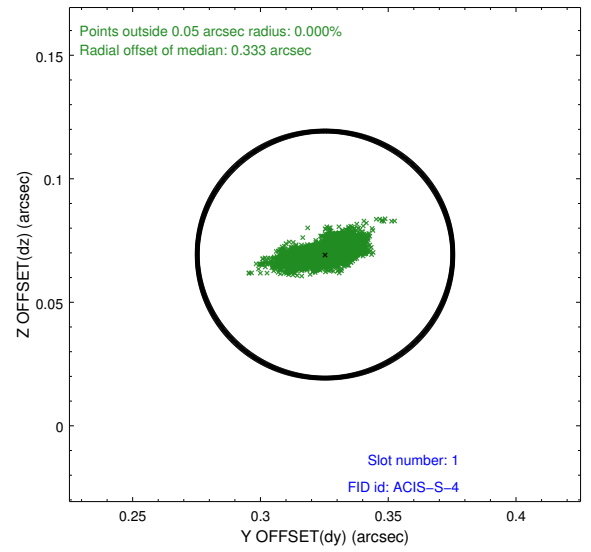
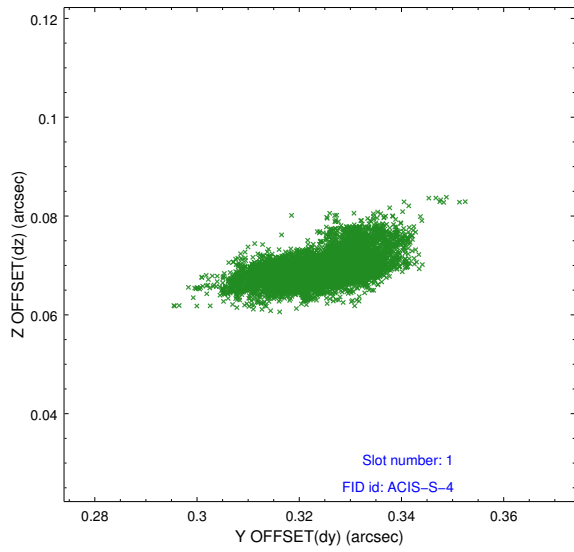


2.5 FID Slots

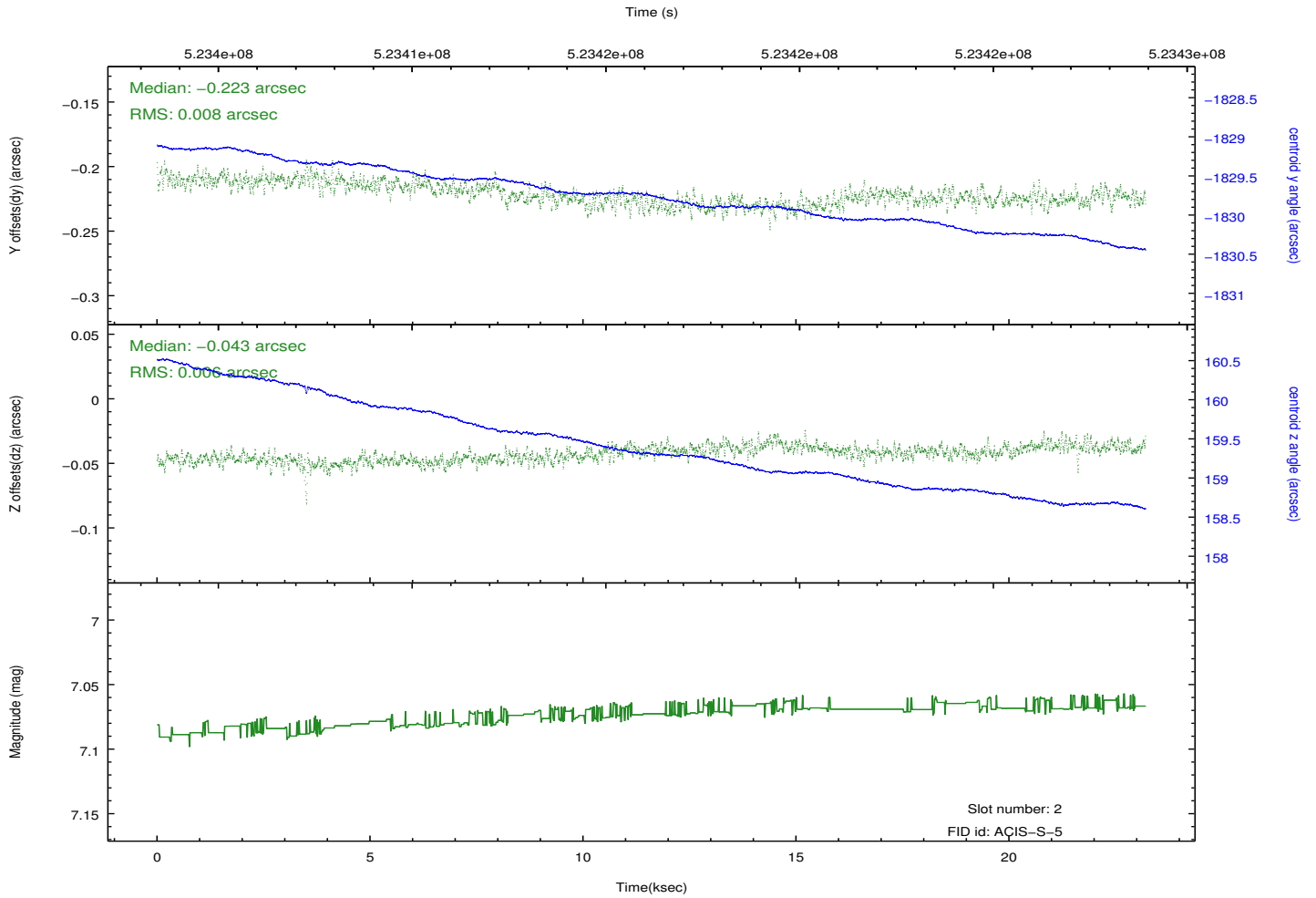
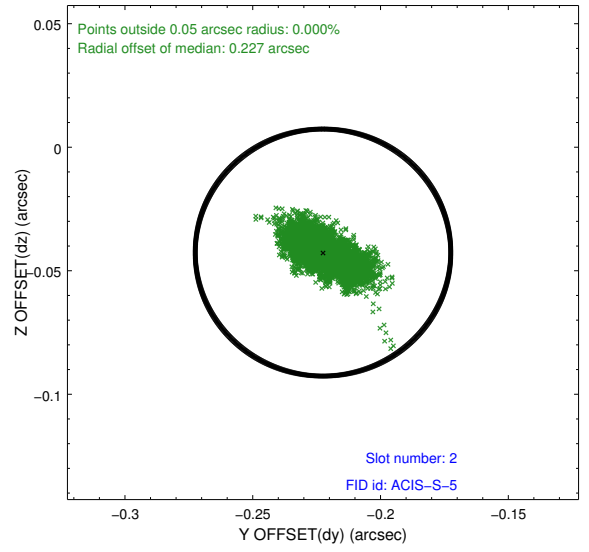
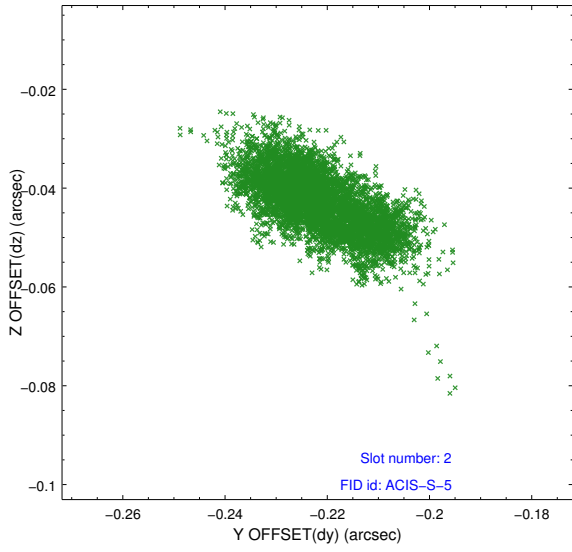
2.5.1 Slot 0



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)	2014.08.05
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	23.011037967205

A.2 Comments

A spatial region of the original bias map for CCD = 4 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 = 4 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:

(37.76515,
73.13568), (37.76818,73.13085), (37.98998,73.14243), (37.98006,73.14691)