

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12986 - L2 Version 2
Chandra X-Ray Center

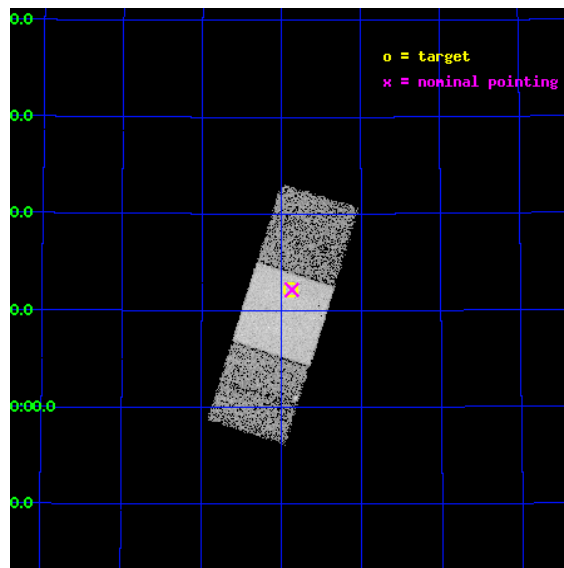
L2 Processing Date : Jan 26 2012

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1 Front

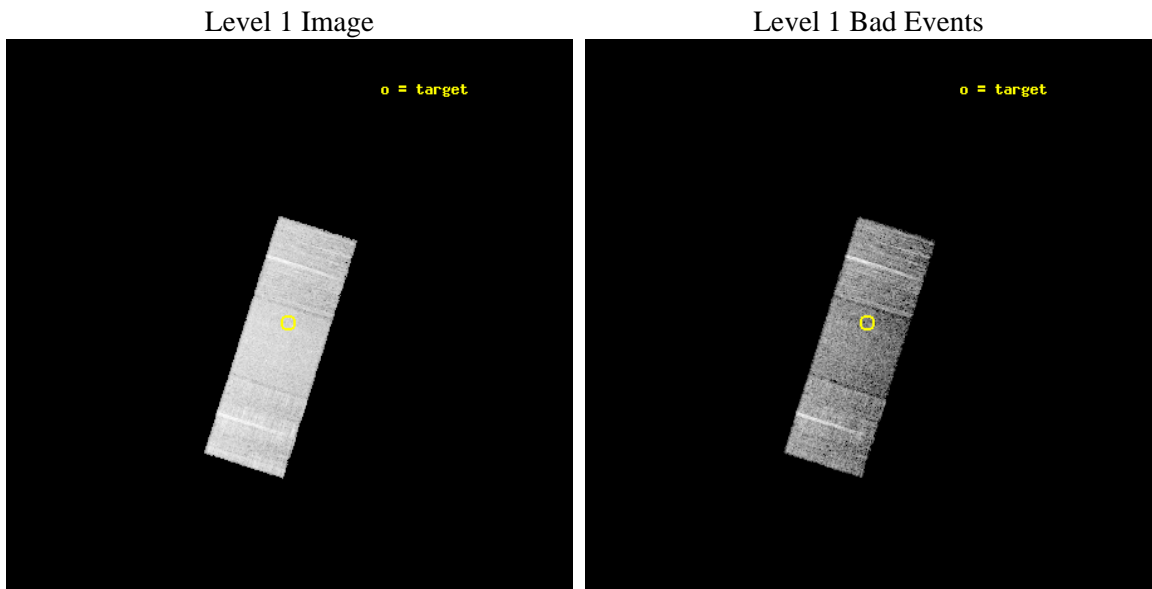
seq_num	600954	Sequence number
obs_id	12986	Observation id
title	Black-hole--galaxy co-evolution at the end of the Hubble sequence	
observer	Prof. Smita Mathur	Principal investigator
object	NGC 3794	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	175.2225	Observer's specified target RA [deg]
dec_targ	56.201944	Observer's specified target Dec [deg]
ra_nom	175.21720931165	Nominal RA [deg]
dec_nom	56.20276869885	Nominal Dec [deg]
roll_nom	107.55146794988	Nominal Roll [deg]
revision	2	Processing version of data
ontime	10062.600077391	Sum of GTIs [s]
livetime	9931.1247994012	Livetime [s]
ontime6	10062.600077391	Sum of GTIs [s]
ontime7	10062.600077391	Sum of GTIs [s]
ontime8	10062.600077391	Sum of GTIs [s]
l2events	49829	Number of level 2 events



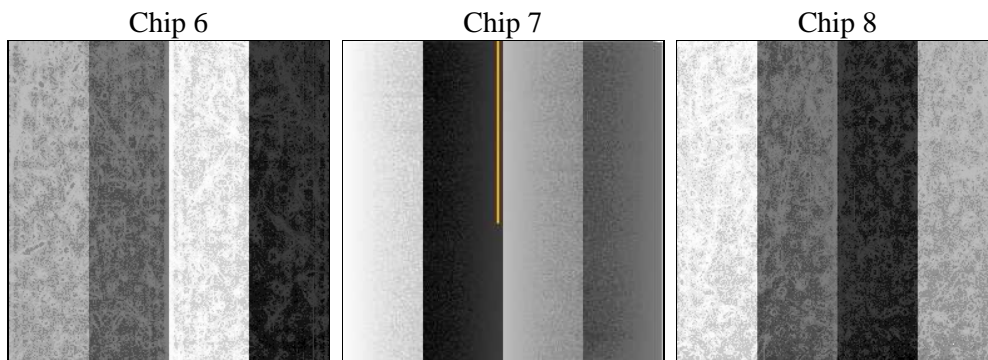
2 OBI

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	8.4.3	Processing system revision	ontime	10062.600077391	Sum of GTIs [s]
caldbver	4.4.7	 	ontime6	10062.600077391	Sum of GTIs [s]
date	2012-01-26T23:28:32	Date and time of file creation	ontime7	10062.600077391	Sum of GTIs [s]
revision	2	Processing version of data	ontime8	10062.600077391	Sum of GTIs [s]
			l1events	231360	Number of level 1 events

2.1.4 Events

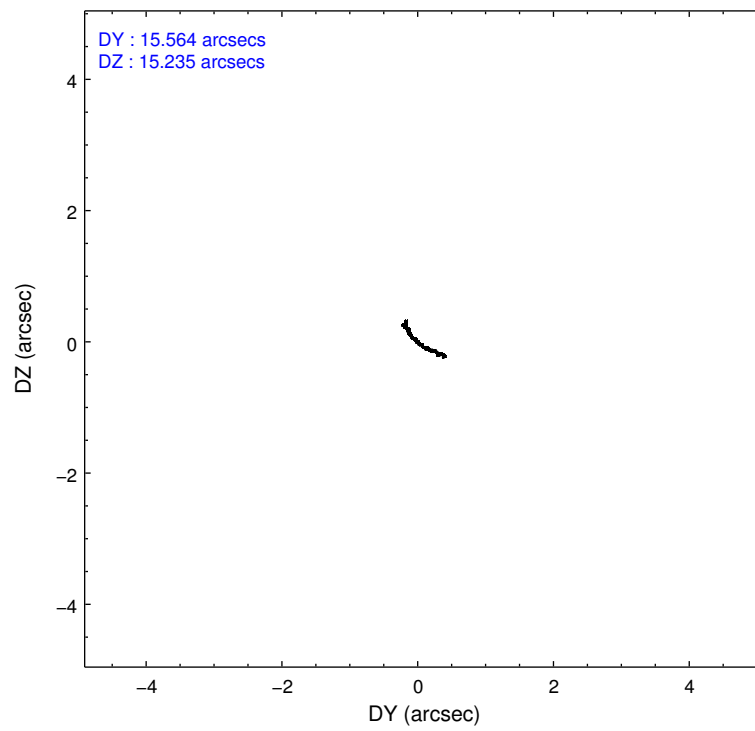
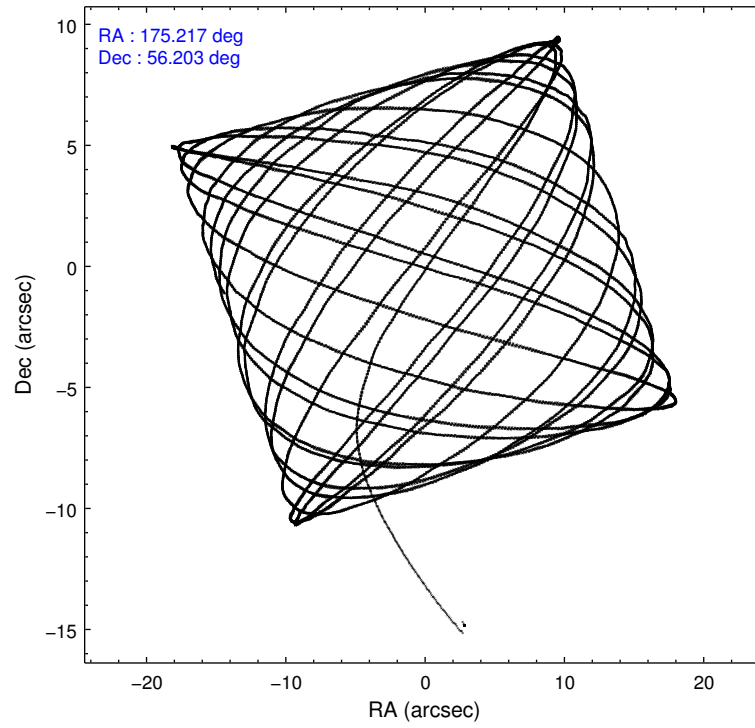
	ccd 6	ccd 7	ccd 8
level 1 events	64383	80857	86120
rejected events	57005	43974	61899
rejected %	88%	54%	71%

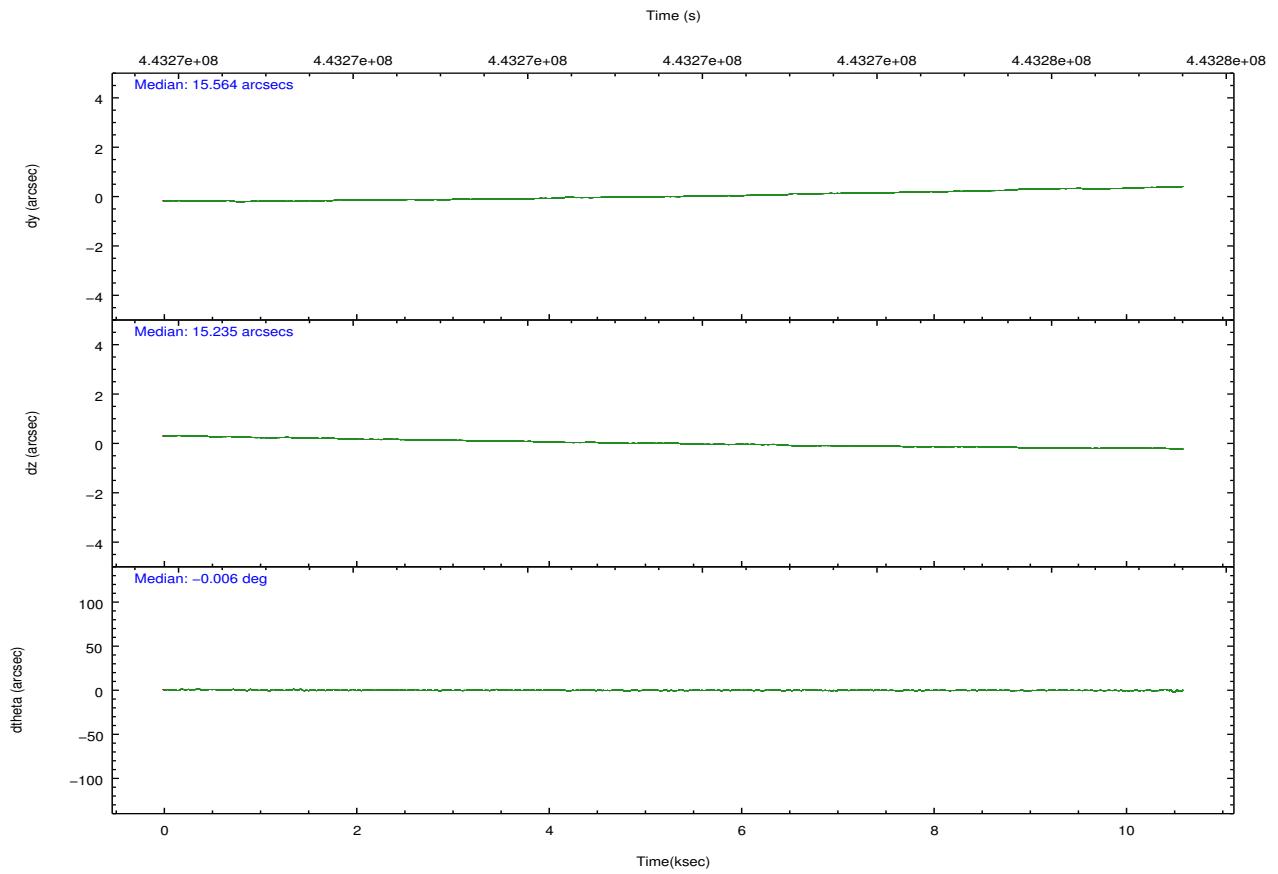
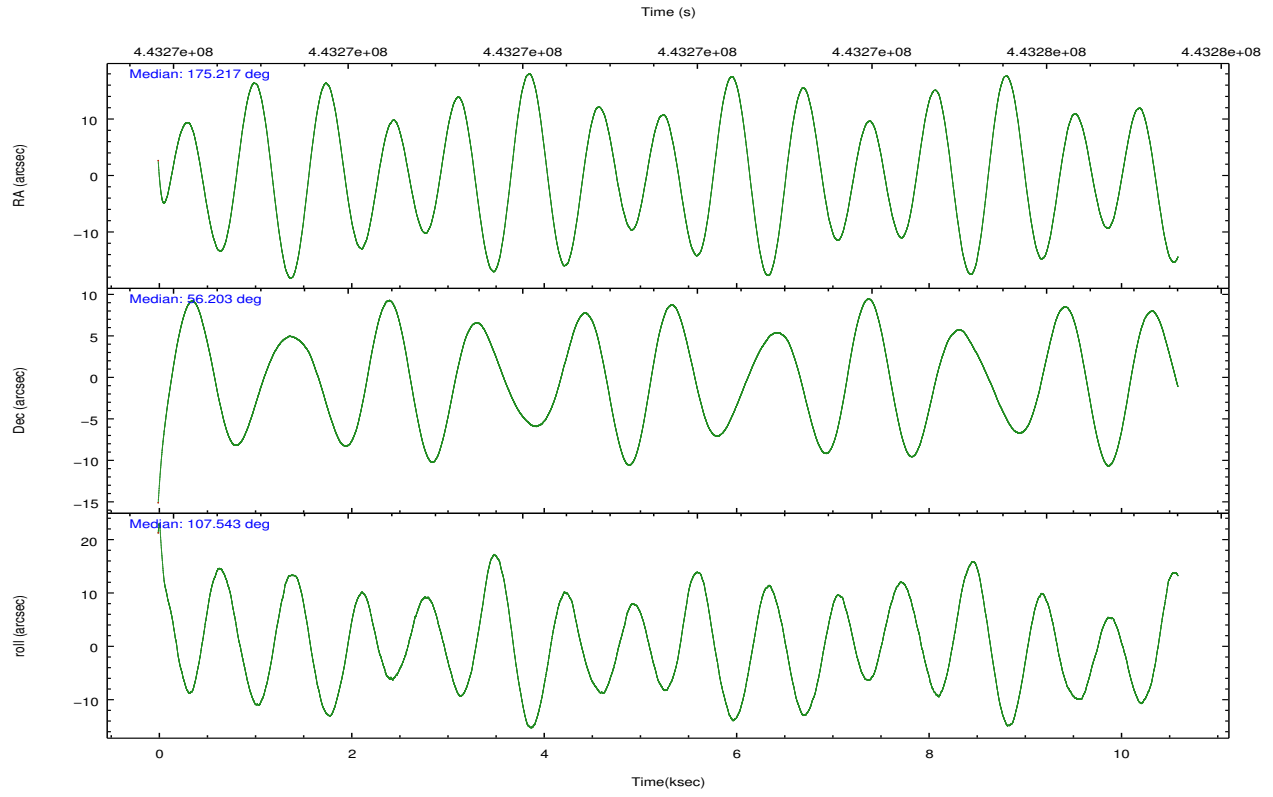
	ccd 6	ccd 7	ccd 8
grade 0 events	2496	3422	7402
	3%	4%	8%
grade 1 events	34	94	65
	0%	0%	0%
grade 2 events	1688	7444	5293
	2%	9%	6%
grade 3 events	785	3301	2765
	1%	4%	3%
grade 4 events	755	3287	2552
	1%	4%	2%
grade 5 events	3077	8406	4677
	4%	10%	5%
grade 6 events	1656	19442	6212
	2%	24%	7%
grade 7 events	53892	35461	57154
	83%	43%	66%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-678	ACIS-678	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	175.253936	175.2172093116509	CCD I2 on	N	N
[deg] Pointing Dec	56.184548	56.20276869885038	CCD I3 on	N	N
[deg] Pointing Roll	107.364304	107.5514679498815	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	O1	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	O2	Y
[s] Observation start time (MET)	443266955.184000	443265353.76271	CCD S5 on	N	N
Observation start date	2012-01-18T09:41:29	2012-01-18T09:15:53	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	443276955.184000	443277820.32587	On-chip summing requested	N	N
Observation end date	2012-01-18T12:28:09	2012-01-18T12:43:40	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



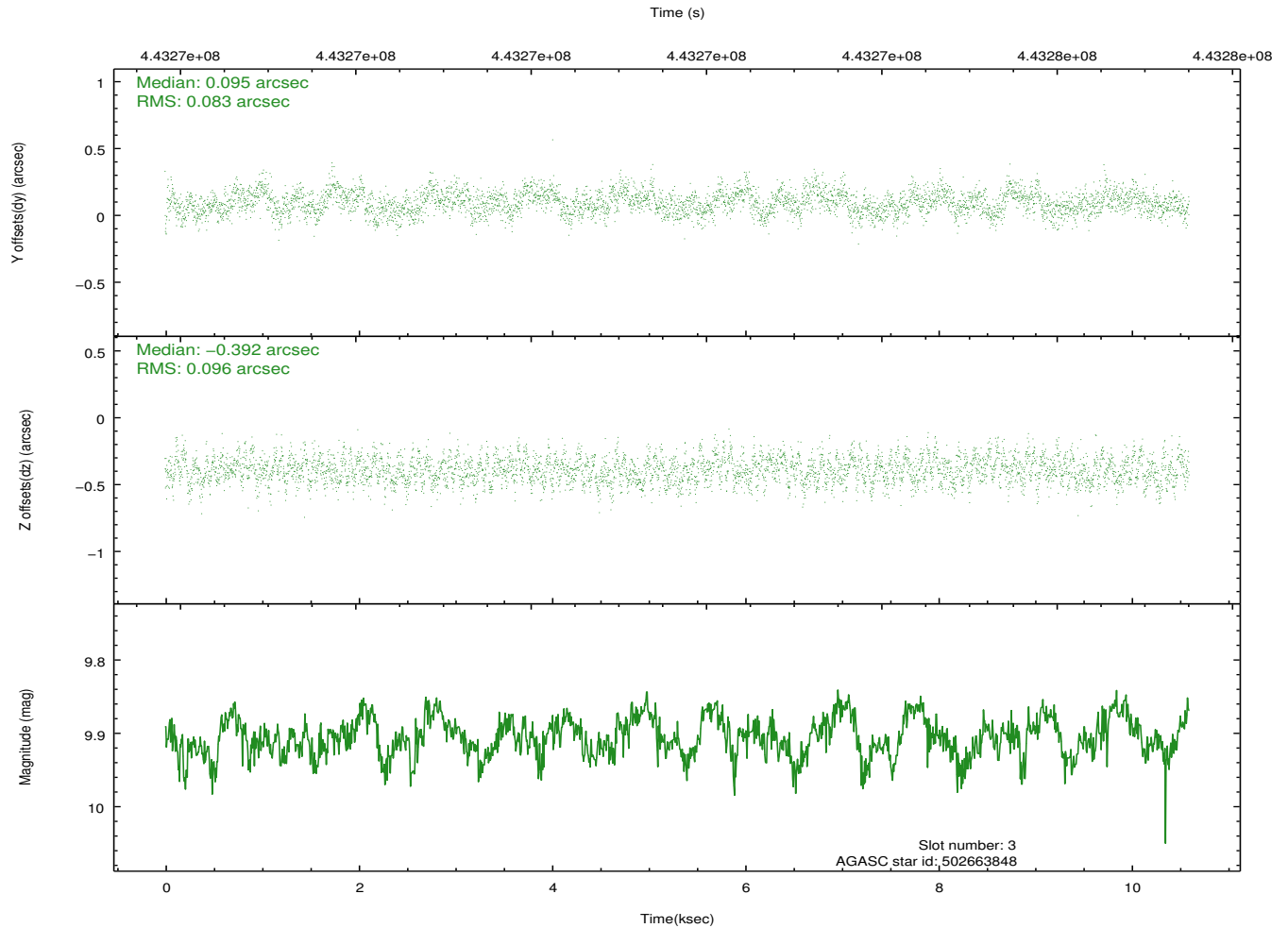
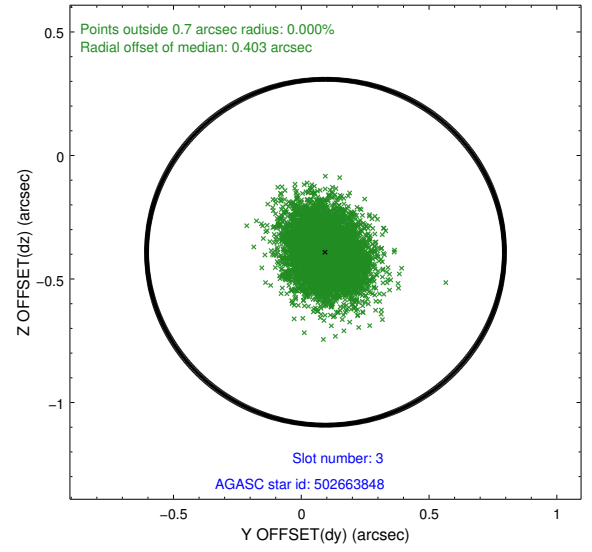
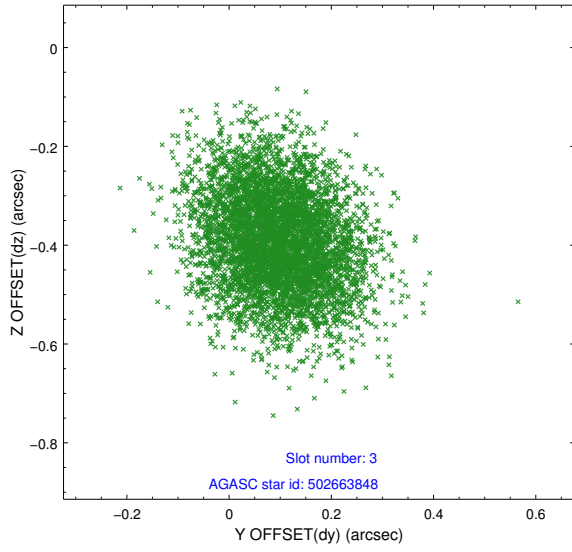


Slot Statistics

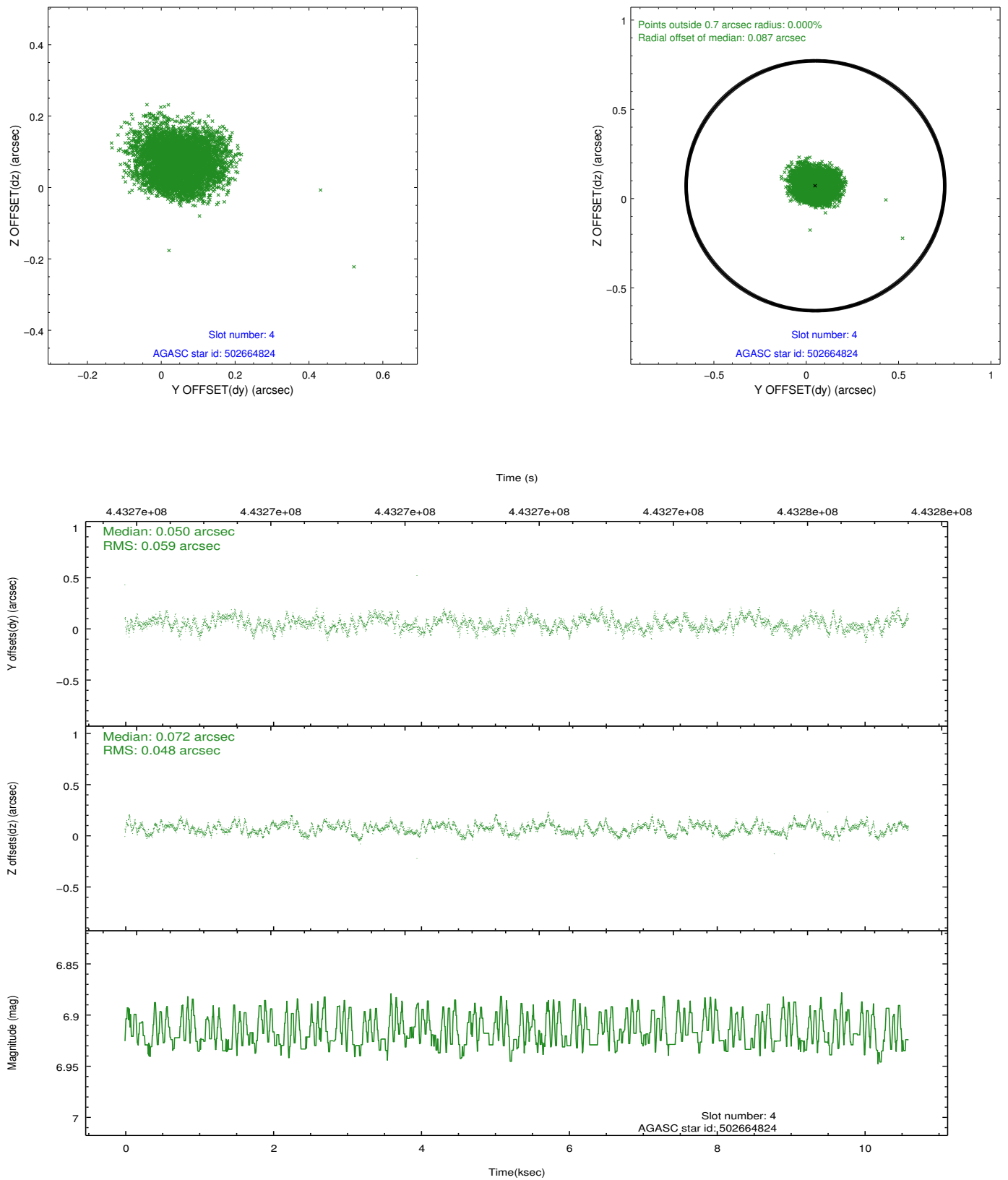
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	6.92	2586	0.016	-0.021	0.009	0.016	0.000000	0.000000	927.47	-1732.28
1	FID	ACIS-S-4	6.93	2586	0.163	0.011	0.009	0.014	0.000000	0.000000	2145.28	171.42
2	FID	ACIS-S-5	6.96	2586	-0.206	0.022	0.006	0.011	0.000000	0.000000	-1821.01	165.54
3	GUIDE	502663848	9.91	5166	0.095	-0.392	0.135	0.219	174.267125	55.806070	-691.14	2307.58
4	GUIDE	502664824	6.92	5171	0.050	0.072	0.082	0.127	175.793574	56.019745	-886.32	-859.43
5	GUIDE	502667448	9.08	5168	0.003	0.107	0.130	0.204	175.866579	56.945193	2260.09	-1966.51
6	GUIDE	502667672	8.30	5170	-0.285	0.141	0.074	0.123	175.402268	56.711911	1725.23	-846.21
7	GUIDE	502669400	9.92	5156	0.148	0.063	0.188	0.294	174.815589	55.815680	-999.70	1241.70

2.4 Star Slots

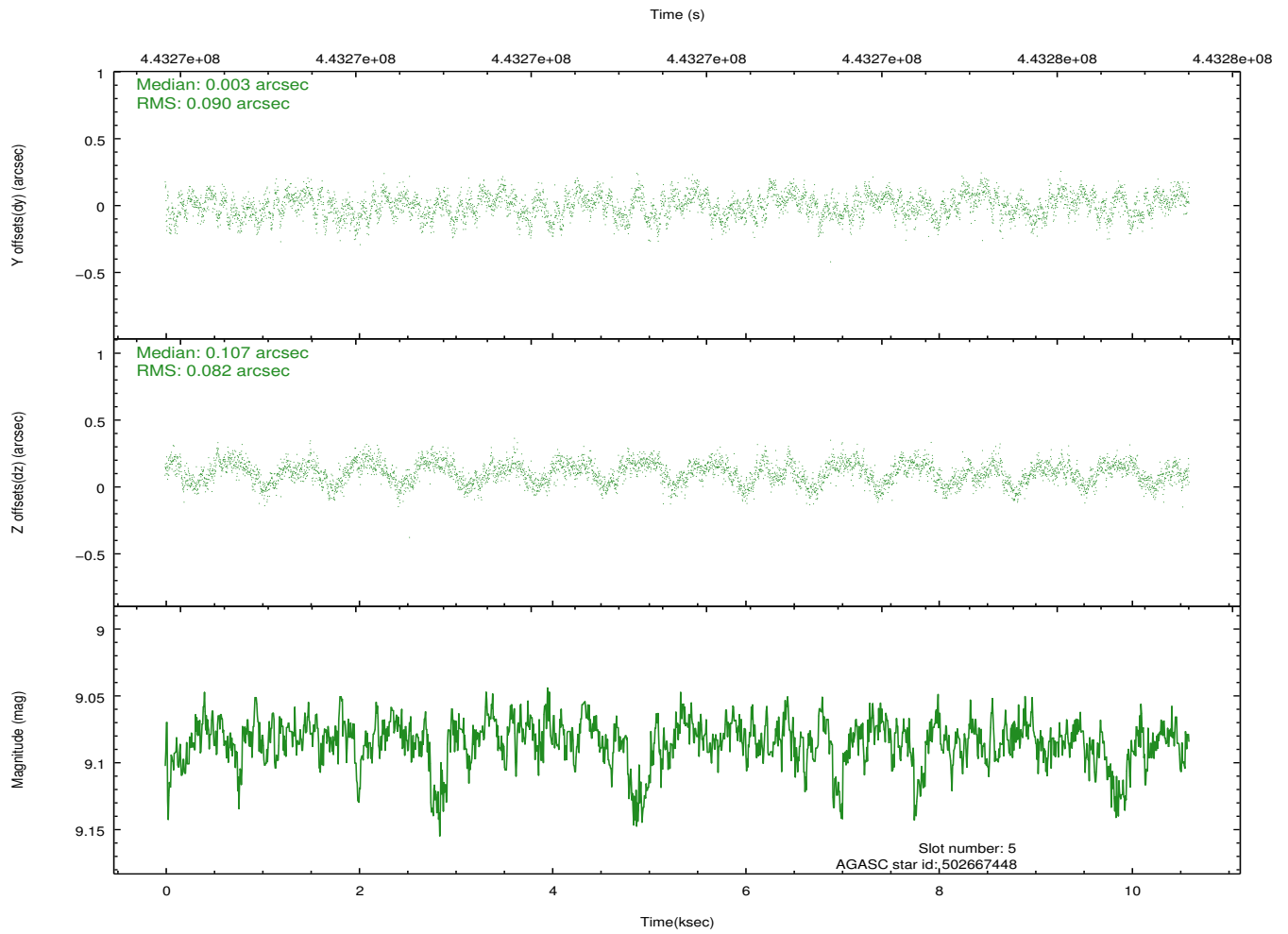
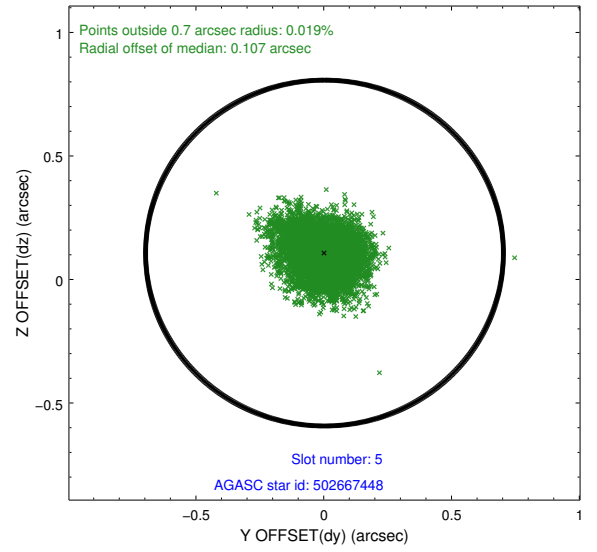
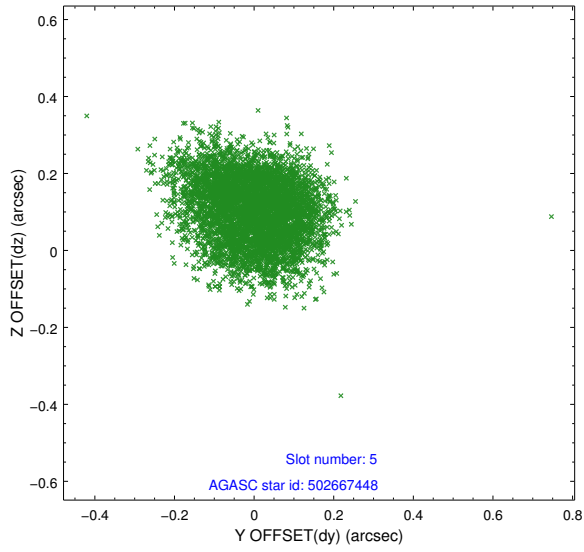
2.4.1 Slot 3



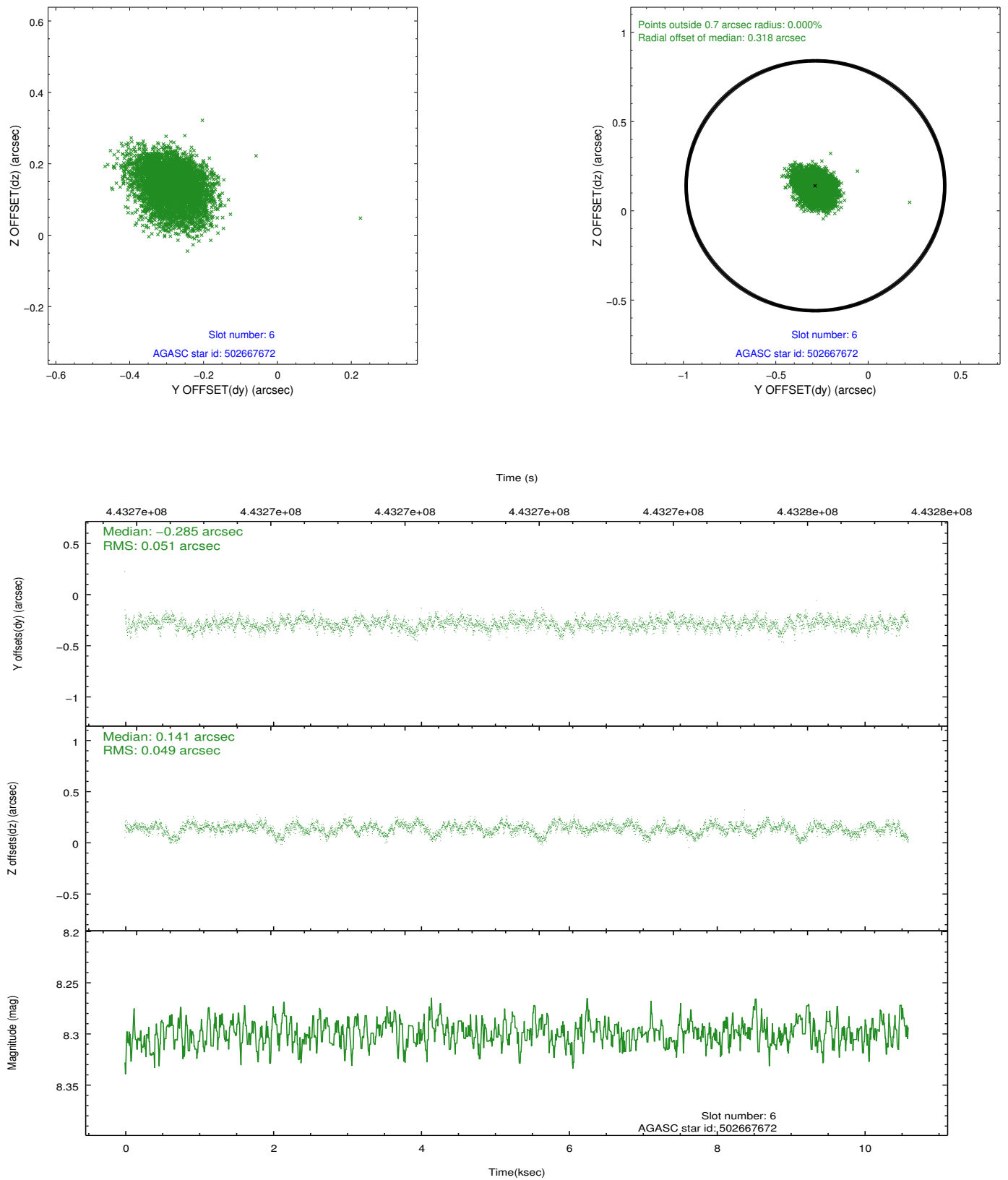
2.4.2 Slot 4



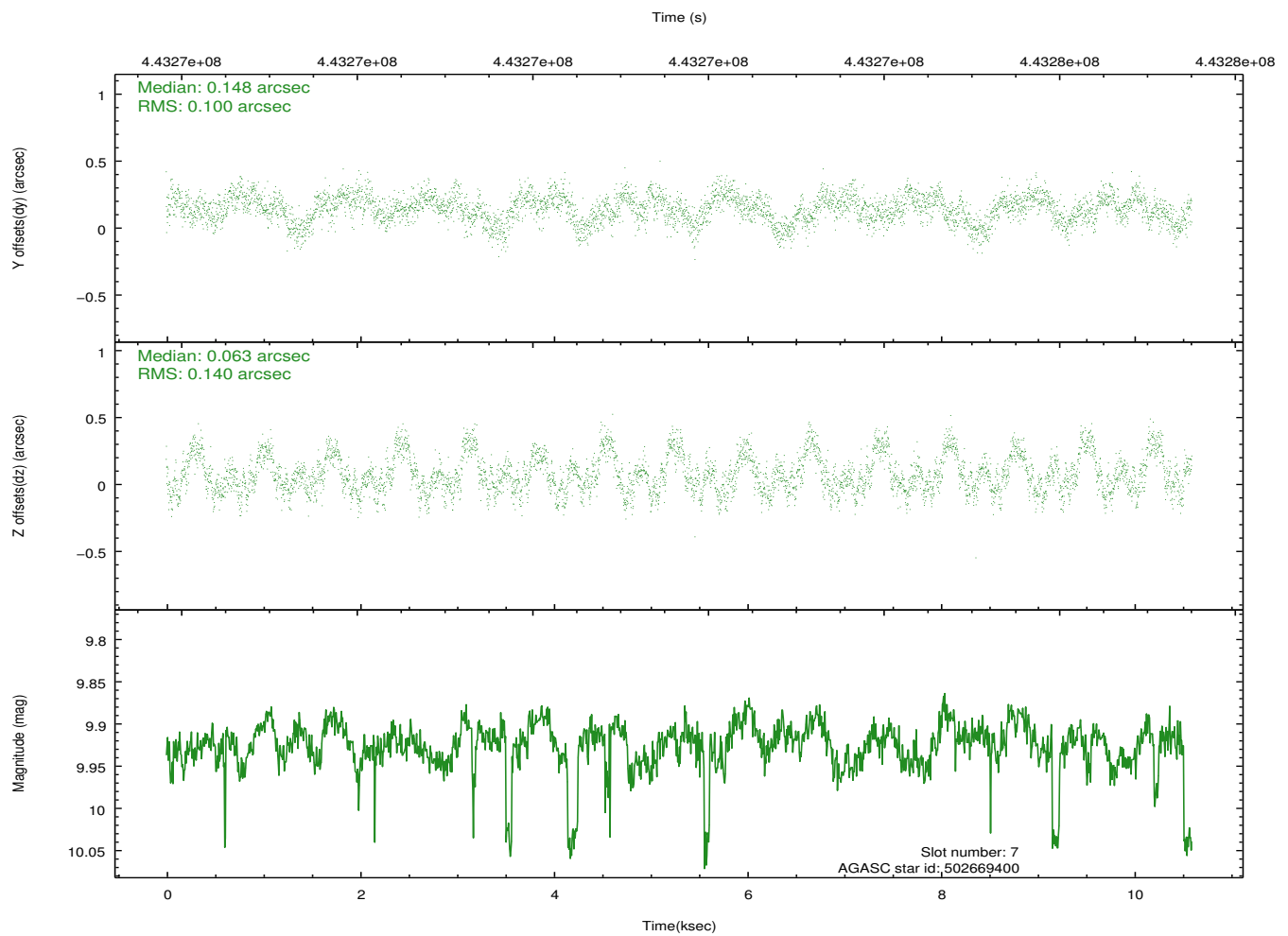
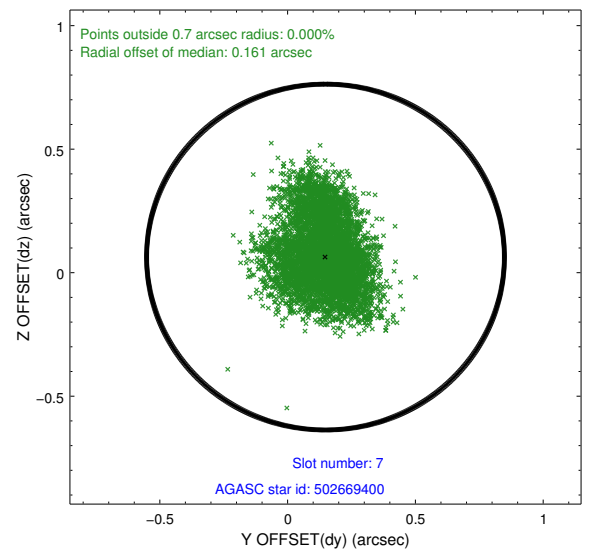
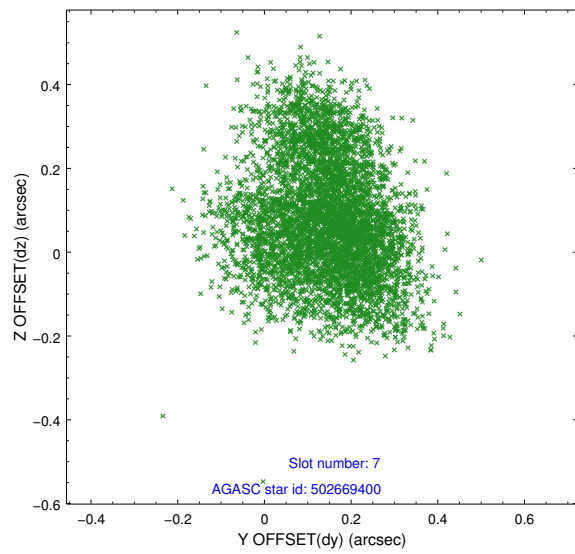
2.4.3 Slot 5



2.4.4 Slot 6

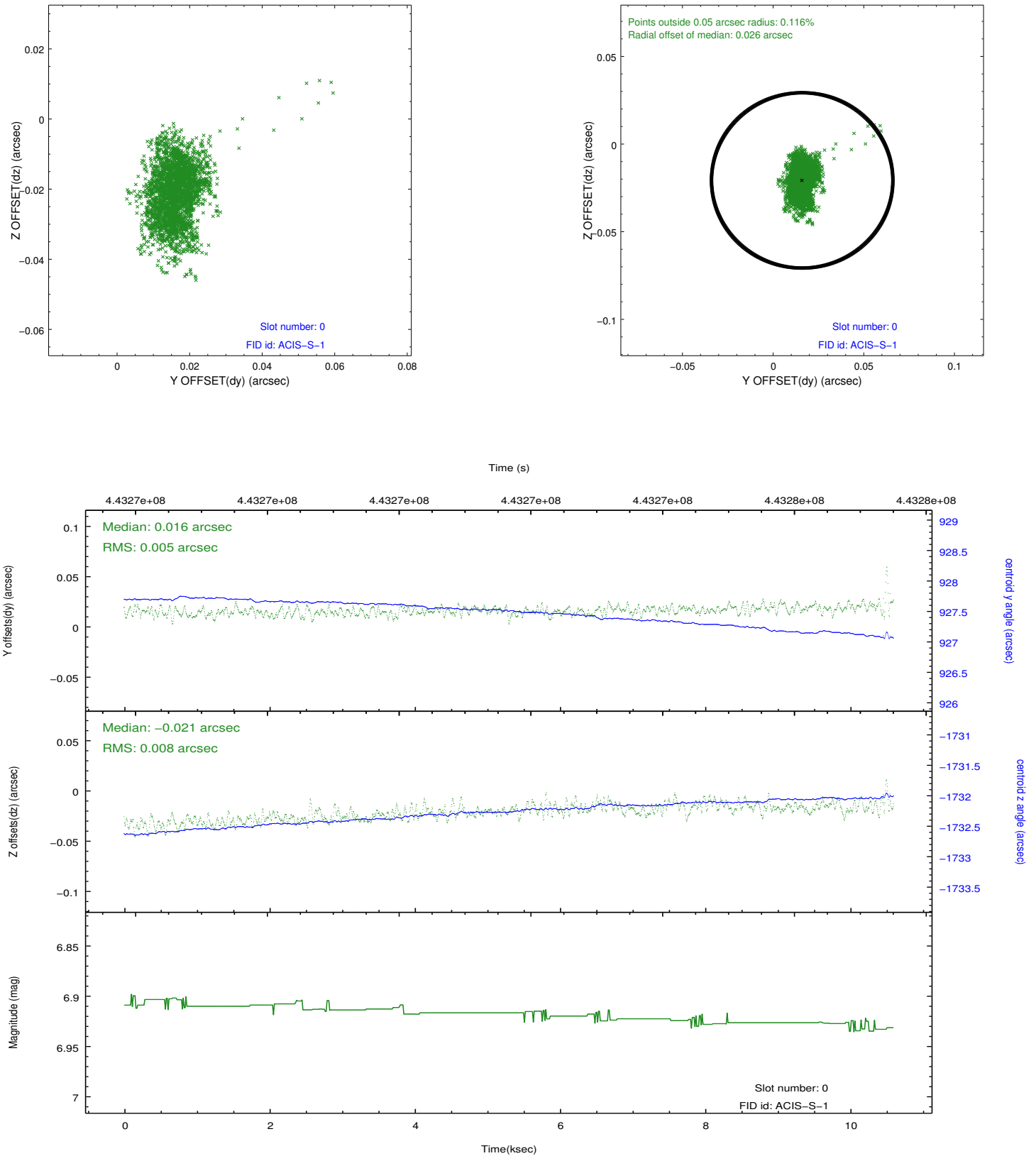


2.4.5 Slot 7

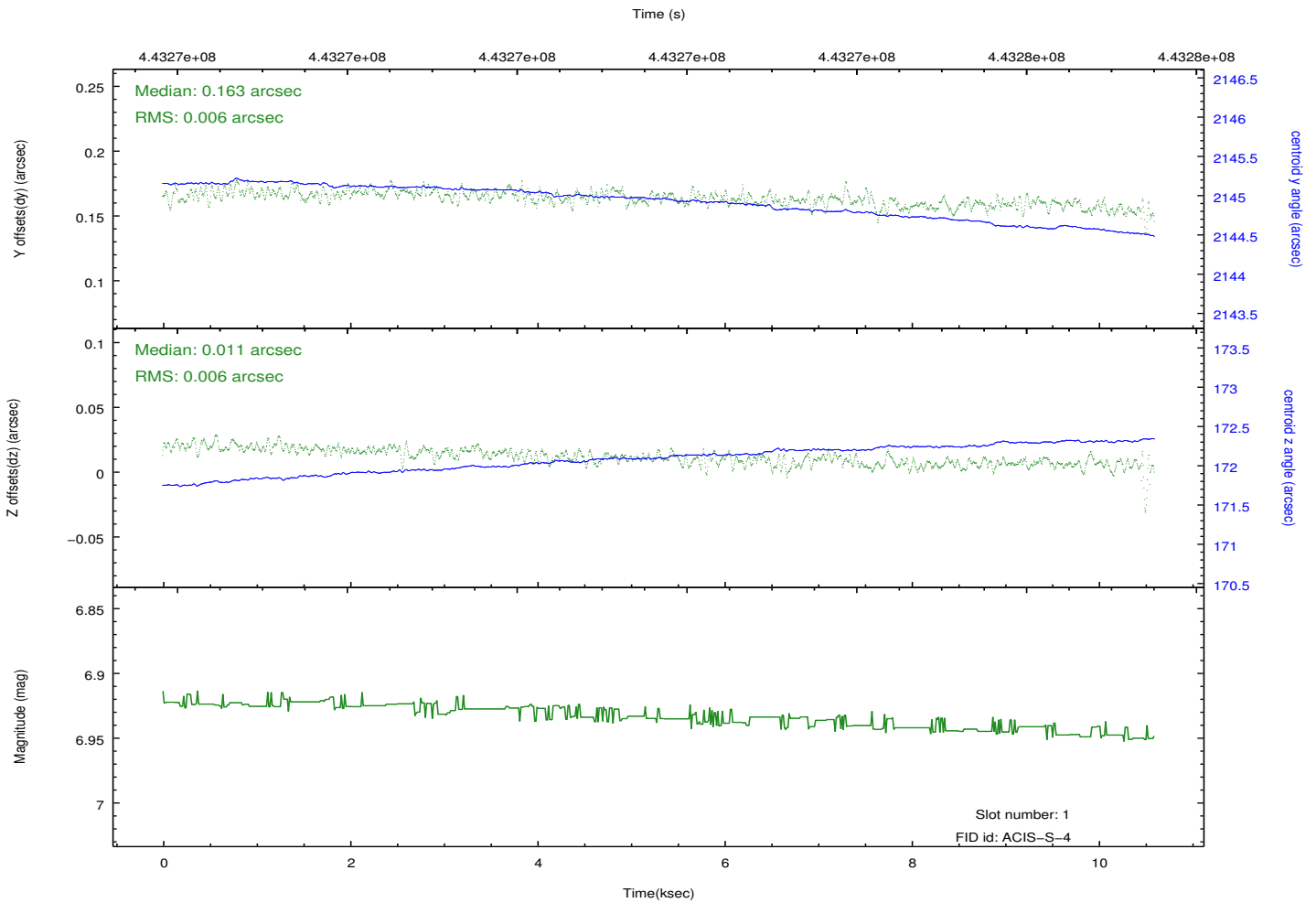
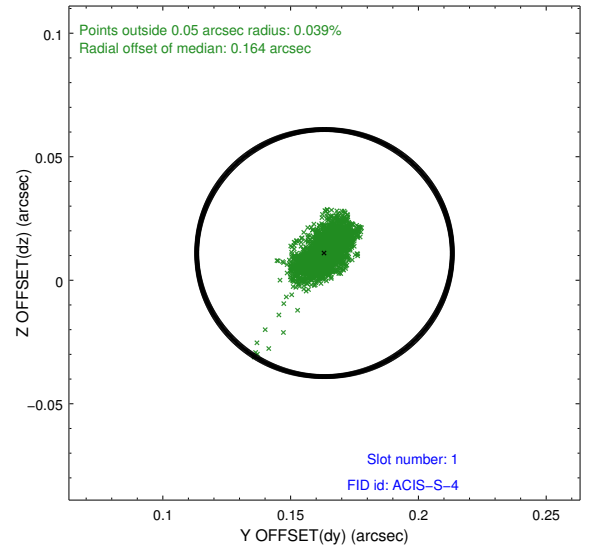
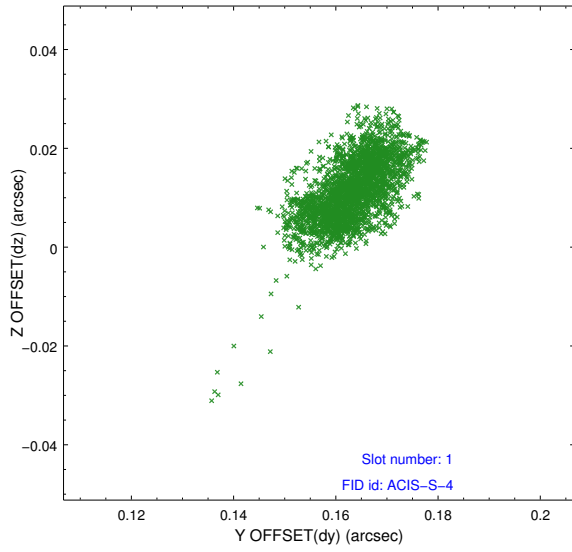


2.5 FID Slots

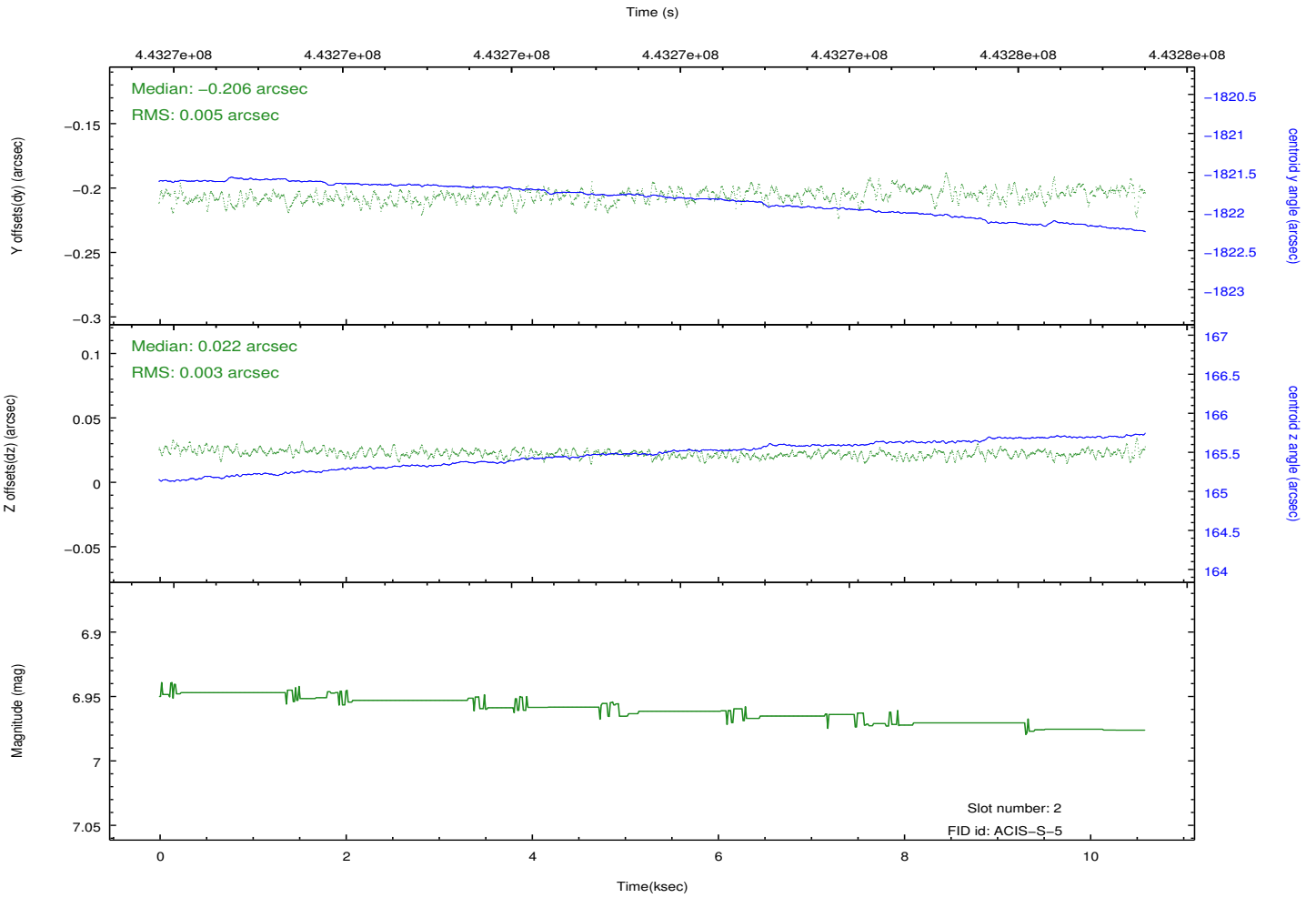
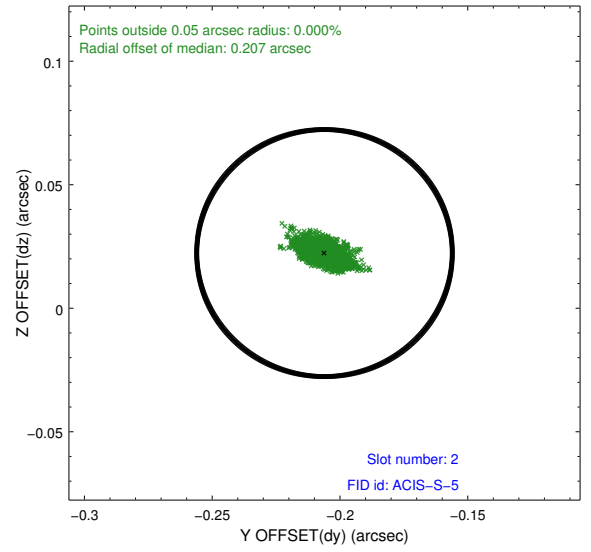
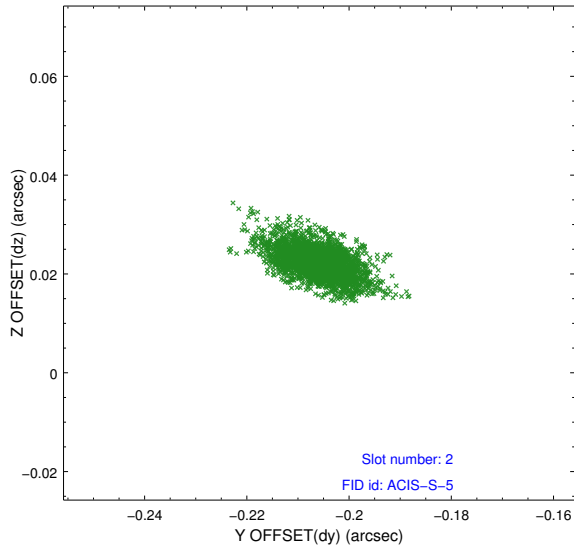
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.01.30
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.062600077391

A.2 Comments

During the downlink of obsid 12986, an anomaly occurred that caused an error in the telemetry stream for one byte of bias map data. The error resulted in anomalous values in the bias file for the remainder of the telemetry packet, which in this case is about 6 rows of data.

Fortunately we were able to recover the full bias map from another concurrent telemetry stream. The observation was reprocessed with a bias map for CCD_ID = 6 from the other telemetry stream. The coordinates of the affected region are:

(175.19232,56.37475), (175.26839,56.24166), (175.26956,56.24187), (175.19350,56.37496)

This region spans the entire CCD chip 6, but is only 6 pixels high.