

V&V Reference Report

L2 ASCDS Version : 10.1.1

Observation 15977 - L2 Version 2
Chandra X-Ray Center

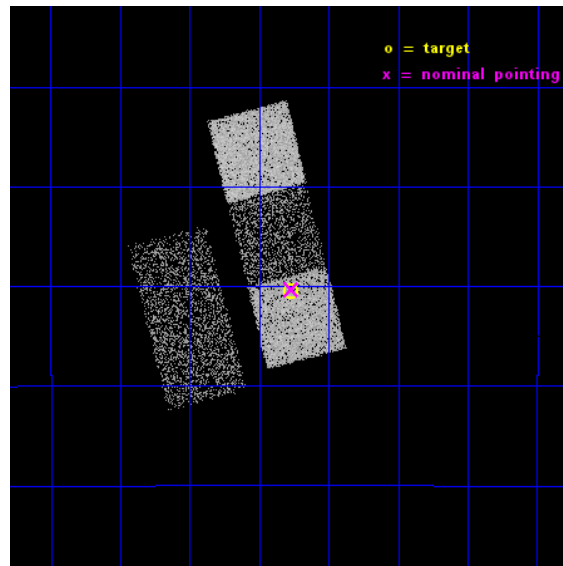
L2 Processing Date : Dec 9 2014

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

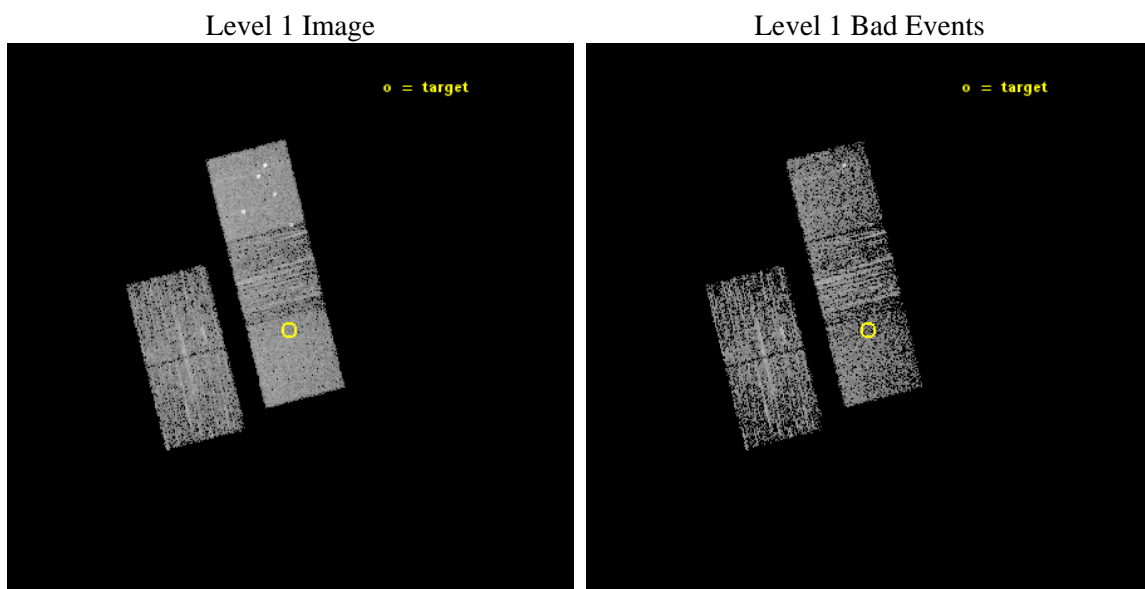
seq_num	502210	Sequence number
obs_id	15977	Observation id
title	Where Have All The Central Compact Objects Gone?	Proposal title
observer	Dr. Eric Gotthelf	Principal investigator
object	PSR J1652-1400	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	253.069167	Observer's specified target RA [deg]
dec_targ	-14.007611	Observer's specified target Dec [deg]
ra_nom	253.06705802719	Nominal RA [deg]
dec_nom	-14.005467388637	Nominal Dec [deg]
roll_nom	75.848773347246	Nominal Roll [deg]
revision	2	Processing version of data
ontime	3565.0000274181	Sum of GTIs [s]
livetime	3518.4206775451	Livetime [s]
ontime2	3565.0000274181	Sum of GTIs [s]
ontime3	3565.0000274181	Sum of GTIs [s]
ontime5	3565.0000274181	Sum of GTIs [s]
ontime6	3565.0000274181	Sum of GTIs [s]
ontime7	3565.0000274181	Sum of GTIs [s]
l2events	27774	Number of level 2 events



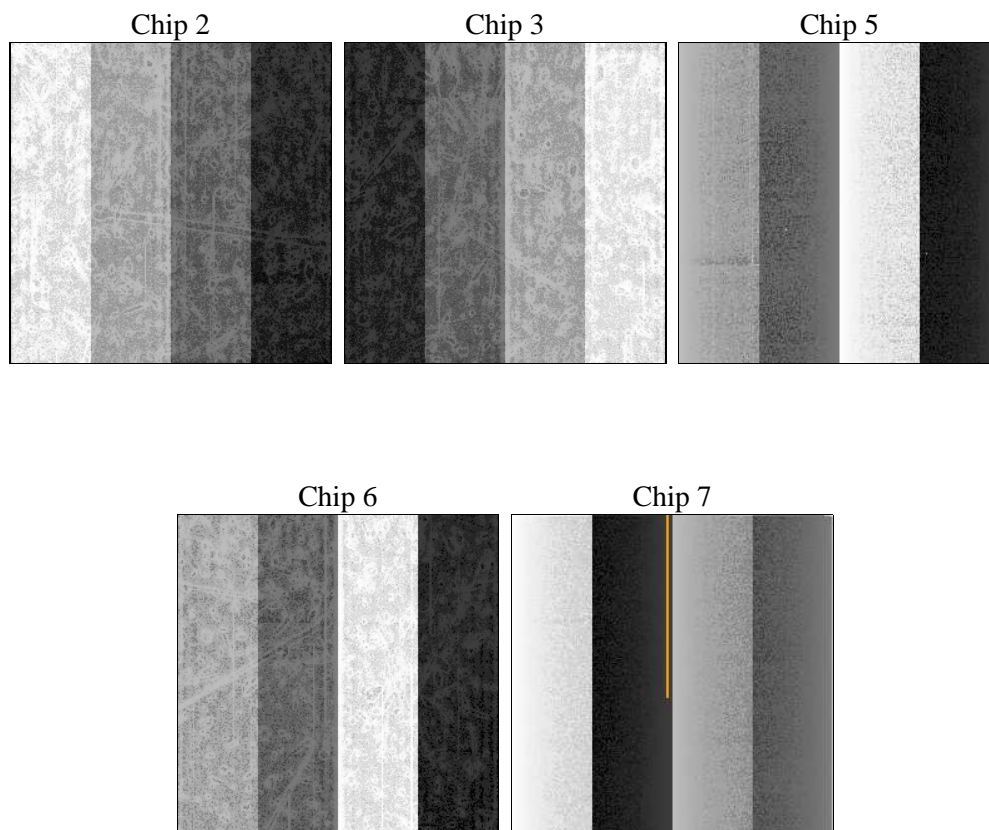
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	3500.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	3565.0000274181	Sum of GTIs [s]
caldsver	4.6.4	 	ontime2	3565.0000274181	Sum of GTIs [s]
date	2014-12-10T01:03:54	Date and time of file creation	ontime3	3565.0000274181	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	3565.0000274181	Sum of GTIs [s]
			ontime6	3565.0000274181	Sum of GTIs [s]
			ontime7	3565.0000274181	Sum of GTIs [s]
			l1events	106152	Number of level 1 events

2.1.4 Events

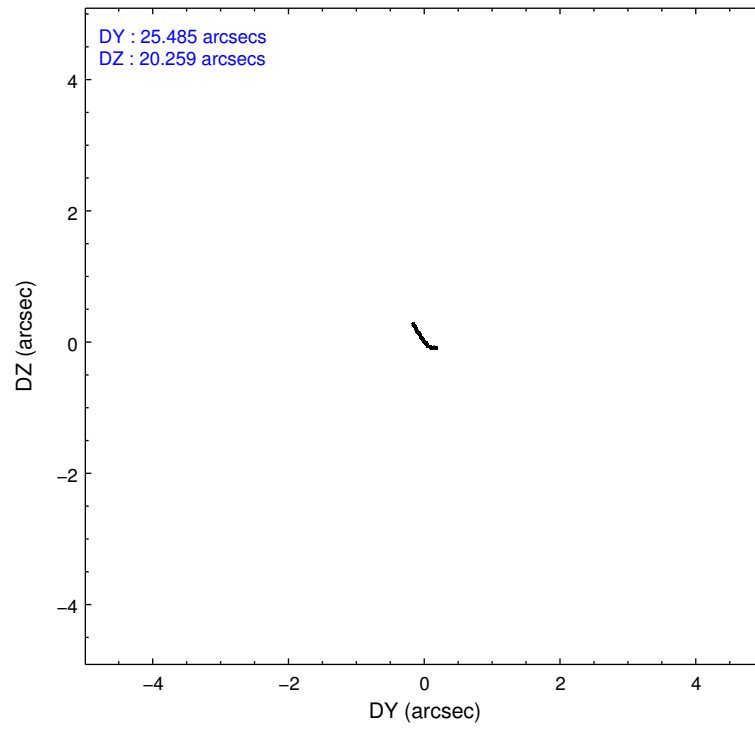
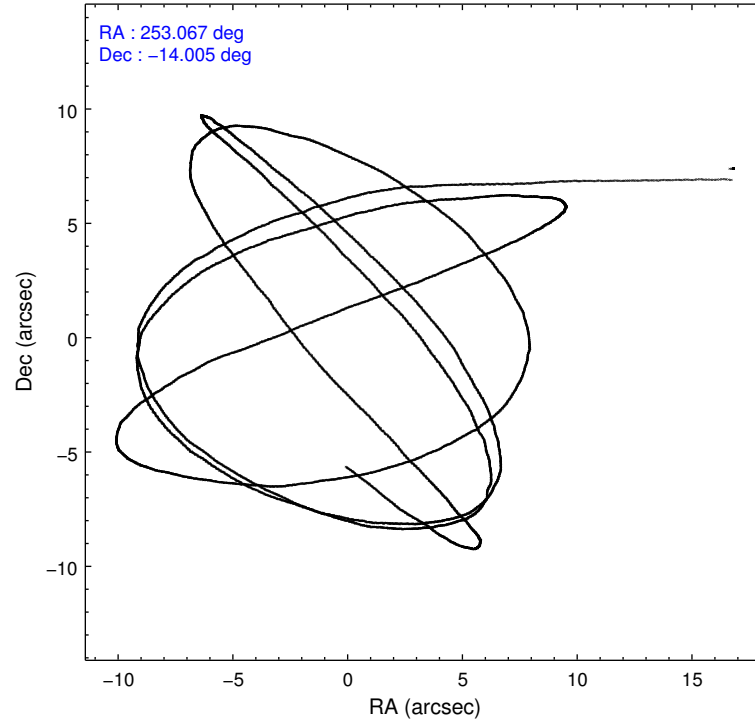
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	16839	15883	31493	18367	23570
rejected events	14889	14007	15356	16330	13405
rejected %	88%	88%	48%	88%	56%

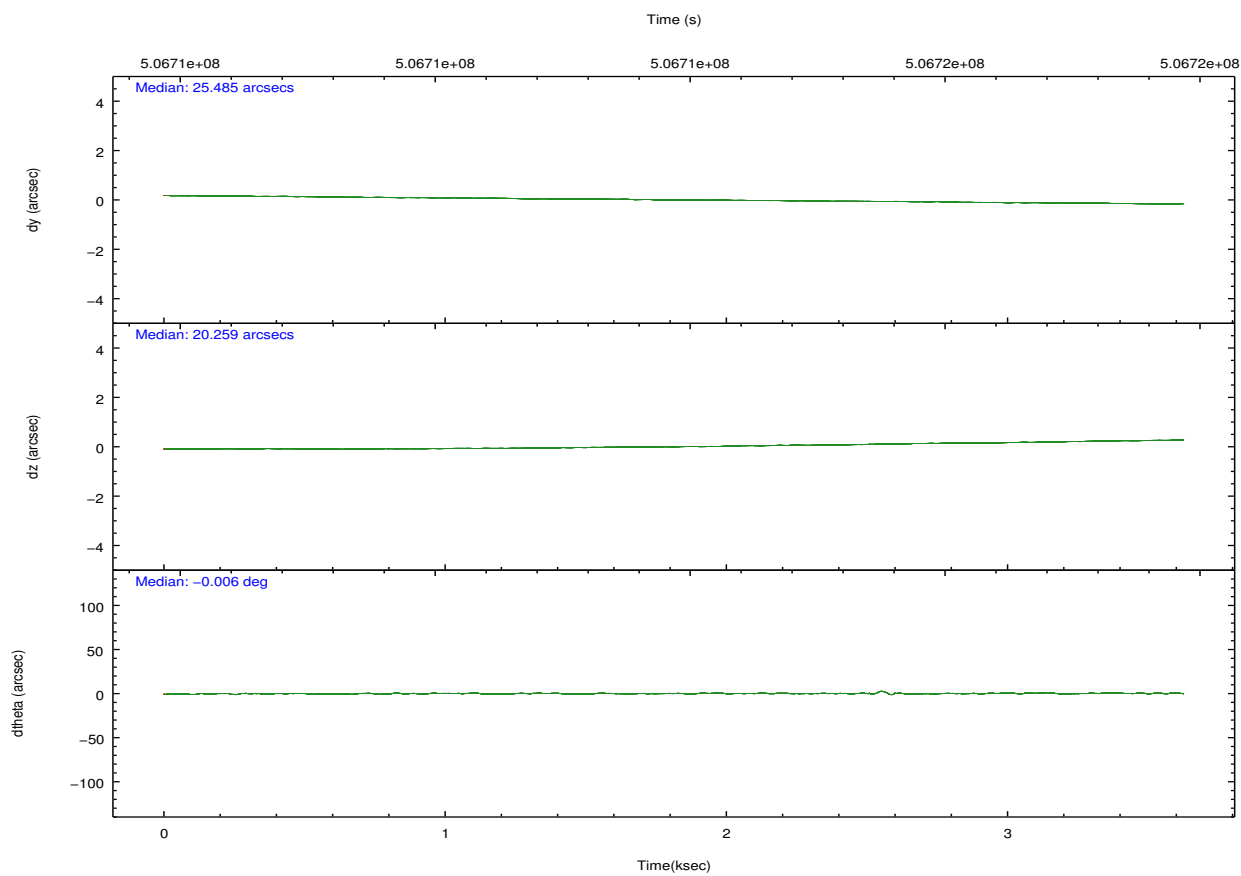
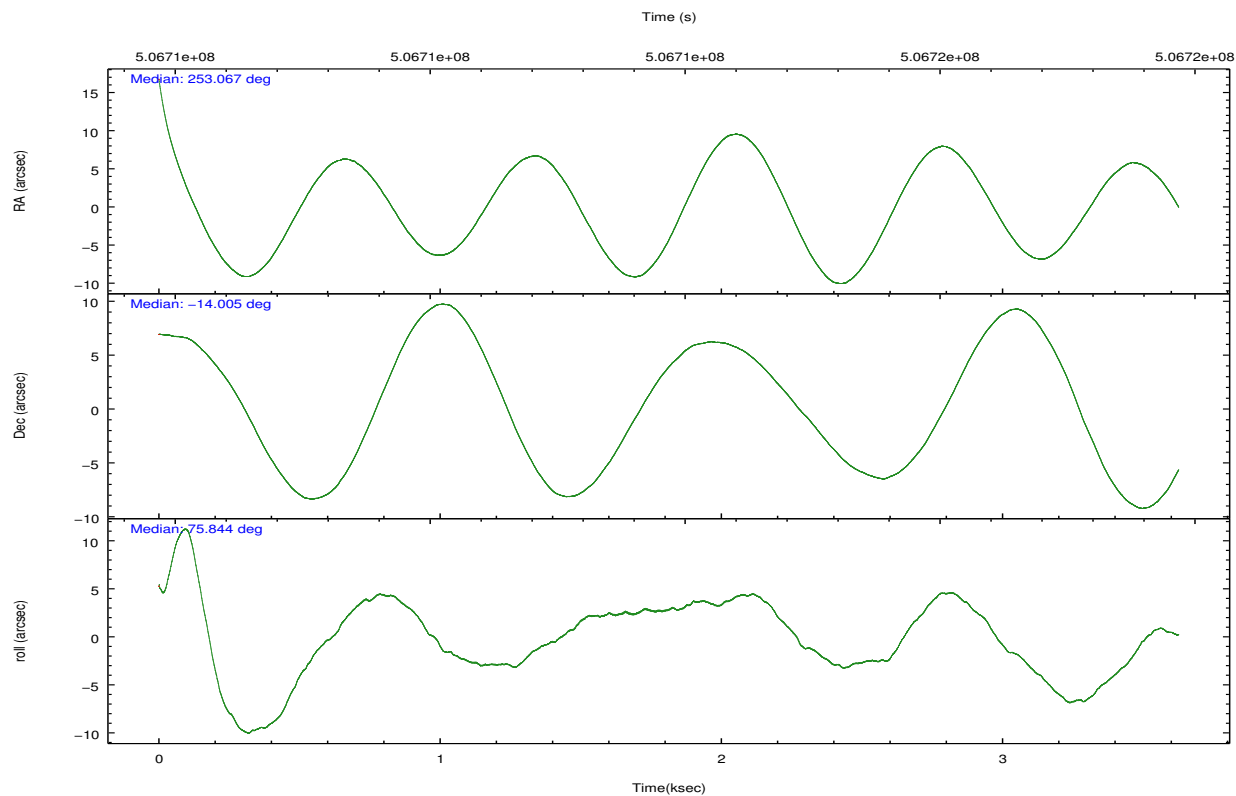
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	699	640	3418	676	874
	4%	4%	10%	3%	3%
grade 1 events	10	8	382	5	40
	0%	0%	1%	0%	0%
grade 2 events	471	457	4374	438	2049
	2%	2%	13%	2%	8%
grade 3 events	186	189	450	219	826
	1%	1%	1%	1%	3%
grade 4 events	231	218	429	226	825
	1%	1%	1%	1%	3%
grade 5 events	799	870	2036	890	2316
	4%	5%	6%	4%	9%
grade 6 events	370	375	7501	481	5608
	2%	2%	23%	2%	23%
grade 7 events	14073	13126	12903	15432	11032
	83%	82%	40%	84%	46%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23567	ACIS-23567	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	253.075090	253.0670580271882	CCD I2 on	O2	Y
[deg] Pointing Dec	-14.031605	-14.0054673886373	CCD I3 on	O3	Y
[deg] Pointing Roll	75.694138	75.84877334724627	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O1	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	O4	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	N	N
[s] Observation start time (MET)	506712253.184000	506710975.79235	CCD S5 on	N	N
Observation start date	2014-01-21T17:23:06	2014-01-21T17:02:55	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	506715753.184000	506716147.94263	On-chip summing requested	N	N
Observation end date	2014-01-21T18:21:26	2014-01-21T18:29:07	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



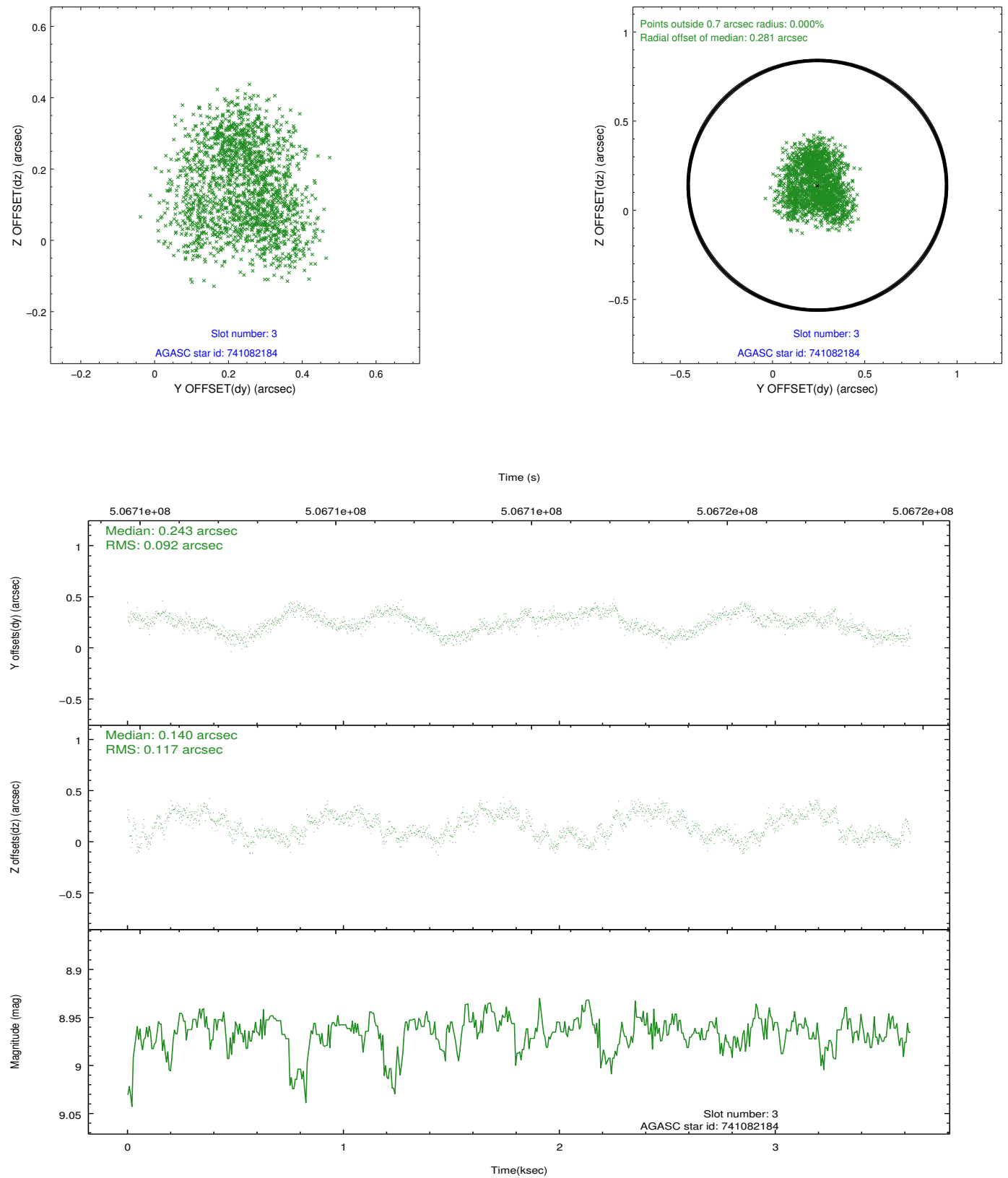


Slot Statistics

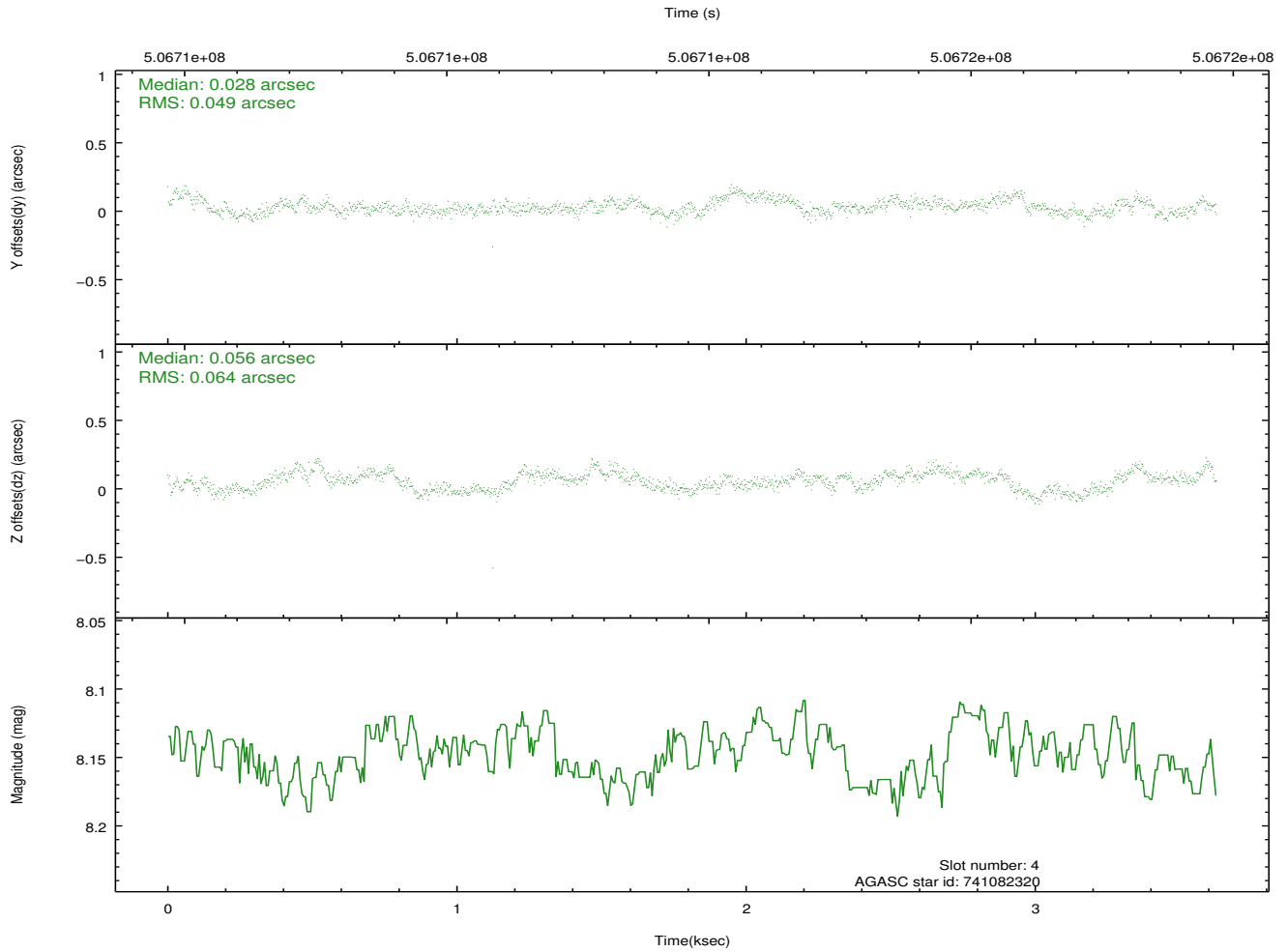
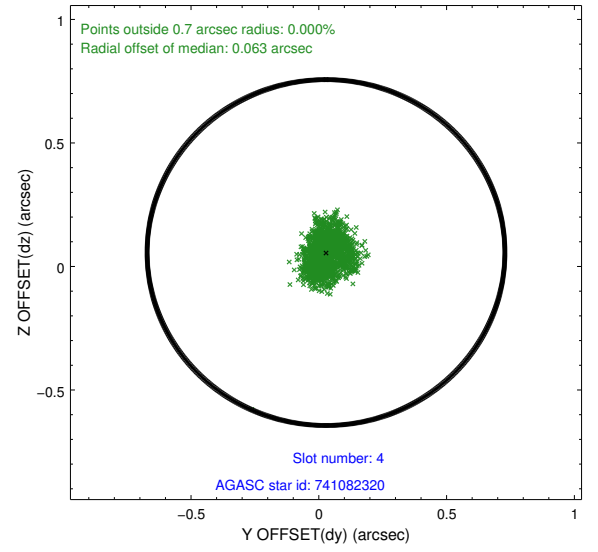
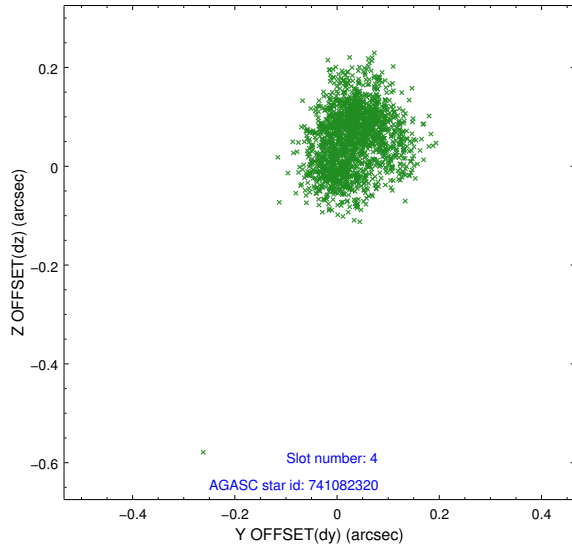
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-1	7.15	885	-0.031	-0.049	0.007	0.013	0.000000	0.000000	917.29	-1737.42
1	FID		ACIS-S-4	7.17	885	0.307	0.054	0.007	0.012	0.000000	0.000000	2135.94	165.06
2	FID		ACIS-S-5	7.19	885	-0.302	0.008	0.008	0.013	0.000000	0.000000	-1829.68	160.49
3	GUIDE	used	741082184	8.96	1770	0.243	0.140	0.166	0.235	253.574818	-14.351647	-687.12	-1973.32
4	GUIDE	used	741082320	8.15	1770	0.028	0.056	0.085	0.133	253.204204	-14.354158	-1013.86	-724.25
5	GUIDE	used	741082408	7.97	1770	-0.032	-0.029	0.082	0.130	253.062231	-14.370508	-1193.75	-258.12
6	GUIDE	used	741083304	9.25	1770	-0.403	-0.549	0.120	0.187	252.817328	-13.597371	1290.85	1259.95
7	GUIDE	used	741082704	9.41	1767	0.171	0.378	0.190	0.288	253.627749	-14.583239	-1451.92	-2353.01

2.4 Star Slots

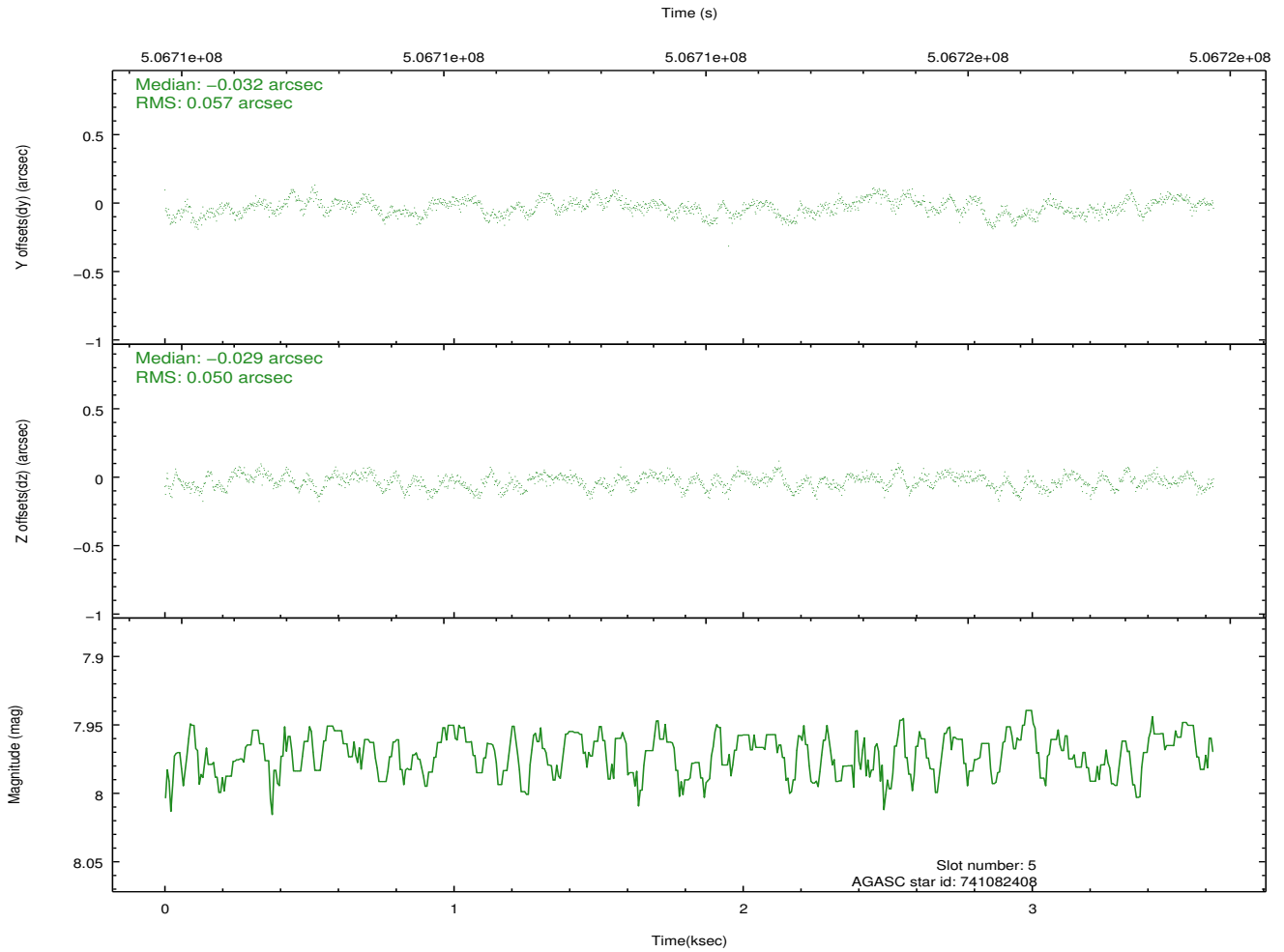
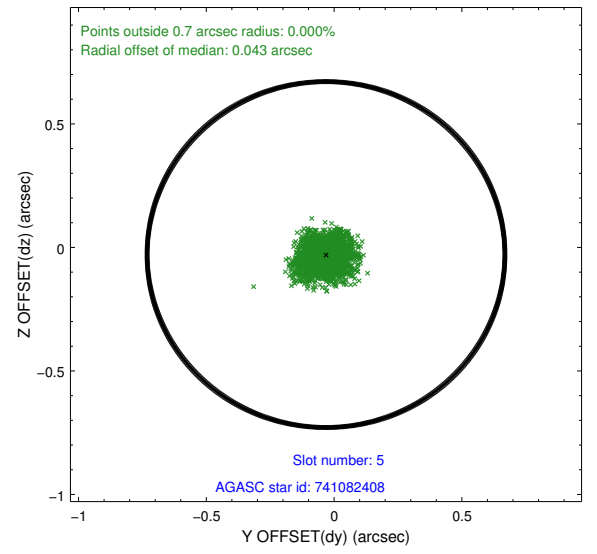
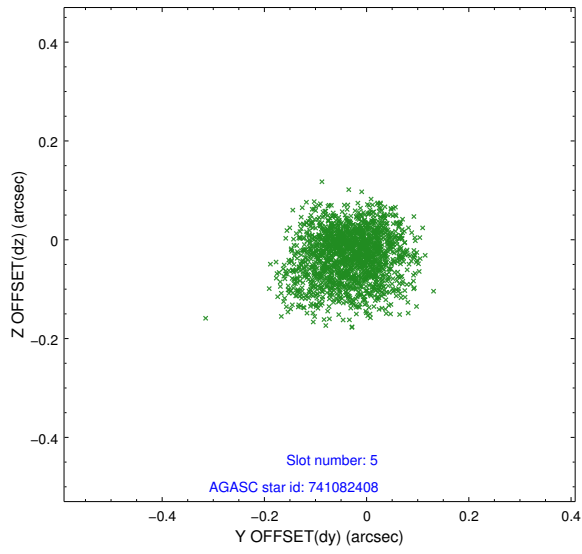
2.4.1 Slot 3



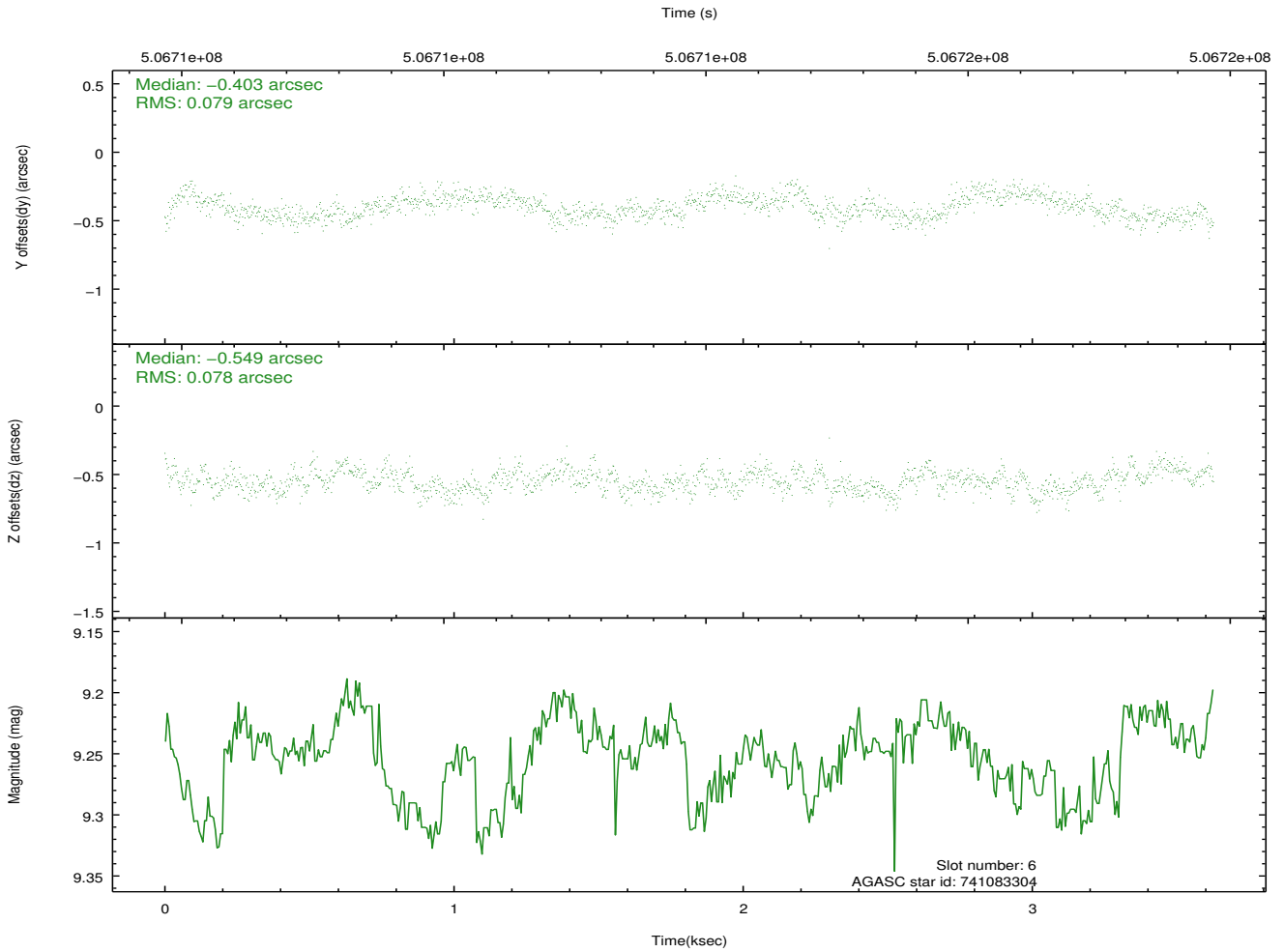
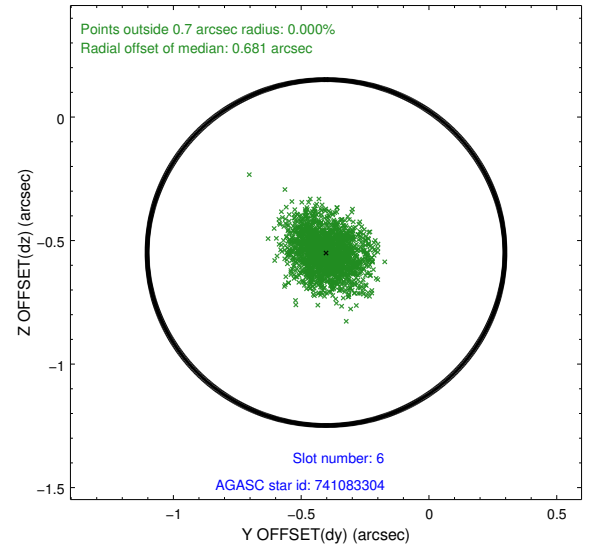
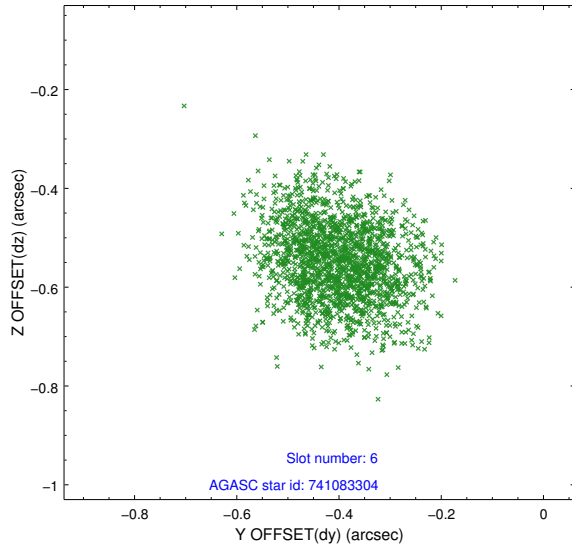
2.4.2 Slot 4



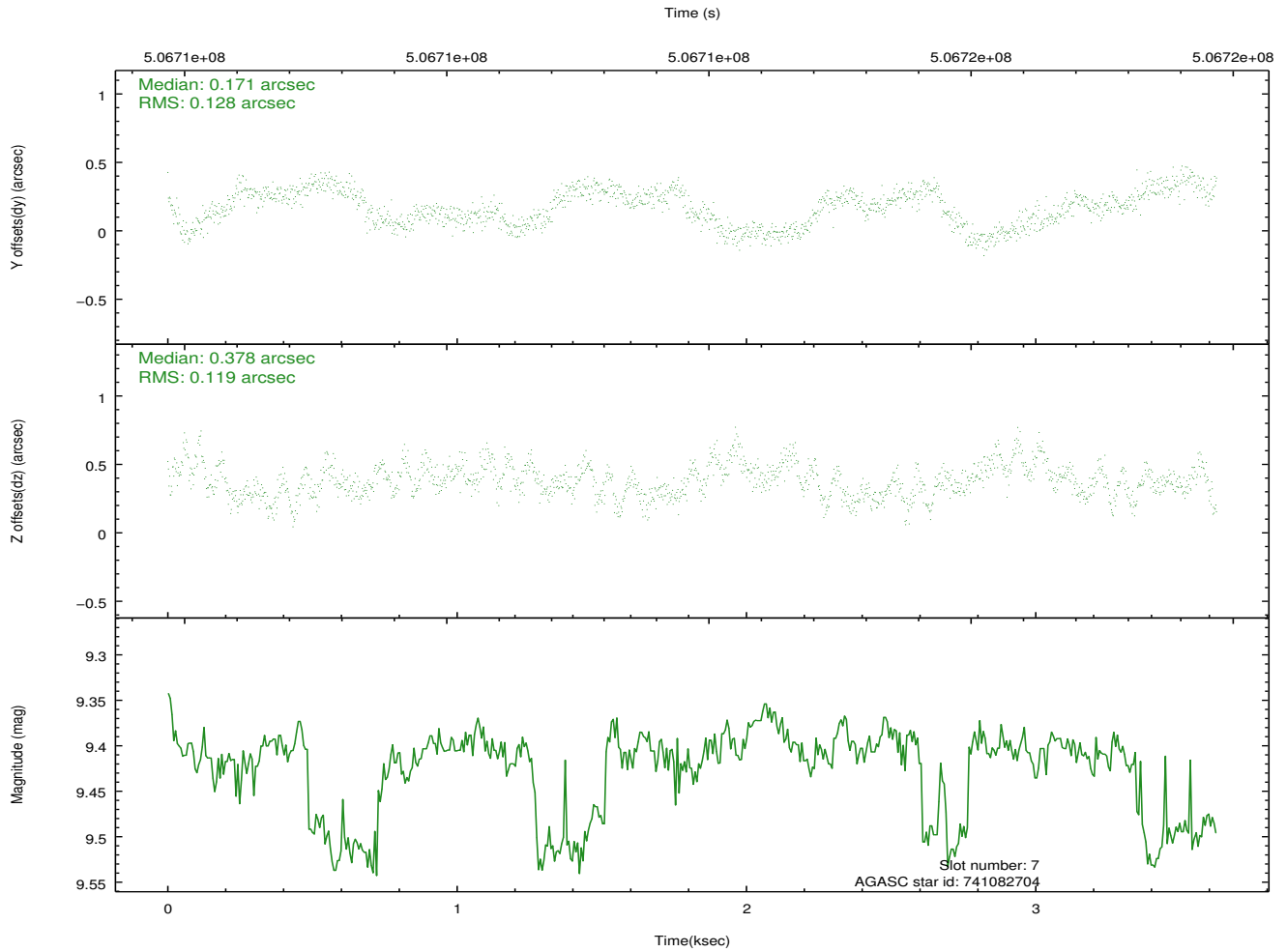
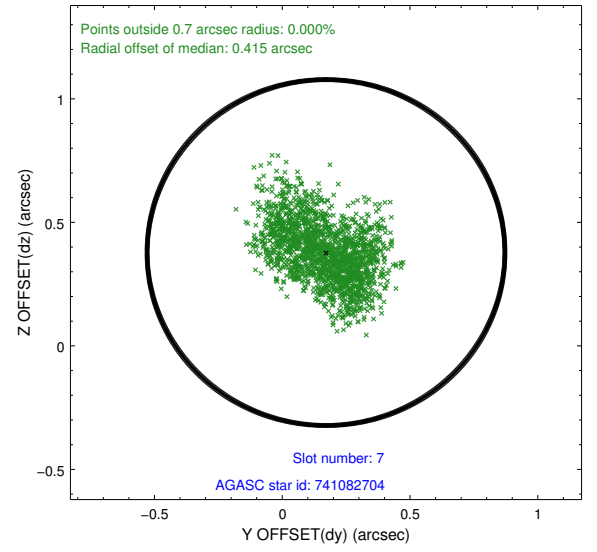
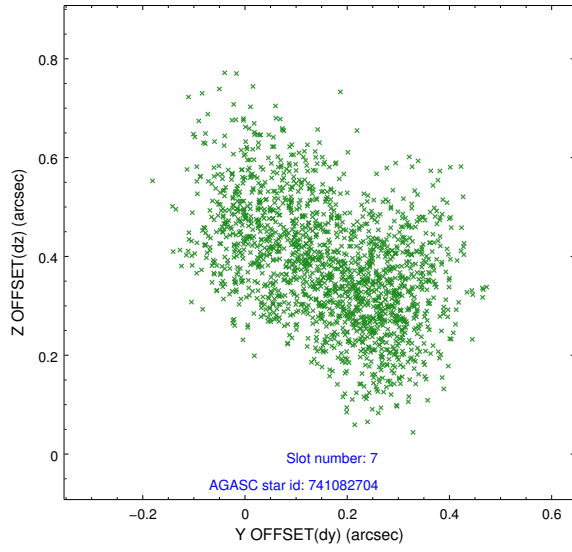
2.4.3 Slot 5



2.4.4 Slot 6

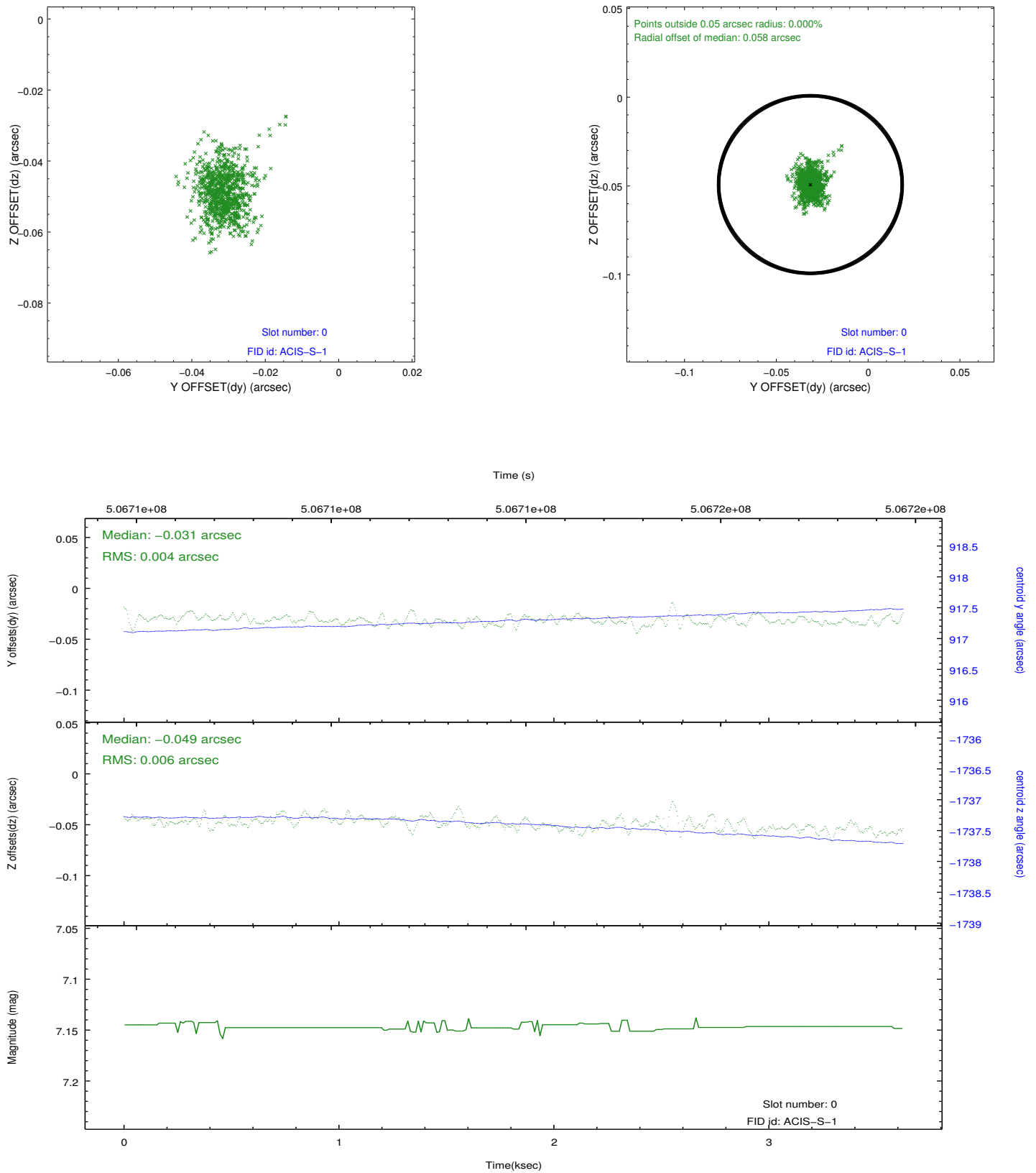


2.4.5 Slot 7

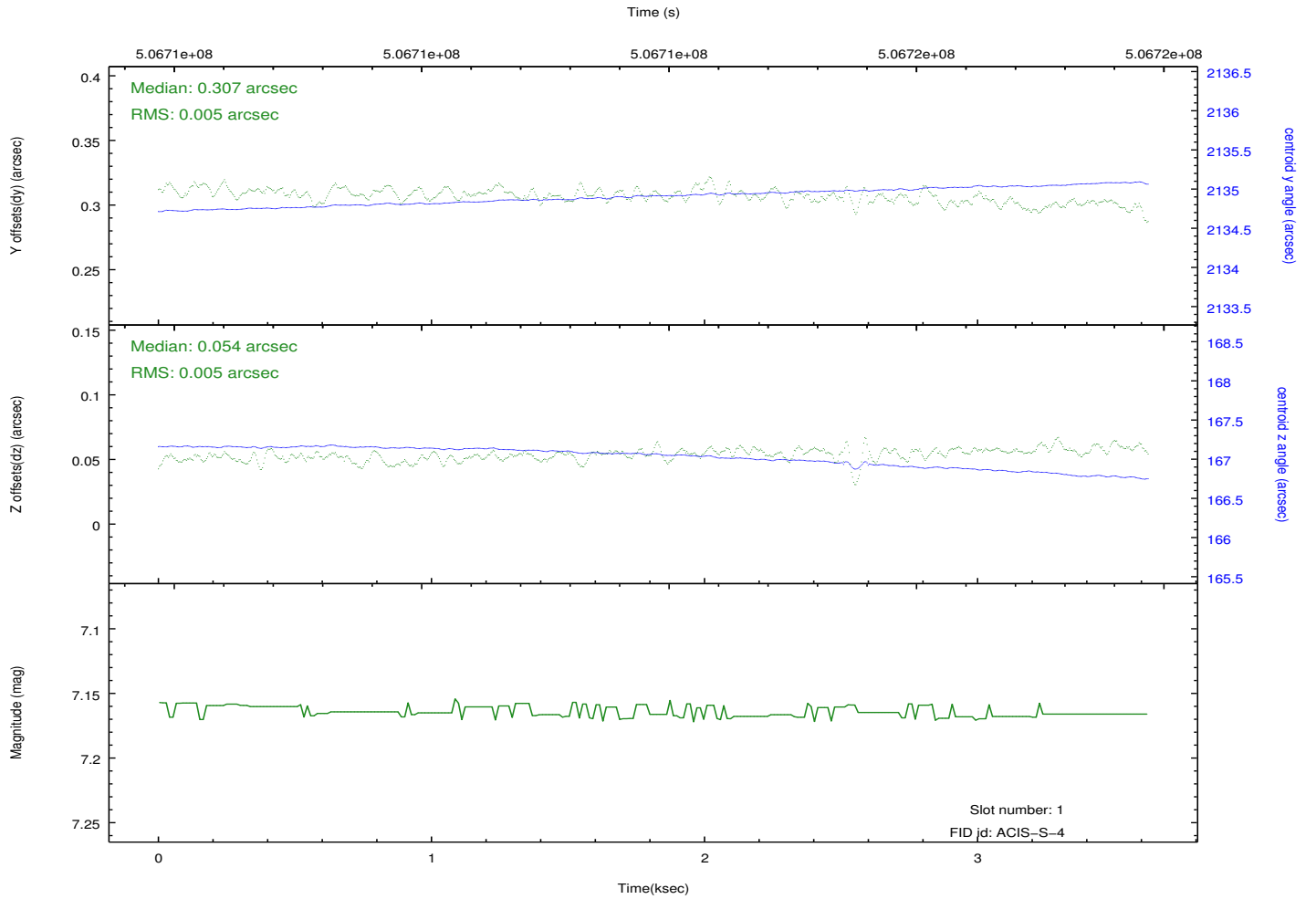
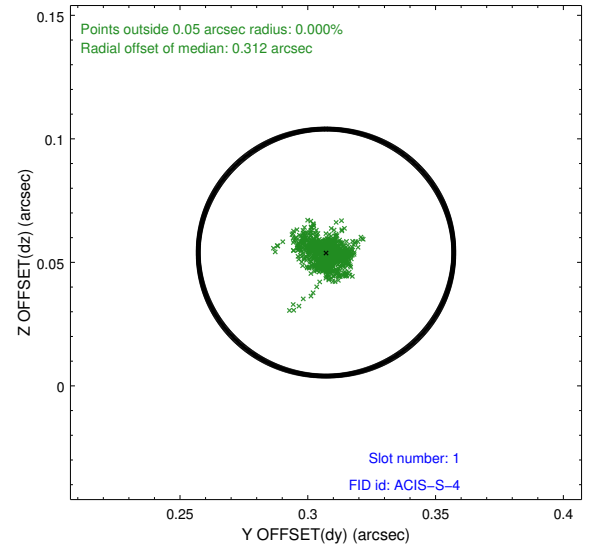
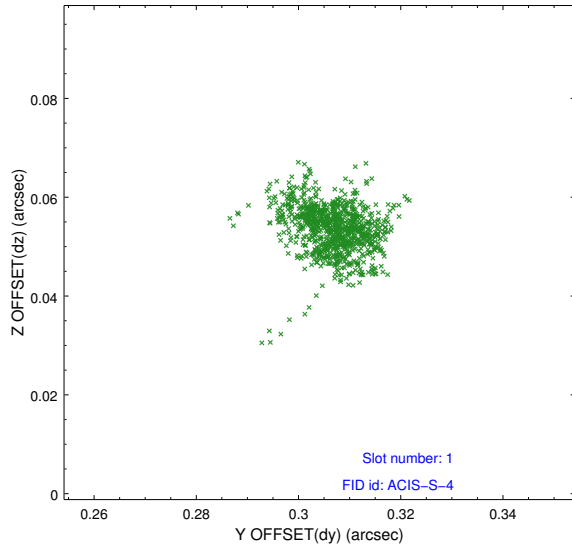


2.5 FID Slots

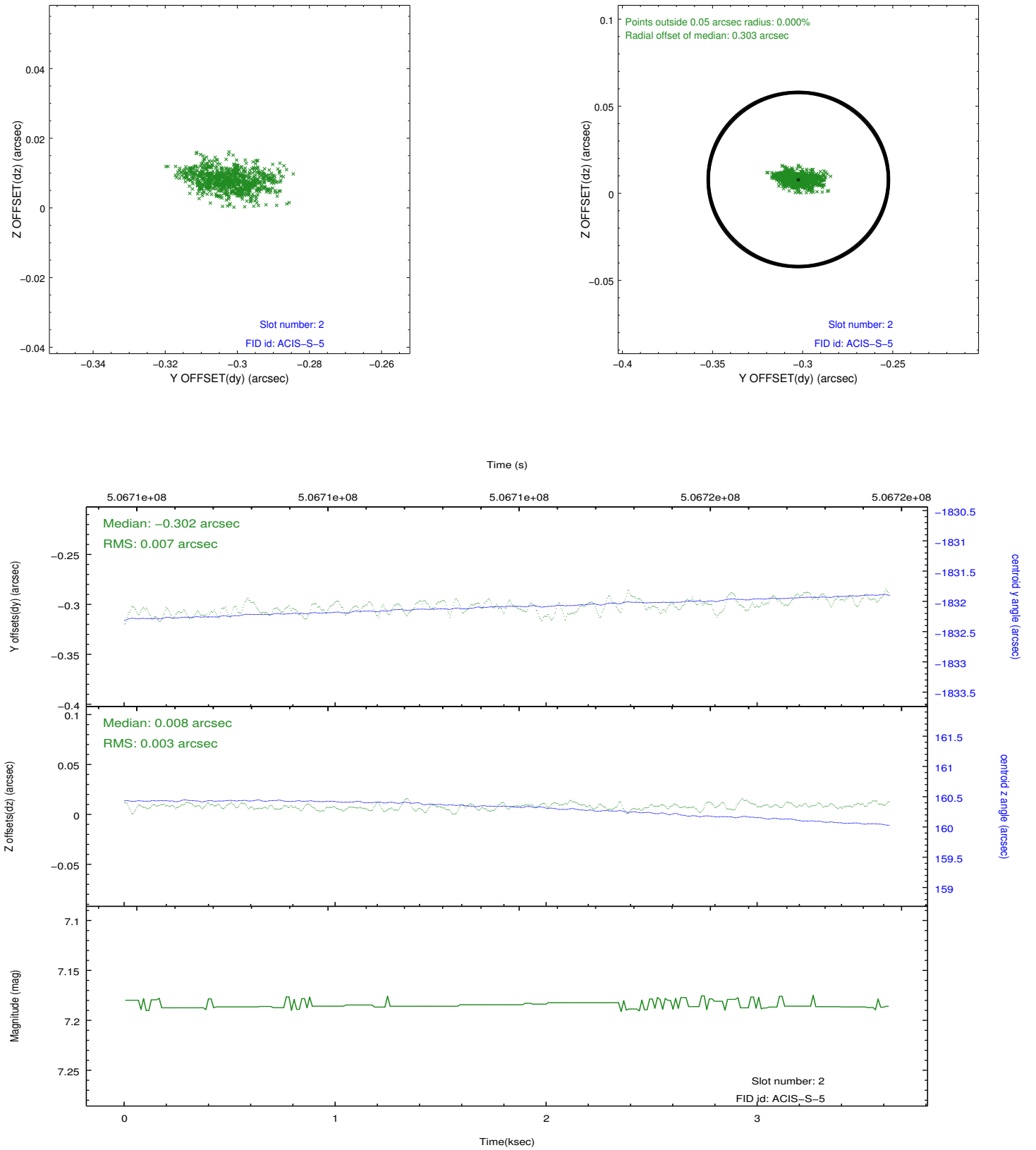
2.5.1 Slot 0



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)	2014.12.16
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	3.5650000274181

A.2 Comments

These data have been reprocessed with new aspect alignment calibration files that correct small mean offsets (up to 0.4 arcsecs) and improve overall astrometric accuracy. The new calibration was determined using data from the time period being reprocessed and was performed using cross-correlation of X-ray sources with radio and optical counterparts.