

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 12221 - L2 Version 2
Chandra X-Ray Center

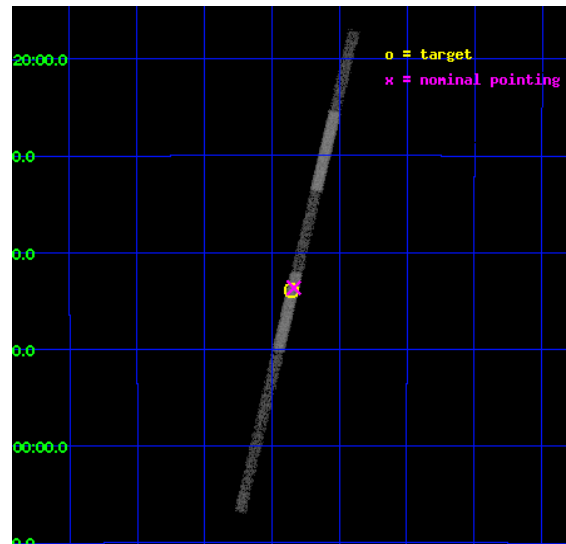
L2 Processing Date : Jun 28 2012

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

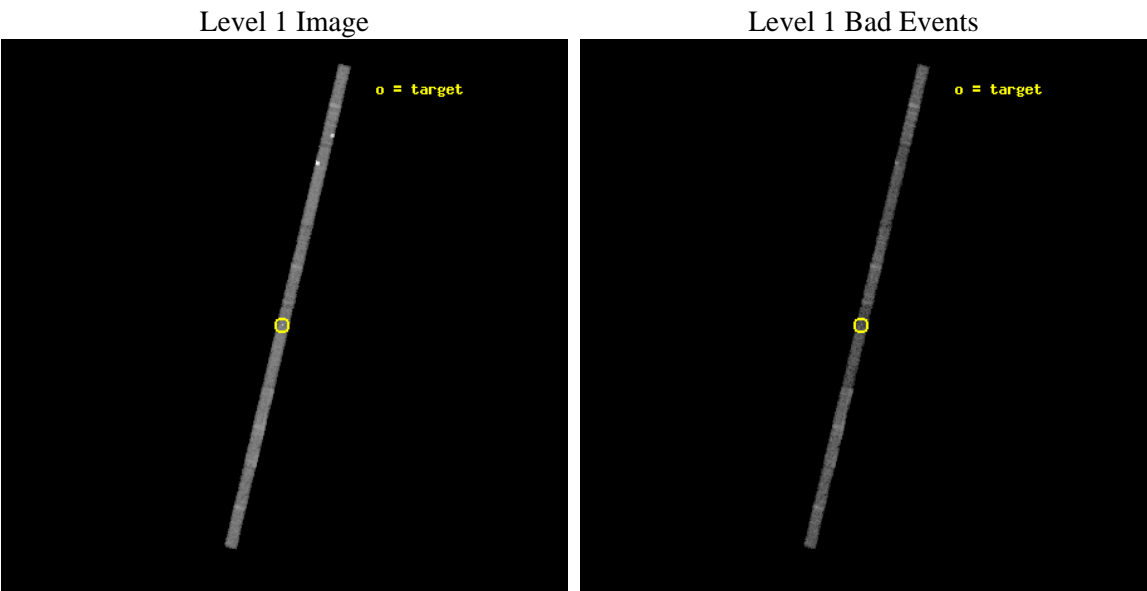
seq_num	501368	Sequence number
obs_id	12221	Observation id
title	Unveiling the nature of cyclic behavior in the period evolution of the Anomalous X ray Pulsar XTE j1810-197	Proposal title
observer	Dr. Federico Bernardini	Principal investigator
object	XTE J1810-197	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	272.462917	Observer's specified target RA [deg]
dec_targ	-19.731083	Observer's specified target Dec [deg]
ra_nom	272.45929014093	Nominal RA [deg]
dec_nom	-19.727680422679	Nominal Dec [deg]
roll_nom	103.45368997446	Nominal Roll [deg]
revision	2	Processing version of data
ontime	10065.299828529	Sum of GTIs [s]
livetime	9507.8671596277	Livetime [s]
ontime4	10065.299828529	Sum of GTIs [s]
ontime5	10065.299828529	Sum of GTIs [s]
ontime6	10065.299828529	Sum of GTIs [s]
ontime7	10065.299828529	Sum of GTIs [s]
ontime8	10065.299828529	Sum of GTIs [s]
ontime9	10065.299828529	Sum of GTIs [s]
l2events	20411	Number of level 2 events



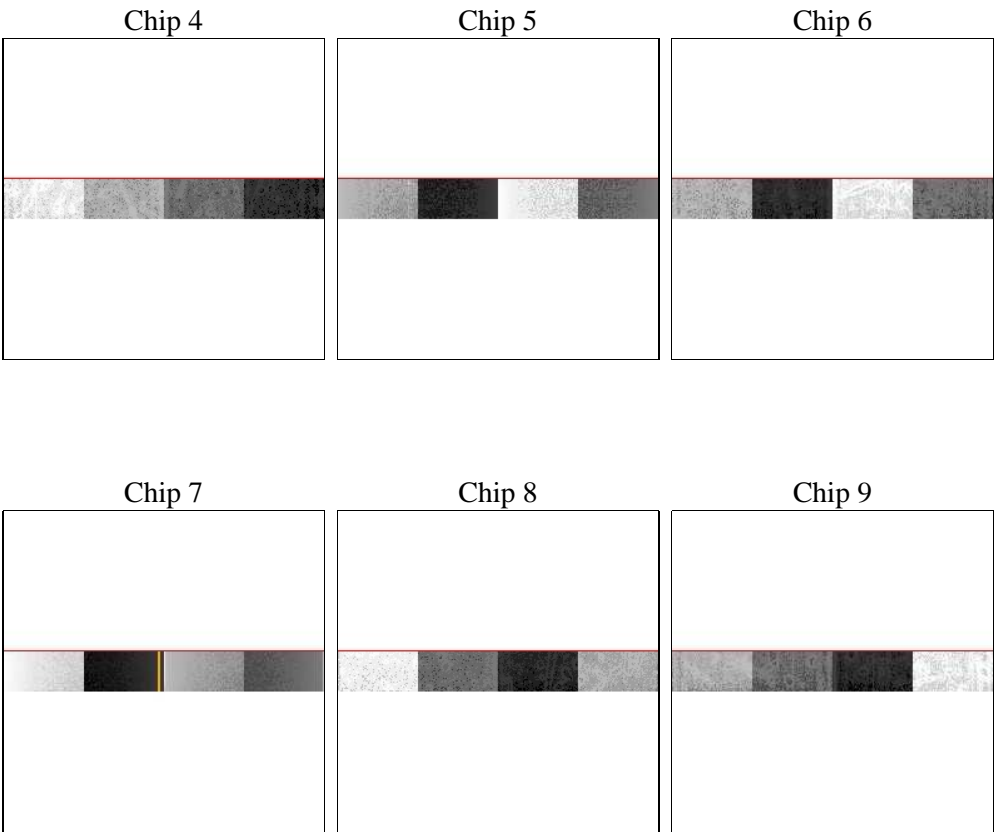
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



Chip 7



Chip 8



Chip 9



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	10000.716000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	10065.299828529	Sum of GTIs [s]
caldsver	4.5.0	 	ontime4	10065.299828529	Sum of GTIs [s]
date	2012-06-28T03:55:06	Date and time of file creation	ontime5	10065.299828529	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	10065.299828529	Sum of GTIs [s]
			ontime7	10065.299828529	Sum of GTIs [s]
			ontime8	10065.299828529	Sum of GTIs [s]
			ontime9	10065.299828529	Sum of GTIs [s]
			l1events	106669	Number of level 1 events

2.1.4 Events

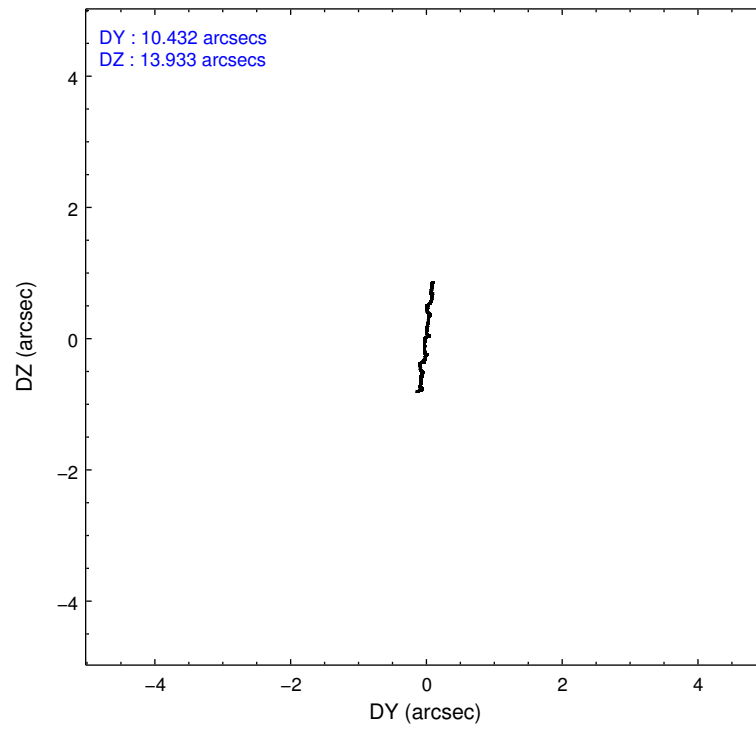
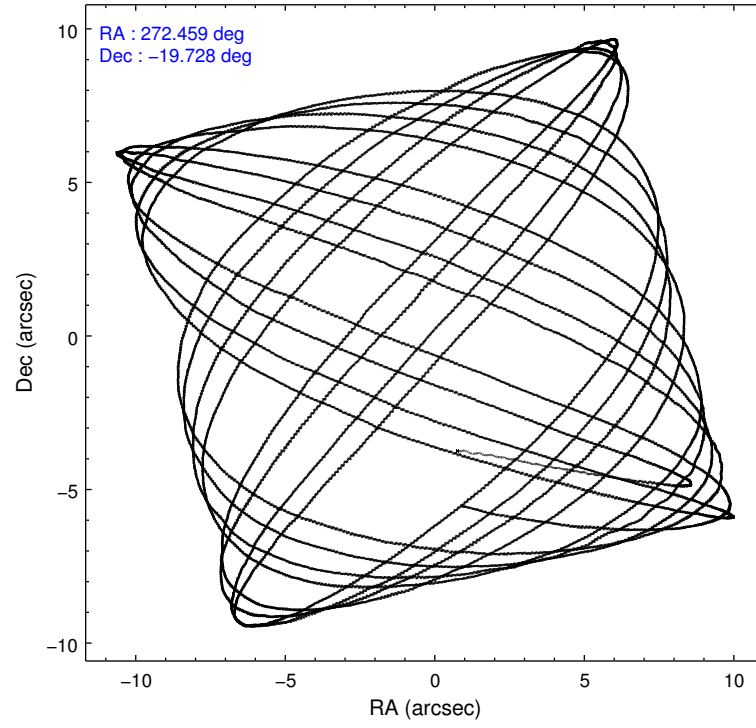
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	19225	29029	12664	15190	18386	12175
rejected events	13429	7995	11214	6915	14419	10798
rejected %	69%	27%	88%	45%	78%	88%

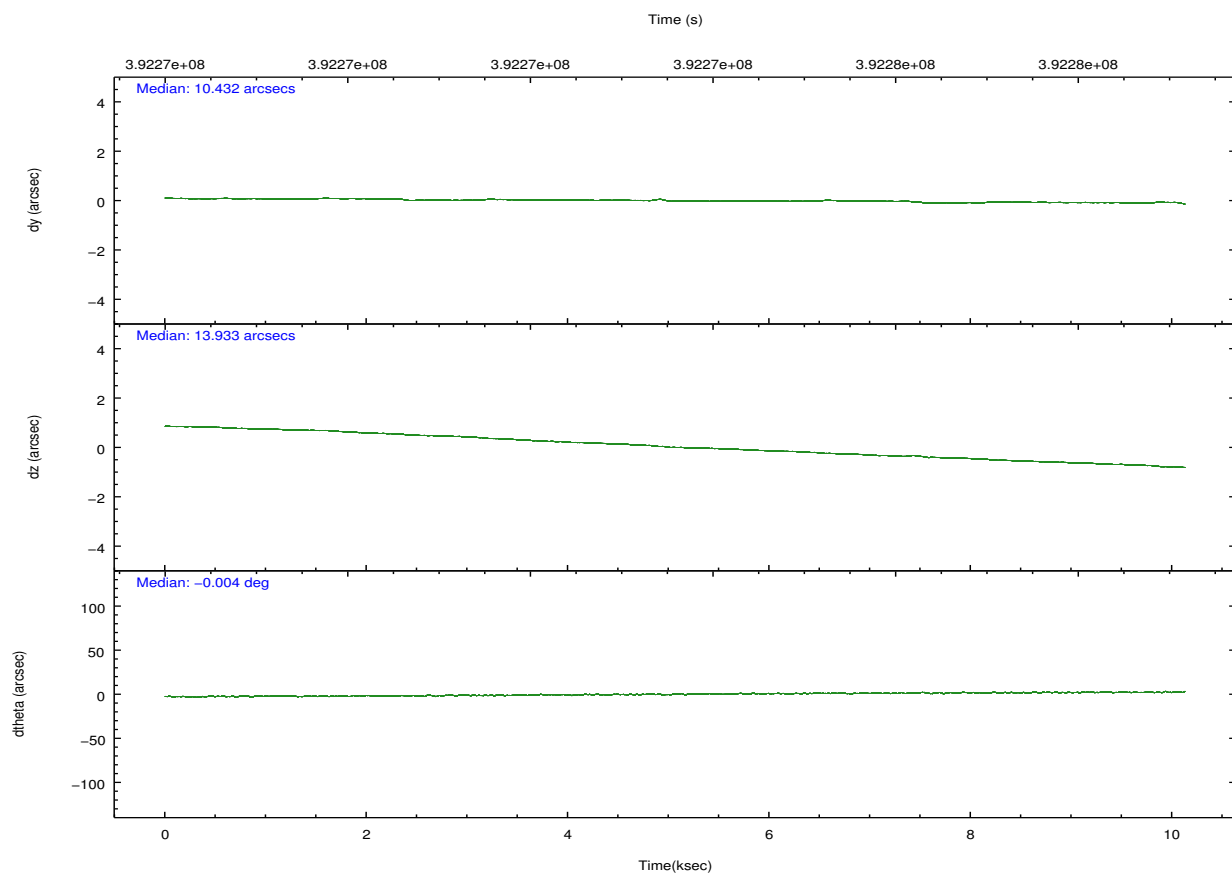
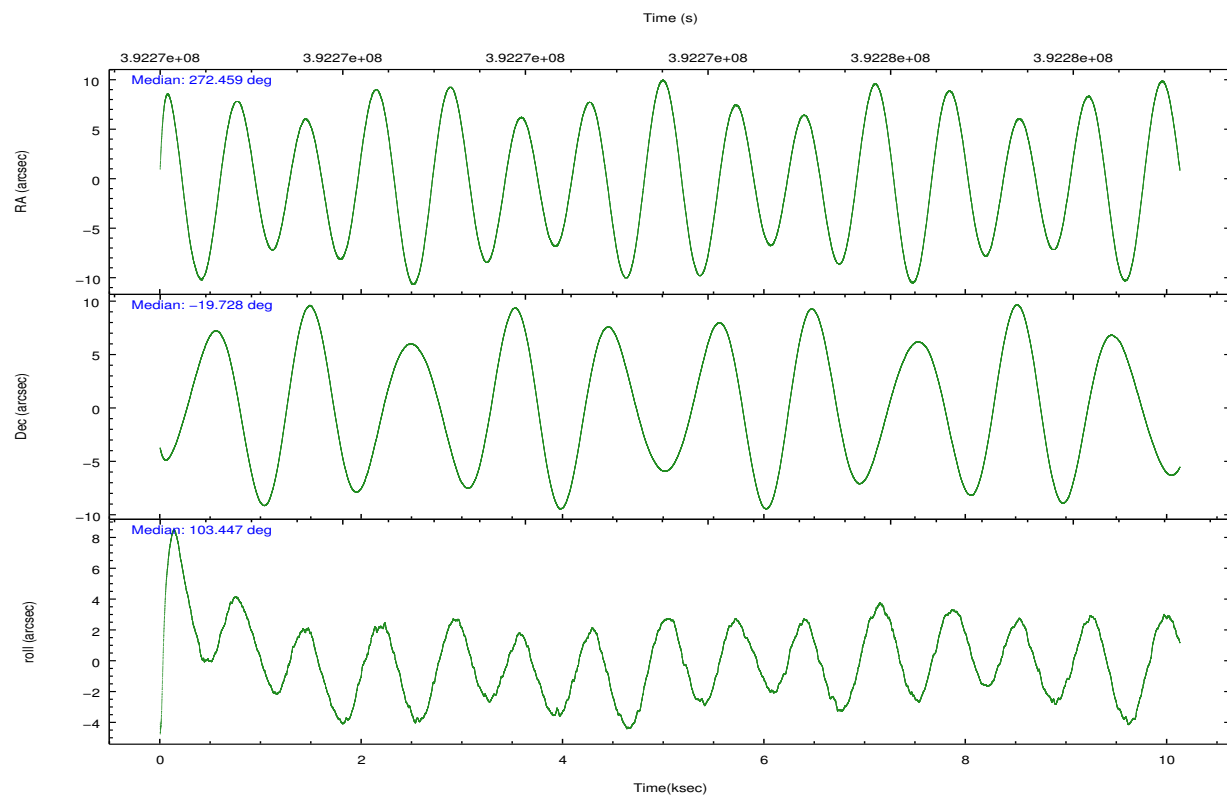
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	4660	10487	463	1217	948	429
	24%	36%	3%	8%	5%	3%
grade 1 events	21	292	7	26	8	0
	0%	1%	0%	0%	0%	0%
grade 2 events	373	5263	261	1888	841	247
	1%	18%	2%	12%	4%	2%
grade 3 events	237	604	244	896	470	254
	1%	2%	1%	5%	2%	2%
grade 4 events	273	848	227	993	414	206
	1%	2%	1%	6%	2%	1%
grade 5 events	511	1484	493	1354	680	481
	2%	5%	3%	8%	3%	3%
grade 6 events	254	3835	255	3281	1294	241
	1%	13%	2%	21%	7%	1%
grade 7 events	12896	6216	10714	5535	13731	10317
	67%	21%	84%	36%	74%	84%

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	272.479530	272.4592901409293	CCD I2 on	N	N
[deg] Pointing Dec	-19.747254	-19.72768042267912	CCD I3 on	N	N
[deg] Pointing Roll	103.303911	103.453689974465	CCD S0 on	O1	Y
[s] Window start time (MET)	390787266.184000	390787266.184000	CCD S1 on	O2	Y
[s] Window stop time (MET)	392947266.184000	392947266.184000	CCD S2 on	O3	Y
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S3 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S4 on	O4	Y
[mm] SIM translation stage pos	-190.132523	-190.1425803651734	CCD S5 on	O5	Y
[mm] SIM translation stage offset	0	0.01005778216563158	Number of optional ACIS chips dropped	0	0
[s] Observation start time (MET)	392268643.184000	392267341.28837	On-chip summing requested	N	N
Observation start date	2010-06-07T03:29:37	2010-06-07T03:09:01	Subarray requested	CUSTOM	1/8
[s] Observation end time (MET)	392278643.184000	392278874.58896	Subarray start row	449	449
Observation end date	2010-06-07T06:16:17	2010-06-07T06:21:14	Subarray row count	128	128
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	0.7

2.3 Aspect



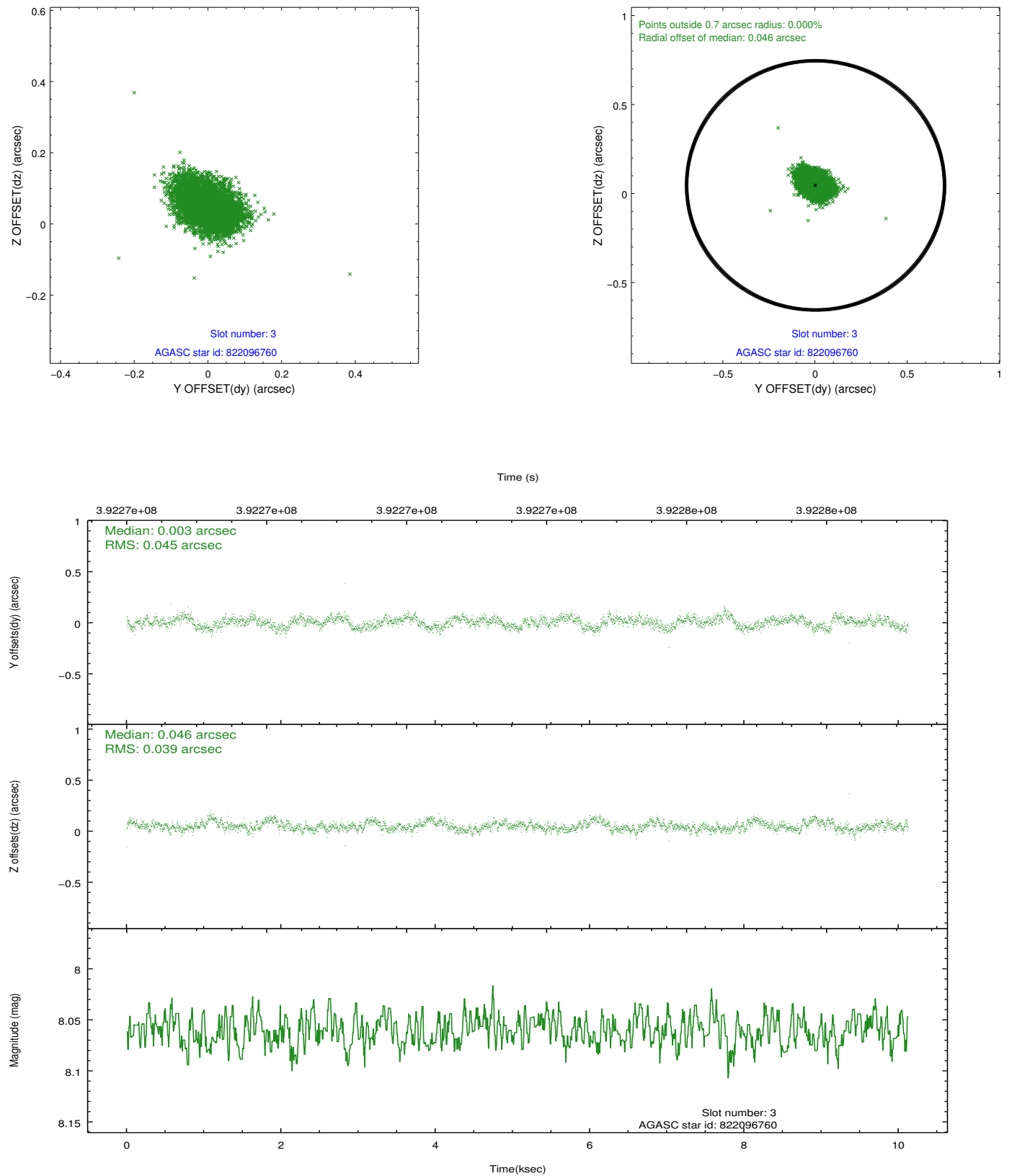


Slot Statistics

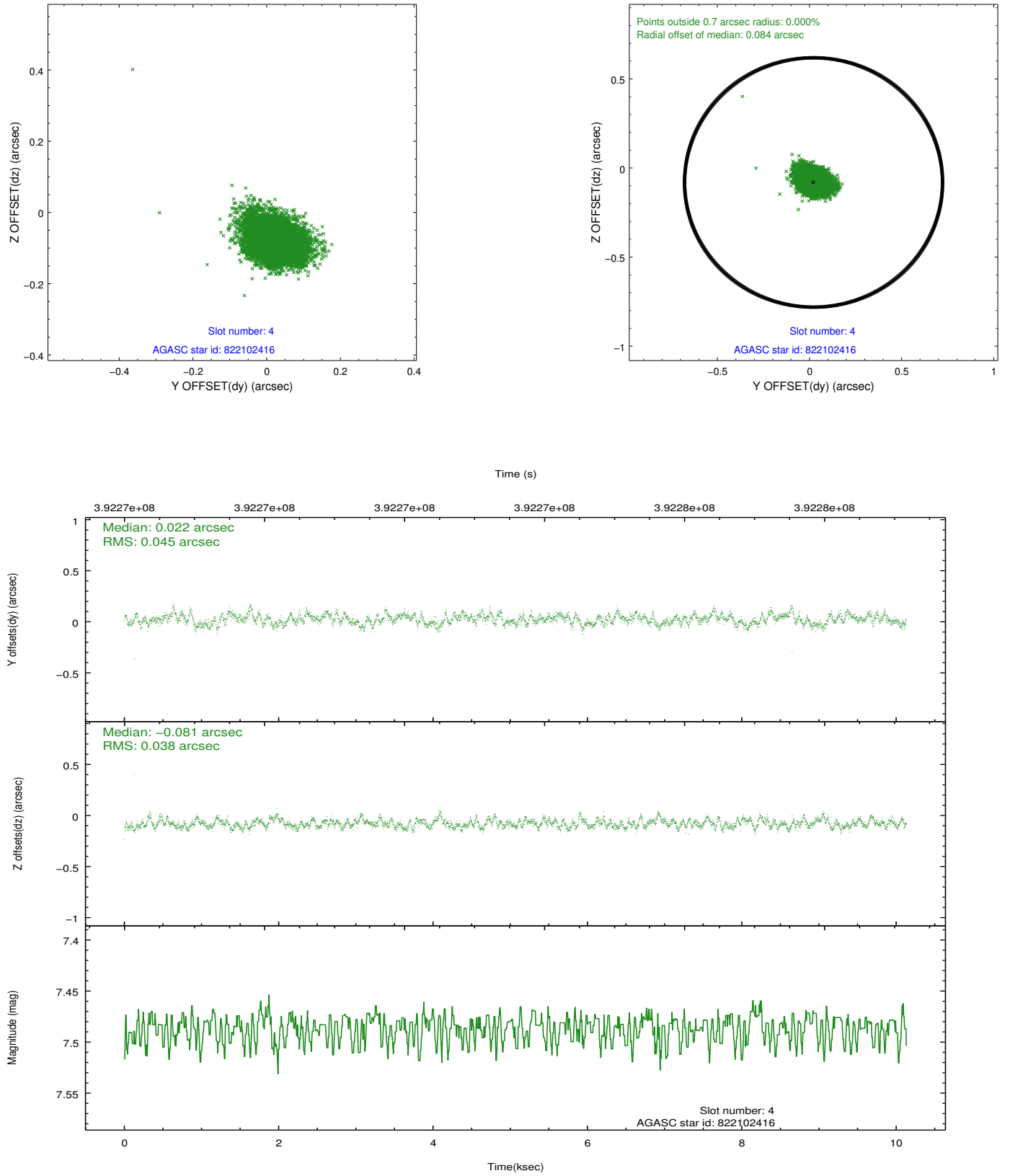
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.90	2471	-0.035	-0.032	0.012	0.019	0.000000	0.000000	-763.31	-1735.31
1	FID	ACIS-S-4	6.99	2471	0.127	0.026	0.009	0.017	0.000000	0.000000	2149.89	172.68
2	FID	ACIS-S-5	7.01	2471	-0.123	0.016	0.009	0.017	0.000000	0.000000	-1815.57	166.95
3	GUIDE	822096760	8.06	4941	0.003	0.046	0.063	0.102	272.830526	-19.438690	806.14	-1414.58
4	GUIDE	822102416	7.49	4942	0.022	-0.081	0.061	0.101	272.173216	-20.087156	-953.05	1289.39
5	GUIDE	822103320	9.07	4941	0.084	0.264	0.078	0.121	273.198291	-20.140480	-1941.29	-2036.75
6	GUIDE	820401112	7.93	4942	-0.257	-0.206	0.060	0.096	271.884761	-19.293988	2049.13	1591.89
7	GUIDE	822085152	9.02	4938	0.154	-0.026	0.103	0.178	272.974056	-19.057083	2029.58	-2208.12

2.4 Star Slots

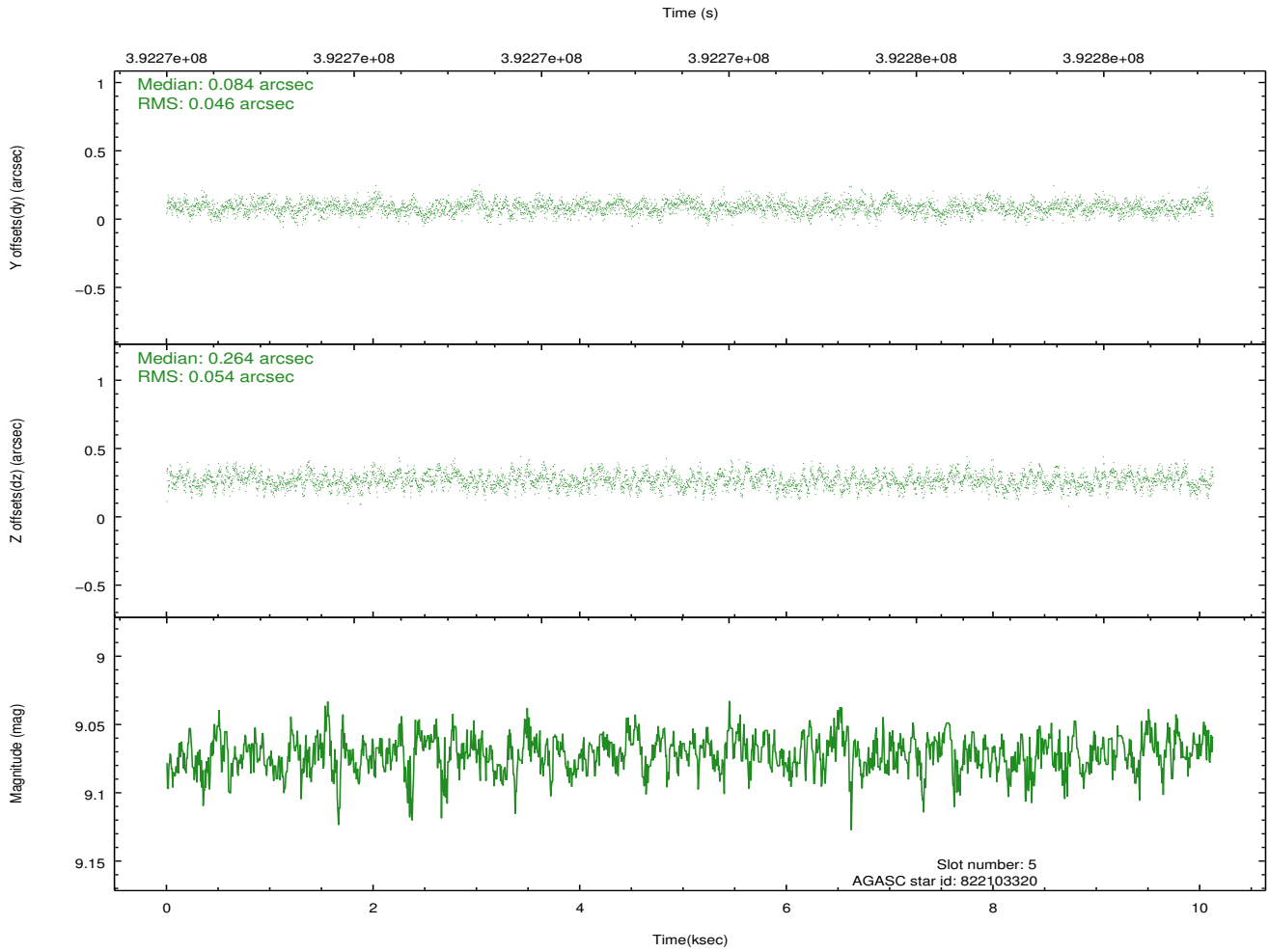
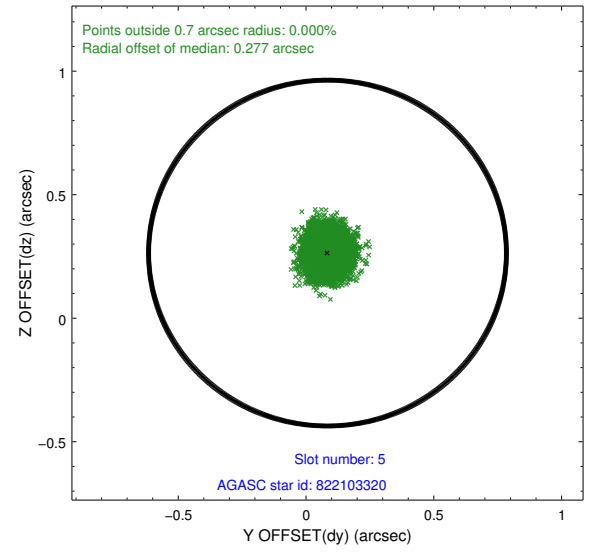
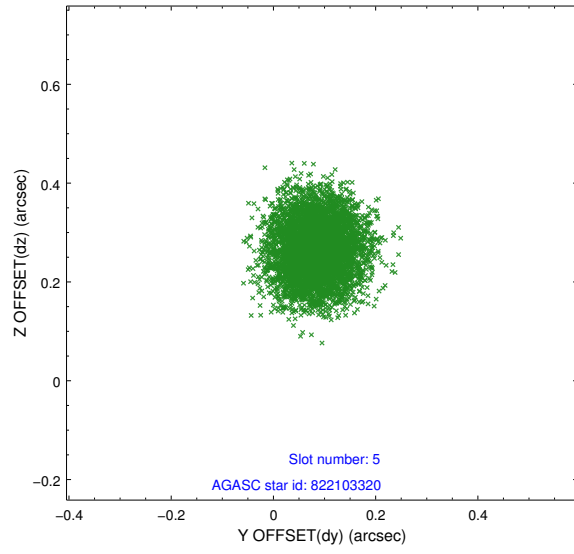
2.4.1 Slot 3



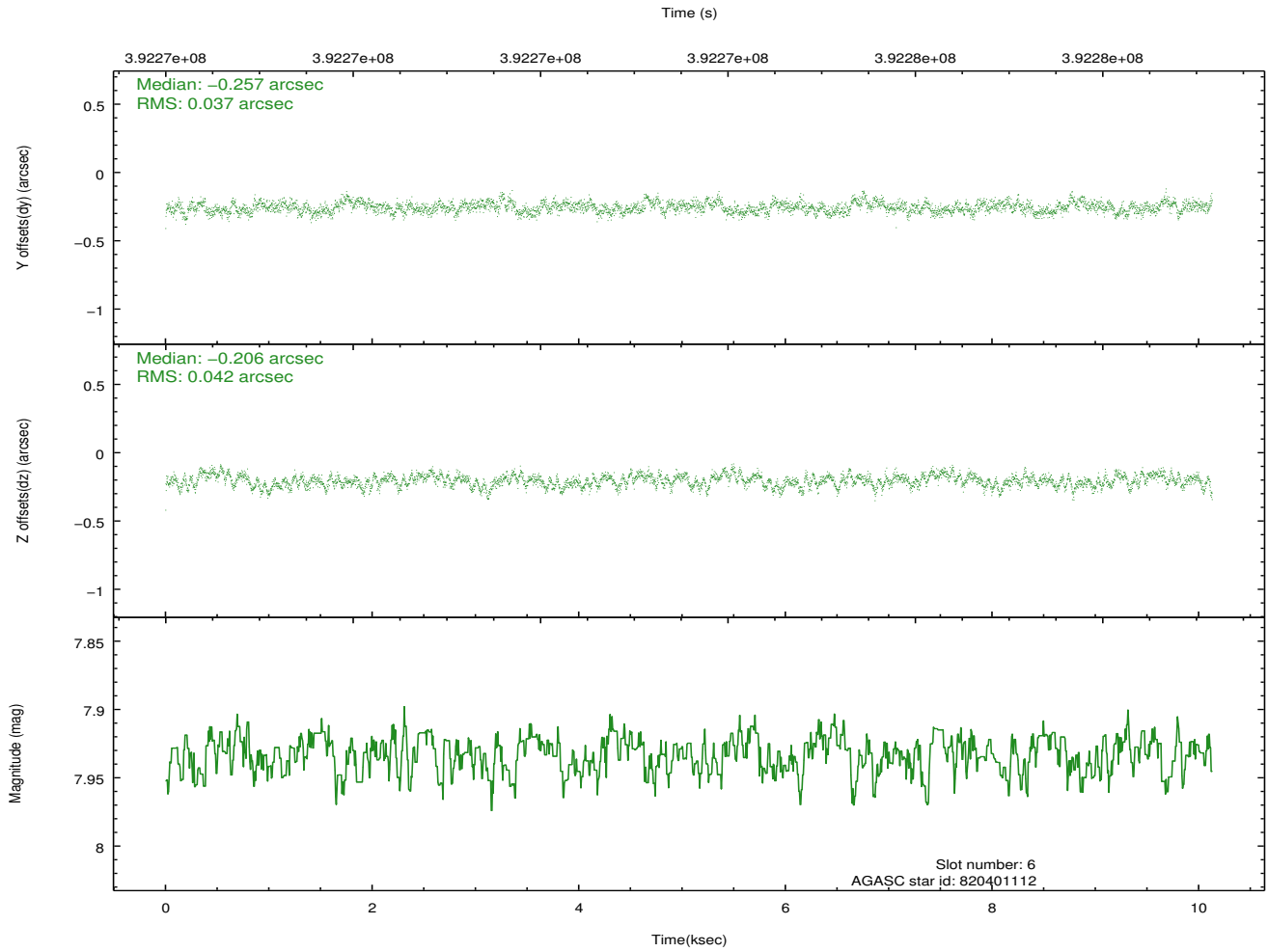
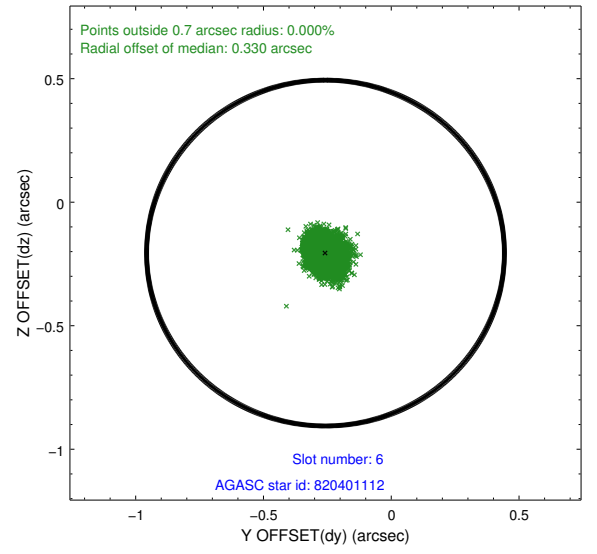
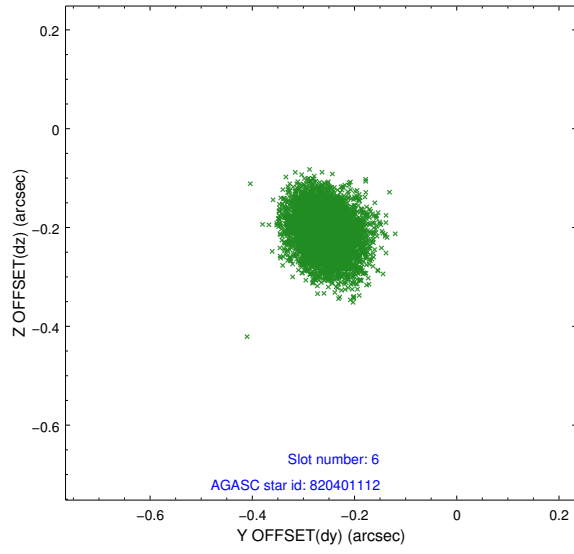
2.4.2 Slot 4



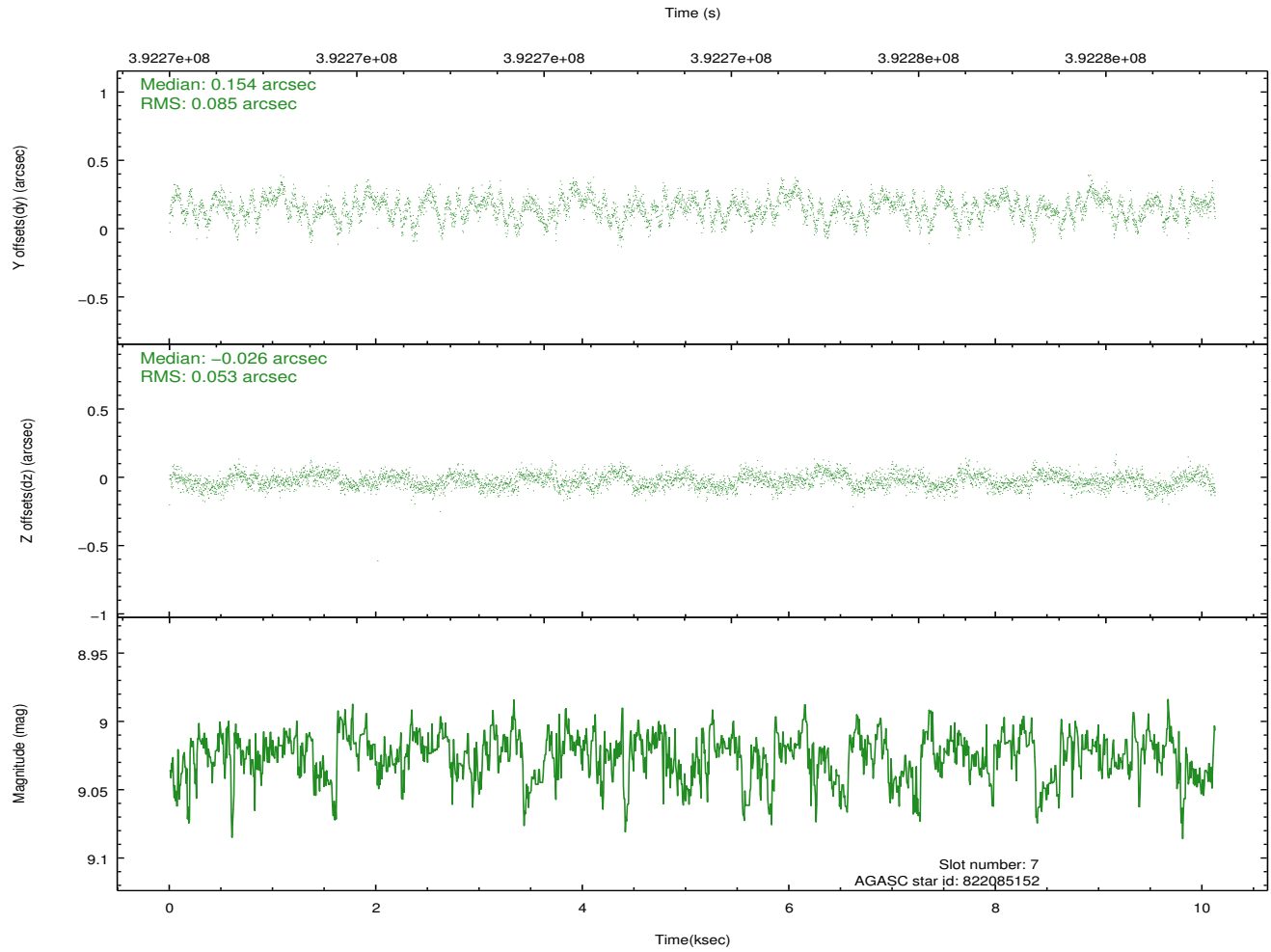
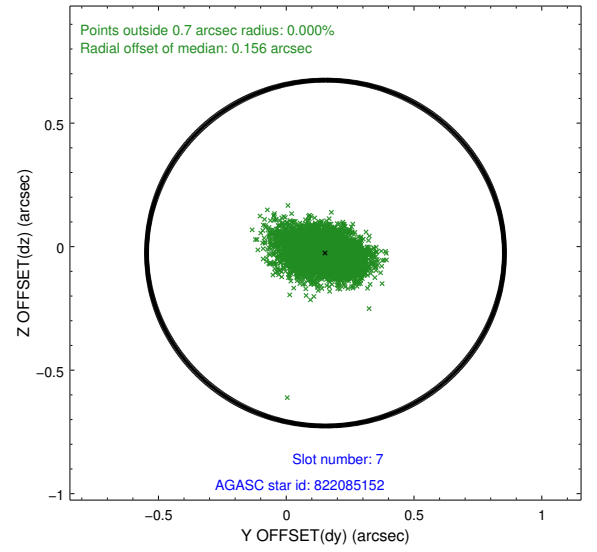
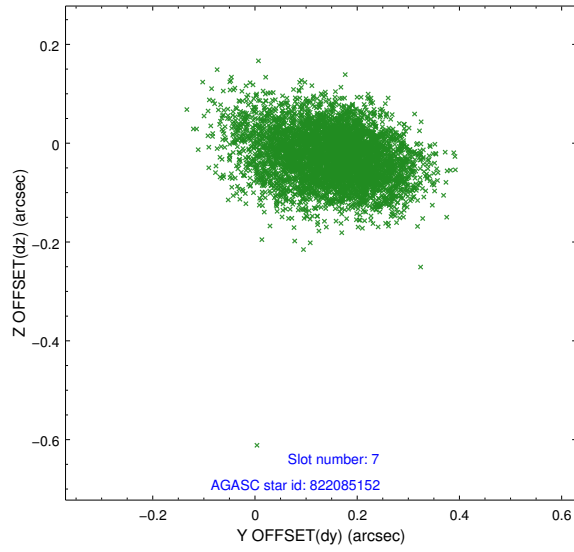
2.4.3 Slot 5



2.4.4 Slot 6

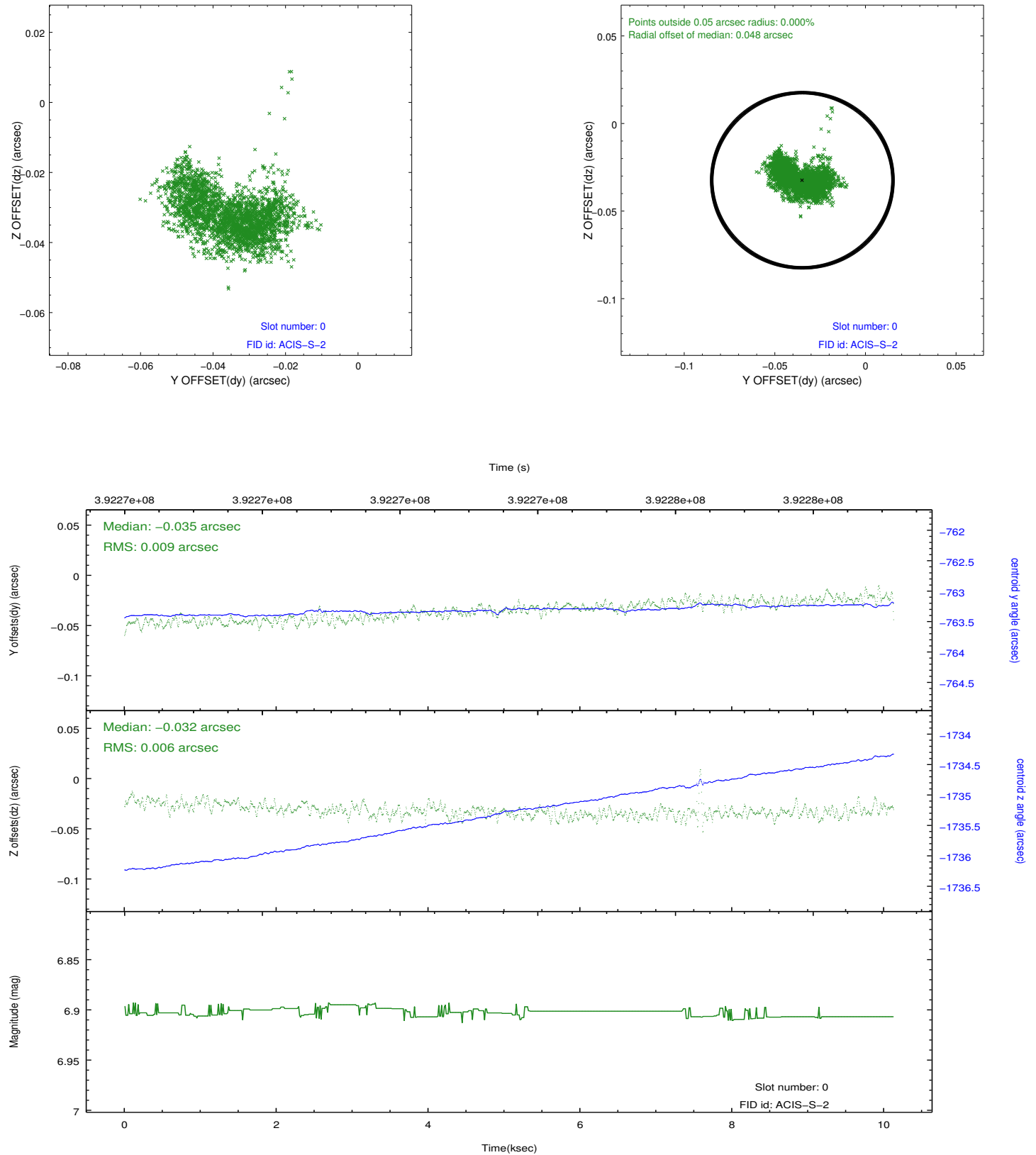


2.4.5 Slot 7

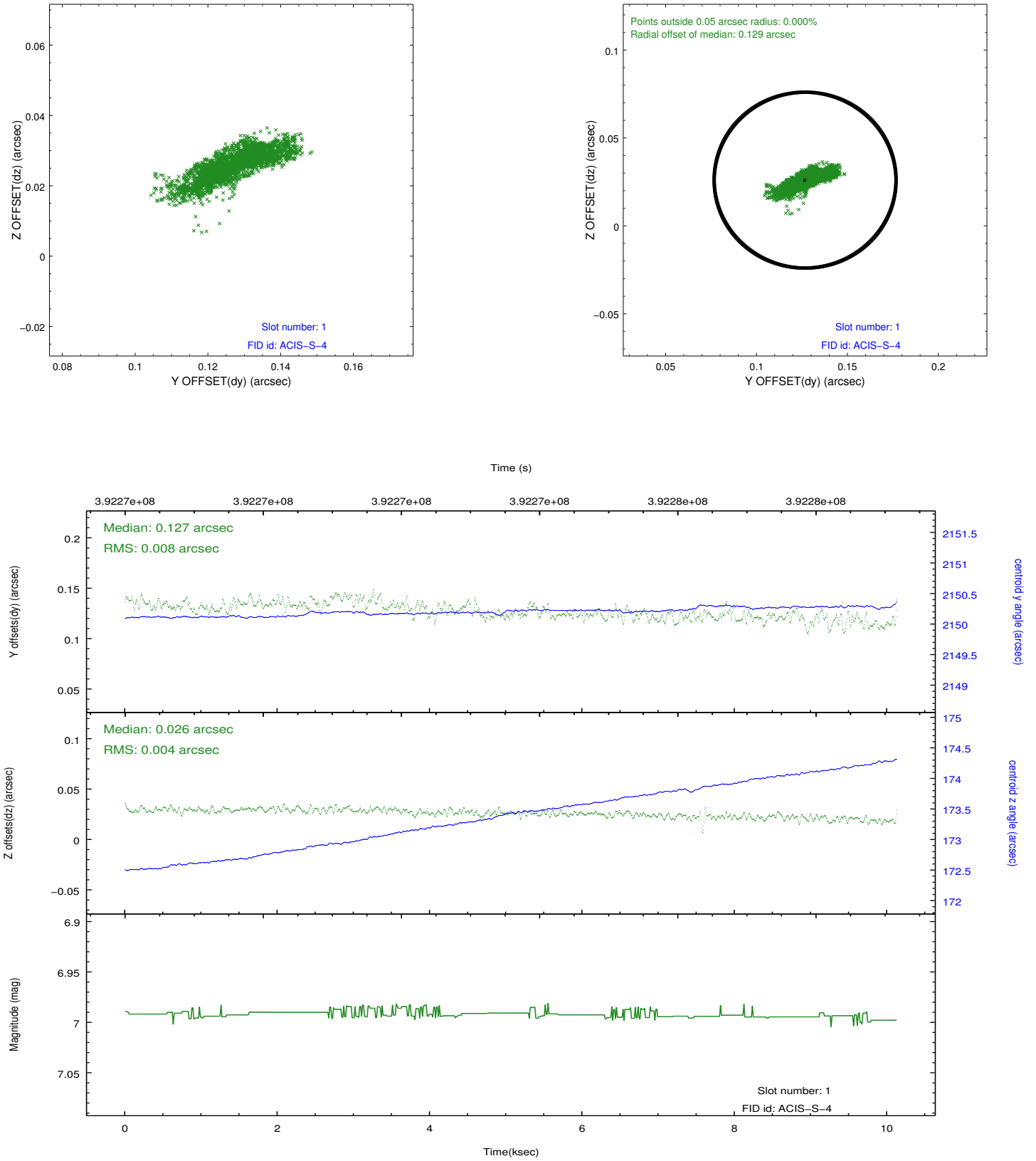


2.5 FID Slots

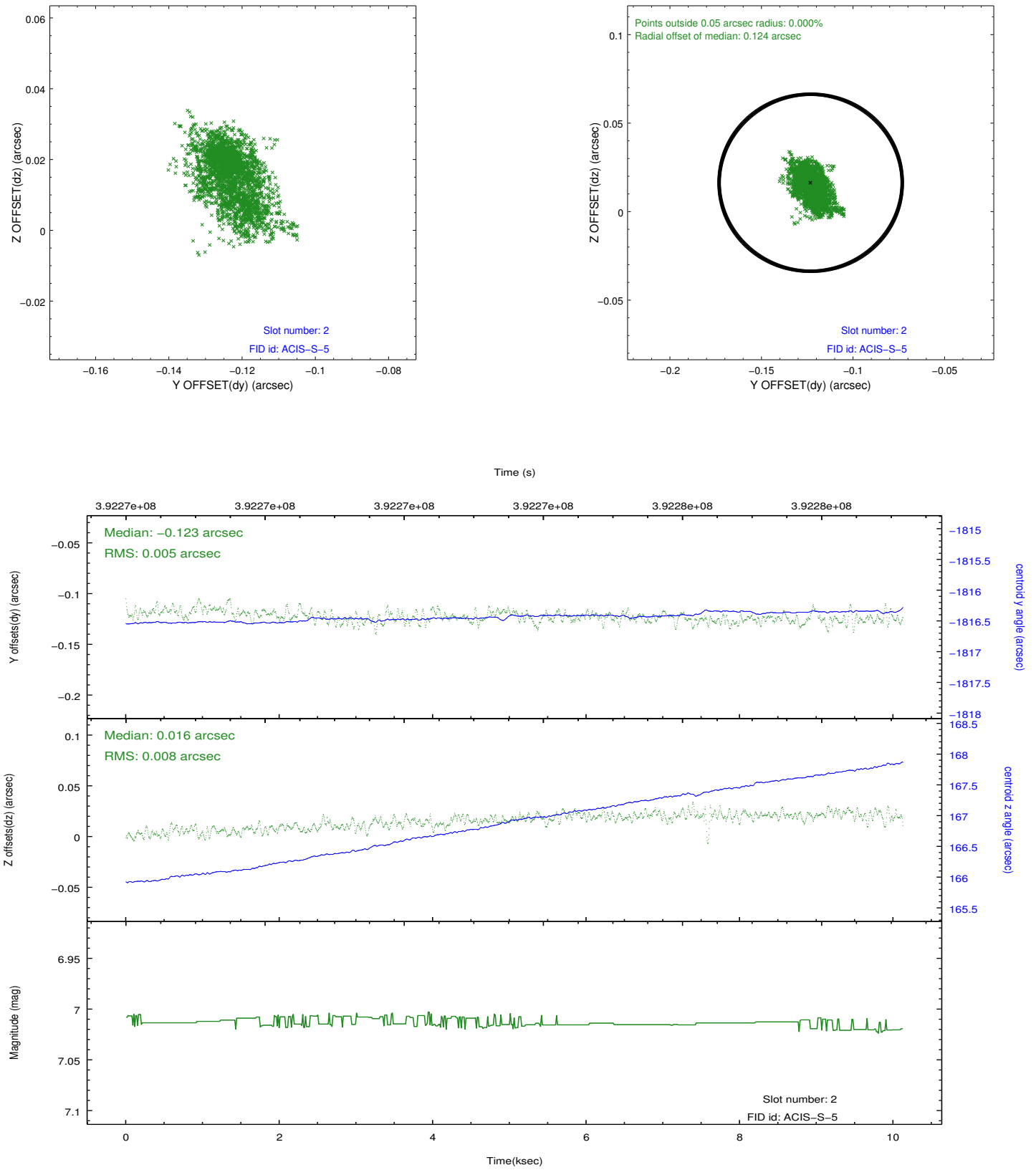
2.5.1 Slot 0



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)	2012.07.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.065299828529

A.2 Comments

Window constraint satisfied.