

V&V Reference Report

L2 ASCDS Version : 8.4.3.1

Observation 7310 - L2 Version 3
Chandra X-Ray Center

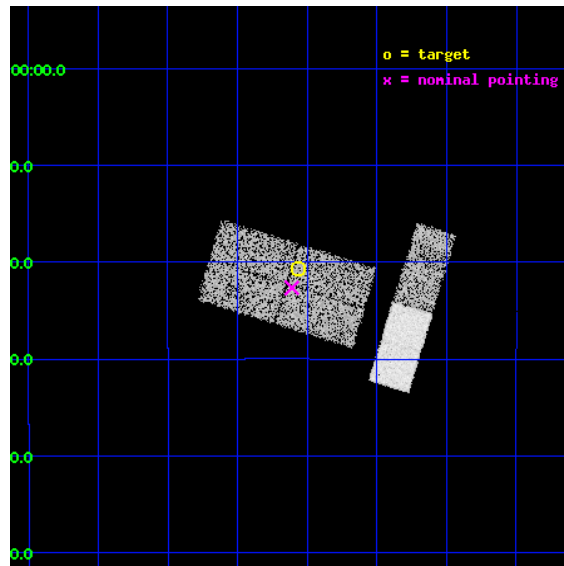
L2 Processing Date : Apr 18 2012

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1 Front

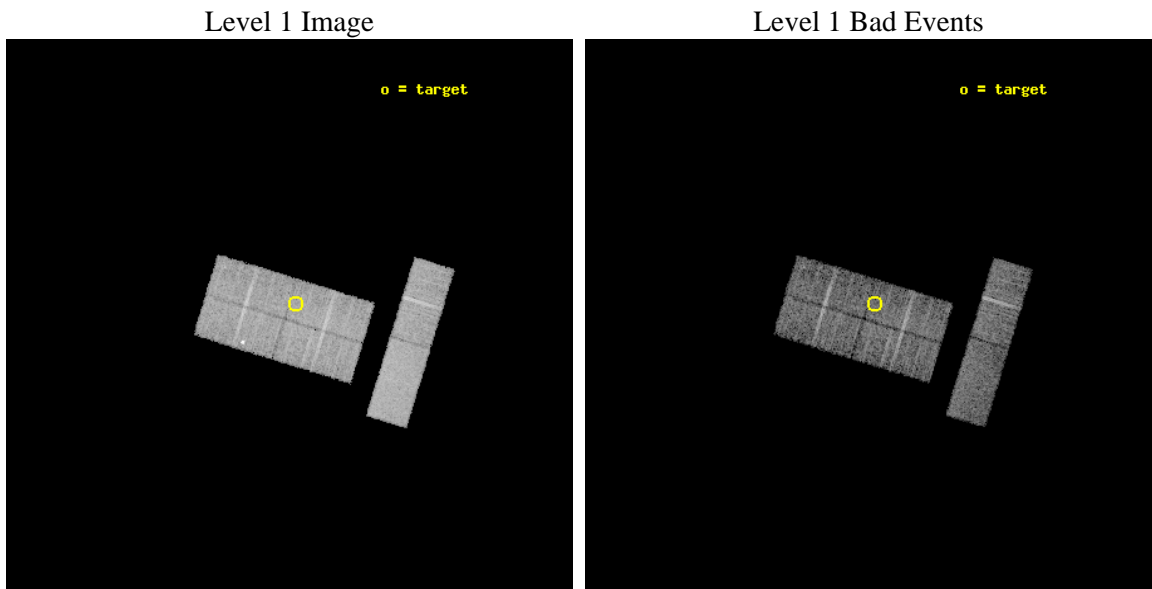
seq_num	100062	Sequence number
obs_id	7310	Observation id
title	Search for charge exchange induced X-ray emission in the Venusian exosphere	Proposal title
observer	Dr. Peter Predehl	Principal investigator
object	Venus	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	322.140441	Observer's specified target RA [deg]
dec_targ	-13.345142	Observer's specified target Dec [deg]
ra_nom	322.15251045916	Nominal RA [deg]
dec_nom	-13.37762779057	Nominal Dec [deg]
roll_nom	107.12593750161	Nominal Roll [deg]
revision	3	Processing version of data
ontime	6390.0000423193	Sum of GTIs [s]
livetime	6247.5557707463	Livetime [s]
ontime0	6388.1590521336	Sum of GTIs [s]
ontime1	6390.0000423193	Sum of GTIs [s]
ontime2	6390.0000423193	Sum of GTIs [s]
ontime3	6390.0000423193	Sum of GTIs [s]
ontime6	6390.0000423193	Sum of GTIs [s]
ontime7	6390.0000423193	Sum of GTIs [s]
l2events	31172	Number of level 2 events



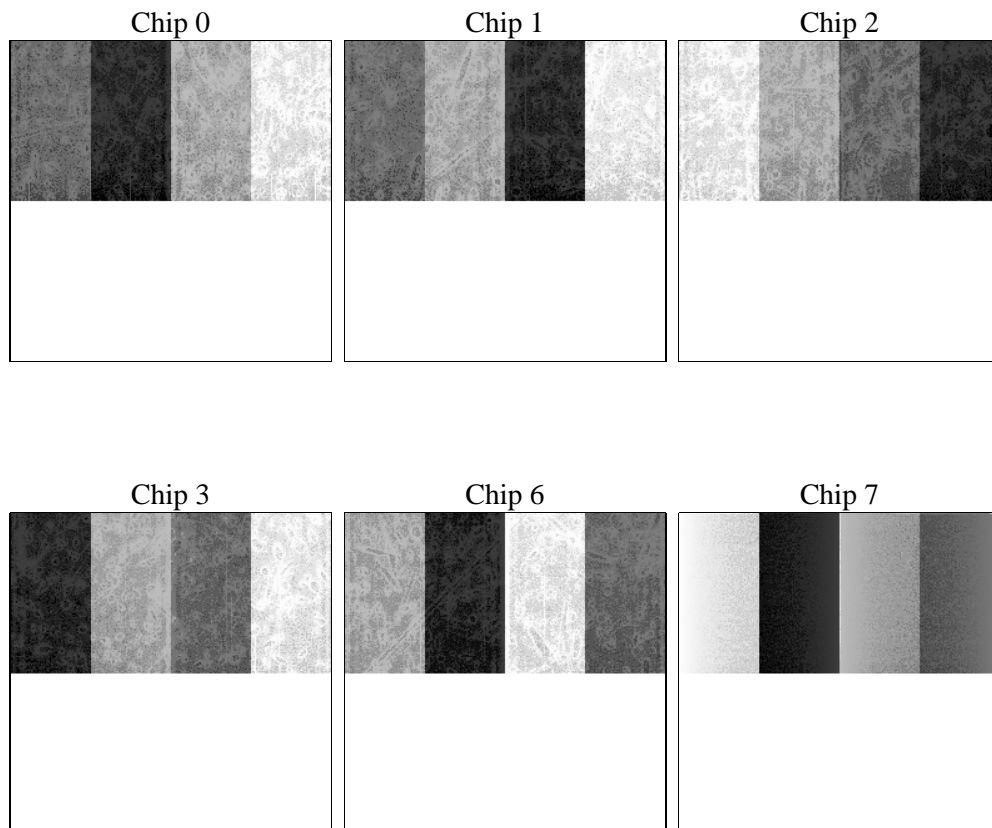
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	6200.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	6390.0000423193	Sum of GTIs [s]
caldsver	4.4.9	 	ontime0	6388.1590521336	Sum of GTIs [s]
date	2012-04-18T20:57:48	Date and time of file creation	ontime1	6390.0000423193	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	6390.0000423193	Sum of GTIs [s]
			ontime3	6390.0000423193	Sum of GTIs [s]
			ontime6	6390.0000423193	Sum of GTIs [s]
			ontime7	6390.0000423193	Sum of GTIs [s]
			l1events	200718	Number of level 1 events

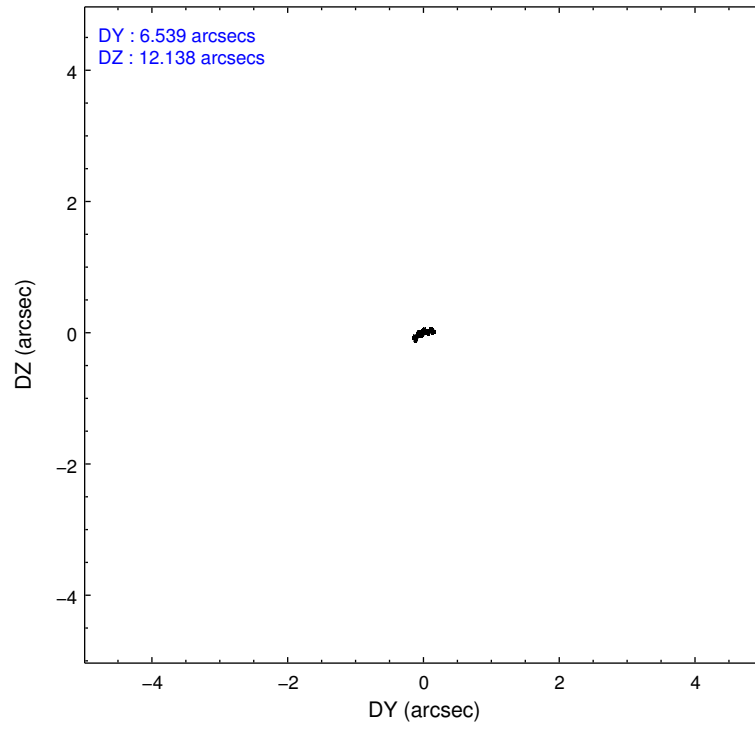
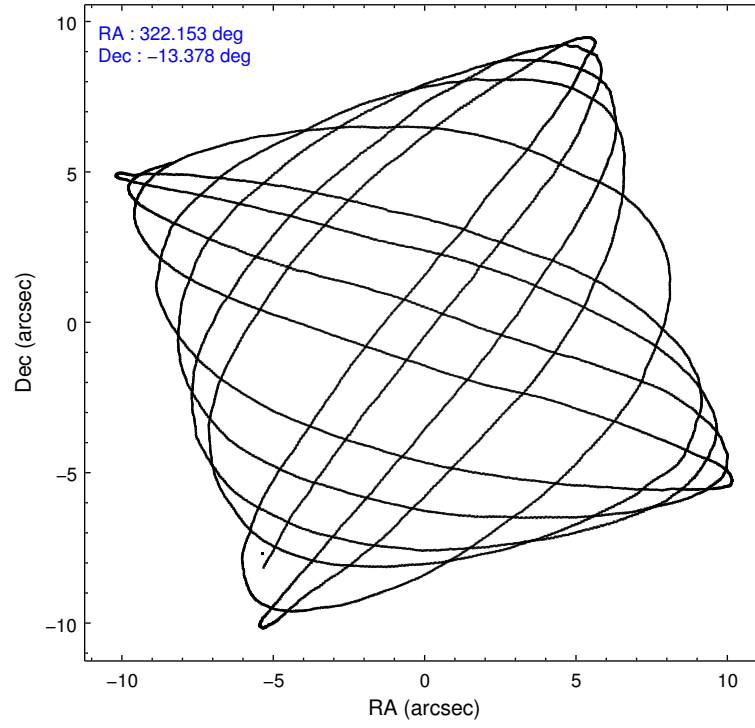
2.1.4 Events

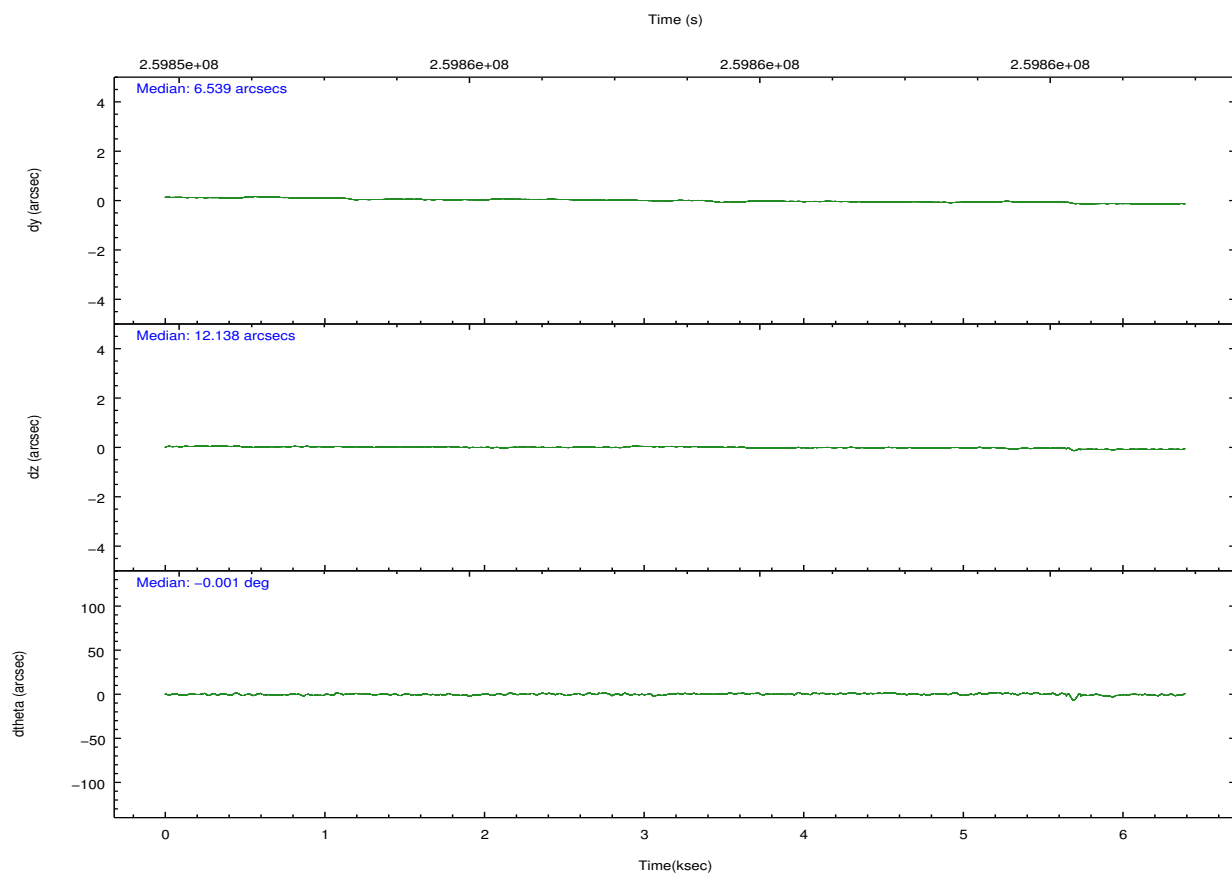
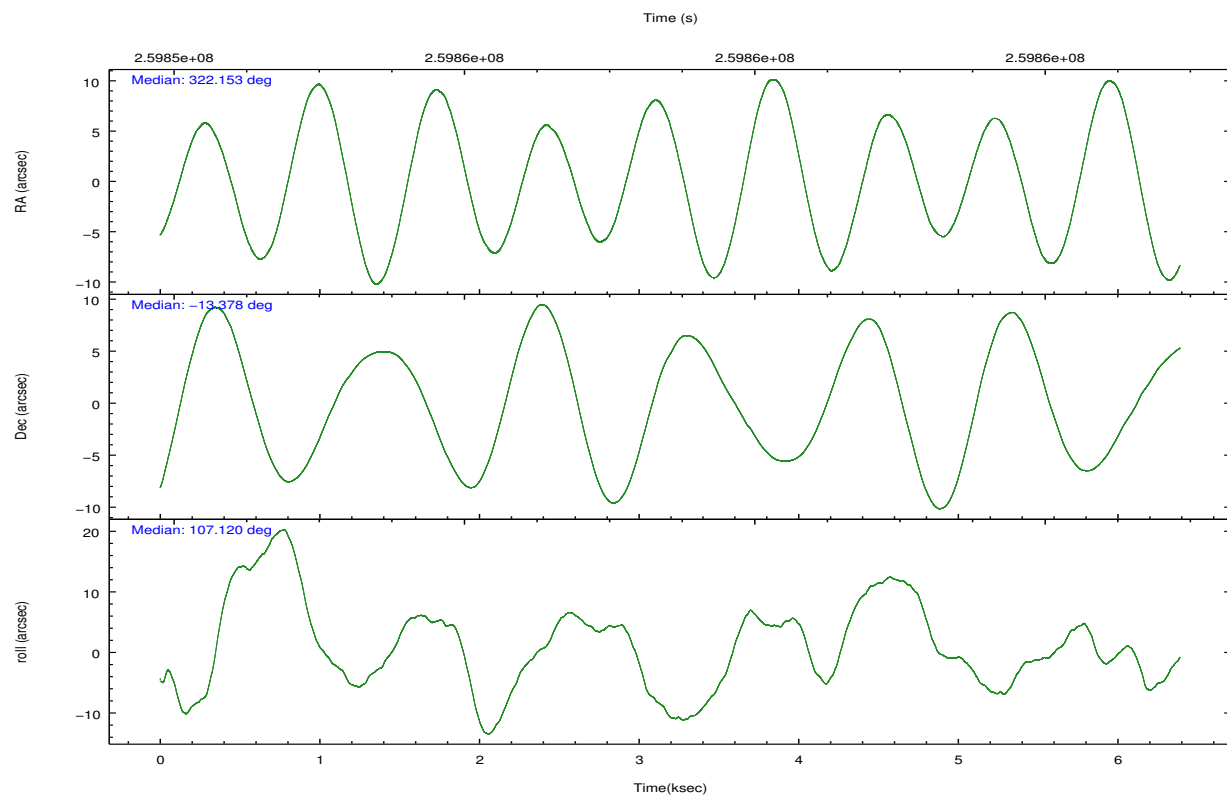
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	29370	32117	32659	31499	33603	41470	grade 0 events	1585	2884	1624	1603	1418	1660
rejected events	25802	27156	29081	27937	29996	25012		5%	8%	4%	5%	4%	4%
rejected %	87%	84%	89%	88%	89%	60%	grade 1 events	21	19	17	16	20	57
								0%	0%	0%	0%	0%	0%
							grade 2 events	761	813	691	638	761	3522
								2%	2%	2%	2%	2%	8%
							grade 3 events	382	405	397	426	384	1661
								1%	1%	1%	1%	1%	4%
							grade 4 events	400	397	425	416	437	1619
								1%	1%	1%	1%	1%	3%
							grade 5 events	1244	1288	1213	1454	1517	4022
								4%	4%	3%	4%	4%	9%
							grade 6 events	600	702	612	652	791	8787
								2%	2%	1%	2%	2%	21%
							grade 7 events	24377	25609	27680	26294	28275	20142
								82%	79%	84%	83%	84%	48%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	322.173252	322.1525104591624	Subarray requested	CUSTOM	1/2
[deg] Pointing Dec	-13.396232	-13.37762779057013	Subarray start row	513	513
[deg] Pointing Roll	106.922066	107.1259375016141	Subarray row count	512	512
[s] Window start time (MET)	258076865.184000	258076865.184000	Alternating exposures requested	N	N
[s] Window stop time (MET)	261705665.184000	261705665.184000	[s] Primary exposure time	0.000000	1.8
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	259854412.184000	259854036.40923			
Observation start date	2006-03-27T13:45:47	2006-03-27T13:40:36			
[s] Observation end time (MET)	259860612.184000	259860746.05955			
Observation end date	2006-03-27T15:29:07	2006-03-27T15:32:26			
Read mode	TIMED	TIMED			

2.3 Aspect



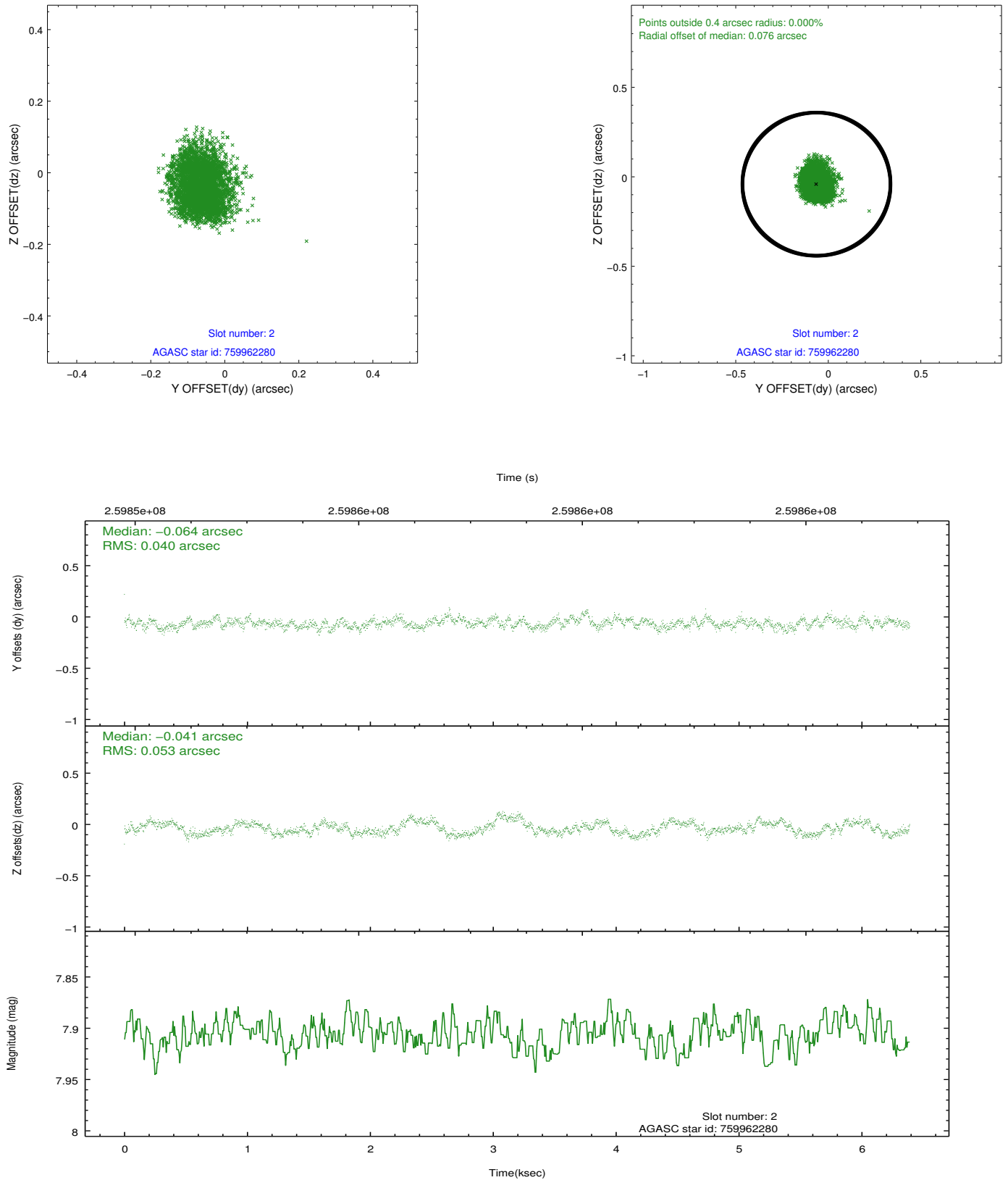


Slot Statistics

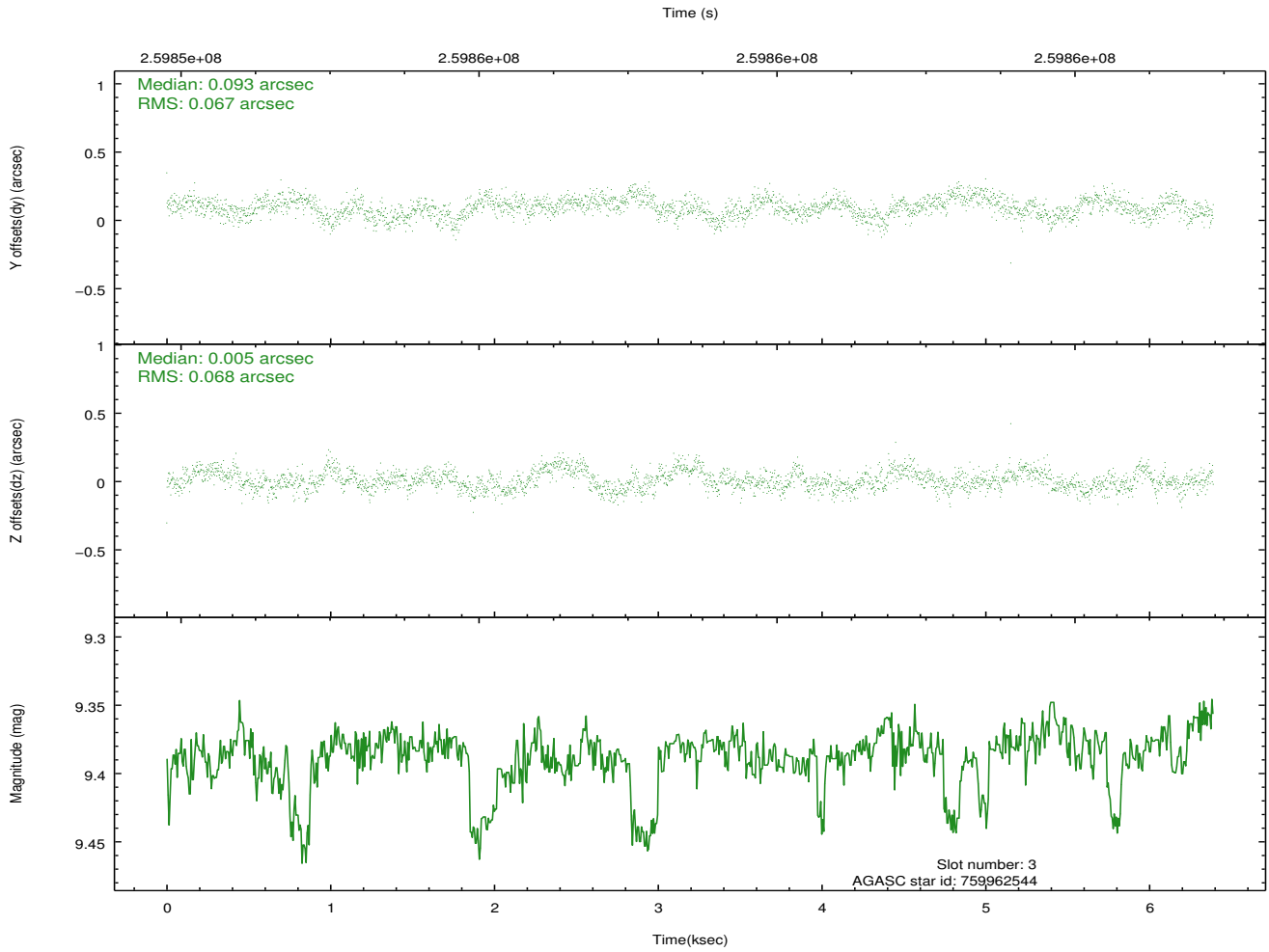
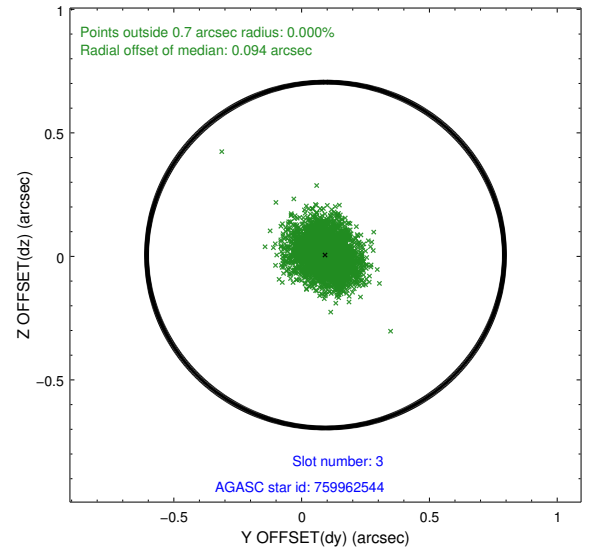
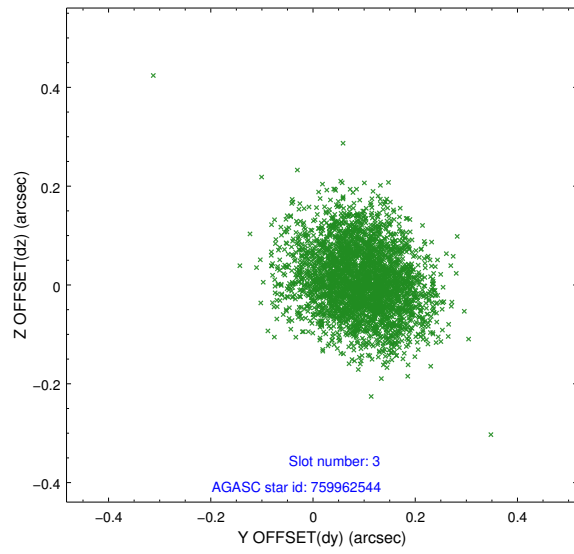
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.14	1559	0.022	-0.074	0.008	0.023	0.000000	0.000000	-761.02	-842.08
1	FID	ACIS-I-5	7.23	1559	-0.085	0.122	0.008	0.023	0.000000	0.000000	-1815.59	1061.53
2	GUIDE	759962280	7.91	3118	-0.064	-0.041	0.072	0.110	322.001957	-13.698366	-866.96	890.09
3	GUIDE	759962544	9.39	3117	0.093	0.005	0.102	0.161	322.119077	-13.952845	-1862.25	764.61
4	GUIDE	759962960	8.44	3112	-0.182	0.029	0.081	0.187	321.922663	-13.562736	-319.52	1013.96
5	GUIDE	759963784	9.87	3115	0.005	0.085	0.121	0.201	322.079300	-13.771695	-1197.77	708.16
6	GUIDE	759961200	9.94	3038	0.145	-0.088	0.175	0.283	321.872560	-14.109246	-2151.34	1751.74
7	OMITTED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00

2.4 Star Slots

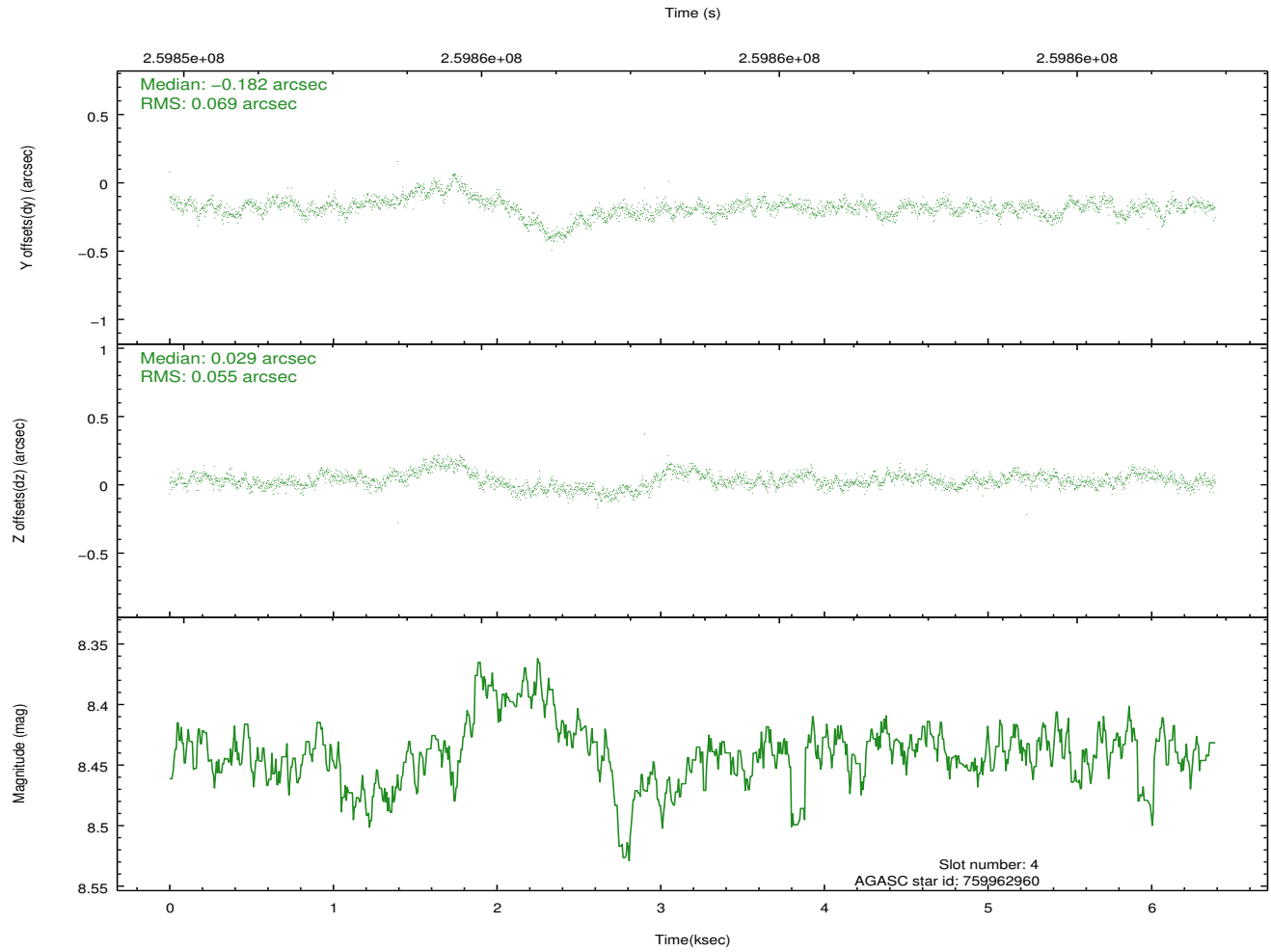
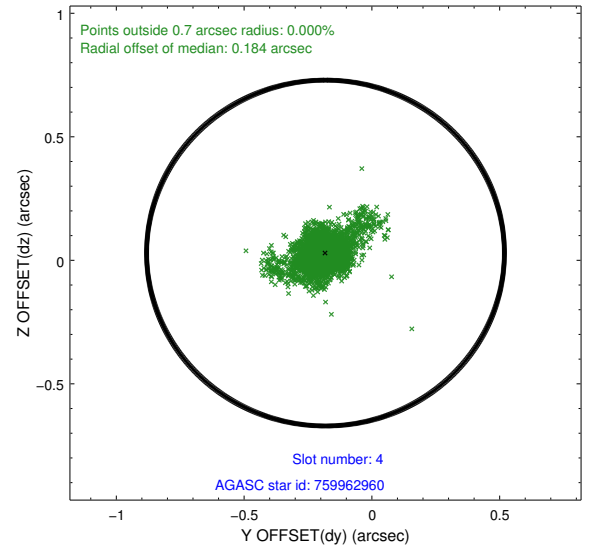
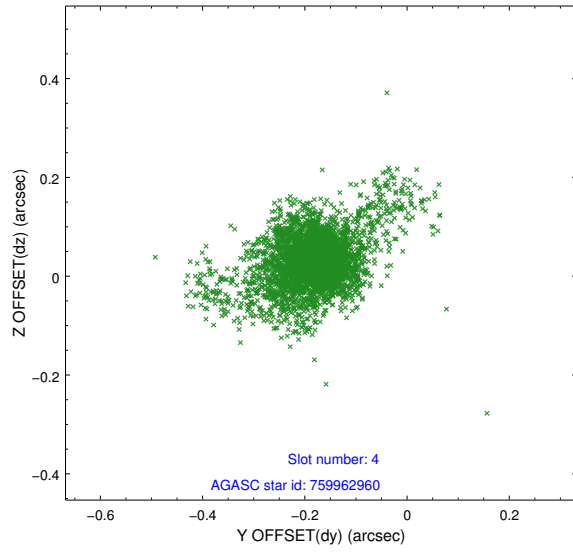
2.4.1 Slot 2



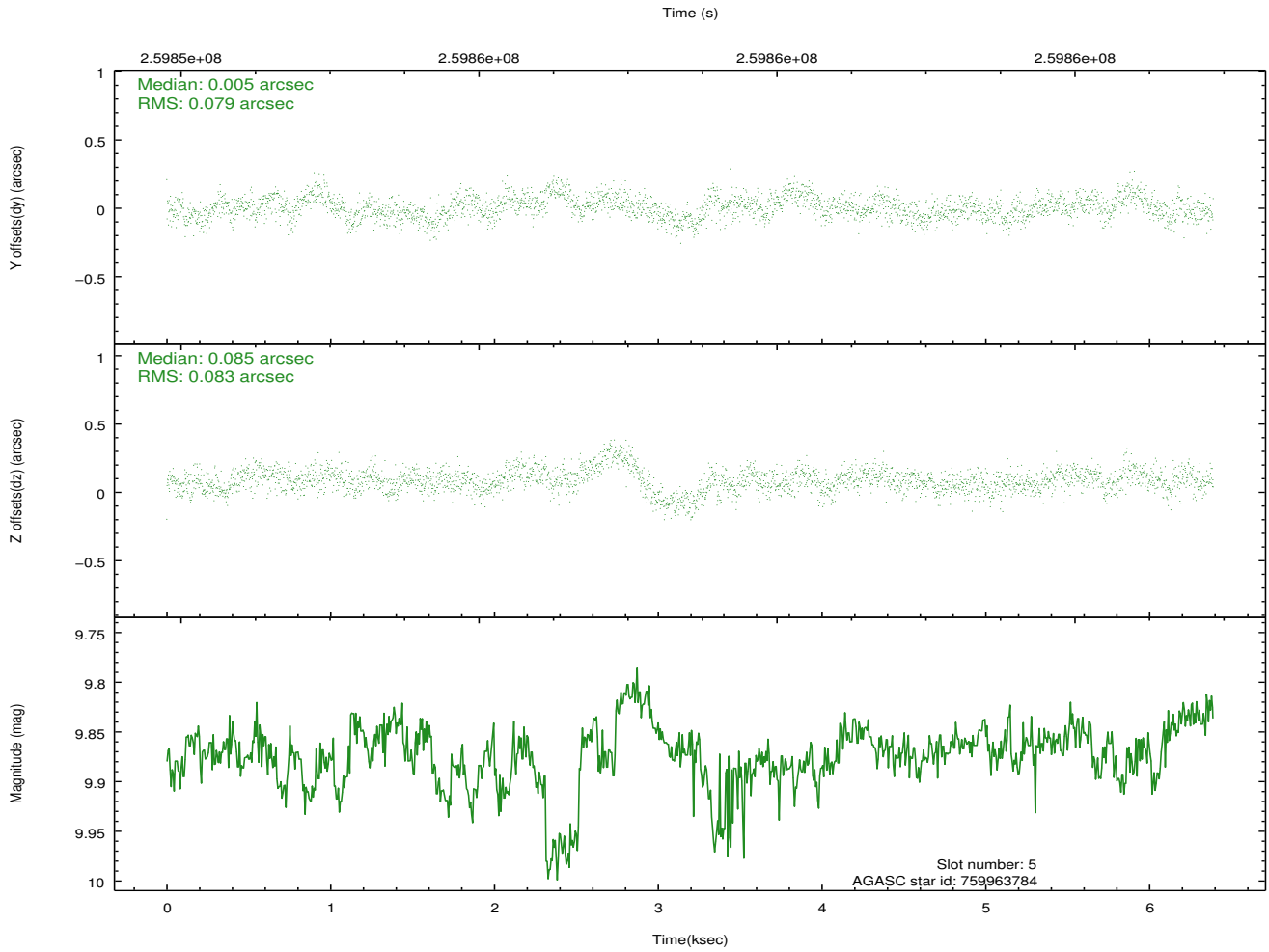
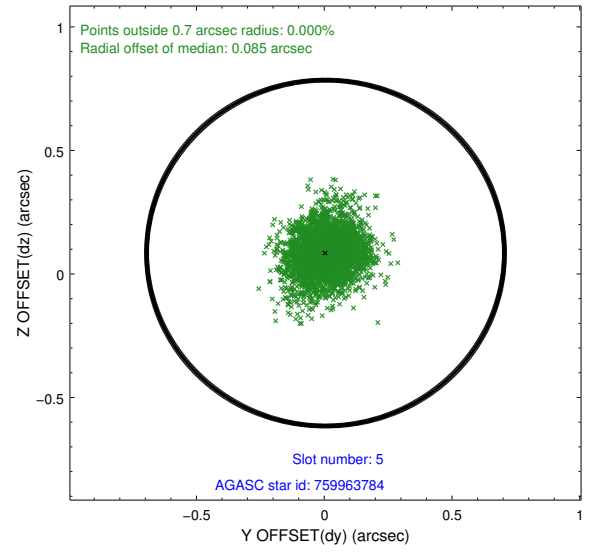
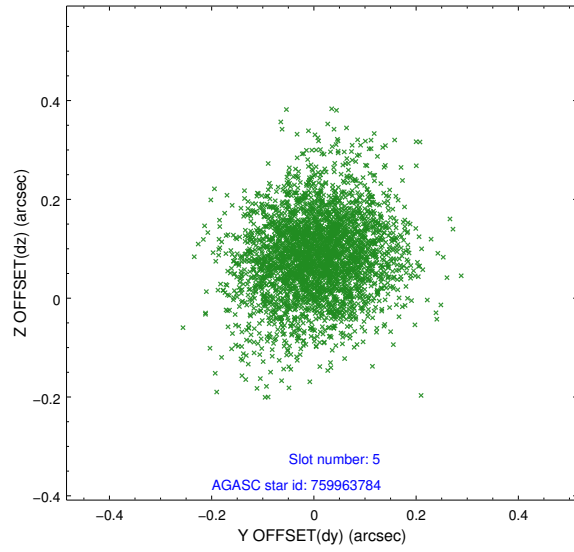
2.4.2 Slot 3



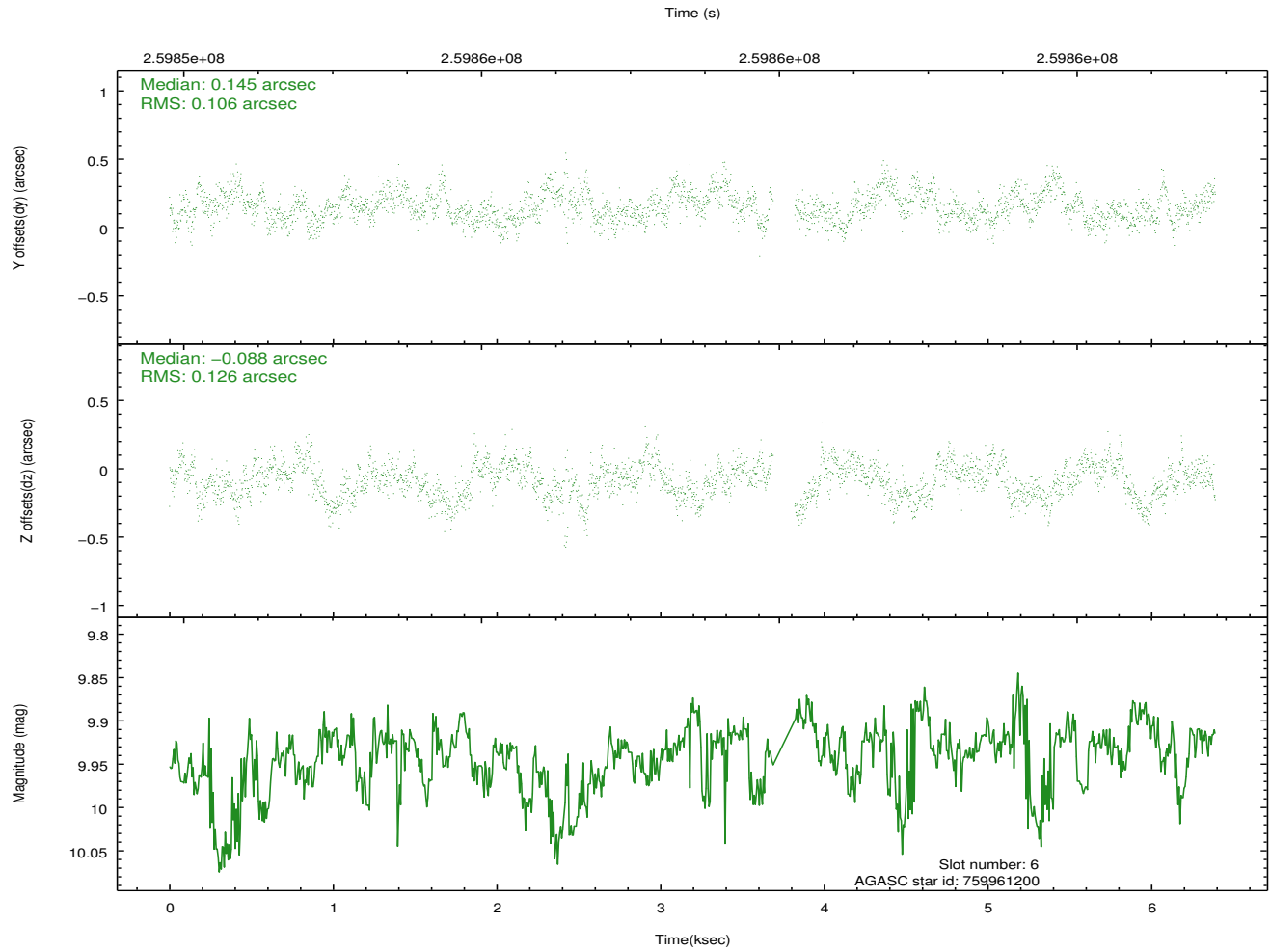
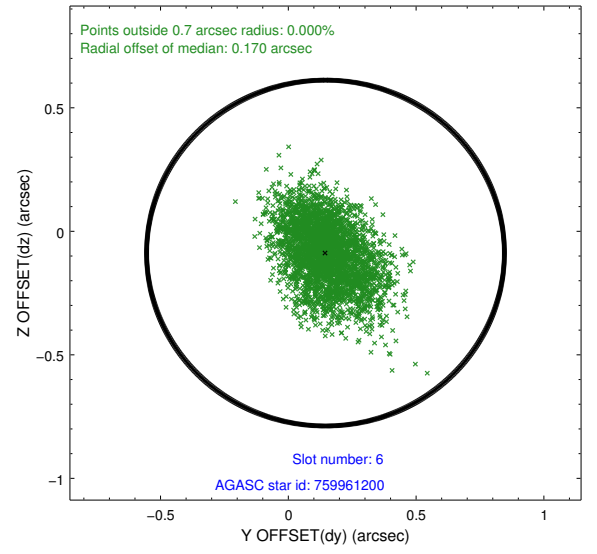
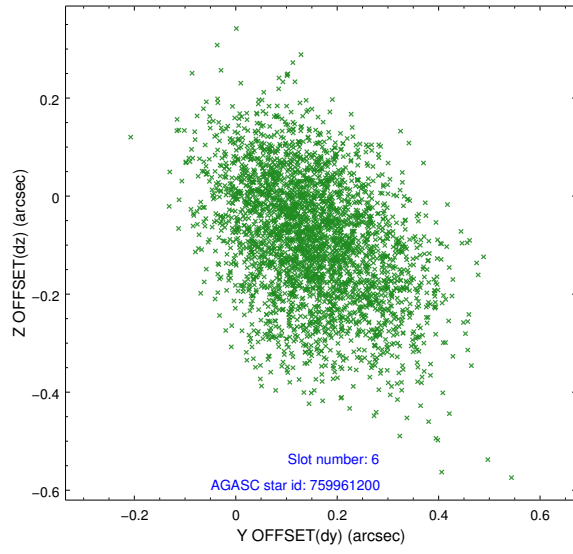
2.4.3 Slot 4



2.4.4 Slot 5

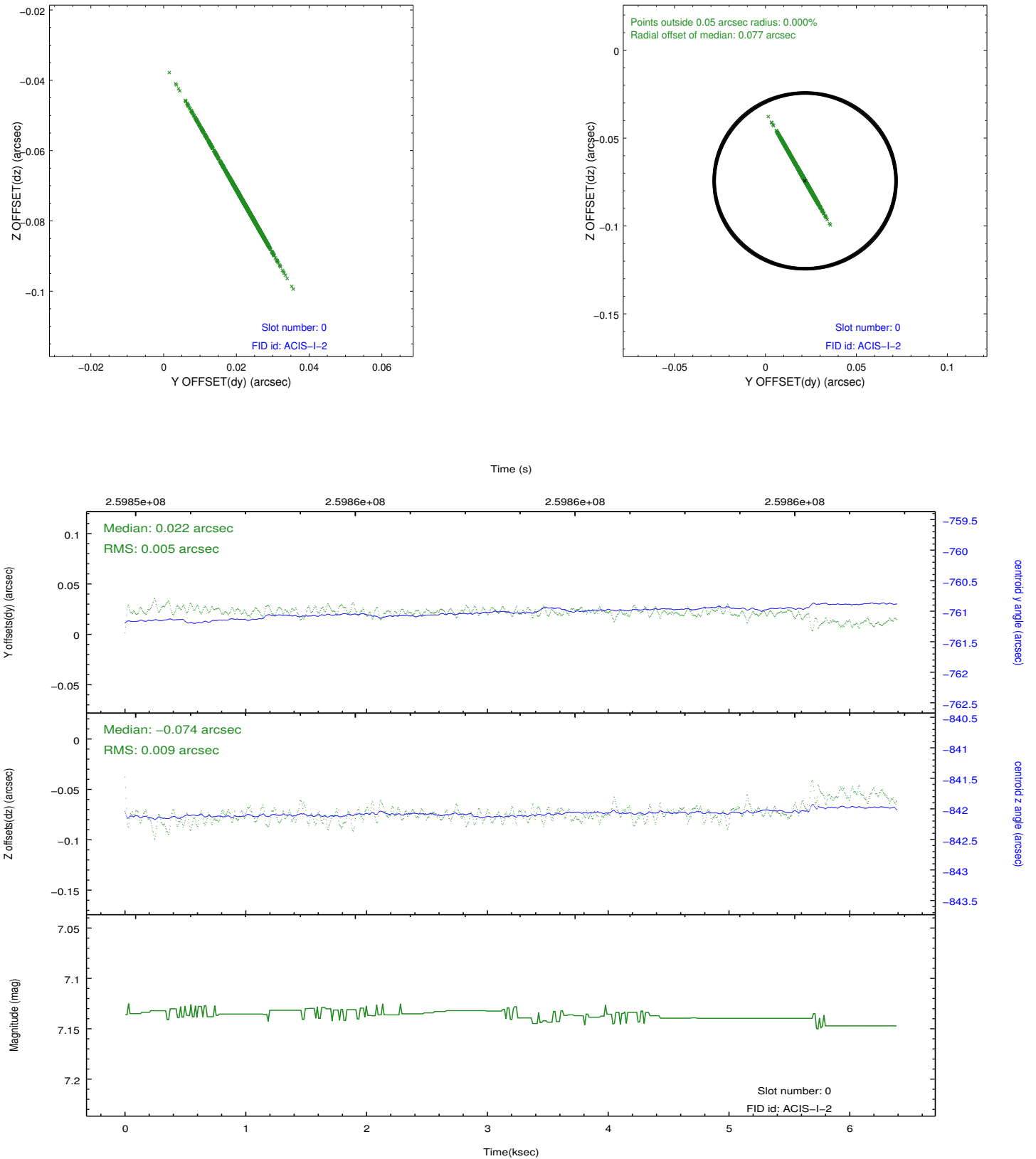


2.4.5 Slot 6

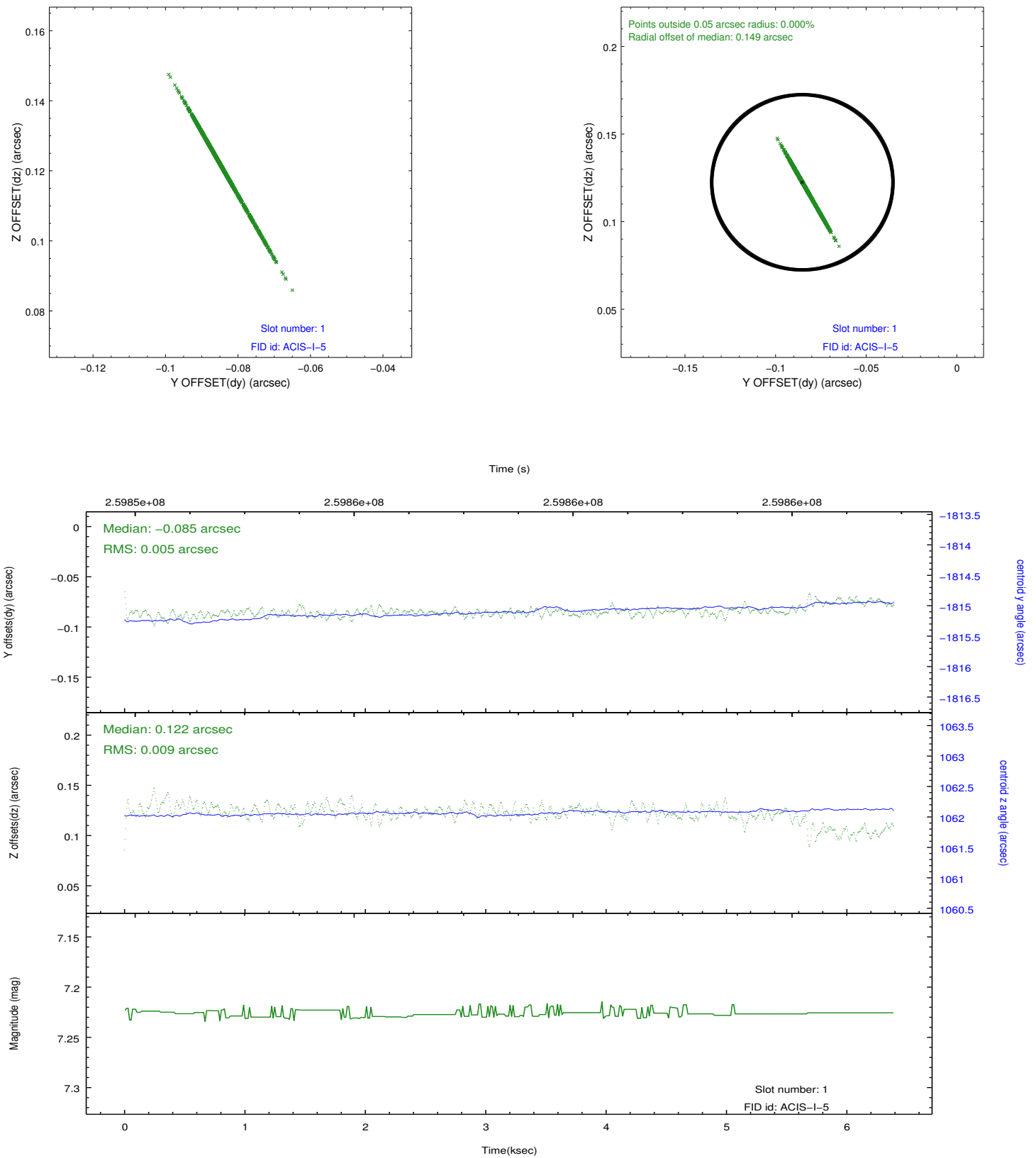


2.5 FID Slots

2.5.1 Slot 0



2.5.2 Slot 1



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.04.19
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	6.39000004

A.2 Comments

The guide star in slot 7 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this guide star from the solution. Window constraint met.