

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 3463 - L2 Version 4
Chandra X-Ray Center

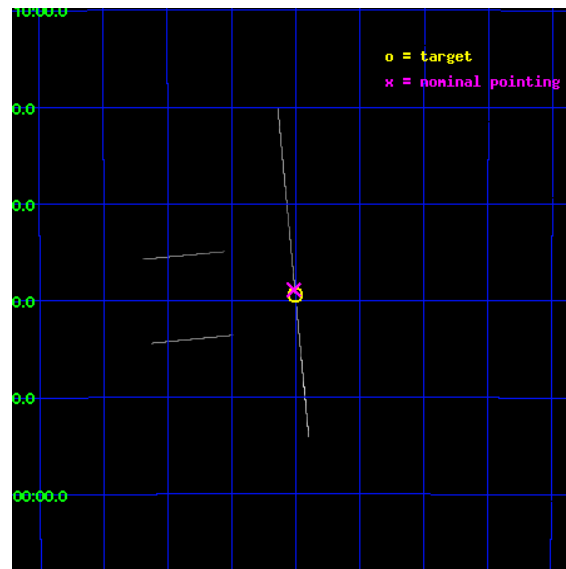
L2 Processing Date : Nov 8 2012

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1 Front

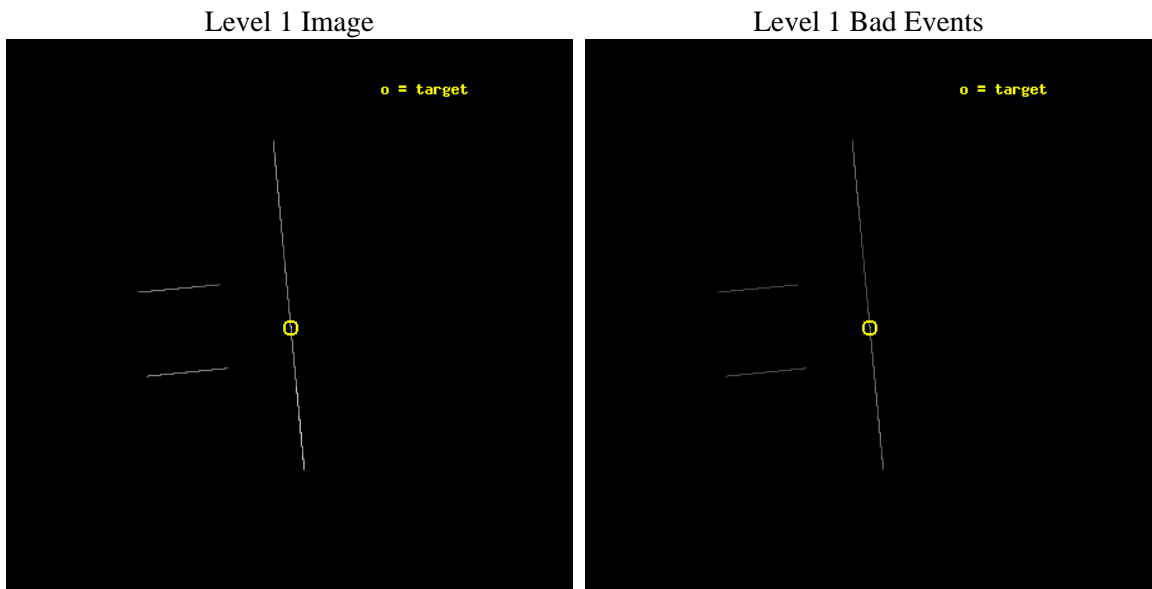
seq_num	400238	Sequence number
obs_id	3463	Observation id
title	A FAINT NEUTRON STAR SOFT X-RAY TRANSIENT RETURNING TO QUIESCENCE	
observer	dr Peter Jonker	Principal investigator
object	RX J170930.2-263927	Source name
ra_targ	257.375833	Observer's specified target RA [deg]
dec_targ	-26.6575	Observer's specified target Dec [deg]
ra_nom	257.37873503506	Nominal RA [deg]
dec_nom	-26.648192052919	Nominal Dec [deg]
roll_nom	84.529907563359	Nominal Roll [deg]
revision	4	Processing version of data
ontime	7468.0379508436	Sum of GTIs [s]
livetime	7438.8659275981	Livetime [s]
ontime2	7230.1689306498	Sum of GTIs [s]
ontime3	7249.1943459213	Sum of GTIs [s]
ontime5	7454.895960629	Sum of GTIs [s]
ontime6	7119.2974852026	Sum of GTIs [s]
ontime7	7468.0379508436	Sum of GTIs [s]
ontime8	5493.8508393168	Sum of GTIs [s]
l2events	849418	Number of level 2 events



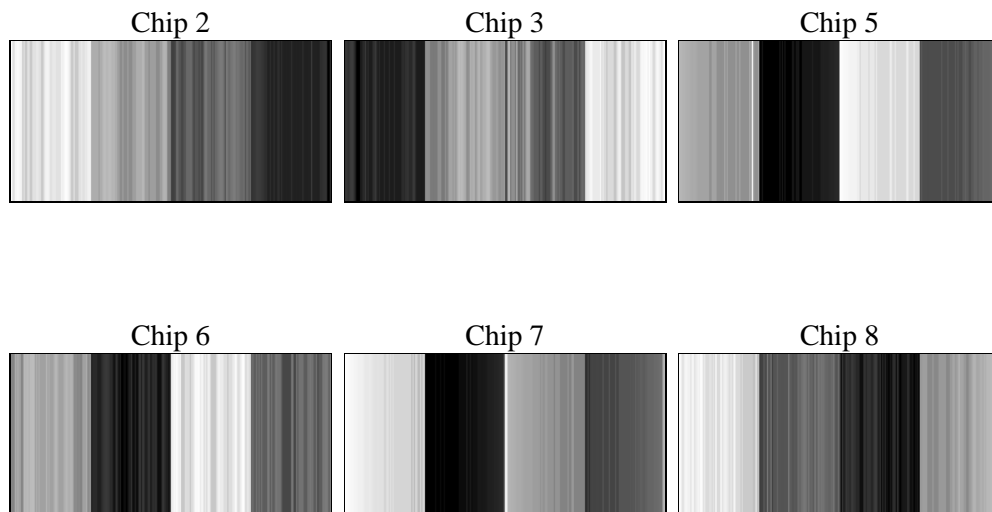
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	15000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	7468.0379508436	Sum of GTIs [s]
caldsver	4.5.2	 	ontime2	7230.1689306498	Sum of GTIs [s]
date	2012-11-08T19:00:36	Date and time of file creation	ontime3	7249.1943459213	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	7454.895960629	Sum of GTIs [s]
			ontime6	7119.2974852026	Sum of GTIs [s]
			ontime7	7468.0379508436	Sum of GTIs [s]
			ontime8	5493.8508393168	Sum of GTIs [s]
			l1events	1236488	Number of level 1 events

2.1.4 Events

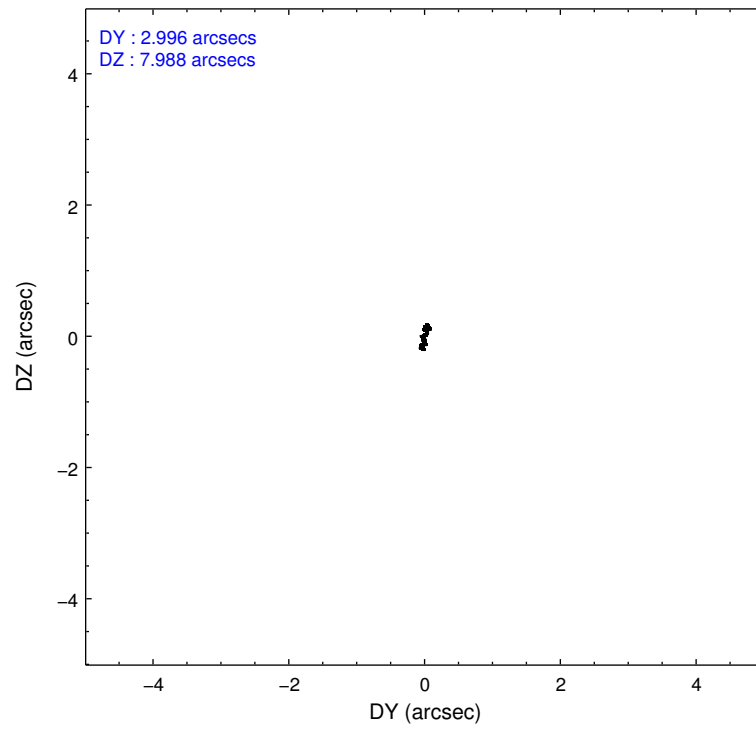
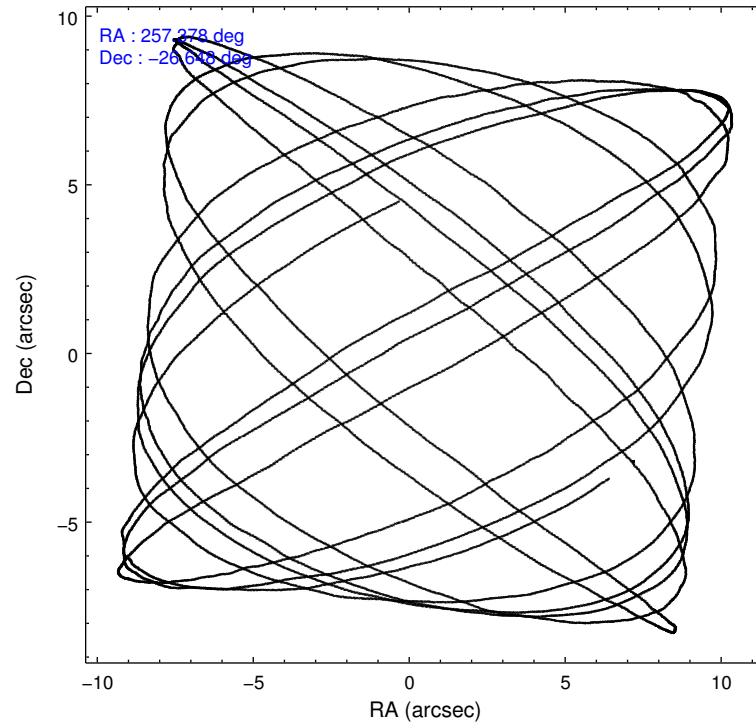
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	50128	61061	124863	65767	168984	765685	grade 0 events	4397	4386	21011	14210	31827	321635
rejected events	1921	2096	9035	2477	9293	13092		8%	7%	16%	21%	18%	42%
rejected %	3%	3%	7%	3%	5%	1%	grade 1 events	33	47	896	163	730	3273
								0%	0%	0%	0%	0%	0%
							grade 2 events	35319	45819	34896	41165	44346	65019
								70%	75%	27%	62%	26%	8%
							grade 3 events	1186	1424	12015	1179	16579	165525
								2%	2%	9%	1%	9%	21%
							grade 4 events	1290	1270	11634	1230	16642	154448
								2%	2%	9%	1%	9%	20%
							grade 5 events	1716	1816	7807	2089	8045	7107
								3%	2%	6%	3%	4%	0%
							grade 6 events	6187	6299	36604	5731	50815	48678
								12%	10%	29%	8%	30%	6%
							grade 7 events	0	0	0	0	0	0
								0%	0%	0%	0%	0%	0%

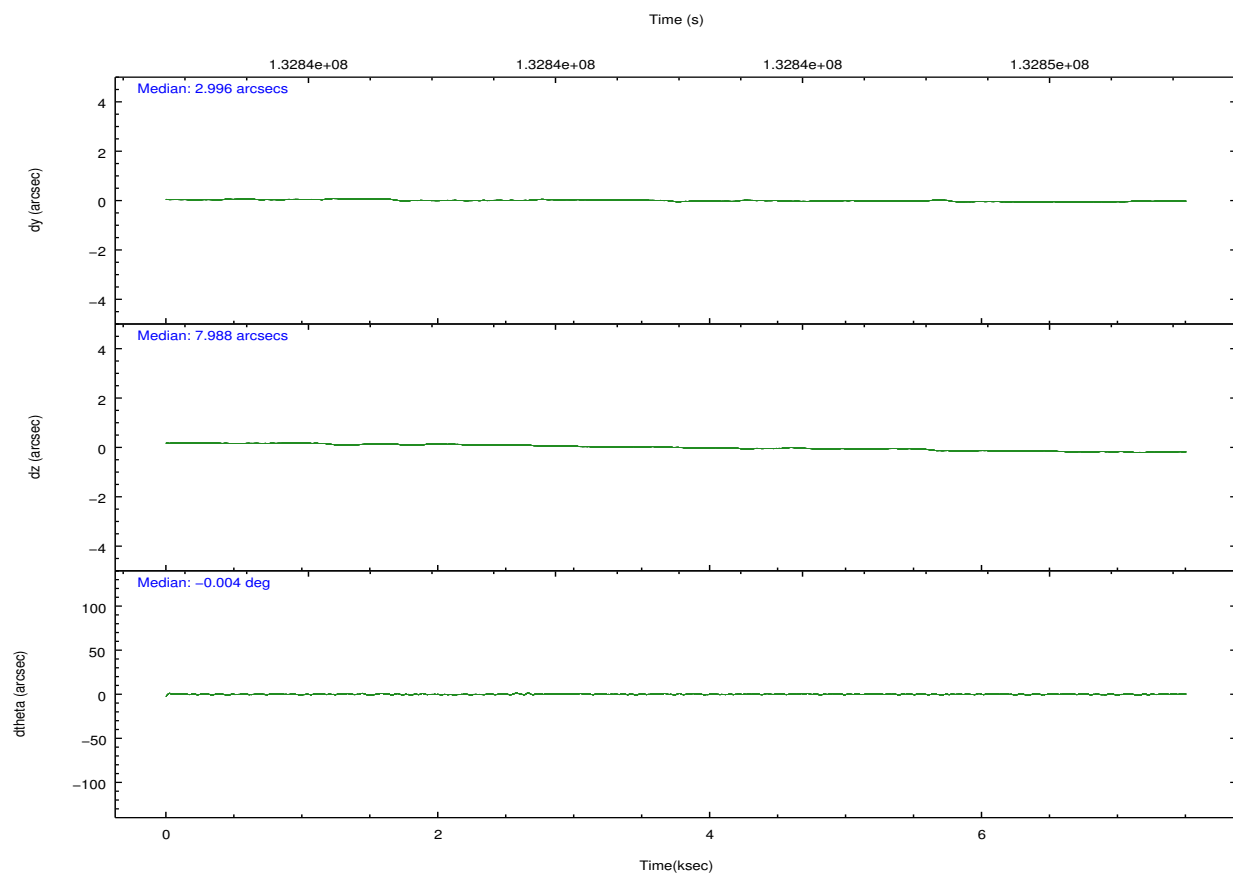
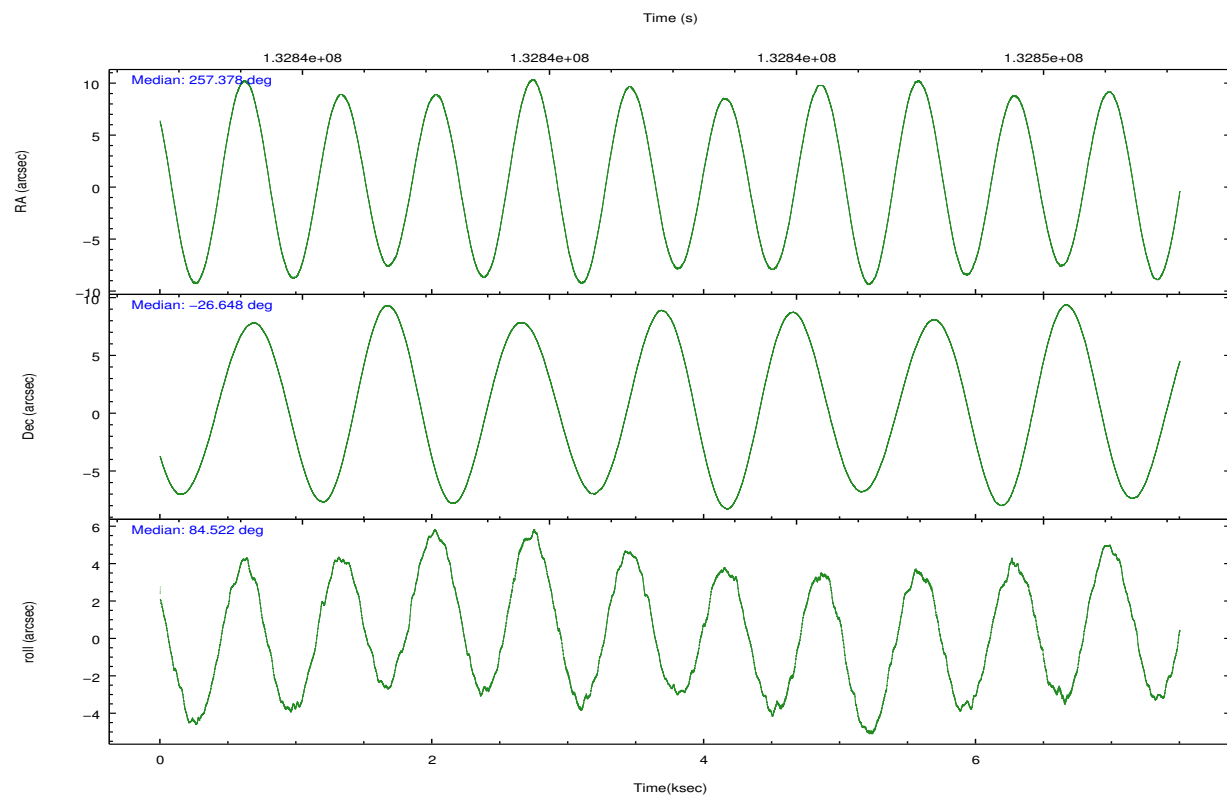
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-235678	ACIS-235678
Grating	NONE	NONE
Data mode	CC33_FAINT	CC33_FAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	257.391763	257.3787350350577
[deg] Pointing Dec	-26.672796	-26.64819205291881
[deg] Pointing Roll	84.379120	84.52990756335943
[mm] SIM focus pos	-0.6828225247311905	-0.6828225247311905
[mm] SIM defocus	0.001444942264670179	0.001444942264670179
[mm] SIM translation stage pos	-190.1400660498719	-190.1400660498719
[mm] SIM translation stage offset	0.007542945904702947	0.007542945904702947
[s] Observation start time (MET)	132839225.184000	132839225.184
Observation start date	2002-03-18T11:46:01	2002-03-18T11:47:05
[s] Observation end time (MET)	132846728.800000	132846728.8
Observation end date	2002-03-18T13:52:09	2002-03-18T13:52:08
Read mode	CONTINUOUS	CONTINUOUS

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	OVERRIDE	OVERRIDE
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	0.000000

2.3 Aspect



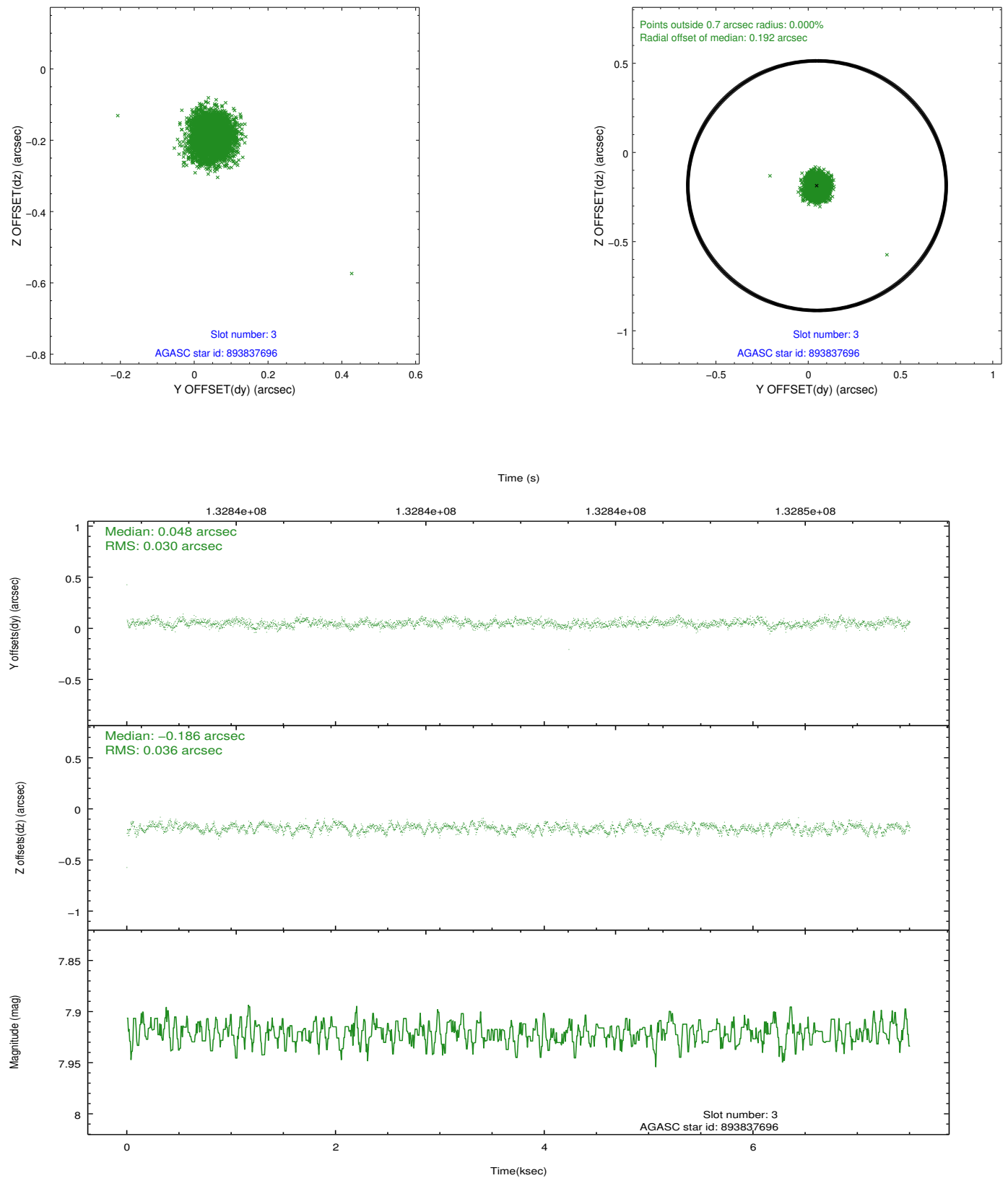


Slot Statistics

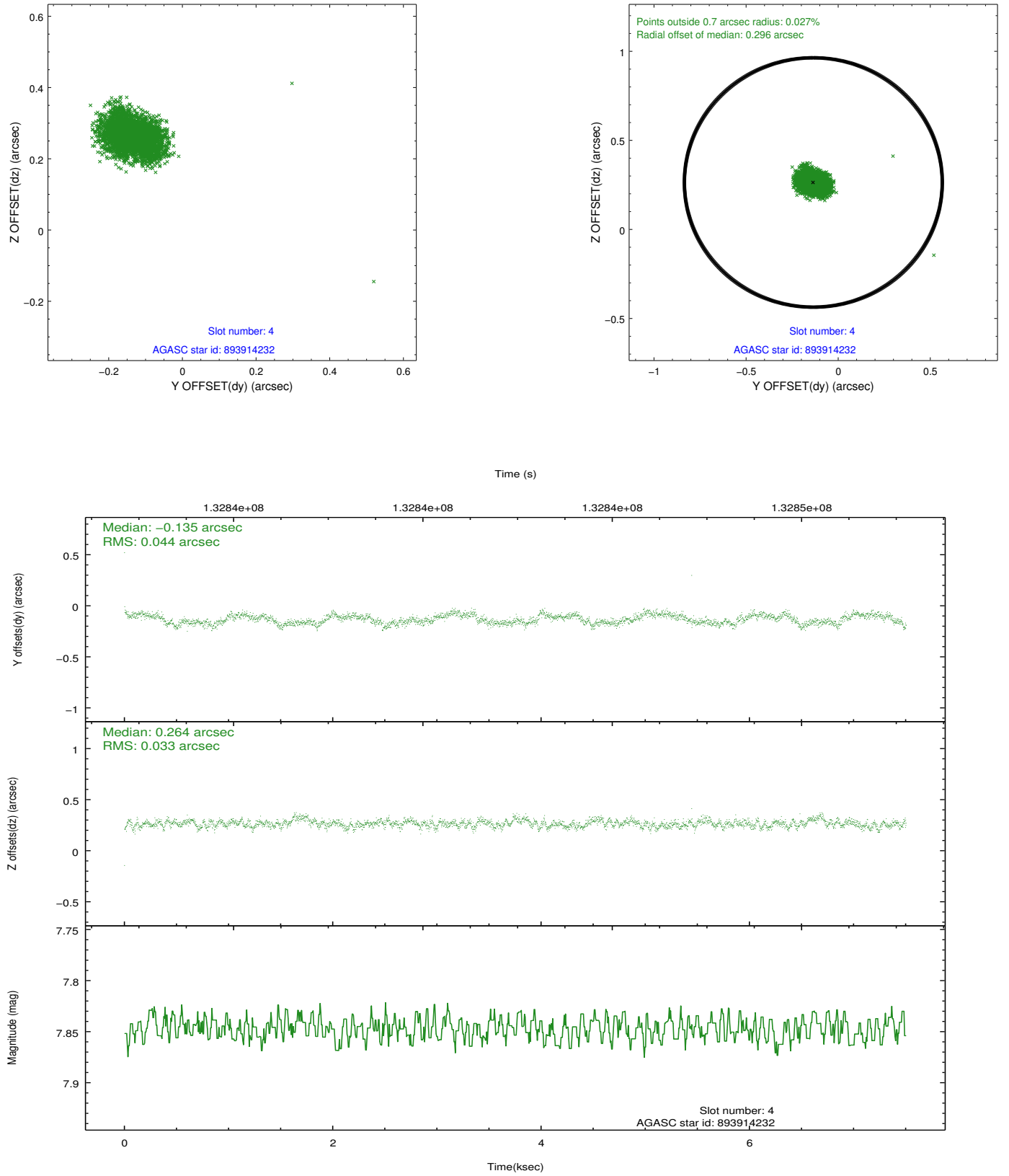
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	1825	-0.003	-0.002	0.008	0.012	0.000000	0.000000	-755.65	-1729.18
1	FID	ACIS-S-4	7.20	1825	-0.038	0.002	0.006	0.010	0.000000	0.000000	2157.26	178.51
2	FID	ACIS-S-5	7.24	1825	0.011	0.009	0.009	0.015	0.000000	0.000000	-1807.49	173.07
3	GUIDE	893837696	7.92	3655	0.048	-0.186	0.049	0.079	257.277958	-26.423720	857.03	452.02
4	GUIDE	893914232	7.85	3654	-0.135	0.264	0.058	0.090	257.948003	-26.439334	1009.30	-1702.80
5	GUIDE	893913752	8.70	3655	0.188	0.093	0.055	0.091	257.717246	-26.451689	894.97	-967.30
6	GUIDE	893837592	9.30	3655	-0.060	-0.202	0.080	0.129	256.924631	-26.316123	1128.24	1624.50
7	GUIDE	893835576	8.92	3654	-0.040	0.034	0.089	0.139	257.152526	-26.836742	-662.41	706.46

2.4 Star Slots

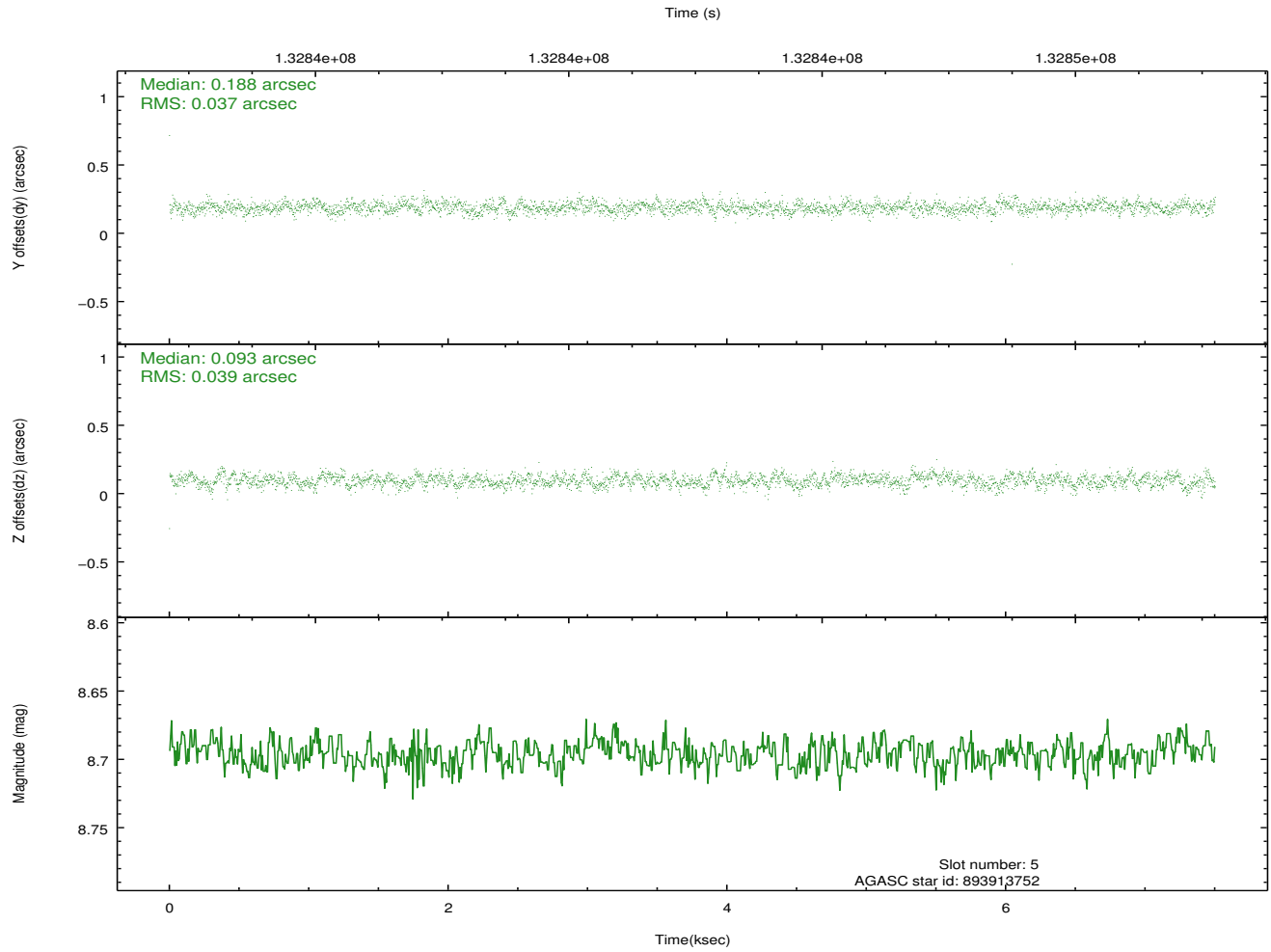
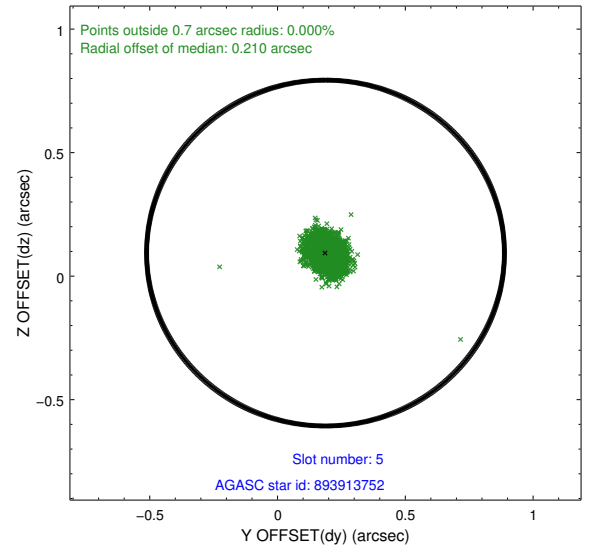
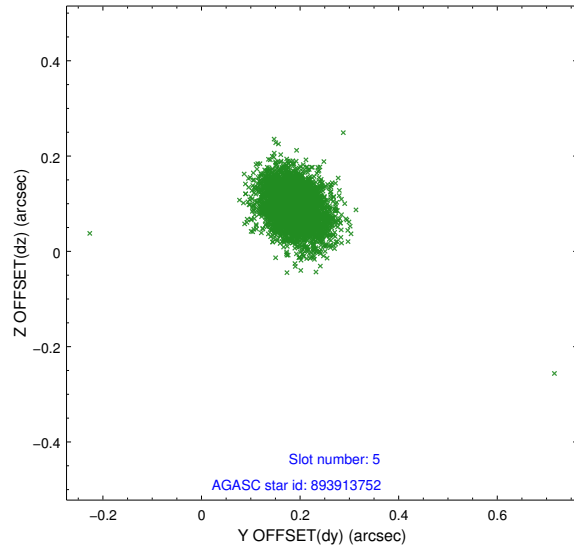
2.4.1 Slot 3



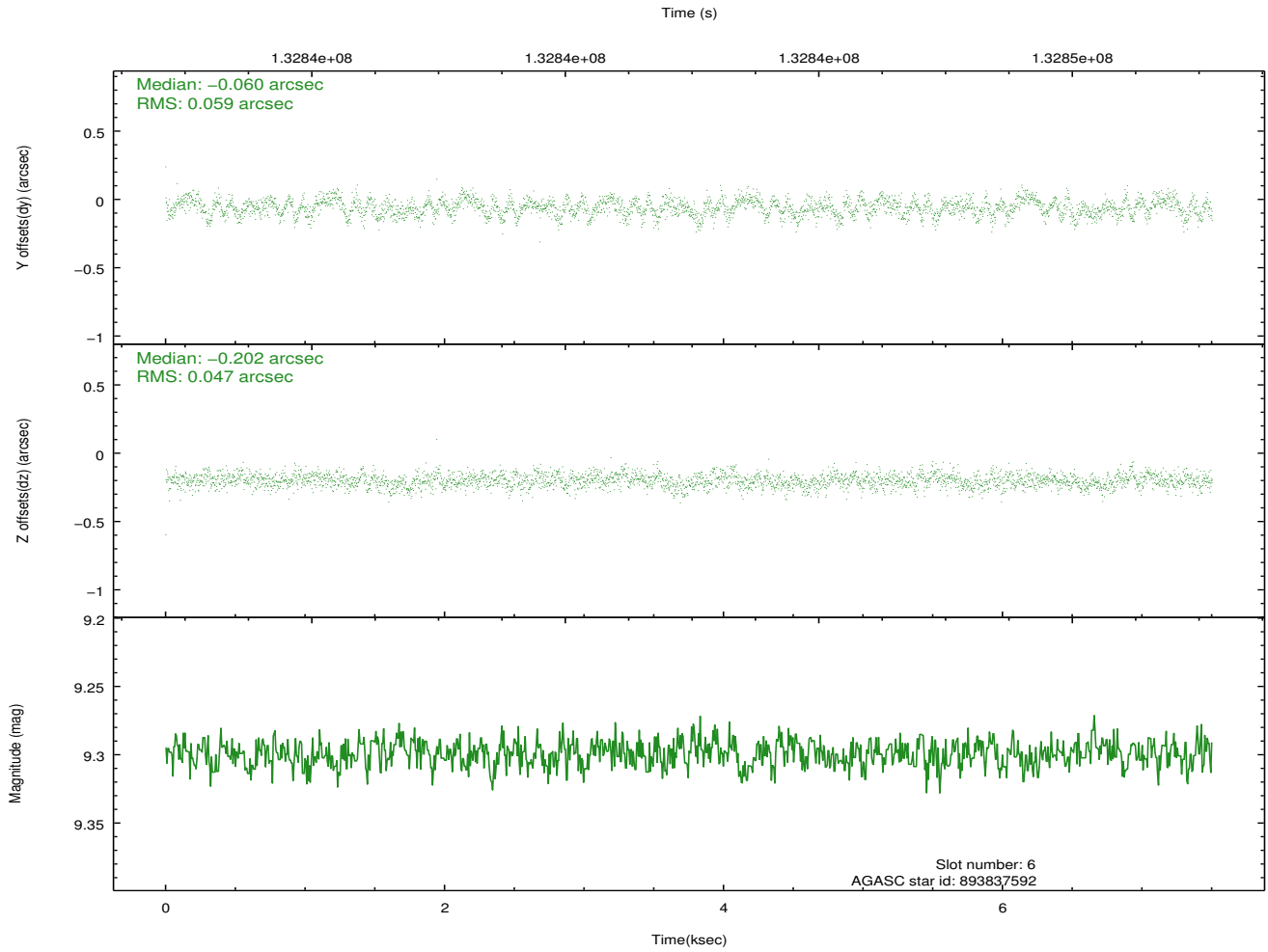
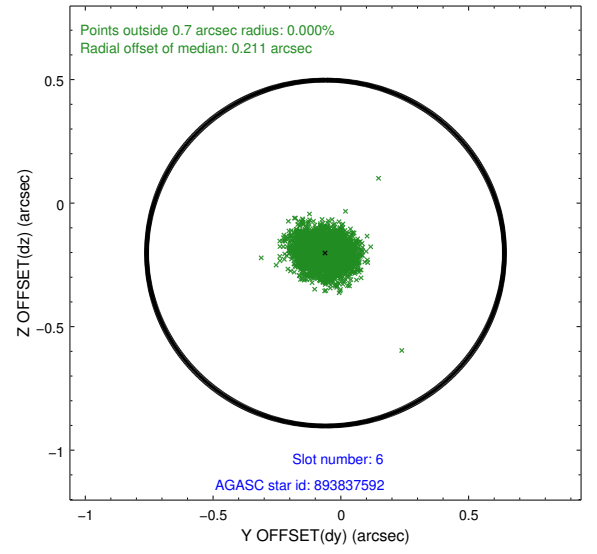
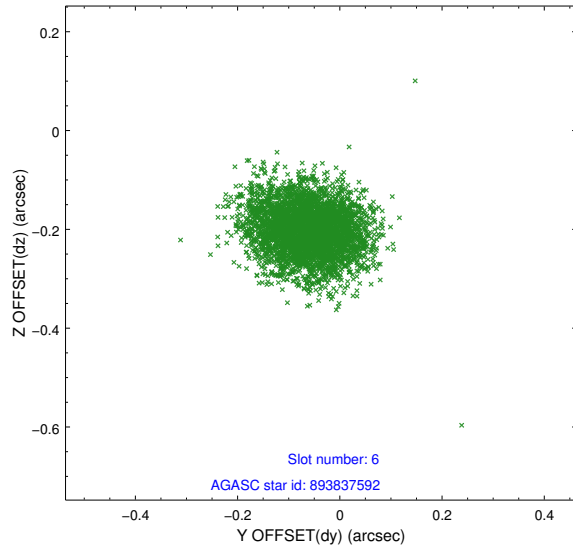
2.4.2 Slot 4



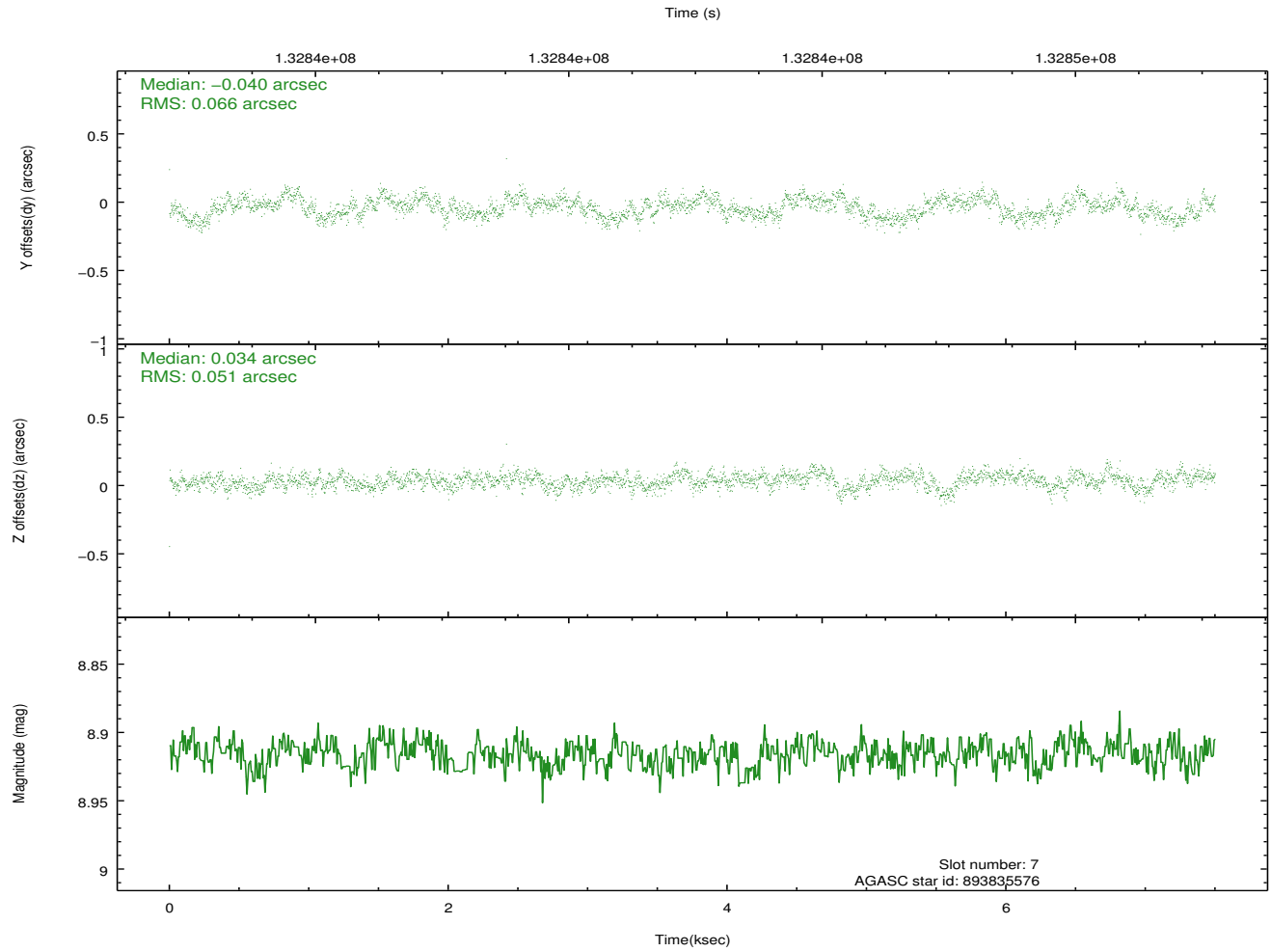
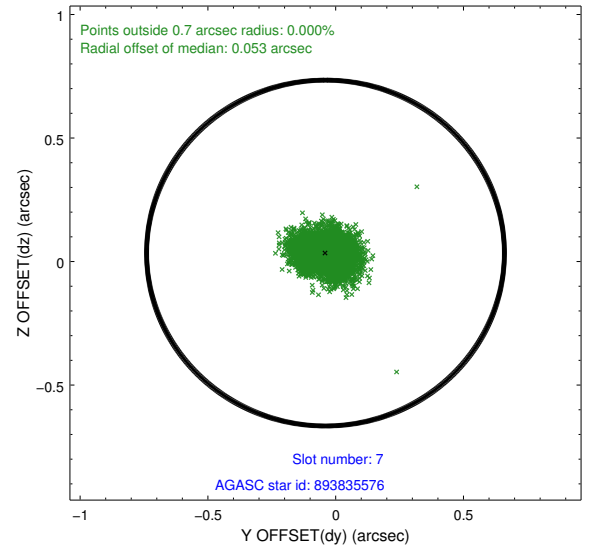
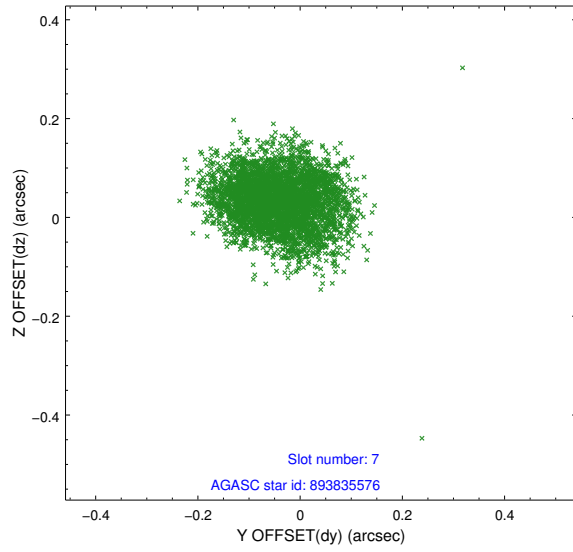
2.4.3 Slot 5



2.4.4 Slot 6

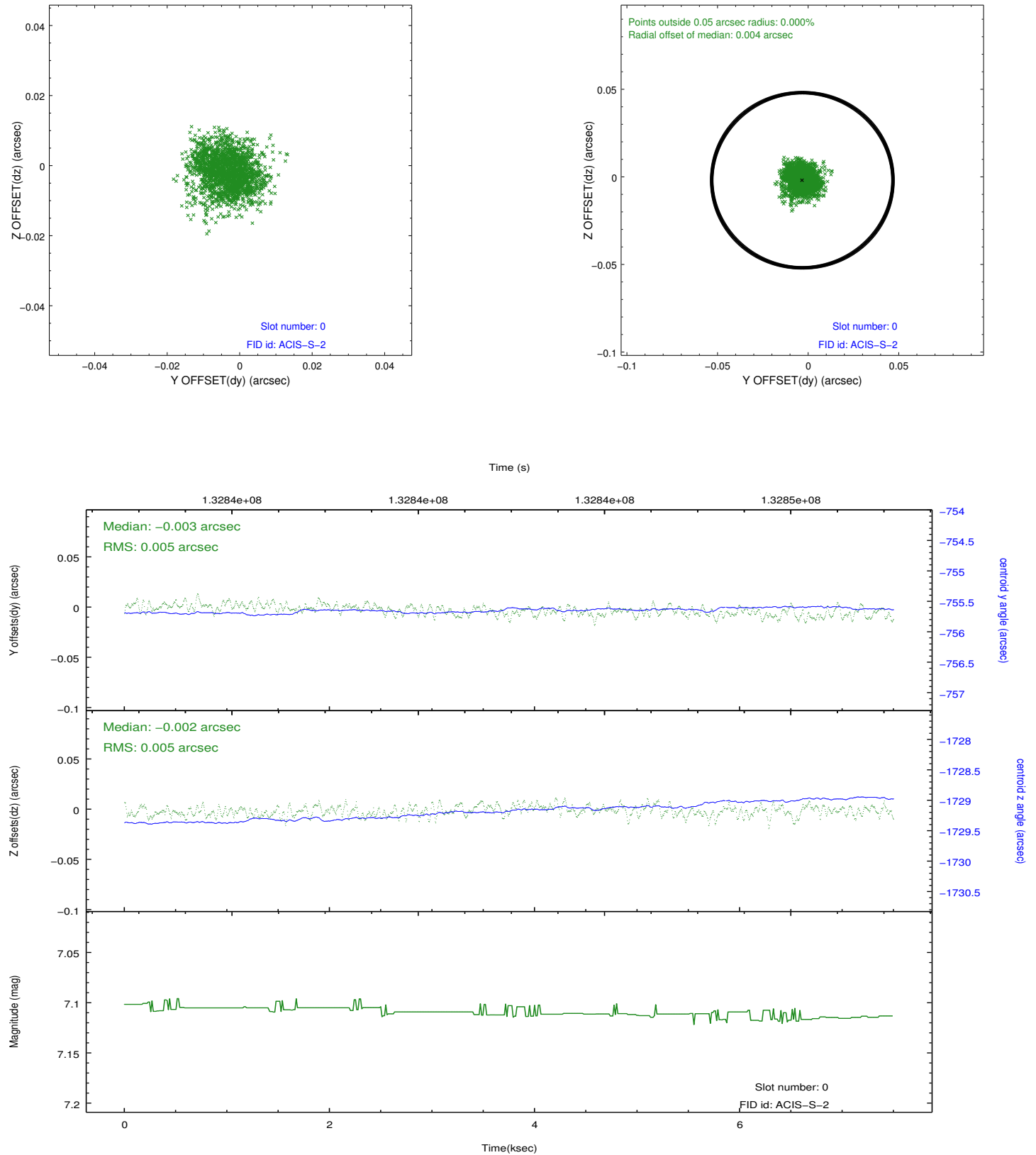


2.4.5 Slot 7

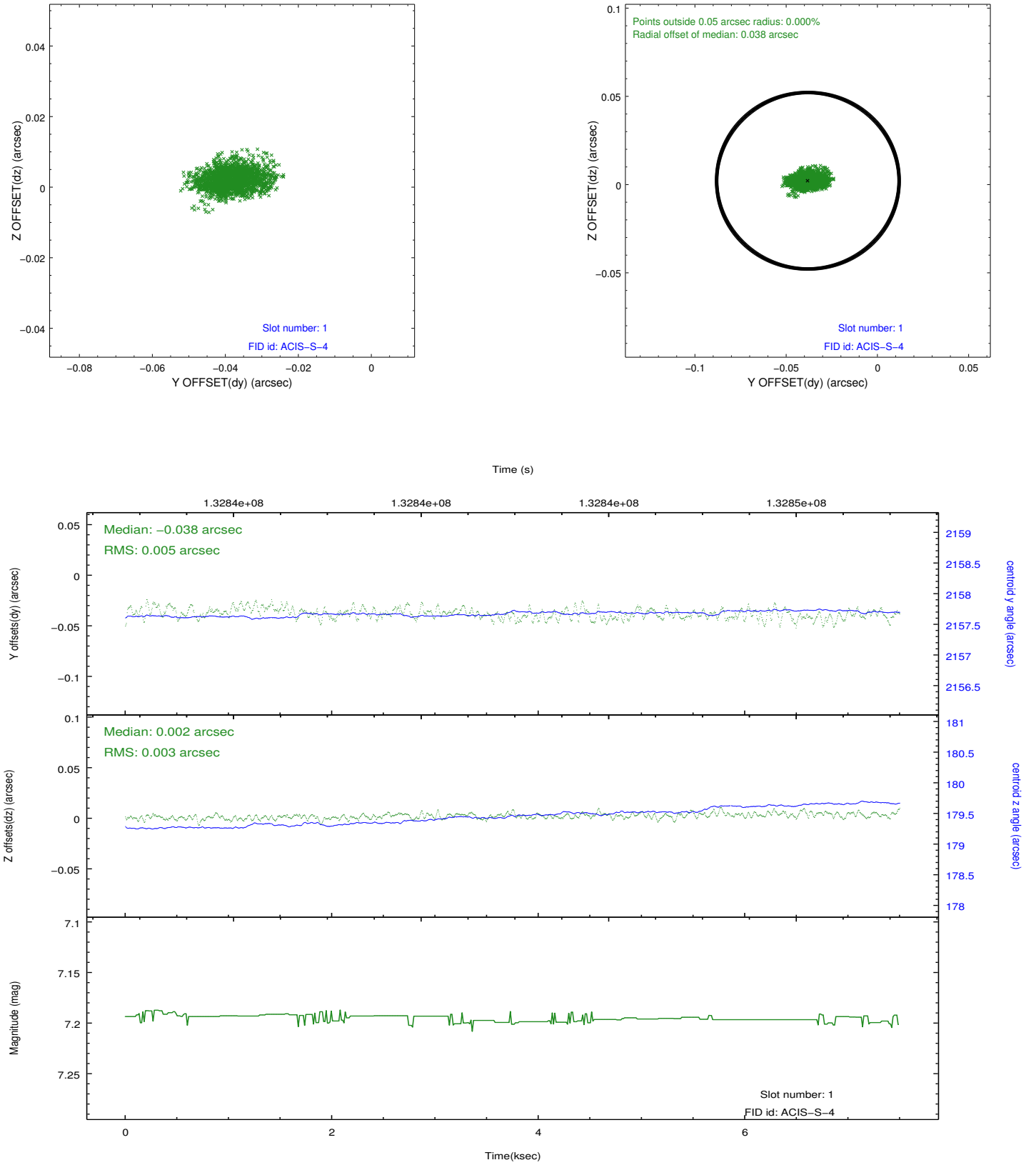


2.5 FID Slots

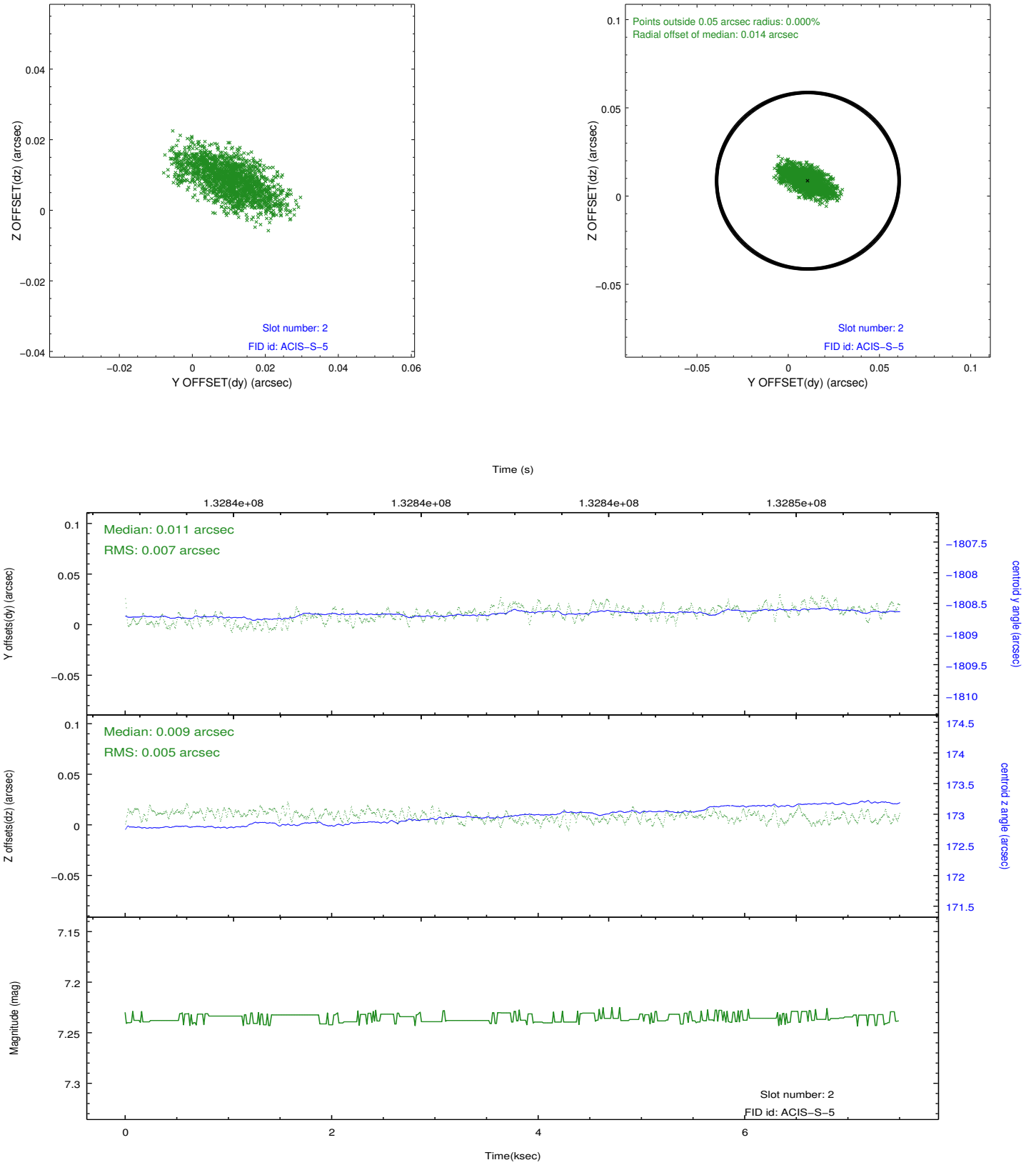
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.12.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.477

A.2 Comments

Observation cut short due to high radiation. S1 looks clean and could be used for background for S3. Background increases significantly about 6500s into the observation. The source events on S3 look reasonable (aspect corrected); note that the source dithers across a node boundary, which will introduce spurious periodic features into the light curve. Chip S4 has elevated 'streaking' with dropped frames.

===

This observation was interrupted by safing of the science instruments onboard Chandra due to high solar radiation environment. The observation was interrupted at 13:54 on March 18, 2002 GMT. Due to a high radiation environment, the instruments were safed and the observation terminated early. This observation has been reprocessed so that the aspect solution correctly handles the instrument safing and maneuver activities at the end of the observation.

===

The high count rate resulted in telemetry saturation and a large number of dropped exposures. The telemetry saturation occurs primarily during the high radiation time near the end of the observation. The ONTIME value reflects the lost exposure time.

===

Charge time for this ObsId remains at original value of 8.477 ksec, although with the current processing the charge time would have been 7.468 ksec.

Variation in Chips > 15% threshold.

Low Chip 8, ONTIME=5493.850839 seconds

High Chip 7, ONTIME=7468.037951 seconds

Chip 8, ONTIME=5493.850839 seconds is less than 80% of scheduled time=15000.000000 seconds

Chip 7, ONTIME=7468.037951 seconds is less than 80% of scheduled time=15000.000000 seconds

Chip 6, ONTIME=7119.297485 seconds is less than 80% of scheduled time=15000.000000 seconds

Chip 5, ONTIME=7454.895961 seconds is less than 80% of scheduled time=15000.000000 seconds

Chip 3, ONTIME=7249.194346 seconds is less than 80% of scheduled time=15000.000000 seconds

Chip 2, ONTIME=7230.168931 seconds is less than 80% of scheduled time=15000.000000 seconds

ONTIME of 7468.0379508436 seconds is less than 85% of expected scheduled time of 15000 seconds