

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 14699 - L2 Version 2
Chandra X-Ray Center

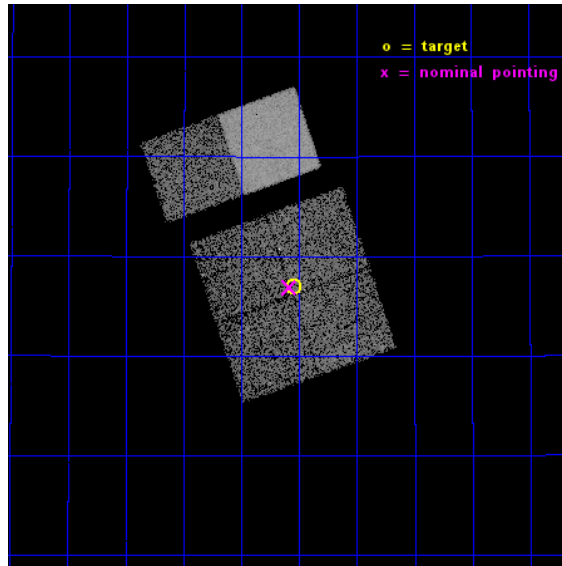
L2 Processing Date : Nov 30 2014

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

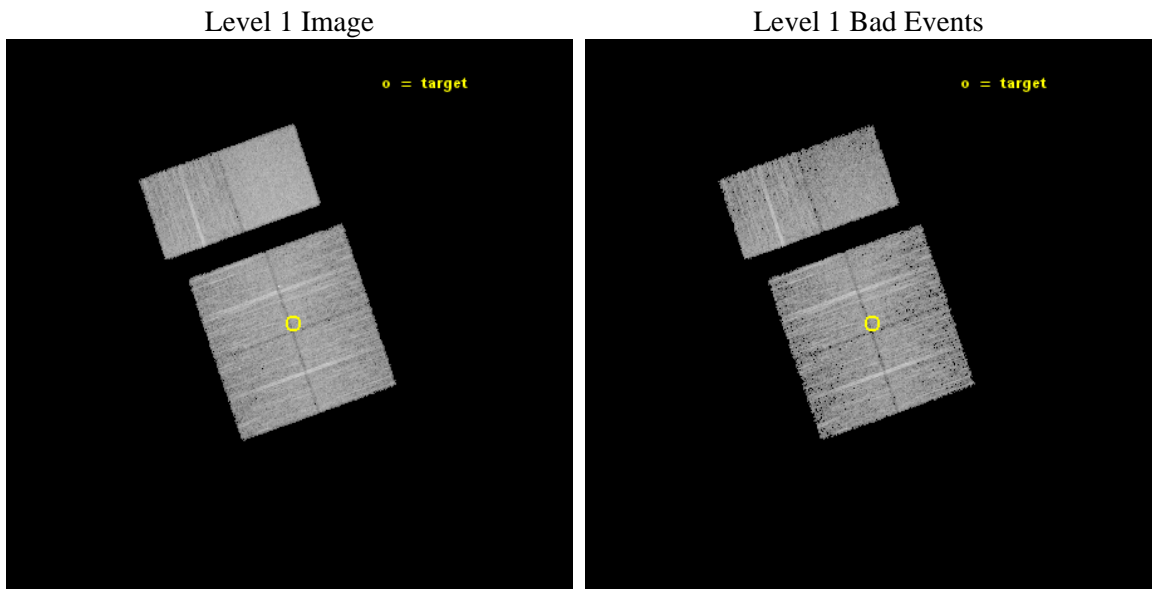
seq_num	501827	Sequence number
obs_id	14699	Observation id
title	Revealing pulsars hidden in the 2nd Fermi Catalogue	Proposal title
observer	Dr. George Pavlov	Principal investigator
object	2FGL J2018.0+3626	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	304.510833	Observer's specified target RA [deg]
dec_targ	36.448333	Observer's specified target Dec [deg]
ra_nom	304.52089427721	Nominal RA [deg]
dec_nom	36.448112469268	Nominal Dec [deg]
roll_nom	340.85894812895	Nominal Roll [deg]
revision	2	Processing version of data
ontime	9970.1969343424	Sum of GTIs [s]
livetime	9843.9482974279	Livetime [s]
ontime0	9970.0738143325	Sum of GTIs [s]
ontime1	9970.1148543358	Sum of GTIs [s]
ontime2	9970.1558943391	Sum of GTIs [s]
ontime3	9970.1969343424	Sum of GTIs [s]
ontime6	9970.279014349	Sum of GTIs [s]
ontime7	9970.2379743457	Sum of GTIs [s]
l2events	61467	Number of level 2 events



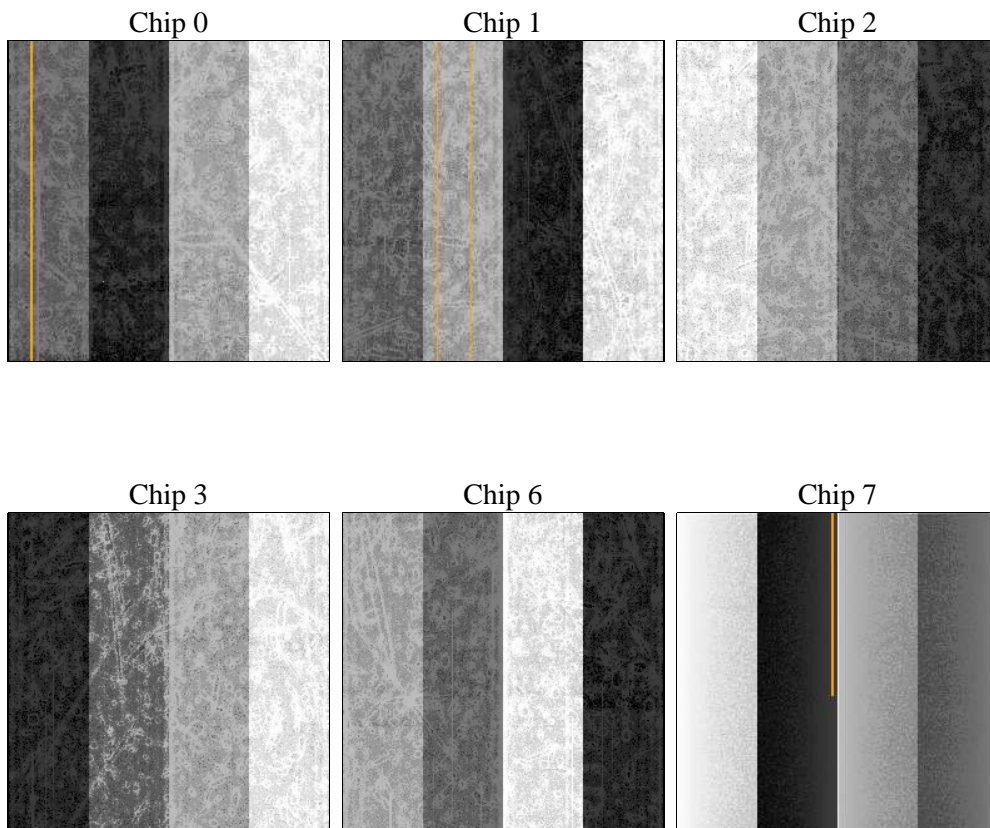
2 OBI

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	10.3	Processing system revision	ontime	9970.1969343424	Sum of GTIs [s]
caldbver	4.6.4	 	ontime0	9970.0738143325	Sum of GTIs [s]
date	2014-11-30T22:08:00	Date and time of file creation	ontime1	9970.1148543358	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	9970.1558943391	Sum of GTIs [s]
			ontime3	9970.1969343424	Sum of GTIs [s]
			ontime6	9970.279014349	Sum of GTIs [s]
			ontime7	9970.2379743457	Sum of GTIs [s]
			l1events	332466	Number of level 1 events

2.1.4 Events

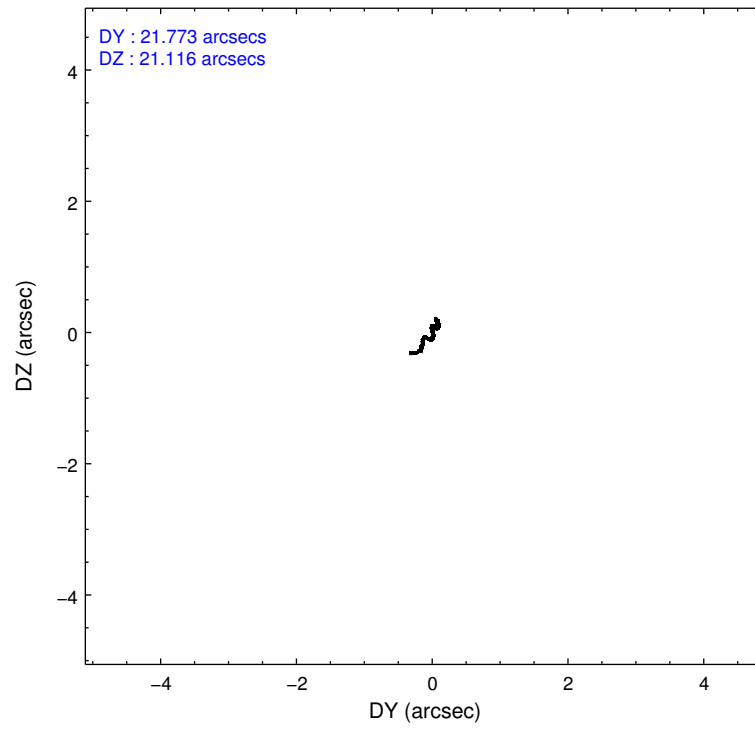
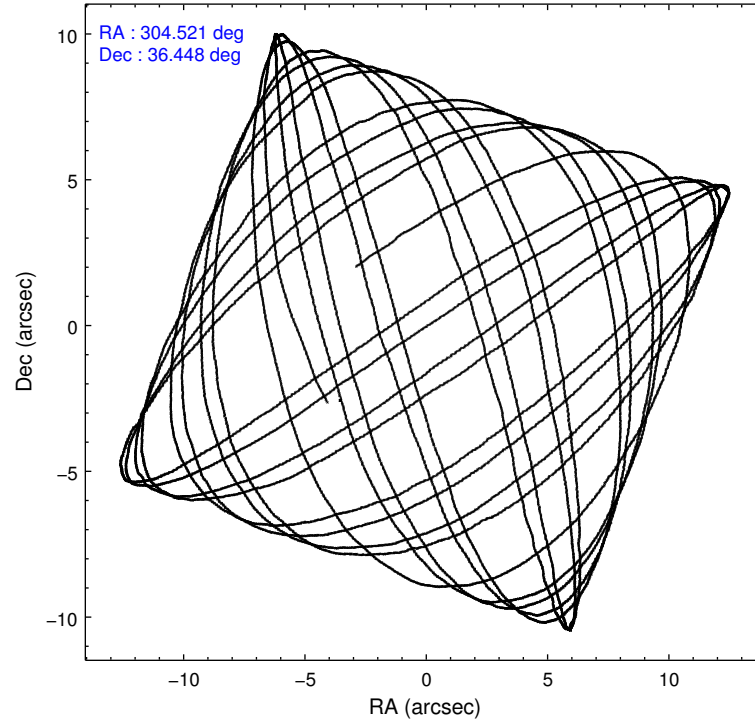
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	47156	50678	54067	51706	55692	73167	grade 0 events	2509	2923	2597	2977	2502	3084
rejected events	40472	43099	47488	44686	48807	40442		5%	5%	4%	5%	4%	4%
rejected %	85%	85%	87%	86%	87%	55%	grade 1 events	29	30	26	44	28	85
								0%	0%	0%	0%	0%	0%
							grade 2 events	1609	1700	1519	1393	1551	6917
								3%	3%	2%	2%	2%	9%
							grade 3 events	673	768	601	668	672	2878
								1%	1%	1%	1%	1%	3%
							grade 4 events	638	716	662	703	625	2843
								1%	1%	1%	1%	1%	3%
							grade 5 events	2433	2566	2228	2879	2895	7721
								5%	5%	4%	5%	5%	10%
							grade 6 events	1268	1476	1204	1281	1541	17034
								2%	2%	2%	2%	2%	23%
							grade 7 events	37997	40499	45230	41761	45878	32605
								80%	79%	83%	80%	82%	44%

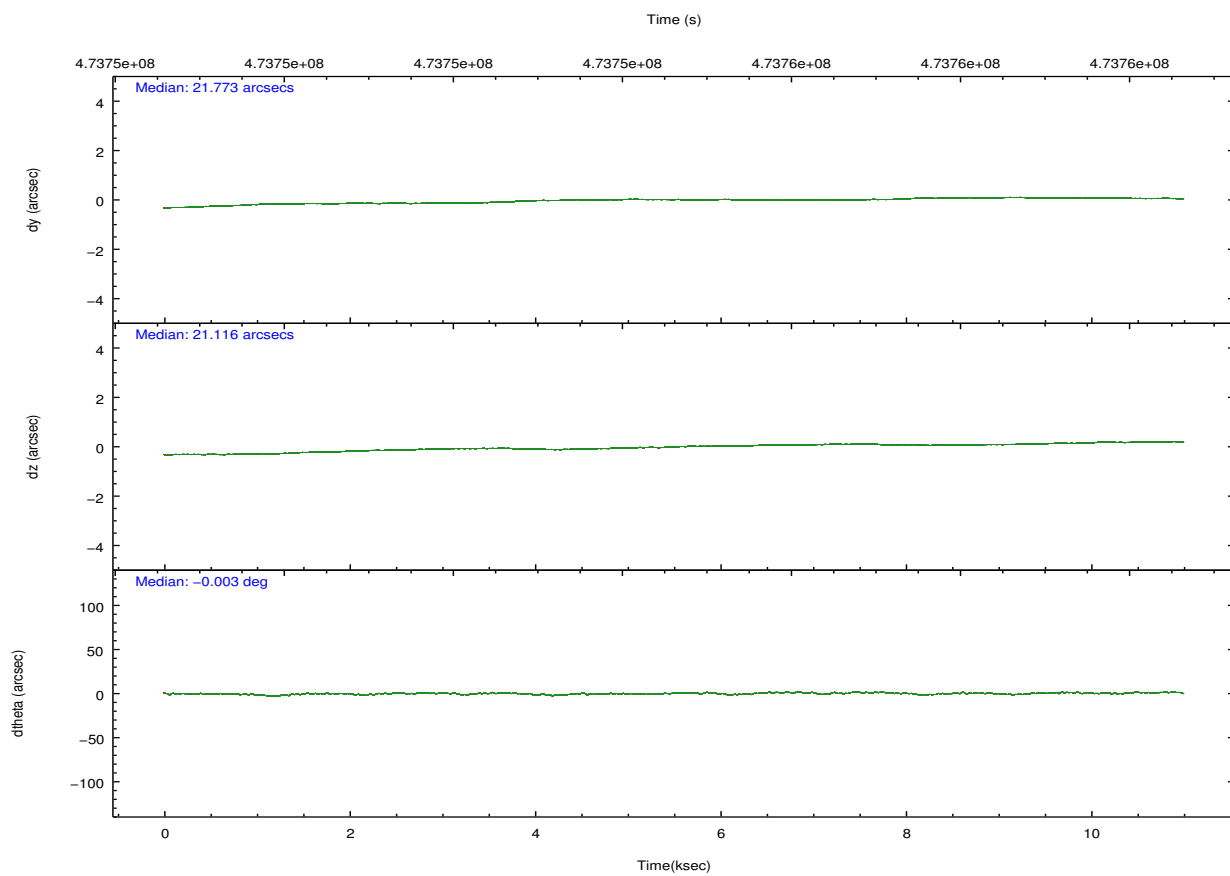
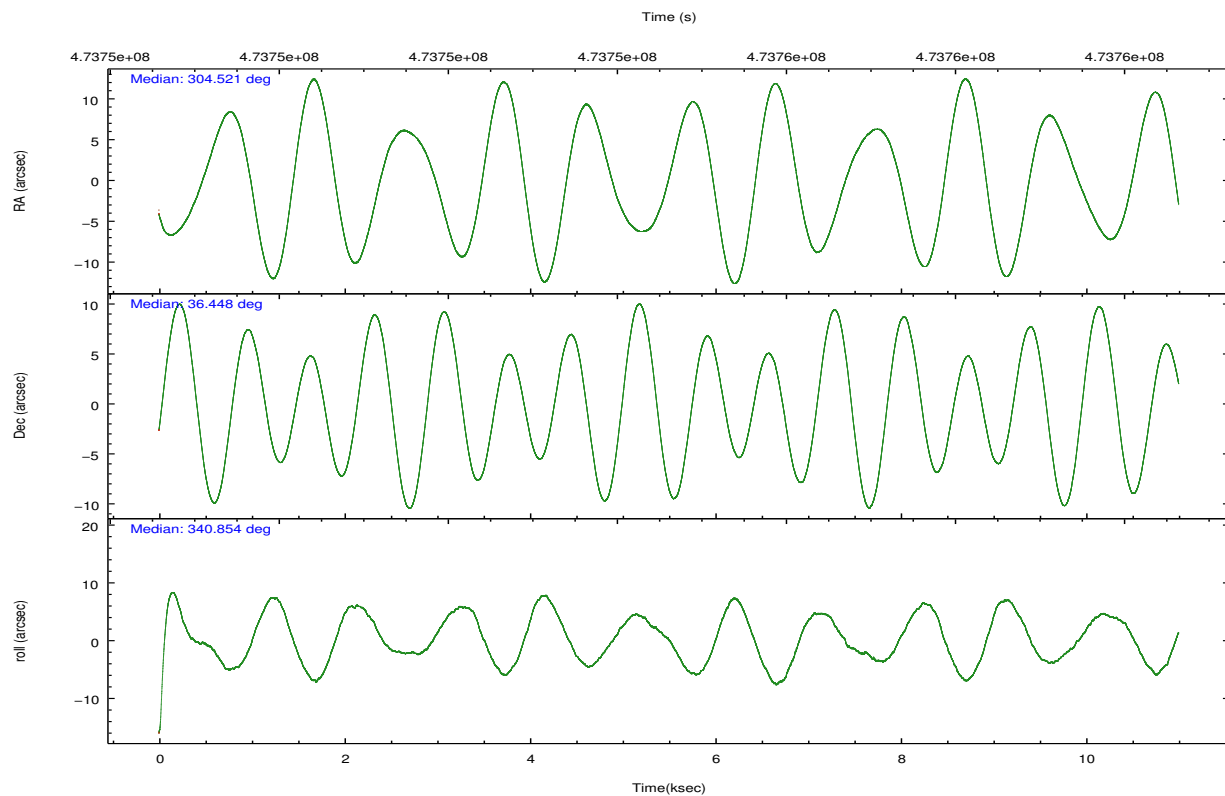
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-012367	ACIS-012367
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	304.487330	304.5208942772088
[deg] Pointing Dec	36.442787	36.4481124692677
[deg] Pointing Roll	340.670224	340.8589481289545
[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)	473750110.184000	473748743.6608
Observation start date	2013-01-05T05:14:03	2013-01-05T04:52:23
[s] Observation end time (MET)	473760110.184000	473761074.92396
Observation end date	2013-01-05T08:00:43	2013-01-05T08:17:54
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
CCD I0 on	Y	Y
CCD I1 on	Y	Y
CCD I2 on	Y	Y
CCD I3 on	Y	Y
CCD S0 on	N	N
CCD S1 on	N	N
CCD S2 on	O1	Y
CCD S3 on	O2	Y
CCD S4 on	N	N
CCD S5 on	N	N
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	3.2

2.3 Aspect



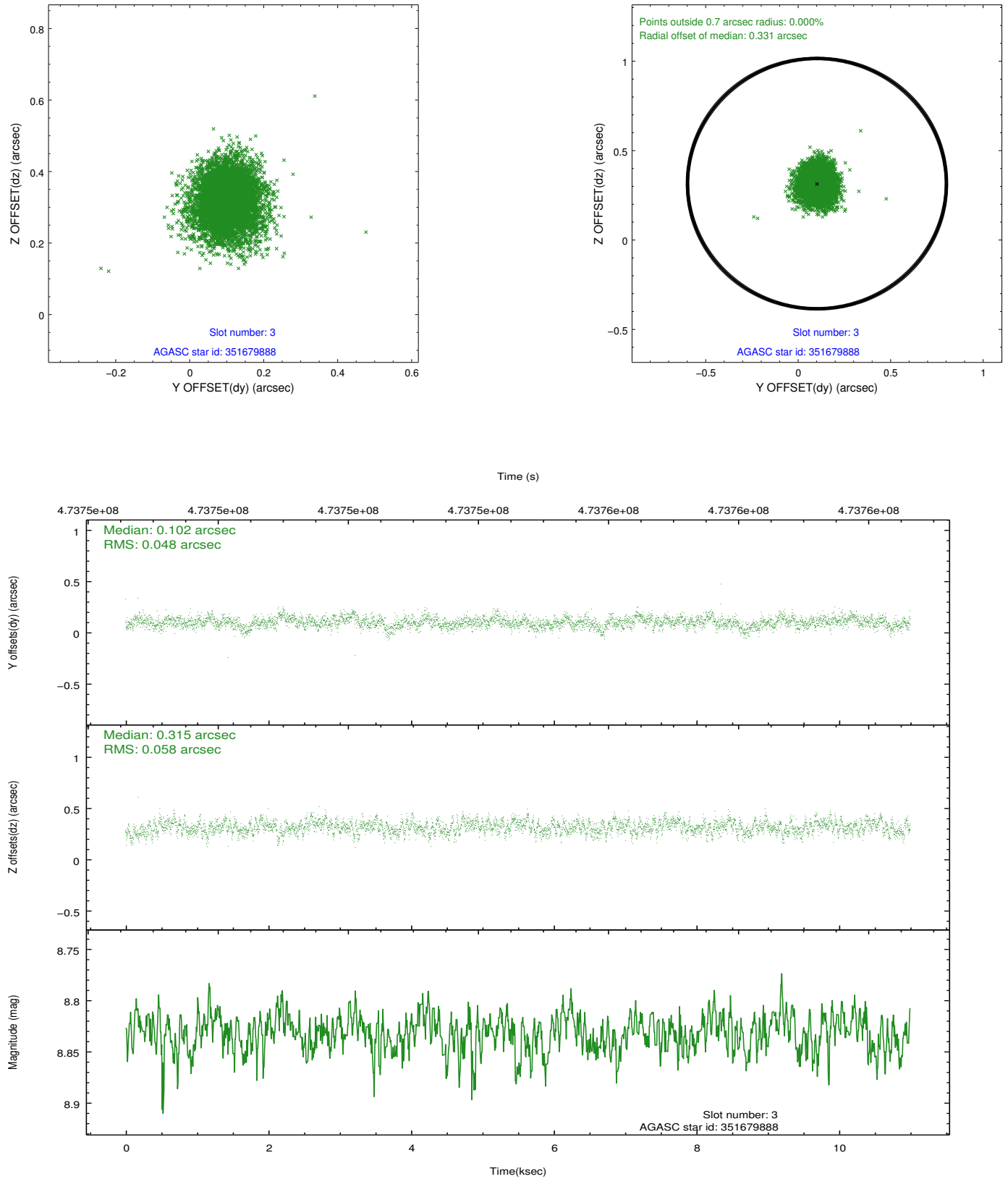


Slot Statistics

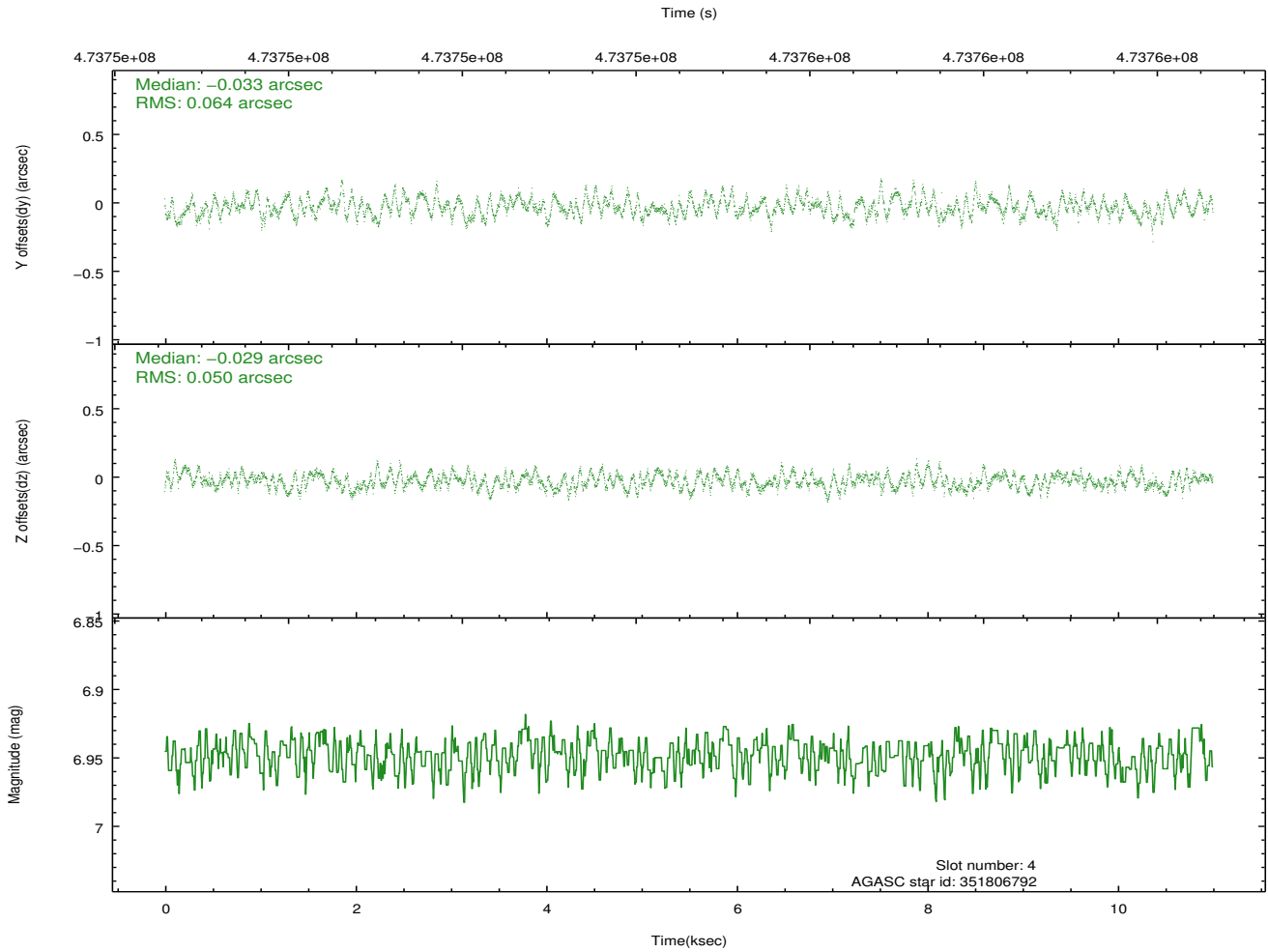
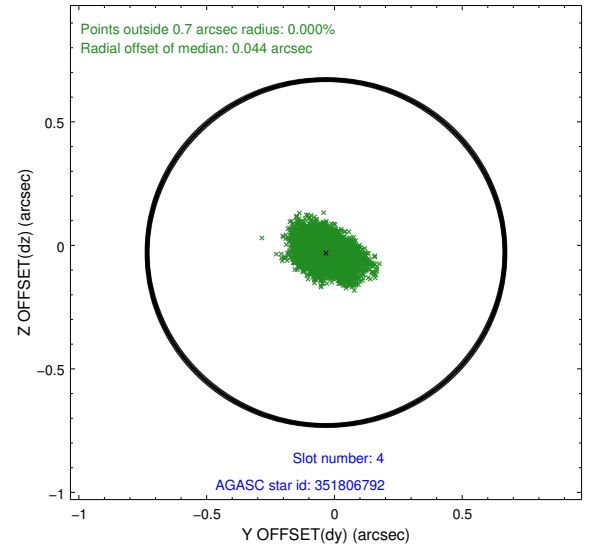
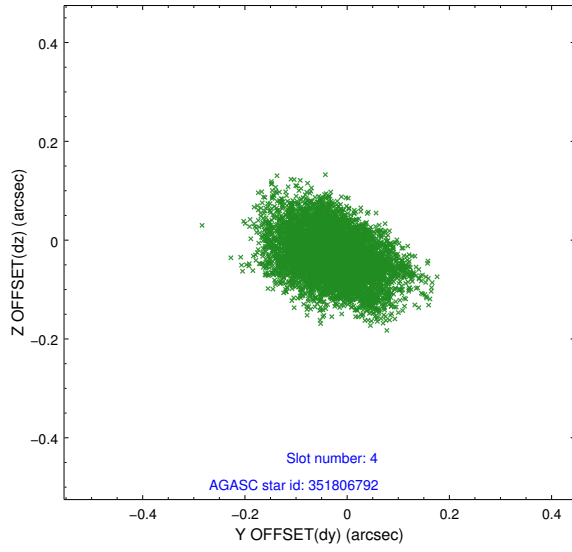
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.06	2684	0.059	-0.026	0.013	0.024	0.000000	0.000000	917.60	-844.86
1	FID		ACIS-I-5	7.05	2684	-0.236	0.055	0.011	0.018	0.000000	0.000000	-1830.56	1052.44
2	FID		ACIS-I-6	7.05	2684	0.088	0.043	0.013	0.027	0.000000	0.000000	382.63	1697.49
3	GUIDE	used	351679888	8.83	5366	0.102	0.315	0.080	0.130	303.620959	36.035348	-1897.72	-2208.19
4	GUIDE	used	351806792	6.95	5367	-0.033	-0.029	0.087	0.139	304.117302	37.056402	-1735.38	1733.98
5	GUIDE	used	351807624	7.66	5367	-0.234	-0.043	0.073	0.120	304.779553	36.752137	425.95	1330.89
6	GUIDE	used	351809872	8.04	5366	0.078	-0.205	0.076	0.123	304.614845	36.254342	574.23	-517.30
7	GUIDE	used	351806224	9.00	5365	0.079	-0.041	0.114	0.186	304.924903	35.837021	1927.10	-1632.56

2.4 Star Slots

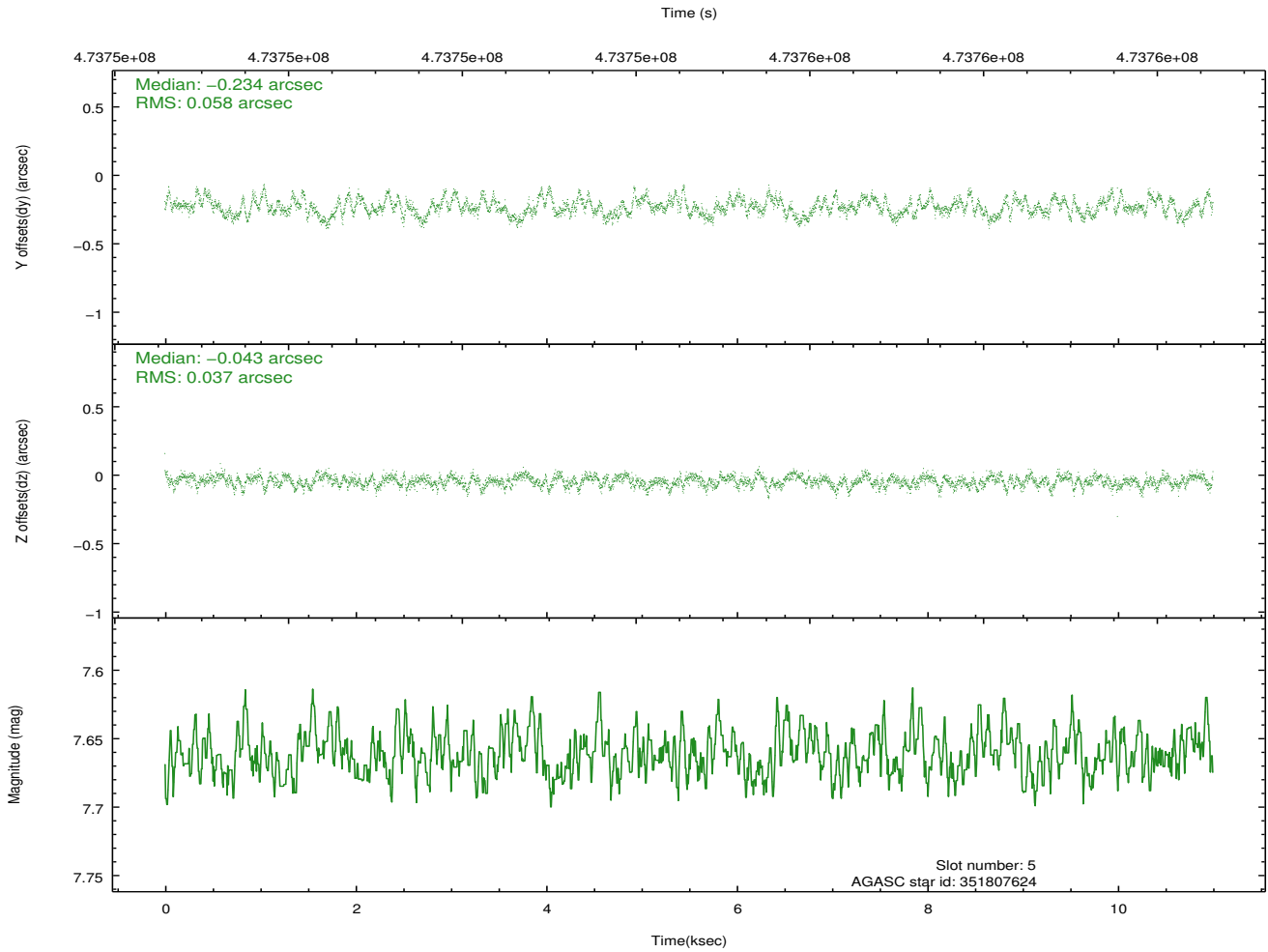
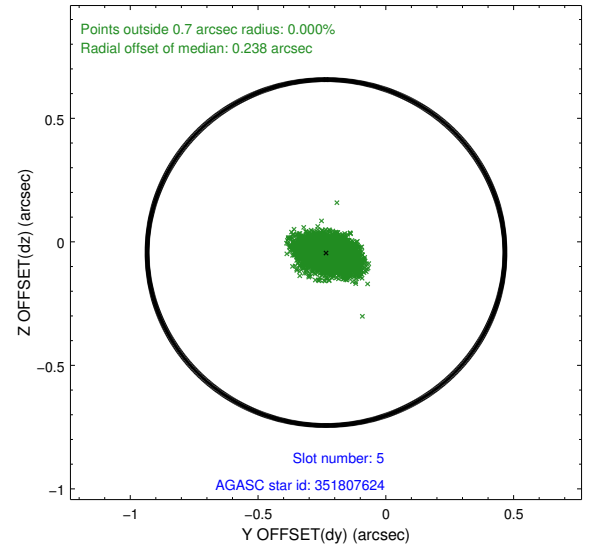
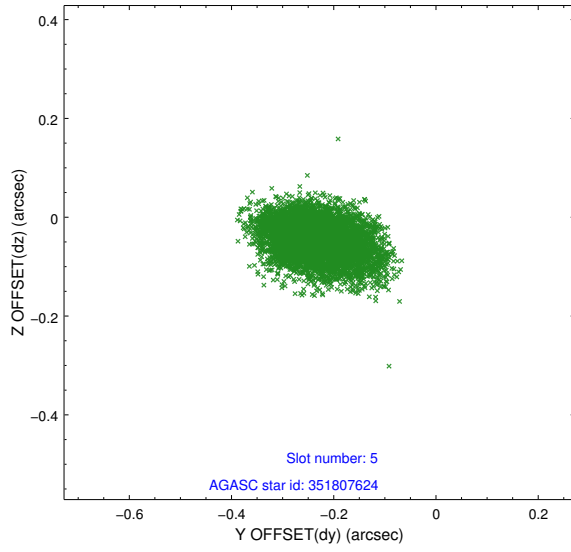
2.4.1 Slot 3



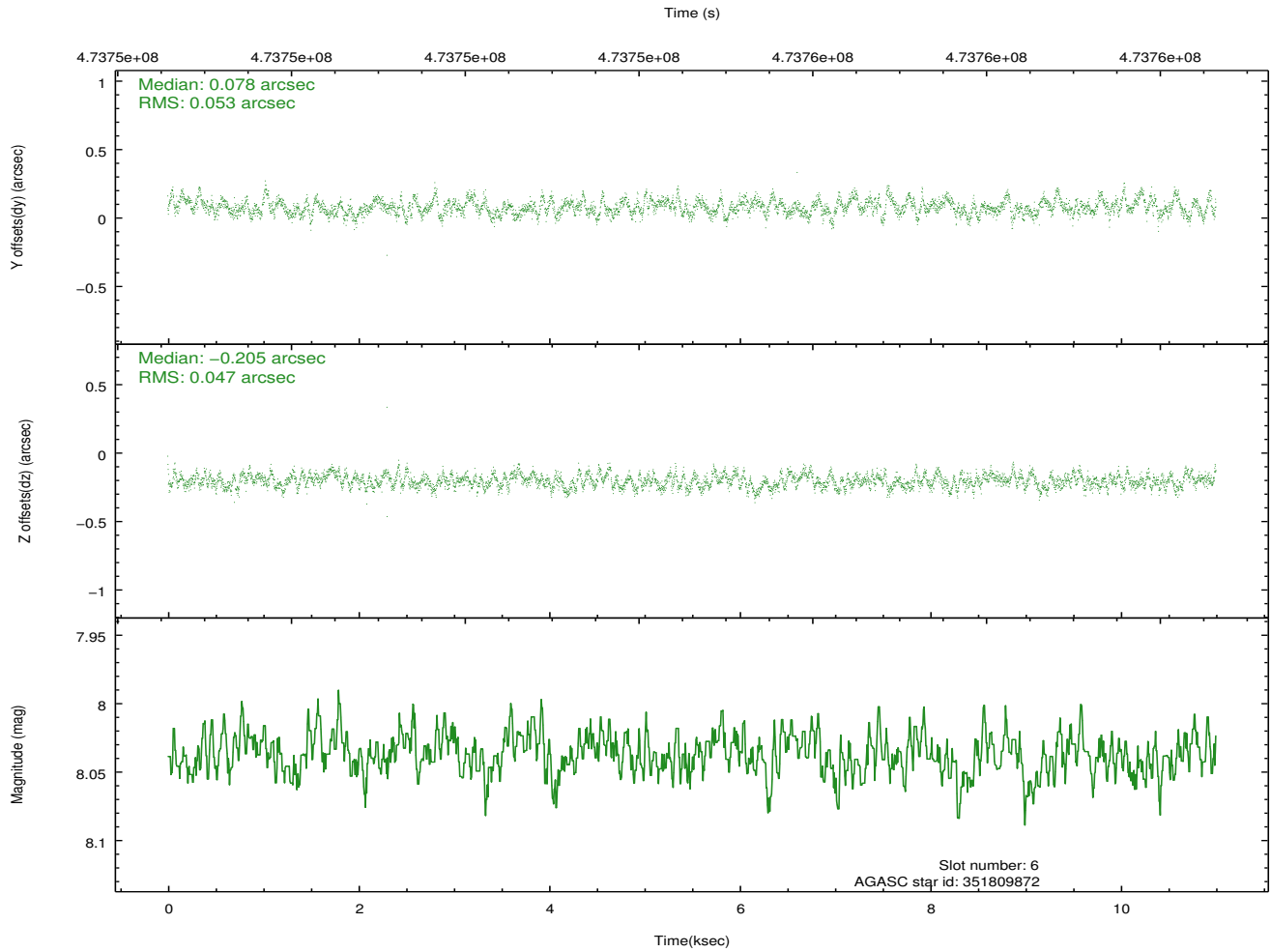
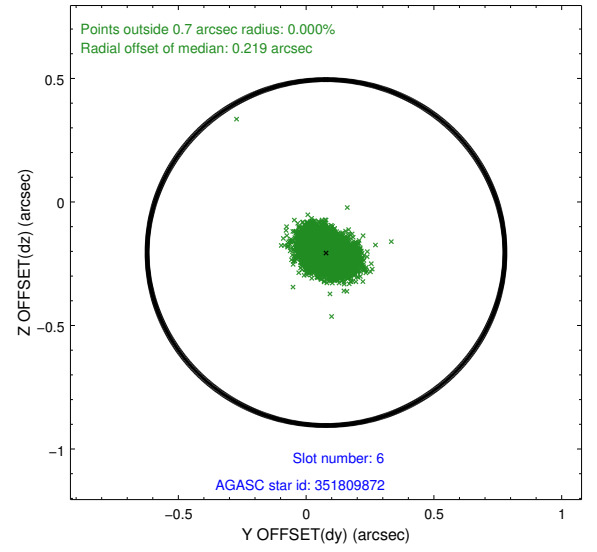
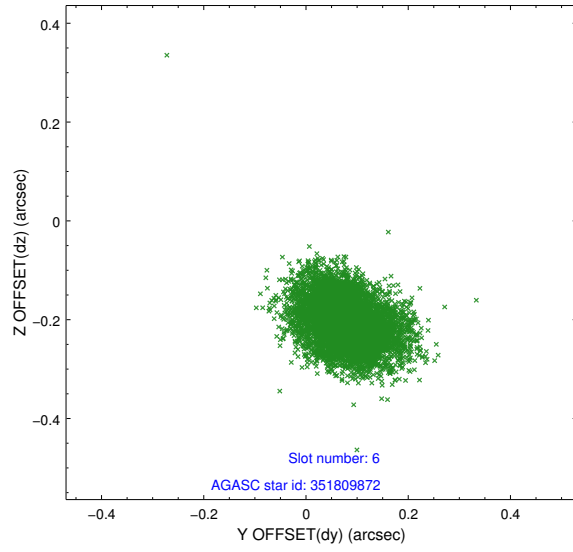
2.4.2 Slot 4



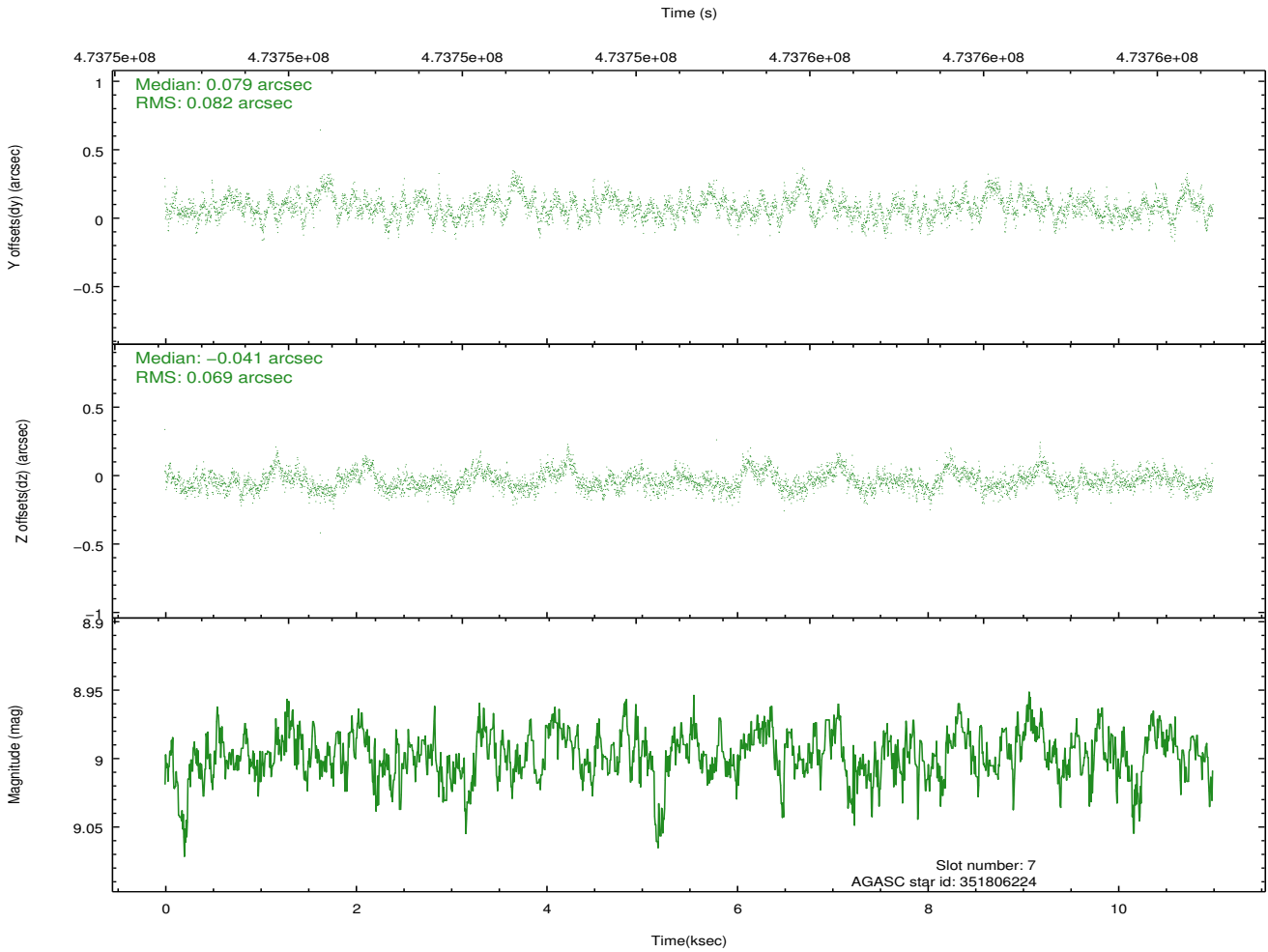
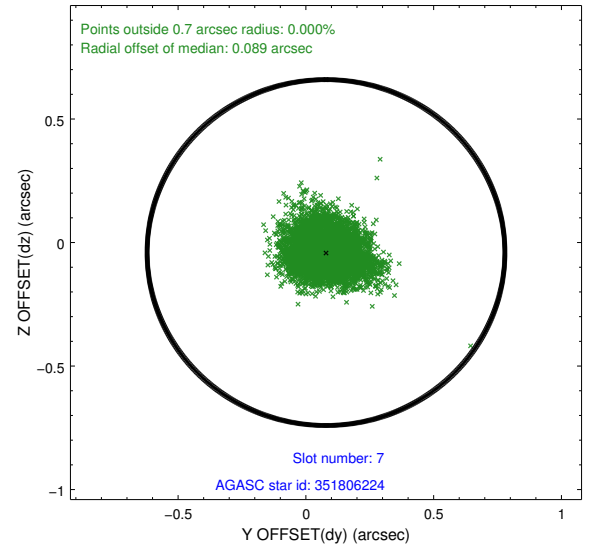
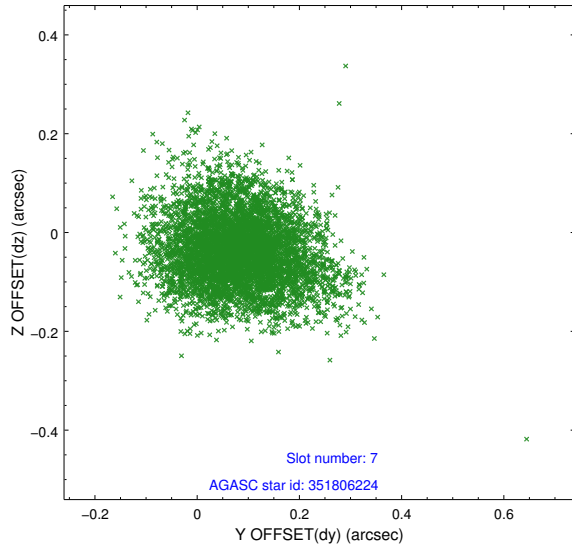
2.4.3 Slot 5



2.4.4 Slot 6

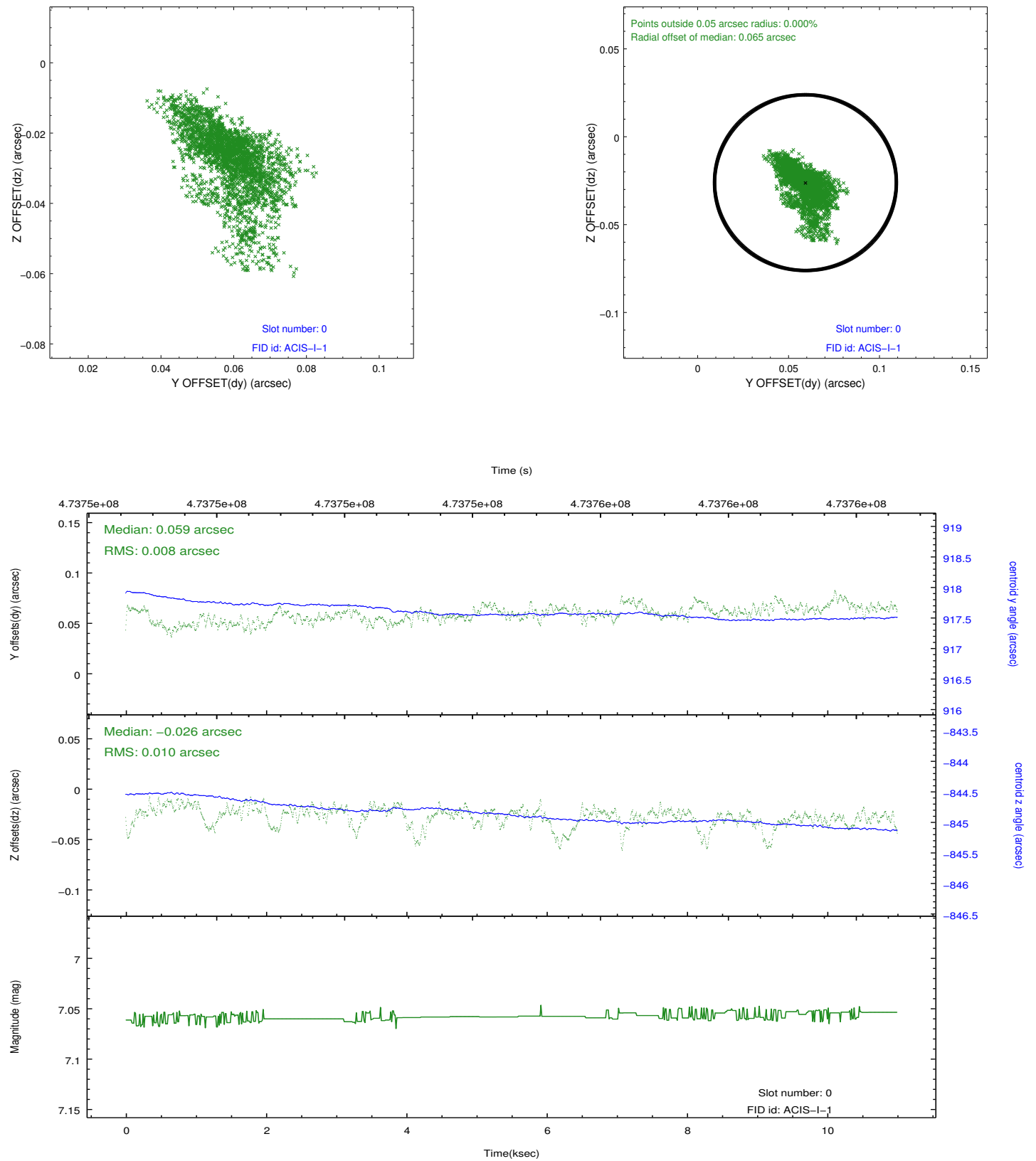


2.4.5 Slot 7

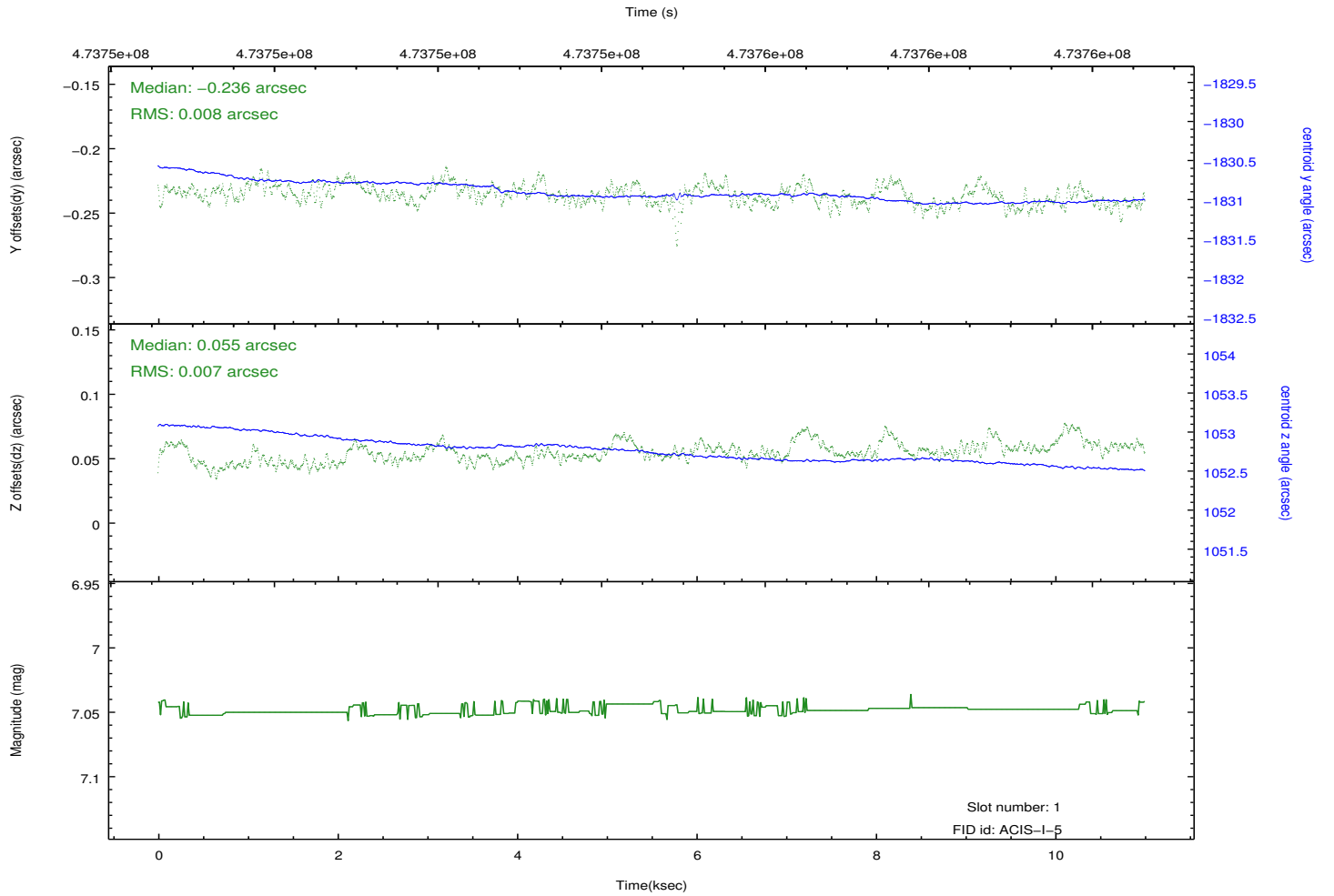
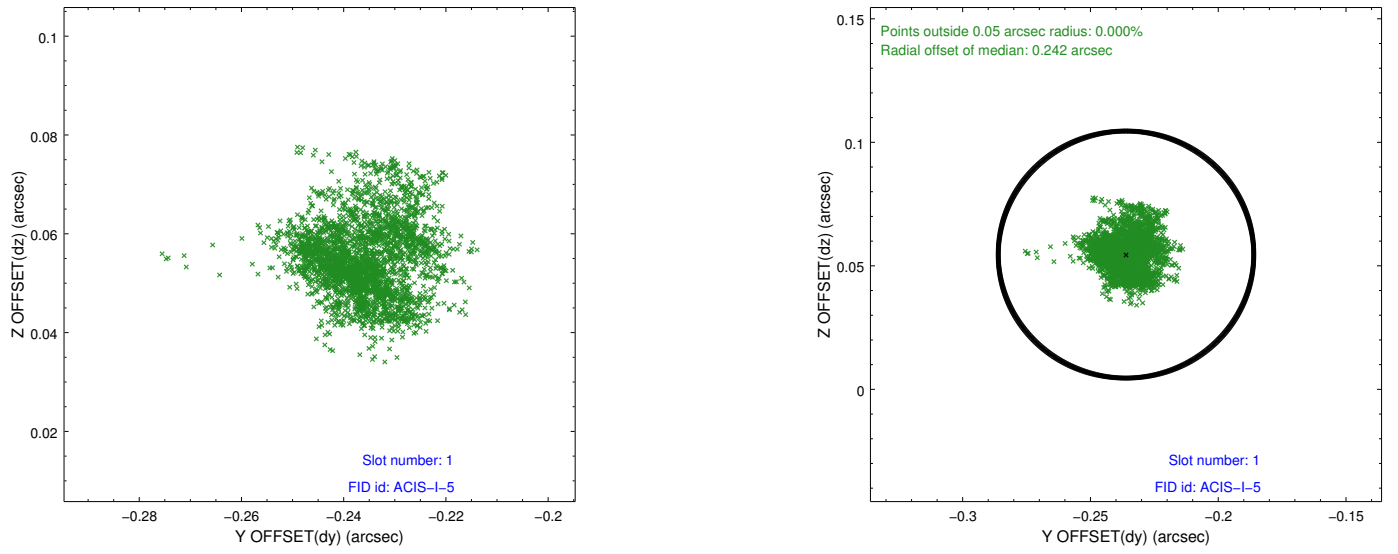


2.5 FID Slots

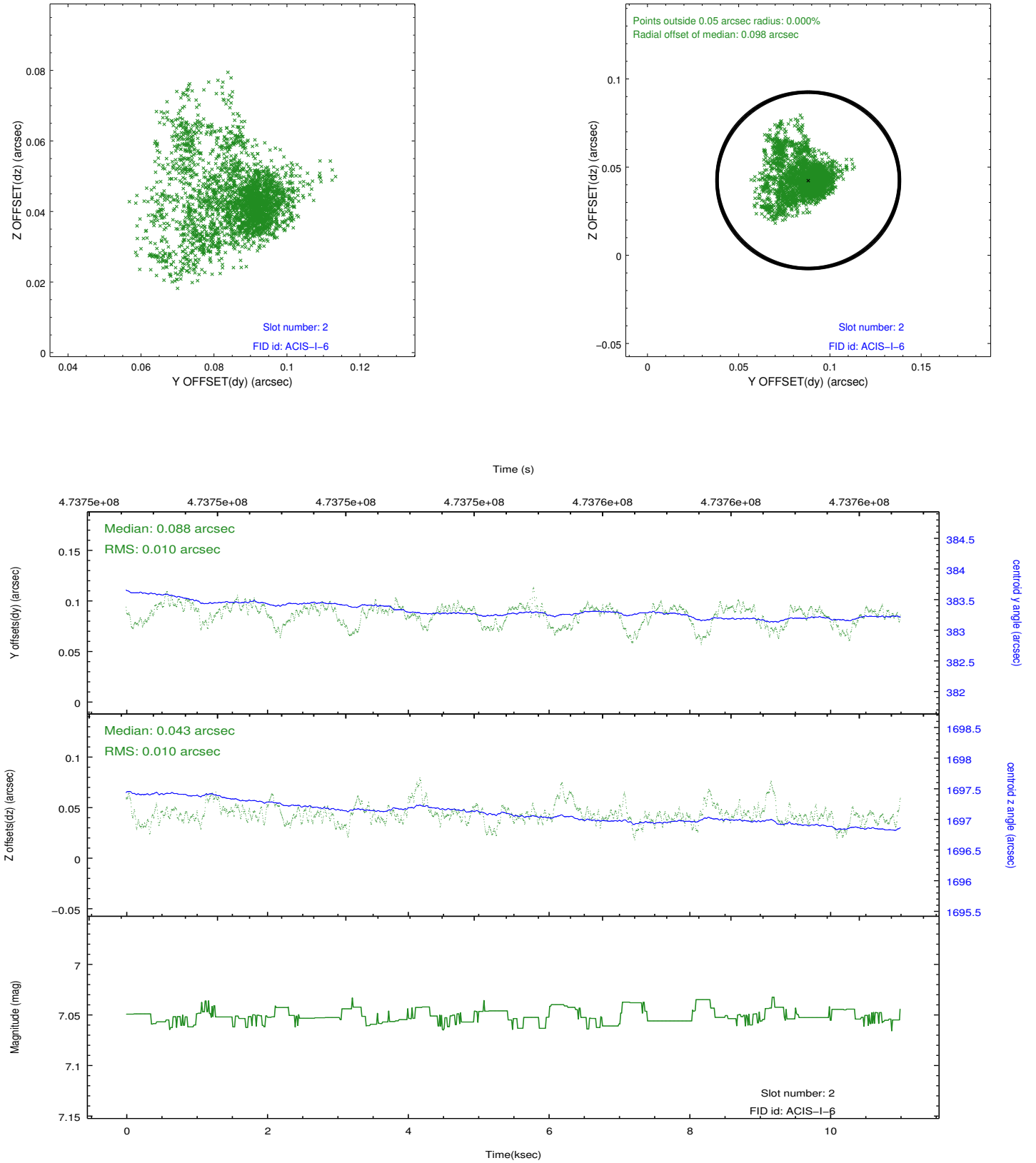
2.5.1 Slot 0



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)	2014.12.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.9701969343424

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.