

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 15580 - L2 Version 2
Chandra X-Ray Center

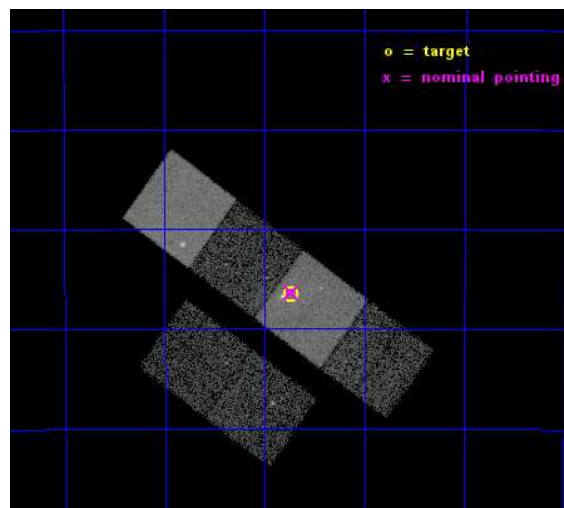
L2 Processing Date : Nov 29 2014

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1 Front

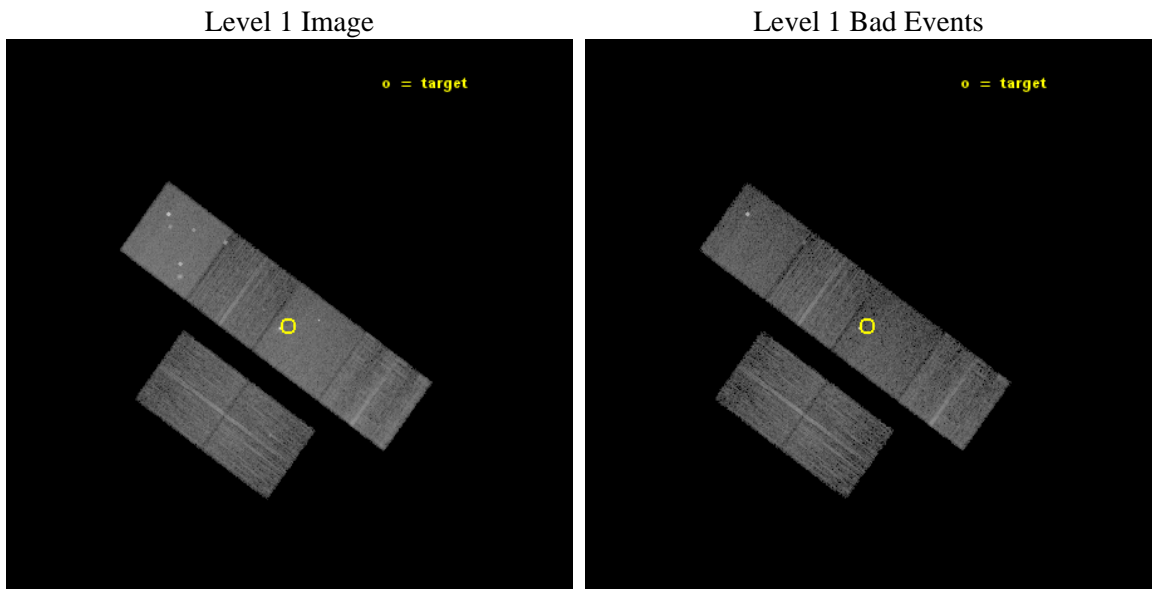
seq_num	702717	Sequence number
obs_id	15580	Observation id
title	Variability and particle acceleration in the jet of Pictor A	Propo
observer	Dr Martin Hardcastle	Principal investigator
object	Pictor A Jet	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	79.933333	Observer's specified target RA [deg]
dec_targ	-45.775556	Observer's specified target Dec [deg]
ra_nom	79.9330078398	Nominal RA [deg]
dec_nom	-45.772569229933	Nominal Dec [deg]
roll_nom	36.15639226559	Nominal Roll [deg]
revision	2	Processing version of data
ontime	10617.117834091	Sum of GTIs [s]
livetime	10482.677495215	Livetime [s]
ontime2	10617.158874094	Sum of GTIs [s]
ontime3	10616.994714081	Sum of GTIs [s]
ontime5	10617.076794088	Sum of GTIs [s]
ontime6	10617.035754085	Sum of GTIs [s]
ontime7	10617.117834091	Sum of GTIs [s]
ontime8	10616.953674078	Sum of GTIs [s]
l2events	107975	Number of level 2 events



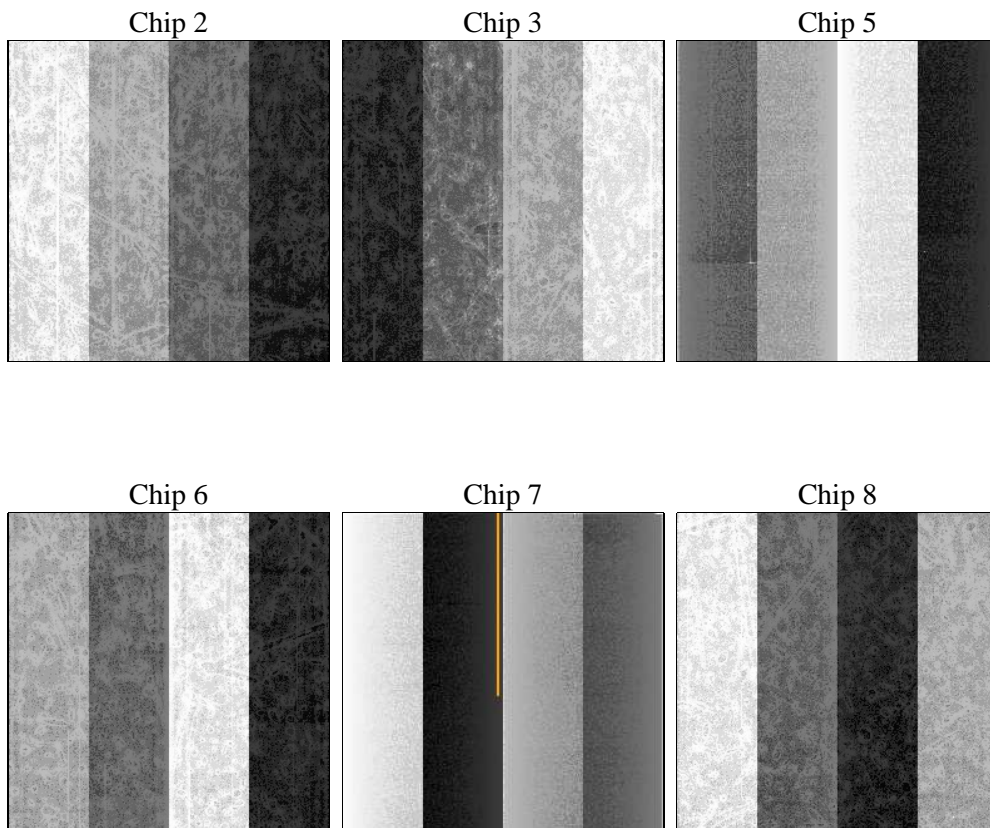
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10649.231000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	10617.117834091	Sum of GTIs [s]
caldbver	4.6.4	 	ontime2	10617.158874094	Sum of GTIs [s]
date	2014-11-29T12:54:55	Date and time of file creation	ontime3	10616.994714081	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	10617.076794088	Sum of GTIs [s]
			ontime6	10617.035754085	Sum of GTIs [s]
			ontime7	10617.117834091	Sum of GTIs [s]
			ontime8	10616.953674078	Sum of GTIs [s]
			l1events	436790	Number of level 1 events

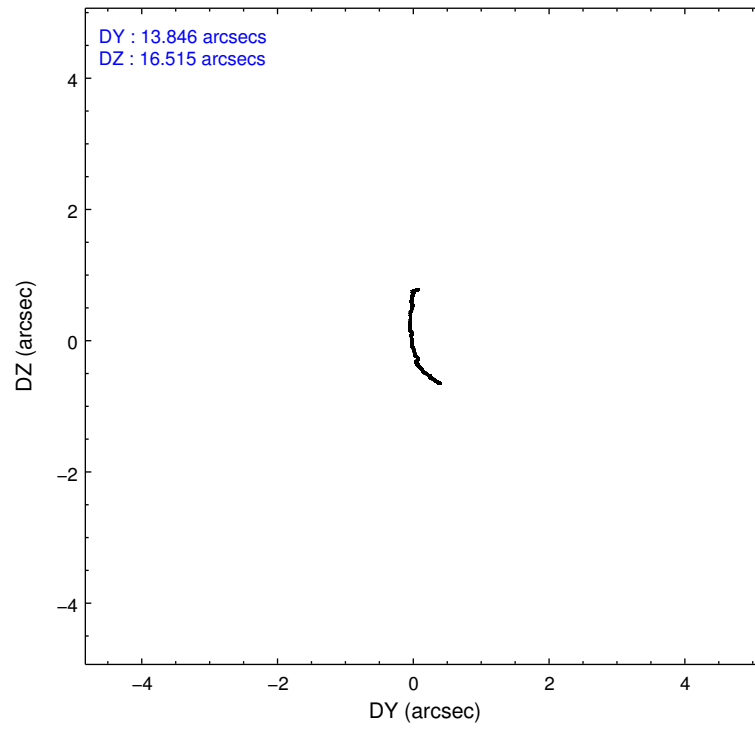
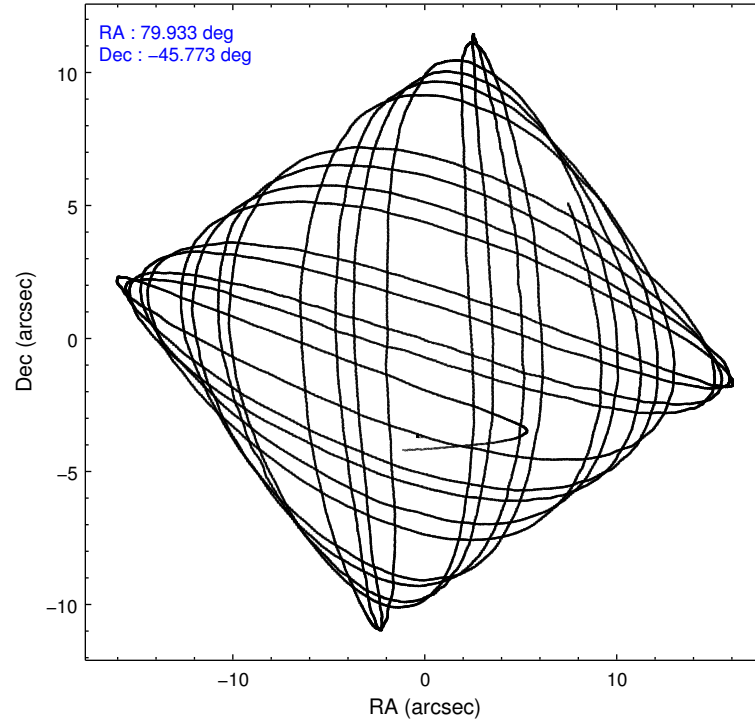
2.1.4 Events

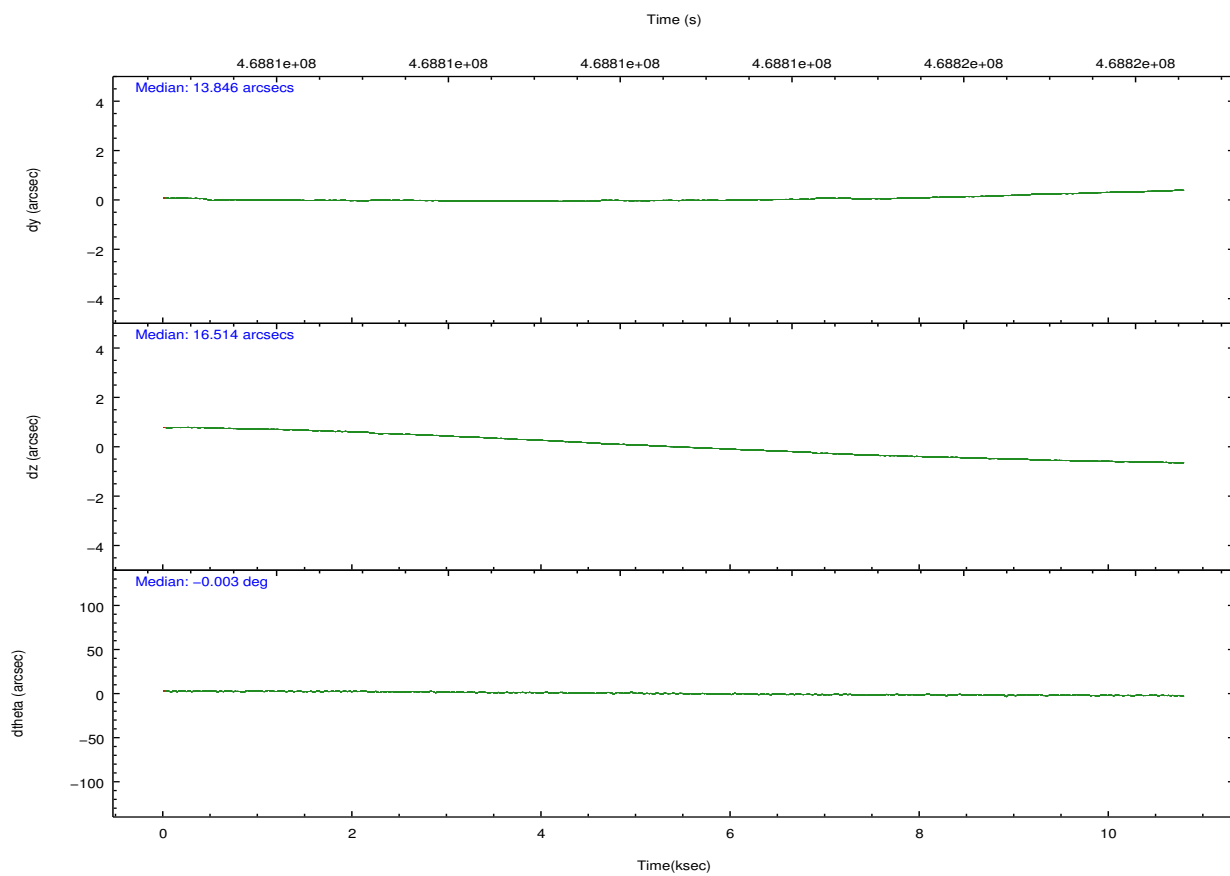
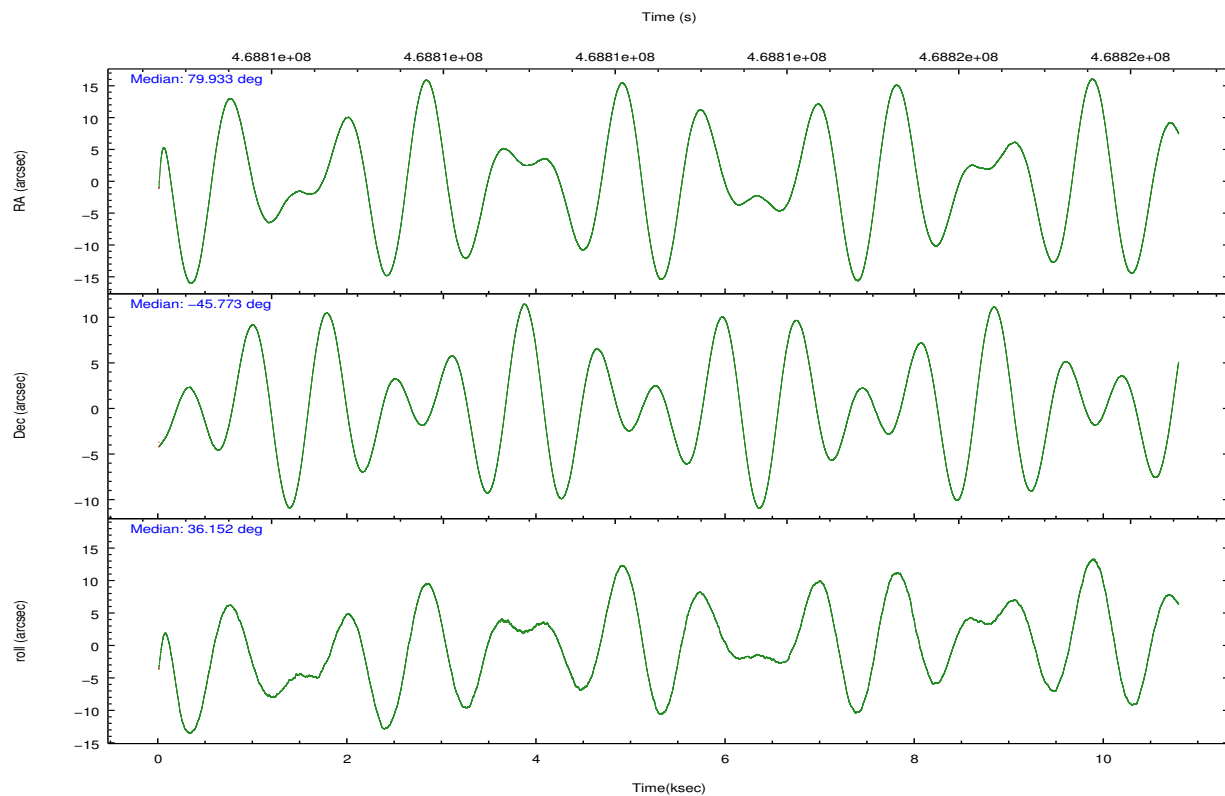
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	57000	57173	98745	60217	85008	78647	grade 0 events	2444	2443	6554	2917	4369	6503
rejected events	50229	50575	49181	52657	45537	57095		4%	4%	6%	4%	5%	8%
rejected %	88%	88%	49%	87%	53%	72%	grade 1 events	34	30	250	28	167	46
								0%	0%	0%	0%	0%	0%
							grade 2 events	1682	1441	15097	1657	8235	4874
								2%	2%	15%	2%	9%	6%
							grade 3 events	713	708	1748	731	3416	2275
								1%	1%	1%	1%	4%	2%
							grade 4 events	672	678	1642	717	3413	2208
								1%	1%	1%	1%	4%	2%
							grade 5 events	2559	3035	7034	2839	8439	4135
								4%	5%	7%	4%	9%	5%
							grade 6 events	1263	1328	24536	1542	20048	5697
								2%	2%	24%	2%	23%	7%
							grade 7 events	47633	47510	41884	49786	36921	52909
								83%	83%	42%	82%	43%	67%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	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	79.917686	79.93300783980013	CCD I2 on	O3	Y
[deg] Pointing Dec	-45.797685	-45.7725692299331	CCD I3 on	O2	Y
[deg] Pointing Roll	35.988786	36.15639226559031	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O4	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	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	O1	Y
[s] Observation start time (MET)	468807380.184000	468806171.35736	CCD S5 on	N	N
Observation start date	2012-11-09T00:15:13	2012-11-08T23:56:11	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	468818029.184000	468818255.08301	On-chip summing requested	N	N
Observation end date	2012-11-09T03:12:42	2012-11-09T03:17:35	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



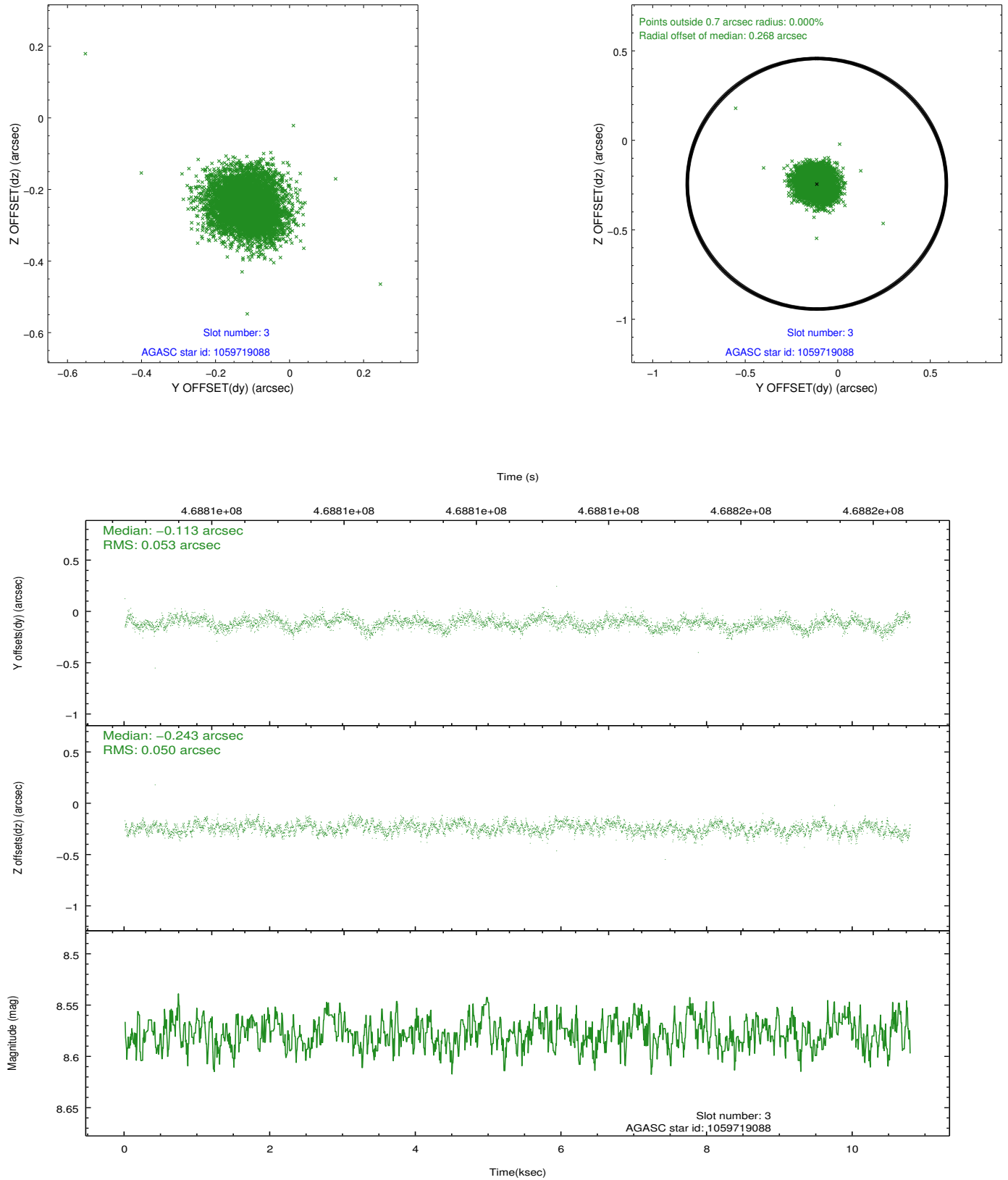


Slot Statistics

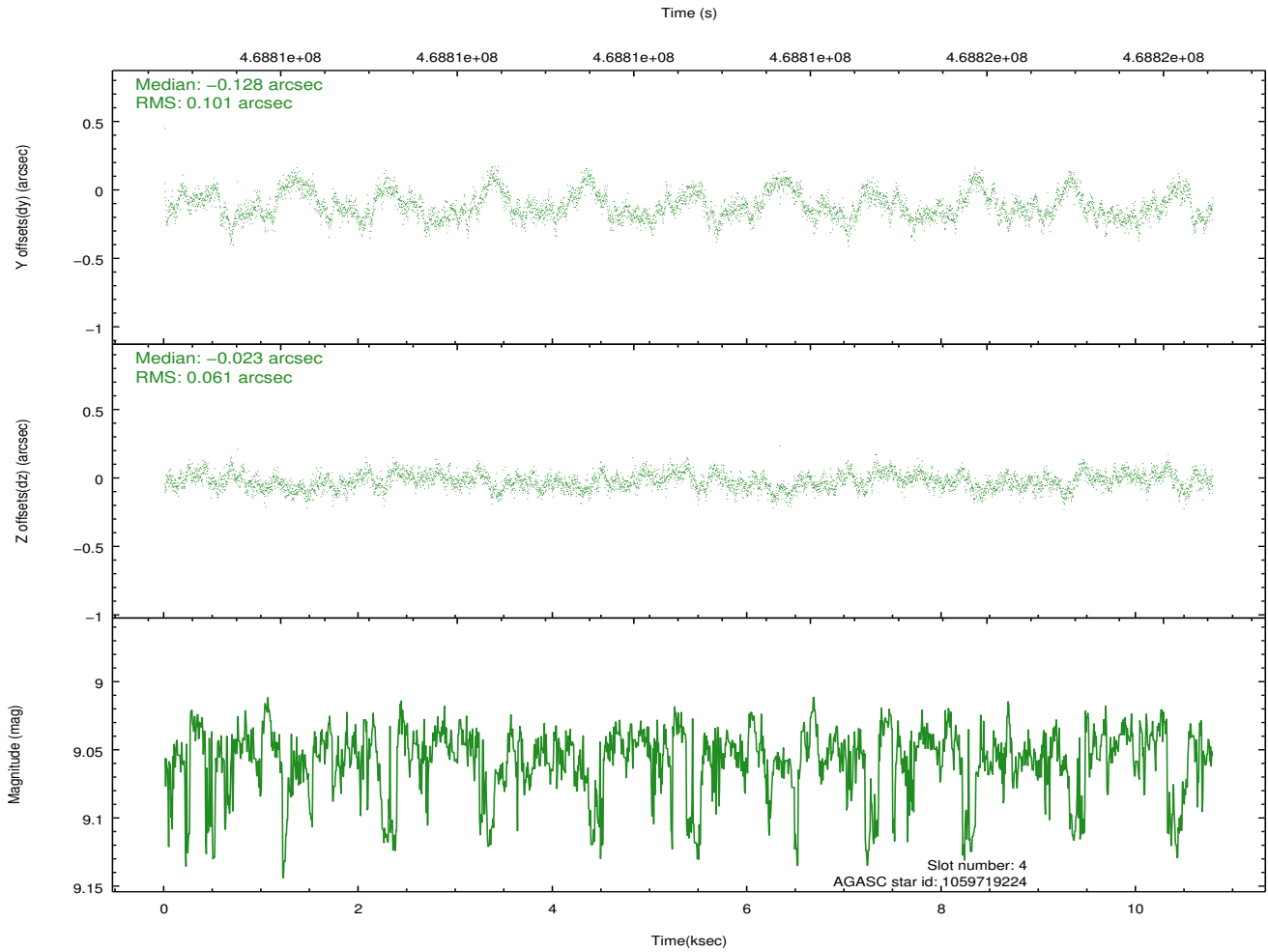
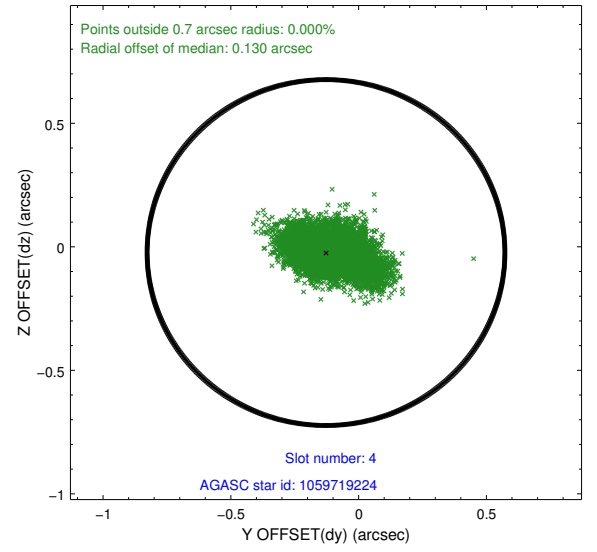
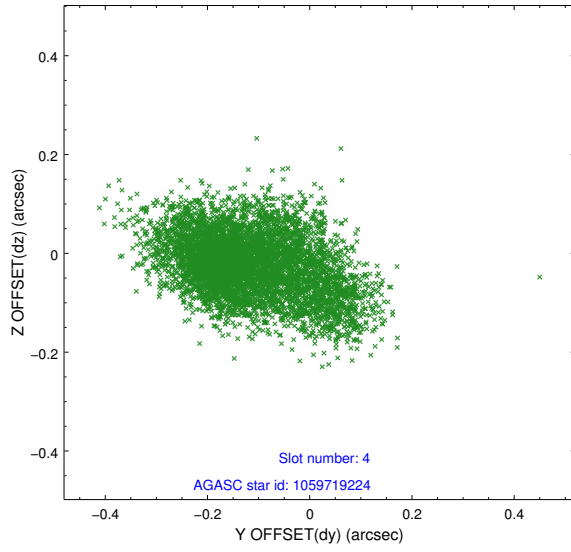
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.91	2631	-0.058	-0.006	0.023	0.032	0.000000	0.000000	-766.92	-1737.92
1	FID		ACIS-S-4	7.00	2630	0.211	0.030	0.008	0.014	0.000000	0.000000	2146.43	170.07
2	FID		ACIS-S-5	7.03	2631	-0.187	-0.014	0.023	0.035	0.000000	0.000000	-1819.25	164.28
3	GUIDE	used	1059719088	8.58	5262	-0.113	-0.243	0.078	0.122	80.358941	-45.341185	1867.85	671.61
4	GUIDE	used	1059719224	9.05	5258	-0.128	-0.023	0.122	0.215	80.899888	-45.779497	2025.84	-1407.92
5	GUIDE	used	1059720912	8.91	5259	0.166	0.051	0.104	0.167	80.344072	-46.279067	-160.29	-2027.95
6	GUIDE	used	1059722304	7.51	5260	0.038	0.056	0.092	0.163	79.157586	-45.913736	-1790.70	773.08
7	GUIDE	used	1059718424	8.53	5257	0.023	0.160	0.091	0.151	81.108521	-45.890614	2205.12	-2041.41

2.4 Star Slots

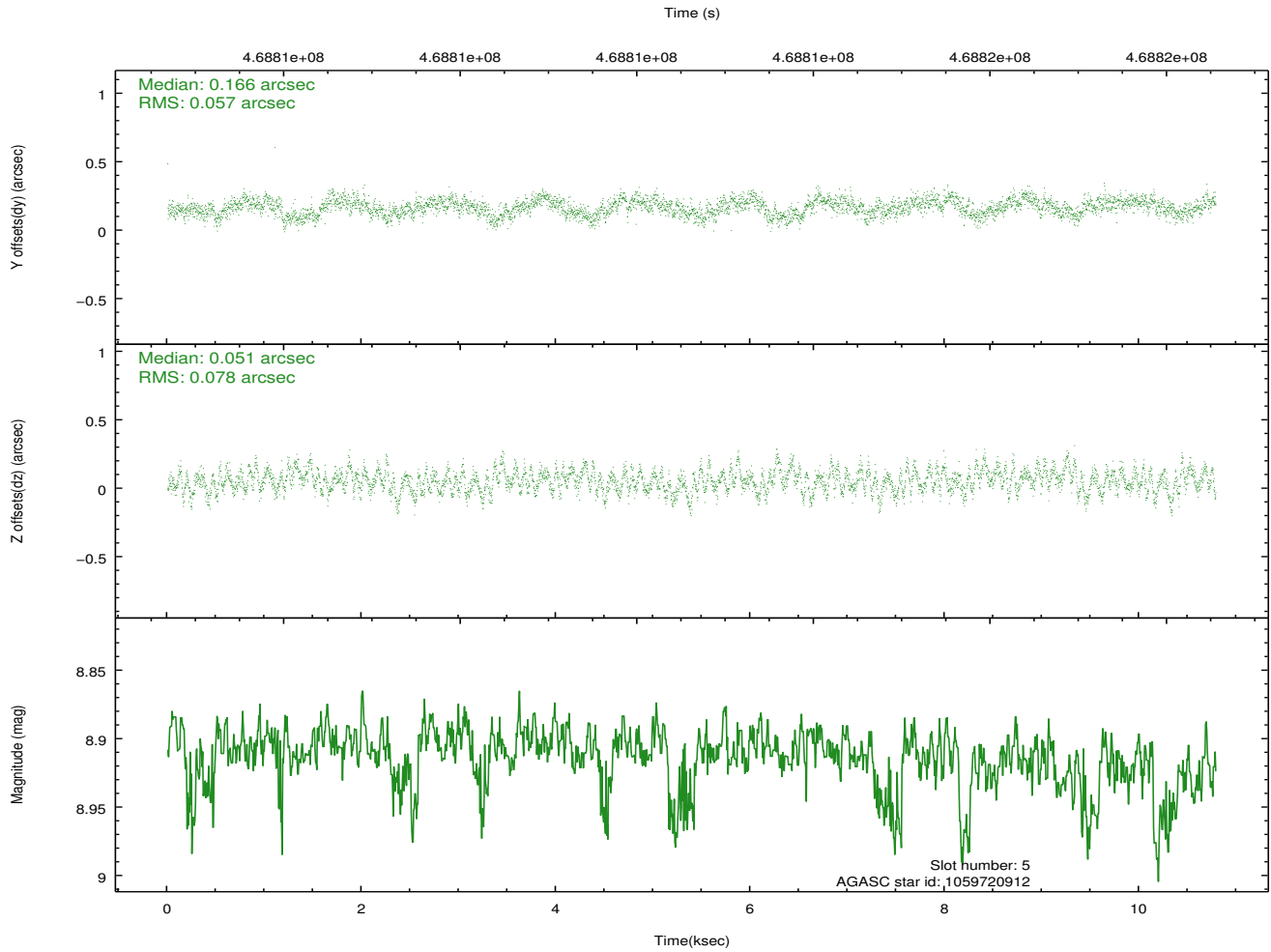
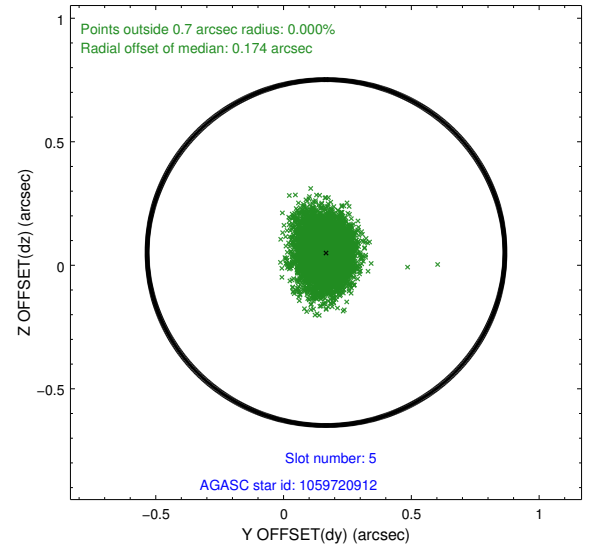
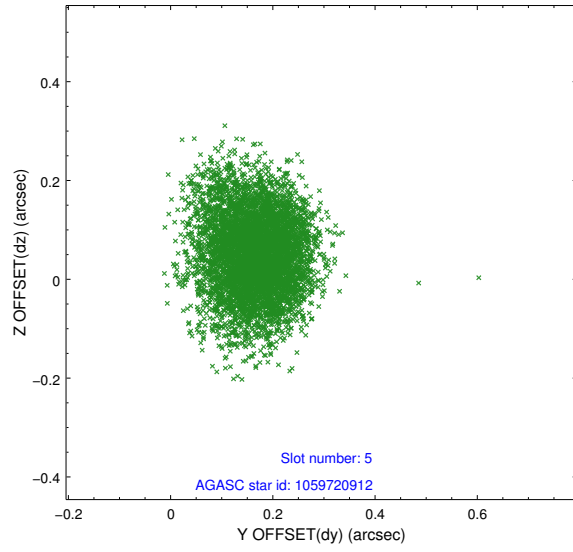
2.4.1 Slot 3



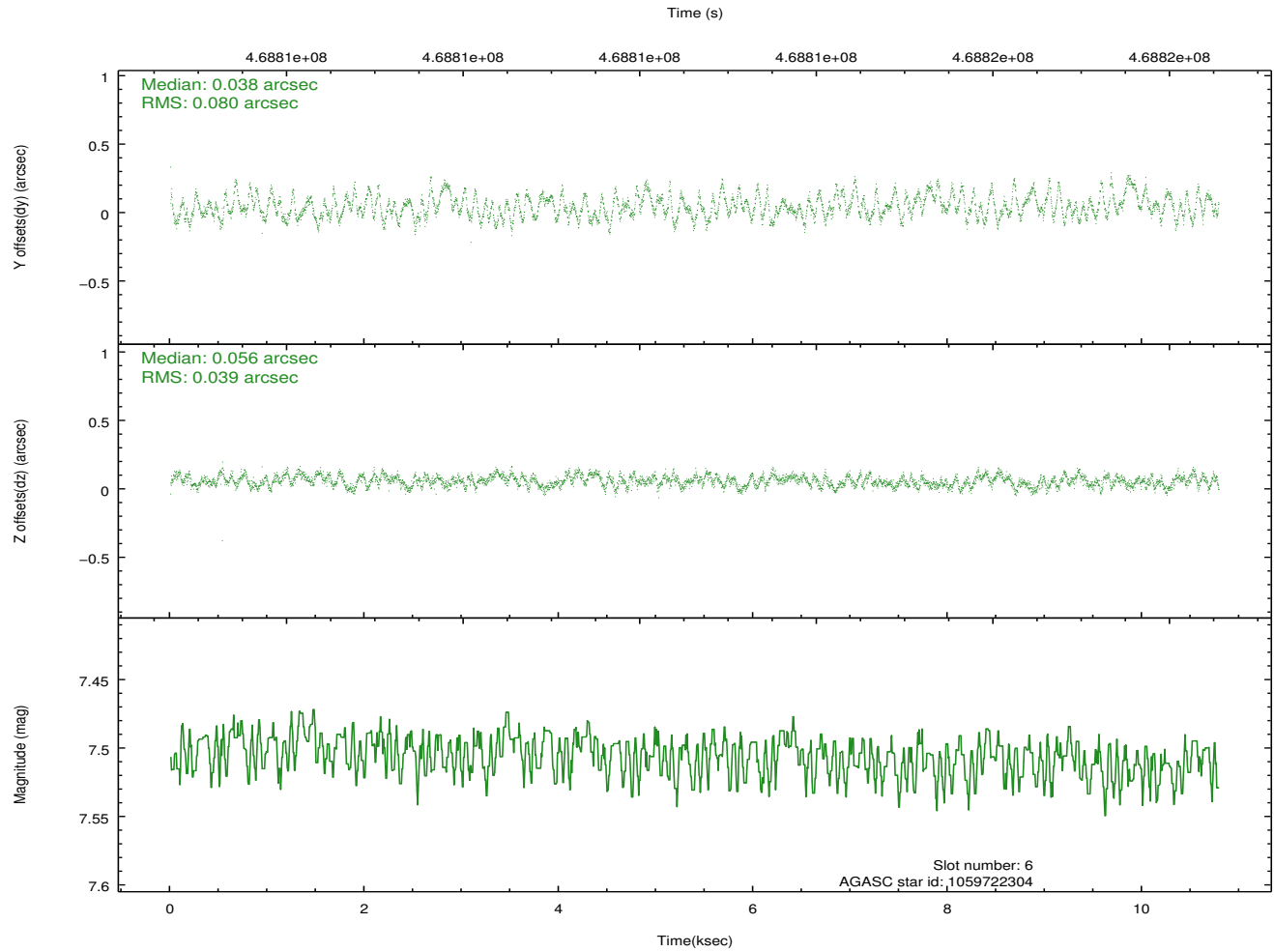
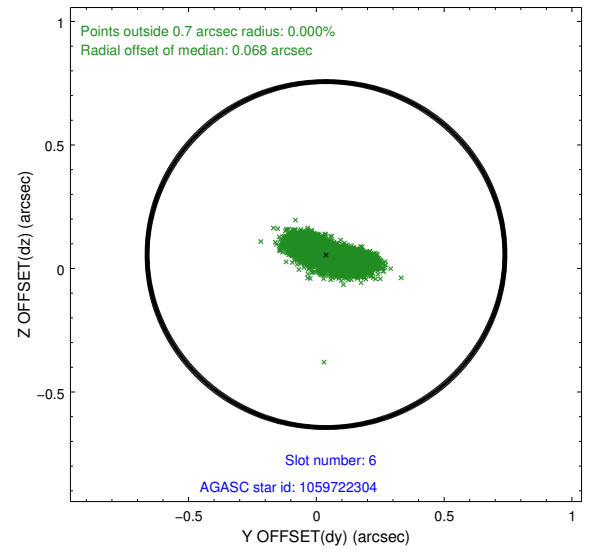
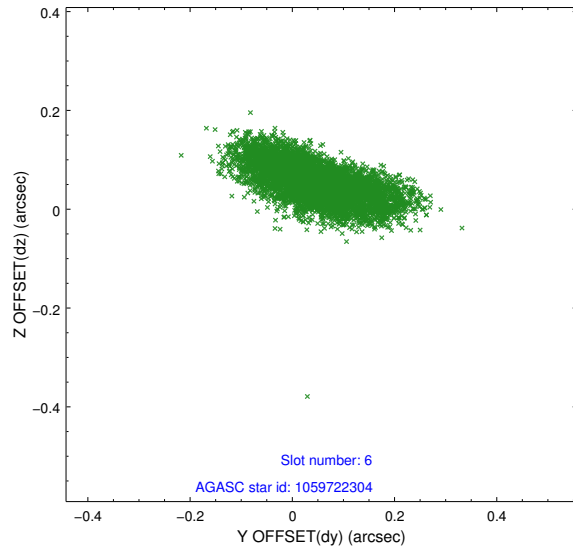
2.4.2 Slot 4



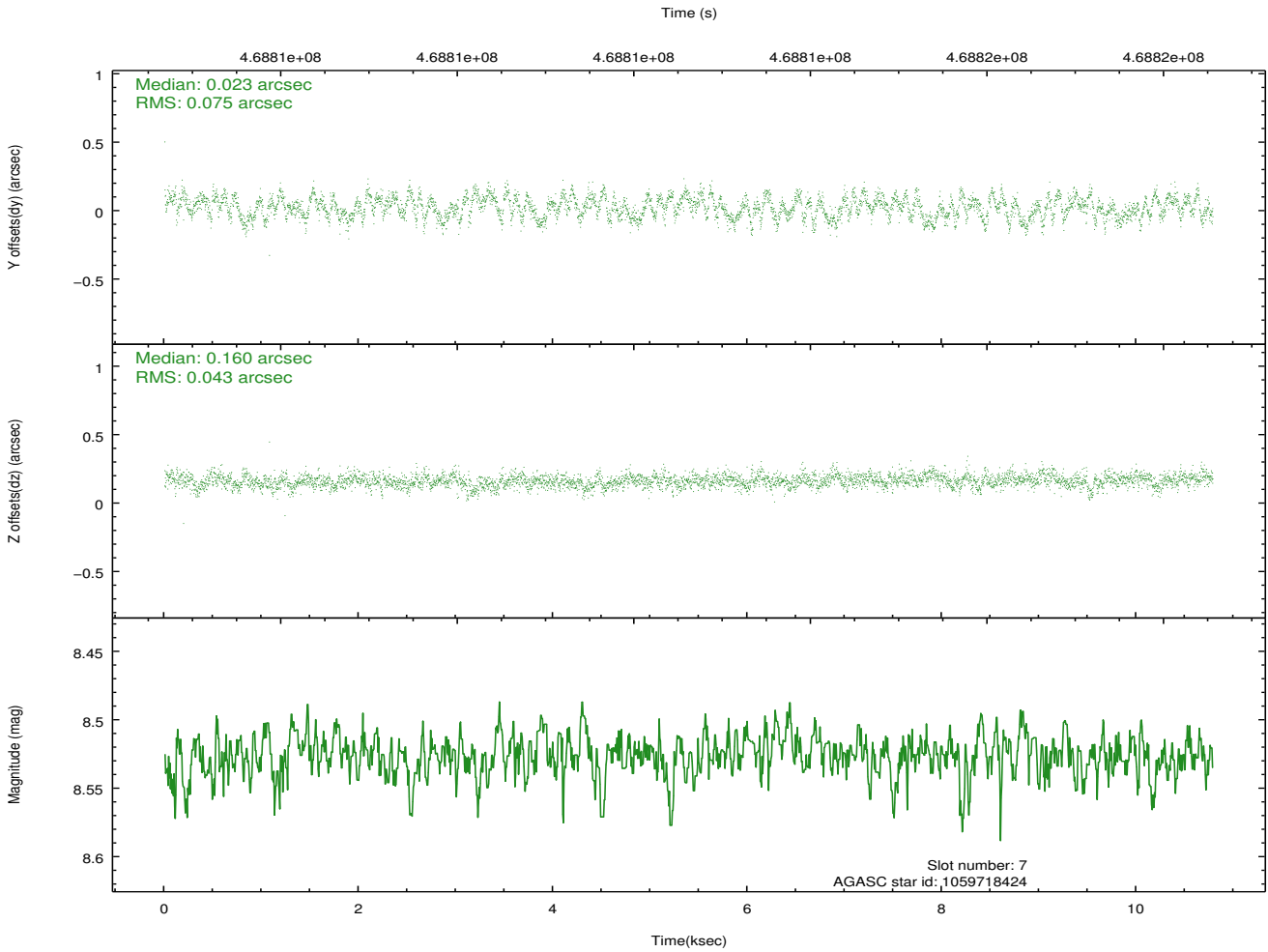
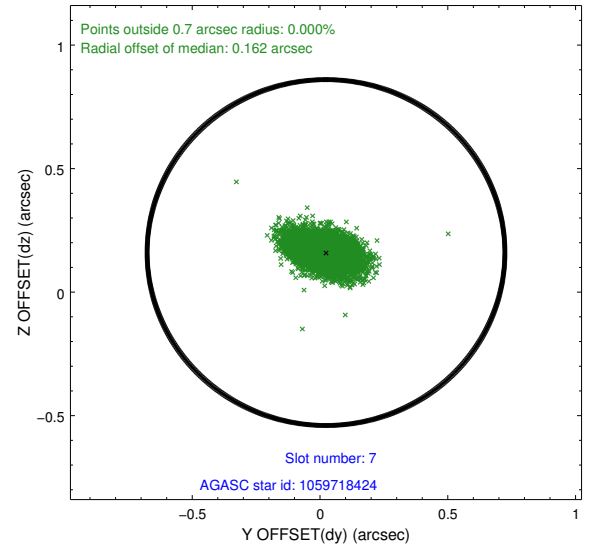
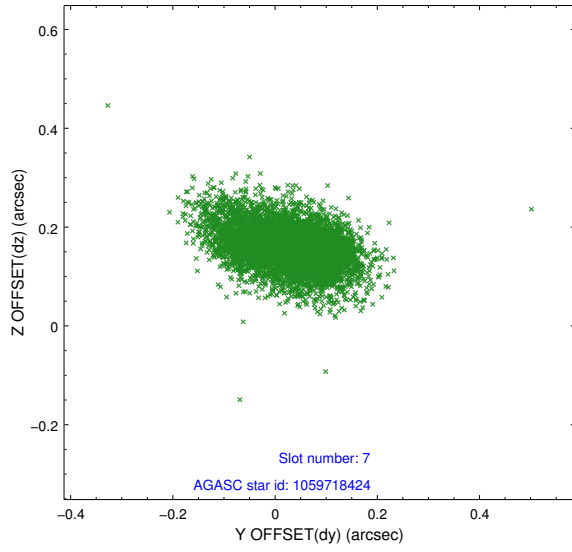
2.4.3 Slot 5



2.4.4 Slot 6

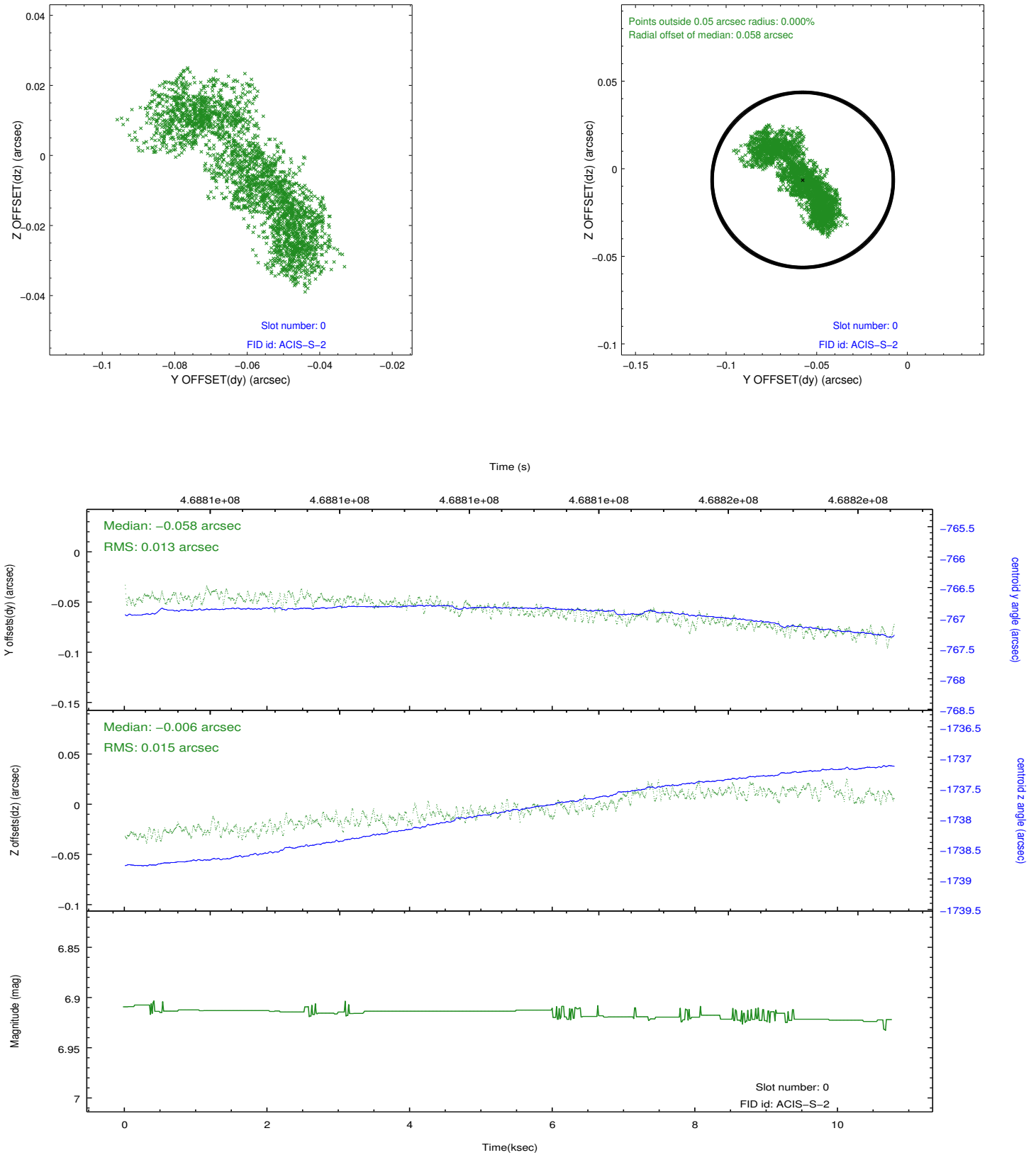


2.4.5 Slot 7

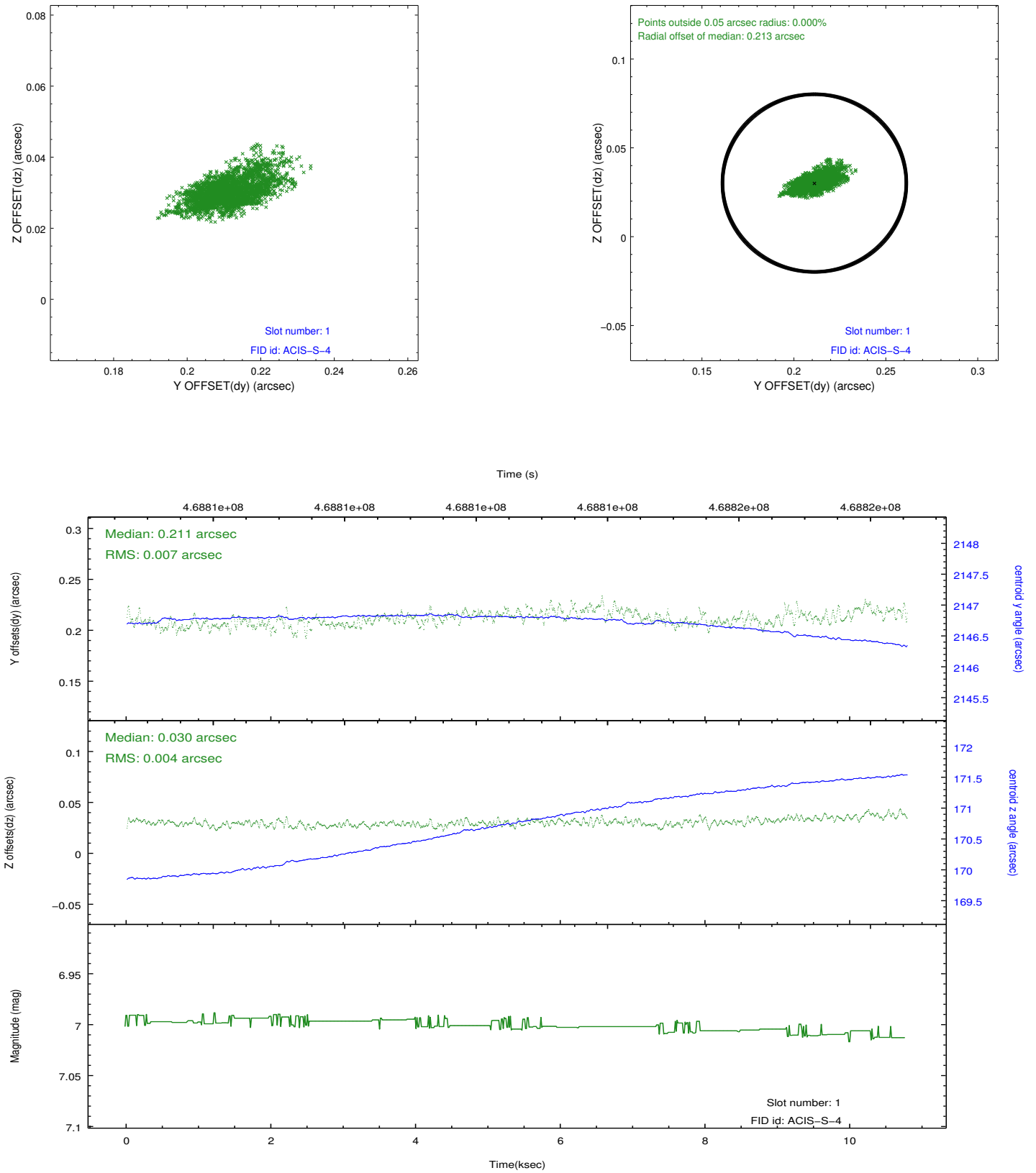


2.5 FID Slots

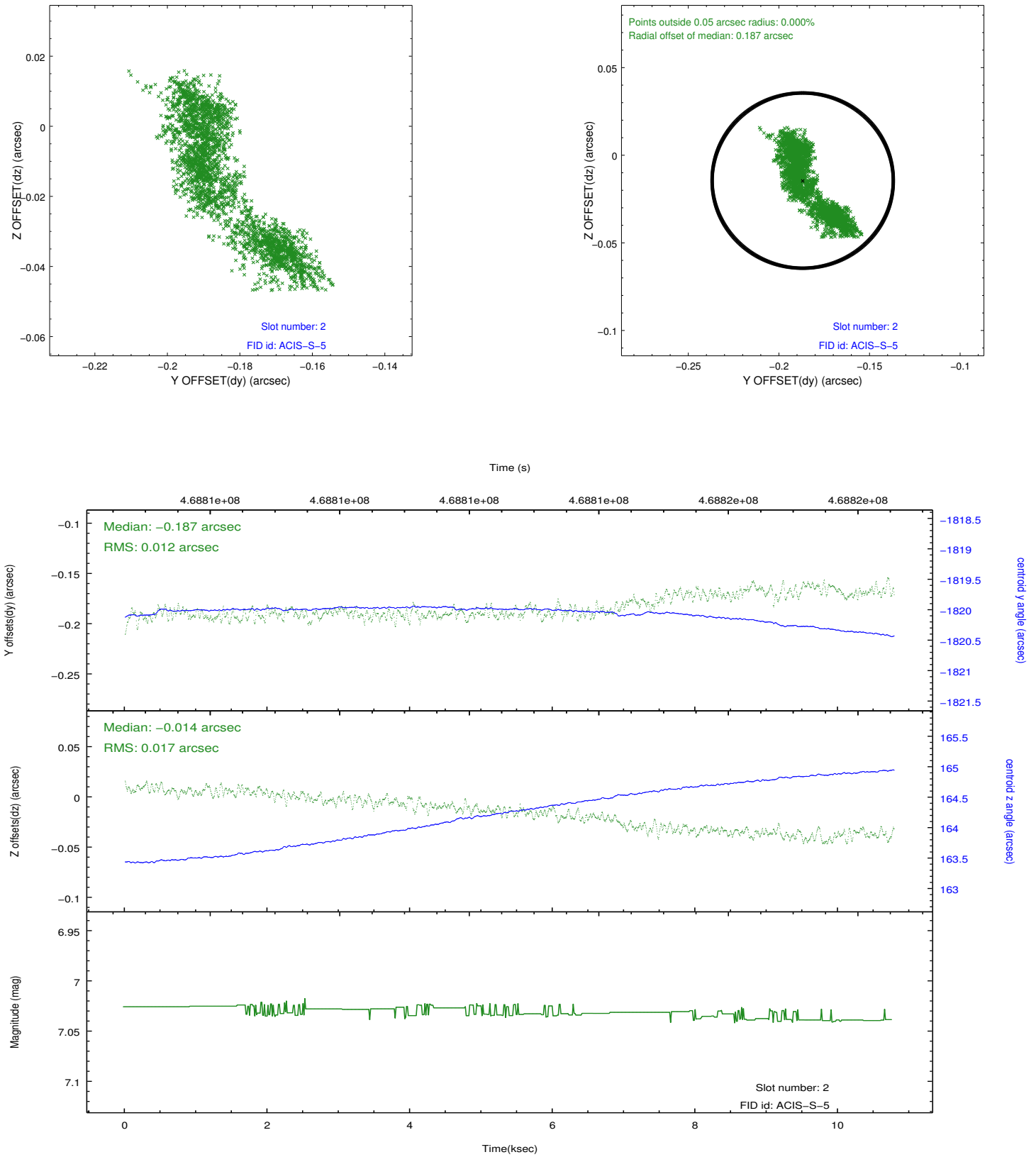
2.5.1 Slot 0



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)	2014.12.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.617117834091

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.