

V&V Reference Report

L2 ASCDS Version : 10.1.1

Observation 15089 - L2 Version 2
Chandra X-Ray Center

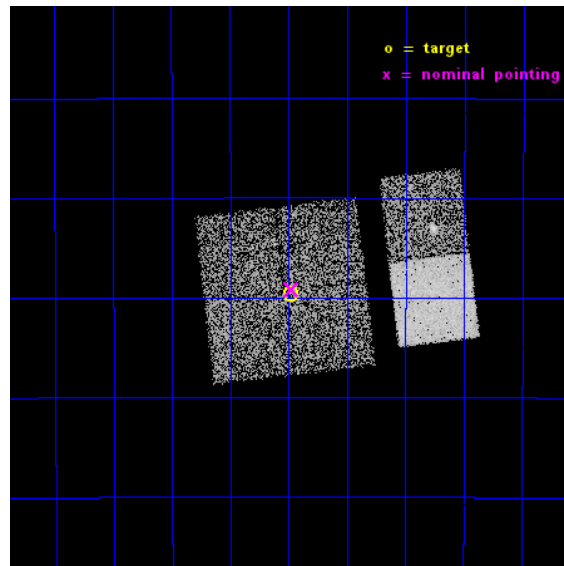
L2 Processing Date : Dec 7 2014

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1 Front

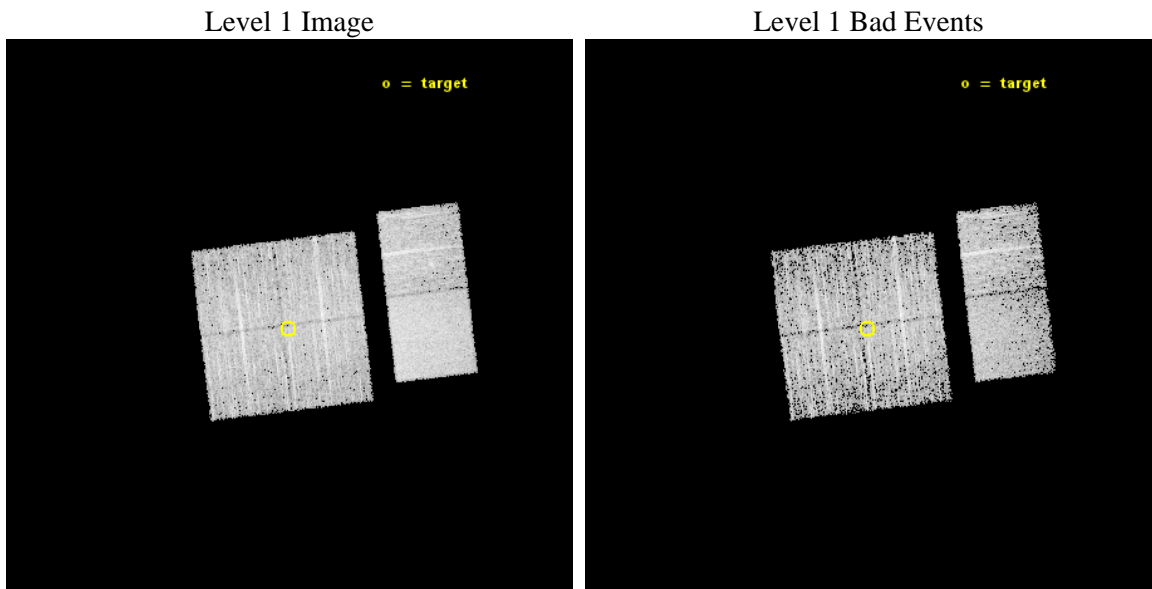
seq_num	801221	Sequence number
obs_id	15089	Observation id
title	Mapping the nearest non-cool core cluster out to R200	Proposal tit
observer	Dr Ka-wah Wong	Principal investigator
object	Antlia E2	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	158.245833	Observer's specified target RA [deg]
dec_targ	-35.327694	Observer's specified target Dec [deg]
ra_nom	158.24401781705	Nominal RA [deg]
dec_nom	-35.319766970194	Nominal Dec [deg]
roll_nom	83.207611594553	Nominal Roll [deg]
revision	2	Processing version of data
ontime	6968.3489222527	Sum of GTIs [s]
livetime	6880.1114923631	Livetime [s]
ontime0	6968.2258022428	Sum of GTIs [s]
ontime1	6968.2668422461	Sum of GTIs [s]
ontime2	6968.3078822494	Sum of GTIs [s]
ontime3	6968.3489222527	Sum of GTIs [s]
ontime6	6968.4310022593	Sum of GTIs [s]
ontime7	6968.389962256	Sum of GTIs [s]
l2events	37609	Number of level 2 events



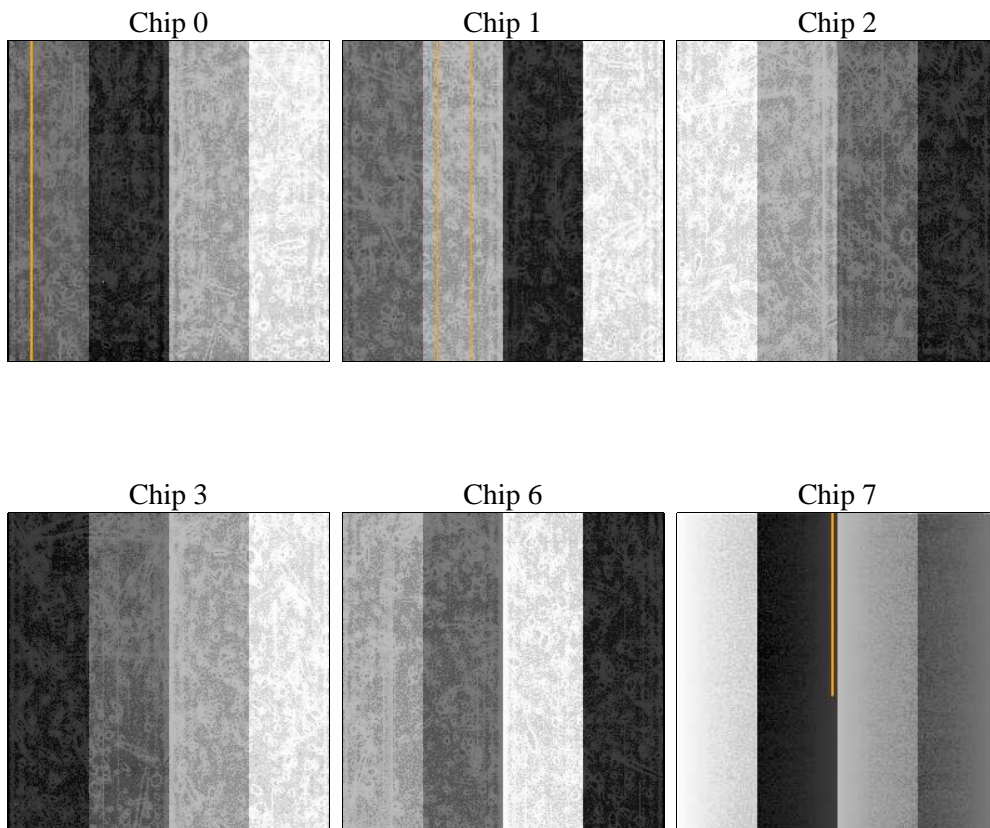
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	7000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	6968.3489222527	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	6968.2258022428	Sum of GTIs [s]
date	2014-12-08T02:12:34	Date and time of file creation	ontime1	6968.2668422461	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	6968.3078822494	Sum of GTIs [s]
			ontime3	6968.3489222527	Sum of GTIs [s]
			ontime6	6968.4310022593	Sum of GTIs [s]
			ontime7	6968.389962256	Sum of GTIs [s]
			l1events	211884	Number of level 1 events

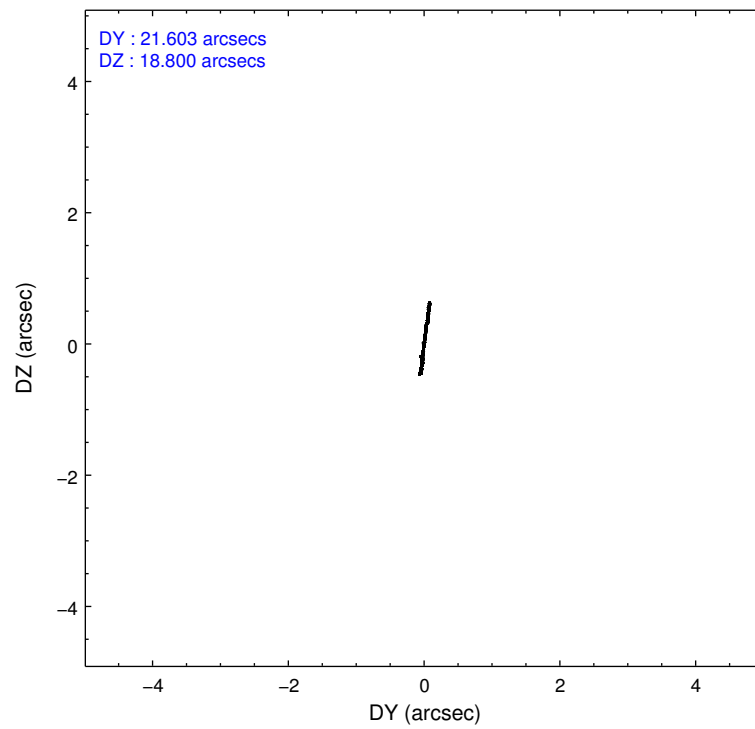
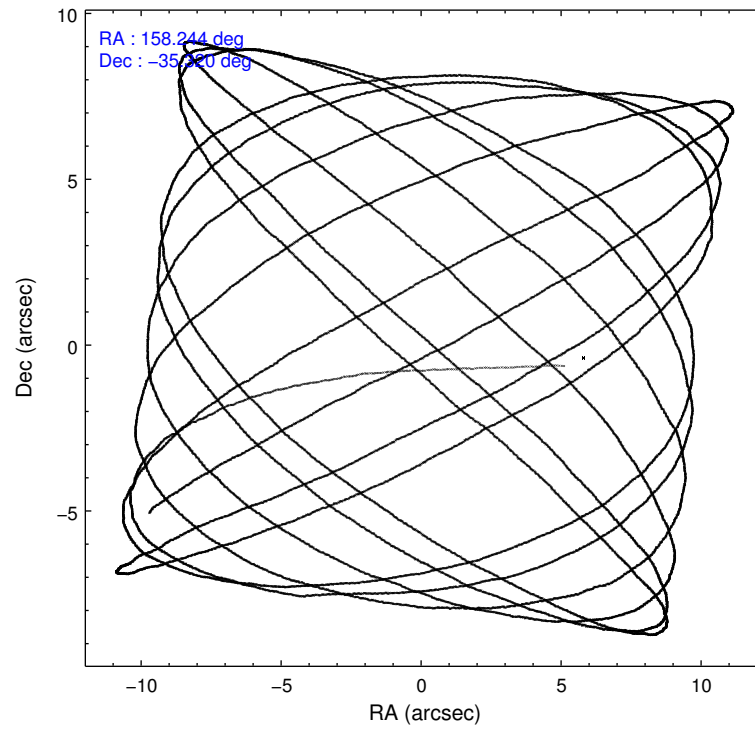
2.1.4 Events

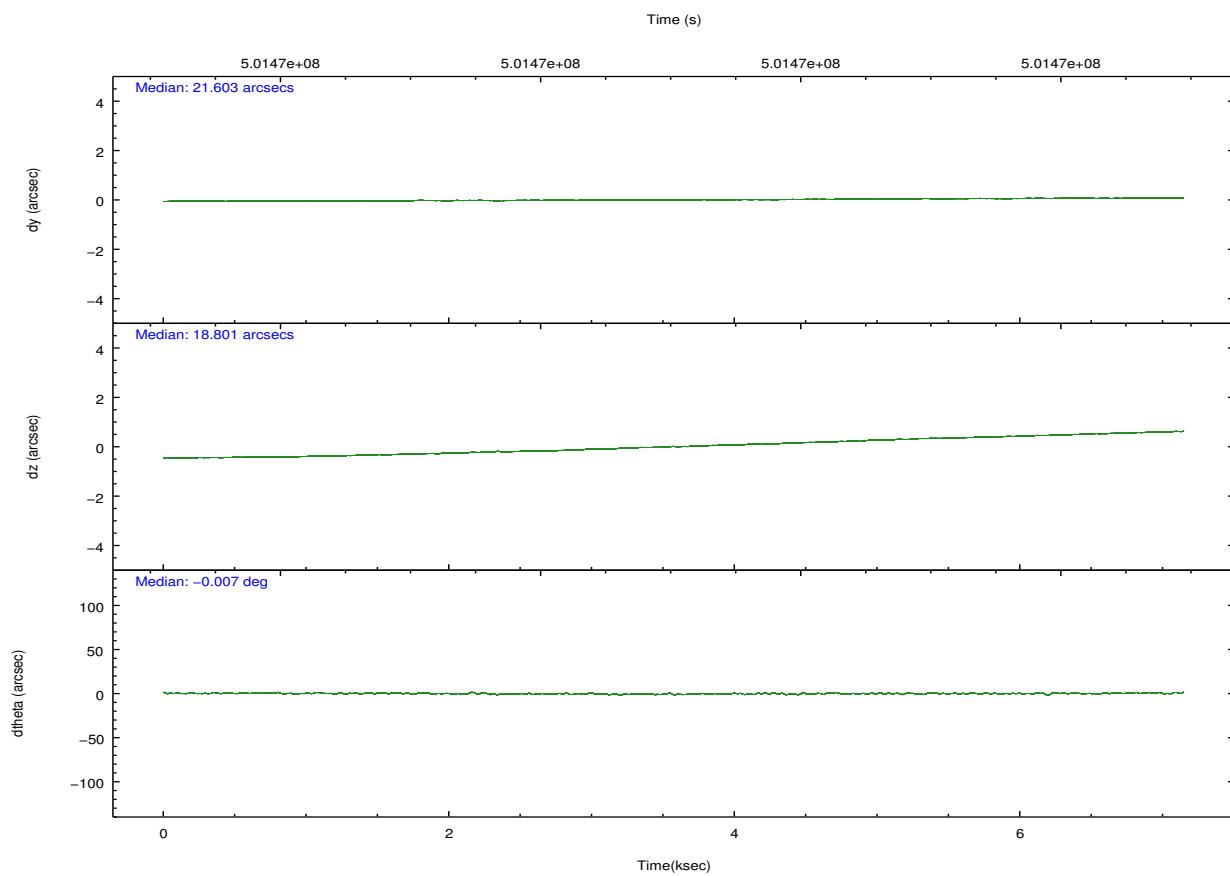
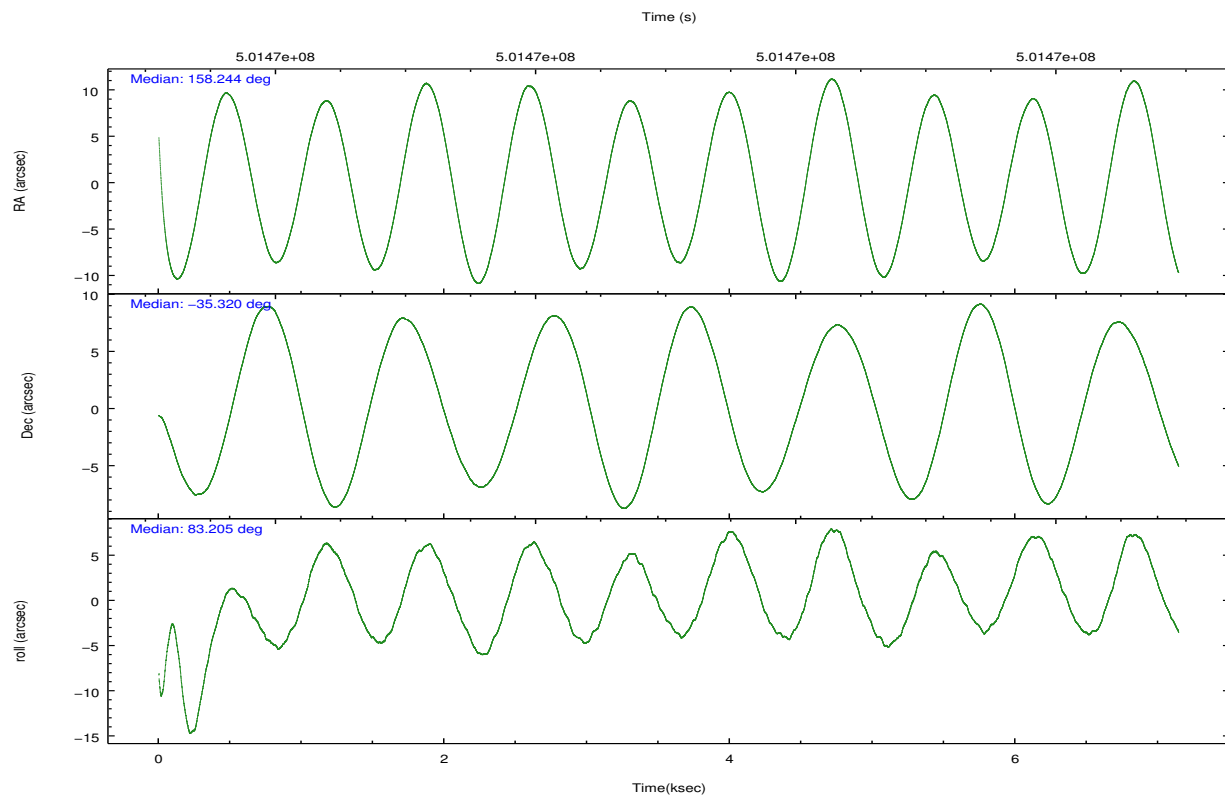
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	31716	31681	33876	32444	35095	47072	grade 0 events	1469	1584	1424	1372	1785	1859
rejected events	27594	27275	30012	28641	30560	26673		4%	4%	4%	4%	5%	3%
rejected %	87%	86%	88%	88%	87%	56%	grade 1 events	20	18	20	19	22	50
								0%	0%	0%	0%	0%	0%
							grade 2 events	1006	1017	894	836	969	4178
								3%	3%	2%	2%	2%	8%
							grade 3 events	406	436	430	424	394	1646
								1%	1%	1%	1%	1%	3%
							grade 4 events	390	424	379	398	373	1639
								1%	1%	1%	1%	1%	3%
							grade 5 events	1553	1590	1486	1775	1807	4662
								4%	5%	4%	5%	5%	9%
							grade 6 events	861	950	739	775	1019	11092
								2%	2%	2%	2%	2%	23%
							grade 7 events	26011	25662	28504	26845	28726	21946
								82%	81%	84%	82%	81%	46%

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	FAINT	FAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	158.257435	158.2440178170486	CCD I2 on	Y	Y
[deg] Pointing Dec	-35.344981	-35.31976697019411	CCD I3 on	Y	Y
[deg] Pointing Roll	83.006715	83.20761159455267	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	O1	Y
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	O2	Y
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	501467605.184000	501466479.46694	CCD S5 on	N	N
Observation start date	2013-11-22T00:32:18	2013-11-22T00:14:39	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	501474605.184000	501475281.14243	On-chip summing requested	N	N
Observation end date	2013-11-22T02:28:58	2013-11-22T02:41:21	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



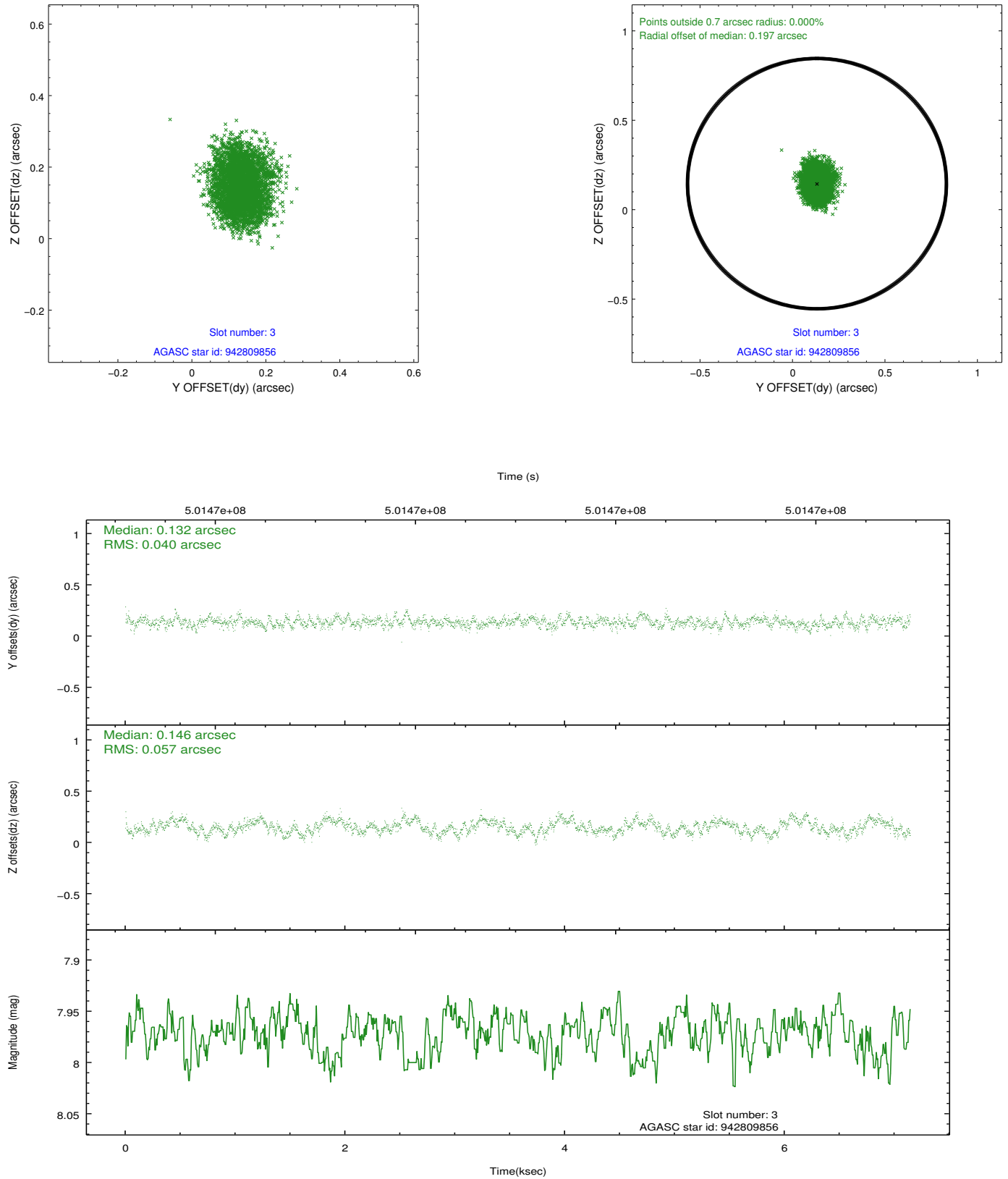


Slot Statistics

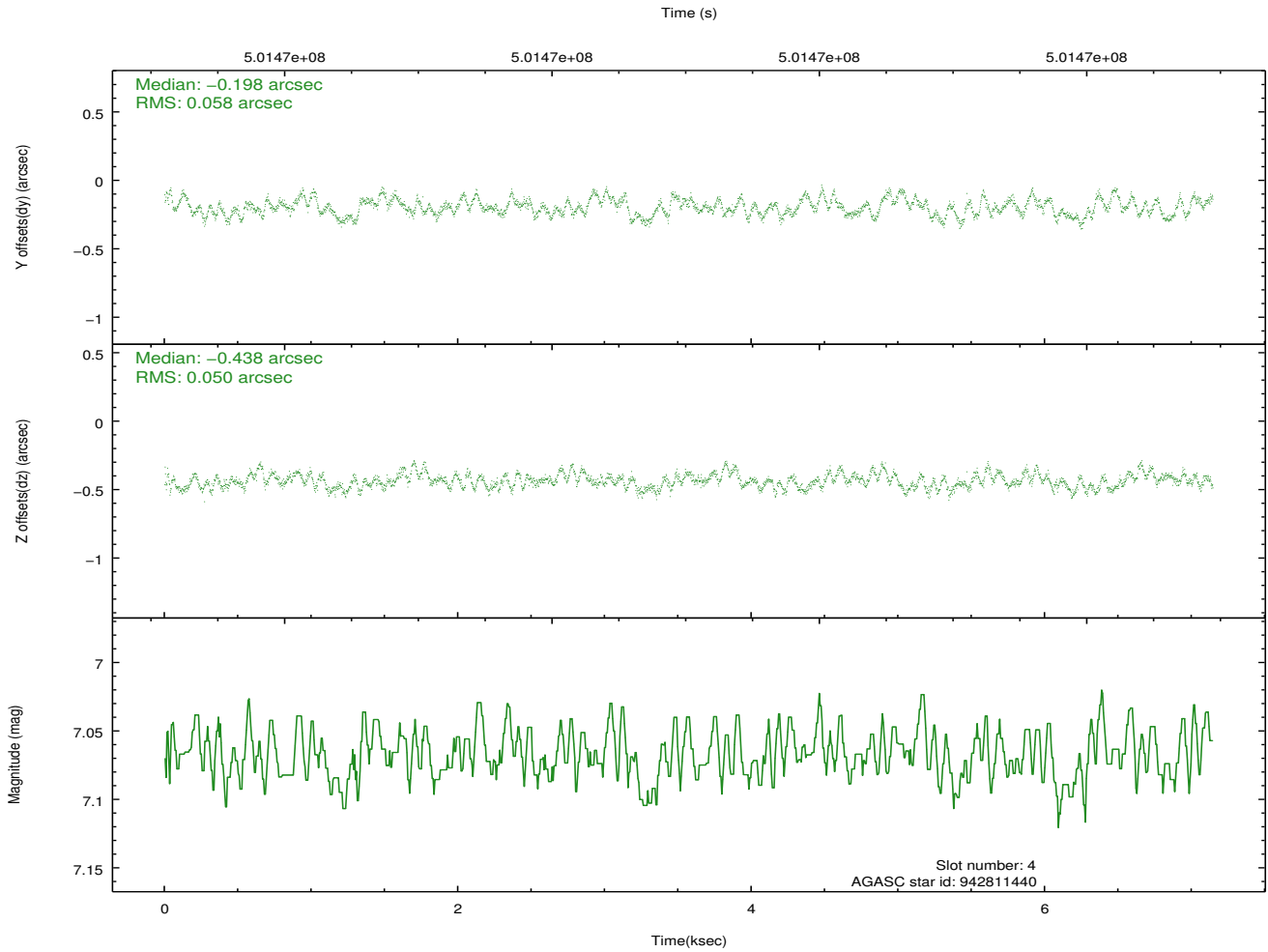
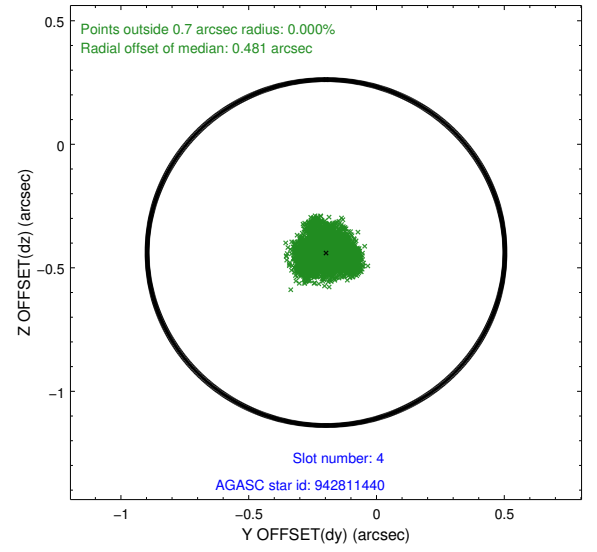
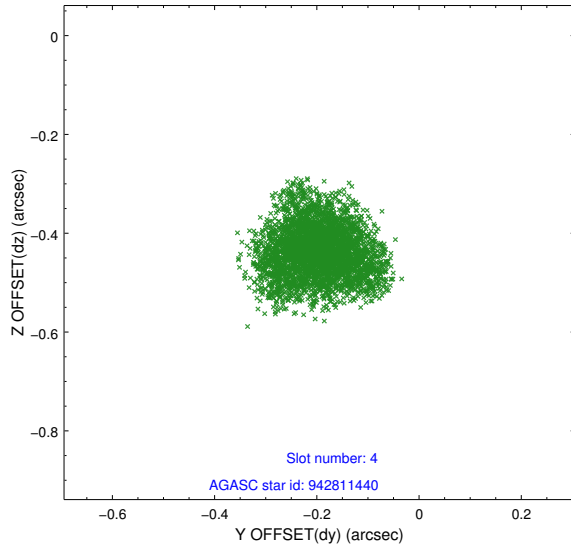
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.22	1742	0.067	-0.022	0.007	0.012	0.000000	0.000000	917.81	-842.46
1	FID		ACIS-I-2	7.11	1743	-0.020	-0.051	0.012	0.021	0.000000	0.000000	-775.92	-849.49
2	FID		ACIS-I-5	7.20	1743	-0.139	0.145	0.009	0.016	0.000000	0.000000	-1831.20	1054.54
3	GUIDE	used	942809856	7.97	3486	0.132	0.146	0.076	0.118	158.721337	-35.085088	1092.91	-1241.93
4	GUIDE	used	942811440	7.07	3486	-0.198	-0.438	0.085	0.128	157.875674	-35.128343	634.52	1209.96
5	GUIDE	used	942813200	8.09	3484	-0.301	-0.352	0.083	0.125	157.742104	-35.047777	873.35	1637.39
6	GUIDE	used	943339192	9.23	3481	0.475	0.365	0.119	0.196	158.241251	-35.818886	-1698.01	-160.03
7	GUIDE	used	942814496	8.93	3482	-0.115	0.277	0.106	0.170	158.878530	-35.136399	962.14	-1723.87

2.4 Star Slots

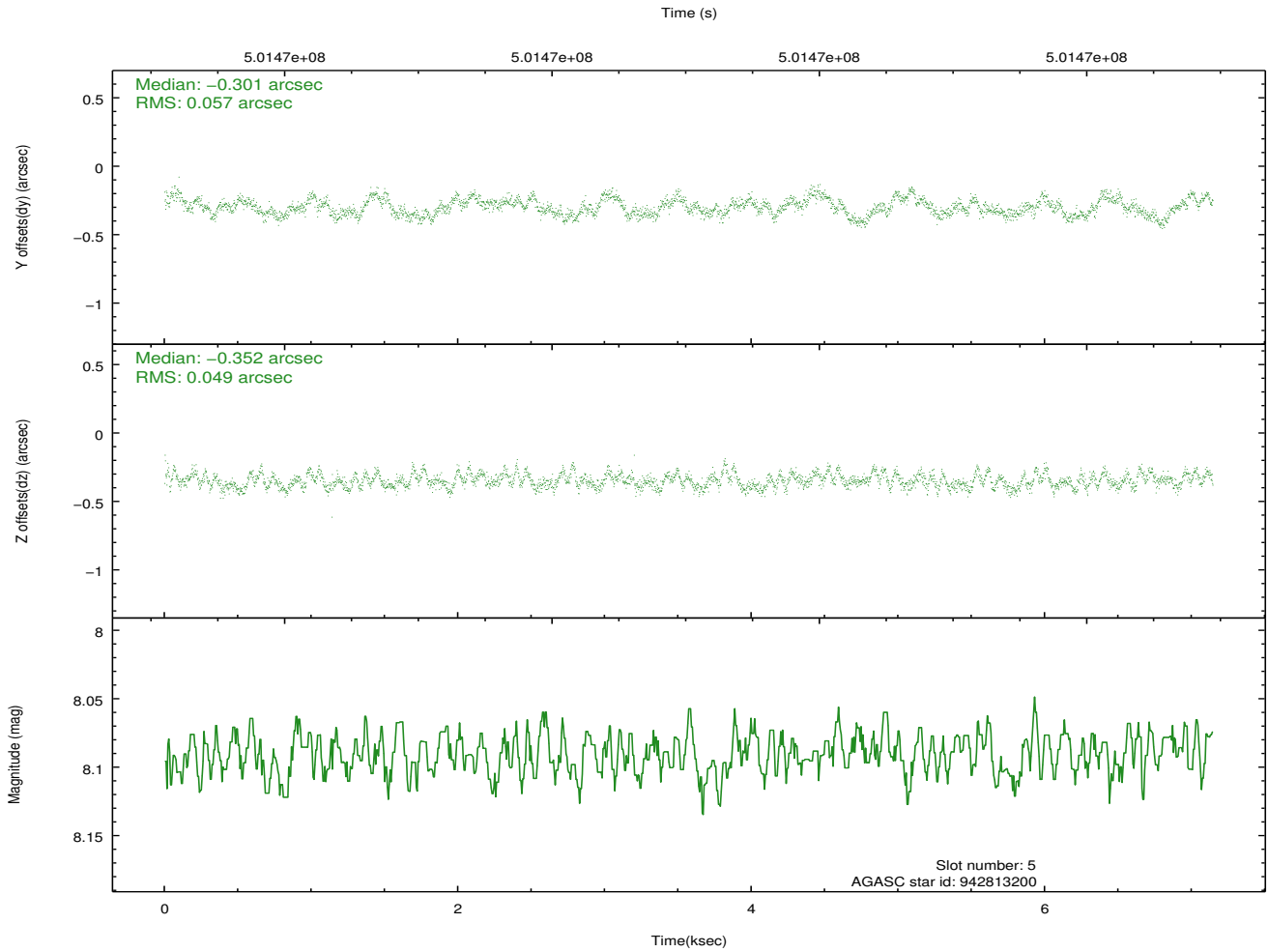
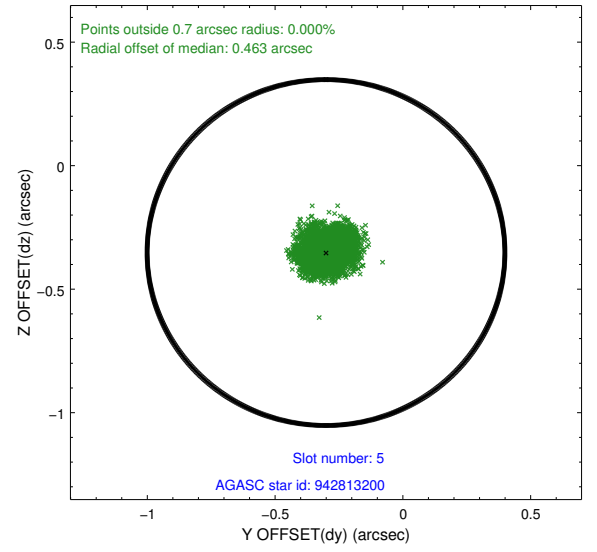
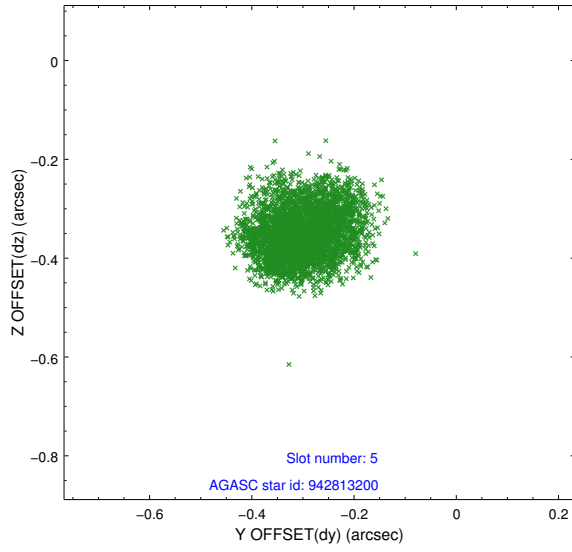
2.4.1 Slot 3



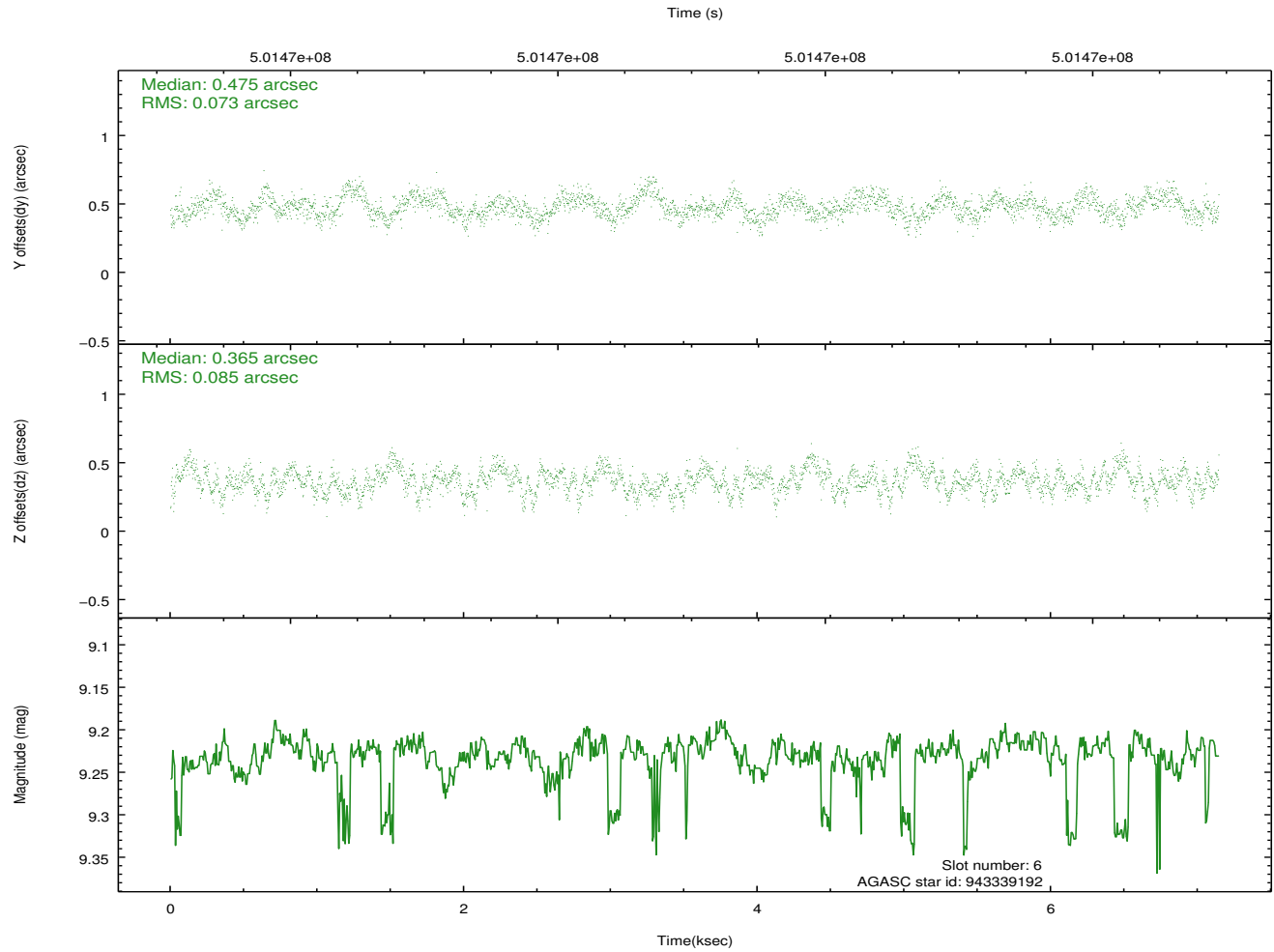
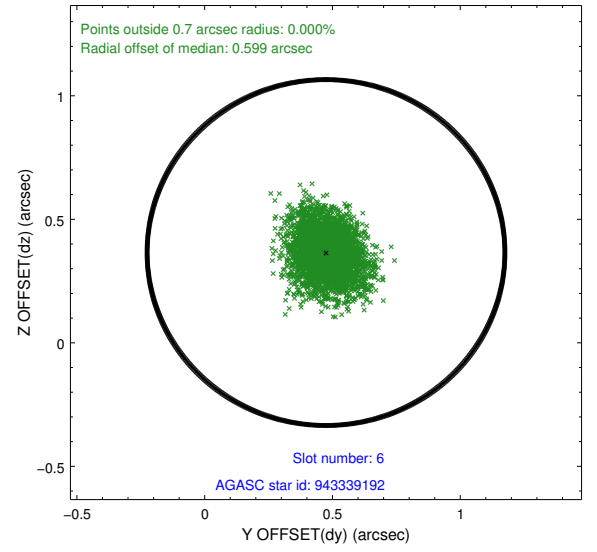
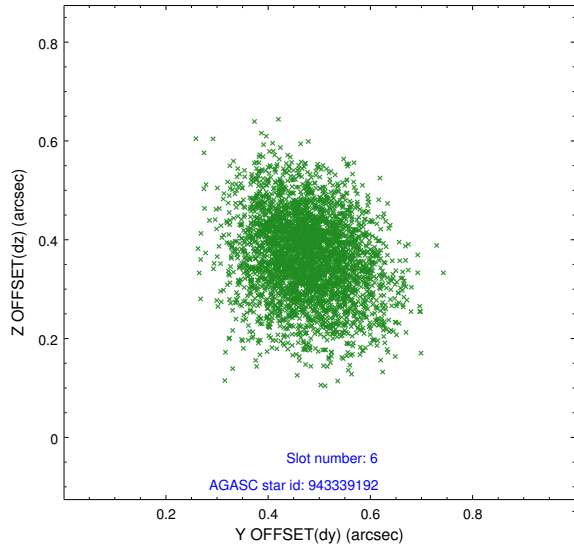
2.4.2 Slot 4



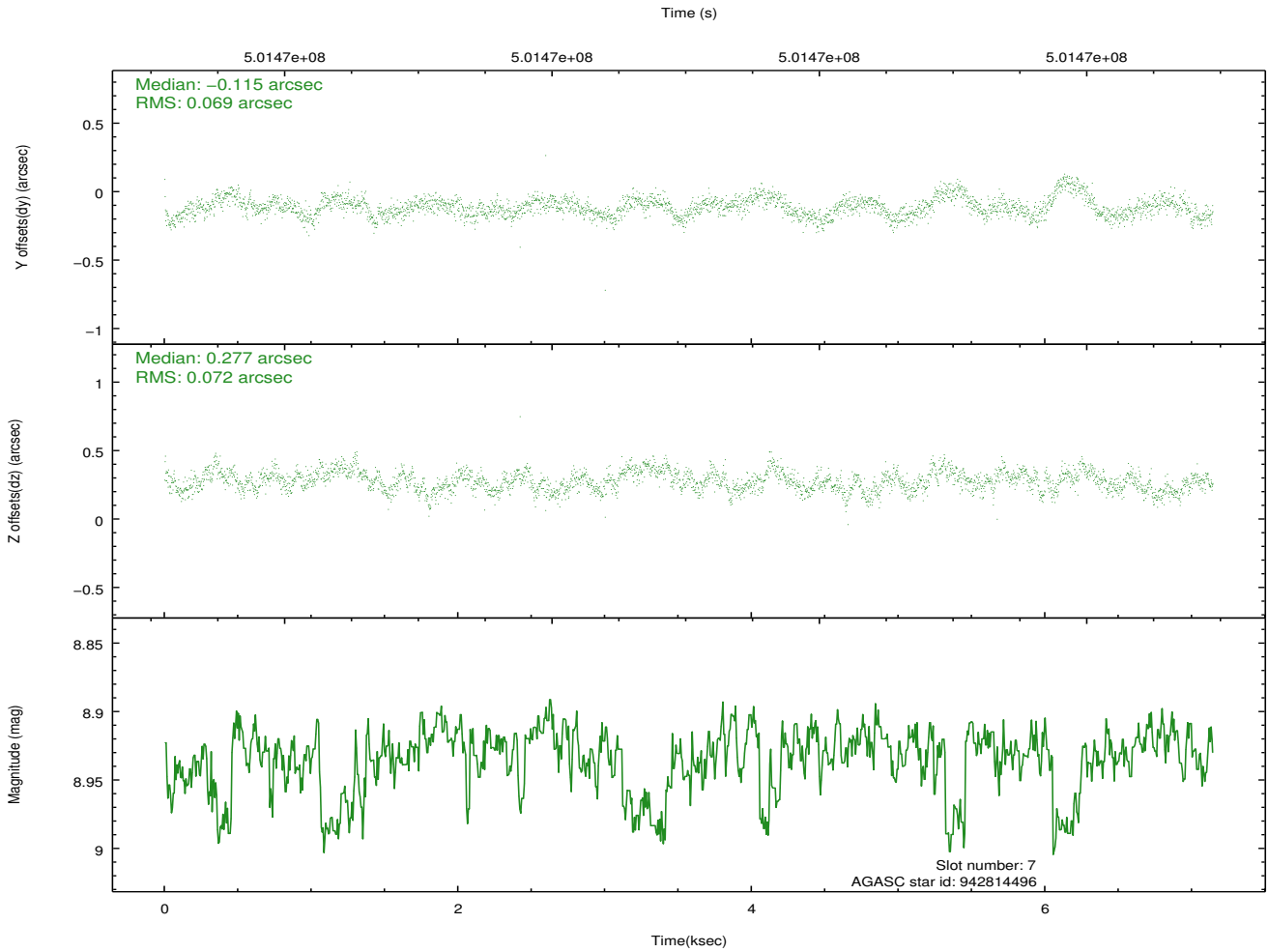
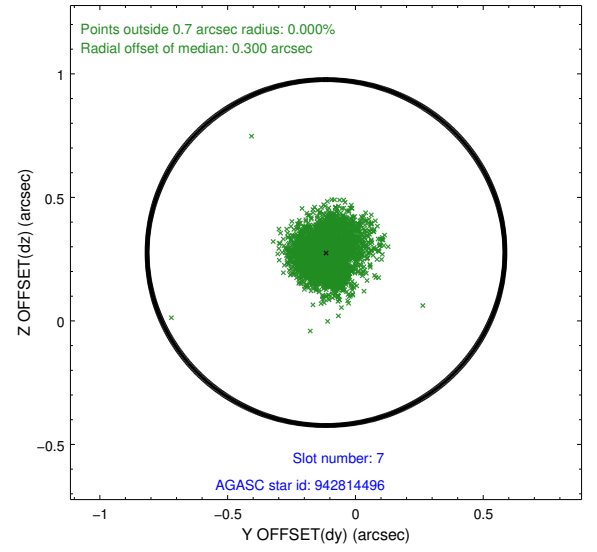
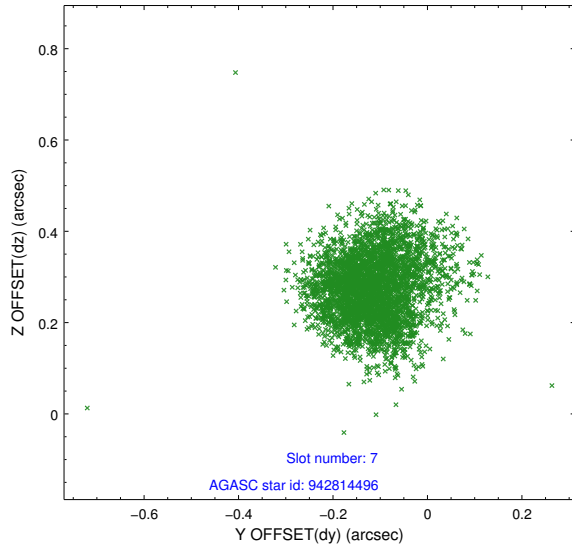
2.4.3 Slot 5



2.4.4 Slot 6

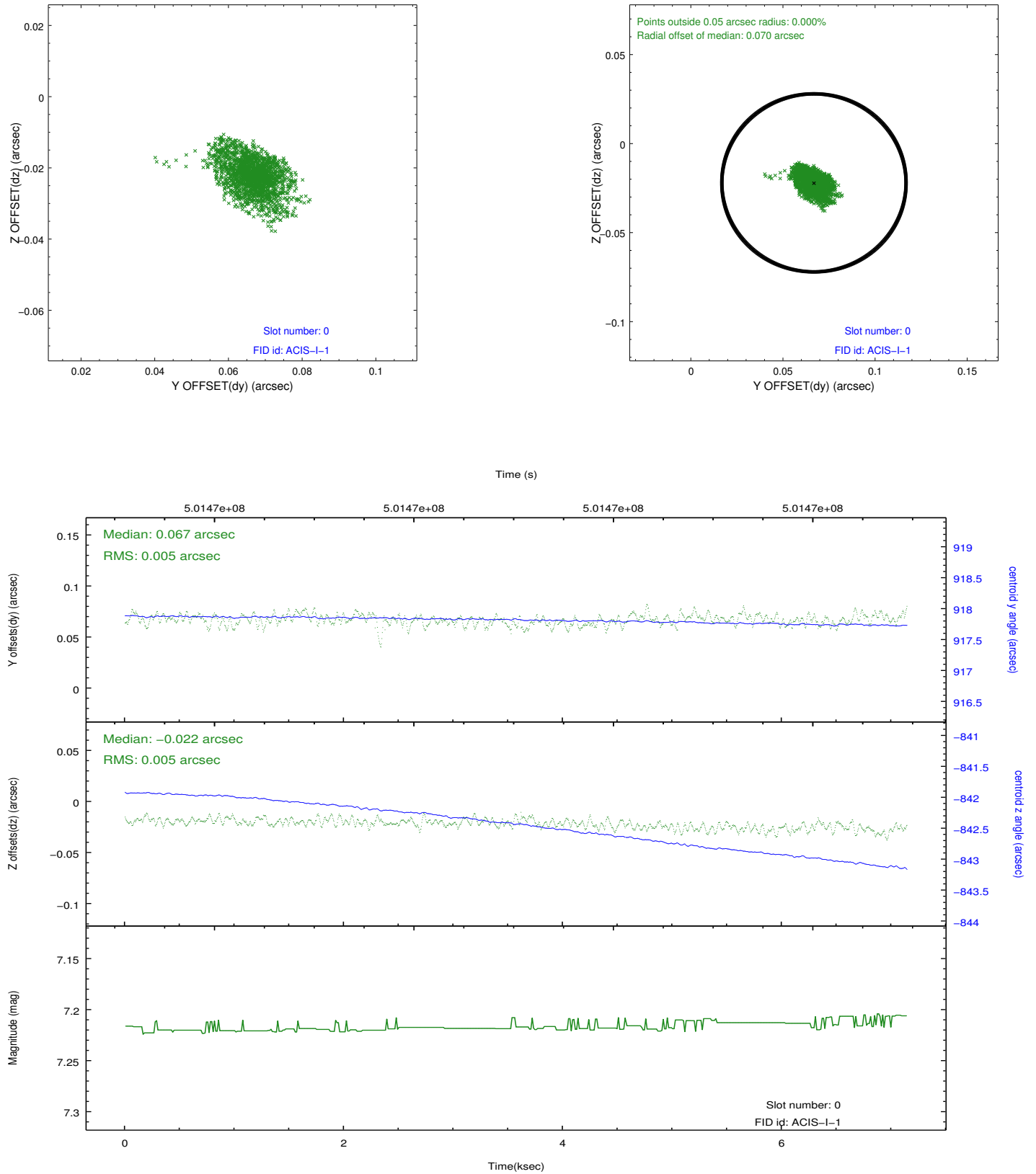


2.4.5 Slot 7

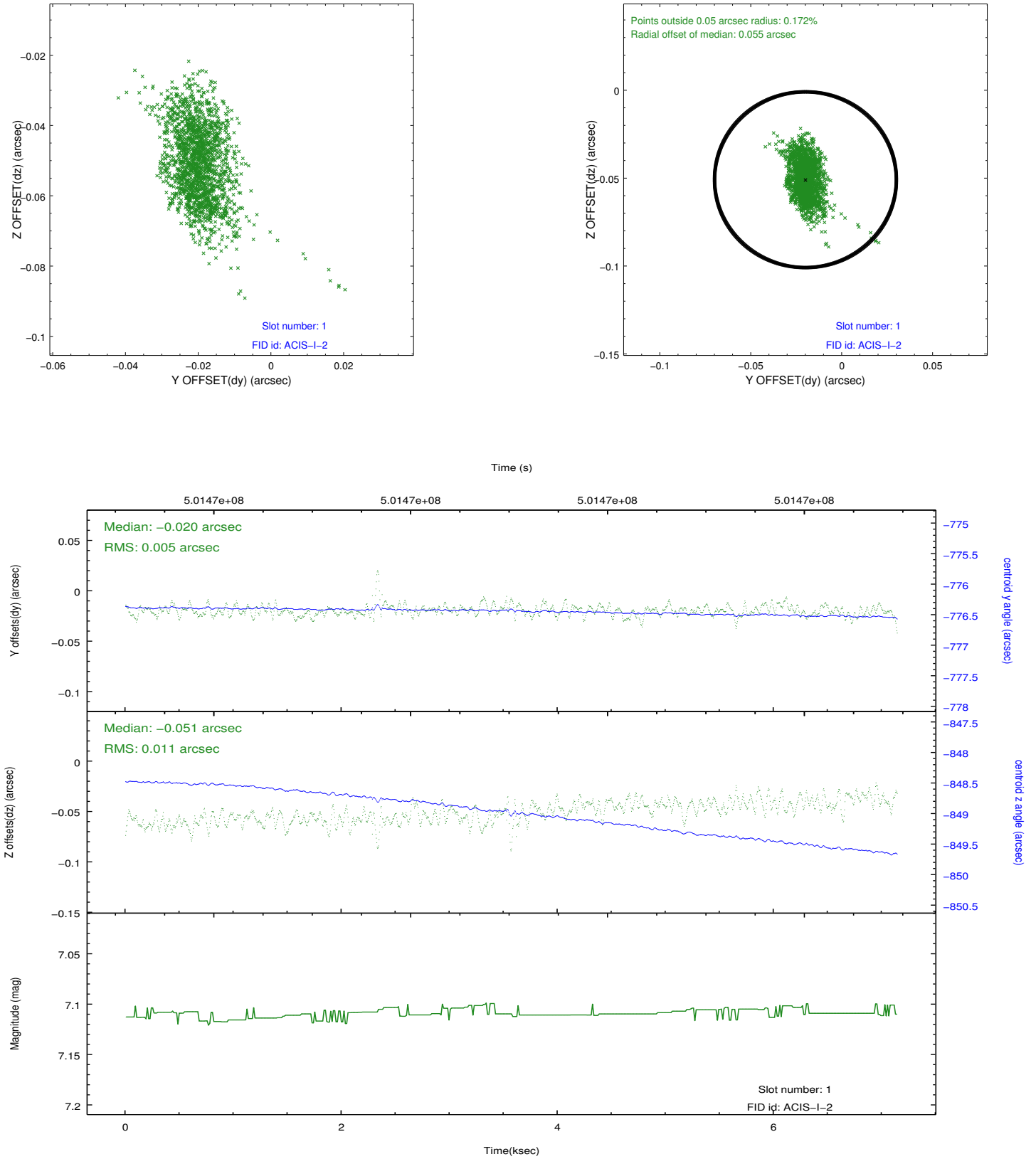


2.5 FID Slots

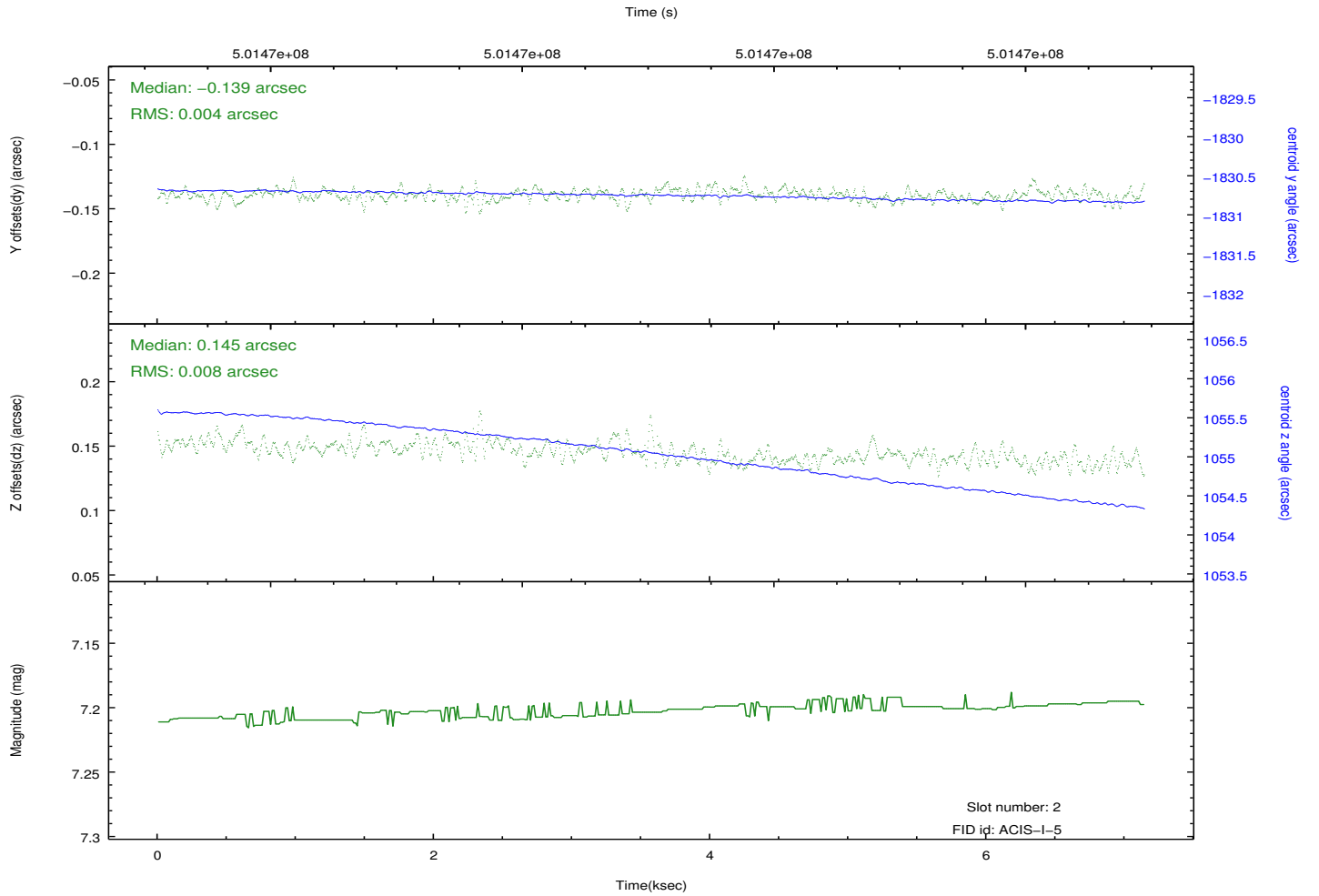
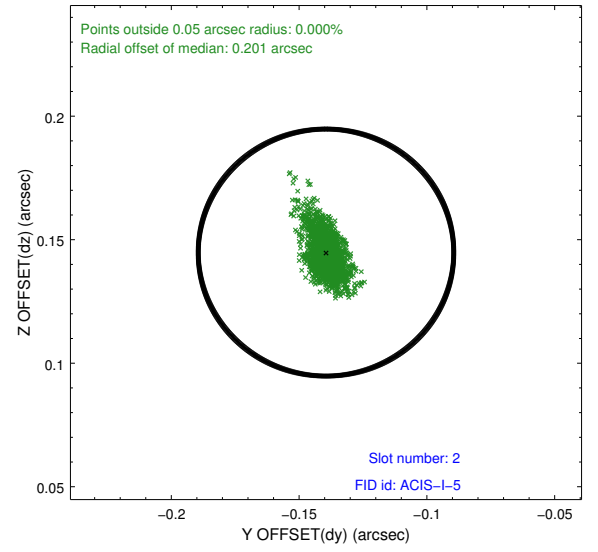
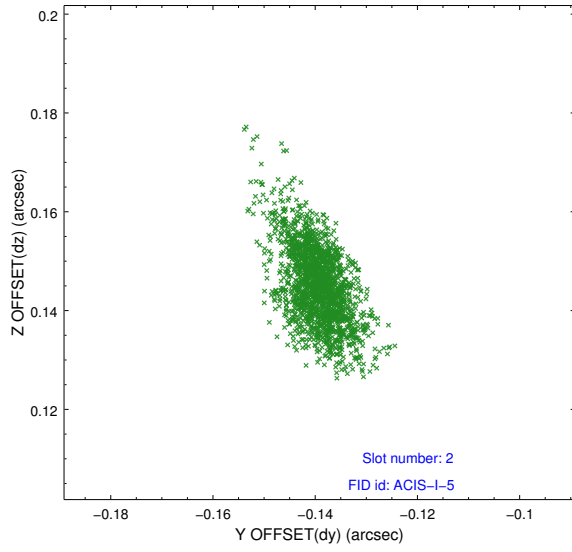
2.5.1 Slot 0



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)	2014.12.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	6.9683489222527

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.