

V&V Reference Report

L2 ASCDS Version : 10

Observation 15666 - L2 Version 2
Chandra X-Ray Center

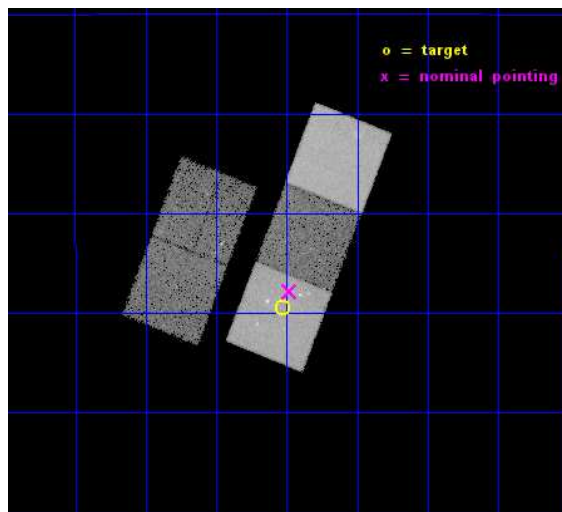
L2 Processing Date : Dec 4 2014

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1 Front

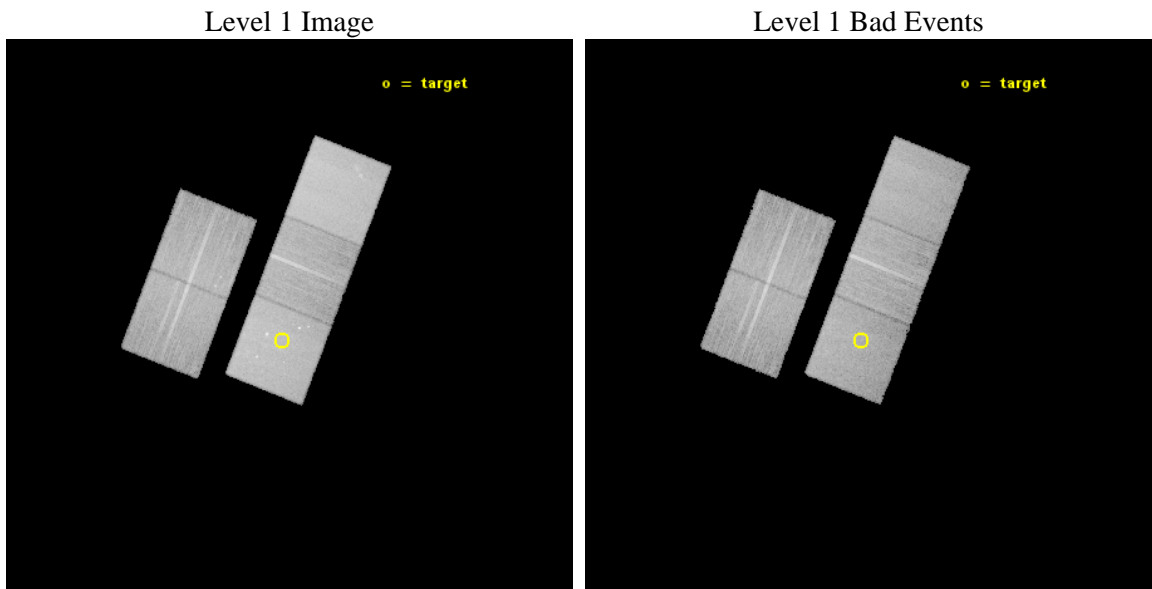
seq_num	801306	Sequence number
obs_id	15666	Observation id
title	Hot gas in spiral-dominated groups: does HGC 16 have a halo?	Propo
observer	Dr. Jan Vrtilik	Principal investigator
object	HGC 16	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	32.383333	Observer's specified target RA [deg]
dec_targ	-10.156667	Observer's specified target Dec [deg]
ra_nom	32.370214784134	Nominal RA [deg]
dec_nom	-10.130446315159	Nominal Dec [deg]
roll_nom	111.35431704561	Nominal Roll [deg]
revision	2	Processing version of data
ontime	30107.200231552	Sum of GTIs [s]
livetime	29713.827495929	Livetime [s]
ontime2	30107.200231552	Sum of GTIs [s]
ontime3	30104.059231222	Sum of GTIs [s]
ontime5	30107.200231552	Sum of GTIs [s]
ontime6	30097.777270675	Sum of GTIs [s]
ontime7	30107.200231552	Sum of GTIs [s]
l2events	243831	Number of level 2 events



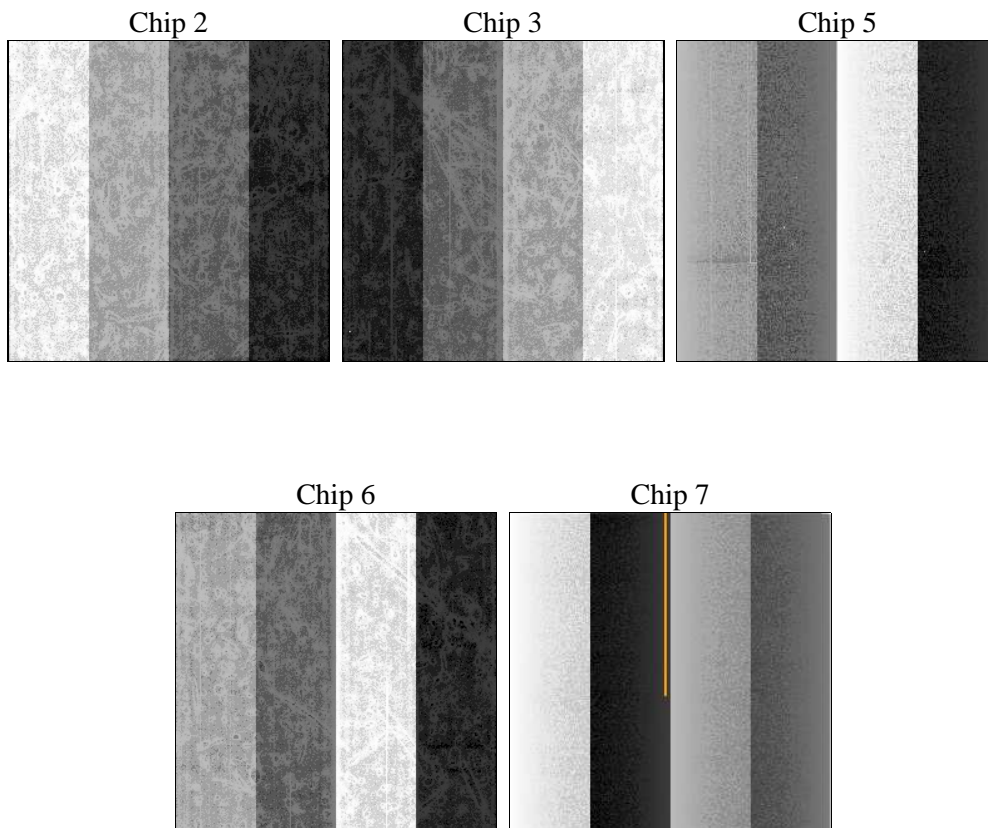
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	30000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	30107.200231552	Sum of GTIs [s]
caldbver	4.6.4	 	ontime2	30107.200231552	Sum of GTIs [s]
date	2014-12-04T19:00:02	Date and time of file creation	ontime3	30104.059231222	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	30107.200231552	Sum of GTIs [s]
			ontime6	30097.777270675	Sum of GTIs [s]
			ontime7	30107.200231552	Sum of GTIs [s]
			l1events	858830	Number of level 1 events

2.1.4 Events

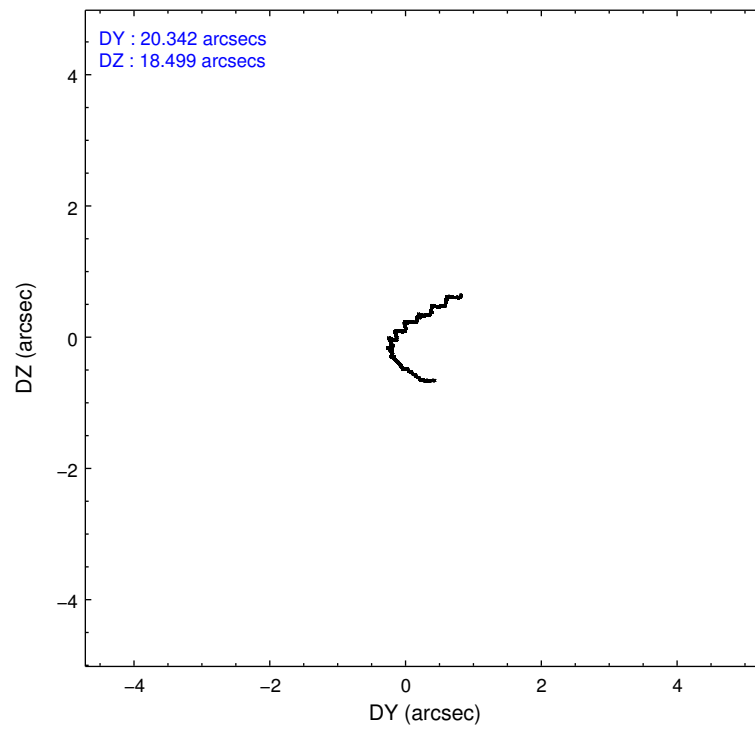
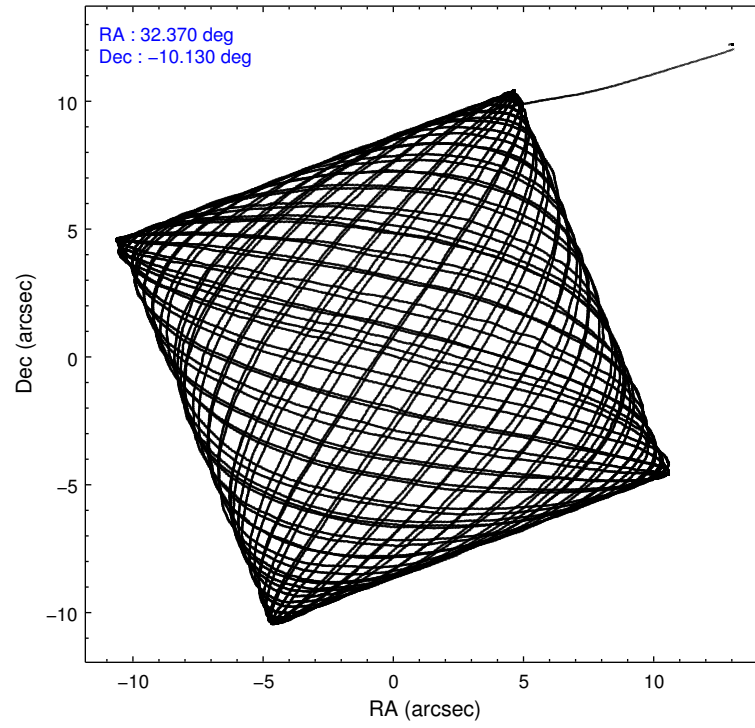
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	142918	134585	236973	142762	201592
rejected events	125876	118848	123698	125080	110083
rejected %	88%	88%	52%	87%	54%

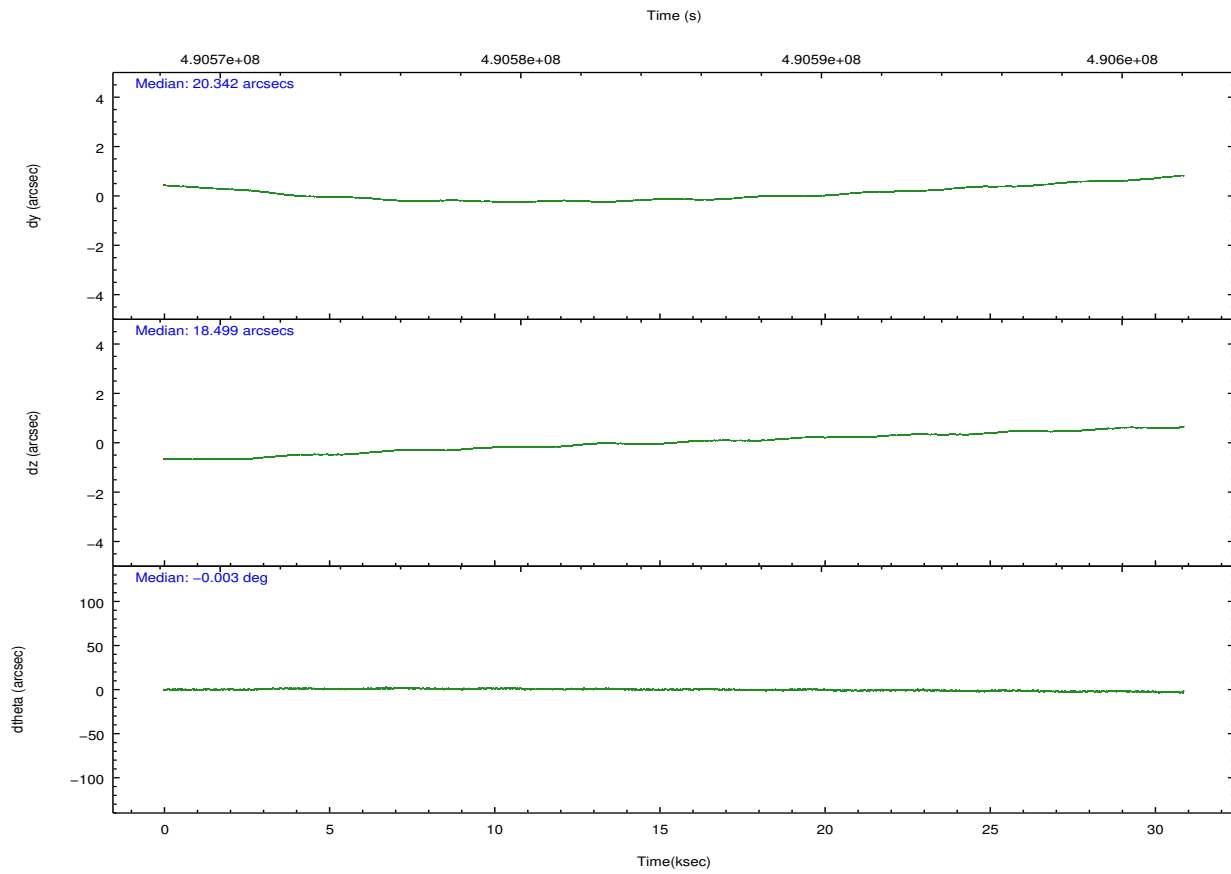
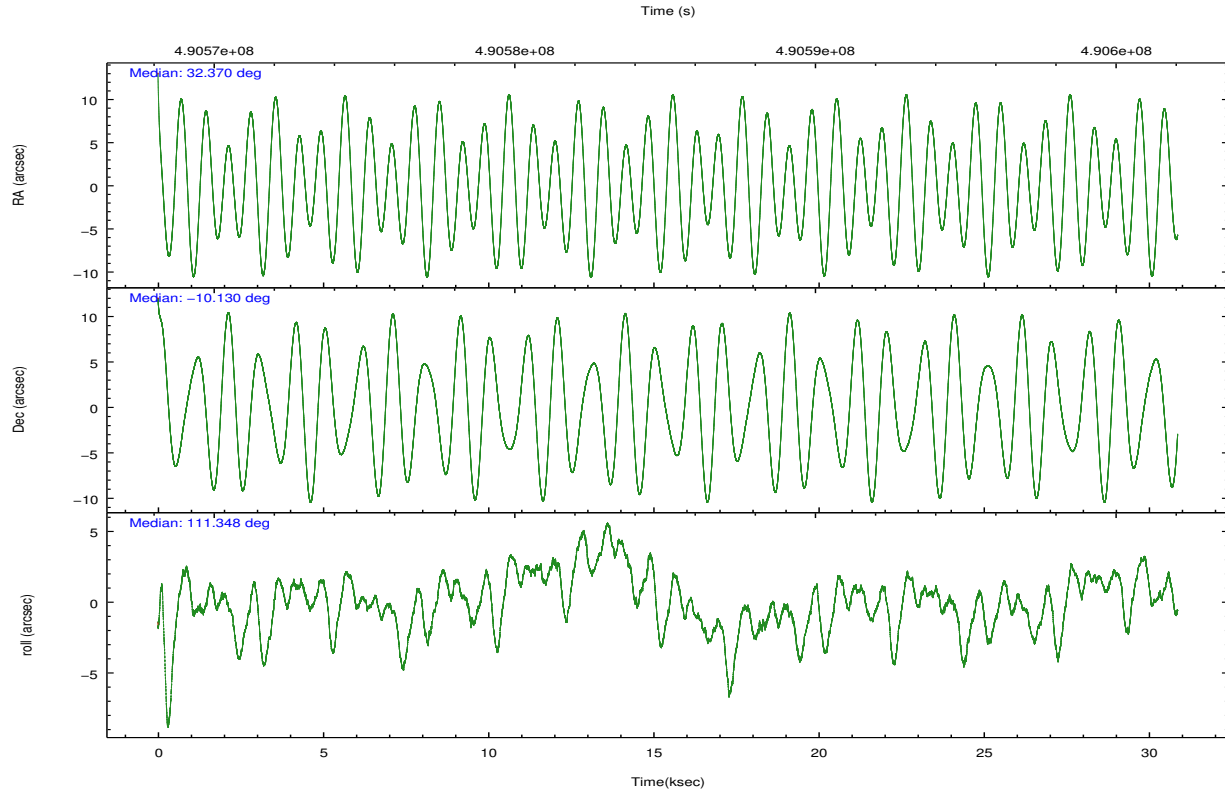
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	6345	5312	7299	5996	8933
	4%	3%	3%	4%	4%
grade 1 events	89	81	356	67	227
	0%	0%	0%	0%	0%
grade 2 events	4059	3666	34870	3918	18952
	2%	2%	14%	2%	9%
grade 3 events	1745	1755	4030	1897	8018
	1%	1%	1%	1%	3%
grade 4 events	1655	1730	3891	1823	7823
	1%	1%	1%	1%	3%
grade 5 events	5943	7509	17741	7410	20326
	4%	5%	7%	5%	10%
grade 6 events	3239	3275	63199	4048	47815
	2%	2%	26%	2%	23%
grade 7 events	119843	111257	105587	117603	89498
	83%	82%	44%	82%	44%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23567	ACIS-23567	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	32.392143	32.37021478413401	CCD I2 on	O1	Y
[deg] Pointing Dec	-10.147220	-10.1304463151586	CCD I3 on	Y	Y
[deg] Pointing Roll	111.201552	111.3543170456062	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	N	N
[s] Observation start time (MET)	490570520.184000	490568784.44666	CCD S5 on	N	N
Observation start date	2013-07-18T21:34:13	2013-07-18T21:06:24	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	490600520.184000	490601734.61096	On-chip summing requested	N	N
Observation end date	2013-07-19T05:54:13	2013-07-19T06:15:34	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





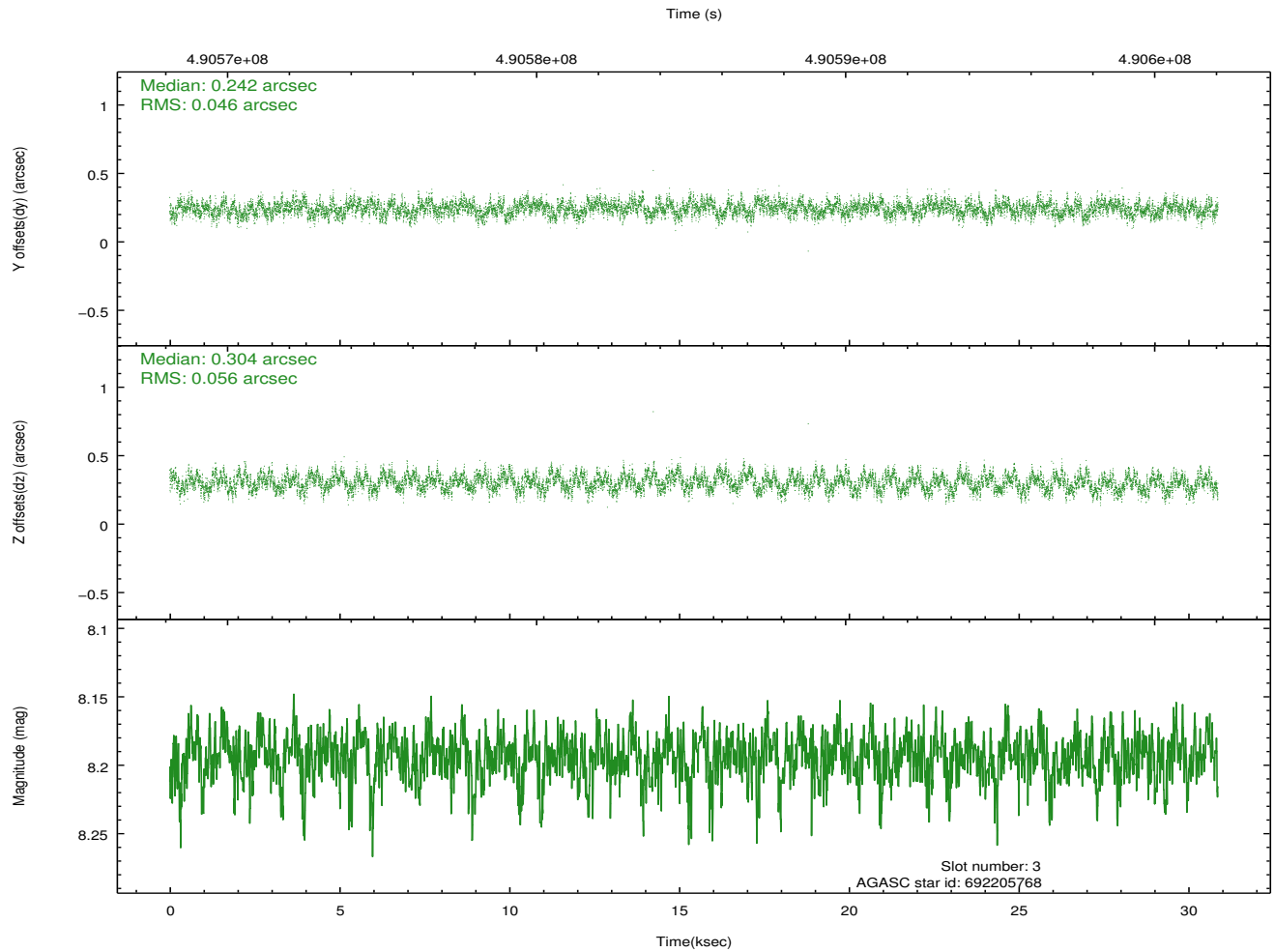
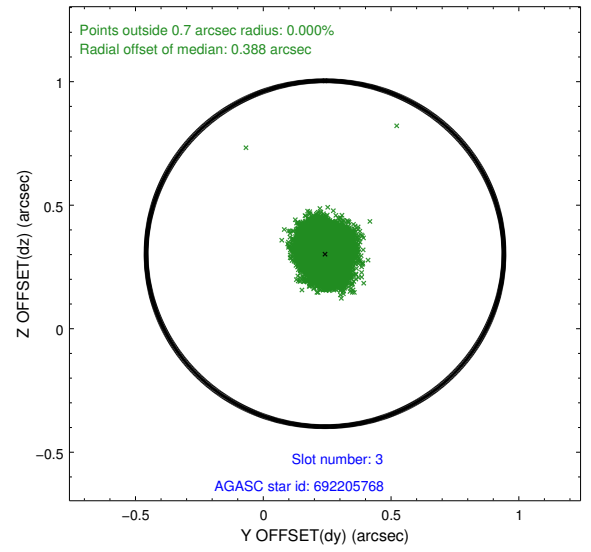
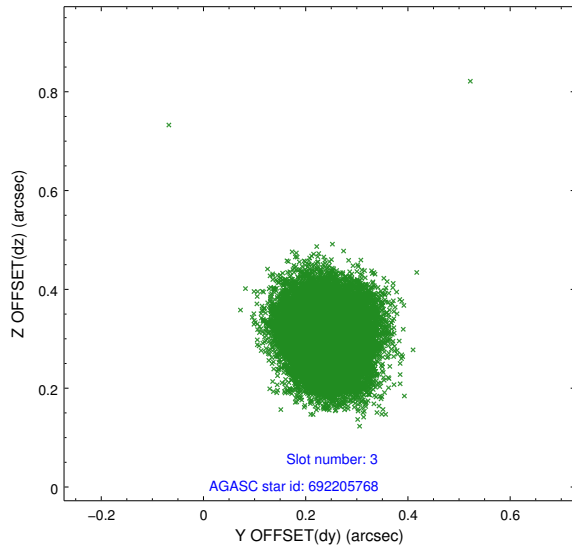
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.98	7530	-0.122	-0.057	0.008	0.013	0.000000	0.000000	-773.71	-1740.02
1	FID		ACIS-S-4	7.07	7530	0.261	0.074	0.008	0.015	0.000000	0.000000	2139.95	168.48
2	FID		ACIS-S-5	7.09	7529	-0.170	-0.008	0.008	0.014	0.000000	0.000000	-1826.49	162.21
3	GUIDE	used	692205768	8.19	15060	0.242	0.304	0.079	0.121	32.434117	-10.419931	-968.67	216.80
4	GUIDE	used	692207400	8.26	15053	-0.035	0.453	0.072	0.113	32.382891	-9.868805	946.47	-331.46
5	GUIDE	used	692207496	7.34	15058	-0.104	-0.068	0.084	0.136	32.082363	-10.041338	751.88	885.57
6	GUIDE	used	692203840	8.09	15059	-0.238	-0.370	0.080	0.122	31.608949	-9.990830	1525.45	2386.25
7	GUIDE	used	692200704	9.22	15050	0.141	-0.318	0.105	0.170	31.832694	-10.547045	-628.16	2367.85

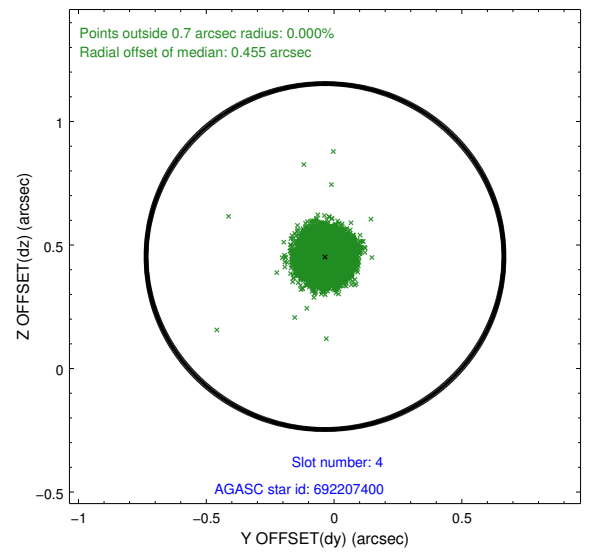
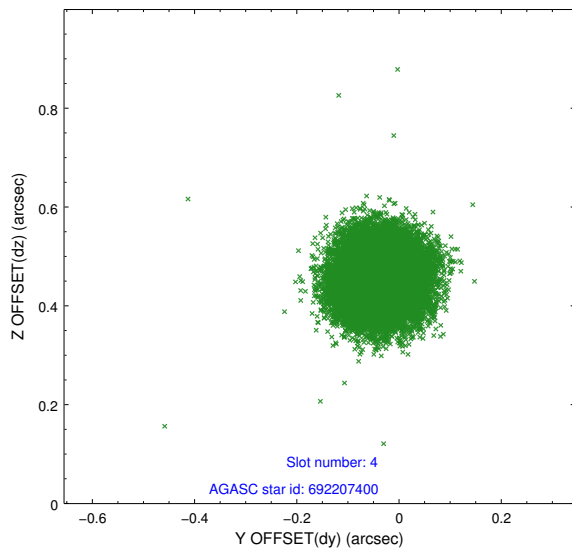
∞

2.4 Star Slots

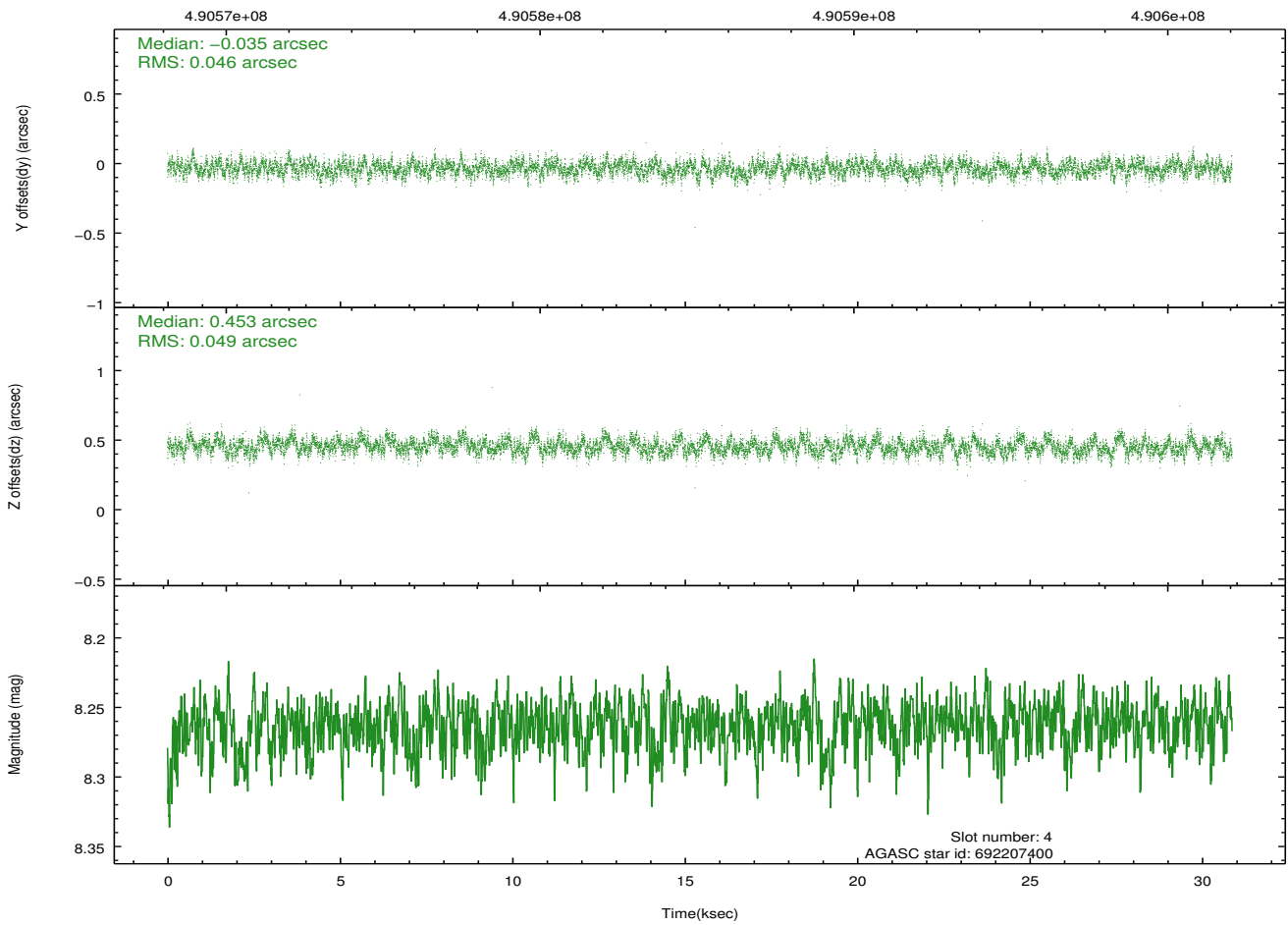
2.4.1 Slot 3



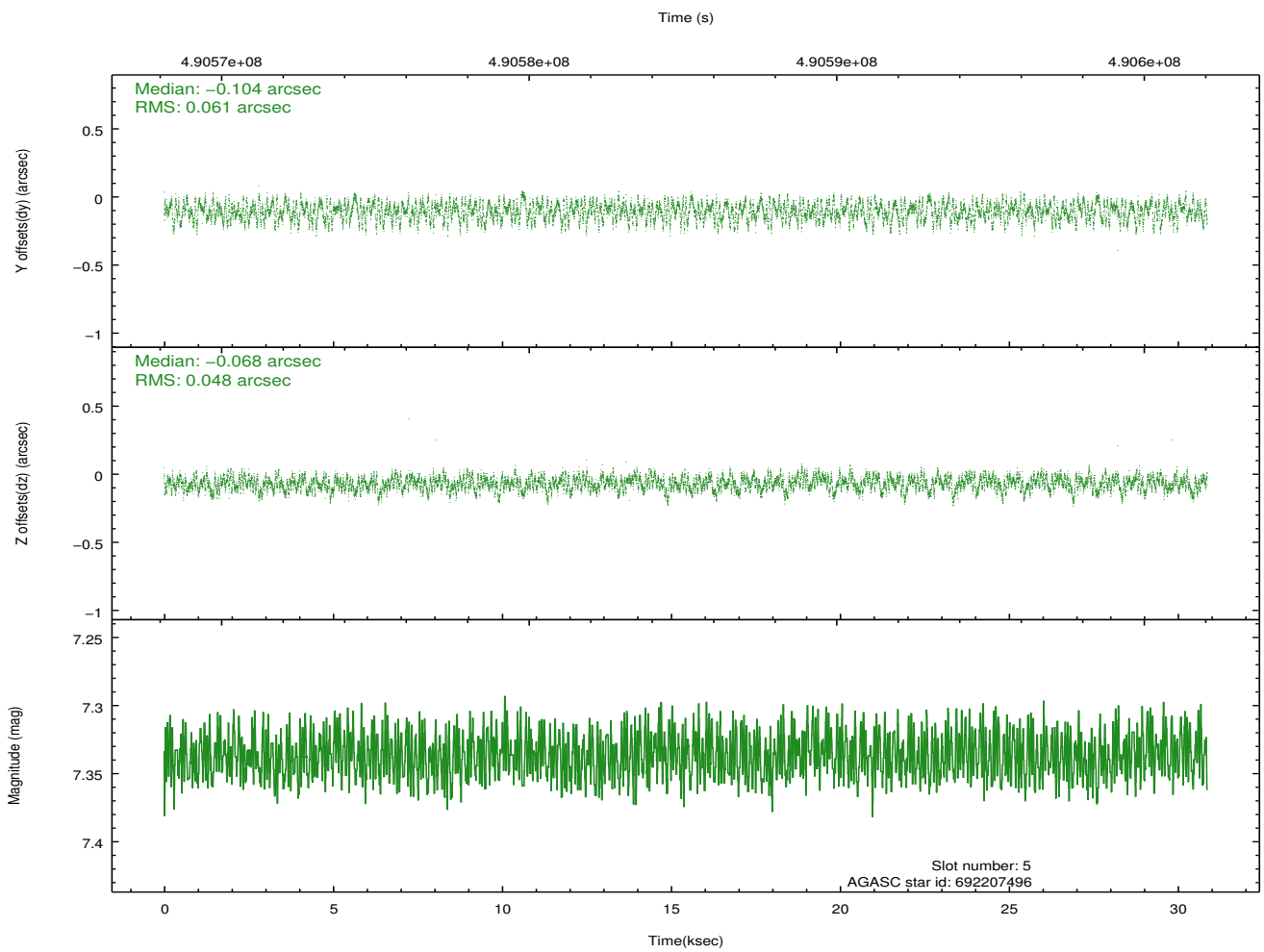
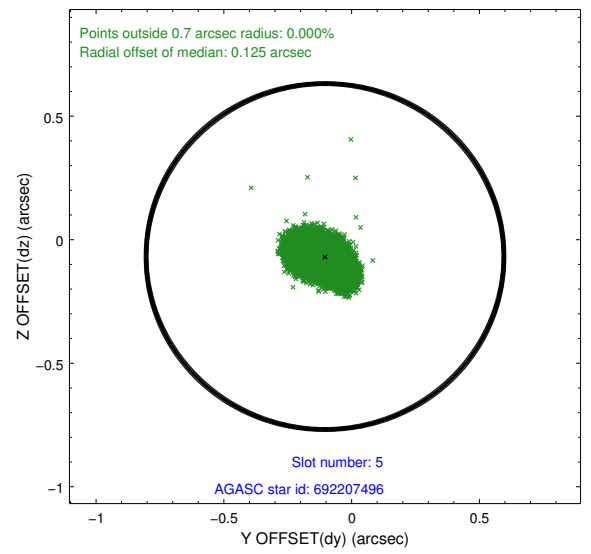
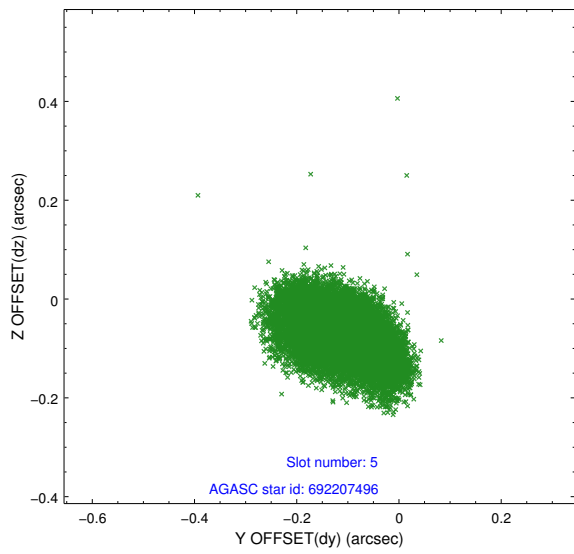
2.4.2 Slot 4



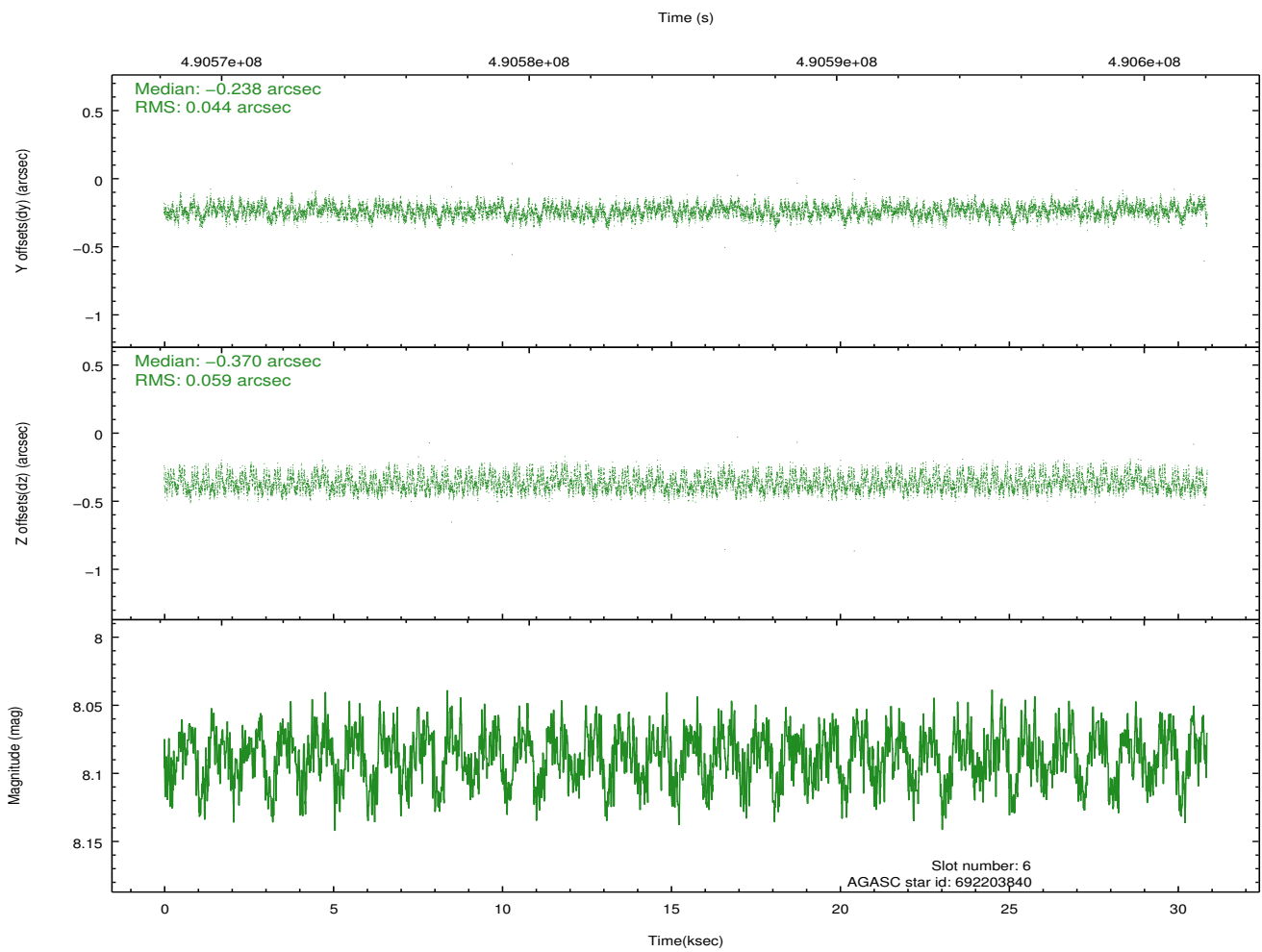
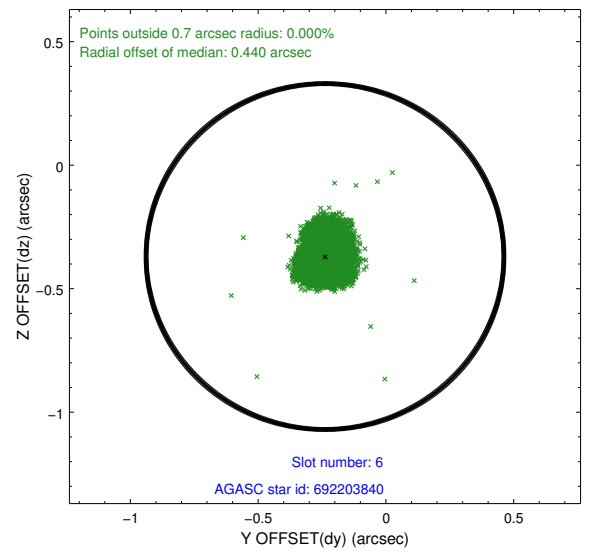
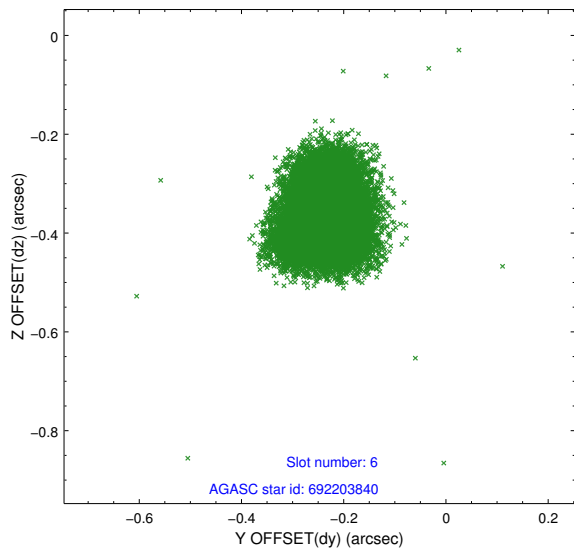
Time (s)



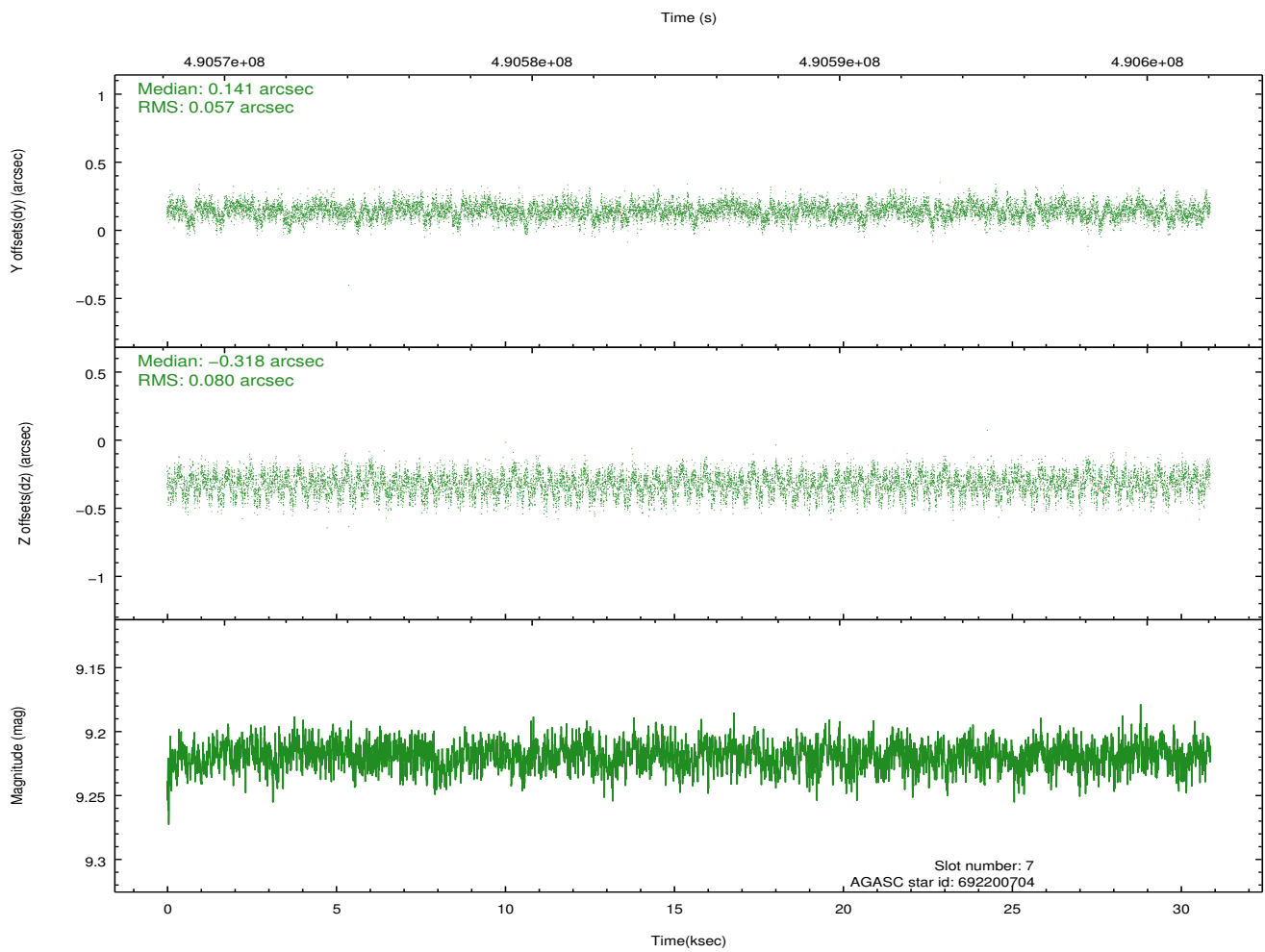
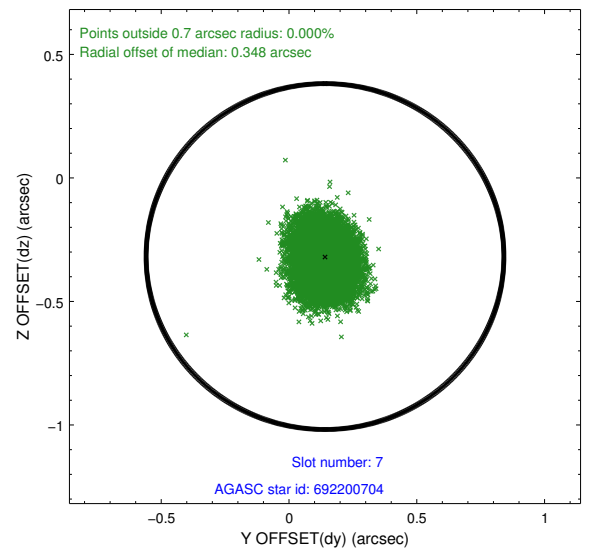
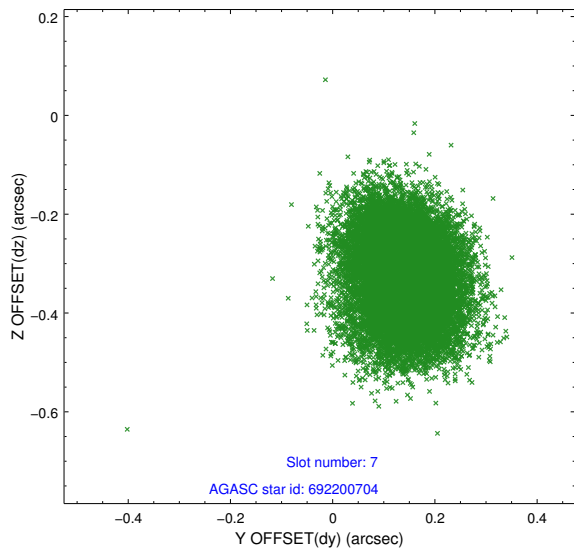
2.4.3 Slot 5



2.4.4 Slot 6

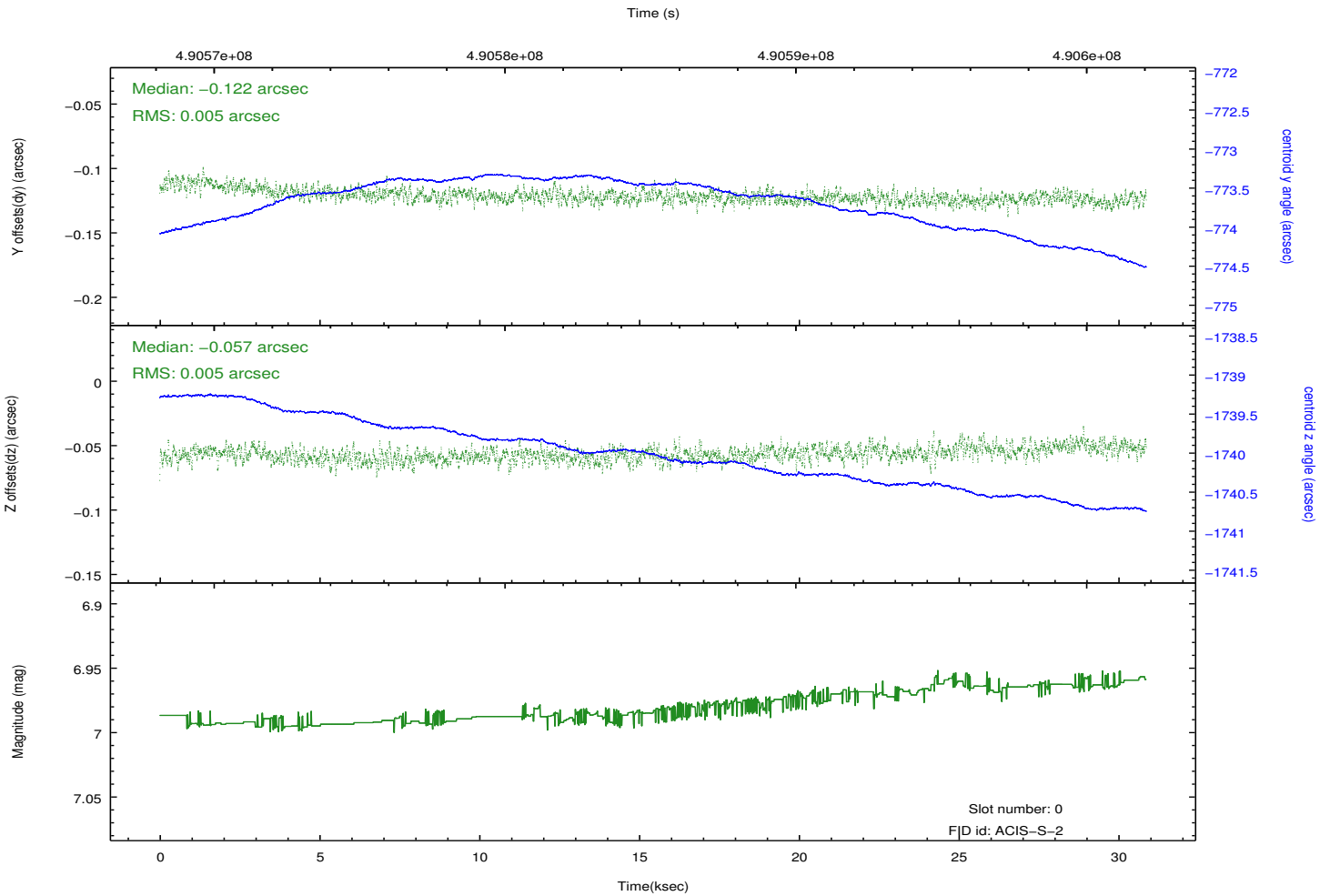
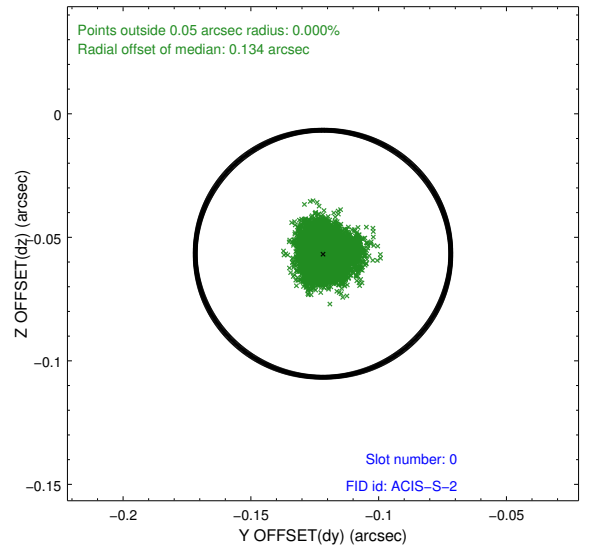
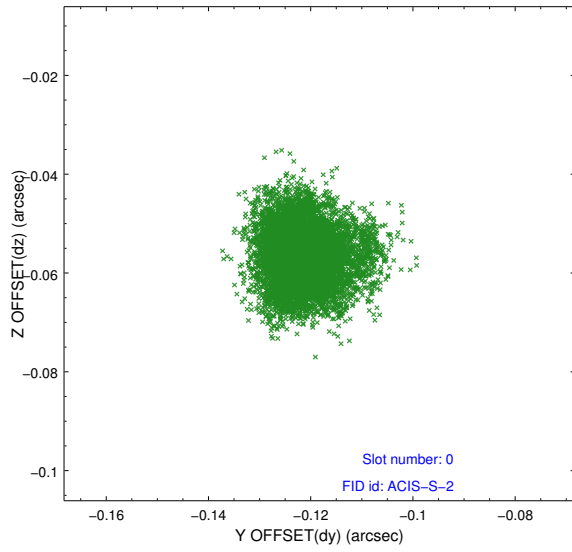


2.4.5 Slot 7

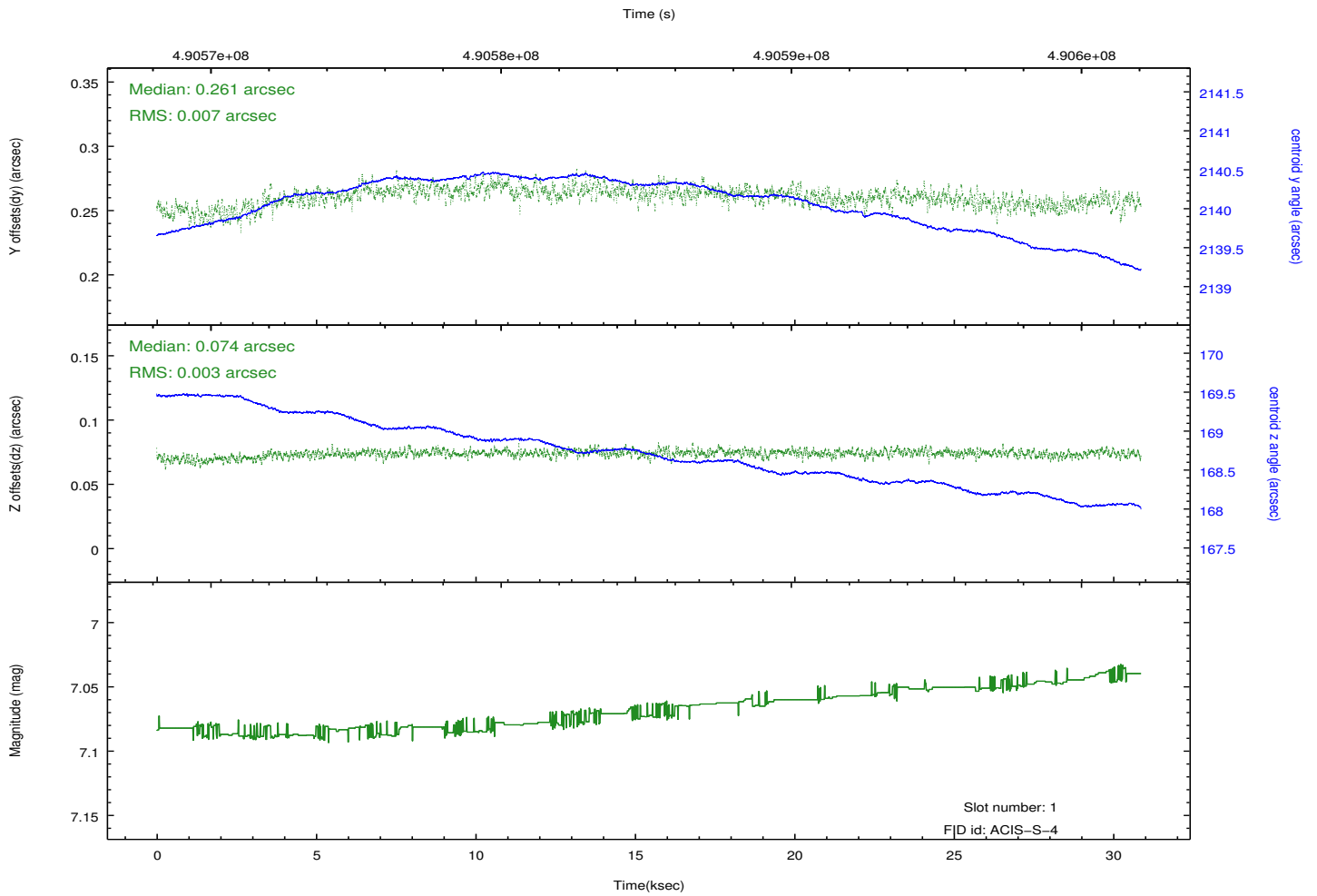
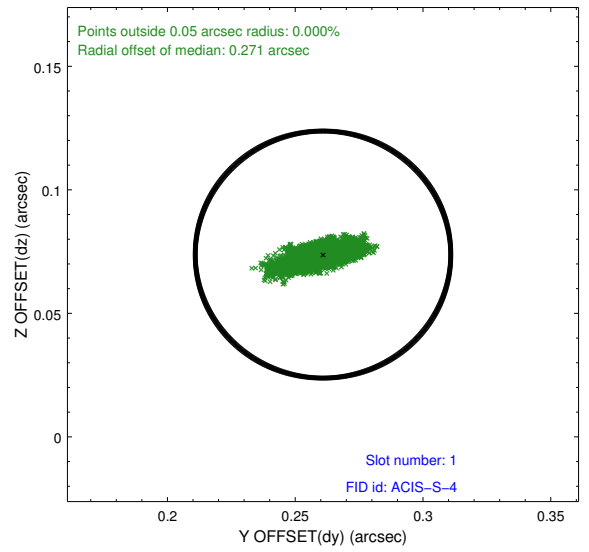
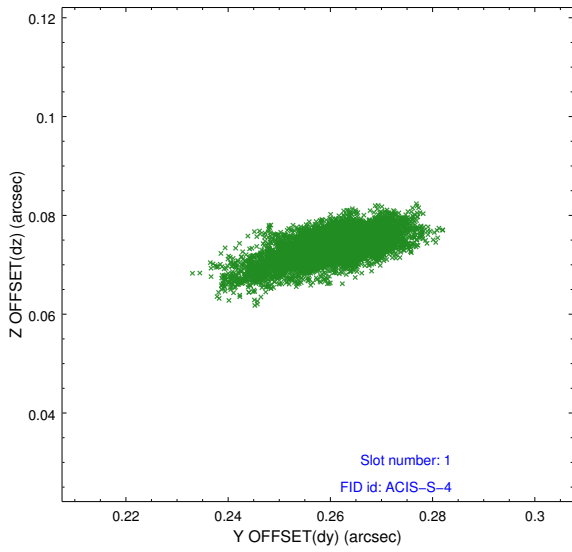


2.5 FID Slots

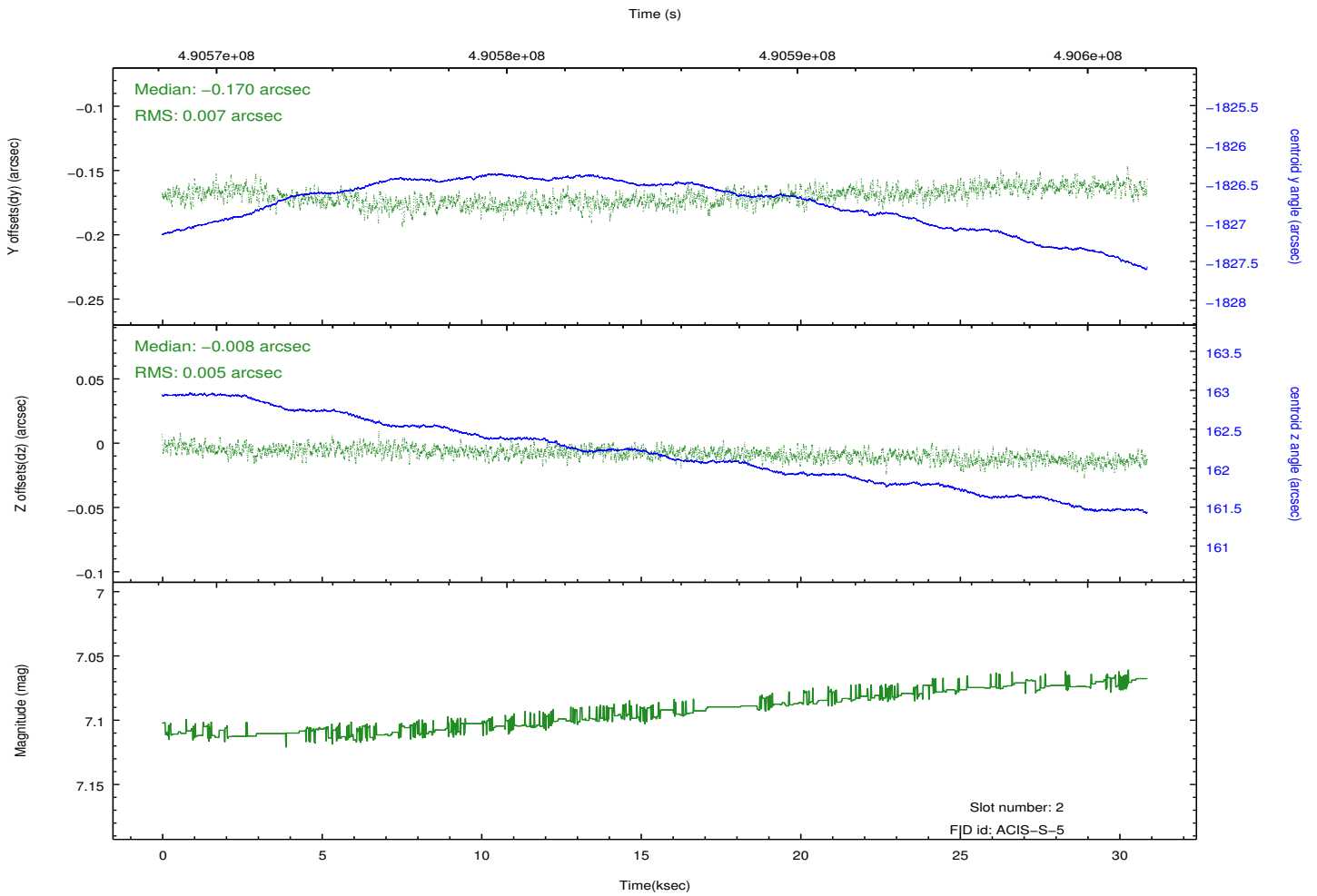
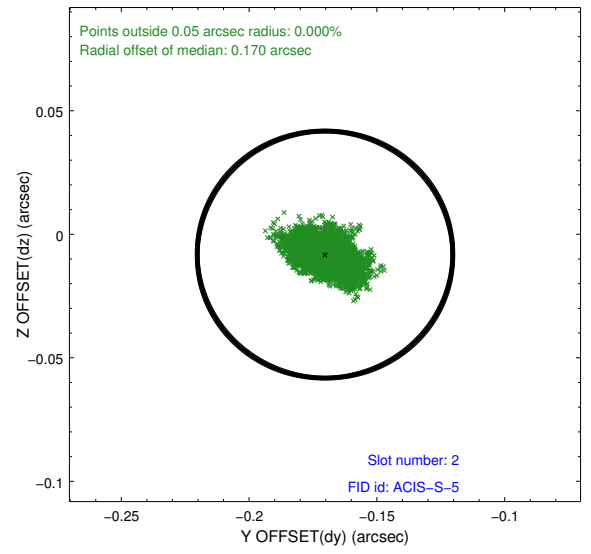
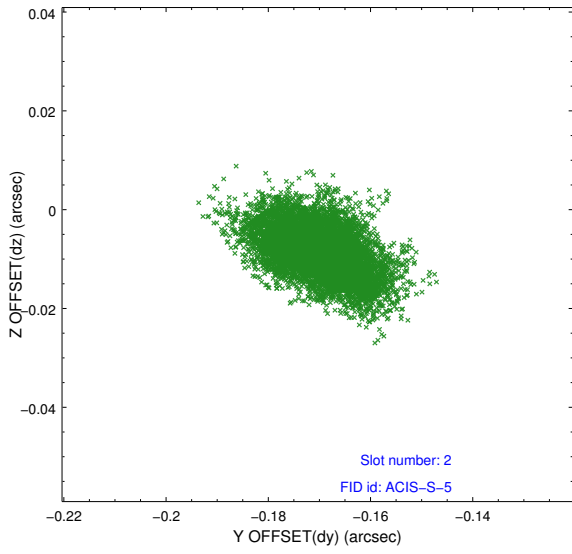
2.5.1 Slot 0



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)	2014.12.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.107200231552

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.