

V&V Reference Report

L2 ASCDS Version : 10

Observation 15135 - L2 Version 2
Chandra X-Ray Center

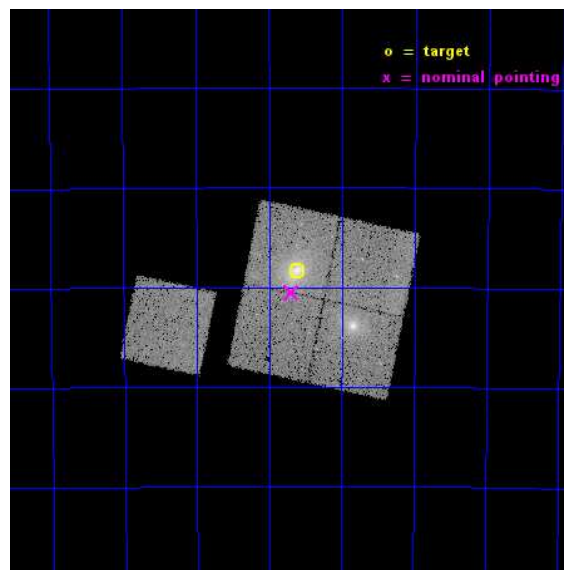
L2 Processing Date : Dec 6 2014

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1 Front

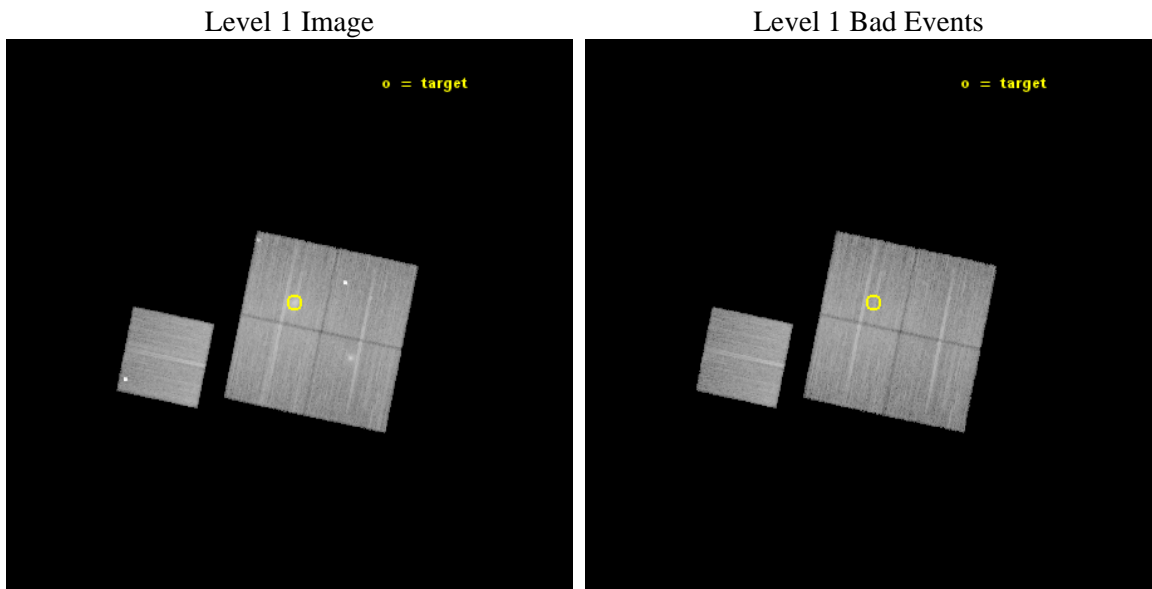
seq_num	801264	Sequence number
obs_id	15135	Observation id
title	A Chandra-Planck Legacy Program for Massive Clusters of Galaxies	P
observer	Dr. Christine Jones	Principal investigator
object	G337.09-25.97	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	288.65375	Observer's specified target RA [deg]
dec_targ	-59.472194	Observer's specified target Dec [deg]
ra_nom	288.67332688358	Nominal RA [deg]
dec_nom	-59.508657852763	Nominal Dec [deg]
roll_nom	281.7856538373	Nominal Roll [deg]
revision	2	Processing version of data
ontime	25078.959212542	Sum of GTIs [s]
livetime	24751.284147569	Livetime [s]
ontime0	25078.959152699	Sum of GTIs [s]
ontime1	25082.100192904	Sum of GTIs [s]
ontime2	25078.959202528	Sum of GTIs [s]
ontime3	25078.959212542	Sum of GTIs [s]
ontime6	25082.100192904	Sum of GTIs [s]
l2events	95868	Number of level 2 events



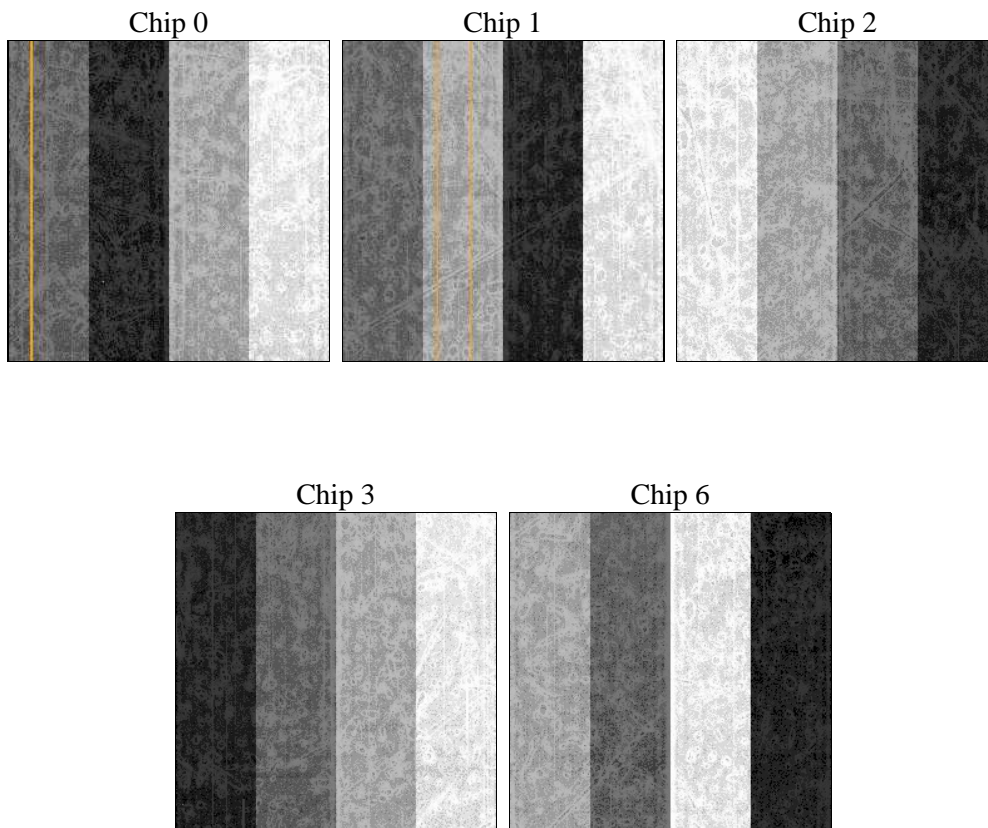
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	25000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	25078.959212542	Sum of GTIs [s]
caldbver	4.6.4	 	ontime0	25078.959152699	Sum of GTIs [s]
date	2014-12-07T00:38:44	Date and time of file creation	ontime1	25082.100192904	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	25078.959202528	Sum of GTIs [s]
			ontime3	25078.959212542	Sum of GTIs [s]
			ontime6	25082.100192904	Sum of GTIs [s]
			l1events	860314	Number of level 1 events

2.1.4 Events

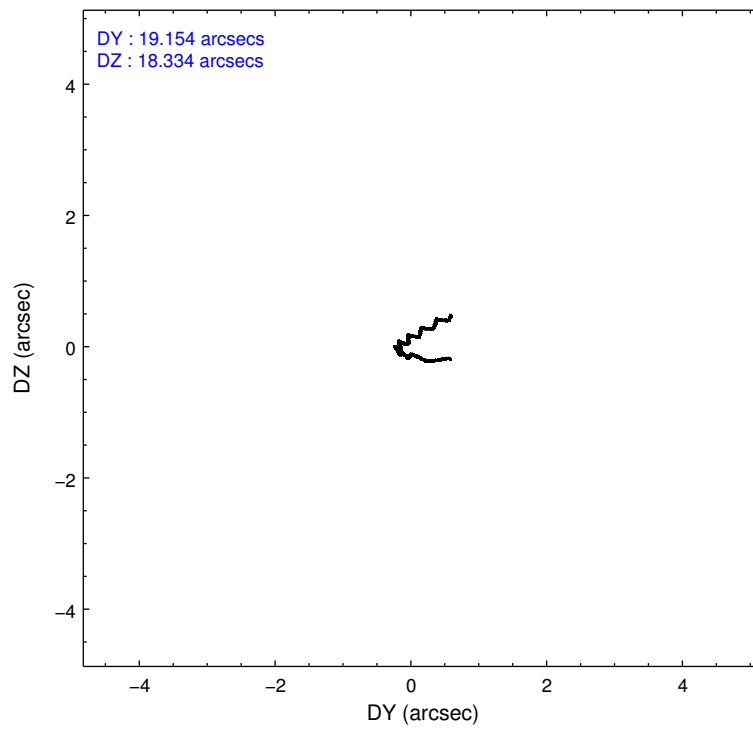
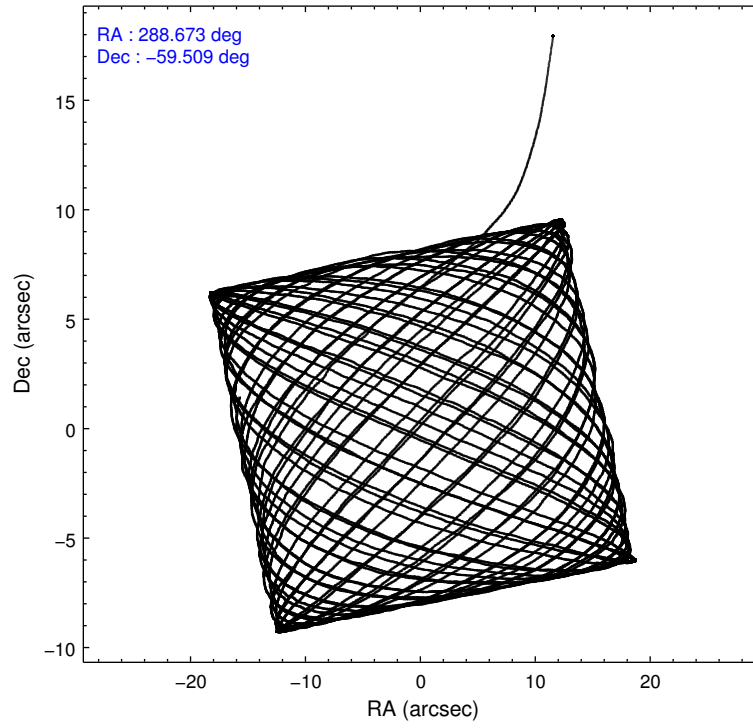
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	150201	162606	179624	181344	186539
rejected events	122779	133770	155969	148784	158337
rejected %	81%	82%	86%	82%	84%

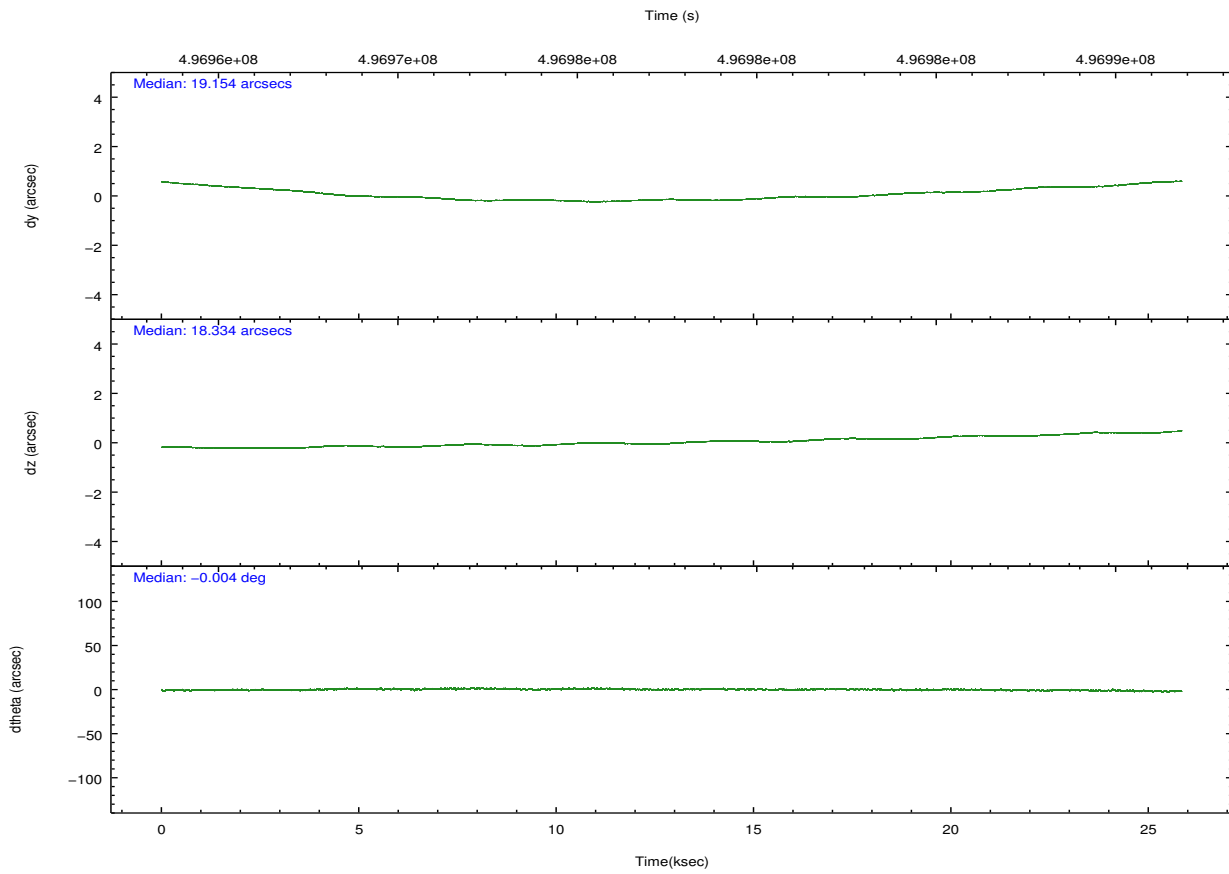
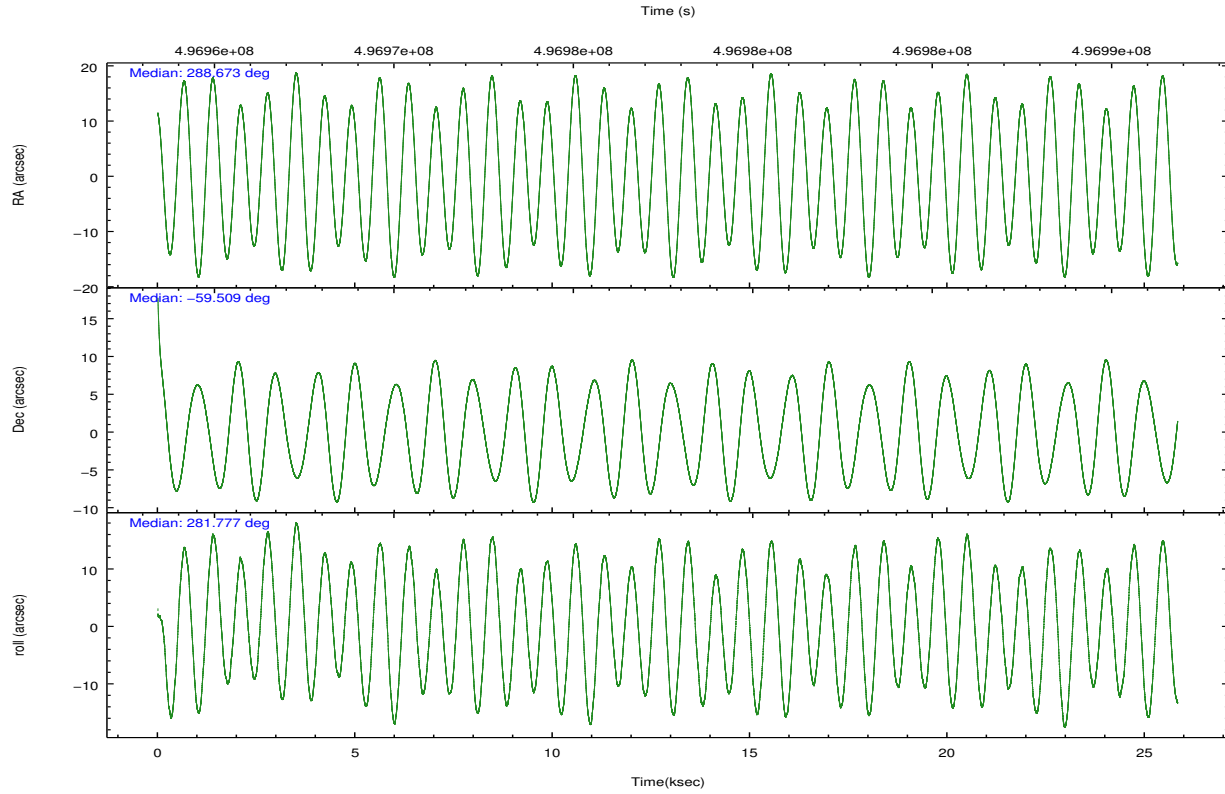
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	13144	15859	9122	19207	15076
	8%	9%	5%	10%	8%
grade 1 events	103	130	115	143	88
	0%	0%	0%	0%	0%
grade 2 events	7252	5538	7230	5521	5965
	4%	3%	4%	3%	3%
grade 3 events	1850	1683	1600	2029	1631
	1%	1%	0%	1%	0%
grade 4 events	1715	1743	2004	2114	1675
	1%	1%	1%	1%	0%
grade 5 events	5777	6430	5712	6808	6401
	3%	3%	3%	3%	3%
grade 6 events	3463	4016	3703	3692	3858
	2%	2%	2%	2%	2%
grade 7 events	116897	127207	150138	141830	151845
	77%	78%	83%	78%	81%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	288.637088	288.6733268835761	CCD I2 on	Y	Y
[deg] Pointing Dec	-59.488218	-59.50865785276346	CCD I3 on	Y	Y
[deg] Pointing Roll	281.545748	281.785653837303	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	-225.842463	-225.8433433320239	CCD S3 on	N	N
[mm] SIM translation stage offset	-7.75	-7.749109670905796	CCD S4 on	N	N
[s] Observation start time (MET)	496965551.184000	496963825.39547	CCD S5 on	N	N
Observation start date	2013-09-30T21:58:04	2013-09-30T21:30:25	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	496990551.184000	496991014.03445	On-chip summing requested	N	N
Observation end date	2013-10-01T04:54:44	2013-10-01T05:03:34	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





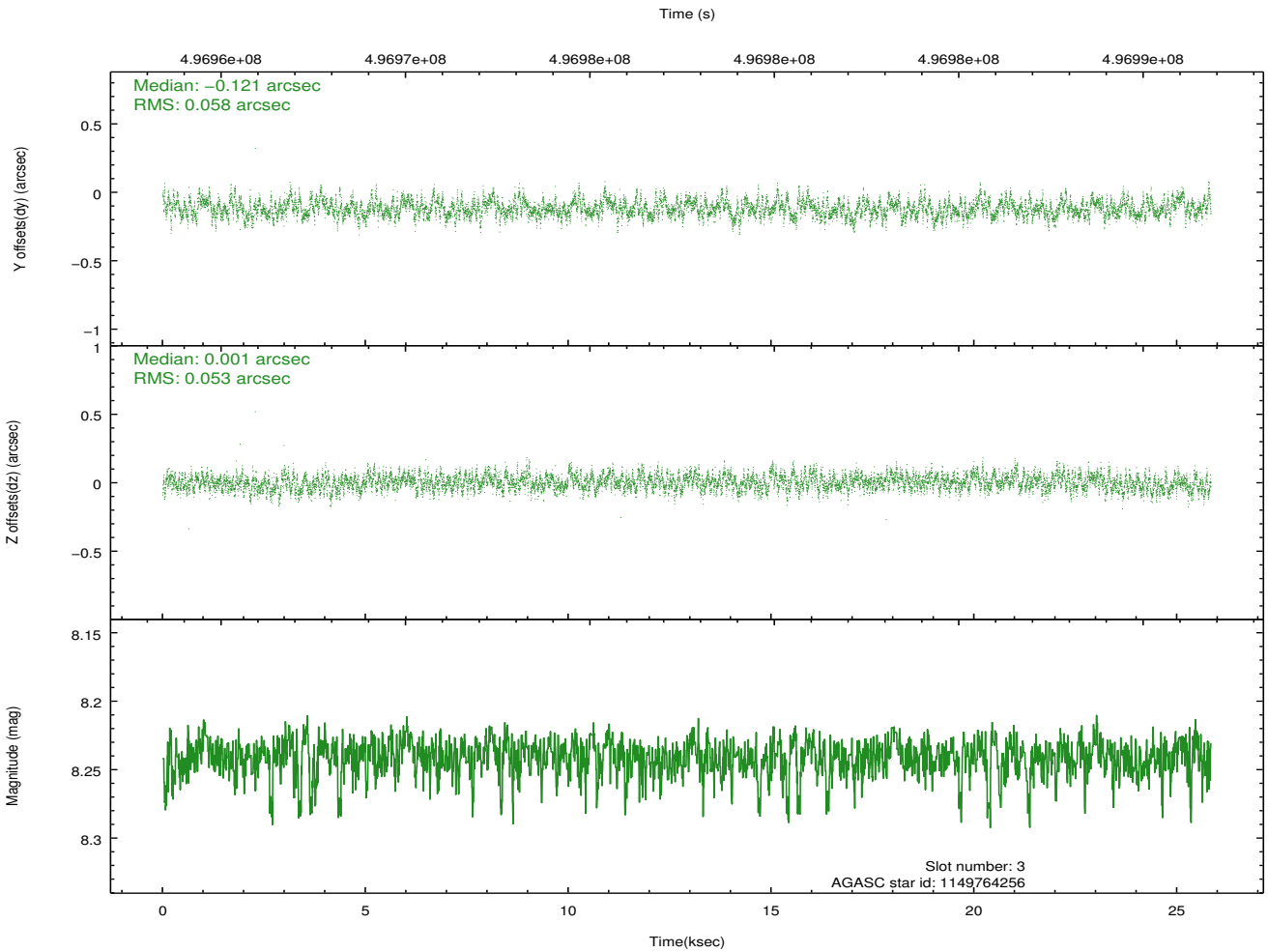
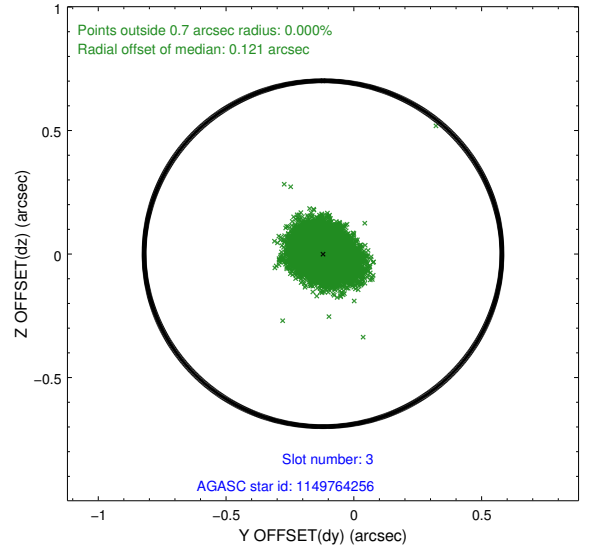
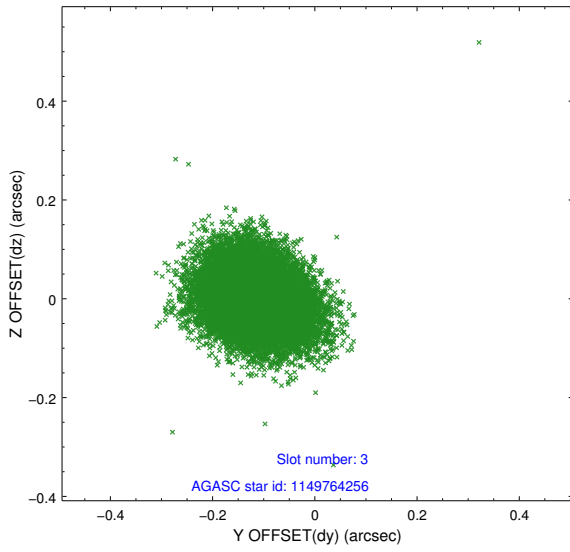
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.07	6301	0.129	-0.078	0.008	0.020	0.000000	0.000000	920.14	-1001.18
1	FID		ACIS-I-5	7.06	6301	-0.322	0.098	0.009	0.015	0.000000	0.000000	-1828.44	896.28
2	FID		ACIS-I-6	7.08	6301	0.102	0.051	0.009	0.014	0.000000	0.000000	385.42	1540.96
3	GUIDE	used	1149764256	8.24	12595	-0.121	0.001	0.084	0.134	289.584303	-58.874297	-1800.11	2166.96
4	GUIDE	used	1149765288	9.09	12508	0.054	0.008	0.108	0.174	288.533709	-59.930458	1523.00	-500.68
5	GUIDE	used	1149774504	9.30	12528	-0.093	0.186	0.122	0.195	288.144933	-58.902341	-2245.58	-474.55
6	GUIDE	used	1149777744	7.75	12598	0.089	-0.052	0.066	0.111	287.546652	-59.548386	-169.44	-1995.60
7	GUIDE	used	1149778600	8.77	12598	0.058	-0.138	0.091	0.152	288.226368	-59.688705	560.09	-875.59

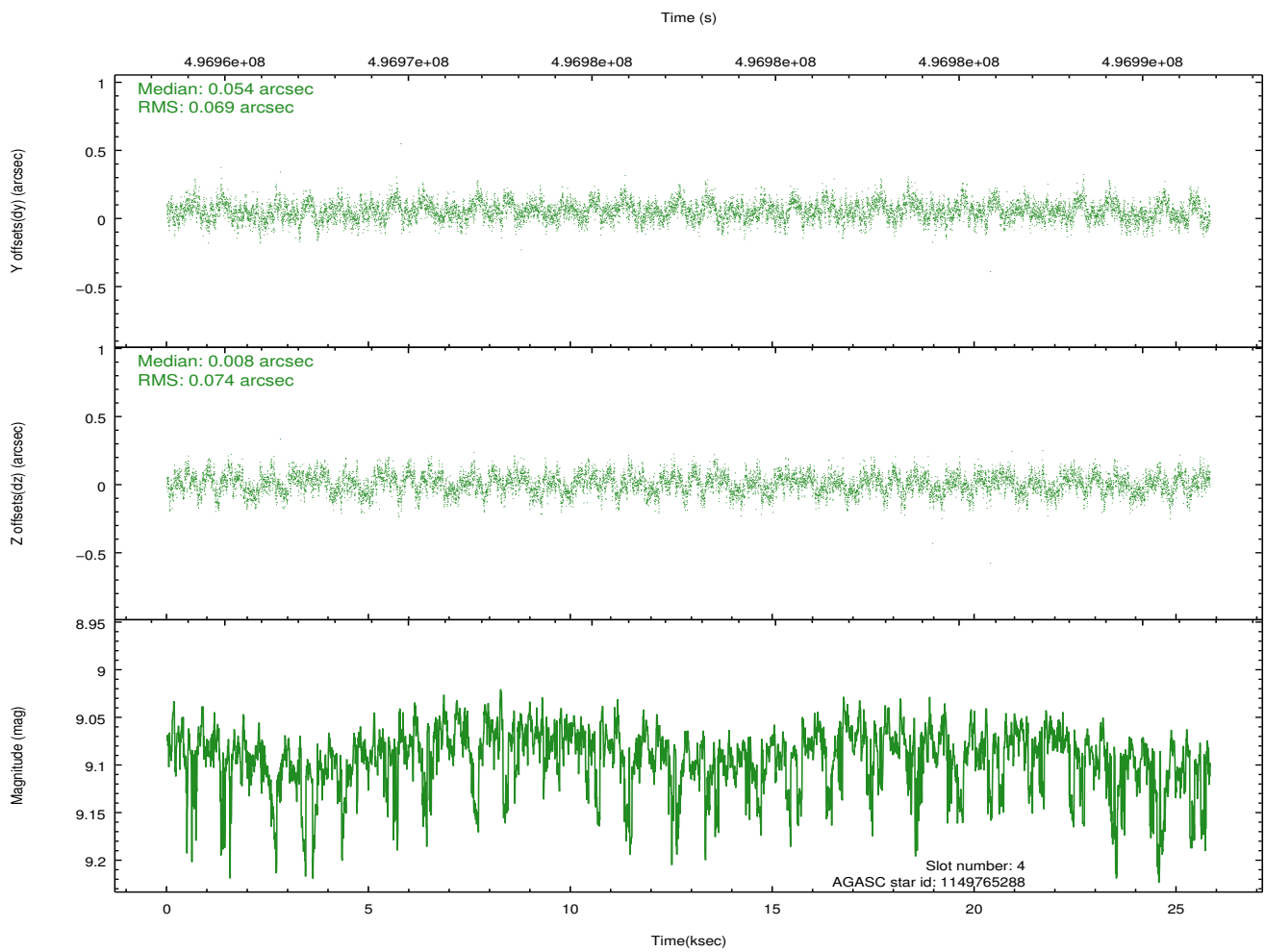
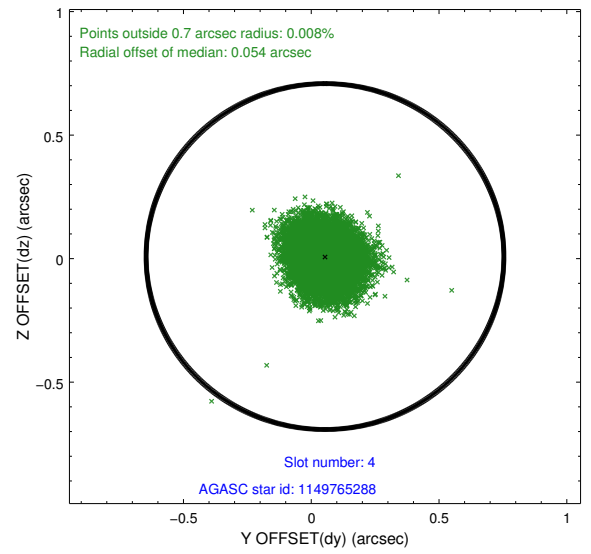
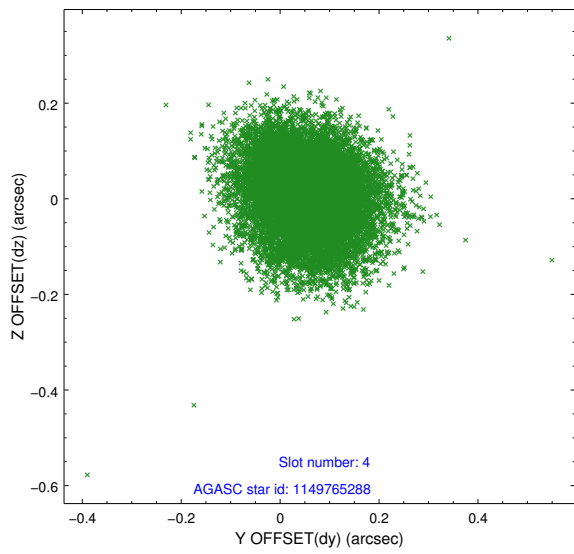
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2.4 Star Slots

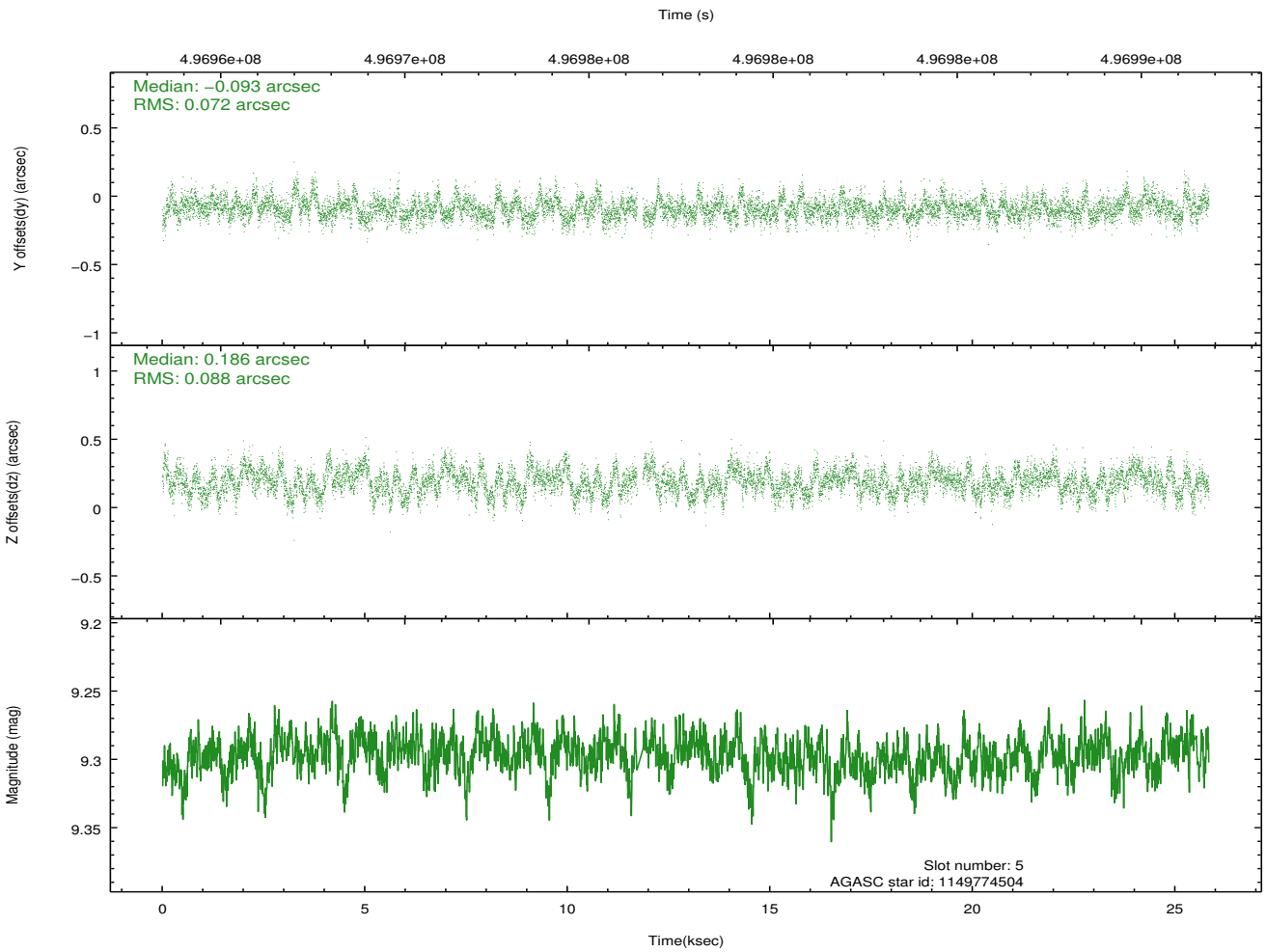
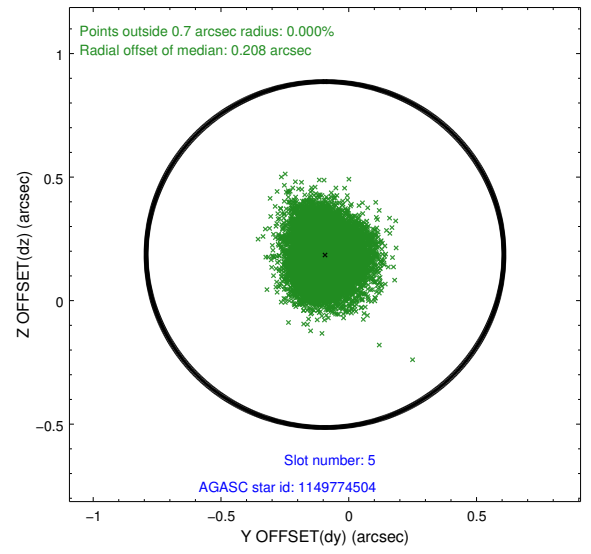
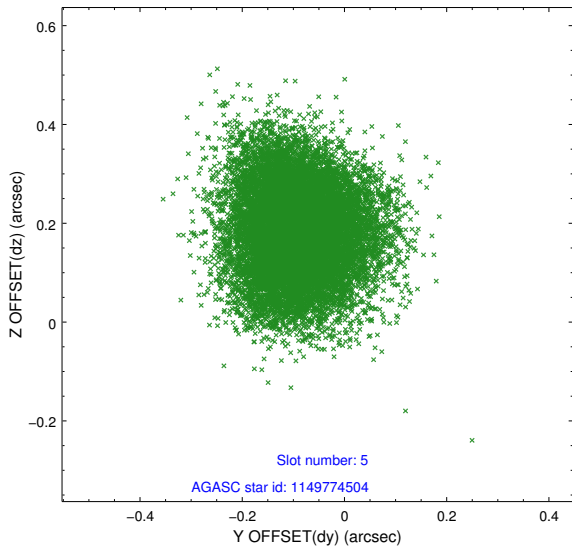
2.4.1 Slot 3



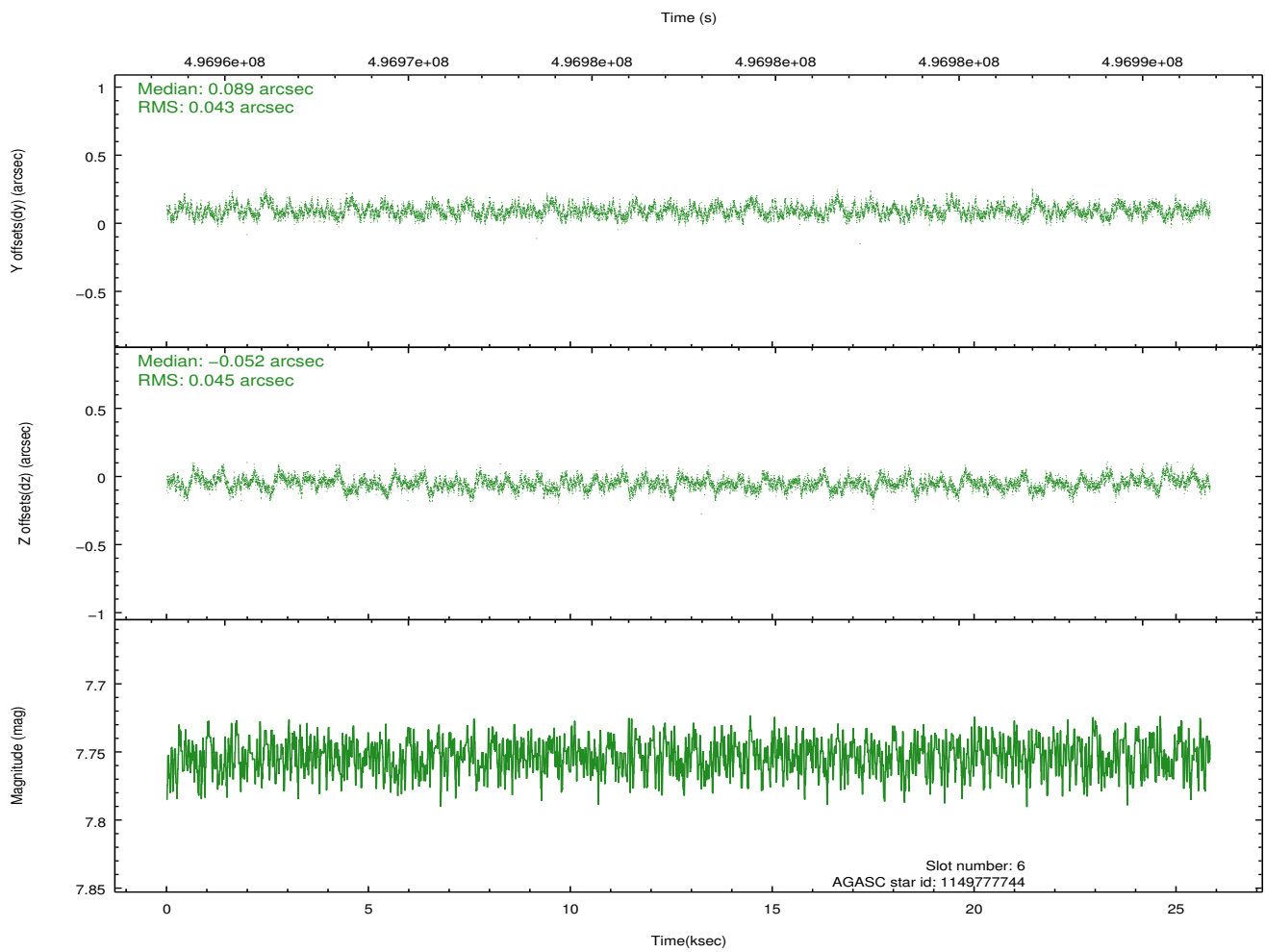
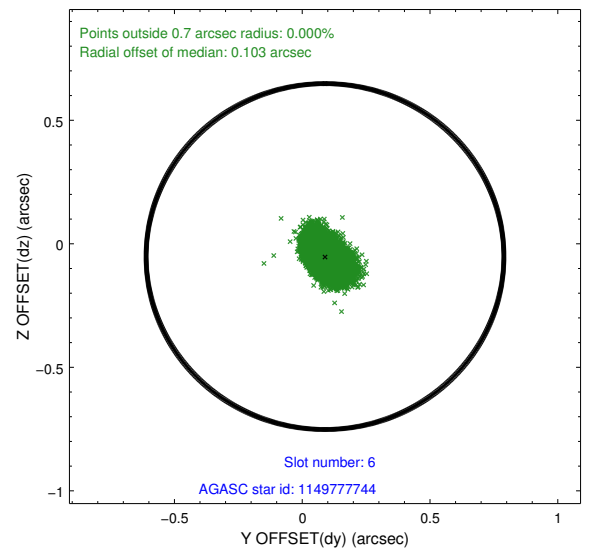
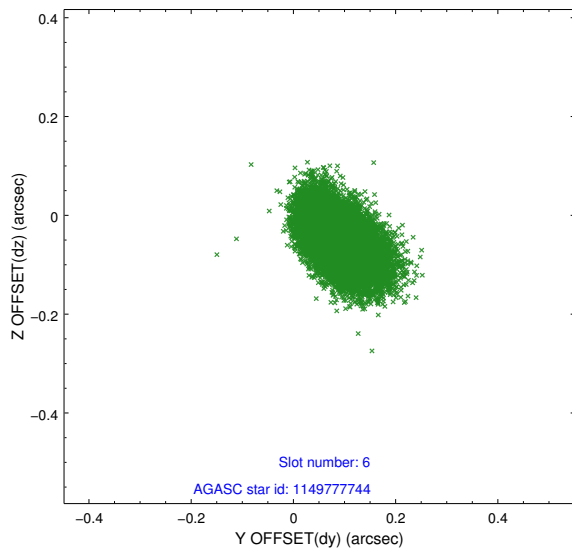
2.4.2 Slot 4



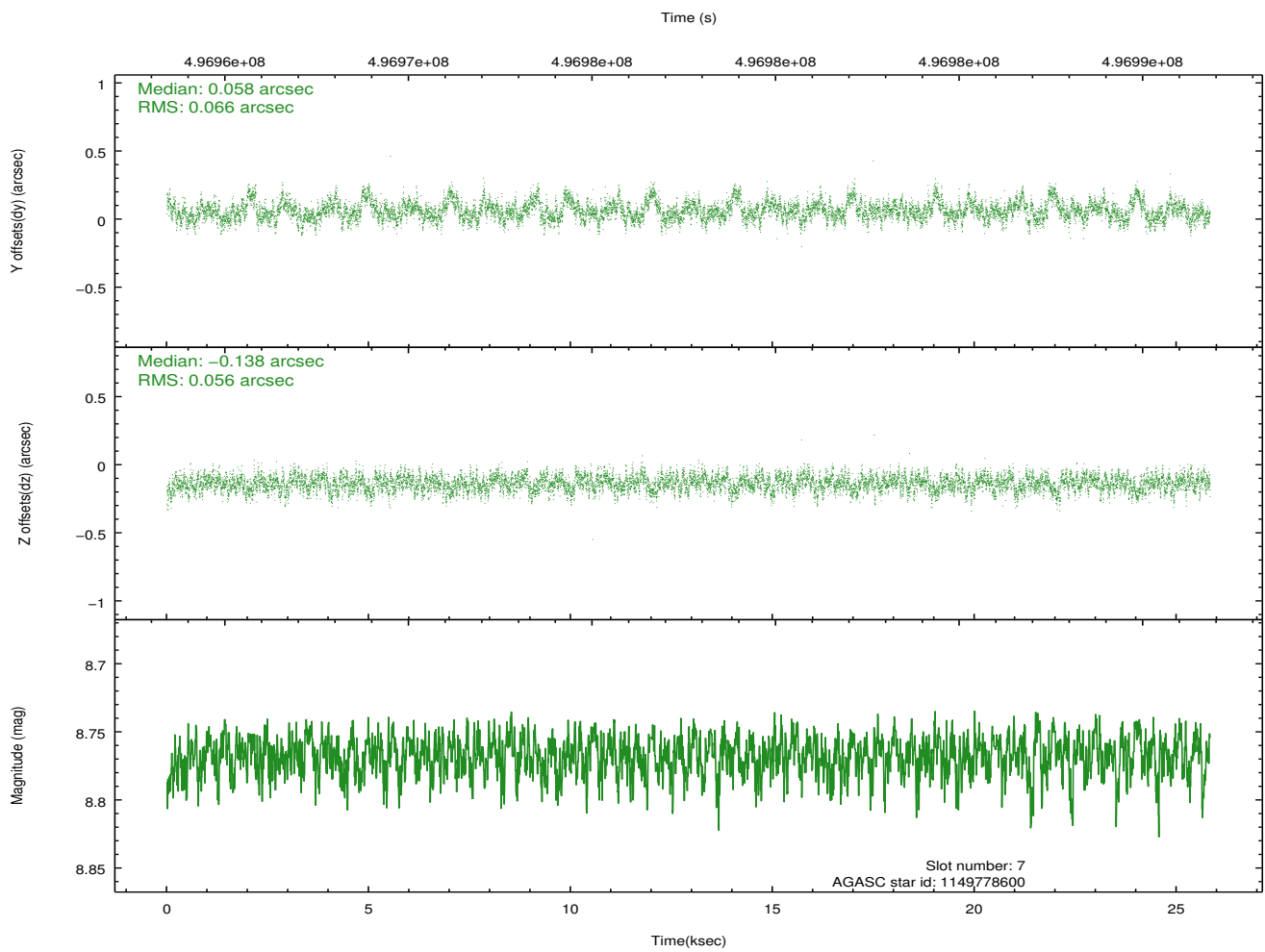
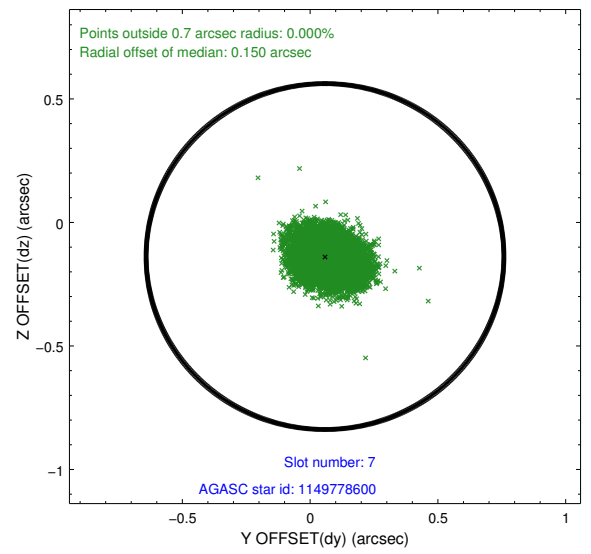
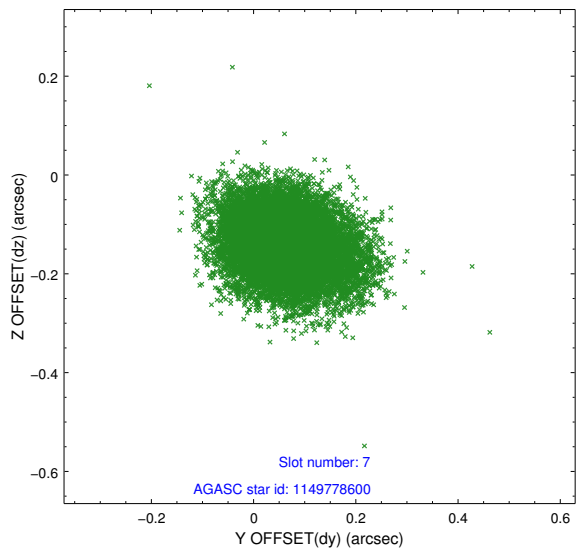
2.4.3 Slot 5



2.4.4 Slot 6

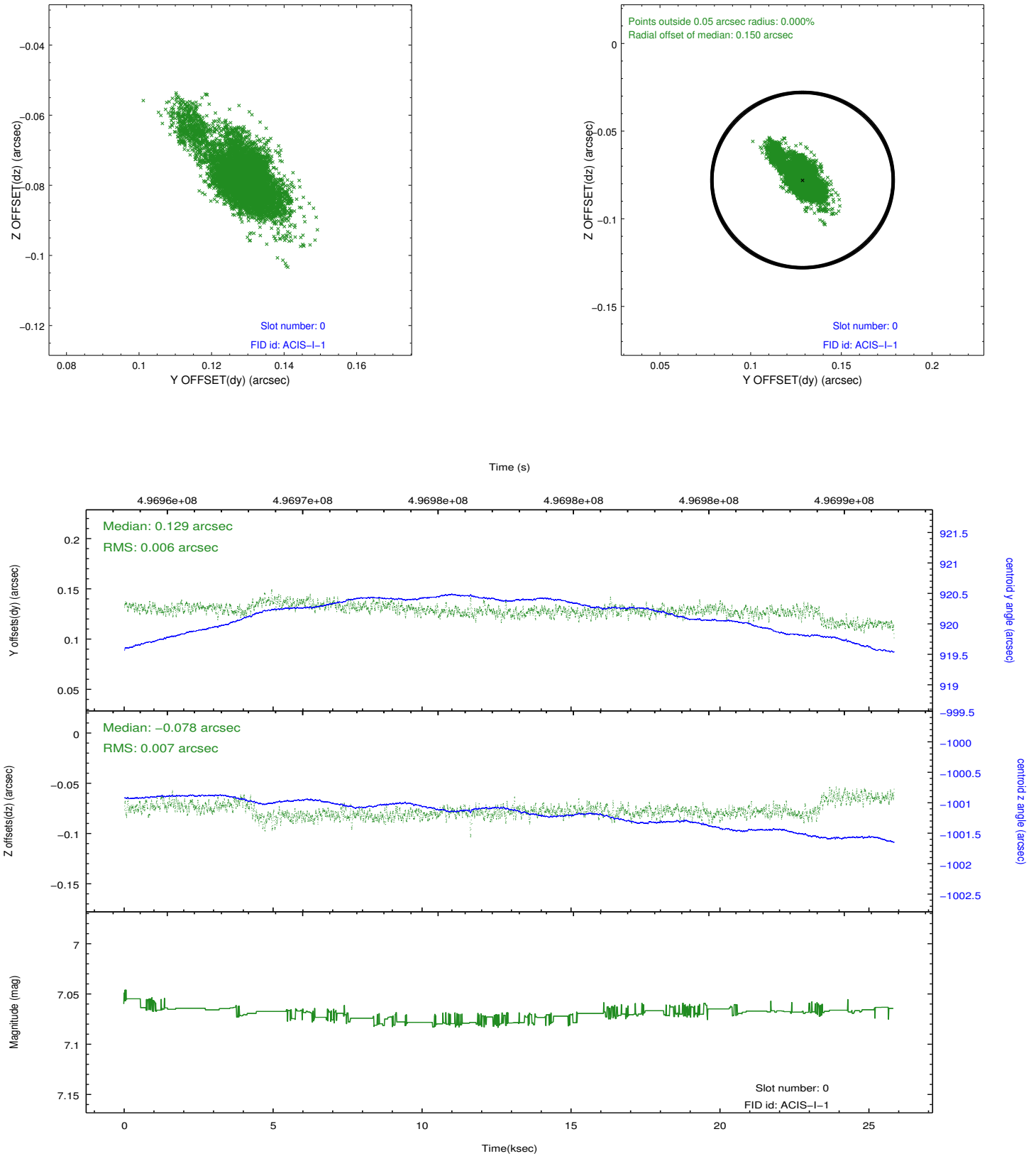


2.4.5 Slot 7

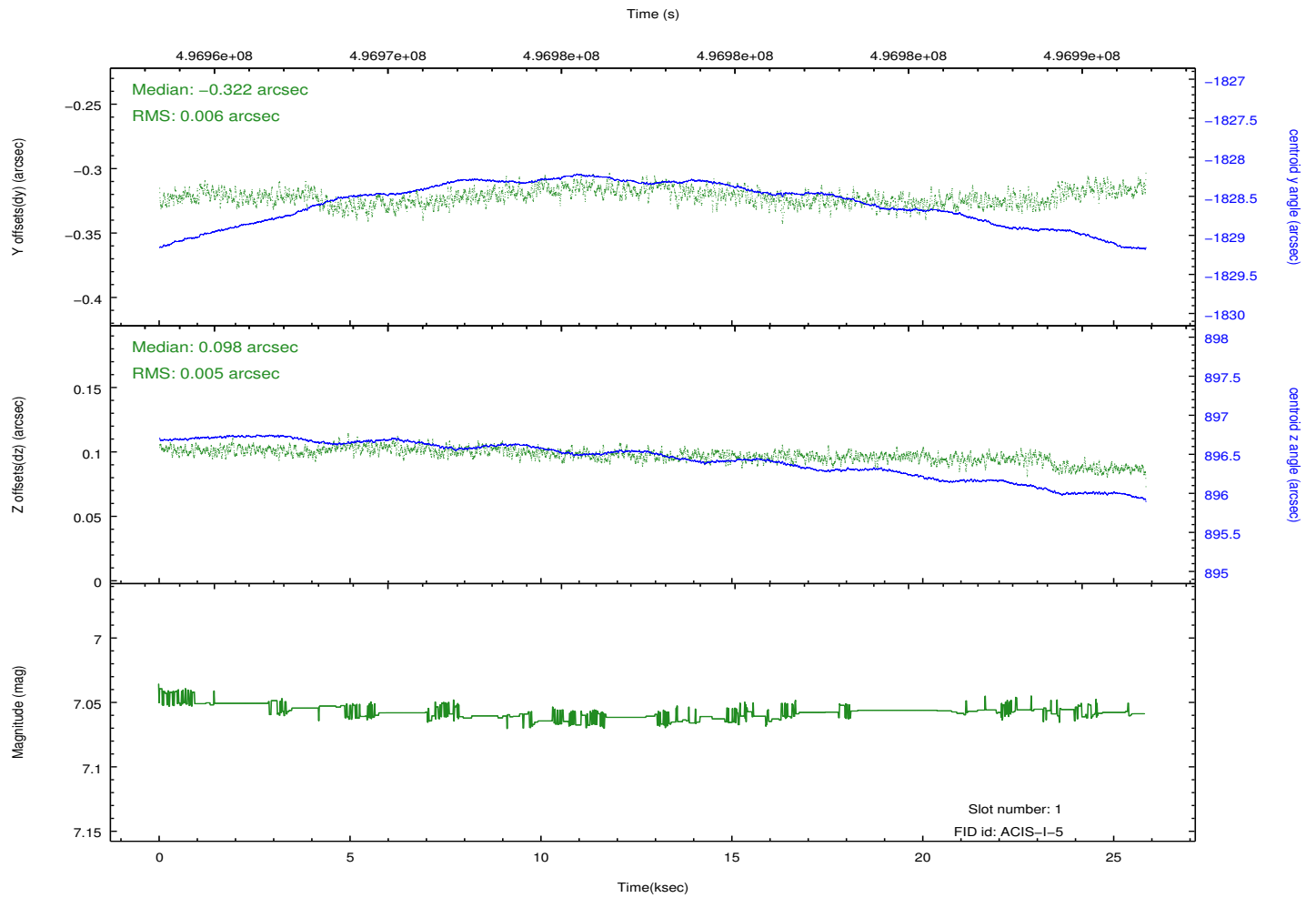
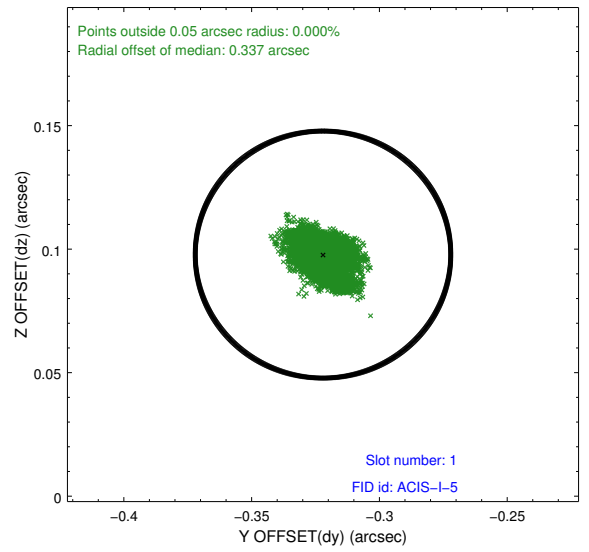
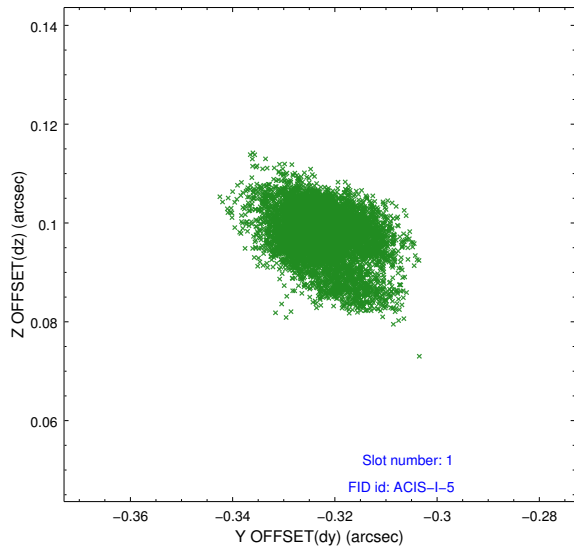


2.5 FID Slots

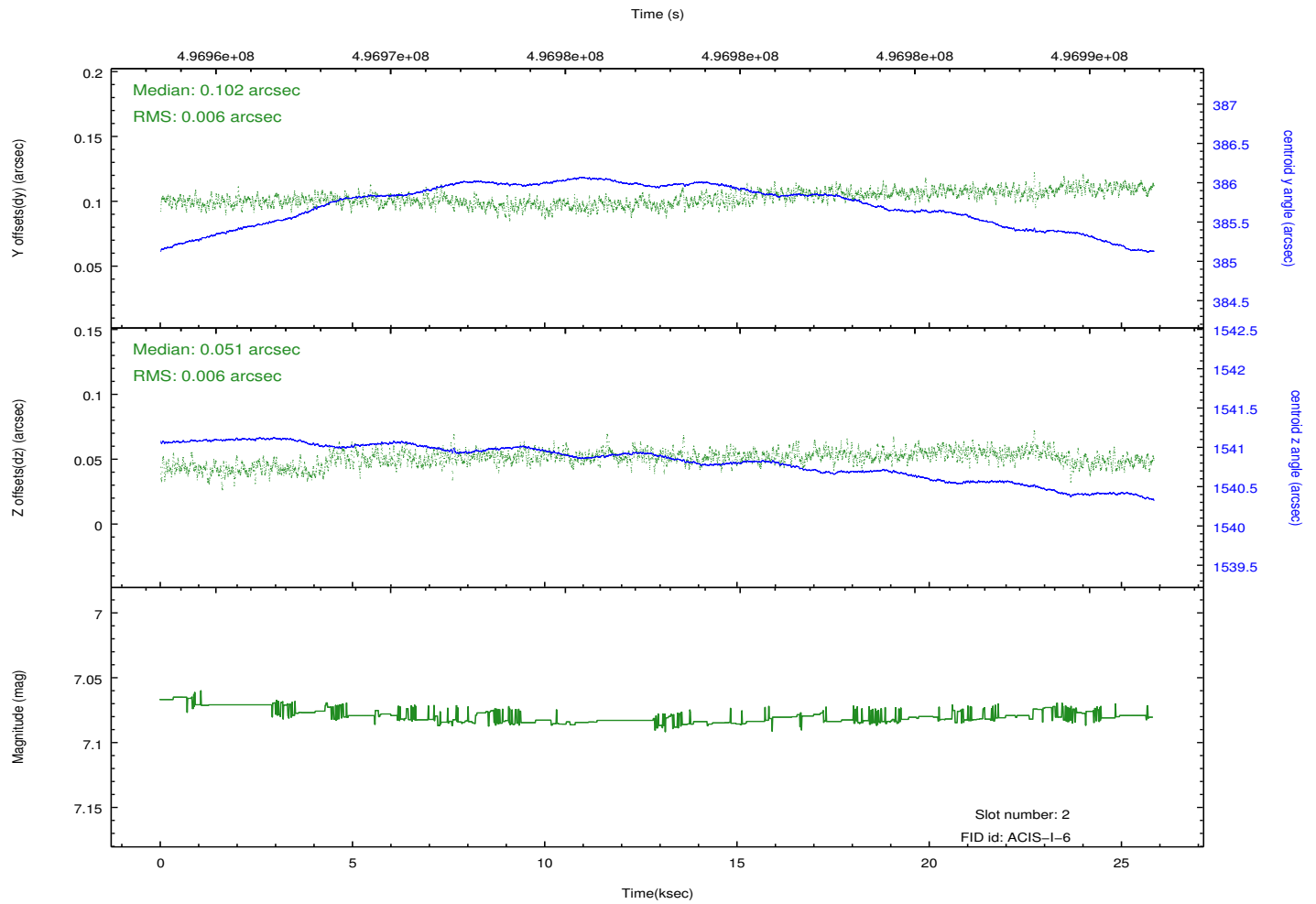
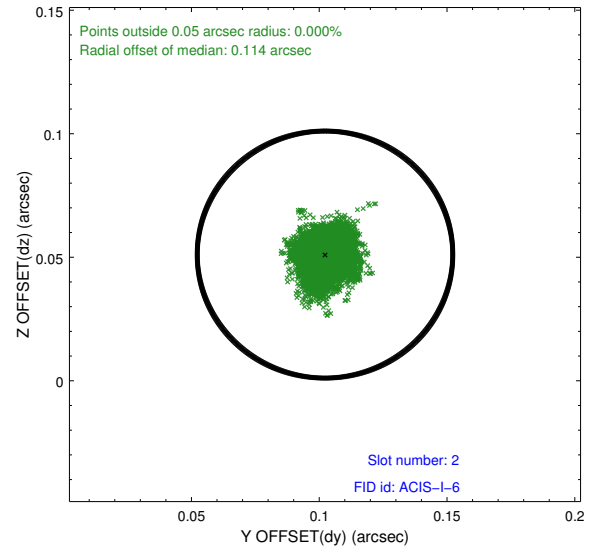
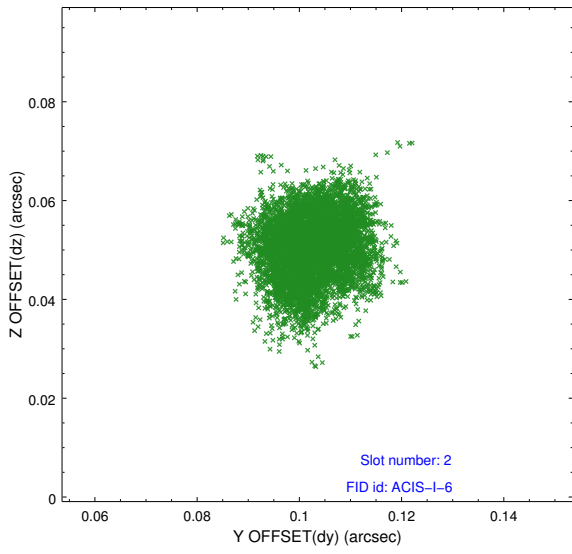
2.5.1 Slot 0



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	25.078959212542

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.