

V&V Reference Report

L2 ASCDS Version : 10

Observation 15312 - L2 Version 2
Chandra X-Ray Center

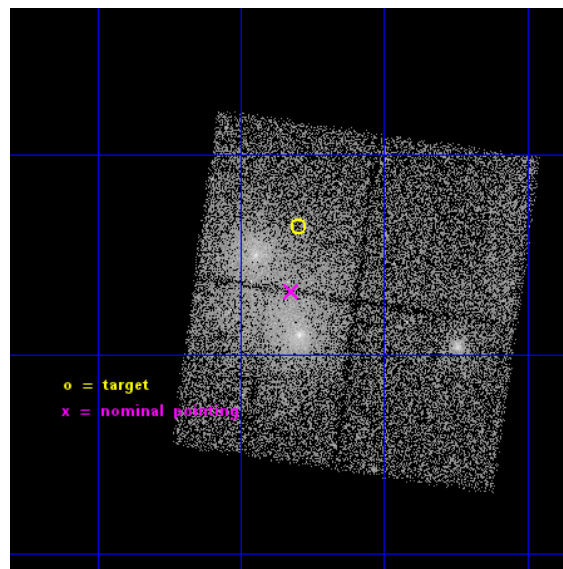
L2 Processing Date : Dec 6 2014

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

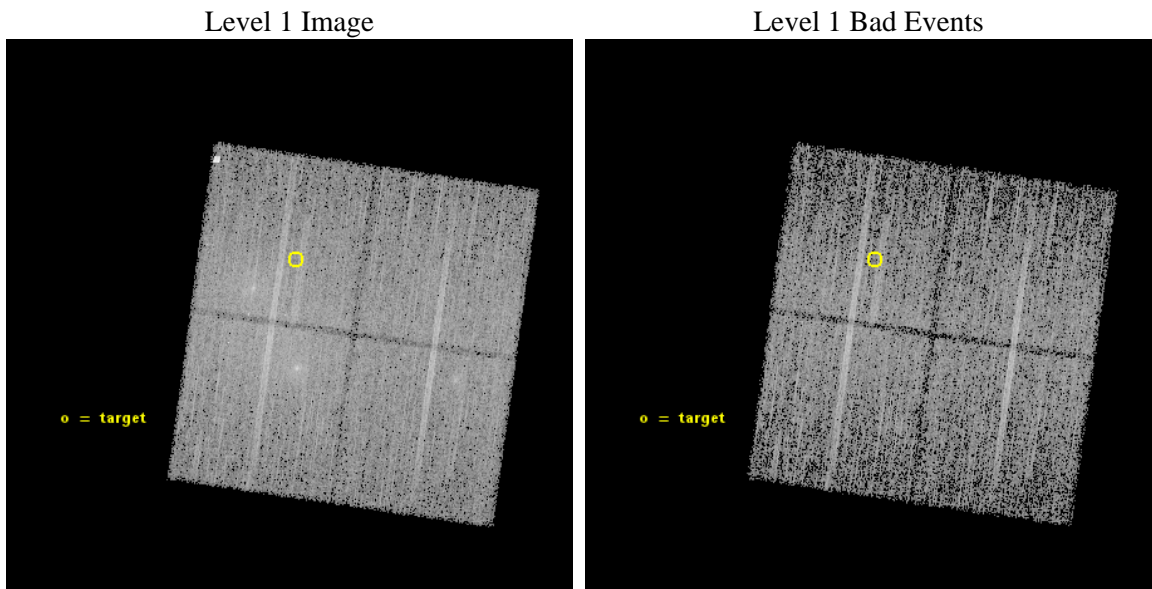
seq_num	801345	Sequence number
obs_id	15312	Observation id
title	Characterizing the Most Massive Clusters in the z	Proposal title
observer	Dr Stephen Murray	Principal investigator
object	G062.42-46.41	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	335.95	Observer's specified target RA [deg]
dec_targ	-1.56	Observer's specified target Dec [deg]
ra_nom	335.95577887541	Nominal RA [deg]
dec_nom	-1.6140828577015	Nominal Dec [deg]
roll_nom	278.15380850452	Nominal Roll [deg]
revision	2	Processing version of data
ontime	20091.100154519	Sum of GTIs [s]
livetime	19828.595140148	Livetime [s]
ontime0	20091.100154519	Sum of GTIs [s]
ontime1	20091.100154519	Sum of GTIs [s]
ontime2	20091.100154519	Sum of GTIs [s]
ontime3	20091.100154519	Sum of GTIs [s]
l2events	58144	Number of level 2 events



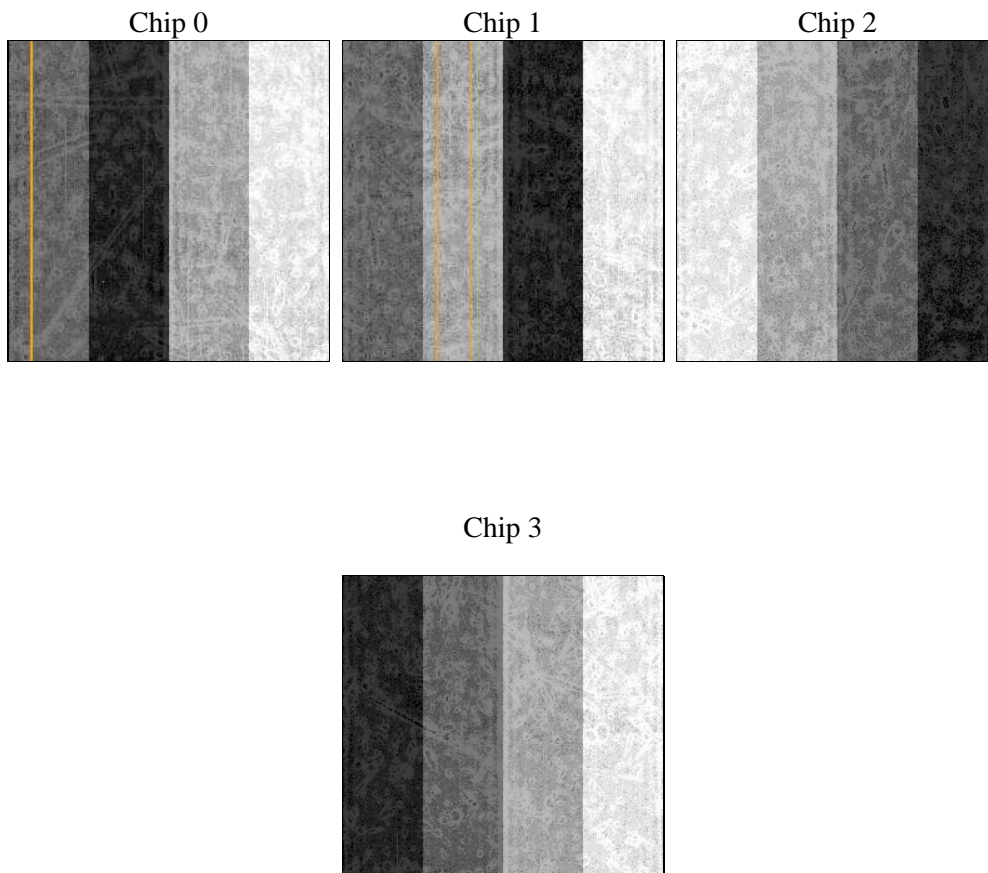
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	20000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	20091.100154519	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	20091.100154519	Sum of GTIs [s]
date	2014-12-07T00:05:34	Date and time of file creation	ontime1	20091.100154519	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	20091.100154519	Sum of GTIs [s]
			ontime3	20091.100154519	Sum of GTIs [s]
			l1events	391436	Number of level 1 events

2.1.4 Events

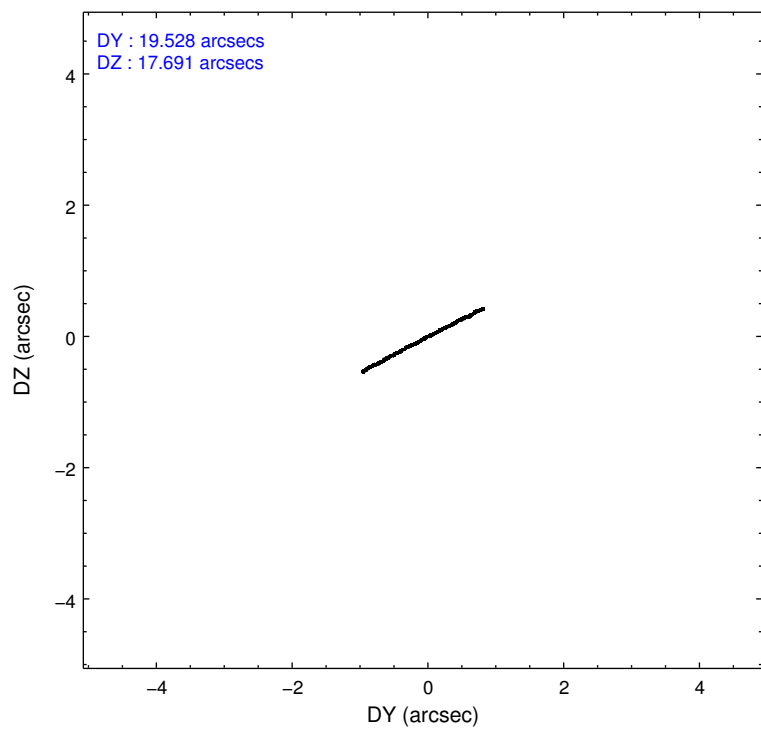
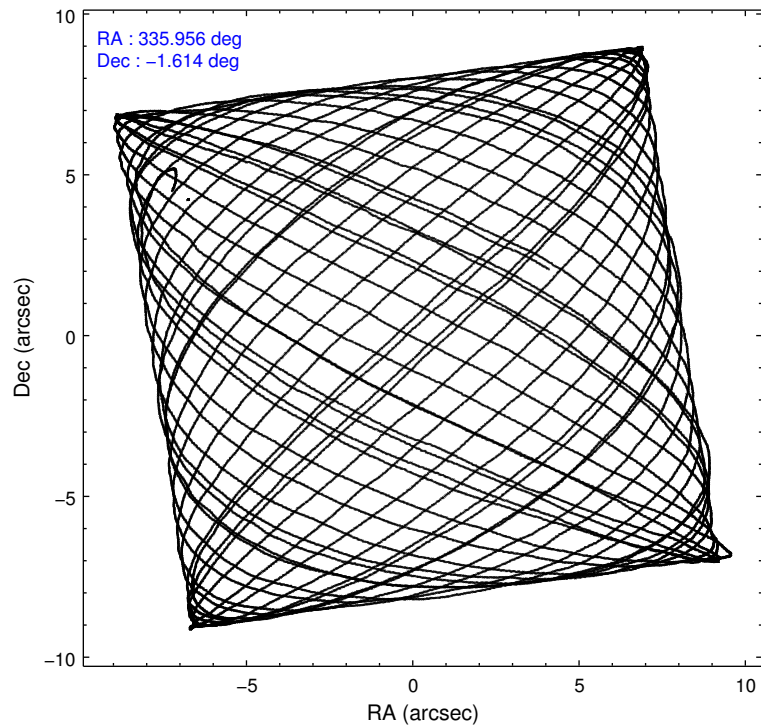
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	88904	92097	107055	103380
rejected events	76045	79213	84942	82403
rejected %	85%	86%	79%	79%

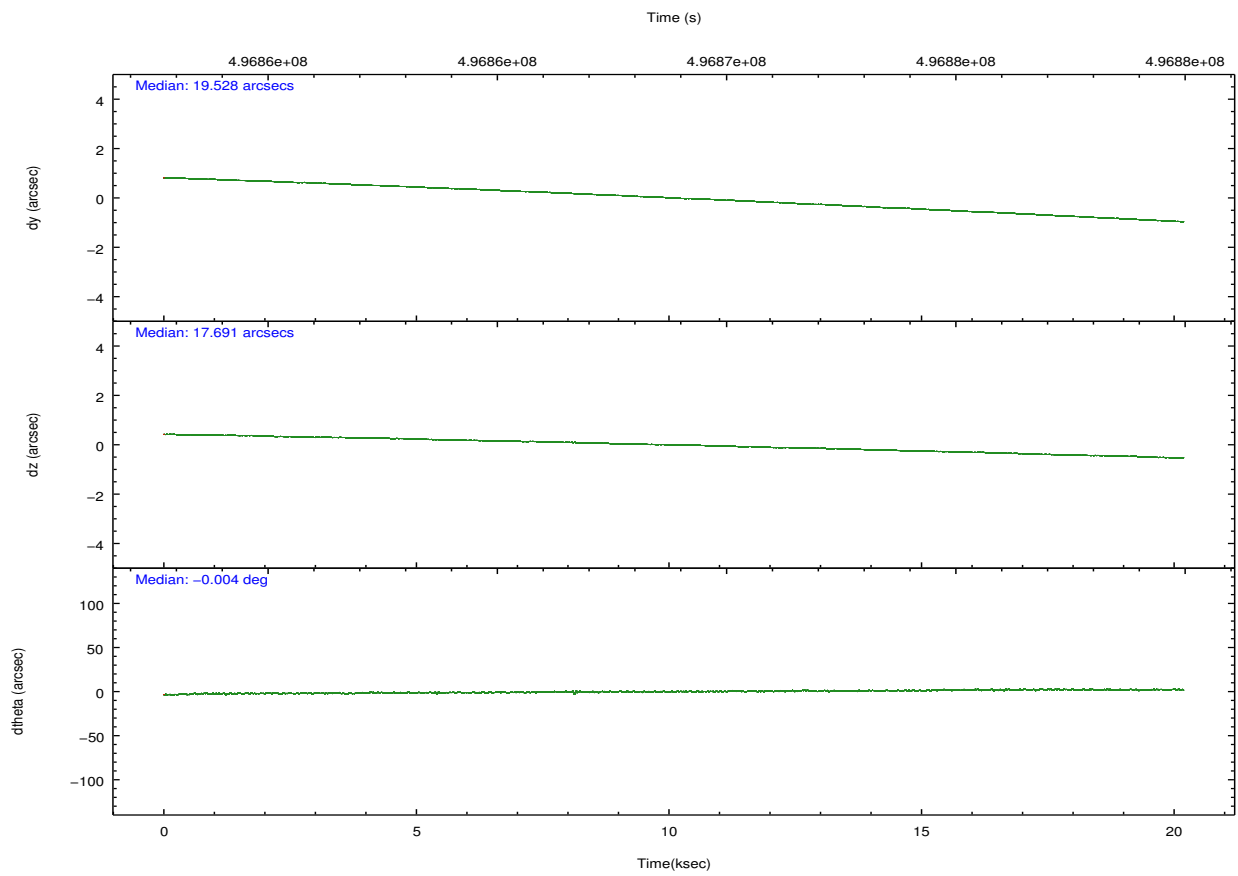
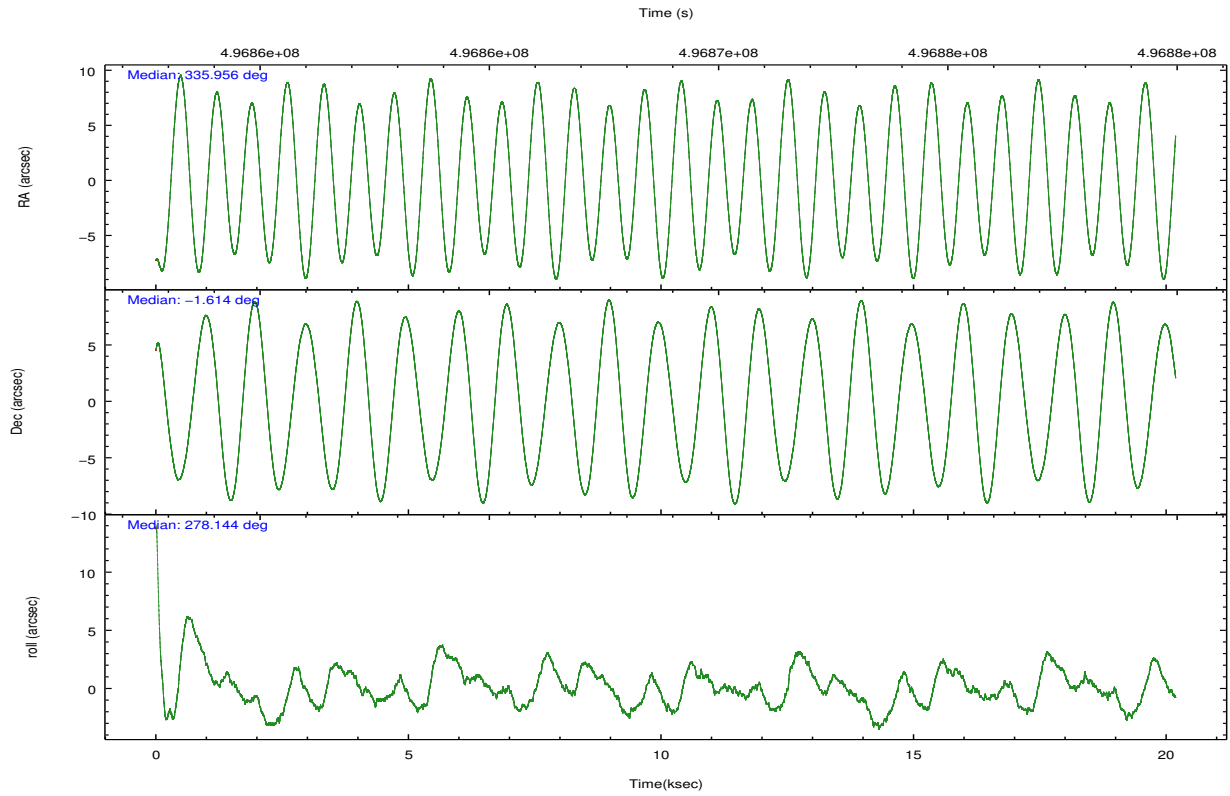
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	5050	4583	12890	12465
	5%	4%	12%	12%
grade 1 events	66	68	105	99
	0%	0%	0%	0%
grade 2 events	2943	3063	3732	3183
	3%	3%	3%	3%
grade 3 events	1277	1191	1482	1398
	1%	1%	1%	1%
grade 4 events	1197	1284	1483	1436
	1%	1%	1%	1%
grade 5 events	4624	4850	4352	5334
	5%	5%	4%	5%
grade 6 events	2393	2765	2528	2499
	2%	3%	2%	2%
grade 7 events	71354	74293	80483	76966
	80%	80%	75%	74%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-0123	ACIS-0123	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	335.938718	335.9557788754052	CCD I2 on	Y	Y
[deg] Pointing Dec	-1.592544	-1.614082857701483	CCD I3 on	Y	Y
[deg] Pointing Roll	277.944632	278.1538085045232	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	N
[mm] SIM translation stage pos	-225.840463	-225.8433433320239	CCD S3 on	N	N
[mm] SIM translation stage offset	-7.752	-7.749109670905796	CCD S4 on	N	N
[s] Observation start time (MET)	496858943.184000	496857623.60216	CCD S5 on	N	N
Observation start date	2013-09-29T16:21:16	2013-09-29T16:00:23	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	496878943.184000	496879718.50337	On-chip summing requested	N	N
Observation end date	2013-09-29T21:54:36	2013-09-29T22:08:38	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





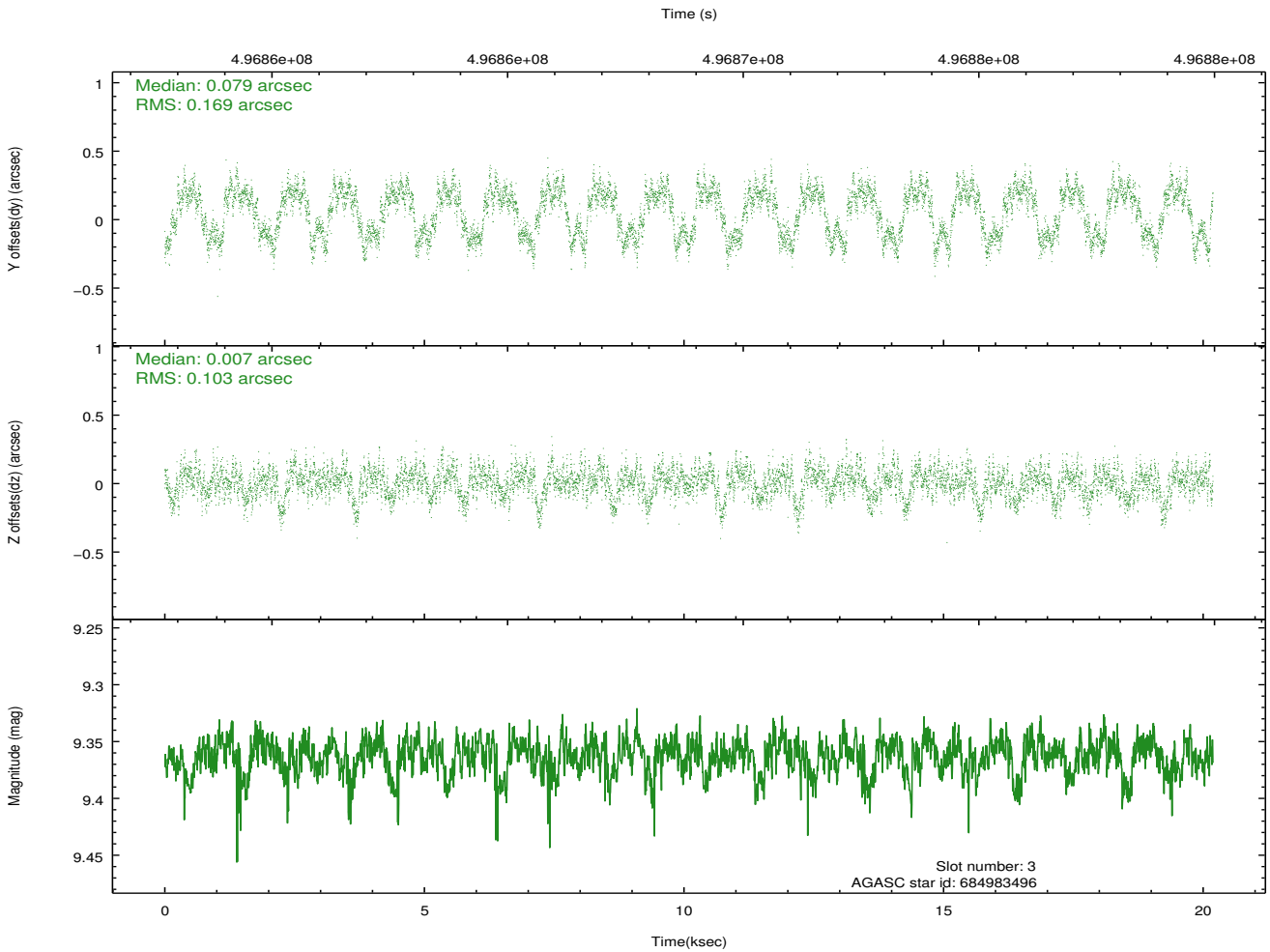
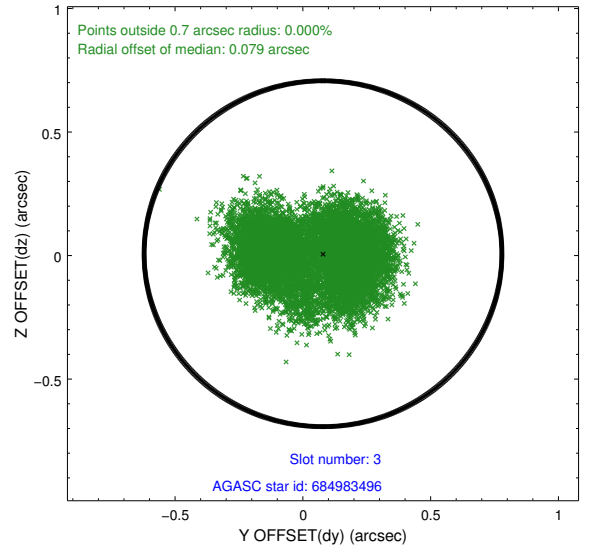
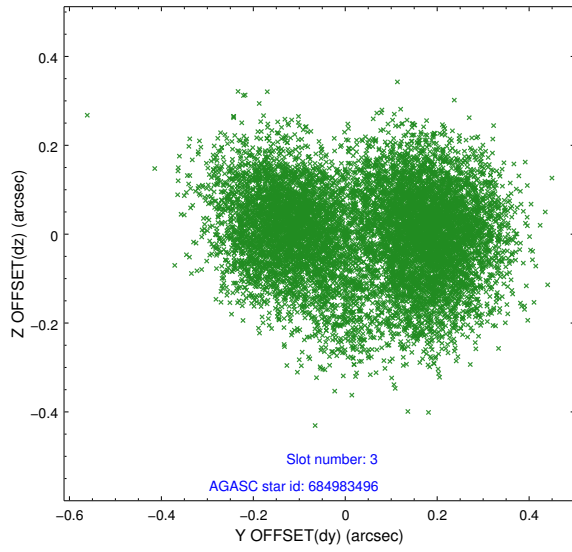
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.15	4925	0.160	-0.107	0.014	0.034	0.000000	0.000000	919.88	-1000.50
1	FID		ACIS-I-5	7.14	4925	-0.349	0.119	0.009	0.015	0.000000	0.000000	-1828.69	897.02
2	FID		ACIS-I-6	7.16	4925	0.097	0.060	0.011	0.023	0.000000	0.000000	385.08	1541.74
3	GUIDE	used	684983496	9.36	9843	0.079	0.007	0.217	0.319	335.372511	-2.110127	1565.75	-2274.18
4	GUIDE	used	684983944	8.54	9847	0.059	0.133	0.125	0.187	335.506030	-2.277752	2229.24	-1882.06
5	GUIDE	used	684984472	7.67	9848	-0.073	-0.341	0.071	0.113	336.043398	-2.061939	1726.48	139.50
6	GUIDE	used	684990016	8.80	9847	0.029	-0.056	0.107	0.166	336.074884	-1.446788	-452.23	558.23
7	GUIDE	used	684993328	9.41	9780	-0.069	0.264	0.131	0.208	335.439993	-1.852822	680.98	-1906.12

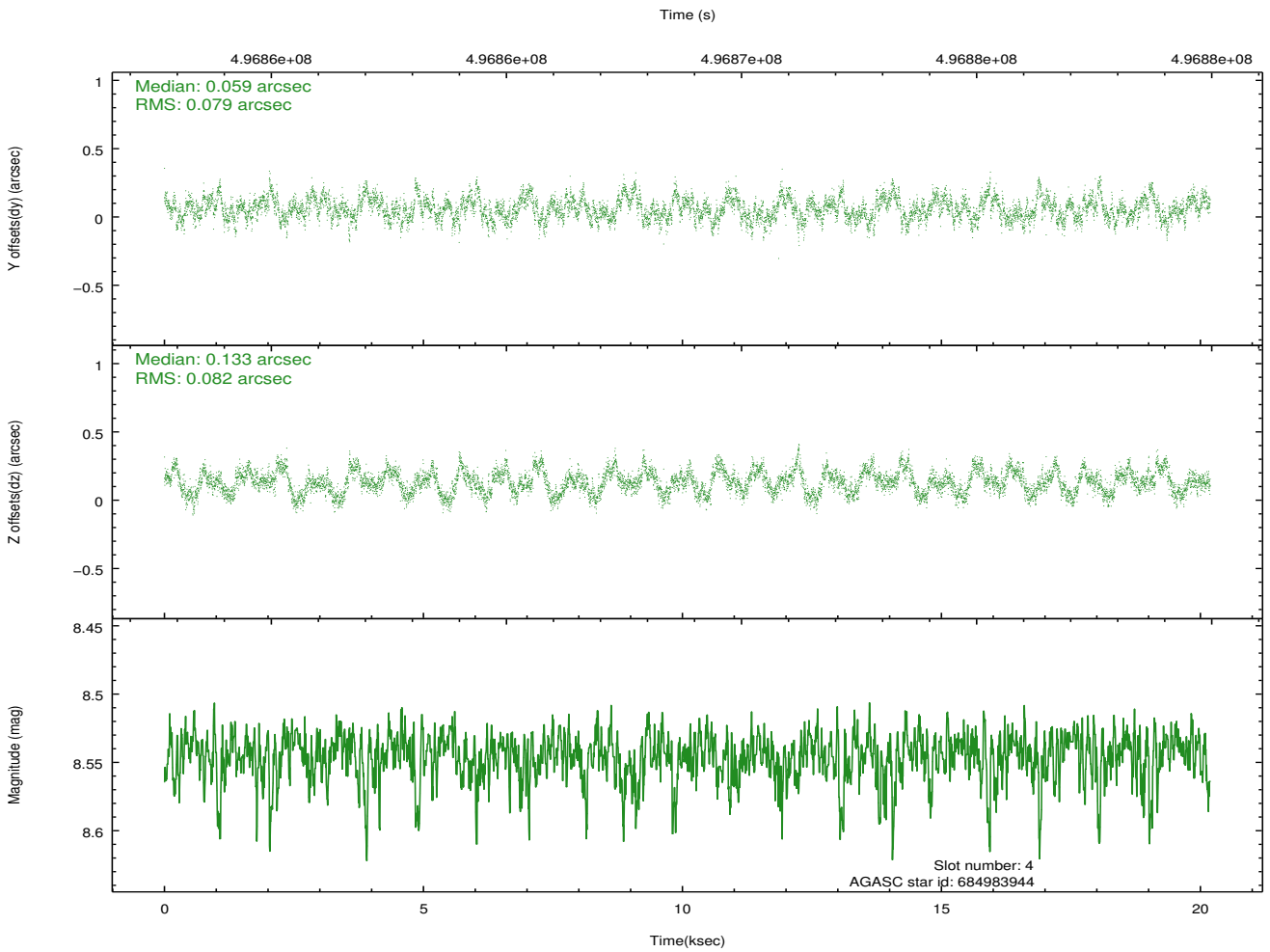
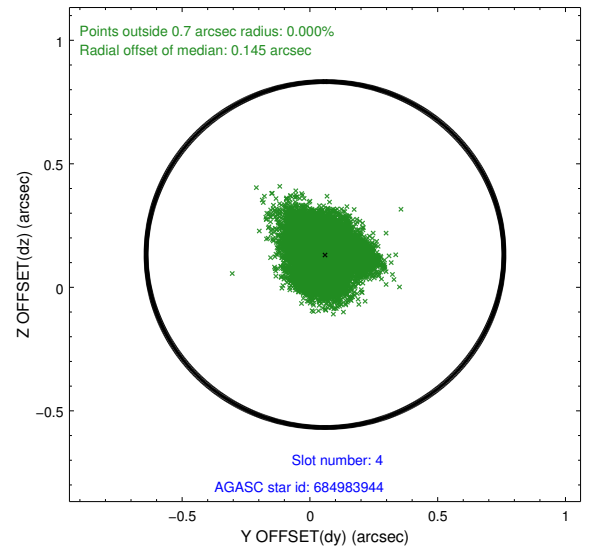
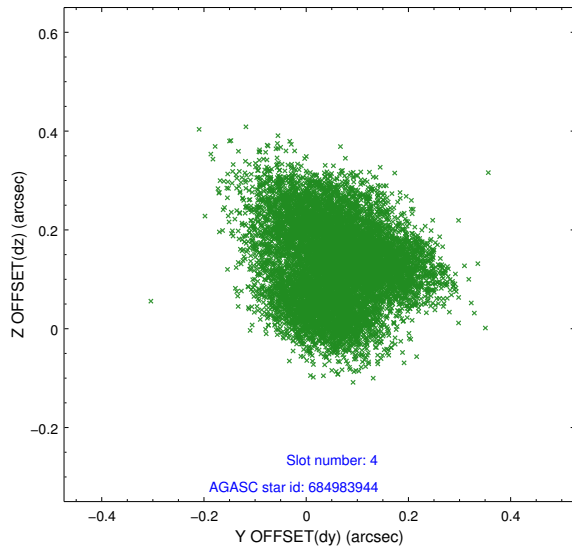
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2.4 Star Slots

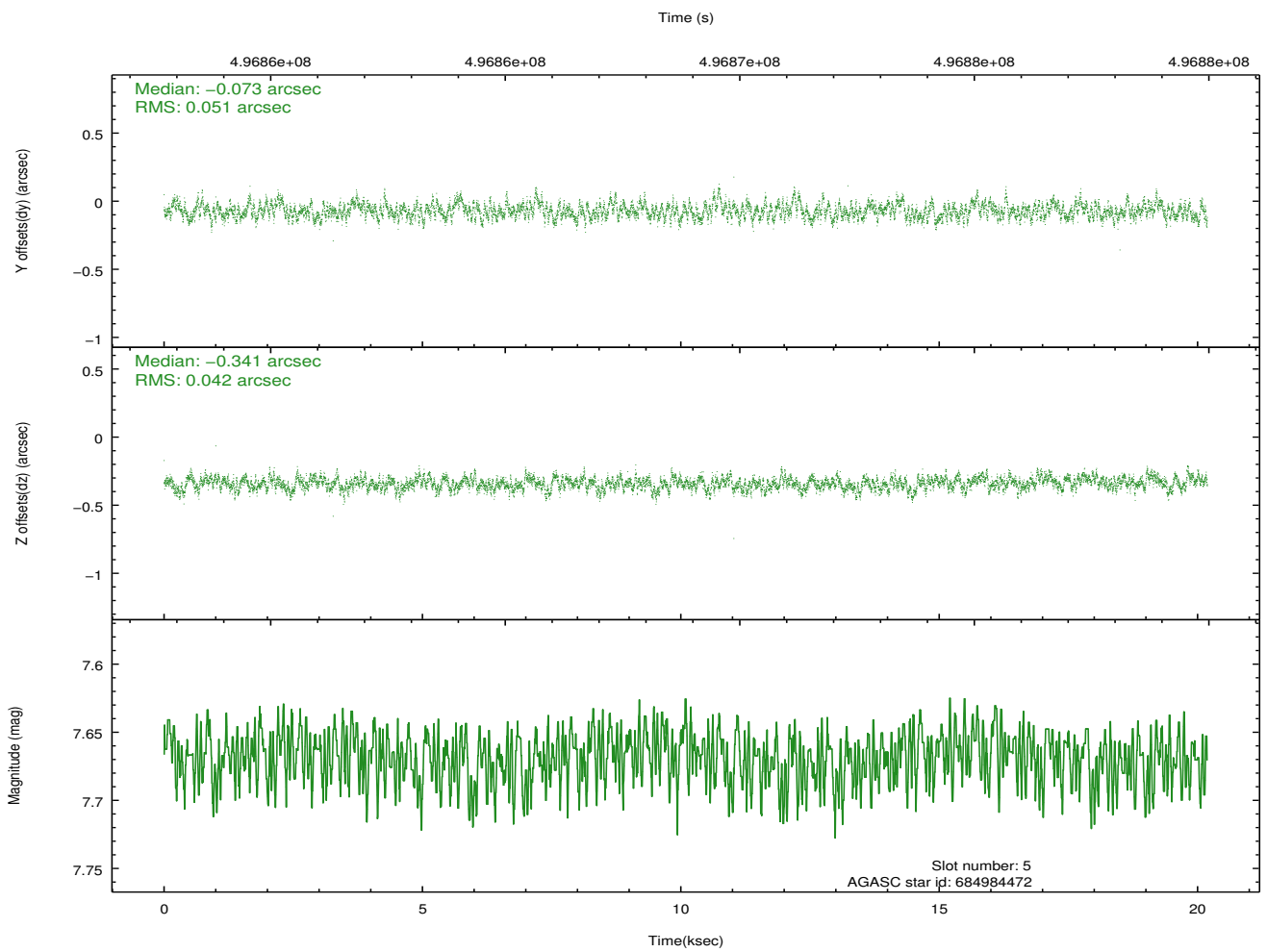
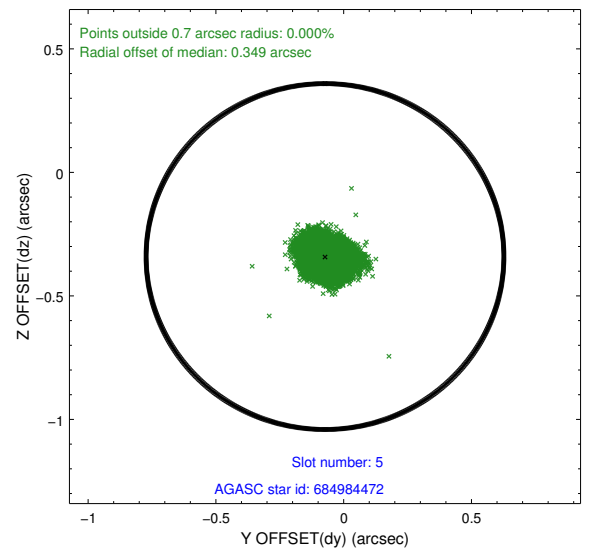
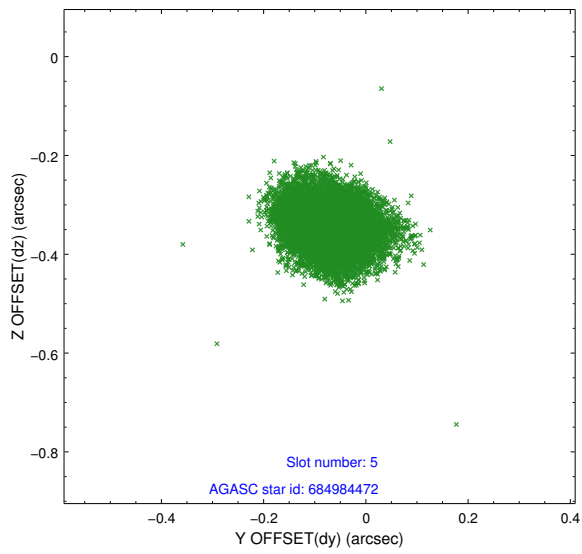
2.4.1 Slot 3



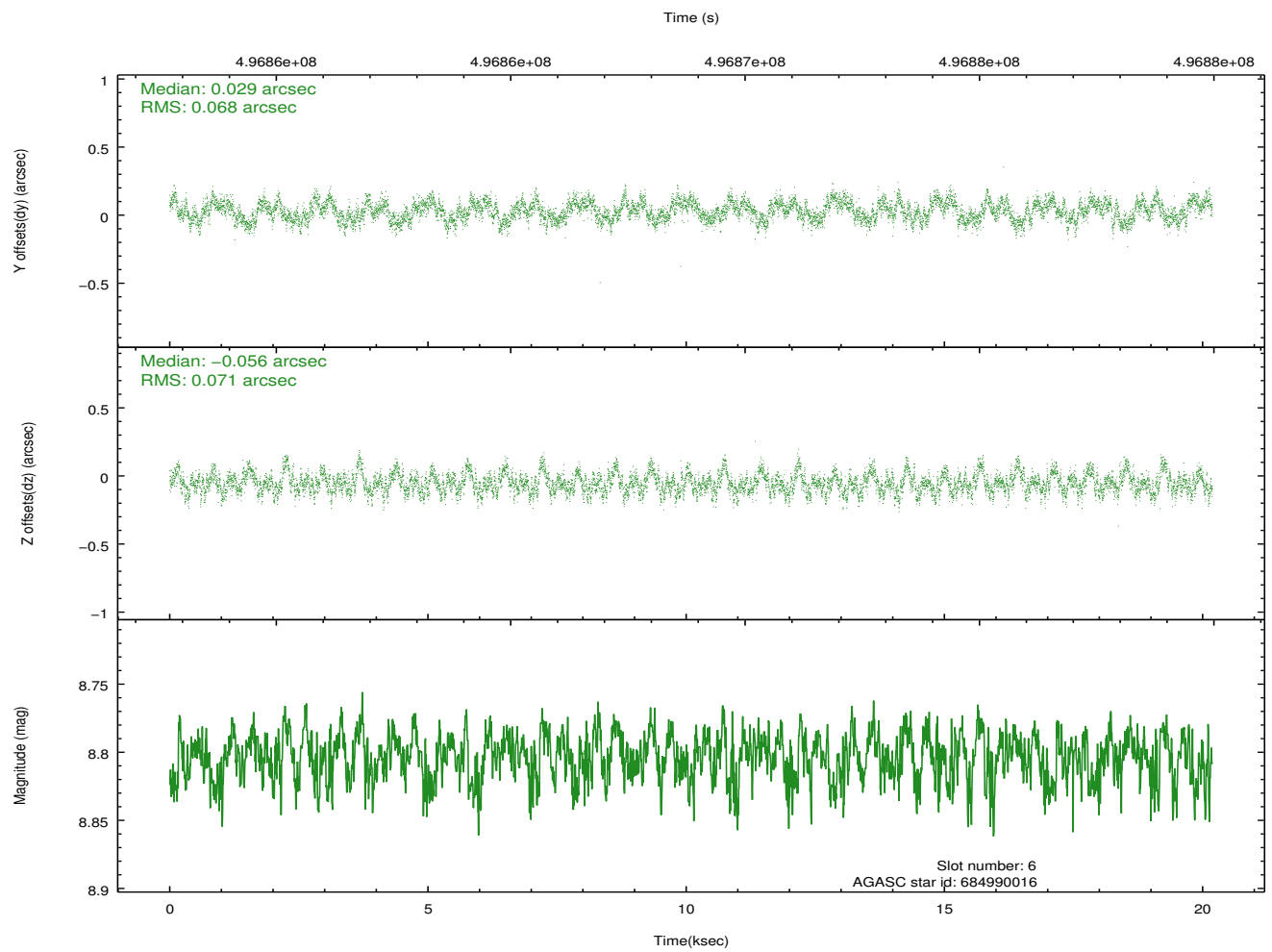
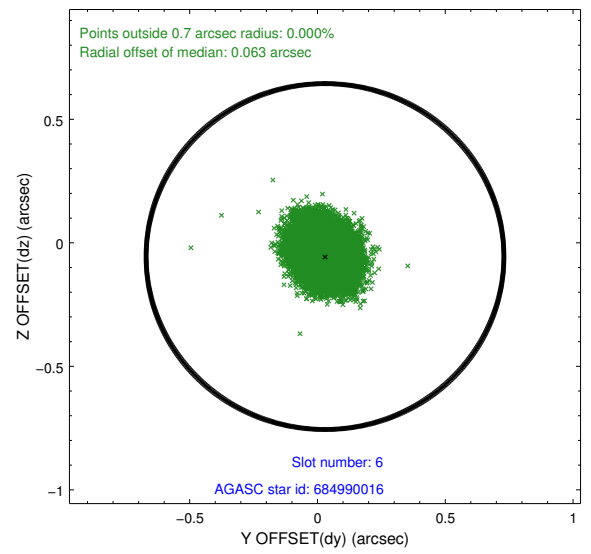
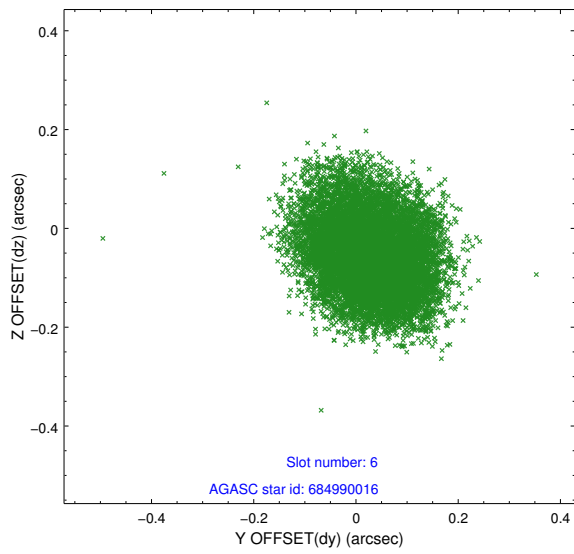
2.4.2 Slot 4



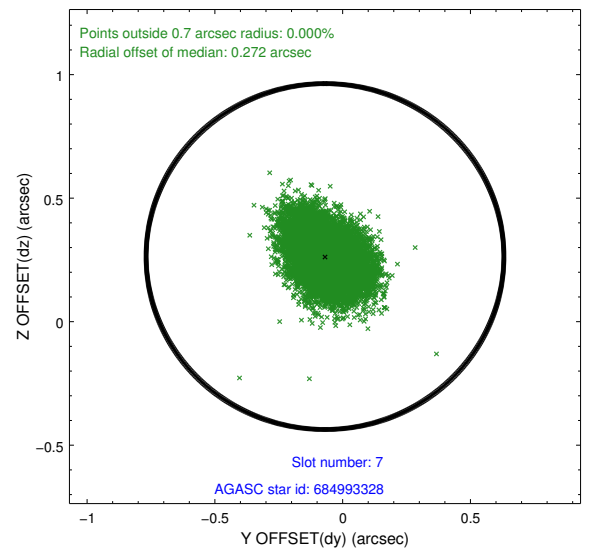
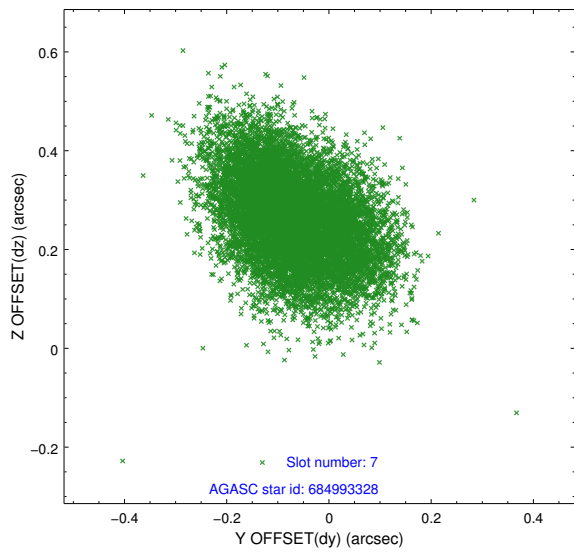
2.4.3 Slot 5



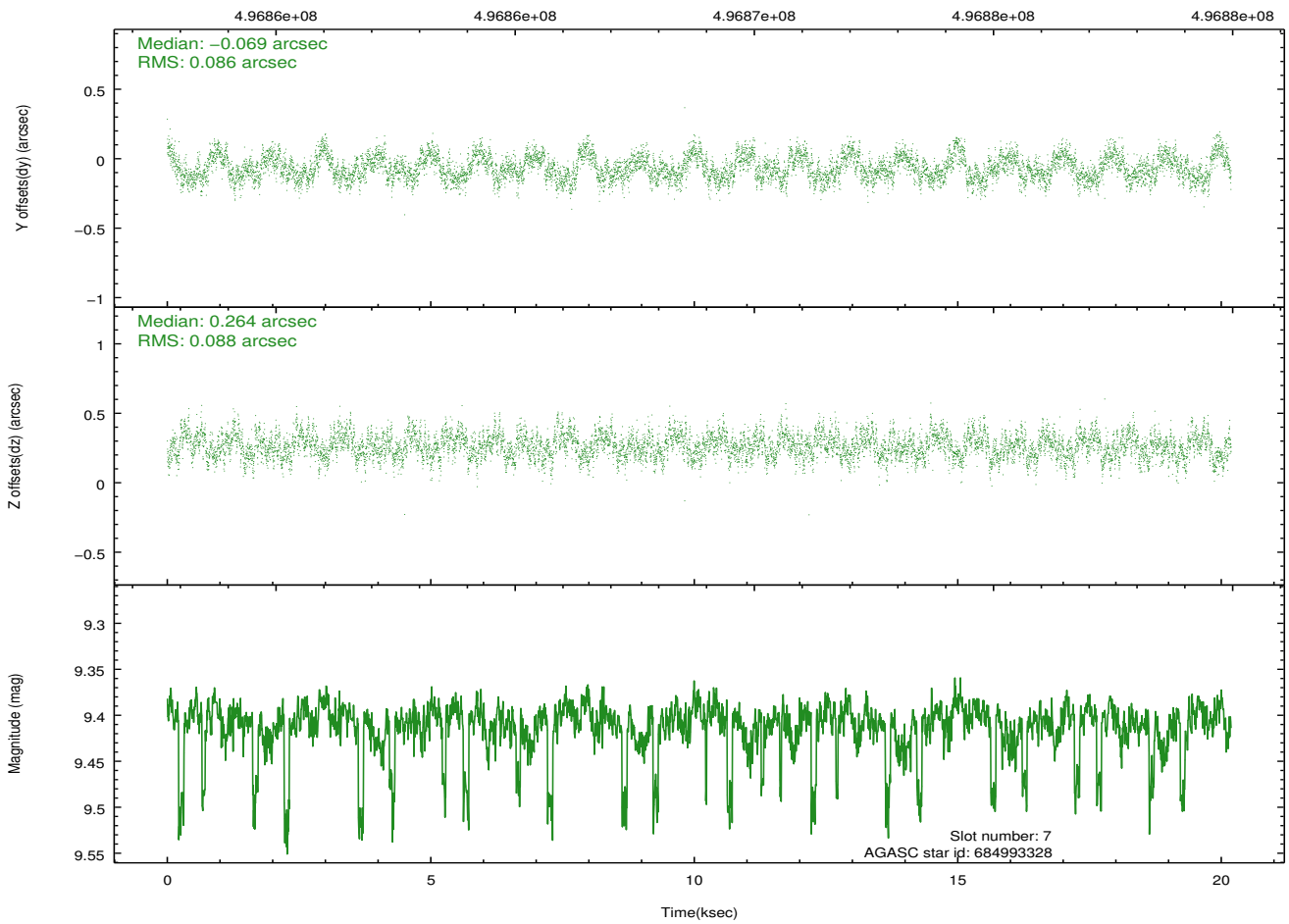
2.4.4 Slot 6



2.4.5 Slot 7

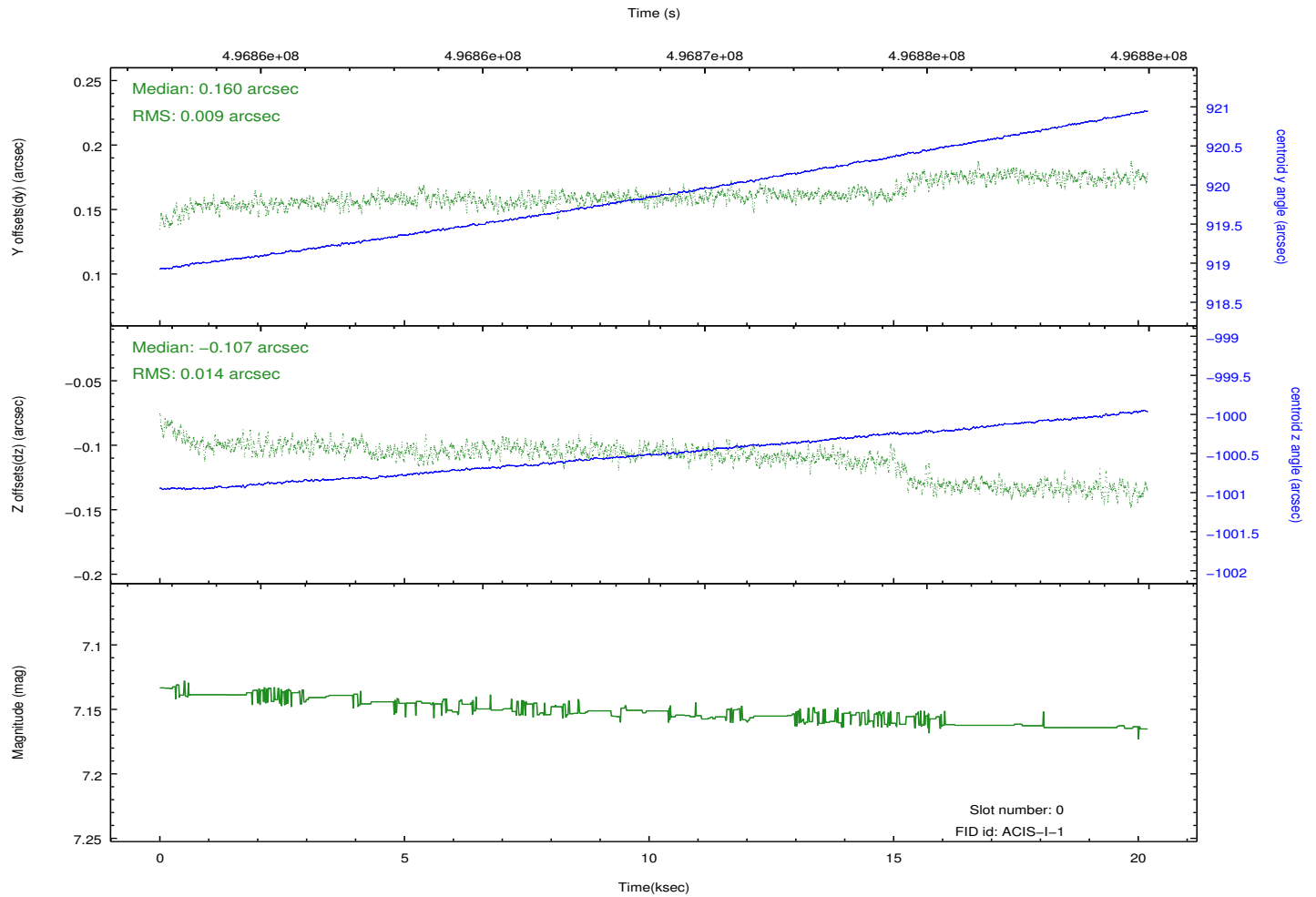
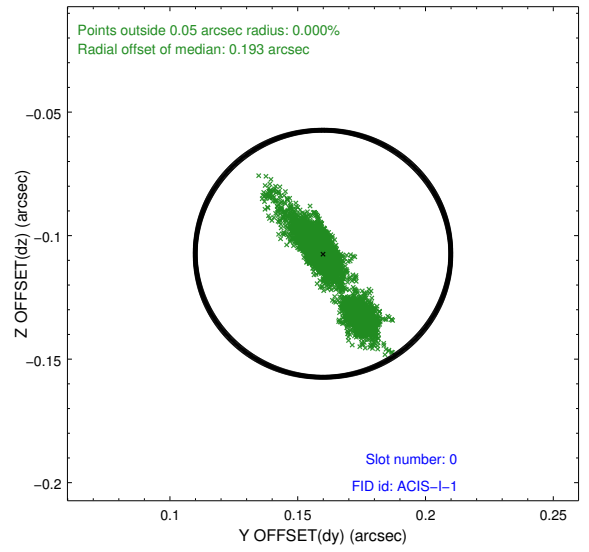
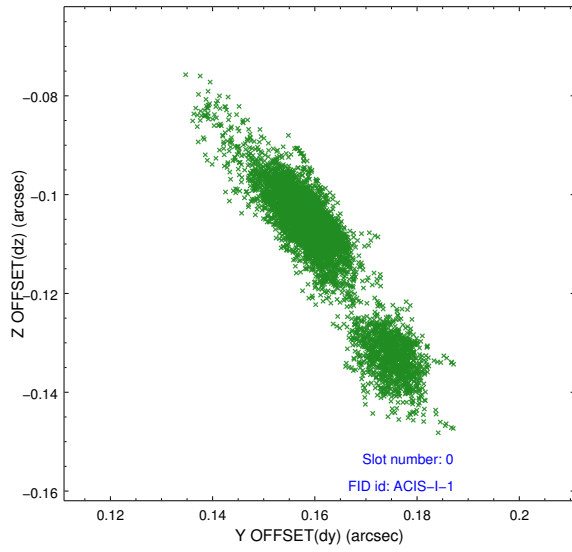


Time (s)

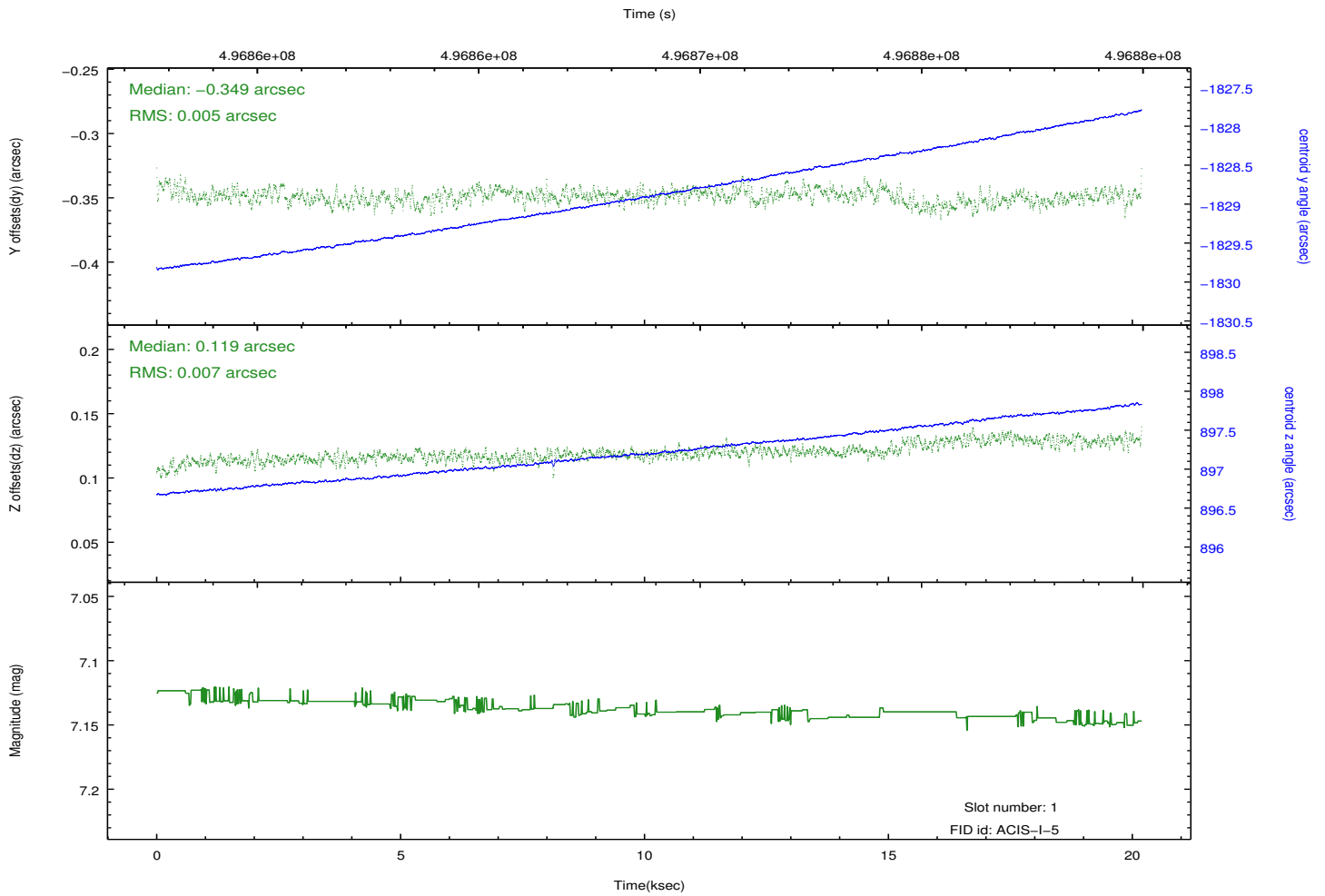
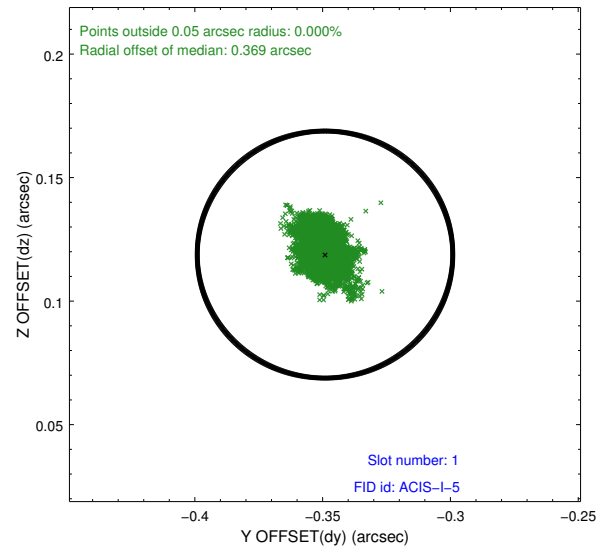
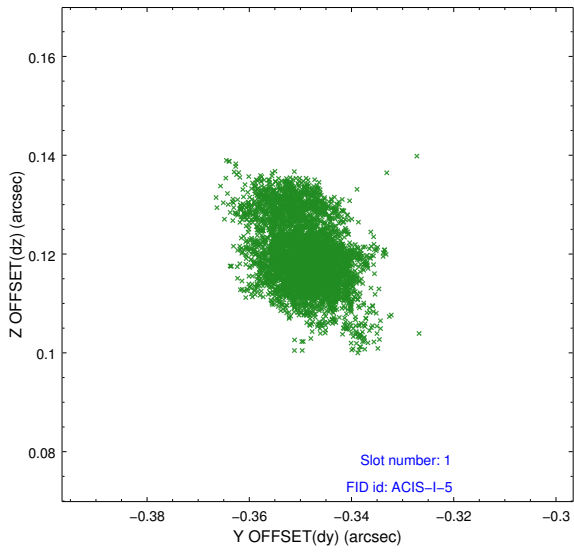


2.5 FID Slots

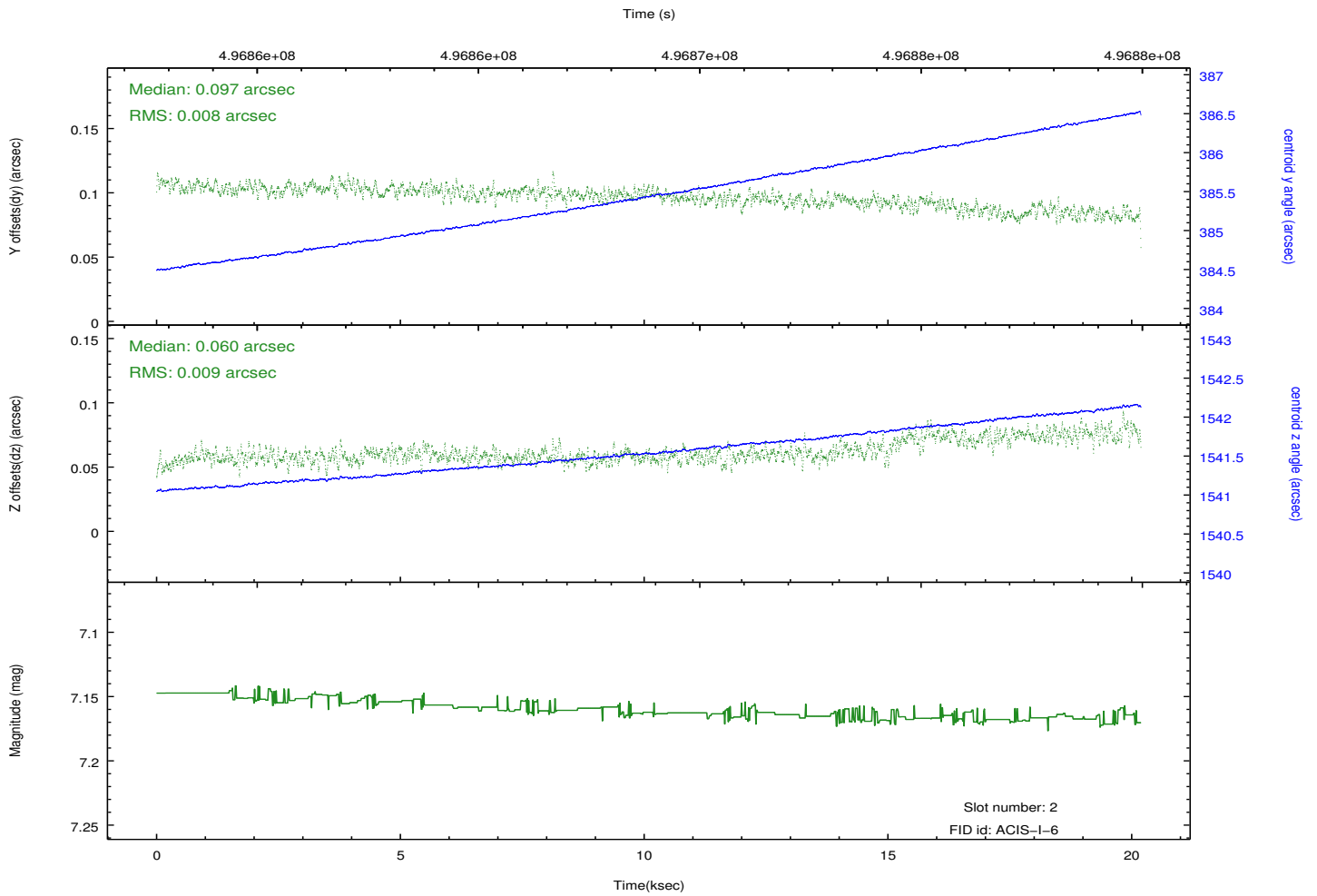
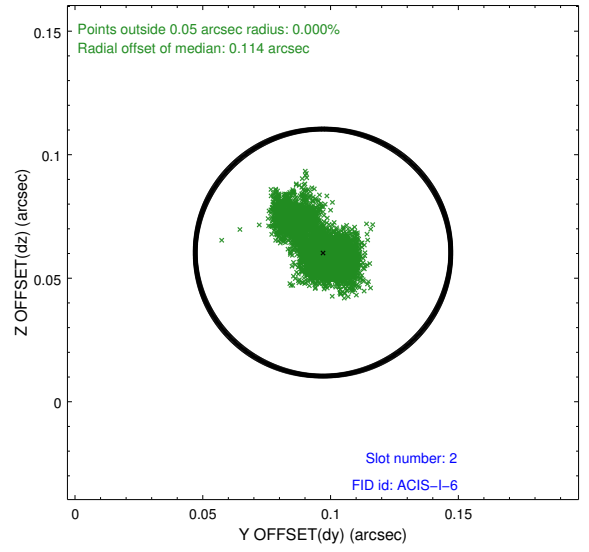
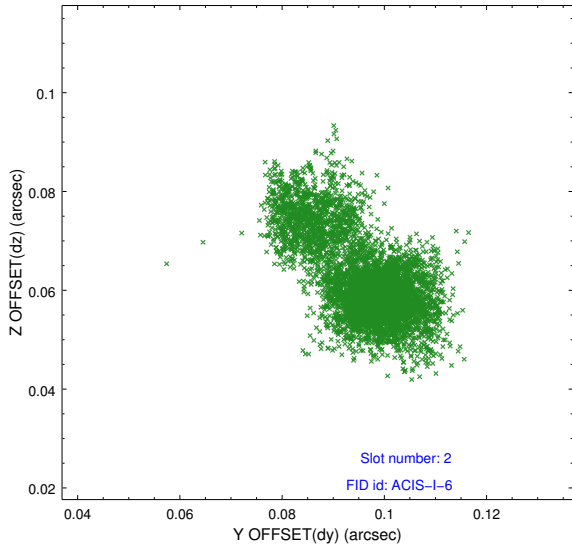
2.5.1 Slot 0



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	20.091100154519

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.