

V&V Reference Report

L2 ASCDS Version : 10.1

Observation 15102 - L2 Version 2
Chandra X-Ray Center

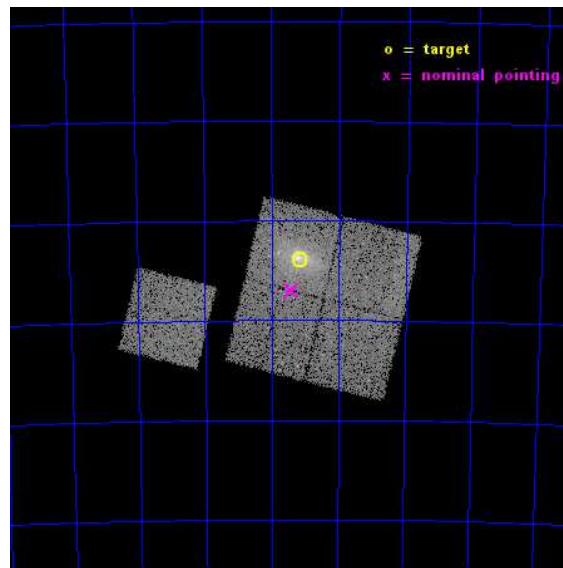
L2 Processing Date : Dec 6 2014

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

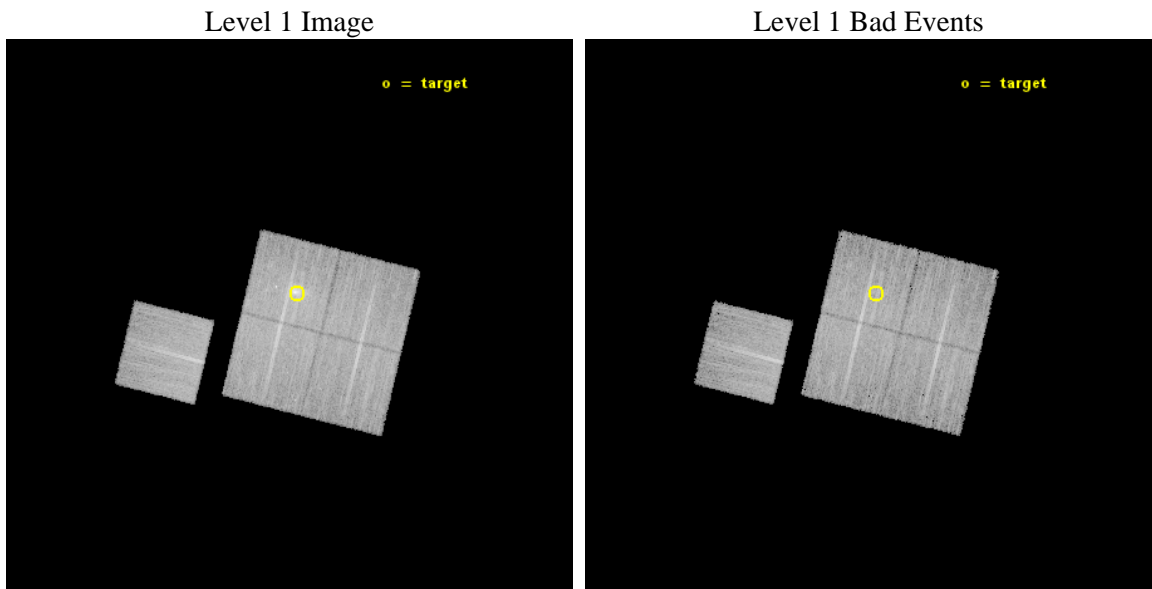
seq_num	801231	Sequence number
obs_id	15102	Observation id
title	A Chandra-Planck Legacy Program for Massive Clusters of Galaxies	P
observer	Dr. Christine Jones	Principal investigator
object	G318.13-29.57	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	296.78875	Observer's specified target RA [deg]
dec_targ	-76.397778	Observer's specified target Dec [deg]
ra_nom	296.85335218219	Nominal RA [deg]
dec_nom	-76.450034192576	Nominal Dec [deg]
roll_nom	283.84487683129	Nominal Roll [deg]
revision	2	Processing version of data
ontime	20084.640279949	Sum of GTIs [s]
livetime	19822.219668594	Livetime [s]
ontime0	20084.517159939	Sum of GTIs [s]
ontime1	20084.558199942	Sum of GTIs [s]
ontime2	20084.599239945	Sum of GTIs [s]
ontime3	20084.640279949	Sum of GTIs [s]
ontime6	20078.194159269	Sum of GTIs [s]
l2events	65094	Number of level 2 events



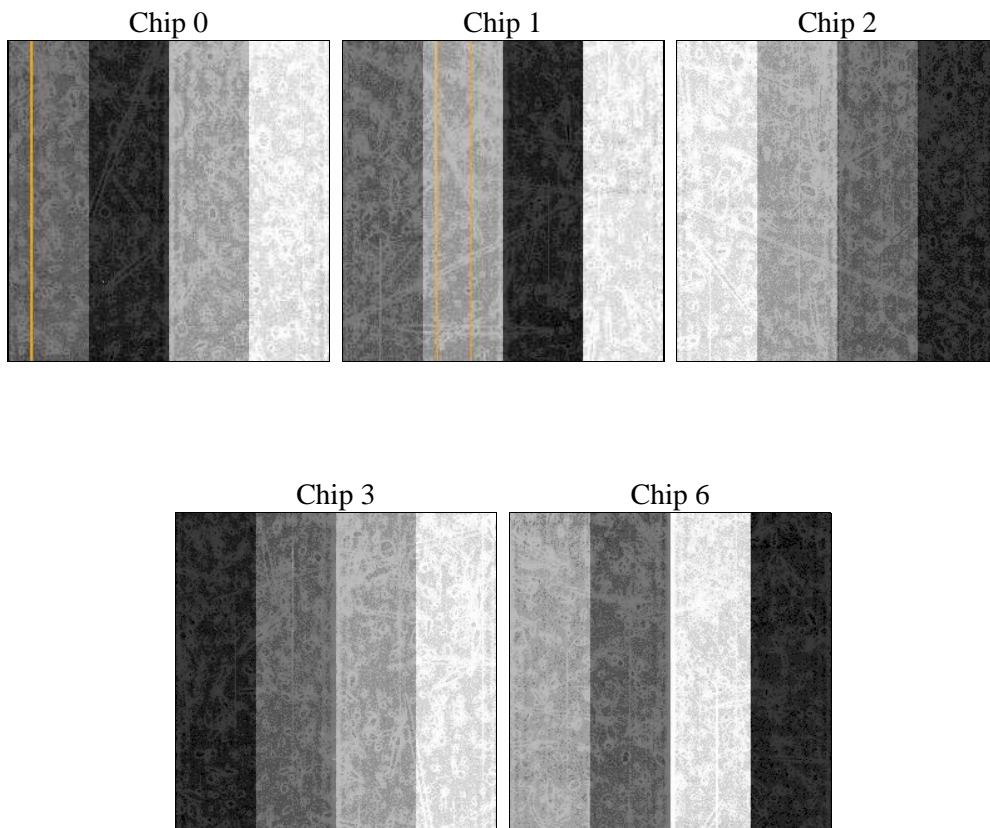
2 OBI

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	20084.640279949	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	20084.517159939	Sum of GTIs [s]
date	2014-12-07T02:10:24	Date and time of file creation	ontime1	20084.558199942	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	20084.599239945	Sum of GTIs [s]
			ontime3	20084.640279949	Sum of GTIs [s]
			ontime6	20078.194159269	Sum of GTIs [s]
			l1events	488294	Number of level 1 events

2.1.4 Events

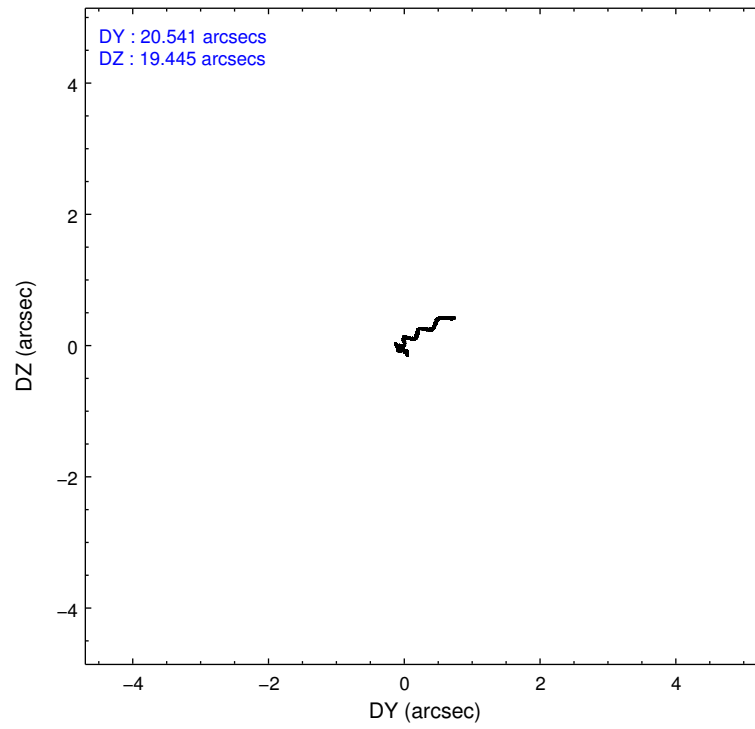
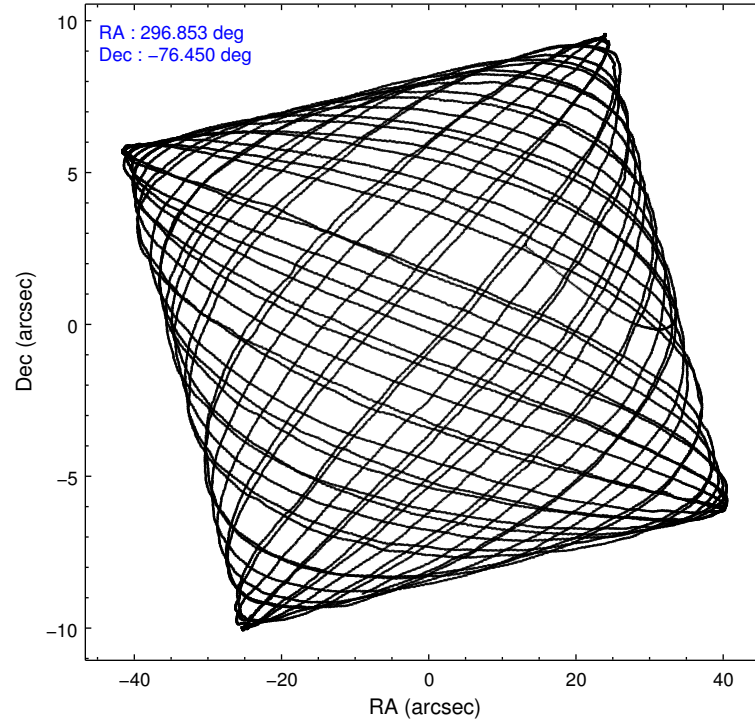
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	89724	89503	100106	109769	99192
rejected events	77845	75722	87823	85000	87046
rejected %	86%	84%	87%	77%	87%

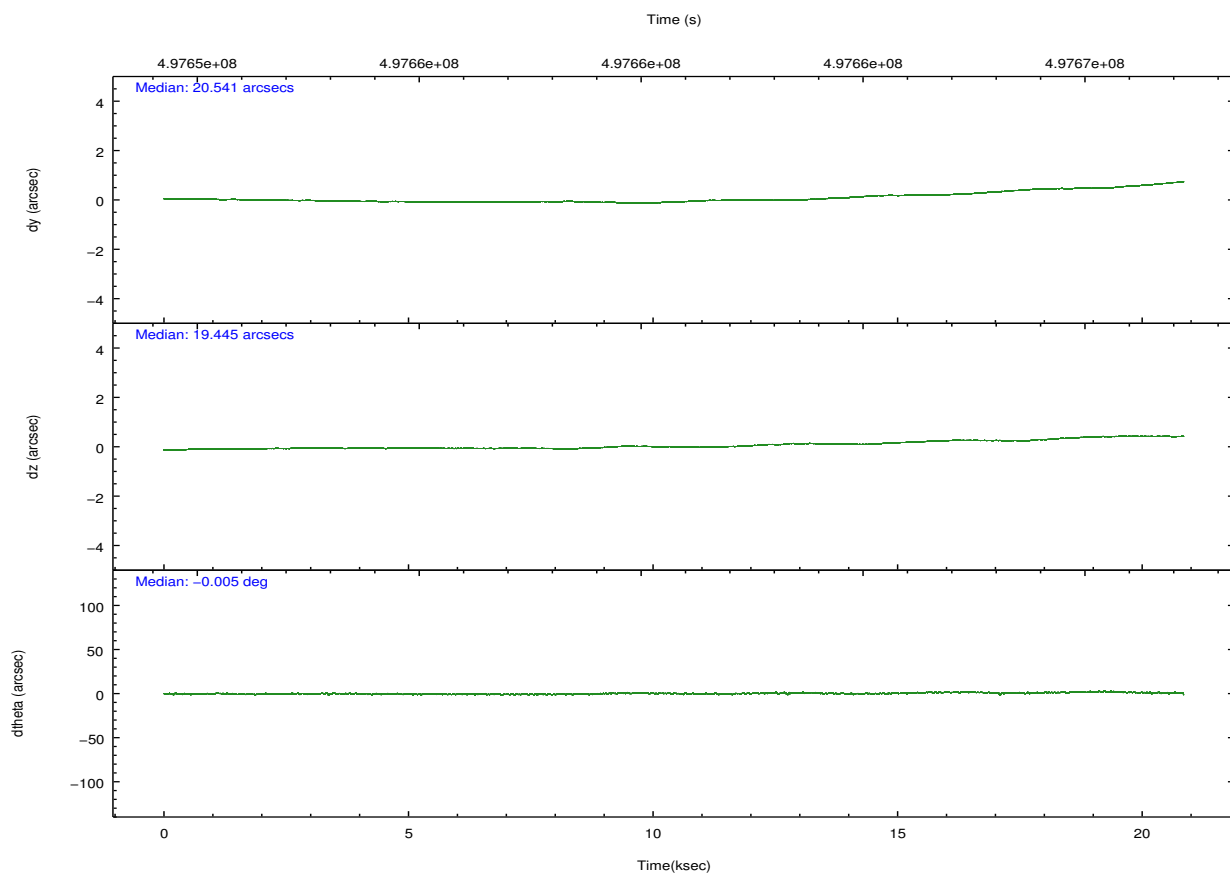
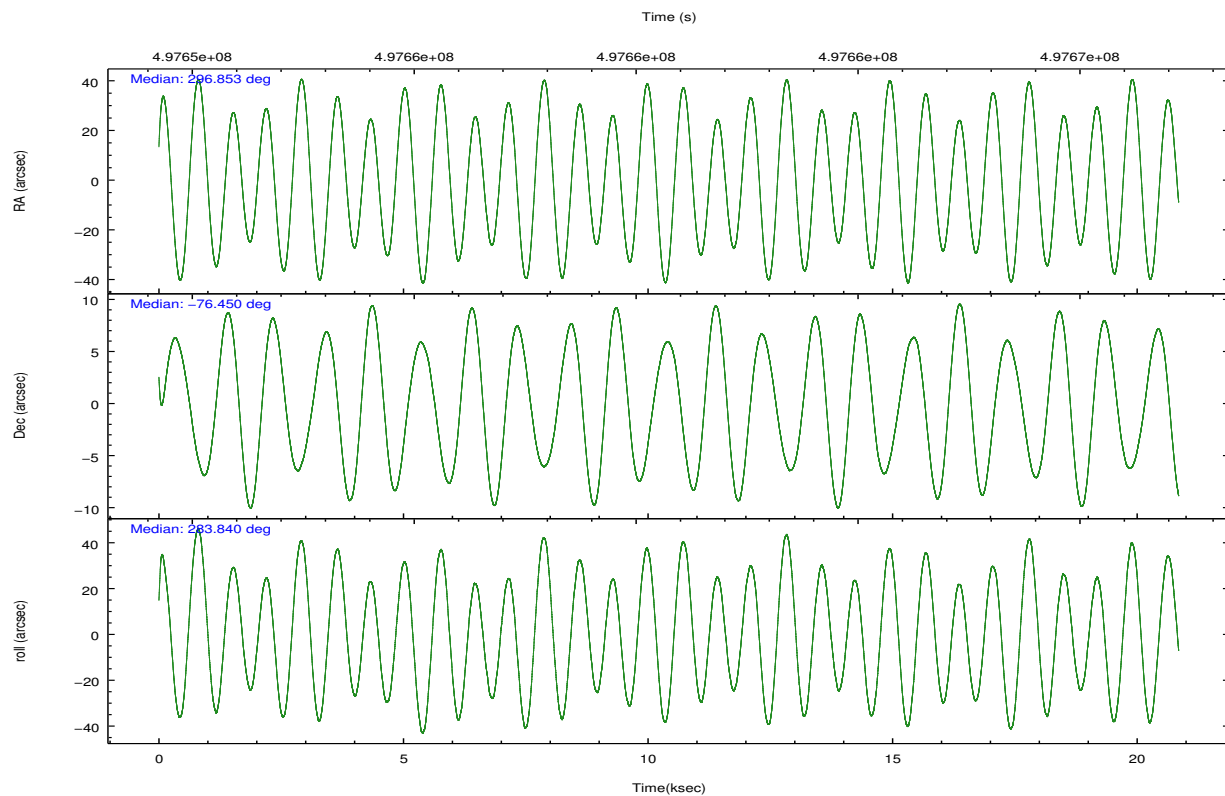
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	4175	5146	4714	14966	4360
	4%	5%	4%	13%	4%
grade 1 events	53	47	56	98	52
	0%	0%	0%	0%	0%
grade 2 events	2983	3241	2882	3893	2732
	3%	3%	2%	3%	2%
grade 3 events	1223	1279	1170	1595	1187
	1%	1%	1%	1%	1%
grade 4 events	1106	1308	1183	1621	1157
	1%	1%	1%	1%	1%
grade 5 events	4791	4838	4649	5385	5134
	5%	5%	4%	4%	5%
grade 6 events	2398	2813	2336	2700	2715
	2%	3%	2%	2%	2%
grade 7 events	72995	70831	83116	79511	81855
	81%	79%	83%	72%	82%

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	296.771783	296.8533521821876	CCD I2 on	Y	Y
[deg] Pointing Dec	-76.430313	-76.45003419257583	CCD I3 on	Y	Y
[deg] Pointing Roll	283.556894	283.8448768312934	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)	497651153.184000	497649449.98294	CCD S5 on	N	N
Observation start date	2013-10-08T20:24:46	2013-10-08T19:57:29	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	497671153.184000	497671717.08416	On-chip summing requested	N	N
Observation end date	2013-10-09T01:58:06	2013-10-09T02:08:37	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



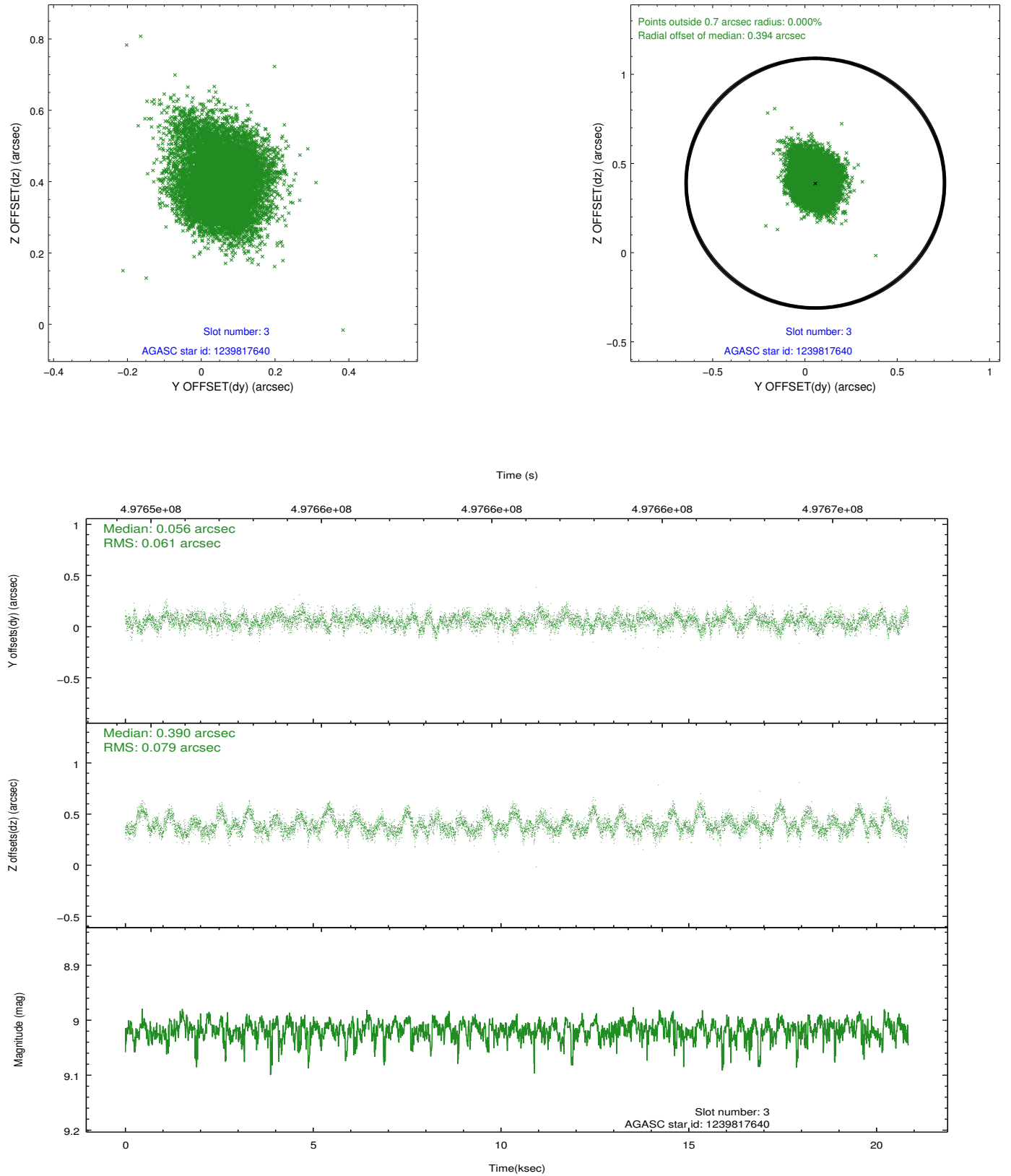


Slot Statistics

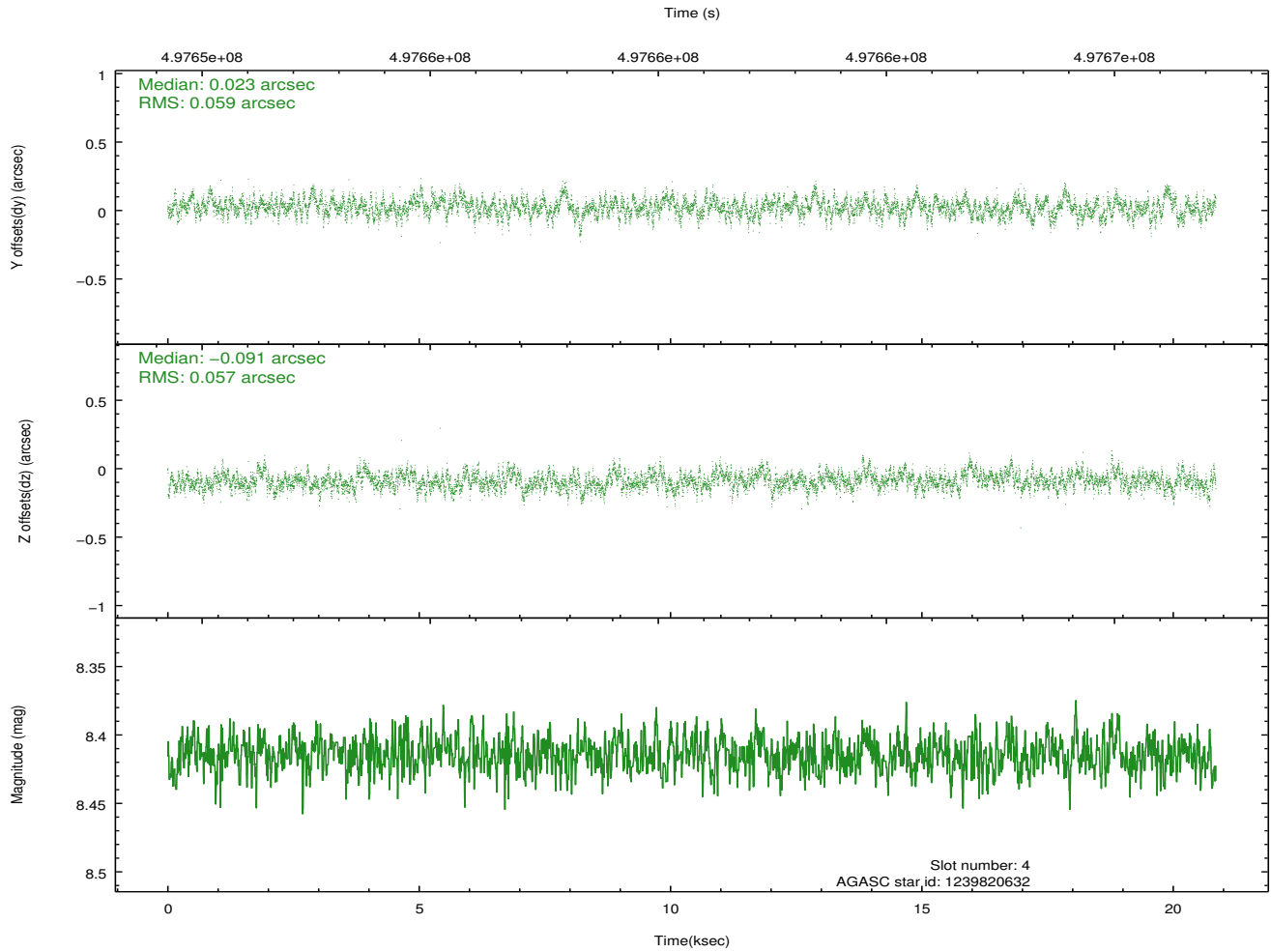
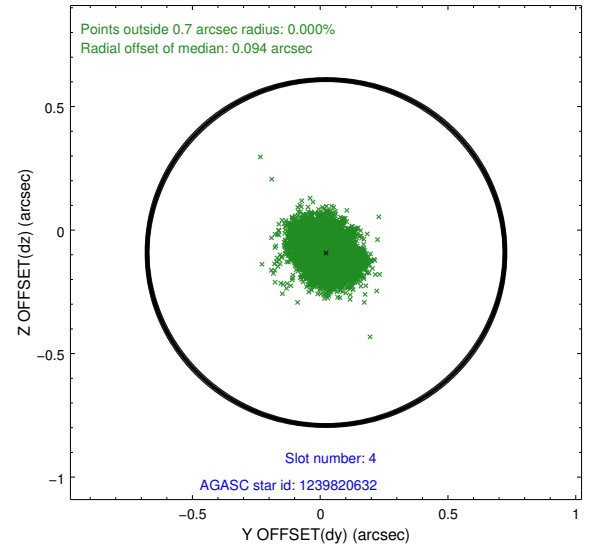
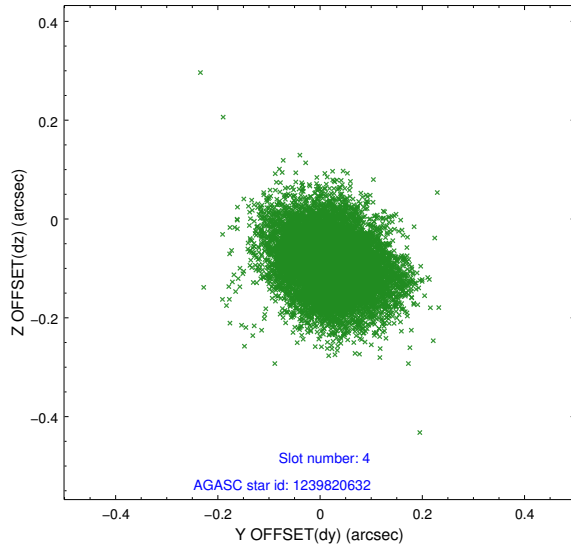
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.03	5086	0.136	-0.106	0.010	0.020	0.000000	0.000000	918.71	-1002.38
1	FID		ACIS-I-5	7.02	5086	-0.338	0.095	0.007	0.012	0.000000	0.000000	-1829.87	895.06
2	FID		ACIS-I-6	7.04	5086	0.110	0.083	0.009	0.015	0.000000	0.000000	383.91	1539.86
3	GUIDE	used	1239817640	9.02	10123	0.056	0.390	0.105	0.174	297.656598	-75.834993	-1894.63	1259.08
4	GUIDE	used	1239820632	8.41	10166	0.023	-0.091	0.087	0.143	298.221334	-76.179418	-570.57	1420.09
5	GUIDE	used	1239822424	9.15	10162	0.239	0.054	0.178	0.287	294.776068	-76.084829	-1584.43	-1394.39
6	GUIDE	used	1240338632	8.74	10166	0.014	-0.033	0.112	0.175	296.368911	-76.997586	1910.30	-796.17
7	GUIDE	used	1239821664	9.12	10098	-0.299	-0.328	0.127	0.202	299.527594	-76.310521	184.00	2369.47

2.4 Star Slots

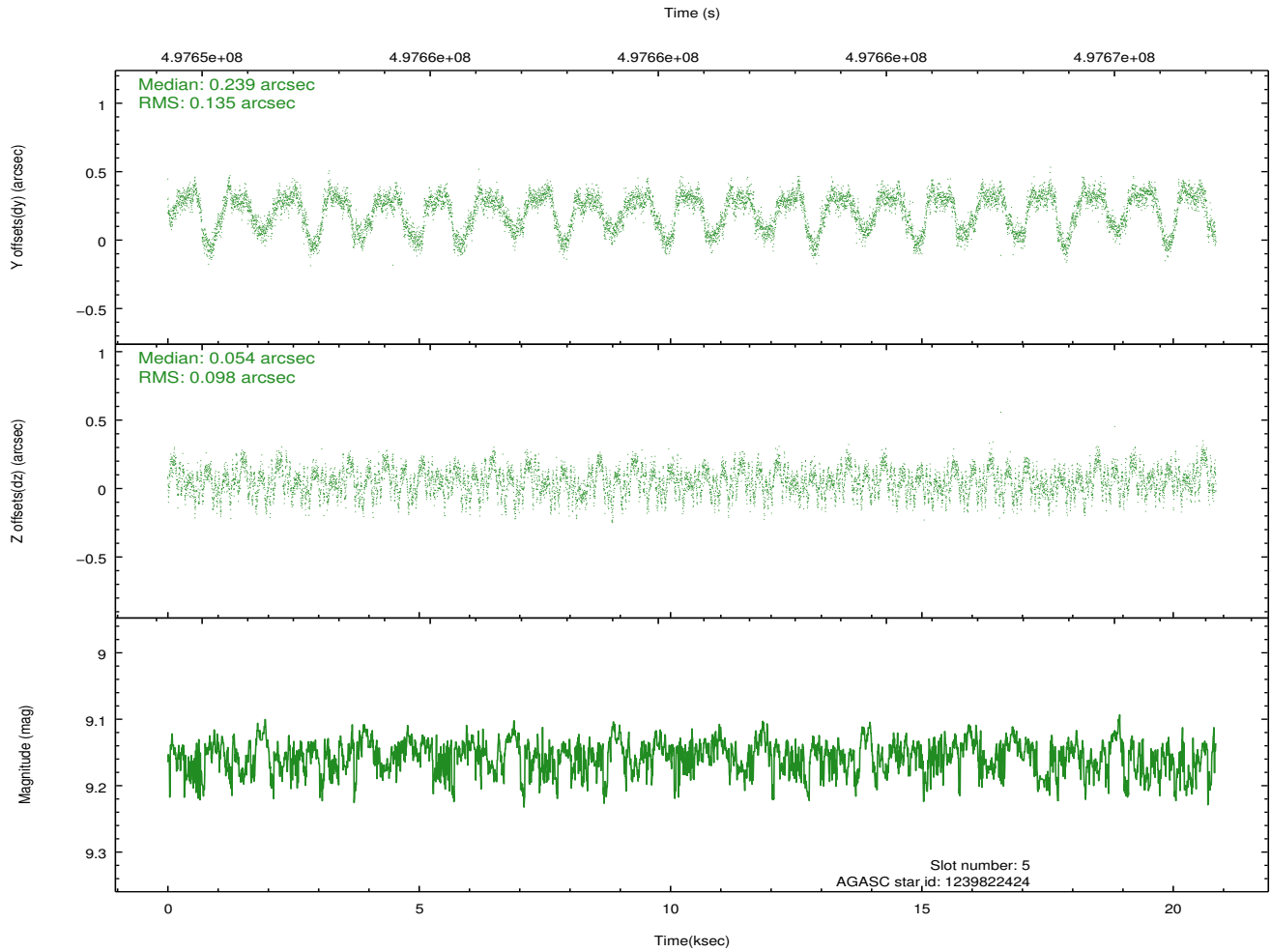
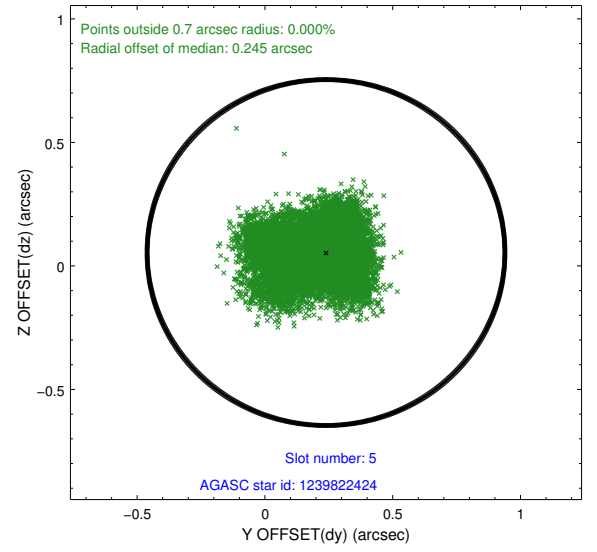
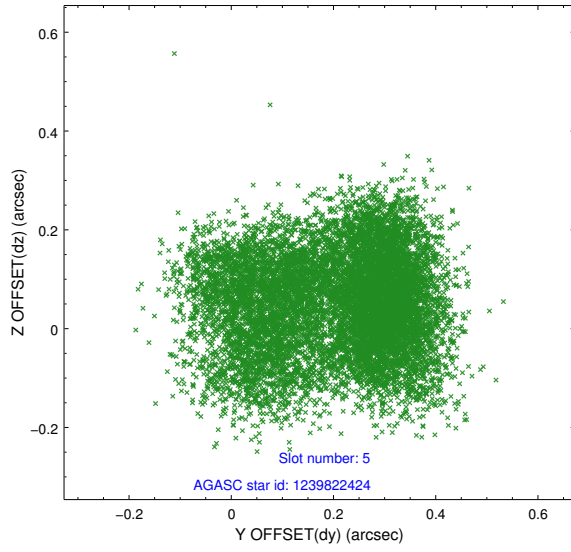
2.4.1 Slot 3



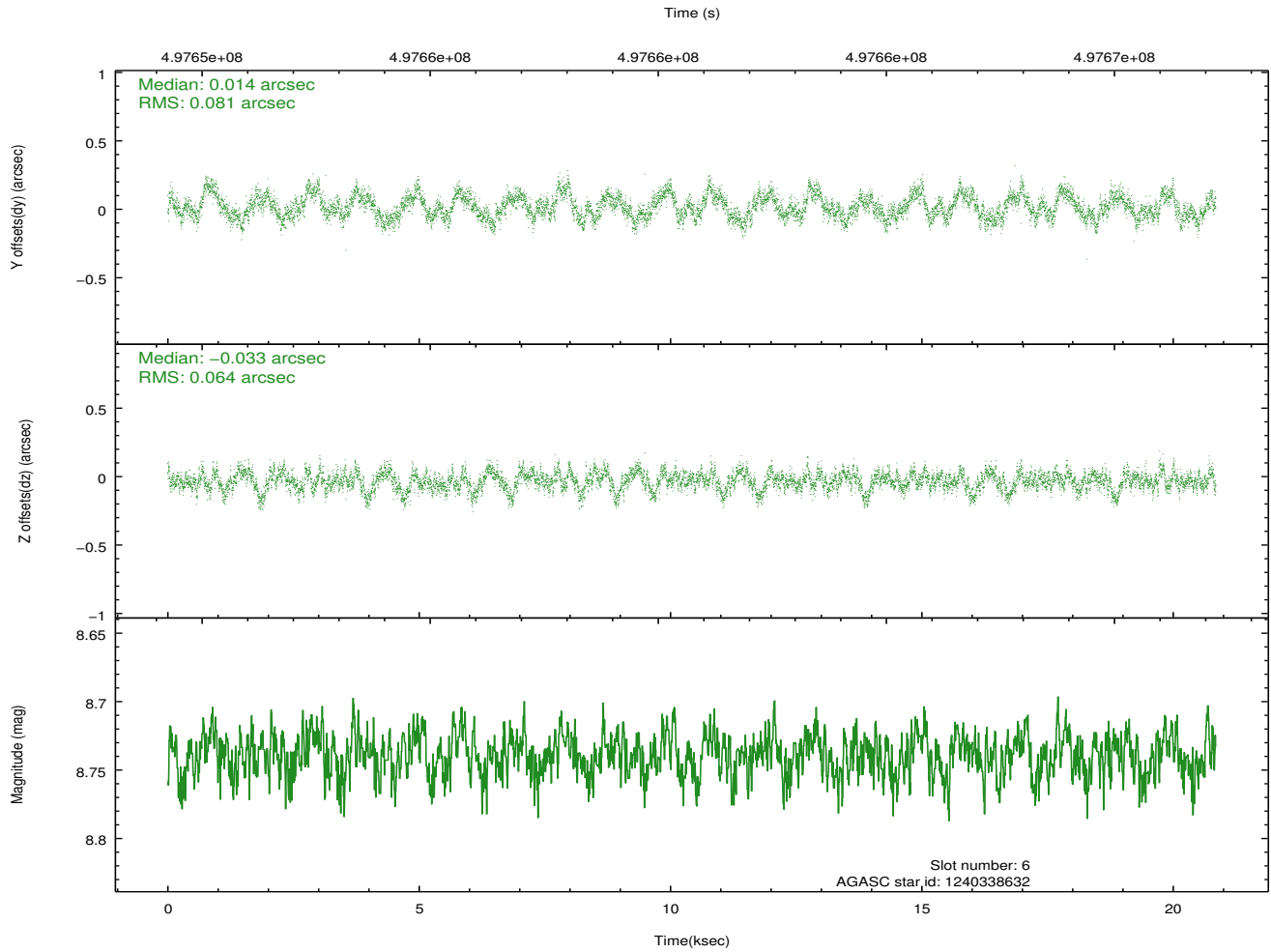
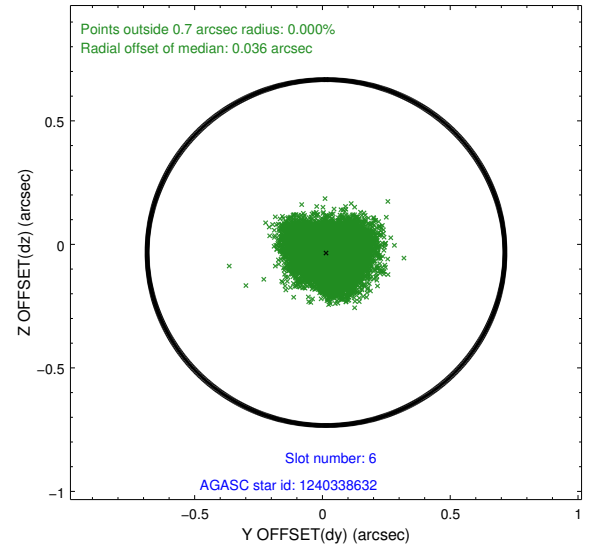
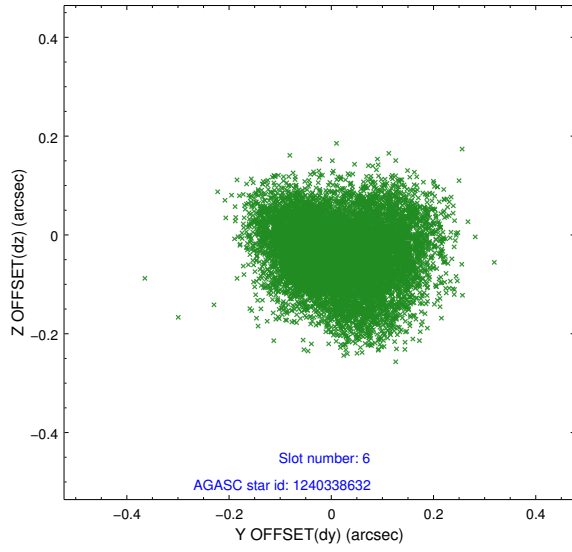
2.4.2 Slot 4



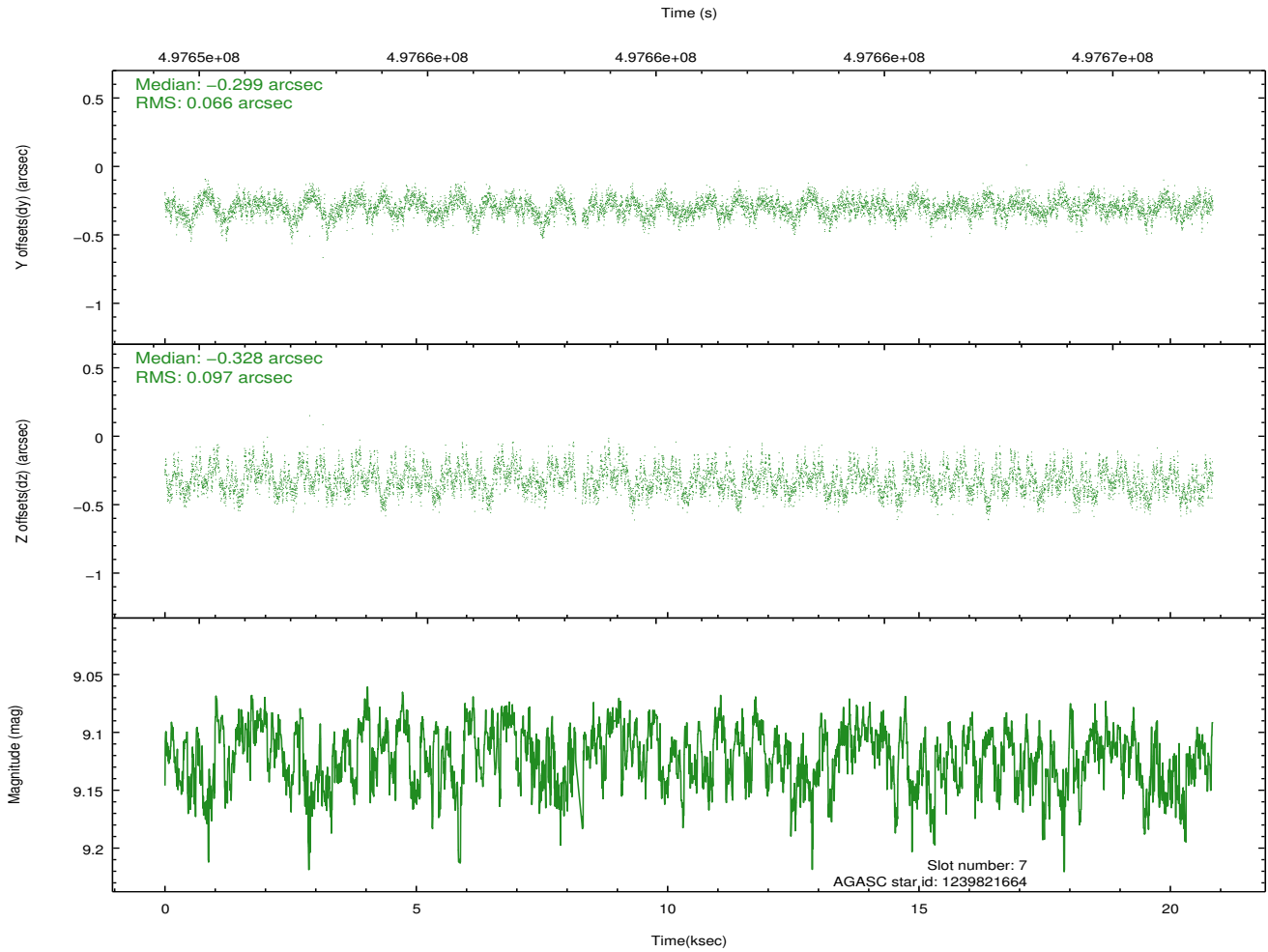
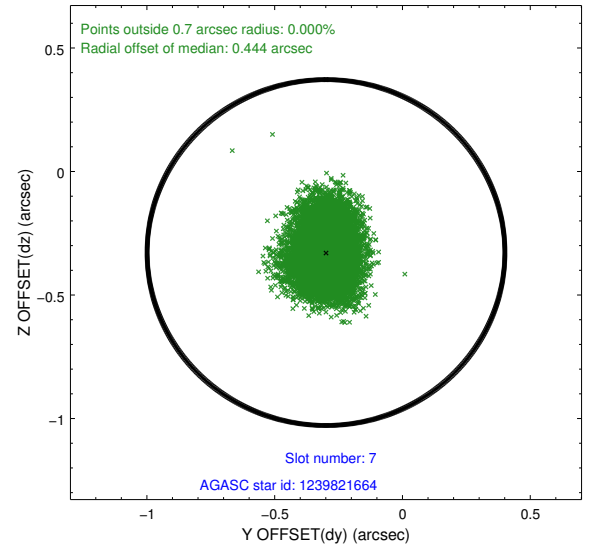
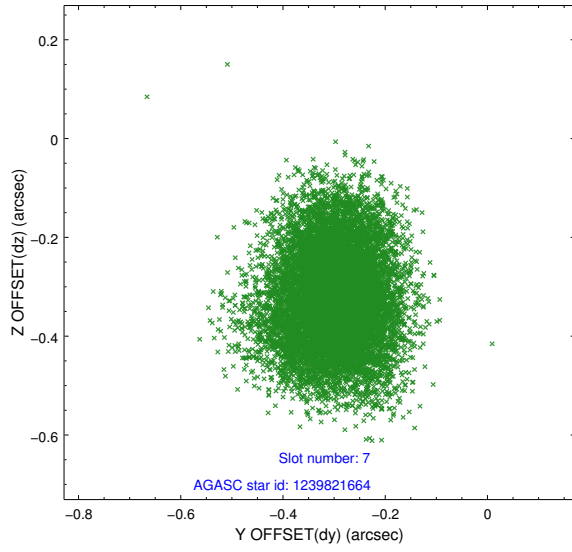
2.4.3 Slot 5



2.4.4 Slot 6

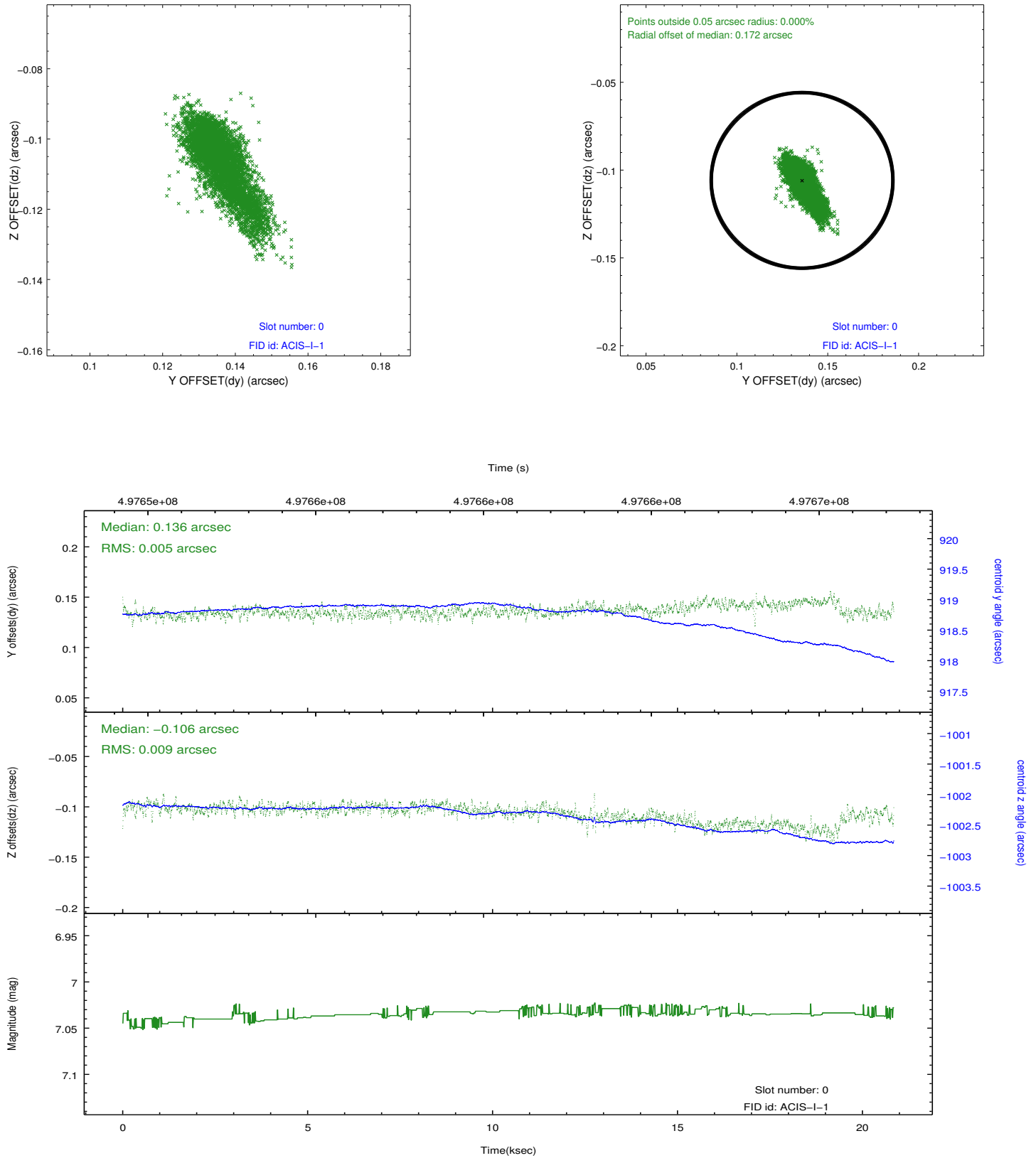


2.4.5 Slot 7

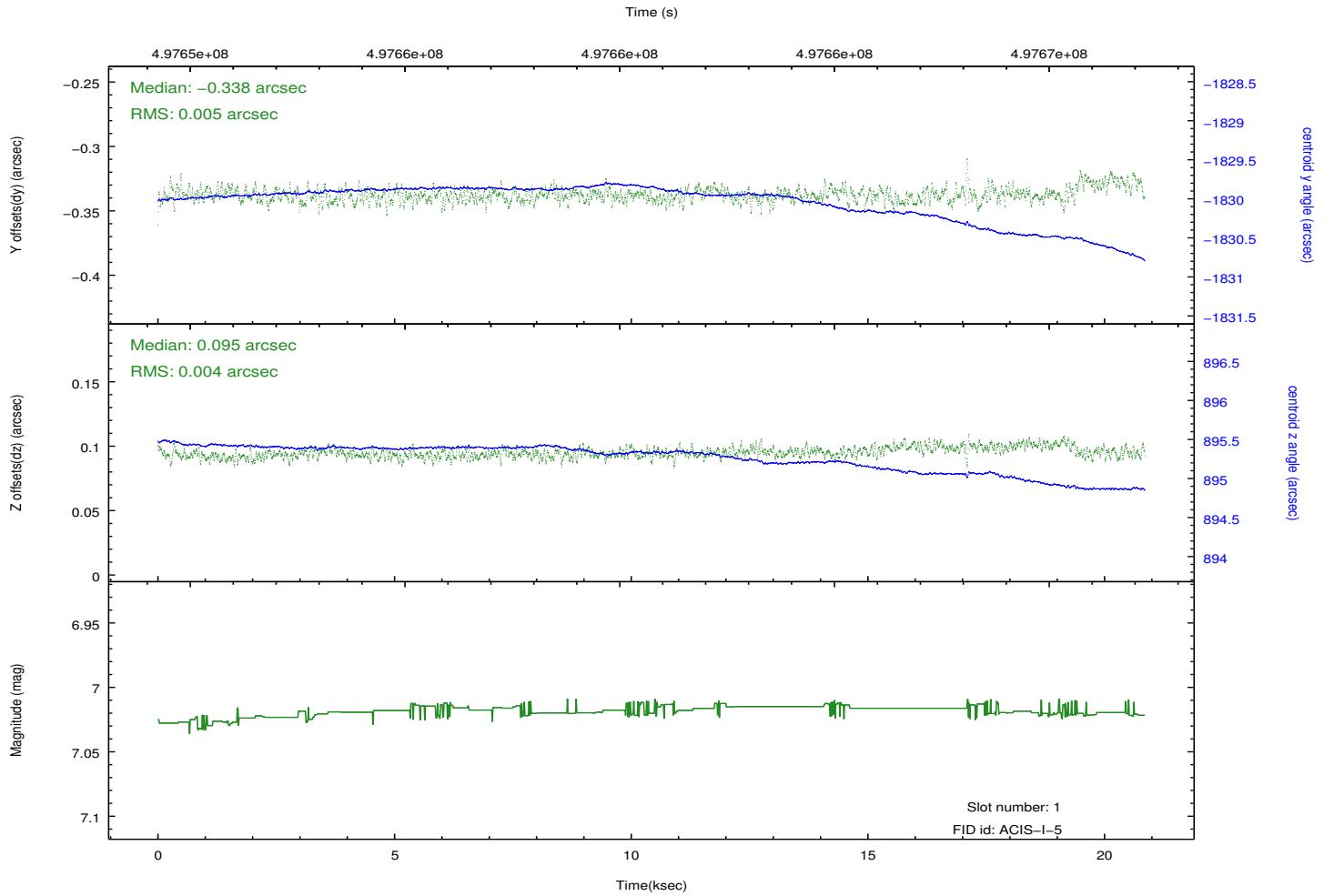
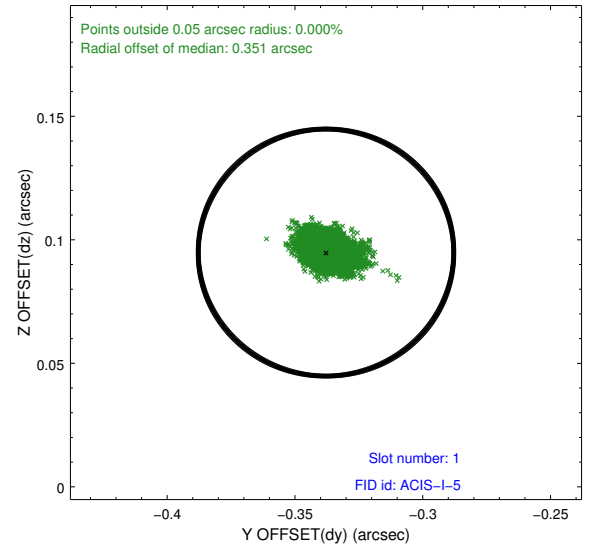
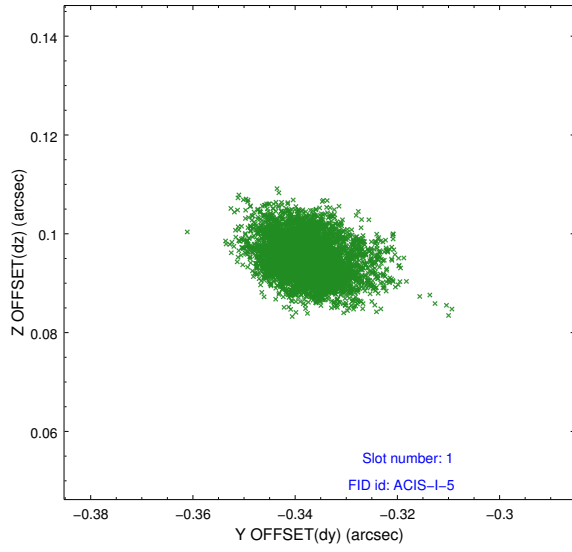


2.5 FID Slots

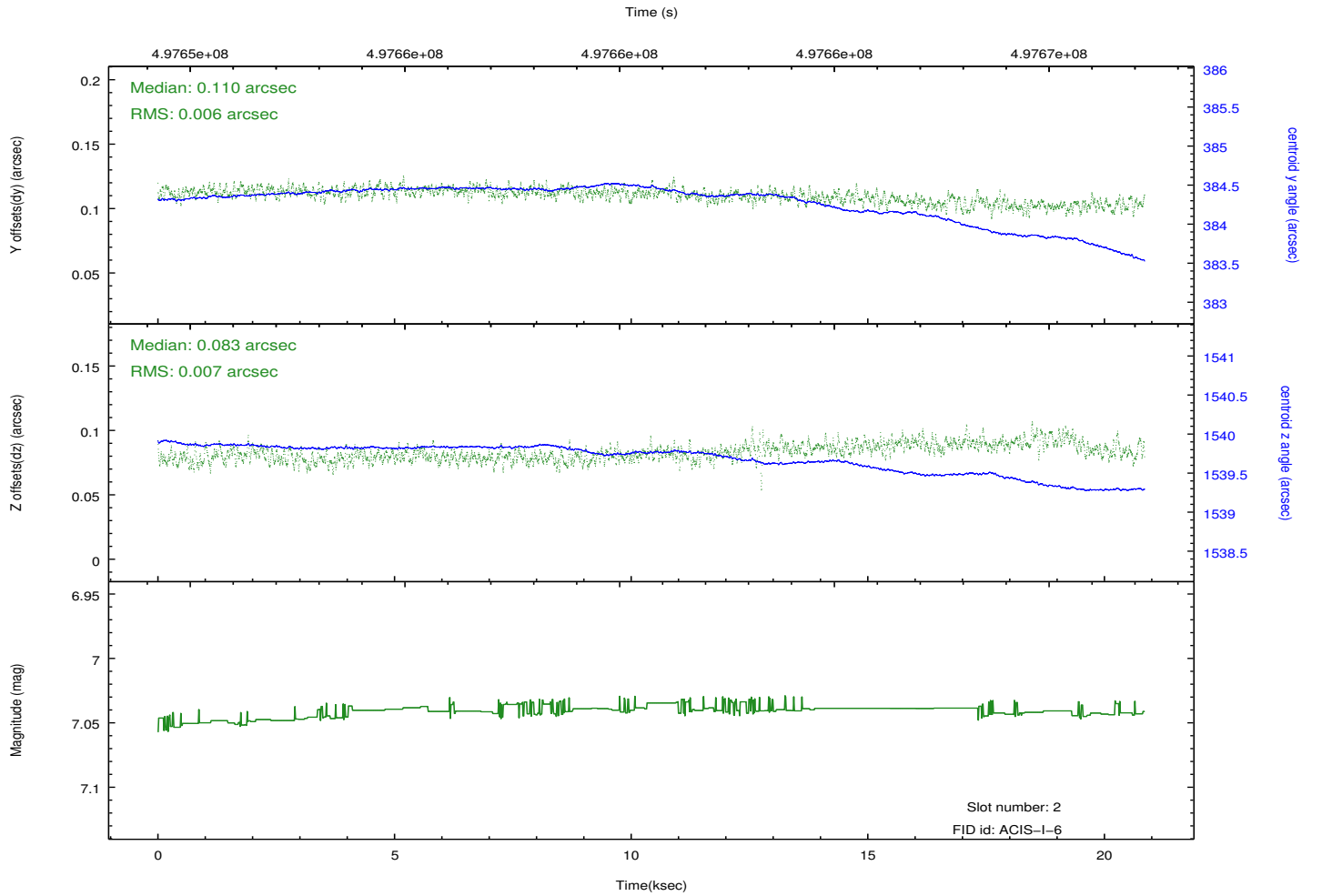
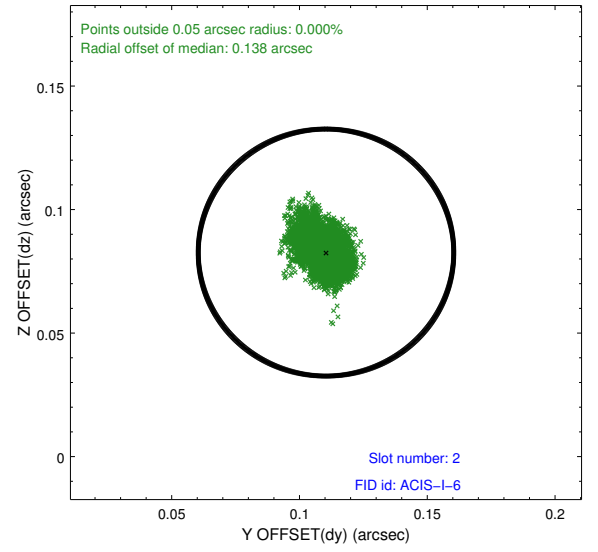
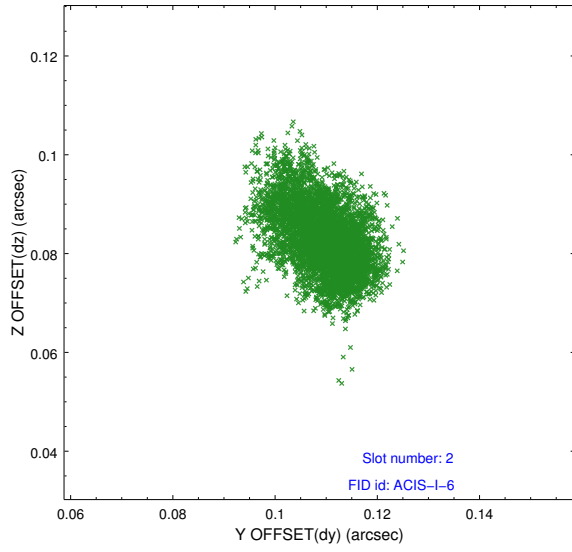
2.5.1 Slot 0



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)	2014.12.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.084640279949

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.