

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 14031 - L2 Version 2
Chandra X-Ray Center

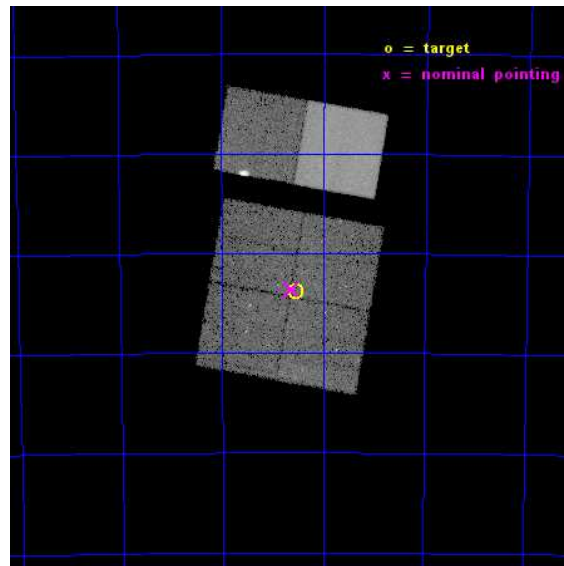
L2 Processing Date : Nov 29 2014

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

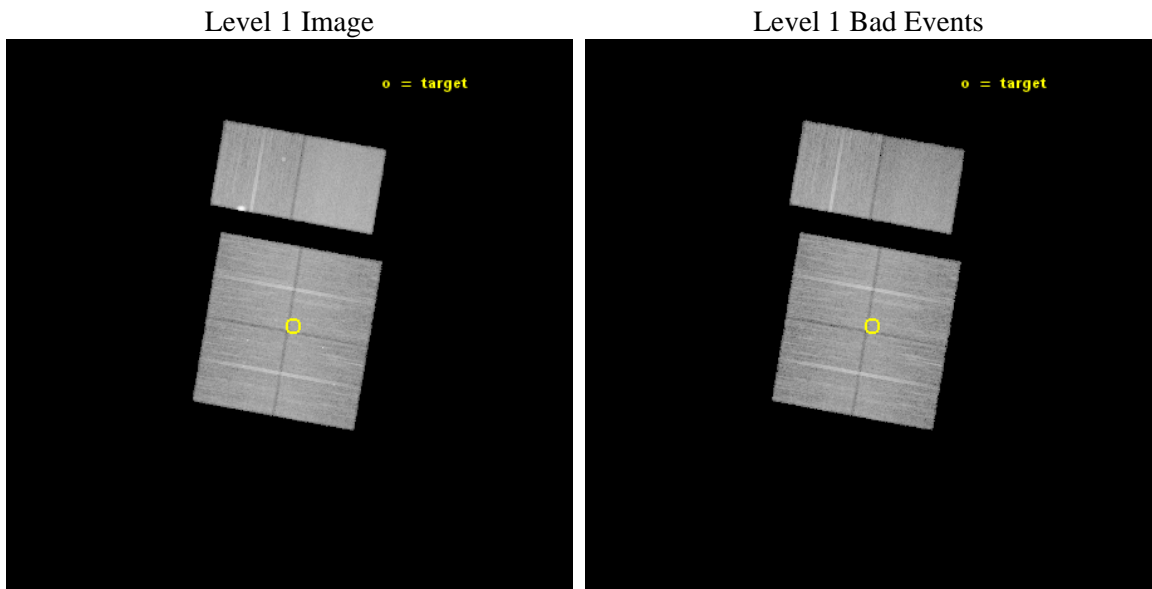
seq_num	900997	Sequence number
obs_id	14031	Observation id
title	Probing the Nature and Role of X-ray Emission in HII Regions with Chandra	Proposal title
observer	Dr. Laura Lopez	Principal investigator
object	N119	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	79.6375	Observer's specified target RA [deg]
dec_targ	-69.230833	Observer's specified target Dec [deg]
ra_nom	79.657757763944	Nominal RA [deg]
dec_nom	-69.227124193305	Nominal Dec [deg]
roll_nom	10.005108498451	Nominal Roll [deg]
revision	2	Processing version of data
ontime	29768.139456511	Sum of GTIs [s]
livetime	29391.197350491	Livetime [s]
ontime0	29768.016336501	Sum of GTIs [s]
ontime1	29764.816386223	Sum of GTIs [s]
ontime2	29768.098416507	Sum of GTIs [s]
ontime3	29768.139456511	Sum of GTIs [s]
ontime6	29764.980516195	Sum of GTIs [s]
ontime7	29768.180496514	Sum of GTIs [s]
l2events	176229	Number of level 2 events



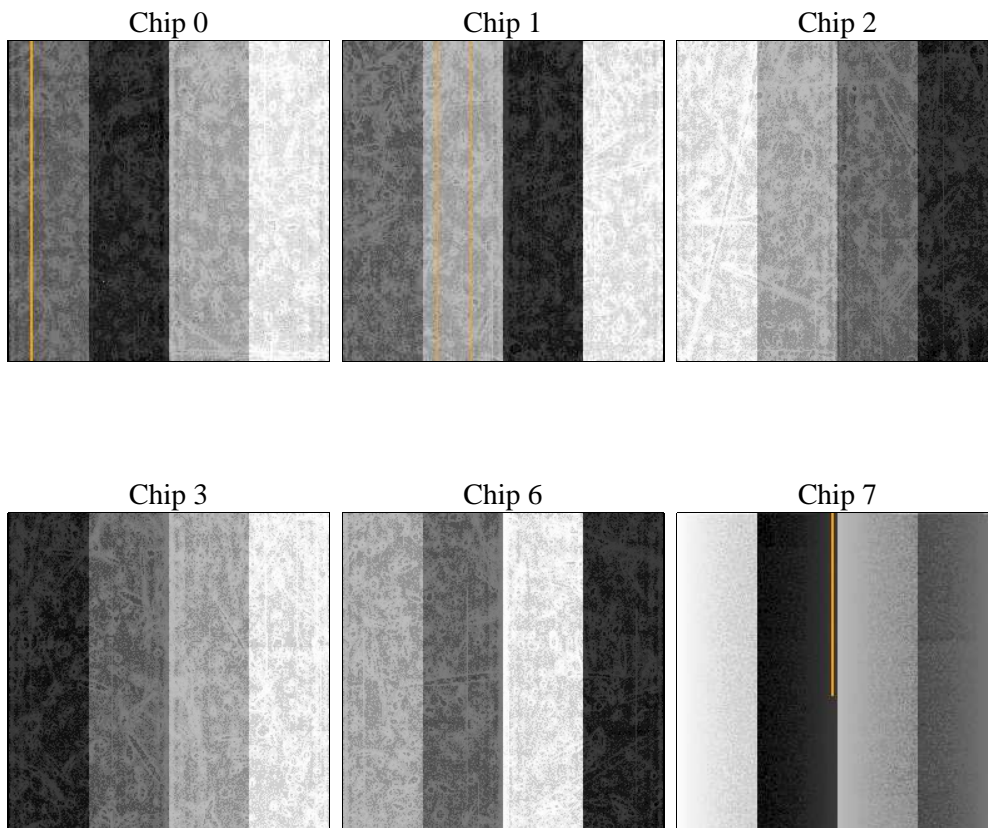
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	29797.143000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	29768.139456511	Sum of GTIs [s]
caldbver	4.6.4	 	ontime0	29768.016336501	Sum of GTIs [s]
date	2014-11-30T00:38:00	Date and time of file creation	ontime1	29764.816386223	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	29768.098416507	Sum of GTIs [s]
			ontime3	29768.139456511	Sum of GTIs [s]
			ontime6	29764.980516195	Sum of GTIs [s]
			ontime7	29768.180496514	Sum of GTIs [s]
			l1events	940587	Number of level 1 events

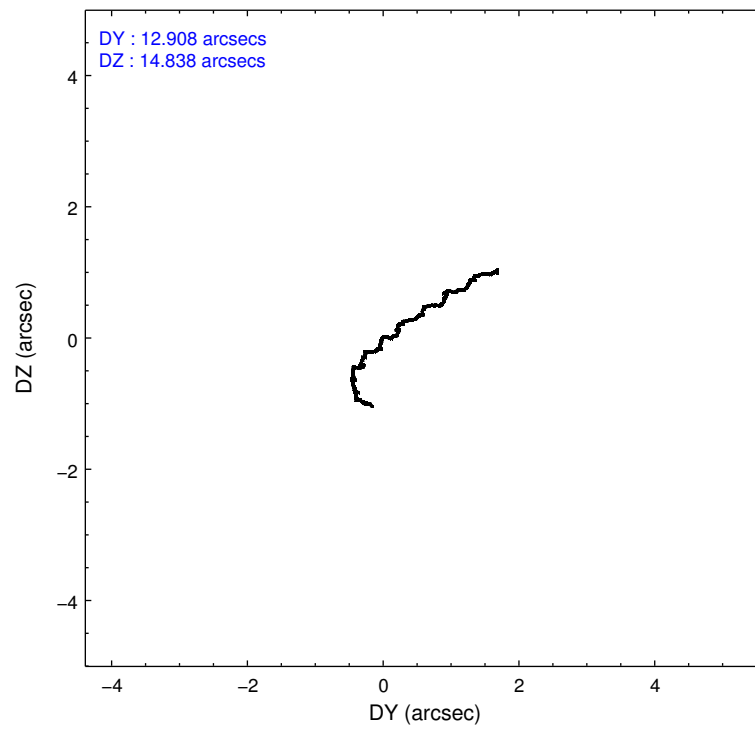
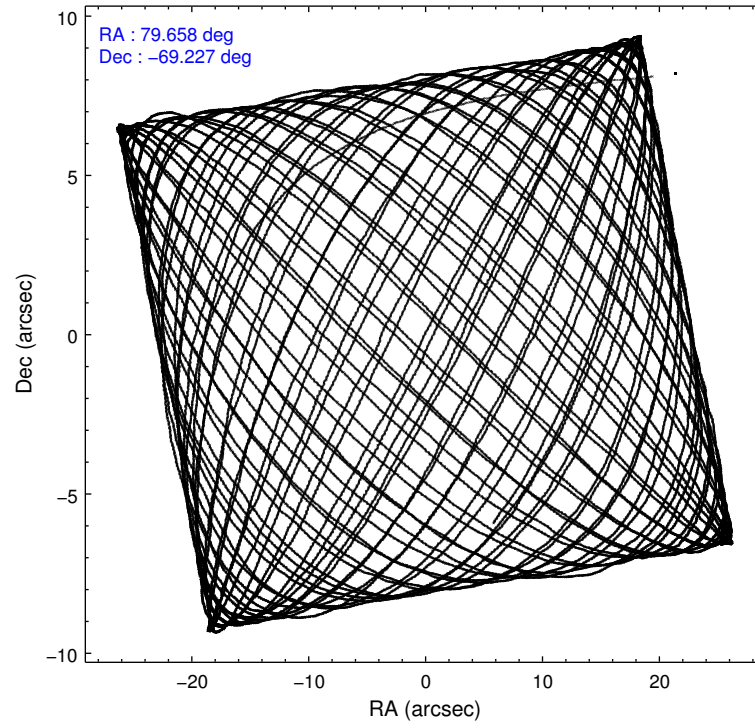
2.1.4 Events

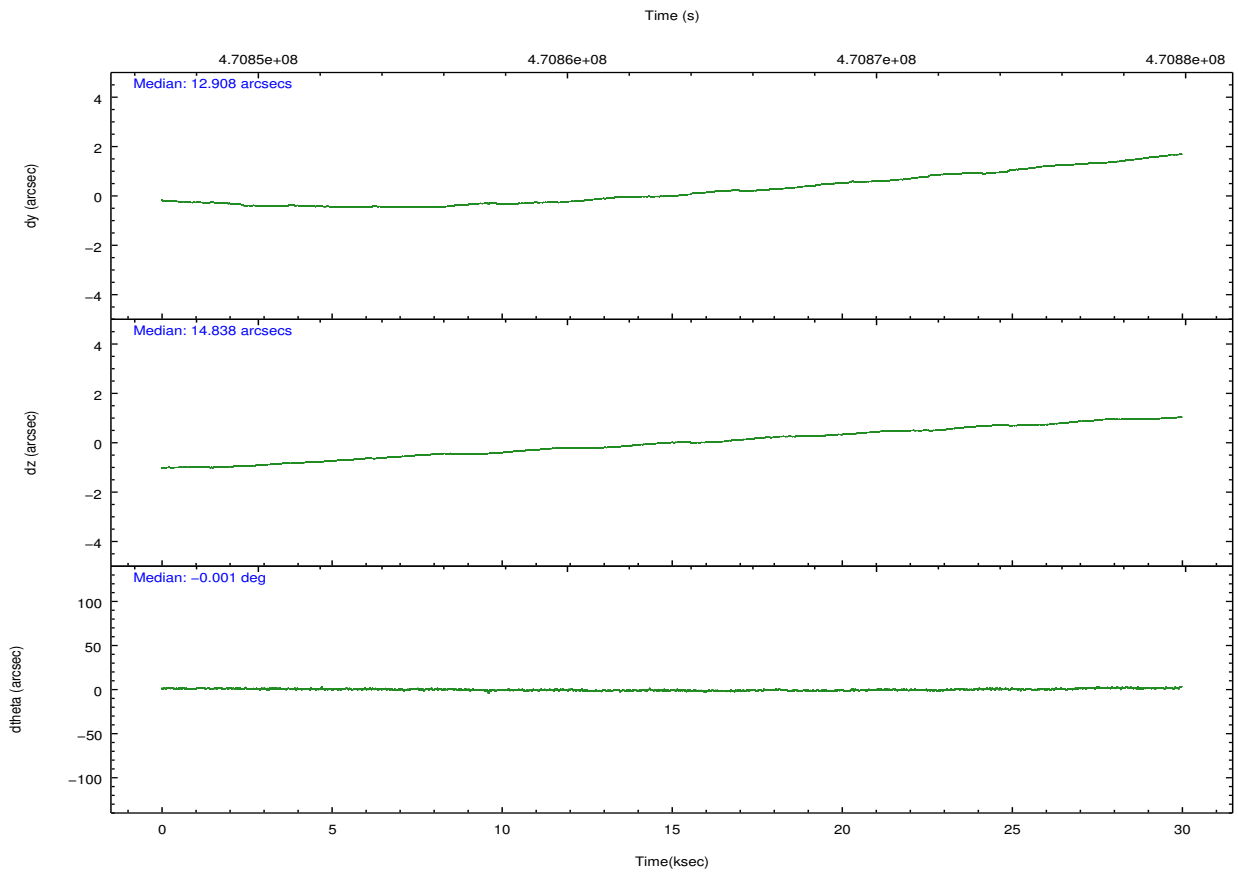
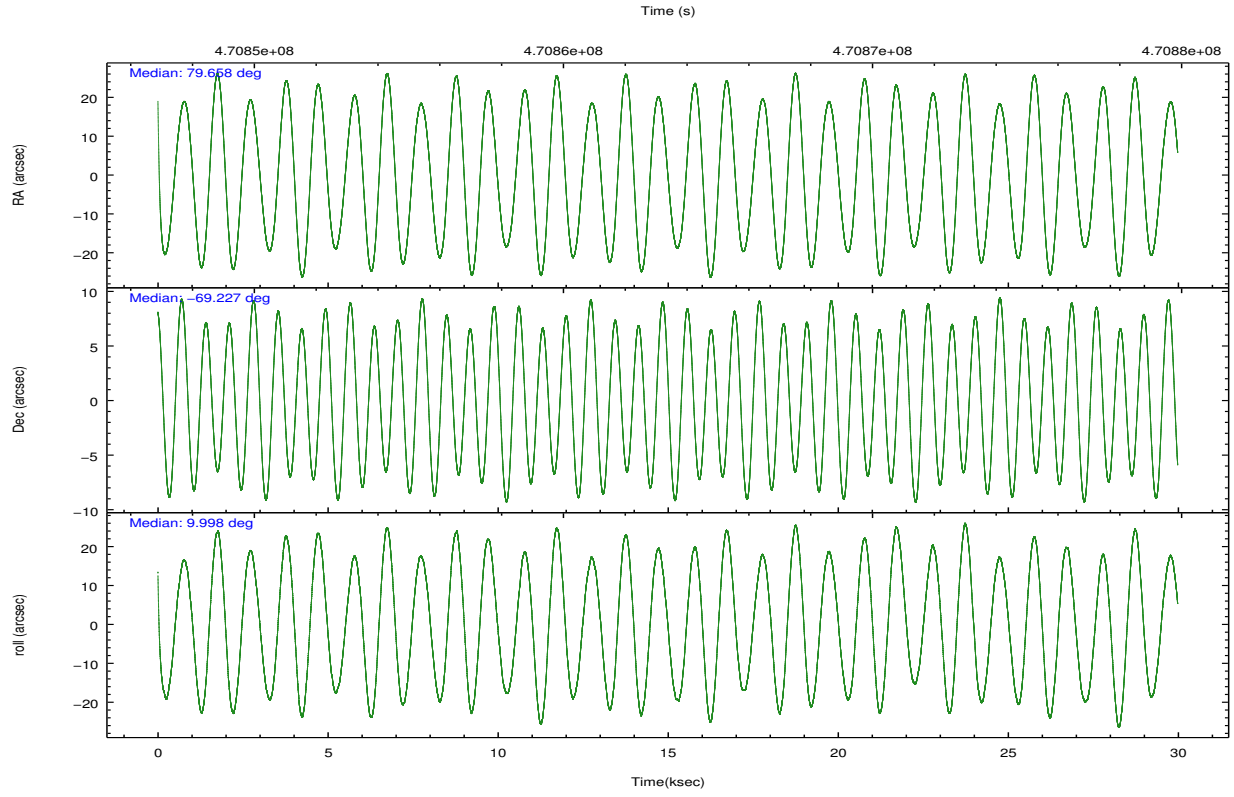
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	135774	141325	149242	144518	167647	202081	grade 0 events	7337	8344	6963	6846	15787	8025
rejected events	116768	120209	131601	126862	138464	113464		5%	5%	4%	4%	9%	3%
rejected %	86%	85%	88%	87%	82%	56%	grade 1 events	64	87	89	89	137	248
								0%	0%	0%	0%	0%	0%
							grade 2 events	4362	4791	4057	3746	5051	18214
								3%	3%	2%	2%	3%	9%
							grade 3 events	1892	1920	1728	1778	1981	7454
								1%	1%	1%	1%	1%	3%
							grade 4 events	1738	1927	1685	1792	1978	7410
								1%	1%	1%	1%	1%	3%
							grade 5 events	6802	7293	6503	7930	7960	20462
								5%	5%	4%	5%	4%	10%
							grade 6 events	3680	4136	3209	3495	4391	47525
								2%	2%	2%	2%	2%	23%
							grade 7 events	109899	112827	125008	118842	130362	92743
								80%	79%	83%	82%	77%	45%

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	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	79.598516	79.65775776394401	CCD I2 on	Y	Y
[deg] Pointing Dec	-69.244888	-69.22712419330495	CCD I3 on	Y	Y
[deg] Pointing Roll	9.741033	10.00510849845128	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)	470848566.184000	470847534.81709	CCD S5 on	N	N
Observation start date	2012-12-02T15:14:59	2012-12-02T14:58:54	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	470878363.184000	470878600.51876	On-chip summing requested	N	N
Observation end date	2012-12-02T23:31:36	2012-12-02T23:36:40	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect





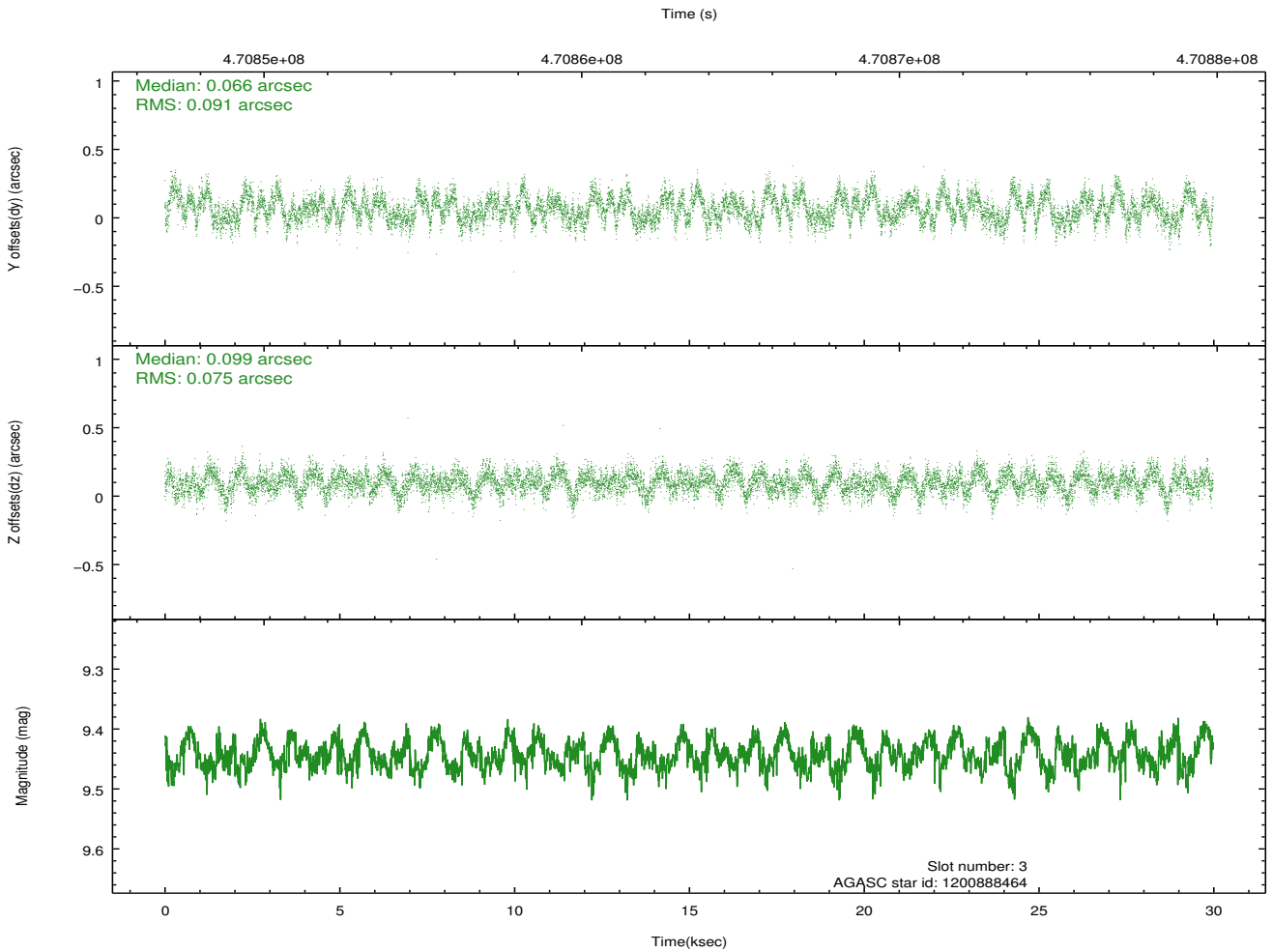
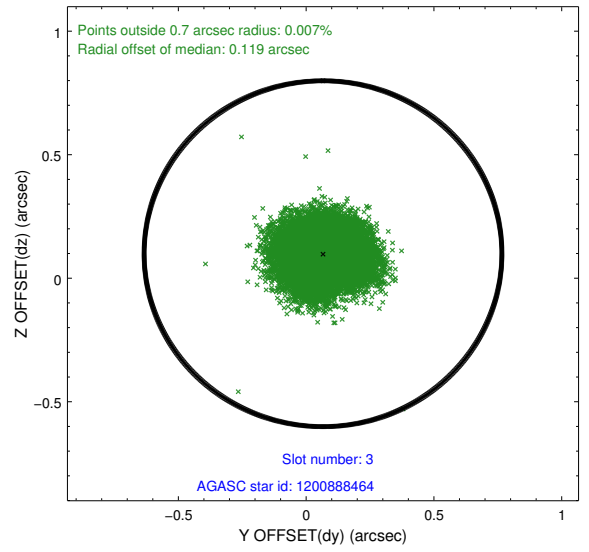
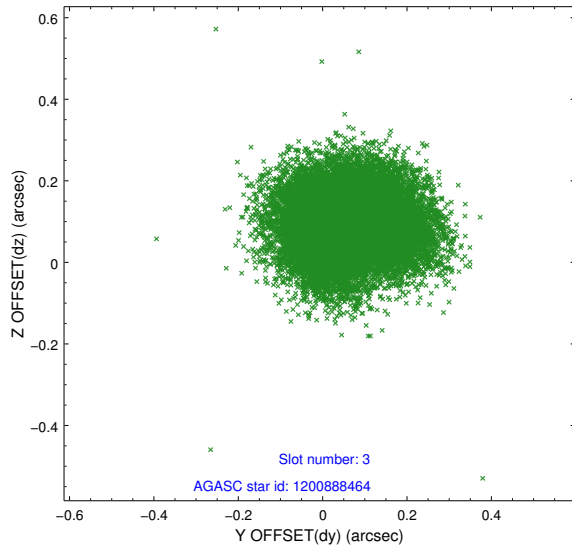
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-2	7.09	7312	-0.028	-0.103	0.019	0.031	0.000000	0.000000	-767.86	-844.87
1	FID		ACIS-I-5	7.17	7312	-0.176	0.053	0.012	0.019	0.000000	0.000000	-1822.10	1059.11
2	FID		ACIS-I-6	7.16	7313	0.110	0.118	0.011	0.016	0.000000	0.000000	391.96	1703.73
3	GUIDE	used	1200888464	9.45	14600	0.066	0.099	0.127	0.197	78.430687	-69.005633	-1340.92	1089.61
4	GUIDE	used	1201409312	9.23	14617	-0.057	0.007	0.113	0.181	80.915231	-69.503059	1475.74	-1213.87
5	GUIDE	used	1201411288	9.26	14616	0.053	0.021	0.110	0.182	81.410076	-69.595403	2022.10	-1660.61
6	GUIDE	used	1201280984	7.01	14627	-0.048	-0.091	0.062	0.097	77.867422	-69.546090	-2334.29	-731.08
7	GUIDE	used	1200888648	9.49	14608	-0.007	-0.034	0.155	0.231	80.690258	-68.830099	1649.34	1219.33

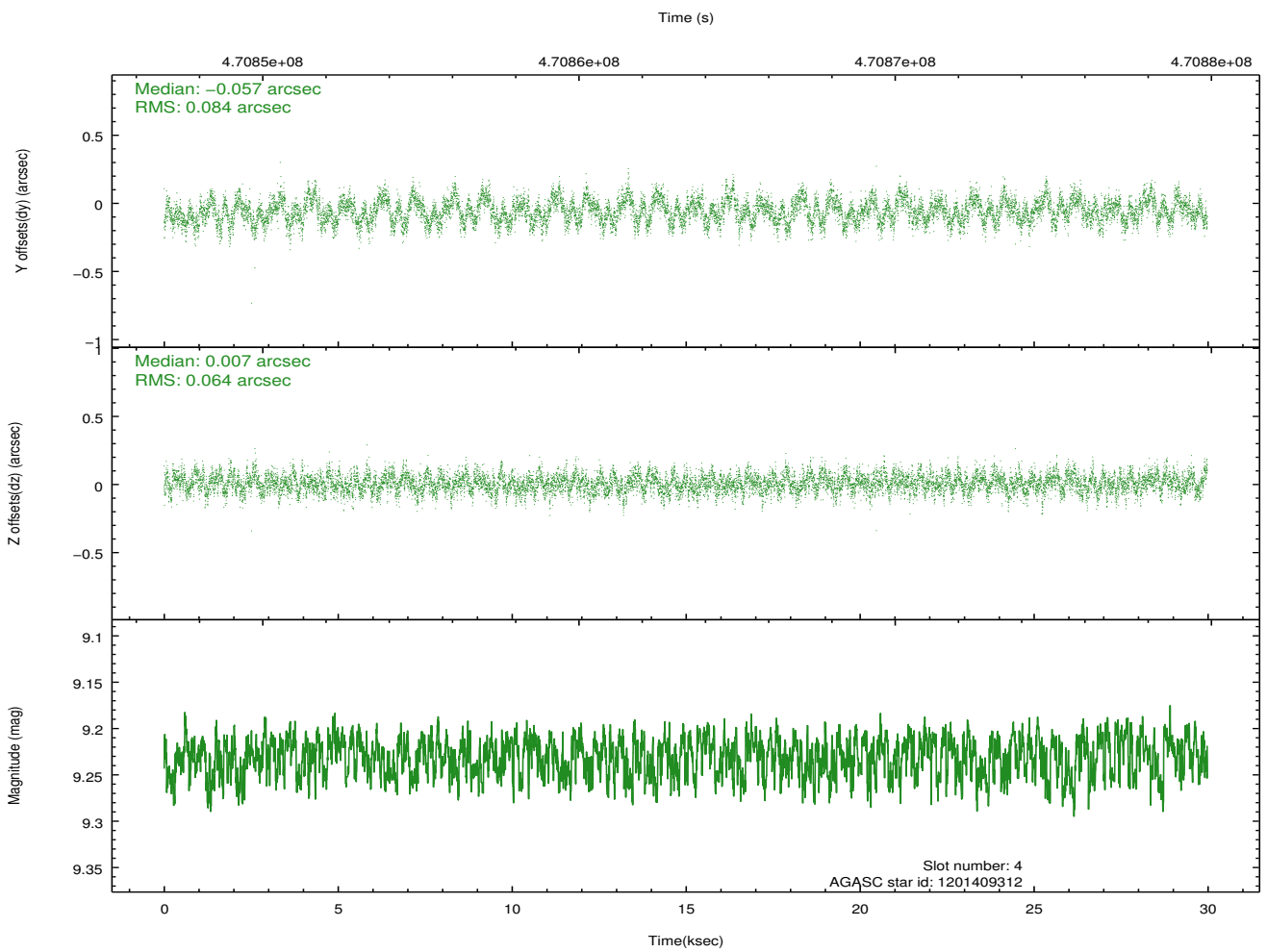
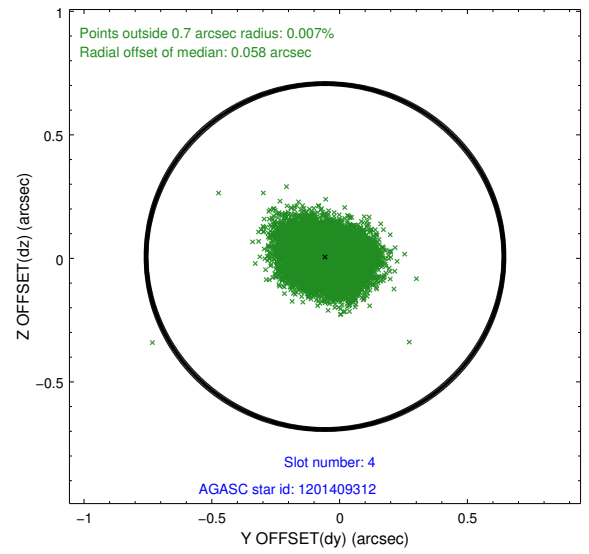
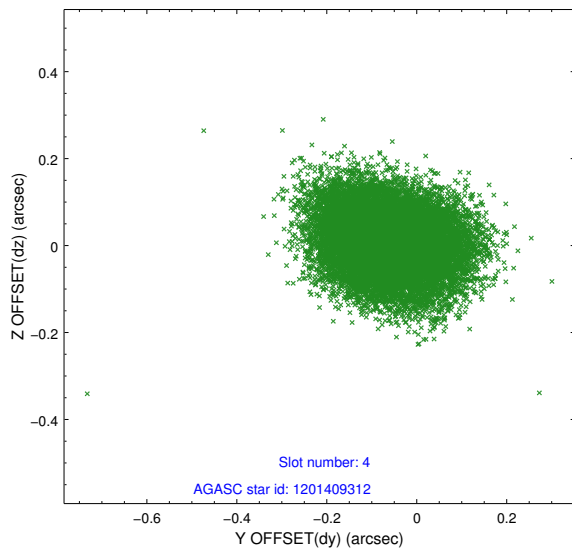
∞

2.4 Star Slots

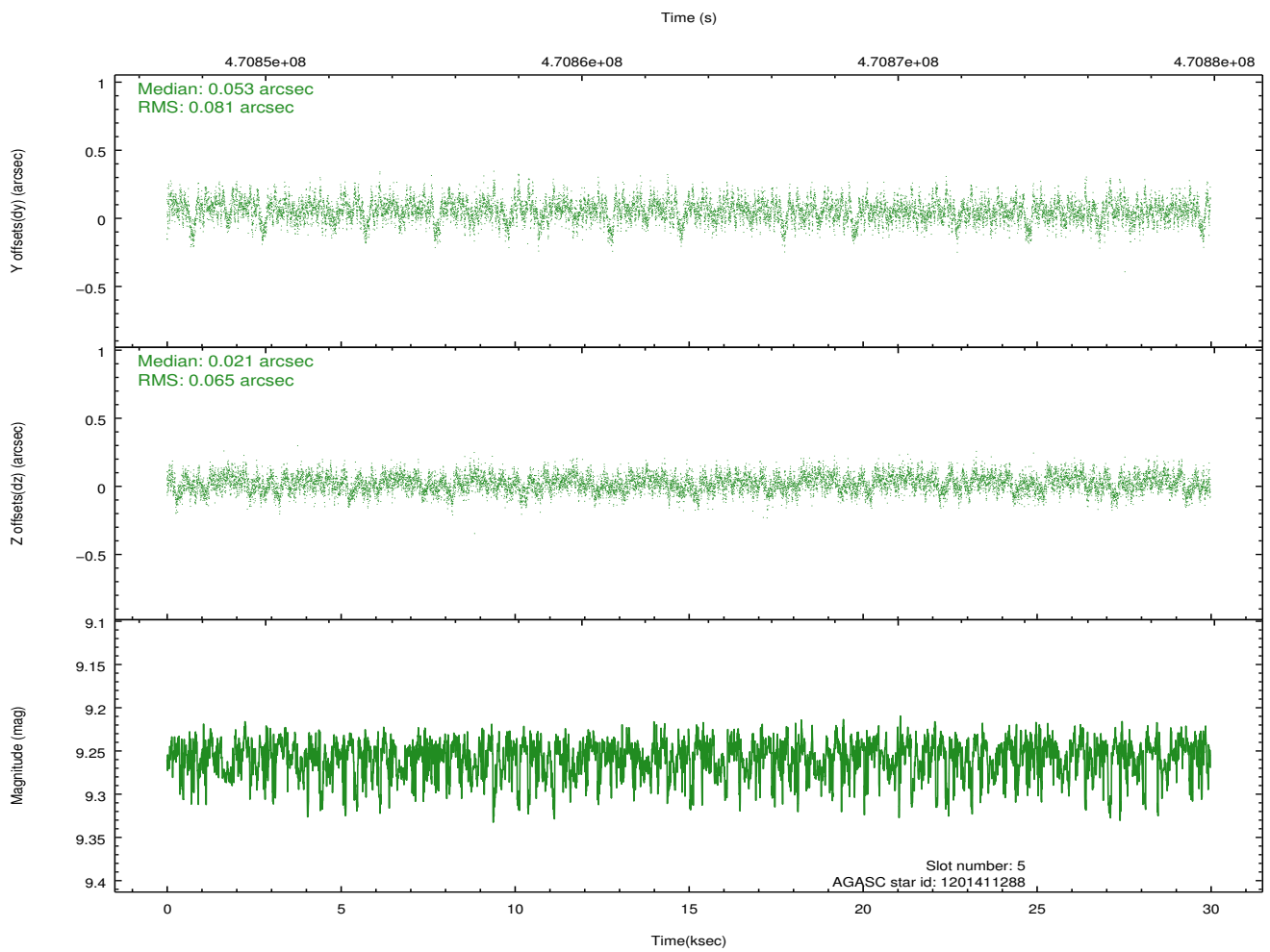
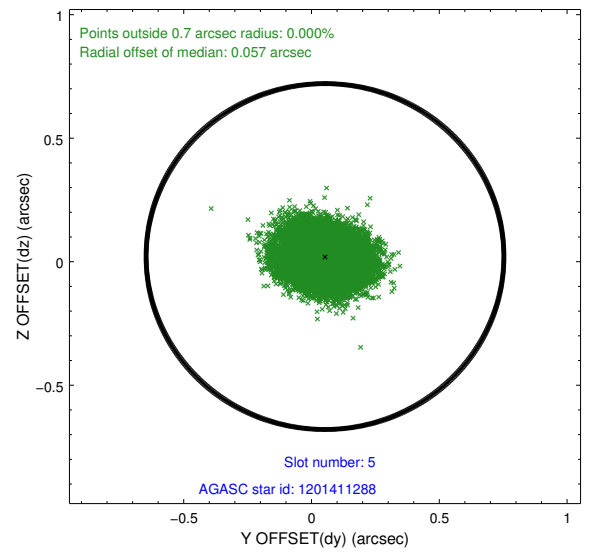
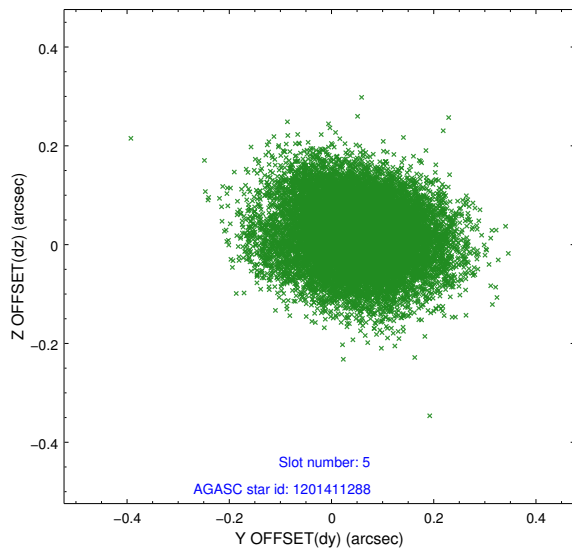
2.4.1 Slot 3



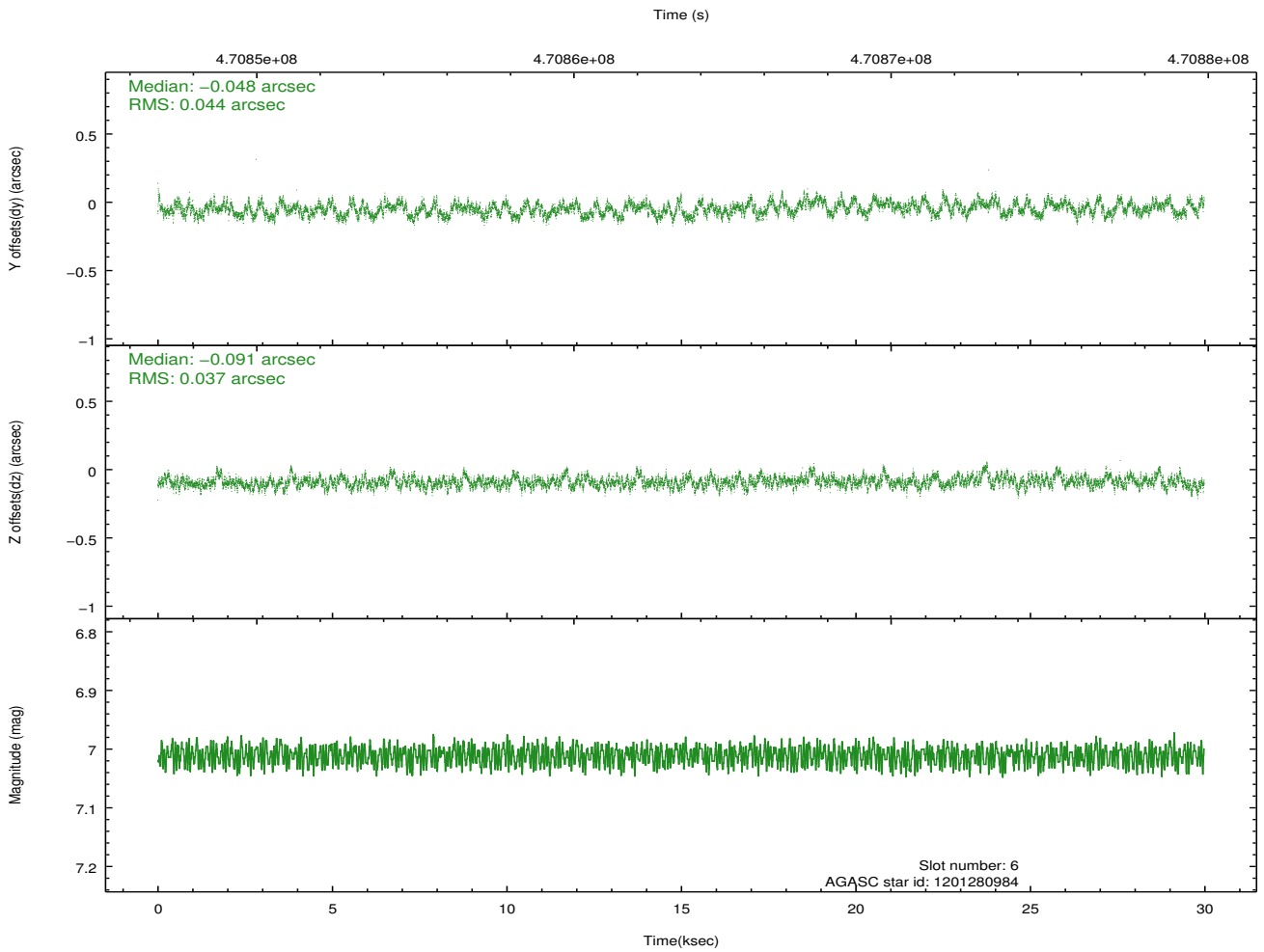
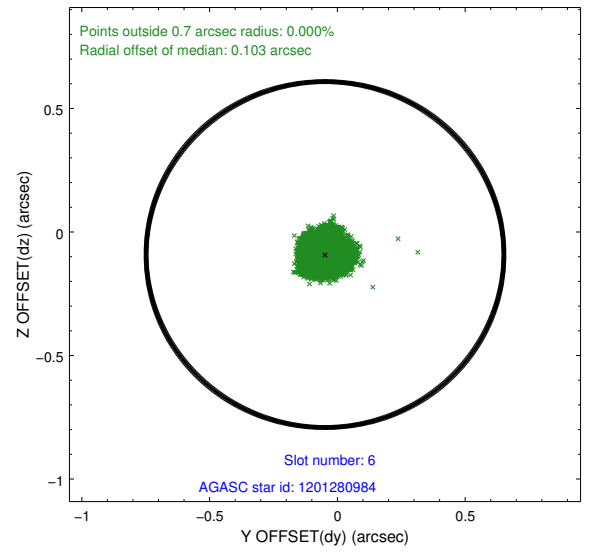
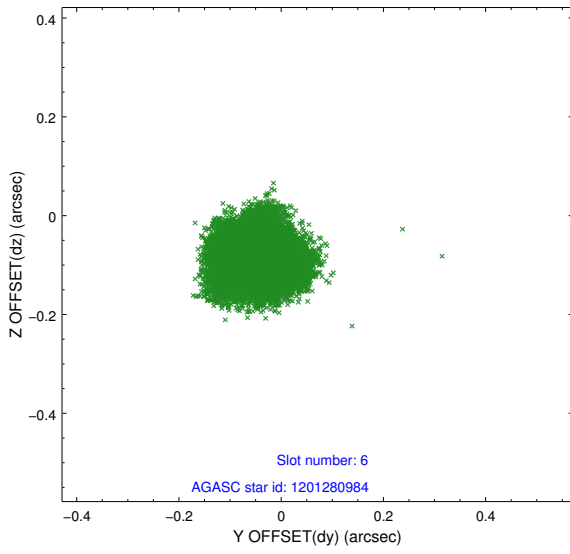
2.4.2 Slot 4



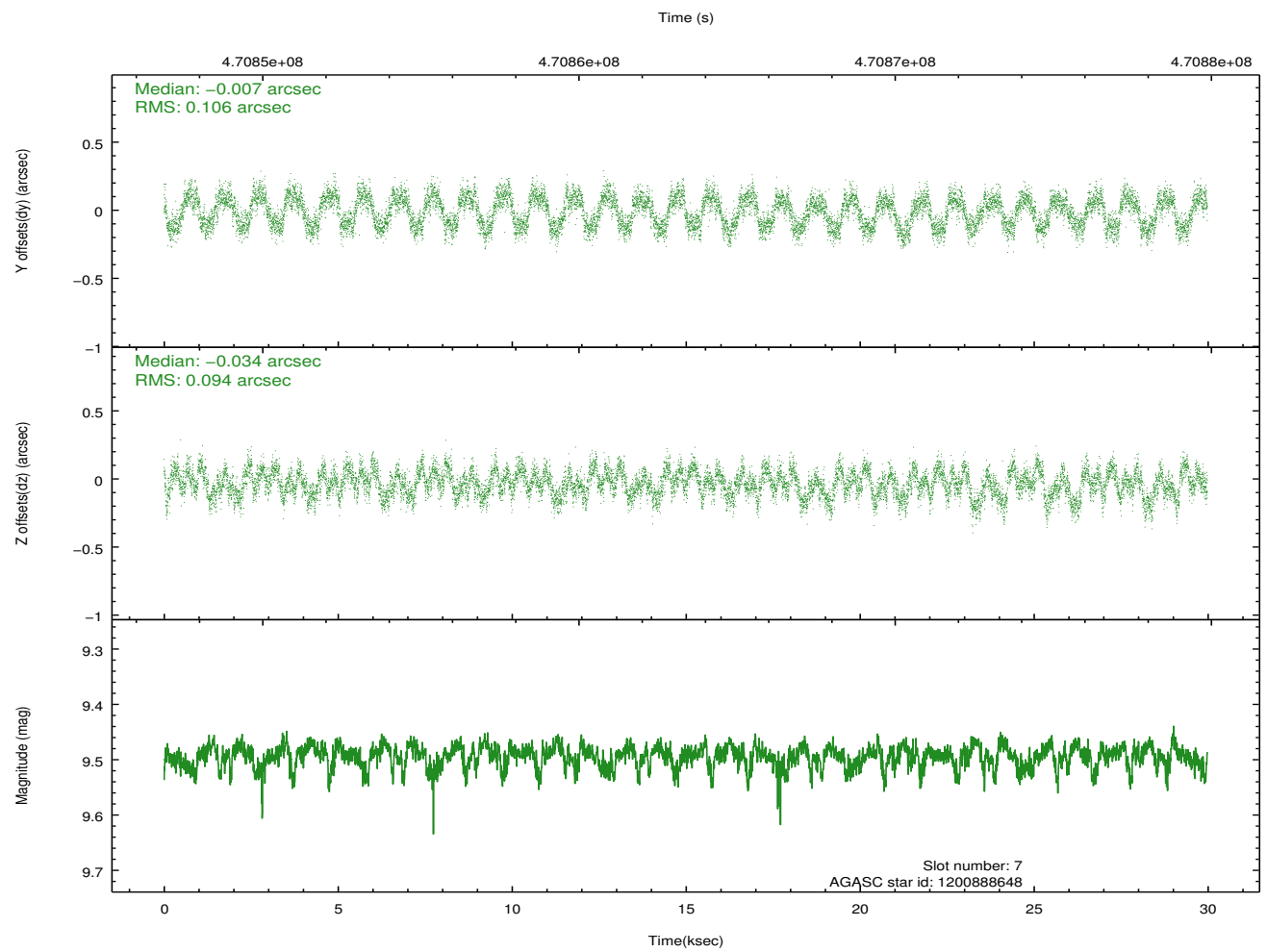
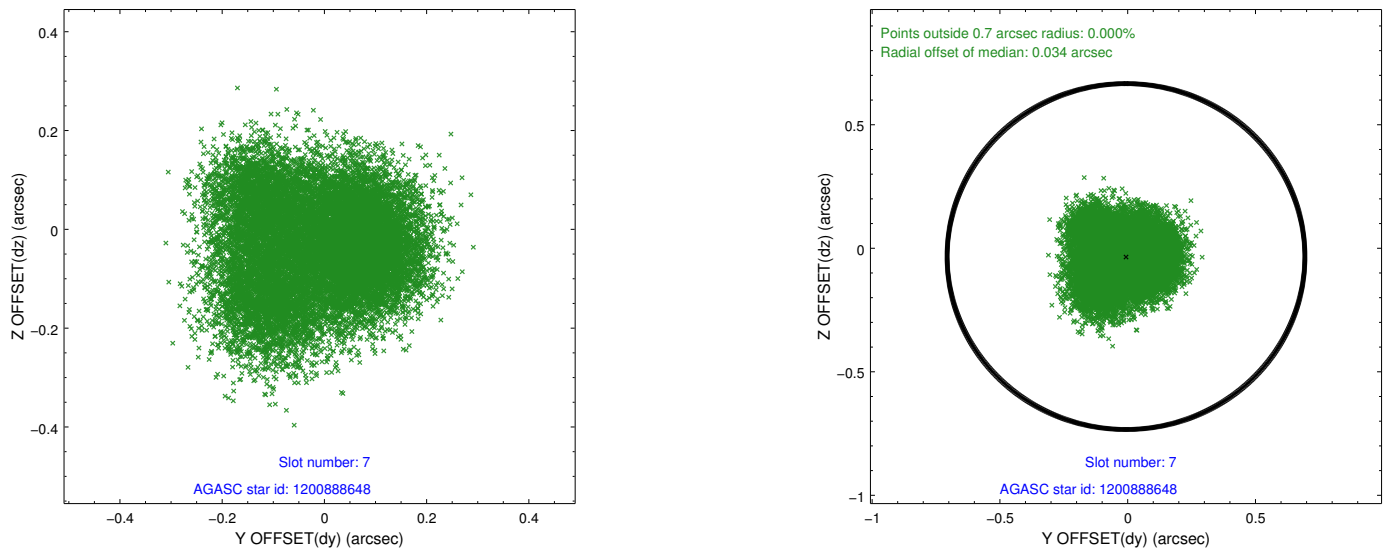
2.4.3 Slot 5



2.4.4 Slot 6

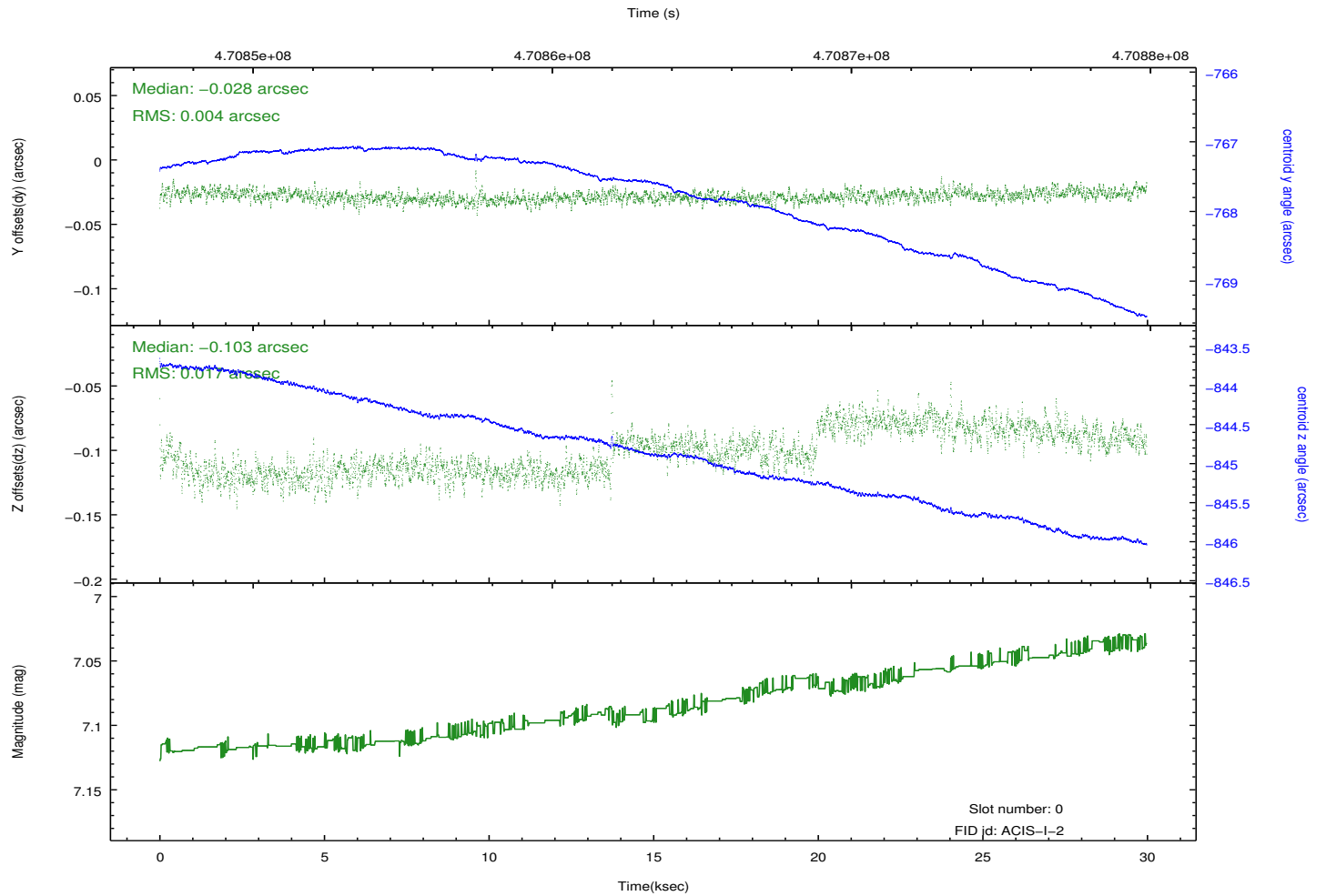
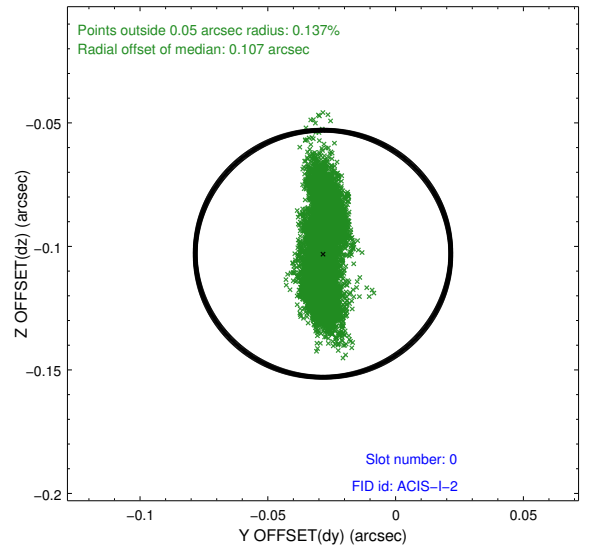
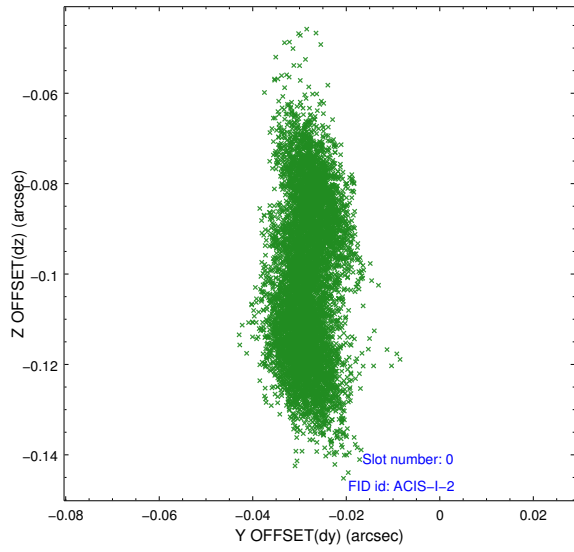


2.4.5 Slot 7

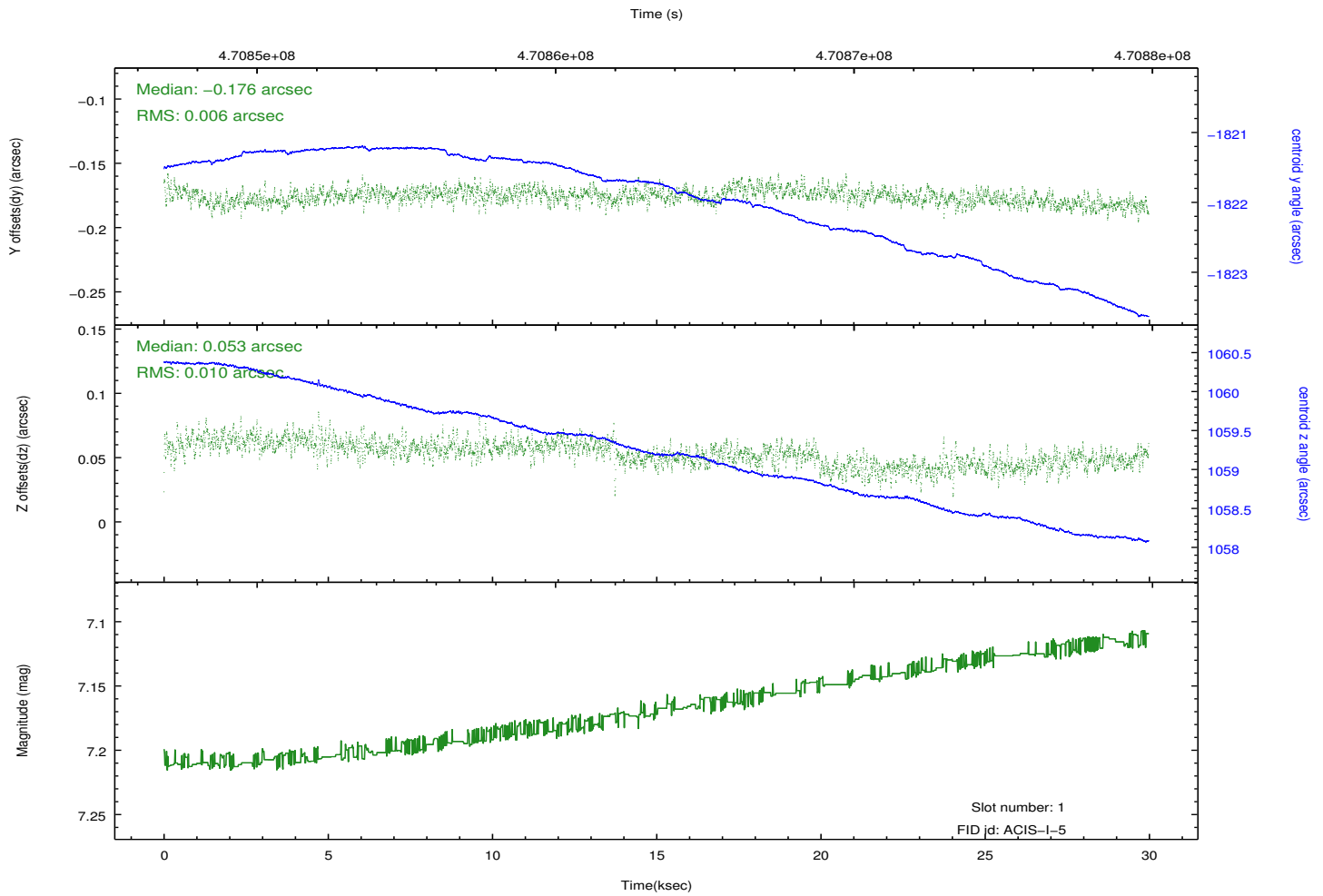
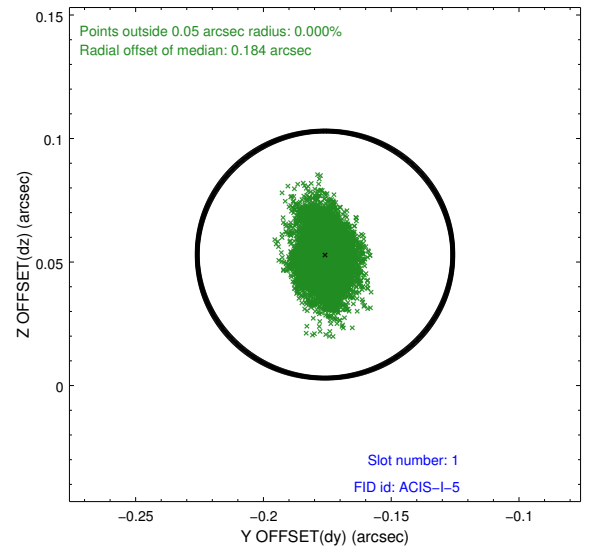
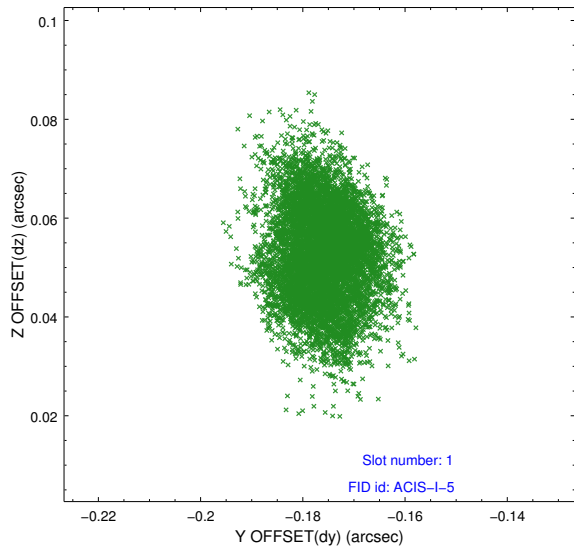


2.5 FID Slots

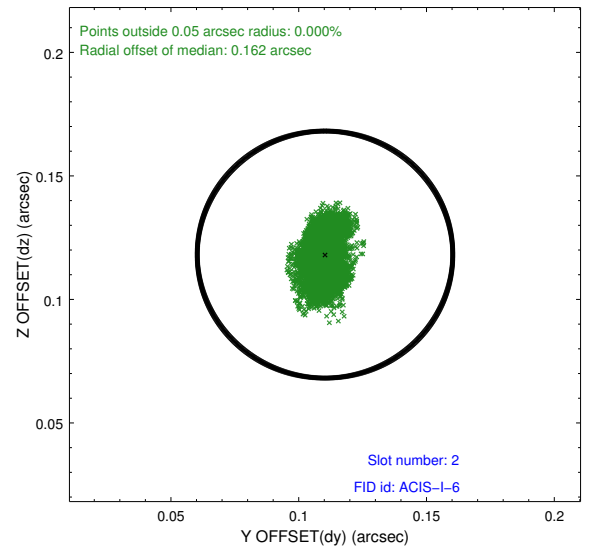
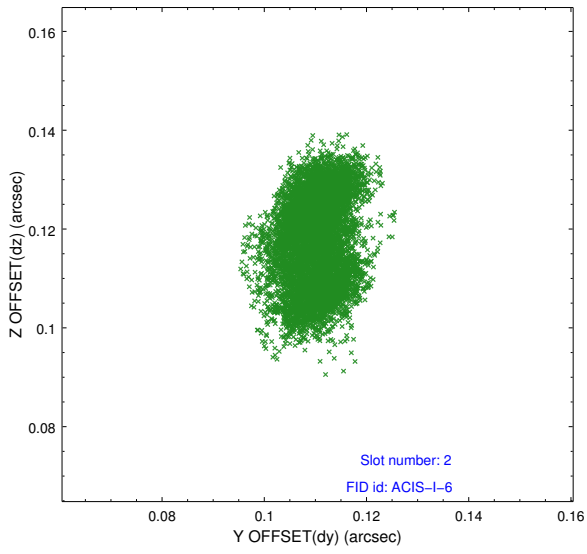
2.5.1 Slot 0



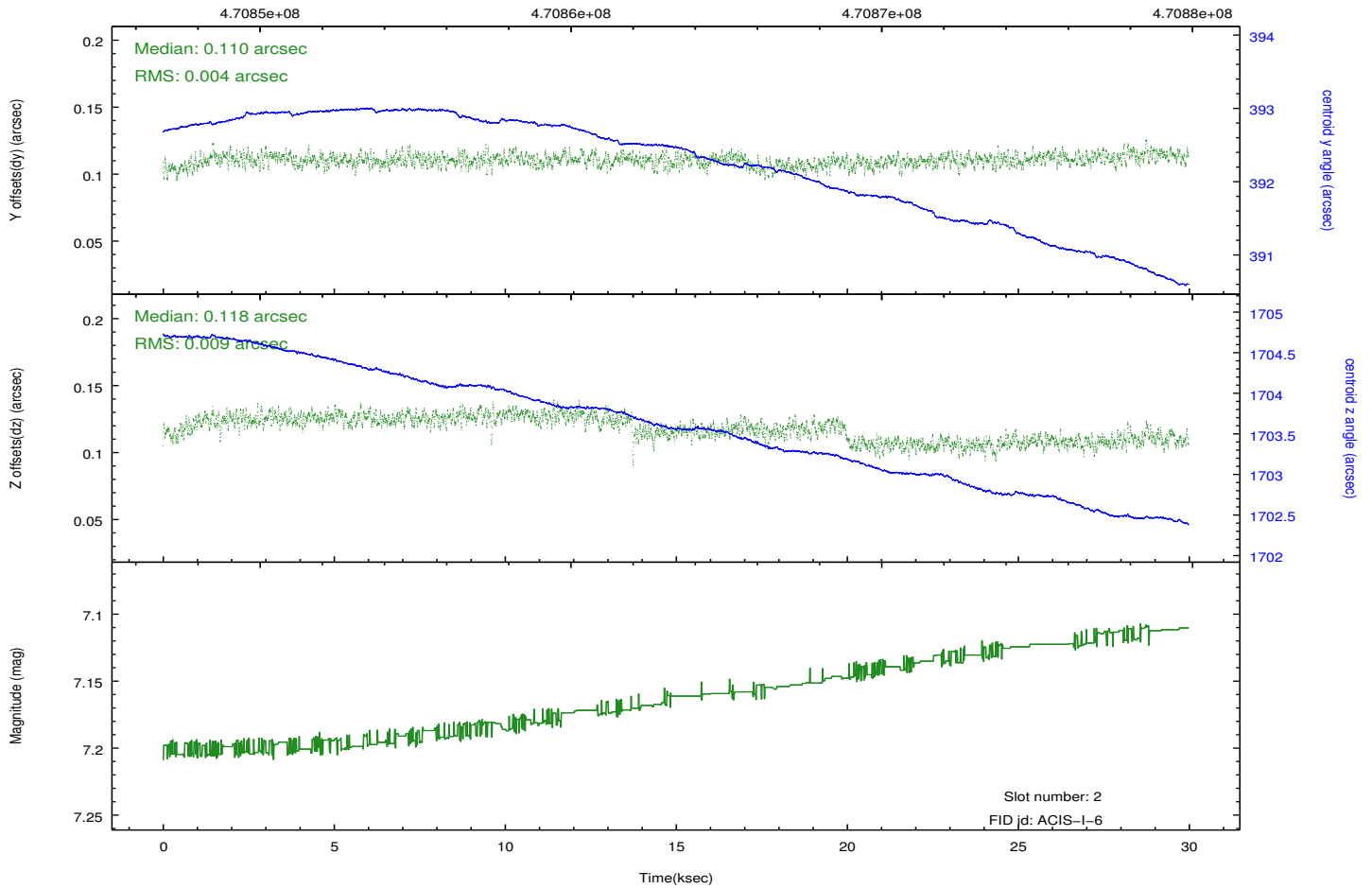
2.5.2 Slot 1



2.5.3 Slot 2



Time (s)



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2014.12.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	29.768139456511

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.