

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 14029 - L2 Version 2
Chandra X-Ray Center

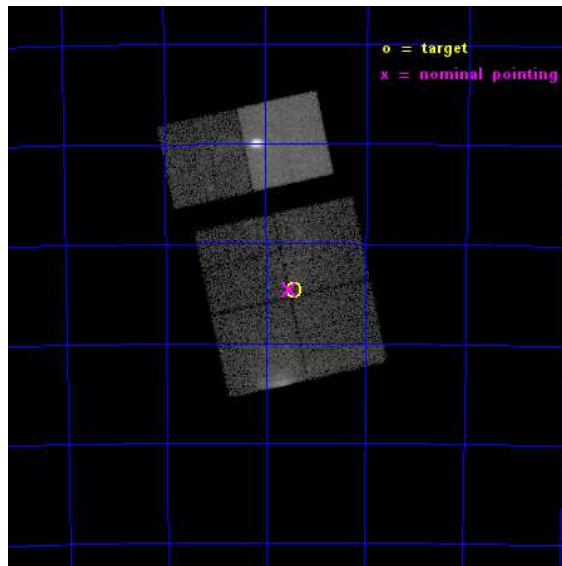
L2 Processing Date : Nov 30 2014

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

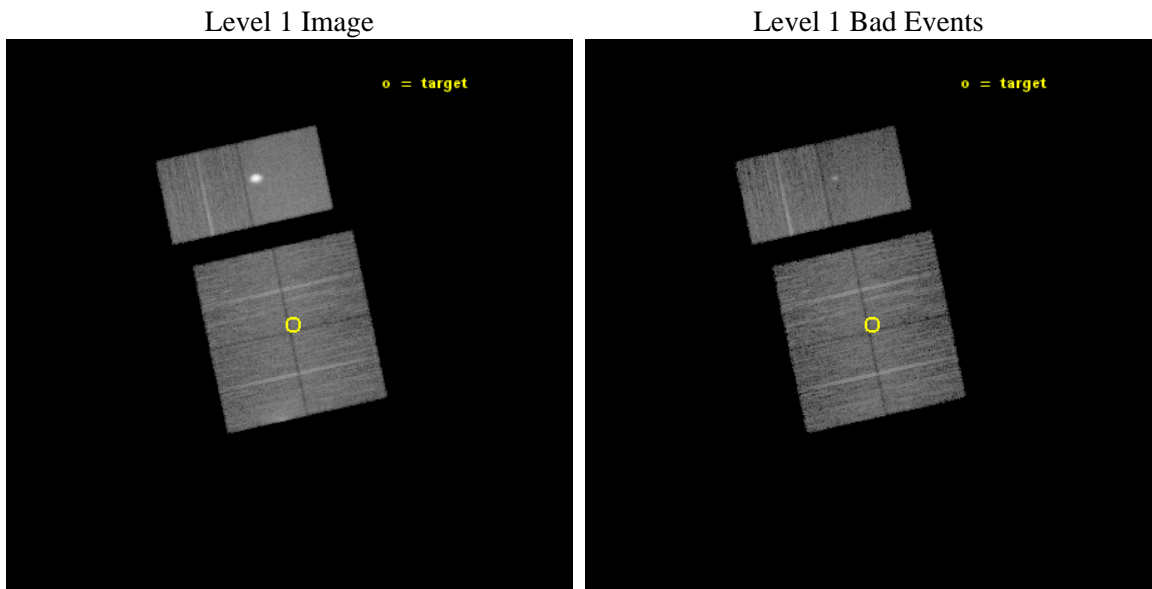
seq_num	900995	Sequence number
obs_id	14029	Observation id
title	Probing the Nature and Role of X-ray Emission in HII Regions with Chandra	Proposal title
observer	Dr. Laura Lopez	Principal investigator
object	N158C	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	84.858333	Observer's specified target RA [deg]
dec_targ	-69.577778	Observer's specified target Dec [deg]
ra_nom	84.881383408074	Nominal RA [deg]
dec_nom	-69.577044138145	Nominal Dec [deg]
roll_nom	347.77806521705	Nominal Roll [deg]
revision	2	Processing version of data
ontime	15343.999942899	Sum of GTIs [s]
livetime	15149.704976574	Livetime [s]
ontime0	15343.999942899	Sum of GTIs [s]
ontime1	15343.999942899	Sum of GTIs [s]
ontime2	15343.999942899	Sum of GTIs [s]
ontime3	15343.999942899	Sum of GTIs [s]
ontime6	15340.758952737	Sum of GTIs [s]
ontime7	15343.999942899	Sum of GTIs [s]
l2events	163495	Number of level 2 events



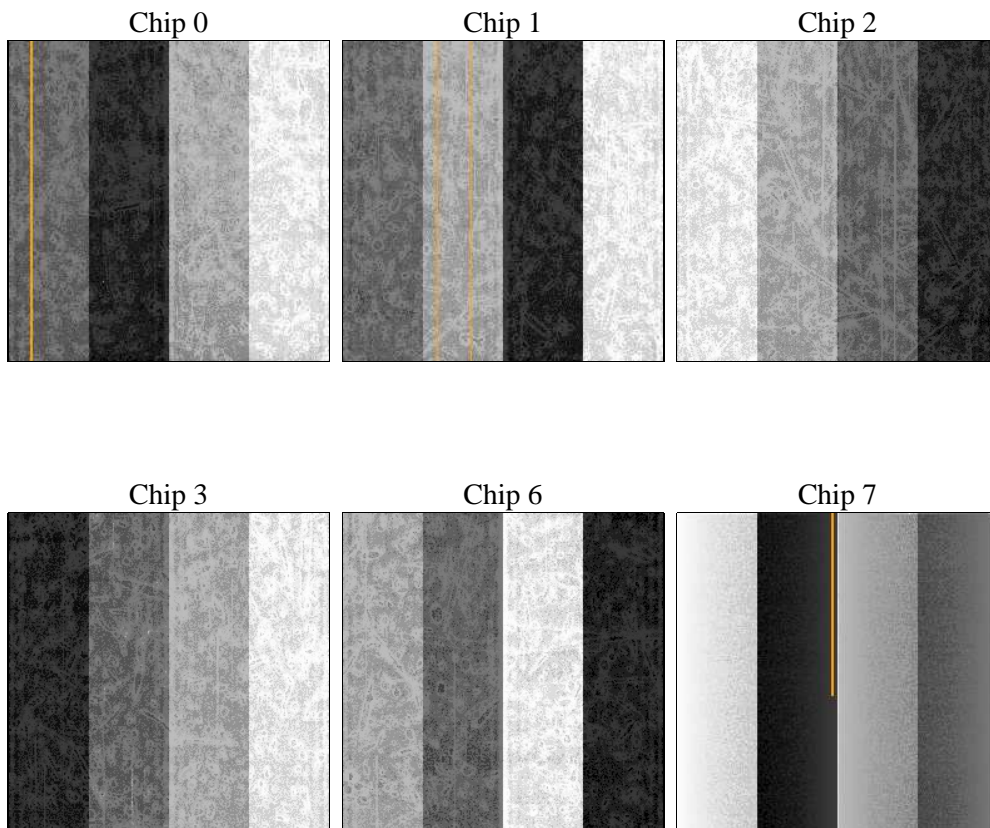
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	15373.864000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	15343.999942899	Sum of GTIs [s]
caldbver	4.6.4	 	ontime0	15343.999942899	Sum of GTIs [s]
date	2014-12-01T00:46:20	Date and time of file creation	ontime1	15343.999942899	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	15343.999942899	Sum of GTIs [s]
			ontime3	15343.999942899	Sum of GTIs [s]
			ontime6	15340.758952737	Sum of GTIs [s]
			ontime7	15343.999942899	Sum of GTIs [s]
			l1events	582791	Number of level 1 events

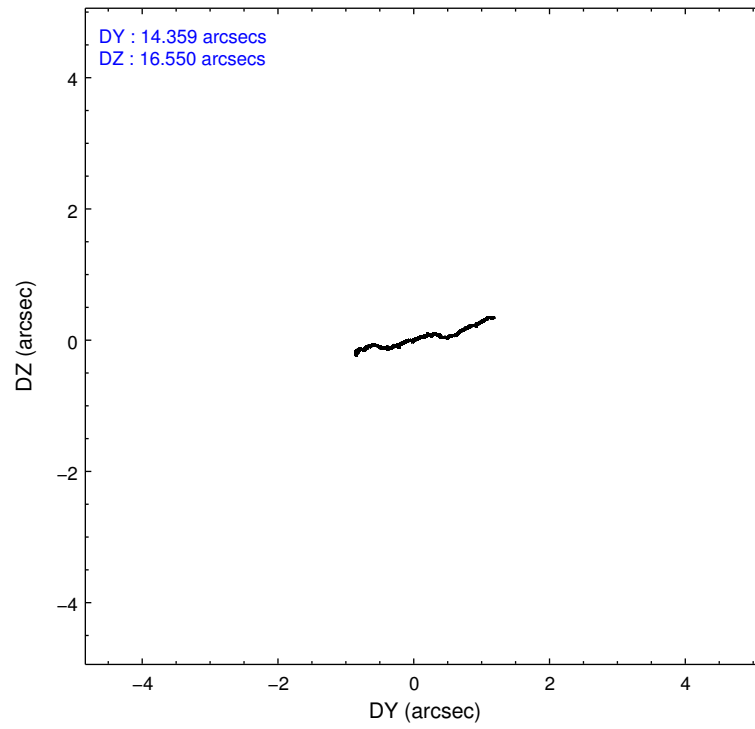
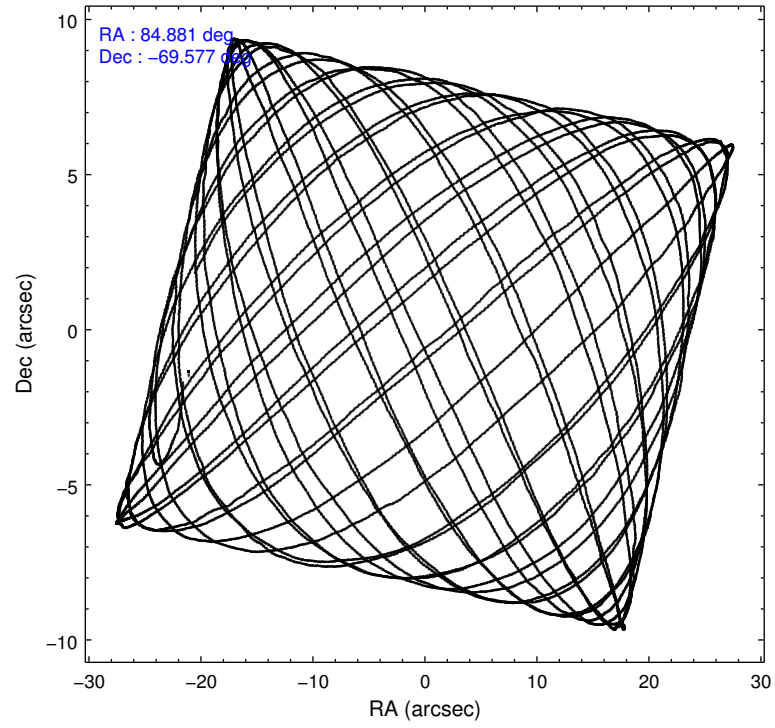
2.1.4 Events

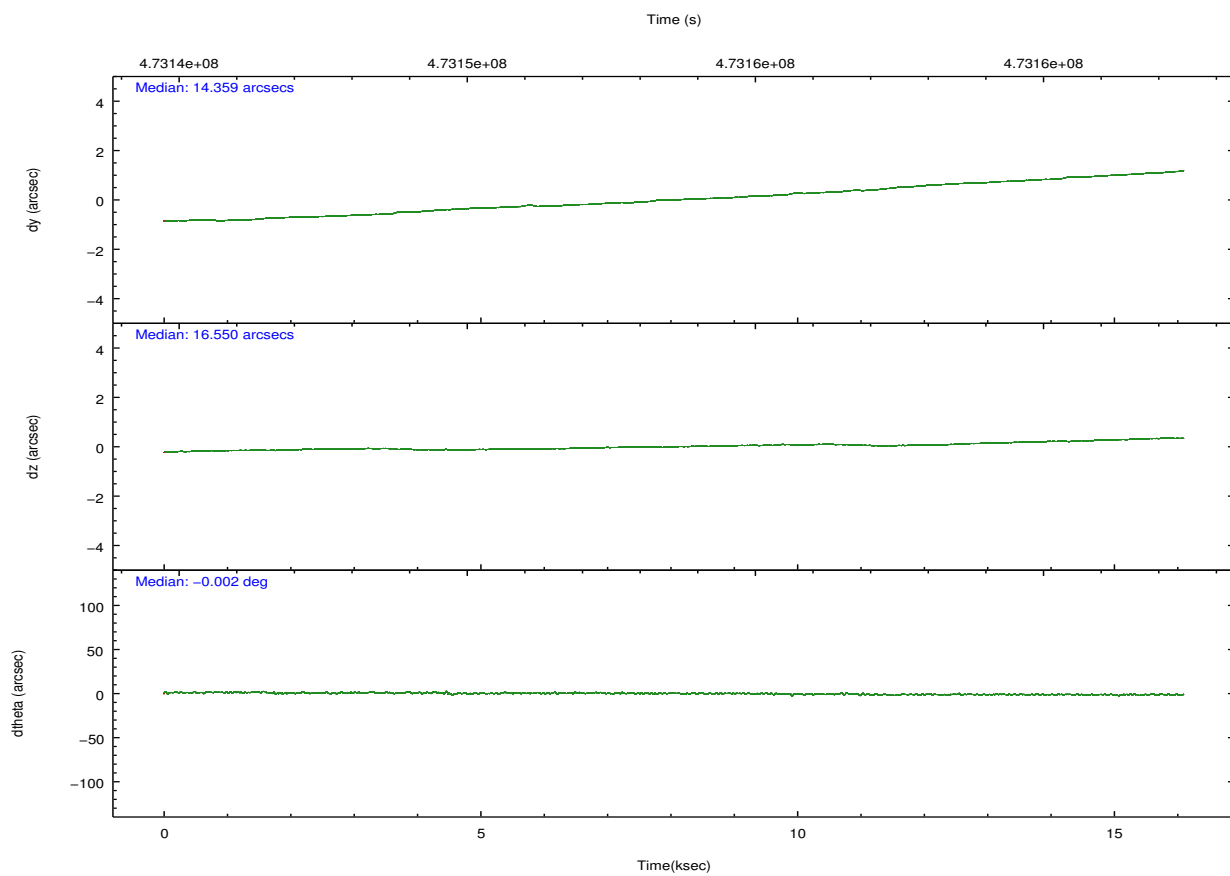
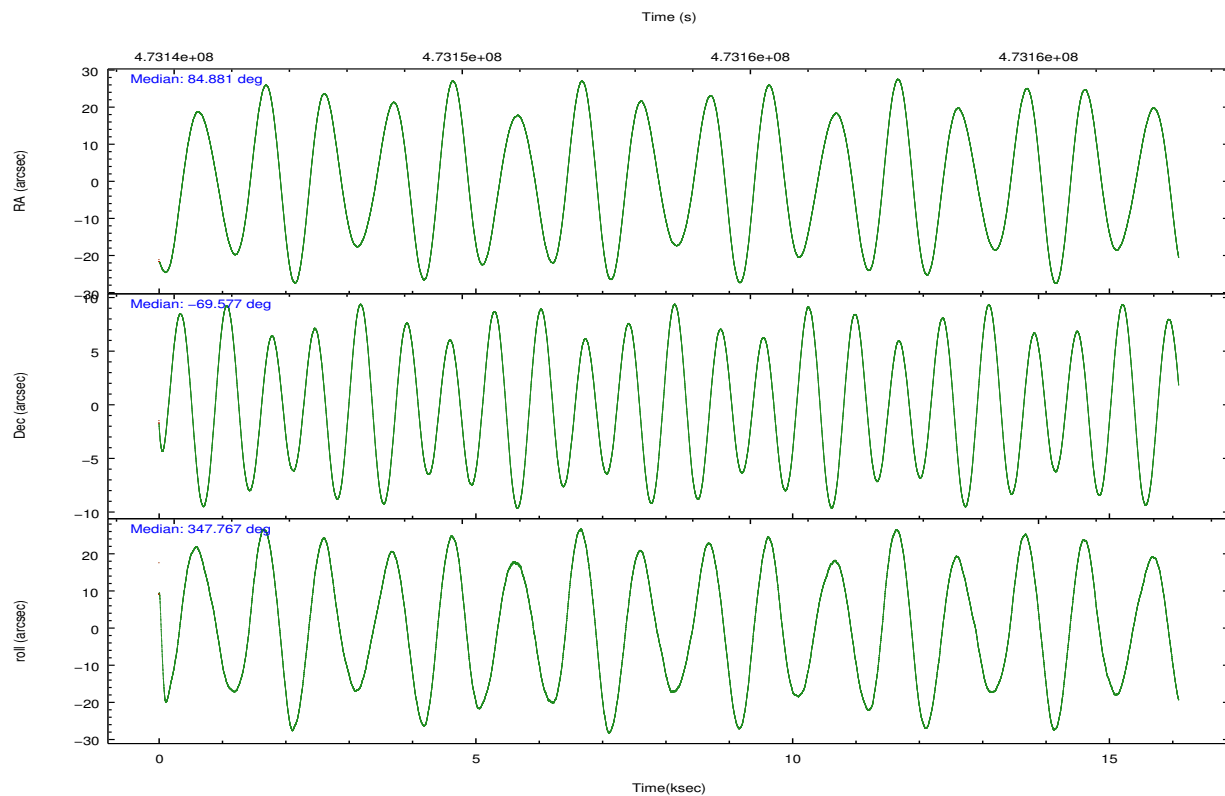
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	86392	79693	82817	79768	89031	165090	grade 0 events	12007	6097	5226	5723	6207	17775
rejected events	66092	66188	71281	67859	75798	61676		13%	7%	6%	7%	6%	10%
rejected %	76%	83%	86%	85%	85%	37%	grade 1 events	78	55	53	59	44	188
								0%	0%	0%	0%	0%	0%
							grade 2 events	3525	2838	2529	2289	2534	24823
								4%	3%	3%	2%	2%	15%
							grade 3 events	1396	1130	995	1046	1052	10725
								1%	1%	1%	1%	1%	6%
							grade 4 events	1251	1132	1004	964	1076	10296
								1%	1%	1%	1%	1%	6%
							grade 5 events	3823	4194	3495	4303	4279	11868
								4%	5%	4%	5%	4%	7%
							grade 6 events	2124	2311	1786	1889	2367	39812
								2%	2%	2%	2%	2%	24%
							grade 7 events	62188	61936	67729	63495	71472	49603
								71%	77%	81%	79%	80%	30%

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	84.806441	84.88138340807352	CCD I2 on	Y	Y
[deg] Pointing Dec	-69.585555	-69.5770441381453	CCD I3 on	Y	Y
[deg] Pointing Roll	347.499130	347.7780652170495	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)	473146256.184000	473145026.82825	CCD S5 on	N	N
Observation start date	2012-12-29T05:29:49	2012-12-29T05:10:26	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	473161630.184000	473161867.57916	On-chip summing requested	N	N
Observation end date	2012-12-29T09:46:03	2012-12-29T09:51:07	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



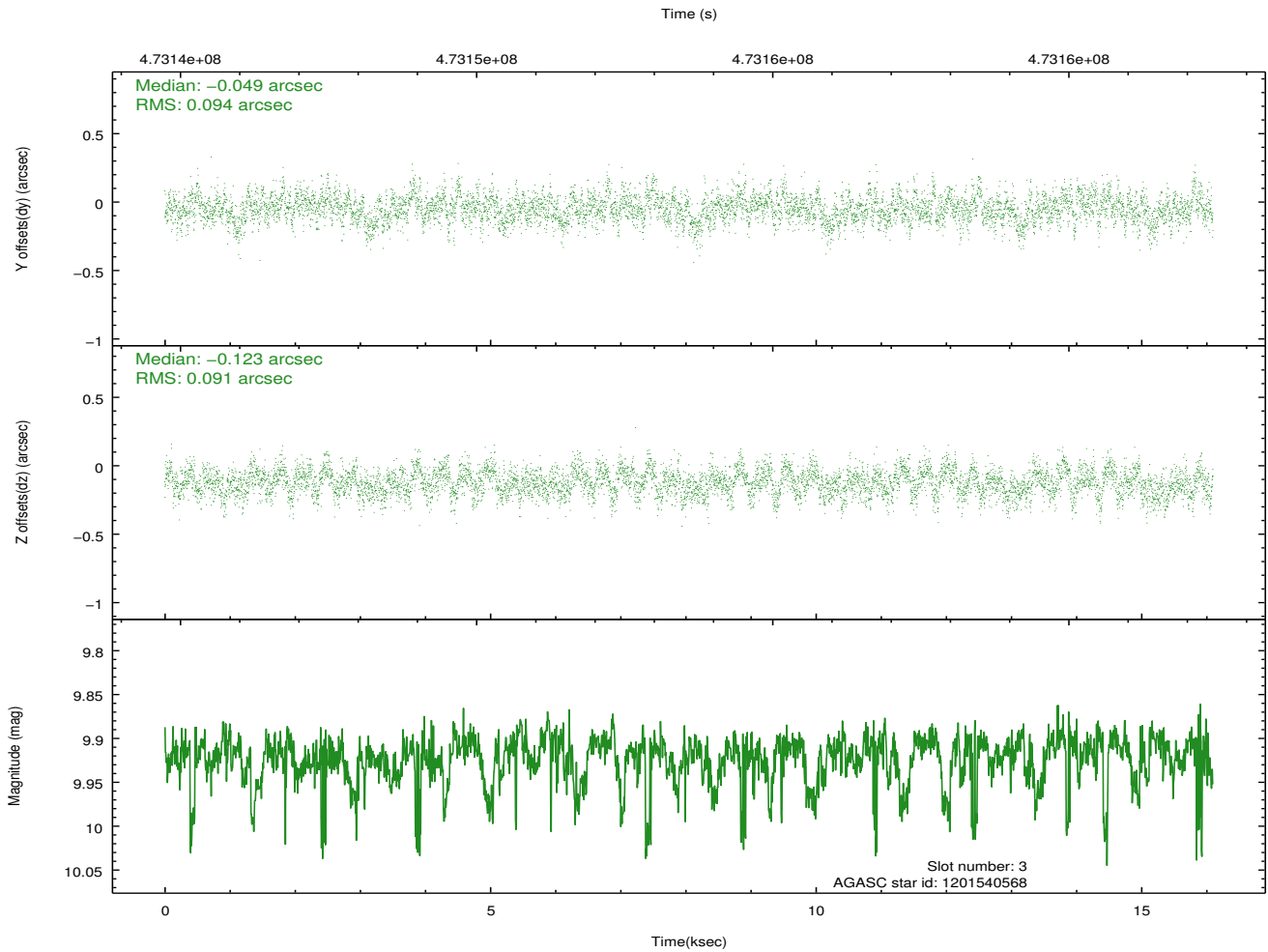
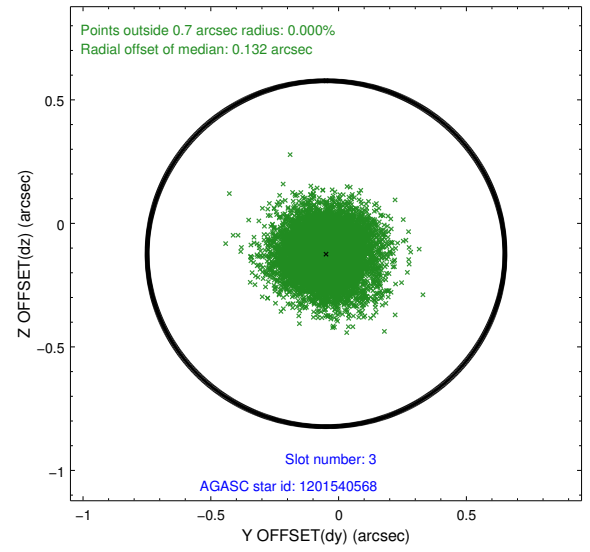
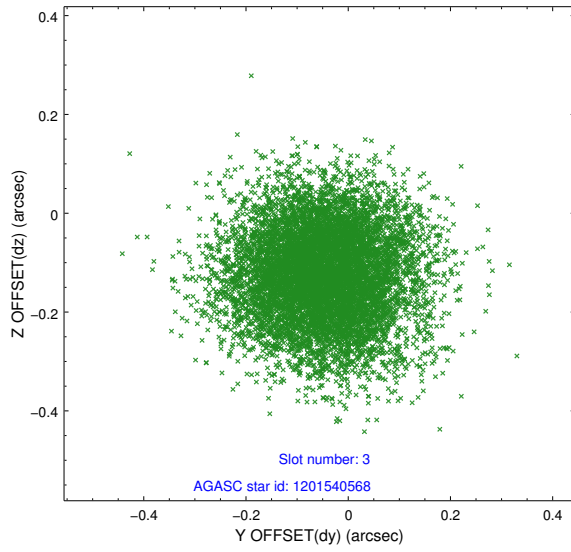


Slot Statistics

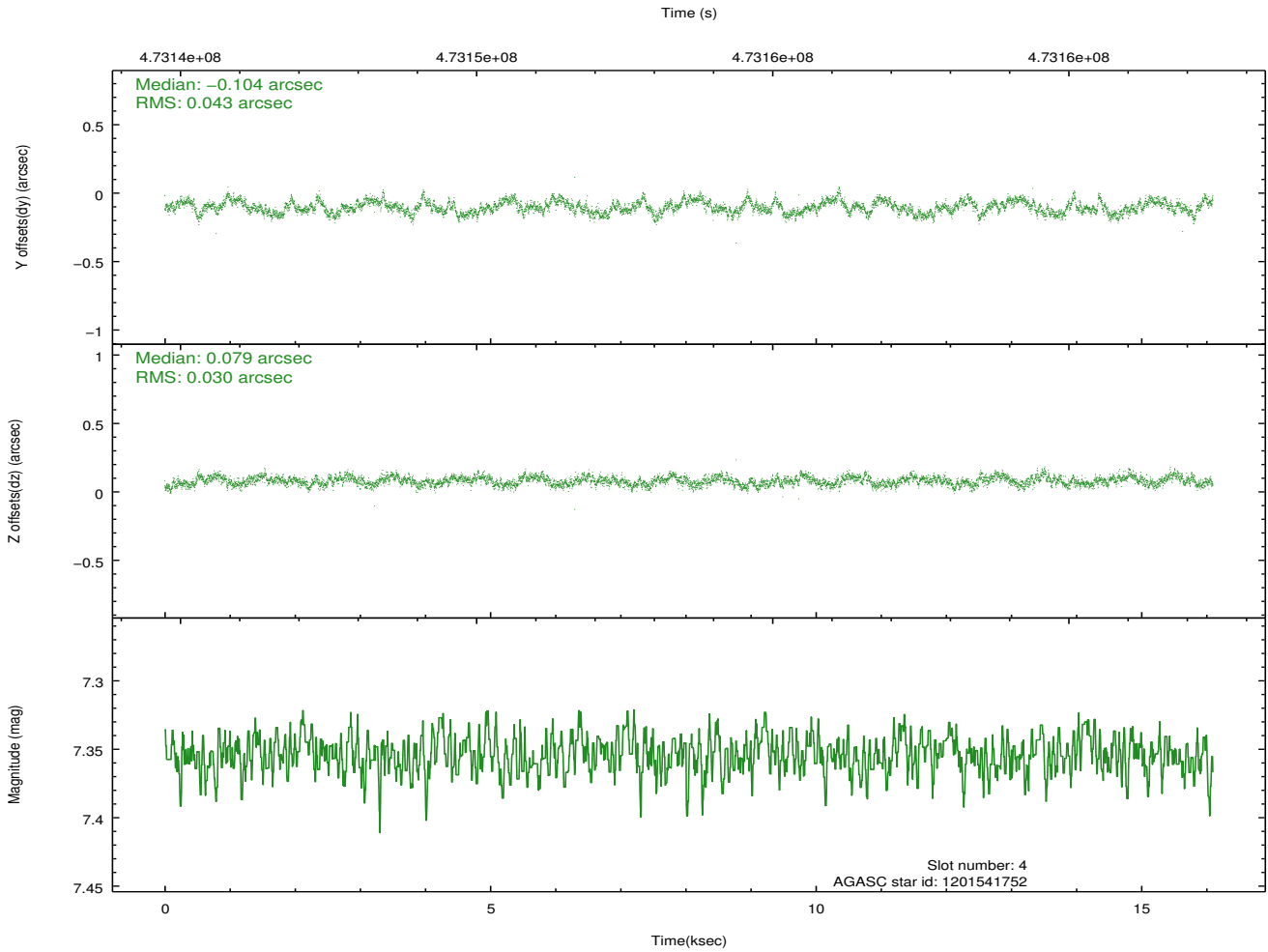
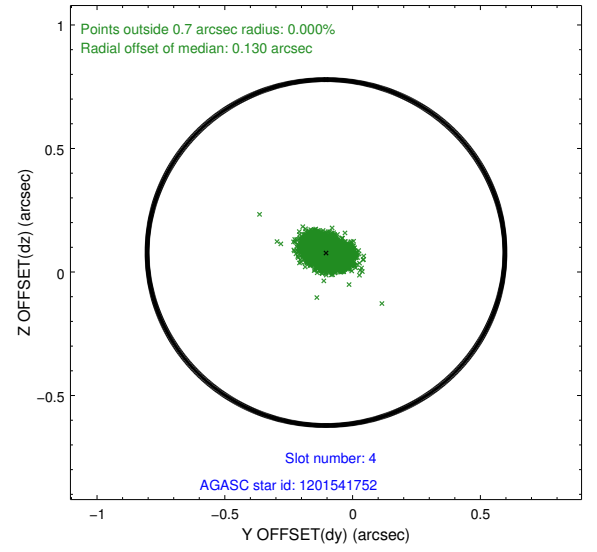
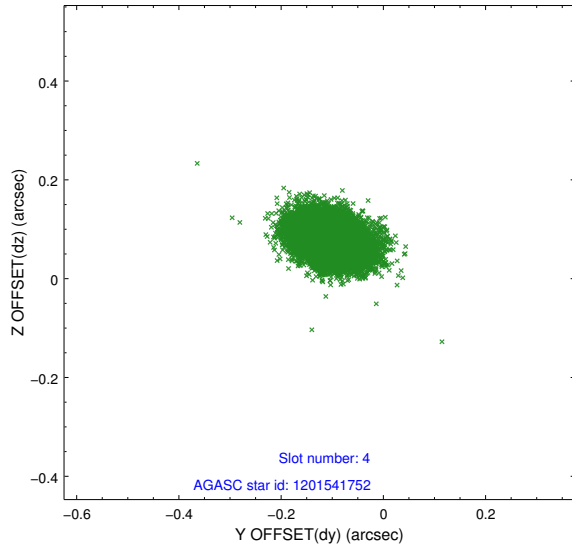
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.07	3927	-0.001	-0.076	0.010	0.019	0.000000	0.000000	925.07	-840.28
1	FID		ACIS-I-4	6.99	3925	0.140	0.077	0.016	0.023	0.000000	0.000000	2145.39	1059.55
2	FID		ACIS-I-5	7.07	3926	-0.238	0.070	0.016	0.025	0.000000	0.000000	-1822.82	1057.68
3	GUIDE	used	1201540568	9.92	7828	-0.049	-0.123	0.139	0.226	85.901764	-70.070643	1693.30	-1425.56
4	GUIDE	used	1201541752	7.35	7853	-0.104	0.079	0.057	0.090	85.373891	-70.033762	1031.65	-1427.35
5	GUIDE	used	1201542672	8.20	7847	0.130	0.030	0.068	0.106	84.492488	-69.957531	-87.09	-1390.02
6	GUIDE	used	1201407840	7.96	7853	0.107	0.116	0.057	0.092	83.696303	-70.172201	-862.84	-2367.79
7	GUIDE	used	1201018312	9.56	7849	-0.081	-0.104	0.112	0.180	86.298231	-69.115627	1507.54	2043.16

2.4 Star Slots

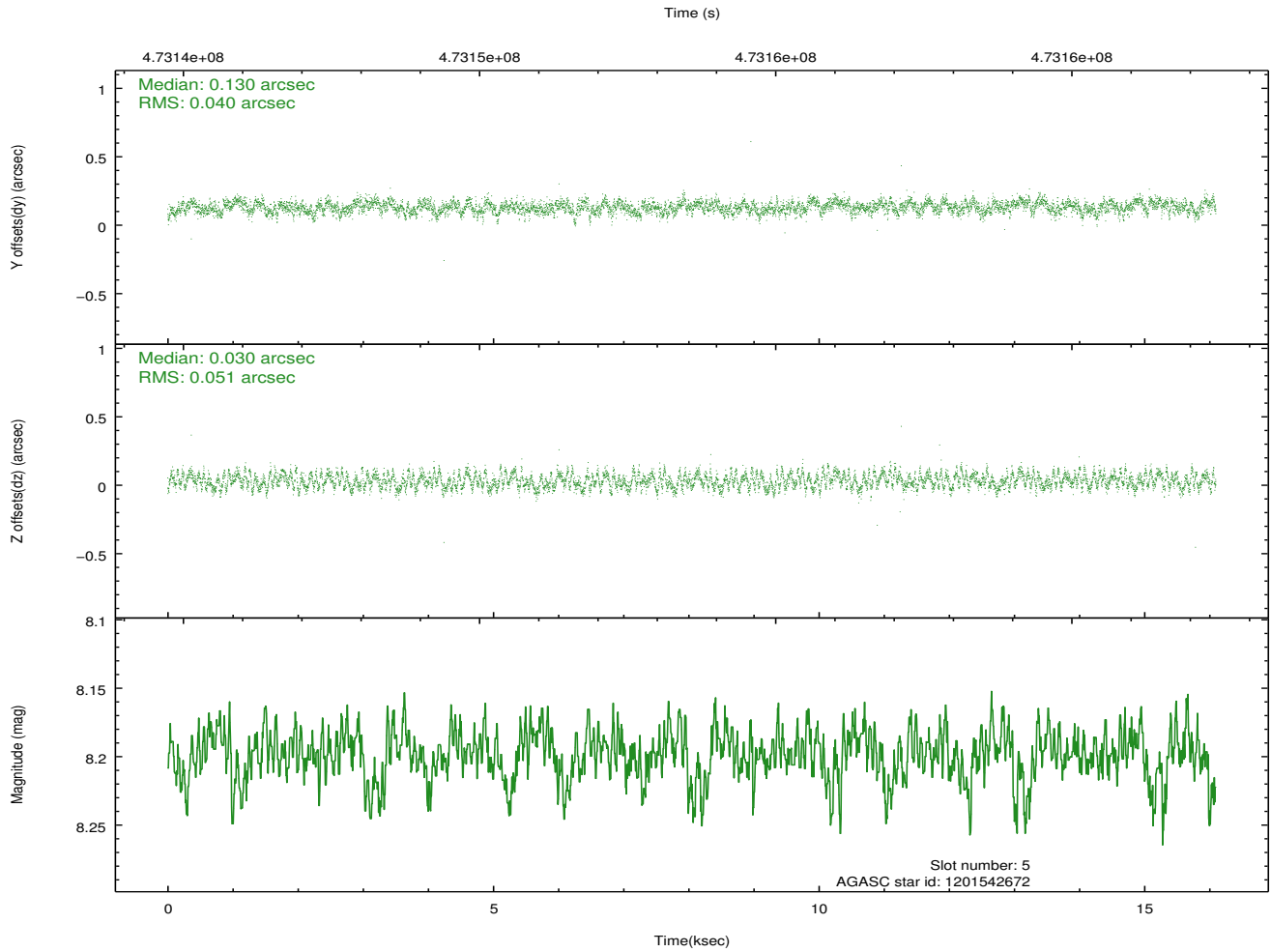
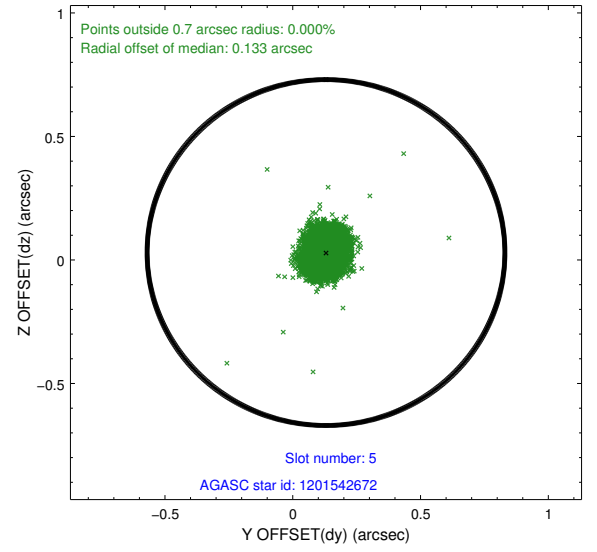
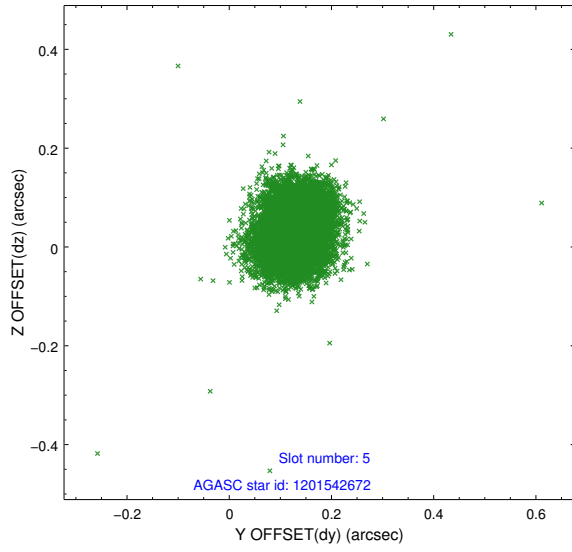
2.4.1 Slot 3



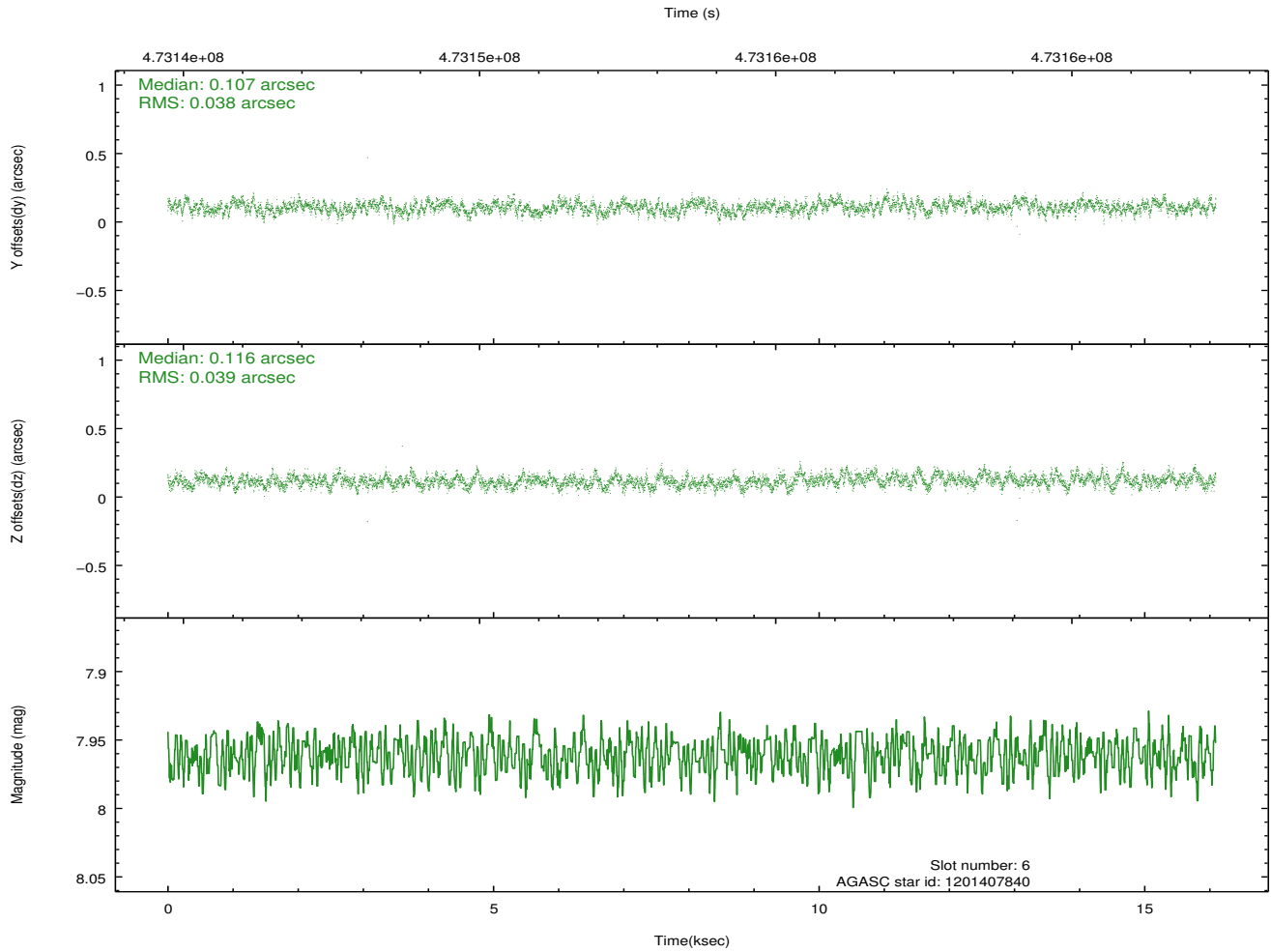
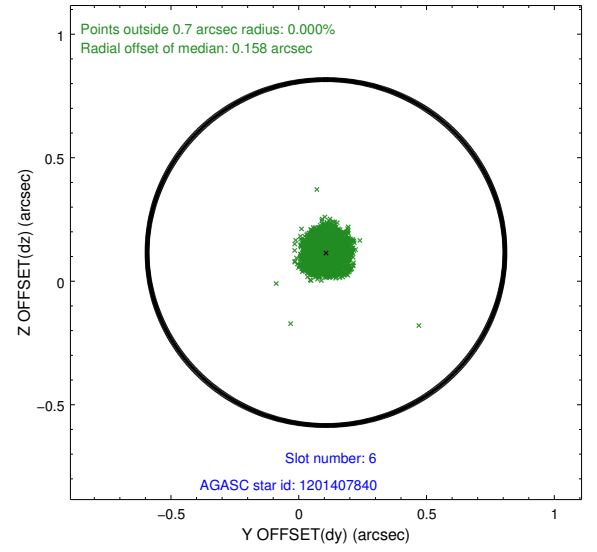
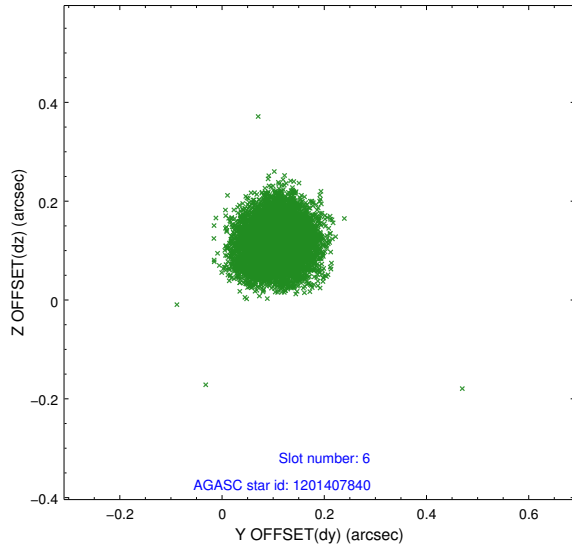
2.4.2 Slot 4



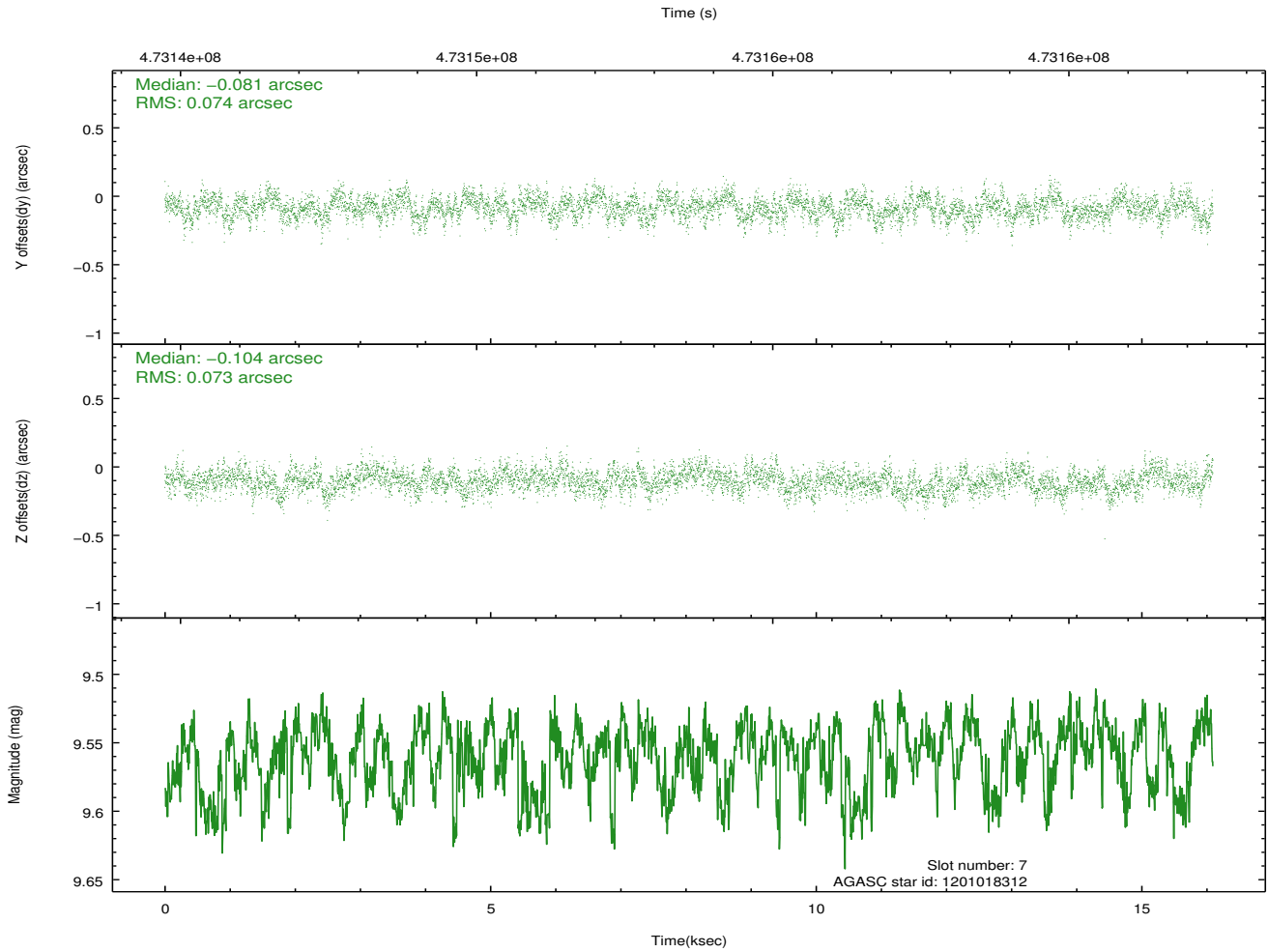
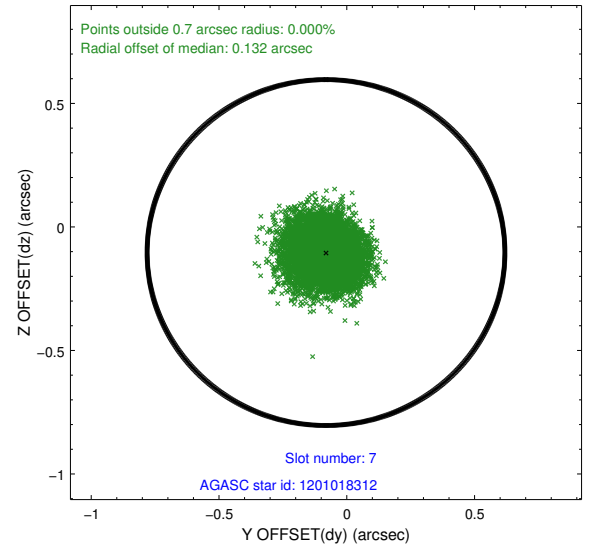
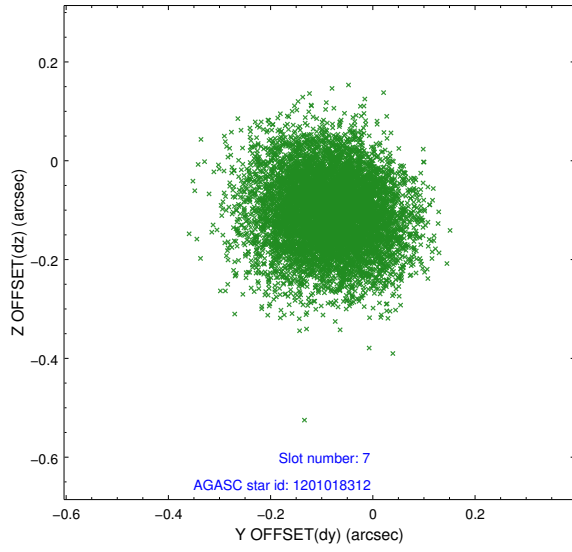
2.4.3 Slot 5



2.4.4 Slot 6

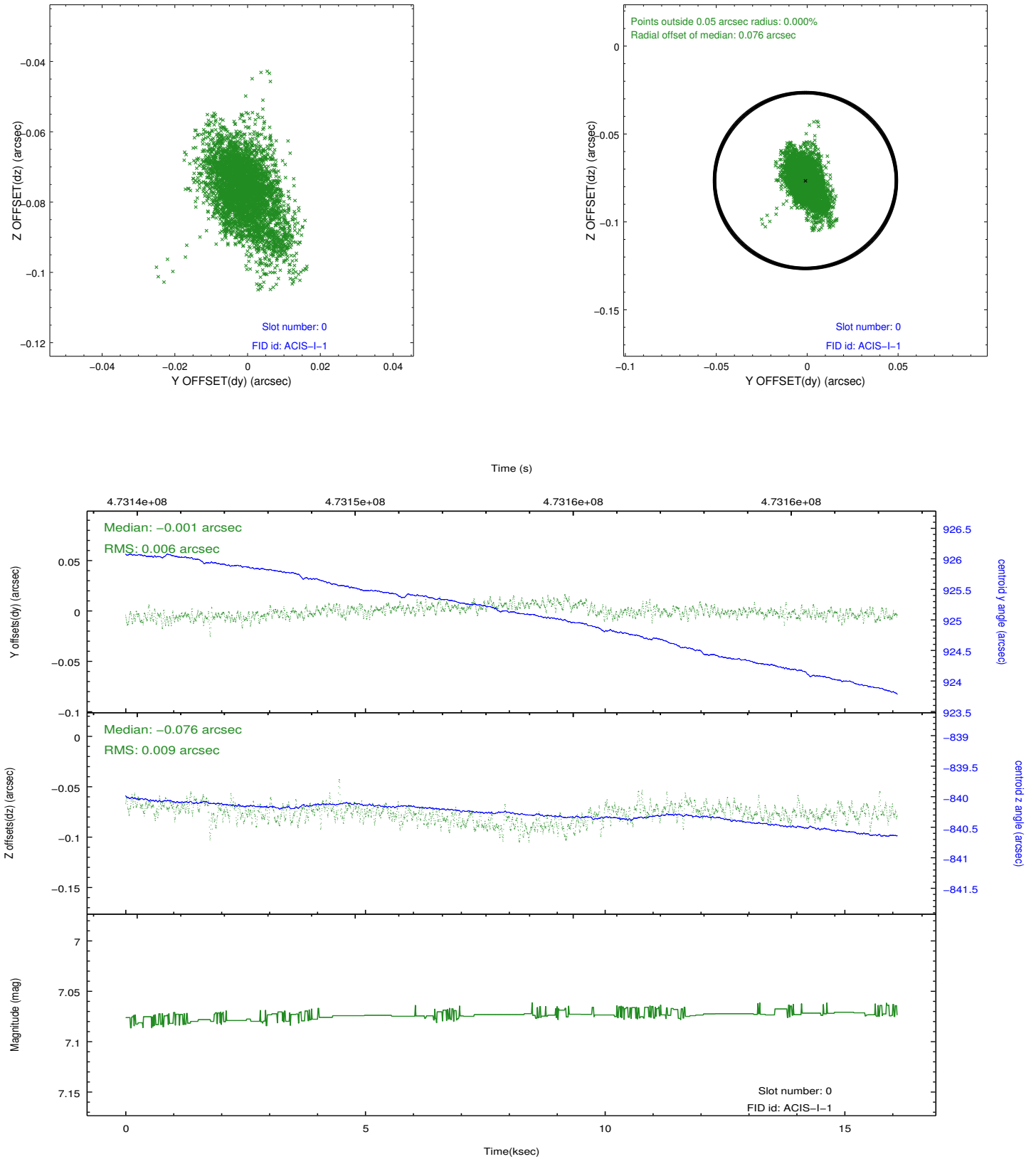


2.4.5 Slot 7

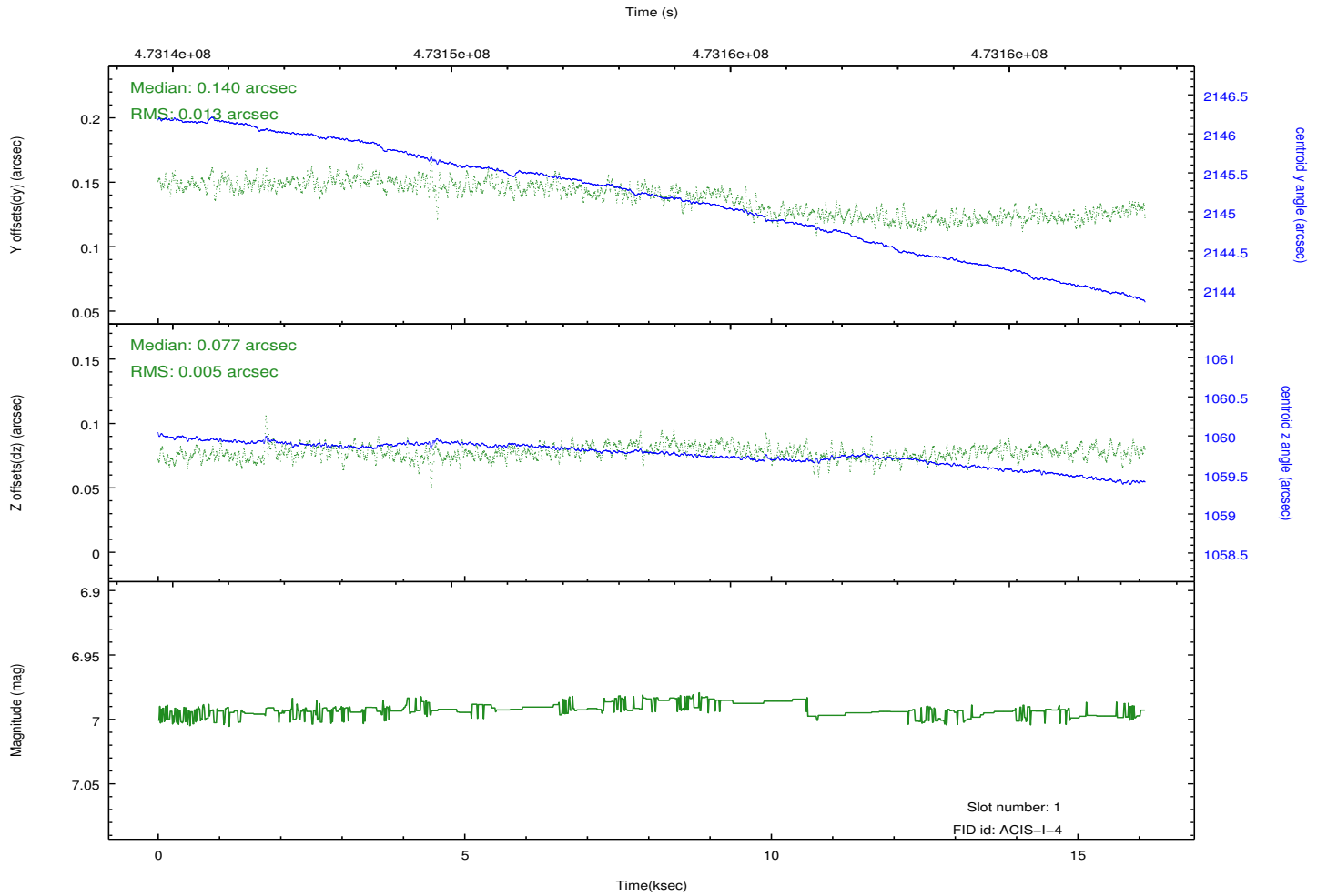
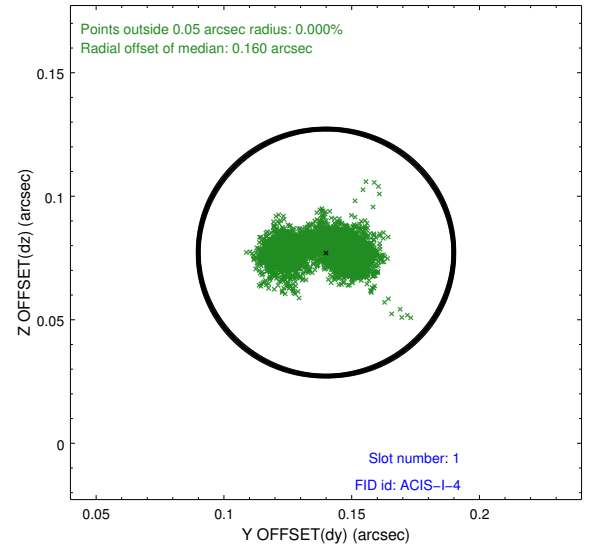
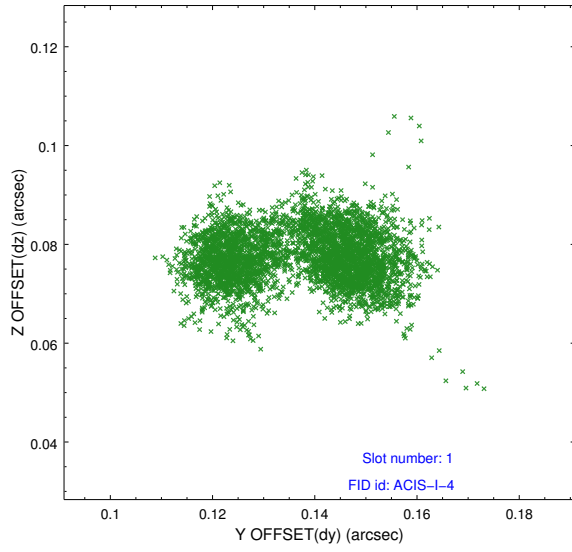


2.5 FID Slots

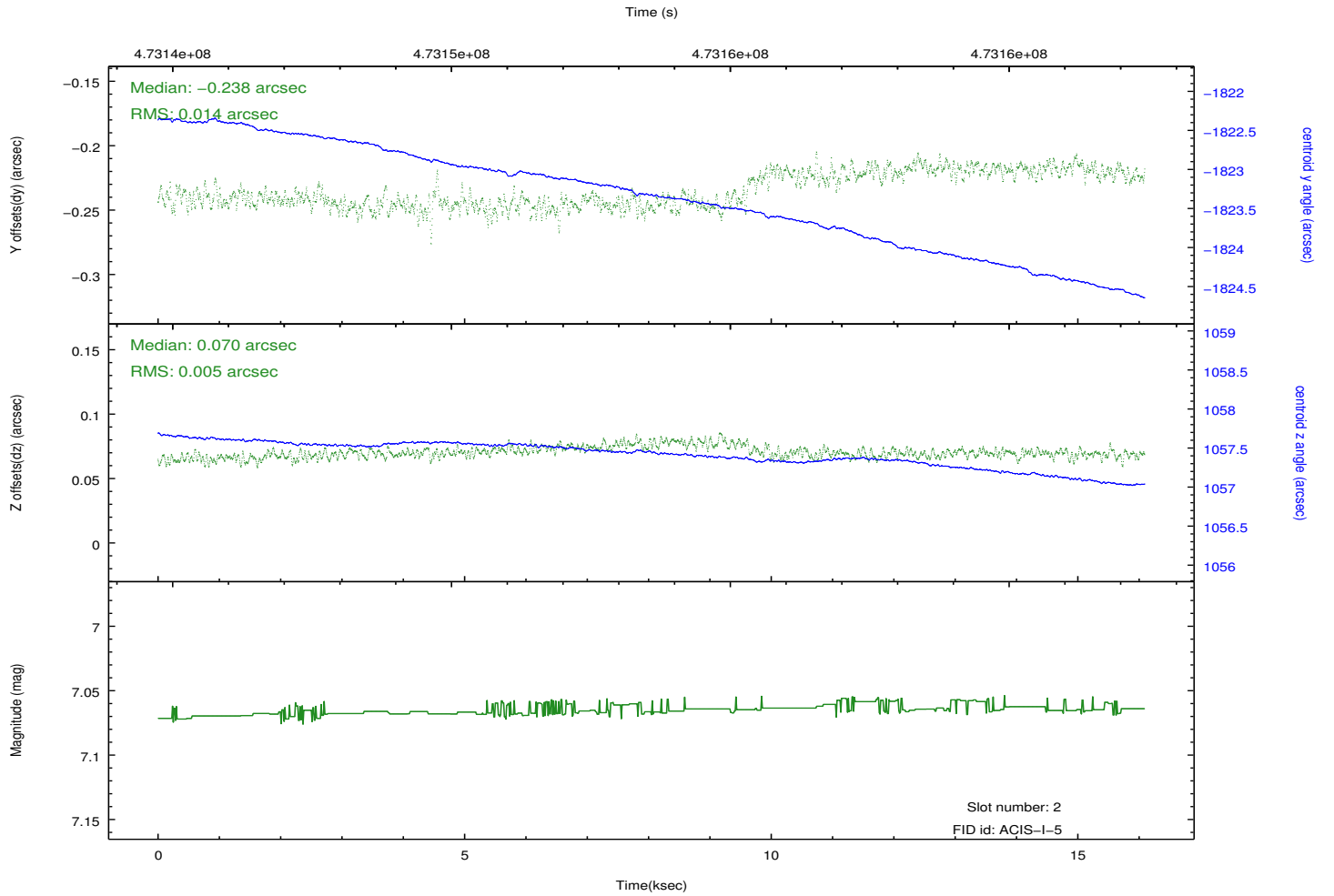
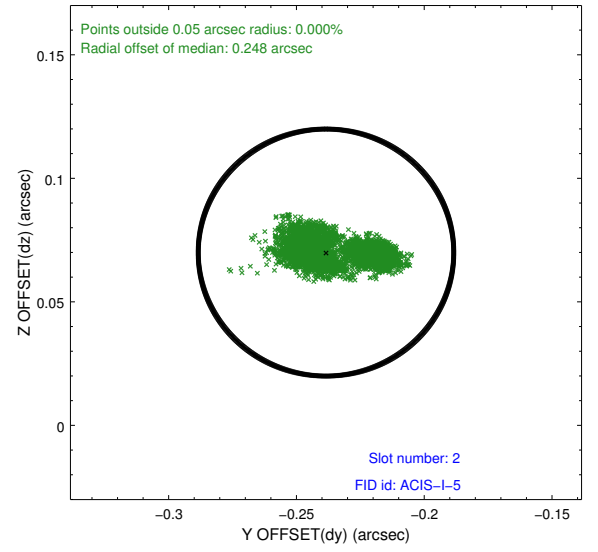
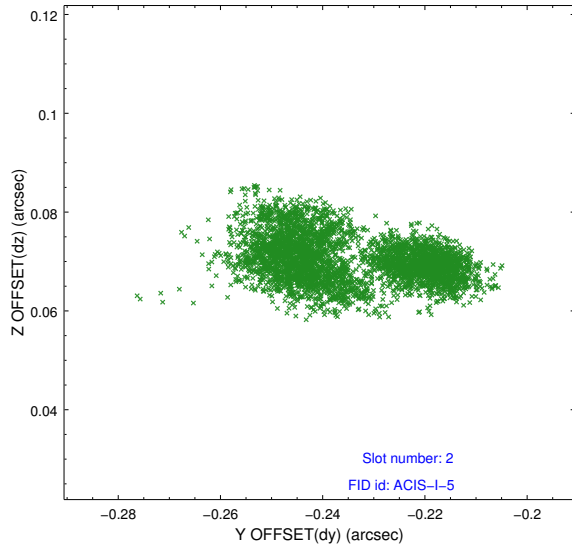
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2014.12.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	15.343999942899

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.