

V&V Reference Report

L2 ASCDS Version : 10.2.1

Observation 15788 - L2 Version 2
Chandra X-Ray Center

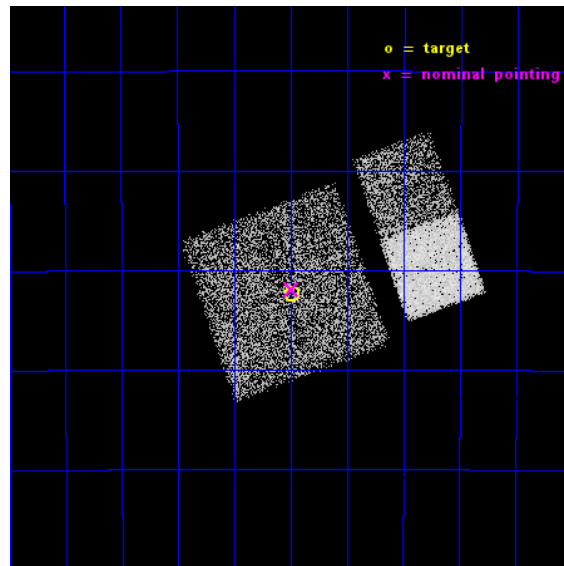
L2 Processing Date : Dec 10 2014

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

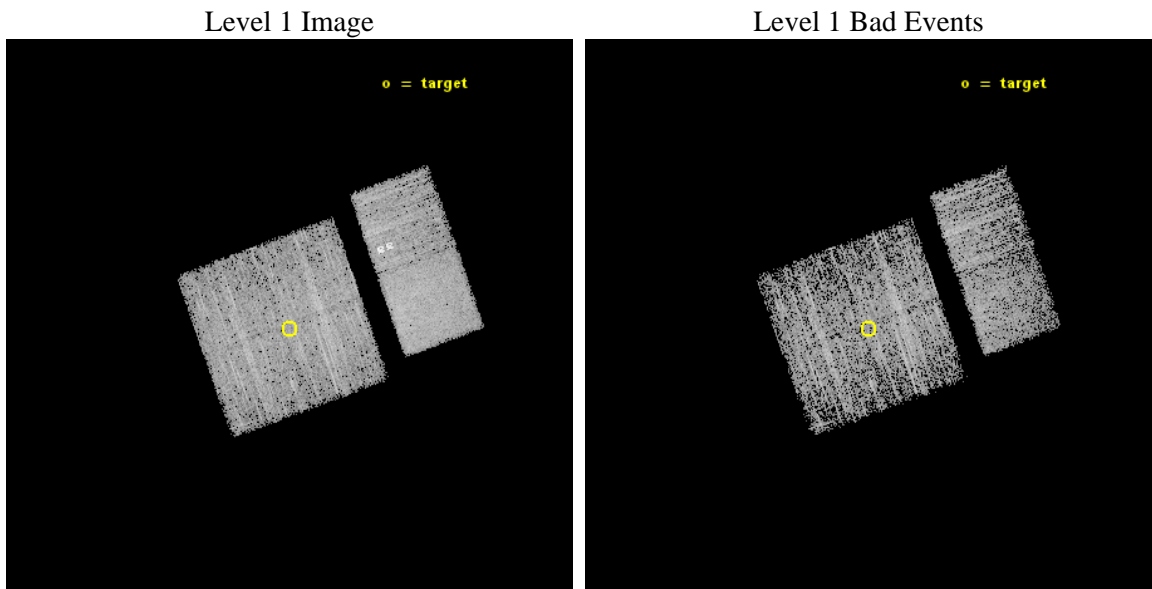
seq_num	401585	Sequence number
obs_id	15788	Observation id
title	The Nature of INTEGRAL Sources in the Galactic Plane	Proposal titl
observer	Dr. John Tomsick	Principal investigator
object	IGR J17164-3803	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	259.122917	Observer's specified target RA [deg]
dec_targ	-38.04	Observer's specified target Dec [deg]
ra_nom	259.12330764507	Nominal RA [deg]
dec_nom	-38.032111009973	Nominal Dec [deg]
roll_nom	70.208884533156	Nominal Roll [deg]
revision	2	Processing version of data
ontime	4972.7999815345	Sum of GTIs [s]
livetime	4909.8313939076	Livetime [s]
ontime0	4972.7999815345	Sum of GTIs [s]
ontime1	4972.7999815345	Sum of GTIs [s]
ontime2	4972.7999815345	Sum of GTIs [s]
ontime3	4972.7999815345	Sum of GTIs [s]
ontime6	4972.7999815345	Sum of GTIs [s]
ontime7	4972.7999815345	Sum of GTIs [s]
l2events	27435	Number of level 2 events



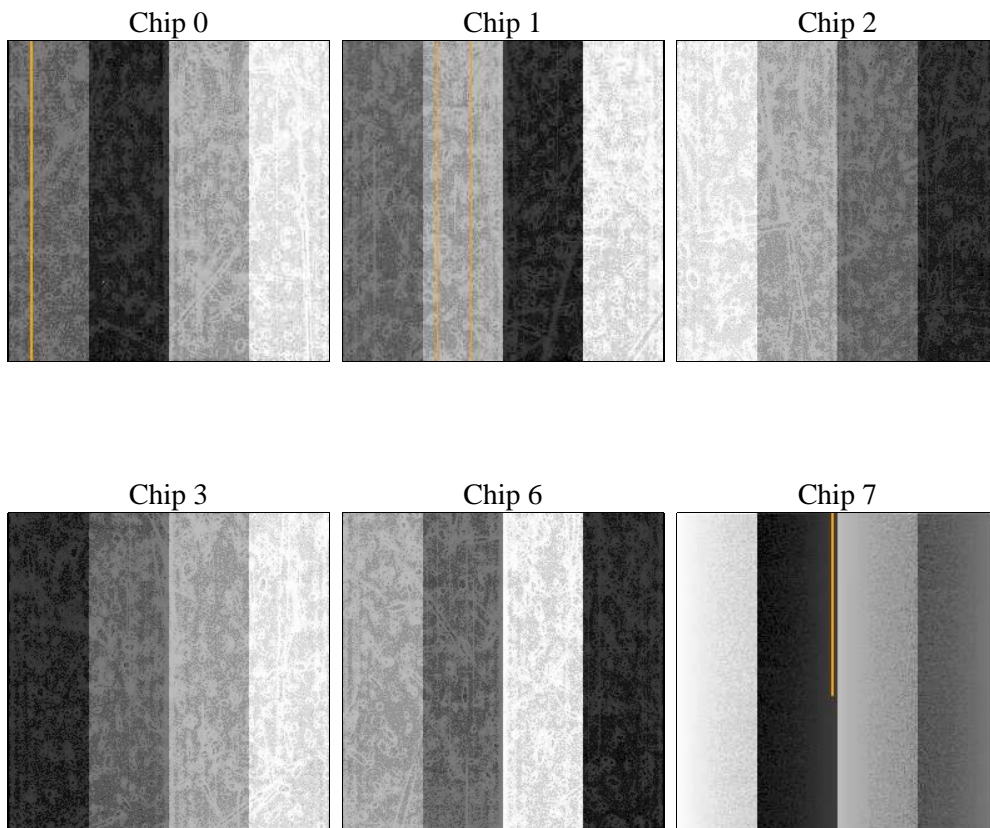
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	4972.7999815345	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	4972.7999815345	Sum of GTIs [s]
date	2014-12-11T02:37:30	Date and time of file creation	ontime1	4972.7999815345	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	4972.7999815345	Sum of GTIs [s]
			ontime3	4972.7999815345	Sum of GTIs [s]
			ontime6	4972.7999815345	Sum of GTIs [s]
			ontime7	4972.7999815345	Sum of GTIs [s]
			l1events	151834	Number of level 1 events

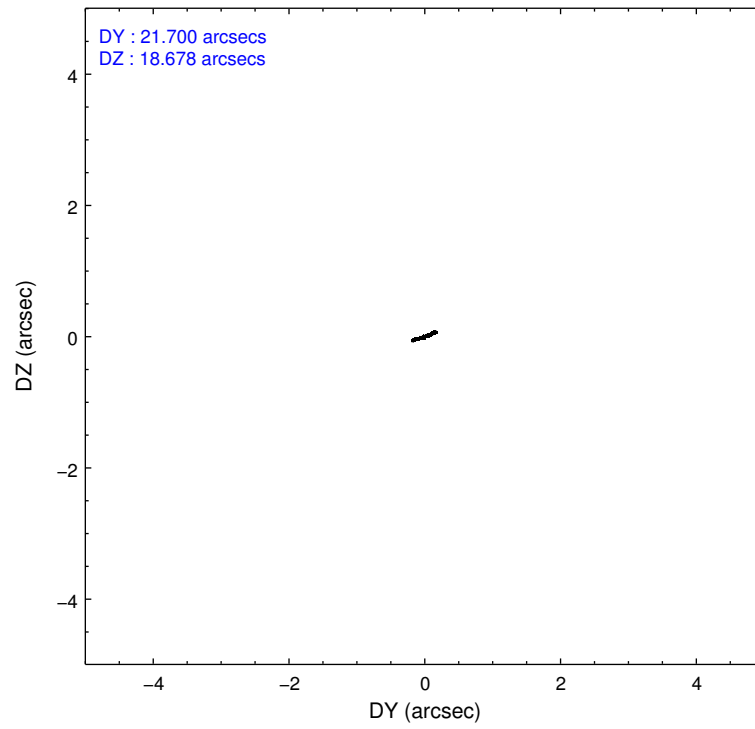
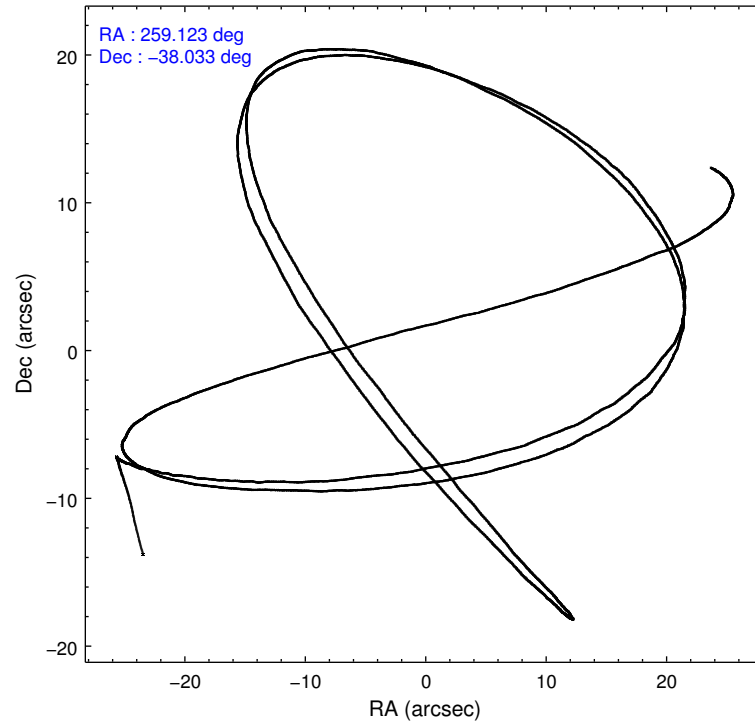
2.1.4 Events

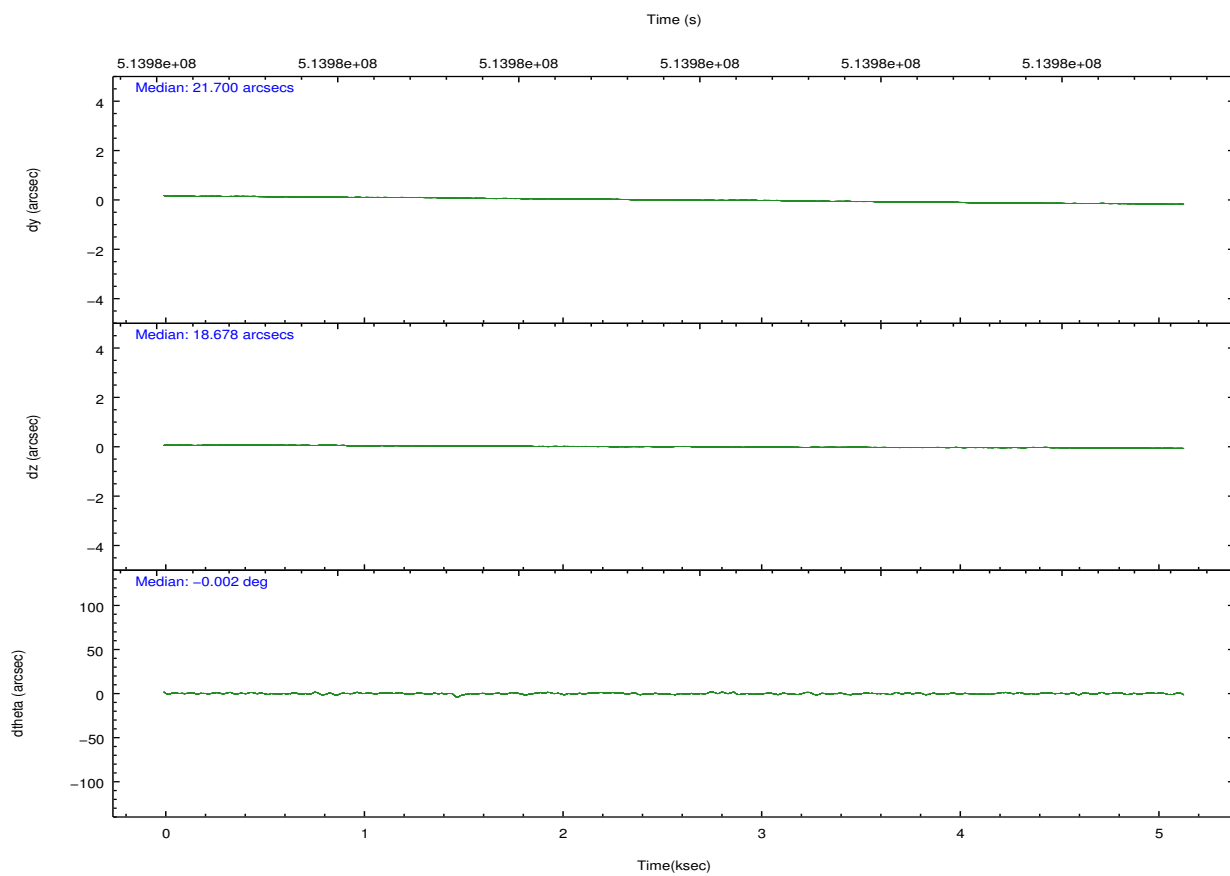
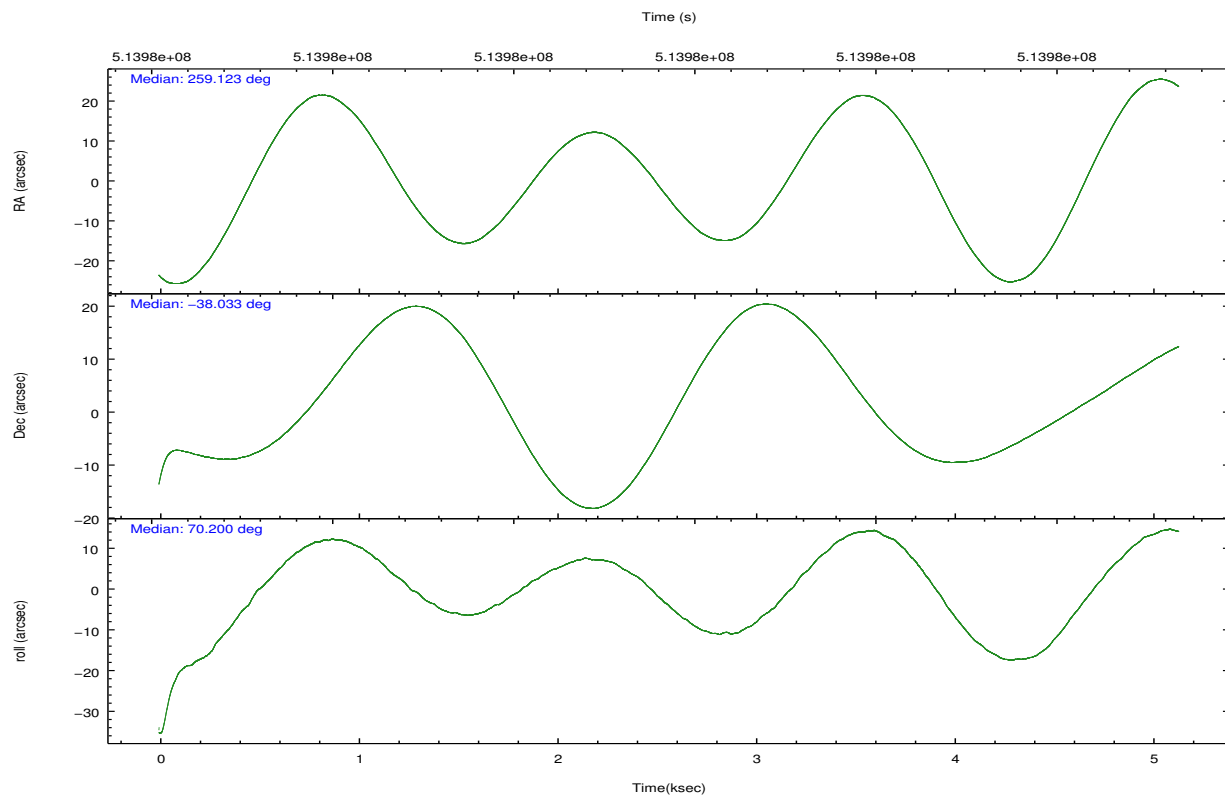
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	21232	22145	23769	24180	27335	33173	grade 0 events	1301	1301	1241	1193	2333	1242
rejected events	17985	18742	20631	21213	21544	19021		6%	5%	5%	4%	8%	3%
rejected %	84%	84%	86%	87%	78%	57%	grade 1 events	10	8	12	17	22	35
								0%	0%	0%	0%	0%	0%
							grade 2 events	757	794	718	619	2183	2905
								3%	3%	3%	2%	7%	8%
							grade 3 events	347	304	301	300	300	1128
								1%	1%	1%	1%	1%	3%
							grade 4 events	258	307	307	296	296	1141
								1%	1%	1%	1%	1%	3%
							grade 5 events	1150	1185	1054	1262	1304	3385
								5%	5%	4%	5%	4%	10%
							grade 6 events	586	697	571	560	681	7743
								2%	3%	2%	2%	2%	23%
							grade 7 events	16823	17549	19565	19933	20216	15594
								79%	79%	82%	82%	73%	47%

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	259.129696	259.1233076450706	CCD I2 on	Y	Y
[deg] Pointing Dec	-38.058967	-38.03211100997269	CCD I3 on	Y	Y
[deg] Pointing Roll	70.004179	70.20888453315632	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	-233.5899487761303	CCD S3 on	O2	Y
[mm] SIM translation stage offset	0	-0.002504226799430853	CCD S4 on	N	N
[s] Observation start time (MET)	513975421.184000	513973980.64237	CCD S5 on	N	N
Observation start date	2014-04-15T18:55:54	2014-04-15T18:33:00	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	513980421.184000	513981851.1053	On-chip summing requested	N	N
Observation end date	2014-04-15T20:19:14	2014-04-15T20:44:11	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



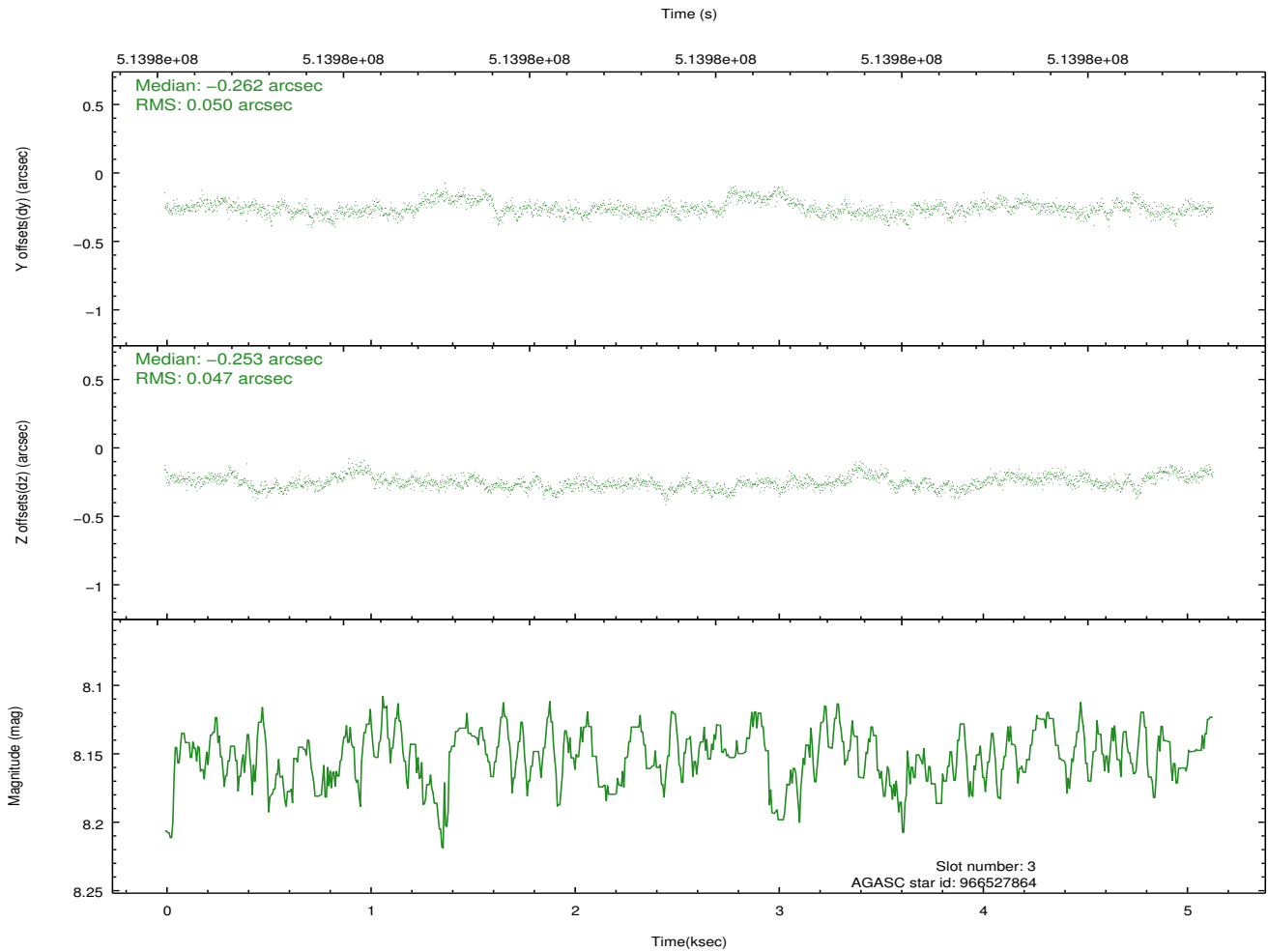
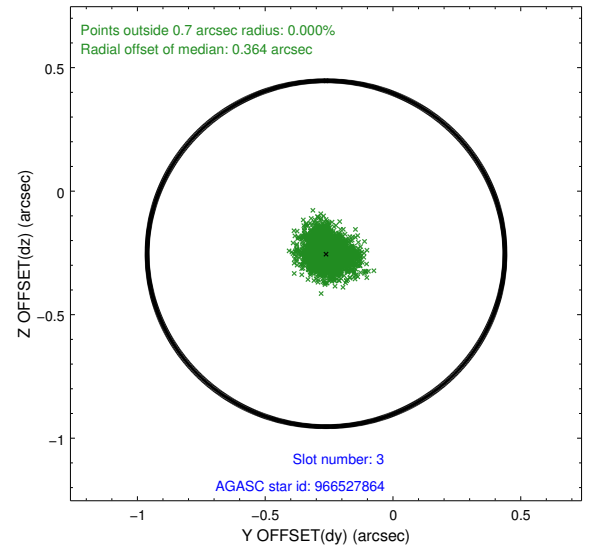
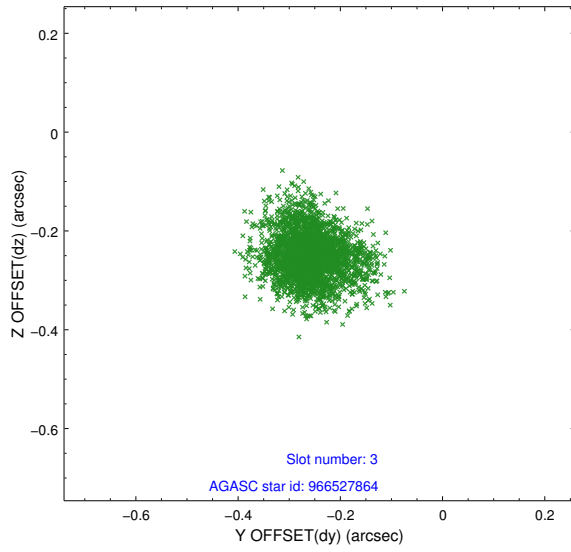


Slot Statistics

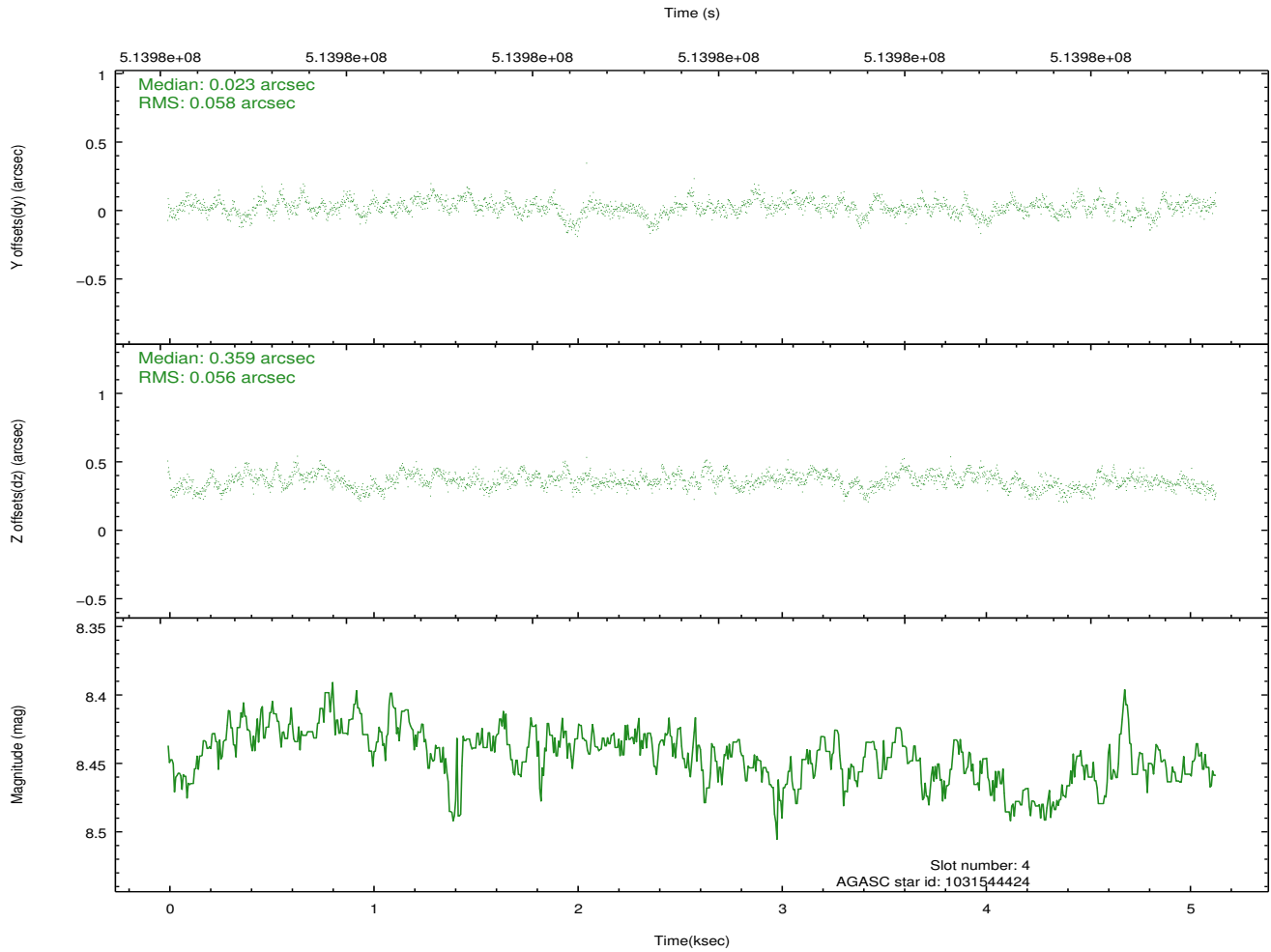
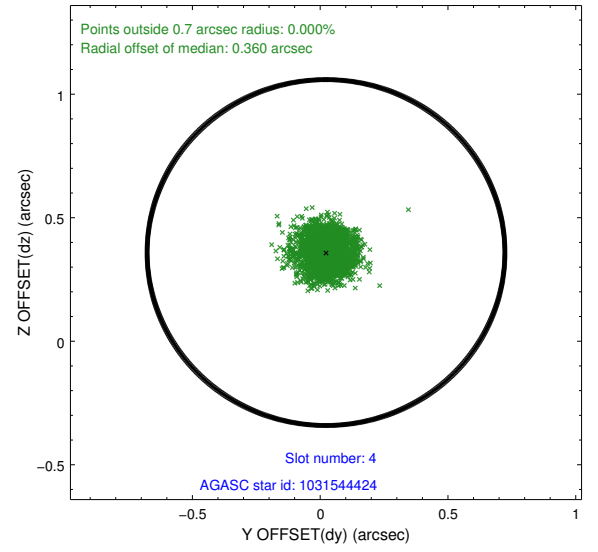
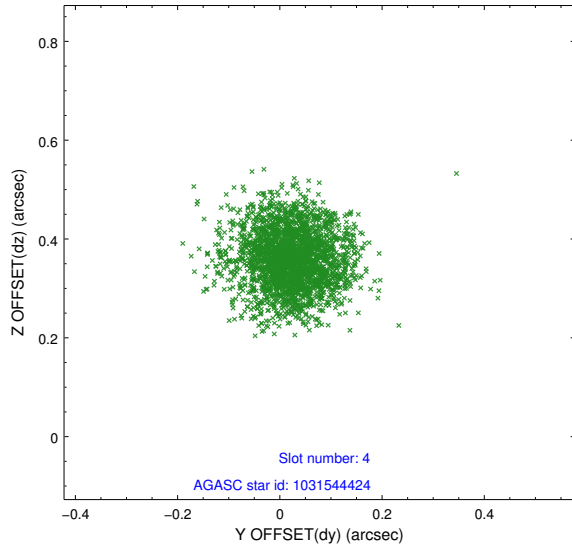
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.16	1253	-0.129	0.004	0.007	0.011	0.000000	0.000000	917.45	-842.32
1	FID		ACIS-I-4	7.09	1253	0.135	0.109	0.009	0.016	0.000000	0.000000	2138.41	1056.99
2	FID		ACIS-I-6	7.15	1252	-0.103	-0.048	0.009	0.017	0.000000	0.000000	384.89	1700.37
3	GUIDE	used	966527864	8.15	2505	-0.262	-0.253	0.074	0.121	259.198901	-37.409371	2265.83	613.96
4	GUIDE	used	1031544424	8.44	2506	0.023	0.359	0.086	0.140	259.780458	-38.098548	492.46	-1782.53
5	GUIDE	used	1031549032	7.97	2505	0.299	0.040	0.074	0.121	258.584727	-38.516573	-2075.86	876.85
6	GUIDE	used	1031549280	8.00	2506	-0.035	0.347	0.087	0.138	259.850615	-38.003687	879.31	-1855.41
7	GUIDE	used	1031541216	6.75	2505	-0.040	-0.491	0.096	0.143	258.289266	-37.952377	-464.37	2368.25

2.4 Star Slots

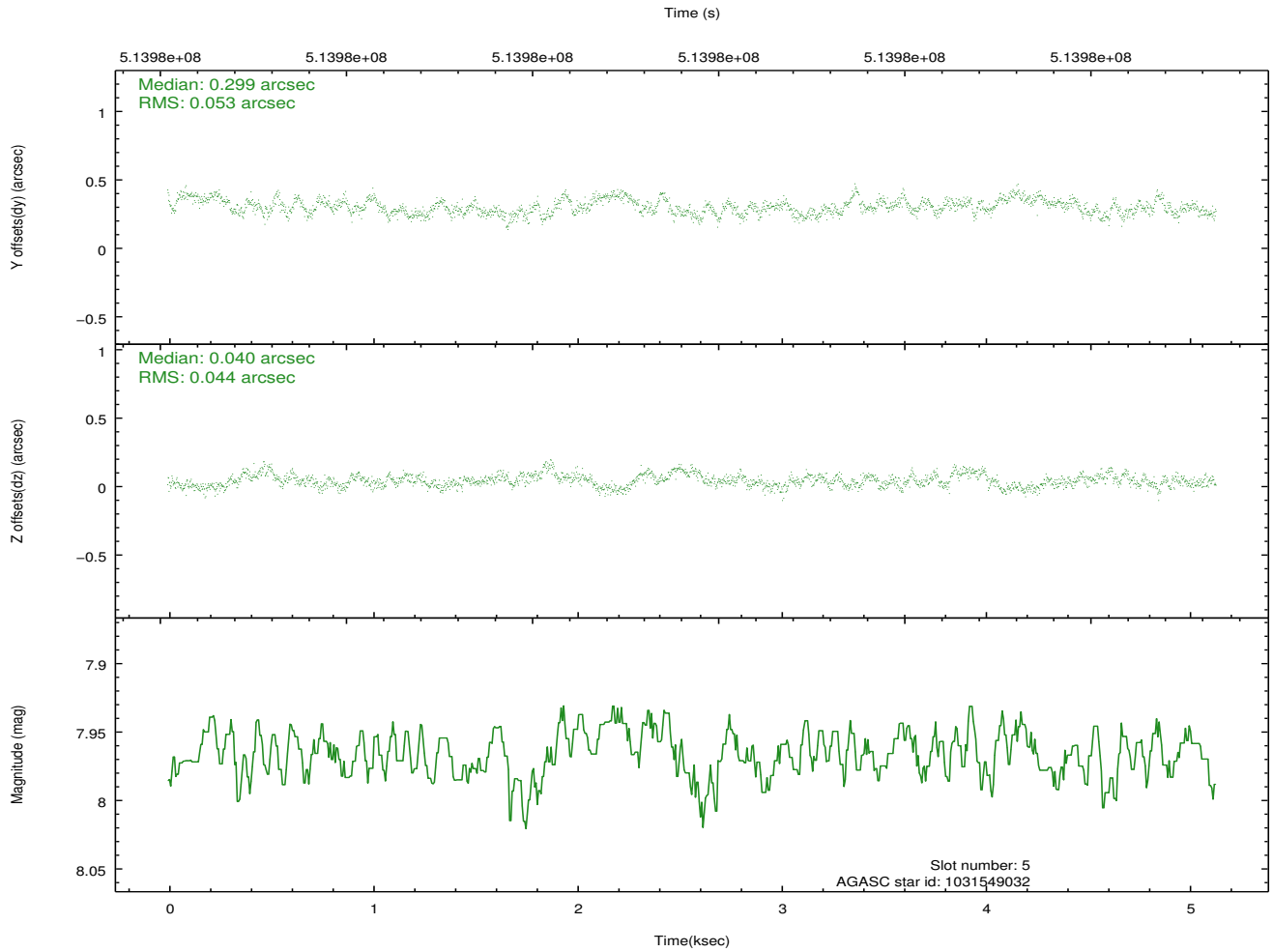
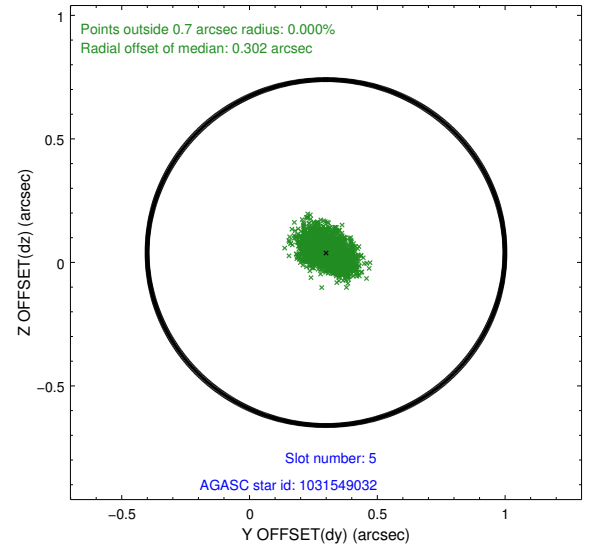
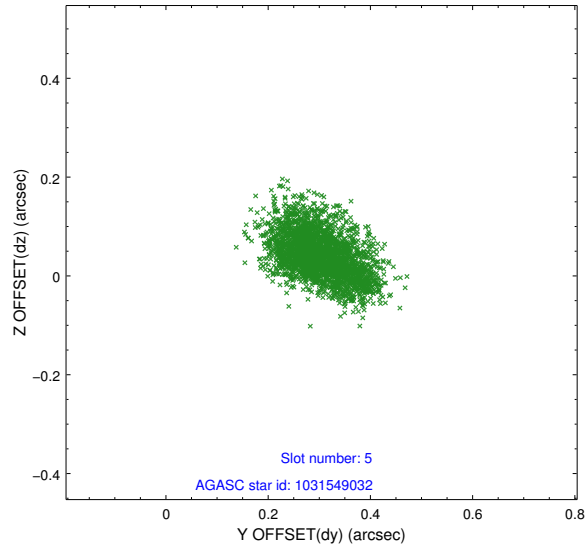
2.4.1 Slot 3



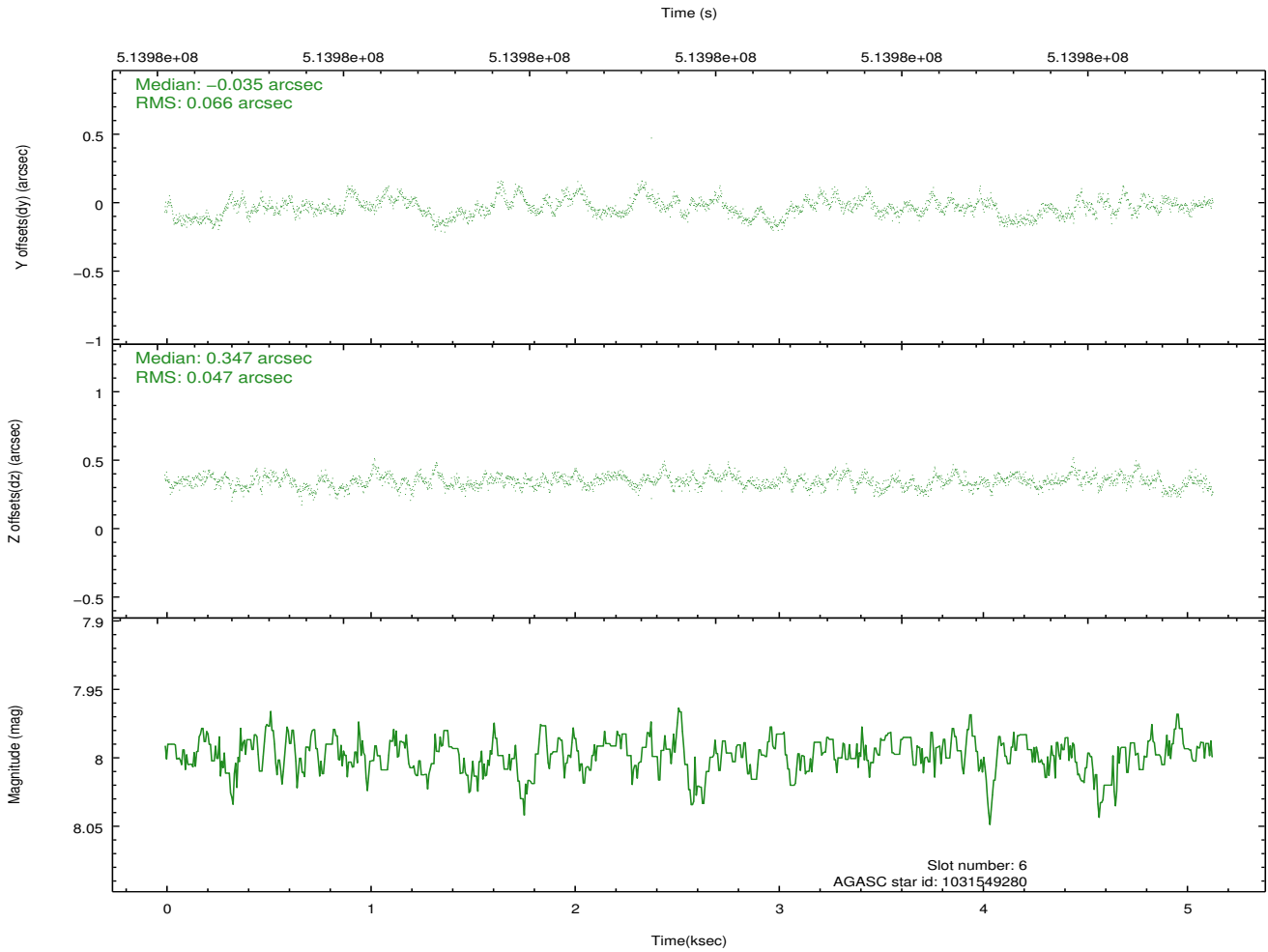
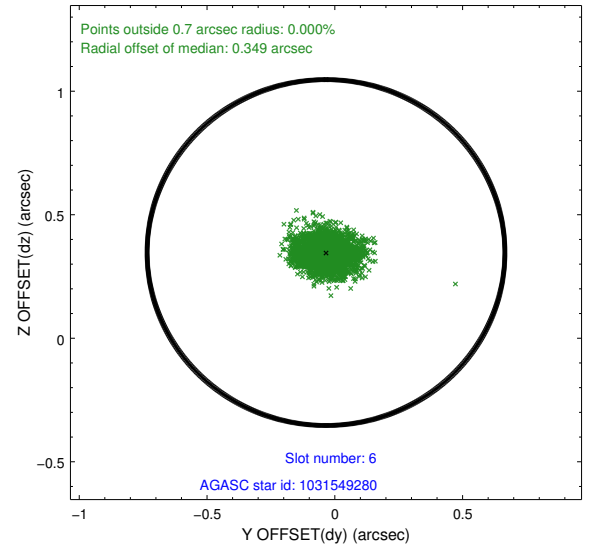
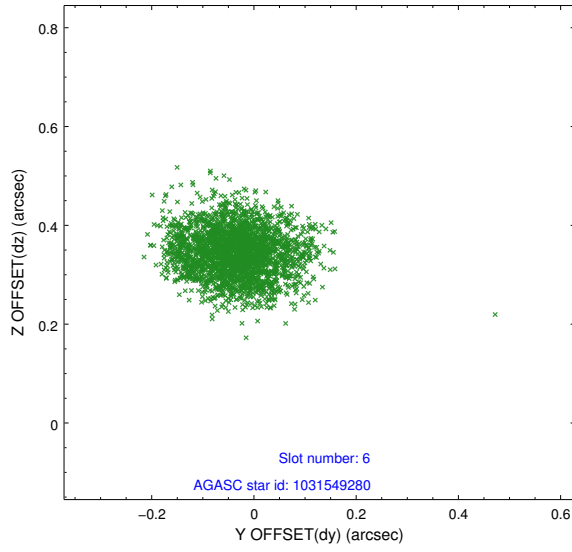
2.4.2 Slot 4



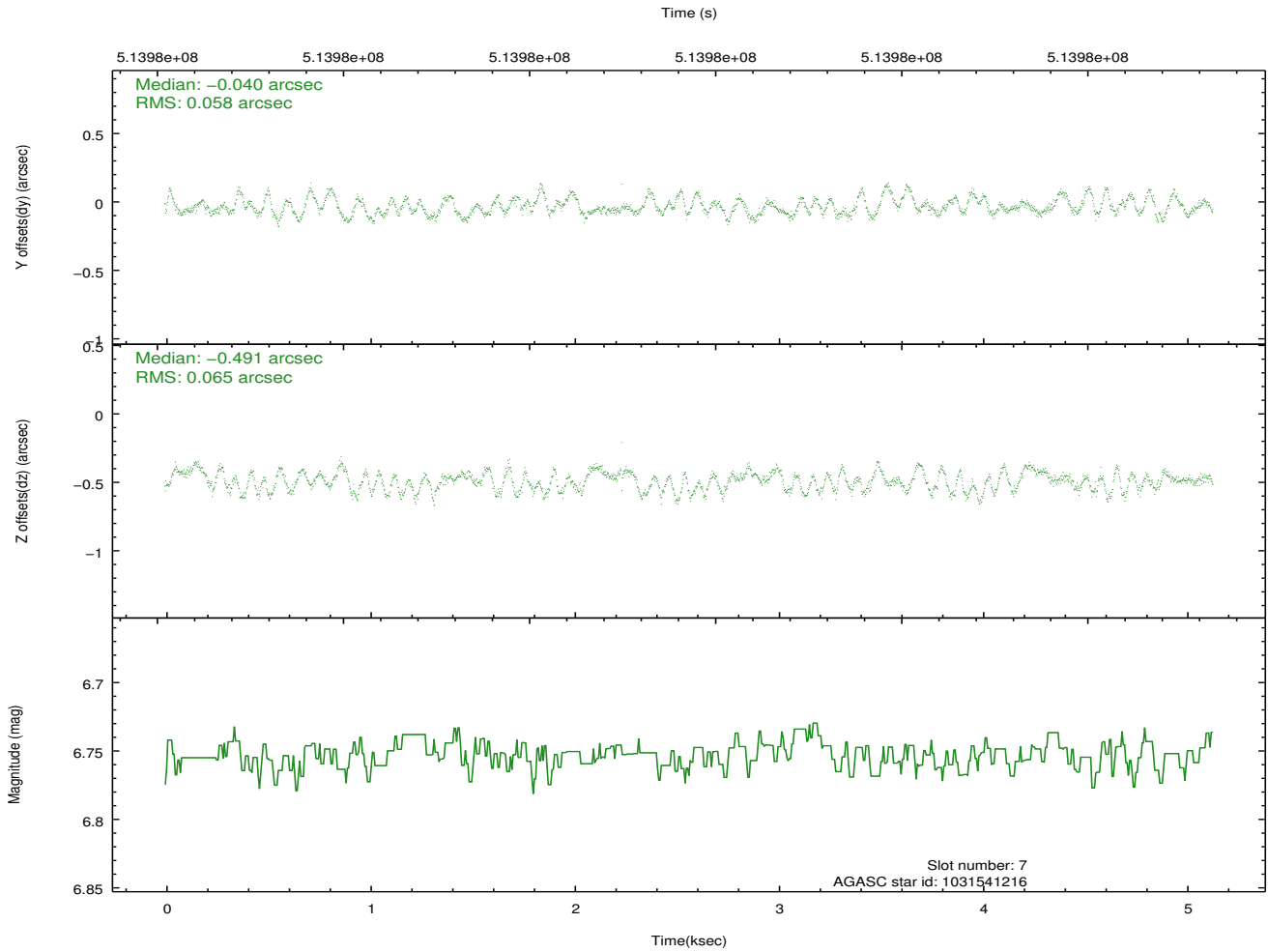
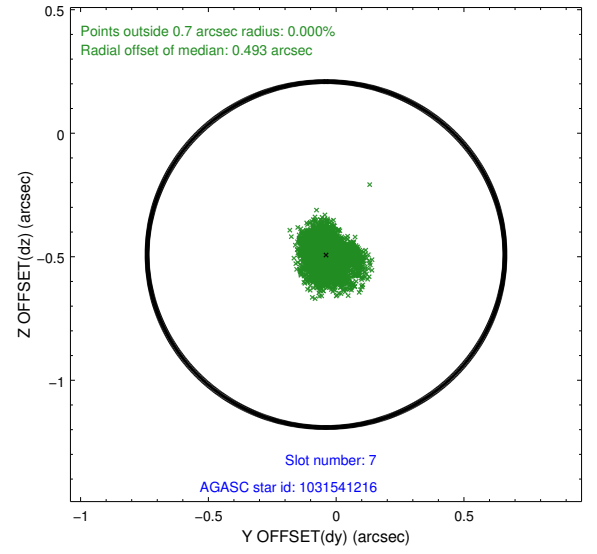
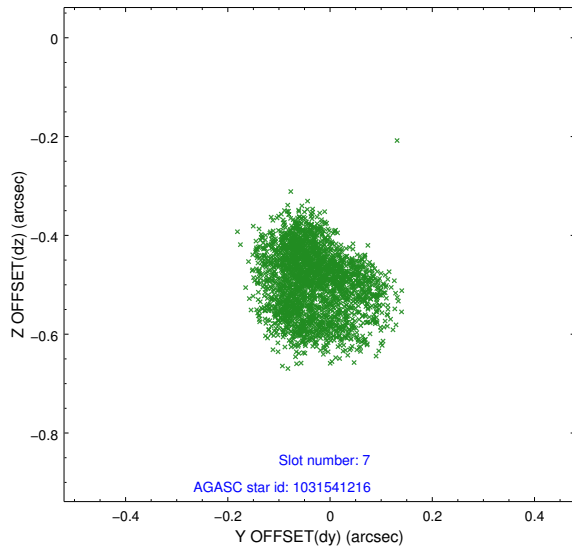
2.4.3 Slot 5



2.4.4 Slot 6

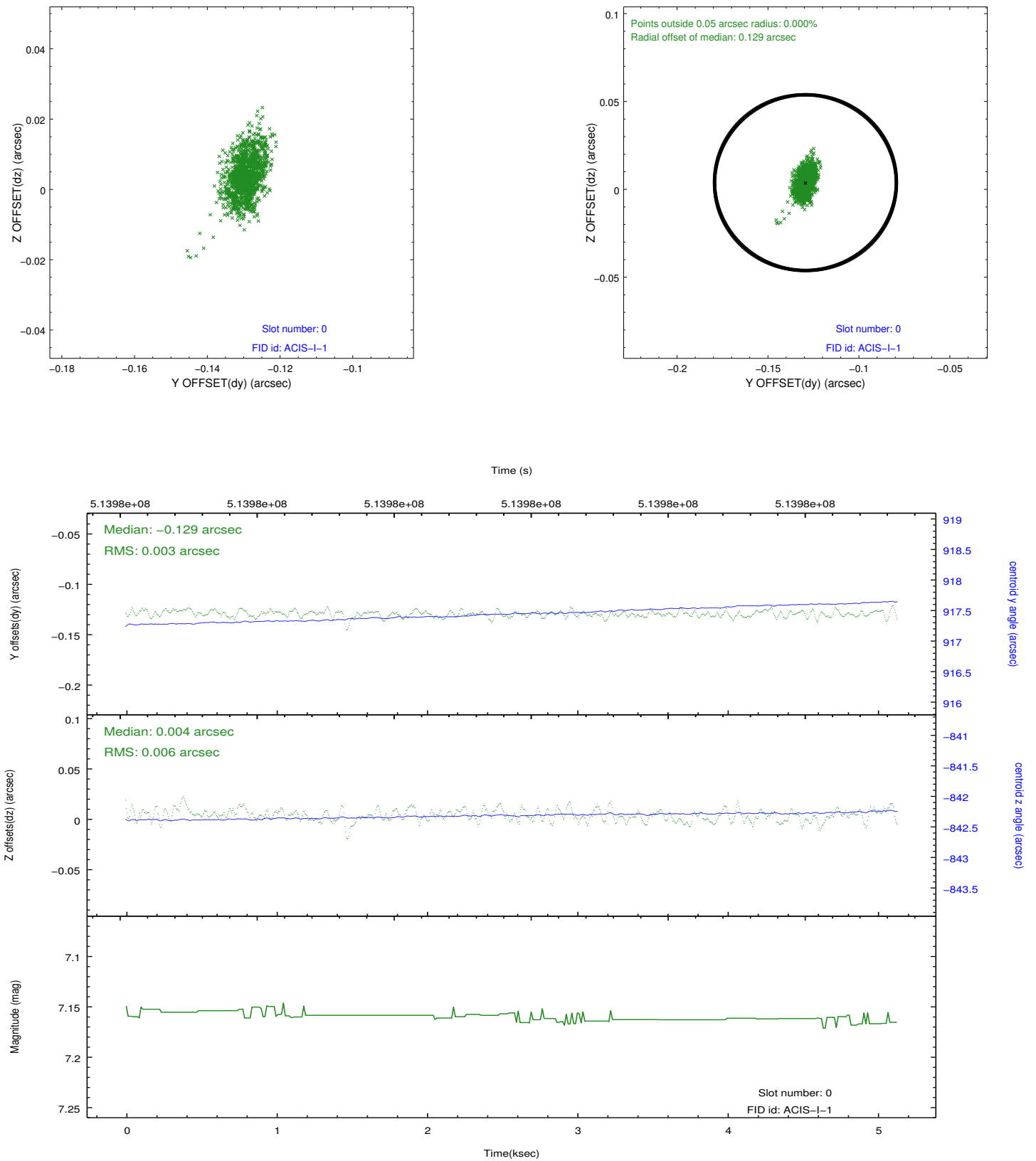


2.4.5 Slot 7

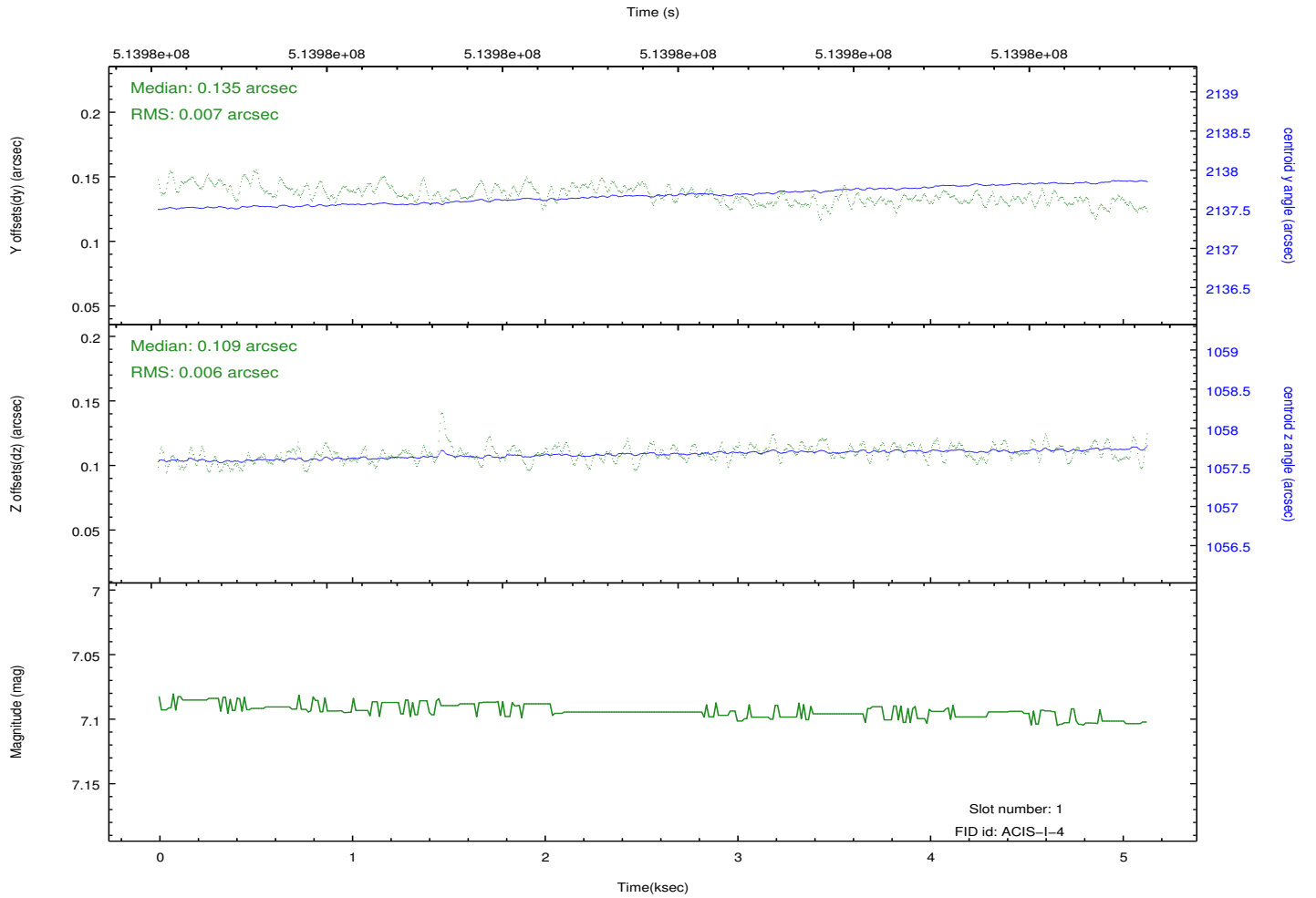
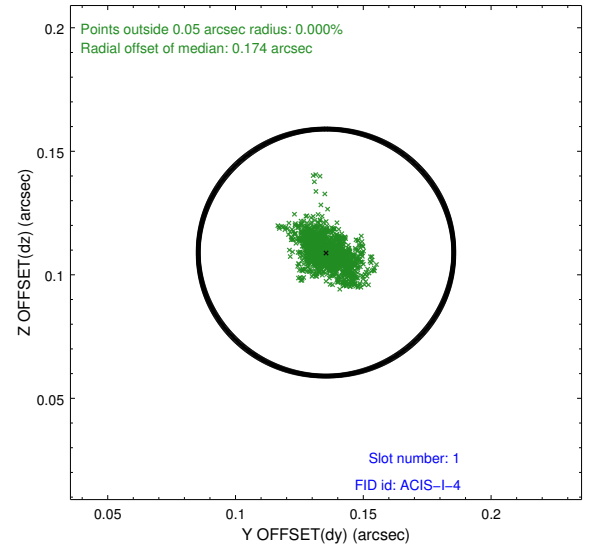
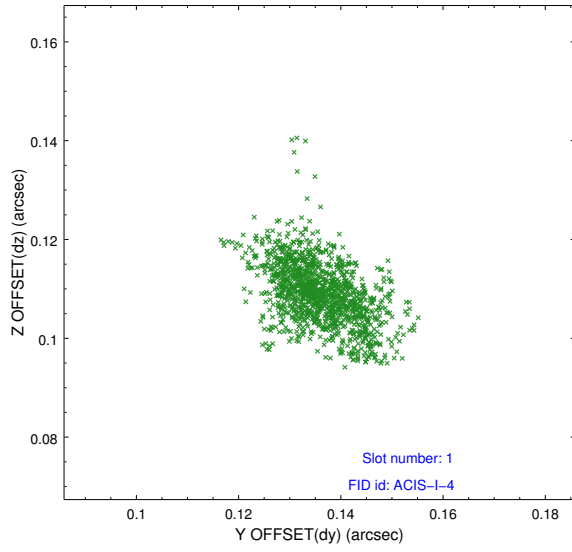


2.5 FID Slots

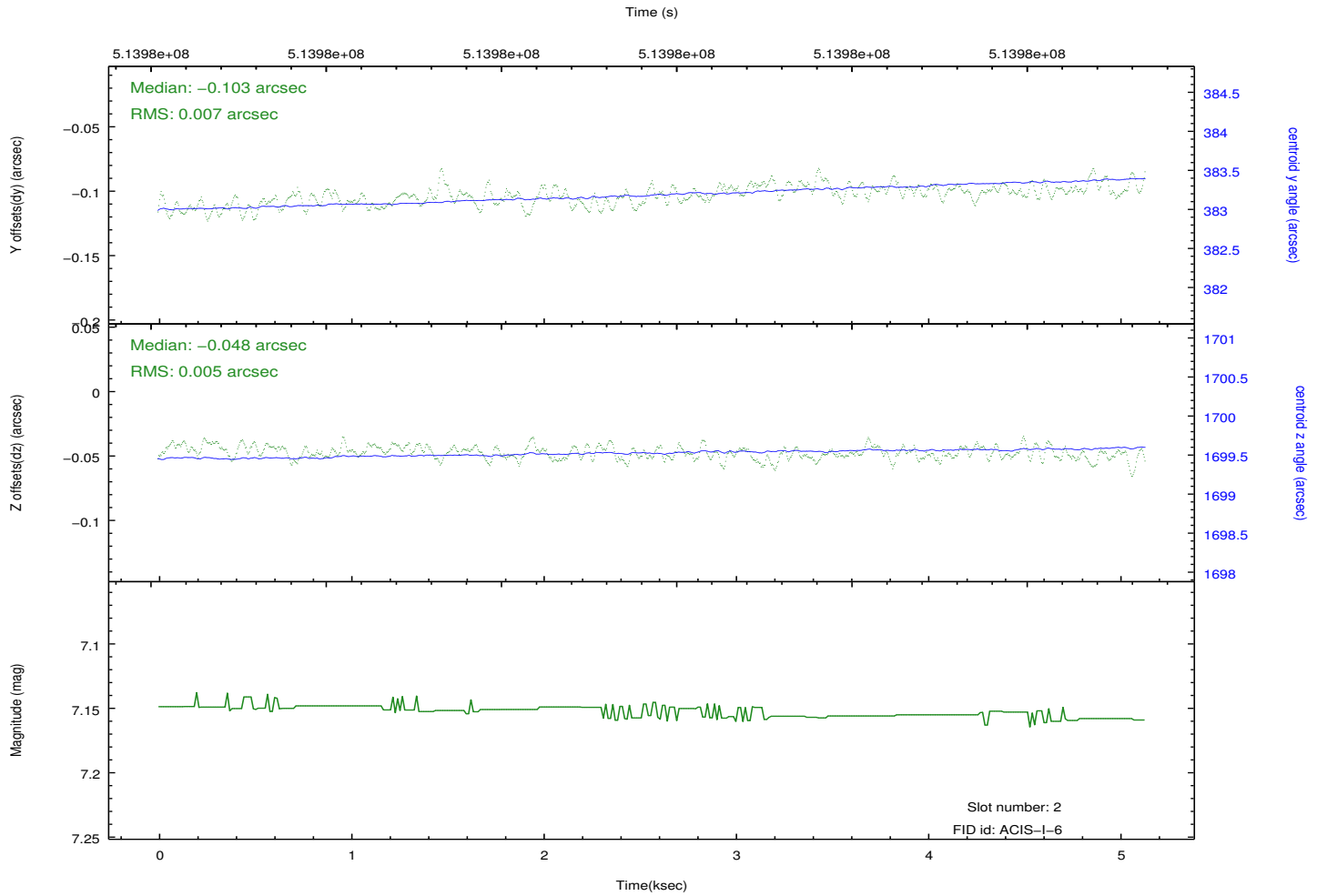
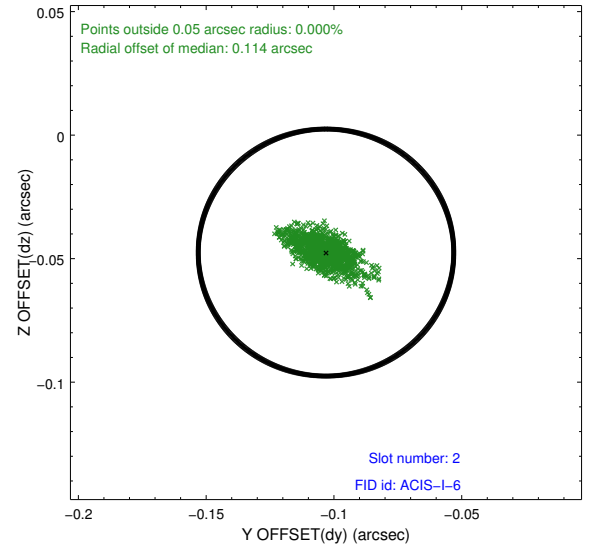
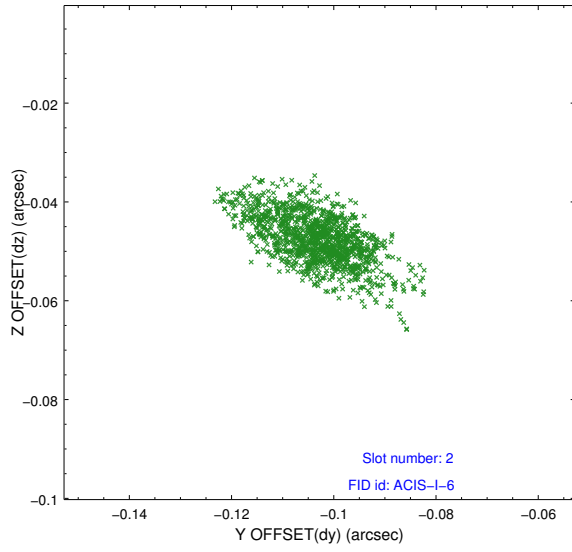
2.5.1 Slot 0



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)	2014.12.18
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.9727999815345

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.