

V&V Reference Report

L2 ASCDS Version : 10.2.1

Observation 16541 - L2 Version 2
Chandra X-Ray Center

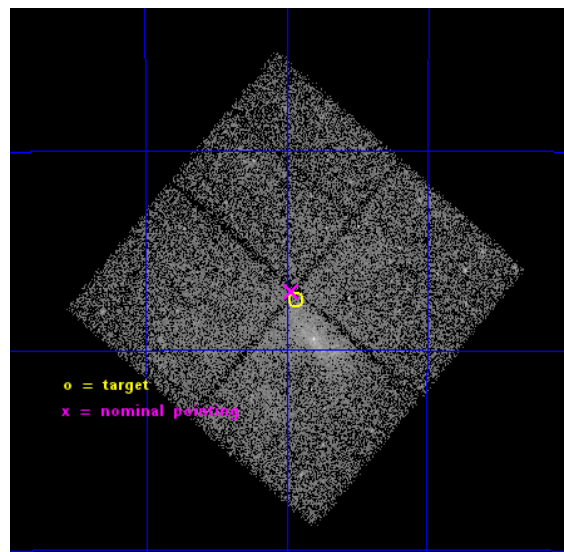
L2 Processing Date : Dec 9 2014

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

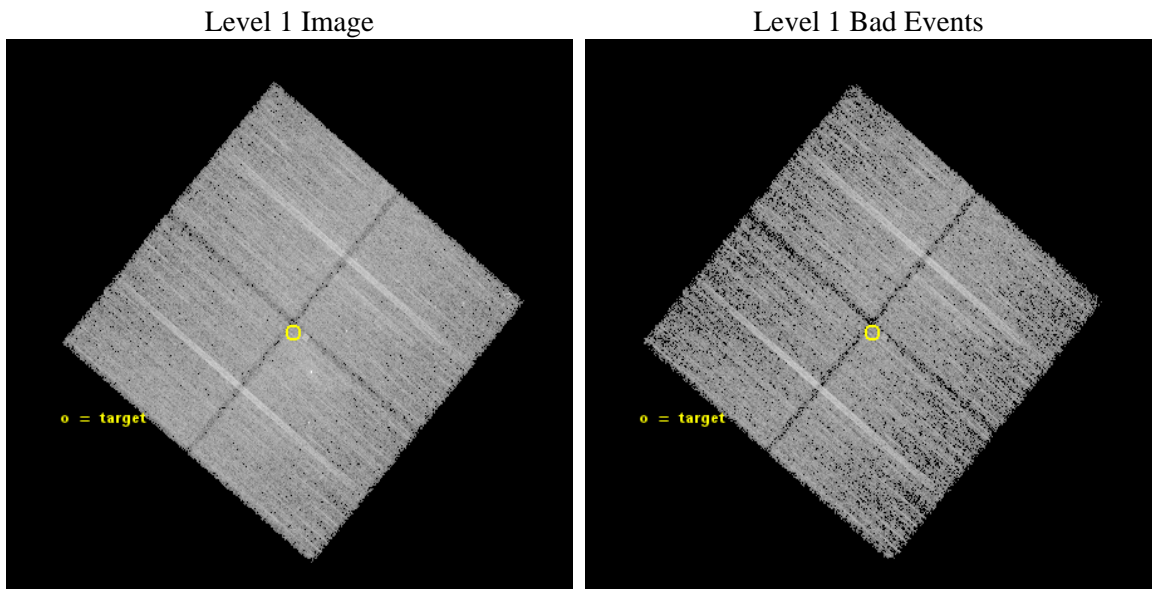
seq_num	501950	Sequence number
obs_id	16541	Observation id
title	A Detailed Study of the Composite Supernova Remnant MSH 11-62	Prop
observer	Dr. Patrick Slane	Principal investigator
object	MSH 11-62	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	167.982333	Observer's specified target RA [deg]
dec_targ	-60.624583	Observer's specified target Dec [deg]
ra_nom	167.99117767625	Nominal RA [deg]
dec_nom	-60.6177619718	Nominal Dec [deg]
roll_nom	40.216397755807	Nominal Roll [deg]
revision	2	Processing version of data
ontime	29586.400227547	Sum of GTIs [s]
livetime	29199.832127383	Livetime [s]
ontime0	29580.114736319	Sum of GTIs [s]
ontime1	29586.400227547	Sum of GTIs [s]
ontime2	29567.554315925	Sum of GTIs [s]
ontime3	29580.118266821	Sum of GTIs [s]
l2events	72739	Number of level 2 events



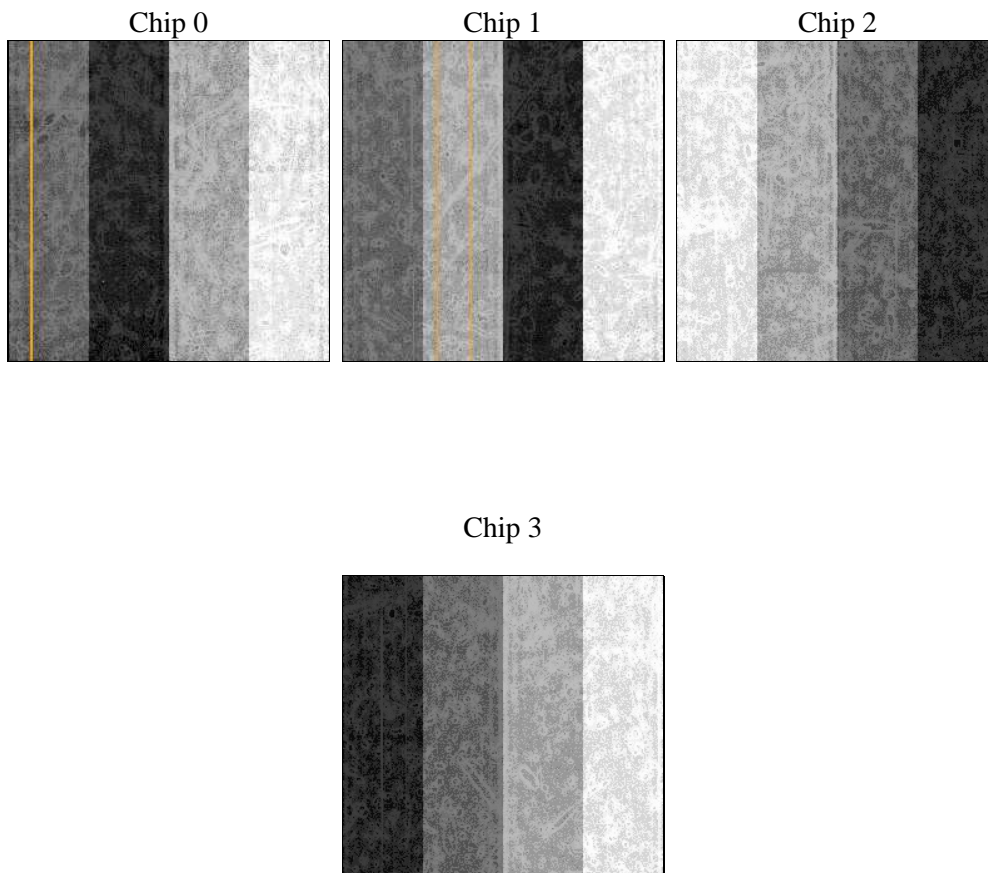
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	29496.387000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	29586.400227547	Sum of GTIs [s]
caldbver	4.6.4	 	ontime0	29580.114736319	Sum of GTIs [s]
date	2014-12-10T00:27:42	Date and time of file creation	ontime1	29586.400227547	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	29567.554315925	Sum of GTIs [s]
			ontime3	29580.118266821	Sum of GTIs [s]
			l1events	516209	Number of level 1 events

2.1.4 Events

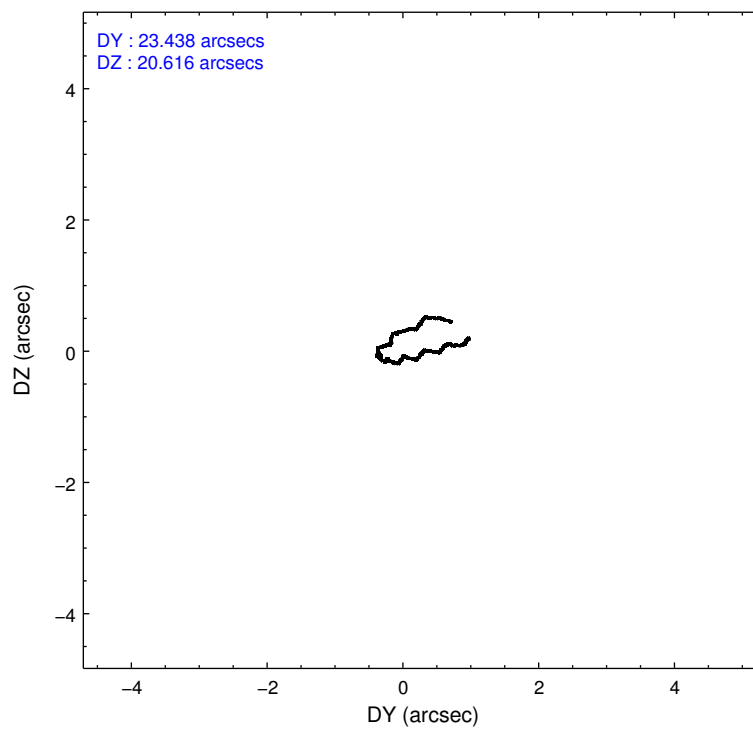
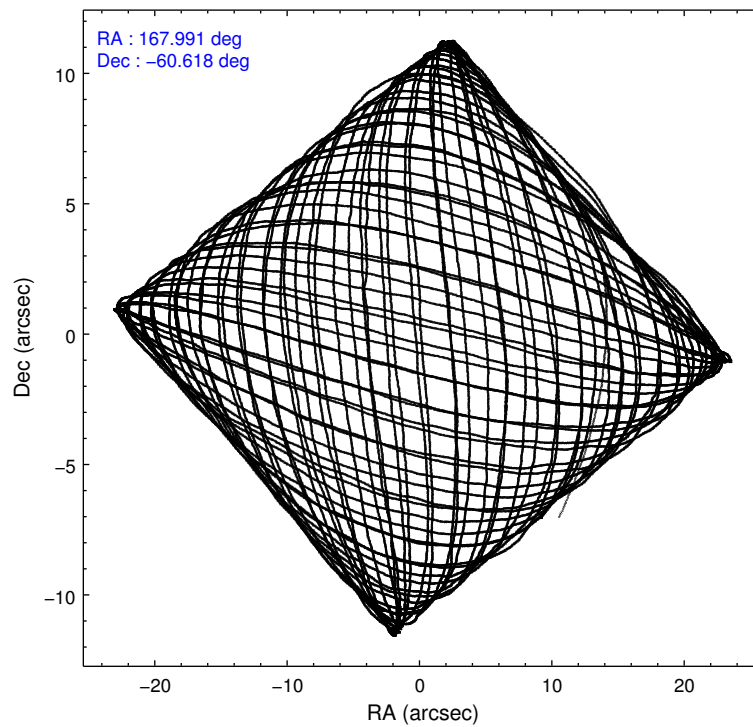
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	120297	130355	135436	130121
rejected events	99741	103315	117263	110693
rejected %	82%	79%	86%	85%

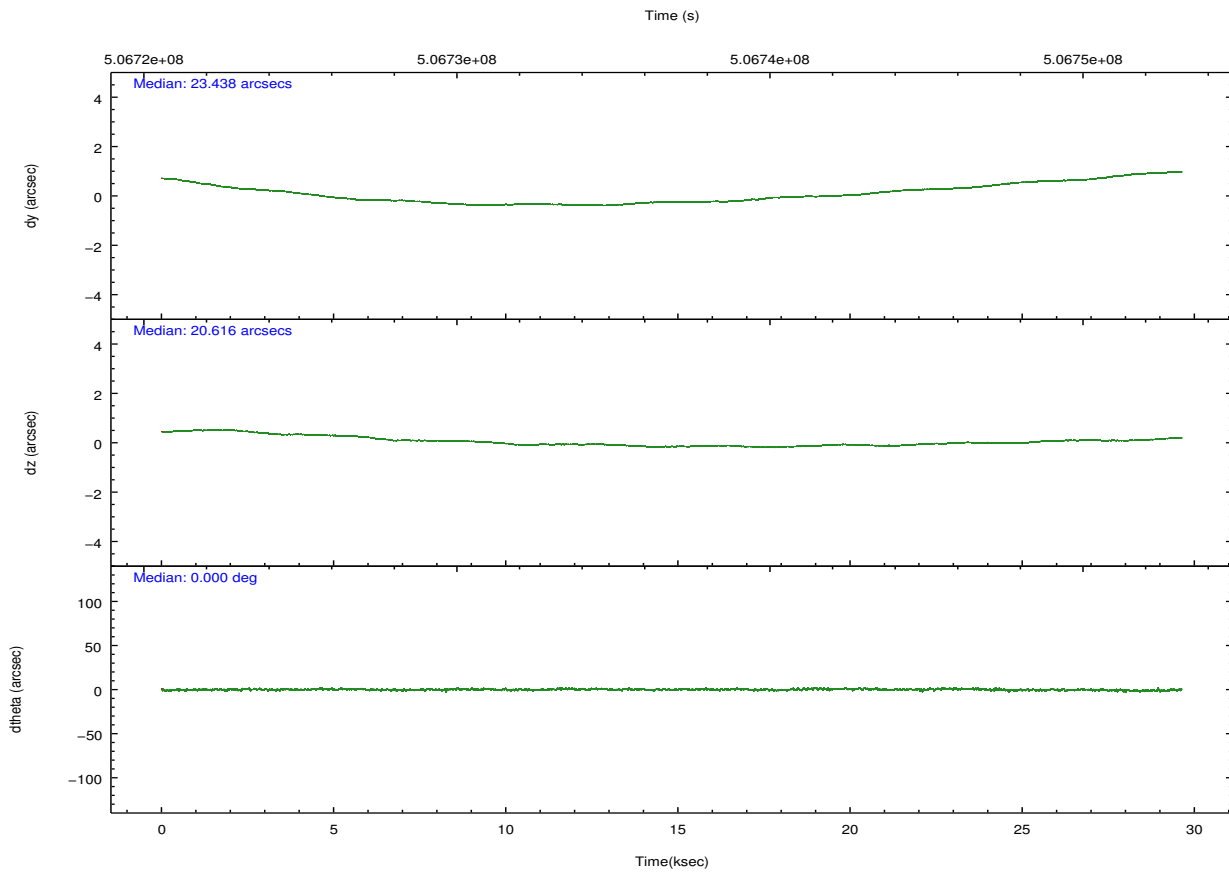
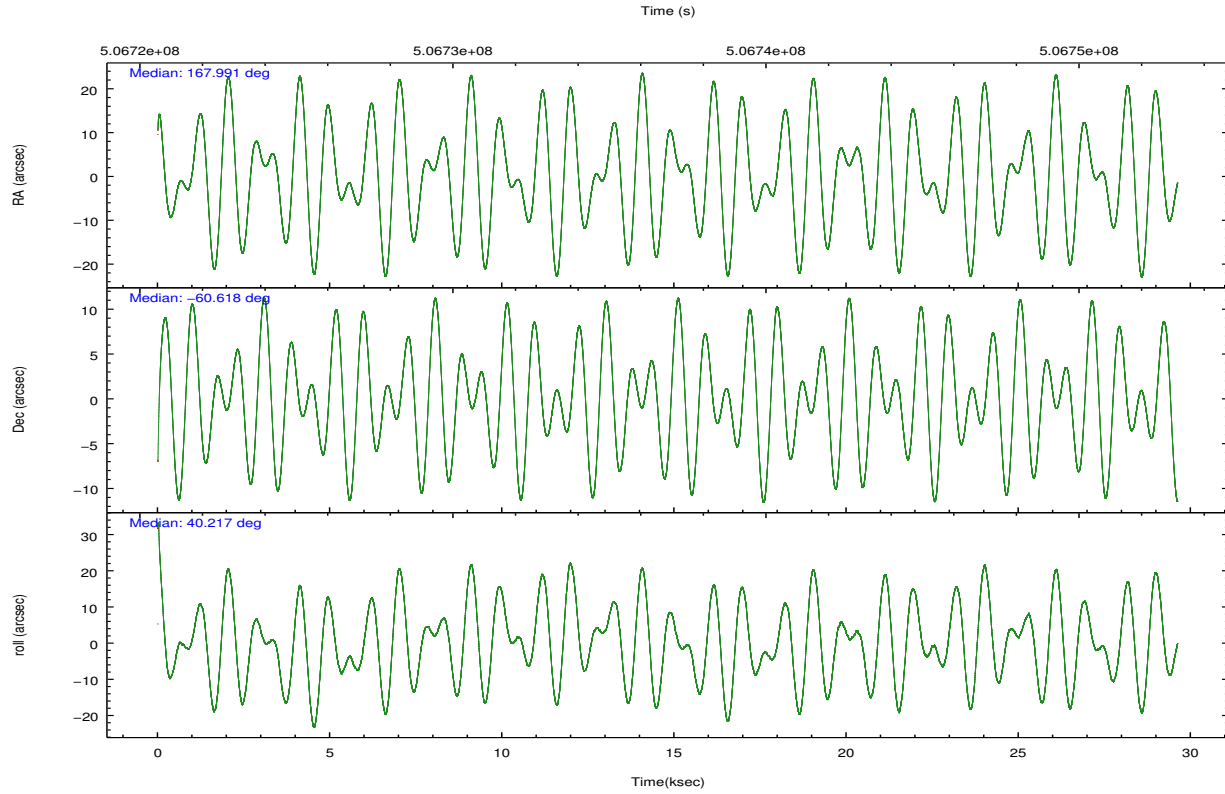
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	9721	14165	8348	9278
	8%	10%	6%	7%
grade 1 events	69	94	71	92
	0%	0%	0%	0%
grade 2 events	4403	5265	3846	3754
	3%	4%	2%	2%
grade 3 events	1736	1958	1534	1731
	1%	1%	1%	1%
grade 4 events	1597	1932	1620	1635
	1%	1%	1%	1%
grade 5 events	5276	5836	5008	6206
	4%	4%	3%	4%
grade 6 events	3102	3727	2826	3033
	2%	2%	2%	2%
grade 7 events	94393	97378	112183	104392
	78%	74%	82%	80%

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	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	167.972424	167.9911776762462	Subarray requested	NONE	NONE
[deg] Pointing Dec	-60.643674	-60.61776197180033	Alternating exposures requested	N	N
[deg] Pointing Roll	39.991365	40.21639775580654	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-236.517463	-236.5241547330508			
[mm] SIM translation stage offset	2.925	2.931701730121091			
[s] Observation start time (MET)	506722185.184000	506721166.85541			
Observation start date	2014-01-21T20:08:38	2014-01-21T19:52:46			
[s] Observation end time (MET)	506751682.184000	506751922.4946			
Observation end date	2014-01-22T04:20:15	2014-01-22T04:25:22			
Read mode	TIMED	TIMED			

2.3 Aspect





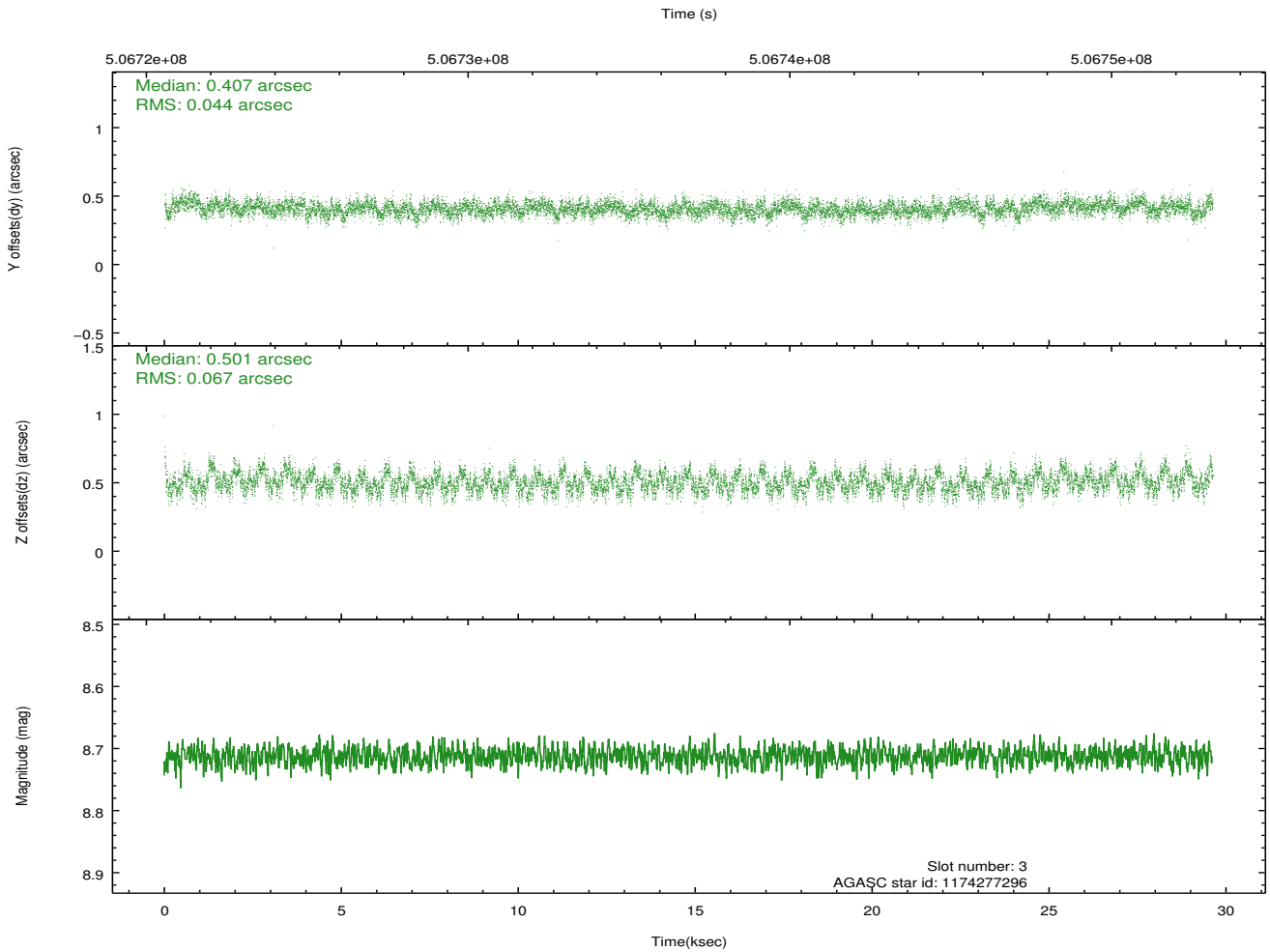
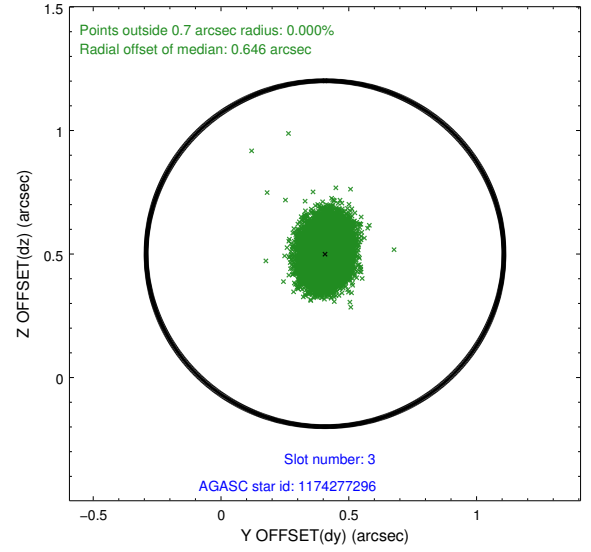
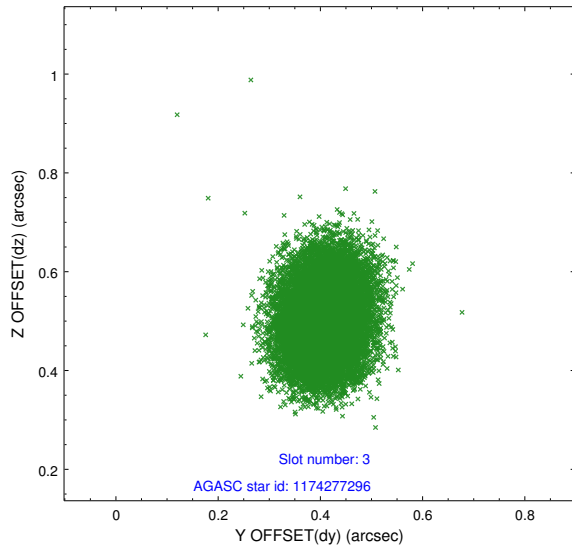
Slot Statistics

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	7224	-0.091	0.027	0.014	0.030	0.000000	0.000000	915.62	-784.10
1	FID		ACIS-I-4	7.10	7225	0.195	0.026	0.016	0.030	0.000000	0.000000	2136.22	1115.26
2	FID		ACIS-I-6	7.12	7224	-0.200	0.013	0.015	0.028	0.000000	0.000000	381.61	1757.96
3	GUIDE	used	1174277296	8.71	14445	0.407	0.501	0.086	0.138	167.558753	-61.273161	-2005.75	-1277.23
4	GUIDE	used	1174279704	6.47	14448	-0.598	-0.299	0.064	0.100	168.374888	-60.091354	1829.34	1057.19
5	GUIDE	used	1174171768	8.76	14444	0.177	-0.120	0.084	0.144	166.839003	-60.963190	-2267.05	378.57
6	GUIDE	used	1174282864	8.21	14446	-0.297	-0.331	0.084	0.131	167.509743	-60.095137	630.71	2044.28
7	GUIDE	used	1174277360	8.33	14439	0.311	0.243	0.104	0.155	167.516992	-60.979156	-1386.87	-415.65

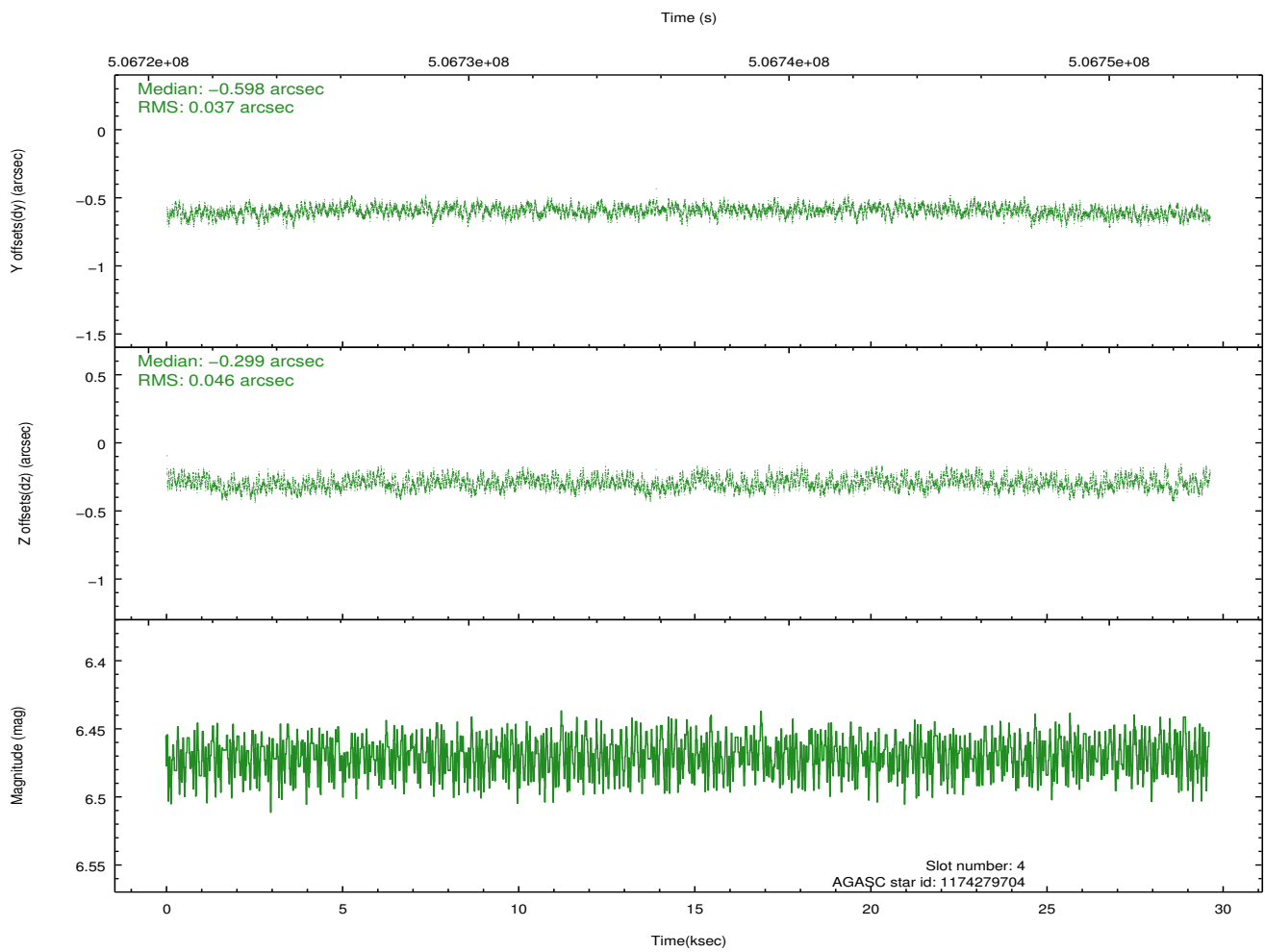
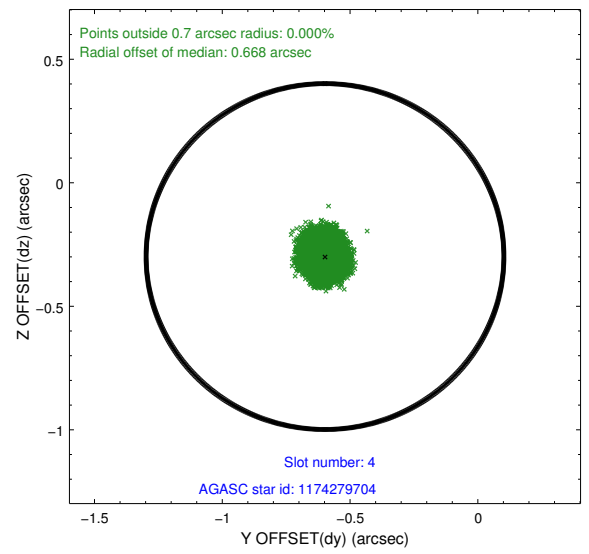
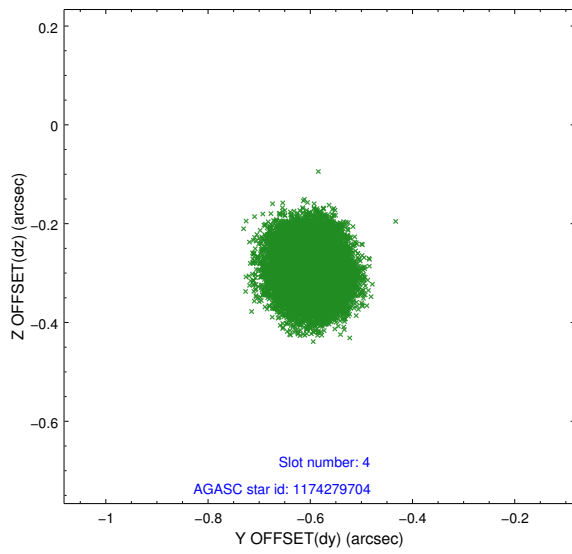
∞

2.4 Star Slots

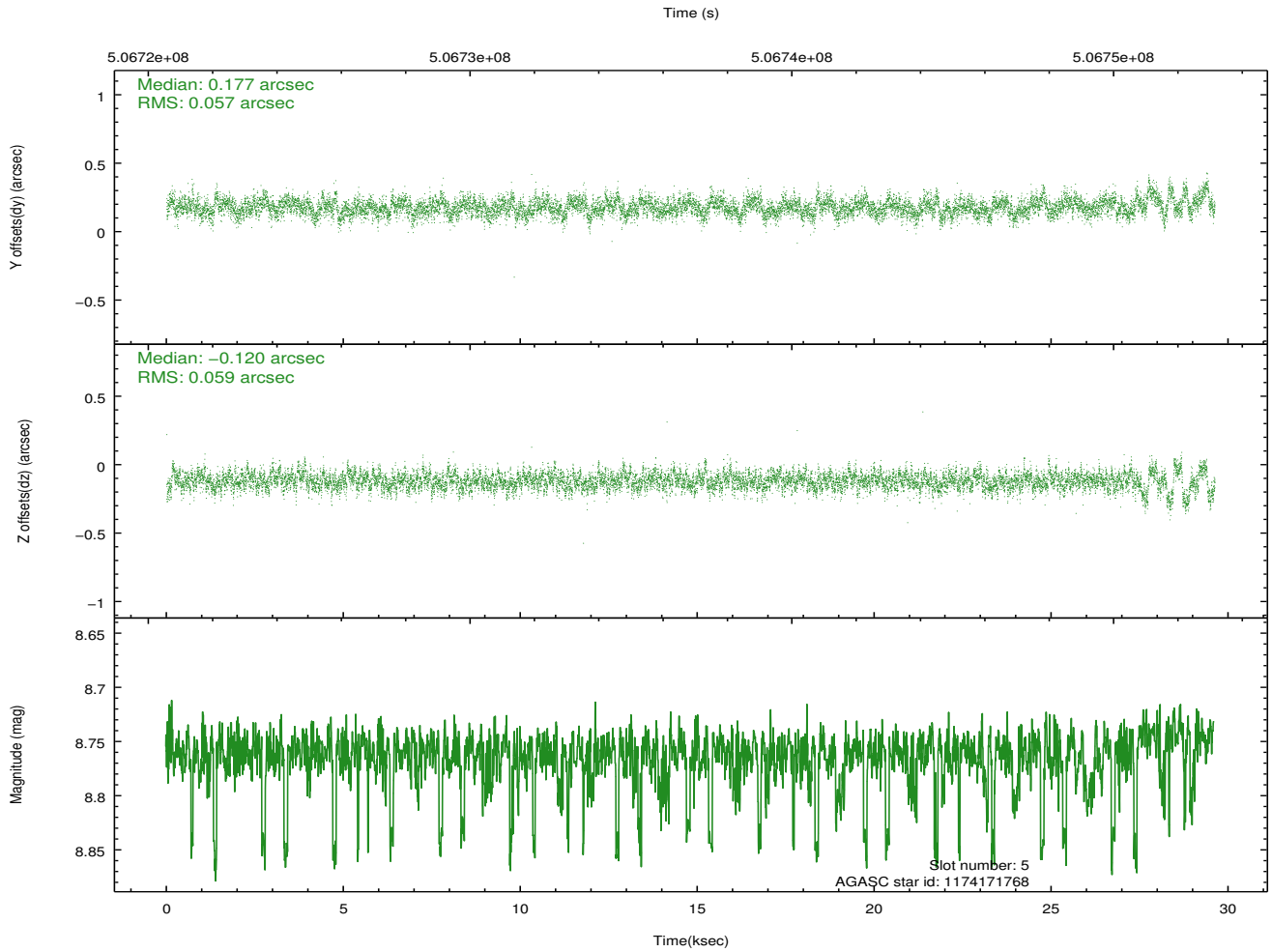
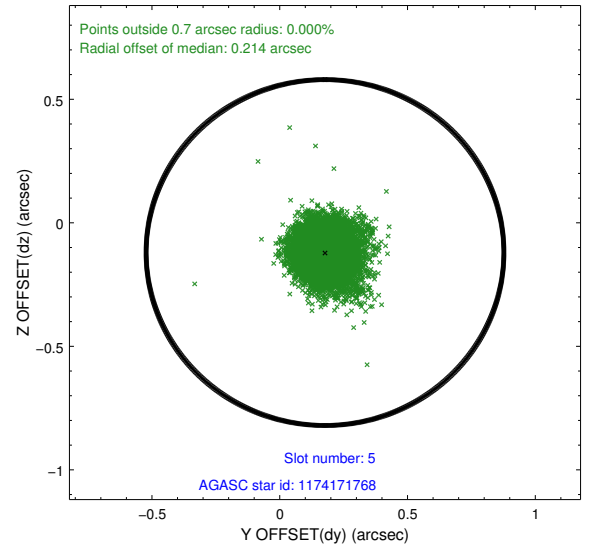
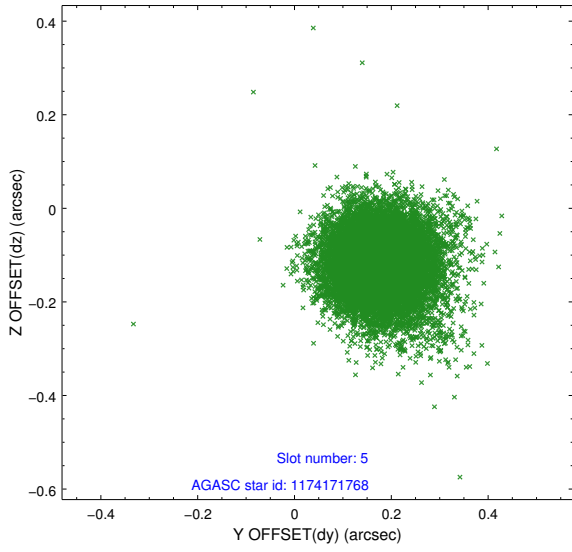
2.4.1 Slot 3



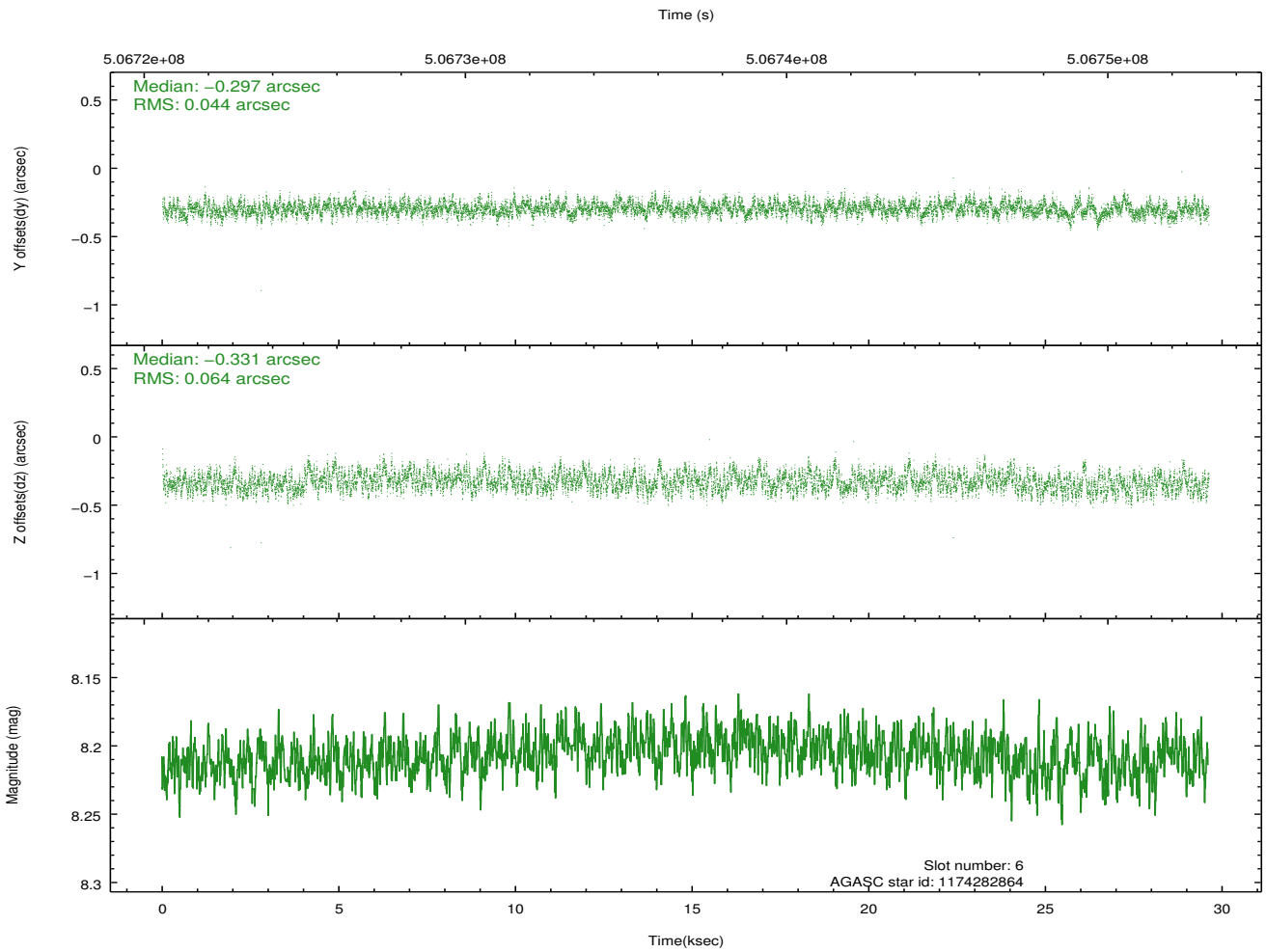
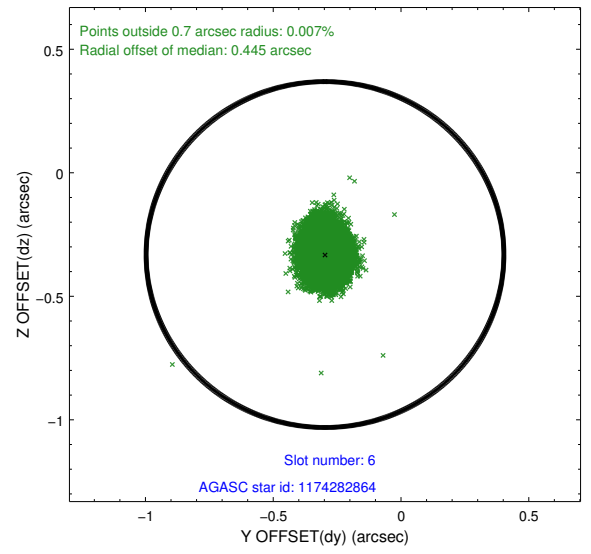
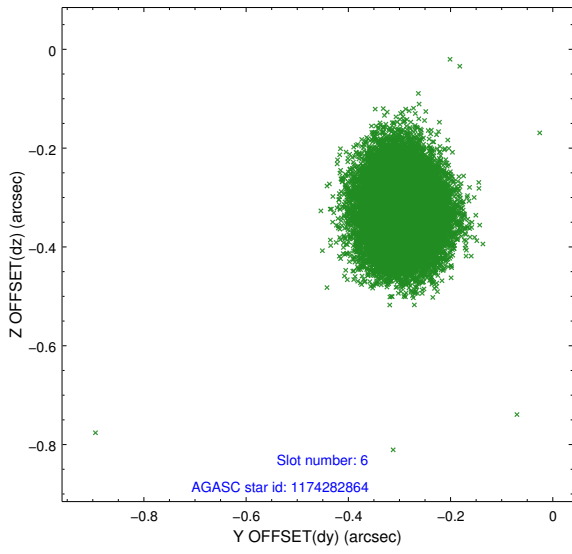
2.4.2 Slot 4



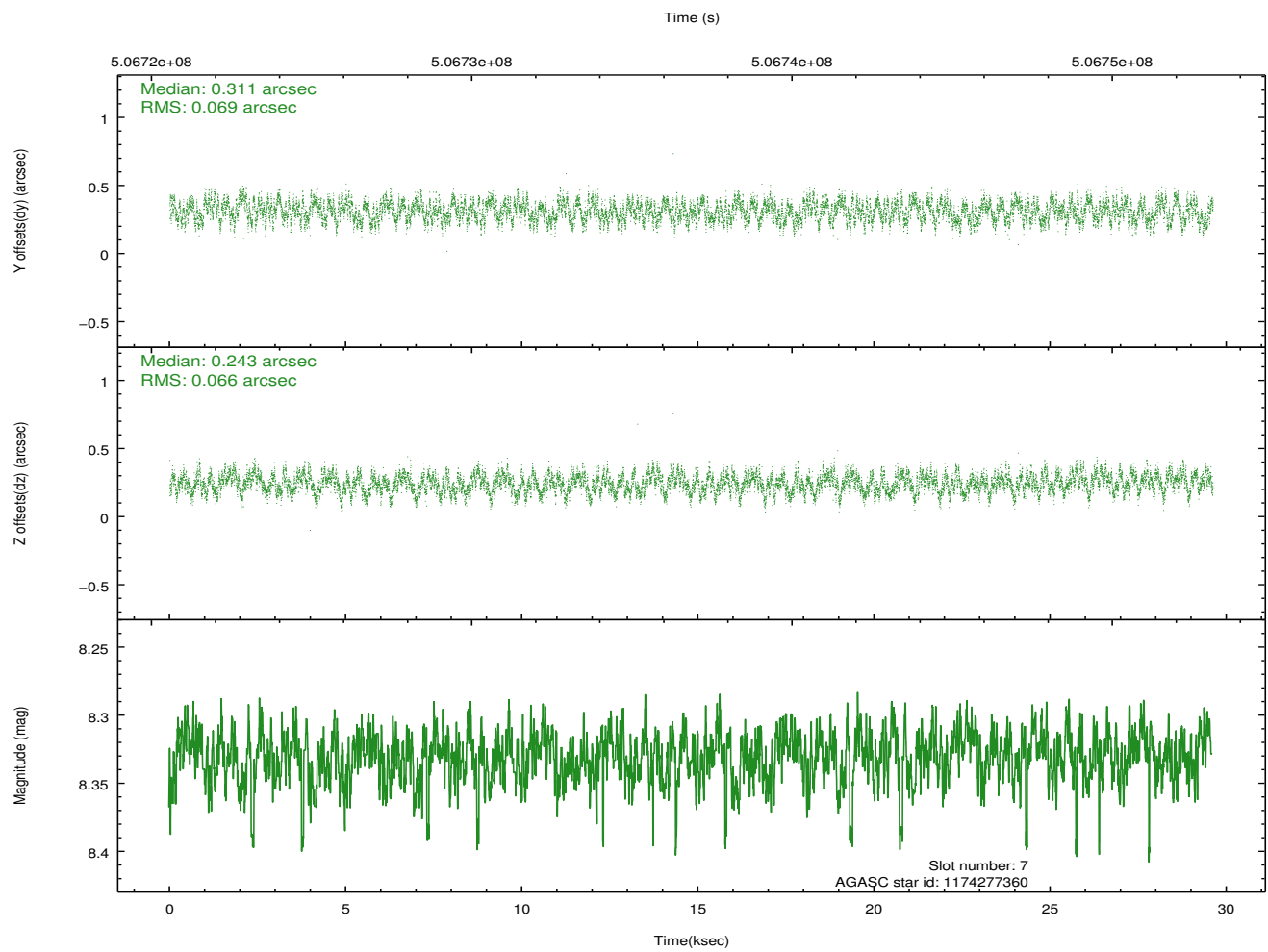
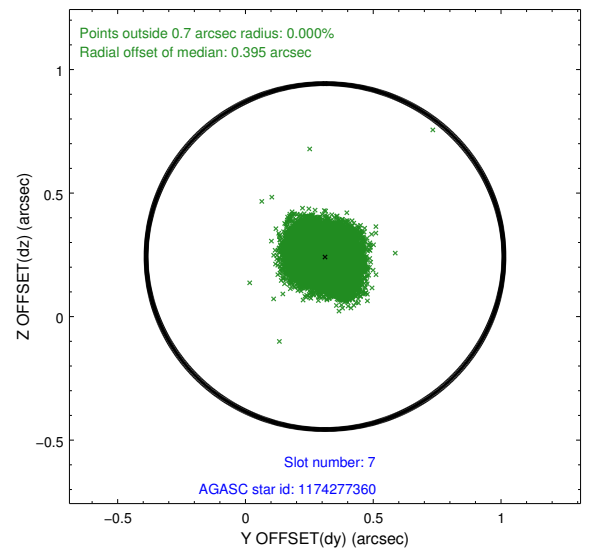
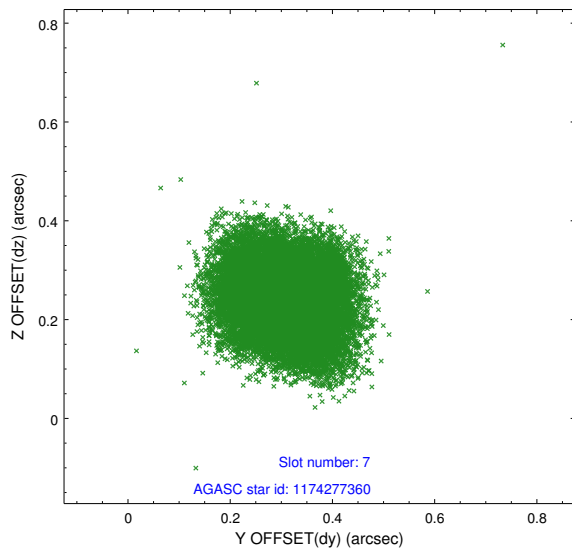
2.4.3 Slot 5



2.4.4 Slot 6

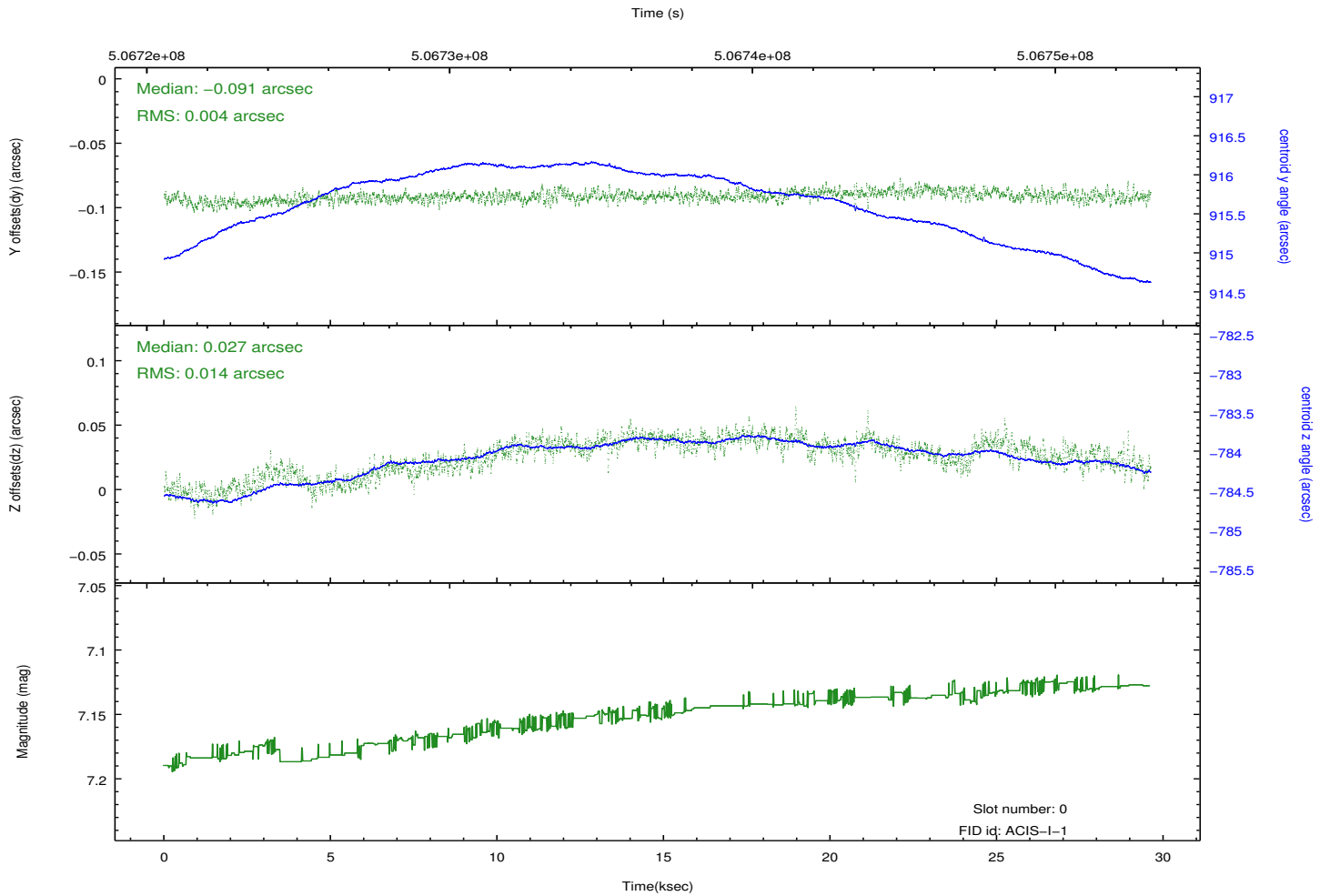
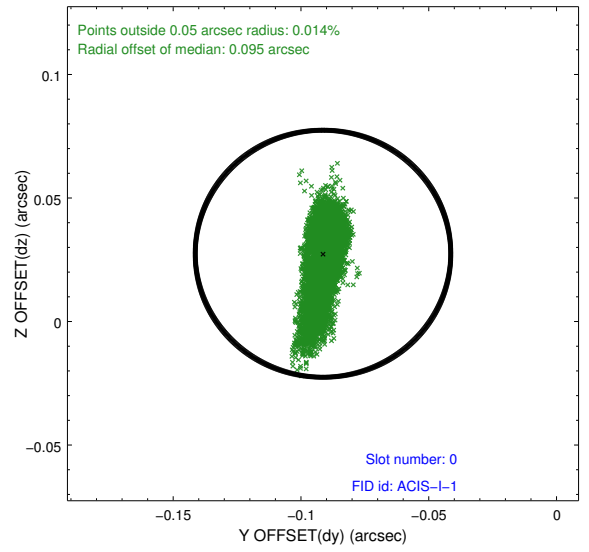
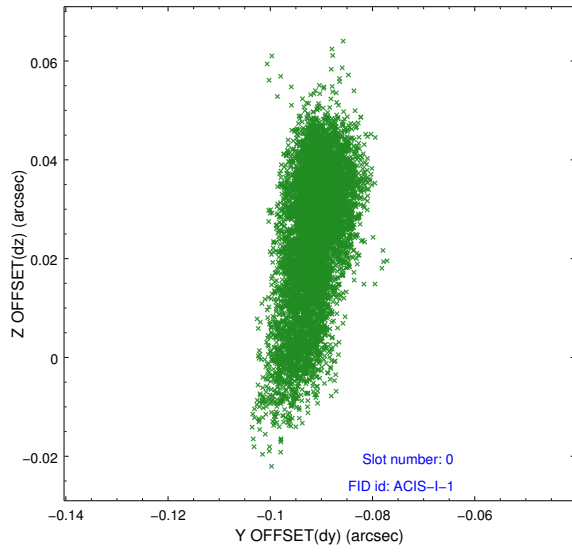


2.4.5 Slot 7

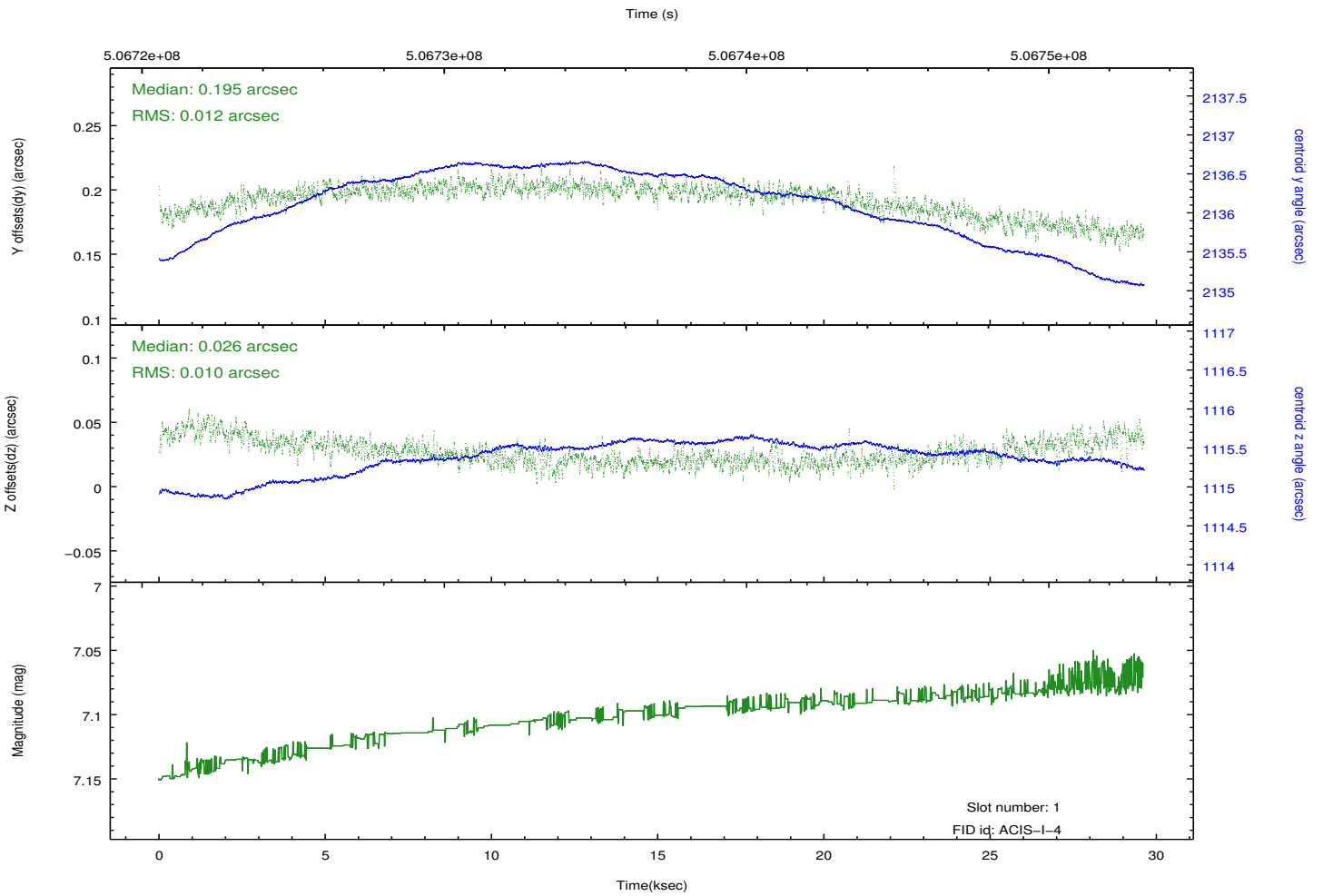
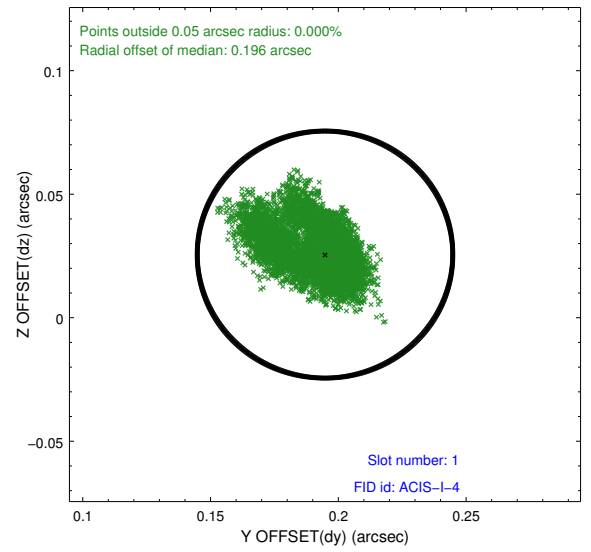
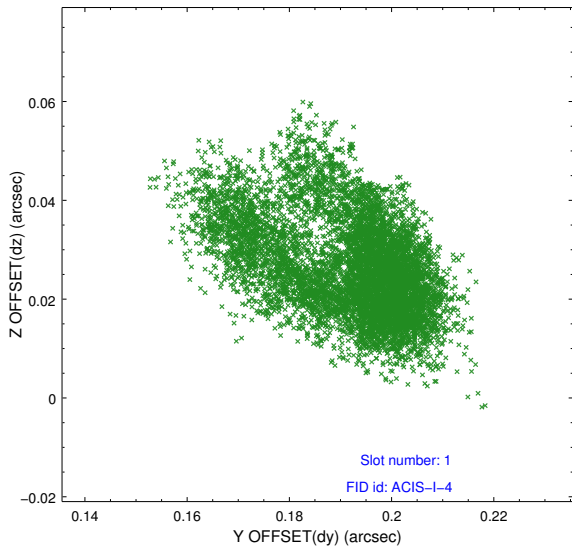


2.5 FID Slots

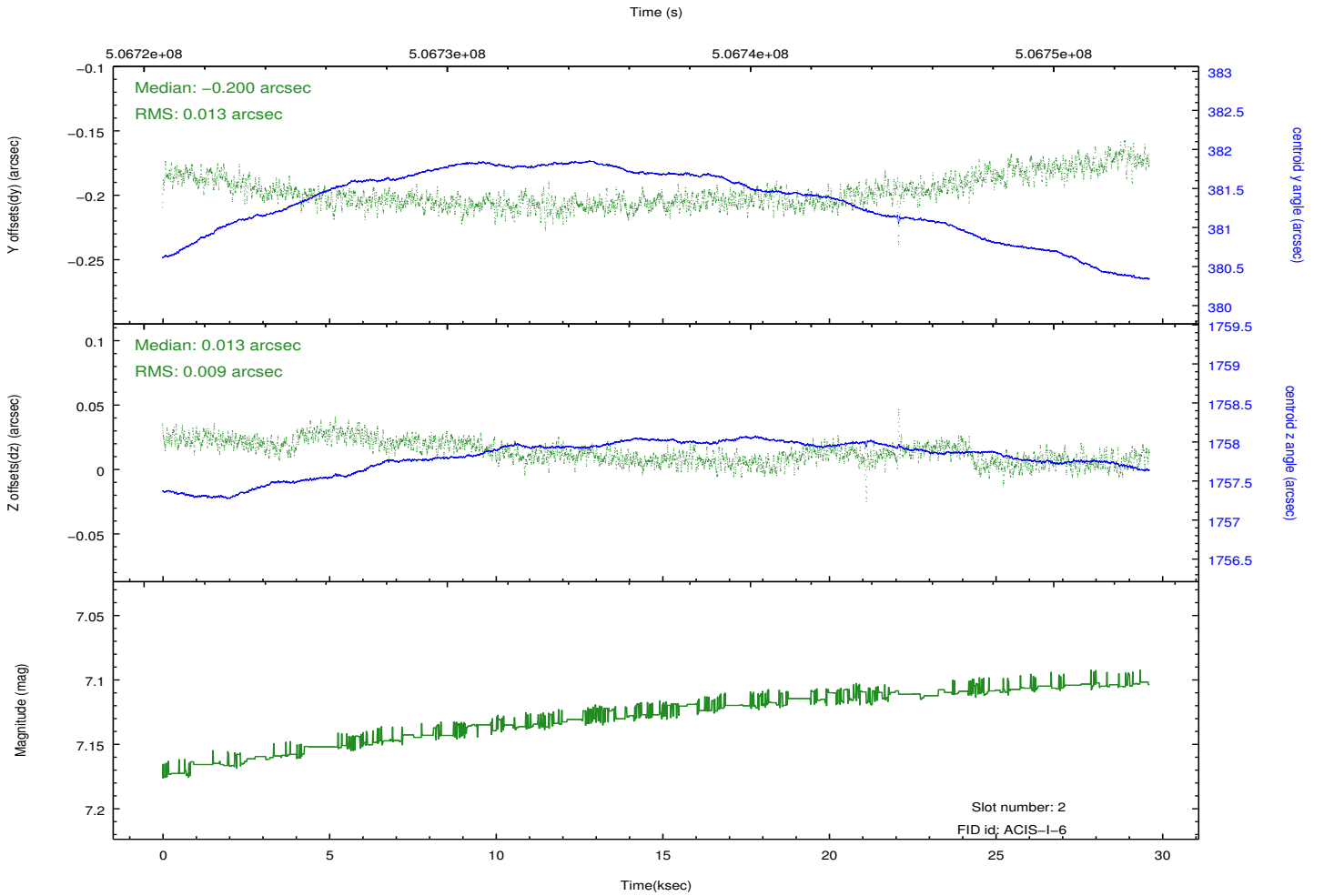
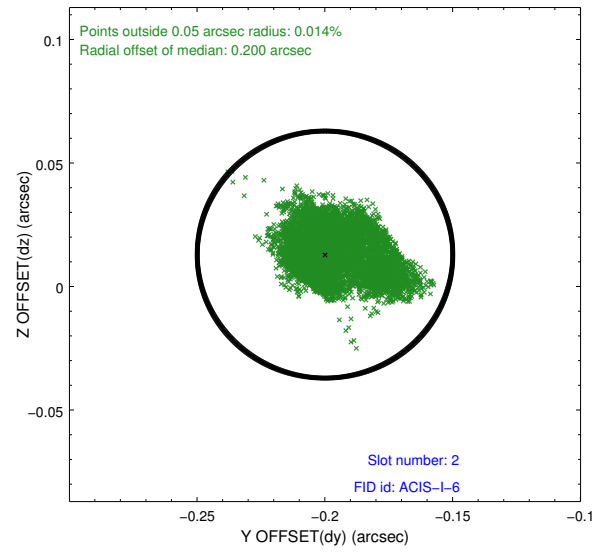
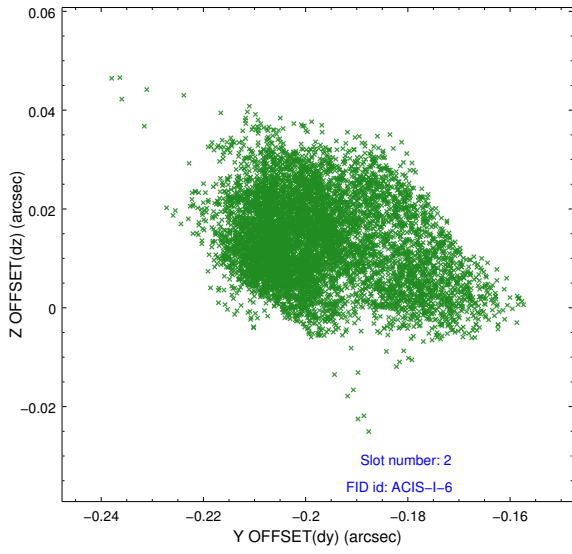
2.5.1 Slot 0



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)	2014.12.16
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	29.586400227547

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.