

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 15056 - L2 Version 2
Chandra X-Ray Center

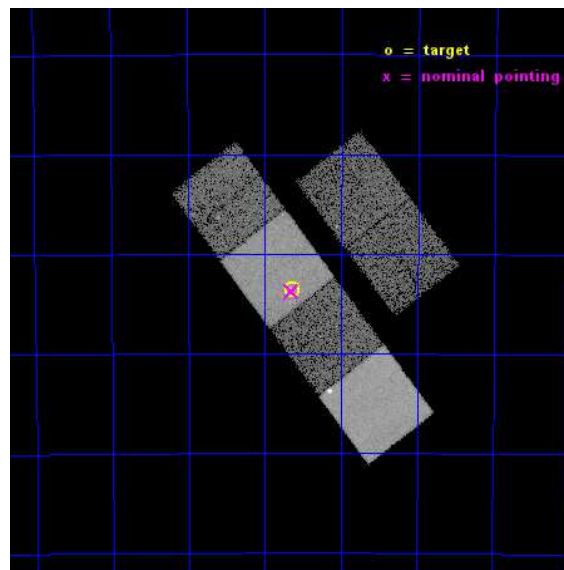
L2 Processing Date : Nov 29 2014

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

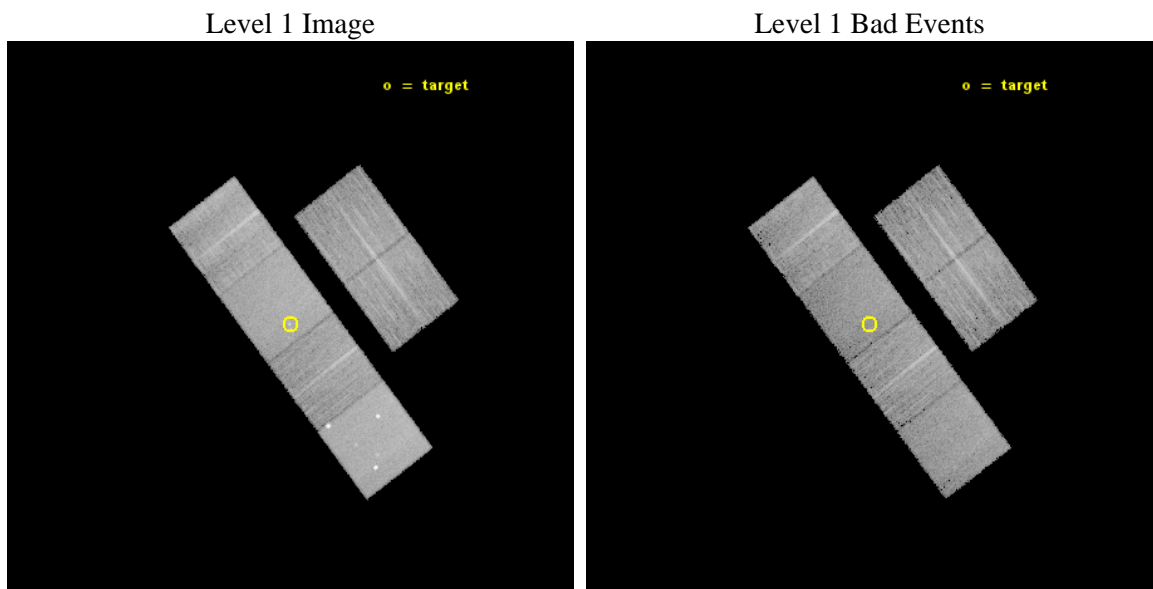
seq_num	702863	Sequence number
obs_id	15056	Observation id
title	C-GOALS: The Chandra-RBGS Survey of a Complete Sample of Major-Merger LIRGs	Proposal title
observer	Professor David Sanders	Principal investigator
object	IC 4687/6	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	273.410833	Observer's specified target RA [deg]
dec_targ	-57.726667	Observer's specified target Dec [deg]
ra_nom	273.41278982645	Nominal RA [deg]
dec_nom	-57.72950410508	Nominal Dec [deg]
roll_nom	232.71921557611	Nominal Roll [deg]
revision	2	Processing version of data
ontime	14668.332212925	Sum of GTIs [s]
livetime	14482.592958236	Livetime [s]
ontime2	14668.373252928	Sum of GTIs [s]
ontime3	14668.209092915	Sum of GTIs [s]
ontime5	14668.291172922	Sum of GTIs [s]
ontime6	14668.250132918	Sum of GTIs [s]
ontime7	14668.332212925	Sum of GTIs [s]
ontime8	14668.168052912	Sum of GTIs [s]
l2events	140220	Number of level 2 events



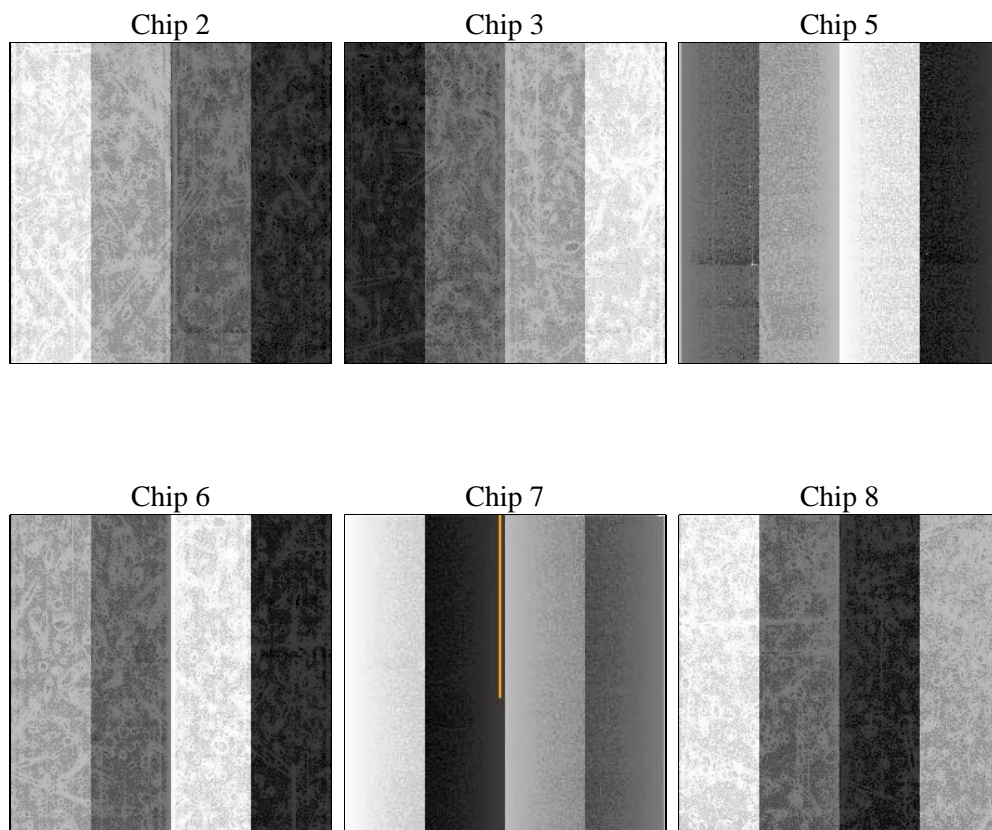
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	14701.719000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	14668.332212925	Sum of GTIs [s]
caldsver	4.6.4	 	ontime2	14668.373252928	Sum of GTIs [s]
date	2014-11-29T14:17:49	Date and time of file creation	ontime3	14668.209092915	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	14668.291172922	Sum of GTIs [s]
			ontime6	14668.250132918	Sum of GTIs [s]
			ontime7	14668.332212925	Sum of GTIs [s]
			ontime8	14668.168052912	Sum of GTIs [s]
			l1events	569359	Number of level 1 events

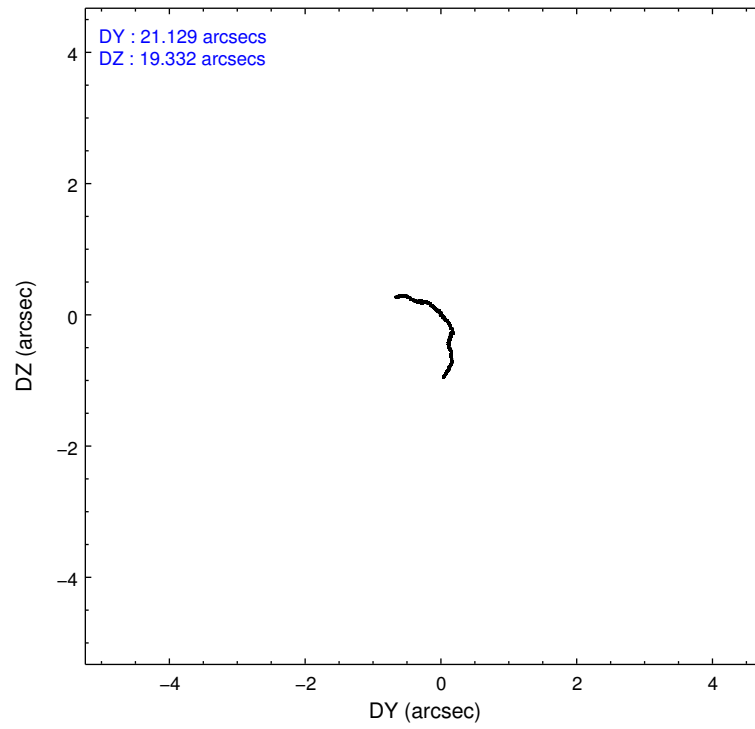
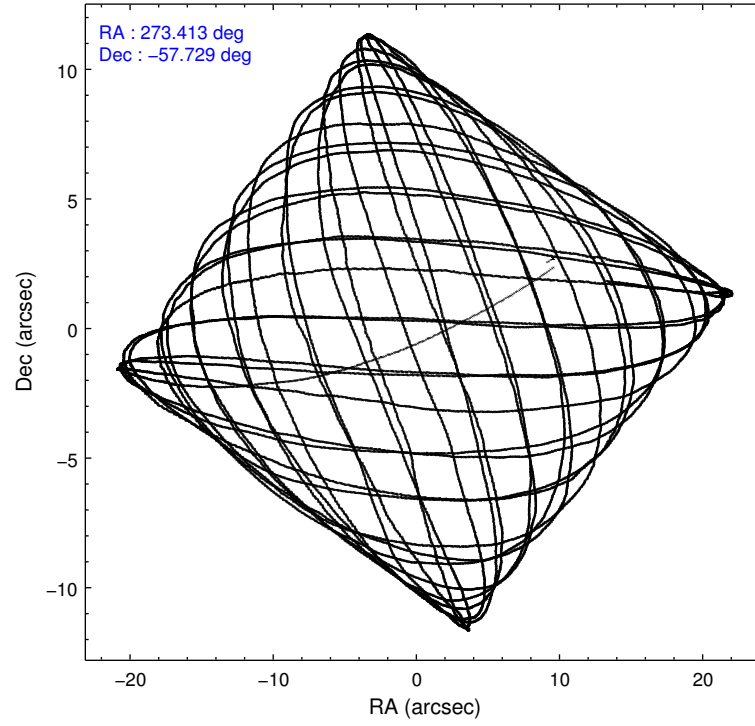
2.1.4 Events

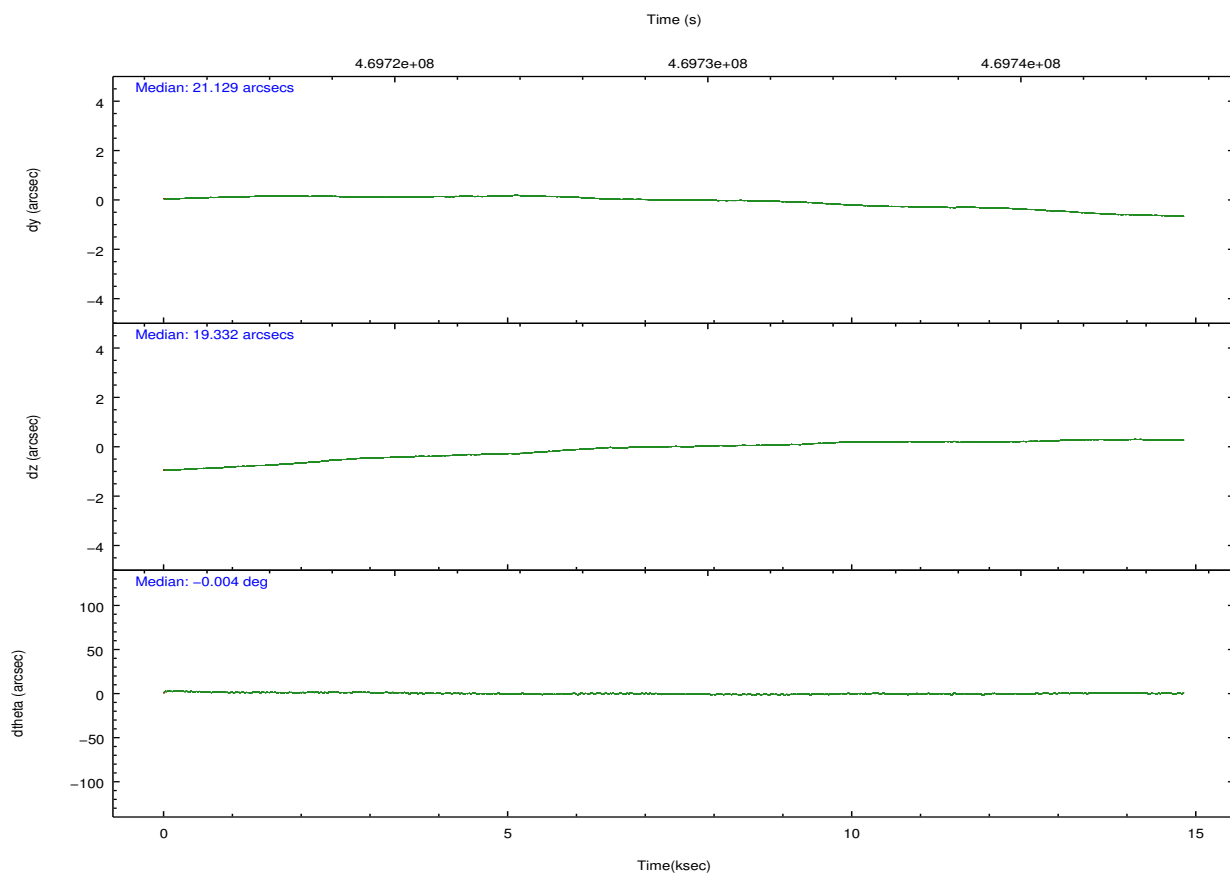
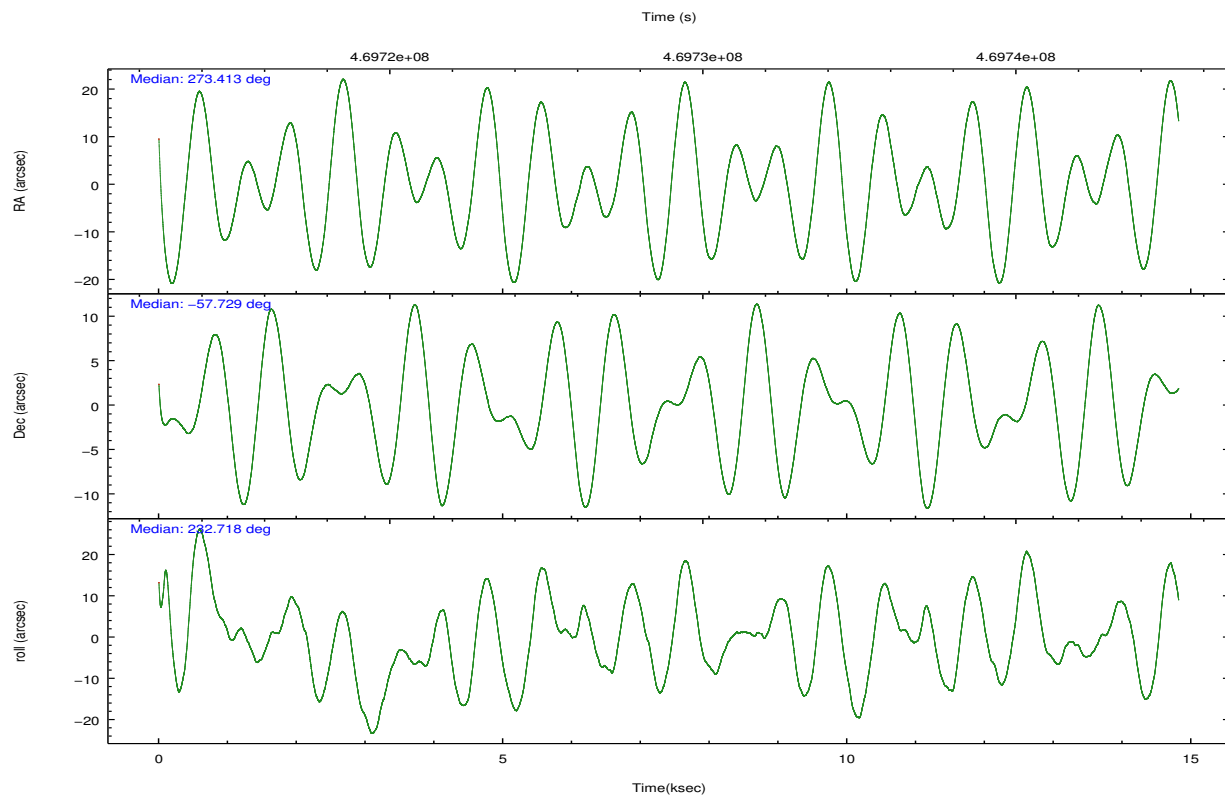
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	77399	74763	132697	77686	104451	102363	grade 0 events	3284	3174	9139	3485	4543	8364
rejected events	68323	66218	65596	68071	57252	75360		4%	4%	6%	4%	4%	8%
rejected %	88%	88%	49%	87%	54%	73%	grade 1 events	47	36	359	43	126	94
								0%	0%	0%	0%	0%	0%
							grade 2 events	2150	1856	19951	2181	9814	6284
								2%	2%	15%	2%	9%	6%
							grade 3 events	872	898	2424	939	4123	2652
								1%	1%	1%	1%	3%	2%
							grade 4 events	954	869	2288	928	3993	2548
								1%	1%	1%	1%	3%	2%
							grade 5 events	3395	3926	9346	3962	10658	5782
								4%	5%	7%	5%	10%	5%
							grade 6 events	1818	1749	33311	2085	24737	7157
								2%	2%	25%	2%	23%	6%
							grade 7 events	64879	62255	55879	64063	46457	69482
								83%	83%	42%	82%	44%	67%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	273.418584	273.4127898264503	CCD I2 on	O2	Y
[deg] Pointing Dec	-57.702339	-57.72950410508016	CCD I3 on	Y	Y
[deg] Pointing Roll	232.567514	232.719215576109	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O1	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.145094680475	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01257209746719923	CCD S4 on	Y	Y
[s] Observation start time (MET)	469722171.184000	469720396.06896	CCD S5 on	N	N
Observation start date	2012-11-19T14:21:44	2012-11-19T13:53:16	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	469736872.184000	469737097.93236	On-chip summing requested	N	N
Observation end date	2012-11-19T18:26:45	2012-11-19T18:31:37	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



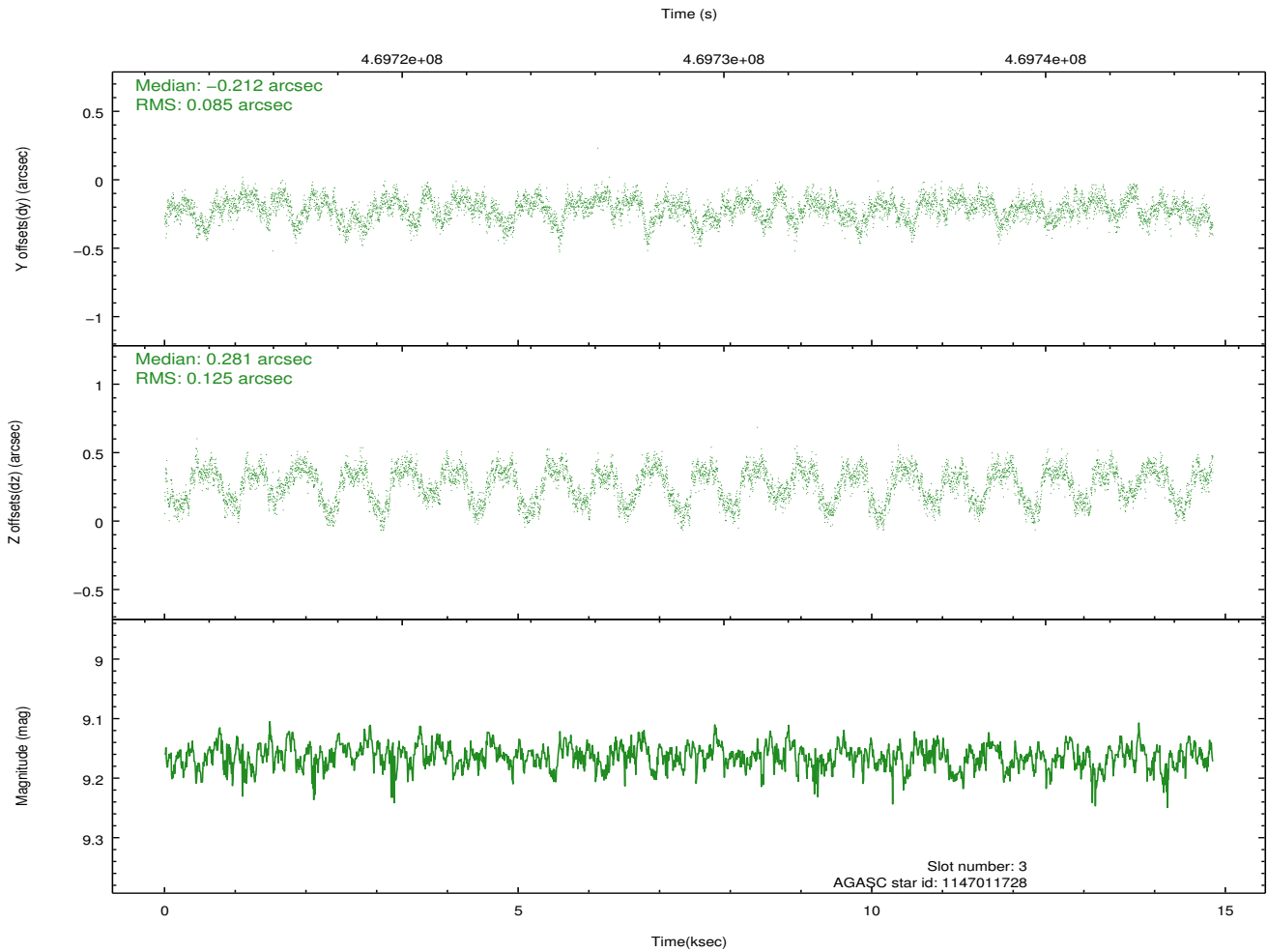
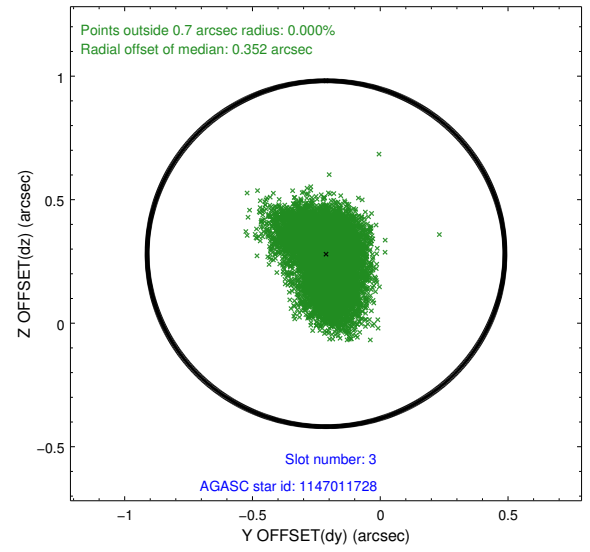
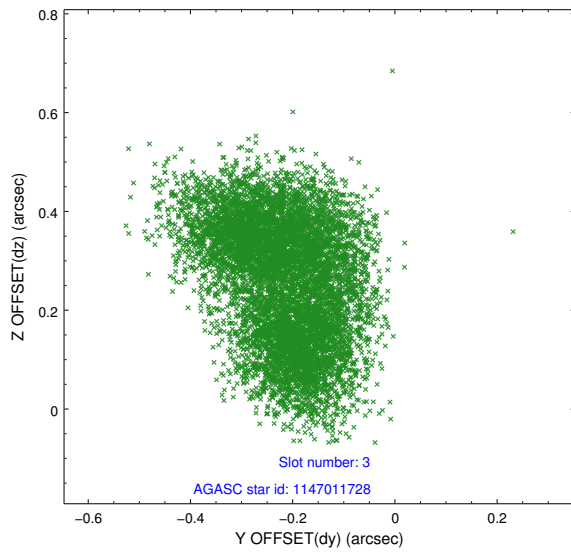


Slot Statistics

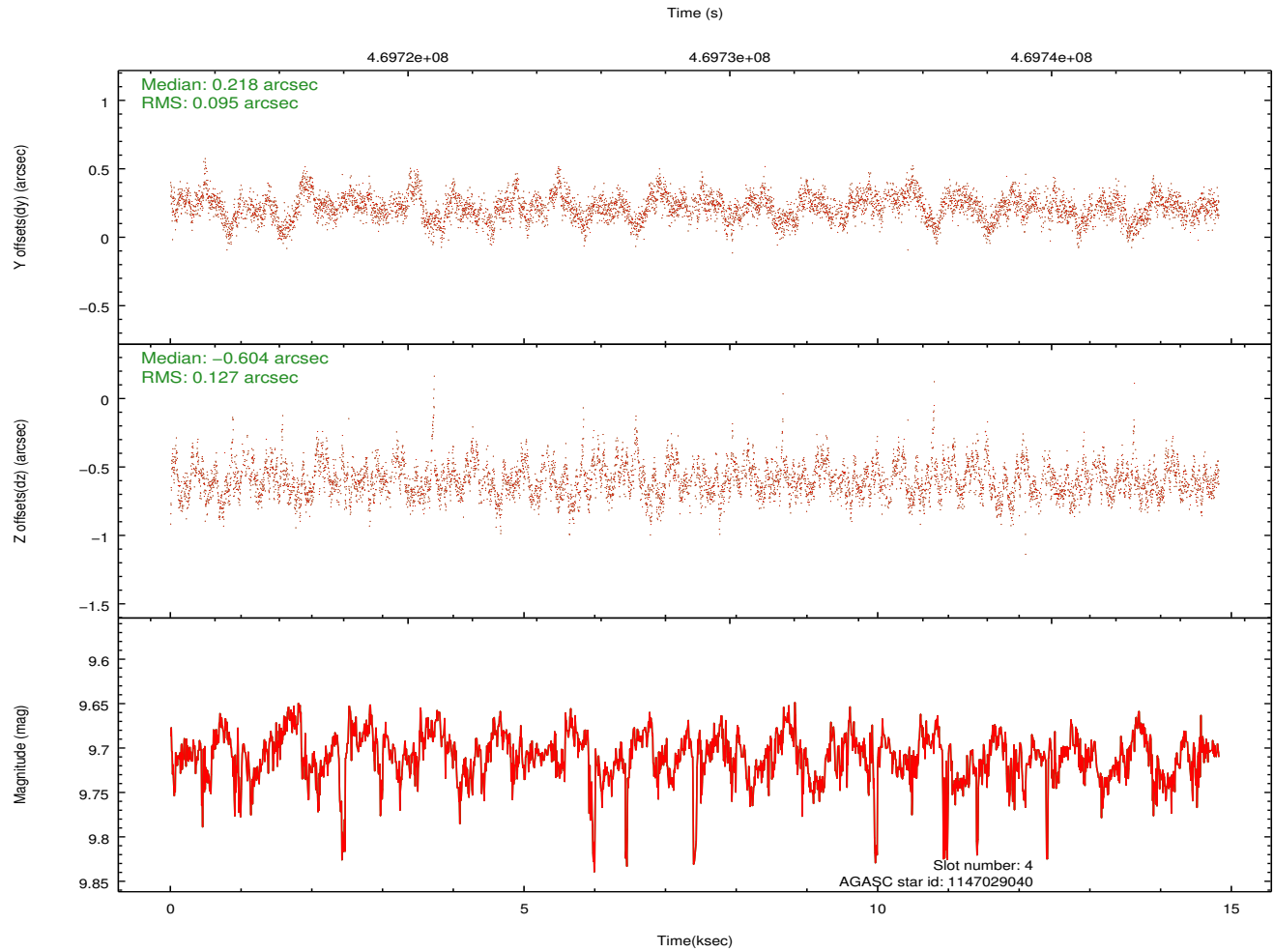
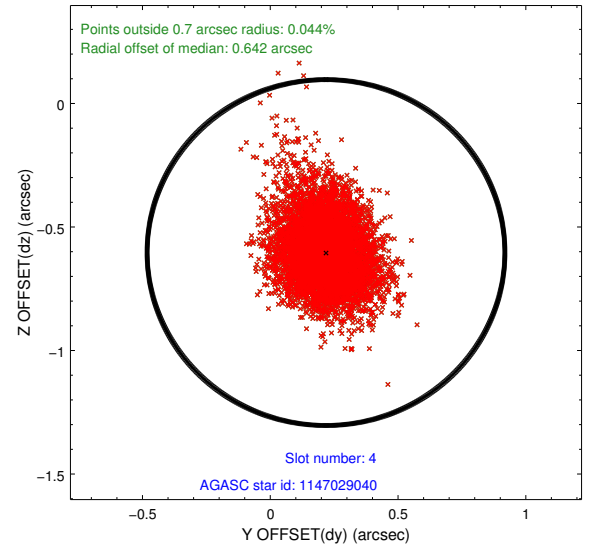
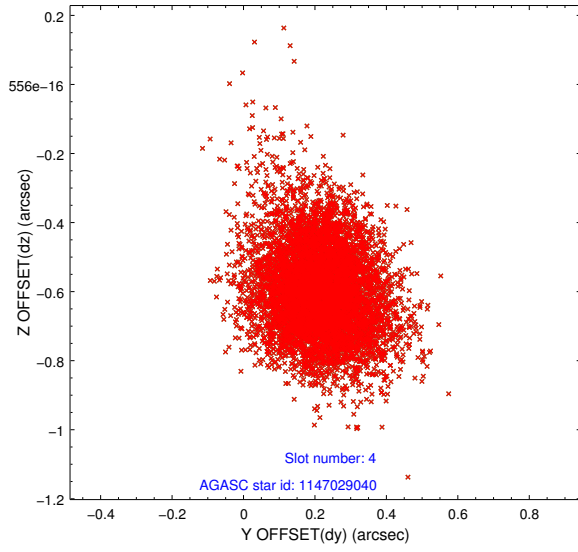
lot	status	used	id	mag	n_pts	med_dy	med_dz	drl	dr2	ra	dec	mean_y	mean_x
0	FID		ACIS-S-2	6.99	3614	-0.118	-0.042	0.015	0.025	0.000000	0.000000	-774.29	-1740.64
1	FID		ACIS-S-4	7.08	3615	0.242	0.068	0.008	0.016	0.000000	0.000000	2139.20	167.63
2	FID		ACIS-S-5	7.11	3615	-0.156	-0.019	0.015	0.026	0.000000	0.000000	-1826.78	161.58
3	GUIDE	used	1147011728	9.16	7222	-0.212	0.281	0.163	0.253	273.288602	-57.895311	702.99	225.33
4	BAD	used	1147029040	9.71	6815	0.218	-0.604	0.164	0.275	273.197850	-57.077881	-1521.25	-1708.34
5	GUIDE	used	1147159720	7.26	7229	-0.017	0.417	0.191	0.314	274.118999	-57.447135	-1548.49	523.74
6	GUIDE	used	1147671848	8.71	7205	0.173	-0.059	0.084	0.138	273.555213	-58.314607	1593.59	1545.28
7	GUIDE	used	1147020848	9.26	7208	-0.130	-0.072	0.141	0.241	271.852157	-57.805612	2149.31	-2138.25

2.4 Star Slots

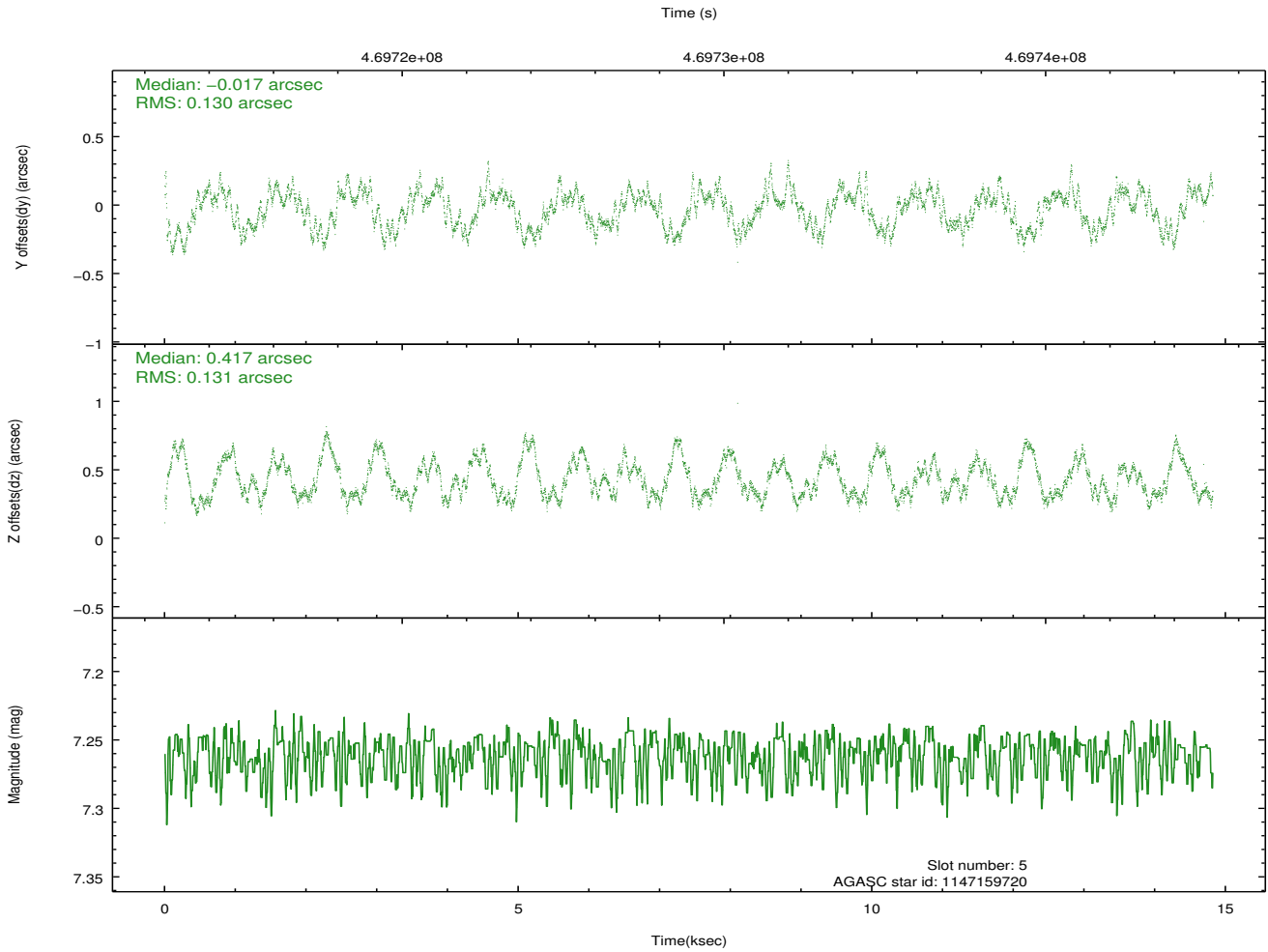
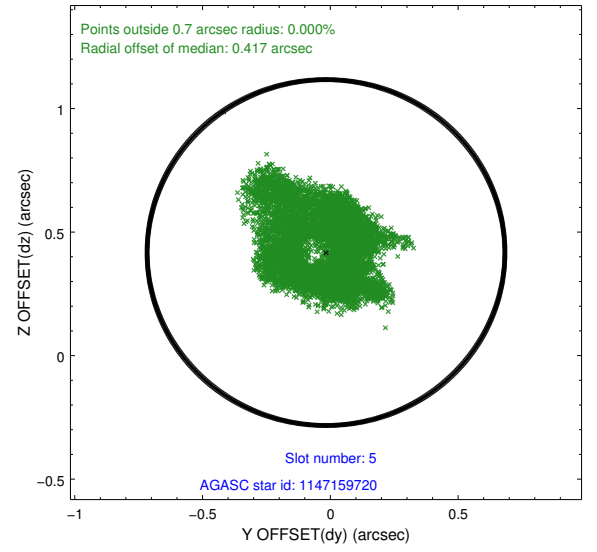
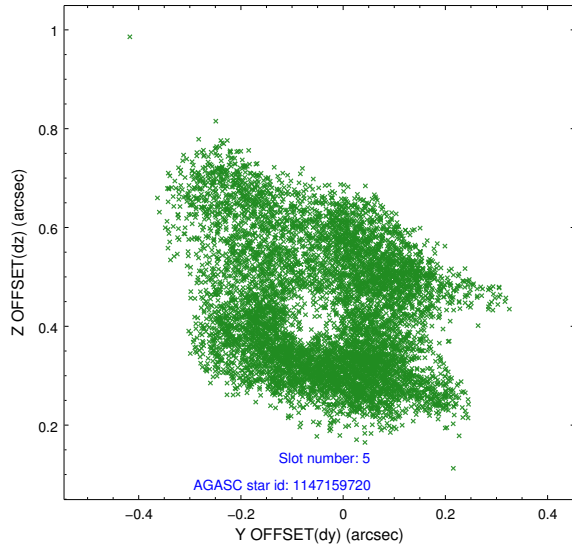
2.4.1 Slot 3



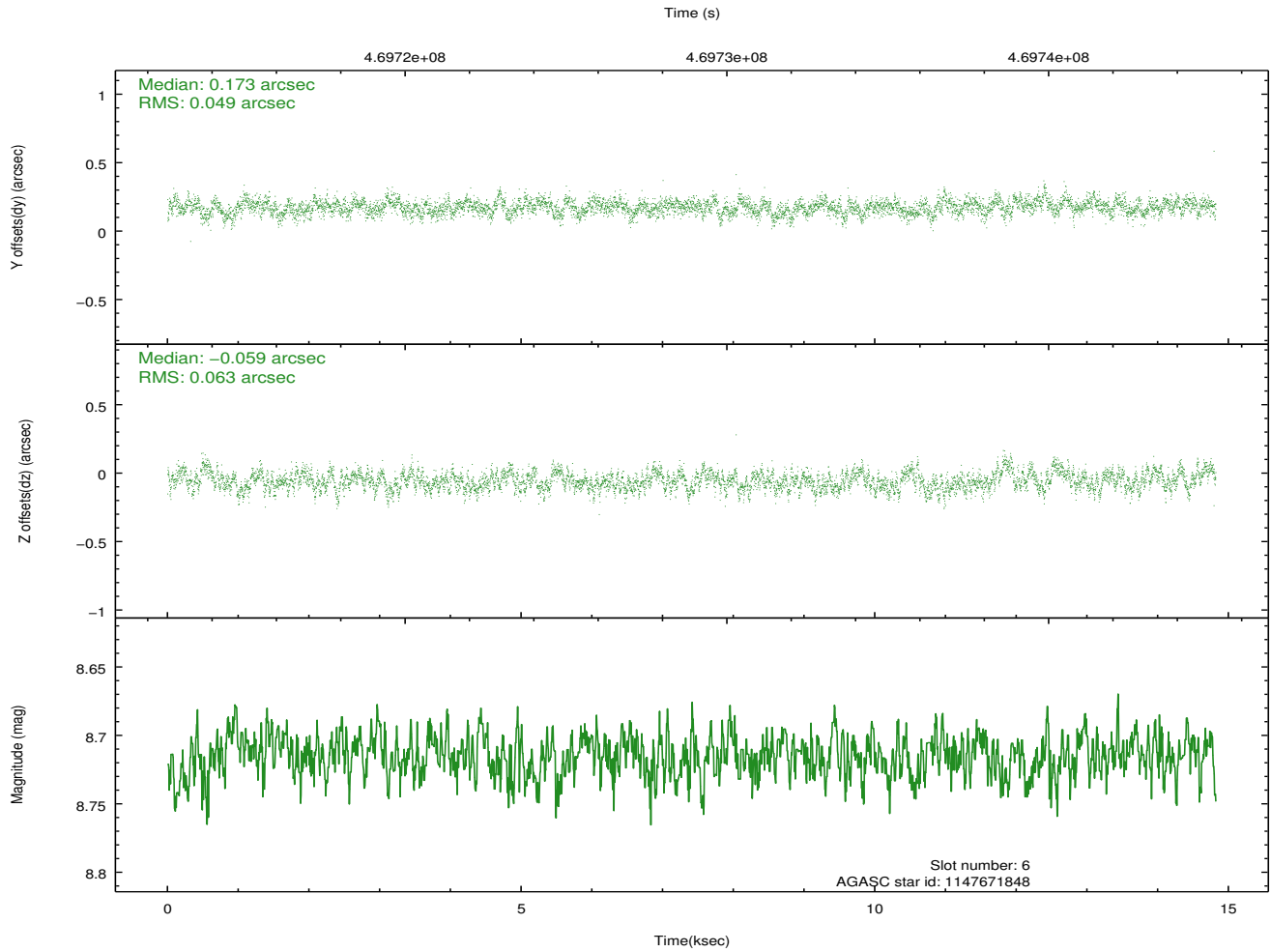
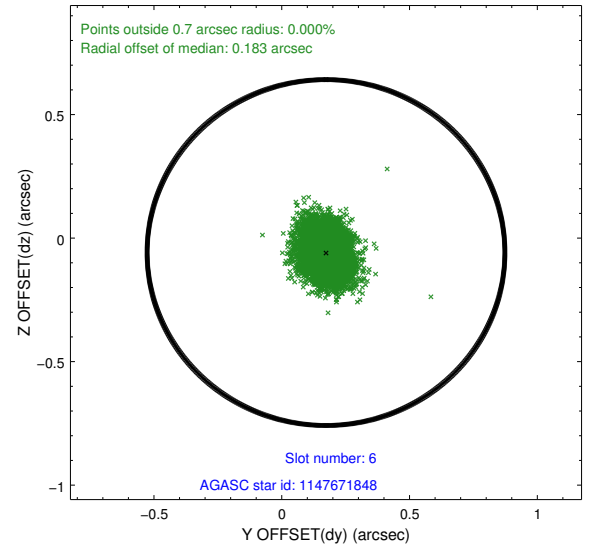
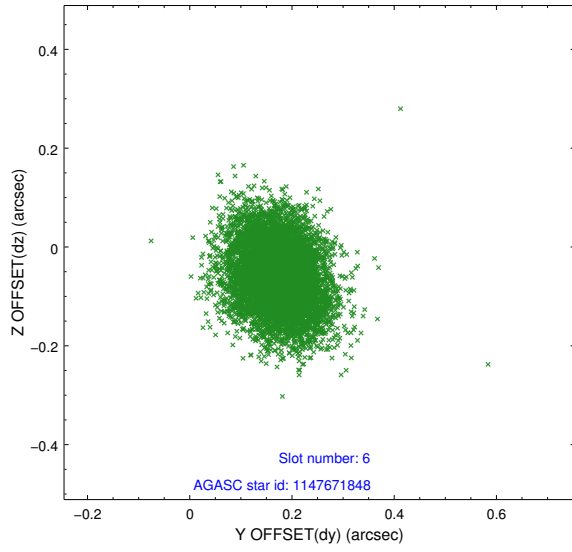
2.4.2 Slot 4



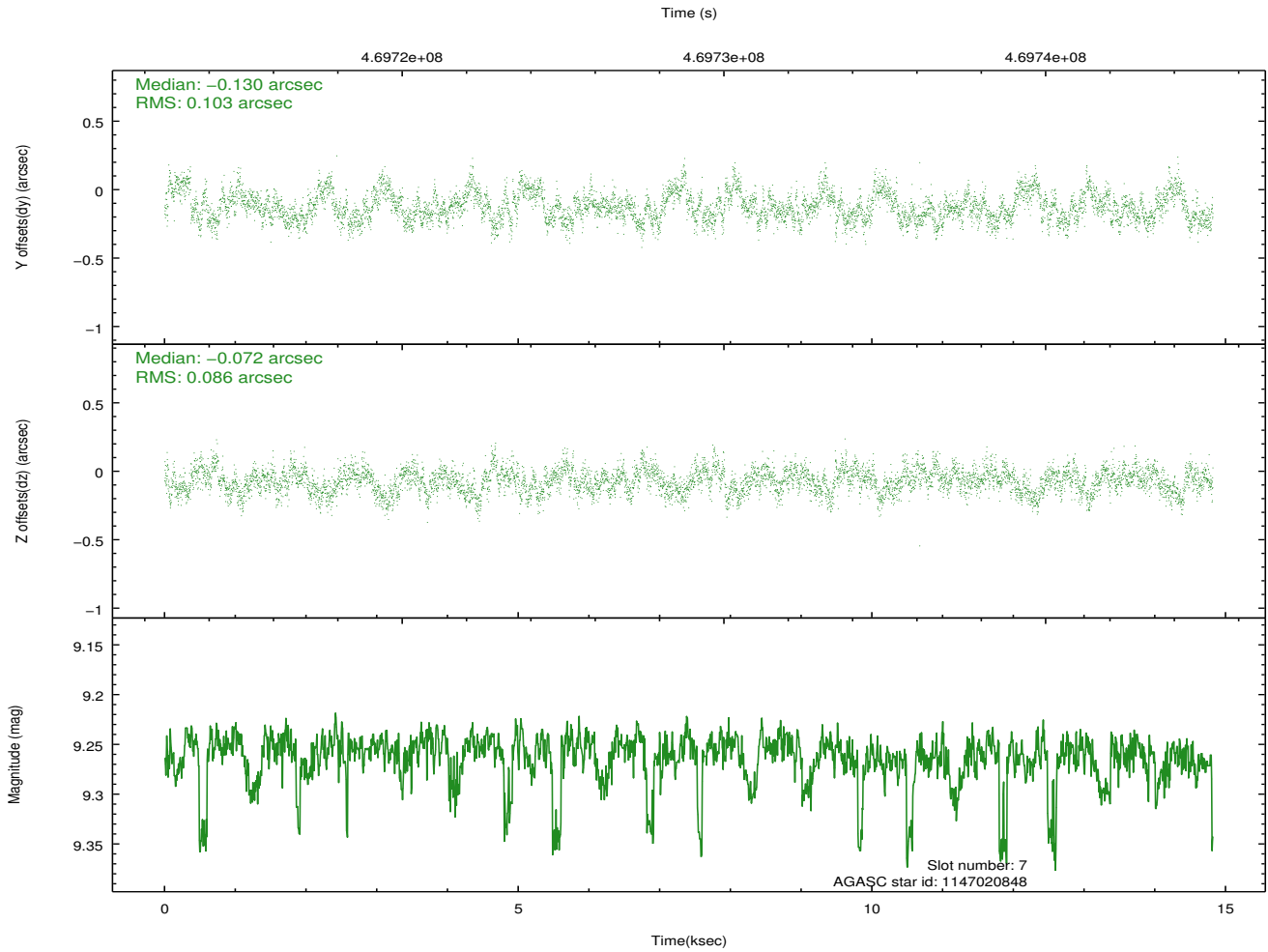
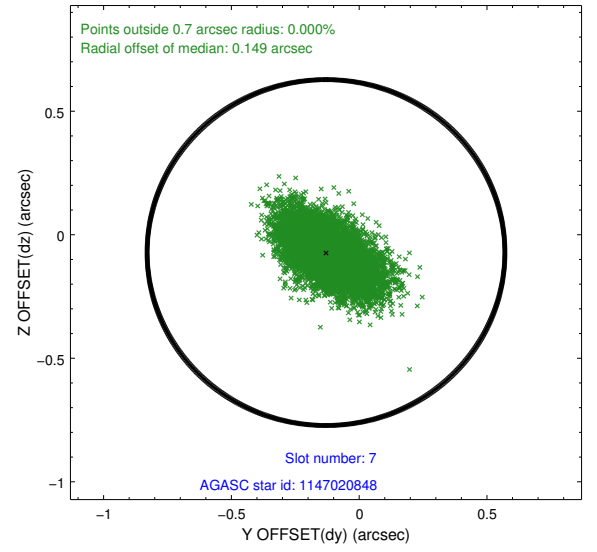
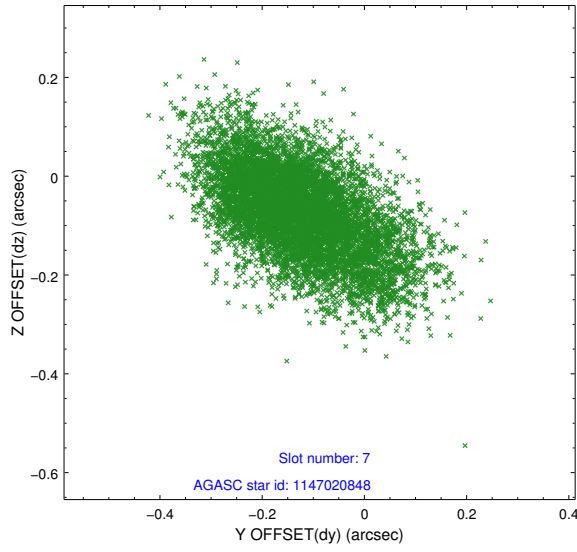
2.4.3 Slot 5



2.4.4 Slot 6

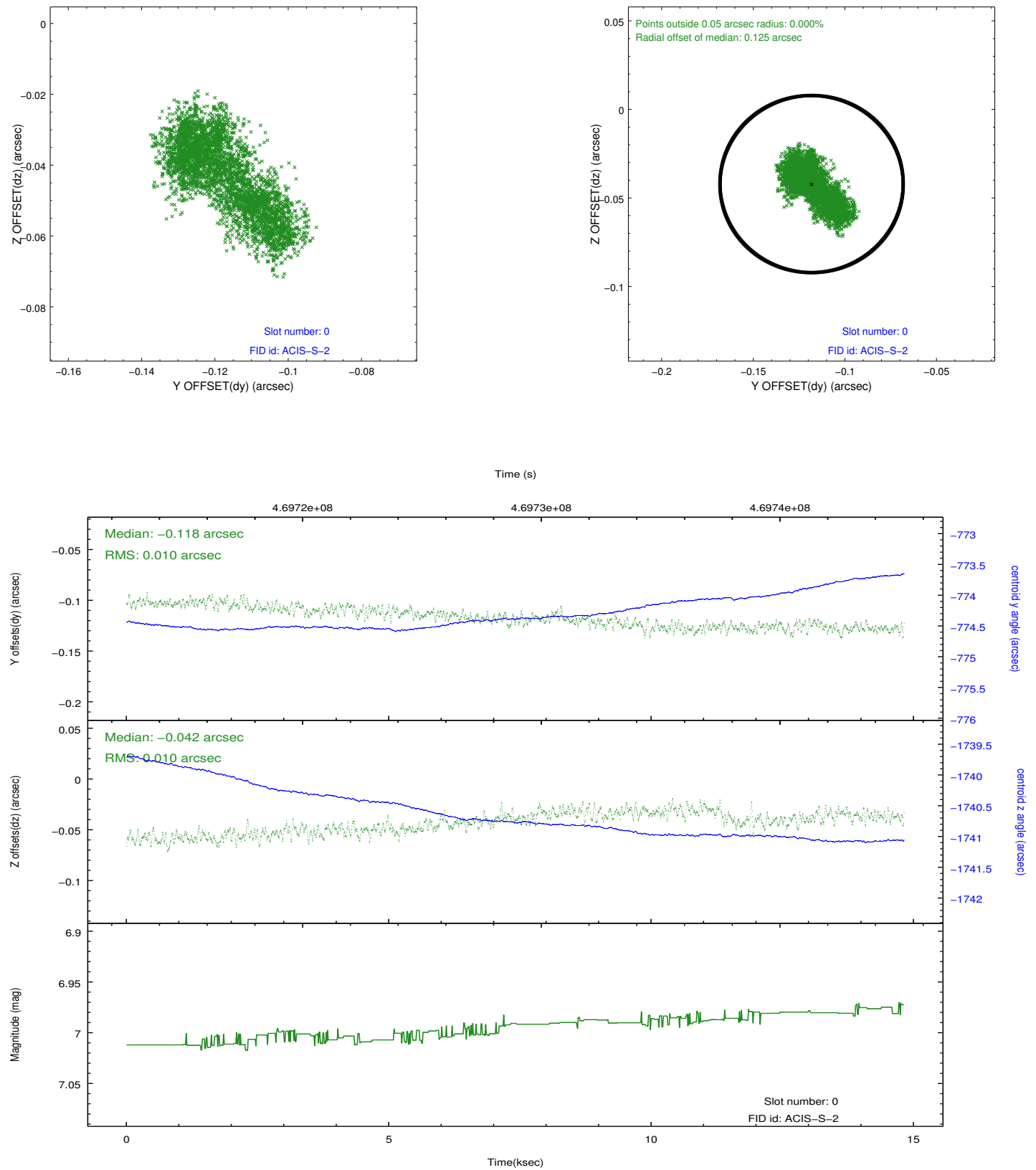


2.4.5 Slot 7

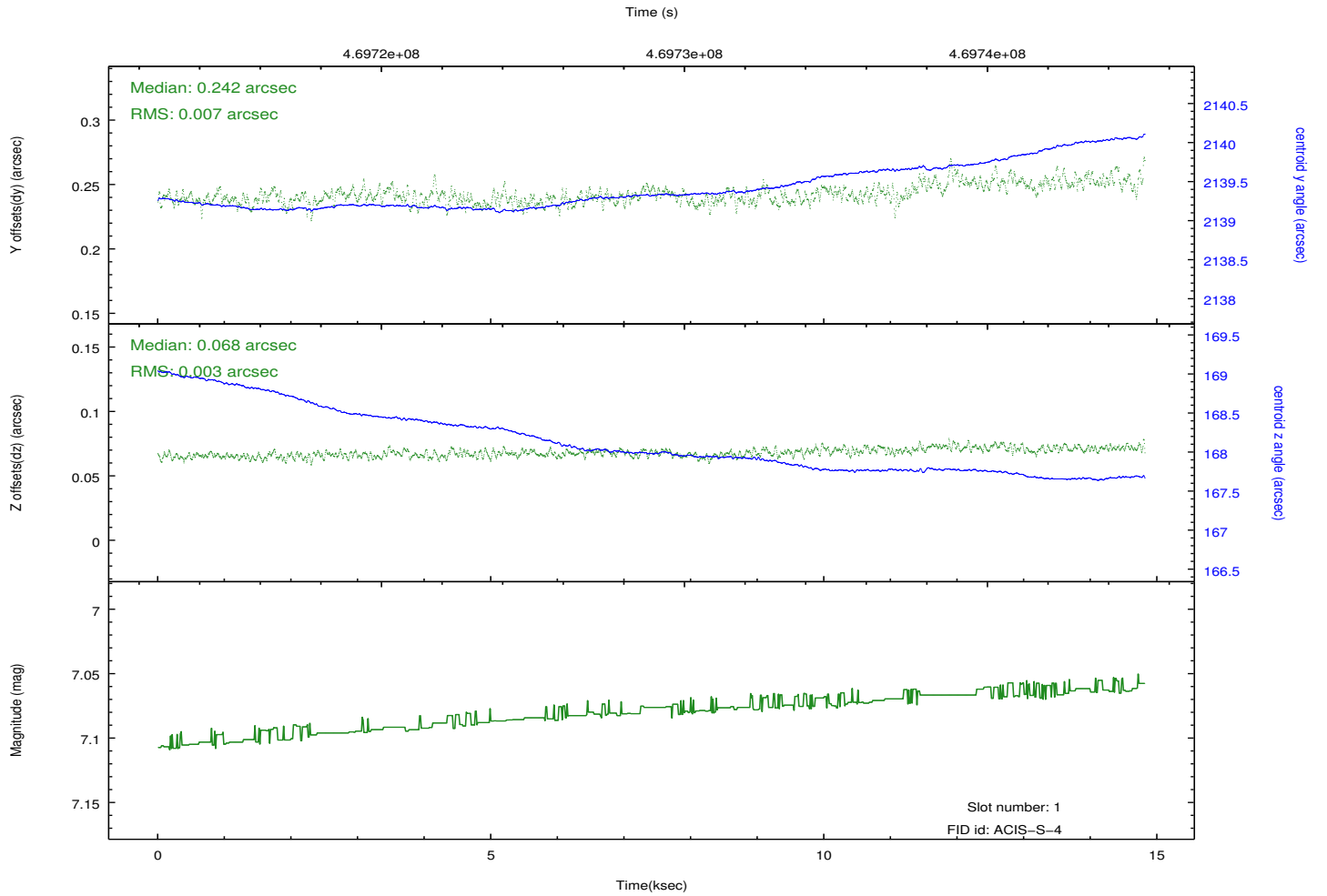
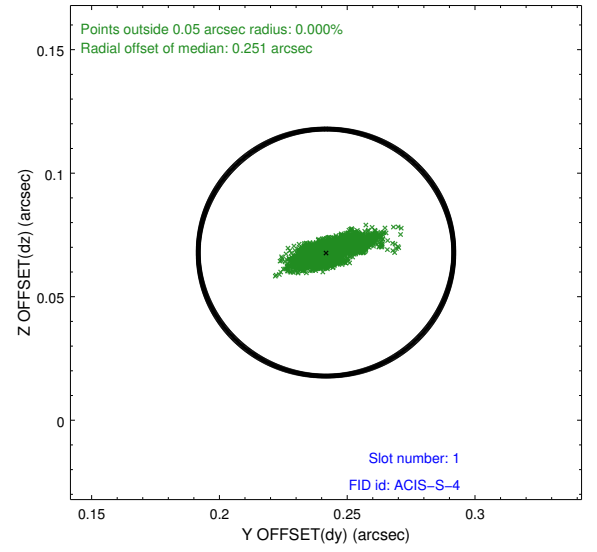
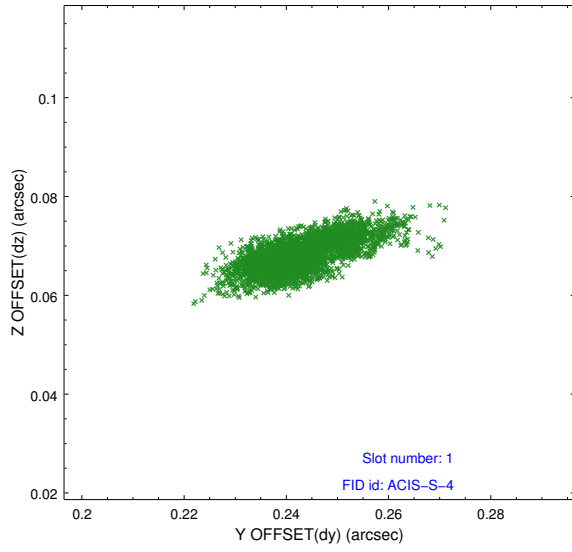


2.5 FID Slots

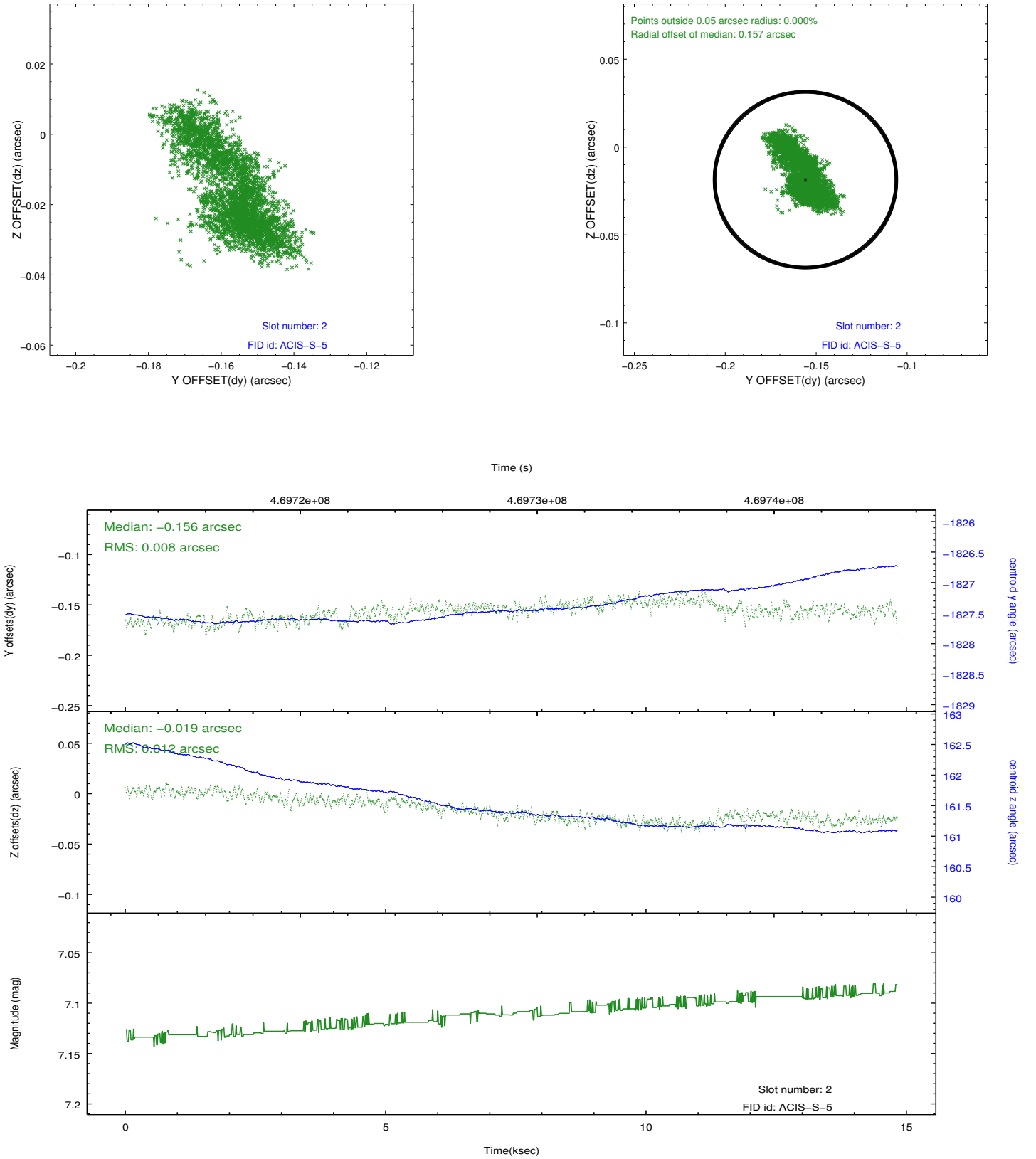
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2014.12.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	14.668332212925

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.