

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 13671 - L2 Version 2
Chandra X-Ray Center

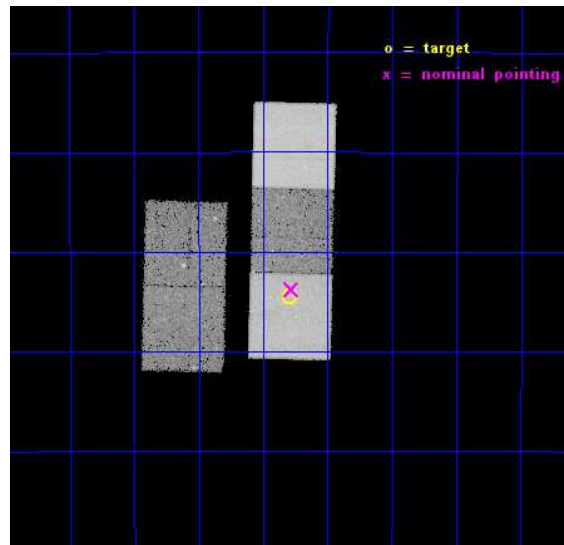
L2 Processing Date : Dec 1 2014

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

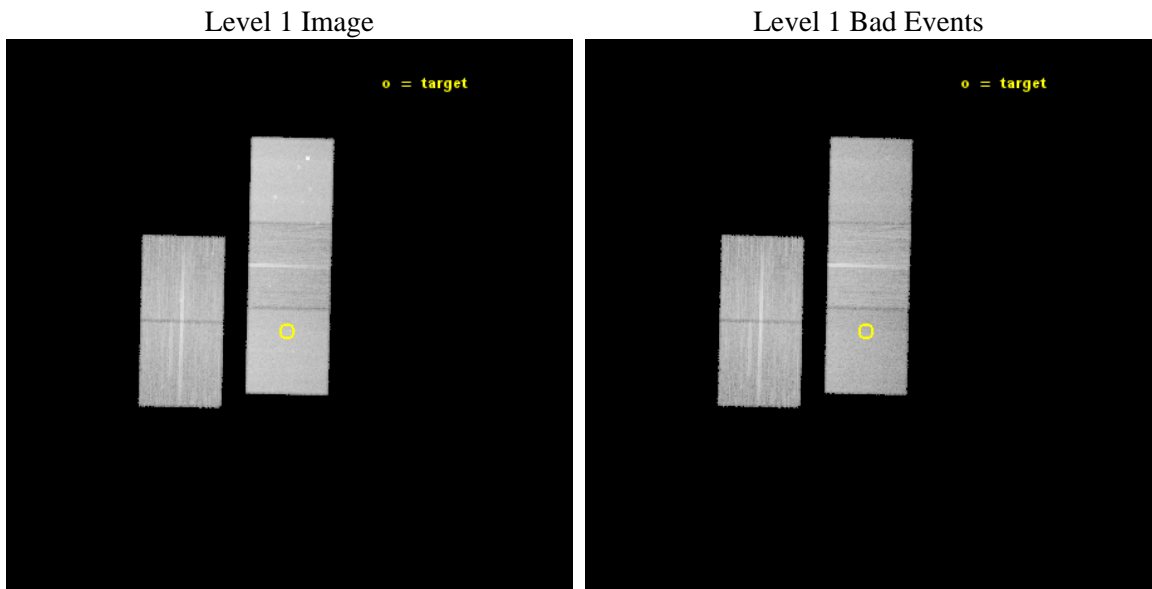
seq_num	300302	Sequence number
obs_id	13671	Observation id
title	Close binary populations in metal-rich globular clusters	Proposal
observer	Prof. Albert Kong	Principal investigator
object	NGC6553	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	272.323333	Observer's specified target RA [deg]
dec_targ	-25.908694	Observer's specified target Dec [deg]
ra_nom	272.32021451643	Nominal RA [deg]
dec_nom	-25.896298292208	Nominal Dec [deg]
roll_nom	91.356508642326	Nominal Roll [deg]
revision	2	Processing version of data
ontime	31964.100245833	Sum of GTIs [s]
livetime	31546.465744493	Livetime [s]
ontime2	31964.100245833	Sum of GTIs [s]
ontime3	31964.100245833	Sum of GTIs [s]
ontime5	31964.100245833	Sum of GTIs [s]
ontime6	31960.959265471	Sum of GTIs [s]
ontime7	31964.100245833	Sum of GTIs [s]
l2events	291598	Number of level 2 events



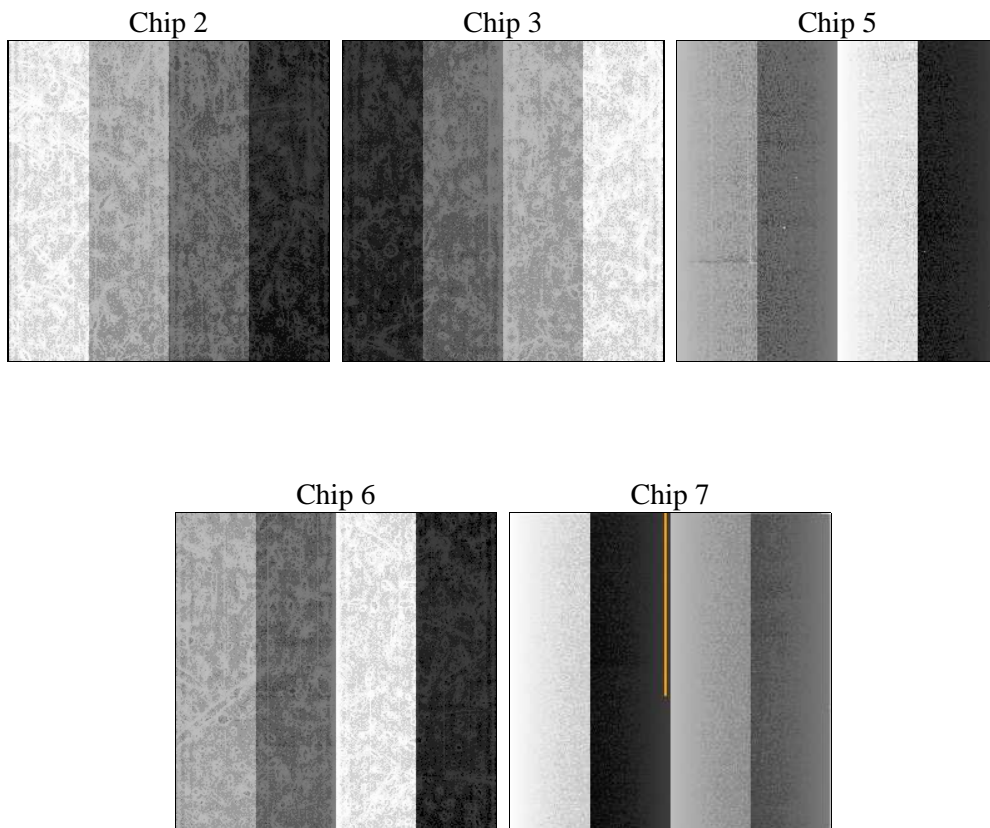
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	31900.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	31964.100245833	Sum of GTIs [s]
caldbver	4.6.4	 	ontime2	31964.100245833	Sum of GTIs [s]
date	2014-12-02T03:11:44	Date and time of file creation	ontime3	31964.100245833	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	31964.100245833	Sum of GTIs [s]
			ontime6	31960.959265471	Sum of GTIs [s]
			ontime7	31964.100245833	Sum of GTIs [s]
			l1events	1038474	Number of level 1 events

2.1.4 Events

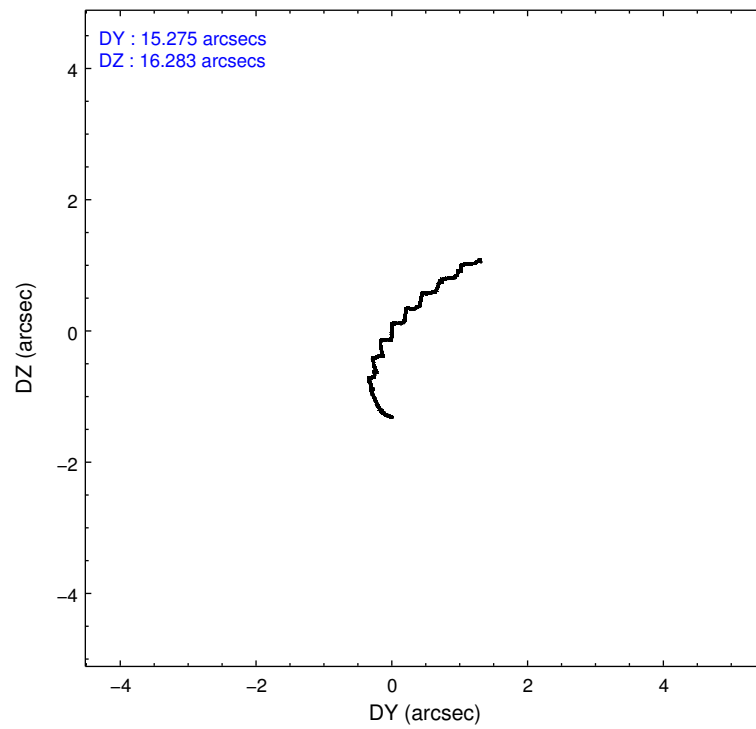
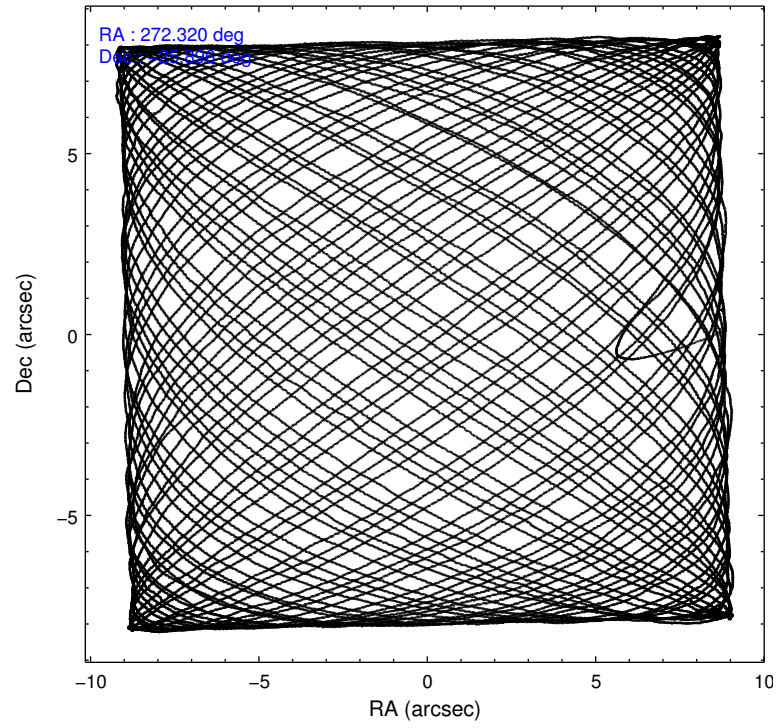
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	174703	166522	282914	179438	234897
rejected events	152765	145560	145425	155822	129520
rejected %	87%	87%	51%	86%	55%

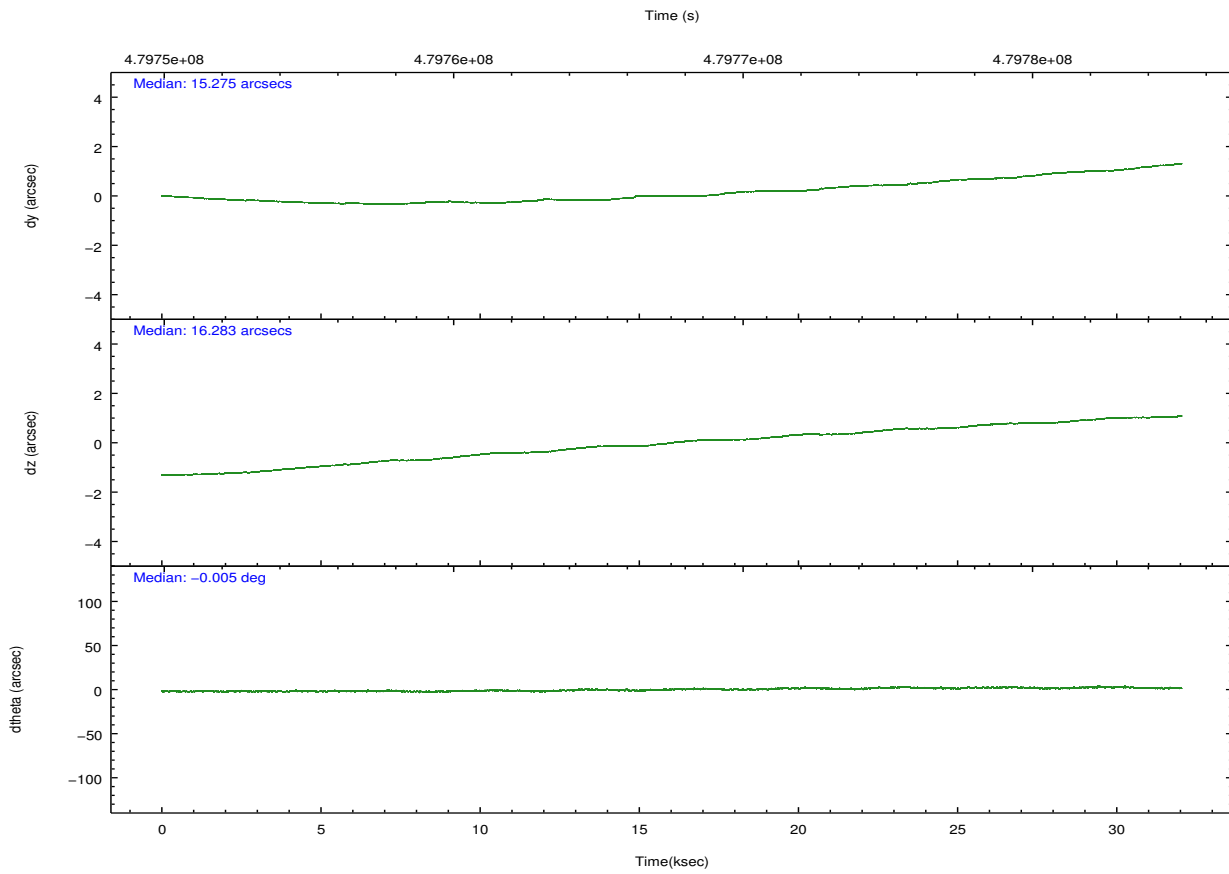
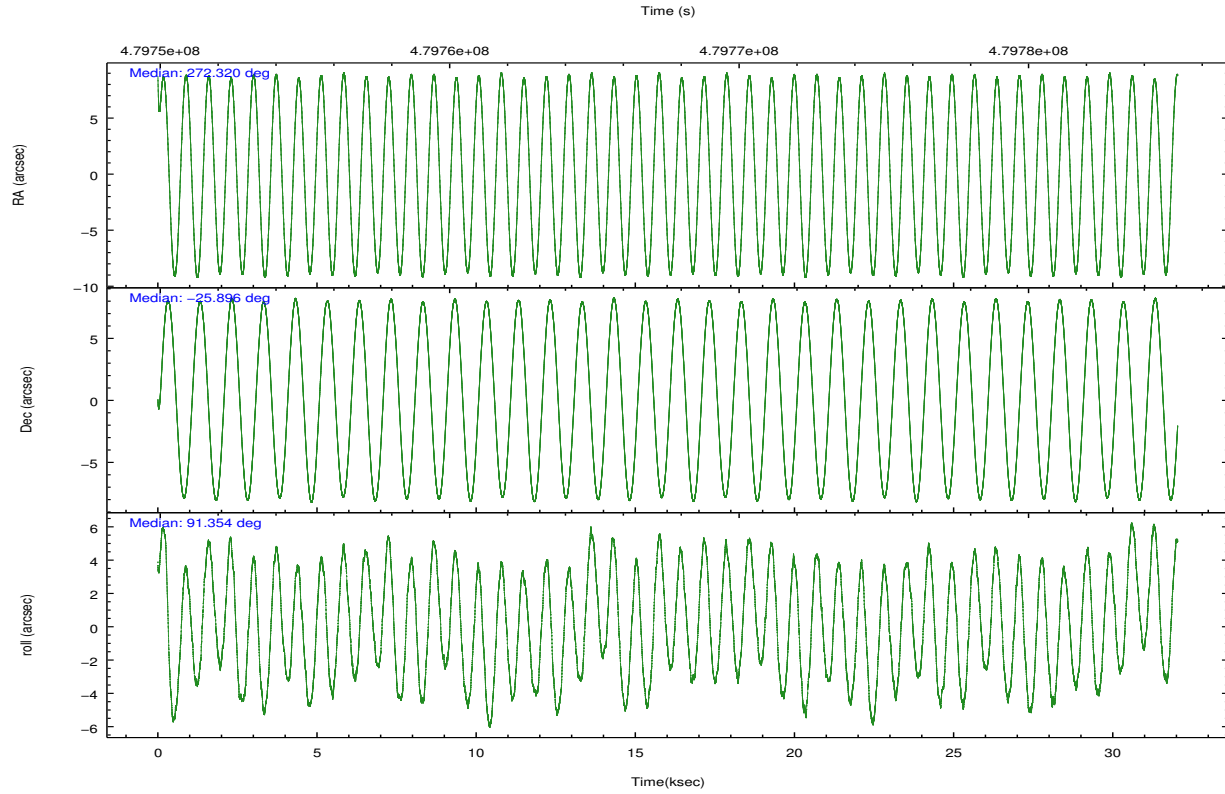
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	8966	8488	10869	9566	10330
	5%	5%	3%	5%	4%
grade 1 events	130	98	620	85	252
	0%	0%	0%	0%	0%
grade 2 events	5065	4217	42630	5060	21851
	2%	2%	15%	2%	9%
grade 3 events	1935	2031	4869	2131	9198
	1%	1%	1%	1%	3%
grade 4 events	2174	2164	4834	2024	9114
	1%	1%	1%	1%	3%
grade 5 events	7036	8594	20383	8677	23548
	4%	5%	7%	4%	10%
grade 6 events	3800	4064	74299	4836	54895
	2%	2%	26%	2%	23%
grade 7 events	145597	136866	124410	147059	105709
	83%	82%	43%	81%	45%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23567	ACIS-23567	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	272.336377	272.320214516427	CCD I2 on	O1	Y
[deg] Pointing Dec	-25.919446	-25.89629829220785	CCD I3 on	O2	Y
[deg] Pointing Roll	91.206946	91.35650864232592	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	N	N
[s] Observation start time (MET)	479751659.184000	479750629.94748	CCD S5 on	N	N
Observation start date	2013-03-15T16:19:52	2013-03-15T16:03:49	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	479783559.184000	479783773.32427	On-chip summing requested	N	N
Observation end date	2013-03-16T01:11:32	2013-03-16T01:16:13	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





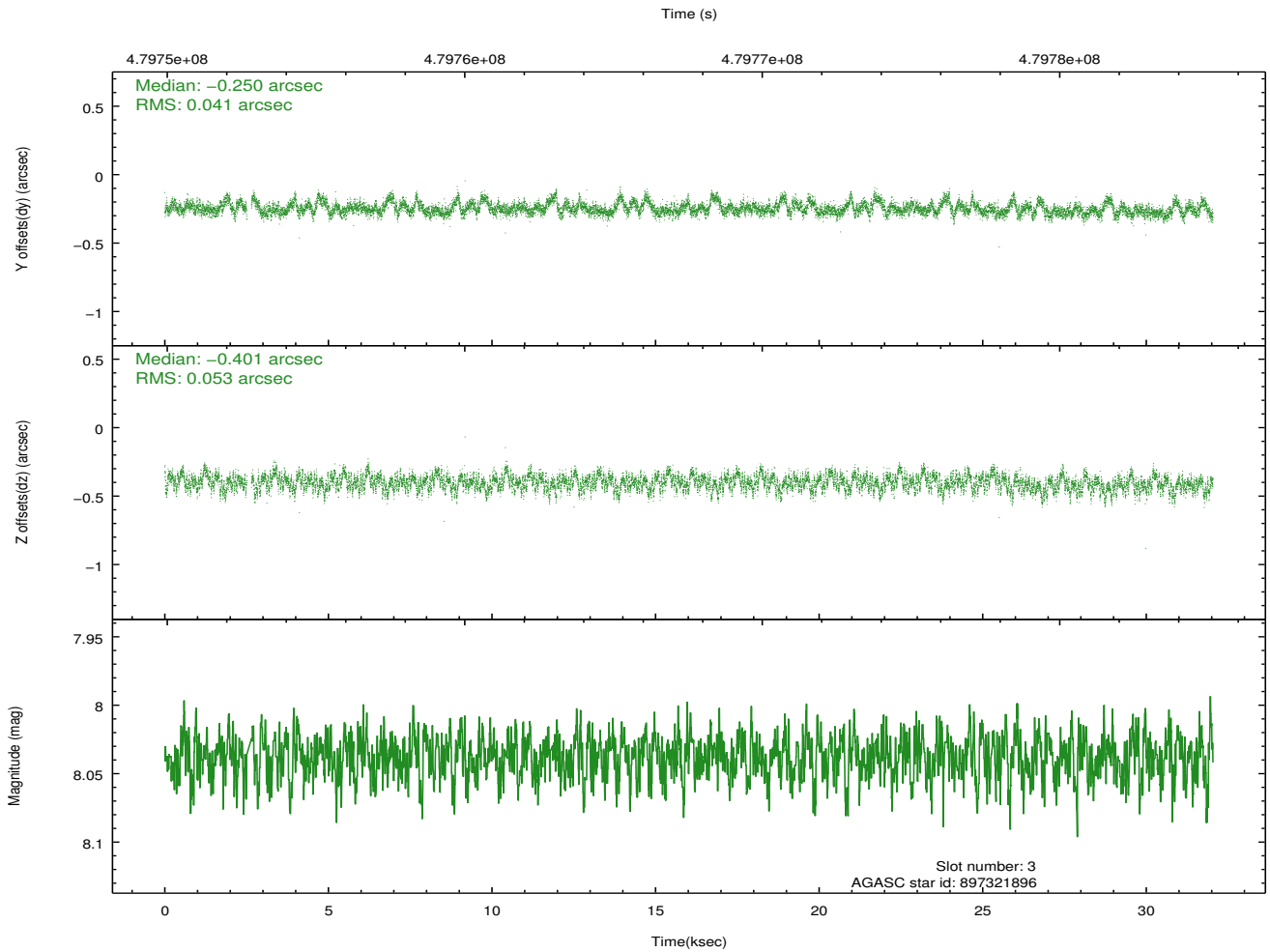
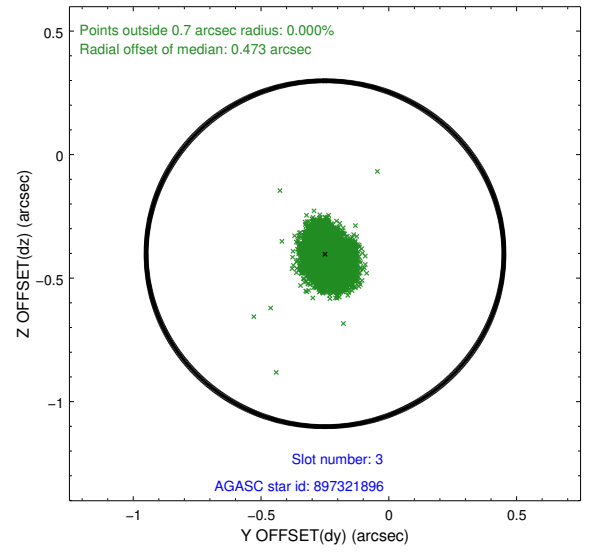
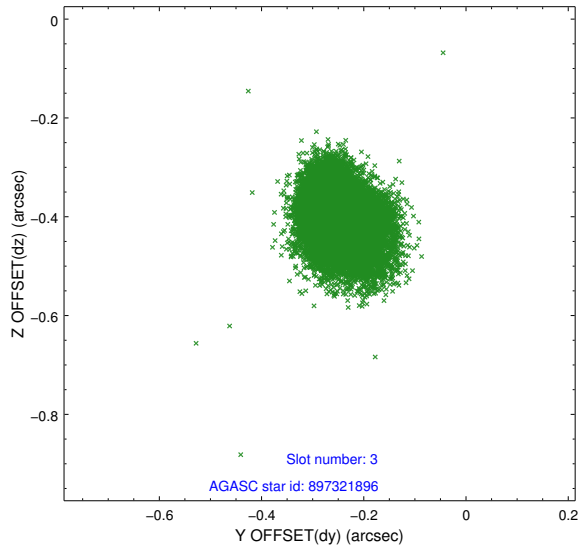
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-1	7.10	7813	0.041	-0.072	0.024	0.037	0.000000	0.000000	927.62	-1733.28
1	FID		ACIS-S-4	7.12	7813	0.175	0.035	0.023	0.047	0.000000	0.000000	2145.19	170.92
2	FID		ACIS-S-5	7.14	7814	-0.242	0.053	0.015	0.022	0.000000	0.000000	-1821.46	164.59
3	GUIDE	used	897321896	8.04	15558	-0.250	-0.401	0.070	0.115	271.639414	-25.476837	1634.06	2230.44
4	GUIDE	used	897328024	8.35	15622	-0.072	-0.188	0.065	0.105	272.030000	-25.349450	2071.58	953.57
5	GUIDE	used	897452472	8.55	15613	0.256	0.366	0.078	0.125	272.897639	-26.119105	-760.06	-1798.06
6	GUIDE	used	897465768	7.84	15627	-0.282	0.236	0.053	0.087	272.486247	-25.285827	2269.87	-535.44
7	GUIDE	used	898027632	7.97	15599	0.341	-0.011	0.060	0.100	272.207016	-26.554933	-2278.18	464.84

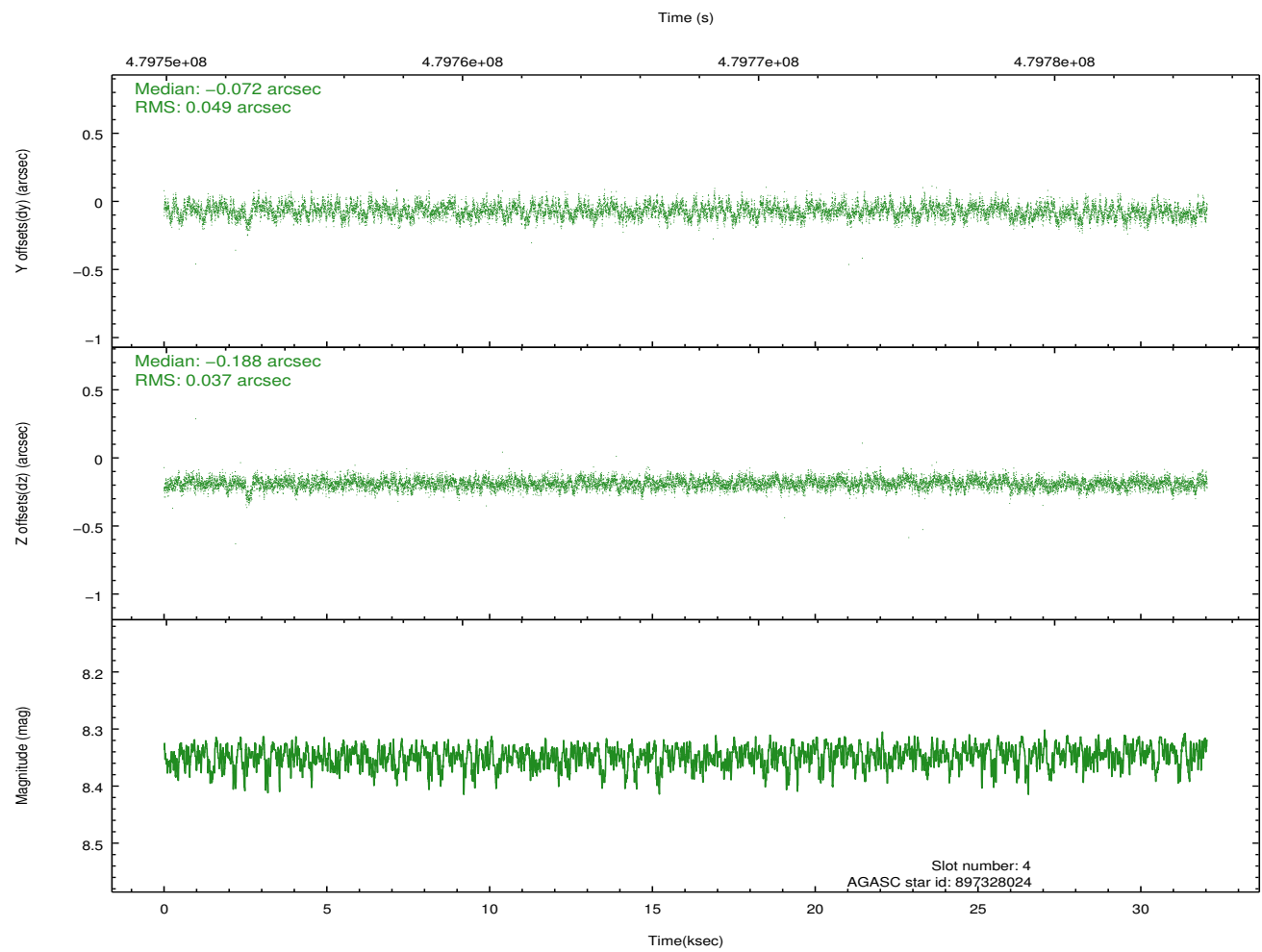
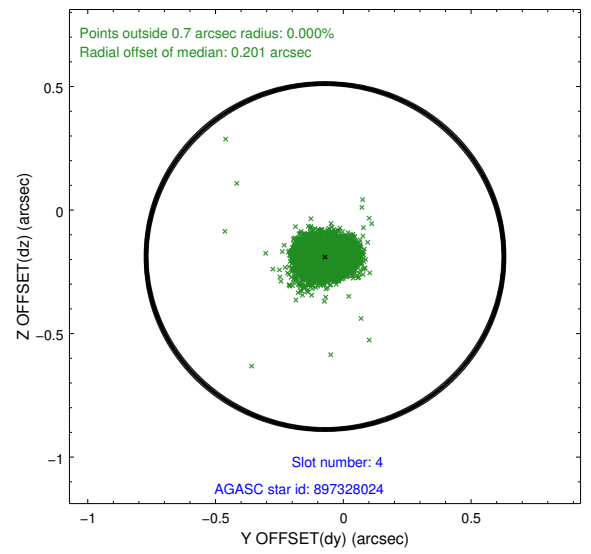
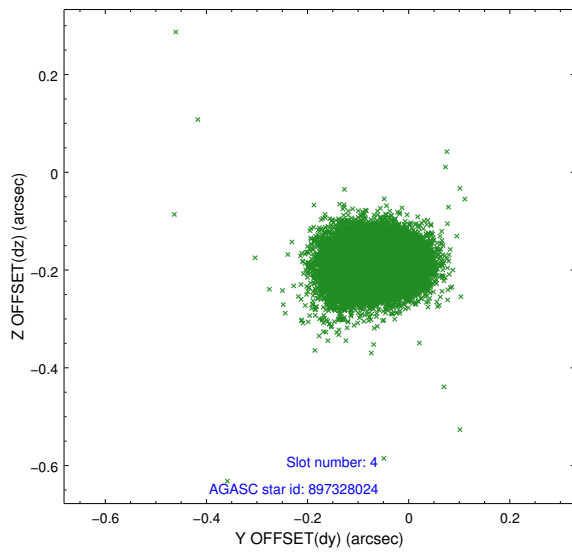
∞

2.4 Star Slots

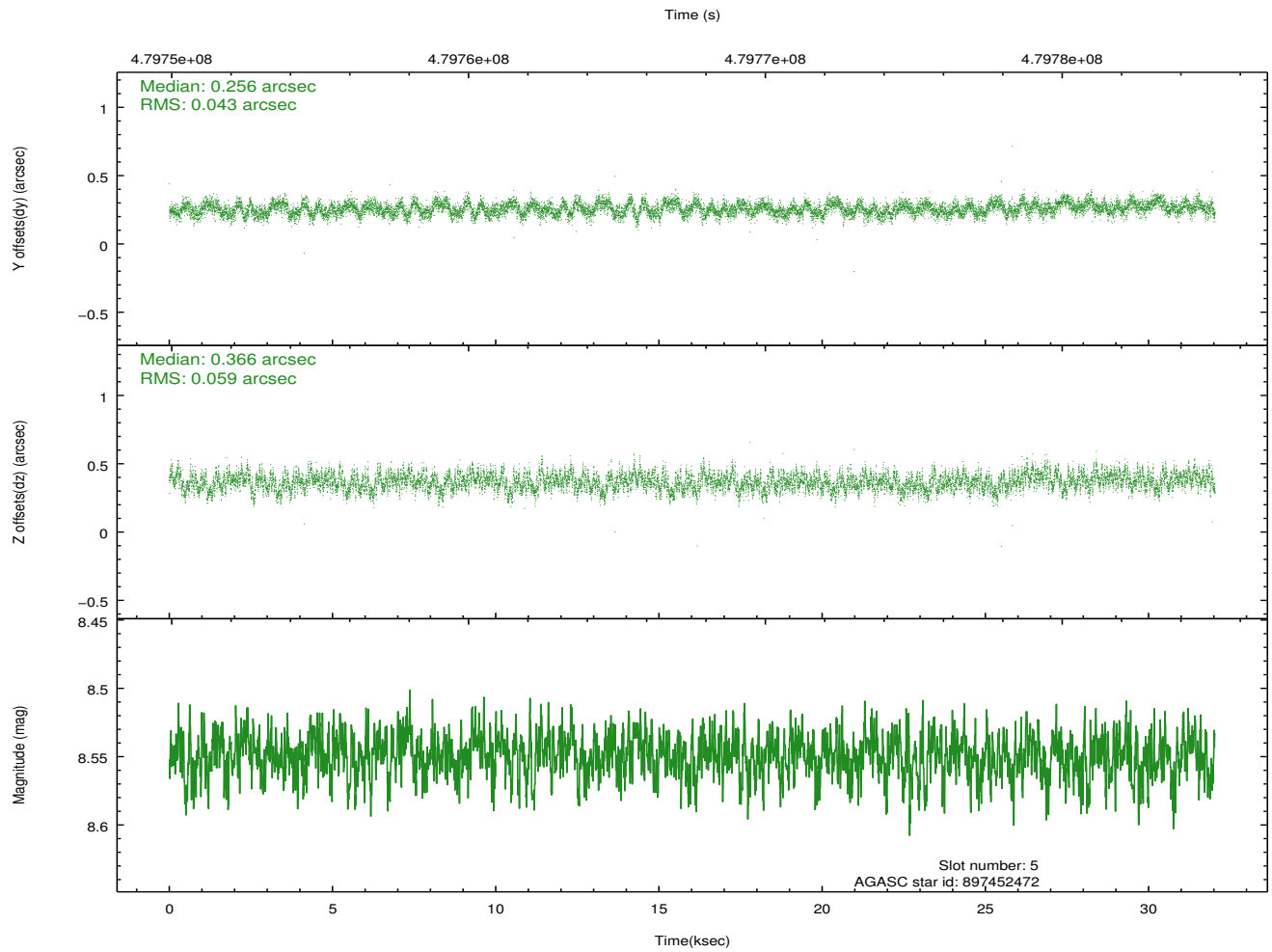
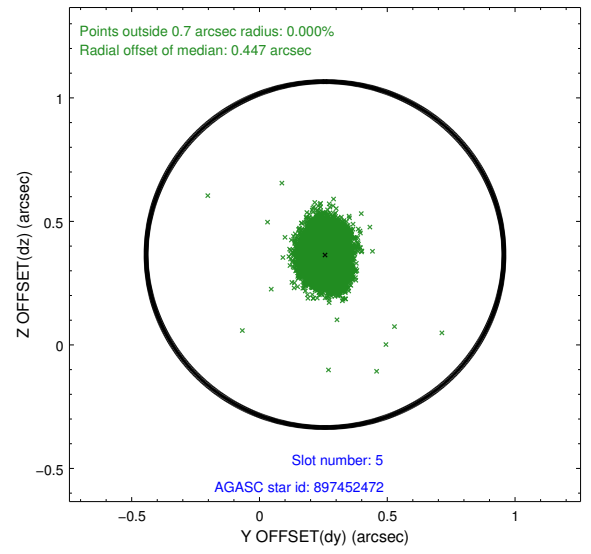
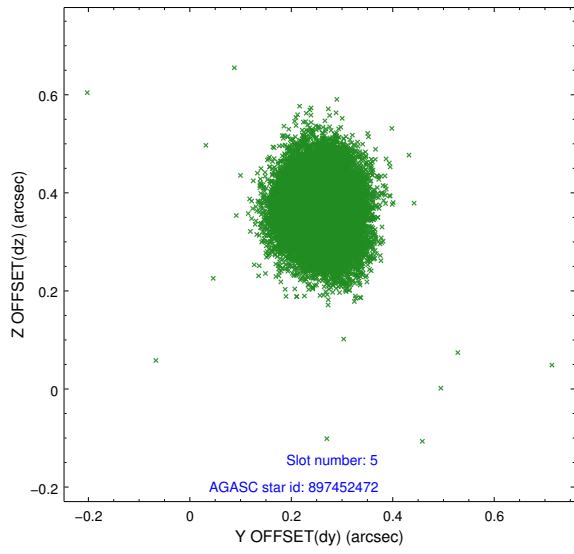
2.4.1 Slot 3



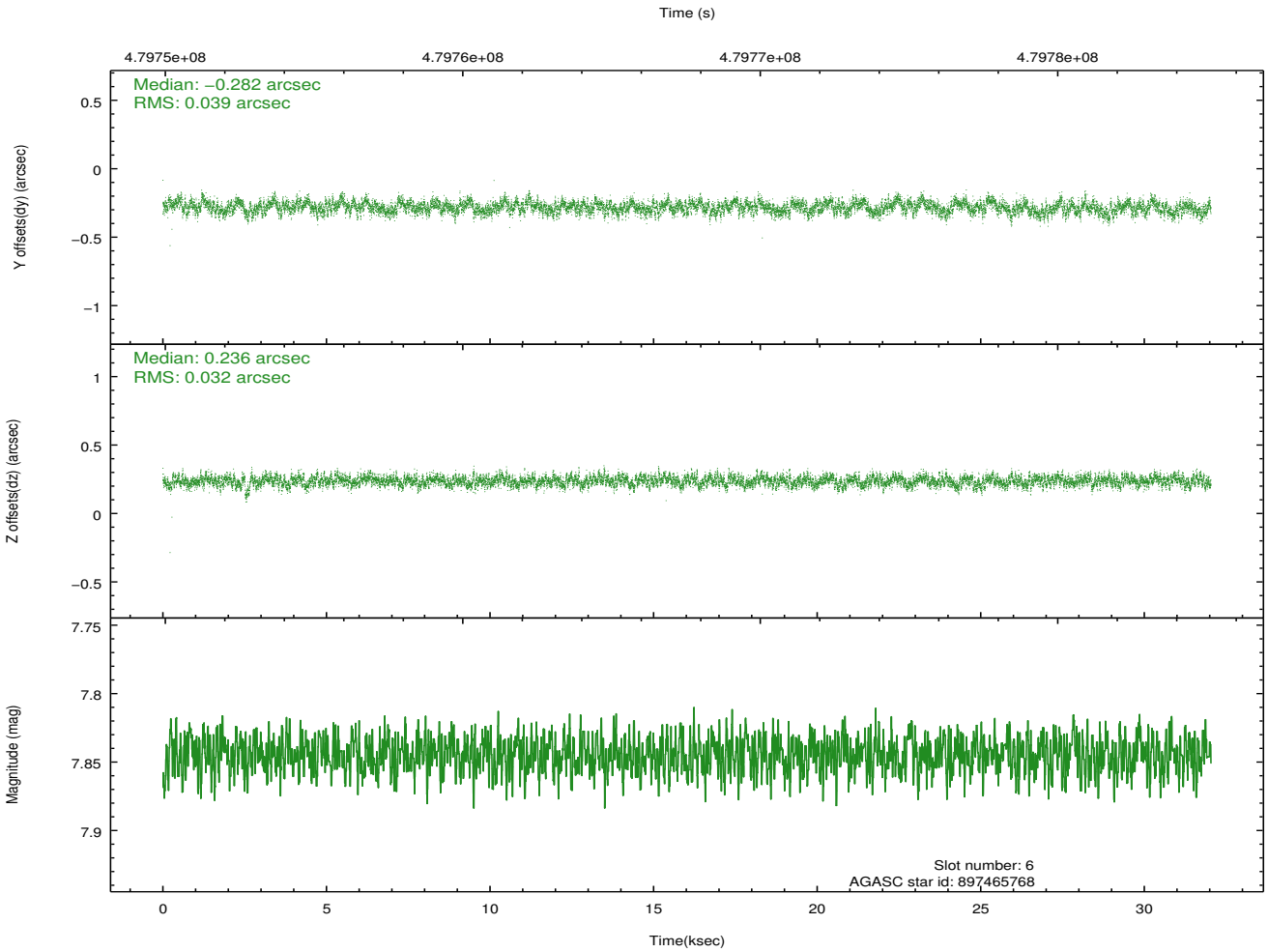
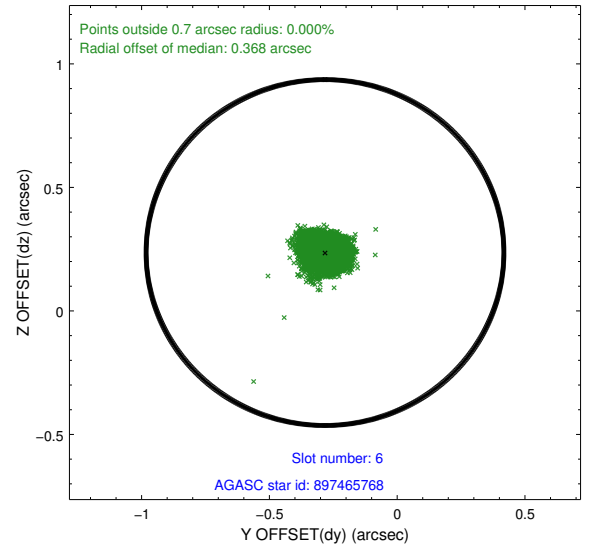
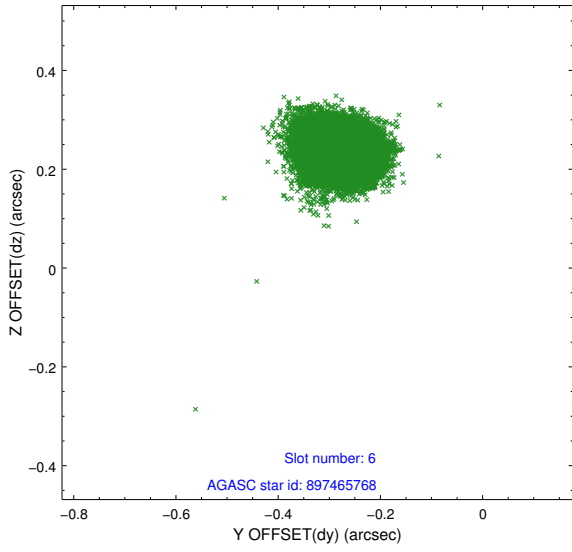
2.4.2 Slot 4



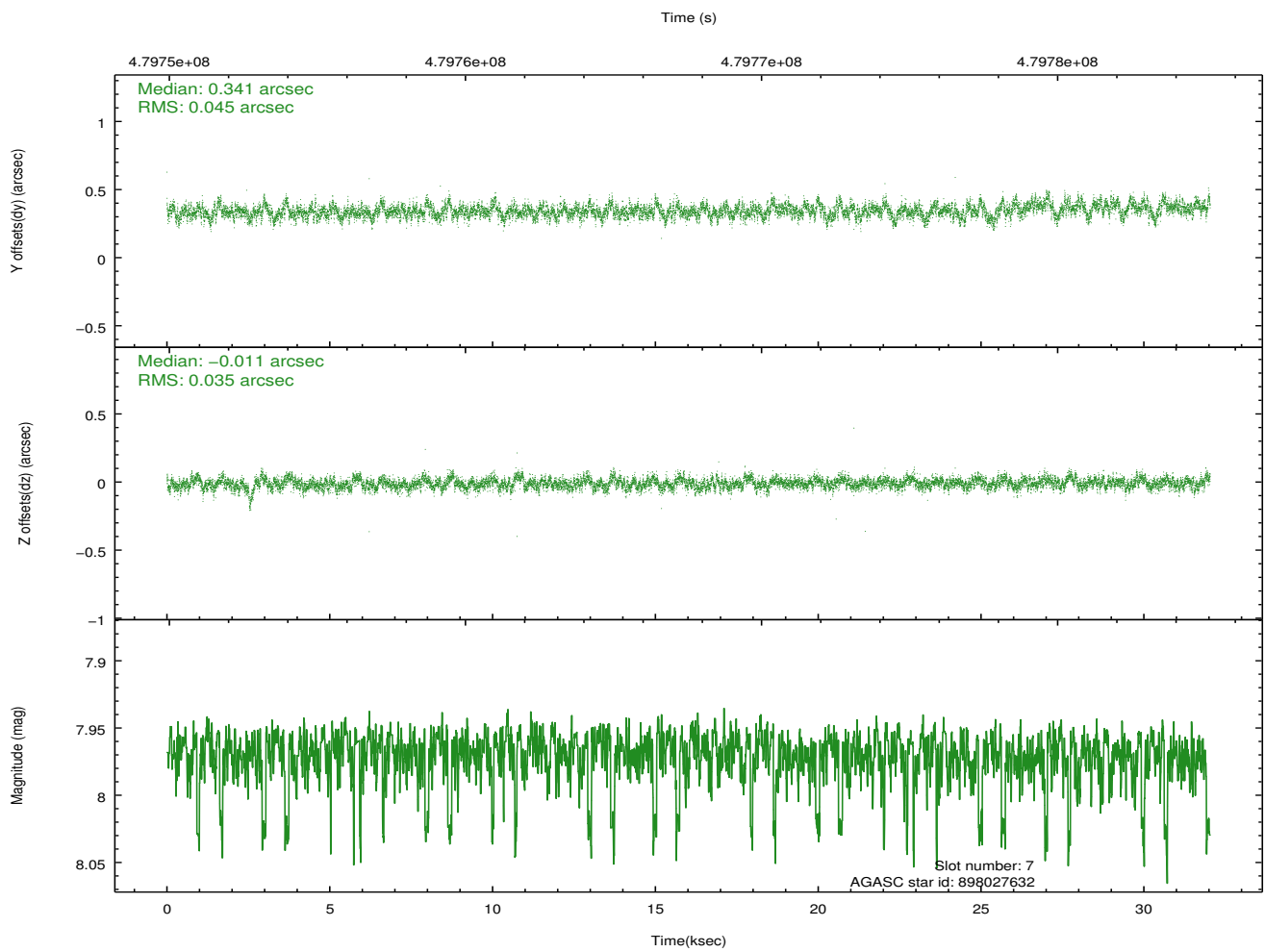
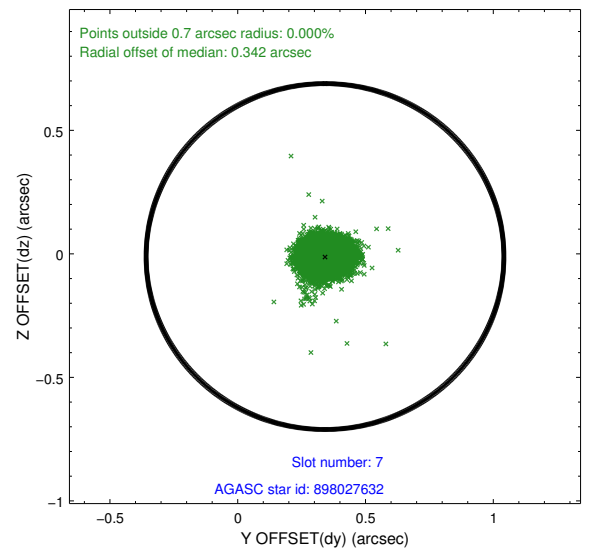
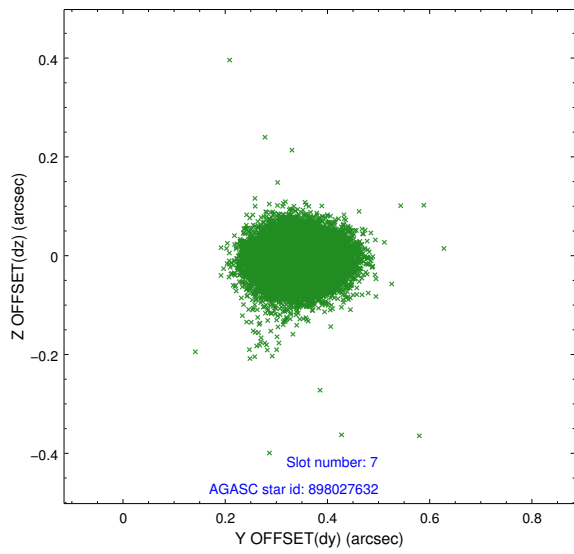
2.4.3 Slot 5



2.4.4 Slot 6

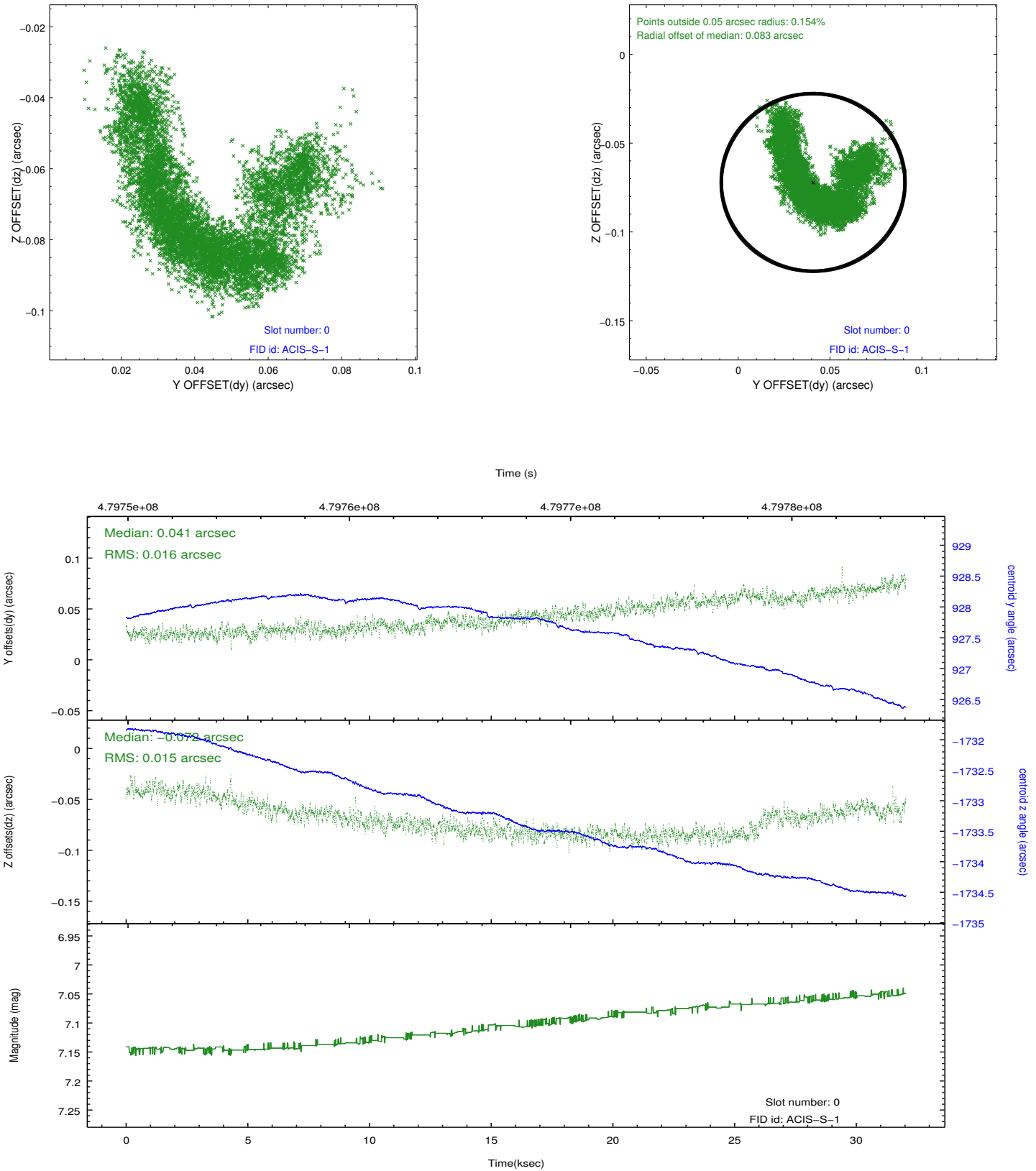


2.4.5 Slot 7

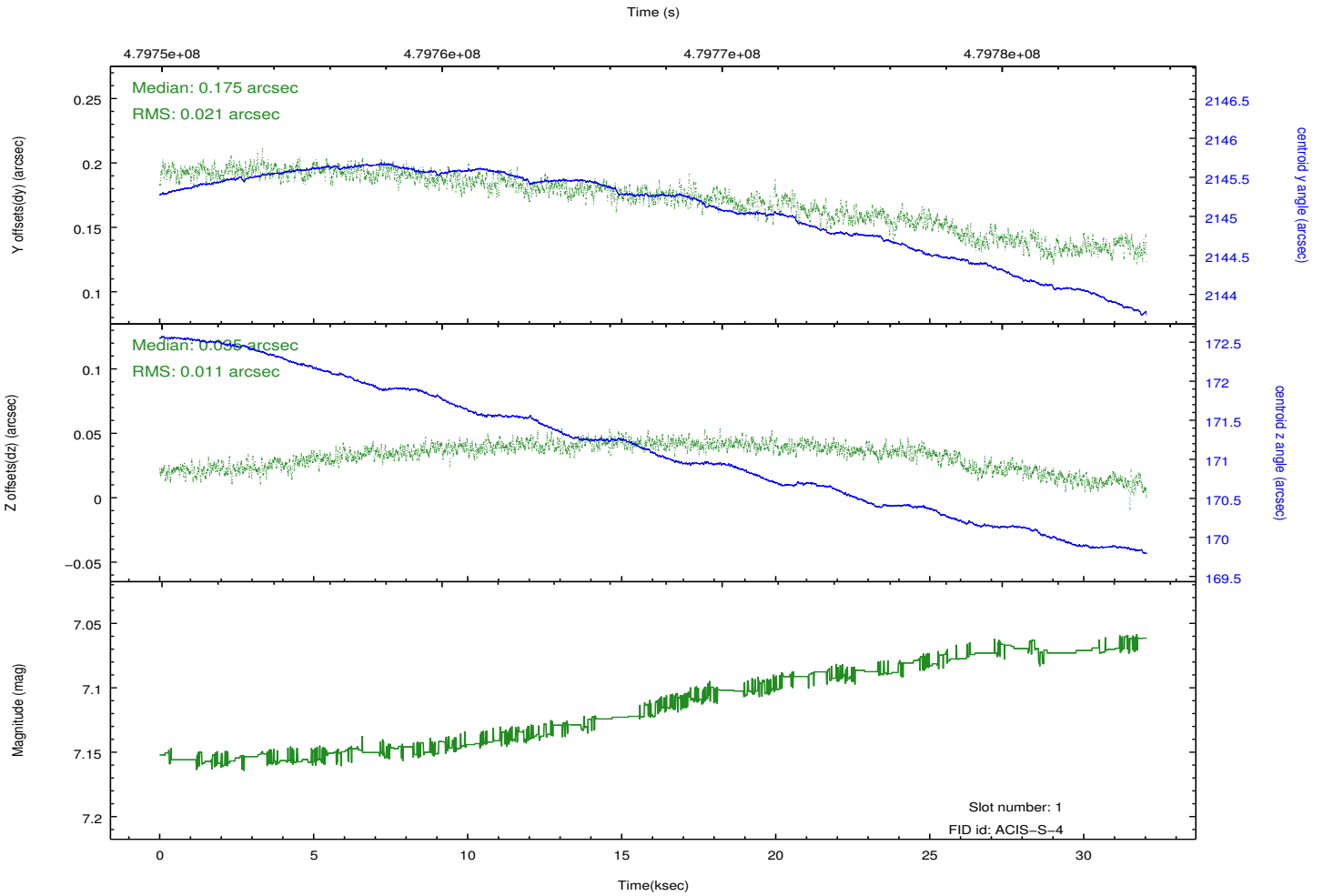
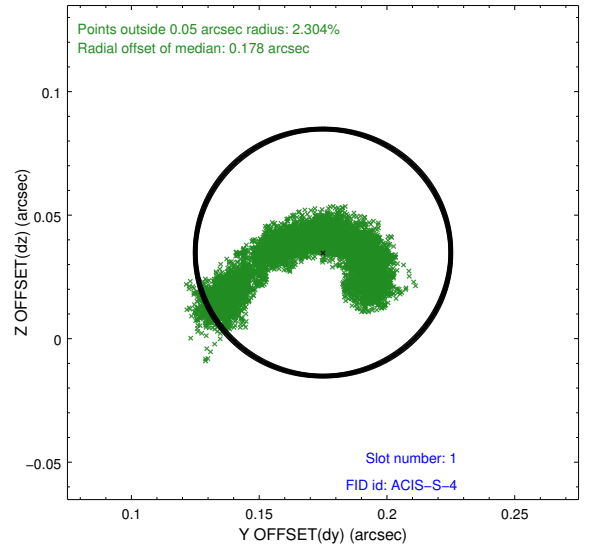
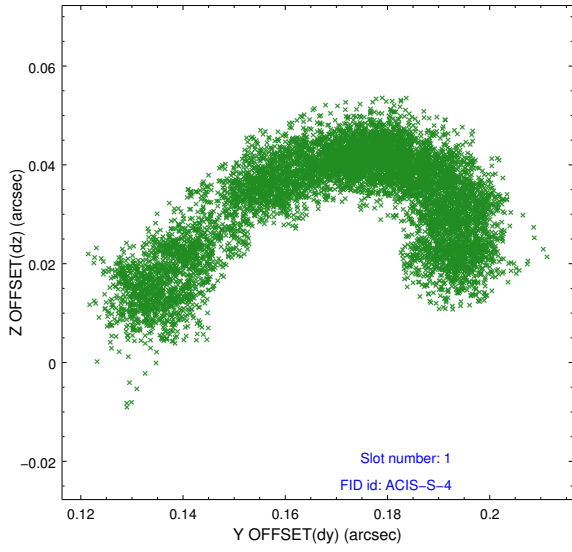


2.5 FID Slots

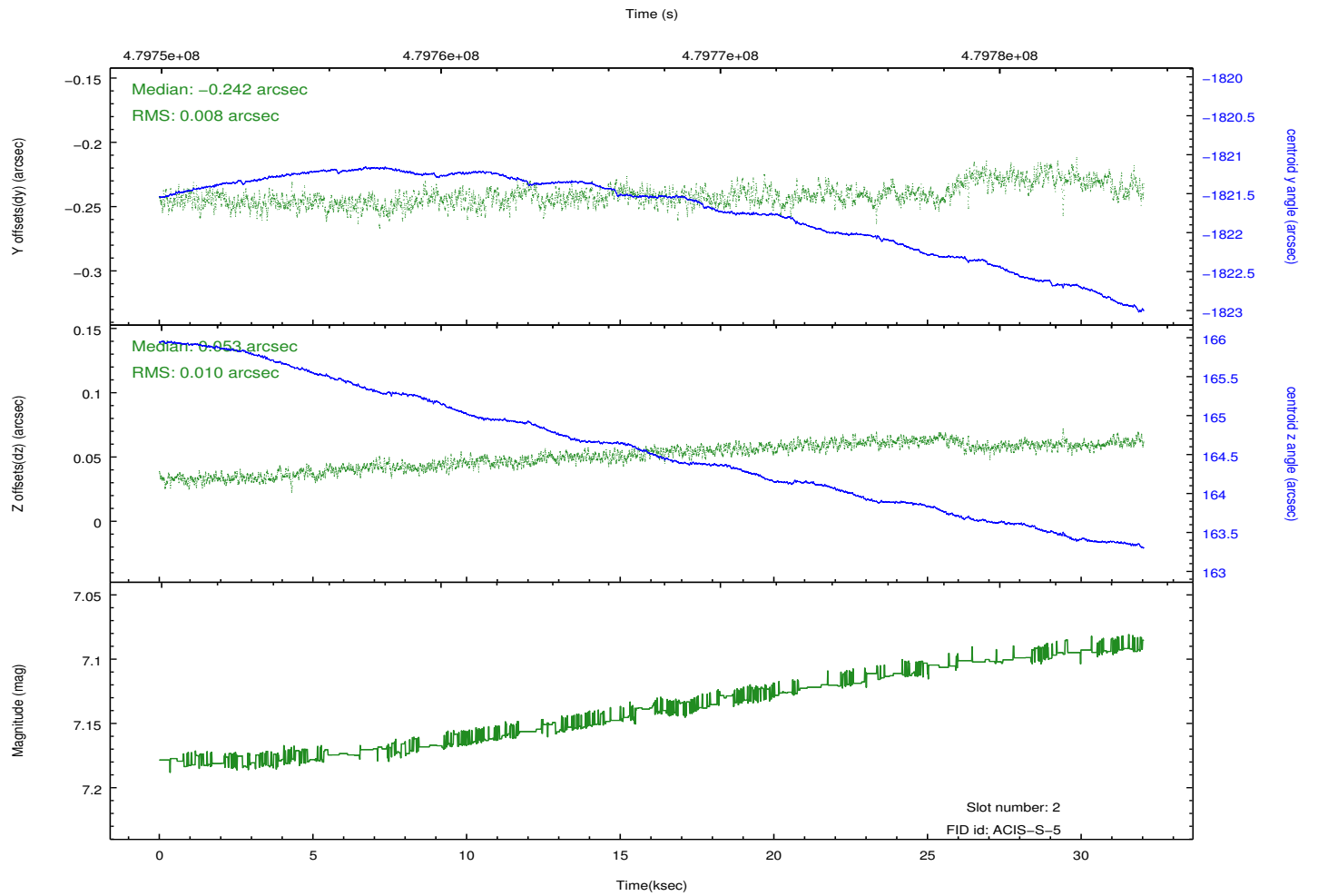
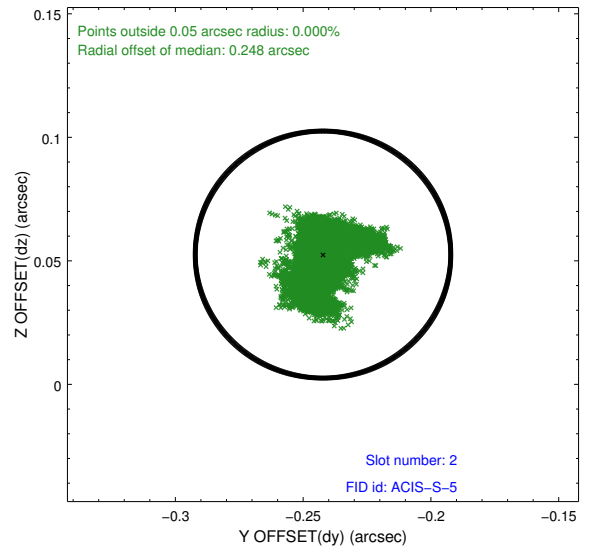
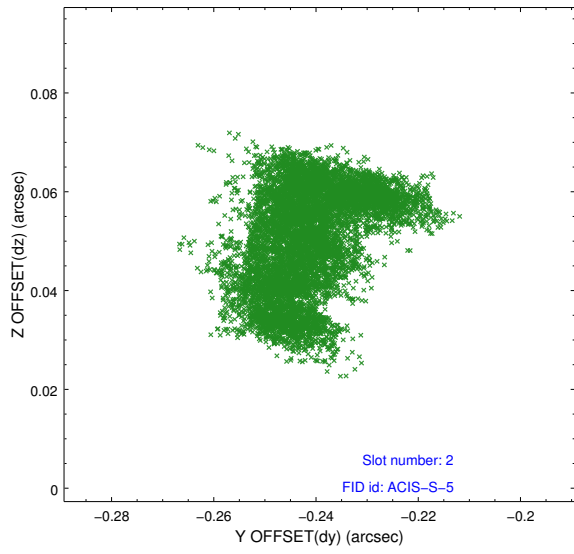
2.5.1 Slot 0



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)	2014.12.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	31.964100245833

A.2 Comments

Joint proposal with HST.

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.