

V&V Reference Report

L2 ASCDS Version : 10.1

Observation 14596 - L2 Version 2
Chandra X-Ray Center

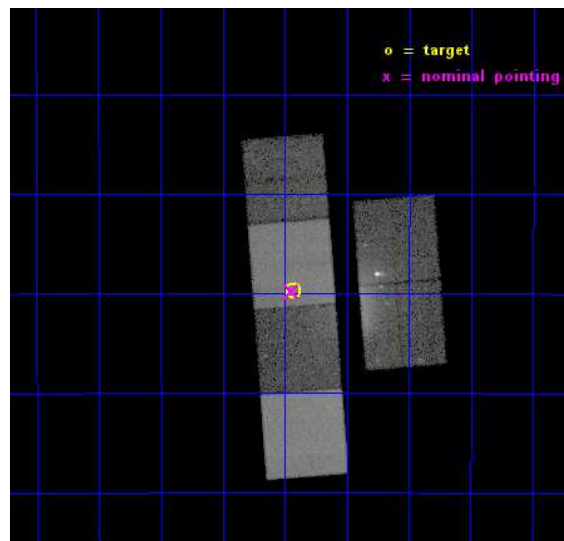
L2 Processing Date : Dec 9 2014

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

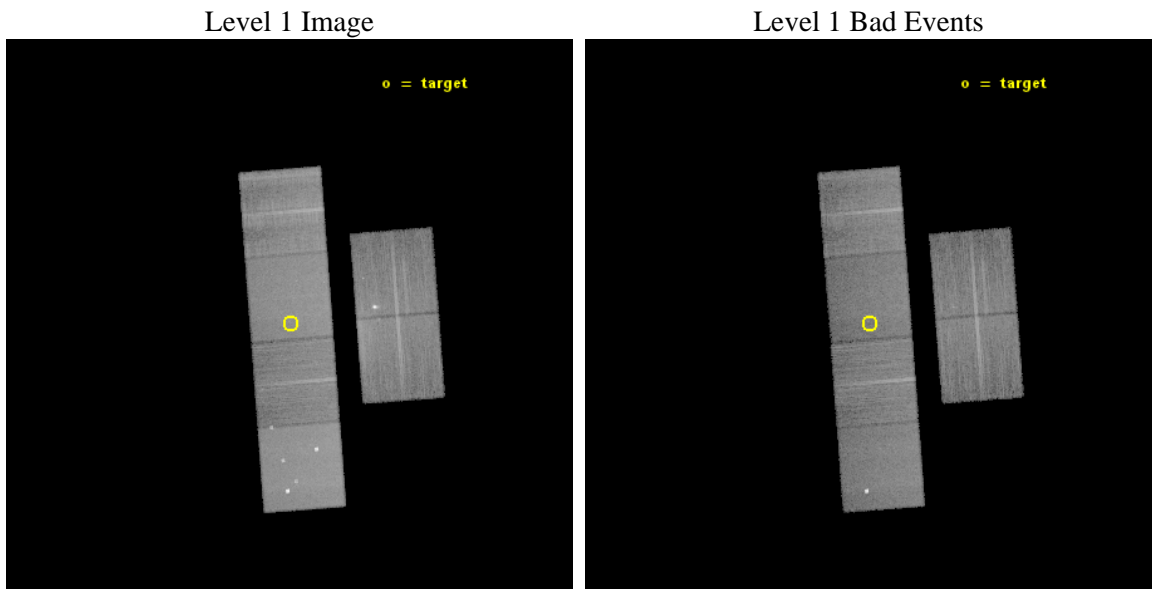
seq_num	200897	Sequence number
obs_id	14596	Observation id
title	COMPACT AND DIFFUSE X-RAY SOURCES IN THE YOUNGEST PLANETARY NEBULAE	
observer	Dr. Joel Kastner	Principal investigator
object	ESO 455-42	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	266.984167	Observer's specified target RA [deg]
dec_targ	-29.994972	Observer's specified target Dec [deg]
ra_nom	266.98696280743	Nominal RA [deg]
dec_nom	-29.99679272604	Nominal Dec [deg]
roll_nom	265.52977959178	Nominal Roll [deg]
revision	2	Processing version of data
ontime	29452.118244827	Sum of GTIs [s]
livetime	29079.177789674	Livetime [s]
ontime2	29452.15928483	Sum of GTIs [s]
ontime3	29451.995124817	Sum of GTIs [s]
ontime5	29452.077204823	Sum of GTIs [s]
ontime6	29448.795224309	Sum of GTIs [s]
ontime7	29452.118244827	Sum of GTIs [s]
ontime8	29451.954084814	Sum of GTIs [s]
l2events	312667	Number of level 2 events



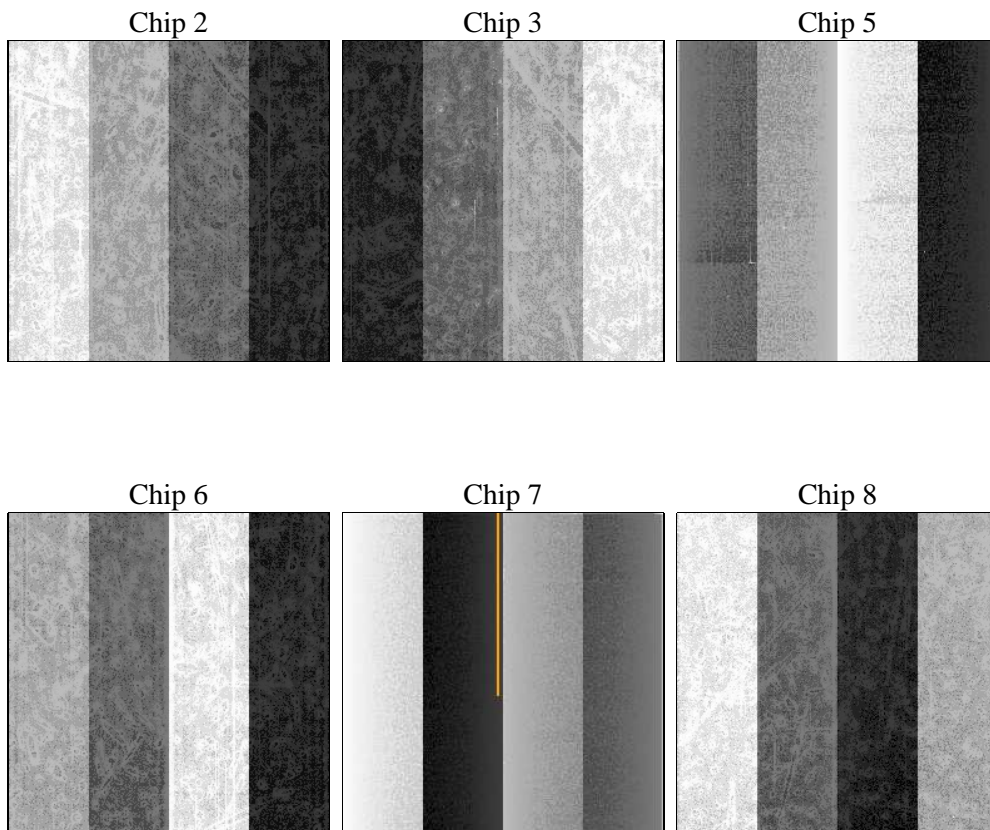
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	29487.532000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	29452.118244827	Sum of GTIs [s]
caldbver	4.6.4	 	ontime2	29452.15928483	Sum of GTIs [s]
date	2014-12-09T05:00:29	Date and time of file creation	ontime3	29451.995124817	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	29452.077204823	Sum of GTIs [s]
			ontime6	29448.795224309	Sum of GTIs [s]
			ontime7	29452.118244827	Sum of GTIs [s]
			ontime8	29451.954084814	Sum of GTIs [s]
			l1events	1113520	Number of level 1 events

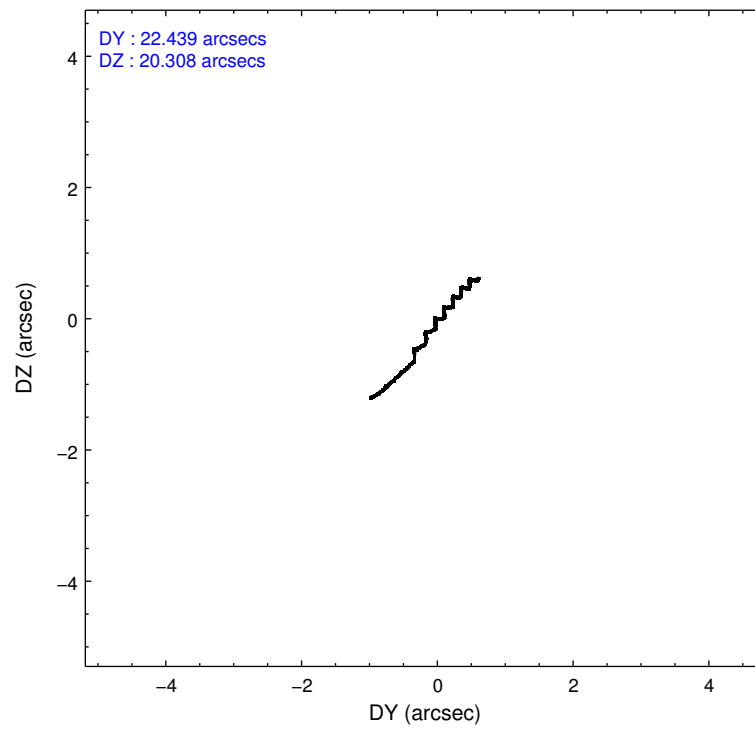
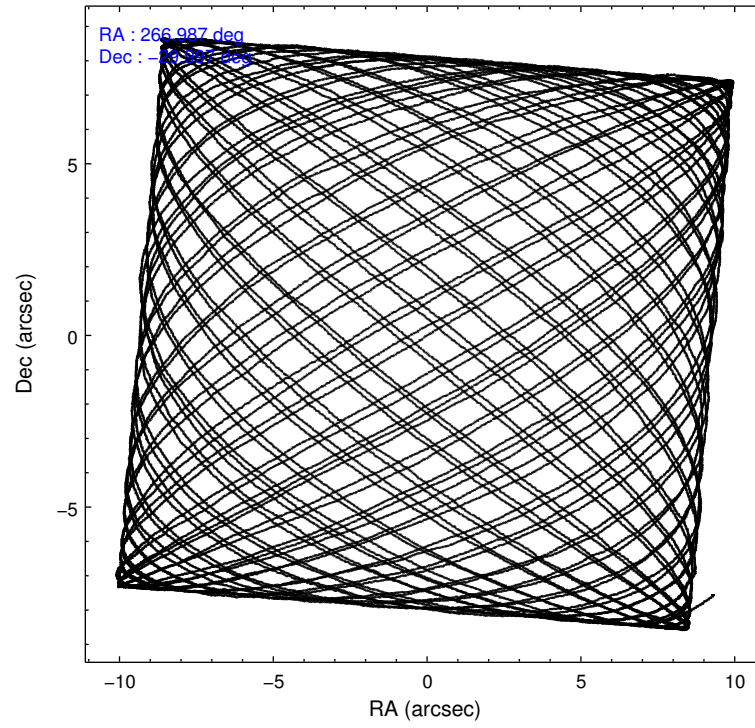
2.1.4 Events

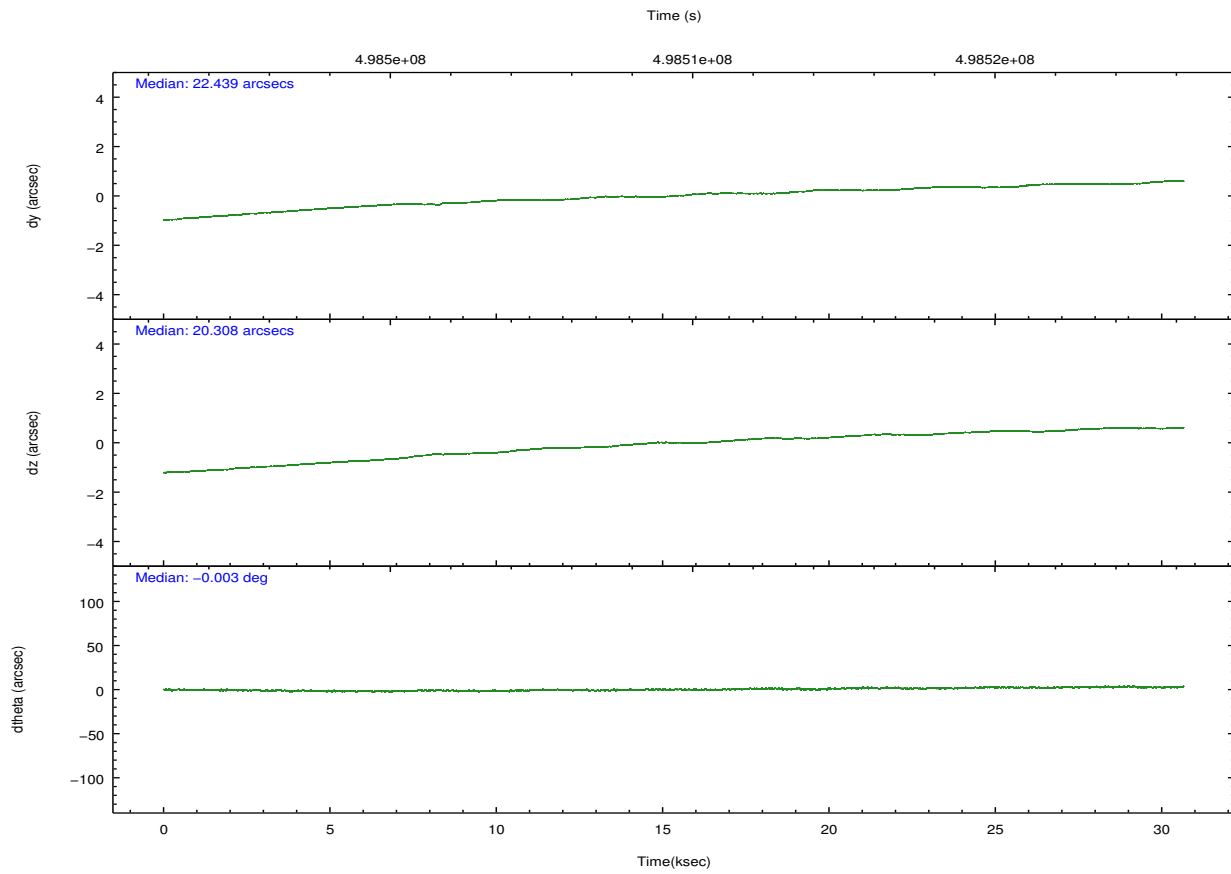
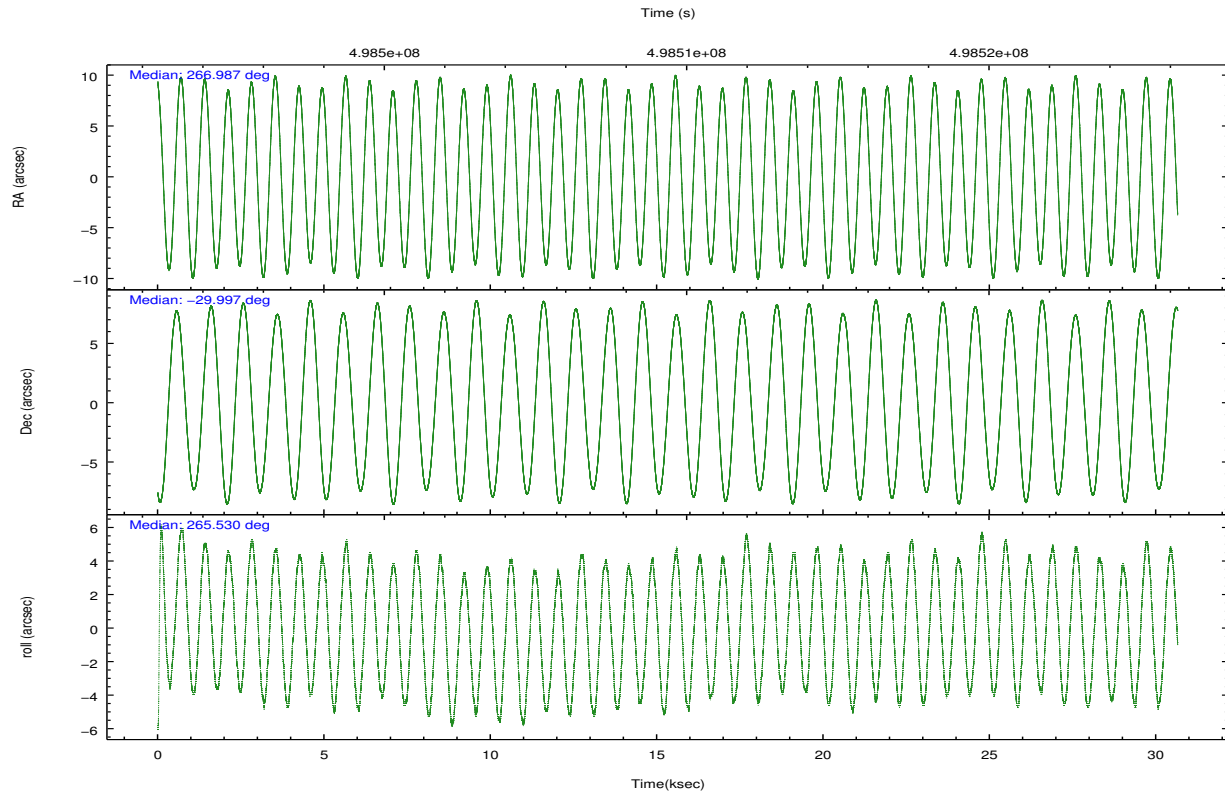
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	159556	148110	254654	152046	204969	194185	grade 0 events	20749	17446	18665	12815	9898	19107
rejected events	123277	116450	127712	125800	109342	138477		13%	11%	7%	8%	4%	9%
rejected %	77%	78%	50%	82%	53%	71%	grade 1 events	149	147	439	99	237	197
								0%	0%	0%	0%	0%	0%
							grade 2 events	6635	5593	37031	4921	20184	12411
								4%	3%	14%	3%	9%	6%
							grade 3 events	2464	2295	4930	2067	8270	5278
								1%	1%	1%	1%	4%	2%
							grade 4 events	2362	2308	4416	2056	8331	5002
								1%	1%	1%	1%	4%	2%
							grade 5 events	6490	7350	22575	7428	20254	10989
								4%	4%	8%	4%	9%	5%
							grade 6 events	4078	4022	61931	4395	48965	13917
								2%	2%	24%	2%	23%	7%
							grade 7 events	116629	108949	104667	118265	88830	127284
								73%	73%	41%	77%	43%	65%

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	266.972969	266.9869628074264	CCD I2 on	O3	Y
[deg] Pointing Dec	-29.972292	-29.99679272604034	CCD I3 on	O2	Y
[deg] Pointing Roll	265.366158	265.5297795917777	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	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	Y	Y
[s] Observation start time (MET)	498495222.184000	498493770.71663	CCD S5 on	N	N
Observation start date	2013-10-18T14:52:35	2013-10-18T14:29:30	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	498524710.184000	498524938.40583	On-chip summing requested	N	N
Observation end date	2013-10-18T23:04:03	2013-10-18T23:08:58	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect





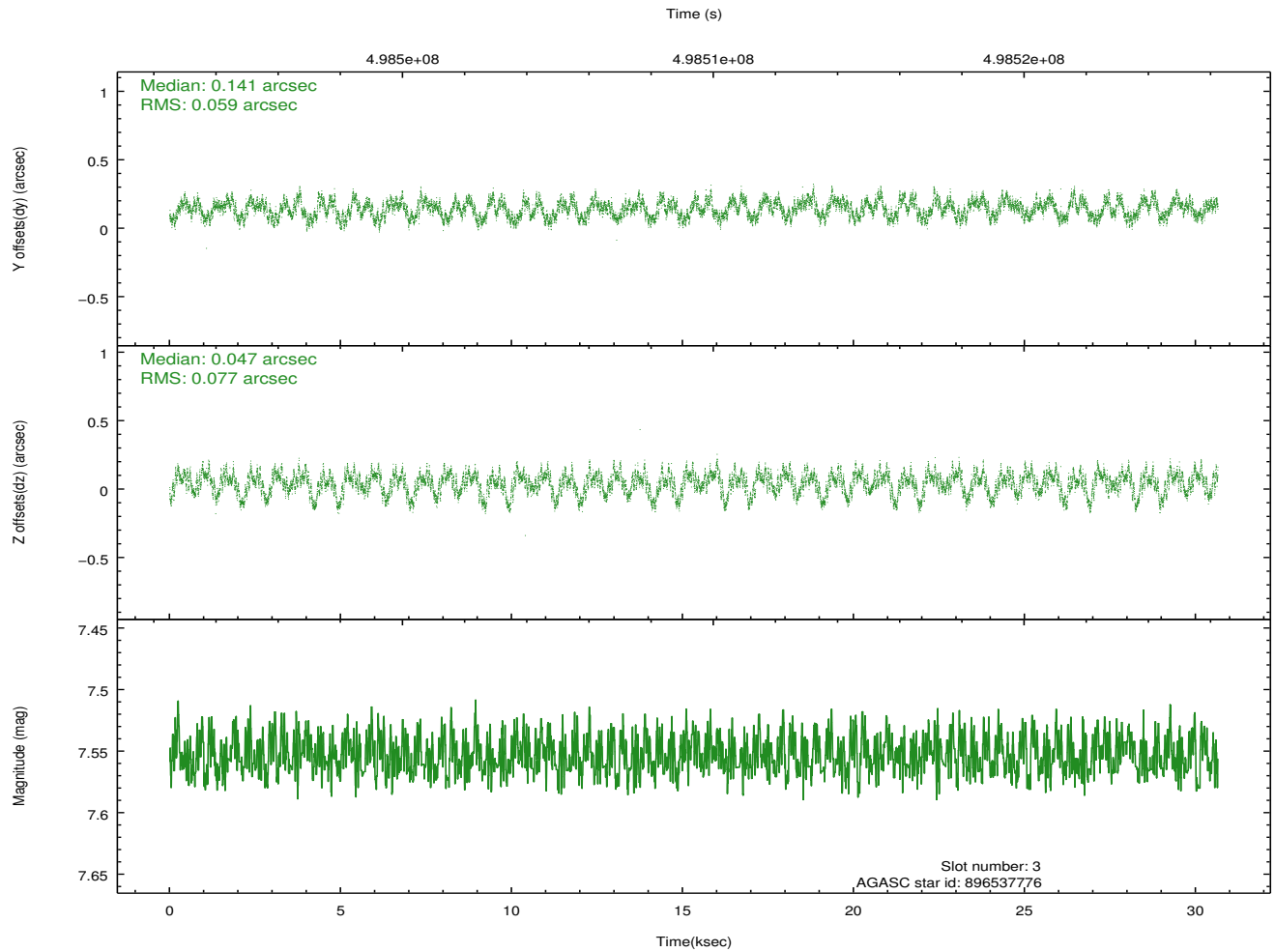
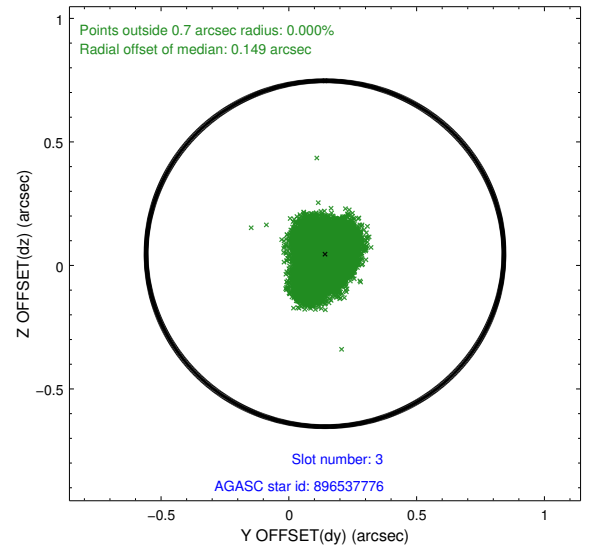
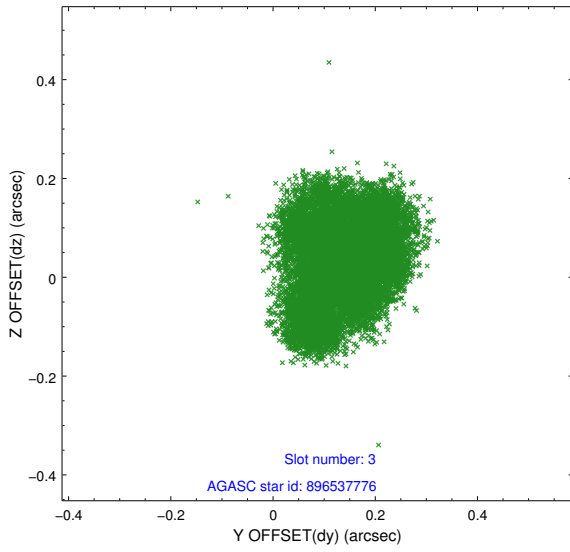
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.87	7476	-0.130	-0.073	0.008	0.016	0.000000	0.000000	-775.74	-1741.76
1	FID		ACIS-S-4	6.96	7476	0.170	0.068	0.007	0.011	0.000000	0.000000	2137.85	166.72
2	FID		ACIS-S-6	7.08	7474	-0.068	0.013	0.009	0.016	0.000000	0.000000	386.45	804.18
3	GUIDE	used	896537776	7.55	14953	0.141	0.047	0.104	0.169	266.655684	-29.665673	-1018.19	-1078.27
4	GUIDE	used	966919736	6.91	14951	-0.114	-0.142	0.085	0.130	267.322278	-30.597445	2158.14	1261.57
5	GUIDE	used	896533888	7.04	14953	0.089	0.086	0.066	0.104	266.666434	-29.392757	-1999.98	-1126.61
6	GUIDE	used	896541360	7.72	14951	0.085	0.059	0.068	0.104	266.684478	-29.453744	-1786.19	-1052.11
7	GUIDE	used	966920512	8.35	14948	-0.203	-0.036	0.082	0.127	267.231170	-30.494681	1810.72	950.27

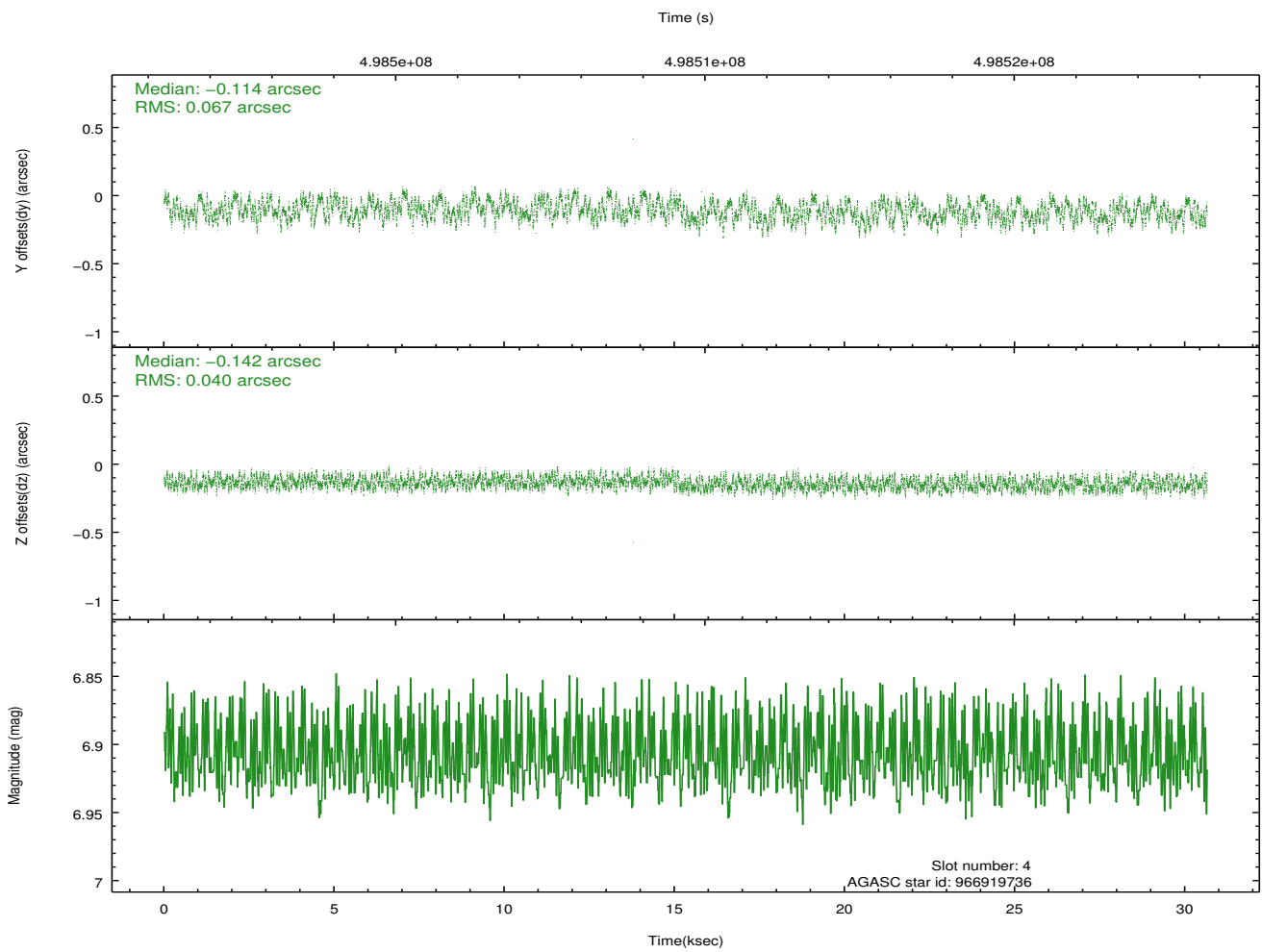
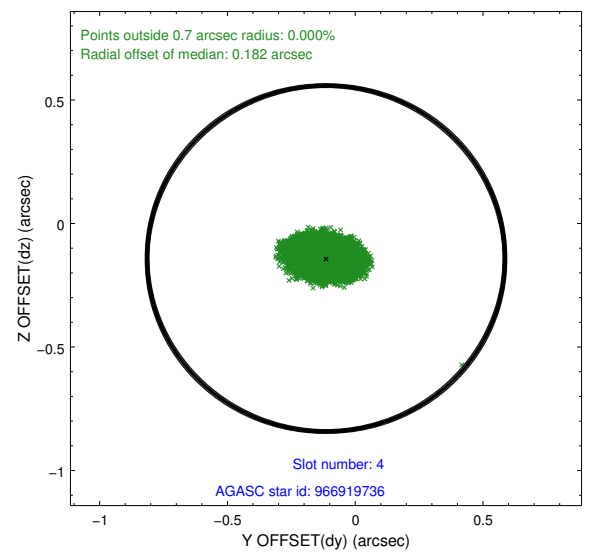
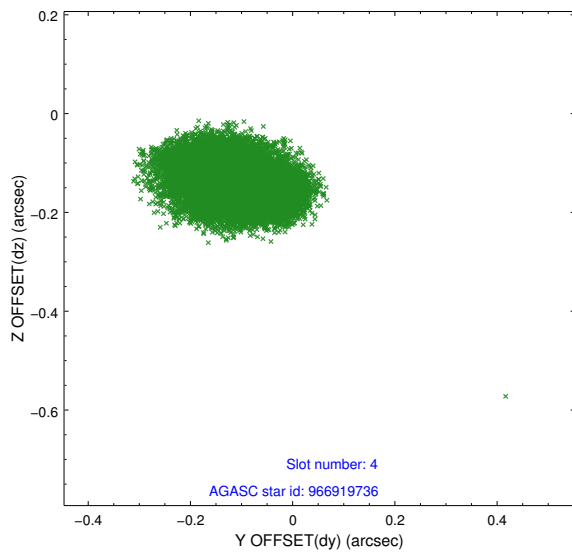
∞

2.4 Star Slots

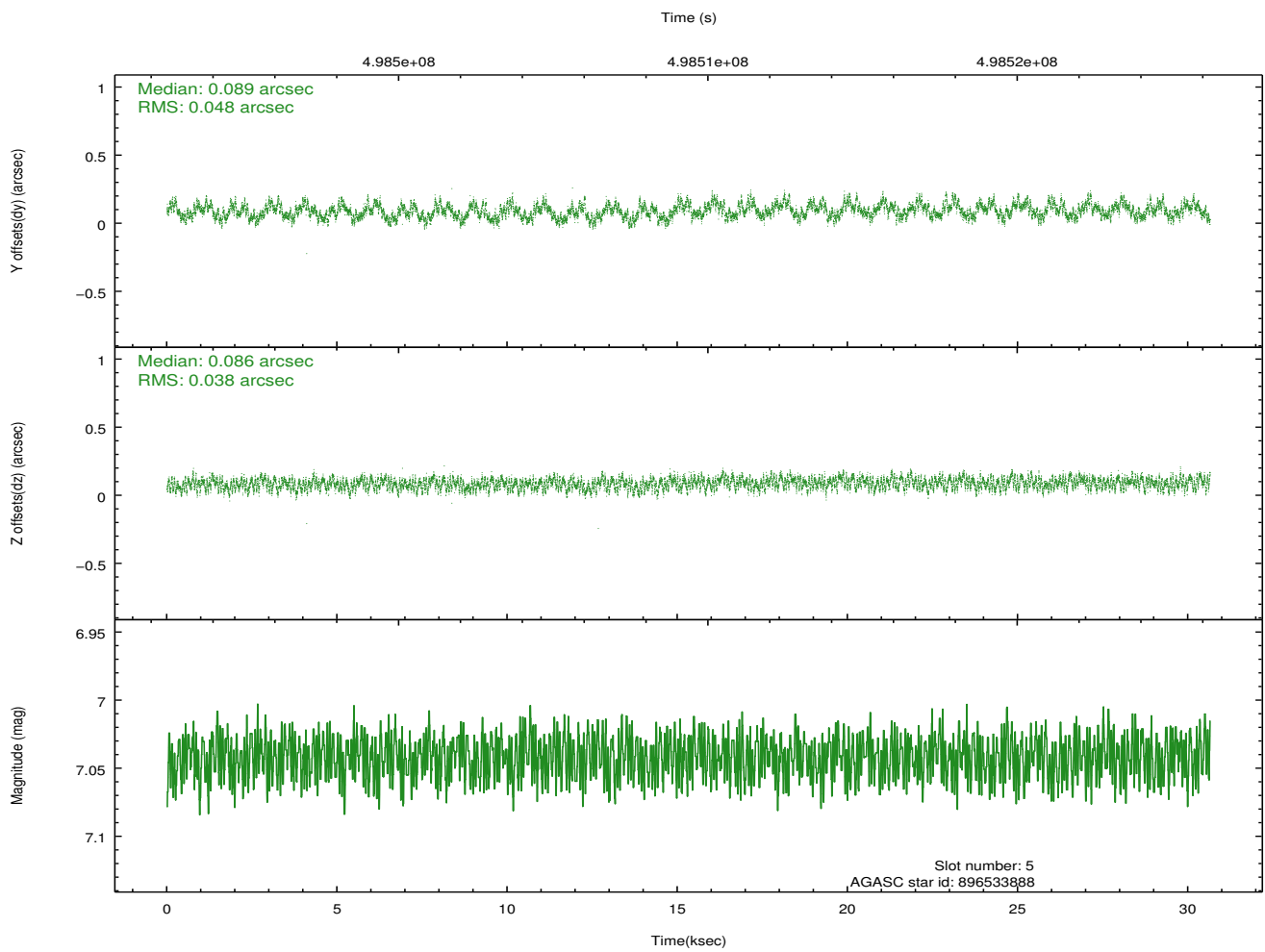
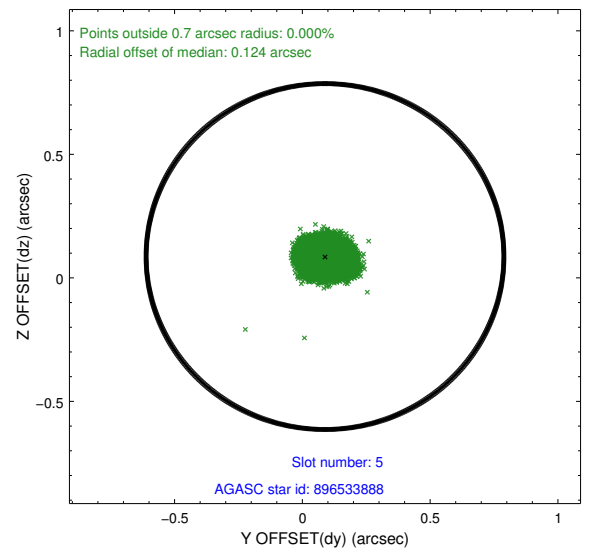
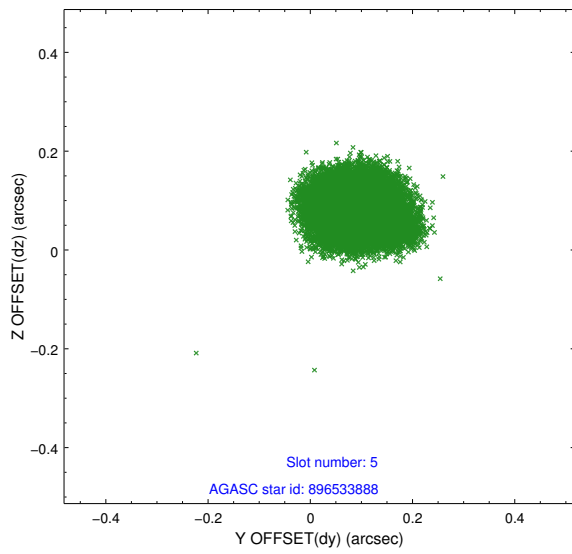
2.4.1 Slot 3



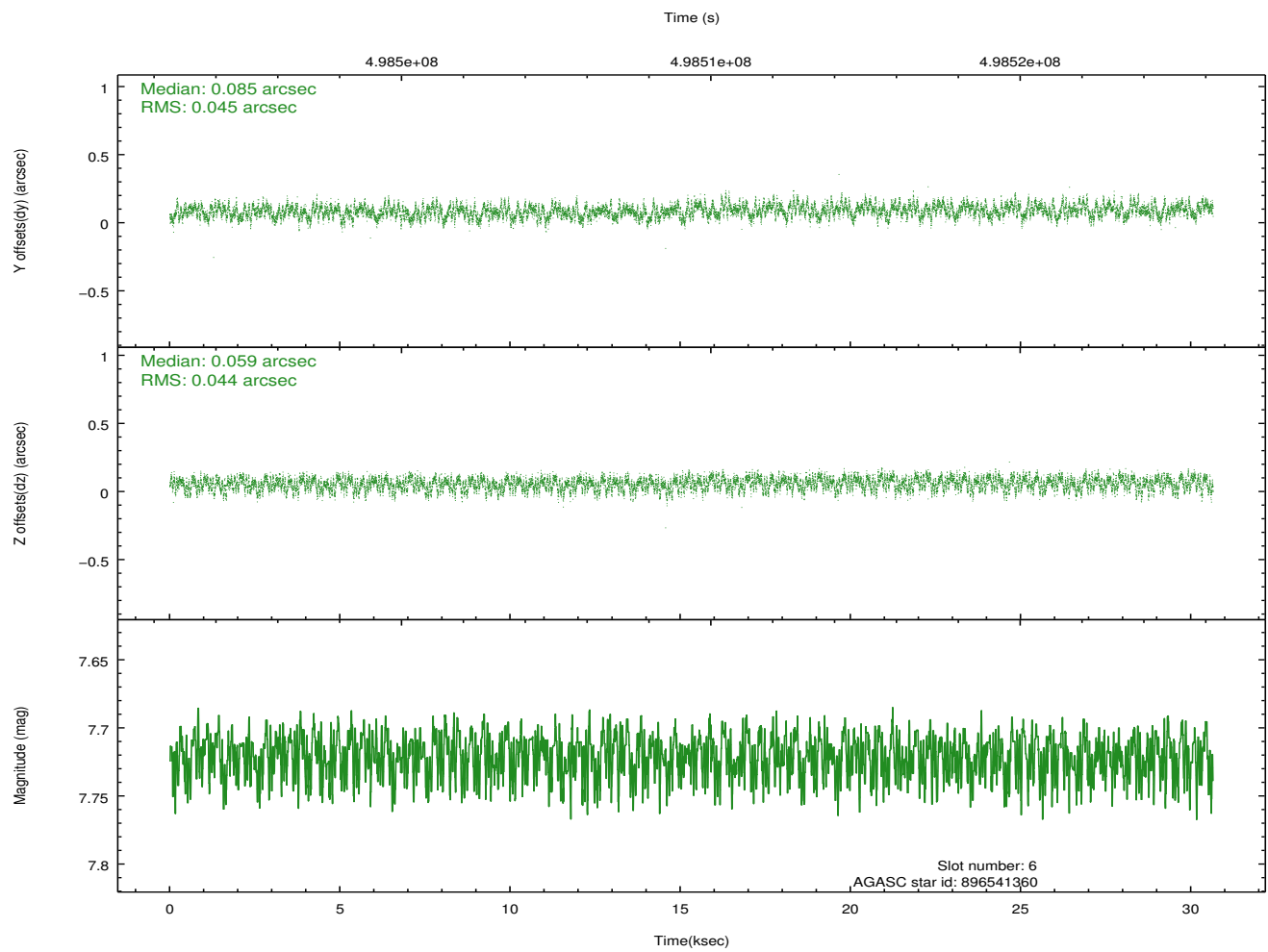
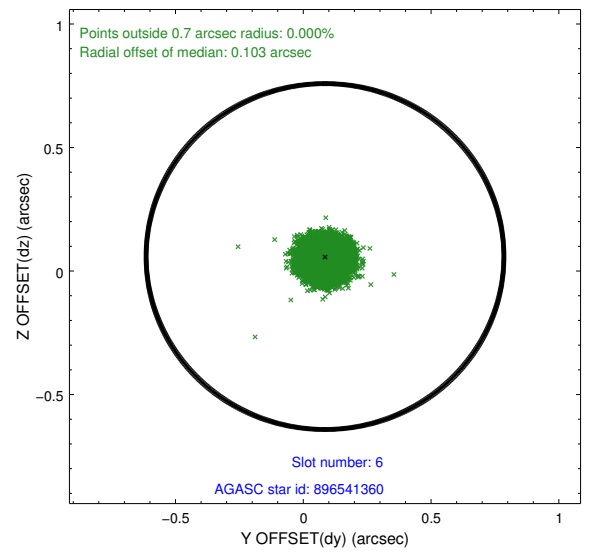
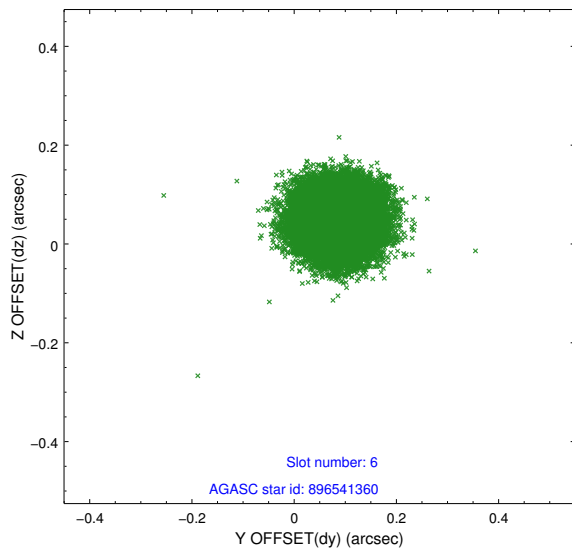
2.4.2 Slot 4



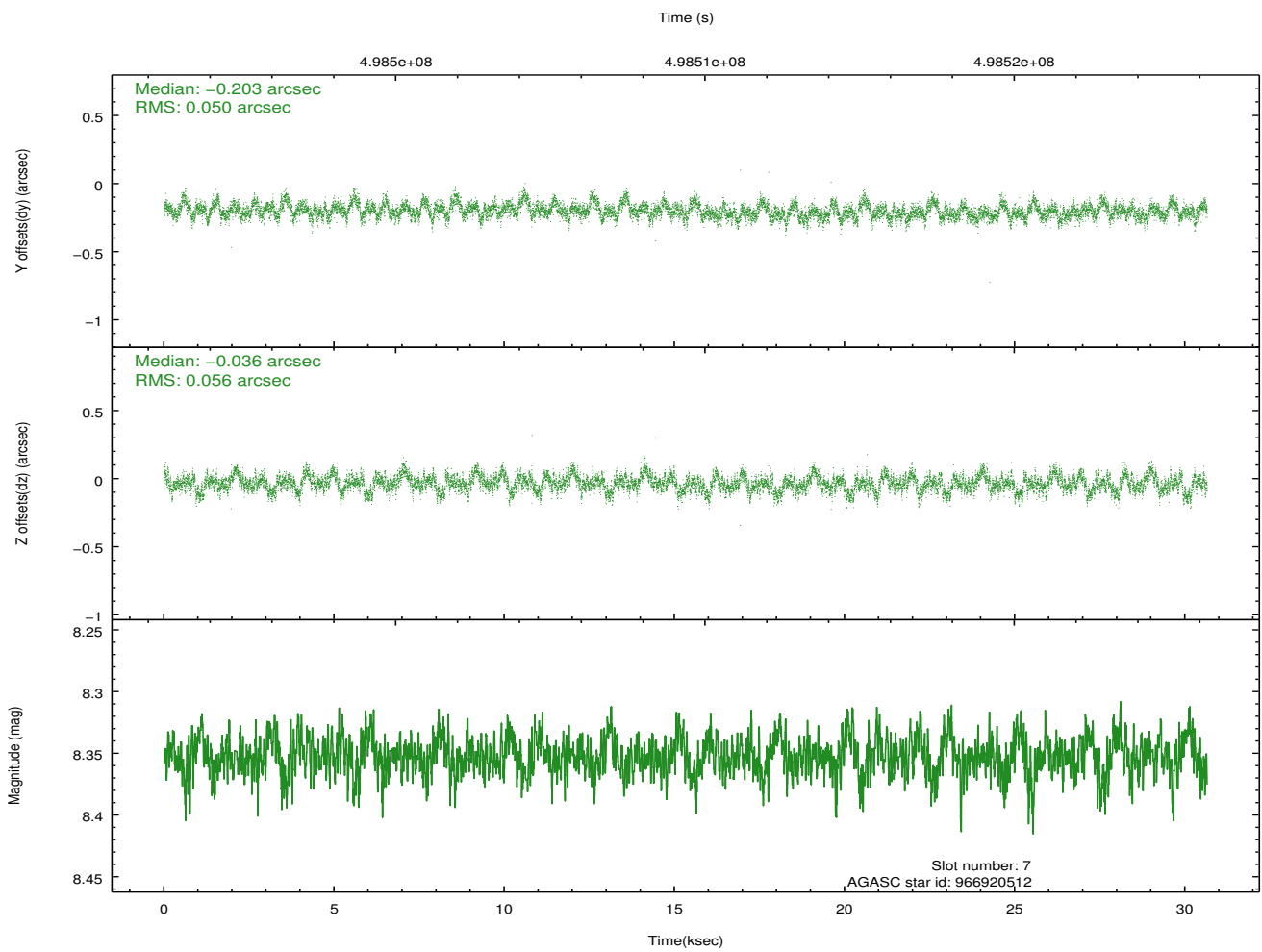
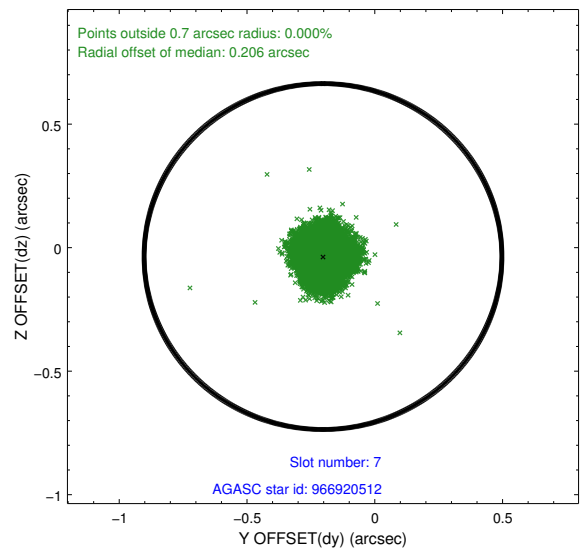
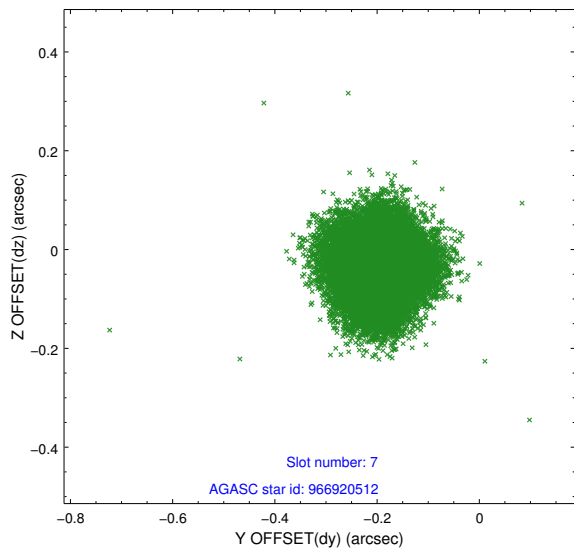
2.4.3 Slot 5



2.4.4 Slot 6

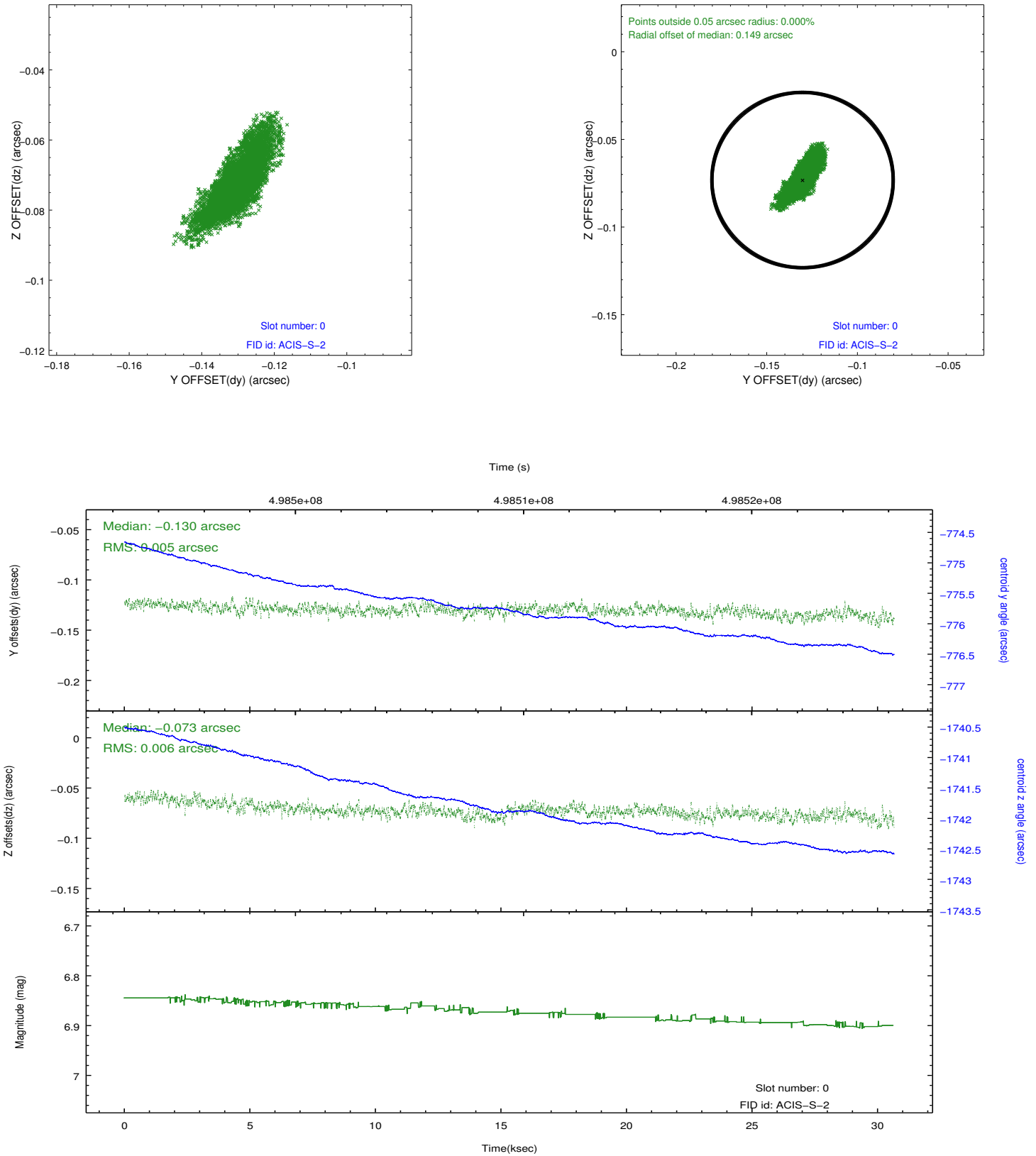


2.4.5 Slot 7

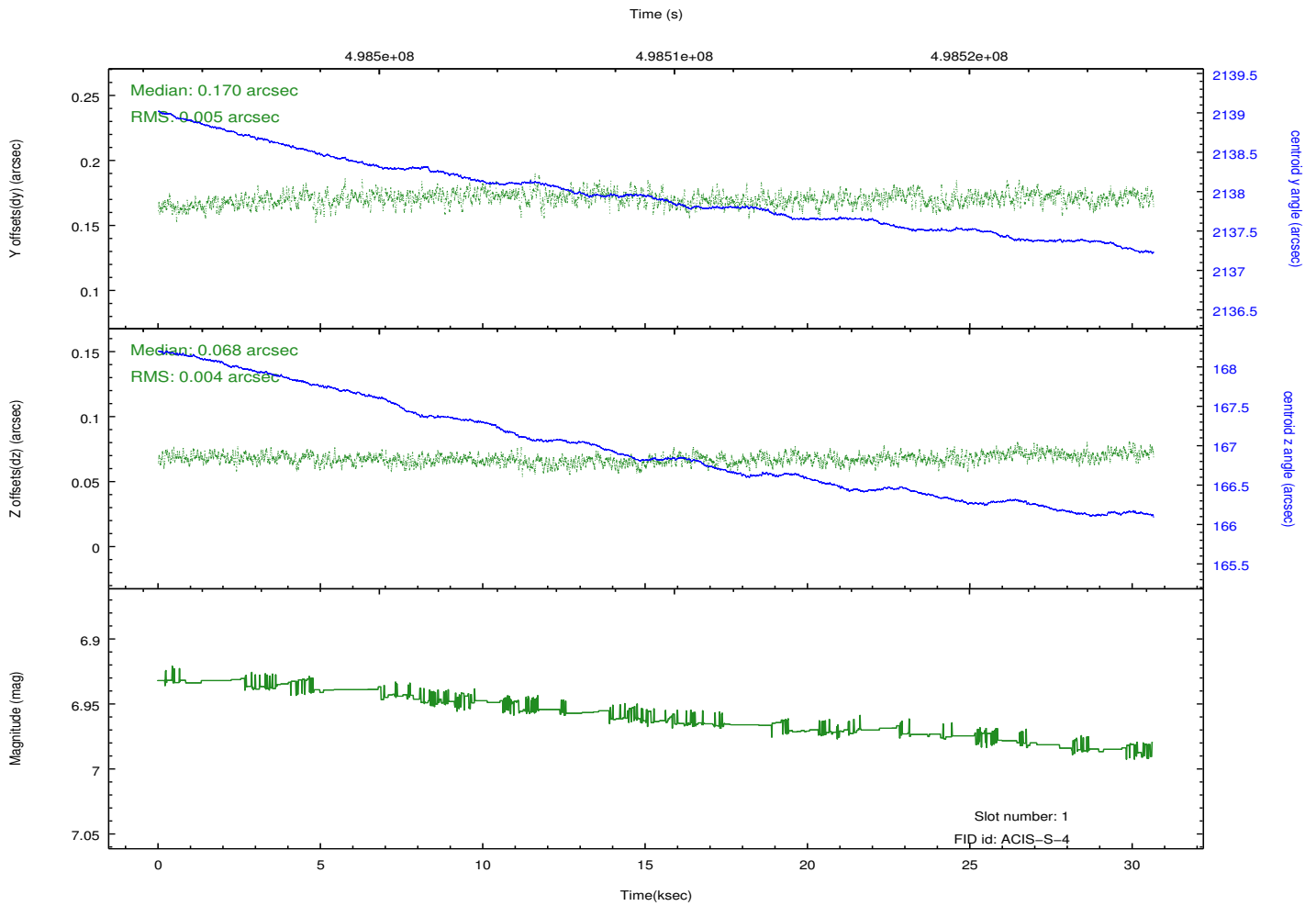
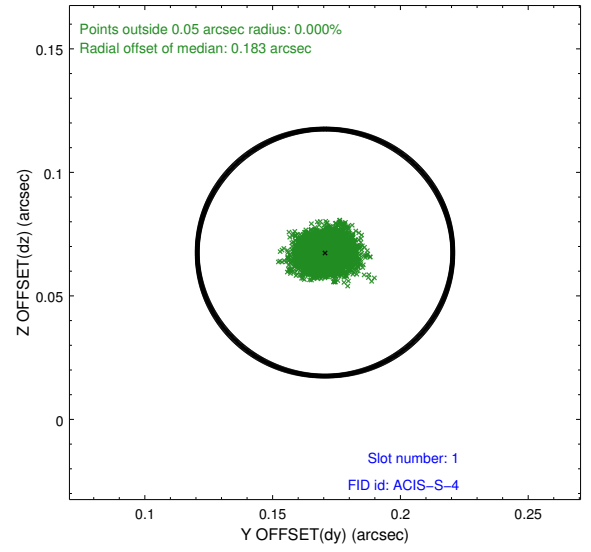
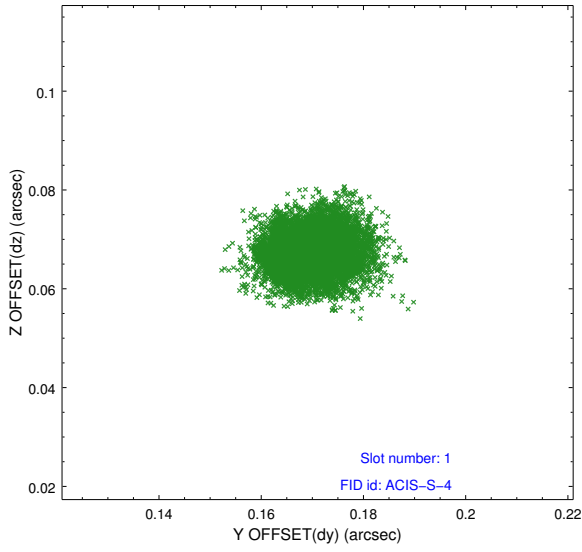


2.5 FID Slots

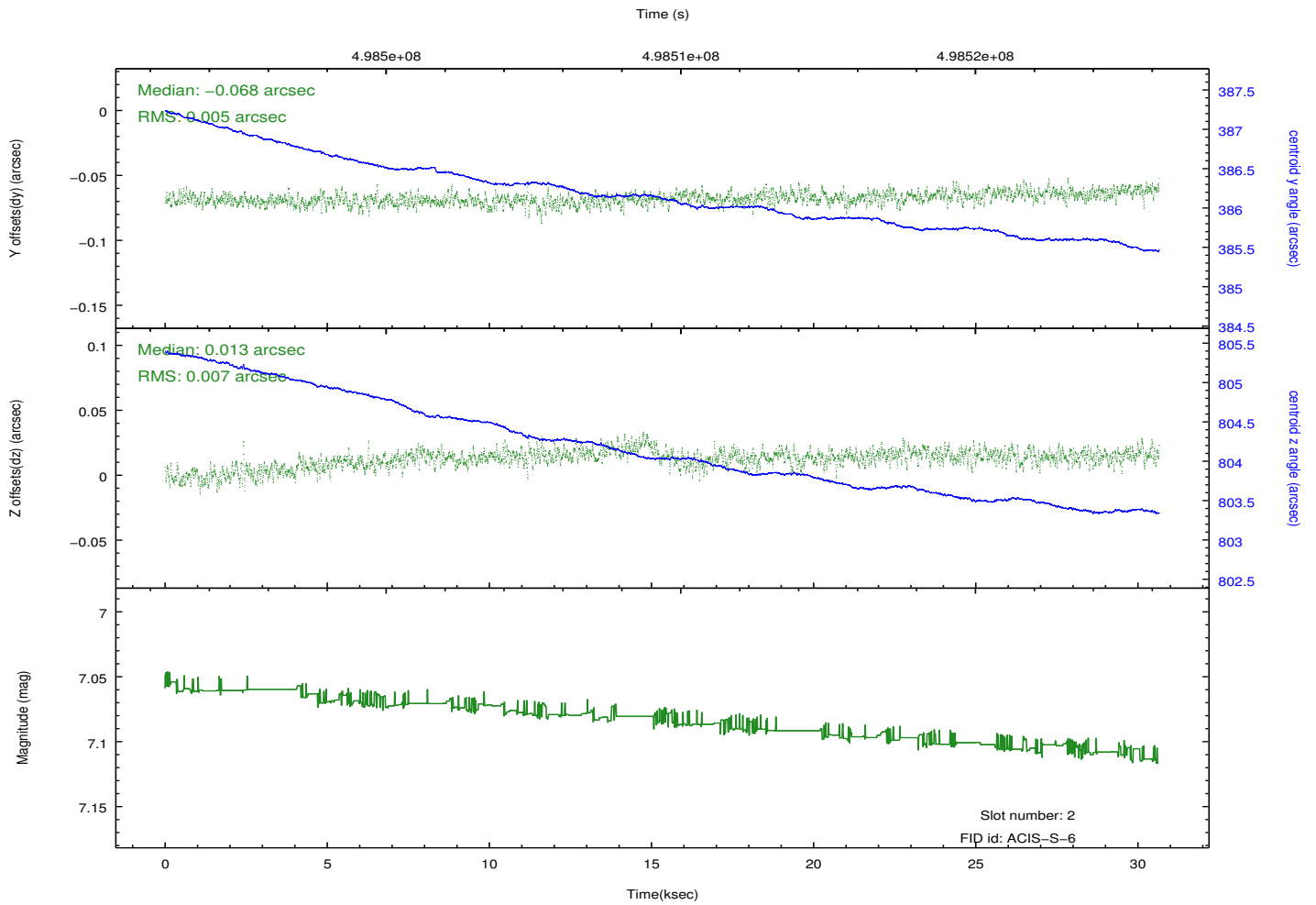
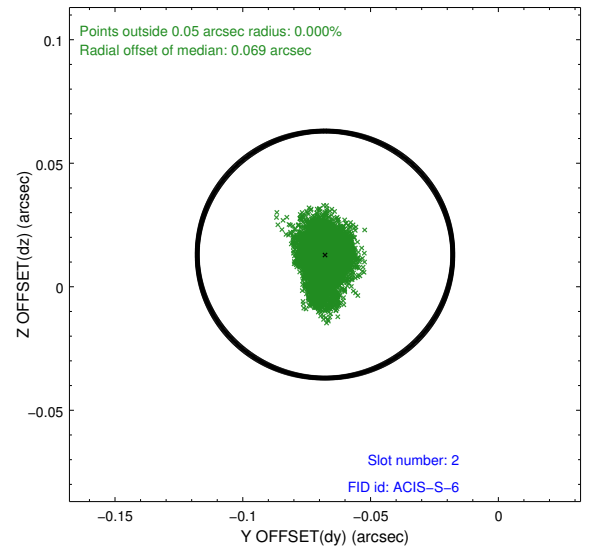
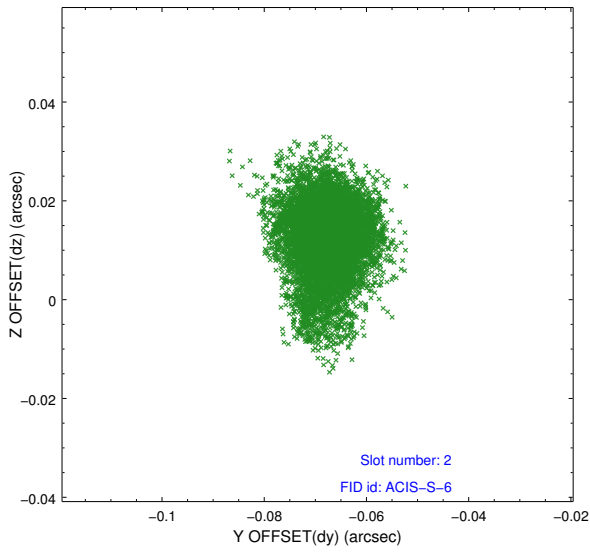
2.5.1 Slot 0



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	29.452118244827

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.