

V&V Reference Report

L2 ASCDS Version : 10.2.1

Observation 15633 - L2 Version 2
Chandra X-Ray Center

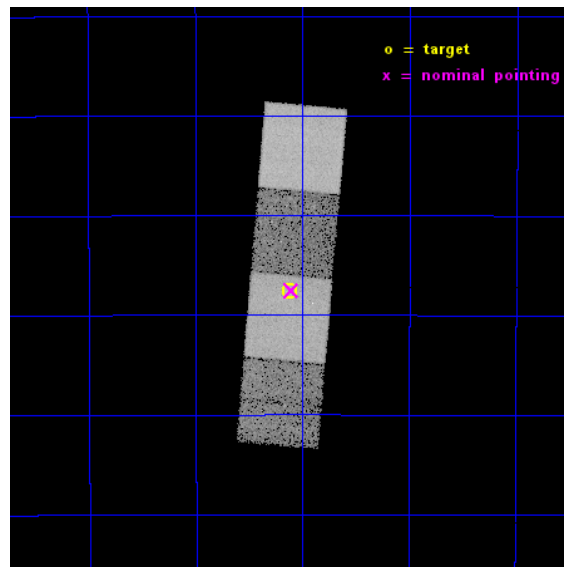
L2 Processing Date : Dec 10 2014

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

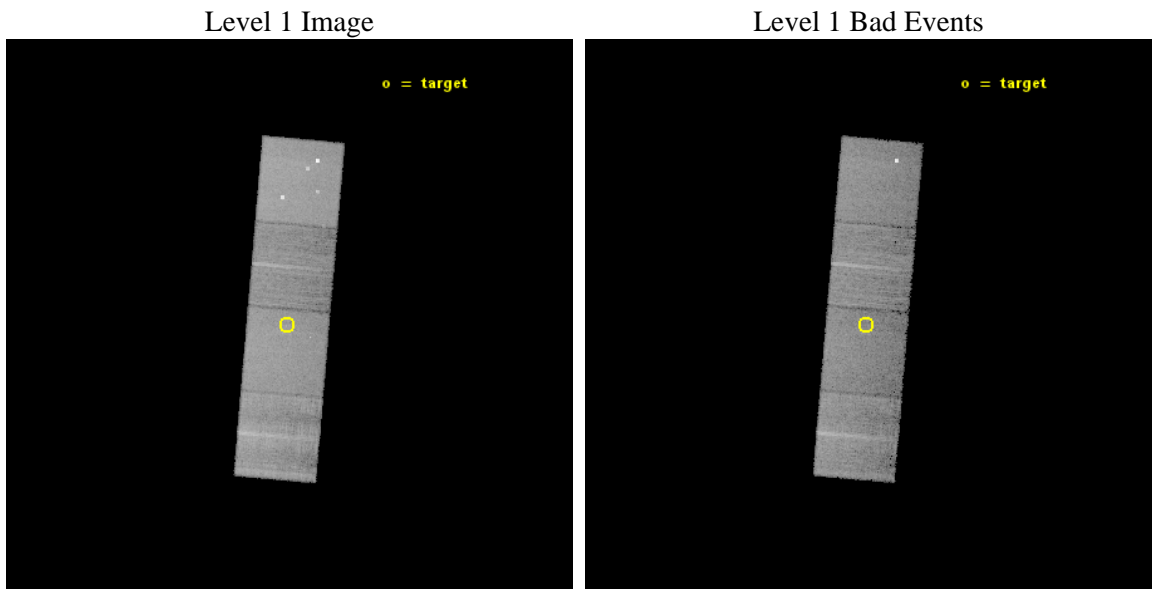
seq_num	502034	Sequence number
obs_id	15633	Observation id
title	A Study of Massive Star Evolution and Mass Loss With Multi-Wavelength Observations of Type II _n Supernovae	Proposal title
observer	Ori Fox	Principal investigator
object	SN 2012ca	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	280.279417	Observer's specified target RA [deg]
dec_targ	-41.793722	Observer's specified target Dec [deg]
ra_nom	280.27582841362	Nominal RA [deg]
dec_nom	-41.792348290373	Nominal Dec [deg]
roll_nom	95.030327660495	Nominal Roll [deg]
revision	2	Processing version of data
ontime	20072.500154376	Sum of GTIs [s]
livetime	19810.238162699	Livetime [s]
ontime5	20072.500154376	Sum of GTIs [s]
ontime6	20072.500154376	Sum of GTIs [s]
ontime7	20072.500154376	Sum of GTIs [s]
ontime8	20072.500154376	Sum of GTIs [s]
l2events	148013	Number of level 2 events



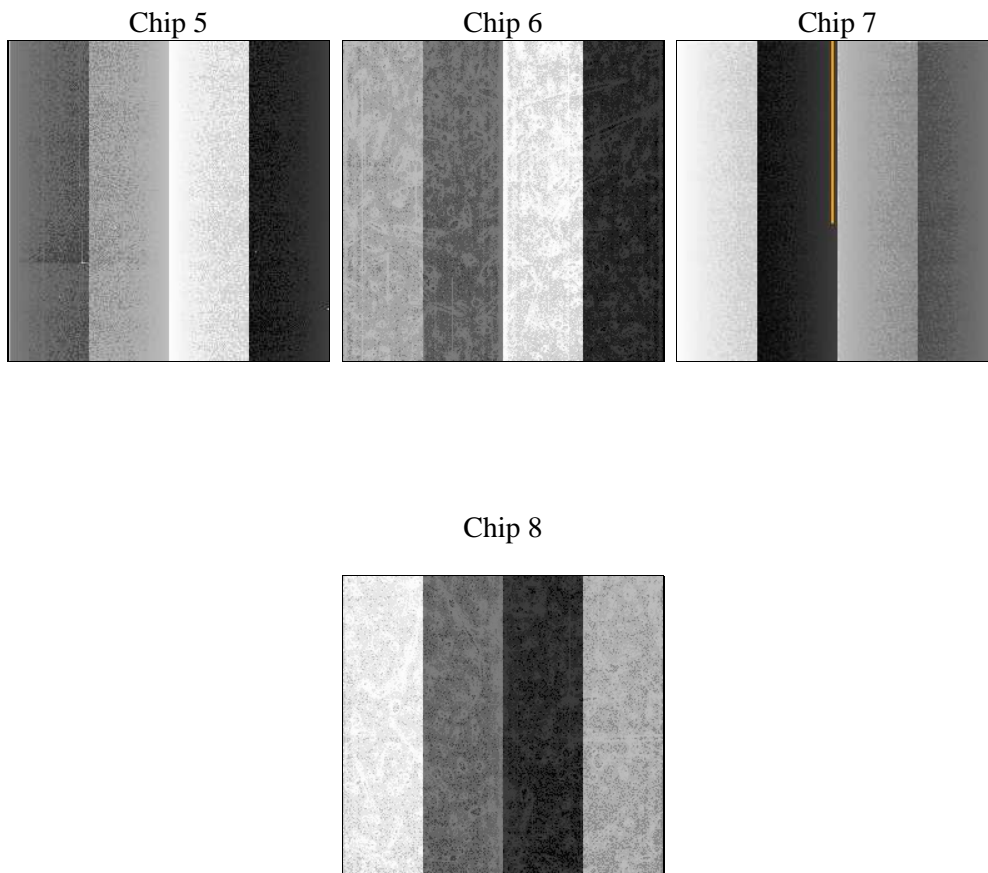
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	20000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	20072.500154376	Sum of GTIs [s]
caldsver	4.6.4	 	ontime5	20072.500154376	Sum of GTIs [s]
date	2014-12-10T17:55:35	Date and time of file creation	ontime6	20072.500154376	Sum of GTIs [s]
revision	2	Processing version of data	ontime7	20072.500154376	Sum of GTIs [s]
			ontime8	20072.500154376	Sum of GTIs [s]
			l1events	513221	Number of level 1 events

2.1.4 Events

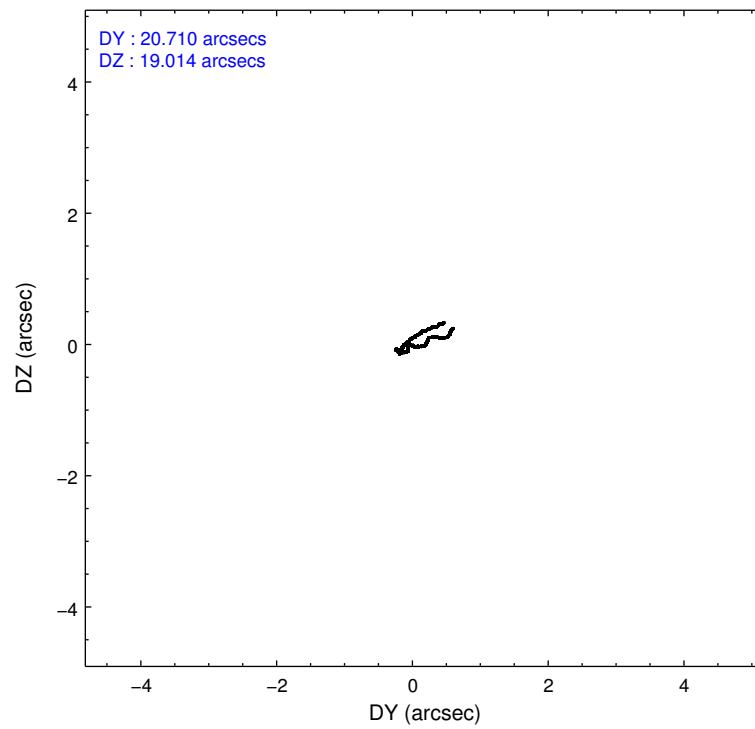
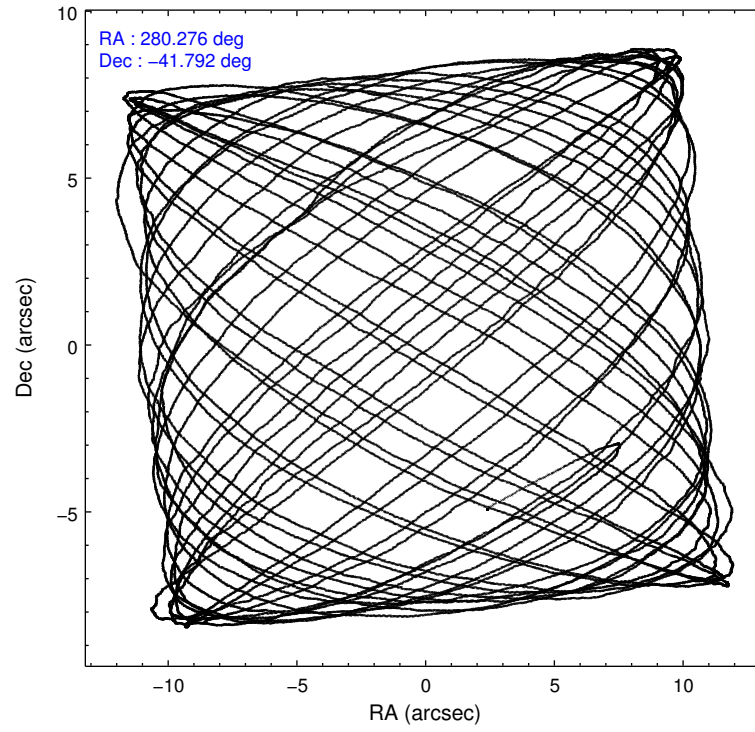
	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	164335	92308	127141	129437
rejected events	84500	80332	70848	90024
rejected %	51%	87%	55%	69%

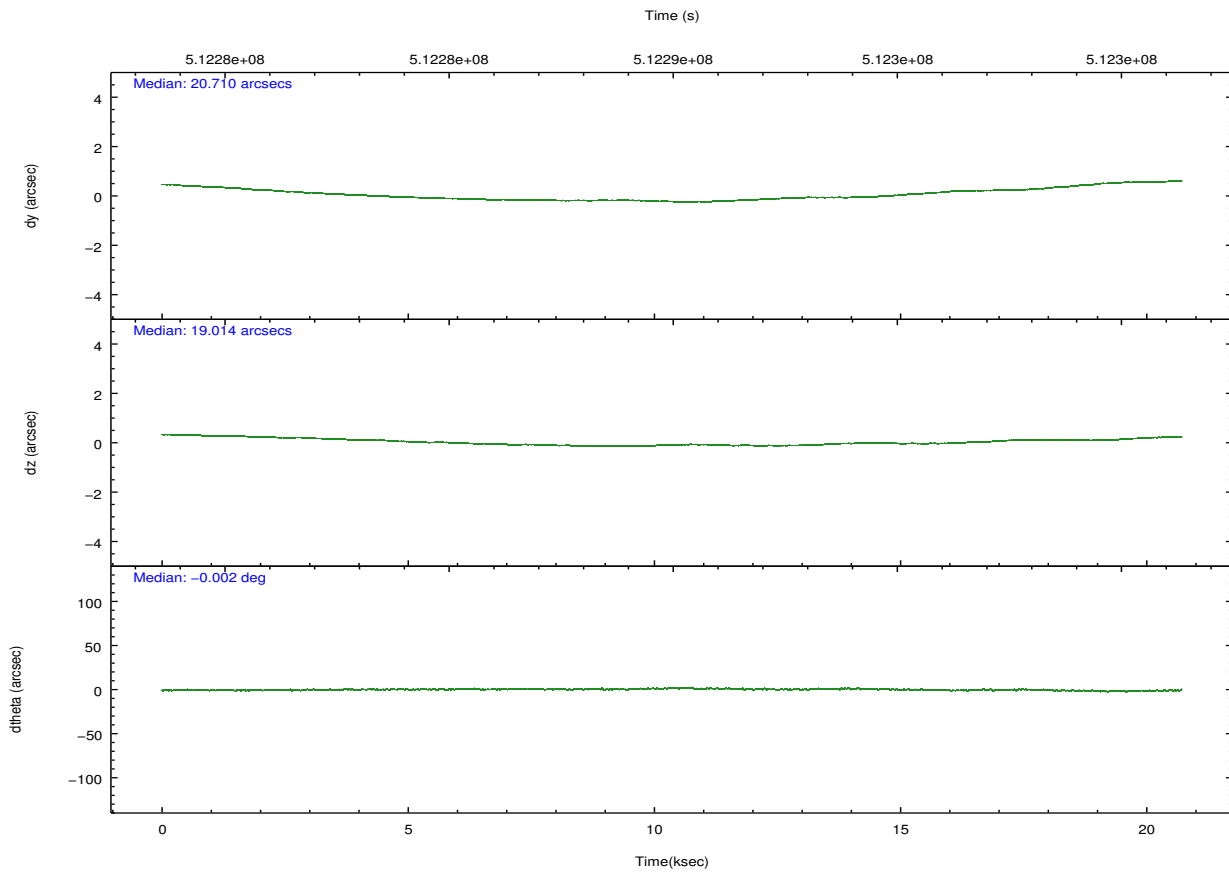
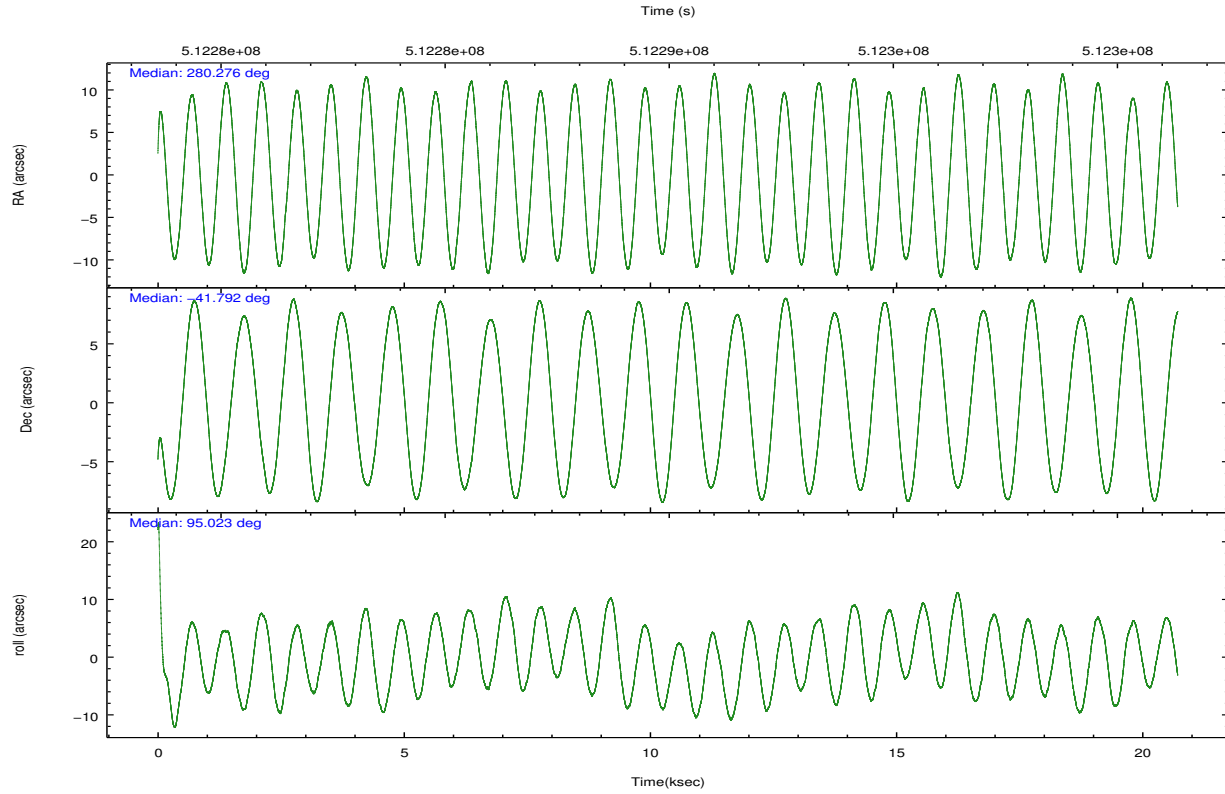
	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	11360	4453	5419	12875
	6%	4%	4%	9%
grade 1 events	968	33	161	111
	0%	0%	0%	0%
grade 2 events	23823	2652	11778	8140
	14%	2%	9%	6%
grade 3 events	2797	1153	4816	4642
	1%	1%	3%	3%
grade 4 events	2623	1120	4685	4409
	1%	1%	3%	3%
grade 5 events	13537	4827	13174	7236
	8%	5%	10%	5%
grade 6 events	39243	2600	29607	9352
	23%	2%	23%	7%
grade 7 events	69984	75470	57501	82672
	42%	81%	45%	63%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-5678	ACIS-5678	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	280.297272	280.2758284136171	Subarray requested	NONE	NONE
[deg] Pointing Dec	-41.814496	-41.79234829037287	Alternating exposures requested	N	N
[deg] Pointing Roll	94.887983	95.03032766049513	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	512280325.184000	512278821.19887			
Observation start date	2014-03-27T04:04:18	2014-03-27T03:40:21			
[s] Observation end time (MET)	512300325.184000	512301022.18759			
Observation end date	2014-03-27T09:37:38	2014-03-27T09:50:22			
Read mode	TIMED	TIMED			

2.3 Aspect





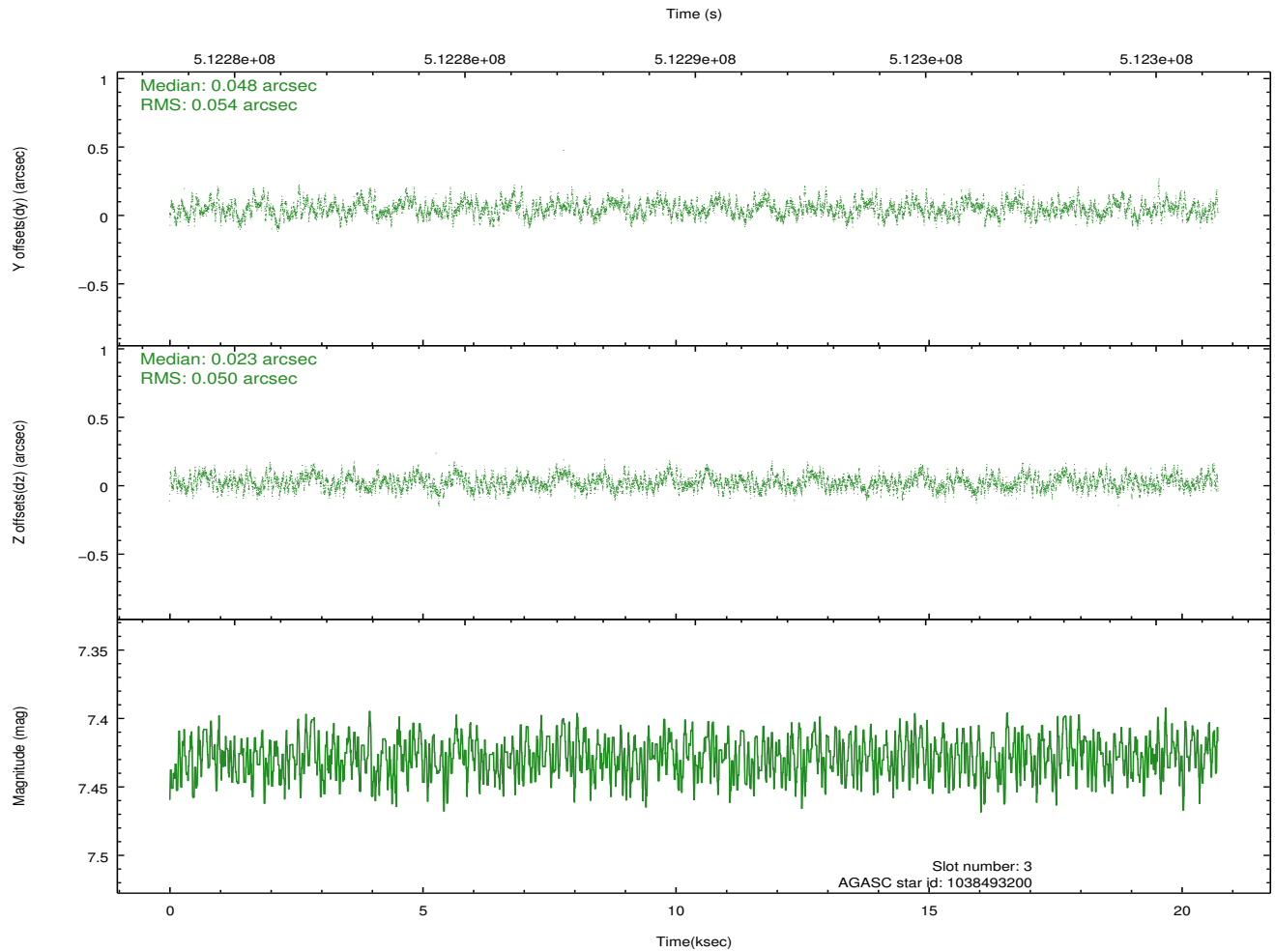
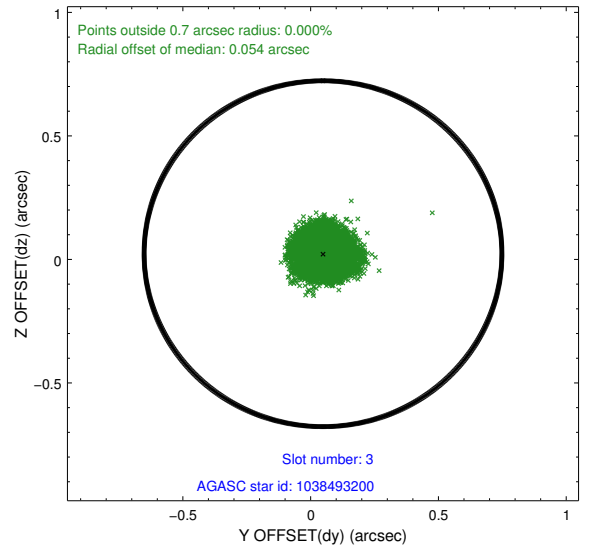
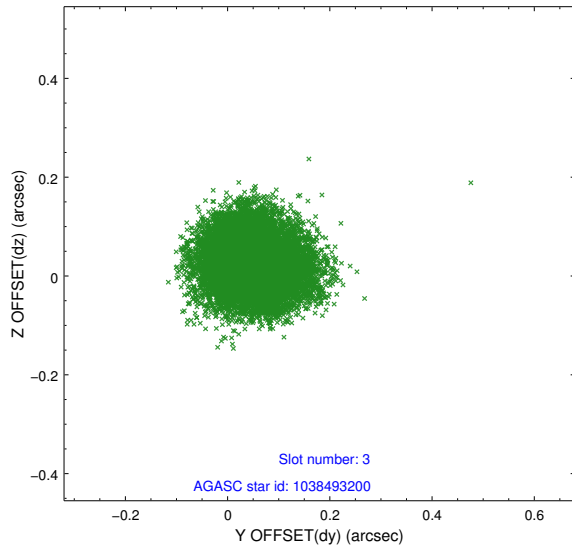
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.89	5053	-0.145	-0.074	0.007	0.013	0.000000	0.000000	-774.10	-1740.59
1	FID		ACIS-S-4	6.98	5052	0.177	0.085	0.008	0.014	0.000000	0.000000	2139.47	167.79
2	FID		ACIS-S-6	7.11	5052	-0.060	-0.004	0.009	0.015	0.000000	0.000000	388.26	805.34
3	GUIDE	used	1038493200	7.43	10105	0.048	0.023	0.081	0.123	280.542930	-41.907658	-392.23	-625.53
4	GUIDE	used	1038493440	8.59	10098	0.215	0.330	0.084	0.133	281.127171	-42.046961	-1032.70	-2137.97
5	GUIDE	used	1036797664	9.25	10098	-0.179	-0.328	0.129	0.205	279.866917	-41.439606	1440.67	1042.24
6	GUIDE	used	1038488056	8.76	10102	0.033	-0.296	0.122	0.195	280.044455	-41.935360	-376.28	711.70
7	GUIDE	used	1038501064	7.46	10102	-0.121	0.269	0.068	0.110	281.153638	-41.378556	1355.44	-2437.07

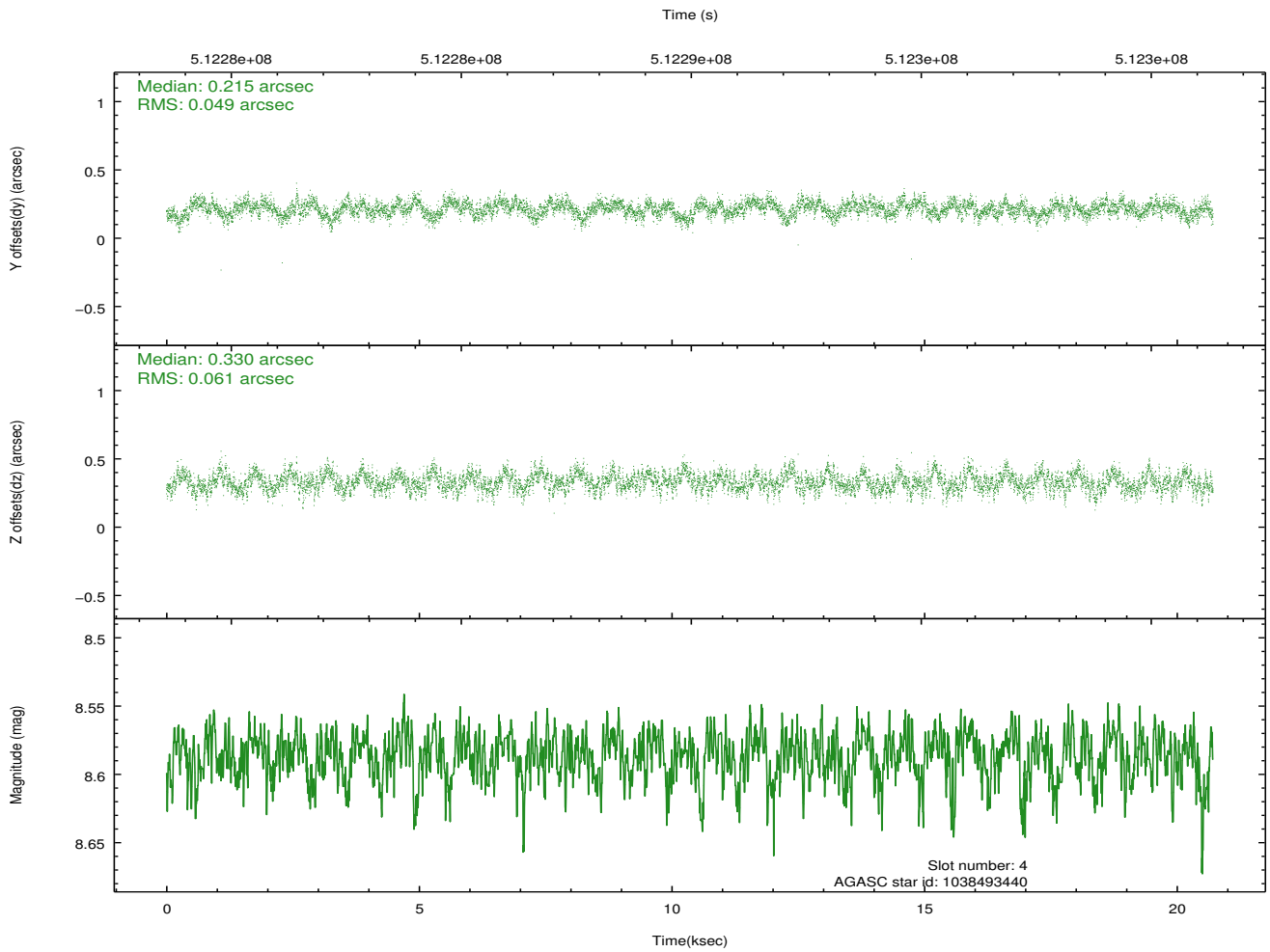
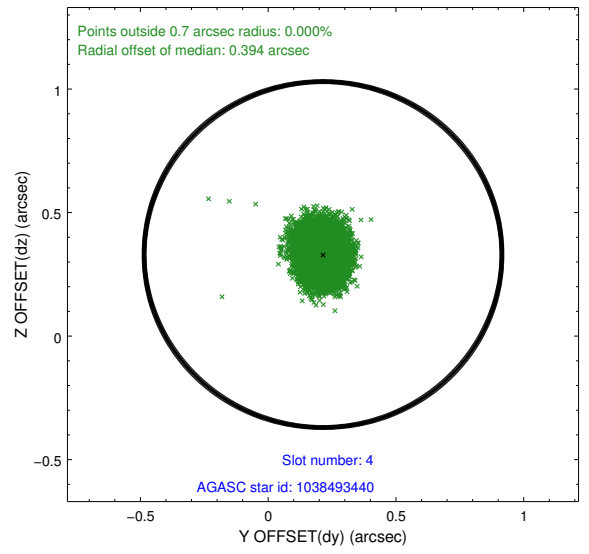
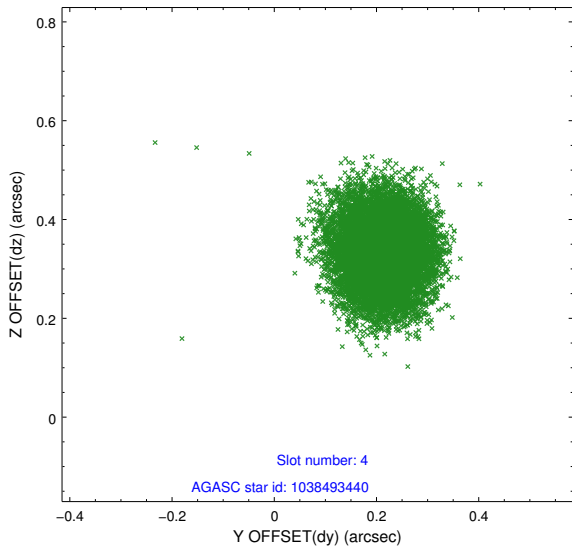
∞

2.4 Star Slots

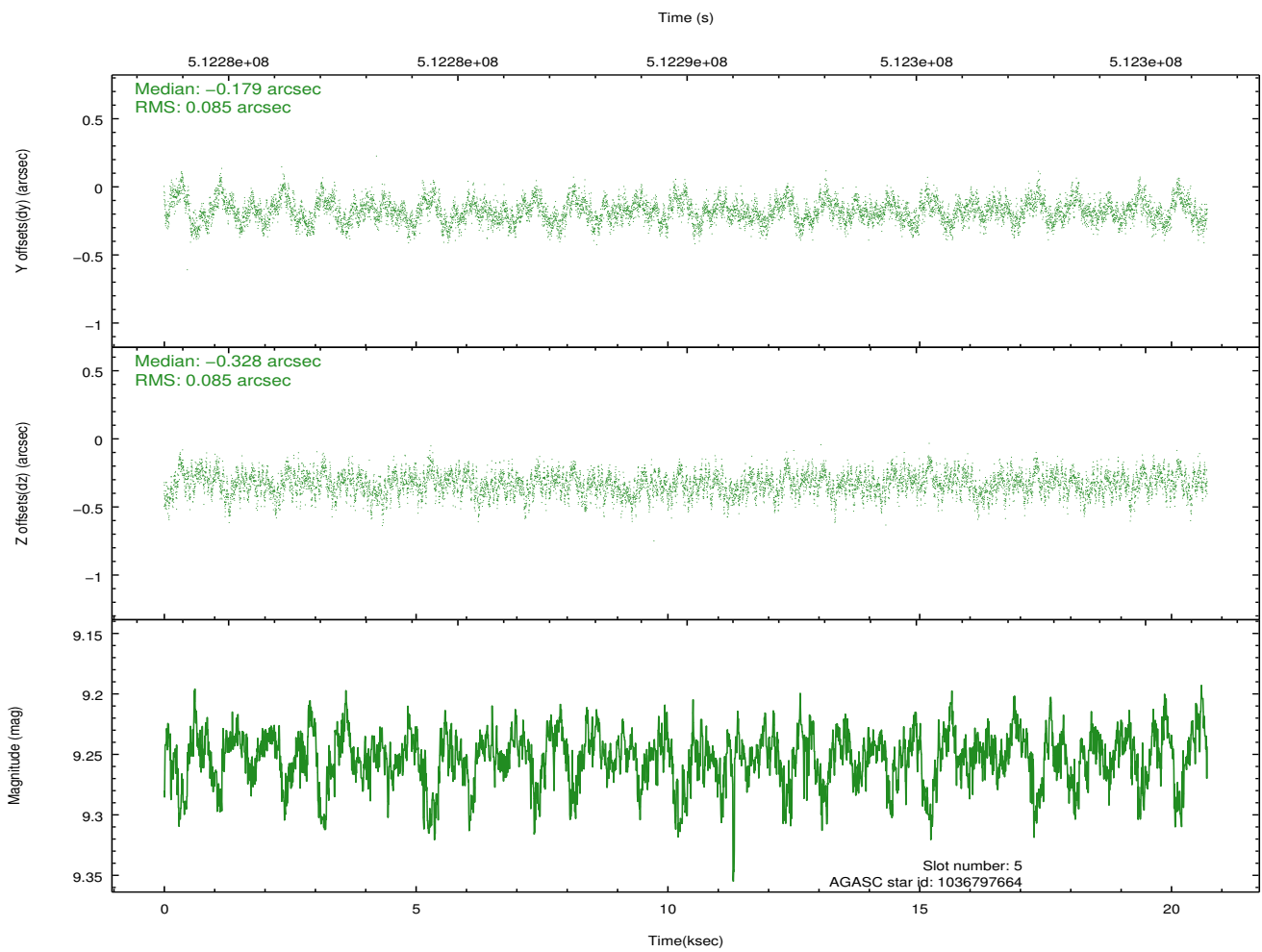
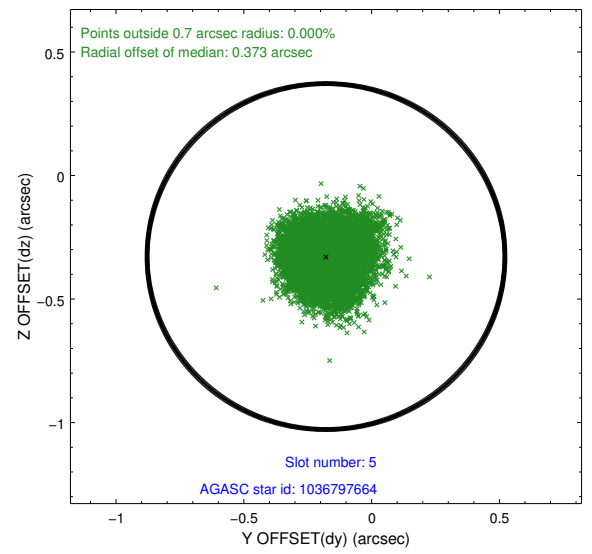
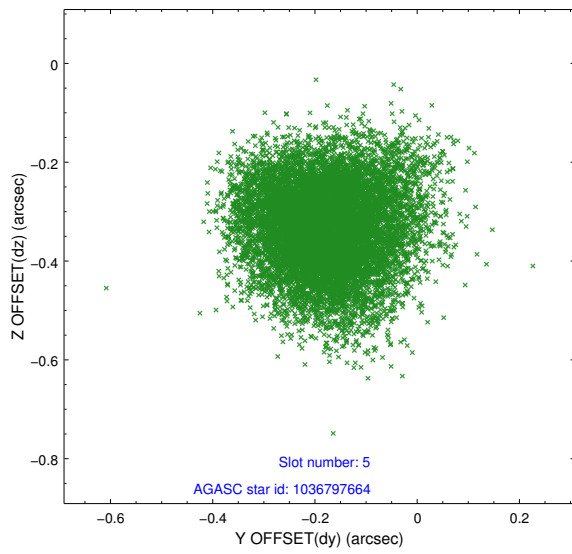
2.4.1 Slot 3



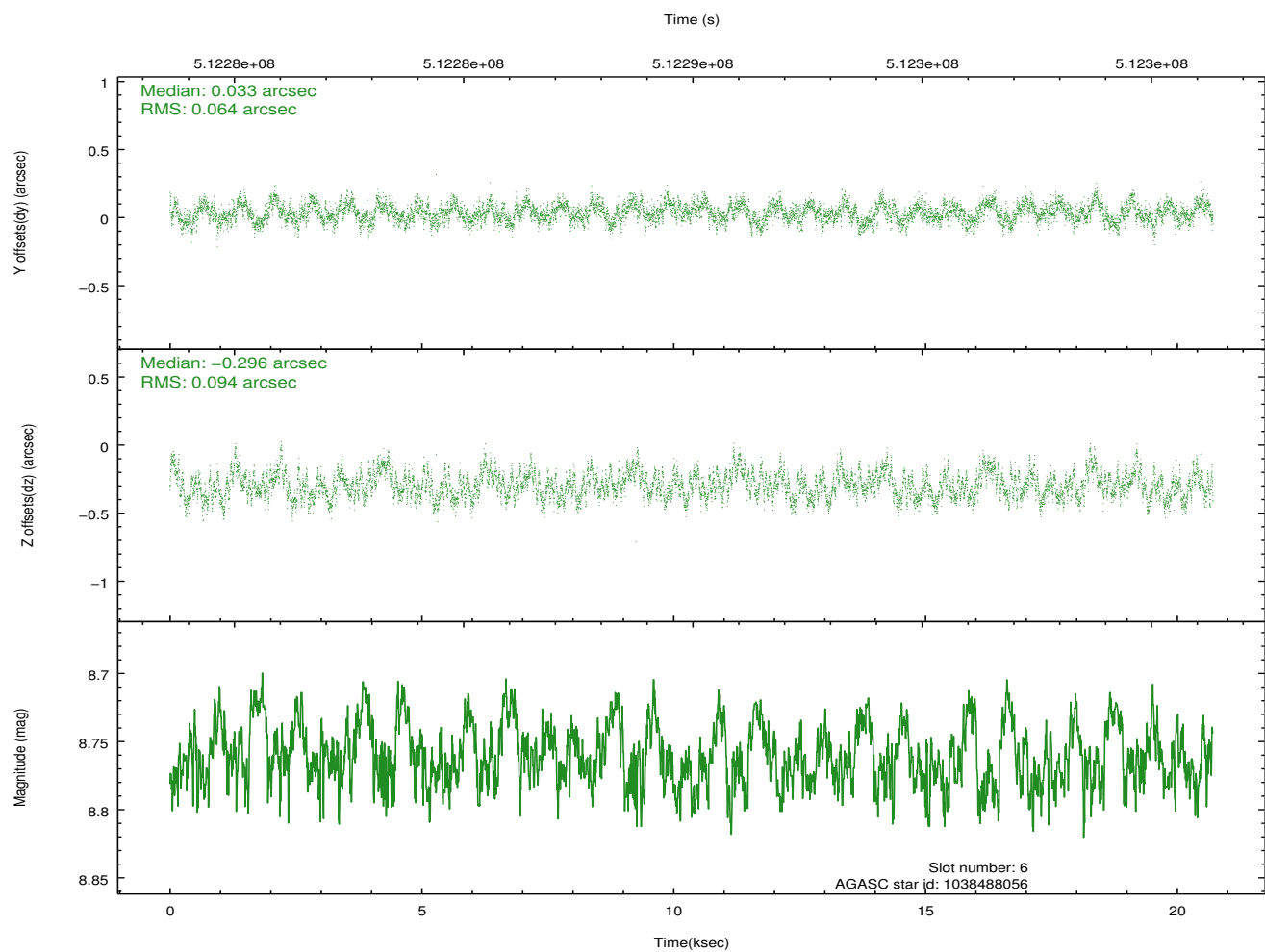
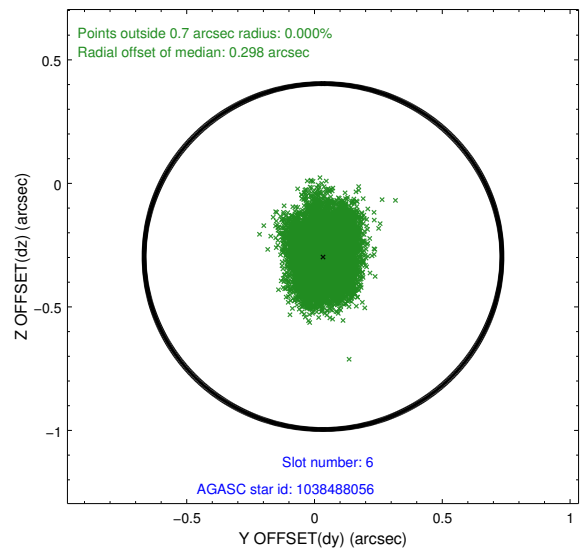
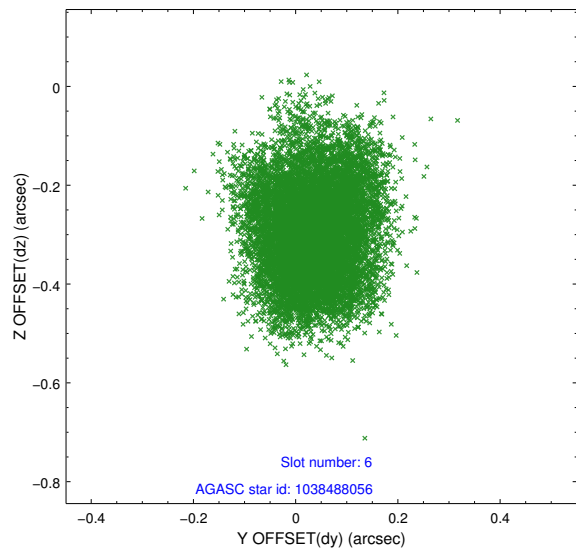
2.4.2 Slot 4



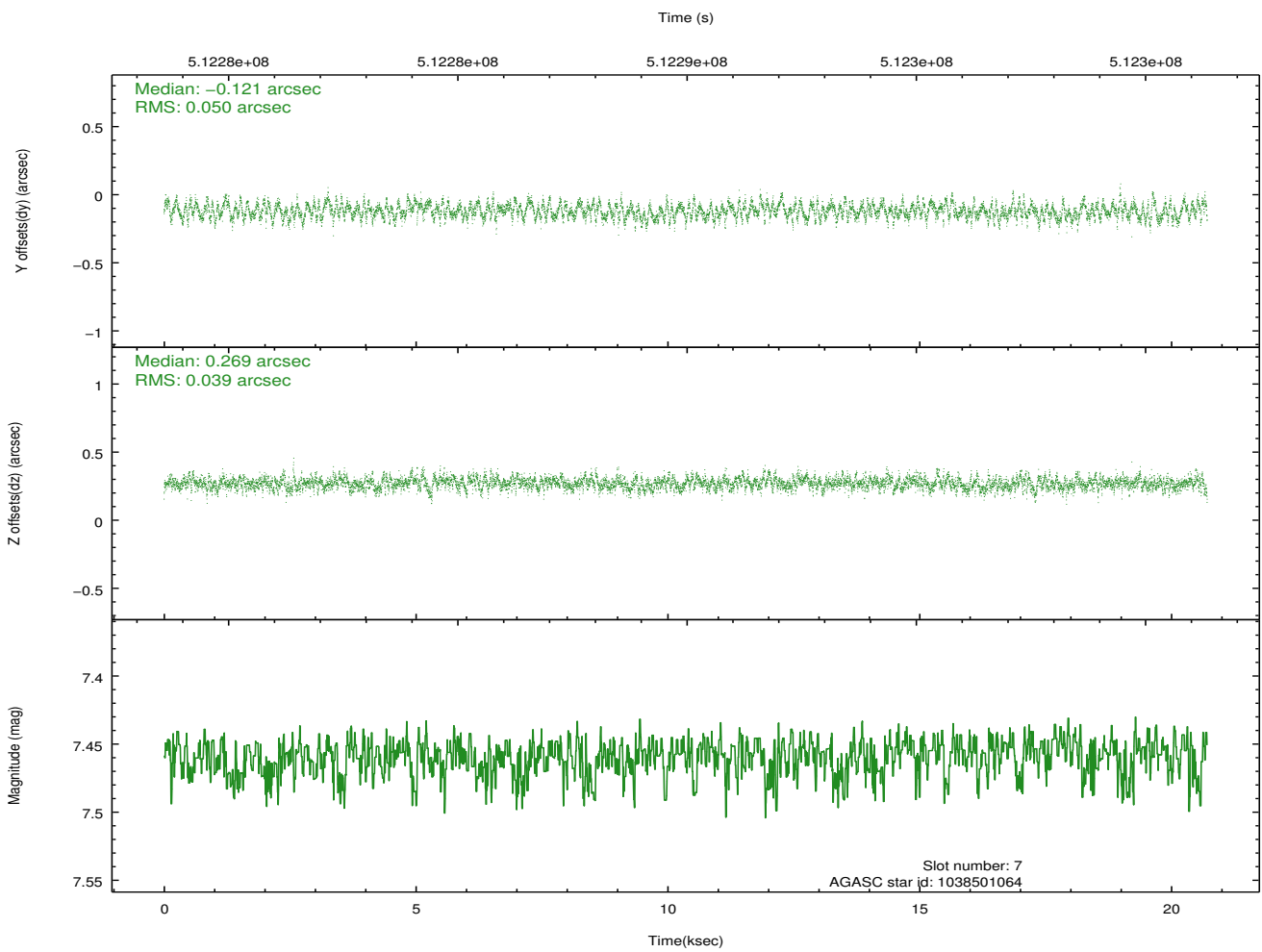
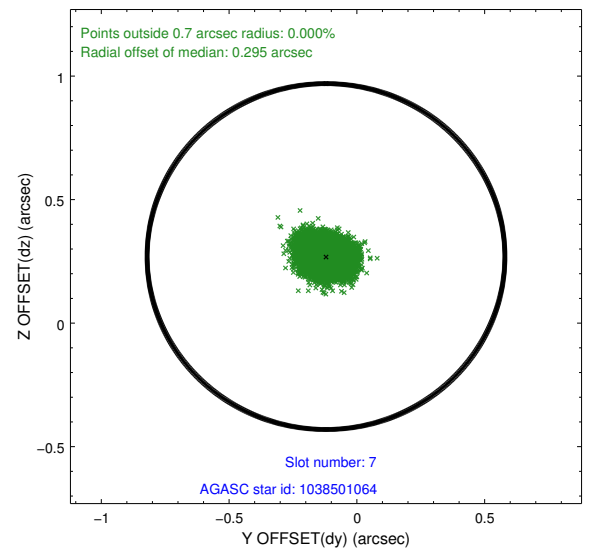
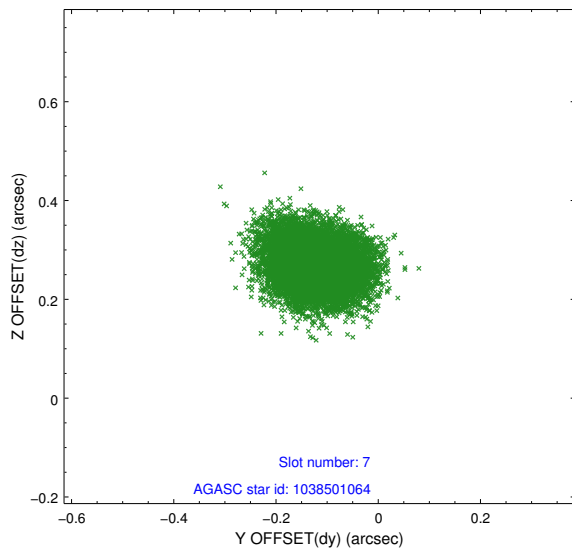
2.4.3 Slot 5



2.4.4 Slot 6

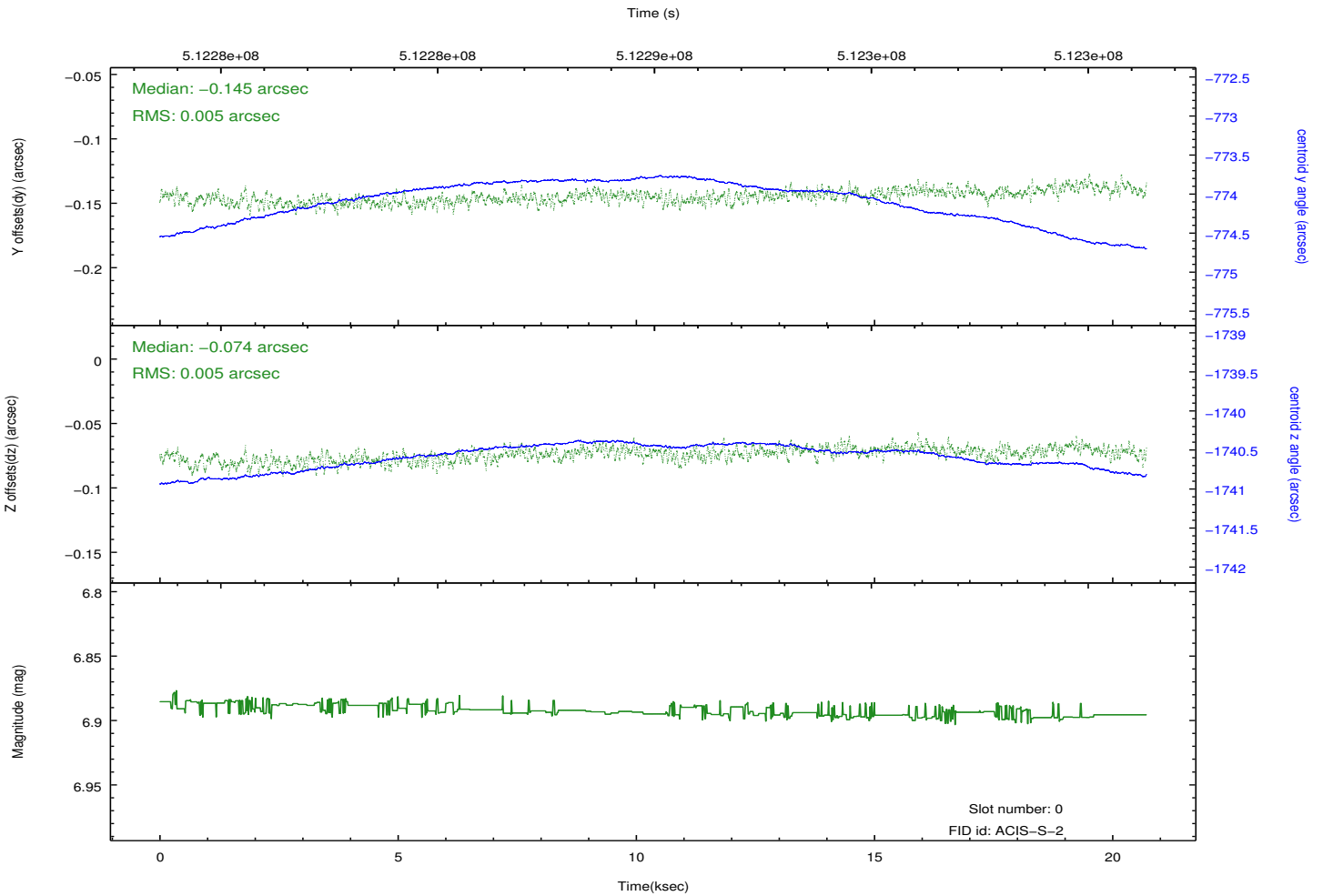
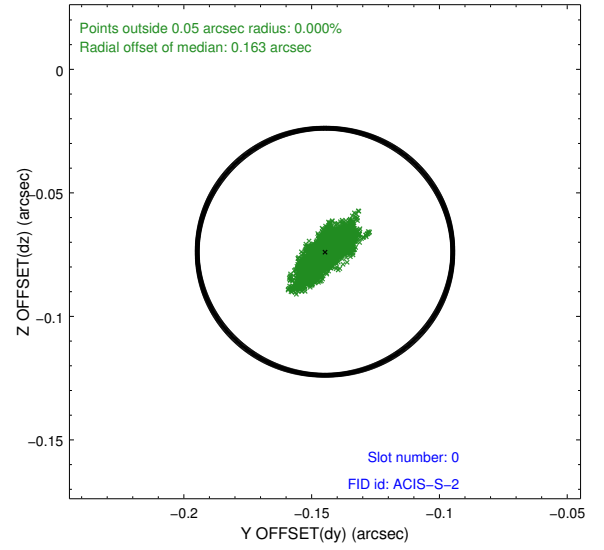
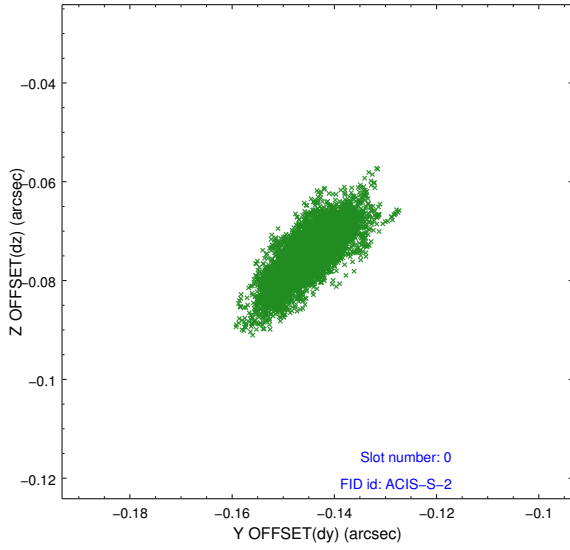


2.4.5 Slot 7

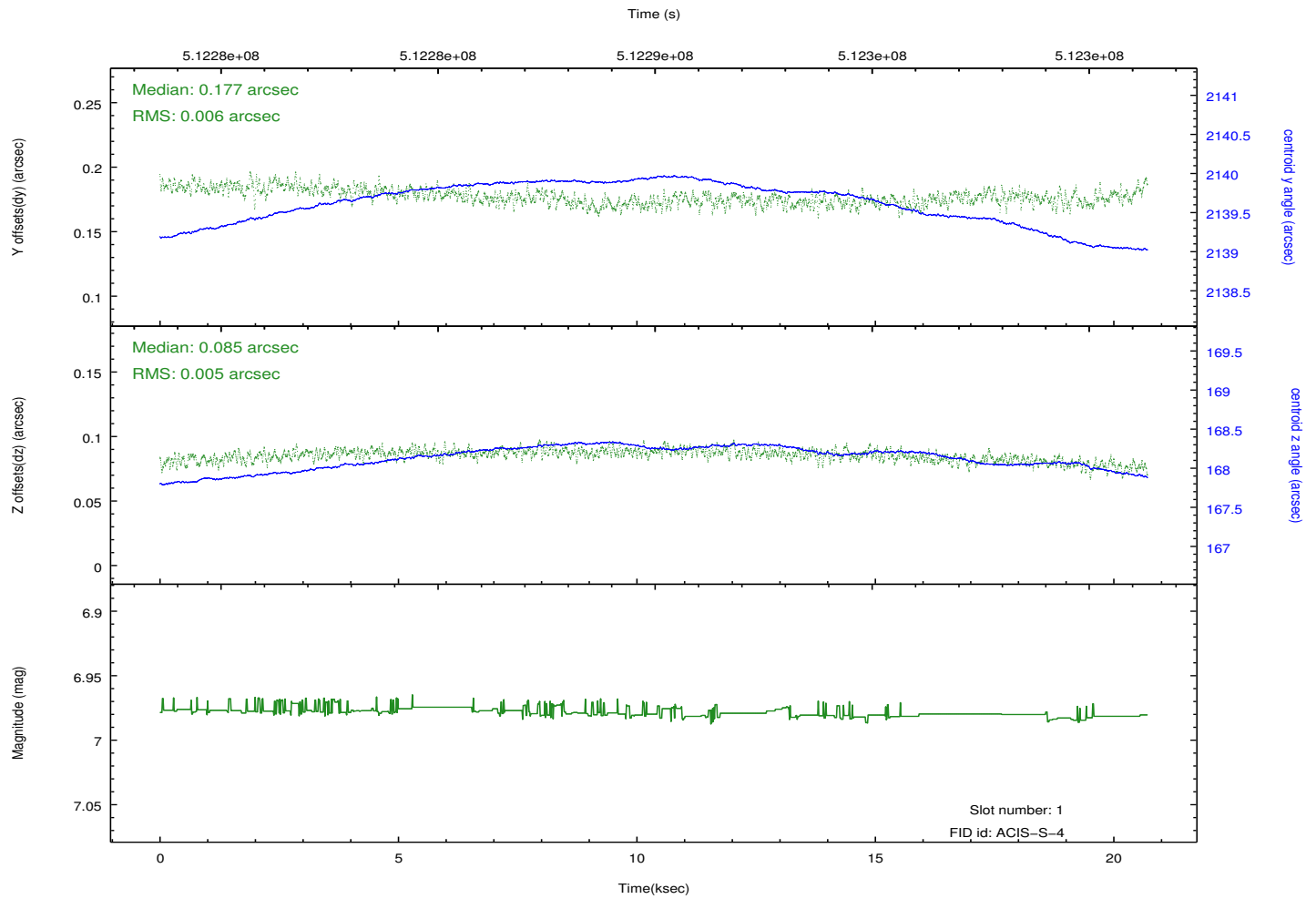
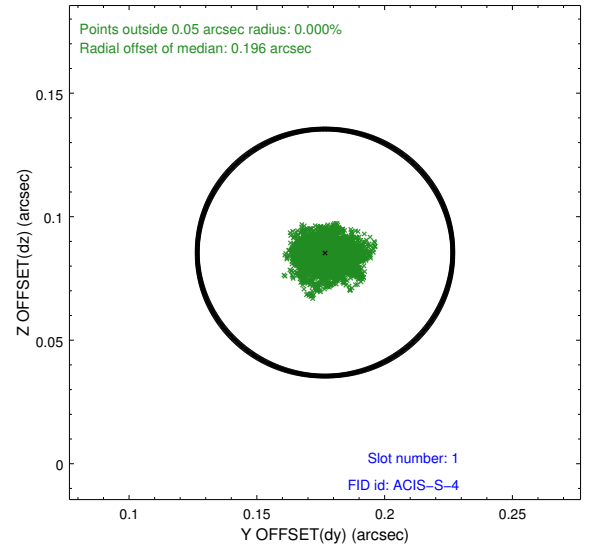
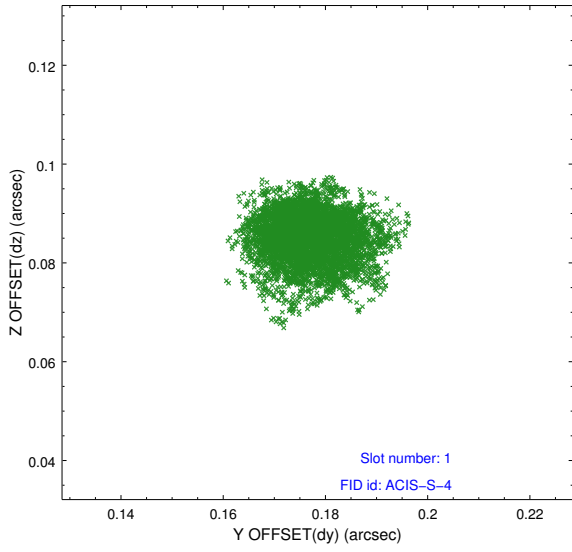


2.5 FID Slots

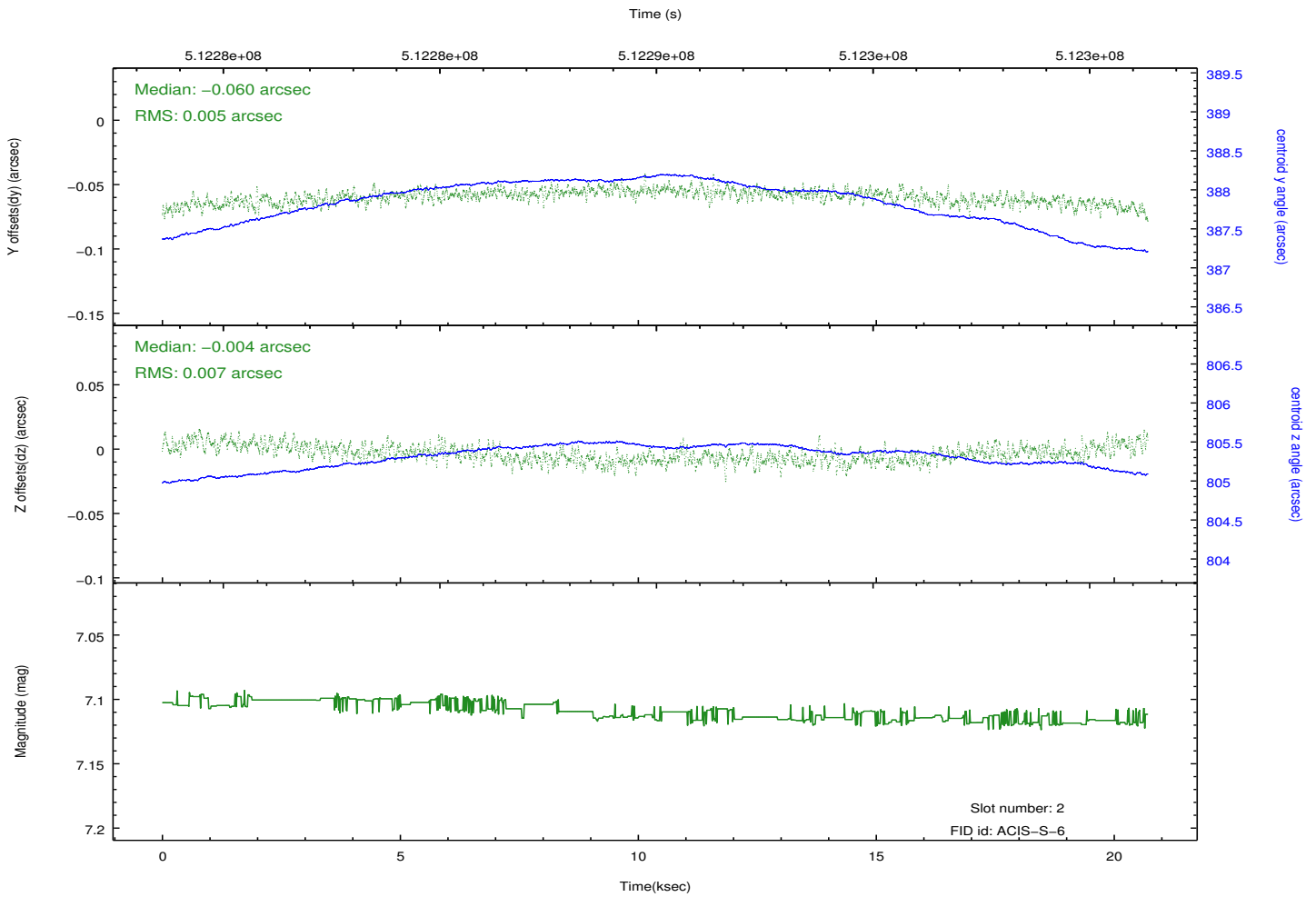
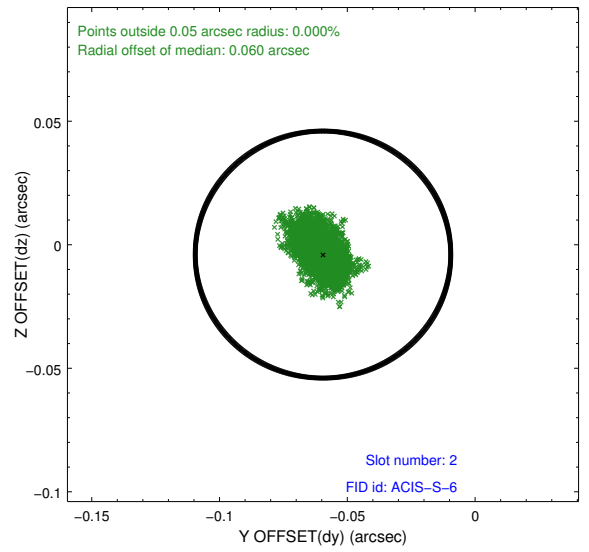
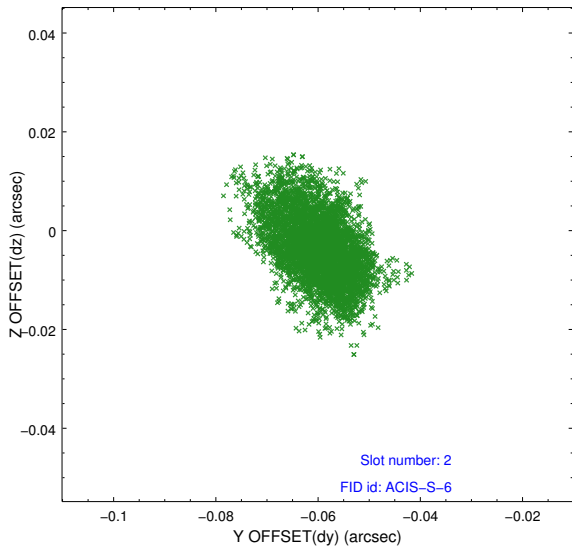
2.5.1 Slot 0



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)	2014.12.18
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.072500154376

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.