

V&V Reference Report

L2 ASCDS Version : 10.6

Observation 21001 - L2 Version 2
Chandra X-Ray Center

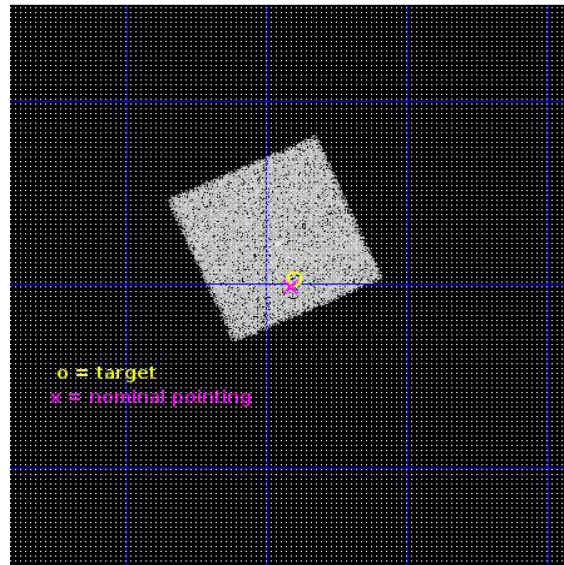
L2 Processing Date : Mar 30 2018

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 6	11
2.4.4	Slot 7	12
2.5	FID Slots	13
2.5.1	Slot 0	13
2.5.2	Slot 1	14
2.5.3	Slot 2	15
A	Summary	16
A.1	Status	16
A.2	Comments	16

1 Front

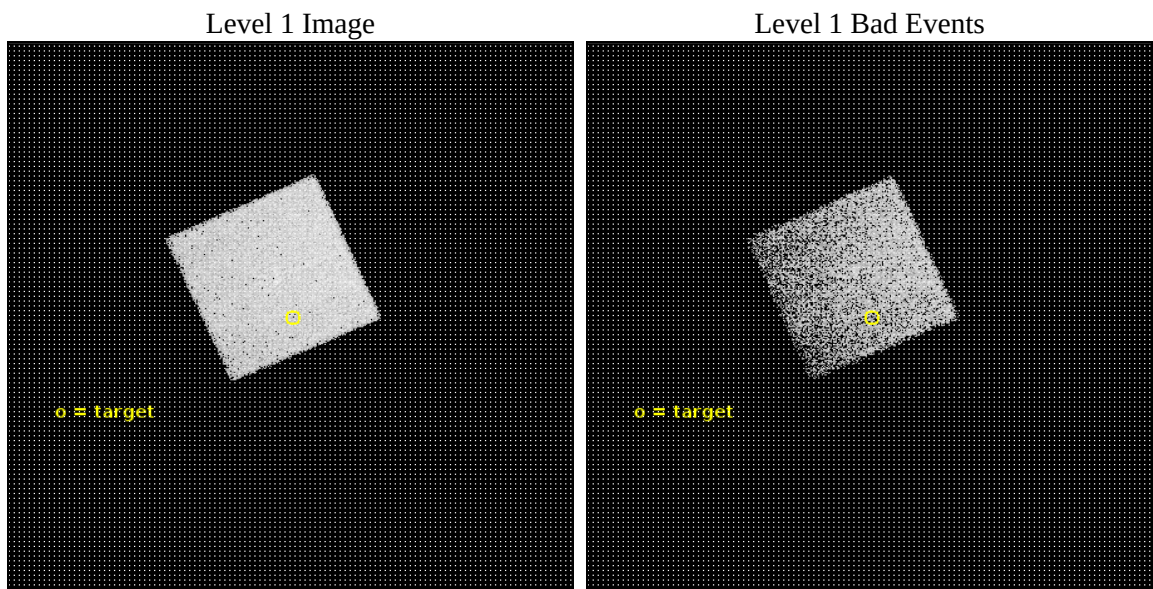
seq_num	503047	Sequence number
obs_id	21001	Observation id
title	Zeroing in on the Mass Loss Properties of Core Collapse Supernova Progenitors	Proposal title
observer	Dan Patnaude	Principal investigator
object	SN2012aw	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	160.975	Observer's specified target RA [deg]
dec_targ	11.671389	Observer's specified target Dec [deg]
ra_nom	160.97758393453	Nominal RA [deg]
dec_nom	11.664225856956	Nominal Dec [deg]
roll_nom	245.95617699209	Nominal Roll [deg]
revision	2	Processing version of data
ontime	10091.451193571	Sum of GTIs [s]
liveltime	9955.2631930897	Livetime [s]
ontime7	10091.451193571	Sum of GTIs [s]
l2events	40033	Number of level 2 events



2 OBI

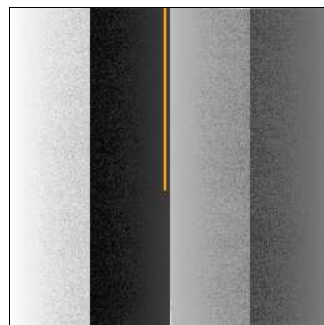
2.1 OBI

2.1.1 Images



2.1.2 Bias

Chip 7



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	10.6	Processing system revision	ontime	10091.451193571	Sum of GTIs [s]
caldsver	4.7.8	 	ontime7	10091.451193571	Sum of GTIs [s]
date	2018-03-30T13:02:51	Date and time of file creation	l1events	92082	Number of level 1 events
revision	2	Processing version of data			

2.1.4 Events

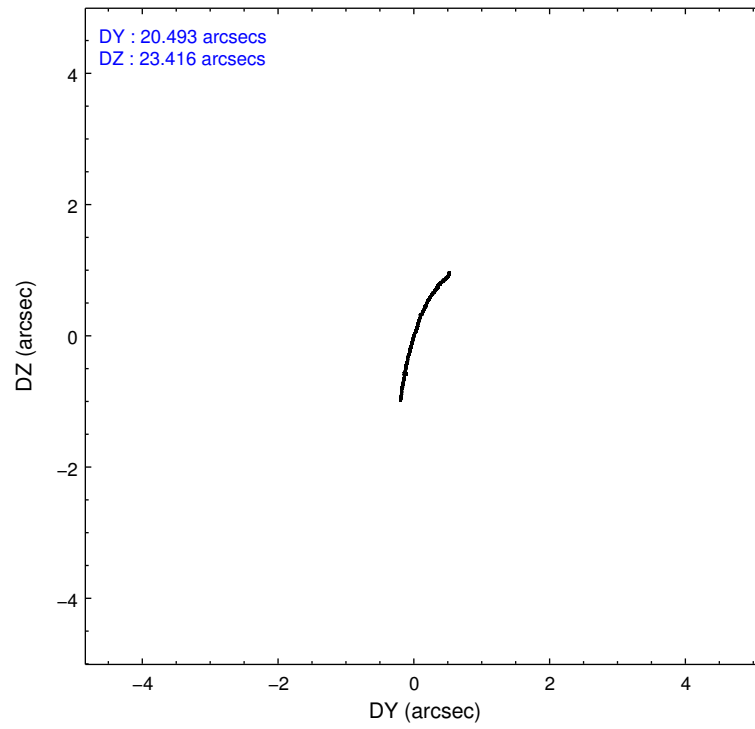
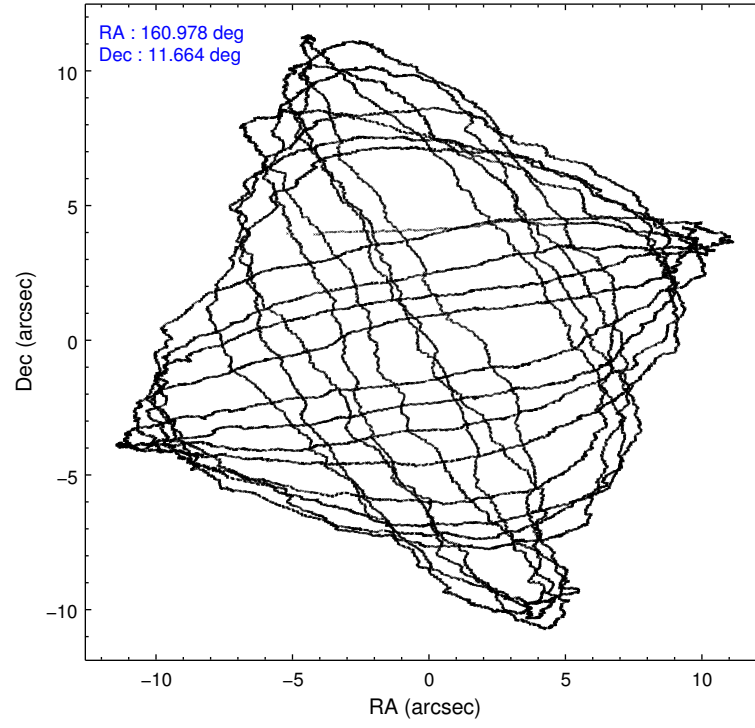
	ccd 7
level 1 events	92082
rejected events	51095
rejected %	55%

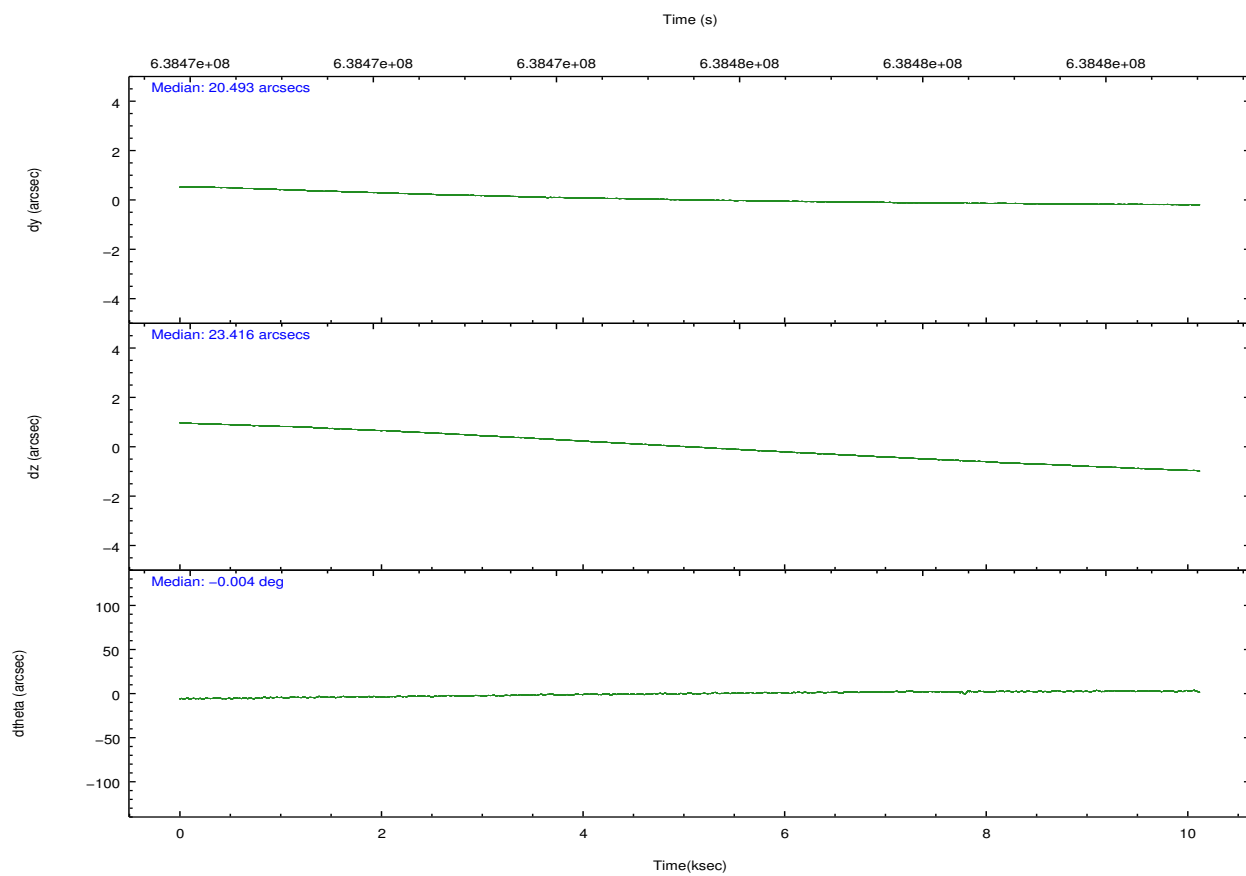
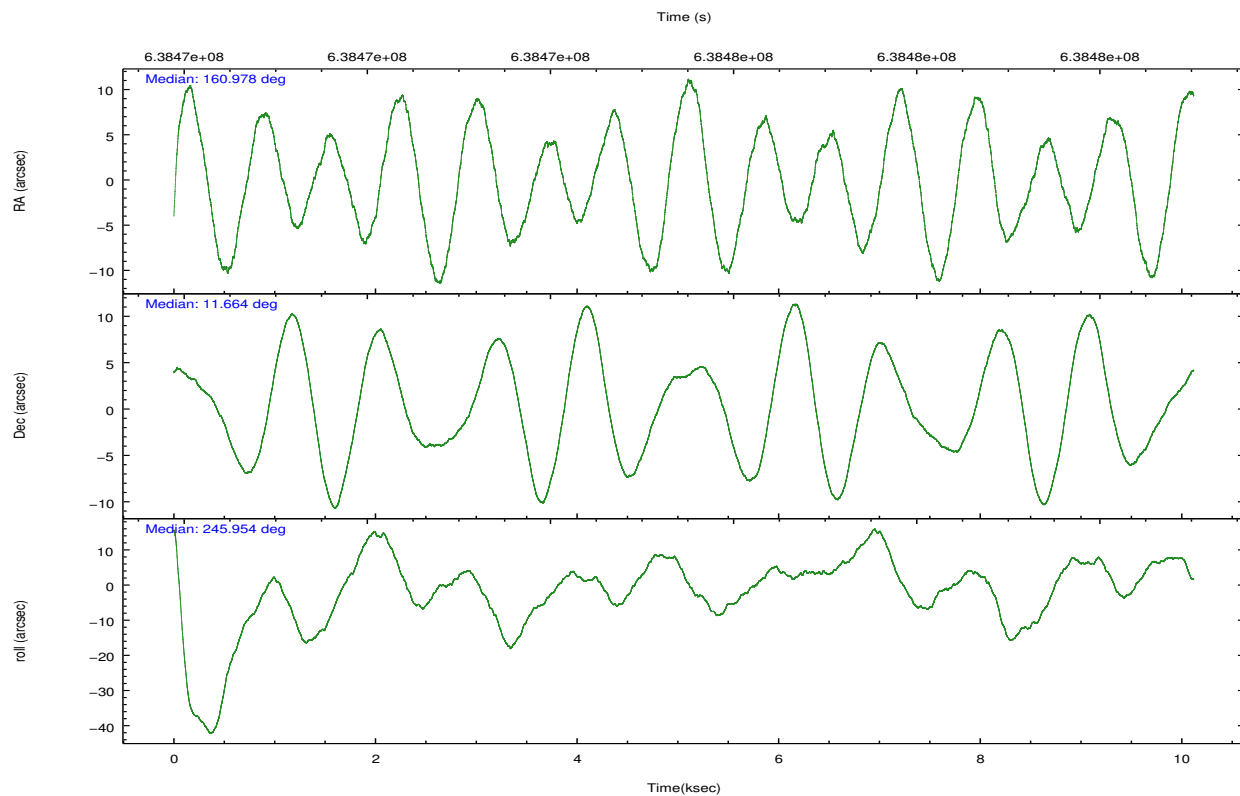
	ccd 7
grade 0 events	3543
	3%
grade 1 events	145
	0%
grade 2 events	8850
	9%
grade 3 events	3438
	3%
grade 4 events	3388
	3%
grade 5 events	9441
	10%
grade 6 events	21795
	23%
grade 7 events	41482
	45%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-7	ACIS-7	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	160.974261	160.9775839345334	Subarray requested	NONE	NONE
[deg] Pointing Dec	11.691482	11.66422585695622	Alternating exposures requested	N	N
[deg] Pointing Roll	245.800152	245.9561769920915	[s] Primary exposure time	0.000000	3
[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)	638470513.184000	638469147.77057			
Observation start date	2018-03-26T16:54:04	2018-03-26T16:32:27			
[s] Observation end time (MET)	638480513.184000	638481292.48379			
Observation end date	2018-03-26T19:40:44	2018-03-26T19:54:52			
Read mode	TIMED	TIMED			

2.3 Aspect



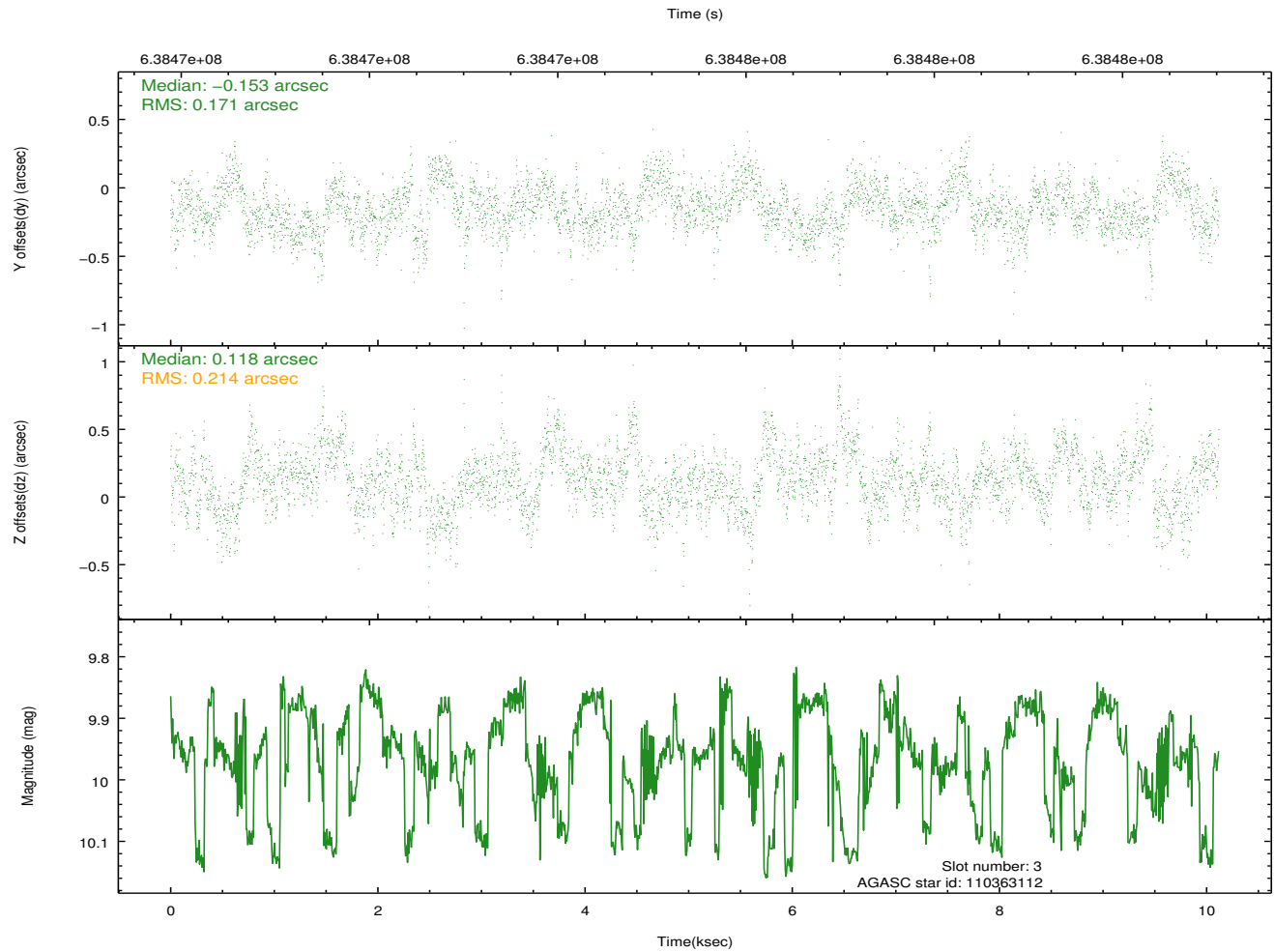
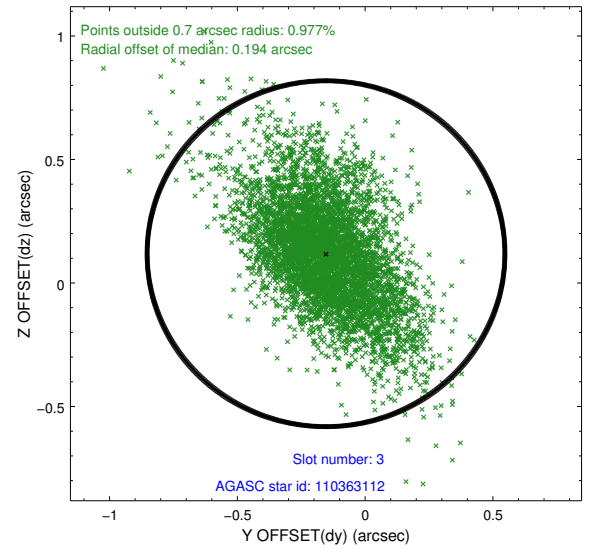
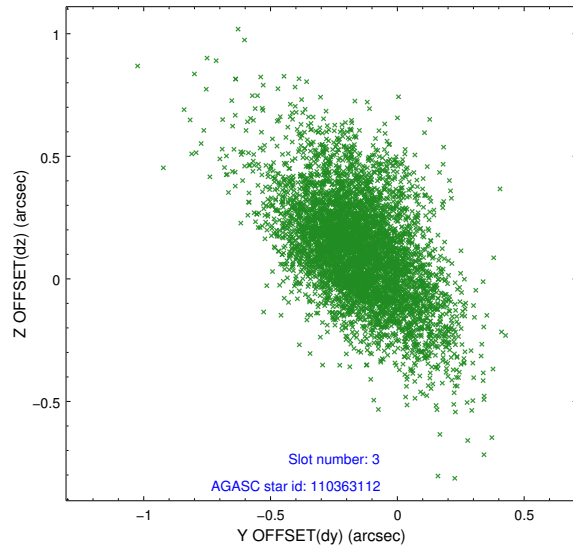


Slot Statistics

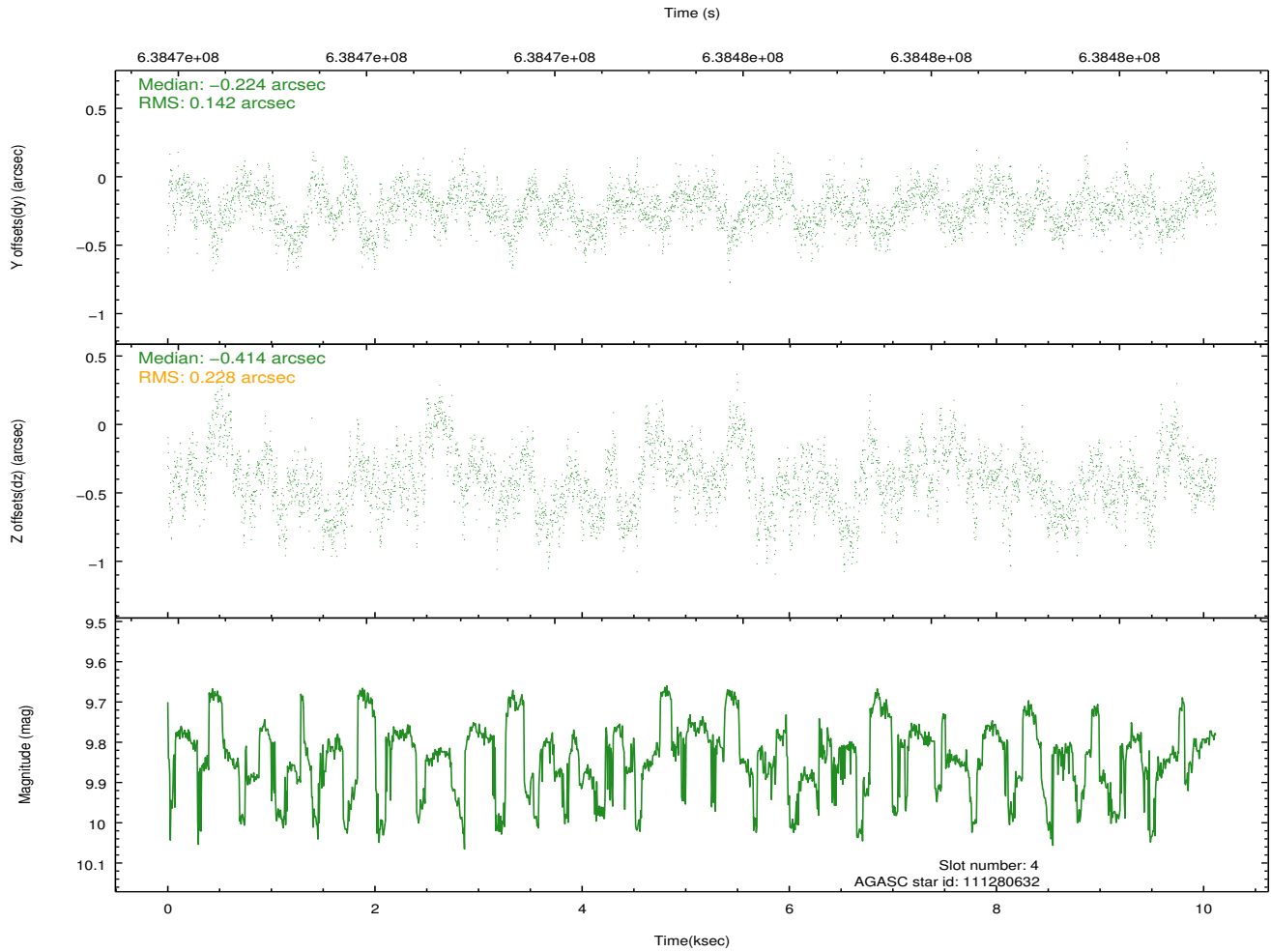
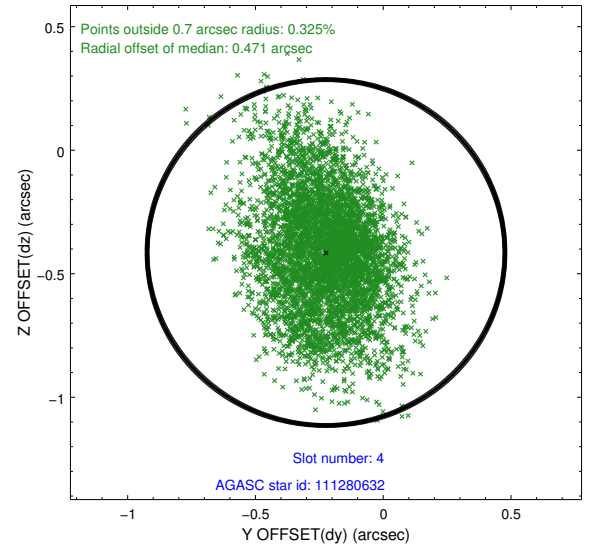
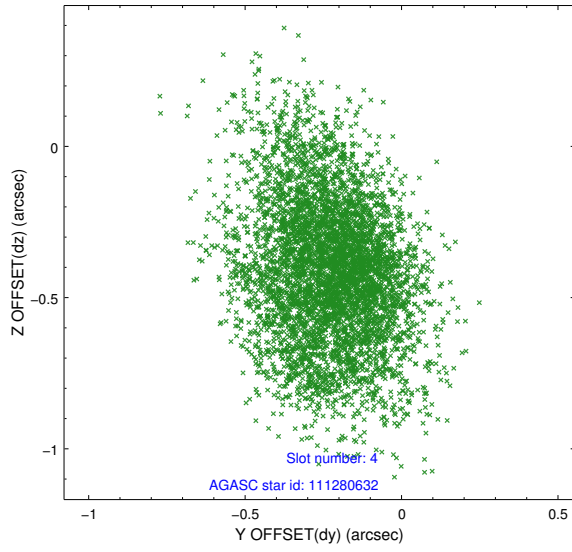
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.97	2468	-0.251	-0.124	0.028	0.057	0.000000	0.000000	-773.91	-1745.15
1	FID		ACIS-S-4	7.07	2468	0.506	0.153	0.008	0.013	0.000000	0.000000	2139.86	163.08
2	FID		ACIS-S-5	7.08	2468	-0.286	-0.021	0.026	0.049	0.000000	0.000000	-1826.14	157.13
3	GUIDE	used	110363112	9.96	4911	-0.153	0.118	0.275	0.499	160.492613	11.398369	1658.44	-1118.33
4	GUIDE	used	111280632	9.83	4928	-0.224	-0.414	0.281	0.480	161.089942	11.335611	1001.53	897.06
5	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
6	GUIDE	used	110365200	9.22	4929	0.173	0.175	0.203	0.334	160.778767	12.493533	-2350.92	-1810.97
7	GUIDE	used	110363240	8.12	4935	0.197	0.116	0.175	0.281	160.564767	12.418075	-1796.09	-2386.46

2.4 Star Slots

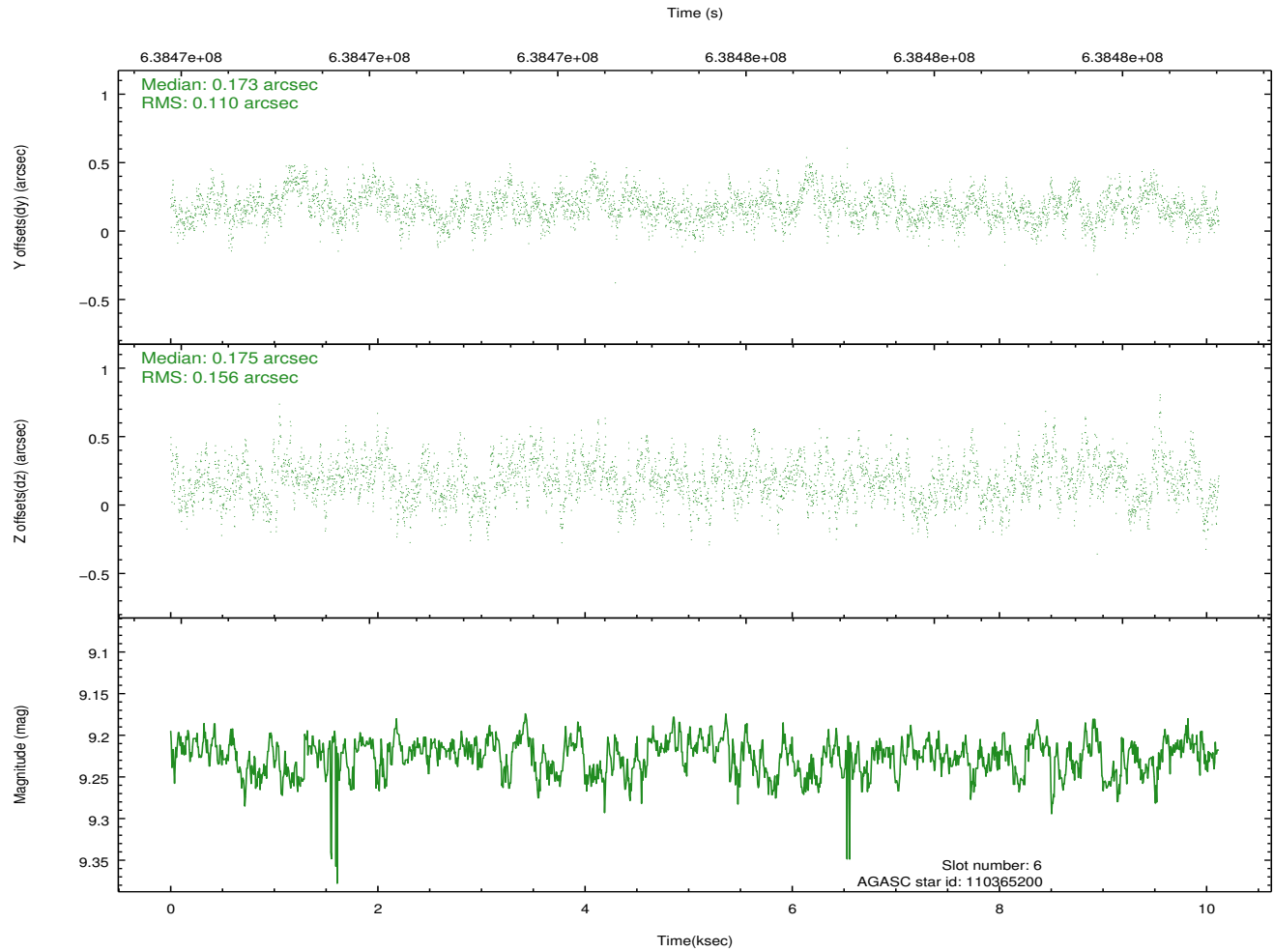
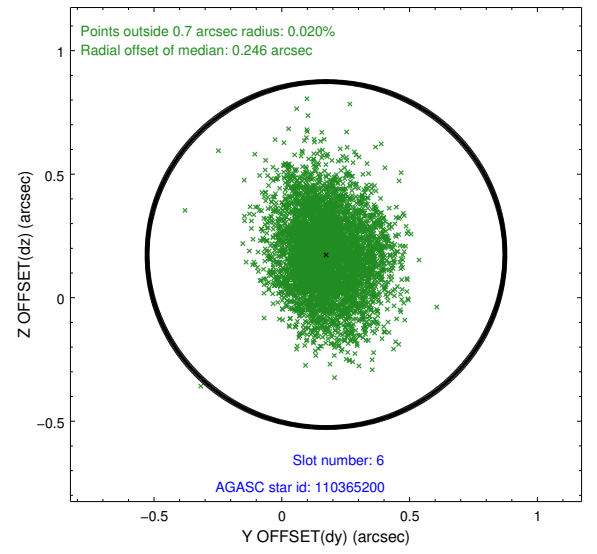
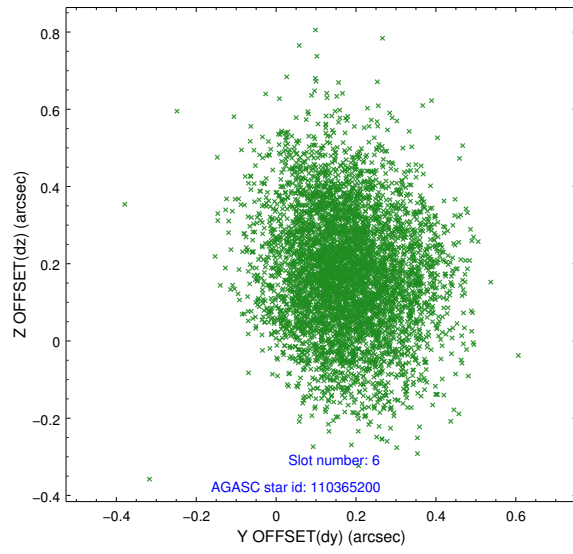
2.4.1 Slot 3



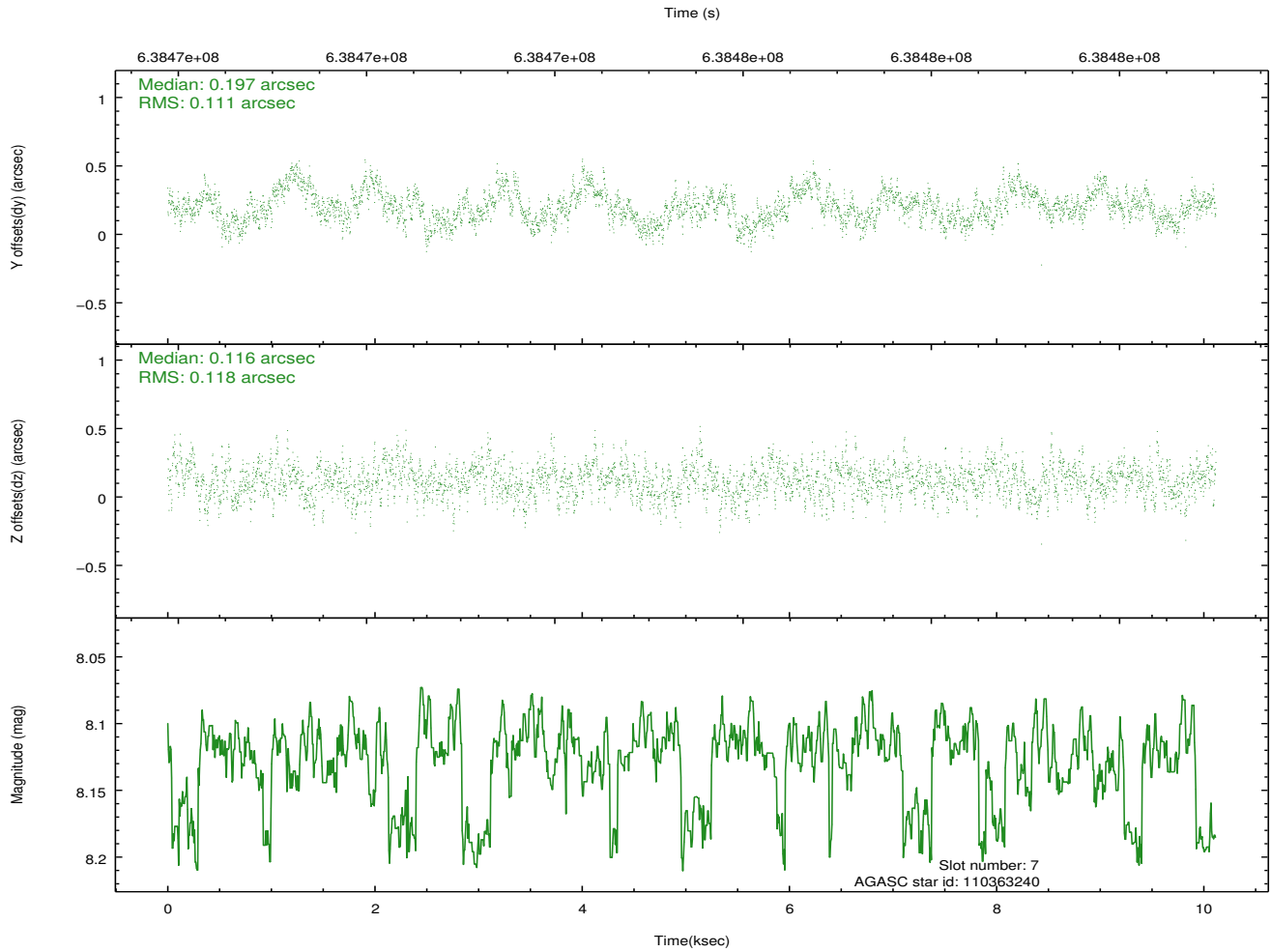
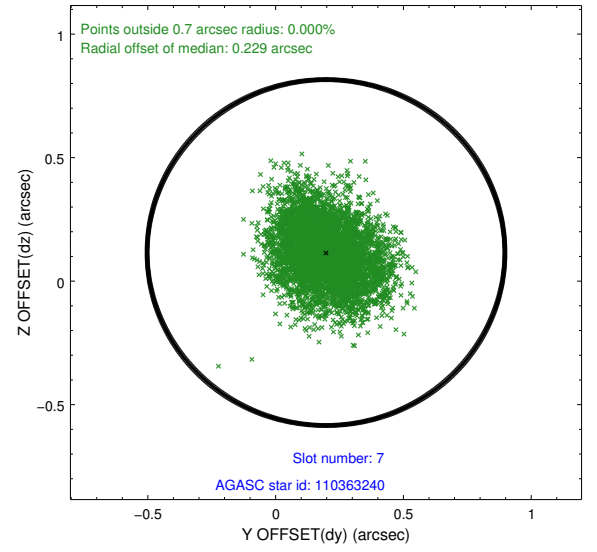
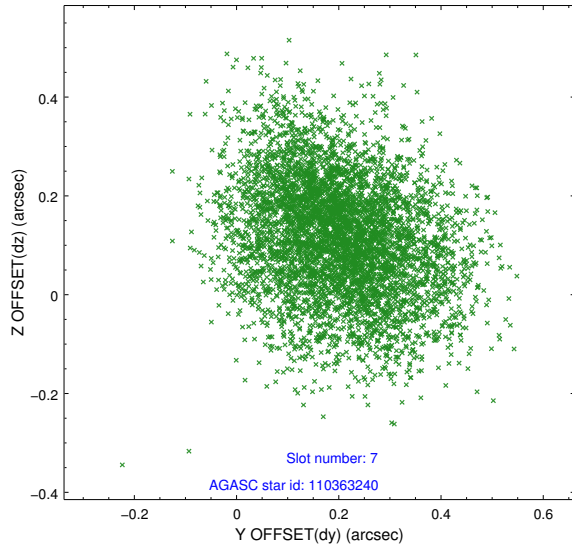
2.4.2 Slot 4



2.4.3 Slot 6

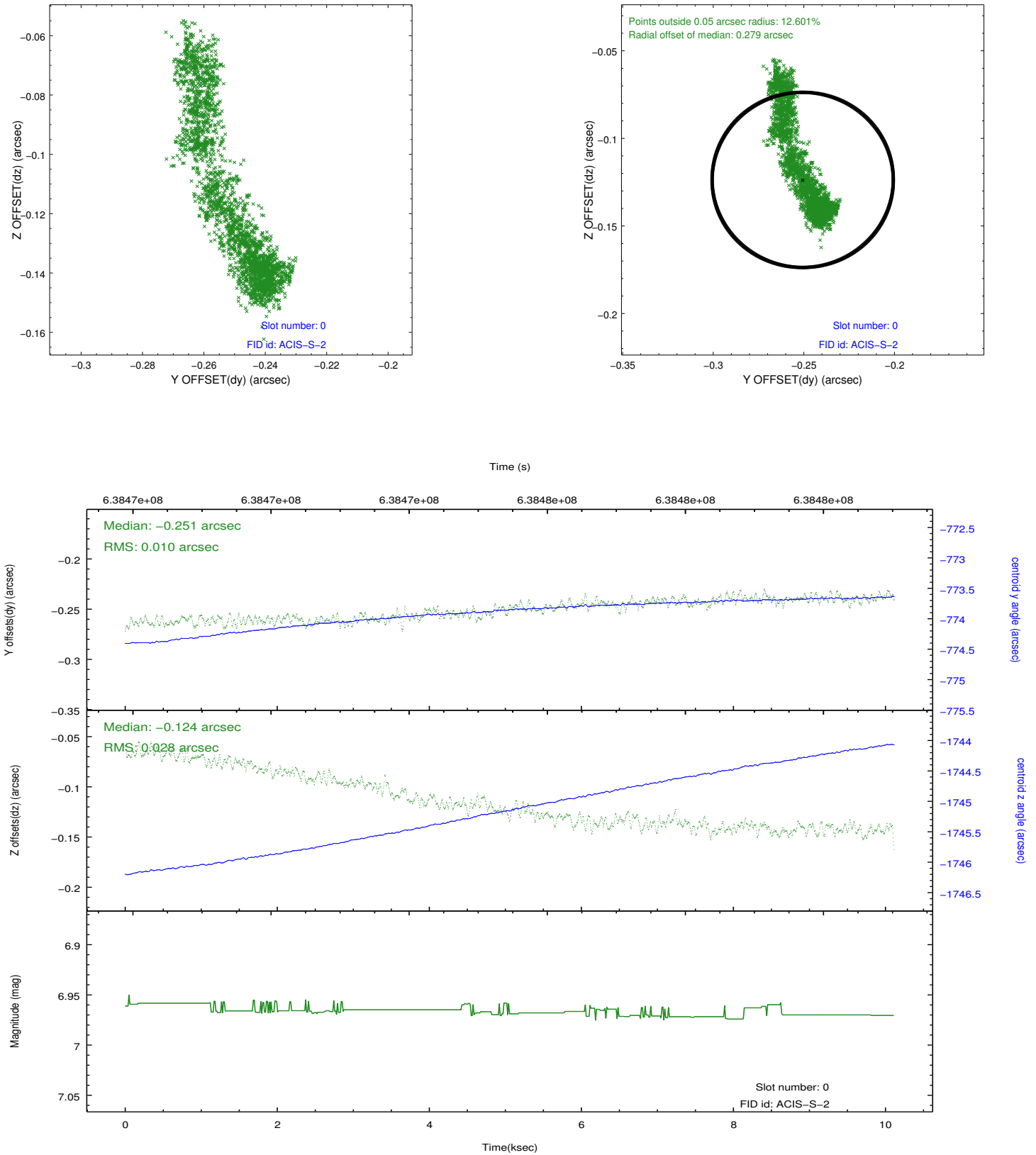


2.4.4 Slot 7

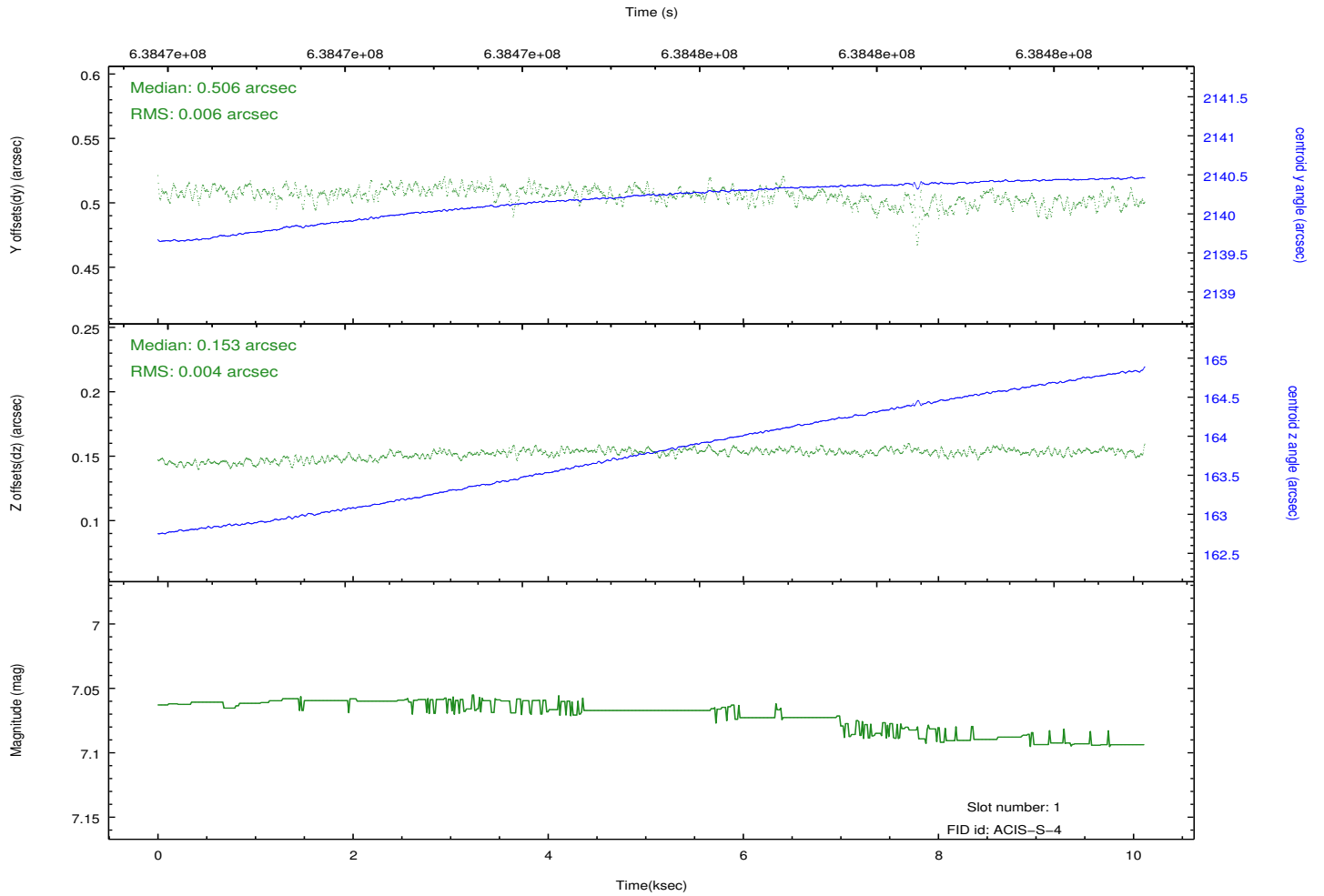
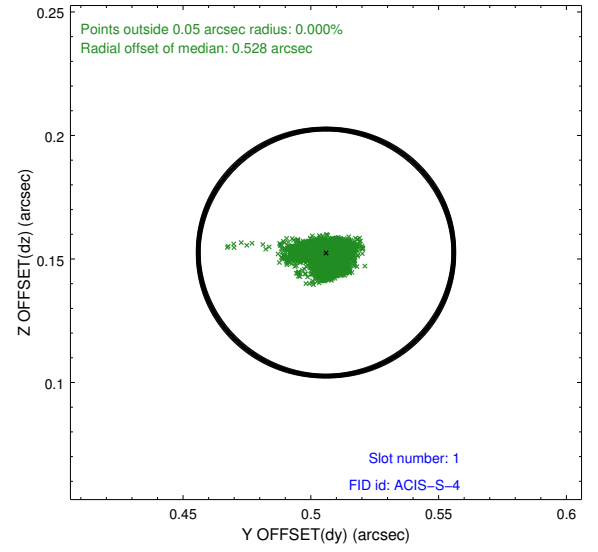
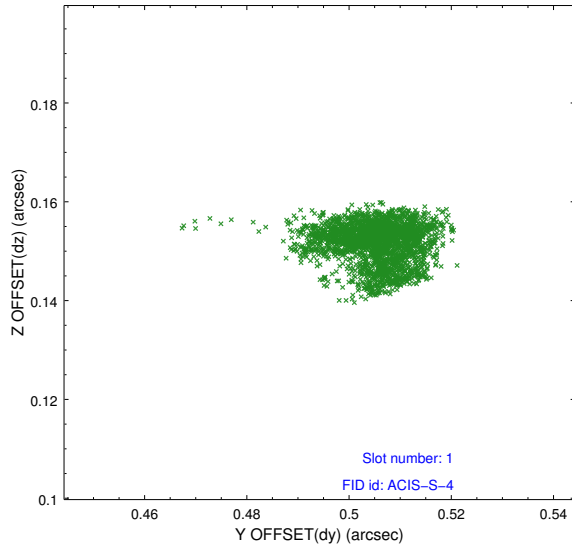


2.5 FID Slots

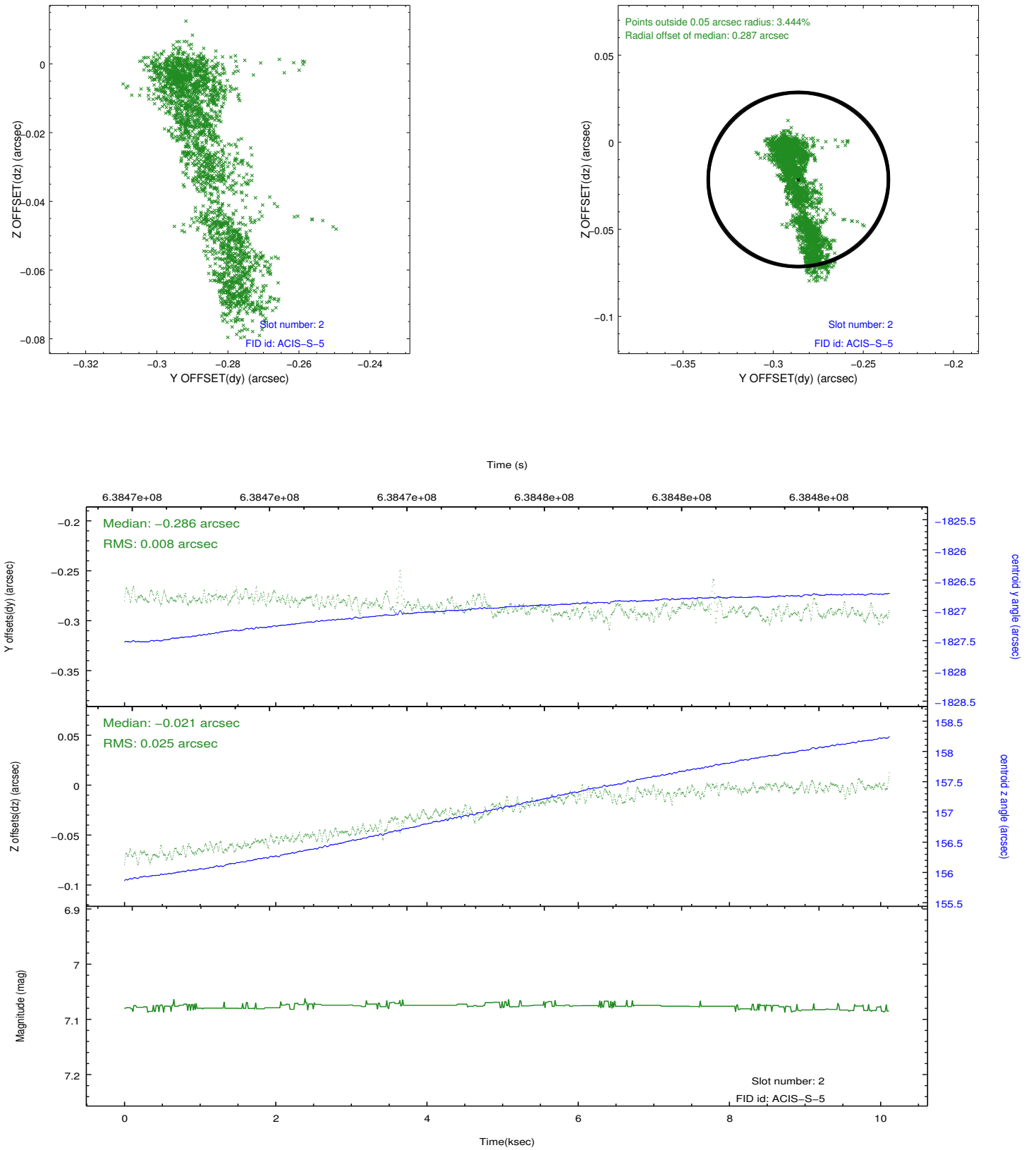
2.5.1 Slot 0



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)	2018.03.30
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.091451193571

A.2 Comments

The guide star in slot 5 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this slot from the solution.