

V&V Reference Report

L2 ASCDS Version : 10.7.1

Observation 21522 - L2 Version 1
Chandra X-Ray Center

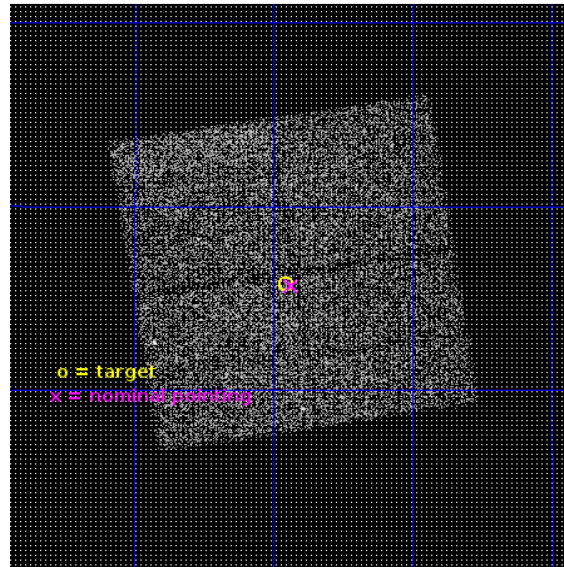
L2 Processing Date : May 18 2019

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 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

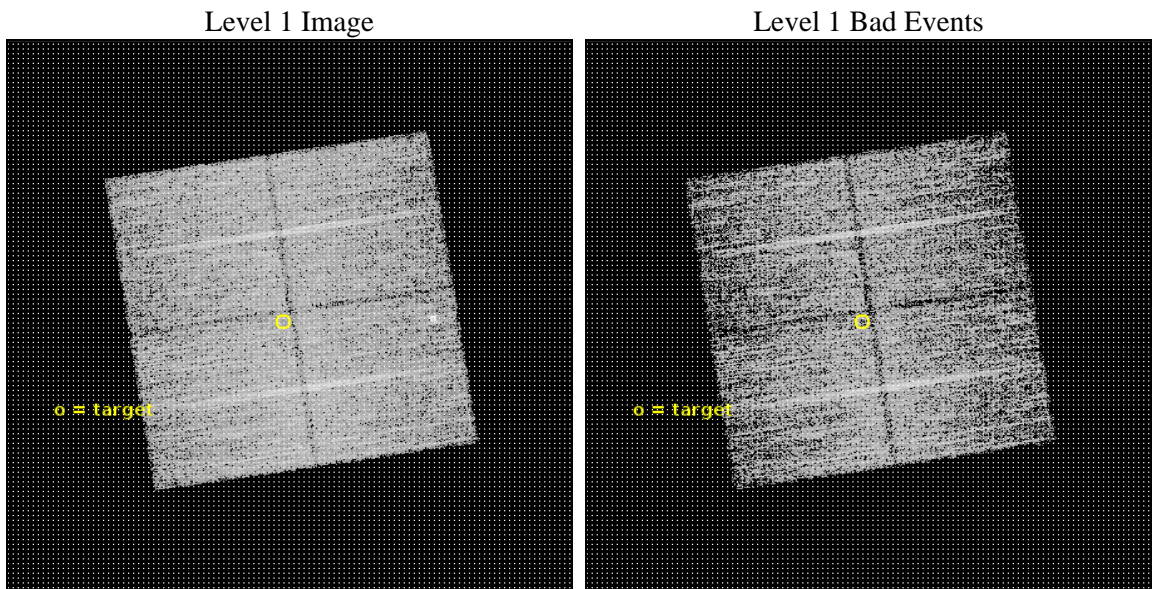
seq_num	703815	Sequence number
obs_id	21522	Observation id
title	Black Holes in Green Peas?	Proposal title
observer	Sangeeta Malhotra	Principal investigator
object	J160627.53+135547.7	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	241.614583	Observer's specified target RA [deg]
dec_targ	13.929972	Observer's specified target Dec [deg]
ra_nom	241.60913455518	Nominal RA [deg]
dec_nom	13.928003632212	Nominal Dec [deg]
roll_nom	171.20995578905	Nominal Roll [deg]
revision	1	Processing version of data
ontime	10081.200077653	Sum of GTIs [s]
livetime	9949.4817769669	Livetime [s]
ontime0	10081.200077653	Sum of GTIs [s]
ontime1	10081.200077653	Sum of GTIs [s]
ontime2	10081.200077653	Sum of GTIs [s]
ontime3	10081.200077653	Sum of GTIs [s]
l2events	27953	Number of level 2 events



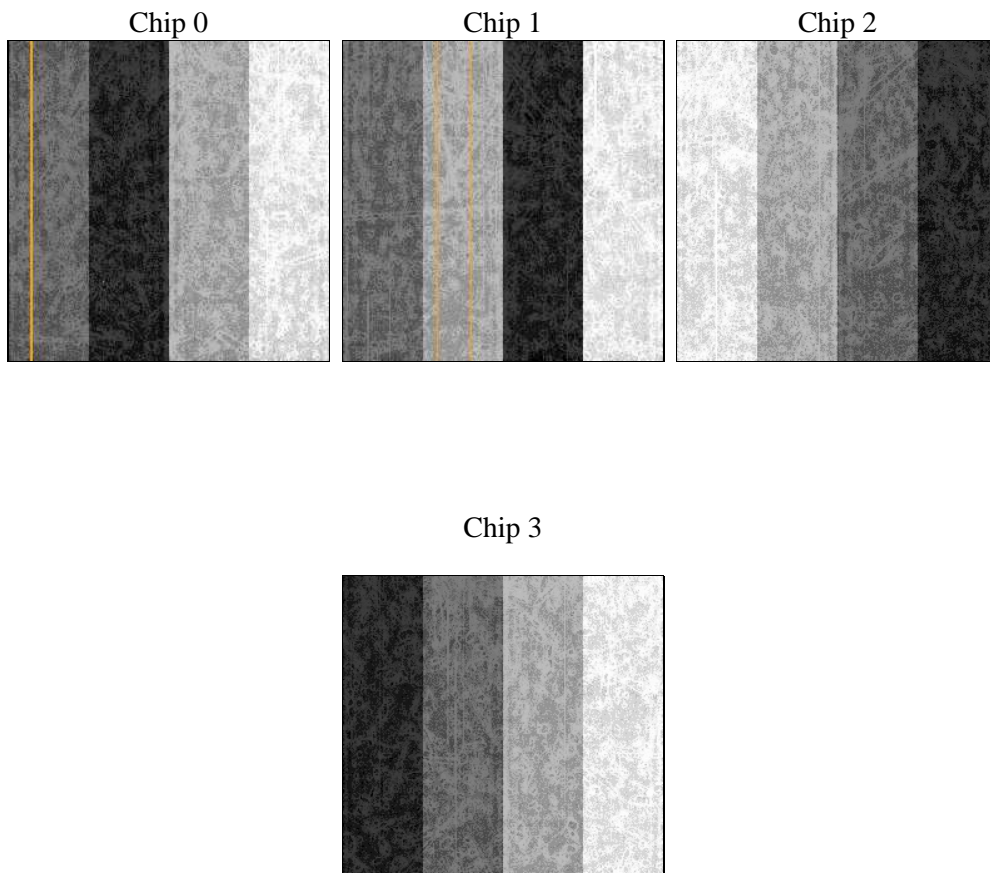
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	10.7.1	Processing system revision	ontime	10081.200077653	Sum of GTIs [s]
caldsver	4.8.2	 	ontime0	10081.200077653	Sum of GTIs [s]
date	2019-05-18T13:25:04	Date and time of file creation	ontime1	10081.200077653	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	10081.200077653	Sum of GTIs [s]
			ontime3	10081.200077653	Sum of GTIs [s]
			l1events	277038	Number of level 1 events

2.1.4 Events

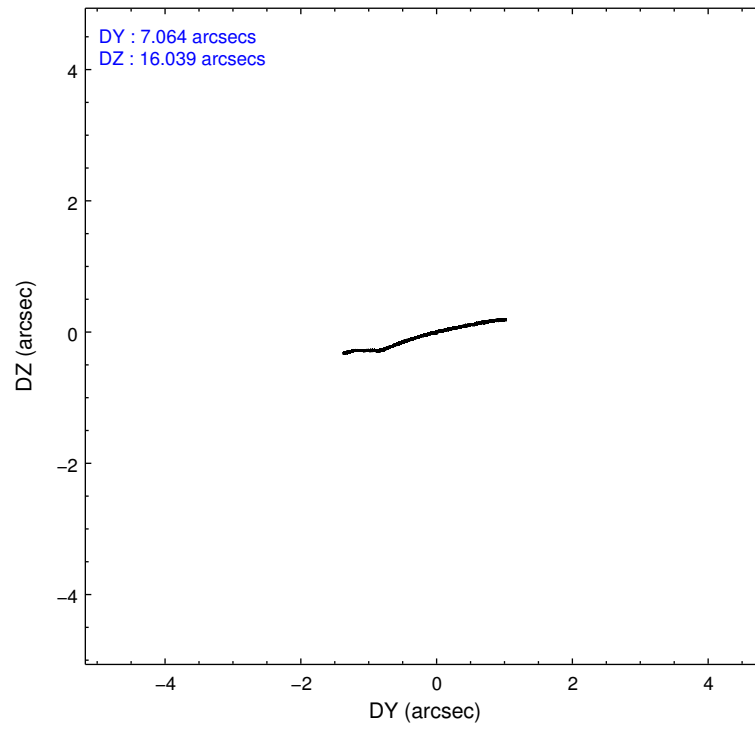
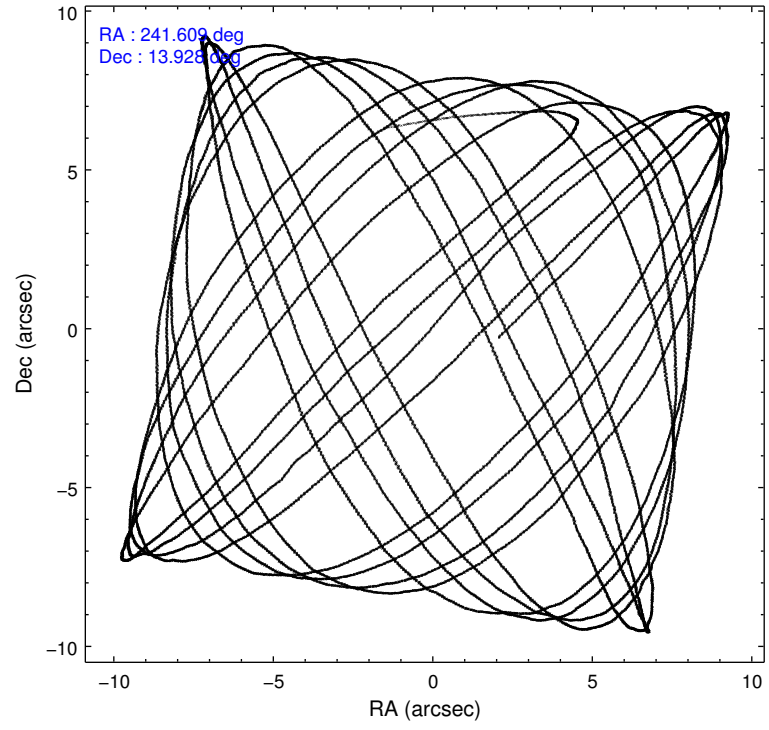
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	64373	66579	71578	74508
rejected events	56008	57490	62838	66432
rejected %	87%	86%	87%	89%

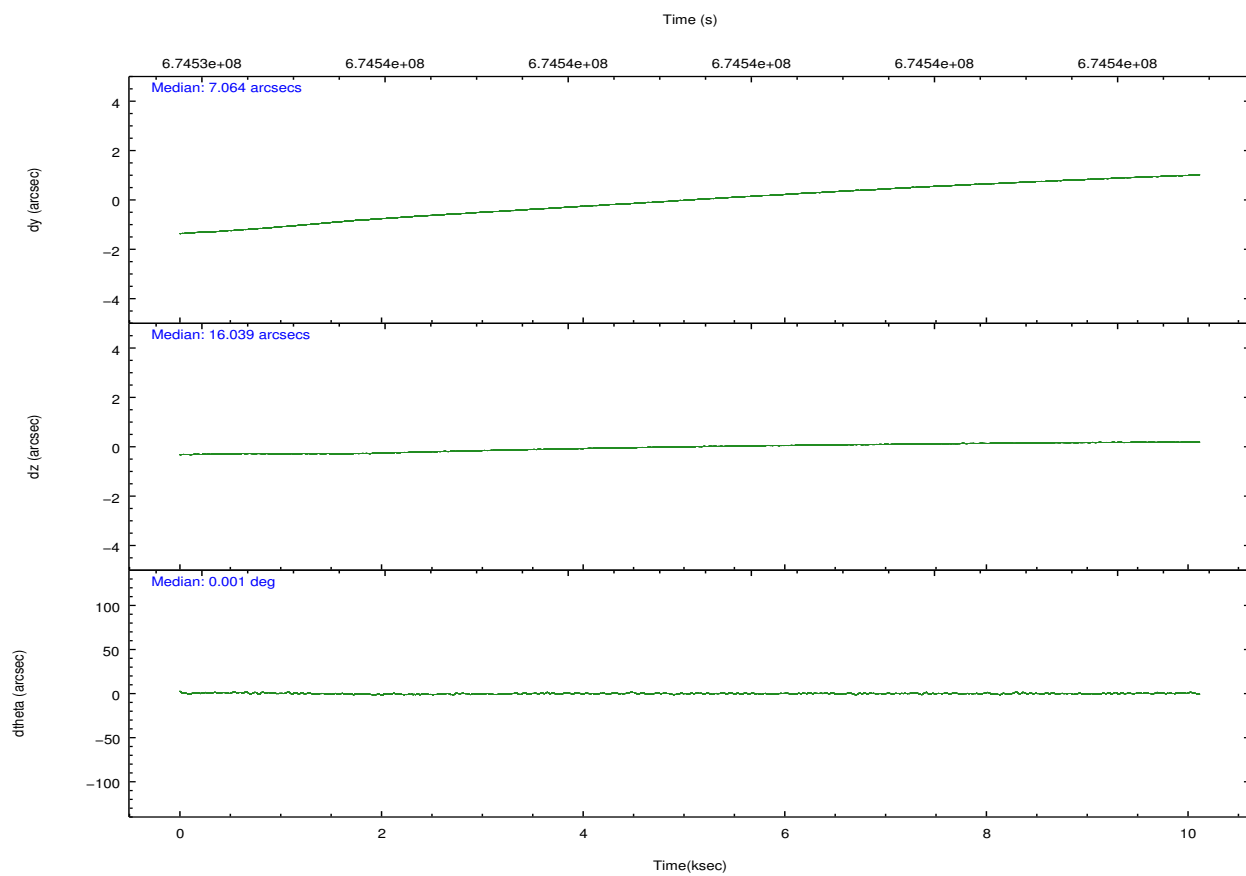
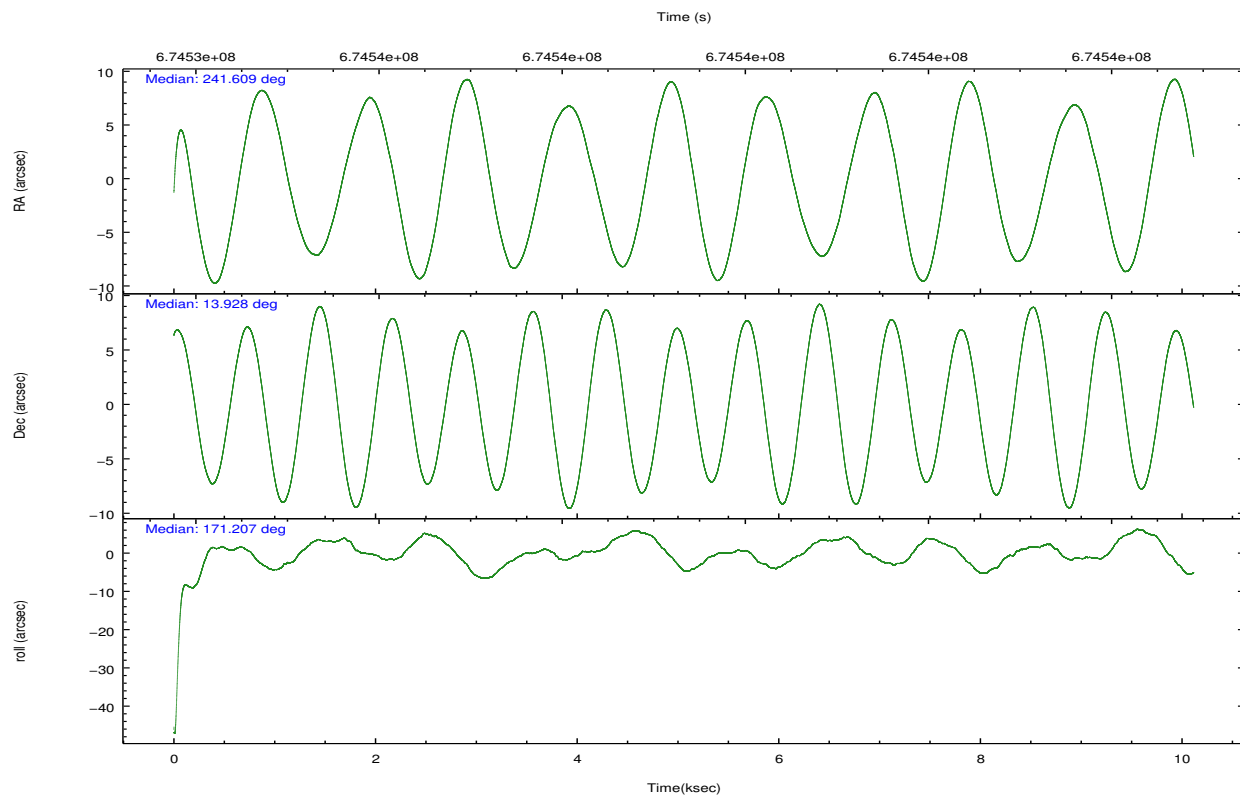
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	2866	3055	3502	2933
	4%	4%	4%	3%
grade 1 events	39	34	47	46
	0%	0%	0%	0%
grade 2 events	2159	2319	2033	1849
	3%	3%	2%	2%
grade 3 events	840	858	804	817
	1%	1%	1%	1%
grade 4 events	791	882	836	837
	1%	1%	1%	1%
grade 5 events	3172	3242	3046	3650
	4%	4%	4%	4%
grade 6 events	1711	1978	1567	1644
	2%	2%	2%	2%
grade 7 events	52795	54211	59743	62732
	82%	81%	83%	84%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-0123	ACIS-0123	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	241.635599	241.6091345551785	Subarray requested	NONE	NONE
[deg] Pointing Dec	13.938067	13.92800363221165	Alternating exposures requested	N	N
[deg] Pointing Roll	170.994934	171.2099557890477	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	674534364.184000	674533428.03303			
Observation start date	2019-05-18T02:38:15	2019-05-18T02:23:48			
[s] Observation end time (MET)	674544364.184000	674545730.59627			
Observation end date	2019-05-18T05:24:55	2019-05-18T05:48:50			
Read mode	TIMED	TIMED			

2.3 Aspect



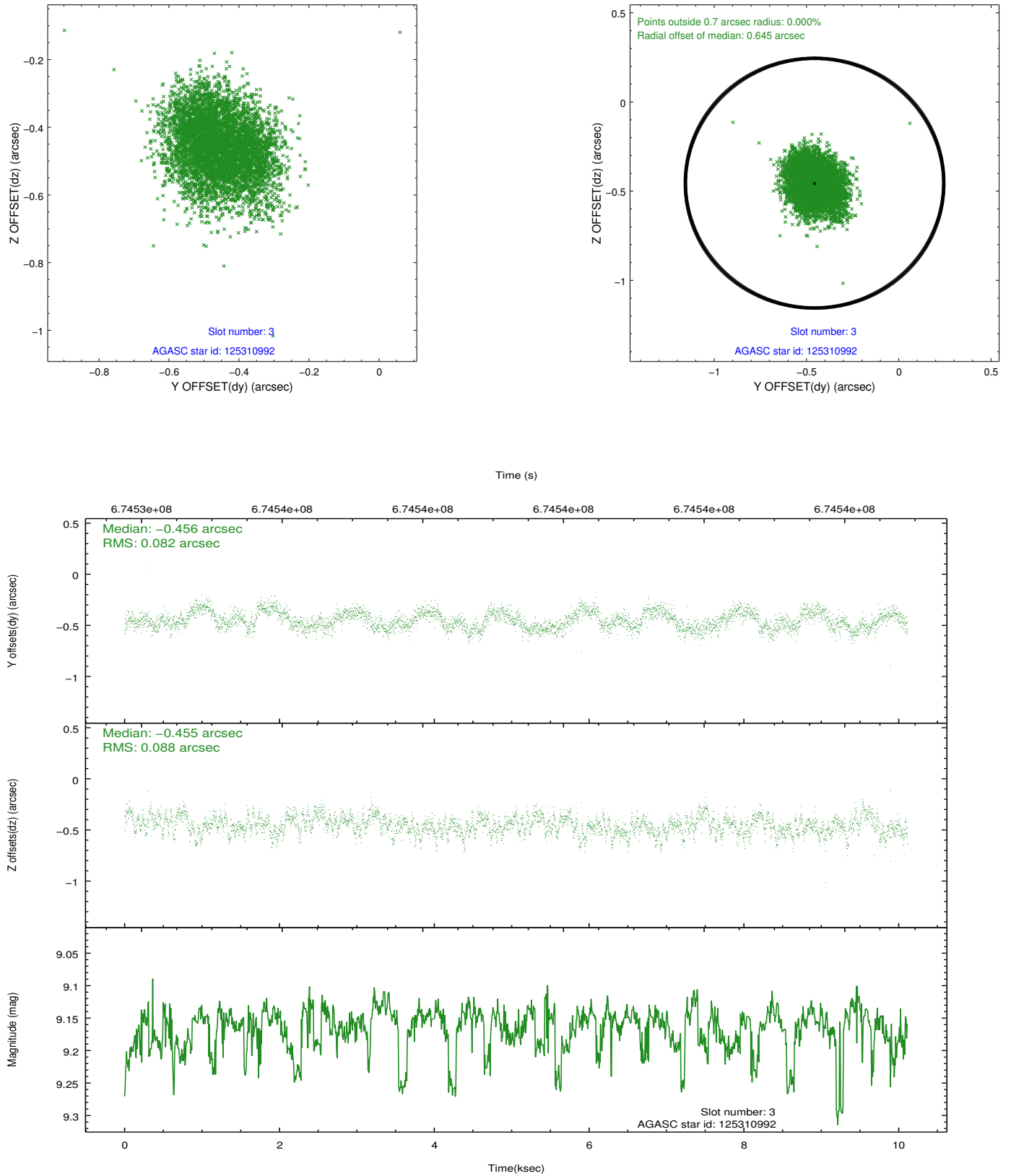


Slot Statistics

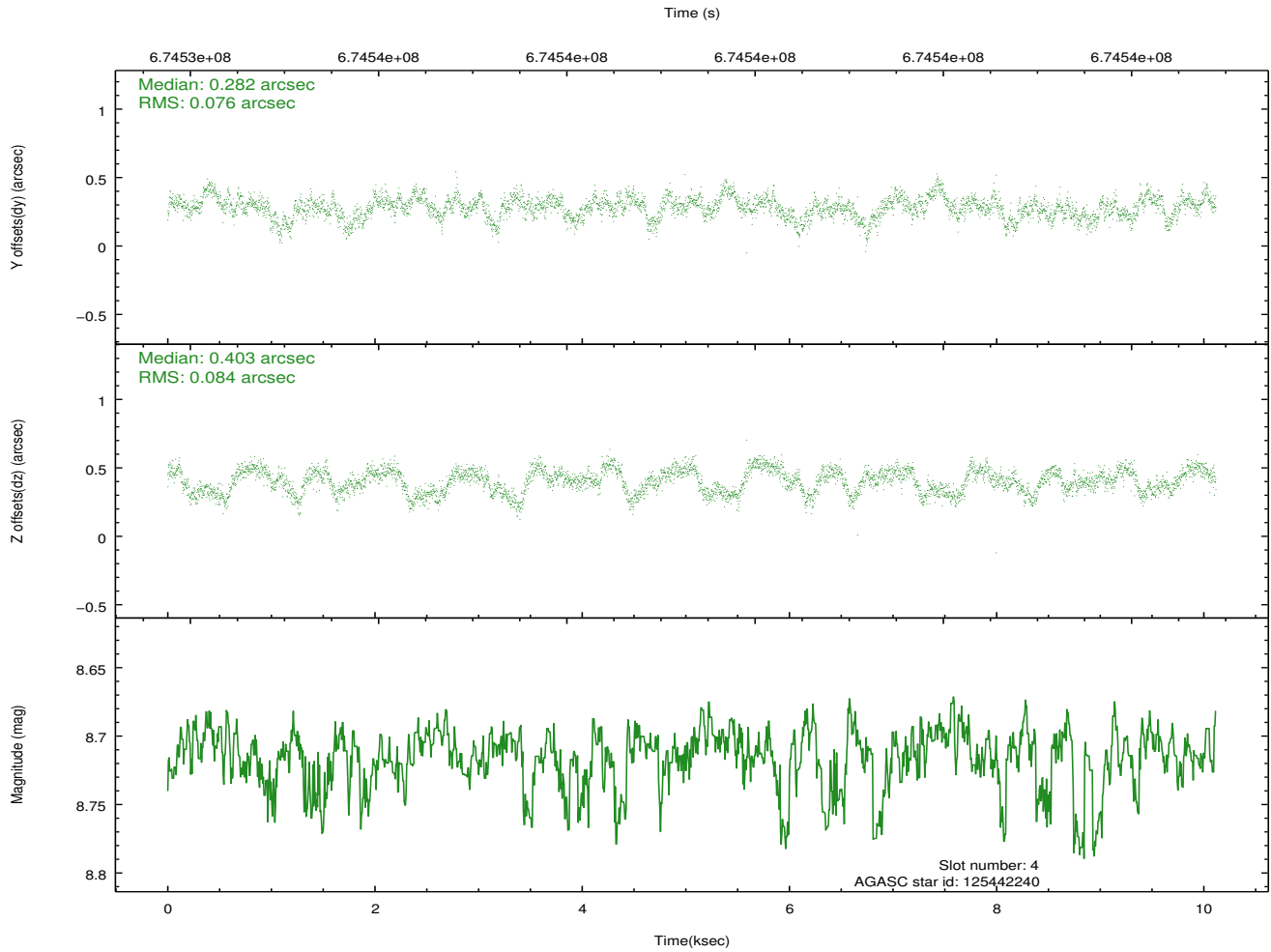
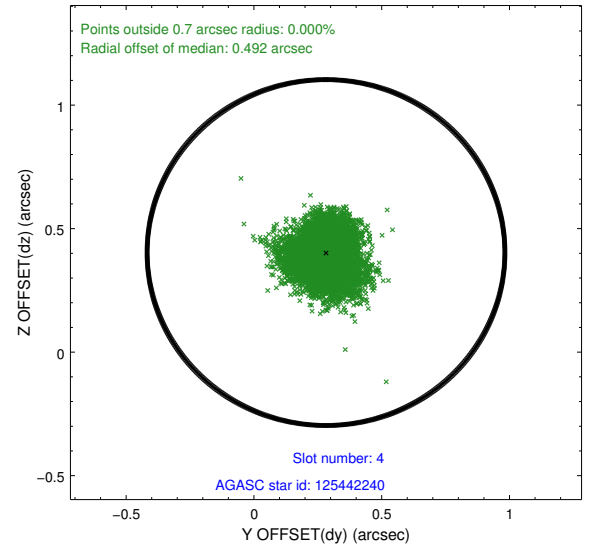
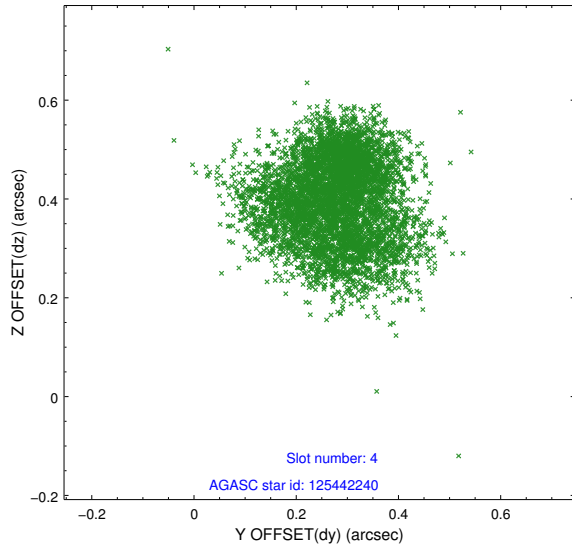
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.18	2468	1.000	0.143	-0.148	0.012	0.020	0.000000	0.000000	932.76	-839
1	FID		ACIS-I-3	7.36	2467	1.000	-0.149	0.098	0.014	0.023	0.000000	0.000000	50.25	-973
2	FID		ACIS-I-6	7.12	2466	1.000	-0.083	0.118	0.016	0.027	0.000000	0.000000	398.40	1701
3	GUIDE	used	125310992	9.16	4931	1.000	-0.456	-0.455	0.130	0.201	241.104024	13.415315	1544.35	2147
4	GUIDE	used	125442240	8.71	4932	1.000	0.282	0.403	0.122	0.187	242.151284	13.907464	-1796.87	-174
5	GUIDE	used	125442848	9.67	4924	1.000	0.262	0.153	0.194	0.303	241.567628	14.127975	341.55	-637
6	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0
7	GUIDE	used	125445336	9.19	4928	1.000	-0.088	-0.080	0.139	0.243	241.824005	13.535303	-877.99	1328

2.4 Star Slots

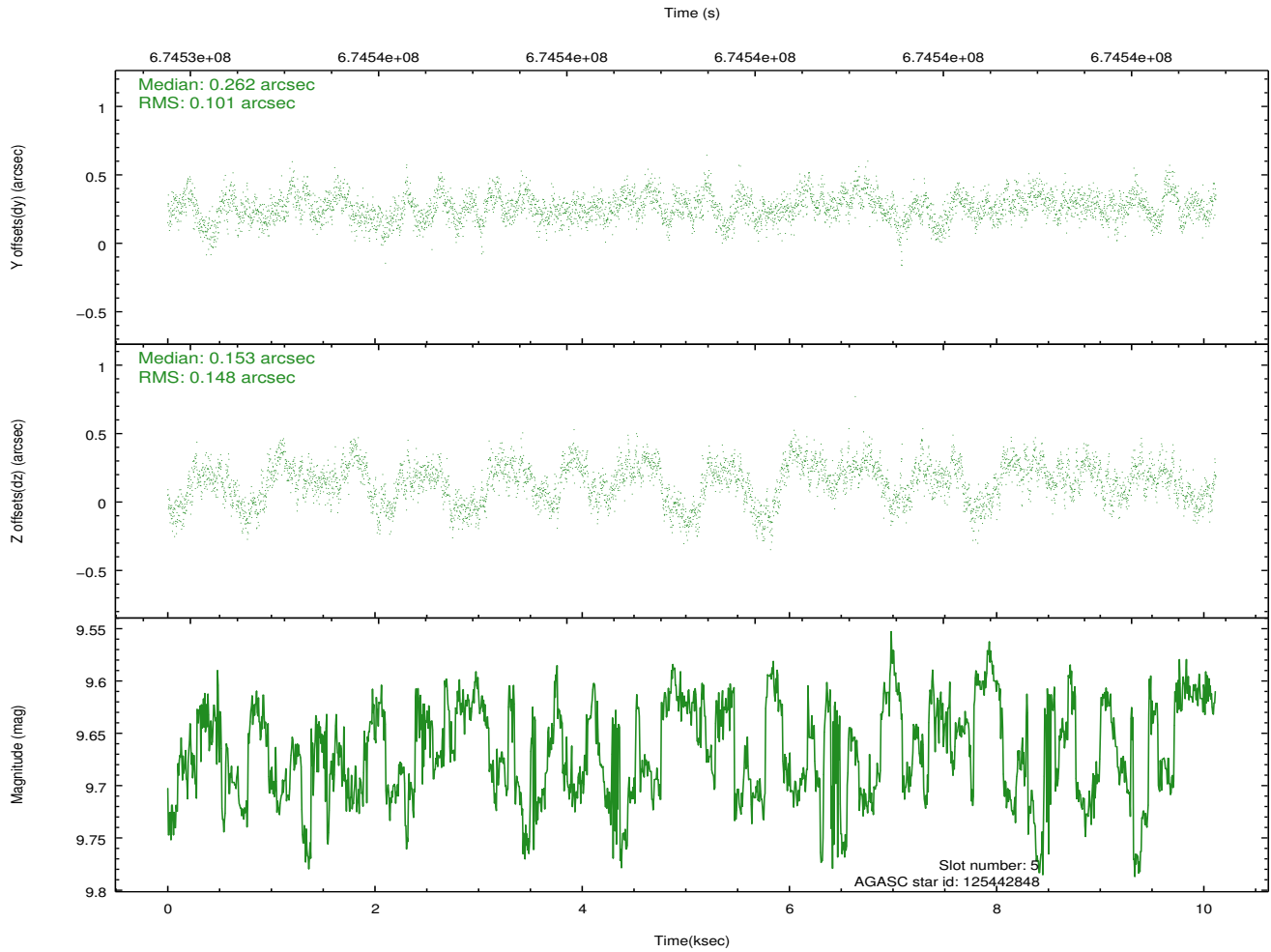
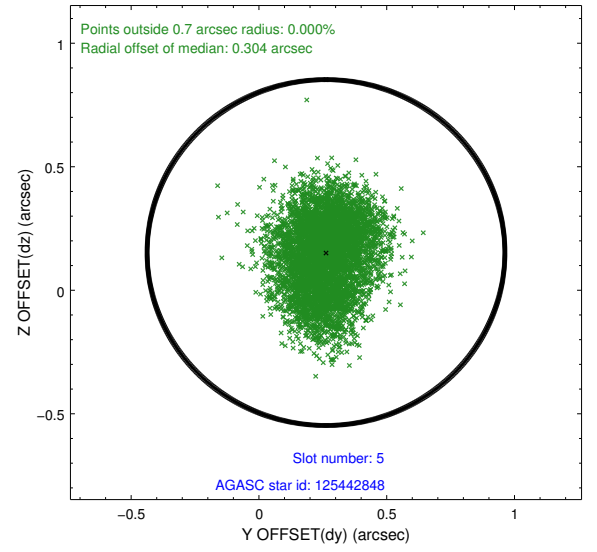
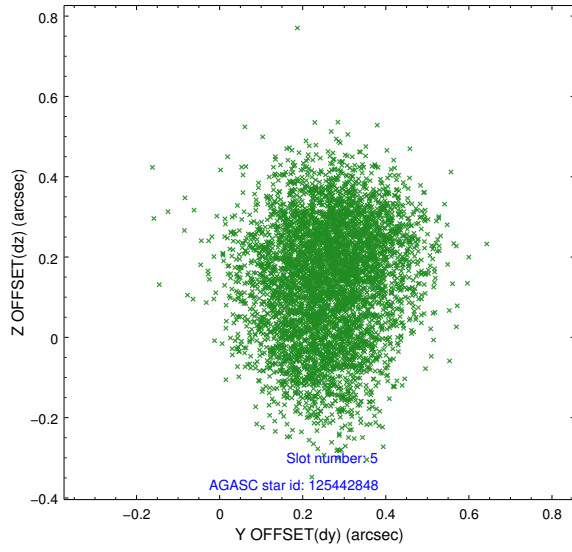
2.4.1 Slot 3



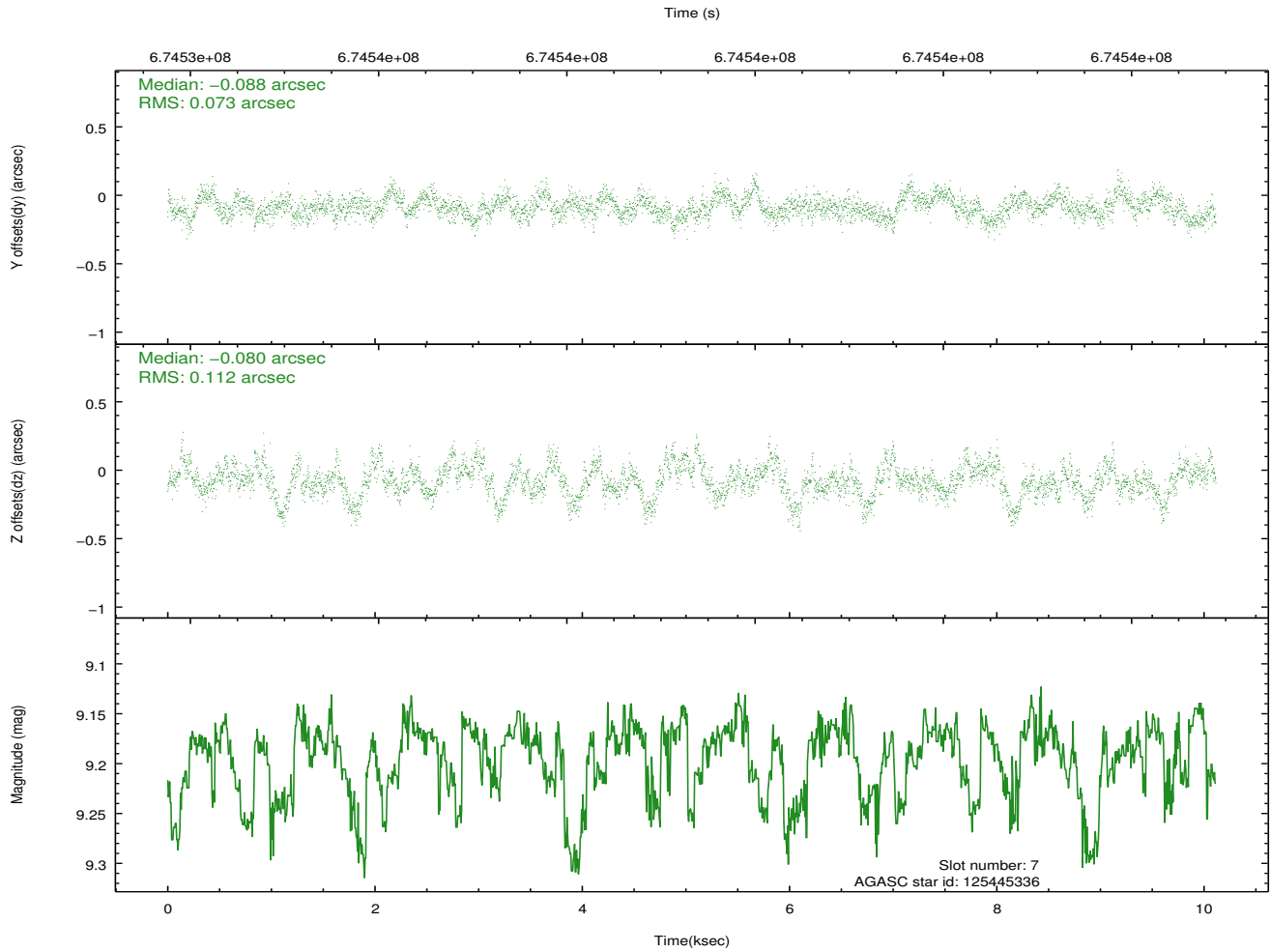
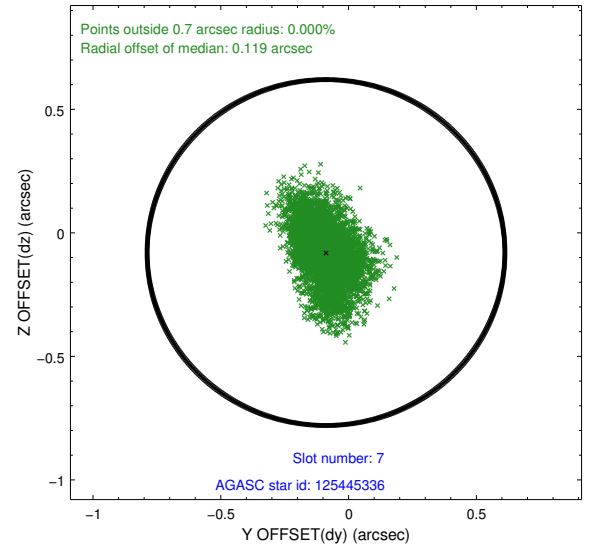
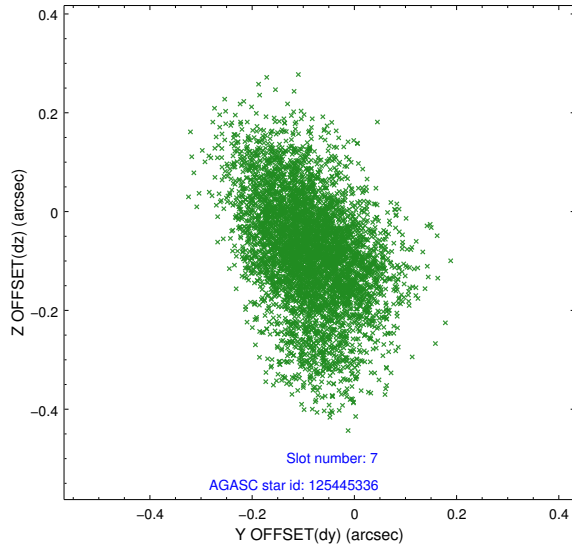
2.4.2 Slot 4



2.4.3 Slot 5

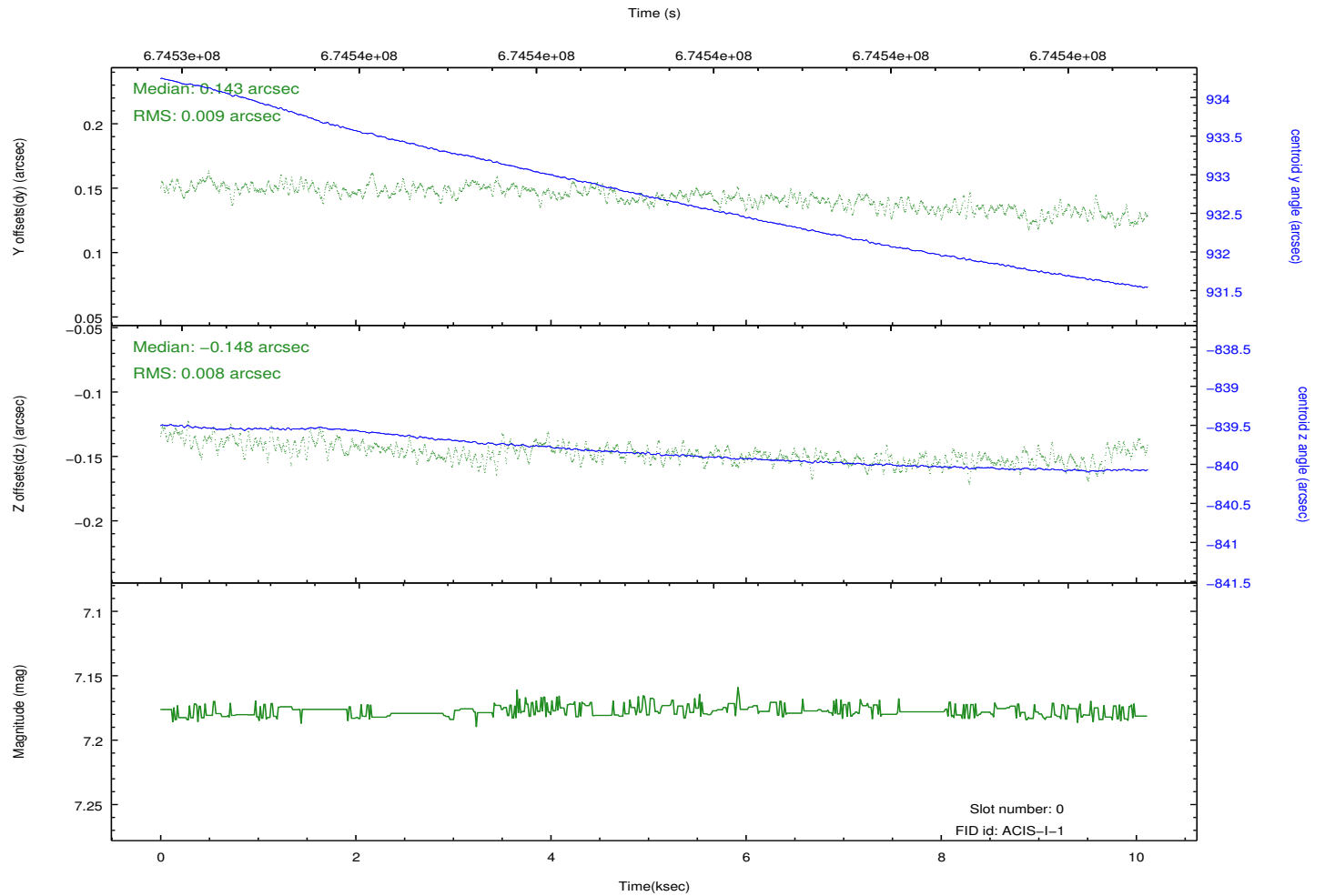
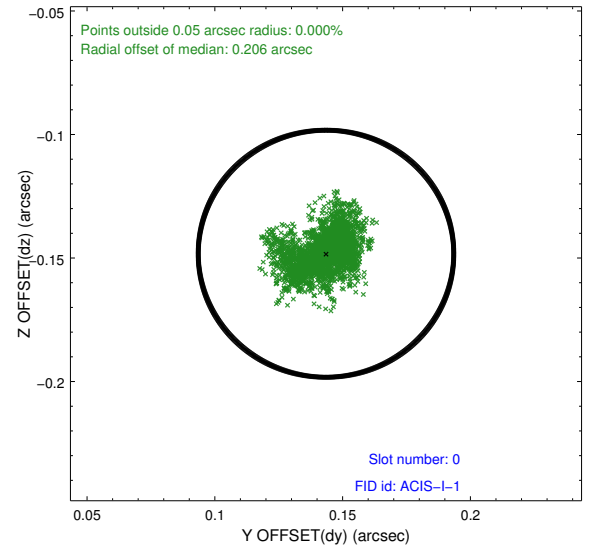
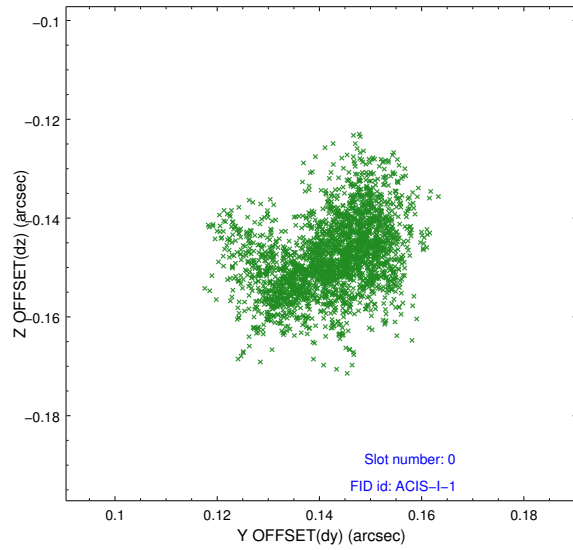


2.4.4 Slot 7

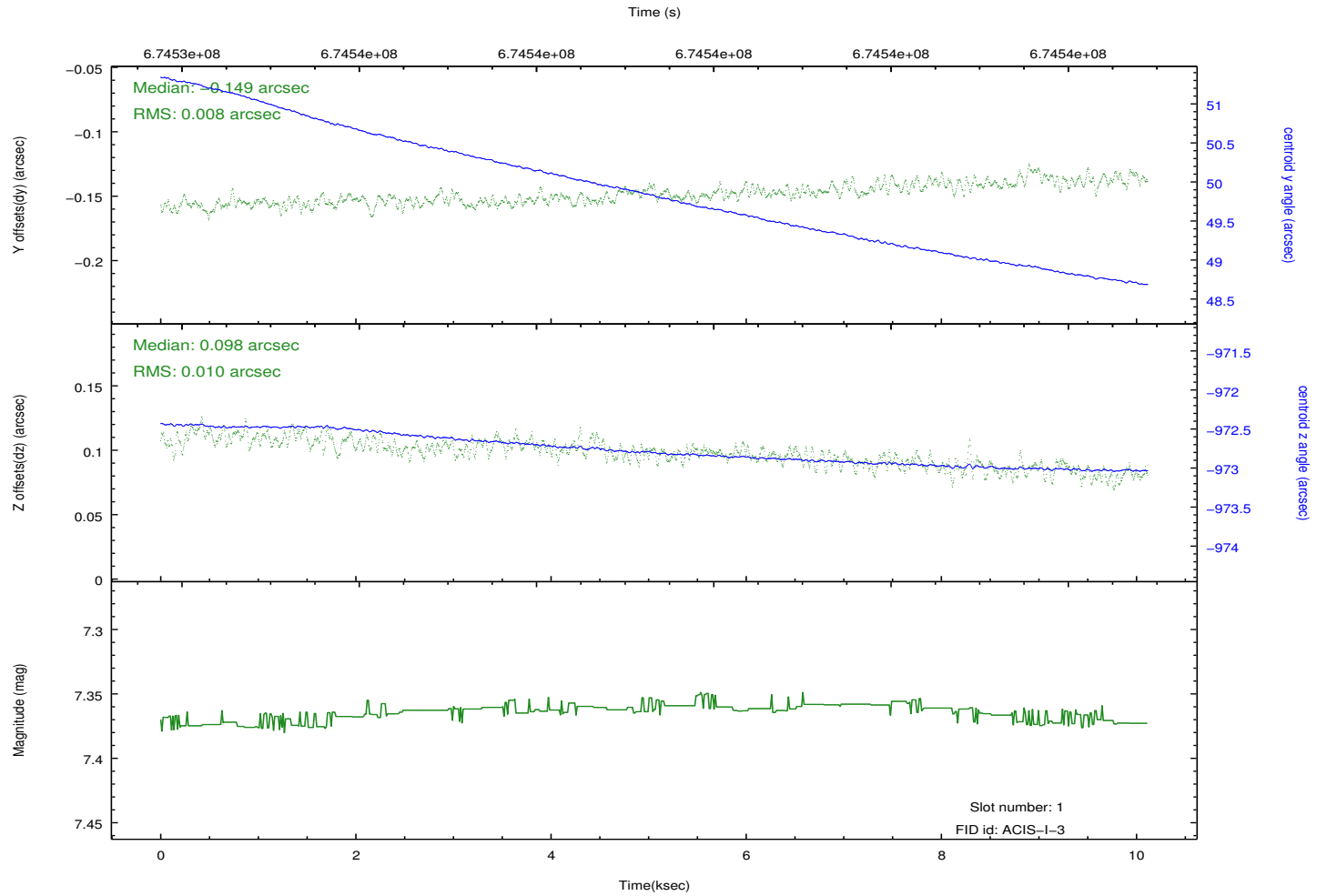
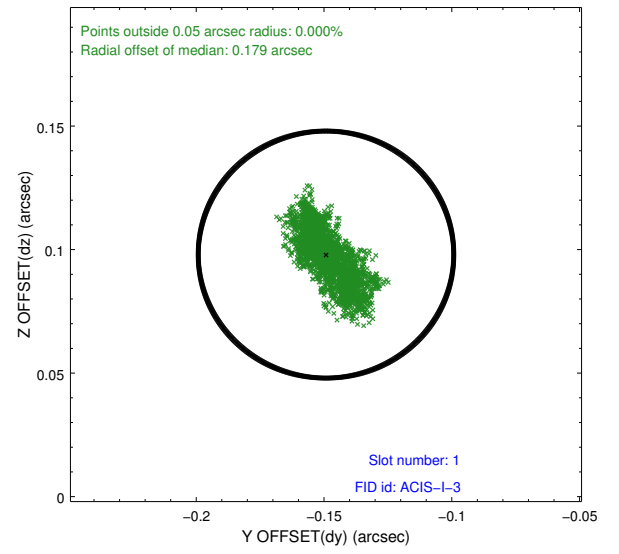
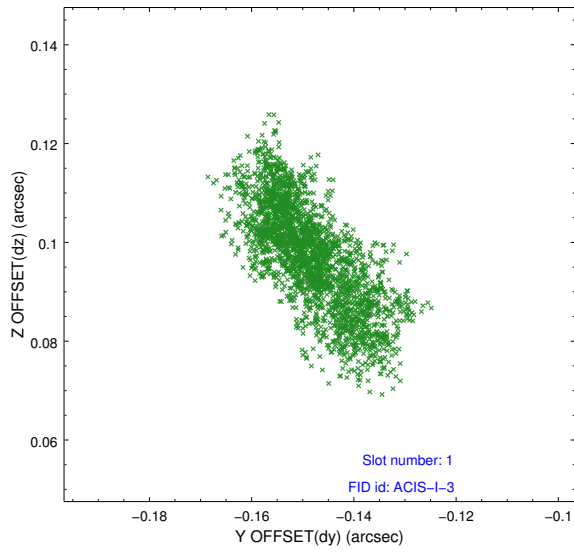


2.5 FID Slots

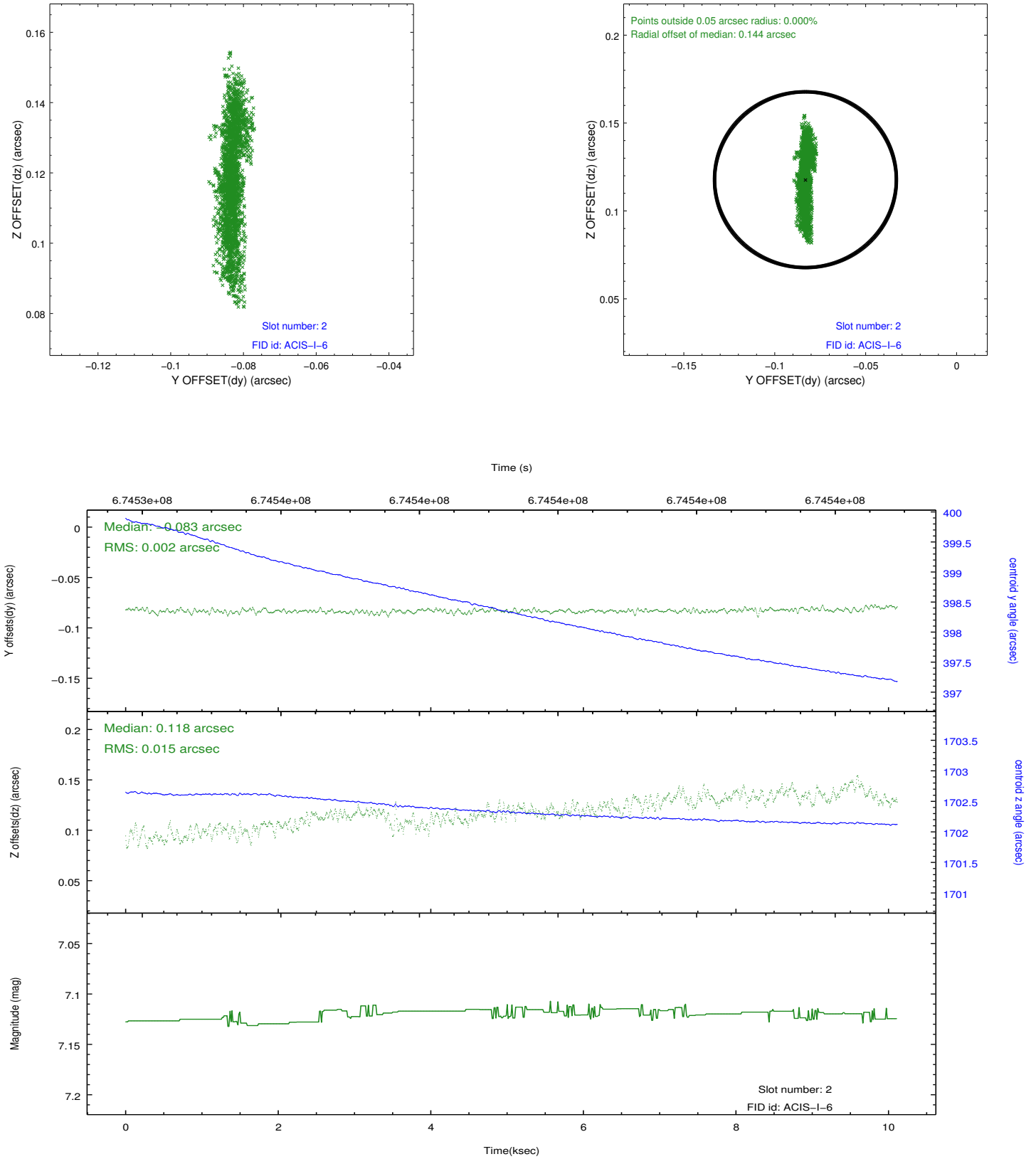
2.5.1 Slot 0



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)	2019.05.19
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.081200077653

A.2 Comments

Joint proposal with HST.

The guide star in slot 6 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.