

V&V Reference Report

L2 ASCDS Version : 10.5.4

Observation 18975 - L2 Version 1
Chandra X-Ray Center

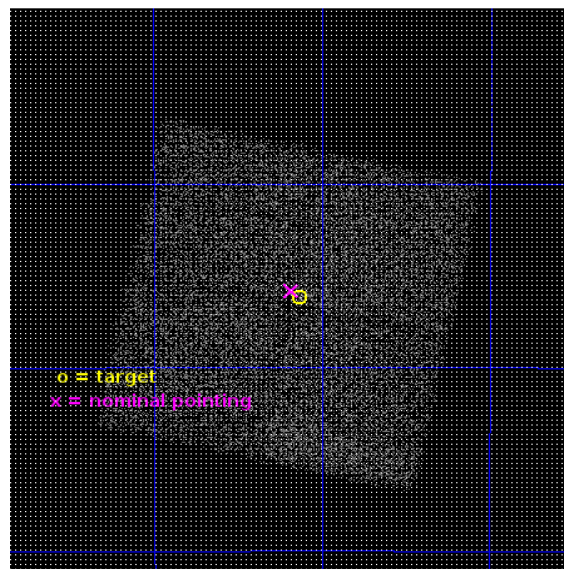
L2 Processing Date : May 21 2017

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

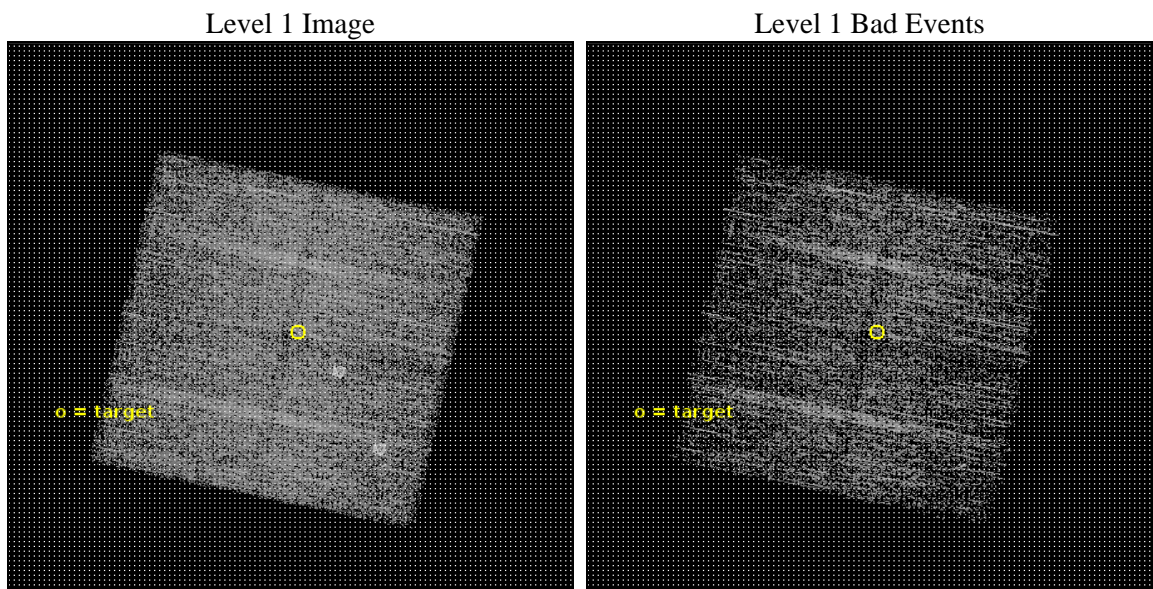
seq_num	401843	Sequence number
obs_id	18975	Observation id
title	The Nature of INTEGRAL Sources in the Galactic Plane	Proposal titl
observer	John Tomsick	Principal investigator
object	IGR J16181-5407	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	244.533333	Observer's specified target RA [deg]
dec_targ	-54.102722	Observer's specified target Dec [deg]
ra_nom	244.54542155963	Nominal RA [deg]
dec_nom	-54.097213112597	Nominal Dec [deg]
roll_nom	12.180658046267	Nominal Roll [deg]
revision	1	Processing version of data
ontime	5083.9502309561	Sum of GTIs [s]
livetime	5017.5246784389	Livetime [s]
ontime0	5083.8271110058	Sum of GTIs [s]
ontime1	5083.8681509495	Sum of GTIs [s]
ontime2	5083.9091910124	Sum of GTIs [s]
ontime3	5083.9502309561	Sum of GTIs [s]
l2events	22737	Number of level 2 events



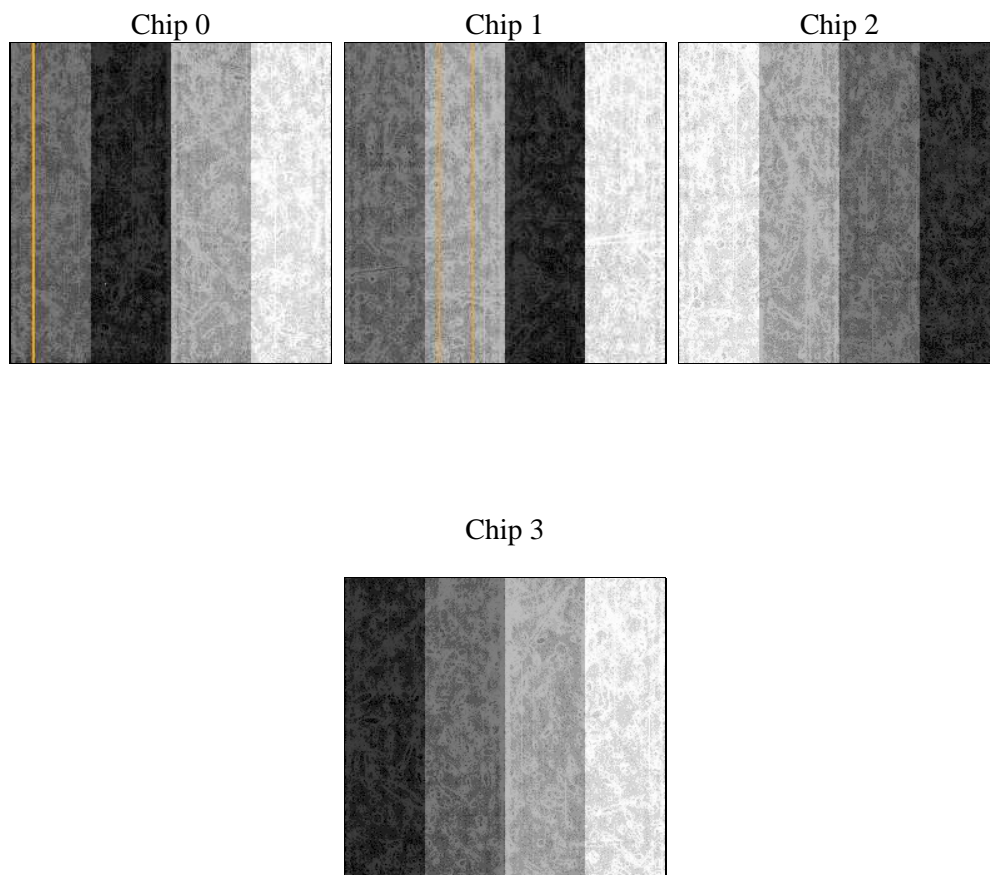
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	10.5.4	Processing system revision	ontime	5083.9502309561	Sum of GTIs [s]
caldsver	4.7.4	 	ontime0	5083.8271110058	Sum of GTIs [s]
date	2017-05-21T03:37:22	Date and time of file creation	ontime1	5083.8681509495	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	5083.9091910124	Sum of GTIs [s]
			ontime3	5083.9502309561	Sum of GTIs [s]
			l1events	148075	Number of level 1 events

2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	34180	38987	36234	38674
rejected events	27972	28851	29950	32183
rejected %	81%	74%	82%	83%

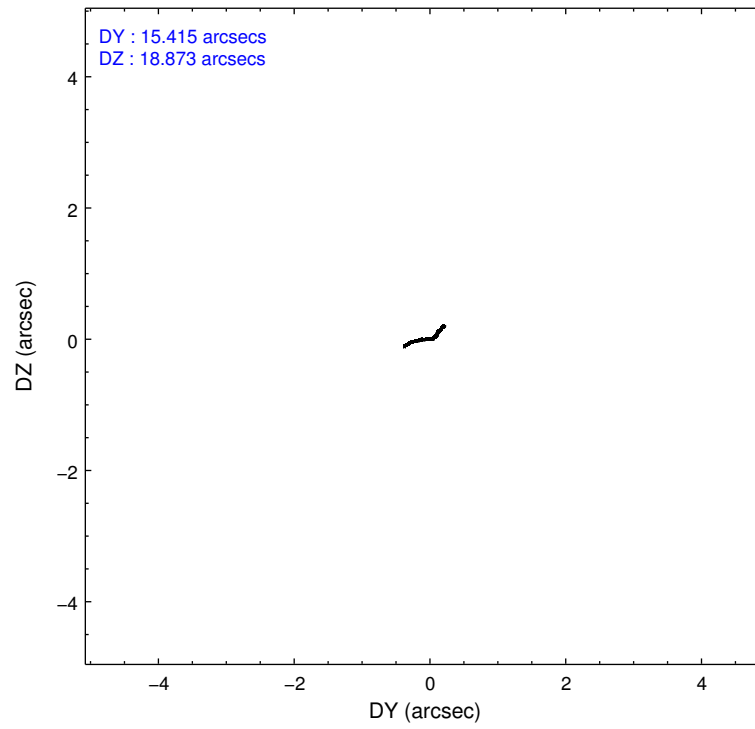
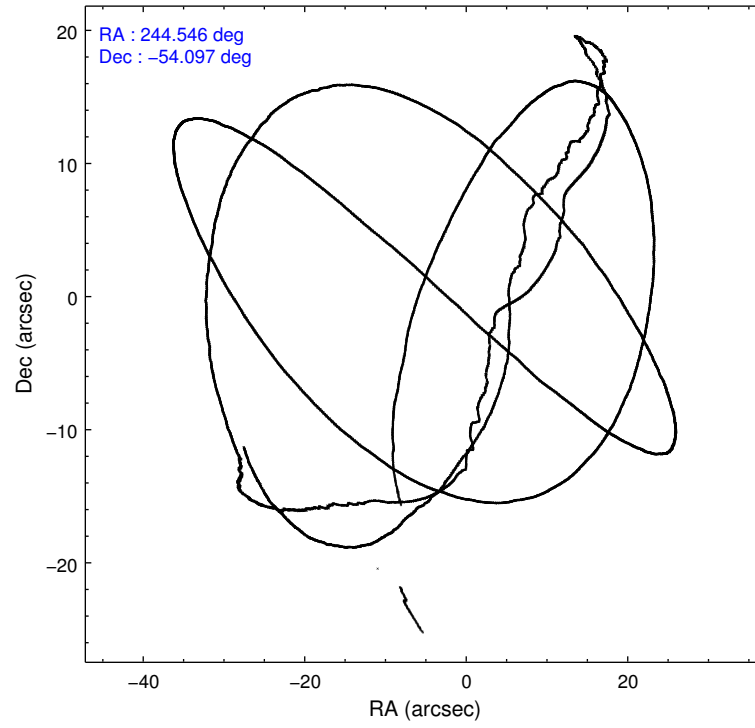
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	2872	4845	3081	3208
	8%	12%	8%	8%
grade 1 events	31	29	32	30
	0%	0%	0%	0%
grade 2 events	1258	3075	1120	1159
	3%	7%	3%	2%
grade 3 events	499	505	539	559
	1%	1%	1%	1%
grade 4 events	484	506	521	537
	1%	1%	1%	1%
grade 5 events	1579	1650	1482	1733
	4%	4%	4%	4%
grade 6 events	1095	1210	1026	1028
	3%	3%	2%	2%
grade 7 events	26362	27167	28433	30420
	77%	69%	78%	78%

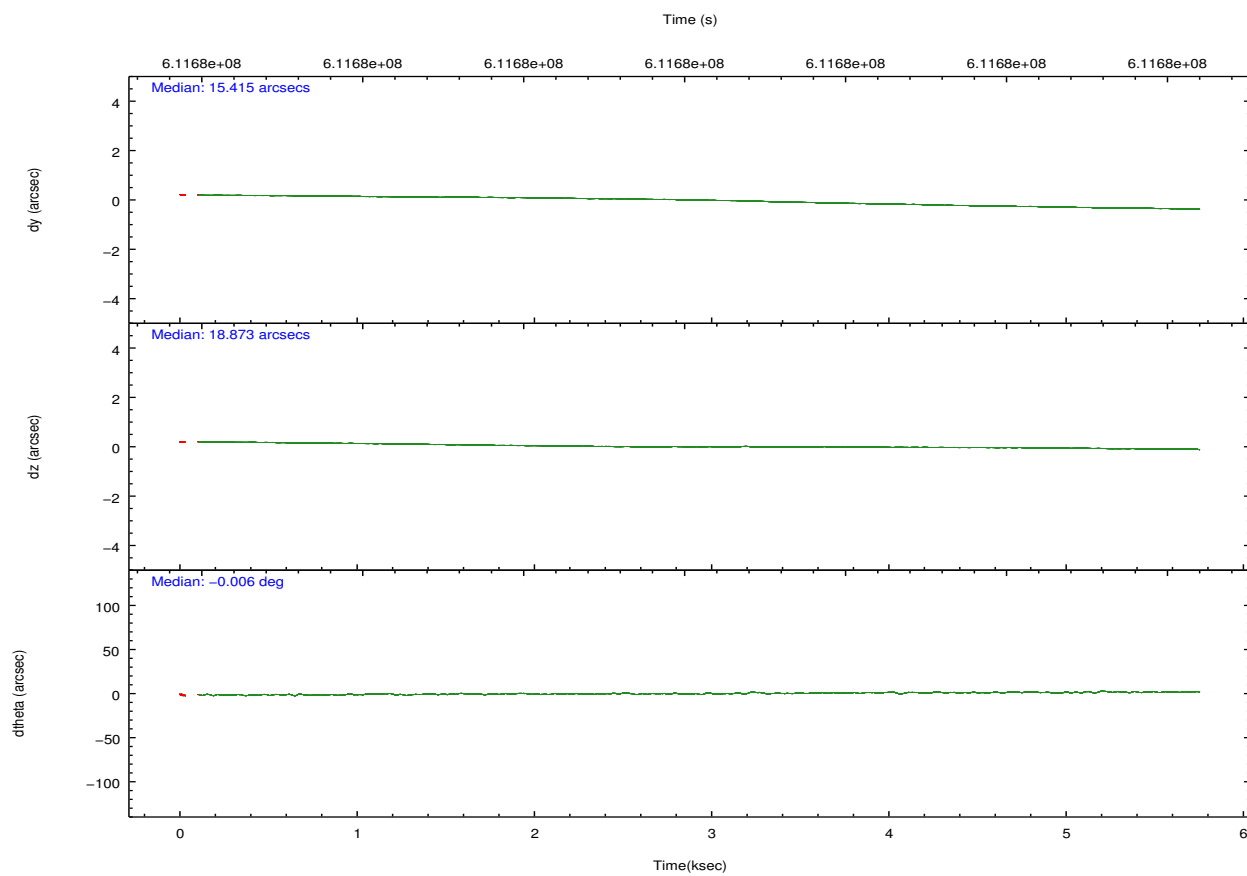
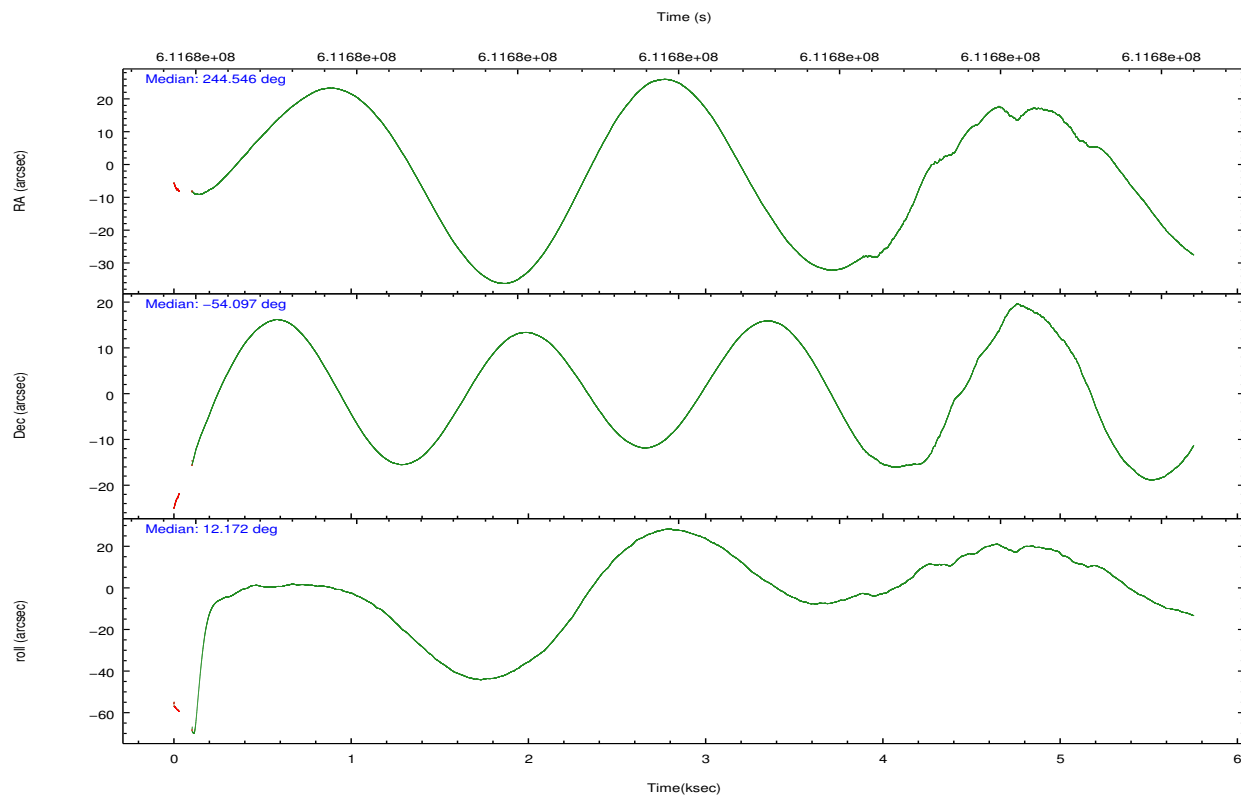
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-0123	ACIS-0123
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	244.510181	244.5454215596306
[deg] Pointing Dec	-54.115804	-54.09721311259695
[deg] Pointing Roll	11.943621	12.18065804626723
[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)	611677929.184000	611676487.21297
Observation start date	2017-05-20T14:31:00	2017-05-20T14:08:07
[s] Observation end time (MET)	611682929.184000	611683589.9508801
Observation end date	2017-05-20T15:54:20	2017-05-20T16:06:29
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
CCD I0 on	Y	Y
CCD I1 on	Y	Y
CCD I2 on	Y	Y
CCD I3 on	Y	Y
CCD S0 on	N	N
CCD S1 on	N	N
CCD S2 on	O1	N
CCD S3 on	O2	N
CCD S4 on	N	N
CCD S5 on	N	N
Number of optional ACIS chips dropped	2	2
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.1

2.3 Aspect



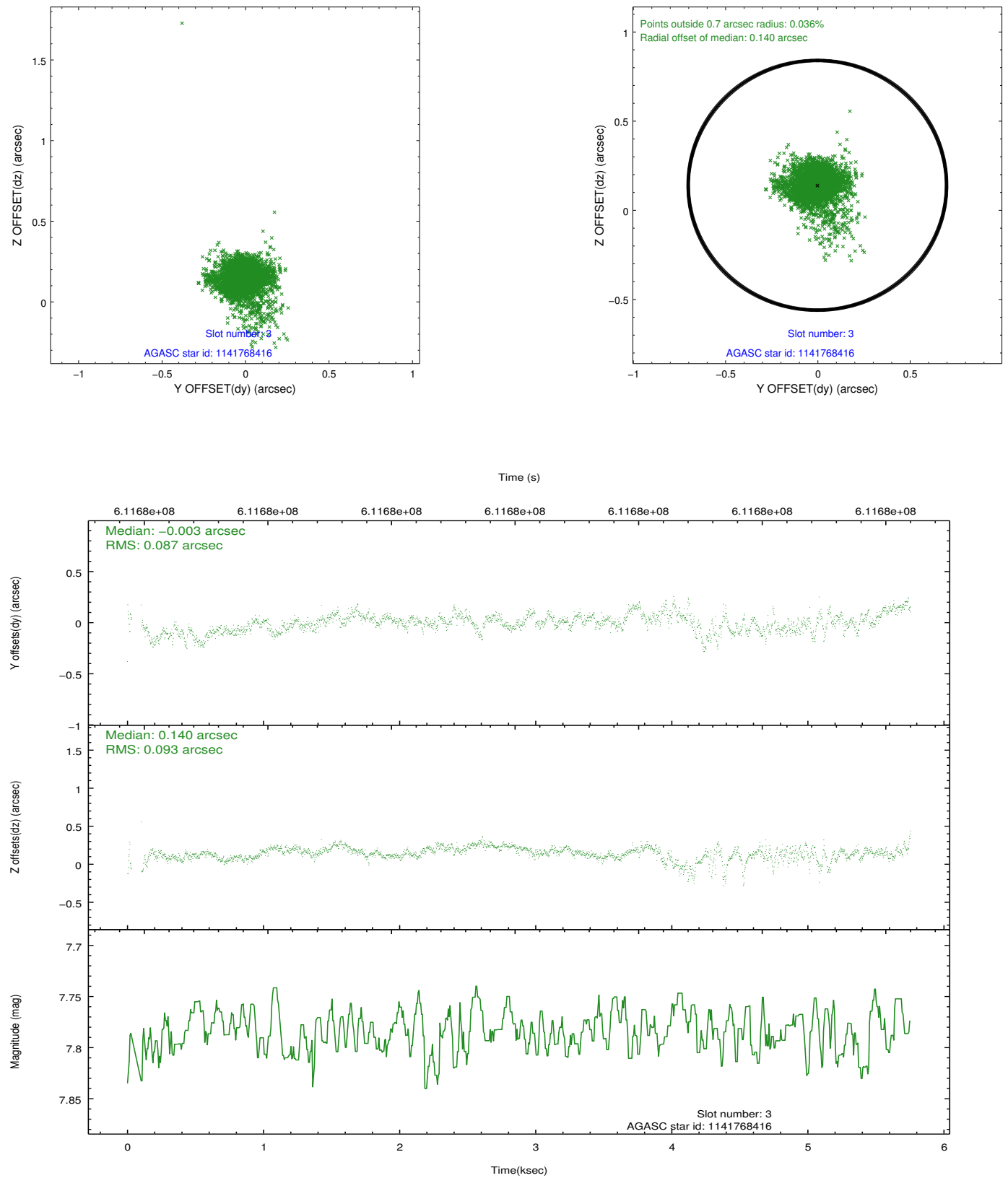


Slot Statistics

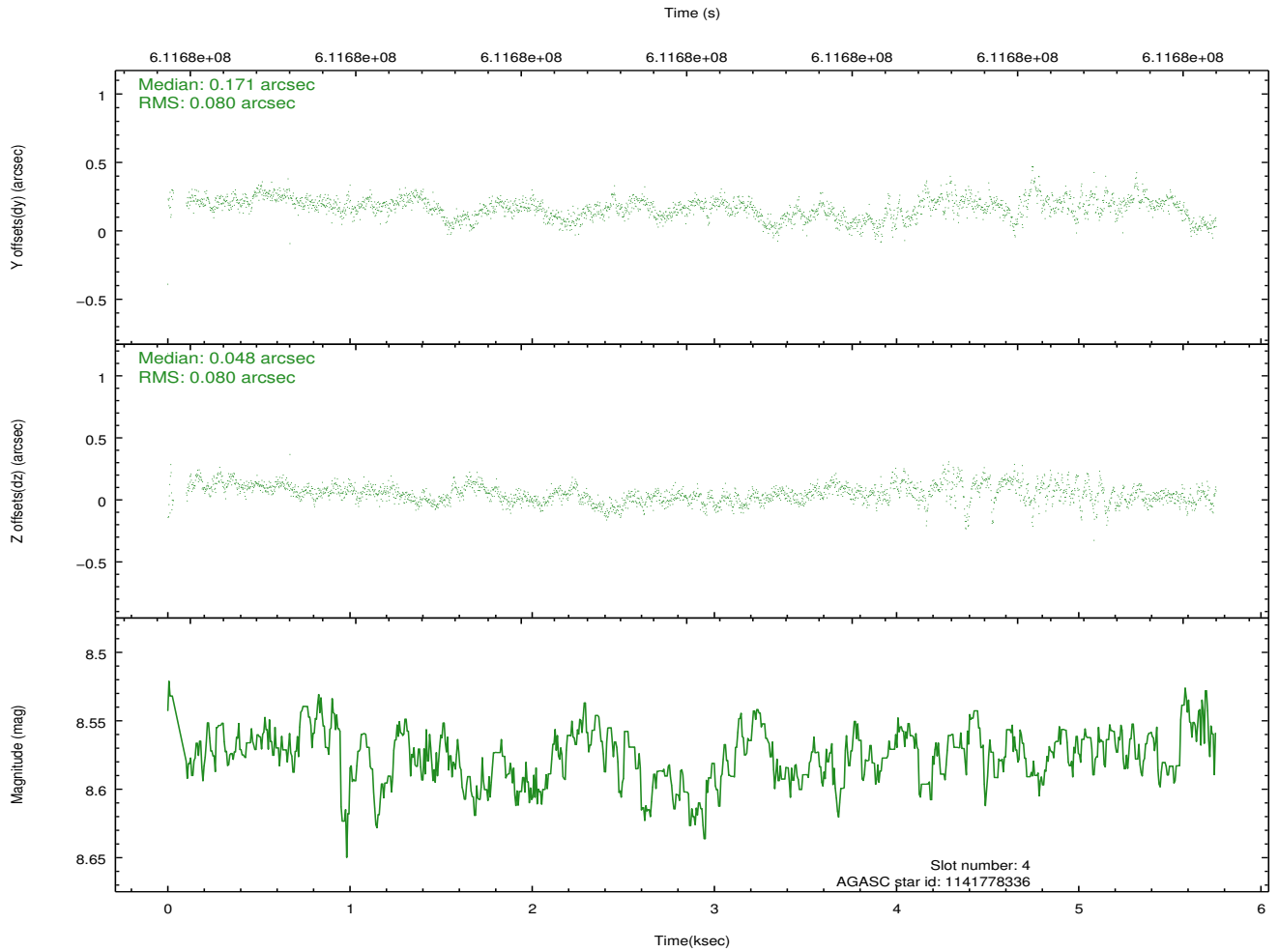
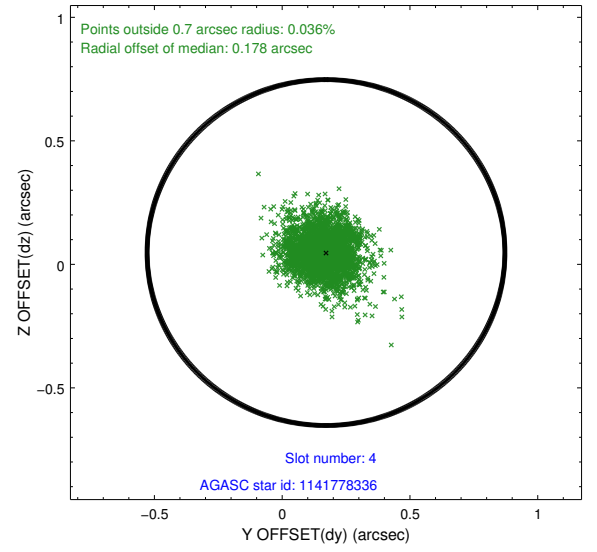
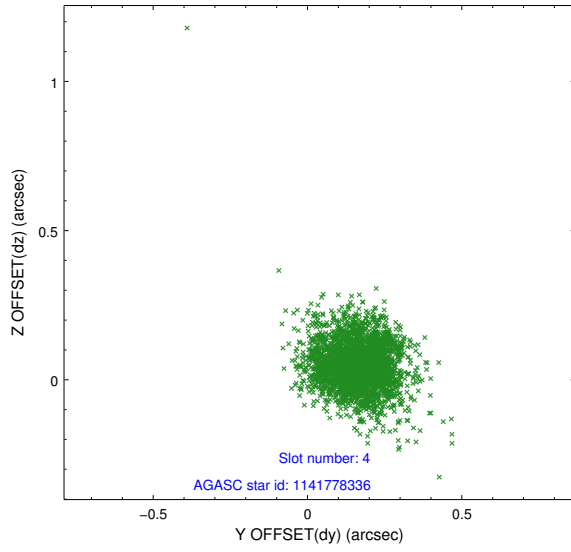
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.04	1387	0.040	0.009	0.009	0.020	0.000000	0.000000	924.18	-842.54
1	FID		ACIS-I-5	7.05	1387	-0.334	0.014	0.008	0.015	0.000000	0.000000	-1823.85	1054.25
2	FID		ACIS-I-6	7.06	1386	0.203	0.048	0.008	0.013	0.000000	0.000000	388.57	1700.12
3	GUIDE	used	1141768416	7.78	2773	-0.003	0.140	0.123	0.225	245.584178	-54.322575	2048.03	-1210.76
4	GUIDE	used	1141778336	8.57	2772	0.171	0.048	0.116	0.190	243.786034	-54.158915	-1526.90	156.23
5	GUIDE	used	1141785912	7.95	2774	-0.134	-0.308	0.122	0.239	244.452287	-53.553721	295.96	2005.54
6	GUIDE	used	1142294744	8.08	2774	0.220	0.511	0.166	0.267	244.279496	-54.781527	-964.71	-2244.84
7	GUIDE	used	1141783328	8.69	2770	-0.256	-0.377	0.133	0.239	245.189578	-53.538762	1849.02	1724.38

2.4 Star Slots

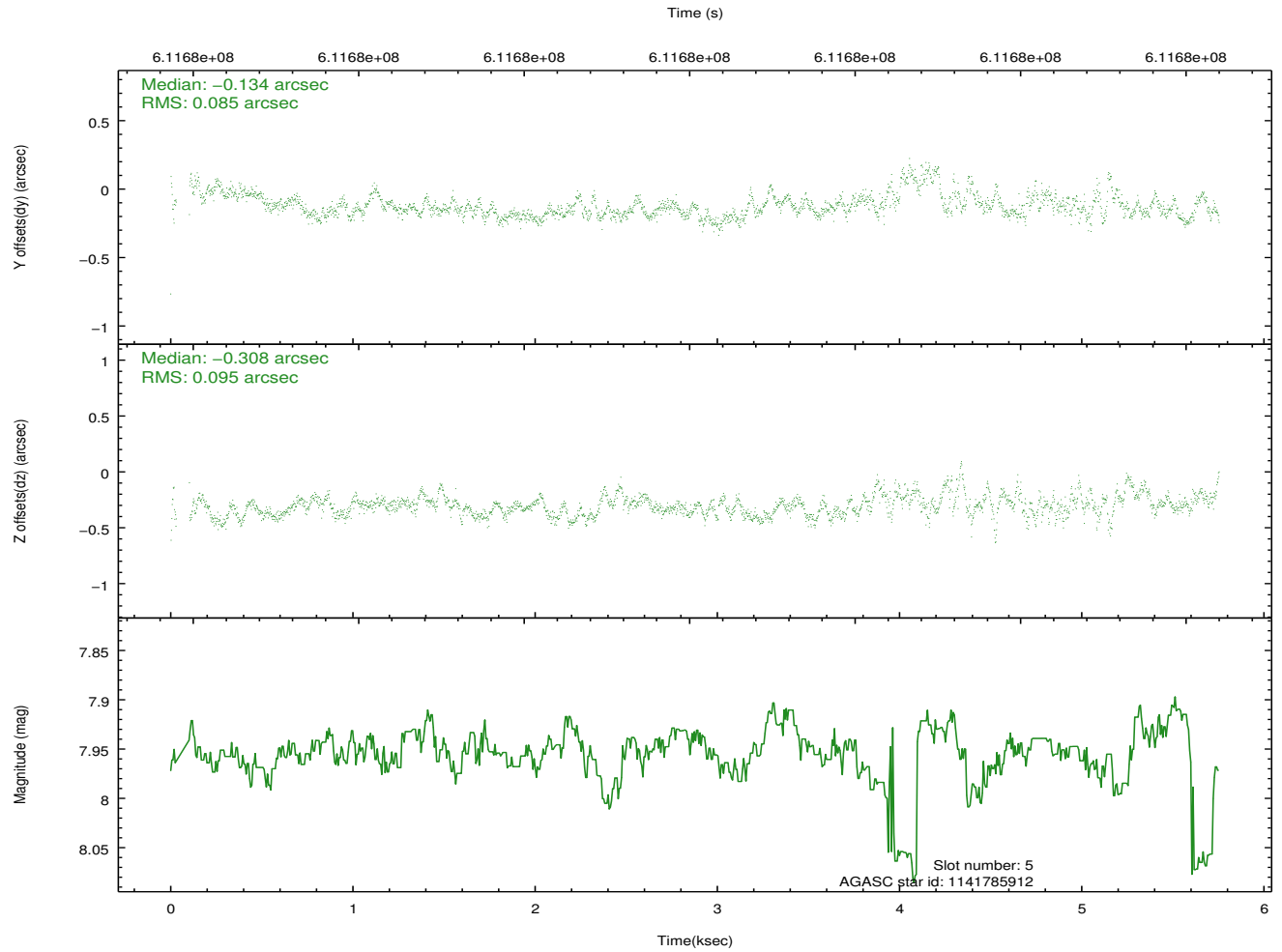
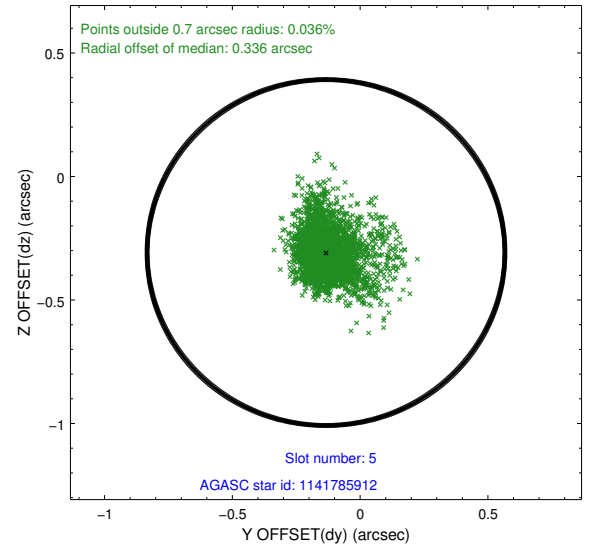
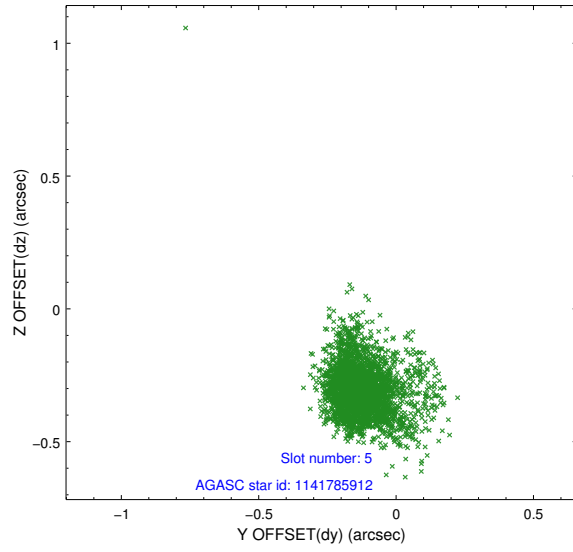
2.4.1 Slot 3



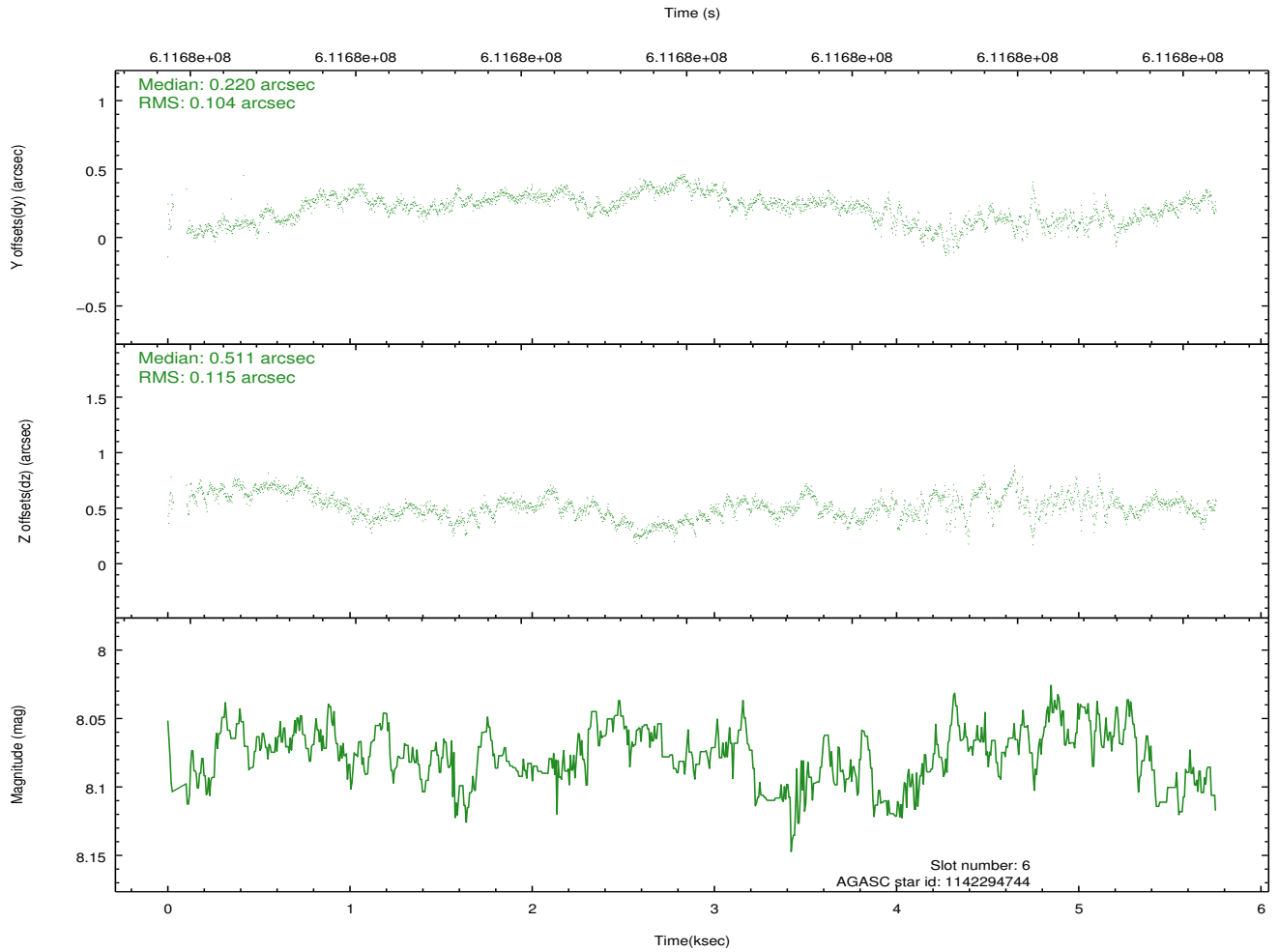
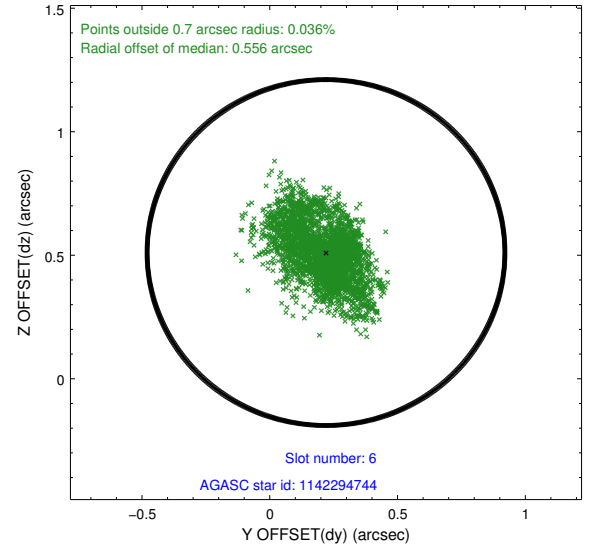
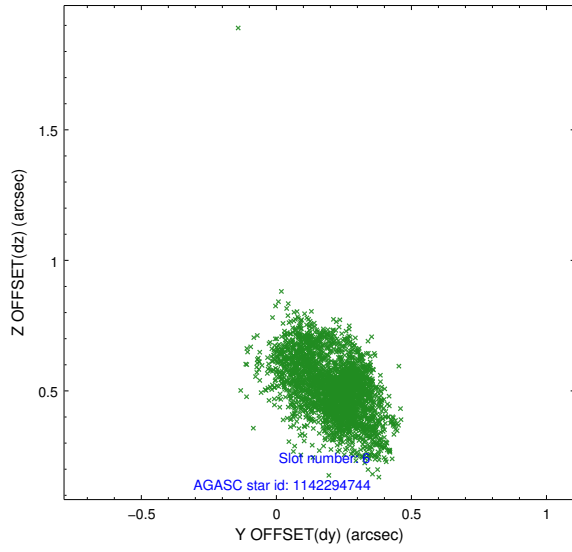
2.4.2 Slot 4



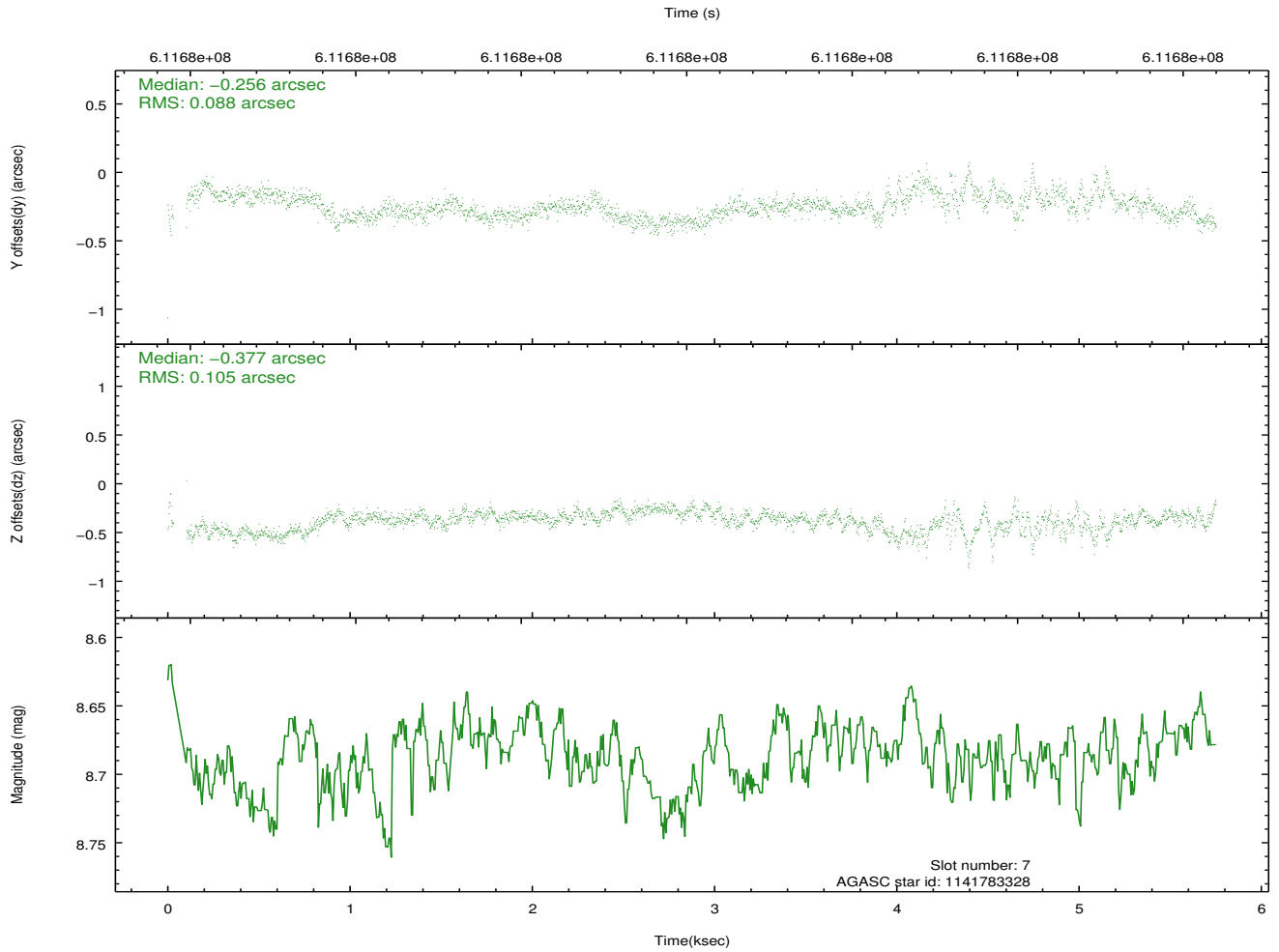
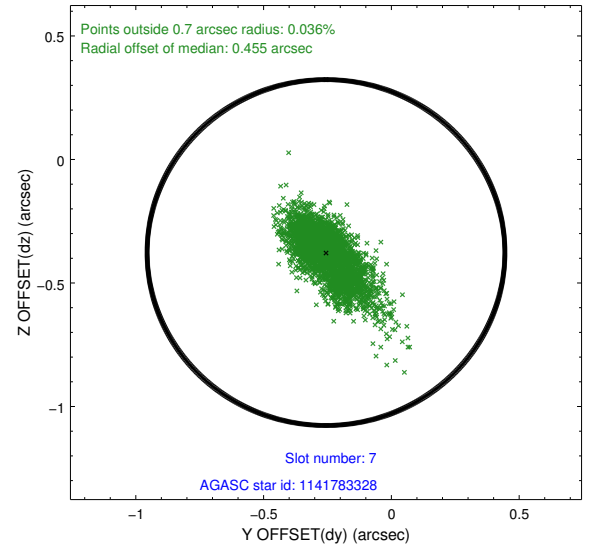
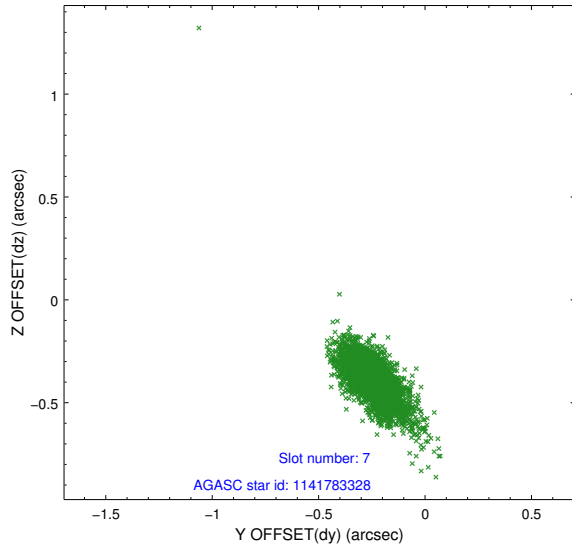
2.4.3 Slot 5



2.4.4 Slot 6

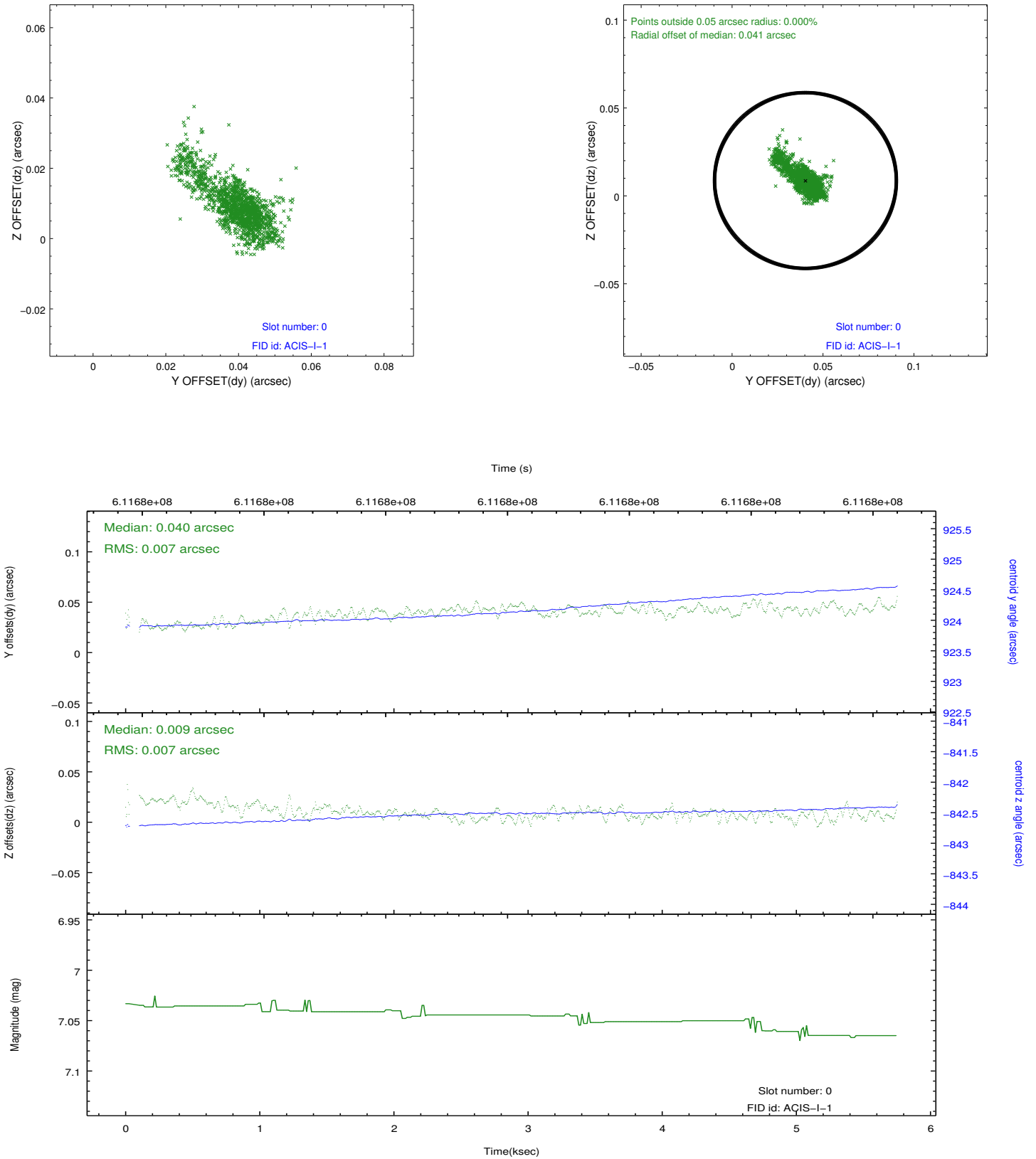


2.4.5 Slot 7

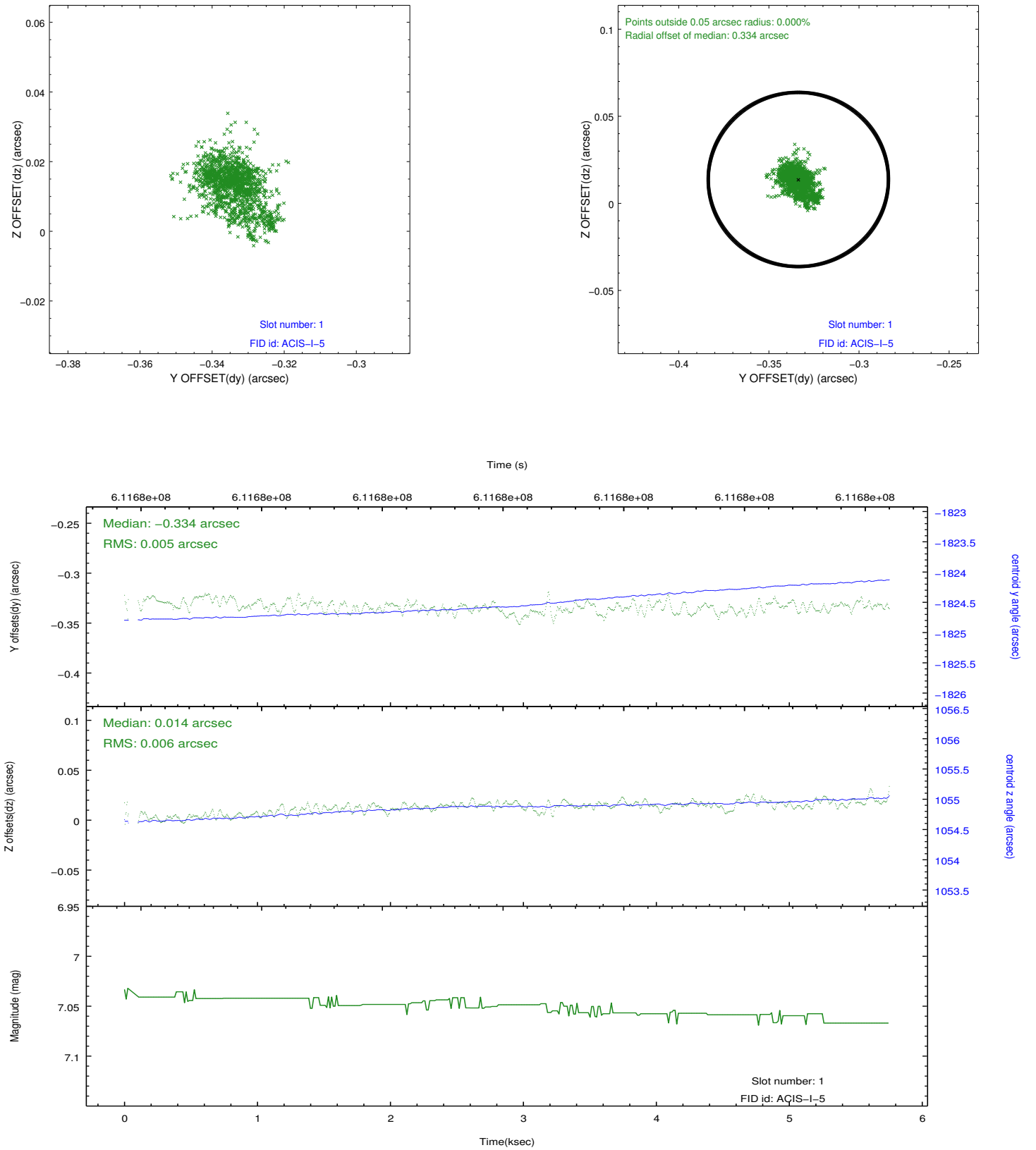


2.5 FID Slots

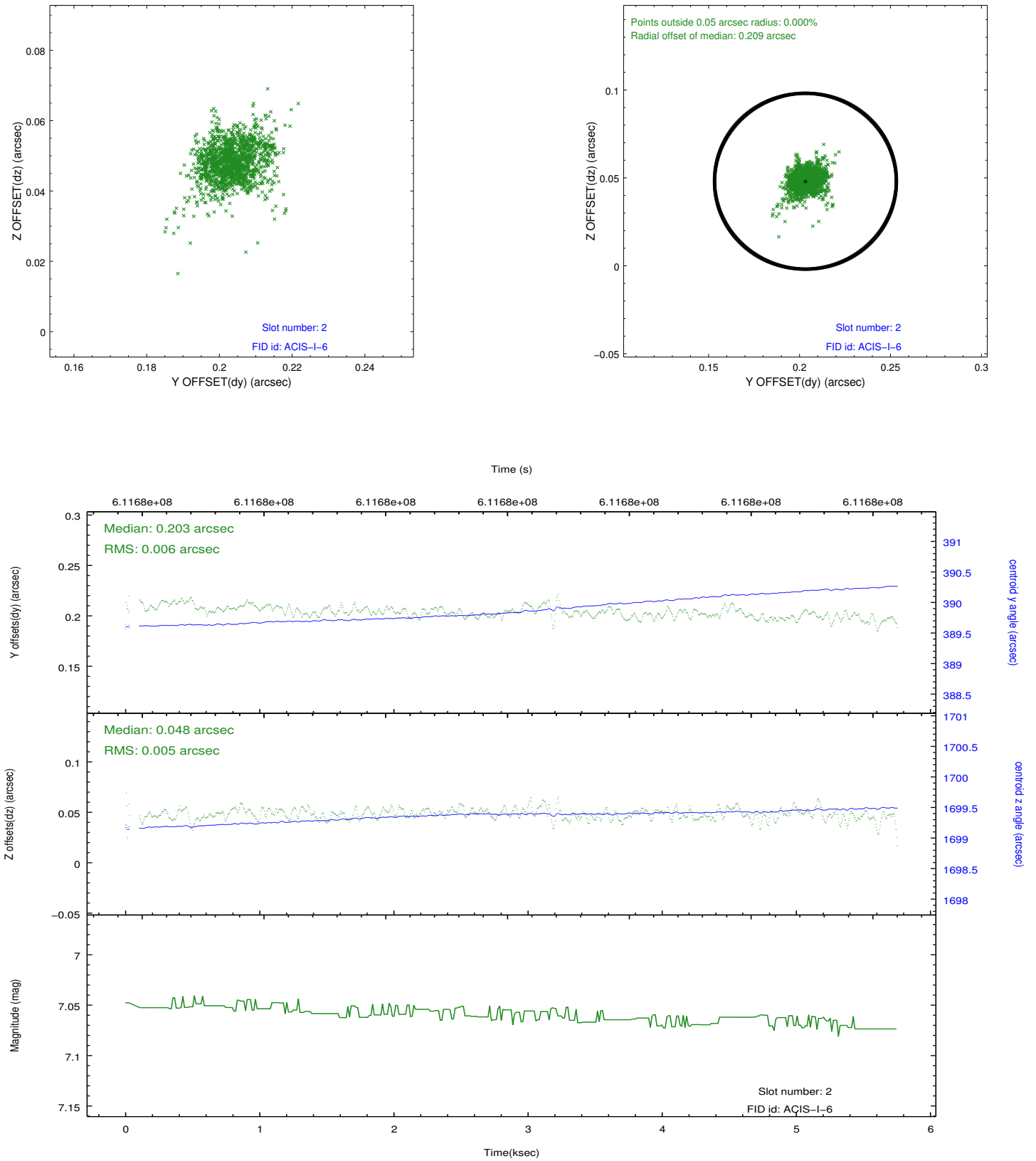
2.5.1 Slot 0



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)	2017.05.21
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.0839502309561

A.2 Comments

Two optional chips were dropped.