

V&V Reference Report

L2 ASCDS Version : 10.6

Observation 19370 - L2 Version 1
Chandra X-Ray Center

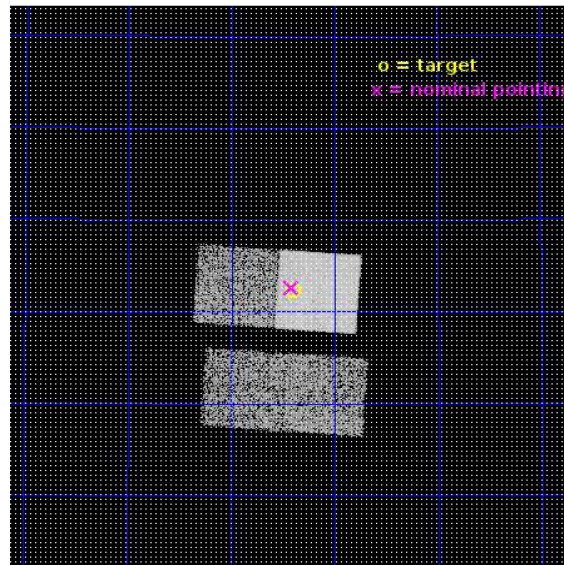
L2 Processing Date : Oct 25 2017

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

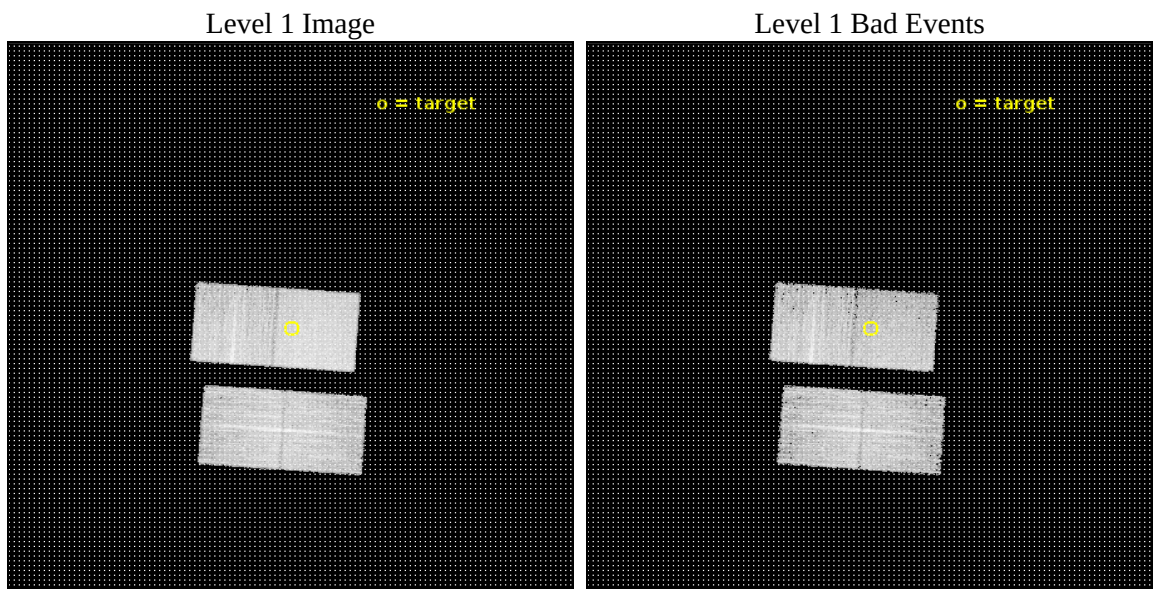
seq_num	601327	Sequence number
obs_id	19370	Observation id
title	A Statistically Complete High Resolution Chandra and Radio (eMERLIN) Survey of the Palomar Nearby Galaxies Sample	Proposal title
observer	Ian McHardy	Principal investigator
object	NGC 5297	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	206.59875	Observer's specified target RA [deg]
dec_targ	43.872028	Observer's specified target Dec [deg]
ra_nom	206.60441632837	Nominal RA [deg]
dec_nom	43.876915630523	Nominal Dec [deg]
roll_nom	4.0786313352423	Nominal Roll [deg]
revision	1	Processing version of data
ontime	10074.345596671	Sum of GTIs [s]
livetime	9942.7168548253	Livetime [s]
ontime2	10074.222476721	Sum of GTIs [s]
ontime3	10074.263516665	Sum of GTIs [s]
ontime6	10074.304556727	Sum of GTIs [s]
ontime7	10074.345596671	Sum of GTIs [s]
l2events	55904	Number of level 2 events



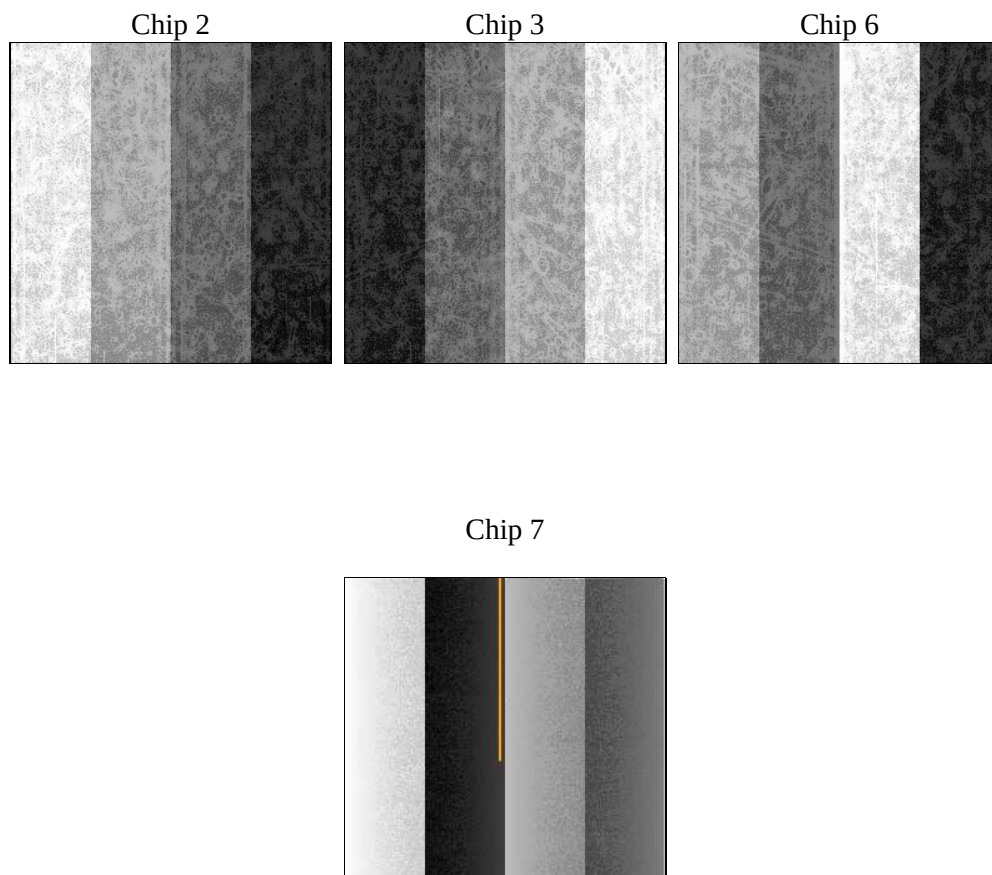
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10001.049000	[s] Scheduled observation exposure time
ascdsver	10.6	Processing system revision	ontime	10074.345596671	Sum of GTIs [s]
caldbver	4.7.6	 	ontime2	10074.222476721	Sum of GTIs [s]
date	2017-10-26T02:32:19	Date and time of file creation	ontime3	10074.263516665	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	10074.304556727	Sum of GTIs [s]
			ontime7	10074.345596671	Sum of GTIs [s]
			l1events	280129	Number of level 1 events

2.1.4 Events

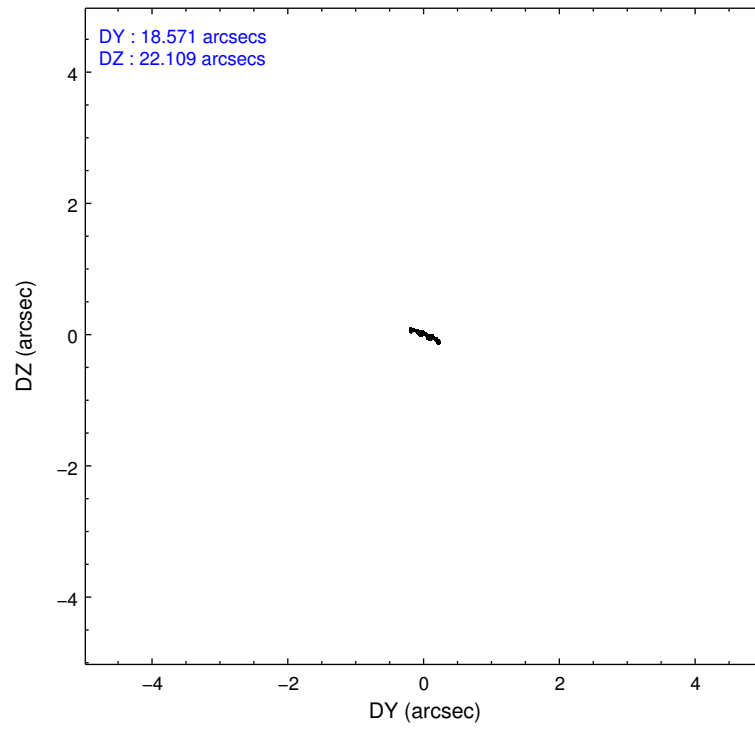
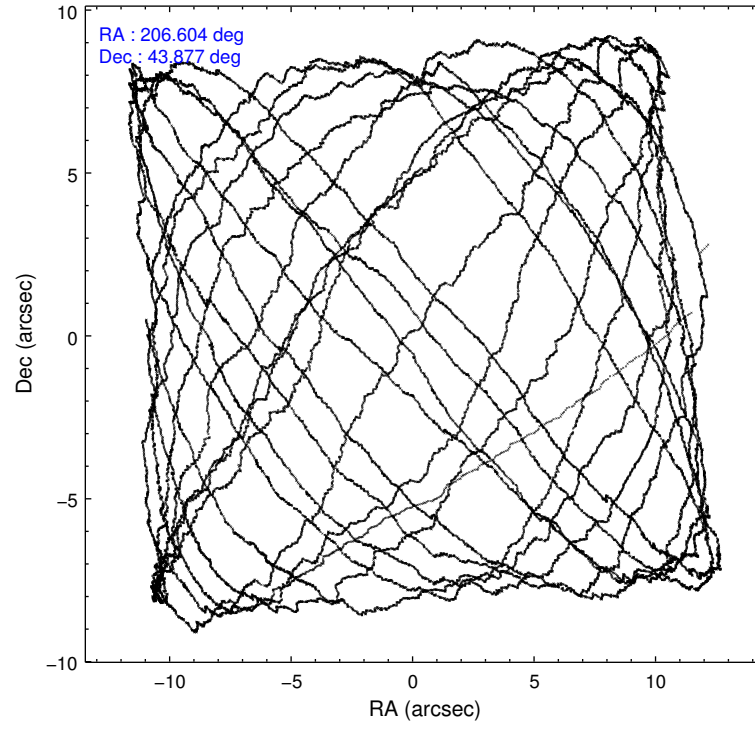
	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	65374	61368	67290	86097
rejected events	58147	53995	59779	48444
rejected %	88%	87%	88%	56%

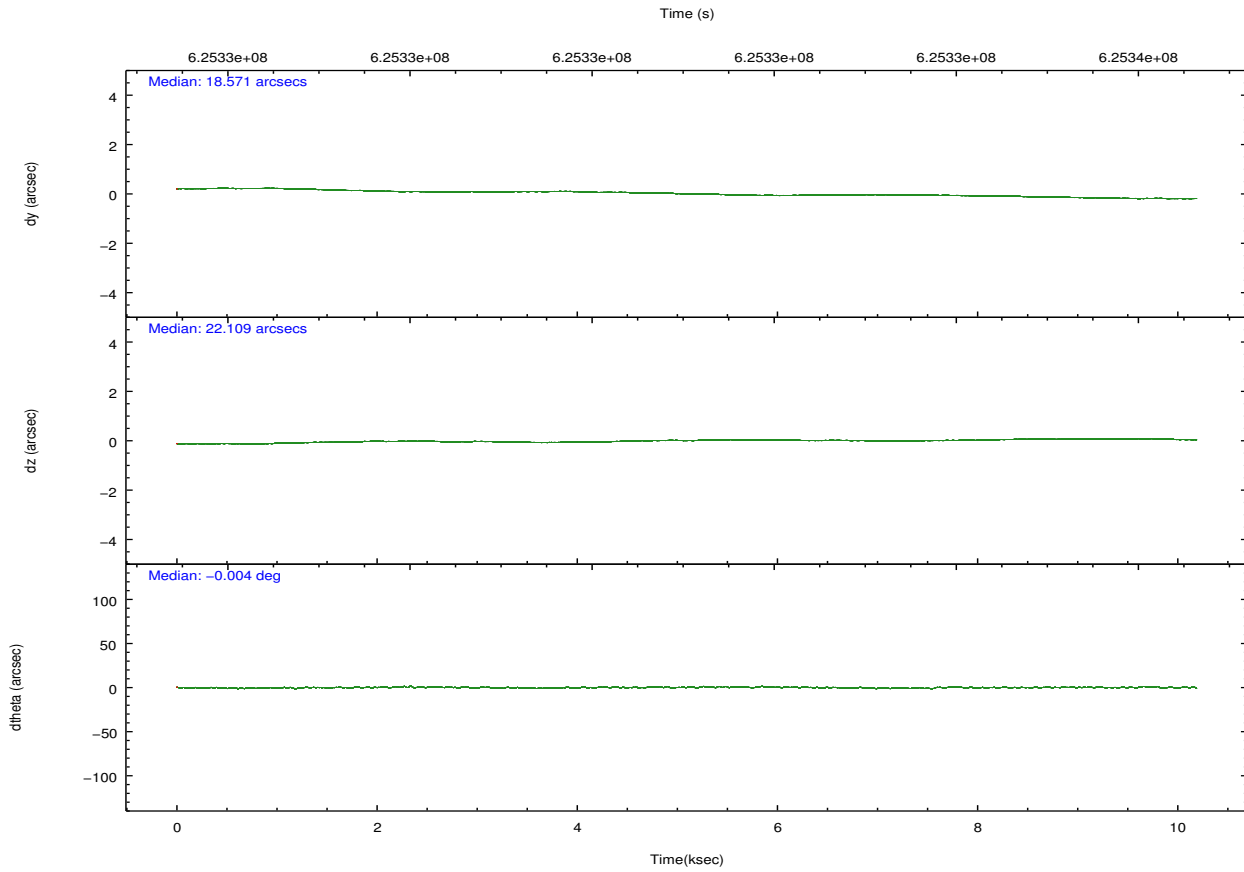
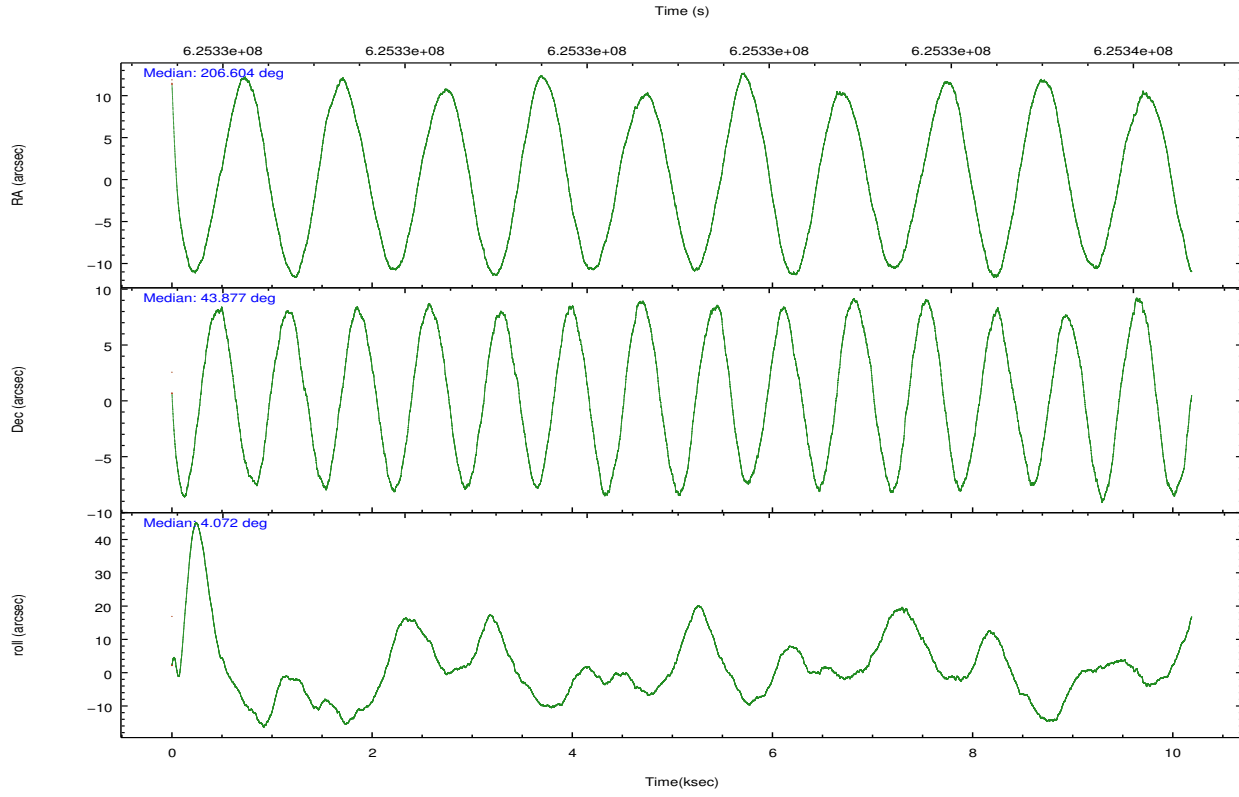
	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	2586	2866	2517	3212
	3%	4%	3%	3%
grade 1 events	35	51	32	127
	0%	0%	0%	0%
grade 2 events	1795	1530	1722	8119
	2%	2%	2%	9%
grade 3 events	729	766	758	2984
	1%	1%	1%	3%
grade 4 events	734	775	754	3056
	1%	1%	1%	3%
grade 5 events	2639	3230	3261	8604
	4%	5%	4%	9%
grade 6 events	1388	1440	1765	20299
	2%	2%	2%	23%
grade 7 events	55468	50710	56481	39696
	84%	82%	83%	46%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-2367	ACIS-2367	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	206.573183	206.6044163283653	Subarray requested	NONE	NONE
[deg] Pointing Dec	43.861280	43.87691563052269	Alternating exposures requested	N	N
[deg] Pointing Roll	3.943703	4.078631335242298	[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)	625326116.184000	625324643.85993			
Observation start date	2017-10-25T13:40:47	2017-10-25T13:17:23			
[s] Observation end time (MET)	625336117.184000	625337050.97316			
Observation end date	2017-10-25T16:27:28	2017-10-25T16:44:10			
Read mode	TIMED	TIMED			

2.3 Aspect



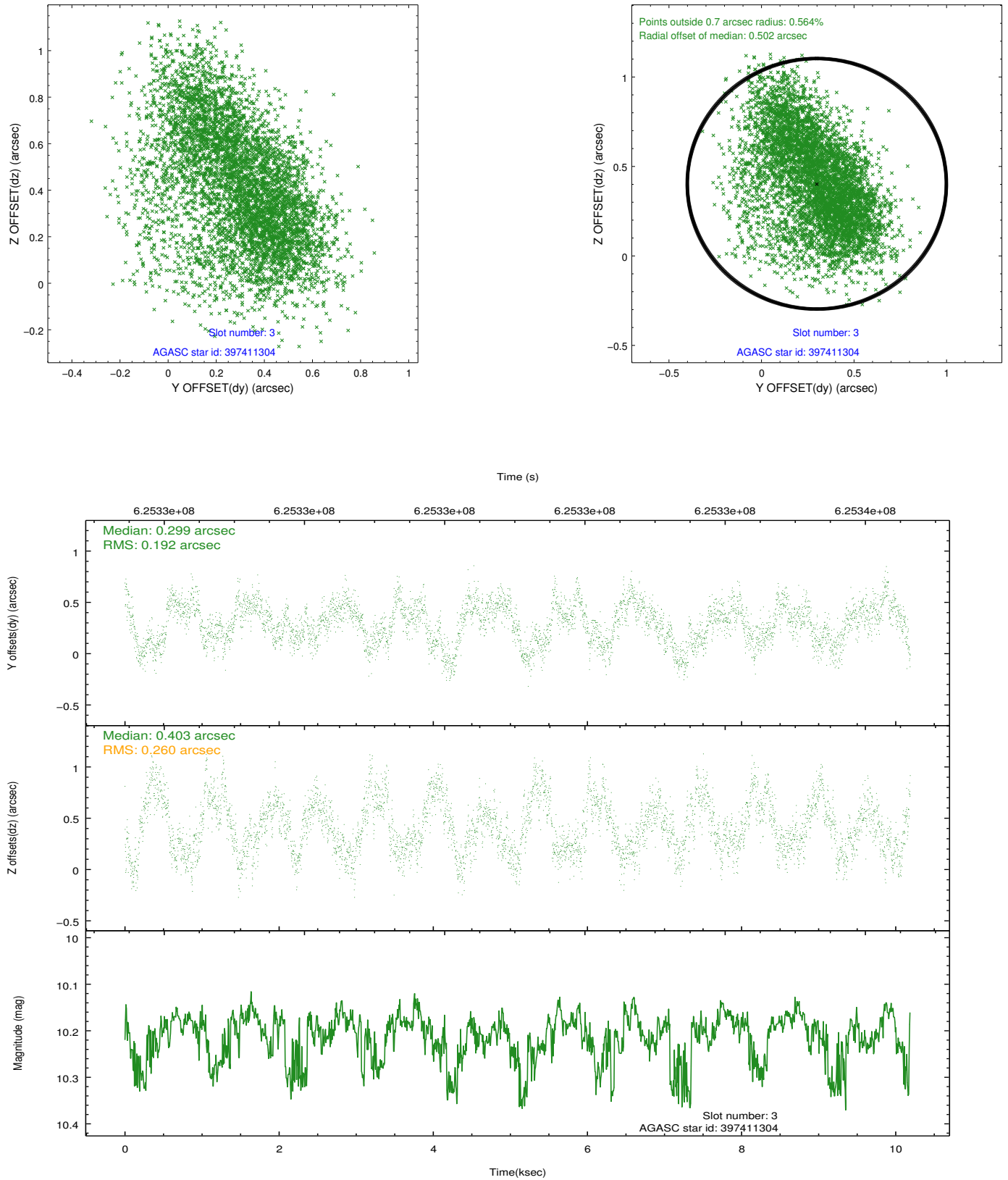


Slot Statistics

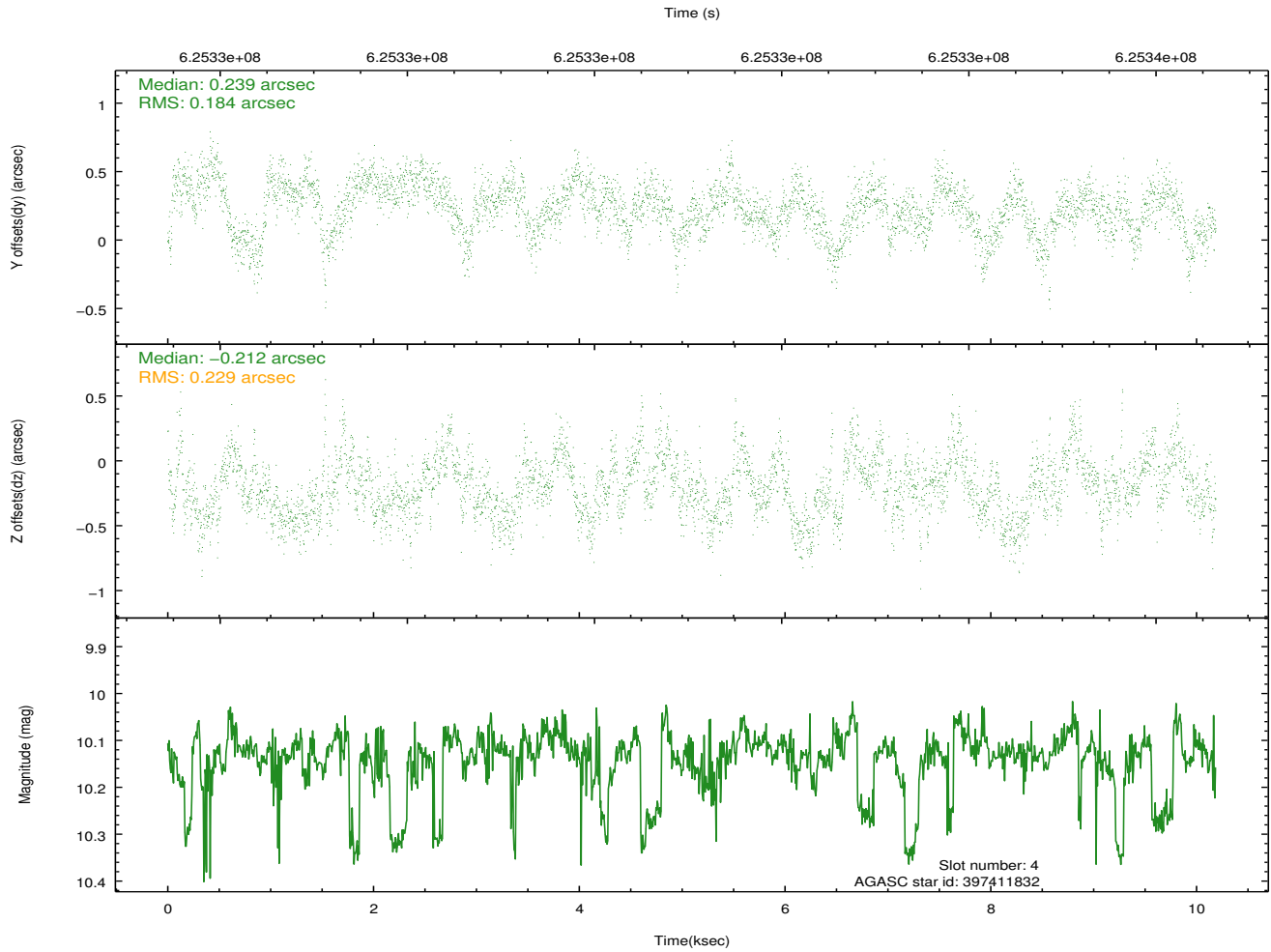
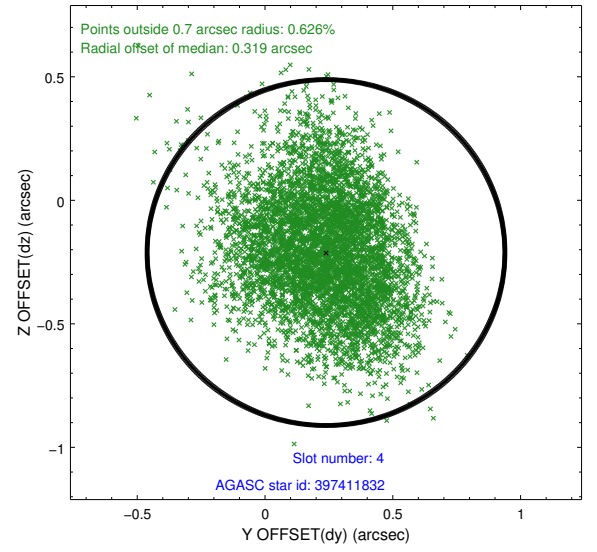
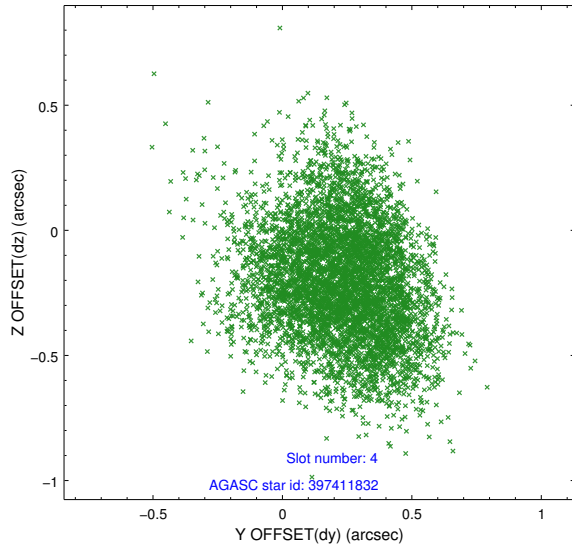
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.01	2486	-0.202	-0.134	0.009	0.014	0.000000	0.000000	-771.86	-1743.80
1	FID		ACIS-S-4	7.10	2486	0.480	0.133	0.007	0.013	0.000000	0.000000	2141.86	164.40
2	FID		ACIS-S-5	7.10	2486	-0.309	0.009	0.007	0.012	0.000000	0.000000	-1824.14	158.54
3	GUIDE	used	397411304	10.21	4964	0.299	0.403	0.351	0.549	205.893509	43.350216	-1900.38	-1705.38
4	GUIDE	used	397411832	10.13	4956	0.239	-0.212	0.310	0.498	206.398123	44.147667	-380.21	1059.83
5	GUIDE	used	397412368	9.20	4963	-0.513	-0.097	0.190	0.368	206.641286	43.888760	182.73	87.04
6	GUIDE	used	397419168	10.21	4955	0.064	-0.559	0.295	0.588	206.282945	44.393946	-612.86	1965.22
7	GUIDE	used	397549856	9.57	4961	-0.090	0.429	0.276	0.478	207.047883	43.324592	1107.96	-2008.22

2.4 Star Slots

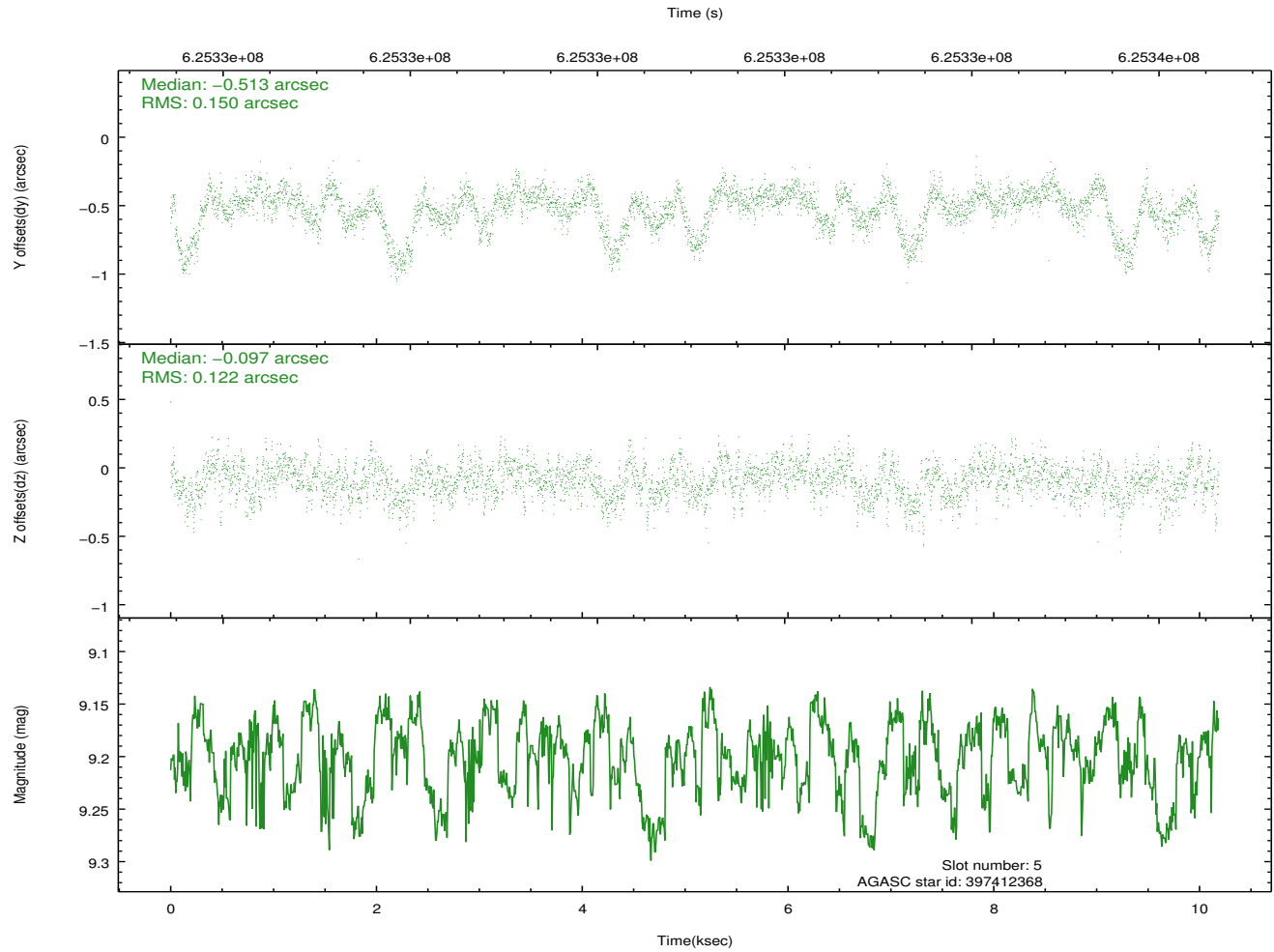
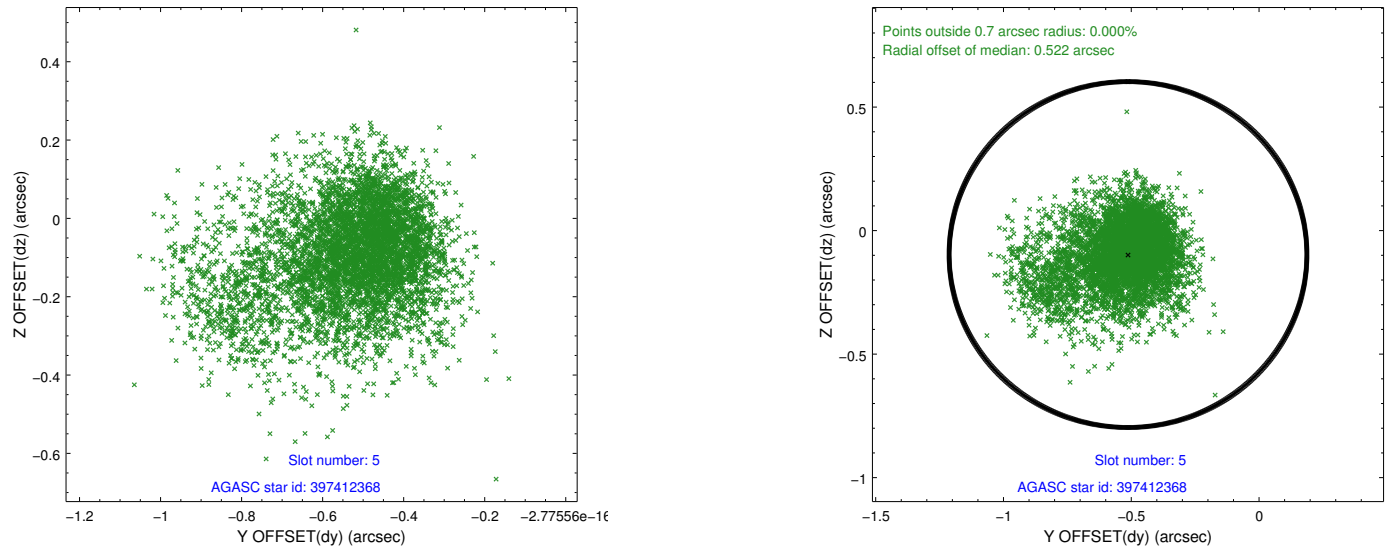
2.4.1 Slot 3



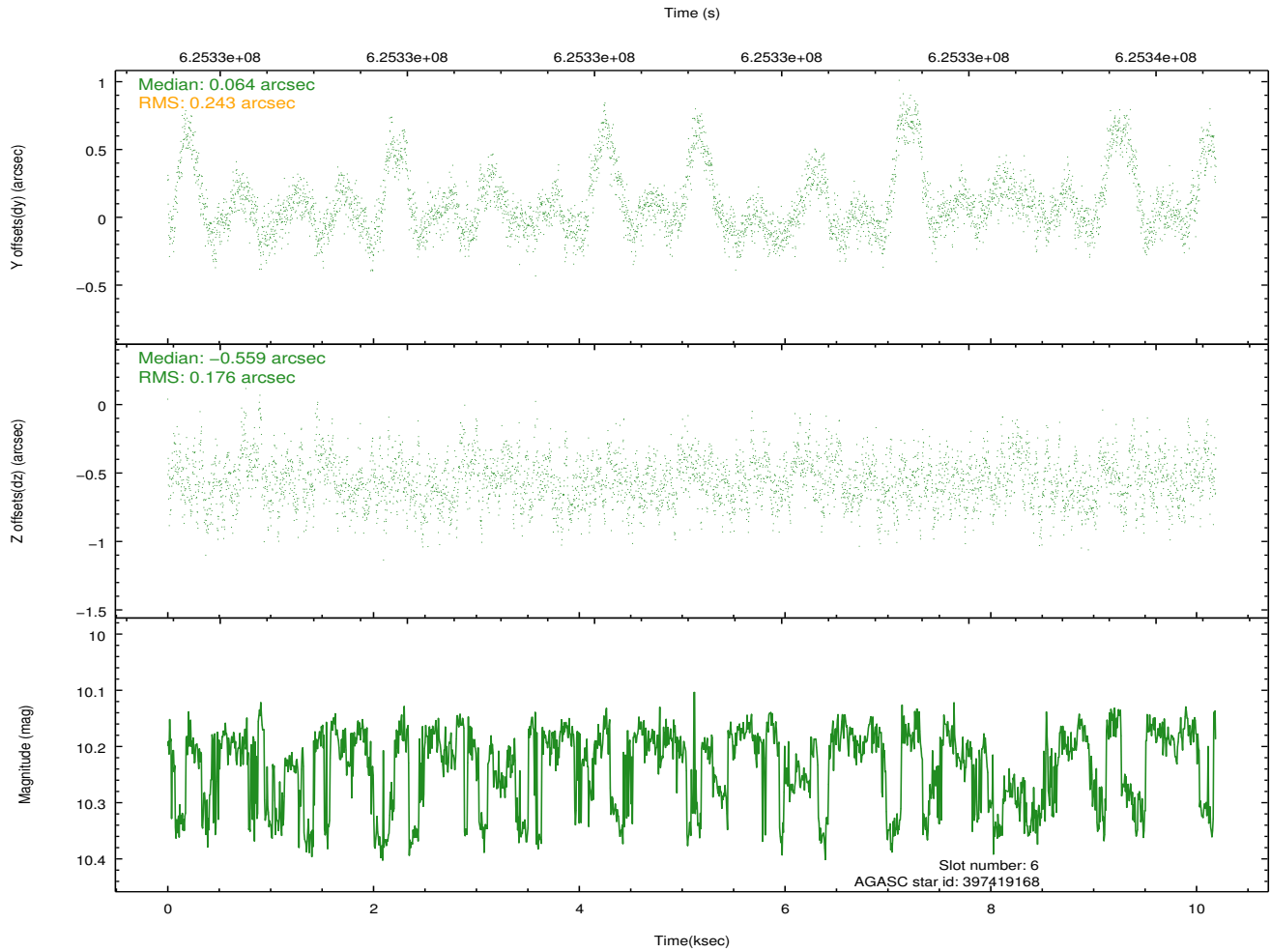
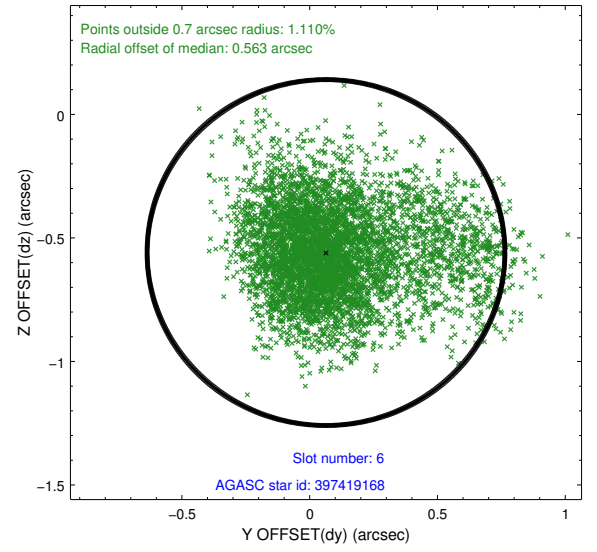
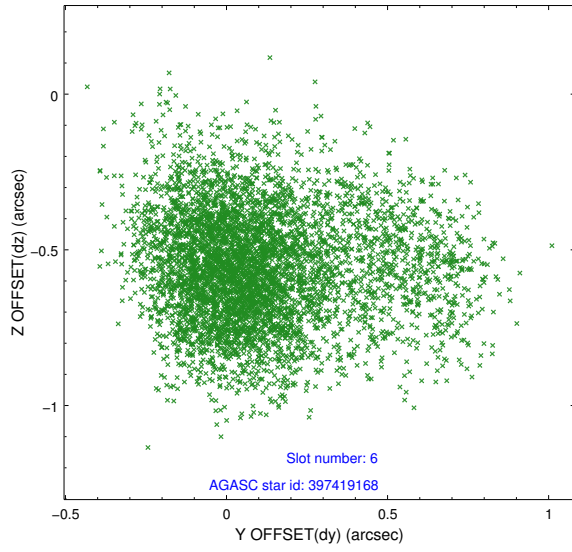
2.4.2 Slot 4



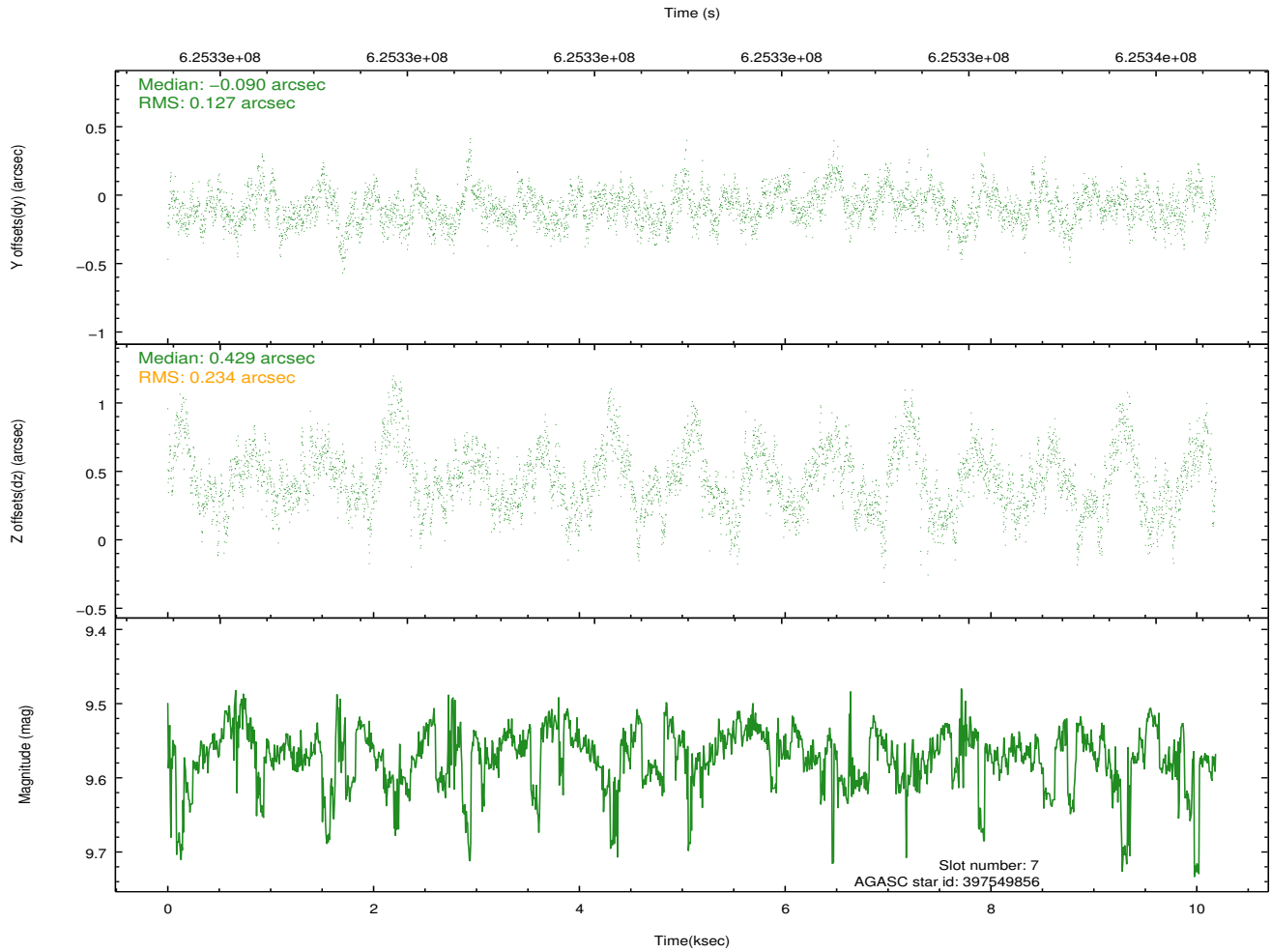
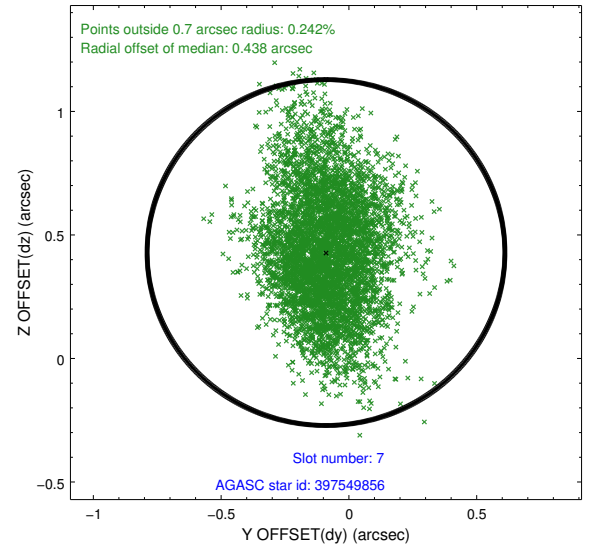
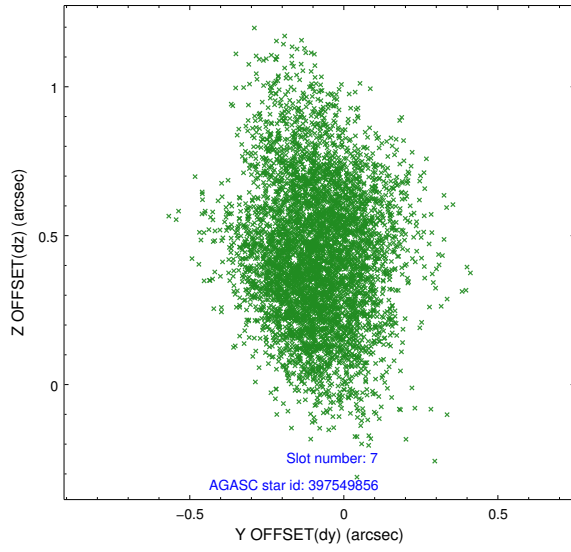
2.4.3 Slot 5



2.4.4 Slot 6

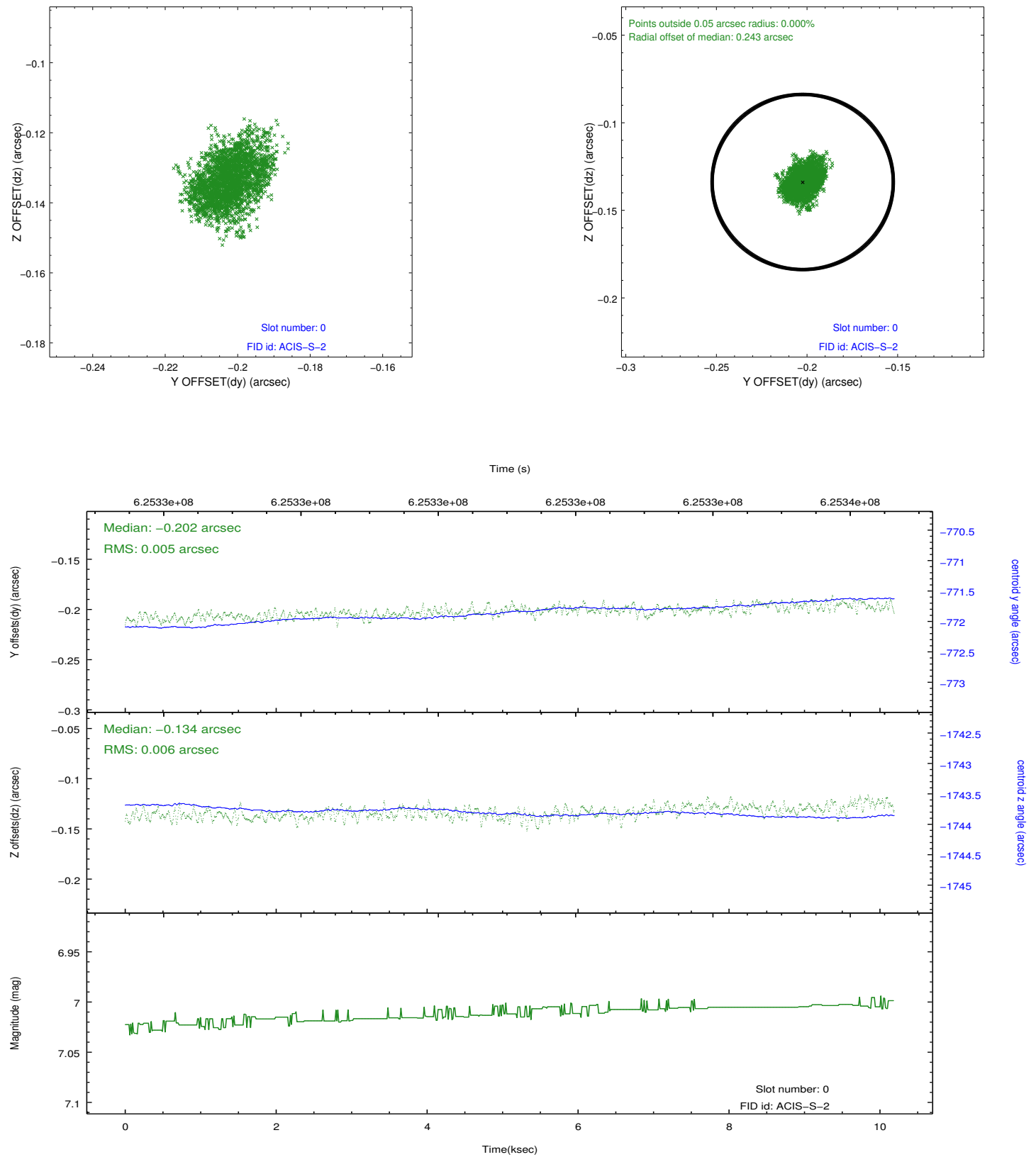


2.4.5 Slot 7

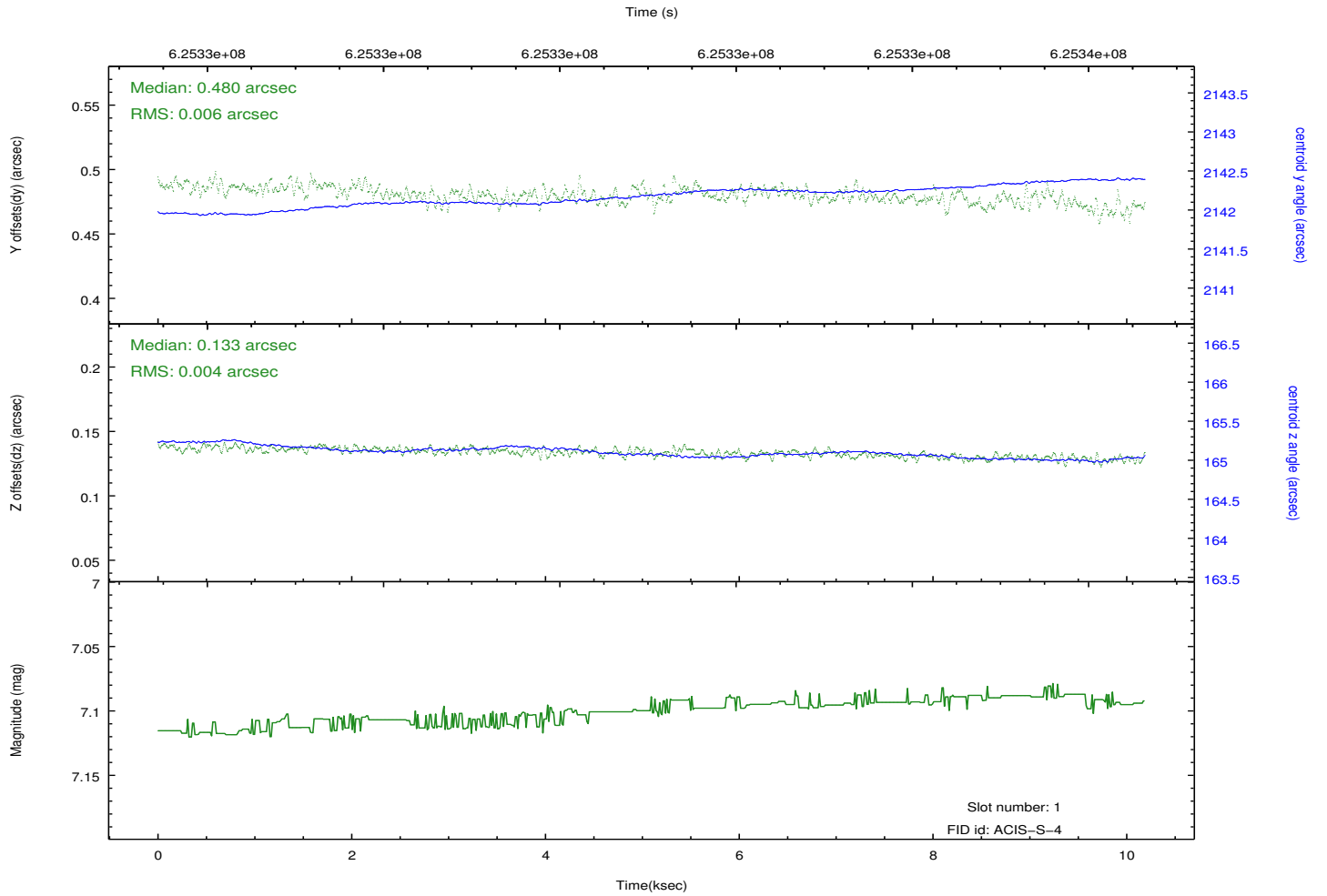
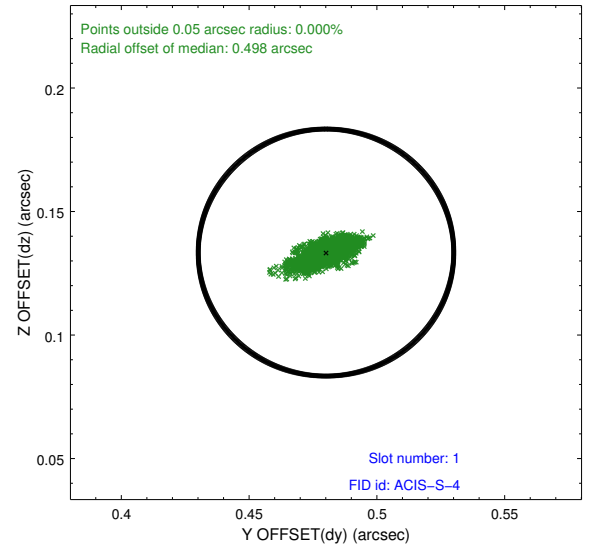
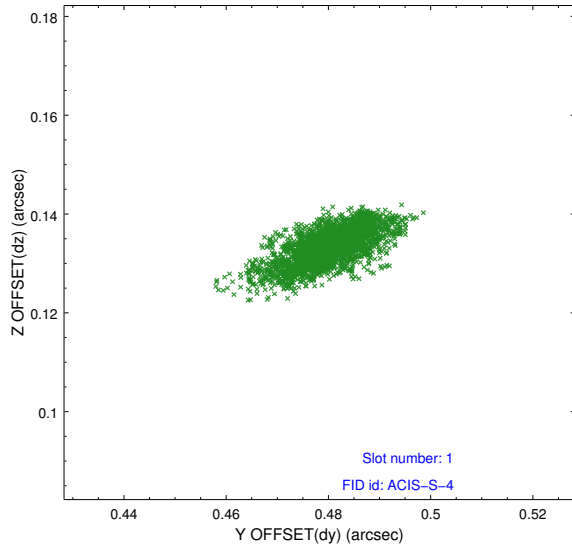


2.5 FID Slots

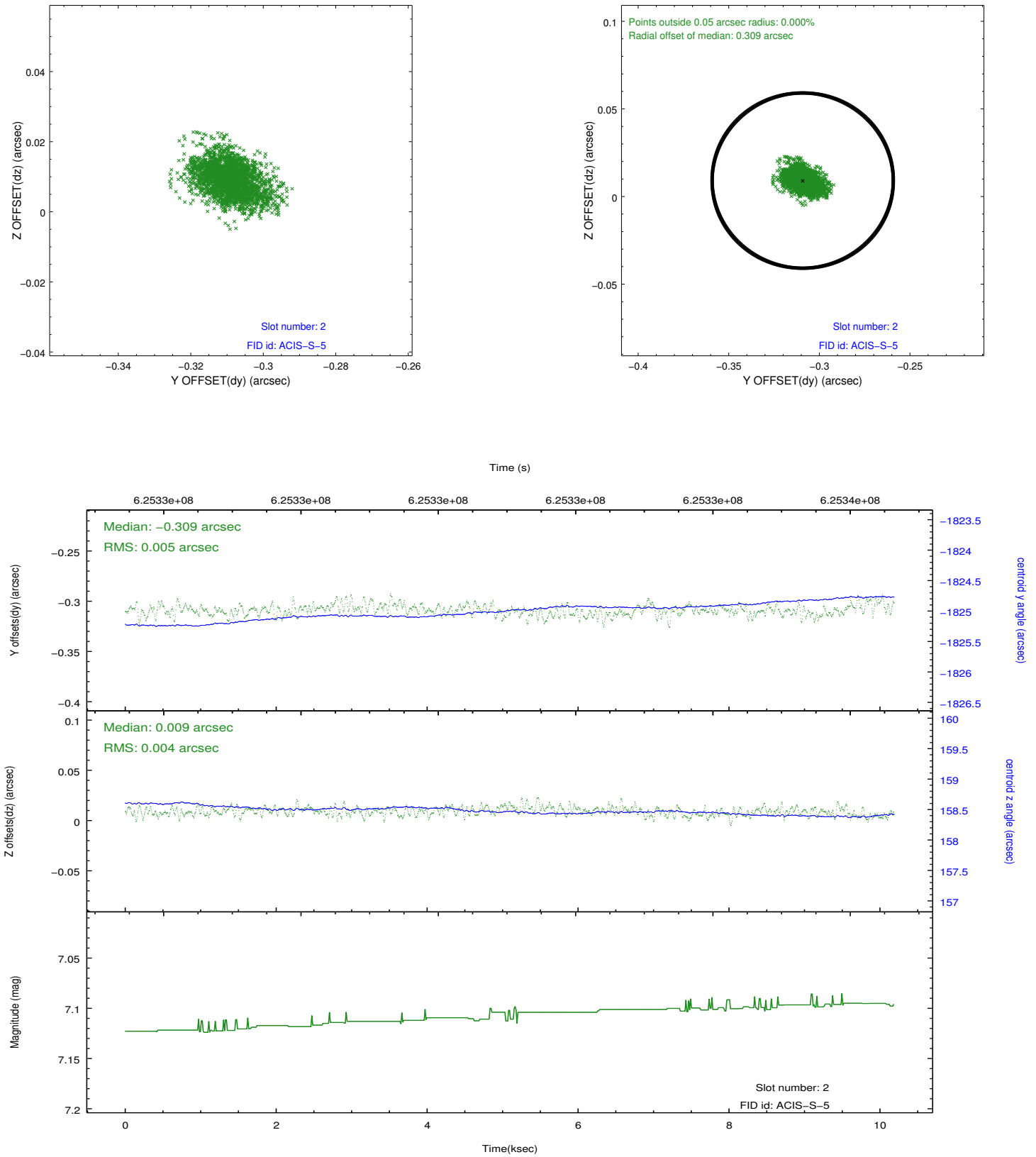
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2017.10.26
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.074345596671

A.2 Comments

The large rms values for slots 3,4,6, and 7 are acceptable for the aspect solution. The solution will not be improved by removing one or more of these slots