

V&V Reference Report

L2 ASCDS Version : 10.4.2.1

Observation 17268 - L2 Version 1
Chandra X-Ray Center

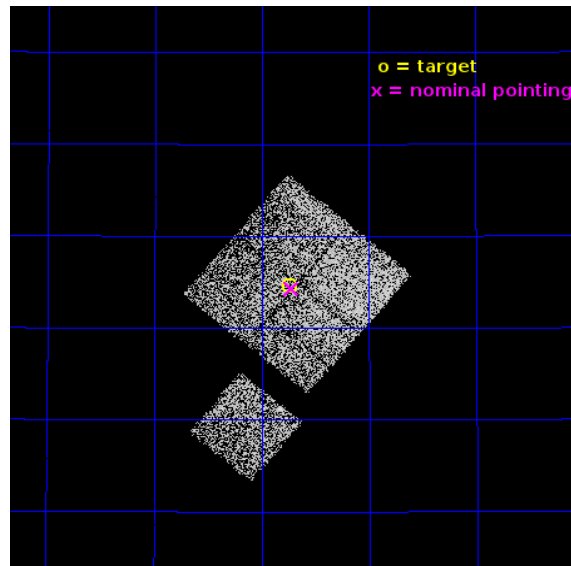
L2 Processing Date : Dec 1 2015

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

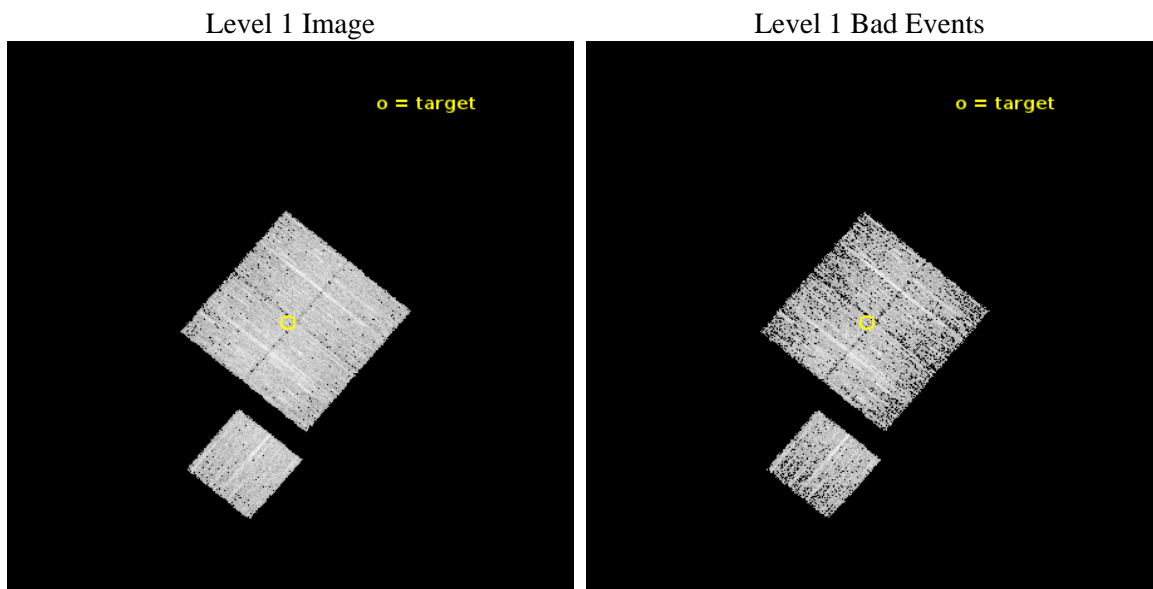
seq_num	801513	Sequence number
obs_id	17268	Observation id
title	Perseus: A New, Low-Redshift Anchor for Cluster Cosmology	Proposal
observer	Prof. Steven Allen	Principal investigator
object	Perseus cluster	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	50.68458	Observer's specified target RA [deg]
dec_targ	41.577022	Observer's specified target Dec [deg]
ra_nom	50.680732689544	Nominal RA [deg]
dec_nom	41.571386603691	Nominal Dec [deg]
roll_nom	219.85260684872	Nominal Roll [deg]
revision	1	Processing version of data
ontime	4770.9000368118	Sum of GTIs [s]
livetime	4708.5647155454	Livetime [s]
ontime0	4770.9000368118	Sum of GTIs [s]
ontime1	4770.9000368118	Sum of GTIs [s]
ontime2	4770.9000368118	Sum of GTIs [s]
ontime3	4770.9000368118	Sum of GTIs [s]
ontime6	4770.9000368118	Sum of GTIs [s]
l2events	19006	Number of level 2 events



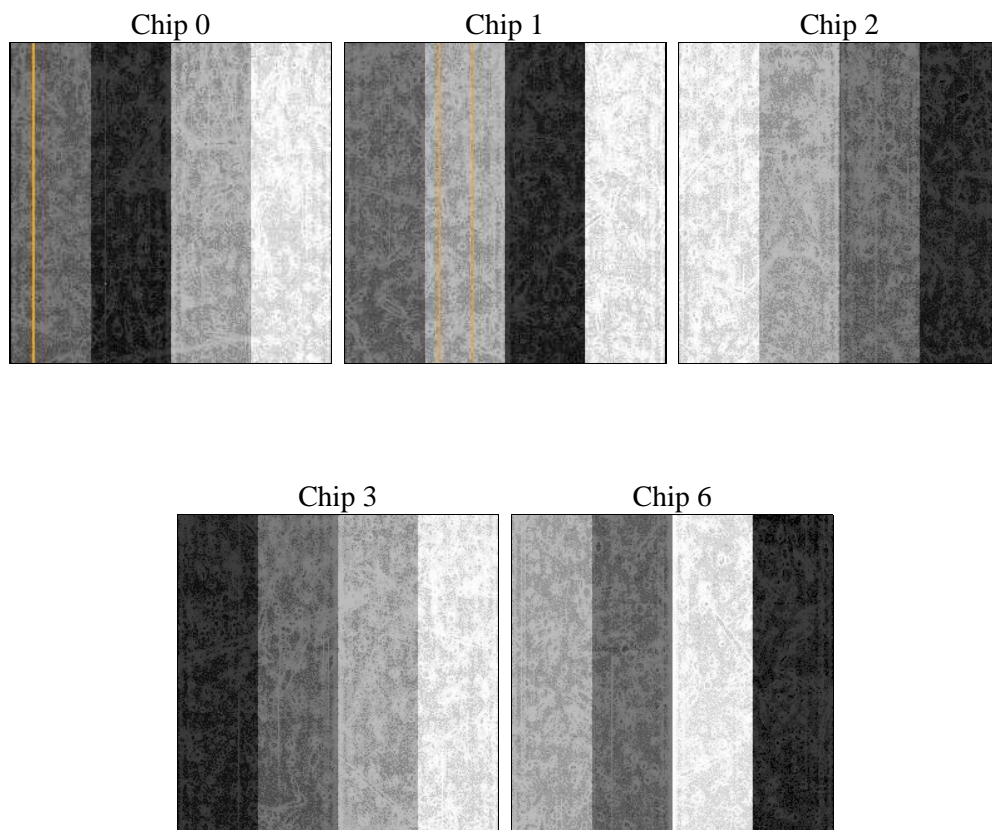
2 OBI

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	10.4.2.1	Processing system revision	ontime	4770.9000368118	Sum of GTIs [s]
caldsver	4.6.10a	 	ontime0	4770.9000368118	Sum of GTIs [s]
date	2015-12-01T20:20:39	Date and time of file creation	ontime1	4770.9000368118	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	4770.9000368118	Sum of GTIs [s]
			ontime3	4770.9000368118	Sum of GTIs [s]
			ontime6	4770.9000368118	Sum of GTIs [s]
			l1events	141911	Number of level 1 events

2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	28092	27464	30838	27831	27686
rejected events	21949	23183	26310	24448	23956
rejected %	78%	84%	85%	87%	86%

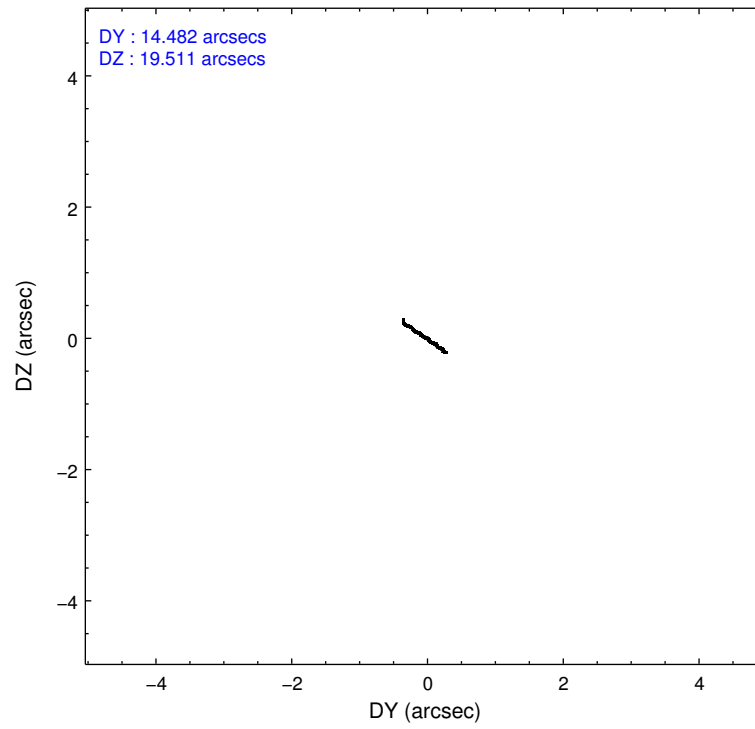
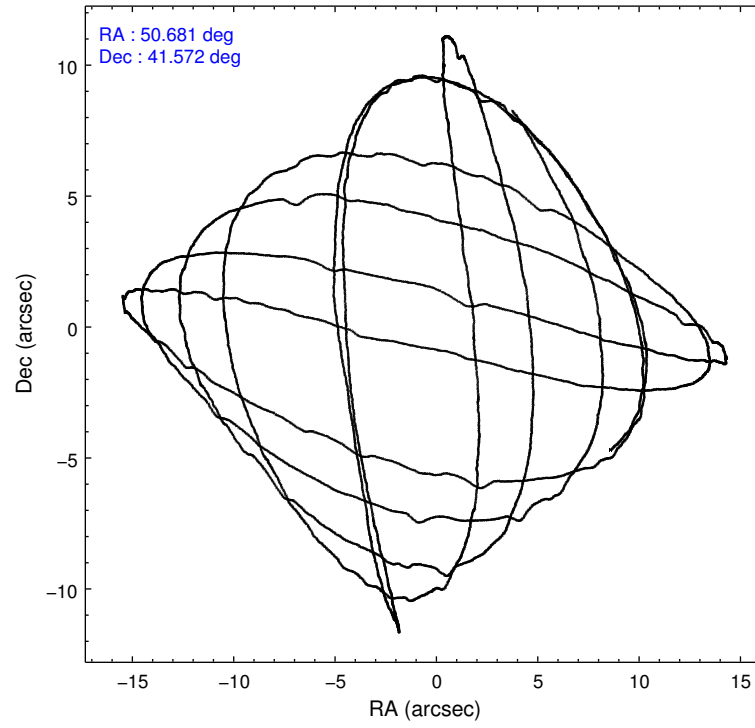
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	3417	1774	2261	1396	1498
	12%	6%	7%	5%	5%
grade 1 events	22	22	27	13	12
	0%	0%	0%	0%	0%
grade 2 events	1152	971	982	709	795
	4%	3%	3%	2%	2%
grade 3 events	454	399	330	307	340
	1%	1%	1%	1%	1%
grade 4 events	410	366	339	359	330
	1%	1%	1%	1%	1%
grade 5 events	1253	1253	1178	1386	1344
	4%	4%	3%	4%	4%
grade 6 events	713	776	622	615	775
	2%	2%	2%	2%	2%
grade 7 events	20671	21903	25099	23046	22592
	73%	79%	81%	82%	81%

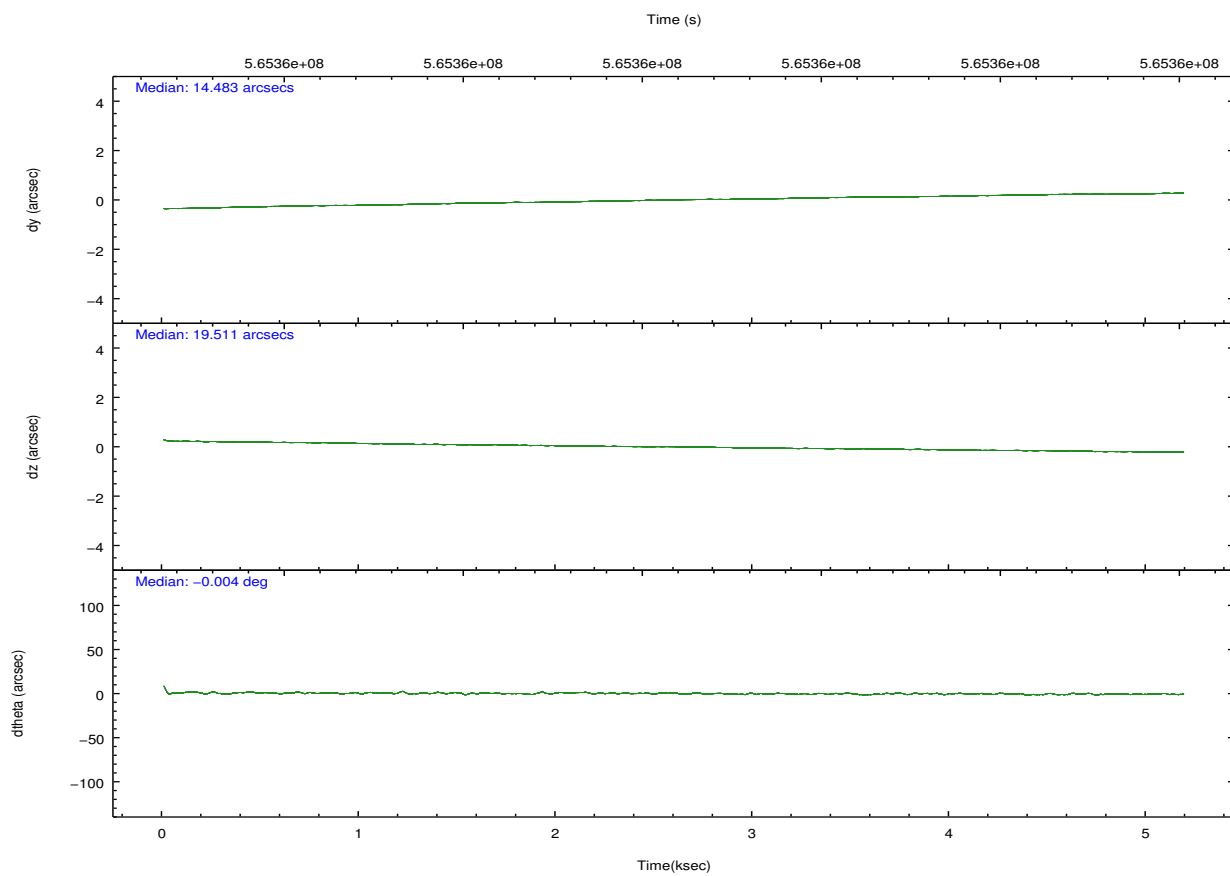
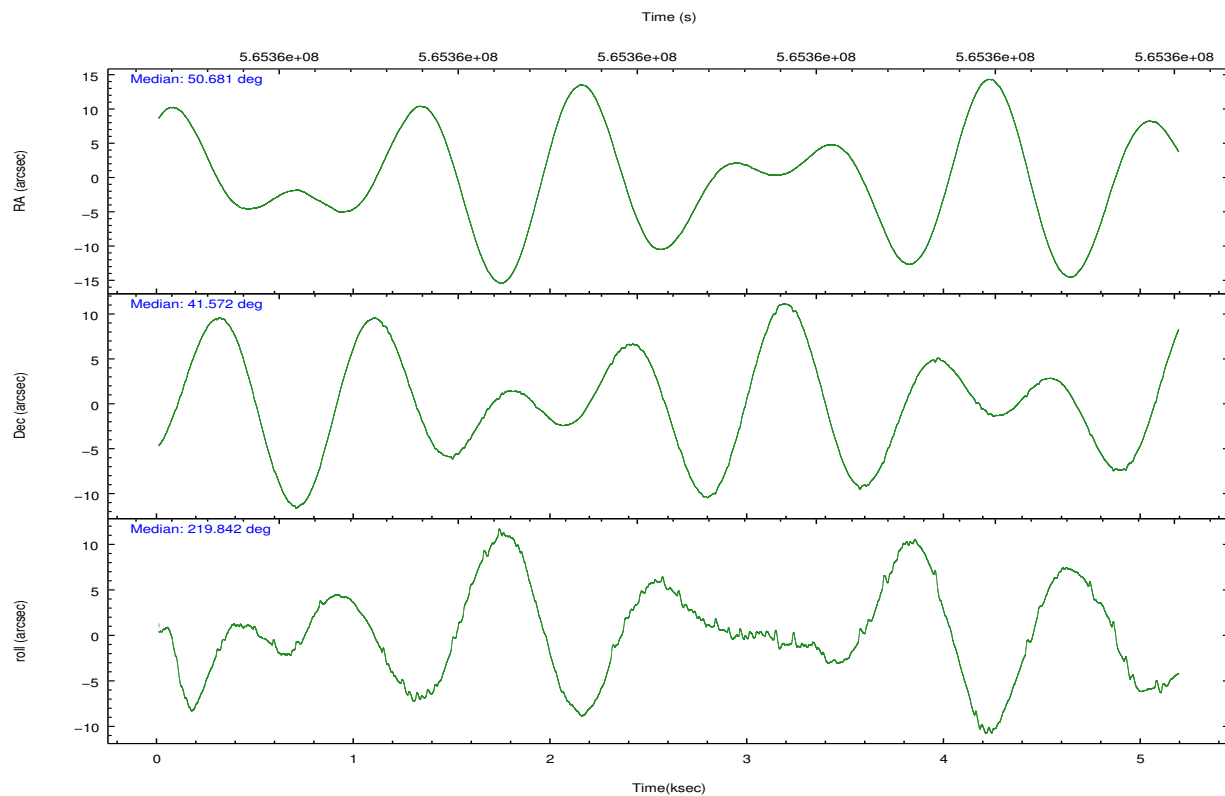
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-01236	ACIS-01236
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	50.693199	50.68073268954372
[deg] Pointing Dec	41.597342	41.57138660369091
[deg] Pointing Roll	219.635641	219.8526068487179
[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)	565355779.184000	565355349.84029
Observation start date	2015-12-01T11:15:11	2015-12-01T11:09:09
[s] Observation end time (MET)	565360779.184000	565360913.5405999
Observation end date	2015-12-01T12:38:31	2015-12-01T12:41:53
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	Y
CCD S3 on	N	N
CCD S4 on	N	N
CCD S5 on	N	N
Number of optional ACIS chips dropped	0	0
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



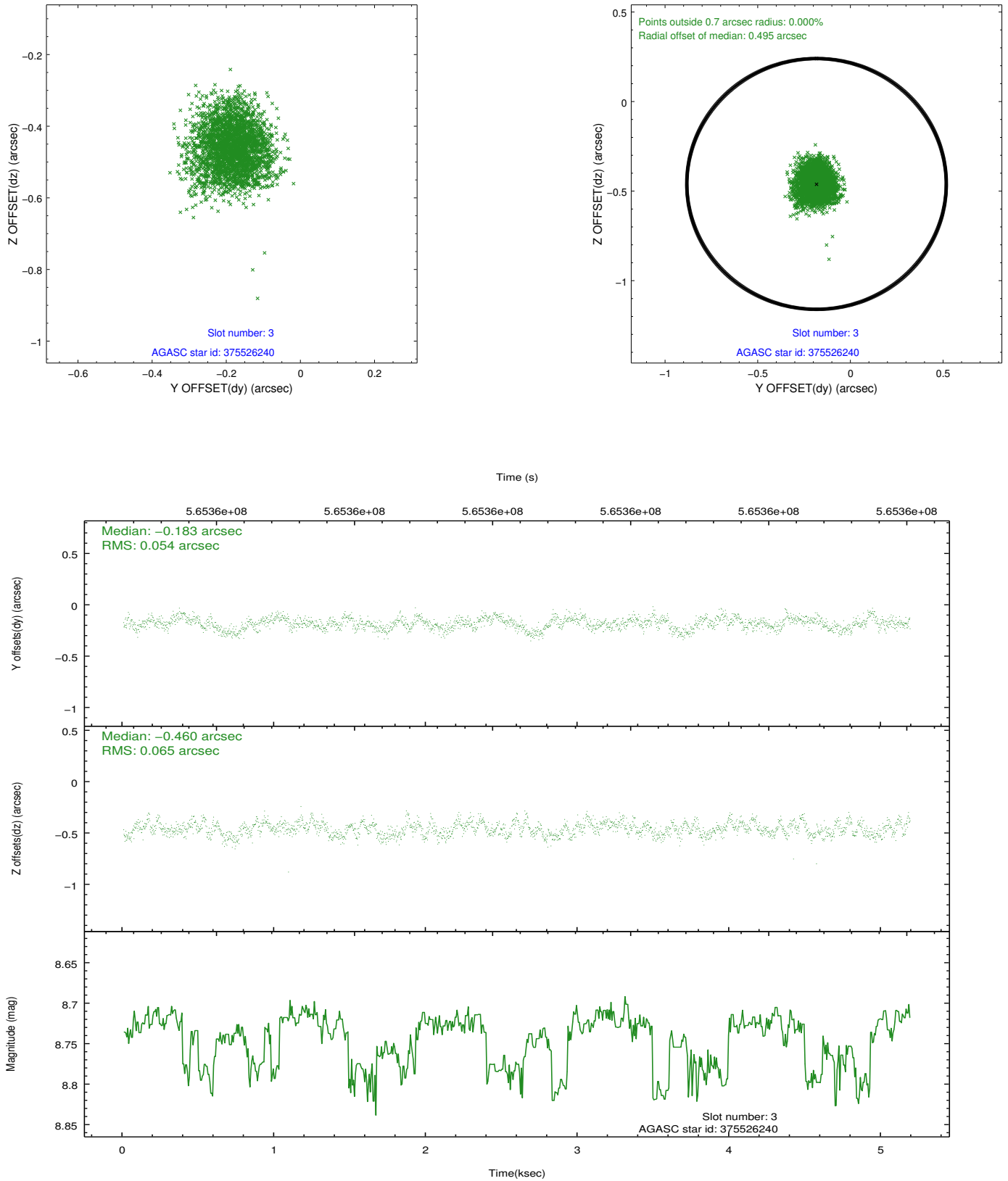


Slot Statistics

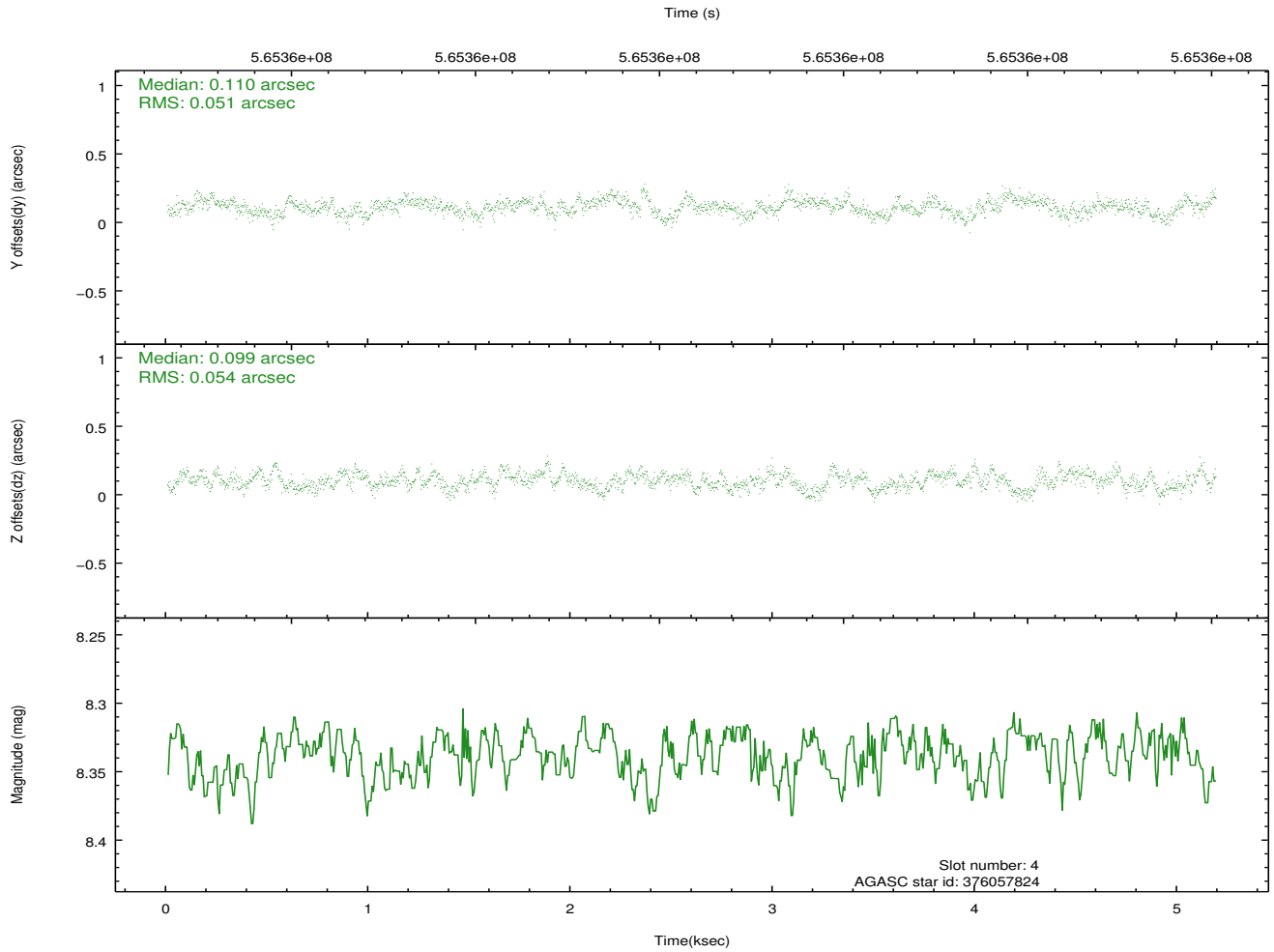
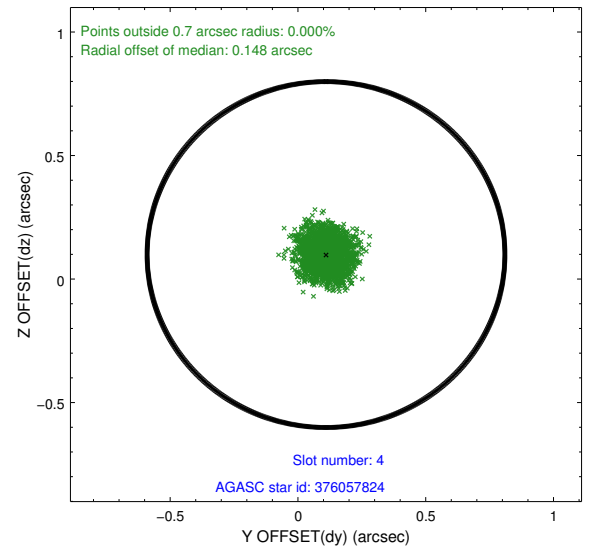
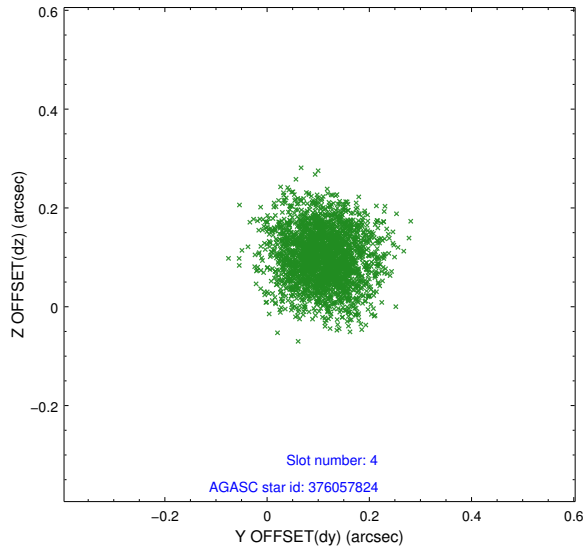
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.25	1265	-0.042	-0.024	0.010	0.017	0.000000	0.000000	925.00	-843.21
1	FID		ACIS-I-4	7.19	1265	0.311	0.061	0.009	0.015	0.000000	0.000000	2145.96	1056.14
2	FID		ACIS-I-5	7.26	1265	-0.368	0.034	0.007	0.012	0.000000	0.000000	-1821.91	1055.13
3	GUIDE	used	375526240	8.74	2529	-0.183	-0.460	0.090	0.142	51.034416	40.968783	728.06	2333.08
4	GUIDE	used	376057824	8.34	2530	0.110	0.099	0.081	0.129	50.665569	41.926280	-697.14	-957.45
5	GUIDE	used	376068632	8.75	2528	0.280	0.534	0.087	0.141	50.582093	42.167240	-1079.64	-1769.23
6	GUIDE	used	376070040	8.39	2530	-0.149	0.030	0.091	0.153	50.072031	41.897206	589.83	-1897.92
7	GUIDE	used	376070440	6.97	2529	-0.061	-0.198	0.094	0.153	51.289107	41.257301	-464.21	1966.10

2.4 Star Slots

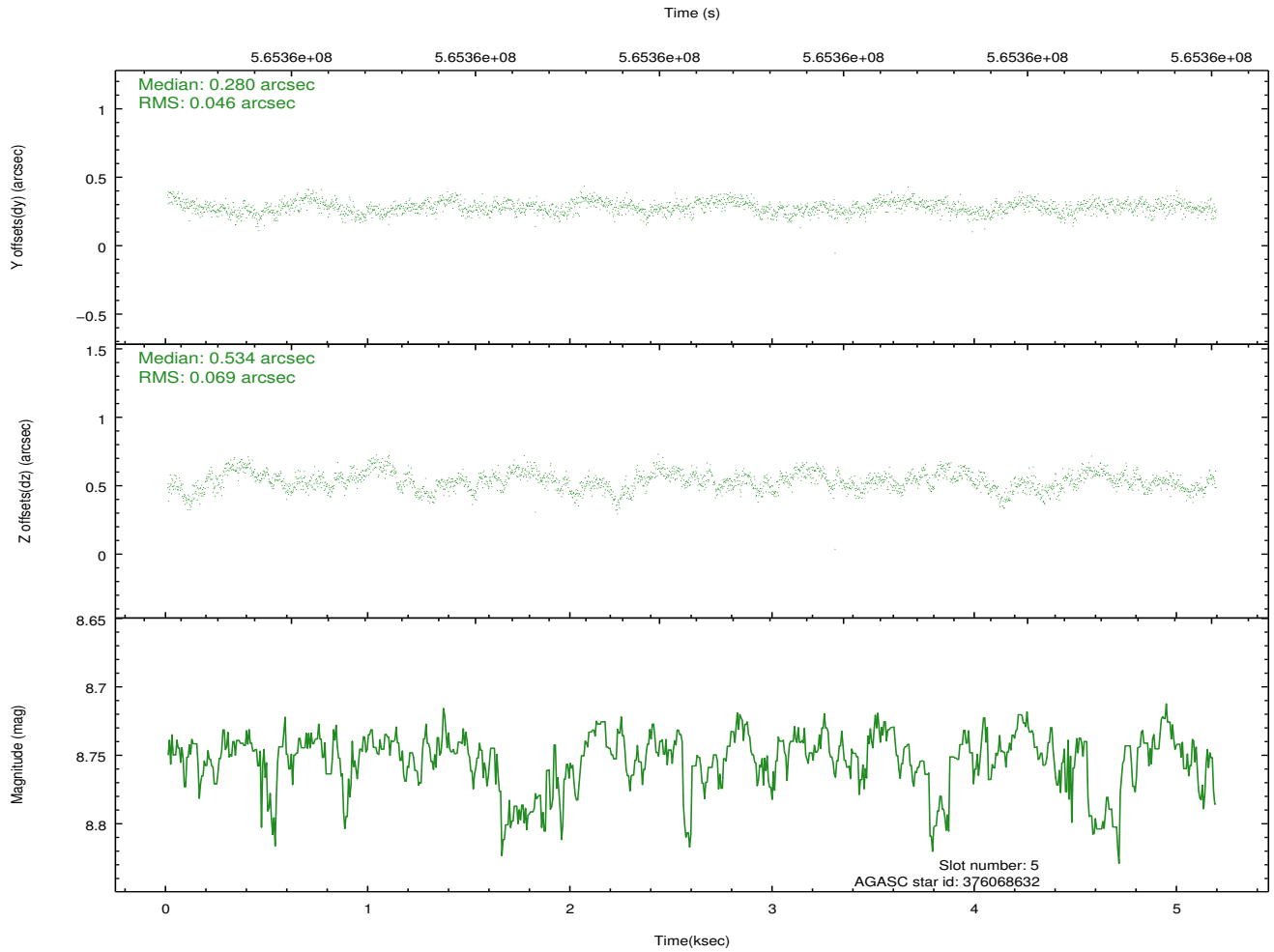
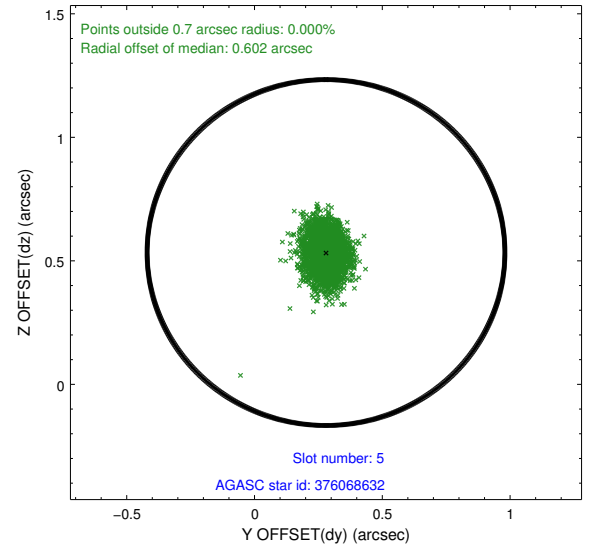
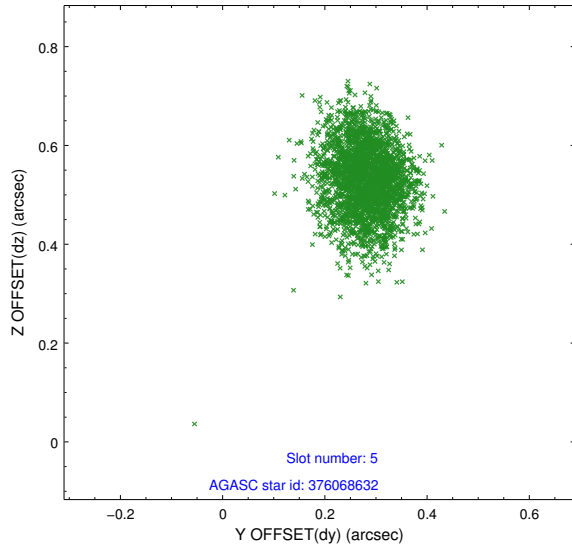
2.4.1 Slot 3



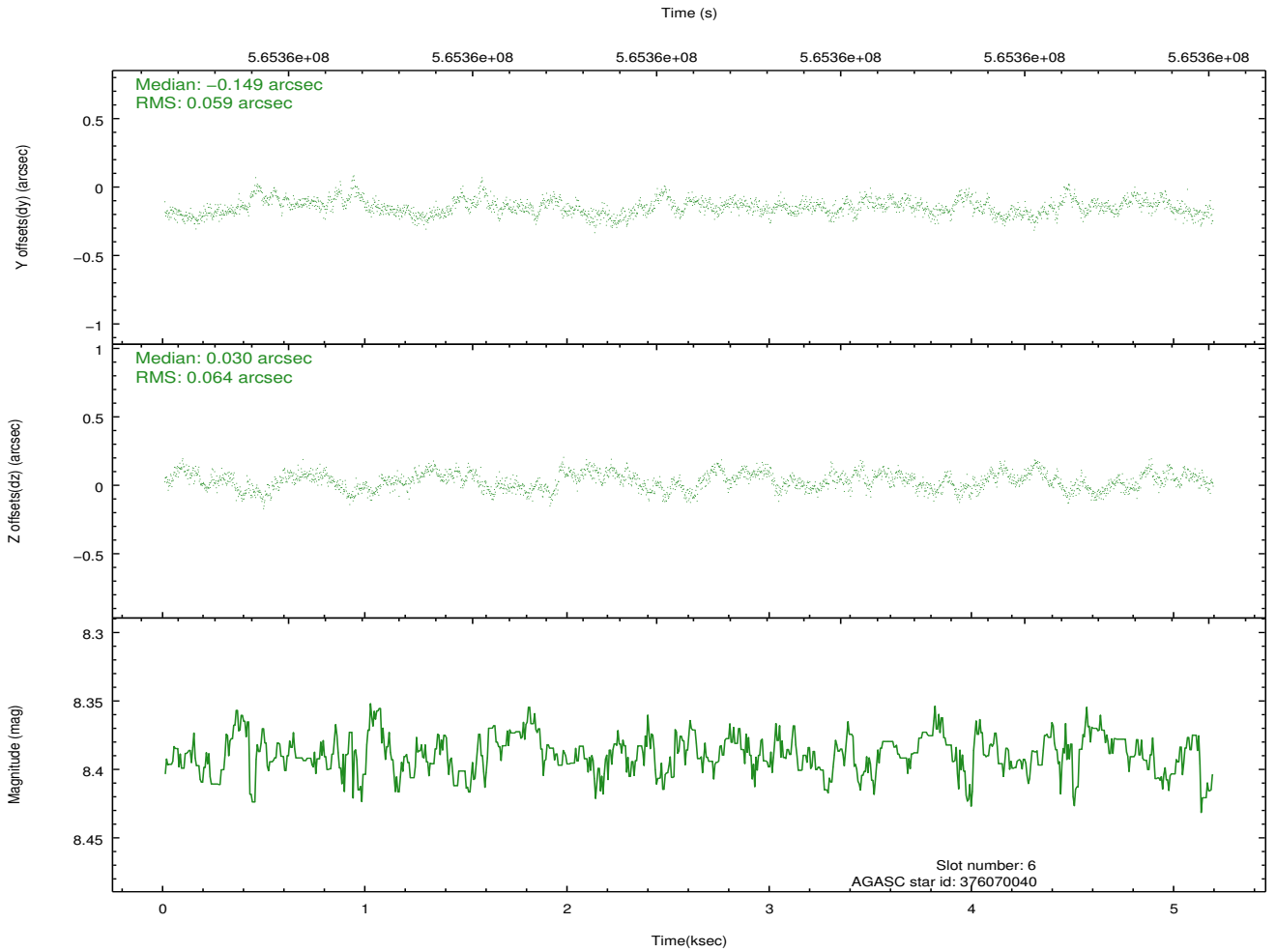
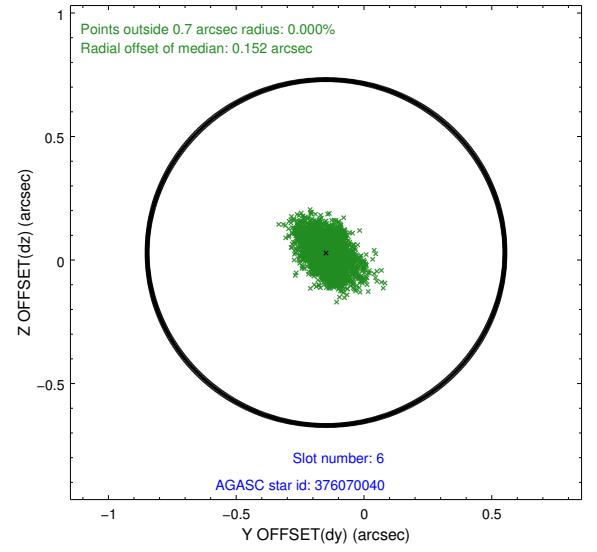
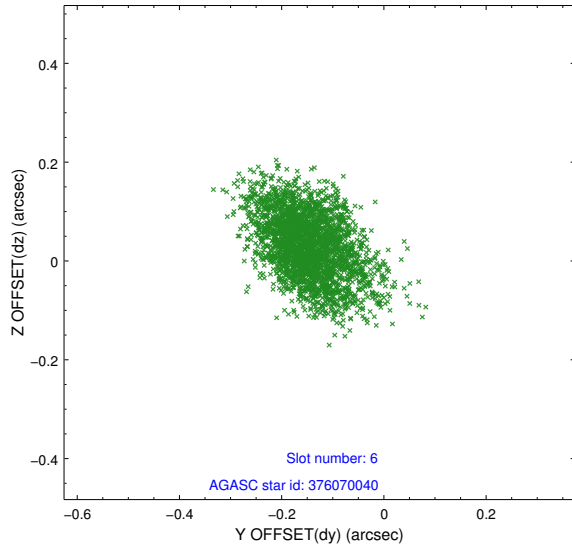
2.4.2 Slot 4



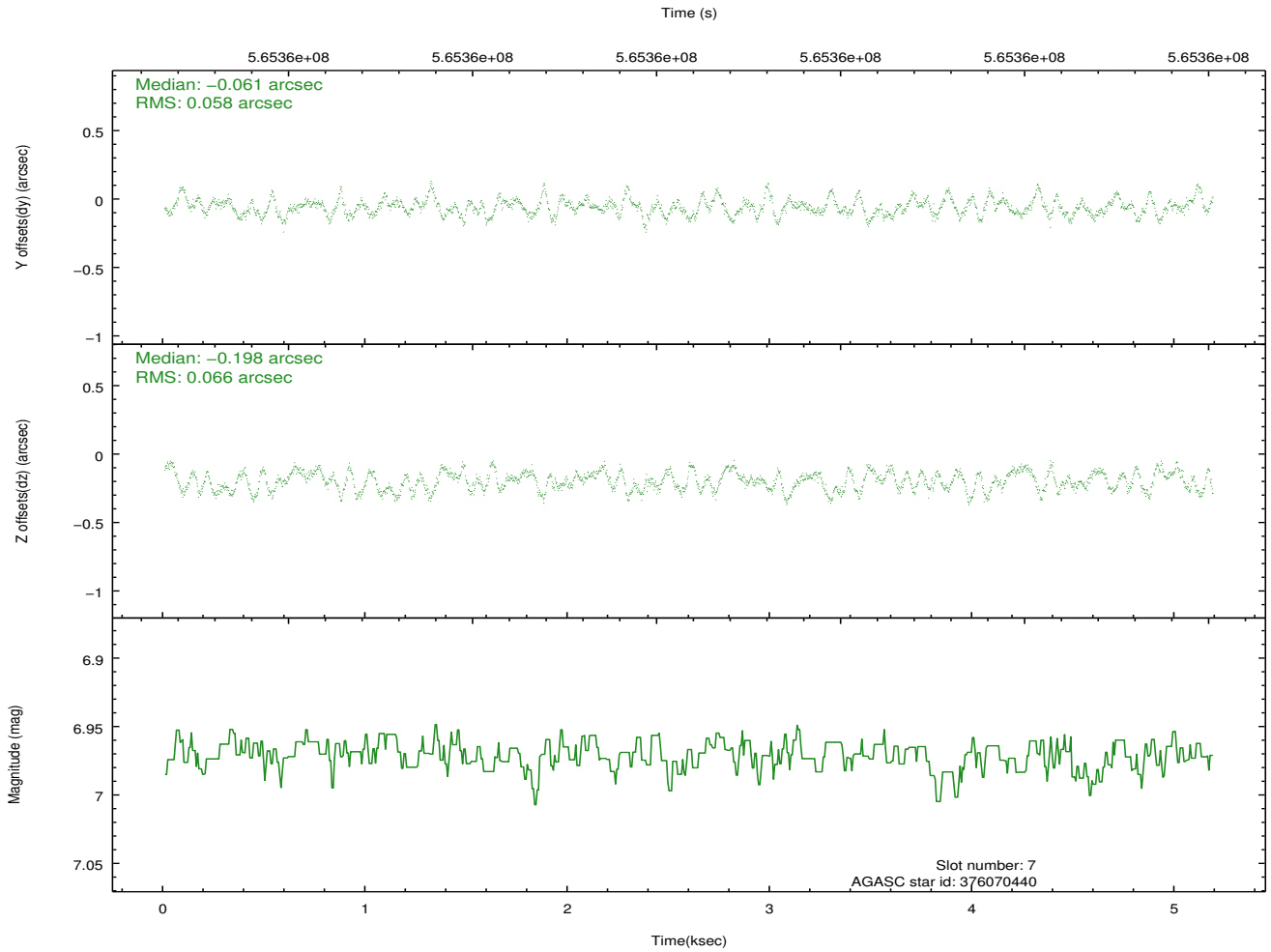
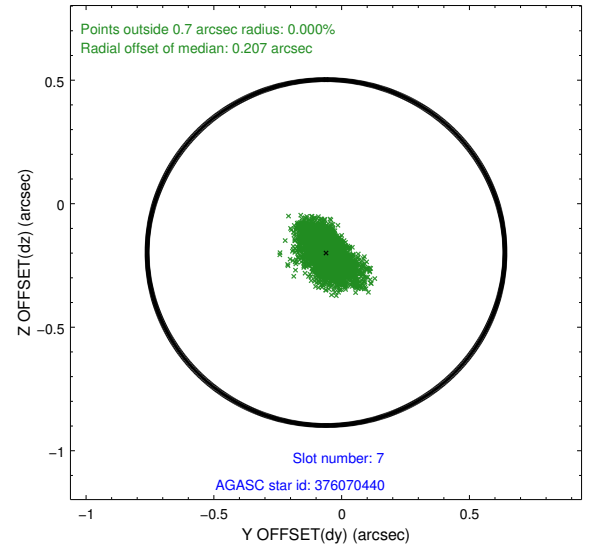
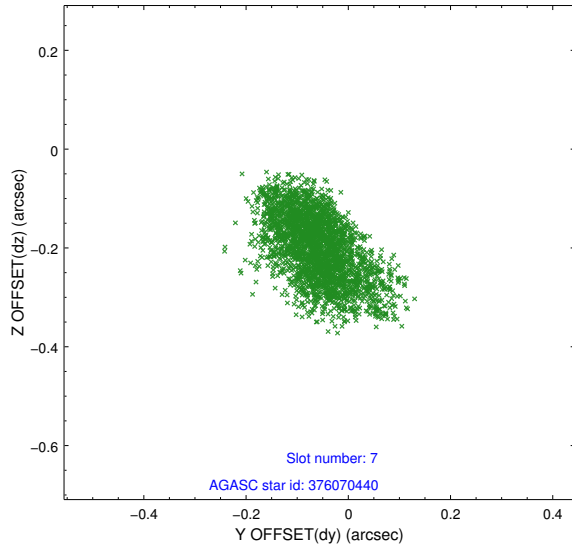
2.4.3 Slot 5



2.4.4 Slot 6

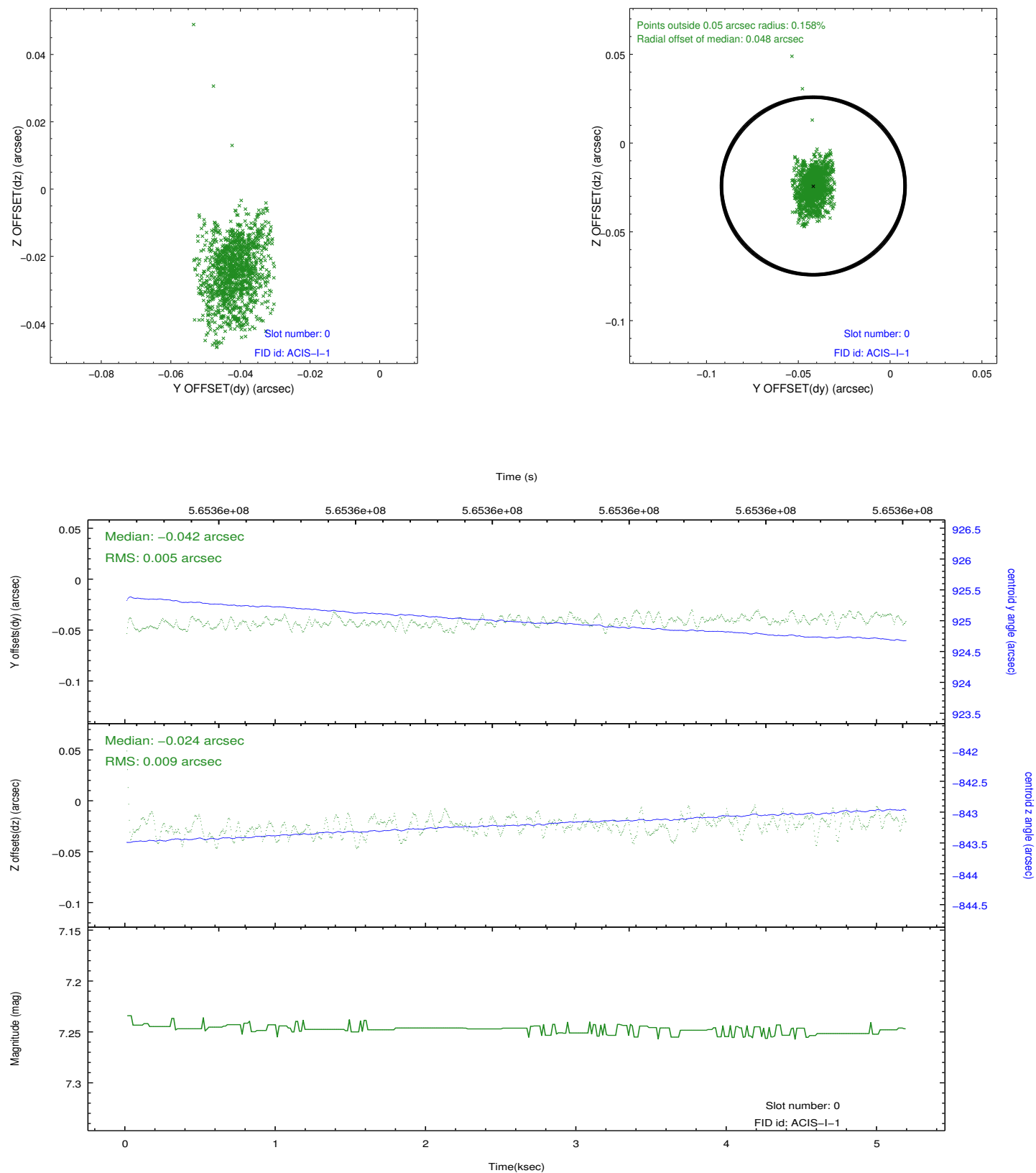


2.4.5 Slot 7

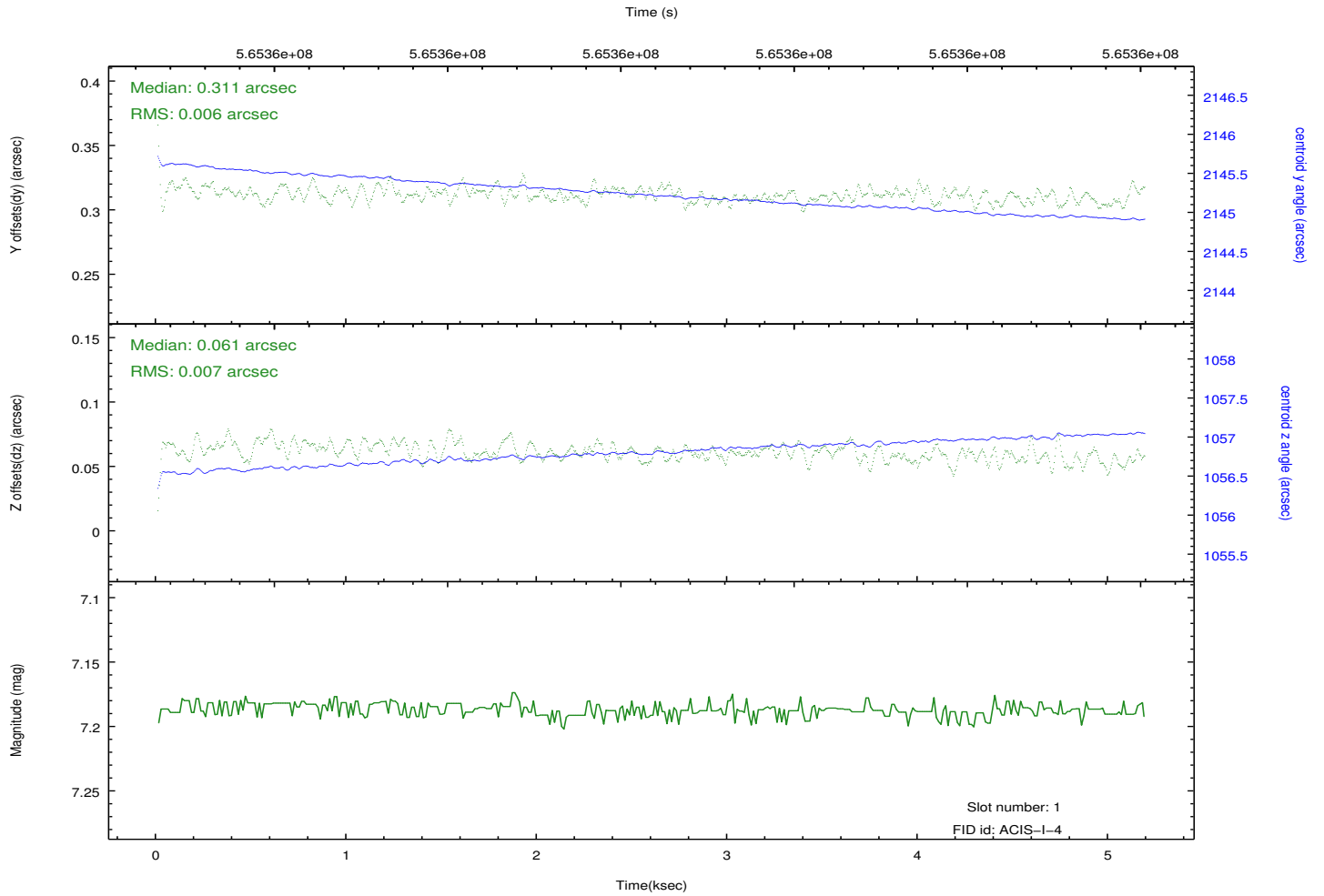
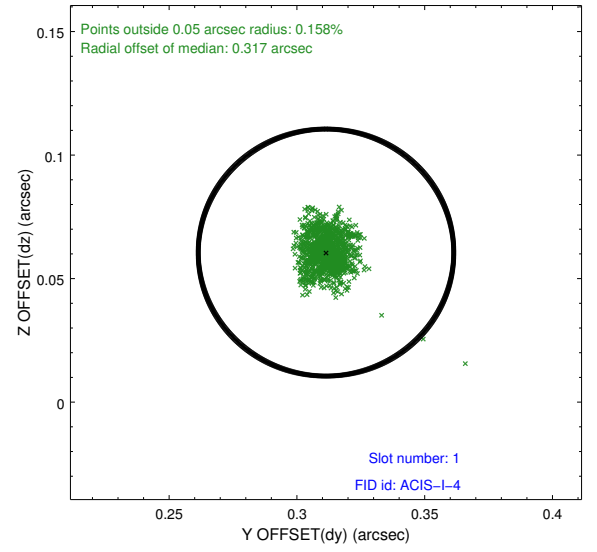
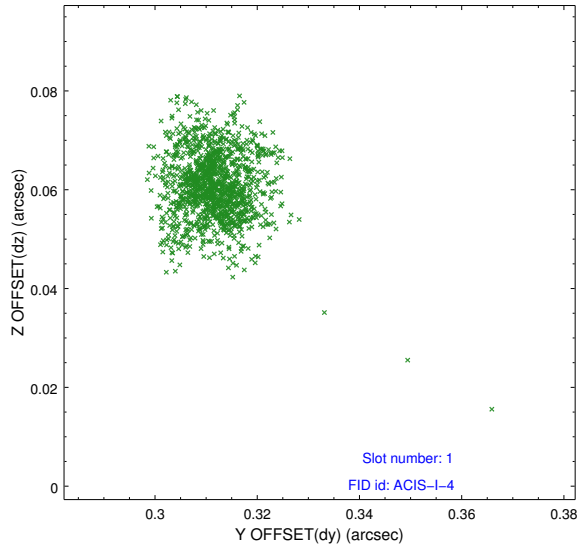


2.5 FID Slots

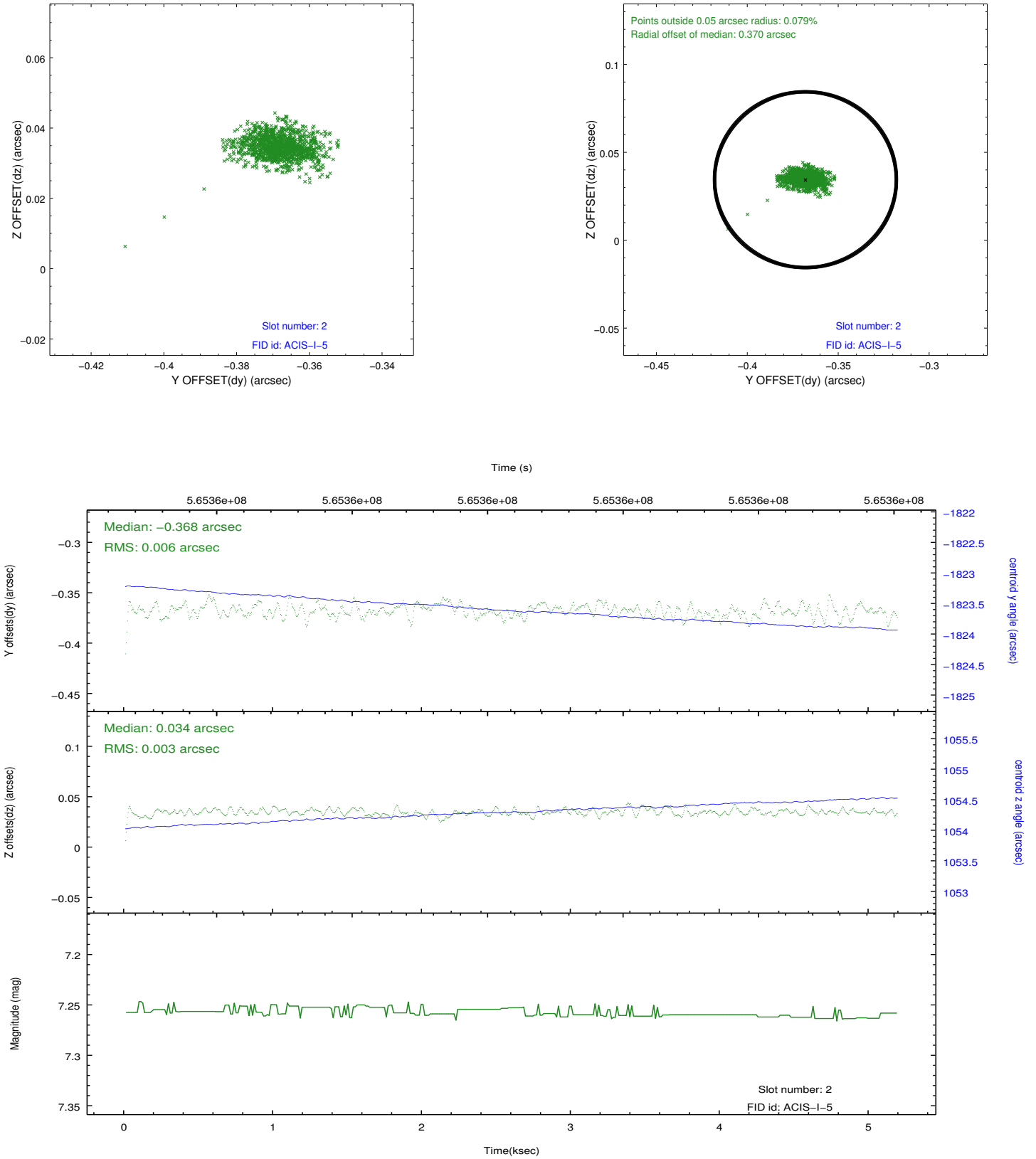
2.5.1 Slot 0



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)	2015.12.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.7709000368118

A.2 Comments