

V&V Reference Report

L2 ASCDS Version : 10.6.4.1

Observation 20520 - L2 Version 1
Chandra X-Ray Center

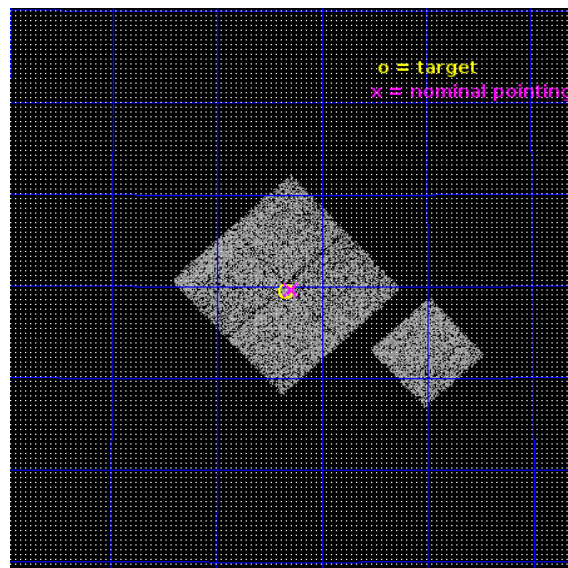
L2 Processing Date : Oct 6 2018

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 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

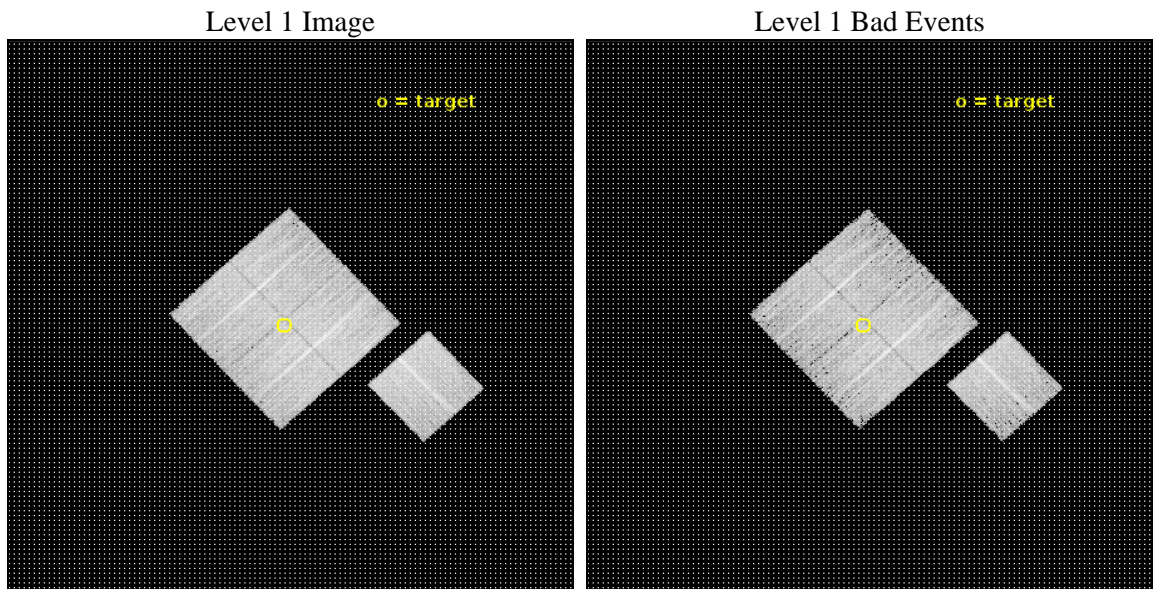
seq_num	801734	Sequence number
obs_id	20520	Observation id
title	Unravelling gas clumping in the outskirts of the Perseus cluster	P
observer	Stephen Walker	Principal investigator
object	Perseus r200 N	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	50.336667	Observer's specified target RA [deg]
dec_targ	42.824778	Observer's specified target Dec [deg]
ra_nom	50.322293716222	Nominal RA [deg]
dec_nom	42.827673392955	Nominal Dec [deg]
roll_nom	137.21847287825	Nominal Roll [deg]
revision	1	Processing version of data
ontime	8167.9163370132	Sum of GTIs [s]
livetime	8061.1964969376	Livetime [s]
ontime0	8164.6522170305	Sum of GTIs [s]
ontime1	8167.8342570066	Sum of GTIs [s]
ontime2	8167.8752970695	Sum of GTIs [s]
ontime3	8167.9163370132	Sum of GTIs [s]
ontime6	8167.752177	Sum of GTIs [s]
l2events	29578	Number of level 2 events



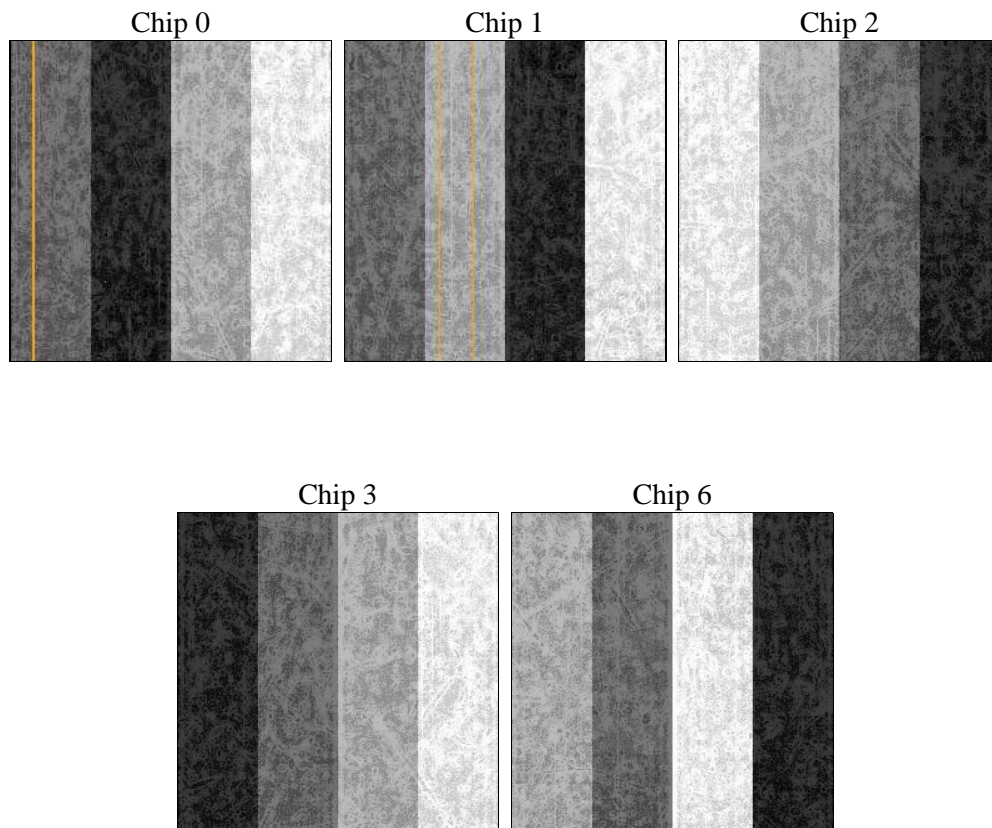
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	8100.000000	[s] Scheduled observation exposure time
ascdsver	10.6.4.1	Processing system revision	ontime	8167.9163370132	Sum of GTIs [s]
caldsver	4.8.0	 	ontime0	8164.6522170305	Sum of GTIs [s]
date	2018-10-06T21:58:28	Date and time of file creation	ontime1	8167.8342570066	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	8167.8752970695	Sum of GTIs [s]
			ontime3	8167.9163370132	Sum of GTIs [s]
			ontime6	8167.752177	Sum of GTIs [s]
			l1events	298387	Number of level 1 events

2.1.4 Events

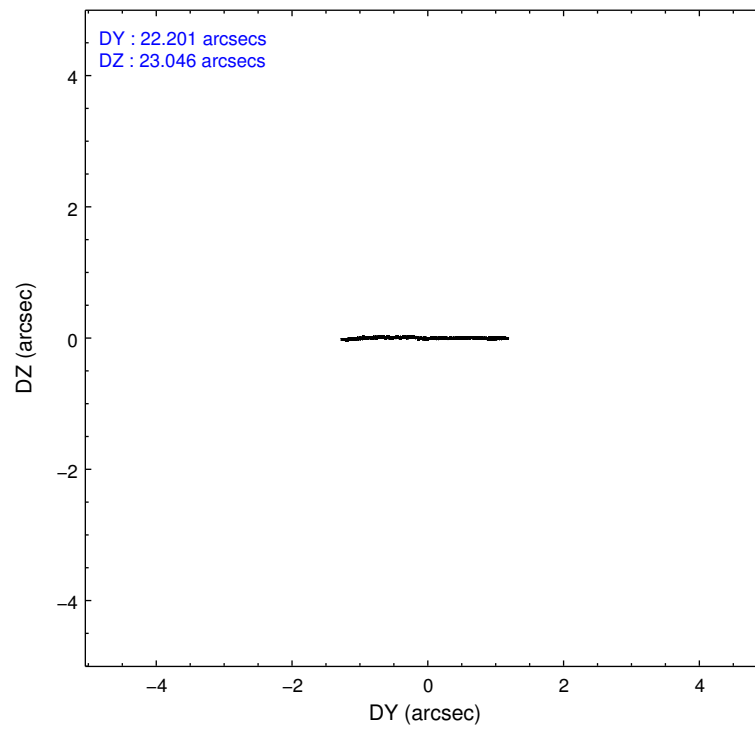
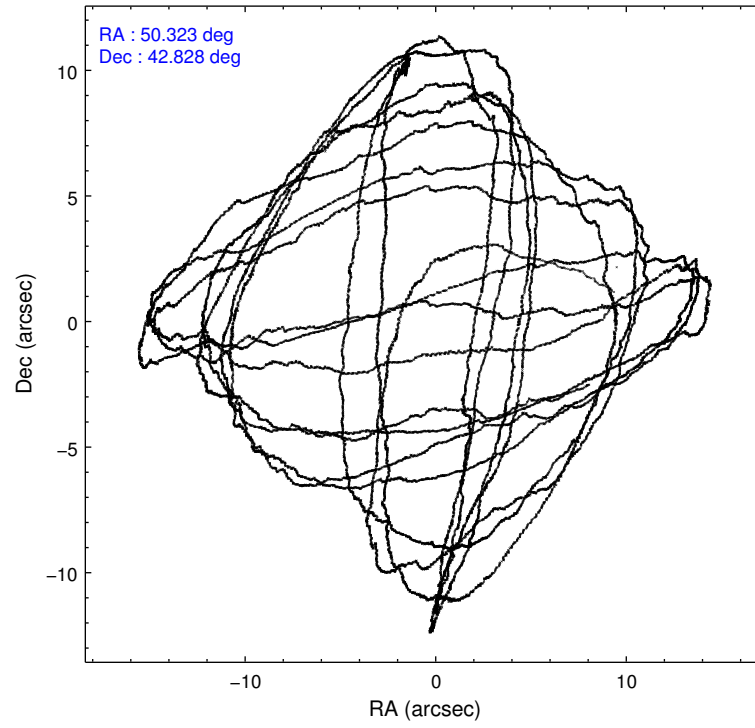
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	54669	56216	66187	60027	61288
rejected events	47713	48598	59353	53308	54205
rejected %	87%	86%	89%	88%	88%

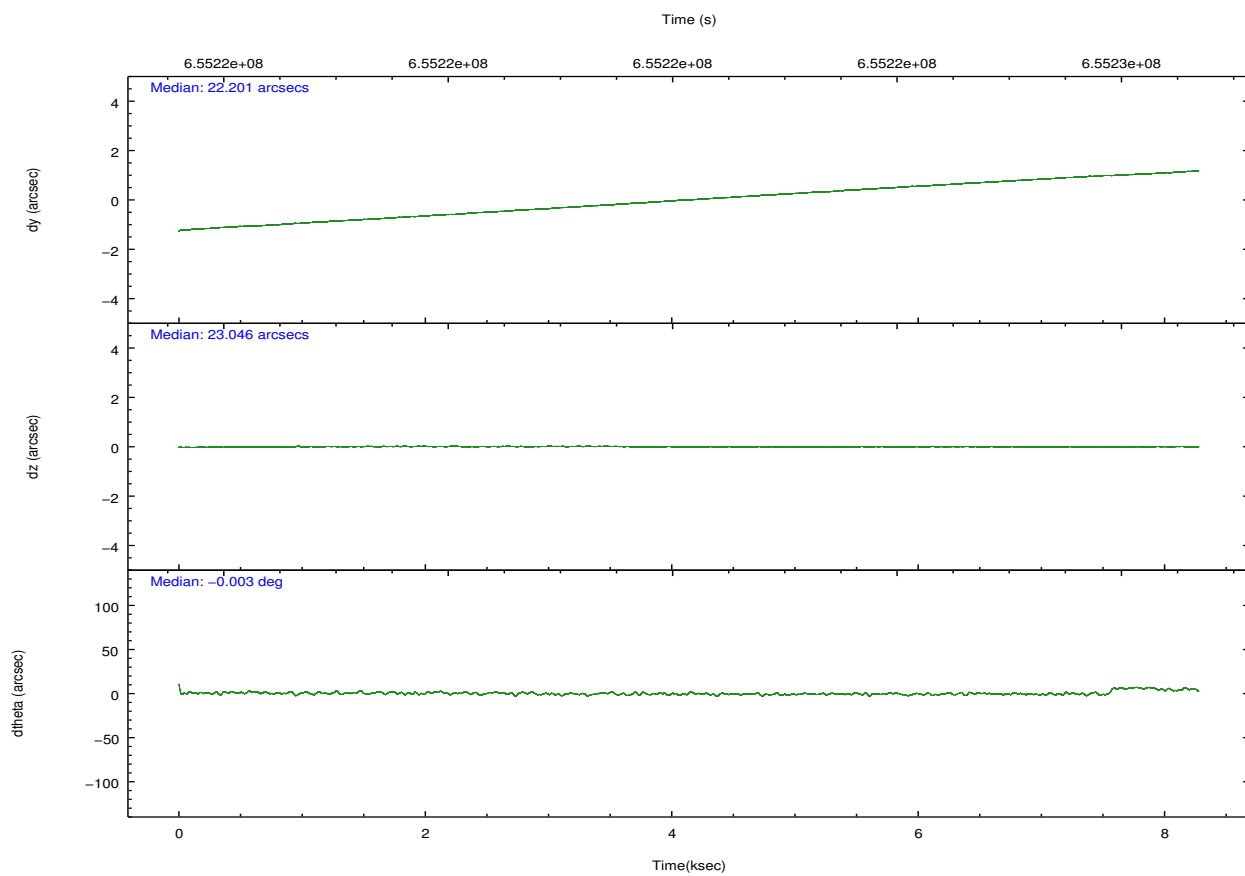
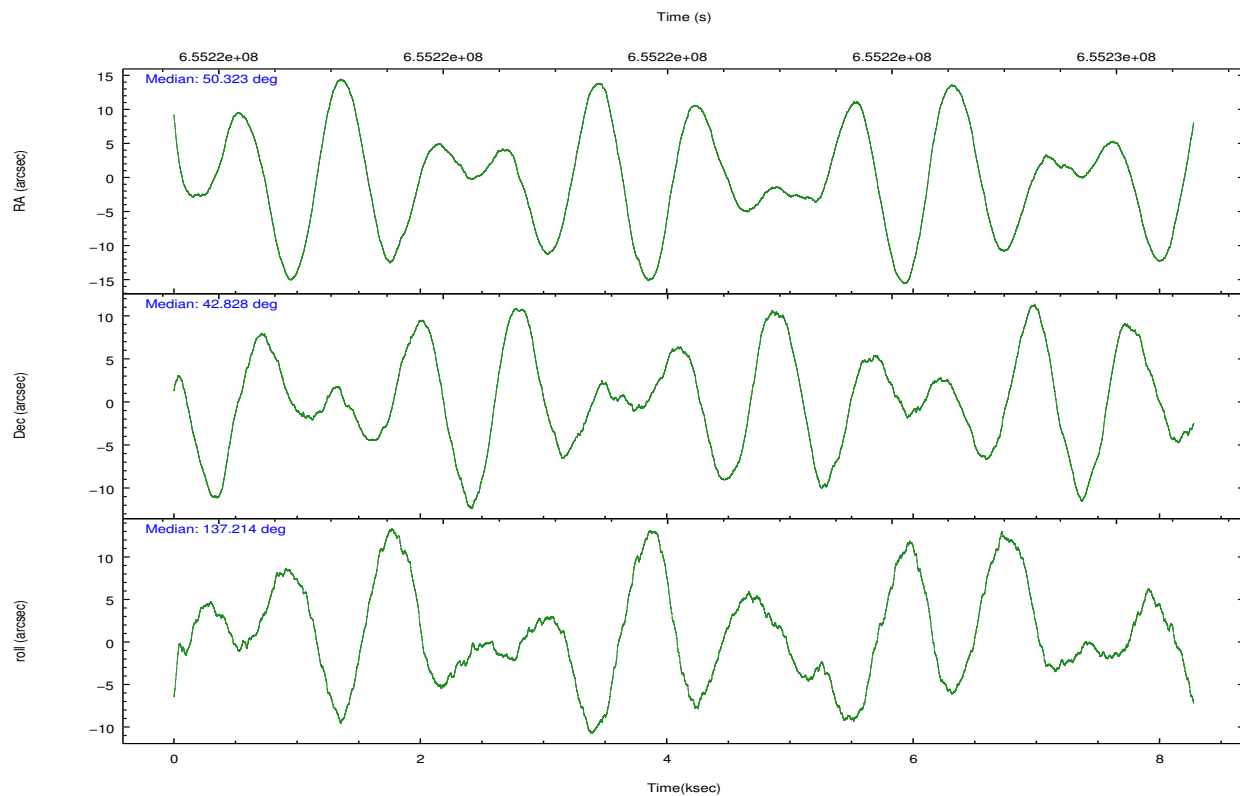
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	2478	2628	2314	2499	2393
	4%	4%	3%	4%	3%
grade 1 events	32	32	35	40	26
	0%	0%	0%	0%	0%
grade 2 events	1740	1979	1787	1479	1676
	3%	3%	2%	2%	2%
grade 3 events	697	686	665	747	732
	1%	1%	1%	1%	1%
grade 4 events	646	702	713	636	632
	1%	1%	1%	1%	1%
grade 5 events	2613	2832	2389	2994	2932
	4%	5%	3%	4%	4%
grade 6 events	1398	1631	1362	1364	1655
	2%	2%	2%	2%	2%
grade 7 events	45065	45726	56922	50268	51242
	82%	81%	86%	83%	83%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	50.359065	50.32229371622195	CCD I2 on	Y	Y
[deg] Pointing Dec	42.821722	42.82767339295478	CCD I3 on	Y	Y
[deg] Pointing Roll	136.984776	137.2184728782497	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	O1	Y
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	N	N
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	655218174.184000	655217125.49985	CCD S5 on	N	N
Observation start date	2018-10-06T13:01:45	2018-10-06T12:45:25	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	655226274.184000	655227577.42547	On-chip summing requested	N	N
Observation end date	2018-10-06T15:16:45	2018-10-06T15:39:37	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



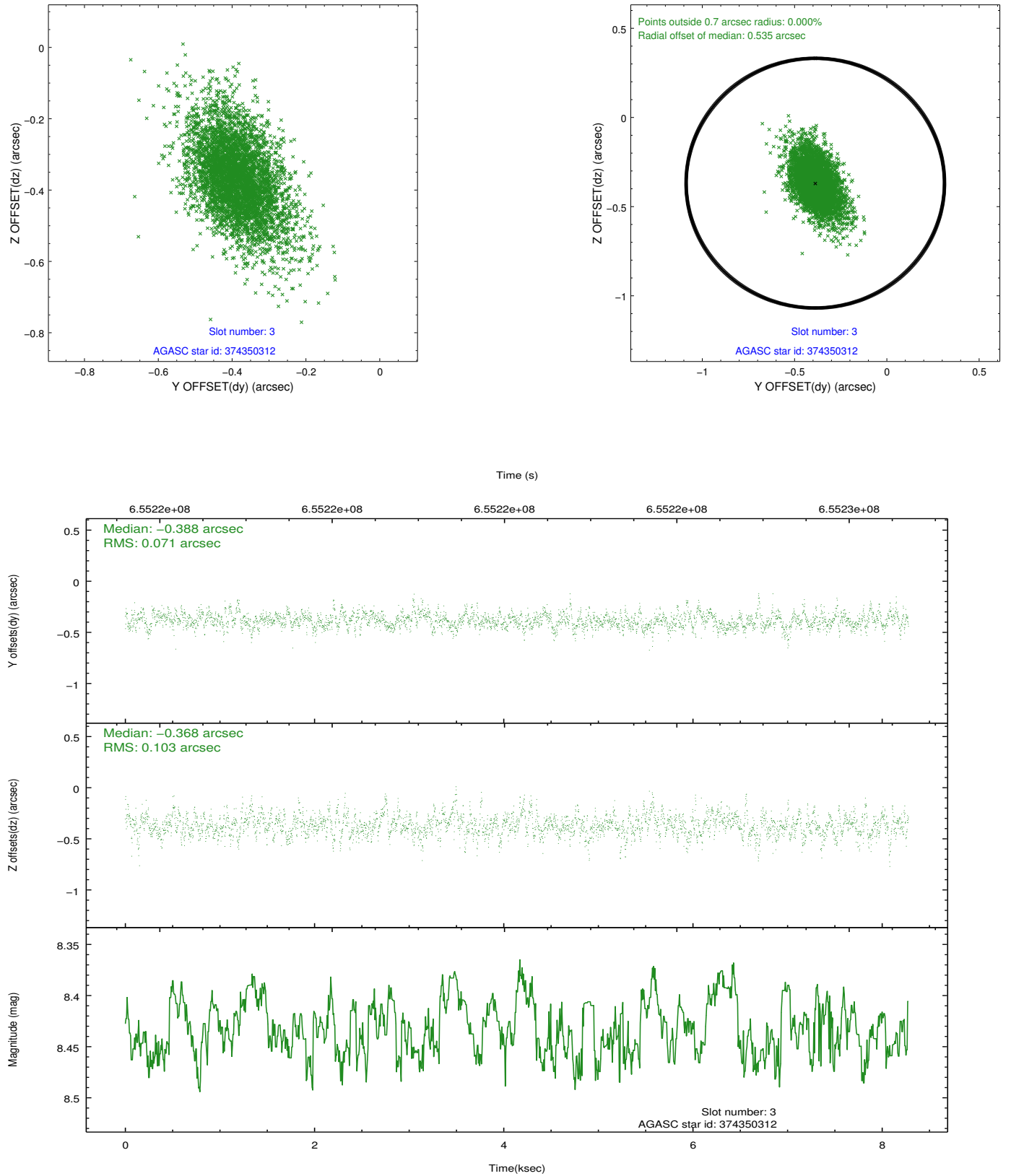


Slot Statistics

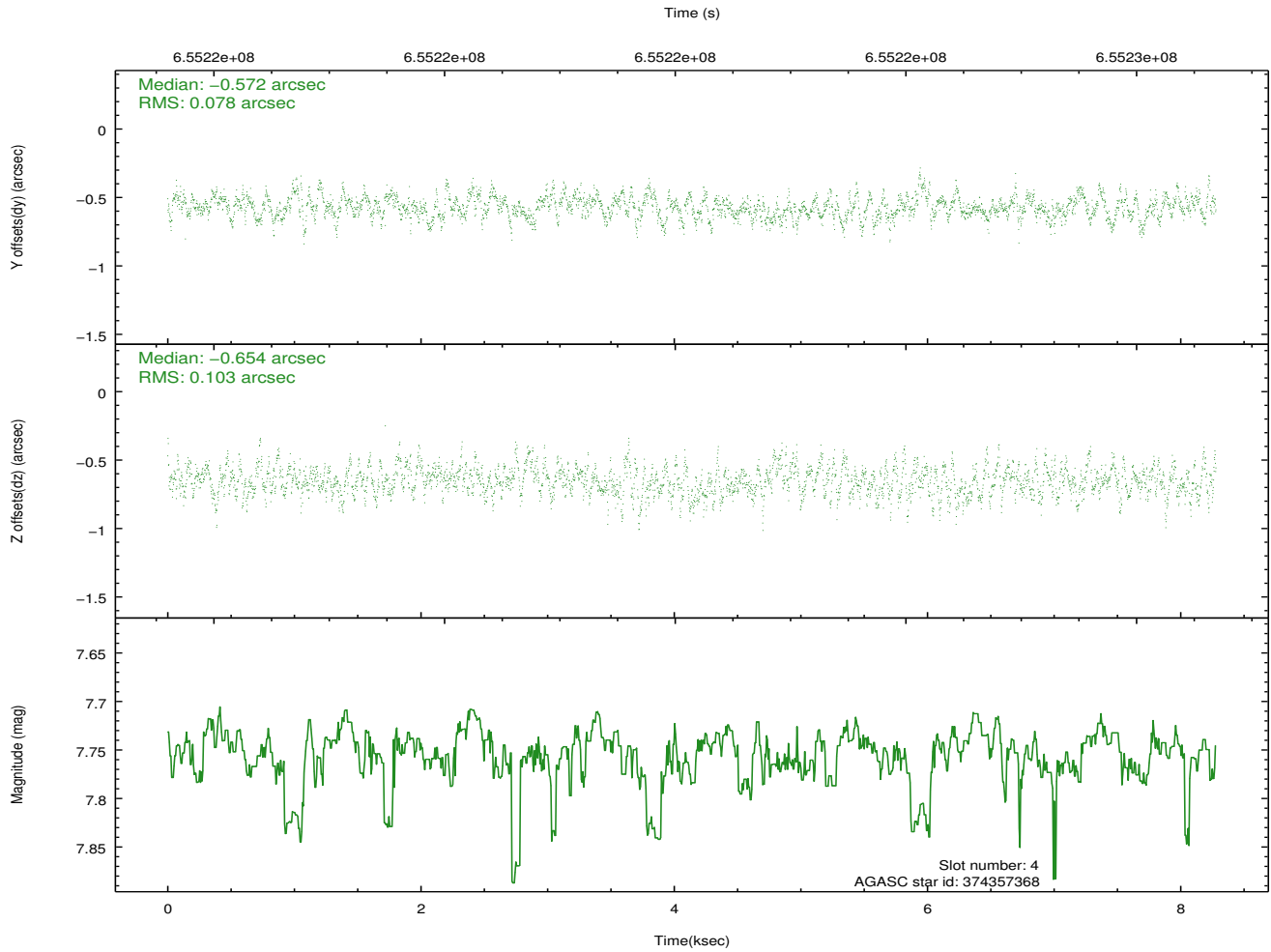
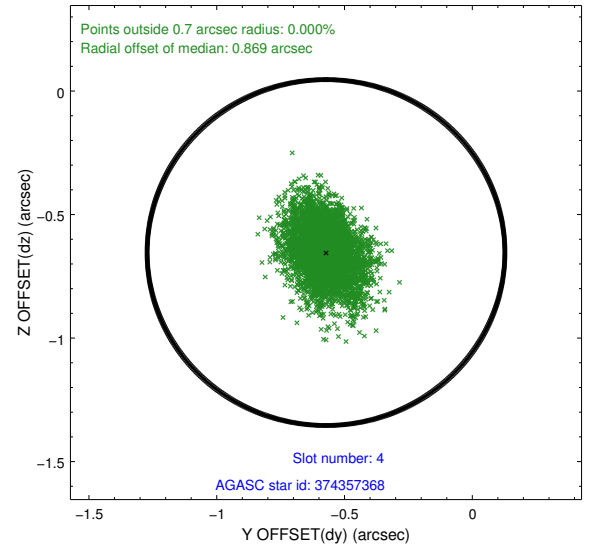
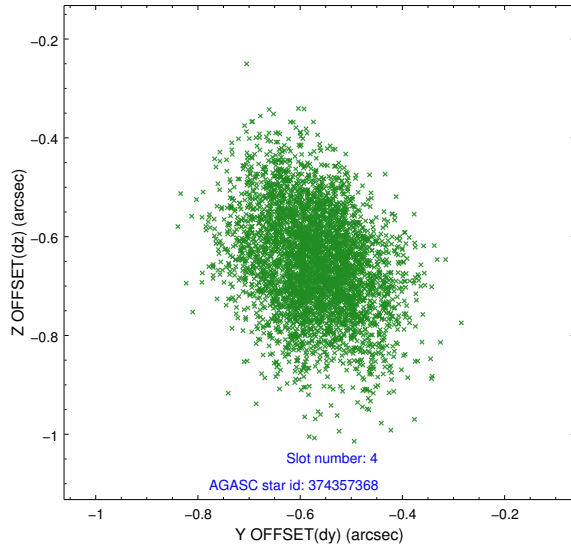
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.10	2019	1.000	-0.071	-0.010	0.012	0.054	0.000000	0.000000	917.01	-846
1	FID		ACIS-I-2	7.01	2019	1.000	-0.381	-0.222	0.038	0.051	0.000000	0.000000	-777.02	-853
2	FID		ACIS-I-4	7.04	2019	1.000	0.359	0.298	0.030	0.056	0.000000	0.000000	2136.97	1052
3	GUIDE	used	374350312	8.43	4037	1.000	-0.388	-0.368	0.125	0.231	49.824622	42.610331	519.14	1518
4	GUIDE	used	374357368	7.75	4038	1.000	-0.572	-0.654	0.137	0.227	49.396079	42.675115	1512.41	2113
5	GUIDE	used	376051400	8.64	4034	1.000	0.577	0.874	0.132	0.229	51.516123	42.880874	-2070.51	-2251
6	GUIDE	used	376066648	7.72	4037	1.000	0.183	0.236	0.138	0.234	50.550240	42.822138	-369.03	-346
7	GUIDE	used	376068632	8.74	4035	1.000	0.196	-0.081	0.117	0.213	50.582093	42.167240	-2041.99	1316

2.4 Star Slots

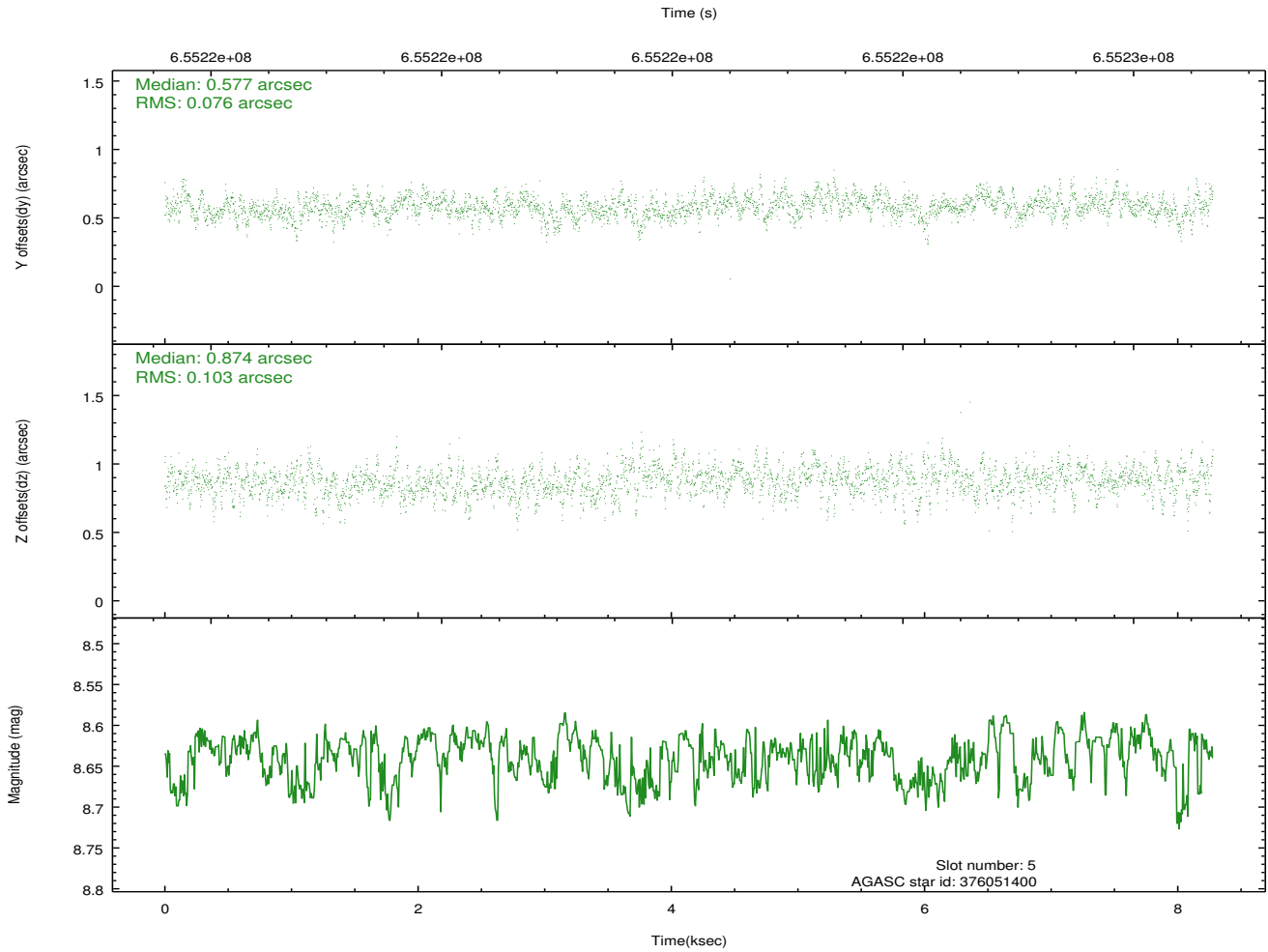
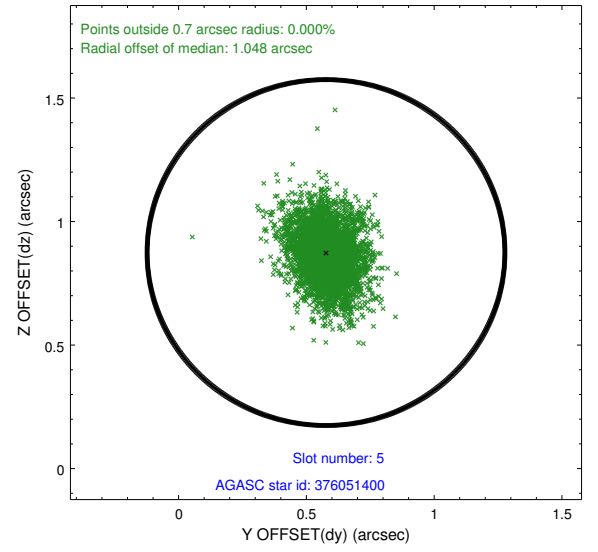
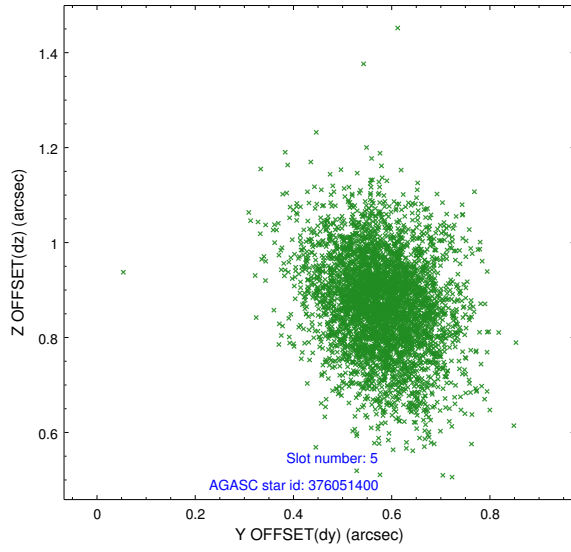
2.4.1 Slot 3



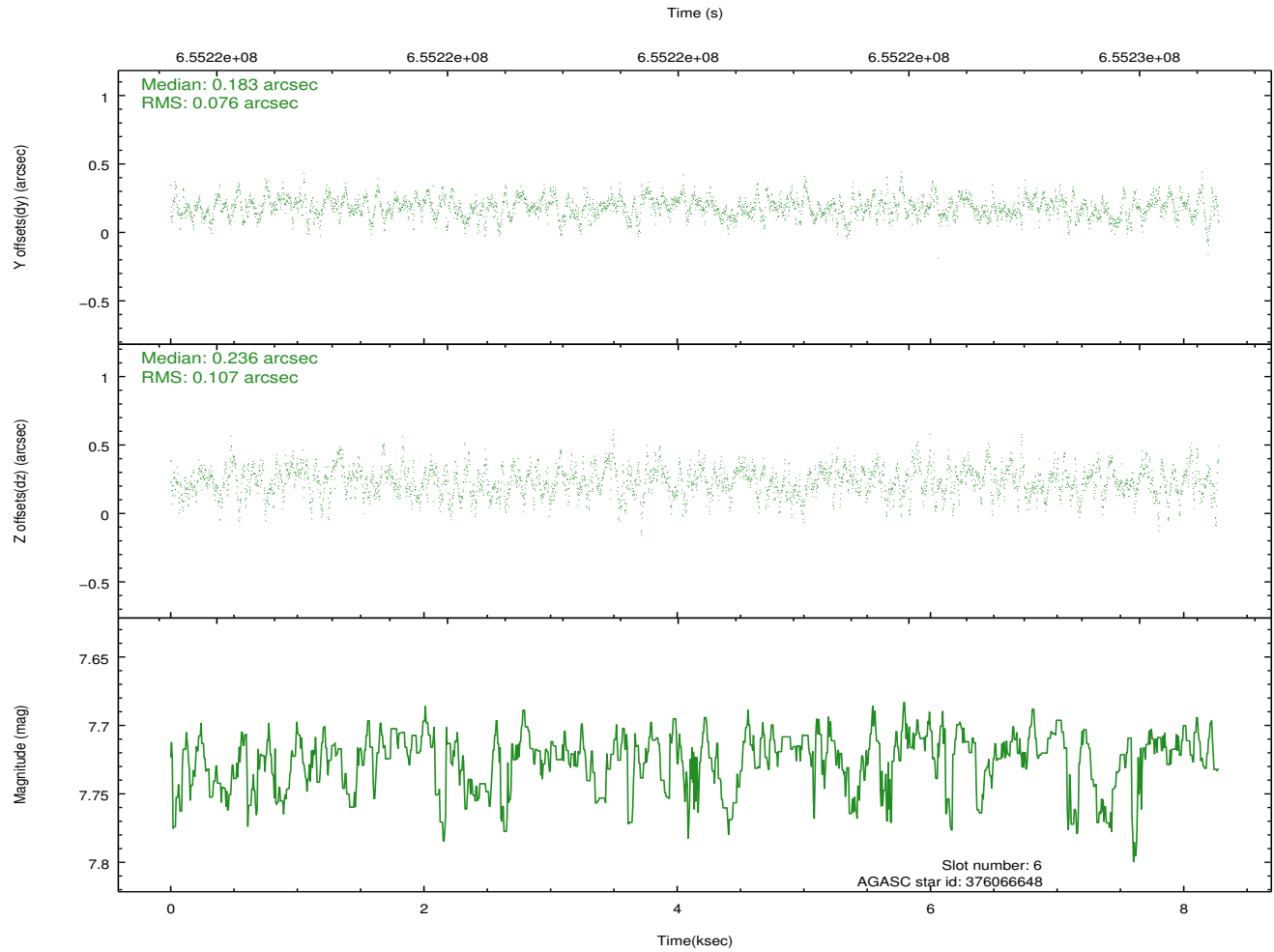
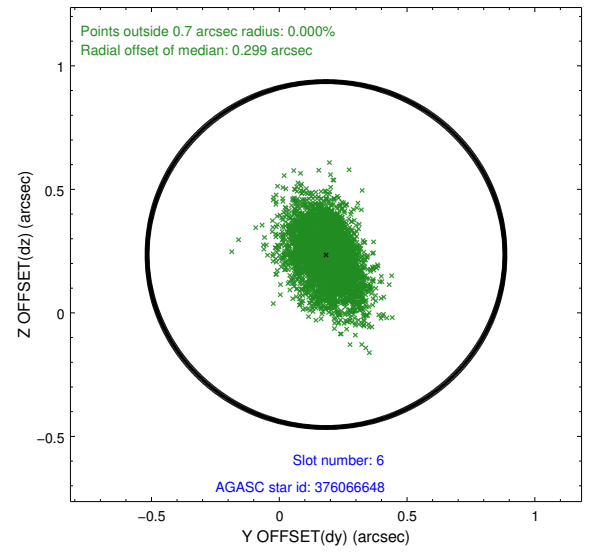
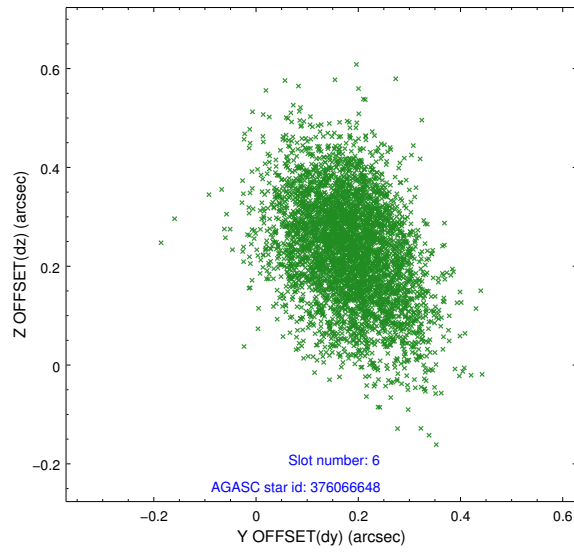
2.4.2 Slot 4



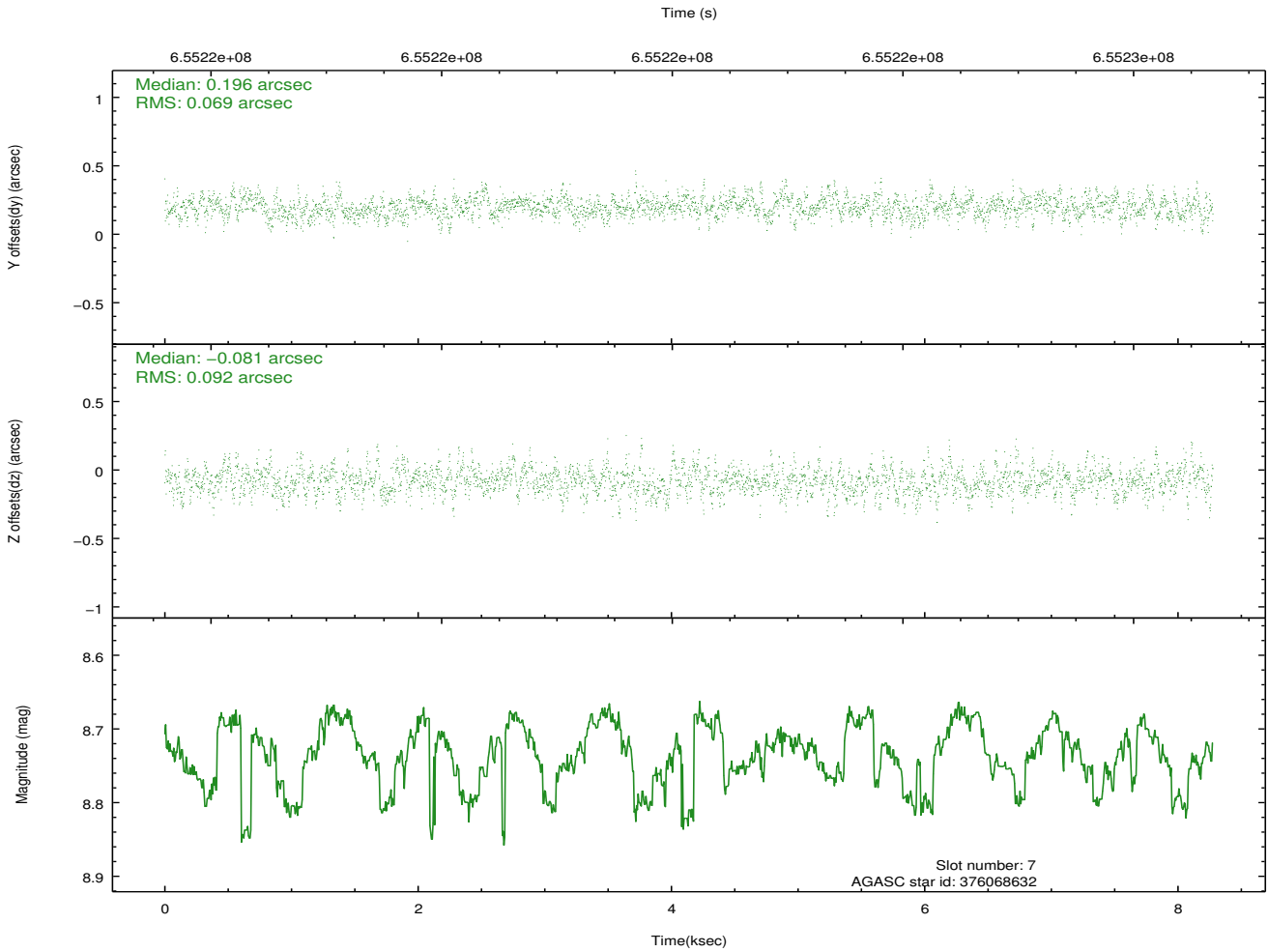
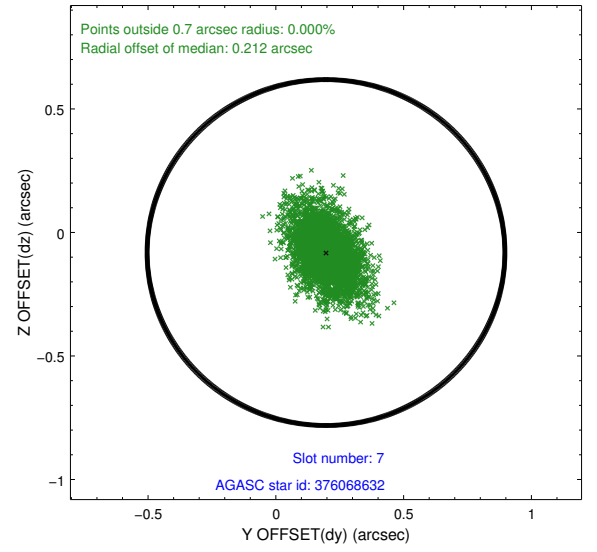
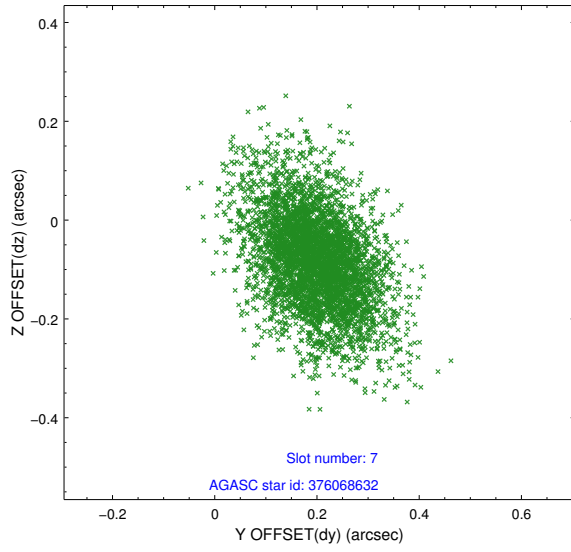
2.4.3 Slot 5



2.4.4 Slot 6

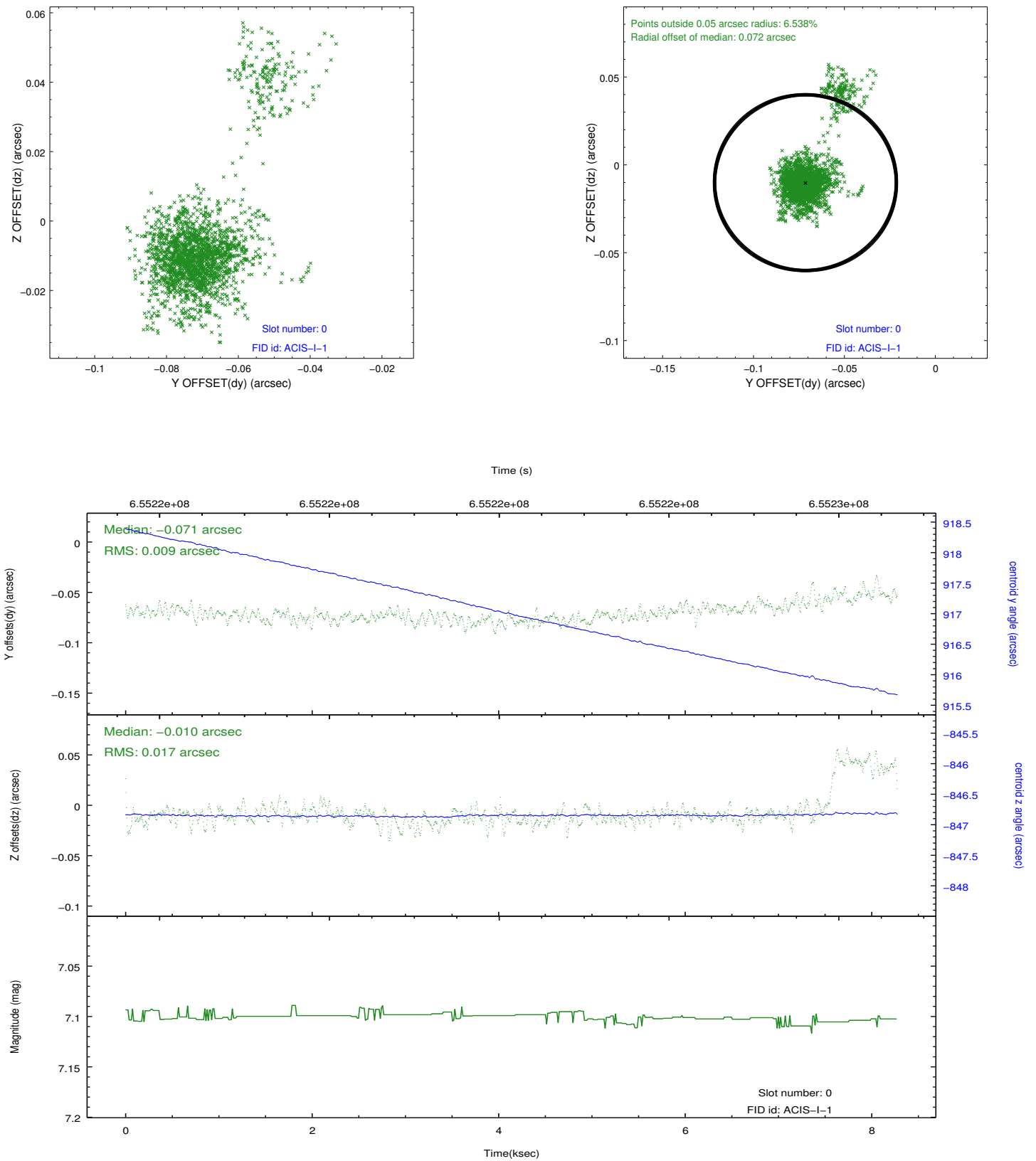


2.4.5 Slot 7

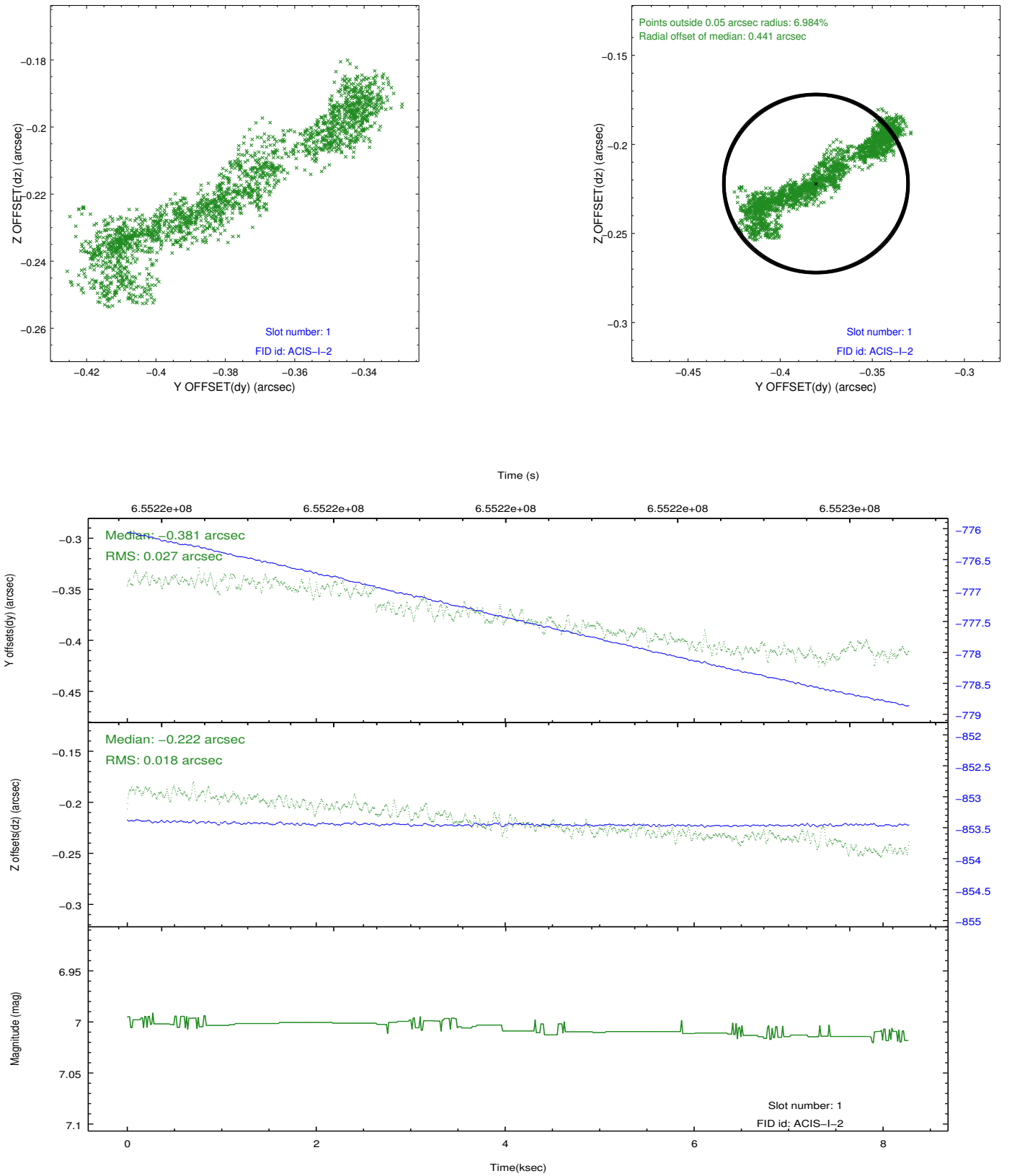


2.5 FID Slots

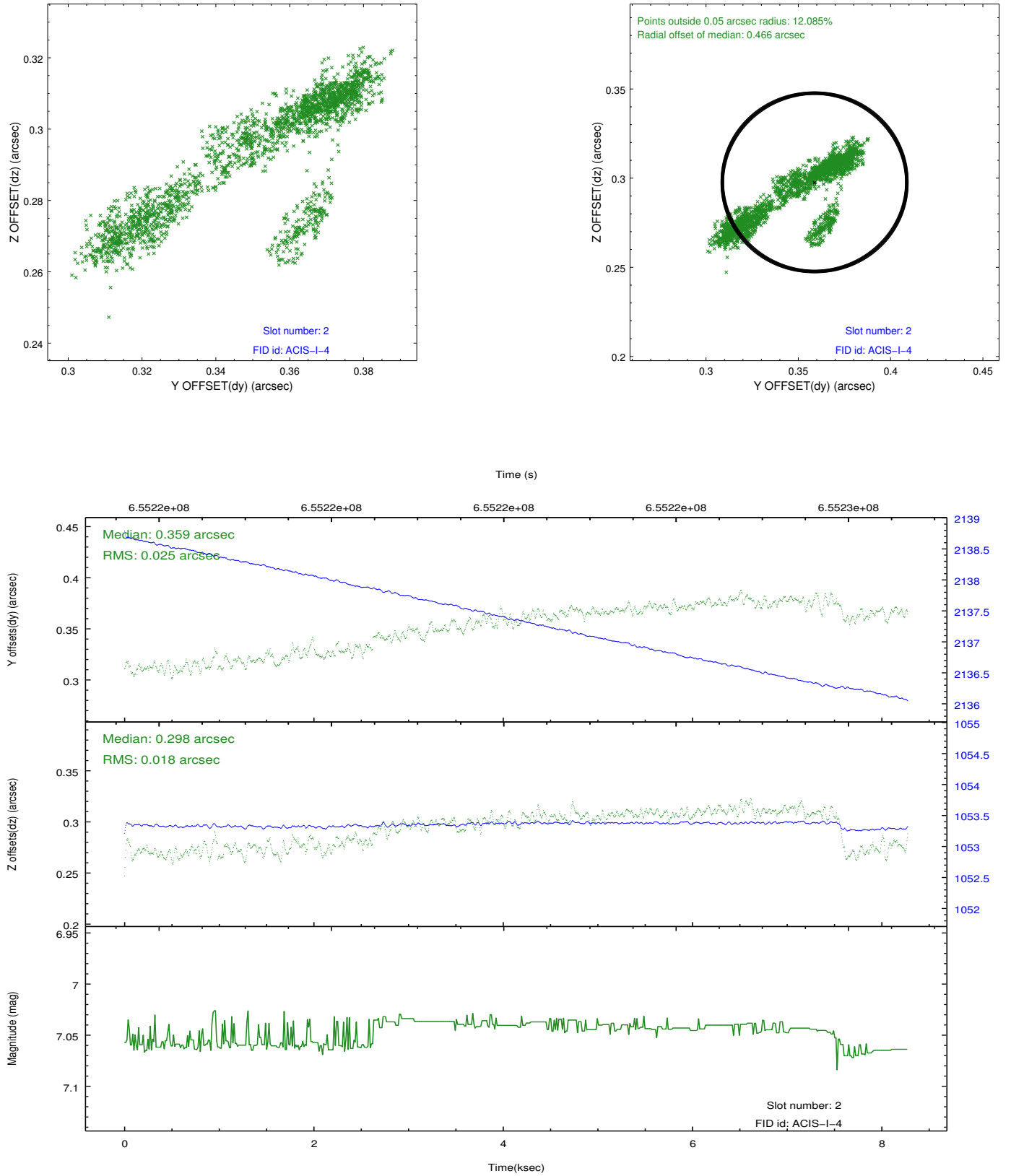
2.5.1 Slot 0



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)	2018.10.07
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.1679163370132

A.2 Comments