

V&V Reference Report

L2 ASCDS Version : 10.4.3.1

Observation 18088 - L2 Version 1
Chandra X-Ray Center

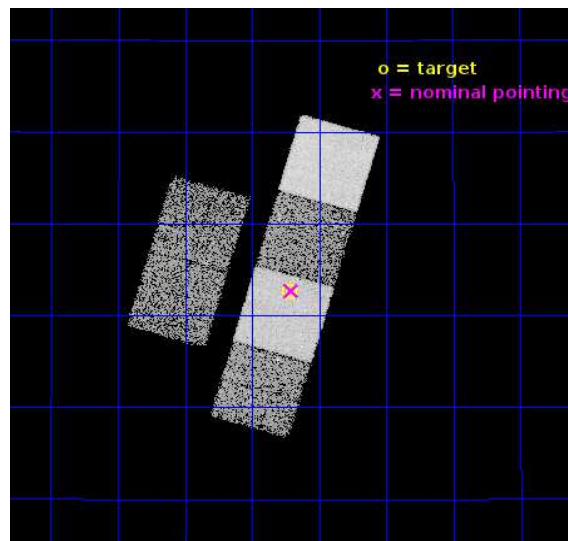
L2 Processing Date : May 3 2016

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

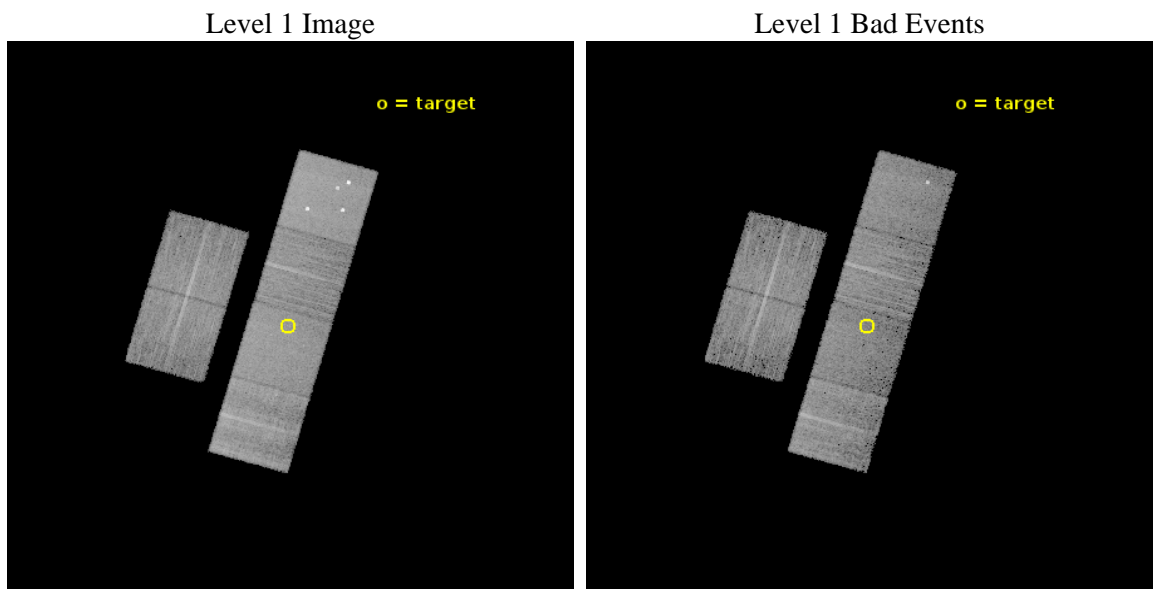
seq_num	901202	Sequence number
obs_id	18088	Observation id
title	Follow-up of Serendipitous NuSTAR Sources in the Galactic Plane	Pr
observer	John Tomsick	Principal investigator
object	Swift J202313+2042.7	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	305.804583	Observer's specified target RA [deg]
dec_targ	20.712083	Observer's specified target Dec [deg]
ra_nom	305.80189088446	Nominal RA [deg]
dec_nom	20.712102114741	Nominal Dec [deg]
roll_nom	106.16275900349	Nominal Roll [deg]
revision	1	Processing version of data
ontime	9939.2001481056	Sum of GTIs [s]
livetime	9813.3440111625	Livetime [s]
ontime2	9939.2001481056	Sum of GTIs [s]
ontime3	9939.2001481056	Sum of GTIs [s]
ontime5	9939.2001481056	Sum of GTIs [s]
ontime6	9939.2001481056	Sum of GTIs [s]
ontime7	9939.2001481056	Sum of GTIs [s]
ontime8	9939.2001481056	Sum of GTIs [s]
l2events	102612	Number of level 2 events



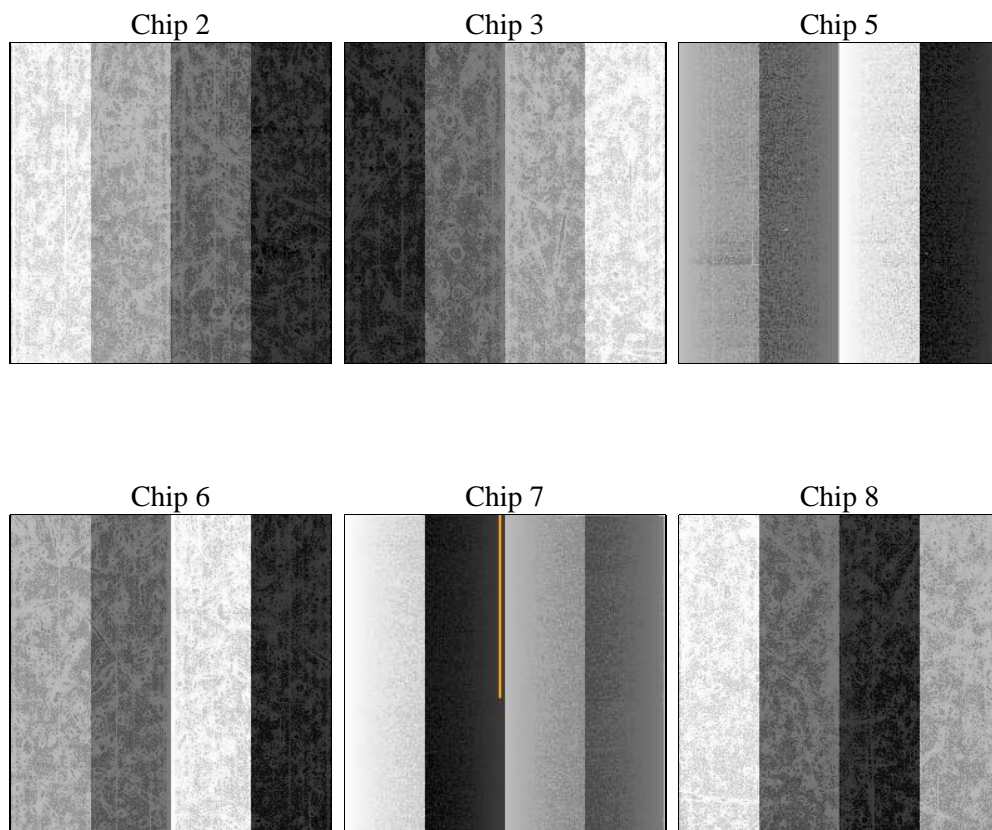
2 OBI

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	10.4.3.1	Processing system revision	ontime	9939.2001481056	Sum of GTIs [s]
caldbver	4.7.1	 	ontime2	9939.2001481056	Sum of GTIs [s]
date	2016-05-03T10:40:43	Date and time of file creation	ontime3	9939.2001481056	Sum of GTIs [s]
revision	1	Processing version of data	ontime5	9939.2001481056	Sum of GTIs [s]
			ontime6	9939.2001481056	Sum of GTIs [s]
			ontime7	9939.2001481056	Sum of GTIs [s]
			ontime8	9939.2001481056	Sum of GTIs [s]
			l1events	455057	Number of level 1 events

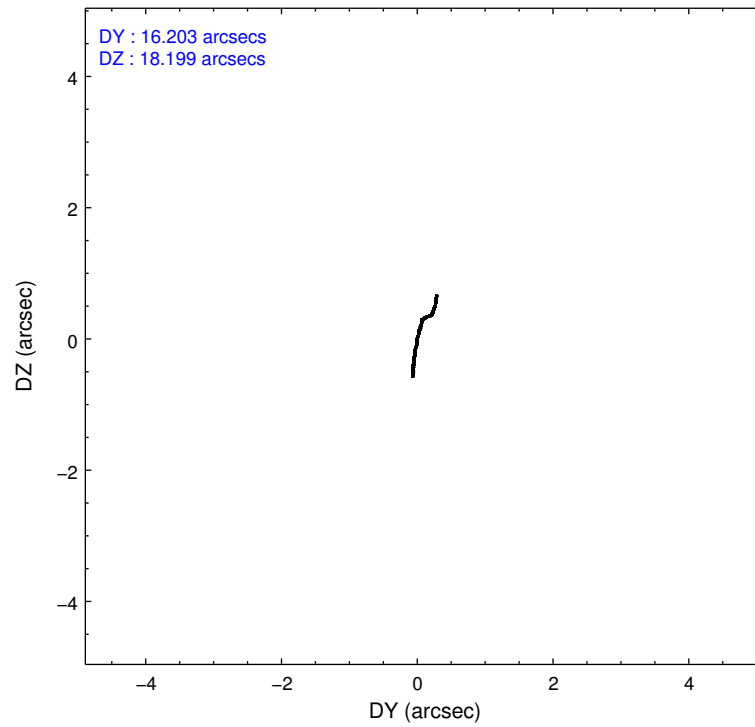
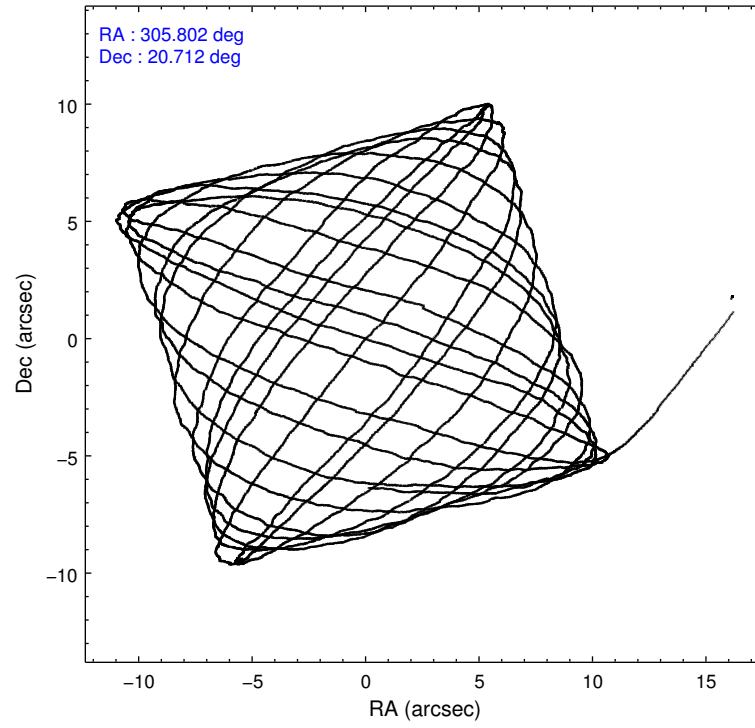
2.1.4 Events

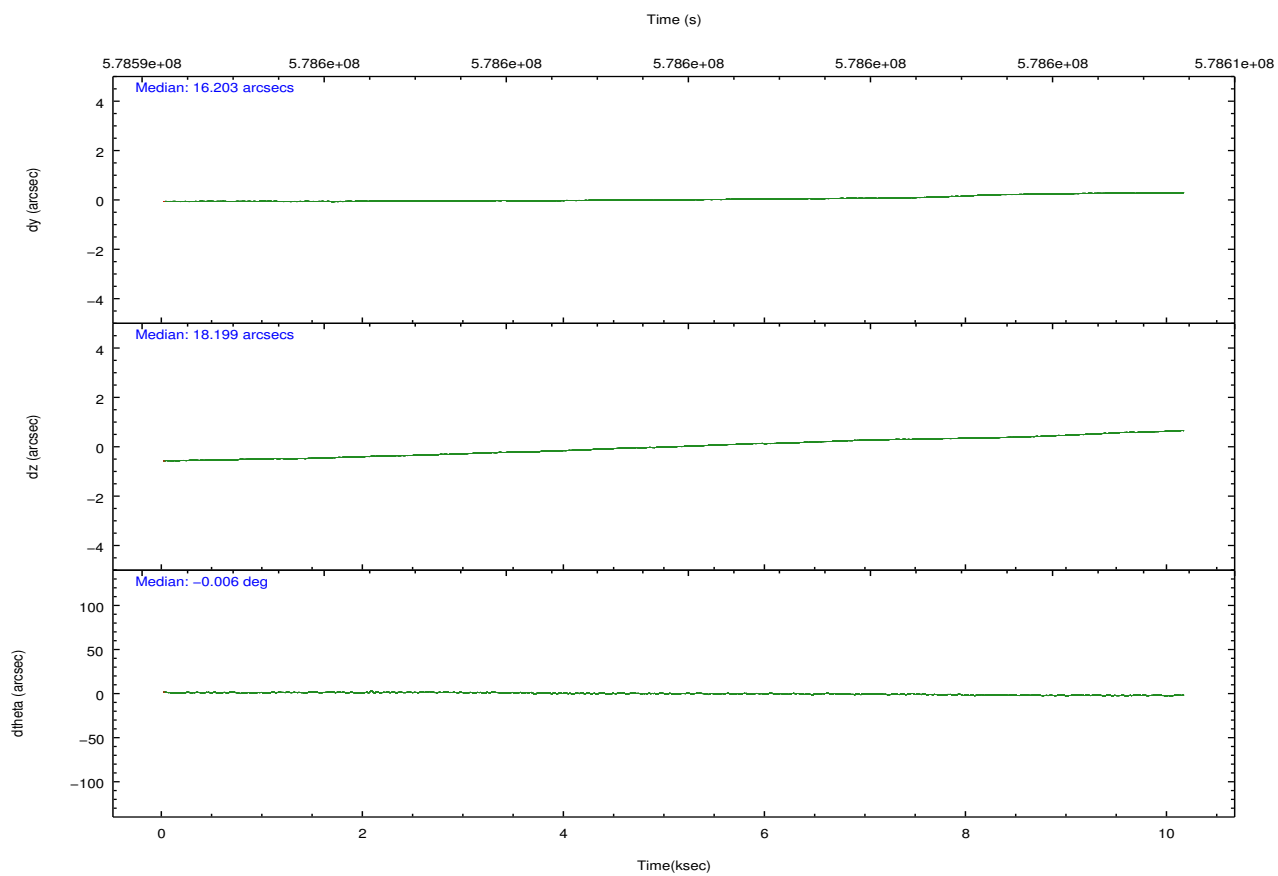
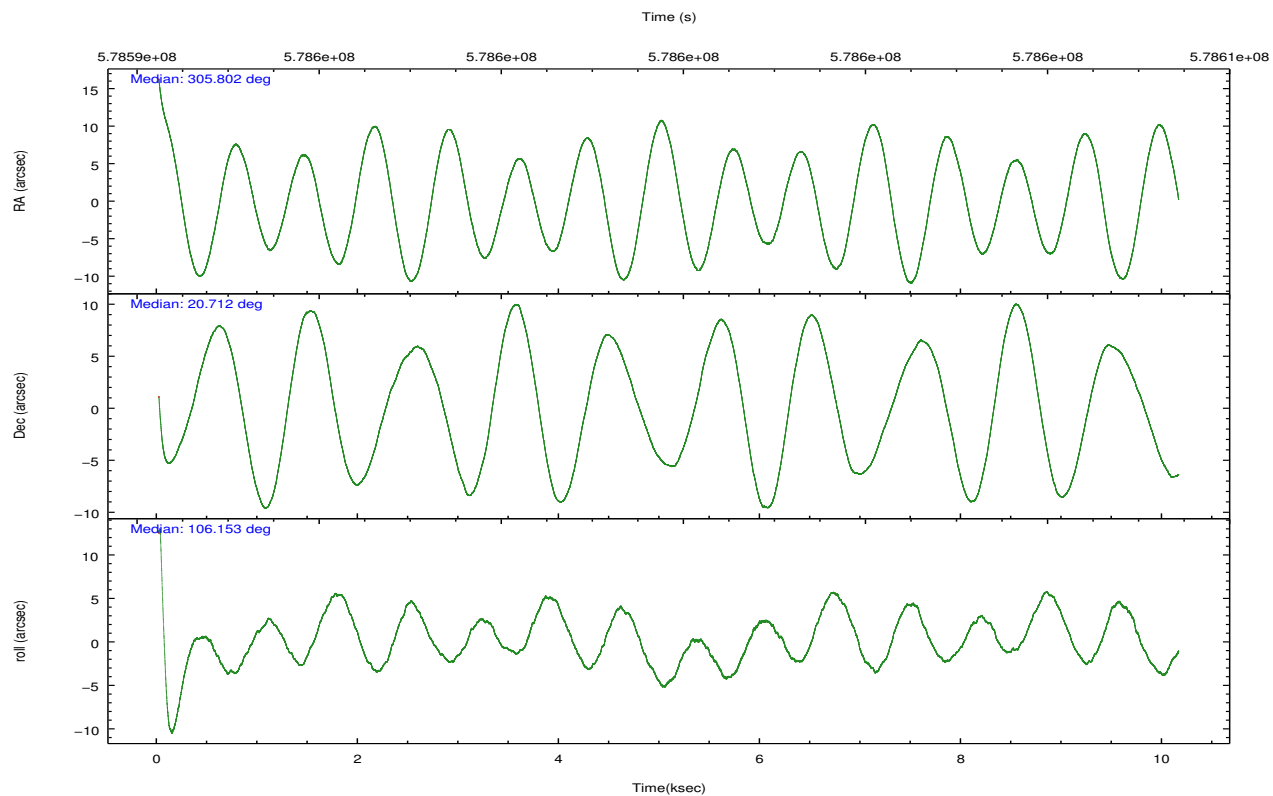
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	61780	58210	107969	64493	79986	82619	grade 0 events	2364	2140	11028	2456	2894	6158
rejected events	55110	51963	52443	57210	45300	60701		3%	3%	10%	3%	3%	7%
rejected %	89%	89%	48%	88%	56%	73%	grade 1 events	30	33	1011	24	107	60
								0%	0%	0%	0%	0%	0%
							grade 2 events	1658	1421	15689	1686	7383	5237
								2%	2%	14%	2%	9%	6%
							grade 3 events	691	688	1495	722	2654	2415
								1%	1%	1%	1%	3%	2%
							grade 4 events	672	659	1413	766	2704	2168
								1%	1%	1%	1%	3%	2%
							grade 5 events	2478	2913	6717	2908	7888	4389
								4%	5%	6%	4%	9%	5%
							grade 6 events	1291	1346	25939	1656	19076	5946
								2%	2%	24%	2%	23%	7%
							grade 7 events	52596	49010	44677	54275	37280	56246
								85%	84%	41%	84%	46%	68%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	305.823270	305.8018908844576	CCD I2 on	O2	Y
[deg] Pointing Dec	20.693372	20.71210211474121	CCD I3 on	Y	Y
[deg] Pointing Roll	105.998538	106.1627590034892	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O1	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	Y	Y
[s] Observation start time (MET)	578594925.184000	578593526.36682	CCD S5 on	N	N
Observation start date	2016-05-02T16:47:37	2016-05-02T16:25:26	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	578604925.184000	578606122.08004	On-chip summing requested	N	N
Observation end date	2016-05-02T19:34:17	2016-05-02T19:55:22	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



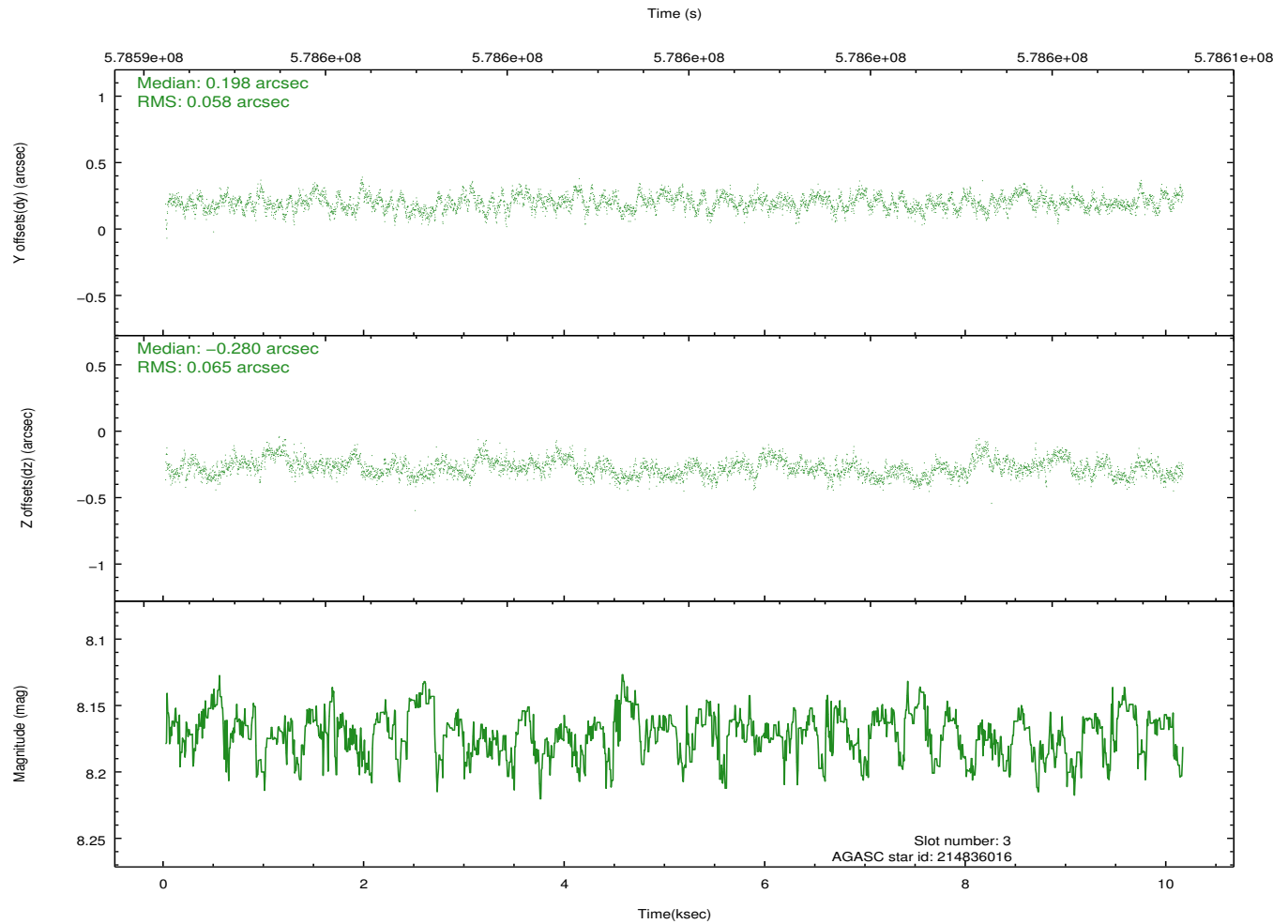
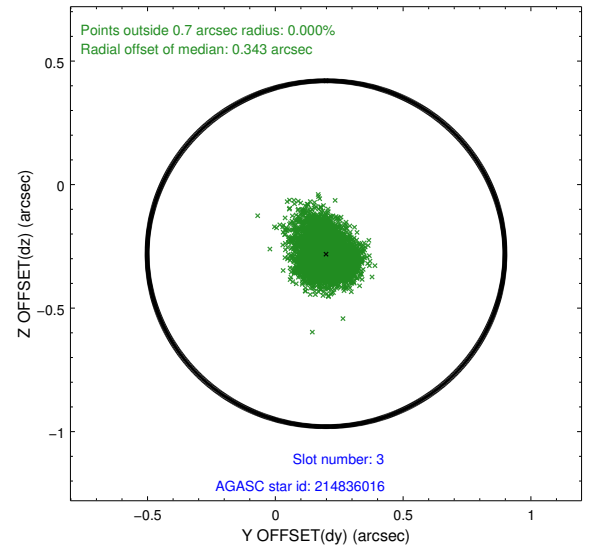
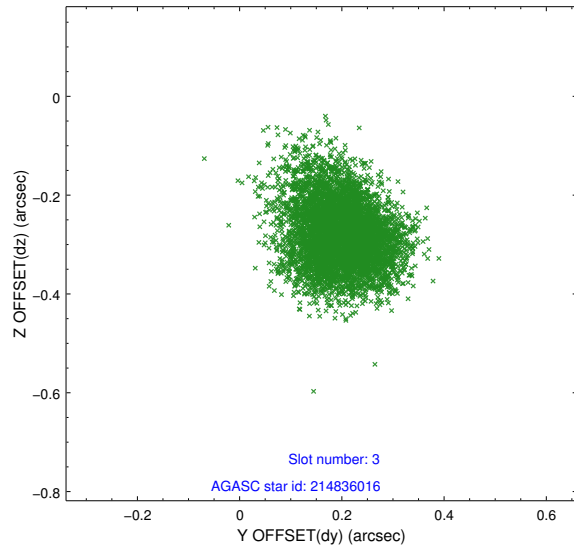


Slot Statistics

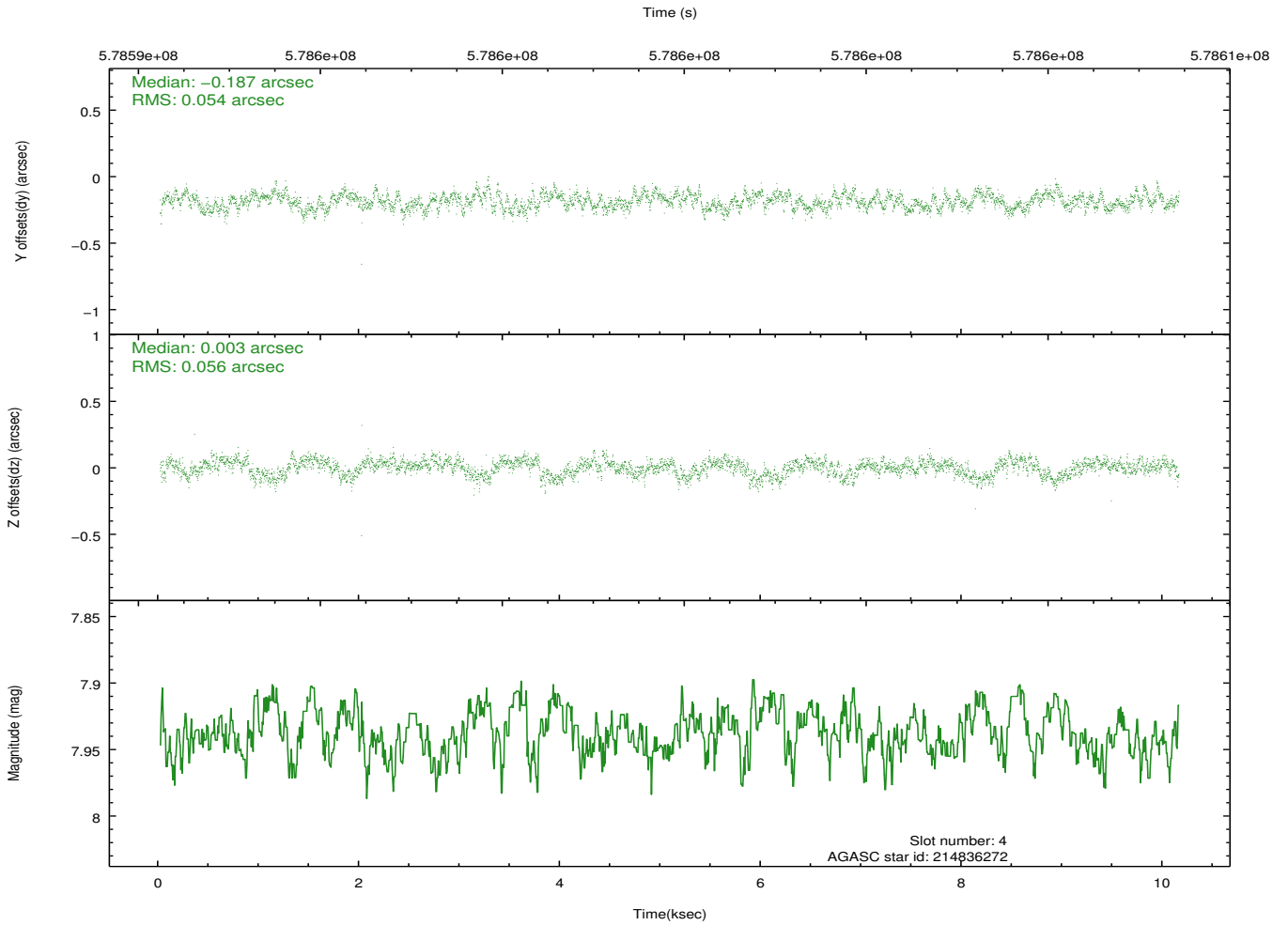
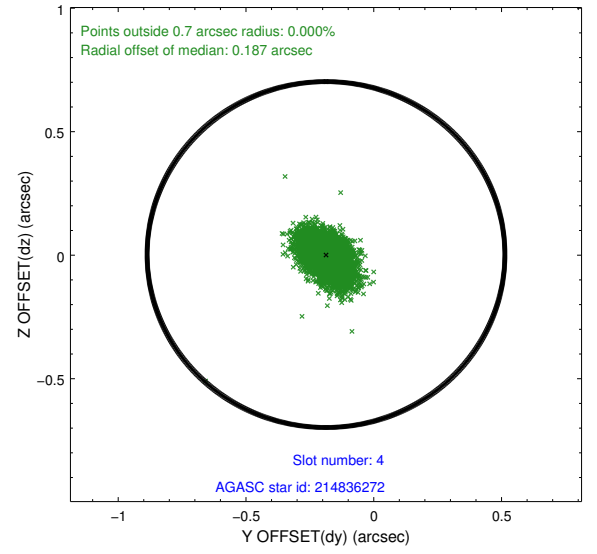
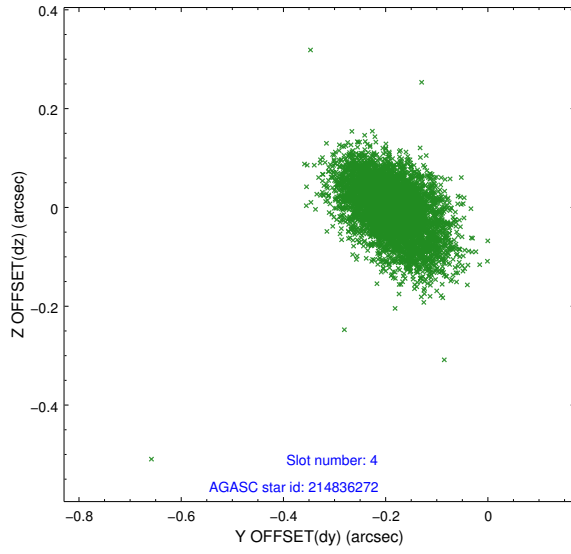
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-1	7.22	2475	0.046	-0.033	0.015	0.027	0.000000	0.000000	926.85	-1735.27
1	FID		ACIS-S-4	7.23	2475	0.326	0.007	0.010	0.016	0.000000	0.000000	2144.79	168.42
2	FID		ACIS-S-5	7.24	2474	-0.399	0.040	0.009	0.016	0.000000	0.000000	-1821.83	162.56
3	GUIDE	used	214836016	8.17	4949	0.198	-0.280	0.092	0.149	305.369551	20.098083	-1634.64	2064.22
4	GUIDE	used	214836272	7.94	4950	-0.187	0.003	0.082	0.134	305.520357	20.358881	-875.32	1315.22
5	GUIDE	used	214958928	8.27	4949	0.163	0.432	0.087	0.139	306.505103	20.582194	-1012.87	-2098.87
6	GUIDE	used	215371392	8.92	4947	-0.022	-0.260	0.106	0.168	305.558302	20.742758	417.83	807.69
7	GUIDE	used	215497480	8.51	4944	-0.151	0.108	0.094	0.151	306.153937	21.105146	1120.44	-1475.44

2.4 Star Slots

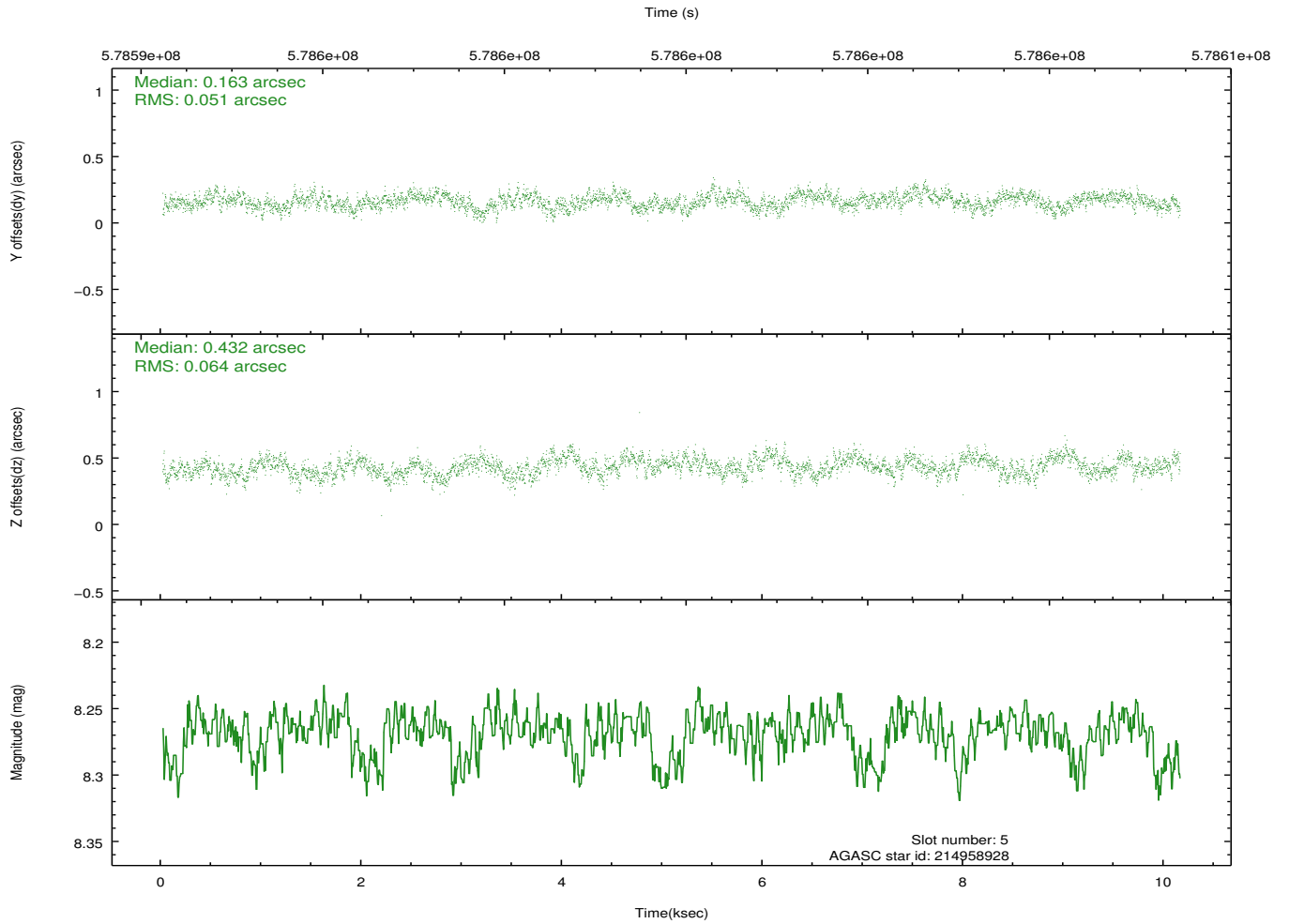
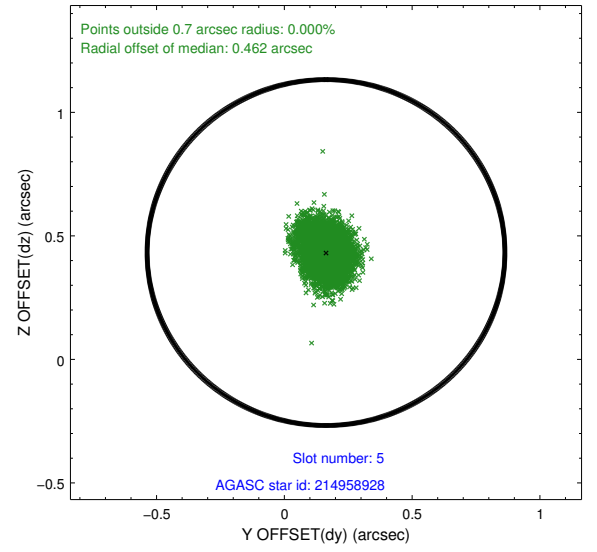
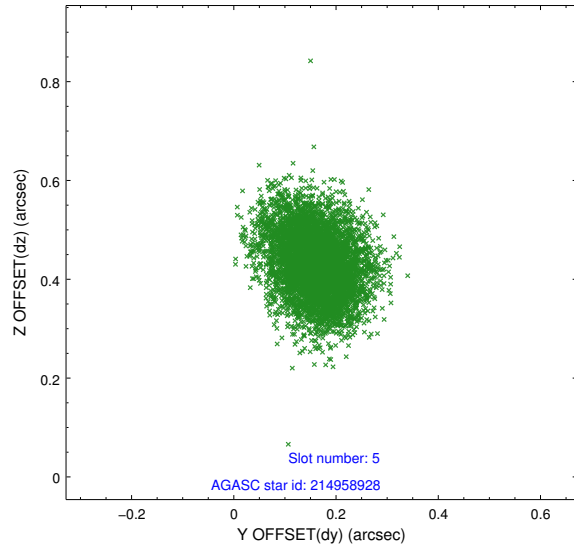
2.4.1 Slot 3



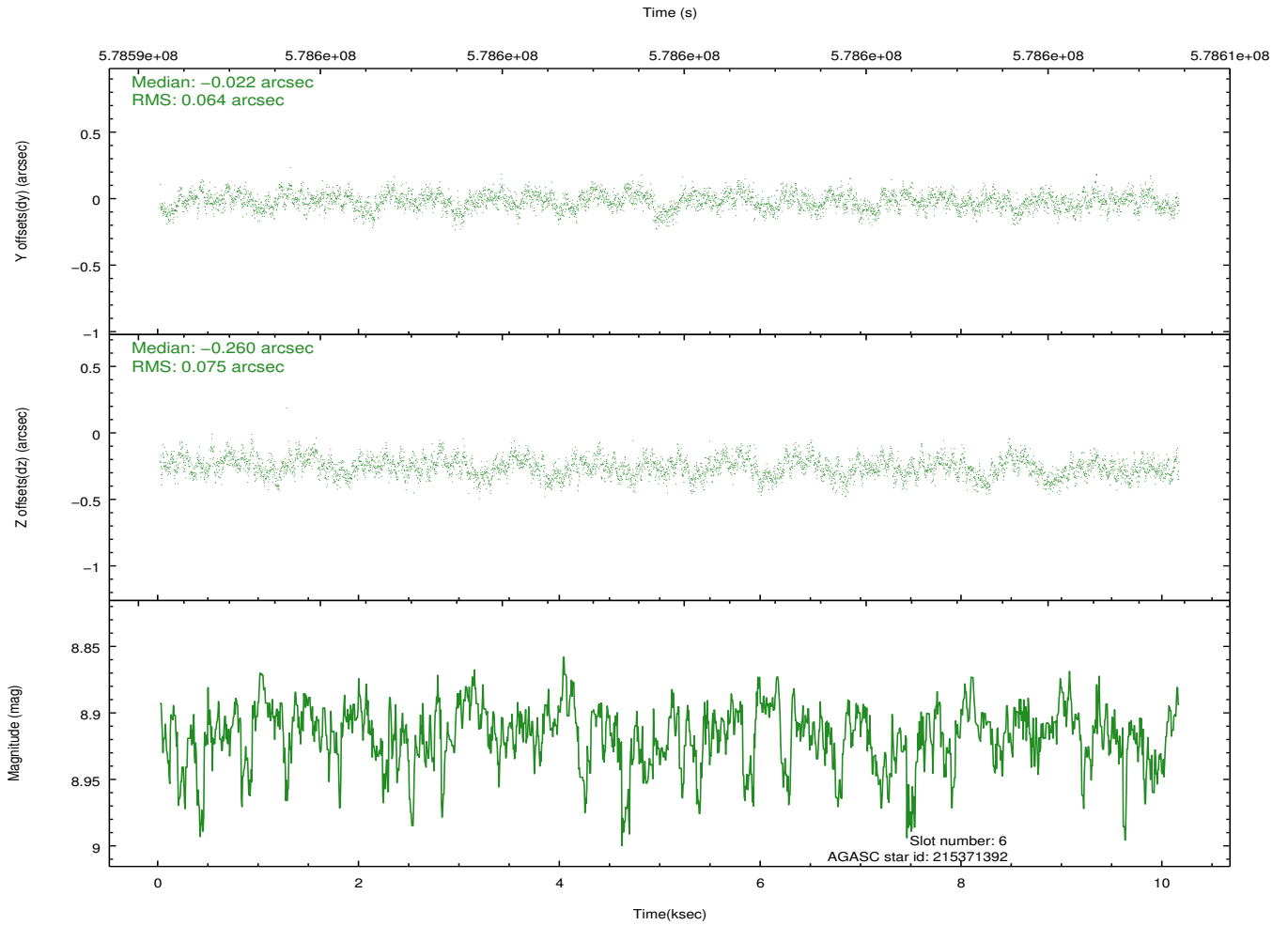
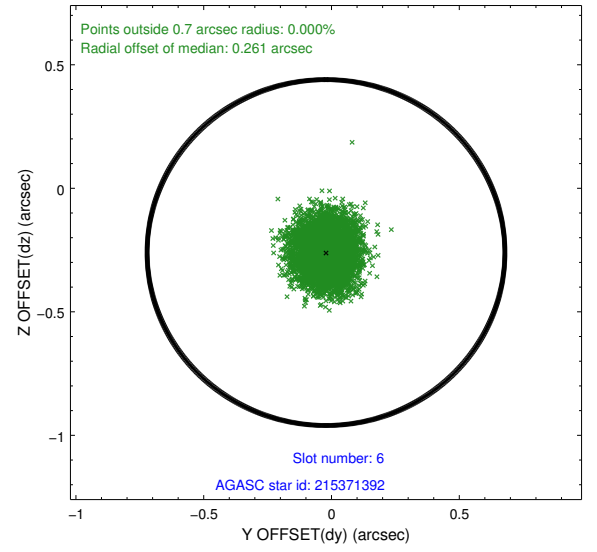
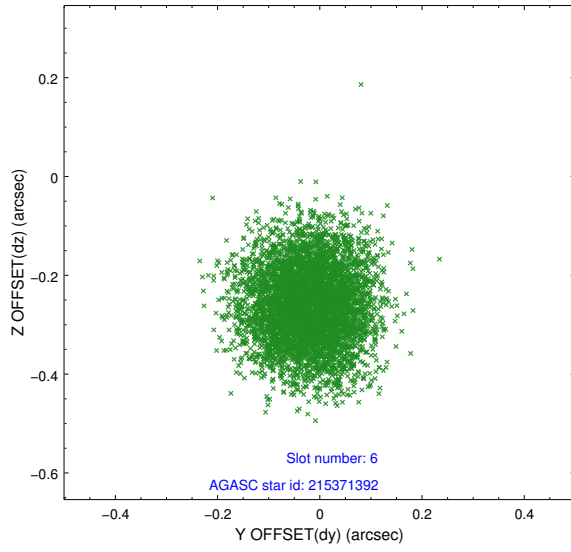
2.4.2 Slot 4



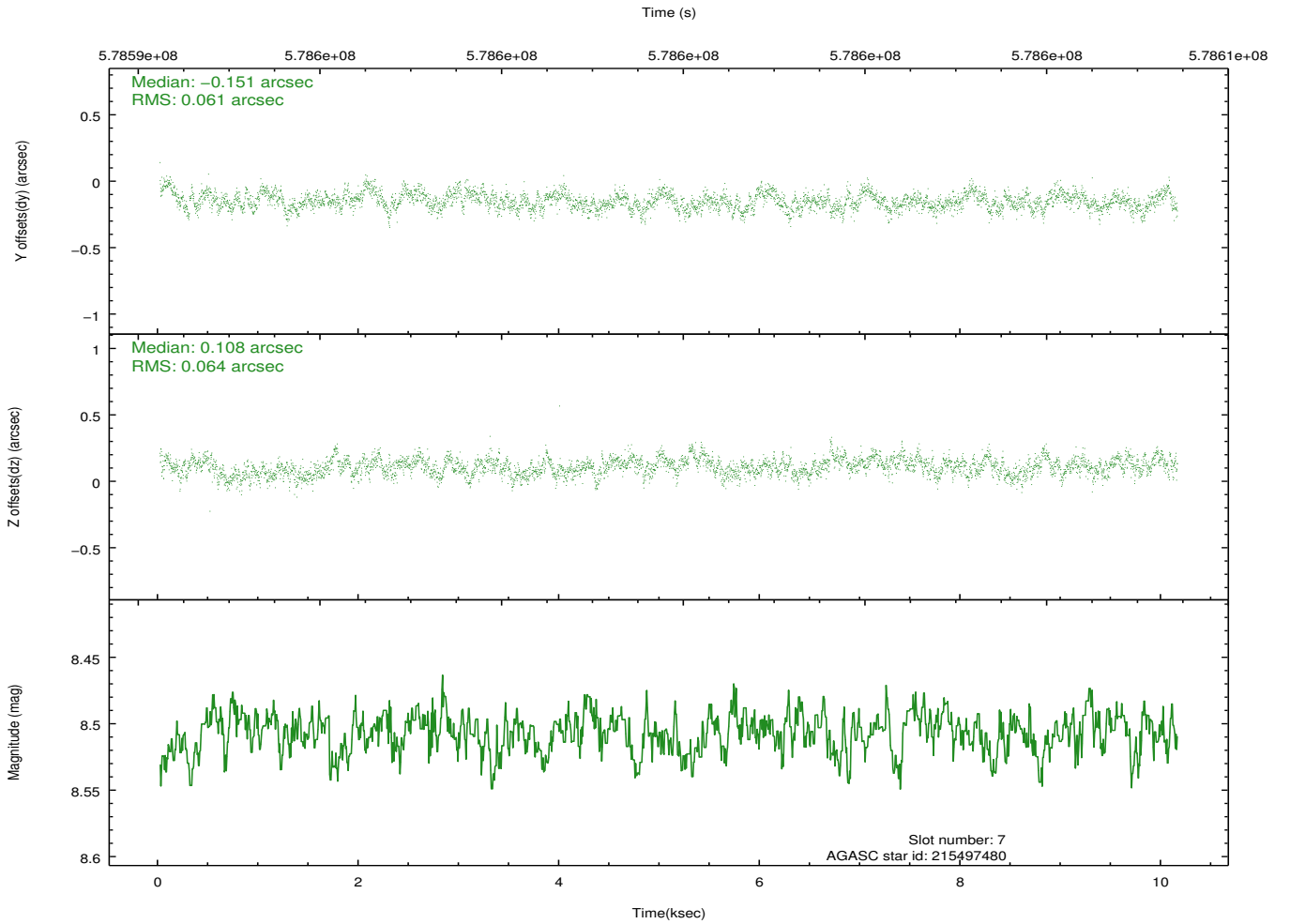
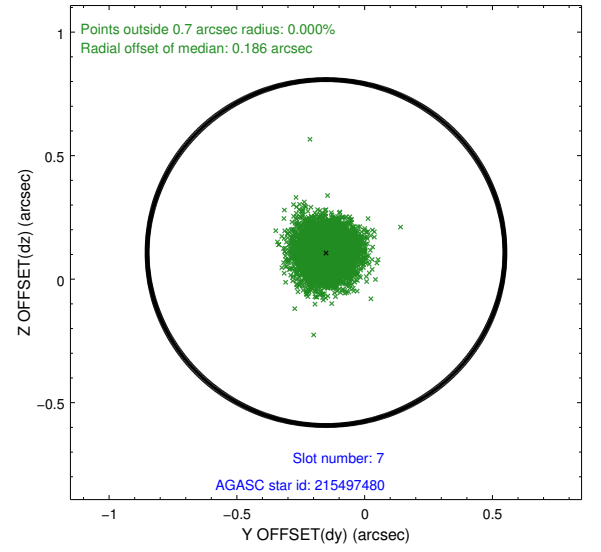
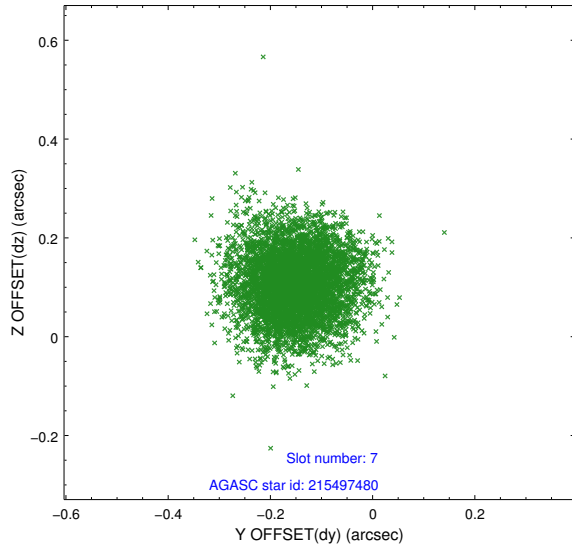
2.4.3 Slot 5



2.4.4 Slot 6

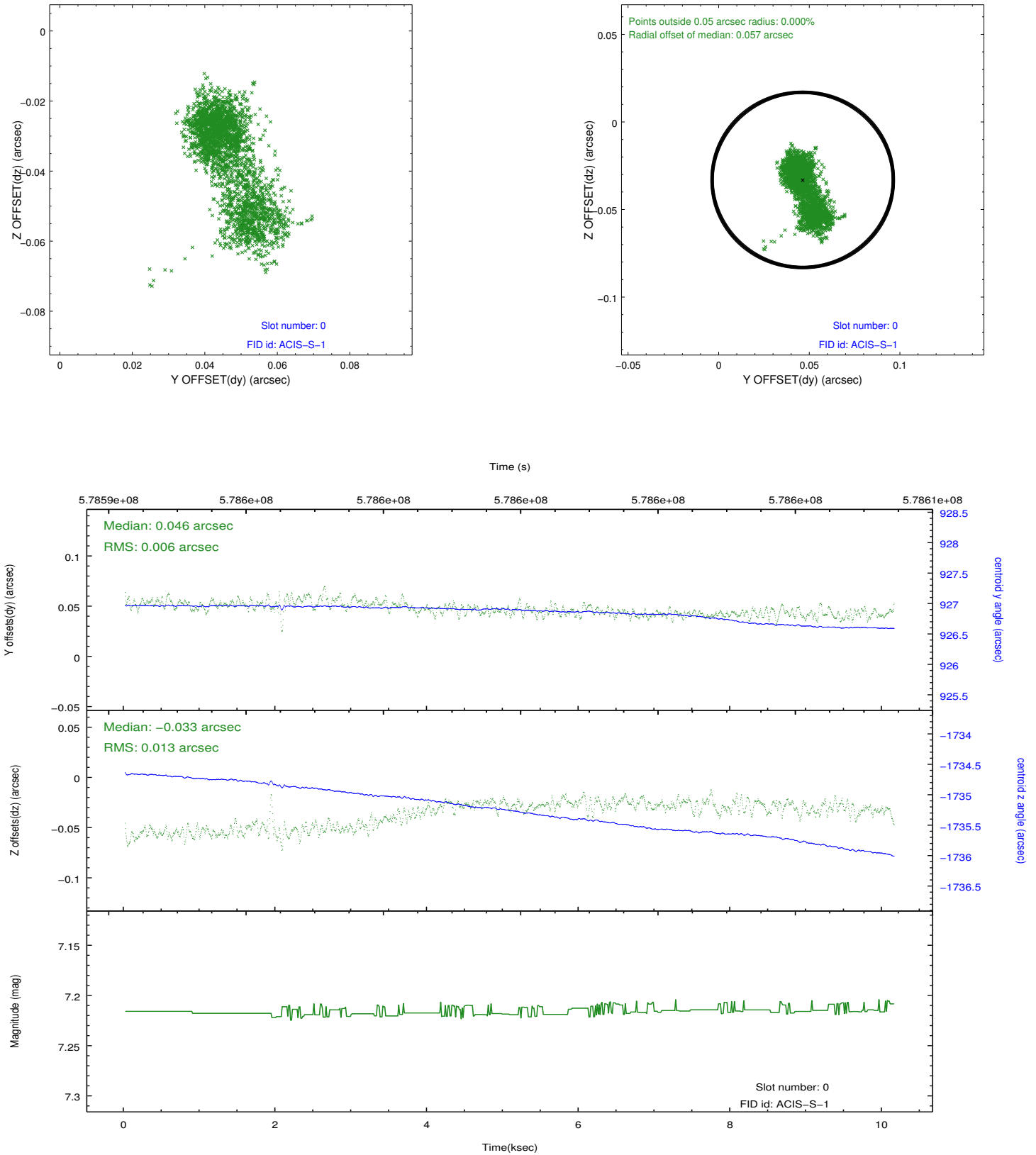


2.4.5 Slot 7

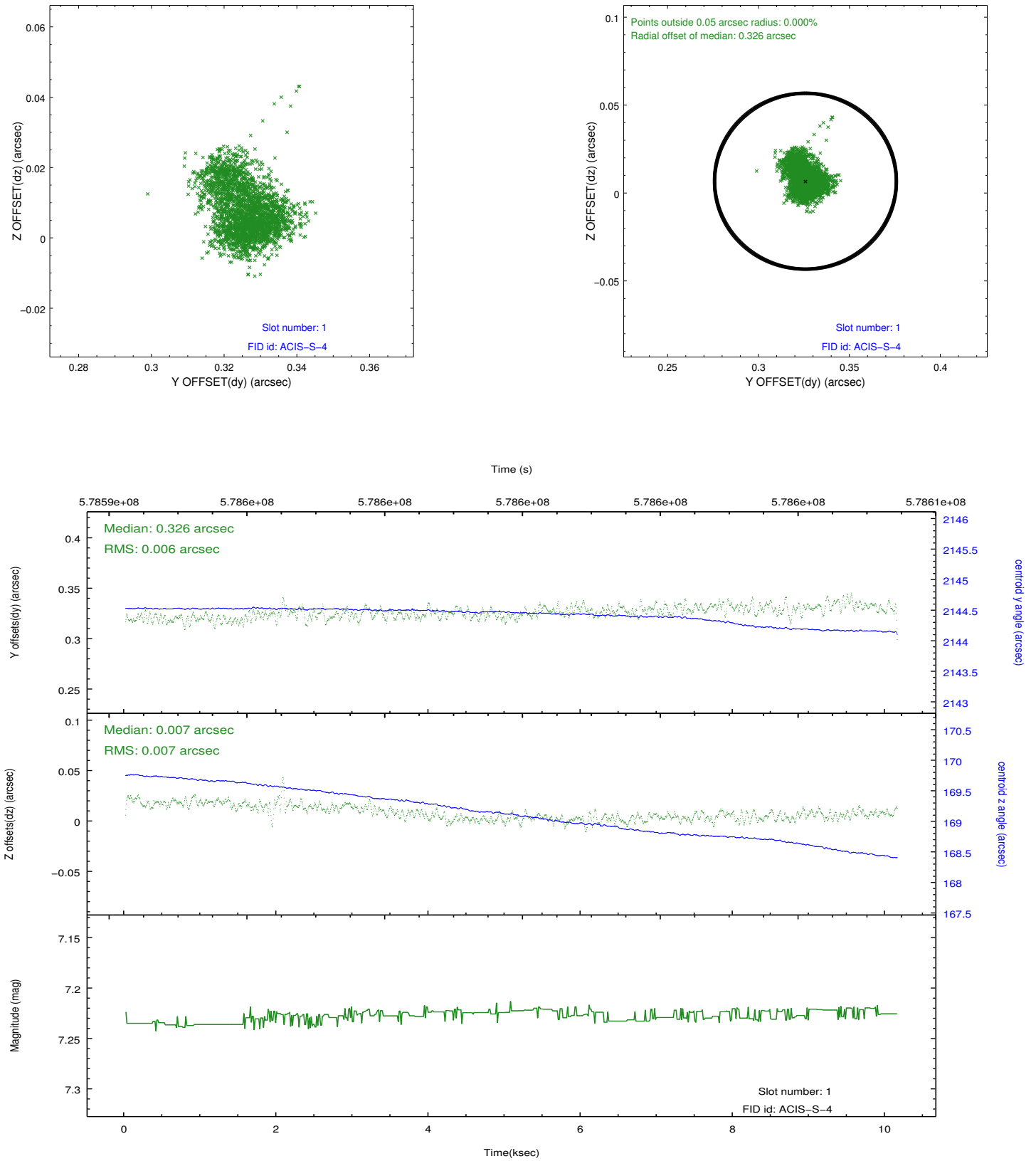


2.5 FID Slots

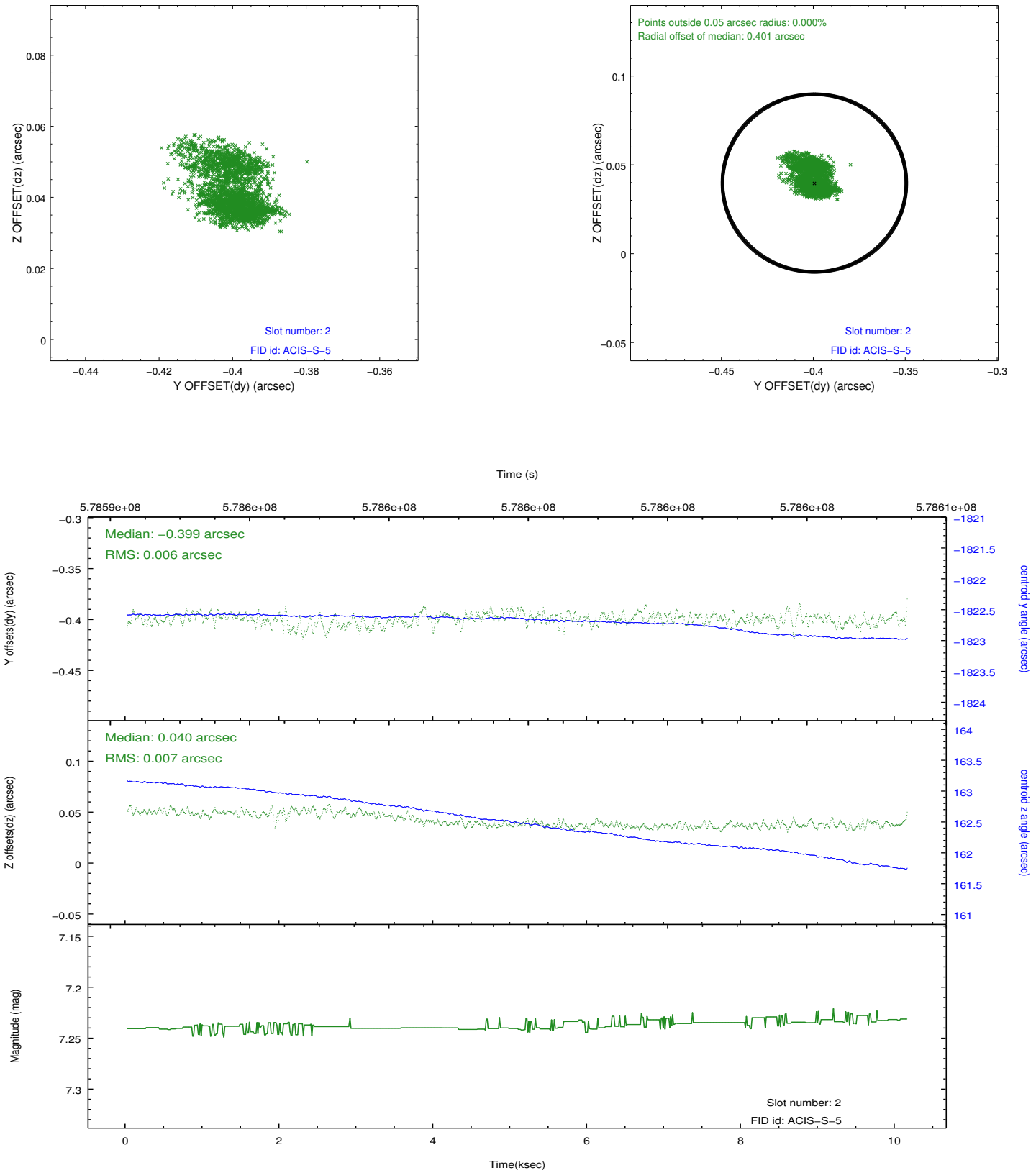
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2016.05.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.9392001481056

A.2 Comments