

V&V Reference Report

L2 ASCDS Version : 10.6.4.1

Observation 21728 - L2 Version 1
Chandra X-Ray Center

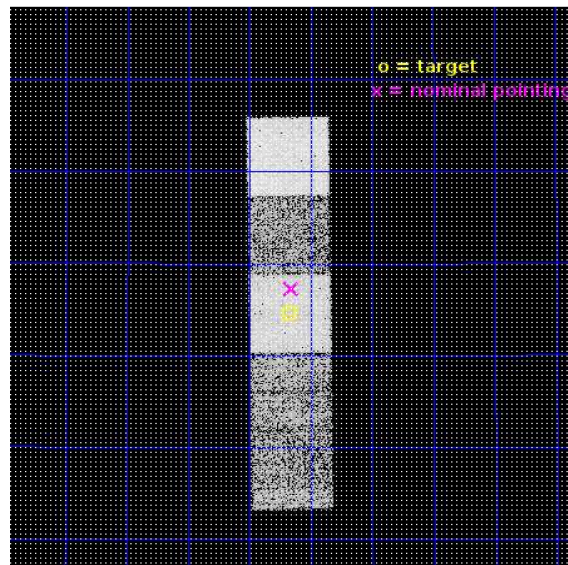
L2 Processing Date : Sep 13 2018

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1 Front

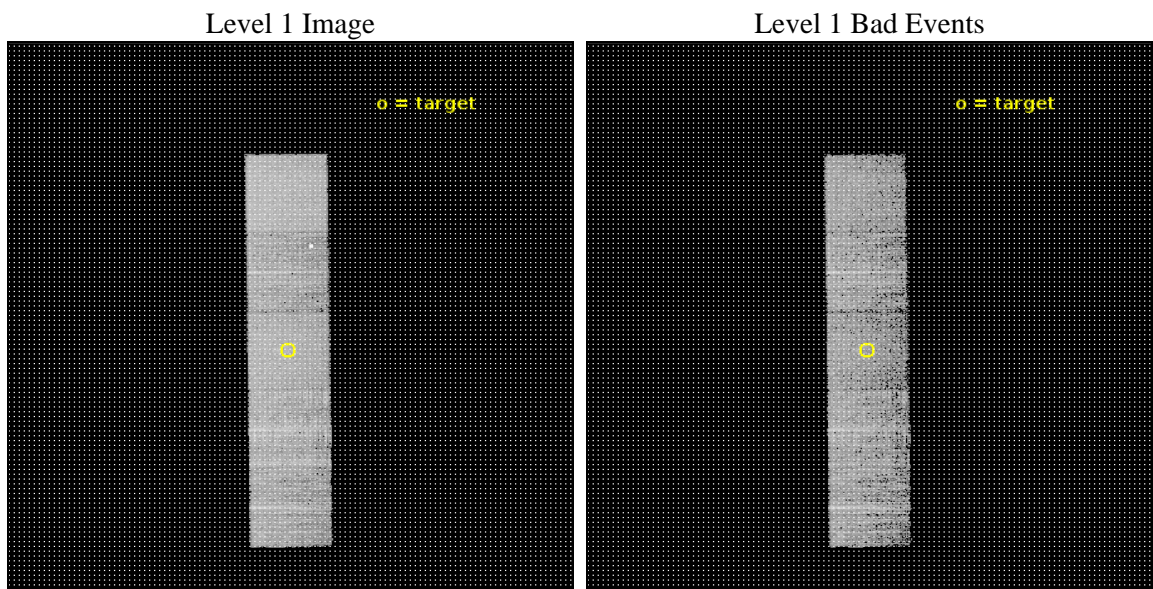
seq_num	100173	Sequence number
obs_id	21728	Observation id
title	Chandra Observations of the High-Heliospheric Latitude Comet 21P/Giacobini-Zinner	Proposal title
observer	Bradford Snios	Principal investigator
object	21P/Giacobini-Zinner	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	88.669467	Observer's specified target RA [deg]
dec_targ	31.075687	Observer's specified target Dec [deg]
ra_nom	88.665082893886	Nominal RA [deg]
dec_nom	31.121102287199	Nominal Dec [deg]
roll_nom	89.252238909288	Nominal Roll [deg]
revision	1	Processing version of data
ontime	5173.9000399113	Sum of GTIs [s]
livetime	5106.29922692	Livetime [s]
ontime5	5173.9000399113	Sum of GTIs [s]
ontime6	5173.9000399113	Sum of GTIs [s]
ontime7	5173.9000399113	Sum of GTIs [s]
ontime8	5173.9000399113	Sum of GTIs [s]
ontime9	5173.9000399113	Sum of GTIs [s]
l2events	68484	Number of level 2 events



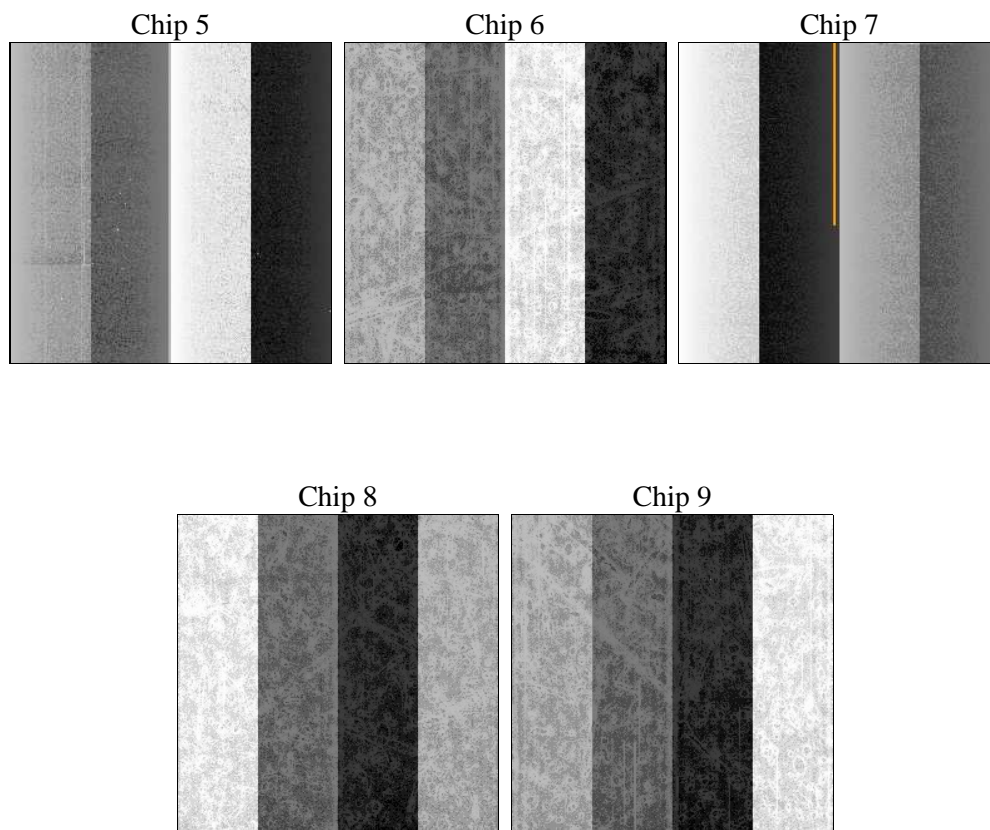
2 OBI

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	10.6.4.1	Processing system revision	ontime	5173.9000399113	Sum of GTIs [s]
caldsver	4.8.0	 	ontime5	5173.9000399113	Sum of GTIs [s]
date	2018-09-13T07:22:43	Date and time of file creation	ontime6	5173.9000399113	Sum of GTIs [s]
revision	1	Processing version of data	ontime7	5173.9000399113	Sum of GTIs [s]
			ontime8	5173.9000399113	Sum of GTIs [s]
			ontime9	5173.9000399113	Sum of GTIs [s]
			l1events	266986	Number of level 1 events

2.1.4 Events

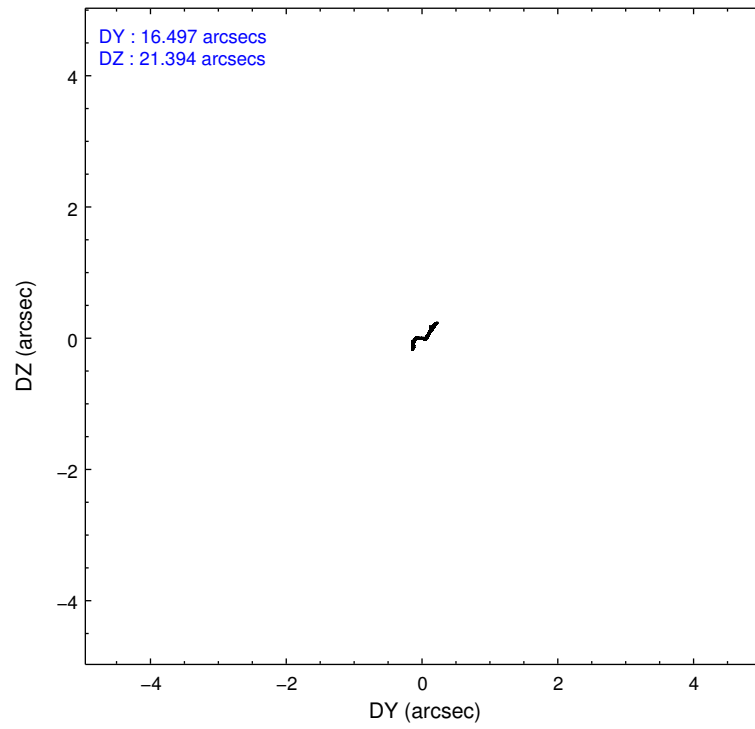
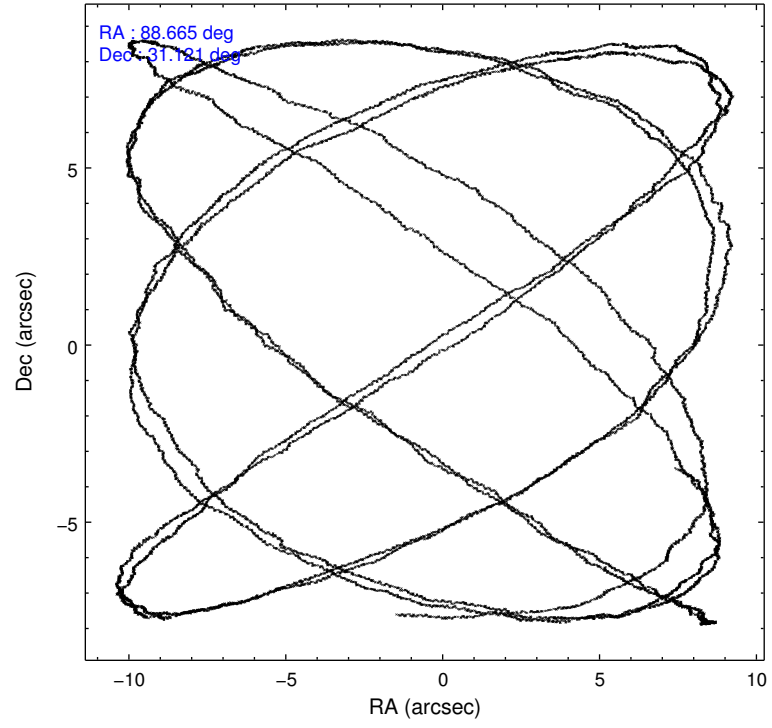
	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	65973	46011	54711	57364	42927
rejected events	35513	39185	31502	41480	37143
rejected %	53%	85%	57%	72%	86%

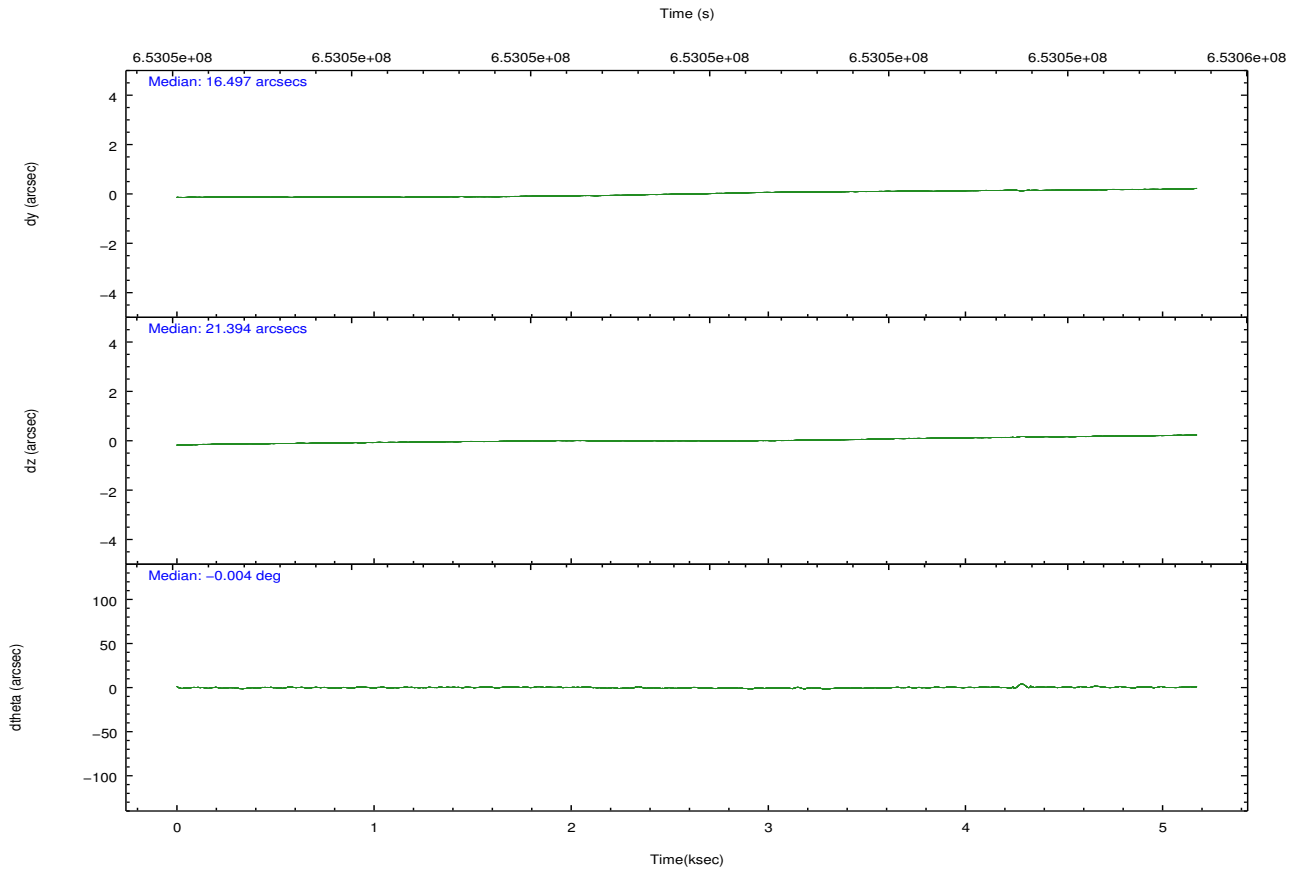
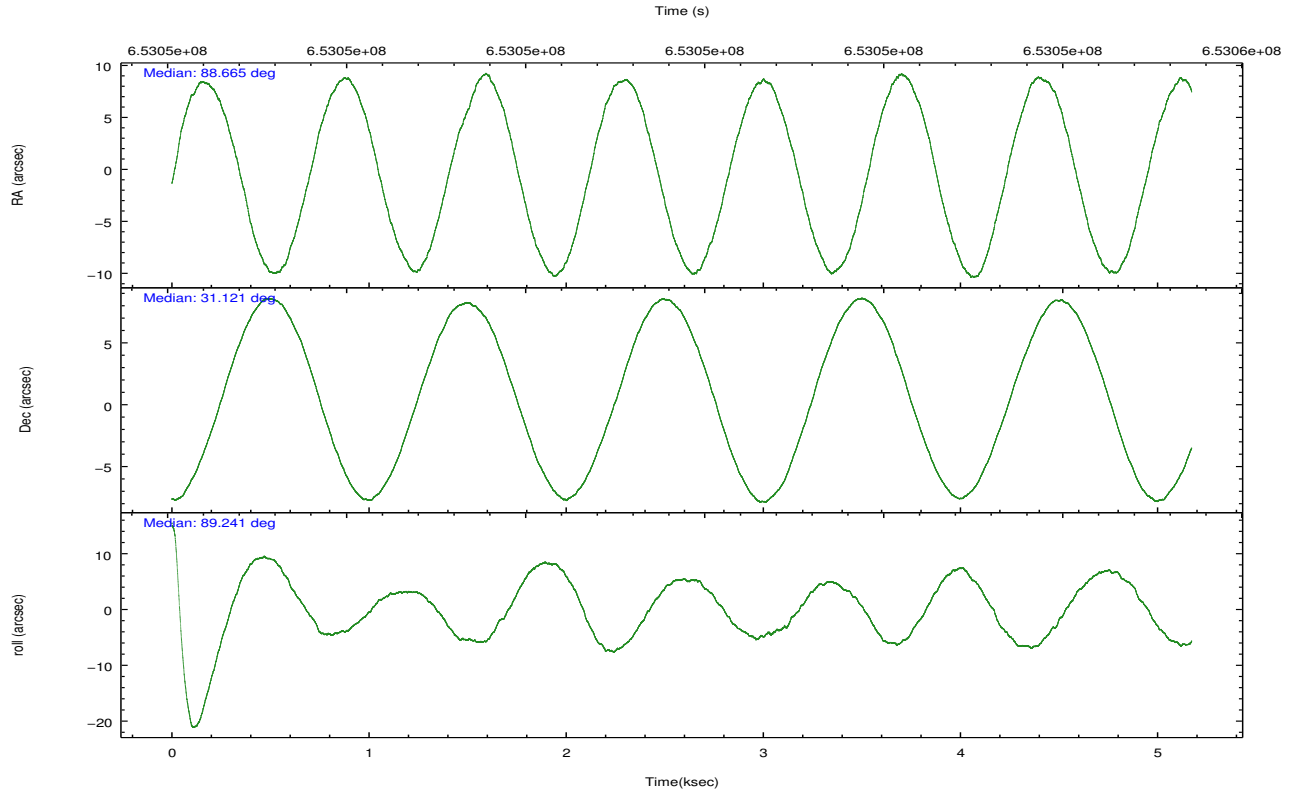
	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	1907	3714	2239	5454	2466
	2%	8%	4%	9%	5%
grade 1 events	125	32	97	42	20
	0%	0%	0%	0%	0%
grade 2 events	10222	1287	5184	3888	1301
	15%	2%	9%	6%	3%
grade 3 events	1093	515	1965	1636	601
	1%	1%	3%	2%	1%
grade 4 events	1014	493	1927	1510	529
	1%	1%	3%	2%	1%
grade 5 events	4731	1888	5218	2937	2169
	7%	4%	9%	5%	5%
grade 6 events	18052	1209	13363	4344	1225
	27%	2%	24%	7%	2%
grade 7 events	28829	36873	24718	37553	34616
	43%	80%	45%	65%	80%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-56789	ACIS-56789	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	88.681042	88.66508289388561	CCD I2 on	N	N
[deg] Pointing Dec	31.097398	31.12110228719898	CCD I3 on	N	N
[deg] Pointing Roll	89.087369	89.25223890928767	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	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	Y	Y
[s] Observation start time (MET)	653049463.184000	653049087.39601	CCD S5 on	O2	Y
Observation start date	2018-09-11T10:36:34	2018-09-11T10:31:27	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	653054463.184000	653054597.28383	On-chip summing requested	N	N
Observation end date	2018-09-11T11:59:54	2018-09-11T12:03:17	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



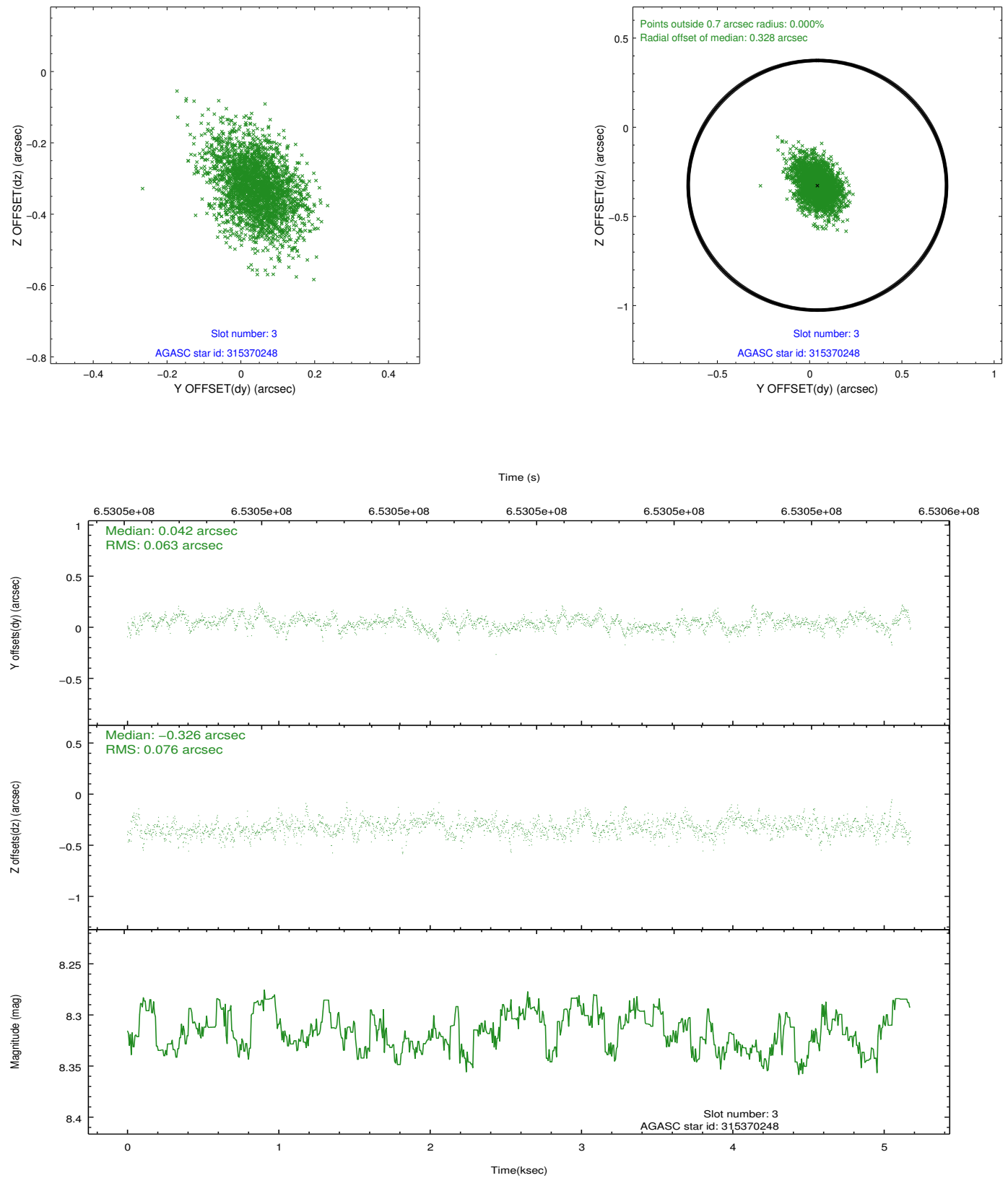


Slot Statistics

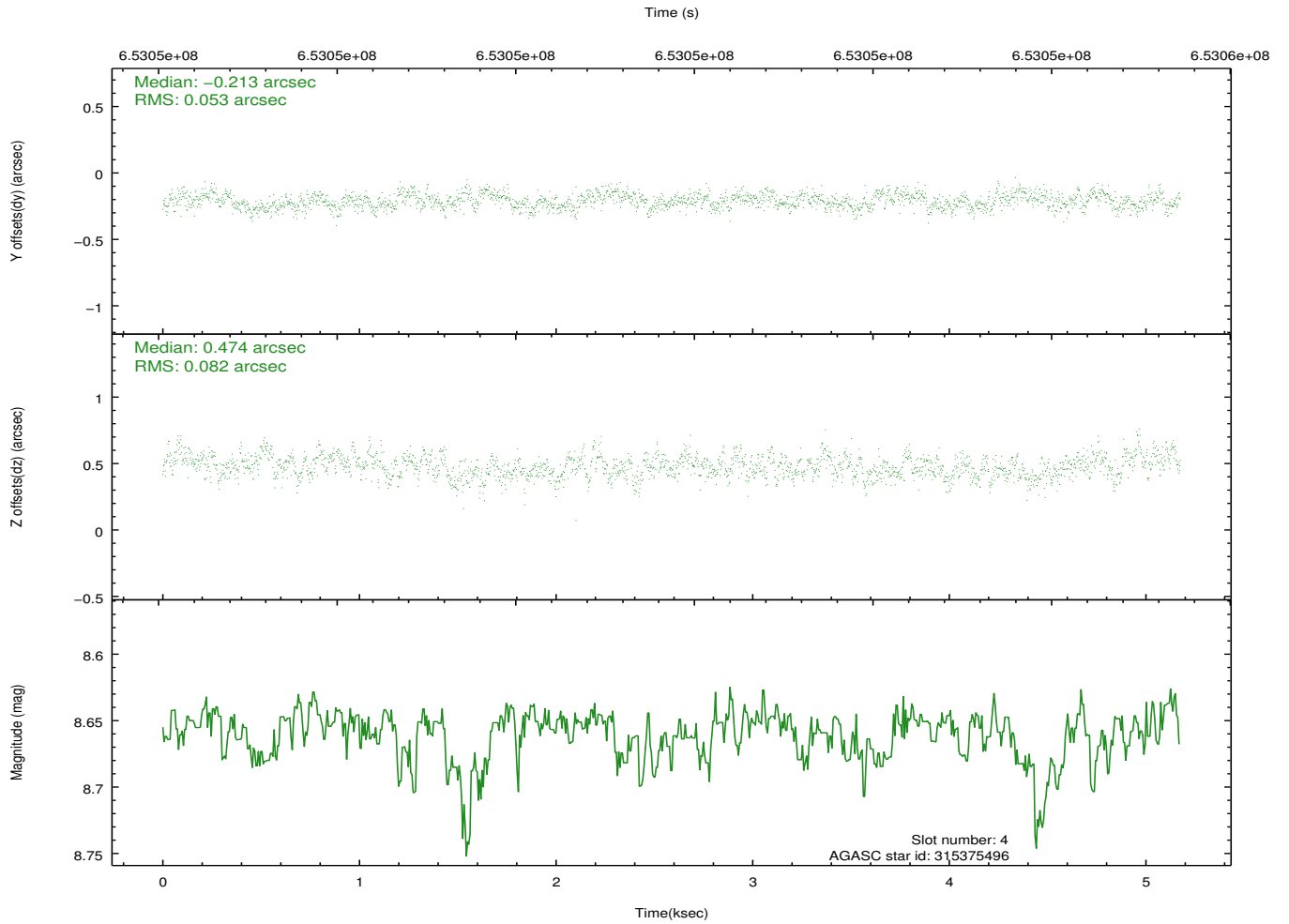
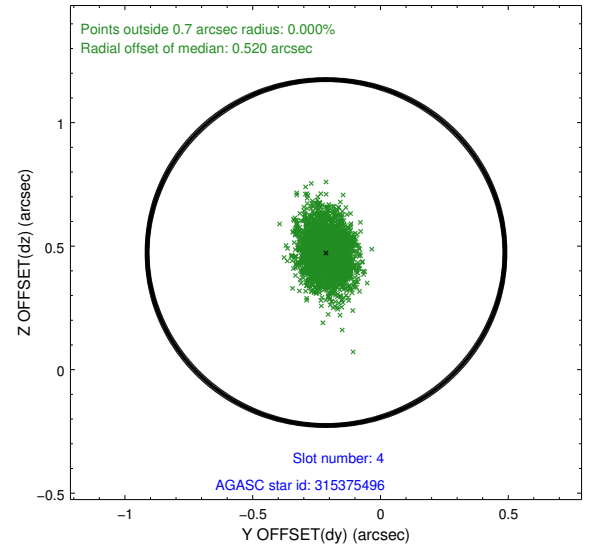
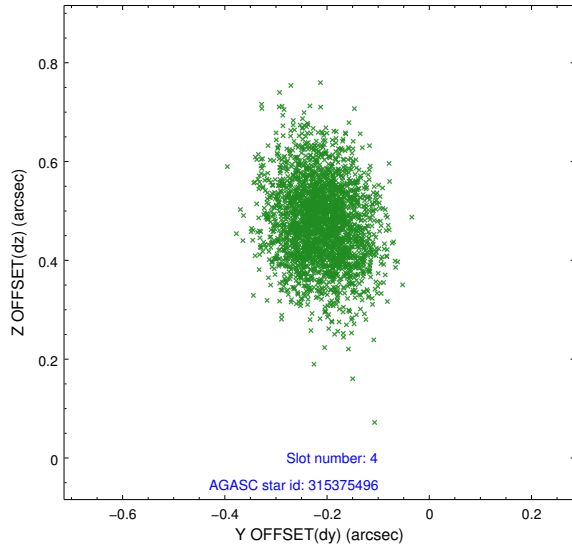
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.03	1262	1.000	-0.211	-0.103	0.008	0.013	0.000000	0.000000	-769.71	-1743
1	FID		ACIS-S-4	7.13	1262	1.000	0.469	0.129	0.006	0.012	0.000000	0.000000	2143.69	164
2	FID		ACIS-S-5	7.12	1262	1.000	-0.289	-0.018	0.008	0.014	0.000000	0.000000	-1821.15	159
3	GUIDE	used	315370248	8.32	2524	1.000	0.042	-0.326	0.103	0.176	87.935825	30.749932	-1280.51	2285
4	GUIDE	used	315375496	8.66	2521	1.000	-0.213	0.474	0.103	0.169	89.379333	31.109784	85.62	-2149
5	GUIDE	used	315376264	8.71	2525	1.000	0.139	0.470	0.114	0.183	88.902699	30.711380	-1377.16	-708
6	GUIDE	used	315376720	7.90	2522	1.000	-0.137	-0.529	0.114	0.185	87.931221	30.957268	-534.19	2306
7	GUIDE	used	315375336	8.45	2524	1.000	0.168	-0.093	0.109	0.171	88.334590	30.449269	-2350.52	1039

2.4 Star Slots

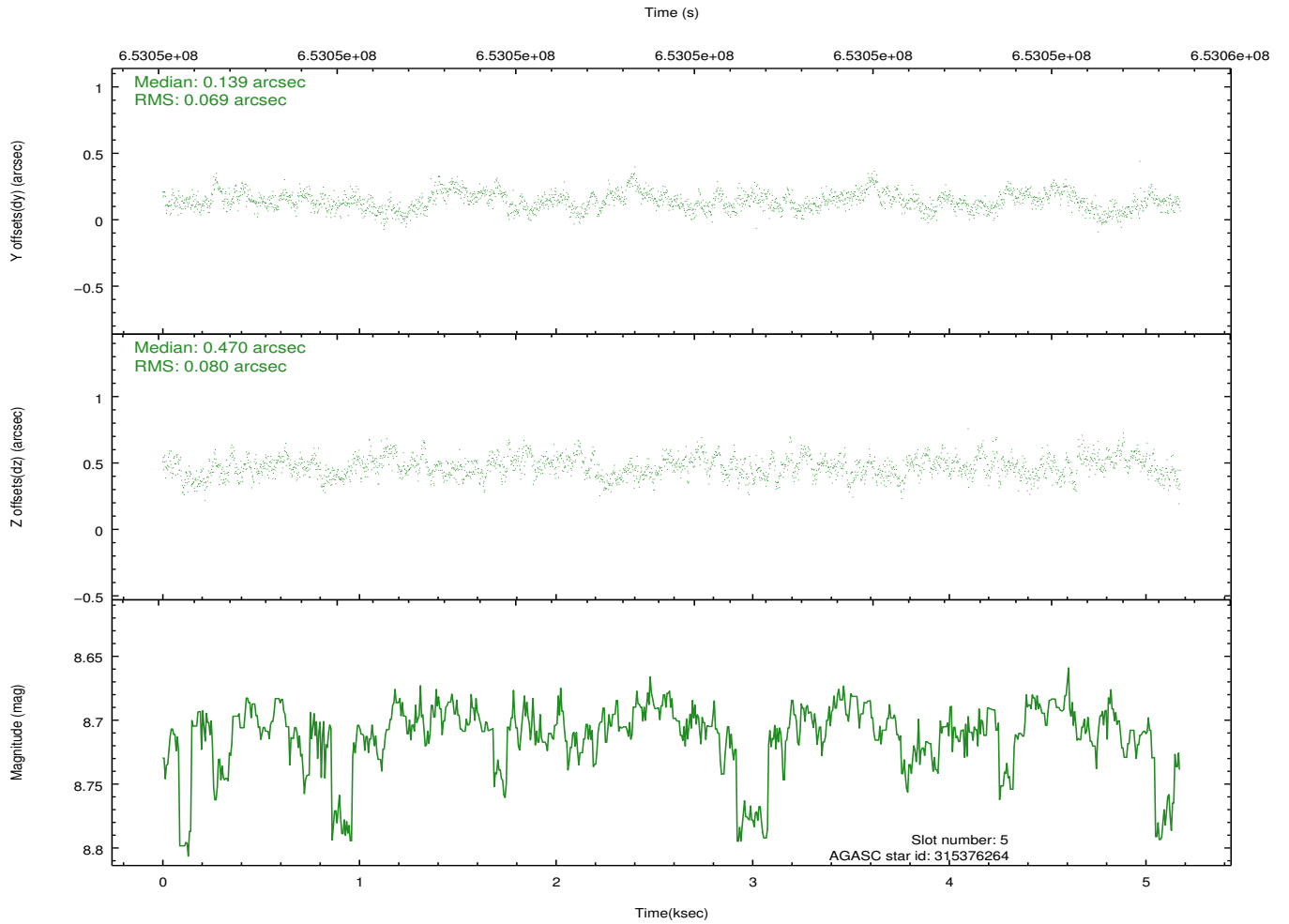
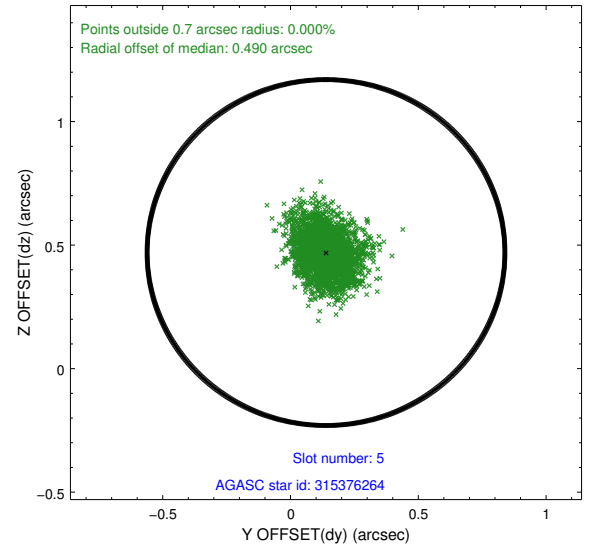
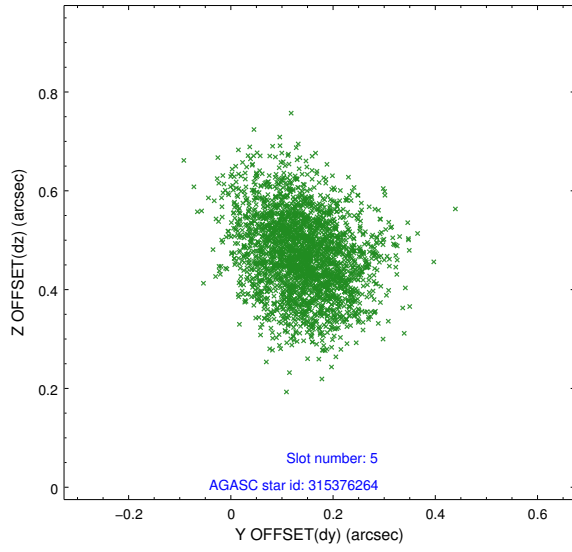
2.4.1 Slot 3



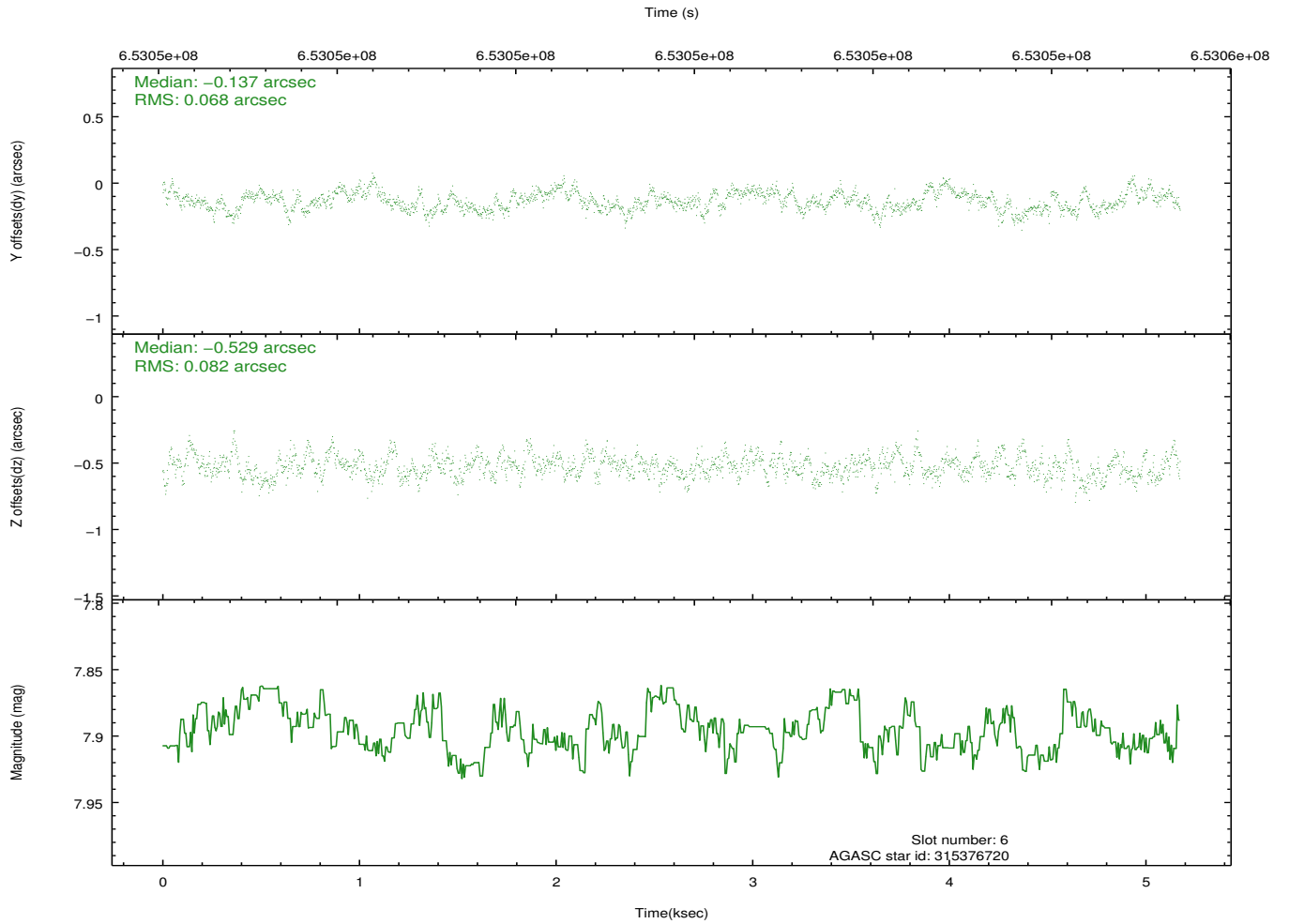
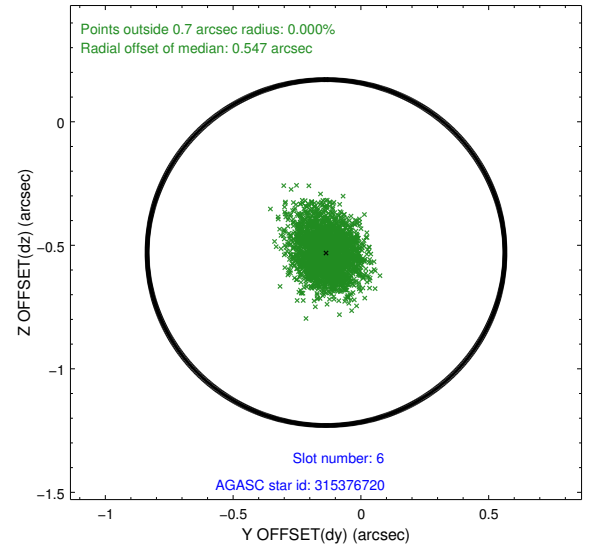
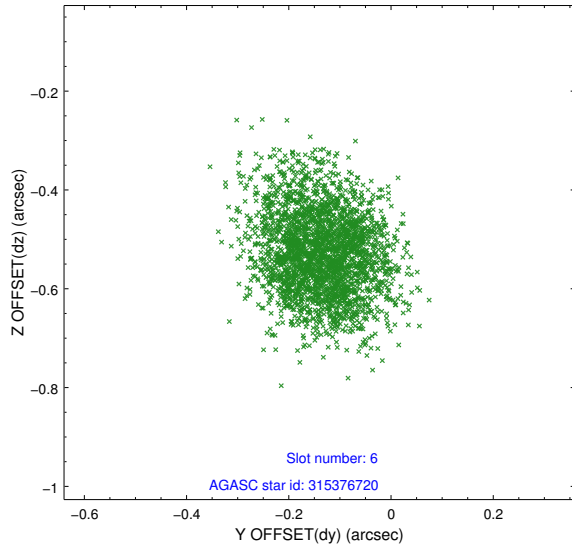
2.4.2 Slot 4



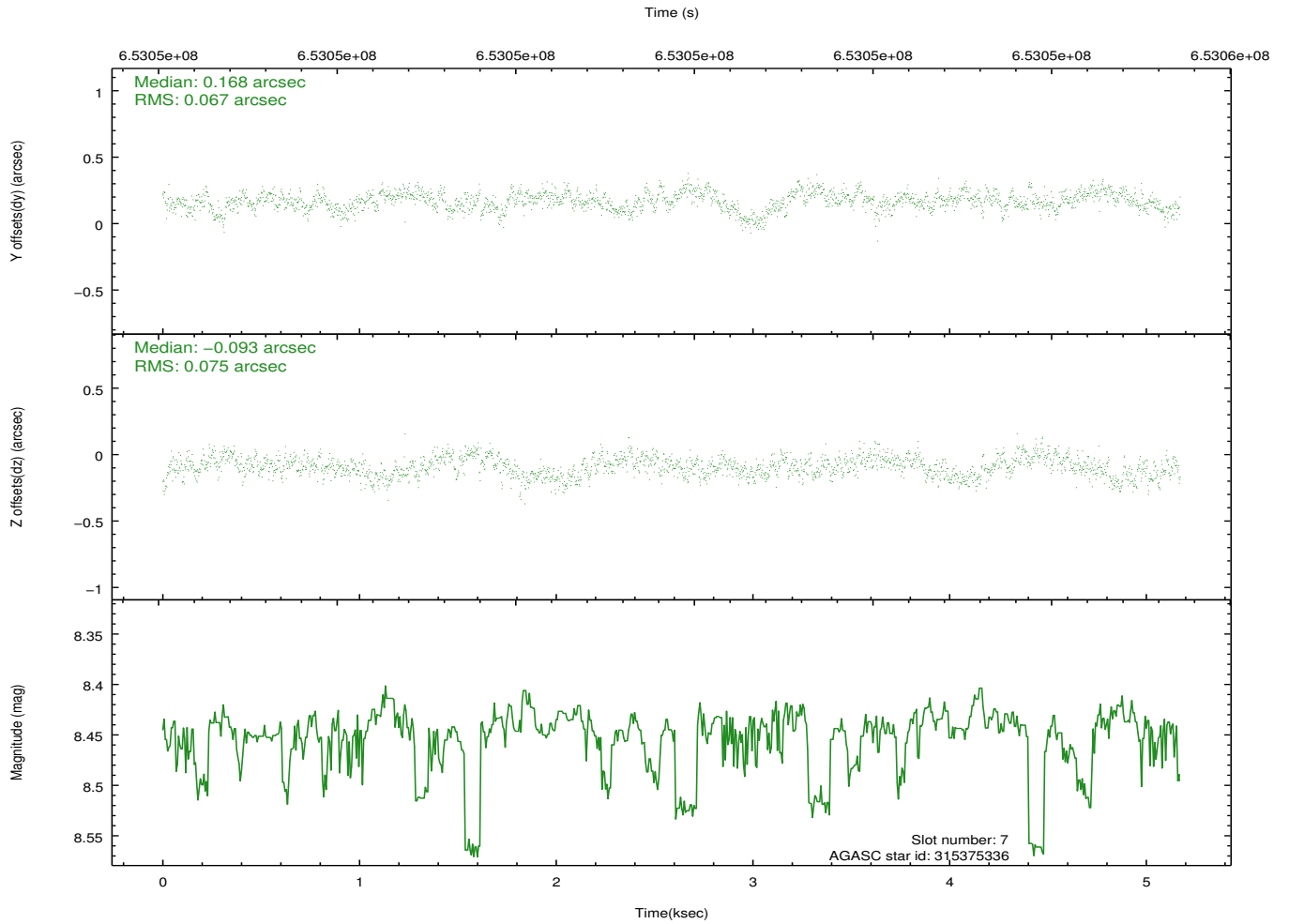
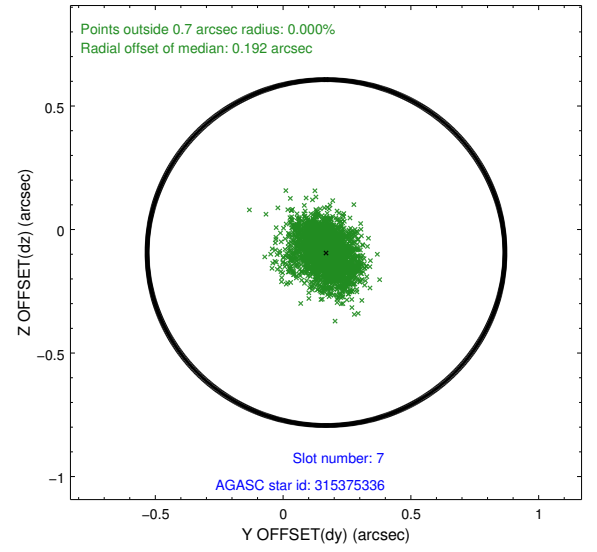
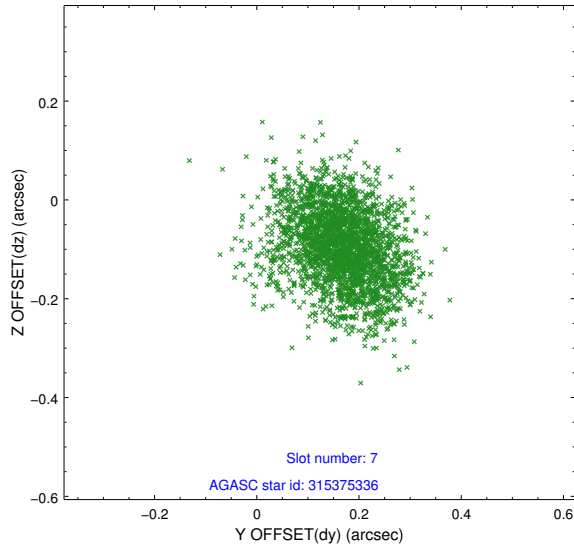
2.4.3 Slot 5



2.4.4 Slot 6

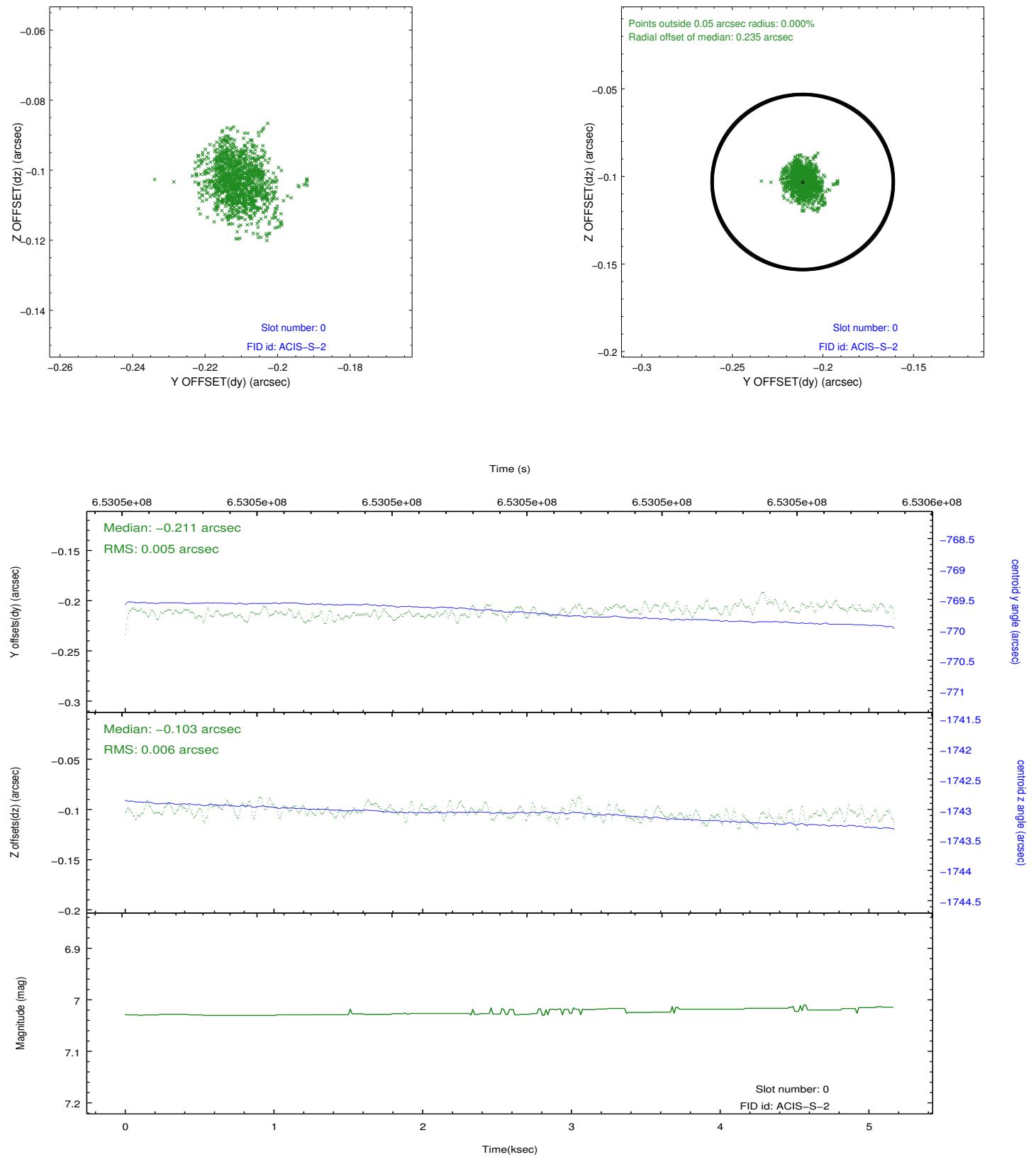


2.4.5 Slot 7

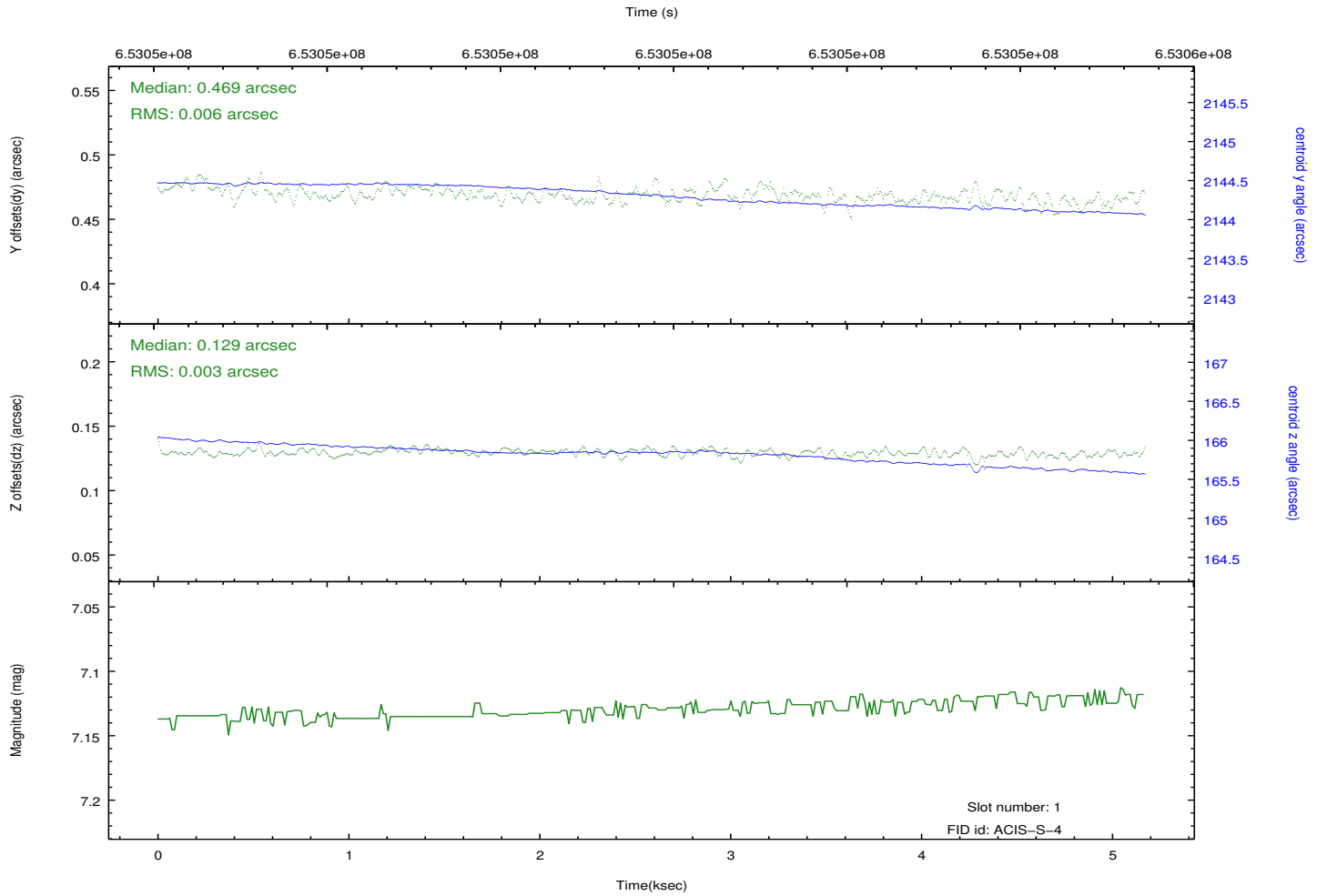
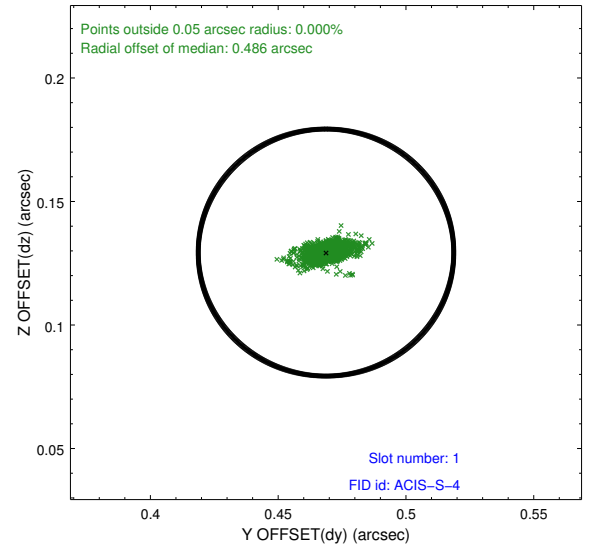
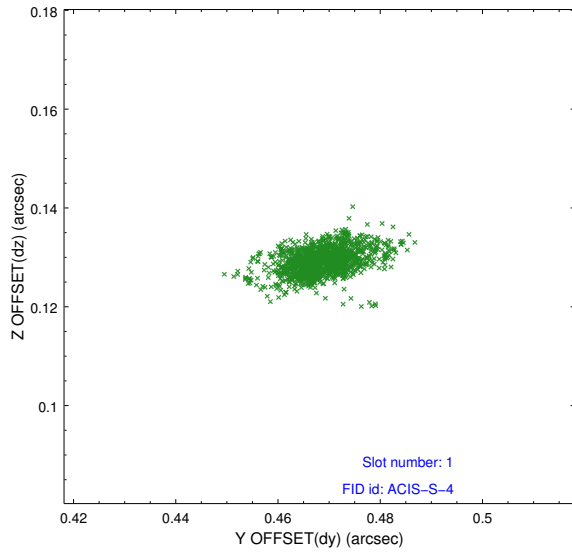


2.5 FID Slots

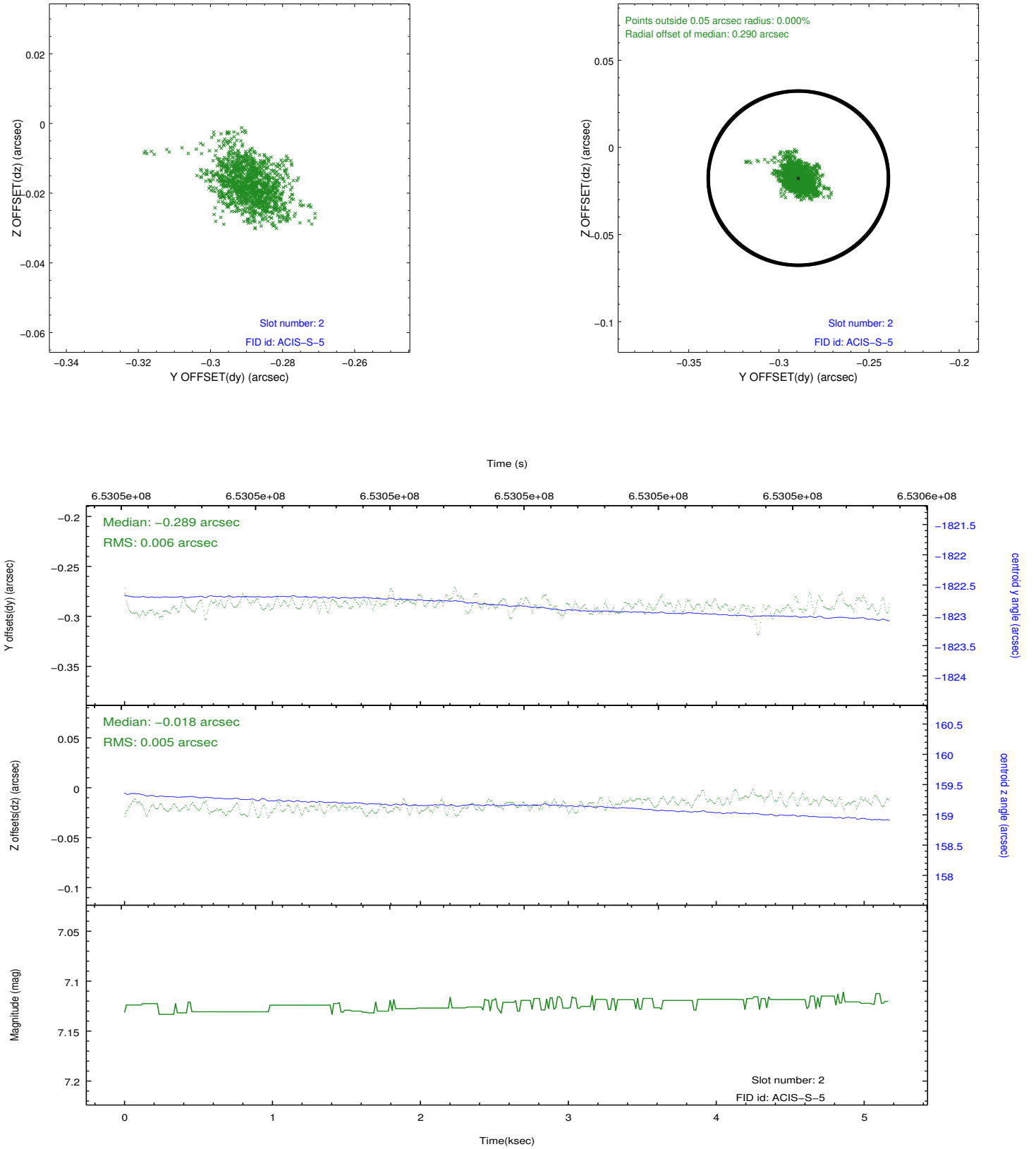
2.5.1 Slot 0



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)	2018.09.13
V&V Edition	2
V&V Disposition and Status	OK
V&V Charge Time	5.1739000399113

A.2 Comments

This is a moving target. Users will need to run `sso_freeze` or similar software to position the events in the reference frame of the target.