

V&V Reference Report

L2 ASCDS Version : 10.6.4

Observation 21721 - L2 Version 1
Chandra X-Ray Center

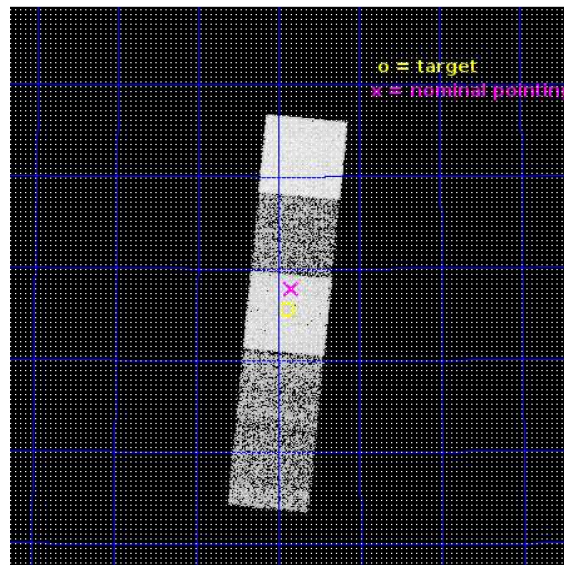
L2 Processing Date : Aug 27 2018

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1 Front

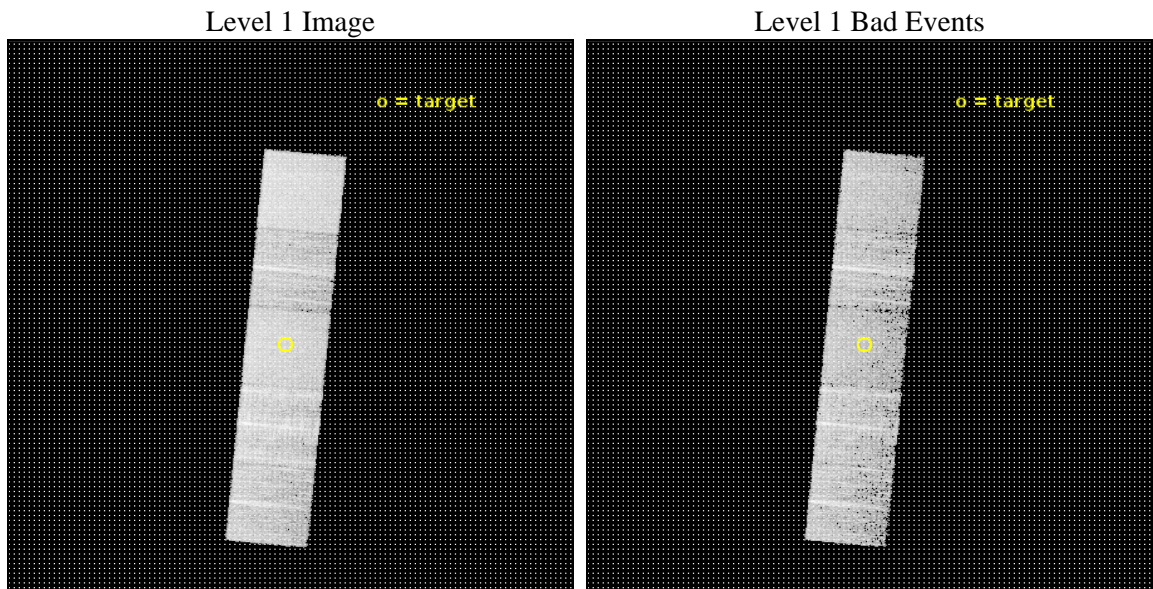
seq_num	100172	Sequence number
obs_id	21721	Observation id
title	Chandra Observations of the High-Heliospheric Latitude Comet 21P/Giacobini-Zinner	Proposal title
observer	Bradford Snios	Principal investigator
object	21P/Giacobini-Zinner	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	65.724639	Observer's specified target RA [deg]
dec_targ	55.426127	Observer's specified target Dec [deg]
ra_nom	65.710092238284	Nominal RA [deg]
dec_nom	55.463370295798	Nominal Dec [deg]
roll_nom	95.454230009914	Nominal Roll [deg]
revision	1	Processing version of data
ontime	6175.2000476122	Sum of GTIs [s]
liveltime	6094.516512874	Livetime [s]
ontime5	6175.2000476122	Sum of GTIs [s]
ontime6	6175.2000476122	Sum of GTIs [s]
ontime7	6175.2000476122	Sum of GTIs [s]
ontime8	6175.2000476122	Sum of GTIs [s]
ontime9	6175.2000476122	Sum of GTIs [s]
l2events	75145	Number of level 2 events



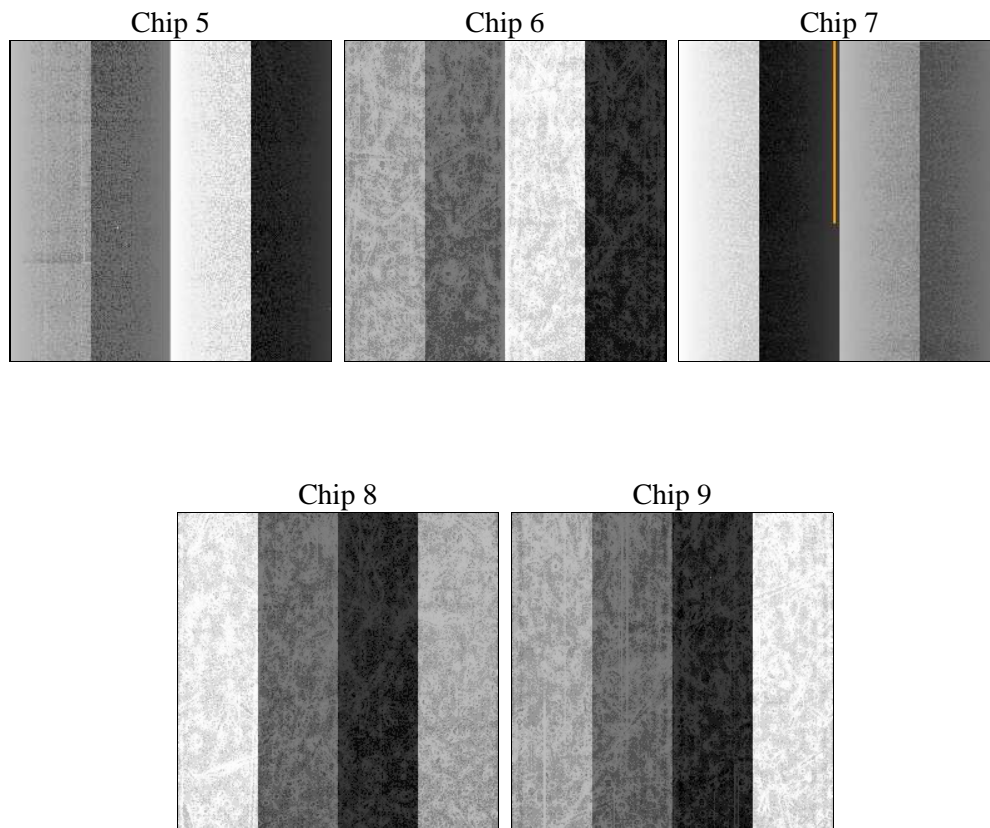
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	6000.000000	[s] Scheduled observation exposure time
ascdsver	10.6.4	Processing system revision	ontime	6175.2000476122	Sum of GTIs [s]
caldbver	4.7.8	 	ontime5	6175.2000476122	Sum of GTIs [s]
date	2018-08-27T05:22:52	Date and time of file creation	ontime6	6175.2000476122	Sum of GTIs [s]
revision	1	Processing version of data	ontime7	6175.2000476122	Sum of GTIs [s]
			ontime8	6175.2000476122	Sum of GTIs [s]
			ontime9	6175.2000476122	Sum of GTIs [s]
			l1events	303322	Number of level 1 events

2.1.4 Events

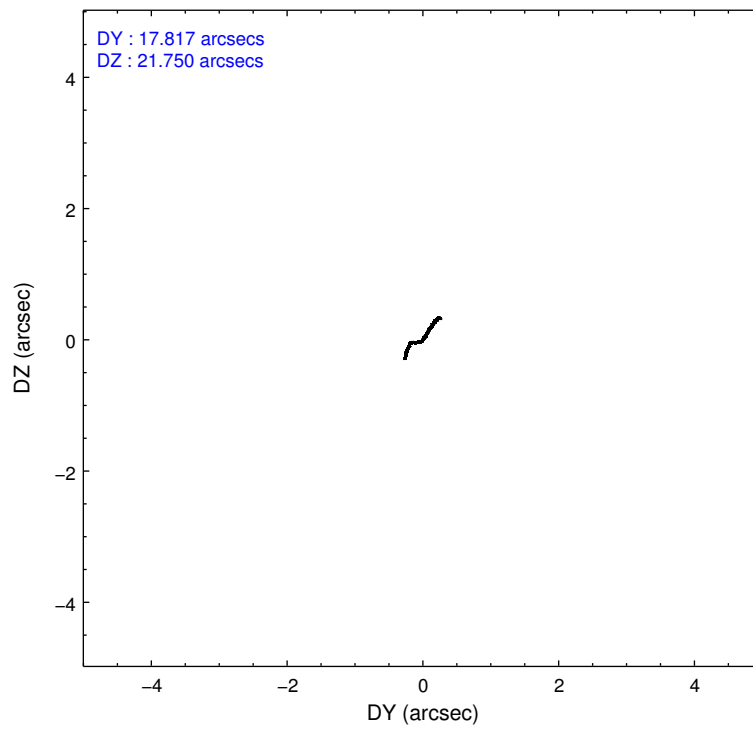
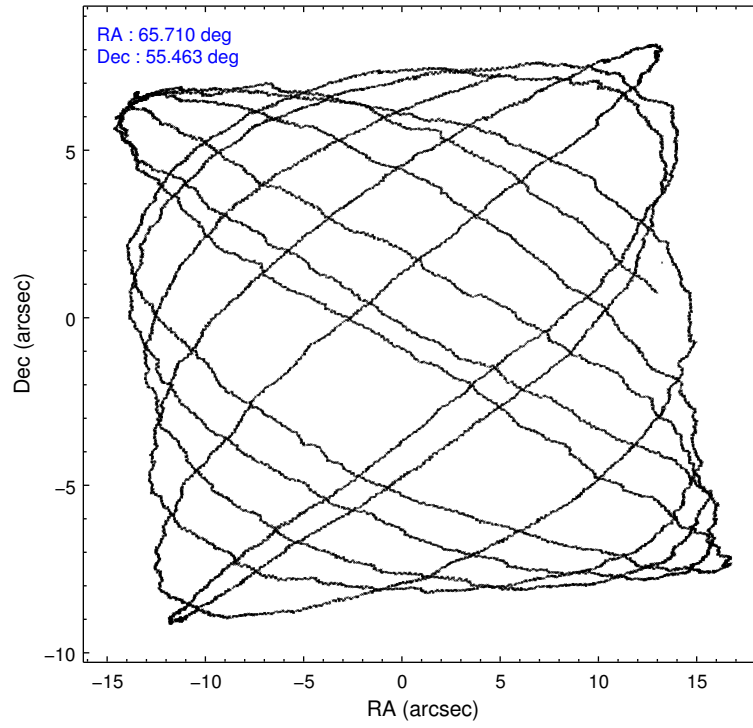
	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	76423	49139	62989	66469	48302
rejected events	41643	43713	36658	49223	42598
rejected %	54%	88%	58%	74%	88%

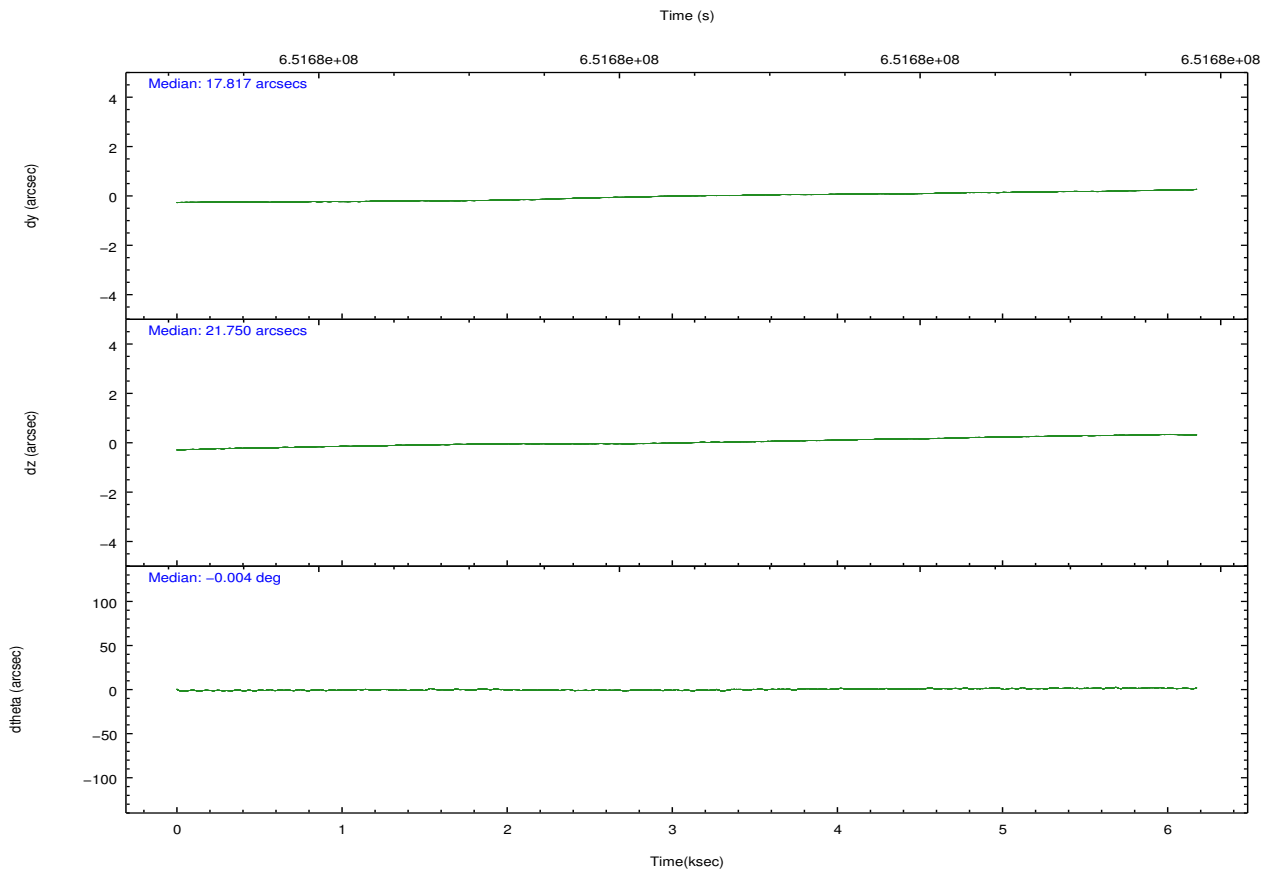
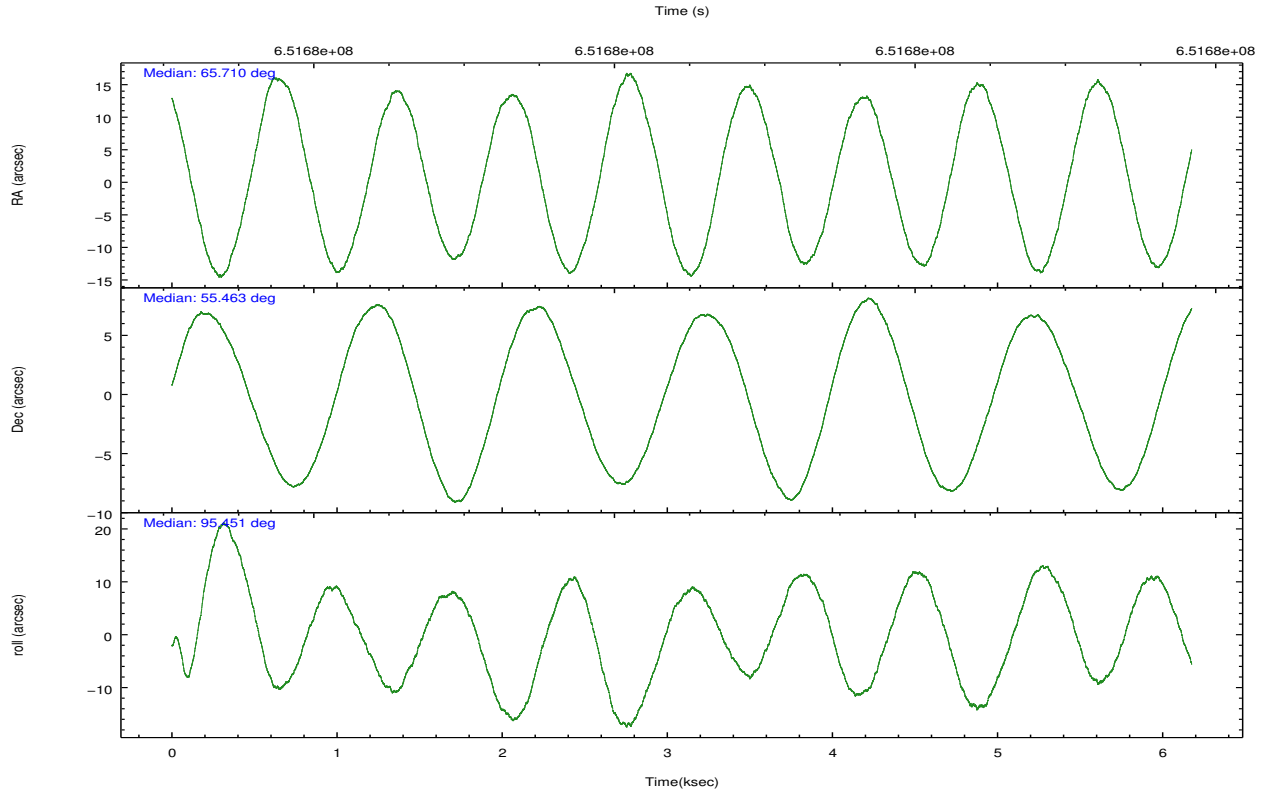
	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	2013	1924	2688	5360	2090
	2%	3%	4%	8%	4%
grade 1 events	159	32	94	54	27
	0%	0%	0%	0%	0%
grade 2 events	11693	1402	6016	4405	1378
	15%	2%	9%	6%	2%
grade 3 events	1165	539	2073	1874	612
	1%	1%	3%	2%	1%
grade 4 events	1239	537	2113	1758	591
	1%	1%	3%	2%	1%
grade 5 events	5505	2367	6291	3504	2615
	7%	4%	9%	5%	5%
grade 6 events	20636	1331	14910	4836	1336
	27%	2%	23%	7%	2%
grade 7 events	34013	41007	28804	44678	39653
	44%	83%	45%	67%	82%

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	65.738784	65.71009223828409	CCD I2 on	N	N
[deg] Pointing Dec	55.441188	55.46337029579789	CCD I3 on	N	N
[deg] Pointing Roll	95.273967	95.45423000991389	CCD S0 on	N	N
[s] Window start time (MET)	651196869.184000	651196869.184000	CCD S1 on	O1	Y
[s] Window stop time (MET)	655776069.184000	655776069.184000	CCD S2 on	Y	Y
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S3 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S4 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S5 on	O2	Y
[mm] SIM translation stage offset	0	0.00754346686406393	Number of optional ACIS chips dropped	0	0
[s] Observation start time (MET)	651677556.184000	651677180.16453	On-chip summing requested	N	N
Observation start date	2018-08-26T13:31:27	2018-08-26T13:26:20	Subarray requested	NONE	NONE
[s] Observation end time (MET)	651683556.184000	651683690.45242	Alternating exposures requested	N	N
Observation end date	2018-08-26T15:11:27	2018-08-26T15:14:50	[s] Primary exposure time	0.000000	3.1
Read mode	TIMED	TIMED			

2.3 Aspect





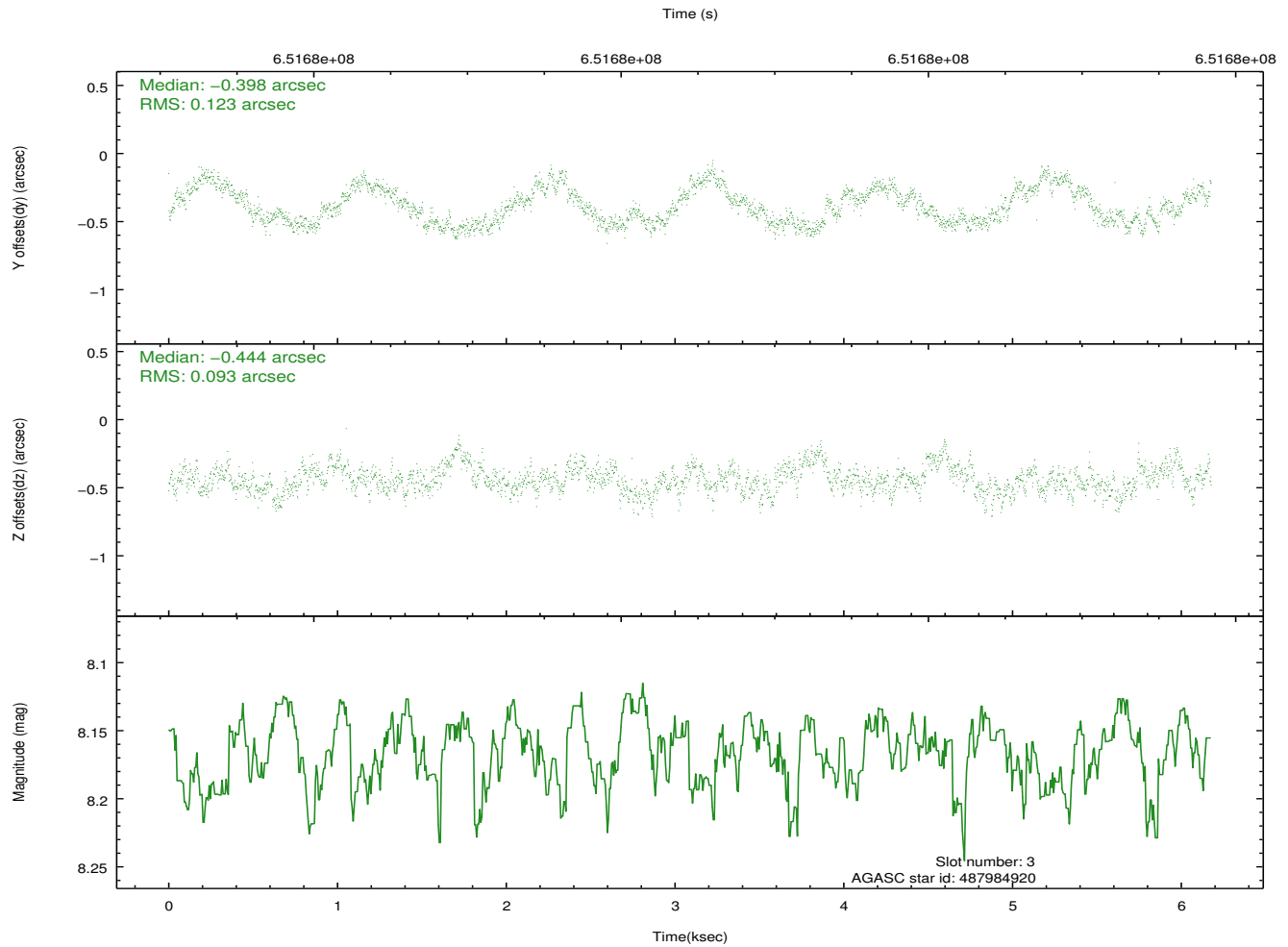
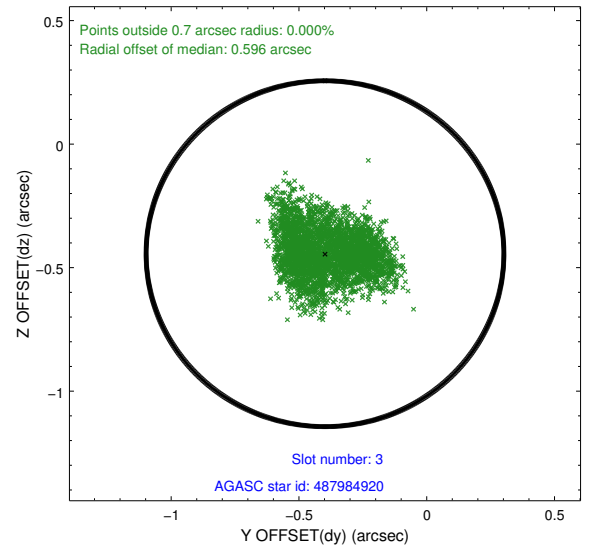
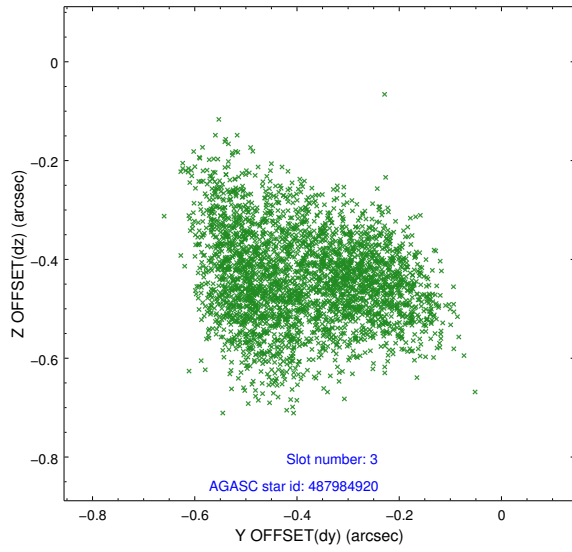
Slot Statistics

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	7.01	1507	1.000	-0.197	-0.115	0.012	0.019	0.000000	0.000000	-771.02	-1743
1	FID		ACIS-S-4	7.10	1506	1.000	0.460	0.126	0.007	0.013	0.000000	0.000000	2142.46	164
2	FID		ACIS-S-5	7.10	1507	1.000	-0.295	-0.002	0.012	0.018	0.000000	0.000000	-1822.75	158
3	GUIDE	used	487984920	8.17	3012	1.000	-0.398	-0.444	0.168	0.253	65.279802	55.505250	318.61	909
4	GUIDE	used	487986504	8.73	3014	1.000	-0.105	0.177	0.161	0.255	66.270060	56.088835	2228.84	-1277
5	GUIDE	used	487987528	8.16	3011	1.000	-0.277	0.054	0.125	0.199	66.082375	55.991093	1910.04	-871
6	GUIDE	used	487987840	9.56	3007	1.000	0.607	0.427	0.188	0.299	66.389470	54.818703	-2347.97	-1138
7	GUIDE	used	487988744	9.74	3001	1.000	0.151	-0.231	0.262	0.413	65.399717	55.288051	-484.39	741

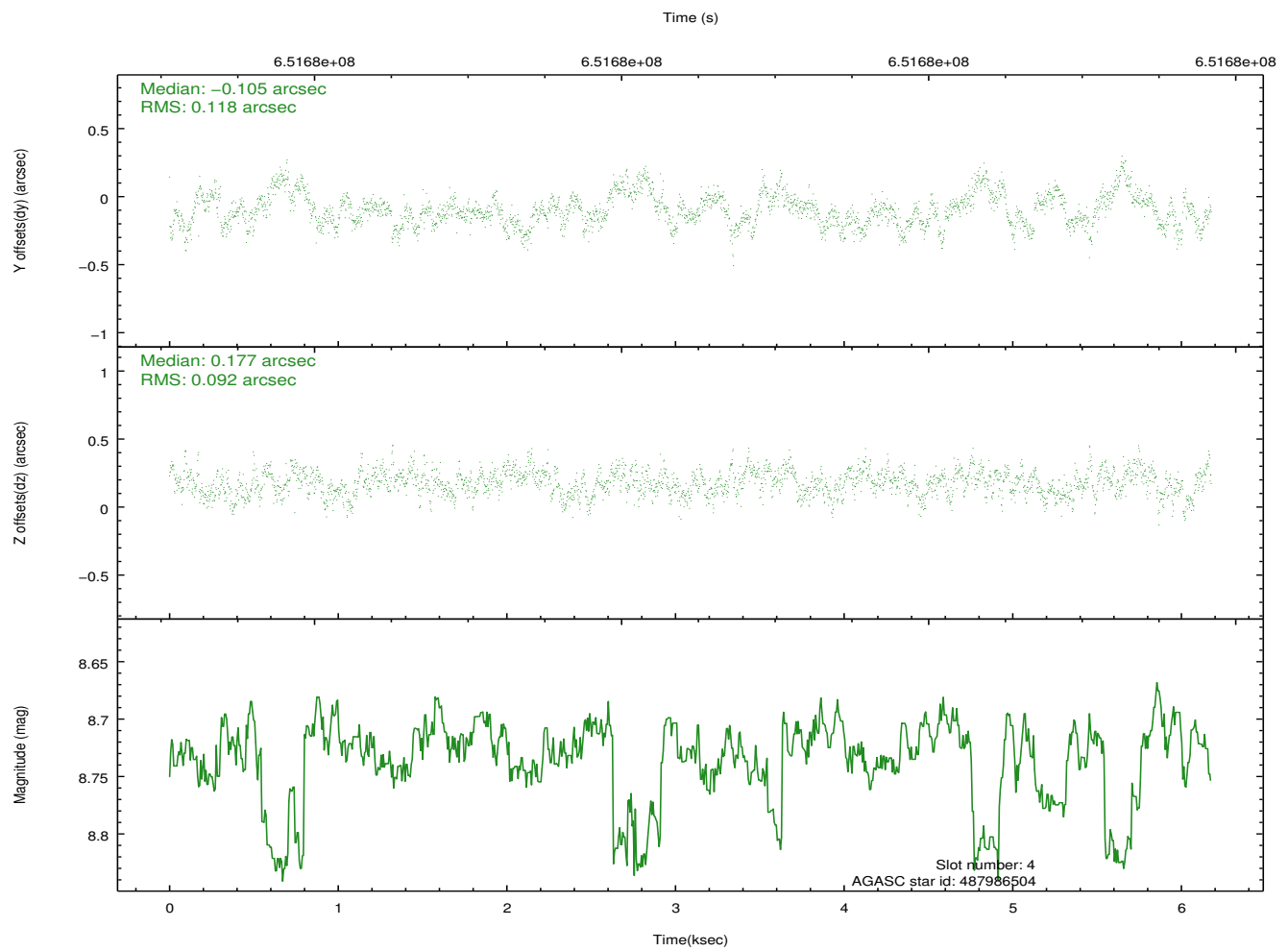
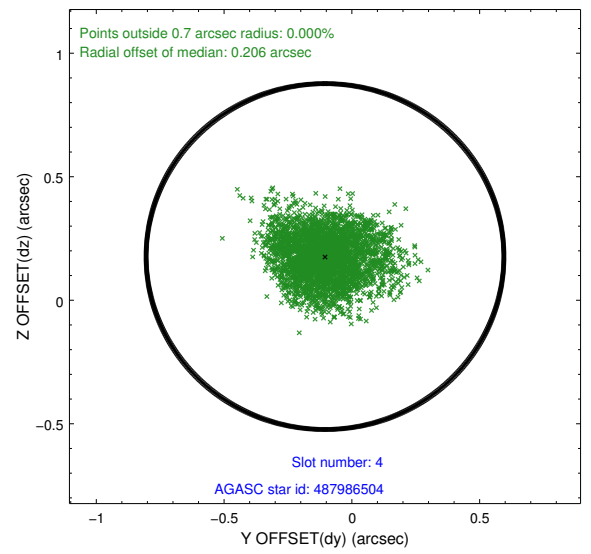
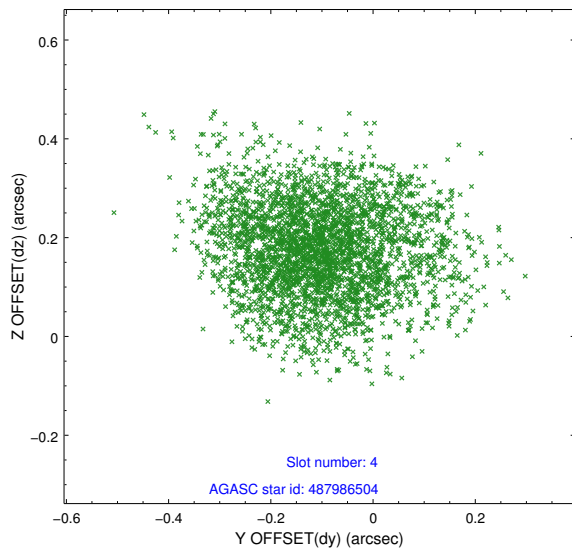
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2.4 Star Slots

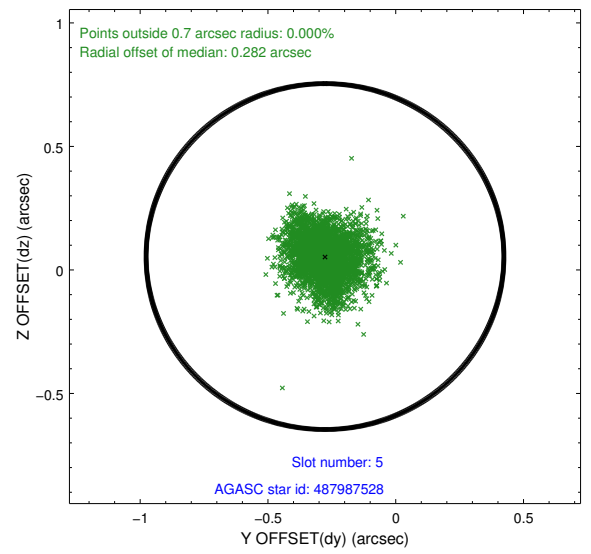
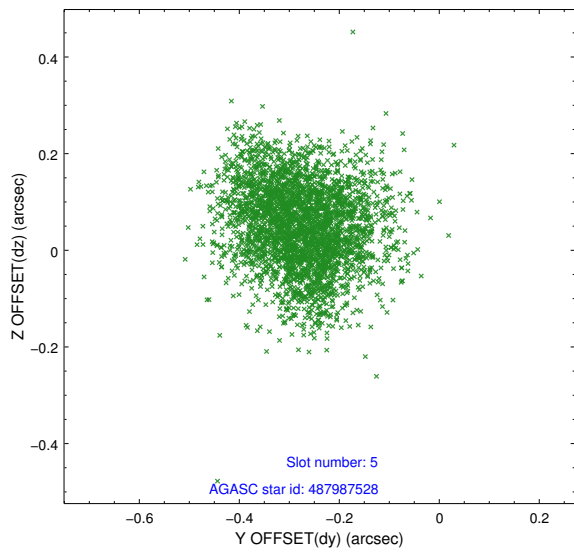
2.4.1 Slot 3



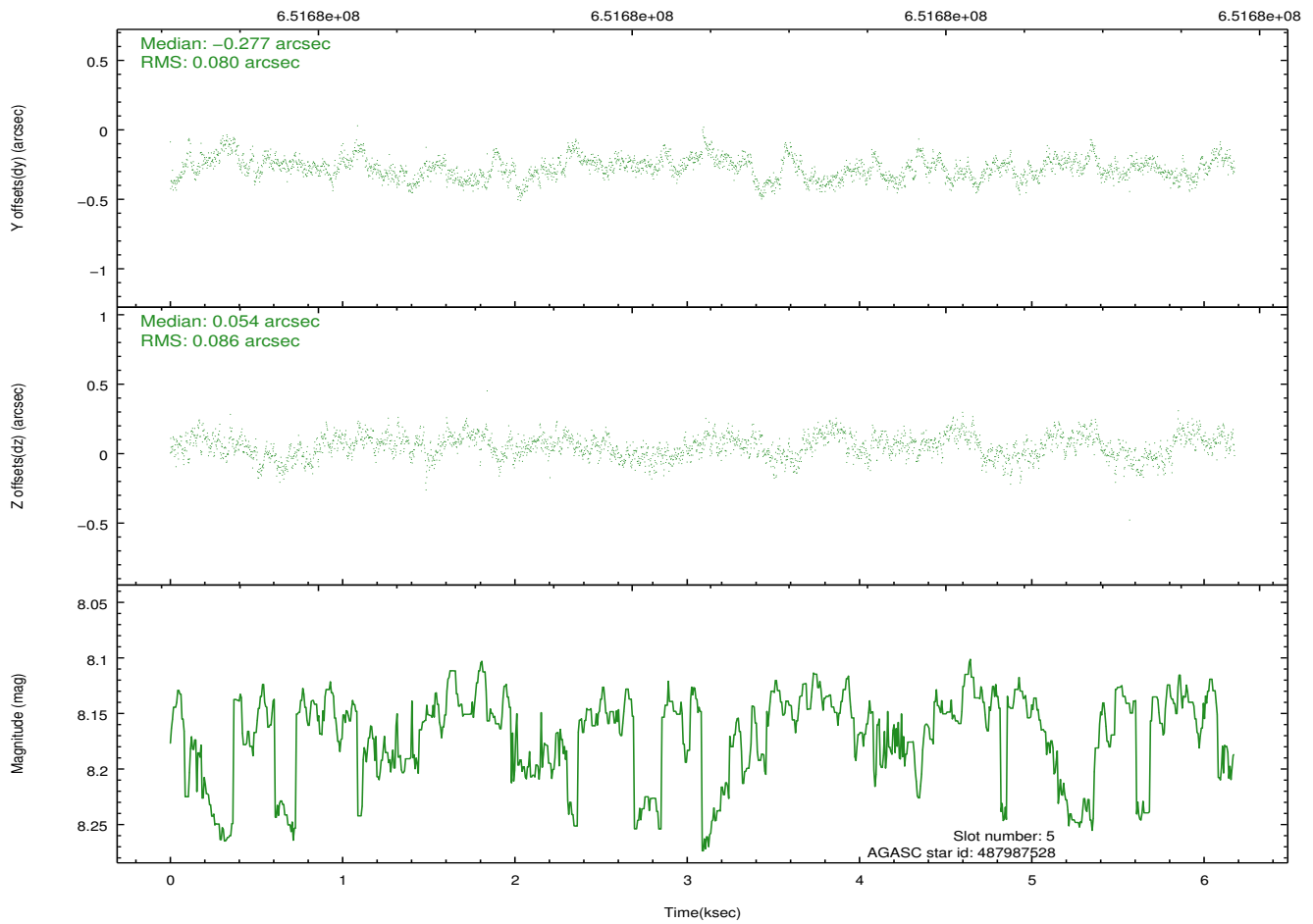
2.4.2 Slot 4



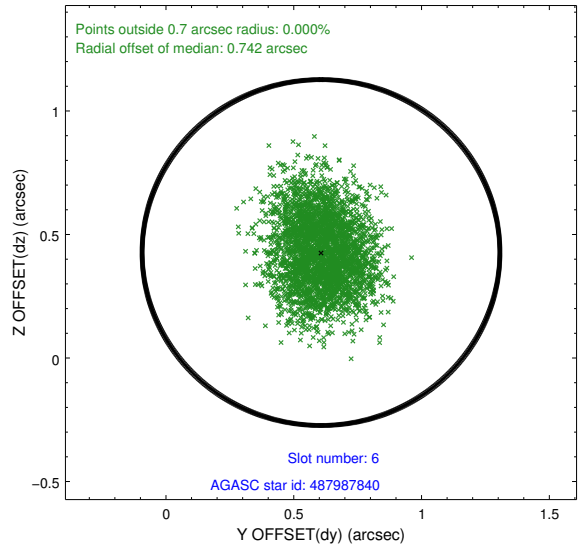
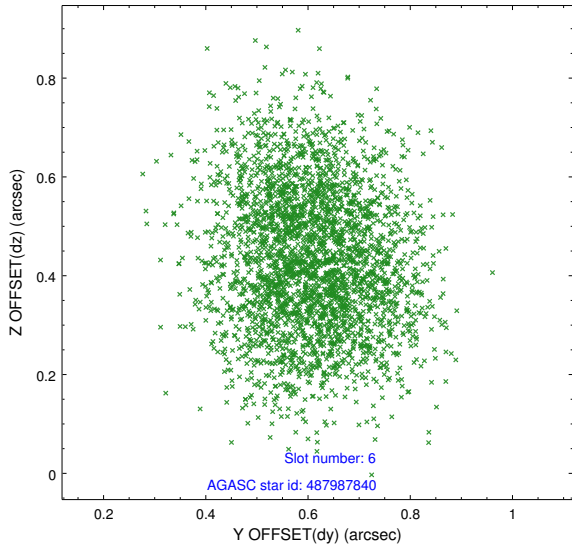
2.4.3 Slot 5



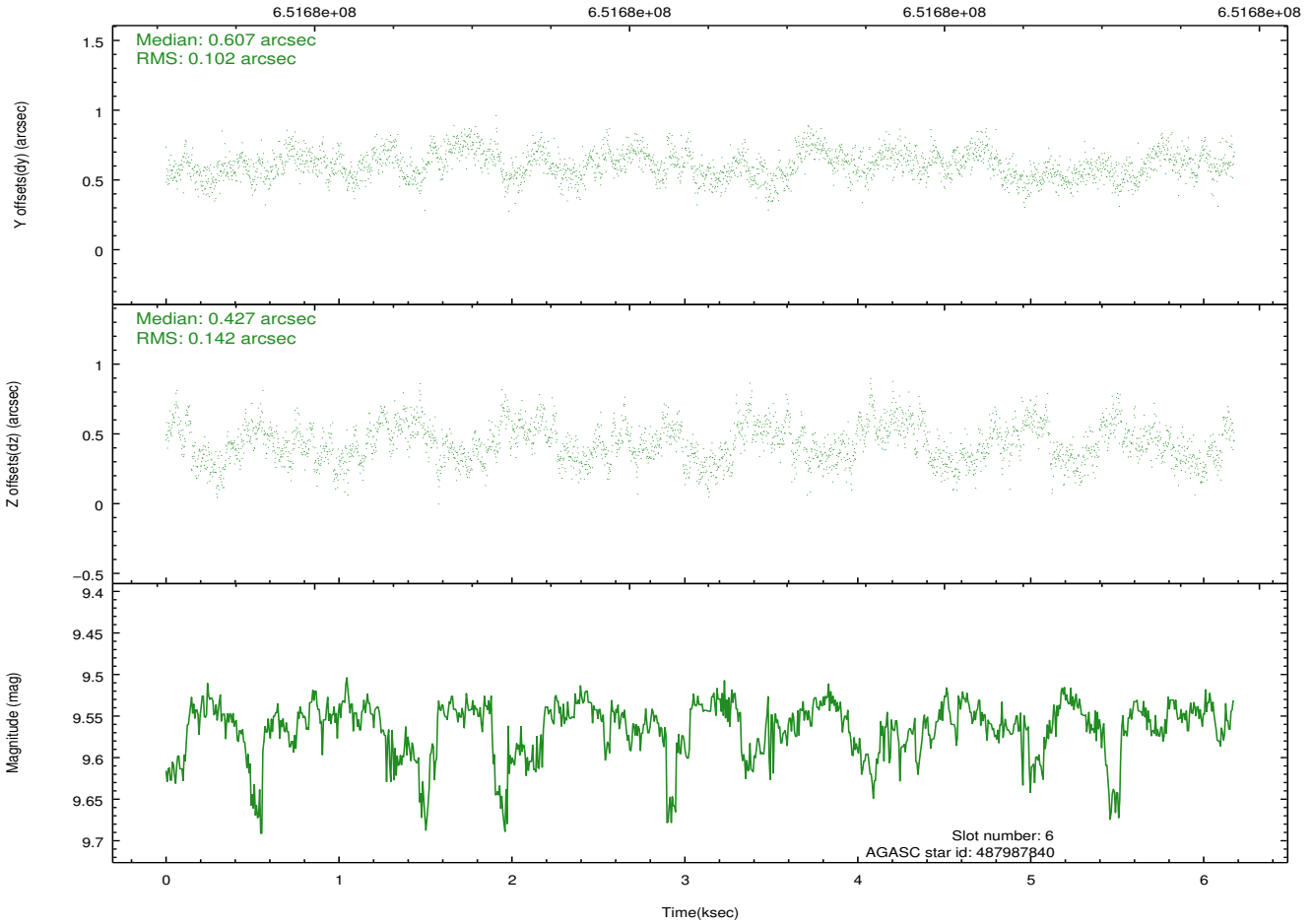
Time (s)



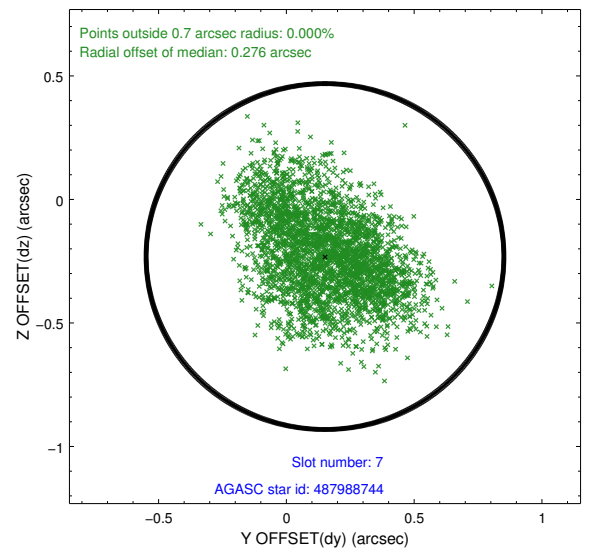
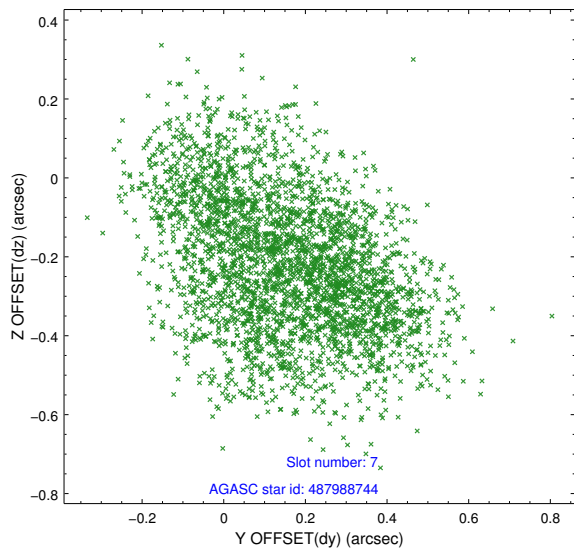
2.4.4 Slot 6



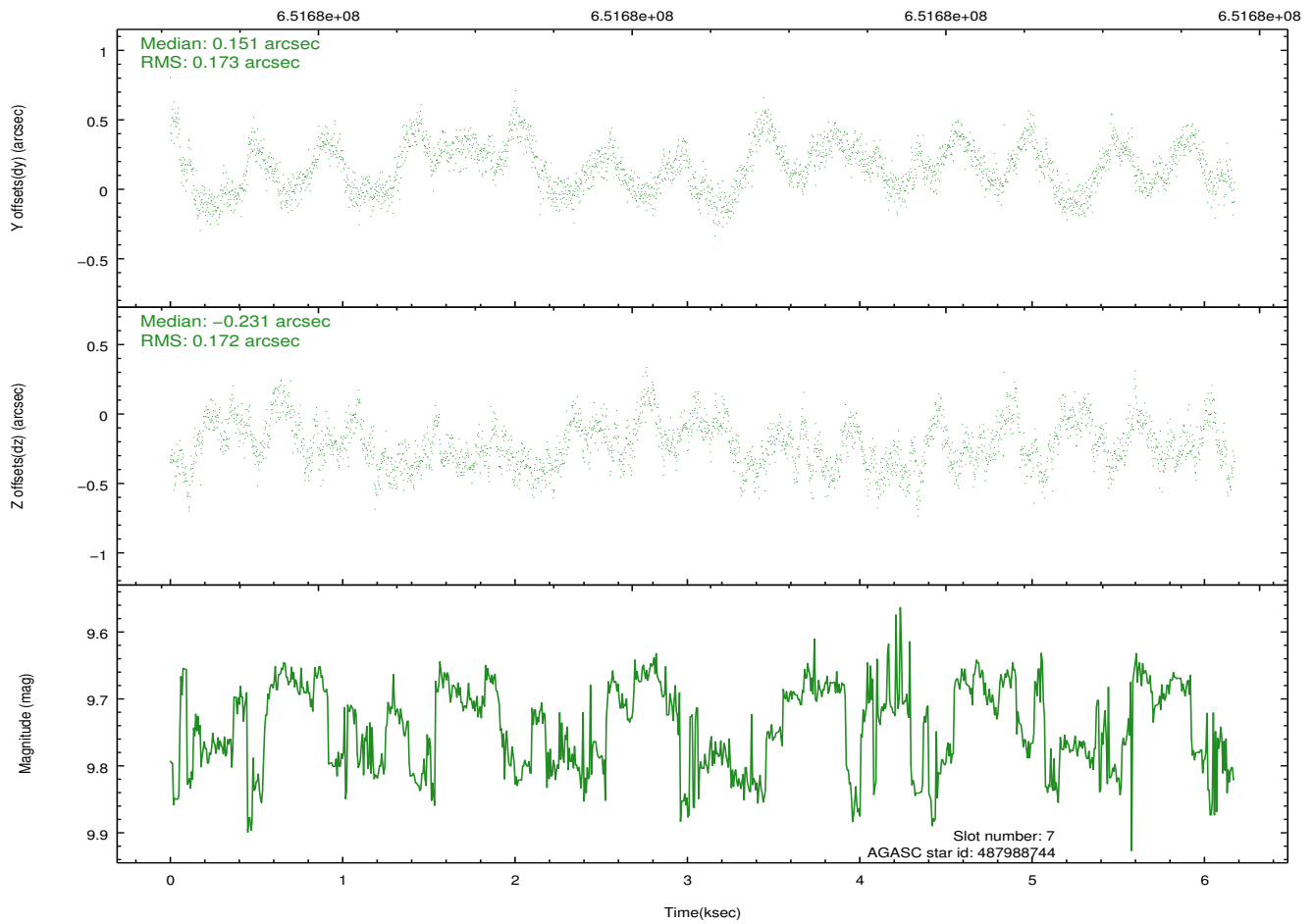
Time (s)



2.4.5 Slot 7

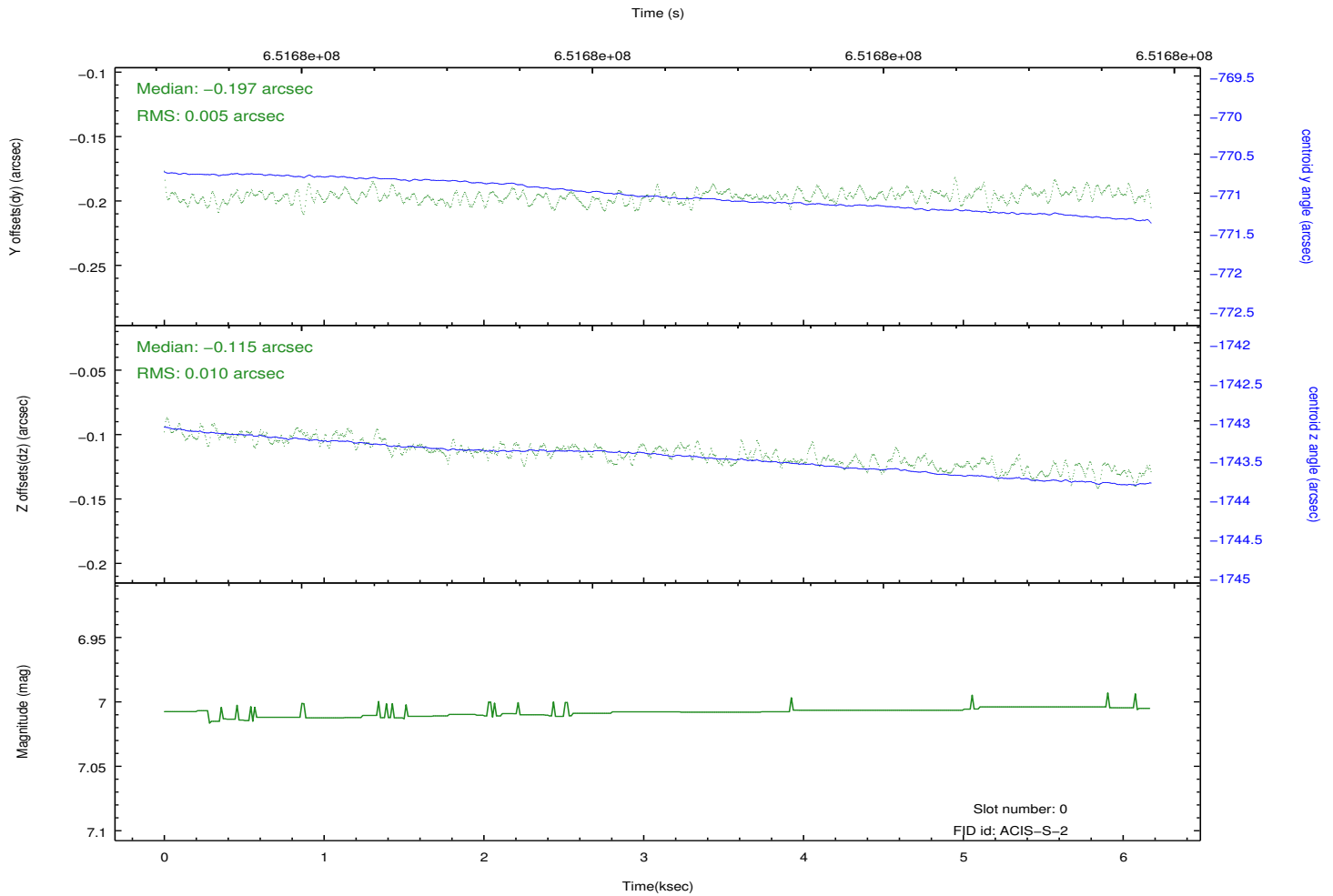
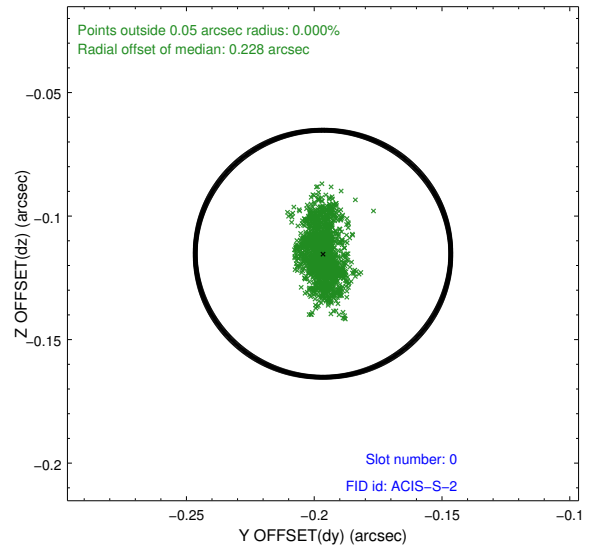
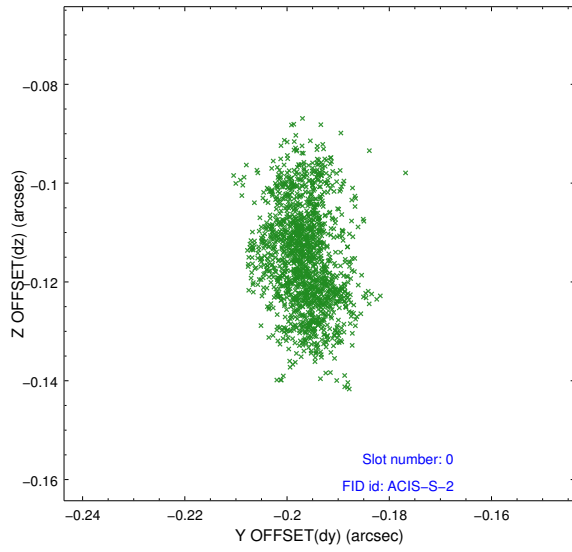


Time (s)

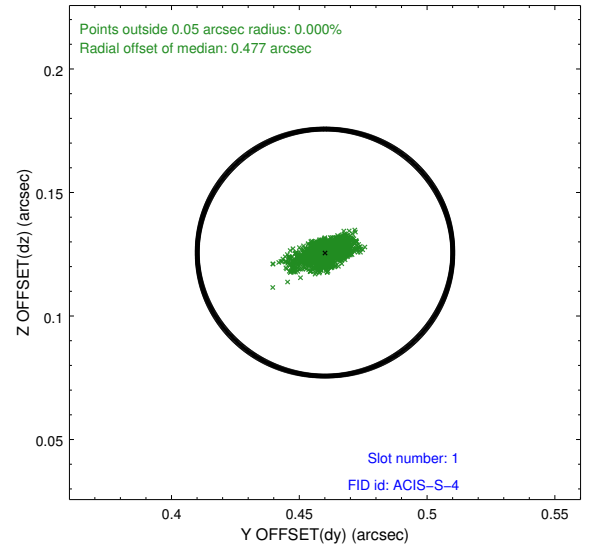
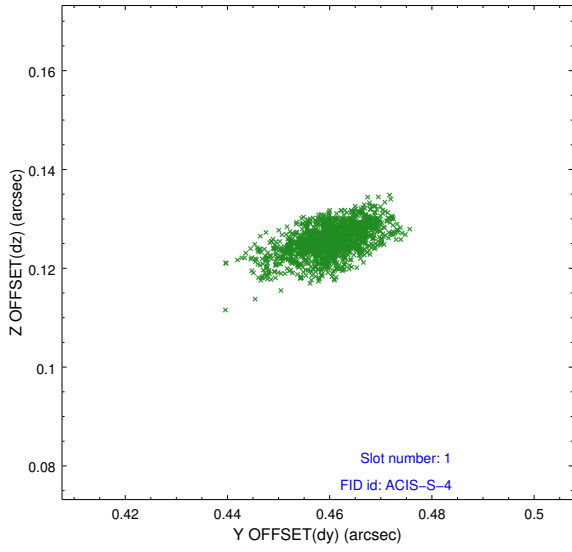


2.5 FID Slots

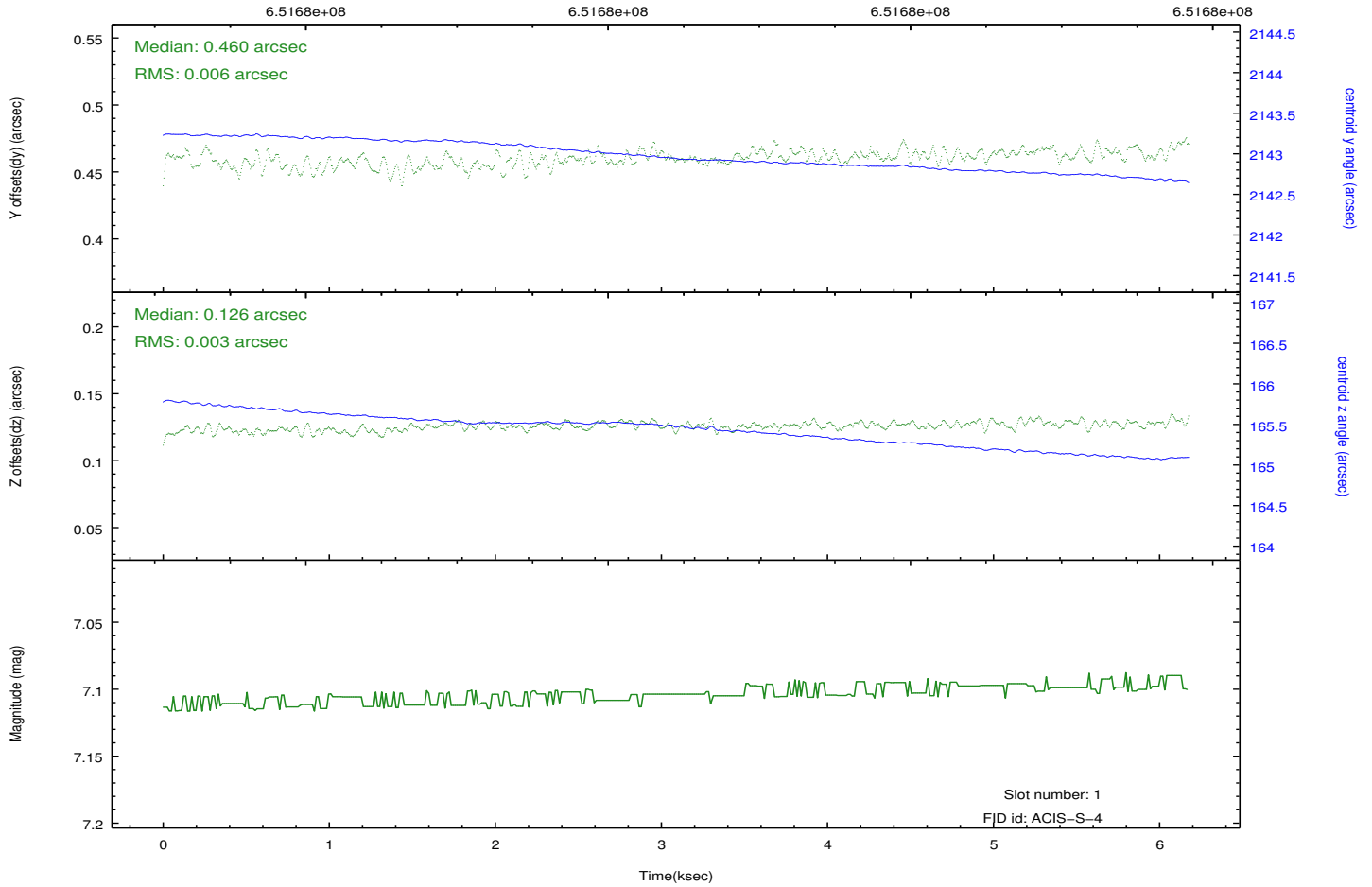
2.5.1 Slot 0



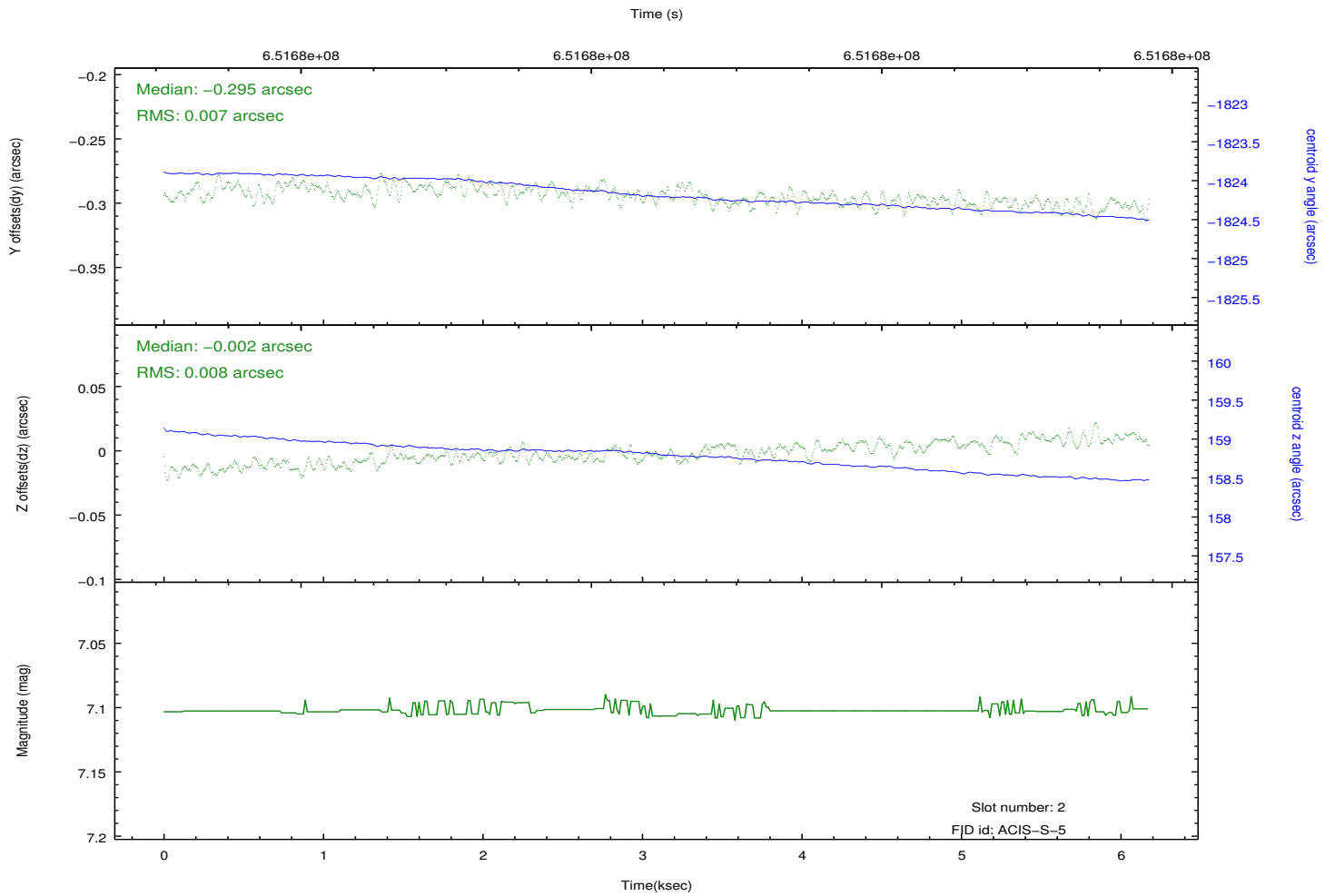
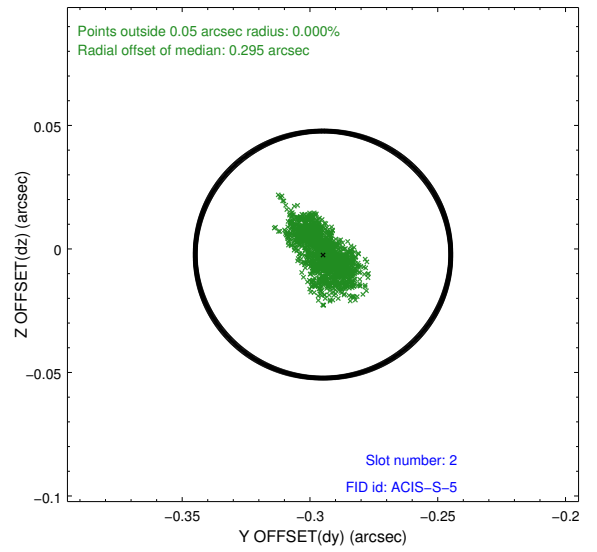
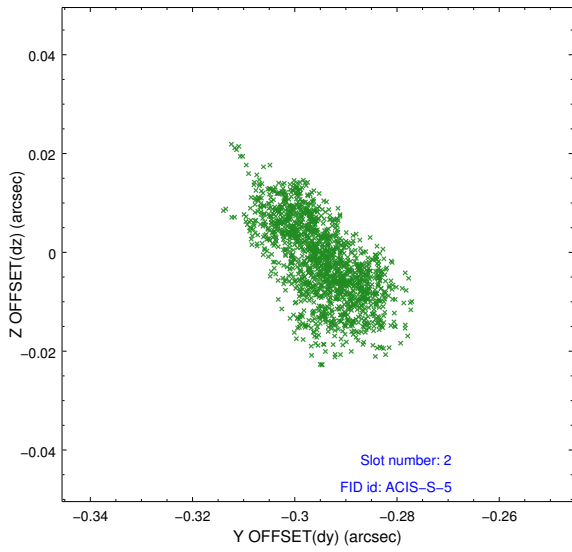
2.5.2 Slot 1



Time (s)



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2018.08.27
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	6.1752000476122

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.