

V&V Reference Report

L2 ASCDS Version : 10.5.2

Observation 19386 - L2 Version 2
Chandra X-Ray Center

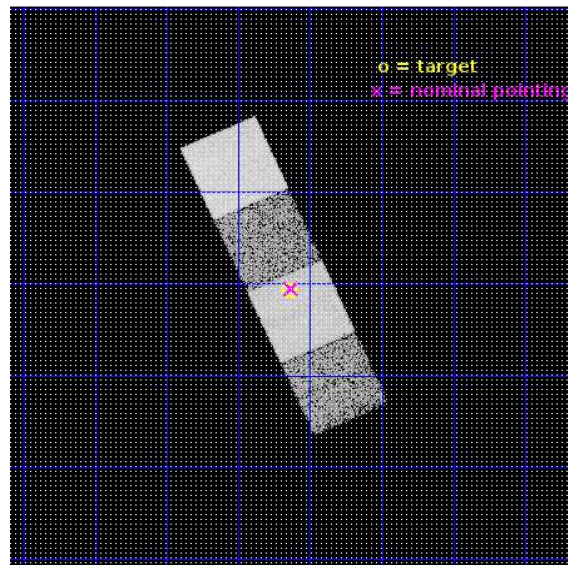
L2 Processing Date : Dec 21 2016

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1 Front

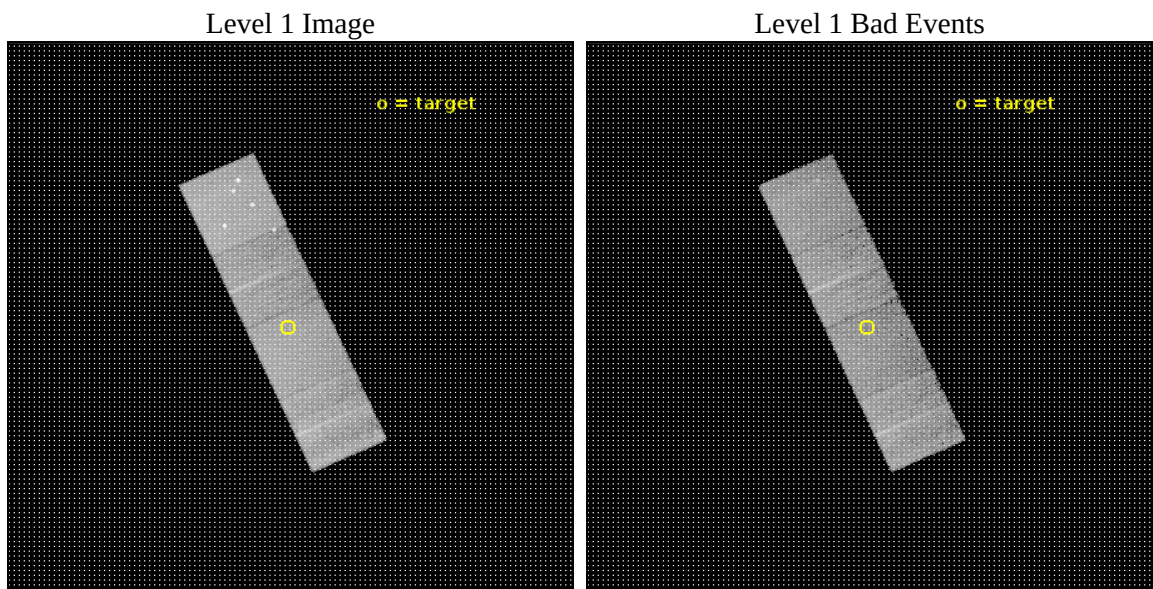
seq_num	601343	Sequence number
obs_id	19386	Observation id
title	Spiral galaxies of the Virgo cluster	Proposal title
observer	Roberto Soria	Principal investigator
object	NGC 4527	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	188.535	Observer's specified target RA [deg]
dec_targ	2.653667	Observer's specified target Dec [deg]
ra_nom	188.53269423116	Nominal RA [deg]
dec_nom	2.6578756929294	Nominal Dec [deg]
roll_nom	65.817996015681	Nominal Roll [deg]
revision	2	Processing version of data
ontime	10062.220612288	Sum of GTIs [s]
livetime	9930.7502922889	Livetime [s]
ontime5	10062.179572344	Sum of GTIs [s]
ontime6	10062.138532281	Sum of GTIs [s]
ontime7	10062.220612288	Sum of GTIs [s]
ontime8	10062.097492337	Sum of GTIs [s]
l2events	106287	Number of level 2 events



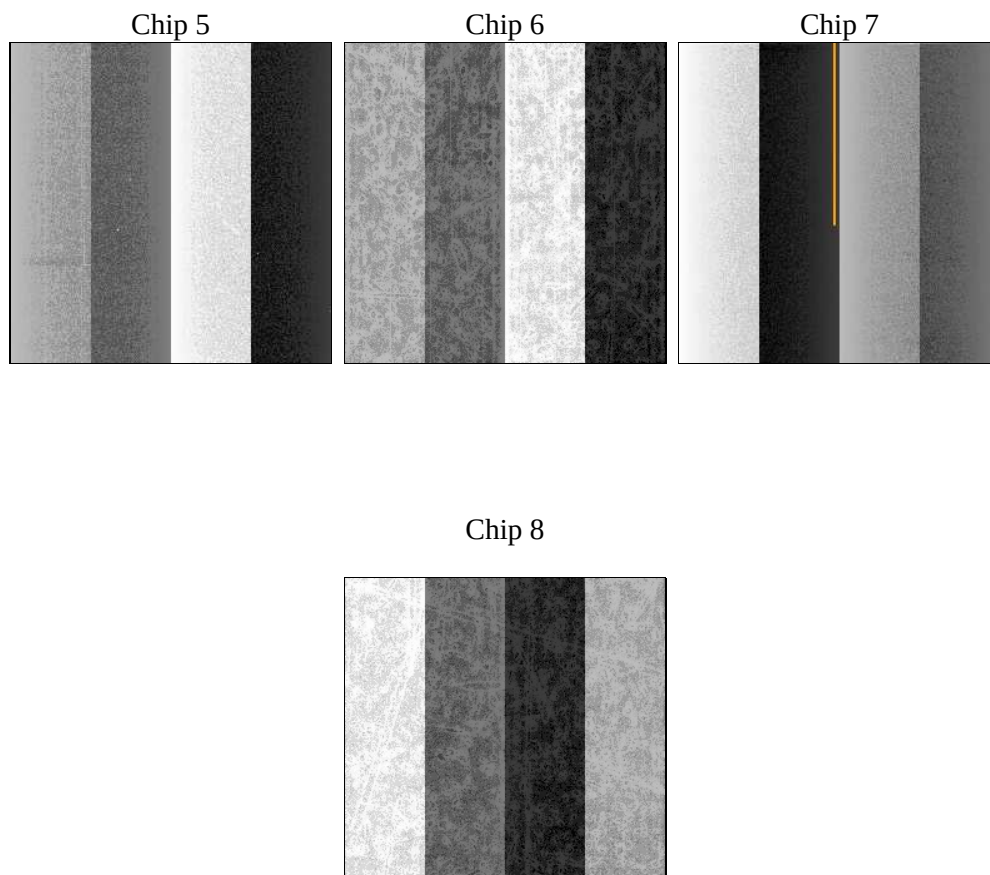
2 OBI

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	10.5.2	Processing system revision	ontime	10062.220612288	Sum of GTIs [s]
caldsver	4.7.3	 	ontime5	10062.179572344	Sum of GTIs [s]
date	2016-12-21T14:11:10	Date and time of file creation	ontime6	10062.138532281	Sum of GTIs [s]
revision	2	Processing version of data	ontime7	10062.220612288	Sum of GTIs [s]
			ontime8	10062.097492337	Sum of GTIs [s]
			l1events	386344	Number of level 1 events

2.1.4 Events

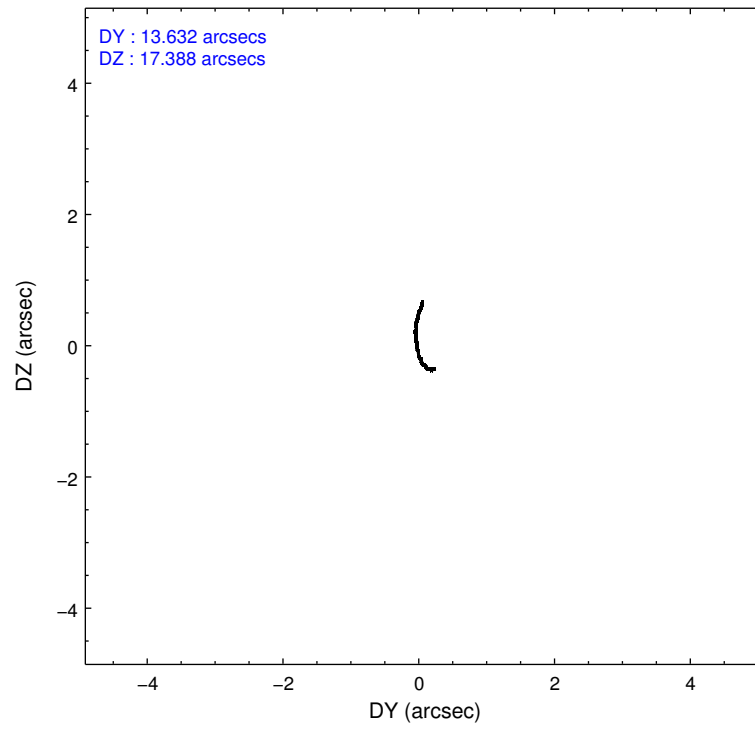
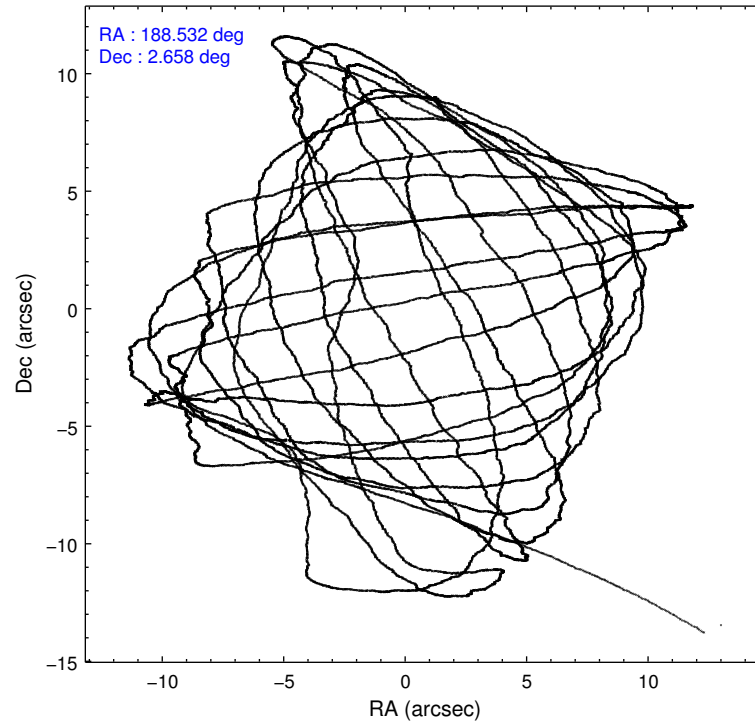
	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	123443	75120	92326	95455
rejected events	58486	66794	52074	70788
rejected %	47%	88%	56%	74%

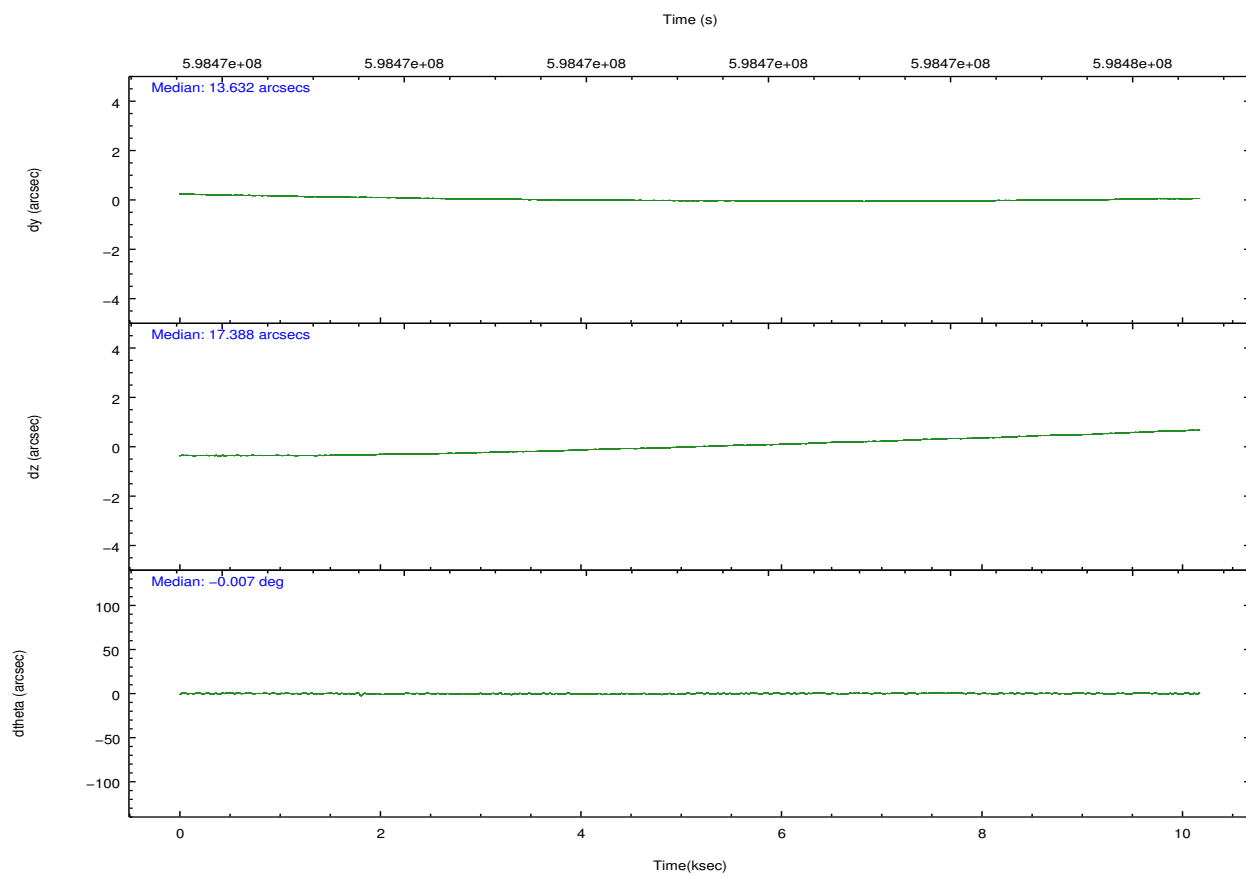
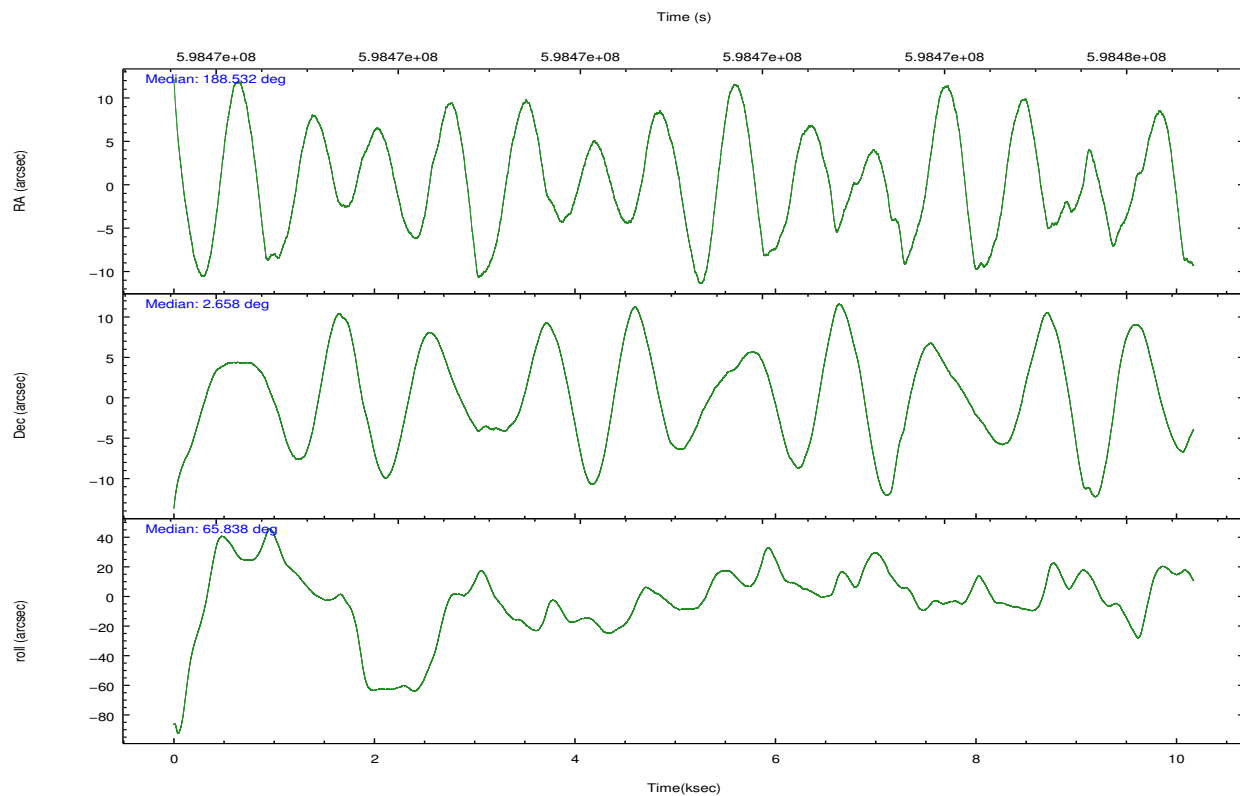
	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	11493	2742	3390	6825
	9%	3%	3%	7%
grade 1 events	462	45	124	77
	0%	0%	0%	0%
grade 2 events	19206	1934	8654	6037
	15%	2%	9%	6%
grade 3 events	2127	851	3161	2573
	1%	1%	3%	2%
grade 4 events	1958	786	3113	2504
	1%	1%	3%	2%
grade 5 events	7890	3349	8902	5104
	6%	4%	9%	5%
grade 6 events	30207	2020	21958	6735
	24%	2%	23%	7%
grade 7 events	50100	63393	43024	65600
	40%	84%	46%	68%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-5678	ACIS-5678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	188.535852	188.5326942311553	Subarray requested	NONE	NONE
[deg] Pointing Dec	2.630648	2.657875692929408	Alternating exposures requested	N	N
[deg] Pointing Roll	65.661306	65.8179960156813	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	598466211.184000	598465115.8968101			
Observation start date	2016-12-18T16:35:43	2016-12-18T16:18:35			
[s] Observation end time (MET)	598476211.184000	598477046.385			
Observation end date	2016-12-18T19:22:23	2016-12-18T19:37:26			
Read mode	TIMED	TIMED			

2.3 Aspect



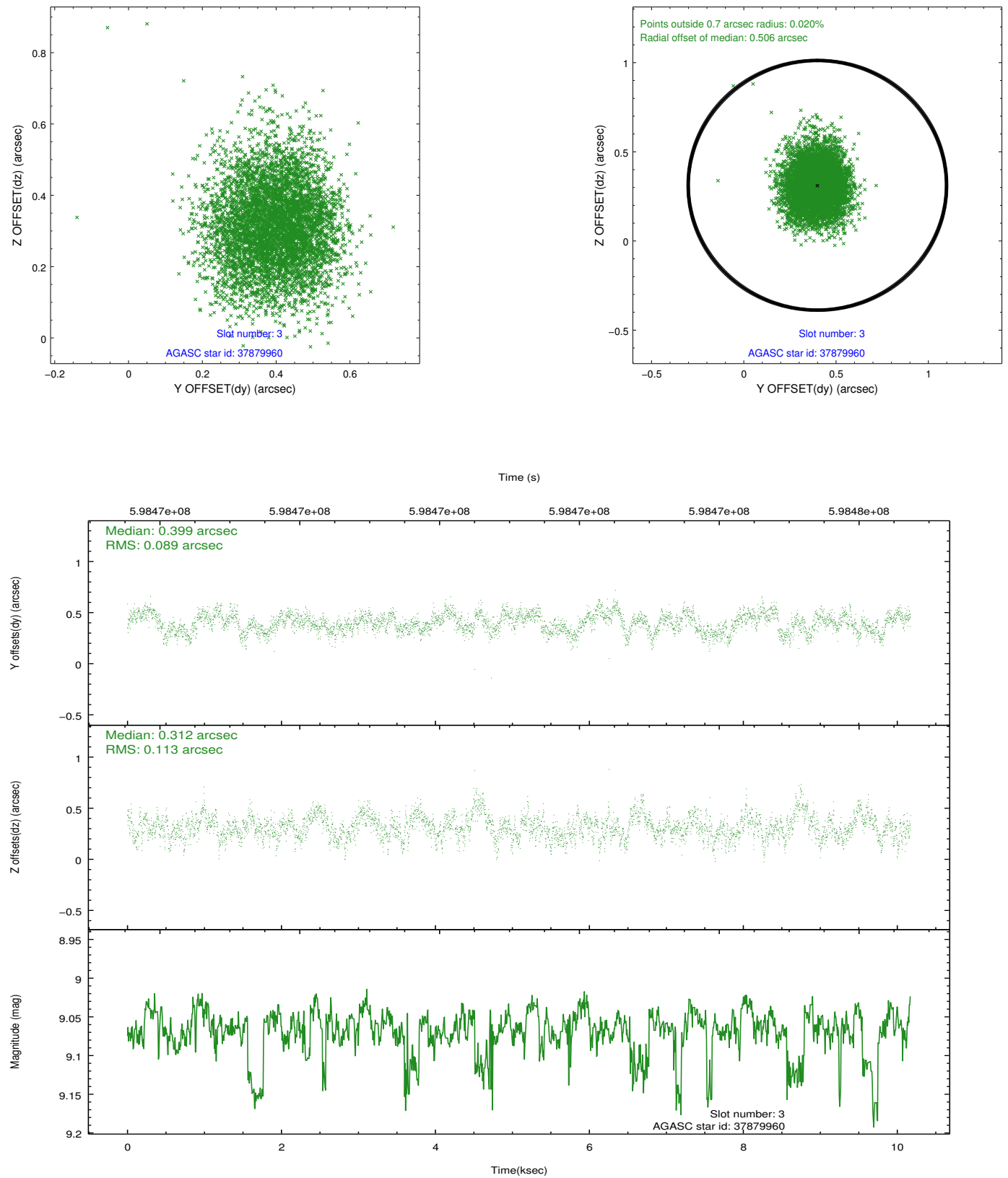


Slot Statistics

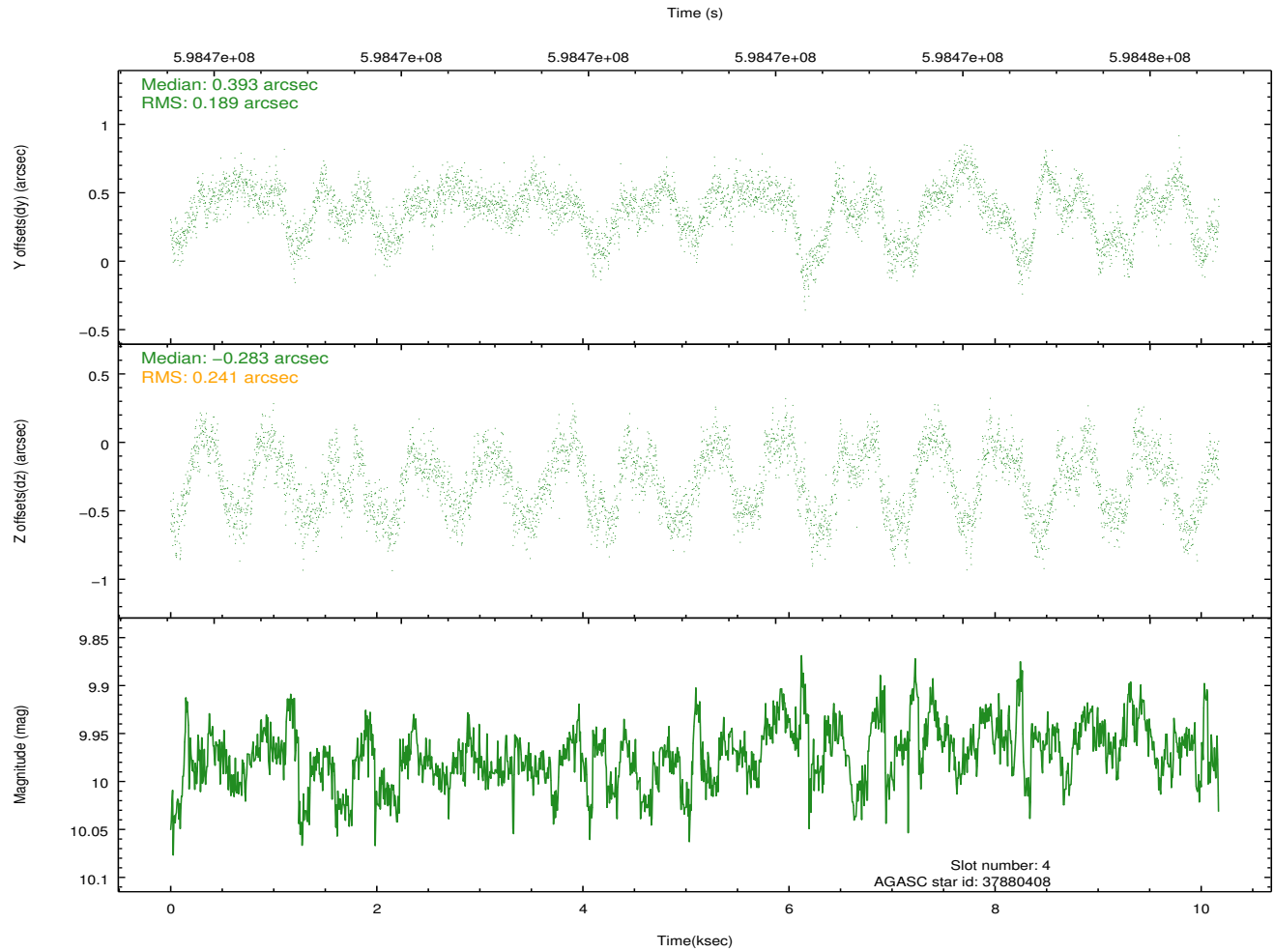
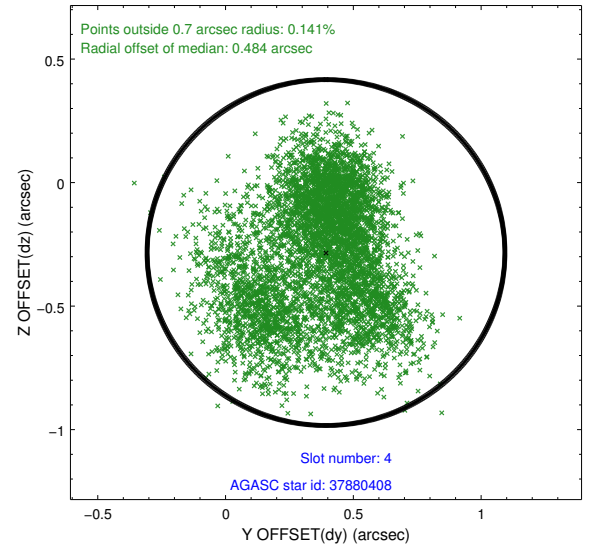
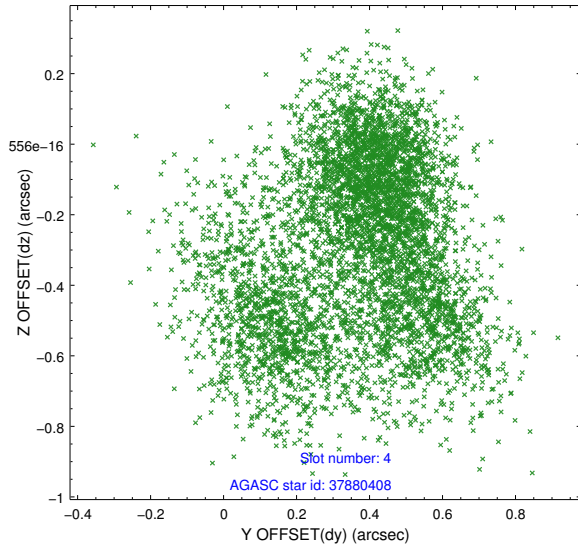
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-1	7.14	2481	0.153	-0.068	0.013	0.022	0.000000	0.000000	929.65	-1734.49
1	FID		ACIS-S-5	7.17	2481	-0.299	0.086	0.010	0.014	0.000000	0.000000	-1819.57	162.60
2	FID		ACIS-S-6	7.29	2480	0.124	-0.007	0.018	0.029	0.000000	0.000000	394.54	807.12
3	GUIDE	used	37879960	9.07	4953	0.399	0.312	0.153	0.245	188.579259	2.444508	-545.32	-418.94
4	GUIDE	used	37880408	9.97	4954	0.393	-0.283	0.338	0.505	187.758191	2.290324	-2267.05	2044.57
5	GUIDE	used	38279336	9.93	4865	-0.366	-0.323	0.368	0.515	188.708780	3.261056	2324.06	367.65
6	GUIDE	used	38280776	8.79	4955	-0.402	0.303	0.159	0.254	188.539013	3.077618	1471.77	651.91
7	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00

2.4 Star Slots

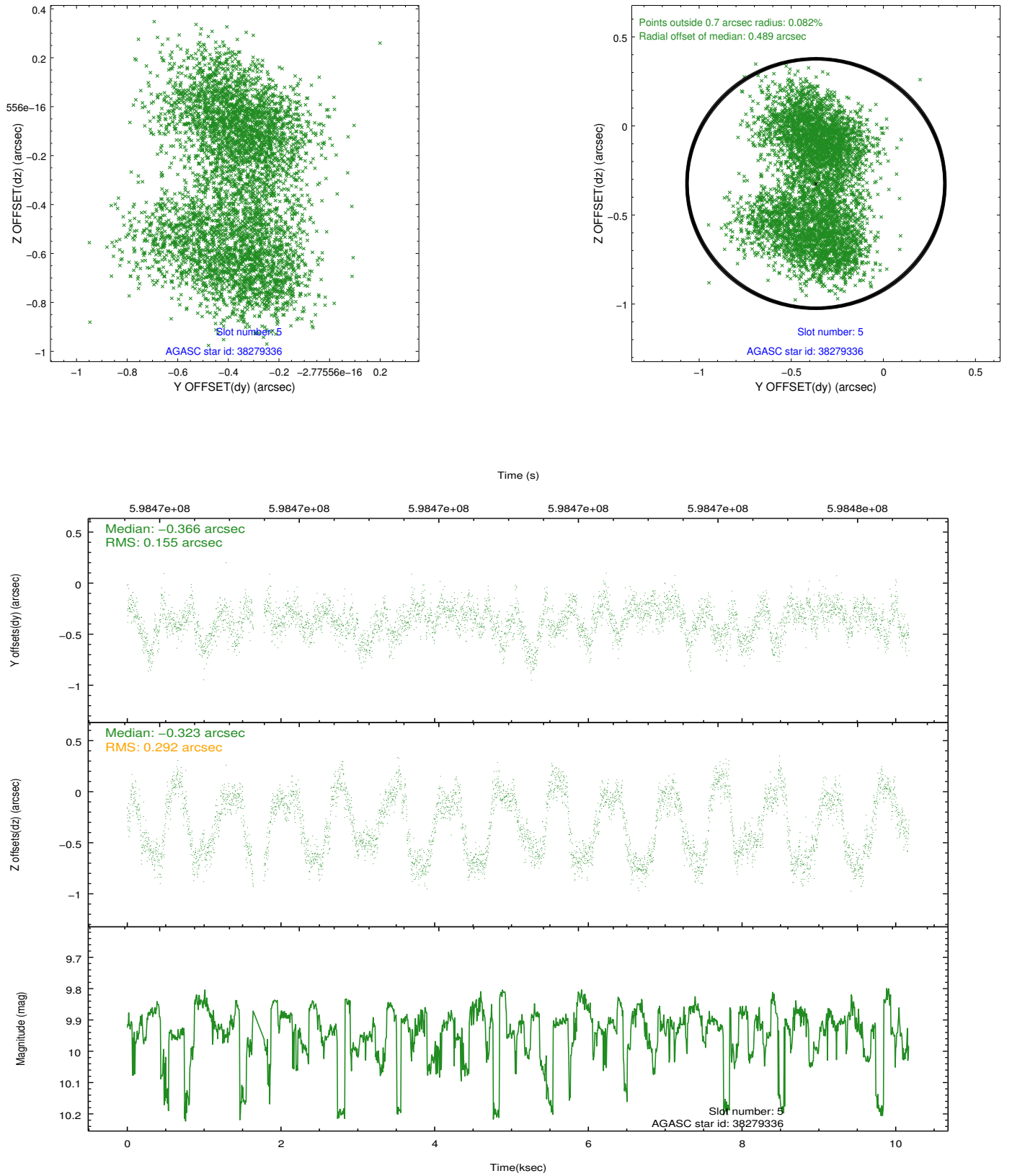
2.4.1 Slot 3



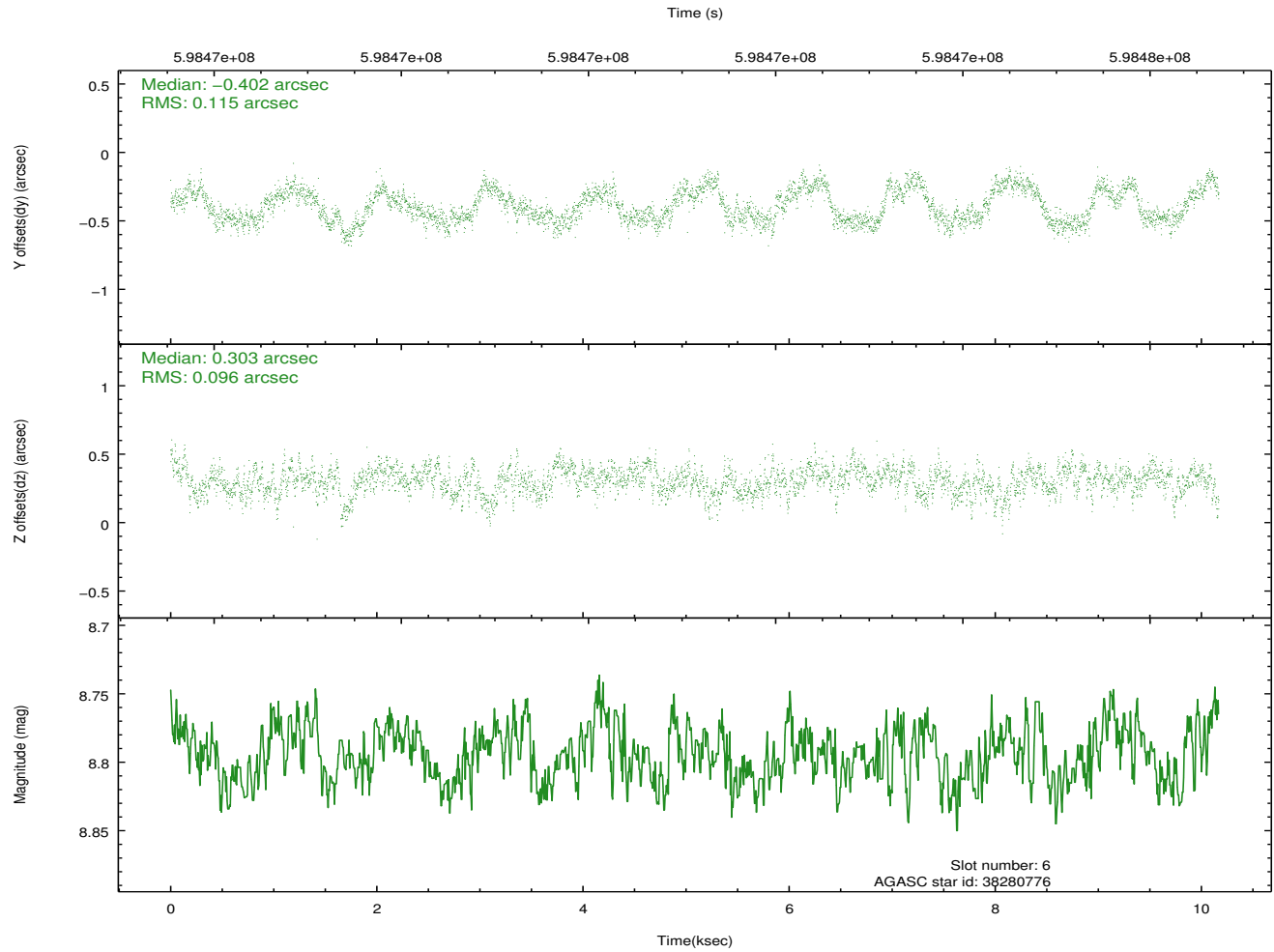
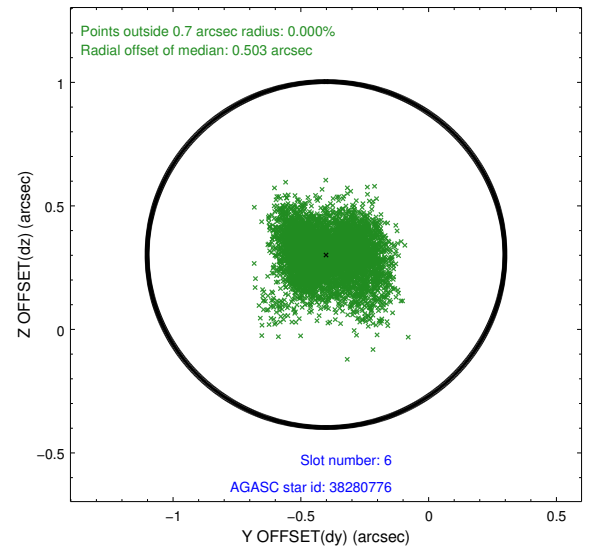
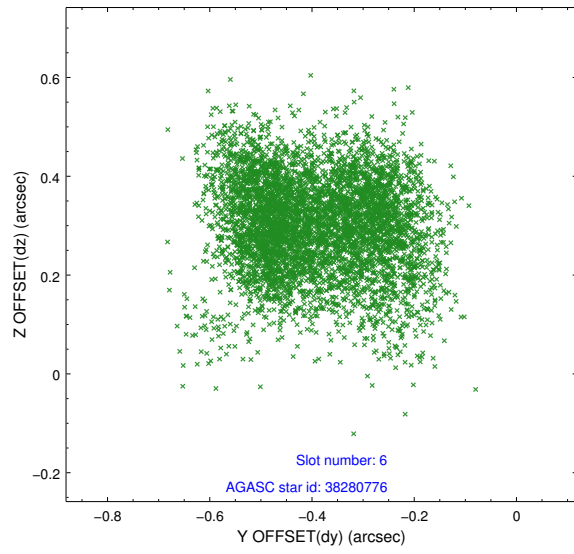
2.4.2 Slot 4



2.4.3 Slot 5

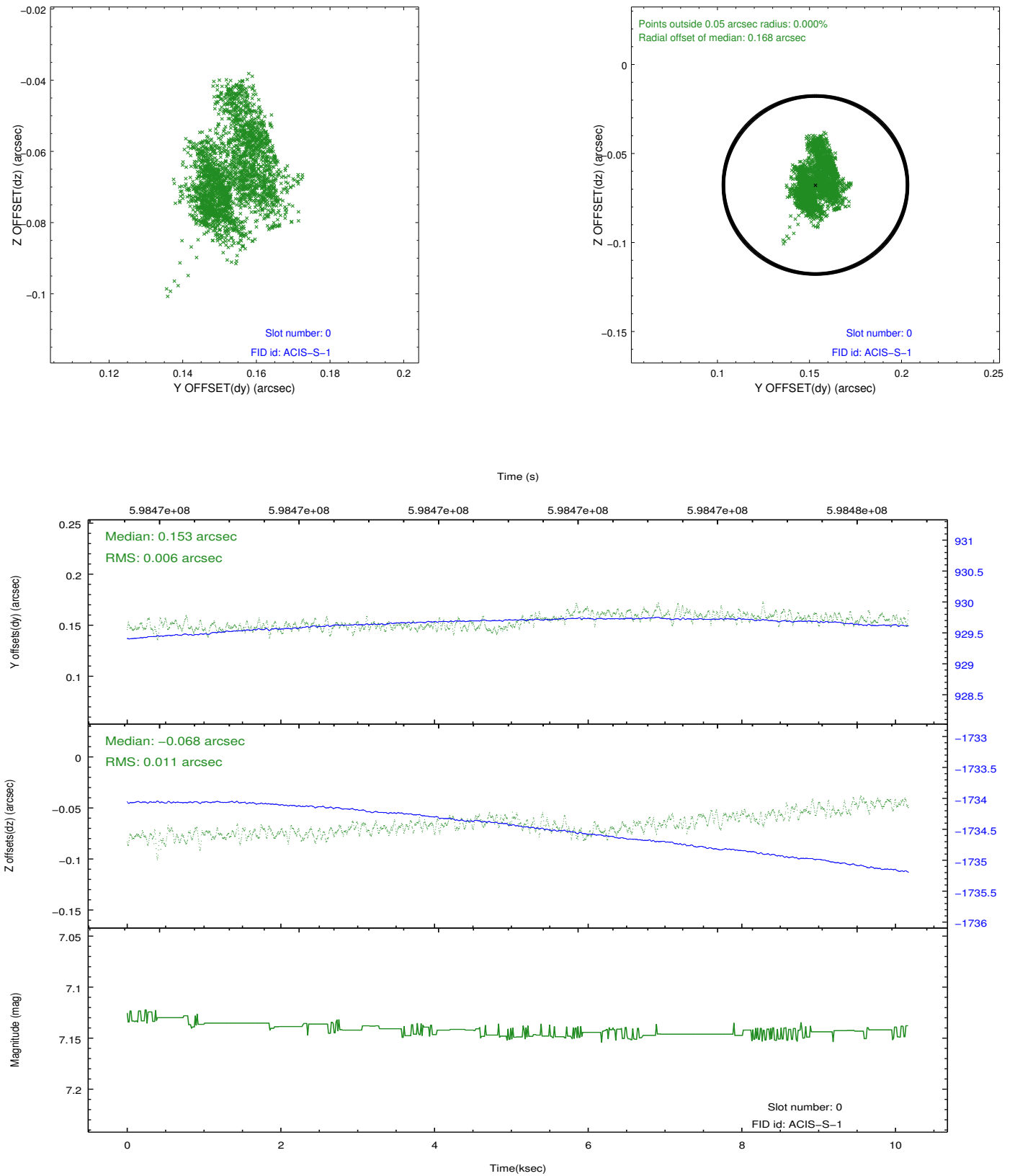


2.4.4 Slot 6

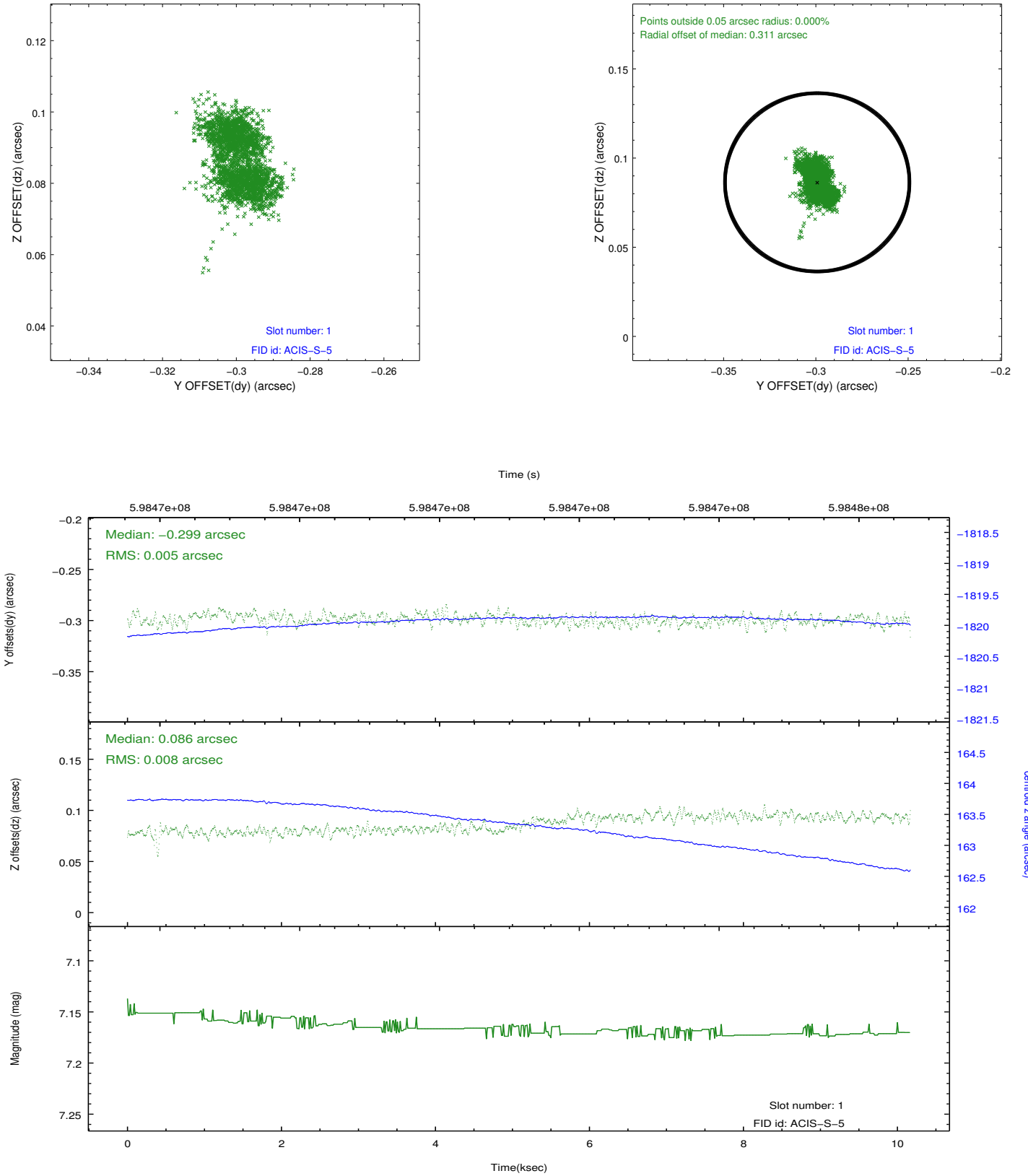


2.5 FID Slots

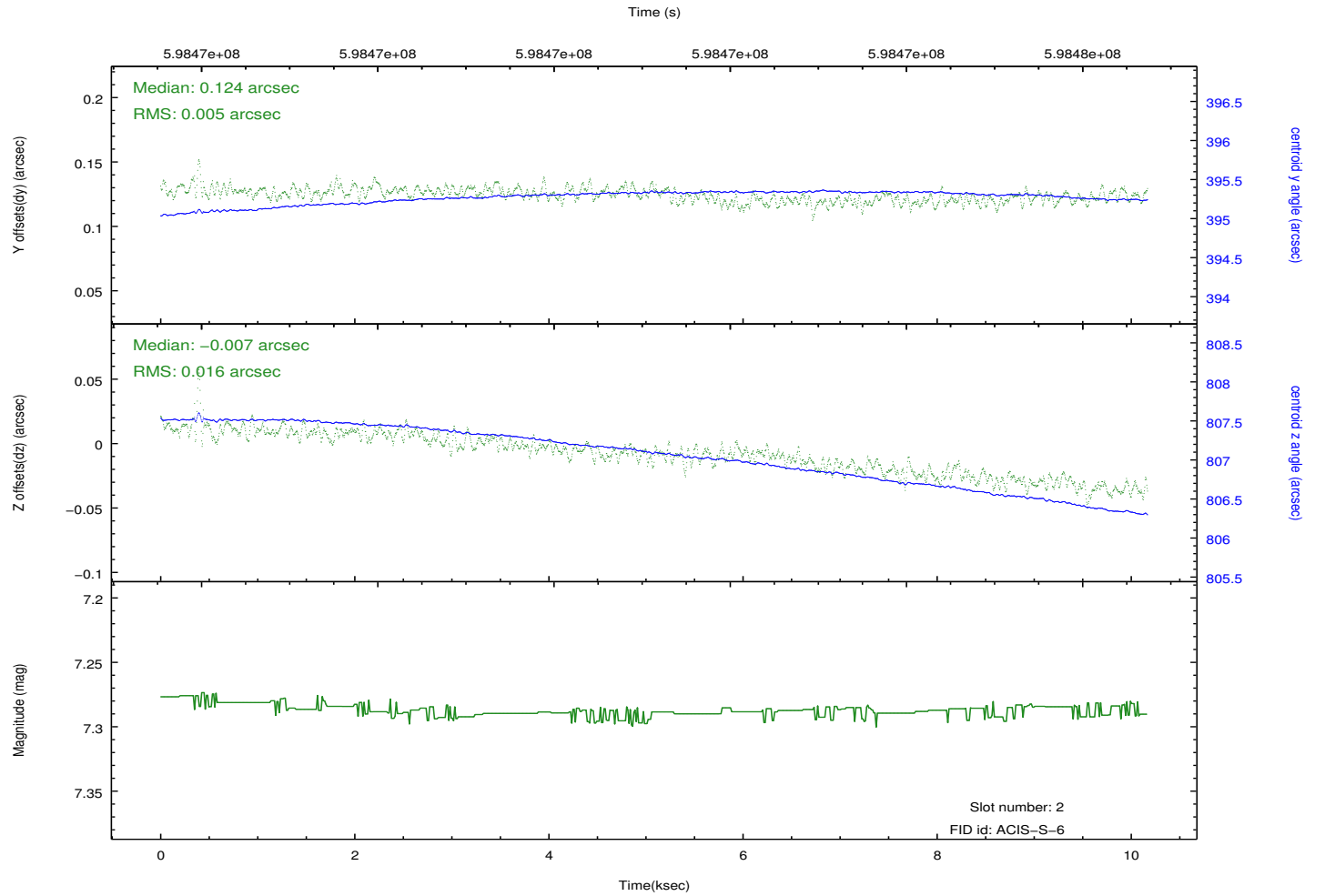
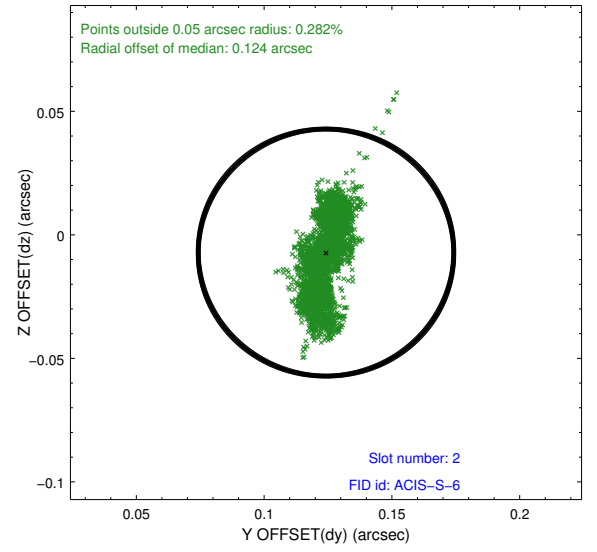
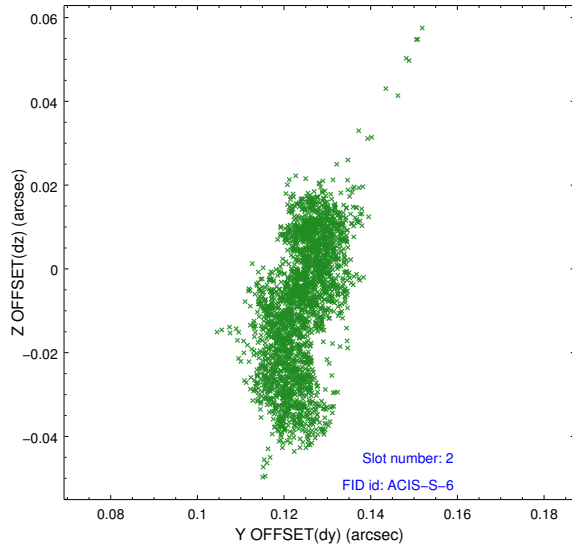
2.5.1 Slot 0



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)	2016.12.21
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.062220612288

A.2 Comments

The guide star in slot 7 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this slot from the solution.