

V&V Reference Report

L2 ASCDS Version : 10.8

Observation 22682 - L2 Version 1
Chandra X-Ray Center

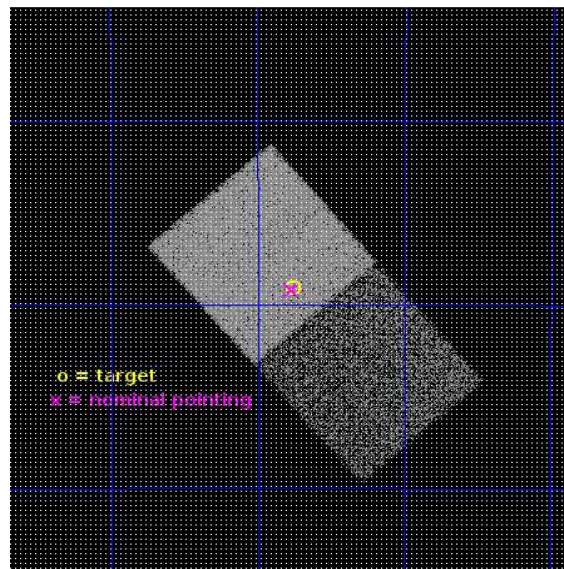
L2 Processing Date : Sep 2 2019

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1 Front

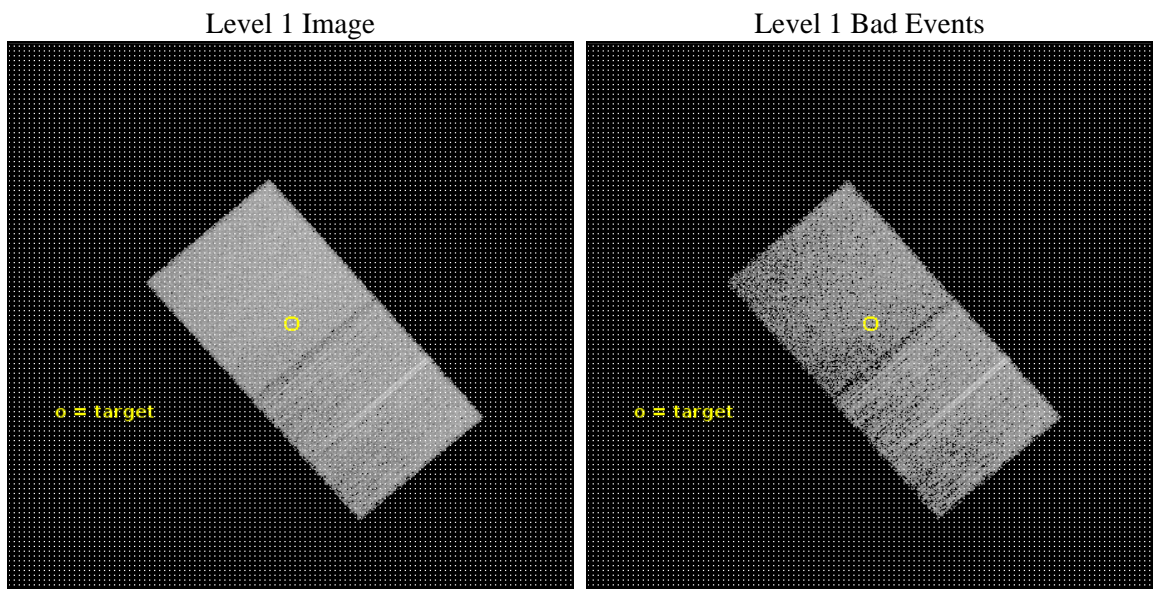
seq_num	300465	Sequence number
obs_id	22682	Observation id
title	Catching the return to quiescence of a classical nova post-explosion system: the unique opportunity for V1369 Cen	Proposal title
observer	Jeremy Drake	Principal investigator
object	V1369 Cen	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	208.68875	Observer's specified target RA [deg]
dec_targ	-59.151167	Observer's specified target Dec [deg]
ra_nom	208.69256537627	Nominal RA [deg]
dec_nom	-59.153229372051	Nominal Dec [deg]
roll_nom	229.09718335867	Nominal Roll [deg]
revision	1	Processing version of data
ontime	15082.639324427	Sum of GTIs [s]
livetime	14879.093327704	Livetime [s]
ontime6	15079.557323933	Sum of GTIs [s]
ontime7	15082.639324427	Sum of GTIs [s]
l2events	73282	Number of level 2 events



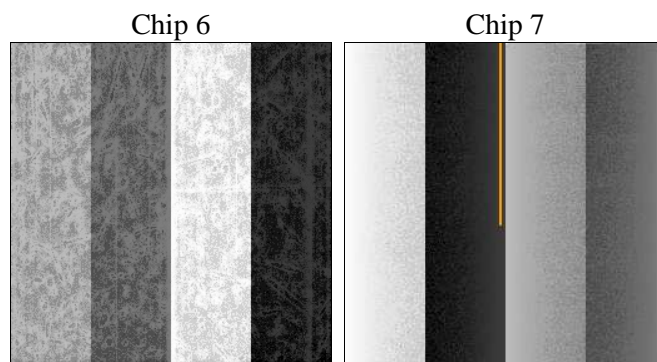
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	15000.000000	[s] Scheduled observation exposure time
ascdsver	10.8	Processing system revision	ontime	15082.639324427	Sum of GTIs [s]
caldsver	4.8.4	 	ontime6	15079.557323933	Sum of GTIs [s]
date	2019-09-02T13:21:04	Date and time of file creation	ontime7	15082.639324427	Sum of GTIs [s]
revision	1	Processing version of data	l1events	260640	Number of level 1 events

2.1.4 Events

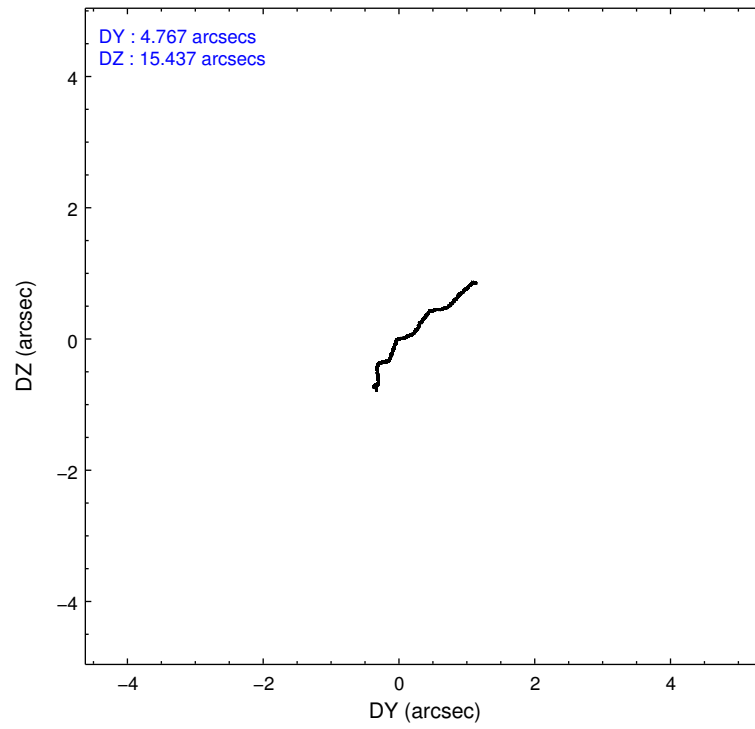
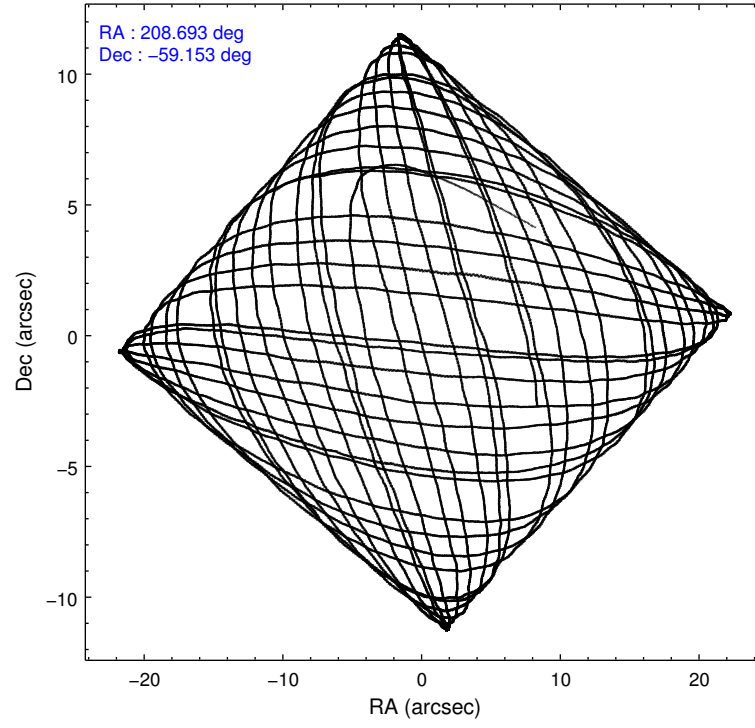
	ccd 6	ccd 7
level 1 events	116676	143964
rejected events	103459	80593
rejected %	88%	55%

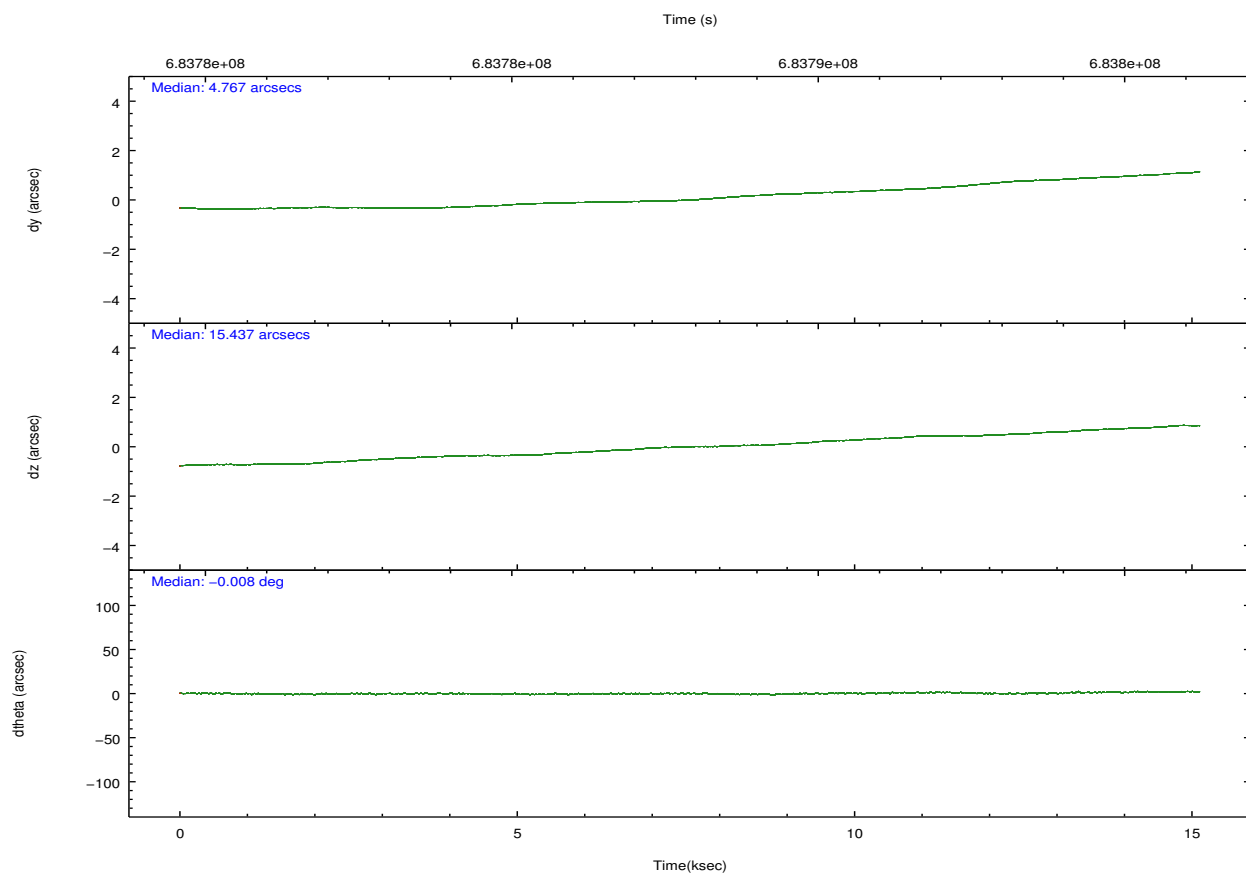
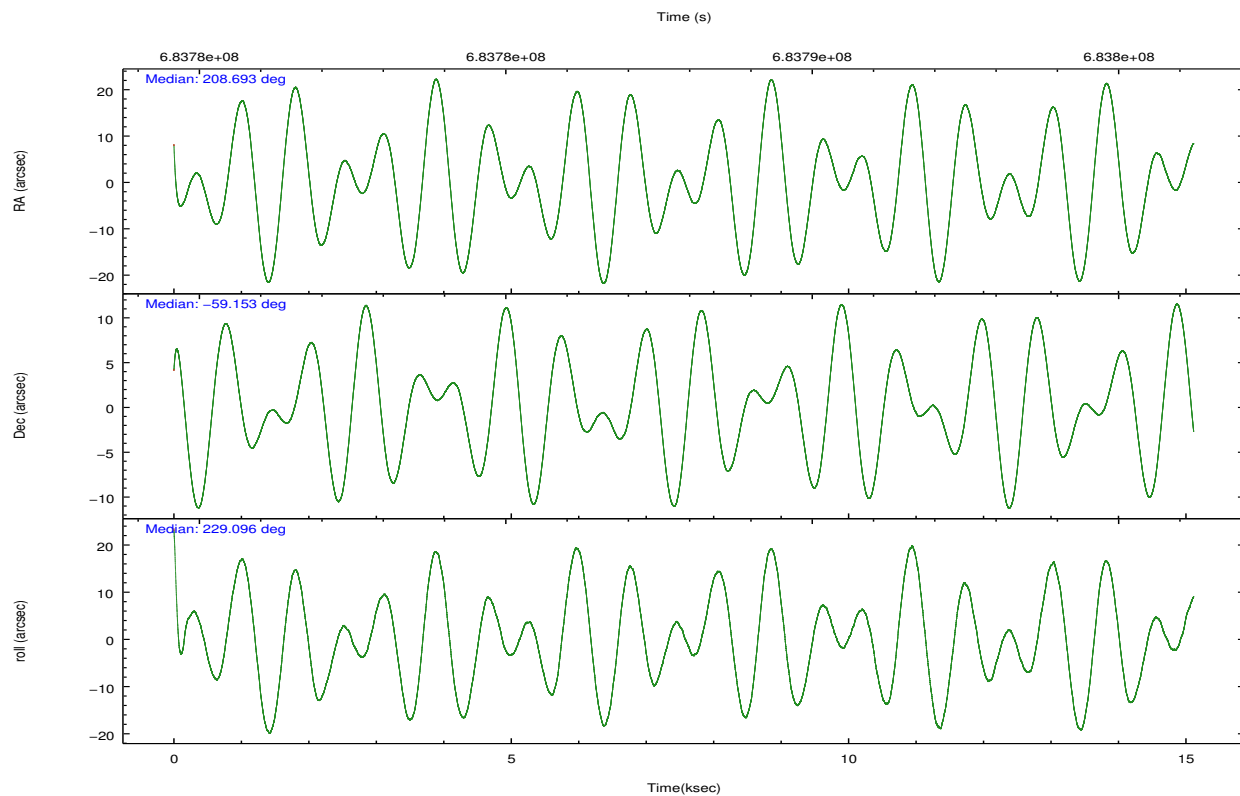
	ccd 6	ccd 7
grade 0 events	4266	5437
	3%	3%
grade 1 events	53	237
	0%	0%
grade 2 events	3255	13470
	2%	9%
grade 3 events	1245	4978
	1%	3%
grade 4 events	1198	4943
	1%	3%
grade 5 events	5045	14069
	4%	9%
grade 6 events	3256	34547
	2%	23%
grade 7 events	98358	66283
	84%	46%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-67	ACIS-67	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	208.701990	208.6925653762657	CCD I2 on	N	N
[deg] Pointing Dec	-59.126225	-59.153229372051	CCD I3 on	N	N
[deg] Pointing Roll	228.948637	229.0971833586745	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	O1	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	N	N
[s] Observation start time (MET)	683780478.184000	683778780.98822	CCD S5 on	N	N
Observation start date	2019-09-02T03:00:09	2019-09-02T02:33:00	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	683795478.184000	683796129.11426	On-chip summing requested	N	N
Observation end date	2019-09-02T07:10:09	2019-09-02T07:22:09	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3

2.3 Aspect



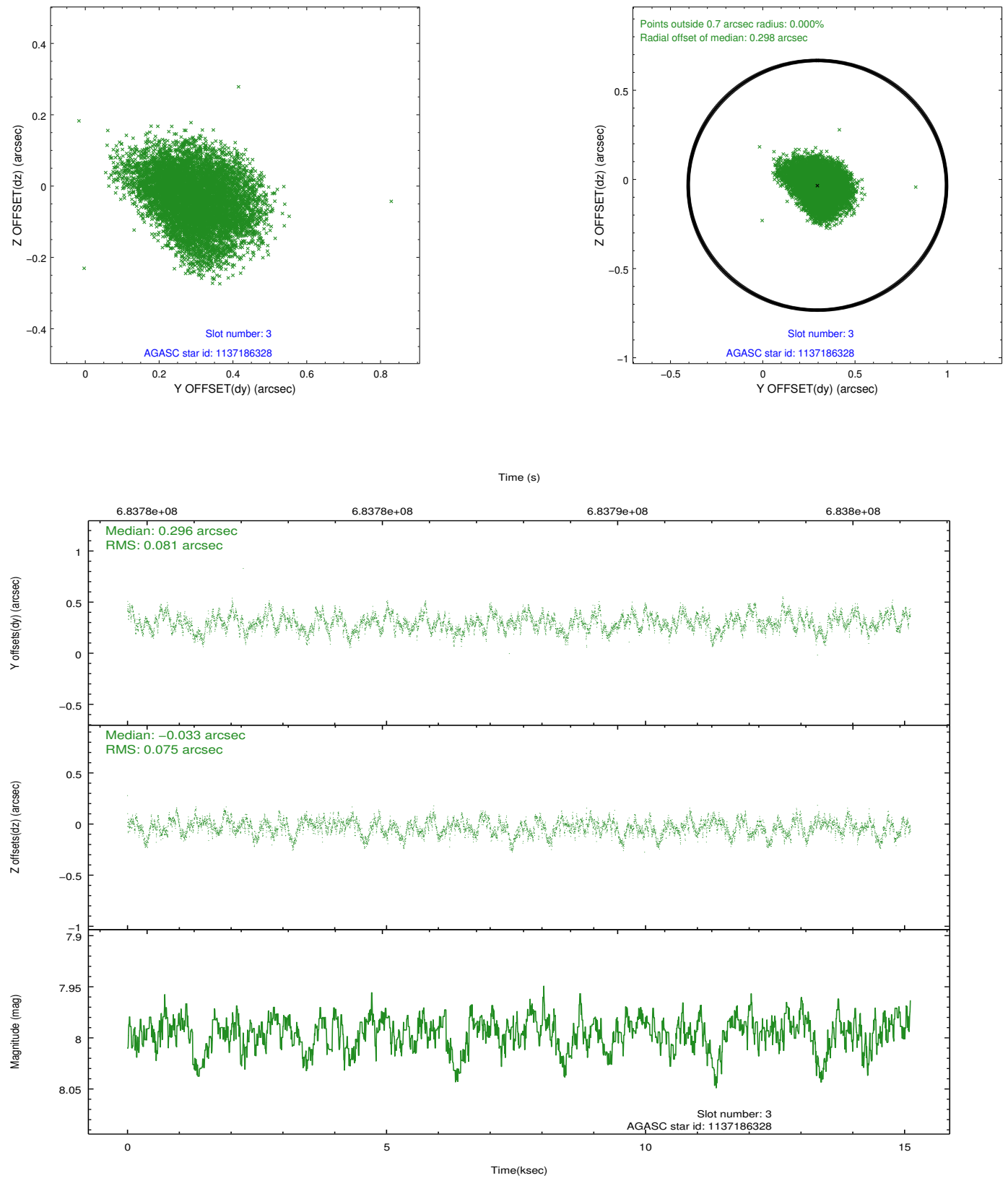


Slot Statistics

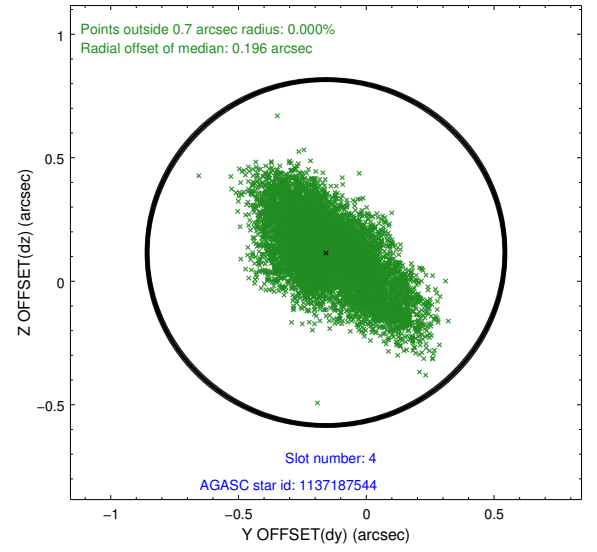
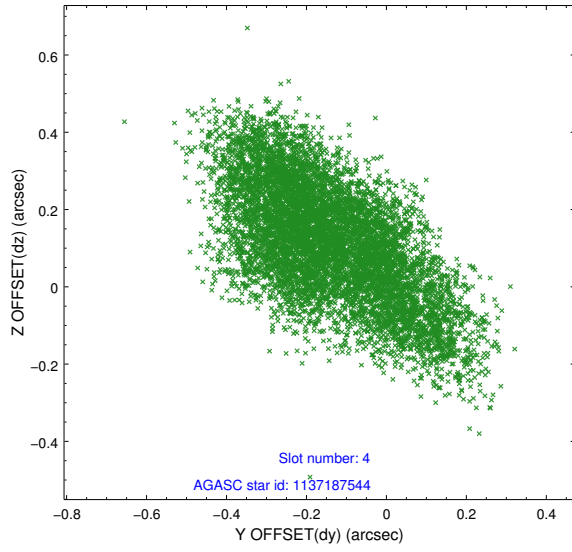
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-1	7.16	3687	1.000	-0.028	-0.097	0.017	0.027	0.000000	0.000000	938.45	-1732
1	FID		ACIS-S-4	7.18	3687	1.000	0.443	0.086	0.017	0.025	0.000000	0.000000	2156.41	171
2	FID		ACIS-S-5	7.18	3687	1.000	-0.443	0.023	0.018	0.032	0.000000	0.000000	-1810.53	165
3	GUIDE	used	1137186328	7.99	7371	1.000	0.296	-0.033	0.119	0.185	208.186475	-59.096070	547.85	-787
4	GUIDE	used	1137187544	9.42	7360	1.000	-0.158	0.116	0.227	0.382	208.442129	-59.226589	587.79	-122
5	GUIDE	used	1137193672	8.12	7370	1.000	-0.172	-0.093	0.087	0.152	208.968015	-59.371238	345.69	947
6	GUIDE	used	1137195376	8.33	7366	1.000	0.078	0.204	0.128	0.209	208.954603	-58.790855	-1218.60	-436
7	GUIDE	used	1137213448	7.91	7369	1.000	-0.064	-0.185	0.088	0.141	208.679670	-59.645002	1435.54	1195

2.4 Star Slots

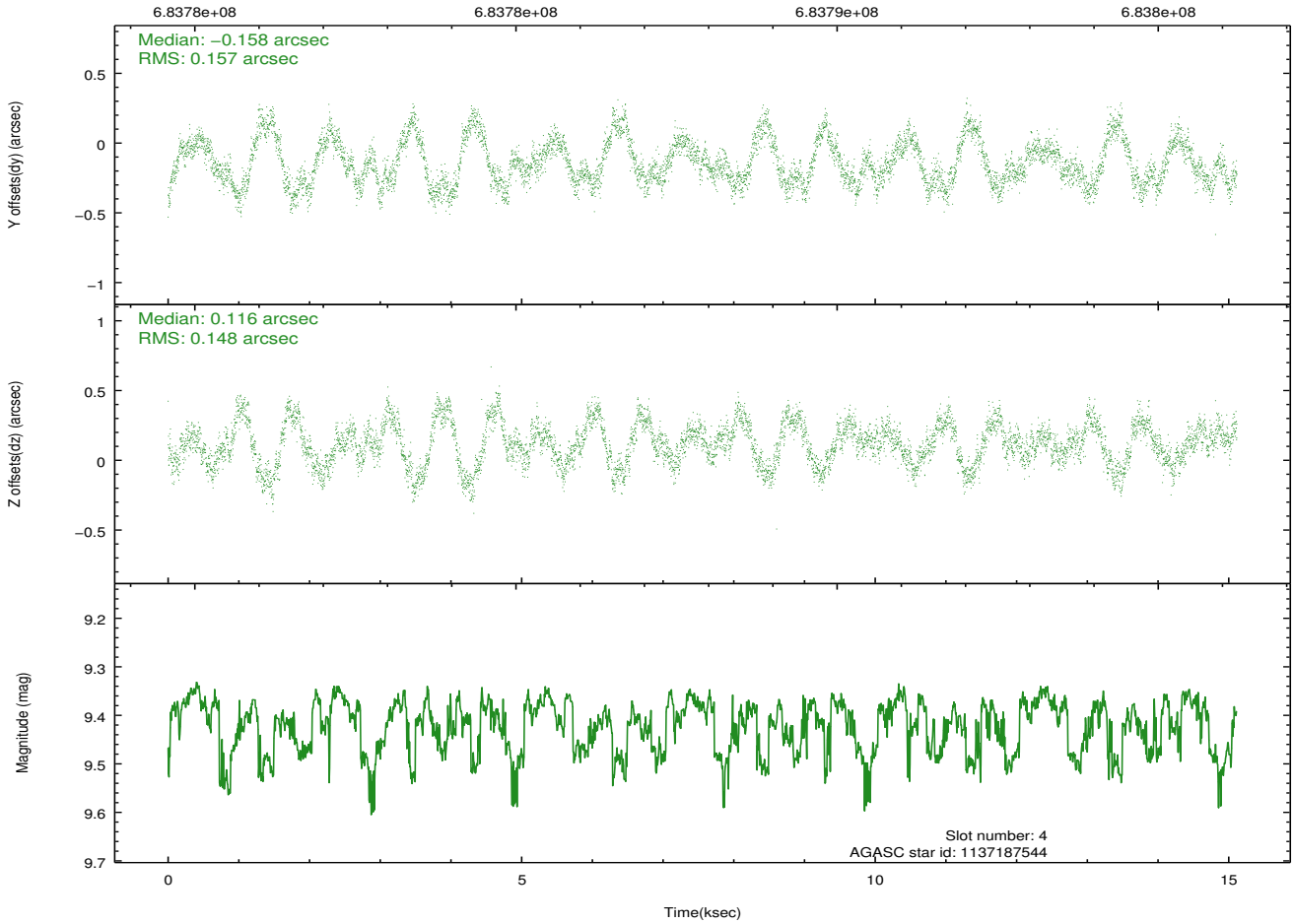
2.4.1 Slot 3



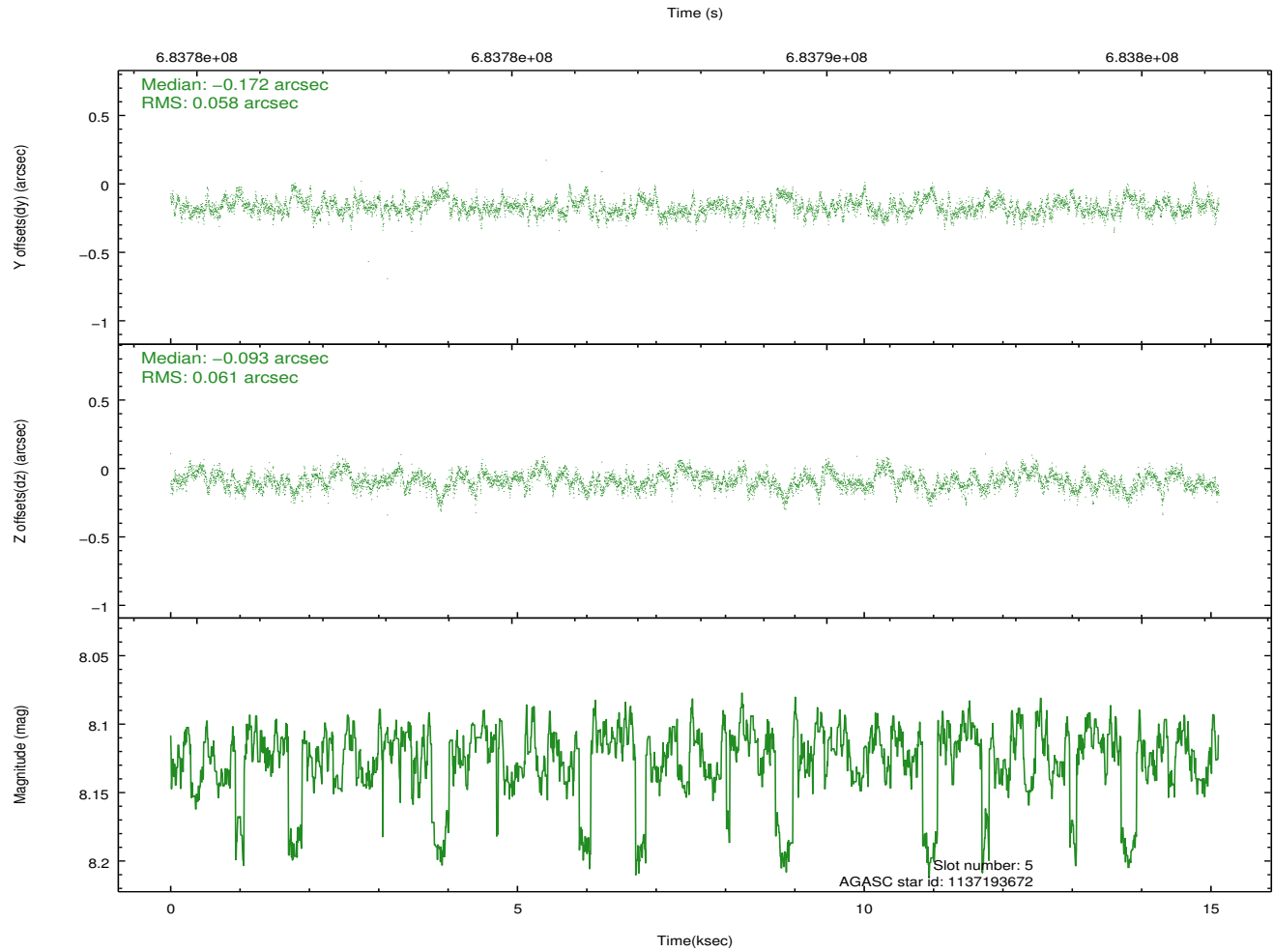
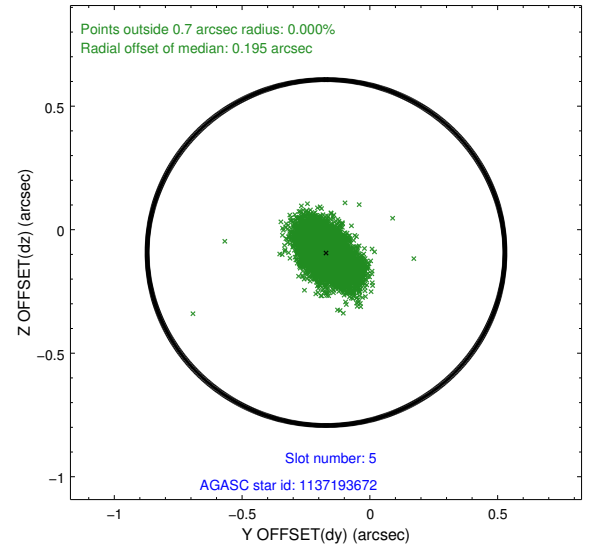
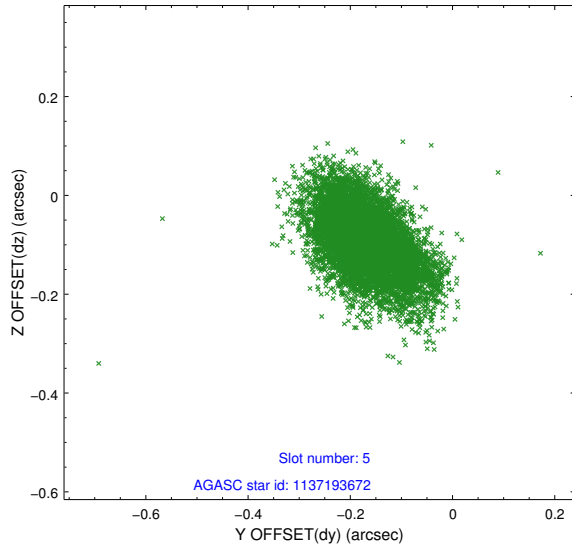
2.4.2 Slot 4



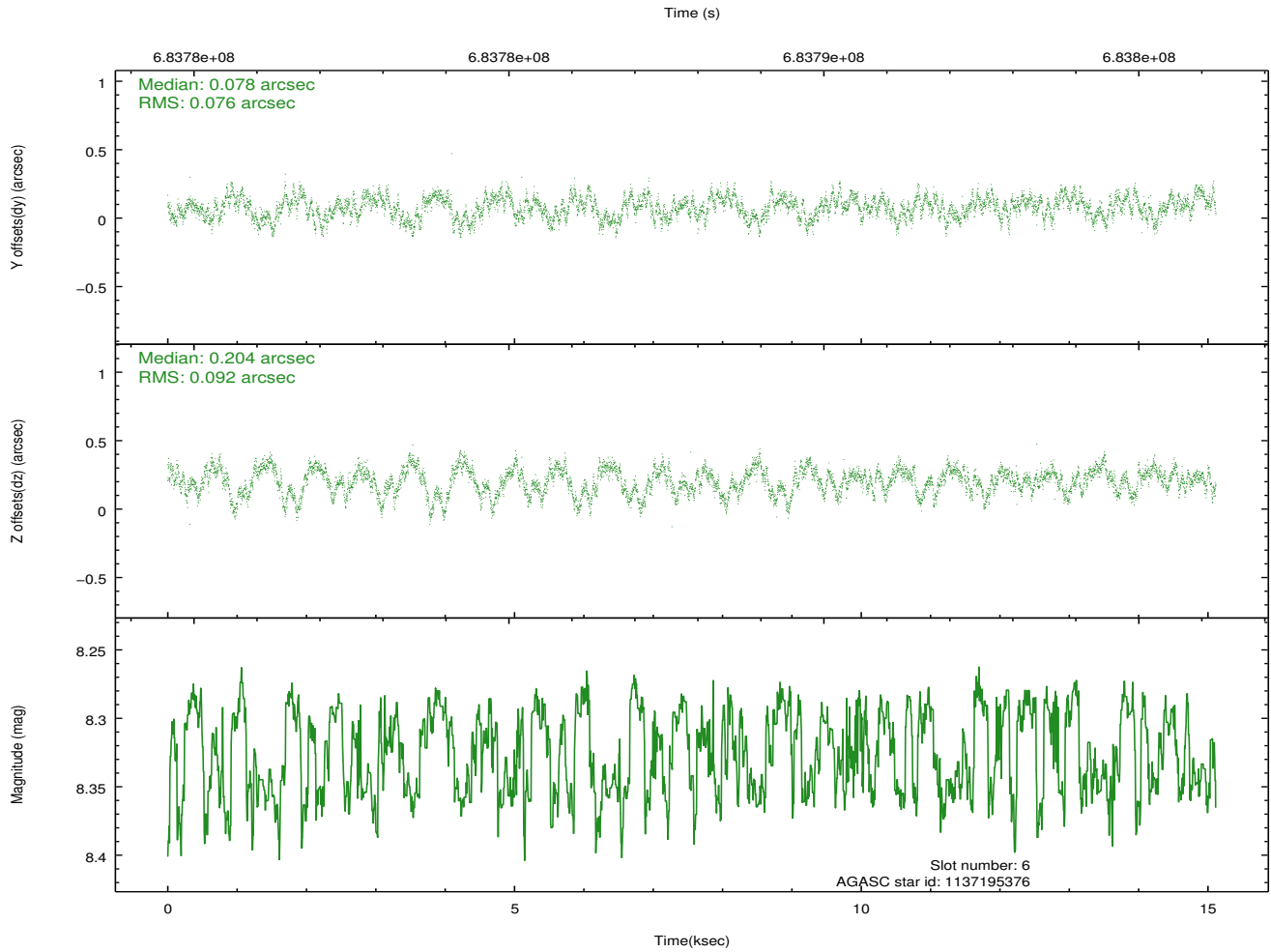
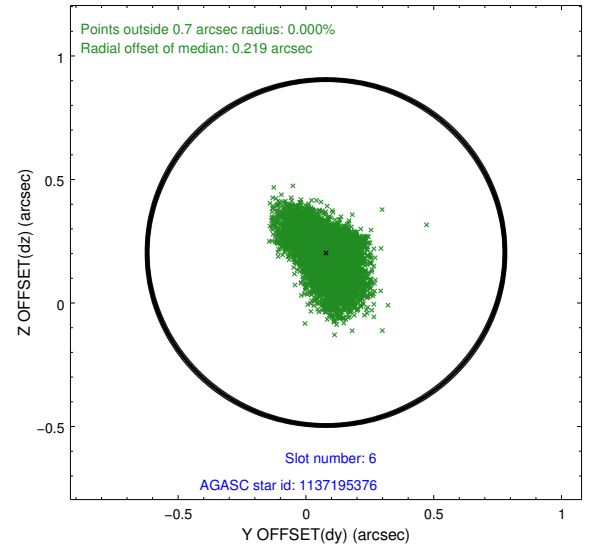
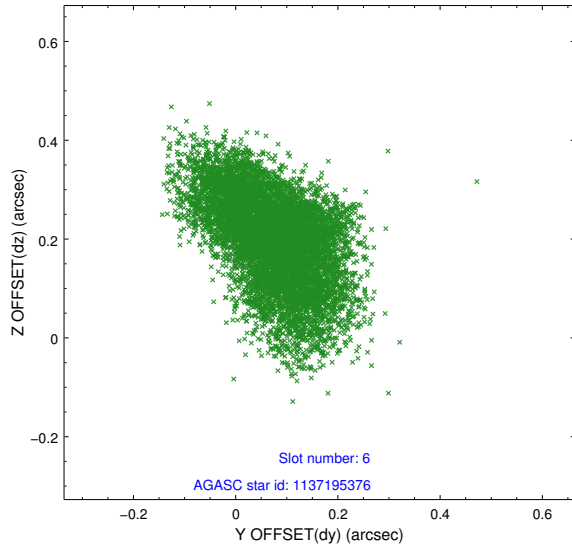
Time (s)



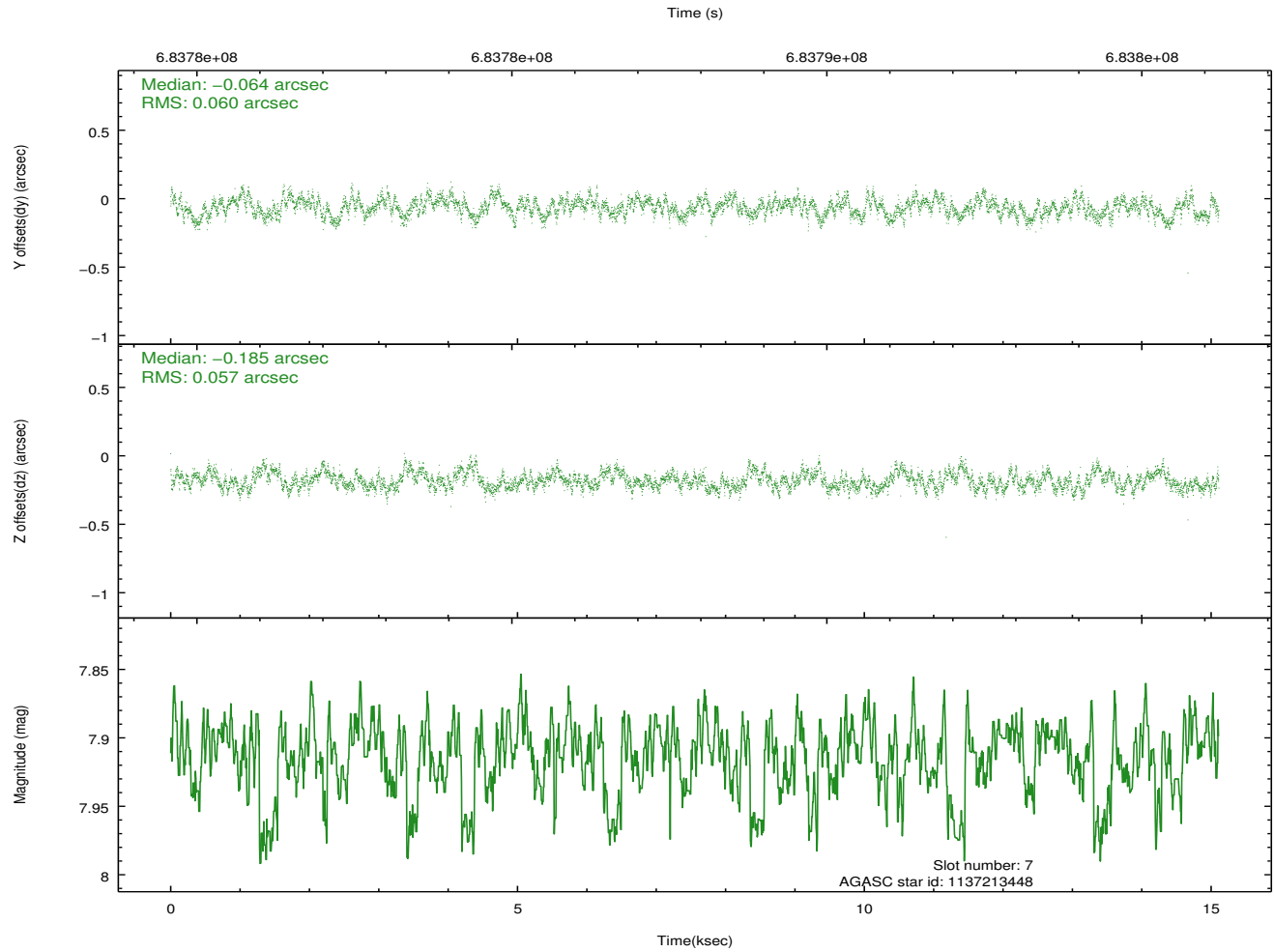
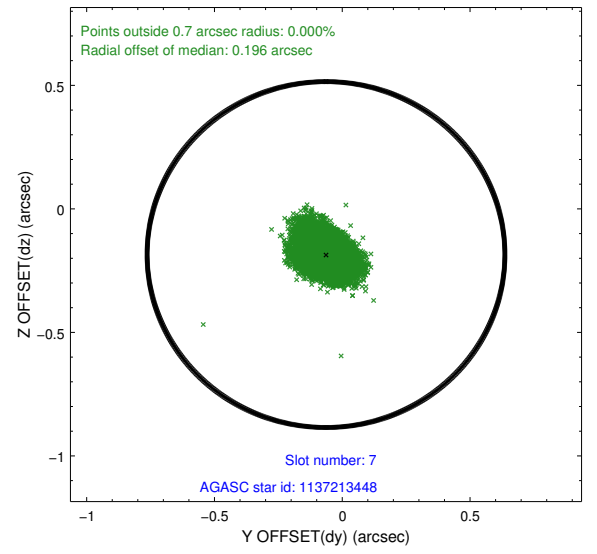
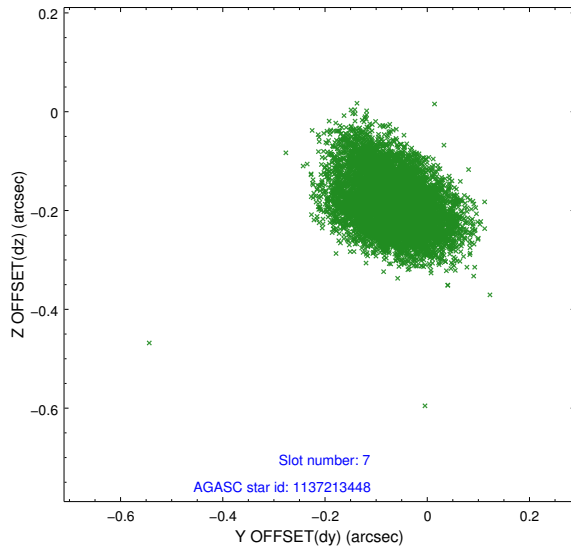
2.4.3 Slot 5



2.4.4 Slot 6

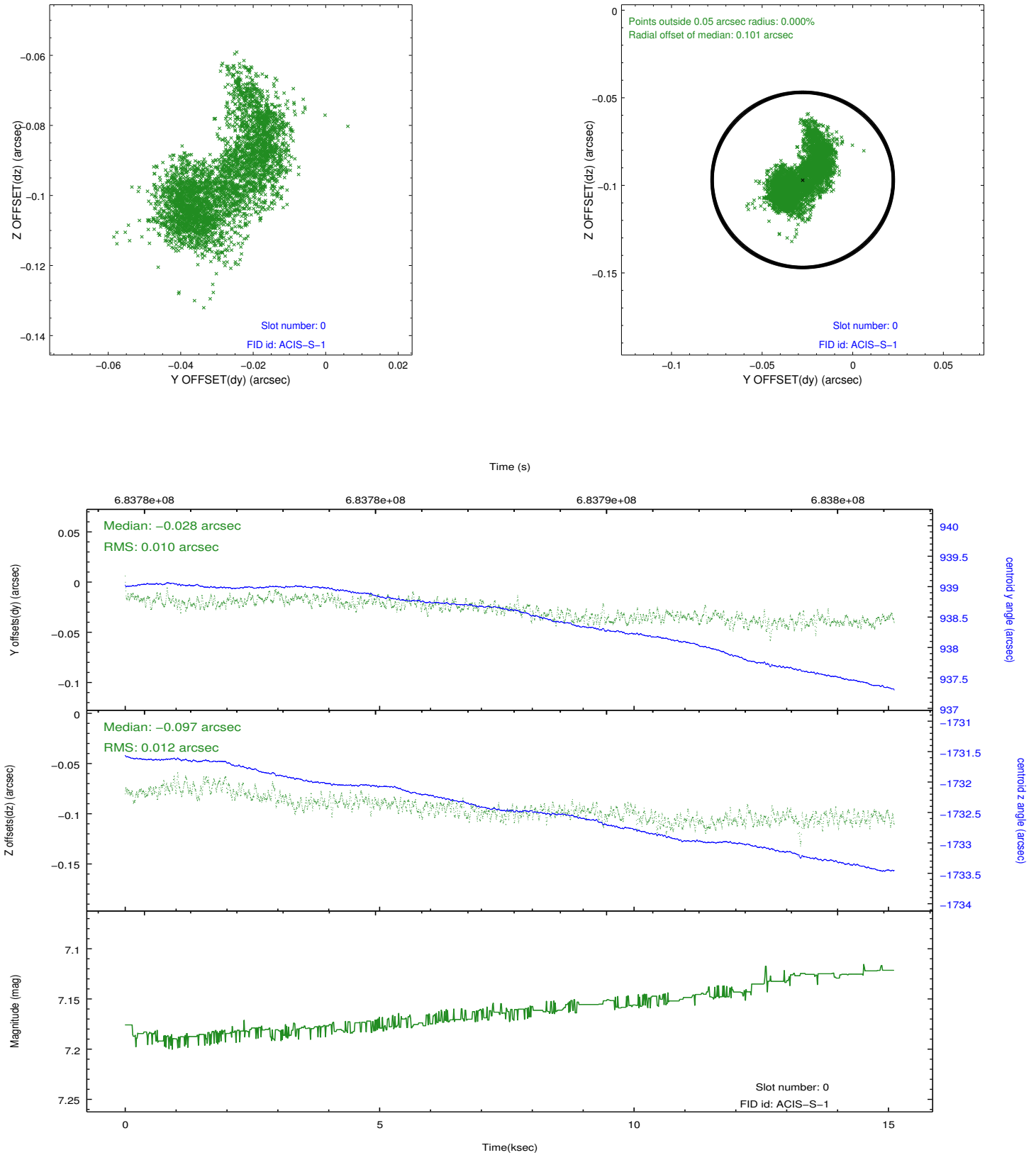


2.4.5 Slot 7

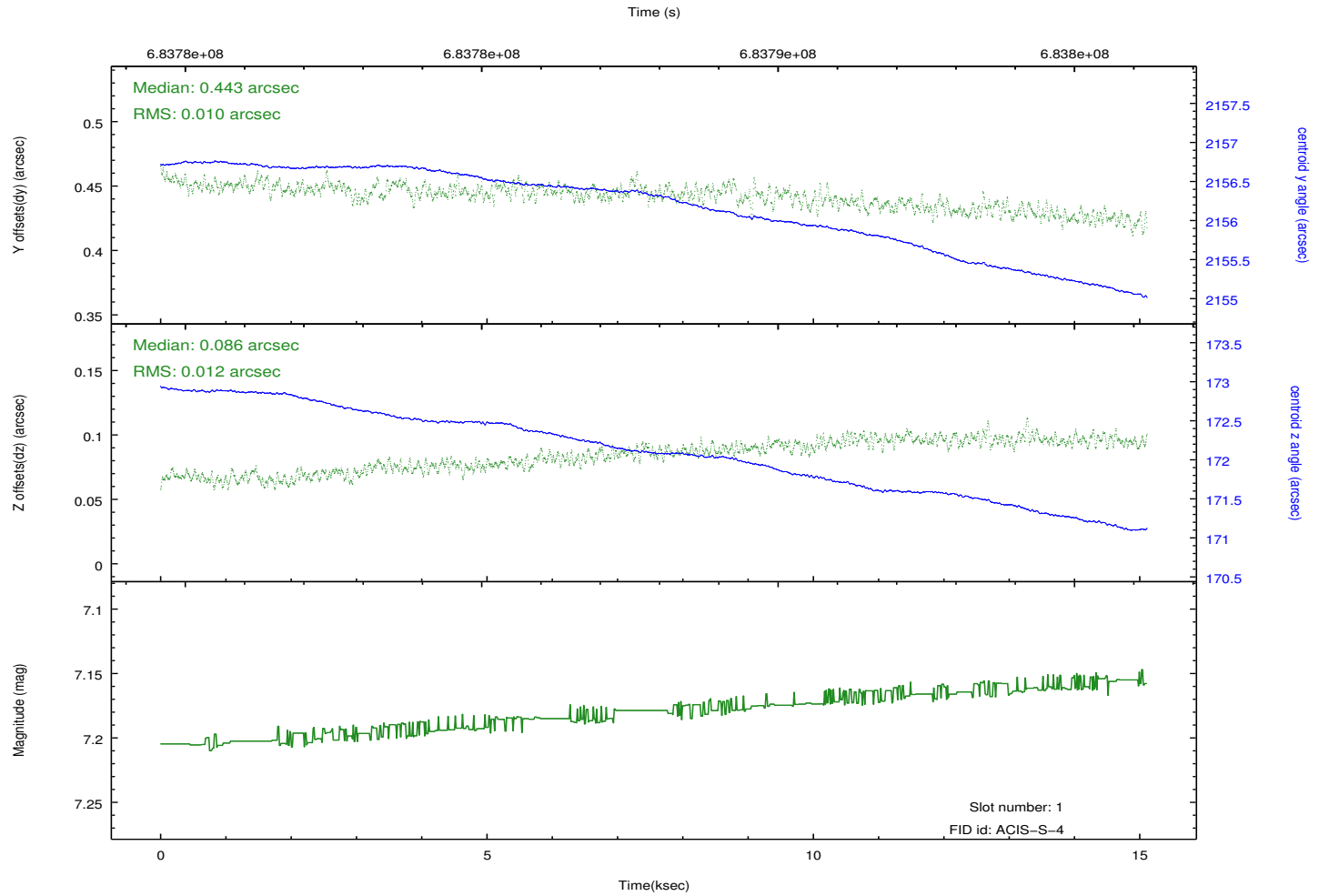
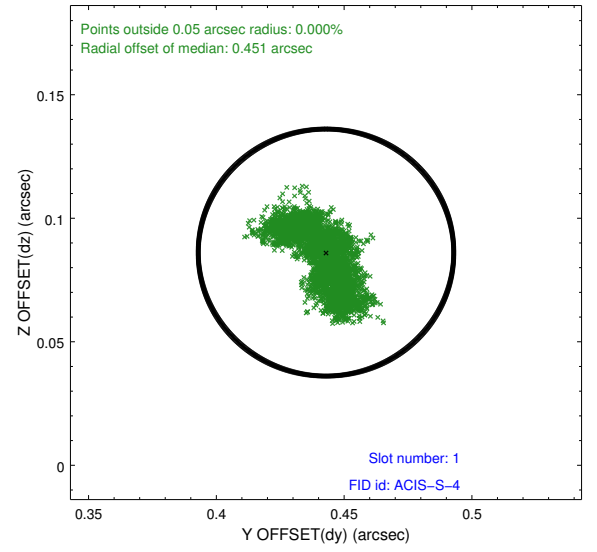
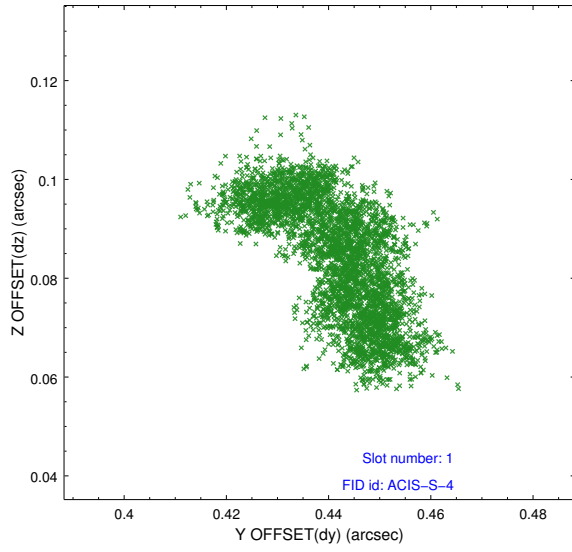


2.5 FID Slots

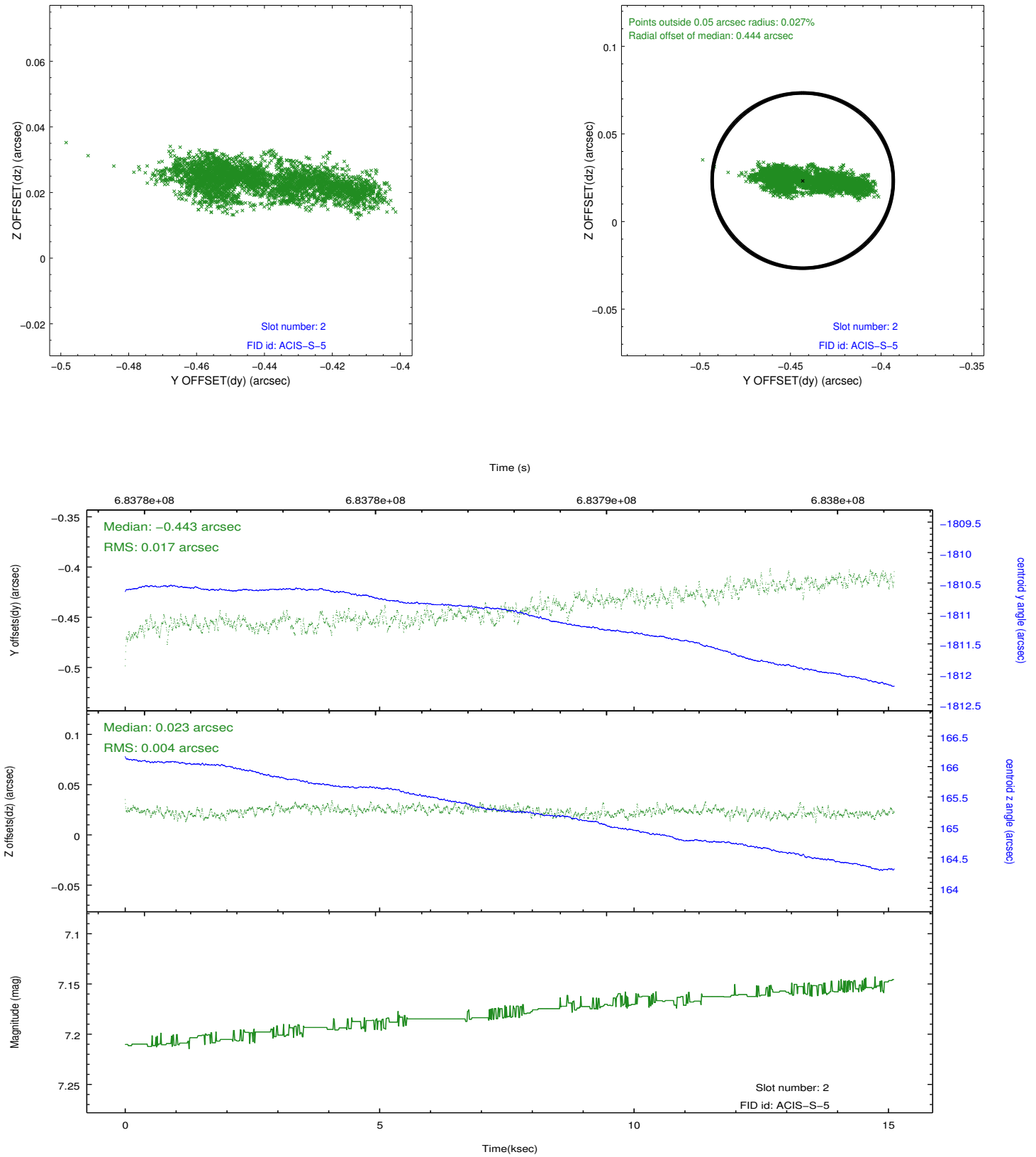
2.5.1 Slot 0



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)	2019.09.12
V&V Edition	2
V&V Disposition and Status	OK
V&V Charge Time	15.082639324427

A.2 Comments

A spatial region of the original bias map for CCD = 6 suffered from anomalously high data values. Pixels in the event data that were bias-corrected by one of the original affected bias pixels may have an apparent energy shift. While the change in energy is expected to be small (~ 20 eV), it depends on many parameters that have not yet been fully explored for this bias anomaly. In this case, the bias map for CCD = 6 could not be improved because no suitable data at a compatible temperature and time range are available to use as replacement values. The bias map used in this processing is the original bias map telemetered with the observation.