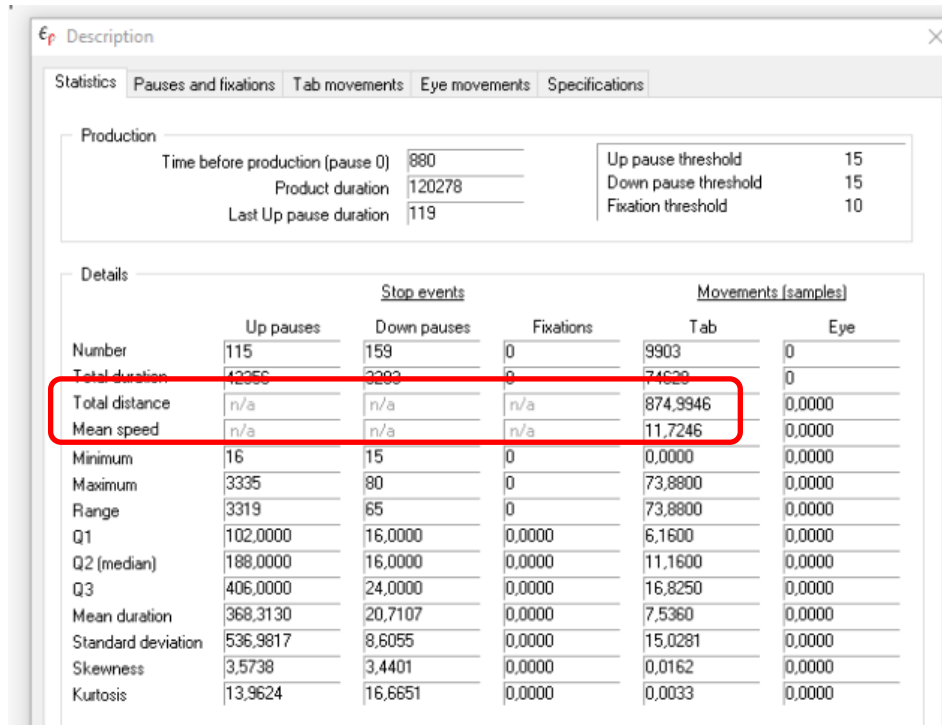


Overwriting a file's recording settings.

One day, I opened a data file in Eye and Pen 2 and I noticed that mean tracing speed was about 11 cm/sec, which is far above usual values. Tracing length is also too high for 4 lines of text (nearly 9 meters) !

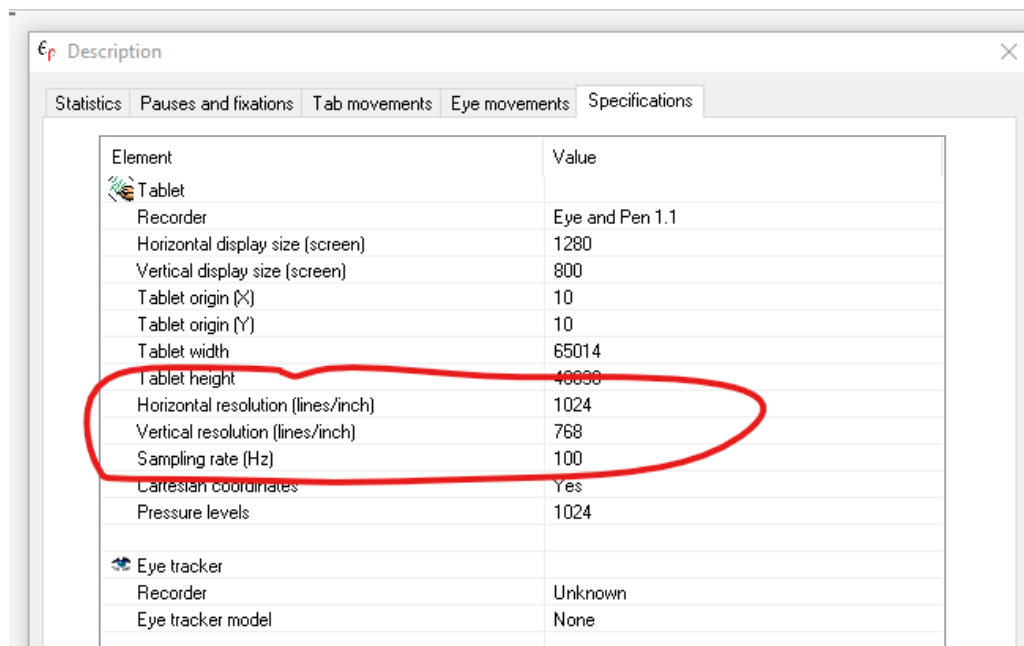


The screenshot shows the 'Description' window with the 'Statistics' tab selected. The 'Production' section shows a total duration of 120278 and a last up pause duration of 119. The 'Details' section contains a table of recording statistics. A red box highlights the 'Total distance' (874,9946) and 'Mean speed' (11,7246) values, which are circled in red.

Number	Stop events			Movements (samples)	
	Up pauses	Down pauses	Fixations	Tab	Eye
115	159	0	0	9903	0
Total duration	42355	3292	0	74629	0
Total distance	n/a	n/a	n/a	874,9946	0,0000
Mean speed	n/a	n/a	n/a	11,7246	0,0000
Minimum	16	15	0	0,0000	0,0000
Maximum	3335	80	0	73,8800	0,0000
Range	3319	65	0	73,8800	0,0000
Q1	102,0000	16,0000	0,0000	6,1600	0,0000
Q2 (median)	188,0000	16,0000	0,0000	11,1600	0,0000
Q3	406,0000	24,0000	0,0000	16,8250	0,0000
Mean duration	368,3130	20,7107	0,0000	7,5360	0,0000
Standard deviation	536,9817	8,6055	0,0000	15,0281	0,0000
Skewness	3,5738	3,4401	0,0000	0,0162	0,0000
Kurtosis	13,9624	16,6651	0,0000	0,0033	0,0000

There should be something weird about resolution, and maybe sampling rate...

Looking into Protocol | Description | Specifications, I can see that the file is not "normal": horizontal and vertical resolutions are that of a display screen (1024 * 768).



The screenshot shows the 'Description' window with the 'Specifications' tab selected. The table lists various recording parameters. A red box highlights the 'Tablet height' (48000), 'Horizontal resolution (lines/inch)' (1024), 'Vertical resolution (lines/inch)' (768), and 'Sampling rate (Hz)' (100) values.

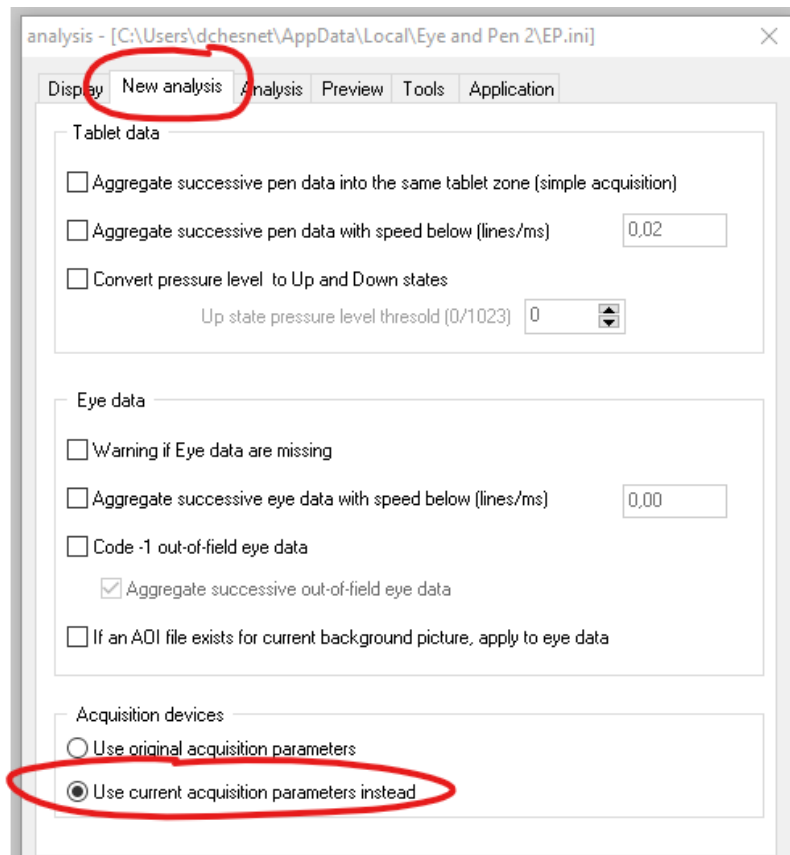
Element	Value
Tablet	
Recorder	Eye and Pen 1.1
Horizontal display size (screen)	1280
Vertical display size (screen)	800
Tablet origin (X)	10
Tablet origin (Y)	10
Tablet width	65014
Tablet height	48000
Horizontal resolution (lines/inch)	1024
Vertical resolution (lines/inch)	768
Sampling rate (Hz)	100
Cartesian coordinates	Yes
Pressure levels	1024
Eye tracker	
Recorder	Unknown
Eye tracker model	None

How it came to this, I do not know, but from all evidence, it is to be fixed.

So, I decided to “tweak” these parameters.

They can be overwritten thanks to an option into the Configuration | Analysis menu, “New analysis” tab.

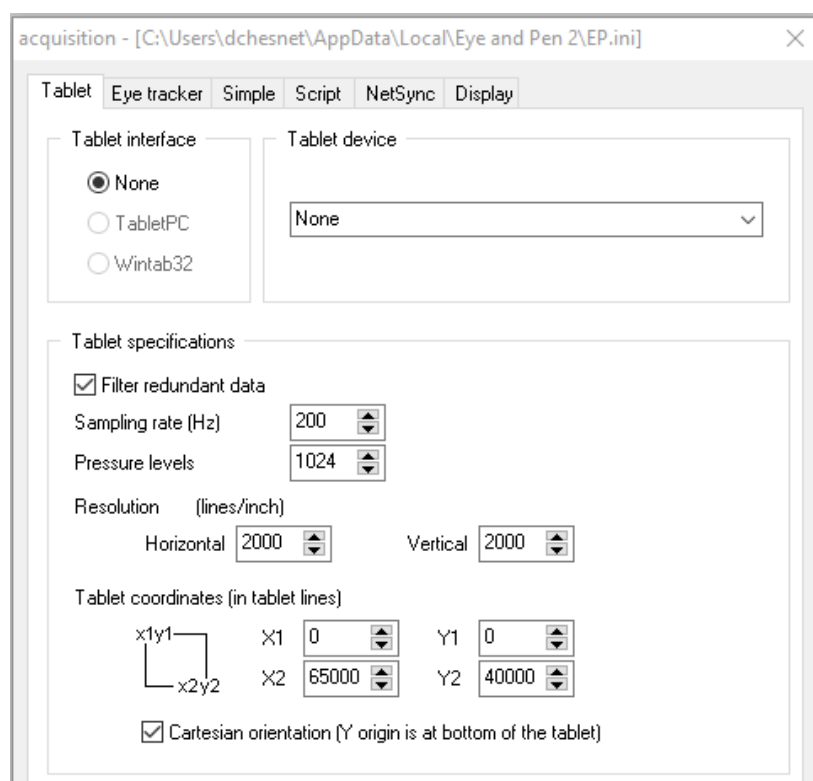
I set the options to use my current Eye and Pen settings instead of the file's original one.



Now, I should set the values I need into Configuration | Acquisition.

I set pressure levels to 1024, sampling rate to 200 Hz and resolutions to 2000 lines /cm.

I manually set the tablet width and height.



And here is what I got (Protocol | Description | Specifications):

Element	Value
Tablet	
Recorder	Eye and Pen 1.1
Horizontal display size (screen)	1280
Vertical display size (screen)	800
Tablet origin (X)	10
Tablet origin (Y)	10
Tablet width	65014
Tablet height	40630
Horizontal resolution (lines/inch)	2000
Vertical resolution (lines/inch)	2000
Sampling rate (Hz)	200
Cartesian coordinates	Yes
Pressure levels	1024
Eye tracker	
Recorder	Unknown
Eye tracker model	None

Now, one can see the effect on calculations.

Production

Time before production (pause 0)	880	Up pause threshold	15
Product duration	120278	Down pause threshold	15
Last Up pause duration	119	Fixation threshold	10

Details

	Stop events		Movements (samples)		
	Up pauses	Down pauses	Fixations	Tab	Eye
Number	115	159	0	9903	0
Total duration	42356	3293	0	74629	0
Total distance	n/a	n/a	n/a	366,0925	0,0000
Mean speed	n/a	n/a	n/a	4,9055	0,0000
Minimum	16	15	0	0,0000	0,0000
Maximum	3335	80	0	30,2500	0,0000
Range	3319	65	0	30,2500	0,0000
Q1	102,0000	16,0000	0,0000	2,7400	0,0000
Q2 (median)	188,0000	16,0000	0,0000	4,7900	0,0000
Q3	406,0000	24,0000	0,0000	6,9300	0,0000
Mean duration	368,3130	20,7107	0,0000	7,5360	0,0000
Standard deviation	536,9817	8,6055	0,0000	6,1693	0,0000
Skewness	3,5738	3,4401	0,0000	0,0158	0,0000
Kurtosis	13,9624	16,6651	0,0000	0,0016	0,0000

Distance in inch Duration in milliseconds Speed in inch by second