



RR Interval File Explanation

What Is It?

Many of you want to do further HRV analysis using popular application such as Kubios. In order to support this, SweetBeat Life provides the capability of emailing your session RR intervals in a CSV format.

In order to email your RR interval CSV file, simply select “Share” from your session summary, then select the “Email” option.

What is in the CSV File?

In order to comply with internationally accepted HRV measurement standards, SweetBeat Life performs a filter of the RR intervals before they are applied to the HRV calculation. The result is that the RR intervals are labeled:

- Label “N” = Normal RR interval, used for HRV Calculation
- Label “O”, “I”, “X”, “Q” = RR interval that falls outside the filter criteria and is not used for HRV calculation

In general only advanced users are interested in their RR intervals and for this reason, SweetBeat Life provides all the RRs, not just the normal ones used for HRV calculation. This gives our customers the choice to see Ectopic and noisy RRs as well as the “Normal” RRs.

What do I do with the CSV?

Many people will only want to analyze the normal RR intervals. Below is one way to remove the unwanted O, I, X, Q labeled intervals while still maintaining the original order of the RRs (which is mandatory for analysis).

Below are some illustrations which should make the process easier to follow. Just follow along in the order of this explanation.

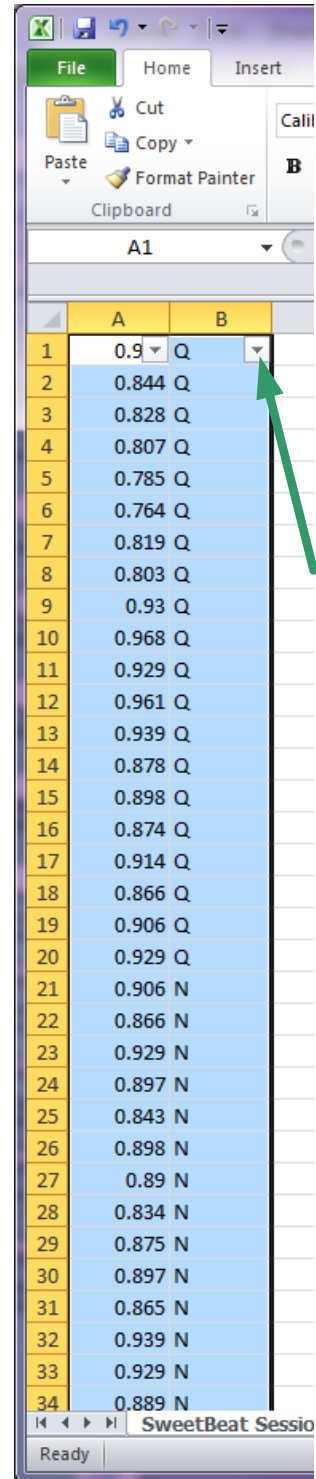
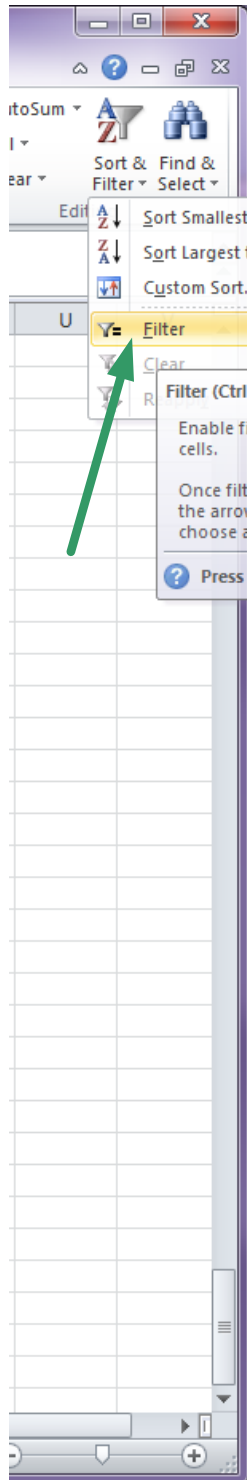
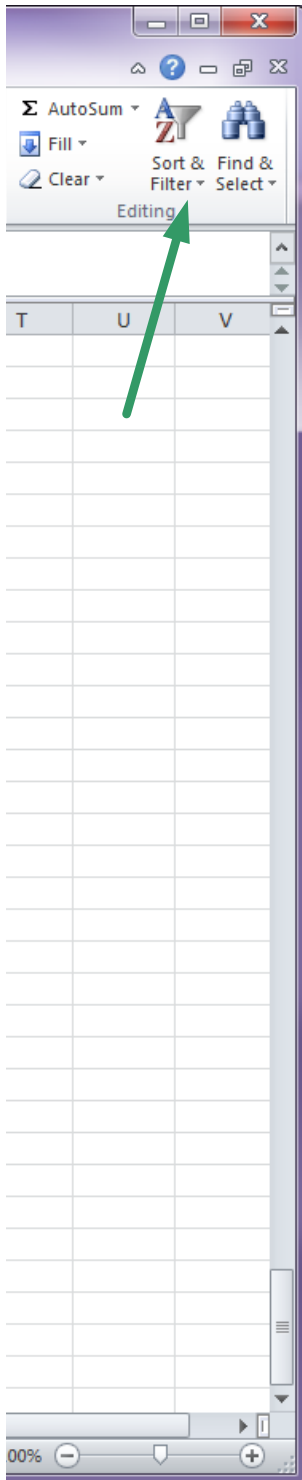
1. The first figure shows an example of a CSV file as it is emailed from SweetBeat Life
2. Remove the top row
3. Select the data exactly, meaning do not select the entire column. Drag the selection the entire length of the data as shown here.

	A	B
1	value	label
2	0.932	Q
3	0.844	Q
4	0.828	Q
5	0.807	Q
6	0.785	Q
7	0.764	Q
8	0.819	Q
9	0.803	Q
10	0.93	Q
11	0.968	Q
12	0.929	Q
13	0.961	Q
14	0.939	Q
15	0.878	Q
16	0.898	Q
17	0.874	Q
18	0.914	Q
19	0.866	Q
20	0.906	Q
21	0.929	Q
22	0.906	N
23	0.866	N
24	0.929	N
25	0.897	N
26	0.843	N
27	0.898	N
28	0.89	N
29	0.834	N
30	0.875	N
31	0.897	N
32	0.865	N
33	0.939	N
34	0.929	N

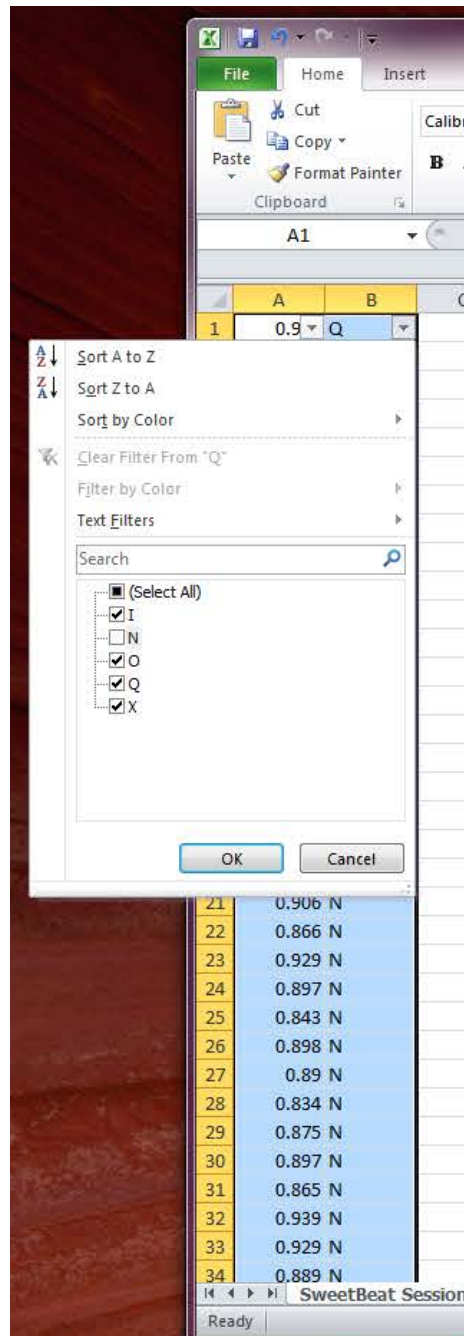
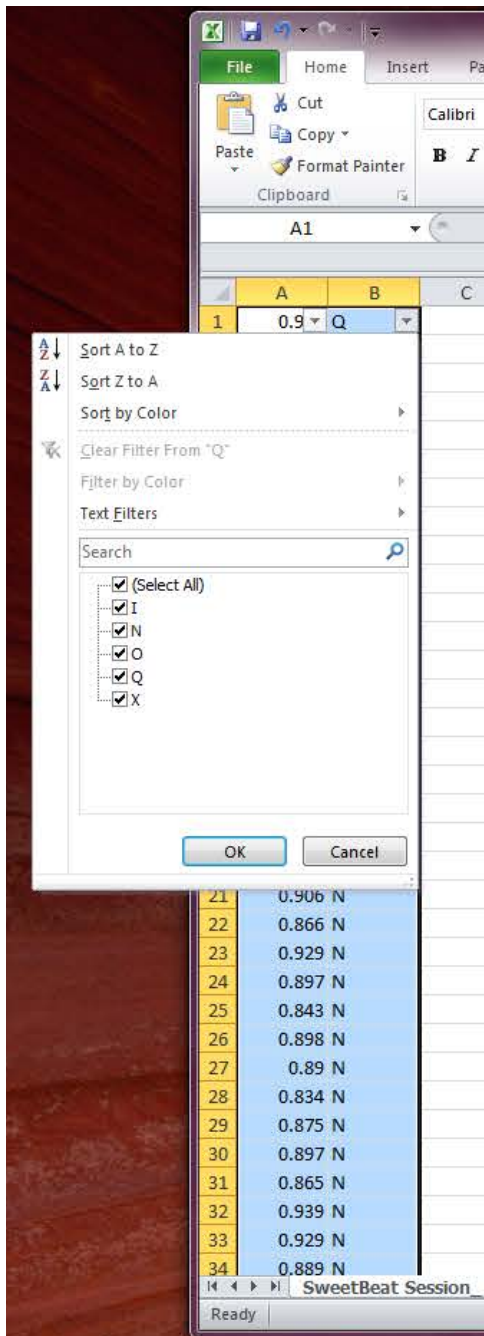
	A	B
1	0.932	Q
2	0.844	Q
3	0.828	Q
4	0.807	Q
5	0.785	Q
6	0.764	Q
7	0.819	Q
8	0.803	Q
9	0.93	Q
10	0.968	Q
11	0.929	Q
12	0.961	Q
13	0.939	Q
14	0.878	Q
15	0.898	Q
16	0.874	Q
17	0.914	Q
18	0.866	Q
19	0.906	Q
20	0.929	Q
21	0.906	N
22	0.866	N
23	0.929	N
24	0.897	N
25	0.843	N
26	0.898	N
27	0.89	N
28	0.834	N
29	0.875	N
30	0.897	N
31	0.865	N
32	0.939	N
33	0.929	N
34	0.889	N

	A	B
260	1.086	N
261	1.094	N
262	0.985	N
263	1.039	N
264	1.062	N
265	1.022	N
266	0.94	N
267	1.001	N
268	1.008	N
269	1.015	N
270	0.946	N
271	1.047	N
272	1.074	Q
273	1.024	Q
274	0.954	Q
275	0.955	Q
276	1.007	Q
277	0.985	Q
278	0.906	Q
279	0.961	Q
280	0.921	Q
281	0.899	Q
282	0.968	Q
283	1.002	Q
284	0.976	Q
285	0.922	Q
286	0.968	Q
287	1.008	Q
288	0.984	Q
289	0.914	Q
290	0.969	Q
291	0.975	Q

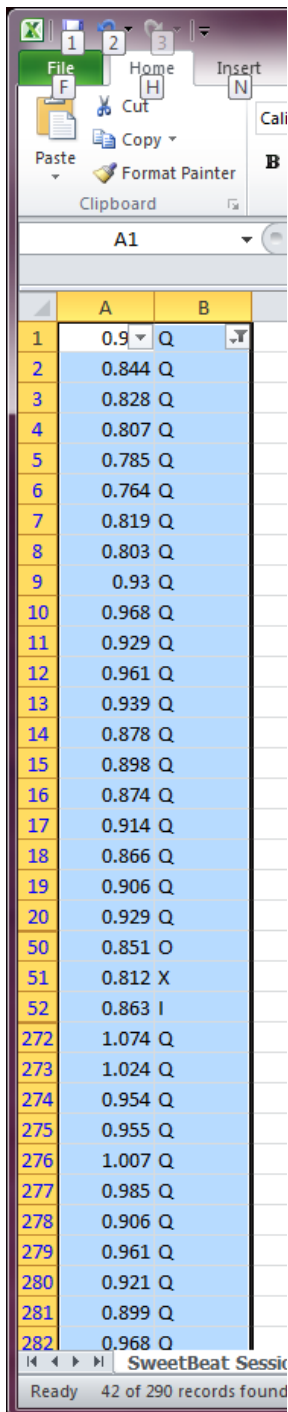
4. With the data highlighted, select the Sort & Filter feature in Excel
5. Select Filter
6. Notice the arrows next to the data in the first row



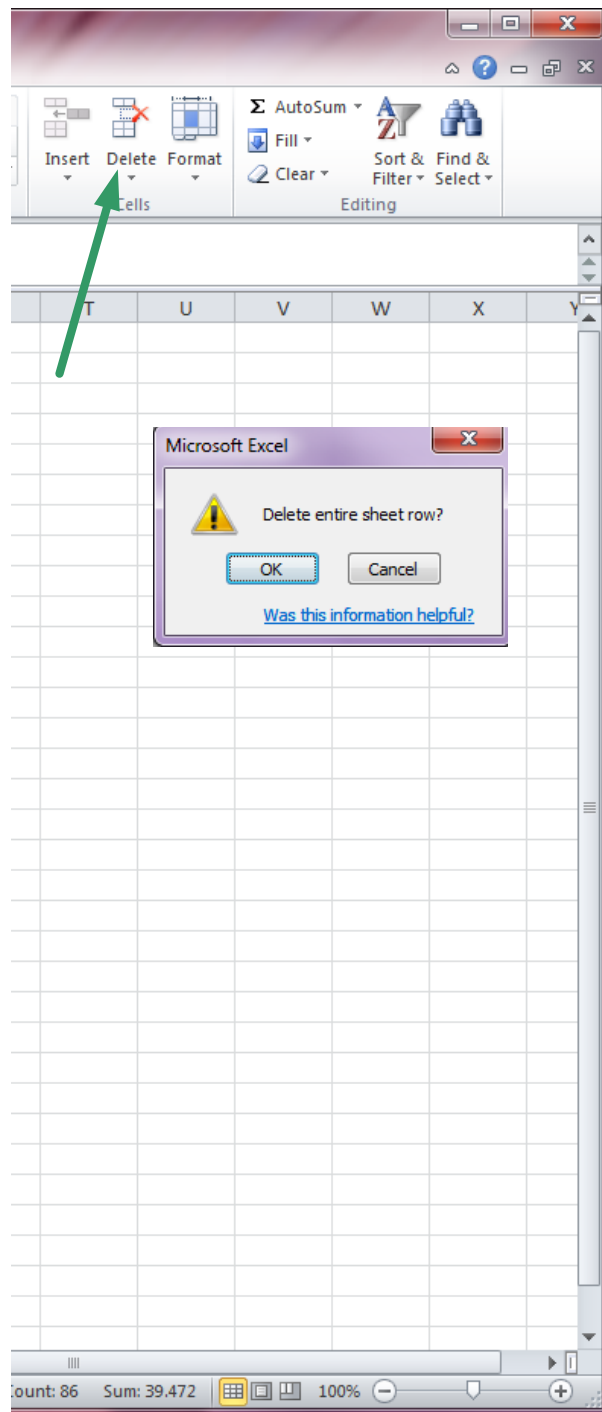
7. Click on the arrow next to the "Q" in column B. A screen will open showing the contents of column B
8. Un-Check the "N" box



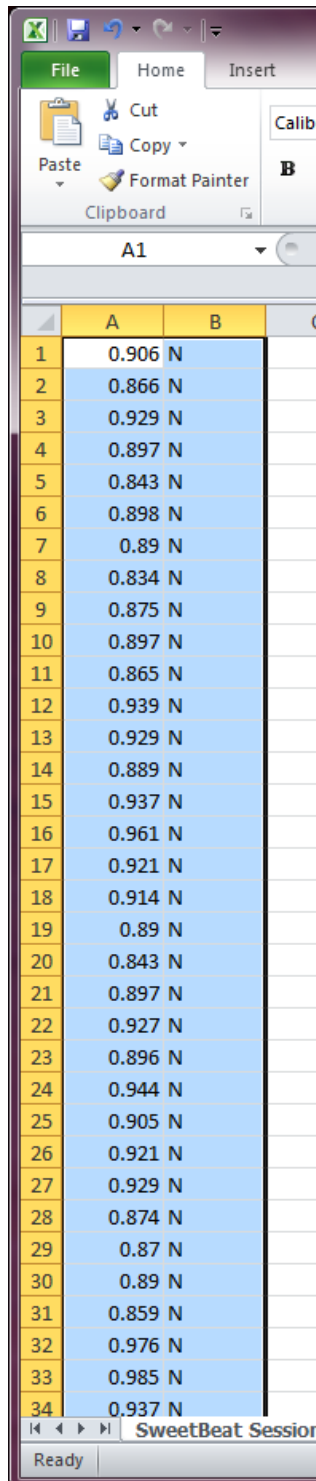
9. Now only the data with Q, I, O or X in column B remain (No "N"s)
10. Click on "Delete" and answer "OK" when the dialog box pops up



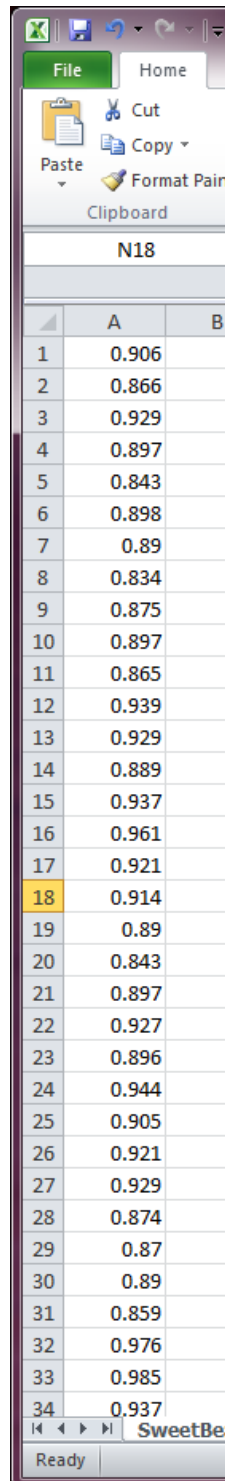
	A	B
1	0.9	Q
2	0.844	Q
3	0.828	Q
4	0.807	Q
5	0.785	Q
6	0.764	Q
7	0.819	Q
8	0.803	Q
9	0.93	Q
10	0.968	Q
11	0.929	Q
12	0.961	Q
13	0.939	Q
14	0.878	Q
15	0.898	Q
16	0.874	Q
17	0.914	Q
18	0.866	Q
19	0.906	Q
20	0.929	Q
50	0.851	O
51	0.812	X
52	0.863	I
272	1.074	Q
273	1.024	Q
274	0.954	Q
275	0.955	Q
276	1.007	Q
277	0.985	Q
278	0.906	Q
279	0.961	Q
280	0.921	Q
281	0.899	Q
282	0.968	Q



11. Now you will see the data labeled "N" and with the original order preserved.
12. Now delete column B to be left with only RRs that were labeled normal.
13. Save the file as a text file for import to Kubios.



	A	B
1	0.906	N
2	0.866	N
3	0.929	N
4	0.897	N
5	0.843	N
6	0.898	N
7	0.89	N
8	0.834	N
9	0.875	N
10	0.897	N
11	0.865	N
12	0.939	N
13	0.929	N
14	0.889	N
15	0.937	N
16	0.961	N
17	0.921	N
18	0.914	N
19	0.89	N
20	0.843	N
21	0.897	N
22	0.927	N
23	0.896	N
24	0.944	N
25	0.905	N
26	0.921	N
27	0.929	N
28	0.874	N
29	0.87	N
30	0.89	N
31	0.859	N
32	0.976	N
33	0.985	N
34	0.937	N



	A
1	0.906
2	0.866
3	0.929
4	0.897
5	0.843
6	0.898
7	0.89
8	0.834
9	0.875
10	0.897
11	0.865
12	0.939
13	0.929
14	0.889
15	0.937
16	0.961
17	0.921
18	0.914
19	0.89
20	0.843
21	0.897
22	0.927
23	0.896
24	0.944
25	0.905
26	0.921
27	0.929
28	0.874
29	0.87
30	0.89
31	0.859
32	0.976
33	0.985
34	0.937