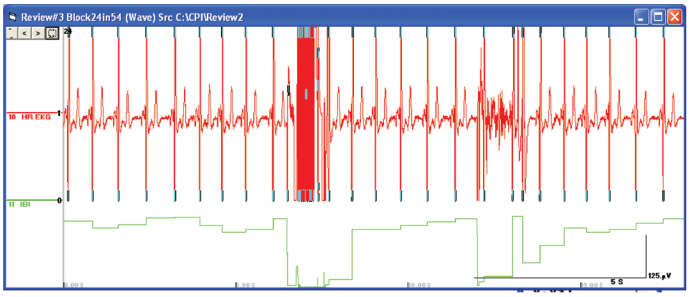
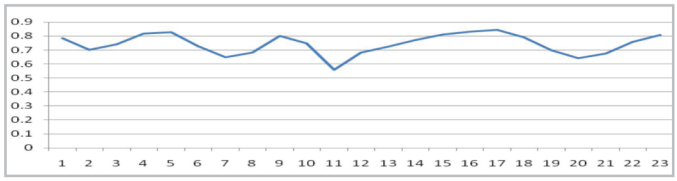
www.psychlab.com E-mail: rd@psychlab.com



to the green IBI trace produced by the hardware. Below that is a plot of IBI produced by off line R wave detection using the cleaning script, demonstrating how it can improve a poor recording without risking inventing data.



Average Heart Rate

The RFP may also be configured to manipulate IBI data produced by applying the Wave algorithm for R wave detection to produce average heart rate over any given period, in blocks, trials, grand average, as required.

HR Acceleration and Deceleration

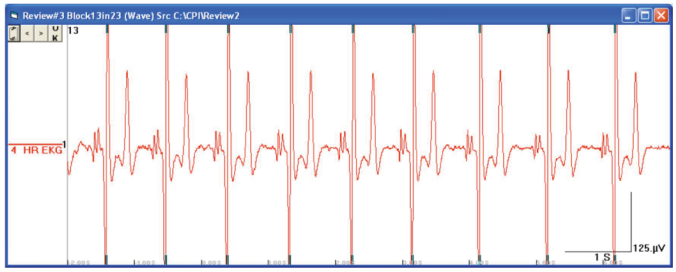
The RFP has also been configured to compare beats following a stimulus, such that tabulated result data can include such difference readout.

Second by Second IBI

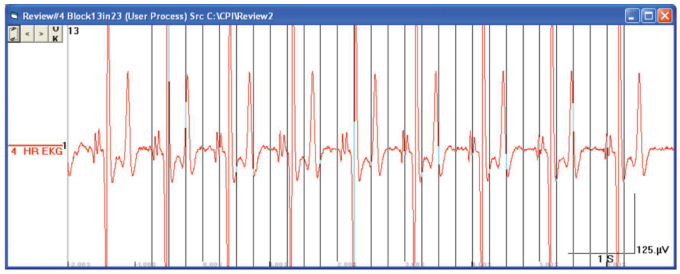
The ´User Process´facility in PsychLab software makes it possible to first obtain beat by beat information using the methods discussed above, and then re-arrange the information into one second intervals. The advantage of Second by Second IBI or Heart Rate is that for a given trial period, a standard number of fields will be produced, whereas with beat by beat IBI, the number of beats per given trial period will vary depending on HR.

Half Second and Quarter Second Heart Rate

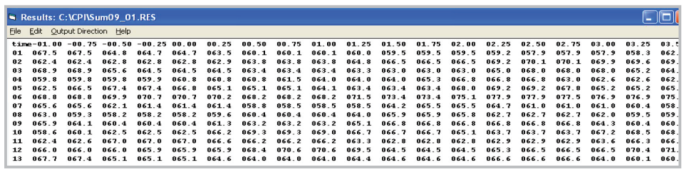
The same way, data can be expressed in half second, quarter second or any other such desired format.



Beat-by-beat Heart Rate



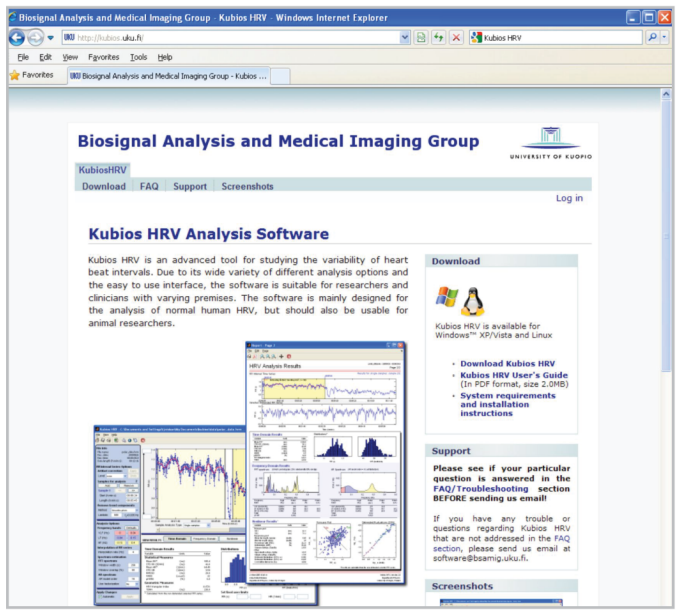
Quarter Second Heart Rate



Numerical quarter second data, quarter second time by column, trial by row.

Heart Rate Variability

Using the R wave detection and data cleaning methods discussed above, high quality IBI data series may be exported directly into the wide range of free programs available for HRV processing, for example Kubios HRV, as shown below at http://kubios.uku.fi/



http://kubios.uku.fi/