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Appendix A

A.1 The frequency band power for volume of oxygen consumption ($\dot{V}O_2$)

The mean normalized wavelet power for each frequency band for the rate of volume of oxygen consumption physiological activity for all cyclists for each pacing time trial is depicted in Figure A.1. Moreover, the changes in HF

band, LF band and ULF band for this particular physiological activity are compared as shown below.

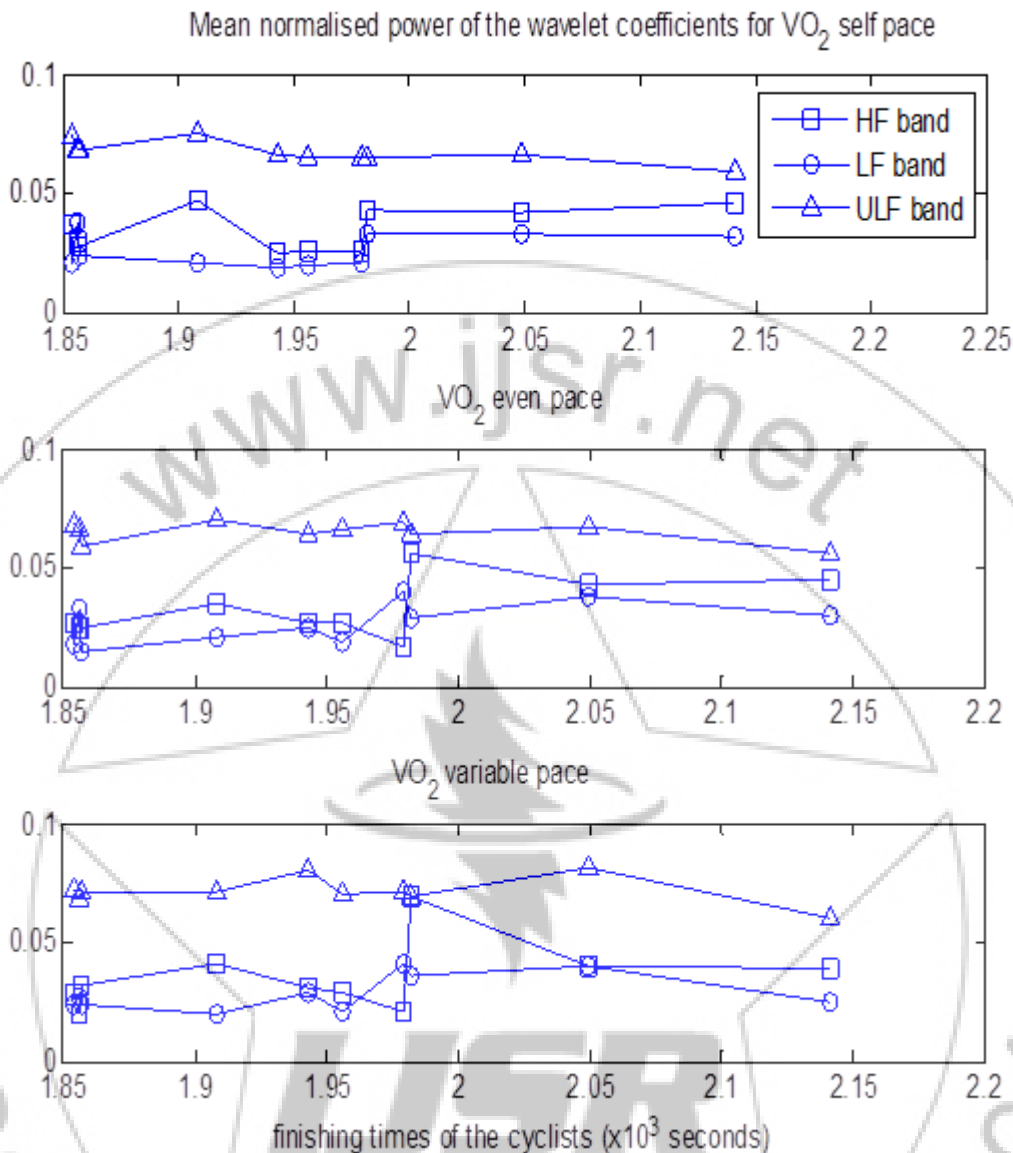


Figure A.1: The x-axis represents the finishing times of the cyclists and the y-axis represents the normalized wavelet power so that the changes in the three different frequency bands can be compared.

A.2 The frequency band power for heart rate (HR)

The mean normalized wavelet power for each frequency band for heart rate physiological activity for all cyclists for each pacing time trial is depicted in Figure A.2. Moreover, the changes in HF band, LF band and ULF band for this particular physiological activity are compared as shown below. There was a significant difference between HF band and LF band ($p < 0.01$), and there was a small positive correlation between HF band with increasing performance times of the cyclists (correlation $r = 0.3$ and statistical $p = 0.03$).

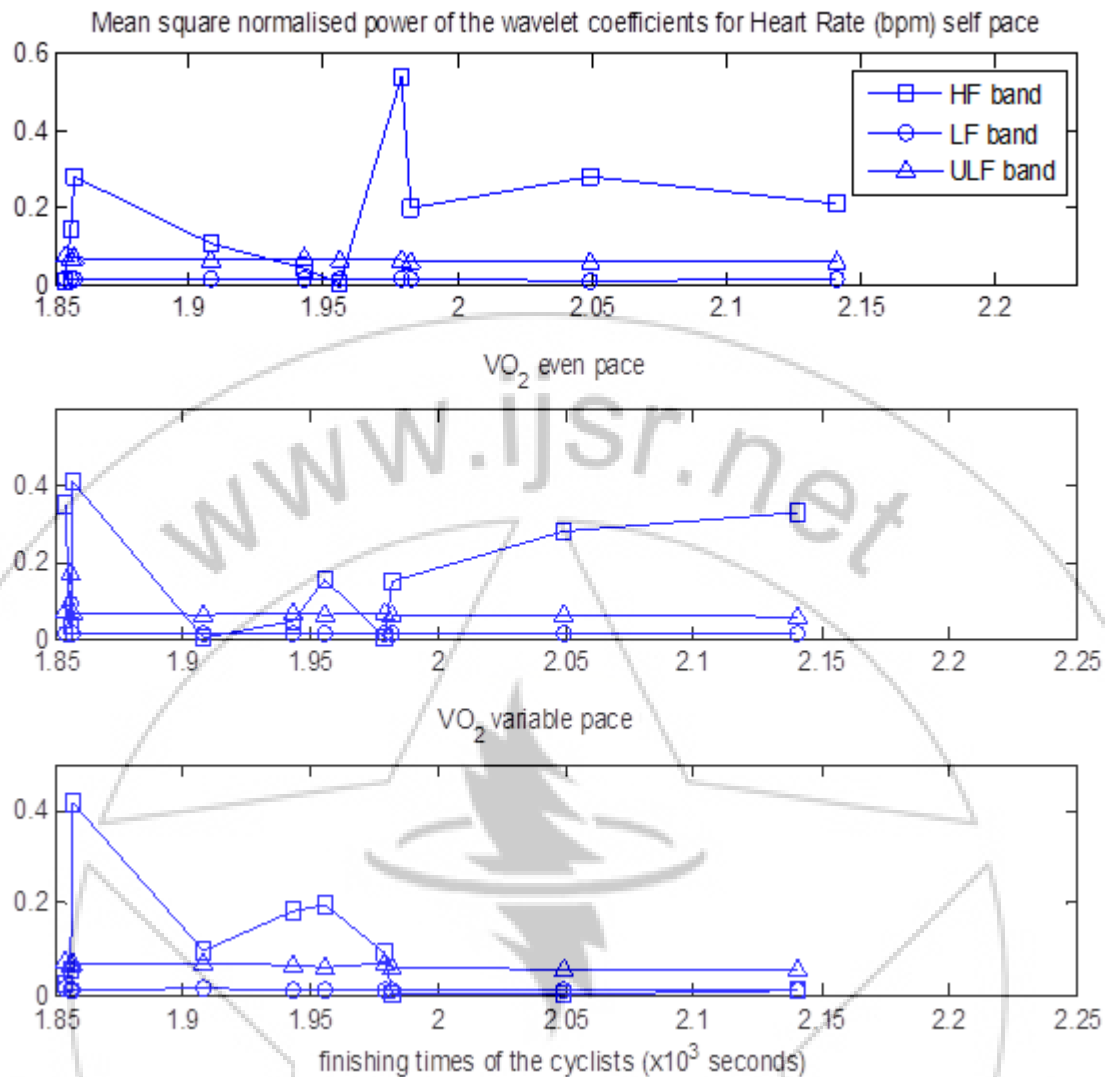


Figure A.2: The x-axis represents the finishing times of the cyclists, and the y-axis represents the normalized wavelet power of the heart rate activities so that the changes in the three different frequency bands can be compared.