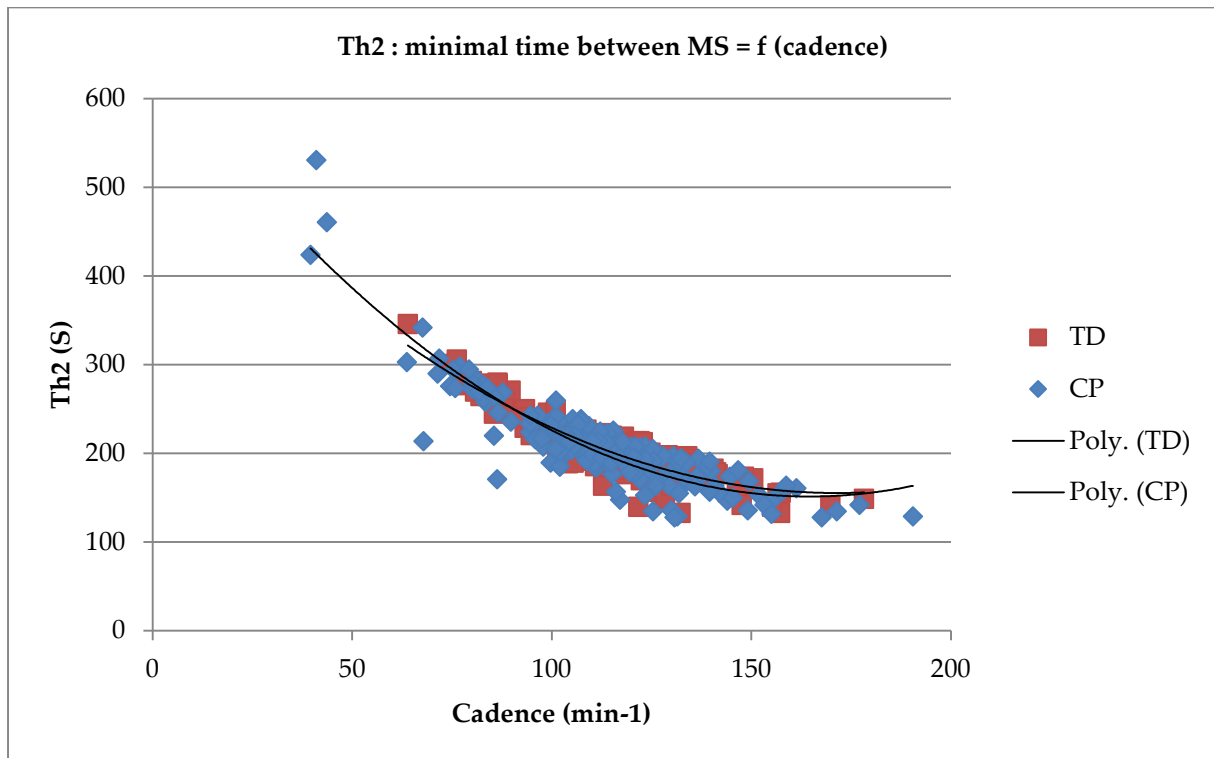


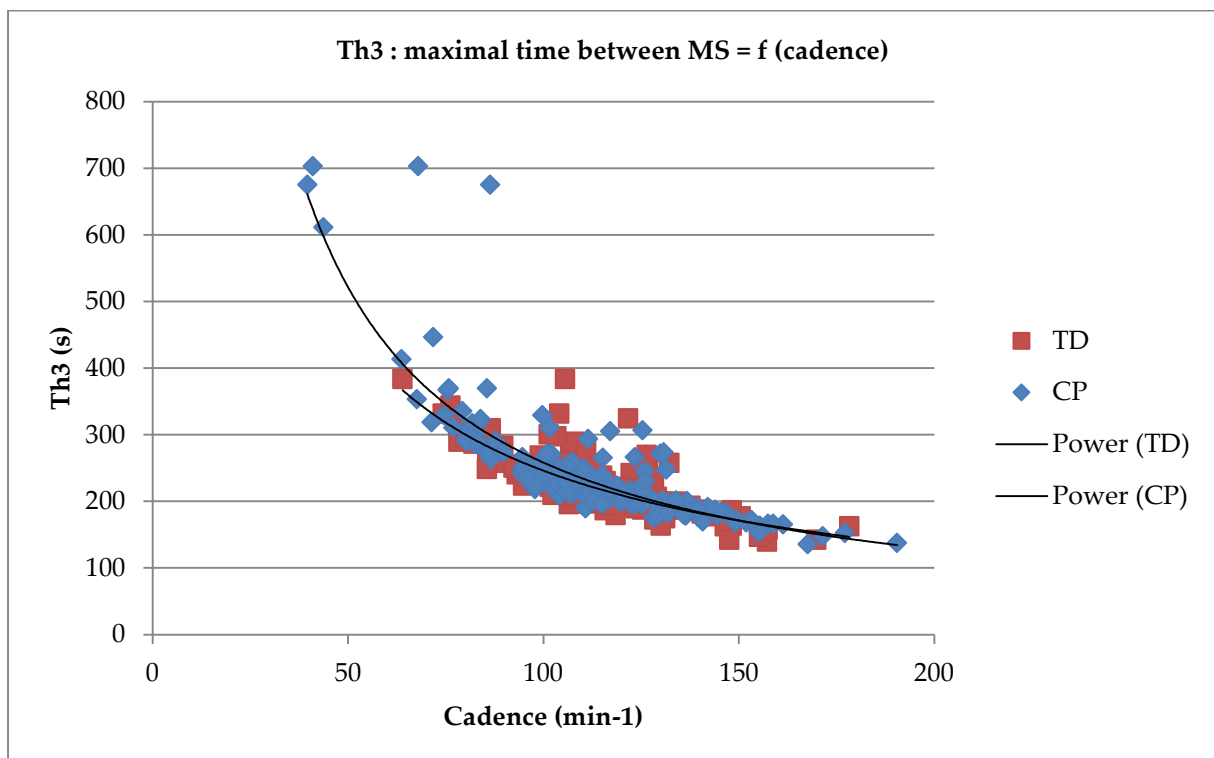
Figure S1 - Relation between the cadence of the walking bout (detected by FFT) in the laboratory and the 3 temporal thresholds Th2, Th3, Th4:



TD : $y = 0.0179x^2 - 5.8958x + 636.31$; $R^2 = 0.833$

CP : $y = 0.0144x^2 - 4.9303x + 578.11$; $R^2 = 0.8175$

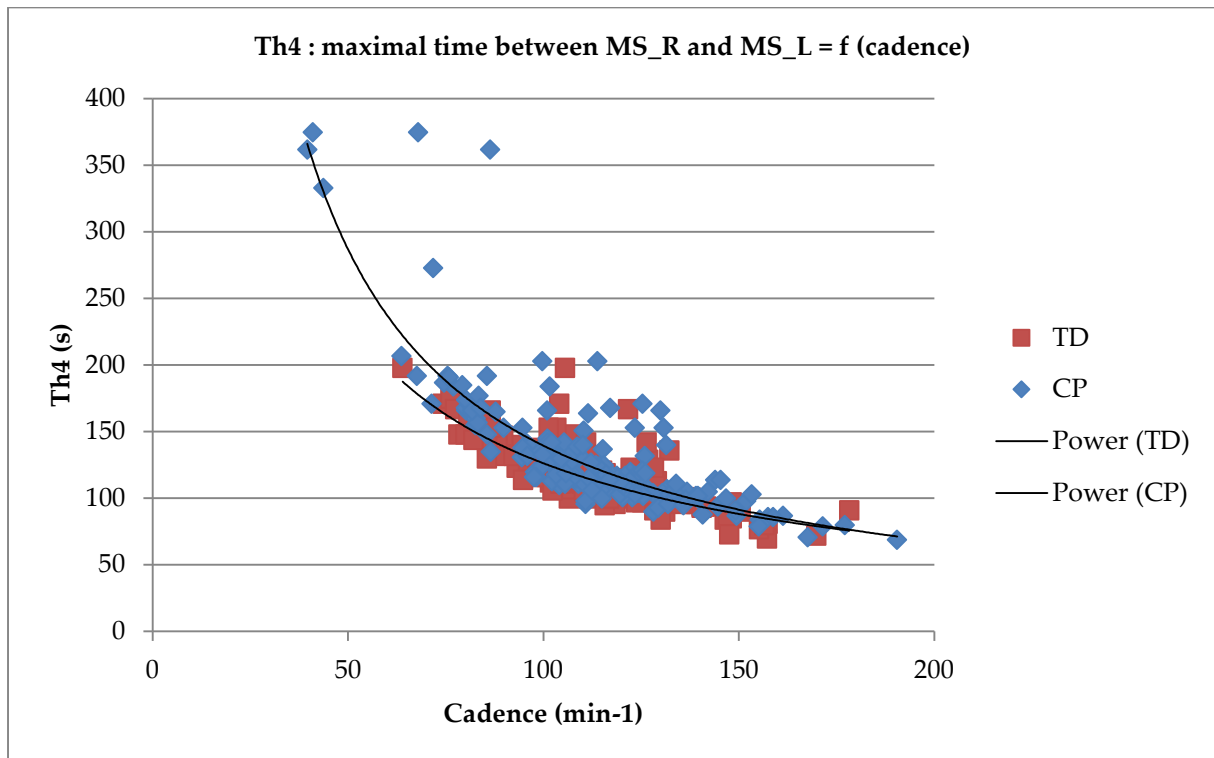
ALL: $y = 0.0169x^2 - 5.6105x + 619.73$; $R^2 = 0.825$



TD : $y = 15116x^{-0.894}$; $R^2 = 0.7861$

CP : $y = 27637x^{-1.015}$; $R^2 = 0.6785$

ALL : $y = 23558x^{-0.984}$; $R^2 = 0.7523$



TD : $y = 7442.2x^{-0.885}$; $R^2 = 0.7379$

CP : $y = 16873x^{-1.042}$; $R^2 = 0.6565$

ALL : $y = 14029x^{-1.011}$; $R^2 = 0.7017$