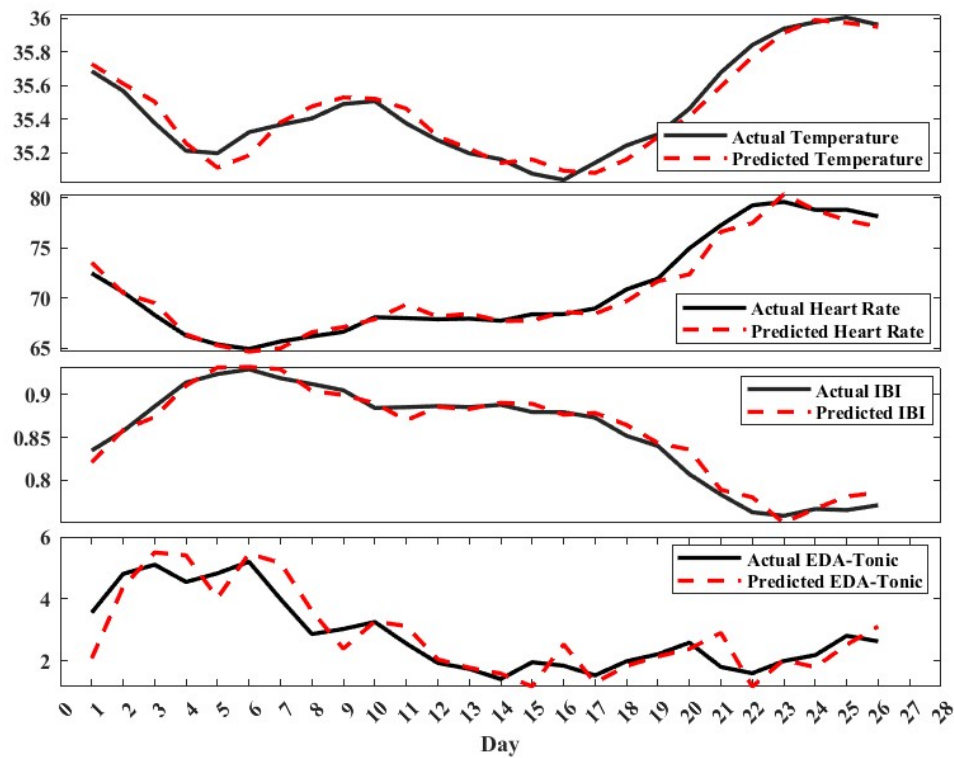


## Supplementary Material

### 1 SUPPLEMENTARY DATA

#### 1.1 Figures



**Figure S1.** The actual and ARIMA predicated average daily values for third cycle of an ovulating subject with length of 26 days with RMSE values of 0.063 (C°), 0.89 (bpm), 0.011 (s), and 0.6 (μS).

#### 1.2 Tables

## Average Heart Rate

<i>Phase</i>	<i>p-value</i>
Menses & Mid FH	**2.388E-04
Menses & OV	*0.022
Menses & Mid LH	*0.024
Menses & Late LH	**1.689E-04
Mid FH & OV	0.143
Mid FH & Mid LH	**1.486E-08
Mid FH & Late LH	**4.974E-12
OV & Mid LH	**1.036E-05
OV & Late LH	**8.328E-09
Mid LH & Late LH	0.114

**Table S1.** Results for significant changes of average heart rate across 5 phases of the menstrual cycle (*Menses*, *Mid-follicular*, *Ovulation*, *Midluteal*, and *Late luteal*),  $n = 31$  cycles using a paired t-test with a Bonferroni correction. **Note:** \*\* $\alpha \leq 0.005$ , \* $0.05 \geq \alpha > 0.005$ .

## Average Inter-beat Interval

<i>Phase</i>	<i>p-value</i>
Menses & Mid FH	**3.309E-05
Menses & OV	*0.009
Menses & Mid LH	0.054
Menses & Late LH	**5.325E-05
Mid FH & OV	0.101
Mid FH & Mid LH	**6.203E-09
Mid FH & Late LH	**5.951E-14
OV & Mid LH	**1.031E-05
OV & Late LH	**3.343E-10
Mid LH & Late LH	*0.027

**Table S2.** Same as table S1 except for average inter-beat-interval. **Note:** \*\* $\alpha \leq 0.005$ , \* $0.05 \geq \alpha > 0.005$ .

## Average Temperature

<i>Phase</i>	<i>p-value</i>
Menses & Mid FH	*0.013
Menses & OV	**0.003
Menses & Mid LH	**1.779E-06
Menses & Late LH	**6.360E-09
Mid FH & OV	0.644
Mid FH & Mid LH	**9.809E-12
Mid FH & Late LH	**1.421E-14
OV & Mid LH	**8.615E-13
OV & Late LH	**1.110E-15
Mid LH & Late LH	0.221

**Table S3.** Same as table S1 except for average temperature. **Note:** \*\* $\alpha \leq 0.005$ , \* $0.05 \geq \alpha > 0.005$ .

### Average EDA Tonic Component

<i>Phase</i>	<i>p-value</i>
Menses & Mid FH	**0.001
Menses & OV	**1.401E-08
Menses & Mid LH	**4.132E-08
Menses & Late LH	**3.009E-04
Mid FH & OV	**0.005
Mid FH & Mid LH	*0.010
Mid FH & Late LH	0.640
OV & Mid LH	0.819
OV & Late LH	*0.020
Mid LH & Late LH	*0.035

**Table S4.** Same as table S1 except for average EDA tonic component. **Note:**  $**\alpha \leq 0.005$ ,  $*0.05 \geq \alpha > 0.005$ .

### Average SMA of the Phasic Component

<i>Phase</i>	<i>p-value</i>
Menses & Mid FH	*0.007
Menses & OV	**1.221E-08
Menses & Mid LH	**9.306E-07
Menses & Late LH	**4.306E-04
Mid FH & OV	**0.001
Mid FH & Mid LH	*0.017
Mid FH & Late LH	0.384
OV & Mid LH	0.347
OV & Late LH	*0.014
Mid LH & Late LH	0.123

**Table S5.** Same as table S1 except for the EDA signal magnitude area of the phasic component. **Note:**  $**\alpha \leq 0.005$ ,  $*0.05 \geq \alpha > 0.005$ .