## Subject Info
| Subj | Age | Ht | Wt | Chest | Ab | Thigh | SSKF | Density | % BF | VO2max | HRmax | Max Watts | Max W/Kg |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN |
| 1 | 26.00000 | 175.000000 | 85.500000 | 16.500000 | 24.000000 | 19.50000 | 60.000000 | 1.058846 | 17.402115 | 45.600000 | 193.000000 | 290.000000 | 3.391813 |
| 2 | 22.00000 | 190.000000 | 90.500000 | 6.000000 | 10.500000 | 14.50000 | 31.000000 | 1.079627 | 9.094302 | 46.200000 | 191.000000 | 310.000000 | 3.425414 |
| 3 | 26.00000 | 178.000000 | 72.500000 | 8.000000 | 15.000000 | 10.50000 | 33.500000 | 1.076789 | 10.210080 | 54.900000 | 183.000000 | 290.000000 | 4.000000 |
| 4 | 24.00000 | 180.000000 | 79.000000 | 10.500000 | 30.500000 | 14.50000 | 55.500000 | 1.062249 | 16.019300 | 49.800000 | 189.000000 | 310.000000 | 3.924051 |
| 5 | 23.00000 | 183.000000 | 88.000000 | 12.000000 | 30.000000 | 18.00000 | 60.000000 | 1.059618 | 17.087583 | 47.200000 | 190.000000 | 330.000000 | 3.750000 |
| 6 | 25.00000 | 175.000000 | 62.900000 | 7.000000 | 25.500000 | 14.50000 | 47.000000 | 1.067624 | 13.853122 | 45.800000 | 184.000000 | 210.000000 | 3.338633 |
| 7 | 25.00000 | 193.000000 | 89.000000 | 5.000000 | 8.500000 | 6.00000 | 19.500000 | 1.087433 | 6.055873 | 48.900000 | 174.000000 | 370.000000 | 4.157303 |
| 8 | 21.00000 | 175.000000 | 74.300000 | 7.500000 | 15.500000 | 9.00000 | 32.000000 | 1.079159 | 9.278069 | 52.600000 | 191.000000 | 250.000000 | 3.364738 |
| Mean | 24.00000 | 182.000000 | 80.212500 | 9.062500 | 19.937500 | 13.31250 | 42.312500 | 1.071418 | 12.375056 | 48.875000 | 186.875000 | 295.000000 | 3.668994 |
| STEDV | 1.85164 | 7.118052 | 9.763553 | 3.774326 | 8.653808 | 4.54295 | 15.371443 | 0.010746 | 4.274815 | 3.405353 | 6.266407 | 48.697316 | 0.328959 |

## PV Expansion
| Hct | HIIE | Unnamed: 2 | Unnamed: 3 | Unnamed: 4 | Unnamed: 5 | Unnamed: 6 | Unnamed: 7 | Unnamed: 8 | CON | Unnamed: 10 | Unnamed: 11 | Unnamed: 12 | Unnamed: 13 | Unnamed: 14 | Unnamed: 15 | Unnamed: 16 |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Subject | 1 | 2.000000 | 3.000000 | 4.000000 | 5.000000 | 6.000000 | 7.000000 | 8.000000 | 1 | 2.000000 | 3.000000 | 4.000000 | 5.000000 | 6.000000 | 7.000000 | 8.000000 |
| TT-1 | 49.5 | 51.500000 | 47.750000 | 48.750000 | 48.750000 | 45.000000 | 48.000000 | 48.600000 | 49.25 | 47.750000 | 46.600000 | 48.750000 | 47.750000 | 44.000000 | 49.750000 | 48.000000 |
| Intervention | 50 | 46.000000 | 48.500000 | 48.500000 | 45.250000 | 46.500000 | 48.500000 | 44.000000 | 48.25 | 43.500000 | 49.250000 | 47.500000 | 44.500000 | 48.500000 | 49.000000 | 44.000000 |
| 24 hrs Post | 47.75 | 44.750000 | 46.000000 | 46.000000 | 45.250000 | 47.000000 | 46.000000 | 43.500000 | 47.5 | 43.750000 | 48.000000 | 47.250000 | 45.250000 | 49.500000 | 48.750000 | 43.750000 |
| 48 hrs Post | 46.5 | 43.125000 | 45.500000 | 45.500000 | 43.500000 | 46.000000 | 46.500000 | 43.000000 | 49.75 | 45.500000 | 49.500000 | 48.000000 | 45.500000 | 49.000000 | 48.500000 | 43.500000 |
| NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN |
| Hb | HIIE | NaN | NaN | NaN | NaN | NaN | NaN | NaN | CON | NaN | NaN | NaN | NaN | NaN | NaN | NaN |
| Subject | 1 | 2.000000 | 3.000000 | 4.000000 | 5.000000 | 6.000000 | 7.000000 | 8.000000 | 1 | 2.000000 | 3.000000 | 4.000000 | 5.000000 | 6.000000 | 7.000000 | 8.000000 |
| TT-1 | 16.5 | 18.346560 | 15.916667 | 17.990700 | 13.587318 | 16.239870 | 18.346560 | 15.618695 | 16.416667 | 15.916667 | 16.053646 | 17.253320 | 17.753460 | 16.250220 | 18.734470 | 12.927400 |
| Intervention | 16.666667 | 19.335549 | 16.166667 | 16.606722 | 17.230080 | 15.500000 | 18.821516 | 13.562220 | 16.083333 | 14.500000 | 16.416667 | 17.160360 | 17.373692 | 16.166667 | 18.231780 | 12.178320 |
| 24 hrs Post | 15.916667 | 17.872532 | 15.333333 | 15.971058 | 16.912650 | 15.666667 | 17.951614 | 13.641300 | 15.833333 | 14.583333 | 16.000000 | 18.979200 | 16.852080 | 16.500000 | 18.356790 | 12.692340 |
| 48 hrs Post | 15.5 | 18.307483 | 15.166667 | 14.660001 | 16.834670 | 15.333333 | 16.923548 | 13.471640 | 16.583333 | 15.166667 | 16.500000 | 18.346560 | 16.410716 | 16.333333 | 17.621360 | 12.941080 |
| NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN |
| PVE | HIIE | NaN | NaN | NaN | NaN | NaN | NaN | NaN | CON | NaN | NaN | NaN | NaN | NaN | NaN | NaN |
| Subject | 1 | 2.000000 | 3.000000 | 4.000000 | 5.000000 | 6.000000 | 7.000000 | 8.000000 | 1 | 2.000000 | 3.000000 | 4.000000 | 5.000000 | 6.000000 | 7.000000 | 8.000000 |
| Pre-Training | -0.058241 | -2.759096 | -0.399440 | 0.030455 | -5.211458 | 0.042648 | 0.036921 | 0.080374 | 0.000998 | 2.825849 | 2.461800 | 2.902979 | -1.378914 | 0.122418 | -2.923777 | 0.817190 |
| 24 hrs Post | 5 | 6.468610 | 4.578000 | 1.492537 | 4.872742 | 2.560000 | -0.672386 | 1.735760 | -1.269988 | -3.098244 | -0.094000 | -1.069444 | -1.576574 | 0.128000 | -1.198288 | -2.607694 |
| 48 hrs Post | 3.90265 | 8.968430 | 7.806000 | 6.124661 | 8.301717 | 4.500000 | 7.253375 | 6.846673 | -1.191574 | -3.149839 | -0.030100 | -0.459770 | -1.698908 | 0.184690 | 3.628103 | 5.669804 |

## Hemodynamic Data
| TT | Q | HIIE1 | HIIE2 | CON1 | CON2 | Unnamed: 6 | Submax | Q.1 | HIIE1.1 | HIIE2.1 | CON1.1 | CON2.1 |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| NaN | 1 | 21.1 | 25.4 | 19.6 | 20.6 | NaN | NaN | 1 | 15.7 | 18.6 | 12.3 | 10.6 |
| NaN | 2 | 12.6 | 14.9 | 12.4 | 13.6 | NaN | NaN | 2 | 7.4 | 9.5 | 8.9 | 12.9 |
| NaN | 3 | 24.4 | 23.3 | 21.2 | 22.1 | NaN | NaN | 3 | 15.8 | 15.9 | 13.4 | 12.9 |
| NaN | 4 | 21.7 | 23.6 | 22.9 | 22.2 | NaN | NaN | 4 | 10.5 | 13.2 | 11.1 | 14.8 |
| NaN | 5 | 15.6 | 18.3 | 13.4 | 14.2 | NaN | NaN | 5 | 10.2 | 10.9 | 11.2 | 11.4 |
| NaN | 6 | 18.04 | 16.3 | 14.8 | 14.7 | NaN | NaN | 6 | 13.5 | 12.5 | 13.4 | 11.1 |
| NaN | 7 | 24.13 | 25.3 | 24.1 | 24.6 | NaN | NaN | 7 | 17.5 | 18.9 | 17 | 17.2 |
| NaN | 8 | 26.5 | 28.1 | 27.4 | 27.3 | NaN | NaN | 8 | 18.05 | 19.7 | 17.3 | 17.8 |
| NaN | Average | 20.50875 | 21.9 | 19.475 | 19.9125 | NaN | NaN | Average | 13.58125 | 14.9 | 13.075 | 13.5875 |
| NaN | STDV | 4.760821 | 4.787185 | 5.447608 | 5.164283 | NaN | NaN | STDV | 3.852266 | 3.919548 | 2.901108 | 2.754444 |
| NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN |
| NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN |
| TT | SV | HIIE1 | HIIE2 | CON1 | CON2 | NaN | Submax | SV | HIIE1 | HIIE2 | CON1 | CON2 |
| NaN | 1 | 122.1 | 152.9 | 113.4 | 120.4 | NaN | NaN | 1 | 112.1 | 135.6 | 86.1 | 81.5 |
| NaN | 2 | 67.8 | 87.7 | 67.9 | 74.7 | NaN | NaN | 2 | 56.8 | 73.8 | 68.9 | 84.4 |
| NaN | 3 | 152.4 | 157.3 | 139.2 | 133.9 | NaN | NaN | 3 | 117.7 | 116.2 | 104.7 | 115.1 |
| NaN | 4 | 129.4 | 133.1 | 130.8 | 129.2 | NaN | NaN | 4 | 107.3 | 113.9 | 109.1 | 111.3 |
| NaN | 5 | 87.2 | 91.4 | 82.3 | 83.9 | NaN | NaN | 5 | 79.2 | 78.3 | 78.5 | 83.2 |
| NaN | 6 | 114.1 | 103.01 | 105.2 | 97.6 | NaN | NaN | 6 | 102.1 | 96.9 | 95.2 | 90.3 |
| NaN | 7 | 163 | 171.5 | 168.1 | 168.9 | NaN | NaN | 7 | 148.5 | 152.7 | 139.1 | 145.3 |
| NaN | 8 | 160.9 | 166.5 | 166.2 | 169.1 | NaN | NaN | 8 | 133.3 | 143.4 | 130.3 | 133.4 |
| NaN | Average | 124.6125 | 132.92625 | 121.6375 | 122.2125 | NaN | NaN | Average | 107.125 | 113.85 | 101.4875 | 105.5625 |
| NaN | STDV | 34.495608 | 34.378184 | 36.469515 | 35.652948 | NaN | NaN | STDV | 28.961292 | 29.316548 | 24.435948 | 24.604758 |
| NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN |
| NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN |
| TT | HR | HIIE1 | HIIE2 | CON1 | CON2 | NaN | Submax | HR | HIIE1 | HIIE2 | CON1 | CON2 |
| NaN | 1 | 172.9 | 166.4 | 172.8 | 171.7 | NaN | NaN | 1 | 139.9 | 137.2 | 142.6 | 138.1 |
| NaN | 2 | 171.8 | 169.4 | 182.7 | 182.9 | NaN | NaN | 2 | 130.8 | 128 | 130.1 | 132.4 |
| NaN | 3 | 160.2 | 157.3 | 164.1 | 165 | NaN | NaN | 3 | 134.2 | 137.4 | 138.8 | 136.3 |
| NaN | 4 | 167.6 | 163 | 167.6 | 171.8 | NaN | NaN | 4 | 128.1 | 127.9 | 132.4 | 130.8 |
| NaN | 5 | 172.7 | 173.1 | 173.5 | 168.5 | NaN | NaN | 5 | 132.4 | 129.1 | 142.3 | 136.7 |
| NaN | 6 | 157.6 | 157.7 | 155.8 | 150.7 | NaN | NaN | 6 | 132.1 | 128.4 | 131.3 | 135.2 |
| NaN | 7 | 152 | 155.1 | 153.2 | 149.6 | NaN | NaN | 7 | 118.3 | 122.8 | 124.3 | 122.5 |
| NaN | 8 | 166.5 | 168.8 | 165.4 | 160.8 | NaN | NaN | 8 | 135.4 | 137.3 | 132.7 | 133.4 |
| NaN | Average | 165.1625 | 163.85 | 166.8875 | 165.125 | NaN | NaN | Average | 131.4 | 131.0125 | 134.3125 | 133.175 |
| NaN | STDV | 7.77853 | 6.604976 | 9.632451 | 11.231048 | NaN | NaN | STDV | 6.329523 | 5.546025 | 6.391387 | 4.939563 |

## TT Variables
| HIIE 1st Trial | Unnamed: 1 | Total Time (min) | Power (W) | Power (W/kg) | Cadence (rpm) | Pre - Blood Lactate | Peak - Blood Lactate | RPE | SaO2 |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| NaN | 1 | 30.116667 | 175.1 | 2.047953 | 90.4 | 1.3 | 15.8 | 14.6 | 88 |
| NaN | 2 | 28.65 | 200 | 2.209945 | 96.8 | 2.3 | 17.8 | 14.8 | 85.6 |
| NaN | 3 | 32.916667 | 137.8 | 1.90069 | 118.4 | 2.4 | 12.4 | 16.6 | 86.8 |
| NaN | 4 | 31.733333 | 152.2 | 1.926582 | 104.8 | 2.9 | 15.9 | 17.75 | 88.4 |
| NaN | 5 | 29.366667 | 185.2 | 2.104545 | 98.1 | 1.5 | 14.2 | 17.6 | 87.2 |
| NaN | 6 | 38.516667 | 91.7 | 1.45787 | 99.7 | 1.9 | 11.2 | 13.8 | 90.3 |
| NaN | 7 | 28.033333 | 211.7 | 2.378652 | 95.6 | 1.4 | 9.6 | 13.2 | 88.2 |
| NaN | 8 | 31.266667 | 157.3 | 2.117093 | 107.3 | 2 | 12.5 | 16.2 | 84.2 |
| NaN | Mean | 31.325 | 163.875 | 2.017916 | 101.3875 | 1.9625 | 13.675 | 15.56875 | 87.3375 |
| NaN | Standad Dev. | 3.331869 | 38.250444 | 0.272812 | 8.659831 | 0.555331 | 2.738482 | 1.716087 | 1.861595 |
| NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN |
| NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN |
| HIIE 2nd Trial | Trial | Total Time (min) | Power (W) | Power (W/kg) | Cadence (rpm) | Pre - Blood Lactate | Peak - Blood Lactate | RPE | SaO2 |
| NaN | 1 | 29.033333 | 192.1 | 2.246784 | 86.2 | 1.5 | 15.7 | 15.2 | 85.2 |
| NaN | 2 | 28.733333 | 197.7 | 2.18453 | 106.4 | 1.9 | 15.7 | 14.2 | 84.6 |
| NaN | 3 | 31.266667 | 157.2 | 2.168276 | 114.7 | 1.9 | 12.1 | 16.2 | 87.4 |
| NaN | 4 | 31.733333 | 151.4 | 1.916456 | 108.4 | 1.6 | 20.6 | 17.2 | 86.2 |
| NaN | 5 | 28.966667 | 191.3 | 2.173864 | 101.2 | 2.2 | 17.1 | 16 | 89.1 |
| NaN | 6 | 37.583333 | 97.5 | 1.550079 | 99.6 | 2.1 | 12 | 15.4 | 87.2 |
| NaN | 7 | 27.45 | 213.9 | 2.403371 | 94.1 | 0.9 | 8.7 | 12.6 | 87.4 |
|  | 8 | 30.75 | 168.9 | 2.273217 | 95.2 | 2.2 | 12.7 | 15.6 | 86 |
| NaN | Mean | 30.689583 | 171.25 | 2.114572 | 100.725 | 1.7875 | 14.325 | 15.3 | 86.6375 |
| NaN | Standad Dev. | 3.139229 | 36.62817 | 0.265988 | 9.049822 | 0.442194 | 3.693527 | 1.389758 | 1.432219 |
| NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN |
| CON 1st Trial | Trial | Total Time (min) | Power (W) | Power (W/kg) | Cadence (rpm) | Pre - Blood Lactate | Peak - Blood Lactate | RPE | SaO2 |
| NaN | 1 | 30.566667 | 168.9 | 1.975439 | 92.7 | 3.1 | 12.1 | 14 | 86.75 |
| NaN | 2 | 28.833333 | 195.8 | 2.163536 | 105.3 | 2 | 15.2 | 16 | 86.6 |
| NaN | 3 | 32.916667 | 137.6 | 1.897931 | 114.8 | 2.5 | 11 | 14.6 | 86 |
| NaN | 4 | 32.266667 | 144.8 | 1.832911 | 112.6 | 1.2 | 17.1 | 17.75 | 88.1 |
| NaN | 5 | 29.75 | 179.8 | 2.043182 | 96.4 | 2.8 | 15.4 | 16.6 | 89.2 |
| NaN | 6 | 36 | 104.7 | 1.664547 | 100.2 | 1.2 | 14.1 | 15.2 | 87.2 |
| NaN | 7 | 28.333333 | 205.9 | 2.313483 | 91.9 | 1.7 | 9.7 | 13.4 | 81 |
| NaN | 8 | 30.916667 | 162 | 2.18035 | 103 | 2.2 | 19.2 | 16.8 | 85.6 |
| NaN | Mean | 31.197917 | 162.4375 | 2.008922 | 102.1125 | 2.0875 | 14.225 | 15.54375 | 86.30625 |
| NaN | Standad Dev. | 2.493634 | 32.965477 | 0.210523 | 8.544746 | 0.701911 | 3.179286 | 1.500342 | 2.432582 |
| NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN | NaN |
| CON 2nd Trial | Trial | Total Time (min) | Power (W) | Power (W/kg) | Cadence (rpm) | Pre - Blood Lactate | Peak - Blood Lactate | RPE | SaO2 |
| NaN | 1 | 29.533333 | 183.2 | 2.14269 | 94.3 | 3.5 | 14.2 | 13.4 | 87.2 |
| NaN | 2 | 29.283333 | 188 | 2.077348 | 106.1 | 2.2 | 18.7 | 16.4 | 85.2 |
| NaN | 3 | 32.083333 | 146.9 | 2.026207 | 116.3 | 2.5 | 12.1 | 15.8 | 87 |
| NaN | 4 | 31.65 | 153 | 1.936709 | 102.5 | 3.2 | 19.1 | 17.4 | 88.25 |
| NaN | 5 | 29.783333 | 179.2 | 2.036364 | 96.7 | 1.7 | 17 | 16 | 88 |
| NaN | 6 | 37.116667 | 101 | 1.605723 | 98.8 | 1.9 | 14.1 | 15.8 | 88.2 |
| NaN | 7 | 30.95 | 205.6 | 2.310112 | 91.9 | 1.9 | 9.7 | 13 | 82.6 |
| NaN | 8 | 31.09375 | 161.7 | 2.176312 | 90.4 | 2.1 | 16.1 | 15.8 | 87 |
| NaN | Mean | 31.436719 | 164.825 | 2.038933 | 99.625 | 2.375 | 15.125 | 15.45 | 86.68125 |
| NaN | Standad Dev. | 2.509227 | 32.267841 | 0.208032 | 8.540785 | 0.65192 | 3.241142 | 1.491883 | 1.920926 |

## Power per km
| Power | 1 | Unnamed: 2 | Unnamed: 3 | Unnamed: 4 | 2 | Unnamed: 6 | Unnamed: 7 | Unnamed: 8 | 3 | Unnamed: 10 | Unnamed: 11 | Unnamed: 12 | 4 | Unnamed: 14 | Unnamed: 15 | Unnamed: 16 | 5 | Unnamed: 18 | Unnamed: 19 | Unnamed: 20 | 6 | Unnamed: 22 | Unnamed: 23 | Unnamed: 24 | 7 | Unnamed: 26 | Unnamed: 27 | Unnamed: 28 | 8 | Unnamed: 30 | Unnamed: 31 | Unnamed: 32 |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| NaN | HIIE 1 | HIIE 2 | CON 1 | CON 2 | HIIE 1 | HIIE 2 | CON 1 | CON 2 | HIIE 1 | HIIE 2 | CON 1 | CON 2 | HIIE 1 | HIIE 2 | CON 1 | CON 2 | HIIE 1 | HIIE 2 | CON 1 | CON 2 | HIIE 1 | HIIE 2 | CON 1 | CON 2 | HIIE 1 | HIIE 2 | CON 1 | CON 2 | HIIE 1 | HIIE 2 | CON 1 | CON 2 |
| 1km | 208.8 | 183.5 | 170.3 | 176.4 | 177.8 | 180.6 | 197.7 | 182.2 | 164.7 | 156.9 | 187.6 | 147.6 | 161.4 | 157.4 | 119.08 | 206.8 | 174.4 | 175.2 | 172.3 | 171.8 | 111.6 | 104.657534 | 112.685315 | 97.456954 | 174.942623 | 180.508333 | 179.258333 | 177.305785 | 170.065574 | 161.572581 | 96.352564 | 169.57377 |
| 2km | 200.1 | 185.01 | 175 | 179.8 | 189.9 | 185.04 | 200.1 | 185.1 | 175.3 | 160.1 | 133.2 | 149.9 | 164.6 | 168.3 | 154.4 | 190.6 | 175.1 | 180.2 | 185.5 | 175.08 | 95.5 | 95.849315 | 112.51049 | 95.05298 | 199.680328 | 194.35 | 189.641667 | 190.057851 | 173.95082 | 164.395161 | 125.076923 | 173.770492 |
| 3km | 193.1 | 185.1 | 175.04 | 179.81 | 189.8 | 185.01 | 200.3 | 185.1 | 148.2 | 151.8 | 131.2 | 150.1 | 155.8 | 153.3 | 150.6 | 168.6 | 174.9 | 180.3 | 185.01 | 175.1 | 94.9 | 97.445205 | 109.937063 | 101.139073 | 199.877049 | 195.083333 | 194.45 | 190.198347 | 174.254098 | 164.209677 | 124.50641 | 173.852459 |
| 4km | 177.5 | 185.09 | 158.4 | 179.95 | 195 | 184.9 | 200.5 | 184.7 | 140.3 | 150.7 | 130.3 | 150.2 | 153.7 | 134.06 | 151.7 | 153.8 | 175.1 | 182.4 | 185.06 | 175.09 | 91.7 | 100.041096 | 110.076923 | 94.993377 | 203.631148 | 195.025 | 194.725 | 194.652893 | 174.385246 | 164.169355 | 124.801282 | 166.827869 |
| 5km | 165.1 | 185.06 | 154.9 | 179.8 | 199.9 | 184.8 | 200.2 | 180.4 | 134.23 | 149.3 | 131.3 | 150 | 159.7 | 143.9 | 156.3 | 139.1 | 175.01 | 186.7 | 185.3 | 175 | 95.1 | 100.020548 | 103.643357 | 106.97351 | 205.065574 | 194.858333 | 194.666667 | 194.826446 | 169.172131 | 164.354839 | 124.410256 | 155.147541 |
| 6km | 165.06 | 189.9 | 154.8 | 180.05 | 191.2 | 190.04 | 188.1 | 176.6 | 130.2 | 155.8 | 130.2 | 127.09 | 153.7 | 147.3 | 143.9 | 139.6 | 175.1 | 185.4 | 185.01 | 175.1 | 95.04 | 99.616438 | 110.006993 | 102.807947 | 205.016393 | 199.216667 | 194.775 | 194.61157 | 169.631148 | 164.427419 | 122.532051 | 149.401639 |
| 7km | 160.3 | 190.07 | 146.6 | 180.09 | 190.05 | 193.4 | 185.5 | 174.9 | 130.3 | 155.4 | 130.5 | 132.9 | 145.9 | 141.6 | 135.4 | 131.7 | 185.08 | 191.2 | 185.1 | 175.1 | 90.8 | 90.143836 | 99.300699 | 105.940397 | 207.016393 | 203.741667 | 197.041667 | 199.181818 | 161.696721 | 164.322581 | 119.775641 | 152.04918 |
| 8km | 153.94 | 190.1 | 149.7 | 180 | 186.5 | 194.9 | 185.4 | 175.5 | 129.9 | 150.4 | 130.3 | 150.1 | 137.5 | 136.6 | 138.9 | 136.2 | 184.9 | 190.3 | 182.04 | 175.2 | 90.1 | 100.19863 | 101.153846 | 91.139073 | 210.155738 | 208.283333 | 202.116667 | 200.107438 | 149.360656 | 164.290323 | 119.589744 | 153.909836 |
| 9km | 157.06 | 189.9 | 152.4 | 179.94 | 194.1 | 199.4 | 185.3 | 178.9 | 121.5 | 150.2 | 130.2 | 150.1 | 143.8 | 159.02 | 145.6 | 139.9 | 185.08 | 195.9 | 176.6 | 175.1 | 85.8 | 91.452055 | 87.965035 | 97.86755 | 210 | 210.033333 | 204.741667 | 199.586777 | 154.327869 | 164.387097 | 119.480769 | 153.959016 |
| 10km | 157.89 | 190.1 | 153.05 | 179.99 | 179.9 | 197.3 | 185.2 | 181.8 | 130.2 | 151.2 | 130.7 | 150.1 | 147.5 | 155.8 | 145.5 | 142.1 | 185.25 | 201.6 | 171.3 | 179.2 | 82.7 | 90.027397 | 100.468531 | 104.549669 | 212.606557 | 210.341667 | 204.691667 | 204.479339 | 157.229508 | 164.201613 | 119.49359 | 153.918033 |
| 11km | 165.3 | 190.3 | 158.2 | 180.075 | 220.1 | 190.1 | 198.5 | 185.07 | 130.1 | 156.4 | 136.6 | 128.4 | 146.1 | 156.2 | 145.9 | 148.5 | 185.1 | 193.7 | 169.7 | 180.2 | 86.02 | 90.171233 | 102.874126 | 87.271523 | 218.868852 | 219.583333 | 208.541667 | 204.710744 | 157.688525 | 168.991935 | 119.551282 | 154.163934 |
| 12km | 159.06 | 190.1 | 160.03 | 181.675 | 219.9 | 190 | 200.6 | 190.4 | 130.1 | 157.72 | 134.9 | 147.4 | 140.4 | 153.7 | 142.5 | 142.7 | 185.2 | 190.2 | 165.1 | 180.4 | 85.8 | 99.376712 | 94.41958 | 96.562914 | 220.139344 | 219.958333 | 210.016667 | 204.595041 | 152.811475 | 173.943548 | 129.698718 | 147.532787 |
| 13km | 155.21 | 190.1 | 173.1 | 184.9 | 208.4 | 207.2 | 194.7 | 199.7 | 130.2 | 159.03 | 140.1 | 150.3 | 145.4 | 152.2 | 135.7 | 160.01 | 184.7 | 194.7 | 165.6 | 175.9 | 81.4 | 91.376712 | 99.160839 | 95.423841 | 220.032787 | 239.041667 | 210.108333 | 213.570248 | 149.360656 | 178.766129 | 149.467949 | 149.040984 |
| 14km | 181.25 | 192.7 | 189.4 | 189.11 | 190.4 | 224.65 | 192.4 | 200.8 | 133.1 | 165.1 | 143 | 150.3 | 160.3 | 148.9 | 142.4 | 156.1 | 185.7 | 205.9 | 167.5 | 179.5 | 88.2 | 94.986301 | 98.629371 | 98.198675 | 220.008197 | 261.483333 | 231.141667 | 242.644628 | 153.655738 | 179.112903 | 154.185897 | 151.442623 |
| 15km | 241.84 | 250.4 | 285.1 | 220.71 | 280.7 | 271.1 | 225.1 | 247.2 | 146.8 | 191.3 | 143.6 | 173.9 | 170.4 | 167.2 | 168.1 | 151.7 | 222.9 | 232.5 | 225.8 | 225.4 | 102.52 | 118.871429 | 132.664179 | 145.415385 | 281.411765 | 304.714286 | 287.95098 | 296.54 | 167.614754 | 189.871795 | 177.586777 | 158.204918 |
| Mean | 176.100667 | 192.495333 | 168.9 | 183.486667 | 200.91 | 198.562667 | 195.973333 | 188.558 | 138.342 | 157.423333 | 137.58 | 147.226 | 152.413333 | 151.698667 | 145.065333 | 153.827333 | 183.568 | 192.413333 | 180.461333 | 179.544667 | 91.812 | 97.615629 | 105.03309 | 101.386191 | 212.563517 | 215.748175 | 206.92451 | 207.137928 | 162.346995 | 168.734464 | 128.43399 | 157.519672 |
| STEDV | 24.228945 | 15.709607 | 32.734418 | 10.321039 | 24.473416 | 22.123934 | 9.936765 | 17.34594 | 14.217146 | 10.024939 | 14.127571 | 10.808675 | 9.235429 | 9.574208 | 10.736829 | 20.211932 | 11.588978 | 13.360133 | 14.873305 | 12.916171 | 7.859854 | 7.476843 | 10.374993 | 13.321887 | 22.243469 | 31.746039 | 25.313788 | 28.556957 | 9.352951 | 8.06298 | 18.965191 | 8.957107 |
| Peak Power | 501 | 515 | 475 | 427 | 691 | 662 | 684 | 745 | 383 | 337 | 280 | 329 | 210 | 292 | 192 | 247 | 560 | 544 | 448 | 475 | 245 | 273 | 256 | 256 | 454 | 463 | 365 | 444 | 302 | 332 | 304 | 284 |

## Speed per km
| Speed (km/hr) | 1 | Unnamed: 2 | Unnamed: 3 | Unnamed: 4 | 2 | Unnamed: 6 | Unnamed: 7 | Unnamed: 8 | 3 | Unnamed: 10 | Unnamed: 11 | Unnamed: 12 | 4 | Unnamed: 14 | Unnamed: 15 | Unnamed: 16 | 5 | Unnamed: 18 | Unnamed: 19 | Unnamed: 20 | 6 | Unnamed: 22 | Unnamed: 23 | Unnamed: 24 | 7 | Unnamed: 26 | Unnamed: 27 | Unnamed: 28 | 8 | Unnamed: 30 | Unnamed: 31 | Unnamed: 32 |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| NaN | HIIE 1 | HIIE 2 | CON 1 | CON 2 | HIIE 1 | HIIE 2 | CON 1 | CON 2 | HIIE 1 | HIIE 2 | CON 1 | CON 2 | HIIE 1 | HIIE 2 | CON 1 | CON 2 | HIIE 1 | HIIE 2 | CON 1 | CON 2 | HIIE 1 | HIIE 2 | CON 1 | CON 2 | HIIE 1 | HIIE 2 | CON 1 | CON 2 | HIIE 1 | HIIE 2 | CON 1 | CON 2 |
| 1km | 31.896 | 30.492 | 29.2 | 29.97 | 29.916 | 30.24 | 31.284 | 30.348 | 29.088 | 28.728 | 30.6 | 28.08 | 28.908 | 28.548 | 25.812 | 31.608 | 28.908 | 29.081 | 29.7 | 29.664 | 25.236 | 24.66 | 25.074126 | 23.8944 | 29.59377 | 30.081 | 30.036 | 29.802645 | 29.58843 | 29.043871 | 23.051538 | 29.540656 |
| 2km | 31.464 | 30.6 | 29.88 | 30.24 | 30.924 | 30.6 | 31.464 | 30.6 | 29.952 | 29.016 | 27.036 | 28.296 | 29.268 | 29.556 | 28.584 | 30.924 | 29.952 | 30.732 | 30.348 | 29.916 | 23.796 | 23.826575 | 25.381259 | 23.7528 | 31.432131 | 31.224 | 30.915 | 30.951074 | 29.930579 | 29.247097 | 26.409231 | 29.909508 |
| 3km | 31.104 | 30.6 | 29.88 | 30.24 | 30.924 | 30.6 | 31.464 | 30.6 | 28.116 | 28.44 | 26.856 | 28.296 | 28.692 | 28.476 | 28.296 | 29.556 | 29.916 | 30.831 | 30.6 | 29.916 | 23.724 | 23.979452 | 25.18993 | 24.324 | 31.455738 | 31.284 | 31.215 | 30.951074 | 29.900826 | 29.229677 | 26.337692 | 29.900656 |
| 4km | 30.096 | 30.6 | 28.872 | 30.258 | 31.176 | 30.6 | 31.5 | 30.564 | 27.612 | 28.332 | 26.784 | 28.332 | 28.548 | 27.072 | 28.404 | 28.548 | 29.952 | 31.273 | 30.564 | 29.916 | 23.436 | 24.23589 | 25.192448 | 23.7504 | 31.653443 | 31.266 | 31.233 | 31.266446 | 29.915702 | 29.267419 | 26.386154 | 29.469836 |
| 5km | 29.304 | 30.564 | 28.44 | 30.24 | 31.464 | 30.6 | 31.464 | 30.276 | 27.108 | 28.224 | 26.856 | 28.296 | 28.98 | 27.828 | 28.728 | 27.468 | 29.916 | 31.245 | 30.636 | 29.952 | 23.724 | 24.216164 | 24.588252 | 24.8712 | 31.75377 | 31.245 | 31.236 | 31.24562 | 29.600331 | 29.261613 | 26.335385 | 28.676066 |
| 6km | 29.268 | 30.924 | 28.44 | 30.258 | 30.996 | 30.924 | 30.816 | 30.06 | 26.784 | 28.692 | 26.784 | 26.532 | 28.548 | 28.116 | 27.828 | 27.54 | 29.952 | 31.471 | 30.564 | 29.952 | 23.724 | 24.196438 | 25.17986 | 24.4896 | 31.747869 | 31.413 | 31.236 | 31.233719 | 29.636033 | 29.25871 | 26.178462 | 28.262951 |
| 7km | 28.98 | 30.924 | 28.044 | 30.24 | 30.924 | 31.14 | 30.636 | 29.88 | 26.784 | 28.656 | 26.784 | 27 | 28.008 | 27.684 | 27.216 | 26.892 | 30.952 | 31.561 | 30.6 | 29.952 | 23.364 | 23.306301 | 24.162797 | 24.7968 | 31.883607 | 31.683 | 31.329 | 31.412231 | 29.070744 | 29.255806 | 25.943077 | 28.442951 |
| 8km | 28.548 | 30.924 | 28.26 | 30.2508 | 30.708 | 31.176 | 30.6 | 29.988 | 26.748 | 28.332 | 26.784 | 28.296 | 27.396 | 27.288 | 27.468 | 27.252 | 30.952 | 31.458 | 30.384 | 29.952 | 23.292 | 24.248219 | 24.331469 | 23.3928 | 32.057705 | 31.953 | 31.578 | 31.459835 | 28.184132 | 29.261613 | 25.926923 | 28.552131 |
| 9km | 28.764 | 30.888 | 28.44 | 30.2436 | 31.104 | 31.428 | 30.6 | 30.168 | 26.064 | 28.296 | 26.748 | 28.296 | 27.828 | 28.908 | 27.756 | 27.54 | 30.952 | 31.273 | 30.06 | 29.952 | 22.824 | 23.424658 | 23.002238 | 24.0072 | 32.048852 | 32.07 | 31.749 | 31.427107 | 28.585785 | 29.270323 | 25.92 | 28.566885 |
| 10km | 28.8 | 30.924 | 28.512 | 30.2652 | 30.24 | 31.32 | 30.6 | 30.384 | 26.784 | 28.332 | 26.82 | 28.296 | 28.116 | 28.692 | 27.972 | 27.684 | 30.988 | 31.689 | 29.7 | 30.204 | 22.464 | 23.269315 | 24.266014 | 24.648 | 32.243607 | 32.079 | 31.746 | 31.718678 | 28.844428 | 29.255806 | 25.917692 | 28.569836 |
| 11km | 29.304 | 30.924 | 28.872 | 30.258 | 32.616 | 30.924 | 31.392 | 30.564 | 26.784 | 28.728 | 27.324 | 26.64 | 28.008 | 28.728 | 27.972 | 28.188 | 30.952 | 31.58 | 29.628 | 30.24 | 22.788 | 23.316164 | 24.50014 | 22.908 | 32.568197 | 32.595 | 31.983 | 31.727603 | 28.862479 | 29.575161 | 25.92 | 28.58459 |
| 12km | 28.908 | 30.924 | 29.016 | 30.3624 | 32.58 | 30.924 | 31.536 | 30.924 | 26.748 | 28.836 | 27.216 | 28.116 | 27.576 | 28.548 | 27.72 | 27.756 | 30.952 | 31.724 | 29.304 | 30.276 | 22.752 | 24.169315 | 23.692028 | 23.8824 | 32.639016 | 32.622 | 32.049 | 31.718678 | 28.505455 | 29.885806 | 26.727692 | 28.124262 |
| 13km | 28.656 | 30.924 | 29.808 | 30.564 | 31.932 | 31.896 | 31.176 | 31.464 | 26.784 | 28.908 | 27.54 | 28.296 | 27.972 | 28.44 | 27.216 | 28.98 | 30.564 | 31.832 | 29.34 | 29.988 | 22.32 | 23.409863 | 24.162797 | 23.8056 | 32.612459 | 33.615 | 32.067 | 32.239339 | 28.252562 | 30.196452 | 28.255385 | 28.215738 |
| 14km | 30.312 | 31.068 | 30.888 | 30.888 | 30.96 | 32.868 | 31.032 | 31.428 | 27 | 29.304 | 27.756 | 28.296 | 28.98 | 28.188 | 27.756 | 28.692 | 30.636 | 32.732 | 29.448 | 30.24 | 23.076 | 23.774795 | 24.08979 | 24.06 | 32.603607 | 34.719 | 33.231 | 33.813223 | 28.573884 | 30.208065 | 28.580769 | 28.398689 |
| 15km | 33.48 | 33.948 | 35.604 | 32.49 | 35.352 | 35.064 | 32.58 | 33.588 | 28.044 | 30.924 | 27.792 | 29.88 | 29.664 | 29.448 | 29.52 | 28.404 | 32.688 | 33.272 | 32.904 | 32.868 | 24.444 | 25.876286 | 26.978507 | 27.955385 | 35.597647 | 36.705306 | 35.943529 | 36.342 | 29.478347 | 30.867692 | 30.09719 | 28.87377 |
| Mean | 29.9256 | 31.0152 | 29.477067 | 30.4512 | 31.4544 | 31.3536 | 31.2096 | 30.7224 | 27.36 | 28.7832 | 27.312 | 28.0632 | 28.4328 | 28.368 | 27.8832 | 28.4688 | 30.5488 | 31.450267 | 30.252 | 30.1992 | 23.3976 | 23.993962 | 24.652777 | 24.302572 | 32.126095 | 32.30362 | 31.836435 | 31.820618 | 29.128648 | 29.539007 | 26.532479 | 28.805902 |

## Equality of Intervention
| kJ Count | Unnamed: 1 | HIIT | CON |
| --- | --- | --- | --- |
| NaN | 1 | 495.700000 | 500.900000 |
| NaN | 2 | 546.100000 | 545.100000 |
| NaN | 3 | 582.200000 | 588.200000 |
| NaN | 4 | 591.300000 | 594.700000 |
| NaN | 5 | 602.300000 | 600.700000 |
| NaN | 6 | 357.400000 | 361.900000 |
| NaN | 7 | 602.400000 | 599.500000 |
| NaN | 8 | 587.300000 | 584.500000 |
| NaN | Mean | 545.587500 | 546.937500 |
| NaN | Standad Dev. | 84.106708 | 82.297126 |