null

knitr::opts\_knit$set(root.dir = './output')

## Tables for manuscript

**Tab 1** Summary of biological and experimental paramaters for individual eels

| ID | Length (cm) | Silvering Index\* | Biomass at start (g) | Biomass at end (g) | Fat at start (% WM) | Fat at end (% WM) | Swim time (d) | Distance (km) | Velocity range (BL/s) | Temperature range (°C) |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | 78 | 4 | 935 | 866 | 17.20 | 18.50 | 44.1 | 1727 | 0.56 - 0.66 | 12.7 - 20.2 |
| B | 74 | 5 | 732 | 701 | 20.85 | 21.65 | 44.1 | 1837 | 0.59 - 0.73 | 12.1 - 20.1 |
| C | 77 | 5 | 908 | 864 | 22.55 | 24.50 | 44.1 | 1814 | 0.57 - 0.7 | 12 - 20.7 |
| D | 78 | 5 | 973 | 928 | 19.25 | 17.65 | 32.6 | 1481 | 0.46 - 0.75 | 13.4 - 20.3 |
| E | 83 | 4 | 1045 | 1000 | 18.45 | 20.05 | 32.6 | 1573 | 0.54 - 0.74 | 12.6 - 19.7 |
| F | 90 | 4 | 1142 | 1079 | 21.55 | 20.75 | 32.2 | 1464 | 0.47 - 0.73 | 12.6 - 19.7 |
| G | 87 | 5 | 1345 | 1070 | 17.05 | 20.90 | 43.4 | 1935 | 0.57 - 0.67 | 13.3 - 20.5 |
| H | 81 | 4 | 987 | 947 | 19.15 | 19.15 | 45.8 | 2195 | 0.67 - 0.78 | 12.3 - 19.7 |
| I | 86 | 4 | 1345 | 1247 | 18.35 | 18.50 | 47.0 | 2169 | 0.62 - 0.7 | 12.2 - 19.5 |

\*according to Durif et al. (2005)

**Tab 2** Mean and range of observed temperatures and velocities (at the respective presets) and resulting oxygen consumption rates (mg/kg \* h^-1), calculated as the arithmetic mean (and range) of the mean per individual (for individual values see Tab S1). Observed pressure not shown since deviations from the nominal pressure were negligibly small

## `summarise()` has grouped output by 'ID', 'ntemp'. You can override using the  
## `.groups` argument.  
## `summarise()` has grouped output by 'ntemp'. You can override using the  
## `.groups` argument.

| Nominal Temperature (°C) / Pressure (bar) | Mean oxygen consupmtion rate (mg/kg/h) | Mean observed temperature (°C) | Mean observed velocity (BL/s) |
| --- | --- | --- | --- |
| 12 / 1 | 22.6 ± 9.6 | 12.7 ± 0.5 | 0.64 ± 0.04 |
| 12 / 8 | 22.1 ± 8.1 | 13.6 ± 0.6 | 0.64 ± 0.04 |
| 15.5 / 1 | 20.8 ± 10.5 | 15.5 ± 0.6 | 0.62 ± 0.05 |
| 15.5 / 8 | 21.6 ± 7.9 | 16.4 ± 0.4 | 0.63 ± 0.05 |
| 19 / 1 | 33.4 ± 11 | 18.9 ± 0.4 | 0.64 ± 0.05 |
| 19 / 8 | 32.5 ± 14.1 | 19.6 ± 0.4 | 0.63 ± 0.04 |

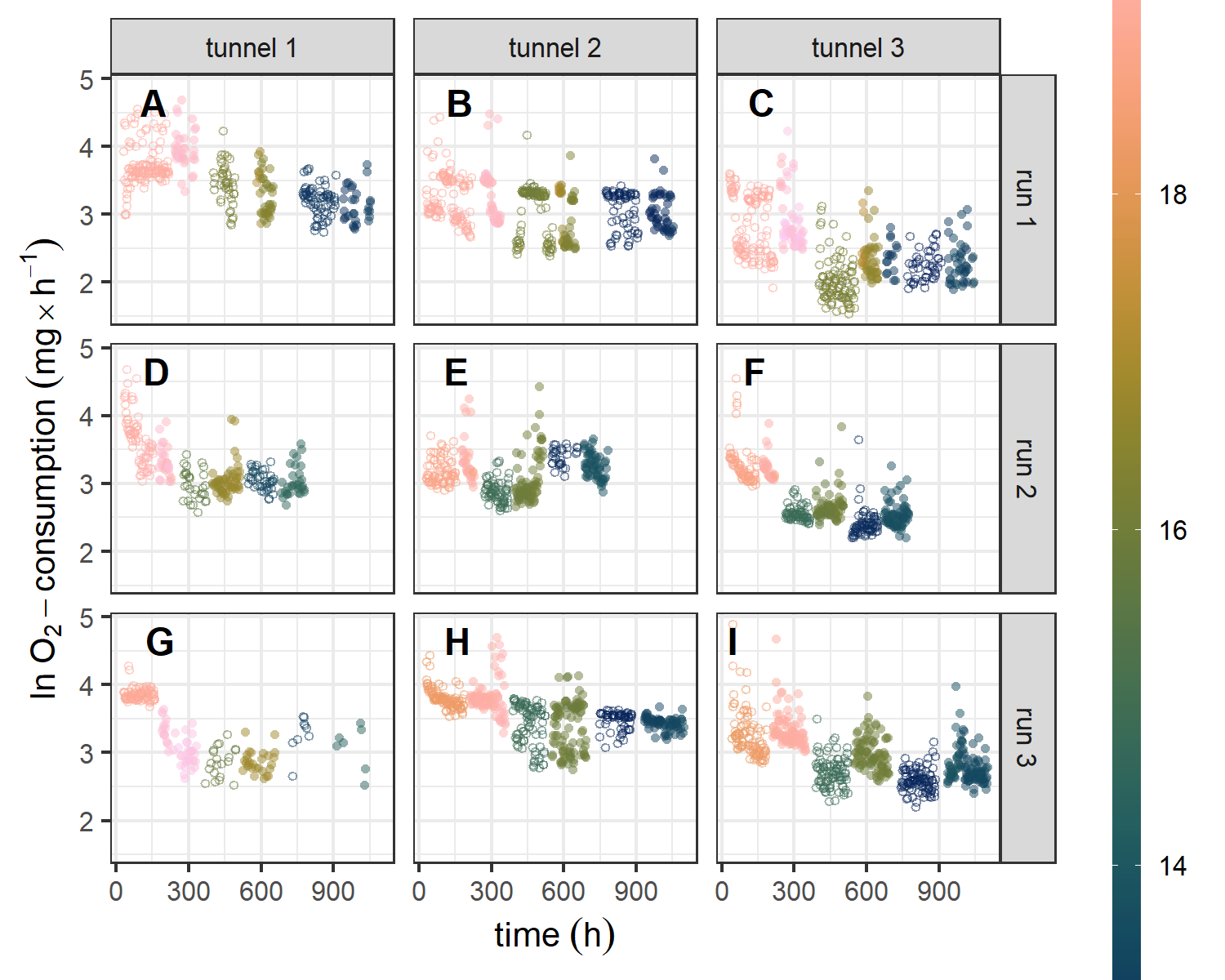
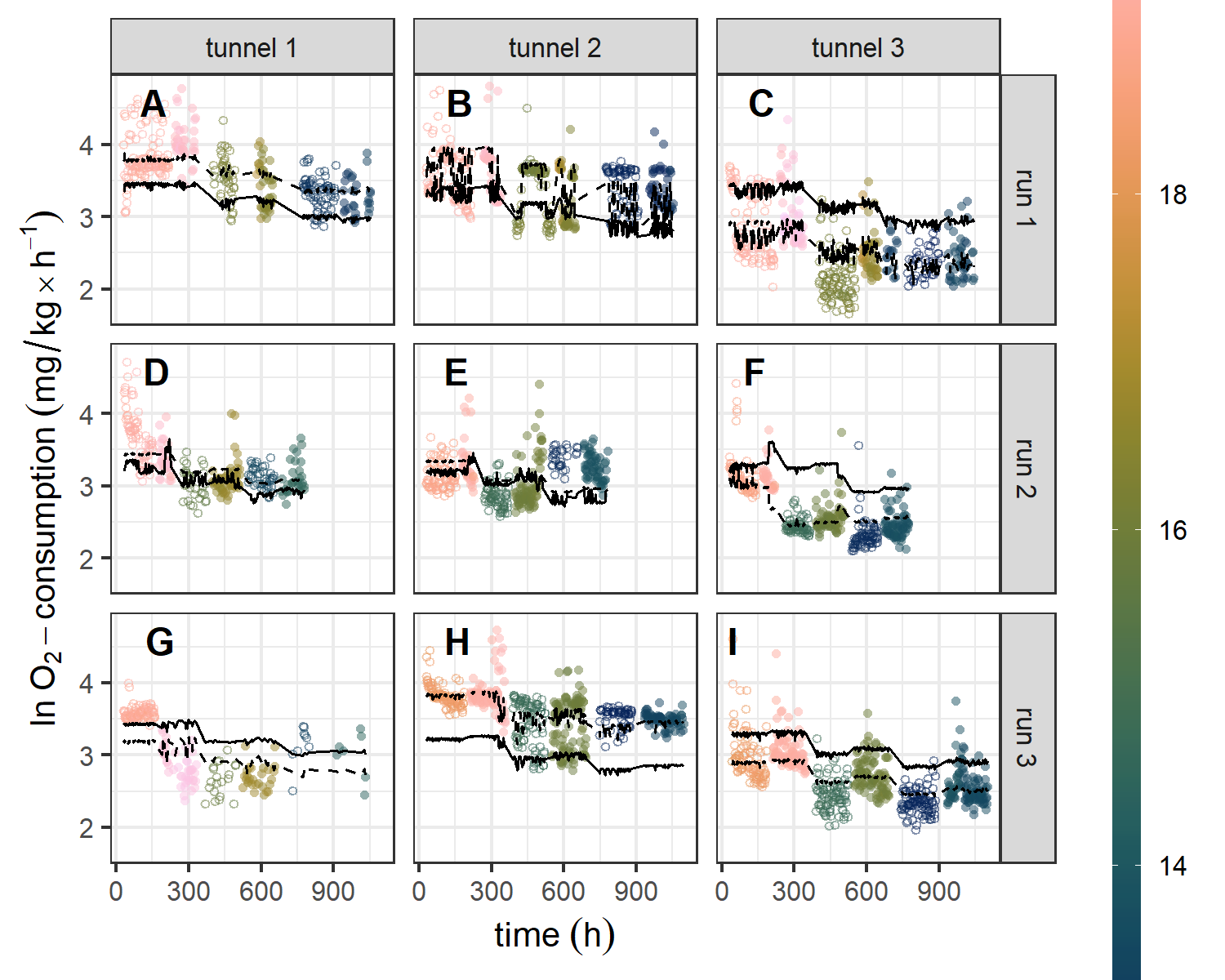
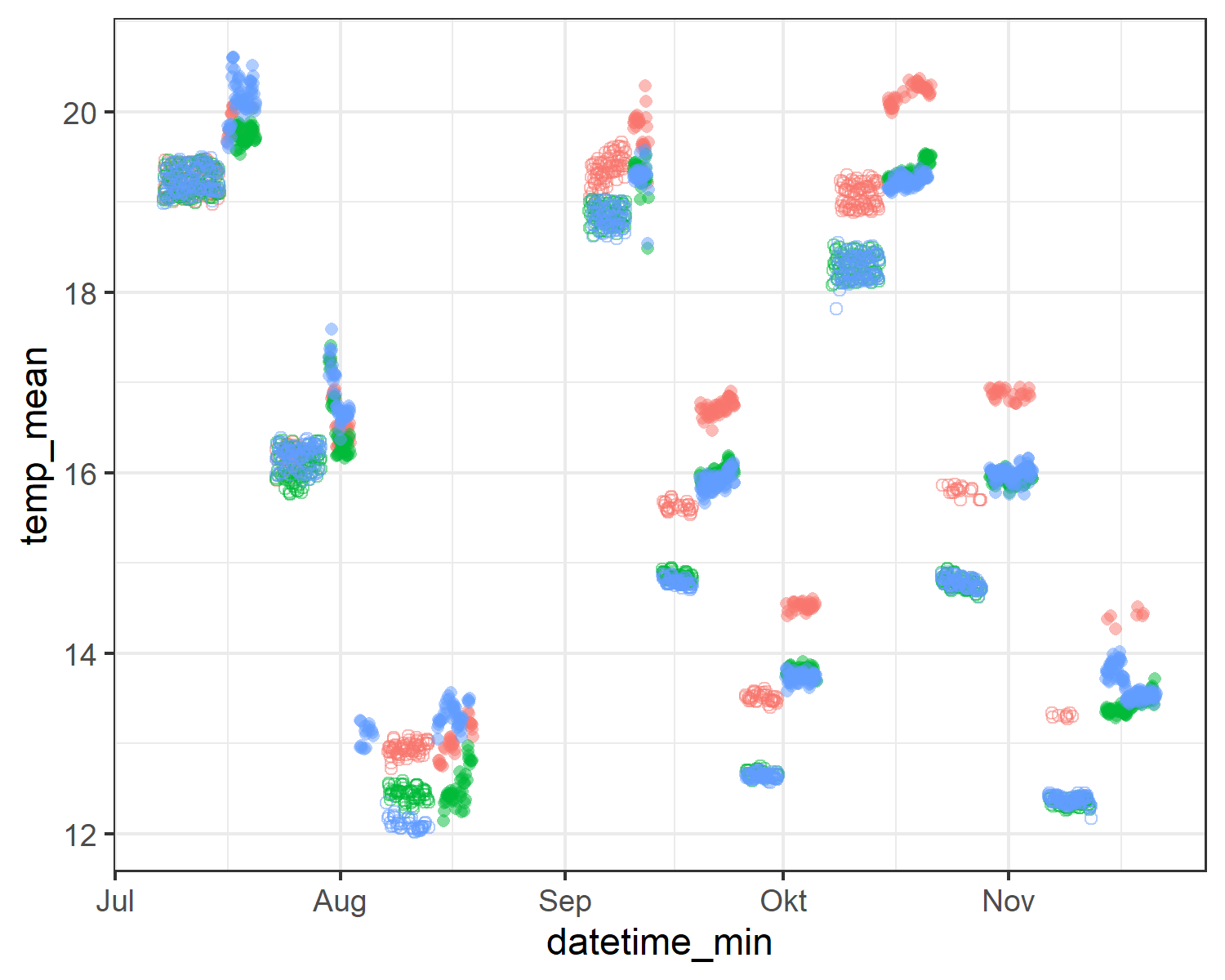
**Tab 3** Short summary of the model statistics for main effects. Note, that value gives the change in the log of O2-consuption rate per change in one unit of the predictor.

| Parameter | Value | Lower conf. limit | Upper conf. limit | p |
| --- | --- | --- | --- | --- |
| Intercept | 3.082 | 1.942 | 4.221 | <0.001 |
| Temperature (°C) | 0.069 | 0.062 | 0.076 | <0.001 |
| Pressure (bar) | -0.004 | -0.009 | 0.002 | 0.195 |
| Velocity (BL/s) | -1.680 | -3.389 | 0.029 | 0.054 |

## Graphs for the manuscript

## Warning: Using `size` aesthetic for lines was deprecated in ggplot2 3.4.0.  
## i Please use `linewidth` instead.

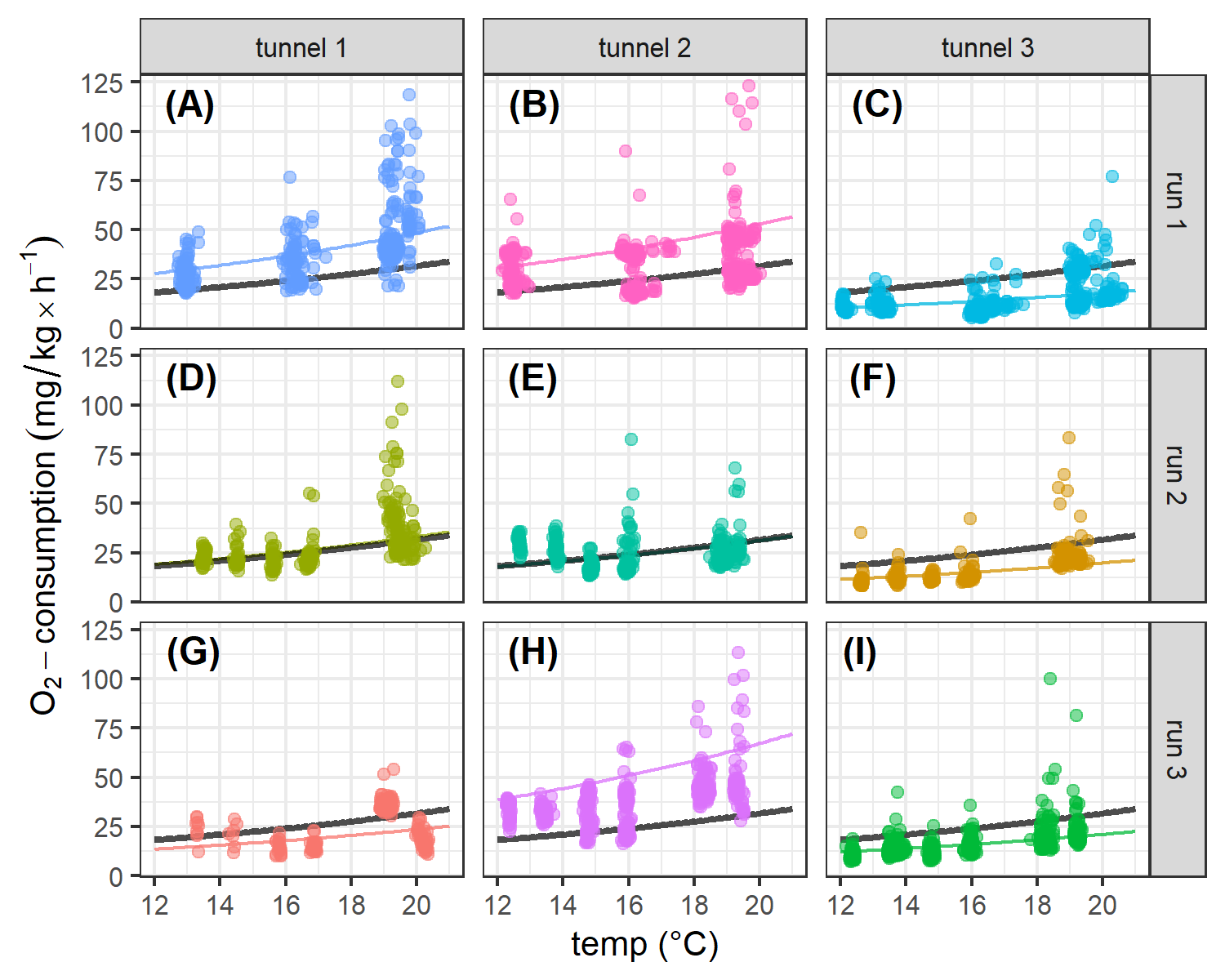
## Warning: `aes\_string()` was deprecated in ggplot2 3.0.0.  
## i Please use tidy evaluation ideoms with `aes()`



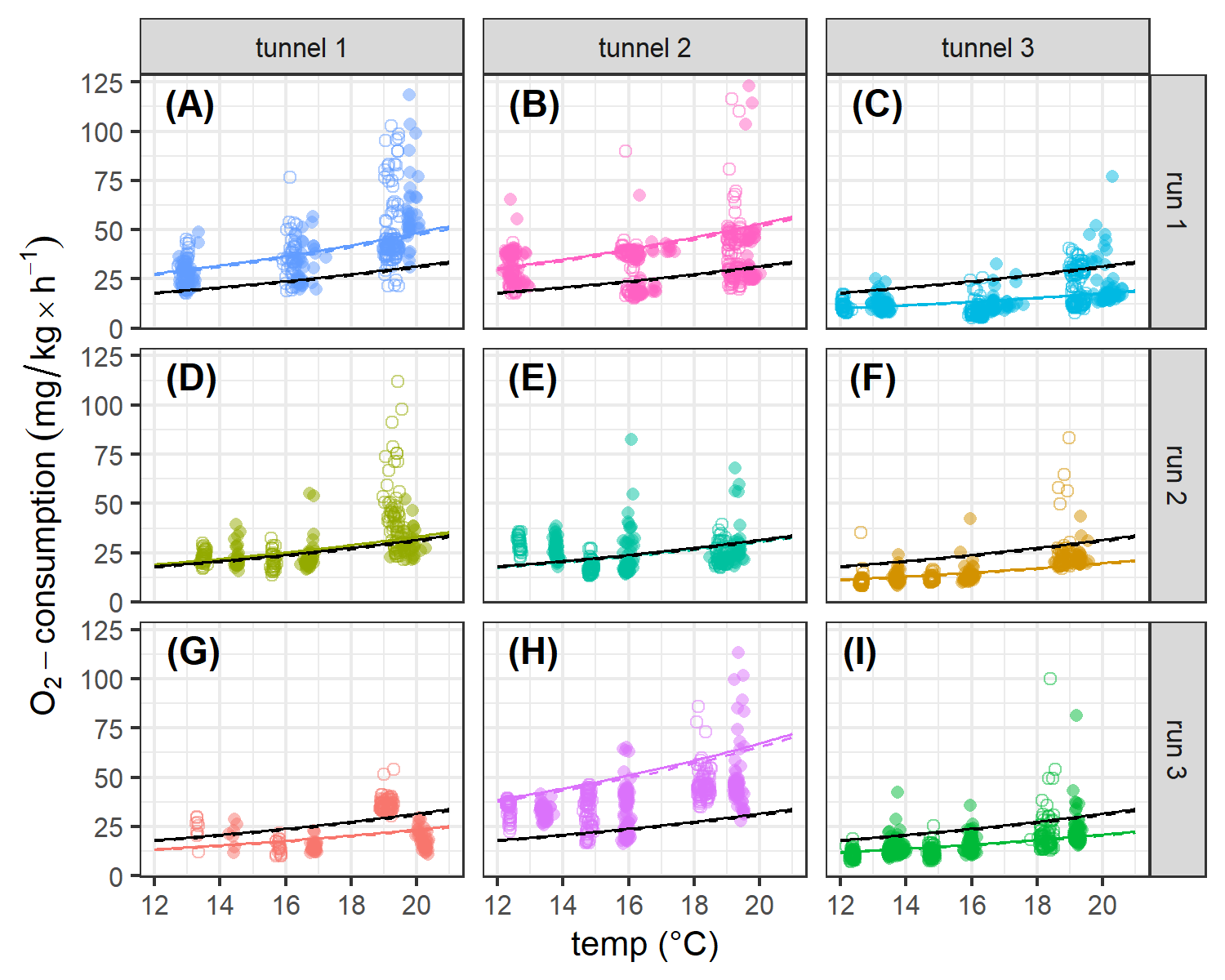
**Fig 1** Oxygen consumption rate per individual (a-i) over time different at temperatures (color scale) at 1 bar (open circles) and 8 bar (closed circles). Modeled predictions are displayed on the population level (solid line) and for the individual (dashed line). Colour indicates temp in °C

## Warning: The `size` argument of `element\_rect()` is deprecated as of ggplot2 3.4.0.  
## i Please use the `linewidth` argument instead.

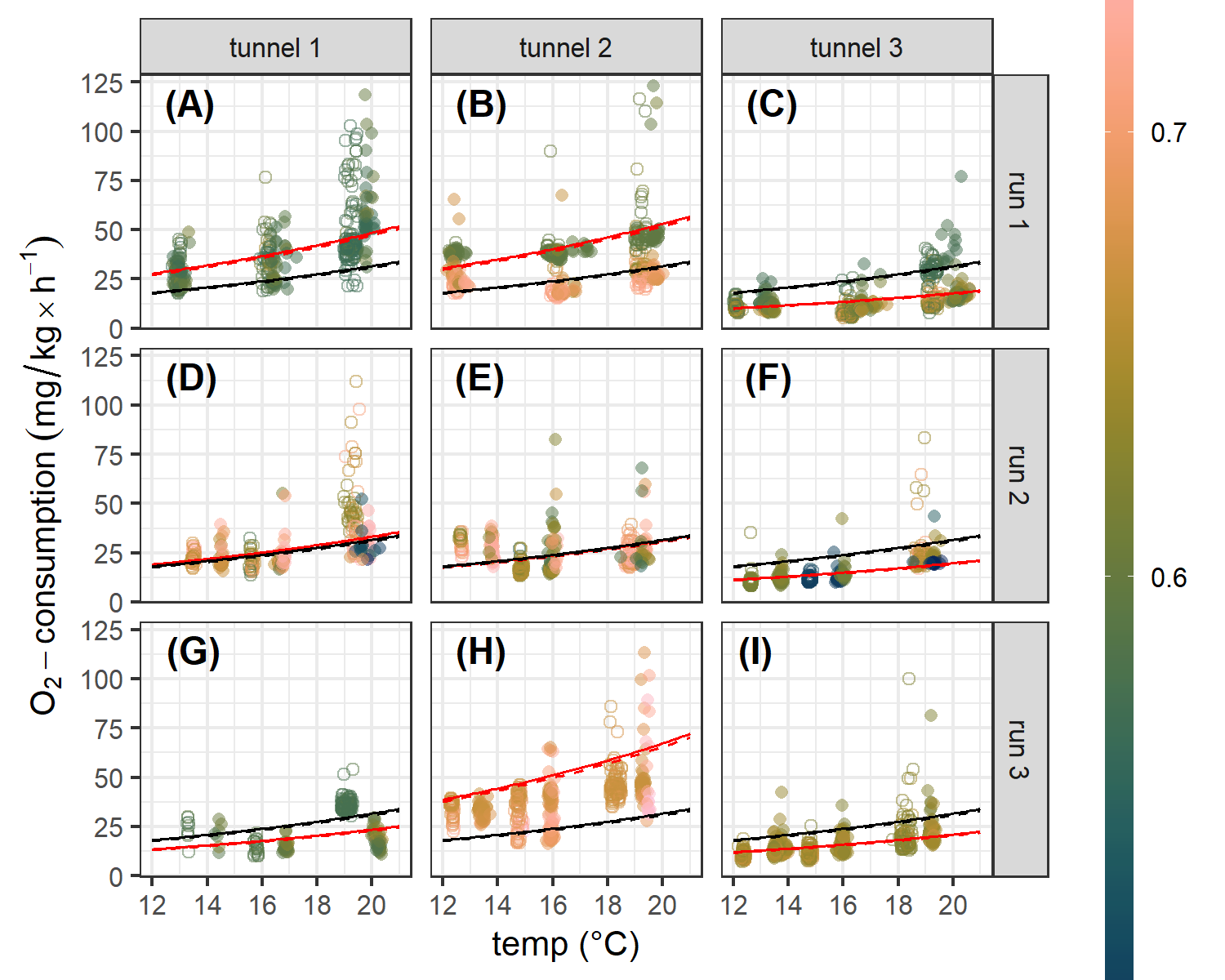
## `geom\_smooth()` using method = 'loess' and formula = 'y ~ x'  
## `geom\_smooth()` using method = 'loess' and formula = 'y ~ x'  
## `geom\_smooth()` using method = 'loess' and formula = 'y ~ x'  
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## `geom\_smooth()` using method = 'loess' and formula = 'y ~ x'  
## `geom\_smooth()` using method = 'loess' and formula = 'y ~ x'  
## `geom\_smooth()` using method = 'loess' and formula = 'y ~ x'  
## `geom\_smooth()` using method = 'loess' and formula = 'y ~ x'



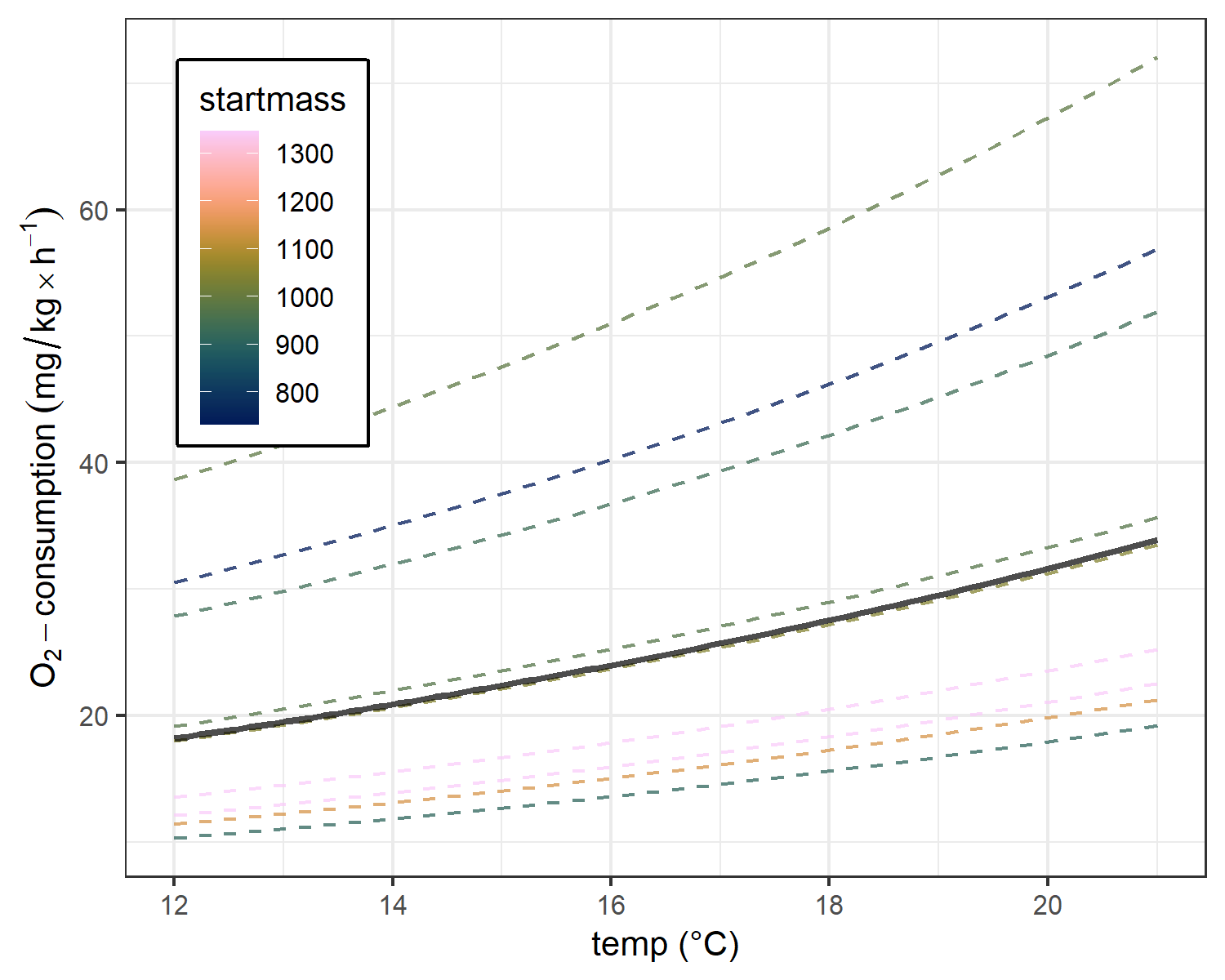
## `geom\_smooth()` using method = 'loess' and formula = 'y ~ x'  
## `geom\_smooth()` using method = 'loess' and formula = 'y ~ x'  
## `geom\_smooth()` using method = 'loess' and formula = 'y ~ x'  
## `geom\_smooth()` using method = 'loess' and formula = 'y ~ x'



## `geom\_smooth()` using method = 'loess' and formula = 'y ~ x'  
## `geom\_smooth()` using method = 'loess' and formula = 'y ~ x'  
## `geom\_smooth()` using method = 'loess' and formula = 'y ~ x'  
## `geom\_smooth()` using method = 'loess' and formula = 'y ~ x'



## `geom\_smooth()` using method = 'loess' and formula = 'y ~ x'  
## `geom\_smooth()` using method = 'loess' and formula = 'y ~ x'



**Fig 2** Predicted oxygen consumption rate at different temperatures and pressures at a swimming speed of 0.6 BL/s.  Difference between 1 and 8 bar is not significant.

## Graphs/tabs for supplementary

**Tab S1** Summary of experimental parameters and oxygen consumption grouped by individual, nominal temperature and pressure. Note, that temperature means and ranges are calculated from the mean temperature of individual measurements (since for each measurement only a single oxygen consumption rate is available).

| ID | nominal temperature (°C) | nominal pressure (bar) | swim time (d) | n | Mean observed temperature (°C) | Observed Temperature range (°C) | Mean oxygen consumption (mg/kg/h) | Oxygen consumption range (mg/kg/h) | Mean observed velocity (BL/s) | Observed velocity range (BL/s) |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | 12.0 | 1 | 7.0 | 68 | 12.9 ± 0.1 | 12.7 - 13.1 | 12.9 ± 0.1 | 12.7 - 13.1 | 0.58 ± 0.01 | 0.56 - 0.61 |
| A | 12.0 | 8 | 6.1 | 29 | 13 ± 0.2 | 12.8 - 13.4 | 13 ± 0.2 | 12.8 - 13.4 | 0.59 ± 0.02 | 0.56 - 0.62 |
| A | 15.5 | 1 | 7.5 | 44 | 16.2 ± 0.1 | 15.9 - 16.3 | 16.2 ± 0.1 | 15.9 - 16.3 | 0.6 ± 0.03 | 0.56 - 0.66 |
| A | 15.5 | 8 | 4.0 | 41 | 16.5 ± 0.2 | 16.3 - 17.2 | 16.5 ± 0.2 | 16.3 - 17.2 | 0.59 ± 0.02 | 0.56 - 0.63 |
| A | 19.0 | 1 | 9.0 | 125 | 19.2 ± 0.1 | 19 - 19.5 | 19.2 ± 0.1 | 19 - 19.5 | 0.57 ± 0.01 | 0.56 - 0.63 |
| A | 19.0 | 8 | 4.6 | 37 | 19.8 ± 0.1 | 19.7 - 20.1 | 19.8 ± 0.1 | 19.7 - 20.1 | 0.58 ± 0.02 | 0.56 - 0.63 |
| B | 12.0 | 1 | 7.0 | 66 | 12.4 ± 0.1 | 12.2 - 12.6 | 12.4 ± 0.1 | 12.2 - 12.6 | 0.64 ± 0.05 | 0.59 - 0.72 |
| B | 12.0 | 8 | 5.5 | 43 | 12.5 ± 0.2 | 12.1 - 13 | 12.5 ± 0.2 | 12.1 - 13 | 0.66 ± 0.05 | 0.59 - 0.72 |
| B | 15.5 | 1 | 7.5 | 101 | 16.1 ± 0.2 | 15.8 - 16.4 | 16.1 ± 0.2 | 15.8 - 16.4 | 0.64 ± 0.06 | 0.59 - 0.73 |
| B | 15.5 | 8 | 4.0 | 49 | 16.5 ± 0.4 | 16.2 - 17.4 | 16.5 ± 0.4 | 16.2 - 17.4 | 0.65 ± 0.05 | 0.59 - 0.72 |
| B | 19.0 | 1 | 9.1 | 125 | 19.2 ± 0.1 | 19 - 19.5 | 19.2 ± 0.1 | 19 - 19.5 | 0.65 ± 0.05 | 0.59 - 0.72 |
| B | 19.0 | 8 | 4.0 | 47 | 19.7 ± 0.1 | 19.5 - 20 | 19.7 ± 0.1 | 19.5 - 20 | 0.65 ± 0.05 | 0.59 - 0.72 |
| C | 12.0 | 1 | 7.0 | 44 | 12.1 ± 0.1 | 12 - 12.3 | 12.1 ± 0.1 | 12 - 12.3 | 0.61 ± 0.03 | 0.57 - 0.68 |
| C | 12.0 | 8 | 6.1 | 59 | 13.3 ± 0.2 | 12.9 - 13.6 | 13.3 ± 0.2 | 12.9 - 13.6 | 0.6 ± 0.03 | 0.57 - 0.67 |
| C | 15.5 | 1 | 7.6 | 100 | 16.2 ± 0.1 | 15.9 - 16.4 | 16.2 ± 0.1 | 15.9 - 16.4 | 0.63 ± 0.03 | 0.57 - 0.69 |
| C | 15.5 | 8 | 4.5 | 47 | 16.8 ± 0.3 | 16.4 - 17.6 | 16.8 ± 0.3 | 16.4 - 17.6 | 0.62 ± 0.02 | 0.57 - 0.68 |
| C | 19.0 | 1 | 9.0 | 125 | 19.2 ± 0.1 | 19 - 19.5 | 19.2 ± 0.1 | 19 - 19.5 | 0.61 ± 0.04 | 0.57 - 0.7 |
| C | 19.0 | 8 | 5.0 | 64 | 20.1 ± 0.2 | 19.6 - 20.6 | 20.1 ± 0.2 | 19.6 - 20.6 | 0.61 ± 0.03 | 0.57 - 0.66 |
| D | 12.0 | 1 | 5.8 | 41 | 13.5 ± 0 | 13.4 - 13.6 | 13.5 ± 0 | 13.4 - 13.6 | 0.69 ± 0.02 | 0.65 - 0.75 |
| D | 12.0 | 8 | 5.2 | 31 | 14.5 ± 0 | 14.4 - 14.6 | 14.5 ± 0 | 14.4 - 14.6 | 0.67 ± 0.02 | 0.64 - 0.73 |
| D | 15.5 | 1 | 5.1 | 31 | 15.6 ± 0 | 15.5 - 15.7 | 15.6 ± 0 | 15.5 - 15.7 | 0.65 ± 0.04 | 0.58 - 0.7 |
| D | 15.5 | 8 | 5.8 | 53 | 16.7 ± 0.1 | 16.5 - 16.9 | 16.7 ± 0.1 | 16.5 - 16.9 | 0.68 ± 0.04 | 0.59 - 0.75 |
| D | 19.0 | 1 | 6.4 | 77 | 19.4 ± 0.1 | 19 - 19.7 | 19.4 ± 0.1 | 19 - 19.7 | 0.68 ± 0.04 | 0.63 - 0.75 |
| D | 19.0 | 8 | 3.9 | 29 | 19.8 ± 0.2 | 19.2 - 20.3 | 19.8 ± 0.2 | 19.2 - 20.3 | 0.64 ± 0.11 | 0.46 - 0.75 |
| E | 12.0 | 1 | 5.8 | 30 | 12.7 ± 0 | 12.6 - 12.7 | 12.7 ± 0 | 12.6 - 12.7 | 0.68 ± 0.03 | 0.63 - 0.74 |
| E | 12.0 | 8 | 5.2 | 55 | 13.8 ± 0 | 13.7 - 13.9 | 13.8 ± 0 | 13.7 - 13.9 | 0.71 ± 0.04 | 0.63 - 0.74 |
| E | 15.5 | 1 | 5.1 | 67 | 14.9 ± 0 | 14.8 - 15 | 14.9 ± 0 | 14.8 - 15 | 0.64 ± 0.02 | 0.55 - 0.66 |
| E | 15.5 | 8 | 5.8 | 77 | 16 ± 0.1 | 15.8 - 16.2 | 16 ± 0.1 | 15.8 - 16.2 | 0.63 ± 0.04 | 0.54 - 0.74 |
| E | 19.0 | 1 | 6.4 | 82 | 18.9 ± 0.1 | 18.6 - 19 | 18.9 ± 0.1 | 18.6 - 19 | 0.71 ± 0.02 | 0.67 - 0.74 |
| E | 19.0 | 8 | 3.9 | 33 | 19.3 ± 0.2 | 18.5 - 19.5 | 19.3 ± 0.2 | 18.5 - 19.5 | 0.66 ± 0.06 | 0.55 - 0.74 |
| F | 12.0 | 1 | 5.8 | 72 | 12.6 ± 0 | 12.6 - 12.7 | 12.6 ± 0 | 12.6 - 12.7 | 0.61 ± 0 | 0.61 - 0.63 |
| F | 12.0 | 8 | 5.2 | 68 | 13.7 ± 0.1 | 13.6 - 13.8 | 13.7 ± 0.1 | 13.6 - 13.8 | 0.62 ± 0 | 0.61 - 0.63 |
| F | 15.5 | 1 | 5.1 | 67 | 14.8 ± 0 | 14.7 - 14.9 | 14.8 ± 0 | 14.7 - 14.9 | 0.51 ± 0.01 | 0.5 - 0.56 |
| F | 15.5 | 8 | 5.8 | 77 | 15.9 ± 0.1 | 15.7 - 16.1 | 15.9 ± 0.1 | 15.7 - 16.1 | 0.53 ± 0.05 | 0.5 - 0.63 |
| F | 19.0 | 1 | 6.0 | 76 | 18.8 ± 0.1 | 18.6 - 19 | 18.8 ± 0.1 | 18.6 - 19 | 0.66 ± 0.02 | 0.63 - 0.73 |
| F | 19.0 | 8 | 3.9 | 34 | 19.3 ± 0.2 | 18.5 - 19.6 | 19.3 ± 0.2 | 18.5 - 19.6 | 0.56 ± 0.08 | 0.47 - 0.64 |
| G | 12.0 | 1 | 7.0 | 9 | 13.3 ± 0 | 13.3 - 13.3 | 13.3 ± 0 | 13.3 - 13.3 | 0.58 ± 0.01 | 0.57 - 0.6 |
| G | 12.0 | 8 | 6.6 | 7 | 14.4 ± 0.1 | 14.3 - 14.5 | 14.4 ± 0.1 | 14.3 - 14.5 | 0.6 ± 0.01 | 0.58 - 0.62 |
| G | 15.5 | 1 | 6.9 | 20 | 15.8 ± 0.1 | 15.7 - 15.9 | 15.8 ± 0.1 | 15.7 - 15.9 | 0.59 ± 0.01 | 0.58 - 0.6 |
| G | 15.5 | 8 | 7.9 | 28 | 16.9 ± 0.1 | 16.8 - 16.9 | 16.9 ± 0.1 | 16.8 - 16.9 | 0.61 ± 0.02 | 0.58 - 0.65 |
| G | 19.0 | 1 | 6.8 | 87 | 19.1 ± 0.1 | 18.9 - 19.3 | 19.1 ± 0.1 | 18.9 - 19.3 | 0.58 ± 0 | 0.57 - 0.59 |
| G | 19.0 | 8 | 7.0 | 47 | 20.2 ± 0.1 | 20 - 20.4 | 20.2 ± 0.1 | 20 - 20.4 | 0.61 ± 0.02 | 0.58 - 0.67 |
| H | 12.0 | 1 | 7.0 | 58 | 12.3 ± 0 | 12.3 - 12.4 | 12.3 ± 0 | 12.3 - 12.4 | 0.68 ± 0.02 | 0.67 - 0.72 |
| H | 12.0 | 8 | 8.0 | 69 | 13.4 ± 0.1 | 13.3 - 13.7 | 13.4 ± 0.1 | 13.3 - 13.7 | 0.67 ± 0.01 | 0.67 - 0.71 |
| H | 15.5 | 1 | 6.9 | 87 | 14.8 ± 0.1 | 14.6 - 14.9 | 14.8 ± 0.1 | 14.6 - 14.9 | 0.69 ± 0.03 | 0.67 - 0.78 |
| H | 15.5 | 8 | 7.9 | 94 | 15.9 ± 0.1 | 15.8 - 16.1 | 15.9 ± 0.1 | 15.8 - 16.1 | 0.69 ± 0.02 | 0.67 - 0.73 |
| H | 19.0 | 1 | 7.8 | 105 | 18.3 ± 0.1 | 18.1 - 18.5 | 18.3 ± 0.1 | 18.1 - 18.5 | 0.67 ± 0 | 0.67 - 0.69 |
| H | 19.0 | 8 | 7.0 | 97 | 19.3 ± 0.1 | 19.2 - 19.5 | 19.3 ± 0.1 | 19.2 - 19.5 | 0.68 ± 0.03 | 0.67 - 0.78 |
| I | 12.0 | 1 | 7.0 | 96 | 12.4 ± 0 | 12.2 - 12.5 | 12.4 ± 0 | 12.2 - 12.5 | 0.65 ± 0.01 | 0.62 - 0.68 |
| I | 12.0 | 8 | 8.0 | 110 | 13.6 ± 0.2 | 13.4 - 14 | 13.6 ± 0.2 | 13.4 - 14 | 0.65 ± 0.01 | 0.62 - 0.68 |
| I | 15.5 | 1 | 6.9 | 89 | 14.8 ± 0.1 | 14.6 - 14.9 | 14.8 ± 0.1 | 14.6 - 14.9 | 0.65 ± 0.01 | 0.62 - 0.69 |
| I | 15.5 | 8 | 7.5 | 94 | 16 ± 0.1 | 15.8 - 16.2 | 16 ± 0.1 | 15.8 - 16.2 | 0.64 ± 0.01 | 0.62 - 0.66 |
| I | 19.0 | 1 | 7.8 | 97 | 18.3 ± 0.1 | 17.8 - 18.6 | 18.3 ± 0.1 | 17.8 - 18.6 | 0.63 ± 0.01 | 0.62 - 0.68 |
| I | 19.0 | 8 | 6.6 | 90 | 19.2 ± 0.1 | 19.1 - 19.4 | 19.2 ± 0.1 | 19.1 - 19.4 | 0.64 ± 0.02 | 0.62 - 0.7 |

**Tab S2** Summary of model AICs

## Downloading GitHub repo davidgohel/flextable@HEAD

## fs (1.5.2 -> 1.6.1 ) [CRAN]  
## cli (3.5.0 -> 3.6.0 ) [CRAN]  
## Rcpp (1.0.9 -> 1.0.10) [CRAN]  
## cachem (1.0.6 -> 1.0.7 ) [CRAN]  
## fastmap (1.1.0 -> 1.1.1 ) [CRAN]  
## curl (4.3.3 -> 5.0.0 ) [CRAN]  
## xfun (0.36 -> 0.37 ) [CRAN]  
## vctrs (0.5.1 -> 0.5.2 ) [CRAN]  
## stringi (1.7.8 -> 1.7.12) [CRAN]  
## yaml (2.3.6 -> 2.3.7 ) [CRAN]  
## data.table (1.14.6 -> 1.14.8) [CRAN]  
## gdtools (0.2.4 -> 0.3.1 ) [CRAN]  
## ragg (1.2.4 -> 1.2.5 ) [CRAN]

## Installing 13 packages: fs, cli, Rcpp, cachem, fastmap, curl, xfun, vctrs, stringi, yaml, data.table, gdtools, ragg

##   
## Es gibt eine Binärversion, jedoch ist der Quelltext neuer:  
## binary source needs\_compilation  
## fs 1.5.2 1.6.1 TRUE  
##   
## Binaries will be installed  
## package 'fs' successfully unpacked and MD5 sums checked

## Warning: cannot remove prior installation of package 'fs'

## Warning in file.copy(savedcopy, lib, recursive = TRUE): Problem  
## C:\Users\pohlmann\Documents\R\R-4.1.2\library\00LOCK\fs\libs\x64\fs.dll nach  
## C:\Users\pohlmann\Documents\R\R-4.1.2\library\fs\libs\x64\fs.dll zu kopieren:  
## Permission denied

## Warning: restored 'fs'

## package 'cli' successfully unpacked and MD5 sums checked

## Warning: cannot remove prior installation of package 'cli'

## Warning in file.copy(savedcopy, lib, recursive = TRUE): Problem  
## C:\Users\pohlmann\Documents\R\R-4.1.2\library\00LOCK\cli\libs\x64\cli.dll nach  
## C:\Users\pohlmann\Documents\R\R-4.1.2\library\cli\libs\x64\cli.dll zu kopieren:  
## Permission denied

## Warning: restored 'cli'

## package 'Rcpp' successfully unpacked and MD5 sums checked

## Warning: cannot remove prior installation of package 'Rcpp'

## Warning in file.copy(savedcopy, lib, recursive = TRUE): Problem  
## C:\Users\pohlmann\Documents\R\R-4.1.2\library\00LOCK\Rcpp\libs\x64\Rcpp.dll  
## nach C:\Users\pohlmann\Documents\R\R-4.1.2\library\Rcpp\libs\x64\Rcpp.dll zu  
## kopieren: Permission denied

## Warning: restored 'Rcpp'

## package 'cachem' successfully unpacked and MD5 sums checked

## Warning: cannot remove prior installation of package 'cachem'

## Warning in file.copy(savedcopy, lib, recursive = TRUE): Problem  
## C:\Users\pohlmann\Documents\R\R-4.1.2\library\00LOCK\cachem\libs\x64\cachem.dll  
## nach C:\Users\pohlmann\Documents\R\R-4.1.2\library\cachem\libs\x64\cachem.dll  
## zu kopieren: Permission denied

## Warning: restored 'cachem'

## package 'fastmap' successfully unpacked and MD5 sums checked

## Warning: cannot remove prior installation of package 'fastmap'

## Warning in file.copy(savedcopy, lib, recursive = TRUE): Problem  
## C:\Users\pohlmann\Documents\R\R-4.1.2\library\00LOCK\fastmap\libs\x64\fastmap.dll  
## nach C:\Users\pohlmann\Documents\R\R-4.1.2\library\fastmap\libs\x64\fastmap.dll  
## zu kopieren: Permission denied

## Warning: restored 'fastmap'

## package 'curl' successfully unpacked and MD5 sums checked

## Warning: cannot remove prior installation of package 'curl'

## Warning in file.copy(savedcopy, lib, recursive = TRUE): Problem  
## C:\Users\pohlmann\Documents\R\R-4.1.2\library\00LOCK\curl\libs\x64\curl.dll  
## nach C:\Users\pohlmann\Documents\R\R-4.1.2\library\curl\libs\x64\curl.dll zu  
## kopieren: Permission denied

## Warning: restored 'curl'

## package 'xfun' successfully unpacked and MD5 sums checked

## Warning: cannot remove prior installation of package 'xfun'

## Warning in file.copy(savedcopy, lib, recursive = TRUE): Problem  
## C:\Users\pohlmann\Documents\R\R-4.1.2\library\00LOCK\xfun\libs\x64\xfun.dll  
## nach C:\Users\pohlmann\Documents\R\R-4.1.2\library\xfun\libs\x64\xfun.dll zu  
## kopieren: Permission denied

## Warning: restored 'xfun'

## package 'vctrs' successfully unpacked and MD5 sums checked

## Warning: cannot remove prior installation of package 'vctrs'

## Warning in file.copy(savedcopy, lib, recursive = TRUE): Problem  
## C:\Users\pohlmann\Documents\R\R-4.1.2\library\00LOCK\vctrs\libs\x64\vctrs.dll  
## nach C:\Users\pohlmann\Documents\R\R-4.1.2\library\vctrs\libs\x64\vctrs.dll zu  
## kopieren: Permission denied

## Warning: restored 'vctrs'

## package 'stringi' successfully unpacked and MD5 sums checked

## Warning: cannot remove prior installation of package 'stringi'

## Warning in file.copy(savedcopy, lib, recursive = TRUE): Problem  
## C:\Users\pohlmann\Documents\R\R-4.1.2\library\00LOCK\stringi\libs\icudt69l.dat  
## nach C:\Users\pohlmann\Documents\R\R-4.1.2\library\stringi\libs\icudt69l.dat zu  
## kopieren: Invalid argument

## Warning in file.copy(savedcopy, lib, recursive = TRUE): Problem  
## C:\Users\pohlmann\Documents\R\R-4.1.2\library\00LOCK\stringi\libs\x64\stringi.dll  
## nach C:\Users\pohlmann\Documents\R\R-4.1.2\library\stringi\libs\x64\stringi.dll  
## zu kopieren: Permission denied

## Warning: restored 'stringi'

## package 'yaml' successfully unpacked and MD5 sums checked

## Warning: cannot remove prior installation of package 'yaml'

## Warning in file.copy(savedcopy, lib, recursive = TRUE): Problem  
## C:\Users\pohlmann\Documents\R\R-4.1.2\library\00LOCK\yaml\libs\x64\yaml.dll  
## nach C:\Users\pohlmann\Documents\R\R-4.1.2\library\yaml\libs\x64\yaml.dll zu  
## kopieren: Permission denied

## Warning: restored 'yaml'

## package 'data.table' successfully unpacked and MD5 sums checked

## Warning: cannot remove prior installation of package 'data.table'

## Warning in file.copy(savedcopy, lib, recursive = TRUE): Problem  
## C:\Users\pohlmann\Documents\R\R-4.1.2\library\00LOCK\data.table\libs\x64\data\_table.dll  
## nach  
## C:\Users\pohlmann\Documents\R\R-4.1.2\library\data.table\libs\x64\data\_table.dll  
## zu kopieren: Permission denied

## Warning: restored 'data.table'

## package 'gdtools' successfully unpacked and MD5 sums checked

## Warning: cannot remove prior installation of package 'gdtools'

## Warning in file.copy(savedcopy, lib, recursive = TRUE): Problem  
## C:\Users\pohlmann\Documents\R\R-4.1.2\library\00LOCK\gdtools\libs\x64\gdtools.dll  
## nach C:\Users\pohlmann\Documents\R\R-4.1.2\library\gdtools\libs\x64\gdtools.dll  
## zu kopieren: Permission denied

## Warning: restored 'gdtools'

## package 'ragg' successfully unpacked and MD5 sums checked

## Warning: cannot remove prior installation of package 'ragg'

## Warning in file.copy(savedcopy, lib, recursive = TRUE): Problem  
## C:\Users\pohlmann\Documents\R\R-4.1.2\library\00LOCK\ragg\libs\x64\ragg.dll  
## nach C:\Users\pohlmann\Documents\R\R-4.1.2\library\ragg\libs\x64\ragg.dll zu  
## kopieren: Permission denied

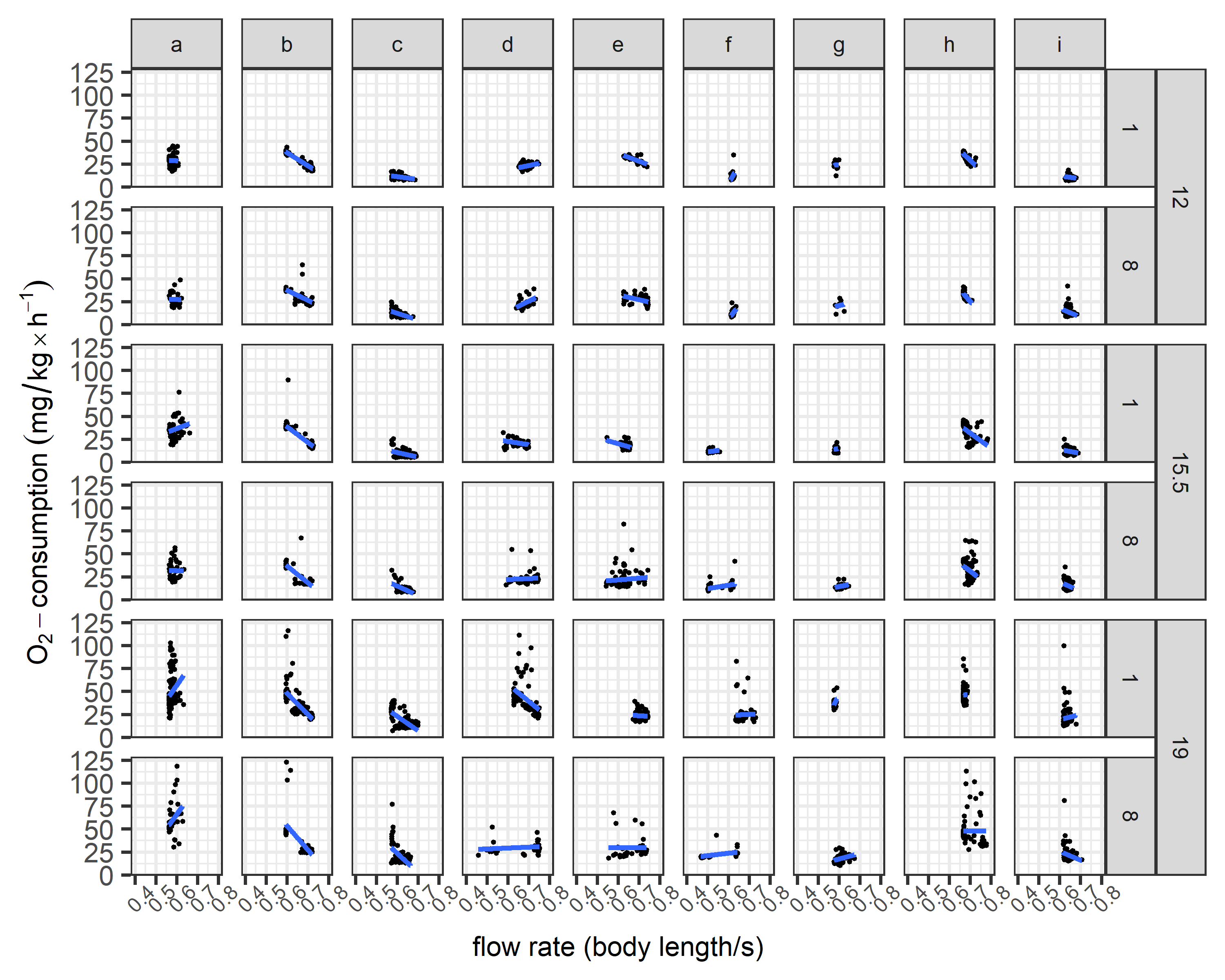
## Warning: restored 'ragg'

##   
## The downloaded binary packages are in  
## C:\Users\pohlmann\AppData\Local\Temp\RtmpeIkVbA\downloaded\_packages  
## -- R CMD build -----------------------------------------------------------------  
## \* checking for file 'C:\Users\pohlmann\AppData\Local\Temp\RtmpeIkVbA\remotes2440406d7077\davidgohel-flextable-cc2a01c/DESCRIPTION' ... OK  
## \* preparing 'flextable':  
## \* checking DESCRIPTION meta-information ... OK  
## \* checking for LF line-endings in source and make files and shell scripts  
## \* checking for empty or unneeded directories  
## \* building 'flextable\_0.8.7.001.tar.gz'  
##

## Warning: Paket 'flextable' wird gerade benutzt und deshab nicht installiert

## Warning in `[<-.factor`(`\*tmp\*`, thisvar, value = ""): ungültiges Faktorniveau,  
## NA erzeugt

| (Intercept) | press\_mean | run | speedBL | temp\_mean | df | logLik | AIC | delta | weight |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 3 | -0.01 |  | -1.72 | 0.08 | 9 | -11.8 | 41.6 | 0 |  |
| 2.95 | -0.01 | + | -1.72 | 0.08 | 11 | -11.4 | 44.8 | 3.2 |  |
| 1.93 | -0.01 | + |  | 0.08 | 10 | -13 | 46.01 | 4.41 |  |
| 2.96 |  | + | -1.76 | 0.08 | 10 | -13.53 | 47.06 | 5.46 |  |
| 3.94 | 0 | + | -1.37 |  | 10 | -146.91 | 313.81 | 272.21 |  |



**Fig S1** Effect of swimming speed on Oxygen consumption rate per Temperature and pressure for each individual