

Ranges in predictor variables

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Main calibration set:

```
table(ds2$country, ds2$app.mthd)
```

```
##
##      bsth bc ts os
## CH   12 27  5  1
## DK   53  9  0 17
## FR    2  4  1  0
## IE   18  8 23  0
## NL    3 69 22 66
## UK   63  0 46  0
```

```
dim(ds2)
```

```
## [1] 449 161
```

```
dim(d2)
```

```
## [1] 5514 204
```

Ranges etc.

```
dfsumm(ds2[, c('man.dm', 'man.ph')])
```

```
##
## 449 rows and 2 columns
## 260 unique rows
##           man.dm man.ph
## Class      numeric numeric
## Minimum           1    6.4
## Maximum          11.9    8.5
## Mean             5.86    7.42
## Unique (excl. NA)   199    65
## Missing values      0     0
## Sorted             FALSE FALSE
```

```
dfsumm(d2[, c('air.temp', 'wind.2m', 'ct')])
```

```
##
## 5514 rows and 3 columns
## 4789 unique rows
##           air.temp wind.2m      ct
## Class      numeric numeric numeric
## Minimum      -1.9  0.0423   0.15
## Maximum       32.1   28.4   176
## Mean          12.9   3.05   50.3
```

```
## Unique (excl. NA)      979    2008    1653
## Missing values        0        0        0
## Sorted                FALSE   FALSE   FALSE
```

Quantiles.

```
apply(ds2[, c('man.dm', 'man.ph')], 2, quantile, 0:20 / 20)
```

```
##      man.dm man.ph
## 0%      1.000  6.400
## 5%      1.810  6.800
## 10%     2.210  6.900
## 15%     2.482  7.000
## 20%     3.006  7.020
## 25%     3.400  7.100
## 30%     3.764  7.100
## 35%     4.900  7.200
## 40%     5.448  7.200
## 45%     5.880  7.300
## 50%     6.500  7.400
## 55%     6.800  7.400
## 60%     7.150  7.518
## 65%     7.328  7.600
## 70%     7.670  7.660
## 75%     7.840  7.760
## 80%     8.130  7.800
## 85%     8.336  7.980
## 90%     8.804  8.100
## 95%     9.500  8.200
## 100%    11.900  8.500
```

```
apply(d2[, c('air.temp', 'wind.2m', 'ct')], 2, quantile, 0:20 / 20)
```

```
##      air.temp  wind.2m      ct
## 0%    -1.90000  0.042297  0.1500
## 5%     4.44545  0.656746  1.0000
## 10%     6.60000  0.945788  1.5000
## 15%     7.60000  1.169905  3.0000
## 20%     8.60000  1.400000  4.0000
## 25%     9.20000  1.665375  6.0000
## 30%     9.87000  1.900000  8.6000
## 35%    10.30000  2.110220 14.0000
## 40%    10.80000  2.300000 22.0000
## 45%    11.50000  2.490000 24.0000
## 50%    12.20000  2.700000 31.0000
## 55%    13.00000  2.900000 45.3075
## 60%    13.70000  3.180000 48.0180
## 65%    14.50000  3.400000 57.6125
## 70%    15.50000  3.683200 71.5000
## 75%    16.40000  3.912400 85.6875
## 80%    17.50000  4.296340 96.0000
## 85%    18.80000  4.700000 113.2625
## 90%    20.40000  5.200000 135.0000
## 95%    22.90000  6.200000 153.0875
## 100%   32.10000 28.374000 176.2700
```