**Table S1 Characteristic numbers for the collectives under baseline (base) and minimum (min), median (med) and maximum (max) climate scenario for *Uelzen* at the end of the respective period (for age, dbh and height 1st quantile, median (med) and 3rd quantile values are given).**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Period | Climate | N | Age (y) | | |  | Dbh (cm) | | |  | Height (m) | | |
| scenario | 1st | med. | 3rd |  | 1st | med. | 3rd |  | 1st | med. | 3rd |
| Scots pine | 2011 –2030 | base  min  med  max | 61,799  60,552  60,391  60,519 | 55  55  55  55 | 75  75  75  75 | 84  84  85  84 |  | 22.9  24.9  24.8  24.8 | 32.3  32.5  32.5  32.5 | 36.9  37.1  37.0  37.1 |  | 20.3  21.9  21.7  21.9 | 24.4  24.8  24.5  24.7 | 25.7  26.2  26.0  26.2 |
| 2031  –2050 | base  min  med  max | 71,390  66,764  68,925  68,885 | 35  40  40  40 | 73  77  75  75 | 99  100  100  100 |  | 10.5  11.4  10.8  10.9 | 27.8  31.2  30.1  30.2 | 38.9  39.3  39.0  39.1 |  | 10.8  13.0  12.5  12.7 | 23.4  25.3  25.0  25.2 | 27.0  27.3  27.3  27.6 |
| 2051  –2070 | base  min  med  max | 99,902  98,333  97,426  93,215 | 30  30  30  30 | 40  40  40  40 | 89  90  91  93 |  | 8.7  9.1  9.1  9.5 | 11.3  12.4  11.7  12.4 | 28.6  29.7  30.2  32.1 |  | 9.2  10.4  10.5  10.8 | 11.4  13.8  13.5  13.6 | 24.2  25.5  26.2  26.1 |
| Eur. beech | 2011 –2030 | base  min  med  max | 17,267  17,447  16,671  17,250 | 32  32  32  32 | 37  37  37  37 | 41  41  41  41 |  | 7.9  8.1  8.0  8.0 | 9.3  9.3  9.1  9.0 | 11.3  11.4  11.3  11.4 |  | 11.0  11.5  11.0  11.3 | 12.6  13.0  12.7  12.6 | 13.9  15.1  14.8  14.8 |
| 2031  –2050 | base  min  med  max | 16,858  18,254  20,661  18,504 | 44  42  40  42 | 52  51  50  51 | 57  57  57  57 |  | 9.6  10.1  9.7  10.1 | 14.3  14.4  13.4  14.1 | 17.5  18.0  16.8  17.5 |  | 12.6  13.9  13.3  13.5 | 16.6  18.6  17.4  17.7 | 19.9  21.2  20.3  20.2 |
| 2051  –2070 | base  min  med  max | 17,357  20,093  23,079  19,409 | 40  35  35  35 | 57  45  50  50 | 72  71  70  72 |  | 8.9  7.9  8.8  8.1 | 13.9  12.9  13.4  13.2 | 20.4  19.8  19.0  19.5 |  | 12.4  11.2  12.7  10.4 | 16.0  16.7  17.8  15.0 | 22.4  22.6  22.6  20.1 |
| Oak | 2011 –2030 | base  min  med  max | 5,746  5,500  5,436  5,499 | 43  45  45  45 | 53  53  53  53 | 98  100  100  100 |  | 12.4  12.2  12.2  12.1 | 16.3  17.0  16.9  16.9 | 36.5  37.7  37.6  37.3 |  | 13.5  13.5  13.2  13.1 | 15.3  16.7  16.1  16.1 | 22.2  23.7  23.2  23.4 |
| 2031  –2050 | base  min  med  max | 7,775  7,393  7,663  7,177 | 30  30  30  30 | 45  58  53  58 | 73  79  76  80 |  | 8.5  7.2  8.5  8.3 | 12.8  13.8  12.3  14.3 | 23.8  24.9  23.5  25.2 |  | 10.7  8.7  9.8  9.5 | 14.6  14.6  13.9  14.5 | 20.9  21.7  20.5  21.3 |
| 2051  –2070 | base  min  med  max | 11,524  11,483  12,112  10,427 | 35  35  30  35 | 40  40  40  45 | 60  65  60  73 |  | 9.2  9.1  8.6  8.3 | 11.1  10.5  10.5  11.0 | 16.2  15.6  15.1  17.5 |  | 11.6  10.7  10.4  9.1 | 13.9  12.3  12.4  12.2 | 17.6  15.9  16.6  16.2 |

**Table S2 Characteristic numbers for the collectives under baseline (base) and minimum (min), median (med) and maximum (max) climate scenario for *Fläming* at the end of the respective period (for age, dbh and height 1st quantile, median (med) and 3rd quantile values are given).**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Period | Climate | N | Age (y) | | |  | Dbh (cm) | | |  | Height (m) | | |
| scenario | 1st | med. | 3rd |  | 1st | med. | 3rd |  | 1st | med. | 3rd |
| Scots pine | 2011 –2030 | base  min  med  max | 71,440  71,779  71,631  71,719 | 57  57  57  57 | 73  73  73  73 | 92  91  92  92 |  | 26.9  26.9  26.9  27.0 | 33.5  33.6  33.5  33.6 | 39.5  39.5  39.4  39.5 |  | 22.1  22.9  22.7  23.0 | 25.0  26.0  25.7  26.0 | 26.5  27.4  27.1  27.5 |
| 2031  –2050 | base  min  med  max | 142,306  145,674  143,246  146,114 | 30  30  30  30 | 40  35  40  35 | 77  76  77  75 |  | 9.2  9.5  9.5  9.4 | 11.5  11.8  11.6  11.7 | 32.4  32.0  32.4  32.0 |  | 10.1  10.8  10.9  10.5 | 12.7  13.4  13.3  13.2 | 25.4  26.2  26.2  26.0 |
| 2051  –2070 | base  min  med  max | 252,086  252,984  248,804  249,784 | 30  30  30  30 | 40  40  40  40 | 50  50  50  50 |  | 9.3  9.8  9.5  9.4 | 11.7  12.1  11.7  11.8 | 15.0  15.5  15.0  15.3 |  | 10.2  11.3  10.7  10.2 | 12.9  14.0  13.2  12.9 | 16.1  17.3  16.6  16.2 |
| Eur. beech | 2011 –2030 | base  min  med  max | 699  703  703  703 | 64  64  64  64 | 100  100  100  100 | 126  126  126  126 |  | 30.9  31.3  30.9  32.0 | 44.0  44.9  44.1  44.3 | 54.1  54.5  54.2  54.8 |  | 20.0  21.3  20.6  21.1 | 23.5  25.0  24.0  24.2 | 26.9  28.0  27.0  27.5 |
| 2031  –2050 | base  min  med  max | 1,624  3,630  2,983  2,608 | 40  40  40  40 | 40  40  40  40 | 45  40  40  40 |  | 6.3  6.4  6.2  6.3 | 6.6  6.6  6.5  6.4 | 10.4  7.6  7.8  7.0 |  | 7.8  7.9  7.4  7.1 | 8.4  8.3  7.8  7.6 | 11.4  10.2  9.8  8.6 |
| 2051  –2070 | base  min  med  max | 13,104  13,288  12,744  10,846 | 45  45  50  50 | 50  50  50  55 | 55  55  55  55 |  | 7.3  7.5  7.5  7.1 | 8.8  9.2  9.1  8.5 | 10.6  11.1  10.6  10.2 |  | 8.8  9.4  8.4  7.7 | 10.4  11.1  10.1  9.4 | 12.3  13.2  11.6  10.8 |
| Oak | 2011 –2030 | base  min  med  max | 1,809  1,813  1,819  1,813 | 53  54  53  53 | 65  65  65  65 | 111  111  111  111 |  | 27.7  27.9  27.7  27.9 | 33.2  33.7  33.6  33.7 | 44.7  44.7  44.8  44.8 |  | 18.6  19.7  19.3  19.5 | 20.8  22.0  21.6  21.9 | 23.6  24.9  24.4  24.7 |
| 2031  –2050 | base  min  med  max | 8,286  9,535  9,974  9,690 | 35  30  35  35 | 40  35  35  40 | 40  40  40  40 |  | 7.9  7.5  8.0  8.1 | 8.5  8.6  8.6  8.6 | 9.1  9.5  9.3  9.6 |  | 7.5  8.0  7.9  7.8 | 8.6  9.3  9.1  9.1 | 9.5  10.3  9.9  10.1 |
| 2051  –2070 | base  min  med  max | 14,580  17,331  16,635  15,983 | 40  35  35  35 | 50  45  45  45 | 55  55  55  55 |  | 8.7  8.6  8.4  8.6 | 10.3  10.2  10.1  10.1 | 11.8  12.1  11.9  12.0 |  | 9.1  9.2  8.8  8.5 | 10.5  10.9  10.2  9.8 | 11.8  12.7  11.9  11.6 |