

Table 2.20(m) Annual and seasonal average percentage frequencies of hourly wind speed by temperature: Southampton (1982–2011)

| Temperature / °C | Percentage frequency for stated range of wind speed / m·s ⁻¹ | | | | | | | | | | | | | | | | |
|-----------------------|---|-------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------------|
| | 0–2 | 2–4 | 4–6 | 6–8 | 8–10 | 10–12 | 12–14 | 14–16 | 16–18 | 18–20 | 20–22 | 22–24 | 24–26 | 26–28 | 28–30 | 30–32 | All speeds |
| Annual average | | | | | | | | | | | | | | | | | |
| –12 to –10.1 | 0.00 | | | | | | | | | | | | | | | | 0.00 |
| –10 to –8.1 | 0.03 | 0.01 | 0.01 | 0.00 | | | | | | | | | | | | | 0.05 |
| –8 to –6.1 | 0.10 | 0.02 | 0.01 | | | | | | | | | | | | | | 0.13 |
| –6 to –4.1 | 0.33 | 0.10 | 0.03 | 0.01 | | | | | | | | | | | | | 0.47 |
| –4 to –2.1 | 0.96 | 0.31 | 0.12 | 0.04 | 0.00 | 0.00 | | | | | | | | | | | 1.44 |
| –2 to –0.1 | 1.51 | 0.73 | 0.29 | 0.10 | 0.03 | 0.00 | | | | | | | | | | | 2.66 |
| 0 to 1.9 | 1.73 | 1.35 | 0.64 | 0.20 | 0.04 | 0.01 | 0.00 | | | | | | | | | | 3.97 |
| 2 to 3.9 | 1.95 | 1.86 | 1.09 | 0.52 | 0.13 | 0.03 | 0.00 | 0.00 | | | | | | | | | 5.58 |
| 4 to 5.9 | 2.34 | 2.49 | 1.70 | 0.78 | 0.25 | 0.08 | 0.01 | 0.00 | | | | | | | | | 7.66 |
| 6 to 7.9 | 2.61 | 3.19 | 2.44 | 1.25 | 0.52 | 0.16 | 0.03 | 0.00 | 0.00 | | | | | | | | 10.21 |
| 8 to 9.9 | 2.71 | 3.77 | 3.33 | 2.14 | 0.97 | 0.31 | 0.08 | 0.02 | 0.00 | 0.00 | 0.00 | | | | | | 13.32 |
| 10 to 11.9 | 2.60 | 3.47 | 3.26 | 2.37 | 1.26 | 0.47 | 0.12 | 0.03 | 0.00 | 0.00 | | | | | | | 13.59 |
| 12 to 13.9 | 2.26 | 3.52 | 2.84 | 1.76 | 0.85 | 0.29 | 0.06 | 0.02 | 0.00 | | | | | | | | 11.60 |
| 14 to 15.9 | 1.72 | 3.35 | 3.14 | 1.61 | 0.67 | 0.14 | 0.03 | 0.00 | | | | | | | | | 10.66 |
| 16 to 17.9 | 1.00 | 2.68 | 2.79 | 1.51 | 0.48 | 0.08 | 0.01 | 0.00 | | | | | | | | | 8.54 |
| 18 to 19.9 | 0.47 | 1.54 | 1.76 | 0.91 | 0.23 | 0.03 | 0.00 | 0.00 | | | | | | | | | 4.94 |
| 20 to 21.9 | 0.20 | 0.97 | 1.12 | 0.41 | 0.06 | 0.01 | | | | | | | | | | | 2.77 |
| 22 to 23.9 | 0.10 | 0.57 | 0.60 | 0.16 | 0.02 | | | | | | | | | | | | 1.45 |
| 24 to 25.9 | 0.04 | 0.24 | 0.27 | 0.07 | 0.01 | 0.00 | | | | | | | | | | | 0.63 |
| 26 to 27.9 | 0.01 | 0.10 | 0.09 | 0.03 | 0.00 | | | | | | | | | | | | 0.24 |
| 28 to 29.9 | 0.00 | 0.03 | 0.04 | 0.01 | | | | | | | | | | | | | 0.09 |
| 30 to 31.9 | 0.00 | 0.01 | 0.01 | 0.00 | | | | | | | | | | | | | 0.02 |
| 32 to 33.9 | | 0.00 | 0.00 | | | | | | | | | | | | | | 0.01 |
| 34 to 35.9 | | | | | | | | | | | | | | | | | |
| 36 to 37.9 | | | | | | | | | | | | | | | | | |
| All temps. | 22.66 | 30.32 | 25.58 | 13.86 | 5.52 | 1.61 | 0.36 | 0.08 | 0.01 | 0.00 | 0.00 | | | | | | 100.00 |
| Spring average | | | | | | | | | | | | | | | | | |
| –12 to –10.1 | | | | | | | | | | | | | | | | | |
| –10 to –8.1 | | | | | | | | | | | | | | | | | |
| –8 to –6.1 | 0.03 | | | | | | | | | | | | | | | | 0.03 |
| –6 to –4.1 | 0.16 | 0.02 | | | | | | | | | | | | | | | 0.18 |
| –4 to –2.1 | 0.71 | 0.13 | 0.01 | 0.00 | | | | | | | | | | | | | 0.84 |
| –2 to –0.1 | 1.56 | 0.44 | 0.09 | 0.05 | 0.01 | | | | | | | | | | | | 2.16 |
| 0 to 1.9 | 2.09 | 1.08 | 0.44 | 0.12 | 0.03 | | | | | | | | | | | | 3.75 |
| 2 to 3.9 | 2.53 | 1.99 | 1.04 | 0.55 | 0.17 | 0.05 | 0.00 | | | | | | | | | | 6.33 |
| 4 to 5.9 | 3.10 | 2.94 | 2.17 | 0.93 | 0.24 | 0.07 | 0.01 | | | | | | | | | | 9.46 |
| 6 to 7.9 | 3.19 | 4.30 | 3.43 | 1.79 | 0.65 | 0.22 | 0.06 | 0.00 | 0.00 | | | | | | | | 13.65 |
| 8 to 9.9 | 2.93 | 5.99 | 5.56 | 3.23 | 1.25 | 0.39 | 0.09 | 0.01 | 0.00 | 0.00 | | | | | | | 19.45 |
| 10 to 11.9 | 2.21 | 5.04 | 5.72 | 3.79 | 1.47 | 0.40 | 0.07 | 0.01 | 0.00 | 0.00 | | | | | | | 18.70 |
| 12 to 13.9 | 1.12 | 3.36 | 3.84 | 2.37 | 0.97 | 0.14 | 0.02 | | | | | | | | | | 11.83 |
| 14 to 15.9 | 0.54 | 1.90 | 2.44 | 1.26 | 0.51 | 0.06 | 0.01 | | | | | | | | | | 6.71 |
| 16 to 17.9 | 0.23 | 1.16 | 1.28 | 0.57 | 0.15 | 0.02 | 0.01 | | | | | | | | | | 3.43 |
| 18 to 19.9 | 0.14 | 0.61 | 0.63 | 0.20 | 0.05 | 0.01 | | | | | | | | | | | 1.64 |
| 20 to 21.9 | 0.08 | 0.39 | 0.46 | 0.13 | 0.02 | 0.00 | | | | | | | | | | | 1.08 |
| 22 to 23.9 | 0.03 | 0.21 | 0.21 | 0.08 | 0.02 | | | | | | | | | | | | 0.55 |
| 24 to 25.9 | 0.01 | 0.08 | 0.07 | 0.03 | | | | | | | | | | | | | 0.19 |
| 26 to 27.9 | | 0.01 | 0.02 | 0.01 | | | | | | | | | | | | | 0.03 |
| 28 to 29.9 | | | | | | | | | | | | | | | | | |
| 30 to 31.9 | | | | | | | | | | | | | | | | | |
| 32 to 33.9 | | | | | | | | | | | | | | | | | |
| 34 to 35.9 | | | | | | | | | | | | | | | | | |
| 36 to 37.9 | | | | | | | | | | | | | | | | | |
| All temps. | 20.66 | 29.63 | 27.40 | 15.11 | 5.55 | 1.37 | 0.26 | 0.02 | 0.01 | 0.00 | | | | | | | 100.01 |

Table continues

Table 2.20(m) Annual and seasonal average percentage frequencies of hourly wind speed by temperature: Southampton (1982–2011) — *continued*

| Temperature / °C | Percentage frequency for stated range of wind speed / m·s ⁻¹ | | | | | | | | | | | | | | | All speeds | |
|-----------------------|---|-------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------------|--------|
| | 0–2 | 2–4 | 4–6 | 6–8 | 8–10 | 10–12 | 12–14 | 14–16 | 16–18 | 18–20 | 20–22 | 22–24 | 24–26 | 26–28 | 28–30 | | 30–32 |
| Summer average | | | | | | | | | | | | | | | | | |
| –12 to –10.1 | | | | | | | | | | | | | | | | | |
| –10 to –8.1 | | | | | | | | | | | | | | | | | |
| –8 to –6.1 | | | | | | | | | | | | | | | | | |
| –6 to –4.1 | | | | | | | | | | | | | | | | | |
| –4 to –2.1 | | | | | | | | | | | | | | | | | |
| –2 to –0.1 | | | | | | | | | | | | | | | | | |
| 0 to 1.9 | 0.01 | 0.00 | | | | | | | | | | | | | | | 0.01 |
| 2 to 3.9 | 0.09 | 0.01 | | | | | | | | | | | | | | | 0.10 |
| 4 to 5.9 | 0.45 | 0.05 | | | | | | | | | | | | | | | 0.50 |
| 6 to 7.9 | 1.45 | 0.28 | 0.02 | 0.01 | | | | | | | | | | | | | 1.74 |
| 8 to 9.9 | 2.75 | 0.95 | 0.16 | 0.03 | 0.00 | | | | | | | | | | | | 3.89 |
| 10 to 11.9 | 4.19 | 2.60 | 0.85 | 0.19 | 0.06 | 0.01 | | | | | | | | | | | 7.89 |
| 12 to 13.9 | 4.71 | 5.20 | 2.82 | 0.89 | 0.26 | 0.07 | 0.01 | | | | | | | | | | 13.96 |
| 14 to 15.9 | 4.35 | 7.27 | 5.58 | 2.30 | 0.66 | 0.13 | 0.04 | | | | | | | | | | 20.33 |
| 16 to 17.9 | 2.88 | 6.72 | 6.67 | 3.32 | 0.91 | 0.11 | 0.02 | | | | | | | | | | 20.62 |
| 18 to 19.9 | 1.44 | 4.32 | 4.97 | 2.68 | 0.62 | 0.07 | 0.01 | | | | | | | | | | 14.11 |
| 20 to 21.9 | 0.63 | 2.91 | 3.50 | 1.31 | 0.20 | 0.03 | | | | | | | | | | | 8.57 |
| 22 to 23.9 | 0.32 | 1.85 | 2.00 | 0.53 | 0.05 | 0.00 | | | | | | | | | | | 4.75 |
| 24 to 25.9 | 0.15 | 0.86 | 0.95 | 0.21 | 0.02 | 0.01 | | | | | | | | | | | 2.19 |
| 26 to 27.9 | 0.04 | 0.39 | 0.34 | 0.11 | 0.01 | 0.00 | | | | | | | | | | | 0.89 |
| 28 to 29.9 | 0.01 | 0.13 | 0.17 | 0.03 | 0.00 | | | | | | | | | | | | 0.34 |
| 30 to 31.9 | 0.00 | 0.04 | 0.05 | 0.01 | | | | | | | | | | | | | 0.10 |
| 32 to 33.9 | 0.00 | 0.01 | 0.01 | | | | | | | | | | | | | | 0.03 |
| 34 to 35.9 | | | | | | | | | | | | | | | | | |
| 36 to 37.9 | | | | | | | | | | | | | | | | | |
| All temps. | 23.48 | 33.57 | 28.07 | 11.61 | 2.79 | 0.43 | 0.06 | | | | | | | | | | 100.00 |
| Autumn average | | | | | | | | | | | | | | | | | |
| –12 to –10.1 | | | | | | | | | | | | | | | | | |
| –10 to –8.1 | 0.01 | | | | | | | | | | | | | | | | 0.01 |
| –8 to –6.1 | 0.04 | | | | | | | | | | | | | | | | 0.04 |
| –6 to –4.1 | 0.24 | 0.01 | | | | | | | | | | | | | | | 0.25 |
| –4 to –2.1 | 0.78 | 0.08 | 0.01 | 0.00 | | | | | | | | | | | | | 0.87 |
| –2 to –0.1 | 1.37 | 0.22 | 0.05 | 0.00 | | | | | | | | | | | | | 1.65 |
| 0 to 1.9 | 1.87 | 0.59 | 0.19 | 0.04 | | | | | | | | | | | | | 2.69 |
| 2 to 3.9 | 2.25 | 1.12 | 0.39 | 0.15 | 0.02 | | | | | | | | | | | | 3.93 |
| 4 to 5.9 | 2.93 | 1.85 | 0.83 | 0.24 | 0.07 | 0.01 | 0.01 | 0.00 | | | | | | | | | 5.95 |
| 6 to 7.9 | 3.46 | 2.89 | 1.51 | 0.68 | 0.19 | 0.05 | 0.00 | 0.00 | | | | | | | | | 8.76 |
| 8 to 9.9 | 3.87 | 4.02 | 2.46 | 1.09 | 0.31 | 0.08 | 0.01 | 0.01 | | 0.00 | | | | | | | 11.85 |
| 10 to 11.9 | 3.71 | 4.74 | 3.38 | 2.14 | 0.94 | 0.23 | 0.06 | 0.01 | 0.00 | | | | | | | | 15.20 |
| 12 to 13.9 | 3.13 | 5.35 | 4.31 | 2.96 | 1.39 | 0.44 | 0.11 | 0.03 | 0.01 | | | | | | | | 17.71 |
| 14 to 15.9 | 1.94 | 4.18 | 4.49 | 2.84 | 1.51 | 0.35 | 0.07 | 0.01 | | | | | | | | | 15.38 |
| 16 to 17.9 | 0.84 | 2.78 | 3.15 | 2.13 | 0.85 | 0.18 | 0.03 | 0.01 | | | | | | | | | 9.96 |
| 18 to 19.9 | 0.27 | 1.20 | 1.39 | 0.74 | 0.23 | 0.03 | 0.00 | 0.00 | 0.00 | | | | | | | | 3.87 |
| 20 to 21.9 | 0.07 | 0.55 | 0.50 | 0.18 | 0.03 | | | | | | | | | | | | 1.33 |
| 22 to 23.9 | 0.03 | 0.19 | 0.16 | 0.04 | 0.03 | | | | | | | | | | | | 0.44 |
| 24 to 25.9 | 0.01 | 0.03 | 0.04 | 0.03 | 0.00 | | | | | | | | | | | | 0.11 |
| 26 to 27.9 | | 0.01 | 0.01 | 0.00 | | | | | | | | | | | | | 0.02 |
| 28 to 29.9 | | | | | | | | | | | | | | | | | |
| 30 to 31.9 | | | | | | | | | | | | | | | | | |
| 32 to 33.9 | | | | | | | | | | | | | | | | | |
| 34 to 35.9 | | | | | | | | | | | | | | | | | |
| 36 to 37.9 | | | | | | | | | | | | | | | | | |
| All temps. | 26.79 | 29.80 | 22.86 | 13.27 | 5.55 | 1.37 | 0.29 | 0.08 | 0.01 | 0.00 | | | | | | | 100.00 |

Table continues

Table 2.20(m) Annual and seasonal average percentage frequencies of hourly wind speed by temperature: Southampton (1982–2011) — *continued*

| Temperature / °C | Percentage frequency for stated range of wind speed / m·s ⁻¹ | | | | | | | | | | | | | | | | |
|-----------------------|---|-------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------------|
| | 0–2 | 2–4 | 4–6 | 6–8 | 8–10 | 10–12 | 12–14 | 14–16 | 16–18 | 18–20 | 20–22 | 22–24 | 24–26 | 26–28 | 28–30 | 30–32 | All speeds |
| Winter average | | | | | | | | | | | | | | | | | |
| –12 to –10.1 | 0.01 | | | | | | | | | | | | | | | | 0.01 |
| –10 to –8.1 | 0.12 | 0.03 | 0.04 | 0.01 | | | | | | | | | | | | | 0.19 |
| –8 to –6.1 | 0.33 | 0.10 | 0.03 | | | | | | | | | | | | | | 0.46 |
| –6 to –4.1 | 0.95 | 0.37 | 0.11 | 0.03 | 0.00 | | | | | | | | | | | | 1.46 |
| –4 to –2.1 | 2.38 | 1.05 | 0.48 | 0.16 | 0.01 | 0.01 | | | | | | | | | | | 4.08 |
| –2 to –0.1 | 3.14 | 2.28 | 1.04 | 0.34 | 0.09 | 0.01 | | | | | | | | | | | 6.90 |
| 0 to 1.9 | 2.99 | 3.78 | 1.97 | 0.64 | 0.14 | 0.03 | 0.00 | | | | | | | | | | 9.55 |
| 2 to 3.9 | 2.95 | 4.35 | 2.95 | 1.39 | 0.35 | 0.08 | 0.01 | 0.01 | | | | | | | | | 12.09 |
| 4 to 5.9 | 2.91 | 5.19 | 3.83 | 1.98 | 0.69 | 0.22 | 0.04 | 0.01 | | | | | | | | | 14.86 |
| 6 to 7.9 | 2.36 | 5.36 | 4.84 | 2.54 | 1.23 | 0.39 | 0.08 | 0.01 | 0.01 | 0.00 | | | | | | | 16.81 |
| 8 to 9.9 | 1.27 | 4.14 | 5.18 | 4.23 | 2.32 | 0.75 | 0.22 | 0.05 | 0.01 | 0.00 | 0.00 | 0.00 | | | | | 18.18 |
| 10 to 11.9 | 0.25 | 1.47 | 3.10 | 3.38 | 2.62 | 1.28 | 0.37 | 0.10 | 0.01 | 0.00 | | | | | | | 12.57 |
| 12 to 13.9 | 0.03 | 0.12 | 0.37 | 0.81 | 0.78 | 0.53 | 0.12 | 0.04 | 0.01 | | | | | | | | 2.80 |
| 14 to 15.9 | 0.00 | | 0.01 | 0.01 | 0.01 | 0.01 | | | | | | | | | | | 0.04 |
| 16 to 17.9 | | | | | | | | | | | | | | | | | |
| 18 to 19.9 | | | | | | | | | | | | | | | | | |
| 20 to 21.9 | | | | | | | | | | | | | | | | | |
| 22 to 23.9 | | | | | | | | | | | | | | | | | |
| 24 to 25.9 | | | | | | | | | | | | | | | | | |
| 26 to 27.9 | | | | | | | | | | | | | | | | | |
| 28 to 29.9 | | | | | | | | | | | | | | | | | |
| 30 to 31.9 | | | | | | | | | | | | | | | | | |
| 32 to 33.9 | | | | | | | | | | | | | | | | | |
| 34 to 35.9 | | | | | | | | | | | | | | | | | |
| 36 to 37.9 | | | | | | | | | | | | | | | | | |
| All temps. | 19.68 | 28.23 | 23.94 | 15.51 | 8.25 | 3.30 | 0.84 | 0.22 | 0.03 | 0.01 | 0.00 | 0.00 | | | | | 100.01 |