

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

Temperature / °C	Percentage frequency for stated range of wind speed / m·s <sup>-1</sup>																
	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
<b>Annual average</b>																	
–12 to –10.1	0.02	0.00															0.03
–10 to –8.1	0.05	0.02															0.06
–8 to –6.1	0.10	0.03	0.01	0.00	0.00												0.15
–6 to –4.1	0.30	0.09	0.02	0.02	0.00	0.00											0.44
–4 to –2.1	0.67	0.32	0.09	0.04	0.03	0.00											1.15
–2 to –0.1	1.18	0.86	0.31	0.12	0.05	0.01											2.52
0 to 1.9	1.64	2.17	0.93	0.28	0.05	0.02	0.00										5.10
2 to 3.9	1.83	3.02	1.69	0.63	0.15	0.03	0.01										7.35
4 to 5.9	1.94	3.79	2.46	1.01	0.29	0.06	0.01	0.00									9.57
6 to 7.9	2.15	4.28	3.14	1.46	0.47	0.11	0.02	0.00									11.62
8 to 9.9	2.25	4.33	3.54	1.74	0.58	0.14	0.03	0.00									12.61
10 to 11.9	2.29	4.46	3.33	1.61	0.59	0.15	0.03	0.01									12.46
12 to 13.9	2.18	4.71	3.12	1.31	0.39	0.09	0.01	0.00									11.83
14 to 15.9	1.68	3.84	2.83	0.98	0.23	0.03	0.00										9.58
16 to 17.9	1.11	2.73	2.01	0.71	0.11	0.01	0.00										6.68
18 to 19.9	0.63	1.71	1.27	0.39	0.05	0.01											4.05
20 to 21.9	0.35	1.05	0.72	0.21	0.03	0.00											2.36
22 to 23.9	0.22	0.62	0.36	0.10	0.01												1.31
24 to 25.9	0.11	0.32	0.18	0.06	0.01												0.66
26 to 27.9	0.05	0.14	0.08	0.03	0.00												0.30
28 to 29.9	0.02	0.05	0.04	0.01													0.13
30 to 31.9	0.01	0.02	0.01	0.00													0.04
32 to 33.9		0.01	0.00														0.01
34 to 35.9		0.00	0.00														0.00
36 to 37.9																	
All temps.	20.77	38.57	26.14	10.71	3.03	0.65	0.12	0.02									100.00
<b>Spring average</b>																	
–12 to –10.1	0.00																0.00
–10 to –8.1	0.01																0.01
–8 to –6.1	0.01																0.01
–6 to –4.1	0.06	0.01															0.07
–4 to –2.1	0.37	0.13	0.02														0.52
–2 to –0.1	0.86	0.49	0.14	0.08	0.02	0.00											1.59
0 to 1.9	1.51	1.64	0.76	0.20	0.05	0.01											4.17
2 to 3.9	2.26	3.04	1.69	0.70	0.16	0.04	0.01										7.89
4 to 5.9	2.71	5.19	3.10	1.27	0.30	0.06	0.01										12.64
6 to 7.9	3.23	6.38	4.57	2.06	0.58	0.15	0.02	0.00									16.99
8 to 9.9	2.74	6.76	5.66	2.48	0.66	0.14	0.03	0.00									18.46
10 to 11.9	1.79	5.38	4.99	2.33	0.58	0.09	0.01	0.01	0.00								15.18
12 to 13.9	1.27	3.65	3.36	1.61	0.34	0.04	0.01										10.27
14 to 15.9	0.81	2.26	2.00	0.87	0.17	0.02	0.00										6.13
16 to 17.9	0.40	1.21	0.99	0.43	0.07	0.01											3.11
18 to 19.9	0.21	0.63	0.50	0.16	0.04	0.00											1.54
20 to 21.9	0.11	0.35	0.24	0.10	0.02												0.82
22 to 23.9	0.07	0.19	0.13	0.05	0.01												0.44
24 to 25.9	0.02	0.08	0.02	0.02	0.01												0.14
26 to 27.9		0.01	0.01														0.02
28 to 29.9																	
30 to 31.9																	
32 to 33.9																	
34 to 35.9																	
36 to 37.9																	
All temps.	18.43	37.40	28.16	12.35	3.01	0.56	0.09	0.01	0.00								100.00

Table continues

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

Temperature / °C	Percentage frequency for stated range of wind speed / m·s <sup>-1</sup>															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
<b>Summer average</b>																	
–12 to –10.1																	
–10 to –8.1																	
–8 to –6.1																	
–6 to –4.1																	
–4 to –2.1																	
–2 to –0.1	0.00																0.00
0 to 1.9	0.01																0.01
2 to 3.9	0.07																0.07
4 to 5.9	0.25	0.04	0.01	0.00													0.30
6 to 7.9	0.89	0.33	0.07	0.01													1.30
8 to 9.9	2.20	1.63	0.43	0.07	0.02												4.34
10 to 11.9	3.71	4.61	1.87	0.31	0.04	0.00											10.55
12 to 13.9	4.69	8.41	4.03	1.01	0.10	0.01											18.26
14 to 15.9	4.43	8.78	5.46	1.40	0.19	0.02											20.27
16 to 17.9	3.27	7.24	5.09	1.48	0.20	0.02	0.01										17.31
18 to 19.9	1.96	5.02	3.74	1.02	0.10	0.02											11.86
20 to 21.9	1.11	3.38	2.26	0.62	0.08	0.00											7.45
22 to 23.9	0.73	2.08	1.13	0.30	0.02	0.00											4.26
24 to 25.9	0.36	1.08	0.60	0.19	0.03	0.00											2.27
26 to 27.9	0.18	0.54	0.27	0.11	0.01												1.10
28 to 29.9	0.08	0.21	0.16	0.04													0.49
30 to 31.9	0.02	0.07	0.04	0.01													0.14
32 to 33.9		0.02	0.01														0.03
34 to 35.9		0.01	0.00														0.01
36 to 37.9																	
All temps.	23.97	43.45	25.17	6.56	0.78	0.07	0.01										100.01
<b>Autumn average</b>																	
–12 to –10.1																	
–10 to –8.1	0.01																0.01
–8 to –6.1	0.03	0.00															0.04
–6 to –4.1	0.14	0.01															0.15
–4 to –2.1	0.42	0.04	0.00	0.00													0.46
–2 to –0.1	0.96	0.25	0.06	0.01													1.27
0 to 1.9	1.41	0.87	0.22	0.08	0.01	0.01											2.60
2 to 3.9	1.78	1.97	0.63	0.15	0.03	0.00											4.56
4 to 5.9	2.47	3.19	1.50	0.38	0.04	0.02											7.59
6 to 7.9	2.95	5.16	2.64	0.78	0.14	0.04	0.00										11.71
8 to 9.9	3.52	6.32	3.96	1.43	0.33	0.06	0.01										15.63
10 to 11.9	3.46	6.92	4.60	1.86	0.52	0.13	0.02	0.01									17.49
12 to 13.9	2.66	6.56	4.64	2.08	0.61	0.13	0.02										16.70
14 to 15.9	1.38	4.18	3.73	1.64	0.50	0.06	0.01										11.50
16 to 17.9	0.72	2.32	1.85	0.91	0.18	0.01											5.98
18 to 19.9	0.31	1.08	0.76	0.34	0.06	0.01											2.56
20 to 21.9	0.17	0.40	0.33	0.10	0.03	0.00											1.03
22 to 23.9	0.06	0.19	0.16	0.04	0.00												0.45
24 to 25.9	0.03	0.08	0.07	0.02	0.00												0.21
26 to 27.9	0.01	0.02	0.04	0.01	0.00												0.07
28 to 29.9		0.00	0.01														0.01
30 to 31.9																	
32 to 33.9																	
34 to 35.9																	
36 to 37.9																	
All temps.	22.48	39.55	25.18	9.83	2.45	0.46	0.05	0.01									100.01

*Table continues*

