

**Table 2.20(f)** Annual and seasonal average percentage frequencies of hourly wind speed by temperature: Leeds (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	0.01																0.01
–10 to –8.1	0.02	0.00	0.00														0.02
–8 to –6.1	0.02	0.01	0.00														0.04
–6 to –4.1	0.10	0.06	0.01														0.17
–4 to –2.1	0.33	0.24	0.07	0.01													0.64
–2 to –0.1	0.73	0.88	0.31	0.09	0.01	0.01	0.00	0.00									2.03
0 to 1.9	1.31	2.08	0.77	0.25	0.05	0.01	0.00	0.00									4.48
2 to 3.9	1.71	3.19	1.50	0.57	0.20	0.08	0.04	0.01		0.00	0.00						7.29
4 to 5.9	1.88	3.85	2.23	0.97	0.46	0.22	0.11	0.04	0.01	0.01	0.00	0.00					9.75
6 to 7.9	1.94	4.13	2.75	1.45	0.72	0.36	0.16	0.07	0.02	0.01	0.01		0.00		0.00		11.61
8 to 9.9	2.06	4.66	2.87	1.54	0.84	0.44	0.17	0.07	0.02	0.02	0.01	0.00					12.69
10 to 11.9	2.08	4.68	3.00	1.68	0.84	0.37	0.16	0.07	0.03	0.02	0.00	0.00					12.93
12 to 13.9	2.03	4.55	2.87	1.52	0.72	0.31	0.10	0.04	0.02	0.01	0.00						12.16
14 to 15.9	1.49	3.74	2.57	1.40	0.57	0.21	0.06	0.02	0.00	0.00	0.00						10.06
16 to 17.9	0.93	2.51	1.97	1.18	0.47	0.16	0.03	0.01	0.00								7.26
18 to 19.9	0.48	1.44	1.30	0.75	0.29	0.07	0.01	0.00	0.00								4.35
20 to 21.9	0.25	0.82	0.74	0.39	0.12	0.02	0.00										2.35
22 to 23.9	0.14	0.48	0.36	0.17	0.04	0.00											1.17
24 to 25.9	0.07	0.27	0.20	0.06	0.01	0.00	0.00										0.61
26 to 27.9	0.03	0.11	0.08	0.03	0.00	0.00											0.26
28 to 29.9	0.01	0.04	0.03	0.01	0.00												0.10
30 to 31.9	0.00	0.01	0.01	0.00													0.02
32 to 33.9		0.00	0.00	0.00													0.01
34 to 35.9																	
36 to 37.9																	
All temps.	17.62	37.74	23.62	12.07	5.34	2.27	0.85	0.31	0.11	0.06	0.02	0.00	0.00		0.00		100.01
<b>Spring average</b>																	
–12 to –10.1																	
–10 to –8.1																	
–8 to –6.1	0.01																0.01
–6 to –4.1	0.05	0.00															0.05
–4 to –2.1	0.14	0.08	0.01														0.24
–2 to –0.1	0.39	0.42	0.11	0.08	0.00												1.00
0 to 1.9	1.00	1.36	0.52	0.18	0.04	0.02											3.11
2 to 3.9	1.74	3.38	1.47	0.59	0.18	0.09	0.03	0.01									7.48
4 to 5.9	2.36	5.01	2.48	0.96	0.43	0.21	0.08	0.02	0.00								11.56
6 to 7.9	2.77	6.72	3.83	1.82	0.83	0.36	0.18	0.07	0.01	0.01							16.59
8 to 9.9	2.58	7.14	4.47	2.19	1.19	0.66	0.20	0.08	0.03	0.02	0.00	0.00					18.56
10 to 11.9	1.86	5.84	4.30	2.48	1.23	0.52	0.25	0.09	0.02	0.01							16.60
12 to 13.9	1.15	3.67	3.06	2.01	1.03	0.35	0.14	0.03	0.00	0.01							11.45
14 to 15.9	0.62	2.08	1.96	1.20	0.54	0.18	0.05	0.02	0.00	0.01	0.00						6.67
16 to 17.9	0.33	1.12	1.10	0.64	0.23	0.10	0.01										3.53
18 to 19.9	0.19	0.62	0.56	0.32	0.10	0.02	0.01										1.81
20 to 21.9	0.11	0.34	0.23	0.10	0.04												0.81
22 to 23.9	0.07	0.16	0.10	0.02	0.00												0.35
24 to 25.9	0.03	0.08	0.06	0.00													0.17
26 to 27.9	0.01	0.01	0.00	0.01													0.03
28 to 29.9				0.00													0.00
30 to 31.9																	
32 to 33.9																	
34 to 35.9																	
36 to 37.9																	
All temps.	15.40	38.02	24.25	12.60	5.84	2.50	0.94	0.31	0.07	0.06	0.01	0.00					100.01

Table continues

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

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>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 to 1.9																	
2 to 3.9	0.03	0.01															
4 to 5.9	0.10	0.06	0.01														
6 to 7.9	0.37	0.33	0.06	0.01													
8 to 9.9	1.31	1.59	0.50	0.10	0.01	0.00											
10 to 11.9	2.88	4.70	1.68	0.52	0.13	0.04	0.00										
12 to 13.9	4.06	8.00	3.74	1.44	0.57	0.18	0.02										
14 to 15.9	3.66	8.53	5.01	2.45	0.83	0.27	0.08	0.01									
16 to 17.9	2.71	6.86	4.88	2.96	1.13	0.37	0.07	0.01									
18 to 19.9	1.45	4.26	3.85	2.20	0.86	0.19	0.03	0.01	0.00								
20 to 21.9	0.79	2.55	2.41	1.25	0.37	0.07	0.01										
22 to 23.9	0.45	1.57	1.21	0.58	0.12	0.00											
24 to 25.9	0.22	0.92	0.67	0.21	0.04	0.01	0.00										
26 to 27.9	0.11	0.42	0.32	0.10	0.00	0.00											
28 to 29.9	0.04	0.17	0.12	0.03	0.00												
30 to 31.9	0.01	0.05	0.02	0.01													
32 to 33.9		0.00	0.02	0.00													
34 to 35.9																	
36 to 37.9																	
All temps.	18.20	40.03	24.49	11.84	4.06	1.14	0.21	0.03	0.00								
<b>Autumn average</b>																	
–12 to –10.1	0.01																
–10 to –8.1	0.01																
–8 to –6.1	0.00																
–6 to –4.1	0.04	0.01	0.00														
–4 to –2.1	0.12	0.04	0.02														
–2 to –0.1	0.43	0.39	0.08	0.02	0.01												
0 to 1.9	0.84	0.98	0.34	0.12	0.02	0.01	0.00										
2 to 3.9	1.14	1.76	0.78	0.27	0.06	0.02											
4 to 5.9	2.03	2.82	1.42	0.50	0.18	0.05	0.01										
6 to 7.9	2.65	4.39	2.56	1.13	0.35	0.11	0.04	0.02	0.00								
8 to 9.9	3.54	6.79	3.38	1.37	0.60	0.26	0.14	0.03	0.01	0.00							
10 to 11.9	3.40	7.23	4.34	2.01	0.87	0.31	0.14	0.05	0.02	0.01							
12 to 13.9	2.85	6.33	4.18	2.00	0.90	0.40	0.09	0.04	0.02	0.01	0.01						
14 to 15.9	1.64	4.24	3.20	1.86	0.82	0.36	0.07	0.03	0.00	0.01							
16 to 17.9	0.67	1.99	1.85	1.10	0.51	0.17	0.04	0.02	0.00								
18 to 19.9	0.28	0.86	0.76	0.45	0.18	0.07	0.02	0.01	0.01								
20 to 21.9	0.09	0.39	0.29	0.21	0.07	0.02	0.01										
22 to 23.9	0.02	0.16	0.11	0.07	0.02	0.00											
24 to 25.9	0.00	0.06	0.08	0.03	0.01	0.00	0.00										
26 to 27.9	0.01	0.03	0.01	0.01													
28 to 29.9				0.01													
30 to 31.9																	
32 to 33.9																	
34 to 35.9																	
36 to 37.9																	
All temps.	19.75	38.47	23.41	11.16	4.59	1.76	0.56	0.19	0.07	0.02	0.01						

*Table continues*

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

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>Winter average</b>																	
–12 to –10.1	0.03																0.03
–10 to –8.1	0.07	0.01	0.00														0.09
–8 to –6.1	0.08	0.04	0.01														0.12
–6 to –4.1	0.31	0.23	0.05														0.59
–4 to –2.1	1.07	0.83	0.24	0.03													2.17
–2 to –0.1	2.13	2.72	1.06	0.28	0.05	0.02	0.01	0.00									6.26
0 to 1.9	3.43	6.05	2.25	0.70	0.16	0.03	0.01	0.00									12.63
2 to 3.9	3.96	7.66	3.78	1.45	0.58	0.23	0.12	0.01		0.00	0.00						17.79
4 to 5.9	3.07	7.55	5.03	2.43	1.24	0.62	0.33	0.12	0.02	0.02	0.00	0.00					20.44
6 to 7.9	1.98	5.09	4.56	2.88	1.70	0.96	0.42	0.17	0.08	0.04	0.02		0.00		0.00		17.90
8 to 9.9	0.80	3.11	3.15	2.52	1.56	0.83	0.34	0.17	0.05	0.05	0.02	0.00					12.59
10 to 11.9	0.14	0.93	1.68	1.70	1.13	0.63	0.27	0.13	0.07	0.05	0.01	0.01					6.74
12 to 13.9	0.02	0.14	0.44	0.61	0.39	0.33	0.16	0.09	0.04	0.01	0.00						2.23
14 to 15.9	0.01	0.04	0.06	0.07	0.09	0.04	0.02	0.02	0.00								0.35
16 to 17.9	0.00	0.01	0.00	0.01		0.00	0.00										0.03
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.	17.15	34.40	22.32	12.67	6.89	3.68	1.68	0.71	0.27	0.16	0.06	0.01	0.00		0.00		100.00