











表 2a<sub>1</sub> 球状水银温度表相对湿度查算表  
 $P=110\text{ kPa}, A=0.857 \times 10^{-3} \text{ } ^\circ\text{C}^{-1} (0.4\text{ m/s})$

$t$ \ $t-t_w$	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
15	100.0	98.8	97.6	96.4	95.2	94.1	92.9	91.7	90.5	89.4	88.2
16	100.0	98.8	97.7	96.5	95.4	94.3	93.1	92.0	90.9	89.7	88.6
17	100.0	98.9	97.8	96.7	95.5	94.4	93.3	92.2	91.1	90.1	89.0
18	100.0	98.9	97.8	96.8	95.7	94.6	93.5	92.5	91.4	90.4	89.3
19	100.0	98.9	97.9	96.9	95.8	94.8	93.7	92.7	91.7	90.7	89.6
20	100.0	99.0	98.0	96.9	95.9	94.9	93.9	92.9	91.9	90.9	89.9
21	100.0	99.0	98.0	97.0	96.1	95.1	94.1	93.1	92.2	91.2	90.2
22	100.0	99.0	98.1	97.1	96.2	95.2	94.3	93.3	92.4	91.4	90.5
23	100.0	99.1	98.1	97.2	96.3	95.5	94.4	93.5	92.6	91.7	90.7
24	100.0	99.1	98.2	97.3	96.4	95.5	94.6	93.7	92.8	91.9	91.0
25	100.0	99.1	98.2	97.3	96.4	95.6	94.7	93.8	92.9	92.1	91.2
26	100.0	99.1	98.3	97.4	96.5	95.7	94.8	94.0	93.1	92.3	91.4
27	100.0	99.1	98.3	97.5	96.6	95.8	94.9	94.1	93.3	92.5	91.6
28	100.0	99.2	98.3	97.5	96.7	95.9	95.1	94.2	93.4	92.6	91.8
29	100.0	99.2	98.4	97.6	96.8	96.0	95.2	94.4	93.6	92.8	92.0
30	100.0	99.2	98.4	97.6	96.8	96.1	95.3	94.5	93.7	92.9	92.2
31	100.0	99.2	98.4	97.7	96.9	96.1	95.4	94.6	93.9	93.1	92.3
32	100.0	99.2	98.5	97.7	97.0	96.2	95.5	94.7	94.0	93.2	92.5
33	100.0	99.3	98.5	97.8	97.0	96.3	95.6	94.8	94.1	93.4	92.6
34	100.0	99.3	98.5	97.8	97.1	96.4	95.6	94.9	94.2	93.5	92.8
35	100.0	99.3	98.6	97.8	97.1	96.4	95.7	95.0	94.3	93.6	92.9
36	100.0	99.3	98.6	97.9	97.2	96.5	95.8	95.1	94.4	93.7	93.1
37	100.0	99.3	98.6	97.9	97.2	96.6	95.9	95.2	94.5	93.8	93.2
38	100.0	99.3	98.6	98.0	97.3	96.6	95.9	95.3	94.6	94.0	93.3
39	100.0	99.3	98.7	98.0	97.3	96.7	96.0	95.4	94.7	94.1	93.4
40	100.0	99.3	98.7	98.0	97.4	96.7	96.1	95.4	94.8	94.2	93.5
41	100.0	99.4	98.7	98.1	97.4	96.8	96.1	95.5	94.9	94.2	93.6
42	100.0	99.4	98.7	98.1	97.5	96.8	96.2	95.6	95.0	94.3	93.7
43	100.0	99.4	98.7	98.1	97.5	96.9	96.3	95.6	95.0	94.4	93.8
44	100.0	99.4	98.8	98.1	97.5	96.9	96.3	95.7	95.1	94.5	93.9
45	100.0	99.4	98.8	98.2	97.6	97.0	96.4	95.8	95.2	94.6	94.0
46	100.0	99.4	98.8	98.2	97.6	97.0	96.4	95.8	95.2	94.7	94.1
47	100.0	99.4	98.8	98.2	97.6	97.0	96.5	95.9	95.3	94.7	94.2
48	100.0	99.4	98.8	98.2	97.7	97.1	96.5	95.9	95.4	94.8	94.2
49	100.0	99.4	98.8	98.3	97.7	97.1	96.6	96.0	95.4	94.9	94.3
50	100.0	99.4	98.9	98.3	97.7	97.2	96.6	96.0	95.5	94.9	94.4
51	100.0	99.4	98.9	98.3	97.8	97.2	96.6	96.1	95.5	95.0	94.4
52	100.0	99.4	98.9	98.3	97.8	97.2	96.7	96.1	95.6	95.1	94.5
53	100.0	99.4	98.9	98.4	97.8	97.3	96.7	96.2	95.6	95.1	94.6
54	100.0	99.5	98.9	98.4	97.8	97.3	96.8	96.2	95.7	95.2	94.6
55	100.0	99.5	98.9	98.4	97.9	97.3	96.8	96.3	95.8	95.2	94.7
56	100.0	99.5	98.9	98.4	97.9	97.4	96.8	96.3	95.8	95.3	94.8
57	100.0	99.5	98.9	98.4	97.9	97.4	96.9	96.4	95.8	95.3	94.8



表 2a<sub>1</sub> (续)

$t$ \ $t-t_w$	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
15	87.0	85.9	84.7	83.6	82.4	81.3	80.2	79.0	77.9	76.8
16	87.5	86.4	85.2	84.1	83.0	81.9	80.8	79.7	78.6	77.5
17	87.9	86.8	85.7	84.6	83.6	82.5	81.4	80.4	79.3	78.3
18	88.3	87.2	86.2	85.1	84.1	83.1	82.0	81.0	80.0	79.0
19	88.6	87.6	86.6	85.6	84.6	83.6	82.6	81.6	80.6	79.6
20	88.9	88.0	87.0	86.0	85.0	84.1	83.1	82.1	81.2	80.2
21	89.3	88.3	87.4	86.4	85.5	84.5	83.6	82.6	81.7	80.8
22	89.6	88.6	87.7	86.8	85.9	84.9	84.0	83.1	82.2	81.3
23	89.8	88.9	88.0	87.1	86.2	85.3	84.5	83.6	82.7	81.8
24	90.1	89.2	88.3	87.5	86.6	85.7	84.9	84.0	83.1	82.3
25	90.4	89.5	88.6	87.8	86.9	86.1	85.2	84.4	83.6	82.7
26	90.6	89.8	88.9	88.1	87.3	86.4	85.6	84.8	84.0	83.2
27	90.8	90.0	89.2	88.4	87.6	86.8	85.9	85.1	84.3	83.6
28	91.0	90.2	89.4	88.6	87.8	87.1	86.3	85.5	84.7	83.9
29	91.2	90.4	89.7	88.9	88.1	87.3	86.6	85.8	85.1	84.3
30	91.4	90.6	89.9	89.1	88.4	87.6	86.9	86.1	85.4	84.6
31	91.6	90.8	90.1	89.4	88.6	87.9	87.1	86.4	85.7	85.0
32	91.8	91.0	90.3	89.6	88.8	88.1	87.4	86.7	86.0	85.3
33	91.9	91.2	90.5	89.8	89.1	88.4	87.7	87.0	86.3	85.6
34	92.1	91.4	90.7	90.0	89.3	88.6	87.9	87.2	86.5	85.8
35	92.2	91.5	90.9	90.2	89.5	88.8	88.1	87.4	86.8	86.1
36	92.4	91.7	91.0	90.3	89.7	89.0	88.3	87.7	87.0	86.4
37	92.5	91.8	91.2	90.5	89.9	89.2	88.5	87.9	87.2	86.6
38	92.6	92.0	91.3	90.7	90.0	89.4	88.7	88.1	87.5	86.8
39	92.8	92.1	91.5	90.8	90.2	89.6	88.9	88.3	87.7	87.0
40	92.9	92.2	91.6	91.0	90.4	89.7	89.1	88.5	87.9	87.3
41	93.0	92.4	91.7	91.1	90.5	89.9	89.3	88.7	88.1	87.5
42	93.1	92.5	91.9	91.3	90.7	90.1	89.5	88.9	88.3	87.7
43	93.2	92.6	92.0	91.4	90.8	90.2	89.6	89.0	88.4	87.8
44	93.3	92.7	92.1	91.5	90.9	90.3	89.8	89.2	88.6	88.0
45	93.4	92.8	92.2	91.6	91.1	90.5	89.9	89.3	88.8	88.2
46	93.5	92.9	92.3	91.8	91.2	90.6	90.0	89.5	88.9	88.4
47	93.6	93.0	92.4	91.9	91.3	90.7	90.2	89.6	89.1	88.5
48	93.7	93.1	92.5	92.0	91.4	90.9	90.3	89.8	89.2	88.7
49	93.7	93.2	92.6	92.1	91.5	91.0	90.4	89.9	89.4	88.8
50	93.8	93.3	92.7	92.2	91.6	91.1	90.6	90.0	89.5	89.0
51	93.9	93.4	92.8	92.3	91.7	91.2	90.7	90.2	89.6	89.1
52	94.0	93.4	92.9	92.4	91.8	91.3	90.8	90.3	89.8	89.2
53	94.1	93.5	93.0	92.5	91.9	91.4	90.9	90.4	89.9	89.4
54	94.1	93.6	93.1	92.6	92.0	91.5	91.0	90.5	90.0	89.5
55	94.2	93.7	93.2	92.6	92.1	91.6	91.1	90.6	90.1	89.6
56	94.3	93.7	93.2	92.7	92.2	91.7	91.2	90.7	90.2	89.7
57	94.3	93.8	93.3	92.8	92.3	91.8	91.3	90.8	90.3	89.8

表 2a<sub>1</sub> (续)

$t$ \ $t-t_w$	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
58	94.4	93.9	93.4	92.9	92.4	91.9	91.4	90.9	90.4	89.9
59	94.4	93.9	93.5	93.0	92.5	92.0	91.5	91.0	90.5	90.1
60	94.5	94.0	93.5	93.0	92.6	92.1	91.6	91.1	90.6	90.2
61	94.6	94.1	93.6	93.1	92.6	92.1	91.7	91.2	90.7	90.3
62	94.6	94.1	93.7	93.2	92.7	92.2	91.8	91.3	90.8	90.4
63	94.7	94.2	93.7	93.2	92.8	92.3	91.8	91.4	90.9	90.4
64	94.7	94.2	93.8	93.3	92.8	92.4	91.9	91.5	91.0	90.5
65	94.8	94.3	93.8	93.4	92.9	92.5	92.0	91.5	91.1	90.6
66	94.8	94.4	93.9	93.4	93.0	92.5	92.1	91.6	91.2	90.7
67	94.9	94.4	94.0	93.5	93.0	92.6	92.1	91.7	91.3	90.8
68	94.9	94.5	94.0	93.6	93.1	92.7	92.2	91.8	91.3	90.9
69	95.0	94.5	94.1	93.6	93.2	92.7	92.3	91.8	91.4	91.0
70	95.0	94.6	94.1	93.7	93.2	92.8	92.4	91.9	91.5	91.1
71	95.0	94.6	94.2	93.7	93.3	92.9	92.4	92.0	91.6	91.1
72	95.1	94.7	94.2	93.8	93.4	92.9	92.5	92.1	91.6	91.2
73	95.1	94.7	94.3	93.8	93.4	93.0	92.6	92.1	91.7	91.3
74	95.2	94.7	94.3	93.9	93.5	93.0	92.6	92.2	91.8	91.4
75	95.2	94.8	94.4	93.9	93.5	93.1	92.7	92.3	91.8	91.4
76	95.3	94.8	94.4	94.0	93.6	93.2	92.7	92.3	91.9	91.5
77	95.3	94.9	94.5	94.0	93.6	93.2	92.8	92.4	92.0	91.6
78	95.3	94.9	94.5	94.1	93.7	93.3	92.9	92.5	92.0	91.6
79	95.4	95.0	94.5	94.1	93.7	93.3	92.9	92.5	92.1	91.7
80	95.4	95.0	94.6	94.2	93.8	93.4	93.0	92.6	92.2	91.8
81	95.4	95.0	94.6	94.2	93.8	93.4	93.0	92.6	92.2	91.8
82	95.5	95.1	94.7	94.3	93.9	93.5	93.1	92.7	92.3	91.9
83	95.5	95.1	94.7	94.3	93.9	93.5	93.1	92.7	92.4	92.0
84	95.6	95.2	94.8	94.4	94.0	93.6	93.2	92.8	92.4	92.0
85	95.6	95.2	94.8	94.4	94.0	93.6	93.2	92.9	92.5	92.1
86	95.6	95.2	94.8	94.4	94.1	93.7	93.3	92.9	92.5	92.1
87	95.7	95.3	94.9	94.5	94.1	93.7	93.3	93.0	92.6	92.2
88	95.7	95.3	94.9	94.5	94.1	93.8	93.4	93.0	92.6	92.3
89	95.7	95.3	95.0	94.6	94.2	93.8	93.4	93.1	92.7	92.3
90	95.7	95.4	95.0	94.6	94.2	93.9	93.5	93.1	92.7	92.4
91	95.8	95.4	95.0	94.6	94.3	93.9	93.5	93.2	92.8	92.4
92	95.8	95.4	95.1	94.7	94.3	93.9	93.6	93.2	92.8	92.5
93	95.8	95.5	95.1	94.7	94.4	94.0	93.6	93.3	92.9	92.5
94	95.9	95.5	95.1	94.8	94.4	94.0	93.7	93.3	92.9	92.6
95	95.9	95.5	95.2	94.8	94.4	94.1	93.7	93.4	93.0	92.6
96	95.9	95.6	95.2	94.8	94.5	94.1	93.8	93.4	93.0	92.7
97	96.0	95.6	95.2	94.9	94.5	94.2	93.8	93.4	93.1	92.7
98	96.0	95.6	95.3	94.9	94.6	94.2	93.8	93.5	93.1	92.8
99	96.0	95.7	95.3	94.9	94.6	94.2	93.9	93.5	93.2	92.8
100	96.0	95.7	95.3	95.0	94.6	94.3	93.9	93.6	93.2	92.9



表 2a<sub>1</sub> (续)

$t$ \ $t-t_w$	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0
58	89.5	89.0	88.5	88.0	87.5	87.1	86.6	86.1	85.7	85.2
59	89.6	89.1	88.6	88.1	87.7	87.2	86.7	86.3	85.8	85.3
60	89.7	89.2	88.7	88.3	87.8	87.3	86.9	86.4	86.0	85.5
61	89.8	89.3	88.9	88.4	87.9	87.5	87.0	86.5	86.1	85.6
62	89.9	89.4	89.0	88.5	88.0	87.6	87.1	86.7	86.2	85.8
63	90.0	89.5	89.1	88.6	88.2	87.7	87.3	86.8	86.4	85.9
64	90.1	89.6	89.2	88.7	88.3	87.8	87.4	86.9	86.5	86.1
65	90.2	89.7	89.3	88.8	88.4	87.9	87.5	87.1	86.6	86.2
66	90.3	89.8	89.4	88.9	88.5	88.1	87.6	87.2	86.8	86.3
67	90.4	89.9	89.5	89.0	88.6	88.2	87.7	87.3	86.9	86.4
68	90.5	90.0	89.6	89.1	88.7	88.3	87.9	87.4	87.0	86.6
69	90.5	90.1	89.7	89.2	88.8	88.4	88.0	87.5	87.1	86.7
70	90.6	90.2	89.8	89.3	88.9	88.5	88.1	87.6	87.2	86.8
71	90.7	90.3	89.9	89.4	89.0	88.6	88.2	87.8	87.3	86.9
72	90.8	90.4	89.9	89.5	89.1	88.7	88.3	87.9	87.4	87.0
73	90.9	90.4	90.0	89.6	89.2	88.8	88.4	88.0	87.6	87.1
74	90.9	90.5	90.1	89.7	89.3	88.9	88.5	88.1	87.7	87.3
75	91.0	90.6	90.2	89.8	89.4	89.0	88.6	88.2	87.8	87.4
76	91.1	90.7	90.3	89.9	89.5	89.1	88.7	88.3	87.9	87.5
77	91.2	90.8	90.4	90.0	89.6	89.2	88.8	88.4	88.0	87.6
78	91.2	90.8	90.4	90.0	89.6	89.2	88.8	88.4	88.1	87.7
79	91.3	90.9	90.5	90.1	89.7	89.3	88.9	88.5	88.2	87.8
80	91.4	91.0	90.6	90.2	89.8	89.4	89.0	88.6	88.2	87.9
81	91.4	91.1	90.7	90.3	89.9	89.5	89.1	88.7	88.3	88.0
82	91.5	91.1	90.7	90.3	90.0	89.6	89.2	88.8	88.4	88.0
83	91.6	91.2	90.8	90.4	90.0	89.7	89.3	88.9	88.5	88.1
84	91.6	91.3	90.9	90.5	90.1	89.7	89.4	89.0	88.6	88.2
85	91.7	91.3	90.9	90.6	90.2	89.8	89.4	89.1	88.7	88.3
86	91.8	91.4	91.0	90.6	90.3	89.9	89.5	89.1	88.8	88.4
87	91.8	91.4	91.1	90.7	90.3	90.0	89.6	89.2	88.8	88.5
88	91.9	91.5	91.1	90.8	90.4	90.0	89.7	89.3	88.9	88.6
89	91.9	91.6	91.2	90.8	90.5	90.1	89.7	89.4	89.0	88.6
90	92.0	91.6	91.3	90.9	90.5	90.2	89.8	89.4	89.1	88.7
91	92.1	91.7	91.3	91.0	90.6	90.2	89.9	89.5	89.2	88.8
92	92.1	91.8	91.4	91.0	90.7	90.3	90.0	89.6	89.2	88.9
93	92.2	91.8	91.5	91.1	90.7	90.4	90.0	89.7	89.3	89.0
94	92.2	91.9	91.5	91.2	90.8	90.4	90.1	89.7	89.4	89.0
95	92.3	91.9	91.6	91.2	90.9	90.5	90.2	89.8	89.5	89.1
96	92.3	92.0	91.6	91.3	90.9	90.6	90.2	89.9	89.5	89.2
97	92.4	92.0	91.7	91.3	91.0	90.6	90.3	89.9	89.6	89.3
98	92.4	92.1	91.7	91.4	91.0	90.7	90.4	90.0	89.7	89.3
99	92.5	92.1	91.8	91.5	91.1	90.8	90.4	90.1	89.7	89.4
100	92.5	92.2	91.9	91.5	91.2	90.8	90.5	90.1	89.8	89.5















表 2a<sub>1</sub>(续)

$t-t_w$ $t$	7.2	7.4	7.6	7.8	8.0	8.2	8.4	8.6	8.8	9.0
58	67.0	66.2	65.4	64.6	63.8	63.0	62.3	61.5	60.8	60.0
59	67.3	66.5	65.7	65.0	64.2	63.4	62.7	61.9	61.2	60.4
60	67.7	66.9	66.1	65.3	64.6	63.8	63.0	62.3	61.5	60.8
61	68.0	67.2	66.4	65.7	64.9	64.2	63.4	62.7	61.9	61.2
62	68.3	67.5	66.8	66.0	65.2	64.5	63.8	63.0	62.3	61.6
63	68.6	67.8	67.1	66.3	65.6	64.8	64.1	63.4	62.6	61.9
64	68.9	68.1	67.4	66.6	65.9	65.2	64.4	63.7	63.0	62.3
65	69.2	68.4	67.7	66.9	66.2	65.5	64.8	64.0	63.3	62.6
66	69.5	68.7	68.0	67.2	66.5	65.8	65.1	64.4	63.7	63.0
67	69.7	69.0	68.3	67.5	66.8	66.1	65.4	64.7	64.0	63.3
68	70.0	69.3	68.5	67.8	67.1	66.4	65.7	65.0	64.3	63.6
69	70.3	69.5	68.8	68.1	67.4	66.7	66.0	65.3	64.6	63.9
70	70.5	69.8	69.1	68.4	67.7	67.0	66.3	65.6	64.9	64.2
71	70.8	70.0	69.3	68.6	67.9	67.2	66.6	65.9	65.2	64.5
72	71.0	70.3	69.6	68.9	68.2	67.5	66.8	66.2	65.5	64.8
73	71.2	70.5	69.8	69.1	68.5	67.8	67.1	66.4	65.8	65.1
74	71.5	70.8	70.1	69.4	68.7	68.0	67.4	66.7	66.0	65.4
75	71.7	71.0	70.3	69.6	69.0	68.3	67.6	67.0	66.3	65.6
76	71.9	71.2	70.5	69.9	69.2	68.5	67.9	67.2	66.6	65.9
77	72.1	71.4	70.8	70.1	69.4	68.8	68.1	67.5	66.8	66.2
78	72.3	71.7	71.0	70.3	69.7	69.0	68.4	67.7	67.1	66.4
79	72.6	71.9	71.2	70.6	69.9	69.2	68.6	67.9	67.3	66.7
80	72.8	72.1	71.4	70.8	70.1	69.5	68.8	68.2	67.5	66.9
81	73.0	72.3	71.6	71.0	70.3	69.7	69.0	68.4	67.8	67.2
82	73.2	72.5	71.8	71.2	70.5	69.9	69.3	68.6	68.0	67.4
83	73.4	72.7	72.0	71.4	70.8	70.1	69.5	68.9	68.2	67.6
84	73.5	72.9	72.2	71.6	71.0	70.3	69.7	69.1	68.5	67.8
85	73.7	73.1	72.4	71.8	71.2	70.5	69.9	69.3	68.7	68.1
86	73.9	73.3	72.6	72.0	71.4	70.7	70.1	69.5	68.9	68.3
87	74.1	73.5	72.8	72.2	71.6	70.9	70.3	69.7	69.1	68.5
88	74.3	73.6	73.0	72.4	71.8	71.1	70.5	69.9	69.3	68.7
89	74.4	73.8	73.2	72.6	72.0	71.3	70.7	70.1	69.5	68.9
90	74.6	74.0	73.4	72.8	72.1	71.5	70.9	70.3	69.7	69.1
91	74.8	74.2	73.6	72.9	72.3	71.7	71.1	70.5	69.9	69.3
92	75.0	74.3	73.7	73.1	72.5	71.9	71.3	70.7	70.1	69.5
93	75.1	74.5	73.9	73.3	72.7	72.1	71.5	70.9	70.3	69.7
94	75.3	74.7	74.1	73.5	72.9	72.3	71.7	71.1	70.5	69.9
95	75.4	74.8	74.2	73.6	73.0	72.4	71.9	71.3	70.7	70.1
96	75.6	75.0	74.4	73.8	73.2	72.6	72.0	71.5	70.9	70.3
97	75.8	75.2	74.6	74.0	73.4	72.8	72.2	71.6	71.1	70.5
98	75.9	75.3	74.7	74.1	73.5	73.0	72.4	71.8	71.2	70.7
99	76.1	75.5	74.9	74.3	73.7	73.1	72.6	72.0	71.4	70.9
100	76.2	75.6	75.0	74.5	73.9	73.3	72.7	72.2	71.6	71.0



表 2a<sub>1</sub>(续)

$t$ \ $t-t_w$	9.2	9.4	9.6	9.8	10.0	10.2	10.4	10.6	10.8	11.0
58	59.3	58.5	57.8	57.0	56.3	55.6	54.9	54.2	53.5	52.8
59	59.7	58.9	58.2	57.5	56.8	56.0	55.3	54.6	53.9	53.2
60	60.1	59.3	58.6	57.9	57.2	56.5	55.8	55.1	54.4	53.7
61	60.5	59.7	59.0	58.3	57.6	56.9	56.2	55.5	54.8	54.2
62	60.8	60.1	59.4	58.7	58.0	57.3	56.6	56.0	55.3	54.6
63	61.2	60.5	59.8	59.1	58.4	57.7	57.0	56.4	55.7	55.0
64	61.6	60.9	60.2	59.5	58.8	58.1	57.4	56.8	56.1	55.4
65	61.9	61.2	60.5	59.9	59.2	58.5	57.8	57.2	56.5	55.8
66	62.3	61.6	60.9	60.2	59.5	58.9	58.2	57.5	56.9	56.2
67	62.6	61.9	61.2	60.6	59.9	59.2	58.6	57.9	57.3	56.6
68	62.9	62.2	61.6	60.9	60.2	59.6	58.9	58.3	57.6	57.0
69	63.2	62.6	61.9	61.2	60.6	59.9	59.3	58.6	58.0	57.3
70	63.6	62.9	62.2	61.6	60.9	60.3	59.6	59.0	58.3	57.7
71	63.9	63.2	62.5	61.9	61.2	60.6	59.9	59.3	58.7	58.0
72	64.1	63.5	62.8	62.2	61.5	60.9	60.3	59.6	59.0	58.4
73	64.4	63.8	63.1	62.5	61.8	61.2	60.6	59.9	59.3	58.7
74	64.7	64.1	63.4	62.8	62.1	61.5	60.9	60.3	59.6	59.0
75	65.0	64.3	63.7	63.1	62.4	61.8	61.2	60.6	60.0	59.3
76	65.3	64.6	64.0	63.4	62.7	62.1	61.5	60.9	60.3	59.7
77	65.5	64.9	64.3	63.6	63.0	62.4	61.8	61.2	60.6	60.0
78	65.8	65.1	64.5	63.9	63.3	62.7	62.1	61.4	60.8	60.2
79	66.0	65.4	64.8	64.2	63.5	62.9	62.3	61.7	61.1	60.5
80	66.3	65.7	65.0	64.4	63.8	63.2	62.6	62.0	61.4	60.8
81	66.5	65.9	65.3	64.7	64.1	63.5	62.9	62.3	61.7	61.1
82	66.8	66.1	65.5	64.9	64.3	63.7	63.1	62.5	62.0	61.4
83	67.0	66.4	65.8	65.2	64.6	64.0	63.4	62.8	62.2	61.6
84	67.2	66.6	66.0	65.4	64.8	64.2	63.6	63.1	62.5	61.9
85	67.5	66.9	66.3	65.7	65.1	64.5	63.9	63.3	62.7	62.2
86	67.7	67.1	66.5	65.9	65.3	64.7	64.1	63.6	63.0	62.4
87	67.9	67.3	66.7	66.1	65.5	65.0	64.4	63.8	63.2	62.7
88	68.1	67.5	66.9	66.3	65.8	65.2	64.6	64.0	63.5	62.9
89	68.3	67.7	67.2	66.6	66.0	65.4	64.8	64.3	63.7	63.2
90	68.5	68.0	67.4	66.8	66.2	65.6	65.1	64.5	63.9	63.4
91	68.7	68.2	67.6	67.0	66.4	65.9	65.3	64.7	64.2	63.6
92	68.9	68.4	67.8	67.2	66.6	66.1	65.5	65.0	64.4	63.9
93	69.1	68.6	68.0	67.4	66.9	66.3	65.7	65.2	64.6	64.1
94	69.3	68.8	68.2	67.6	67.1	66.5	66.0	65.4	64.9	64.3
95	69.5	69.0	68.4	67.8	67.3	66.7	66.2	65.6	65.1	64.5
96	69.7	69.2	68.6	68.0	67.5	66.9	66.4	65.8	65.3	64.7
97	69.9	69.4	68.8	68.2	67.7	67.1	66.6	66.0	65.5	65.0
98	70.1	69.5	69.0	68.4	67.9	67.3	66.8	66.2	65.7	65.2
99	70.3	69.7	69.2	68.6	68.1	67.5	67.0	66.4	65.9	65.4
100	70.5	69.9	69.4	68.8	68.3	67.7	67.2	66.6	66.1	65.6

表 2a<sub>1</sub>(续)

$t$ \ $t-t_w$	11.5	12.0	12.5	13.5	13.5	14.0	14.5	15.0	15.5	16.0
15										
16										
17										
18										
19										
20	1.1									
21	4.1	0.6								
22	7.0	3.6	0.3							
23	9.7	6.4	3.2	0.1						
24	12.2	9.1	6.0	2.9						
25	14.6	11.5	8.5	5.6	2.6					
26	16.8	13.9	11.0	8.1	5.2	2.4				
27	19.0	16.1	13.2	10.4	7.7	5.0	2.3			
28	21.0	18.1	15.4	12.7	10.0	7.3	4.7	2.2		
29	22.8	20.1	17.4	14.8	12.2	9.6	7.1	4.6	2.1	
30	24.6	22.0	19.3	16.8	14.2	11.7	9.3	6.8	4.5	2.1
31	26.3	23.7	21.2	18.6	16.2	13.7	11.3	9.0	6.6	4.4
32	27.9	25.4	22.9	20.4	18.0	15.6	13.3	11.0	8.7	6.5
33	29.4	26.9	24.5	22.1	19.7	17.4	15.1	12.9	10.7	8.5
34	30.8	28.4	26.0	23.7	21.4	19.1	16.9	14.7	12.5	10.4
35	32.2	29.8	27.5	25.2	23.0	20.7	18.6	16.4	14.3	12.2
36	33.5	31.2	28.9	26.6	24.4	22.3	20.1	18.0	16.0	13.9
37	34.7	32.4	30.2	28.0	25.8	23.7	21.6	19.6	17.6	15.6
38	35.9	33.6	31.5	29.3	27.2	25.1	23.1	21.0	19.1	17.1
39	37.0	34.8	32.6	30.5	28.5	26.4	24.4	22.4	20.5	18.6
40	38.0	35.9	33.8	31.7	29.7	27.7	25.7	23.8	21.9	20.0
41	39.1	36.9	34.9	32.8	30.8	28.9	26.9	25.0	23.2	21.3
42	40.0	37.9	35.9	33.9	31.9	30.0	28.1	26.2	24.4	22.6
43	40.9	38.9	36.9	34.9	33.0	31.1	29.2	27.4	25.6	23.8
44	41.8	39.8	37.8	35.9	34.0	32.1	30.3	28.5	26.7	24.9
45	42.7	40.7	38.7	36.8	34.9	33.1	31.3	29.5	27.8	26.0
46	43.5	41.5	39.6	37.7	35.9	34.0	32.3	30.5	28.8	27.1
47	44.2	42.3	40.4	38.6	36.7	35.0	33.2	31.5	29.8	28.1
48	45.0	43.1	41.2	39.4	37.6	35.8	34.1	32.4	30.7	29.1
49	45.7	43.8	42.0	40.2	38.4	36.7	34.9	33.3	31.6	30.0
50	46.4	44.5	42.7	40.9	39.2	37.5	35.8	34.1	32.5	30.9
51	47.0	45.2	43.4	41.7	39.9	38.2	36.6	34.9	33.3	31.7
52	47.7	45.9	44.1	42.4	40.6	39.0	37.3	35.7	34.1	32.6
53	48.3	46.5	44.7	43.0	41.3	39.7	38.1	36.5	34.9	33.3
54	48.9	47.1	45.4	43.7	42.0	40.4	38.8	37.2	35.6	34.1
55	49.4	47.7	46.0	44.3	42.6	41.0	39.4	37.9	36.3	34.8
56	50.0	48.3	46.6	44.9	43.3	41.7	40.1	38.5	37.0	35.5
57	50.5	48.8	47.1	45.5	43.9	42.3	40.7	39.2	37.7	36.2



表 2a<sub>2</sub> 柱状水银温度表相对湿度查算表  
 $P=110\text{ kPa}, A=0.815 \times 10^{-3} \text{ } ^\circ\text{C}^{-1} (0.4\text{ m/s})$

$t \backslash t-t_w$	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
15	100.0	98.8	97.7	96.5	95.3	94.2	93.0	91.9	90.8	89.6	88.5
16	100.0	98.9	97.7	96.6	95.5	94.4	93.3	92.2	91.1	90.0	88.9
17	100.0	98.9	97.8	96.7	95.6	94.6	93.5	92.4	91.3	90.3	89.2
18	100.0	98.9	97.9	96.8	95.8	94.7	93.7	92.6	91.6	90.6	89.5
19	100.0	99.0	97.9	96.9	95.9	94.9	93.9	92.9	91.8	90.8	89.8
20	100.0	99.0	98.0	97.0	96.0	95.0	94.0	93.1	92.1	91.1	90.1
21	100.0	99.0	98.1	97.1	96.1	95.2	94.2	93.3	92.3	91.4	90.4
22	100.0	99.1	98.1	97.2	96.2	95.3	94.4	93.4	92.5	91.6	90.7
23	100.0	99.1	98.2	97.2	96.3	95.4	94.5	93.6	92.7	91.8	90.9
24	100.0	99.1	98.2	97.3	96.4	95.5	94.6	93.8	92.9	92.0	91.1
25	100.0	99.1	98.2	97.4	96.5	95.6	94.8	93.9	93.1	92.2	91.4
26	100.0	99.1	98.3	97.4	96.6	95.7	94.9	94.1	93.2	92.4	91.6
27	100.0	99.2	98.3	97.5	96.7	95.8	95.0	94.2	93.4	92.6	91.8
28	100.0	99.2	98.4	97.6	96.7	95.9	95.1	94.3	93.5	92.7	91.9
29	100.0	99.2	98.4	97.6	96.8	96.0	95.2	94.5	93.7	92.9	92.1
30	100.0	99.2	98.4	97.7	96.9	96.1	95.3	94.6	93.8	93.0	92.3
31	100.0	99.2	98.5	97.7	96.9	96.2	95.4	94.7	93.9	93.2	92.4
32	100.0	99.2	98.5	97.8	97.0	96.3	95.5	94.8	94.1	93.3	92.6
33	100.0	99.3	98.5	97.8	97.1	96.3	95.6	94.9	94.2	93.5	92.7
34	100.0	99.3	98.6	97.8	97.1	96.4	95.7	95.0	94.3	93.6	92.9
35	100.0	99.3	98.6	97.9	97.2	96.5	95.8	95.1	94.4	93.7	93.0
36	100.0	99.3	98.6	97.9	97.2	96.5	95.8	95.2	94.5	93.8	93.1
37	100.0	99.3	98.6	97.9	97.3	96.6	95.9	95.2	94.6	93.9	93.2
38	100.0	99.3	98.7	98.0	97.3	96.7	96.0	95.3	94.7	94.0	93.4
39	100.0	99.3	98.7	98.0	97.4	96.7	96.1	95.4	94.8	94.1	93.5
40	100.0	99.3	98.7	98.0	97.4	96.8	96.1	95.5	94.8	94.2	93.6
41	100.0	99.4	98.7	98.1	97.4	96.8	96.2	95.5	94.9	94.3	93.7
42	100.0	99.4	98.7	98.1	97.5	96.9	96.2	95.6	95.0	94.4	93.8
43	100.0	99.4	98.8	98.1	97.5	96.9	96.3	95.7	95.1	94.5	93.9
44	100.0	99.4	98.8	98.2	97.6	96.9	96.3	95.7	95.1	94.5	94.0
45	100.0	99.4	98.8	98.2	97.6	97.0	96.4	95.8	95.2	94.6	94.0
46	100.0	99.4	98.8	98.2	97.6	97.0	96.4	95.9	95.3	94.7	94.1
47	100.0	99.4	98.8	98.2	97.7	97.1	96.5	95.9	95.3	94.8	94.2
48	100.0	99.4	98.8	98.3	97.7	97.1	96.5	96.0	95.4	94.8	94.3
49	100.0	99.4	98.9	98.3	97.7	97.1	96.6	96.0	95.5	94.9	94.3
50	100.0	99.4	98.9	98.3	97.7	97.2	96.6	96.1	95.5	95.0	94.4
51	100.0	99.4	98.9	98.3	97.8	97.2	96.7	96.1	95.6	95.0	94.5
52	100.0	99.4	98.9	98.3	97.8	97.2	96.7	96.2	95.6	95.1	94.6
53	100.0	99.5	98.9	98.4	97.8	97.3	96.7	96.2	95.7	95.1	94.6
54	100.0	99.5	98.9	98.4	97.8	97.3	96.8	96.3	95.7	95.2	94.7
55	100.0	99.5	98.9	98.4	97.9	97.3	96.8	96.3	95.8	95.3	94.7
56	100.0	99.5	98.9	98.4	97.9	97.4	96.9	96.3	95.8	95.3	94.8
57	100.0	99.5	99.0	98.4	97.9	97.4	96.9	96.4	95.9	95.4	94.9







表 2a<sub>2</sub> (续)

$t$ \ $t-t_w$	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0
15	76.2	75.1	74.0	72.9	71.8	70.8	69.7	68.6	67.5	66.5
16	77.0	75.9	74.9	73.8	72.8	71.7	70.7	69.6	68.6	67.6
17	77.7	76.7	75.7	74.7	73.6	72.6	71.6	70.6	69.6	68.6
18	78.4	77.4	76.4	75.4	74.4	73.5	72.5	71.5	70.5	69.6
19	79.0	78.1	77.1	76.2	75.2	74.3	73.3	72.4	71.4	70.5
20	79.7	78.7	77.8	76.9	75.9	75.0	74.1	73.2	72.3	71.4
21	80.2	79.3	78.4	77.5	76.6	75.7	74.8	73.9	73.0	72.2
22	80.8	79.9	79.0	78.1	77.2	76.4	75.5	74.6	73.8	72.9
23	81.3	80.4	79.6	78.7	77.9	77.0	76.2	75.3	74.5	73.6
24	81.7	80.9	80.1	79.2	78.4	77.6	76.8	76.0	75.1	74.3
25	82.2	81.4	80.6	79.8	79.0	78.1	77.3	76.5	75.8	75.0
26	82.6	81.8	81.0	80.2	79.5	78.7	77.9	77.1	76.3	75.6
27	83.0	82.3	81.5	80.7	79.9	79.2	78.4	77.6	76.9	76.1
28	83.4	82.7	81.9	81.1	80.4	79.6	78.9	78.2	77.4	76.7
29	83.8	83.0	82.3	81.6	80.8	80.1	79.4	78.6	77.9	77.2
30	84.1	83.4	82.7	82.0	81.2	80.5	79.8	79.1	78.4	77.7
31	84.4	83.7	83.0	82.3	81.6	80.9	80.2	79.5	78.8	78.1
32	84.8	84.1	83.4	82.7	82.0	81.3	80.6	79.9	79.3	78.6
33	85.1	84.4	83.7	83.0	82.3	81.7	81.0	80.3	79.7	79.0
34	85.3	84.7	84.0	83.3	82.7	82.0	81.4	80.7	80.0	79.4
35	85.6	84.9	84.3	83.6	83.0	82.3	81.7	81.1	80.4	79.8
36	85.9	85.2	84.6	83.9	83.3	82.7	82.0	81.4	80.8	80.1
37	86.1	85.5	84.8	84.2	83.6	83.0	82.3	81.7	81.1	80.5
38	86.3	85.7	85.1	84.5	83.9	83.2	82.6	82.0	81.4	80.8
39	86.6	86.0	85.3	84.7	84.1	83.5	82.9	82.3	81.7	81.1
40	86.8	86.2	85.6	85.0	84.4	83.8	83.2	82.6	82.0	81.4
41	87.0	86.4	85.8	85.2	84.6	84.0	83.5	82.9	82.3	81.7
42	87.2	86.6	86.0	85.4	84.9	84.3	83.7	83.1	82.6	82.0
43	87.4	86.8	86.2	85.6	85.1	84.5	83.9	83.4	82.8	82.3
44	87.6	87.0	86.4	85.9	85.3	84.7	84.2	83.6	83.1	82.5
45	87.7	87.2	86.6	86.1	85.5	84.9	84.4	83.8	83.3	82.8
46	87.9	87.3	86.8	86.2	85.7	85.2	84.6	84.1	83.5	83.0
47	88.1	87.5	87.0	86.4	85.9	85.3	84.8	84.3	83.7	83.2
48	88.2	87.7	87.1	86.6	86.1	85.5	85.0	84.5	84.0	83.4
49	88.4	87.8	87.3	86.8	86.2	85.7	85.2	84.7	84.2	83.6
50	88.5	88.0	87.5	86.9	86.4	85.9	85.4	84.9	84.4	83.9
51	88.6	88.1	87.6	87.1	86.6	86.1	85.6	85.1	84.6	84.0
52	88.8	88.3	87.8	87.3	86.7	86.2	85.7	85.2	84.7	84.2
53	88.9	88.4	87.9	87.4	86.9	86.4	85.9	85.4	84.9	84.4
54	89.0	88.5	88.0	87.5	87.1	86.6	86.1	85.6	85.1	84.6
55	89.2	88.7	88.2	87.7	87.2	86.7	86.2	85.7	85.3	84.8
56	89.3	88.8	88.3	87.8	87.3	86.9	86.4	85.9	85.4	84.9
57	89.4	88.9	88.4	88.0	87.5	87.0	86.5	86.0	85.6	85.1





















表 2a<sub>2</sub>(续)

$t-t_w$ $t$	9.2	9.4	9.6	9.8	10.0	10.2	10.4	10.6	10.8	11.0
58	59.5	58.7	58.0	57.3	56.6	55.9	55.1	54.4	53.7	53.0
59	59.9	59.2	58.4	57.7	57.0	56.3	55.6	54.9	54.2	53.5
60	60.3	59.6	58.8	58.1	57.4	56.7	56.0	55.3	54.6	54.0
61	60.7	60.0	59.2	58.5	57.8	57.1	56.4	55.8	55.1	54.4
62	61.0	60.3	59.6	58.9	58.2	57.5	56.9	56.2	55.5	54.8
63	61.4	60.7	60.0	59.3	58.6	57.9	57.3	56.6	55.9	55.3
64	61.8	61.1	60.4	59.7	59.0	58.3	57.6	57.0	56.3	55.7
65	62.1	61.4	60.7	60.0	59.4	58.7	58.0	57.4	56.7	56.0
66	62.4	61.7	61.1	60.4	59.7	59.0	58.4	57.7	57.1	56.4
67	62.8	62.1	61.4	60.7	60.1	59.4	58.7	58.1	57.4	56.8
68	63.1	62.4	61.7	61.1	60.4	59.7	59.1	58.4	57.8	57.2
69	63.4	62.7	62.0	61.4	60.7	60.1	59.4	58.8	58.2	57.5
70	63.7	63.0	62.4	61.7	61.1	60.4	59.8	59.1	58.5	57.9
71	64.0	63.3	62.7	62.0	61.4	60.7	60.1	59.5	58.8	58.2
72	64.3	63.6	63.0	62.3	61.7	61.0	60.4	59.8	59.2	58.5
73	64.6	63.9	63.3	62.6	62.0	61.3	60.7	60.1	59.5	58.9
74	64.8	64.2	63.5	62.9	62.3	61.6	61.0	60.4	59.8	59.2
75	65.1	64.5	63.8	63.2	62.6	61.9	61.3	60.7	60.1	59.5
76	65.4	64.7	64.1	63.5	62.8	62.2	61.6	61.0	60.4	59.8
77	65.6	65.0	64.4	63.7	63.1	62.5	61.9	61.3	60.7	60.1
78	65.9	65.2	64.6	64.0	63.4	62.8	62.2	61.6	61.0	60.4
79	66.1	65.5	64.9	64.3	63.7	63.0	62.4	61.8	61.2	60.6
80	66.4	65.8	65.1	64.5	63.9	63.3	62.7	62.1	61.5	60.9
81	66.6	66.0	65.4	64.8	64.2	63.6	63.0	62.4	61.8	61.2
82	66.8	66.2	65.6	65.0	64.4	63.8	63.2	62.6	62.1	61.5
83	67.1	66.5	65.9	65.3	64.7	64.1	63.5	62.9	62.3	61.7
84	67.3	66.7	66.1	65.5	64.9	64.3	63.7	63.1	62.6	62.0
85	67.5	66.9	66.3	65.7	65.1	64.6	64.0	63.4	62.8	62.2
86	67.8	67.2	66.6	66.0	65.4	64.8	64.2	63.6	63.1	62.5
87	68.0	67.4	66.8	66.2	65.6	65.0	64.5	63.9	63.3	62.7
88	68.2	67.6	67.0	66.4	65.8	65.3	64.7	64.1	63.5	63.0
89	68.4	67.8	67.2	66.6	66.1	65.5	64.9	64.3	63.8	63.2
90	68.6	68.0	67.4	66.9	66.3	65.7	65.1	64.6	64.0	63.5
91	68.8	68.2	67.6	67.1	66.5	65.9	65.4	64.8	64.2	63.7
92	69.0	68.4	67.8	67.3	66.7	66.1	65.6	65.0	64.5	63.9
93	69.2	68.6	68.1	67.5	66.9	66.4	65.8	65.2	64.7	64.1
94	69.4	68.8	68.3	67.7	67.1	66.6	66.0	65.5	64.9	64.4
95	69.6	69.0	68.5	67.9	67.3	66.8	66.2	65.7	65.1	64.6
96	69.8	69.2	68.6	68.1	67.5	67.0	66.4	65.9	65.3	64.8
97	70.0	69.4	68.8	68.3	67.7	67.2	66.6	66.1	65.6	65.0
98	70.1	69.6	69.0	68.5	67.9	67.4	66.8	66.3	65.8	65.2
99	70.3	69.8	69.2	68.7	68.1	67.6	67.0	66.5	66.0	65.4
100	70.5	70.0	69.4	68.9	68.3	67.8	67.2	66.7	66.2	65.6









表 2b (续)

$t-t_w$ $t$	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
15	87.5	86.4	85.3	84.2	83.0	81.9	80.8	79.7	78.7	77.6
16	87.9	86.8	85.7	84.7	83.6	82.5	81.5	80.4	79.3	78.3
17	88.3	87.2	86.2	85.1	84.1	83.1	82.0	81.0	80.0	79.0
18	88.6	87.6	86.6	85.6	84.6	83.6	82.6	81.6	80.6	79.6
19	89.0	88.0	87.0	86.0	85.0	84.1	83.1	82.1	81.2	80.2
20	89.3	88.3	87.4	86.4	85.5	84.5	83.6	82.6	81.7	80.8
21	89.6	88.6	87.7	86.8	85.9	85.0	84.0	83.1	82.2	81.3
22	89.8	88.9	88.0	87.1	86.2	85.4	84.5	83.6	82.7	81.8
23	90.1	89.2	88.4	87.5	86.6	85.7	84.9	84.0	83.1	82.3
24	90.4	89.5	88.6	87.8	86.9	86.1	85.3	84.4	83.6	82.7
25	90.6	89.8	88.9	88.1	87.3	86.4	85.6	84.8	84.0	83.2
26	90.8	90.0	89.2	88.4	87.6	86.8	86.0	85.2	84.4	83.6
27	91.0	90.2	89.4	88.6	87.8	87.1	86.3	85.5	84.7	83.9
28	91.2	90.4	89.7	88.9	88.1	87.3	86.6	85.8	85.1	84.3
29	91.4	90.6	89.9	89.1	88.4	87.6	86.9	86.1	85.4	84.6
30	91.6	90.8	90.1	89.4	88.6	87.9	87.1	86.4	85.7	85.0
31	91.8	91.0	90.3	89.6	88.8	88.1	87.4	86.7	86.0	85.3
32	91.9	91.2	90.5	89.8	89.1	88.4	87.7	87.0	86.3	85.6
33	92.1	91.4	90.7	90.0	89.3	88.6	87.9	87.2	86.5	85.8
34	92.2	91.5	90.8	90.2	89.5	88.8	88.1	87.4	86.8	86.1
35	92.4	91.7	91.0	90.3	89.7	89.0	88.3	87.7	87.0	86.3
36	92.5	91.8	91.2	90.5	89.8	89.2	88.5	87.9	87.2	86.6
37	92.6	92.0	91.3	90.7	90.0	89.4	88.7	88.1	87.5	86.8
38	92.7	92.1	91.5	90.8	90.2	89.6	88.9	88.3	87.7	87.0
39	92.9	92.2	91.6	91.0	90.3	89.7	89.1	88.5	87.9	87.2
40	93.0	92.4	91.7	91.1	90.5	89.9	89.3	88.7	88.1	87.4
41	93.1	92.5	91.9	91.3	90.6	90.0	89.4	88.8	88.2	87.6
42	93.2	92.6	92.0	91.4	90.8	90.2	89.6	89.0	88.4	87.8
43	93.3	92.7	92.1	91.5	90.9	90.3	89.7	89.2	88.6	88.0
44	93.4	92.8	92.2	91.6	91.0	90.5	89.9	89.3	88.7	88.2
45	93.5	92.9	92.3	91.7	91.2	90.6	90.0	89.5	88.9	88.3
46	93.6	93.0	92.4	91.9	91.3	90.7	90.2	89.6	89.0	88.5
47	93.7	93.1	92.5	92.0	91.4	90.8	90.3	89.7	89.2	88.6
48	93.7	93.2	92.6	92.1	91.5	91.0	90.4	89.9	89.3	88.8
49	93.8	93.3	92.7	92.2	91.6	91.1	90.5	90.0	89.5	88.9
50	93.9	93.3	92.8	92.3	91.7	91.2	90.7	90.1	89.6	89.1
51	94.0	93.4	92.9	92.4	91.8	91.3	90.8	90.2	89.7	89.2
52	94.0	93.5	93.0	92.4	91.9	91.4	90.9	90.4	89.8	89.3
53	94.1	93.6	93.1	92.5	92.0	91.5	91.0	90.5	90.0	89.5
54	94.2	93.7	93.1	92.6	92.1	91.6	91.1	90.6	90.1	89.6
55	94.2	93.7	93.2	92.7	92.2	91.7	91.2	90.7	90.2	89.7
56	94.3	93.8	93.3	92.8	92.3	91.8	91.3	90.8	90.3	89.8
57	94.4	93.9	93.4	92.9	92.4	91.9	91.4	90.9	90.4	89.9













表 2b (续)

$t$	$t-t_w$	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0
58		80.3	79.9	79.4	79.0	78.5	78.1	77.7	77.2	76.8	76.4
59		80.5	80.1	79.6	79.2	78.7	78.3	77.9	77.5	77.0	76.6
60		80.7	80.3	79.8	79.4	79.0	78.5	78.1	77.7	77.3	76.8
61		80.9	80.5	80.0	79.6	79.2	78.7	78.3	77.9	77.5	77.1
62		81.1	80.6	80.2	79.8	79.4	78.9	78.5	78.1	77.7	77.3
63		81.3	80.8	80.4	80.0	79.6	79.1	78.7	78.3	77.9	77.5
64		81.4	81.0	80.6	80.2	79.8	79.3	78.9	78.5	78.1	77.7
65		81.6	81.2	80.8	80.4	79.9	79.5	79.1	78.7	78.3	77.9
66		81.8	81.4	80.9	80.5	80.1	79.7	79.3	78.9	78.5	78.1
67		81.9	81.5	81.1	80.7	80.3	79.9	79.5	79.1	78.7	78.3
68		82.1	81.7	81.3	80.9	80.5	80.1	79.7	79.3	78.9	78.5
69		82.2	81.8	81.4	81.0	80.6	80.2	79.9	79.5	79.1	78.7
70		82.4	82.0	81.6	81.2	80.8	80.4	80.0	79.6	79.2	78.9
71		82.5	82.1	81.8	81.4	81.0	80.6	80.2	79.8	79.4	79.0
72		82.7	82.3	81.9	81.5	81.1	80.7	80.4	80.0	79.6	79.2
73		82.8	82.4	82.1	81.7	81.3	80.9	80.5	80.1	79.8	79.4
74		83.0	82.6	82.2	81.8	81.4	81.1	80.7	80.3	79.9	79.5
75		83.1	82.7	82.3	82.0	81.6	81.2	80.8	80.5	80.1	79.7
76		83.2	82.9	82.5	82.1	81.7	81.4	81.0	80.6	80.2	79.9
77		83.4	83.0	82.6	82.2	81.9	81.5	81.1	80.8	80.4	80.0
78		83.5	83.1	82.8	82.4	82.0	81.6	81.3	80.9	80.5	80.2
79		83.6	83.3	82.9	82.5	82.2	81.8	81.4	81.1	80.7	80.3
80		83.8	83.4	83.0	82.7	82.3	81.9	81.6	81.2	80.8	80.5
81		83.9	83.5	83.1	82.8	82.4	82.1	81.7	81.3	81.0	80.6
82		84.0	83.6	83.3	82.9	82.5	82.2	81.8	81.5	81.1	80.8
83		84.1	83.8	83.4	83.0	82.7	82.3	82.0	81.6	81.3	80.9
84		84.2	83.9	83.5	83.2	82.8	82.4	82.1	81.7	81.4	81.0
85		84.3	84.0	83.6	83.3	82.9	82.6	82.2	81.9	81.5	81.2
86		84.5	84.1	83.8	83.4	83.1	82.7	82.4	82.0	81.7	81.3
87		84.6	84.2	83.9	83.5	83.2	82.8	82.5	82.1	81.8	81.4
88		84.7	84.3	84.0	83.6	83.3	82.9	82.6	82.3	81.9	81.6
89		84.8	84.4	84.1	83.7	83.4	83.1	82.7	82.4	82.0	81.7
90		84.9	84.5	84.2	83.9	83.5	83.2	82.8	82.5	82.2	81.8
91		85.0	84.7	84.3	84.0	83.6	83.3	83.0	82.6	82.3	82.0
92		85.1	84.8	84.4	84.1	83.7	83.4	83.1	82.7	82.4	82.1
93		85.2	84.9	84.5	84.2	83.9	83.5	83.2	82.9	82.5	82.2
94		85.3	85.0	84.6	84.3	84.0	83.6	83.3	83.0	82.6	82.3
95		85.4	85.1	84.7	84.4	84.1	83.7	83.4	83.1	82.8	82.4
96		85.5	85.2	84.8	84.5	84.2	83.8	83.5	83.2	82.9	82.5
97		85.6	85.3	84.9	84.6	84.3	84.0	83.6	83.3	83.0	82.7
98		85.7	85.4	85.0	84.7	84.4	84.1	83.7	83.4	83.1	82.8
99		85.8	85.5	85.1	84.8	84.5	84.2	83.8	83.5	83.2	82.9
100		85.9	85.5	85.2	84.9	84.6	84.3	83.9	83.6	83.3	83.0

表 2b (续)

$t-t_w$	5.2	5.4	5.6	5.8	6.0	6.2	6.4	6.6	6.8	7.0
15	44.4	42.4	40.4	38.5	36.5	34.6	32.7	30.8	28.9	27.0
16	46.2	44.3	42.4	40.5	38.7	36.8	35.0	33.1	31.3	29.5
17	48.0	46.1	44.3	42.5	40.7	38.9	37.1	35.3	33.5	31.8
18	49.6	47.8	46.0	44.3	42.5	40.8	39.1	37.3	35.6	33.9
19	51.1	49.4	47.7	46.0	44.3	42.6	40.9	39.3	37.6	36.0
20	52.5	50.9	49.2	47.6	45.9	44.3	42.7	41.1	39.5	37.9
21	53.9	52.3	50.6	49.0	47.5	45.9	44.3	42.7	41.2	39.6
22	55.2	53.6	52.0	50.5	48.9	47.4	45.8	44.3	42.8	41.3
23	56.3	54.8	53.3	51.8	50.3	48.8	47.3	45.8	44.4	42.9
24	57.5	56.0	54.5	53.0	51.6	50.1	48.7	47.2	45.8	44.4
25	58.5	57.1	55.6	54.2	52.8	51.4	50.0	48.6	47.2	45.8
26	59.5	58.1	56.7	55.3	53.9	52.6	51.2	49.8	48.5	47.1
27	60.5	59.1	57.7	56.4	55.0	53.7	52.3	51.0	49.7	48.4
28	61.4	60.0	58.7	57.4	56.0	54.7	53.4	52.1	50.9	49.6
29	62.2	60.9	59.6	58.3	57.0	55.7	54.5	53.2	52.0	50.7
30	63.0	61.8	60.5	59.2	57.9	56.7	55.4	54.2	53.0	51.8
31	63.8	62.5	61.3	60.1	58.8	57.6	56.4	55.2	54.0	52.8
32	64.5	63.3	62.1	60.9	59.6	58.4	57.3	56.1	54.9	53.7
33	65.2	64.0	62.8	61.6	60.4	59.3	58.1	56.9	55.8	54.6
34	65.9	64.7	63.5	62.3	61.2	60.0	58.9	57.8	56.6	55.5
35	66.5	65.3	64.2	63.0	61.9	60.8	59.6	58.5	57.4	56.3
36	67.1	66.0	64.8	63.7	62.6	61.5	60.4	59.3	58.2	57.1
7	67.7	66.5	65.3	64.2	63.1	62.0	60.9	59.8	58.7	57.6

表 2b (续)

$t$ \ $t-t_w$	5.2	5.4	5.6	5.8	6.0	6.2	6.4	6.6	6.8	7.0
58	75.5	74.6	73.8	73.0	72.1	71.3	70.5	69.7	68.9	68.0
59	75.7	74.9	74.1	73.2	72.4	71.6	70.8	70.0	69.2	68.4
60	76.0	75.2	74.3	73.5	72.7	71.9	71.1	70.3	69.5	68.7
61	76.2	75.4	74.6	73.8	72.9	72.1	71.3	70.6	69.8	69.0
62	76.5	75.6	74.8	74.0	73.2	72.4	71.6	70.8	70.1	69.3
63	76.7	75.9	75.1	74.3	73.5	72.7	71.9	71.1	70.3	69.6
64	76.9	76.1	75.3	74.5	73.7	72.9	72.1	71.4	70.6	69.8
65	77.1	76.3	75.5	74.7	73.9	73.2	72.4	71.6	70.9	70.1
66	77.3	76.5	75.7	74.9	74.2	73.4	72.6	71.9	71.1	70.4
67	77.5	76.7	75.9	75.2	74.4	73.6	72.9	72.1	71.4	70.6
68	77.7	76.9	76.2	75.4	74.6	73.9	73.1	72.4	71.6	70.9
69	77.9	77.1	76.4	75.6	74.8	74.1	73.3	72.6	71.9	71.1
70	78.1	77.3	76.6	75.8	75.1	74.3	73.6	72.8	72.1	71.4
71	78.3	77.5	76.8	76.0	75.3	74.5	73.8	73.1	72.3	71.6
72	78.4	77.7	76.9	76.2	75.5	74.7	74.0	73.3	72.6	71.8
73	78.6	77.9	77.1	76.4	75.7	74.9	74.2	73.5	72.8	72.1
74	78.8	78.1	77.3	76.6	75.9	75.1	74.4	73.7	73.0	72.3
75	79.0	78.2	77.5	76.8	76.0	75.3	74.6	73.9	73.2	72.5
76	79.1	78.4	77.7	77.0	76.2	75.5	74.8	74.1	73.4	72.7
77	79.3	78.6	77.8	77.1	76.4	75.7	75.0	74.3	73.6	72.9
78	79.5	78.7	78.0	77.3	76.6	75.9	75.2	74.5	73.8	73.1
79	79.6	78.9	78.2	77.5	76.8	76.1	75.4	74.7	74.0	73.3
80	79.8	79.0	78.3	77.6	76.9	76.3	75.6	74.9	74.2	73.5
81	79.9	79.2	78.5	77.8	77.1	76.4	75.7	75.1	74.4	73.7
82	80.1	79.4	78.7	78.0	77.3	76.6	75.9	75.2	74.6	73.9
83	80.2	79.5	78.8	78.1	77.4	76.8	76.1	75.4	74.8	74.1
84	80.3	79.7	79.0	78.3	77.6	76.9	76.3	75.6	74.9	74.3
85	80.5	79.8	79.1	78.4	77.8	77.1	76.4	75.8	75.1	74.5
86	80.6	79.9	79.3	78.6	77.9	77.3	76.6	75.9	75.3	74.6
87	80.8	80.1	79.4	78.7	78.1	77.4	76.8	76.1	75.5	74.8
88	80.9	80.2	79.6	78.9	78.2	77.6	76.9	76.3	75.6	75.0
89	81.0	80.4	79.7	79.0	78.4	77.7	77.1	76.4	75.8	75.2
90	81.2	80.5	79.8	79.2	78.5	77.9	77.2	76.6	76.0	75.3
91	81.3	80.6	80.0	79.3	78.7	78.0	77.4	76.7	76.1	75.5
92	81.4	80.8	80.1	79.5	78.8	78.2	77.5	76.9	76.3	75.6
93	81.5	80.9	80.2	79.6	78.9	78.3	77.7	77.1	76.4	75.8
94	81.7	81.0	80.4	79.7	79.1	78.5	77.8	77.2	76.6	76.0
95	81.8	81.1	80.5	79.9	79.2	78.6	78.0	77.3	76.7	76.1
96	81.9	81.3	80.6	80.0	79.4	78.7	78.1	77.5	76.9	76.3
97	82.0	81.4	80.7	80.1	79.5	78.9	78.3	77.6	77.0	76.4
98	82.1	81.5	80.9	80.2	79.6	79.0	78.4	77.8	77.2	76.6
99	82.2	81.6	81.0	80.4	79.8	79.1	78.5	77.9	77.3	76.7
100	82.4	81.7	81.1	80.5	79.9	79.3	78.7	78.1	77.5	76.9



表 2b (续)

$t$ \ $t-t_w$	7.2	7.4	7.6	7.8	8.0	8.2	8.4	8.6	8.8	9.0
58	67.3	66.5	65.7	64.9	64.1	63.4	62.6	61.8	61.1	60.3
59	67.6	66.8	66.0	65.2	64.5	63.7	63.0	62.2	61.5	60.7
60	67.9	67.1	66.4	65.6	64.8	64.1	63.3	62.6	61.8	61.1
61	68.2	67.4	66.7	65.9	65.2	64.4	63.7	62.9	62.2	61.5
62	68.5	67.8	67.0	66.2	65.5	64.8	64.0	63.3	62.6	61.8
63	68.8	68.1	67.3	66.6	65.8	65.1	64.4	63.6	62.9	62.2
64	69.1	68.3	67.6	66.9	66.1	65.4	64.7	64.0	63.2	62.5
65	69.4	68.6	67.9	67.2	66.4	65.7	65.0	64.3	63.6	62.9
66	69.6	68.9	68.2	67.4	66.7	66.0	65.3	64.6	63.9	63.2
67	69.9	69.2	68.5	67.7	67.0	66.3	65.6	64.9	64.2	63.5
68	70.2	69.4	68.7	68.0	67.3	66.6	65.9	65.2	64.5	63.8
69	70.4	69.7	69.0	68.3	67.6	66.9	66.2	65.5	64.8	64.1
70	70.7	70.0	69.2	68.5	67.8	67.1	66.5	65.8	65.1	64.4
71	70.9	70.2	69.5	68.8	68.1	67.4	66.7	66.1	65.4	64.7
72	71.1	70.4	69.7	69.0	68.4	67.7	67.0	66.3	65.7	65.0
73	71.4	70.7	70.0	69.3	68.6	67.9	67.3	66.6	65.9	65.3
74	71.6	70.9	70.2	69.5	68.9	68.2	67.5	66.8	66.2	65.5
75	71.8	71.1	70.4	69.8	69.1	68.4	67.8	67.1	66.4	65.8
76	72.0	71.4	70.7	70.0	69.3	68.7	68.0	67.4	66.7	66.1
77	72.2	71.6	70.9	70.2	69.6	68.9	68.2	67.6	67.0	66.3
78	72.5	71.8	71.1	70.4	69.8	69.1	68.5	67.8	67.2	66.6
79	72.7	72.0	71.3	70.7	70.0	69.4	68.7	68.1	67.4	66.8
80	72.9	72.2	71.5	70.9	70.2	69.6	68.9	68.3	67.7	67.0
81	73.1	72.4	71.7	71.1	70.4	69.8	69.2	68.5	67.9	67.3
82	73.3	72.6	71.9	71.3	70.7	70.0	69.4	68.8	68.1	67.5
83	73.4	72.8	72.1	71.5	70.9	70.2	69.6	69.0	68.4	67.7
84	73.6	73.0	72.3	71.7	71.1	70.4	69.8	69.2	68.6	68.0
85	73.8	73.2	72.5	71.9	71.3	70.6	70.0	69.4	68.8	68.2
86	74.0	73.4	72.7	72.1	71.5	70.8	70.2	69.6	69.0	68.4
87	74.2	73.5	72.9	72.3	71.7	71.0	70.4	69.8	69.2	68.6
88	74.3	73.7	73.1	72.5	71.8	71.2	70.6	70.0	69.4	68.8
89	74.5	73.9	73.3	72.7	72.0	71.4	70.8	70.2	69.6	69.0
90	74.7	74.1	73.4	72.8	72.2	71.6	71.0	70.4	69.8	69.2
91	74.9	74.2	73.6	73.0	72.4	71.8	71.2	70.6	70.0	69.4
92	75.0	74.4	73.8	73.2	72.6	72.0	71.4	70.8	70.2	69.6
93	75.2	74.6	74.0	73.4	72.8	72.2	71.6	71.0	70.4	69.8
94	75.3	74.7	74.1	73.5	72.9	72.3	71.7	71.2	70.6	70.0
95	75.5	74.9	74.3	73.7	73.1	72.5	71.9	71.3	70.8	70.2
96	75.7	75.1	74.5	73.9	73.3	72.7	72.1	71.5	70.9	70.4
97	75.8	75.2	74.6	74.0	73.4	72.9	72.3	71.7	71.1	70.6
98	76.0	75.4	74.8	74.2	73.6	73.0	72.4	71.9	71.3	70.7
99	76.1	75.5	74.9	74.4	73.8	73.2	72.6	72.0	71.5	70.9
100	76.3	75.7	75.1	74.5	73.9	73.4	72.8	72.2	71.7	71.1



表 2b (续)

$t$ \ $t-t_w$	9.2	9.4	9.6	9.8	10.0	10.2	10.4	10.6	10.8	11.0
58	59.6	58.9	58.1	57.4	56.7	56.0	55.3	54.6	53.9	53.2
59	60.0	59.3	58.6	57.8	57.1	56.4	55.7	55.0	54.3	53.6
60	60.4	59.7	59.0	58.2	57.5	56.8	56.1	55.5	54.8	54.1
61	60.8	60.1	59.3	58.6	57.9	57.2	56.6	55.9	55.2	54.5
62	61.1	60.4	59.7	59.0	58.3	57.6	57.0	56.3	55.6	54.9
63	61.5	60.8	60.1	59.4	58.7	58.0	57.4	56.7	56.0	55.4
64	61.8	61.1	60.5	59.8	59.1	58.4	57.7	57.1	56.4	55.8
65	62.2	61.5	60.8	60.1	59.4	58.8	58.1	57.5	56.8	56.1
66	62.5	61.8	61.1	60.5	59.8	59.1	58.5	57.8	57.2	56.5
67	62.8	62.2	61.5	60.8	60.1	59.5	58.8	58.2	57.5	56.9
68	63.1	62.5	61.8	61.1	60.5	59.8	59.2	58.5	57.9	57.3
69	63.5	62.8	62.1	61.5	60.8	60.2	59.5	58.9	58.2	57.6
70	63.8	63.1	62.4	61.8	61.1	60.5	59.8	59.2	58.6	57.9
71	64.0	63.4	62.7	62.1	61.4	60.8	60.2	59.5	58.9	58.3
72	64.3	63.7	63.0	62.4	61.7	61.1	60.5	59.8	59.2	58.6
73	64.6	64.0	63.3	62.7	62.0	61.4	60.8	60.2	59.5	58.9
74	64.9	64.2	63.6	63.0	62.3	61.7	61.1	60.5	59.8	59.2
75	65.2	64.5	63.9	63.2	62.6	62.0	61.4	60.8	60.1	59.5
76	65.4	64.8	64.1	63.5	62.9	62.3	61.7	61.0	60.4	59.8
77	65.7	65.0	64.4	63.8	63.2	62.6	61.9	61.3	60.7	60.1
78	65.9	65.3	64.7	64.1	63.4	62.8	62.2	61.6	61.0	60.4
79	66.2	65.5	64.9	64.3	63.7	63.1	62.5	61.9	61.3	60.7
80	66.4	65.8	65.2	64.6	64.0	63.4	62.8	62.2	61.6	61.0
81	66.7	66.0	65.4	64.8	64.2	63.6	63.0	62.4	61.8	61.3
82	66.9	66.3	65.7	65.1	64.5	63.9	63.3	62.7	62.1	61.5
83	67.1	66.5	65.9	65.3	64.7	64.1	63.5	62.9	62.4	61.8
84	67.3	66.7	66.1	65.5	64.9	64.4	63.8	63.2	62.6	62.0
85	67.6	67.0	66.4	65.8	65.2	64.6	64.0	63.4	62.9	62.3
86	67.8	67.2	66.6	66.0	65.4	64.8	64.3	63.7	63.1	62.5
87	68.0	67.4	66.8	66.2	65.6	65.1	64.5	63.9	63.3	62.8
88	68.2	67.6	67.0	66.4	65.9	65.3	64.7	64.2	63.6	63.0
89	68.4	67.8	67.2	66.7	66.1	65.5	64.9	64.4	63.8	63.3
90	68.6	68.0	67.5	66.9	66.3	65.7	65.2	64.6	64.1	63.5
91	68.8	68.2	67.7	67.1	66.5	66.0	65.4	64.8	64.3	63.7
92	69.0	68.5	67.9	67.3	66.7	66.2	65.6	65.1	64.5	64.0
93	69.2	68.7	68.1	67.5	66.9	66.4	65.8	65.3	64.7	64.2
94	69.4	68.8	68.3	67.7	67.2	66.6	66.0	65.5	64.9	64.4
95	69.6	69.0	68.5	67.9	67.4	66.8	66.2	65.7	65.2	64.6
96	69.8	69.2	68.7	68.1	67.6	67.0	66.5	65.9	65.4	64.8
97	70.0	69.4	68.9	68.3	67.8	67.2	66.7	66.1	65.6	65.0
98	70.2	69.6	69.1	68.5	68.0	67.4	66.9	66.3	65.8	65.2
99	70.4	69.8	69.2	68.7	68.1	67.6	67.1	66.5	66.0	65.5
100	70.5	70.0	69.4	68.9	68.3	67.8	67.3	66.7	66.2	65.7

表 2b (续)

$t$ \ $t-t_w$	11.5	12.0	12.5	13.5	13.5	14.0	14.5	15.0	15.5	16.0
15										
16										
17										
18										
19	1.4									
20	4.4	1.0								
21	7.3	4.0	0.7							
22	10.0	6.7	3.6	0.4						
23	12.5	9.4	6.3	3.2	0.2					
24	14.9	11.8	8.8	5.9	3.0	0.1				
25	17.1	14.1	11.2	8.4	5.6	2.8	0.0			
26	19.2	16.3	13.5	10.7	8.0	5.3	2.6	0.0		
27	21.2	18.4	15.6	12.9	10.3	7.7	5.1	2.5	0.0	
28	23.0	20.3	17.7	15.0	12.4	9.9	7.4	4.9	2.5	0.1
29	24.8	22.2	19.6	17.0	14.5	12.0	9.6	7.1	4.8	2.4
30	26.5	23.9	21.4	18.9	16.4	14.0	11.6	9.3	7.0	4.7
31	28.1	25.5	23.1	20.6	18.2	15.9	13.5	11.3	9.0	6.8
32	29.6	27.1	24.7	22.3	19.9	17.6	15.4	13.2	11.0	8.8
33	31.0	28.6	26.2	23.9	21.6	19.3	17.1	14.9	12.8	10.7
34	32.3	30.0	27.6	25.4	23.1	20.9	18.8	16.6	14.5	12.5
35	33.6	31.3	29.0	26.8	24.6	22.4	20.3	18.2	16.2	14.2
36	34.8	32.5	30.3	28.1	26.0	23.9	21.8	19.8	17.8	15.8
37	36.0	33.7	31.6	29.4	27.3	25.2	23.2	21.2	19.3	17.3
38	37.1	34.9	32.7	30.6	28.6	26.5	24.6	22.6	20.7	18.8
39	38.1	36.0	33.9	31.8	29.8	27.8	25.8	23.9	22.0	20.2
40	39.1	37.0	34.9	32.9	30.9	29.0	27.0	25.2	23.3	21.5
41	40.1	38.0	36.0	34.0	32.0	30.1	28.2	26.3	24.5	22.7
42	41.0	38.9	36.9	35.0	33.1	31.2	29.3	27.5	25.7	23.9
43	41.9	39.8	37.9	35.9	34.0	32.2	30.4	28.6	26.8	25.1
44	42.7	40.7	38.8	36.9	35.0	33.2	31.4	29.6	27.9	26.2
45	43.5	41.5	39.6	37.8	35.9	34.1	32.3	30.6	28.9	27.2
46	44.3	42.3	40.4	38.6	36.8	35.0	33.2	31.5	29.8	28.2
47	45.0	43.1	41.2	39.4	37.6	35.9	34.1	32.4	30.8	29.1
48	45.7	43.8	42.0	40.2	38.4	36.7	35.0	33.3	31.7	30.1
49	46.4	44.5	42.7	40.9	39.2	37.5	35.8	34.1	32.5	30.9
50	47.0	45.2	43.4	41.7	39.9	38.2	36.6	34.9	33.3	31.8
51	47.7	45.8	44.1	42.3	40.6	39.0	37.3	35.7	34.1	32.6
52	48.3	46.5	44.7	43.0	41.3	39.7	38.1	36.5	34.9	33.4
53	48.8	47.1	45.3	43.7	42.0	40.4	38.7	37.2	35.6	34.1
54	49.4	47.7	45.9	44.3	42.6	41.0	39.4	37.9	36.3	34.8
55	49.9	48.2	46.5	44.9	43.2	41.6	40.1	38.5	37.0	35.5
56	50.5	48.8	47.1	45.4	43.8	42.2	40.7	39.2	37.7	36.2
57	51.0	49.3	47.6	46.0	44.4	42.8	41.3	39.8	38.3	36.8















表 2c (续)

$t - t_w$	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0
15	68.5	67.5	66.5	65.6	64.6	63.7	62.7	61.8	60.8	59.9
16	69.4	68.5	67.5	66.6	65.7	64.8	63.8	62.9	62.0	61.1
17	70.3	69.4	68.5	67.6	66.7	65.8	64.9	64.0	63.1	62.2
18	71.1	70.3	69.4	68.5	67.6	66.8	65.9	65.0	64.2	63.3
19	71.9	71.1	70.2	69.4	68.5	67.7	66.8	66.0	65.2	64.3
20	72.7	71.8	71.0	70.2	69.4	68.5	67.7	66.9	66.1	65.3
21	73.4	72.6	71.8	71.0	70.2	69.4	68.6	67.8	67.0	66.2
22	74.0	73.3	72.5	71.7	70.9	70.1	69.3	68.6	67.8	67.0
23	74.7	73.9	73.1	72.4	71.6	70.8	70.1	69.3	68.6	67.8
24	75.3	74.5	73.8	73.0	72.3	71.5	70.8	70.0	69.3	68.6
25	75.8	75.1	74.3	73.6	72.9	72.2	71.4	70.7	70.0	69.3
26	76.3	75.6	74.9	74.2	73.5	72.8	72.1	71.4	70.7	70.0
27	76.8	76.1	75.4	74.7	74.1	73.4	72.7	72.0	71.3	70.6
28	77.3	76.6	75.9	75.3	74.6	73.9	73.2	72.6	71.9	71.2
29	77.8	77.1	76.4	75.8	75.1	74.4	73.8	73.1	72.4	71.8
30	78.2	77.5	76.9	76.2	75.6	74.9	74.3	73.6	73.0	72.3
31	78.6	78.0	77.3	76.7	76.0	75.4	74.8	74.1	73.5	72.9
32	79.0	78.4	77.7	77.1	76.5	75.8	75.2	74.6	74.0	73.4
33	79.4	78.7	78.1	77.5	76.9	76.3	75.7	75.0	74.4	73.8
34	79.7	79.1	78.5	77.9	77.3	76.7	76.1	75.5	74.9	74.3
35	80.1	79.5	78.9	78.3	77.7	77.1	76.5	75.9	75.3	74.7
36	80.4	79.8	79.2	78.6	78.0	77.4	76.9	76.3	75.7	75.1
37	80.7	80.1	79.5	78.9	78.4	77.8	77.2	76.6	76.1	75.5
38	81.0	80.4	79.8	79.3	78.7	78.1	77.6	77.0	76.4	75.9
39	81.3	80.7	80.1	79.6	79.0	78.5	77.9	77.4	76.8	76.2
40	81.5	81.0	80.4	79.9	79.3	78.8	78.2	77.7	77.1	76.6
41	81.8	81.3	80.7	80.2	79.6	79.1	78.5	78.0	77.5	76.9
42	82.1	81.5	81.0	80.4	79.9	79.4	78.8	78.3	77.8	77.2
43	82.3	81.8	81.2	80.7	80.2	79.6	79.1	78.6	78.1	77.5
44	82.5	82.0	81.5	81.0	80.4	79.9	79.4	78.9	78.4	77.8
45	82.8	82.2	81.7	81.2	80.7	80.2	79.7	79.1	78.6	78.1
46	83.0	82.5	81.9	81.4	80.9	80.4	79.9	79.4	78.9	78.4
47	83.2	82.7	82.2	81.7	81.2	80.7	80.2	79.7	79.2	78.7
48	83.4	82.9	82.4	81.9	81.4	80.9	80.4	79.9	79.4	78.9
49	83.6	83.1	82.6	82.1	81.6	81.1	80.6	80.1	79.6	79.2
50	83.8	83.3	82.8	82.3	81.8	81.3	80.8	80.4	79.9	79.4
51	83.9	83.5	83.0	82.5	82.0	81.5	81.1	80.6	80.1	79.6
52	84.1	83.6	83.2	82.7	82.2	81.7	81.3	80.8	80.3	79.9
53	84.3	83.8	83.3	82.9	82.4	81.9	81.5	81.0	80.5	80.1
54	84.5	84.0	83.5	83.1	82.6	82.1	81.7	81.2	80.7	80.3
55	84.6	84.2	83.7	83.2	82.8	82.3	81.9	81.4	80.9	80.5
56	84.8	84.3	83.9	83.4	82.9	82.5	82.0	81.6	81.1	80.7
57	84.9	84.5	84.0	83.6	83.1	82.7	82.2	81.8	81.3	80.9

表 2c (续)

$t$ \ $t-t_w$	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0
58	85.1	84.6	84.2	83.7	83.3	82.8	82.4	81.9	81.5	81.1
59	85.2	84.8	84.3	83.9	83.4	83.0	82.6	82.1	81.7	81.2
60	85.4	84.9	84.5	84.0	83.6	83.2	82.7	82.3	81.9	81.4
61	85.5	85.1	84.6	84.2	83.8	83.3	82.9	82.5	82.0	81.6
62	85.6	85.2	84.8	84.3	83.9	83.5	83.0	82.6	82.2	81.8
63	85.8	85.3	84.9	84.5	84.0	83.6	83.2	82.8	82.4	81.9
64	85.9	85.5	85.0	84.6	84.2	83.8	83.3	82.9	82.5	82.1
65	86.0	85.6	85.2	84.8	84.3	83.9	83.5	83.1	82.7	82.2
66	86.1	85.7	85.3	84.9	84.5	84.1	83.6	83.2	82.8	82.4
67	86.3	85.8	85.4	85.0	84.6	84.2	83.8	83.4	83.0	82.6
68	86.4	86.0	85.6	85.1	84.7	84.3	83.9	83.5	83.1	82.7
69	86.5	86.1	85.7	85.3	84.9	84.5	84.0	83.6	83.2	82.8
70	86.6	86.2	85.8	85.4	85.0	84.6	84.2	83.8	83.4	83.0
71	86.7	86.3	85.9	85.5	85.1	84.7	84.3	83.9	83.5	83.1
72	86.8	86.4	86.0	85.6	85.2	84.8	84.4	84.0	83.6	83.3
73	86.9	86.5	86.1	85.7	85.3	84.9	84.6	84.2	83.8	83.4
74	87.0	86.6	86.2	85.8	85.5	85.1	84.7	84.3	83.9	83.5
75	87.1	86.7	86.3	86.0	85.6	85.2	84.8	84.4	84.0	83.6
76	87.2	86.8	86.5	86.1	85.7	85.3	84.9	84.5	84.2	83.8
77	87.3	86.9	86.6	86.2	85.8	85.4	85.0	84.6	84.3	83.9
78	87.4	87.0	86.7	86.3	85.9	85.5	85.1	84.8	84.4	84.0
79	87.5	87.1	86.8	86.4	86.0	85.6	85.3	84.9	84.5	84.1
80	87.6	87.2	86.9	86.5	86.1	85.7	85.4	85.0	84.6	84.3
81	87.7	87.3	87.0	86.6	86.2	85.8	85.5	85.1	84.7	84.4
82	87.8	87.4	87.0	86.7	86.3	85.9	85.6	85.2	84.8	84.5
83	87.9	87.5	87.1	86.8	86.4	86.0	85.7	85.3	85.0	84.6
84	88.0	87.6	87.2	86.9	86.5	86.1	85.8	85.4	85.1	84.7
85	88.1	87.7	87.3	87.0	86.6	86.2	85.9	85.5	85.2	84.8
86	88.1	87.8	87.4	87.1	86.7	86.3	86.0	85.6	85.3	84.9
87	88.2	87.9	87.5	87.1	86.8	86.4	86.1	85.7	85.4	85.0
88	88.3	87.9	87.6	87.2	86.9	86.5	86.2	85.8	85.5	85.1
89	88.4	88.0	87.7	87.3	87.0	86.6	86.3	85.9	85.6	85.2
90	88.5	88.1	87.8	87.4	87.1	86.7	86.4	86.0	85.7	85.3
91	88.5	88.2	87.8	87.5	87.1	86.8	86.5	86.1	85.8	85.4
92	88.6	88.3	87.9	87.6	87.2	86.9	86.5	86.2	85.9	85.5
93	88.7	88.4	88.0	87.7	87.3	87.0	86.6	86.3	86.0	85.6
94	88.8	88.4	88.1	87.7	87.4	87.1	86.7	86.4	86.0	85.7
95	88.8	88.5	88.2	87.8	87.5	87.1	86.8	86.5	86.1	85.8
96	88.9	88.6	88.2	87.9	87.6	87.2	86.9	86.6	86.2	85.9
97	89.0	88.7	88.3	88.0	87.6	87.3	87.0	86.6	86.3	86.0
98	89.1	88.7	88.4	88.1	87.7	87.4	87.1	86.7	86.4	86.1
99	89.1	88.8	88.5	88.1	87.8	87.5	87.1	86.8	86.5	86.2
100	89.2	88.9	88.5	88.2	87.9	87.6	87.2	86.9	86.6	86.3





表 2c (续)

$t-t_w$	5.2	5.4	5.6	5.8	6.0	6.2	6.4	6.6	6.8	7.0
15	48.8	47.0	45.2	43.5	41.7	39.9	38.2	36.4	34.7	33.0
16	50.4	48.7	46.9	45.2	43.5	41.8	40.1	38.4	36.7	35.1
17	51.9	50.2	48.5	46.8	45.2	43.5	41.9	40.3	38.6	37.0
18	53.3	51.6	50.0	48.4	46.8	45.2	43.6	42.0	40.4	38.9
19	54.6	53.0	51.4	49.8	48.3	46.7	45.2	43.6	42.1	40.6
20	55.8	54.2	52.7	51.2	49.7	48.2	46.7	45.2	43.7	42.2
21	56.9	55.4	53.9	52.5	51.0	49.5	48.1	46.6	45.2	43.8
22	58.0	56.6	55.1	53.7	52.2	50.8	49.4	48.0	46.6	45.2
23	59.0	57.6	56.2	54.8	53.4	52.0	50.6	49.3	47.9	46.6
24	60.0	58.6	57.2	55.9	54.5	53.2	51.8	50.5	49.1	47.8
25	60.9	59.6	58.2	56.9	55.6	54.2	52.9	51.6	50.3	49.0
26	61.8	60.5	59.2	57.8	56.5	55.3	54.0	52.7	51.4	50.2
27	62.6	61.3	60.0	58.7	57.5	56.2	55.0	53.7	52.5	51.3
28	63.4	62.1	60.9	59.6	58.4	57.1	55.9	54.7	53.5	52.3
29	64.1	62.9	61.7	60.4	59.2	58.0	56.8	55.6	54.4	53.3
30	64.8	63.6	62.4	61.2	60.0	58.8	57.6	56.5	55.3	54.2
31	65.5	64.3	63.1	61.9	60.8	59.6	58.5	57.3	56.2	55.1
32	66.1	65.0	63.8	62.6	61.5	60.4	59.2	58.1	57.0	55.9
33	66.7	65.6	64.4	63.3	62.2	61.1	59.9	58.8	57.8	56.7
34	67.3	66.2	65.1	63.9	62.8	61.7	60.6	59.6	58.5	57.4
35	67.9	66.7	65.6	64.5	63.5	62.4	61.3	60.2	59.2	58.1
36	68.4	67.3	66.2	65.1	64.1	63.0	61.9	60.9	59.9	58.8
37	68.9	67.8	66.7	65.7	64.6	63.6	62.5	61.5	60.5	59.5
38	69.4	68.3	67.2	66.2	65.2	64.1	63.1	62.1	61.1	60.1
39	69.8	68.8	67.7	66.7	65.7	64.7	63.7	62.7	61.7	60.7
40	70.3	69.2	68.2	67.2	66.2	65.2	64.2	63.2	62.2	61.3
41	70.7	69.7	68.7	67.7	66.7	65.7	64.7	63.7	62.8	61.8
42	71.1	70.1	69.1	68.1	67.1	66.2	65.2	64.2	63.3	62.4
43	71.5	70.5	69.5	68.5	67.6	66.6	65.7	64.7	63.8	62.9
44	71.8	70.9	69.9	68.9	68.0	67.0	66.1	65.2	64.3	63.3
45	72.2	71.2	70.3	69.3	68.4	67.5	66.5	65.6	64.7	63.8
46	72.5	71.6	70.7	69.7	68.8	67.9	67.0	66.1	65.2	64.3
47	72.9	71.9	71.0	70.1	69.2	68.3	67.4	66.5	65.6	64.7
48	73.2	72.3	71.4	70.4	69.5	68.6	67.7	66.9	66.0	65.1
49	73.5	72.6	71.7	70.8	69.9	69.0	68.1	67.2	66.4	65.5
50	73.8	72.9	72.0	71.1	70.2	69.4	68.5	67.6	66.8	65.9
51	74.1	73.2	72.3	71.4	70.6	69.7	68.8	68.0	67.1	66.3
52	74.4	73.5	72.6	71.7	70.9	70.0	69.2	68.3	67.5	66.6
53	74.7	73.8	72.9	72.1	71.2	70.3	69.5	68.7	67.8	67.0
54	74.9	74.1	73.2	72.3	71.5	70.6	69.8	69.0	68.2	67.3
55	75.2	74.3	73.5	72.6	71.8	70.9	70.1	69.3	68.5	67.7
56	75.4	74.6	73.7	72.9	72.1	71.2	70.4	69.6	68.8	68.0
57	75.7	74.8	74.0	73.2	72.3	71.5	70.7	69.9	69.1	68.3

表 2c (续)

$t \backslash t-t_w$	5.2	5.4	5.6	5.8	6.0	6.2	6.4	6.6	6.8	7.0
58	75.9	75.1	74.2	73.4	72.6	71.8	71.0	70.2	69.4	68.6
59	76.1	75.3	74.5	73.7	72.9	72.1	71.3	70.5	69.7	68.9
60	76.4	75.5	74.7	73.9	73.1	72.3	71.5	70.7	70.0	69.2
61	76.6	75.8	75.0	74.2	73.4	72.6	71.8	71.0	70.2	69.5
62	76.8	76.0	75.2	74.4	73.6	72.8	72.0	71.3	70.5	69.7
63	77.0	76.2	75.4	74.6	73.8	73.1	72.3	71.5	70.8	70.0
64	77.2	76.4	75.6	74.8	74.1	73.3	72.5	71.8	71.0	70.3
65	77.4	76.6	75.8	75.1	74.3	73.5	72.8	72.0	71.3	70.5
66	77.6	76.8	76.0	75.3	74.5	73.8	73.0	72.3	71.5	70.8
67	77.8	77.0	76.2	75.5	74.7	74.0	73.2	72.5	71.7	71.0
68	78.0	77.2	76.4	75.7	74.9	74.2	73.4	72.7	72.0	71.3
69	78.2	77.4	76.6	75.9	75.1	74.4	73.7	72.9	72.2	71.5
70	78.3	77.6	76.8	76.1	75.3	74.6	73.9	73.1	72.4	71.7
71	78.5	77.8	77.0	76.3	75.5	74.8	74.1	73.4	72.6	71.9
72	78.7	77.9	77.2	76.5	75.7	75.0	74.3	73.6	72.9	72.1
73	78.8	78.1	77.4	76.6	75.9	75.2	74.5	73.8	73.1	72.4
74	79.0	78.3	77.5	76.8	76.1	75.4	74.7	74.0	73.3	72.6
75	79.2	78.4	77.7	77.0	76.3	75.6	74.9	74.2	73.5	72.8
76	79.3	78.6	77.9	77.2	76.5	75.7	75.0	74.4	73.7	73.0
77	79.5	78.8	78.0	77.3	76.6	75.9	75.2	74.5	73.9	73.2
78	79.6	78.9	78.2	77.5	76.8	76.1	75.4	74.7	74.0	73.4
79	79.8	79.1	78.4	77.7	77.0	76.3	75.6	74.9	74.2	73.6
80	79.9	79.2	78.5	77.8	77.1	76.4	75.8	75.1	74.4	73.7
81	80.1	79.4	78.7	78.0	77.3	76.6	75.9	75.3	74.6	73.9
82	80.2	79.5	78.8	78.1	77.5	76.8	76.1	75.4	74.8	74.1
83	80.3	79.7	79.0	78.3	77.6	76.9	76.3	75.6	74.9	74.3
84	80.5	79.8	79.1	78.4	77.8	77.1	76.4	75.8	75.1	74.5
85	80.6	79.9	79.3	78.6	77.9	77.3	76.6	75.9	75.3	74.6
86	80.8	80.1	79.4	78.7	78.1	77.4	76.8	76.1	75.5	74.8
87	80.9	80.2	79.5	78.9	78.2	77.6	76.9	76.3	75.6	75.0
88	81.0	80.3	79.7	79.0	78.4	77.7	77.1	76.4	75.8	75.1
89	81.1	80.5	79.8	79.2	78.5	77.9	77.2	76.6	75.9	75.3
90	81.3	80.6	79.9	79.3	78.6	78.0	77.4	76.7	76.1	75.5
91	81.4	80.7	80.1	79.4	78.8	78.1	77.5	76.9	76.2	75.6
92	81.5	80.9	80.2	79.6	78.9	78.3	77.7	77.0	76.4	75.8
93	81.6	81.0	80.3	79.7	79.1	78.4	77.8	77.2	76.6	75.9
94	81.8	81.1	80.5	79.8	79.2	78.6	77.9	77.3	76.7	76.1
95	81.9	81.2	80.6	80.0	79.3	78.7	78.1	77.5	76.8	76.2
96	82.0	81.3	80.7	80.1	79.5	78.8	78.2	77.6	77.0	76.4
97	82.1	81.5	80.8	80.2	79.6	79.0	78.4	77.7	77.1	76.5
98	82.2	81.6	81.0	80.3	79.7	79.1	78.5	77.9	77.3	76.7
99	82.3	81.7	81.1	80.5	79.8	79.2	78.6	78.0	77.4	76.8
100	82.4	81.8	81.2	80.6	80.0	79.4	78.8	78.2	77.6	77.0

表 2c (续)

$t$	$t-t_w$	7.2	7.4	7.6	7.8	8.0	8.2	8.4	8.6	8.8	9.0
15		31.3	29.6	27.9	26.2	24.6	22.9	21.3	19.6	18.0	16.4
16		33.4	31.8	30.2	28.5	26.9	25.3	23.7	22.2	20.6	19.0
17		35.4	33.9	32.3	30.7	29.2	27.6	26.1	24.5	23.0	21.5
18		37.3	35.8	34.3	32.8	31.2	29.7	28.3	26.8	25.3	23.8
19		39.1	37.6	36.1	34.7	33.2	31.8	30.3	28.9	27.4	26.0
20		40.8	39.3	37.9	36.5	35.0	33.6	32.2	30.8	29.5	28.1
21		42.3	40.9	39.5	38.2	36.8	35.4	34.0	32.7	31.4	30.0
22		43.8	42.5	41.1	39.7	38.4	37.1	35.8	34.4	33.1	31.8
23		45.2	43.9	42.6	41.2	39.9	38.6	37.4	36.1	34.8	33.5
24		46.5	45.2	43.9	42.7	41.4	40.1	38.9	37.6	36.4	35.2
25		47.8	46.5	45.2	44.0	42.8	41.5	40.3	39.1	37.9	36.7
26		48.9	47.7	46.5	45.3	44.0	42.8	41.7	40.5	39.3	38.1
27		50.0	48.8	47.6	46.5	45.3	44.1	42.9	41.8	40.6	39.5
28		51.1	49.9	48.7	47.6	46.4	45.3	44.1	43.0	41.9	40.8
29		52.1	50.9	49.8	48.7	47.5	46.4	45.3	44.2	43.1	42.0
30		53.0	51.9	50.8	49.7	48.6	47.5	46.4	45.3	44.2	43.1
31		53.9	52.8	51.7	50.6	49.5	48.5	47.4	46.3	45.3	44.2
32		54.8	53.7	52.6	51.5	50.5	49.4	48.4	47.3	46.3	45.3
33		55.6	54.5	53.5	52.4	51.4	50.3	49.3	48.3	47.3	46.3
34		56.4	55.3	54.3	53.2	52.2	51.2	50.2	49.2	48.2	47.2
35		57.1	56.1	55.1	54.0	53.0	52.0	51.0	50.1	49.1	48.1
36		57.8	56.8	55.8	54.8	53.8	52.8	51.8	50.9	49.9	49.0
37		58.5	57.5	56.5	55.5	54.5	53.6	52.6	51.7	50.7	49.8
38		59.1	58.1	57.2	56.2	55.2	54.3	53.3	52.4	51.5	50.6
39		59.7	58.8	57.8	56.9	55.9	55.0	54.0	53.1	52.2	51.3
40		60.3	59.4	58.4	57.5	56.6	55.6	54.7	53.8	52.9	52.0
41		60.9	59.9	59.0	58.1	57.2	56.3	55.4	54.5	53.6	52.7
42		61.4	60.5	59.6	58.7	57.8	56.9	56.0	55.1	54.2	53.3
43		61.9	61.0	60.1	59.2	58.3	57.4	56.6	55.7	54.8	54.0
44		62.4	61.5	60.6	59.8	58.9	58.0	57.1	56.3	55.4	54.6
45		62.9	62.0	61.1	60.3	59.4	58.5	57.7	56.8	56.0	55.2
46		63.4	62.5	61.6	60.8	59.9	59.1	58.2	57.4	56.5	55.7
47		63.8	63.0	62.1	61.2	60.4	59.5	58.7	57.9	57.1	56.2
48		64.2	63.4	62.5	61.7	60.9	60.0	59.2	58.4	57.6	56.8
49		64.7	63.8	63.0	62.1	61.3	60.5	59.7	58.9	58.1	57.3
50		65.1	64.2	63.4	62.6	61.7	60.9	60.1	59.3	58.5	57.7
51		65.4	64.6	63.8	63.0	62.2	61.4	60.6	59.8	59.0	58.2
52		65.8	65.0	64.2	63.4	62.6	61.8	61.0	60.2	59.4	58.7
53		66.2	65.4	64.6	63.8	63.0	62.2	61.4	60.6	59.8	59.1
54		66.5	65.7	64.9	64.1	63.3	62.6	61.8	61.0	60.3	59.5
55		66.9	66.1	65.3	64.5	63.7	62.9	62.2	61.4	60.7	59.9
56		67.2	66.4	65.6	64.8	64.1	63.3	62.6	61.8	61.0	60.3
57		67.5	66.7	66.0	65.2	64.4	63.7	62.9	62.2	61.4	60.7

表 2c (续)

$t-t_w$ $t$	7.2	7.4	7.6	7.8	8.0	8.2	8.4	8.6	8.8	9.0
58	67.8	67.1	66.3	65.5	64.8	64.0	63.3	62.5	61.8	61.1
59	68.1	67.4	66.6	65.8	65.1	64.3	63.6	62.9	62.1	61.4
60	68.4	67.7	66.9	66.2	65.4	64.7	63.9	63.2	62.5	61.8
61	68.7	68.0	67.2	66.5	65.7	65.0	64.3	63.5	62.8	62.1
62	69.0	68.2	67.5	66.8	66.0	65.3	64.6	63.9	63.2	62.5
63	69.3	68.5	67.8	67.1	66.3	65.6	64.9	64.2	63.5	62.8
64	69.5	68.8	68.1	67.3	66.6	65.9	65.2	64.5	63.8	63.1
65	69.8	69.1	68.3	67.6	66.9	66.2	65.5	64.8	64.1	63.4
66	70.0	69.3	68.6	67.9	67.2	66.5	65.8	65.1	64.4	63.7
67	70.3	69.6	68.9	68.1	67.4	66.7	66.0	65.4	64.7	64.0
68	70.5	69.8	69.1	68.4	67.7	67.0	66.3	65.6	65.0	64.3
69	70.8	70.1	69.4	68.7	68.0	67.3	66.6	65.9	65.2	64.6
70	71.0	70.3	69.6	68.9	68.2	67.5	66.9	66.2	65.5	64.8
71	71.2	70.5	69.8	69.1	68.5	67.8	67.1	66.4	65.8	65.1
72	71.5	70.8	70.1	69.4	68.7	68.0	67.4	66.7	66.0	65.4
73	71.7	71.0	70.3	69.6	68.9	68.3	67.6	66.9	66.3	65.6
74	71.9	71.2	70.5	69.8	69.2	68.5	67.8	67.2	66.5	65.9
75	72.1	71.4	70.7	70.1	69.4	68.7	68.1	67.4	66.8	66.1
76	72.3	71.6	71.0	70.3	69.6	69.0	68.3	67.7	67.0	66.4
77	72.5	71.8	71.2	70.5	69.8	69.2	68.5	67.9	67.3	66.6
78	72.7	72.0	71.4	70.7	70.1	69.4	68.8	68.1	67.5	66.9
79	72.9	72.2	71.6	70.9	70.3	69.6	69.0	68.3	67.7	67.1
80	73.1	72.4	71.8	71.1	70.5	69.8	69.2	68.6	67.9	67.3
81	73.3	72.6	72.0	71.3	70.7	70.0	69.4	68.8	68.2	67.5
82	73.5	72.8	72.2	71.5	70.9	70.3	69.6	69.0	68.4	67.8
83	73.6	73.0	72.4	71.7	71.1	70.5	69.8	69.2	68.6	68.0
84	73.8	73.2	72.5	71.9	71.3	70.7	70.0	69.4	68.8	68.2
85	74.0	73.4	72.7	72.1	71.5	70.8	70.2	69.6	69.0	68.4
86	74.2	73.5	72.9	72.3	71.7	71.0	70.4	69.8	69.2	68.6
87	74.3	73.7	73.1	72.5	71.8	71.2	70.6	70.0	69.4	68.8
88	74.5	73.9	73.3	72.6	72.0	71.4	70.8	70.2	69.6	69.0
89	74.7	74.1	73.4	72.8	72.2	71.6	71.0	70.4	69.8	69.2
90	74.8	74.2	73.6	73.0	72.4	71.8	71.2	70.6	70.0	69.4
91	75.0	74.4	73.8	73.2	72.6	72.0	71.4	70.8	70.2	69.6
92	75.2	74.6	73.9	73.3	72.7	72.1	71.5	71.0	70.4	69.8
93	75.3	74.7	74.1	73.5	72.9	72.3	71.7	71.1	70.6	70.0
94	75.5	74.9	74.3	73.7	73.1	72.5	71.9	71.3	70.7	70.2
95	75.6	75.0	74.4	73.8	73.2	72.7	72.1	71.5	70.9	70.3
96	75.8	75.2	74.6	74.0	73.4	72.8	72.2	71.7	71.1	70.5
97	75.9	75.3	74.7	74.2	73.6	73.0	72.4	71.8	71.3	70.7
98	76.1	75.5	74.9	74.3	73.7	73.2	72.6	72.0	71.4	70.9
99	76.2	75.6	75.1	74.5	73.9	73.3	72.7	72.2	71.6	71.0
100	76.4	75.8	75.2	74.6	74.0	73.5	72.9	72.3	71.8	71.2



表 2c (续)

$t$ \ $t-t_w$	9.2	9.4	9.6	9.8	10.0	10.2	10.4	10.6	10.8	11.0
58	60.3	59.6	58.9	58.2	57.5	56.8	56.1	55.4	54.7	54.1
59	60.7	60.0	59.3	58.6	57.9	57.2	56.5	55.8	55.2	54.5
60	61.1	60.4	59.7	59.0	58.3	57.6	56.9	56.2	55.6	54.9
61	61.4	60.7	60.0	59.3	58.6	58.0	57.3	56.6	56.0	55.3
62	61.8	61.1	60.4	59.7	59.0	58.3	57.7	57.0	56.3	55.7
63	62.1	61.4	60.7	60.0	59.4	58.7	58.0	57.4	56.7	56.1
64	62.4	61.7	61.0	60.4	59.7	59.0	58.4	57.7	57.1	56.4
65	62.7	62.0	61.4	60.7	60.0	59.4	58.7	58.1	57.4	56.8
66	63.0	62.4	61.7	61.0	60.4	59.7	59.1	58.4	57.8	57.1
67	63.3	62.7	62.0	61.3	60.7	60.0	59.4	58.7	58.1	57.5
68	63.6	63.0	62.3	61.6	61.0	60.3	59.7	59.1	58.4	57.8
69	63.9	63.2	62.6	61.9	61.3	60.7	60.0	59.4	58.8	58.1
70	64.2	63.5	62.9	62.2	61.6	61.0	60.3	59.7	59.1	58.5
71	64.5	63.8	63.2	62.5	61.9	61.3	60.6	60.0	59.4	58.8
72	64.7	64.1	63.4	62.8	62.2	61.5	60.9	60.3	59.7	59.1
73	65.0	64.3	63.7	63.1	62.4	61.8	61.2	60.6	60.0	59.4
74	65.2	64.6	64.0	63.3	62.7	62.1	61.5	60.9	60.3	59.7
75	65.5	64.9	64.2	63.6	63.0	62.4	61.8	61.2	60.6	60.0
76	65.7	65.1	64.5	63.9	63.3	62.6	62.0	61.4	60.8	60.2
77	66.0	65.4	64.7	64.1	63.5	62.9	62.3	61.7	61.1	60.5
78	66.2	65.6	65.0	64.4	63.8	63.2	62.6	62.0	61.4	60.8
79	66.5	65.8	65.2	64.6	64.0	63.4	62.8	62.2	61.6	61.1
80	66.7	66.1	65.5	64.9	64.3	63.7	63.1	62.5	61.9	61.3
81	66.9	66.3	65.7	65.1	64.5	63.9	63.3	62.7	62.2	61.6
82	67.2	66.5	65.9	65.3	64.7	64.2	63.6	63.0	62.4	61.8
83	67.4	66.8	66.2	65.6	65.0	64.4	63.8	63.2	62.7	62.1
84	67.6	67.0	66.4	65.8	65.2	64.6	64.0	63.5	62.9	62.3
85	67.8	67.2	66.6	66.0	65.4	64.9	64.3	63.7	63.1	62.6
86	68.0	67.4	66.8	66.2	65.7	65.1	64.5	63.9	63.4	62.8
87	68.2	67.6	67.0	66.5	65.9	65.3	64.7	64.2	63.6	63.0
88	68.4	67.8	67.2	66.7	66.1	65.5	65.0	64.4	63.8	63.3
89	68.6	68.0	67.5	66.9	66.3	65.7	65.2	64.6	64.1	63.5
90	68.8	68.2	67.7	67.1	66.5	66.0	65.4	64.8	64.3	63.7
91	69.0	68.4	67.9	67.3	66.7	66.2	65.6	65.0	64.5	63.9
92	69.2	68.6	68.1	67.5	66.9	66.4	65.8	65.3	64.7	64.2
93	69.4	68.8	68.3	67.7	67.1	66.6	66.0	65.5	64.9	64.4
94	69.6	69.0	68.5	67.9	67.3	66.8	66.2	65.7	65.1	64.6
95	69.8	69.2	68.6	68.1	67.5	67.0	66.4	65.9	65.3	64.8
96	70.0	69.4	68.8	68.3	67.7	67.2	66.6	66.1	65.5	65.0
97	70.1	69.6	69.0	68.5	67.9	67.4	66.8	66.3	65.8	65.2
98	70.3	69.8	69.2	68.7	68.1	67.6	67.0	66.5	66.0	65.4
99	70.5	69.9	69.4	68.8	68.3	67.8	67.2	66.7	66.1	65.6
100	70.7	70.1	69.6	69.0	68.5	67.9	67.4	66.9	66.3	65.8







表 3a<sub>1</sub>(续)

$t$ \ $t-t_w$	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
58	100.0	99.5	99.0	98.5	97.9	97.4	96.9	96.4	95.9	95.4	94.9
59	100.0	99.5	99.0	98.5	98.0	97.5	97.0	96.5	96.0	95.5	95.0
60	100.0	99.5	99.0	98.5	98.0	97.5	97.0	96.5	96.0	95.5	95.0
61	100.0	99.5	99.0	98.5	98.0	97.5	97.0	96.5	96.1	95.6	95.1
62	100.0	99.5	99.0	98.5	98.0	97.5	97.1	96.6	96.1	95.6	95.1
63	100.0	99.5	99.0	98.5	98.1	97.6	97.1	96.6	96.1	95.7	95.2
64	100.0	99.5	99.0	98.5	98.1	97.6	97.1	96.6	96.2	95.7	95.2
65	100.0	99.5	99.0	98.6	98.1	97.6	97.1	96.7	96.2	95.7	95.3
66	100.0	99.5	99.0	98.6	98.1	97.6	97.2	96.7	96.2	95.8	95.3
67	100.0	99.5	99.1	98.6	98.1	97.7	97.2	96.7	96.3	95.8	95.4
68	100.0	99.5	99.1	98.6	98.1	97.7	97.2	96.8	96.3	95.9	95.4
69	100.0	99.5	99.1	98.6	98.2	97.7	97.2	96.8	96.3	95.9	95.4
70	100.0	99.5	99.1	98.6	98.2	97.7	97.3	96.8	96.4	95.9	95.5
71	100.0	99.5	99.1	98.6	98.2	97.7	97.3	96.8	96.4	96.0	95.5
72	100.0	99.5	99.1	98.7	98.2	97.8	97.3	96.9	96.4	96.0	95.6
73	100.0	99.6	99.1	98.7	98.2	97.8	97.3	96.9	96.5	96.0	95.6
74	100.0	99.6	99.1	98.7	98.2	97.8	97.4	96.9	96.5	96.1	95.6
75	100.0	99.6	99.1	98.7	98.2	97.8	97.4	97.0	96.5	96.1	95.7
76	100.0	99.6	99.1	98.7	98.3	97.8	97.4	97.0	96.6	96.1	95.7
77	100.0	99.6	99.1	98.7	98.3	97.9	97.4	97.0	96.6	96.2	95.7
78	100.0	99.6	99.1	98.7	98.3	97.9	97.4	97.0	96.6	96.2	95.8
79	100.0	99.6	99.1	98.7	98.3	97.9	97.5	97.0	96.6	96.2	95.8
80	100.0	99.6	99.2	98.7	98.3	97.9	97.5	97.1	96.7	96.2	95.8
81	100.0	99.6	99.2	98.7	98.3	97.9	97.5	97.1	96.7	96.3	95.9
82	100.0	99.6	99.2	98.8	98.3	97.9	97.5	97.1	96.7	96.3	95.9
83	100.0	99.6	99.2	98.8	98.4	98.0	97.5	97.1	96.7	96.3	95.9
84	100.0	99.6	99.2	98.8	98.4	98.0	97.6	97.2	96.8	96.4	96.0
85	100.0	99.6	99.2	98.8	98.4	98.0	97.6	97.2	96.8	96.4	96.0
86	100.0	99.6	99.2	98.8	98.4	98.0	97.6	97.2	96.8	96.4	96.0
87	100.0	99.6	99.2	98.8	98.4	98.0	97.6	97.2	96.8	96.4	96.1
88	100.0	99.6	99.2	98.8	98.4	98.0	97.6	97.2	96.9	96.5	96.1
89	100.0	99.6	99.2	98.8	98.4	98.0	97.7	97.3	96.9	96.5	96.1
90	100.0	99.6	99.2	98.8	98.4	98.1	97.7	97.3	96.9	96.5	96.1
91	100.0	99.6	99.2	98.8	98.5	98.1	97.7	97.3	96.9	96.5	96.2
92	100.0	99.6	99.2	98.8	98.5	98.1	97.7	97.3	96.9	96.6	96.2
93	100.0	99.6	99.2	98.9	98.5	98.1	97.7	97.3	97.0	96.6	96.2
94	100.0	99.6	99.2	98.9	98.5	98.1	97.7	97.4	97.0	96.6	96.2
95	100.0	99.6	99.2	98.9	98.5	98.1	97.8	97.4	97.0	96.6	96.3
96	100.0	99.6	99.3	98.9	98.5	98.1	97.8	97.4	97.0	96.7	96.3
97	100.0	99.6	99.3	98.9	98.5	98.1	97.8	97.4	97.1	96.7	96.3
98	100.0	99.6	99.3	98.9	98.5	98.2	97.8	97.4	97.1	96.7	96.3
99	100.0	99.6	99.3	98.9	98.5	98.2	97.8	97.5	97.1	96.7	96.4
100	100.0	99.6	99.3	98.9	98.5	98.2	97.8	97.5	97.1	96.8	96.4

表 3a<sub>1</sub>(续)

$t$ \ $t-t_w$	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
15	87.6	86.5	85.4	84.3	83.2	82.1	81.0	79.9	78.8	77.8
16	88.0	86.9	85.9	84.8	83.7	82.7	81.6	80.6	79.5	78.5
17	88.4	87.3	86.3	85.3	84.2	83.2	82.2	81.2	80.2	79.2
18	88.7	87.7	86.7	85.7	84.7	83.7	82.7	81.7	80.8	79.8
19	89.0	88.1	87.1	86.1	85.2	84.2	83.2	82.3	81.3	80.4
20	89.4	88.4	87.5	86.5	85.6	84.6	83.7	82.8	81.9	80.9
21	89.6	88.7	87.8	86.9	86.0	85.1	84.2	83.3	82.4	81.5
22	89.9	89.0	88.1	87.2	86.3	85.5	84.6	83.7	82.8	81.9
23	90.2	89.3	88.4	87.6	86.7	85.8	85.0	84.1	83.3	82.4
24	90.4	89.6	88.7	87.9	87.0	86.2	85.3	84.5	83.7	82.9
25	90.7	89.8	89.0	88.2	87.3	86.5	85.7	84.9	84.1	83.3
26	90.9	90.1	89.2	88.4	87.6	86.8	86.0	85.2	84.5	83.7
27	91.1	90.3	89.5	88.7	87.9	87.1	86.4	85.6	84.8	84.0
28	91.3	90.5	89.7	89.0	88.2	87.4	86.7	85.9	85.1	84.4
29	91.5	90.7	89.9	89.2	88.4	87.7	86.9	86.2	85.5	84.7
30	91.6	90.9	90.1	89.4	88.7	87.9	87.2	86.5	85.8	85.0
31	91.8	91.1	90.3	89.6	88.9	88.2	87.5	86.8	86.0	85.3
32	92.0	91.2	90.5	89.8	89.1	88.4	87.7	87.0	86.3	85.6
33	92.1	91.4	90.7	90.0	89.3	88.6	87.9	87.3	86.6	85.9
34	92.3	91.6	90.9	90.2	89.5	88.8	88.2	87.5	86.8	86.2
35	92.4	91.7	91.0	90.4	89.7	89.0	88.4	87.7	87.1	86.4
36	92.5	91.9	91.2	90.5	89.9	89.2	88.6	87.9	87.3	86.6
37	92.7	92.0	91.4	90.7	90.1	89.4	88.8	88.1	87.5	86.9
38	92.8	92.1	91.5	90.9	90.2	89.6	89.0	88.3	87.7	87.1
39	92.9	92.3	91.6	91.0	90.4	89.8	89.1	88.5	87.9	87.3
40	93.0	92.4	91.8	91.1	90.5	89.9	89.3	88.7	88.1	87.5
41	93.1	92.5	91.9	91.3	90.7	90.1	89.5	88.9	88.3	87.7
42	93.2	92.6	92.0	91.4	90.8	90.2	89.6	89.0	88.5	87.9
43	93.3	92.7	92.1	91.5	90.9	90.4	89.8	89.2	88.6	88.0
44	93.4	92.8	92.2	91.7	91.1	90.5	89.9	89.3	88.8	88.2
45	93.5	92.9	92.3	91.8	91.2	90.6	90.1	89.5	88.9	88.4
46	93.6	93.0	92.4	91.9	91.3	90.8	90.2	89.6	89.1	88.5
47	93.7	93.1	92.5	92.0	91.4	90.9	90.3	89.8	89.2	88.7
48	93.7	93.2	92.6	92.1	91.5	91.0	90.4	89.9	89.4	88.8
49	93.8	93.3	92.7	92.2	91.6	91.1	90.6	90.0	89.5	89.0
50	93.9	93.4	92.8	92.3	91.7	91.2	90.7	90.2	89.6	89.1
51	94.0	93.4	92.9	92.4	91.8	91.3	90.8	90.3	89.7	89.2
52	94.0	93.5	93.0	92.5	91.9	91.4	90.9	90.4	89.9	89.4
53	94.1	93.6	93.1	92.6	92.0	91.5	91.0	90.5	90.0	89.5
54	94.2	93.7	93.2	92.6	92.1	91.6	91.1	90.6	90.1	89.6
55	94.2	93.7	93.2	92.7	92.2	91.7	91.2	90.7	90.2	89.7
56	94.3	93.8	93.3	92.8	92.3	91.8	91.3	90.8	90.3	89.8
57	94.4	93.9	93.4	92.9	92.4	91.9	91.4	90.9	90.4	89.9

表 3a<sub>1</sub> (续)

$t$ \ $t-t_w$	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
58	94.4	93.9	93.4	93.0	92.5	92.0	91.5	91.0	90.5	90.0
59	94.5	94.0	93.5	93.0	92.5	92.1	91.6	91.1	90.6	90.1
60	94.5	94.1	93.6	93.1	92.6	92.1	91.7	91.2	90.7	90.2
61	94.6	94.1	93.6	93.2	92.7	92.2	91.7	91.3	90.8	90.3
62	94.7	94.2	93.7	93.2	92.8	92.3	91.8	91.4	90.9	90.4
63	94.7	94.2	93.8	93.3	92.8	92.4	91.9	91.4	91.0	90.5
64	94.8	94.3	93.8	93.4	92.9	92.4	92.0	91.5	91.1	90.6
65	94.8	94.3	93.9	93.4	93.0	92.5	92.1	91.6	91.2	90.7
66	94.9	94.4	93.9	93.5	93.0	92.6	92.1	91.7	91.2	90.8
67	94.9	94.4	94.0	93.5	93.1	92.6	92.2	91.8	91.3	90.9
68	94.9	94.5	94.0	93.6	93.2	92.7	92.3	91.8	91.4	91.0
69	95.0	94.5	94.1	93.7	93.2	92.8	92.3	91.9	91.5	91.0
70	95.0	94.6	94.2	93.7	93.3	92.8	92.4	92.0	91.5	91.1
71	95.1	94.6	94.2	93.8	93.3	92.9	92.5	92.0	91.6	91.2
72	95.1	94.7	94.3	93.8	93.4	93.0	92.5	92.1	91.7	91.3
73	95.2	94.7	94.3	93.9	93.4	93.0	92.6	92.2	91.8	91.3
74	95.2	94.8	94.3	93.9	93.5	93.1	92.7	92.2	91.8	91.4
75	95.2	94.8	94.4	94.0	93.6	93.1	92.7	92.3	91.9	91.5
76	95.3	94.9	94.4	94.0	93.6	93.2	92.8	92.4	92.0	91.5
77	95.3	94.9	94.5	94.1	93.7	93.2	92.8	92.4	92.0	91.6
78	95.4	94.9	94.5	94.1	93.7	93.3	92.9	92.5	92.1	91.7
79	95.4	95.0	94.6	94.2	93.8	93.4	92.9	92.5	92.1	91.7
80	95.4	95.0	94.6	94.2	93.8	93.4	93.0	92.6	92.2	91.8
81	95.5	95.1	94.7	94.3	93.9	93.5	93.1	92.7	92.3	91.9
82	95.5	95.1	94.7	94.3	93.9	93.5	93.1	92.7	92.3	91.9
83	95.5	95.1	94.7	94.3	93.9	93.6	93.2	92.8	92.4	92.0
84	95.6	95.2	94.8	94.4	94.0	93.6	93.2	92.8	92.4	92.1
85	95.6	95.2	94.8	94.4	94.0	93.7	93.3	92.9	92.5	92.1
86	95.6	95.2	94.9	94.5	94.1	93.7	93.3	92.9	92.6	92.2
87	95.7	95.3	94.9	94.5	94.1	93.7	93.4	93.0	92.6	92.2
88	95.7	95.3	94.9	94.5	94.2	93.8	93.4	93.0	92.7	92.3
89	95.7	95.3	95.0	94.6	94.2	93.8	93.5	93.1	92.7	92.3
90	95.8	95.4	95.0	94.6	94.3	93.9	93.5	93.1	92.8	92.4
91	95.8	95.4	95.0	94.7	94.3	93.9	93.6	93.2	92.8	92.4
92	95.8	95.4	95.1	94.7	94.3	94.0	93.6	93.2	92.9	92.5
93	95.8	95.5	95.1	94.7	94.4	94.0	93.6	93.3	92.9	92.6
94	95.9	95.5	95.1	94.8	94.4	94.0	93.7	93.3	93.0	92.6
95	95.9	95.5	95.2	94.8	94.5	94.1	93.7	93.4	93.0	92.7
96	95.9	95.6	95.2	94.8	94.5	94.1	93.8	93.4	93.1	92.7
97	96.0	95.6	95.2	94.9	94.5	94.2	93.8	93.5	93.1	92.8
98	96.0	95.6	95.3	94.9	94.6	94.2	93.9	93.5	93.2	92.8
99	96.0	95.7	95.3	95.0	94.6	94.2	93.9	93.5	93.2	92.9
100	96.0	95.7	95.3	95.0	94.6	94.3	93.9	93.6	93.2	92.9



表 3a<sub>1</sub> (续)

$t$ \ $t-t_w$	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0
58	89.6	89.1	88.6	88.1	87.7	87.2	86.7	86.3	85.8	85.3
59	89.7	89.2	88.7	88.3	87.8	87.3	86.9	86.4	85.9	85.5
60	89.8	89.3	88.8	88.4	87.9	87.4	87.0	86.5	86.1	85.6
61	89.9	89.4	88.9	88.5	88.0	87.6	87.1	86.7	86.2	85.8
62	90.0	89.5	89.1	88.6	88.1	87.7	87.2	86.8	86.3	85.9
63	90.1	89.6	89.2	88.7	88.3	87.8	87.4	86.9	86.5	86.0
64	90.2	89.7	89.3	88.8	88.4	87.9	87.5	87.0	86.6	86.2
65	90.3	89.8	89.4	88.9	88.5	88.0	87.6	87.2	86.7	86.3
66	90.3	89.9	89.5	89.0	88.6	88.1	87.7	87.3	86.8	86.4
67	90.4	90.0	89.6	89.1	88.7	88.3	87.8	87.4	87.0	86.5
68	90.5	90.1	89.6	89.2	88.8	88.4	87.9	87.5	87.1	86.7
69	90.6	90.2	89.7	89.3	88.9	88.5	88.0	87.6	87.2	86.8
70	90.7	90.3	89.8	89.4	89.0	88.6	88.1	87.7	87.3	86.9
71	90.8	90.3	89.9	89.5	89.1	88.7	88.2	87.8	87.4	87.0
72	90.8	90.4	90.0	89.6	89.2	88.8	88.3	87.9	87.5	87.1
73	90.9	90.5	90.1	89.7	89.3	88.8	88.4	88.0	87.6	87.2
74	91.0	90.6	90.2	89.8	89.3	88.9	88.5	88.1	87.7	87.3
75	91.1	90.7	90.2	89.8	89.4	89.0	88.6	88.2	87.8	87.4
76	91.1	90.7	90.3	89.9	89.5	89.1	88.7	88.3	87.9	87.5
77	91.2	90.8	90.4	90.0	89.6	89.2	88.8	88.4	88.0	87.6
78	91.3	90.9	90.5	90.1	89.7	89.3	88.9	88.5	88.1	87.7
79	91.3	90.9	90.6	90.2	89.8	89.4	89.0	88.6	88.2	87.8
80	91.4	91.0	90.6	90.2	89.8	89.5	89.1	88.7	88.3	87.9
81	91.5	91.1	90.7	90.3	89.9	89.5	89.2	88.8	88.4	88.0
82	91.5	91.2	90.8	90.4	90.0	89.6	89.2	88.9	88.5	88.1
83	91.6	91.2	90.8	90.5	90.1	89.7	89.3	88.9	88.6	88.2
84	91.7	91.3	90.9	90.5	90.1	89.8	89.4	89.0	88.6	88.3
85	91.7	91.4	91.0	90.6	90.2	89.8	89.5	89.1	88.7	88.4
86	91.8	91.4	91.0	90.7	90.3	89.9	89.5	89.2	88.8	88.4
87	91.9	91.5	91.1	90.7	90.4	90.0	89.6	89.3	88.9	88.5
88	91.9	91.5	91.2	90.8	90.4	90.1	89.7	89.3	89.0	88.6
89	92.0	91.6	91.2	90.9	90.5	90.1	89.8	89.4	89.0	88.7
90	92.0	91.7	91.3	90.9	90.6	90.2	89.8	89.5	89.1	88.8
91	92.1	91.7	91.4	91.0	90.6	90.3	89.9	89.6	89.2	88.8
92	92.1	91.8	91.4	91.1	90.7	90.3	90.0	89.6	89.3	88.9
93	92.2	91.8	91.5	91.1	90.8	90.4	90.1	89.7	89.3	89.0
94	92.2	91.9	91.5	91.2	90.8	90.5	90.1	89.8	89.4	89.1
95	92.3	91.9	91.6	91.2	90.9	90.5	90.2	89.8	89.5	89.1
96	92.4	92.0	91.6	91.3	90.9	90.6	90.3	89.9	89.6	89.2
97	92.4	92.1	91.7	91.4	91.0	90.7	90.3	90.0	89.6	89.3
98	92.5	92.1	91.8	91.4	91.1	90.7	90.4	90.0	89.7	89.4
99	92.5	92.2	91.8	91.5	91.1	90.8	90.4	90.1	89.8	89.4
100	92.6	92.2	91.9	91.5	91.2	90.8	90.5	90.2	89.8	89.5



表 3a<sub>1</sub>(续)

$t$ \ $t-t_w$	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0
58	84.9	84.4	83.9	83.5	83.0	82.6	82.1	81.7	81.2	80.8
59	85.0	84.6	84.1	83.7	83.2	82.8	82.3	81.9	81.4	81.0
60	85.2	84.7	84.3	83.8	83.4	82.9	82.5	82.0	81.6	81.2
61	85.3	84.9	84.4	84.0	83.5	83.1	82.7	82.2	81.8	81.4
62	85.5	85.0	84.6	84.1	83.7	83.3	82.8	82.4	82.0	81.5
63	85.6	85.2	84.7	84.3	83.9	83.4	83.0	82.6	82.1	81.7
64	85.7	85.3	84.9	84.4	84.0	83.6	83.1	82.7	82.3	81.9
65	85.9	85.4	85.0	84.6	84.1	83.7	83.3	82.9	82.5	82.0
66	86.0	85.6	85.1	84.7	84.3	83.9	83.5	83.0	82.6	82.2
67	86.1	85.7	85.3	84.9	84.4	84.0	83.6	83.2	82.8	82.4
68	86.2	85.8	85.4	85.0	84.6	84.2	83.7	83.3	82.9	82.5
69	86.4	85.9	85.5	85.1	84.7	84.3	83.9	83.5	83.1	82.7
70	86.5	86.1	85.7	85.2	84.8	84.4	84.0	83.6	83.2	82.8
71	86.6	86.2	85.8	85.4	85.0	84.6	84.2	83.8	83.4	83.0
72	86.7	86.3	85.9	85.5	85.1	84.7	84.3	83.9	83.5	83.1
73	86.8	86.4	86.0	85.6	85.2	84.8	84.4	84.0	83.6	83.2
74	86.9	86.5	86.1	85.7	85.3	84.9	84.5	84.2	83.8	83.4
75	87.0	86.6	86.2	85.8	85.5	85.1	84.7	84.3	83.9	83.5
76	87.1	86.7	86.3	86.0	85.6	85.2	84.8	84.4	84.0	83.6
77	87.2	86.8	86.5	86.1	85.7	85.3	84.9	84.5	84.2	83.8
78	87.3	86.9	86.6	86.2	85.8	85.4	85.0	84.7	84.3	83.9
79	87.4	87.0	86.7	86.3	85.9	85.5	85.1	84.8	84.4	84.0
80	87.5	87.1	86.8	86.4	86.0	85.6	85.3	84.9	84.5	84.1
81	87.6	87.2	86.9	86.5	86.1	85.7	85.4	85.0	84.6	84.3
82	87.7	87.3	87.0	86.6	86.2	85.8	85.5	85.1	84.7	84.4
83	87.8	87.4	87.1	86.7	86.3	86.0	85.6	85.2	84.9	84.5
84	87.9	87.5	87.2	86.8	86.4	86.1	85.7	85.3	85.0	84.6
85	88.0	87.6	87.3	86.9	86.5	86.2	85.8	85.4	85.1	84.7
86	88.1	87.7	87.3	87.0	86.6	86.3	85.9	85.5	85.2	84.8
87	88.2	87.8	87.4	87.1	86.7	86.4	86.0	85.6	85.3	84.9
88	88.2	87.9	87.5	87.2	86.8	86.5	86.1	85.7	85.4	85.0
89	88.3	88.0	87.6	87.3	86.9	86.5	86.2	85.8	85.5	85.1
90	88.4	88.1	87.7	87.3	87.0	86.6	86.3	85.9	85.6	85.2
91	88.5	88.1	87.8	87.4	87.1	86.7	86.4	86.0	85.7	85.4
92	88.6	88.2	87.9	87.5	87.2	86.8	86.5	86.1	85.8	85.5
93	88.6	88.3	88.0	87.6	87.3	86.9	86.6	86.2	85.9	85.5
94	88.7	88.4	88.0	87.7	87.3	87.0	86.7	86.3	86.0	85.6
95	88.8	88.5	88.1	87.8	87.4	87.1	86.8	86.4	86.1	85.7
96	88.9	88.5	88.2	87.9	87.5	87.2	86.8	86.5	86.2	85.8
97	89.0	88.6	88.3	87.9	87.6	87.3	86.9	86.6	86.3	85.9
98	89.0	88.7	88.3	88.0	87.7	87.3	87.0	86.7	86.4	86.0
99	89.1	88.8	88.4	88.1	87.8	87.4	87.1	86.8	86.4	86.1
100	89.2	88.8	88.5	88.2	87.8	87.5	87.2	86.9	86.5	86.2

表 3a<sub>1</sub>(续)

$t-t_w$ $t$	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0
15	55.8	54.8	53.8	52.8	51.8	50.8	49.8	48.8	47.8	46.9
16	57.3	56.3	55.3	54.4	53.4	52.4	51.5	50.5	49.6	48.6
17	58.6	57.7	56.8	55.8	54.9	53.9	53.0	52.1	51.2	50.2
18	59.9	59.0	58.1	57.2	56.3	55.4	54.5	53.6	52.7	51.8
19	61.1	60.2	59.3	58.5	57.6	56.7	55.8	55.0	54.1	53.2
20	62.2	61.4	60.5	59.7	58.8	58.0	57.1	56.3	55.4	54.6
21	63.3	62.4	61.6	60.8	60.0	59.1	58.3	57.5	56.7	55.9
22	64.3	63.5	62.6	61.8	61.0	60.2	59.4	58.6	57.9	57.1
23	65.2	64.4	63.6	62.8	62.1	61.3	60.5	59.7	59.0	58.2
24	66.1	65.3	64.6	63.8	63.0	62.3	61.5	60.8	60.0	59.3
25	66.9	66.2	65.4	64.7	63.9	63.2	62.5	61.7	61.0	60.3
26	67.7	67.0	66.2	65.5	64.8	64.1	63.4	62.6	61.9	61.2
27	68.5	67.7	67.0	66.3	65.6	64.9	64.2	63.5	62.8	62.1
28	69.2	68.5	67.8	67.1	66.4	65.7	65.0	64.3	63.6	63.0
29	69.8	69.1	68.5	67.8	67.1	66.4	65.8	65.1	64.4	63.8
30	70.5	69.8	69.1	68.5	67.8	67.1	66.5	65.8	65.2	64.5
31	71.1	70.4	69.8	69.1	68.5	67.8	67.2	66.5	65.9	65.3
32	71.6	71.0	70.4	69.7	69.1	68.5	67.8	67.2	66.6	66.0
33	72.2	71.5	70.9	70.3	69.7	69.1	68.4	67.8	67.2	66.6
34	72.7	72.1	71.5	70.9	70.2	69.6	69.0	68.4	67.8	67.2
35	73.2	72.6	72.0	71.4	70.8	70.2	69.6	69.0	68.4	67.8
36	73.7	73.1	72.5	71.9	71.3	70.7	70.1	69.5	69.0	68.4
37	74.1	73.5	72.9	72.4	71.8	71.2	70.6	70.1	69.5	68.9
38	74.5	74.0	73.4	72.8	72.3	71.7	71.1	70.6	70.0	69.5
39	74.9	74.4	73.8	73.3	72.7	72.1	71.6	71.0	70.5	69.9
40	75.3	74.8	74.2	73.7	73.1	72.6	72.0	71.5	71.0	70.4
41	75.7	75.2	74.6	74.1	73.5	73.0	72.5	71.9	71.4	70.9
42	76.1	75.5	75.0	74.5	73.9	73.4	72.9	72.3	71.8	71.3
43	76.4	75.9	75.4	74.8	74.3	73.8	73.3	72.7	72.2	71.7
44	76.8	76.2	75.7	75.2	74.7	74.2	73.6	73.1	72.6	72.1
45	77.1	76.6	76.0	75.5	75.0	74.5	74.0	73.5	73.0	72.5
46	77.4	76.9	76.4	75.9	75.4	74.9	74.4	73.9	73.4	72.9
47	77.7	77.2	76.7	76.2	75.7	75.2	74.7	74.2	73.7	73.2
48	78.0	77.5	77.0	76.5	76.0	75.5	75.0	74.5	74.0	73.6
49	78.2	77.7	77.3	76.8	76.3	75.8	75.3	74.8	74.4	73.9
50	78.5	78.0	77.5	77.1	76.6	76.1	75.6	75.1	74.7	74.2
51	78.8	78.3	77.8	77.3	76.9	76.4	75.9	75.4	75.0	74.5
52	79.0	78.5	78.1	77.6	77.1	76.7	76.2	75.7	75.3	74.8
53	79.2	78.8	78.3	77.8	77.4	76.9	76.5	76.0	75.6	75.1
54	79.5	79.0	78.6	78.1	77.6	77.2	76.7	76.3	75.8	75.4
55	79.7	79.2	78.8	78.3	77.9	77.4	77.0	76.5	76.1	75.6
56	79.9	79.5	79.0	78.6	78.1	77.7	77.2	76.8	76.3	75.9
57	80.1	79.7	79.2	78.8	78.3	77.9	77.5	77.0	76.6	76.2



表 3a<sub>1</sub>(续)

$t$ \ $t-t_w$	5.2	5.4	5.6	5.8	6.0	6.2	6.4	6.6	6.8	7.0
15	44.9	42.9	41.0	39.1	37.1	35.2	33.3	31.4	29.6	27.7
16	46.7	44.8	42.9	41.1	39.2	37.4	35.6	33.7	31.9	30.1
17	48.4	46.6	44.8	43.0	41.2	39.4	37.6	35.9	34.1	32.4
18	50.0	48.2	46.5	44.8	43.0	41.3	39.6	37.9	36.2	34.5
19	51.5	49.8	48.1	46.4	44.7	43.1	41.4	39.8	38.1	36.5
20	52.9	51.3	49.6	48.0	46.4	44.7	43.1	41.5	39.9	38.4
21	54.2	52.6	51.0	49.4	47.9	46.3	44.7	43.2	41.7	40.1
22	55.5	53.9	52.4	50.8	49.3	47.8	46.3	44.8	43.3	41.8
23	56.7	55.1	53.6	52.1	50.6	49.2	47.7	46.2	44.8	43.3
24	57.8	56.3	54.8	53.4	51.9	50.5	49.0	47.6	46.2	44.8
25	58.8	57.4	55.9	54.5	53.1	51.7	50.3	48.9	47.6	46.2
26	59.8	58.4	57.0	55.6	54.2	52.9	51.5	50.2	48.8	47.5
27	60.7	59.4	58.0	56.7	55.3	54.0	52.7	51.3	50.0	48.7
28	61.6	60.3	59.0	57.6	56.3	55.0	53.7	52.4	51.2	49.9
29	62.5	61.2	59.9	58.6	57.3	56.0	54.7	53.5	52.2	51.0
30	63.3	62.0	60.7	59.4	58.2	56.9	55.7	54.5	53.3	52.1
31	64.0	62.8	61.5	60.3	59.0	57.8	56.6	55.4	54.2	53.0
32	64.7	63.5	62.3	61.1	59.9	58.7	57.5	56.3	55.1	54.0
33	65.4	64.2	63.0	61.8	60.6	59.5	58.3	57.2	56.0	54.9
34	66.0	64.9	63.7	62.5	61.4	60.2	59.1	58.0	56.8	55.7
35	66.7	65.5	64.4	63.2	62.1	61.0	59.8	58.7	57.6	56.5
36	67.2	66.1	65.0	63.9	62.8	61.6	60.6	59.5	58.4	57.3
37	67.8	66.7	65.6	64.5	63.4	62.3	61.2	60.2	59.1	58.0
38	68.3	67.2	66.2	65.1	64.0	62.9	61.9	60.8	59.8	58.7
39	68.9	67.8	66.7	65.6	64.6	63.5	62.5	61.5	60.4	59.4
40	69.3	68.3	67.2	66.2	65.1	64.1	63.1	62.1	61.1	60.1
41	69.8	68.8	67.7	66.7	65.7	64.7	63.6	62.6	61.7	60.7
42	70.3	69.2	68.2	67.2	66.2	65.2	64.2	63.2	62.2	61.3
43	70.7	69.7	68.7	67.7	66.7	65.7	64.7	63.7	62.8	61.8
44	71.1	70.1	69.1	68.1	67.1	66.2	65.2	64.2	63.3	62.4
45	71.5	70.5	69.5	68.6	67.6	66.6	65.7	64.7	63.8	62.9
46	71.9	70.9	69.9	69.0	68.0	67.1	66.1	65.2	64.3	63.4
47	72.2	71.3	70.3	69.4	68.4	67.5	66.6	65.7	64.8	63.8
48	72.6	71.7	70.7	69.8	68.8	67.9	67.0	66.1	65.2	64.3
49	72.9	72.0	71.1	70.2	69.2	68.3	67.4	66.5	65.6	64.7
50	73.3	72.3	71.4	70.5	69.6	68.7	67.8	66.9	66.0	65.2
51	73.6	72.7	71.8	70.9	70.0	69.1	68.2	67.3	66.4	65.6
52	73.9	73.0	72.1	71.2	70.3	69.4	68.6	67.7	66.8	66.0
53	74.2	73.3	72.4	71.5	70.7	69.8	68.9	68.1	67.2	66.4
54	74.5	73.6	72.7	71.8	71.0	70.1	69.3	68.4	67.6	66.7
55	74.8	73.9	73.0	72.1	71.3	70.4	69.6	68.8	67.9	67.1
56	75.0	74.2	73.3	72.4	71.6	70.8	69.9	69.1	68.3	67.5
57	75.3	74.4	73.6	72.7	71.9	71.1	70.2	69.4	68.6	67.8









表 3a<sub>1</sub>(续)

$t$ \ $t-t_w$	9.2	9.4	9.6	9.8	10.0	10.2	10.4	10.6	10.8	11.0
58	59.7	59.0	58.2	57.5	56.8	56.1	55.4	54.7	54.0	53.3
59	60.1	59.4	58.6	57.9	57.2	56.5	55.8	55.1	54.4	53.7
60	60.5	59.8	59.0	58.3	57.6	56.9	56.2	55.5	54.9	54.2
61	60.8	60.1	59.4	58.7	58.0	57.3	56.6	56.0	55.3	54.6
62	61.2	60.5	59.8	59.1	58.4	57.7	57.0	56.4	55.7	55.0
63	61.6	60.9	60.2	59.5	58.8	58.1	57.4	56.8	56.1	55.4
64	61.9	61.2	60.5	59.8	59.2	58.5	57.8	57.2	56.5	55.8
65	62.2	61.6	60.9	60.2	59.5	58.8	58.2	57.5	56.9	56.2
66	62.6	61.9	61.2	60.5	59.9	59.2	58.5	57.9	57.2	56.6
67	62.9	62.2	61.5	60.9	60.2	59.5	58.9	58.2	57.6	57.0
68	63.2	62.5	61.9	61.2	60.5	59.9	59.2	58.6	58.0	57.3
69	63.5	62.8	62.2	61.5	60.9	60.2	59.6	58.9	58.3	57.7
70	63.8	63.1	62.5	61.8	61.2	60.5	59.9	59.3	58.6	58.0
71	64.1	63.4	62.8	62.1	61.5	60.8	60.2	59.6	59.0	58.3
72	64.4	63.7	63.1	62.4	61.8	61.2	60.5	59.9	59.3	58.7
73	64.7	64.0	63.4	62.7	62.1	61.5	60.8	60.2	59.6	59.0
74	64.9	64.3	63.6	63.0	62.4	61.7	61.1	60.5	59.9	59.3
75	65.2	64.6	63.9	63.3	62.7	62.0	61.4	60.8	60.2	59.6
76	65.5	64.8	64.2	63.6	62.9	62.3	61.7	61.1	60.5	59.9
77	65.7	65.1	64.5	63.8	63.2	62.6	62.0	61.4	60.8	60.2
78	66.0	65.3	64.7	64.1	63.5	62.9	62.3	61.7	61.1	60.5
79	66.2	65.6	65.0	64.3	63.7	63.1	62.5	61.9	61.3	60.7
80	66.4	65.8	65.2	64.6	64.0	63.4	62.8	62.2	61.6	61.0
81	66.7	66.1	65.5	64.8	64.2	63.6	63.1	62.5	61.9	61.3
82	66.9	66.3	65.7	65.1	64.5	63.9	63.3	62.7	62.1	61.6
83	67.1	66.5	65.9	65.3	64.7	64.1	63.6	63.0	62.4	61.8
84	67.4	66.8	66.2	65.6	65.0	64.4	63.8	63.2	62.6	62.1
85	67.6	67.0	66.4	65.8	65.2	64.6	64.0	63.5	62.9	62.3
86	67.8	67.2	66.6	66.0	65.4	64.9	64.3	63.7	63.1	62.6
87	68.0	67.4	66.8	66.3	65.7	65.1	64.5	63.9	63.4	62.8
88	68.2	67.6	67.1	66.5	65.9	65.3	64.7	64.2	63.6	63.1
89	68.4	67.9	67.3	66.7	66.1	65.5	65.0	64.4	63.8	63.3
90	68.7	68.1	67.5	66.9	66.3	65.8	65.2	64.6	64.1	63.5
91	68.9	68.3	67.7	67.1	66.5	66.0	65.4	64.9	64.3	63.8
92	69.1	68.5	67.9	67.3	66.8	66.2	65.6	65.1	64.5	64.0
93	69.2	68.7	68.1	67.5	67.0	66.4	65.9	65.3	64.7	64.2
94	69.4	68.9	68.3	67.7	67.2	66.6	66.1	65.5	65.0	64.4
95	69.6	69.1	68.5	67.9	67.4	66.8	66.3	65.7	65.2	64.6
96	69.8	69.3	68.7	68.1	67.6	67.0	66.5	65.9	65.4	64.9
97	70.0	69.4	68.9	68.3	67.8	67.2	66.7	66.1	65.6	65.1
98	70.2	69.6	69.1	68.5	68.0	67.4	66.9	66.3	65.8	65.3
99	70.4	69.8	69.3	68.7	68.2	67.6	67.1	66.5	66.0	65.5
100	70.5	70.0	69.4	68.9	68.4	67.8	67.3	66.7	66.2	65.7





表 3a<sub>2</sub> 柱状水银温度表相对湿度查算表  
 $P=100\text{ kPa}, A=0.815 \times 10^{-3} \text{ } ^\circ\text{C}^{-1} (0.4\text{ m/s})$

$t$ \ $t-t_w$	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
15	100.0	98.9	97.8	96.6	95.5	94.4	93.3	92.2	91.1	90.0	89.0
16	100.0	98.9	97.8	96.8	95.7	94.6	93.5	92.5	91.4	90.4	89.3
17	100.0	98.9	97.9	96.9	95.8	94.8	93.7	92.7	91.7	90.6	89.6
18	100.0	99.0	98.0	96.9	95.9	94.9	93.9	92.9	91.9	90.9	89.9
19	100.0	99.0	98.0	97.0	96.0	95.1	94.1	93.1	92.1	91.2	90.2
20	100.0	99.0	98.1	97.1	96.2	95.2	94.3	93.3	92.4	91.4	90.5
21	100.0	99.1	98.1	97.2	96.3	95.3	94.4	93.5	92.6	91.6	90.7
22	100.0	99.1	98.2	97.3	96.4	95.4	94.5	93.7	92.8	91.9	91.0
23	100.0	99.1	98.2	97.3	96.4	95.6	94.7	93.8	92.9	92.1	91.2
24	100.0	99.1	98.3	97.4	96.5	95.7	94.8	94.0	93.1	92.3	91.4
25	100.0	99.1	98.3	97.5	96.6	95.8	94.9	94.1	93.3	92.4	91.6
26	100.0	99.2	98.3	97.5	96.7	95.9	95.0	94.2	93.4	92.6	91.8
27	100.0	99.2	98.4	97.6	96.8	96.0	95.2	94.4	93.6	92.8	92.0
28	100.0	99.2	98.4	97.6	96.8	96.0	95.3	94.5	93.7	92.9	92.2
29	100.0	99.2	98.4	97.7	96.9	96.1	95.4	94.6	93.8	93.1	92.3
30	100.0	99.2	98.5	97.7	97.0	96.2	95.5	94.7	94.0	93.2	92.5
31	100.0	99.3	98.5	97.8	97.0	96.3	95.5	94.8	94.1	93.4	92.6
32	100.0	99.3	98.5	97.8	97.1	96.4	95.6	94.9	94.2	93.5	92.8
33	100.0	99.3	98.6	97.8	97.1	96.4	95.7	95.0	94.3	93.6	92.9
34	100.0	99.3	98.6	97.9	97.2	96.5	95.8	95.1	94.4	93.7	93.0
35	100.0	99.3	98.6	97.9	97.2	96.5	95.9	95.2	94.5	93.8	93.2
36	100.0	99.3	98.6	98.0	97.3	96.6	95.9	95.3	94.6	93.9	93.3
37	100.0	99.3	98.7	98.0	97.3	96.7	96.0	95.3	94.7	94.0	93.4
38	100.0	99.3	98.7	98.0	97.4	96.7	96.1	95.4	94.8	94.1	93.5
39	100.0	99.3	98.7	98.1	97.4	96.8	96.1	95.5	94.9	94.2	93.6
40	100.0	99.4	98.7	98.1	97.4	96.8	96.2	95.6	94.9	94.3	93.7
41	100.0	99.4	98.7	98.1	97.5	96.9	96.2	95.6	95.0	94.4	93.8
42	100.0	99.4	98.8	98.1	97.5	96.9	96.3	95.7	95.1	94.5	93.9
43	100.0	99.4	98.8	98.2	97.6	96.9	96.3	95.7	95.1	94.6	94.0
44	100.0	99.4	98.8	98.2	97.6	97.0	96.4	95.8	95.2	94.6	94.0
45	100.0	99.4	98.8	98.2	97.6	97.0	96.4	95.9	95.3	94.7	94.1
46	100.0	99.4	98.8	98.2	97.7	97.1	96.5	95.9	95.3	94.8	94.2
47	100.0	99.4	98.8	98.3	97.7	97.1	96.5	96.0	95.4	94.8	94.3
48	100.0	99.4	98.9	98.3	97.7	97.1	96.6	96.0	95.5	94.9	94.3
49	100.0	99.4	98.9	98.3	97.7	97.2	96.6	96.1	95.5	95.0	94.4
50	100.0	99.4	98.9	98.3	97.8	97.2	96.7	96.1	95.6	95.0	94.5
51	100.0	99.4	98.9	98.3	97.8	97.2	96.7	96.2	95.6	95.1	94.5
52	100.0	99.5	98.9	98.4	97.8	97.3	96.7	96.2	95.7	95.1	94.6
53	100.0	99.5	98.9	98.4	97.8	97.3	96.8	96.2	95.7	95.2	94.7
54	100.0	99.5	98.9	98.4	97.9	97.3	96.8	96.3	95.8	95.2	94.7
55	100.0	99.5	98.9	98.4	97.9	97.4	96.8	96.3	95.8	95.3	94.8
56	100.0	99.5	99.0	98.4	97.9	97.4	96.9	96.4	95.9	95.4	94.8
57	100.0	99.5	99.0	98.4	97.9	97.4	96.9	96.4	95.9	95.4	94.9



表 3a<sub>2</sub>(续)

$t-t_w$ $t$	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
15	87.9	86.8	85.7	84.6	83.6	82.5	81.4	80.4	79.3	78.3
16	88.3	87.2	86.2	85.1	84.1	83.0	82.0	81.0	80.0	78.9
17	88.6	87.6	86.6	85.6	84.6	83.6	82.6	81.6	80.6	79.6
18	88.9	88.0	87.0	86.0	85.0	84.0	83.1	82.1	81.1	80.2
19	89.3	88.3	87.3	86.4	85.4	84.5	83.6	82.6	81.7	80.8
20	89.6	88.6	87.7	86.8	85.8	84.9	84.0	83.1	82.2	81.3
21	89.8	88.9	88.0	87.1	86.2	85.3	84.4	83.6	82.7	81.8
22	90.1	89.2	88.3	87.5	86.6	85.7	84.8	84.0	83.1	82.3
23	90.3	89.5	88.6	87.8	86.9	86.1	85.2	84.4	83.5	82.7
24	90.6	89.7	88.9	88.1	87.2	86.4	85.6	84.8	83.9	83.1
25	90.8	90.0	89.2	88.3	87.5	86.7	85.9	85.1	84.3	83.5
26	91.0	90.2	89.4	88.6	87.8	87.0	86.3	85.5	84.7	83.9
27	91.2	90.4	89.6	88.9	88.1	87.3	86.6	85.8	85.0	84.3
28	91.4	90.6	89.9	89.1	88.4	87.6	86.8	86.1	85.4	84.6
29	91.6	90.8	90.1	89.3	88.6	87.9	87.1	86.4	85.7	84.9
30	91.7	91.0	90.3	89.5	88.8	88.1	87.4	86.7	85.9	85.2
31	91.9	91.2	90.5	89.8	89.0	88.3	87.6	86.9	86.2	85.5
32	92.1	91.4	90.7	90.0	89.3	88.6	87.9	87.2	86.5	85.8
33	92.2	91.5	90.8	90.1	89.5	88.8	88.1	87.4	86.7	86.1
34	92.3	91.7	91.0	90.3	89.6	89.0	88.3	87.6	87.0	86.3
35	92.5	91.8	91.1	90.5	89.8	89.2	88.5	87.9	87.2	86.6
36	92.6	92.0	91.3	90.6	90.0	89.3	88.7	88.1	87.4	86.8
37	92.7	92.1	91.4	90.8	90.2	89.5	88.9	88.3	87.6	87.0
38	92.8	92.2	91.6	90.9	90.3	89.7	89.1	88.4	87.8	87.2
39	93.0	92.3	91.7	91.1	90.5	89.9	89.2	88.6	88.0	87.4
40	93.1	92.5	91.8	91.2	90.6	90.0	89.4	88.8	88.2	87.6
41	93.2	92.6	92.0	91.4	90.8	90.2	89.6	89.0	88.4	87.8
42	93.3	92.7	92.1	91.5	90.9	90.3	89.7	89.1	88.5	88.0
43	93.4	92.8	92.2	91.6	91.0	90.4	89.9	89.3	88.7	88.1
44	93.5	92.9	92.3	91.7	91.1	90.6	90.0	89.4	88.9	88.3
45	93.5	93.0	92.4	91.8	91.3	90.7	90.1	89.6	89.0	88.5
46	93.6	93.1	92.5	91.9	91.4	90.8	90.3	89.7	89.2	88.6
47	93.7	93.2	92.6	92.0	91.5	90.9	90.4	89.8	89.3	88.8
48	93.8	93.2	92.7	92.1	91.6	91.1	90.5	90.0	89.4	88.9
49	93.9	93.3	92.8	92.2	91.7	91.2	90.6	90.1	89.6	89.0
50	93.9	93.4	92.9	92.3	91.8	91.3	90.7	90.2	89.7	89.2
51	94.0	93.5	93.0	92.4	91.9	91.4	90.8	90.3	89.8	89.3
52	94.1	93.6	93.0	92.5	92.0	91.5	91.0	90.4	89.9	89.4
53	94.1	93.6	93.1	92.6	92.1	91.6	91.1	90.5	90.0	89.5
54	94.2	93.7	93.2	92.7	92.2	91.7	91.2	90.7	90.2	89.7
55	94.3	93.8	93.3	92.8	92.3	91.8	91.3	90.8	90.3	89.8
56	94.3	93.8	93.3	92.8	92.3	91.8	91.3	90.9	90.4	89.9
57	94.4	93.9	93.4	92.9	92.4	91.9	91.4	91.0	90.5	90.0





表 3a<sub>2</sub>(续)

$t-t_w$ $t$	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0
58	89.6	89.1	88.7	88.2	87.7	87.2	86.8	86.3	85.9	85.4
59	89.7	89.2	88.8	88.3	87.8	87.4	86.9	86.5	86.0	85.5
60	89.8	89.3	88.9	88.4	88.0	87.5	87.0	86.6	86.1	85.7
61	89.9	89.5	89.0	88.5	88.1	87.6	87.2	86.7	86.3	85.8
62	90.0	89.6	89.1	88.6	88.2	87.7	87.3	86.8	86.4	86.0
63	90.1	89.7	89.2	88.8	88.3	87.9	87.4	87.0	86.5	86.1
64	90.2	89.8	89.3	88.9	88.4	88.0	87.5	87.1	86.7	86.2
65	90.3	89.8	89.4	89.0	88.5	88.1	87.6	87.2	86.8	86.3
66	90.4	89.9	89.5	89.1	88.6	88.2	87.8	87.3	86.9	86.5
67	90.5	90.0	89.6	89.2	88.7	88.3	87.9	87.4	87.0	86.6
68	90.5	90.1	89.7	89.3	88.8	88.4	88.0	87.5	87.1	86.7
69	90.6	90.2	89.8	89.3	88.9	88.5	88.1	87.7	87.2	86.8
70	90.7	90.3	89.9	89.4	89.0	88.6	88.2	87.8	87.3	86.9
71	90.8	90.4	89.9	89.5	89.1	88.7	88.3	87.9	87.5	87.0
72	90.9	90.4	90.0	89.6	89.2	88.8	88.4	88.0	87.6	87.1
73	90.9	90.5	90.1	89.7	89.3	88.9	88.5	88.1	87.7	87.3
74	91.0	90.6	90.2	89.8	89.4	89.0	88.6	88.2	87.8	87.4
75	91.1	90.7	90.3	89.9	89.5	89.1	88.7	88.3	87.9	87.5
76	91.2	90.8	90.4	89.9	89.5	89.1	88.7	88.3	88.0	87.6
77	91.2	90.8	90.4	90.0	89.6	89.2	88.8	88.4	88.0	87.7
78	91.3	90.9	90.5	90.1	89.7	89.3	88.9	88.5	88.1	87.8
79	91.4	91.0	90.6	90.2	89.8	89.4	89.0	88.6	88.2	87.8
80	91.4	91.0	90.6	90.3	89.9	89.5	89.1	88.7	88.3	87.9
81	91.5	91.1	90.7	90.3	89.9	89.6	89.2	88.8	88.4	88.0
82	91.6	91.2	90.8	90.4	90.0	89.6	89.3	88.9	88.5	88.1
83	91.6	91.2	90.9	90.5	90.1	89.7	89.3	89.0	88.6	88.2
84	91.7	91.3	90.9	90.5	90.2	89.8	89.4	89.0	88.7	88.3
85	91.7	91.4	91.0	90.6	90.2	89.9	89.5	89.1	88.7	88.4
86	91.8	91.4	91.1	90.7	90.3	89.9	89.6	89.2	88.8	88.5
87	91.9	91.5	91.1	90.7	90.4	90.0	89.6	89.3	88.9	88.5
88	91.9	91.6	91.2	90.8	90.4	90.1	89.7	89.4	89.0	88.6
89	92.0	91.6	91.2	90.9	90.5	90.2	89.8	89.4	89.1	88.7
90	92.0	91.7	91.3	90.9	90.6	90.2	89.9	89.5	89.1	88.8
91	92.1	91.7	91.4	91.0	90.6	90.3	89.9	89.6	89.2	88.9
92	92.2	91.8	91.4	91.1	90.7	90.4	90.0	89.6	89.3	88.9
93	92.2	91.8	91.5	91.1	90.8	90.4	90.1	89.7	89.4	89.0
94	92.3	91.9	91.5	91.2	90.8	90.5	90.1	89.8	89.4	89.1
95	92.3	92.0	91.6	91.3	90.9	90.6	90.2	89.9	89.5	89.2
96	92.4	92.0	91.7	91.3	91.0	90.6	90.3	89.9	89.6	89.2
97	92.4	92.1	91.7	91.4	91.0	90.7	90.3	90.0	89.6	89.3
98	92.5	92.1	91.8	91.4	91.1	90.7	90.4	90.1	89.7	89.4
99	92.5	92.2	91.8	91.5	91.1	90.8	90.5	90.1	89.8	89.4
100	92.6	92.2	91.9	91.5	91.2	90.9	90.5	90.2	89.8	89.5

表 3a<sub>2</sub>(续)

$t-t_w$ $t$	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0
15	66.9	65.9	64.8	63.8	62.8	61.8	60.8	59.8	58.8	57.8
16	67.9	66.9	66.0	65.0	64.0	63.0	62.1	61.1	60.1	59.2
17	68.9	68.0	67.0	66.1	65.1	64.2	63.2	62.3	61.4	60.5
18	69.8	68.9	68.0	67.1	66.2	65.3	64.3	63.4	62.5	61.6
19	70.7	69.8	68.9	68.0	67.1	66.3	65.4	64.5	63.6	62.8
20	71.5	70.7	69.8	68.9	68.1	67.2	66.4	65.5	64.6	63.8
21	72.3	71.5	70.6	69.8	68.9	68.1	67.3	66.4	65.6	64.8
22	73.0	72.2	71.4	70.6	69.7	68.9	68.1	67.3	66.5	65.7
23	73.7	72.9	72.1	71.3	70.5	69.7	68.9	68.2	67.4	66.6
24	74.4	73.6	72.8	72.0	71.2	70.5	69.7	68.9	68.2	67.4
25	75.0	74.2	73.4	72.7	71.9	71.2	70.4	69.7	68.9	68.2
26	75.5	74.8	74.1	73.3	72.6	71.8	71.1	70.4	69.7	68.9
27	76.1	75.4	74.6	73.9	73.2	72.5	71.8	71.1	70.3	69.6
28	76.6	75.9	75.2	74.5	73.8	73.1	72.4	71.7	71.0	70.3
29	77.1	76.4	75.7	75.0	74.3	73.6	73.0	72.3	71.6	70.9
30	77.6	76.9	76.2	75.5	74.9	74.2	73.5	72.9	72.2	71.5
31	78.0	77.3	76.7	76.0	75.4	74.7	74.0	73.4	72.7	72.1
32	78.4	77.8	77.1	76.5	75.8	75.2	74.5	73.9	73.3	72.6
33	78.8	78.2	77.6	76.9	76.3	75.6	75.0	74.4	73.8	73.1
34	79.2	78.6	78.0	77.3	76.7	76.1	75.5	74.9	74.2	73.6
35	79.6	79.0	78.3	77.7	77.1	76.5	75.9	75.3	74.7	74.1
36	79.9	79.3	78.7	78.1	77.5	76.9	76.3	75.7	75.1	74.5
37	80.3	79.7	79.1	78.5	77.9	77.3	76.7	76.1	75.5	75.0
38	80.6	80.0	79.4	78.8	78.2	77.7	77.1	76.5	75.9	75.4
39	80.9	80.3	79.7	79.2	78.6	78.0	77.4	76.9	76.3	75.8
40	81.2	80.6	80.0	79.5	78.9	78.4	77.8	77.2	76.7	76.1
41	81.5	80.9	80.3	79.8	79.2	78.7	78.1	77.6	77.0	76.5
42	81.7	81.2	80.6	80.1	79.5	79.0	78.4	77.9	77.4	76.8
43	82.0	81.4	80.9	80.4	79.8	79.3	78.7	78.2	77.7	77.1
44	82.2	81.7	81.2	80.6	80.1	79.6	79.0	78.5	78.0	77.5
45	82.5	81.9	81.4	80.9	80.4	79.8	79.3	78.8	78.3	77.8
46	82.7	82.2	81.7	81.1	80.6	80.1	79.6	79.1	78.6	78.1
47	82.9	82.4	81.9	81.4	80.9	80.4	79.9	79.3	78.8	78.3
48	83.1	82.6	82.1	81.6	81.1	80.6	80.1	79.6	79.1	78.6
49	83.3	82.8	82.3	81.8	81.3	80.8	80.3	79.9	79.4	78.9
50	83.5	83.0	82.6	82.1	81.6	81.1	80.6	80.1	79.6	79.1
51	83.7	83.2	82.8	82.3	81.8	81.3	80.8	80.3	79.8	79.4
52	83.9	83.4	83.0	82.5	82.0	81.5	81.0	80.6	80.1	79.6
53	84.1	83.6	83.1	82.7	82.2	81.7	81.2	80.8	80.3	79.8
54	84.3	83.8	83.3	82.9	82.4	81.9	81.4	81.0	80.5	80.1
55	84.5	84.0	83.5	83.0	82.6	82.1	81.6	81.2	80.7	80.3
56	84.6	84.2	83.7	83.2	82.8	82.3	81.8	81.4	80.9	80.5
57	84.8	84.3	83.9	83.4	82.9	82.5	82.0	81.6	81.1	80.7

表 3a<sub>2</sub> (续)

$t$ \ $t-t_w$	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0
58	84.9	84.5	84.0	83.6	83.1	82.7	82.2	81.8	81.3	80.9
59	85.1	84.6	84.2	83.7	83.3	82.8	82.4	81.9	81.5	81.1
60	85.2	84.8	84.3	83.9	83.4	83.0	82.6	82.1	81.7	81.3
61	85.4	84.9	84.5	84.0	83.6	83.2	82.7	82.3	81.9	81.4
62	85.5	85.1	84.6	84.2	83.8	83.3	82.9	82.5	82.0	81.6
63	85.7	85.2	84.8	84.3	83.9	83.5	83.1	82.6	82.2	81.8
64	85.8	85.4	84.9	84.5	84.1	83.6	83.2	82.8	82.4	81.9
65	85.9	85.5	85.1	84.6	84.2	83.8	83.4	82.9	82.5	82.1
66	86.0	85.6	85.2	84.8	84.3	83.9	83.5	83.1	82.7	82.3
67	86.2	85.7	85.3	84.9	84.5	84.1	83.7	83.2	82.8	82.4
68	86.3	85.9	85.5	85.0	84.6	84.2	83.8	83.4	83.0	82.6
69	86.4	86.0	85.6	85.2	84.8	84.3	83.9	83.5	83.1	82.7
70	86.5	86.1	85.7	85.3	84.9	84.5	84.1	83.7	83.3	82.9
71	86.6	86.2	85.8	85.4	85.0	84.6	84.2	83.8	83.4	83.0
72	86.7	86.3	85.9	85.5	85.1	84.7	84.3	83.9	83.5	83.2
73	86.9	86.5	86.1	85.7	85.3	84.9	84.5	84.1	83.7	83.3
74	87.0	86.6	86.2	85.8	85.4	85.0	84.6	84.2	83.8	83.4
75	87.1	86.7	86.3	85.9	85.5	85.1	84.7	84.3	83.9	83.6
76	87.2	86.8	86.4	86.0	85.6	85.2	84.8	84.4	84.1	83.7
77	87.3	86.9	86.5	86.1	85.7	85.3	85.0	84.6	84.2	83.8
78	87.4	87.0	86.6	86.2	85.8	85.4	85.1	84.7	84.3	83.9
79	87.5	87.1	86.7	86.3	85.9	85.6	85.2	84.8	84.4	84.1
80	87.6	87.2	86.8	86.4	86.0	85.7	85.3	84.9	84.5	84.2
81	87.7	87.3	86.9	86.5	86.1	85.8	85.4	85.0	84.7	84.3
82	87.7	87.4	87.0	86.6	86.2	85.9	85.5	85.1	84.8	84.4
83	87.8	87.5	87.1	86.7	86.4	86.0	85.6	85.3	84.9	84.5
84	87.9	87.6	87.2	86.8	86.4	86.1	85.7	85.4	85.0	84.6
85	88.0	87.6	87.3	86.9	86.5	86.2	85.8	85.5	85.1	84.7
86	88.1	87.7	87.4	87.0	86.6	86.3	85.9	85.6	85.2	84.9
87	88.2	87.8	87.5	87.1	86.7	86.4	86.0	85.7	85.3	85.0
88	88.3	87.9	87.5	87.2	86.8	86.5	86.1	85.8	85.4	85.1
89	88.3	88.0	87.6	87.3	86.9	86.6	86.2	85.9	85.5	85.2
90	88.4	88.1	87.7	87.4	87.0	86.7	86.3	86.0	85.6	85.3
91	88.5	88.2	87.8	87.5	87.1	86.8	86.4	86.1	85.7	85.4
92	88.6	88.2	87.9	87.5	87.2	86.8	86.5	86.2	85.8	85.5
93	88.7	88.3	88.0	87.6	87.3	86.9	86.6	86.3	85.9	85.6
94	88.7	88.4	88.1	87.7	87.4	87.0	86.7	86.3	86.0	85.7
95	88.8	88.5	88.1	87.8	87.4	87.1	86.8	86.4	86.1	85.8
96	88.9	88.6	88.2	87.9	87.5	87.2	86.9	86.5	86.2	85.9
97	89.0	88.6	88.3	88.0	87.6	87.3	86.9	86.6	86.3	85.9
98	89.0	88.7	88.4	88.0	87.7	87.4	87.0	86.7	86.4	86.0
99	89.1	88.8	88.4	88.1	87.8	87.4	87.1	86.8	86.5	86.1
100	89.2	88.8	88.5	88.2	87.9	87.5	87.2	86.9	86.5	86.2

表 3a<sub>2</sub>(续)

$t$	$t-t_w$	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0
15		56.9	55.9	54.9	53.9	52.9	52.0	51.0	50.0	49.1	48.1
16		58.2	57.3	56.3	55.4	54.4	53.5	52.6	51.6	50.7	49.8
17		59.5	58.6	57.7	56.8	55.9	54.9	54.0	53.1	52.2	51.3
18		60.7	59.9	59.0	58.1	57.2	56.3	55.4	54.5	53.7	52.8
19		61.9	61.0	60.2	59.3	58.4	57.6	56.7	55.9	55.0	54.2
20		63.0	62.1	61.3	60.4	59.6	58.8	58.0	57.1	56.3	55.5
21		64.0	63.2	62.3	61.5	60.7	59.9	59.1	58.3	57.5	56.7
22		64.9	64.1	63.3	62.5	61.8	61.0	60.2	59.4	58.6	57.9
23		65.8	65.0	64.3	63.5	62.7	62.0	61.2	60.5	59.7	58.9
24		66.7	65.9	65.2	64.4	63.7	62.9	62.2	61.4	60.7	60.0
25		67.5	66.7	66.0	65.3	64.5	63.8	63.1	62.4	61.6	60.9
26		68.2	67.5	66.8	66.1	65.4	64.7	63.9	63.2	62.5	61.8
27		68.9	68.2	67.5	66.8	66.1	65.5	64.8	64.1	63.4	62.7
28		69.6	68.9	68.2	67.6	66.9	66.2	65.5	64.9	64.2	63.5
29		70.3	69.6	68.9	68.2	67.6	66.9	66.3	65.6	65.0	64.3
30		70.9	70.2	69.6	68.9	68.3	67.6	67.0	66.3	65.7	65.0
31		71.4	70.8	70.2	69.5	68.9	68.2	67.6	67.0	66.4	65.7
32		72.0	71.4	70.7	70.1	69.5	68.9	68.2	67.6	67.0	66.4
33		72.5	71.9	71.3	70.7	70.1	69.4	68.8	68.2	67.6	67.0
34		73.0	72.4	71.8	71.2	70.6	70.0	69.4	68.8	68.2	67.6
35		73.5	72.9	72.3	71.7	71.1	70.5	69.9	69.4	68.8	68.2
36		73.9	73.4	72.8	72.2	71.6	71.0	70.5	69.9	69.3	68.7
37		74.4	73.8	73.2	72.7	72.1	71.5	71.0	70.4	69.8	69.3
38		74.8	74.2	73.7	73.1	72.5	72.0	71.4	70.9	70.3	69.8
39		75.2	74.6	74.1	73.5	73.0	72.4	71.9	71.3	70.8	70.2
40		75.6	75.0	74.5	73.9	73.4	72.8	72.3	71.8	71.2	70.7
41		75.9	75.4	74.9	74.3	73.8	73.2	72.7	72.2	71.7	71.1
42		76.3	75.8	75.2	74.7	74.2	73.6	73.1	72.6	72.1	71.6
43		76.6	76.1	75.6	75.0	74.5	74.0	73.5	73.0	72.5	72.0
44		76.9	76.4	75.9	75.4	74.9	74.4	73.9	73.4	72.8	72.3
45		77.3	76.7	76.2	75.7	75.2	74.7	74.2	73.7	73.2	72.7
46		77.5	77.0	76.5	76.0	75.5	75.0	74.5	74.1	73.6	73.1
47		77.8	77.3	76.8	76.3	75.9	75.4	74.9	74.4	73.9	73.4
48		78.1	77.6	77.1	76.6	76.2	75.7	75.2	74.7	74.2	73.7
49		78.4	77.9	77.4	76.9	76.4	76.0	75.5	75.0	74.5	74.1
50		78.6	78.2	77.7	77.2	76.7	76.3	75.8	75.3	74.8	74.4
51		78.9	78.4	77.9	77.5	77.0	76.5	76.1	75.6	75.1	74.7
52		79.1	78.7	78.2	77.7	77.3	76.8	76.3	75.9	75.4	75.0
53		79.4	78.9	78.4	78.0	77.5	77.1	76.6	76.1	75.7	75.2
54		79.6	79.1	78.7	78.2	77.8	77.3	76.9	76.4	76.0	75.5
55		79.8	79.4	78.9	78.5	78.0	77.6	77.1 <sub>64</sub>	76.7 <sub>0</sub>	76.2 <sub>7t</sub>	75.8 <sub>2</sub>













表 3a<sub>2</sub>(续)

$t$ \ $t-t_w$	9.2	9.4	9.6	9.8	10.0	10.2	10.4	10.6	10.8	11.0
58	59.9	59.2	58.4	57.7	57.0	56.3	55.6	54.9	54.2	53.5
59	60.3	59.6	58.8	58.1	57.4	56.7	56.0	55.3	54.7	54.0
60	60.7	59.9	59.2	58.5	57.8	57.1	56.5	55.8	55.1	54.4
61	61.0	60.3	59.6	58.9	58.2	57.5	56.9	56.2	55.5	54.8
62	61.4	60.7	60.0	59.3	58.6	57.9	57.2	56.6	55.9	55.2
63	61.7	61.0	60.3	59.7	59.0	58.3	57.6	57.0	56.3	55.6
64	62.1	61.4	60.7	60.0	59.3	58.7	58.0	57.3	56.7	56.0
65	62.4	61.7	61.0	60.4	59.7	59.0	58.4	57.7	57.1	56.4
66	62.7	62.0	61.4	60.7	60.0	59.4	58.7	58.1	57.4	56.8
67	63.0	62.4	61.7	61.0	60.4	59.7	59.1	58.4	57.8	57.1
68	63.3	62.7	62.0	61.3	60.7	60.0	59.4	58.7	58.1	57.5
69	63.6	63.0	62.3	61.7	61.0	60.4	59.7	59.1	58.4	57.8
70	63.9	63.3	62.6	62.0	61.3	60.7	60.0	59.4	58.8	58.2
71	64.2	63.6	62.9	62.3	61.6	61.0	60.3	59.7	59.1	58.5
72	64.5	63.8	63.2	62.6	61.9	61.3	60.7	60.0	59.4	58.8
73	64.8	64.1	63.5	62.8	62.2	61.6	61.0	60.3	59.7	59.1
74	65.0	64.4	63.8	63.1	62.5	61.9	61.2	60.6	60.0	59.4
75	65.3	64.7	64.0	63.4	62.8	62.1	61.5	60.9	60.3	59.7
76	65.6	64.9	64.3	63.7	63.0	62.4	61.8	61.2	60.6	60.0
77	65.8	65.2	64.5	63.9	63.3	62.7	62.1	61.5	60.9	60.3
78	66.0	65.4	64.8	64.2	63.6	63.0	62.4	61.8	61.2	60.6
79	66.3	65.7	65.1	64.4	63.8	63.2	62.6	62.0	61.4	60.8
80	66.5	65.9	65.3	64.7	64.1	63.5	62.9	62.3	61.7	61.1
81	66.8	66.1	65.5	64.9	64.3	63.7	63.1	62.5	62.0	61.4
82	67.0	66.4	65.8	65.2	64.6	64.0	63.4	62.8	62.2	61.6
83	67.2	66.6	66.0	65.4	64.8	64.2	63.6	63.1	62.5	61.9
84	67.4	66.8	66.2	65.6	65.1	64.5	63.9	63.3	62.7	62.2
85	67.7	67.1	66.5	65.9	65.3	64.7	64.1	63.5	63.0	62.4
86	67.9	67.3	66.7	66.1	65.5	64.9	64.4	63.8	63.2	62.6
87	68.1	67.5	66.9	66.3	65.7	65.2	64.6	64.0	63.5	62.9
88	68.3	67.7	67.1	66.5	66.0	65.4	64.8	64.2	63.7	63.1
89	68.5	67.9	67.3	66.8	66.2	65.6	65.0	64.5	63.9	63.4
90	68.7	68.1	67.5	67.0	66.4	65.8	65.3	64.7	64.1	63.6
91	68.9	68.3	67.7	67.2	66.6	66.0	65.5	64.9	64.4	63.8
92	69.1	68.5	68.0	67.4	66.8	66.3	65.7	65.1	64.6	64.0
93	69.3	68.7	68.2	67.6	67.0	66.5	65.9	65.4	64.8	64.3
94	69.5	68.9	68.3	67.8	67.2	66.7	66.1	65.6	65.0	64.5
95	69.7	69.1	68.5	68.0	67.4	66.9	66.3	65.8	65.2	64.7
96	69.9	69.3	68.7	68.2	67.6	67.1	66.5	66.0	65.4	64.9
97	70.0	69.5	68.9	68.4	67.8	67.3	66.7	66.2	65.6	65.1
98	70.2	69.7	69.1	68.6	68.0	67.5	66.9	66.4	65.9	65.3
99	70.4	69.9	69.3	68.7	68.2	67.7	67.1	66.6	66.1	65.5
100	70.6	70.0	69.5	68.9	68.4	67.9	67.3	66.8	66.3	65.7





表 3b 球状水银温度表相对湿度查算表  
 $P=100\text{ kPa}, A=0.7947 \times 10^{-3} \text{ } ^\circ\text{C}^{-1} (0.8\text{ m/s})$

$t-t_w$	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
15	100.0	98.9	97.8	96.7	95.6	94.5	93.4	92.3	91.2	90.2	89.1
16	100.0	98.9	97.9	96.8	95.7	94.7	93.6	92.6	91.5	90.5	89.4
17	100.0	99.0	97.9	96.9	95.9	94.8	93.8	92.8	91.8	90.7	89.7
18	100.0	99.0	98.0	97.0	96.0	95.0	94.0	93.0	92.0	91.0	90.0
19	100.0	99.0	98.0	97.1	96.1	95.1	94.1	93.2	92.2	91.3	90.3
20	100.0	99.0	98.1	97.1	96.2	95.2	94.3	93.4	92.4	91.5	90.6
21	100.0	99.1	98.1	97.2	96.3	95.4	94.5	93.5	92.6	91.7	90.8
22	100.0	99.1	98.2	97.3	96.4	95.5	94.6	93.7	92.8	91.9	91.1
23	100.0	99.1	98.2	97.3	96.5	95.6	94.7	93.9	93.0	92.1	91.3
24	100.0	99.1	98.3	97.4	96.6	95.7	94.9	94.0	93.2	92.3	91.5
25	100.0	99.2	98.3	97.5	96.6	95.8	95.0	94.1	93.3	92.5	91.7
26	100.0	99.2	98.3	97.5	96.7	95.9	95.1	94.3	93.5	92.7	91.9
27	100.0	99.2	98.4	97.6	96.8	96.0	95.2	94.4	93.6	92.8	92.0
28	100.0	99.2	98.4	97.6	96.9	96.1	95.3	94.5	93.7	93.0	92.2
29	100.0	99.2	98.5	97.7	96.9	96.2	95.4	94.6	93.9	93.1	92.4
30	100.0	99.2	98.5	97.7	97.0	96.2	95.5	94.7	94.0	93.3	92.5
31	100.0	99.3	98.5	97.8	97.0	96.3	95.6	94.8	94.1	93.4	92.7
32	100.0	99.3	98.5	97.8	97.1	96.4	95.7	94.9	94.2	93.5	92.8
33	100.0	99.3	98.6	97.9	97.1	96.4	95.7	95.0	94.3	93.6	92.9
34	100.0	99.3	98.6	97.9	97.2	96.5	95.8	95.1	94.4	93.7	93.1
35	100.0	99.3	98.6	97.9	97.2	96.6	95.9	95.2	94.5	93.9	93.2
36	100.0	99.3	98.6	98.0	97.3	96.6	96.0	95.3	94.6	94.0	93.3
37	100.0	99.3	98.7	98.0	97.3	96.7	96.0	95.4	94.7	94.1	93.4
38	100.0	99.3	98.7	98.0	97.4	96.7	96.1	95.4	94.8	94.2	93.5
39	100.0	99.4	98.7	98.1	97.4	96.8	96.1	95.5	94.9	94.2	93.6
40	100.0	99.4	98.7	98.1	97.5	96.8	96.2	95.6	95.0	94.3	93.7
41	100.0	99.4	98.7	98.1	97.5	96.9	96.3	95.6	95.0	94.4	93.8
42	100.0	99.4	98.8	98.1	97.5	96.9	96.3	95.7	95.1	94.5	93.9
43	100.0	99.4	98.8	98.2	97.6	97.0	96.4	95.8	95.2	94.6	94.0
44	100.0	99.4	98.8	98.2	97.6	97.0	96.4	95.8	95.2	94.6	94.1
45	100.0	99.4	98.8	98.2	97.6	97.0	96.5	95.9	95.3	94.7	94.1
46	100.0	99.4	98.8	98.2	97.7	97.1	96.5	95.9	95.4	94.8	94.2
47	100.0	99.4	98.8	98.3	97.7	97.1	96.5	96.0	95.4	94.9	94.3
48	100.0	99.4	98.9	98.3	97.7	97.2	96.6	96.0	95.5	94.9	94.4
49	100.0	99.4	98.9	98.3	97.7	97.2	96.6	96.1	95.5	95.0	94.4
50	100.0	99.4	98.9	98.3	97.8	97.2	96.7	96.1	95.6	95.0	94.5
51	100.0	99.4	98.9	98.3	97.8	97.3	96.7	96.2	95.6	95.1	94.6
52	100.0	99.5	98.9	98.4	97.8	97.3	96.8	96.2	95.7	95.2	94.6
53	100.0	99.5	98.9	98.4	97.9	97.3	96.8	96.3	95.7	95.2	94.7
54	100.0	99.5	98.9	98.4	97.9	97.3	96.8	96.3	95.8	95.3	94.7
55	100.0	99.5	98.9	98.4	97.9	97.4	96.9	96.3	95.8	95.3	94.8
56	100.0	99.5	99.0	98.4	97.9	97.4	96.9	96.4	95.9	95.4	94.9
57	100.0	99.5	99.0	98.5	97.9	97.4	96.9	96.4	95.9	95.4	94.9



表 3b (续)

$t-t_w$	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
15	88.0	86.9	85.9	84.8	83.7	82.7	81.6	80.6	79.5	78.5
16	88.4	87.3	86.3	85.3	84.2	83.2	82.2	81.2	80.2	79.2
17	88.7	87.7	86.7	85.7	84.7	83.7	82.7	81.8	80.8	79.8
18	89.0	88.1	87.1	86.1	85.2	84.2	83.2	82.3	81.3	80.4
19	89.4	88.4	87.5	86.5	85.6	84.6	83.7	82.8	81.9	80.9
20	89.6	88.7	87.8	86.9	86.0	85.1	84.2	83.3	82.4	81.5
21	89.9	89.0	88.1	87.2	86.3	85.5	84.6	83.7	82.8	82.0
22	90.2	89.3	88.4	87.6	86.7	85.8	85.0	84.1	83.3	82.4
23	90.4	89.6	88.7	87.9	87.0	86.2	85.4	84.5	83.7	82.9
24	90.6	89.8	89.0	88.2	87.3	86.5	85.7	84.9	84.1	83.3
25	90.9	90.1	89.2	88.4	87.6	86.8	86.0	85.2	84.5	83.7
26	91.1	90.3	89.5	88.7	87.9	87.1	86.4	85.6	84.8	84.0
27	91.3	90.5	89.7	88.9	88.2	87.4	86.7	85.9	85.1	84.4
28	91.5	90.7	89.9	89.2	88.4	87.7	86.9	86.2	85.5	84.7
29	91.6	90.9	90.1	89.4	88.7	87.9	87.2	86.5	85.8	85.0
30	91.8	91.1	90.3	89.6	88.9	88.2	87.5	86.7	86.0	85.3
31	92.0	91.2	90.5	89.8	89.1	88.4	87.7	87.0	86.3	85.6
32	92.1	91.4	90.7	90.0	89.3	88.6	87.9	87.3	86.6	85.9
33	92.3	91.6	90.9	90.2	89.5	88.8	88.2	87.5	86.8	86.1
34	92.4	91.7	91.0	90.4	89.7	89.0	88.4	87.7	87.0	86.4
35	92.5	91.9	91.2	90.5	89.9	89.2	88.6	87.9	87.3	86.6
36	92.6	92.0	91.3	90.7	90.0	89.4	88.8	88.1	87.5	86.9
37	92.8	92.1	91.5	90.8	90.2	89.6	88.9	88.3	87.7	87.1
38	92.9	92.2	91.6	91.0	90.4	89.7	89.1	88.5	87.9	87.3
39	93.0	92.4	91.7	91.1	90.5	89.9	89.3	88.7	88.1	87.5
40	93.1	92.5	91.9	91.3	90.7	90.1	89.5	88.9	88.3	87.7
41	93.2	92.6	92.0	91.4	90.8	90.2	89.6	89.0	88.4	87.8
42	93.3	92.7	92.1	91.5	90.9	90.3	89.8	89.2	88.6	88.0
43	93.4	92.8	92.2	91.6	91.1	90.5	89.9	89.3	88.8	88.2
44	93.5	92.9	92.3	91.7	91.2	90.6	90.0	89.5	88.9	88.3
45	93.6	93.0	92.4	91.9	91.3	90.7	90.2	89.6	89.1	88.5
46	93.7	93.1	92.5	92.0	91.4	90.9	90.3	89.7	89.2	88.7
47	93.7	93.2	92.6	92.1	91.5	91.0	90.4	89.9	89.3	88.8
48	93.8	93.3	92.7	92.2	91.6	91.1	90.5	90.0	89.5	88.9
49	93.9	93.3	92.8	92.3	91.7	91.2	90.7	90.1	89.6	89.1
50	94.0	93.4	92.9	92.4	91.8	91.3	90.8	90.2	89.7	89.2
51	94.0	93.5	93.0	92.4	91.9	91.4	90.9	90.4	89.8	89.3
52	94.1	93.6	93.1	92.5	92.0	91.5	91.0	90.5	90.0	89.4
53	94.2	93.6	93.1	92.6	92.1	91.6	91.1	90.6	90.1	89.6
54	94.2	93.7	93.2	92.7	92.2	91.7	91.2	90.7	90.2	89.7
55	94.3	93.8	93.3	92.8	92.3	91.8	91.3	90.8	90.3	89.8
56	94.4	93.9	93.4	92.9	92.4	91.9	91.4	90.9	90.4	89.9
57	94.4	93.9	93.4	92.9	92.4	91.9	91.5	91.0	90.5	90.0



表 3b (续)

$t-t_w$	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0
15	77.5	76.4	75.4	74.4	73.3	72.3	71.3	70.3	69.3	68.3
16	78.2	77.2	76.2	75.2	74.2	73.2	72.2	71.2	70.2	69.2
17	78.8	77.8	76.9	75.9	74.9	74.0	73.0	72.1	71.1	70.2
18	79.4	78.5	77.6	76.6	75.7	74.8	73.8	72.9	72.0	71.1
19	80.0	79.1	78.2	77.3	76.4	75.5	74.6	73.7	72.8	71.9
20	80.6	79.7	78.8	77.9	77.0	76.1	75.3	74.4	73.5	72.7
21	81.1	80.2	79.4	78.5	77.6	76.8	75.9	75.1	74.2	73.4
22	81.6	80.7	79.9	79.0	78.2	77.4	76.6	75.7	74.9	74.1
23	82.0	81.2	80.4	79.6	78.8	77.9	77.1	76.3	75.5	74.7
24	82.5	81.7	80.9	80.1	79.3	78.5	77.7	76.9	76.1	75.3
25	82.9	82.1	81.3	80.5	79.8	79.0	78.2	77.4	76.7	75.9
26	83.3	82.5	81.7	81.0	80.2	79.5	78.7	78.0	77.2	76.5
27	83.6	82.9	82.1	81.4	80.7	79.9	79.2	78.4	77.7	77.0
28	84.0	83.2	82.5	81.8	81.1	80.3	79.6	78.9	78.2	77.5
29	84.3	83.6	82.9	82.2	81.5	80.8	80.0	79.3	78.6	78.0
30	84.6	83.9	83.2	82.5	81.8	81.1	80.5	79.8	79.1	78.4
31	84.9	84.2	83.6	82.9	82.2	81.5	80.8	80.2	79.5	78.8
32	85.2	84.5	83.9	83.2	82.5	81.9	81.2	80.5	79.9	79.2
33	85.5	84.8	84.2	83.5	82.8	82.2	81.5	80.9	80.2	79.6
34	85.7	85.1	84.4	83.8	83.2	82.5	81.9	81.2	80.6	80.0
35	86.0	85.3	84.7	84.1	83.4	82.8	82.2	81.6	80.9	80.3
36	86.2	85.6	85.0	84.3	83.7	83.1	82.5	81.9	81.3	80.6
37	86.4	85.8	85.2	84.6	84.0	83.4	82.8	82.2	81.6	81.0
38	86.7	86.1	85.4	84.8	84.2	83.6	83.0	82.5	81.9	81.3
39	86.9	86.3	85.7	85.1	84.5	83.9	83.3	82.7	82.1	81.6
40	87.1	86.5	85.9	85.3	84.7	84.1	83.6	83.0	82.4	81.8
41	87.3	86.7	86.1	85.5	84.9	84.4	83.8	83.2	82.7	82.1
42	87.4	86.9	86.3	85.7	85.2	84.6	84.0	83.5	82.9	82.4
43	87.6	87.1	86.5	85.9	85.4	84.8	84.3	83.7	83.2	82.6
44	87.8	87.2	86.7	86.1	85.6	85.0	84.5	83.9	83.4	82.8
45	87.9	87.4	86.9	86.3	85.8	85.2	84.7	84.1	83.6	83.1
46	88.1	87.6	87.0	86.5	85.9	85.4	84.9	84.3	83.8	83.3
47	88.3	87.7	87.2	86.7	86.1	85.6	85.1	84.5	84.0	83.5
48	88.4	87.9	87.3	86.8	86.3	85.8	85.3	84.7	84.2	83.7
49	88.5	88.0	87.5	87.0	86.5	85.9	85.4	84.9	84.4	83.9
50	88.7	88.2	87.6	87.1	86.6	86.1	85.6	85.1	84.6	84.1
51	88.8	88.3	87.8	87.3	86.8	86.3	85.8	85.3	84.8	84.3
52	88.9	88.4	87.9	87.4	86.9	86.4	85.9	85.4	85.0	84.5
53	89.1	88.6	88.1	87.6	87.1	86.6	86.1	85.6	85.1	84.6
54	89.2	88.7	88.2	87.7	87.2	86.7	86.2	85.8	85.3	84.8
55	89.3	88.8	88.3	87.8	87.4	86.9	86.4	85.9	85.4	85.0
56	89.4	88.9	88.4	88.0	87.5	87.0	86.5	86.1	85.6	85.1
57	89.5	89.0	88.6	88.1	87.6	87.1	86.7	86.2	85.7	85.3





表 3b (续)

$t-t_w$ $t$	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0
58	85.0	84.5	84.1	83.6	83.2	82.7	82.3	81.8	81.4	80.9
59	85.1	84.7	84.2	83.8	83.3	82.9	82.4	82.0	81.5	81.1
60	85.3	84.8	84.4	83.9	83.5	83.0	82.6	82.2	81.7	81.3
61	85.4	85.0	84.5	84.1	83.6	83.2	82.8	82.3	81.9	81.5
62	85.5	85.1	84.7	84.2	83.8	83.4	82.9	82.5	82.1	81.6
63	85.7	85.2	84.8	84.4	83.9	83.5	83.1	82.7	82.2	81.8
64	85.8	85.4	84.9	84.5	84.1	83.7	83.2	82.8	82.4	82.0
65	85.9	85.5	85.1	84.7	84.2	83.8	83.4	83.0	82.6	82.1
66	86.1	85.6	85.2	84.8	84.4	84.0	83.5	83.1	82.7	82.3
67	86.2	85.8	85.3	84.9	84.5	84.1	83.7	83.3	82.9	82.5
68	86.3	85.9	85.5	85.1	84.6	84.2	83.8	83.4	83.0	82.6
69	86.4	86.0	85.6	85.2	84.8	84.4	84.0	83.6	83.2	82.8
70	86.5	86.1	85.7	85.3	84.9	84.5	84.1	83.7	83.3	82.9
71	86.7	86.2	85.8	85.4	85.0	84.6	84.2	83.8	83.4	83.0
72	86.8	86.4	86.0	85.6	85.2	84.8	84.4	84.0	83.6	83.2
73	86.9	86.5	86.1	85.7	85.3	84.9	84.5	84.1	83.7	83.3
74	87.0	86.6	86.2	85.8	85.4	85.0	84.6	84.2	83.8	83.4
75	87.1	86.7	86.3	85.9	85.5	85.1	84.7	84.3	84.0	83.6
76	87.2	86.8	86.4	86.0	85.6	85.2	84.9	84.5	84.1	83.7
77	87.3	86.9	86.5	86.1	85.7	85.4	85.0	84.6	84.2	83.8
78	87.4	87.0	86.6	86.2	85.8	85.5	85.1	84.7	84.3	84.0
79	87.5	87.1	86.7	86.3	86.0	85.6	85.2	84.8	84.4	84.1
80	87.6	87.2	86.8	86.4	86.1	85.7	85.3	84.9	84.6	84.2
81	87.7	87.3	86.9	86.5	86.2	85.8	85.4	85.0	84.7	84.3
82	87.8	87.4	87.0	86.6	86.3	85.9	85.5	85.2	84.8	84.4
83	87.8	87.5	87.1	86.7	86.4	86.0	85.6	85.3	84.9	84.5
84	87.9	87.6	87.2	86.8	86.5	86.1	85.7	85.4	85.0	84.7
85	88.0	87.7	87.3	86.9	86.6	86.2	85.8	85.5	85.1	84.8
86	88.1	87.7	87.4	87.0	86.7	86.3	85.9	85.6	85.2	84.9
87	88.2	87.8	87.5	87.1	86.8	86.4	86.0	85.7	85.3	85.0
88	88.3	87.9	87.6	87.2	86.8	86.5	86.1	85.8	85.4	85.1
89	88.4	88.0	87.6	87.3	86.9	86.6	86.2	85.9	85.5	85.2
90	88.4	88.1	87.7	87.4	87.0	86.7	86.3	86.0	85.6	85.3
91	88.5	88.2	87.8	87.5	87.1	86.8	86.4	86.1	85.7	85.4
92	88.6	88.2	87.9	87.5	87.2	86.9	86.5	86.2	85.8	85.5
93	88.7	88.3	88.0	87.6	87.3	86.9	86.6	86.3	85.9	85.6
94	88.7	88.4	88.1	87.7	87.4	87.0	86.7	86.4	86.0	85.7
95	88.8	88.5	88.1	87.8	87.5	87.1	86.8	86.4	86.1	85.8
96	88.9	88.6	88.2	87.9	87.5	87.2	86.9	86.5	86.2	85.9
97	89.0	88.6	88.3	88.0	87.6	87.3	87.0	86.6	86.3	86.0
98	89.0	88.7	88.4	88.0	87.7	87.4	87.0	86.7	86.4	86.0
99	89.1	88.8	88.4	88.1	87.8	87.5	87.1	86.8	86.5	86.1
100	89.2	88.9	88.5	88.2	87.9	87.5	87.2	86.9	86.6	86.2



表 3b (续)

$t$ \ $t-t_w$	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0
58	80.5	80.0	79.6	79.2	78.7	78.3	77.9	77.4	77.0	76.6
59	80.7	80.2	79.8	79.4	78.9	78.5	78.1	77.7	77.2	76.8
60	80.9	80.4	80.0	79.6	79.1	78.7	78.3	77.9	77.4	77.0
61	81.0	80.6	80.2	79.8	79.3	78.9	78.5	78.1	77.7	77.2
62	81.2	80.8	80.4	80.0	79.5	79.1	78.7	78.3	77.9	77.5
63	81.4	81.0	80.6	80.1	79.7	79.3	78.9	78.5	78.1	77.7
64	81.6	81.1	80.7	80.3	79.9	79.5	79.1	78.7	78.3	77.9
65	81.7	81.3	80.9	80.5	80.1	79.7	79.3	78.9	78.5	78.1
66	81.9	81.5	81.1	80.7	80.3	79.9	79.5	79.1	78.7	78.3
67	82.0	81.6	81.2	80.8	80.4	80.0	79.6	79.2	78.8	78.4
68	82.2	81.8	81.4	81.0	80.6	80.2	79.8	79.4	79.0	78.6
69	82.4	82.0	81.6	81.2	80.8	80.4	80.0	79.6	79.2	78.8
70	82.5	82.1	81.7	81.3	80.9	80.5	80.1	79.8	79.4	79.0
71	82.6	82.3	81.9	81.5	81.1	80.7	80.3	79.9	79.5	79.2
72	82.8	82.4	82.0	81.6	81.2	80.8	80.5	80.1	79.7	79.3
73	82.9	82.5	82.2	81.8	81.4	81.0	80.6	80.2	79.9	79.5
74	83.1	82.7	82.3	81.9	81.5	81.2	80.8	80.4	80.0	79.7
75	83.2	82.8	82.4	82.1	81.7	81.3	80.9	80.6	80.2	79.8
76	83.3	82.9	82.6	82.2	81.8	81.4	81.1	80.7	80.3	80.0
77	83.5	83.1	82.7	82.3	82.0	81.6	81.2	80.9	80.5	80.1
78	83.6	83.2	82.8	82.5	82.1	81.7	81.4	81.0	80.6	80.3
79	83.7	83.3	83.0	82.6	82.2	81.9	81.5	81.1	80.8	80.4
80	83.8	83.5	83.1	82.7	82.4	82.0	81.6	81.3	80.9	80.6
81	83.9	83.6	83.2	82.9	82.5	82.1	81.8	81.4	81.1	80.7
82	84.1	83.7	83.3	83.0	82.6	82.3	81.9	81.5	81.2	80.8
83	84.2	83.8	83.5	83.1	82.7	82.4	82.0	81.7	81.3	81.0
84	84.3	83.9	83.6	83.2	82.9	82.5	82.2	81.8	81.5	81.1
85	84.4	84.0	83.7	83.3	83.0	82.6	82.3	81.9	81.6	81.2
86	84.5	84.2	83.8	83.5	83.1	82.8	82.4	82.1	81.7	81.4
87	84.6	84.3	83.9	83.6	83.2	82.9	82.5	82.2	81.9	81.5
88	84.7	84.4	84.0	83.7	83.3	83.0	82.7	82.3	82.0	81.6
89	84.8	84.5	84.1	83.8	83.5	83.1	82.8	82.4	82.1	81.8
90	84.9	84.6	84.3	83.9	83.6	83.2	82.9	82.6	82.2	81.9
91	85.0	84.7	84.4	84.0	83.7	83.3	83.0	82.7	82.3	82.0
92	85.1	84.8	84.5	84.1	83.8	83.5	83.1	82.8	82.5	82.1
93	85.2	84.9	84.6	84.2	83.9	83.6	83.2	82.9	82.6	82.2
94	85.3	85.0	84.7	84.3	84.0	83.7	83.3	83.0	82.7	82.4
95	85.4	85.1	84.8	84.4	84.1	83.8	83.5	83.1	82.8	82.5
96	85.5	85.2	84.9	84.5	84.2	83.9	83.6	83.2	82.9	82.6
97	85.6	85.3	85.0	84.6	84.3	84.0	83.7	83.3	83.0	82.7
98	85.7	85.4	85.1	84.7	84.4	84.1	83.8	83.5	83.1	82.8
99	85.8	85.5	85.2	84.8	84.5	84.2	83.9	83.6	83.2	82.9
100	85.9	85.6	85.3	84.9	84.6	84.3	84.0	83.7	83.3	83.0



表 3b (续)

$t$ \ $t-t_w$	5.2	5.4	5.6	5.8	6.0	6.2	6.4	6.6	6.8	7.0
58	75.7	74.9	74.0	73.2	72.4	71.6	70.8	70.0	69.2	68.4
59	76.0	75.1	74.3	73.5	72.7	71.8	71.0	70.2	69.5	68.7
60	76.2	75.4	74.5	73.7	72.9	72.1	71.3	70.5	69.7	69.0
61	76.4	75.6	74.8	74.0	73.2	72.4	71.6	70.8	70.0	69.3
62	76.6	75.8	75.0	74.2	73.4	72.6	71.9	71.1	70.3	69.5
63	76.9	76.0	75.2	74.5	73.7	72.9	72.1	71.3	70.6	69.8
64	77.1	76.3	75.5	74.7	73.9	73.1	72.4	71.6	70.8	70.1
65	77.3	76.5	75.7	74.9	74.1	73.4	72.6	71.8	71.1	70.3
66	77.5	76.7	75.9	75.1	74.4	73.6	72.8	72.1	71.3	70.6
67	77.7	76.9	76.1	75.3	74.6	73.8	73.1	72.3	71.6	70.8
68	77.9	77.1	76.3	75.5	74.8	74.0	73.3	72.6	71.8	71.1
69	78.0	77.3	76.5	75.8	75.0	74.3	73.5	72.8	72.1	71.3
70	78.2	77.5	76.7	76.0	75.2	74.5	73.7	73.0	72.3	71.6
71	78.4	77.6	76.9	76.1	75.4	74.7	73.9	73.2	72.5	71.8
72	78.6	77.8	77.1	76.3	75.6	74.9	74.2	73.4	72.7	72.0
73	78.7	78.0	77.3	76.5	75.8	75.1	74.4	73.6	72.9	72.2
74	78.9	78.2	77.4	76.7	76.0	75.3	74.6	73.8	73.1	72.4
75	79.1	78.3	77.6	76.9	76.2	75.5	74.7	74.0	73.3	72.7
76	79.2	78.5	77.8	77.1	76.4	75.6	74.9	74.2	73.6	72.9
77	79.4	78.7	78.0	77.2	76.5	75.8	75.1	74.4	73.7	73.1
78	79.5	78.8	78.1	77.4	76.7	76.0	75.3	74.6	73.9	73.3
79	79.7	79.0	78.3	77.6	76.9	76.2	75.5	74.8	74.1	73.5
80	79.8	79.1	78.4	77.7	77.0	76.4	75.7	75.0	74.3	73.6
81	80.0	79.3	78.6	77.9	77.2	76.5	75.8	75.2	74.5	73.8
82	80.1	79.4	78.7	78.1	77.4	76.7	76.0	75.3	74.7	74.0
83	80.3	79.6	78.9	78.2	77.5	76.9	76.2	75.5	74.9	74.2
84	80.4	79.7	79.0	78.4	77.7	77.0	76.4	75.7	75.0	74.4
85	80.6	79.9	79.2	78.5	77.8	77.2	76.5	75.9	75.2	74.6
86	80.7	80.0	79.3	78.7	78.0	77.3	76.7	76.0	75.4	74.7
87	80.8	80.2	79.5	78.8	78.2	77.5	76.8	76.2	75.5	74.9
88	81.0	80.3	79.6	79.0	78.3	77.6	77.0	76.4	75.7	75.1
89	81.1	80.4	79.8	79.1	78.4	77.8	77.2	76.5	75.9	75.2
90	81.2	80.6	79.9	79.2	78.6	77.9	77.3	76.7	76.0	75.4
91	81.3	80.7	80.0	79.4	78.7	78.1	77.5	76.8	76.2	75.6
92	81.5	80.8	80.2	79.5	78.9	78.2	77.6	77.0	76.3	75.7
93	81.6	80.9	80.3	79.6	79.0	78.4	77.7	77.1	76.5	75.9
94	81.7	81.1	80.4	79.8	79.1	78.5	77.9	77.3	76.6	76.0
95	81.8	81.2	80.5	79.9	79.3	78.7	78.0	77.4	76.8	76.2
96	81.9	81.3	80.7	80.0	79.4	78.8	78.2	77.6	76.9	76.3
97	82.1	81.4	80.8	80.2	79.5	78.9	78.3	77.7	77.1	76.5
98	82.2	81.5	80.9	80.3	79.7	79.1	78.4	77.8	77.2	76.6
99	82.3	81.7	81.0	80.4	79.8	79.2	78.6	78.0	77.4	76.8
100	82.4	81.8	81.2	80.5	79.9	79.3	78.7	78.1	77.5	76.9







表 3b (续)

$t$ \ $t-t_w$	9.2	9.4	9.6	9.8	10.0	10.2	10.4	10.6	10.8	11.0
58	60.0	59.3	58.6	57.8	57.1	56.4	55.7	55.0	54.3	53.7
59	60.4	59.7	59.0	58.2	57.5	56.8	56.2	55.5	54.8	54.1
60	60.8	60.0	59.3	58.6	57.9	57.2	56.6	55.9	55.2	54.5
61	61.1	60.4	59.7	59.0	58.3	57.6	57.0	56.3	55.6	54.9
62	61.5	60.8	60.1	59.4	58.7	58.0	57.3	56.7	56.0	55.3
63	61.8	61.1	60.4	59.7	59.1	58.4	57.7	57.1	56.4	55.7
64	62.1	61.5	60.8	60.1	59.4	58.8	58.1	57.4	56.8	56.1
65	62.5	61.8	61.1	60.4	59.8	59.1	58.4	57.8	57.1	56.5
66	62.8	62.1	61.4	60.8	60.1	59.4	58.8	58.1	57.5	56.9
67	63.1	62.4	61.8	61.1	60.4	59.8	59.1	58.5	57.8	57.2
68	63.4	62.7	62.1	61.4	60.8	60.1	59.5	58.8	58.2	57.6
69	63.7	63.0	62.4	61.7	61.1	60.4	59.8	59.2	58.5	57.9
70	64.0	63.3	62.7	62.0	61.4	60.7	60.1	59.5	58.8	58.2
71	64.3	63.6	63.0	62.3	61.7	61.0	60.4	59.8	59.2	58.5
72	64.5	63.9	63.3	62.6	62.0	61.3	60.7	60.1	59.5	58.9
73	64.8	64.2	63.5	62.9	62.3	61.6	61.0	60.4	59.8	59.2
74	65.1	64.4	63.8	63.2	62.5	61.9	61.3	60.7	60.1	59.5
75	65.3	64.7	64.1	63.4	62.8	62.2	61.6	61.0	60.4	59.8
76	65.6	65.0	64.3	63.7	63.1	62.5	61.9	61.3	60.7	60.1
77	65.8	65.2	64.6	64.0	63.4	62.7	62.1	61.5	60.9	60.3
78	66.1	65.5	64.8	64.2	63.6	63.0	62.4	61.8	61.2	60.6
79	66.3	65.7	65.1	64.5	63.9	63.3	62.7	62.1	61.5	60.9
80	66.6	66.0	65.3	64.7	64.1	63.5	62.9	62.3	61.7	61.2
81	66.8	66.2	65.6	65.0	64.4	63.8	63.2	62.6	62.0	61.4
82	67.0	66.4	65.8	65.2	64.6	64.0	63.4	62.8	62.3	61.7
83	67.3	66.6	66.0	65.4	64.9	64.3	63.7	63.1	62.5	61.9
84	67.5	66.9	66.3	65.7	65.1	64.5	63.9	63.3	62.8	62.2
85	67.7	67.1	66.5	65.9	65.3	64.7	64.2	63.6	63.0	62.4
86	67.9	67.3	66.7	66.1	65.5	65.0	64.4	63.8	63.2	62.7
87	68.1	67.5	66.9	66.4	65.8	65.2	64.6	64.1	63.5	62.9
88	68.3	67.7	67.2	66.6	66.0	65.4	64.8	64.3	63.7	63.2
89	68.5	67.9	67.4	66.8	66.2	65.6	65.1	64.5	63.9	63.4
90	68.7	68.1	67.6	67.0	66.4	65.9	65.3	64.7	64.2	63.6
91	68.9	68.4	67.8	67.2	66.6	66.1	65.5	65.0	64.4	63.8
92	69.1	68.6	68.0	67.4	66.8	66.3	65.7	65.2	64.6	64.1
93	69.3	68.7	68.2	67.6	67.0	66.5	65.9	65.4	64.8	64.3
94	69.5	68.9	68.4	67.8	67.3	66.7	66.1	65.6	65.0	64.5
95	69.7	69.1	68.6	68.0	67.5	66.9	66.3	65.8	65.3	64.7
96	69.9	69.3	68.8	68.2	67.6	67.1	66.5	66.0	65.5	64.9
97	70.1	69.5	68.9	68.4	67.8	67.3	66.7	66.2	65.7	65.1
98	70.2	69.7	69.1	68.6	68.0	67.5	66.9	66.4	65.9	65.3
99	70.4	69.9	69.3	68.8	68.2	67.7	67.1	66.6	66.1	65.5
100	70.6	70.1	69.5	69.0	68.4	67.9	67.3	66.8	66.3	65.7













表 3c (续)

$t-t_w$	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0
15	79.1	78.1	77.2	76.2	75.3	74.3	73.4	72.5	71.5	70.6
16	79.7	78.8	77.8	76.9	76.0	75.1	74.2	73.3	72.3	71.4
17	80.3	79.4	78.5	77.6	76.7	75.8	74.9	74.0	73.1	72.2
18	80.8	79.9	79.0	78.2	77.3	76.4	75.6	74.7	73.8	73.0
19	81.3	80.4	79.6	78.7	77.9	77.0	76.2	75.4	74.5	73.7
20	81.8	80.9	80.1	79.3	78.4	77.6	76.8	76.0	75.2	74.4
21	82.2	81.4	80.6	79.8	79.0	78.2	77.4	76.6	75.8	75.0
22	82.6	81.8	81.0	80.3	79.5	78.7	77.9	77.1	76.4	75.6
23	83.0	82.2	81.5	80.7	79.9	79.2	78.4	77.7	76.9	76.1
24	83.4	82.6	81.9	81.1	80.4	79.6	78.9	78.2	77.4	76.7
25	83.8	83.0	82.3	81.5	80.8	80.1	79.3	78.6	77.9	77.2
26	84.1	83.4	82.6	81.9	81.2	80.5	79.8	79.1	78.4	77.7
27	84.4	83.7	83.0	82.3	81.6	80.9	80.2	79.5	78.8	78.1
28	84.7	84.0	83.3	82.6	81.9	81.3	80.6	79.9	79.2	78.5
29	85.0	84.3	83.6	83.0	82.3	81.6	80.9	80.3	79.6	78.9
30	85.3	84.6	83.9	83.3	82.6	82.0	81.3	80.6	80.0	79.3
31	85.5	84.9	84.2	83.6	82.9	82.3	81.6	81.0	80.3	79.7
32	85.8	85.1	84.5	83.9	83.2	82.6	81.9	81.3	80.7	80.1
33	86.0	85.4	84.8	84.1	83.5	82.9	82.3	81.6	81.0	80.4
34	86.3	85.6	85.0	84.4	83.8	83.2	82.5	81.9	81.3	80.7
35	86.5	85.9	85.3	84.6	84.0	83.4	82.8	82.2	81.6	81.0
36	86.7	86.1	85.5	84.9	84.3	83.7	83.1	82.5	81.9	81.3
37	86.9	86.3	85.7	85.1	84.5	83.9	83.3	82.8	82.2	81.6
38	87.1	86.5	85.9	85.3	84.7	84.2	83.6	83.0	82.4	81.9
39	87.3	86.7	86.1	85.5	85.0	84.4	83.8	83.3	82.7	82.1
40	87.4	86.9	86.3	85.7	85.2	84.6	84.0	83.5	82.9	82.4
41	87.6	87.1	86.5	85.9	85.4	84.8	84.3	83.7	83.2	82.6
42	87.8	87.2	86.7	86.1	85.6	85.0	84.5	83.9	83.4	82.8
43	87.9	87.4	86.8	86.3	85.8	85.2	84.7	84.1	83.6	83.1
44	88.1	87.6	87.0	86.5	85.9	85.4	84.9	84.3	83.8	83.3
45	88.2	87.7	87.2	86.6	86.1	85.6	85.1	84.5	84.0	83.5
46	88.4	87.9	87.3	86.8	86.3	85.8	85.2	84.7	84.2	83.7
47	88.5	88.0	87.5	87.0	86.4	85.9	85.4	84.9	84.4	83.9
48	88.7	88.1	87.6	87.1	86.6	86.1	85.6	85.1	84.6	84.1
49	88.8	88.3	87.8	87.3	86.7	86.2	85.7	85.2	84.7	84.2
50	88.9	88.4	87.9	87.4	86.9	86.4	85.9	85.4	84.9	84.4
51	89.0	88.5	88.0	87.5	87.0	86.5	86.1	85.6	85.1	84.6
52	89.1	88.7	88.2	87.7	87.2	86.7	86.2	85.7	85.2	84.8
53	89.3	88.8	88.3	87.8	87.3	86.8	86.3	85.9	85.4	84.9
54	89.4	88.9	88.4	87.9	87.4	87.0	86.5	86.0	85.5	85.1
55	89.5	89.0	88.5	88.0	87.6	87.1	86.6	86.2	85.7	85.2
56	89.6	89.1	88.6	88.2	87.7	87.2	86.8	86.3	85.8	85.4
57	89.7	89.2	88.7	88.3	87.8	87.3	86.9	86.4	86.0	85.5



表 3c (续)

$t$ \ $t-t_w$	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0
15	69.7	68.7	67.8	66.9	66.0	65.1	64.1	63.2	62.3	61.4
16	70.5	69.6	68.7	67.9	67.0	66.1	65.2	64.3	63.4	62.6
17	71.4	70.5	69.6	68.8	67.9	67.0	66.2	65.3	64.5	63.6
18	72.1	71.3	70.4	69.6	68.8	67.9	67.1	66.3	65.4	64.6
19	72.9	72.0	71.2	70.4	69.6	68.8	68.0	67.1	66.3	65.5
20	73.6	72.8	72.0	71.2	70.4	69.6	68.8	68.0	67.2	66.4
21	74.2	73.4	72.6	71.9	71.1	70.3	69.5	68.8	68.0	67.3
22	74.8	74.1	73.3	72.5	71.8	71.0	70.3	69.5	68.8	68.0
23	75.4	74.7	73.9	73.2	72.4	71.7	71.0	70.2	69.5	68.8
24	75.9	75.2	74.5	73.8	73.0	72.3	71.6	70.9	70.2	69.5
25	76.5	75.8	75.0	74.3	73.6	72.9	72.2	71.5	70.8	70.1
26	77.0	76.3	75.6	74.9	74.2	73.5	72.8	72.1	71.4	70.8
27	77.4	76.7	76.1	75.4	74.7	74.0	73.4	72.7	72.0	71.4
28	77.9	77.2	76.5	75.9	75.2	74.5	73.9	73.2	72.6	71.9
29	78.3	77.6	77.0	76.3	75.7	75.0	74.4	73.7	73.1	72.5
30	78.7	78.0	77.4	76.8	76.1	75.5	74.9	74.2	73.6	73.0
31	79.1	78.4	77.8	77.2	76.5	75.9	75.3	74.7	74.1	73.5
32	79.4	78.8	78.2	77.6	77.0	76.3	75.7	75.1	74.5	73.9
33	79.8	79.2	78.6	78.0	77.3	76.7	76.1	75.5	74.9	74.4
34	80.1	79.5	78.9	78.3	77.7	77.1	76.5	75.9	75.4	74.8
35	80.4	79.8	79.2	78.7	78.1	77.5	76.9	76.3	75.8	75.2
36	80.7	80.1	79.6	79.0	78.4	77.8	77.3	76.7	76.1	75.6
37	81.0	80.4	79.9	79.3	78.7	78.2	77.6	77.0	76.5	75.9
38	81.3	80.7	80.2	79.6	79.1	78.5	77.9	77.4	76.8	76.3
39	81.6	81.0	80.5	79.9	79.4	78.8	78.3	77.7	77.2	76.6
40	81.8	81.3	80.7	80.2	79.6	79.1	78.6	78.0	77.5	77.0
41	82.1	81.5	81.0	80.5	79.9	79.4	78.8	78.3	77.8	77.3
42	82.3	81.8	81.2	80.7	80.2	79.7	79.1	78.6	78.1	77.6
43	82.5	82.0	81.5	81.0	80.4	79.9	79.4	78.9	78.4	77.9
44	82.8	82.2	81.7	81.2	80.7	80.2	79.7	79.1	78.6	78.1
45	83.0	82.5	81.9	81.4	80.9	80.4	79.9	79.4	78.9	78.4
46	83.2	82.7	82.2	81.7	81.2	80.6	80.2	79.7	79.2	78.7
47	83.4	82.9	82.4	81.9	81.4	80.9	80.4	79.9	79.4	78.9
48	83.6	83.1	82.6	82.1	81.6	81.1	80.6	80.1	79.6	79.2
49	83.8	83.3	82.8	82.3	81.8	81.3	80.8	80.3	79.9	79.4
50	83.9	83.4	83.0	82.5	82.0	81.5	81.0	80.6	80.1	79.6
51	84.1	83.6	83.1	82.7	82.2	81.7	81.2	80.8	80.3	79.8
52	84.3	83.8	83.3	82.9	82.4	81.9	81.4	81.0	80.5	80.1
53	84.4	84.0	83.5	83.0	82.6	82.1	81.6	81.2	80.7	80.3
54	84.6	84.1	83.7	83.2	82.7	82.3	81.8	81.4	80.9	80.5
55	84.8	84.3	83.8	83.4	82.9	82.5	82.0	81.6	81.1	80.7
56	84.9	84.4	84.0	83.5	83.1	82.6	82.2	81.7	81.3	80.8
57	85.1	84.6	84.1	83.7	83.2	82.8	82.4	81.9	81.5	81.0



表 3c (续)

$t$	$t-t_w$	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0
15		60.5	59.6	58.7	57.9	57.0	56.1	55.2	54.3	53.5	52.6
16		61.7	60.8	60.0	59.1	58.2	57.4	56.5	55.7	54.8	54.0
17		62.8	61.9	61.1	60.2	59.4	58.6	57.8	56.9	56.1	55.3
18		63.8	63.0	62.1	61.3	60.5	59.7	58.9	58.1	57.3	56.5
19		64.7	63.9	63.2	62.4	61.6	60.8	60.0	59.2	58.4	57.7
20		65.6	64.9	64.1	63.3	62.6	61.8	61.0	60.3	59.5	58.8
21		66.5	65.7	65.0	64.2	63.5	62.7	62.0	61.3	60.5	59.8
22		67.3	66.6	65.8	65.1	64.4	63.6	62.9	62.2	61.5	60.8
23		68.1	67.3	66.6	65.9	65.2	64.5	63.8	63.1	62.4	61.7
24		68.8	68.1	67.4	66.7	66.0	65.3	64.6	63.9	63.2	62.5
25		69.4	68.8	68.1	67.4	66.7	66.0	65.4	64.7	64.0	63.3
26		70.1	69.4	68.7	68.1	67.4	66.7	66.1	65.4	64.8	64.1
27		70.7	70.0	69.4	68.7	68.1	67.4	66.8	66.1	65.5	64.9
28		71.3	70.6	70.0	69.3	68.7	68.1	67.4	66.8	66.2	65.6
29		71.8	71.2	70.6	69.9	69.3	68.7	68.1	67.4	66.8	66.2
30		72.3	71.7	71.1	70.5	69.9	69.3	68.7	68.0	67.4	66.8
31		72.8	72.2	71.6	71.0	70.4	69.8	69.2	68.6	68.0	67.4
32		73.3	72.7	72.1	71.5	70.9	70.3	69.8	69.2	68.6	68.0
33		73.8	73.2	72.6	72.0	71.4	70.8	70.3	69.7	69.1	68.5
34		74.2	73.6	73.0	72.5	71.9	71.3	70.8	70.2	69.6	69.1
35		74.6	74.0	73.5	72.9	72.3	71.8	71.2	70.7	70.1	69.6
36		75.0	74.4	73.9	73.3	72.8	72.2	71.7	71.1	70.6	70.0
37		75.4	74.8	74.3	73.7	73.2	72.6	72.1	71.6	71.0	70.5
38		75.7	75.2	74.7	74.1	73.6	73.0	72.5	72.0	71.4	70.9
39		76.1	75.6	75.0	74.5	74.0	73.4	72.9	72.4	71.9	71.3
40		76.4	75.9	75.4	74.8	74.3	73.8	73.3	72.8	72.2	71.7
41		76.7	76.2	75.7	75.2	74.7	74.2	73.6	73.1	72.6	72.1
42		77.0	76.5	76.0	75.5	75.0	74.5	74.0	73.5	73.0	72.5
43		77.3	76.8	76.3	75.8	75.3	74.8	74.3	73.8	73.3	72.8
44		77.6	77.1	76.6	76.1	75.6	75.1	74.6	74.2	73.7	73.2
45		77.9	77.4	76.9	76.4	75.9	75.4	75.0	74.5	74.0	73.5
46		78.2	77.7	77.2	76.7	76.2	75.7	75.3	74.8	74.3	73.8
47		78.4	77.9	77.5	77.0	76.5	76.0	75.6	75.1	74.6	74.1
48		78.7	78.2	77.7	77.2	76.8	76.3	75.8	75.4	74.9	74.4
49		78.9	78.4	78.0	77.5	77.0	76.6	76.1	75.6	75.2	74.7
50		79.1	78.7	78.2	77.7	77.3	76.8	76.4	75.9	75.5	75.0
51		79.4	78.9	78.4	78.0	77.5	77.1	76.6	76.2	75.7	75.3
52		79.6	79.1	78.7	78.2	77.8	77.3	76.9	76.4	76.0	75.5
53		79.8	79.3	78.9	78.4	78.0	77.6	77.1	76.7	76.2	75.8
54		80.0	79.6	79.1	78.7	78.2	77.8	77.3	76.9	76.5	76.0
55		80.2	79.8	79.3	78.9	78.4	78.0	77.6	77.1	76.7	76.3
56		80.4	80.0	79.5	79.1	78.6	78.2	77.8	77.4	76.9	76.5
57		80.6	80.2	79.7	79.3	78.9	78.4	78.0	77.6	77.1	76.7





表 3c (续)

$t$ \ $t-t_w$	5.2	5.4	5.6	5.8	6.0	6.2	6.4	6.6	6.8	7.0
58	76.1	75.3	74.5	73.6	72.8	72.0	71.2	70.4	69.6	68.9
59	76.3	75.5	74.7	73.9	73.1	72.3	71.5	70.7	69.9	69.2
60	76.5	75.7	74.9	74.1	73.3	72.5	71.7	71.0	70.2	69.4
61	76.8	75.9	75.1	74.3	73.6	72.8	72.0	71.2	70.5	69.7
62	77.0	76.2	75.4	74.6	73.8	73.0	72.2	71.5	70.7	70.0
63	77.2	76.4	75.6	74.8	74.0	73.2	72.5	71.7	71.0	70.2
64	77.4	76.6	75.8	75.0	74.2	73.5	72.7	72.0	71.2	70.5
65	77.5	76.8	76.0	75.2	74.5	73.7	72.9	72.2	71.4	70.7
66	77.7	77.0	76.2	75.4	74.7	73.9	73.2	72.4	71.7	71.0
67	77.9	77.1	76.4	75.6	74.9	74.1	73.4	72.6	71.9	71.2
68	78.1	77.3	76.6	75.8	75.1	74.3	73.6	72.9	72.1	71.4
69	78.3	77.5	76.8	76.0	75.3	74.5	73.8	73.1	72.4	71.6
70	78.4	77.7	76.9	76.2	75.5	74.7	74.0	73.3	72.6	71.9
71	78.6	77.9	77.1	76.4	75.7	74.9	74.2	73.5	72.8	72.1
72	78.8	78.0	77.3	76.6	75.8	75.1	74.4	73.7	73.0	72.3
73	78.9	78.2	77.5	76.7	76.0	75.3	74.6	73.9	73.2	72.5
74	79.1	78.4	77.6	76.9	76.2	75.5	74.8	74.1	73.4	72.7
75	79.3	78.5	77.8	77.1	76.4	75.7	75.0	74.3	73.6	72.9
76	79.4	78.7	78.0	77.3	76.6	75.8	75.2	74.5	73.8	73.1
77	79.6	78.8	78.1	77.4	76.7	76.0	75.3	74.6	74.0	73.3
78	79.7	79.0	78.3	77.6	76.9	76.2	75.5	74.8	74.1	73.5
79	79.8	79.1	78.4	77.7	77.1	76.4	75.7	75.0	74.3	73.7
80	80.0	79.3	78.6	77.9	77.2	76.5	75.9	75.2	74.5	73.8
81	80.1	79.4	78.7	78.1	77.4	76.7	76.0	75.4	74.7	74.0
82	80.3	79.6	78.9	78.2	77.5	76.9	76.2	75.5	74.9	74.2
83	80.4	79.7	79.0	78.4	77.7	77.0	76.3	75.7	75.0	74.4
84	80.5	79.9	79.2	78.5	77.8	77.2	76.5	75.9	75.2	74.6
85	80.7	80.0	79.3	78.7	78.0	77.3	76.7	76.0	75.4	74.7
86	80.8	80.1	79.5	78.8	78.1	77.5	76.8	76.2	75.5	74.9
87	80.9	80.3	79.6	78.9	78.3	77.6	77.0	76.3	75.7	75.1
88	81.1	80.4	79.7	79.1	78.4	77.8	77.1	76.5	75.8	75.2
89	81.2	80.5	79.9	79.2	78.6	77.9	77.3	76.6	76.0	75.4
90	81.3	80.7	80.0	79.4	78.7	78.1	77.4	76.8	76.2	75.5
91	81.4	80.8	80.1	79.5	78.8	78.2	77.6	76.9	76.3	75.7
92	81.6	80.9	80.3	79.6	79.0	78.3	77.7	77.1	76.5	75.8
93	81.7	81.0	80.4	79.7	79.1	78.5	77.9	77.2	76.6	76.0
94	81.8	81.2	80.5	79.9	79.2	78.6	78.0	77.4	76.8	76.1
95	81.9	81.3	80.6	80.0	79.4	78.8	78.1	77.5	76.9	76.3
96	82.0	81.4	80.8	80.1	79.5	78.9	78.3	77.7	77.0	76.4
97	82.1	81.5	80.9	80.3	79.6	79.0	78.4	77.8	77.2	76.6
98	82.3	81.6	81.0	80.4	79.8	79.1	78.5	77.9	77.3	76.7
99	82.4	81.7	81.1	80.5	79.9	79.3	78.7	78.1	77.5	76.9
100	82.5	81.8	81.2	80.6	80.0	79.4	78.8	78.2	77.6	77.0







表 3c (续)

$t$ \ $t-t_w$	9.2	9.4	9.6	9.8	10.0	10.2	10.4	10.6	10.8	11.0
58	60.7	60.0	59.3	58.6	57.9	57.2	56.5	55.8	55.1	54.5
59	61.0	60.3	59.6	58.9	58.2	57.6	56.9	56.2	55.5	54.9
60	61.4	60.7	60.0	59.3	58.6	57.9	57.3	56.6	55.9	55.3
61	61.7	61.0	60.3	59.6	59.0	58.3	57.6	57.0	56.3	55.6
62	62.0	61.3	60.7	60.0	59.3	58.6	58.0	57.3	56.7	56.0
63	62.3	61.7	61.0	60.3	59.6	59.0	58.3	57.7	57.0	56.4
64	62.7	62.0	61.3	60.6	60.0	59.3	58.7	58.0	57.4	56.7
65	63.0	62.3	61.6	61.0	60.3	59.6	59.0	58.4	57.7	57.1
66	63.3	62.6	61.9	61.3	60.6	60.0	59.3	58.7	58.0	57.4
67	63.5	62.9	62.2	61.6	60.9	60.3	59.6	59.0	58.4	57.7
68	63.8	63.2	62.5	61.9	61.2	60.6	59.9	59.3	58.7	58.1
69	64.1	63.5	62.8	62.2	61.5	60.9	60.2	59.6	59.0	58.4
70	64.4	63.7	63.1	62.4	61.8	61.2	60.5	59.9	59.3	58.7
71	64.6	64.0	63.4	62.7	62.1	61.5	60.8	60.2	59.6	59.0
72	64.9	64.3	63.6	63.0	62.4	61.7	61.1	60.5	59.9	59.3
73	65.2	64.5	63.9	63.3	62.6	62.0	61.4	60.8	60.2	59.6
74	65.4	64.8	64.1	63.5	62.9	62.3	61.7	61.1	60.5	59.9
75	65.7	65.0	64.4	63.8	63.2	62.6	61.9	61.3	60.7	60.1
76	65.9	65.3	64.7	64.0	63.4	62.8	62.2	61.6	61.0	60.4
77	66.1	65.5	64.9	64.3	63.7	63.1	62.5	61.9	61.3	60.7
78	66.4	65.8	65.1	64.5	63.9	63.3	62.7	62.1	61.5	61.0
79	66.6	66.0	65.4	64.8	64.2	63.6	63.0	62.4	61.8	61.2
80	66.8	66.2	65.6	65.0	64.4	63.8	63.2	62.6	62.0	61.5
81	67.0	66.4	65.8	65.2	64.6	64.0	63.5	62.9	62.3	61.7
82	67.3	66.7	66.1	65.5	64.9	64.3	63.7	63.1	62.5	62.0
83	67.5	66.9	66.3	65.7	65.1	64.5	63.9	63.4	62.8	62.2
84	67.7	67.1	66.5	65.9	65.3	64.7	64.2	63.6	63.0	62.5
85	67.9	67.3	66.7	66.1	65.5	65.0	64.4	63.8	63.3	62.7
86	68.1	67.5	66.9	66.3	65.8	65.2	64.6	64.1	63.5	62.9
87	68.3	67.7	67.1	66.6	66.0	65.4	64.8	64.3	63.7	63.2
88	68.5	67.9	67.3	66.8	66.2	65.6	65.1	64.5	63.9	63.4
89	68.7	68.1	67.6	67.0	66.4	65.8	65.3	64.7	64.2	63.6
90	68.9	68.3	67.8	67.2	66.6	66.0	65.5	64.9	64.4	63.8
91	69.1	68.5	68.0	67.4	66.8	66.3	65.7	65.1	64.6	64.0
92	69.3	68.7	68.1	67.6	67.0	66.5	65.9	65.4	64.8	64.3
93	69.5	68.9	68.3	67.8	67.2	66.7	66.1	65.6	65.0	64.5
94	69.7	69.1	68.5	68.0	67.4	66.9	66.3	65.8	65.2	64.7
95	69.8	69.3	68.7	68.2	67.6	67.1	66.5	66.0	65.4	64.9
96	70.0	69.5	68.9	68.3	67.8	67.3	66.7	66.2	65.6	65.1
97	70.2	69.6	69.1	68.5	68.0	67.4	66.9	66.4	65.8	65.3
98	70.4	69.8	69.3	68.7	68.2	67.6	67.1	66.6	66.0	65.5
99	70.6	70.0	69.4	68.9	68.4	67.8	67.3	66.8	66.2	65.7
100	70.7	70.2	69.6	69.1	68.5	68.0	67.5	66.9	66.4	65.9



表 3c (续)

$t$ \ $t-t_w$	11.5	12.0	12.5	13.5	13.5	14.0	14.5	15.0	15.5	16.0
58	52.8	51.2	49.6	48.1	46.5	45.0	43.6	42.1	40.7	39.3
59	53.2	51.6	50.1	48.5	47.0	45.5	44.1	42.6	41.2	39.9
60	53.6	52.0	50.5	49.0	47.5	46.0	44.5	43.1	41.7	40.4
61	54.0	52.5	50.9	49.4	47.9	46.4	45.0	43.6	42.2	40.9
62	54.4	52.9	51.3	49.8	48.3	46.9	45.4	44.1	42.7	41.3
63	54.8	53.2	51.7	50.2	48.7	47.3	45.9	44.5	43.1	41.8
64	55.2	53.6	52.1	50.6	49.1	47.7	46.3	44.9	43.6	42.3
65	55.5	54.0	52.5	51.0	49.5	48.1	46.7	45.4	44.0	42.7
66	55.9	54.3	52.8	51.4	49.9	48.5	47.1	45.8	44.4	43.1
67	56.2	54.7	53.2	51.7	50.3	48.9	47.5	46.2	44.8	43.5
68	56.5	55.0	53.6	52.1	50.7	49.3	47.9	46.6	45.2	44.0
69	56.9	55.4	53.9	52.5	51.0	49.7	48.3	47.0	45.6	44.4
70	57.2	55.7	54.2	52.8	51.4	50.0	48.7	47.3	46.0	44.7
71	57.5	56.0	54.6	53.1	51.7	50.4	49.0	47.7	46.4	45.1
72	57.8	56.3	54.9	53.5	52.1	50.7	49.4	48.1	46.8	45.5
73	58.1	56.6	55.2	53.8	52.4	51.1	49.7	48.4	47.1	45.9
74	58.4	56.9	55.5	54.1	52.7	51.4	50.1	48.8	47.5	46.2
75	58.7	57.2	55.8	54.4	53.1	51.7	50.4	49.1	47.8	46.6
76	59.0	57.5	56.1	54.7	53.4	52.0	50.7	49.4	48.2	46.9
77	59.2	57.8	56.4	55.0	53.7	52.4	51.0	49.8	48.5	47.3
78	59.5	58.1	56.7	55.3	54.0	52.7	51.4	50.1	48.8	47.6
79	59.8	58.4	57.0	55.6	54.3	53.0	51.7	50.4	49.2	47.9
80	60.0	58.6	57.3	55.9	54.6	53.3	52.0	50.7	49.5	48.3
81	60.3	58.9	57.5	56.2	54.9	53.6	52.3	51.0	49.8	48.6
82	60.6	59.2	57.8	56.5	55.1	53.8	52.6	51.3	50.1	48.9
83	60.8	59.4	58.1	56.7	55.4	54.1	52.9	51.6	50.4	49.2
84	61.1	59.7	58.3	57.0	55.7	54.4	53.2	51.9	50.7	49.5
85	61.3	59.9	58.6	57.3	56.0	54.7	53.4	52.2	51.0	49.8
86	61.5	60.2	58.8	57.5	56.2	55.0	53.7	52.5	51.3	50.1
87	61.8	60.4	59.1	57.8	56.5	55.2	54.0	52.8	51.6	50.4
88	62.0	60.7	59.3	58.0	56.8	55.5	54.3	53.0	51.8	50.7
89	62.2	60.9	59.6	58.3	57.0	55.8	54.5	53.3	52.1	50.9
90	62.5	61.1	59.8	58.5	57.3	56.0	54.8	53.6	52.4	51.2
91	62.7	61.4	60.1	58.8	57.5	56.3	55.0	53.8	52.7	51.5
92	62.9	61.6	60.3	59.0	57.8	56.5	55.3	54.1	52.9	51.8
93	63.1	61.8	60.5	59.2	58.0	56.8	55.5	54.4	53.2	52.0
94	63.4	62.0	60.8	59.5	58.2	57.0	55.8	54.6	53.4	52.3
95	63.6	62.3	61.0	59.7	58.5	57.2	56.0	54.9	53.7	52.6
96	63.8	62.5	61.2	59.9	58.7	57.5	56.3	55.1	53.9	52.8
97	64.0	62.7	61.4	60.2	58.9	57.7	56.5	55.4	54.2	53.1
98	64.2	62.9	61.6	60.4	59.2	58.0	56.8	55.6	54.4	53.3
99	64.4	63.1	61.9	60.6	59.4	58.2	57.0	55.8	54.7	53.6
100	64.6	63.3	62.1	60.8	59.6	58.4	57.2	56.1	54.9	53.8

表 4a 球状水银温度表相对湿度查算表  
 $P=90 \text{ kPa}, A=0.857 \times 10^{-3} \text{ } ^\circ\text{C}^{-1} (0.4 \text{ m/s})$

$t$ \ $t-t_w$	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
15	100.0	98.9	97.8	96.7	95.6	94.6	93.5	92.4	91.3	90.3	89.2
16	100.0	98.9	97.9	96.8	95.8	94.7	93.7	92.6	91.6	90.6	89.5
17	100.0	99.0	97.9	96.9	95.9	94.9	93.9	92.9	91.9	90.8	89.9
18	100.0	99.0	98.0	97.0	96.0	95.0	94.0	93.1	92.1	91.1	90.1
19	100.0	99.0	98.1	97.1	96.1	95.2	94.2	93.3	92.3	91.4	90.4
20	100.0	99.1	98.1	97.2	96.2	95.3	94.4	93.4	92.5	91.6	90.7
21	100.0	99.1	98.2	97.2	96.3	95.4	94.5	93.6	92.7	91.8	90.9
22	100.0	99.1	98.2	97.3	96.4	95.5	94.6	93.8	92.9	92.0	91.1
23	100.0	99.1	98.2	97.4	96.5	95.6	94.8	93.9	93.1	92.2	91.4
24	100.0	99.1	98.3	97.4	96.6	95.7	94.9	94.1	93.2	92.4	91.6
25	100.0	99.2	98.3	97.5	96.7	95.8	95.0	94.2	93.4	92.6	91.8
26	100.0	99.2	98.4	97.6	96.7	95.9	95.1	94.3	93.5	92.7	91.9
27	100.0	99.2	98.4	97.6	96.8	96.0	95.2	94.4	93.7	92.9	92.1
28	100.0	99.2	98.4	97.7	96.9	96.1	95.3	94.6	93.8	93.0	92.3
29	100.0	99.2	98.5	97.7	96.9	96.2	95.4	94.7	93.9	93.2	92.4
30	100.0	99.2	98.5	97.7	97.0	96.3	95.5	94.8	94.0	93.3	92.6
31	100.0	99.3	98.5	97.8	97.1	96.3	95.6	94.9	94.2	93.4	92.7
32	100.0	99.3	98.6	97.8	97.1	96.4	95.7	95.0	94.3	93.6	92.9
33	100.0	99.3	98.6	97.9	97.2	96.5	95.8	95.1	94.4	93.7	93.0
34	100.0	99.3	98.6	97.9	97.2	96.5	95.8	95.2	94.5	93.8	93.1
35	100.0	99.3	98.6	97.9	97.3	96.6	95.9	95.2	94.6	93.9	93.2
36	100.0	99.3	98.6	98.0	97.3	96.6	96.0	95.3	94.7	94.0	93.3
37	100.0	99.3	98.7	98.0	97.3	96.7	96.0	95.4	94.7	94.1	93.4
38	100.0	99.3	98.7	98.0	97.4	96.7	96.1	95.5	94.8	94.2	93.6
39	100.0	99.4	98.7	98.1	97.4	96.8	96.2	95.5	94.9	94.3	93.6
40	100.0	99.4	98.7	98.1	97.5	96.8	96.2	95.6	95.0	94.4	93.7
41	100.0	99.4	98.7	98.1	97.5	96.9	96.3	95.7	95.0	94.4	93.8
42	100.0	99.4	98.8	98.2	97.5	96.9	96.3	95.7	95.1	94.5	93.9
43	100.0	99.4	98.8	98.2	97.6	97.0	96.4	95.8	95.2	94.6	94.0
44	100.0	99.4	98.8	98.2	97.6	97.0	96.4	95.8	95.3	94.7	94.1
45	100.0	99.4	98.8	98.2	97.6	97.1	96.5	95.9	95.3	94.7	94.2
46	100.0	99.4	98.8	98.2	97.7	97.1	96.5	95.9	95.4	94.8	94.2
47	100.0	99.4	98.8	98.3	97.7	97.1	96.6	96.0	95.4	94.9	94.3
48	100.0	99.4	98.9	98.3	97.7	97.2	96.6	96.0	95.5	94.9	94.4
49	100.0	99.4	98.9	98.3	97.8	97.2	96.6	96.1	95.5	95.0	94.5
50	100.0	99.4	98.9	98.3	97.8	97.2	96.7	96.1	95.6	95.1	94.5
51	100.0	99.4	98.9	98.4	97.8	97.3	96.7	96.2	95.6	95.1	94.6
52	100.0	99.5	98.9	98.4	97.8	97.3	96.8	96.2	95.7	95.2	94.6
53	100.0	99.5	98.9	98.4	97.9	97.3	96.8	96.3	95.7	95.2	94.7
54	100.0	99.5	98.9	98.4	97.9	97.4	96.8	96.3	95.8	95.3	94.8
55	100.0	99.5	98.9	98.4	97.9	97.4	96.9	96.4	95.8	95.3	94.8
56	100.0	99.5	99.0	98.4	97.9	97.4	96.9	96.4	95.9	95.4	94.9
57	100.0	99.5	99.0	98.5	97.9	97.4	96.9	96.4	95.9	95.4	94.9



表 4a<sub>1</sub> (续)

$t$ \ $t-t_w$	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
15	88.2	87.1	86.0	85.0	84.0	82.9	81.9	80.8	79.8	78.8
16	88.5	87.5	86.5	85.5	84.4	83.4	82.4	81.4	80.4	79.4
17	88.9	87.9	86.9	85.9	84.9	83.9	82.9	82.0	81.0	80.0
18	89.2	88.2	87.2	86.3	85.3	84.4	83.4	82.5	81.6	80.6
19	89.5	88.5	87.6	86.7	85.7	84.8	83.9	83.0	82.1	81.2
20	89.8	88.8	87.9	87.0	86.1	85.2	84.3	83.4	82.5	81.7
21	90.0	89.1	88.2	87.4	86.5	85.6	84.7	83.9	83.0	82.1
22	90.3	89.4	88.5	87.7	86.8	86.0	85.1	84.3	83.4	82.6
23	90.5	89.7	88.8	88.0	87.2	86.3	85.5	84.7	83.8	83.0
24	90.7	89.9	89.1	88.3	87.5	86.6	85.8	85.0	84.2	83.4
25	90.9	90.1	89.3	88.5	87.7	87.0	86.2	85.4	84.6	83.8
26	91.1	90.4	89.6	88.8	88.0	87.2	86.5	85.7	84.9	84.2
27	91.3	90.6	89.8	89.0	88.3	87.5	86.8	86.0	85.3	84.5
28	91.5	90.8	90.0	89.3	88.5	87.8	87.0	86.3	85.6	84.8
29	91.7	91.0	90.2	89.5	88.8	88.0	87.3	86.6	85.9	85.1
30	91.9	91.1	90.4	89.7	89.0	88.3	87.6	86.8	86.1	85.4
31	92.0	91.3	90.6	89.9	89.2	88.5	87.8	87.1	86.4	85.7
32	92.2	91.5	90.8	90.1	89.4	88.7	88.0	87.3	86.7	86.0
33	92.3	91.6	90.9	90.3	89.6	88.9	88.2	87.6	86.9	86.2
34	92.4	91.8	91.1	90.4	89.8	89.1	88.4	87.8	87.1	86.5
35	92.6	91.9	91.2	90.6	89.9	89.3	88.6	88.0	87.4	86.7
36	92.7	92.0	91.4	90.7	90.1	89.5	88.8	88.2	87.6	86.9
37	92.8	92.2	91.5	90.9	90.3	89.6	89.0	88.4	87.8	87.1
38	92.9	92.3	91.7	91.0	90.4	89.8	89.2	88.6	88.0	87.3
39	93.0	92.4	91.8	91.2	90.6	90.0	89.3	88.7	88.1	87.5
40	93.1	92.5	91.9	91.3	90.7	90.1	89.5	88.9	88.3	87.7
41	93.2	92.6	92.0	91.4	90.8	90.2	89.7	89.1	88.5	87.9
42	93.3	92.7	92.1	91.6	91.0	90.4	89.8	89.2	88.6	88.1
43	93.4	92.8	92.3	91.7	91.1	90.5	89.9	89.4	88.8	88.2
44	93.5	92.9	92.4	91.8	91.2	90.6	90.1	89.5	89.0	88.4
45	93.6	93.0	92.5	91.9	91.3	90.8	90.2	89.7	89.1	88.6
46	93.7	93.1	92.6	92.0	91.4	90.9	90.3	89.8	89.2	88.7
47	93.8	93.2	92.6	92.1	91.6	91.0	90.5	89.9	89.4	88.8
48	93.8	93.3	92.7	92.2	91.7	91.1	90.6	90.0	89.5	89.0
49	93.9	93.4	92.8	92.3	91.8	91.2	90.7	90.2	89.6	89.1
50	94.0	93.4	92.9	92.4	91.9	91.3	90.8	90.3	89.8	89.2
51	94.0	93.5	93.0	92.5	91.9	91.4	90.9	90.4	89.9	89.4
52	94.1	93.6	93.1	92.6	92.0	91.5	91.0	90.5	90.0	89.5
53	94.2	93.7	93.2	92.6	92.1	91.6	91.1	90.6	90.1	89.6
54	94.2	93.7	93.2	92.7	92.2	91.7	91.2	90.7	90.2	89.7
55	94.3	93.8	93.3	92.8	92.3	91.8	91.3	90.8	90.3	89.8
56	94.4	93.9	93.4	92.9	92.4	91.9	91.4	90.9	90.4	89.9
57	94.4	93.9	93.4	92.9	92.5	92.0	91.5	91.0	90.5	90.0















表 4a<sub>1</sub> (续)

$t-t_w$ $t$	5.2	5.4	5.6	5.8	6.0	6.2	6.4	6.6	6.8	7.0
15	47.5	45.7	43.8	42.0	40.2	38.4	36.6	34.8	33.0	31.2
16	49.2	47.4	45.6	43.8	42.1	40.3	38.6	36.8	35.1	33.4
17	50.7	49.0	47.3	45.5	43.8	42.1	40.5	38.8	37.1	35.5
18	52.2	50.5	48.8	47.2	45.5	43.9	42.2	40.6	39.0	37.4
19	53.5	51.9	50.3	48.7	47.1	45.5	43.9	42.3	40.8	39.2
20	54.8	53.2	51.7	50.1	48.6	47.0	45.5	44.0	42.4	40.9
21	56.0	54.5	53.0	51.4	49.9	48.4	47.0	45.5	44.0	42.5
22	57.2	55.7	54.2	52.7	51.2	49.8	48.3	46.9	45.5	44.1
23	58.3	56.8	55.3	53.9	52.5	51.1	49.6	48.2	46.9	45.5
24	59.3	57.8	56.4	55.0	53.6	52.3	50.9	49.5	48.2	46.8
25	60.2	58.8	57.5	56.1	54.7	53.4	52.0	50.7	49.4	48.1
26	61.1	59.8	58.4	57.1	55.8	54.5	53.2	51.9	50.6	49.3
27	62.0	60.7	59.4	58.0	56.8	55.5	54.2	52.9	51.7	50.4
28	62.8	61.5	60.2	58.9	57.7	56.4	55.2	53.9	52.7	51.5
29	63.6	62.3	61.0	59.8	58.6	57.3	56.1	54.9	53.7	52.5
30	64.3	63.1	61.8	60.6	59.4	58.2	57.0	55.8	54.6	53.5
31	65.0	63.8	62.6	61.4	60.2	59.0	57.8	56.7	55.5	54.4
32	65.7	64.5	63.3	62.1	60.9	59.8	58.6	57.5	56.4	55.2
33	66.3	65.1	64.0	62.8	61.7	60.5	59.4	58.3	57.2	56.1
34	66.9	65.7	64.6	63.5	62.3	61.2	60.1	59.0	57.9	56.9
35	67.5	66.3	65.2	64.1	63.0	61.9	60.8	59.7	58.7	57.6
36	68.0	66.9	65.8	64.7	63.6	62.5	61.5	60.4	59.4	58.3
37	68.5	67.4	66.3	65.3	64.2	63.2	62.1	61.1	60.0	59.0
38	69.0	67.9	66.9	65.8	64.8	63.7	62.7	61.7	60.7	59.7
39	69.5	68.4	67.4	66.3	65.3	64.3	63.3	62.3	61.3	60.3
40	69.9	68.9	67.9	66.9	65.8	64.8	63.8	62.8	61.8	60.9
41	70.4	69.4	68.3	67.3	66.3	65.3	64.4	63.4	62.4	61.4
42	70.8	69.8	68.8	67.8	66.8	65.8	64.9	63.9	62.9	62.0
43	71.2	70.2	69.2	68.2	67.3	66.3	65.3	64.4	63.4	62.5
44	71.6	70.6	69.6	68.7	67.7	66.8	65.8	64.9	63.9	63.0
45	72.0	71.0	70.0	69.1	68.1	67.2	66.3	65.3	64.4	63.5
46	72.3	71.4	70.4	69.5	68.5	67.6	66.7	65.8	64.9	64.0
47	72.7	71.7	70.8	69.9	68.9	68.0	67.1	66.2	65.3	64.4
48	73.0	72.1	71.1	70.2	69.3	68.4	67.5	66.6	65.7	64.8
49	73.3	72.4	71.5	70.6	69.7	68.8	67.9	67.0	66.1	65.3
50	73.6	72.7	71.8	70.9	70.0	69.1	68.3	67.4	66.5	65.7
51	73.9	73.0	72.1	71.2	70.4	69.5	68.6	67.8	66.9	66.0
52	74.2	73.3	72.4	71.6	70.7	69.8	69.0	68.1	67.3	66.4
53	74.5	73.6	72.7	71.9	71.0	70.2	69.3	68.5	67.6	66.8
54	74.8	73.9	73.0	72.2	71.3	70.5	69.6	68.8	68.0	67.1
55	75.0	74.2	73.3	72.5	71.6	70.8	69.9	69.1	68.3	67.5
56	75.3	74.4	73.6	72.7	71.9	71.1	70.3	69.4	68.6	67.8
57	75.5	74.7	73.9	73.0	72.2	71.4	70.6	69.7	68.9	68.1





表 4a<sub>1</sub>(续)

$t$ \ $t-t_w$	7.2	7.4	7.6	7.8	8.0	8.2	8.4	8.6	8.8	9.0
58	67.7	66.9	66.1	65.3	64.6	63.8	63.1	62.3	61.6	60.8
59	68.0	67.2	66.4	65.7	64.9	64.2	63.4	62.7	61.9	61.2
60	68.3	67.5	66.7	66.0	65.2	64.5	63.8	63.0	62.3	61.6
61	68.6	67.8	67.1	66.3	65.6	64.8	64.1	63.4	62.6	61.9
62	68.9	68.1	67.4	66.6	65.9	65.1	64.4	63.7	63.0	62.3
63	69.1	68.4	67.6	66.9	66.2	65.5	64.7	64.0	63.3	62.6
64	69.4	68.7	67.9	67.2	66.5	65.8	65.0	64.3	63.6	62.9
65	69.7	68.9	68.2	67.5	66.8	66.0	65.3	64.6	63.9	63.2
66	69.9	69.2	68.5	67.8	67.0	66.3	65.6	64.9	64.2	63.6
67	70.2	69.5	68.7	68.0	67.3	66.6	65.9	65.2	64.5	63.9
68	70.4	69.7	69.0	68.3	67.6	66.9	66.2	65.5	64.8	64.2
69	70.7	70.0	69.2	68.5	67.8	67.2	66.5	65.8	65.1	64.4
70	70.9	70.2	69.5	68.8	68.1	67.4	66.7	66.1	65.4	64.7
71	71.1	70.4	69.7	69.0	68.4	67.7	67.0	66.3	65.7	65.0
72	71.4	70.7	70.0	69.3	68.6	67.9	67.3	66.6	65.9	65.3
73	71.6	70.9	70.2	69.5	68.8	68.2	67.5	66.8	66.2	65.5
74	71.8	71.1	70.4	69.8	69.1	68.4	67.7	67.1	66.4	65.8
75	72.0	71.3	70.7	70.0	69.3	68.6	68.0	67.3	66.7	66.0
76	72.2	71.5	70.9	70.2	69.5	68.9	68.2	67.6	66.9	66.3
77	72.4	71.8	71.1	70.4	69.8	69.1	68.5	67.8	67.2	66.5
78	72.6	72.0	71.3	70.6	70.0	69.3	68.7	68.0	67.4	66.8
79	72.8	72.2	71.5	70.8	70.2	69.5	68.9	68.3	67.6	67.0
80	73.0	72.4	71.7	71.1	70.4	69.8	69.1	68.5	67.9	67.2
81	73.2	72.6	71.9	71.3	70.6	70.0	69.3	68.7	68.1	67.5
82	73.4	72.7	72.1	71.5	70.8	70.2	69.6	68.9	68.3	67.7
83	73.6	72.9	72.3	71.7	71.0	70.4	69.8	69.1	68.5	67.9
84	73.8	73.1	72.5	71.8	71.2	70.6	70.0	69.3	68.7	68.1
85	73.9	73.3	72.7	72.0	71.4	70.8	70.2	69.6	68.9	68.3
86	74.1	73.5	72.9	72.2	71.6	71.0	70.4	69.8	69.1	68.5
87	74.3	73.7	73.0	72.4	71.8	71.2	70.6	70.0	69.3	68.7
88	74.5	73.8	73.2	72.6	72.0	71.4	70.8	70.1	69.5	69.0
89	74.6	74.0	73.4	72.8	72.2	71.5	70.9	70.3	69.7	69.2
90	74.8	74.2	73.6	72.9	72.3	71.7	71.1	70.5	69.9	69.3
91	75.0	74.3	73.7	73.1	72.5	71.9	71.3	70.7	70.1	69.5
92	75.1	74.5	73.9	73.3	72.7	72.1	71.5	70.9	70.3	69.7
93	75.3	74.7	74.1	73.5	72.9	72.3	71.7	71.1	70.5	69.9
94	75.4	74.8	74.2	73.6	73.0	72.4	71.9	71.3	70.7	70.1
95	75.6	75.0	74.4	73.8	73.2	72.6	72.0	71.4	70.9	70.3
96	75.7	75.1	74.6	74.0	73.4	72.8	72.2	71.6	71.0	70.5
97	75.9	75.3	74.7	74.1	73.5	73.0	72.4	71.8	71.2	70.7
98	76.0	75.5	74.9	74.3	73.7	73.1	72.5	72.0	71.4	70.8
99	76.2	75.6	75.0	74.4	73.9	73.3	72.7	72.1	71.6	71.0
100	76.3	75.8	75.2	74.6	74.0	73.4	72.9	72.3	71.7	71.2



表 4a<sub>1</sub>(续)

$t$ \ $t-t_w$	9.2	9.4	9.6	9.8	10.0	10.2	10.4	10.6	10.8	11.0
58	60.1	59.4	58.7	58.0	57.3	56.6	55.9	55.2	54.5	53.8
59	60.5	59.8	59.1	58.4	57.7	57.0	56.3	55.6	54.9	54.2
60	60.9	60.2	59.4	58.7	58.1	57.4	56.7	56.0	55.3	54.7
61	61.2	60.5	59.8	59.1	58.4	57.8	57.1	56.4	55.7	55.1
62	61.6	60.9	60.2	59.5	58.8	58.1	57.5	56.8	56.1	55.5
63	61.9	61.2	60.5	59.8	59.2	58.5	57.8	57.2	56.5	55.9
64	62.2	61.6	60.9	60.2	59.5	58.9	58.2	57.5	56.9	56.2
65	62.6	61.9	61.2	60.5	59.9	59.2	58.5	57.9	57.2	56.6
66	62.9	62.2	61.5	60.9	60.2	59.5	58.9	58.2	57.6	57.0
67	63.2	62.5	61.8	61.2	60.5	59.9	59.2	58.6	57.9	57.3
68	63.5	62.8	62.1	61.5	60.8	60.2	59.5	58.9	58.3	57.6
69	63.8	63.1	62.5	61.8	61.1	60.5	59.9	59.2	58.6	58.0
70	64.1	63.4	62.7	62.1	61.5	60.8	60.2	59.6	58.9	58.3
71	64.3	63.7	63.0	62.4	61.8	61.1	60.5	59.9	59.2	58.6
72	64.6	64.0	63.3	62.7	62.0	61.4	60.8	60.2	59.5	58.9
73	64.9	64.2	63.6	63.0	62.3	61.7	61.1	60.5	59.8	59.2
74	65.1	64.5	63.9	63.2	62.6	62.0	61.4	60.8	60.1	59.5
75	65.4	64.8	64.1	63.5	62.9	62.3	61.6	61.0	60.4	59.8
76	65.7	65.0	64.4	63.8	63.1	62.5	61.9	61.3	60.7	60.1
77	65.9	65.3	64.6	64.0	63.4	62.8	62.2	61.6	61.0	60.4
78	66.1	65.5	64.9	64.3	63.7	63.1	62.5	61.9	61.3	60.7
79	66.4	65.8	65.1	64.5	63.9	63.3	62.7	62.1	61.5	61.0
80	66.6	66.0	65.4	64.8	64.2	63.6	63.0	62.4	61.8	61.2
81	66.8	66.2	65.6	65.0	64.4	63.8	63.2	62.6	62.1	61.5
82	67.1	66.5	65.9	65.3	64.7	64.1	63.5	62.9	62.3	61.7
83	67.3	66.7	66.1	65.5	64.9	64.3	63.7	63.1	62.6	62.0
84	67.5	66.9	66.3	65.7	65.1	64.5	64.0	63.4	62.8	62.2
85	67.7	67.1	66.5	65.9	65.4	64.8	64.2	63.6	63.1	62.5
86	67.9	67.3	66.8	66.2	65.6	65.0	64.4	63.9	63.3	62.7
87	68.2	67.6	67.0	66.4	65.8	65.2	64.7	64.1	63.5	63.0
88	68.4	67.8	67.2	66.6	66.0	65.5	64.9	64.3	63.8	63.2
89	68.6	68.0	67.4	66.8	66.2	65.7	65.1	64.5	64.0	63.4
90	68.8	68.2	67.6	67.0	66.5	65.9	65.3	64.8	64.2	63.7
91	69.0	68.4	67.8	67.2	66.7	66.1	65.5	65.0	64.4	63.9
92	69.2	68.6	68.0	67.4	66.9	66.3	65.8	65.2	64.6	64.1
93	69.3	68.8	68.2	67.6	67.1	66.5	66.0	65.4	64.9	64.3
94	69.5	69.0	68.4	67.8	67.3	66.7	66.2	65.6	65.1	64.5
95	69.7	69.2	68.6	68.0	67.5	66.9	66.4	65.8	65.3	64.7
96	69.9	69.3	68.8	68.2	67.7	67.1	66.6	66.0	65.5	65.0
97	70.1	69.5	69.0	68.4	67.9	67.3	66.8	66.2	65.7	65.2
98	70.3	69.7	69.2	68.6	68.1	67.5	67.0	66.4	65.9	65.4
99	70.4	69.9	69.3	68.8	68.2	67.7	67.2	66.6	66.1	65.6
100	70.6	70.1	69.5	69.0	68.4	67.9	67.4	66.8	66.3	65.8

表 4a<sub>1</sub> (续)

$t$ \ $t-t_w$	11.5	12.0	12.5	13.5	13.5	14.0	14.5	15.0	15.5	16.0
15										
16										
17	0.8									
18	3.9	0.4								
19	6.8	3.4	0.1							
20	9.5	6.3	3.1							
21	12.1	8.9	5.8	2.8						
22	14.4	11.4	8.4	5.5	2.6					
23	16.7	13.8	10.8	8.0	5.2	2.4				
24	18.8	16.0	13.1	10.4	7.6	4.9	2.3			
25	20.8	18.0	15.3	12.6	9.9	7.3	4.8	2.2		
26	22.7	20.0	17.3	14.7	12.1	9.6	7.1	4.6	2.2	
27	24.5	21.8	19.2	16.7	14.2	11.7	9.3	6.9	4.5	2.2
28	26.2	23.6	21.1	18.6	16.1	13.7	11.3	9.0	6.7	4.4
29	27.8	25.2	22.8	20.3	17.9	15.6	13.3	11.0	8.8	6.6
30	29.3	26.8	24.4	22.0	19.7	17.4	15.1	12.9	10.7	8.6
31	30.7	28.3	25.9	23.6	21.3	19.1	16.9	14.7	12.6	10.5
32	32.0	29.7	27.4	25.1	22.9	20.7	18.5	16.4	14.3	12.3
33	33.3	31.0	28.8	26.5	24.3	22.2	20.1	18.0	16.0	14.0
34	34.5	32.3	30.1	27.9	25.7	23.6	21.6	19.5	17.5	15.6
35	35.7	33.5	31.3	29.2	27.1	25.0	23.0	21.0	19.0	17.1
36	36.8	34.6	32.5	30.4	28.3	26.3	24.3	22.4	20.4	18.6
37	37.9	35.7	33.6	31.6	29.5	27.5	25.6	23.7	21.8	19.9
38	38.9	36.7	34.7	32.7	30.7	28.7	26.8	24.9	23.1	21.3
39	39.8	37.7	35.7	33.7	31.8	29.8	28.0	26.1	24.3	22.5
40	40.7	38.7	36.7	34.7	32.8	30.9	29.1	27.2	25.5	23.7
41	41.6	39.6	37.6	35.7	33.8	31.9	30.1	28.3	26.6	24.8
42	42.4	40.4	38.5	36.6	34.7	32.9	31.1	29.4	27.6	25.9
43	43.2	41.3	39.4	37.5	35.7	33.9	32.1	30.3	28.6	27.0
44	44.0	42.1	40.2	38.3	36.5	34.7	33.0	31.3	29.6	28.0
45	44.7	42.8	41.0	39.1	37.4	35.6	33.9	32.2	30.5	28.9
46	45.4	43.6	41.7	39.9	38.2	36.4	34.7	33.1	31.4	29.8
47	46.1	44.3	42.4	40.7	38.9	37.2	35.5	33.9	32.3	30.7
48	46.8	44.9	43.1	41.4	39.7	38.0	36.3	34.7	33.1	31.5
49	47.4	45.6	43.8	42.1	40.4	38.7	37.1	35.5	33.9	32.3
50	48.0	46.2	44.5	42.7	41.1	39.4	37.8	36.2	34.6	33.1
51	48.6	46.8	45.1	43.4	41.7	40.1	38.5	36.9	35.4	33.9
52	49.1	47.4	45.7	44.0	42.3	40.7	39.1	37.6	36.1	34.6
53	49.7	47.9	46.2	44.6	43.0	41.4	39.8	38.3	36.7	35.3
54	50.2	48.5	46.8	45.2	43.5	42.0	40.4	38.9	37.4	35.9
55	50.7	49.0	47.3	45.7	44.1	42.6	41.0	39.5	38.0	36.6
56	51.2	49.5	47.9	46.3	44.7	43.1	41.6	40.1	38.6	37.2
57	51.7	50.0	48.4	46.8	45.2	43.7	42.2	40.7	39.2	37.8















表 4a<sub>2</sub>(续)

$t-t_w$ $t$	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0
15	68.4	67.4	66.4	65.5	64.5	63.5	62.6	61.6	60.7	59.8
16	69.3	68.4	67.4	66.5	65.6	64.7	63.7	62.8	61.9	61.0
17	70.2	69.3	68.4	67.5	66.6	65.7	64.8	63.9	63.0	62.1
18	71.1	70.2	69.3	68.4	67.5	66.7	65.8	64.9	64.1	63.2
19	71.9	71.0	70.1	69.3	68.4	67.6	66.8	65.9	65.1	64.2
20	72.6	71.8	70.9	70.1	69.3	68.5	67.6	66.8	66.0	65.2
21	73.3	72.5	71.7	70.9	70.1	69.3	68.5	67.7	66.9	66.1
22	74.0	73.2	72.4	71.6	70.8	70.0	69.3	68.5	67.7	67.0
23	74.6	73.8	73.1	72.3	71.5	70.8	70.0	69.3	68.5	67.8
24	75.2	74.4	73.7	72.9	72.2	71.5	70.7	70.0	69.2	68.5
25	75.8	75.0	74.3	73.6	72.8	72.1	71.4	70.7	69.9	69.2
26	76.3	75.6	74.9	74.1	73.4	72.7	72.0	71.3	70.6	69.9
27	76.8	76.1	75.4	74.7	74.0	73.3	72.6	71.9	71.2	70.6
28	77.3	76.6	75.9	75.2	74.5	73.9	73.2	72.5	71.8	71.2
29	77.7	77.1	76.4	75.7	75.0	74.4	73.7	73.1	72.4	71.7
30	78.2	77.5	76.8	76.2	75.5	74.9	74.2	73.6	72.9	72.3
31	78.6	77.9	77.3	76.6	76.0	75.4	74.7	74.1	73.4	72.8
32	79.0	78.3	77.7	77.1	76.4	75.8	75.2	74.6	73.9	73.3
33	79.3	78.7	78.1	77.5	76.8	76.2	75.6	75.0	74.4	73.8
34	79.7	79.1	78.5	77.9	77.2	76.6	76.0	75.4	74.8	74.2
35	80.0	79.4	78.8	78.2	77.6	77.0	76.4	75.8	75.3	74.7
36	80.4	79.8	79.2	78.6	78.0	77.4	76.8	76.2	75.7	75.1
37	80.7	80.1	79.5	78.9	78.3	77.8	77.2	76.6	76.0	75.5
38	81.0	80.4	79.8	79.2	78.7	78.1	77.5	77.0	76.4	75.9
39	81.3	80.7	80.1	79.6	79.0	78.4	77.9	77.3	76.8	76.2
40	81.5	81.0	80.4	79.9	79.3	78.7	78.2	77.7	77.1	76.6
41	81.8	81.2	80.7	80.1	79.6	79.0	78.5	78.0	77.4	76.9
42	82.0	81.5	81.0	80.4	79.9	79.3	78.8	78.3	77.7	77.2
43	82.3	81.7	81.2	80.7	80.1	79.6	79.1	78.6	78.0	77.5
44	82.5	82.0	81.5	80.9	80.4	79.9	79.4	78.8	78.3	77.8
45	82.7	82.2	81.7	81.2	80.7	80.1	79.6	79.1	78.6	78.1
46	83.0	82.4	81.9	81.4	80.9	80.4	79.9	79.4	78.9	78.4
47	83.2	82.7	82.1	81.6	81.1	80.6	80.1	79.6	79.1	78.6
48	83.4	82.9	82.4	81.9	81.4	80.9	80.4	79.9	79.4	78.9
49	83.6	83.1	82.6	82.1	81.6	81.1	80.6	80.1	79.6	79.1
50	83.8	83.3	82.8	82.3	81.8	81.3	80.8	80.3	79.9	79.4
51	83.9	83.4	83.0	82.5	82.0	81.5	81.0	80.6	80.1	79.6
52	84.1	83.6	83.2	82.7	82.2	81.7	81.2	80.8	80.3	79.8
53	84.3	83.8	83.3	82.9	82.4	81.9	81.5	81.0	80.5	80.1
54	84.5	84.0	83.5	83.0	82.6	82.1	81.6	81.2	80.7	80.3
55	84.6	84.1	83.7	83.2	82.8	82.3	81.8	81.4	80.9	80.5
56	84.8	84.3	83.8	83.4	82.9	82.5	82.0	81.6	81.1	80.7
57	84.9	84.5	84.0	83.6	83.1	82.7	82.2	81.8	81.3	80.9



表 4a<sub>2</sub>(续)

$t$	$t-t_w$	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0
15		58.8	57.9	56.9	56.0	55.1	54.2	53.2	52.3	51.4	50.5
16		60.1	59.2	58.3	57.4	56.5	55.6	54.7	53.8	52.9	52.0
17		61.3	60.4	59.5	58.6	57.8	56.9	56.0	55.2	54.3	53.4
18		62.4	61.5	60.7	59.8	59.0	58.1	57.3	56.4	55.6	54.8
19		63.4	62.6	61.8	60.9	60.1	59.3	58.5	57.7	56.8	56.0
20		64.4	63.6	62.8	62.0	61.2	60.4	59.6	58.8	58.0	57.2
21		65.3	64.5	63.7	63.0	62.2	61.4	60.6	59.9	59.1	58.3
22		66.2	65.4	64.7	63.9	63.1	62.4	61.6	60.9	60.1	59.4
23		67.0	66.3	65.5	64.8	64.0	63.3	62.6	61.8	61.1	60.4
24		67.8	67.1	66.3	65.6	64.9	64.2	63.5	62.7	62.0	61.3
25		68.5	67.8	67.1	66.4	65.7	65.0	64.3	63.6	62.9	62.2
26		69.2	68.5	67.8	67.1	66.5	65.8	65.1	64.4	63.7	63.1
27		69.9	69.2	68.5	67.8	67.2	66.5	65.8	65.2	64.5	63.9
28		70.5	69.8	69.2	68.5	67.9	67.2	66.5	65.9	65.2	64.6
29		71.1	70.4	69.8	69.1	68.5	67.9	67.2	66.6	66.0	65.3
30		71.7	71.0	70.4	69.7	69.1	68.5	67.9	67.2	66.6	66.0
31		72.2	71.6	70.9	70.3	69.7	69.1	68.5	67.9	67.2	66.6
32		72.7	72.1	71.5	70.9	70.3	69.7	69.0	68.4	67.9	67.3
33		73.2	72.6	72.0	71.4	70.8	70.2	69.6	69.0	68.4	67.8
34		73.6	73.1	72.5	71.9	71.3	70.7	70.1	69.5	69.0	68.4
35		74.1	73.5	72.9	72.3	71.8	71.2	70.6	70.1	69.5	68.9
36		74.5	73.9	73.4	72.8	72.2	71.7	71.1	70.5	70.0	69.4
37		74.9	74.3	73.8	73.2	72.7	72.1	71.6	71.0	70.5	69.9
38		75.3	74.7	74.2	73.6	73.1	72.5	72.0	71.5	70.9	70.4
39		75.7	75.1	74.6	74.0	73.5	73.0	72.4	71.9	71.4	70.8
40		76.0	75.5	74.9	74.4	73.9	73.4	72.8	72.3	71.8	71.3
41		76.4	75.8	75.3	74.8	74.3	73.7	73.2	72.7	72.2	71.7
42		76.7	76.2	75.6	75.1	74.6	74.1	73.6	73.1	72.6	72.1
43		77.0	76.5	76.0	75.5	75.0	74.4	73.9	73.4	72.9	72.4
44		77.3	76.8	76.3	75.8	75.3	74.8	74.3	73.8	73.3	72.8
45		77.6	77.1	76.6	76.1	75.6	75.1	74.6	74.1	73.6	73.1
46		77.9	77.4	76.9	76.4	75.9	75.4	74.9	74.4	74.0	73.5
47		78.2	77.7	77.2	76.7	76.2	75.7	75.2	74.8	74.3	73.8
48		78.4	77.9	77.4	77.0	76.5	76.0	75.5	75.1	74.6	74.1
49		78.7	78.2	77.7	77.2	76.8	76.3	75.8	75.3	74.9	74.4
50		78.9	78.4	78.0	77.5	77.0	76.6	76.1	75.6	75.2	74.7
51		79.1	78.7	78.2	77.7	77.3	76.8	76.4	75.9	75.4	75.0
52		79.4	78.9	78.5	78.0	77.5	77.1	76.6	76.2	75.7	75.3
53		79.6	79.1	78.7	78.2	77.8	77.3	76.9	76.4	76.0	75.5
54		79.8	79.4	78.9	78.5	78.0	77.6	77.1	76.7	76.2	75.8
55		80.0	79.6	79.1	78.7	78.2	77.8	77.3	76.9	76.5	76.0
56		80.2	79.8	79.3	78.9	78.5	78.0	77.6	77.1	76.7	76.3
57		80.4	80.0	79.5	79.1	78.7	78.2	77.8	77.4	76.9	76.5

表 4a<sub>2</sub>(续)

$t$ \ $t-t_w$	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0
58	80.6	80.2	79.7	79.3	78.9	78.4	78.0	77.6	77.2	76.7
59	80.8	80.4	79.9	79.5	79.1	78.7	78.2	77.8	77.4	77.0
60	81.0	80.6	80.1	79.7	79.3	78.9	78.4	78.0	77.6	77.2
61	81.2	80.7	80.3	79.9	79.5	79.1	78.6	78.2	77.8	77.4
62	81.3	80.9	80.5	80.1	79.7	79.2	78.8	78.4	78.0	77.6
63	81.5	81.1	80.7	80.3	79.8	79.4	79.0	78.6	78.2	77.8
64	81.7	81.3	80.8	80.4	80.0	79.6	79.2	78.8	78.4	78.0
65	81.8	81.4	81.0	80.6	80.2	79.8	79.4	79.0	78.6	78.2
66	82.0	81.6	81.2	80.8	80.4	80.0	79.6	79.2	78.8	78.4
67	82.1	81.7	81.3	80.9	80.5	80.1	79.7	79.3	78.9	78.6
68	82.3	81.9	81.5	81.1	80.7	80.3	79.9	79.5	79.1	78.7
69	82.4	82.0	81.6	81.2	80.9	80.5	80.1	79.7	79.3	78.9
70	82.6	82.2	81.8	81.4	81.0	80.6	80.2	79.8	79.5	79.1
71	82.7	82.3	81.9	81.6	81.2	80.8	80.4	80.0	79.6	79.2
72	82.9	82.5	82.1	81.7	81.3	80.9	80.6	80.2	79.8	79.4
73	83.0	82.6	82.2	81.8	81.5	81.1	80.7	80.3	80.0	79.6
74	83.1	82.7	82.4	82.0	81.6	81.2	80.9	80.5	80.1	79.7
75	83.3	82.9	82.5	82.1	81.7	81.4	81.0	80.6	80.3	79.9
76	83.4	83.0	82.6	82.3	81.9	81.5	81.1	80.8	80.4	80.0
77	83.5	83.1	82.8	82.4	82.0	81.7	81.3	80.9	80.6	80.2
78	83.6	83.3	82.9	82.5	82.2	81.8	81.4	81.1	80.7	80.3
79	83.8	83.4	83.0	82.7	82.3	81.9	81.6	81.2	80.8	80.5
80	83.9	83.5	83.1	82.8	82.4	82.1	81.7	81.3	81.0	80.6
81	84.0	83.6	83.3	82.9	82.5	82.2	81.8	81.5	81.1	80.8
82	84.1	83.7	83.4	83.0	82.7	82.3	82.0	81.6	81.3	80.9
83	84.2	83.9	83.5	83.2	82.8	82.4	82.1	81.7	81.4	81.0
84	84.3	84.0	83.6	83.3	82.9	82.6	82.2	81.9	81.5	81.2
85	84.4	84.1	83.7	83.4	83.0	82.7	82.3	82.0	81.6	81.3
86	84.6	84.2	83.9	83.5	83.2	82.8	82.5	82.1	81.8	81.4
87	84.7	84.3	84.0	83.6	83.3	82.9	82.6	82.2	81.9	81.6
88	84.8	84.4	84.1	83.7	83.4	83.0	82.7	82.4	82.0	81.7
89	84.9	84.5	84.2	83.8	83.5	83.2	82.8	82.5	82.1	81.8
90	85.0	84.6	84.3	83.9	83.6	83.3	82.9	82.6	82.3	81.9
91	85.1	84.7	84.4	84.1	83.7	83.4	83.0	82.7	82.4	82.0
92	85.2	84.8	84.5	84.2	83.8	83.5	83.2	82.8	82.5	82.2
93	85.3	84.9	84.6	84.3	83.9	83.6	83.3	82.9	82.6	82.3
94	85.4	85.0	84.7	84.4	84.0	83.7	83.4	83.1	82.7	82.4
95	85.5	85.1	84.8	84.5	84.1	83.8	83.5	83.2	82.8	82.5
96	85.6	85.2	84.9	84.6	84.2	83.9	83.6	83.3	82.9	82.6
97	85.7	85.3	85.0	84.7	84.3	84.0	83.7	83.4	83.1	82.7
98	85.7	85.4	85.1	84.8	84.4	84.1	83.8	83.5	83.2	82.8
99	85.8	85.5	85.2	84.9	84.5	84.2	83.9	83.6	83.3	83.0
100	85.9	85.6	85.3	85.0	84.6	84.3	84.0	83.7	83.4	83.1

表 4a<sub>2</sub>(续)

$t$ \ $t-t_w$	5.2	5.4	5.6	5.8	6.0	6.2	6.4	6.6	6.8	7.0
15	48.7	46.9	45.1	43.3	41.5	39.7	38.0	36.2	34.5	32.8
16	50.2	48.5	46.8	45.0	43.3	41.6	39.9	38.2	36.5	34.9
17	51.7	50.0	48.3	46.7	45.0	43.4	41.7	40.1	38.5	36.9
18	53.1	51.5	49.8	48.2	46.6	45.0	43.4	41.8	40.3	38.7
19	54.4	52.8	51.3	49.7	48.1	46.6	45.0	43.5	42.0	40.4
20	55.7	54.1	52.6	51.0	49.5	48.0	46.5	45.0	43.5	42.1
21	56.8	55.3	53.8	52.3	50.9	49.4	47.9	46.5	45.0	43.6
22	57.9	56.5	55.0	53.5	52.1	50.7	49.3	47.8	46.4	45.1
23	59.0	57.5	56.1	54.7	53.3	51.9	50.5	49.1	47.8	46.4
24	59.9	58.5	57.1	55.8	54.4	53.0	51.7	50.4	49.0	47.7
25	60.8	59.5	58.1	56.8	55.5	54.1	52.8	51.5	50.2	48.9
26	61.7	60.4	59.1	57.8	56.4	55.2	53.9	52.6	51.3	50.1
27	62.5	61.2	59.9	58.7	57.4	56.1	54.9	53.6	52.4	51.2
28	63.3	62.0	60.8	59.5	58.3	57.0	55.8	54.6	53.4	52.2
29	64.1	62.8	61.6	60.3	59.1	57.9	56.7	55.5	54.3	53.2
30	64.8	63.5	62.3	61.1	59.9	58.7	57.6	56.4	55.2	54.1
31	65.4	64.2	63.0	61.9	60.7	59.5	58.4	57.2	56.1	55.0
32	66.1	64.9	63.7	62.6	61.4	60.3	59.1	58.0	56.9	55.8
33	66.7	65.5	64.4	63.2	62.1	61.0	59.9	58.8	57.7	56.6
34	67.3	66.1	65.0	63.9	62.8	61.7	60.6	59.5	58.4	57.4
35	67.8	66.7	65.6	64.5	63.4	62.3	61.2	60.2	59.1	58.1
36	68.3	67.2	66.1	65.1	64.0	62.9	61.9	60.8	59.8	58.8
37	68.8	67.8	66.7	65.6	64.6	63.5	62.5	61.5	60.4	59.4
38	69.3	68.3	67.2	66.2	65.1	64.1	63.1	62.1	61.0	60.1
39	69.8	68.7	67.7	66.7	65.6	64.6	63.6	62.6	61.6	60.7
40	70.2	69.2	68.2	67.1	66.1	65.1	64.2	63.2	62.2	61.2
41	70.6	69.6	68.6	67.6	66.6	65.6	64.7	63.7	62.7	61.8
42	71.0	70.0	69.0	68.1	67.1	66.1	65.2	64.2	63.2	62.3
43	71.4	70.4	69.5	68.5	67.5	66.6	65.6	64.7	63.7	62.8
44	71.8	70.8	69.9	68.9	68.0	67.0	66.1	65.1	64.2	63.3
45	72.2	71.2	70.3	69.3	68.4	67.4	66.5	65.6	64.7	63.8
46	72.5	71.6	70.6	69.7	68.8	67.8	66.9	66.0	65.1	64.2
47	72.9	71.9	71.0	70.1	69.1	68.2	67.3	66.4	65.5	64.7
48	73.2	72.3	71.3	70.4	69.5	68.6	67.7	66.8	66.0	65.1
49	73.5	72.6	71.7	70.8	69.9	69.0	68.1	67.2	66.3	65.5
50	73.8	72.9	72.0	71.1	70.2	69.3	68.5	67.6	66.7	65.9
51	74.1	73.2	72.3	71.4	70.5	69.7	68.8	67.9	67.1	66.3
52	74.4	73.5	72.6	71.7	70.9	70.0	69.1	68.3	67.5	66.6
53	74.6	73.8	72.9	72.0	71.2	70.3	69.5	68.6	67.8	67.0
54	74.9	74.0	73.2	72.3	71.5	70.6	69.8	69.0	68.1	67.3
55	75.2	74.3	73.5	72.6	71.8	70.9	70.1	69.3	68.5	67.7
56	75.4	74.6	73.7	72.9	72.0	71.2	70.4	69.6	68.8	68.0
57	75.7	74.8	74.0	73.1	72.3	71.5	70.7	69.9	69.1	68.3



表 4a<sub>2</sub>(续)

$t$	$t-t_w$	7.2	7.4	7.6	7.8	8.0	8.2	8.4	8.6	8.8	9.0
15		31.1	29.4	27.7	26.0	24.3	22.7	21.0	19.4	17.7	16.1
16		33.2	31.6	29.9	28.3	26.7	25.1	23.5	21.9	20.3	18.8
17		35.2	33.7	32.1	30.5	28.9	27.4	25.8	24.3	22.8	21.3
18		37.1	35.6	34.1	32.6	31.0	29.5	28.0	26.6	25.1	23.6
19		38.9	37.4	36.0	34.5	33.0	31.6	30.1	28.7	27.2	25.8
20		40.6	39.2	37.7	36.3	34.9	33.4	32.0	30.6	29.3	27.9
21		42.2	40.8	39.4	38.0	36.6	35.2	33.9	32.5	31.2	29.8
22		43.7	42.3	40.9	39.6	38.2	36.9	35.6	34.3	33.0	31.7
23		45.1	43.7	42.4	41.1	39.8	38.5	37.2	35.9	34.6	33.4
24		46.4	45.1	43.8	42.5	41.2	40.0	38.7	37.5	36.2	35.0
25		47.6	46.4	45.1	43.9	42.6	41.4	40.2	38.9	37.7	36.5
26		48.8	47.6	46.4	45.1	43.9	42.7	41.5	40.3	39.2	38.0
27		49.9	48.7	47.5	46.3	45.1	44.0	42.8	41.6	40.5	39.3
28		51.0	49.8	48.6	47.5	46.3	45.2	44.0	42.9	41.8	40.6
29		52.0	50.8	49.7	48.5	47.4	46.3	45.2	44.1	43.0	41.9
30		52.9	51.8	50.7	49.6	48.5	47.4	46.3	45.2	44.1	43.0
31		53.8	52.7	51.6	50.5	49.5	48.4	47.3	46.2	45.2	44.1
32		54.7	53.6	52.5	51.5	50.4	49.3	48.3	47.2	46.2	45.2
33		55.5	54.5	53.4	52.3	51.3	50.3	49.2	48.2	47.2	46.2
34		56.3	55.2	54.2	53.2	52.1	51.1	50.1	49.1	48.1	47.1
35		57.0	56.0	55.0	54.0	53.0	52.0	51.0	50.0	49.0	48.0
36		57.7	56.7	55.7	54.7	53.7	52.7	51.8	50.8	49.8	48.9
37		58.4	57.4	56.4	55.4	54.5	53.5	52.5	51.6	50.6	49.7
38		59.1	58.1	57.1	56.1	55.2	54.2	53.3	52.3	51.4	50.5
39		59.7	58.7	57.7	56.8	55.9	54.9	54.0	53.1	52.1	51.2
40		60.3	59.3	58.4	57.4	56.5	55.6	54.7	53.7	52.8	51.9
41		60.8	59.9	59.0	58.0	57.1	56.2	55.3	54.4	53.5	52.6
42		61.4	60.4	59.5	58.6	57.7	56.8	55.9	55.0	54.2	53.3
43		61.9	61.0	60.1	59.2	58.3	57.4	56.5	55.6	54.8	53.9
44		62.4	61.5	60.6	59.7	58.8	58.0	57.1	56.2	55.4	54.5
45		62.9	62.0	61.1	60.2	59.4	58.5	57.6	56.8	55.9	55.1
46		63.3	62.5	61.6	60.7	59.9	59.0	58.2	57.3	56.5	55.7
47		63.8	62.9	62.1	61.2	60.3	59.5	58.7	57.8	57.0	56.2
48		64.2	63.4	62.5	61.7	60.8	60.0	59.2	58.3	57.5	56.7
49		64.6	63.8	62.9	62.1	61.3	60.4	59.6	58.8	58.0	57.2
50		65.0	64.2	63.4	62.5	61.7	60.9	60.1	59.3	58.5	57.7
51		65.4	64.6	63.8	62.9	62.1	61.3	60.5	59.7	58.9	58.2
52		65.8	65.0	64.2	63.3	62.5	61.7	61.0	60.2	59.4	58.6
53		66.2	65.3	64.5	63.7	62.9	62.1	61.4	60.6	59.8	59.1
54		66.5	65.7	64.9	64.1	63.3	62.5	61.8	61.0	60.2	59.5
55		66.8	66.0	65.3	64.5	63.7	62.9	62.2	61.4	60.6	59.9
56		67.2	66.4	65.6	64.8	64.1	63.3	62.5	61.8	61.0	60.3
57		67.5	66.7	65.9	65.2	64.4	63.6	62.9	62.1	61.4	60.7









表 4a<sub>2</sub>(续)

$t$ \ $t-t_w$	11.5	12.0	12.5	13.5	13.5	14.0	14.5	15.0	15.5	16.0
58	52.4	50.7	49.1	47.6	46.0	44.5	43.0	41.5	40.1	38.7
59	52.8	51.2	49.6	48.0	46.5	45.0	43.5	42.1	40.7	39.3
60	53.2	51.6	50.0	48.5	47.0	45.5	44.0	42.6	41.2	39.8
61	53.6	52.0	50.5	48.9	47.4	46.0	44.5	43.1	41.7	40.3
62	54.0	52.5	50.9	49.4	47.9	46.4	45.0	43.6	42.2	40.8
63	54.4	52.9	51.3	49.8	48.3	46.9	45.4	44.0	42.7	41.3
64	54.8	53.3	51.7	50.2	48.7	47.3	45.9	44.5	43.1	41.8
65	55.2	53.6	52.1	50.6	49.2	47.7	46.3	44.9	43.6	42.2
66	55.5	54.0	52.5	51.0	49.6	48.1	46.7	45.4	44.0	42.7
67	55.9	54.4	52.9	51.4	50.0	48.5	47.1	45.8	44.4	43.1
68	56.2	54.7	53.2	51.8	50.3	48.9	47.6	46.2	44.9	43.6
69	56.6	55.1	53.6	52.1	50.7	49.3	47.9	46.6	45.3	44.0
70	56.9	55.4	53.9	52.5	51.1	49.7	48.3	47.0	45.7	44.4
71	57.2	55.7	54.3	52.9	51.4	50.1	48.7	47.4	46.1	44.8
72	57.6	56.1	54.6	53.2	51.8	50.4	49.1	47.7	46.4	45.2
73	57.9	56.4	54.9	53.5	52.1	50.8	49.4	48.1	46.8	45.6
74	58.2	56.7	55.3	53.9	52.5	51.1	49.8	48.5	47.2	45.9
75	58.5	57.0	55.6	54.2	52.8	51.5	50.1	48.8	47.5	46.3
76	58.8	57.3	55.9	54.5	53.1	51.8	50.5	49.2	47.9	46.6
77	59.0	57.6	56.2	54.8	53.4	52.1	50.8	49.5	48.2	47.0
78	59.3	57.9	56.5	55.1	53.8	52.4	51.1	49.8	48.6	47.3
79	59.6	58.2	56.8	55.4	54.1	52.7	51.4	50.2	48.9	47.7
80	59.9	58.5	57.1	55.7	54.4	53.1	51.8	50.5	49.2	48.0
81	60.1	58.7	57.4	56.0	54.7	53.4	52.1	50.8	49.6	48.3
82	60.4	59.0	57.6	56.3	55.0	53.7	52.4	51.1	49.9	48.7
83	60.7	59.3	57.9	56.6	55.2	53.9	52.7	51.4	50.2	49.0
84	60.9	59.5	58.2	56.8	55.5	54.2	53.0	51.7	50.5	49.3
85	61.2	59.8	58.4	57.1	55.8	54.5	53.3	52.0	50.8	49.6
86	61.4	60.0	58.7	57.4	56.1	54.8	53.5	52.3	51.1	49.9
87	61.6	60.3	58.9	57.6	56.3	55.1	53.8	52.6	51.4	50.2
88	61.9	60.5	59.2	57.9	56.6	55.3	54.1	52.9	51.7	50.5
89	62.1	60.8	59.4	58.1	56.9	55.6	54.4	53.1	52.0	50.8
90	62.4	61.0	59.7	58.4	57.1	55.9	54.6	53.4	52.2	51.1
91	62.6	61.2	59.9	58.6	57.4	56.1	54.9	53.7	52.5	51.3
92	62.8	61.5	60.2	58.9	57.6	56.4	55.2	54.0	52.8	51.6
93	63.0	61.7	60.4	59.1	57.9	56.6	55.4	54.2	53.0	51.9
94	63.3	61.9	60.6	59.4	58.1	56.9	55.7	54.5	53.3	52.2
95	63.5	62.2	60.9	59.6	58.4	57.1	55.9	54.7	53.6	52.4
96	63.7	62.4	61.1	59.8	58.6	57.4	56.2	55.0	53.8	52.7
97	63.9	62.6	61.3	60.1	58.8	57.6	56.4	55.2	54.1	52.9
98	64.1	62.8	61.5	60.3	59.1	57.8	56.7	55.5	54.3	53.2
99	64.3	63.0	61.8	60.5	59.3	58.1	56.9	55.7	54.6	53.4
100	64.5	63.2	62.0	60.7	59.5	58.3	57.1	56.0	54.8	53.7













表 4b (续)

$t$ \ $t-t_w$	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0
15	68.7	67.7	66.8	65.8	64.9	63.9	63.0	62.1	61.1	60.2
16	69.6	68.7	67.8	66.9	65.9	65.0	64.1	63.2	62.3	61.4
17	70.5	69.6	68.7	67.8	66.9	66.0	65.2	64.3	63.4	62.5
18	71.3	70.5	69.6	68.7	67.9	67.0	66.1	65.3	64.4	63.6
19	72.1	71.3	70.4	69.6	68.7	67.9	67.1	66.2	65.4	64.6
20	72.9	72.0	71.2	70.4	69.6	68.7	67.9	67.1	66.3	65.5
21	73.5	72.7	71.9	71.1	70.3	69.5	68.8	68.0	67.2	66.4
22	74.2	73.4	72.6	71.8	71.1	70.3	69.5	68.8	68.0	67.2
23	74.8	74.0	73.3	72.5	71.8	71.0	70.3	69.5	68.8	68.0
24	75.4	74.6	73.9	73.2	72.4	71.7	70.9	70.2	69.5	68.8
25	75.9	75.2	74.5	73.8	73.0	72.3	71.6	70.9	70.2	69.5
26	76.5	75.8	75.0	74.3	73.6	72.9	72.2	71.5	70.8	70.1
27	77.0	76.3	75.6	74.9	74.2	73.5	72.8	72.1	71.4	70.8
28	77.4	76.7	76.1	75.4	74.7	74.0	73.4	72.7	72.0	71.4
29	77.9	77.2	76.5	75.9	75.2	74.5	73.9	73.2	72.6	71.9
30	78.3	77.6	77.0	76.3	75.7	75.0	74.4	73.7	73.1	72.5
31	78.7	78.1	77.4	76.8	76.1	75.5	74.9	74.2	73.6	73.0
32	79.1	78.5	77.8	77.2	76.6	75.9	75.3	74.7	74.1	73.5
33	79.5	78.8	78.2	77.6	77.0	76.4	75.8	75.1	74.5	73.9
34	79.8	79.2	78.6	78.0	77.4	76.8	76.2	75.6	75.0	74.4
35	80.1	79.5	78.9	78.3	77.7	77.1	76.6	76.0	75.4	74.8
36	80.5	79.9	79.3	78.7	78.1	77.5	76.9	76.4	75.8	75.2
37	80.8	80.2	79.6	79.0	78.4	77.9	77.3	76.7	76.2	75.6
38	81.1	80.5	79.9	79.3	78.8	78.2	77.6	77.1	76.5	76.0
39	81.3	80.8	80.2	79.6	79.1	78.5	78.0	77.4	76.9	76.3
40	81.6	81.0	80.5	79.9	79.4	78.8	78.3	77.7	77.2	76.7
41	81.9	81.3	80.8	80.2	79.7	79.1	78.6	78.1	77.5	77.0
42	82.1	81.6	81.0	80.5	80.0	79.4	78.9	78.4	77.8	77.3
43	82.3	81.8	81.3	80.7	80.2	79.7	79.2	78.6	78.1	77.6
44	82.6	82.0	81.5	81.0	80.5	80.0	79.4	78.9	78.4	77.9
45	82.8	82.3	81.8	81.2	80.7	80.2	79.7	79.2	78.7	78.2
46	83.0	82.5	82.0	81.5	81.0	80.5	80.0	79.5	79.0	78.5
47	83.2	82.7	82.2	81.7	81.2	80.7	80.2	79.7	79.2	78.7
48	83.4	82.9	82.4	81.9	81.4	80.9	80.4	79.9	79.5	79.0
49	83.6	83.1	82.6	82.1	81.6	81.1	80.7	80.2	79.7	79.2
50	83.8	83.3	82.8	82.3	81.8	81.4	80.9	80.4	79.9	79.4
51	84.0	83.5	83.0	82.5	82.0	81.6	81.1	80.6	80.1	79.7
52	84.2	83.7	83.2	82.7	82.2	81.8	81.3	80.8	80.4	79.9
53	84.3	83.8	83.4	82.9	82.4	82.0	81.5	81.0	80.6	80.1
54	84.5	84.0	83.6	83.1	82.6	82.2	81.7	81.2	80.8	80.3
55	84.7	84.2	83.7	83.3	82.8	82.3	81.9	81.4	81.0	80.5
56	84.8	84.3	83.9	83.4	83.0	82.5	82.1	81.6	81.2	80.7
57	85.0	84.5	84.0	83.6	83.1	82.7	82.2	81.8	81.4	80.9

表 4b (续)

$t$ \ $t-t_w$	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0
58	85.1	84.7	84.2	83.8	83.3	82.9	82.4	82.0	81.5	81.1
59	85.2	84.8	84.4	83.9	83.5	83.0	82.6	82.1	81.7	81.3
60	85.4	84.9	84.5	84.1	83.6	83.2	82.7	82.3	81.9	81.5
61	85.5	85.1	84.6	84.2	83.8	83.3	82.9	82.5	82.0	81.6
62	85.7	85.2	84.8	84.4	83.9	83.5	83.1	82.6	82.2	81.8
63	85.8	85.4	84.9	84.5	84.1	83.6	83.2	82.8	82.4	82.0
64	85.9	85.5	85.1	84.6	84.2	83.8	83.4	82.9	82.5	82.1
65	86.0	85.6	85.2	84.8	84.3	83.9	83.5	83.1	82.7	82.3
66	86.2	85.7	85.3	84.9	84.5	84.1	83.7	83.2	82.8	82.4
67	86.3	85.9	85.4	85.0	84.6	84.2	83.8	83.4	83.0	82.6
68	86.4	86.0	85.6	85.2	84.7	84.3	83.9	83.5	83.1	82.7
69	86.5	86.1	85.7	85.3	84.9	84.5	84.1	83.7	83.3	82.9
70	86.6	86.2	85.8	85.4	85.0	84.6	84.2	83.8	83.4	83.0
71	86.7	86.3	85.9	85.5	85.1	84.7	84.3	83.9	83.5	83.1
72	86.8	86.4	86.0	85.6	85.2	84.8	84.4	84.1	83.7	83.3
73	86.9	86.5	86.1	85.7	85.4	85.0	84.6	84.2	83.8	83.4
74	87.0	86.6	86.3	85.9	85.5	85.1	84.7	84.3	83.9	83.5
75	87.1	86.8	86.4	86.0	85.6	85.2	84.8	84.4	84.0	83.7
76	87.2	86.9	86.5	86.1	85.7	85.3	84.9	84.5	84.2	83.8
77	87.3	87.0	86.6	86.2	85.8	85.4	85.0	84.7	84.3	83.9
78	87.4	87.1	86.7	86.3	85.9	85.5	85.2	84.8	84.4	84.0
79	87.5	87.1	86.8	86.4	86.0	85.6	85.3	84.9	84.5	84.1
80	87.6	87.2	86.9	86.5	86.1	85.7	85.4	85.0	84.6	84.3
81	87.7	87.3	87.0	86.6	86.2	85.8	85.5	85.1	84.7	84.4
82	87.8	87.4	87.1	86.7	86.3	85.9	85.6	85.2	84.9	84.5
83	87.9	87.5	87.2	86.8	86.4	86.1	85.7	85.3	85.0	84.6
84	88.0	87.6	87.2	86.9	86.5	86.1	85.8	85.4	85.1	84.7
85	88.1	87.7	87.3	87.0	86.6	86.2	85.9	85.5	85.2	84.8
86	88.1	87.8	87.4	87.1	86.7	86.3	86.0	85.6	85.3	84.9
87	88.2	87.9	87.5	87.2	86.8	86.4	86.1	85.7	85.4	85.0
88	88.3	88.0	87.6	87.2	86.9	86.5	86.2	85.8	85.5	85.1
89	88.4	88.0	87.7	87.3	87.0	86.6	86.3	85.9	85.6	85.2
90	88.5	88.1	87.8	87.4	87.1	86.7	86.4	86.0	85.7	85.3
91	88.6	88.2	87.8	87.5	87.2	86.8	86.5	86.1	85.8	85.4
92	88.6	88.3	87.9	87.6	87.2	86.9	86.5	86.2	85.9	85.5
93	88.7	88.4	88.0	87.7	87.3	87.0	86.6	86.3	86.0	85.6
94	88.8	88.4	88.1	87.7	87.4	87.1	86.7	86.4	86.1	85.7
95	88.9	88.5	88.2	87.8	87.5	87.2	86.8	86.5	86.1	85.8
96	88.9	88.6	88.2	87.9	87.6	87.2	86.9	86.6	86.2	85.9
97	89.0	88.7	88.3	88.0	87.7	87.3	87.0	86.7	86.3	86.0
98	89.1	88.7	88.4	88.1	87.7	87.4	87.1	86.7	86.4	86.1
99	89.1	88.8	88.5	88.1	87.8	87.5	87.2	86.8	86.5	86.2
100	89.2	88.9	88.5	88.2	87.9	87.6	87.2	86.9	86.6	86.3

表 4b (续)

$t$ \ $t-t_w$	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0
15	59.3	58.3	57.4	56.5	55.6	54.7	53.7	52.8	51.9	51.0
16	60.5	59.6	58.7	57.8	56.9	56.0	55.1	54.3	53.4	52.5
17	61.6	60.8	59.9	59.0	58.2	57.3	56.5	55.6	54.8	53.9
18	62.7	61.9	61.0	60.2	59.4	58.5	57.7	56.9	56.0	55.2
19	63.7	62.9	62.1	61.3	60.5	59.7	58.9	58.1	57.3	56.5
20	64.7	63.9	63.1	62.3	61.5	60.7	60.0	59.2	58.4	57.6
21	65.6	64.8	64.1	63.3	62.5	61.8	61.0	60.2	59.5	58.7
22	66.5	65.7	65.0	64.2	63.5	62.7	62.0	61.2	60.5	59.7
23	67.3	66.5	65.8	65.1	64.3	63.6	62.9	62.2	61.4	60.7
24	68.0	67.3	66.6	65.9	65.2	64.5	63.7	63.0	62.3	61.6
25	68.8	68.1	67.3	66.6	66.0	65.3	64.6	63.9	63.2	62.5
26	69.4	68.7	68.1	67.4	66.7	66.0	65.3	64.7	64.0	63.3
27	70.1	69.4	68.7	68.1	67.4	66.7	66.1	65.4	64.8	64.1
28	70.7	70.0	69.4	68.7	68.1	67.4	66.8	66.1	65.5	64.8
29	71.3	70.6	70.0	69.3	68.7	68.1	67.4	66.8	66.2	65.5
30	71.8	71.2	70.6	69.9	69.3	68.7	68.1	67.4	66.8	66.2
31	72.4	71.7	71.1	70.5	69.9	69.3	68.7	68.1	67.4	66.8
32	72.9	72.2	71.6	71.0	70.4	69.8	69.2	68.6	68.0	67.4
33	73.3	72.7	72.1	71.5	70.9	70.4	69.8	69.2	68.6	68.0
34	73.8	73.2	72.6	72.0	71.4	70.9	70.3	69.7	69.1	68.6
35	74.2	73.6	73.1	72.5	71.9	71.3	70.8	70.2	69.7	69.1
36	74.6	74.1	73.5	72.9	72.4	71.8	71.3	70.7	70.1	69.6
37	75.0	74.5	73.9	73.4	72.8	72.3	71.7	71.2	70.6	70.1
38	75.4	74.9	74.3	73.8	73.2	72.7	72.1	71.6	71.1	70.5
39	75.8	75.2	74.7	74.2	73.6	73.1	72.5	72.0	71.5	71.0
40	76.1	75.6	75.1	74.5	74.0	73.5	72.9	72.4	71.9	71.4
41	76.5	75.9	75.4	74.9	74.4	73.8	73.3	72.8	72.3	71.8
42	76.8	76.3	75.7	75.2	74.7	74.2	73.7	73.2	72.7	72.2
43	77.1	76.6	76.1	75.6	75.0	74.5	74.0	73.5	73.0	72.5
44	77.4	76.9	76.4	75.9	75.4	74.9	74.4	73.9	73.4	72.9
45	77.7	77.2	76.7	76.2	75.7	75.2	74.7	74.2	73.7	73.2
46	78.0	77.5	77.0	76.5	76.0	75.5	75.0	74.5	74.0	73.6
47	78.2	77.7	77.2	76.8	76.3	75.8	75.3	74.8	74.4	73.9
48	78.5	78.0	77.5	77.0	76.6	76.1	75.6	75.1	74.7	74.2
49	78.7	78.3	77.8	77.3	76.8	76.4	75.9	75.4	75.0	74.5
50	79.0	78.5	78.0	77.6	77.1	76.6	76.2	75.7	75.2	74.8
51	79.2	78.7	78.3	77.8	77.3	76.9	76.4	76.0	75.5	75.1
52	79.4	79.0	78.5	78.0	77.6	77.1	76.7	76.2	75.8	75.3
53	79.7	79.2	78.7	78.3	77.8	77.4	76.9	76.5	76.0	75.6
54	79.9	79.4	79.0	78.5	78.1	77.6	77.2	76.7	76.3	75.8
55	80.1	79.6	79.2	78.7	78.3	77.8	77.4	77.0	76.5	76.1
56	80.3	79.8	79.4	78.9	78.5	78.1	77.6	77.2	76.8	76.3
57	80.5	80.0	79.6	79.2	78.7	78.3	77.9	77.4	77.0	76.6







表 4b (续)

$t-t_w$	7.2	7.4	7.6	7.8	8.0	8.2	8.4	8.6	8.8	9.0
15	31.8	30.2	28.5	26.8	25.2	23.5	21.9	20.3	18.7	17.1
16	33.9	32.3	30.7	29.1	27.5	25.9	24.3	22.8	21.2	19.7
17	35.9	34.4	32.8	31.2	29.7	28.2	26.6	25.1	23.6	22.1
18	37.8	36.3	34.7	33.2	31.7	30.3	28.8	27.3	25.9	24.4
19	39.5	38.1	36.6	35.1	33.7	32.2	30.8	29.4	28.0	26.6
20	41.2	39.7	38.3	36.9	35.5	34.1	32.7	31.3	29.9	28.6
21	42.7	41.3	39.9	38.6	37.2	35.8	34.5	33.1	31.8	30.5
22	44.2	42.8	41.5	40.1	38.8	37.5	36.2	34.9	33.6	32.3
23	45.5	44.2	42.9	41.6	40.3	39.0	37.7	36.5	35.2	34.0
24	46.8	45.5	44.3	43.0	41.7	40.5	39.2	38.0	36.8	35.6
25	48.1	46.8	45.6	44.3	43.1	41.9	40.6	39.4	38.2	37.1
26	49.2	48.0	46.8	45.6	44.4	43.2	42.0	40.8	39.6	38.5
27	50.3	49.1	47.9	46.7	45.6	44.4	43.2	42.1	40.9	39.8
28	51.3	50.2	49.0	47.8	46.7	45.6	44.4	43.3	42.2	41.1
29	52.3	51.2	50.0	48.9	47.8	46.7	45.6	44.5	43.4	42.3
30	53.3	52.1	51.0	49.9	48.8	47.7	46.6	45.5	44.5	43.4
31	54.1	53.0	51.9	50.9	49.8	48.7	47.6	46.6	45.5	44.5
32	55.0	53.9	52.8	51.8	50.7	49.7	48.6	47.6	46.5	45.5
33	55.8	54.7	53.7	52.6	51.6	50.5	49.5	48.5	47.5	46.5
34	56.5	55.5	54.5	53.4	52.4	51.4	50.4	49.4	48.4	47.4
35	57.3	56.2	55.2	54.2	53.2	52.2	51.2	50.3	49.3	48.3
36	58.0	57.0	56.0	55.0	54.0	53.0	52.0	51.1	50.1	49.2
37	58.6	57.6	56.6	55.7	54.7	53.7	52.8	51.8	50.9	50.0
38	59.3	58.3	57.3	56.4	55.4	54.4	53.5	52.6	51.6	50.7
39	59.9	58.9	57.9	57.0	56.1	55.1	54.2	53.3	52.4	51.5
40	60.4	59.5	58.6	57.6	56.7	55.8	54.9	54.0	53.1	52.2
41	61.0	60.1	59.1	58.2	57.3	56.4	55.5	54.6	53.7	52.8
42	61.5	60.6	59.7	58.8	57.9	57.0	56.1	55.2	54.4	53.5
43	62.0	61.1	60.2	59.3	58.4	57.6	56.7	55.8	55.0	54.1
44	62.5	61.6	60.7	59.9	59.0	58.1	57.3	56.4	55.5	54.7
45	63.0	62.1	61.2	60.4	59.5	58.6	57.8	56.9	56.1	55.3
46	63.5	62.6	61.7	60.9	60.0	59.2	58.3	57.5	56.6	55.8
47	63.9	63.0	62.2	61.3	60.5	59.6	58.8	58.0	57.2	56.4
48	64.3	63.5	62.6	61.8	60.9	60.1	59.3	58.5	57.7	56.9
49	64.7	63.9	63.1	62.2	61.4	60.6	59.8	59.0	58.2	57.4
50	65.1	64.3	63.5	62.6	61.8	61.0	60.2	59.4	58.6	57.8
51	65.5	64.7	63.9	63.1	62.2	61.4	60.6	59.9	59.1	58.3
52	65.9	65.1	64.3	63.4	62.6	61.9	61.1	60.3	59.5	58.7
53	66.2	65.4	64.6	63.8	63.0	62.3	61.5	60.7	59.9	59.2
54	66.6	65.8	65.0	64.2	63.4	62.6	61.9	61.1	60.3	59.6
55	66.9	66.1	65.3	64.6	63.8	63.0	62.2	61.5	60.7	60.0
56	67.3	66.5	65.7	64.9	64.1	63.4	62.6	61.9	61.1	60.4
57	67.6	66.8	66.0	65.2	64.5	63.7	63.0	62.2	61.5	60.8

表 4b (续)

$t$ \ $t-t_w$	7.2	7.4	7.6	7.8	8.0	8.2	8.4	8.6	8.8	9.0
58	67.9	67.1	66.3	65.6	64.8	64.1	63.3	62.6	61.9	61.1
59	68.2	67.4	66.7	65.9	65.1	64.4	63.7	62.9	62.2	61.5
60	68.5	67.7	67.0	66.2	65.5	64.7	64.0	63.3	62.5	61.8
61	68.8	68.0	67.3	66.5	65.8	65.0	64.3	63.6	62.9	62.2
62	69.0	68.3	67.5	66.8	66.1	65.4	64.6	63.9	63.2	62.5
63	69.3	68.6	67.8	67.1	66.4	65.7	64.9	64.2	63.5	62.8
64	69.6	68.8	68.1	67.4	66.7	65.9	65.2	64.5	63.8	63.1
65	69.8	69.1	68.4	67.7	66.9	66.2	65.5	64.8	64.1	63.4
66	70.1	69.4	68.6	67.9	67.2	66.5	65.8	65.1	64.4	63.7
67	70.3	69.6	68.9	68.2	67.5	66.8	66.1	65.4	64.7	64.0
68	70.6	69.9	69.1	68.4	67.7	67.0	66.4	65.7	65.0	64.3
69	70.8	70.1	69.4	68.7	68.0	67.3	66.6	65.9	65.3	64.6
70	71.0	70.3	69.6	68.9	68.2	67.6	66.9	66.2	65.5	64.9
71	71.3	70.6	69.9	69.2	68.5	67.8	67.1	66.5	65.8	65.1
72	71.5	70.8	70.1	69.4	68.7	68.1	67.4	66.7	66.1	65.4
73	71.7	71.0	70.3	69.6	69.0	68.3	67.6	67.0	66.3	65.7
74	71.9	71.2	70.5	69.9	69.2	68.5	67.9	67.2	66.6	65.9
75	72.1	71.4	70.8	70.1	69.4	68.8	68.1	67.5	66.8	66.2
76	72.3	71.6	71.0	70.3	69.6	69.0	68.3	67.7	67.1	66.4
77	72.5	71.9	71.2	70.5	69.9	69.2	68.6	67.9	67.3	66.7
78	72.7	72.1	71.4	70.7	70.1	69.4	68.8	68.2	67.5	66.9
79	72.9	72.3	71.6	70.9	70.3	69.6	69.0	68.4	67.7	67.1
80	73.1	72.4	71.8	71.1	70.5	69.9	69.2	68.6	68.0	67.3
81	73.3	72.6	72.0	71.3	70.7	70.1	69.4	68.8	68.2	67.6
82	73.5	72.8	72.2	71.5	70.9	70.3	69.6	69.0	68.4	67.8
83	73.7	73.0	72.4	71.7	71.1	70.5	69.8	69.2	68.6	68.0
84	73.8	73.2	72.6	71.9	71.3	70.7	70.0	69.4	68.8	68.2
85	74.0	73.4	72.7	72.1	71.5	70.9	70.2	69.6	69.0	68.4
86	74.2	73.6	72.9	72.3	71.7	71.1	70.4	69.8	69.2	68.6
87	74.4	73.7	73.1	72.5	71.9	71.2	70.6	70.0	69.4	68.8
88	74.5	73.9	73.3	72.7	72.0	71.4	70.8	70.2	69.6	69.0
89	74.7	74.1	73.4	72.8	72.2	71.6	71.0	70.4	69.8	69.2
90	74.9	74.2	73.6	73.0	72.4	71.8	71.2	70.6	70.0	69.4
91	75.0	74.4	73.8	73.2	72.6	72.0	71.4	70.8	70.2	69.6
92	75.2	74.6	74.0	73.4	72.7	72.2	71.6	71.0	70.4	69.8
93	75.3	74.7	74.1	73.5	72.9	72.3	71.7	71.2	70.6	70.0
94	75.5	74.9	74.3	73.7	73.1	72.5	71.9	71.3	70.7	70.2
95	75.6	75.0	74.4	73.8	73.3	72.7	72.1	71.5	70.9	70.4
96	75.8	75.2	74.6	74.0	73.4	72.8	72.3	71.7	71.1	70.5
97	75.9	75.3	74.8	74.2	73.6	73.0	72.4	71.8	71.3	70.7
98	76.1	75.5	74.9	74.3	73.7	73.2	72.6	72.0	71.5	70.9
99	76.2	75.6	75.1	74.5	73.9	73.3	72.8	72.2	71.6	71.1
100	76.4	75.8	75.2	74.6	74.1	73.5	72.9	72.4	71.8	71.2





表 4b (续)

$t-t_w$ $t$	11.5	12.0	12.5	13.5	13.5	14.0	14.5	15.0	15.5	16.0
15										
16	1.1									
17	4.1	0.7								
18	7.0	3.7	0.4							
19	9.7	6.5	3.3	0.2						
20	12.3	9.1	6.1	3.1	0.1					
21	14.6	11.6	8.7	5.7	2.8					
22	16.9	14.0	11.1	8.2	5.4	2.7				
23	19.0	16.1	13.3	10.6	7.9	5.2	2.6			
24	21.0	18.2	15.5	12.8	10.2	7.6	5.0	2.5	0.0	
25	22.9	20.2	17.5	14.9	12.3	9.8	7.3	4.9	2.5	0.1
26	24.6	22.0	19.4	16.9	14.4	11.9	9.5	7.1	4.8	2.5
27	26.3	23.7	21.2	18.7	16.3	13.9	11.5	9.2	6.9	4.7
28	27.9	25.4	22.9	20.5	18.1	15.8	13.5	11.2	9.0	6.8
29	29.4	26.9	24.5	22.2	19.8	17.5	15.3	13.1	10.9	8.8
30	30.8	28.4	26.0	23.7	21.5	19.2	17.0	14.9	12.8	10.7
31	32.1	29.8	27.5	25.2	23.0	20.8	18.7	16.6	14.5	12.5
32	33.4	31.1	28.8	26.6	24.5	22.3	20.2	18.2	16.1	14.1
33	34.6	32.4	30.1	28.0	25.8	23.8	21.7	19.7	17.7	15.7
34	35.8	33.5	31.4	29.3	27.2	25.1	23.1	21.1	19.2	17.3
35	36.8	34.7	32.6	30.5	28.4	26.4	24.4	22.5	20.6	18.7
36	37.9	35.8	33.7	31.6	29.6	27.6	25.7	23.8	21.9	20.1
37	38.9	36.8	34.7	32.7	30.7	28.8	26.9	25.0	23.2	21.4
38	39.8	37.8	35.7	33.8	31.8	29.9	28.0	26.2	24.4	22.6
39	40.7	38.7	36.7	34.8	32.8	31.0	29.1	27.3	25.5	23.8
40	41.6	39.6	37.6	35.7	33.8	32.0	30.2	28.4	26.6	24.9
41	42.4	40.4	38.5	36.6	34.8	32.9	31.2	29.4	27.7	26.0
42	43.2	41.3	39.4	37.5	35.7	33.9	32.1	30.4	28.7	27.0
43	44.0	42.1	40.2	38.3	36.5	34.8	33.0	31.3	29.6	28.0
44	44.7	42.8	41.0	39.1	37.4	35.6	33.9	32.2	30.6	28.9
45	45.4	43.5	41.7	39.9	38.1	36.4	34.7	33.1	31.4	29.8
46	46.1	44.2	42.4	40.6	38.9	37.2	35.5	33.9	32.3	30.7
47	46.7	44.9	43.1	41.4	39.6	38.0	36.3	34.7	33.1	31.5
48	47.3	45.5	43.8	42.0	40.3	38.7	37.0	35.4	33.9	32.3
49	47.9	46.1	44.4	42.7	41.0	39.4	37.8	36.2	34.6	33.1
50	48.5	46.7	45.0	43.3	41.7	40.0	38.4	36.9	35.3	33.8
51	49.1	47.3	45.6	43.9	42.3	40.7	39.1	37.6	36.0	34.5
52	49.6	47.9	46.2	44.5	42.9	41.3	39.7	38.2	36.7	35.2
53	50.1	48.4	46.7	45.1	43.5	41.9	40.4	38.8	37.4	35.9
54	50.6	48.9	47.3	45.6	44.1	42.5	41.0	39.5	38.0	36.5
55	51.1	49.4	47.8	46.2	44.6	43.1	41.5	40.0	38.6	37.1
56	51.6	49.9	48.3	46.7	45.1	43.6	42.1	40.6	39.2	37.7
57	52.0	50.4	48.8	47.2	45.6	44.1	42.6	41.2	39.7	38.3





表 4c (续)

$t$ \ $t-t_w$	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
58	100.0	99.5	99.0	98.5	98.0	97.5	97.0	96.5	96.0	95.6	95.1
59	100.0	99.5	99.0	98.5	98.0	97.5	97.0	96.6	96.1	95.6	95.1
60	100.0	99.5	99.0	98.5	98.0	97.6	97.1	96.6	96.1	95.6	95.2
61	100.0	99.5	99.0	98.5	98.1	97.6	97.1	96.6	96.2	95.7	95.2
62	100.0	99.5	99.0	98.6	98.1	97.6	97.1	96.7	96.2	95.7	95.2
63	100.0	99.5	99.0	98.6	98.1	97.6	97.2	96.7	96.2	95.8	95.3
64	100.0	99.5	99.1	98.6	98.1	97.6	97.2	96.7	96.3	95.8	95.3
65	100.0	99.5	99.1	98.6	98.1	97.7	97.2	96.7	96.3	95.8	95.4
66	100.0	99.5	99.1	98.6	98.1	97.7	97.2	96.8	96.3	95.9	95.4
67	100.0	99.5	99.1	98.6	98.2	97.7	97.3	96.8	96.3	95.9	95.5
68	100.0	99.5	99.1	98.6	98.2	97.7	97.3	96.8	96.4	95.9	95.5
69	100.0	99.5	99.1	98.6	98.2	97.7	97.3	96.9	96.4	96.0	95.5
70	100.0	99.5	99.1	98.7	98.2	97.8	97.3	96.9	96.4	96.0	95.6
71	100.0	99.6	99.1	98.7	98.2	97.8	97.3	96.9	96.5	96.0	95.6
72	100.0	99.6	99.1	98.7	98.2	97.8	97.4	96.9	96.5	96.1	95.6
73	100.0	99.6	99.1	98.7	98.2	97.8	97.4	97.0	96.5	96.1	95.7
74	100.0	99.6	99.1	98.7	98.3	97.8	97.4	97.0	96.5	96.1	95.7
75	100.0	99.6	99.1	98.7	98.3	97.8	97.4	97.0	96.6	96.2	95.7
76	100.0	99.6	99.1	98.7	98.3	97.9	97.4	97.0	96.6	96.2	95.8
77	100.0	99.6	99.1	98.7	98.3	97.9	97.5	97.0	96.6	96.2	95.8
78	100.0	99.6	99.2	98.7	98.3	97.9	97.5	97.1	96.7	96.2	95.8
79	100.0	99.6	99.2	98.7	98.3	97.9	97.5	97.1	96.7	96.3	95.9
80	100.0	99.6	99.2	98.8	98.3	97.9	97.5	97.1	96.7	96.3	95.9
81	100.0	99.6	99.2	98.8	98.4	97.9	97.5	97.1	96.7	96.3	95.9
82	100.0	99.6	99.2	98.8	98.4	98.0	97.6	97.2	96.8	96.4	96.0
83	100.0	99.6	99.2	98.8	98.4	98.0	97.6	97.2	96.8	96.4	96.0
84	100.0	99.6	99.2	98.8	98.4	98.0	97.6	97.2	96.8	96.4	96.0
85	100.0	99.6	99.2	98.8	98.4	98.0	97.6	97.2	96.8	96.4	96.0
86	100.0	99.6	99.2	98.8	98.4	98.0	97.6	97.2	96.8	96.5	96.1
87	100.0	99.6	99.2	98.8	98.4	98.0	97.6	97.3	96.9	96.5	96.1
88	100.0	99.6	99.2	98.8	98.4	98.0	97.7	97.3	96.9	96.5	96.1
89	100.0	99.6	99.2	98.8	98.4	98.1	97.7	97.3	96.9	96.5	96.1
90	100.0	99.6	99.2	98.8	98.5	98.1	97.7	97.3	96.9	96.6	96.2
91	100.0	99.6	99.2	98.8	98.5	98.1	97.7	97.3	97.0	96.6	96.2
92	100.0	99.6	99.2	98.9	98.5	98.1	97.7	97.3	97.0	96.6	96.2
93	100.0	99.6	99.2	98.9	98.5	98.1	97.7	97.4	97.0	96.6	96.3
94	100.0	99.6	99.2	98.9	98.5	98.1	97.8	97.4	97.0	96.6	96.3
95	100.0	99.6	99.3	98.9	98.5	98.1	97.8	97.4	97.0	96.7	96.3
96	100.0	99.6	99.3	98.9	98.5	98.2	97.8	97.4	97.1	96.7	96.3
97	100.0	99.6	99.3	98.9	98.5	98.2	97.8	97.4	97.1	96.7	96.4
98	100.0	99.6	99.3	98.9	98.5	98.2	97.8	97.5	97.1	96.7	96.4
99	100.0	99.6	99.3	98.9	98.5	98.2	97.8	97.5	97.1	96.8	96.4
100	100.0	99.6	99.3	98.9	98.6	98.2	97.8	97.5	97.1	96.8	96.4







表 4c (续)

$t$ \ $t-t_w$	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0
58	89.9	89.4	88.9	88.5	88.0	87.6	87.1	86.7	86.2	85.8
59	90.0	89.5	89.0	88.6	88.1	87.7	87.2	86.8	86.3	85.9
60	90.0	89.6	89.1	88.7	88.2	87.8	87.3	86.9	86.5	86.0
61	90.1	89.7	89.2	88.8	88.3	87.9	87.5	87.0	86.6	86.1
62	90.2	89.8	89.3	88.9	88.4	88.0	87.6	87.1	86.7	86.3
63	90.3	89.9	89.4	89.0	88.5	88.1	87.7	87.2	86.8	86.4
64	90.4	90.0	89.5	89.1	88.6	88.2	87.8	87.3	86.9	86.5
65	90.5	90.0	89.6	89.2	88.7	88.3	87.9	87.5	87.0	86.6
66	90.6	90.1	89.7	89.3	88.8	88.4	88.0	87.6	87.1	86.7
67	90.6	90.2	89.8	89.4	88.9	88.5	88.1	87.7	87.2	86.8
68	90.7	90.3	89.9	89.4	89.0	88.6	88.2	87.8	87.3	86.9
69	90.8	90.4	89.9	89.5	89.1	88.7	88.3	87.9	87.5	87.0
70	90.9	90.4	90.0	89.6	89.2	88.8	88.4	88.0	87.5	87.1
71	90.9	90.5	90.1	89.7	89.3	88.9	88.5	88.1	87.6	87.2
72	91.0	90.6	90.2	89.8	89.4	89.0	88.5	88.1	87.7	87.3
73	91.1	90.7	90.3	89.8	89.4	89.0	88.6	88.2	87.8	87.4
74	91.1	90.7	90.3	89.9	89.5	89.1	88.7	88.3	87.9	87.5
75	91.2	90.8	90.4	90.0	89.6	89.2	88.8	88.4	88.0	87.6
76	91.3	90.9	90.5	90.1	89.7	89.3	88.9	88.5	88.1	87.7
77	91.3	90.9	90.5	90.2	89.8	89.4	89.0	88.6	88.2	87.8
78	91.4	91.0	90.6	90.2	89.8	89.4	89.1	88.7	88.3	87.9
79	91.5	91.1	90.7	90.3	89.9	89.5	89.1	88.8	88.4	88.0
80	91.5	91.1	90.8	90.4	90.0	89.6	89.2	88.8	88.5	88.1
81	91.6	91.2	90.8	90.4	90.1	89.7	89.3	88.9	88.5	88.2
82	91.7	91.3	90.9	90.5	90.1	89.7	89.4	89.0	88.6	88.2
83	91.7	91.3	91.0	90.6	90.2	89.8	89.4	89.1	88.7	88.3
84	91.8	91.4	91.0	90.6	90.3	89.9	89.5	89.1	88.8	88.4
85	91.8	91.5	91.1	90.7	90.3	90.0	89.6	89.2	88.9	88.5
86	91.9	91.5	91.1	90.8	90.4	90.0	89.7	89.3	88.9	88.6
87	91.9	91.6	91.2	90.8	90.5	90.1	89.7	89.4	89.0	88.6
88	92.0	91.6	91.3	90.9	90.5	90.2	89.8	89.4	89.1	88.7
89	92.1	91.7	91.3	91.0	90.6	90.2	89.9	89.5	89.2	88.8
90	92.1	91.7	91.4	91.0	90.7	90.3	89.9	89.6	89.2	88.9
91	92.2	91.8	91.4	91.1	90.7	90.4	90.0	89.7	89.3	89.0
92	92.2	91.9	91.5	91.1	90.8	90.4	90.1	89.7	89.4	89.0
93	92.3	91.9	91.6	91.2	90.8	90.5	90.1	89.8	89.4	89.1
94	92.3	92.0	91.6	91.3	90.9	90.6	90.2	89.9	89.5	89.2
95	92.4	92.0	91.7	91.3	91.0	90.6	90.3	89.9	89.6	89.2
96	92.4	92.1	91.7	91.4	91.0	90.7	90.3	90.0	89.6	89.3
97	92.5	92.1	91.8	91.4	91.1	90.7	90.4	90.1	89.7	89.4
98	92.5	92.2	91.8	91.5	91.1	90.8	90.5	90.1	89.8	89.4
99	92.6	92.2	91.9	91.5	91.2	90.9	90.5	90.2	89.8	89.5
100	92.6	92.3	91.9	91.6	91.3	90.9	90.6	90.2	89.9	89.6









表 4c (续)

$t-t_w$ $t$	5.2	5.4	5.6	5.8	6.0	6.2	6.4	6.6	6.8	7.0
15	52.9	51.2	49.6	48.0	46.3	44.7	43.1	41.6	40.0	38.4
16	54.2	52.6	51.0	49.4	47.9	46.3	44.8	43.2	41.7	40.2
17	55.4	53.9	52.3	50.8	49.3	47.8	46.3	44.8	43.3	41.8
18	56.6	55.1	53.6	52.1	50.6	49.1	47.7	46.2	44.8	43.4
19	57.7	56.2	54.8	53.3	51.9	50.4	49.0	47.6	46.2	44.8
20	58.7	57.3	55.9	54.5	53.1	51.7	50.3	48.9	47.5	46.2
21	59.7	58.3	56.9	55.5	54.2	52.8	51.5	50.1	48.8	47.5
22	60.6	59.3	57.9	56.6	55.2	53.9	52.6	51.3	50.0	48.7
23	61.5	60.2	58.8	57.5	56.2	54.9	53.6	52.4	51.1	49.9
24	62.3	61.0	59.7	58.4	57.2	55.9	54.6	53.4	52.2	50.9
25	63.1	61.8	60.6	59.3	58.1	56.8	55.6	54.4	53.2	52.0
26	63.8	62.6	61.4	60.1	58.9	57.7	56.5	55.3	54.1	52.9
27	64.5	63.3	62.1	60.9	59.7	58.5	57.3	56.2	55.0	53.9
28	65.2	64.0	62.8	61.6	60.5	59.3	58.2	57.0	55.9	54.7
29	65.9	64.7	63.5	62.3	61.2	60.1	58.9	57.8	56.7	55.6
30	66.5	65.3	64.1	63.0	61.9	60.8	59.6	58.5	57.4	56.4
31	67.0	65.9	64.8	63.6	62.5	61.4	60.3	59.3	58.2	57.1
32	67.6	66.5	65.4	64.3	63.2	62.1	61.0	59.9	58.9	57.8
33	68.1	67.0	65.9	64.8	63.8	62.7	61.6	60.6	59.5	58.5
34	68.6	67.5	66.4	65.4	64.3	63.3	62.2	61.2	60.2	59.2
35	69.1	68.0	67.0	65.9	64.9	63.8	62.8	61.8	60.8	59.8
36	69.5	68.5	67.4	66.4	65.4	64.4	63.4	62.4	61.4	60.4
37	70.0	68.9	67.9	66.9	65.9	64.9	63.9	62.9	61.9	61.0
38	70.4	69.4	68.4	67.4	66.4	65.4	64.4	63.4	62.5	61.5
39	70.8	69.8	68.8	67.8	66.8	65.8	64.9	63.9	63.0	62.0
40	71.2	70.2	69.2	68.2	67.3	66.3	65.3	64.4	63.5	62.5
41	71.6	70.6	69.6	68.6	67.7	66.7	65.8	64.9	63.9	63.0
42	71.9	70.9	70.0	69.0	68.1	67.2	66.2	65.3	64.4	63.5
43	72.3	71.3	70.4	69.4	68.5	67.6	66.6	65.7	64.8	63.9
44	72.6	71.7	70.7	69.8	68.9	67.9	67.0	66.1	65.2	64.4
45	72.9	72.0	71.1	70.1	69.2	68.3	67.4	66.5	65.7	64.8
46	73.2	72.3	71.4	70.5	69.6	68.7	67.8	66.9	66.0	65.2
47	73.5	72.6	71.7	70.8	69.9	69.0	68.2	67.3	66.4	65.6
48	73.8	72.9	72.0	71.1	70.2	69.4	68.5	67.6	66.8	65.9
49	74.1	73.2	72.3	71.4	70.6	69.7	68.8	68.0	67.1	66.3
50	74.4	73.5	72.6	71.7	70.9	70.0	69.2	68.3	67.5	66.7
51	74.6	73.8	72.9	72.0	71.2	70.3	69.5	68.6	67.8	67.0
52	74.9	74.0	73.2	72.3	71.5	70.6	69.8	69.0	68.1	67.3
53	75.1	74.3	73.4	72.6	71.7	70.9	70.1	69.3	68.5	67.6
54	75.4	74.5	73.7	72.9	72.0	71.2	70.4	69.6	68.8	68.0
55	75.6	74.8	73.9	73.1	72.3	71.5	70.7	69.9	69.1	68.3
56	75.9	75.0	74.2	73.4	72.5	71.7	70.9	70.1	69.3	68.6
57	76.1	75.2	74.4	73.6	72.8	72.0	71.2	70.4	69.6	68.8

表 4c (续)

$t$ \ $t-t_w$	5.2	5.4	5.6	5.8	6.0	6.2	6.4	6.6	6.8	7.0
58	76.3	75.5	74.7	73.8	73.0	72.2	71.5	70.7	69.9	69.1
59	76.5	75.7	74.9	74.1	73.3	72.5	71.7	70.9	70.2	69.4
60	76.7	75.9	75.1	74.3	73.5	72.7	72.0	71.2	70.4	69.7
61	76.9	76.1	75.3	74.5	73.7	73.0	72.2	71.4	70.7	69.9
62	77.1	76.3	75.5	74.7	74.0	73.2	72.4	71.7	70.9	70.2
63	77.3	76.5	75.7	75.0	74.2	73.4	72.7	71.9	71.2	70.4
64	77.5	76.7	75.9	75.2	74.4	73.6	72.9	72.1	71.4	70.7
65	77.7	76.9	76.1	75.4	74.6	73.9	73.1	72.4	71.6	70.9
66	77.9	77.1	76.3	75.6	74.8	74.1	73.3	72.6	71.9	71.1
67	78.0	77.3	76.5	75.8	75.0	74.3	73.5	72.8	72.1	71.4
68	78.2	77.5	76.7	76.0	75.2	74.5	73.7	73.0	72.3	71.6
69	78.4	77.6	76.9	76.1	75.4	74.7	73.9	73.2	72.5	71.8
70	78.5	77.8	77.1	76.3	75.6	74.9	74.1	73.4	72.7	72.0
71	78.7	78.0	77.2	76.5	75.8	75.1	74.3	73.6	72.9	72.2
72	78.9	78.1	77.4	76.7	76.0	75.2	74.5	73.8	73.1	72.4
73	79.0	78.3	77.6	76.9	76.1	75.4	74.7	74.0	73.3	72.6
74	79.2	78.5	77.7	77.0	76.3	75.6	74.9	74.2	73.5	72.8
75	79.3	78.6	77.9	77.2	76.5	75.8	75.1	74.4	73.7	73.0
76	79.5	78.8	78.1	77.4	76.6	76.0	75.3	74.6	73.9	73.2
77	79.6	78.9	78.2	77.5	76.8	76.1	75.4	74.7	74.1	73.4
78	79.8	79.1	78.4	77.7	77.0	76.3	75.6	74.9	74.3	73.6
79	79.9	79.2	78.5	77.8	77.1	76.5	75.8	75.1	74.4	73.8
80	80.1	79.4	78.7	78.0	77.3	76.6	75.9	75.3	74.6	73.9
81	80.2	79.5	78.8	78.1	77.5	76.8	76.1	75.4	74.8	74.1
82	80.3	79.7	79.0	78.3	77.6	76.9	76.3	75.6	74.9	74.3
83	80.5	79.8	79.1	78.4	77.8	77.1	76.4	75.8	75.1	74.5
84	80.6	79.9	79.2	78.6	77.9	77.2	76.6	75.9	75.3	74.6
85	80.7	80.1	79.4	78.7	78.1	77.4	76.7	76.1	75.4	74.8
86	80.9	80.2	79.5	78.9	78.2	77.5	76.9	76.2	75.6	75.0
87	81.0	80.3	79.7	79.0	78.3	77.7	77.0	76.4	75.8	75.1
88	81.1	80.5	79.8	79.1	78.5	77.8	77.2	76.6	75.9	75.3
89	81.2	80.6	79.9	79.3	78.6	78.0	77.3	76.7	76.1	75.4
90	81.4	80.7	80.1	79.4	78.8	78.1	77.5	76.9	76.2	75.6
91	81.5	80.8	80.2	79.5	78.9	78.3	77.6	77.0	76.4	75.8
92	81.6	81.0	80.3	79.7	79.0	78.4	77.8	77.1	76.5	75.9
93	81.7	81.1	80.4	79.8	79.2	78.5	77.9	77.3	76.7	76.1
94	81.8	81.2	80.6	79.9	79.3	78.7	78.0	77.4	76.8	76.2
95	82.0	81.3	80.7	80.0	79.4	78.8	78.2	77.6	77.0	76.3
96	82.1	81.4	80.8	80.2	79.5	78.9	78.3	77.7	77.1	76.5
97	82.2	81.5	80.9	80.3	79.7	79.1	78.4	77.8	77.2	76.6
98	82.3	81.7	81.0	80.4	79.8	79.2	78.6	78.0	77.4	76.8
99	82.4	81.8	81.2	80.5	79.9	79.3	78.7	78.1	77.5	76.9
100	82.5	81.9	81.3	80.7	80.0	79.4	78.8	78.2	77.6	77.1



表 4c (续)

$t$ \ $t-t_w$	7.2	7.4	7.6	7.8	8.0	8.2	8.4	8.6	8.8	9.0
58	68.4	67.6	66.8	66.1	65.3	64.6	63.9	63.2	62.4	61.7
59	68.6	67.9	67.1	66.4	65.7	64.9	64.2	63.5	62.8	62.1
60	68.9	68.2	67.4	66.7	65.9	65.2	64.5	63.8	63.1	62.4
61	69.2	68.4	67.7	67.0	66.2	65.5	64.8	64.1	63.4	62.7
62	69.4	68.7	68.0	67.2	66.5	65.8	65.1	64.4	63.7	63.0
63	69.7	69.0	68.2	67.5	66.8	66.1	65.4	64.7	64.0	63.3
64	69.9	69.2	68.5	67.8	67.1	66.4	65.7	65.0	64.3	63.6
65	70.2	69.5	68.7	68.0	67.3	66.6	65.9	65.2	64.6	63.9
66	70.4	69.7	69.0	68.3	67.6	66.9	66.2	65.5	64.8	64.2
67	70.6	69.9	69.2	68.5	67.8	67.1	66.5	65.8	65.1	64.4
68	70.9	70.2	69.5	68.8	68.1	67.4	66.7	66.0	65.4	64.7
69	71.1	70.4	69.7	69.0	68.3	67.6	67.0	66.3	65.6	65.0
70	71.3	70.6	69.9	69.2	68.6	67.9	67.2	66.5	65.9	65.2
71	71.5	70.8	70.1	69.5	68.8	68.1	67.4	66.8	66.1	65.5
72	71.7	71.0	70.4	69.7	69.0	68.3	67.7	67.0	66.4	65.7
73	71.9	71.3	70.6	69.9	69.2	68.6	67.9	67.3	66.6	66.0
74	72.1	71.5	70.8	70.1	69.5	68.8	68.1	67.5	66.9	66.2
75	72.3	71.7	71.0	70.3	69.7	69.0	68.4	67.7	67.1	66.4
76	72.5	71.9	71.2	70.5	69.9	69.2	68.6	67.9	67.3	66.7
77	72.7	72.1	71.4	70.7	70.1	69.4	68.8	68.2	67.5	66.9
78	72.9	72.3	71.6	70.9	70.3	69.7	69.0	68.4	67.8	67.1
79	73.1	72.4	71.8	71.1	70.5	69.9	69.2	68.6	68.0	67.4
80	73.3	72.6	72.0	71.3	70.7	70.1	69.4	68.8	68.2	67.6
81	73.5	72.8	72.2	71.5	70.9	70.3	69.6	69.0	68.4	67.8
82	73.6	73.0	72.4	71.7	71.1	70.5	69.8	69.2	68.6	68.0
83	73.8	73.2	72.5	71.9	71.3	70.7	70.0	69.4	68.8	68.2
84	74.0	73.4	72.7	72.1	71.5	70.8	70.2	69.6	69.0	68.4
85	74.2	73.5	72.9	72.3	71.7	71.0	70.4	69.8	69.2	68.6
86	74.3	73.7	73.1	72.5	71.8	71.2	70.6	70.0	69.4	68.8
87	74.5	73.9	73.2	72.6	72.0	71.4	70.8	70.2	69.6	69.0
88	74.7	74.0	73.4	72.8	72.2	71.6	71.0	70.4	69.8	69.2
89	74.8	74.2	73.6	73.0	72.4	71.8	71.2	70.6	70.0	69.4
90	75.0	74.4	73.8	73.1	72.5	71.9	71.3	70.7	70.2	69.6
91	75.1	74.5	73.9	73.3	72.7	72.1	71.5	70.9	70.3	69.8
92	75.3	74.7	74.1	73.5	72.9	72.3	71.7	71.1	70.5	69.9
93	75.4	74.8	74.2	73.6	73.0	72.5	71.9	71.3	70.7	70.1
94	75.6	75.0	74.4	73.8	73.2	72.6	72.0	71.5	70.9	70.3
95	75.7	75.1	74.5	74.0	73.4	72.8	72.2	71.6	71.1	70.5
96	75.9	75.3	74.7	74.1	73.5	72.9	72.4	71.8	71.2	70.7
97	76.0	75.4	74.9	74.3	73.7	73.1	72.5	72.0	71.4	70.8
98	76.2	75.6	75.0	74.4	73.8	73.3	72.7	72.1	71.6	71.0
99	76.3	75.7	75.2	74.6	74.0	73.4	72.9	72.3	71.7	71.2
100	76.5	75.9	75.3	74.7	74.2	73.6	73.0	72.5	71.9	71.3

表 4c (续)

$t-t_w$	9.2	9.4	9.6	9.8	10.0	10.2	10.4	10.6	10.8	11.0
15	21.9	20.5	19.0	17.6	16.2	14.8	13.4	12.0	10.6	9.2
16	24.2	22.8	21.4	20.0	18.6	17.3	15.9	14.6	13.2	11.9
17	26.3	24.9	23.6	22.3	20.9	19.6	18.3	17.0	15.7	14.4
18	28.3	27.0	25.7	24.4	23.1	21.8	20.5	19.3	18.0	16.8
19	30.2	28.9	27.6	26.4	25.1	23.9	22.6	21.4	20.2	19.0
20	31.9	30.7	29.5	28.2	27.0	25.8	24.6	23.4	22.2	21.0
21	33.6	32.4	31.2	30.0	28.8	27.6	26.5	25.3	24.1	23.0
22	35.2	34.0	32.8	31.6	30.5	29.3	28.2	27.1	26.0	24.8
23	36.6	35.5	34.3	33.2	32.1	31.0	29.9	28.8	27.7	26.6
24	38.0	36.9	35.8	34.7	33.6	32.5	31.4	30.3	29.3	28.2
25	39.3	38.2	37.2	36.1	35.0	33.9	32.9	31.8	30.8	29.7
26	40.6	39.5	38.4	37.4	36.3	35.3	34.3	33.2	32.2	31.2
27	41.8	40.7	39.7	38.6	37.6	36.6	35.6	34.6	33.6	32.6
28	42.9	41.9	40.8	39.8	38.8	37.8	36.8	35.8	34.9	33.9
29	43.9	42.9	41.9	40.9	40.0	39.0	38.0	37.0	36.1	35.1
30	45.0	44.0	43.0	42.0	41.0	40.1	39.1	38.2	37.2	36.3
31	45.9	44.9	44.0	43.0	42.1	41.1	40.2	39.3	38.3	37.4
32	46.8	45.9	44.9	44.0	43.1	42.1	41.2	40.3	39.4	38.5
33	47.7	46.8	45.8	44.9	44.0	43.1	42.2	41.3	40.4	39.5
34	48.5	47.6	46.7	45.8	44.9	44.0	43.1	42.2	41.3	40.5
35	49.3	48.4	47.5	46.6	45.7	44.8	44.0	43.1	42.2	41.4
36	50.1	49.2	48.3	47.4	46.5	45.7	44.8	44.0	43.1	42.3
37	50.8	49.9	49.0	48.2	47.3	46.5	45.6	44.8	43.9	43.1
38	51.5	50.6	49.7	48.9	48.0	47.2	46.4	45.5	44.7	43.9
39	52.1	51.3	50.4	49.6	48.8	47.9	47.1	46.3	45.5	44.7
40	52.8	51.9	51.1	50.3	49.4	48.6	47.8	47.0	46.2	45.4
41	53.4	52.5	51.7	50.9	50.1	49.3	48.5	47.7	46.9	46.1
42	54.0	53.1	52.3	51.5	50.7	49.9	49.1	48.3	47.6	46.8
43	54.5	53.7	52.9	52.1	51.3	50.5	49.7	49.0	48.2	47.4
44	55.1	54.3	53.5	52.7	51.9	51.1	50.3	49.6	48.8	48.1
45	55.6	54.8	54.0	53.2	52.5	51.7	50.9	50.2	49.4	48.7
46	56.1	55.3	54.5	53.8	53.0	52.2	51.5	50.7	50.0	49.2
47	56.6	55.8	55.0	54.3	53.5	52.8	52.0	51.3	50.5	49.8
48	57.1	56.3	55.5	54.8	54.0	53.3	52.5	51.8	51.1	50.3
49	57.5	56.7	56.0	55.2	54.5	53.8	53.0	52.3	51.6	50.9
50	57.9	57.2	56.4	55.7	55.0	54.2	53.5	52.8	52.1	51.4
51	58.4	57.6	56.9	56.1	55.4	54.7	54.0	53.3	52.6	51.8
52	58.8	58.0	57.3	56.6	55.9	55.1	54.4	53.7	53.0	52.3
53	59.2	58.4	57.7	57.0	56.3	55.6	54.9	54.2	53.5	52.8
54	59.6	58.8	58.1	57.4	56.7	56.0	55.3	54.6	53.9	53.2
55	59.9	59.2	58.5	57.8	57.1	56.4	55.7	55.0	54.3	53.7
56	60.3	59.6	58.9	58.2	57.5	56.8	56.1	55.4	54.7	54.1
57	60.7	60.0	59.3	58.6	57.9	57.2	56.5	55.8	55.1	54.5













表 5a<sub>1</sub>(续)

$t$ \ $t-t_w$	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
58	94.5	94.0	93.6	93.1	92.6	92.1	91.6	91.2	90.7	90.2
59	94.6	94.1	93.6	93.2	92.7	92.2	91.7	91.3	90.8	90.3
60	94.6	94.2	93.7	93.2	92.7	92.3	91.8	91.3	90.9	90.4
61	94.7	94.2	93.7	93.3	92.8	92.3	91.9	91.4	91.0	90.5
62	94.7	94.3	93.8	93.3	92.9	92.4	92.0	91.5	91.0	90.6
63	94.8	94.3	93.9	93.4	92.9	92.5	92.0	91.6	91.1	90.7
64	94.8	94.4	93.9	93.5	93.0	92.6	92.1	91.7	91.2	90.8
65	94.9	94.4	94.0	93.5	93.1	92.6	92.2	91.7	91.3	90.8
66	94.9	94.5	94.0	93.6	93.1	92.7	92.2	91.8	91.4	90.9
67	95.0	94.5	94.1	93.6	93.2	92.7	92.3	91.9	91.4	91.0
68	95.0	94.6	94.1	93.7	93.2	92.8	92.4	91.9	91.5	91.1
69	95.1	94.6	94.2	93.7	93.3	92.9	92.4	92.0	91.6	91.1
70	95.1	94.7	94.2	93.8	93.4	92.9	92.5	92.1	91.6	91.2
71	95.1	94.7	94.3	93.8	93.4	93.0	92.6	92.1	91.7	91.3
72	95.2	94.7	94.3	93.9	93.5	93.0	92.6	92.2	91.8	91.4
73	95.2	94.8	94.4	93.9	93.5	93.1	92.7	92.3	91.8	91.4
74	95.3	94.8	94.4	94.0	93.6	93.2	92.7	92.3	91.9	91.5
75	95.3	94.9	94.5	94.0	93.6	93.2	92.8	92.4	92.0	91.6
76	95.3	94.9	94.5	94.1	93.7	93.3	92.9	92.4	92.0	91.6
77	95.4	95.0	94.5	94.1	93.7	93.3	92.9	92.5	92.1	91.7
78	95.4	95.0	94.6	94.2	93.8	93.4	93.0	92.6	92.2	91.8
79	95.4	95.0	94.6	94.2	93.8	93.4	93.0	92.6	92.2	91.8
80	95.5	95.1	94.7	94.3	93.9	93.5	93.1	92.7	92.3	91.9
81	95.5	95.1	94.7	94.3	93.9	93.5	93.1	92.7	92.3	91.9
82	95.5	95.1	94.7	94.3	94.0	93.6	93.2	92.8	92.4	92.0
83	95.6	95.2	94.8	94.4	94.0	93.6	93.2	92.8	92.4	92.1
84	95.6	95.2	94.8	94.4	94.0	93.7	93.3	92.9	92.5	92.1
85	95.6	95.2	94.9	94.5	94.1	93.7	93.3	92.9	92.6	92.2
86	95.7	95.3	94.9	94.5	94.1	93.7	93.4	93.0	92.6	92.2
87	95.7	95.3	94.9	94.5	94.2	93.8	93.4	93.0	92.7	92.3
88	95.7	95.3	95.0	94.6	94.2	93.8	93.5	93.1	92.7	92.3
89	95.8	95.4	95.0	94.6	94.2	93.9	93.5	93.1	92.8	92.4
90	95.8	95.4	95.0	94.7	94.3	93.9	93.5	93.2	92.8	92.4
91	95.8	95.4	95.1	94.7	94.3	94.0	93.6	93.2	92.9	92.5
92	95.8	95.5	95.1	94.7	94.4	94.0	93.6	93.3	92.9	92.5
93	95.9	95.5	95.1	94.8	94.4	94.0	93.7	93.3	93.0	92.6
94	95.9	95.5	95.2	94.8	94.4	94.1	93.7	93.4	93.0	92.6
95	95.9	95.6	95.2	94.8	94.5	94.1	93.8	93.4	93.1	92.7
96	96.0	95.6	95.2	94.9	94.5	94.2	93.8	93.5	93.1	92.7
97	96.0	95.6	95.3	94.9	94.6	94.2	93.8	93.5	93.1	92.8
98	96.0	95.7	95.3	94.9	94.6	94.2	93.9	93.5	93.2	92.8
99	96.0	95.7	95.3	95.0	94.6	94.3	93.9	93.6	93.2	92.9
100	96.1	95.7	95.4	95.0	94.7	94.3	94.0	93.6	93.3	92.9

表 5a<sub>1</sub> (续)

$t$	$t-t_w$	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0
15		78.8	77.8	76.9	75.9	74.9	74.0	73.0	72.1	71.1	70.2
16		79.4	78.5	77.5	76.6	75.7	74.7	73.8	72.9	72.0	71.0
17		80.0	79.1	78.2	77.3	76.4	75.5	74.6	73.7	72.8	71.9
18		80.5	79.7	78.8	77.9	77.0	76.1	75.3	74.4	73.5	72.6
19		81.1	80.2	79.3	78.5	77.6	76.8	75.9	75.1	74.2	73.4
20		81.5	80.7	79.9	79.0	78.2	77.4	76.5	75.7	74.9	74.1
21		82.0	81.2	80.4	79.5	78.7	77.9	77.1	76.3	75.5	74.7
22		82.4	81.6	80.8	80.0	79.2	78.5	77.7	76.9	76.1	75.3
23		82.8	82.1	81.3	80.5	79.7	79.0	78.2	77.4	76.7	75.9
24		83.2	82.5	81.7	80.9	80.2	79.4	78.7	77.9	77.2	76.4
25		83.6	82.8	82.1	81.4	80.6	79.9	79.1	78.4	77.7	77.0
26		83.9	83.2	82.5	81.8	81.0	80.3	79.6	78.9	78.2	77.4
27		84.3	83.6	82.8	82.1	81.4	80.7	80.0	79.3	78.6	77.9
28		84.6	83.9	83.2	82.5	81.8	81.1	80.4	79.7	79.0	78.4
29		84.9	84.2	83.5	82.8	82.1	81.5	80.8	80.1	79.4	78.8
30		85.2	84.5	83.8	83.1	82.5	81.8	81.1	80.5	79.8	79.2
31		85.4	84.8	84.1	83.4	82.8	82.1	81.5	80.8	80.2	79.5
32		85.7	85.0	84.4	83.7	83.1	82.5	81.8	81.2	80.5	79.9
33		85.9	85.3	84.7	84.0	83.4	82.8	82.1	81.5	80.9	80.3
34		86.2	85.5	84.9	84.3	83.7	83.0	82.4	81.8	81.2	80.6
35		86.4	85.8	85.2	84.5	83.9	83.3	82.7	82.1	81.5	80.9
36		86.6	86.0	85.4	84.8	84.2	83.6	83.0	82.4	81.8	81.2
37		86.8	86.2	85.6	85.0	84.4	83.8	83.2	82.7	82.1	81.5
38		87.0	86.4	85.8	85.2	84.7	84.1	83.5	82.9	82.3	81.8
39		87.2	86.6	86.0	85.5	84.9	84.3	83.7	83.2	82.6	82.0
40		87.4	86.8	86.2	85.7	85.1	84.5	84.0	83.4	82.8	82.3
41		87.6	87.0	86.4	85.9	85.3	84.7	84.2	83.6	83.1	82.5
42		87.7	87.2	86.6	86.0	85.5	84.9	84.4	83.8	83.3	82.8
43		87.9	87.3	86.8	86.2	85.7	85.1	84.6	84.1	83.5	83.0
44		88.0	87.5	86.9	86.4	85.9	85.3	84.8	84.3	83.7	83.2
45		88.2	87.7	87.1	86.6	86.0	85.5	85.0	84.5	83.9	83.4
46		88.3	87.8	87.3	86.7	86.2	85.7	85.2	84.7	84.1	83.6
47		88.5	87.9	87.4	86.9	86.4	85.9	85.3	84.8	84.3	83.8
48		88.6	88.1	87.6	87.1	86.5	86.0	85.5	85.0	84.5	84.0
49		88.7	88.2	87.7	87.2	86.7	86.2	85.7	85.2	84.7	84.2
50		88.9	88.4	87.9	87.3	86.8	86.3	85.8	85.4	84.9	84.4
51		89.0	88.5	88.0	87.5	87.0	86.5	86.0	85.5	85.0	84.5
52		89.1	88.6	88.1	87.6	87.1	86.6	86.2	85.7	85.2	84.7
53		89.2	88.7	88.2	87.8	87.3	86.8	86.3	85.8	85.3	84.9
54		89.3	88.9	88.4	87.9	87.4	86.9	86.4	86.0	85.5	85.0
55		89.4	89.0	88.5	88.0	87.5	87.1	86.6	86.1	85.6	85.2
56		89.6	89.1	88.6	88.1	87.7	87.2	86.7	86.3	85.8	85.3
57		89.7	89.2	88.7	88.2	87.8	87.3	86.8	86.4	85.9	85.5

表 5a<sub>1</sub>(续)

$t-t_w$ $t$	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0
58	89.8	89.3	88.8	88.4	87.9	87.4	87.0	86.5	86.1	85.6
59	89.9	89.4	88.9	88.5	88.0	87.6	87.1	86.6	86.2	85.7
60	90.0	89.5	89.0	88.6	88.1	87.7	87.2	86.8	86.3	85.9
61	90.0	89.6	89.1	88.7	88.2	87.8	87.3	86.9	86.5	86.0
62	90.1	89.7	89.2	88.8	88.3	87.9	87.5	87.0	86.6	86.1
63	90.2	89.8	89.3	88.9	88.4	88.0	87.6	87.1	86.7	86.3
64	90.3	89.9	89.4	89.0	88.5	88.1	87.7	87.2	86.8	86.4
65	90.4	90.0	89.5	89.1	88.6	88.2	87.8	87.4	86.9	86.5
66	90.5	90.0	89.6	89.2	88.7	88.3	87.9	87.5	87.0	86.6
67	90.6	90.1	89.7	89.3	88.8	88.4	88.0	87.6	87.1	86.7
68	90.6	90.2	89.8	89.4	88.9	88.5	88.1	87.7	87.3	86.8
69	90.7	90.3	89.9	89.5	89.0	88.6	88.2	87.8	87.4	86.9
70	90.8	90.4	90.0	89.5	89.1	88.7	88.3	87.9	87.5	87.1
71	90.9	90.5	90.0	89.6	89.2	88.8	88.4	88.0	87.6	87.2
72	90.9	90.5	90.1	89.7	89.3	88.9	88.5	88.1	87.7	87.3
73	91.0	90.6	90.2	89.8	89.4	89.0	88.6	88.2	87.8	87.4
74	91.1	90.7	90.3	89.9	89.5	89.1	88.7	88.3	87.9	87.5
75	91.2	90.8	90.3	89.9	89.5	89.1	88.7	88.4	88.0	87.6
76	91.2	90.8	90.4	90.0	89.6	89.2	88.8	88.4	88.0	87.7
77	91.3	90.9	90.5	90.1	89.7	89.3	88.9	88.5	88.1	87.7
78	91.4	91.0	90.6	90.2	89.8	89.4	89.0	88.6	88.2	87.8
79	91.4	91.0	90.6	90.2	89.9	89.5	89.1	88.7	88.3	87.9
80	91.5	91.1	90.7	90.3	89.9	89.5	89.2	88.8	88.4	88.0
81	91.6	91.2	90.8	90.4	90.0	89.6	89.2	88.9	88.5	88.1
82	91.6	91.2	90.8	90.5	90.1	89.7	89.3	88.9	88.6	88.2
83	91.7	91.3	90.9	90.5	90.2	89.8	89.4	89.0	88.7	88.3
84	91.7	91.4	91.0	90.6	90.2	89.9	89.5	89.1	88.7	88.4
85	91.8	91.4	91.0	90.7	90.3	89.9	89.6	89.2	88.8	88.4
86	91.9	91.5	91.1	90.7	90.4	90.0	89.6	89.3	88.9	88.5
87	91.9	91.5	91.2	90.8	90.4	90.1	89.7	89.3	89.0	88.6
88	92.0	91.6	91.2	90.9	90.5	90.1	89.8	89.4	89.0	88.7
89	92.0	91.7	91.3	90.9	90.6	90.2	89.8	89.5	89.1	88.8
90	92.1	91.7	91.4	91.0	90.6	90.3	89.9	89.6	89.2	88.8
91	92.1	91.8	91.4	91.1	90.7	90.3	90.0	89.6	89.3	88.9
92	92.2	91.8	91.5	91.1	90.8	90.4	90.0	89.7	89.3	89.0
93	92.2	91.9	91.5	91.2	90.8	90.5	90.1	89.8	89.4	89.1
94	92.3	91.9	91.6	91.2	90.9	90.5	90.2	89.8	89.5	89.1
95	92.3	92.0	91.6	91.3	90.9	90.6	90.2	89.9	89.6	89.2
96	92.4	92.0	91.7	91.3	91.0	90.7	90.3	90.0	89.6	89.3
97	92.4	92.1	91.7	91.4	91.1	90.7	90.4	90.0	89.7	89.3
98	92.5	92.1	91.8	91.5	91.1	90.8	90.4	90.1	89.8	89.4
99	92.5	92.2	91.9	91.5	91.2	90.8	90.5	90.2	89.8	89.5
100	92.6	92.2	91.9	91.6	91.2	90.9	90.6	90.2	89.9	89.6

表 5a<sub>1</sub> (续)

$t$ \ $t-t_w$	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0
15	69.2	68.3	67.4	66.4	65.5	64.6	63.6	62.7	61.8	60.9
16	70.1	69.2	68.3	67.4	66.5	65.6	64.7	63.8	62.9	62.0
17	71.0	70.1	69.2	68.3	67.5	66.6	65.7	64.9	64.0	63.1
18	71.8	70.9	70.1	69.2	68.4	67.5	66.7	65.8	65.0	64.1
19	72.5	71.7	70.9	70.0	69.2	68.4	67.6	66.7	65.9	65.1
20	73.2	72.4	71.6	70.8	70.0	69.2	68.4	67.6	66.8	66.0
21	73.9	73.1	72.3	71.5	70.8	70.0	69.2	68.4	67.6	66.9
22	74.5	73.8	73.0	72.2	71.5	70.7	69.9	69.2	68.4	67.7
23	75.1	74.4	73.6	72.9	72.1	71.4	70.6	69.9	69.2	68.4
24	75.7	75.0	74.2	73.5	72.8	72.0	71.3	70.6	69.9	69.2
25	76.2	75.5	74.8	74.1	73.4	72.7	71.9	71.2	70.5	69.8
26	76.7	76.0	75.3	74.6	73.9	73.2	72.5	71.9	71.2	70.5
27	77.2	76.5	75.8	75.2	74.5	73.8	73.1	72.4	71.8	71.1
28	77.7	77.0	76.3	75.6	75.0	74.3	73.6	73.0	72.3	71.7
29	78.1	77.4	76.8	76.1	75.5	74.8	74.2	73.5	72.9	72.2
30	78.5	77.9	77.2	76.6	75.9	75.3	74.6	74.0	73.4	72.7
31	78.9	78.3	77.6	77.0	76.4	75.7	75.1	74.5	73.9	73.2
32	79.3	78.7	78.0	77.4	76.8	76.2	75.5	74.9	74.3	73.7
33	79.6	79.0	78.4	77.8	77.2	76.6	76.0	75.4	74.8	74.2
34	80.0	79.4	78.8	78.2	77.6	77.0	76.4	75.8	75.2	74.6
35	80.3	79.7	79.1	78.5	77.9	77.3	76.8	76.2	75.6	75.0
36	80.6	80.0	79.4	78.9	78.3	77.7	77.1	76.5	76.0	75.4
37	80.9	80.3	79.8	79.2	78.6	78.0	77.5	76.9	76.3	75.8
38	81.2	80.6	80.1	79.5	78.9	78.4	77.8	77.3	76.7	76.1
39	81.5	80.9	80.3	79.8	79.2	78.7	78.1	77.6	77.0	76.5
40	81.7	81.2	80.6	80.1	79.5	79.0	78.4	77.9	77.4	76.8
41	82.0	81.4	80.9	80.3	79.8	79.3	78.7	78.2	77.7	77.1
42	82.2	81.7	81.1	80.6	80.1	79.5	79.0	78.5	78.0	77.5
43	82.5	81.9	81.4	80.9	80.3	79.8	79.3	78.8	78.3	77.7
44	82.7	82.2	81.6	81.1	80.6	80.1	79.6	79.0	78.5	78.0
45	82.9	82.4	81.9	81.3	80.8	80.3	79.8	79.3	78.8	78.3
46	83.1	82.6	82.1	81.6	81.1	80.6	80.1	79.6	79.1	78.6
47	83.3	82.8	82.3	81.8	81.3	80.8	80.3	79.8	79.3	78.8
48	83.5	83.0	82.5	82.0	81.5	81.0	80.5	80.0	79.6	79.1
49	83.7	83.2	82.7	82.2	81.7	81.2	80.8	80.3	79.8	79.3
50	83.9	83.4	82.9	82.4	81.9	81.4	81.0	80.5	80.0	79.5
51	84.1	83.6	83.1	82.6	82.1	81.7	81.2	80.7	80.2	79.8
52	84.2	83.7	83.3	82.8	82.3	81.8	81.4	80.9	80.4	80.0
53	84.4	83.9	83.4	83.0	82.5	82.0	81.6	81.1	80.7	80.2
54	84.6	84.1	83.6	83.2	82.7	82.2	81.8	81.3	80.9	80.4
55	84.7	84.2	83.8	83.3	82.9	82.4	82.0	81.5	81.0	80.6
56	84.9	84.4	83.9	83.5	83.0	82.6	82.1	81.7	81.2	80.8
57	85.0	84.6	84.1	83.7	83.2	82.8	82.3	81.9	81.4	81.0



表 5a<sub>1</sub> (续)

$t-t_w$ $t$	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0
15	60.0	59.1	58.2	57.2	56.3	55.5	54.6	53.7	52.8	51.9
16	61.2	60.3	59.4	58.5	57.6	56.8	55.9	55.0	54.2	53.3
17	62.3	61.4	60.6	59.7	58.9	58.0	57.2	56.3	55.5	54.7
18	63.3	62.5	61.7	60.8	60.0	59.2	58.4	57.6	56.7	55.9
19	64.3	63.5	62.7	61.9	61.1	60.3	59.5	58.7	57.9	57.1
20	65.2	64.4	63.7	62.9	62.1	61.3	60.6	59.8	59.0	58.3
21	66.1	65.3	64.6	63.8	63.1	62.3	61.5	60.8	60.1	59.3
22	66.9	66.2	65.4	64.7	64.0	63.2	62.5	61.8	61.0	60.3
23	67.7	67.0	66.3	65.5	64.8	64.1	63.4	62.7	62.0	61.2
24	68.4	67.7	67.0	66.3	65.6	64.9	64.2	63.5	62.8	62.1
25	69.1	68.4	67.8	67.1	66.4	65.7	65.0	64.3	63.6	63.0
26	69.8	69.1	68.4	67.8	67.1	66.4	65.8	65.1	64.4	63.8
27	70.4	69.8	69.1	68.4	67.8	67.1	66.5	65.8	65.2	64.5
28	71.0	70.4	69.7	69.1	68.4	67.8	67.1	66.5	65.9	65.2
29	71.6	70.9	70.3	69.7	69.0	68.4	67.8	67.2	66.5	65.9
30	72.1	71.5	70.9	70.2	69.6	69.0	68.4	67.8	67.2	66.6
31	72.6	72.0	71.4	70.8	70.2	69.6	69.0	68.4	67.8	67.2
32	73.1	72.5	71.9	71.3	70.7	70.1	69.5	68.9	68.3	67.8
33	73.6	73.0	72.4	71.8	71.2	70.6	70.0	69.5	68.9	68.3
34	74.0	73.4	72.9	72.3	71.7	71.1	70.5	70.0	69.4	68.8
35	74.4	73.9	73.3	72.7	72.2	71.6	71.0	70.5	69.9	69.4
36	74.8	74.3	73.7	73.2	72.6	72.0	71.5	70.9	70.4	69.8
37	75.2	74.7	74.1	73.6	73.0	72.5	71.9	71.4	70.8	70.3
38	75.6	75.0	74.5	74.0	73.4	72.9	72.3	71.8	71.3	70.7
39	76.0	75.4	74.9	74.3	73.8	73.3	72.7	72.2	71.7	71.2
40	76.3	75.8	75.2	74.7	74.2	73.7	73.1	72.6	72.1	71.6
41	76.6	76.1	75.6	75.0	74.5	74.0	73.5	73.0	72.5	72.0
42	76.9	76.4	75.9	75.4	74.9	74.4	73.9	73.4	72.8	72.3
43	77.2	76.7	76.2	75.7	75.2	74.7	74.2	73.7	73.2	72.7
44	77.5	77.0	76.5	76.0	75.5	75.0	74.5	74.0	73.5	73.1
45	77.8	77.3	76.8	76.3	75.8	75.3	74.8	74.4	73.9	73.4
46	78.1	77.6	77.1	76.6	76.1	75.6	75.2	74.7	74.2	73.7
47	78.3	77.9	77.4	76.9	76.4	75.9	75.4	75.0	74.5	74.0
48	78.6	78.1	77.6	77.2	76.7	76.2	75.7	75.3	74.8	74.3
49	78.8	78.4	77.9	77.4	76.9	76.5	76.0	75.5	75.1	74.6
50	79.1	78.6	78.1	77.7	77.2	76.7	76.3	75.8	75.4	74.9
51	79.3	78.8	78.4	77.9	77.4	77.0	76.5	76.1	75.6	75.2
52	79.5	79.1	78.6	78.1	77.7	77.2	76.8	76.3	75.9	75.4
53	79.7	79.3	78.8	78.4	77.9	77.5	77.0	76.6	76.1	75.7
54	79.9	79.5	79.0	78.6	78.2	77.7	77.3	76.8	76.4	75.9
55	80.1	79.7	79.3	78.8	78.4	77.9	77.5	77.1	76.6	76.2
56	80.3	79.9	79.5	79.0	78.6	78.1	77.7	77.3	76.9	76.4
57	80.5	80.1	79.7	79.2	78.8	78.4	77.9	77.5	77.1	76.7



表 5a<sub>1</sub> (续)

$t$ \ $t-t_w$	5.2	5.4	5.6	5.8	6.0	6.2	6.4	6.6	6.8	7.0
15	50.1	48.4	46.6	44.9	43.2	41.5	39.8	38.1	36.4	34.7
16	51.6	49.9	48.2	46.6	44.9	43.2	41.6	40.0	38.3	36.7
17	53.0	51.4	49.7	48.1	46.5	44.9	43.3	41.7	40.1	38.6
18	54.3	52.7	51.1	49.6	48.0	46.4	44.9	43.4	41.8	40.3
19	55.6	54.0	52.5	50.9	49.4	47.9	46.4	44.9	43.4	42.0
20	56.7	55.2	53.7	52.2	50.8	49.3	47.8	46.4	44.9	43.5
21	57.8	56.4	54.9	53.4	52.0	50.6	49.2	47.7	46.3	45.0
22	58.9	57.4	56.0	54.6	53.2	51.8	50.4	49.0	47.7	46.3
23	59.8	58.4	57.1	55.7	54.3	53.0	51.6	50.3	48.9	47.6
24	60.8	59.4	58.0	56.7	55.4	54.0	52.7	51.4	50.1	48.8
25	61.6	60.3	59.0	57.7	56.4	55.1	53.8	52.5	51.2	50.0
26	62.5	61.2	59.9	58.6	57.3	56.0	54.8	53.5	52.3	51.1
27	63.2	62.0	60.7	59.4	58.2	57.0	55.7	54.5	53.3	52.1
28	64.0	62.7	61.5	60.3	59.0	57.8	56.6	55.4	54.3	53.1
29	64.7	63.5	62.2	61.0	59.8	58.7	57.5	56.3	55.2	54.0
30	65.4	64.2	63.0	61.8	60.6	59.4	58.3	57.1	56.0	54.9
31	66.0	64.8	63.6	62.5	61.3	60.2	59.1	57.9	56.8	55.7
32	66.6	65.4	64.3	63.2	62.0	60.9	59.8	58.7	57.6	56.5
33	67.2	66.0	64.9	63.8	62.7	61.6	60.5	59.4	58.3	57.3
34	67.7	66.6	65.5	64.4	63.3	62.2	61.2	60.1	59.0	58.0
35	68.2	67.2	66.1	65.0	63.9	62.8	61.8	60.7	59.7	58.7
36	68.7	67.7	66.6	65.5	64.5	63.4	62.4	61.4	60.3	59.3
37	69.2	68.2	67.1	66.1	65.0	64.0	63.0	62.0	61.0	60.0
38	69.7	68.6	67.6	66.6	65.6	64.5	63.5	62.5	61.5	60.6
39	70.1	69.1	68.1	67.1	66.1	65.1	64.1	63.1	62.1	61.1
40	70.6	69.5	68.5	67.5	66.5	65.5	64.6	63.6	62.6	61.7
41	71.0	70.0	69.0	68.0	67.0	66.0	65.1	64.1	63.2	62.2
42	71.3	70.4	69.4	68.4	67.4	66.5	65.5	64.6	63.6	62.7
43	71.7	70.7	69.8	68.8	67.9	66.9	66.0	65.0	64.1	63.2
44	72.1	71.1	70.2	69.2	68.3	67.3	66.4	65.5	64.6	63.7
45	72.4	71.5	70.5	69.6	68.7	67.7	66.8	65.9	65.0	64.1
46	72.8	71.8	70.9	70.0	69.0	68.1	67.2	66.3	65.4	64.6
47	73.1	72.2	71.2	70.3	69.4	68.5	67.6	66.7	65.8	65.0
48	73.4	72.5	71.6	70.7	69.8	68.9	68.0	67.1	66.2	65.4
49	73.7	72.8	71.9	71.0	70.1	69.2	68.4	67.5	66.6	65.8
50	74.0	73.1	72.2	71.3	70.4	69.6	68.7	67.8	67.0	66.1
51	74.3	73.4	72.5	71.6	70.8	69.9	69.0	68.2	67.3	66.5
52	74.6	73.7	72.8	71.9	71.1	70.2	69.4	68.5	67.7	66.9
53	74.8	73.9	73.1	72.2	71.4	70.5	69.7	68.9	68.0	67.2
54	75.1	74.2	73.4	72.5	71.7	70.8	70.0	69.2	68.4	67.5
55	75.3	74.5	73.6	72.8	71.9	71.1	70.3	69.5	68.7	67.9
56	75.6	74.7	73.9	73.0	72.2	71.4	70.6	69.8	69.0	68.2
57	75.8	75.0	74.1	73.3	72.5	71.7	70.9	70.1	69.3	68.5



表 5a<sub>1</sub> (续)

$t$ \ $t-t_w$	7.2	7.4	7.6	7.8	8.0	8.2	8.4	8.6	8.8	9.0
15	33.1	31.4	29.8	28.2	26.6	25.0	23.4	21.8	20.2	18.6
16	35.1	33.5	31.9	30.4	28.8	27.3	25.7	24.2	22.7	21.1
17	37.0	35.5	34.0	32.4	30.9	29.4	27.9	26.4	25.0	23.5
18	38.8	37.3	35.8	34.4	32.9	31.4	30.0	28.6	27.1	25.7
19	40.5	39.1	37.6	36.2	34.8	33.3	31.9	30.5	29.2	27.8
20	42.1	40.7	39.3	37.9	36.5	35.1	33.8	32.4	31.1	29.7
21	43.6	42.2	40.8	39.5	38.1	36.8	35.5	34.2	32.9	31.6
22	45.0	43.6	42.3	41.0	39.7	38.4	37.1	35.8	34.6	33.3
23	46.3	45.0	43.7	42.4	41.2	39.9	38.6	37.4	36.1	34.9
24	47.6	46.3	45.0	43.8	42.5	41.3	40.1	38.9	37.6	36.4
25	48.7	47.5	46.3	45.0	43.8	42.6	41.4	40.2	39.1	37.9
26	49.9	48.6	47.4	46.2	45.1	43.9	42.7	41.6	40.4	39.3
27	50.9	49.7	48.5	47.4	46.2	45.1	43.9	42.8	41.7	40.6
28	51.9	50.8	49.6	48.5	47.3	46.2	45.1	44.0	42.9	41.8
29	52.9	51.7	50.6	49.5	48.4	47.3	46.2	45.1	44.0	42.9
30	53.8	52.6	51.5	50.4	49.4	48.3	47.2	46.1	45.1	44.0
31	54.6	53.5	52.4	51.4	50.3	49.2	48.2	47.2	46.1	45.1
32	55.4	54.4	53.3	52.2	51.2	50.2	49.1	48.1	47.1	46.1
33	56.2	55.2	54.1	53.1	52.1	51.0	50.0	49.0	48.0	47.0
34	56.9	55.9	54.9	53.9	52.9	51.9	50.9	49.9	48.9	47.9
35	57.7	56.6	55.6	54.6	53.6	52.7	51.7	50.7	49.7	48.8
36	58.3	57.3	56.3	55.3	54.4	53.4	52.4	51.5	50.5	49.6
37	59.0	58.0	57.0	56.0	55.1	54.1	53.2	52.2	51.3	50.4
38	59.6	58.6	57.7	56.7	55.8	54.8	53.9	53.0	52.0	51.1
39	60.2	59.2	58.3	57.3	56.4	55.5	54.6	53.6	52.7	51.8
40	60.7	59.8	58.9	57.9	57.0	56.1	55.2	54.3	53.4	52.5
41	61.3	60.3	59.4	58.5	57.6	56.7	55.8	54.9	54.1	53.2
42	61.8	60.9	60.0	59.1	58.2	57.3	56.4	55.5	54.7	53.8
43	62.3	61.4	60.5	59.6	58.7	57.8	57.0	56.1	55.3	54.4
44	62.8	61.9	61.0	60.1	59.2	58.4	57.5	56.7	55.8	55.0
45	63.2	62.4	61.5	60.6	59.8	58.9	58.1	57.2	56.4	55.6
46	63.7	62.8	61.9	61.1	60.2	59.4	58.6	57.7	56.9	56.1
47	64.1	63.2	62.4	61.5	60.7	59.9	59.0	58.2	57.4	56.6
48	64.5	63.7	62.8	62.0	61.2	60.3	59.5	58.7	57.9	57.1
49	64.9	64.1	63.2	62.4	61.6	60.8	60.0	59.2	58.4	57.6
50	65.3	64.5	63.7	62.8	62.0	61.2	60.4	59.6	58.8	58.0
51	65.7	64.9	64.0	63.2	62.4	61.6	60.8	60.1	59.3	58.5
52	66.0	65.2	64.4	63.6	62.8	62.0	61.2	60.5	59.7	58.9
53	66.4	65.6	64.8	64.0	63.2	62.4	61.6	60.9	60.1	59.4
54	66.7	65.9	65.1	64.4	63.6	62.8	62.0	61.3	60.5	59.8
55	67.1	66.3	65.5	64.7	63.9	63.2	62.4	61.7	60.9	60.2
56	67.4	66.6	65.8	65.1	64.3	63.5	62.8	62.0	61.3	60.5
57	67.7	66.9	66.1	65.4	64.6	63.9	63.1	62.4	61.6	60.9



表 5a<sub>1</sub> (续)

$t$ \ $t-t_w$	9.2	9.4	9.6	9.8	10.0	10.2	10.4	10.6	10.8	11.0
15	17.1	15.5	14.0	12.4	10.9	9.4	7.9	6.4	4.9	3.4
16	19.6	18.1	16.6	15.2	13.7	12.2	10.8	9.3	7.9	6.5
17	22.0	20.6	19.2	17.7	16.3	14.9	13.5	12.1	10.7	9.3
18	24.3	22.9	21.5	20.1	18.7	17.4	16.0	14.7	13.3	12.0
19	26.4	25.0	23.7	22.4	21.0	19.7	18.4	17.1	15.8	14.5
20	28.4	27.1	25.8	24.5	23.2	21.9	20.6	19.3	18.1	16.8
21	30.3	29.0	27.7	26.4	25.2	23.9	22.7	21.5	20.2	19.0
22	32.0	30.8	29.5	28.3	27.1	25.9	24.7	23.5	22.3	21.1
23	33.7	32.5	31.3	30.1	28.9	27.7	26.5	25.4	24.2	23.1
24	35.3	34.1	32.9	31.7	30.6	29.4	28.3	27.1	26.0	24.9
25	36.7	35.6	34.4	33.3	32.2	31.0	29.9	28.8	27.7	26.6
26	38.1	37.0	35.9	34.8	33.7	32.6	31.5	30.4	29.3	28.3
27	39.4	38.3	37.3	36.2	35.1	34.0	33.0	31.9	30.9	29.8
28	40.7	39.6	38.6	37.5	36.4	35.4	34.4	33.3	32.3	31.3
29	41.9	40.8	39.8	38.7	37.7	36.7	35.7	34.7	33.7	32.7
30	43.0	42.0	41.0	39.9	38.9	37.9	36.9	35.9	35.0	34.0
31	44.1	43.1	42.1	41.1	40.1	39.1	38.1	37.1	36.2	35.2
32	45.1	44.1	43.1	42.1	41.2	40.2	39.2	38.3	37.4	36.4
33	46.1	45.1	44.1	43.2	42.2	41.3	40.3	39.4	38.5	37.5
34	47.0	46.0	45.1	44.1	43.2	42.3	41.3	40.4	39.5	38.6
35	47.8	46.9	46.0	45.0	44.1	43.2	42.3	41.4	40.5	39.6
36	48.7	47.8	46.8	45.9	45.0	44.1	43.2	42.4	41.5	40.6
37	49.5	48.6	47.7	46.8	45.9	45.0	44.1	43.2	42.4	41.5
38	50.2	49.3	48.4	47.6	46.7	45.8	45.0	44.1	43.3	42.4
39	51.0	50.1	49.2	48.3	47.5	46.6	45.8	44.9	44.1	43.3
40	51.7	50.8	49.9	49.1	48.2	47.4	46.5	45.7	44.9	44.1
41	52.3	51.5	50.6	49.8	48.9	48.1	47.3	46.5	45.6	44.8
42	53.0	52.1	51.3	50.4	49.6	48.8	48.0	47.2	46.4	45.6
43	53.6	52.7	51.9	51.1	50.3	49.5	48.7	47.9	47.1	46.3
44	54.2	53.3	52.5	51.7	50.9	50.1	49.3	48.5	47.7	47.0
45	54.7	53.9	53.1	52.3	51.5	50.7	49.9	49.2	48.4	47.6
46	55.3	54.5	53.7	52.9	52.1	51.3	50.5	49.8	49.0	48.3
47	55.8	55.0	54.2	53.4	52.7	51.9	51.1	50.4	49.6	48.9
48	56.3	55.5	54.7	54.0	53.2	52.4	51.7	50.9	50.2	49.5
49	56.8	56.0	55.3	54.5	53.7	53.0	52.2	51.5	50.7	50.0
50	57.3	56.5	55.7	55.0	54.2	53.5	52.7	52.0	51.3	50.6
51	57.7	57.0	56.2	55.5	54.7	54.0	53.2	52.5	51.8	51.1
52	58.2	57.4	56.7	55.9	55.2	54.5	53.7	53.0	52.3	51.6
53	58.6	57.9	57.1	56.4	55.6	54.9	54.2	53.5	52.8	52.1
54	59.0	58.3	57.5	56.8	56.1	55.4	54.7	54.0	53.3	52.6
55	59.4	58.7	58.0	57.2	56.5	55.8	55.1	54.4	53.7	53.0
56	59.8	59.1	58.4	57.6	56.9	56.2	55.5	54.8	54.2	53.5
57	60.2	59.5	58.8	58.0	57.3	56.6	55.9	55.3	54.6	53.9

表 5a<sub>1</sub>(续)

$t$ \ $t-t_w$	9.2	9.4	9.6	9.8	10.0	10.2	10.4	10.6	10.8	11.0
58	60.6	59.8	59.1	58.4	57.7	57.0	56.4	55.7	55.0	54.3
59	60.9	60.2	59.5	58.8	58.1	57.4	56.7	56.1	55.4	54.7
60	61.3	60.6	59.9	59.2	58.5	57.8	57.1	56.5	55.8	55.1
61	61.6	60.9	60.2	59.5	58.8	58.2	57.5	56.8	56.2	55.5
62	61.9	61.2	60.6	59.9	59.2	58.5	57.9	57.2	56.5	55.9
63	62.3	61.6	60.9	60.2	59.5	58.9	58.2	57.6	56.9	56.3
64	62.6	61.9	61.2	60.5	59.9	59.2	58.6	57.9	57.3	56.6
65	62.9	62.2	61.5	60.9	60.2	59.5	58.9	58.3	57.6	57.0
66	63.2	62.5	61.8	61.2	60.5	59.9	59.2	58.6	57.9	57.3
67	63.5	62.8	62.1	61.5	60.8	60.2	59.5	58.9	58.3	57.6
68	63.8	63.1	62.4	61.8	61.1	60.5	59.9	59.2	58.6	58.0
69	64.0	63.4	62.7	62.1	61.4	60.8	60.2	59.5	58.9	58.3
70	64.3	63.7	63.0	62.4	61.7	61.1	60.5	59.8	59.2	58.6
71	64.6	63.9	63.3	62.6	62.0	61.4	60.8	60.1	59.5	58.9
72	64.8	64.2	63.6	62.9	62.3	61.7	61.0	60.4	59.8	59.2
73	65.1	64.5	63.8	63.2	62.6	61.9	61.3	60.7	60.1	59.5
74	65.4	64.7	64.1	63.5	62.8	62.2	61.6	61.0	60.4	59.8
75	65.6	65.0	64.3	63.7	63.1	62.5	61.9	61.3	60.7	60.1
76	65.8	65.2	64.6	64.0	63.4	62.8	62.1	61.5	60.9	60.4
77	66.1	65.5	64.8	64.2	63.6	63.0	62.4	61.8	61.2	60.6
78	66.3	65.7	65.1	64.5	63.9	63.3	62.7	62.1	61.5	60.9
79	66.6	65.9	65.3	64.7	64.1	63.5	62.9	62.3	61.7	61.2
80	66.8	66.2	65.6	65.0	64.4	63.8	63.2	62.6	62.0	61.4
81	67.0	66.4	65.8	65.2	64.6	64.0	63.4	62.8	62.2	61.7
82	67.2	66.6	66.0	65.4	64.8	64.2	63.7	63.1	62.5	61.9
83	67.4	66.8	66.2	65.6	65.1	64.5	63.9	63.3	62.7	62.2
84	67.7	67.1	66.5	65.9	65.3	64.7	64.1	63.5	63.0	62.4
85	67.9	67.3	66.7	66.1	65.5	64.9	64.4	63.8	63.2	62.6
86	68.1	67.5	66.9	66.3	65.7	65.2	64.6	64.0	63.4	62.9
87	68.3	67.7	67.1	66.5	65.9	65.4	64.8	64.2	63.7	63.1
88	68.5	67.9	67.3	66.7	66.2	65.6	65.0	64.5	63.9	63.3
89	68.7	68.1	67.5	66.9	66.4	65.8	65.2	64.7	64.1	63.6
90	68.9	68.3	67.7	67.1	66.6	66.0	65.5	64.9	64.3	63.8
91	69.1	68.5	67.9	67.3	66.8	66.2	65.7	65.1	64.6	64.0
92	69.3	68.7	68.1	67.5	67.0	66.4	65.9	65.3	64.8	64.2
93	69.4	68.9	68.3	67.7	67.2	66.6	66.1	65.5	65.0	64.4
94	69.6	69.1	68.5	67.9	67.4	66.8	66.3	65.7	65.2	64.7
95	69.8	69.3	68.7	68.1	67.6	67.0	66.5	65.9	65.4	64.9
96	70.0	69.4	68.9	68.3	67.8	67.2	66.7	66.1	65.6	65.1
97	70.2	69.6	69.1	68.5	68.0	67.4	66.9	66.3	65.8	65.3
98	70.4	69.8	69.2	68.7	68.2	67.6	67.1	66.5	66.0	65.5
99	70.5	70.0	69.4	68.9	68.3	67.8	67.3	66.7	66.2	65.7
100	70.7	70.2	69.6	69.1	68.5	68.0	67.4	66.9	66.4	65.9

表 5a<sub>1</sub> (续)

$t$ \ $t-t_w$	11.5	12.0	12.5	13.5	13.5	14.0	14.5	15.0	15.5	16.0
15										
16	2.9									
17	5.9	2.5								
18	8.7	5.4	2.2							
19	11.3	8.1	5.0	2.0						
20	13.7	10.7	7.7	4.7	1.8					
21	16.0	13.1	10.1	7.3	4.4	1.7				
22	18.2	15.3	12.5	9.7	6.9	4.2	1.6			
23	20.2	17.4	14.7	12.0	9.3	6.7	4.1	1.6		
24	22.1	19.4	16.7	14.1	11.5	9.0	6.5	4.0	1.6	
25	23.9	21.3	18.7	16.1	13.6	11.1	8.7	6.3	3.9	1.6
26	25.6	23.1	20.5	18.0	15.6	13.1	10.8	8.4	6.1	3.9
27	27.3	24.7	22.2	19.8	17.4	15.1	12.7	10.5	8.2	6.0
28	28.8	26.3	23.9	21.5	19.2	16.9	14.6	12.4	10.2	8.1
29	30.2	27.8	25.4	23.1	20.8	18.6	16.4	14.2	12.1	10.0
30	31.6	29.2	26.9	24.6	22.4	20.2	18.0	15.9	13.8	11.8
31	32.9	30.6	28.3	26.1	23.9	21.7	19.6	17.6	15.5	13.5
32	34.1	31.8	29.6	27.4	25.3	23.2	21.1	19.1	17.1	15.1
33	35.3	33.1	30.9	28.7	26.6	24.6	22.6	20.6	18.6	16.7
34	36.4	34.2	32.1	30.0	27.9	25.9	23.9	22.0	20.0	18.2
35	37.5	35.3	33.2	31.1	29.1	27.1	25.2	23.3	21.4	19.5
36	38.5	36.4	34.3	32.3	30.3	28.3	26.4	24.5	22.7	20.9
37	39.4	37.4	35.3	33.3	31.4	29.5	27.6	25.7	23.9	22.1
38	40.3	38.3	36.3	34.3	32.4	30.5	28.7	26.9	25.1	23.3
39	41.2	39.2	37.2	35.3	33.4	31.6	29.7	27.9	26.2	24.5
40	42.1	40.1	38.1	36.2	34.4	32.5	30.7	29.0	27.3	25.6
41	42.9	40.9	39.0	37.1	35.3	33.5	31.7	30.0	28.3	26.6
42	43.6	41.7	39.8	38.0	36.2	34.4	32.6	30.9	29.2	27.6
43	44.4	42.5	40.6	38.8	37.0	35.2	33.5	31.8	30.2	28.6
44	45.1	43.2	41.4	39.6	37.8	36.1	34.4	32.7	31.1	29.5
45	45.7	43.9	42.1	40.3	38.6	36.9	35.2	33.5	31.9	30.3
46	46.4	44.6	42.8	41.0	39.3	37.6	36.0	34.3	32.7	31.2
47	47.0	45.2	43.5	41.7	40.0	38.3	36.7	35.1	33.5	32.0
48	47.6	45.8	44.1	42.4	40.7	39.0	37.4	35.8	34.3	32.8
49	48.2	46.5	44.7	43.0	41.4	39.7	38.1	36.6	35.0	33.5
50	48.8	47.0	45.3	43.6	42.0	40.4	38.8	37.2	35.7	34.2
51	49.3	47.6	45.9	44.2	42.6	41.0	39.4	37.9	36.4	34.9
52	49.8	48.1	46.5	44.8	43.2	41.6	40.1	38.5	37.0	35.6
53	50.4	48.7	47.0	45.4	43.8	42.2	40.7	39.2	37.7	36.2
54	50.8	49.2	47.5	45.9	44.3	42.8	41.2	39.7	38.3	36.8
55	51.3	49.7	48.0	46.4	44.9	43.3	41.8	40.3	38.9	37.4
56	51.8	50.1	48.5	46.9	45.4	43.8	42.3	40.9	39.4	38.0
57	52.2	50.6	49.0	47.4	45.9	44.4	42.9	41.4	40.0	38.6

表 5a<sub>1</sub> (续)

$t$ \ $t-t_w$	11.5	12.0	12.5	13.5	13.5	14.0	14.5	15.0	15.5	16.0
58	52.7	51.0	49.5	47.9	46.4	44.9	43.4	41.9	40.5	39.1
59	53.1	51.5	49.9	48.4	46.8	45.3	43.9	42.4	41.0	39.7
60	53.5	51.9	50.3	48.8	47.3	45.8	44.4	42.9	41.5	40.2
61	53.9	52.3	50.8	49.2	47.7	46.3	44.8	43.4	42.0	40.7
62	54.3	52.7	51.2	49.7	48.2	46.7	45.3	43.9	42.5	41.2
63	54.7	53.1	51.6	50.1	48.6	47.2	45.7	44.3	43.0	41.6
64	55.0	53.5	52.0	50.5	49.0	47.6	46.2	44.8	43.4	42.1
65	55.4	53.9	52.4	50.9	49.4	48.0	46.6	45.2	43.9	42.5
66	55.8	54.2	52.7	51.3	49.8	48.4	47.0	45.6	44.3	43.0
67	56.1	54.6	53.1	51.6	50.2	48.8	47.4	46.0	44.7	43.4
68	56.4	54.9	53.4	52.0	50.6	49.2	47.8	46.4	45.1	43.8
69	56.8	55.3	53.8	52.4	50.9	49.5	48.2	46.8	45.5	44.2
70	57.1	55.6	54.1	52.7	51.3	49.9	48.6	47.2	45.9	44.6
71	57.4	55.9	54.5	53.0	51.6	50.3	48.9	47.6	46.3	45.0
72	57.7	56.2	54.8	53.4	52.0	50.6	49.3	48.0	46.7	45.4
73	58.0	56.6	55.1	53.7	52.3	51.0	49.6	48.3	47.0	45.8
74	58.3	56.9	55.4	54.0	52.7	51.3	50.0	48.7	47.4	46.1
75	58.6	57.2	55.7	54.3	53.0	51.6	50.3	49.0	47.7	46.5
76	58.9	57.5	56.0	54.7	53.3	52.0	50.6	49.4	48.1	46.8
77	59.2	57.7	56.3	55.0	53.6	52.3	51.0	49.7	48.4	47.2
78	59.4	58.0	56.6	55.3	53.9	52.6	51.3	50.0	48.8	47.5
79	59.7	58.3	56.9	55.6	54.2	52.9	51.6	50.3	49.1	47.9
80	60.0	58.6	57.2	55.8	54.5	53.2	51.9	50.6	49.4	48.2
81	60.2	58.8	57.5	56.1	54.8	53.5	52.2	51.0	49.7	48.5
82	60.5	59.1	57.7	56.4	55.1	53.8	52.5	51.3	50.0	48.8
83	60.8	59.4	58.0	56.7	55.4	54.1	52.8	51.6	50.3	49.1
84	61.0	59.6	58.3	56.9	55.6	54.4	53.1	51.8	50.6	49.4
85	61.3	59.9	58.5	57.2	55.9	54.6	53.4	52.1	50.9	49.7
86	61.5	60.1	58.8	57.5	56.2	54.9	53.7	52.4	51.2	50.0
87	61.7	60.4	59.0	57.7	56.4	55.2	53.9	52.7	51.5	50.3
88	62.0	60.6	59.3	58.0	56.7	55.4	54.2	53.0	51.8	50.6
89	62.2	60.9	59.5	58.2	57.0	55.7	54.5	53.3	52.1	50.9
90	62.4	61.1	59.8	58.5	57.2	56.0	54.7	53.5	52.3	51.2
91	62.7	61.3	60.0	58.7	57.5	56.2	55.0	53.8	52.6	51.4
92	62.9	61.6	60.3	59.0	57.7	56.5	55.3	54.1	52.9	51.7
93	63.1	61.8	60.5	59.2	58.0	56.7	55.5	54.3	53.1	52.0
94	63.3	62.0	60.7	59.4	58.2	57.0	55.8	54.6	53.4	52.2
95	63.5	62.2	60.9	59.7	58.4	57.2	56.0	54.8	53.7	52.5
96	63.7	62.4	61.2	59.9	58.7	57.4	56.2	55.1	53.9	52.8
97	64.0	62.7	61.4	60.1	58.9	57.7	56.5	55.3	54.2	53.0
98	64.2	62.9	61.6	60.4	59.1	57.9	56.7	55.6	54.4	53.3
99	64.4	63.1	61.8	60.6	59.4	58.2	57.0	55.8	54.7	53.5
100	64.6	63.3	62.0	60.8	59.6	58.4	57.2	56.0	54.9	53.8

表 5a<sub>2</sub> 柱状水银温度表相对湿度查算表 $P=80 \text{ kPa}, A=0.815 \times 10^{-3} \text{ } ^\circ\text{C}^{-1} (0.4 \text{ m/s})$ 

$t$ \ $t-t_w$	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
15	100.0	99.0	98.0	96.9	95.9	94.9	93.9	92.9	91.9	90.9	89.9
16	100.0	99.0	98.0	97.0	96.0	95.1	94.1	93.1	92.1	91.2	90.2
17	100.0	99.0	98.1	97.1	96.1	95.2	94.2	93.3	92.3	91.4	90.5
18	100.0	99.1	98.1	97.2	96.2	95.3	94.4	93.5	92.5	91.6	90.7
19	100.0	99.1	98.2	97.3	96.3	95.4	94.5	93.6	92.7	91.8	91.0
20	100.0	99.1	98.2	97.3	96.4	95.5	94.7	93.8	92.9	92.0	91.2
21	100.0	99.1	98.3	97.4	96.5	95.7	94.8	93.9	93.1	92.2	91.4
22	100.0	99.1	98.3	97.4	96.6	95.8	94.9	94.1	93.2	92.4	91.6
23	100.0	99.2	98.3	97.5	96.7	95.9	95.0	94.2	93.4	92.6	91.8
24	100.0	99.2	98.4	97.6	96.7	95.9	95.1	94.3	93.5	92.8	92.0
25	100.0	99.2	98.4	97.6	96.8	96.0	95.2	94.5	93.7	92.9	92.1
26	100.0	99.2	98.4	97.7	96.9	96.1	95.3	94.6	93.8	93.1	92.3
27	100.0	99.2	98.5	97.7	96.9	96.2	95.4	94.7	93.9	93.2	92.4
28	100.0	99.2	98.5	97.7	97.0	96.3	95.5	94.8	94.1	93.3	92.6
29	100.0	99.3	98.5	97.8	97.1	96.3	95.6	94.9	94.2	93.4	92.7
30	100.0	99.3	98.6	97.8	97.1	96.4	95.7	95.0	94.3	93.6	92.9
31	100.0	99.3	98.6	97.9	97.2	96.5	95.8	95.1	94.4	93.7	93.0
32	100.0	99.3	98.6	97.9	97.2	96.5	95.8	95.1	94.5	93.8	93.1
33	100.0	99.3	98.6	97.9	97.3	96.6	95.9	95.2	94.6	93.9	93.2
34	100.0	99.3	98.6	98.0	97.3	96.6	96.0	95.3	94.6	94.0	93.3
35	100.0	99.3	98.7	98.0	97.3	96.7	96.0	95.4	94.7	94.1	93.4
36	100.0	99.3	98.7	98.0	97.4	96.7	96.1	95.5	94.8	94.2	93.5
37	100.0	99.4	98.7	98.1	97.4	96.8	96.2	95.5	94.9	94.3	93.6
38	100.0	99.4	98.7	98.1	97.5	96.8	96.2	95.6	95.0	94.3	93.7
39	100.0	99.4	98.7	98.1	97.5	96.9	96.3	95.6	95.0	94.4	93.8
40	100.0	99.4	98.8	98.1	97.5	96.9	96.3	95.7	95.1	94.5	93.9
41	100.0	99.4	98.8	98.2	97.6	97.0	96.4	95.8	95.2	94.6	94.0
42	100.0	99.4	98.8	98.2	97.6	97.0	96.4	95.8	95.2	94.7	94.1
43	100.0	99.4	98.8	98.2	97.6	97.0	96.5	95.9	95.3	94.7	94.1
44	100.0	99.4	98.8	98.2	97.7	97.1	96.5	95.9	95.4	94.8	94.2
45	100.0	99.4	98.8	98.3	97.7	97.1	96.5	96.0	95.4	94.9	94.3
46	100.0	99.4	98.9	98.3	97.7	97.2	96.6	96.0	95.5	94.9	94.4
47	100.0	99.4	98.9	98.3	97.7	97.2	96.6	96.1	95.5	95.0	94.4
48	100.0	99.4	98.9	98.3	97.8	97.2	96.7	96.1	95.6	95.0	94.5
49	100.0	99.4	98.9	98.3	97.8	97.3	96.7	96.2	95.6	95.1	94.6
50	100.0	99.5	98.9	98.4	97.8	97.3	96.7	96.2	95.7	95.1	94.6
51	100.0	99.5	98.9	98.4	97.8	97.3	96.8	96.2	95.7	95.2	94.7
52	100.0	99.5	98.9	98.4	97.9	97.3	96.8	96.3	95.8	95.2	94.7
53	100.0	99.5	98.9	98.4	97.9	97.4	96.8	96.3	95.8	95.3	94.8
54	100.0	99.5	99.0	98.4	97.9	97.4	96.9	96.4	95.9	95.3	94.8
55	100.0	99.5	99.0	98.4	97.9	97.4	96.9	96.4	95.9	95.4	94.9
56	100.0	99.5	99.0	98.5	98.0	97.4	96.9	96.4	95.9	95.4	94.9
57	100.0	99.5	99.0	98.5	98.0	97.5	97.0	96.5	96.0	95.5	95.0

表 5a<sub>2</sub>(续)

$t \backslash t-t_w$	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
58	100.0	99.5	99.0	98.5	98.0	97.5	97.0	96.5	96.0	95.5	95.0
59	100.0	99.5	99.0	98.5	98.0	97.5	97.0	96.5	96.1	95.6	95.1
60	100.0	99.5	99.0	98.5	98.0	97.5	97.1	96.6	96.1	95.6	95.1
61	100.0	99.5	99.0	98.5	98.1	97.6	97.1	96.6	96.1	95.7	95.2
62	100.0	99.5	99.0	98.5	98.1	97.6	97.1	96.6	96.2	95.7	95.2
63	100.0	99.5	99.0	98.6	98.1	97.6	97.1	96.7	96.2	95.7	95.3
64	100.0	99.5	99.0	98.6	98.1	97.6	97.2	96.7	96.2	95.8	95.3
65	100.0	99.5	99.1	98.6	98.1	97.7	97.2	96.7	96.3	95.8	95.4
66	100.0	99.5	99.1	98.6	98.1	97.7	97.2	96.8	96.3	95.8	95.4
67	100.0	99.5	99.1	98.6	98.2	97.7	97.2	96.8	96.3	95.9	95.4
68	100.0	99.5	99.1	98.6	98.2	97.7	97.3	96.8	96.4	95.9	95.5
69	100.0	99.5	99.1	98.6	98.2	97.7	97.3	96.8	96.4	95.9	95.5
70	100.0	99.5	99.1	98.6	98.2	97.8	97.3	96.9	96.4	96.0	95.5
71	100.0	99.6	99.1	98.7	98.2	97.8	97.3	96.9	96.5	96.0	95.6
72	100.0	99.6	99.1	98.7	98.2	97.8	97.4	96.9	96.5	96.0	95.6
73	100.0	99.6	99.1	98.7	98.2	97.8	97.4	96.9	96.5	96.1	95.7
74	100.0	99.6	99.1	98.7	98.3	97.8	97.4	97.0	96.5	96.1	95.7
75	100.0	99.6	99.1	98.7	98.3	97.8	97.4	97.0	96.6	96.1	95.7
76	100.0	99.6	99.1	98.7	98.3	97.9	97.4	97.0	96.6	96.2	95.8
77	100.0	99.6	99.1	98.7	98.3	97.9	97.5	97.0	96.6	96.2	95.8
78	100.0	99.6	99.2	98.7	98.3	97.9	97.5	97.1	96.6	96.2	95.8
79	100.0	99.6	99.2	98.7	98.3	97.9	97.5	97.1	96.7	96.3	95.8
80	100.0	99.6	99.2	98.8	98.3	97.9	97.5	97.1	96.7	96.3	95.9
81	100.0	99.6	99.2	98.8	98.3	97.9	97.5	97.1	96.7	96.3	95.9
82	100.0	99.6	99.2	98.8	98.4	98.0	97.5	97.1	96.7	96.3	95.9
83	100.0	99.6	99.2	98.8	98.4	98.0	97.6	97.2	96.8	96.4	96.0
84	100.0	99.6	99.2	98.8	98.4	98.0	97.6	97.2	96.8	96.4	96.0
85	100.0	99.6	99.2	98.8	98.4	98.0	97.6	97.2	96.8	96.4	96.0
86	100.0	99.6	99.2	98.8	98.4	98.0	97.6	97.2	96.8	96.4	96.1
87	100.0	99.6	99.2	98.8	98.4	98.0	97.6	97.2	96.9	96.5	96.1
88	100.0	99.6	99.2	98.8	98.4	98.0	97.7	97.3	96.9	96.5	96.1
89	100.0	99.6	99.2	98.8	98.4	98.1	97.7	97.3	96.9	96.5	96.1
90	100.0	99.6	99.2	98.8	98.5	98.1	97.7	97.3	96.9	96.5	96.2
91	100.0	99.6	99.2	98.8	98.5	98.1	97.7	97.3	96.9	96.6	96.2
92	100.0	99.6	99.2	98.9	98.5	98.1	97.7	97.3	97.0	96.6	96.2
93	100.0	99.6	99.2	98.9	98.5	98.1	97.7	97.4	97.0	96.6	96.2
94	100.0	99.6	99.2	98.9	98.5	98.1	97.7	97.4	97.0	96.6	96.3
95	100.0	99.6	99.3	98.9	98.5	98.1	97.8	97.4	97.0	96.7	96.3
96	100.0	99.6	99.3	98.9	98.5	98.1	97.8	97.4	97.0	96.7	96.3
97	100.0	99.6	99.3	98.9	98.5	98.2	97.8	97.4	97.1	96.7	96.3
98	100.0	99.6	99.3	98.9	98.5	98.2	97.8	97.4	97.1	96.7	96.4
99	100.0	99.6	99.3	98.9	98.5	98.2	97.8	97.5	97.1	96.8	96.4
100	100.0	99.6	99.3	98.9	98.6	98.2	97.8	97.5	97.1	96.8	96.4







表 5a<sub>2</sub>(续)

$t$ \ $t-t_w$	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0
58	89.8	89.3	88.9	88.4	87.9	87.5	87.0	86.6	86.1	85.7
59	89.9	89.4	89.0	88.5	88.1	87.6	87.1	86.7	86.2	85.8
60	90.0	89.5	89.1	88.6	88.2	87.7	87.3	86.8	86.4	85.9
61	90.1	89.6	89.2	88.7	88.3	87.8	87.4	86.9	86.5	86.1
62	90.2	89.7	89.3	88.8	88.4	87.9	87.5	87.1	86.6	86.2
63	90.3	89.8	89.4	88.9	88.5	88.0	87.6	87.2	86.7	86.3
64	90.3	89.9	89.5	89.0	88.6	88.1	87.7	87.3	86.9	86.4
65	90.4	90.0	89.6	89.1	88.7	88.3	87.8	87.4	87.0	86.5
66	90.5	90.1	89.6	89.2	88.8	88.4	87.9	87.5	87.1	86.7
67	90.6	90.2	89.7	89.3	88.9	88.5	88.0	87.6	87.2	86.8
68	90.7	90.2	89.8	89.4	89.0	88.5	88.1	87.7	87.3	86.9
69	90.7	90.3	89.9	89.5	89.1	88.6	88.2	87.8	87.4	87.0
70	90.8	90.4	90.0	89.6	89.1	88.7	88.3	87.9	87.5	87.1
71	90.9	90.5	90.1	89.6	89.2	88.8	88.4	88.0	87.6	87.2
72	91.0	90.6	90.1	89.7	89.3	88.9	88.5	88.1	87.7	87.3
73	91.0	90.6	90.2	89.8	89.4	89.0	88.6	88.2	87.8	87.4
74	91.1	90.7	90.3	89.9	89.5	89.1	88.7	88.3	87.9	87.5
75	91.2	90.8	90.4	90.0	89.6	89.2	88.8	88.4	88.0	87.6
76	91.2	90.8	90.4	90.0	89.6	89.3	88.9	88.5	88.1	87.7
77	91.3	90.9	90.5	90.1	89.7	89.3	88.9	88.6	88.2	87.8
78	91.4	91.0	90.6	90.2	89.8	89.4	89.0	88.6	88.2	87.9
79	91.4	91.0	90.7	90.3	89.9	89.5	89.1	88.7	88.3	88.0
80	91.5	91.1	90.7	90.3	90.0	89.6	89.2	88.8	88.4	88.0
81	91.6	91.2	90.8	90.4	90.0	89.6	89.3	88.9	88.5	88.1
82	91.6	91.2	90.9	90.5	90.1	89.7	89.3	89.0	88.6	88.2
83	91.7	91.3	90.9	90.5	90.2	89.8	89.4	89.0	88.7	88.3
84	91.7	91.4	91.0	90.6	90.2	89.9	89.5	89.1	88.8	88.4
85	91.8	91.4	91.1	90.7	90.3	89.9	89.6	89.2	88.8	88.5
86	91.9	91.5	91.1	90.7	90.4	90.0	89.6	89.3	88.9	88.5
87	91.9	91.6	91.2	90.8	90.4	90.1	89.7	89.3	89.0	88.6
88	92.0	91.6	91.2	90.9	90.5	90.1	89.8	89.4	89.1	88.7
89	92.0	91.7	91.3	90.9	90.6	90.2	89.9	89.5	89.1	88.8
90	92.1	91.7	91.4	91.0	90.6	90.3	89.9	89.6	89.2	88.9
91	92.1	91.8	91.4	91.1	90.7	90.3	90.0	89.6	89.3	88.9
92	92.2	91.8	91.5	91.1	90.8	90.4	90.1	89.7	89.4	89.0
93	92.2	91.9	91.5	91.2	90.8	90.5	90.1	89.8	89.4	89.1
94	92.3	91.9	91.6	91.2	90.9	90.5	90.2	89.8	89.5	89.1
95	92.4	92.0	91.6	91.3	90.9	90.6	90.3	89.9	89.6	89.2
96	92.4	92.1	91.7	91.4	91.0	90.7	90.3	90.0	89.6	89.3
97	92.5	92.1	91.8	91.4	91.1	90.7	90.4	90.0	89.7	89.4
98	92.5	92.2	91.8	91.5	91.1	90.8	90.4	90.1	89.8	89.4
99	92.5	92.2	91.9	91.5	91.2	90.8	90.5	90.2	89.8	89.5
100	92.6	92.3	91.9	91.6	91.2	90.9	90.6	90.2	89.9	89.6







表 5a<sub>2</sub>(续)

$t$ \ $t-t_w$	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0
58	80.8	80.4	79.9	79.5	79.1	78.7	78.2	77.8	77.4	77.0
59	81.0	80.5	80.1	79.7	79.3	78.9	78.4	78.0	77.6	77.2
60	81.2	80.7	80.3	79.9	79.5	79.0	78.6	78.2	77.8	77.4
61	81.3	80.9	80.5	80.1	79.6	79.2	78.8	78.4	78.0	77.6
62	81.5	81.1	80.7	80.2	79.8	79.4	79.0	78.6	78.2	77.8
63	81.6	81.2	80.8	80.4	80.0	79.6	79.2	78.8	78.4	78.0
64	81.8	81.4	81.0	80.6	80.2	79.8	79.4	79.0	78.6	78.2
65	82.0	81.6	81.1	80.7	80.3	79.9	79.5	79.1	78.7	78.3
66	82.1	81.7	81.3	80.9	80.5	80.1	79.7	79.3	78.9	78.5
67	82.3	81.9	81.5	81.1	80.7	80.3	79.9	79.5	79.1	78.7
68	82.4	82.0	81.6	81.2	80.8	80.4	80.0	79.7	79.3	78.9
69	82.5	82.2	81.8	81.4	81.0	80.6	80.2	79.8	79.4	79.0
70	82.7	82.3	81.9	81.5	81.1	80.7	80.4	80.0	79.6	79.2
71	82.8	82.4	82.0	81.7	81.3	80.9	80.5	80.1	79.8	79.4
72	83.0	82.6	82.2	81.8	81.4	81.0	80.7	80.3	79.9	79.5
73	83.1	82.7	82.3	81.9	81.6	81.2	80.8	80.4	80.1	79.7
74	83.2	82.8	82.5	82.1	81.7	81.3	81.0	80.6	80.2	79.8
75	83.3	83.0	82.6	82.2	81.8	81.5	81.1	80.7	80.4	80.0
76	83.5	83.1	82.7	82.3	82.0	81.6	81.2	80.9	80.5	80.1
77	83.6	83.2	82.8	82.5	82.1	81.7	81.4	81.0	80.7	80.3
78	83.7	83.3	83.0	82.6	82.2	81.9	81.5	81.2	80.8	80.4
79	83.8	83.5	83.1	82.7	82.4	82.0	81.6	81.3	80.9	80.6
80	83.9	83.6	83.2	82.9	82.5	82.1	81.8	81.4	81.1	80.7
81	84.1	83.7	83.3	83.0	82.6	82.3	81.9	81.6	81.2	80.8
82	84.2	83.8	83.5	83.1	82.7	82.4	82.0	81.7	81.3	81.0
83	84.3	83.9	83.6	83.2	82.9	82.5	82.2	81.8	81.5	81.1
84	84.4	84.0	83.7	83.3	83.0	82.6	82.3	81.9	81.6	81.2
85	84.5	84.2	83.8	83.5	83.1	82.8	82.4	82.1	81.7	81.4
86	84.6	84.3	83.9	83.6	83.2	82.9	82.5	82.2	81.8	81.5
87	84.7	84.4	84.0	83.7	83.3	83.0	82.6	82.3	82.0	81.6
88	84.8	84.5	84.1	83.8	83.4	83.1	82.8	82.4	82.1	81.7
89	84.9	84.6	84.2	83.9	83.6	83.2	82.9	82.5	82.2	81.9
90	85.0	84.7	84.3	84.0	83.7	83.3	83.0	82.7	82.3	82.0
91	85.1	84.8	84.4	84.1	83.8	83.4	83.1	82.8	82.4	82.1
92	85.2	84.9	84.5	84.2	83.9	83.5	83.2	82.9	82.5	82.2
93	85.3	85.0	84.6	84.3	84.0	83.7	83.3	83.0	82.7	82.3
94	85.4	85.1	84.7	84.4	84.1	83.8	83.4	83.1	82.8	82.4
95	85.5	85.2	84.8	84.5	84.2	83.9	83.5	83.2	82.9	82.6
96	85.6	85.3	84.9	84.6	84.3	84.0	83.6	83.3	83.0	82.7
97	85.7	85.4	85.0	84.7	84.4	84.1	83.7	83.4	83.1	82.8
98	85.8	85.5	85.1	84.8	84.5	84.2	83.8	83.5	83.2	82.9
99	85.9	85.5	85.2	84.9	84.6	84.3	83.9	83.6	83.3	83.0
100	86.0	85.6	85.3	85.0	84.7	84.4	84.0	83.7	83.4	83.1





表 5a<sub>2</sub>(续)

$t$ \ $t-t_w$	7.2	7.4	7.6	7.8	8.0	8.2	8.4	8.6	8.8	9.0
15	34.5	32.9	31.3	29.7	28.1	26.6	25.0	23.5	21.9	20.4
16	36.5	34.9	33.4	31.8	30.3	28.8	27.3	25.8	24.3	22.8
17	38.3	36.8	35.3	33.8	32.3	30.8	29.4	27.9	26.5	25.1
18	40.0	38.5	37.1	35.6	34.2	32.8	31.4	30.0	28.6	27.2
19	41.6	40.2	38.8	37.4	36.0	34.6	33.2	31.9	30.5	29.2
20	43.1	41.7	40.4	39.0	37.7	36.3	35.0	33.6	32.3	31.0
21	44.6	43.2	41.9	40.5	39.2	37.9	36.6	35.3	34.0	32.8
22	45.9	44.6	43.3	42.0	40.7	39.4	38.2	36.9	35.7	34.4
23	47.2	45.9	44.6	43.4	42.1	40.9	39.6	38.4	37.2	36.0
24	48.4	47.1	45.9	44.7	43.4	42.2	41.0	39.8	38.6	37.5
25	49.5	48.3	47.1	45.9	44.7	43.5	42.3	41.2	40.0	38.9
26	50.6	49.4	48.2	47.0	45.9	44.7	43.6	42.4	41.3	40.2
27	51.6	50.4	49.3	48.1	47.0	45.8	44.7	43.6	42.5	41.4
28	52.5	51.4	50.3	49.2	48.0	46.9	45.8	44.7	43.7	42.6
29	53.5	52.3	51.2	50.1	49.0	48.0	46.9	45.8	44.8	43.7
30	54.3	53.2	52.1	51.1	50.0	48.9	47.9	46.8	45.8	44.8
31	55.2	54.1	53.0	52.0	50.9	49.9	48.8	47.8	46.8	45.8
32	55.9	54.9	53.8	52.8	51.8	50.7	49.7	48.7	47.7	46.7
33	56.7	55.7	54.6	53.6	52.6	51.6	50.6	49.6	48.6	47.6
34	57.4	56.4	55.4	54.4	53.4	52.4	51.4	50.4	49.5	48.5
35	58.1	57.1	56.1	55.1	54.1	53.1	52.2	51.2	50.3	49.3
36	58.7	57.7	56.8	55.8	54.8	53.9	52.9	52.0	51.0	50.1
37	59.4	58.4	57.4	56.5	55.5	54.6	53.6	52.7	51.8	50.9
38	59.9	59.0	58.0	57.1	56.2	55.2	54.3	53.4	52.5	51.6
39	60.5	59.6	58.6	57.7	56.8	55.9	55.0	54.1	53.2	52.3
40	61.1	60.1	59.2	58.3	57.4	56.5	55.6	54.7	53.8	52.9
41	61.6	60.7	59.8	58.9	58.0	57.1	56.2	55.3	54.4	53.6
42	62.1	61.2	60.3	59.4	58.5	57.6	56.8	55.9	55.0	54.2
43	62.6	61.7	60.8	59.9	59.0	58.2	57.3	56.5	55.6	54.8
44	63.0	62.2	61.3	60.4	59.5	58.7	57.8	57.0	56.2	55.3
45	63.5	62.6	61.7	60.9	60.0	59.2	58.3	57.5	56.7	55.9
46	63.9	63.1	62.2	61.3	60.5	59.7	58.8	58.0	57.2	56.4
47	64.3	63.5	62.6	61.8	61.0	60.1	59.3	58.5	57.7	56.9
48	64.7	63.9	63.1	62.2	61.4	60.6	59.8	59.0	58.2	57.4
49	65.1	64.3	63.5	62.6	61.8	61.0	60.2	59.4	58.6	57.8
50	65.5	64.7	63.9	63.0	62.2	61.4	60.6	59.9	59.1	58.3
51	65.9	65.1	64.2	63.4	62.6	61.8	61.1	60.3	59.5	58.7
52	66.2	65.4	64.6	63.8	63.0	62.2	61.5	60.7	59.9	59.2
53	66.6	65.8	65.0	64.2	63.4	62.6	61.8	61.1	60.3	59.6
54	66.9	66.1	65.3	64.5	63.8	63.0	62.2	61.5	60.7	60.0
55	67.2	66.4	65.7	64.9	64.1	63.3	62.6	61.8	61.1	60.3
56	67.5	66.8	66.0	65.2	64.4	63.7	62.9	62.2	61.5	60.7
57	67.8	67.1	66.3	65.5	64.8	64.0	63.3	62.5	61.8	61.1

表 5a<sub>2</sub>(续)

$t-t_w$ $t$	7.2	7.4	7.6	7.8	8.0	8.2	8.4	8.6	8.8	9.0
58	68.1	67.4	66.6	65.9	65.1	64.4	63.6	62.9	62.2	61.4
59	68.4	67.7	66.9	66.2	65.4	64.7	63.9	63.2	62.5	61.8
60	68.7	67.9	67.2	66.5	65.7	65.0	64.3	63.5	62.8	62.1
61	69.0	68.2	67.5	66.8	66.0	65.3	64.6	63.9	63.2	62.4
62	69.2	68.5	67.8	67.0	66.3	65.6	64.9	64.2	63.5	62.8
63	69.5	68.8	68.0	67.3	66.6	65.9	65.2	64.5	63.8	63.1
64	69.8	69.0	68.3	67.6	66.9	66.2	65.5	64.8	64.1	63.4
65	70.0	69.3	68.6	67.9	67.1	66.4	65.7	65.0	64.4	63.7
66	70.3	69.5	68.8	68.1	67.4	66.7	66.0	65.3	64.6	64.0
67	70.5	69.8	69.1	68.4	67.7	67.0	66.3	65.6	64.9	64.2
68	70.7	70.0	69.3	68.6	67.9	67.2	66.5	65.9	65.2	64.5
69	71.0	70.2	69.6	68.9	68.2	67.5	66.8	66.1	65.5	64.8
70	71.2	70.5	69.8	69.1	68.4	67.7	67.1	66.4	65.7	65.1
71	71.4	70.7	70.0	69.3	68.6	68.0	67.3	66.6	66.0	65.3
72	71.6	70.9	70.2	69.6	68.9	68.2	67.5	66.9	66.2	65.6
73	71.8	71.1	70.5	69.8	69.1	68.4	67.8	67.1	66.5	65.8
74	72.0	71.3	70.7	70.0	69.3	68.7	68.0	67.4	66.7	66.1
75	72.2	71.6	70.9	70.2	69.6	68.9	68.2	67.6	67.0	66.3
76	72.4	71.8	71.1	70.4	69.8	69.1	68.5	67.8	67.2	66.6
77	72.6	72.0	71.3	70.6	70.0	69.3	68.7	68.1	67.4	66.8
78	72.8	72.2	71.5	70.8	70.2	69.6	68.9	68.3	67.6	67.0
79	73.0	72.4	71.7	71.0	70.4	69.8	69.1	68.5	67.9	67.2
80	73.2	72.5	71.9	71.2	70.6	70.0	69.3	68.7	68.1	67.5
81	73.4	72.7	72.1	71.4	70.8	70.2	69.5	68.9	68.3	67.7
82	73.6	72.9	72.3	71.6	71.0	70.4	69.7	69.1	68.5	67.9
83	73.7	73.1	72.5	71.8	71.2	70.6	69.9	69.3	68.7	68.1
84	73.9	73.3	72.6	72.0	71.4	70.8	70.1	69.5	68.9	68.3
85	74.1	73.5	72.8	72.2	71.6	71.0	70.3	69.7	69.1	68.5
86	74.3	73.6	73.0	72.4	71.8	71.1	70.5	69.9	69.3	68.7
87	74.4	73.8	73.2	72.6	71.9	71.3	70.7	70.1	69.5	68.9
88	74.6	74.0	73.4	72.7	72.1	71.5	70.9	70.3	69.7	69.1
89	74.8	74.1	73.5	72.9	72.3	71.7	71.1	70.5	69.9	69.3
90	74.9	74.3	73.7	73.1	72.5	71.9	71.3	70.7	70.1	69.5
91	75.1	74.5	73.9	73.2	72.6	72.0	71.5	70.9	70.3	69.7
92	75.2	74.6	74.0	73.4	72.8	72.2	71.6	71.0	70.5	69.9
93	75.4	74.8	74.2	73.6	73.0	72.4	71.8	71.2	70.6	70.1
94	75.5	74.9	74.3	73.7	73.2	72.6	72.0	71.4	70.8	70.2
95	75.7	75.1	74.5	73.9	73.3	72.7	72.1	71.6	71.0	70.4
96	75.8	75.2	74.7	74.1	73.5	72.9	72.3	71.7	71.2	70.6
97	76.0	75.4	74.8	74.2	73.6	73.1	72.5	71.9	71.3	70.8
98	76.1	75.5	75.0	74.4	73.8	73.2	72.6	72.1	71.5	70.9
99	76.3	75.7	75.1	74.5	74.0	73.4	72.8	72.2	71.7	71.1
100	76.4	75.8	75.3	74.7	74.1	73.5	73.0	72.4	71.8	71.3











表 5b (续)

$t$ \ $t-t_w$	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
58	100.0	99.5	99.0	98.5	98.0	97.5	97.0	96.5	96.0	95.5	95.1
59	100.0	99.5	99.0	98.5	98.0	97.5	97.0	96.5	96.1	95.6	95.1
60	100.0	99.5	99.0	98.5	98.0	97.5	97.1	96.6	96.1	95.6	95.1
61	100.0	99.5	99.0	98.5	98.1	97.6	97.1	96.6	96.1	95.7	95.2
62	100.0	99.5	99.0	98.6	98.1	97.6	97.1	96.6	96.2	95.7	95.2
63	100.0	99.5	99.0	98.6	98.1	97.6	97.1	96.7	96.2	95.7	95.3
64	100.0	99.5	99.0	98.6	98.1	97.6	97.2	96.7	96.2	95.8	95.3
65	100.0	99.5	99.1	98.6	98.1	97.7	97.2	96.7	96.3	95.8	95.4
66	100.0	99.5	99.1	98.6	98.1	97.7	97.2	96.8	96.3	95.8	95.4
67	100.0	99.5	99.1	98.6	98.2	97.7	97.2	96.8	96.3	95.9	95.4
68	100.0	99.5	99.1	98.6	98.2	97.7	97.3	96.8	96.4	95.9	95.5
69	100.0	99.5	99.1	98.6	98.2	97.7	97.3	96.8	96.4	96.0	95.5
70	100.0	99.5	99.1	98.6	98.2	97.8	97.3	96.9	96.4	96.0	95.5
71	100.0	99.6	99.1	98.7	98.2	97.8	97.3	96.9	96.5	96.0	95.6
72	100.0	99.6	99.1	98.7	98.2	97.8	97.4	96.9	96.5	96.1	95.6
73	100.0	99.6	99.1	98.7	98.2	97.8	97.4	96.9	96.5	96.1	95.7
74	100.0	99.6	99.1	98.7	98.3	97.8	97.4	97.0	96.5	96.1	95.7
75	100.0	99.6	99.1	98.7	98.3	97.8	97.4	97.0	96.6	96.1	95.7
76	100.0	99.6	99.1	98.7	98.3	97.9	97.4	97.0	96.6	96.2	95.8
77	100.0	99.6	99.1	98.7	98.3	97.9	97.5	97.0	96.6	96.2	95.8
78	100.0	99.6	99.2	98.7	98.3	97.9	97.5	97.1	96.6	96.2	95.8
79	100.0	99.6	99.2	98.7	98.3	97.9	97.5	97.1	96.7	96.3	95.9
80	100.0	99.6	99.2	98.8	98.3	97.9	97.5	97.1	96.7	96.3	95.9
81	100.0	99.6	99.2	98.8	98.3	97.9	97.5	97.1	96.7	96.3	95.9
82	100.0	99.6	99.2	98.8	98.4	98.0	97.6	97.1	96.7	96.3	95.9
83	100.0	99.6	99.2	98.8	98.4	98.0	97.6	97.2	96.8	96.4	96.0
84	100.0	99.6	99.2	98.8	98.4	98.0	97.6	97.2	96.8	96.4	96.0
85	100.0	99.6	99.2	98.8	98.4	98.0	97.6	97.2	96.8	96.4	96.0
86	100.0	99.6	99.2	98.8	98.4	98.0	97.6	97.2	96.8	96.4	96.1
87	100.0	99.6	99.2	98.8	98.4	98.0	97.6	97.2	96.9	96.5	96.1
88	100.0	99.6	99.2	98.8	98.4	98.0	97.7	97.3	96.9	96.5	96.1
89	100.0	99.6	99.2	98.8	98.4	98.1	97.7	97.3	96.9	96.5	96.1
90	100.0	99.6	99.2	98.8	98.5	98.1	97.7	97.3	96.9	96.5	96.2
91	100.0	99.6	99.2	98.8	98.5	98.1	97.7	97.3	96.9	96.6	96.2
92	100.0	99.6	99.2	98.9	98.5	98.1	97.7	97.3	97.0	96.6	96.2
93	100.0	99.6	99.2	98.9	98.5	98.1	97.7	97.4	97.0	96.6	96.2
94	100.0	99.6	99.2	98.9	98.5	98.1	97.8	97.4	97.0	96.6	96.3
95	100.0	99.6	99.3	98.9	98.5	98.1	97.8	97.4	97.0	96.7	96.3
96	100.0	99.6	99.3	98.9	98.5	98.1	97.8	97.4	97.1	96.7	96.3
97	100.0	99.6	99.3	98.9	98.5	98.2	97.8	97.4	97.1	96.7	96.3
98	100.0	99.6	99.3	98.9	98.5	98.2	97.8	97.4	97.1	96.7	96.4
99	100.0	99.6	99.3	98.9	98.5	98.2	97.8	97.5	97.1	96.8	96.4
100	100.0	99.6	99.3	98.9	98.6	98.2	97.8	97.5	97.1	96.8	96.4







表 5b (续)

$t$ \ $t-t_w$	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0
58	89.8	89.4	88.9	88.4	88.0	87.5	87.1	86.6	86.1	85.7
59	89.9	89.5	89.0	88.5	88.1	87.6	87.2	86.7	86.3	85.8
60	90.0	89.5	89.1	88.6	88.2	87.7	87.3	86.8	86.4	86.0
61	90.1	89.6	89.2	88.7	88.3	87.8	87.4	87.0	86.5	86.1
62	90.2	89.7	89.3	88.8	88.4	88.0	87.5	87.1	86.6	86.2
63	90.3	89.8	89.4	88.9	88.5	88.1	87.6	87.2	86.8	86.3
64	90.4	89.9	89.5	89.0	88.6	88.2	87.7	87.3	86.9	86.4
65	90.4	90.0	89.6	89.1	88.7	88.3	87.8	87.4	87.0	86.6
66	90.5	90.1	89.7	89.2	88.8	88.4	87.9	87.5	87.1	86.7
67	90.6	90.2	89.7	89.3	88.9	88.5	88.0	87.6	87.2	86.8
68	90.7	90.3	89.8	89.4	89.0	88.6	88.1	87.7	87.3	86.9
69	90.8	90.3	89.9	89.5	89.1	88.7	88.2	87.8	87.4	87.0
70	90.8	90.4	90.0	89.6	89.2	88.7	88.3	87.9	87.5	87.1
71	90.9	90.5	90.1	89.7	89.2	88.8	88.4	88.0	87.6	87.2
72	91.0	90.6	90.2	89.7	89.3	88.9	88.5	88.1	87.7	87.3
73	91.0	90.6	90.2	89.8	89.4	89.0	88.6	88.2	87.8	87.4
74	91.1	90.7	90.3	89.9	89.5	89.1	88.7	88.3	87.9	87.5
75	91.2	90.8	90.4	90.0	89.6	89.2	88.8	88.4	88.0	87.6
76	91.3	90.9	90.5	90.1	89.7	89.3	88.9	88.5	88.1	87.7
77	91.3	90.9	90.5	90.1	89.7	89.3	89.0	88.6	88.2	87.8
78	91.4	91.0	90.6	90.2	89.8	89.4	89.0	88.6	88.3	87.9
79	91.4	91.1	90.7	90.3	89.9	89.5	89.1	88.7	88.3	88.0
80	91.5	91.1	90.7	90.3	90.0	89.6	89.2	88.8	88.4	88.1
81	91.6	91.2	90.8	90.4	90.0	89.7	89.3	88.9	88.5	88.1
82	91.6	91.3	90.9	90.5	90.1	89.7	89.3	89.0	88.6	88.2
83	91.7	91.3	90.9	90.6	90.2	89.8	89.4	89.1	88.7	88.3
84	91.8	91.4	91.0	90.6	90.2	89.9	89.5	89.1	88.8	88.4
85	91.8	91.4	91.1	90.7	90.3	89.9	89.6	89.2	88.8	88.5
86	91.9	91.5	91.1	90.8	90.4	90.0	89.6	89.3	88.9	88.6
87	91.9	91.6	91.2	90.8	90.5	90.1	89.7	89.4	89.0	88.6
88	92.0	91.6	91.2	90.9	90.5	90.2	89.8	89.4	89.1	88.7
89	92.0	91.7	91.3	90.9	90.6	90.2	89.9	89.5	89.1	88.8
90	92.1	91.7	91.4	91.0	90.6	90.3	89.9	89.6	89.2	88.9
91	92.1	91.8	91.4	91.1	90.7	90.4	90.0	89.6	89.3	88.9
92	92.2	91.8	91.5	91.1	90.8	90.4	90.1	89.7	89.4	89.0
93	92.3	91.9	91.5	91.2	90.8	90.5	90.1	89.8	89.4	89.1
94	92.3	92.0	91.6	91.2	90.9	90.5	90.2	89.8	89.5	89.2
95	92.4	92.0	91.7	91.3	91.0	90.6	90.3	89.9	89.6	89.2
96	92.4	92.1	91.7	91.4	91.0	90.7	90.3	90.0	89.6	89.3
97	92.5	92.1	91.8	91.4	91.1	90.7	90.4	90.0	89.7	89.4
98	92.5	92.2	91.8	91.5	91.1	90.8	90.4	90.1	89.8	89.4
99	92.6	92.2	91.9	91.5	91.2	90.8	90.5	90.2	89.8	89.5
100	92.6	92.3	91.9	91.6	91.2	90.9	90.6	90.2	89.9	89.6

















表 5b (续)

$t-t_w$ $t$	9.2	9.4	9.6	9.8	10.0	10.2	10.4	10.6	10.8	11.0
15	19.8	18.3	16.8	15.3	13.9	12.4	10.9	9.5	8.1	6.7
16	22.2	20.7	19.3	17.9	16.4	15.0	13.6	12.2	10.9	9.5
17	24.4	23.0	21.6	20.2	18.9	17.5	16.2	14.8	13.5	12.1
18	26.5	25.2	23.8	22.5	21.1	19.8	18.5	17.2	15.9	14.6
19	28.5	27.2	25.9	24.6	23.3	22.0	20.7	19.5	18.2	17.0
20	30.4	29.1	27.8	26.6	25.3	24.1	22.8	21.6	20.4	19.2
21	32.1	30.9	29.6	28.4	27.2	26.0	24.8	23.6	22.4	21.2
22	33.8	32.6	31.4	30.2	29.0	27.8	26.6	25.5	24.3	23.2
23	35.3	34.1	33.0	31.8	30.7	29.5	28.4	27.2	26.1	25.0
24	36.8	35.6	34.5	33.4	32.2	31.1	30.0	28.9	27.8	26.7
25	38.2	37.1	35.9	34.8	33.7	32.6	31.6	30.5	29.4	28.4
26	39.5	38.4	37.3	36.2	35.2	34.1	33.0	32.0	30.9	29.9
27	40.7	39.7	38.6	37.5	36.5	35.4	34.4	33.4	32.4	31.4
28	41.9	40.9	39.8	38.8	37.8	36.7	35.7	34.7	33.7	32.7
29	43.0	42.0	41.0	40.0	39.0	38.0	37.0	36.0	35.0	34.0
30	44.1	43.1	42.1	41.1	40.1	39.1	38.2	37.2	36.2	35.3
31	45.1	44.1	43.1	42.1	41.2	40.2	39.3	38.3	37.4	36.5
32	46.1	45.1	44.1	43.2	42.2	41.3	40.3	39.4	38.5	37.6
33	47.0	46.0	45.1	44.1	43.2	42.3	41.3	40.4	39.5	38.6
34	47.8	46.9	46.0	45.0	44.1	43.2	42.3	41.4	40.5	39.6
35	48.7	47.7	46.8	45.9	45.0	44.1	43.2	42.3	41.5	40.6
36	49.4	48.5	47.6	46.7	45.9	45.0	44.1	43.2	42.4	41.5
37	50.2	49.3	48.4	47.5	46.7	45.8	44.9	44.1	43.2	42.4
38	50.9	50.0	49.2	48.3	47.4	46.6	45.7	44.9	44.1	43.2
39	51.6	50.7	49.9	49.0	48.2	47.3	46.5	45.7	44.9	44.0
40	52.3	51.4	50.6	49.7	48.9	48.1	47.2	46.4	45.6	44.8
41	52.9	52.1	51.2	50.4	49.6	48.8	47.9	47.1	46.3	45.5
42	53.5	52.7	51.9	51.0	50.2	49.4	48.6	47.8	47.0	46.3
43	54.1	53.3	52.5	51.7	50.9	50.1	49.3	48.5	47.7	46.9
44	54.7	53.9	53.0	52.2	51.5	50.7	49.9	49.1	48.3	47.6
45	55.2	54.4	53.6	52.8	52.0	51.3	50.5	49.7	49.0	48.2
46	55.7	54.9	54.2	53.4	52.6	51.8	51.1	50.3	49.6	48.8
47	56.2	55.5	54.7	53.9	53.1	52.4	51.6	50.9	50.1	49.4
48	56.7	55.9	55.2	54.4	53.7	52.9	52.2	51.4	50.7	49.9
49	57.2	56.4	55.7	54.9	54.2	53.4	52.7	51.9	51.2	50.5
50	57.6	56.9	56.1	55.4	54.6	53.9	53.2	52.4	51.7	51.0
51	58.1	57.3	56.6	55.8	55.1	54.4	53.6	52.9	52.2	51.5
52	58.5	57.8	57.0	56.3	55.6	54.8	54.1	53.4	52.7	52.0
53	58.9	58.2	57.4	56.7	56.0	55.3	54.6	53.9	53.2	52.5
54	59.3	58.6	57.9	57.1	56.4	55.7	55.0	54.3	53.6	52.9
55	59.7	59.0	58.3	57.5	56.8	56.1	55.4	54.7	54.1	53.4
56	60.1	59.4	58.7	57.9	57.2	56.5	55.8	55.2	54.5	53.8
57	60.5	59.7	59.0	58.3	57.6	56.9	56.2	55.6	54.9	54.2







表 5c 球状、柱状水银温度表相对湿度查算表

 $P=80 \text{ kPa}, A=0.662 \times 10^{-3} \text{ } ^\circ\text{C}^{-1} (2.5 \text{ m/s})$ 

$t-t_w$	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
15	100.0	99.0	98.1	97.2	96.2	95.3	94.3	93.4	92.5	91.6	90.6
16	100.0	99.1	98.1	97.2	96.3	95.4	94.5	93.6	92.7	91.8	90.9
17	100.0	99.1	98.2	97.3	96.4	95.5	94.6	93.7	92.9	92.0	91.1
18	100.0	99.1	98.2	97.4	96.5	95.6	94.7	93.9	93.0	92.2	91.3
19	100.0	99.1	98.3	97.4	96.6	95.7	94.9	94.0	93.2	92.3	91.5
20	100.0	99.2	98.3	97.5	96.6	95.8	95.0	94.2	93.3	92.5	91.7
21	100.0	99.2	98.4	97.5	96.7	95.9	95.1	94.3	93.5	92.7	91.9
22	100.0	99.2	98.4	97.6	96.8	96.0	95.2	94.4	93.6	92.8	92.1
23	100.0	99.2	98.4	97.6	96.9	96.1	95.3	94.5	93.8	93.0	92.2
24	100.0	99.2	98.4	97.7	96.9	96.1	95.4	94.6	93.9	93.1	92.4
25	100.0	99.2	98.5	97.7	97.0	96.2	95.5	94.7	94.0	93.3	92.5
26	100.0	99.3	98.5	97.8	97.0	96.3	95.6	94.8	94.1	93.4	92.7
27	100.0	99.3	98.5	97.8	97.1	96.4	95.6	94.9	94.2	93.5	92.8
28	100.0	99.3	98.6	97.8	97.1	96.4	95.7	95.0	94.3	93.6	92.9
29	100.0	99.3	98.6	97.9	97.2	96.5	95.8	95.1	94.4	93.7	93.0
30	100.0	99.3	98.6	97.9	97.2	96.5	95.9	95.2	94.5	93.8	93.2
31	100.0	99.3	98.6	97.9	97.3	96.6	95.9	95.3	94.6	93.9	93.3
32	100.0	99.3	98.7	98.0	97.3	96.7	96.0	95.3	94.7	94.0	93.4
33	100.0	99.3	98.7	98.0	97.4	96.7	96.0	95.4	94.8	94.1	93.5
34	100.0	99.3	98.7	98.0	97.4	96.7	96.1	95.5	94.8	94.2	93.6
35	100.0	99.4	98.7	98.1	97.4	96.8	96.2	95.5	94.9	94.3	93.7
36	100.0	99.4	98.7	98.1	97.5	96.8	96.2	95.6	95.0	94.4	93.7
37	100.0	99.4	98.7	98.1	97.5	96.9	96.3	95.7	95.0	94.4	93.8
38	100.0	99.4	98.8	98.1	97.5	96.9	96.3	95.7	95.1	94.5	93.9
39	100.0	99.4	98.8	98.2	97.6	97.0	96.4	95.8	95.2	94.6	94.0
40	100.0	99.4	98.8	98.2	97.6	97.0	96.4	95.8	95.2	94.7	94.1
41	100.0	99.4	98.8	98.2	97.6	97.0	96.5	95.9	95.3	94.7	94.1
42	100.0	99.4	98.8	98.2	97.7	97.1	96.5	95.9	95.4	94.8	94.2
43	100.0	99.4	98.8	98.3	97.7	97.1	96.5	96.0	95.4	94.8	94.3
44	100.0	99.4	98.9	98.3	97.7	97.1	96.6	96.0	95.5	94.9	94.4
45	100.0	99.4	98.9	98.3	97.7	97.2	96.6	96.1	95.5	95.0	94.4
46	100.0	99.4	98.9	98.3	97.8	97.2	96.7	96.1	95.6	95.0	94.5
47	100.0	99.4	98.9	98.3	97.8	97.2	96.7	96.2	95.6	95.1	94.5
48	100.0	99.5	98.9	98.4	97.8	97.3	96.7	96.2	95.7	95.1	94.6
49	100.0	99.5	98.9	98.4	97.8	97.3	96.8	96.2	95.7	95.2	94.7
50	100.0	99.5	98.9	98.4	97.9	97.3	96.8	96.3	95.8	95.2	94.7
51	100.0	99.5	98.9	98.4	97.9	97.4	96.8	96.3	95.8	95.3	94.8
52	100.0	99.5	98.9	98.4	97.9	97.4	96.9	96.4	95.8	95.3	94.8
53	100.0	99.5	99.0	98.4	97.9	97.4	96.9	96.4	95.9	95.4	94.9
54	100.0	99.5	99.0	98.5	97.9	97.4	96.9	96.4	95.9	95.4	94.9
55	100.0	99.5	99.0	98.5	98.0	97.5	97.0	96.5	96.0	95.5	95.0
56	100.0	99.5	99.0	98.5	98.0	97.5	97.0	96.5	96.0	95.5	95.0
57	100.0	99.5	99.0	98.5	98.0	97.5	97.0	96.5	96.0	95.5	95.1









表 5c (续)

$t$ \ $t-t_w$	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0
58	89.9	89.5	89.0	88.6	88.1	87.7	87.2	86.8	86.3	85.9
59	90.0	89.6	89.1	88.7	88.2	87.8	87.3	86.9	86.4	86.0
60	90.1	89.7	89.2	88.8	88.3	87.9	87.4	87.0	86.6	86.1
61	90.2	89.8	89.3	88.9	88.4	88.0	87.5	87.1	86.7	86.2
62	90.3	89.8	89.4	89.0	88.5	88.1	87.6	87.2	86.8	86.4
63	90.4	89.9	89.5	89.1	88.6	88.2	87.8	87.3	86.9	86.5
64	90.4	90.0	89.6	89.1	88.7	88.3	87.9	87.4	87.0	86.6
65	90.5	90.1	89.7	89.2	88.8	88.4	88.0	87.5	87.1	86.7
66	90.6	90.2	89.7	89.3	88.9	88.5	88.1	87.6	87.2	86.8
67	90.7	90.3	89.8	89.4	89.0	88.6	88.1	87.7	87.3	86.9
68	90.8	90.3	89.9	89.5	89.1	88.7	88.2	87.8	87.4	87.0
69	90.8	90.4	90.0	89.6	89.2	88.7	88.3	87.9	87.5	87.1
70	90.9	90.5	90.1	89.7	89.2	88.8	88.4	88.0	87.6	87.2
71	91.0	90.6	90.1	89.7	89.3	88.9	88.5	88.1	87.7	87.3
72	91.0	90.6	90.2	89.8	89.4	89.0	88.6	88.2	87.8	87.4
73	91.1	90.7	90.3	89.9	89.5	89.1	88.7	88.3	87.9	87.5
74	91.2	90.8	90.4	90.0	89.6	89.2	88.8	88.4	88.0	87.6
75	91.2	90.8	90.4	90.0	89.6	89.3	88.9	88.5	88.1	87.7
76	91.3	90.9	90.5	90.1	89.7	89.3	88.9	88.5	88.2	87.8
77	91.4	91.0	90.6	90.2	89.8	89.4	89.0	88.6	88.2	87.9
78	91.4	91.0	90.7	90.3	89.9	89.5	89.1	88.7	88.3	87.9
79	91.5	91.1	90.7	90.3	89.9	89.6	89.2	88.8	88.4	88.0
80	91.6	91.2	90.8	90.4	90.0	89.6	89.3	88.9	88.5	88.1
81	91.6	91.2	90.9	90.5	90.1	89.7	89.3	89.0	88.6	88.2
82	91.7	91.3	90.9	90.5	90.2	89.8	89.4	89.0	88.7	88.3
83	91.7	91.4	91.0	90.6	90.2	89.9	89.5	89.1	88.7	88.4
84	91.8	91.4	91.0	90.7	90.3	89.9	89.6	89.2	88.8	88.4
85	91.9	91.5	91.1	90.7	90.4	90.0	89.6	89.3	88.9	88.5
86	91.9	91.5	91.2	90.8	90.4	90.1	89.7	89.3	89.0	88.6
87	92.0	91.6	91.2	90.9	90.5	90.1	89.8	89.4	89.0	88.7
88	92.0	91.7	91.3	90.9	90.6	90.2	89.8	89.5	89.1	88.8
89	92.1	91.7	91.3	91.0	90.6	90.3	89.9	89.5	89.2	88.8
90	92.1	91.8	91.4	91.0	90.7	90.3	90.0	89.6	89.3	88.9
91	92.2	91.8	91.5	91.1	90.7	90.4	90.0	89.7	89.3	89.0
92	92.2	91.9	91.5	91.2	90.8	90.5	90.1	89.8	89.4	89.1
93	92.3	91.9	91.6	91.2	90.9	90.5	90.2	89.8	89.5	89.1
94	92.3	92.0	91.6	91.3	90.9	90.6	90.2	89.9	89.5	89.2
95	92.4	92.0	91.7	91.3	91.0	90.6	90.3	89.9	89.6	89.3
96	92.4	92.1	91.7	91.4	91.0	90.7	90.4	90.0	89.7	89.3
97	92.5	92.1	91.8	91.4	91.1	90.8	90.4	90.1	89.7	89.4
98	92.5	92.2	91.8	91.5	91.2	90.8	90.5	90.1	89.8	89.5
99	92.6	92.2	91.9	91.6	91.2	90.9	90.5	90.2	89.9	89.5
100	92.6	92.3	91.9	91.6	91.3	90.9	90.6	90.3	89.9	89.6







表 5c (续)

$t$ \ $t-t_w$	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0
58	81.1	80.6	80.2	79.8	79.4	79.0	78.5	78.1	77.7	77.3
59	81.2	80.8	80.4	80.0	79.6	79.1	78.7	78.3	77.9	77.5
60	81.4	81.0	80.6	80.2	79.7	79.3	78.9	78.5	78.1	77.7
61	81.6	81.1	80.7	80.3	79.9	79.5	79.1	78.7	78.3	77.9
62	81.7	81.3	80.9	80.5	80.1	79.7	79.3	78.9	78.5	78.1
63	81.9	81.5	81.1	80.6	80.2	79.8	79.4	79.0	78.6	78.2
64	82.0	81.6	81.2	80.8	80.4	80.0	79.6	79.2	78.8	78.4
65	82.2	81.8	81.4	81.0	80.6	80.2	79.8	79.4	79.0	78.6
66	82.3	81.9	81.5	81.1	80.7	80.3	79.9	79.5	79.2	78.8
67	82.4	82.0	81.7	81.3	80.9	80.5	80.1	79.7	79.3	78.9
68	82.6	82.2	81.8	81.4	81.0	80.6	80.2	79.9	79.5	79.1
69	82.7	82.3	81.9	81.5	81.2	80.8	80.4	80.0	79.6	79.3
70	82.8	82.5	82.1	81.7	81.3	80.9	80.5	80.2	79.8	79.4
71	83.0	82.6	82.2	81.8	81.4	81.1	80.7	80.3	79.9	79.6
72	83.1	82.7	82.3	82.0	81.6	81.2	80.8	80.5	80.1	79.7
73	83.2	82.9	82.5	82.1	81.7	81.3	81.0	80.6	80.2	79.9
74	83.4	83.0	82.6	82.2	81.9	81.5	81.1	80.7	80.4	80.0
75	83.5	83.1	82.7	82.4	82.0	81.6	81.2	80.9	80.5	80.2
76	83.6	83.2	82.9	82.5	82.1	81.7	81.4	81.0	80.7	80.3
77	83.7	83.3	83.0	82.6	82.2	81.9	81.5	81.2	80.8	80.4
78	83.8	83.5	83.1	82.7	82.4	82.0	81.6	81.3	80.9	80.6
79	83.9	83.6	83.2	82.9	82.5	82.1	81.8	81.4	81.1	80.7
80	84.1	83.7	83.3	83.0	82.6	82.3	81.9	81.5	81.2	80.8
81	84.2	83.8	83.4	83.1	82.7	82.4	82.0	81.7	81.3	81.0
82	84.3	83.9	83.6	83.2	82.9	82.5	82.1	81.8	81.4	81.1
83	84.4	84.0	83.7	83.3	83.0	82.6	82.3	81.9	81.6	81.2
84	84.5	84.1	83.8	83.4	83.1	82.7	82.4	82.0	81.7	81.4
85	84.6	84.2	83.9	83.5	83.2	82.9	82.5	82.2	81.8	81.5
86	84.7	84.3	84.0	83.7	83.3	83.0	82.6	82.3	81.9	81.6
87	84.8	84.5	84.1	83.8	83.4	83.1	82.7	82.4	82.1	81.7
88	84.9	84.6	84.2	83.9	83.5	83.2	82.8	82.5	82.2	81.8
89	85.0	84.7	84.3	84.0	83.6	83.3	83.0	82.6	82.3	82.0
90	85.1	84.8	84.4	84.1	83.7	83.4	83.1	82.7	82.4	82.1
91	85.2	84.9	84.5	84.2	83.8	83.5	83.2	82.8	82.5	82.2
92	85.3	85.0	84.6	84.3	83.9	83.6	83.3	83.0	82.6	82.3
93	85.4	85.0	84.7	84.4	84.1	83.7	83.4	83.1	82.7	82.4
94	85.5	85.1	84.8	84.5	84.2	83.8	83.5	83.2	82.8	82.5
95	85.6	85.2	84.9	84.6	84.3	83.9	83.6	83.3	83.0	82.6
96	85.7	85.3	85.0	84.7	84.4	84.0	83.7	83.4	83.1	82.7
97	85.7	85.4	85.1	84.8	84.4	84.1	83.8	83.5	83.2	82.8
98	85.8	85.5	85.2	84.9	84.5	84.2	83.9	83.6	83.3	83.0
99	85.9	85.6	85.3	85.0	84.6	84.3	84.0	83.7	83.4	83.1
100	86.0	85.7	85.4	85.1	84.7	84.4	84.1	83.8	83.5	83.2

表 5c (续)

$t-t_w$	5.2	5.4	5.6	5.8	6.0	6.2	6.4	6.6	6.8	7.0
15	54.9	53.3	51.8	50.2	48.7	47.1	45.6	44.1	42.6	41.2
16	56.1	54.6	53.0	51.5	50.0	48.6	47.1	45.6	44.2	42.7
17	57.2	55.7	54.2	52.8	51.3	49.9	48.5	47.0	45.6	44.2
18	58.3	56.8	55.4	54.0	52.5	51.1	49.7	48.4	47.0	45.6
19	59.3	57.9	56.5	55.1	53.7	52.3	51.0	49.6	48.3	46.9
20	60.2	58.8	57.5	56.1	54.8	53.4	52.1	50.8	49.5	48.2
21	61.1	59.7	58.4	57.1	55.8	54.5	53.2	51.9	50.6	49.4
22	61.9	60.6	59.3	58.0	56.7	55.5	54.2	52.9	51.7	50.5
23	62.7	61.4	60.2	58.9	57.6	56.4	55.2	53.9	52.7	51.5
24	63.5	62.2	61.0	59.7	58.5	57.3	56.1	54.9	53.7	52.5
25	64.2	63.0	61.7	60.5	59.3	58.1	56.9	55.8	54.6	53.4
26	64.9	63.7	62.5	61.3	60.1	58.9	57.8	56.6	55.5	54.3
27	65.5	64.3	63.1	62.0	60.8	59.7	58.5	57.4	56.3	55.2
28	66.1	65.0	63.8	62.7	61.5	60.4	59.3	58.2	57.1	56.0
29	66.7	65.6	64.4	63.3	62.2	61.1	60.0	58.9	57.8	56.7
30	67.3	66.1	65.0	63.9	62.8	61.7	60.6	59.6	58.5	57.5
31	67.8	66.7	65.6	64.5	63.4	62.3	61.3	60.2	59.2	58.1
32	68.3	67.2	66.1	65.1	64.0	62.9	61.9	60.9	59.8	58.8
33	68.8	67.7	66.6	65.6	64.5	63.5	62.5	61.5	60.4	59.4
34	69.2	68.2	67.1	66.1	65.1	64.0	63.0	62.0	61.0	60.0
35	69.7	68.6	67.6	66.6	65.6	64.6	63.6	62.6	61.6	59.8
36	70.1	69.1	68.1	67.1	66.1	65.1	64.1	63.1	62.1	60.4
37	70.5	69.5	68.5	67.5	66.5	65.5	64.6	63.6	62.6	61.0
38	70.9	69.9	68.9	67.9	67.0	66.0	65.0	64.1	63.1	61.5
39	71.3	70.3	69.3	68.4	67.4	66.4	65.5	64.5	63.6	62.0
40	71.7	70.7	69.7	68.8	67.8	66.9	65.9	65.0	64.1	62.5
41	72.0	71.0	70.1	69.1	68.2	67.3	66.3	65.4	64.5	63.0
42	72.3	71.4	70.4	69.5	68.6	67.7	66.7	65.8	64.9	63.5
43	72.7	71.7	70.8	69.9	68.9	68.0	67.1	66.2	65.3	63.9
44	73.0	72.0	71.1	70.2	69.3	68.4	67.5	66.6	65.7	64.4
45	73.3	72.4	71.4	70.5	69.6	68.8	67.9	67.0	66.1	64.8
46	73.6	72.7	71.8	70.9	70.0	69.1	68.2	67.4	66.5	65.2
47	73.9	73.0	72.1	71.2	70.3	69.4	68.6	67.7	66.8	65.6
48	74.1	73.2	72.4	71.5	70.6	69.7	68.9	68.0	67.2	65.9
49	74.4	73.5	72.6	71.8	70.9	70.1	69.2	68.4	67.5	66.3
50	74.7	73.8	72.9	72.1	71.2	70.4	69.5	68.7	67.9	67.0
51	74.9	74.0	73.2	72.3	71.5	70.6	69.8	69.0	68.2	67.4
52	75.1	74.3	73.4	72.6	71.8	70.9	70.1	69.3	68.5	67.7
53	75.4	74.5	73.7	72.9	72.0	71.2	70.4	69.6	68.8	68.0
54	75.6	74.8	73.9	73.1	72.3	71.5	70.7	69.9	69.1	68.3
55	75.8	75.0	74.2	73.4	72.5	71.7	70.9	70.1	69.3	68.6
56	76.1	75.2	74.4	73.6	72.8	72.0	71.2	70.4	69.6	68.8
57	76.3	75.5	74.6	73.8	73.0	72.2	71.4	70.7	69.9	69.1





表 5c (续)

$t$ \ $t-t_w$	7.2	7.4	7.6	7.8	8.0	8.2	8.4	8.6	8.8	9.0
58	68.6	67.9	67.1	66.4	65.6	64.9	64.2	63.5	62.8	62.0
59	68.9	68.1	67.4	66.7	65.9	65.2	64.5	63.8	63.1	62.4
60	69.1	68.4	67.7	66.9	66.2	65.5	64.8	64.1	63.4	62.7
61	69.4	68.7	67.9	67.2	66.5	65.8	65.1	64.4	63.7	63.0
62	69.6	68.9	68.2	67.5	66.8	66.1	65.3	64.6	64.0	63.3
63	69.9	69.2	68.4	67.7	67.0	66.3	65.6	64.9	64.2	63.6
64	70.1	69.4	68.7	68.0	67.3	66.6	65.9	65.2	64.5	63.8
65	70.4	69.6	68.9	68.2	67.5	66.8	66.2	65.5	64.8	64.1
66	70.6	69.9	69.2	68.5	67.8	67.1	66.4	65.7	65.1	64.4
67	70.8	70.1	69.4	68.7	68.0	67.3	66.7	66.0	65.3	64.7
68	71.0	70.3	69.6	68.9	68.3	67.6	66.9	66.2	65.6	64.9
69	71.2	70.6	69.9	69.2	68.5	67.8	67.1	66.5	65.8	65.2
70	71.5	70.8	70.1	69.4	68.7	68.1	67.4	66.7	66.1	65.4
71	71.7	71.0	70.3	69.6	68.9	68.3	67.6	67.0	66.3	65.7
72	71.9	71.2	70.5	69.8	69.2	68.5	67.8	67.2	66.5	65.9
73	72.1	71.4	70.7	70.1	69.4	68.7	68.1	67.4	66.8	66.1
74	72.3	71.6	70.9	70.3	69.6	68.9	68.3	67.7	67.0	66.4
75	72.5	71.8	71.1	70.5	69.8	69.2	68.5	67.9	67.2	66.6
76	72.7	72.0	71.3	70.7	70.0	69.4	68.7	68.1	67.5	66.8
77	72.8	72.2	71.5	70.9	70.2	69.6	68.9	68.3	67.7	67.1
78	73.0	72.4	71.7	71.1	70.4	69.8	69.1	68.5	67.9	67.3
79	73.2	72.6	71.9	71.3	70.6	70.0	69.4	68.7	68.1	67.5
80	73.4	72.7	72.1	71.4	70.8	70.2	69.6	68.9	68.3	67.7
81	73.6	72.9	72.3	71.6	71.0	70.4	69.8	69.1	68.5	67.9
82	73.7	73.1	72.5	71.8	71.2	70.6	69.9	69.3	68.7	68.1
83	73.9	73.3	72.6	72.0	71.4	70.8	70.1	69.5	68.9	68.3
84	74.1	73.4	72.8	72.2	71.6	70.9	70.3	69.7	69.1	68.5
85	74.2	73.6	73.0	72.4	71.7	71.1	70.5	69.9	69.3	68.7
86	74.4	73.8	73.2	72.5	71.9	71.3	70.7	70.1	69.5	68.9
87	74.6	73.9	73.3	72.7	72.1	71.5	70.9	70.3	69.7	69.1
88	74.7	74.1	73.5	72.9	72.3	71.7	71.1	70.5	69.9	69.3
89	74.9	74.3	73.7	73.0	72.4	71.8	71.2	70.7	70.1	69.5
90	75.0	74.4	73.8	73.2	72.6	72.0	71.4	70.8	70.2	69.7
91	75.2	74.6	74.0	73.4	72.8	72.2	71.6	71.0	70.4	69.8
92	75.4	74.7	74.1	73.5	72.9	72.4	71.8	71.2	70.6	70.0
93	75.5	74.9	74.3	73.7	73.1	72.5	71.9	71.4	70.8	70.2
94	75.7	75.1	74.5	73.9	73.3	72.7	72.1	71.5	70.9	70.4
95	75.8	75.2	74.6	74.0	73.4	72.8	72.3	71.7	71.1	70.6
96	75.9	75.4	74.8	74.2	73.6	73.0	72.4	71.9	71.3	70.7
97	76.1	75.5	74.9	74.3	73.7	73.2	72.6	72.0	71.5	70.9
98	76.2	75.6	75.1	74.5	73.9	73.3	72.8	72.2	71.6	71.1
99	76.4	75.8	75.2	74.6	74.1	73.5	72.9	72.3	71.8	71.2
100	76.5	75.9	75.4	74.8	74.2	73.6	73.1	72.5	72.0	71.4

表 5c (续)

$t$ \ $t-t_w$	9.2	9.4	9.6	9.8	10.0	10.2	10.4	10.6	10.8	11.0
15	25.5	24.1	22.8	21.4	20.1	18.7	17.4	16.1	14.8	13.5
16	27.5	26.2	24.9	23.6	22.3	21.0	19.7	18.4	17.2	15.9
17	29.4	28.2	26.9	25.6	24.4	23.1	21.9	20.6	19.4	18.2
18	31.3	30.0	28.8	27.5	26.3	25.1	23.9	22.7	21.5	20.3
19	32.9	31.7	30.5	29.3	28.1	26.9	25.8	24.6	23.4	22.3
20	34.5	33.4	32.2	31.0	29.8	28.7	27.5	26.4	25.3	24.2
21	36.0	34.9	33.7	32.6	31.5	30.3	29.2	28.1	27.0	25.9
22	37.5	36.3	35.2	34.1	33.0	31.9	30.8	29.7	28.7	27.6
23	38.8	37.7	36.6	35.5	34.4	33.4	32.3	31.2	30.2	29.2
24	40.1	39.0	37.9	36.9	35.8	34.8	33.7	32.7	31.7	30.6
25	41.3	40.2	39.2	38.1	37.1	36.1	35.1	34.0	33.0	32.0
26	42.4	41.4	40.3	39.3	38.3	37.3	36.3	35.3	34.3	33.4
27	43.5	42.5	41.5	40.5	39.5	38.5	37.5	36.5	35.6	34.6
28	44.5	43.5	42.5	41.5	40.6	39.6	38.6	37.7	36.8	35.8
29	45.5	44.5	43.5	42.6	41.6	40.7	39.7	38.8	37.9	37.0
30	46.4	45.4	44.5	43.5	42.6	41.7	40.8	39.8	38.9	38.0
31	47.3	46.3	45.4	44.5	43.5	42.6	41.7	40.8	39.9	39.1
32	48.1	47.2	46.3	45.3	44.4	43.5	42.7	41.8	40.9	40.0
33	48.9	48.0	47.1	46.2	45.3	44.4	43.5	42.7	41.8	41.0
34	49.7	48.8	47.9	47.0	46.1	45.2	44.4	43.5	42.7	41.8
35	50.4	49.5	48.6	47.8	46.9	46.0	45.2	44.4	43.5	42.7
36	51.1	50.2	49.4	48.5	47.6	46.8	46.0	45.1	44.3	43.5
37	51.8	50.9	50.0	49.2	48.4	47.5	46.7	45.9	45.1	44.3
38	52.4	51.5	50.7	49.9	49.0	48.2	47.4	46.6	45.8	45.0
39	53.0	52.2	51.3	50.5	49.7	48.9	48.1	47.3	46.5	45.7
40	53.6	52.8	52.0	51.1	50.3	49.5	48.7	47.9	47.2	46.4
41	54.2	53.3	52.5	51.7	50.9	50.1	49.4	48.6	47.8	47.0
42	54.7	53.9	53.1	52.3	51.5	50.7	50.0	49.2	48.4	47.7
43	55.2	54.4	53.6	52.9	52.1	51.3	50.5	49.8	49.0	48.3
44	55.7	55.0	54.2	53.4	52.6	51.9	51.1	50.3	49.6	48.9
45	56.2	55.4	54.7	53.9	53.1	52.4	51.6	50.9	50.2	49.4
46	56.7	55.9	55.2	54.4	53.6	52.9	52.2	51.4	50.7	50.0
47	57.2	56.4	55.6	54.9	54.1	53.4	52.7	51.9	51.2	50.5
48	57.6	56.8	56.1	55.3	54.6	53.9	53.1	52.4	51.7	51.0
49	58.0	57.3	56.5	55.8	55.1	54.3	53.6	52.9	52.2	51.5
50	58.4	57.7	57.0	56.2	55.5	54.8	54.1	53.4	52.6	52.0
51	58.8	58.1	57.4	56.6	55.9	55.2	54.5	53.8	53.1	52.4
52	59.2	58.5	57.8	57.1	56.3	55.6	54.9	54.2	53.5	52.9
53	59.6	58.9	58.2	57.4	56.7	56.0	55.3	54.7	54.0	53.3
54	60.0	59.3	58.5	57.8	57.1	56.4	55.7	55.1	54.4	53.7
55	60.3	59.6	58.9	58.2	57.5	56.8	56.1	55.5	54.8	54.1
56	60.7	60.0	59.3	58.6	57.9	57.2	56.5	55.8	55.2	54.5
57	61.0	60.3	59.6	58.9	58.2	57.6	56.9	56.2	55.6	54.9













