



BASIC AIR DATA

REFERENCE TABLES

Indicated Airspeed Correction Factor

$$C_{T,P}$$

JLJ

Authored by

Basic Air Data Team. June 27, 2017

Dry Air, Relative Humidity 0%

| Temperature | | | Pressure Pa | | | | | | | | | | | |
|-------------|-------|------|-------------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|
| °C | °K | °F | 80 000 | 83 000 | 86 000 | 89 000 | 91 000 | 94 000 | 97 000 | 100 000 | 101 325 | 103 000 | 106 000 | 109 000 |
| -15 | 258.1 | 5.0 | 1.065 | 1.046 | 0.983 | 1.010 | 0.999 | 0.983 | 0.967 | 0.953 | 0.947 | 0.939 | 0.925 | 0.913 |
| -14 | 259.1 | 6.8 | 1.067 | 1.048 | 0.985 | 1.012 | 1.001 | 0.985 | 0.969 | 0.955 | 0.948 | 0.941 | 0.927 | 0.914 |
| -13 | 260.1 | 8.6 | 1.069 | 1.050 | 0.986 | 1.014 | 1.003 | 0.986 | 0.971 | 0.956 | 0.950 | 0.942 | 0.929 | 0.916 |
| -12 | 261.1 | 10.4 | 1.071 | 1.052 | 0.988 | 1.016 | 1.005 | 0.988 | 0.973 | 0.958 | 0.952 | 0.944 | 0.931 | 0.918 |
| -11 | 262.1 | 12.2 | 1.073 | 1.054 | 0.990 | 1.018 | 1.006 | 0.990 | 0.975 | 0.960 | 0.954 | 0.946 | 0.933 | 0.920 |
| -10 | 263.1 | 14.0 | 1.075 | 1.056 | 0.992 | 1.020 | 1.008 | 0.992 | 0.977 | 0.962 | 0.956 | 0.948 | 0.934 | 0.921 |
| -9 | 264.1 | 15.8 | 1.078 | 1.058 | 0.994 | 1.022 | 1.010 | 0.994 | 0.979 | 0.964 | 0.957 | 0.950 | 0.936 | 0.923 |
| -8 | 265.1 | 17.6 | 1.080 | 1.060 | 0.996 | 1.024 | 1.012 | 0.996 | 0.980 | 0.966 | 0.959 | 0.951 | 0.938 | 0.925 |
| -7 | 266.1 | 19.4 | 1.082 | 1.062 | 0.998 | 1.025 | 1.014 | 0.998 | 0.982 | 0.967 | 0.961 | 0.953 | 0.940 | 0.927 |
| -6 | 267.1 | 21.2 | 1.084 | 1.064 | 1.000 | 1.027 | 1.016 | 1.000 | 0.984 | 0.969 | 0.963 | 0.955 | 0.941 | 0.928 |
| -5 | 268.1 | 23.0 | 1.086 | 1.066 | 1.002 | 1.029 | 1.018 | 1.002 | 0.986 | 0.971 | 0.965 | 0.957 | 0.943 | 0.930 |
| -4 | 269.1 | 24.8 | 1.088 | 1.068 | 1.003 | 1.031 | 1.020 | 1.003 | 0.988 | 0.973 | 0.966 | 0.959 | 0.945 | 0.932 |
| -3 | 270.1 | 26.6 | 1.090 | 1.070 | 1.005 | 1.033 | 1.022 | 1.005 | 0.990 | 0.975 | 0.968 | 0.960 | 0.947 | 0.934 |
| -2 | 271.1 | 28.4 | 1.092 | 1.072 | 1.007 | 1.035 | 1.024 | 1.007 | 0.991 | 0.976 | 0.970 | 0.962 | 0.948 | 0.935 |
| -1 | 272.1 | 30.2 | 1.094 | 1.074 | 1.009 | 1.037 | 1.025 | 1.009 | 0.993 | 0.978 | 0.972 | 0.964 | 0.950 | 0.937 |
| 0 | 273.1 | 32.0 | 1.096 | 1.076 | 1.011 | 1.039 | 1.027 | 1.011 | 0.995 | 0.980 | 0.974 | 0.966 | 0.952 | 0.939 |
| 1 | 274.1 | 33.8 | 1.098 | 1.078 | 1.013 | 1.041 | 1.029 | 1.013 | 0.997 | 0.982 | 0.975 | 0.967 | 0.954 | 0.940 |
| 2 | 275.1 | 35.6 | 1.100 | 1.080 | 1.015 | 1.043 | 1.031 | 1.015 | 0.999 | 0.984 | 0.977 | 0.969 | 0.955 | 0.942 |
| 3 | 276.1 | 37.4 | 1.102 | 1.082 | 1.016 | 1.045 | 1.033 | 1.016 | 1.001 | 0.985 | 0.979 | 0.971 | 0.957 | 0.944 |
| 4 | 277.1 | 39.2 | 1.104 | 1.084 | 1.018 | 1.046 | 1.035 | 1.018 | 1.002 | 0.987 | 0.981 | 0.973 | 0.959 | 0.946 |
| 5 | 278.1 | 41.0 | 1.106 | 1.086 | 1.020 | 1.048 | 1.037 | 1.020 | 1.004 | 0.989 | 0.982 | 0.974 | 0.961 | 0.947 |
| 6 | 279.1 | 42.8 | 1.108 | 1.087 | 1.022 | 1.050 | 1.039 | 1.022 | 1.006 | 0.991 | 0.984 | 0.976 | 0.962 | 0.949 |
| 7 | 280.1 | 44.6 | 1.110 | 1.089 | 1.024 | 1.052 | 1.040 | 1.024 | 1.008 | 0.993 | 0.986 | 0.978 | 0.964 | 0.951 |
| 8 | 281.1 | 46.4 | 1.112 | 1.091 | 1.026 | 1.054 | 1.042 | 1.026 | 1.010 | 0.994 | 0.988 | 0.980 | 0.966 | 0.952 |
| 9 | 282.1 | 48.2 | 1.114 | 1.093 | 1.027 | 1.056 | 1.044 | 1.027 | 1.011 | 0.996 | 0.990 | 0.981 | 0.967 | 0.954 |
| 10 | 283.1 | 50.0 | 1.116 | 1.095 | 1.029 | 1.058 | 1.046 | 1.029 | 1.013 | 0.998 | 0.991 | 0.983 | 0.969 | 0.956 |

| Temperature | | | Pressure Pa | | | | | | | | | | | |
|-------------|-------|-------|-------------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|
| °C | °K | °F | 80 000 | 83 000 | 86 000 | 89 000 | 91 000 | 94 000 | 97 000 | 100 000 | 101 325 | 103 000 | 106 000 | 109 000 |
| 11 | 284.1 | 51.8 | 1.118 | 1.097 | 1.031 | 1.060 | 1.048 | 1.031 | 1.015 | 1.000 | 0.993 | 0.985 | 0.971 | 0.957 |
| 12 | 285.1 | 53.6 | 1.120 | 1.099 | 1.033 | 1.061 | 1.050 | 1.033 | 1.017 | 1.001 | 0.995 | 0.987 | 0.973 | 0.959 |
| 13 | 286.1 | 55.4 | 1.121 | 1.101 | 1.035 | 1.063 | 1.052 | 1.035 | 1.018 | 1.003 | 0.997 | 0.988 | 0.974 | 0.961 |
| 14 | 287.1 | 57.2 | 1.123 | 1.103 | 1.036 | 1.065 | 1.053 | 1.036 | 1.020 | 1.005 | 0.998 | 0.990 | 0.976 | 0.962 |
| 15 | 288.1 | 59.0 | 1.125 | 1.105 | 1.038 | 1.067 | 1.055 | 1.038 | 1.022 | 1.006 | 1.000 | 0.992 | 0.978 | 0.964 |
| 16 | 289.1 | 60.8 | 1.127 | 1.107 | 1.040 | 1.069 | 1.057 | 1.040 | 1.024 | 1.008 | 1.002 | 0.993 | 0.979 | 0.966 |
| 17 | 290.1 | 62.6 | 1.129 | 1.109 | 1.042 | 1.071 | 1.059 | 1.042 | 1.025 | 1.010 | 1.003 | 0.995 | 0.981 | 0.967 |
| 18 | 291.1 | 64.4 | 1.131 | 1.110 | 1.043 | 1.072 | 1.061 | 1.043 | 1.027 | 1.012 | 1.005 | 0.997 | 0.983 | 0.969 |
| 19 | 292.1 | 66.2 | 1.133 | 1.112 | 1.045 | 1.074 | 1.062 | 1.045 | 1.029 | 1.013 | 1.007 | 0.999 | 0.984 | 0.971 |
| 20 | 293.1 | 68.0 | 1.135 | 1.114 | 1.047 | 1.076 | 1.064 | 1.047 | 1.031 | 1.015 | 1.008 | 1.000 | 0.986 | 0.972 |
| 21 | 294.1 | 69.8 | 1.137 | 1.116 | 1.049 | 1.078 | 1.066 | 1.049 | 1.032 | 1.017 | 1.010 | 1.002 | 0.988 | 0.974 |
| 22 | 295.1 | 71.6 | 1.139 | 1.118 | 1.051 | 1.080 | 1.068 | 1.051 | 1.034 | 1.019 | 1.012 | 1.004 | 0.989 | 0.976 |
| 23 | 296.1 | 73.4 | 1.141 | 1.120 | 1.052 | 1.082 | 1.070 | 1.052 | 1.036 | 1.020 | 1.014 | 1.005 | 0.991 | 0.977 |
| 24 | 297.1 | 75.2 | 1.143 | 1.122 | 1.054 | 1.083 | 1.071 | 1.054 | 1.038 | 1.022 | 1.015 | 1.007 | 0.993 | 0.979 |
| 25 | 298.1 | 77.0 | 1.145 | 1.124 | 1.056 | 1.085 | 1.073 | 1.056 | 1.040 | 1.024 | 1.017 | 1.009 | 0.994 | 0.981 |
| 26 | 299.1 | 78.8 | 1.147 | 1.126 | 1.058 | 1.087 | 1.075 | 1.058 | 1.041 | 1.026 | 1.019 | 1.010 | 0.996 | 0.982 |
| 27 | 300.1 | 80.6 | 1.149 | 1.128 | 1.060 | 1.089 | 1.077 | 1.060 | 1.043 | 1.027 | 1.021 | 1.012 | 0.998 | 0.984 |
| 28 | 301.1 | 82.4 | 1.151 | 1.130 | 1.061 | 1.091 | 1.079 | 1.061 | 1.045 | 1.029 | 1.022 | 1.014 | 0.999 | 0.986 |
| 29 | 302.1 | 84.2 | 1.152 | 1.131 | 1.063 | 1.093 | 1.081 | 1.063 | 1.047 | 1.031 | 1.024 | 1.016 | 1.001 | 0.987 |
| 30 | 303.1 | 86.0 | 1.154 | 1.133 | 1.065 | 1.094 | 1.082 | 1.065 | 1.048 | 1.032 | 1.026 | 1.017 | 1.003 | 0.989 |
| 31 | 304.1 | 87.8 | 1.156 | 1.135 | 1.067 | 1.096 | 1.084 | 1.067 | 1.050 | 1.034 | 1.027 | 1.019 | 1.004 | 0.991 |
| 32 | 305.1 | 89.6 | 1.158 | 1.137 | 1.068 | 1.098 | 1.086 | 1.068 | 1.052 | 1.036 | 1.029 | 1.021 | 1.006 | 0.992 |
| 33 | 306.1 | 91.4 | 1.160 | 1.139 | 1.070 | 1.100 | 1.088 | 1.070 | 1.053 | 1.038 | 1.031 | 1.022 | 1.008 | 0.994 |
| 34 | 307.1 | 93.2 | 1.162 | 1.141 | 1.072 | 1.102 | 1.089 | 1.072 | 1.055 | 1.039 | 1.032 | 1.024 | 1.009 | 0.995 |
| 35 | 308.1 | 95.0 | 1.164 | 1.143 | 1.074 | 1.103 | 1.091 | 1.074 | 1.057 | 1.041 | 1.034 | 1.026 | 1.011 | 0.997 |
| 36 | 309.1 | 96.8 | 1.166 | 1.144 | 1.075 | 1.105 | 1.093 | 1.075 | 1.059 | 1.043 | 1.036 | 1.027 | 1.013 | 0.999 |
| 37 | 310.1 | 98.6 | 1.168 | 1.146 | 1.077 | 1.107 | 1.095 | 1.077 | 1.060 | 1.044 | 1.037 | 1.029 | 1.014 | 1.000 |
| 38 | 311.1 | 100.4 | 1.169 | 1.148 | 1.079 | 1.109 | 1.096 | 1.079 | 1.062 | 1.046 | 1.039 | 1.031 | 1.016 | 1.002 |

| Temperature | | | Pressure Pa | | | | | | | | | | | |
|-------------|-------|-------|-------------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|
| °C | °K | °F | 80 000 | 83 000 | 86 000 | 89 000 | 91 000 | 94 000 | 97 000 | 100 000 | 101 325 | 103 000 | 106 000 | 109 000 |
| 39 | 312.1 | 102.2 | 1.171 | 1.150 | 1.081 | 1.111 | 1.098 | 1.081 | 1.064 | 1.048 | 1.041 | 1.032 | 1.018 | 1.003 |
| 40 | 313.1 | 104.0 | 1.173 | 1.152 | 1.082 | 1.112 | 1.100 | 1.082 | 1.065 | 1.049 | 1.042 | 1.034 | 1.019 | 1.005 |
| 41 | 314.1 | 105.8 | 1.175 | 1.154 | 1.084 | 1.114 | 1.102 | 1.084 | 1.067 | 1.051 | 1.044 | 1.036 | 1.021 | 1.007 |
| 42 | 315.1 | 107.6 | 1.177 | 1.155 | 1.086 | 1.116 | 1.104 | 1.086 | 1.069 | 1.053 | 1.046 | 1.037 | 1.022 | 1.008 |
| 43 | 316.1 | 109.4 | 1.179 | 1.157 | 1.087 | 1.118 | 1.105 | 1.087 | 1.071 | 1.054 | 1.047 | 1.039 | 1.024 | 1.010 |
| 44 | 317.1 | 111.2 | 1.181 | 1.159 | 1.089 | 1.119 | 1.107 | 1.089 | 1.072 | 1.056 | 1.049 | 1.041 | 1.026 | 1.011 |
| 45 | 318.1 | 113.0 | 1.183 | 1.161 | 1.091 | 1.121 | 1.109 | 1.091 | 1.074 | 1.058 | 1.051 | 1.042 | 1.027 | 1.013 |
| 46 | 319.1 | 114.8 | 1.184 | 1.163 | 1.093 | 1.123 | 1.111 | 1.093 | 1.076 | 1.059 | 1.052 | 1.044 | 1.029 | 1.015 |
| 47 | 320.1 | 116.6 | 1.186 | 1.165 | 1.094 | 1.125 | 1.112 | 1.094 | 1.077 | 1.061 | 1.054 | 1.045 | 1.031 | 1.016 |
| 48 | 321.1 | 118.4 | 1.188 | 1.166 | 1.096 | 1.126 | 1.114 | 1.096 | 1.079 | 1.063 | 1.056 | 1.047 | 1.032 | 1.018 |
| 49 | 322.1 | 120.2 | 1.190 | 1.168 | 1.098 | 1.128 | 1.116 | 1.098 | 1.081 | 1.064 | 1.057 | 1.049 | 1.034 | 1.019 |
| 50 | 323.1 | 122.0 | 1.192 | 1.170 | 1.099 | 1.130 | 1.117 | 1.099 | 1.082 | 1.066 | 1.059 | 1.050 | 1.035 | 1.021 |

Moist Air, Relative Humidity 50%

| Temperature | | | Pressure Pa | | | | | | | | | | | |
|-------------|-------|------|-------------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|
| °C | °K | °F | 80 000 | 83 000 | 86 000 | 89 000 | 91 000 | 94 000 | 97 000 | 100 000 | 101 325 | 103 000 | 106 000 | 109 000 |
| -15 | 258.1 | 5.0 | 1.065 | 1.046 | 0.983 | 1.010 | 0.999 | 0.983 | 0.968 | 0.953 | 0.947 | 0.939 | 0.926 | 0.913 |
| -14 | 259.1 | 6.8 | 1.068 | 1.048 | 0.985 | 1.012 | 1.001 | 0.985 | 0.969 | 0.955 | 0.949 | 0.941 | 0.927 | 0.915 |
| -13 | 260.1 | 8.6 | 1.070 | 1.050 | 0.987 | 1.014 | 1.003 | 0.987 | 0.971 | 0.957 | 0.950 | 0.943 | 0.929 | 0.916 |
| -12 | 261.1 | 10.4 | 1.072 | 1.052 | 0.989 | 1.016 | 1.005 | 0.989 | 0.973 | 0.958 | 0.952 | 0.944 | 0.931 | 0.918 |
| -11 | 262.1 | 12.2 | 1.074 | 1.054 | 0.991 | 1.018 | 1.007 | 0.991 | 0.975 | 0.960 | 0.954 | 0.946 | 0.933 | 0.920 |
| -10 | 263.1 | 14.0 | 1.076 | 1.056 | 0.992 | 1.020 | 1.009 | 0.992 | 0.977 | 0.962 | 0.956 | 0.948 | 0.935 | 0.922 |
| -9 | 264.1 | 15.8 | 1.078 | 1.058 | 0.994 | 1.022 | 1.011 | 0.994 | 0.979 | 0.964 | 0.958 | 0.950 | 0.936 | 0.923 |
| -8 | 265.1 | 17.6 | 1.080 | 1.060 | 0.996 | 1.024 | 1.013 | 0.996 | 0.981 | 0.966 | 0.960 | 0.952 | 0.938 | 0.925 |
| -7 | 266.1 | 19.4 | 1.082 | 1.062 | 0.998 | 1.026 | 1.014 | 0.998 | 0.983 | 0.968 | 0.961 | 0.954 | 0.940 | 0.927 |
| -6 | 267.1 | 21.2 | 1.084 | 1.064 | 1.000 | 1.028 | 1.016 | 1.000 | 0.984 | 0.970 | 0.963 | 0.955 | 0.942 | 0.929 |
| -5 | 268.1 | 23.0 | 1.086 | 1.066 | 1.002 | 1.030 | 1.018 | 1.002 | 0.986 | 0.971 | 0.965 | 0.957 | 0.944 | 0.930 |
| -4 | 269.1 | 24.8 | 1.088 | 1.068 | 1.004 | 1.032 | 1.020 | 1.004 | 0.988 | 0.973 | 0.967 | 0.959 | 0.945 | 0.932 |
| -3 | 270.1 | 26.6 | 1.090 | 1.070 | 1.006 | 1.034 | 1.022 | 1.006 | 0.990 | 0.975 | 0.969 | 0.961 | 0.947 | 0.934 |
| -2 | 271.1 | 28.4 | 1.092 | 1.072 | 1.008 | 1.036 | 1.024 | 1.008 | 0.992 | 0.977 | 0.971 | 0.963 | 0.949 | 0.936 |
| -1 | 272.1 | 30.2 | 1.094 | 1.074 | 1.010 | 1.038 | 1.026 | 1.010 | 0.994 | 0.979 | 0.972 | 0.964 | 0.951 | 0.937 |
| 0 | 273.1 | 32.0 | 1.097 | 1.076 | 1.011 | 1.040 | 1.028 | 1.011 | 0.996 | 0.981 | 0.974 | 0.966 | 0.952 | 0.939 |
| 1 | 274.1 | 33.8 | 1.099 | 1.079 | 1.013 | 1.041 | 1.030 | 1.013 | 0.998 | 0.982 | 0.976 | 0.968 | 0.954 | 0.941 |
| 2 | 275.1 | 35.6 | 1.101 | 1.081 | 1.015 | 1.043 | 1.032 | 1.015 | 0.999 | 0.984 | 0.978 | 0.970 | 0.956 | 0.943 |
| 3 | 276.1 | 37.4 | 1.103 | 1.083 | 1.017 | 1.045 | 1.034 | 1.017 | 1.001 | 0.986 | 0.980 | 0.972 | 0.958 | 0.944 |
| 4 | 277.1 | 39.2 | 1.105 | 1.085 | 1.019 | 1.047 | 1.036 | 1.019 | 1.003 | 0.988 | 0.981 | 0.973 | 0.960 | 0.946 |
| 5 | 278.1 | 41.0 | 1.107 | 1.087 | 1.021 | 1.049 | 1.038 | 1.021 | 1.005 | 0.990 | 0.983 | 0.975 | 0.961 | 0.948 |
| 6 | 279.1 | 42.8 | 1.109 | 1.089 | 1.023 | 1.051 | 1.040 | 1.023 | 1.007 | 0.992 | 0.985 | 0.977 | 0.963 | 0.950 |
| 7 | 280.1 | 44.6 | 1.111 | 1.091 | 1.025 | 1.053 | 1.042 | 1.025 | 1.009 | 0.993 | 0.987 | 0.979 | 0.965 | 0.951 |
| 8 | 281.1 | 46.4 | 1.113 | 1.093 | 1.027 | 1.055 | 1.043 | 1.027 | 1.011 | 0.995 | 0.989 | 0.981 | 0.967 | 0.953 |
| 9 | 282.1 | 48.2 | 1.115 | 1.095 | 1.029 | 1.057 | 1.045 | 1.029 | 1.012 | 0.997 | 0.991 | 0.982 | 0.968 | 0.955 |
| 10 | 283.1 | 50.0 | 1.117 | 1.097 | 1.030 | 1.059 | 1.047 | 1.030 | 1.014 | 0.999 | 0.992 | 0.984 | 0.970 | 0.957 |

| Temperature | | | Pressure Pa | | | | | | | | | | | |
|-------------|-------|-------|-------------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|
| °C | °K | °F | 80 000 | 83 000 | 86 000 | 89 000 | 91 000 | 94 000 | 97 000 | 100 000 | 101 325 | 103 000 | 106 000 | 109 000 |
| 11 | 284.1 | 51.8 | 1.119 | 1.099 | 1.032 | 1.061 | 1.049 | 1.032 | 1.016 | 1.001 | 0.994 | 0.986 | 0.972 | 0.959 |
| 12 | 285.1 | 53.6 | 1.121 | 1.101 | 1.034 | 1.063 | 1.051 | 1.034 | 1.018 | 1.003 | 0.996 | 0.988 | 0.974 | 0.960 |
| 13 | 286.1 | 55.4 | 1.123 | 1.103 | 1.036 | 1.065 | 1.053 | 1.036 | 1.020 | 1.005 | 0.998 | 0.990 | 0.976 | 0.962 |
| 14 | 287.1 | 57.2 | 1.126 | 1.105 | 1.038 | 1.067 | 1.055 | 1.038 | 1.022 | 1.006 | 1.000 | 0.992 | 0.977 | 0.964 |
| 15 | 288.1 | 59.0 | 1.128 | 1.107 | 1.040 | 1.069 | 1.057 | 1.040 | 1.024 | 1.008 | 1.001 | 0.993 | 0.979 | 0.965 |
| 16 | 289.1 | 60.8 | 1.130 | 1.109 | 1.042 | 1.071 | 1.059 | 1.042 | 1.025 | 1.010 | 1.003 | 0.995 | 0.981 | 0.967 |
| 17 | 290.1 | 62.6 | 1.132 | 1.111 | 1.044 | 1.073 | 1.061 | 1.044 | 1.027 | 1.012 | 1.005 | 0.997 | 0.983 | 0.969 |
| 18 | 291.1 | 64.4 | 1.134 | 1.113 | 1.046 | 1.075 | 1.063 | 1.046 | 1.029 | 1.014 | 1.007 | 0.999 | 0.984 | 0.971 |
| 19 | 292.1 | 66.2 | 1.136 | 1.115 | 1.048 | 1.077 | 1.065 | 1.048 | 1.031 | 1.016 | 1.009 | 1.001 | 0.986 | 0.973 |
| 20 | 293.1 | 68.0 | 1.138 | 1.117 | 1.050 | 1.079 | 1.067 | 1.050 | 1.033 | 1.017 | 1.011 | 1.002 | 0.988 | 0.974 |
| 21 | 294.1 | 69.8 | 1.140 | 1.119 | 1.051 | 1.081 | 1.069 | 1.051 | 1.035 | 1.019 | 1.013 | 1.004 | 0.990 | 0.976 |
| 22 | 295.1 | 71.6 | 1.142 | 1.121 | 1.053 | 1.083 | 1.071 | 1.053 | 1.037 | 1.021 | 1.014 | 1.006 | 0.992 | 0.978 |
| 23 | 296.1 | 73.4 | 1.145 | 1.124 | 1.055 | 1.085 | 1.073 | 1.055 | 1.039 | 1.023 | 1.016 | 1.008 | 0.994 | 0.980 |
| 24 | 297.1 | 75.2 | 1.147 | 1.126 | 1.057 | 1.087 | 1.075 | 1.057 | 1.041 | 1.025 | 1.018 | 1.010 | 0.995 | 0.981 |
| 25 | 298.1 | 77.0 | 1.149 | 1.128 | 1.059 | 1.089 | 1.077 | 1.059 | 1.043 | 1.027 | 1.020 | 1.012 | 0.997 | 0.983 |
| 26 | 299.1 | 78.8 | 1.151 | 1.130 | 1.061 | 1.091 | 1.079 | 1.061 | 1.045 | 1.029 | 1.022 | 1.014 | 0.999 | 0.985 |
| 27 | 300.1 | 80.6 | 1.153 | 1.132 | 1.063 | 1.093 | 1.081 | 1.063 | 1.047 | 1.031 | 1.024 | 1.016 | 1.001 | 0.987 |
| 28 | 301.1 | 82.4 | 1.156 | 1.134 | 1.065 | 1.095 | 1.083 | 1.065 | 1.049 | 1.033 | 1.026 | 1.017 | 1.003 | 0.989 |
| 29 | 302.1 | 84.2 | 1.158 | 1.137 | 1.067 | 1.097 | 1.085 | 1.067 | 1.051 | 1.035 | 1.028 | 1.019 | 1.005 | 0.991 |
| 30 | 303.1 | 86.0 | 1.160 | 1.139 | 1.069 | 1.099 | 1.087 | 1.069 | 1.053 | 1.037 | 1.030 | 1.021 | 1.007 | 0.993 |
| 31 | 304.1 | 87.8 | 1.162 | 1.141 | 1.072 | 1.101 | 1.089 | 1.072 | 1.055 | 1.039 | 1.032 | 1.023 | 1.009 | 0.994 |
| 32 | 305.1 | 89.6 | 1.165 | 1.143 | 1.074 | 1.104 | 1.091 | 1.074 | 1.057 | 1.041 | 1.034 | 1.025 | 1.010 | 0.996 |
| 33 | 306.1 | 91.4 | 1.167 | 1.145 | 1.076 | 1.106 | 1.093 | 1.076 | 1.059 | 1.043 | 1.036 | 1.027 | 1.012 | 0.998 |
| 34 | 307.1 | 93.2 | 1.169 | 1.148 | 1.078 | 1.108 | 1.095 | 1.078 | 1.061 | 1.045 | 1.038 | 1.029 | 1.014 | 1.000 |
| 35 | 308.1 | 95.0 | 1.172 | 1.150 | 1.080 | 1.110 | 1.098 | 1.080 | 1.063 | 1.047 | 1.040 | 1.031 | 1.016 | 1.002 |
| 36 | 309.1 | 96.8 | 1.174 | 1.152 | 1.082 | 1.112 | 1.100 | 1.082 | 1.065 | 1.049 | 1.042 | 1.033 | 1.018 | 1.004 |
| 37 | 310.1 | 98.6 | 1.176 | 1.155 | 1.084 | 1.114 | 1.102 | 1.084 | 1.067 | 1.051 | 1.044 | 1.035 | 1.020 | 1.006 |
| 38 | 311.1 | 100.4 | 1.179 | 1.157 | 1.086 | 1.117 | 1.104 | 1.086 | 1.069 | 1.053 | 1.046 | 1.037 | 1.022 | 1.008 |

| Temperature | | | Pressure Pa | | | | | | | | | | | |
|-------------|-------|-------|-------------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|
| °C | °K | °F | 80 000 | 83 000 | 86 000 | 89 000 | 91 000 | 94 000 | 97 000 | 100 000 | 101 325 | 103 000 | 106 000 | 109 000 |
| 39 | 312.1 | 102.2 | 1.181 | 1.159 | 1.088 | 1.119 | 1.106 | 1.088 | 1.071 | 1.055 | 1.048 | 1.039 | 1.024 | 1.010 |
| 40 | 313.1 | 104.0 | 1.184 | 1.162 | 1.090 | 1.121 | 1.109 | 1.090 | 1.073 | 1.057 | 1.050 | 1.041 | 1.026 | 1.012 |
| 41 | 314.1 | 105.8 | 1.186 | 1.164 | 1.093 | 1.123 | 1.111 | 1.093 | 1.075 | 1.059 | 1.052 | 1.043 | 1.028 | 1.014 |
| 42 | 315.1 | 107.6 | 1.189 | 1.166 | 1.095 | 1.126 | 1.113 | 1.095 | 1.077 | 1.061 | 1.054 | 1.045 | 1.030 | 1.016 |
| 43 | 316.1 | 109.4 | 1.191 | 1.169 | 1.097 | 1.128 | 1.115 | 1.097 | 1.080 | 1.063 | 1.056 | 1.047 | 1.032 | 1.018 |
| 44 | 317.1 | 111.2 | 1.194 | 1.171 | 1.099 | 1.130 | 1.118 | 1.099 | 1.082 | 1.065 | 1.058 | 1.049 | 1.034 | 1.020 |
| 45 | 318.1 | 113.0 | 1.196 | 1.174 | 1.102 | 1.133 | 1.120 | 1.102 | 1.084 | 1.067 | 1.060 | 1.051 | 1.036 | 1.022 |
| 46 | 319.1 | 114.8 | 1.199 | 1.176 | 1.104 | 1.135 | 1.122 | 1.104 | 1.086 | 1.070 | 1.062 | 1.054 | 1.038 | 1.024 |
| 47 | 320.1 | 116.6 | 1.201 | 1.179 | 1.106 | 1.138 | 1.125 | 1.106 | 1.089 | 1.072 | 1.065 | 1.056 | 1.040 | 1.026 |
| 48 | 321.1 | 118.4 | 1.204 | 1.182 | 1.109 | 1.140 | 1.127 | 1.109 | 1.091 | 1.074 | 1.067 | 1.058 | 1.043 | 1.028 |
| 49 | 322.1 | 120.2 | 1.207 | 1.184 | 1.111 | 1.143 | 1.130 | 1.111 | 1.093 | 1.076 | 1.069 | 1.060 | 1.045 | 1.030 |
| 50 | 323.1 | 122.0 | 1.210 | 1.187 | 1.113 | 1.145 | 1.132 | 1.113 | 1.096 | 1.079 | 1.071 | 1.062 | 1.047 | 1.032 |

Moist Air, Relative Humidity 100%

| Temperature | | | Pressure Pa | | | | | | | | | | | |
|-------------|-------|------|-------------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|
| °C | °K | °F | 80 000 | 83 000 | 86 000 | 89 000 | 91 000 | 94 000 | 97 000 | 100 000 | 101 325 | 103 000 | 106 000 | 109 000 |
| -15 | 258.1 | 5.0 | 1.066 | 1.046 | 0.983 | 1.010 | 0.999 | 0.983 | 0.968 | 0.953 | 0.947 | 0.939 | 0.926 | 0.913 |
| -14 | 259.1 | 6.8 | 1.068 | 1.048 | 0.985 | 1.012 | 1.001 | 0.985 | 0.970 | 0.955 | 0.949 | 0.941 | 0.928 | 0.915 |
| -13 | 260.1 | 8.6 | 1.070 | 1.050 | 0.987 | 1.014 | 1.003 | 0.987 | 0.972 | 0.957 | 0.951 | 0.943 | 0.929 | 0.916 |
| -12 | 261.1 | 10.4 | 1.072 | 1.052 | 0.989 | 1.016 | 1.005 | 0.989 | 0.973 | 0.959 | 0.952 | 0.945 | 0.931 | 0.918 |
| -11 | 262.1 | 12.2 | 1.074 | 1.054 | 0.991 | 1.018 | 1.007 | 0.991 | 0.975 | 0.961 | 0.954 | 0.946 | 0.933 | 0.920 |
| -10 | 263.1 | 14.0 | 1.076 | 1.057 | 0.993 | 1.020 | 1.009 | 0.993 | 0.977 | 0.962 | 0.956 | 0.948 | 0.935 | 0.922 |
| -9 | 264.1 | 15.8 | 1.078 | 1.059 | 0.995 | 1.022 | 1.011 | 0.995 | 0.979 | 0.964 | 0.958 | 0.950 | 0.937 | 0.924 |
| -8 | 265.1 | 17.6 | 1.080 | 1.061 | 0.997 | 1.024 | 1.013 | 0.997 | 0.981 | 0.966 | 0.960 | 0.952 | 0.938 | 0.925 |
| -7 | 266.1 | 19.4 | 1.083 | 1.063 | 0.999 | 1.026 | 1.015 | 0.999 | 0.983 | 0.968 | 0.962 | 0.954 | 0.940 | 0.927 |
| -6 | 267.1 | 21.2 | 1.085 | 1.065 | 1.000 | 1.028 | 1.017 | 1.000 | 0.985 | 0.970 | 0.964 | 0.956 | 0.942 | 0.929 |
| -5 | 268.1 | 23.0 | 1.087 | 1.067 | 1.002 | 1.030 | 1.019 | 1.002 | 0.987 | 0.972 | 0.965 | 0.958 | 0.944 | 0.931 |
| -4 | 269.1 | 24.8 | 1.089 | 1.069 | 1.004 | 1.032 | 1.021 | 1.004 | 0.989 | 0.974 | 0.967 | 0.959 | 0.946 | 0.933 |
| -3 | 270.1 | 26.6 | 1.091 | 1.071 | 1.006 | 1.034 | 1.023 | 1.006 | 0.991 | 0.976 | 0.969 | 0.961 | 0.947 | 0.934 |
| -2 | 271.1 | 28.4 | 1.093 | 1.073 | 1.008 | 1.036 | 1.025 | 1.008 | 0.992 | 0.977 | 0.971 | 0.963 | 0.949 | 0.936 |
| -1 | 272.1 | 30.2 | 1.095 | 1.075 | 1.010 | 1.038 | 1.027 | 1.010 | 0.994 | 0.979 | 0.973 | 0.965 | 0.951 | 0.938 |
| 0 | 273.1 | 32.0 | 1.097 | 1.077 | 1.012 | 1.040 | 1.029 | 1.012 | 0.996 | 0.981 | 0.975 | 0.967 | 0.953 | 0.940 |
| 1 | 274.1 | 33.8 | 1.099 | 1.079 | 1.014 | 1.042 | 1.031 | 1.014 | 0.998 | 0.983 | 0.977 | 0.969 | 0.955 | 0.941 |
| 2 | 275.1 | 35.6 | 1.102 | 1.081 | 1.016 | 1.044 | 1.033 | 1.016 | 1.000 | 0.985 | 0.978 | 0.970 | 0.957 | 0.943 |
| 3 | 276.1 | 37.4 | 1.104 | 1.083 | 1.018 | 1.046 | 1.035 | 1.018 | 1.002 | 0.987 | 0.980 | 0.972 | 0.958 | 0.945 |
| 4 | 277.1 | 39.2 | 1.106 | 1.086 | 1.020 | 1.048 | 1.037 | 1.020 | 1.004 | 0.989 | 0.982 | 0.974 | 0.960 | 0.947 |
| 5 | 278.1 | 41.0 | 1.108 | 1.088 | 1.022 | 1.050 | 1.039 | 1.022 | 1.006 | 0.991 | 0.984 | 0.976 | 0.962 | 0.949 |
| 6 | 279.1 | 42.8 | 1.110 | 1.090 | 1.024 | 1.052 | 1.041 | 1.024 | 1.008 | 0.993 | 0.986 | 0.978 | 0.964 | 0.951 |
| 7 | 280.1 | 44.6 | 1.112 | 1.092 | 1.026 | 1.054 | 1.043 | 1.026 | 1.010 | 0.994 | 0.988 | 0.980 | 0.966 | 0.952 |
| 8 | 281.1 | 46.4 | 1.114 | 1.094 | 1.028 | 1.056 | 1.045 | 1.028 | 1.012 | 0.996 | 0.990 | 0.982 | 0.968 | 0.954 |
| 9 | 282.1 | 48.2 | 1.117 | 1.096 | 1.030 | 1.058 | 1.047 | 1.030 | 1.014 | 0.998 | 0.992 | 0.984 | 0.969 | 0.956 |
| 10 | 283.1 | 50.0 | 1.119 | 1.098 | 1.032 | 1.060 | 1.049 | 1.032 | 1.016 | 1.000 | 0.994 | 0.985 | 0.971 | 0.958 |

| Temperature | | | Pressure Pa | | | | | | | | | | | |
|-------------|-------|-------|-------------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|
| °C | °K | °F | 80 000 | 83 000 | 86 000 | 89 000 | 91 000 | 94 000 | 97 000 | 100 000 | 101 325 | 103 000 | 106 000 | 109 000 |
| 11 | 284.1 | 51.8 | 1.121 | 1.100 | 1.034 | 1.063 | 1.051 | 1.034 | 1.018 | 1.002 | 0.995 | 0.987 | 0.973 | 0.960 |
| 12 | 285.1 | 53.6 | 1.123 | 1.103 | 1.036 | 1.065 | 1.053 | 1.036 | 1.019 | 1.004 | 0.997 | 0.989 | 0.975 | 0.961 |
| 13 | 286.1 | 55.4 | 1.125 | 1.105 | 1.038 | 1.067 | 1.055 | 1.038 | 1.021 | 1.006 | 0.999 | 0.991 | 0.977 | 0.963 |
| 14 | 287.1 | 57.2 | 1.128 | 1.107 | 1.040 | 1.069 | 1.057 | 1.040 | 1.023 | 1.008 | 1.001 | 0.993 | 0.979 | 0.965 |
| 15 | 288.1 | 59.0 | 1.130 | 1.109 | 1.042 | 1.071 | 1.059 | 1.042 | 1.025 | 1.010 | 1.003 | 0.995 | 0.980 | 0.967 |
| 16 | 289.1 | 60.8 | 1.132 | 1.111 | 1.044 | 1.073 | 1.061 | 1.044 | 1.027 | 1.012 | 1.005 | 0.997 | 0.982 | 0.969 |
| 17 | 290.1 | 62.6 | 1.134 | 1.113 | 1.046 | 1.075 | 1.063 | 1.046 | 1.029 | 1.014 | 1.007 | 0.999 | 0.984 | 0.971 |
| 18 | 291.1 | 64.4 | 1.137 | 1.116 | 1.048 | 1.077 | 1.065 | 1.048 | 1.031 | 1.016 | 1.009 | 1.001 | 0.986 | 0.972 |
| 19 | 292.1 | 66.2 | 1.139 | 1.118 | 1.050 | 1.079 | 1.067 | 1.050 | 1.033 | 1.018 | 1.011 | 1.003 | 0.988 | 0.974 |
| 20 | 293.1 | 68.0 | 1.141 | 1.120 | 1.052 | 1.081 | 1.069 | 1.052 | 1.035 | 1.020 | 1.013 | 1.005 | 0.990 | 0.976 |
| 21 | 294.1 | 69.8 | 1.144 | 1.123 | 1.054 | 1.084 | 1.072 | 1.054 | 1.038 | 1.022 | 1.015 | 1.007 | 0.992 | 0.978 |
| 22 | 295.1 | 71.6 | 1.146 | 1.125 | 1.056 | 1.086 | 1.074 | 1.056 | 1.040 | 1.024 | 1.017 | 1.009 | 0.994 | 0.980 |
| 23 | 296.1 | 73.4 | 1.148 | 1.127 | 1.058 | 1.088 | 1.076 | 1.058 | 1.042 | 1.026 | 1.019 | 1.011 | 0.996 | 0.982 |
| 24 | 297.1 | 75.2 | 1.151 | 1.130 | 1.061 | 1.090 | 1.078 | 1.061 | 1.044 | 1.028 | 1.021 | 1.013 | 0.998 | 0.984 |
| 25 | 298.1 | 77.0 | 1.153 | 1.132 | 1.063 | 1.093 | 1.080 | 1.063 | 1.046 | 1.030 | 1.023 | 1.015 | 1.000 | 0.986 |
| 26 | 299.1 | 78.8 | 1.156 | 1.134 | 1.065 | 1.095 | 1.083 | 1.065 | 1.048 | 1.032 | 1.025 | 1.017 | 1.002 | 0.988 |
| 27 | 300.1 | 80.6 | 1.158 | 1.137 | 1.067 | 1.097 | 1.085 | 1.067 | 1.050 | 1.034 | 1.027 | 1.019 | 1.004 | 0.990 |
| 28 | 301.1 | 82.4 | 1.161 | 1.139 | 1.070 | 1.100 | 1.087 | 1.070 | 1.053 | 1.036 | 1.030 | 1.021 | 1.006 | 0.992 |
| 29 | 302.1 | 84.2 | 1.163 | 1.142 | 1.072 | 1.102 | 1.090 | 1.072 | 1.055 | 1.039 | 1.032 | 1.023 | 1.008 | 0.994 |
| 30 | 303.1 | 86.0 | 1.166 | 1.144 | 1.074 | 1.104 | 1.092 | 1.074 | 1.057 | 1.041 | 1.034 | 1.025 | 1.010 | 0.996 |
| 31 | 304.1 | 87.8 | 1.169 | 1.147 | 1.076 | 1.107 | 1.094 | 1.076 | 1.059 | 1.043 | 1.036 | 1.027 | 1.013 | 0.998 |
| 32 | 305.1 | 89.6 | 1.171 | 1.150 | 1.079 | 1.109 | 1.097 | 1.079 | 1.062 | 1.045 | 1.038 | 1.030 | 1.015 | 1.000 |
| 33 | 306.1 | 91.4 | 1.174 | 1.152 | 1.081 | 1.112 | 1.099 | 1.081 | 1.064 | 1.048 | 1.041 | 1.032 | 1.017 | 1.003 |
| 34 | 307.1 | 93.2 | 1.177 | 1.155 | 1.084 | 1.114 | 1.102 | 1.084 | 1.066 | 1.050 | 1.043 | 1.034 | 1.019 | 1.005 |
| 35 | 308.1 | 95.0 | 1.180 | 1.157 | 1.086 | 1.117 | 1.104 | 1.086 | 1.069 | 1.052 | 1.045 | 1.036 | 1.021 | 1.007 |
| 36 | 309.1 | 96.8 | 1.182 | 1.160 | 1.088 | 1.119 | 1.107 | 1.088 | 1.071 | 1.055 | 1.047 | 1.039 | 1.024 | 1.009 |
| 37 | 310.1 | 98.6 | 1.185 | 1.163 | 1.091 | 1.122 | 1.109 | 1.091 | 1.074 | 1.057 | 1.050 | 1.041 | 1.026 | 1.011 |
| 38 | 311.1 | 100.4 | 1.188 | 1.166 | 1.094 | 1.125 | 1.112 | 1.094 | 1.076 | 1.059 | 1.052 | 1.043 | 1.028 | 1.014 |

| Temperature | | | Pressure Pa | | | | | | | | | | | |
|-------------|-------|-------|-------------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|
| °C | °K | °F | 80 000 | 83 000 | 86 000 | 89 000 | 91 000 | 94 000 | 97 000 | 100 000 | 101 325 | 103 000 | 106 000 | 109 000 |
| 39 | 312.1 | 102.2 | 1.191 | 1.169 | 1.096 | 1.127 | 1.115 | 1.096 | 1.079 | 1.062 | 1.055 | 1.046 | 1.031 | 1.016 |
| 40 | 313.1 | 104.0 | 1.194 | 1.172 | 1.099 | 1.130 | 1.117 | 1.099 | 1.081 | 1.064 | 1.057 | 1.048 | 1.033 | 1.018 |
| 41 | 314.1 | 105.8 | 1.197 | 1.175 | 1.101 | 1.133 | 1.120 | 1.101 | 1.084 | 1.067 | 1.060 | 1.051 | 1.035 | 1.021 |
| 42 | 315.1 | 107.6 | 1.200 | 1.178 | 1.104 | 1.136 | 1.123 | 1.104 | 1.086 | 1.069 | 1.062 | 1.053 | 1.038 | 1.023 |
| 43 | 316.1 | 109.4 | 1.204 | 1.181 | 1.107 | 1.139 | 1.126 | 1.107 | 1.089 | 1.072 | 1.065 | 1.056 | 1.040 | 1.025 |
| 44 | 317.1 | 111.2 | 1.207 | 1.184 | 1.110 | 1.142 | 1.129 | 1.110 | 1.092 | 1.075 | 1.067 | 1.058 | 1.043 | 1.028 |
| 45 | 318.1 | 113.0 | 1.210 | 1.187 | 1.113 | 1.145 | 1.132 | 1.113 | 1.095 | 1.077 | 1.070 | 1.061 | 1.045 | 1.030 |
| 46 | 319.1 | 114.8 | 1.214 | 1.190 | 1.115 | 1.148 | 1.135 | 1.115 | 1.097 | 1.080 | 1.073 | 1.064 | 1.048 | 1.033 |
| 47 | 320.1 | 116.6 | 1.217 | 1.194 | 1.118 | 1.151 | 1.138 | 1.118 | 1.100 | 1.083 | 1.076 | 1.066 | 1.051 | 1.035 |
| 48 | 321.1 | 118.4 | 1.221 | 1.197 | 1.122 | 1.154 | 1.141 | 1.122 | 1.103 | 1.086 | 1.078 | 1.069 | 1.053 | 1.038 |
| 49 | 322.1 | 120.2 | 1.224 | 1.201 | 1.125 | 1.157 | 1.144 | 1.125 | 1.106 | 1.089 | 1.081 | 1.072 | 1.056 | 1.041 |
| 50 | 323.1 | 122.0 | 1.228 | 1.204 | 1.128 | 1.161 | 1.147 | 1.128 | 1.109 | 1.092 | 1.084 | 1.075 | 1.059 | 1.044 |