HYGROMETRICAL TABLES

24

ADAPTED TO THE USE OF THE

DRY- AND WET-BULB THERMOMETER.

BY

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PREFACE.

Many instruments have been constructed for the purpose of measuring the quantity of aqueous vapour in the atmosphere. Instruments used for this purpose are called *Hygrometers* (measurers of moisture), and have generally been made of substances which possess great capability for absorption, and undergo variation from that cause. Amongst hygrometrical substances may be reckoned cordage, catgut, wood (especially deal), the beard of the wild oat, &c. These in turn have all furnished material for the construction of Hygrometers, or rather Hygroscopes; but in use they are found to become less and less sensitive, and finally to lose all their hygrometrical properties.

Other substances have been sought for, which would regularly lengthen and shorten by the loss or absorption of moisture. Saussure of Geneva thought that this property might be found in a human hair, freed from all unctuosity by being boiled in a caustic ley. Thus prepared, he stretched and fastened it at one end to an easily moveable grooved wheel, with an index attached: whenever the hair was shortened or lengthened, the wheel and index were moved round, and thus indicated every increase or diminution of moisture.

M. De Luc constructed a hygrometer of a very thin piece of whalebone cut in a direction transverse to the fibre; this he affixed at one end by gold wire to a delicate wheel carrying an index, &c. The idea was suggested by the fact, that whalebone lengthens as it absorbs moisture, and shortens or contracts as it becomes dry. These two instruments are still in use on the continent; but confidence cannot be placed in their indications, nor in any which are dependent upon the hygrometric properties of any substance that has as yet been employed.

The Hygrometer invented by Mr. Daniell was a great advance upon the previous methods of construction. It denotes the degree of moisture in the air with considerable accuracy, exhibiting the amount in temperature of the dew-point, expressed in degrees of the ordinary thermometer, and thus referred to a well-known standard of comparison.

The Hygrometer invented by M. Regnault is said to possess advantages over Daniell's Hygrometer, but in practice I have not found this to be the case. It consists of two delicate thermometers, kept in position by passing through corks fitting into long cylindrical cups of polished gold or silver, one of which is partly filled with ether, so that a portion of the bulb of its thermometer is immersed in it; a small tube passes through the corks, open at both ends, to which a flexible tube is fixed of any length, allowing the observer to be as distant from the instrument as he pleases; by this means air is drawn from or driven into the cups. The ether evaporates with a rapidity depending on the current, which is obtained at pleasure; dew is deposited on the cup containing the ether, the slightest dulling of which is seen by contrast with the other cup, which continues bright.

To use these instruments effectively, experience is required, united with a keen eye, and promptness of observation. Their employment is expensive, owing to the required ether, which must be the best in quality and not sparingly supplied. It is difficult to procure good ether at all times; it suffers much loss from evaporation if kept or taken to hot climates, and deteriorates rapidly. When the air is very dry it is a long time before any deposition on the instrument takes place, and sometimes no deposit at all will ensue with bad or indifferent ether; neither are these instruments well adapted for observations at short intervals, as, from the principle of their construction, some little time must necessarily elapse before an observation can be repeated.

For these reasons, which forbid their general employment, I directed my attention some years ago to the most effective and simple method of determining the true hygrometric conditions of the air. This, I considered, would be best performed by the employment of the Dry- and Wet-bulb thermometers, which combined may be considered to constitute but one instrument, and to give results identical with Daniell's Hygrometer, over which they possess the advantage of requiring water only for their supply, and giving, when desired, continuous observations.

The thermometers should have very small bulbs so as to be delicate and sensitive in the extreme; their graduations should be on their own stems, and their readings should be compared with those of a standard thermometer before use, to determine their index errors.

In my balloon experiments the temperature of the dew-point was determined at different heights by simultaneous readings of the Dry- and Wet-bulb thermometers, Daniell's Hygrometer, and Regnault's Hygrometer.

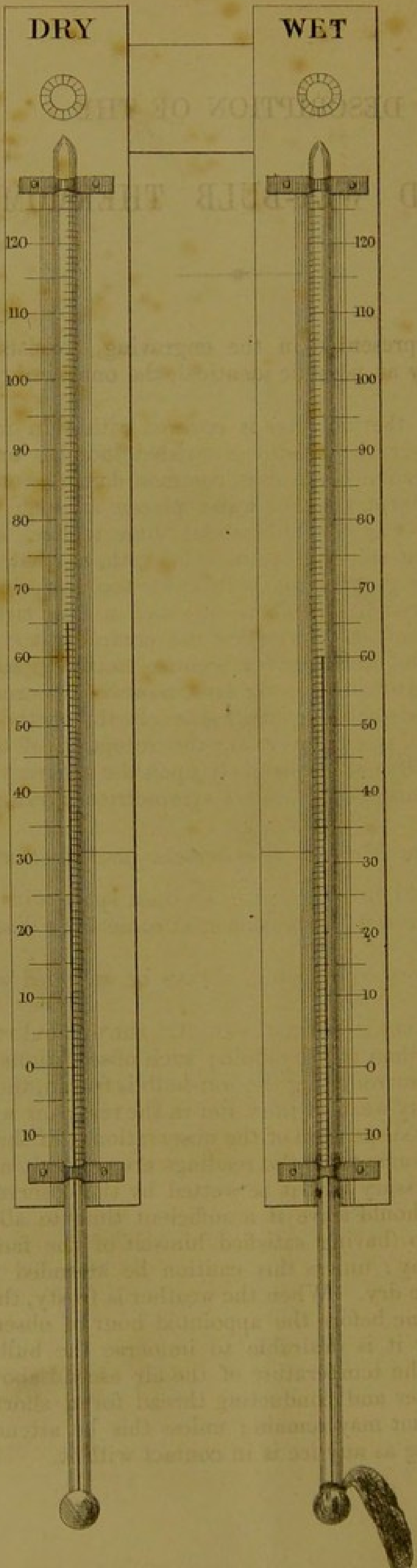
In the experiments of every year there was not found any certain difference in the determination of the dew-point by Daniell's and Regnault's Hygrometers, and this temperature determined by the use of the Dry- and Wet-bulb thermometers, was found to be very closely approximate to the results obtained by either of the above instruments.

The results of all the simultaneous determinations of the temperature of the dew-point by Daniell's Hygrometer and the Dry- and Wet-bulb thermometers are as follows.

The temperature of the dew-point as found by the use of the Dry- and Wet-bulb thermometers.

Up to	1,000 feet high was	0°·15 lower than by Daniell's Hygrometer, from				28 exps.
From 1,000 to	2,000	,,	0·10	,, ,, ,,		40
2,000 to	3,000	,,	0·05	,, ,, ,,		59
3,000 to	4,000 feet high was the same as by Daniell's Hygrometer					66
4,000 to	5,000	,,	0·05 lower	,, ,, ,,		40
5,000 to	6,000	,,	0·7	,, ,, ,,		34
6,000 to	7,000	,,	0·2	,, ,, ,,		34
7,000 to	8,000 feet high was the same as by Daniell's Hygrometer					8
8,000 to	9,000	,,	1·5 higher	,, ,, ,,		2
9,000 to	10,000	,,	1·2 higher	,, ,, ,,		2
10,000 to	11,000	,,	0·3 higher	,, ,, ,,		1
12,000 to	13,000	,,	0·3 higher	,, ,, ,,		5
13,000 to	14,000	,,	0·8 lower	,, ,, ,,		7
14,000 to	15,000	,,	1·0 lower	,, ,, ,,		2

The number of experiments made up to the height of 7000 feet varying from 28 to 66 in each step of 1000 feet, are sufficient to enable us to speak with confidence; the results are that the temperatures of the dew-point, as found by the use of the Dry- and Wet-bulb thermometers and these Tables, are worthy of full confidence up to this point. At heights exceeding 7000 feet my experiments do not yield a sufficient number of simultaneous readings to give satisfactory results, and before we can speak with certainty at these high elevations more experiments must be made.


DRY
WET
120
110
100
90
80
70
60
50
40
30
20
10
0
10

DESCRIPTION OF THE

DRY- AND WET-BULB THERMOMETER.

THE instrument, as represented in the engraving, consists of two parallel thermometers, as nearly as possible identical, the one marked Dry, the other Wet.

The bulb of the Wet thermometer is covered with thin muslin, round the neck of which and over the muslin is twisted loosely, or tied in a loose knot, a conducting thread of lamp-wick, common darning cotton, or floss silk; this passes into an adjacent vessel of water placed at such a distance as to allow a length of conducting thread of about three inches. The cup or glass should be placed on one side and a little beneath, so that the water within may not affect the reading of the dry bulb by its too near vicinity.

I greatly object to those instruments in which a long cistern of glass as a reservoir for the supply of water occupies the central space between the two thermometers; the water in the cistern becomes heated or cooled in excess of the surrounding temperature, and never fails, however imperceptibly, to vitiate the readings of the thermometer on either side. In this method of construction a large surface of metal is employed for the reception of the thermometers and cistern, and fails not to act injuriously upon the accuracy of the readings; nor do they in compensation offer a more symmetrical arrangement.

Position of the Dry- and Wet-bulb Thermometer, and Precautions in using it.

The instrument should be mounted in an open space with the bulbs raised about four feet above the soil, in the shade, at some little distance from walls, trees, &c.

The water-vessel or reservoir should always be supplied with rain or distilled water.

If the temperature of the air descend below 32°, the wet-bulb thermometer will for a time read higher than the dry-bulb; such observations must not be recorded: when the water surrounding the wet-bulb is frozen, the proper readings will take place. In frosty weather the water in the reservoir will be frozen, but this is no reason for the suspension of the observations; if the water upon the muslin be frozen at the same time, the readings are perfectly available. If the muslin be dry, it is necessary that it be wetted by the observer by means of a sponge or brush, who should leave it a sufficient time to allow the water to become frozen, and who (having satisfied himself of the fact) will take the reading in the usual way: unless this caution be attended to, the wet-bulb will read higher than the dry. When the weather is frosty, the muslin should be wetted a sufficient time before the appointed hour of observation; and, as a rule, in frosty weather it is desirable to immerse the bulb in water after every observation. If the temperature of the air ascend above 32°, immerse the wet-bulb thermometer and conducting thread for a short time in warm water, to melt any ice that may remain; unless this be attended to, the wet-bulb will read 32° so long as any ice is in contact with it.

Before use, the cotton lamp-wick should be washed in a solution of carbonate of soda, and pressed whilst under water throughout its length. In use it should be of such extent that the water conveyed be sufficient in quantity to keep the muslin on the bulb as moist as when the air is saturated with vapour. The amount of water supplied can be increased or diminished by increasing or decreasing the extent of the conducting thread.

In observing, the eye should be placed on a level with the top of the mercury in the tube; and the observer should be careful to refrain from breathing whilst taking the observation.

Temperatures of the Air and of Evaporation

are given by the readings of the two thermometers.

Temperature of the Dew-Point.

If a mass of air be gradually cooled, it will descend to a degree of temperature at which it will be saturated by the quantity of vapour then mixed with it. This temperature is called the dew-point. It can be found directly from observation by the use of either Daniell's or Regnault's Hygrometer.

Calculating the Dew-Point from observations of the Dry- and Wet-bulb Thermometers.

Table I.—Factors by which it is necessary to multiply the excess of the reading of the dry thermometer over that of the wet, to give the excess of the temperature of the air above that of the Dew-Point, for every degree of air-temperature, from 10° to 100°.

Reading of Dry-bulb Therm.	Factor.	Reading of Dry-bulb Therm.	Factor.	Reading of Dry-bulb Therm.	Factor.	Reading of Dry-bulb Therm.	Factor.
°		°		°		°	
10	8·78	33	3·01	56	1·94	79	1·69
11	8·78	34	2·77	57	1·92	80	1·68
12	8·78	35	2·60	58	1·90	81	1·68
13	8·77	36	2·50	59	1·89	82	1·67
14	8·76	37	2·42	60	1·88	83	1·67
15	8·75	38	2·36	61	1·87	84	1·66
16	8·70	39	2·32	62	1·86	85	1·65
17	8·62	40	2·29	63	1·85	86	1·65
18	8·50	41	2·26	64	1·83	87	1·64
19	8·34	42	2·23	65	1·82	88	1·64
20	8·14	43	2·20	66	1·81	89	1·63
21	7·88	44	2·18	67	1·80	90	1·63
22	7·60	45	2·16	68	1·79	91	1·62
23	7·28	46	2·14	69	1·78	92	1·62
24	6·92	47	2·12	70	1·77	93	1·61
25	6·53	48	2·10	71	1·76	94	1·60
26	6·08	49	2·08	72	1·75	95	1·60
27	5·61	50	2·06	73	1·74	96	1·59
28	5·12	51	2·04	74	1·73	97	1·59
29	4·63	52	2·02	75	1·72	98	1·58
30	4·15	53	2·00	76	1·71	99	1·58
31	3·70	54	1·98	77	1·70	100	1·57
32	3·32	55	1·96	78	1·69		

The numbers in this Table have been found from the combination of all the simultaneous observations of the dry- and wet-bulb thermometers with Daniell's Hygrometer, taken at the Royal Observatory, Greenwich, from the year 1841 to 1854, with some observations taken at high temperatures in India, and others at low and medium temperatures at Toronto. The results at the same temperatures were found to be alike at these different places; and therefore the factors may be considered as of general application.

By the numbers in this Table the temperatures of the dew-point in the general tables have been calculated; and these have been constantly checked by direct observations with Daniell's Hygrometer, at the Royal Observatory, Greenwich, till the present time, 1866.

Expansion of Air from Heat.

M. Regnault has determined that air expands $\frac{1}{491 \cdot 13}$ part for every increase of one 1° of heat. The following Table has been calculated using this value, considering a volume of air under the pressure of 30 inches of mercury and at the temperature of 32° as the unit of comparison.

Table II.—Showing the volume of a mass of Dry Air after expansion from heat, for every degree of Fahrenheit's scale, from 0° to 100°.

Temp. Fahr.	The volume after expansion from heat.	Temp. Fahr.	The volume after expansion from heat.	Temp. Fahr.	The volume after expansion from heat.
0°	0·9348448	34°	1·0040722	68°	1·0732996
1	·9368809	35	·0061083	69	·0753357
2	·9389170	36	·0081444	70	·0773718
3	·9409531	37	·0101805	71	·0794079
4	·9429892	38	·0122166	72	·0814440
5	·9450253	39	·0142527	73	·0834801
6	·9470614	40	·0162888	74	·0855162
7	·9490975	41	·0183249	75	·0875523
8	·9511336	42	·0203610	76	·0895884
9	·9531697	43	·0223971	77	·0916245
10	·9552058	44	·0244332	78	·0936606
11	·9572419	45	·0264693	79	·0956967
12	·9592780	46	·0285054	80	·0977328
13	·9613141	47	·0305415	81	·0997689
14	·9633502	48	·0325776	82	·1018050
15	·9653863	49	·0346137	83	·1038411
16	·9674224	50	·0366498	84	·1058772
17	·9694585	51	·0386859	85	·1079133
18	·9714946	52	·0407220	86	·1099494
19	·9735307	53	·0427581	87	·1119855
20	·9755668	54	·0447942	88	·1140216
21	·9776029	55	·0468303	89	·1160577
22	·9796390	56	·0488664	90	·1180938
23	·9816751	57	·0509025	91	·1201299
24	·9837112	58	·0529386	92	·1221660
25	·9857473	59	·0549747	93	·1242021
26	·9877834	60	·0570108	94	·1262382
27	·9898195	61	·0590469	95	·1282743
28	·9918556	62	·0610830	96	·1303104
29	·9938917	63	·0631191	97	·1323465
30	·9959278	64	·0651552	98	·1343826
31	0·9979639	65	·0671913	99	·1364187
32	1·0000000	66	·0692274	100	1·1384548
33	1·0020361	67	1·0712635		

Elastic Force of Aqueous Vapour.

M. Regnault has determined, by a very careful series of experiments, the value of the Elastic Force of Vapour (Annales de Chimie et de Physique, 3e série, tom. xv.). The numbers in the following Table have been calculated from his results.

Table III.—Showing the Elastic Force of Aqueous Vapour, in inches of Mercury, from −41° to 100°, calculated from the experiments of Regnault.

Temp. Fahr.	Force of Vapour.	Temp. Fahr.	Force of Vapour.	Temp. Fahr.	Force of Vapour.	Temp. Fahr.	Force of Vapour.	Temp. Fahr.	Force of Vapour.
°	in.	°	in.	°	in.	°	in.	°	in.
−41·0	0·005	6·1	0·057	12·2	0·075	18·3	0·099	24·4	0·131
−40·0	·005	·2	·057	·3	·075	·4	·100	·5	·132
−39·0	·006	·3	·058	·4	·075	·5	·100	·6	·133
−38·0	·006	·4	·058	·5	·076	·6	·101	·7	·133
−37·0	·006	·5	·058	·6	·076	·7	·101	·8	·134
−36·0	·007	·6	·059	·7	·077	·8	·102	·9	·134
−35·0	·007	·7	·059	·8	·077	·9	·102	25·0	·135
−34·0	·007	·8	·059	·9	·077	19·0	·103	·1	·136
−33·0	·008	·9	·059	13·0	·078	·1	·103	·2	·136
−32·0	·008	7·0	·060	·1	·078	·2	·104	·3	·137
−31·0	·009	·1	·060	·2	·078	·3	·104	·4	·137
−30·0	·009	·2	·060	·3	·079	·4	·105	·5	·138
−29·0	·010	·3	·060	·4	·079	·5	·105	·6	·139
−28·0	·010	·4	·060	·5	·080	·6	·106	·7	·139
−27·0	·011	·5	·061	·6	·080	·7	·106	·8	·140
−26·0	·011	·6	·061	·7	·081	·8	·107	·9	·140
−25·0	·012	·7	·061	·8	·081	·9	·107	26·0	·141
−24·0	·013	·8	·061	·9	·081	20·0	·108	·1	·142
−23·0	·014	·9	·062	14·0	·082	·1	·108	·2	·142
−22·0	·015	8·0	·062	·1	·082	·2	·109	·3	·143
−21·0	·016	·1	·062	·2	·082	·3	·109	·4	·143
−20·0	·017	·2	·062	·3	·083	·4	·110	·5	·144
−19·0	·017	·3	·063	·4	·083	·5	·110	·6	·145
−18·0	·018	·4	·063	·5	·084	·6	·111	·7	·145
−17·0	·019	·5	·063	·6	·084	·7	·111	·8	·146
−16·0	·020	·6	·063	·7	·085	·8	·112	·9	·146
−15·0	·021	·7	·064	·8	·085	·9	·112	27·0	·147
−14·0	·022	·8	·064	·9	·085	21·0	·113	·1	·148
−13·0	·023	·9	·064	15·0	·086	·1	·113	·2	·148
−12·0	·024	9·0	·065	·1	·086	·2	·114	·3	·149
−11·0	·025	·1	·065	·2	·086	·3	·114	·4	·149
−10·0	·026	·2	·065	·3	·087	·4	·115	·5	·150
− 9·0	·028	·3	·066	·4	·087	·5	·115	·6	·151
− 8·0	·029	·4	·066	·5	·088	·6	·116	·7	·151
− 7·0	·031	·5	·066	·6	·088	·7	·116	·8	·152
− 6·0	·032	·6	·066	·7	·089	·8	·117	·9	·152
− 5·5	·033	·7	·067	·8	·089	·9	·117	28·0	·153
− 5·0	·034	·8	·067	·9	·089	22·0	·118	·1	·154
− 4·5	·035	·9	·067	16·0	·090	·1	·118	·2	·154
− 4·0	·036	10·0	·068	·1	·090	·2	·119	·3	·155
− 3·5	·037	·1	·068	·2	·090	·3	·119	·4	·156
− 3·0	·038	·2	·068	·3	·091	·4	·120	·5	·156
− 2·5	·039	·3	·069	·4	·091	·5	·120	·6	·157
− 2·0	·040	·4	·069	·5	·092	·6	·121	·7	·158
− 1·5	·041	·5	·069	·6	·092	·7	·121	·8	·158
− 1·0	·042	·6	·069	·7	·093	·8	·122	·9	·159
− 0·5	·043	·7	·070	·8	·093	·9	·122	29·0	·160
0·0	·044	·8	·070	·9	·093	23·0	·123	·1	·160
+ 0·5	·045	·9	·070	17·0	·094	·1	·124	·2	·161
1·0	·046	11·0	·071	·1	·094	·2	·124	·3	·162
1·5	·047	·1	·071	·2	·094	·3	·125	·4	·162
2·0	·048	·2	·071	·3	·095	·4	·125	·5	·163
2·5	·049	·3	·072	·4	·095	·5	·126	·6	·164
3·0	·050	·4	·072	·5	·096	·6	·127	·7	·165
3·5	·051	·5	·072	·6	·096	·7	·127	·8	·166
4·0	·052	·6	·072	·7	·097	·8	·128	·9	·166
4·5	·053	·7	·073	·8	·097	·9	·128	30·0	·167
5·0	·054	·8	·073	·9	·097	24·0	·129	·1	·168
5·3	·055	·9	·073	18·0	·098	·1	·130	·2	·168
5·7	·056	12·0	·074	·1	·098	·2	·130	·3	·169
6·0	0·057	12·1	0·074	18·2	0·099	24·3	0·131	30·4	0·170

TABLE III. (*continued*).

Temp. Fahr.	Force of Vapour.	Temp. Fahr.	Force of Vapour.	Temp. Fahr.	Force of Vapour.	Temp. Fahr.	Force of Vapour.	Temp. Fahr.	Force of Vapour.
°	in.	°	in.	°	in.	°	in.	°	in.
30·5	0·170	37·0	0·220	43·5	0·283	50·0	0·361	56·5	0·457
·6	·171	·1	·221	·6	·284	·1	·362	·6	·459
·7	·172	·2	·222	·7	·285	·2	·364	·7	·461
·8	·172	·3	·223	·8	·286	·3	·365	·8	·462
·9	·173	·4	·224	·9	·287	·4	·366	·9	·464
31·0	·174	·5	·225	44·0	·288	·5	·367	57·0	·465
·1	·174	·6	·225	·1	·289	·6	·369	·1	·467
·2	·175	·7	·226	·2	·290	·7	·370	·2	·469
·3	·176	·8	·227	·3	·292	·8	·371	·3	·470
·4	·176	·9	·228	·4	·293	·9	·373	·4	·472
·5	·177	38·0	·229	·5	·294	51·0	·374	·5	·473
·6	·178	·1	·230	·6	·295	·1	·375	·6	·475
·7	·179	·2	·231	·7	·296	·2	·377	·7	·477
·8	·179	·3	·231	·8	·297	·3	·378	·8	·479
·9	·180	·4	·232	·9	·298	·4	·379	·9	·480
32·0	·181	·5	·233	45·0	·299	·5	·381	58·0	·482
·1	·182	·6	·234	·1	·301	·6	·382	·1	·483
·2	·182	·7	·235	·2	·302	·7	·384	·2	·485
·3	·183	·8	·236	·3	·303	·8	·385	·3	·487
·4	·184	·9	·237	·4	·304	·9	·386	·4	·489
·5	·184	39·0	·238	·5	·305	52·0	·388	·5	·491
·6	·185	·1	·238	·6	·306	·1	·389	·6	·492
·7	·186	·2	·239	·7	·307	·2	·391	·7	·494
·8	·186	·3	·240	·8	·308	·3	·393	·8	·496
·9	·187	·4	·241	·9	·309	·4	·394	·9	·498
33·0	·188	·5	·242	46·0	·311	·5	·396	59·0	·500
·1	·188	·6	·243	·1	·312	·6	·397	·1	·501
·2	·189	·7	·244	·2	·313	·7	·399	·2	·503
·3	·190	·8	·245	·3	·315	·8	·400	·3	·505
·4	·191	·9	·246	·4	·316	·9	·401	·4	·507
·5	·192	40·0	·247	·5	·317	53·0	·403	·5	·509
·6	·193	·1	·248	·6	·318	·1	·404	·6	·511
·7	·193	·2	·249	·7	·319	·2	·406	·7	·512
·8	·194	·3	·250	·8	·321	·3	·407	·8	·514
·9	·195	·4	·251	·9	·322	·4	·409	·9	·516
34·0	·196	·5	·252	47·0	·323	·5	·410	60·0	·518
·1	·196	·6	·253	·1	·324	·6	·412	·1	·520
·2	·197	·7	·254	·2	·325	·7	·413	·2	·522
·3	·198	·8	·255	·3	·327	·8	·415	·3	·524
·4	·199	·9	·256	·4	·328	·9	·416	·4	·526
·5	·199	41·0	·257	·5	·329	54·0	·418	·5	·528
·6	·200	·1	·258	·6	·330	·1	·419	·6	·529
·7	·201	·2	·259	·7	·331	·2	·421	·7	·531
·8	·202	·3	·260	·8	·333	·3	·422	·8	·533
·9	·203	·4	·261	·9	·334	·4	·424	·9	·535
35·0	·204	·5	·262	48·0	·335	·5	·425	61·0	·537
·1	·204	·6	·263	·1	·336	·6	·427	·1	·539
·2	·205	·7	·264	·2	·338	·7	·428	·2	·541
·3	·206	·8	·265	·3	·339	·8	·430	·3	·543
·4	·207	·9	·266	·4	·340	·9	·431	·4	·545
·5	·208	42·0	·267	·5	·342	55·0	·433	·5	·546
·6	·208	·1	·268	·6	·343	·1	·434	·6	·548
·7	·209	·2	·269	·7	·344	·2	·436	·7	·550
·8	·210	·3	·270	·8	·345	·3	·437	·8	·552
·9	·211	·4	·271	·9	·346	·4	·439	·9	·554
36·0	·212	·5	·272	49·0	·348	·5	·441	62·0	·556
·1	·213	·6	·273	·1	·349	·6	·443	·1	·558
·2	·214	·7	·274	·2	·351	·7	·444	·2	·560
·3	·214	·8	·275	·3	·352	·8	·446	·3	·562
·4	·215	·9	·276	·4	·353	·9	·447	·4	·564
·5	·216	43·0	·277	·5	·355	56·0	·449	·5	·566
·6	·217	·1	·278	·6	·356	·1	·451	·6	·568
·7	·218	·2	·279	·7	·357	·2	·453	·7	·570
·8	·218	·3	·280	·8	·358	·3	·454	·8	·572
36·9	0·219	43·4	0·281	49·9	0·360	56·4	0·456	62·9	0·574

TABLE III. (*continued*).

Temp. Fahr.	Force of Vapour.	Temp. Fahr.	Force of Vapour.	Temp. Fahr.	Force of Vapour.	Temp. Fahr.	Force of Vapour.	Temp. Fahr.	Force of Vapour.
°	in.	°	in.	°	in.	°	in.	°	in.
63·0	0·576	69·5	0·721	76·0	0·897	82·5	1·110	89·0	1·366
·1	·578	·6	·723	·1	·900	·6	·114	·1	·370
·2	·580	·7	·726	·2	·903	·7	·117	·2	·375
·3	·582	·8	·728	·3	·906	·8	·121	·3	·379
·4	·584	·9	·731	·4	·909	·9	·124	·4	·384
·5	·586	70·0	·733	·5	·912	83·0	·128	·5	·388
·6	·588	·1	·736	·6	·915	·1	·131	·6	·393
·7	·590	·2	·738	·7	·918	·2	·135	·7	·397
·8	·592	·3	·741	·8	·921	·3	·139	·8	·401
·9	·594	·4	·744	·9	·924	·4	·142	·9	·406
64·0	·596	·5	·746	77·0	·927	·5	·146	90·0	·410
·1	·598	·6	·749	·1	·930	·6	·150	·1	·415
·2	·601	·7	·751	·2	·934	·7	·154	·2	·419
·3	·603	·8	·754	·3	·937	·8	·157	·3	·424
·4	·605	·9	·756	·4	·940	·9	·161	·4	·428
·5	·607	71·0	·759	·5	·943	84·0	·165	·5	·433
·6	·609	·1	·761	·6	·946	·1	·169	·6	·437
·7	·611	·2	·764	·7	·949	·2	·173	·7	·442
·8	·613	·3	·766	·8	·952	·3	·176	·8	·446
·9	·615	·4	·769	·9	·955	·4	·180	·9	·451
65·0	·617	·5	·772	78·0	·958	·5	·184	91·0	·455
·1	·620	·6	·774	·1	·961	·6	·188	·1	·460
·2	·622	·7	·777	·2	·965	·7	·192	·2	·464
·3	·624	·8	·779	·3	·968	·8	·196	·3	·469
·4	·626	·9	·782	·4	·971	·9	·200	·4	·473
·5	·628	72·0	·785	·5	·974	85·0	·203	·5	·478
·6	·630	·1	·788	·6	·977	·1	·207	·6	·483
·7	·633	·2	·790	·7	·981	·2	·211	·7	·487
·8	·635	·3	·793	·8	·984	·3	·215	·8	·492
·9	·637	·4	·796	·9	·987	·4	·219	·9	·496
66·0	·639	·5	·799	79·0	·990	·5	·222	92·0	·501
·1	·641	·6	·801	·1	·994	·6	·226	·1	·505
·2	·644	·7	·804	·2	0·997	·7	·230	·2	·510
·3	·646	·8	·807	·3	1·000	·8	·234	·3	·515
·4	·648	·9	·810	·4	·003	·9	·238	·4	·519
·5	·650	73·0	·812	·5	·007	86·0	·242	·5	·524
·6	·652	·1	·815	·6	·010	·1	·246	·6	·529
·7	·655	·2	·818	·7	·013	·2	·250	·7	·534
·8	·657	·3	·820	·8	·016	·3	·254	·8	·538
·9	·659	·4	·823	·9	·020	·4	·258	·9	·543
67·0	·661	·5	·826	80·0	·023	·5	·262	93·0	·548
·1	·664	·6	·829	·1	·026	·6	·266	·1	·553
·2	·666	·7	·832	·2	·030	·7	·270	·2	·557
·3	·668	·8	·834	·3	·033	·8	·274	·3	·562
·4	·671	·9	·837	·4	·037	·9	·278	·4	·567
·5	·673	74·0	·840	·5	·040	87·0	·282	·5	·572
·6	·675	·1	·843	·6	·043	·1	·286	·6	·577
·7	·678	·2	·846	·7	·047	·2	·290	·7	·581
·8	·680	·3	·848	·8	·050	·3	·295	·8	·586
·9	·682	·4	·851	·9	·053	·4	·299	·9	·591
68·0	·684	·5	·854	81·0	·057	·5	·303	94·0	·596
·1	·687	·6	·857	·1	·060	·6	·307	·1	·601
·2	·689	·7	·860	·2	·064	·7	·311	·2	·606
·3	·692	·8	·863	·3	·067	·8	·315	·3	·611
·4	·694	·9	·865	·4	.070	·9	·319	·4	·616
·5	·697	75·0	·868	·5	·074	88·0	·323	·5	·621
·6	·699	·1	·871	·6	·077	·1	·328	·6	·626
·7	·701	·2	·874	·7	·081	·2	·332	·7	·631
·8	·704	·3	·877	·8	·084	·3	·336	·8	·636
·9	·706	·4	·880	·9	·088	·4	·340	·9	·641
69·0	·708	·5	·883	82·0	·092	·5	·345	95·0	·646
·1	·711	·6	·885	·1	·095	·6	·349	·1	·651
·2	·713	·7	·888	·2	·099	·7	·353	·2	·657
·3	·716	·8	·891	·3	·103	·8	·357	·3	·662
69·4	0·718	75·9	0·894	82·4	1·106	88·9	1·361	95·4	1·667

TABLE III. (*continued*).

Temp. Fahr.	Force of Vapour.	Temp. Fahr.	Force of Vapour.	Temp. Fahr.	Force of Vapour.	Temp. Fahr.	Force of Vapour.	Temp. Fahr.	Force of Vapour.
°	in.	°	in.	°	in.	°	in.	in.	in.
95·5	1·672	96·5	1·724	97·5	1·779	98·5	1·833	99·5	1·890
·6	·677	·6	·730	·6	·784	·6	·839	·6	·896
·7	·682	·7	·735	·7	·790	·7	·845	·7	·901
·8	·687	·8	·741	·8	·795	·8	·850	·8	·907
·9	·692	·9	·746	·9	·801	·9	·856	·9	·912
96·0	·697	97·0	·751	98·0	·806	99·0	·862	100·0	·918
·1	·703	·1	·757	·1	·811	·1	·868	·1	·923
·2	·708	·2	·762	.2	·817	·2	·873	·2	·929
·3	·714	·3	·768	·3	·822	·3	·879	·3	·935
96·4	1·719	97·4	1·773	98·4	1·828	99·4	1·884	100·4	1·940

From the numbers in this Table the Elastic Force of Vapour in the General Tables have been found.

The numbers in this Table show the length of a column of mercury, corresponding to the pressure of aqueous vapour at different temperatures. As in an atmosphere of pure steam its force at the earth's surface is its weight, so in a mixture of atmospheres, the elastic force of each at the surface of the earth is the weight of each. Therefore the elastic force of aqueous vapour representing the weight of the entire mass diffused throughout the atmosphere expresses the pressure on the surface in the cistern of the barometer, produced by the vapour present at the time of observation. To find the elastic force of vapour at any time, it is simply necessary to determine the temperature of the dew-point, and to seek for that temperature in this Table, and the quantity of vapour which corresponds to it is seen by inspection.

For instance, suppose the temperature of the dew-point be 51°, opposite to this reading in the Table is 0·374 inch of mercury, a quantity which is about $\frac{1}{80}$th part of an atmosphere whose whole pressure is 30 inches.

As the pressure of the whole atmosphere is about 15 lbs. on the square inch when the reading of the barometer is about 30 inches, and as the weight of vapour in the atmosphere when the temperature of the dew-point is 51° is about $\frac{1}{80}$th part of the whole pressure, it follows that the actual weight of the vapour is about $\frac{15}{80}$ lb., or 1300 grains nearly. The weight of a cubic inch of water is 253 grains; therefore the quantity of water present in a column of the atmosphere reaching to its limit is $\frac{1300}{253}$, or about 5 inches.

An examination of the numbers in this Table at different temperatures shows that the increased capacity of heat for aqueous vapour at higher temperatures does not follow the same ratio as the temperature, the capacity for aqueous vapour at any temperature being less than the mean of equidistant temperatures: for example, at 50° the elastic force of vapour is 0·361 inch, and at 70° is 0·733 inch; if, therefore, two masses of air, the one at 50° and the other at 70° (both being saturated with moisture), be mixed together, the compound will take a mean temperature of 60°; but the elastic force of vapour at 60° is 0·518 inch, while the mean of the forces at 50° and 70° is 0·547. The tension of vapour is therefore greater than the air can sustain, and the excess must fall.

Weight of a Cubic Foot of Air.

From M. Regnault's experiments, 1000 cubic inches of dry air under the pressure of 30 inches of mercury, and at the temperature of 60°, weigh 310·3529 grains, and 1000 cubic inches of water under the same pressure, and at the same temperature, weigh 252525 grains; therefore water is 813·67 times heavier than air.

From Table II., the volume of a mass of dry air at 60°, whose volume at 32° is represented by unity, is 1·05701.

Therefore the weight of a cubic foot of dry air at 32° is equal to the weight at 60°, viz. 536·3 grains, multiplied by 1·05701, or to 566·86 grains.

The following Table has been calculated by dividing 566·86 by the number expressing the volume of dry air after expansion from heat, as contained in Table II.

Table IV.—Showing the weight in Grains of a Cubic Foot of Dry Air, under the pressure of 30 inches of Mercury, for every degree from 0° to 100°.

Temp. Fahr.	Weight of a Cubic Foot of Dry Air.	Temp. Fahr.	Weight of a Cubic Foot of Dry Air.	Temp. Fahr.	Weight of a Cubic Foot of Dry Air.	Temp. Fahr.	Weight of a Cubic Foot of Dry Air.
°	grs.	°	grs.	°	grs.	°	grs.
0	606·37	26	573·87	51	545·74	76	520·25
1	605·05	27	572·69	52	544·67	77	519·28
2	603·74	28	571·51	53	543·61	78	518·31
3	602·43	29	570·34	54	542·55	79	517·35
4	601·13	30	569·17	55	541·50	80	516·39
5	599·83	31	568·01	56	540·45	81	515·43
6	598·54	32	566·85	57	539·40	82	514·48
7	597·26	33	565·70	58	538·36	83	513·53
8	595·98	34	564·56	59	537·32	84	512·59
9	594·71	35	563·42	60	536·28	85	511·65
10	593·44	36	562·28	61	535·25	86	510·71
11	592·18	37	561·15	62	534·22	87	509·77
12	590·92	38	560·02	63	533·20	88	508·84
13	589·67	39	558·89	64	532·18	89	507·91
14	588·42	40	557·77	65	531·17	90	506·99
15	587·18	41	556·66	66	530·16	91	506·07
16	585·95	42	555·55	67	529·15	92	505·15
17	584·72	43	554·44	68	528·14	93	504·23
18	583·49	44	553·34	69	527·14	94	503·32
19	582·27	45	552·24	70	526·15	95	502·41
20	581·05	46	551·15	71	525·16	96	501·50
21	579·84	47	550·06	72	524·17	97	500·60
22	578·64	48	548·97	73	523·18	98	499·70
23	577·44	49	547·89	74	522·20	99	498·81
24	576·24	50	546·82	75	521·22	100	497·93
25	575·05						

Enlargement of Volume of Air by Vapour.

If a volume of dry air of known elasticity be mixed with an equal volume of vapour, also of known elasticity, and if the mixture be so compressed as to occupy a space only equal to one of these volumes, the elasticity of the mixture will be the sum of the two elasticities of the air and vapour; or if the mixture be allowed to expand till its elasticity is equal to that of the unmixed air, it will occupy a larger volume in the proportion of the sum of the two elasticities to the elasticity of the air alone.

Let p = the atmospheric pressure as measured by inches of mercury in the barometer tube.

E_t = the elastic force of vapour at temperature t measured in inches of mercury in the barometer tube.

n = the bulk of a certain quantity of air, when dry, at the temperature t, and under the pressure p.

Let n' = the bulk of the same quantity of air when saturated with vapour, at the temperature t, and under the pressure p.

The elasticity varies inversely as the volume, the temperature remaining the same; therefore that portion of the elastic force p, which depends on the air only which occupies the space $n' = \frac{np}{n'}$,

and the whole atmospheric pressure

$$p = \frac{pn}{n'} + \mathrm{E}_t,$$

$$\text{or} \quad \frac{n}{n'} = \frac{p - \mathrm{E}_t}{p},$$

$$= 1 - \frac{\mathrm{E}_t}{p};$$

$$\therefore n' = \frac{n}{1 - \frac{\mathrm{E}_t}{p}}.$$

And from this formula the following Table has been constructed :—

Table V.—Showing the enlargement which a volume of Dry Air receives when saturated with Vapour under the pressure of 30 inches of Mercury, for every degree of temperature, from 0° to 100°.

Temp. Fahr.	Increased volume owing to the presence of vapour, the original bulk being considered as unity.	Temp. Fahr.	Increased volume owing to the presence of vapour, the original bulk being considered as unity.	Temp. Fahr.	Increased volume owing to the presence of vapour, the original bulk being considered as unity.	Temp. Fahr.	Increased volume owing to the presence of vapour, the original bulk being considered as unity.
0°	1·0015	26°	1·0047	51°	1·0125	76°	1·0299
1	1·0015	27	1·0049	52	1·0129	77	1·0309
2	1·0016	28	1·0051	53	1·0134	78	1·0319
3	1·0017	29	1·0053	54	1·0139	79	1·0330
4	1·0018	30	1·0056	55	1·0144	80	1·0341
5	1·0018	31	1·0058	56	1·0150	81	1·0352
6	1·0019	32	1·0060	57	1·0155	82	1·0364
7	1·0020	33	1·0063	58	1·0161	83	1·0376
8	1·0020	34	1·0065	59	1·0167	84	1·0389
9	1·0021	35	1·0068	60	1·0173	85	1·0402
10	1·0023	36	1·0071	61	1·0179	86	1·0414
11	1·0024	37	1·0074	62	1·0185	87	1·0427
12	1·0025	38	1·0077	63	1·0192	88	1·0441
13	1·0026	39	1·0080	64	1·0199	89	1·0455
14	1·0027	40	1·0083	65	1·0206	90	1·0470
15	1·0029	41	1·0086	66	1·0213	91	1·0485
16	1·0030	42	1·0089	67	1·0220	92	1·0500
17	1·0031	43	1·0093	68	1·0228	93	1·0516
18	1·0033	44	1·0096	69	1·0236	94	1·0532
19	1·0034	45	1·0100	70	1·0244	95	1·0549
20	1·0036	46	1·0104	71	1·0253	96	1·0566
21	1·0038	47	1·0108	72	1·0262	97	1·0584
22	1·0039	48	1·0112	73	1·0271	98	1·0602
23	1·0041	49	1·0116	74	1·0280	99	1·0620
24	1·0043	50	1·0120	75	1·0289	100	1·0639
25	1·0045						

Weight of Vapour in a Cubic Foot of Air.

Vapours, so long as they remain in an aëriform state, expand by the increase of temperature as permanently elastic fluids, and suffer changes of volume proportional to the changes of pressure. Air, as before stated, expands $\frac{1}{491 \cdot 13}$, or ·0020361 for every increase of 1° of heat; it therefore expands 0·3665 of its bulk from 32° to 212°, and its expansion is uniform between these points.

Therefore, if the weight of a cubic foot of vapour, under the pressure of 30 inches of mercury, and at the temperature of 212°, be called W, and the weight expressed in the same denomination, of an equal volume of vapour, at the temperature t, and under the same pressure of 30 inches, be called W′, and if E_t be the elasticity of vapour at the temperature t, then (the expansion of dry air from 32° to 212° being 0·3665, or 0·0020361 for each degree of temperature),

$$W' = \frac{1 \cdot 3665 \times W \times E_t}{30\{1 + \cdot 0020361 \times (t^\circ - 32^\circ)\}}.$$

A cubic foot of vapour at 212°, and under a pressure of 30 inches, weighs 258·448 grains. Therefore, substituting this value of a cubic foot of vapour at 212°, and under a pressure of 30 inches, the above formula becomes

$$W' = \frac{1 \cdot 3665 \times \overset{\text{grs.}}{258 \cdot 448} \times E_t}{30\{1 + \cdot 0020361 \times (t^\circ - 32^\circ)\}}.$$

And from this formula the next Table has been formed.

Table VI.—Showing the Weight in Grains of a Cubic Foot of Vapour, under the pressure of 30 inches of Mercury, for every degree of temperature, from 0° to 100°.

Temp. Fahr.	Weight in grains of a Cubic Foot of Vapour.	Temp. Fahr.	Weight in grains of a Cubic Foot of Vapour.	Temp. Fahr.	Weight in grains of a Cubic Foot of Vapour.	Temp. Fahr.	Weight in grains of a Cubic Foot of Vapour.
°	grs.	°	grs.	°	grs.	°	grs.
0	0·55	26	1·68	51	4·24	76	9·69
1	0·57	27	1·75	52	4·39	77	9·99
2	0·59	28	1·82	53	4·55	78	10·31
3	0·62	29	1·89	54	4·71	79	10·64
4	0·65	30	1·97	55	4·87	80	10·98
5	0·68	31	2·05	56	5·04	81	11·32
6	0·71	32	2·13	57	5·21	82	11·67
7	0·74	33	2·21	58	5·39	83	12·03
8	0·77	34	2·30	59	5·58	84	12·40
9	0·80	35	2·39	60	5·77	85	12·78
10	0·84	36	2·48	61	5·97	86	13·17
11	0·88	37	2·57	62	6·17	87	13·57
12	0·92	38	2·66	63	6·38	88	13·98
13	0·96	39	2·76	64	6·59	89	14·41
14	1·00	40	2·86	65	6·81	90	14·85
15	1·04	41	2·97	66	7·04	91	15·29
16	1·09	42	3·08	67	7·27	92	15·74
17	1·14	43	3·20	68	7·51	93	16·21
18	1·19	44	3·32	69	7·76	94	16·69
19	1·24	45	3·44	70	8·01	95	17·18
20	1·30	46	3·56	71	8·27	96	17·68
21	1·36	47	3·69	72	8·54	97	18·20
22	1·42	48	3·82	73	8·82	98	18·73
23	1·48	49	3·96	74	9·10	99	19·28
24	1·54	50	4·10	75	9·39	100	19·84
25	1·61						

From the numbers in this Table, it appears that the capacity of air for moisture doubles for a rise from 0° to 16°; from 16° to 33°; from 33° to 52°; from 52° to 73°; and from 73° to 96°; so that if the quantities of water held in solution be taken in a geometrical progression, the temperatures increase in a quicker ratio than the terms of an arithmetical progression.

When the readings of the dry- and wet-bulb thermometers are alike, the weight of a cubic foot of vapour is at once taken from the numbers in Table VI. In all other cases as the quantity of vapour at the temperature of the dew-point expands in the same ratio as air, the weight of a cubic foot of vapour is calculated from the following formula:—

$$\left.\begin{array}{l}\text{Weight of}\\ \text{a cubic foot}\\ \text{of vapour.}\end{array}\right\} = \frac{\text{Volume of temperature of dew-point} \times \text{weight of a cubic foot of vapour at temperature of dew-point}}{\text{Volume at temperature of air.}}$$

Sum of the Weights of a Cubic Foot of Air and a Cubic Foot of Vapour.

TABLE VII.—Showing the Weight of a Cubic Foot of Dry Air added to the Weight of a Cubic Foot of Vapour, at all temperatures between 0° and 100°, under a pressure of 30 inches of Mercury.

Temp. Fahr.	Sum of the weights of a Cubic Foot of Dry Air and of a Cubic Foot of Vapour.	Temp. Fahr.	Sum of the weights of a Cubic Foot of Dry Air and of a Cubic Foot of Vapour.	Temp. Fahr.	Sum of the weights of a Cubic Foot of Dry Air and of a Cubic Foot of Vapour.	Temp. Fahr.	Sum of the weights of a Cubic Foot of Dry Air and of a Cubic Foot of Vapour.
°	grs.	°	grs.	°	grs.	°	grs.
0	606·92	26	575·55	51	549·98	76	529·94
1	605·62	27	574·44	52	549·06	77	529·27
2	604·33	28	573·33	53	548·16	78	528·62
3	603·05	29	572·23	54	547·26	79	527·99
4	601·78	30	571·14	55	546·37	80	527·37
5	600·51	31	570·06	56	545·49	81	526·75
6	599·25	32	568·98	57	544·62	82	526·15
7	598·00	33	567·91	58	543·75	83	525·56
8	596·75	34	566·86	59	542·90	84	524·99
9	595·51	35	565·81	60	542·05	85	524·43
10	594·28	36	564·76	61	541·22	86	523·88
11	593·06	37	563·72	62	540·39	87	523·34
12	591·84	38	562·68	63	539·58	88	522·82
13	590·63	39	561·65	64	538·77	89	522·32
14	589·43	40	560·63	65	537·98	90	521·84
15	588·23	41	559·63	66	537·20	91	521·36
16	587·04	42	558·63	67	536·42	92	520·89
17	585·86	43	557·64	68	535·65	93	520·44
18	584·68	44	556·66	69	534·90	94	520·01
19	583·51	45	555·68	70	534·16	95	519·59
20	582·35	46	554·71	71	533·43	96	519·18
21	581·20	47	553·75	72	532·71	97	518·80
22	580·06	48	552·79	73	532·00	98	518·43
23	578·92	49	551·85	74	531·30	99	518·09
24	577·78	50	550·92	75	530·61	100	517·77
25	576·66						

The next Table is computed from the following formula:—

$$\left.\begin{array}{l}\text{Weight of a}\\ \text{cubic foot}\\ \text{of satura-}\\ \text{ted air.}\end{array}\right\} = \frac{\text{Weight of a cubic foot of air and a cubic foot of vapour (Table VII.)}}{\text{Increase of volume of a cubic foot of dry air in consequence of its saturation with moisture (Table V.).}}$$

Weight of a Cubic foot of Saturated Air.

TABLE VIII.—Showing the Weight in Grains of a Cubic Foot of Air saturated with moisture, at all temperatures between 0° and 100°, under the pressure of 30 inches of Mercury.

Temp. Fahr.	Weight of a Cubic Foot of Air saturated with Vapour.	Temp. Fahr.	Weight of a Cubic Foot of Air saturated with Vapour.	Temp. Fahr.	Weight of a Cubic Foot of Air saturated with Vapour.	Temp. Fahr.	Weight of a Cubic Foot of Air saturated with Vapour.
°	grs.	°	grs.	°	grs.	°	grs.
0	606·03	26	572·85	51	543·21	76	514·55
1	604·69	27	571·63	52	542·06	77	513·40
2	603·37	28	570·42	53	540·89	78	512·26
3	602·05	29	569·20	54	539·75	79	511·13
4	600·72	30	567·99	55	538·60	80	509·97
5	599·40	31	566·79	56	537·45	81	508·81
6	598·11	32	565·58	57	536·30	82	507·67
7	596·80	33	564·38	58	535·16	83	506·51
8	595·51	34	563·18	59	534·00	84	505·36
9	594·24	35	561·99	60	532·84	85	504·19
10	592·94	36	560·79	61	531·69	86	503·05
11	591·64	37	559·59	62	530·55	87	501·90
12	590·35	38	558·42	63	529·42	88	500·74
13	589·08	39	557·22	64	528·27	89	499·57
14	587·82	40	556·03	65	527·14	90	498·43
15	586·55	41	554·87	66	526·01	91	497·25
16	585·30	42	553·69	67	524·86	92	496·07
17	584·03	43	552·52	68	523·71	93	494·90
18	582·76	44	551·36	69	522·55	94	493·74
19	581·51	45	550·19	70	521·41	95	492·56
20	580·26	46	549·01	71	520·27	96	491·39
21	579·03	47	547·85	72	519·12	97	490·19
22	577·78	48	546·69	73	517·98	98	489·01
23	576·56	49	545·53	74	516·82	99	487·83
24	575·32	50	544·36	75	515·69	100	486·65
25	574·08						

When the readings of the two thermometers are alike, the weight of a cubic foot of air, under a pressure of 30 inches of mercury, will be found opposite to the temperature in the above Table.

In all other cases it is necessary to multiply the degree of humidity into the excess of the weight of a cubic foot of dry air (Table IV.) above that of a cubic foot of saturated air (Table VIII.), and to take the product from the weight of a cubic foot of dry air: the result will be under a pressure of 30 inches of mercury. The numbers in the General Tables have been calculated for a pressure of 29 inches.

Degree of Humidity.

In calculating the numbers in the Tables saturation has been assumed as 100, and air without moisture as zero. The numbers are found by dividing the quantity of vapour corresponding to the temperature of the dew-point, by the quantity which would have been present had the air been saturated.

ON THE MANNER OF USING THE TABLES.

To find the Temperature of the Dew-Point.

Case I.—If the readings of both the dry- and wet-bulb thermometers be whole degrees, the dew-point will be found opposite to the reading of the wet-bulb.

Case II.—If the reading of the dry-bulb be affected with parts of a degree, in the fourth column, opposite to the reading of the wet-bulb, will be found the amount of the decrease in the temperature of the dew-point, corresponding to an increase of reading of 1° in the dry-bulb. A proportional part of this, for the parts of a degree, is to be taken from the dew-point opposite to the reading of the wet-bulb.

Case III.—If the readings of the dry- and wet-bulb be both affected with parts of a degree, then the decrease due to the excess above the whole degree in the dry will be found as in Case II.; and the increase due to the excess of reading of the wet-bulb above the whole degree will be found by taking the difference between two consecutive dew-points, which will give the difference for an increase of one degree in the wet-bulb: a proportional part of this being taken and applied will give the reading required.

Example.—Suppose the readings of the dry- and wet-bulb be 51°·6 and 46°·4.

In Table, 51° dry, on page 10,—

The dew-point opposite to 46° wet is	40°·8	40°·8
The dew-point opposite to 47° wet is	42·8	
Difference, or the increase in dew-point for an increase of 1° in wet	2·0	
Proportional part of the increase for 0°·4 . . .		is + 0·8
Temperature of the dew-point corresponding to 51° dry and 46°·4 wet is		41·6
In the fourth column the decrease of dew-point for an increase of 1° in the dry is 0·9, the proportional part for 0·6 is		− 0·5
The temperature of dew-point corresponding to 51°·6 dry and 46°·4 wet is		41·1

In like manner the elastic force of vapour, the weight of vapour in a cubic foot of air, the additional weight required to saturate a cubic foot of air, and the degree of humidity may be found.

To find the weight of a cubic foot of air the reading of the barometer is required in addition.

Example.—Required the weight of a cubic foot of air when the reading of the dry-bulb is 51°·6, wet 46°·4, and barometer 29·72 inches.

	grs.
In column 13, opposite 46° wet is	525·9
In column 14, the decrease of weight for an increase of 1° in dry is 1 gr.; the proportional part for 0°·6 is	−0·6
Carried over . .	525·3

		grs.
	Brought over . .	525·3
In column 14, the increase of weight for an increase in the reading of the barometer for one inch is 18·1 grs.		
Opposite ·7 (in the Table, under 18·1 in last column) is . .		12·7
Opposite ·02 (in the little Table in right-hand corner of the page)		0·4
The weight required is		538·4

When the reading of the barometer exceeds 30 inches, the numbers in column 13 are to be increased by the quantity in column 14 for one inch, and still further increased by the quantities in the little Tables in the last column, corresponding to the excess of reading above 30 inches.

When the reading is less than 29 inches, the difference from 29 inches is to be taken, and the quantities from the small Tables, corresponding to the difference, are to be taken and applied subtractively to the number in column 13.

In all cases throughout the Tables the sign − denotes decrease, and the sign + increase.

General Remarks.

In addition to its value to the meteorologist, there are many cases in ordinary life in which this instrument may be used to advantage; the simple inspection of the two thermometers will often afford a better criterion of the weather, and of the probability of rain, than the barometer itself: regard, however, must be had to the time of the day and the time of the year when the observation is made.

In summer, when the diurnal range of temperature is great, if in the morning the difference between the air-temperature and the dew-point temperature be small, and the rise of temperature during the day considerable, it is probable that the difference will increase; and if the temperature of the dew-point at the same time decrease, it is an indication of very fine weather. If, on the contrary, the temperature of both should increase with the day in nearly equal proportion, rain will almost certainly follow as the temperature of the air falls with the declining sun.

In winter, when the diurnal range of temperature is small, the indication of the weather is shown by the increase or decrease in the temperature of the dew-point, rather than by the difference between the temperatures of the air and of the dew-point. In showery weather the indications vary rapidly, and a person making observations at short intervals may predict the approach of a storm, particularly if he take simultaneous observations with the barometer.

Use of the Instrument in the Sick Chamber.

The importance of this instrument in the requirements of a sick chamber are scarcely to be over-rated, and will be at once obvious to all who know that the comfort of the patient is dependent not so much on the temperature, as on the hygrometric condition of the air. In cold frosty weather the air of apartments is frequently too dry, in which case the difference between the readings of the two thermometers will be great, and this condition will be manifest to the patient by the degree of inconvenience experienced attributable to this cause. If the air be moist, the difference between the readings will be less, in proportion to the degree of moisture; and if the air be saturated, the readings will be alike. It would be well for the medical profession to enforce, as far as lies in its power, the use of this simple and effectual instrument, which in case of sickness gives indications so important to the comfort of the patient. If the air in the apartment be too dry, that is to say, if the difference between the readings of the thermometers is very considerable, it will be necessary to expose water in some shallow vessel of some extent of surface, so that the evaporation from it, mixing with the air, will cause a greater degree of humidity. This process may be considerably accelerated by heating the water, when the evaporation will proceed more rapidly.

If, on the contrary, the air be too moist, or should be required to be remarkably dry, all water must either be removed or covered over; and the required degree of dryness obtained either by raising the temperature, or by placing in the room sulphuric acid, or any other medium which has the property of rapidly absorbing watery vapour. By these simple means an artificial locality may be produced, and invalids whose circumstances or avocations prevent them from seeking a climate suited to their peculiar constitution may to a great extent, by the assistance of this instrument, obviate the necessity of so doing.

The instrument in use should be placed in a part of the room away from the immediate influence of the fire, and not exposed to open doors or currents of air; in ordinarily constructed rooms, the best place is in a recess on the same side of the room as the fire.

A difference of from 6 to 8 degrees between the readings of the two thermometers will generally be found to give a pleasant degree of humidity.

Use of the Instrument in Hothouses, Greenhouses, and in Conservatories.

In regulating the hygrometrical state of the air in conservatories, &c., it may be made to render essential service, the temperature of the air being regulated by the dry-bulb, and the degree of humidity by the lower reading of the wet-bulb.

It is well known that in greenhouses plants become shrivelled or otherwise injured before there is any suspicion of an alteration in the humidity of the air; and when suspected, a quantity of water, without any guide as to the amount required, is thrown upon the plants and walls; and occasionally at other times, when our senses indicate a dry atmosphere, water is spread in the same indefinite manner. Our sensations, with regard to heat and humidity, are very fallacious guides: every one must have felt in summer the heat at times to be almost insupportable, without any apparent reason as shown by the reading of the thermometer; this happens when the air is nearly calm and moist; and should the air become in motion, under the same hygrometric conditions we feel cool, and experience a relief; should these hygrometric conditions change, with the same temperature, and the air become dryer, evaporation of moisture from the skin takes place with activity, and we feel a marked sensation of cold; so that with the same temperature, and enjoying an equal state of health, we experience according to our own sensations various vicissitudes of temperature; in fact, our senses cannot guide us with regard to heat and humidity. A dry- and wet-bulb thermometer properly used, and its indications attended to, may be made the means of preserving many valuable plants which might otherwise perish in an ill-regulated atmosphere.

To make the instrument properly available for this purpose, a knowledge is required of the climatic conditions of the countries in which the plants naturally have their growth. The temperature of the hothouse may then be regulated by the dry, and the degree of humidity by the wet bulb. For example, suppose the temperature of the climate be 70°, and its mean state of humidity about 60 or 70 per cent. of the quantity of aqueous vapour which the air would contain if saturated. It is necessary then that the reading of the dry thermometer should be maintained at 70°, and the reading of the wet between 60° and 64°. These last numbers are found by looking in the Table at div. 70° of the dry bulb, and under degree of humidity for 60 or 70, which give corresponding readings between 61° and 65°. The introduction of a large surface of water with a moveable cover to regulate at pleasure the extent of evaporating surface, is a certain means of obtaining and afterwards continuing the required degree of humidity: should it be found desirable to throw water on the walls, the attendant will find in the instrument a certain guide as to the degree of humidity in the air occasioned by the performance of this operation, which he will regulate accordingly.

Value of the Instrument in places where Stoves are used.

The use of stoves is general, but their effects are often injurious to health, and frequently subject the occupant of rooms so heated to much pain and inconvenience; this arises in a great measure from the excessive dryness of the air of such rooms, causing moisture from the skin to evaporate too rapidly.

Blackheath, April 1866.

Reading of Thermometer. Dry.	Wet.	Temperature of the Dew-point.	Difference for an increase of 1° in Dry.	Elastic force of Vapour.	Difference for an increase of 1° in Dry.	Vapour in a Cubic Foot of Air.	Difference for an increase of 1° in Dry.	Vap. reqd. to sat. a Cubic Foot of Air.	Difference for an increase of 1° in Dry.	Degree of Humidity. (Satn.=100.)	Difference for an increase of 1° in Dry.	Weight of a Cubic Foot of Air. Bar. reading 29 inches.	Diff. for an increase of 1° in Dry / 1 in. in Bar.	Difference for one inch in Barometer and proportional parts.
°	°	°	°	in.	in.	gr.	gr.	gr.	gr.			grs.	grs.	
10	10·0	10·0	−7·8	0·068	−·020	0·8	−0·2	0·0	+0·2	100	−33	573·1	− 1·1	19·8
	9·8	8·2	7·8	0·063	·018	0·8	0·2	0·1	0·2	92	29	·2		in. grs.
	9·6	6·5	7·8	0·058	·016	0·7	0·2	0·1	0·2	85	26	·2	+19·8	·1 2·0
	9·4	4·7	7·7	0·054	·015	0·7	0·2	0·2	0·2	78	23	·2		·2 4·0
	9·2	3·0	7·7	0·050	·014	0·6	0·2	0·2	0·2	72	20	·3		·3 5·9
	9·0	1·2	−7·7	0·046	−·012	0·6	−0·2	0·3	+0·2	67	−18	573·3		·4 7·9
														·5 9·9
11	11·0	11·0	−7·8	0·071	−·021	0·9	−0·2	0·0	+0·2	100	−34	571·9	− 1·1	·6 11·9
	10·8	9·2	7·8	0·065	·018	0·8	0·2	0·1	0·2	92	30	572·0		·7 13·9
	10·6	7·5	7·8	0·060	·016	0·8	0·2	0·1	0·2	85	27	·0	+19·7	·8 15·8
	10·4	5·7	7·7	0·056	·014	0·7	0·2	0·2	0·2	78	24	·0		·9 17·8
	10·2	4·0	7·7	0·052	·012	0·7	0·2	0·2	0·2	72	22	·1		
	10·0	2·2	7·7	0·048	·010	0·6	0·2	0·3	0·2	67	20	·1		
	9·8	0·5	−7·7	0·045	−·008	0·6	−0·2	0·3	+0·2	62	−18	572·1		
12	12·0	12·0	−7·8	0·074	−·022	0·9	0·2	0·0	+0·3	100	−34	570·7	− 1·1	
	11·8	10·2	7·8	0·068	·020	0·8	0·2	0·1	0·3	92	31	·7		
	11·6	8·5	7·8	0·063	·018	0·8	0·2	0·1	0·3	85	28	·7	+19·7	
	11·4	6·7	7·7	0·058	·016	0·7	0·2	0·2	0·3	78	26	·8		19·7
	11·2	5·0	7·7	0·054	·014	0·7	0·2	0·2	0·3	72	24	·8		·1 2·0
	11·0	3·2	7·7	0·050	·012	0·6	0·2	0·3	0·3	66	22	·8		·2 4·0
	10·8	1·5	−7·7	0·047	−·010	0·6	−0·2	0·3	+0·3	61	−20	570·9		·3 5·9
														·4 7·9
13	13·0	13·0	−7·8	0·078	−·023	1·0	−0·3	0·0	+0·3	100	−34	569·5	− 1·1	·5 9·9
	12·8	11·5	7·8	0·072	·021	0·9	0·3	0·1	0·3	92	31	·5		·6 11·9
	12·6	9·5	7·8	0·066	·019	0·8	0·2	0·2	0·3	85	28	·6	+19·6	·7 13·9
	12·4	7·7	7·7	0·061	·017	0·8	0·2	0·2	0·3	78	25	·6		·8 15·8
	12·2	6·0	7·7	0·056	·015	0·7	0·2	0·3	0·3	72	23	·6		·9 17·8
	12·0	4·2	7·7	0·052	·013	0·7	0·2	0·3	0·3	66	21	·7		
	11·8	2·5	7·7	0·048	·011	0·6	0·2	0·4	0·3	61	19	·7		
	11·6	0·7	−7·7	0·045	−·009	0·6	−0·2	0·4	+0·3	57	−18	569·7		
14	14·0	14·0	−7·8	0·082	−·025	1·0	−0·3	0·0	+0·3	100	−33	568·2	− 1·1	
	13·8	12·2	7·8	0·075	·022	0·9	0·3	0·1	0·3	92	30	·3		
	13·6	10·5	7·8	0·069	·020	0·9	0·3	0·1	0·3	85	28	·3	+19·6	
	13·4	8·7	7·7	0·064	·018	0·8	0·2	0·2	0·3	78	26	·3		
	13·2	7·0	7·7	0·059	·016	0·7	0·2	0·3	0·3	72	24	·4		19·6
	13·0	5·2	7·7	0·055	·014	0·7	0·2	0·3	0·3	66	22	·4		·1 2·0
	12·8	3·5	7·7	0·051	·012	0·6	0·2	0·4	0·3	61	20	·4		·2 3·9
	12·6	1·7	−7·7	0·048	−·010	0·6	−0·2	0·4	+0·3	57	−18	568·5		·3 5·9
														·4 7·8
15	15·0	15·0	−7·7	0·086	−·026	1·1	−0·3	0·0	+0·3	100	−33	567·0	− 1·1	·5 9·8
	14·8	13·3	7·7	0·079	·024	1·0	0·3	0·1	0·3	92	30	·0		·6 11·8
	14·6	11·5	7·7	0·073	·022	0·9	0·3	0·2	0·3	85	27	·0	+19·6	·7 13·7
	14·4	9·7	7·7	0·067	·020	0·8	0·3	0·3	0·3	78	25	·1		·8 15·6
	14·2	8·0	7·7	0·062	·018	0·8	0·3	0·3	0·3	72	24	·1		·9 17·6
	14·0	6·2	7·6	0·057	·016	0·7	0·2	0·4	0·3	67	22	·2		
	13·8	4·5	7·6	0·053	·014	0·7	0·2	0·4	0·3	62	19	·2		
	13·6	2·7	7·6	0·049	·012	0·6	0·2	0·5	0·3	57	17	·2		
	13·4	1·0	−7·6	0·046	−·010	0·6	−0·2	0·5	+0·3	52	−16	567·3		
16	16·0	16·0	−7·6	0·090	−·027	1·1	−0·3	0·0	+0·3	100	−32	565·8	− 1·1	
	15·8	14·3	7·6	0·083	·025	1·0	0·3	0·1	0·3	92	29	·9		·01 0·2
	15·6	12·5	7·6	0·076	·022	0·9	0·3	0·2	0·3	85	27	565·9	+19·5	·02 0·4
	15·4	10·8	7·6	0·070	·020	0·9	0·3	0·2	0·3	79	25	566·0		·03 0·6
	15·2	9·0	7·5	0·065	·018	0·8	0·3	0·3	0·3	73	23	·0		·04 0·8
	15·0	7·3	7·5	0·060	·016	0·7	0·2	0·4	0·3	67	22	·0		·05 1·0
	14·8	5·6	7·5	0·055	·014	0·7	0·2	0·4	0·3	62	21	·1		·06 1·2
	14·6	3·8	7·5	0·051	·012	0·6	0·2	0·5	0·3	58	19	·1		·07 1·4
	14·4	2·1	7·4	0·047	·010	0·6	0·2	0·5	0·3	53	18	·1		·08 1·6
	14·2	0·3	−7·4	0·044	−·008	0·5	−0·2	0·6	+0·3	50	−17	566·1		·09 1·8

Reading of Thermometer. Dry.	Reading of Thermometer. Wet.	Temperature of the Dew-Point.	Difference for an increase of 1° in Dry.	Elastic force of Vapour.	Difference for an increase of 1° in Dry.	Vapour in a Cubic Foot of Air.	Difference for an increase of 1° in Dry.	Vap. reqd. to sat. a Cubic Foot of Air.	Difference for an increase of 1° in Dry.	Degree of Humidity. (Satn. = 100.)	Difference for an increase of 1° in Dry.	Weight of a Cubic Foot of Air. Bar. reading 29 inches.	Diff. for an inc case of 1° in Dry / of 1 in. in Bar.
°	°	°	°	in.	in.	gr.	gr.	gr.	gr.			grs.	grs.
17	17·0	17·0	−7·5	0·094	—·028	1·1	−0·3	0·0	+0·4	100	−32	564·5	− 1·1
	16·8	15·3	7·5	0·087	·026	1·0	0·3	0·1	0·4	93	30	·6	
	16·6	13·6	7·5	0·080	·023	1·0	0·3	0·1	0·4	86	28	·6	+19·5
	16·4	11·8	7·4	0·074	·021	0·9	0·3	0·2	0·4	80	26	·7	
	16·2	10·1	7·4	0·068	·019	0·8	0·2	0·3	0·3	74	24	·7	
	16·0	8·4	7·4	0·063	·017	0·8	0·2	0·3	0·3	68	22	·8	
	15·8	6·7	7·3	0·058	·015	0·7	0·2	0·4	0·3	63	20	·8	
	15·6	4·9	7·3	0·054	·013	0·6	0·2	0·5	0·2	58	18	·8	
	15·4	3·2	7·3	0·050	·011	0·6	0·2	0·5	0·2	53	16	·9	
	15·2	1·5	−7·3	0·047	—·009	0·5	−0·2	0·6	+0·2	49	−14	564·9	
18	18·0	18·0	−7·3	0·098	—·028	1·2	−0·3	0·0	+0·4	100	−32	563·4	− 1·1
	17·8	16·3	7·3	0·091	·026	1·1	0·3	0·1	0·4	93	30	·4	
	17·6	14·6	7·3	0·084	·024	1·0	0·3	0·2	0·4	86	28	·5	+19·4
	17·4	12·9	7·3	0·077	·022	1·0	0·3	0·2	0·4	80	26	·5	
	17·2	11·2	7·2	0·071	·020	0·9	0·3	0·3	0·4	74	23	·6	
	17·0	9·5	7·2	0·066	·018	0·8	0·2	0·4	0·3	68	21	·6	
	16·8	7·8	7·1	0·061	·016	0·7	0·2	0·5	0·3	63	19	·6	
	16·6	6·1	7·1	0·057	·014	0·7	0·2	0·5	0·3	58	17	·7	
	16·4	4·4	7·0	0·053	·012	0·6	0·2	0·6	0·2	54	15	·7	
	16·2	2·7	7·0	0·049	·010	0·6	0·2	0·6	0·2	50	13	·7	
	16·0	1·0	−6·9	0·046	—·008	0·6	−0·2	0·6	+0·2	46	−11	563·8	
19	19·0	19·0	−7·1	0·103	—·030	1·3	−0·3	0·0	+0·4	100	−32	562·1	− 1·1
	18·8	17·3	7·1	0·095	·027	1·2	0·3	0·1	0·4	93	29	·2	
	18·6	15·7	7·1	0·088	·025	1·1	0·3	0·2	0·3	86	27	·2	+19·4
	18·4	14·0	7·0	0·081	·022	1·0	0·3	0·3	0·3	80	25	·3	
	18·2	12·3	7·0	0·075	·020	0·9	0·3	0·4	0·3	74	22	·3	
	18·0	10·7	6·9	0·070	·019	0·9	0·3	0·4	0·3	68	20	·4	
	17·8	9·0	6·9	0·065	·017	0·8	0·2	0·5	0·2	63	18	·4	
	17·6	7·3	6·8	0·060	·015	0·7	0·2	0·6	0·2	58	17	·4	
	17·4	5·6	6·8	0·055	·013	0·7	0·2	0·6	0·2	54	16	·5	
	17·2	4·0	6·7	0·051	·011	0·6	0·2	0·7	0·2	50	14	·5	
	17·0	2·3	6·7	0·048	·009	0·6	0·2	0·7	0·2	47	13	·5	
	16·8	0·7	−6·7	0·045	—·008	0·6	−0·2	0·7	+0·2	44	−11	562·5	
20	20·0	20·0	−6·9	0·108	—·030	1·3	−0·3	0·0	+0·4	100	−30	561·0	− 1·1
	19·8	18·4	6·8	0·100	·028	1·2	0·3	0·1	0·4	93	28	·0	
	19·6	16·7	6·7	0·093	·026	1·1	0·3	0·2	0·4	86	26	·1	+19·3
	19·4	15·1	6·7	0·086	·024	1·0	0·3	0·3	0·4	80	24	·1	
	19·2	13·5	6·7	0·079	·021	1·0	0·3	0·3	0·4	74	22	·2	
	19·0	11·9	6·6	0·073	·019	0·9	0·2	0·4	0·3	68	20	·2	
	18·8	10·2	6·5	0·068	·017	0·8	0·2	0·5	0·3	63	18	·3	
	18·6	8·6	6·5	0·063	·015	0·8	0·2	0·5	0·3	59	16	·3	
	18·4	7·0	6·5	0·059	·014	0·7	0·2	0·6	0·3	55	15	3	
	18·2	5·4	6·4	0·055	·013	0·7	0·2	0·6	0·3	51	14	·4	
	18·0	3·7	6·4	0·051	·012	0·6	0·2	0·7	0·2	48	13	·4	
	17·8	2·1	6·4	0·048	·011	0·6	0·2	0·7	0·2	45	12	·4	
	17·6	0·5	−6·3	0·045	—·010	0·5	−0·2	0·8	+0·2	42	−11	561·4	
21	21·0	21·0	−6·6	0·113	—·030	1·4	−0·3	0·0	+0·4	100	−29	559·7	− 1·1
	20·8	19·4	6·5	0·105	·028	1·3	0·3	0·1	0·4	93	27	·8	
	20·6	17·9	6·5	0·097	·025	1·2	0·3	0·2	0·3	87	25	·8	+19·3
	20·4	16·3	6·5	0·090	·023	1·1	0·3	0·3	0·3	81	23	·9	
	20·2	14·7	6·4	0·084	·021	1·0	0·3	0·4	0·3	75	21	559·9	
	20·0	13·1	6·3	0·078	·019	1·0	0·3	0·4	0·3	70	20	560·0	
	19·8	11·5	6·2	0·072	·017	0·9	0·2	0·5	0·2	65	18	·0	
	19·6	10·0	6·2	0·067	·016	0·8	0·2	0·6	0·2	60	16	·1	
	19·4	8·4	6·2	0·062	·014	0·8	0·2	0·6	0·2	56	15	·1	
	19·2	6·8	6·1	0·058	·013	0·7	0·2	0·7	0·2	52	14	·1	
	19·0	5·2	6·1	0·054	·012	0·7	0·2	0·7	0·2	49	13	·2	
	18·8	3·7	6·0	0·051	·011	0·6	0·2	0·8	0·2	46	12	·2	
	18·6	2·1	6·0	0·048	·010	0·6	0·2	0·8	0·2	43	11	·2	
	18·4	0·5	−5·9	0·045	—·010	0·5	−0·2	0·8	+0·2	40	−10	560·2	

Difference for one inch in Barometer and proportional parts.

19·5 in.	gr.
·1	2·0
·2	3·9
·3	5·9
·4	7·8
·5	9·8
·6	11·7
·7	13·7
·8	15·6
·9	17·6

19·4	
·1	1·9
·2	3·9
·3	5·8
·4	7·8
·5	9·7
·6	11·6
·7	13·6
·8	15·5
·9	17·5

19·3	
·1	1·9
·2	3·9
·3	5·8
·4	7·7
·5	9·7
·6	11·6
·7	13·5
·8	15·4
·9	17·4

·01	0·2
·02	0·4
·03	0·6
·04	0·8
·05	1·0
·06	1·2
·07	1·4
·08	1·6
·09	1·8

Reading of Thermometer. Dry.	Wet.	Temperature of the Dew-Point.	Difference for an increase of 1° in Dry.	Elastic force of Vapour.	Difference for an increase of 1° in Dry.	Vapour in a Cubic Foot of Air.	Difference for an increase of 1° in Dry.	Vap. reqd. to sat. a Cubic Foot of Air.	Difference for an increase of 1° in Dry.	Degree of Humidity. (Satn.=100.)	Difference for an increase of 1° in Dry.	Weight of a Cubic Foot of Air. Bar. reading 29 inches.	Diff. for an increase of 1° in Dry / 1 in. in Bar.	Difference for one inch in Barometer and proportional parts.	
°	°	°	°	in.	in.	gr.	gr.	gr.	gr.			grs.	grs.		
22	22·0	22·0	−6·3	0·118	−·030	1·4	−0·3	0·0	+0·4	100	−28	558·5	− 1·1	19·3	
	21·8	20·5	6·2	0·110	·027	1·3	0·3	0·1	0·4	94	26	·5		in.	grs.
	21·6	19·0	6·1	0·102	·025	1·2	0·3	0·2	0·4	88	24	·6	+19·3	·1	1·9
	21·4	17·4	6·0	0·095	·023	1·2	0·3	0·2	0·4	82	23	·6		·2	3·9
	21·2	15·9	6·0	0·089	·022	1·1	0·3	0·3	0·4	76	21	·7		·3	5·8
	21·0	14·4	6·0	0·083	·020	1·0	0·2	0·4	0·3	71	19	·7		·4	7·7
	20·8	12·9	5·9	0·077	·018	0·9	0·2	0·5	0·3	66	18	·8		·5	9·7
	20·6	11·4	5·8	0·072	·017	0·9	0·2	0·5	0·3	62	16	·8		·6	11·6
	20·4	9·8	5·7	0·067	·015	0·8	0·2	0·6	0·3	58	15	·9		·7	13·5
	20·2	8·3	5·7	0·063	·014	0·8	0·2	0·6	0·3	54	15	·9		·8	15·4
	20·0	6·8	5·6	0·059	·013	0·7	0·2	0·7	0·3	50	14	·9		·9	17·4
	19·8	5·3	5·6	0·055	·012	0·7	0·2	0·7	0·2	47	13	558·9			
	19·6	3·8	5·5	0·051	·011	0·6	0·2	0·8	0·2	44	12	559·0			
	19·4	2·2	5·5	0·048	·010	0·6	0·2	0·8	0·2	41	12	·0			
	19·2	0·7	−5·4	0·045	−·010	0·5	−0·2	0·9	+0·2	38	−11	559·0			
23	23·0	23·0	−5·9	0·123	−·029	1·5	−0·3	0·0	+0·4	100	−27	557·4	− 1·1		
	22·8	21·5	5·8	0·115	·027	1·4	0·3	0·1	0·4	94	25	·4			
	22·6	20·1	5·8	0·108	·026	1·3	0·3	0·2	0·3	88	23	·5	+19·2	19·2	
	22·4	18·6	5·7	0·101	·024	1·2	0·3	0·3	0·3	82	22	·5			
	22·2	17·2	5·6	0·094	·022	1·1	0·3	0·4	0·3	77	20	·6		·1	1·9
	22·0	15·7	5·5	0·088	·020	1·1	0·3	0·4	0·3	72	19	·6		·2	3·8
	21·8	14·3	5·5	0·082	·018	1·0	0·2	0·5	0·2	67	17	·7		·3	5·8
	21·6	12·8	5·4	0·077	·017	0·9	0·2	0·6	0·2	63	16	·7		·4	7·7
	21·4	11·4	5·4	0·072	·016	0·9	0·2	0·6	0·2	59	15	·7		·5	9·6
	21·2	9·9	5·3	0·067	·014	0·8	0·2	0·7	0·2	55	14	·8		·6	11·5
	21·0	8·4	5·2	0·063	·013	0·8	0·2	0·7	0·2	52	13	·8		·7	13·4
	20·8	7·0	5·2	0·059	·012	0·7	0·2	0·8	0·2	48	12	·8		·8	15·4
	20·6	5·5	5·1	0·055	·011	0·7	0·2	0·8	0·2	45	11	·8		·9	17·3
	20·4	4·1	5·0	0·052	·010	0·6	0·2	0·9	0·2	42	10	·9			
	20·2	2·6	−5·0	0·049	−·010	0·6	−0·2	0·9	+0·2	39	−9	557·9			
24	24·0	24·0	−5·5	0·129	−·029	1·5	−0·3	0·0	+0·4	100	−26	556·1	− 1·1		
	23·8	22·6	5·4	0·121	·027	1·5	0·3	0·1	0·4	94	24	·2			
	23·6	21·2	5·3	0·114	·025	1·4	0·3	0·2	0·3	88	23	·2	+19·2		
	23·4	19·8	5·2	0·107	·023	1·3	0·3	0·3	0·3	83	21	·3			
	23·2	18·5	5·2	0·100	·021	1·2	0·3	0·3	0·3	78	20	·3			
	23·0	17·1	5·2	0·094	·020	1·1	0·3	0·4	0·3	73	18	·4		19·1	
	22·8	15·7	5·1	0·088	·019	1·1	0·3	0·4	0·3	69	17	·4		·1	1·9
	22·6	14·3	5·0	0·082	·017	1·0	0·3	0·5	0·3	65	15	·5		·2	3·8
	22·4	12·9	4·9	0·077	·015	0·9	0·3	0·6	0·3	61	14	·5		·3	5·7
	22·2	11·5	4·8	0·072	·013	0·9	0·2	0·6	0·2	57	13	·5		·4	7·6
	22·0	10·2	4·7	0·068	·012	0·8	0·2	0·7	0·2	53	12	·6		·5	9·6
	21·8	8·8	4·7	0·064	·011	0·8	0·2	0·7	0·2	50	12	·6		·6	11·5
	21·6	7·4	4·6	0·060	·010	0·7	0·2	0·8	0·2	47	11	·6		·7	13·4
	21·4	6·0	4·5	0·056	·010	0·7	0·2	0·8	0·2	44	10	·6		·8	15·3
	21·2	4·6	4·5	0·053	·009	0·6	0·2	0·9	0·2	42	10	·7		·9	17·2
	21·0	3·2	−4·4	0·050	−·009	0·6	−0·2	0·9	+0·2	39	−9	556·7			
25	25·0	25·0	−5·1	0·135	−·028	1·6	−0·3	0·0	+0·4	100	−24	555·0	− 1·1		
	24·8	23·7	5·0	0·127	·026	1·5	0·3	0·1	0·4	94	22	·0			
	24·6	22·4	4·9	0·120	·024	1·4	0·3	0·2	0·4	89	21	·1	+19·1		
	24·4	21·1	4·8	0·113	·022	1·4	0·3	0·2	0·4	84	20	·1			
	24·2	19·8	4·7	0·106	·020	1·3	0·3	0·3	0·4	79	18	·2			
	24·0	18·5	4·7	0·100	·019	1·2	0·2	0·4	0·3	74	17	·2			
	23·8	17·2	4·6	0·094	·018	1·1	0·2	0·5	0·3	70	16	·3		·01	0·2
	23·6	15·9	4·5	0·089	·017	1·1	0·2	0·5	0·3	66	14	·3		·02	0·4
	23·4	14·6	4·4	0·084	·016	1·0	0·2	0·6	0·3	62	13	·4		·03	0·6
	23·2	13·3	4·3	0·079	·014	1·0	0·2	0·6	0·3	59	12	·4		·04	0·8
	23·0	11·9	4·2	0·074	·013	0·9	0·2	0·7	0·3	55	11	·4		·05	1·0
	22·8	10·6	4·1	0·069	·012	0·8	0·2	0·8	0·3	52	10	·4		·06	1·2
	22·6	9·3	4·0	0·065	·011	0·8	0·2	0·8	0·2	49	9	·5		·07	1·3
	22·4	8·0	3·9	0·062	·010	0·9	0·2	0·9	0·2	46	8	·5		·08	1·5
	22·2	6·7	−3·8	0·059	−·010	0·9	−0·2	0·9	+0·2	43	−7	555·5		·09	1·7

Reading of Thermometer. Dry.	Reading of Thermometer. Wet.	Temperature of the Dew-Point.	Difference for an increase of 1° in Dry.	Elastic force of Vapour.	Difference for an increase of 1° in Dry.	Vapour in a Cubic Foot of Air.	Difference for an increase of 1° in Dry.	Vap. reqd. to sat. a Cubic Foot of Air.	Difference for an increase of 1° in Dry.	Degree of Humidity. (Satn.=100.)	Difference for an increase of 1° in Dry.	Weight of a Cubic Foot of Air. Bar. reading 29 inches.	Diff. for an increase of 1° in Dry / 1 in. in Bar.	Difference for one inch in Barometer and proportional parts.	
°	°	°	°	in.	in.	gr.	gr.	gr.	gr.			grs.	grs.		
26	26·0	26·0	−4·6	0·141	−·027	1·7	−0·3	0·0	+0·3	100	−21	553·7	− 1·1		
	25·8	24·8	4·5	0·134	·025	1·6	0·3	0·1	0·3	95	20	·8		19·1	
	25·6	23·6	4·4	0·127	·023	1·5	0·3	0·2	0·3	90	18	·9	+19·1	in.	grs.
	25·4	22·3	4·3	0·120	·021	1·4	0·3	0·3	0·3	85	17	553·9		·1	1·9
	25·2	21·1	4·2	0·113	·019	1·4	0·3	0·3	0·3	80	16	554·0		·2	3·8
	25·0	19·9	4·1	0·107	·018	1·3	0·2	0·4	0·2	76	15	·0		·3	5·7
	24·8	18·7	4·0	0·101	·017	1·2	0·2	0·5	0·2	72	14	·0		·4	7·6
	24·6	17·5	4·0	0·096	·016	1·1	0·2	0·6	0·2	68	13	·1		·5	9·6
	24·4	16·3	3·9	0·091	·015	1·1	0·1	0·6	0·2	64	12	·1		·6	11·5
	24·2	15·1	3·8	0·086	·014	1·0	0·1	0·7	0·1	61	11	·2		·7	13·4
	24·0	13·8	3·7	0·081	·013	1·0	0·1	0·7	0·1	58	11	·2		·8	15·3
	23·8	12·6	3·6	0·076	·012	0·9	0·1	0·8	0·1	55	10	·2		·9	17·2
	23·6	11·4	3·5	0·072	·011	0·9	0·1	0·8	0·1	52	10	·2			
	23·4	10·2	3·5	0·068	·010	0·8	0·1	0·9	0·1	49	9	·3			
	23·2	9·0	−3·4	0·065	−·009	0·8	−0·1	0·9	+0·1	46	− 9	554·3			
27	27·0	27·0	−4·1	0·147	−·025	1·7	−0·3	0·0	+0·3	100	−20	552·5	− 1·1		
	26·8	25·9	4·0	0·140	·023	1·7	0·3	0·1	0·3	95	19	·6			
	26·6	24·8	3·9	0·133	·021	1·6	0·3	0·1	0·3	91	18	·6	+19·1		
	26·4	23·6	3·8	0·126	·019	1·5	0·2	0·2	0·3	87	17	·7			
	26·2	22·5	3·7	0·120	·018	1·4	0·2	0·3	0·3	83	16	·7			
	26·0	21·4	3·6	0·114	·017	1·4	0·2	0·3	0·3	79	15	·8			
	25·8	20·3	3·5	0·109	·016	1·3	0·2	0·4	0·3	75	14	·8			
	25·6	19·2	3·4	0·104	·015	1·2	0·2	0·5	0·3	71	13	·8			
	25·4	18·0	3·3	0·099	·014	1·2	0·2	0·5	0·3	68	12	·9			
	25·2	16·9	3·2	0·094	·013	1·1	0·1	0·6	0·2	64	12	552·9			
	25·0	15·8	3·1	0·089	·013	1·1	0·1	0·6	0·2	61	11	553·0			
	24·8	14·7	3·0	0·084	·012	1·0	0·1	0·7	0·2	58	10	·0			
	24·6	13·5	2·9	0·080	·011	1·0	0·1	0·7	0·2	55	9	·0		19·0	
	24·4	12·4	2·8	0·076	·010	0·9	0·1	0·8	0·2	52	8	·0		·1	1·9
	24·2	11·3	−2·7	0·072	−·010	0·9	−0·1	0·8	+0·2	49	− 7	553·1		·2	3·8
														·3	5·7
28	28·0	28·0	−3·6	0·153	−·023	1·8	−0·3	0·0	+0·3	100	−18	551·4	− 1·1	·4	7·6
	27·8	27·0	3·6	0·146	·021	1·7	0·3	0·1	0·3	95	16	·5		·5	9·5
	27·6	26·0	3·5	0·140	·020	1·7	0·3	0·1	0·3	91	15	·5	+19·0	·6	11·4
	27·4	24·9	3·4	0·134	·019	1·6	0·2	0·2	0·3	87	14	·6		·7	13·3
	27·2	23·9	3·3	0·128	·018	1·5	0·2	0·3	0·3	84	14	·6		·8	15·2
	27·0	22·9	3·2	0·122	·016	1·5	0·2	0·3	0·3	80	13	·6		·9	17·1
	26·8	21·9	3·1	0·117	·015	1·4	0·2	0·4	0·3	76	12	·7			
	26·6	20·8	3·0	0·112	·014	1·3	0·2	0·5	0·3	73	11	·7			
	26·4	19·8	2·9	0·107	·013	1·3	0·2	0·5	0·3	70	11	·8			
	26·2	18·8	2·8	0·102	·012	1·2	0·1	0·6	0·2	67	10	·8			
	26·0	17·8	2·8	0·097	·011	1·2	0·1	0·6	0·2	64	10	·8			
	25·8	16·7	2·7	0·093	·010	1·1	0·1	0·7	0·2	61	9	·9			
	25·6	15·7	2·6	0·089	010	1·1	0·1	0·7	0·2	58	8	·9			
	25·4	14·7	2·5	0·085	·009	1·0	0·1	0·8	0·2	55	8	·9			
	25·2	13·7	−2·4	0·081	−·009	1·0	−0·1	0·8	+0·2	53	− 7	551·9			
29	29·0	29·0	−3·1	0·160	−·020	1·9	−0·2	0·0	+0·3	100	−17	550·2	− 1·1		
	28·8	28·1	3·1	0·154	·019	1·8	0·2	0·1	0·3	96	16	·2			
	28·6	27·2	3·0	0·148	·018	1·8	0·2	0·1	0·3	93	15	·3	+19·0		
	28·4	26·2	2·9	0·142	·017	1·7	0·2	0·2	0·3	89	14	·3			
	28·2	25·3	2·8	0·136	·016	1·6	0·2	0·3	0·3	86	14	·4			
	28·0	24·4	2·7	0·130	·014	1·6	0·2	0·3	0·3	82	13	·4			
	27·8	23·4	2·6	0·125	·013	1·5	0·2	0·4	0·3	79	12	·4			
	27·6	22·5	2·5	0·120	·012	1·4	0·2	0·5	0·3	76	12	·5		·01	0·2
	27·4	21·6	2·4	0·115	·011	1·4	0·2	0·5	0·3	73	11	·5		·02	0·4
	27·2	20·7	2·3	0·110	·010	1·3	0·1	0·6	0·2	70	10	·6		·03	0·6
	27·0	19·7	2·2	0·106	·009	1·3	0·1	0·6	0·2	67	9	·6		·04	0·8
	26·8	18·8	2·1	0·102	·009	1·2	0·1	0·7	0·2	64	9	·6		·05	1·0
	26·6	17·9	2·0	0·098	·008	1·2	0·1	0·7	0·2	61	8	·6		·06	1·2
	26·4	17·0	1·9	0·094	·008	1·1	0·1	0·8	0·2	58	7	·7		·07	1·3
	26·2	16·0	−1·8	0·090	−·007	1·1	−0·1	0·8	+0·2	56	− 7	550·7		·08	1·5
														·09	1·7

Reading of Thermometer. Dry.	Wet.	Temperature of the Dew-Point.	Difference for an increase of 1° in Dry.	Elastic force of Vapour.	Difference for an increase of 1° in Dry.	Vapour in a Cubic Foot of Air.	Difference for an increase of 1° in Dry.	Vap. reqd. to sat. a Cubic Foot of Air.	Difference for an increase of 1° in Dry.	Degree of Humidity. (Satn. = 100).	Difference for an increase of 1° in Dry.	Weight of a Cubic Foot of Air. Bar. reading 29 inches.	Diff. for an increase of $\frac{1° \text{ in Dry}}{1 \text{ in. in Bar.}}$
°	°	°	°	in.	in.	gr.	gr.	g.	gr.			grs.	grs.
30	30·0	30·0	−2·7	0·167	−·019	2·0	−0·2	0·0	+0·3	100	−15	549·1	− 1·1
	29·8	29·2	2·6	0·161	·018	1·9	0·2	0·1	0·3	96	14	·1	
	29·6	28·3	2·5	0·155	·017	1·8	0·2	0·2	0·3	93	14	·2	+18·9
	29·4	27·5	2·4	0·150	·016	1·8	0·2	0·2	0·3	90	13	·2	
	29·2	26·7	2·4	0·145	·015	1·7	0·2	0·3	0·3	86	12	·2	
	29·0	25·9	2·3	0·140	·014	1·7	0·2	0·3	0·3	83	11	·3	
	28·8	25·0	2·2	0·135	·013	1·6	0·2	0·4	0·3	80	10	·3	
	28·6	24·2	2·1	0·130	·012	1·5	0·1	0·5	0·2	77	10	·3	
	28·4	23·4	2·0	0·125	·011	1·5	0·1	0·5	0·2	75	9	·3	
	28·2	22·5	1·9	0·120	·010	1·4	0·1	0·6	0·2	72	8	·4	
	28·0	21·7	1·8	0·116	·009	1·4	0·1	0·6	0·2	69	7	·4	
	27·8	20·9	1·7	0·112	·008	1·3	0·1	0·7	0·2	67	7	·5	
	27·6	20·0	1·7	0·108	·008	1·3	0·1	0·7	0·2	64	6	·5	
	27·4	19·2	1·6	0·104	·008	1·2	0·1	0·8	0·2	62	5	·5	
	27·2	18·4	−1·5	0·100	−·007	1·2	−0·1	0·8	+0·2	60	− 4	549·6	
31	31·0	31·0	−2·3	0·174	−·017	2·1	−0·2	0·0	+0·2	100	−13	547·9	− 1·1
	30·8	30·3	2·2	0·168	·015	2·0	0·2	0·1	0·2	96	12	547·9	
	30·6	29·5	2·1	0·163	·014	1·9	0·2	0·2	0·2	93	12	548·0	+18·9
	30·4	28·8	2·1	0·158	·013	1·9	0·2	0·2	0·2	90	11	·0	
	30·2	28·0	2·0	0·153	·012	1·8	0·2	0·3	0·2	87	10	·1	
	30·0	27·3	1·9	0·148	·011	1·7	0·2	0·4	0·2	85	9	·1	
	29·8	26·6	1·9	0·143	·010	1·7	0·1	0·4	0·1	82	9	·1	
	29·6	25·8	1·8	0·139	·010	1·6	0·1	0·5	0·1	79	8	·2	
	29·4	25·1	1·7	0·135	·010	1·6	0·1	0·5	0·1	77	8	·2	
	29·2	24·3	1·6	0·131	·010	1·5	0·1	0·6	0·1	74	7	·2	
	29·0	23·6	1·5	0·127	·009	1·5	0·1	0·6	0·1	72	7	·2	
	28·8	22·9	1·5	0·123	·009	1·4	0·1	0·7	0·1	70	6	·3	
	28·6	22·1	1·4	0·119	·008	1·4	0·1	0·7	0·1	68	6	·3	
	28·4	21·4	1·3	0·115	·007	1·4	0·1	0·7	0·1	66	5	·3	
	28·2	20·6	−1·2	0·111	−·007	1·3	−0·1	0·8	+0·1	64	− 5	548·3	
32	32·0	32·0	−2·0	0·182	−·015	2·1	−0·2	0·0	+0·3	100	−11	546·7	− 1·1
	31·8	31·3	1·9	0·177	·014	2·1	0·2	0·0	0·3	97	11	·7	
	31·6	30·7	1·9	0·172	·013	2·0	0·2	0·1	0·3	94	10	·8	+18·9
	31·4	30·0	1·8	0·167	·012	2·0	0·2	0·1	0·3	92	10	·8	
	31·2	29·3	1·7	0·162	·011	1·9	0·2	0·2	0·3	89	9	·8	
	31·0	28·7	1·7	0·157	·010	1·9	0·2	0·2	0·3	87	8	·9	
	30·8	28·0	1·6	0·153	·010	1·8	0·1	0·3	0·2	84	8	·9	
	30·6	27·4	1·6	0·149	·010	1·8	0·1	0·3	0·2	82	7	·9	
	30·4	26·7	1·5	0·145	·009	1·8	0·1	0·3	0·2	79	7	546·9	
	30·2	26·0	1·4	0·141	·008	1·7	0·1	0·4	0·2	77	7	547·0	
	30·0	25·4	1·3	0·137	·008	1·6	0·1	0·5	0·2	75	6	·0	
	29·8	24·7	1·3	0·133	·008	1·6	0·1	0·5	0·2	73	6	·0	
	29·6	24·0	1·2	0·129	·008	1·5	0·1	0·6	0·2	71	6	·1	
	29·4	23·4	1·1	0·125	·007	1·5	0·1	0·6	0·2	69	5	·1	
	29·2	22·7	−1·1	0·121	−·007	1·4	−0·1	0·7	+0·2	67	− 5	547·1	
33	33·0	33·0	−1·8	0·188	−·012	2·2	−0·2	0·0	+0·3	100	−11	545·6	− 1·1
	32·8	32·4	1·7	0·183	·011	2·2	0·2	0·0	0·3	97	11	·6	
	32·6	31·8	1·7	0·179	·011	2·1	0·2	0·1	0·3	95	10	·6	+18·8
	32·4	31·2	1·6	0·175	·011	2·1	0·2	0·1	0·3	93	10	·7	
	32·2	30·6	1·6	0·171	·011	2·0	0·2	0·2	0·3	91	9	·7	
	32·0	30·0	1·5	0·167	·011	2·0	0·1	0·2	0·2	89	9	·7	
	31·8	29·4	1·5	0·163	·011	1·9	0·1	0·3	0·2	86	9	·8	
	31·6	28·8	1·4	0·159	·010	1·9	0·1	0·3	0·2	84	8	·8	
	31·4	28·2	1·4	0·155	·010	1·8	0·1	0·4	0·2	82	8	·8	
	31·2	27·6	1·4	0·151	·009	1·8	0·1	0·4	0·2	80	8	·9	
	31·0	27·0	1·3	0·147	·009	1·7	0·1	0·5	0·2	78	7	·9	
	30·8	26·4	1·3	0·143	·009	1·7	0·1	0·5	0·2	76	7	·9	
	30·6	25·8	1·3	0·139	·009	1·6	0·1	0·6	0·2	74	7	545·9	
	30·4	25·2	1·2	0·136	·008	1·6	0·1	0·6	0·2	72	6	546·0	
	30·2	24·6	−1·2	0·133	−·008	1·6	−0·1	0·6	+0·2	71	− 6	546·0	

Difference for one inch in Barometer and proportional parts.

in.	grs.
1	18·9
·1	1·9
·2	3·8
·3	5·7
·4	7·6
·5	9·5
·6	11·3
·7	13·2
·8	15·1
·9	17·0
·01	0·2
·02	0·4
·03	0·6
·04	0·8
·05	1·0
·06	1·1
·07	1·3
·08	1·5
·09	1·7

Reading of Thermometer. Dry.	Wet.	Temperature of the Dew-Point.	Difference for an increase of 1° in Dry.	Elastic force of Vapour.	Difference for an increase of 1° in Dry.	Vapour in a Cubic Foot of Air.	Difference for an increase of 1° in Dry.	Vap. reqd. to sat. a Cubic Foot of Air.	Difference for an increase of 1° in Dry.	Degree of Humidity. (Satn.=100.)	Difference for an increase of 1° in Dry.	Weight of a Cubic Foot of Air. Bar. reading 29 inches.	Diff. for an increase of 1° in Dry / 1 in. in Bar.
°	°	°	°	in.	in.	gr.	gr.	gr.	gr.			grs.	grs.
34	34·0	34·0	−1·6	0·196	−·012	2·3	−0·2	0·0	+0·3	100	−10	544·4	−1·1
	33·8	33·5	1·6	0·192	·012	2·3	0·2	0·0	0·3	98	10	·4	
	33·6	32·9	1·5	0·188	·012	2·2	0·2	0·1	0·3	96	10	·4	+18·8
	33·4	32·3	1·5	0·184	·012	2·2	0·2	0·1	0·3	93	9	·5	
	33·2	31·8	1·5	0·180	·012	2·1	0·2	0·2	0·3	91	9	·5	
	33·0	31·2	1·4	0·176	·012	2·1	0·1	0·2	0·2	89	9	·5	
	32·8	30·7	1·4	0·172	·011	2·0	0·1	0·3	0·2	87	8	·6	
	32·6	30·1	1·4	0·168	·011	2·0	0·1	0·3	0·2	85	8	·6	
	32·4	29·6	1·3	0·164	·010	1·9	0·1	0·4	0·2	83	8	·6	
	32·2	29·0	1·3	0·160	·009	1·9	0·1	0·4	0·2	81	7	·6	
	32·0	28·5	1·3	0·156	·008	1·8	0·1	0·5	0·2	79	7	·7	
	31·8	27·9	1·2	0·152	·008	1·8	0·1	0·5	0·2	78	7	·7	
	31·6	27·4	1.2	0·148	·008	1·8	0·1	0·5	0·2	76	7	·7	
	31·4	26·8	1·2	0·145	·008	1·7	0·1	0·6	0·2	74	6	·7	
	31·2	26·2	−1·1	0·142	−·008	1·7	−0·0	0·6	+0·1	73	−6	544·8	
35	35·0	35·0	−1·5	0·204	−·011	2·4	−0·2	0·0	+0·3	100	−10	543·3	−1·1
	34·8	34·5	1·5	0·200	·011	2·3	0·2	0·1	0·3	98	9	·3	+18·7
	34·6	34·0	1·5	0·196	·010	2·3	0·2	0·1	0·3	96	9	·4	
	34·4	33·4	1·5	0·192	·010	2·2	0·2	0·2	0·3	94	9	·4	
	34·2	32·9	1·4	0·188	·010	2·2	0·2	0·2	0·3	92	8	·4	
	34·0	32·4	1·4	0·184	·009	2·1	0·1	0·3	0·2	90	8	·4	
	33·8	31·9	1·4	0·180	·009	2·1	0·1	0·3	0·2	88	8	·5	
	33·6	31·4	1·4	0·176	·008	2·1	0·1	0·3	0·2	86	8	·5	
	33·4	30·8	1·4	0·172	·008	2·0	0·1	0·4	0·2	84	7	·5	
	33·2	30·3	1·3	0·168	·007	2·0	0·1	0·4	0·2	82	7	·5	
	33·0	29·8	1·3	0·164	·006	1·9	0·1	0·5	0·2	80	7	·6	
	32·8	29·3	1·3	0·160	·006	1·9	0·1	0·5	0·2	79	7	·6	
	32·6	28·8	1·3	0·157	·006	1·9	0·1	0·5	0·2	77	6	·6	
	32·4	28·2	1·2	0·154	·006	1·8	0·1	0·6	0·2	75	6	·6	
	32·2	27·7	1·2	0·151	·006	1·8	0·0	0 6	0·1	74	6	·7	
	32·0	27·2	−1·2	0·148	−·006	1·7	−0·0	0·7	+0·1	72	−6	543·7	
36	36	36·0	−1·4	0·212	−·012	2·5	−0·1	0·0	+0·2	100	−9	542·1	−1·1
	35	33·5	1·3	0·193	·011	2·2	0·1	0·3	0·2	91	8	·2	
	34	31·0	1·3	0·175	·010	2·0	0·1	0·5	0·2	82	7	·4	+18·7
	33	28·5	1·2	0·158	·009	1·8	0·1	0·7	0·2	74	6	·5	
	32	26·0	1·1	0·142	·008	1·7	0·1	0·8	0·2	66	5	·6	
	31	23·5	1·0	0·127	·007	1·5	0·1	1·0	0·2	59	5	·7	
	30	21·0	0·9	0·113	·006	1·3	0·1	1·2	0·2	53	4	·8	
	29	18·5	0·9	0·101	·005	1·2	0·1	1·3	0·2	47	4	542·9	
	28	16·0	−0·8	0·090	−·004	1·1	−0·1	1·4	+0·2	42	−3	543·0	
37	37	37·0	−1·4	0·220	−·012	2·6	−0·1	0·0	+0·2	100	−9	540·9	−1·1
	36	34·6	1·3	0·200	·010	2·3	0·1	0·3	0·2	91	8	541·0	
	35	32·2	1·3	0·182	·009	2·1	0·1	0·5	0·2	83	7	·2	+18·7
	34	29·7	1·2	0·165	·008	1·9	0·1	0·7	0·2	75	6	·3	
	33	27·3	1·1	0·149	·007	1·7	0·1	0·9	0·2	68	6	·4	
	32	24·9	1·1	0·134	·006	1·6	0·1	1·0	0·2	61	5	·5	
	31	22·5	1·0	0·120	·005	1·4	0·1	1·2	0·2	55	5	·6	
	30	20·1	0·9	0·107	·004	1·3	0·1	1·3	0·2	49	4	·7	
	29	17·6	0·8	0·096	·004	1·1	0·0	1·5	0·1	44	3	·8	
	28	15·2	−0·8	0·086	−·003	1·0	−0·0	1·6	+0·1	39	−2	541·8	
38	38	38·0	−1·3	0·228	−·010	2·7	−0·1	0·0	+0·2	100	−8	539·8	−1·1
	37	35·6	1·3	0·208	·009	2·4	0·1	0·3	0·2	91	7	540·0	
	36	33·3	1·3	0·190	·009	2·2	0·1	0·5	0·2	83	6	·1	+18·6
	35	30·9	1·2	0·173	·009	2·0	0·1	0·7	0·2	75	6	·2	
	34	28·6	1·2	0·157	·008	1·8	0·1	0·9	0·2	68	5	·3	
	33	26 2	1·1	0·142	·007	1·7	0·1	1·0	0·2	62	5	·4	
	32	23·8	1·1	0·128	·006	1·5	0·1	1·2	0·2	56	4	·5	
	31	21·5	1·0	0·115	·005	1·3	0·0	1·4	0·1	50	4	·6	
	30	19·1	1·0	0·103	·004	1·2	0·0	1·5	0·1	45	3	·7	
	29	16·8	1·0	0·092	·003	1·1	0·0	1·6	0·1	41	3	·8	
	28	14·4	−0·9	0·083	−·003	1·0	−0·0	1·7	+0·1	37	−3	540·8	

Difference for one inch in Barometer and proportional parts.

18·8 in.	grs.
·1	1·9
·2	3·8
·3	5·6
·4	7·5
·5	9·4
·6	11·3
·7	13·2
·8	15·0
·9	16·9

18·7	
·1	1·9
·2	3·8
·3	5·6
·4	7·5
·5	9·4
·6	11·2
·7	13·1
·8	15·0
·9	16·8

·01	0·2
·02	0·4
·03	0·6
·04	0·7
·05	0·9
·06	1·1
·07	1·3
·08	1·5
·09	1·7

Reading of Thermometer.		Temperature of the Dew-Point.	Difference for an increase of 1° in Dry.	Elastic force of Vapour.	Difference for an increase of 1° in Dry.	Vapour in a Cubic Foot of Air.	Difference for an increase of 1° in Dry.	Vap. reqd. to sat. a Cubic Foot of Air.	Difference for an increase of 1° in Dry.	Degree of Humidity. (Satn. = 100.)	Difference for an increase of 1° in Dry.	Weight of a Cubic Foot of Air. Bar. reading 29 inches.	Diff. for an increase of 1° in Dry / of 1 in. in Bar.	Difference for one inch in Barometer and proportional parts.	
Dry.	Wet.														
°	°	°	°	in.	in.	gr.	gr.	gr.	gr.			grs.	grs.		
39	39	39·0	−1·3	0·238	−·012	2·8	−0·1	0·0	+0·2	100	− 8	538·6	− 1·1	18·6	
	38	36·7	1·3	0·218	·011	2·5	0·1	0·3	0·2	92	8	·8		in.	grs.
	37	34·4	1·3	0·199	·010	2·3	0·1	0·5	0·2	84	8	538·9	+18·6	·1	1·9
	36	32·0	1·2	0·181	·009	2·1	0·1	0·7	0·2	77	7	539·0		·2	3·7
	35	29·7	1·2	0·164	·008	1·9	0·1	0·9	0·2	70	7	·1		·3	5·6
	34	27·4	1·1	0·149	·007	1·7	0·1	1·1	0·2	63	6	·2		·4	7·4
	33	25·1	1·1	0·135	·006	1·6	0·1	1·2	0·2	57	6	·3		·5	9·3
	32	22·8	1·1	0·122	·005	1·4	0·1	1·4	0·2	52	5	·4		·6	11·2
	31	20·4	1·0	0·110	·004	1·3	0·1	1·5	0·2	47	5	·5		·7	13·0
	30	18·1	1·0	0·099	·003	1·2	0·1	1·6	0·2	42	4	·6		·8	14·9
	29	15·8	1·0	0·089	·002	1·0	0·0	1·8	0·1	38	4	·7		·9	16·7
	28	13·5	−1·0	0·080	−·002	0·9	−0·0	1·9	+0·1	34	− 3	539·7			
40	40	40·0	−1·2	0·247	−·012	2·9	−0·1	0·0	+0·2	100	− 8	537·5	− 1·1		
	39	37·7	1·2	0·226	·011	2·6	0·1	0·3	0·2	92	8	·7			
	38	35·4	1·2	0·207	·010	2·4	0·1	0·5	0·2	84	7	537·8	+18·5		
	37	33·1	1·1	0·189	·009	2·2	0·1	0·7	0·2	76	6	538·0			
	36	30·8	1·1	0·172	·008	2·0	0·1	0·9	0·2	69	5	·1			
	35	28·5	1·1	0·156	·007	1·8	0·1	1·1	0·2	63	5	·2			
	34	26·3	1·1	0·142	·007	1·6	0·1	1·3	0·2	57	4	·3			
	33	24·0	1·1	0·129	·007	1·5	0·1	1·4	0·2	51	4	·4			
	32	21·7	1·0	0·117	·007	1·4	0·1	1·5	0·2	46	3	·5			
	31	19·4	1·0	0·106	·007	1·2	0·1	1·7	0·2	42	3	·5			
	30	17·1	1·0	0·096	007	1·1	0·1	1·8	0·2	38	3	·6			
	29	14·8	0·9	0·087	·007	1·0	0·1	1·9	0·2	34	3	·7			
	28	12·5	−0·9	0·078	−·006	0·9	−0·0	2·0	+0·1	31	− 2	538·7			
41	41	41·0	−1·2	0·257	−·012	3·0	−0·1	0·0	+0·2	100	− 8	536·4	− 1·1		
	40	38·7	1·2	0·235	·010	2·7	0·1	0·3	0·2	92	7	·5			
	39	36·5	1·2	0·215	·008	2·5	0·1	0·5	0·2	84	6	·7	+18·5	18·5	
	38	34·2	1·1	0·197	·007	2·3	0·1	0·7	0·2	77	5	·8		·1	1·9
	37	32·0	1·1	0·180	·006	2·1	0·1	0·9	0·2	70	5	536·9		·2	3·7
	36	29·7	1·1	0·164	·005	1·9	0·1	1·1	0·2	64	4	537·0		·3	5·6
	35	27·4	1·0	0·149	·005	1·7	0·1	1·3	0·2	58	4	·1		·4	7·4
	34	25·2	1·0	0·135	·005	1·6	0·1	1·4	0·2	53	4	·2		·5	9·3
	33	22·9	1·0	0·122	·005	1·4	0·1	1·6	0·2	48	3	·3		·6	11·1
	32	20·7	1·0	0·110	·004	1·3	0·1	1·7	0·2	43	3	·4		·7	13·0
	31	18·4	0·9	0·099	·003	1·2	0·1	1·8	0·2	39	3	·5		·8	14·8
	30	16·1	0·9	0·089	·002	1·0	0·0	2·0	0·1	35	2	·5		·9	16·7
	29	13·9	0·9	0·080	·002	0·9	0·0	2·1	0·1	31	2	·6			
	28	11·6	−0·8	0·072	−·002	0·9	−0·0	2·1	+0·1	28	− 2	537·7			
42	42	42·0	−1·2	0·267	−·012	3·1	−0·1	0·0	+0·2	100	− 8	535·2	− 1·1		
	41	39·8	1·2	0·245	·011	2·8	0·1	0·3	0·2	92	8	·3			
	40	37·5	1·1	0·225	·010	2·6	0·1	0·5	0·2	85	7	·5	+18·5		
	39	35·3	1·1	0·207	·010	2·4	0·1	0·7	0·2	78	7	·6			
	38	33·1	1·1	0·190	·009	2·2	0·1	0·9	0·2	72	6	·7			
	37	30·9	1·1	0·174	·008	2·0	0·1	1·1	0·2	66	6	·8			
	36	28·6	1·0	0·159	·007	1·8	0·1	1·3	0·2	60	5	535·9			
	35	26·4	1·0	0·144	·006	1·7	0·1	1·4	0·2	54	5	536·0			
	34	24·2	1·0	0·130	·005	1·5	0·1	1·6	0·2	49	4	·1			
	33	21·9	0·9	0·117	·004	1·4	0·1	1·7	0·2	44	4	·2			
	32	19·7	0·9	0·106	·004	1·2	0·0	1·9	0·1	40	3	·3			
	31	17·5	0·9	0·096	·004	1·1	0·0	2·0	0·1	36	2	·4			
	30	15·2	0·8	0·087	·004	1·0	0·0	2·1	0·1	33	2	·5			
	29	13·0	0·8	0·078	·004	0·9	0·0	2·2	0·1	30	2	·5		·01	0·2
	28	10·8	−0·8	0·070	−·004	0·8	−0·0	2·3	+0·1	27	− 2	536·6		·02	0·4
														·03	0·6
43	43	43·0	−1·2	0·277	−·012	3·2	−0·1	0·0	+0·2	100	− 8	534·1	− 1·1	·04	0·7
	42	40·8	1·2	0·255	·011	2·9	0·1	0·3	0·2	92	8	·3		·05	0·9
	41	38·6	1·1	0·234	·010	2·7	0·1	0·5	0·2	84	7	·4	+18·4	·06	1·1
	40	36·4	1·1	0·215	·010	2·5	0·1	0·7	0·2	78	7	·5		·07	1·3
	39	34·2	1·1	0·197	·009	2·3	0·1	0·9	0·2	71	6	·7		·08	1·5
	38	32·0	−1·1	0·181	−·009	2·1	−0·1	1·1	+0·2	65	− 6	534·8		·09	1·7

Reading of Thermometer. Dry.	Wet.	Temperature of the Dew-Point.	Difference for an increase of 1° in Dry.	Elastic force of Vapour.	Difference for an increase of 1° in Dry.	Vapour in a Cubic Foot of Air.	Difference for an increase of 1° in Dry.	Vap. reqd. to sat. a Cubic Foot of Air.	Difference for an increase of 1° in Dry.	Degree of Humidity. (Satn. = 100.)	Difference for an increase of 1° in Dry.	Weight of a Cubic Foot of Air. Bar. reading 29 inches.	Diff. for an increase of 1° in Dry / 1 in. in Bar.	Difference for one inch in Barometer and proportional parts.
°	°	°	°	in.	in.	gr.	gr.	gr.	gr.			grs.	grs.	
43	38	32·0	−1·1	0·181	−·009	2·1	−0·1	1·1	+0·2	65	− 6	534·8	− 1·1	18·4
	37	29·8	1·1	0·166	·009	1·9	0·1	1·3	0·..	59	5	534·9		in. gr.
	36	27·6	1·0	0·152	·009	1·7	0·1	1·5	0·2	54	5	535·0	+18·4	·1 1·8
	35	25·4	1·0	0·138	·008	1·6	0·1	1·6	0·2	49	4	·1		·2 3·7
	34	23·2	1·0	0·125	·007	1·4	0·1	1·8	0·2	45	4	·2		·3 5·5
	33	21·0	1·0	0·113	·006	1·3	0·1	1·9	0·2	41	4	·3		·4 7·4
	32	18·8	1·0	0·102	·005	1·2	0·1	2·0	0·2	37	3	·3		·5 9·2
	31	16·6	0·9	0·092	·004	1·1	0·1	2·1	0·2	34	3	·4		·6 11·0
	30	14·4	0·9	0·083	·003	1·0	0·1	2·2	0·2	31	3	·5		·7 12·9
	29	12·2	−0·9	0·074	−·003	0·9	−0·1	2·3	+0·2	28	− 3	535·5		·8 14·7
														·9 16·6
44	44	44·0	−1·2	0·288	−·013	3·3	−0·1	0·0	+0·2	100	− 8	533·0	− 1·0	
	43	41·8	1·1	0·265	·012	3·0	0·1	0·3	0·2	92	7	·1		
	42	39·6	1·1	0·244	·011	2·8	0·1	0·5	0·2	84	6	·3	+18·4	
	41	37·5	1·1	0·224	·010	2·6	0·1	0·7	0·2	77	6	·4		
	40	35·3	1·1	0·205	·008	2·4	0·1	0·9	0·2	71	5	·5		
	39	33·1	1·1	0·188	·007	2·2	0·1	1·2	0·2	65	5	·6		
	38	30·9	1·0	0·172	·006	2·0	0·1	1·3	0·2	59	4	·7		
	37	28·7	1·0	0·157	·005	1·8	0·1	1·5	0·2	54	4	·8		
	36	26·6	1·0	0·143	·004	1·7	0·1	1·6	0·2	49	4	533·9		
	35	24·4	1·0	0·130	·003	1·5	0·1	1·8	0·2	45	3	534·0		
	34	22·2	1·0	0·118	·003	1·4	0·1	1·9	0·2	41	3	·1		
	33	20·0	0·9	0·107	·003	1·2	0·0	2·1	0·1	37	3	·2		
	32	17·8	0·9	0·097	·003	1·1	0·0	2·2	0·1	34	3	·3		
	31	15·7	0·9	0·088	·003	1·0	0·0	2·3	0·1	31	3	·3		
	30	13·5	−0·9	0·080	−·002	0·9	−0·0	2·4	0·1	28	− 3	534·4		
45	45	45·0	−1·1	0·299	−·013	3·4	−0·1	0·0	+0·3	100	− 7	531·9	− 1·0	18·3
	44	42·8	1·1	0·275	·011	3·1	0·1	0·3	0·3	92	7	532·1		·1 1·8
	43	40·7	1·1	0·253	·009	2·9	0·1	0·5	0·3	85	6	·2	+18·3	·2 3·7
	42	38·5	1·1	0·233	·008	2·7	0·1	0·7	0·3	78	6	·3		·3 5·5
	41	36·4	1·1	0·214	·007	2·5	0·1	0·9	0·3	72	5	·5		·4 7·3
	40	34·2	1·0	0·197	·007	2·3	0·1	1·1	0·3	66	5	·6		·5 9·1
	39	32·0	1·0	0·181	·007	2·1	0·1	1·3	0·3	60	4	·7		·6 11·0
	38	29·9	1·0	0·166	·007	1·9	0·1	1·5	0·3	55	4	·8		·7 12·8
	37	27·7	1·0	0·152	·007	1·7	0·1	1·7	0·3	50	4	532·9		·8 14·6
	36	25·6	1·0	0·139	·007	1·6	0·1	1·8	0·3	46	3	533·0		·9 16·5
	35	23·4	0·9	0·127	·007	1·4	0·0	2·0	0·2	42	3	·1		
	34	21·2	0·9	0·115	·006	1·3	0·0	2·1	0·2	38	3	·2		
	33	19·1	0·9	0·104	·005	1·2	0·0	2·2	0·2	34	3	·2		
	32	16·9	0·9	0·094	·004	1·1	0·0	2·3	0·1	31	3	·3		
	31	14·8	−0·9	0·085	−·003	1·0	−0·0	2·4	+0·1	28	− 3	533·4		
46	46	46·0	−1·1	0·311	−·013	3·6	−0·2	0·0	+0·3	100	− 7	530·7	− 1·0	
	45	43·9	1·1	0·287	·012	3·3	0·2	0·3	0·3	93	7	530·9		
	44	41·7	1·1	0·265	·012	3·1	0·2	0·5	0·3	86	7	531·0	+18·3	
	43	39·6	1·1	0·244	·011	2·8	0·1	0·8	0·2	79	6	·2		
	42	37·4	1·0	0·225	·011	2·6	0·1	1·0	0·2	73	6	·3		
	41	35·3	1·0	0·207	·010	2·4	0·1	1·2	0·2	67	5	·4		
	40	33·2	1·0	0·190	·009	2·2	0·1	1·4	0·2	61	5	·5		
	39	31·0	1·0	0·174	·008	2·0	0·1	1·6	0·2	56	4	·6		
	38	28·9	1·	0·159	·007	1·8	0·1	1·8	0·2	51	4	·8		
	37	26·7	0·9	0·145	·006	1·7	0·1	1·9	0·2	47	4	531·9		
	36	24·6	0·9	0·132	·005	1·5	0·1	2·1	0·2	43	3	532·0		
	35	22·5	0·9	0·120	·004	1·4	0·1	2·2	0·2	39	3	·0		
	34	20·3	0·9	0·109	·004	1·3	0·1	2·3	0·2	35	3	·1		·01 0·2
	33	18·2	0·9	0·099	·004	1·1	0·0	2·5	0·1	32	3	·2		·02 0·4
	32	16·0	−0·8	0·090	−·003	1·0	−0·0	2·6	+0·1	29	− 3	532·2		·03 0·6
														·04 0·7
47	47	47·0	−1·1	0·323	−·014	3·7	−0·2	0·0	+0·3	100	− 7	529·6	− 1·0	·05 0·9
	46	44·9	1·1	0·298	·013	3·4	0·2	0·3	0·3	93	7	·7		·06 1·1
	45	42·8	1·1	0·275	·012	3·2	0·2	0·5	0·3	86	6	529·9	+18·3	·07 1·3
	44	40·6	1·0	0·253	·010	2·9	0·1	0·8	0·2	79	6	530·0		·08 1·5
	43	38·5	−1·0	0·233	−·009	2·7	−0·1	1·0	+0·2	73	− 5	530·1		·09 1·7

Reading of Thermometer. Dry.	Reading of Thermometer. Wet.	Temperature of the Dew-point.	Difference for an increase of 1° in Dry.	Elastic force of Vapour.	Difference for an increase of 1° in Dry.	Vapour in a Cubic Foot of Air.	Difference for an increase of 1° in Dry.	Vap. reqd. to sat. a Cubic Foot of Air.	Difference for an increase of 1° in Dry.	Degree of Humidity. (Satn. = 100.)	Difference for an increase of 1° in Dry.	Weight of a Cubic Foot of Air. Bar. reading 29 inches.	Diff. for an increase of $\frac{1° \text{ in Dry}}{1 \text{ in. in Bar.}}$	Difference for one inch in Barometer and proportional parts.
°	°	°	°	in.	in.	gr.	gr.	gr.	gr.			grs.	grs.	
47	43	38·5	−1·0	0·233	−·009	2·7	−0·1	1·0	+0·2	73	−5	530·1	−1·0	18·2
	42	36·4	1·0	0·214	·008	2·5	0·1	1·2	0·2	67	5	·3		in. grs.
	41	34·3	1·0	0·197	·008	2·3	0·1	1·4	0·2	61	5	·4	+18·3	·1 1·8
	40	32·2	1·0	0·181	·008	2·1	0·1	1·6	0·2	56	4	·5		·2 3·6
	39	30·0	0·9	0·166	·007	1·9	0·1	1·8	0·2	51	4	·6		·3 5·5
	38	27·9	0·9	0·152	·006	1·7	0·1	2·0	0·2	47	3	·7		·4 7·3
	37	25·8	0·9	0·139	·005	1·6	0·1	2·1	0·2	43	3	·8		·5 9·1
	36	23·7	0·9	0·127	·005	1·5	0·1	2·2	0·2	39	3	530·9		·6 10·9
	35	21·6	0·9	0·116	·005	1·3	0·0	2·4	0·1	36	3	531·0		·7 12·7
	34	19·4	0·8	0·105	·004	1·2	0·0	2·5	0·1	33	2	·0		·8 14·6
	33	17·3	−0·8	0·095	−·004	1·1	−0·0	2·6	+0·1	30	−2	531·1		·9 16·4
48	48	48·0	−1·1	0·335	−·013	3·8	−0·2	0·0	+0·3	100	−7	528·5	−1·0	
	47	45·9	1·1	0·309	·011	3·5	0·2	0·3	0·3	93	7	·7		
	46	43·8	1·0	0·285	·009	3·3	0·2	0·5	0·3	86	7	528·8	+18·2	
	45	41·7	1·0	0·263	·008	3·0	0·1	0·8	0·3	79	6	530·0		
	44	39·6	1·0	0·243	·008	2·8	0·1	1·0	0·3	73	6	·1		
	43	37·5	1·0	0·224	·007	2·6	0·1	1·2	0·3	67	5	·2		
	42	35·4	1·0	0·206	·006	2·4	0·1	1·4	0·3	62	5	·4		
	41	33·3	0·9	0·189	·005	2·2	0·1	1·6	0·3	57	4	·5		
	40	31·2	0·9	0·173	·004	2·0	0·1	1·8	0·3	52	4	·6		
	39	29·1	0·9	0·159	·004	1·8	0·1	2·0	0·2	48	3	·7		
	38	27·0	0·9	0·146	·004	1·7	0·1	2·1	0·2	44	3	·8		
	37	24·9	0·9	0·134	·004	1·5	0·1	2·3	0·2	40	3	·9		
	36	22·8	0·8	0·122	·004	1·4	0·1	2·4	0·2	36	2	530·9		
	35	20·7	0·8	0·111	·004	1·3	0·0	2·5	0·2	33	2	531·0		
	34	18·6	−0·8	0·101	−·004	1·2	−0·0	2·6	+0·2	30	−2	531·1		
49	49	49·0	−1·1	0·348	−·014	4·0	−0·2	0·0	+0·3	100	−7	527·3	−1·0	
	48	46·9	1·0	0·322	·013	3·7	0·2	0·3	0·3	93	7	·5		
	47	44·8	1·0	0·298	·012	3·4	0·1	0·6	0·2	86	6	·7	+18·2	
	46	42·8	1·0	0·276	·011	3·1	0·1	0·9	0·2	79	6	527·8		
	45	40·7	1·0	0·255	·010	2·9	0·1	1·1	0·2	73	5	528·0		
	44	38·6	1·0	0·235	·009	2·7	0·1	1·3	0·2	67	5	·1		
	43	36·5	0·9	0·217	·009	2·5	0·1	1·5	0·2	62	4	·2		
	42	34·4	0·9	0·200	·009	2·3	0·1	1·7	0·2	57	4	·3		
	41	32·4	0·9	0·184	·008	2·1	0·1	1·9	0·2	53	4	·4		
	40	30·3	0·9	0·169	·007	1·9	0·1	2·1	0·2	49	4	·5		
	39	28·2	0·9	0·155	·006	1·8	0·1	2·2	0·2	45	3	·6		
	38	26·1	0·8	0·142	·006	1·6	0·1	2·4	0·2	41	3	·7		
	37	24·0	0·8	0·130	·006	1·5	0·1	2·5	0·2	37	3	·8		
	36	22·0	0·8	0·118	·005	1·3	0·0	2·7	0·1	34	2	528·9		
	35	19·9	0·8	0·107	·004	1·2	0·0	2·8	0·1	31	2	529·0		
	34	17·8	−0·8	0·097	−·003	1·1	−0·0	2·9	+0·1	28	−2	529·0		
50	50	50·0	−1·0	0·361	−·013	4·1	−0·2	0·0	+0·3	100	−7	526·2	−1·0	
	49	47·9	1·0	0·334	·012	3·8	0·2	0·3	0·3	93	7	·3		
	48	45·9	1·0	0·309	·011	3·5	0·1	0·6	0·2	86	6	·5	+18·2	
	47	43·8	1·0	0·286	·010	3·3	0·1	0·8	0·2	80	6	·7		
	46	41·8	1·0	0·265	·010	3·0	0·1	1·1	0·2	74	5	526·8		
	45	39·7	0·9	0·245	·009	2·8	0·1	1·3	0·2	68	5	527·0		
	44	37·6	0·9	0·226	·008	2·6	0·1	1·5	0·2	63	5	·1		
	43	35·6	0·9	0·208	·007	2·4	0·1	1·7	0·2	58	4	·2		
	42	33·5	0·9	0·191	·006	2·2	0·1	1·9	0·2	53	4	·3		·01 0·2
	41	31·5	0·9	0·176	·006	2·0	0·1	2·1	0·2	49	3	·4		·02 0·4
	40	29·4	0·8	0·162	·006	1·8	0·1	2·3	0·2	45	3	·5		·03 0·6
	39	2,·3	0·8	0·149	·006	1·7	0·1	2·4	0·2	41	3	·6		·04 0·7
	38	25·3	0·8	0·136	·005	1·5	0·1	2·6	0·2	37	2	·7		·05 0·9
	37	23·2	0·8	0·124	·004	1·4	0·1	2·7	0·2	34	2	·8		·06 1·1
	36	21·2	0·8	0·113	·003	1·3	0·0	2·8	0·1	31	2	·9		·07 1·3
	35	19·1	0·7	0·103	·003	1·2	0·0	2·9	0·1	29	2	527·9		·08 1·5
	34	17·0	−0·7	0·094	−·003	1·1	−0·0	3·0	+0·1	27	−2	528·0		·09 1·7

Reading of Thermometer. Dry.	Wet.	Temperature of the Dew-Point.	Difference for an increase of 1° in Dry.	Elastic force of Vapour.	Difference for an increase of 1° in Dry.	Vapour in a Cubic Foot of Air.	Difference for an increase of 1° in Dry.	Vap. reqd. to sat. a Cubic Foot of Air.	Difference for an increase of 1° in Dry.	Degree of Humidity. (Satn. = 100.)	Difference for an increase of 1° in Dry.	Weight of a Cubic Foot of Air. Bar. reading 29 inches.	Diff. for an increase of 1° in Dry / 1 in. in Bar.	Difference for one inch in Barometer and proportional parts.	
°	°	°	°	in.	in.	gr.	gr.	gr.	gr.			grs.	grs.		
51	51	51·0	−1·0	0·374	−·013	4·2	−0·1	0·0	+0·3	100	− 7	525·1	− 1·0	18·1	
	50	49·0	1·0	0·348	·013	3·9	0·1	0·3	0·3	93	7	·3		in.	grs.
	49	46·9	0·9	0·323	·012	3·6	0·1	0·6	0·3	86	6	·5	+18·1	·1	1·8
	48	44·9	0·9	0·299	·011	3·4	0·1	0·8	0·3	80	6	·6		·2	3·6
	47	42·8	0·9	0·276	·010	3·1	0·1	1·1	0·3	74	5	·8		·3	5·4
	46	40·8	0·9	0·255	·009	2·9	0·1	1·3	0·3	68	5	525·9		·4	7·2
	45	38·8	0·9	0·236	·009	2·7	0·1	1·5	0·3	63	4	526·0		·5	9·1
	44	36·7	0·8	0·218	·008	2·5	0·1	1·7	0·3	58	4	·2		·6	10·9
	43	34·7	0·8	0·201	·007	2·3	0·1	1·9	0·3	54	4	·3		·7	12·7
	42	32·6	0·8	0·185	·006	2·1	0·1	2·1	0·3	50	3	·4		·8	14·5
	41	30·6	0·8	0·170	·005	1·9	0·1	2·3	0·3	46	3	·5		·9	16·3
	40	28·6	0·8	0·156	·004	1·8	0·1	2·4	0·3	42	3	·6			
	39	26·5	0·8	0·143	·004	1·6	0·1	2·6	0·3	38	3	·7			
	38	24·5	0·8	0·131	·004	1·5	0·1	2·7	0·3	35	2	·8			
	37	22·4	0·7	0·120	·004	1·4	0·1	2·8	0·3	32	2	·8			
	36	20·4	0·7	0·110	·004	1·2	0·0	3·0	0·2	29	2	526·9			
	35	18·4	0·7	0·100	·003	1·1	0·0	3·1	0·2	27	2	527·0			
	34	16·3	−0·7	0·091	−·003	1·0	−0·0	3·2	+0·2	25	− 2	527·0			
52	52	52·0	−1·0	0·388	−·014	4·4	−0·2	0·0	+0·3	100	− 7	524·0	− 1·0		
	51	50·0	1·0	0·361	·013	4·1	0·2	0·3	0·3	93	6	·2			
	50	48·0	1·0	0·335	·012	3·8	0·2	0·6	0·3	86	6	·4	+18·1		
	49	45·9	0·9	0·310	·011	3·5	0·1	0·9	0·3	80	5	·6			
	48	43·9	0·9	0·287	·010	3·3	0·1	1·1	0·3	74	5	·7			
	47	41·9	0·9	0·266	·009	3·0	0·1	1·4	0·2	69	5	524·9			
	46	39·9	0·9	0·246	·008	2·8	0·1	1·6	0·2	64	4	5··5·0			
	45	37·9	0·9	0·227	·007	2·6	0·1	1·8	0·2	59	4	·1			
	44	35·9	0·9	0·210	·007	2·4	0·1	2·0	0·2	54	4	·3		18·0	
	43	33·8	0·8	0·194	·006	2·2	0·1	2·2	0·2	50	3	·4		·1	1·8
	42	31·8	0·8	0·179	·005	2·0	0·1	2·4	0·2	46	3	·5		·2	3·6
	41	29·8	0·8	0·165	·005	1·9	0·1	2·5	0·2	42	3	·6		·3	5·4
	40	27·8	0·8	0·152	·005	1·7	0·1	2·7	0·2	39	3	·7		·4	7·2
	39	25·7	0·7	0·139	·004	1·6	0·1	2·8	0·2	36	2	·7		·5	9·0
	38	23·7	0·7	0·127	·003	1·4	0·0	3·0	0·2	33	2	·8		·6	10·8
	37	21·7	0·7	0·116	·003	1·3	0·0	3·1	0·1	30	2	525·9		·7	12·6
	36	19·7	0·7	0·106	·003	1·2	0·0	3·2	0·1	27	2	526·0		·8	14·4
	35	17·7	−0·7	0·097	−·003	1·1	−0·0	3·3	+0·1	25	− 2	526·0		·9	16·2
53	53	53·0	−1·0	0·403	−·015	4·5	−0·1	0·0	+0·3	100	− 7	522·9	− 1·0		
	52	51·0	1·0	0·374	·014	4·2	0·1	0·3	0·3	93	7	523·1			
	51	49·0	0·9	0·347	·013	3·9	0·1	0·6	0·3	86	6	·3	+18·0		
	50	47·0	0·9	0·322	·012	3·6	0·1	0·9	0·3	80	6	·4			
	49	45·0	0·9	0·299	·011	3·4	0·1	1·1	0·3	74	5	·6			
	48	43·0	0·9	0·277	·010	3·1	0·1	1·4	0·3	69	5	·7			
	47	41·0	0·9	0·257	·009	2·9	0·1	1·6	0·3	64	5	523·9			
	46	39·0	0·8	0·238	·008	2·7	0·1	1·8	0·3	59	4	524·0			
	45	37·0	0·8	0·220	·007	2·5	0·1	2·0	0·3	55	4	·1			
	44	35·0	0·8	0·203	·006	2·3	0·1	2·2	0·3	51	4	·2			
	43	33·0	0·8	0·188	·006	2·1	0·1	2·4	0·3	47	3	·3			
	42	31·0	0·8	0·174	·006	2·0	0·1	2·5	0·3	43	3	·4			
	41	29·0	0·7	0·160	·005	1·8	0·1	2·7	0·3	39	3	·5			
	40	27·0	0·7	0·147	.005	1·7	0·1	2·8	0·3	36	3	·6			
	39	25·0	0·7	0·135	·005	1·5	0·0	3·0	0·2	33	2	·7			
	38	23·0	0·7	0·124	·005	1·4	0·0	3·1	0·2	30	2	·8			
	37	21·0	0·7	0·113	·004	1·3	0·0	3·2	0·2	28	2	·9			
	36	19·0	−0·7	0·103	−·004	1·2	−0·0	3·3	+0·2	26	− 2	524·9		·01	0·2
														·02	0·4
54	54	54·0	−1·0	0·418	−·015	4·7	−0·2	0·0	+0·4	100	− 7	521·8	− 1·0	·03	0·5
	53	52·0	1·0	0·388	·013	4·4	0·2	0·3	0·4	93	7	522·0		·04	0·7
	52	50·0	0·9	0·360	·012	4·1	0·2	0·6	0·4	86	6	·1	+18·0	·05	0·9
	51	48·1	0·9	0·334	·011	3·8	0·1	0·9	0·3	80	6	·3		·06	1·1
	50	46·1	0·9	0·310	·009	3·5	0·1	1·2	0·3	74	5	·5		·07	1·3
	49	44·1	0·9	0·288	·008	3·3	0·1	1·4	0·3	69	5	·6		·08	1·5
	48	42·1	−0·8	·0267	−·007	3·0	−0·1	1·7	+0·3	64	− 4	522·7		·09	1·6

Reading of Thermometer. Dry.	Wet.	Temperature of the Dew-Point.	Difference for an increase of 1° in Dry.	Elastic force of Vapour.	Difference for an increase of 1° in Dry.	Vapour in a Cubic Foot of Air.	Difference for an increase of 1° in Dry.	Vap. reqd. to sat. a Cubic Foot of Air.	Difference for an increase of 1° in Dry.	Degree of Humidity. (Satn.=100.)	Difference for an increase of 1° in Dry.	Weight of a Cubic Foot of Air. Bar. reading 29 inches.	Diff. for an increase of $\frac{1° \text{ in Dry}}{1 \text{ in. in Bar.}}$.	Difference for one inch in Barometer and proportional parts.	
°	°	°	°	in.	in.	gr.	gr.	gr.	gr.			grs.	grs.		
54	48	42·1	−0·8	0·267	−·007	3·0	−0·1	1·7	+0·3	64	− 4	522·7	− 1·0	18·0	
	47	40·1	0·8	0·248	·007	2·8	0·1	1·9	0·3	59	4	522·9		in.	grs.
	46	38·2	0·8	0·230	·007	2·6	0·1	2·1	0·3	55	3	523·0	+18·0	·1	1·8
	45	36·2	0·8	0·213	·007	2·4	0·1	2·3	0·3	51	3	·1		·2	3·6
	44	34·2	0·8	0·197	·007	2·2	0·1	2·5	0·3	47	3	·2		·3	5·4
	43	32·2	0·7	0·182	·007	2·1	0·1	2·6	0·3	43	3	·3		·4	7·2
	42	30·2	0·7	0·168	·006	1·9	0·1	2·8	0·3	40	3	·4		·5	9·0
	41	28·3	0·7	0·155	·005	1·7	0·0	3·0	0·2	37	2	·5		·6	10·8
	40	26·3	0·7	0·142	·004	1·6	0·0	3·1	0·2	34	2	·6		·7	12·6
	39	24·3	0·7	0·130	·003	1·5	0·0	3·2	0·2	31	2	·7		·8	14·4
	38	22·3	0·6	0·119	·003	1·3	0·0	3·4	0·2	28	2	·8		·9	16·2
	37	20·3	−0·6	0·109	−·003	1·2	−0·0	3·5	+0·2	26	− 2	523·8			
55	55	55·0	−0·9	0·433	−·014	4·9	−0·1	0·0	+0·2	100	− 7	520·6	− 1·0		
	54	53·0	0·9	0·403	·012	4·5	0·1	0·4	0·2	93	6	520·8			
	53	51·1	0·9	0·375	·010	4·2	0·1	0·7	0·2	87	5	521·0	+18·0		
	52	49·1	0·9	0·349	·009	3·9	0·1	1·0	0·2	81	5	·2			
	51	47·2	0·9	0·325	·008	3·7	0·1	1·2	0·2	75	5	·3			
	50	45·2	0·8	0·302	·007	3·4	0·1	1·5	0·2	70	5	·5			
	49	43·2	0·8	0·280	·006	3·1	0·1	1·8	0·2	65	4	·6			
	48	41·3	0·8	0·260	·006	2·9	0·1	2·0	0·2	60	4	·8			
	47	39·3	0·8	0·241	·006	2·7	0·1	2·2	0·2	56	4	521·9			
	46	37·4	0·8	0·223	·006	2·5	0·1	2·4	0·2	52	3	522·0			
	45	35·4	0·7	0·206	·006	2·3	0·0	2·6	0·2	48	3	·1			
	44	33·4	0·7	0·190	·005	2·1	0·0	2·8	0·2	44	3	·2			
	43	31·5	0·7	0·175	·004	2·0	0·0	2·9	0·2	41	3	·3			
	42	29·5	0·7	0·162	·004	1·8	0·0	3·1	0·2	38	2	·4			
	41	27·6	0·7	0·150	·004	1·7	0·0	3·2	0·2	35	2	·5			
	40	25·6	0·6	0·138	·003	1·6	0·0	3·3	0·2	32	2	·6			
	39	23·6	0·6	0·127	·003	1·4	0·0	3·5	0·2	29	2	·7		17·9	
	38	21·7	−0·6	0·116	−·003	1·3	−0·0	3·6	+0·2	27	− 2	522·7		·1	1·8
														·2	3·6
56	56	56·0	−0·9	0·449	−·015	5·0	−0·2	0·0	+0·4	100	− 7	519·6	− 1·0	·3	5·4
	55	54·1	0·9	0·419	·014	4·7	0·2	0·3	0·4	93	6	·8		·4	7·2
	54	52·1	0·9	0·391	·014	4·4	0·2	0·6	0·4	87	6	519·9	+17·9	·5	9·0
	53	50·2	0·9	0·365	·014	4·1	0·2	0·9	0·4	81	6	520·1		·6	10·7
	52	48·2	0·8	0·340	·013	3·8	0·1	1·2	0·3	75	5	·3		·7	12·5
	51	46·3	0·8	0·317	·013	3·5	0·1	1·5	0·3	70	5	·5		·8	14·3
	50	44·4	0·8	0·295	·012	3·3	0·1	1·7	0·3	65	4	·6		·9	16·1
	49	42·4	0·8	0·274	·011	3·1	0·1	1·9	0·3	60	4	·7			
	48	40·5	0·8	0·254	·010	2·8	0·1	2·2	0·3	56	4	520·9			
	47	38·5	0·7	0·235	·008	2·6	0·1	2·4	0·3	52	3	521·0			
	46	36·6	0·7	0·217	·007	2·4	0·1	2·6	0·3	48	3	·1			
	45	34·7	0·7	0·200	·005	2·3	0·1	2·7	0·3	44	3	·2			
	44	32·7	0·7	0·185	·004	2·1	0·1	2·9	0·3	41	3	·3			
	43	30·8	0·7	0·171	·004	1·9	0·0	3·1	0·2	38	2	·4			
	42	28·8	0·6	0·158	·004	1·8	0·0	3·2	0·2	35	2	·5			
	41	26·9	0·6	0·146	·004	1·6	0·0	3·4	0·2	32	2	·6			
	40	25·0	0·6	0·135	·004	1·5	0·0	3·5	0·2	29	2	·7			
	39	23·0	−0·6	0·124	−·004	1·4	−0·0	3·6	+0·2	27	− 2	521·7			
57	57	57·0	−0·9	0·465	−·014	5·2	−0·2	0·0	+0·4	100	− 6	518·4	− 1·0		
	56	55·1	0·9	0·434	·013	4·8	0·2	0·4	0·4	93	6	·6			
	55	53·2	0·9	0·405	·012	4·5	0·1	0·7	0·3	87	6	518·8	+17·9		
	54	51·2	0·8	0·377	·011	4·2	0·1	1·0	0·3	81	5	519·0			
	53	49·3	0·8	0·351	·010	3·9	0·1	1·3	0·3	75	5	·2		·01	0·2
	52	47·4	0·8	0·327	·009	3·7	0·1	1·5	0·3	70	4	·3		·02	0·4
	51	45·5	0·8	0·304	·008	3·4	0·1	1·8	0·3	65	4	·4		·03	0·5
	50	43·6	0·8	0·283	·008	3·2	0·1	2·0	0·3	61	4	·6		·04	0·7
	49	41·6	0·7	0·263	·007	3·0	0·1	2·2	0·3	57	4	·7		·05	0·9
	48	39·7	0·7	0·244	·006	2·7	0.1	2·5	0·3	53	3	519·9		·06	1·1
	47	37·8	0·7	0·227	·006	2·5	0.1	2·7	0·3	49	3	520·0		·07	1·3
	46	35·9	0·7	0·211	·006	2·4	0.1	2·8	0·3	45	3	·1		·08	1·4
	45	34·0	−0·7	0·196	−·006	2·2	−0·1	3·0	+0·3	42	− 2	520·2		·09	1·6

Reading of Thermometer. Dry.	Wet.	Temperature of the Dew-Point.	Difference for an increase of 1° in Dry.	Elastic force of Vapour.	Difference for an increase of 1° in Dry.	Vapour in a Cubic Foot of Air.	Difference for an increase of 1° in Dry.	Vap. reqd. to sat. a Cubic Foot of Air.	Difference for an increase of 1° in Dry.	Degree of Humidity. (Satn. = 100).	Difference for an increase of 1° in Dry.	Weight of a Cubic Foot of Air. Bar. reading 29 inches.	Diff. for an increase of 1° in Dry / 1 in. in Bar.	Difference for one inch in Barometer and proportional parts.	
°	°	°	°	in.	in.	gr.	gr	gr.	gr.			grs.	grs.		
57	45	34·0	−0·7	0·196	−·006	2·2	−0·1	3·0	+0·3	42	− 2	520·2	− 1·0	17·8	
	44	32·0	0·6	0·181	·005	2·0	0·0	3·2	0·2	39	2	·3			
	43	30·1	0·6	0·167	·004	1·9	0·0	3·3	0·2	36	2	·4	+17·9	in.	grs.
	42	28·2	0·6	0·154	·003	1·7	0·0	3·5	0·2	33	2	·5		·1	1·8
	41	26·3	0·6	0·142	·003	1·6	0·0	3·6	0·2	30	2	·6		·2	3·6
	40	24·4	0·6	0·131	·003	1·5	0·0	3·7	0·2	28	2	·6		·3	5·3
	39	22·4	−0·6	0·120	−·003	1·4	−0·0	3·8	+0·2	26	− 2	520·7		·4	7·1
														·5	8·9
														·6	10·7
58	58	58·0	−0·9	0·482	−·015	5·4	−0·2	0·0	+0·4	100	− 6	517·4	− 1·0	·7	12·5
	57	56·1	0·9	0·451	·015	5·0	0·2	0·4	0·4	93	6	·6		·8	14·2
	56	54·2	0·9	0·421	·014	4·7	0·2	0·7	0·4	87	6	517·8	+17·8	·9	16·0
	55	52·3	0·9	0·393	·013	4·4	0·2	1·0	0·4	81	5	518·0			
	54	50·4	0·9	0·367	·013	4·1	0·1	1·3	0·3	76	5	·1			
	53	48·5	0·8	0·342	·012	3·8	0·1	1·6	0·3	71	5	·3			
	52	46·6	0·8	0·318	·010	3·6	0·1	1·8	0·3	66	4	·5			
	51	44·7	0·8	0·296	·009	3·3	0·1	2·1	0·3	61	4	·6			
	50	42·8	0·8	0·275	·008	3·1	0·1	2·3	0·3	57	4	·7			
	49	40·9	0·8	0·256	·008	2·9	0·1	2·5	0·3	53	4	518·9			
	48	39·0	0·8	0·238	·008	2·7	0·1	2·7	0·3	49	3	519·0			
	47	37·1	0·8	0·221	·008	2·5	0·1	2·9	0·3	46	3	·1			
	46	35·2	0·8	0·205	·008	2·3	0·1	3·1	0·3	43	3	·2			
	45	33·3	0·8	0·190	·008	2·1	0·1	3·3	0·3	40	3	·3			
	44	31·4	0·7	0·176	·007	2·0	0·1	3·4	0·3	37	2	·4			
	43	29·5	0·7	0·163	·006	1·8	0·0	3·6	0·2	34	2	·5			
	42	27·6	0·7	0·151	·006	1·7	0·0	3·7	0·2	31	2	·6			
	41	25·7	0·7	0·139	·005	1·6	0·0	3·8	0·2	28	2	·6			
	40	23·8	−0·7	0·128	−·004	1·4	−0·0	4·0	+0·2	26	− 2	519·7			
59	59	59·0	−0·8	0·500	−·015	5·6	−0·2	0·0	+0·4	100	− 6	516·2	− 1·0		
	58	57·1	0·8	0·467	·014	5·2	0·2	0·4	0·4	94	6	·4			
	57	55·2	0·8	0·436	·013	4·9	0·2	0·7	0·4	88	6	·6	+17·8		
	56	53·3	0·8	0·407	·012	4·6	0·2	1·0	0·4	82	5	516·8			
	55	51·4	0·8	0·380	·011	4·3	0·2	1·3	0·4	76	5	517·0			
	54	49·5	0·8	0·354	·010	4·0	0·2	1·6	0·4	71	5	·2			
	53	47·7	0·8	0·330	·009	3·7	0·1	1·9	0·3	66	4	·3			
	52	45·8	0·8	0·308	·009	3·5	0·1	2·1	0·3	61	4	·5			
	51	43·9	0·8	0·287	·009	3·2	0·1	2·4	0·3	57	4	·6			
	50	42·0	0·8	0·267	·008	3·0	0·1	2·6	0·3	53	4	·8			
	49	40·1	0·8	0·248	·007	2·8	0·1	2·8	0·3	49	3	517·9			
	48	38·2	0·8	0·230	·006	2·6	0·1	3·0	0·3	46	3	518·0			
	47	36·3	0·7	0·213	·005	2·4	0·1	3·2	0·3	43	3	·1			
	46	34·4	0·7	0·197	·004	2·2	0·1	3·4	0·3	40	3	·2			
	45	32·5	0·7	0·182	·003	2·1	0·1	3·5	0·3	37	2	·3			
	44	30·7	0·7	0·169	·003	1·9	0·1	3·7	0·3	34	2	·4			
	43	28·8	0·7	0·157	·003	1·8	0·1	3·8	0·3	31	2	·5			
	42	26·9	0·7	0·145	·003	1·6	0·0	4·0	0·2	29	2	·6			
	41	25·0	0·7	0·134	·003	1·5	0·0	4·1	0·2	27	2	·6			
	40	23·1	−0·7	0·124	−·003	1·4	−0·0	4·2	+0·2	25	− 2	518·7			
60	60	60·0	−0·8	0·518	−·015	5·8	−0·2	0·0	+0·4	100	− 6	515·0	− 1·0		
	59	58·1	0·8	0·485	·015	5·4	0·2	0·4	0·4	94	6	·3			
	58	56·2	0·8	0·453	·014	5·1	0·2	0·7	0·4	88	6	·5	+17·8		
	57	54·4	0·8	0·423	·013	4·7	0·1	1·1	0·3	82	5	·7			
	56	52·5	0·8	0·395	·012	4·4	0·1	1·4	0·3	76	5	515·9			
	55	50·6	0·8	0·369	·011	4·1	0·1	1·7	0·3	71	5	516·0			
	54	48·7	0·8	0·344	·010	3·8	0·1	2·0	0·3	66	4	·2		·01	0·2
	53	46·8	0·8	0·321	·010	3·6	0·1	2·2	0·3	62	4	·4		·02	0·4
	52	45·0	0·8	0·299	·010	3·3	0·1	2·5	0·3	58	4	·5		·03	0·5
	51	43·1	0·8	0·278	·009	3·1	0·1	2·7	0·3	54	3	·6		·04	0·7
	50	41·2	0·8	0·259	·009	2·9	0·1	2·9	0·3	50	3	·8		·05	0·9
	49	39·3	0·7	0·241	·009	2·7	0·1	3·1	0·3	46	3	516·9		·06	1·1
	48	37·4	0·7	0·224	·008	2·5	0·1	3·3	0·3	43	3	517·0		·07	1·3
	47	35·6	0·7	0·208	·007	2·3	0·1	3·5	0·3	40	3	·1		·08	1·4
	46	33·7	−0·7	0·193	−·006	2·2	−0·1	3·6	+0·3	37	− 2	517·2		·09	1·6

Reading of Thermometer. Dry.	Wet.	Temperature of the Dew-Point.	Difference for an increase of 1° in Dry.	Elastic force of Vapour.	Difference for an increase of 1° in Dry.	Vapour in a Cubic Foot of Air.	Difference for an increase of 1° in Dry.	Vap. reqd. to sat. a Cubic Foot of Air.	Difference for an increase of 1° in Dry.	Degree of Humidity. (Satn.=100.)	Difference for an increase of 1° in Dry.	Weight of a Cubic Foot of Air. Bar. reading 29 inches.	Diff. for an increase $\frac{1° \text{ in Dry}}{1 \text{ in. in Bar.}}$ of	Difference for one inch in Barometer and proportional parts.	
°	°	°	°	in.	in.	gr.	gr.	gr.	gr.			grs.	grs.		
60	46	33·7	−0·7	0·193	−·006	2·2	−0·1	3·6	+0·3	37	− 2	517·2	− 1·0	17·7	
	45	31·8	0·7	0·179	·005	2·0	0·1	3·8	0·3	34	2	·3		in.	grs.
	44	30·0	0·7	0·166	·005	1·8	0·0	4·0	0·2	32	2	·4	+17·8	·1	1·8
	43	28·1	0·7	0·154	·005	1·7	0·0	4·1	0·2	30	2	·5		·2	3·5
	42	26·2	0·7	0·142	·004	1·6	0·0	4·2	0·2	28	2	·6		·3	5·3
	41	24·3	−0·7	0·131	−·004	1·4	−0·0	4·4	+0·2	26	− 2	517·6		·4	7·1
														·5	8·9
61	61	61·0	−0·8	0·537	−·017	6·0	−0·2	0·0	+0·4	100	− 6	514·0	− 1·0	·6	10·6
	60	59·1	0·8	0·503	·016	5·6	0·2	0·4	0·4	94	6	·2		·7	12·4
	59	57·3	0·8	0·470	·014	5·2	0·2	0·8	0·4	88	6	·4	+17·7	·8	14·2
	58	55·4	0·8	0·439	·013	4·9	0·2	1·1	0·4	82	5	·6		·9	15·9
	57	53·5	0·8	0·410	·012	4·6	0·2	1·4	0·4	77	5	514·8			
	56	51·7	0·8	0·383	·011	4·3	0·2	1·7	0·4	72	5	515·0			
	55	49·8	0·8	0·358	·011	4·0	0·1	2·0	0·3	67	4	·2			
	54	47·9	0·8	0·334	·010	3·7	0·1	2·3	0·3	62	4	·3			
	53	46·0	0·8	0·311	·009	3·5	0·1	2·5	0·3	58	4	·5			
	52	44·1	0·8	0·289	·008	3·2	0·1	2·8	0·3	54	3	·6			
	51	42·3	0·8	0·269	·007	3·0	0·1	3·0	0·3	50	3	·8			
	50	40·4	0·7	0·250	·006	2·8	0·1	3·2	0·3	47	3	515·9			
	49	38·6	0·7	0·232	·005	2·6	0·1	3·4	0·3	44	3	516·0			
	48	36·7	0·7	0·216	·005	2·4	0·1	3·6	0·3	41	2	·1			
	47	34·8	0·7	0·201	·005	2·3	0·1	3·7	0·3	38	2	·2			
	46	33·0	0·7	0·187	·005	2·1	0·1	3·9	0·3	35	2	·3			
	45	31·1	0·7	0·174	·005	1·9	0·0	4·1	0·2	32	2	·4			
	44	29·2	0·7	0·161	·004	1·8	0·0	4·2	0·2	30	2	·5			
	43	27·3	0·6	0·149	·004	1·7	0·0	4·3	0·2	28	2	·6			
	42	25·5	−0·6	0·138	−·004	1·5	−0·0	4·5	+0·2	26	− 2	516·6			
62	62	62·0	−0·8	0·556	−·016	6·2	−0·2	0·0	+0·4	100	− 6	512·9	− 1·0		
	61	60·1	0·8	0·520	·015	5·8	0·2	0·4	0·4	94	6	513·1			
	60	58·3	0·8	0·487	·014	5·4	0·2	0·8	0·4	88	6	·3	+17·7		
	59	56·4	0·8	0·456	·013	5·1	0·2	1·1	0·4	82	5	·5			
	58	54·6	0·8	0·427	·013	4·7	0·1	1·5	0·3	77	5	·7			
	57	52·7	0·8	0·399	·012	4·4	0·1	1·8	0·3	72	5	513·9			
	56	50·8	0·8	0·372	·011	4·1	0·1	2·1	0·3	67	4	514·1			
	55	49·0	0·8	0·347	·010	3·9	0·1	2·3	0·3	62	4	·2			
	54	47·1	0·8	0·323	·009	3·6	0·1	2·6	0·3	58	4	·4			
	53	45·3	0·7	0·301	·009	3·4	0·1	2·8	0·3	54	3	·5			
	52	43·4	0·7	0·281	·009	3·1	0·1	3·1	0·3	50	3	·7			
	51	41·5	0·7	0·262	·008	2·9	0·1	3·3	0·3	47	3	·8			
	50	39·7	0·7	0·244	·008	2·7	0·1	3·5	0·3	44	3	514·9			
	49	37·8	0·7	0·227	·007	2·5	0·1	3·7	0·3	41	3	515·0			
	48	36·0	0·7	0·211	·006	2·4	0·1	3·8	0·3	38	3	·1			
	47	34·1	0·7	0·196	·005	2·2	0·1	4·0	0·3	35	2	·2			
	46	32·2	0·7	0·182	·004	2·0	0·0	4·2	0·2	32	2	·3			
	45	30·4	0·6	0·169	·004	1·9	0·0	4·3	0·2	30	2	·4			
	44	28·5	0·6	0·157	·004	1·7	0·0	4·5	0·2	28	2	·5			
	43	26·7	−0·6	0·145	−·004	1·6	−0·0	4·6	+0·2	26	− 2	515·6			
63	63	63·0	−0·8	0·576	−·016	6·4	−0·2	0·0	+0·4	100	− 6	511·7	− 1·0		
	62	61·2	0·8	0·540	·015	6·0	0·2	0·4	0·4	94	6	512·0			
	61	59·3	0·8	0·506	·014	5·6	0·2	0·8	0·4	88	5	·2	+17·7		
	60	57·5	0·8	0·474	·013	5·2	0·1	1·2	0·3	82	5	·4			
	59	55·6	0·8	0·443	·012	4·9	0·1	1·5	0·3	77	4	512·6			
	58	53·8	0·8	0·414	·011	4·6	0·1	1·8	0·3	72	4	513·1			
	57	51·9	0·7	0·387	·011	4·3	0·1	2·1	0·3	67	4	·0		·01	0·2
	56	50·1	0·7	0·361	·010	4·0	0·1	2·4	0·3	63	4	·1		·02	0·4
	55	48·2	0·7	0·337	·009	3·7	0·1	2·7	0·3	59	4	·3		·03	0·5
	54	46·4	0·7	0·314	·008	3·5	0·1	2·9	0·3	55	3	·4		·04	0·7
	53	44·5	0·6	0·292	·007	3·3	0·1	3·1	0·3	51	3	·6		·05	0·9
	52	42·6	0·6	0·272	·006	3·0	0·0	3·4	0·2	47	3	·7		·06	1·1
	51	40·8	0·6	0·253	·005	2·8	0·0	3·6	0·2	44	2	513·8		·07	1·2
	50	39·0	0·6	0·236	·004	2 6	0·0	3·8	0·2	41	2	514·0		·08	1·4
	49	37·1	−0·5	0·220	−·004	2·4	−0·0	4·0	+0·2	38	− 2	514·1		·09	1·6

Reading of Thermometer. Dry.	Wet.	Temperature of the Dew-point.	Difference for an increase of 1° in Dry.	Elastic force of Vapour.	Difference for an increase of 1° in Dry.	Vapour in a Cubic Foot of Air.	Difference for an increase of 1° in Dry.	Vap. reqd. to sat. a Cubic Foot of Air.	Difference for an increase of 1° in Dry.	Degree of Humidity. (Satn. = 100.)	Difference for an increase of 1° in Dry.	Weight of a Cubic Foot of Air. Bar. reading 29 inches.	Diff. for an increase of 1° in Dry / of 1 in. in Bar.	Difference for one inch in Barometer and proportional parts.	
°	°	°	°	in.	in.	gr.	gr.	gr.	gr.			grs.	grs.		
63	49	37.1	−0.5	0.220	−.004	2.4	−0.0	4.0	+0.2	38	− 2	514.1	− 1.0	17.6	
	48	35.2	0.5	0.205	.004	2.3	0.0	4.1	0.2	35	2	.2		in.	grs.
	47	33.4	0.5	0.191	.004	2.1	0.0	4.3	0.2	33	2	.3	+17.7	.1	1.8
	46	31.6	0.5	0.178	.004	2.0	0.0	4.4	0.2	31	2	.3		.2	3.5
	45	29.7	0.5	0.165	.004	1.8	0.0	4.6	0.2	29	2	.4		.3	5.3
	44	27.8	−0.5	0.153	−.004	1.7	−0.0	4.7	+0.2	27	− 2	514.5		4	7.0
64	64	64.0	−0.8	0.596	−.016	6.6	−0.2	0.0	+0.4	100	− 6	510.7	− 0.9	.5	8.8
	63	62.2	0.8	0.560	.016	6.2	0.2	0.4	0.4	94	6	510.9		.6	10.6
	62	60.3	0.8	0.525	.015	5.8	0.2	0.8	0.4	88	5	511.1	+17.6	.7	12.3
	61	58.5	0.8	0.492	.014	5.4	0.2	1.2	0.4	82	5	.4		.8	14.1
	60	56.7	0.8	0.461	.014	5.1	0.2	1.5	0.4	77	5	.6		.9	15.8
	59	54.8	0.8	0.431	.013	4.8	0.2	1.8	0.4	72	4	.8			
	58	53.0	0.8	0.403	.012	4.5	0.2	2.1	0.4	67	4	511.9			
	57	51.2	0.8	0.376	.010	4.2	0.2	2.4	0.4	63	4	512.1			
	56	49.4	0.8	0.351	.009	3.9	0.1	2.7	0.3	59	4	.3			
	55	47.5	0.7	0.328	.008	3.6	0.1	3.0	0.3	55	3	.4			
	54	45.7	0.7	0.306	.007	3.4	0.1	3.2	0.3	51	3	.6			
	53	43.9	0.7	0.286	.007	3.2	0.1	3.4	0.3	48	3	.7			
	52	42.0	0.7	0.267	.007	3.0	0.1	3.6	0.3	45	3	512.8			
	51	40.2	0.7	0.249	.007	2.8	0.1	3.8	0.3	42	3	513.0			
	50	38.4	0.7	0.232	.006	2.6	0.1	4.0	0.3	39	2	.1			
	49	36.6	0.7	0.216	.006	2.4	0.1	4.2	0.3	36	2	.2			
	48	34.7	0.6	0.201	.005	2.2	0.0	4.4	0.2	33	2	.3			
	47	32.9	0.6	0.187	.005	2.1	0.0	4.5	0.2	31	2	.4			
	46	31.1	0.6	0.174	.005	1.9	0.0	4.7	0.2	29	2	.5			
	45	29.2	−0.6	0.162	−.004	1.8	−0.0	4.8	+0.2	27	− 2	513.5		17.5	
65	65	65.0	−0.8	0.617	−.016	6.8	−0.2	0.0	+0.4	100	− 6	509.5	− 0.9	1	1.8
	64	63.2	0.8	0.580	.016	6.4	0.2	0.4	0.4	94	6	509.8		.2	3.5
	63	61.4	0.8	0.544	.015	6.0	0.2	0.8	0.4	88	6	510.0	+17.6	.3	5.3
	62	59.5	0.8	0.510	.014	5.6	0.2	1.2	0.4	83	5	.2		.4	7.0
	61	57.7	0.8	0.478	.013	5.3	0.2	1.5	0.4	78	5	.4		.5	8.8
	60	55.9	0.8	0.447	.012	4.9	0.1	1.9	0.3	73	5	.6		.6	10.5
	59	54.1	0.8	0.418	.011	4.6	0.1	2.2	0.3	68	4	510.8		.7	12.3
	58	52.3	0.8	0.391	.010	4.3	0.1	2.5	0.3	63	4	511.0		.8	14.0
	57	50.4	0.7	0.366	.010	4.0	0.1	2.8	0.3	59	4	.2		.9	15.8
	56	48.6	0.7	0.342	.009	3.8	0.1	3.0	0.3	55	4	.3			
	55	46.8	0.7	0.320	.009	3.5	0.1	3.3	0.3	51	3	.5			
	54	45.0	0.7	0.299	.009	3.3	0.1	3.5	0.3	48	3	.6			
	53	43.2	0.7	0.279	.008	3.1	0.1	3.7	0.3	45	3	.8			
	52	41.3	0.7	0.260	.007	2.9	0.1	3.9	0.3	42	2	511.9			
	51	39.5	0.7	0.242	.006	2.7	0.1	4.1	0.3	39	2	512.0			
	50	37.7	0.7	0.225	.005	2.5	0.1	4.3	0.3	36	2	.1			
	49	35.9	0.7	0.210	.005	2.3	0.1	4.5	0.3	34	2	.2			
	48	34.1	0.7	0.196	.005	2.2	0.1	4.6	0.3	32	2	.3			
	47	32.2	0.6	0.182	.004	2.0	0.0	4.8	0.2	29	2	.4			
	46	30.4	0.6	0.169	.004	1.9	0.0	4.9	0.2	27	1	.5			
	45	28.6	0.6	0.157	.004	1.7	0.0	5.1	0.2	25	1	.6			
	44	26.8	−0.6	0.146	−.003	1.6	−0.0	5.2	+0.2	23	− 1	512.6			
66	66	66.0	−0.8	0.639	−.017	7.0	−0.2	0.0	+0.5	100	− 6	508.5	− 0.9		
	65	64.2	0.8	0.601	.017	6.6	0.2	0.4	0.5	94	6	508.8			
	64	62.4	0.8	0.564	.016	6.2	0.2	0.8	0.5	88	5	509.0	+17.5		
	63	60.6	0.8	0.529	.015	5.8	0.2	1.2	0.5	83	5	.2			
	62	58.8	0.8	0.496	.014	5.5	0.2	1.5	0.5	78	5	.4		.01	0.2
	61	57.0	0.8	0.464	.012	5.1	0.1	1.9	0.4	73	4	.6		.02	0.4
	60	55.1	0.7	0.434	.011	4.8	0.1	2.2	0.4	68	4	509.8		.03	0.5
	59	53.3	0.7	0.406	.010	4.5	0.1	2.5	0.4	64	4	510.0		.04	0.7
	58	51.5	0.7	0.380	.009	4.2	0.1	2.8	0.4	60	3	.2		.05	0.9
	57	49.7	0.7	0.356	.008	3.9	0.1	3.1	0.4	56	3	.4		.06	1.1
	56	47.9	0.7	0.333	.008	3.7	0.1	3.3	0.4	52	3	.5		.07	1.2
	55	46.1	0.7	0.311	.007	3.4	0.1	3.6	0.4	48	3	.6		.08	1.4
	54	44.3	−0.7	0.280	−.006	3.2	−0.1	3.8	+0.4	45	− 3	510.8		.09	1.6

Reading of Thermometer. Dry.	Reading of Thermometer. Wet.	Temperature of the Dew-Point.	Difference for an increase of 1° in Dry.	Elastic force of Vapour.	Difference for an increase of 1° in Dry.	Vapour in a Cubic Foot of Air.	Difference for an increase of 1° in Dry.	Vap. reqd. to sat. a Cubic Foot of Air.	Difference for an increase of 1° in Dry.	Degree of Humidity. (Satn. = 100.)	Difference for an increase of 1° in Dry.	Weight of a Cubic Foot of Air. Bar. reading 29 inches.	Diff. for an increase of 1° in Dry / 1 in. in Bar.
°	°	°	°	in.	in.	gr.	gr.	gr.	gr.			grs.	grs.
66	54	44.3	−0.7	0.280	−.006	3.2	−0.1	3.8	+0.4	45	− 3	510.8	− 0.9
	53	42.5	0.7	0.271	.006	3.0	0.1	4.0	0.4	42	2	510.9	
	52	40.7	0.7	0.253	.006	2.8	0.1	4.2	0.4	40	2	511.0	+17.5
	51	38.9	0.7	0.236	.006	2.6	0.1	4.4	0.4	37	2	.1	
	50	37.0	0.6	0.220	.006	2.4	0.1	4.6	0.4	34	2	.2	
	49	35.2	0.6	0.205	.006	2.3	0.1	4.7	0.4	32	2	.3	
	48	33.4	0.6	0.191	.006	2.1	0.1	4.9	0.4	30	2	.4	
	47	31.6	0.6	0.178	.006	2.0	0.0	5.0	0.3	28	2	.5	
	46	29.8	0.6	0.165	.005	1.8	0.0	5.2	0.3	26	2	.6	
	45	28.0	−0.6	0.153	−.005	1.7	−0.0	5.3	+0.3	24	− 2	511.7	
67	67	67.0	−0.8	0.661	−.017	7.3	−0.2	0.0	+0.4	100	− 6	507.4	− 0.9
	66	65.2	0.8	0.622	.016	6.8	0.2	0.5	0.4	94	6	.6	
	65	63.4	0.8	0.585	.016	6.4	0.2	0.9	0.4	88	6	507.9	+17.5
	64	61.6	0.8	0.549	.015	6.0	0.2	1.3	0.4	83	5	508.1	
	63	59.8	0.7	0.515	.014	5.6	0.2	1.7	0.4	78	5	.3	
	62	58.0	0.7	0.483	.013	5.3	0.2	2.0	0.4	73	5	.5	
	61	56.2	0.7	0.453	.012	5.0	0.2	2.3	0.4	68	5	.7	
	60	54.4	0.7	0.424	.011	4.7	0.2	2.6	0.4	64	4	508.9	
	59	52.6	0.7	0.397	.010	4.4	0.2	2.9	0.4	60	4	509.1	
	58	50.8	0.7	0.372	.010	4.1	0.1	3.2	0.3	56	4	.2	
	57	49.0	0.7	0.348	.009	3.8	0.1	3.5	0.3	52	4	.4	
	56	47.2	0.7	0.325	.008	3.6	0.1	3.7	0.3	49	3	.5	
	55	45.4	0.7	0.304	.008	3.3	0.1	4.0	0.3	46	3	.7	
	54	43.6	0.7	0.284	.008	3.1	0.1	4.2	0.3	43	3	.8	
	53	41.8	0.6	0.265	.007	2.9	0.1	4.4	0.3	40	3	509.9	
	52	40.0	0.6	0.247	.006	2.7	0.1	4.6	0.3	37	3	510.1	
	51	38.2	0.6	0.230	.005	2.5	0.1	4.8	0.3	34	3	.2	
	50	36.4	0.6	0.214	.004	2.4	0.1	4.9	0.3	32	2	.3	
	49	34.6	0.6	0.199	.003	2.2	0.0	5.1	0.2	30	2	.4	
	48	32.8	0.6	0.185	.003	2.0	0.0	5.3	0.2	28	2	.4	
	47	31.0	0.6	0.172	.003	1.9	0.0	5.4	0.2	26	2	.5	
	46	29.2	−0.6	0.160	−.003	1.8	−0.0	5.5	+0.2	24	− 2	510.6	
68	68	68.0	−0.8	0.684	−.018	7.5	−0.2	0.0	+0.5	100	− 6	506.2	− 0.9
	67	66.2	0.8	0.644	.018	7.1	0.2	0.4	0.5	94	6	.5	
	66	64.4	0.8	0.606	.017	6.6	0.2	0.9	0.5	88	6	506.7	+17.5
	65	62.6	0.8	0.569	.017	6.2	0.2	1.3	0.5	83	5	507.0	
	64	60.8	0.8	0.534	.016	5.8	0.2	1.7	0.5	78	5	.2	
	63	59.1	0.8	0.501	.015	5.5	0.1	2.0	0.4	73	5	.4	
	62	57.3	0.8	0.470	.013	5.2	0.1	2.3	0.4	68	5	.6	
	61	55.5	0.7	0.441	.012	4.8	0.1	2.7	0.4	64	4	507.8	
	60	53.7	0.7	0.413	.011	4.5	0.1	3.0	0.4	60	4	508.0	
	59	51.9	0.7	0.387	.010	4.2	0.1	3.3	0.4	56	4	.2	
	58	50.1	0.7	0.362	.009	4.0	0.1	3.5	0.4	52	4	.3	
	57	48.3	0.7	0.339	.009	3.7	0.1	3.8	0.4	49	3	.5	
	56	46.5	0.6	0.317	.008	3.5	0.1	4.0	0.4	46	3	.6	
	55	44.7	0.6	0.296	.007	3.2	0.0	4.3	0.3	43	3	.7	
	54	42.9	0.6	0.276	.007	3.0	0.0	4.5	0.3	40	3	508.9	
	53	41.2	0.6	0.258	.006	2.8	0.0	4.7	0.3	37	3	509.0	
	52	39.4	0.6	0.241	.006	2.6	0.0	4.9	0.3	35	3	.1	
	51	37.6	0.6	0.225	.006	2.5	0.0	5.0	0.3	33	2	.2	
	50	35.8	0.6	0.210	.006	2.3	0.0	5.2	0.3	31	2	.3	
	49	34.0	0.6	0.196	.006	2.2	0.0	5.3	0.3	29	2	.4	
	48	32.2	0.6	0.182	.005	2.0	0.0	5.5	0.3	27	2	.5	
	47	30.4	0.6	0.169	.005	1.9	0.0	5.6	0.3	25	2	.6	
	46	28.6	−0.6	0.157	−.004	1.7	−0.0	5.8	+0.3	23	− 2	509.6	
69	69	69.0	−0.8	0.707	−.018	7.8	−0.2	0.0	+0.4	100	− 6	505.2	− 0.9
	68	67.2	0.8	0.665	.016	7.3	0.2	0.5	0.4	94	6	.4	
	67	65.4	0.8	0.625	.015	6.9	0.2	0.9	0.4	88	5	.7	+17.4
	66	63.7	0.8	0.587	.014	6.5	0.2	1.3	0.4	83	5	505.9	
	65	61.9	0.8	0.551	.013	6.1	0.2	1.7	0.4	78	5	506.2	
	64	60.1	−0.7	0.517	−.012	5.7	−0.2	2.1	+0.4	73	− 4	506.4	

Difference for one inch in Barometer and proportional parts.

17.5	
in.	grs.
1	1.8
.2	3.5
.3	5.3
.4	7.0
.5	8.8
.6	10.5
.7	12.3
.8	14.0
.9	15.8
.01	0.2
.02	0.4
.03	0.5
.04	0.7
.05	0.9
.06	1.0
.07	1.2
.08	1.4
.09	1.6

Reading of Thermometer. Dry.	Reading of Thermometer. Wet.	Temperature of the Dew-Point.	Difference for an increase of 1° in Dry.	Elastic force of Vapour.	Difference for an increase of 1° in Dry.	Vapour in a Cubic Foot of Air.	Difference for an increase of 1° in Dry.	Vap. reqd. to sat. a Cubic Foot of Air.	Difference for an increase of 1° in Dry.	Degree of Humidity. (Satn. = 100.)	Difference for an increase of 1° in Dry.	Weight of a Cubic Foot of Air. Bar. reading 29 inches.	Diff. for an increase of 1° in Dry / of 1 in in Bar.	Difference for one inch in Barometer and proportional parts.	
°	°	°	°	in.	in.	gr.	gr.	gr.	gr.			grs.	grs.		
69	64	60·1	−0·7	0·547	−·012	5·7	−0·2	2·1	+0·4	73	− 4	506·4	− 0·9	17·4	
	63	58·3	0·7	0·486	·011	5·3	0·1	2·5	0·3	68	4	·6		in.	grs.
	62	56·5	0·7	0·457	·010	5·0	0·1	2·8	0·3	64	4	506·8	+17·4	·1	1·7
	61	54·8	0·7	0·429	·010	4·7	0·1	3·1	0·3	60	4	507·0		·2	3·5
	60	53·0	0·7	0·402	·009	4·4	0·1	3·4	0·3	56	3	·1		·3	5·2
	59	51·2	0·7	0·377	·009	4·1	0·1	3·7	0·3	53	3	·3		·4	7·0
	58	49·4	0·6	0·353	·008	3·9	0·1	3·9	0·3	50	3	·5		·5	8·7
	57	47·6	0·6	0·330	·007	3·6	0·1	4·2	0·3	47	3	·6		·6	10·4
	56	45·9	0·6	0·309	·007	3·4	0·1	4·4	0·3	44	3	·7		·7	12·2
	55	44·1	0·6	0·289	·006	3·2	0·1	4·6	0·3	41	3	507·9		·8	13·9
	54	42·3	0·6	0·270	·005	3·0	0·1	4·8	0·3	38	2	508·0		·9	15·7
	53	40·5	0·6	0·252	·005	2·8	0·1	5·0	0·3	35	2	·1			
	52	38·7	0·6	0·235	·005	2·6	0·1	5·2	0·3	33	2	·2			
	51	37·0	0·6	0·219	·005	2·4	0·1	5·4	0·3	31	2	·3			
	50	35·2	0·6	0·204	·005	2·2	0·0	5·6	0·2	29	2	·4			
	49	33·4	0·6	0·190	·004	2·1	0·0	5·7	0·2	27	2	·5			
	48	31·6	−0·6	0·177	−·004	2·0	−0·0	5·8	+0·2	25	− 2	508·6			
70	70	70·0	−0·8	0·733	−·019	8·0	−0·2	0·0	+0·5	100	− 6	504·0	− 0·9		
	69	68·2	0·8	0·691	·019	7·5	0·2	0·5	0·5	94	6	·3			
	68	66·5	0·8	0·651	·018	7·1	0·2	0·9	0·5	88	5	·6	+17·4		
	67	64·7	0·7	0·613	·017	6·7	0·2	1·3	0·5	83	5	504·8			
	66	62·9	0·7	0·576	·016	6·3	0·2	1·7	0·5	78	5	505·0			
	65	61·1	0·7	0·541	·015	5·9	0·2	2·1	0·5	73	4	·3			
	64	59·4	0·7	0·508	·014	5·5	0·2	2·5	0·5	69	4	·5			
	63	57·6	0·7	0·476	·013	5·2	0·1	2·8	0·4	65	4	·7			
	62	55·8	0·7	0·446	·011	4·9	0·1	3·1	0·4	61	4	505·9			
	61	54·0	0·7	0·418	·010	4·6	0·1	3·4	0·4	57	3	506·0			
	60	52·3	0·7	0·392	·009	4·3	0·1	3·7	0·4	53	3	·2			
	59	50·5	0·7	0·368	·009	4·0	0·1	4·0	0·4	50	3	·4			
	58	48·8	0·7	0·345	·009	3·8	0·1	4·2	0·4	47	3	·5			
	57	47·0	0·6	0·323	·008	3·5	0·1	4·5	0·4	44	2	·7			
	56	45·2	0·6	0·302	·007	3·3	0·1	4·7	0·4	41	2	·8			
	55	43·5	0·6	0·283	·007	3·1	0·1	4·9	0·4	38	2	506·9			
	54	41·7	0·6	0·265	·007	2·9	0·1	5·1	0·4	36	2	507·1			
	53	39·9	0·6	0·247	·006	2·7	0·1	5·3	0·4	34	2	·2			
	52	38·1	0·6	0·230	·005	2·5	0·0	5·5	0·3	31	2	·3			
	51	36·4	0·6	0·214	·004	2·3	0·0	5·7	0·3	29	2	·4			
	50	34·6	0·5	0·199	·003	2·2	0·0	5·8	0·3	27	2	·5			
	49	32·8	−0·5	0·185	−·003	2·0	−0·0	6·0	+0·3	25	− 1	507·5			
71	71	71·0	−0·8	0·759	−·020	8·3	−0·2	0·0	+0·4	100	− 6	502·9	− 0·9		
	70	69·2	0·8	0·714	·018	7·8	0·2	0·5	0·4	94	5	503·2			
	69	67·5	0·8	0·672	·017	7·3	0·2	1·0	0·4	88	5	·4	+17·4		
	68	65·7	0·8	0·633	·016	6·9	0·2	1·4	0·4	83	5	·7			
	67	64·0	0·8	0·596	·015	6·5	0·2	1·8	0·4	78	5	503·9			
	66	62·2	0·7	0·560	·013	6·1	0·2	2·2	0·4	73	4	504·2			
	65	60·4	0·7	0·526	·012	5·7	0·1	2·6	0·3	69	4	·4			
	64	58·7	0·7	0·494	·011	5·4	0·1	2·9	0·3	65	4	·6			
	63	56·9	0·7	0·464	·010	5·1	0·1	3·2	0·3	61	3	·7			
	62	55·2	0·7	0·436	·010	4·7	0·1	3·6	0·3	57	3	504·9			
	61	53·4	0·7	0·409	·010	4·4	0·1	3·9	0·3	53	3	505·1			
	60	51·6	0·7	0·383	·009	4·2	0·1	4·1	0·3	50	2	·3			
	59	46·9	0·7	0·359	·009	3·9	0·1	4·4	0·3	47	2	·5			
	58	48·1	0·6	0·336	·008	3·7	0·1	4·6	0·3	44	2	·6			
	57	46·4	0·6	0·315	·008	3·4	0·1	4·9	0·3	41	2	·7			
	56	44·6	0·6	0·295	·008	3·2	0·1	5·1	0·3	38	2	505·9		·01	0·2
	55	42·8	0·6	0·276	·007	3·0	0·1	5·3	0·3	36	2	506·0		·02	0·4
	54	41·1	0·6	0·258	·006	2·8	0·1	5·5	0·3	34	2	·1		·03	0·5
	53	39·3	0·6	0·241	·005	2·6	0·1	5·7	0·3	32	2	·2		·04	0·7
	52	37·6	0·6	0·225	·004	2·5	0·1	5·8	0·3	30	2	·3		·05	0·9
	51	35·8	0·5	0·210	·003	2·3	0·1	6·0	0·3	28	2			·06	1·0
	50	34·0	0·5	0·196	·003	2·1	0·1	6·2	0·3	26	1	·5		·07	1·2
	49	32·3	0·5	0·183	·003	2·0	0·0	6·3	0·2	24	1	·6		·08	1·4
	48	30·5	−0·5	0·170	−·003	1·9	−0·0	6·4	+0·2	22	− 1	506·7		·09	1·6

Reading of Thermometer. Dry.	Wet.	Temperature of the Dew-Point.	Difference for an increase of 1° in Dry.	Elastic force of Vapour.	Difference for an increase of 1° in Dry.	Vapour in a Cubic Foot of Air.	Difference for an increase of 1° in Dry.	Vap. reqd. to sat. a Cubic Foot of Air.	Difference for an increase of 1° in Dry.	Degree of Humidity. (Satn.=100.)	Difference for an increase of 1° in Dry.	Weight of a Cubic Foot of Air. Bar. reading 29 inches.	Diff. for an increase of 1° in Dry / of 1 in. in Bar.	Difference for one inch in Barometer and proportional parts.
°	°	°	°	in.	in.	gr.	gr.	gr.	gr.			grs.	grs.	
72	72	72·0	−0·7	0·785	−·019	8·5	−0·2	0·0	+0·5	100	−6	501·8	−0·9	17·3
	71	70·2	0·7	0·739	·017	8·0	0·2	0·5	0·5	94	5	502·1		in. grs.
	70	68·5	0·7	0·696	·016	7·6	0·2	0·9	0·5	89	5	·4	+17·3	·1 1·7
	69	66·7	0·7	0·655	·015	7·1	0·2	1·4	0·5	84	5	·6		·2 3·5
	68	65·0	0·7	0·617	·014	6·7	0·2	1·8	0·5	79	4	502·9		·3 5·2
	67	63·2	0·7	0·581	·013	6·3	0·2	2·2	0·5	74	4	503·1		·4 6·9
	66	61·5	0·7	0·547	·013	5·9	0·2	2·6	0·5	69	4	·4		·5 8·7
	65	59·7	0·7	0·514	·012	5·6	0·2	2·9	0·5	65	4	·6		·6 10·4
	64	58·0	0·7	0·483	·011	5·3	0·2	3·2	0·5	61	4	·8		·7 12·1
	63	56·2	0·7	0·454	·011	5·0	0·1	3·5	0·4	57	3	503·9		·8 13·8
	62	54·5	0·6	0·426	·010	4·7	0·1	3·8	0·4	54	3	504·1		·9 15·6
	61	52·7	0·6	0·399	·009	4·4	0·1	4·1	0·4	51	3	·3		
	60	51·0	0·6	0·374	·008	4·1	0·1	4·4	0·4	48	3	·5		
	59	49·2	0·6	0·350	·007	3·8	0·1	4·7	0·4	45	3	·6		
	58	47·5	0·6	0·328	·006	3·6	0·1	4·9	0·4	42	2	·8		
	57	45·7	0·6	0·307	·005	3·3	0·0	5·2	0·3	39	2	504·9		
	56	44·0	0·6	0·287	·005	3·1	0·0	5·4	0·3	36	2	505·0		
	55	42·2	0·6	0·269	·005	2·9	0·0	5·6	0·3	34	2	·1		
	54	40·5	0·6	0·252	·004	2·7	0·0	5·8	0·3	32	2	·3		
	53	38·7	0·6	0·236	·004	2·6	0·0	5·9	0·3	30	2	·4		
	52	37·0	0·5	0·221	·004	2·4	0·0	6·1	0·3	28	2	·5		
	51	35·3	0·5	0·207	·004	2·2	0·0	6·3	0·3	26	1	·6		
	50	33·5	0·5	0·193	·004	2·0	0·0	6·5	0·3	24	1	·6		
	49	31·8	−0·5	0·180	−·004	1·9	−0·0	6·6	+0·3	23	−1	505·7		
73	73	73·0	−0·7	0·812	−·019	8·8	−0·2	0·0	+0·5	100	−6	500·7	−0·9	
	72	71·3	0·7	0·766	·018	8·3	0·2	0·5	0·5	94	5	501·0		
	71	69·5	0·7	0·722	·017	7·8	0·2	1·0	0·5	89	5	·3	+17·3	
	70	67·8	0·7	0·680	·016	7·4	0·2	1·4	0·5	84	5	·5		
	69	66·0	0·7	0·641	·016	7·0	0·2	1·8	0·5	79	4	501·8		
	68	64·3	0·7	0·604	·015	6·6	0·2	2·2	0·5	74	4	502·0		
	67	62·6	0·7	0·568	·014	6·2	0·2	2·6	0·5	70	4	·3		
	66	60·8	0·7	0·534	·013	5·8	0·2	3·0	0·5	66	4	·5		
	65	59·1	0·7	0·502	·011	5·4	0·1	3·4	0·4	62	3	·7		
	64	57·3	0·6	0·472	·009	5·1	0·1	3·7	0·4	58	3	502·9		
	63	55·6	0·6	0·443	·008	4·8	0·1	4·0	0·4	54	3	503·1		
	62	53·9	0·6	0·416	·008	4·5	0·1	4·3	0·4	51	3	·2		
	61	52·1	0·6	0·390	·008	4·2	0·1	4·6	0·4	48	3	·4		
	60	50·4	0·6	0·366	·008	4·0	0·1	4·8	0·4	45	2	·5		
	59	48·6	0·6	0·343	·007	3·7	0·1	5·1	0·4	42	2	·7		
	58	46·9	0·6	0·322	·007	3·5	0·1	5·3	0·4	40	2	503·8		
	57	45·2	0·6	0·302	·007	3·3	0·1	5·5	0·4	37	2	504·0		
	56	43·4	0·6	0·283	·007	3·1	0·1	5·7	0·4	35	2	·1		
	55	41·7	0·6	0·265	·007	2·9	0·1	5·9	0·4	32	2	·2		
	54	39·9	0·5	0·248	·007	2·7	0·1	6·1	0·4	30	2	·3		
	53	38·2	0·5	0·232	·007	2·5	0·1	6·3	0·4	28	2	·4		
	52	36·5	0·5	0·217	·006	2·3	0·0	6·5	0·3	26	1	·5		
	51	34·7	0·5	0·202	·006	2·2	0·0	6·6	0·3	24	1	·6		
	50	33·0	−0·5	0·188	−·005	2·0	−0·0	6·8	+0·3	23	−1	504·7		
74	74	74·0	−0·7	0·840	−·020	9·1	−0·2	0·0	+0·5	100	−6	499·6	−0·9	
	73	72·3	0·7	0·793	·019	8·6	0·2	0·5	0·5	94	5	499·9		
	72	70·5	0·7	0·748	·018	8·1	0·2	1·0	0·5	89	5	500·2	+17·2	
	71	68·8	0·7	0·705	·017	7·6	0·2	1·5	0·5	84	5	·5		
	70	67·1	0·7	0·664	·016	7·2	0·2	1·9	0·5	79	5	500·7		
	69	65·3	0·7	0·625	·015	6·8	0·2	2·3	0·5	74	4	501·0		·01 0·2
	68	63·6	0·7	0·588	·014	6·4	0·2	2·7	0·5	70	4	·2		·02 0·4
	67	61·9	0·7	0·554	·013	6·0	0·2	3·1	0·5	66	4	·5		·03 0·5
	66	60·2	0·7	0·522	·013	5·6	0·1	3·5	0·4	62	4	·7		·04 0·7
	65	58·4	0·6	0·492	·012	5·3	0·1	3·8	0·4	58	3	501·9		·05 0·9
	64	56·7	0·6	0·463	·012	5·0	0·1	4·1	0·4	55	3	502·1		·06 1·0
	63	55·0	0·6	0·435	·011	4·7	0·1	4·4	0·4	52	3	·2		·07 1·2
	62	53·2	0·6	0·408	·010	4·4	0·1	4·7	0·4	48	3	·4		·08 1·4
	61	51·5	−0·6	0·382	−·009	4·1	−0·1	5·0	+0·4	45	−2	502·6		·09 1·6

Reading of Thermometer. Dry.	Wet.	Temperature of the Dew-Point.	Difference for an increase of 1° in Dry.	Elastic force of Vapour.	Difference for an increase of 1° in Dry.	Vapour in a Cubic Foot of Air.	Difference for an increase of 1° in Dry.	Vap. reqd. to sat. a Cubic Foot of Air.	Difference for an increase of 1° in Dry.	Degree of Humidity. (Satn.=100.)	Difference for an increase of 1° in Dry.	Weight of a Cubic Foot of Air. Bar. reading 29 inches.	Diff. for an increase of 1° in Dry / 1 in. in Bar.	Difference for one inch in Barometer and proportional parts.	
°	°	°	°	in.	in.	gr.	gr.	gr.	gr.			grs.	grs.		
74	61	51·5	−0·6	0·382	−·009	4·1	−0·1	5·0	+0·4	45	− 2	502·6	− 0·9	17·2	
	60	49·8	0·6	0·358	·008	3·9	0·1	5·2	0·4	43	2	·7		in.	grs.
	59	48·1	0·6	0·336	·007	3·6	0·1	5·5	0·4	40	2	502·9	+17·2	·1	1·7
	58	46·3	0·6	0·315	·007	3·4	0·1	5·7	0·4	37	2	503·0		·2	3·4
	57	44·6	0·6	0·295	·007	3·2	0·1	5·9	0·4	35	2	·1		·3	5·2
	56	42·9	0·6	0·276	·006	3·0	0·1	6·1	0·4	33	2	·2		·4	6·9
	55	41·1	0·5	0·258	·005	2·8	0·1	6·3	0·4	31	2	·3		·5	8·6
	54	39·4	0·5	0·241	·004	2·6	0·0	6·5	0·3	29	1	·4		·6	10·3
	53	37·7	0·5	0·225	·004	2·4	0·0	6·7	0·3	27	1	·5		·7	12·0
	52	35·9	0·5	0·210	·003	2·3	0·0	6·8	0·3	25	1	·6		·8	13·8
	51	34·2	−0·5	0·196	−·003	2·1	−0·0	7·0	+0·3	23	− 1	503·7		·9	15·5
75	75	75·0	−0·7	0·868	−·020	9·4	−0·2	0·0	+0·5	100	− 6	498·5	− 0·9		
	74	73·3	0·7	0·820	·019	8·9	0·2	0·5	0·5	94	5	498·8			
	73	71·6	0·7	0·774	·018	8·4	0·2	1·0	0·5	89	5	499·1	+17·2		
	72	69·8	0·7	0·731	·018	7·9	0·2	1·5	0·5	84	5	·4			
	71	68·1	0·7	0·690	·018	7·4	0·2	2·0	0·5	79	4	·6			
	70	66·4	0·7	0·650	·017	7·0	0·2	2·4	0·5	74	4	499·9			
	69	64·7	0·7	0·612	·016	6·6	0·2	2·8	0·5	70	4	500·1			
	68	63·0	0·7	0·576	·015	6·2	0·1	3·2	0·4	66	4	·4			
	67	61·2	0·6	0·542	·014	5·8	0·1	3·6	0·4	62	3	·6			
	66	59·5	0·6	0·510	·012	5·5	0·1	3·9	0·4	58	3	500·8			
	65	57·8	0·6	0·479	·011	5·2	0·1	4·2	0·4	55	3	501·0			
	64	56·1	0·6	0·450	·010	4·9	0·1	4·5	0·4	52	3	·2			
	63	54·4	0·6	0·423	·009	4·6	0·1	4·8	0·4	49	3	·3			
	62	52·6	0·6	0·397	·008	4·3	0·1	5·1	0·4	46	3	·5			
	61	50·9	0·6	0·373	·007	4·0	0·1	5·4	0·4	43	2	·6			
	60	49·2	0·6	0·350	·007	3·8	0·1	5·6	0·4	40	2	·8			
	59	47·5	0·6	0·328	·006	3·6	0·1	5·8	0·4	38	2	501·9			
	58	45·8	0·6	0·307	·006	3·3	0·0	6·1	0·3	36	2	502·1			
	57	44·0	0·5	0·288	·005	3·1	0·0	6·3	0·3	33	2	·2			
	56	42·3	0·5	0·270	·005	2·9	0·0	6·5	0·3	31	1	·3			
	55	40·6	0·5	0·253	·005	2·7	0·0	6·7	0·3	29	1	·4			
	54	38·9	0·5	0·237	·005	2·6	0·0	6·8	0·3	27	1	·5			
	53	37·2	−0·5	0·222	−·005	2·4	−0·0	7·0	+0·3	25	− 1	502·6			
76	76	76·0	−0·7	0·897	−·020	9·7	−0·2	0·0	+0·5	100	− 5	497·4	− 0·9		
	75	74·3	0·7	0·848	·019	9·2	0·2	0·5	0·5	94	5	497·7			
	74	72·6	0·7	0·801	·018	8·6	0·2	1·1	0·5	89	5	498·0	+17·2		
	73	70·9	0·7	0·756	·017	8·2	0·2	1·5	0·5	84	5	·3			
	72	69·2	0·7	0·713	·016	7·7	0·2	2·0	0·5	79	4	·5			
	71	67·4	0·6	0·672	·014	7·2	0·1	2·5	0·4	75	4	498·8			
	70	65·7	0·6	0·633	·013	6·8	0·1	2·9	0·4	71	4	499·0			
	69	64·0	0·6	0·596	·012	6·4	0·1	3·3	0·4	67	4	·3			
	68	62·3	0·6	0·561	·011	6·1	0·1	3·6	0·4	63	3	·5			
	67	60·6	0·6	0·528	·010	5·7	0·1	4·0	0·4	59	3	·4			
	66	58·9	0·6	0·497	.009	5·4	0·1	4·3	0·4	55	3	499·9			
	65	57·2	0·6	0·468	·009	5·1	0·1	4·6	0·4	52	3	500·1			
	64	55·5	0·6	0·441	·008	4·8	0·1	4·9	0·4	49	3	·3			
	63	53·8	0·6	0·415	·008	4·5	0·1	5·2	0·4	46	2	·4			
	62	52·1	0·6	0·390	·008	4·2	0·1	5·5	0·4	43	2	·6			
	61	50·4	0·6	0·366	·008	3·9	0·1	5·8	0·4	40	2	·7			
	60	48·6	0·5	0·343	·007	3·7	0·1	6·0	0·4	38	2	500·9			
	59	46·9	0·5	0·322	·007	3·5	0·1	6·2	0·4	36	2	501·0			
	58	45·2	0·5	0·302	·007	3·3	0·1	6·4	0·4	34	2	·2			
	57	43·5	0·5	0·283	·007	3·1	0·1	6·6	0·4	32	2	·3		·01	0·2
	56	41·8	0·5	0·265	·006	2·9	0·1	6·8	0·4	30	1	·4		·02	0·3
	55	40·1	0·5	0·248	·005	2·7	0·1	7·0	0·4	28	1	·5		·03	0·5
	54	38·4	0·5	0·232	·005	2·5	0·0	7·2	0·3	26	1	·6		·04	0·7
	53	36·7	−0·5	0·217	−·005	2·3	−0·0	7·4	+0·3	24	− 1	501·7		·05	0·9
														·06	1·0
77	77	77·0	−0·7	0·927	−·021	10·0	−0·2	0·0	+0·5	100	− 5	496·3	− 0·9	·07	1·2
	76	75·3	0·7	0·877	·020	9·5	0·2	0·5	0·5	94	5	·6		·08	1·4
	75	73·6	−0·7	0·829	−·019	8·9	−0·2	1·1	+0·5	89	− 5	496·9	+17·1	·09	1·6

Reading of Thermometer. Dry.	Wet.	Temperature of the Dew-point.	Difference for an increase of 1° in Dry.	Elastic force of Vapour.	Difference for an increase of 1° in Dry.	Vapour in a Cubic Foot of Air.	Difference for an increase of 1° in Dry.	Vap. reqd. to sat. a Cubic Foot of Air.	Difference for an increase of 1° in Dry.	Degree of Humidity. (Satn.=100.)	Difference for an increase of 1° in Dry.	Weight of a Cubic Foot of Air. Bar. reading 29 inches.	Diff. for an increase of 1° in Dry / 1 in. in Bar.	Difference for one inch in Barometer and proportional parts.	
°	°	°	°	in.	in.	gr.	gr.	gr.	gr.			grs.	grs.		
77	75	73·6	−0·7	0·829	−·019	8·9	−0·2	1·1	+0·5	89	− 5	496·9	− 0·9	17·1	
	74	71·9	0·7	0·783	·018	8·4	0·2	1·6	0·5	84	5	497·2		in.	grs.
	73	70·2	0·7	0·739	·017	8·0	0·2	2·0	0·5	79	4	·5	+17·1	·1	1·7
	72	68·5	0·7	0·697	·016	7·5	0·2	2·5	0·5	75	4	497·8		·2	3·4
	71	66·8	0·7	0·658	·015	7·1	0·2	2·9	0·5	71	4	498·0		·3	5·1
	70	65·1	0·7	0·620	·014	6·7	0·2	3·3	0·5	67	4	·3		·4	6·8
	69	63·4	0·7	0·584	·013	6·3	0·1	3·7	0·4	63	3	·5		·5	8·6
	68	61·7	0·6	0·550	·012	5·9	0·1	4·1	0·4	59	3	·7		·6	10·3
	67	60·0	0·6	0·518	·011	5·6	0·1	4·4	0·4	56	3	498·9		·7	12·0
	66	58·3	0·6	0·488	·010	5·3	0·1	4·7	0·4	53	3	499·1		·8	13·7
	65	56·6	0·6	0·459	·010	4·9	0·1	5·1	0·4	50	2	·3		·9	15·4
	64	54·9	0·6	0·431	·009	4·6	0·1	5·4	0·4	47	2	·4			
	63	53·2	0·6	0·405	·008	4·3	0·1	5·7	0·4	44	2	·6			
	62	51·5	0·6	0·381	·008	4·1	0·1	5·9	0·4	41	2	·8			
	61	49·8	0·6	0·358	·008	3·9	0·1	6·1	0·4	38	2	499·9			
	60	48·1	0·6	0·336	·008	3·6	0·1	6·4	0·4	36	2	500·1			
	59	46·4	0·6	0·315	·007	3·4	0·1	6·6	0·4	34	2	·2			
	58	44·7	0·6	0·295	·006	3·2	0·1	6·8	0·4	32	2	·3			
	57	43·0	0·6	0·276	·005	3·0	0·1	7·0	0·4	30	2	·4			
	56	41·3	0·6	0·259	·005	2·8	0·1	7·2	0·4	28	1	·5			
	55	39·6	0·6	0·243	·005	2·6	0·1	7·4	0·4	26	1	·6			
	54	37·9	−0·6	0·228	−·005	2·4	−0·0	7·6	+0·3	24	− 1	500·7			
78	78	78·0	−0·7	0·958	−·021	10·3	−0·2	0·0	+0·5	100	− 5	495·2	− 0·9		
	77	76·3	0·7	0·906	·019	9·7	0·2	0·6	0·5	94	5	·5			
	76	74·6	0·7	0·857	·018	9·2	0·2	1·1	0·5	89	5	495·8	+17·1		
	75	72·9	0·6	0·810	·017	8·7	0·2	1·6	0·5	84	5	496·1			
	74	71·2	0·6	0·765	·016	8·2	0·2	2·1	0·5	79	4	·4			
	73	69·5	0·6	0·722	·015	7·8	0·2	2·5	0·5	75	4	·7			
	72	67·8	0·6	0·681	·015	7·3	0·2	3·0	0·5	71	4	496·9			
	71	66·1	0·6	0·642	·014	6·9	0·2	3·4	0·5	67	3	497·2			
	70	64·4	0·6	0·605	·013	6·5	0·1	3·8	0·4	63	3	·4			
	69	62·7	0·6	0·571	·013	6·2	0·1	4·1	0·4	59	3	·6			
	68	61·1	0·6	0·539	·013	5·8	0·1	4·5	0·4	56	3	497·8			
	67	59·4	0·6	0·508	·012	5·5	0·1	4·8	0·4	53	3	498·0			
	66	57·7	0·6	0·478	·011	5·1	0·1	5·2	0·4	50	3	·2			
	65	56·0	0·6	0·449	·010	4·8	0·1	5·5	0·4	47	3	·4			
	64	54·3	0·6	0·422	·009	4·5	0·1	5·8	0·4	44	3	·5			
	63	52·6	0·6	0·397	·009	4·3	0·1	6·0	0·4	41	2	·7			
	62	50·9	0·6	0·373	·008	4·0	0·1	6·3	0·4	39	2	498·8			
	61	49·2	0·6	0·350	·007	3·8	0·1	6·5	0·4	37	2	499·0			
	60	47·5	0·6	0·328	·006	3·5	0·1	6·8	0·4	35	2	·1			
	59	45·8	0·6	0·308	·006	3·3	0·1	7·0	0·4	32	2	·3			
	58	44·1	0·6	0·289	·006	3·1	0·1	7·2	0·4	30	2	·4			
	57	42·4	0·6	0·271	·006	2·9	0·1	7·4	0·4	28	1	·5			
	56	40·7	0·6	0·254	·005	2·7	0·0	7·6	0·3	27	1	·6			
	55	39·0	−0·5	0·238	−·005	2·5	−0·0	7·8	+0·3	25	− 1	499·7			
79	79	79·0	−0·7	0·990	−·022	10·6	−0·2	0·0	+0·6	100	− 5	494·1	− 0·9		
	78	77·3	0·7	0·937	·021	10·1	0·2	0·5	0·6	95	5	·5			
	77	75·6	0·7	0·887	·020	9·5	0·2	1·1	0·6	90	5	494·8	+17·0		
	76	73·9	0·7	0·839	·019	9·0	0·2	1·6	0·6	85	5	495·1			
	75	72·3	0·7	0·793	·018	8·5	0·2	2·1	0·6	80	4	·4			
	74	70·6	0·7	0·749	·018	8·0	0·2	2·6	0·6	75	4	·7			
	73	68·9	0·7	0·707	·017	7·6	0·2	3·0	0·6	71	4	495·9			
	72	67·2	0·7	0·666	·016	7·2	0·2	3·4	0·6	67	4	496·2		·01	0·2
	71	65·5	0·6	0·628	·015	6·8	0·2	3·8	0·6	63	3	·4		·02	0·3
	70	63·8	0·6	0·592	·014	6·4	0·2	4·2	0·6	59	3	·6		·03	0·5
	69	62·1	0·6	0·558	·013	6·0	0·2	4·6	0·6	56	3	496·8		·04	0·7
	68	60·4	0·6	0·526	·013	5·6	0·1	5·0	0·5	53	3	497·0		·05	0·9
	67	58·7	0·6	0·495	·012	5·3	0·1	5·3	0·5	50	3	·2		·06	1·0
	66	57·0	0·6	0·466	·011	5·0	0·1	5·6	0·5	47	3	·4		·07	1·2
	65	55·4	0·6	0·439	·010	4·7	0·1	5·9	0·5	44	3	·6		·08	1·4
	64	53·7	−0·6	0·413	−·009	4·4	−0·1	6·2	+0·5	42	− 3	497·8		·09	1·5

Reading of Thermometer. Dry.	Reading of Thermometer. Wet.	Temperature of the Dew-Point.	Difference for an increase of 1° in Dry.	Elastic force of Vapour.	Difference for an increase of 1° in Dry.	Vapour in a Cubic Foot of Air.	Difference for an increase of 1° in Dry.	Vap. reqd. to sat. a Cubic Foot of Air.	Difference for an increase of 1° in Dry.	Degree of Humidity. (Satn. = 100.)	Difference for an increase of 1° in Dry.	Weight of a Cubic Foot of Air. Bar. reading 29 inches.	Diff. for an increase of 1° in Dry / 1 in. in Bar.
°	°	°	°	in.	in.	gr.	gr.	gr.	gr.			grs.	grs.
79	64	53·7	−0·6	0·413	−·009	4·4	−0·1	6·2	+0·5	42	−3	497·8	−0·9
	63	52·0	0·6	0·388	·008	4·2	0·1	6·4	0·5	39	2	497·9	
	62	50·3	0·6	0·365	·008	3·9	0·1	6·7	0·5	37	2	498·1	+17·0
	61	48·6	0·6	0·343	·008	3·7	0·1	6·9	0·5	35	2	·2	
	60	46·9	0·6	0·322	·007	3·5	0·1	7·1	0·5	32	2	·3	
	59	45·2	0·5	0·302	·006	3·2	0·0	7·4	0·4	30	2	·5	
	58	43·5	0·5	0·283	·005	3·0	0·0	7·6	0·4	28	1	·6	
	57	41·8	0·5	0·265	·005	2·8	0·0	7·8	0·4	26	1	·7	
	56	40·2	−0·5	0·248	−·005	2·7	−0·0	7·9	+0·4	25	−1	498·8	
80	80	80·0	−0·7	1·023	−·023	11·0	−0·2	0·0	+0·5	100	−5	493·0	−0·9
	79	78·3	0·7	0·968	·021	10·4	0·2	0·6	0·5	95	5	·4	
	78	76·6	0·7	0·916	·020	9·8	0·2	1·2	0·5	90	5	493·7	+17·0
	77	75·0	0·7	0·867	·019	9·3	0·2	1·7	0·5	85	5	494·0	
	76	73·3	0·7	0·820	·018	8·8	0·2	2·2	0·5	80	4	·3	
	75	71·6	0·7	0·775	·017	8·3	0·2	2·7	0·5	75	4	·6	
	74	69·9	0·6	0·732	·016	7·8	0·2	3·2	0·5	71	4	494·8	
	73	68·2	0·6	0·690	·015	7·4	0·2	3·6	0·5	67	4	495·1	
	72	66·5	0·6	0·650	·013	7·0	0·2	4·0	0·5	63	3	·3	
	71	64·9	0·6	0·613	·012	6·6	0·2	4·4	0·5	59	3	·6	
	70	63·2	0·6	0·578	·011	6·2	0·2	4·8	0·5	56	3	495·8	
	69	61·5	0·6	0·545	·011	5·8	0·1	5·2	0·4	53	3	496·0	
	68	59·8	0·6	0·513	·010	5·5	0·1	5·5	0·4	50	3	·2	
	67	58·1	0·6	0·483	·010	5·2	0·1	5·8	0·4	47	2	·4	
	66	56·4	0·6	0·455	·010	4·9	0·1	6·1	0·4	44	2	·6	
	65	54·8	0·6	0·429	·010	4·6	0·1	6·4	0·4	41	2	·7	
	64	53·1	0·6	0·404	·010	4·3	0·1	6·7	0·4	39	2	496·9	
	63	51·4	0·6	0·380	·009	4·1	0·1	6·9	0·4	37	2	497·0	
	62	49·7	0·6	0·357	·008	3·8	0·1	7·2	0·4	35	2	·2	
	61	48·0	0·6	0·335	·007	3·6	0·1	7·4	0·4	33	2	·3	
	60	46·3	0·5	0·315	·007	3·4	0·1	7·6	0·4	31	1	·4	
	59	44·7	0·5	0·296	·007	3·2	0·1	7·8	0·4	29	1	·6	
	58	43·0	0·5	0·278	·006	3·0	0·1	8·0	0·4	27	1	·7	
	57	41·3	−0·5	0·261	−·006	2·8	−0·0	8·2	+0·3	25	−1	497·8	
81	81	81·0	−0·7	1·057	−·024	11·3	−0·2	0·0	+0·6	100	−5	491·8	−0·9
	80	79·3	0·7	1·000	·022	10·7	0·2	0·6	0·6	95	5	492·2	
	79	77·7	0·7	0·947	·021	10·1	0·2	1·2	0·6	90	5	·5	+17·0
	78	76·0	0·7	0·897	·020	9·5	0·2	1·8	0·6	85	4	492·8	
	77	74·3	0·7	0·849	·019	9·1	0·2	2·2	0·6	80	4	493·1	
	76	72·6	0·6	0·802	·018	8·6	0·2	2·7	0·6	76	4	·4	
	75	70·9	0·6	0·757	·016	8·1	0·2	3·2	0·6	72	4	493·7	
	74	69·3	0·6	0·715	·015	7·6	0·1	3·7	0·5	68	4	494·0	
	73	67·6	0·6	0·675	·014	7·2	0·1	4·1	0·5	64	3	·2	
	72	65·9	0·6	0·637	·013	6·8	0·1	4·5	0·5	60	3	·5	
	71	64·2	0·6	0·601	·013	6·4	0·1	4·9	0·5	56	3	·7	
	70	62·6	0·6	0·567	·013	6·0	0·1	5·3	0·5	53	3	494·9	
	69	60·9	0·6	0·534	·012	5·7	0·1	5·6	0·5	50	3	495·1	
	68	59·2	0·6	0·503	·011	5·4	0·1	5·9	0·5	47	2	·3	
	67	57·5	0·6	0·473	·009	5·1	0·1	6·2	0·5	44	2	·5	
	66	55·8	0·6	0·445	·008	4·8	0·1	6·5	0·5	41	2	·6	
	65	54·2	0·6	0·419	·008	4·5	0·1	6·8	0·5	39	2	495·8	
	64	52·5	0·6	0·394	·007	4·2	0·1	7·1	0·5	37	2	496·0	
	63	50·8	0·6	0·371	·007	4·0	0·1	7·3	0·5	35	2	·1	
	62	49·1	0·6	0·349	·007	3·7	0·1	7·6	0·5	33	2	·3	
	61	47·5	0·6	0·328	·007	3·5	0·1	7·8	0·5	31	2	·4	
	60	45·8	0·6	0·308	·007	3·3	0·1	8·0	0·5	29	2	·5	
	59	44·1	0·5	0·289	·007	3·1	0·1	8·2	0·5	27	1	·6	
	58	42·4	−0·5	0·271	−·006	2·9	−0·0	8·4	+0·4	26	−1	496·7	
82	82	82·0	−0·7	1·091	−·025	11·7	−0·3	0·0	+0·6	100	−5	490·8	−0·8
	81	80·3	0·7	1·033	·024	11·1	0·3	0·6	0·6	95	5	491·1	
	80	78·7	0·7	0·978	·023	10·5	0·3	1·2	0·6	90	5	·5	+16·9
	79	77·0	−0·7	0·926	−·022	9·9	−0·3	1·8	+0·6	85	−5	491·8	

Difference for one inch in Barometer and proportional parts.

17·0	
in.	grs.
·1	1·7
·2	3·4
·3	5·1
·4	6·8
·5	8·5
·6	10·2
·7	11·9
·8	13·6
·9	15·3
·01	0·2
·02	0·3
·03	0·5
·04	0·7
·05	0·9
·06	1·0
·07	1·2
·08	1·4
·09	1·5

Reading of Thermometer. Dry.	Wet.	Temperature of the Dew-Point.	Difference for an increase of 1° in Dry.	Elastic force of Vapour.	Difference for an increase of 1° in Dry.	Vapour in a Cubic Foot of Air.	Difference for an increase of 1° in Dry.	Vap. reqd. to sat. a Cubic Foot of Air.	Difference for an increase of 1° in Dry.	Degree of Humidity. (Satn. = 100.)	Difference for an increase of 1° in Dry.	Weight of a Cubic Foot of Air. Bar. reading 29 inches.	Diff. for an increase of 1° in Dry / of 1 in. in Bar.	Difference for one inch in Barometer and proportional parts. (in.)	(grs.)
°	°	°	°	in.	in.	gr.	gr.	gr.	gr.			grs.	grs.		
82	79	77.0	−0.7	0.926	−.022	9.9	−0.3	1.8	+0.6	85	− 5	491.8	− 0.8	16.9	
	78	75.3	0.6	0.877	.021	9.4	0.3	2.3	0.6	80	4	492.1		in.	grs.
	77	73.6	0.6	0.830	.020	8.9	0.3	2.8	0.6	76	4	.4	+16.9	.1	1.7
	76	72.0	0.6	0.785	.019	8.4	0.2	3.3	0.5	72	4	492.7		.2	3.4
	75	70.3	0.6	0.742	.018	7.9	0.2	3.8	0.5	68	4	493.0		.3	5.1
	74	68.6	0.6	0.701	.017	7.5	0.2	4.2	0.5	64	3	.2		.4	6.8
	73	67.0	0.6	0.662	.016	7.1	0.2	4.6	0.5	60	3	.5		.5	8.5
	72	65.3	0.6	0.624	.014	6.7	0.2	5.0	0.5	57	3	.7		.6	10.1
	71	63.6	0.6	0.588	.013	6.3	0.2	5.4	0.5	54	3	493.9		.7	11.8
	70	61.9	0.6	0.554	.012	5.9	0.2	5.8	0.5	51	3	494.1		.8	13.5
	69	60.3	0.6	0.522	.011	5.6	0.2	6.1	0.5	48	3	.3		.9	15.2
	68	58.6	0.6	0.492	.010	5.2	0.1	6.5	0.4	45	3	.5			
	67	56.9	0.6	0.464	.010	4.9	0.1	6.8	0.4	42	2	.7			
	66	55.3	0.6	0.437	.009	4.7	0.1	7.0	0.4	40	2	494.8			
	65	53.6	0.6	0.411	.008	4.4	0.1	7.3	0.4	38	2	495.0			
	64	51.9	0.6	0.387	.008	4.1	0.1	7.6	0.4	35	2	.2			
	63	50.2	0.6	0.364	.008	3.9	0.1	7.8	0.4	33	2	.3			
	62	48.6	0.6	0.342	.007	3.6	0.1	8.1	0.4	31	1	.5			
	61	46.9	0.5	0.321	.006	3.4	0.1	8.3	0.4	29	1	.6			
	60	45.2	0.5	0.301	.005	3.2	0.1	8.5	0.4	27	1	.7			
	59	43.5	−0.5	0.282	−.005	3.0	−0.1	8.7	+0.4	26	− 1	495.8			
83	83	83.0	−0.7	1.127	−.023	12.0	−0.3	0.0	+0.7	100	− 5	489.6	− 0.8		
	82	81.3	0.7	1.067	.022	11.7	0.3	0.6	0.7	95	5	490.0			
	81	79.7	0.6	1.010	.021	10.8	0.3	1.2	0.7	90	5	.4	+16.9		
	80	78.0	0.6	0.956	.019	10.2	0.2	1.8	0.6	85	5	490.7			
	79	76.3	0.6	0.905	.018	9.7	0.2	2.3	0.6	80	4	491.0			
	78	74.7	0.6	0.856	.017	9.1	0.2	2.9	0.6	76	4	.3			
	77	73.0	0.6	0.810	.016	8.6	0.2	3.4	0.6	72	4	.6			
	76	71.3	0.6	0.766	.015	8.2	0.2	3.8	0.6	68	4	491.8			
	75	69.7	0.6	0.724	.014	7.7	0.2	4.3	0.6	64	3	492.1			
	74	68.0	0.6	0.684	.013	7.3	0.2	4.7	0.6	60	3	.4			
	73	66.3	0.6	0.646	.012	6.9	0.2	5.1	0.6	57	3	.6			
	72	64.7	0.6	0.610	.012	6.5	0.2	5.5	0.6	54	3	492.9			
	71	63.0	0.6	0.576	.012	6.1	0.2	5.9	0.6	51	3	493.1			
	70	61.3	0.6	0.543	.011	5.8	0.2	6.2	0.6	48	2	.3			
	69	59.7	0.6	0.512	.011	5.4	0.1	6.6	0.5	45	2	.5			
	68	58.0	0.6	0.482	.010	5.1	0.1	6.9	0.5	42	2	.6			
	67	56.3	0.6	0.454	.009	4.8	0.1	7.2	0.5	40	2	493.8			
	66	54.7	0.6	0.428	.009	4.6	0.1	7.4	0.5	38	2	494.0			
	65	53.0	0.5	0.403	.009	4.3	0.1	7.7	0.5	36	2	.1			
	64	51.3	0.5	0.379	.008	4.0	0.1	8.0	0.5	34	2	.3			
	63	49.7	0.5	0.356	.007	3.8	0.1	8.2	0.5	32	2	.4			
	62	48.0	0.5	0.335	.007	3.6	0.1	8.4	0.5	30	1	.6			
	61	46.3	0.5	0.315	.007	3.3	0.1	8.7	0.5	28	1	.7			
	60	44.7	−0.5	0.296	−.006	3.1	−0.1	8.9	+0.5	26	− 1	494.8			
84	84	84.0	−0.6	1.164	−.023	12.4	−0.3	0.0	+0.7	100	− 5	488.4	− 0.8		
	83	82.3	0.6	1.103	.021	11.7	0.3	0.7	0.7	95	5	488.8			
	82	80.7	0.6	1.045	.019	11.1	0.2	1.3	0.6	90	5	489.2	+16.9		
	81	79.0	0.6	0.990	.017	10.5	0.2	1.9	0.6	85	4	.6			
	80	77.4	0.6	0.938	.016	10.0	0.2	2.4	0.6	80	4	489.9			
	79	75.7	0.6	0.888	.015	9.4	0.2	3.0	0.6	76	4	490.2			
	78	74.0	0.6	0.840	.014	8.9	0.2	3.5	0.6	72	4	.5			
	77	72.4	0.6	0.794	.013	8.5	0.2	3.9	0.6	68	4	490.8			
	76	70.7	0.6	0.751	.013	8.0	0.2	4.4	0.6	64	3	491.1		.01	0.2
	75	69.1	0.6	0.710	.012	7.5	0.1	4.9	0.5	60	3	.3		.02	0.3
	74	67.4	0.6	0.671	.011	7.1	0.1	5.3	0.5	57	3	.5		.03	0.5
	73	65.7	0.6	0.634	.011	6.7	0.1	5.7	0.5	54	3	491.8		.04	0.7
	72	64.1	0.6	0.598	.010	6.3	0.1	6.1	0.5	51	3	492.0		.05	0.9
	71	62.4	0.6	0.564	.009	6.0	0.1	6.4	0.5	48	2	.2		.06	1.0
	70	60.8	0.6	0.532	.008	5.6	0.1	6.8	0.5	45	2	.4		.07	1.2
	69	59.1	0.6	0.501	.007	5.3	0.1	7.1	0.5	43	2	.6		.08	1.4
	68	57.4	−0.6	0.472	−.006	5.0	−0.1	7.4	+0.5	41	− 2	492.8		.09	1.5

Reading of Thermometer. Dry.	Reading of Thermometer. Wet.	Temperature of the Dew-Point.	Difference for an increase of 1° in Dry.	Elastic force of Vapour.	Difference for an increase of 1° in Dry.	Vapour in a Cubic Foot of Air.	Difference for an increase of 1° in Dry.	Vap. reqd. to sat. a Cubic Foot of Air.	Difference for an increase of 1° in Dry.	Degree of Humidity. (Satn. = 100.)	Difference for an increase of 1° in Dry.	Weight of a Cubic Foot of Air. Bar. reading 29 inches.	Diff. for an increase of 1° in Dry / of 1 in. in Bar.	Difference for one inch in Barometer and proportional parts.	
°	°	°	°	in.	in.	gr.	gr	gr.	gr.			grs.	grs.		
84	68	57·4	−0·6	0·472	−·006	5·0	−0·1	7·4	+0·5	41	−2	492·8	−0·8	16·8	
	67	55·8	0·6	0·445	·006	4·7	0·1	7·7	0·5	38	2	492·9		in.	grs.
	66	54·1	0·6	0·419	·006	4·5	0·1	7·9	0·5	36	2	493·1	+16·9	·1	1·7
	65	52·5	0·6	0·394	·006	4·2	0·1	8·2	0·5	34	2	·2		·2	3·4
	64	50·8	0·6	0·371	·006	4·0	0·1	8·4	0·5	32	2	·4		·3	5·0
	63	49·1	0·5	0·349	·006	3·7	0·1	8·7	0·5	30	2	·5		·4	6·7
	62	47·5	0·5	0·328	·006	3·5	0·1	8·9	0·5	28	1	·7		·5	8·4
	61	45·8	−0·5	0·308	−·006	3·3	−0·1	9·1	+0·5	26	−1	493·8		·6	10·1
														·7	11·8
85	85	85·0	−0·6	1·203	−·023	12·8	−0·3	0·0	+0·7	100	−5	487·4	−0·8	·8	13·4
	84	83·4	0·6	1·141	·021	12·1	0·3	0·7	0·7	95	5	487·8		·9	15·1
	83	81·7	0·6	1·082	·020	11·5	0·3	1·3	0·7	90	5	488·2	+16·8		
	82	80·0	0·6	1·026	·019	10·9	0·3	1·9	0·7	85	4	·5			
	81	78·4	0·6	0·973	·018	10·3	0·2	2·5	0·6	80	4	488·8			
	80	76·7	0·6	0·922	·018	9·7	0·2	3·1	0·6	76	4	489·2			
	79	75·1	0·6	0·873	·018	9·2	0·2	3·6	0·6	72	4	·5			
	78	73·4	0·6	0·826	·018	8·7	0·2	4·1	0·6	68	3	489·8			
	77	71·8	0·6	0·781	·018	8·3	0·2	4·5	0·6	64	3	490·0			
	76	70·1	0·6	0·738	·017	7·8	0·2	5·0	0·6	61	3	·3			
	75	68·5	0·6	0·698	·017	7·4	0·2	5·4	0·6	58	3	·6			
	74	66·8	0·6	0·660	·017	7·0	0·2	5·8	0·6	55	3	490·8			
	73	65·2	0·6	0·623	·016	6·6	0·2	6·2	0·6	52	3	491·0			
	72	63·5	0·6	0·588	·015	6·2	0·2	6·6	0·6	49	3	·2			
	71	61·8	0·6	0·555	·014	5·9	0·2	6·9	0·6	46	2	·4			
	70	60·2	0·6	0·524	·014	5·5	0·1	7·3	0·5	43	2	·6			
	69	58·5	0·6	0·494	·014	5·2	0·1	7·6	0·5	40	2	491·8			
	68	56·9	0·6	0·466	·013	4·9	0·1	7·9	0·5	38	2	492·0			
	67	55·2	0·6	0·439	·012	4·6	0·1	8·2	0·5	36	2	·2			
	66	53·6	0·6	0·413	·011	4·3	0·1	8·5	0·5	34	2	·3			
	65	51·9	0·5	0·388	·009	4·1	0·1	8·7	0·5	32	1	·5			
	64	50·2	0·5	0·365	·008	3·8	0·1	9·0	0·5	30	1	·6			
	63	48·6	0·5	0·343	·007	3·6	0·1	9·2	0·5	28	1	·8			
	62	46 9	−0·5	0·322	−·006	3·4	−0·1	9·4	+0·5	27	−1	492·9			
86	86	86·0	−0·6	1·242	−·024	13·2	−0·3	0·0	+0·7	100	−5	486·2	−0·8		
	85	84·3	0·6	1·180	·023	12·5	0·3	0·7	0·7	95	5	486·6			
	84	82·7	0·6	1·121	·023	11·8	0·2	1·4	0·6	90	5	487·0	+16·8		
	83	81·1	0·6	1·064	·022	11·2	0·2	2·0	0·6	85	4	·4			
	82	79·4	0·6	1·008	·022	10·6	0·2	2·6	0·6	80	4	487·7			
	81	77·8	0·6	0·955	·021	10·1	0·2	3·1	0·6	76	4	488·1			
	80	76·1	0·6	0·904	·020	9·5	0·2	3·7	0·6	72	4	·4			
	79	74·5	0·6	0·855	·018	9·0	0·2	4·2	0·6	68	3	488·7			
	78	72·8	0·6	0·808	·016	8·5	0·2	4·7	0·6	64	3	489·0			
	77	71·2	0·6	0·763	·014	8·1	0·2	5·1	0·6	61	3	·2			
	76	69·5	0·6	0·721	·013	7·6	0·2	5·6	0·6	58	3	·5			
	75	67·9	0·6	0·681	·012	7·2	0·2	6·0	0·6	55	3	489·7			
	74	66·2	0·6	0·643	·011	6·8	0·2	6·4	0·6	52	2	490·0			
	73	64·6	0·6	0·607	·010	6·4	0·2	6·8	0·6	49	2	·2			
	72	62·9	0·6	0·573	·009	6·1	0·2	7·1	0·6	46	2	·4			
	71	61·3	0·6	0·541	·009	5·7	0·1	7·5	0·5	43	2	·6			
	70	59·6	0·6	0·510	·008	5·4	0·1	7·8	0·5	40	2	490·8			
	69	58·0	0·6	0·480	·007	5·1	0·1	8·1	0·5	38	2	491·0			
	68	56·3	0·6	0·452	·007	4·8	0·1	8·4	0·5	36	2	·1			
	67	54·7	0·6	0·426	·007	4·5	0·1	8·7	0·5	34	1	·3			
	66	53·0	0 5	0·402	·007	4·2	0·1	9·0	0·5	32	1	·4			
	65	51·4	0·5	0·379	·006	4·0	0·1	9·2	0·5	30	1	·6		·01	0·2
	64	49·7	0·5	0·357	·006	3·7	0·1	9·5	0·5	28	1	·7		·02	0·3
	63	48·1	−0·5	0·336	−·006	3·5	−0·1	9·7	+0·5	27	−1	491·8		·03	0·5
														·04	0·7
87	87	87·0	−0·6	1·282	−·024	13·6	−0·3	0·0	+0·7	100	−5	485·2	−0·8	·05	0·8
	86	85·4	0·6	1·219	·024	12·9	0·3	0·7	0·7	95	5	485·6		·06	1·0
	85	83·7	0·6	1·158	·024	12·2	0·3	1·4	0·7	90	5	486·0	+16·7	·07	1·2
	84	82·1	0·6	1·098	·023	11·6	0·3	2·0	0·7	85	5	·4		·08	1·3
	83	80·4	−0·6	1·040	−·022	11·0	−0·2	2·6	+0·6	81	−4	486·7		·09	1·5

Reading of Thermometer. Dry.	Wet.	Temperature of the Dew-point.	Difference for an increase of 1° in Dry.	Elastic force of Vapour.	Difference for an increase of 1° in Dry.	Vapour in a Cubic Foot of Air.	Difference for an increase of 1° in Dry.	Vap. reqd. to sat. a Cubic Foot of Air.	Difference for an increase of 1° in Dry.	Degree of Humidity. (Satn.=100.)	Difference for an increase of 1° in Dry.	Weight of a Cubic Foot of Air. Bar. reading 29 inches.	Diff. for an increase of 1° in Dry / of 1 in. in Bar.
°	°	°	°	in.	in.	gr.	gr.	gr.	gr.			grs.	grs.
87	83	80·4	−0·6	1·040	−·022	11·0	−0·2	2·6	+0·6	81	−4	486·7	−0·8
	82	78·8	0·6	0·985	·021	10·4	0·2	3·2	0·6	77	4	487·1	
	81	77·1	0·6	0·933	·020	9·8	0·2	3·8	0·6	73	4	·4	+16·7
	80	75·5	0·6	0·884	·019	9·3	0·2	4·3	0·6	69	4	487·7	
	79	73·9	0·6	0·837	·018	8·8	0·2	4·8	0·6	65	4	488·0	
	78	72·2	0·6	0·792	·017	8·3	0·2	5·3	0·6	61	3	·2	
	77	70·6	0·6	0·749	·016	7·9	0·2	5·7	0·6	58	3	·5	
	76	68·9	0·6	0·708	·015	7·4	0·1	6·2	0·5	55	3	488·8	
	75	67·3	0·6	0·669	·014	7·0	0·1	6·6	0·5	52	3	489·0	
	74	65·6	0·6	0·632	·013	6·6	0·1	7·0	0·5	49	3	·2	
	73	64·0	0·6	0·597	·012	6·3	0·1	7·3	0·5	46	2	·4	
	72	62·4	0·6	0·564	·011	5·9	0·1	7·7	0·5	43	2	·6	
	71	60·7	0·6	0·532	·010	5·6	0·1	8·0	0·5	41	2	489·8	
	70	59·1	0·6	0·502	·010	5·3	0·1	8·3	0·5	39	2	490·0	
	69	57·4	0·5	0·473	·009	5·0	0·1	8·6	0·5	37	2	·2	
	68	55·8	0·5	0·446	·009	4·7	0·1	8·9	0·5	35	2	·3	
	67	54·1	0·5	0·420	·009	4·4	0·1	9·2	0·5	33	2	·5	
	66	52·5	0·5	0·395	·008	4·2	0·1	9·4	0·5	31	2	·7	
	65	50·8	0·5	0·372	·007	3·9	0·1	9·7	0·5	29	1	·8	
	64	49·2	−0·5	0·351	−·006	3·7	−0·1	9·9	+0·5	27	−1	490·9	
88	88	88·0	−0·6	1·323	−·024	14·0	−0·3	0·0	+0·7	100	−5	484·0	−0·8
	87	86·4	0·6	1·258	·023	13·3	0·3	0·7	0·7	95	5	·4	
	86	84·7	0·6	1·195	·023	12·6	0·3	1·4	0·7	90	5	484·8	+16·7
	85	83·1	0·6	1·134	·022	12·0	0·3	2·0	0·7	85	4	485·2	
	84	81·5	0·6	1·075	·021	11·4	0·3	2·6	0·7	81	4	·6	
	83	79·8	0·6	1·018	·020	10·8	0·3	3·2	0·7	77	4	485·9	
	82	78·2	0·6	0·964	·019	10·2	0·2	3·8	0·6	73	4	486·3	
	81	76·5	0·6	0·913	·018	9·6	0·2	4·4	0·6	69	3	·6	
	80	74·9	0·6	0·865	·018	9·1	0·2	4·9	0·6	65	3	486·9	
	79	73·3	0·6	0·819	·018	8·6	0·2	5·4	0·6	61	3	487·2	
	78	71·6	0·6	0·775	·018	8·1	0·2	5·9	0·6	58	3	·4	
	77	70·0	0·6	0·733	·017	7·7	0·2	6·3	0·6	55	3	·7	
	76	68·4	0·6	0·693	·016	7·3	0·2	6·7	0·6	52	3	487·9	
	75	66·7	0·6	0·655	·015	6·9	0·2	7·1	0·6	49	3	488·2	
	74	65·1	0·6	0·619	·014	6·5	0·1	7·5	0·5	46	2	·4	
	73	63·4	0·5	0·585	·013	6·1	0·1	7·9	0·5	43	2	·6	
	72	61·8	0·5	0·553	·012	5·8	0·1	8·2	0·5	41	2	488·8	
	71	60·2	0·5	0·522	·011	5·5	0·1	8·5	0·5	39	2	489·0	
	70	58·5	0·5	0·492	·010	5·2	0·1	8·8	0·5	37	2	·2	
	69	56·9	0·5	0·464	·009	4·9	0·1	9·1	0·5	35	2	·3	
	68	55·2	0·5	0·437	·008	4·6	0·1	9·4	0·5	33	1	·5	
	67	53·6	0·5	0·411	·007	4·3	0·1	9·7	0·5	31	1	·6	
	66	52·0	0·5	0·387	·006	4·1	0·1	9·9	0·5	29	1	·8	
	65	50·3	−0·5	0·365	−·006	3·8	−0·1	10·2	+0·5	27	−1	489·9	
89	89	89·0	−0·6	1·366	−·024	14·4	−0·3	0·0	+0·7	100	−5	482·9	−0·8
	88	87·4	0·6	1·299	·023	13·7	0·3	0·7	0·7	95	5	483·3	
	87	85·7	0·6	1·234	·022	13·0	0·3	1·4	0·7	90	5	483·7	+16·7
	86	84·1	0·6	1·172	·021	12·3	0·3	2·1	0·7	85	4	484·1	
	85	82·5	0·6	1·112	·020	11·7	0·3	2·7	0·7	81	4	·5	
	84	80·8	0·6	1·054	·019	11·1	0·3	3·3	0·7	77	4	484·8	
	83	79·2	0·6	0·998	·017	10·5	0·2	3·9	0·6	73	4	485·1	
	82	77·6	0·6	0·945	·016	10·0	0·2	4·4	0·6	69	4	·5	
	81	76·0	0·6	0·895	·015	9·4	0·2	5·0	0·6	65	4	485·8	
	80	74·3	0·6	0·847	·014	8·9	0·2	5·5	0·6	61	3	486·1	
	79	72·7	0·6	0·801	·013	8·4	0·2	6·0	0·6	58	3	·3	
	78	71·1	0·6	0·757	·012	8·0	0·2	6·4	0·6	55	3	·6	
	77	69·4	0·6	0·716	·012	7·5	0·1	6·9	0·5	52	2	486·9	
	76	67·8	0·6	0·677	·012	7·1	0·1	7·3	0·5	49	2	487·1	
	75	66·2	0·6	0·640	·011	6·7	0·1	7·7	0·5	46	2	·3	
	74	64·6	0·6	0·605	·010	6·4	0·1	8·0	0·5	43	2	·5	
	73	63·0	0·6	0·572	·010	6·0	0·1	8·4	0·5	41	2	·7	
	72	61·3	−0·5	0·541	−·010	5·7	−0·1	8·7	+0·5	39	−2	487·9	

Difference for one inch in Barometer and proportional parts.

16·7

in.	grs.
·1	1·[illegible]
·2	3·3
·3	5·0
·4	6·7
·5	8·4
·6	10·0
·7	11·7
·8	13·4
·9	15·0

·01	0·2
·02	0·3
·03	0·5
·04	0·7
·05	0·8
·06	1·0
·07	1·1
·08	1·3
·09	1·5

Reading of Thermometer. Dry.	Wet.	Temperature of the Dew-Point.	Difference for an increase of 1° in Dry.	Elastic force of Vapour.	Difference for an increase of 1° in Dry.	Vapour in a Cubic Foot of Air.	Difference for an increase of 1° in Dry.	Vap. reqd. to sat. a Cubic Foot of Air.	Difference for an increase of 1° in Dry.	Degree of Humidity. (Satn. = 100.)	Difference for an increase of 1° in Dry.	Weight of a Cubic Foot of Air. Bar. reading 29 inches.	Diff. for an increase 1° in Dry / of 1 in. in Bar.	Difference for one inch in Barometer and proportional parts.	
°	°	°	°	in.	in.	gr.	gr.	gr.	gr.			grs.	grs.		
89	72	61·3	−0·5	0·541	−·010	5·7	−0·1	8·7	+0·5	39	− 2	487·9	− 0·8	16·6	
	71	59·6	0·5	0·511	·010	5·4	0·1	9·0	0·5	37	2	488·1		in.	grs.
	70	58·0	0·5	0·482	·009	5·1	0·1	9·3	0·5	35	2	·3	+16·7	·1	1·7
	69	56·4	0·5	0·455	·009	4·8	0·1	9·6	0·5	33	2	·4		·2	3·3
	68	54·7	0·5	0·429	·008	4·5	0·1	9·9	0·5	31	1	·6		·3	5·0
	67	53·1	0·5	0·404	·007	4·2	0·1	10·2	0·5	29	1	·8		·4	6·6
	66	51·5	−0·5	0·381	−·006	4·0	−0·1	10·4	+0·5	28	− 1	488·9		·5	8·3
														·6	10·0
90	90	90·0	−0·6	1·411	−·027	14·8	−0·3	0·0	+0·8	100	− 5	481·8	− 0·8	·7	11·6
	89	88·4	0·6	1·342	·026	14·1	0·3	0·7	0·8	95	5	482·3		·8	13·3
	88	86·8	0·6	1·276	·026	13·4	0·3	1·4	0·8	90	4	482·7	+16·6	·9	14·9
	87	85·1	0·6	1·212	·025	12·7	0·3	2·1	0·8	85	4	483·1			
	86	83·5	0·6	1·151	·024	12·1	0·3	2·7	0·8	81	4	·4			
	85	81·9	0·6	1·092	·023	11·4	0·2	3·4	0·7	77	4	483·8			
	84	80·3	0·6	1·036	·022	10·8	0·2	4·0	0·7	73	4	484·1			
	83	78·6	0·6	0·982	·021	10·3	0·2	4·5	0·7	69	3	·5			
	82	77·0	0·6	0·930	·020	9·7	0·2	5·1	0·7	65	3	484·8			
	81	75·4	0·6	0·880	·018	9·2	0·2	5·6	0·7	62	3	485·1			
	80	73·7	0·5	0·833	·017	8·7	0·2	6·1	0·7	59	3	·4			
	79	72·1	0·5	0·788	·016	8·3	0·2	6·5	0·7	56	3	·6			
	78	70·5	0·5	0·745	·015	7·8	0·2	7·0	0·7	53	3	485·9			
	77	68·8	0·5	0·704	·014	7·4	0·2	7·4	0·7	50	2	486·1			
	76	67·2	0·5	0·665	·013	7·0	0·2	7·8	0·7	47	2	·4			
	75	65·6	0·5	0·629	·013	6·6	0·1	8·2	0·6	44	2	·6			
	74	64·0	0·5	0·595	·013	6·2	0·1	8·6	0·6	42	2	486·8			
	73	62·4	0·5	0·562	·012	5·9	0·1	8·9	0·6	40	2	487·0			
	72	60·7	0·5	0·531	·011	5·6	0·1	9·2	0·6	38	2	·2			
	71	59·1	0·5	0·501	·010	5·3	0·1	9·5	0·6	36	2	·4			
	70	57·5	0·5	0·473	·010	5·0	0·1	9·8	0·6	34	2	·5			
	69	55·8	0·5	0·446	·009	4·7	0·1	10·1	0·6	32	2	·7			
	68	54·2	0·5	0·421	·008	4·4	0·1	10·4	0·6	30	1	487·8			
	67	52·6	−0·5	0·397	−·007	4·2	−0·1	10·6	+0·6	28	− 1	488·0			
91	91	91·0	−0·6	1·455	−·027	15·3	−0·3	0·0	+0·7	100	− 5	480·7	− 0·8		
	90	89·4	0·6	1·384	·027	14·5	0·3	0·8	0·7	95	5	481·1			
	89	87·8	0·6	1·316	·027	13·8	0·3	1·5	0·7	90	4	·5	+16·6		
	88	86·1	0·6	1·250	·026	13·1	0·3	2·2	0·7	86	4	481·9			
	87	84·5	0·6	1·187	·025	12·5	0·3	2·8	0·7	82	4	482·3			
	86	82·9	0·6	1·127	·023	11·8	0·2	3·5	0·6	78	4	482·6			
	85	81·3	0·6	1·069	·021	11·2	0·2	4·1	0·6	74	4	483·0			
	84	79·7	0·6	1·013	·019	10·6	0·2	4·7	0·6	70	4	·4			
	83	78·0	0·6	0·960	·017	10·1	0·2	5·2	0·6	66	3	483·7			
	82	76·4	0·6	0·910	·016	9·5	0·2	5·8	0·6	62	3	484·0			
	81	74·8	0·6	0·862	·015	9·0	0·2	6·3	0·6	59	3	·3			
	80	73·2	0·6	0·816	·014	8·5	0·2	6·8	0·6	56	3	·5			
	79	71·6	0·6	0·772	·013	8·1	0·2	7·2	0·6	53	3	484·8			
	78	69·9	0·5	0·730	·012	7·7	0·2	7·6	0·6	50	3	485·1			
	77	68·3	0·5	0·690	·011	7·2	0·1	8·1	0·5	47	2	·3			
	76	66·7	0·5	0·652	·010	6·8	0·1	8·5	0·5	44	2	·5			
	75	65·1	0·5	0·616	·009	6·5	0·1	8·8	0·5	42	2	485·8			
	74	63·5	0·5	0·582	·009	6·1	0·1	9·2	0·5	40	2	486·0			
	73	61·8	0·5	0·550	·009	5·8	0·1	9·5	0·5	38	2	·1			
	72	60·2	0·5	0·520	·009	5·5	0·1	9·8	0·5	36	2	·3			
	71	58·6	0·5	0·491	·008	5·1	0·1	10·2	0·5	34	2	·5			
	70	57·0	0·5	0·463	·007	4·8	0·1	10·5	0·5	32	1	·7			
	69	55·3	0·5	0·437	·007	4·5	0·1	10·8	0·5	30	1	486·8		·01	0·2
	68	53·7	−0·5	0·413	−·006	4·3	−0·1	11·0	+0·5	28	− 1	487·0		·02	0·3
														·03	0·5
92	92	92·0	−0·6	1·501	−·028	15·7	−0·3	0·0	+0·8	100	− 5	479·5	− 0·8	·04	0·7
	91	90·4	0·6	1·428	·027	14·9	0·3	0·8	0·8	95	5	480·0		·05	0·8
	90	88·8	0·6	1·357	·025	14·2	0·3	1·5	0·8	90	4	·4	+16·6	·06	1·0
	89	87·1	0·6	1·289	·024	13·5	0·3	2·2	0·8	85	4	480·8		·07	1·2
	88	85·5	0·6	1·224	·023	12·8	0·3	2·9	0·8	81	4	481·2		·08	1·3
	87	83·9	−0·6	1·162	−·022	12·2	−0·3	3·5	+0·8	77	− 4	481·5		·09	1·5

Reading of Thermometer. Dry.	Reading of Thermometer. Wet.	Temperature of the Dew-Point.	Difference for an increase of 1° in Dry.	Elastic force of Vapour.	Difference for an increase of 1° in Dry.	Vapour in a Cubic Foot of Air.	Difference for an increase of 1° in Dry.	Vap. reqd. to sat. a Cubic Foot of Air.	Difference for an increase of 1° in Dry.	Degree of Humidity. (Satn. = 100.)	Difference for an increase of 1° in Dry.	Weight of a Cubic Foot of Air. Bar. reading 29 inches.	Diff. for an increase of 1° in Dry / 1 in. in Bar.	Difference for one inch in Barometer and proportional parts.	
°	°	°	°	in.	in.	gr.	gr.	gr.	gr.			grs.	grs.		
92	87	83.9	−0.6	1.162	−.022	12.2	−0.3	3.5	+0.8	77	− 4	481.5	− 0.8	16.5	
	86	82.3	0.6	1.103	.021	11.6	0.3	4.1	0.8	73	4	481.9		in.	grs.
	85	80.7	0.6	1.047	.020	11.0	0.3	4.7	0.8	70	3	482.3	+16.6	.1	1.7
	84	79.1	0.6	0.994	.020	10.4	0.2	5.3	0.7	66	3	.6		.2	3.3
	83	77.5	0.6	0.943	.020	9.9	0.2	5.8	0.7	62	3	482.9		.3	5.0
	82	75.9	0.6	0.894	.019	9.3	0.2	6.4	0.7	59	3	483.2		.4	6.6
	81	74.2	0.6	0.847	.018	8.8	0.2	6.9	0.7	56	3	.5		.5	8.3
	80	72.6	0.5	0.802	.017	8.3	0.2	7.4	0.7	53	3	483.7		.6	9.9
	79	71.0	0.5	0.759	.015	7.9	0.1	7.8	0.6	50	2	484.0		.7	11.6
	78	69.4	0.5	0.718	.014	7.5	0.1	8.2	0.6	47	2	.2		.8	13.2
	77	67.8	0.5	0.679	.013	7.1	0.1	8.6	0.6	45	2	.5		.9	14.9
	76	66.2	0.5	0.642	.012	6.7	0.1	9.0	0.6	43	2	.7			
	75	64.5	0.5	0.607	.011	6.3	0.1	9.4	0.6	41	2	484.9			
	74	62.9	0.5	0.573	.009	6.0	0.1	9.7	0.6	38	2	485.1			
	73	61.3	0.5	0.541	.008	5.7	0.1	10.0	0.6	36	2	.3			
	72	59.7	0.5	0.511	.008	5.3	0.1	10.4	0.6	34	2	.5			
	71	58.1	0.5	0.483	.008	5.0	0.1	10.7	0.6	32	1	.6			
	70	56.5	0.5	0.456	.007	4.8	0.1	10.9	0.6	30	1	485.8			
	69	54.8	−0.5	0.430	−.007	4.5	−0.1	11.2	+0.6	28	− 1	486.0			
93	93	93.0	−0.6	1.548	−.028	16.2	−0.3	0.0	+0.8	100	− 5	478.4	− 0.8		
	92	91.4	0.6	1.473	.027	15.4	0.3	0.8	0.8	95	5	478.9			
	91	89.8	0.6	1.401	.026	14.7	0.3	1.5	0.8	90	4	479.3	+16.5		
	90	88.2	0.6	1.332	.025	14.0	0.3	2.2	0.8	86	4	479.7			
	89	86.6	0.6	1.266	.024	13.3	0.3	2.9	0.8	82	4	480.1			
	88	85.0	0.6	1.203	.022	12.6	0.3	3.6	0.8	78	4	.5			
	87	83.4	0.6	1.142	.021	11.9	0.2	4.3	0.7	74	4	480.9			
	86	81.7	0.5	1.084	.020	11.3	0.2	4.9	0.7	70	3	481.2			
	85	80.1	0.5	1.028	.018	10.7	0.2	5.5	0.7	66	3	.6			
	84	78.5	0.5	0.974	.016	10.2	0.2	6.0	0.7	63	3	481.9			
	83	76.9	0.5	0.923	.015	9.6	0.2	6.6	0.7	60	3	482.2			
	82	75.3	0.5	0.874	.014	9.1	0.2	7.1	0.7	57	3	.5			
	81	73.7	0.5	0.828	.013	8.7	0.2	7.5	0.7	54	3	482.8			
	80	72.1	0.5	0.785	.013	8.2	0.2	8.0	0.7	51	3	483.0			
	79	70.5	0.5	0.744	.012	7.8	0.2	8.4	0.7	48	2	.3			
	78	68.9	0.5	0.704	.012	7.4	0.2	8.8	0.7	45	2	.5			
	77	67.2	0.5	0.666	.011	6.9	0.1	9.3	0.6	42	2	483.7			
	76	65.6	0.5	0.630	.010	6.6	0.1	9.6	0.6	40	2	484.0			
	75	64.0	0.5	0.596	.009	6.2	0.1	10.0	0.6	38	2	.2			
	74	62.4	0.5	0.564	.009	5.9	0.1	10.3	0.6	36	2	.4			
	73	60.8	0.5	0.533	.009	5.5	0.1	10.7	0.6	34	2	.5			
	72	59.2	0.5	0.503	.009	5.2	0.1	11.0	0.6	32	2	.7			
	71	57.6	0.5	0.475	.009	5.0	0.1	11.2	0.6	30	1	484.[illegible]			
	70	56.0	−0.5	0.449	−.008	4.7	−0.1	11.5	+0.6	29	− 1	485.[illegible]			
94	94	94.0	−0.6	1.597	−.029	16.7	−0.3	0.0	+0.8	100	− 5	477.2	− 0.8		
	93	92.4	0.6	1.520	.028	15.9	0.3	0.8	0.8	95	5	477.7			
	92	90.8	0.6	1.446	.026	15.1	0.3	1.6	0.8	90	4	478.1	+16.5		
	91	89.2	0.6	1.375	.025	14.4	0.3	2.3	0.8	86	4	478.6			
	90	87.6	0.6	1.307	.024	13.7	0.3	3.0	0.8	82	4	479.0			
	89	86.0	0.6	1.242	.023	13.0	0.3	3.7	0.8	78	4	.4			
	88	84.4	0.6	1.180	.022	12.3	0.2	4.4	0.7	74	4	479.7			
	87	82.8	0.6	1.121	.022	11.7	0.2	5.0	0.7	70	3	480.1			
	86	81.2	0.6	1.064	.021	11.1	0.2	5.6	0.7	66	3	.5			
	85	79.6	0.6	1.010	.020	10.5	0.2	6.2	0.7	63	3	480.8			
	84	78.0	0.6	0.958	.018	10.0	0.2	6.7	0.7	60	3	481.1		.01	0.2
	83	76.4	0.6	0.909	.017	9.5	0.2	7.2	0.7	57	3	.4		.02	0.3
	82	74.8	0.6	0.862	.016	9.0	0.2	7.7	0.7	54	3	481.7		.03	0.5
	81	73.1	0.5	0.816	.015	8.5	0.2	8.2	0.7	51	3	482.0		.04	0.7
	80	71.5	0.5	0.772	.014	8.0	0.1	8.7	0.6	48	2	.2		.05	0.8
	79	69.9	0.5	0.731	.013	7.6	0.1	9.1	0.6	45	2	.5		.06	1.0
	78	68.3	0.5	0.692	.012	7.2	0.1	9.5	0.6	43	2	.7		.07	1.2
	77	66.7	0.5	0.655	.011	6.8	0.1	9.9	0.6	41	2	482.9		.08	1.3
	76	65.1	−0.5	0.620	−.010	6.4	−0.1	10.3	+0.6	39	− 2	483.1		.09	1.5

Reading of Thermometer. Dry.	Wet.	Temperature of the Dew-Point.	Difference for an increase of 1° in Dry.	Elastic force of Vapour.	Difference for an increase of 1° in Dry.	Vapour in a Cubic Foot of Air.	Difference for an increase of 1° in Dry.	Vap. reqd. to sat. a Cubic Foot of Air.	Difference for an increase of 1° in Dry.	Degree of Humidity. (Satn.=100.)	Difference for an increase of 1° in Dry.	Weight of a Cubic Foot of Air. Bar. reading 29 inches.	Diff. for an increase of 1° in Dry / 1 in. in Bar.	Difference for one inch in Barometer and proportional parts.	
°	°	°	°	in.	in.	gr.	gr.	gr.	gr.			grs.	grs.		
94	76	65·1	−0·5	0·620	−·010	6·4	−0·1	10·3	+0·6	39	− 2	483·1	− 0·8	16·4	
	75	63·5	0·5	0·587	·010	6·1	0·1	10·6	0·6	37	2	·3		in.	grs.
	74	61·9	0·5	0·555	·010	5·7	0·1	11·0	0·6	35	2	·5	+16·5	·1	1·6
	73	60·3	0·5	0·524	·010	5·4	0·1	11·3	0·6	33	1	·7		·2	3·3
	72	58·7	0·5	0·494	·009	5·1	0·1	11·6	0·6	31	1	483·9		·3	4·9
	71	57·1	−0·5	0·466	−·008	4·9	−0·1	11·8	+0·6	29	− 1	484·0		·4	6·6
														·5	8·2
95	95	95·0	−0·6	1·646	−·030	17·2	−0·3	0·0	+0·8	100	− 5	476·2	− 0·8	·6	9·8
	94	93·4	0·6	1·567	·029	16·3	0·3	0·9	0·8	95	5	476·6		·7	11·5
	93	91·8	0·6	1·492	·028	15·5	0·3	1·7	0·8	91	5	477·1	+16·4	·8	13·1
	92	90·2	0·6	1·420	·027	14·8	0·3	2·4	0·8	86	4	·5		·9	14·8
	91	88·6	0·6	1·350	·026	14·1	0·3	3·1	0·8	82	4	477·9			
	90	87·0	0·6	1·283	·024	13·4	0·3	3·8	0·8	78	4	478·3			
	89	85·4	0·5	1·219	·022	12·7	0·3	4·5	0·8	74	4	478·7			
	88	83·8	0·5	1·158	·020	12·1	0·3	5·1	0·8	70	4	479·1			
	87	82·2	0·5	1·099	·018	11·5	0·3	5·7	0·8	66	3	·5			
	86	80·6	0·5	1·043	·017	10·9	0·2	6·3	0·7	63	3	479·8			
	85	79·0	0·5	0·990	·016	10·3	0·2	6·9	0·7	60	3	480·1			
	84	77·4	0·5	0·940	·016	9·8	0·2	7·4	0·7	57	3	·4			
	83	75·8	0·5	0·892	·016	9·3	0·2	7·9	0·7	54	2	480·7			
	82	74·2	0·5	0·846	·015	8·8	0·2	8·4	0·7	51	2	481·0			
	81	72·6	0·5	0·802	·014	8·3	0·2	8·9	0·7	48	2	·3			
	80	71·0	0·5	0·759	·013	7·9	0·2	9·3	0·7	45	2	·5			
	79	69·4	0·5	0·718	·012	7·5	0·2	9·7	0·7	43	2	481·7			
	78	67·8	0·5	0·680	·012	7·1	0·2	10·1	0·7	41	2	482·0			
	77	66·2	0·5	0·644	·011	6·7	0·2	10·5	0·7	39	2	·2			
	76	64·6	0·5	0·610	·010	6·3	0·1	10·9	0·6	37	2	·4			
	75	63·0	0·4	0·577	·009	6·0	0·1	11·2	0·6	35	2	·6			
	74	61·4	0·4	0·545	·008	5·6	0·1	11·6	0·6	33	2	482·8			
	73	59·8	0·4	0·514	·007	5·3	0·1	11·9	0·6	31	2	483·0			
	72	58·2	−0·4	0·485	−·007	5·0	−0·1	12·2	+0·6	30	− 1	483·1			
96	96	96·0	−0·6	1·697	−·031	17·7	−0·3	0·0	+0·8	100	− 5	475·0	− 0·8		
	95	94·4	0·6	1·616	·030	16·8	0·3	0·9	0·8	95	5	·5			
	94	92·8	0·6	1·538	·028	16·0	0·3	1·7	0·8	90	4	475·9	+16·4		
	93	91·2	0·6	1·464	·027	15·2	0·3	2·5	0·8	86	4	476·4			
	92	89·6	0·6	1·393	·025	14·5	0·3	3·2	0·8	82	4	476·8			
	91	88·0	0·6	1·325	·023	13·8	0·3	3·9	0·8	78	4	477·2			
	90	86·4	0·6	1·260	·022	13·1	0·3	4·6	0·8	74	3	477·6			
	89	84·9	0·6	1·198	·021	12·4	0·2	5·3	0·7	70	3	478·0			
	88	83·3	0·6	1·138	·020	11·8	0·2	5·9	0·7	66	3	·4			
	87	81·7	0·6	1·081	·019	11·2	0·2	6·5	0·7	63	3	478·7			
	86	80·1	0·6	1·026	·017	10·7	0·2	7·0	0·7	60	3	479·0			
	85	78·5	0·5	0·974	·016	10·1	0·2	7·6	0·7	57	3	·3			
	84	76·9	0·5	0·924	·015	9·6	0·2	8·1	0·7	54	3	·6			
	83	75·3	0·5	0·876	·014	9·1	0·2	8·6	0·7	52	3	479·9			
	82	73·7	0·5	0·831	·013	8·6	0·2	9·1	0·7	49	2	480·2			
	81	72·1	0·5	0·788	·013	8·2	0·2	9·5	0·7	46	2	·5			
	80	70·5	0·5	0·746	·012	7·7	0·1	10·0	0·6	43	2	·7			
	79	68·9	0·5	0·706	·011	7·3	0·1	10·4	0·6	41	2	480·9			
	78	67·3	0·5	0·668	·010	6·9	0·1	10·8	0·6	39	2	481·2			
	77	65·7	0·5	0·633	·010	6·5	0·1	11·2	0·6	37	2	·4			
	76	64·2	0·5	0·600	·010	6·2	0·1	11·5	0·6	35	2	·6			
	75	62·6	0·5	0·568	·010	5·9	0·1	11·8	0·6	33	1	·8			
	74	61·0	0·5	0·537	·009	5·6	0·1	12·1	0·6	31	1	481·9			
	73	59·4	−0·4	0·507	−·008	5·3	−0·1	12·4	+0·6	30	− 1	482·1		·01	0·2
														·02	0·3
97	97	97·0	−0·6	1·750	−·030	18·2	−0·3	0·0	+0·8	100	− 5	473·8	− 0·7	·03	0·5
	96	95·4	0·6	1·666	·027	17·3	0·3	0·9	0·8	95	5	474·3		·04	0·7
	95	93·8	0·6	1·586	·025	16·5	0·3	1·7	0·8	90	4	474·7	+16·4	·05	0·8
	94	92·2	0·6	1·510	·024	15·7	0·3	2·5	0·8	86	4	475·2		·06	1·0
	93	90·6	0·6	1·437	·024	14·9	0·3	3·3	0·8	82	4	475·6		·07	1·2
	92	89·1	0·6	1·368	·023	14·2	0·3	4·0	0·8	78	4	476·1		·08	1·3
	91	87·5	−0·6	1·302	−·022	13·5	−0·3	4·7	+0·8	74	− 3	476·5		·09	1·5

Reading of Thermometer. Dry.	Wet.	Temperature of the Dew-Point.	Difference for an increase of 1° in Dry.	Elastic force of Vapour.	Difference for an increase of 1° in Dry.	Vapour in a Cubic Foot of Air.	Difference for an increase of 1° in Dry.	Vap. reqd. to sat. a Cubic Foot of Air.	Difference for an increase of 1° in Dry.	Degree of Humidity. (Satn. = 100.)	Difference for an increase of 1° in Dry.	Weight of a Cubic Foot of Air. Bar. reading 29 inches.	Diff. for an increase of 1° in Dry / 1 in. in Bar.	Difference for one inch in Barometer and proportional parts.	
°	°	°	°	in.	in.	gr.	gr.	gr.	gr.			grs.	grs.		
97	91	87·5	−0·6	1·302	−·022	13·5	−0·3	4·7	+0·8	74	− 3	476·5	− 0·7	16·3	
	90	85·9	0·6	1·238	·021	12·8	0·2	5·4	0·7	70	3	476·8		in.	grs.
	89	84·3	0·5	1·177	·020	12·2	0·2	6·0	0·7	67	3	477·2	+16·4	·1	1·6
	88	82·7	0·5	1·118	·019	11·6	0·2	6·6	0·7	64	3	·6		·2	3·3
	87	81·1	0·5	1·062	·019	11·0	0·2	7·2	0·7	60	3	477·9		·3	4·9
	86	79·5	0·5	1·009	·019	10·4	0·2	7·8	0·7	57	3	478·2		·4	6·5
	85	78·0	0·5	0·958	·018	9·9	0·2	8·3	0·7	54	3	·5		·5	8·2
	84	76·4	0·5	0·909	·016	9·4	0·2	8·8	0·7	52	3	478·8		·6	9·8
	83	74·8	0·5	0·863	·015	8·9	0·2	9·3	0·7	49	2	479·1		·7	11·4
	82	73·2	0·5	0·818	·014	8·4	0·2	9·8	0·7	46	2	·4		·8	13·0
	81	71·6	0·5	0·775	·013	8·0	0·2	10·2	0·7	44	2	·7		·9	14·7
	80	70·0	0·5	0·734	·012	7·6	0·2	10·6	0·7	42	2	479·9			
	79	68·4	0·5	0·695	·011	7·2	0·1	11·0	0·6	39	2	480·1			
	78	66·8	0·5	0·658	·010	6·8	0·1	11·4	0·6	37	2	·3			
	77	65·3	0·5	0·623	·010	6·4	0·1	11·8	0·6	35	1	·5			
	76	63·7	0·5	0·590	·010	6·1	0·1	12·1	0·6	33	1	·7			
	75	62·1	0·4	0·558	·009	5·8	0·1	12·4	0·6	31	1	480·9			
	74	60·5	−0·4	0·528	−·008	5·5	−0·1	12·7	+0·6	30	− 1	481·1			
98	98	98·0	−0·6	1·807	−·032	18·7	−0·3	0·0	+0·9	100	− 5	472·7	− 0·7		
	97	96·4	0·6	1·721	·031	17·8	0·3	0·9	0·9	95	4	473·2			
	96	94·8	0·6	1·639	·029	17·0	0·3	1·7	0·9	90	4	473·7	+16·3		
	95	93·3	0·6	1·561	·027	16·2	0·3	2·5	0·9	86	4	474·2			
	94	91·7	0·6	1·487	·025	15·4	0·3	3·3	0·9	82	4	474·6			
	93	90·1	0·5	1·416	·023	14·6	0·3	4·1	0·9	78	4	475·0			
	92	88·5	0·5	1·347	·021	13·9	0·3	4·8	0·9	74	3	·4			
	91	86·9	0·5	1·281	·019	13·2	0·3	5·5	0·9	70	3	475·8			
	90	85·3	0·5	1·218	·017	12·6	0·3	6·1	0·9	67	3	476·2			
	89	83·8	0·5	1·157	·016	12·0	0·3	6·7	0·9	64	3	·6			
	88	82·2	0·5	1·099	·015	11·4	0·2	7·3	0·8	61	3	476·9			
	87	80·6	0·5	1·043	·014	10·8	0·2	7·9	0·8	58	3	477·3			
	86	79·0	0·5	0·990	·013	10·2	0·2	8·5	0·8	55	3	·6			
	85	77·4	0·5	0·940	·013	9·7	0·2	9·0	0·8	52	2	477·9			
	84	75·9	0·5	0·893	·013	9·2	0·2	9·5	0·8	49	2	478·2			
	83	74·3	0·5	0·848	·013	8·7	0·2	10·0	0·8	46	2	·4			
	82	72·7	0·5	0·804	·012	8·3	0·2	10·4	0·8	44	2	·7			
	81	71·1	0·5	0·762	·011	7·8	0·1	10·9	0·7	42	2	478·9			
	80	69·5	0·5	0·722	·010	7·4	0·1	11·3	0·7	40	2	479·2			
	79	68·0	0·5	0·684	·009	7·1	0·1	11·6	0·7	38	2	·4			
	78	66·4	0·5	0·648	·009	6·7	0·1	12·0	0·7	36	2	·6			
	77	64·8	0·5	0·613	·008	6·3	0·1	12·4	0·7	34	2	479·8			
	76	63·2	0·4	0·580	·008	6·0	0·1	12·7	0·7	32	1	480·0			
	75	61·6	−0·4	0·548	−·008	5·7	−0·1	13·0	+0·7	30	− 1	480·2			
99	99	99·0	−0·6	1·862	−·034	19·3	−0·4	0·0	+0·9	100	− 5	471·5	− 0·7		
	98	97·4	0·6	1·774	·032	18·4	0·4	0·9	0·9	95	5	472·0			
	97	95·9	0·6	1·690	·030	17·5	0·4	1·8	0·9	91	4	472·5	+16·3		
	96	94·3	0·6	1·610	·029	16·7	0·4	2·6	0·9	87	4	473·0			
	95	92·7	0·6	1·534	·028	15·9	0·4	3·4	0·9	83	4	·5			
	94	91·1	0·6	1·462	·027	15·1	0·3	4·2	0·8	79	4	473·9			
	93	89·6	0·6	1·393	·026	14·4	0·3	4·9	0·8	75	4	474·3			
	92	88·0	0·6	1·327	·026	13·7	0·3	5·6	0·8	71	3	474·7			
	91	86·4	0·5	1·263	·025	13·0	0·3	6·3	0·8	67	3	475·1			
	90	84·8	0·5	1·201	·025	12·3	0·2	7·0	0·7	64	3	·5			
	89	83·2	0·5	1·141	·025	11·7	0·2	7·6	0·7	61	3	475·9			
	88	81·7	0·5	1·084	·024	11·1	0·2	8·2	0·7	58	3	476·2		·01	0·2
	87	80·1	0·5	1·029	·023	10·5	0·1	8·8	0·6	55	2	·5		·02	0·3
	86	78·5	0·5	0·977	·022	10·0	0·1	9·3	0·6	52	2	476·8		·03	0·5
	85	76·9	0·5	0·927	·020	9·5	0·1	9·8	0·6	49	2	477·1		·04	0·7
	84	75·4	0·5	0·880	·019	9·0	0·1	10·3	0·6	46	2	·4		·05	0·8
	83	73·8	0·5	0·835	·017	8·6	0·1	10·7	0·6	44	2	·6		·06	1·0
	82	72·2	0·5	0·792	·015	8·1	0·1	11·2	0·6	42	2	477·9		·07	1·1
	81	70·6	0·5	0·751	·014	7·7	0·1	11·6	0·6	40	2	478·1		·08	1·3
	80	69·1	−0·5	0·712	−·013	7·3	−0·1	12·0	+0·6	38	− 2	478·4		·09	1·5

Reading of Thermometer. Dry.	Reading of Thermometer. Wet.	Temperature of the Dew-point.	Difference for an increase of 1° in Dry.	Elastic force of Vapour.	Difference for an increase of 1° in Dry.	Vapour in a Cubic Foot of Air.	Difference for an increase of 1° in Dry.	Vap. reqd. to sat. a Cubic Foot of Air.	Difference for an increase of 1° in Dry.	Degree of Humidity. (Satn. = 100.)	Difference for an increase of 1° in Dry.	Weight of a Cubic Foot of Air. Bar. reading 29 inches.	Diff. for an increase of $\frac{1^\circ \text{ in Dry}}{1 \text{ in. in Bar.}}$	Difference for one inch in Barometer and proportional parts.	
°	°	°	°	in.	in.	gr.	gr.	gr.	gr.			grs.	grs.		
99	80	69·1	−0·5	0·712	−·013	7·3	−0·1	12·0	+0·6	38	− 2	478·4	− 0·7	16·2	
	79	67·5	0·5	0·675	·012	6·9	0·1	12·4	0·6	36	2	·6		in.	grs.
	78	65·9	0·4	0·639	·011	6·6	0·1	12·7	0·6	34	2	478·8	+16·3	·1	1·6
	77	64·3	0·4	0·605	·011	6·2	0·1	13·1	0·6	32	1	479·0		·2	3·2
	76	62·8	−0·4	0·572	−·010	5·9	−0·1	13·4	+0·6	31	− 1	479·2		·3	4·9
														·4	6·5
100	100	100·0	−0·6	1·918	−·035	19·8	−0·4	0·0	+1·0	100	− 5	470·5	− 0·7	·5	8·1
	99	98·4	0·6	1·828	·033	18·9	0·4	0·9	1·0	95	5	471·0		·6	9·7
	98	96·9	0·6	1·742	·031	18·0	0·4	1·8	1·0	90	4	471·5	+16·2	·7	11·3
	97	95·3	0·6	1·660	·029	17·2	0·4	2·6	1·0	86	4	472·0		·8	13·0
	96	93·7	0·6	1·582	·027	16·3	0·3	3·5	0·9	82	4	·4		·9	14·6
	95	92·1	0·6	1·508	·026	15·5	0·3	4·3	0·9	78	4	472·9			
	94	90·6	0·6	1·437	·025	14·8	0·3	5·0	0·9	74	4	473·3			
	93	89·0	0·6	1·368	·023	14·1	0·3	5·7	0·9	71	4	473·7			
	92	87·4	0·6	1·301	·022	13·4	0·3	6·4	0·9	68	3	474·1			
	91	85·9	0·6	1·237	·020	12·7	0·3	7·1	0·9	64	3	·5			
	90	84·3	0·5	1·175	·018	12·1	0·2	7·7	0·8	61	3	474·9			
	89	82·7	0·5	1·116	·017	11·5	0·2	8·3	0·8	58	3	475·2			
	88	81·2	0·5	1·060	·016	10·9	0·2	8·9	0·8	55	3	·5			
	87	79·6	0·5	1·006	·015	10·4	0·2	9·4	0·8	52	3	475·8			
	86	78·0	0·5	0·955	·014	9·9	0·2	9·9	0·8	49	2	476·1			
	85	76·5	0·5	0·907	·014	9·4	0·2	10·4	0·8	47	2	·4			
	84	74·9	0·5	0·861	·013	8·9	0·2	10·9	0·8	45	2	·7		·01	0·2
	83	73·3	0·5	0·818	·013	8·4	0·2	11·4	0·8	43	2	476·9		·02	0·3
	82	71·7	0·5	0·777	·013	8·0	0·1	11·8	0·7	40	2	477·2		·03	0·5
	81	70·2	0·5	0·738	·012	7·6	0·1	12·2	0·7	38	2	·4		·04	0·7
	80	68·6	0·5	0·700	·012	7·2	0·1	12·6	0·7	36	2	·6		·05	0·8
	79	67·0	0·5	0·663	·012	6·8	0·1	13·0	0·7	34	2	477·9		·06	1·0
	78	65·5	0·4	0·628	·011	6·4	0·1	13·4	0·7	32	1	478·1		·07	1·1
	77	63·9	0·4	0·594	·011	6·1	0·1	13·7	0·7	30	1	·3		·08	1·3
	76	62·4	−0·4	0·561	−·010	5·8	−0·1	14·0	+0·7	29	− 1	478·5		·09	1·5