# UPPER-AIR TEMPERATURE, PRESSURE, AND RELATIVE HUMIDITY DATA

For the Period

## DECEMBER 1942 THROUGH DECEMBER 1943 AND ANNUAL SUMMARIES FOR 1942 AND 1943

SINCE military restrictions on the dissemination of weather information have been lifted, it is now possible to publish all back RAOB data, except those for Alaska, which have not heretofore been published. RAOB data and upper-air charts for the period, December 1942 through December 1943, are accordingly included in this issue. Charts for January 1944 are also included, but tabular data for that month will be published in the February REVIEW.

All observations were taken near 11 p. m., E. S. T., except at Mazatland and Tapachula, Mexico, near 9 p. m., and at Tacubaya, Mexico, near 10 p. m.

"Number of observations" refers to pressure only, as temperature and humidity data are sometimes missing for some observations at certain levels. Relative humidity data are not used in daily observations when the temperature is below −40° C.

None of the means included in these tables are based on less than 15 surface or 5 standard-level observations.

Means for observations obtained by the electric hygrometer have been adjusted to compensate for the values occurring below the operating range of the humidity element.

*Mean free-air barometric pressure in millibars, temperature in degrees centigrade, and relative humidities in percent, obtained by radiosondes during December 1942*

STATIONS AND ELEVATIONS IN METERS ABOVE SEA LEVEL

| Altitude (meters) m. s. l. | Albuquerque, N. Mex. (1,620 m.) | | | | Apalachicola, Fla. (8 m.) | | | | Atlanta, Ga. (300 m.) | | | | Bismarck, N. Dak. (505 m.) | | | | Boise, Idaho (868 m.) | | | | Brownsville, Tex. (6 m.) | | | | Buffalo, N. Y. (221 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 31 | 839 | 5.0 | 54 | 31 | 1,020 | 13.1 | 86 | 31 | 985 | 4.7 | 79 | 30 | 956 | −10.1 | 88 | 30 | 919 | 1.4 | 83 | 31 | 1,017 | 15.8 | 87 | 30 | 990 | −4.1 | 84 |
| 500 | | | | | 31 | 961 | 13.2 | 74 | 31 | 961 | 5.5 | 77 | | | | | | | | | 31 | 960 | 17.0 | 76 | 30 | 956 | −5.3 | 84 |
| 1,000 | | | | | 31 | 906 | 12.3 | 63 | 31 | 904 | 6.0 | 69 | 30 | 897 | −7.4 | 86 | 30 | 905 | 1.9 | 80 | 31 | 905 | 14.7 | 68 | 30 | 897 | −7.1 | 85 |
| 1,500 | | | | | 31 | 853 | 10.9 | 57 | 31 | 851 | 5.6 | 63 | 30 | 841 | −6.7 | 81 | 30 | 850 | 0.0 | 79 | 31 | 853 | 12.8 | 60 | 30 | 840 | −8.8 | 83 |
| 2,000 | 31 | 800 | 4.6 | 55 | 31 | 803 | 8.6 | 51 | 31 | 800 | 4.1 | 57 | 30 | 789 | −7.8 | 75 | 30 | 798 | −0.8 | 73 | 31 | 803 | 11.0 | 50 | 30 | 788 | −9.5 | 77 |
| 2,500 | 31 | 753 | 1.6 | 54 | 31 | 756 | 6.4 | 45 | 31 | 752 | 2.5 | 53 | 29 | 739 | −9.8 | 72 | 30 | 750 | −3.1 | 69 | 31 | 756 | 8.9 | 43 | 30 | 738 | −10.9 | 72 |
| 3,000 | 31 | 707 | −1.0 | 55 | 31 | 711 | 4.1 | 38 | 31 | 707 | 0.0 | 49 | 29 | 692 | −12.4 | 69 | 30 | 703 | −5.9 | 67 | 31 | 712 | 6.3 | 38 | 30 | 692 | −13.0 | 71 |
| 4,000 | 31 | 623 | −6.9 | 55 | 31 | 628 | −1.0 | 35 | 31 | 623 | −5.4 | 44 | 29 | 607 | −18.7 | 64 | 30 | 618 | −11.9 | 66 | 31 | 629 | 0.0 | 33 | 30 | 606 | −17.8 | 70 |
| 5,000 | 31 | 548 | −13.0 | 54 | 31 | 555 | −6.7 | 32 | 30 | 548 | −12.0 | 41 | 28 | 530 | −24.9 | 62 | 29 | 542 | −17.9 | 60 | 31 | 555 | −5.8 | 30 | 29 | 529 | −23.9 | 67 |
| 6,000 | 30 | 479 | −19.8 | 51 | 31 | 486 | −13.0 | 29 | 29 | 480 | −18.0 | 38 | 26 | 462 | −31.9 | 60 | 29 | 473 | −24.6 | 57 | 30 | 487 | −12.6 | 28 | 27 | 461 | −29.5 | 65 |
| 7,000 | 29 | 418 | −27.3 | 49 | 31 | 426 | −20.5 | 27 | 29 | 419 | −24.6 | 37 | 25 | 400 | −39.1 | 57 | 28 | 411 | −31.7 | 55 | 29 | 427 | −19.7 | 28 | 27 | 400 | −36.2 | 63 |
| 8,000 | 29 | 363 | −35.0 | 49 | 30 | 371 | −27.7 | 26 | 28 | 365 | −31.6 | 38 | 23 | 344 | −46.3 | | 26 | 356 | −39.1 | 54 | 29 | 372 | −26.6 | 28 | 26 | 345 | −42.1 | |
| 9,000 | 26 | 314 | −42.3 | | 30 | 322 | −34.7 | 26 | 28 | 316 | −39.2 | 37 | 22 | 295 | −52.4 | | 26 | 307 | −46.4 | | 29 | 323 | −33.9 | 28 | 22 | 297 | −47.4 | |
| 10,000 | 26 | 270 | −48.3 | | 30 | 279 | −41.7 | | 28 | 273 | −46.0 | | 22 | 252 | −55.8 | | 24 | 264 | −52.7 | | 29 | 280 | −41.3 | | 21 | 255 | −51.2 | |
| 11,000 | 25 | 232 | −53.7 | | 29 | 240 | −48.4 | | 28 | 234 | −51.9 | | 18 | 216 | −56.6 | | 19 | 226 | −56.1 | | 29 | 241 | −48.0 | | 17 | 219 | −52.4 | |
| 12,000 | 24 | 198 | −56.7 | | 28 | 206 | −54.8 | | 24 | 200 | −56.6 | | 18 | 184 | −55.8 | | 15 | 192 | −57.0 | | 28 | 207 | −53.9 | | 15 | 186 | −53.3 | |
| 13,000 | 20 | 169 | −57.3 | | 25 | 175 | −60.4 | | 20 | 171 | −60.0 | | 17 | 157 | −54.3 | | 11 | 165 | −56.3 | | 28 | 177 | −59.0 | | 12 | 159 | −54.9 | |
| 14,000 | 19 | 144 | −60.1 | | 19 | 149 | −65.1 | | 16 | 146 | −63.1 | | 13 | 134 | −55.0 | | 10 | 141 | −56.9 | | 27 | 150 | −63.8 | | 10 | 135 | −54.9 | |
| 15,000 | 17 | 122 | −62.8 | | 16 | 126 | −69.0 | | 13 | 123 | −65.6 | | 8 | 114 | −55.1 | | 9 | 120 | −58.0 | | 26 | 127 | −68.1 | | 6 | 114 | −56.1 | |
| 16,000 | 14 | 104 | −64.4 | | 12 | 107 | −73.2 | | 9 | 104 | −68.9 | | | | | | 6 | 102 | −58.0 | | 22 | 108 | −72.2 | | 6 | 98 | −57.7 | |
| 17,000 | 13 | 88 | −64.2 | | 9 | 90 | −76.8 | | | | | | | | | | 6 | 87 | −57.5 | | 19 | 91 | −74.5 | | | | | |
| 18,000 | 11 | 75 | −63.3 | | 7 | 75 | −77.1 | | | | | | | | | | | | | | 14 | 76 | −75.3 | | | | | |
| 19,000 | 6 | 64 | −64.1 | | | | | | | | | | | | | | | | | | 6 | 65 | −74.3 | | | | | |

| | Caribou, Maine (191 m.) | | | | Charleston, S. C. (14 m.) | | | | Denver, Colo. (1,616 m.) | | | | Detroit, Mich. (217 m.) | | | | El Paso, Tex. (1,193 m.) | | | | Ely, Nev. (1,968 m.) | | | | Great Falls, Mont. (1,128 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Surface | 30 | 988 | −12.6 | 87 | 28 | 1,018 | 8.5 | 82 | 31 | 836 | −0.1 | 61 | 31 | 991 | −4.9 | 85 | 31 | 883 | 8.4 | 57 | 31 | 810 | −2.5 | 66 | 29 | 883 | −2.4 | 71 |
| 500 | 30 | 948 | −13.2 | 86 | 28 | 960 | 8.8 | 76 | | | | | 31 | 956 | −5.7 | 84 | | | | | | | | | | | | |
| 1,000 | 30 | 888 | −14.3 | 86 | 28 | 904 | 8.4 | 71 | | | | | 31 | 897 | −6.7 | 84 | | | | | | | | | | | | |
| 1,500 | 30 | 832 | −14.5 | 83 | 28 | 851 | 7.1 | 65 | | | | | 31 | 842 | −7.4 | 77 | 31 | 851 | 10.1 | 51 | | | | | 29 | 843 | −1.9 | 70 |
| 2,000 | 30 | 778 | −15.3 | 78 | 28 | 800 | 5.3 | 61 | 31 | 797 | 2.0 | 59 | 31 | 789 | −8.2 | 72 | 31 | 801 | 7.3 | 48 | 31 | 801 | −0.2 | 66 | 29 | 791 | −4.1 | 69 |
| 2,500 | 30 | 728 | −16.7 | 73 | 28 | 753 | 4.0 | 55 | 31 | 748 | −0.6 | 56 | 31 | 739 | −10.0 | 70 | 31 | 754 | 4.1 | 48 | 31 | 753 | 0.0 | 61 | 29 | 742 | −7.4 | 68 |
| 3,000 | 30. | 681 | −18.8 | 70 | 28 | 708 | 1.7 | 50 | 31 | 703 | −3.8 | 54 | 31 | 693 | −12.2 | 68 | 31 | 709 | 1.5 | 48 | 31 | 707 | −3.0 | 60 | 29 | 696 | −10.7 | 69 |
| 4,000 | 30 | 595 | −22.8 | 67 | 28 | 624 | −3.9 | 43 | 31 | 619 | −10.3 | 52 | 31 | 607 | −16.9 | 59 | 31 | 625 | −3.8 | 44 | 31 | 622 | −9.4 | 60 | 29 | 610 | −17.3 | 68 |
| 5,000 | 29 | 518 | −28.1 | 63 | 28 | 550 | −10.3 | 40 | 31 | 542 | −17.1 | 51 | 31 | 530 | −22.9 | 55 | 31 | 550 | −10.6 | 41 | 31 | 546 | −15.4 | 58 | 28 | 533 | −23.9 | 69 |
| 6,000 | 29 | 450 | −34.3 | 60 | 26 | 482 | −16.4 | 37 | 30 | 474 | −24.0 | 48 | 31 | 462 | −29.5 | 53 | 31 | 482 | −17.6 | 39 | 30 | 477 | −22.5 | 57 | 28 | 464 | −30.9 | 68 |
| 7,000 | 29 | 389 | −40.9 | | 23 | 422 | −22.8 | 35 | 27 | 413 | −31.5 | 46 | 31 | 401 | −35.8 | 52 | 29 | 421 | −24.9 | 38 | 29 | 416 | −30.1 | 57 | 28 | 403 | −38.4 | 66 |
| 8,000 | 28 | 335 | −45.8 | | 23 | 367 | −29.3 | 34 | 25 | 357 | −39.2 | 46 | 31 | 346 | −41.8 | | 27 | 366 | −32.2 | 37 | 29 | 360 | −38.1 | 56 | 26 | 347 | −45.0 | |
| 9,000 | 27 | 288 | −49.0 | | 20 | 318 | −36.7 | | 23 | 308 | −46.7 | | 31 | 298 | −47.4 | | 26 | 317 | −39.0 | | 28 | 310 | −46.3 | | 26 | 298 | −50.8 | |
| 10,000 | 27 | 248 | −50.7 | | 18 | 274 | −44.1 | | 22 | 264 | −53.2 | | 29 | 256 | −52.1 | | 25 | 274 | −45.7 | | 27 | 267 | −53.6 | | 26 | 256 | −55.1 | |
| 11,000 | 26 | 213 | −51.0 | | 16 | 236 | −50.6 | | 20 | 226 | −56.7 | | 29 | 220 | −55.3 | | 21 | 235 | −52.0 | | 27 | 228 | −59.1 | | 26 | 219 | −57.8 | |
| 12,000 | 21 | 182 | −50.2 | | 14 | 202 | −55.6 | | 20 | 193 | −57.0 | | 29 | 187 | −55.7 | | 18 | 201 | −55.7 | | 26 | 194 | −57.0 | | 25 | 187 | −58.3 | |
| 13,000 | 19 | 156 | −49.6 | | 14 | 172 | −59.4 | | 17 | 164 | −56.2 | | 28 | 160 | −55.7 | | 18 | 172 | −58.5 | | 26 | 165 | −56.9 | | 21 | 159 | −57.0 | |
| 14,000 | 13 | 134 | −51.2 | | 10 | 146 | −62.6 | | 15 | 140 | −57.2 | | 27 | 137 | −56.9 | | 17 | 146 | −61.4 | | 26 | 141 | −58.1 | | 21 | 136 | −56.0 | |
| 15,000 | 11 | 115 | −52.8 | | 6 | 124 | −66.5 | | 13 | 119 | −59.1 | | 22 | 116 | −58.4 | | 16 | 124 | −64.0 | | 25 | 120 | −59.9 | | 21 | 117 | −56.5 | |
| 16,000 | 7 | 98 | −54.8 | | 5 | 105 | −68.5 | | 12 | 102 | −60.9 | | 15 | 99 | −59.3 | | 14 | 106 | −66.6 | | 22 | 102 | −61.8 | | 18 | 100 | −57.2 | |
| 17,000 | | | | | | | | | 11 | 86 | −61.4 | | 7 | 85 | −60.5 | | 10 | 90 | −67.0 | | 16 | 86 | −61.5 | | 15 | 85 | −58.6 | |
| 18,000 | | | | | | | | | 6 | 74 | −61.6 | | | | | | 5 | 76 | −66.8 | | | | | | 8 | 72 | −59.4 | |

*Mean free-air barometric pressure in millibars, temperature in degrees centigrade, and relative humidities in percent, obtained by radiosondes during December 1942*—Continued

STATIONS AND ELEVATIONS IN METERS ABOVE SEA LEVEL—Continued

| Altitude (meters) m. s. l. | Huntington, W. Va. (172 m.) | | | | International Falls, Minn. (343 m.) | | | | Joliet, Ill. (178 m.) | | | | Lake Charles, La. (5 m.) | | | | Lakehurst, N. J.[1] (39 m.) | | | | Medford, Oreg. (409 m.) | | | | Miami, Fla. (4 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 31 | 999 | 0.6 | 86 | 31 | 976 | −14.1 | 89 | 31 | 998 | −6.0 | 92 | 29 | 1,019 | 11.0 | 89 | 26 | 1,015 | −1.2 | 73 | 31 | 972 | 4.7 | 92 | 31 | 1,020 | 18.9 | 87 |
| 500 | 31 | 958 | 0.0 | 86 | 31 | 956 | −14.3 | 90 | 31 | 957 | −5.8 | 94 | 29 | 960 | 11.9 | 76 | 26 | 958 | −2.9 | 68 | 31 | 961 | 4.4 | 92 | 31 | 962 | 19.2 | 80 |
| 1,000 | 31 | 900 | −1.9 | 86 | 31 | 895 | −14.0 | 90 | 31 | 898 | −5.6 | 90 | 29 | 905 | 11.6 | 65 | 26 | 899 | −4.1 | 66 | 31 | 904 | 4.2 | 84 | 31 | 908 | 16.2 | 78 |
| 1,500 | 31 | 846 | −2.7 | 81 | 31 | 838 | −13.4 | 87 | 31 | 843 | −4.9 | 84 | 29 | 853 | 10.0 | 54 | 26 | 843 | −4.7 | 66 | 31 | 850 | 3.1 | 75 | 31 | 856 | 14.2 | 68 |
| 2,000 | 31 | 794 | −4.1 | 76 | 31 | 785 | −13.3 | 83 | 31 | 791 | −6.2 | 79 | 29 | 802 | 7.9 | 49 | 26 | 791 | −5.5 | 67 | 31 | 798 | 0.5 | 72 | 31 | 806 | 13.0 | 53 |
| 2,500 | 31 | 745 | −5.1 | 71 | 31 | 734 | −14.9 | 81 | 31 | 742 | −8.1 | 75 | 29 | 755 | 5.9 | 39 | 26 | 741 | −6.3 | 68 | 31 | 750 | −1.9 | 63 | 31 | 760 | 10.6 | 47 |
| 3,000 | 31 | 699 | −7.3 | 69 | 31 | 687 | −17.1 | 80 | 31 | 695 | −10.4 | 73 | 29 | 710 | 3.8 | 35 | 26 | 695 | −8.2 | 61 | 31 | 704 | −4.4 | 60 | 31 | 715 | 8.0 | 45 |
| 4,000 | 31 | 614 | −12.2 | 60 | 31 | 600 | −22.3 | 75 | 30 | 610 | −16.0 | 71 | 29 | 627 | −1.3 | 30 | 26 | 611 | −13.4 | 63 | 31 | 620 | −10.2 | 58 | 31 | 633 | 2.5 | 44 |
| 5,000 | 31 | 538 | −17.6 | 54 | 31 | 523 | −28.4 | 71 | 30 | 534 | −22.0 | 69 | 29 | 553 | −7.3 | 31 | 25 | 536 | −19.4 | 68 | 30 | 543 | −16.6 | 57 | 31 | 559 | −3.3 | 43 |
| 6,000 | 30 | 470 | −24.2 | 54 | 31 | 454 | −35.0 | 70 | 30 | 465 | −28.4 | 68 | 29 | 485 | −14.4 | 30 | 25 | 469 | −25.2 | 70 | 30 | 474 | −23.2 | 55 | 31 | 491 | −9.3 | 42 |
| 7,000 | 30 | 409 | −30.7 | 53 | 30 | 393 | −41.4 | ---- | 30 | 404 | −34.9 | 66 | 29 | 424 | −21.6 | 29 | 25 | 407 | −31.0 | 62 | 29 | 414 | −30.5 | 53 | 31 | 432 | −16.1 | 41 |
| 8,000 | 30 | 354 | −37.1 | 51 | 30 | 338 | −47.6 | ---- | 30 | 349 | −41.3 | ---- | 28 | 370 | −28.4 | 28 | 25 | 353 | −37.1 | 62 | 29 | 358 | −38.3 | 52 | 29 | 377 | −23.1 | 40 |
| 9,000 | 30 | 306 | −43.3 | ---- | 26 | 290 | −52.1 | ---- | 29 | 301 | −47.6 | ---- | 28 | 321 | −35.8 | 28 | 24 | 304 | −43.7 | ---- | 29 | 309 | −45.8 | ---- | 29 | 328 | −30.1 | 40 |
| 10,000 | 29 | 264 | −48.8 | ---- | 24 | 248 | −53.9 | ---- | 26 | 258 | −52.9 | ---- | 28 | 277 | −43.0 | ---- | 24 | 262 | −49.1 | ---- | 29 | 265 | −52.5 | ---- | 28 | 285 | −37.5 | 40 |
| 11,000 | 29 | 226 | −53.4 | ---- | 22 | 213 | −52.2 | ---- | 25 | 221 | −55.9 | ---- | 26 | 238 | −49.7 | ---- | 24 | 225 | −52.6 | ---- | 29 | 227 | −56.9 | ---- | 25 | 246 | −44.6 | ---- |
| 12,000 | 26 | 193 | −56.0 | ---- | 19 | 182 | −51.6 | ---- | 24 | 189 | −55.9 | ---- | 25 | 204 | −55.2 | ---- | 22 | 193 | −55.0 | ---- | 29 | 194 | −59.5 | ---- | 23 | 212 | −51.3 | ---- |
| 13,000 | 25 | 165 | −57.0 | ---- | 17 | 156 | −51.4 | ---- | 24 | 161 | −55.9 | ---- | 23 | 174 | −58.8 | ---- | 20 | 165 | −56.4 | ---- | 27 | 165 | −58.3 | ---- | 19 | 181 | −58.2 | ---- |
| 14,000 | 22 | 140 | −58.5 | ---- | 10 | 134 | −51.1 | ---- | 21 | 137 | −57.1 | ---- | 21 | 148 | −62.0 | ---- | 17 | 141 | −57.6 | ---- | 27 | 140 | −58.4 | ---- | 14 | 154 | −64.0 | ---- |
| 15,000 | 19 | 120 | −61.1 | ---- | 9 | 115 | −51.7 | ---- | 19 | 117 | −58.8 | ---- | 17 | 126 | −66.0 | ---- | 14 | 120 | −59.0 | ---- | 23 | 119 | −59.6 | ---- | 12 | 130 | −69.4 | ---- |
| 16,000 | 12 | 102 | −62.4 | ---- | ---- | ---- | ---- | ---- | 12 | 100 | −60.6 | ---- | 14 | 107 | −69.5 | ---- | 13 | 102 | −60.6 | ---- | 19 | 102 | −60.4 | ---- | 7 | 110 | −73.2 | ---- |
| 17,000 | 8 | 87 | −63.5 | ---- | ---- | ---- | ---- | ---- | 6 | 84 | −62.9 | ---- | 11 | 90 | −71.4 | ---- | 5 | 87 | −62.3 | ---- | 17 | 86 | −61.1 | ---- | 5 | 92 | −78.0 | ---- |
| 18,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 9 | 76 | −72.0 | ---- | ---- | ---- | ---- | ---- | 10 | 73 | −59.0 | ---- | ---- | ---- | ---- | ---- |
| 19,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 7 | 64 | −69.2 | ---- | ---- | ---- | ---- | ---- | 7 | 62 | −56.8 | ---- | ---- | ---- | ---- | ---- |

| | Nashville, Tenn. (180 m.) | | | | Norfolk, Va.[1] (4 m.) | | | | Oakland, Calif. (6 m.) | | | | Oklahoma City, Okla. (391 m.) | | | | Omaha, Nebr. (301 m.) | | | | Pensacola, Fla.[1] (24 m.) | | | | Phoenix, Ariz. (339 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Surface | 31 | 998 | 3.7 | 80 | 25 | 1,021 | 5.1 | 82 | 31 | 1,021 | 9.5 | 86 | 31 | 972 | 3.4 | 83 | 31 | 984 | −4.7 | 86 | 25 | 1,016 | 13.8 | 85 | 31 | 977 | 9.5 | 64 |
| 500 | 31 | 959 | 2.8 | 79 | 25 | 961 | 4.9 | 69 | 31 | 961 | 9.3 | 75 | 31 | 958 | 4.1 | 81 | 31 | 959 | −4.7 | 83 | 25 | 960 | 12.4 | 66 | 31 | 959 | 14.9 | 51 |
| 1,000 | 31 | 902 | 2.3 | 75 | 25 | 904 | 3.5 | 65 | 31 | 905 | 8.5 | 67 | 31 | 901 | 4.3 | 75 | 31 | 900 | −3.9 | 73 | 25 | 905 | 11.6 | 51 | 31 | 904 | 13.5 | 42 |
| 1,500 | 30 | 848 | 2.0 | 70 | 25 | 850 | 2.5 | 62 | 31 | 852 | 7.3 | 58 | 31 | 848 | 5.5 | 62 | 31 | 845 | −2.2 | 64 | 25 | 852 | 9.9 | 48 | 31 | 852 | 10.5 | 42 |
| 2,000 | 30 | 797 | 1.2 | 60 | 25 | 799 | 1.4 | 58 | 31 | 801 | 5.5 | 51 | 31 | 798 | 4.3 | 54 | 31 | 793 | −3.2 | 60 | 25 | 802 | 8.4 | 38 | 31 | 801 | 7.2 | 42 |
| 2,500 | 30 | 749 | −0.5 | 52 | 25 | 750 | −0.9 | 56 | 31 | 754 | 3.2 | 45 | 31 | 750 | 2.1 | 49 | 31 | 744 | −5.5 | 59 | 25 | 755 | 5.9 | 38 | 31 | 754 | 4.3 | 41 |
| 3,000 | 29 | 703 | −2.8 | 49 | 25 | 705 | −3.3 | 53 | 31 | 708 | 0.3 | 43 | 31 | 704 | −0.7 | 48 | 31 | 698 | −8.2 | 61 | 25 | 710 | 3.2 | 37 | 31 | 709 | 1.8 | 40 |
| 4,000 | 27 | 619 | −8.0 | 45 | 23 | 620 | −8.1 | 47 | 31 | 624 | −5.5 | 38 | 31 | 621 | −6.8 | 47 | 31 | 613 | −13.4 | 59 | 23 | 627 | −2.6 | 30 | 31 | 625 | −3.8 | 37 |
| 5,000 | 25 | 544 | −14.1 | 41 | 23 | 545 | −14.0 | 43 | 31 | 549 | −12.1 | 36 | 31 | 545 | −12.9 | 46 | 31 | 537 | −19.4 | 56 | 23 | 552 | −8.8 | 32 | 31 | 550 | −10.2 | 35 |
| 6,000 | 25 | 475 | −20.6 | 40 | 20 | 477 | −20.1 | 42 | 31 | 480 | −19.2 | 36 | 31 | 477 | −20.2 | 42 | 31 | 468 | −26.4 | 54 | 23 | 484 | −15.6 | 31 | 29 | 482 | −17.4 | 35 |
| 7,000 | 25 | 415 | −27.3 | 40 | 17 | 415 | −26.6 | 39 | 31 | 420 | −26.2 | 36 | 30 | 417 | −27.3 | 41 | 31 | 407 | −33.5 | 53 | 23 | 424 | −22.4 | 34 | 28 | 421 | −24.9 | 34 |
| 8,000 | 25 | 360 | −33.6 | 37 | ---- | ---- | ---- | ---- | 31 | 364 | −33.7 | 36 | 29 | 362 | −34.6 | 41 | 31 | 352 | −40.5 | ---- | 22 | 369 | −29.3 | 41 | 28 | 367 | −32.1 | 34 |
| 9,000 | 24 | 312 | −40.0 | 34 | ---- | ---- | ---- | ---- | 30 | 315 | −41.1 | ---- | 28 | 312 | −42.0 | ---- | 31 | 303 | −46.8 | ---- | 20 | 319 | −36.2 | 41 | 28 | 317 | −39.3 | 34 |
| 10,000 | 23 | 269 | −46.4 | ---- | ---- | ---- | ---- | ---- | 29 | 272 | −47.9 | ---- | 28 | 269 | −48.8 | ---- | 31 | 260 | −52.0 | ---- | 19 | 276 | −42.6 | ---- | 27 | 274 | −46.3 | ---- |
| 11,000 | 20 | 232 | −51.7 | ---- | ---- | ---- | ---- | ---- | 29 | 233 | −53.7 | ---- | 26 | 231 | −54.4 | ---- | 31 | 223 | −55.4 | ---- | 18 | 238 | −49.4 | ---- | 27 | 235 | −52.3 | ---- |
| 12,000 | 17 | 198 | −56.0 | ---- | ---- | ---- | ---- | ---- | 26 | 199 | −57.9 | ---- | 25 | 197 | −57.3 | ---- | 31 | 191 | −55.0 | ---- | 16 | 204 | −55.5 | ---- | 27 | 201 | −56.8 | ---- |
| 13,000 | 15 | 169 | −58.1 | ---- | ---- | ---- | ---- | ---- | 23 | 170 | −59.1 | ---- | 22 | 168 | −58.1 | ---- | 31 | 163 | −54.4 | ---- | 15 | 174 | −59.4 | ---- | 27 | 171 | −58.4 | ---- |
| 14,000 | 14 | 145 | −59.8 | ---- | ---- | ---- | ---- | ---- | 21 | 144 | −59.2 | ---- | 20 | 144 | −59.8 | ---- | 31 | 139 | −55.2 | ---- | 13 | 148 | −63.2 | ---- | 27 | 146 | −60.4 | ---- |
| 15,000 | 14 | 123 | −62.6 | ---- | ---- | ---- | ---- | ---- | 19 | 123 | −60.4 | ---- | 18 | 123 | −61.9 | ---- | 31 | 119 | −56.2 | ---- | 7 | 125 | −67.6 | ---- | 25 | 124 | −62.6 | ---- |
| 16,000 | 13 | 104 | −64.7 | ---- | ---- | ---- | ---- | ---- | 19 | 104 | −61.4 | ---- | 11 | 104 | −63.5 | ---- | 29 | 102 | −57.5 | ---- | ---- | ---- | ---- | ---- | 23 | 105 | −65.5 | ---- |
| 17,000 | 11 | 89 | −66.3 | ---- | ---- | ---- | ---- | ---- | 18 | 89 | −62.2 | ---- | ---- | ---- | ---- | ---- | 26 | 87 | −58.5 | ---- | ---- | ---- | ---- | ---- | 21 | 89 | −67.0 | ---- |
| 18,000 | 8 | 75 | −67.3 | ---- | ---- | ---- | ---- | ---- | 14 | 75 | −62.3 | ---- | ---- | ---- | ---- | ---- | 21 | 74 | −58.9 | ---- | ---- | ---- | ---- | ---- | 20 | 76 | −66.9 | ---- |
| 19,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 11 | 64 | −61.2 | ---- | ---- | ---- | ---- | ---- | 14 | 63 | −58.7 | ---- | ---- | ---- | ---- | ---- | 12 | 64 | −65.4 | ---- |
| 20,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 5 | 54 | −60.1 | ---- | ---- | ---- | ---- | ---- | 5 | 53 | −58.2 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |

| | Portland, Maine (20 m.) | | | | St. Louis, Mo. (171 m.) | | | | St. Paul, Minn. (225 m.) | | | | San Antonio, Tex. (242 m.) | | | | San Diego, Calif. (19 m.) | | | | San Juan, P. R. (15 m.) | | | | Sault Ste. Marie, Mich. (221 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Surface | 30 | 1,012 | −6.0 | 72 | 31 | 999 | −0.5 | 83 | 31 | 992 | −8.9 | 86 | 30 | 990 | 11.0 | 74 | 30 | 1,016 | 13.6 | 81 | 30 | 1,014 | 24.8 | 81 | 31 | 988 | −8.6 | 80 |
| 500 | 30 | 952 | −7.4 | 75 | 31 | 958 | −1.0 | 82 | 31 | 957 | −10.3 | 89 | 30 | 960 | 13.0 | 69 | 30 | 960 | 12.5 | 62 | 30 | 960 | 21.9 | 85 | 31 | 954 | −9.6 | 82 |
| 1,000 | 30 | 892 | −9.4 | 75 | 31 | 900 | −1.5 | 77 | 31 | 897 | −9.5 | 84 | 30 | 904 | 12.1 | 61 | 30 | 906 | 11.0 | 47 | 30 | 907 | 18.6 | 88 | 31 | 894 | −10.5 | 84 |
| 1,500 | 30 | 836 | −10.6 | 74 | 31 | 846 | −1.3 | 71 | 31 | 842 | −8.3 | 78 | 29 | 852 | 10.5 | 57 | 30 | 853 | 8.9 | 36 | 30 | 855 | 15.5 | 86 | 31 | 837 | −11.3 | 80 |
| 2,000 | 30 | 784 | −11.3 | 72 | 31 | 794 | −2.0 | 62 | 31 | 789 | −9.2 | 73 | 29 | 802 | 8.6 | 50 | 30 | 803 | 6.4 | 32 | 30 | 806 | 13.5 | 75 | 31 | 784 | −13.2 | 76 |
| 2,500 | 30 | 734 | −12.7 | 67 | 31 | 746 | −3.7 | 56 | 31 | 739 | −11.1 | 71 | 29 | 755 | 6.4 | 47 | 30 | 754 | 3.9 | 31 | 30 | 759 | 11.9 | 59 | 31 | 734 | −14.6 | 72 |
| 3,000 | 30 | 688 | −14.7 | 65 | 31 | 700 | −6.1 | 52 | 31 | 692 | −13.7 | 72 | 29 | 710 | 4.4 | 40 | 30 | 708 | 1.2 | 30 | 30 | 715 | 9.8 | 48 | 31 | 687 | −16.6 | 69 |
| 4,000 | 29 | 602 | −19.6 | 62 | 30 | 615 | −11.3 | 49 | 29 | 606 | −19.2 | 73 | 29 | 627 | −1.4 | 37 | 30 | 625 | −5.2 | 26 | 30 | 634 | 5.0 | 33 | 31 | 600 | −21.4 | 63 |
| 5,000 | 29 | 525 | −25.1 | 61 | 28 | 539 | −17.6 | 45 | 29 | 529 | −25.3 | 67 | 29 | 553 | −7.6 | 36 | 30 | 549 | −11.8 | 28 | 30 | 560 | −0.3 | 31 | 30 | 523 | −26.8 | 60 |
| 6,000 | 29 | 457 | −31.5 | 60 | 28 | 471 | −24.2 | 44 | 28 | 460 | −31.9 | 63 | 29 | 485 | −14.4 | 34 | 29 | 481 | −18.6 | 30 | 28 | 494 | −6.4 | 28 | 29 | 455 | −33.2 | 57 |
| 7,000 | 29 | 396 | −37.4 | 59 | 28 | 410 | −31.2 | 43 | 27 | 399 | −38.8 | 63 | 28 | 425 | −21.6 | 33 | 29 | 420 | −26.1 | 24 | 28 | 434 | −13.2 | 27 | 29 | 394 | −40.2 | -- |
| 8,000 | 29 | 342 | −43.3 | ---- | 27 | 355 | −38.3 | 43 | 25 | 344 | −44.9 | ---- | 28 | 369 | −28.6 | 33 | 19 | 364 | −33.6 | ---- | 26 | 380 | −19.8 | 26 | 28 | 339 | −45.9 | ---- |
| 9,000 | 29 | 294 | −47.3 | ---- | 26 | 306 | −44.8 | ---- | 24 | 296 | −49.6 | ---- | 28 | 320 | −35.6 | 32 | 16 | 315 | −40.8 | ---- | 26 | 331 | −26.8 | 25 | 26 | 292 | −49.4 | ---- |
| 10,000 | 26 | 253 | −50.2 | ---- | 26 | 263 | −51.0 | ---- | 20 | 254 | −52.4 | ---- | 28 | 277 | −42.7 | ---- | 16 | 272 | −47.5 | ---- | 26 | 288 | −34.3 | 25 | 26 | 250 | −51.5 | ---- |
| 11,000 | 24 | 218 | −52.8 | ---- | 26 | 226 | −54.9 | ---- | 13 | 218 | −53.0 | ---- | 26 | 238 | −49.0 | ---- | 14 | 233 | −54.2 | ---- | 26 | 249 | −41.6 | ---- | 22 | 215 | −52.1 | ---- |
| 12,000 | 18 | 186 | −53.9 | ---- | 26 | 193 | −56.5 | ---- | 11 | 186 | −52.7 | ---- | 22 | 204 | −54.6 | ---- | 14 | 199 | −60.1 | ---- | 24 | 215 | −49.0 | ---- | 19 | 184 | −51.3 | ---- |
| 13,000 | 15 | 160 | −54.7 | ---- | 23 | 164 | −56.6 | ---- | 11 | 160 | −53.1 | ---- | 18 | 174 | −57.9 | ---- | 11 | 169 | −62.8 | ---- | 24 | 184 | −56.3 | ---- | 17 | 157 | −50.8 | ---- |
| 14,000 | 12 | 137 | −56.0 | ---- | 21 | 140 | −58.1 | ---- | 8 | 137 | −54.2 | ---- | 14 | 149 | −61.5 | ---- | 9 | 144 | −65.1 | ---- | 24 | 156 | −63.3 | ---- | 17 | 135 | −51.6 | ---- |
| 15,000 | 10 | 117 | −57.9 | ---- | 20 | 119 | −60.5 | ---- | ---- | ---- | ---- | ---- | 10 | 127 | −66.1 | ---- | 9 | 121 | −67.1 | ---- | 21 | 132 | −70.4 | ---- | 14 | 115 | −53.2 | ---- |
| 16,000 | 5 | 100 | −60.2 | ---- | 19 | 102 | −62.0 | ---- | ---- | ---- | ---- | ---- | 8 | 107 | −70.7 | ---- | 9 | 102 | −69.0 | ---- | 21 | 112 | −76.1 | ---- | 7 | 99 | −54.2 | ---- |
| 17,000 | ---- | ---- | ---- | ---- | 17 | 86 | −63.5 | ---- | ---- | ---- | ---- | ---- | 7 | 91 | −74.4 | ---- | 6 | 86 | −71.0 | ---- | 19 | 94 | −79.9 | ---- | ---- | ---- | ---- | ---- |
| 18,000 | ---- | ---- | ---- | ---- | 9 | 73 | −63.5 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 17 | 78 | −71.4 | ---- | ---- | ---- | ---- | ---- |
| 19,000 | ---- | ---- | ---- | ---- | 5 | 62 | −63.0 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 15 | 66 | −68.3 | ---- | ---- | ---- | ---- | ---- |
| 20,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 9 | 56 | −62.6 | ---- | ---- | ---- | ---- | ---- |
| 21,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 5 | 47 | −57.2 | ---- | ---- | ---- | ---- | ---- |

[1] U. S. Navy.

*Mean free-air barometric pressure in millibars, temperature in degrees centigrade, and relative humidities in percent, obtained by radiosondes during December 1942*—Continued

STATIONS AND ELEVATIONS IN METERS ABOVE SEA LEVEL—Continued

| Altitude (meters) m. s. l. | Spokane, Wash. (598 m.) | | | | Seattle, Wash.[1] (22 m.) | | | | Swan Island, West Indies (10 m.) | | | | Tongue Point, Oreg.[1] (21 m.) | | | | Washington, D. C. (25 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 31 | 945 | 0.7 | 90 | 27 | 1,013 | 6.3 | 87 | 30 | 1,014 | 25.5 | 84 | 23 | 1,015 | 6.3 | 92 | 27 | 1,016 | 1.0 | 72 |
| 500 | | | | | 27 | 956 | 3.2 | 85 | 30 | 959 | 22.3 | 87 | 23 | 958 | 4.9 | 82 | 27 | 957 | .3 | 68 |
| 1,000 | 31 | 899 | −.5 | 88 | 27 | 899 | −.5 | 82 | 30 | 906 | 19.0 | 87 | 23 | 901 | 2.6 | 73 | 27 | 899 | −1.5 | 68 |
| 1,500 | 31 | 844 | −2.0 | 82 | 27 | 844 | −1.9 | 78 | 30 | 855 | 16.3 | 83 | 23 | 847 | −0.3 | 77 | 27 | 844 | −2.4 | 67 |
| 2,000 | 31 | 792 | −4.0 | 74 | 27 | 792 | −4.7 | 75 | 30 | 805 | 13.5 | 79 | 23 | 795 | −3.0 | 66 | 27 | 793 | −3.1 | 63 |
| 2,500 | 30 | 743 | −7.0 | 72 | 27 | 743 | −7.9 | 75 | 29 | 759 | 11.4 | 71 | 23 | 747 | −5.5 | 57 | 27 | 744 | −4.6 | 61 |
| 3,000 | 30 | 697 | −10.0 | 72 | 27 | 696 | −11.0 | 73 | 28 | 715 | 9.1 | 62 | 23 | 700 | −8.7 | 59 | 27 | 698 | −7.1 | 59 |
| 4,000 | 30 | 612 | −16.0 | 66 | 27 | 610 | −17.5 | 74 | 28 | 633 | 3.4 | 60 | 23 | 614 | −14.0 | 55 | 26 | 613 | −12.3 | 56 |
| 5,000 | 30 | 534 | −22.5 | 64 | 27 | 534 | −24.0 | 72 | 27 | 559 | −2.2 | 62 | 22 | 538 | −20.0 | 55 | 26 | 537 | −17.9 | 49 |
| 6,000 | 29 | 466 | −29.1 | 59 | 27 | 465 | −30.4 | 77 | 27 | 492 | −8.3 | 58 | 21 | 470 | −26.4 | 67 | 25 | 469 | −23.9 | 47 |
| 7,000 | 29 | 404 | −35.7 | 57 | 26 | 403 | −36.8 | 85 | 27 | 432 | −14.8 | 53 | 20 | 408 | −33.5 | 69 | 22 | 409 | −29.8 | 47 |
| 8,000 | 29 | 349 | −42.5 | | 22 | 348 | −43.3 | | 26 | 378 | −21.8 | 52 | 13 | 352 | −39.6 | | 19 | 354 | −35.7 | 46 |
| 9,000 | 29 | 300 | −48.4 | | 21 | 299 | −49.6 | | 25 | 329 | −28.9 | 51 | 13 | 304 | −44.7 | | 16 | 306 | −41.7 | |
| 10,000 | 28 | 257 | −53.2 | | 18 | 256 | −54.7 | | 24 | 286 | −36.3 | | 11 | 261 | −50.3 | | 15 | 264 | −47.8 | |
| 11,000 | 28 | 221 | −55.6 | | 18 | 219 | −58.3 | | 24 | 247 | −43.8 | | 10 | 224 | −52.2 | | 12 | 227 | −51.7 | |
| 12,000 | 26 | 188 | −56.2 | | 14 | 186 | −59.9 | | 24 | 212 | −51.0 | | 9 | 191 | −53.7 | | 11 | 194 | −53.8 | |
| 13,000 | 25 | 161 | −54.8 | | 10 | 158 | −59.7 | | 23 | 181 | −58.4 | | 8 | 164 | −52.9 | | 10 | 167 | −55.1 | |
| 14,000 | 22 | 138 | −54.3 | | 7 | 134 | −61.0 | | 21 | 154 | −65.8 | | | | | | 6 | 143 | −56.5 | |
| 15,000 | 22 | 118 | −55.0 | | 5 | 113 | −61.3 | | 21 | 130 | −72.9 | | | | | | 6 | 122 | −57.3 | |
| 16,000 | 20 | 101 | −55.2 | | | | | | 20 | 110 | −79.3 | | | | | | | | | |
| 17,000 | 15 | 86 | −55.5 | | | | | | 20 | 92 | −83.2 | | | | | | | | | |
| 18,000 | 8 | 73 | −55.9 | | | | | | 15 | 77 | −85.0 | | | | | | | | | |
| 19,000 | | | | | | | | | 10 | 64 | −81.6 | | | | | | | | | |
| 20,000 | | | | | | | | | 9 | 53 | −73.4 | | | | | | | | | |

*Mean free-air barometric pressure in millibars, temperature in degrees centigrade, and relative humidities in percent, obtained by radiosondes during January 1943*

STATIONS AND ELEVATIONS IN METERS ABOVE SEA LEVEL

| Altitude (meters) m. s. l. | Albuquerque, N. Mex. (1,620 m.) | | | | Apalachicola, Fla. (7 m.) | | | | Atlanta, Ga. (300 m.) | | | | Bismarck, N. Dak. (505 m.) | | | | Boise, Idaho (868 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 31 | 838 | 3.8 | 45 | 31 | 1,020 | 12.3 | 86 | 31 | 985 | 6.2 | 84 | 31 | 960 | −19.0 | 85 | 31 | 919 | −2.5 | 82 |
| 500 | | | | | 31 | 962 | 12.9 | 71 | 31 | 961 | 7.2 | 81 | | | | | | | | |
| 1,000 | | | | | 31 | 906 | 11.4 | 66 | 31 | 904 | 6.2 | 75 | 31 | 898 | −15.2 | 87 | 31 | 904 | −1.8 | 79 |
| 1,500 | | | | | 31 | 854 | 10.5 | 54 | 31 | 851 | 6.1 | 63 | 31 | 841 | −12.8 | 87 | 31 | 849 | −3.2 | 75 |
| 2,000 | 31 | 800 | 3.4 | 46 | 31 | 804 | 9.3 | 44 | 31 | 800 | 5.3 | 49 | 31 | 787 | −11.2 | 84 | 31 | 797 | −3.5 | 69 |
| 2,500 | 31 | 752 | 0.6 | 45 | 31 | 757 | 7.2 | 39 | 31 | 753 | 3.0 | 46 | 31 | 738 | −12.5 | 82 | 31 | 748 | −5.6 | 67 |
| 3,000 | 31 | 706 | −2.6 | 48 | 31 | 712 | 4.7 | 39 | 31 | 707 | 1.3 | 45 | 31 | 691 | −14.4 | 81 | 31 | 701 | −8.1 | 65 |
| 4,000 | 31 | 622 | −8.3 | 51 | 29 | 629 | −.5 | 36 | 29 | 624 | −3.7 | 41 | 31 | 604 | −20.3 | 78 | 29 | 617 | −13.9 | 59 |
| 5,000 | 31 | 546 | −14.6 | 50 | 29 | 554 | −6.7 | 34 | 28 | 549 | −10.4 | 36 | 30 | 528 | −26.4 | 77 | 28 | 540 | −19.9 | 56 |
| 6,000 | 31 | 477 | −21.2 | 48 | 28 | 487 | −13.3 | 34 | 28 | 481 | −17.0 | 36 | 30 | 459 | −33.3 | 72 | 28 | 471 | −26.4 | 53 |
| 7,000 | 31 | 416 | −28.3 | 45 | 28 | 426 | −19.9 | 34 | 28 | 421 | −23.9 | 36 | 29 | 396 | −40.3 | | 27 | 409 | −34.1 | 47 |
| 8,000 | 31 | 362 | −35.7 | 39 | 28 | 372 | −27.0 | 34 | 28 | 366 | −31.1 | 37 | 29 | 342 | −46.9 | | 25 | 353 | −42.0 | |
| 9,000 | 31 | 312 | −43.0 | | 27 | 323 | −34.5 | 30 | 27 | 317 | −38.3 | 35 | 29 | 293 | −52.5 | | 25 | 304 | −48.5 | |
| 10,000 | 30 | 269 | −49.7 | | 27 | 279 | −42.1 | | 27 | 274 | −45.1 | | 26 | 250 | −56.6 | | 22 | 260 | −54.7 | |
| 11,000 | 28 | 230 | −54.7 | | 26 | 240 | −48.8 | | 26 | 235 | −52.3 | | 23 | 214 | −56.6 | | 20 | 222 | −58.2 | |
| 12,000 | 24 | 197 | −57.2 | | 25 | 206 | −53.8 | | 22 | 201 | −56.5 | | 21 | 182 | −55.9 | | 15 | 189 | −59.2 | |
| 13,000 | 23 | 168 | −58.1 | | 24 | 176 | −57.4 | | 16 | 172 | −58.5 | | 19 | 156 | −52.8 | | 11 | 161 | −57.3 | |
| 14,000 | 22 | 143 | −60.2 | | 19 | 150 | −61.1 | | 15 | 147 | −61.2 | | 15 | 134 | −52.4 | | 8 | 138 | −58.5 | |
| 15,000 | 21 | 122 | −61.6 | | 16 | 128 | −64.8 | | 11 | 124 | −64.1 | | 5 | 114 | −56.2 | | 6 | 117 | −61.6 | |
| 16,000 | 17 | 104 | −63.0 | | 11 | 109 | −69.3 | | 10 | 106 | −66.3 | | | | | | | | | |
| 17,000 | 14 | 88 | −64.3 | | 10 | 92 | −72.2 | | 9 | 90 | −68.7 | | | | | | | | | |
| 18,000 | 7 | 75 | −65.1 | | | | | | 5 | 76 | −69.6 | | | | | | | | | |
| 19,000 | | | | | | | | | | | | | | | | | | | | |

| Altitude (meters) m. s. l. | Brownsville, Tex. (6 m.) | | | | Buffalo, N. Y. (221 m.) | | | | Caribou, Maine (191 m.) | | | | Charleston, S. C. (14 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 31 | 1,019 | 12.7 | 90 | 31 | 991 | −5.9 | [2]80 | 30 | 990 | −15.5 | 89 | 31 | 1,019 | 8.4 | 85 |
| 500 | 31 | 961 | 13.0 | 82 | 31 | 956 | −5.9 | [2]78 | 30 | 950 | −14.5 | 87 | 31 | 960 | 9.7 | 75 |
| 1,000 | 31 | 906 | 13.1 | 71 | 31 | 896 | −7.0 | [2]69 | 30 | 890 | −14.6 | 85 | 31 | 905 | 8.7 | 70 |
| 1,500 | 31 | 853 | 12.3 | 63 | 31 | 841 | −8.3 | [2]69 | 30 | 833 | −13.5 | 82 | 31 | 852 | 7.8 | 61 |
| 2,000 | 31 | 803 | 10.8 | 57 | 31 | 788 | −9.2 | [2]63 | 30 | 780 | −13.9 | 77 | 31 | 801 | 6.3 | 53 |
| 2,500 | 31 | 757 | 8.6 | 54 | 31 | 739 | −10.5 | [2]58 | 30 | 730 | −15.0 | 75 | 31 | 754 | 4.3 | 48 |
| 3,000 | 31 | 712 | 5.8 | 52 | 31 | 692 | −12.4 | [2]51 | 30 | 683 | −16.8 | 73 | 31 | 708 | 1.9 | 44 |
| 4,000 | 30 | 629 | 0.0 | 48 | 31 | 606 | −17.8 | [2]46 | 30 | 597 | −21.8 | 68 | 31 | 625 | −2.9 | 42 |
| 5,000 | 30 | 555 | −6.3 | 47 | 28 | 531 | −22.7 | [2]47 | 30 | 520 | −27.9 | 65 | 31 | 551 | −9.2 | 39 |
| 6,000 | 29 | 487 | −12.9 | 45 | 27 | 462 | −28.9 | | 30 | 452 | −34.0 | 64 | 31 | 483 | −16.0 | 39 |
| 7,000 | 29 | 427 | −19.9 | 44 | 26 | 401 | −35.7 | | 30 | 391 | −40.4 | | 30 | 423 | −22.7 | 37 |
| 8,000 | 28 | 372 | −27.1 | 44 | 24 | 347 | −42.1 | | 29 | 337 | −46.8 | | 30 | 368 | −29.6 | 37 |
| 9,000 | 28 | 323 | −34.4 | 49 | 21 | 299 | −48.4 | | 28 | 290 | −51.7 | | 30 | 319 | −36.9 | 26 |
| 10,000 | 28 | 280 | −41.9 | | 15 | 256 | −51.8 | | 27 | 247 | −54.3 | | 28 | 276 | −44.5 | |
| 11,000 | 27 | 241 | −49.1 | | 11 | 218 | −52.7 | | 27 | 212 | −54.1 | | 26 | 237 | −51.4 | |
| 12,000 | 26 | 206 | −54.4 | | 10 | 187 | −52.8 | | 24 | 182 | −54.0 | | 25 | 203 | −56.2 | |
| 13,000 | 24 | 176 | −59.2 | | 8 | 160 | −53.5 | | 22 | 156 | −54.0 | | 21 | 173 | −58.9 | |
| 14,000 | 23 | 150 | −62.8 | | 5 | 138 | −57.4 | | 17 | 133 | −54.6 | | 17 | 147 | −62.3 | |
| 15,000 | 22 | 127 | −66.2 | | | | | | 15 | 115 | −55.6 | | 11 | 125 | −65.1 | |
| 16,000 | 20 | 108 | −69.3 | | | | | | 12 | 98 | −58.3 | | 10 | 106 | −67.6 | |
| 17,000 | 17 | 91 | −72.5 | | | | | | 8 | 83 | −58.9 | | 7 | 90 | −70.0 | |
| 18,000 | 13 | 77 | −75.1 | | | | | | | | | | | | | |
| 19,000 | 9 | 65 | −73.6 | | | | | | | | | | | | | |

| Altitude (meters) m. s. l. | Denver, Colo. (1,616 m.) | | | | Detroit, Mich. (217 m.) | | | | El Paso, Tex. (1,193 m.) | | | | Ely, Nev. (1,908 m.) | | | | Great Falls, Mont. (1,128 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 31 | 835 | −1.3 | 59 | 31 | 991 | −7.1 | 89 | 31 | 884 | 7.3 | 52 | 30 | 809 | −4.7 | 64 | 29 | 886 | −11.8 | 73 |
| 500 | | | | | 31 | 956 | −7.3 | 89 | | | | | | | | | | | | |
| 1,000 | | | | | 31 | 896 | −7.1 | 86 | | | | | | | | | | | | |
| 1,500 | | | | | 31 | 841 | −7.3 | 80 | 31 | 851 | 8.0 | 49 | | | | | 29 | 844 | −9.5 | 75 |
| 2,000 | 31 | 796 | 0.0 | 54 | 31 | 788 | −8.1 | 73 | 31 | 801 | 5.9 | 47 | 30 | 800 | −2.9 | 64 | 29 | 791 | −10.7 | 74 |
| 2,500 | 31 | 748 | −2.7 | 51 | 31 | 739 | −8.9 | 64 | 31 | 753 | 3.1 | 47 | 30 | 751 | −2.8 | 63 | 29 | 741 | −10.2 | 72 |
| 3,000 | 31 | 702 | −5.4 | 50 | 31 | 692 | −11.1 | 59 | 31 | 708 | 0.4 | 47 | 30 | 705 | −5.7 | 64 | 28 | 694 | −12.9 | 73 |
| 4,000 | 31 | 616 | −12.2 | 49 | 31 | 607 | −16.3 | 54 | 31 | 624 | −5.2 | 45 | 30 | 620 | −11.0 | 57 | 28 | 608 | −18.5 | 72 |
| 5,000 | 31 | 540 | −18.7 | 50 | 31 | 531 | −22.4 | 51 | 30 | 549 | −12.0 | 43 | 30 | 544 | −17.0 | 53 | 27 | 531 | −25.4 | 69 |
| 6,000 | 30 | 472 | −25.1 | 49 | 31 | 463 | −28.6 | 49 | 26 | 480 | −19.4 | 41 | 30 | 475 | −23.5 | 52 | 27 | 462 | −32.3 | 65 |
| 7,000 | 29 | 411 | −32.0 | 45 | 31 | 401 | −35.6 | 50 | 22 | 419 | −26.6 | 39 | 29 | 413 | −31.5 | 50 | 27 | 400 | −39.3 | 55 |
| 8,000 | 29 | 355 | −39.6 | 48 | 31 | 347 | −42.0 | | 19 | 364 | −33.5 | 32 | 29 | 358 | −39.6 | 43 | 26 | 344 | −46.2 | |
| 9,000 | 27 | 306 | −46.5 | | 30 | 298 | −47.9 | | 17 | 314 | −41.4 | | 29 | 308 | −47.9 | | 25 | 297 | −51.9 | |
| 10,000 | 26 | 263 | −53.4 | | 28 | 256 | −52.4 | | 17 | 271 | −48.3 | | 26 | 265 | −54.6 | | 23 | 255 | −56.4 | |
| 11,000 | 24 | 226 | −57.4 | | 27 | 219 | −54.5 | | 14 | 232 | −54.7 | | 24 | 226 | −60.2 | | 22 | 218 | −59.2 | |
| 12,000 | 20 | 192 | −59.1 | | 26 | 188 | −54.5 | | 12 | 198 | −57.6 | | 24 | 192 | −62.8 | | 21 | 186 | −59.2 | |
| 13,000 | 17 | 164 | −59.2 | | 23 | 160 | −55.7 | | 10 | 169 | −59.8 | | 23 | 163 | −62.2 | | 20 | 159 | −58.3 | |
| 14,000 | 16 | 139 | −60.0 | | 19 | 137 | −57.5 | | 8 | 144 | −62.1 | | 21 | 139 | −62.8 | | 19 | 136 | −58.4 | |
| 15,000 | 14 | 118 | −60.6 | | 10 | 117 | −59.4 | | 7 | 123 | −65.1 | | 21 | 118 | −64.0 | | 15 | 116 | −59.6 | |
| 16,000 | 13 | 101 | −61.5 | | 7 | 100 | −53.6 | | 5 | 104 | −68.4 | | 19 | 100 | −65.8 | | 12 | 99 | −61.4 | |
| 17,000 | 10 | 86 | −61.0 | | | | | | | | | | 13 | 85 | −65.7 | | 8 | 86 | −61.5 | |
| 18,000 | 9 | 73 | −62.0 | | | | | | | | | | 5 | 72 | −64.3 | | 5 | 74 | −62.6 | |

[1] U. S. Navy.

[2] Humidity data obtained by electric hygrometer.

*Mean free-air barometric pressure in millibars, temperature in degrees centigrade, and relative humidities in percent, obtained by radiosondes during January 1943*—Continued

STATIONS AND ELEVATIONS IN METERS ABOVE SEA LEVEL—Continued

| Altitude (meters) m. s. l. | Huntington, W. Va. (172 m.) | | | | International Falls, Minn. (343 m.) | | | | Joliet, Ill. (178 m.) | | | | Lake Charles, La. (5 m.) | | | | Lakehurst, N. J.[1] (39 m.) | | | | Medford, Oreg. (409 m.) | | | | Miami, Fla. (4 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 30 | 998 | 2.1 | 81 | 31 | 977 | −18.8 | 90 | 31 | 996 | −6.1 | 87 | 27 | 1,020 | 10.2 | [2]87 | 27 | 1,013 | −1.0 | [2]76 | 31 | 971 | 1.7 | 89 | 31 | 1,020 | 18.6 | 88 |
| 500 | 30 | 958 | 1.6 | 81 | 31 | 956 | −18.6 | 91 | 31 | 956 | −6.3 | 89 | 27 | 961 | 10.7 | [2]72 | 27 | 956 | −1.7 | [2]69 | 31 | 960 | 1.5 | 87 | 31 | 962 | 18.6 | 81 |
| 1,000 | 30 | 901 | −.2 | 82 | 31 | 894 | −18.0 | 91 | 31 | 897 | −6.3 | 83 | 27 | 905 | 10.8 | 60 | 27 | 898 | −2.5 | [2]68 | 31 | 902 | 2.7 | 70 | 31 | 908 | 15.4 | 81 |
| 1,500 | 30 | 846 | −1.8 | 81 | 31 | 836 | −16.3 | 89 | 31 | 841 | −5.8 | 79 | 27 | 853 | 10.2 | [2]47 | 27 | 843 | −3.2 | [2]69 | 31 | 848 | .9 | 64 | 31 | 856 | 13.5 | 72 |
| 2,000 | 30 | 794 | −3.1 | 77 | 31 | 783 | −15.7 | 86 | 31 | 789 | −6.3 | 72 | 27 | 802 | 9.0 | [2]41 | 27 | 791 | −4.5 | [2]65 | 29 | 798 | −1.4 | 60 | 31 | 806 | 12.2 | 52 |
| 2,500 | 30 | 745 | −4.7 | 72 | 31 | 732 | −16.7 | 83 | 31 | 740 | −8.2 | 69 | 27 | 755 | 6.7 | [2]40 | 27 | 742 | −6.4 | [2]61 | 29 | 749 | −3.2 | 55 | 31 | 760 | 9.4 | 47 |
| 3,000 | 30 | 699 | −6.4 | 64 | 31 | 685 | −18.6 | 81 | 31 | 694 | −10.3 | 68 | 27 | 710 | 4.3 | [2]42 | 27 | 696 | −8.5 | [2]60 | 29 | 703 | −5.7 | 49 | 31 | 715 | 6.8 | 45 |
| 4,000 | 30 | 615 | −11.2 | 56 | 30 | 598 | −23.9 | 78 | 31 | 609 | −15.7 | 62 | 27 | 627 | −1.1 | [2]45 | 27 | 611 | −13.0 | [2]59 | 29 | 618 | −11.3 | 46 | 31 | 632 | 1.6 | 38 |
| 5,000 | 30 | 539 | −16.7 | 52 | 30 | 520 | −29.6 | 72 | 31 | 532 | −22.0 | 60 | 27 | 553 | −7.6 | ---- | 26 | 536 | −18.9 | [2]60 | 28 | 541 | −17.6 | 45 | 30 | 558 | −4.2 | 32 |
| 6,000 | 30 | 471 | −23.0 | 49 | 30 | 452 | −36.4 | 67 | 30 | 464 | −28.3 | 55 | 26 | 485 | −14.3 | ---- | 26 | 469 | −25.0 | ---- | 27 | 473 | −24.2 | 43 | 30 | 490 | −10.8 | 31 |
| 7,000 | 30 | 411 | −29.0 | 46 | 28 | 390 | −42.5 | ---- | 30 | 403 | −34.9 | 49 | 25 | 424 | −21.2 | ---- | 26 | 408 | −32.1 | ---- | 26 | 412 | −31.3 | 39 | 30 | 430 | −18.0 | 30 |
| 8,000 | 30 | 356 | −36.1 | 45 | 26 | 335 | −48.5 | ---- | 28 | 348 | −41.3 | ---- | 23 | 370 | −28.6 | ---- | 26 | 352 | −38.8 | ---- | 25 | 357 | −38.9 | 26 | 30 | 376 | −25.3 | 29 |
| 9,000 | 30 | 307 | −43.4 | ---- | 24 | 288 | −52.6 | ---- | 28 | 300 | −47.4 | ---- | 21 | 321 | −36.2 | ---- | 26 | 304 | −45.5 | ---- | 25 | 307 | −46.4 | ---- | 30 | 326 | −32.4 | 28 |
| 10,000 | 28 | 265 | −49.5 | ---- | 23 | 247 | −55.1 | ---- | 28 | 257 | −51.8 | ---- | 19 | 278 | −43.3 | ---- | 23 | 262 | −51.0 | ---- | 25 | 264 | −53.1 | ---- | 30 | 283 | −39.3 | ---- |
| 11,000 | 25 | 227 | −54.4 | ---- | 22 | 211 | −55.3 | ---- | 28 | 221 | −54.4 | ---- | 17 | 239 | −50.1 | ---- | 20 | 224 | −54.1 | ---- | 24 | 226 | −58.4 | ---- | 30 | 244 | −45.9 | ---- |
| 12,000 | 23 | 193 | −56.8 | ---- | 22 | 180 | −54.9 | ---- | 26 | 189 | −56.0 | ---- | 17 | 204 | −55.4 | ---- | 19 | 192 | −56.0 | ---- | 23 | 193 | −61.0 | ---- | 28 | 209 | −52.4 | ---- |
| 13,000 | 17 | 166 | −57.3 | ---- | 20 | 154 | −54.1 | ---- | 24 | 161 | −55.2 | ---- | 16 | 175 | −59.2 | ---- | 15 | 164 | −56.9 | ---- | 22 | 164 | −59.3 | ---- | 25 | 179 | −58.0 | ---- |
| 14,000 | 14 | 141 | −59.3 | ---- | 18 | 132 | −56.0 | ---- | 17 | 138 | −56.6 | ---- | 14 | 149 | −63.1 | ---- | 12 | 140 | −57.4 | ---- | 21 | 140 | −59.5 | ---- | 23 | 152 | −62.7 | ---- |
| 15,000 | 10 | 120 | −61.4 | ---- | 10 | 114 | −56.5 | ---- | 11 | 118 | −57.9 | ---- | 13 | 126 | −66.5 | ---- | 9 | 120 | −59.5 | ---- | 20 | 119 | −60.5 | ---- | 16 | 129 | −67.0 | ---- |
| 16,000 | 7 | 103 | −64.4 | ---- | ---- | ---- | ---- | ---- | 6 | 101 | −60.6 | ---- | 12 | 107 | −69.0 | ---- | ---- | ---- | ---- | ---- | 17 | 102 | −61.9 | ---- | 15 | 110 | −72.4 | ---- |
| 17,000 | 5 | 88 | −64.6 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 9 | 91 | −72.1 | ---- | ---- | ---- | ---- | ---- | 15 | 87 | −61.8 | ---- | 7 | 92 | −76.4 | ---- |
| 18,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 8 | 76 | −72.1 | ---- | ---- | ---- | ---- | ---- | 7 | 75 | −61.0 | ---- | 6 | 78 | −76.3 | ---- |
| 19,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 6 | 65 | −69.5 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |

| Altitude (meters) m. s. l. | Nashville, Tenn. (180 m.) | | | | Norfolk, Va.[1] (4 m.) | | | | Oakland, Calif. (6 m.) | | | | Oklahoma City, Okla. (391 m.) | | | | Omaha, Nebr. (301 m.) | | | | Pensacola, Fla.[1] (24 m.) | | | | Phoenix, Ariz. (339 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Surface | 30 | 998 | 4.2 | [2]75 | 30 | 1,020 | 5.2 | 81 | 31 | 1,017 | 9.3 | 79 | 30 | 973 | 0.6 | 64 | 31 | 984 | −7.1 | [2]77 | 27 | 1,017 | 11.8 | [2]85 | 31 | 977 | 9.4 | 64 |
| 500 | 30 | 959 | 4.3 | [2]71 | 30 | 960 | 5.7 | 66 | 31 | 958 | 10.3 | 65 | 30 | 959 | 2.1 | 63 | 31 | 959 | −7.1 | [2]70 | 27 | 962 | 10.9 | [2]71 | 31 | 959 | 13.1 | 54 |
| 1,000 | 30 | 902 | 3.2 | [2]73 | 30 | 903 | 4.5 | 59 | 31 | 902 | 8.6 | 62 | 30 | 902 | 3.6 | 56 | 31 | 900 | −4.7 | [2]59 | 27 | 906 | 9.9 | [2]60 | 31 | 903 | 11.7 | 45 |
| 1,500 | 30 | 848 | 2.4 | [2]68 | 30 | 849 | 3.6 | 54 | 31 | 850 | 7.0 | 56 | 30 | 849 | 4.3 | 51 | 31 | 844 | −4.3 | [2]53 | 27 | 853 | 8.9 | [2]51 | 31 | 850 | 8.6 | 44 |
| 2,000 | 30 | 797 | 1.6 | [2]54 | 30 | 798 | 1.9 | 48 | 31 | 799 | 4.7 | 52 | 30 | 798 | 3.0 | 45 | 31 | 792 | −5.1 | [2]48 | 27 | 803 | 6.9 | [2]48 | 31 | 800 | 5.4 | 43 |
| 2,500 | 30 | 749 | −0.1 | [2]48 | 30 | 750 | −0.2 | 45 | 31 | 752 | 2.4 | 46 | 30 | 750 | 0.8 | 44 | 31 | 743 | −6.5 | [2]41 | 27 | 755 | 5.1 | [2]38 | 31 | 752 | 2.7 | 44 |
| 3,000 | 30 | 703 | −2.2 | [2]40 | 29 | 704 | −2.9 | 42 | 31 | 706 | .1 | 43 | 30 | 704 | −1.4 | 44 | 31 | 697 | −8.7 | [2]41 | 27 | 710 | 2.7 | [2]36 | 31 | 707 | −0.2 | 43 |
| 4,000 | 30 | 620 | −7.2 | [2]36 | 29 | 620 | −7.6 | 38 | 29 | 623 | −6.5 | 38 | 30 | 620 | −6.8 | 41 | 31 | 612 | −14.7 | [2]47 | 24 | 626 | −2.9 | [2]40 | 31 | 623 | −6.1 | 41 |
| 5,000 | 28 | 544 | −13.0 | [2]33 | 29 | 544 | −13.8 | 39 | 28 | 547 | −13.5 | 37 | 30 | 545 | −12.8 | 38 | 31 | 536 | −20.8 | [2]49 | 23 | 551 | −9.2 | [2]34 | 31 | 548 | −12.6 | 40 |
| 6,000 | 28 | 476 | −19.4 | ---- | 28 | 477 | −20.1 | 38 | 28 | 478 | −20.6 | 36 | 30 | 477 | −19.7 | 36 | 31 | 467 | −28.0 | ---- | 23 | 484 | −15.8 | [2]30 | 31 | 479 | −19.7 | 39 |
| 7,000 | 27 | 416 | −26.5 | ---- | 26 | 416 | −26.3 | 40 | 28 | 418 | −27.9 | 34 | 30 | 416 | −27.2 | 35 | 29 | 406 | −34.2 | ---- | 22 | 423 | −23.0 | [2]26 | 30 | 419 | −27.2 | 38 |
| 8,000 | 25 | 361 | −33.5 | ---- | ---- | ---- | ---- | ---- | 28 | 362 | −35.3 | 33 | 30 | 362 | −34.5 | 35 | 29 | 351 | −40.8 | ---- | 22 | 368 | −30.6 | ---- | 29 | 363 | −34.7 | 41 |
| 9,000 | 22 | 312 | −40.6 | ---- | ---- | ---- | ---- | ---- | 28 | 313 | −42.8 | ---- | 30 | 313 | −41.7 | ---- | 29 | 302 | −47.4 | ---- | 21 | 319 | −37.9 | ---- | 29 | 313 | −42.2 | ---- |
| 10,000 | 19 | 269 | −46.6 | ---- | ---- | ---- | ---- | ---- | 27 | 270 | −49.5 | ---- | 29 | 270 | −48.2 | ---- | 29 | 259 | −52.8 | ---- | 20 | 275 | −45.3 | ---- | 28 | 270 | −48.5 | ---- |
| 11,000 | 15 | 231 | −51.5 | ---- | ---- | ---- | ---- | ---- | 26 | 231 | −55.1 | ---- | 26 | 231 | −53.7 | ---- | 29 | 222 | −55.3 | ---- | 19 | 236 | −52.3 | ---- | 28 | 232 | −53.9 | ---- |
| 12,000 | 14 | 197 | −55.2 | ---- | ---- | ---- | ---- | ---- | 20 | 198 | −59.1 | ---- | 25 | 198 | −57.6 | ---- | 29 | 190 | −55.9 | ---- | 19 | 202 | −55.8 | ---- | 28 | 198 | −56.9 | ---- |
| 13,000 | 13 | 168 | −56.0 | ---- | ---- | ---- | ---- | ---- | 17 | 169 | −58.4 | ---- | 22 | 168 | −59.7 | ---- | 28 | 162 | −55.5 | ---- | 16 | 172 | −59.1 | ---- | 28 | 169 | −58.6 | ---- |
| 14,000 | 10 | 143 | −58.8 | ---- | ---- | ---- | ---- | ---- | 16 | 145 | −58.2 | ---- | 21 | 143 | −61.1 | ---- | 27 | 138 | −56.7 | ---- | 12 | 146 | −62.2 | ---- | 25 | 144 | −59.5 | ---- |
| 15,000 | 9 | 122 | −60.3 | ---- | ---- | ---- | ---- | ---- | 15 | 124 | −59.9 | ---- | 17 | 122 | −63.1 | ---- | 23 | 118 | −58.7 | ---- | 7 | 124 | −66.9 | ---- | 23 | 123 | −62.0 | ---- |
| 16,000 | 9 | 103 | −61.1 | ---- | ---- | ---- | ---- | ---- | 13 | 105 | −61.3 | ---- | 8 | 104 | −65.3 | ---- | 21 | 101 | −59.9 | ---- | ---- | ---- | ---- | ---- | 20 | 104 | −63.7 | ---- |
| 17,000 | 6 | 88 | −60.6 | ---- | ---- | ---- | ---- | ---- | 10 | 90 | −61.7 | ---- | 5 | 88 | −65.7 | ---- | 18 | 86 | −60.1 | ---- | ---- | ---- | ---- | ---- | 20 | 88 | −65.0 | ---- |
| 18,000 | 5 | 75 | −63.1 | ---- | ---- | ---- | ---- | ---- | 9 | 76 | −62.2 | ---- | ---- | ---- | ---- | ---- | 9 | 73 | −61.1 | ---- | ---- | ---- | ---- | ---- | 18 | 75 | −65.0 | ---- |
| 19,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 12 | 64 | −63.9 | ---- |
| 20,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 8 | 54 | −62.9 | ---- |

| Altitude (meters) m. s. l. | Portland, Maine (20 m.) | | | | St. Louis, Mo. (171 m.) | | | | St. Paul, Minn. (225 m.) | | | | San Antonio, Tex. (242 m.) | | | | San Diego, Calif.[1] (19 m.) | | | | San Juan, P. R. (15 m.) | | | | S. Ste. Marie, Mich. (221 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Surface | 30 | 1,014 | −8.5 | 65 | 31 | 999 | −1.7 | 74 | 31 | 992 | −13.2 | 84 | 30 | 992 | 8.5 | 66 | 30 | 1,105 | 13.4 | [2]75 | 31 | 1,016 | 23.3 | 85 | 31 | 990 | −10.7 | 86 |
| 500 | 30 | 954 | −7.7 | 65 | 31 | 958 | −1.7 | 71 | 31 | 957 | −13.6 | 86 | 30 | 962 | 10.6 | 62 | 30 | 959 | 11.3 | [2]56 | 31 | 961 | 20.7 | 88 | 31 | 955 | −11.5 | 88 |
| 1,000 | 30 | 894 | −8.9 | 63 | 31 | 900 | −2.3 | 68 | 31 | 896 | −11.8 | 84 | 30 | 906 | 10.0 | 57 | 30 | 903 | 8.9 | [2]47 | 31 | 907 | 17.3 | 86 | 31 | 894 | −12.6 | 84 |
| 1,500 | 30 | 838 | −8.8 | 57 | 31 | 845 | −1.8 | 63 | 31 | 840 | −10.5 | 82 | 30 | 853 | 9.6 | 53 | 30 | 850 | 5.8 | [2]43 | 31 | 856 | 14.8 | 83 | 31 | 838 | −13.6 | 82 |
| 2,000 | 30 | 786 | −9.9 | 53 | 31 | 794 | −2.8 | 57 | 31 | 787 | −10.6 | 78 | 30 | 802 | 7.7 | 47 | 30 | 799 | 3.8 | [2]39 | 31 | 806 | 11.6 | 76 | 31 | 784 | −14.2 | 76 |
| 2,500 | 30 | 736 | −11.7 | 50 | 31 | 745 | −4.4 | 52 | 31 | 737 | −12.2 | 75 | 30 | 755 | 5.6 | 44 | 30 | 751 | 1.0 | [2]36 | 31 | 759 | 9.5 | 66 | 31 | 734 | −15.0 | 72 |
| 3,000 | 30 | 690 | −13.9 | 51 | 31 | 699 | −6.4 | 48 | 31 | 690 | −14.4 | 72 | 30 | 710 | 3.2 | 45 | 30 | 705 | −1.9 | [2]31 | 30 | 715 | 7.7 | 51 | 31 | 687 | −16.9 | 69 |
| 4,000 | 30 | 604 | −18.4 | 53 | 30 | 614 | −11.7 | 44 | 31 | 604 | −19.6 | 70 | 30 | 627 | −2.2 | 45 | 30 | 620 | −8.0 | [2]33 | 29 | 632 | 3.7 | 33 | 31 | 601 | −21.4 | 68 |
| 5,000 | 30 | 527 | −24.1 | 54 | 30 | 538 | −17.6 | 42 | 29 | 528 | −25.1 | 69 | 30 | 552 | −8.7 | 42 | 30 | 544 | −14.8 | [2]41 | 28 | 559 | −2.2 | 27 | 29 | 524 | −28.0 | 69 |
| 6,000 | 29 | 459 | −30.9 | 56 | 30 | 470 | −23.8 | 41 | 29 | 459 | −31.1 | 69 | 30 | 484 | −15.6 | 42 | 30 | 476 | −22.0 | ---- | 27 | 492 | −8.8 | 25 | 26 | 455 | −34.3 | 60 |
| 7,000 | 29 | 398 | −36.8 | 60 | 29 | 410 | −30.2 | 39 | 26 | 397 | −39.3 | 66 | 30 | 424 | −22.4 | 39 | 30 | 416 | −29.4 | ---- | 25 | 432 | −15.3 | 23 | 25 | 394 | −41.3 | ---- |
| 8,000 | 26 | 344 | −42.8 | ---- | 28 | 355 | −37.1 | 32 | 24 | 343 | −45.6 | ---- | 29 | 369 | −29.5 | 37 | 17 | 361 | −37.4 | ---- | 23 | 378 | −21.4 | 23 | 24 | 338 | −47.3 | ---- |
| 9,000 | 26 | 296 | −48.3 | ---- | 28 | 307 | −44.2 | ---- | 21 | 295 | −50.8 | ---- | 28 | 319 | −37.2 | 37 | 16 | 312 | −44.4 | ---- | 21 | 329 | −28.2 | 22 | 23 | 290 | −52.2 | ---- |
| 10,000 | 26 | 254 | −51.8 | ---- | 28 | 264 | −50.3 | ---- | 17 | 252 | −54.9 | ---- | 28 | 276 | −44.1 | ---- | 16 | 268 | −51.4 | ---- | 20 | 286 | −35.0 | 24 | 22 | 249 | −54.7 | ---- |
| 11,000 | 25 | 218 | −54.2 | ---- | 28 | 226 | −54.2 | ---- | 14 | 216 | −54.9 | ---- | 27 | 238 | −50.8 | ---- | 15 | 230 | −56.2 | ---- | 18 | 248 | −41.8 | ---- | 16 | 213 | −54.8 | ---- |
| 12,000 | 22 | 186 | −54.6 | ---- | 28 | 193 | −56.1 | ---- | 10 | 186 | −54.5 | ---- | 26 | 203 | −55.7 | ---- | 14 | 197 | −58.5 | ---- | 15 | 214 | −48.0 | ---- | 14 | 182 | −54.3 | ---- |
| 13,000 | 17 | 159 | −54.6 | ---- | 27 | 165 | −57.3 | ---- | 10 | 159 | −55.1 | ---- | 26 | 174 | −60.0 | ---- | 12 | 166 | −59.7 | ---- | 14 | 183 | −54.0 | ---- | 13 | 156 | −54.2 | ---- |
| 14,000 | 16 | 136 | −55.5 | ---- | 24 | 140 | −58.4 | ---- | 8 | 136 | −55.2 | ---- | 23 | 148 | −62.6 | ---- | 7 | 141 | −59.9 | ---- | 12 | 157 | −59.9 | ---- | 10 | 134 | −55.4 | ---- |
| 15,000 | 12 | 118 | −56.8 | ---- | 23 | 120 | −60.7 | ---- | 6 | 116 | −54.7 | ---- | 21 | 126 | −65.4 | ---- | 5 | 119 | −61.4 | ---- | 11 | 133 | −66.4 | ---- | ---- | ---- | ---- | ---- |
| 16,000 | 10 | 100 | −58.4 | ---- | 20 | 102 | −62.5 | ---- | ---- | ---- | ---- | ---- | 17 | 107 | −67.8 | ---- | ---- | ---- | ---- | ---- | 11 | 112 | −72.6 | ---- | ---- | ---- | ---- | ---- |
| 17,000 | 6 | 86 | −60.7 | ---- | 15 | 87 | −63.5 | ---- | ---- | ---- | ---- | ---- | 13 | 90 | −69.6 | ---- | ---- | ---- | ---- | ---- | 11 | 94 | −78.0 | ---- | ---- | ---- | ---- | ---- |
| 18,000 | ---- | ---- | ---- | ---- | 9 | 74 | −64.4 | ---- | ---- | ---- | ---- | ---- | 10 | 76 | −71.0 | ---- | ---- | ---- | ---- | ---- | 11 | 79 | −81.4 | ---- | ---- | ---- | ---- | ---- |
| 19,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 10 | 66 | −80.6 | ---- | ---- | ---- | ---- | ---- |
| 20,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 9 | 55 | −75.9 | ---- | ---- | ---- | ---- | ---- |
| 21,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 5 | 47 | −69.7 | ---- | ---- | ---- | ---- | ---- |

[1] U. S. Navy

[2] Humidity data obtained by electric hydrometer.

*Mean free-air barometric pressure in millibars, temperature in degrees centigrade, and relative humidities in percent, obtained by radiosondes during January 1943*—Continued

STATIONS AND ELEVATIONS IN METERS ABOVE SEA LEVEL—Continued

| Altitude (meters) m. s. l. | Seattle, Wash.[1] (22 m.) | | | | Spokane, Wash. (598 m.) | | | | Swan Island, West Indies (10 m.) | | | | Tongue Point, Oreg.[1] (21 m.) | | | | Washington, D. C. (25 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 26 | 1,018 | 2.4 | [2]81 | 31 | 949 | −5.0 | 81 | 29 | 1,016 | 24.9 | 81 | 22 | 1,017 | 2.7 | [2]82 | 27 | 1,016 | 1.5 | [2]77 |
| 500 | 26 | 960 | 0.7 | [2]74 | | | | | 29 | 960 | 21.6 | 85 | 22 | 959 | 2.5 | [2]71 | 27 | 958 | 1.5 | [2]72 |
| 1,000 | 26 | 902 | −0.4 | [2]66 | 31 | 901 | −6.6 | 82 | 29 | 906 | 18.3 | 85 | 22 | 902 | 1.0 | [2]65 | 27 | 900 | 0.9 | [2]68 |
| 1,500 | 26 | 847 | −2.5 | [2]70 | 31 | 845 | −7.1 | 76 | 29 | 855 | 15.6 | 78 | 22 | 846 | −1.4 | [2]61 | 27 | 846 | −0.7 | [2]68 |
| 2,000 | 25 | 795 | −5.5 | [2]70 | 31 | 793 | −7.1 | 65 | 29 | 805 | 12.9 | 72 | 22 | 794 | −3.9 | [2]53 | 27 | 794 | −1.2 | [2]63 |
| 2,500 | 25 | 746 | −8.5 | [2]67 | 31 | 743 | −9.1 | 61 | 29 | 759 | 10.6 | 64 | 22 | 745 | −6.1 | [2]41 | 27 | 746 | −2.6 | [2]54 |
| 3,000 | 25 | 699 | −11.8 | [2]64 | 30 | 697 | −11.3 | 59 | 29 | 715 | 8.1 | 58 | 22 | 699 | −8.8 | [2]40 | 27 | 700 | −4.7 | [2]48 |
| 4,000 | 25 | 613 | −17.7 | [2]67 | 30 | 610 | −17.4 | 55 | 28 | 633 | 3.0 | 47 | 22 | 613 | −14.6 | [2]43 | 27 | 616 | −10.0 | [2]50 |
| 5,000 | 25 | 535 | −23.4 | [2]69 | 30 | 533 | −23.3 | 53 | 28 | 559 | −2.1 | 39 | 22 | 538 | −21.2 | [2]50 | 27 | 540 | −15.6 | [2]52 |
| 6,000 | 25 | 466 | −30.1 | | 30 | 464 | −30.1 | 53 | 28 | 492 | −8.4 | 35 | 22 | 468 | −27.4 | [2]58 | 27 | 472 | −22.0 | |
| 7,000 | 25 | 404 | −37.0 | | 27 | 402 | −37.4 | 40 | 27 | 432 | −15.7 | 33 | 20 | 407 | −34.4 | | 27 | 412 | −28.8 | |
| 8,000 | 25 | 348 | −44.4 | | 26 | 347 | −45.0 | | 26 | 377 | −23.0 | 33 | 18 | 353 | −40.3 | | 25 | 357 | −36.3 | |
| 9,000 | 25 | 299 | −50.8 | | 25 | 298 | −51.5 | | 26 | 328 | −30.3 | 34 | 18 | 304 | −47.3 | | 23 | 308 | −43.0 | |
| 10,000 | 22 | 258 | −55.5 | | 24 | 256 | −56.2 | | 23 | 285 | −38.1 | | 17 | 260 | −54.0 | | 20 | 266 | −49.8 | |
| 11,000 | 21 | 220 | −58.5 | | 21 | 218 | −59.6 | | 22 | 246 | −45.0 | | 14 | 224 | −58.3 | | 18 | 228 | −55.3 | |
| 12,000 | 19 | 187 | −60.0 | | 17 | 186 | −60.2 | | 19 | 211 | −51.6 | | 12 | 190 | −62.1 | | 14 | 195 | −57.5 | |
| 13,000 | 15 | 159 | −59.2 | | 17 | 159 | −58.8 | | 17 | 181 | −57.2 | | 9 | 162 | −62.6 | | 12 | 167 | −58.8 | |
| 14,000 | 12 | 136 | −58.6 | | 15 | 136 | −58.8 | | 17 | 154 | −63.4 | | 5 | 140 | −60.0 | | 10 | 143 | −60.2 | |
| 15,000 | 10 | 117 | −58.3 | | 11 | 117 | −59.4 | | 17 | 130 | −69.9 | | | | | | 8 | 122 | −62.7 | |
| 16,000 | 8 | 100 | −59.5 | | 9 | 100 | −59.4 | | 17 | 110 | −76.3 | | | | | | 6 | 104 | −64.0 | |
| 17,000 | | | | | | | | | 16 | 92 | −81.0 | | | | | | | | | |
| 18,000 | | | | | | | | | 12 | 77 | −80.6 | | | | | | | | | |
| 19,000 | | | | | | | | | 10 | 65 | −77.3 | | | | | | | | | |
| 20,000 | | | | | | | | | 9 | 55 | −72.9 | | | | | | | | | |
| 21,000 | | | | | | | | | 8 | 46 | −68.0 | | | | | | | | | |

*Mean free-air barometric pressure in millibars, temperature in degrees centigrade, and relative humidities in percent, obtained by radiosondes during February 1943*

STATIONS AND ELEVATIONS IN METERS ABOVE SEA LEVEL

| Altitude (meters) m. s. l. | Albuquerque, N. Mex. (1,620 m.) | | | | Apalachicola, Fla. (7 m.) | | | | Atlanta, Ga. (300 m.) | | | | Bismarck, N. Dak. (505 m.) | | | | Boise, Idaho (868 m.) | | | | Brownsville, Tex. (6 m.) | | | | Buffalo, N. Y. (221 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 28 | 840 | 7.1 | [2]31 | 28 | 1,021 | 12.3 | 73 | 28 | 985 | 6.6 | 62 | 28 | 957 | 9.4 | 88 | 25 | 921 | 1.4 | 80 | 28 | 1,019 | 16.4 | 84 | 25 | 987 | −3.7 | [2]78 |
| 500 | | | | | 28 | 963 | 11.7 | 60 | 28 | 962 | 8.1 | 58 | | | | | | | | | 28 | 962 | 16.1 | 73 | 25 | 953 | −5.1 | [2]78 |
| 1,000 | | | | | 28 | 907 | 9.4 | 55 | 28 | 905 | 5.7 | 56 | 28 | 898 | −5.8 | 80 | 25 | 906 | 2.4 | 76 | 28 | 907 | 14.4 | 60 | 25 | 894 | −7.6 | [2]75 |
| 1,500 | | | | | 28 | 854 | 7.4 | 51 | 27 | 852 | 3.6 | 57 | 28 | 842 | −5.3 | 73 | 25 | 852 | 1.5 | 69 | 28 | 855 | 12.9 | 49 | 25 | 838 | −9.4 | [2]65 |
| 2,000 | 28 | 802 | 6.7 | [2]31 | 28 | 803 | 5.7 | 45 | 27 | 800 | 1.5 | 54 | 28 | 790 | −6.3 | 65 | 25 | 801 | −0.5 | 64 | 28 | 806 | 11.0 | 47 | 25 | 785 | −11.2 | [2]61 |
| 2,500 | 28 | 754 | 3.2 | [2]32 | 28 | 755 | 4.0 | 43 | 27 | 752 | −0.1 | 52 | 28 | 741 | −8.5 | 61 | 25 | 752 | −2.6 | 61 | 28 | 758 | 8.9 | 41 | 25 | 735 | −13.5 | [2]58 |
| 3,000 | 28 | 709 | −0.3 | [2]35 | 28 | 710 | 2.0 | 37 | 27 | 706 | −2.5 | 51 | 28 | 694 | −11.1 | 58 | 25 | 705 | −5.4 | 60 | 28 | 714 | 6.4 | 38 | 25 | 688 | −15.3 | [2]52 |
| 4,000 | 28 | 625 | −6.9 | [2]38 | 28 | 626 | −3.4 | 32 | 25 | 622 | −8.0 | 46 | 28 | 609 | −16.9 | 56 | 25 | 620 | −10.9 | 53 | 28 | 631 | 0.3 | 35 | 22 | 602 | −20.3 | [2]51 |
| 5,000 | 27 | 549 | −13.5 | [2]36 | 27 | 552 | −9.3 | 28 | 25 | 546 | −14.5 | 44 | 28 | 532 | −22.4 | 55 | 25 | 544 | −17.7 | 48 | 28 | 556 | −6.2 | 33 | 22 | 525 | −25.6 | [2]46 |
| 6,000 | 26 | 481 | −19.6 | [2]32 | 26 | 484 | −15.9 | 28 | 25 | 478 | −20.7 | 42 | 27 | 463 | −29.5 | 54 | 25 | 475 | −24.9 | 47 | 25 | 489 | −13.0 | 34 | 22 | 457 | −32.2 | |
| 7,000 | 26 | 420 | −26.4 | [2]34 | 25 | 423 | −23.0 | 29 | 24 | 416 | −27.4 | 43 | 26 | 402 | −36.7 | 47 | 25 | 413 | −32.0 | 47 | 25 | 428 | −20.1 | 33 | 21 | 396 | −37.9 | |
| 8,000 | 26 | 365 | −33.8 | [2]38 | 23 | 368 | −30.2 | 27 | 23 | 362 | −34.2 | 44 | 25 | 347 | −43.5 | | 24 | 357 | −39.4 | 41 | 25 | 373 | −27.4 | 33 | 17 | 339 | −44.3 | |
| 9,000 | 26 | 315 | −41.2 | | 23 | 319 | −38.0 | | 21 | 312 | −41.6 | | 25 | 299 | −49.5 | | 22 | 307 | −46.7 | | 25 | 324 | −34.6 | 35 | 13 | 291 | −46.7 | |
| 10,000 | 24 | 272 | −48.0 | | 22 | 275 | −44.8 | | 19 | 270 | −47.3 | | 24 | 256 | −52.8 | | 21 | 264 | −51.7 | | 25 | 280 | −42.1 | | 12 | 250 | −47.3 | |
| 11,000 | 23 | 233 | −53.4 | | 20 | 237 | −49.7 | | 18 | 232 | −52.4 | | 24 | 219 | −53.3 | | 19 | 226 | −55.1 | | 23 | 241 | −49.4 | | 8 | 212 | −44.8 | |
| 12,000 | 21 | 200 | −56.5 | | 17 | 203 | −53.0 | | 16 | 199 | −53.9 | | 23 | 188 | −51.4 | | 15 | 194 | −54.5 | | 22 | 207 | −55.5 | | 7 | 182 | −44.1 | |
| 13,000 | 19 | 170 | −56.8 | | 17 | 174 | −55.4 | | 14 | 170 | −55.5 | | 21 | 161 | −50.9 | | 13 | 166 | −53.5 | | 22 | 176 | −58.4 | | 7 | 157 | −44.3 | |
| 14,000 | 17 | 145 | −58.1 | | 15 | 148 | −58.9 | | 11 | 145 | −58.3 | | 18 | 138 | −51.5 | | 10 | 141 | −54.5 | | 22 | 150 | −62.2 | | 5 | 137 | −46.0 | |
| 15,000 | 14 | 124 | −60.2 | | 12 | 126 | −62.4 | | 10 | 124 | −61.4 | | 13 | 118 | −54.1 | | 8 | 121 | −56.9 | | 22 | 128 | −66.5 | | 5 | 117 | −48.7 | |
| 16,000 | 8 | 105 | −60.8 | | 9 | 107 | −66.3 | | 7 | 106 | −64.5 | | 8 | 101 | −54.2 | | | | | | 21 | 108 | −70.4 | | 5 | 101 | −50.9 | |
| 17,000 | 7 | 90 | −60.9 | | 6 | 91 | −68.8 | | 6 | 90 | −67.9 | | 5 | 87 | −55.2 | | | | | | 16 | 91 | −72.9 | | | | | |
| 18,000 | 7 | 76 | −62.3 | | | | | | | | | | | | | | | | | | 14 | 77 | −74.0 | | | | | |
| 19,000 | | | | | | | | | | | | | | | | | | | | | 8 | 65 | −74.6 | | | | | |

| Altitude (meters) m. s. l. | Caribou, Maine (191 m.) | | | | Charleston, S. C. (14 m.) | | | | Denver, Colo. (1616 m.) | | | | Detroit, Mich. (217 m.) | | | | El Paso, Tex. (1193 m.) | | | | Ely, Nev. (1908 m.) | | | | Great Falls, Mont. (1128 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Surface | 28 | 985 | −9.8 | 87 | 27 | 1,019 | 7.8 | 75 | 28 | 838 | 2.2 | 41 | 28 | 988 | −4.2 | 82 | 28 | 884 | 11.3 | 31 | 28 | 811 | −2.3 | 80 | 28 | 888 | −1.4 | 66 |
| 500 | 28 | 947 | −9.5 | 87 | 27 | 961 | 9.8 | 58 | | | | | 28 | 951 | −4.2 | 76 | | | | | | | | | | | | |
| 1,000 | 28 | 887 | −11.5 | 86 | 27 | 905 | 6.8 | 53 | | | | | 28 | 895 | −5.8 | 72 | | | | | | | | | | | | |
| 1,500 | 28 | 831 | −12.6 | 82 | 27 | 851 | 4.5 | 50 | | | | | 28 | 839 | −7.2 | 67 | 28 | 852 | 12.4 | 31 | | | | | 28 | 847 | −0.2 | 64 |
| 2,000 | 28 | 778 | −13.8 | 78 | 27 | 800 | 1.9 | 49 | 28 | 799 | 3.7 | 40 | 28 | 787 | −9.3 | 63 | 28 | 802 | 9.4 | 31 | 28 | 802 | −0.3 | 78 | 28 | 796 | −2.2 | 61 |
| 2,500 | 28 | 728 | −15.6 | 75 | 27 | 752 | −0.4 | 48 | 28 | 751 | 0.7 | 38 | 28 | 737 | −11.1 | 59 | 28 | 755 | 6.1 | 31 | 28 | 753 | −0.2 | 69 | 28 | 747 | −4.8 | 59 |
| 3,000 | 28 | 682 | −17.8 | 74 | 27 | 706 | −2.8 | 48 | 28 | 705 | −2.7 | 38 | 28 | 691 | −13.2 | 55 | 28 | 711 | 3.1 | 32 | 28 | 708 | −3.3 | 64 | 28 | 701 | −7.9 | 59 |
| 4,000 | 28 | 595 | −23.2 | 73 | 27 | 622 | −7.5 | 43 | 28 | 621 | −9.7 | 36 | 28 | 605 | −18.2 | 55 | 28 | 627 | −3.4 | 32 | 27 | 623 | −9.3 | 58 | 28 | 615 | −13.4 | 57 |
| 5,000 | 28 | 519 | −28.6 | 66 | 27 | 546 | −13.3 | 42 | 28 | 544 | −16.8 | 36 | 26 | 527 | −24.2 | 55 | 28 | 552 | −9.9 | 32 | 27 | 546 | −15.9 | 53 | 27 | 539 | −19.7 | 55 |
| 6,000 | 28 | 451 | −34.5 | 59 | 27 | 478 | −20.0 | 42 | 28 | 476 | −24.2 | 34 | 26 | 459 | −30.6 | 55 | 27 | 484 | −17.2 | 32 | 27 | 477 | −23.4 | 52 | 26 | 471 | −26.1 | 54 |
| 7,000 | 27 | 390 | −40.4 | | 26 | 418 | −26.7 | 41 | 26 | 414 | −31.3 | 34 | 24 | 397 | −37.1 | 49 | 27 | 423 | −24.4 | 32 | 27 | 416 | −30.9 | 46 | 26 | 408 | −33.2 | 47 |
| 8,000 | 26 | 336 | −45.5 | | 25 | 362 | −33.5 | 41 | 25 | 357 | −39.1 | | 24 | 343 | −43.4 | | 26 | 368 | −31.7 | 31 | 27 | 360 | −38.7 | 38 | 26 | 353 | −41.0 | |
| 9,000 | 26 | 289 | −49.6 | | 25 | 314 | −40.5 | | 25 | 308 | −45.9 | | 24 | 295 | −47.3 | | 25 | 318 | −39.0 | | 27 | 310 | −46.0 | | 25 | 304 | −47.0 | |
| 10,000 | 25 | 248 | −51.2 | | 23 | 271 | −46.7 | | 22 | 265 | −50.7 | | 24 | 254 | −49.5 | | 24 | 275 | −46.2 | | 27 | 267 | −51.4 | | 25 | 261 | −51.9 | |
| 11,000 | 25 | 212 | −51.8 | | 22 | 233 | −51.7 | | 22 | 227 | −53.7 | | 21 | 218 | −50.3 | | 24 | 236 | −52.7 | | 26 | 229 | −55.2 | | 25 | 224 | −54.5 | |
| 12,000 | 23 | 182 | −51.4 | | 18 | 199 | −54.6 | | 19 | 194 | −53.3 | | 20 | 187 | −49.3 | | 21 | 202 | −57.3 | | 26 | 196 | −56.4 | | 21 | 192 | −53.8 | |
| 13,000 | 22 | 156 | −51.4 | | 14 | 170 | −57.3 | | 19 | 166 | −54.0 | | 19 | 160 | −50.4 | | 18 | 172 | −58.9 | | 25 | 167 | −57.0 | | 18 | 165 | −52.7 | |
| 14,000 | 22 | 134 | −52.5 | | 12 | 145 | −59.4 | | 18 | 142 | −54.8 | | 17 | 138 | −51.5 | | 14 | 147 | −60.8 | | 22 | 143 | −59.2 | | 14 | 141 | −53.2 | |
| 15,000 | 19 | 115 | −53.7 | | 8 | 123 | −62.6 | | 17 | 121 | −57.6 | | 13 | 118 | −52.9 | | 13 | 125 | −63.8 | | 18 | 122 | −61.6 | | 11 | 120 | −54.2 | |
| 16,000 | 14 | 99 | −54.9 | | 5 | 104 | −66.3 | | 16 | 103 | −60.0 | | 9 | 102 | −54.3 | | 9 | 106 | −66.5 | | 17 | 104 | −64.1 | | 7 | 103 | −55.4 | |
| 17,000 | 9 | 85 | −56.8 | | | | | | 15 | 88 | −60.7 | | | | | | 7 | 90 | −67.8 | | 16 | 88 | −64.2 | | | | | |
| 18,000 | | | | | | | | | 13 | 75 | −60.6 | | | | | | 6 | 76 | −66.6 | | 10 | 75 | −63.2 | | | | | |
| 19,000 | | | | | | | | | 10 | 64 | −59.1 | | | | | | | | | | | | | | | | | |

[1] U. S. Navy.

[2] Humidity data obtained by electric hygrometer.

*Mean free-air barometric pressure in millibars, temperature in degrees centigrade, and relative humidities in percent, obtained by radiosondes during February 1943*—Continued

STATIONS AND ELEVATIONS IN METERS ABOVE SEA LEVEL—Continued

| Altitude (meters) m. s. l. | Huntington, W. Va. (172 m.) | | | | International Falls, Minn. (343 m.) | | | | Joliet, Ill. (178 m.) | | | | Lake Charles, La. (5 m.) | | | | Lakehurst, N. J.[1] (39 m.) | | | | Medford, Oreg. (409 m.) | | | | Miami, Fla. (4 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 28 | 998 | 1.3 | 77 | 28 | 972 | −12.3 | 83 | 28 | 994 | −3.5 | 82 | 28 | 1,021 | 12.3 | [2]83 | 26 | 1,011 | 0.0 | [2]65 | 28 | 971 | 8.6 | 66 | 28 | 1,021 | 15.8 | 79 |
| 500 | 28 | 958 | 1.6 | 73 | 28 | 953 | −11.7 | 85 | 28 | 955 | −3.0 | 78 | 28 | 963 | 12.1 | [2]63 | 26 | 954 | −0.5 | [2]52 | 28 | 961 | 9.0 | 64 | 28 | 964 | 16.6 | 73 |
| 1,000 | 28 | 900 | −1.2 | 70 | 28 | 892 | −11.5 | 80 | 28 | 896 | −4.1 | 72 | 28 | 907 | 9.9 | [2]58 | 26 | 896 | −3.1 | [2]54 | 28 | 904 | 7.8 | 57 | 28 | 908 | 13.3 | 75 |
| 1,500 | 28 | 846 | −3.2 | 71 | 28 | 836 | −11.8 | 78 | 27 | 841 | −5.5 | 70 | 28 | 854 | 8.7 | [2]52 | 26 | 841 | −5.4 | [2]57 | 28 | 851 | 5.1 | 58 | 28 | 856 | 11.1 | 67 |
| 2,000 | 27 | 793 | −6.1 | 67 | 28 | 783 | −13.1 | 78 | 27 | 789 | −7.2 | 69 | 28 | 804 | 7.1 | [2]51 | 26 | 789 | −6.6 | [2]56 | 28 | 800 | 2.0 | 60 | 28 | 806 | 9.9 | 53 |
| 2,500 | 27 | 744 | −8.0 | 63 | 28 | 734 | −14.5 | 76 | 26 | 740 | −9.8 | 66 | 28 | 756 | 4.7 | [2]51 | 26 | 740 | −8.8 | [2]58 | 28 | 751 | −1.0 | 57 | 28 | 759 | 8.1 | 44 |
| 3,000 | 27 | 697 | −9.8 | 58 | 28 | 686 | −16.5 | 73 | 26 | 693 | −12.2 | 65 | 28 | 710 | 2.5 | [2]40 | 26 | 693 | −11.1 | [2]58 | 27 | 705 | −3.8 | 52 | 28 | 714 | 6.2 | 35 |
| 4,000 | 27 | 612 | −15.0 | 55 | 28 | 660 | −21.7 | 71 | 25 | 606 | −17.5 | 59 | 28 | 627 | −3.0 | [2]36 | 26 | 608 | −15.8 | [2]47 | 27 | 621 | −10.3 | 52 | 27 | 631 | 1.2 | 33 |
| 5,000 | 26 | 535 | −21.3 | 53 | 27 | 523 | −27.4 | 68 | 25 | 530 | −23.4 | 56 | 26 | 552 | −9.6 | [2]34 | 26 | 531 | −21.3 | [2]50 | 27 | 544 | −17.1 | 49 | 27 | 557 | −4.7 | 30 |
| 6,000 | 26 | 467 | −27.2 | 48 | 26 | 454 | −33.7 | 65 | 24 | 462 | −30.0 | 51 | 26 | 484 | −16.4 | ---- | 26 | 464 | −27.7 | ---- | 27 | 476 | −23.7 | 46 | 27 | 490 | −11.7 | 28 |
| 7,000 | 26 | 405 | −33.7 | 44 | 26 | 393 | −39.8 | 57 | 24 | 400 | −36.5 | 47 | 26 | 423 | −23.6 | ---- | 26 | 403 | −34.5 | ---- | 27 | 414 | −30.5 | 45 | 27 | 429 | −18.9 | 27 |
| 8,000 | 25 | 352 | −39.5 | 40 | 26 | 338 | −45.6 | ---- | 22 | 346 | −42.4 | ---- | 25 | 368 | −31.3 | ---- | 26 | 348 | −41.0 | ---- | 25 | 358 | −37.3 | 42 | 25 | 374 | −26.4 | 27 |
| 9,000 | 23 | 303 | −45.3 | ---- | 25 | 291 | −49.2 | ---- | 20 | 299 | −46.8 | ---- | 25 | 319 | −38.6 | ---- | 26 | 296 | −45.7 | ---- | 24 | 309 | −43.9 | ---- | 24 | 325 | −33.9 | 25 |
| 10,000 | 23 | 260 | −50.0 | ---- | 24 | 249 | −50.8 | ---- | 19 | 257 | −48.7 | ---- | 22 | 275 | −45.3 | ---- | 24 | 258 | −49.3 | ---- | 23 | 266 | −49.9 | ---- | 23 | 282 | −40.6 | ---- |
| 11,000 | 23 | 223 | −52.6 | ---- | 22 | 214 | −50.5 | ---- | 17 | 221 | −50.7 | ---- | 17 | 236 | −50.5 | ---- | 22 | 223 | −53.6 | ---- | 23 | 229 | −54.0 | ---- | 23 | 242 | −47.3 | ---- |
| 12,000 | 23 | 191 | −53.4 | ---- | 20 | 184 | −49.7 | ---- | 15 | 190 | −51.9 | ---- | 15 | 202 | −53.8 | ---- | 20 | 191 | −51.7 | ---- | 21 | 196 | −54.0 | ---- | 23 | 208 | −52.7 | ---- |
| 13,000 | 22 | 164 | −53.2 | ---- | 18 | 158 | −49.5 | ---- | 13 | 162 | −52.8 | ---- | 13 | 173 | −57.9 | ---- | 18 | 163 | −52.2 | ---- | 18 | 168 | −52.9 | ---- | 18 | 178 | −57.3 | ---- |
| 14,000 | 20 | 140 | −55.1 | ---- | 18 | 135 | −49.4 | ---- | 9 | 140 | −55.0 | ---- | 11 | 148 | −61.6 | ---- | 18 | 140 | −54.2 | ---- | 18 | 143 | −53.9 | ---- | 15 | 151 | −61.8 | ---- |
| 15,000 | 17 | 120 | −57.5 | ---- | 15 | 116 | −49.8 | ---- | 8 | 120 | −57.5 | ---- | 9 | 126 | −64.7 | ---- | 13 | 121 | −55.5 | ---- | 14 | 123 | −56.7 | ---- | 13 | 129 | −65.9 | ---- |
| 16,000 | 13 | 102 | −60.3 | ---- | 10 | 100 | −52.2 | ---- | 5 | 103 | −57.6 | ---- | 8 | 107 | −67.9 | ---- | 9 | 103 | −56.1 | ---- | 11 | 106 | −59.8 | ---- | 8 | 110 | −69.0 | ---- |
| 17,000 | 11 | 87 | −61.5 | ---- | 5 | 86 | −56.4 | ---- | ---- | ---- | ---- | ---- | 6 | 91 | −70.8 | ---- | 5 | 88 | −53.7 | ---- | 6 | 91 | −62.0 | ---- | 6 | 92 | −71.2 | ---- |
| 18,000 | 6 | 75 | −61.3 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 5 | 78 | −61.8 | ---- | ---- | ---- | ---- | ---- |

| Altitude (meters) m. s. l. | Nashville, Tenn. (180 m.) | | | | Norfolk, Va.[1] (4 m.) | | | | Oakland, Calif. (6 m.) | | | | Oklahoma City, Okla. (391 m.) | | | | Omaha, Nebr. (301 m. | | | | Pensacola, Fla.[1] (24 m.) | | | | Phoenix, Ariz. (339 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 27 | 998 | 5.4 | [2]60 | 23 | 1,017 | 7.3 | 68 | 28 | 1,019 | 11.9 | 75 | 28 | 973 | 6.4 | [2]56 | 27 | 982 | −0.9 | [2]72 | 20 | 1,020 | 12.5 | [2]72 | 28 | 978 | 13.3 | 50 |
| 500 | 27 | 960 | 4.9 | [2]54 | 23 | 958 | 7.4 | 53 | 28 | 961 | 10.8 | 65 | 28 | 960 | 7.5 | [2]52 | 27 | 958 | 0.7 | [2]60 | 20 | 964 | 10.9 | [2]57 | 28 | 960 | 16.9 | 45 |
| 1,000 | 27 | 903 | 2.2 | [2]58 | 23 | 901 | 4.8 | 52 | 28 | 905 | 8.9 | 60 | 28 | 904 | 7.2 | [2]45 | 27 | 900 | −0.6 | [2]51 | 20 | 907 | 7.9 | [2]49 | 28 | 905 | 14.7 | 41 |
| 1,500 | 27 | 848 | 0.4 | [2]53 | 23 | 847 | 1.9 | 55 | 28 | 852 | 6.5 | 55 | 28 | 850 | 6.2 | [2]40 | 27 | 846 | −1.4 | [2]49 | 20 | 853 | 6.3 | [2]50 | 28 | 852 | 11.0 | 40 |
| 2,000 | 27 | 796 | −1.3 | [2]50 | 23 | 796 | −0.6 | 54 | 28 | 800 | 3.8 | 54 | 28 | 800 | 4.0 | [2]36 | 27 | 794 | −3.3 | [2]42 | 19 | 803 | 5.1 | [2]40 | 28 | 802 | 7.4 | 41 |
| 2,500 | 27 | 748 | −3.2 | [2]46 | 23 | 747 | −2.7 | 51 | 28 | 753 | 1.1 | 49 | 27 | 751 | 1.8 | [2]35 | 27 | 745 | −5.6 | [2]42 | 19 | 755 | 3.2 | [2]36 | 28 | 755 | 4.2 | 42 |
| 3,000 | 27 | 702 | −5 5 | [2]46 | 23 | 701 | −5.3 | 47 | 28 | 707 | −1.9 | 46 | 27 | 706 | −0.9 | [2]35 | 27 | 699 | −8.0 | [2]41 | 19 | 710 | 0.8 | [2]29 | 28 | 709 | 1.0 | 41 |
| 4,000 | 27 | 617 | −11.0 | [2]46 | 23 | 617 | −11.2 | 45 | 28 | 622 | −8.1 | 42 | 27 | 622 | −6.7 | [2]32 | 27 | 614 | −13.2 | [2]46 | 19 | 625 | −5.0 | [2]33 | 28 | 626 | −4.6 | 38 |
| 5,000 | 26 | 541 | −17.0 | ---- | 22 | 541 | −17.6 | 48 | 27 | 546 | −15.1 | 44 | 26 | 546 | −13.2 | [2]33 | 27 | 538 | −19.1 | [2]47 | 19 | 550 | −10.8 | [2]37 | 27 | 551 | −10.7 | 37 |
| 6,000 | 24 | 473 | −23.8 | ---- | 21 | 472 | −24.0 | 49 | 27 | 478 | −21.9 | 43 | 24 | 478 | −20.6 | [2]39 | 27 | 469 | −26.1 | ---- | 18 | 483 | −17.1 | 42 | 26 | 483 | −18.0 | 35 |
| 7,000 | 24 | 411 | −30.7 | ---- | 18 | 412 | −29.8 | 50 | 26 | 416 | −29.2 | 42 | 23 | 417 | −27.9 | [2]47 | 26 | 408 | −33.6 | ---- | 18 | 422 | −23.4 | 47 | 26 | 422 | −25.1 | 34 |
| 8,000 | 24 | 356 | −37.6 | ---- | ---- | ---- | ---- | ---- | 26 | 361 | −36.2 | 41 | 20 | 362 | −34.8 | ---- | 26 | 353 | −40.9 | ---- | 15 | 366 | −31.7 | 49 | 26 | 367 | −32.4 | 32 |
| 9,000 | 20 | 307 | −43.5 | ---- | ---- | ---- | ---- | ---- | 25 | 311 | −42.9 | ---- | 19 | 313 | −41.6 | ---- | 26 | 304 | −46.8 | ---- | 15 | 316 | −38.1 | ---- | 26 | 317 | −39.7 | 27 |
| 10,000 | 15 | 265 | −48.4 | ---- | ---- | ---- | ---- | ---- | 25 | 268 | −48.3 | ---- | 13 | 271 | −47.3 | ---- | 26 | 261 | −50.8 | ---- | 13 | 273 | −45.1 | ---- | 26 | 274 | −46.7 | ---- |
| 11,000 | 14 | 228 | −52.0 | ---- | ---- | ---- | ---- | ---- | 22 | 231 | −52.8 | ---- | 8 | 232 | −51.6 | ---- | 26 | 224 | −52.2 | ---- | 13 | 235 | −50.3 | ---- | 26 | 235 | −53.0 | ---- |
| 12,000 | 11 | 195 | −53.2 | ---- | ---- | ---- | ---- | ---- | 22 | 197 | −54.9 | ---- | 6 | 199 | −50.6 | ---- | 26 | 192 | −51.0 | ---- | 12 | 201 | −54.8 | ---- | 25 | 201 | −56.7 | ---- |
| 13,000 | 7 | 169 | −54.0 | ---- | ---- | ---- | ---- | ---- | 21 | 169 | −54.4 | ---- | ---- | ---- | ---- | ---- | 25 | 164 | −51.0 | ---- | 12 | 172 | −57.4 | ---- | 24 | 172 | −57.9 | ---- |
| 14,000 | 5 | 144 | −55.2 | ---- | ---- | ---- | ---- | ---- | 21 | 144 | −55.3 | ---- | ---- | ---- | ---- | ---- | 25 | 141 | −53.1 | ---- | 9 | 146 | −60.6 | ---- | 22 | 147 | −59.8 | ---- |
| 15,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 17 | 124 | −57.1 | ---- | ---- | ---- | ---- | ---- | 22 | 121 | −55.1 | ---- | 7 | 124 | −64.6 | ---- | 21 | 125 | −61.7 | ---- |
| 16,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 15 | 106 | −59.5 | ---- | ---- | ---- | ---- | ---- | 20 | 103 | −56.7 | ---- | 5 | 104 | −68.2 | ---- | 21 | 106 | −64.2 | ---- |
| 17,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 12 | 90 | −61.0 | ---- | ---- | ---- | ---- | ---- | 15 | 88 | −57.9 | ---- | ---- | ---- | ---- | ---- | 21 | 90 | −65.0 | ---- |
| 18,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 9 | 77 | −61.7 | ---- | ---- | ---- | ---- | ---- | 7 | 76 | −59.2 | ---- | ---- | ---- | ---- | ---- | 18 | 77 | −64.9 | ---- |
| 19,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 5 | 66 | −63.0 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 15 | 65 | −64.5 | ---- |
| 20,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 11 | 56 | −62.9 | ---- |

| Altitude (meters) m. s. l. | Portland, Maine (20 m.) | | | | St. Louis, Mo. (171 m.) | | | | St. Paul, Minn. (225 m.) | | | | San Antonio, Tex. (242 m.) | | | | San Diego, Calif.[1] (19 m.) | | | | San Juan, P. R. (15 m.) | | | | Sault Ste. Marie, Mich (221 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 28 | 1,009 | −5.4 | 71 | 28 | 997 | 2.6 | [2]63 | 27 | 988 | −8.3 | [2]75 | 28 | 992 | 13.3 | [2]60 | 27 | 1,016 | 15.0 | 78 | 28 | 1,015 | 23.2 | 82 | 28 | 984 | −8.5 | 86 |
| 500 | 28 | 950 | −4.6 | 71 | 28 | 957 | 2.7 | [2]54 | 27 | 954 | −8.3 | [2]71 | 28 | 963 | 14.0 | [2]56 | 27 | 960 | 13.4 | 61 | 28 | 960 | 19.8 | 84 | 28 | 950 | −8.9 | 88 |
| 1,000 | 28 | 891 | −6.9 | 68 | 28 | 900 | 0.6 | [2]52 | 27 | 895 | −8.0 | [2]63 | 28 | 908 | 12.2 | [2]54 | 27 | 904 | 11.1 | 50 | 28 | 906 | 16.3 | 84 | 28 | 890 | −10.4 | 85 |
| 1,500 | 28 | 836 | −8.4 | 66 | 28 | 845 | −0.9 | [2]46 | 26 | 839 | −8.3 | [2]59 | 28 | 855 | 10.1 | [2]51 | 27 | 851 | 8.8 | 41 | 28 | 855 | 13.3 | 80 | 28 | 834 | −11.9 | 80 |
| 2,000 | 28 | 783 | −10.3 | 62 | 28 | 793 | −2.7 | [2]44 | 26 | 786 | −9.5 | [2]56 | 28 | 804 | 8.8 | [2]44 | 27 | 801 | 6.4 | 42 | 28 | 805 | 10.6 | 75 | 28 | 780 | −13.2 | 75 |
| 2,500 | 28 | 734 | −12.4 | 59 | 28 | 745 | −5.1 | [2]48 | 26 | 737 | −11.5 | [2]51 | 28 | 757 | 5.9 | [2]39 | 27 | 753 | 4.0 | 35 | 28 | 758 | 8.6 | 63 | 28 | 731 | −15.1 | 72 |
| 3,000 | 27 | 687 | −14.5 | 56 | 28 | 699 | −7.7 | [2]48 | 26 | 690 | −13.5 | [2]46 | 28 | 712 | 3.5 | [2]31 | 27 | 707 | 0.6 | 36 | 28 | 714 | 6.8 | 49 | 28 | 684 | −17.2 | 70 |
| 4,000 | 25 | 600 | −20.1 | 57 | 28 | 614 | −13.0 | [2]43 | 26 | 604 | −18.8 | [2]48 | 28 | 629 | −2.0 | [2]29 | 27 | 624 | −5.6 | 40 | 26 | 631 | 2.5 | 33 | 28 | 598 | −21.8 | 67 |
| 5,000 | 24 | 524 | −25.5 | 56 | 28 | 537 | −19.5 | [2]47 | 26 | 528 | −24.4 | ---- | 28 | 554 | −8.4 | [2]30 | 27 | 548 | −11.8 | 40 | 26 | 557 | −2.3 | 28 | 28 | 521 | −27.5 | 64 |
| 6,000 | 23 | 456 | −31.9 | 55 | 27 | 469 | −26.0 | ---- | 25 | 459 | −30.8 | ---- | 28 | 486 | −14.9 | [2]23 | 27 | 480 | −19.3 | ---- | 24 | 490 | −8.7 | 27 | 28 | 453 | −34.1 | 61 |
| 7,000 | 23 | 395 | −38.8 | 52 | 27 | 408 | −32.6 | ---- | 25 | 398 | −37.1 | ---- | 26 | 425 | −22.0 | ---- | 27 | 420 | −26.7 | ---- | 24 | 430 | −15.4 | 28 | 26 | 393 | −39.9 | 55 |
| 8,000 | 22 | 340 | −44.8 | ---- | 26 | 353 | −39.6 | ---- | 22 | 344 | −43.3 | ---- | 25 | 370 | −29.1 | ---- | 11 | 364 | −33.6 | ---- | 21 | 377 | −22.5 | 28 | 26 | 338 | −46.0 | ---- |
| 9,000 | 21 | 293 | −49.0 | ---- | 23 | 305 | −45.7 | ---- | 21 | 296 | −48.4 | ---- | 21 | 321 | −36.9 | ---- | 11 | 315 | −40.5 | ---- | 19 | 328 | −30.0 | 28 | 26 | 290 | −50.1 | ---- |
| 10,000 | 20 | 252 | −51.6 | ---- | 23 | 262 | −50.4 | ---- | 20 | 254 | −51.0 | ---- | 18 | 278 | −44.2 | ---- | 9 | 271 | −47.9 | ---- | 17 | 285 | −36.9 | ---- | 25 | 250 | −51.6 | ---- |
| 11,000 | 16 | 217 | −53.4 | ---- | 22 | 225 | −52.9 | ---- | 19 | 218 | −51.2 | ---- | 14 | 238 | −51.3 | ---- | 9 | 233 | −53.9 | ---- | 15 | 247 | −43.3 | ---- | 25 | 214 | −51.1 | ---- |
| 12,000 | 13 | 186 | −52.9 | ---- | 22 | 192 | −52.9 | ---- | 16 | 187 | −50.3 | ---- | 13 | 204 | −56.2 | ---- | 9 | 199 | −57.3 | ---- | 11 | 212 | −48.6 | ---- | 24 | 184 | −49.9 | ---- |
| 13,000 | 12 | 159 | −52.3 | ---- | 21 | 165 | −52.8 | ---- | 15 | 161 | −50.3 | ---- | 13 | 174 | −57.5 | ---- | 8 | 170 | −58.6 | ---- | 9 | 182 | −55.3 | ---- | 18 | 158 | −50.2 | ---- |
| 14,000 | 9 | 136 | −54.8 | ---- | 18 | 141 | −55.2 | ---- | 12 | 138 | −51.6 | ---- | 12 | 148 | −61.2 | ---- | ---- | ---- | ---- | ---- | 6 | 156 | −62.0 | ---- | 17 | 136 | −51.6 | ---- |
| 15,000 | 6 | 117 | −56.8 | ---- | 14 | 121 | −57.3 | ---- | 11 | 119 | −53.7 | ---- | 9 | 126 | −64.9 | ---- | ---- | ---- | ---- | ---- | 6 | 132 | −67.3 | ---- | 15 | 116 | −53.8 | ---- |
| 16,000 | ---- | ---- | ---- | ---- | 9 | 104 | −58.0 | ---- | 5 | 101 | −53.8 | ---- | 6 | 107 | −67.8 | ---- | ---- | ---- | ---- | ---- | 5 | 111 | −72.4 | ---- | 10 | 100 | −55.1 | ---- |
| 17,000 | ---- | ---- | ---- | ---- | 5 | 89 | −60.4 | ---- | ---- | ---- | ---- | ---- | 5 | 90 | −69.7 | ---- | ---- | ---- | ---- | ---- | 5 | 94 | −76.8 | ---- | 5 | 86 | −55.8 | ---- |
| 18,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 5 | 79 | −80.8 | ---- | ---- | ---- | ---- | ---- |

[1] U. S. Navy.

[2] Humidity data obtained by electric hygrometer.

*Mean free-air barometric pressure in millibars, temperature in degrees centigrade, and relative humidities in percent, obtained by radiosondes during February 1943*—Continued

STATIONS AND ELEVATION IN METER ABOVE SEA LEVELS—Continued

| Altitude (meters) m. s. l. | Seattle, Wash.[1] (22 m.) | | | | Spokane, Wash. (598 m.) | | | | Swan Island, West Indies (10 m.) | | | | Tacubaya, Mexico (2,310 m.) | | | | Tongue Point, Oreg.[1] (21 m.) | | | | Washington, D. C. (25 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 18 | 1,019 | 6.6 | [2]75 | 26 | 950 | −0.1 | 86 | 28 | 1,017 | 24.5 | 76 | 19 | 775 | 14.6 | 40 | 20 | 1,018 | 8.2 | [2]75 | 28 | 1,014 | 2.9 | [2]60 |
| 500 | 18 | 961 | 6.7 | [2]56 | ---- | ---- | ---- | ---- | 28 | 961 | 21.1 | 82 | ---- | ---- | ---- | ---- | 20 | 961 | 8.2 | [2]62 | 28 | 956 | 1.7 | [2]52 |
| 1,000 | 18 | 905 | 5.2 | [2]53 | 26 | 904 | 1.2 | 75 | 28 | 907 | 17.5 | 85 | ---- | ---- | ---- | ---- | 20 | 904 | 6.0 | [2]57 | 28 | 898 | −0.9 | [2]56 |
| 1,500 | 18 | 851 | 2.7 | [2]51 | 26 | 849 | 0.3 | 68 | 28 | 856 | 14.5 | 83 | ---- | ---- | ---- | ---- | 20 | 850 | 3.0 | [2]52 | 28 | 844 | −3.4 | [2]61 |
| 2,000 | 18 | 799 | −0.4 | [2]55 | 26 | 797 | −2.1 | 62 | 28 | 806 | 11.6 | 75 | ---- | ---- | ---- | ---- | 20 | 799 | −0.2 | [2]48 | 28 | 792 | −5.5 | [2]58 |
| 2,500 | 18 | 750 | −3.0 | [2]53 | 26 | 748 | −4.6 | 56 | 27 | 759 | 9.8 | 66 | 19 | 758 | 13.3 | 41 | 20 | 750 | −3.1 | [2]42 | 28 | 743 | −7.2 | [2]49 |
| 3,000 | 18 | 704 | −5.8 | [2]51 | 26 | 702 | −7.4 | 53 | 27 | 714 | 7.6 | 61 | 19 | 714 | 10.1 | 45 | 20 | 704 | −5.9 | [2]42 | 28 | 696 | −9.3 | [2]43 |
| 4,000 | 17 | 619 | −11.9 | [2]57 | 26 | 617 | −12.6 | 51 | 26 | 633 | 3.7 | 45 | 19 | 632 | 3.3 | 49 | 20 | 619 | −12.3 | [2]43 | 28 | 611 | −14.7 | [2]37 |
| 5,000 | 16 | 543 | −18.4 | [2]58 | 26 | 540 | −19.0 | 48 | 26 | 559 | −0.8 | 33 | 18 | 558 | −3.6 | 50 | 20 | 542 | −18.9 | [2]44 | 27 | 534 | −21.3 | [2]38 |
| 6,000 | 16 | 474 | −25.4 | ---- | 26 | 472 | −26.3 | 47 | 26 | 492 | −6.9 | 28 | 18 | 491 | −9.7 | 44 | 20 | 474 | −25.6 | [2]55 | 27 | 466 | −27.6 | ---- |
| 7,000 | 14 | 411 | −32.2 | ---- | 24 | 410 | −32.8 | 40 | 26 | 433 | −14.1 | 27 | 17 | 431 | −16.5 | 36 | 18 | 412 | −31.8 | [2]52 | 25 | 405 | −33.2 | ---- |
| 8,000 | 13 | 356 | −39.0 | ---- | 23 | 355 | −39.2 | 31 | 25 | 379 | −21.4 | 26 | 17 | 376 | −24.1 | 35 | 17 | 356 | −38.8 | ---- | 25 | 350 | −39.3 | ---- |
| 9,000 | 12 | 306 | −45.8 | ---- | 22 | 307 | −45.3 | ---- | 25 | 329 | −29.1 | 27 | 17 | 327 | −31.7 | 36 | 17 | 308 | −45.2 | ---- | 23 | 303 | −44.6 | ---- |
| 10,000 | 11 | 262 | −52.1 | ---- | 21 | 264 | −51.3 | ---- | 25 | 286 | −36.9 | 30 | 17 | 284 | −39.2 | ---- | 16 | 264 | −50.0 | ---- | 19 | 261 | −49.4 | ---- |
| 11,000 | 9 | 227 | −54.7 | ---- | 19 | 227 | −56.0 | ---- | 25 | 247 | −44.6 | ---- | 17 | 245 | −46.8 | ---- | 15 | 227 | −53.6 | ---- | 18 | 224 | −51.9 | ---- |
| 12,000 | 8 | 195 | −52.8 | ---- | 19 | 194 | −54.4 | ---- | 25 | 212 | −52.0 | ---- | 17 | 210 | −53.7 | ---- | 9 | 197 | −55.1 | ---- | 17 | 192 | −53.5 | ---- |
| 13,000 | 7 | 167 | −54.7 | ---- | 14 | 166 | −53.2 | ---- | 23 | 181 | −59.1 | ---- | 17 | 179 | −58.6 | ---- | 9 | 168 | −54.1 | ---- | 16 | 164 | −52.5 | ---- |
| 14,000 | 5 | 143 | −57.4 | ---- | 12 | 142 | −54.0 | ---- | 23 | 154 | −65.8 | ---- | 16 | 153 | −63.7 | ---- | 6 | 144 | −56.8 | ---- | 10 | 141 | −55.7 | ---- |
| 15,000 | ---- | ---- | ---- | ---- | 11 | 121 | −56.0 | ---- | 23 | 130 | −72.0 | ---- | 16 | 129 | −68.9 | ---- | ---- | ---- | ---- | ---- | 7 | 120 | −56.2 | ---- |
| 16,000 | ---- | ---- | ---- | ---- | 9 | 103 | −56.9 | ---- | 22 | 110 | −77.0 | ---- | 14 | 110 | −73.7 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 17,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 18 | 92 | −79.5 | ---- | 13 | 92 | −78.1 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 18,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 16 | 77 | −80.4 | ---- | 11 | 77 | −79.2 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 19,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 15 | 65 | −75.6 | ---- | 5 | 66 | −78.9 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 20,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 8 | 55 | −71.7 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |

*Mean free-air barometric pressure in millibars, temperature in degrees centigrade, and relative humidities in percent, obtained by radiosonde during March 1943*

STATIONS AND ELEVATIONS IN METERS ABOVE SEA LEVEL

| Altitude (meters) m. s. l. | Albuquerque, N. Mex. (1,620 m.) | | | | Apalachicola, Fla. (7 m.) | | | | Atlanta, Ga. (300 m.) | | | | Bismarck, N. Dak. (505 m.) | | | | Boise, Idaho (868 m.) | | | | Brownsville, Tex. (6 m.) | | | | Buffalo, N. Y. (221 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 30 | 836 | 9.6 | [2]35 | 31 | 1,020 | 15.0 | [2]82 | 31 | 986 | 9.4 | 73 | 31 | 957 | −7.4 | 82 | 31 | 915 | 4.7 | [2]63 | 31 | 1,016 | 17.3 | [2]84 | 30 | 993 | −0.6 | [2]72 |
| 500 | ---- | ---- | ---- | ---- | 31 | 962 | 14.2 | [2]67 | 31 | 963 | 9.4 | 71 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 31 | 959 | 15.8 | [2]76 | 30 | 959 | −0.6 | [2]64 |
| 1,000 | ---- | ---- | ---- | ---- | 31 | 907 | 12.1 | [2]61 | 31 | 906 | 7.3 | 68 | 31 | 898 | −7.0 | 76 | 31 | 901 | 5.2 | [2]58 | 31 | 904 | 14.4 | [2]59 | 30 | 901 | −2.8 | [2]60 |
| 1,500 | ---- | ---- | ---- | ---- | 31 | 854 | 9.8 | [2]56 | 31 | 853 | 5.0 | 70 | 31 | 842 | −8.4 | 72 | 31 | 847 | 2.8 | [2]53 | 31 | 852 | 13.2 | [2]49 | 30 | 845 | −5.4 | [2]57 |
| 2,000 | 30 | 798 | 8.9 | [2]34 | 31 | 804 | 7.6 | [2]49 | 31 | 802 | 3.6 | 63 | 31 | 788 | −10.3 | 70 | 31 | 796 | −0.5 | [2]57 | 31 | 802 | 11.7 | [2]41 | 30 | 793 | −7.4 | [2]60 |
| 2,500 | 30 | 751 | 5.1 | [2]37 | 31 | 756 | 5.6 | [2]39 | 31 | 754 | 2.0 | 56 | 31 | 739 | −12.4 | 70 | 31 | 747 | −3.9 | [2]63 | 31 | 756 | 10.1 | [2]33 | 30 | 743 | −9.2 | [2]61 |
| 3,000 | 30 | 706 | 1.0 | [2]39 | 30 | 711 | 3.6 | [2]36 | 31 | 708 | −0.2 | 52 | 31 | 692 | −14.1 | 69 | 31 | 701 | −7.1 | [2]65 | 31 | 712 | 7.7 | [2]28 | 30 | 696 | −11.2 | [2]59 |
| 4,000 | 30 | 622 | −7.0 | [2]47 | 29 | 628 | −1.9 | [2]35 | 30 | 625 | −5.7 | 48 | 31 | 606 | −19.9 | 68 | 31 | 616 | −13.3 | [2]65 | 30 | 630 | 1.3 | [2]26 | 29 | 610 | −16.5 | [2]54 |
| 5,000 | 30 | 547 | −14.1 | [2]54 | 29 | 553 | −8.1 | [2]39 | 28 | 549 | −11.9 | 46 | 30 | 529 | −25.5 | 65 | 31 | 540 | −19.8 | [2]62 | 29 | 555 | −6.2 | [2]24 | 28 | 535 | −21.7 | [2]58 |
| 6,000 | 30 | 478 | −20.8 | [2]48 | 28 | 486 | −14.7 | [2]41 | 26 | 481 | −19.0 | 45 | 30 | 460 | −32.0 | 63 | 31 | 471 | −26.3 | [2]61 | 29 | 488 | −13.2 | [2]24 | 28 | 466 | −28.5 | ---- |
| 7,000 | 30 | 417 | −28.0 | [2]47 | 28 | 425 | −22.2 | [2]42 | 25 | 420 | −25.7 | 44 | 30 | 398 | −39.2 | 55 | 29 | 409 | −33.0 | [2]62 | 28 | 427 | −20.6 | [2]25 | 24 | 404 | −34.7 | ---- |
| 8,000 | 29 | 362 | −35.3 | ---- | 28 | 370 | −29.9 | ---- | 23 | 365 | −32.5 | 48 | 30 | 343 | −45.6 | ---- | 29 | 354 | −39.9 | ---- | 27 | 372 | −28.5 | [2]32 | 23 | 350 | −41.4 | ---- |
| 9,000 | 27 | 313 | −42.5 | ---- | 26 | 320 | −37.7 | ---- | 22 | 316 | −39.9 | 49 | 29 | 295 | −50.9 | ---- | 28 | 305 | −46.7 | ---- | 27 | 323 | −36.3 | [2]35 | 17 | 301 | −47.5 | ---- |
| 10,000 | 26 | 269 | −49.4 | ---- | 25 | 277 | −45.1 | ---- | 21 | 273 | −47.2 | ---- | 28 | 253 | −54.1 | ---- | 22 | 262 | −53.0 | ---- | 27 | 279 | −43.6 | ---- | 11 | 259 | −53.7 | ---- |
| 11,000 | 22 | 232 | −53.9 | ---- | 23 | 238 | −51.1 | ---- | 18 | 234 | −52.7 | ---- | 28 | 216 | −55.1 | ---- | 20 | 225 | −56.6 | ---- | 27 | 240 | −50.0 | ---- | 9 | 221 | −56.7 | ---- |
| 12,000 | 22 | 198 | −56.9 | ---- | 17 | 203 | −55.1 | ---- | 14 | 200 | −56.3 | ---- | 26 | 184 | −54.4 | ---- | 16 | 191 | −58.2 | ---- | 25 | 206 | −54.3 | ---- | 8 | 188 | −54.9 | ---- |
| 13,000 | 19 | 169 | −58.3 | ---- | 14 | 174 | −57.1 | ---- | 13 | 170 | −57.4 | ---- | 24 | 157 | −54.6 | ---- | 15 | 163 | −57.2 | ---- | 22 | 176 | −57.9 | ---- | 8 | 160 | −54.3 | ---- |
| 14,000 | 15 | 144 | −58.7 | ---- | 12 | 148 | −60.4 | ---- | 12 | 145 | −60.5 | ---- | 21 | 135 | −55.1 | ---- | 12 | 140 | −56.8 | ---- | 21 | 150 | −61.7 | ---- | 6 | 137 | −54.2 | ---- |
| 15,000 | 11 | 124 | −61.5 | ---- | 7 | 126 | −64.2 | ---- | 11 | 123 | −62.5 | ---- | 11 | 115 | −57.2 | ---- | 8 | 119 | −57.2 | ---- | 20 | 127 | −66.4 | ---- | 5 | 117 | −54.5 | ---- |
| 16,000 | 10 | 105 | −63.2 | ---- | 6 | 107 | −68.2 | ---- | 6 | 105 | −65.7 | ---- | 7 | 99 | −58.2 | ---- | 5 | 101 | −58.2 | ---- | 19 | 108 | −70.6 | ---- | 5 | 100 | −54.1 | ---- |
| 17,000 | 7 | 89 | −64.7 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 16 | 91 | −73.9 | ---- | ---- | ---- | ---- | ---- |
| 18,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 10 | 77 | −74.8 | ---- | ---- | ---- | ---- | ---- |

| Altitude (meters) m. s. l. | Caribou, Maine (191 m.) | | | | Charleston, S. C. (14 m.) | | | | Denver, Colo. (1,616 m.) | | | | Detroit, Mich. (217 m.) | | | | El Paso, Tex. (1,193 m.) | | | | Ely, Nev. (1,908 m.) | | | | Great Falls, Mont. (1,128 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Surface | 31 | 995 | −8.2 | 77 | 31 | 1,020 | 11.0 | 89 | 31 | 836 | 0.7 | [2]50 | 30 | 993 | −0.6 | [2]77 | 31 | 880 | 14.8 | 29 | 30 | 808 | 2.1 | 70 | 31 | 885 | −3.7 | 66 |
| 500 | 31 | 956 | −8.0 | 74 | 31 | 963 | 11.7 | 77 | ---- | ---- | ---- | ---- | 30 | 958 | −0.7 | [2]65 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 1,000 | 31 | 897 | −10.5 | 72 | 31 | 907 | 9.4 | 74 | ---- | ---- | ---- | ---- | 30 | 900 | −3.4 | [2]63 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 1,500 | 31 | 840 | −13.3 | 71 | 31 | 854 | 7.0 | 70 | ---- | ---- | ---- | ---- | 30 | 844 | −5.3 | [2]61 | 31 | 848 | 14.9 | 29 | ---- | ---- | ---- | ---- | 31 | 844 | −4.1 | 66 |
| 2,000 | 31 | 786 | −14.6 | 69 | 31 | 803 | 5.0 | 62 | 31 | 796 | 1.3 | [2]42 | 30 | 792 | −6.8 | [2]50 | 31 | 799 | 11.4 | 29 | 30 | 799 | 2.3 | 68 | 31 | 792 | −6.7 | 66 |
| 2,500 | 31 | 736 | −15.7 | 67 | 31 | 755 | 2.7 | 55 | 31 | 748 | −1.7 | [2]43 | 30 | 743 | −9.2 | [2]49 | 31 | 752 | 7.6 | 28 | 30 | 751 | 0.4 | 64 | 31 | 742 | −9.2 | 67 |
| 3,000 | 31 | 689 | −16.8 | 65 | 31 | 710 | 0.4 | 49 | 31 | 702 | −4.9 | [2]46 | 30 | 696 | −11.3 | [2]54 | 31 | 708 | 3.5 | 29 | 30 | 705 | −3.4 | 64 | 31 | 696 | −12.3 | 67 |
| 4,000 | 28 | 602 | −20.1 | 62 | 31 | 626 | −5.2 | 46 | 30 | 618 | −11.7 | [2]49 | 30 | 610 | −16.0 | [2]55 | 31 | 625 | −3.9 | 30 | 30 | 620 | −10.2 | 64 | 31 | 609 | −18.0 | 65 |
| 5,000 | 27 | 526 | −25.4 | 58 | 30 | 550 | −10.9 | 42 | 30 | 541 | −18.5 | [2]52 | 30 | 534 | −22.0 | [2]53 | 27 | 550 | −11.3 | 33 | 30 | 544 | −16.2 | 61 | 31 | 532 | −24.2 | 63 |
| 6,000 | 27 | 457 | −31.2 | 54 | 27 | 482 | −17.7 | 40 | 30 | 473 | −25.4 | [2]49 | 27 | 465 | −28.8 | [2]54 | 27 | 482 | −17.9 | 32 | 30 | 476 | −22.8 | 59 | 28 | 464 | −30.6 | 55 |
| 7,000 | 26 | 396 | −37.2 | 49 | 27 | 421 | −24.9 | 38 | 30 | 411 | −32.5 | [2]52 | 26 | 403 | −35.5 | ---- | 27 | 421 | −24.9 | 31 | 27 | 413 | −30.4 | 57 | 27 | 402 | −37.0 | 51 |
| 8,000 | 24 | 343 | −43.0 | ---- | 27 | 366 | −32.2 | 35 | 29 | 356 | −39.6 | ---- | 25 | 348 | −42.1 | ---- | 27 | 366 | −32.4 | 29 | 27 | 358 | −37.9 | 47 | 27 | 347 | −43.6 | ---- |
| 9,000 | 19 | 294 | −48.6 | ---- | 25 | 317 | −39.5 | 33 | 29 | 306 | −46.9 | ---- | 23 | 300 | −48.2 | ---- | 27 | 316 | −40.4 | ---- | 24 | 310 | −45.0 | ---- | 25 | 299 | −49.7 | ---- |
| 10,000 | 17 | 252 | −52.2 | ---- | 24 | 274 | −46.9 | ---- | 27 | 263 | −53.2 | ---- | 18 | 260 | −53.6 | ---- | 25 | 272 | −47.8 | ---- | 24 | 266 | −52.0 | ---- | 24 | 256 | −54.2 | ---- |
| 11,000 | 15 | 217 | −55.3 | ---- | 21 | 235 | −53.7 | ---- | 25 | 224 | −57.4 | ---- | 17 | 222 | −56.3 | ---- | 24 | 234 | −54.5 | ---- | 21 | 228 | −56.7 | ---- | 24 | 219 | −56.4 | ---- |
| 12,000 | 14 | 186 | −56.1 | ---- | 19 | 201 | −57.0 | ---- | 25 | 191 | −57.8 | ---- | 15 | 190 | −56.2 | ---- | 23 | 200 | −57.4 | ---- | 21 | 195 | −58.2 | ---- | 23 | 187 | −56.3 | ---- |
| 13,000 | 13 | 158 | −56.0 | ---- | 18 | 171 | −58.6 | ---- | 24 | 163 | −57.1 | ---- | 10 | 162 | −55.2 | ---- | 22 | 171 | −59.3 | ---- | 21 | 166 | −59.1 | ---- | 19 | 160 | −56.1 | ---- |
| 14,000 | 11 | 136 | −56.7 | ---- | 11 | 146 | −60.4 | ---- | 22 | 139 | −58.6 | ---- | 8 | 138 | −54.9 | ---- | 20 | 146 | −60.4 | ---- | 21 | 142 | −59.4 | ---- | 16 | 137 | −55.4 | ---- |
| 15,000 | 7 | 116 | −58.5 | ---- | 11 | 124 | −63.3 | ---- | 19 | 119 | −60.0 | ---- | 7 | 119 | −57.5 | ---- | 16 | 124 | −63.7 | ---- | 21 | 120 | −60.2 | ---- | 12 | 117 | −55.1 | ---- |
| 16,000 | ---- | ---- | ---- | ---- | 5 | 105 | −66.4 | ---- | 16 | 102 | −60.2 | ---- | ---- | ---- | ---- | ---- | 13 | 106 | −67.5 | ---- | 21 | 103 | −60.9 | ---- | 10 | 100 | −55.4 | ---- |
| 17,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 12 | 86 | −60.4 | ---- | ---- | ---- | ---- | ---- | 7 | 90 | −68.5 | ---- | 19 | 88 | −61.0 | ---- | 6 | 86 | −55.5 | ---- |
| 18,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 14 | 74 | −60.9 | ---- | 6 | 73 | −55.6 | ---- |

[1] U. S. Navy.

[2] Humidity data obtained by electric hygrometer.

*Mean free-air barometric pressure in millibars, temperature in degrees centigrade, and relative humidities in percent, obtained by radiosondes during March 1943*—Continued

STATIONS AND ELEVATIONS IN METERS ABOVE SEA LEVEL—Continued

| Altitude (meters) m. s. l. | Huntington, W. Va. (172 m.) | | | | International Falls, Minn. (343 m.) | | | | Joliet, Ill. (178 m.) | | | | Lake Charles, La. (5 m.) | | | | Lakehurst, N. J.[1] (39 m.) | | | | Mazatlan, Mexico (80 m.) | | | | Medford, Oreg. (409 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 30 | 1,002 | 3.1 | 78 | 31 | 975 | −9.7 | [2]75 | 31 | 999 | −1.0 | [2]77 | 31 | 1,018 | 13.5 | [2]84 | 27 | 1,016 | 2.9 | [2]65 | 30 | 1,006 | 20.9 | 76 | 31 | 968 | 10.1 | 64 |
| 500 | 30 | 962 | 4.1 | 72 | 31 | 956 | −9.2 | [2]72 | 31 | 959 | −1.1 | [2]66 | 31 | 960 | 12.2 | [2]69 | 27 | 956 | 2.8 | [2]53 | 30 | 958 | 21.1 | 54 | 31 | 958 | 10.3 | 63 |
| 1,000 | 20 | 905 | 1.8 | 67 | 31 | 896 | −11.3 | [2]71 | 31 | 900 | −3.3 | [2]63 | 31 | 905 | 10.7 | [2]63 | 27 | 902 | 0.7 | [2]47 | 30 | 904 | 21.0 | 34 | 31 | 902 | 7.7 | 62 |
| 1,500 | 30 | 850 | −0.6 | 66 | 31 | 838 | −13.5 | [2]70 | 31 | 845 | −5.2 | [2]63 | 31 | 852 | 9.3 | [2]57 | 27 | 847 | −1.7 | [2]42 | 29 | 854 | 18.6 | 29 | 31 | 848 | 3.9 | 66 |
| 2,000 | 30 | 798 | −2.4 | 66 | 31 | 785 | −13.8 | [2]63 | 31 | 792 | −6.9 | [2]58 | 31 | 802 | 7.4 | [2]51 | 27 | 795 | −3.4 | [2]44 | 28 | 805 | 15.5 | 26 | 31 | 797 | 0.2 | 73 |
| 2,500 | 30 | 749 | −4.3 | 65 | 31 | 735 | −15.7 | [2]61 | 31 | 743 | −8.8 | [2]57 | 31 | 754 | 5.6 | [2]41 | 27 | 746 | −5.3 | [2]42 | 28 | 758 | 12.4 | 25 | 31 | 749 | −2.5 | 73 |
| 3,000 | 30 | 703 | −6.6 | 65 | 31 | 687 | −18.0 | [2]62 | 31 | 696 | −10.6 | [2]58 | 31 | 709 | 3.2 | [2]37 | 27 | 700 | −7.8 | [2]39 | 28 | 714 | 9.4 | 24 | 31 | 703 | −5.3 | 69 |
| 4,000 | 30 | 618 | −10.7 | 59 | 31 | 600 | −23.3 | [2]62 | 31 | 611 | −16.1 | [2]55 | 31 | 626 | −2.3 | [2]28 | 27 | 614 | −12.7 | [2]44 | 26 | 632 | 3.1 | 23 | 31 | 618 | −10.6 | 60 |
| 5,000 | 30 | 542 | −16.8 | 57 | 30 | 523 | −28.4 | [2]54 | 31 | 534 | −21.6 | [2]54 | 30 | 551 | −9.1 | [2]31 | 27 | 538 | −18.7 | [2]41 | 26 | 558 | −3.8 | 23 | 31 | 542 | −17.1 | 57 |
| 6,000 | 30 | 474 | −23.4 | 57 | 29 | 455 | −35.2 | ---- | 31 | 466 | −28.0 | [2]55 | 30 | 484 | −16.2 | [2]31 | 27 | 470 | −25.3 | [2]41 | 26 | 491 | −11.3 | 23 | 31 | 474 | −23.5 | 54 |
| 7,000 | 29 | 412 | −30.1 | 57 | 29 | 393 | −41.7 | ---- | 27 | 405 | −34.8 | ---- | 29 | 423 | −23.7 | ---- | 26 | 410 | −31.4 | [2]47 | 25 | 430 | −18.9 | 23 | 30 | 413 | −30.4 | 53 |
| 8,000 | 29 | 357 | −37.1 | 59 | 27 | 338 | −47.7 | ---- | 22 | 350 | −41.8 | ---- | 29 | 368 | −31.6 | ---- | 23 | 354 | −37.6 | ---- | 24 | 375 | −26.5 | 23 | 30 | 357 | −38.3 | 54 |
| 9,000 | 29 | 308 | −44.0 | ---- | 23 | 290 | −51.7 | ---- | 19 | 301 | −48.8 | ---- | 27 | 318 | −39.6 | ---- | 21 | 305 | −45.0 | ---- | 24 | 326 | −34.1 | 24 | 29 | 308 | −45.8 | ---- |
| 10,000 | 29 | 265 | −50.3 | ---- | 21 | 248 | −54.0 | ---- | 10 | 257 | −52.8 | ---- | 25 | 275 | −46.4 | ---- | 20 | 263 | −51.1 | ---- | 23 | 283 | −41.6 | ---- | 27 | 264 | −52.8 | ---- |
| 11,000 | 27 | 227 | −55.5 | ---- | 18 | 211 | −54.0 | ---- | 7 | 221 | −55.8 | ---- | 23 | 236 | −52.5 | ---- | 20 | 226 | −56.1 | ---- | 23 | 243 | −48.5 | ---- | 27 | 226 | −57.4 | ---- |
| 12,000 | 25 | 194 | −56.6 | ---- | 18 | 181 | −53.0 | ---- | 5 | 187 | −52.9 | ---- | 19 | 202 | −57.8 | ---- | 17 | 193 | −57.1 | ---- | 22 | 208 | −53.7 | ---- | 25 | 193 | −58.0 | ---- |
| 13,000 | 22 | 166 | −57.4 | ---- | 16 | 155 | −52.9 | ---- | ---- | ---- | ---- | ---- | 18 | 173 | −59.0 | ---- | 13 | 165 | −57.6 | ---- | 21 | 178 | −58.0 | ---- | 23 | 165 | −57.0 | ---- |
| 14,000 | 21 | 141 | −57.5 | ---- | 13 | 133 | −53.4 | ---- | ---- | ---- | ---- | ---- | 17 | 147 | −61.1 | ---- | 9 | 141 | −60.8 | ---- | 21 | 152 | −63.0 | ---- | 21 | 141 | −57.6 | ---- |
| 15,000 | 17 | 120 | −59.1 | ---- | 9 | 113 | −53.7 | ---- | ---- | ---- | ---- | ---- | 13 | 125 | −64.3 | ---- | 6 | 120 | −60.2 | ---- | 21 | 128 | −68.4 | ---- | 20 | 120 | −58.8 | ---- |
| 16,000 | 16 | 103 | −60.8 | ---- | 7 | 97 | −53.4 | ---- | ---- | ---- | ---- | ---- | 9 | 106 | −67.2 | ---- | 6 | 102 | −61.8 | ---- | 20 | 109 | −72.9 | ---- | 17 | 102 | −58.7 | ---- |
| 17,000 | 10 | 88 | −62.3 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 19 | 92 | −75.0 | ---- | 11 | 87 | −59.2 | ---- |
| 18,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 14 | 77 | −74.1 | ---- | 5 | 74 | −58.9 | ---- |
| 19,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 8 | 65 | −73.3 | ---- | ---- | ---- | ---- | ---- |
| 20,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 5 | 55 | −69.4 | ---- | ---- | ---- | ---- | ---- |

| Altitude (meters) m. s. l. | Miami, Fla. (4 m.) | | | | Nashville, Tenn. (180 m.) | | | | Norfolk, Va.[1] (4 m.) | | | | Oakland, Calif. (6 m.) | | | | Oklahoma City, Okla. (391 m.) | | | | Omaha, Nebr. (301 m.) | | | | Pensacola, Fla.[3] (24 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Surface | 31 | 1,020 | 20.1 | 79 | 31 | 1,000 | 7.2 | [2]68 | 24 | 1,023 | 8.1 | [2]75 | 31 | 1,017 | 13.0 | 79 | 31 | 972 | 6.1 | [2]65 | 30 | 983 | 0.9 | [2]67 | ---- | ---- | ---- | ---- |
| 500 | 31 | 963 | 18.6 | 79 | 31 | 962 | 5.9 | [2]60 | 24 | 963 | 7.0 | [2]65 | 31 | 958 | 10.1 | 74 | 31 | 959 | 6.3 | [2]62 | 30 | 959 | 0.7 | [2]62 | ---- | ---- | ---- | ---- |
| 1,000 | 31 | 908 | 15.4 | 79 | 31 | 905 | 3.3 | [2]54 | 24 | 906 | 5.1 | [2]62 | 31 | 902 | 8.0 | 61 | 31 | 903 | 4.7 | [2]57 | 30 | 901 | −1.5 | [2]61 | ---- | ---- | ---- | ---- |
| 1,500 | 31 | 856 | 12.7 | 72 | 31 | 850 | 1.7 | [2]49 | 24 | 852 | 2.9 | [2]57 | 31 | 849 | 6.1 | 52 | 31 | 849 | 4.4 | [2]50 | 30 | 846 | −3.3 | [2]55 | ---- | ---- | ---- | ---- |
| 2,000 | 31 | 806 | 10.5 | 61 | 31 | 799 | 0.4 | [2]48 | 24 | 801 | 1.3 | [2]53 | 31 | 798 | 3.7 | 50 | 31 | 798 | 3.3 | [2]47 | 30 | 794 | −4.4 | [2]44 | ---- | ---- | ---- | ---- |
| 2,500 | 31 | 759 | 8.9 | 50 | 31 | 750 | −1.1 | [2]41 | 24 | 752 | −1.0 | [2]50 | 31 | 750 | 1.4 | 45 | 31 | 750 | 1.4 | [2]42 | 30 | 745 | −6.2 | [2]43 | ---- | ---- | ---- | ---- |
| 3,000 | 31 | 714 | 6.4 | 46 | 31 | 705 | −3.2 | [2]37 | 24 | 706 | −3.2 | [2]48 | 31 | 705 | −1.5 | 43 | 31 | 705 | −1.1 | [2]40 | 30 | 698 | −8.8 | [2]43 | ---- | ---- | ---- | ---- |
| 4,000 | 31 | 632 | 0.8 | 39 | 30 | 620 | −9.3 | [2]44 | 23 | 622 | −8.7 | [2]41 | 31 | 621 | −7.8 | 41 | 31 | 621 | −7.3 | [2]41 | 29 | 613 | −14.6 | [2]38 | ---- | ---- | ---- | ---- |
| 5,000 | 31 | 557 | −5.4 | 35 | 30 | 544 | −15.4 | [2]45 | 23 | 546 | −15.5 | [2]41 | 31 | 545 | −14.3 | 43 | 31 | 545 | −13.9 | [2]44 | 29 | 537 | −20.7 | [2]42 | ---- | ---- | ---- | ---- |
| 6,000 | 29 | 490 | −11.9 | 31 | 28 | 476 | −22.5 | [2]39 | 23 | 477 | −22.3 | ---- | 30 | 477 | −21.4 | 47 | 31 | 477 | −21.1 | [2]47 | 29 | 468 | −27.3 | [2]46 | ---- | ---- | ---- | ---- |
| 7,000 | 29 | 429 | −19.2 | 30 | 28 | 414 | −29.5 | [2]44 | 22 | 417 | −28.6 | ---- | 29 | 416 | −28.9 | 53 | 31 | 416 | −28.3 | [2]53 | 29 | 407 | −34.4 | ---- | ---- | ---- | ---- | ---- |
| 8,000 | 27 | 374 | −26.7 | 32 | 27 | 359 | −37.0 | ---- | ---- | ---- | ---- | ---- | 29 | 360 | −36.7 | 62 | 28 | 361 | −35.6 | ---- | 29 | 352 | −41.7 | ---- | ---- | ---- | ---- | ---- |
| 9,000 | 27 | 325 | −34.0 | 29 | 26 | 310 | −44.3 | ---- | ---- | ---- | ---- | ---- | 24 | 311 | −44.2 | ---- | 25 | 313 | −43.1 | ---- | 29 | 303 | −48.0 | ---- | ---- | ---- | ---- | ---- |
| 10,000 | 26 | 281 | −41.1 | ---- | 24 | 267 | −51.6 | ---- | ---- | ---- | ---- | ---- | 22 | 268 | −50.3 | ---- | 22 | 270 | −50.4 | ---- | 29 | 259 | −52.6 | ---- | ---- | ---- | ---- | ---- |
| 11,000 | 25 | 242 | −47.0 | ---- | 18 | 229 | −57.2 | ---- | ---- | ---- | ---- | ---- | 19 | 229 | −55.9 | ---- | 13 | 231 | −57.0 | ---- | 29 | 222 | −54.6 | ---- | ---- | ---- | ---- | ---- |
| 12,000 | 24 | 208 | −51.7 | ---- | 13 | 197 | −59.7 | ---- | ---- | ---- | ---- | ---- | 17 | 196 | −58.8 | ---- | 12 | 197 | −60.0 | ---- | 29 | 190 | −55.1 | ---- | ---- | ---- | ---- | ---- |
| 13,000 | 21 | 178 | −57.0 | ---- | 9 | 167 | −61.5 | ---- | ---- | ---- | ---- | ---- | 14 | 166 | −59.3 | ---- | 9 | 168 | −61.0 | ---- | 28 | 163 | −55.8 | ---- | ---- | ---- | ---- | ---- |
| 14,000 | 18 | 152 | −62.8 | ---- | 5 | 143 | −59.9 | ---- | ---- | ---- | ---- | ---- | 13 | 142 | −59.3 | ---- | 8 | 144 | −60.5 | ---- | 28 | 139 | −56.1 | ---- | ---- | ---- | ---- | ---- |
| 15,000 | 13 | 128 | −69.1 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 11 | 121 | −60.8 | ---- | 7 | 122 | −62.3 | ---- | 27 | 118 | −57.1 | ---- | ---- | ---- | ---- | ---- |
| 16,000 | 8 | 109 | −72.0 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 9 | 103 | −62.1 | ---- | ---- | ---- | ---- | ---- | 25 | 101 | −58.0 | ---- | ---- | ---- | ---- | ---- |
| 17,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 8 | 88 | −62.0 | ---- | ---- | ---- | ---- | ---- | 19 | 87 | −58.6 | ---- | ---- | ---- | ---- | ---- |
| 18,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 7 | 75 | −61.3 | ---- | ---- | ---- | ---- | ---- | 11 | 74 | −59.2 | ---- | ---- | ---- | ---- | ---- |

| Altitude (meters) m. s. l. | Phoenix, Ariz. (339 m.) | | | | Portland, Maine (20 m.) | | | | St. Louis, Mo. (171 m.) | | | | St. Paul, Minn. (225 m.) | | | | San Antonio, Tex. (242 m.) | | | | San Diego, Calif.[1] (19 m.) | | | | San Juan, P. R. (15 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Surface | 31 | 973 | 16.7 | 45 | 31 | 1,018 | −2.4 | 62 | 31 | 1,000 | 3.8 | 61 | 31 | 991 | −4.5 | [2]77 | 31 | 989 | 13.7 | [2]63 | 30 | 1,014 | 15.0 | [2]81 | 30 | 1,016 | 23.4 | 80 |
| 500 | 31 | 956 | 19.6 | 39 | 31 | 958 | −3.1 | 62 | 31 | 960 | 2.7 | 54 | 31 | 957 | −5.4 | [2]72 | 31 | 960 | 13.2 | [2]61 | 30 | 958 | 12.3 | [2]77 | 30 | 960 | 19.7 | 79 |
| 1,000 | 31 | 901 | 16.7 | 36 | 31 | 899 | −5.5 | 58 | 31 | 903 | 0.9 | 54 | 31 | 898 | −7.3 | [2]68 | 31 | 904 | 11.7 | [2]54 | 30 | 903 | 10.7 | [2]59 | 30 | 906 | 16.2 | 76 |
| 1,500 | 31 | 850 | 12.8 | 37 | 31 | 843 | −7.0 | 59 | 31 | 848 | −1.1 | 52 | 31 | 842 | −8.6 | [2]58 | 31 | 852 | 10.7 | [2]49 | 30 | 850 | 9.1 | [2]51 | 30 | 855 | 13.0 | 72 |
| 2,000 | 31 | 800 | 8.7 | 39 | 31 | 791 | −8.2 | 58 | 31 | 796 | −3.1 | 51 | 31 | 789 | −10.3 | [2]54 | 31 | 802 | 10.0 | [2]38 | 30 | 800 | 6.8 | [2]45 | 30 | 805 | 10.4 | 62 |
| 2,500 | 31 | 752 | 4.9 | 42 | 31 | 741 | −9.6 | 56 | 31 | 747 | −4.5 | 51 | 31 | 739 | −12.3 | [2]54 | 31 | 755 | 7.8 | [2]31 | 30 | 752 | 4.4 | [2]35 | 30 | 758 | 8.5 | 46 |
| 3,000 | 31 | 707 | 1.5 | 43 | 31 | 694 | −11.7 | 57 | 31 | 701 | −6.5 | 46 | 31 | 692 | −14.2 | [2]55 | 31 | 710 | 4.8 | [2]31 | 30 | 707 | 2.0 | [2]25 | 29 | 713 | 6.6 | 38 |
| 4,000 | 31 | 624 | −4.5 | 41 | 30 | 609 | −16.3 | 55 | 30 | 616 | −11.9 | 50 | 31 | 606 | −19.3 | [2]51 | 31 | 627 | −2.0 | [2]32 | 30 | 624 | −3.6 | [2]24 | 27 | 631 | 1.8 | 30 |
| 5,000 | 31 | 549 | −10.8 | 38 | 29 | 533 | −21.3 | 55 | 30 | 540 | −18.0 | 51 | 31 | 529 | −24.9 | [2]52 | 31 | 552 | −8.6 | [2]34 | 30 | 549 | −10.0 | [2]33 | 20 | 556 | −4.0 | 29 |
| 6,000 | 31 | 481 | −17.9 | 36 | 28 | 464 | −28.4 | 53 | 29 | 471 | −25.1 | 49 | 31 | 460 | −30.9 | [2]55 | 30 | 485 | −15.6 | ---- | 30 | 481 | −16.9 | ---- | 18 | 489 | −9.3 | 23 |
| 7,000 | 31 | 420 | −25.3 | 36 | 28 | 403 | −35.5 | 57 | 29 | 410 | −32.4 | ---- | 30 | 399 | −38.0 | ---- | 29 | 424 | −22.8 | ---- | 30 | 421 | −23.9 | ---- | 16 | 439 | −16.1 | 25 |
| 8,000 | 31 | 365 | −32.9 | 35 | 27 | 348 | −42.1 | ---- | 29 | 355 | −39.7 | ---- | 30 | 344 | −45.0 | ---- | 22 | 369 | −30.8 | ---- | 12 | 367 | −30.7 | ---- | 14 | 376 | −22.8 | 27 |
| 9,000 | 31 | 316 | −40.5 | ---- | 25 | 299 | −48.3 | ---- | 28 | 306 | −46.5 | ---- | 28 | 296 | −50.1 | ---- | 20 | 319 | −38.7 | ---- | 12 | 317 | −38.4 | ---- | 11 | 327 | −29.4 | 31 |
| 10,000 | 30 | 273 | −47.4 | ---- | 24 | 256 | −53.0 | ---- | 27 | 262 | −52.4 | ---- | 27 | 254 | −53.1 | ---- | 14 | 276 | −46.2 | ---- | 12 | 274 | −45.6 | ---- | 7 | 285 | −36.2 | ---- |
| 11,000 | 30 | 234 | −53.4 | ---- | 23 | 220 | −55.7 | ---- | 26 | 225 | −56.2 | ---- | 27 | 218 | −54.0 | ---- | 12 | 237 | −53.0 | ---- | 8 | 236 | −52.3 | ---- | 5 | 246 | −42.5 | ---- |
| 12,000 | 30 | 200 | −57.9 | ---- | 20 | 188 | −55.2 | ---- | 22 | 192 | −56.8 | ---- | 21 | 186 | −53.5 | ---- | 10 | 202 | −56.4 | ---- | 8 | 202 | −57.6 | ---- | ---- | ---- | ---- | ---- |
| 13,000 | 30 | 170 | −59.4 | ---- | 14 | 160 | −52.8 | ---- | 19 | 164 | −57.9 | ---- | 19 | 159 | −53.0 | ---- | 9 | 173 | −58.1 | ---- | 8 | 172 | −59.5 | ---- | ---- | ---- | ---- | ---- |
| 14,000 | 28 | 145 | −59.5 | ---- | 8 | 137 | −55.4 | ---- | 17 | 140 | −58.8 | ---- | 13 | 136 | −54.4 | ---- | 6 | 147 | −60.0 | ---- | 5 | 147 | −60.8 | ---- | ---- | ---- | ---- | ---- |
| 15,000 | 25 | 124 | −61.3 | ---- | 6 | 117 | −55.9 | ---- | 11 | 119 | −60.3 | ---- | 9 | 116 | −53.9 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 16,000 | 22 | 106 | −63.7 | ---- | ---- | ---- | ---- | ---- | 9 | 102 | −61.7 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 17,000 | 20 | 90 | −64.6 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 18,000 | 16 | 76 | −64.4 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 19,000 | 10 | 65 | −64.2 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 20,000 | 5 | 54 | −64.1 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |

[1] U. S. Navy. [2] Humidity data obtained by electric hygrometer. [3] Insufficient data.

*Mean free-air barometric pressure in millibars, temperature in degrees centigrade, and relative humidities in percent, obtained by radiosondes during March 1943*—Continued

STATIONS AND ELEVATIONS IN METERS ABOVE SEA LEVEL

| Altitude (meters) m. s. l. | Sault Ste. Marie, Mich. (221 m.) | | | | Seattle, Wash.[1] (22 m.) | | | | Spokane, Wash. (598 m.) | | | | Swan Island, West Indies (10 m.) | | | | Tacubaya, Mexico (2,306 m.) | | | | Tatoosh Island, Wash. (31 m.) | | | | Tongue Point Oreg.[1] (21 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 31 | 991 | −8.6 | 87 | 29 | 1,013 | 7.7 | [2]71 | 31 | 945 | 2.0 | 70 | 18 | 1,015 | 25.1 | 82 | 28 | 773 | 17.4 | 37 | 17 | 1,010 | 6.2 | 82 | 24 | 1,015 | 7.0 | 78 |
| 500 | 31 | 956 | −8.3 | 86 | 29 | 956 | 5.0 | [2]64 | | | | | 18 | 960 | 21.5 | 88 | | | | | 17 | 954 | 3.2 | 83 | 24 | 957 | 4.2 | 72 |
| 1,000 | 31 | 896 | −9.9 | 84 | 29 | 899 | 1.5 | [2]67 | 31 | 899 | 1.0 | 65 | 18 | 906 | 18.4 | 85 | | | | | 17 | 897 | −0.1 | 85 | 24 | 900 | 0.6 | 73 |
| 1,500 | 31 | 840 | −11.7 | 82 | 29 | 844 | −1.9 | [2]72 | 31 | 845 | −2.3 | 65 | 18 | 855 | 15.6 | 79 | | | | | 17 | 842 | −3.0 | 82 | 24 | 845 | −2.0 | 68 |
| 2,000 | 31 | 786 | −13.6 | 79 | 28 | 792 | −5.2 | [2]69 | 31 | 793 | −5.6 | 64 | 18 | 806 | 12.7 | 71 | | | | | 17 | 790 | −5.6 | 75 | 24 | 793 | −4.3 | 52 |
| 2,500 | 31 | 736 | −15.1 | 78 | 28 | 743 | −8.1 | [2]64 | 30 | 744 | −8.6 | 62 | 18 | 759 | 10.2 | 65 | 28 | 756 | 16.4 | 38 | 17 | 741 | −8.2 | 71 | 24 | 744 | −6.6 | 43 |
| 3,000 | 31 | 688 | −17.0 | 75 | 28 | 696 | −11.1 | [2]58 | 30 | 697 | −11.7 | 63 | 18 | 714 | 8.1 | 59 | 28 | 712 | 12.6 | 39 | 17 | 695 | −11.0 | 69 | 24 | 698 | −8.9 | 41 |
| 4,000 | 31 | 602 | −21.7 | 74 | 28 | 611 | −16.5 | [2]63 | 28 | 611 | −17.8 | 58 | 18 | 632 | 3.7 | 43 | 28 | 631 | 4.5 | 45 | 15 | 609 | −16.7 | 62 | 24 | 612 | −14.7 | 40 |
| 5,000 | 31 | 525 | −27.4 | 69 | 27 | 534 | −22.9 | [2]69 | 28 | 534 | −23.3 | 55 | 18 | 559 | −1.6 | 30 | 28 | 558 | −3.6 | 56 | 13 | 532 | −23.2 | 57 | 23 | 536 | −21.2 | 47 |
| 6,000 | 29 | 457 | −32.8 | 68 | 27 | 465 | −29.7 | [2]68 | 27 | 465 | −29.8 | 52 | 17 | 492 | −8.2 | 26 | 28 | 490 | −10.7 | 58 | 13 | 464 | −29.4 | 54 | 23 | 468 | −28.0 | 56 |
| 7,000 | 28 | 396 | −39.0 | 65 | 22 | 404 | −36.3 | | 26 | 403 | −36.6 | 52 | 17 | 432 | −14.3 | 25 | 27 | 430 | −16.9 | 49 | 11 | 403 | −35.1 | 54 | 21 | 406 | −34.5 | 63 |
| 8,000 | 28 | 341 | −44.6 | | 19 | 348 | −43.2 | | 25 | 346 | −43.2 | | 16 | 378 | −21.4 | 24 | 27 | 376 | −24.1 | 46 | 10 | 349 | −41.3 | | 18 | 351 | −41.5 | |
| 9,000 | 28 | 293 | −49.1 | | 17 | 298 | −49.6 | | 25 | 299 | −49.6 | | 16 | 328 | −28.5 | 24 | 27 | 326 | −31.4 | 43 | 10 | 300 | −47.8 | | 16 | 304 | −47.9 | |
| 10,000 | 28 | 251 | −52.6 | | 15 | 256 | −54.0 | | 24 | 257 | −54.3 | | 16 | 286 | −36.1 | | 27 | 284 | −38.8 | | 10 | 258 | −53.7 | | 16 | 260 | −53.1 | |
| 11,000 | 26 | 216 | −54.1 | | 13 | 220 | −54.9 | | 20 | 221 | −56.6 | | 16 | 247 | −43.6 | | 26 | 244 | −45.6 | | 10 | 221 | −56.3 | | 14 | 223 | −56.9 | |
| 12,000 | 23 | 184 | −53.3 | | 10 | 189 | −53.9 | | 18 | 188 | −55.6 | | 13 | 212 | −51.0 | | 25 | 210 | −51.6 | | 9 | 188 | −55.5 | | 9 | 189 | −58.6 | |
| 13,000 | 19 | 157 | −52.4 | | 7 | 161 | −54.1 | | 17 | 161 | −55.1 | | 11 | 182 | −58.2 | | 23 | 180 | −57.0 | | 5 | 162 | −56.6 | | 9 | 161 | −57.4 | |
| 14,000 | 16 | 134 | −52.3 | | 5 | 137 | −54.1 | | 16 | 138 | −56.0 | | 8 | 154 | −65.5 | | 23 | 153 | −63.8 | | | | | | 6 | 137 | −57.6 | |
| 15,000 | 12 | 115 | −52.7 | | 5 | 118 | −54.1 | | 14 | 118 | −55.9 | | 7 | 130 | −72.1 | | 21 | 129 | −70.9 | | | | | | | | | |
| 16,000 | 6 | 99 | −56.8 | | | | | | 8 | 100 | −56.4 | | 5 | 110 | −77.0 | | 20 | 109 | −77.9 | | | | | | | | | |
| 17,000 | | | | | | | | | 5 | 85 | −57.5 | | | | | | 16 | 92 | −82.2 | | | | | | | | | |
| 18,000 | | | | | | | | | | | | | | | | | 11 | 77 | −83.4 | | | | | | | | | |
| 19,000 | | | | | | | | | | | | | | | | | 6 | 64 | −79.5 | | | | | | | | | |
| 20,000 | | | | | | | | | | | | | | | | | 5 | 54 | −73.7 | | | | | | | | | |

| Altitude (meters) m. s. l. | Washington, D. C. (25 m.) | | | | Altitude (meters) m. s. l. | Washington, D. C. (25 m.) | | | | Altitude (meters) m. s. l. | Washington, D. C. (25 m.) | | | | Altitude (meters) m. s. l. | Washington, D. C. (25 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | | Number of observations | Pressure | Temperature | Relative humidity | | Number of observations | Pressure | Temperature | Relative humidity | | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 31 | 1,019 | 6.9 | [3]63 | 2,500 | 31 | 759 | −2.9 | [3]48 | 7,000 | 29 | 412 | −30.6 | [3]47 | 12,000 | 12 | 195 | −56.6 | |
| 500 | 31 | 961 | 6.2 | [3]55 | 3,000 | 31 | 703 | −5.2 | [3]46 | 8,000 | 26 | 359 | −36.5 | | 13,000 | 11 | 167 | −56.5 | |
| 1,000 | 31 | 904 | 3.0 | [3]57 | 4,000 | 30 | 619 | −10.1 | [3]43 | 9,000 | 24 | 310 | −43.5 | | 14,000 | 9 | 141 | −56.8 | |
| 1,500 | 31 | 850 | 0.7 | [3]54 | 5,000 | 30 | 543 | −16.5 | [3]39 | 10,000 | 21 | 267 | −50.3 | | 15,000 | 8 | 120 | −58.2 | |
| 2,000 | 31 | 798 | −1.2 | [3]54 | 6,000 | 29 | 474 | −23.5 | [3]44 | 11,000 | 15 | 229 | −56.1 | | 16,000 | 6 | 103 | −58.7 | |

*Mean free-air barometric pressure in millibars, temperature in degrees centigrade, and relative humidities in percent, obtained by radiosondes during April 1943*

STATIONS AND ELEVATIONS IN METERS ABOVE SEA LEVEL

| Altitude (meters) m. s. l. | Albany, N. Y.[1] (86 m.) | | | | Albuquerque, N. Mex. (1,620 m.) | | | | Apalachicola, Fla. (7 m.) | | | | Atlanta, Ga. (300 m.) | | | | Bismarck, N. Dak. (505 m.) | | | | Boise, Idaho (868 m.) | | | | Brownsville, Tex. (6 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | | | | | 30 | 836 | 17.0 | [2]25 | 30 | 1,017 | 18.4 | [2]79 | 30 | 982 | 14.5 | 62 | 26 | 956 | 7.5 | 54 | 19 | 913 | 12.9 | [2]56 | 30 | 1,014 | 21.3 | [2]86 |
| 500 | | | | | | | | | 30 | 960 | 18.6 | [2]48 | 30 | 960 | 15.2 | 59 | | | | | | | | | 30 | 958 | 19.4 | [2]73 |
| 1,000 | | | | | | | | | 30 | 906 | 15.7 | [2]42 | 30 | 904 | 12.3 | 57 | 26 | 900 | 6.7 | 52 | 19 | 899 | 13.7 | [2]48 | 30 | 904 | 18.5 | [2]43 |
| 1,500 | | | | | | | | | 30 | 854 | 12.7 | [2]44 | 30 | 852 | 9.2 | 58 | 26 | 846 | 4.4 | 53 | 19 | 847 | 11.6 | [2]41 | 30 | 853 | 16.5 | [2]28 |
| 2,000 | | | | | 30 | 800 | 16.3 | [2]23 | 30 | 804 | 10.3 | [2]36 | 30 | 802 | 6.4 | 60 | 26 | 796 | 1.5 | 52 | 19 | 797 | 8.2 | [2]46 | 30 | 803 | 14.2 | [2]24 |
| 2,500 | | | | | 30 | 754 | 12.7 | [2]24 | 30 | 757 | 8.1 | [2]30 | 30 | 754 | 4.2 | 57 | 26 | 748 | −1.4 | 51 | 19 | 750 | 4.7 | [2]50 | 30 | 757 | 11.7 | [2]22 |
| 3,000 | | | | | 30 | 710 | 8.5 | [2]29 | 30 | 712 | 5.3 | [2]31 | 30 | 709 | 1.9 | 54 | 26 | 702 | −4.2 | 50 | 19 | 705 | 0.9 | [2]56 | 30 | 713 | 8.8 | [2]22 |
| 4,000 | | | | | 30 | 628 | −0.3 | [2]42 | 30 | 629 | −0.6 | [2]31 | 29 | 626 | −3.5 | 51 | 26 | 618 | −9.6 | 48 | 19 | 622 | −6.2 | [2]56 | 30 | 631 | 2.2 | [2]23 |
| 5,000 | | | | | 30 | 553 | −8.7 | [2]55 | 30 | 554 | −7.1 | [2]28 | 28 | 551 | −10.0 | 50 | 25 | 542 | −16.0 | 48 | 19 | 546 | −12.7 | [2]49 | 30 | 557 | −4.6 | [2]26 |
| 6,000 | | | | | 30 | 485 | −16.6 | [2]57 | 30 | 487 | −13.6 | | 27 | 483 | −16.8 | 48 | 25 | 474 | −22.5 | 48 | 19 | 478 | −19.5 | [2]41 | 29 | 489 | −11.5 | [2]25 |
| 7,000 | | | | | 30 | 424 | −23.7 | [2]46 | 30 | 426 | −20.1 | | 27 | 422 | −23.7 | 48 | 25 | 413 | −29.6 | 47 | 19 | 417 | −27.1 | [2]44 | 29 | 429 | −18.9 | [2]30 |
| 8,000 | | | | | 30 | 369 | −30.7 | | 30 | 372 | −27.6 | | 26 | 368 | −31.0 | 52 | 25 | 358 | −36.5 | 54 | 18 | 363 | −34.8 | | 28 | 374 | −26.4 | |
| 9,000 | | | | | 30 | 320 | −37.7 | | 30 | 322 | −35.5 | | 26 | 318 | −38.7 | 53 | 25 | 309 | −43.3 | | 16 | 313 | −42.6 | | 27 | 325 | −34.2 | |
| 10,000 | | | | | 30 | 276 | −44.7 | | 29 | 279 | −42.7 | | 26 | 275 | −46.2 | | 22 | 266 | −49.2 | | 14 | 269 | −49.3 | | 26 | 282 | −41.8 | |
| 11,000 | | | | | 29 | 238 | −51.1 | | 29 | 240 | −49.8 | | 24 | 236 | −53.3 | | 21 | 228 | −54.0 | | 11 | 231 | −54.8 | | 26 | 242 | −49.1 | |
| 12,000 | | | | | 29 | 203 | −55.7 | | 26 | 205 | −56.0 | | 20 | 202 | −58.0 | | 20 | 195 | −56.1 | | 11 | 197 | −56.6 | | 26 | 207 | −56.1 | |
| 13,000 | | | | | 27 | 173 | −57.5 | | 24 | 176 | −58.2 | | 18 | 172 | −59.6 | | 20 | 167 | −55.0 | | 9 | 169 | −56.5 | | 25 | 177 | −60.4 | |
| 14,000 | | | | | 23 | 148 | −59.3 | | 20 | 150 | −59.8 | | 15 | 146 | −60.3 | | 19 | 143 | −54.4 | | 9 | 145 | −56.5 | | 22 | 150 | −63.7 | |
| 15,000 | | | | | 23 | 126 | −61.3 | | 18 | 128 | −62.5 | | 11 | 124 | −61.8 | | 17 | 122 | −54.9 | | 7 | 124 | −59.1 | | 20 | 128 | −67.0 | |
| 16,000 | | | | | 20 | 107 | −62.6 | | 15 | 109 | −64.1 | | 8 | 106 | −61.8 | | 13 | 105 | −55.8 | | 5 | 106 | −59.7 | | 16 | 109 | −70.5 | |
| 17,000 | | | | | 14 | 91 | −63.7 | | 8 | 93 | −66.7 | | | | | | 12 | 90 | −55.9 | | | | | | 12 | 92 | −71.6 | |
| 18,000 | | | | | 9 | 78 | −63.9 | | 6 | 80 | −66.8 | | | | | | 8 | 77 | −55.7 | | | | | | 6 | 78 | −73.0 | |

[1] U. S. Navy.

[2] Humidity data obtained by electric hygrometer.

[3] Insufficient data.

*Mean free-air barometric pressure in millibars, temperature in degrees centigrade, and relative humidities in percent, obtained by radiosondes during April 1943*—Continued

STATIONS AND ELEVATIONS IN METERS ABOVE SEA LEVEL—Continued

| Altitude (meters) m. s. l. | Buffalo, N. Y. (221 m.) | | | | Caribou, Maine (191 m.) | | | | Charleston, S. C. (14 m.) | | | | Denver, Colo. (1,616 m.) | | | | Detroit, Mich. (217 m.) | | | | El Paso, Tex. (1193 m.) | | | | Ely, Nev. (1,908 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 30 | 988 | 2.0 | [2]75 | 30 | 987 | −1.7 | 77 | 30 | 1,016 | 14.8 | 77 | 30 | 837 | 11.7 | [2]50 | 30 | 990 | 3.0 | [2]73 | 30 | 880 | 20.6 | [2]24 | 30 | 807 | 8.7 | 56 |
| 500 | 30 | 955 | 2.0 | [2]67 | 30 | 950 | −1.1 | 70 | 30 | 960 | 15.0 | 65 | ---- | ---- | ---- | ---- | 30 | 957 | 3.5 | [2]58 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 1,000 | 30 | 897 | −0.8 | [2]65 | 30 | 892 | −3.9 | 69 | 30 | 904 | 12.2 | 58 | ---- | ---- | ---- | ---- | 30 | 899 | 0.7 | [2]56 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 1,500 | 30 | 842 | −3.7 | [2]64 | 30 | 837 | −6.8 | 71 | 30 | 852 | 9.4 | 59 | ---- | ---- | ---- | ---- | 30 | 844 | −1.8 | [2]55 | 30 | 849 | 20.9 | [2]23 | ---- | ---- | ---- | ---- |
| 2,000 | 30 | 790 | −6.4 | [2]63 | 30 | 785 | −8.8 | 70 | 30 | 802 | 6.7 | 54 | 30 | 800 | 11.7 | [2]41 | 30 | 792 | −4.1 | [2]49 | 30 | 801 | 17.3 | [2]24 | 30 | 799 | 9.5 | 58 |
| 2,500 | 30 | 741 | −8.8 | [2]58 | 30 | 736 | −10.9 | 67 | 30 | 754 | 3.9 | 51 | 30 | 753 | 8.2 | [2]43 | 30 | 744 | −5.9 | [2]44 | 30 | 755 | 13.2 | [2]25 | 30 | 752 | 8.0 | 54 |
| 3,000 | 30 | 694 | −11.1 | [2]56 | 30 | 689 | −13.3 | 67 | 30 | 709 | 1.6 | 51 | 30 | 708 | 4.8 | [2]46 | 30 | 698 | −8.4 | [2]42 | 30 | 711 | 8.9 | [2]25 | 30 | 708 | 3.7 | 51 |
| 4,000 | 30 | 609 | −15.8 | [2]45 | 30 | 603 | −18.9 | 61 | 29 | 625 | −3.6 | 49 | 30 | 626 | −2.5 | [2]52 | 30 | 612 | −13.7 | [2]45 | 30 | 629 | 0.6 | [2]29 | 29 | 625 | −4.1 | 53 |
| 5,000 | 30 | 533 | −21.3 | [2]46 | 27 | 528 | −24.5 | 59 | 27 | 551 | −10.1 | 44 | 30 | 551 | −10.3 | [2]60 | 29 | 536 | −19.3 | [2]46 | 30 | 554 | −7.4 | [2]32 | 29 | 550 | −11.6 | 54 |
| 6,000 | 30 | 464 | −27.5 | [2]42 | 25 | 459 | −31.2 | 56 | 26 | 484 | −16.7 | 43 | 30 | 483 | −17.7 | [2]54 | 28 | 468 | −25.7 | ---- | 29 | 487 | −14.8 | [2]31 | 28 | 481 | −18.6 | 53 |
| 7,000 | 30 | 403 | −34.4 | [2]52 | 23 | 397 | −38.0 | 48 | 24 | 423 | −23.5 | 42 | 29 | 422 | −24.9 | [2]50 | 28 | 407 | −32.7 | ---- | 28 | 426 | −21.7 | [2]29 | 28 | 420 | −25.5 | 52 |
| 8,000 | 29 | 349 | −40.9 | ---- | 22 | 343 | −43.7 | ---- | 22 | 368 | −30.9 | 40 | 28 | 367 | −32.8 | ---- | 28 | 352 | −39.3 | ---- | 28 | 371 | −29.1 | [2]27 | 26 | 366 | −32.7 | 49 |
| 9,000 | 28 | 300 | −46.3 | ---- | 21 | 295 | −47.8 | ---- | 21 | 319 | −38.5 | ---- | 27 | 317 | −40.3 | ---- | 27 | 304 | −45.0 | ---- | 28 | 321 | −36.5 | ---- | 25 | 317 | −40.3 | ---- |
| 10,000 | 28 | 258 | −49.9 | ---- | 20 | 254 | −49.9 | ---- | 19 | 276 | −46.0 | ---- | 25 | 274 | −47.9 | ---- | 26 | 262 | −50.0 | ---- | 27 | 278 | −43.6 | ---- | 22 | 274 | −46.8 | ---- |
| 11,000 | 26 | 222 | −51.6 | ---- | 18 | 218 | −49.5 | ---- | 13 | 238 | −51.5 | ---- | 25 | 234 | −54.4 | ---- | 26 | 225 | −53.2 | ---- | 26 | 240 | −50.3 | ---- | 21 | 235 | −52.5 | ---- |
| 12,000 | 26 | 190 | −50.9 | ---- | 15 | 188 | −49.8 | ---- | 9 | 203 | −57.1 | ---- | 23 | 201 | −58.0 | ---- | 25 | 193 | −53.3 | ---- | 26 | 205 | −56.1 | ---- | 21 | 201 | −56.6 | ---- |
| 13,000 | 24 | 163 | −50.9 | ---- | 15 | 161 | −49.8 | ---- | ---- | ---- | ---- | ---- | 20 | 171 | −60.4 | ---- | 24 | 165 | −52.4 | ---- | 23 | 175 | −59.6 | ---- | 21 | 172 | −58.3 | ---- |
| 14,000 | 21 | 140 | −52.0 | ---- | 15 | 138 | −50.6 | ---- | ---- | ---- | ---- | ---- | 15 | 146 | −60.4 | ---- | 23 | 142 | −53.9 | ---- | 19 | 150 | −62.1 | ---- | 21 | 146 | −58.6 | ---- |
| 15,000 | 17 | 120 | −53.9 | ---- | 11 | 118 | −51.2 | ---- | ---- | ---- | ---- | ---- | 13 | 124 | −60.9 | ---- | 20 | 121 | −55.5 | ---- | 17 | 126 | −63.3 | ---- | 18 | 125 | −59.8 | ---- |
| 16,000 | 13 | 102 | −56.3 | ---- | 8 | 101 | −51.8 | ---- | ---- | ---- | ---- | ---- | 10 | 105 | −62.7 | ---- | 16 | 104 | −56.7 | ---- | 12 | 108 | −63.7 | ---- | 18 | 106 | −61.6 | ---- |
| 17,000 | 8 | 88 | −56.5 | ---- | 7 | 87 | −52.2 | ---- | ---- | ---- | ---- | ---- | 6 | 88 | −63.0 | ---- | 11 | 88 | −56.8 | ---- | 7 | 91 | −65.5 | ---- | 17 | 90 | −62.8 | ---- |
| 18,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 13 | 77 | −63.7 | ---- |
| 19,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 7 | 65 | −63.2 | ---- |

| Altitude (meters) m. s. l. | Great Falls, Mont., (1,128 m.) | | | | Huntington, W. Va. (172 m.) | | | | International Falls, Minn. (343 m.) | | | | Joliet, Ill. (178 m.) | | | | Lake Charles, La. (5 m.) | | | | Lakeburst, N. J.[1] (39 m.) | | | | Mazatlan, Mexico (80 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Surface | 30 | 886 | 9.9 | [2]51 | 30 | 997 | 8.9 | 70 | 30 | 975 | 2.6 | [2]60 | 29 | 995 | 6.1 | [2]77 | 30 | 1,017 | 19.0 | [2]84 | 24 | 1,011 | 5.5 | [2]69 | 29 | 1,004 | 21.7 | 80 |
| 500 | ---- | ---- | ---- | ---- | 30 | 958 | 9.1 | 68 | 30 | 956 | 3.1 | [2]54 | 29 | 957 | 6.4 | [2]60 | 30 | 960 | 18.1 | [2]61 | 24 | 956 | 4.1 | [2]57 | 29 | 957 | 21.8 | 64 |
| 1,000 | ---- | ---- | ---- | ---- | 30 | 902 | 6.4 | 67 | 30 | 899 | 0.5 | [2]55 | 29 | 900 | 4.0 | [2]56 | 30 | 905 | 16.3 | [2]48 | 24 | 898 | 1.8 | [2]60 | 27 | 904 | 21.7 | 49 |
| 1,500 | 30 | 847 | 8.8 | [2]47 | 30 | 849 | 3.6 | 66 | 30 | 844 | −2.7 | [2]61 | 29 | 846 | 1.5 | [2]56 | 30 | 854 | 14.3 | [2]37 | 24 | 844 | −0.9 | [2]59 | 27 | 853 | 19.7 | 42 |
| 2,000 | 30 | 797 | 5.4 | [2]50 | 30 | 797 | 1.0 | 66 | 30 | 792 | −5.0 | [2]57 | 29 | 795 | −0.7 | [2]50 | 30 | 804 | 12.2 | [2]33 | 24 | 792 | −2.7 | [2]55 | 26 | 804 | 17.3 | 33 |
| 2,500 | 30 | 749 | 2.0 | [2]54 | 30 | 749 | −1.4 | 64 | 30 | 743 | −7.1 | [2]51 | 29 | 746 | −2.6 | [2]49 | 30 | 757 | 9.5 | [2]29 | 24 | 744 | −5.4 | [2]54 | 26 | 758 | 14.3 | 30 |
| 3,000 | 30 | 704 | −1.5 | [2]58 | 29 | 703 | −3.7 | 60 | 30 | 697 | −9.7 | [2]51 | 28 | 701 | −5.4 | [2]44 | 30 | 713 | 6.7 | [2]27 | 24 | 697 | −8.0 | [2]50 | 25 | 714 | 11.0 | 28 |
| 4,000 | 30 | 620 | −8.4 | [2]60 | 29 | 619 | −9.0 | 57 | 29 | 611 | −15.4 | [2]47 | 28 | 616 | −10.9 | [2]49 | 30 | 630 | −0.1 | [2]28 | 24 | 612 | −13.0 | [2]48 | 25 | 632 | 4.2 | 29 |
| 5,000 | 30 | 544 | −14.8 | [2]61 | 27 | 543 | −15.5 | 55 | 29 | 535 | −21.5 | [2]47 | 27 | 541 | −16.6 | [2]46 | 30 | 555 | −6.9 | [2]24 | 24 | 537 | −18.9 | [2]43 | 23 | 559 | −2.9 | 32 |
| 6,000 | 30 | 476 | −21.9 | [2]61 | 27 | 475 | −22.1 | 52 | 29 | 466 | −28.3 | ---- | 24 | 472 | −23.8 | [2]48 | 30 | 488 | −13.6 | ---- | 23 | 469 | −25.3 | ---- | 23 | 492 | −10.0 | 34 |
| 7,000 | 29 | 415 | −29.2 | ---- | 27 | 414 | −28.4 | 50 | 28 | 405 | −34.6 | ---- | 24 | 410 | −30.7 | [2]50 | 30 | 427 | −20.5 | ---- | 23 | 408 | −31.6 | ---- | 22 | 431 | −17.7 | 32 |
| 8,000 | 26 | 359 | −37.0 | ---- | 27 | 359 | −34.5 | 48 | 28 | 350 | −40.7 | ---- | 24 | 356 | −37.6 | ---- | 30 | 372 | −28.0 | ---- | 19 | 352 | −37.5 | ---- | 20 | 376 | −25.5 | 32 |
| 9,000 | 25 | 310 | −43.9 | ---- | 26 | 311 | −41.1 | ---- | 24 | 303 | −46.4 | ---- | 22 | 307 | −44.2 | ---- | 30 | 323 | −35.8 | ---- | 18 | 305 | −42.8 | ---- | 18 | 327 | −32.8 | 29 |
| 10,000 | 24 | 267 | −50.8 | ---- | 26 | 268 | −47.6 | ---- | 23 | 260 | −50.3 | ---- | 18 | 264 | −49.3 | ---- | 29 | 279 | −43.4 | ---- | 18 | 263 | −48.5 | ---- | 17 | 284 | −40.3 | ---- |
| 11,000 | 22 | 229 | −56.2 | ---- | 26 | 230 | −53.2 | ---- | 20 | 222 | −51.9 | ---- | 18 | 226 | −54.0 | ---- | 27 | 240 | −50.3 | ---- | 16 | 226 | −52.6 | ---- | 15 | 244 | −48.1 | ---- |
| 12,000 | 21 | 195 | −57.0 | ---- | 26 | 197 | −56.0 | ---- | 20 | 190 | −51.6 | ---- | 16 | 194 | −55.0 | ---- | 26 | 206 | −56.3 | ---- | 14 | 193 | −53.1 | ---- | 15 | 209 | −55.1 | ---- |
| 13,000 | 19 | 166 | −55.3 | ---- | 23 | 168 | −55.2 | ---- | 14 | 163 | −50.8 | ---- | 14 | 166 | −54.3 | ---- | 24 | 175 | −60.0 | ---- | 11 | 166 | −53.0 | ---- | 11 | 178 | −61.3 | ---- |
| 14,000 | 16 | 142 | −55.4 | ---- | 20 | 144 | −55.4 | ---- | 11 | 140 | −51.4 | ---- | 10 | 143 | −56.7 | ---- | 19 | 149 | −61.2 | ---- | 8 | 142 | −54.9 | ---- | 10 | 152 | −64.9 | ---- |
| 15,000 | 14 | 122 | −56.0 | ---- | 18 | 123 | −56.8 | ---- | 7 | 120 | −53.0 | ---- | 6 | 122 | −57.7 | ---- | 19 | 127 | −63.4 | ---- | 8 | 121 | −57.1 | ---- | 10 | 128 | −68.4 | ---- |
| 16,000 | 7 | 104 | −57.0 | ---- | 15 | 105 | −58.3 | ---- | 5 | 103 | −53.3 | ---- | ---- | ---- | ---- | ---- | 13 | 108 | −65.8 | ---- | ---- | ---- | ---- | ---- | 9 | 109 | −71.6 | ---- |
| 17,000 | ---- | ---- | ---- | ---- | 9 | 90 | −60.9 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 9 | 92 | −68.0 | ---- | ---- | ---- | ---- | ---- | 8 | 92 | −73.8 | ---- |
| 18,000 | ---- | ---- | ---- | ---- | 5 | 76 | −58.3 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 7 | 77 | −66.4 | ---- | ---- | ---- | ---- | ---- | 8 | 78 | −71.8 | ---- |
| 19,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 5 | 66 | −65.8 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |

| Altitude (meters) m. s. l. | Medford, Oreg. (409 m.) | | | | Miami, Fla. (4 m.) | | | | Nashville, Tenn. (180 m.) | | | | Norfolk, Va.[1] (4 m.) | | | | Oakland, Calif. (6 m.) | | | | Oklahoma City, Okla. (391 m.) | | | | Omaha, Nebr. (301 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Surface | 29 | 968 | 13.2 | 62 | 30 | 1,017 | 20.8 | 79 | 30 | 996 | 13.1 | [2]64 | 22 | 1,018 | 10.3 | [2]64 | 30 | 1,016 | 13.5 | [2]76 | 30 | 969 | 16.5 | [2]61 | 15 | 981 | 11.1 | [2]63 |
| 500 | 29 | 958 | 12.9 | 63 | 30 | 960 | 19.0 | 79 | 30 | 959 | 12.4 | [2]55 | 22 | 959 | 8.6 | [2]54 | 30 | 958 | 11.2 | [2]66 | 30 | 957 | 17.2 | [2]54 | 15 | 958 | 10.6 | [2]55 |
| 1,000 | 29 | 902 | 10.1 | 64 | 30 | 906 | 15.4 | 81 | 30 | 903 | 9.7 | [2]53 | 22 | 902 | 5.7 | [2]48 | 30 | 903 | 10.1 | [2]51 | 30 | 902 | 16.5 | [2]44 | 15 | 902 | 8.7 | [2]53 |
| 1,500 | 29 | 849 | 6.5 | 68 | 30 | 854 | 12.8 | 76 | 30 | 850 | 6.5 | [2]55 | 22 | 848 | 2.7 | [2]53 | 30 | 850 | 8.5 | [2]43 | 30 | 851 | 13.7 | [2]47 | 15 | 849 | 6.7 | [2]50 |
| 2,000 | 29 | 798 | 2.8 | 73 | 30 | 804 | 10.5 | 65 | 30 | 799 | 4.2 | [2]57 | 22 | 797 | −0.2 | [2]53 | 30 | 800 | 6.3 | [2]35 | 30 | 801 | 11.2 | [2]48 | 15 | 798 | 4.6 | [2]48 |
| 2,500 | 29 | 750 | −0.5 | 77 | 30 | 757 | 8.7 | 54 | 30 | 752 | 1.6 | [2]54 | 22 | 748 | −2.9 | [2]49 | 30 | 752 | 3.8 | [2]33 | 30 | 754 | 8.7 | [2]43 | 15 | 751 | 2.4 | [2]49 |
| 3,000 | 29 | 705 | −3.0 | 73 | 30 | 713 | 6.2 | 49 | 30 | 706 | −1.0 | [2]49 | 22 | 702 | −5.6 | [2]46 | 29 | 707 | 1.0 | [2]34 | 30 | 710 | 6.2 | [2]39 | 15 | 706 | 0.2 | [2]53 |
| 4,000 | 29 | 621 | −8.2 | 60 | 29 | 630 | 0.5 | 43 | 28 | 622 | −6.8 | [2]41 | 22 | 618 | −10.9 | [2]39 | 29 | 624 | −5.5 | [2]38 | 30 | 628 | −0.9 | [2]39 | 15 | 622 | −5.6 | [2]56 |
| 5,000 | 28 | 545 | −14.5 | 55 | 27 | 556 | −5.5 | 38 | 28 | 547 | −12.9 | [2]45 | 22 | 542 | −16.7 | [2]33 | 29 | 548 | −11.9 | [2]37 | 28 | 552 | −8.5 | [2]39 | 15 | 547 | −12.0 | [2]48 |
| 6,000 | 27 | 477 | −20.3 | 54 | 25 | 489 | −11.6 | 38 | 28 | 479 | −19.5 | [2]44 | 19 | 474 | −23.0 | ---- | 29 | 481 | −18.6 | [2]37 | 27 | 485 | −15.1 | [2]38 | 15 | 479 | −18.7 | [2]49 |
| 7,000 | 27 | 416 | −27.0 | 53 | 25 | 428 | −18.5 | 36 | 28 | 418 | −26.6 | [2]44 | 18 | 414 | −29.4 | ---- | 29 | 420 | −25.7 | [2]41 | 27 | 424 | −22.1 | [2]38 | 15 | 418 | −25.8 | ---- |
| 8,000 | 26 | 361 | −34.2 | 50 | 25 | 374 | −25.6 | 38 | 28 | 362 | −33.8 | ---- | ---- | ---- | ---- | ---- | 29 | 365 | −33.1 | [2]47 | 26 | 369 | −30.2 | ---- | 15 | 364 | −33.6 | ---- |
| 9,000 | 23 | 311 | −42.2 | ---- | 23 | 325 | −33.2 | 31 | 27 | 313 | −41.1 | ---- | ---- | ---- | ---- | ---- | 28 | 315 | −40.2 | ---- | 24 | 320 | −37.9 | ---- | 15 | 314 | −41.1 | ---- |
| 10,000 | 21 | 268 | −49.0 | ---- | 20 | 281 | −40.4 | ---- | 25 | 270 | −48.1 | ---- | ---- | ---- | ---- | ---- | 28 | 272 | −46.8 | ---- | 23 | 277 | −45.3 | ---- | 15 | 271 | −48.3 | ---- |
| 11,000 | 21 | 230 | −53.0 | ---- | 18 | 242 | −47.6 | ---- | 25 | 232 | −54.4 | ---- | ---- | ---- | ---- | ---- | 26 | 234 | −52.6 | ---- | 21 | 238 | −52.4 | ---- | 15 | 232 | −54.7 | ---- |
| 12,000 | 21 | 197 | −54.9 | ---- | 17 | 208 | −54.5 | ---- | 24 | 198 | −58.3 | ---- | ---- | ---- | ---- | ---- | 24 | 200 | −56.2 | ---- | 17 | 204 | −57.8 | ---- | 14 | 198 | −60.1 | ---- |
| 13,000 | 20 | 168 | −54.6 | ---- | 16 | 178 | −59.7 | ---- | 22 | 170 | −58.9 | ---- | ---- | ---- | ---- | ---- | 20 | 170 | −55.8 | ---- | 13 | 174 | −60.7 | ---- | 13 | 170 | −60.1 | ---- |
| 14,000 | 19 | 144 | −55.5 | ---- | 15 | 151 | −63.2 | ---- | 17 | 145 | −58.6 | ---- | ---- | ---- | ---- | ---- | 19 | 145 | −56.3 | ---- | 10 | 150 | −60.5 | ---- | 12 | 144 | −58.9 | ---- |
| 15,000 | 18 | 123 | −57.2 | ---- | 13 | 128 | −65.9 | ---- | 14 | 123 | −60.3 | ---- | ---- | ---- | ---- | ---- | 16 | 124 | −58.1 | ---- | 7 | 128 | −62.1 | ---- | 10 | 123 | −58.5 | ---- |
| 16,000 | 13 | 106 | −57.9 | ---- | 11 | 109 | −69.7 | ---- | 11 | 104 | −62.2 | ---- | ---- | ---- | ---- | ---- | 12 | 106 | −59.8 | ---- | 7 | 109 | −63.9 | ---- | 6 | 106 | −58.8 | ---- |
| 17,000 | 10 | 90 | −57.7 | ---- | 6 | 92 | −73.6 | ---- | 6 | 89 | −62.6 | ---- | ---- | ---- | ---- | ---- | 7 | 90 | −60.3 | ---- | 6 | 93 | −65.4 | ---- | 5 | 90 | −59.7 | ---- |
| 18,000 | 8 | 77 | −58.5 | ---- | 5 | 78 | −73.2 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 5 | 77 | −59.3 | ---- | 5 | 79 | −64.3 | ---- | 5 | 77 | −60.0 | ---- |

[1] U. S. Navy.

[2] Humidity data obtained by electric hygrometer

*Mean free-air barometric pressure in millibars, temperature in degrees centigrade, and relative humidities in percent, obtained by radiosondes during April 1943*—Continued

STATIONS AND ELEVATIONS IN METERS ABOVE SEA LEVEL—Continued

| Altitude (meters) m. s. l. | Pensacola, Fla.[3] (24 m.) | | | | Phoenix, Ariz. (339 m.) | | | | Portland, Maine (20 m.) | | | | St. Louis, Mo. (171 m.) | | | | St. Paul, Minn. (225 m.) | | | | San Antonio, Tex. (242 m.) | | | | San Diego, Calif.[1] (19 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | ---- | ---- | ---- | ---- | 29 | 971 | 21.1 | 37 | 28 | 1,010 | 0.9 | 72 | 30 | 996 | 11.7 | [2]64 | 30 | 990 | 6.5 | [2]60 | 30 | 988 | 20.4 | [2]67 | 30 | 1,012 | 15.1 | [2]81 |
| 500 | ---- | ---- | ---- | ---- | 29 | 954 | 24.5 | 33 | 28 | 952 | 1.6 | 72 | 30 | 958 | 11.2 | [2]55 | 30 | 957 | 6.4 | [2]52 | 30 | 959 | 20.1 | [2]62 | 30 | 956 | 13.3 | [2]72 |
| 1,000 | ---- | ---- | ---- | ---- | 29 | 900 | 21.9 | 30 | 28 | 895 | −1.7 | 69 | 30 | 902 | 8.8 | [2]55 | 30 | 900 | 3.5 | [2]52 | 30 | 905 | 17.6 | [2]56 | 30 | 901 | 13.2 | [2]49 |
| 1,500 | ---- | ---- | ---- | ---- | 29 | 850 | 17.9 | 30 | 28 | 840 | −4.4 | 70 | 30 | 849 | 6.1 | [2]54 | 30 | 846 | 0.9 | [2]54 | 30 | 853 | 15.8 | [2]46 | 30 | 849 | 11.5 | [2]40 |
| 2,000 | ---- | ---- | ---- | ---- | 29 | 800 | 13.7 | 31 | 28 | 788 | −6.5 | 69 | 30 | 799 | 3.9 | [2]54 | 30 | 795 | −1.7 | [2]50 | 30 | 804 | 13.7 | [2]32 | 30 | 799 | 9.4 | [2]33 |
| 2,500 | ---- | ---- | ---- | ---- | 29 | 754 | 9.4 | 32 | 28 | 739 | −8.5 | 66 | 30 | 751 | 1.5 | [2]53 | 30 | 746 | −3.8 | [2]44 | 30 | 758 | 11.3 | [2]30 | 30 | 752 | 6.7 | [2]31 |
| 3,000 | ---- | ---- | ---- | ---- | 29 | 710 | 5.5 | 34 | 28 | 692 | −10.8 | 63 | 30 | 705 | −0.9 | [2]48 | 30 | 700 | −6.5 | [2]43 | 30 | 713 | 8.6 | [2]26 | 30 | 708 | 3.7 | [2]29 |
| 4,000 | ---- | ---- | ---- | ---- | 29 | 627 | −1.9 | 31 | 25 | 607 | −17.0 | 62 | 30 | 621 | −6.7 | [2]48 | 30 | 615 | −12.1 | [2]41 | 30 | 631 | 1.9 | [2]24 | 29 | 625 | −3.4 | [2]25 |
| 5,000 | ---- | ---- | ---- | ---- | 25 | 552 | −8.7 | 33 | 23 | 530 | −23.8 | 62 | 30 | 546 | −13.3 | [2]49 | 30 | 539 | −18.2 | [2]41 | 30 | 557 | −5.0 | [2]27 | 29 | 550 | −10.0 | [2]29 |
| 6,000 | ---- | ---- | ---- | ---- | 24 | 484 | −16.0 | 32 | 21 | 462 | −29.8 | 62 | 29 | 478 | −20.4 | [2]49 | 30 | 471 | −24.4 | [2]40 | 30 | 490 | −12.2 | [2]30 | 29 | 482 | −16.7 | ---- |
| 7,000 | ---- | ---- | ---- | ---- | 23 | 423 | −23.2 | 32 | 21 | 400 | −35.2 | 41 | 29 | 416 | −27.2 | [2]49 | 30 | 409 | −31.6 | ---- | 30 | 429 | −19.5 | [2]31 | 29 | 421 | −23.7 | ---- |
| 8,000 | ---- | ---- | ---- | ---- | 23 | 368 | −30.1 | 31 | 19 | 346 | −40.7 | ---- | 27 | 362 | −34.6 | [2]45 | 30 | 354 | −38.3 | ---- | 28 | 373 | −27.0 | ---- | 14 | 369 | −30.4 | ---- |
| 9,000 | ---- | ---- | ---- | ---- | 23 | 319 | −36.3 | 32 | 19 | 298 | −45.0 | ---- | 26 | 312 | −41.9 | ---- | 30 | 306 | −44.5 | ---- | 28 | 324 | −34.7 | ---- | 14 | 318 | −37.8 | ---- |
| 10,000 | ---- | ---- | ---- | ---- | 23 | 276 | −42.6 | ---- | 14 | 257 | −48.3 | ---- | 24 | 269 | −48.7 | ---- | 29 | 263 | −49.9 | ---- | 27 | 280 | −42.4 | ---- | 14 | 275 | −45.1 | ---- |
| 11,000 | ---- | ---- | ---- | ---- | 21 | 238 | −48.7 | ---- | 13 | 222 | −51.5 | ---- | 19 | 231 | −54.4 | ---- | 28 | 225 | −52.9 | ---- | 27 | 241 | −50.1 | ---- | 12 | 236 | −52.4 | ---- |
| 12,000 | ---- | ---- | ---- | ---- | 20 | 204 | −53.2 | ---- | 11 | 190 | −49.9 | ---- | 18 | 197 | −56.9 | ---- | 26 | 193 | −53.1 | ---- | 26 | 207 | −56.6 | ---- | 11 | 202 | −56.3 | ---- |
| 13,000 | ---- | ---- | ---- | ---- | 20 | 174 | −56.4 | ---- | 8 | 162 | −50.4 | ---- | 15 | 169 | −57.1 | ---- | 22 | 165 | −52.3 | ---- | 24 | 176 | −60.2 | ---- | 10 | 172 | −58.0 | ---- |
| 14,000 | ---- | ---- | ---- | ---- | 20 | 148 | −58.3 | ---- | 6 | 139 | −50.9 | ---- | 11 | 144 | −57.1 | ---- | 16 | 141 | −52.4 | ---- | 22 | 150 | −62.0 | ---- | 8 | 148 | −59.5 | ---- |
| 15,000 | ---- | ---- | ---- | ---- | 19 | 126 | −60.3 | ---- | ---- | ---- | ---- | ---- | 11 | 123 | −58.1 | ---- | 13 | 121 | −54.5 | ---- | 20 | 128 | −64.2 | ---- | 7 | 125 | −61.9 | ---- |
| 16,000 | ---- | ---- | ---- | ---- | 19 | 108 | −62.2 | ---- | ---- | ---- | ---- | ---- | 11 | 105 | −59.6 | ---- | 8 | 105 | −57.8 | ---- | 13 | 109 | −66.9 | ---- | 6 | 106 | −64.8 | ---- |
| 17,000 | ---- | ---- | ---- | ---- | 18 | 92 | −63.8 | ---- | ---- | ---- | ---- | ---- | 8 | 89 | −60.5 | ---- | 7 | 89 | −57.8 | ---- | 7 | 92 | −67.0 | ---- | ---- | ---- | ---- | ---- |
| 18,000 | ---- | ---- | ---- | ---- | 15 | 78 | −64.6 | ---- | ---- | ---- | ---- | ---- | 6 | 76 | −60.1 | ---- | ---- | ---- | ---- | ---- | 6 | 78 | −67.0 | ---- | ---- | ---- | ---- | ---- |
| 19,000 | ---- | ---- | ---- | ---- | 9 | 66 | −64.2 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 20,000 | ---- | ---- | ---- | ---- | 7 | 57 | −62.2 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |

| Altitude (meters) m. s. l. | San Juan, P. R. (15 m.) | | | | Sault Ste. Marie, Mich. (221 m.) | | | | Seattle, Wash.[1] (22 m.) | | | | Spokane, Wash. (598 m.) | | | | Swan Island, West Indies (10 m.)[4] | | | | Tacubaya, Mexico (2,306 m.) | | | | Tapachula, Mexico (115 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 30 | 1,014 | 23.7 | [2]85 | 30 | 990 | −0.1 | 78 | 28 | 1,014 | 12.7 | [2]65 | 30 | 945 | 9.7 | [2]72 | ---- | ---- | ---- | ---- | 29 | 774 | 16.7 | 44 | 19 | 1,000 | 26.2 | 78 |
| 500 | 30 | 960 | 20.6 | [2]83 | 30 | 956 | −0.2 | 77 | 28 | 957 | 10.0 | [2]61 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 19 | 957 | 25.2 | 81 |
| 1,000 | 29 | 906 | 17.6 | [2]82 | 30 | 898 | −2.5 | 74 | 28 | 901 | 6.5 | [2]63 | 30 | 900 | 9.9 | [2]55 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 19 | 904 | 22.1 | 79 |
| 1,500 | 29 | 854 | 14.7 | [2]78 | 30 | 843 | −5.4 | 72 | 28 | 847 | 3.1 | [2]64 | 30 | 847 | 6.1 | [2]58 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 19 | 854 | 19.1 | 88 |
| 2,000 | 29 | 805 | 12.3 | [2]68 | 30 | 790 | −8.1 | 70 | 28 | 796 | −0.2 | [2]69 | 30 | 797 | 2.3 | [2]61 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 19 | 805 | 16.3 | 90 |
| 2,500 | 29 | 758 | 10.3 | [2]56 | 30 | 740 | −10.0 | 68 | 27 | 747 | −3.5 | [2]68 | 30 | 749 | −1.2 | [2]60 | ---- | ---- | ---- | ---- | 29 | 757 | 15.3 | 45 | 19 | 759 | 13.8 | 92 |
| 3,000 | 29 | 714 | 8.4 | [2]45 | 30 | 694 | −12.6 | 67 | 27 | 702 | −6.1 | [2]67 | 29 | 703 | −4.1 | [2]59 | ---- | ---- | ---- | ---- | 29 | 713 | 11.9 | 47 | 19 | 715 | 11.4 | 88 |
| 4,000 | 28 | 632 | 3.6 | [2]36 | 29 | 608 | −17.4 | 67 | 27 | 617 | −11.7 | [2]62 | 29 | 618 | −10.2 | [2]52 | ---- | ---- | ---- | ---- | 29 | 632 | 4.6 | 52 | 19 | 634 | 5.6 | 83 |
| 5,000 | 27 | 558 | −2.1 | [2]34 | 28 | 532 | −22.6 | 66 | 27 | 540 | −18.4 | [2]65 | 29 | 543 | −16.5 | ---- | ---- | ---- | ---- | ---- | 29 | 558 | −2.9 | 60 | 19 | 561 | 0.3 | 56 |
| 6,000 | 26 | 492 | −8.0 | [2]36 | 25 | 463 | −29.2 | 65 | 27 | 472 | −25.3 | [2]62 | 28 | 474 | −23.3 | ---- | ---- | ---- | ---- | ---- | 27 | 491 | −9.4 | 58 | 19 | 495 | −5.6 | 42 |
| 7,000 | 26 | 432 | −14.4 | [2]36 | 25 | 402 | −36.1 | 63 | 26 | 410 | −31.6 | [2]59 | 25 | 412 | −30.8 | ---- | ---- | ---- | ---- | ---- | 26 | 431 | −15.7 | 49 | 19 | 435 | −12.5 | 38 |
| 8,000 | 26 | 378 | −21.3 | [2]36 | 24 | 347 | −42.1 | ---- | 22 | 356 | −38.1 | ---- | 25 | 357 | −38.4 | ---- | ---- | ---- | ---- | ---- | 24 | 377 | −22.4 | 44 | 18 | 380 | −19.6 | 33 |
| 9,000 | 25 | 328 | −29.2 | [2]41 | 23 | 298 | −46.4 | ---- | 22 | 306 | −44.7 | ---- | 24 | 308 | −45.5 | ---- | ---- | ---- | ---- | ---- | 23 | 328 | −29.8 | 45 | 17 | 331 | −26.7 | 34 |
| 10,000 | 25 | 285 | −36.9 | ---- | 21 | 257 | −49.3 | ---- | 22 | 264 | −50.3 | ---- | 23 | 264 | −51.5 | ---- | ---- | ---- | ---- | ---- | 22 | 285 | −37.4 | 33 | 17 | 288 | −34.3 | 34 |
| 11,000 | 22 | 246 | −44.8 | ---- | 18 | 221 | −51.2 | ---- | 17 | 226 | −53.0 | ---- | 21 | 226 | −54.5 | ---- | ---- | ---- | ---- | ---- | 20 | 246 | −45.2 | ---- | 17 | 249 | −42.1 | ---- |
| 12,000 | 22 | 212 | −52.3 | ---- | 17 | 189 | −50.3 | ---- | 16 | 193 | −53.7 | ---- | 20 | 193 | −54.2 | ---- | ---- | ---- | ---- | ---- | 19 | 212 | −51.8 | ---- | 17 | 214 | −50.0 | ---- |
| 13,000 | 22 | 181 | −59.2 | ---- | 14 | 162 | −49.1 | ---- | 16 | 165 | −53.2 | ---- | 19 | 166 | −53.0 | ---- | ---- | ---- | ---- | ---- | 16 | 180 | −58.9 | ---- | 17 | 184 | −57.9 | ---- |
| 14,000 | 15 | 154 | −65.9 | ---- | 11 | 139 | −49.8 | ---- | 12 | 141 | −53.9 | ---- | 14 | 142 | −53.4 | ---- | ---- | ---- | ---- | ---- | 15 | 154 | −64.6 | ---- | 16 | 156 | −66.3 | ---- |
| 15,000 | 11 | 130 | −71.2 | ---- | 8 | 120 | −50.3 | ---- | 7 | 121 | −54.1 | ---- | 10 | 121 | −54.9 | ---- | ---- | ---- | ---- | ---- | 15 | 130 | −70.2 | ---- | 15 | 132 | −73.1 | ---- |
| 16,000 | 11 | 110 | −75.2 | ---- | 5 | 102 | −51.2 | ---- | 7 | 103 | −54.3 | ---- | 9 | 104 | −55.4 | ---- | ---- | ---- | ---- | ---- | 11 | 110 | −74.6 | ---- | 15 | 111 | −77.7 | ---- |
| 17,000 | 9 | 92 | −77.2 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 8 | 93 | −77.7 | ---- | 13 | 93 | −80.3 | ---- |
| 18,000 | 7 | 78 | −74.6 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 8 | 78 | −78.7 | ---- | 9 | 78 | −81.3 | ---- |
| 19,000 | 6 | 66 | −69.9 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 5 | 65 | −76.2 | ---- |
| 20,000 | 5 | 56 | −65.1 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |

| Altitude (meters) m. s. l. | Stations and elevations in meters above sea level: Tatoosh Island, Wash. (31 m.) | | | | Tongue Point, Oreg.[1] (21 m.) | | | | Washington, D.C. (25 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 30 | 1,013 | 8.8 | [2]83 | 20 | 1,015 | 10.3 | [2]76 | 30 | 1,013 | 9.3 | [2]56 |
| 500 | 30 | 957 | 6.8 | [2]74 | 20 | 957 | 6.6 | [2]75 | 30 | 956 | 7.2 | [2]51 |
| 1,000 | 30 | 900 | 4.0 | [2]68 | 20 | 901 | 2.7 | [2]79 | 30 | 900 | 4.7 | [2]52 |
| 1,500 | 30 | 846 | 1.4 | [2]64 | 20 | 847 | −0.3 | [2]74 | 30 | 846 | 2.1 | [2]55 |
| 2,000 | 30 | 795 | −1.4 | [2]59 | 20 | 795 | −2.7 | [2]74 | 30 | 795 | −1.0 | [2]56 |
| 2,500 | 30 | 746 | −4.2 | [2]52 | 20 | 746 | −5.6 | [2]67 | 30 | 747 | −2.6 | [2]44 |
| 3,000 | 30 | 700 | −7.1 | [2]51 | 20 | 700 | −8.6 | [2]61 | 30 | 700 | −5.0 | [2]39 |
| 4,000 | 30 | 615 | −12.7 | [2]47 | 20 | 615 | −14.1 | [2]51 | 30 | 616 | −10.9 | [2]36 |
| 5,000 | 30 | 539 | −19.3 | [2]50 | 20 | 539 | −19.6 | [2]55 | 30 | 540 | −17.2 | [2]34 |
| 6,000 | 29 | 470 | −26.3 | [2]49 | 20 | 472 | −25.5 | [2]61 | 30 | 472 | −23.6 | [2]38 |
| 7,000 | 29 | 408 | −33.2 | [2]54 | 19 | 409 | −32.2 | [2]65 | 30 | 411 | −30.4 | [2]44 |

| Altitude (meters) m. s. l. | Stations and elevations in meters above sea level: Tatoosh Island, Wash. (31 m.) | | | | Tongue Point Oreg.[1] (21 m.) | | | | Washington, D. C. (25 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| 8,000 | 29 | 353 | −40.0 | ---- | 17 | 352 | −39.7 | ---- | 29 | 356 | −36.6 | ---- |
| 9,000 | 29 | 305 | −46.0 | ---- | 15 | 305 | −45.5 | ---- | 27 | 308 | −42.6 | ---- |
| 10,000 | 29 | 262 | −50.6 | ---- | 14 | 262 | −51.0 | ---- | 26 | 266 | −48.6 | ---- |
| 11,000 | 28 | 225 | −53.0 | ---- | 14 | 224 | −54.2 | ---- | 22 | 228 | −52.0 | ---- |
| 12,000 | 24 | 192 | −53.0 | ---- | 13 | 193 | −55.3 | ---- | 21 | 195 | −54.0 | ---- |
| 13,000 | 23 | 165 | −51.9 | ---- | 10 | 165 | −53.7 | ---- | 18 | 167 | −53.8 | ---- |
| 14,000 | 19 | 141 | −53.3 | ---- | 9 | 141 | −53.8 | ---- | 17 | 142 | −53.9 | ---- |
| 15,000 | 13 | 122 | −55.0 | ---- | 7 | 121 | −55.1 | ---- | 15 | 122 | −55.6 | ---- |
| 16,000 | 9 | 104 | −56.5 | ---- | 6 | 104 | −55.2 | ---- | 12 | 104 | −56.5 | ---- |
| 17,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 6 | 89 | −57.1 | ---- |

[1] U. S. Navy. [2] Humidity data obtained by electric hygrometer. [3] Insufficient data. [4] Observations temporarily discontinued.

*Mean free-air barometric pressure in millibars, temperature in degrees centigrade, and relative humidities in percent, obtained by radiosondes during May 1943*

STATIONS AND ELEVATIONS IN METERS ABOVE SEA LEVEL—Continued

| Altitude (meters) m. s. l. | Albany, N. Y. (86 m.) | | | | Albuquerque, N. Mex. (1,620 m.) | | | | Apalachicola, Fla. (7 m.) | | | | Atlanta, Ga. (300 m.) | | | | Bismarck, N. Dak. (505 m.) | | | | Boise, Idaho (868 m.) | | | | Brownsville, Tex. (6 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 31 | 1,006 | 12.3 | [2]79 | 31 | 834 | 18.8 | [2]30 | 31 | 1,017 | 23.5 | [2]84 | 31 | 983 | 20.4 | 70 | 31 | 954 | 10.5 | 63 | 21 | 914 | 14.6 | [2]46 | 31 | 1,011 | 24.8 | [2]86 |
| 500 | 31 | 958 | 11.9 | [2]70 | | | | | 31 | 961 | 22.9 | [2]64 | 31 | 961 | 21.4 | 66 | | | | | | | | | 31 | 956 | 22.7 | [2]75 |
| 1,000 | 31 | 902 | 9.6 | [2]69 | | | | | 31 | 907 | 20.3 | [2]61 | 31 | 907 | 18.9 | 63 | 31 | 899 | 9.7 | 63 | 21 | 901 | 14.7 | [2]42 | 31 | 903 | 21.4 | [2]57 |
| 1,500 | 31 | 850 | 7.0 | [2]70 | | | | | 31 | 856 | 16.9 | [2]57 | 31 | 856 | 16.0 | 64 | 31 | 846 | 7.0 | 63 | 21 | 848 | 11.9 | [2]39 | 31 | 852 | 19.3 | [2]43 |
| 2,000 | 31 | 799 | 4.3 | [2]69 | 31 | 798 | 17.7 | [2]27 | 31 | 807 | 14.6 | [2]48 | 31 | 806 | 13.0 | 63 | 31 | 796 | 3.9 | 63 | 21 | 798 | 8.0 | [2]45 | 31 | 804 | 17.4 | [2]35 |
| 2,500 | 31 | 751 | 1.8 | [2]65 | 31 | 752 | 14.3 | [2]27 | 31 | 760 | 12.2 | [2]45 | 31 | 760 | 10.2 | 57 | 31 | 748 | 0.7 | 63 | 21 | 751 | 4.0 | [2]52 | 31 | 758 | 15.3 | [2]31 |
| 3,000 | 31 | 706 | −0.9 | [2]64 | 31 | 709 | 10.6 | [2]30 | 31 | 716 | 9.6 | [2]38 | 31 | 715 | 7.7 | 51 | 31 | 702 | −2.8 | 64 | 21 | 706 | 0.4 | [2]56 | 31 | 714 | 12.6 | [2]29 |
| 4,000 | 31 | 622 | −5.7 | [2]56 | 31 | 628 | 2.3 | [2]37 | 31 | 634 | 3.8 | [2]32 | 31 | 633 | 2.0 | 46 | 31 | 618 | −8.9 | 64 | 21 | 622 | −6.7 | [2]55 | 30 | 634 | 6.1 | [2]28 |
| 5,000 | 31 | 547 | −11.1 | [2]50 | 31 | 554 | −6.0 | [2]47 | 31 | 560 | −2.2 | [2]26 | 31 | 558 | −4.0 | 48 | 30 | 543 | −15.2 | 59 | 21 | 547 | −13.4 | [2]50 | 30 | 560 | −0.6 | [2]30 |
| 6,000 | 31 | 480 | −17.1 | [2]53 | 31 | 486 | −13.6 | [2]46 | 30 | 493 | −7.9 | | 31 | 491 | −10.6 | 44 | 30 | 475 | −22.0 | 58 | 21 | 479 | −20.2 | [2]47 | 30 | 493 | −7.4 | [2]34 |
| 7,000 | 31 | 419 | −23.8 | [2]53 | 29 | 426 | −20.5 | [2]40 | 30 | 433 | −14.6 | | 29 | 430 | −17.6 | 43 | 30 | 414 | −29.3 | 57 | 21 | 418 | −27.3 | [2]45 | 30 | 433 | −14.5 | [2]39 |
| 8,000 | 30 | 364 | −31.3 | [2]61 | 29 | 371 | −27.7 | [2]47 | 30 | 378 | −21.8 | | 27 | 376 | −24.9 | 41 | 28 | 359 | −36.0 | 57 | 21 | 363 | −34.2 | | 30 | 379 | −21.3 | |
| 9,000 | 30 | 315 | −38.0 | | 27 | 322 | −35.4 | | 30 | 329 | −29.1 | | 27 | 326 | −32.4 | 40 | 27 | 310 | −43.4 | | 20 | 313 | −40.9 | | 30 | 330 | −28.7 | |
| 10,000 | 30 | 272 | −44.7 | | 27 | 278 | −42.7 | | 30 | 286 | −36.5 | | 25 | 283 | −39.9 | 35 | 27 | 267 | −49.0 | | 20 | 271 | −16.8 | | 30 | 286 | −36.0 | |
| 11,000 | 29 | 234 | −50.7 | | 26 | 240 | −49.6 | | 30 | 247 | −43.7 | | 22 | 244 | −47.2 | | 26 | 229 | −52.6 | | 17 | 232 | −51.3 | | 29 | 248 | −43.6 | |
| 12,000 | 27 | 200 | −55.6 | | 26 | 205 | −55.3 | | 29 | 213 | −50.6 | | 22 | 210 | −54.0 | | 24 | 196 | −54.0 | | 15 | 200 | −55.7 | | 29 | 213 | −51.3 | |
| 13,000 | 26 | 172 | −57.4 | | 26 | 175 | −57.9 | | 27 | 182 | −57.1 | | 20 | 179 | −59.7 | | 23 | 168 | −53.4 | | 13 | 170 | −57.0 | | 29 | 182 | −58.2 | |
| 14,000 | 24 | 146 | −57.0 | | 26 | 150 | −59.6 | | 25 | 155 | −61.7 | | 19 | 152 | −63.0 | | 20 | 143 | −52.8 | | 11 | 145 | −56.0 | | 29 | 155 | −64.3 | |
| 15,000 | 24 | 125 | −57.8 | | 24 | 127 | −60.9 | | 23 | 132 | −64.4 | | 17 | 129 | −64.3 | | 18 | 123 | −53.2 | | 9 | 124 | −55.4 | | 26 | 132 | −68.9 | |
| 16,000 | 17 | 107 | −57.4 | | 22 | 109 | −61.9 | | 17 | 112 | −66.6 | | 16 | 110 | −65.9 | | 13 | 105 | −54.2 | | 7 | 106 | −56.4 | | 24 | 111 | −72.7 | |
| 17,000 | 11 | 91 | −58.9 | | 18 | 92 | −63.3 | | 12 | 95 | −67.8 | | 14 | 93 | −67.1 | | 7 | 91 | −54.7 | | 6 | 90 | −56.6 | | 18 | 93 | −75.3 | |
| 18,000 | | | | | 12 | 78 | −63.5 | | 8 | 80 | −68.0 | | 6 | 80 | −67.2 | | 5 | 78 | −56.4 | | | | | | 9 | 78 | −73.9 | |
| 19,000 | | | | | | | | | 5 | 68 | −67.6 | | | | | | | | | | | | | | 6 | 67 | −70.0 | |

| Altitude (meters) m. s. l. | Buffalo, N. Y. (221 m.) | | | | Caribou, Maine (191 m.) | | | | Charleston, S. C. (14 m.) | | | | Denver, Colo. (1,616 m.) | | | | Detroit, Mich. (217 m.) | | | | El Paso, Tex. (1,193 m.) | | | | Ely, Nev. (1,908 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Surface | 31 | 990 | 11.4 | [2]83 | 31 | 993 | 7.0 | [2]74 | 30 | 1,018 | 20.0 | 89 | 31 | 836 | 10.6 | [2]67 | 31 | 990 | 12.0 | [2]85 | 31 | 878 | 24.3 | [2]24 | 31 | 807 | 11.6 | 34 |
| 500 | 31 | 958 | 12.5 | [2]73 | 31 | 957 | 8.0 | [2]62 | 30 | 962 | 20.0 | 72 | | | | | 31 | 957 | 13.0 | [2]72 | | | | | | | | |
| 1,000 | 31 | 902 | 10.7 | [2]68 | 31 | 900 | 6.0 | [2]61 | 30 | 908 | 17.7 | 65 | | | | | 31 | 902 | 11.4 | [2]64 | | | | | | | | |
| 1,500 | 31 | 849 | 8.0 | [2]63 | 31 | 847 | 3.7 | [2]60 | 30 | 856 | 15.0 | 60 | | | | | 31 | 849 | 8.6 | [2]66 | 31 | 848 | 23.4 | [2]22 | | | | |
| 2,000 | 31 | 799 | 5.4 | [2]64 | 31 | 796 | 0.9 | [2]57 | 30 | 806 | 12.5 | 55 | 31 | 799 | 9.8 | [2]60 | 31 | 799 | 6.1 | [2]63 | 31 | 800 | 20.3 | [2]22 | 31 | 799 | 11.9 | 34 |
| 2,500 | 31 | 751 | 2.8 | [2]64 | 31 | 748 | −1.8 | [2]56 | 30 | 760 | 10.0 | 52 | 31 | 752 | 6.9 | [2]60 | 31 | 751 | 3.5 | [2]60 | 31 | 754 | 16.5 | [2]22 | 31 | 752 | 9.5 | 34 |
| 3,000 | 31 | 706 | 0.3 | [2]60 | 31 | 702 | −4.9 | [2]53 | 30 | 715 | 7.6 | 50 | 31 | 707 | 3.8 | [2]61 | 31 | 706 | 0.7 | [2]58 | 31 | 711 | 12.6 | [2]23 | 31 | 708 | 5.4 | 35 |
| 4,000 | 30 | 623 | −5.1 | [2]54 | 31 | 617 | −10.4 | [2]45 | 28 | 633 | 2.0 | 44 | 31 | 624 | −2.2 | [2]58 | 31 | 623 | −4.8 | [2]49 | 31 | 630 | 4.6 | [2]27 | 31 | 625 | −2.8 | 39 |
| 5,000 | 30 | 548 | −10.7 | [2]49 | 31 | 542 | −16.2 | [2]43 | 28 | 559 | −4.3 | 41 | 31 | 550 | −9.5 | [2]60 | 31 | 548 | −10.5 | [2]41 | 30 | 557 | −3.1 | [2]32 | 30 | 551 | −9.9 | 44 |
| 6,000 | 30 | 480 | −17.0 | [2]46 | 31 | 474 | −22.4 | [2]45 | 27 | 491 | −10.6 | 40 | 31 | 482 | −16.6 | [2]61 | 29 | 480 | −16.8 | [2]42 | 30 | 490 | −10.6 | [2]32 | 28 | 483 | −16.7 | 44 |
| 7,000 | 30 | 420 | −24.1 | [2]48 | 30 | 413 | −28.5 | [2]50 | 25 | 431 | −17.3 | 39 | 31 | 422 | −23.9 | [2]54 | 29 | 420 | −23.5 | [2]47 | 30 | 429 | −17.7 | [2]30 | 27 | 422 | −23.7 | 43 |
| 8,000 | 30 | 365 | −31.1 | [2]50 | 29 | 358 | −35.2 | | 25 | 376 | −24.2 | 38 | 29 | 367 | −31.4 | [2]57 | 29 | 365 | −30.6 | | 27 | 375 | −25.2 | [2]35 | 24 | 368 | −30.3 | 42 |
| 9,000 | 30 | 316 | −38.4 | | 29 | 310 | −41.7 | | 22 | 328 | −31.2 | 37 | 29 | 317 | −38.9 | [2]65 | 28 | 316 | −37.7 | | 26 | 326 | −32.2 | | 24 | 318 | −37.5 | 53 |
| 10,000 | 30 | 273 | −45.2 | | 27 | 267 | −47.8 | | 20 | 284 | −39.0 | | 24 | 274 | −45.8 | | 28 | 273 | −45.2 | | 25 | 282 | −39.4 | | 23 | 275 | −44.6 | |
| 11,000 | 30 | 234 | −51.4 | | 27 | 230 | −52.2 | | 18 | 244 | −46.5 | | 21 | 236 | −52.5 | | 27 | 235 | −51.2 | | 23 | 244 | −46.1 | | 23 | 236 | −50.8 | |
| 12,000 | 30 | 201 | −55.9 | | 26 | 197 | −54.0 | | 12 | 210 | −53.2 | | 20 | 202 | −55.9 | | 25 | 202 | −55.8 | | 20 | 209 | −52.5 | | 21 | 203 | −55.1 | |
| 13,000 | 29 | 171 | −57.3 | | 25 | 168 | −54.1 | | 7 | 180 | −59.1 | | 19 | 172 | −56.4 | | 23 | 172 | −57.5 | | 15 | 179 | −58.6 | | 21 | 173 | −58.6 | |
| 14,000 | 26 | 146 | −57.5 | | 23 | 144 | −54.5 | | 6 | 153 | −62.5 | | 18 | 147 | −57.7 | | 21 | 147 | −56.9 | | 8 | 153 | −62.9 | | 21 | 148 | −60.5 | |
| 15,000 | 22 | 124 | −58.2 | | 17 | 123 | −55.9 | | 5 | 129 | −66.1 | | 16 | 125 | −58.3 | | 18 | 125 | −58.0 | | 5 | 130 | −63.8 | | 21 | 126 | −59.9 | |
| 16,000 | 19 | 106 | −58.8 | | 12 | 105 | −55.4 | | | | | | 15 | 107 | −59.6 | | 12 | 107 | −58.6 | | | | | | 17 | 107 | −59.8 | |
| 17,000 | 15 | 91 | −58.8 | | 6 | 89 | −55.6 | | | | | | 9 | 91 | −60.0 | | 10 | 91 | −58.4 | | | | | | 15 | 92 | −60.8 | |
| 18,000 | 9 | 78 | −59.9 | | | | | | | | | | 7 | 77 | −60.0 | | | | | | | | | | 11 | 78 | −60.7 | |
| 19,000 | | | | | | | | | | | | | | | | | | | | | | | | | 7 | 66 | −61.2 | |

| Altitude (meters) m. s. l. | Great Falls, Mont. (1,128 m.) | | | | Huntington, W. Va. (172 m.) | | | | International Falls, Minn. (343 m.) | | | | Joliet, Ill. (178 m.) | | | | Lake Charles, La. (5 m.) | | | | Lakehurst, N. J.[1] (39 m.) | | | | Mazatlan, Mexico (80 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Surface | 31 | 886 | 9.9 | [2]55 | 31 | 997 | 16.6 | [2]84 | 31 | 972 | 9.3 | [2]70 | 31 | 994 | 12.5 | [2]84 | 31 | 1,015 | 23.1 | [2]89 | 30 | 1,013 | 15.0 | [2]79 | 31 | 1,002 | 24.9 | 79 |
| 500 | | | | | 31 | 959 | 18.1 | [2]68 | 31 | 954 | 10.0 | [2]64 | 31 | 956 | 12.9 | [2]72 | 31 | 959 | 21.6 | [2]71 | 30 | 960 | 14.6 | [2]65 | 31 | 956 | 24.7 | 56 |
| 1,000 | | | | | 31 | 905 | 15.5 | [2]66 | 31 | 898 | 7.4 | [2]62 | 31 | 901 | 11.4 | [2]68 | 31 | 905 | 19.1 | [2]63 | 30 | 905 | 12.2 | [2]66 | 31 | 903 | 24.4 | 37 |
| 1,500 | 31 | 847 | 8.5 | [2]52 | 31 | 853 | 12.5 | [2]65 | 31 | 845 | 4.2 | [2]64 | 31 | 849 | 9.2 | [2]68 | 31 | 854 | 17.0 | [2]48 | 30 | 852 | 9.2 | [2]67 | 31 | 852 | 22.0 | 34 |
| 2,000 | 31 | 796 | 4.8 | [2]54 | 31 | 803 | 9.6 | [2]62 | 31 | 794 | 1.6 | [2]63 | 31 | 798 | 6.9 | [2]65 | 31 | 805 | 14.8 | [2]39 | 30 | 802 | 6.4 | [2]65 | 31 | 804 | 19.2 | 33 |
| 2,500 | 31 | 749 | 0.9 | [2]60 | 31 | 756 | 6.6 | [2]59 | 31 | 746 | −1.6 | [2]64 | 31 | 751 | 4.4 | [2]64 | 31 | 758 | 12.4 | [2]33 | 30 | 754 | 3.6 | [2]67 | 31 | 758 | 16.1 | 31 |
| 3,000 | 31 | 703 | −3.4 | [2]66 | 31 | 711 | 4.0 | [2]56 | 31 | 700 | −4.7 | [2]64 | 31 | 706 | 1.7 | [2]64 | 31 | 714 | 9.9 | [2]29 | 30 | 709 | 1.3 | [2]68 | 31 | 715 | 13.0 | 30 |
| 4,000 | 31 | 619 | −10.9 | [2]72 | 30 | 628 | −1.6 | [2]49 | 31 | 616 | −10.8 | [2]57 | 30 | 623 | −3.9 | [2]62 | 31 | 633 | 3.7 | [2]31 | 29 | 626 | −4.1 | [2]66 | 28 | 634 | 6.3 | 29 |
| 5,000 | 31 | 543 | −17.3 | [2]72 | 30 | 554 | −7.0 | [2]49 | 31 | 540 | −16.6 | [2]52 | 30 | 549 | −9.7 | [2]66 | 31 | 559 | −3.0 | [2]36 | 29 | 551 | −9.8 | [2]65 | 27 | 560 | −0.7 | 31 |
| 6,000 | 30 | 474 | −24.0 | [2]72 | 30 | 486 | −13.3 | [2]47 | 31 | 472 | −23.4 | [2]54 | 30 | 481 | −16.0 | [2]65 | 31 | 492 | −9.5 | [2]32 | 29 | 483 | −15.5 | [2]64 | 26 | 494 | −7.5 | 33 |
| 7,000 | 30 | 413 | −31.0 | | 29 | 426 | −20.1 | [2]45 | 31 | 411 | −30.3 | [2]50 | 30 | 421 | −22.9 | [2]68 | 31 | 432 | −16.1 | [2]34 | 29 | 423 | −22.2 | [2]72 | 26 | 434 | −14.6 | 32 |
| 8,000 | 30 | 357 | −38.3 | | 29 | 371 | −27.4 | [2]51 | 31 | 356 | −37.4 | | 30 | 366 | −30.3 | | 31 | 377 | −23.2 | | 27 | 368 | −28.8 | | 25 | 379 | −22.0 | 33 |
| 9,000 | 29 | 308 | −45.3 | | 28 | 322 | −34.6 | | 30 | 307 | −44.4 | | 29 | 317 | −37.6 | | 31 | 328 | −30.7 | | 26 | 319 | −35.8 | | 22 | 330 | −29.3 | 32 |
| 10,000 | 28 | 265 | −50.1 | | 28 | 279 | −42.2 | | 30 | 264 | −49.4 | | 29 | 274 | −44.8 | | 31 | 285 | −37.8 | | 25 | 277 | −42.6 | | 21 | 287 | −36.7 | 34 |
| 11,000 | 26 | 228 | −53.0 | | 27 | 240 | −49.6 | | 29 | 227 | −52.3 | | 26 | 236 | −51.1 | | 31 | 246 | −45.2 | | 25 | 238 | −49.4 | | 21 | 248 | −44.0 | |
| 12,000 | 24 | 194 | −53.9 | | 25 | 206 | −56.9 | | 26 | 195 | −52.2 | | 23 | 202 | −56.2 | | 31 | 211 | −52.7 | | 25 | 204 | −55.3 | | 21 | 213 | −51.2 | |
| 13,000 | 22 | 166 | −52.6 | | 25 | 175 | −62.2 | | 19 | 166 | −51.7 | | 21 | 173 | −58.2 | | 31 | 180 | −59.3 | | 23 | 174 | −59.9 | | 20 | 182 | −58.5 | |
| 14,000 | 17 | 143 | −52.6 | | 24 | 149 | −63.0 | | 17 | 142 | −51.7 | | 18 | 147 | −57.9 | | 31 | 153 | −63.7 | | 18 | 148 | −60.8 | | 18 | 155 | −65.1 | |
| 15,000 | 14 | 122 | −53.4 | | 18 | 127 | −64.3 | | 11 | 122 | −52.4 | | 13 | 125 | −59.4 | | 26 | 130 | −66.8 | | 16 | 126 | −60.3 | | 18 | 131 | −70.4 | |
| 16,000 | 13 | 105 | −53.9 | | 16 | 108 | −65.1 | | 8 | 104 | −52.5 | | 8 | 108 | −60.8 | | 24 | 111 | −69.9 | | 13 | 108 | −60.7 | | 17 | 111 | −74.6 | |
| 17,000 | 6 | 89 | −53.5 | | 16 | 92 | −65.6 | | 5 | 90 | −52.9 | | 8 | 92 | −61.1 | | 19 | 93 | −71.7 | | 6 | 92 | −61.4 | | 15 | 93 | −77.0 | |
| 18,000 | | | | | 11 | 78 | −64.8 | | | | | | | | | | 11 | 79 | −69.4 | | | | | | 12 | 78 | −75.0 | |
| 19,000 | | | | | | | | | | | | | | | | | | | | | | | | | 7 | 66 | −71.6 | |

[1] U. S. Navy.

[2] Humidity data obtained by electric hygrometer.

*Mean free-air barometric pressure in millibars, temperature in degrees centigrade, and relative humidities in percent, obtained by radiosondes during May 1943*—Continued

STATIONS AND ELEVATIONS IN METERS ABOVE SEA LEVEL—Continued

| Altitude (meters) m. s. l. | Medford, Oreg. (409 m.) | | | | Miami, Fla. (4 m.) | | | | Nashville, Tenn. (180 m.) | | | | Norfolk, Va.[1] (4 m.) | | | | Oakland, Calif. (6 m.) | | | | Oklahoma City, Okla. (391 m.) | | | | Omaha, Nebr. (301 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 31 | 970 | 15.7 | 49 | 31 | 1,018 | 24.0 | 85 | 30 | 995 | 20.2 | [2] 72 | 15 | 1,020 | 18.7 | [2] 74 | 31 | 1,014 | 15.7 | [2] 68 | 31 | 967 | 17.6 | [2] 81 | 31 | 978 | 15.1 | [2] 70 |
| 500 | 31 | 960 | 15.4 | 49 | 31 | 961 | 21.9 | 87 | 30 | 959 | 19.7 | [2] 62 | 15 | 962 | 17.2 | [2] 62 | 31 | 957 | 15.1 | [2] 51 | 31 | 955 | 17.9 | [2] 76 | 31 | 955 | 14.5 | [2] 63 |
| 1,000 | 31 | 905 | 12.1 | 52 | 31 | 907 | 18.8 | 84 | 30 | 905 | 17.0 | [2] 62 | 15 | 908 | 15.0 | [2] 56 | 31 | 902 | 15.7 | [2] 30 | 31 | 901 | 17.6 | [2] 67 | 31 | 900 | 11.8 | [2] 61 |
| 1,500 | 31 | 852 | 8.2 | 55 | 31 | 856 | 16.0 | 79 | 30 | 853 | 13.9 | [2] 59 | 15 | 856 | 12.4 | [2] 52 | 31 | 851 | 13.4 | [2] 25 | 31 | 850 | 16.6 | [2] 57 | 31 | 848 | 9.1 | [2] 57 |
| 2,000 | 31 | 801 | 4.5 | 61 | 31 | 807 | 13.2 | 73 | 30 | 803 | 10.8 | [2] 61 | 15 | 805 | 9.7 | [2] 50 | 31 | 801 | 10.6 | [2] 25 | 31 | 801 | 14.9 | [2] 47 | 31 | 798 | 7.2 | [2] 55 |
| 2,500 | 31 | 754 | 1.5 | 63 | 31 | 760 | 10.8 | 64 | 30 | 756 | 8.3 | [2] 56 | 15 | 758 | 7.0 | [2] 47 | 31 | 754 | 7.6 | [2] 25 | 31 | 755 | 12.0 | [2] 45 | 31 | 751 | 4.8 | [2] 51 |
| 3,000 | 31 | 708 | −0.8 | 61 | 31 | 716 | 8.0 | 62 | 30 | 712 | 5.7 | [2] 49 | 15 | 713 | 3.8 | [2] 45 | 31 | 709 | 4.9 | [2] 24 | 30 | 711 | 9.2 | [2] 39 | 31 | 706 | 2.0 | [2] 58 |
| 4,000 | 31 | 624 | −5.8 | 50 | 30 | 634 | 2.5 | 56 | 30 | 630 | −0.1 | [2] 44 | 15 | 630 | −2.3 | [2] 39 | 30 | 627 | −0.6 | [2] 24 | 30 | 629 | 2.4 | [2] 32 | 31 | 623 | −3.6 | [2] 50 |
| 5,000 | 31 | 548 | −12.0 | 47 | 28 | 559 | −3.1 | 53 | 30 | 555 | −6.5 | [2] 40 | 15 | 555 | −7.8 | [2] 36 | 30 | 553 | −6.7 | [2] 28 | 30 | 555 | −4.5 | [2] 30 | 31 | 549 | −9.6 | [2] 48 |
| 6,000 | 30 | 481 | −18.3 | 46 | 28 | 492 | −9.1 | 52 | 29 | 488 | −13.1 | [2] 46 | 14 | 486 | −14.6 | ---- | 30 | 485 | −13.6 | [2] 29 | 30 | 488 | −11.4 | [2] 27 | 31 | 481 | −16.5 | [2] 44 |
| 7,000 | 29 | 420 | −25.1 | 47 | 25 | 432 | −16.0 | 47 | 29 | 427 | −19.8 | [2] 44 | 11 | 426 | −21.2 | ---- | 29 | 425 | −21.1 | [2] 32 | 30 | 428 | −18.5 | [2] 26 | 30 | 420 | −23.8 | [2] 48 |
| 8,000 | 29 | 365 | −32.2 | 51 | 25 | 377 | −23.2 | 47 | 29 | 372 | −27.0 | [2] 47 | ---- | ---- | ---- | ---- | 29 | 370 | −28.7 | [2] 37 | 29 | 374 | −25.6 | ---- | 30 | 366 | −30.9 | [2] 57 |
| 9,000 | 29 | 315 | −39.4 | 52 | 23 | 328 | −30.4 | 50 | 29 | 323 | −34.7 | ---- | ---- | ---- | ---- | ---- | 28 | 321 | −36.4 | ---- | 29 | 324 | −33.1 | ---- | 29 | 317 | −38.2 | ---- |
| 10,000 | 28 | 272 | −46.3 | ---- | 22 | 285 | −38.0 | 48 | 29 | 280 | −42.4 | ---- | ---- | ---- | ---- | ---- | 25 | 278 | −44.2 | ---- | 29 | 281 | −40.5 | ---- | 28 | 274 | −44.7 | ---- |
| 11,000 | 27 | 234 | −52.4 | ---- | 19 | 246 | −45.7 | ---- | 28 | 240 | −49.6 | ---- | ---- | ---- | ---- | ---- | 25 | 239 | −51.6 | ---- | 29 | 242 | −47.9 | ---- | 25 | 236 | −51.2 | ---- |
| 12,000 | 25 | 200 | −56.5 | ---- | 19 | 211 | −52.8 | ---- | 28 | 206 | −56.9 | ---- | ---- | ---- | ---- | ---- | 24 | 204 | −57.4 | ---- | 28 | 208 | −54.4 | ---- | 25 | 202 | −56.7 | ---- |
| 13,000 | 24 | 170 | −58.2 | ---- | 18 | 180 | −58.4 | ---- | 26 | 176 | −61.8 | ---- | ---- | ---- | ---- | ---- | 21 | 174 | −59.7 | ---- | 28 | 177 | −59.4 | ---- | 22 | 172 | −57.5 | ---- |
| 14,000 | 22 | 146 | −59.8 | ---- | 16 | 154 | −64.0 | ---- | 23 | 149 | −63.4 | ---- | ---- | ---- | ---- | ---- | 18 | 149 | −61.8 | ---- | 26 | 151 | −61.7 | ---- | 17 | 147 | −57.0 | ---- |
| 15,000 | 22 | 124 | −59.5 | ---- | 15 | 130 | −67.8 | ---- | 21 | 127 | −64.7 | ---- | ---- | ---- | ---- | ---- | 17 | 127 | −61.8 | ---- | 24 | 128 | −63.0 | ---- | 12 | 125 | −58.0 | ---- |
| 16,000 | 14 | 106 | −59.8 | ---- | 11 | 110 | −70.6 | ---- | 19 | 108 | −66.8 | ---- | ---- | ---- | ---- | ---- | 17 | 108 | −62.1 | ---- | 21 | 109 | −63.7 | ---- | 9 | 107 | −59.2 | ---- |
| 17,000 | 9 | 91 | −59.7 | ---- | 10 | 93 | −73.4 | ---- | 16 | 92 | −68.0 | ---- | ---- | ---- | ---- | ---- | 13 | 92 | −61.6 | ---- | 15 | 92 | −64.2 | ---- | 6 | 92 | −59.7 | ---- |
| 18,000 | 5 | 77 | −58.6 | ---- | 7 | 79 | −74.1 | ---- | 13 | 77 | −66.8 | ---- | ---- | ---- | ---- | ---- | 12 | 78 | −61.6 | ---- | 12 | 78 | −64.0 | ---- | ---- | ---- | ---- | ---- |
| 19,000 | ---- | ---- | ---- | ---- | 6 | 67 | −70.3 | ---- | 5 | 66 | −65.6 | ---- | ---- | ---- | ---- | ---- | 7 | 67 | −61.7 | ---- | 6 | 66 | −63.0 | ---- | ---- | ---- | ---- | ---- |
| 20,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 6 | 56 | −60.4 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |

| Altitude (meters) m. s. l. | Pensacola, Fla.[1] (24 m.) | | | | Phoenix, Ariz. (339 m.) | | | | Pittsburgh, Pa. (392 m.) | | | | Portland, Maine (20 m.) | | | | St. Louis, Mo. (171 m.) | | | | St. Paul, Minn. (225 m.) | | | | San Antonio, Tex. (242 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 21 | 1,015 | 24.2 | [2] 83 | 30 | 968 | 26.1 | 23 | 31 | 971 | 14.5 | [2] 77 | 31 | 1,015 | 9.6 | 84 | 31 | 994 | 17.3 | [2] 77 | 31 | 986 | 12.4 | [2] 72 | 31 | 985 | 23.4 | [2] 75 |
| 500 | 21 | 962 | 22.6 | [2] 73 | 30 | 951 | 28.4 | 21 | 31 | 958 | 14.8 | [2] 72 | 31 | 958 | 11.0 | 72 | 31 | 956 | 16.7 | [2] 70 | 31 | 955 | 12.6 | [2] 62 | 31 | 957 | 22.8 | [2] 72 |
| 1,000 | 21 | 909 | 20.0 | [2] 66 | 30 | 898 | 26.0 | 20 | 31 | 904 | 13.9 | [2] 62 | 31 | 902 | 8.7 | 69 | 31 | 902 | 14.7 | [2] 68 | 31 | 899 | 9.5 | [2] 64 | 31 | 904 | 20.8 | [2] 66 |
| 1,500 | 21 | 857 | 16.8 | [2] 59 | 30 | 848 | 21.9 | 20 | 31 | 852 | 11.4 | [2] 62 | 31 | 849 | 6.2 | 69 | 31 | 850 | 12.5 | [2] 64 | 31 | 846 | 6.8 | [2] 67 | 31 | 853 | 18.5 | [2] 57 |
| 2,000 | 21 | 808 | 14.3 | [2] 49 | 30 | 800 | 17.5 | 21 | 31 | 802 | 8.5 | [2] 63 | 31 | 798 | 3.2 | 70 | 31 | 800 | 10.2 | [2] 56 | 31 | 796 | 4.0 | [2] 66 | 31 | 804 | 16.7 | [2] 42 |
| 2,500 | 21 | 761 | 11.7 | [2] 40 | 30 | 754 | 13.7 | 22 | 31 | 754 | 5.4 | [2] 63 | 31 | 750 | 0.4 | 71 | 31 | 754 | 7.9 | [2] 52 | 31 | 748 | 1.3 | [2] 63 | 31 | 758 | 14.6 | [2] 31 |
| 3,000 | 21 | 717 | 9.1 | [2] 36 | 30 | 710 | 9.3 | 23 | 31 | 710 | 2.9 | [2] 56 | 31 | 705 | −1.9 | 69 | 31 | 709 | 5.1 | [2] 52 | 30 | 703 | −1.8 | [2] 66 | 31 | 714 | 12.0 | [2] 24 |
| 4,000 | 20 | 634 | 3.4 | [2] 36 | 28 | 629 | 2.2 | 26 | 31 | 626 | −2.9 | [2] 56 | 29 | 620 | −7.4 | 64 | 30 | 627 | −0.6 | [2] 45 | 28 | 620 | −7.6 | [2] 59 | 31 | 633 | 5.9 | [2] 25 |
| 5,000 | 19 | 560 | −3.2 | [2] 29 | 28 | 555 | −4.4 | 26 | 31 | 552 | −8.5 | [2] 55 | 26 | 545 | −13.6 | 57 | 29 | 552 | −6.5 | [2] 50 | 27 | 545 | −13.7 | [2] 51 | 30 | 559 | −1.2 | [2] 27 |
| 6,000 | 19 | 493 | −9.4 | [2] 36 | 27 | 488 | −11.0 | 23 | 31 | 484 | −14.3 | [2] 47 | 26 | 477 | −19.5 | 54 | 28 | 486 | −13.2 | [2] 46 | 27 | 477 | −20.3 | [2] 44 | 30 | 492 | −8.4 | [2] 27 |
| 7,000 | 19 | 433 | −15.9 | ---- | 24 | 428 | −18.3 | 23 | 31 | 424 | −20.9 | [2] 48 | 24 | 417 | −25.6 | 53 | 27 | 425 | −20.2 | [2] 46 | 25 | 415 | −27.9 | [2] 44 | 29 | 433 | −15.0 | ---- |
| 8,000 | 17 | 378 | −23.0 | ---- | 22 | 374 | −25.7 | 25 | 31 | 369 | −28.0 | [2] 51 | 22 | 362 | −32.7 | 49 | 27 | 370 | −27.4 | ---- | 25 | 360 | −34.9 | ---- | 29 | 378 | −21.9 | ---- |
| 9,000 | 17 | 329 | −30.4 | ---- | 19 | 325 | −33.3 | 28 | 31 | 320 | −35.6 | [2] 53 | 22 | 314 | −39.5 | ---- | 27 | 322 | −35.2 | ---- | 25 | 311 | −42.2 | ---- | 29 | 329 | −29.1 | ---- |
| 10,000 | 13 | 284 | −37.4 | ---- | 17 | 282 | −41.1 | ---- | 31 | 277 | −43.4 | ---- | 22 | 271 | −46.0 | ---- | 27 | 278 | −43.0 | ---- | 24 | 268 | −48.8 | ---- | 29 | 286 | −36.7 | ---- |
| 11,000 | 11 | 246 | −45.8 | ---- | 16 | 243 | −48.5 | ---- | 31 | 238 | −50.8 | ---- | 19 | 234 | −52.6 | ---- | 25 | 240 | −50.3 | ---- | 24 | 230 | −53.4 | ---- | 28 | 247 | −43.9 | ---- |
| 12,000 | 9 | 211 | −54.0 | ---- | 16 | 208 | −55.0 | ---- | 30 | 204 | −56.9 | ---- | 19 | 200 | −56.5 | ---- | 25 | 205 | −56.4 | ---- | 22 | 197 | −54.7 | ---- | 27 | 212 | −51.1 | ---- |
| 13,000 | 7 | 180 | −59.0 | ---- | 16 | 177 | −59.0 | ---- | 29 | 174 | −59.4 | ---- | 16 | 170 | −57.1 | ---- | 25 | 175 | −59.1 | ---- | 20 | 168 | −53.7 | ---- | 24 | 182 | −57.4 | ---- |
| 14,000 | 5 | 154 | −63.5 | ---- | 16 | 151 | −60.9 | ---- | 24 | 149 | −59.9 | ---- | 14 | 145 | −58.2 | ---- | 22 | 149 | −60.0 | ---- | 20 | 144 | −54.4 | ---- | 20 | 155 | −61.9 | ---- |
| 15,000 | ---- | ---- | ---- | ---- | 16 | 128 | −62.0 | ---- | 22 | 127 | −60.1 | ---- | 14 | 124 | −58.7 | ---- | 21 | 127 | −60.8 | ---- | 19 | 123 | −55.6 | ---- | 16 | 131 | −64.7 | ---- |
| 16,000 | ---- | ---- | ---- | ---- | 14 | 109 | −62.7 | ---- | 14 | 108 | −61.5 | ---- | 10 | 106 | −59.1 | ---- | 16 | 108 | −62.1 | ---- | 14 | 105 | −56.0 | ---- | 12 | 112 | −67.2 | ---- |
| 17,000 | ---- | ---- | ---- | ---- | 13 | 93 | −64.3 | ---- | 7 | 92 | −61.5 | ---- | 9 | 90 | −58.6 | ---- | 14 | 92 | −63.4 | ---- | 8 | 90 | −56.1 | ---- | 9 | 95 | −68.9 | ---- |
| 18,000 | ---- | ---- | ---- | ---- | 10 | 79 | −65.4 | ---- | 5 | 78 | −62.8 | ---- | ---- | ---- | ---- | ---- | 13 | 78 | −62.5 | ---- | 6 | 76 | −55.6 | ---- | 7 | 80 | −68.3 | ---- |
| 19,000 | ---- | ---- | ---- | ---- | 7 | 67 | −65.5 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 6 | 67 | −61.3 | ---- | ---- | ---- | ---- | ---- | 5 | 69 | −67.1 | ---- |

| Altitude (meters) m. s. l. | San Diego, Calif.[1] (19 m.) | | | | San Juan P. R. (15 m.) | | | | Santa Maria, Calif. (73 m.) | | | | Sault Ste. Marie, Mich. (221 m.) | | | | Seattle, Wash.[1] (22 m.) | | | | Spokane, Wash. (598 m.) | | | | Swan Island, West Indies[3] (10 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 30 | 1,010 | 17.4 | [2] 74 | 31 | 1,015 | 24.5 | [2] 85 | 19 | 1,006 | 11.8 | 84 | 31 | 988 | 6.9 | 80 | 30 | 1,017 | 12.6 | [2] 69 | 31 | 946 | 11.8 | [2] 63 | ---- | ---- | ---- | ---- |
| 500 | 30 | 954 | 15.0 | [2] 63 | 31 | 961 | 21.4 | [2] 84 | 19 | 958 | 12.6 | 78 | 31 | 956 | 8.7 | 76 | 30 | 960 | 9.0 | [2] 67 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 1,000 | 30 | 900 | 15.7 | [2] 46 | 31 | 907 | 18.4 | [2] 81 | 19 | 902 | 16.0 | 51 | 31 | 900 | 7.5 | 71 | 30 | 904 | 5.2 | [2] 71 | 31 | 901 | 10.3 | [2] 53 | ---- | ---- | ---- | ---- |
| 1,500 | 30 | 849 | 15.2 | [2] 26 | 31 | 856 | 15.8 | [2] 72 | 19 | 851 | 14.7 | 41 | 31 | 846 | 4.7 | 70 | 30 | 850 | 1.8 | [2] 74 | 31 | 848 | 6.4 | [2] 56 | ---- | ---- | ---- | ---- |
| 2,000 | 30 | 799 | 13.2 | [2] 20 | 31 | 806 | 13.7 | [2] 56 | 19 | 801 | 11.8 | 37 | 31 | 796 | 2.0 | 69 | 30 | 798 | −1.6 | [2] 70 | 31 | 797 | 2.4 | [2] 60 | ---- | ---- | ---- | ---- |
| 2,500 | 30 | 753 | 10.6 | [2] 18 | 31 | 760 | 11.4 | [2] 48 | 19 | 754 | 8.6 | 34 | 31 | 748 | −0.5 | 68 | 30 | 749 | −4.5 | [2] 69 | 31 | 749 | −1.5 | [2] 66 | ---- | ---- | ---- | ---- |
| 3,000 | 30 | 709 | 7.6 | [2] 18 | 31 | 715 | 9.0 | [2] 42 | 18 | 710 | 6.3 | 33 | 31 | 702 | −3.4 | 67 | 30 | 703 | −7.1 | [2] 63 | 30 | 703 | −5.2 | [2] 66 | ---- | ---- | ---- | ---- |
| 4,000 | 30 | 627 | 1.5 | [2] 16 | 28 | 634 | 3.9 | [2] 42 | 18 | 628 | 1.9 | 31 | 30 | 618 | −9.4 | 61 | 30 | 618 | −13.0 | [2] 58 | 30 | 618 | −11.7 | [2] 58 | ---- | ---- | ---- | ---- |
| 5,000 | 30 | 553 | −5.3 | [2] 21 | 27 | 560 | −1.9 | [2] 38 | 18 | 554 | −3.6 | 28 | 27 | 543 | −14.7 | 57 | 30 | 541 | −19.3 | [2] 61 | 29 | 542 | −17.7 | [2] 50 | ---- | ---- | ---- | ---- |
| 6,000 | 30 | 486 | −12.0 | ---- | 27 | 493 | −7.9 | [2] 36 | 17 | 488 | −9.9 | 28 | 25 | 474 | −21.3 | 56 | 29 | 472 | −25.6 | [2] 69 | 29 | 473 | −24.7 | [2] 52 | ---- | ---- | ---- | ---- |
| 7,000 | 30 | 426 | −19.5 | ---- | 26 | 433 | −14.5 | [2] 40 | 17 | 428 | −17.3 | 28 | 25 | 413 | −28.2 | 56 | 28 | 411 | −31.6 | [2] 71 | 28 | 412 | −31.8 | ---- | ---- | ---- | ---- | ---- |
| 8,000 | 15 | 372 | −27.1 | ---- | 24 | 379 | −21.0 | [2] 44 | 17 | 374 | −25.0 | 28 | 23 | 359 | −35.3 | ---- | 25 | 356 | −38.7 | ---- | 28 | 356 | −39.0 | ---- | ---- | ---- | ---- | ---- |
| 9,000 | 15 | 322 | −34.9 | ---- | 24 | 330 | −28.2 | [2] 47 | 17 | 324 | −32.8 | 30 | 20 | 309 | −42.1 | ---- | 24 | 307 | −45.0 | ---- | 27 | 307 | −45.1 | ---- | ---- | ---- | ---- | ---- |
| 10,000 | 15 | 279 | −42.3 | ---- | 24 | 287 | −35.9 | ---- | 16 | 282 | −40.4 | ---- | 19 | 266 | −47.9 | ---- | 22 | 264 | −50.3 | ---- | 25 | 264 | −49.4 | ---- | ---- | ---- | ---- | ---- |
| 11,000 | 14 | 241 | −49.2 | ---- | 22 | 248 | −44.0 | ---- | 16 | 242 | −48.2 | ---- | 19 | 229 | −51.5 | ---- | 15 | 226 | −53.0 | ---- | 23 | 227 | −52.2 | ---- | ---- | ---- | ---- | ---- |
| 12,000 | 14 | 206 | −56.0 | ---- | 21 | 213 | −52.1 | ---- | 14 | 208 | −54.8 | ---- | 15 | 196 | −52.4 | ---- | 13 | 194 | −54.5 | ---- | 20 | 194 | −54.3 | ---- | ---- | ---- | ---- | ---- |
| 13,000 | 14 | 176 | −60.3 | ---- | 21 | 182 | −59.9 | ---- | 13 | 177 | −59.3 | ---- | 12 | 168 | −53.1 | ---- | 10 | 165 | −54.8 | ---- | 18 | 167 | −53.6 | ---- | ---- | ---- | ---- | ---- |
| 14,000 | 10 | 150 | −62.5 | ---- | 21 | 155 | −66.0 | ---- | 13 | 151 | −61.7 | ---- | 11 | 144 | −54.0 | ---- | 6 | 141 | −54.9 | ---- | 13 | 142 | −52.6 | ---- | ---- | ---- | ---- | ---- |
| 15,000 | 7 | 128 | −62.5 | ---- | 21 | 131 | −70.3 | ---- | 11 | 128 | −62.2 | ---- | 9 | 124 | −55.2 | ---- | ---- | ---- | ---- | ---- | 9 | 122 | −53.2 | ---- | ---- | ---- | ---- | ---- |
| 16,000 | 5 | 109 | −64.3 | ---- | 18 | 111 | −73.3 | ---- | 10 | 110 | −63.5 | ---- | 8 | 106 | −55.8 | ---- | ---- | ---- | ---- | ---- | 5 | 105 | −55.1 | ---- | ---- | ---- | ---- | ---- |
| 17,000 | ---- | ---- | ---- | ---- | 16 | 93 | −73.4 | ---- | 8 | 93 | −64.2 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 18,000 | ---- | ---- | ---- | ---- | 11 | 78 | −71.3 | ---- | 8 | 79 | −64.4 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 19,000 | ---- | ---- | ---- | ---- | 7 | 67 | −68.5 | ---- | 7 | 67 | −63.9 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 20,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 5 | 57 | −62.8 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |

[1] U. S. Navy.

[2] Humidity data obtained by electric hygrometer.

[3] Insufficient data.

*Mean free-air barometric pressure in millibars, temperature in degrees centigrade, and relative humidities in percent, obtained by radiosondes during May 1943*—Continued

STATIONS AND ELEVATIONS IN METERS ABOVE SEA LEVEL—Continued

| Altitude (meters) m. s. l. | Tacubaya, Mexico (2,306 m.) | | | | Tapachula, Mexico (115 m.) | | | | Tatoosh Island, Wash. (31 m.) | | | | Tongue Point, Oreg.[1] (21 m.) | | | | Washington, D. C. (25 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 27 | 774 | 17.8 | 55 | 30 | 999 | 25.3 | 87 | 31 | 1,017 | 9.3 | [2] 90 | 24 | 1,019 | 11.7 | [2] 75 | 31 | 1,015 | 18.2 | [2] 72 |
| 500 | ---- | ---- | ---- | ---- | 30 | 956 | 24.4 | 85 | 31 | 960 | 6.2 | [2] 81 | 24 | 962 | 7.6 | [2] 80 | 31 | 960 | 17.3 | [2] 63 |
| 1,000 | ---- | ---- | ---- | ---- | 30 | 904 | 21.4 | 85 | 31 | 904 | 3.7 | [2] 75 | 24 | 905 | 4.9 | [2] 73 | 31 | 905 | 14.9 | [2] 62 |
| 1,500 | ---- | ---- | ---- | ---- | 30 | 853 | 18.8 | 82 | 31 | 850 | 1.0 | [2] 70 | 24 | 852 | 2.5 | [2] 62 | 31 | 853 | 11.7 | [2] 64 |
| 2,000 | ---- | ---- | ---- | ---- | 29 | 804 | 16.1 | 81 | 31 | 798 | −1.4 | [2] 60 | 24 | 800 | 1.2 | [2] 50 | 31 | 803 | 8.9 | [2] 64 |
| 2,500 | 27 | 757 | 16.4 | 56 | 29 | 758 | 13.5 | 81 | 31 | 749 | −4.2 | [2] 53 | 24 | 751 | −2.3 | [2] 42 | 31 | 756 | 6.4 | [2] 61 |
| 3,000 | 27 | 713 | 12.6 | 60 | 27 | 714 | 10.7 | 84 | 30 | 703 | −7.0 | [2] 46 | 24 | 705 | −5.0 | [2] 38 | 31 | 711 | 3.9 | [2] 57 |
| 4,000 | 27 | 632 | 5.5 | 70 | 27 | 633 | 4.9 | 87 | 29 | 618 | −12.7 | [2] 38 | 24 | 620 | −10.8 | [2] 41 | 31 | 628 | −1.7 | [2] 47 |
| 5,000 | 25 | 559 | −1.1 | 80 | 26 | 560 | −0.7 | 77 | 29 | 542 | −19.0 | [2] 41 | 24 | 544 | −16.6 | [2] 46 | 31 | 554 | −7.4 | [2] 47 |
| 6,000 | 25 | 493 | −6.6 | 79 | 25 | 493 | −5.9 | 70 | 29 | 473 | −25.6 | [2] 47 | 24 | 476 | −23.1 | [2] 49 | 31 | 486 | −13.4 | [2] 47 |
| 7,000 | 24 | 433 | −12.4 | 68 | 24 | 434 | −12.1 | 61 | 29 | 411 | −32.1 | [2] 51 | 23 | 414 | −30.8 | [2] 56 | 31 | 426 | −20.1 | [2] 41 |
| 8,000 | 24 | 379 | −19.4 | 54 | 23 | 380 | −18.9 | 50 | 28 | 356 | −38.7 | ---- | 18 | 357 | −38.3 | ---- | 30 | 371 | −27.4 | [2] 48 |
| 9,000 | 21 | 330 | −26.3 | 53 | 23 | 331 | −26.1 | 42 | 26 | 307 | −44.5 | ---- | 17 | 309 | −44.5 | ---- | 30 | 322 | −34.6 | ---- |
| 10,000 | 19 | 287 | −33.9 | ---- | 22 | 288 | −33.2 | 46 | 24 | 265 | −49.3 | ---- | 14 | 266 | −48.2 | ---- | 30 | 279 | −42.1 | ---- |
| 11,000 | 15 | 248 | −42.0 | ---- | 22 | 250 | −41.3 | ---- | 23 | 227 | −53.5 | ---- | 13 | 230 | −51.4 | ---- | 30 | 240 | −49.5 | ---- |
| 12,000 | 12 | 213 | −50.0 | ---- | 21 | 214 | −49.6 | ---- | 20 | 193 | −55.8 | ---- | 12 | 195 | −55.9 | ---- | 29 | 205 | −56.1 | ---- |
| 13,000 | 11 | 183 | −56.8 | ---- | 20 | 184 | −58.5 | ---- | 18 | 165 | −55.5 | ---- | 10 | 168 | −57.5 | ---- | 28 | 175 | −59.9 | ---- |
| 14,000 | 10 | 156 | −65.3 | ---- | 20 | 156 | −67.2 | ---- | 16 | 141 | −54.9 | ---- | 7 | 143 | −56.4 | ---- | 26 | 149 | −61.2 | ---- |
| 15,000 | 9 | 132 | ---- | ---- | 20 | 132 | −75.3 | ---- | 14 | 120 | −55.4 | ---- | 6 | 123 | −56.4 | ---- | 20 | 127 | −62.0 | ---- |
| 16,000 | 7 | 112 | ---- | ---- | 17 | 111 | −83.0 | ---- | 7 | 103 | −54.5 | ---- | ---- | ---- | ---- | ---- | 15 | 109 | −62.5 | ---- |
| 17,000 | ---- | ---- | ---- | ---- | 14 | 92 | −83.7 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 14 | 93 | −63.5 | ---- |
| 18,000 | ---- | ---- | ---- | ---- | 10 | 78 | −81.0 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 10 | 79 | −63.9 | ---- |
| 19,000 | ---- | ---- | ---- | ---- | 6 | 65 | −76.0 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 5 | 68 | −64.0 | ---- |

*Mean free-air barometric pressure in millibars, temperature in degrees centigrade, and relative humidities in percent, obtained by radiosondes during June 1943*

STATIONS AND ELEVATIONS IN METERS ABOVE SEA LEVEL

| Altitude (meters) m. s. l. | Albany, N. Y. (86 m.) | | | | Albuquerque, N. Mex. (1,620 m.) | | | | Apalachicola, Fla. (5 m.) | | | | Atlanta, Ga. (300 m.) | | | | Bismarck, N. Dak. (505 m.) | | | | Boise, Idaho (868 m.) | | | | Brownsville, Tex. (6 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 30 | 1,004 | 18.8 | [2] 83 | 30 | 836 | 23.9 | [2] 28 | 30 | 1,017 | 26.1 | [2] 84 | 27 | 983 | 24.6 | 77 | 30 | 954 | 16.1 | 77 | 30 | 913 | 17.2 | [2] 52 | 30 | 1,013 | 26.6 | [2] 83 |
| 500 | 30 | 957 | 19.9 | [2] 71 | ---- | ---- | ---- | ---- | 30 | 961 | 24.4 | [2] 75 | 27 | 961 | 26.0 | 66 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 30 | 958 | 23.6 | [2] 80 |
| 1,000 | 30 | 903 | 17.4 | [2] 70 | ---- | ---- | ---- | ---- | 30 | 908 | 21.8 | [2] 65 | 27 | 908 | 23.8 | 67 | 30 | 900 | 16.0 | 65 | 30 | 899 | 17.8 | [2] 45 | 30 | 905 | 21.8 | [2] 62 |
| 1,500 | 30 | 852 | 14.2 | [2] 69 | ---- | ---- | ---- | ---- | 30 | 857 | 18.8 | [2] 63 | 27 | 857 | 20.3 | 71 | 30 | 849 | 13.2 | 68 | 30 | 848 | 15.2 | [2] 41 | 30 | 854 | 19.4 | [2] 52 |
| 2,000 | 30 | 802 | 11.4 | [2] 65 | 30 | 801 | 23.1 | [2] 25 | 30 | 808 | 15.7 | [2] 65 | 27 | 808 | 16.8 | 72 | 29 | 799 | 10.1 | 67 | 30 | 799 | 11.1 | [2] 45 | 30 | 805 | 16.7 | [2] 45 |
| 2,500 | 30 | 755 | 8.7 | [2] 59 | 30 | 755 | 19.6 | [2] 28 | 30 | 762 | 12.6 | [2] 63 | 27 | 762 | 13.5 | 67 | 29 | 752 | 7.7 | 61 | 30 | 752 | 7.2 | [2] 50 | 30 | 759 | 14.3 | [2] 39 |
| 3,000 | 30 | 711 | 6.4 | [2] 53 | 30 | 713 | 15.7 | [2] 30 | 30 | 718 | 9.8 | [2] 60 | 27 | 718 | 10.4 | 62 | 29 | 708 | 5.0 | 59 | 30 | 707 | 3.7 | [2] 53 | 30 | 715 | 11.3 | [2] 36 |
| 4,000 | 30 | 629 | 1.2 | [2] 48 | 30 | 632 | 7.4 | [2] 39 | 30 | 636 | 4.7 | [2] 53 | 27 | 636 | 4.2 | 59 | 29 | 625 | −1.2 | 55 | 29 | 624 | −3.6 | [2] 53 | 30 | 634 | 5.3 | [2] 36 |
| 5,000 | 29 | 554 | −5.0 | [2] 50 | 30 | 559 | −0.7 | [2] 50 | 29 | 562 | −1.1 | [2] 46 | 27 | 562 | −1.7 | 55 | 29 | 551 | −7.9 | 48 | 29 | 550 | −10.2 | [2] 53 | 30 | 560 | −0.7 | [2] 35 |
| 6,000 | 29 | 487 | −10.6 | [2] 48 | 30 | 493 | −8.3 | [2] 55 | 29 | 495 | −6.8 | [2] 39 | 27 | 495 | −7.7 | 49 | 28 | 485 | −14.4 | 41 | 29 | 482 | −17.3 | [2] 49 | 30 | 494 | −6.9 | [2] 36 |
| 7,000 | 29 | 428 | −16.8 | [2] 48 | 30 | 432 | −14.8 | [2] 49 | 29 | 435 | −13.0 | [2] 42 | 27 | 435 | −14.2 | 44 | 28 | 424 | −21.6 | 37 | 28 | 421 | −24.4 | [2] 54 | 30 | 434 | −13.5 | [2] 41 |
| 8,000 | 29 | 373 | −23.6 | [2] 47 | 30 | 378 | −21.4 | [2] 38 | 29 | 380 | −19.8 | [2] 41 | 27 | 380 | −21.1 | 42 | 28 | 369 | −28.8 | 36 | 27 | 366 | −31.8 | [2] 54 | 30 | 379 | −20.4 | [2] 44 |
| 9,000 | 29 | 324 | −30.9 | [2] 55 | 30 | 329 | −28.7 | ---- | 29 | 331 | −27.1 | ---- | 26 | 331 | −28.2 | 40 | 28 | 320 | −35.8 | 36 | 25 | 316 | −39.3 | ---- | 30 | 330 | −27.7 | [2] 49 |
| 10,000 | 29 | 282 | −38.3 | ---- | 30 | 286 | −36.7 | ---- | 29 | 288 | −34.7 | ---- | 25 | 288 | −36.0 | 41 | 28 | 277 | −42.7 | ---- | 25 | 273 | −44.5 | ---- | 29 | 287 | −35.5 | ---- |
| 11,000 | 29 | 243 | −46.0 | ---- | 30 | 247 | −43.9 | ---- | 29 | 249 | −42.2 | ---- | 25 | 249 | −43.6 | ---- | 27 | 239 | −48.7 | ---- | 24 | 235 | −48.1 | ---- | 28 | 248 | −43.1 | ---- |
| 12,000 | 29 | 208 | −52.2 | ---- | 30 | 212 | −49.7 | ---- | 29 | 215 | −49.7 | ---- | 24 | 214 | −50.9 | ---- | 25 | 204 | −52.8 | ---- | 22 | 202 | −49.5 | ---- | 28 | 213 | −50.4 | ---- |
| 13,000 | 29 | 178 | −57.1 | ---- | 28 | 182 | −55.2 | ---- | 29 | 184 | −56.8 | ---- | 23 | 183 | −58.0 | ---- | 22 | 176 | −54.1 | ---- | 14 | 173 | −50.1 | ---- | 28 | 183 | −57.6 | ---- |
| 14,000 | 28 | 152 | −59.9 | ---- | 28 | 155 | −59.9 | ---- | 27 | 157 | −62.4 | ---- | 22 | 156 | −62.6 | ---- | 20 | 150 | −54.9 | ---- | 10 | 150 | −51.4 | ---- | 26 | 155 | −64.1 | ---- |
| 15,000 | 22 | 130 | −61.7 | ---- | 26 | 132 | −64.4 | ---- | 24 | 133 | −65.8 | ---- | 21 | 132 | −66.1 | ---- | 19 | 128 | −56.4 | ---- | 9 | 128 | −52.1 | ---- | 24 | 132 | −69.2 | ---- |
| 16,000 | 18 | 111 | −62.2 | ---- | 25 | 112 | −66.5 | ---- | 22 | 113 | −67.5 | ---- | 19 | 112 | −68.0 | ---- | 17 | 110 | −57.5 | ---- | 7 | 110 | −52.3 | ---- | 20 | 111 | −72.7 | ---- |
| 17,000 | 16 | 94 | −61.6 | ---- | 22 | 95 | −67.2 | ---- | 18 | 95 | −67.7 | ---- | 16 | 96 | −68.4 | ---- | 13 | 94 | −57.4 | ---- | 5 | 94 | −53.7 | ---- | 14 | 94 | −74.4 | ---- |
| 18,000 | 10 | 80 | −60.0 | ---- | 18 | 81 | −65.3 | ---- | 13 | 80 | −66.2 | ---- | 9 | 81 | −67.6 | ---- | 9 | 80 | −57.0 | ---- | ---- | ---- | ---- | ---- | 8 | 79 | −70.6 | ---- |
| 19,000 | ---- | ---- | ---- | ---- | 8 | 69 | −62.8 | ---- | 6 | 68 | −63.8 | ---- | ---- | ---- | ---- | ---- | 6 | 69 | −56.3 | ---- | ---- | ---- | ---- | ---- | 7 | 67 | −66.2 | ---- |

| Altitude (meters) m. s. l. | Buffalo, N. Y. (221 m.) | | | | Caribou, Maine (191 m.) | | | | Charleston, S. C. (14 m.) | | | | Denver, Colo. (1,616 m.) | | | | Detroit, Mich. (217 m.) | | | | El Paso, Tex. (1,193 m.) | | | | Ely, Nev. (1,908 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Surface | 30 | 989 | 18.6 | [2] 80 | 30 | 989 | 12.4 | [2] 80 | 30 | 1,016 | 24.4 | 95 | 30 | 837 | 17.5 | [2] 58 | 30 | 990 | 19.8 | [2] 81 | 30 | 879 | 26.8 | [2] 34 | 30 | 807 | 13.8 | 40 |
| 500 | 30 | 958 | 19.8 | [2] 66 | 30 | 953 | 13.6 | [2] 67 | 30 | 962 | 24.5 | 80 | ---- | ---- | ---- | ---- | 30 | 959 | 20.4 | [2] 67 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 1,000 | 30 | 904 | 18.0 | [2] 61 | 30 | 899 | 11.5 | [2] 64 | 30 | 908 | 21.8 | 69 | ---- | ---- | ---- | ---- | 30 | 904 | 18.2 | [2] 66 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 1,500 | 30 | 852 | 15.0 | [2] 60 | 30 | 846 | 8.5 | [2] 68 | 30 | 858 | 18.9 | 68 | ---- | ---- | ---- | ---- | 30 | 853 | 15.5 | [2] 60 | 30 | 849 | 26.5 | [2] 32 | ---- | ---- | ---- | ---- |
| 2,000 | 30 | 803 | 12.1 | [2] 57 | 30 | 796 | 6.0 | [2] 65 | 30 | 808 | 16.0 | 65 | 30 | 800 | 16.9 | [2] 50 | 30 | 804 | 13.4 | [2] 53 | 30 | 802 | 23.2 | [2] 34 | 30 | 799 | 14.1 | 41 |
| 2,500 | 30 | 756 | 9.9 | [2] 51 | 30 | 748 | 3.6 | [2] 57 | 30 | 762 | 13.2 | 63 | 30 | 754 | 13.8 | [2] 50 | 30 | 757 | 10.6 | [2] 52 | 30 | 757 | 19.6 | [2] 37 | 30 | 753 | 11.8 | 41 |
| 3,000 | 30 | 712 | 7.2 | [2] 45 | 30 | 704 | 1.2 | [2] 54 | 30 | 718 | 10.3 | 60 | 30 | 711 | 10.2 | [2] 52 | 30 | 713 | 7.9 | [2] 49 | 30 | 714 | 15.8 | [2] 41 | 30 | 708 | 7.9 | 40 |
| 4,000 | 30 | 630 | 1.3 | [2] 42 | 29 | 621 | −3.8 | [2] 44 | 30 | 636 | 4.1 | 58 | 30 | 629 | 3.4 | [2] 54 | 29 | 631 | 1.7 | [2] 46 | 30 | 633 | 7.5 | [2] 53 | 30 | 627 | −0.5 | 43 |
| 5,000 | 30 | 555 | −4.7 | [2] 41 | 29 | 546 | −9.8 | [2] 42 | 29 | 562 | −1.7 | 56 | 30 | 556 | −4.1 | [2] 59 | 29 | 557 | −4.4 | [2] 44 | 30 | 560 | 0.0 | [2] 55 | 29 | 552 | −8.5 | 46 |
| 6,000 | 30 | 489 | −10.5 | [2] 38 | 29 | 479 | −16.1 | [2] 40 | 27 | 495 | −7.1 | 50 | 30 | 489 | −11.7 | [2] 60 | 29 | 490 | −10.7 | [2] 42 | 30 | 494 | −6.5 | [2] 47 | 29 | 484 | −15.7 | 45 |
| 7,000 | 30 | 428 | −16.7 | [2] 36 | 29 | 419 | −22.3 | [2] 40 | 27 | 435 | −13.6 | 43 | 30 | 428 | −18.6 | [2] 51 | 29 | 429 | −17.1 | [2] 44 | 30 | 435 | −12.9 | [2] 35 | 29 | 424 | −22.2 | 43 |
| 8,000 | 30 | 374 | −23.5 | [2] 36 | 29 | 365 | −29.5 | [2] 40 | 26 | 380 | −20.7 | 41 | 30 | 374 | −25.9 | ---- | 29 | 374 | −23.8 | [2] 46 | 30 | 380 | −19.8 | [2] 30 | 29 | 369 | −29.5 | 41 |
| 9,000 | 30 | 325 | −30.9 | ---- | 28 | 316 | −36.6 | ---- | 26 | 331 | −27.7 | 39 | 29 | 324 | −33.4 | ---- | 29 | 326 | −31.2 | ---- | 30 | 331 | −27.4 | ---- | 28 | 320 | −36.5 | 29 |
| 10,000 | 30 | 282 | −38.7 | ---- | 28 | 273 | −43.1 | ---- | 26 | 288 | −35.2 | 30 | 27 | 281 | −40.6 | ---- | 28 | 283 | −38.2 | ---- | 30 | 288 | −35.0 | ---- | 24 | 276 | −42.4 | ---- |
| 11,000 | 30 | 243 | −46.0 | ---- | 27 | 235 | −47.8 | ---- | 24 | 249 | −42.6 | ---- | 26 | 242 | −46.9 | ---- | 28 | 244 | −45.2 | ---- | 29 | 249 | −42.6 | ---- | 24 | 238 | −47.4 | ---- |
| 12,000 | 30 | 209 | −52.3 | ---- | 26 | 202 | −51.3 | ---- | 23 | 214 | −50.2 | ---- | 23 | 209 | −52.6 | ---- | 28 | 210 | −51.5 | ---- | 29 | 214 | −49.3 | ---- | 21 | 204 | −51.1 | ---- |
| 13,000 | 30 | 179 | −57.3 | ---- | 25 | 173 | −54.4 | ---- | 21 | 184 | −57.3 | ---- | 23 | 178 | −56.9 | ---- | 28 | 180 | −56.9 | ---- | 28 | 184 | −55.6 | ---- | 19 | 175 | −54.6 | ---- |
| 14,000 | 29 | 152 | −60.9 | ---- | 23 | 148 | −55.6 | ---- | 20 | 156 | −63.5 | ---- | 18 | 152 | −60.2 | ---- | 28 | 153 | −59.7 | ---- | 27 | 156 | −61.5 | ---- | 17 | 149 | −56.4 | ---- |
| 15,000 | 29 | 130 | −62.8 | ---- | 21 | 126 | −56.4 | ---- | 16 | 133 | −67.6 | ---- | 12 | 130 | −63.8 | ---- | 25 | 130 | −62.0 | ---- | 27 | 133 | −66.5 | ---- | 11 | 127 | −58.2 | ---- |
| 16,000 | 27 | 110 | −63.5 | ---- | 19 | 109 | −56.0 | ---- | 12 | 112 | −70.5 | ---- | 12 | 110 | −65.1 | ---- | 23 | 111 | −63.1 | ---- | 24 | 113 | −69.9 | ---- | 10 | 108 | −59.9 | ---- |
| 17,000 | 19 | 94 | −62.8 | ---- | 14 | 93 | −56.7 | ---- | 11 | 95 | −69.9 | ---- | 8 | 94 | −63.9 | ---- | 19 | 94 | −62.4 | ---- | 18 | 95 | −69.1 | ---- | 9 | 93 | −61.7 | ---- |
| 18,000 | 15 | 80 | −60.7 | ---- | 8 | 79 | −55.2 | ---- | 7 | 80 | −68.0 | ---- | ---- | ---- | ---- | ---- | 15 | 80 | −59.9 | ---- | 11 | 80 | −66.3 | ---- | 6 | 78 | −61.6 | ---- |
| 19,000 | 7 | 68 | −59.9 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 7 | 69 | −57.6 | ---- | 5 | 69 | −63.3 | ---- | ---- | ---- | ---- | ---- |

[1] U. S. Navy.

[2] Humidity data obtained by electric hygrometer.

*Mean free-air barometric pressure in millibars, temperature in degrees centigrade, and relative humidities in percent, obtained by radiosondes during June 1943*—Continued

STATIONS ANE ELEVATIONS IN METERS ABOVE SEA LEVEL—Continued

| Altitude (meters) m. s. l. | Glasgow, Mont. (639 m.) | | | | Great Falls, Mont. (1,128 m.) | | | | Huntington, West Va. (172 m.) | | | | International Falls, Minn. (343 m.) | | | | Joliet, Ill. (178 m.) | | | | Lake Charles, La. (5 m.) | | | | Lakehurst, N. J.[1] (39 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 25 | 939 | 17.0 | [2]63 | 30 | 886 | 12.8 | [2]68 | 30 | 997 | 21.5 | [2]91 | 30 | 973 | 15.0 | [2]79 | 30 | 994 | 19.9 | [2]85 | 30 | 1,016 | 25.7 | [2]87 | 28 | 1,010 | 22.0 | [2]82 |
| 500 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 30 | 960 | 22.8 | [2]70 | 30 | 955 | 15.2 | [2]73 | 30 | 959 | 21.0 | [2]72 | 30 | 960 | 23.8 | [2]74 | 28 | 959 | 21.5 | [2]66 |
| 1,000 | 25 | 900 | 16.5 | [2]53 | ---- | ---- | ---- | ---- | 30 | 907 | 20.4 | [2]64 | 30 | 900 | 13.6 | [2]67 | 30 | 905 | 19.1 | [2]67 | 30 | 906 | 21.3 | [2]69 | 28 | 905 | 18.7 | [2]64 |
| 1,500 | 25 | 849 | 13.2 | [2]55 | 30 | 848 | 11.5 | [2]60 | 30 | 856 | 17.2 | [2]64 | 30 | 848 | 10.7 | [2]67 | 30 | 853 | 16.3 | [2]64 | 30 | 856 | 18.3 | [2]63 | 28 | 854 | 15.8 | [2]66 |
| 2,000 | 25 | 799 | 9.8 | [2]60 | 29 | 798 | 8.7 | [2]58 | 30 | 806 | 14.3 | [2]59 | 30 | 798 | 8.1 | [2]62 | 30 | 804 | 13.8 | [2]56 | 30 | 807 | 15.6 | [2]55 | 28 | 804 | 13.0 | [2]61 |
| 2,500 | 25 | 752 | 6.2 | [2]66 | 29 | 751 | 5.3 | [2]61 | 30 | 760 | 11.8 | [2]50 | 30 | 751 | 5.5 | [2]57 | 30 | 758 | 11.2 | [2]50 | 30 | 760 | 13.0 | [2]50 | 28 | 757 | 10.4 | [2]52 |
| 3,000 | 25 | 708 | 3.1 | [2]66 | 29 | 706 | 1.9 | [2]62 | 30 | 716 | 9.0 | [2]46 | 30 | 706 | 2.8 | [2]53 | 30 | 714 | 8.6 | [2]46 | 30 | 716 | 10.2 | [2]48 | 28 | 713 | 7.7 | [2]46 |
| 4,000 | 25 | 625 | −3.0 | [2]60 | 29 | 623 | −4.5 | [2]63 | 30 | 633 | 3.1 | [2]46 | 30 | 624 | −2.6 | [2]47 | 30 | 631 | 2.4 | [2]43 | 30 | 635 | 4.8 | [2]40 | 28 | 631 | 1.8 | [2]37 |
| 5,000 | 25 | 550 | −9.1 | [2]61 | 29 | 548 | −11.0 | [2]63 | 30 | 559 | −2.6 | [2]44 | 29 | 550 | −9.1 | [2]42 | 28 | 558 | −3.2 | [2]40 | 30 | 561 | −1.0 | [2]40 | 28 | 557 | −3.4 | [2]33 |
| 6,000 | 25 | 483 | −15.3 | [2]53 | 29 | 481 | −17.8 | [2]59 | 30 | 492 | −8.4 | [2]43 | 29 | 482 | −16.0 | [2]37 | 28 | 491 | −9.2 | [2]39 | 30 | 494 | −7.2 | [2]41 | 28 | 490 | −9.5 | [2]37 |
| 7,000 | 25 | 422 | −22.1 | [2]54 | 28 | 420 | −24.5 | [2]61 | 30 | 433 | −14.8 | [2]45 | 28 | 421 | −23.3 | [2]36 | 28 | 431 | −15.8 | [2]46 | 30 | 434 | −13.5 | [2]45 | 28 | 430 | −15.7 | ---- |
| 8,000 | 24 | 367 | −30.2 | [2]56 | 28 | 365 | −32.2 | ---- | 30 | 378 | −21.4 | [2]48 | 28 | 366 | −30.2 | ---- | 28 | 376 | −22.8 | [2]50 | 30 | 380 | −20.2 | [2]44 | 28 | 376 | −22.3 | ---- |
| 9,000 | 24 | 318 | −37.9 | [2]56 | 25 | 316 | −39.7 | ---- | 30 | 329 | −29.0 | [2]49 | 28 | 317 | −37.2 | ---- | 28 | 327 | −30.1 | [2]30 | 30 | 331 | −27.4 | [2]47 | 28 | 327 | −29.6 | ---- |
| 10,000 | 22 | 275 | −45.4 | ---- | 23 | 273 | −46.9 | ---- | 30 | 286 | −36.9 | ---- | 28 | 275 | −43.8 | ---- | 28 | 284 | −37.4 | ---- | 29 | 288 | −35.0 | ---- | 28 | 284 | −37.0 | ---- |
| 11,000 | 22 | 236 | −51.0 | ---- | 18 | 234 | −53.6 | ---- | 30 | 246 | −44.6 | ---- | 28 | 236 | −48.5 | ---- | 27 | 246 | −44.3 | ---- | 29 | 249 | −42.8 | ---- | 27 | 245 | −44.7 | ---- |
| 12,000 | 20 | 202 | −52.7 | ---- | 17 | 199 | −54.2 | ---- | 29 | 212 | −52.4 | ---- | 23 | 203 | −51.8 | ---- | 25 | 210 | −52.0 | ---- | 29 | 214 | −50.6 | ---- | 25 | 211 | −51.9 | ---- |
| 13,000 | 20 | 173 | −52.3 | ---- | 15 | 171 | −52.3 | ---- | 29 | 181 | −59.3 | ---- | 19 | 174 | −54.3 | ---- | 24 | 180 | −57.5 | ---- | 29 | 183 | −58.0 | ---- | 24 | 180 | −58.4 | ---- |
| 14,000 | 18 | 148 | −53.0 | ---- | 14 | 146 | −51.5 | ---- | 28 | 154 | −63.8 | ---- | 18 | 149 | −55.1 | ---- | 20 | 153 | −61.0 | ---- | 27 | 156 | −64.2 | ---- | 21 | 153 | −62.6 | ---- |
| 15,000 | 16 | 127 | −54.3 | ---- | 11 | 125 | −52.7 | ---- | 25 | 131 | −66.2 | ---- | 15 | 127 | −56.8 | ---- | 19 | 130 | −63.6 | ---- | 25 | 132 | −68.5 | ---- | 20 | 130 | −64.6 | ---- |
| 16,000 | 13 | 109 | −54.5 | ---- | 9 | 107 | −53.5 | ---- | 22 | 111 | −68.8 | ---- | 11 | 108 | −55.7 | ---- | 15 | 111 | −65.8 | ---- | 21 | 112 | −71.6 | ---- | 15 | 111 | −65.6 | ---- |
| 17,000 | 8 | 93 | −54.4 | ---- | 5 | 92 | −54.9 | ---- | 14 | 94 | −67.8 | ---- | 8 | 92 | −54.5 | ---- | 11 | 94 | −64.9 | ---- | 11 | 94 | −72.5 | ---- | 11 | 94 | −63.4 | ---- |
| 18,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 10 | 79 | −65.4 | ---- | 5 | 79 | −53.4 | ---- | 8 | 80 | −63.5 | ---- | 7 | 79 | −67.1 | ---- | 8 | 80 | −61.8 | ---- |
| 19,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 6 | 68 | −61.0 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |

| Altitude (meters) m. s. l. | Mazatlan, Mexico (80 m.) | | | | Medford, Oreg. (499 m.) | | | | Miami, Fla. (4 m.) | | | | Nashville, Tenn. (180 m.) | | | | Norfolk, Va.[1] (4 m.) | | | | Oakland, Calif. (6 m.) | | | | Oklahoma City, Okla. (391 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 28 | 1,002 | 27.2 | 79 | 30 | 968 | 17.4 | 57 | 26 | 1,018 | 25.0 | 84 | 30 | 996 | 24.8 | [2]75 | 18 | 1,018 | 24.2 | [2]80 | 30 | 1,014 | 15.4 | [2]73 | 30 | 968 | 24.2 | [2]74 |
| 500 | 28 | 956 | 25.0 | 77 | 30 | 958 | 16.8 | 57 | 26 | 962 | 22.9 | 86 | 30 | 960 | 25.2 | [2]63 | 18 | 962 | 21.7 | [2]78 | 30 | 956 | 13.9 | [2]63 | 30 | 956 | 24.8 | [2]69 |
| 1,000 | 28 | 903 | 23.3 | 65 | 30 | 903 | 14.0 | 56 | 26 | 909 | 20.0 | 82 | 30 | 907 | 22.4 | [2]61 | 18 | 908 | 19.2 | [2]79 | 30 | 902 | 14.7 | [2]42 | 30 | 903 | 23.7 | [2]61 |
| 1,500 | 28 | 853 | 20.7 | 67 | 30 | 850 | 10.3 | 60 | 26 | 857 | 17.1 | 76 | 30 | 856 | 19.0 | [2]62 | 18 | 857 | 17.2 | [2]73 | 30 | 850 | 12.5 | [2]31 | 30 | 853 | 21.2 | [2]56 |
| 2,000 | 28 | 804 | 17.7 | 68 | 30 | 800 | 6.7 | 67 | 26 | 808 | 14.1 | 76 | 30 | 807 | 16.1 | [2]57 | 18 | 807 | 14.5 | [2]66 | 30 | 800 | 9.9 | [2]24 | 30 | 805 | 18.5 | [2]51 |
| 2,500 | 28 | 759 | 14.8 | 68 | 30 | 753 | 3.5 | 71 | 26 | 762 | 11.0 | 70 | 30 | 761 | 13.5 | [2]52 | 18 | 761 | 11.9 | [2]58 | 30 | 753 | 7.2 | [2]22 | 30 | 759 | 16.1 | [2]43 |
| 3,000 | 28 | 715 | 11.7 | 69 | 30 | 708 | 0.5 | 68 | 26 | 717 | 8.4 | 62 | 30 | 717 | 10.4 | [2]49 | 18 | 717 | 8.7 | [2]54 | 30 | 708 | 4.1 | [2]19 | 30 | 716 | 13.0 | [2]47 |
| 4,000 | 28 | 634 | 5.8 | 74 | 30 | 624 | −5.7 | 64 | 25 | 635 | 3.2 | 59 | 30 | 635 | 3.9 | [2]48 | 18 | 634 | 2.6 | [2]50 | 30 | 626 | −1.7 | [2]17 | 30 | 635 | 6.6 | [2]46 |
| 5,000 | 25 | 561 | 0.0 | 80 | 29 | 548 | −12.5 | 57 | 25 | 561 | −2.3 | 51 | 30 | 561 | −2.0 | [2]43 | 18 | 560 | −3.2 | [2]48 | 30 | 551 | −8.0 | [2]21 | 29 | 561 | −0.2 | [2]41 |
| 6,000 | 25 | 494 | −5.7 | 74 | 27 | 480 | −18.8 | 53 | 25 | 494 | −8.4 | 51 | 29 | 494 | −7.6 | [2]39 | 18 | 493 | −9.2 | [2]38 | 30 | 488 | −14.7 | [2]25 | 29 | 494 | −6.6 | [2]37 |
| 7,000 | 23 | 434 | −11.6 | 66 | 26 | 420 | −25.3 | 50 | 25 | 433 | −14.6 | 49 | 29 | 434 | −14.0 | [2]40 | 16 | 433 | −15.1 | [2]32 | 30 | 423 | −21.7 | ---- | 29 | 435 | −12.8 | [2]30 |
| 8,000 | 20 | 380 | −18.2 | 62 | 26 | 365 | −32.5 | 49 | 25 | 379 | −21.4 | 48 | 29 | 379 | −20.6 | [2]37 | ---- | ---- | ---- | ---- | 30 | 368 | −29.0 | ---- | 28 | 381 | −19.7 | [2]29 |
| 9,000 | 19 | 332 | −25.2 | 58 | 24 | 315 | −39.6 | 41 | 25 | 330 | −28.3 | 45 | 28 | 330 | −28.0 | [2]32 | ---- | ---- | ---- | ---- | 30 | 319 | −36.3 | ---- | 28 | 331 | −27.0 | [2]36 |
| 10,000 | 19 | 289 | −32.5 | 62 | 23 | 272 | −44.8 | ---- | 24 | 286 | −35.7 | 41 | 28 | 287 | −35.5 | ---- | ---- | ---- | ---- | ---- | 29 | 276 | −43.5 | ---- | 28 | 288 | −34.3 | ---- |
| 11,000 | 19 | 250 | −40.4 | ---- | 22 | 235 | −49.2 | ---- | 22 | 247 | −42.9 | ---- | 28 | 248 | −43.2 | ---- | ---- | ---- | ---- | ---- | 27 | 238 | −49.1 | ---- | 27 | 249 | −41.4 | ---- |
| 12,000 | 17 | 216 | −48.4 | ---- | 22 | 201 | −51.4 | ---- | 21 | 213 | −50.4 | ---- | 28 | 214 | −50.6 | ---- | ---- | ---- | ---- | ---- | 24 | 204 | −52.0 | ---- | 27 | 215 | −48.4 | ---- |
| 13,000 | 14 | 185 | −56.6 | ---- | 20 | 173 | −52.8 | ---- | 19 | 182 | −57.3 | ---- | 27 | 183 | −57.8 | ---- | ---- | ---- | ---- | ---- | 19 | 175 | −53.9 | ---- | 27 | 184 | −55.1 | ---- |
| 14,000 | 14 | 157 | −64.7 | ---- | 16 | 148 | −54.4 | ---- | 17 | 155 | −62.7 | ---- | 27 | 155 | −63.6 | ---- | ---- | ---- | ---- | ---- | 17 | 149 | −55.9 | ---- | 26 | 157 | −60.9 | ---- |
| 15,000 | 13 | 133 | −72.1 | ---- | 16 | 126 | −54.9 | ---- | 16 | 132 | −66.9 | ---- | 27 | 132 | −66.6 | ---- | ---- | ---- | ---- | ---- | 13 | 128 | −58.3 | ---- | 26 | 134 | −65.6 | ---- |
| 16,000 | 11 | 112 | −77.2 | ---- | 14 | 109 | −55.7 | ---- | 14 | 112 | −69.9 | ---- | 23 | 112 | −69.5 | ---- | ---- | ---- | ---- | ---- | 9 | 109 | −60.5 | ---- | 23 | 113 | −68.9 | ---- |
| 17,000 | 7 | 94 | −76.8 | ---- | 10 | 93 | −56.0 | ---- | 12 | 94 | −72.2 | ---- | 19 | 94 | −69.1 | ---- | ---- | ---- | ---- | ---- | 6 | 93 | −60.0 | ---- | 16 | 96 | −69.4 | ---- |
| 18,000 | ---- | ---- | ---- | ---- | 9 | 79 | −56.3 | ---- | 12 | 80 | −71.2 | ---- | 16 | 80 | −67.5 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 8 | 81 | −69.1 | ---- |
| 19,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 8 | 68 | −68.1 | ---- | 10 | 68 | −64.1 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 6 | 69 | −66.2 | ---- |

| Altitude (meters) m. s. l. | Omaha, Nebr. (301 m.) | | | | Pensacola, Fla.[1] (24 m.) | | | | Phoenix, Ariz. (339 m.) | | | | Pittsburgh, Pa. (392 m.) | | | | Portland, Maine (20 m.) | | | | St. Louis, Mo. (171 m.) | | | | St. Paul, Minn. (225 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 30 | 979 | 21.8 | [2]78 | 21 | 1,016 | 27.0 | [2]80 | 30 | 968 | 29.3 | [2]23 | 30 | 971 | 21.4 | [2]73 | 30 | 1,011 | 15.1 | 84 | 30 | 996 | 23.4 | [2]81 | 30 | 986 | 20.6 | [2]74 |
| 500 | 30 | 957 | 21.8 | [2]72 | 21 | 963 | 24.5 | [2]75 | 30 | 951 | 31.2 | [2]19 | 30 | 959 | 22.2 | [2]66 | 30 | 956 | 16.6 | 70 | 30 | 959 | 23.5 | [2]69 | 30 | 956 | 20.6 | [2]67 |
| 1,000 | 30 | 903 | 19.9 | [2]67 | 21 | 909 | 21.7 | [2]72 | 30 | 899 | 29.0 | [2]18 | 30 | 906 | 20.4 | [2]63 | 30 | 901 | 15.1 | 67 | 30 | 906 | 20.4 | [2]68 | 30 | 902 | 17.7 | [2]66 |
| 1,500 | 30 | 852 | 17.6 | [2]63 | 21 | 858 | 18.6 | [2]69 | 30 | 849 | 24.8 | [2]20 | 30 | 855 | 17.7 | [2]63 | 30 | 850 | 12.4 | 70 | 30 | 855 | 17.7 | [2]60 | 30 | 851 | 14.6 | [2]66 |
| 2,000 | 30 | 803 | 15.4 | [2]59 | 21 | 809 | 15.5 | [2]69 | 30 | 802 | 20.5 | [2]23 | 30 | 806 | 14.2 | [2]58 | 30 | 809 | 9.7 | 70 | 30 | 806 | 15.3 | [2]52 | 30 | 801 | 11.7 | [2]54 |
| 2,500 | 30 | 757 | 12.9 | [2]55 | 21 | 762 | 12.7 | [2]66 | 30 | 756 | 16.4 | [2]25 | 30 | 759 | 11.2 | [2]47 | 30 | 753 | 7.4 | 65 | 30 | 759 | 13.0 | [2]49 | 30 | 754 | 9.3 | [2]47 |
| 3,000 | 30 | 713 | 10.1 | [2]52 | 21 | 719 | 9.7 | [2]62 | 30 | 712 | 12.5 | [2]30 | 30 | 715 | 9.4 | [2]39 | 30 | 708 | 4.9 | 59 | 30 | 715 | 10.4 | [2]48 | 30 | 710 | 6.8 | [2]44 |
| 4,000 | 30 | 632 | 4.1 | [2]47 | 21 | 636 | 3.9 | [2]54 | 30 | 632 | 5.4 | [2]33 | 30 | 633 | 3.7 | [2]31 | 29 | 626 | −0.5 | 50 | 30 | 634 | 4.4 | [2]46 | 29 | 628 | 0.5 | [2]47 |
| 5,000 | 30 | 558 | −2.3 | [2]42 | 19 | 562 | −1.9 | [2]43 | 29 | 558 | −1.3 | [2]35 | 30 | 559 | −2.2 | [2]34 | 29 | 552 | −6.6 | 46 | 29 | 560 | −1.9 | [2]49 | 28 | 554 | −6.1 | [2]47 |
| 6,000 | 30 | 491 | −8.6 | [2]34 | 18 | 495 | −7.9 | [2]44 | 29 | 491 | −8.0 | [2]32 | 30 | 492 | −8.0 | [2]40 | 28 | 485 | −12.8 | 43 | 29 | 493 | −7.7 | [2]40 | 28 | 487 | −12.4 | [2]40 |
| 7,000 | 30 | 432 | −15.0 | [2]33 | 18 | 435 | −14.2 | [2]46 | 29 | 432 | −14.6 | [2]32 | 30 | 432 | −14.1 | [2]39 | 28 | 425 | −19.0 | 44 | 29 | 433 | −14.1 | [2]40 | 28 | 426 | −19.1 | ---- |
| 8,000 | 30 | 377 | −22.6 | [2]43 | 16 | 380 | −21.2 | ---- | 29 | 377 | −22.2 | [2]32 | 29 | 378 | −20.9 | [2]42 | 28 | 370 | −25.8 | 45 | 29 | 479 | −20.7 | [2]42 | 28 | 372 | −26.0 | ---- |
| 9,000 | 30 | 328 | −29.8 | [2]54 | 15 | 331 | −28.5 | ---- | 29 | 328 | −30.1 | [2]33 | 29 | 329 | −28.1 | [2]39 | 28 | 322 | −33.0 | 44 | 29 | 330 | −28.1 | [2]43 | 27 | 323 | −33.2 | ---- |
| 10,000 | 29 | 285 | −36.7 | ---- | 14 | 287 | −35.7 | ---- | 29 | 285 | −37.7 | ---- | 29 | 286 | −35.9 | ---- | 28 | 279 | −40.2 | ---- | 29 | 287 | −36.0 | ---- | 27 | 280 | −40.3 | ---- |
| 11,000 | 28 | 246 | −43.4 | ---- | 14 | 249 | −43.2 | ---- | 29 | 246 | −44.5 | ---- | 29 | 247 | −43.9 | ---- | 27 | 240 | −47.0 | ---- | 28 | 248 | −44.0 | ---- | 26 | 242 | −46.2 | ---- |
| 12,000 | 26 | 212 | −49.7 | ---- | 12 | 213 | −52.1 | ---- | 29 | 211 | −50.4 | ---- | 29 | 212 | −51.4 | ---- | 27 | 206 | −52.5 | ---- | 28 | 213 | −51.3 | ---- | 24 | 208 | −51.4 | ---- |
| 13,000 | 23 | 182 | −55.1 | ---- | 10 | 182 | −59.1 | ---- | 29 | 181 | −55.3 | ---- | 29 | 182 | −57.9 | ---- | 27 | 176 | −57.2 | ---- | 28 | 182 | −57.8 | ---- | 23 | 178 | −54.9 | ---- |
| 14,000 | 15 | 156 | −59.4 | ---- | 7 | 155 | −64.0 | ---- | 27 | 154 | −59.9 | ---- | 29 | 155 | −61.5 | ---- | 24 | 150 | −60.4 | ---- | 25 | 155 | −62.2 | ---- | 23 | 152 | −57.8 | ---- |
| 15,000 | 12 | 133 | −62.9 | ---- | 7 | 132 | −68.1 | ---- | 26 | 131 | −63.4 | ---- | 28 | 132 | −63.9 | ---- | 23 | 128 | −61.3 | ---- | 24 | 132 | −65.6 | ---- | 22 | 129 | −59.7 | ---- |
| 16,000 | 11 | 113 | −65.3 | ---- | ---- | ---- | ---- | ---- | 22 | 112 | −65.7 | ---- | 25 | 112 | −63.5 | ---- | 21 | 110 | −61.9 | ---- | 18 | 112 | −67.6 | ---- | 20 | 110 | −60.6 | ---- |
| 17,000 | 10 | 96 | −65.1 | ---- | ---- | ---- | ---- | ---- | 22 | 95 | −66.3 | ---- | 20 | 95 | −64.2 | ---- | 12 | 93 | −61.4 | ---- | 12 | 96 | −66.2 | ---- | 15 | 94 | −60.1 | ---- |
| 18,000 | 9 | 81 | −62.2 | ---- | ---- | ---- | ---- | ---- | 19 | 80 | −64.4 | ---- | 15 | 81 | −59.6 | ---- | 10 | 79 | −59.9 | ---- | 5 | 80 | −66.3 | ---- | 7 | 79 | −58.5 | ---- |
| 19,000 | 5 | 69 | −60.0 | ---- | ---- | ---- | ---- | ---- | 16 | 68 | −62.1 | ---- | 12 | 69 | −61.7 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 20,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 7 | 58 | −59.3 | ---- | 7 | 58 | −59.9 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |

[1] U. S. Navy.

[2] Humidity data obtained by electric hygrometer.

*Mean free-air barometric pressure in millibars, temperature in degrees centigrade, and relative humidities in percent, obtained by radiosondes during June 1943*—Continued

STATIONS AND ELEVATIONS IN METERS ABOVE SEA LEVEL—Continued

| Altitude (meters) m. s. l. | San Antonio, Tex. (242 m.) | | | | San Diego, Calif.[1] (19 m.) | | | | San Juan, P. R. (15 m.) | | | | Santa Maria, Calif. (73 m.) | | | | Sault Ste. Marie, Mich. (221 m.) | | | | Seattle, Wash.[1] (22 m.) | | | | Spokane, Wash. (598 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 30 | 987 | 25.7 | [2] 77 | 30 | 1,010 | 17.5 | [2] 78 | 30 | 1,016 | 25.3 | [2] 85 | 30 | 1,006 | 13.3 | [2] 80 | 30 | 988 | 12.6 | [2] 89 | 28 | 1,014 | 17.6 | [2] 61 | 30 | 944 | 15.7 | [2] 60 |
| 500 | 30 | 959 | 24.9 | [2] 77 | 30 | 955 | 16.6 | [2] 56 | 30 | 961 | 22.4 | [2] 82 | 30 | 957 | 14.2 | [2] 55 | 30 | 956 | 15.1 | [2] 74 | 28 | 958 | 14.3 | [2] 58 | ---- | ---- | ---- | ---- |
| 1,000 | 30 | 905 | 22.4 | [2] 74 | 30 | 900 | 17.2 | [2] 32 | 30 | 908 | 19.6 | [2] 77 | 30 | 902 | 16.1 | [2] 43 | 30 | 901 | 14.6 | [2] 64 | 28 | 903 | 11.2 | [2] 57 | 30 | 901 | 14.6 | [2] 54 |
| 1,500 | 30 | 855 | 20.2 | [2] 63 | 30 | 849 | 16.5 | [2] 19 | 30 | 857 | 17.0 | [2] 70 | 30 | 851 | 14.9 | [2] 34 | 30 | 849 | 12.2 | [2] 64 | 28 | 850 | 7.8 | [2] 61 | 30 | 849 | 10.9 | [2] 56 |
| 2,000 | 30 | 806 | 17.5 | [2] 56 | 30 | 800 | 14.5 | [2] 16 | 30 | 807 | 14.9 | [2] 59 | 30 | 801 | 12.2 | [2] 31 | 30 | 800 | 9.4 | [2] 61 | 28 | 799 | 4.3 | [2] 66 | 30 | 799 | 7.0 | [2] 62 |
| 2,500 | 30 | 760 | 15.0 | [2] 44 | 30 | 754 | 12.1 | [2] 19 | 30 | 761 | 12.7 | [2] 51 | 30 | 755 | 9.5 | [2] 30 | 30 | 753 | 6.6 | [2] 60 | 28 | 752 | 0.9 | [2] 68 | 30 | 751 | 3.2 | [2] 67 |
| 3,000 | 30 | 716 | 12.2 | [2] 40 | 30 | 710 | 9.2 | [2] 22 | 30 | 716 | 10.4 | [2] 42 | 30 | 710 | 7.0 | [2] 34 | 30 | 708 | 3.8 | [2] 60 | 28 | 706 | −2.3 | [2] 64 | 29 | 706 | −0.3 | [2] 68 |
| 4,000 | 30 | 635 | 6.3 | [2] 38 | 30 | 628 | 2.6 | [2] 26 | 30 | 635 | 4.6 | [2] 43 | 30 | 628 | 1.5 | [2] 30 | 28 | 626 | −1.8 | [2] 56 | 28 | 621 | −8.0 | [2] 57 | 29 | 622 | −7.1 | [2] 51 |
| 5,000 | 30 | 562 | 0.2 | [2] 41 | 30 | 555 | −3.9 | [2] 29 | 30 | 561 | −1.6 | [2] 46 | 30 | 554 | −4.1 | [2] 30 | 27 | 552 | −7.4 | [2] 50 | 27 | 546 | −14.6 | [2] 58 | 27 | 547 | −13.3 | [2] 46 |
| 6,000 | 30 | 495 | −6.0 | [2] 34 | 29 | 488 | −10.2 | ---- | 30 | 494 | −7.5 | [2] 47 | 30 | 487 | −10.6 | [2] 30 | 26 | 484 | −13.7 | [2] 43 | 27 | 477 | −22.2 | ---- | 27 | 479 | −19.8 | [2] 47 |
| 7,000 | 30 | 435 | −12.2 | [2] 37 | 29 | 428 | −17.2 | ---- | 30 | 434 | −14.0 | [2] 50 | 28 | 428 | −17.6 | [2] 33 | 25 | 424 | −20.7 | [2] 39 | 27 | 416 | −29.8 | ---- | 26 | 417 | −27.2 | [2] 50 |
| 8,000 | 30 | 381 | −19.1 | [2] 37 | 20 | 373 | −24.8 | ---- | 30 | 380 | −20.8 | [2] 54 | 27 | 374 | −24.9 | [2] 26 | 25 | 369 | −27.7 | [2] 38 | 25 | 360 | −37.0 | ---- | 26 | 362 | −34.9 | ---- |
| 9,000 | 29 | 332 | −26.3 | [2] 40 | 20 | 324 | −32.4 | ---- | 29 | 331 | −28.2 | [2] 60 | 27 | 324 | −32.5 | ---- | 25 | 320 | −34.7 | [2] 48 | 25 | 311 | −43.5 | ---- | 25 | 313 | −42.1 | ---- |
| 10,000 | 28 | 289 | −33.8 | ---- | 18 | 281 | −39.4 | ---- | 29 | 287 | −36.1 | ---- | 24 | 281 | −40.0 | ---- | 25 | 278 | −41.2 | ---- | 25 | 267 | −48.7 | ---- | 24 | 270 | −47.8 | ---- |
| 11,000 | 28 | 250 | −41.5 | ---- | 17 | 242 | −46.2 | ---- | 29 | 248 | −44.1 | ---- | 24 | 242 | −46.4 | ---- | 24 | 239 | −46.9 | ---- | 23 | 230 | −51.2 | ---- | 23 | 231 | −51.0 | ---- |
| 12,000 | 27 | 215 | −49.1 | ---- | 17 | 208 | −52.7 | ---- | 29 | 213 | −52.1 | ---- | 22 | 208 | −51.9 | ---- | 23 | 206 | −51.4 | ---- | 20 | 198 | −51.8 | ---- | 20 | 198 | −48.8 | ---- |
| 13,000 | 24 | 184 | −56.4 | ---- | 16 | 178 | −57.2 | ---- | 29 | 182 | −59.5 | ---- | 21 | 178 | −55.4 | ---- | 21 | 176 | −55.6 | ---- | 20 | 169 | −51.8 | ---- | 19 | 170 | −48.1 | ---- |
| 14,000 | 21 | 157 | −62.8 | ---- | 14 | 153 | −60.2 | ---- | 29 | 155 | −65.4 | ---- | 20 | 152 | −58.5 | ---- | 20 | 151 | −57.8 | ---- | 15 | 146 | −52.6 | ---- | 15 | 146 | −49.4 | ---- |
| 15,000 | 18 | 134 | −66.1 | ---- | 9 | 130 | −61.8 | ---- | 26 | 132 | −69.1 | ---- | 19 | 129 | −60.6 | ---- | 20 | 129 | −59.6 | ---- | 14 | 125 | −53.0 | ---- | 13 | 126 | −50.8 | ---- |
| 16,000 | 14 | 113 | −68.8 | ---- | 6 | 110 | −63.5 | ---- | 25 | 111 | −70.5 | ---- | 18 | 110 | −61.3 | ---- | 18 | 110 | −60.2 | ---- | 12 | 107 | −53.4 | ---- | 9 | 108 | −52.8 | ---- |
| 17,000 | 10 | 96 | −69.2 | ---- | ---- | ---- | ---- | ---- | 22 | 94 | −69.9 | ---- | 15 | 94 | −60.9 | ---- | 13 | 94 | −61.2 | ---- | 6 | 92 | −54.0 | ---- | 5 | 93 | −54.0 | ---- |
| 18,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 14 | 79 | −68.0 | ---- | 13 | 80 | −60.8 | ---- | 11 | 80 | −59.5 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 19,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 10 | 68 | −65.7 | ---- | 10 | 69 | −58.9 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 20,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 6 | 58 | −62.7 | ---- | 5 | 58 | −58.1 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |

| Altitude (meters) m. s. l. | Swan Islands, West Indies (10 m.) | | | | Tacubaya, Mexico (2,306 m.) | | | | Tampa, Fla. (3 m.) | | | | Tapachula, Mexico (115 m.) | | | | Tatoosh Island, Wash. (31 m.) | | | | Tongue Point, Oreg.[1] (21 m.) | | | | Washington, D. C. (25 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 30 | 1,013 | 26.6 | 82 | 27 | 775 | 14.8 | 76 | 30 | 1,018 | 25.3 | [2] 85 | 30 | 1,000 | 24.4 | 90 | 30 | 1,014 | 11.7 | [2] 88 | 17 | 1,015 | 15.0 | [2] 77 | 30 | 1,013 | 24.4 | [2] 78 |
| 500 | 30 | 959 | 22.3 | 87 | ---- | ---- | ---- | ---- | 30 | 962 | 23.5 | [2] 75 | 30 | 957 | 23.7 | 86 | 30 | 959 | 10.6 | [2] 74 | 17 | 959 | 12.1 | [2] 73 | 30 | 960 | 23.8 | [2] 66 |
| 1,000 | 30 | 905 | 18.7 | 87 | ---- | ---- | ---- | ---- | 30 | 908 | 20.7 | [2] 73 | 29 | 904 | 21.4 | 84 | 30 | 903 | 9.5 | [2] 57 | 17 | 904 | 9.5 | [2] 65 | 30 | 907 | 20.9 | [2] 67 |
| 1,500 | 30 | 854 | 15.9 | 81 | ---- | ---- | ---- | ---- | 30 | 857 | 17.7 | [2] 72 | 30 | 853 | 18.8 | 82 | 30 | 850 | 7.2 | [2] 49 | 17 | 850 | 6.6 | [2] 65 | 30 | 855 | 18.0 | [2] 67 |
| 2,000 | 30 | 805 | 13.5 | 72 | ---- | ---- | ---- | ---- | 30 | 808 | 14.8 | [2] 69 | 30 | 804 | 16.2 | 82 | 30 | 799 | 4.3 | [2] 48 | 17 | 800 | 3.3 | [2] 61 | 30 | 806 | 15.0 | [2] 63 |
| 2,500 | 30 | 758 | 11.0 | 64 | 27 | 757 | 13.5 | 76 | 30 | 762 | 12.2 | [2] 65 | 30 | 758 | 13.7 | 82 | 30 | 751 | 1.3 | [2] 48 | 17 | 752 | 0.4 | [2] 52 | 30 | 760 | 12.2 | [2] 56 |
| 3,000 | 30 | 714 | 8.3 | 59 | 27 | 713 | 10.4 | 76 | 30 | 718 | 9.7 | [2] 60 | 30 | 715 | 10.8 | 85 | 30 | 706 | −1.9 | [2] 48 | 17 | 706 | −2.4 | [2] 46 | 30 | 716 | 9.6 | [2] 50 |
| 4,000 | 28 | 632 | 2.7 | 55 | 27 | 632 | 4.0 | 82 | 30 | 636 | 4.4 | [2] 53 | 28 | 634 | 4.9 | 87 | 30 | 622 | −7.5 | [2] 41 | 17 | 622 | −8.6 | [2] 45 | 30 | 634 | 4.0 | [2] 46 |
| 5,000 | 28 | 558 | −3.0 | 54 | 26 | 558 | −1.6 | 88 | 29 | 562 | −1.1 | [2] 53 | 25 | 560 | −0.5 | 82 | 30 | 546 | −14.0 | [2] 38 | 17 | 546 | −15.2 | [2] 41 | 30 | 560 | −1.6 | [2] 41 |
| 6,000 | 27 | 492 | −8.7 | 55 | 26 | 492 | −6.6 | 82 | 29 | 495 | −7.2 | [2] 52 | 24 | 494 | −6.4 | 76 | 30 | 478 | −21.1 | [2] 44 | 17 | 477 | −22.4 | [2] 47 | 30 | 494 | −7.5 | [2] 36 |
| 7,000 | 27 | 432 | −14.8 | 57 | 22 | 433 | −12.1 | 75 | 28 | 435 | −13.3 | [2] 47 | 23 | 434 | −12.3 | 72 | 30 | 417 | −28.6 | [2] 48 | 17 | 416 | −30.2 | [2] 62 | 30 | 434 | −13.4 | [2] 34 |
| 8,000 | 25 | 377 | −21.2 | 59 | 22 | 378 | −18.7 | 72 | 28 | 380 | −20.0 | [2] 49 | 23 | 380 | −18.8 | 73 | 30 | 361 | −36.0 | ---- | 15 | 361 | −36.1 | ---- | 30 | 379 | −20.3 | ---- |
| 9,000 | 24 | 328 | −28.2 | 58 | 21 | 330 | −25.4 | 67 | 28 | 331 | −27.2 | [2] 52 | 21 | 331 | −25.5 | 69 | 30 | 312 | −42.9 | ---- | 15 | 312 | −42.3 | ---- | 30 | 330 | −27.7 | ---- |
| 10,000 | 24 | 285 | −35.8 | ---- | 20 | 287 | −33.0 | 68 | 27 | 288 | −34.5 | [2] 65 | 21 | 288 | −33.0 | 67 | 29 | 269 | −48.3 | ---- | 15 | 269 | −46.8 | ---- | 30 | 287 | −35.5 | ---- |
| 11,000 | 23 | 247 | −43.4 | ---- | 16 | 249 | −40.5 | ---- | 27 | 249 | −42.5 | ---- | 20 | 250 | −40.8 | ---- | 27 | 231 | −51.5 | ---- | 15 | 231 | −49.7 | ---- | 29 | 248 | −43.4 | ---- |
| 12,000 | 22 | 212 | −51.1 | ---- | 15 | 215 | −48.9 | ---- | 27 | 214 | −50.5 | ---- | 18 | 215 | −49.2 | ---- | 24 | 198 | −51.3 | ---- | 11 | 200 | −51.9 | ---- | 29 | 213 | −51.3 | ---- |
| 13,000 | 20 | 182 | −58.4 | ---- | 15 | 184 | −57.4 | ---- | 27 | 184 | −58.5 | ---- | 17 | 184 | −57.9 | ---- | 19 | 170 | −50.1 | ---- | 11 | 171 | −52.3 | ---- | 29 | 182 | −57.7 | ---- |
| 14,000 | 16 | 155 | −65.1 | ---- | 13 | 156 | −66.3 | ---- | 25 | 156 | −64.2 | ---- | 17 | 157 | −66.8 | ---- | 15 | 146 | −50.4 | ---- | 7 | 146 | −53.8 | ---- | 29 | 155 | −62.5 | ---- |
| 15,000 | 14 | 132 | −70.3 | ---- | 12 | 132 | −73.8 | ---- | 24 | 132 | −67.6 | ---- | 17 | 132 | −75.9 | ---- | 11 | 126 | −50.9 | ---- | 6 | 126 | −53.5 | ---- | 25 | 132 | −65.2 | ---- |
| 16,000 | 11 | 111 | −74.6 | ---- | 9 | 111 | −78.9 | ---- | 19 | 112 | −68.9 | ---- | 14 | 111 | −81.5 | ---- | 7 | 108 | −51.1 | ---- | ---- | ---- | ---- | ---- | 23 | 112 | −67.0 | ---- |
| 17,000 | 6 | 93 | −75.4 | ---- | 7 | 93 | −79.1 | ---- | 14 | 95 | −69.8 | ---- | 9 | 93 | −80.4 | ---- | 5 | 93 | −50.4 | ---- | ---- | ---- | ---- | ---- | 14 | 95 | −66.5 | ---- |
| 18,000 | 5 | 78 | −73.6 | ---- | ---- | ---- | ---- | ---- | 12 | 81 | −68.2 | ---- | 5 | 78 | −76.0 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 7 | 81 | −64.8 | ---- |
| 19,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 9 | 68 | −64.5 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |

*Mean free-air barometric pressure in millibars, temperature in degrees centigrade, and relative humidities in percent, obtained by radiosondes during July 1943*

STATIONS AND ELEVATIONS IN METERS ABOVE SEA LEVEL

| Altitude (meters) m. s. l. | Albany, N. Y. (86 m.) | | | | Albuquerque, N. Mex. (1,620 m.) | | | | Apalachicola, Fla. (5 m.) | | | | Atlanta, Ga. (300 m.) | | | | Bismarck, N. Dak. (505 m.) | | | | Boise, Idaho (868 m.) | | | | Brownsville, Tex. (6 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 31 | 1,004 | 18.7 | [2] 86 | 31 | 840 | 25.4 | [2] 39 | 31 | 1,017 | 26.4 | [2] 85 | 31 | 993 | 24.0 | 85 | 29 | 954 | 21.1 | 77 | 31 | 914 | 24.5 | [2] 36 | 31 | 1,014 | 27.1 | [2] 83 |
| 500 | 31 | 958 | 19.5 | [2] 67 | ---- | ---- | ---- | ---- | 31 | 961 | 25.0 | [2] 73 | 31 | 960 | 24.4 | 75 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 31 | 959 | 24.7 | [2] 74 |
| 1,000 | 31 | 903 | 16.9 | [2] 67 | ---- | ---- | ---- | ---- | 31 | 908 | 22.1 | [2] 69 | 31 | 908 | 22.6 | 70 | 29 | 901 | 21.9 | 55 | 31 | 901 | 25.6 | [2] 30 | 31 | 906 | 22.7 | [2] 57 |
| 1,500 | 31 | 852 | 13.6 | [2] 69 | ---- | ---- | ---- | ---- | 31 | 857 | 19.2 | [2] 64 | 31 | 857 | 19.5 | 75 | 28 | 850 | 19.3 | 52 | 31 | 851 | 24.1 | [2] 23 | 31 | 855 | 20.3 | [2] 42 |
| 2,000 | 31 | 802 | 10.8 | [2] 63 | 31 | 804 | 24.1 | [2] 35 | 31 | 808 | 16.2 | [2] 62 | 31 | 808 | 16.1 | 77 | 28 | 802 | 16.0 | 51 | 31 | 803 | 20.2 | [2] 25 | 31 | 806 | 17.7 | [2] 35 |
| 2,500 | 31 | 755 | 8.4 | [2] 53 | 31 | 759 | 20.6 | [2] 37 | 31 | 762 | 13.1 | [2] 61 | 31 | 762 | 12.9 | 78 | 28 | 755 | 12.7 | 48 | 31 | 757 | 16.2 | [2] 29 | 31 | 760 | 14.7 | [2] 33 |
| 3,000 | 31 | 711 | 6.2 | [2] 50 | 31 | 716 | 16.9 | [2] 41 | 31 | 718 | 10.4 | [2] 59 | 31 | 718 | 10.0 | 74 | 28 | 712 | 9.4 | 47 | 31 | 714 | 12.2 | [2] 32 | 31 | 716 | 11.7 | [2] 28 |
| 4,000 | 30 | 629 | 0.9 | [2] 39 | 31 | 636 | 8.9 | [2] 54 | 31 | 636 | 4.8 | [2] 59 | 30 | 636 | 4.7 | 66 | 28 | 630 | 2.9 | 42 | 31 | 632 | 4.8 | [2] 34 | 30 | 635 | 5.6 | [2] 38 |
| 5,000 | 30 | 564 | −4.9 | [2] 36 | 31 | 563 | 1.1 | [2] 69 | 31 | 562 | −0.6 | [2] 47 | 29 | 562 | −0.5 | 56 | 28 | 556 | −4.0 | 44 | 30 | 558 | −2.6 | [2] 40 | 29 | 561 | 0.0 | [2] 31 |
| 6,000 | 30 | 487 | −11.1 | [2] 37 | 31 | 497 | −5.7 | [2] 71 | 31 | 495 | −5.9 | [2] 37 | 29 | 495 | −6.2 | 49 | 27 | 490 | −10.8 | 41 | 30 | 492 | −9.7 | [2] 43 | 28 | 495 | −5.9 | [2] 31 |
| 7,000 | 30 | 427 | −17.8 | [2] 43 | 30 | 437 | −11.6 | [2] 55 | 30 | 435 | −12.1 | [2] 39 | 28 | 435 | −12.7 | 46 | 27 | 429 | −17.8 | 38 | 30 | 431 | −16.7 | [2] 38 | 28 | 435 | −12.1 | [2] 30 |
| 8,000 | 30 | 373 | −24.8 | [2] 44 | 29 | 382 | −17.8 | [2] 47 | 30 | 381 | −18.8 | [2] 40 | 28 | 381 | −19.6 | 45 | 27 | 374 | −24.9 | 39 | 30 | 377 | −24.0 | [2] 38 | 28 | 381 | −18.8 | [2] 30 |
| 9,000 | 29 | 324 | −32.3 | [2] 50 | 28 | 334 | −24.6 | [2] 44 | 29 | 332 | −26.0 | [2] 41 | 27 | 332 | −26.6 | 44 | 26 | 325 | −32.3 | 38 | 29 | 327 | −31.3 | [2] 43 | 27 | 332 | −26.0 | [2] 34 |
| 10,000 | 29 | 281 | −39.4 | ---- | 25 | 290 | −32.0 | ---- | 29 | 289 | −33.4 | ---- | 27 | 289 | −34.1 | 44 | 26 | 282 | −39.6 | ---- | 28 | 284 | −39.0 | ---- | 27 | 289 | −33.6 | ---- |
| 11,000 | 29 | 242 | −46.5 | ---- | 22 | 252 | −39.7 | ---- | 29 | 250 | −41.2 | ---- | 27 | 250 | −41.9 | ---- | 25 | 243 | −46.2 | ---- | 24 | 245 | −45.5 | ---- | 27 | 250 | −41.4 | ---- |
| 12,000 | 28 | 208 | −51.7 | ---- | 20 | 217 | −47.6 | ---- | 29 | 215 | −48.9 | ---- | 27 | 215 | −50.0 | ---- | 25 | 209 | −51.4 | ---- | 24 | 211 | −50.8 | ---- | 27 | 215 | −49.4 | ---- |
| 13,000 | 28 | 178 | −56.0 | ---- | 18 | 186 | −55.1 | ---- | 29 | 185 | −56.3 | ---- | 24 | 184 | −56.8 | ---- | 24 | 179 | −54.8 | ---- | 23 | 181 | −54.4 | ---- | 27 | 184 | −57.2 | ---- |
| 14,000 | 26 | 152 | −58.9 | ---- | 17 | 159 | −61.9 | ---- | 26 | 157 | −62.3 | ---- | 24 | 157 | −62.8 | ---- | 23 | 153 | −57.4 | ---- | 20 | 154 | −56.7 | ---- | 27 | 157 | −64.6 | ---- |
| 15,000 | 24 | 130 | −60.3 | ---- | 15 | 135 | −66.9 | ---- | 20 | 134 | −66.1 | ---- | 23 | 133 | −67.3 | ---- | 20 | 130 | −60.0 | ---- | 18 | 132 | −59.1 | ---- | 26 | 133 | −69.9 | ---- |
| 16,000 | 22 | 111 | −60.1 | ---- | 14 | 114 | −69.5 | ---- | 14 | 113 | −67.7 | ---- | 21 | 113 | −68.6 | ---- | 17 | 112 | −60.5 | ---- | 17 | 112 | −60.4 | ---- | 25 | 112 | −73.2 | ---- |
| 17,000 | 20 | 94 | −58.9 | ---- | 12 | 96 | −68.1 | ---- | 12 | 95 | −66.3 | ---- | 16 | 95 | −67.5 | ---- | 14 | 95 | −59.9 | ---- | 9 | 96 | −59.5 | ---- | 16 | 95 | −72.9 | ---- |
| 18,000 | 15 | 80 | −57.9 | ---- | 10 | 82 | −66.0 | ---- | 8 | 81 | −64.1 | ---- | 12 | 81 | −65.8 | ---- | 6 | 81 | −56.7 | ---- | ---- | ---- | ---- | ---- | 12 | 80 | −69.8 | ---- |
| 19,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 9 | 69 | −62.9 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |

[1] U. S. Navy.

[2] Humidity data obtained by electric hygrometer.

*Mean free-air barometric pressure in millibars, temperature in degrees centigrade, and relative humitities in percent, obtained by radiosondes during July 1943*

STATIONS AND ELEVATIONS IN METERS ABOVE SEA LEVEL—Continued

| Altitude (meters) m. s. l. | Buffalo, N. Y. (221 m.) | | | | Caribou, Maine (191 m.) | | | | Charleston, S. C. (14 m.) | | | | Denver, Colo. (1,616 m.) | | | | Detroit, Mich (217 m.) | | | | El Paso, Tex. (1,193 m.) | | | | Ely, Nev. (1,908 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 26 | 989 | 20.3 | [2]80 | 31 | 990 | 15.8 | [2]84 | 24 | 1,015 | 24.9 | 93 | 31 | 840 | 22.7 | [2]48 | 31 | 990 | 20.0 | [2]85 | 31 | 882 | 26.8 | [2]46 | 25 | 812 | 20.8 | 32 |
| 500 | 26 | 958 | 20.8 | [2]66 | 31 | 955 | 18.0 | [2]63 | 24 | 960 | 23.6 | 78 | ---- | ---- | ---- | ---- | 31 | 958 | 21.4 | [2]62 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 1,000 | 26 | 904 | 18.4 | [2]64 | 31 | 901 | 15.7 | [2]61 | 24 | 907 | 21.1 | 74 | ---- | ---- | ---- | ---- | 31 | 904 | 18.8 | [2]61 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 1,500 | 26 | 853 | 15.3 | [2]62 | 31 | 850 | 12.2 | [2]65 | 24 | 856 | 18.2 | 74 | ---- | ---- | ---- | ---- | 31 | 853 | 15.4 | [2]66 | 31 | 852 | 26.2 | [2]41 | ---- | ---- | ---- | ---- |
| 2,000 | 26 | 803 | 12.2 | [2]60 | 31 | 800 | 9.3 | [2]66 | 24 | 807 | 15.1 | 69 | 31 | 804 | 22.6 | [2]38 | 31 | 803 | 12.6 | [2]53 | 31 | 805 | 22.9 | [2]42 | 25 | 803 | 21.7 | 31 |
| 2,500 | 26 | 756 | 9.5 | [2]44 | 31 | 753 | 6.6 | [2]58 | 24 | 760 | 12.0 | 65 | 31 | 759 | 19.5 | [2]38 | 31 | 757 | 10.2 | [2]50 | 31 | 759 | 19.3 | [2]47 | 25 | 758 | 20.5 | 29 |
| 3,000 | 26 | 712 | 7.4 | [2]41 | 31 | 708 | 3.9 | [2]52 | 24 | 717 | 9.1 | 63 | 31 | 716 | 15.9 | [2]41 | 31 | 712 | 7.7 | [2]47 | 31 | 716 | 15.5 | [2]54 | 25 | 715 | 16.8 | 29 |
| 4,000 | 26 | 630 | 2.2 | [2]44 | 30 | 625 | −1.5 | [2]50 | 23 | 635 | 3.4 | 61 | 31 | 635 | 8.2 | [2]54 | 31 | 631 | 2.2 | [2]42 | 31 | 636 | 7.7 | [2]67 | 25 | 634 | 8.3 | 31 |
| 5,000 | 26 | 556 | −3.2 | [2]36 | 30 | 551 | −7.2 | [2]42 | 21 | 561 | −2.1 | 57 | 31 | 562 | 0.2 | [2]66 | 31 | 556 | −3.9 | [2]38 | 31 | 563 | −0.6 | [2]67 | 24 | 561 | −0.3 | 37 |
| 6,000 | 26 | 490 | −9.1 | [2]31 | 29 | 484 | −13.5 | [2]34 | 20 | 494 | −7.6 | 57 | 31 | 495 | −7.3 | [2]67 | 31 | 490 | −9.8 | [2]34 | 31 | 496 | −5.4 | [2]58 | 24 | 494 | −8.7 | 42 |
| 7,000 | 25 | 430 | −15.9 | [2]36 | 28 | 424 | −20.6 | [2]35 | 19 | 434 | −13.5 | 53 | 31 | 435 | −13.5 | [2]54 | 31 | 430 | −16.4 | [2]36 | 29 | 437 | −11.2 | [2]49 | 23 | 433 | −15.4 | 44 |
| 8,000 | 25 | 375 | −23.2 | [2]33 | 28 | 369 | −28.0 | [2]37 | 15 | 380 | −19.5 | 50 | 31 | 381 | −20.4 | ---- | 31 | 375 | −23.5 | [2]39 | 29 | 382 | −17.6 | [2]46 | 21 | 379 | −22.7 | 42 |
| 9,000 | 25 | 326 | −30.8 | [2]42 | 28 | 320 | −35.7 | ---- | 15 | 332 | −26.4 | 49 | 31 | 331 | −27.8 | ---- | 31 | 326 | −30.7 | [2]41 | 29 | 333 | −24.5 | [2]45 | 20 | 329 | −29.6 | 41 |
| 10,000 | 25 | 283 | −38.5 | ---- | 28 | 277 | −43.3 | ---- | 15 | 288 | −33.5 | 46 | 31 | 288 | −35.3 | ---- | 31 | 283 | −38.0 | ---- | 29 | 290 | −32.6 | ---- | 20 | 286 | −36.4 | 34 |
| 11,000 | 25 | 244 | −45.8 | ---- | 27 | 238 | −49.3 | ---- | 14 | 250 | −40.8 | ---- | 28 | 248 | −43.1 | ---- | 31 | 244 | −45.0 | ---- | 29 | 251 | −40.6 | ---- | 19 | 247 | −43.1 | ---- |
| 12,000 | 25 | 210 | −52.2 | ---- | 27 | 205 | −52.2 | ---- | 14 | 215 | −48.5 | ---- | 28 | 214 | −50.7 | ---- | 31 | 210 | −51.3 | ---- | 28 | 217 | −48.9 | ---- | 16 | 213 | −49.6 | ---- |
| 13,000 | 24 | 179 | −56.5 | ---- | 25 | 175 | −53.1 | ---- | 12 | 184 | −55.5 | ---- | 27 | 183 | −57.6 | ---- | 31 | 180 | −55.3 | ---- | 28 | 186 | −57.1 | ---- | 15 | 182 | −55.3 | ---- |
| 14,000 | 22 | 153 | −59.7 | ---- | 25 | 149 | −54.6 | ---- | 10 | 158 | −61.6 | ---- | 27 | 156 | −63.0 | ---- | 30 | 153 | −58.6 | ---- | 27 | 158 | −64.2 | ---- | 13 | 156 | −60.0 | ---- |
| 15,000 | 19 | 130 | −61.7 | ---- | 22 | 128 | −55.7 | ---- | 9 | 134 | −66.6 | ---- | 26 | 132 | −66.3 | ---- | 28 | 131 | −61.2 | ---- | 25 | 134 | −68.8 | ---- | 10 | 133 | −63.5 | ---- |
| 16,000 | 18 | 111 | −61.2 | ---- | 15 | 110 | −55.5 | ---- | 9 | 113 | −69.1 | ---- | 23 | 112 | −67.1 | ---- | 25 | 111 | −61.5 | ---- | 22 | 114 | −71.4 | ---- | 9 | 112 | −66.4 | ---- |
| 17,000 | 10 | 94 | −60.3 | ---- | 10 | 93 | −54.8 | ---- | 6 | 96 | −68.3 | ---- | 20 | 95 | −65.3 | ---- | 22 | 95 | −60.4 | ---- | 15 | 96 | −69.6 | ---- | 7 | 95 | −66.7 | ---- |
| 18,000 | 5 | 80 | −58.4 | ---- | 6 | 80 | −55.0 | ---- | 6 | 81 | −65.8 | ---- | 11 | 81 | −63.0 | ---- | 14 | 81 | −58.5 | ---- | 10 | 80 | −67.5 | ---- | ---- | ---- | ---- | ---- |
| 19,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 6 | 70 | −56.8 | ---- | 5 | 68 | −63.6 | ---- | ---- | ---- | ---- | ---- |

| Altitude (meters) m. s. l. | Glasgow, Mont. (639 m.) | | | | Great Falls, Mont. (1,128 m.) | | | | Huntington, W. Va. (172 m.) | | | | International Falls, Minn. (343 m.) | | | | Joliet, Ill. (178 m.) | | | | Lake Charles, La. (5 m.) | | | | Lakehurst, N. J.[1] (39 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Surface | 31 | 939 | 22.0 | [2]53 | 30 | 887 | 21.1 | [2]46 | 23 | 996 | 21.7 | [2]91 | 31 | 972 | 20.2 | [2]76 | 31 | 994 | 21.3 | [2]83 | 31 | 1,015 | 25.9 | [2]90 | 31 | 1,010 | 21.8 | [2]85 |
| 500 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 23 | 959 | 22.4 | [2]73 | 31 | 955 | 21.7 | [2]64 | 31 | 958 | 23.4 | [2]61 | 31 | 960 | 25.0 | [2]68 | 31 | 959 | 20.9 | [2]71 |
| 1,000 | 31 | 901 | 22.7 | [2]36 | ---- | ---- | ---- | ---- | 23 | 905 | 20.5 | [2]67 | 31 | 901 | 19.5 | [2]58 | 31 | 904 | 20.8 | [2]56 | 31 | 907 | 22.6 | [2]56 | 31 | 905 | 18.5 | [2]68 |
| 1,500 | 31 | 850 | 19.6 | [2]35 | 30 | 850 | 20.3 | [2]37 | 23 | 854 | 17.3 | [2]65 | 31 | 850 | 15.7 | [2]59 | 31 | 853 | 17.6 | [2]54 | 31 | 856 | 19.9 | [2]50 | 31 | 854 | 15.1 | [2]70 |
| 2,000 | 31 | 802 | 16.0 | [2]38 | 30 | 801 | 17.2 | [2]37 | 23 | 805 | 14.2 | [2]57 | 31 | 801 | 12.4 | [2]56 | 31 | 804 | 14.9 | [2]46 | 31 | 807 | 17.2 | [2]45 | 31 | 804 | 12.5 | [2]63 |
| 2,500 | 31 | 755 | 12.0 | [2]44 | 30 | 755 | 13.2 | [2]40 | 23 | 759 | 11.4 | [2]51 | 31 | 754 | 9.4 | [2]49 | 31 | 758 | 12.3 | [2]40 | 31 | 761 | 14.2 | [2]43 | 31 | 757 | 10.0 | [2]59 |
| 3,000 | 31 | 712 | 8.3 | [2]48 | 30 | 711 | 9.0 | [2]46 | 23 | 714 | 8.6 | [2]46 | 31 | 710 | 6.6 | [2]46 | 31 | 714 | 9.4 | [2]40 | 31 | 717 | 11.2 | [2]41 | 31 | 713 | 7.4 | [2]53 |
| 4,000 | 30 | 629 | 1.5 | [2]42 | 30 | 630 | 1.6 | [2]48 | 23 | 632 | 3.2 | [2]43 | 31 | 628 | 0.9 | [2]37 | 31 | 632 | 3.7 | [2]43 | 31 | 636 | 5.9 | [2]37 | 31 | 630 | 1.9 | [2]47 |
| 5,000 | 29 | 555 | −5.2 | [2]42 | 30 | 556 | −5.1 | [2]44 | 23 | 559 | −2.3 | [2]37 | 30 | 554 | −5.4 | [2]32 | 31 | 559 | −1.9 | [2]36 | 31 | 562 | −0.5 | [2]39 | 31 | 557 | −3.6 | [2]44 |
| 6,000 | 28 | 488 | −12.0 | [2]36 | 29 | 488 | −11.9 | ---- | 23 | 492 | −8.1 | [2]36 | 30 | 487 | −11.6 | [2]27 | 31 | 492 | −7.7 | [2]32 | 31 | 495 | −5.9 | [2]39 | 31 | 490 | −9.4 | [2]41 |
| 7,000 | 28 | 427 | −19.2 | ---- | 28 | 428 | −19.1 | ---- | 22 | 432 | −14.5 | [2]34 | 30 | 427 | −18.8 | [2]28 | 31 | 432 | −14.3 | [2]31 | 31 | 436 | −12.0 | [2]39 | 31 | 430 | −15.9 | ---- |
| 8,000 | 28 | 373 | −26.7 | ---- | 28 | 372 | −26.6 | ---- | 22 | 377 | −21.4 | [2]31 | 30 | 372 | −26.3 | ---- | 31 | 378 | −21.6 | [2]33 | 31 | 381 | −18.6 | [2]40 | 31 | 376 | −22.6 | ---- |
| 9,000 | 28 | 324 | −34.1 | ---- | 26 | 324 | −33.9 | ---- | 22 | 328 | −28.7 | ---- | 30 | 323 | −33.6 | ---- | 31 | 328 | −28.9 | ---- | 30 | 333 | −25.9 | [2]43 | 31 | 326 | −29.6 | ---- |
| 10,000 | 28 | 280 | −41.0 | ---- | 24 | 281 | −40.8 | ---- | 21 | 286 | −36.4 | ---- | 30 | 280 | −40.8 | ---- | 31 | 286 | −36.1 | ---- | 30 | 289 | −33.5 | ---- | 30 | 284 | −36.7 | ---- |
| 11,000 | 27 | 242 | −47.0 | ---- | 22 | 241 | −47.1 | ---- | 21 | 247 | −44.0 | ---- | 30 | 241 | −47.2 | ---- | 31 | 247 | −43.4 | ---- | 30 | 250 | −41.4 | ---- | 29 | 245 | −44.2 | ---- |
| 12,000 | 27 | 207 | −51.4 | ---- | 15 | 208 | −52.2 | ---- | 21 | 212 | −51.7 | ---- | 29 | 207 | −51.3 | ---- | 29 | 212 | −50.4 | ---- | 30 | 215 | −49.1 | ---- | 28 | 210 | −50.8 | ---- |
| 13,000 | 27 | 178 | −52.9 | ---- | 14 | 178 | −55.0 | ---- | 21 | 181 | −58.4 | ---- | 28 | 178 | −53.4 | ---- | 29 | 182 | −55.6 | ---- | 30 | 185 | −56.4 | ---- | 28 | 180 | −56.5 | ---- |
| 14,000 | 25 | 152 | −54.5 | ---- | 10 | 152 | −56.2 | ---- | 21 | 154 | −64.0 | ---- | 24 | 152 | −55.2 | ---- | 28 | 155 | −60.2 | ---- | 30 | 157 | −62.8 | ---- | 27 | 154 | −60.3 | ---- |
| 15,000 | 23 | 130 | −56.5 | ---- | 10 | 130 | −57.3 | ---- | 17 | 131 | −67.2 | ---- | 21 | 130 | −56.8 | ---- | 27 | 132 | −63.8 | ---- | 27 | 134 | −68.1 | ---- | 24 | 131 | −62.9 | ---- |
| 16,000 | 17 | 111 | −57.0 | ---- | 8 | 111 | −57.3 | ---- | 13 | 111 | −66.1 | ---- | 18 | 111 | −56.7 | ---- | 25 | 112 | −64.4 | ---- | 21 | 113 | −71.2 | ---- | 19 | 111 | −63.4 | ---- |
| 17,000 | 13 | 94 | −57.1 | ---- | 5 | 95 | −57.3 | ---- | 11 | 94 | −64.6 | ---- | 15 | 95 | −55.4 | ---- | 18 | 95 | −63.0 | ---- | 12 | 96 | −69.8 | ---- | 12 | 94 | −63.5 | ---- |
| 18,000 | 7 | 81 | −54.8 | ---- | ---- | ---- | ---- | ---- | 8 | 80 | −62.7 | ---- | 8 | 81 | −54.2 | ---- | 10 | 81 | −61.1 | ---- | 9 | 81 | −66.7 | ---- | 6 | 81 | −61.6 | ---- |
| 19,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 7 | 70 | −52.5 | ---- | 6 | 69 | −59.6 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |

| Altitude (meters) m. s. l. | Mazatlan, Mex. (80 m.) | | | | Medford, Oreg. (409 m.) | | | | Miami, Fla. (4 m.) | | | | Nashville, Tenn. (180 m.) | | | | Norfolk, Va.[1] (4 m.) | | | | Oakland, Calif. (6 m.) | | | | Oklahoma City, Okla. (391 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Surface | 31 | 1,003 | 28.6 | 77 | 30 | 968 | 25.4 | 34 | 31 | 1,018 | 25.1 | 88 | 27 | 995 | 25.6 | [2]73 | 24 | 1,016 | 24.2 | [2]85 | 31 | 1,014 | 15.9 | [2]77 | 29 | 968 | 27.6 | [2]59 |
| 500 | 31 | 957 | 26.0 | 76 | 30 | 958 | 25.0 | 34 | 31 | 962 | 23.4 | 85 | 27 | 959 | 26.3 | [2]62 | 24 | 960 | 22.4 | [2]73 | 31 | 957 | 16.7 | [2]66 | 29 | 957 | 28.2 | [2]54 |
| 1,000 | 31 | 904 | 23.9 | 72 | 30 | 905 | 21.8 | 36 | 31 | 909 | 20.6 | 81 | 27 | 906 | 23.5 | [2]64 | 24 | 906 | 19.7 | [2]68 | 31 | 903 | 21.6 | [2]23 | 29 | 904 | 26.6 | [2]48 |
| 1,500 | 30 | 854 | 21.4 | 75 | 30 | 854 | 18.0 | 40 | 31 | 858 | 17.8 | 76 | 27 | 856 | 20.3 | [2]66 | 24 | 855 | 16.7 | [2]66 | 31 | 852 | 20.6 | [2]18 | 29 | 854 | 23.0 | [2]55 |
| 2,000 | 30 | 806 | 18.8 | 70 | 30 | 805 | 14.4 | 46 | 31 | 808 | 14.9 | 73 | 27 | 807 | 17.4 | [2]62 | 24 | 806 | 13.9 | [2]60 | 31 | 804 | 17.8 | [2]18 | 29 | 806 | 19.6 | [2]58 |
| 2,500 | 30 | 760 | 16.3 | 65 | 30 | 758 | 11.8 | 47 | 31 | 762 | 12.3 | 70 | 27 | 761 | 14.4 | [2]54 | 24 | 759 | 11.2 | [2]56 | 31 | 758 | 14.9 | [2]16 | 29 | 761 | 16.3 | [2]55 |
| 3,000 | 30 | 717 | 13.5 | 63 | 30 | 714 | 9.3 | 45 | 31 | 718 | 9.6 | 69 | 27 | 717 | 11.6 | [2]49 | 24 | 715 | 8.4 | [2]52 | 31 | 714 | 11.8 | [2]15 | 29 | 717 | 13.4 | [2]48 |
| 4,000 | 29 | 636 | 7.2 | 67 | 30 | 632 | 3.2 | 37 | 31 | 636 | 3.9 | 67 | 26 | 636 | 5.6 | [2]44 | 24 | 633 | 3.0 | [2]45 | 31 | 633 | 5.2 | [2]15 | 29 | 636 | 7.1 | [2]44 |
| 5,000 | 28 | 563 | 0.8 | 76 | 29 | 558 | −3.2 | 35 | 31 | 562 | −1.8 | 66 | 26 | 562 | 0.2 | [2]36 | 23 | 559 | −2.7 | [2]47 | 31 | 559 | −1.7 | [2]20 | 28 | 563 | 1.0 | 40 |
| 6,000 | 26 | 496 | −5.2 | 74 | 29 | 492 | −10.4 | 35 | 31 | 494 | −7.6 | 64 | 26 | 496 | −5.3 | [2]28 | 21 | 492 | −8.8 | [2]43 | 31 | 492 | −8.8 | [2]20 | 28 | 496 | −4.6 | [2]30 |
| 7,000 | 23 | 437 | −11.3 | 74 | 29 | 431 | −17.3 | 36 | 31 | 434 | −13.6 | 61 | 26 | 436 | −11.4 | [2]24 | 21 | 432 | −14.7 | [2]43 | 31 | 432 | −16.2 | [2]24 | 28 | 436 | −10.9 | [2]28 |
| 8,000 | 23 | 382 | −17.9 | 69 | 29 | 376 | −24.5 | 35 | 29 | 380 | −20.2 | 56 | 26 | 382 | −18.4 | [2]26 | ---- | ---- | ---- | ---- | 31 | 377 | −23.6 | ---- | 27 | 382 | −17.8 | [2]29 |
| 9,000 | 21 | 333 | −24.7 | 66 | 29 | 327 | −32.0 | 35 | 29 | 331 | −27.2 | 56 | 26 | 333 | −25.7 | ---- | ---- | ---- | ---- | ---- | 30 | 328 | −31.3 | ---- | 25 | 333 | −25.1 | [2]30 |
| 10,000 | 20 | 290 | −32.4 | 64 | 29 | 284 | −39.6 | 40 | 29 | 288 | −34.4 | 63 | 26 | 289 | −33.3 | ---- | ---- | ---- | ---- | ---- | 28 | 284 | −38.5 | ---- | 25 | 290 | −32.6 | ---- |
| 11,000 | 19 | 251 | −40.0 | ---- | 28 | 244 | −46.3 | ---- | 29 | 249 | −42.0 | ---- | 25 | 250 | −41.0 | ---- | ---- | ---- | ---- | ---- | 28 | 245 | −45.2 | ---- | 25 | 252 | −40.4 | ---- |
| 12,000 | 18 | 217 | −48.2 | ---- | 28 | 210 | −51.0 | ---- | 24 | 214 | −49.6 | ---- | 25 | 216 | −48.6 | ---- | ---- | ---- | ---- | ---- | 28 | 211 | −50.8 | ---- | 24 | 217 | −47.7 | ---- |
| 13,000 | 16 | 185 | −57.1 | ---- | 26 | 180 | −54.1 | ---- | 24 | 184 | −57.0 | ---- | 25 | 185 | −56.0 | ---- | ---- | ---- | ---- | ---- | 28 | 181 | −55.0 | ---- | 24 | 186 | −55.2 | ---- |
| 14,000 | 14 | 158 | −64.2 | ---- | 25 | 154 | −56.1 | ---- | 24 | 156 | −63.2 | ---- | 25 | 158 | −62.0 | ---- | ---- | ---- | ---- | ---- | 27 | 154 | −58.7 | ---- | 22 | 158 | −62.5 | ---- |
| 15,000 | 12 | 134 | −70.1 | ---- | 24 | 132 | −57.7 | ---- | 22 | 133 | −67.2 | ---- | 25 | 134 | −66.6 | ---- | ---- | ---- | ---- | ---- | 24 | 132 | −62.1 | ---- | 21 | 135 | −68.2 | ---- |
| 16,000 | 7 | 113 | −74.0 | ---- | 22 | 112 | −59.2 | ---- | 22 | 112 | −69.3 | ---- | 21 | 114 | −68.2 | ---- | ---- | ---- | ---- | ---- | 18 | 112 | −63.8 | ---- | 15 | 114 | −71.7 | ---- |
| 17,000 | 5 | 96 | −73.5 | ---- | 17 | 96 | −59.3 | ---- | 17 | 95 | −70.1 | ---- | 13 | 96 | −67.8 | ---- | ---- | ---- | ---- | ---- | 12 | 95 | −63.2 | ---- | 12 | 96 | −71.2 | ---- |
| 18,000 | ---- | ---- | ---- | ---- | 13 | 82 | −58.7 | ---- | 15 | 80 | −68.9 | ---- | 9 | 81 | −65.5 | ---- | ---- | ---- | ---- | ---- | 7 | 81 | −62.4 | ---- | ---- | ---- | ---- | ---- |
| 19,000 | ---- | ---- | ---- | ---- | 8 | 70 | −56.8 | ---- | 9 | 69 | −68.0 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 20,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 5 | 58 | −65.2 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |

[1] U. S. Navy.

[2] Insufficient data.

*Mean free-air barometric pressure in millibars, temperature in degrees centigrade, and relative humidities in percent, obtained by radiosondes during July 1943*—Continued

STATIONS AND ELEVATIONS IN METERR ABOVE SEA LEVEL—Continued

| Altitude (meters) m. s. l. | Omaha, Nebr. (301 m.) | | | | Pensacola, Fla.[1] (24 m.) | | | | Phoenix, Ariz. (339 m.) | | | | Pittsburgh, Pa. (392 m.) | | | | Portland, Maine (20 m.) | | | | St. Louis, Mo. (171 m.) | | | | St. Paul, Minn. (225 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 29 | 980 | 24.3 | [2]74 | 15 | 1,017 | 27.6 | [2]81 | 31 | 969 | 33.1 | [2]30 | 25 | 970 | 21.0 | [2]77 | 31 | 1,012 | 17.4 | 87 | 31 | 995 | 26.1 | [2]70 | 31 | 987 | 22.8 | [2]80 |
| 500 | 29 | 958 | 24.6 | [2]62 | 15 | 964 | 24.6 | [2]74 | 31 | 952 | 34.9 | [2]23 | 25 | 958 | 21.1 | [2]71 | 31 | 957 | 20.1 | 61 | 31 | 958 | 26.1 | [2]58 | 31 | 957 | 23.1 | [2]66 |
| 1,000 | 29 | 905 | 22.7 | [2]54 | 15 | 910 | 21.6 | [2]72 | 31 | 901 | 32.5 | [2]19 | 25 | 905 | 19.4 | [2]66 | 31 | 903 | 17.0 | 60 | 31 | 906 | 22.9 | [2]60 | 31 | 903 | 20.6 | [2]61 |
| 1,500 | 29 | 855 | 20.5 | [2]53 | 15 | 859 | 18.8 | [2]66 | 31 | 852 | 28.3 | [2]22 | 25 | 854 | 16.0 | [2]68 | 31 | 851 | 13.4 | 65 | 31 | 855 | 19.8 | [2]59 | 31 | 853 | 17.6 | [2]59 |
| 2,000 | 29 | 806 | 17.6 | [2]50 | 15 | 810 | 16.0 | [2]59 | 31 | 804 | 24.0 | [2]26 | 25 | 804 | 13.2 | [2]61 | 31 | 802 | 10.1 | 66 | 31 | 806 | 16.6 | [2]61 | 31 | 803 | 14.4 | [2]55 |
| 2,500 | 29 | 760 | 14.5 | [2]43 | 15 | 763 | 13.5 | [2]57 | 31 | 759 | 19.6 | [2]31 | 25 | 758 | 10.8 | [2]51 | 31 | 755 | 7.7 | 61 | 31 | 760 | 13.9 | [2]58 | 31 | 757 | 11.4 | [2]50 |
| 3,000 | 29 | 716 | 11.8 | [2]39 | 15 | 719 | 11.0 | [2]56 | 31 | 716 | 15.4 | [2]35 | 25 | 714 | 8.3 | [2]45 | 31 | 710 | 4.9 | 62 | 31 | 716 | 11.4 | [2]51 | 31 | 713 | 8.3 | [2]49 |
| 4,000 | 29 | 635 | 5.5 | [2]43 | 15 | 637 | 5.1 | [2]51 | 31 | 635 | 7.4 | [2]50 | 25 | 632 | 3.1 | [2]42 | 31 | 628 | −0.3 | 51 | 31 | 635 | 5.9 | [2]49 | 31 | 631 | 2.5 | [2]42 |
| 5,000 | 28 | 561 | −0.7 | [2]35 | 15 | 564 | −0.5 | [2]45 | 31 | 562 | 0.3 | [2]55 | 25 | 558 | −2.6 | [2]37 | 29 | 554 | −6.3 | 49 | 31 | 562 | 0.3 | [2]38 | 30 | 557 | −3.7 | [2]39 |
| 6,000 | 28 | 495 | −6.4 | [2]28 | 15 | 497 | −6.1 | [2]40 | 31 | 495 | −6.3 | [2]52 | 25 | 491 | −8.3 | [2]31 | 28 | 486 | −12.6 | 48 | 31 | 495 | −5.5 | [2]36 | 30 | 490 | −9.9 | [2]34 |
| 7,000 | 28 | 435 | −12.9 | [2]27 | 15 | 437 | −12.4 | [2]43 | 31 | 436 | −12.1 | [2]42 | 25 | 431 | −14.4 | [2]30 | 28 | 426 | −19.5 | 44 | 31 | 435 | −11.8 | [2]34 | 30 | 430 | −16.4 | ---- |
| 8,000 | 28 | 380 | −19.5 | [2]30 | 14 | 382 | −19.2 | ---- | 30 | 381 | −19.0 | [2]42 | 25 | 377 | −21.3 | [2]38 | 28 | 371 | −26.6 | 46 | 31 | 381 | −18.6 | [2]37 | 30 | 375 | −23.6 | ---- |
| 9,000 | 28 | 332 | −26.6 | [2]35 | 13 | 334 | −26.4 | ---- | 30 | 332 | −26.2 | [2]39 | 25 | 328 | −28.8 | [2]42 | 26 | 322 | −34.5 | 55 | 31 | 332 | −26.0 | [2]38 | 29 | 326 | −30.8 | ---- |
| 10,000 | 28 | 288 | −34.1 | ---- | 13 | 290 | −33.4 | ---- | 30 | 289 | −33.8 | ---- | 25 | 285 | −36.2 | ---- | 25 | 278 | −42.4 | ---- | 31 | 289 | −33.7 | ---- | 29 | 283 | −38.1 | ---- |
| 11,000 | 28 | 250 | −41.4 | ---- | 11 | 252 | −41.3 | ---- | 30 | 250 | −41.4 | ---- | 25 | 246 | −43.3 | ---- | 23 | 240 | −48.9 | ---- | 31 | 250 | −41.4 | ---- | 29 | 244 | −44.8 | ---- |
| 12,000 | 28 | 215 | −48.9 | ---- | 11 | 217 | −48.4 | ---- | 26 | 216 | −48.7 | ---- | 25 | 212 | −50.2 | ---- | 21 | 205 | −53.2 | ---- | 31 | 215 | −48.6 | ---- | 29 | 210 | −50.8 | ---- |
| 13,000 | 27 | 184 | −55.6 | ---- | 9 | 185 | −56.4 | ---- | 19 | 185 | −56.0 | ---- | 25 | 181 | −56.3 | ---- | 18 | 175 | −55.4 | ---- | 31 | 185 | −55.0 | ---- | 26 | 180 | −55.2 | ---- |
| 14,000 | 25 | 157 | −61.0 | ---- | 9 | 158 | −62.0 | ---- | 14 | 158 | −62.4 | ---- | 25 | 155 | −60.6 | ---- | 17 | 150 | −57.4 | ---- | 31 | 158 | −61.2 | ---- | 24 | 153 | −58.5 | ---- |
| 15,000 | 22 | 134 | −63.8 | ---- | 6 | 134 | −66.8 | ---- | 13 | 134 | −67.3 | ---- | 25 | 131 | −63.7 | ---- | 13 | 128 | −58.5 | ---- | 30 | 134 | −65.7 | ---- | 23 | 131 | −60.3 | ---- |
| 16,000 | 21 | 114 | −65.3 | ---- | ---- | ---- | ---- | ---- | 10 | 114 | −69.6 | ---- | 23 | 112 | −63.4 | ---- | 9 | 109 | −57.7 | ---- | 27 | 113 | −67.8 | ---- | 20 | 112 | −61.6 | ---- |
| 17,000 | 15 | 96 | −63.4 | ---- | ---- | ---- | ---- | ---- | 9 | 96 | −68.7 | ---- | 18 | 95 | −61.9 | ---- | 6 | 93 | −57.5 | ---- | 19 | 96 | −66.2 | ---- | 14 | 95 | −60.0 | ---- |
| 18,000 | 9 | 82 | −61.9 | ---- | ---- | ---- | ---- | ---- | 6 | 81 | −64.8 | ---- | 13 | 81 | −60.1 | ---- | ---- | ---- | ---- | ---- | 17 | 82 | −63.9 | ---- | 9 | 81 | −58.8 | ---- |
| 19,000 | 5 | 70 | −62.2 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 7 | 69 | −58.5 | ---- | ---- | ---- | ---- | ---- | 7 | 70 | −61.4 | ---- | ---- | ---- | ---- | ---- |

| Altitude (meters) m. s. l. | San Antonio, Tex. (242 m.) | | | | San Diego, Calif.[1] (19 m.) | | | | San Juan, P. R. (15 m.) | | | | Santa Maria, Calif. (73 m.) | | | | Sault Ste. Marie, Mich. (221 m.) | | | | Seattle, Wash.[1] (22 m.) | | | | Spokane, Wash. (598 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 31 | 987 | 27.1 | [2]73 | 31 | 1,011 | 18.9 | [2]79 | 31 | 1,016 | 25.9 | [2]86 | 31 | 1,007 | 14.4 | [2]83 | 21 | 988 | 15.2 | [2]87 | 31 | 1,016 | 20.5 | [2]59 | 31 | 944 | 23.0 | [2]41 |
| 500 | 31 | 958 | 26.5 | [2]70 | 31 | 956 | 19.1 | [2]57 | 31 | 962 | 23.1 | [2]88 | 31 | 958 | 16.6 | [2]69 | 21 | 957 | 18.5 | [2]68 | 31 | 961 | 17.8 | [2]62 | ---- | ---- | ---- | ---- |
| 1,000 | 31 | 906 | 23.7 | [2]65 | 31 | 903 | 22.4 | [2]22 | 31 | 909 | 20.2 | [2]83 | 31 | 904 | 21.8 | [2]21 | 21 | 903 | 16.5 | [2]67 | 31 | 906 | 14.7 | [2]65 | 31 | 902 | 21.8 | [2]35 |
| 1,500 | 31 | 855 | 21.2 | [2]61 | 31 | 852 | 21.9 | [2]19 | 31 | 858 | 17.3 | [2]73 | 31 | 853 | 21.3 | [2]21 | 21 | 851 | 13.7 | [2]64 | 31 | 854 | 12.1 | [2]66 | 31 | 851 | 18.1 | [2]35 |
| 2,000 | 31 | 807 | 18.1 | [2]57 | 31 | 804 | 19.6 | [2]21 | 31 | 808 | 14.9 | [2]62 | 31 | 805 | 18.5 | [2]20 | 21 | 801 | 10.6 | [2]63 | 31 | 804 | 9.9 | [2]59 | 31 | 802 | 13.8 | [2]41 |
| 2,500 | 31 | 761 | 15.5 | [2]49 | 31 | 758 | 16.5 | [2]23 | 31 | 762 | 12.5 | [2]47 | 31 | 759 | 15.4 | [2]18 | 21 | 754 | 7.9 | [2]57 | 31 | 757 | 7.0 | [2]55 | 31 | 755 | 9.8 | [2]45 |
| 3,000 | 31 | 717 | 12.6 | [2]50 | 31 | 715 | 13.1 | [2]28 | 31 | 718 | 9.9 | [2]38 | 31 | 715 | 12.6 | [2]15 | 21 | 710 | 5.3 | [2]53 | 29 | 712 | 3.6 | [2]51 | 31 | 711 | 5.9 | [2]46 |
| 4,000 | 31 | 636 | 6.8 | [2]42 | 31 | 634 | 6.1 | [2]28 | 29 | 635 | 4.6 | [2]33 | 30 | 634 | 6.3 | [2]19 | 21 | 628 | 0.3 | [2]47 | 29 | 629 | −2.4 | [2]54 | 31 | 628 | −0.4 | [2]34 |
| 5,000 | 31 | 562 | 1.1 | [2]41 | 31 | 560 | −1.0 | [2]26 | 29 | 562 | −0.6 | [2]34 | 30 | 560 | −1.1 | [2]20 | 21 | 554 | −5.3 | [2]39 | 28 | 554 | −8.4 | ---- | 31 | 554 | −6.7 | ---- |
| 6,000 | 31 | 496 | −4.8 | [2]36 | 31 | 494 | −7.2 | ---- | 29 | 495 | −6.2 | [2]30 | 30 | 493 | −8.1 | [2]20 | 21 | 487 | −12.0 | [2]34 | 28 | 486 | −15.1 | ---- | 30 | 487 | −13.2 | ---- |
| 7,000 | 31 | 436 | −10.4 | [2]34 | 31 | 434 | −14.3 | ---- | 29 | 435 | −13.4 | [2]28 | 30 | 433 | −15.0 | ---- | 21 | 426 | −19.3 | [2]31 | 28 | 425 | −22.0 | ---- | 30 | 426 | −20.2 | ---- |
| 8,000 | 31 | 382 | −17.5 | [2]31 | 25 | 379 | −21.8 | ---- | 29 | 381 | −20.7 | [2]33 | 30 | 379 | −22.6 | ---- | 20 | 372 | −26.9 | [2]35 | 25 | 370 | −29.2 | ---- | 30 | 371 | −27.6 | ---- |
| 9,000 | 31 | 334 | −24.7 | [2]34 | 25 | 329 | −29.0 | ---- | 28 | 332 | −28.5 | [2]38 | 30 | 329 | −30.4 | ---- | 19 | 323 | −34.5 | [2]37 | 25 | 320 | −36.3 | ---- | 30 | 322 | −34.8 | ---- |
| 10,000 | 31 | 290 | −32.2 | ---- | 25 | 286 | −36.1 | ---- | 28 | 288 | −36.6 | ---- | 29 | 286 | −37.6 | ---- | 19 | 279 | −42.2 | ---- | 23 | 277 | −42.9 | ---- | 28 | 278 | −41.2 | ---- |
| 11,000 | 31 | 251 | −40.1 | ---- | 25 | 247 | −43.0 | ---- | 28 | 249 | −44.7 | ---- | 29 | 247 | −43.9 | ---- | 19 | 240 | −48.5 | ---- | 20 | 238 | −47.7 | ---- | 28 | 240 | −47.1 | ---- |
| 12,000 | 31 | 217 | −47.9 | ---- | 23 | 213 | −49.7 | ---- | 28 | 214 | −52.8 | ---- | 29 | 212 | −49.5 | ---- | 19 | 206 | −52.9 | ---- | 18 | 204 | −52.0 | ---- | 28 | 206 | −51.4 | ---- |
| 13,000 | 31 | 186 | −55.6 | ---- | 21 | 183 | −56.0 | ---- | 27 | 182 | −60.0 | ---- | 29 | 182 | −54.9 | ---- | 18 | 176 | −54.2 | ---- | 11 | 176 | −52.6 | ---- | 28 | 177 | −52.8 | ---- |
| 14,000 | 28 | 158 | −62.5 | ---- | 20 | 156 | −60.8 | ---- | 25 | 155 | −64.8 | ---- | 29 | 155 | −59.7 | ---- | 17 | 151 | −55.1 | ---- | 10 | 151 | −52.9 | ---- | 28 | 151 | −53.9 | ---- |
| 15,000 | 26 | 134 | −67.6 | ---- | 18 | 132 | −64.6 | ---- | 24 | 132 | −68.6 | ---- | 27 | 132 | −64.1 | ---- | 12 | 129 | −56.9 | ---- | 10 | 129 | −53.5 | ---- | 26 | 130 | −55.4 | ---- |
| 16,000 | 21 | 114 | −70.9 | ---- | 17 | 112 | −66.7 | ---- | 24 | 112 | −71.4 | ---- | 26 | 112 | −66.1 | ---- | 10 | 110 | −57.8 | ---- | 9 | 111 | −54.2 | ---- | 25 | 111 | −56.5 | ---- |
| 17,000 | 21 | 96 | −70.6 | ---- | 13 | 96 | −66.7 | ---- | 18 | 94 | −71.8 | ---- | 25 | 95 | −65.0 | ---- | 8 | 94 | −57.6 | ---- | 6 | 95 | −55.2 | ---- | 20 | 95 | −56.6 | ---- |
| 18,000 | 15 | 81 | −67.8 | ---- | 11 | 81 | −65.3 | ---- | 13 | 80 | −70.1 | ---- | 24 | 81 | −62.5 | ---- | 6 | 80 | −57.4 | ---- | ---- | ---- | ---- | ---- | 16 | 81 | −55.0 | ---- |
| 19,000 | 9 | 69 | −64.3 | ---- | ---- | ---- | ---- | ---- | 9 | 68 | −67.6 | ---- | 17 | 69 | −60.7 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 6 | 70 | −53.2 | ---- |
| 20,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 5 | 58 | −65.1 | ---- | 10 | 58 | −58.9 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |

| Altitude (meters) m. s. l. | Swan Island, West Indies (10 m.) | | | | Tacubaya, Mexico (2,306 m.) | | | | Tampa, Fla. (3 m.) | | | | Tapachula, Mexico (115 m.) | | | | Tatoosh Island, Wash. (31 m.) | | | | Tongue Point, Oreg.[1] (21 m.) | | | | Washington, D. C. (25 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 29 | 1,014 | 26.7 | [2]83 | 29 | 776 | 16.6 | 66 | 26 | 1,018 | 25.3 | [2]93 | 31 | 1,000 | 24.6 | 88 | 31 | 1,016 | 12.2 | [2]94 | 26 | 1,018 | 16.8 | [2]74 | 31 | 1,013 | 24.3 | [2]76 |
| 500 | 29 | 959 | 28.2 | [2]80 | ---- | ---- | ---- | ---- | 26 | 962 | 23.6 | [2]79 | 31 | 958 | 24.5 | 84 | 31 | 961 | 11.9 | [2]82 | 26 | 962 | 13.4 | [2]73 | 31 | 959 | 22.8 | [2]66 |
| 1,000 | 29 | 906 | 20.3 | [2]74 | ---- | ---- | ---- | ---- | 26 | 909 | 21.0 | [2]73 | 31 | 904 | 21.7 | 84 | 31 | 906 | 12.6 | [2]54 | 26 | 907 | 12.4 | [2]57 | 31 | 906 | 20.0 | [2]68 |
| 1,500 | 29 | 855 | 17.8 | [2]61 | ---- | ---- | ---- | ---- | 26 | 858 | 18.2 | [2]71 | 31 | 854 | 19.2 | 81 | 31 | 853 | 11.0 | [2]43 | 26 | 855 | 11.3 | [2]45 | 31 | 854 | 16.6 | [2]71 |
| 2,000 | 29 | 806 | 15.3 | [2]54 | ---- | ---- | ---- | ---- | 26 | 809 | 15.3 | [2]70 | 31 | 805 | 16.3 | 79 | 31 | 803 | 8.7 | [2]40 | 26 | 804 | 9.2 | [2]34 | 31 | 805 | 13.7 | [2]64 |
| 2,500 | 29 | 760 | 13.0 | [2]46 | 29 | 758 | 15.4 | 67 | 26 | 762 | 12.6 | [2]67 | 31 | 759 | 13.6 | 81 | 31 | 756 | 6.2 | [2]35 | 26 | 757 | 6.9 | [2]28 | 31 | 758 | 11.4 | [2]53 |
| 3,000 | 29 | 716 | 10.4 | [2]43 | 29 | 714 | 12.1 | 72 | 26 | 718 | 10.0 | [2]61 | 31 | 715 | 10.7 | 83 | 31 | 711 | 3.4 | [2]38 | 26 | 712 | 4.1 | [2]27 | 31 | 714 | 8.8 | [2]46 |
| 4,000 | 28 | 634 | 4.7 | [2]35 | 29 | 633 | 5.0 | 86 | 26 | 636 | 4.4 | [2]60 | 30 | 634 | 4.8 | 83 | 31 | 628 | −2.6 | [2]36 | 26 | 629 | −2.4 | [2]27 | 31 | 632 | 3.0 | [2]43 |
| 5,000 | 27 | 561 | −0.7 | [2]35 | 28 | 560 | −1.1 | 88 | 26 | 562 | −1.2 | [2]62 | 27 | 561 | −0.6 | 79 | 31 | 552 | −9.0 | [2]33 | 26 | 554 | −8.5 | [2]27 | 30 | 559 | −2.4 | [2]41 |
| 6,000 | 25 | 494 | −6.3 | [2]32 | 28 | 494 | −6.8 | 83 | 26 | 495 | −6.7 | [2]49 | 27 | 494 | −6.3 | 71 | 31 | 485 | −15.4 | [2]31 | 26 | 486 | −15.5 | [2]28 | 29 | 492 | −8.2 | [2]39 |
| 7,000 | 24 | 434 | −12.6 | [2]32 | 25 | 434 | −12.5 | 72 | 26 | 435 | −12.6 | [2]46 | 27 | 434 | −12.4 | 69 | 31 | 424 | −22.2 | [2]34 | 25 | 425 | −22.7 | [2]34 | 29 | 432 | −14.4 | [2]38 |
| 8,000 | 19 | 380 | −19.2 | [2]32 | 23 | 380 | −18.6 | 67 | 26 | 381 | −19.3 | [2]44 | 26 | 380 | −19.0 | 65 | 31 | 369 | −29.2 | [2]39 | 17 | 370 | −30.0 | ---- | 29 | 378 | −21.2 | ---- |
| 9,000 | 19 | 331 | −26.3 | ---- | 22 | 331 | −25.5 | 66 | 26 | 332 | −26.4 | [2]46 | 25 | 332 | −26.1 | 60 | 31 | 320 | −36.6 | ---- | 16 | 321 | −37.9 | ---- | 29 | 328 | −28.5 | ---- |
| 10,000 | 19 | 288 | −33.4 | ---- | 21 | 288 | −32.8 | 60 | 25 | 289 | −34.0 | ---- | 24 | 288 | −33.6 | 52 | 31 | 277 | −43.7 | ---- | 16 | 277 | −45.1 | ---- | 29 | 286 | −35.8 | ---- |
| 11,000 | 18 | 249 | −40.6 | ---- | 21 | 250 | −40.7 | ---- | 25 | 250 | −42.1 | ---- | 23 | 250 | −41.9 | ---- | 30 | 238 | −49.0 | ---- | 16 | 238 | −51.6 | ---- | 29 | 247 | −43.3 | ---- |
| 12,000 | 17 | 214 | −48.0 | ---- | 17 | 215 | −48.1 | ---- | 25 | 215 | −50.3 | ---- | 22 | 214 | −50.5 | ---- | 28 | 204 | −51.6 | ---- | 13 | 204 | −55.7 | ---- | 27 | 213 | −51.0 | ---- |
| 13,000 | 15 | 184 | −55.5 | ---- | 17 | 184 | −55.9 | ---- | 25 | 184 | −58.3 | ---- | 19 | 184 | −58.9 | ---- | 28 | 175 | −52.0 | ---- | 12 | 174 | −56.2 | ---- | 26 | 182 | −57.6 | ---- |
| 14,000 | 13 | 157 | −62.1 | ---- | 17 | 157 | −63.6 | ---- | 23 | 157 | −64.8 | ---- | 19 | 156 | −67.1 | ---- | 27 | 150 | −52.8 | ---- | 7 | 149 | −59.0 | ---- | 26 | 155 | −62.1 | ---- |
| 15,000 | 10 | 134 | −67.5 | ---- | 17 | 133 | −70.8 | ---- | 19 | 133 | −69.6 | ---- | 16 | 132 | −74.6 | ---- | 21 | 128 | −54.7 | ---- | 7 | 127 | −60.0 | ---- | 23 | 132 | −64.4 | ---- |
| 16,000 | 8 | 113 | −69.9 | ---- | 11 | 112 | −74.7 | ---- | 16 | 112 | −70.8 | ---- | 11 | 112 | −78.5 | ---- | 15 | 110 | −55.3 | ---- | 5 | 108 | −62.2 | ---- | 21 | 112 | −65.3 | ---- |
| 17,000 | 7 | 95 | −71.6 | ---- | 10 | 94 | −76.6 | ---- | 12 | 95 | −69.9 | ---- | 8 | 94 | −78.8 | ---- | 12 | 94 | −55.1 | ---- | ---- | ---- | ---- | ---- | 14 | 95 | −64.2 | ---- |
| 18,000 | 6 | 80 | −71.4 | ---- | ---- | ---- | ---- | ---- | 6 | 80 | −67.0 | ---- | ---- | ---- | ---- | ---- | 8 | 80 | −54.1 | ---- | ---- | ---- | ---- | ---- | 7 | 81 | −62.1 | ---- |
| 19,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 5 | 68 | −63.4 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |

[1] U. S. Navy.

[2] Humidity data obtained by electric hygrometer.

***Mean free-air barometric pressure in millibars, temperature in degrees centigrade, and relative humidities in percent, obtained by radiosondes during August 1943***

STATIONS AND ELEVATIONS IN METERS ABOVE SEA LEVEL—Continued

| Altitude (meters) m. s. l. | Albany, N. Y. (86 M.) | | | | Albuquerque, N. M. (1620 m.) | | | | Apalachicola, Fla. (5 m.) | | | | Atlanta, Ga. (300 m.) | | | | Bismarck, N. Dak. (505 m.) | | | | Boise, Idaho (868 m.) | | | | Brownsville, Tex. (6 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 31 | 1,002 | 17.3 | [2]87 | 29 | 838 | 25.2 | [2]44 | 31 | 1,014 | 26.6 | [2]82 | 31 | 980 | 25.0 | 75 | 31 | 953 | 19.5 | 70 | 31 | 912 | 22.9 | [2]32 | 31 | 1,011 | 27.8 | [2]80 |
| 500 | 31 | 955 | 18.2 | [2]67 | ---- | ---- | ---- | ---- | 31 | 958 | 24.6 | [2]72 | 31 | 959 | 25.6 | 68 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 31 | 957 | 24.8 | [2]78 |
| 1,000 | 31 | 901 | 15.5 | [2]65 | ---- | ---- | ---- | ---- | 31 | 906 | 21.8 | [2]70 | 31 | 906 | 23.6 | 62 | 31 | 900 | 19.7 | 60 | 31 | 898 | 24.2 | [2]28 | 31 | 904 | 23.0 | [2]51 |
| 1,500 | 31 | 849 | 12.3 | [2]67 | ---- | ---- | ---- | ---- | 31 | 855 | 18.7 | [2]70 | 31 | 856 | 20.4 | 66 | 31 | 849 | 17.3 | 60 | 31 | 849 | 22.8 | [2]24 | 31 | 853 | 20.8 | [2]43 |
| 2,000 | 31 | 800 | 9.3 | [2]65 | 29 | 803 | 23.3 | [2]39 | 31 | 806 | 15.7 | [2]68 | 31 | 807 | 17.1 | 70 | 31 | 801 | 14.7 | 58 | 31 | 800 | 18.7 | [2]27 | 31 | 804 | 18.4 | [2]39 |
| 2,500 | 31 | 752 | 6.8 | [2]58 | 29 | 758 | 20.4 | [2]42 | 31 | 760 | 13.1 | [2]64 | 31 | 761 | 14.3 | 68 | 31 | 754 | 12.1 | 55 | 31 | 754 | 14.5 | [2]30 | 31 | 758 | 15.4 | [2]36 |
| 3,000 | 31 | 706 | 4.4 | [2]54 | 29 | 715 | 16.6 | [2]48 | 31 | 716 | 10.5 | [2]60 | 31 | 717 | 11.3 | 68 | 31 | 710 | 9.1 | 51 | 31 | 711 | 10.5 | [2]33 | 31 | 715 | 12.4 | [2]38 |
| 4,000 | 31 | 625 | −0.5 | [2]40 | 29 | 634 | 8.8 | [2]66 | 30 | 634 | 5.3 | [2]53 | 30 | 636 | 6.1 | 54 | 31 | 629 | 2.6 | 50 | 31 | 630 | 2.8 | [2]38 | 31 | 634 | 6.5 | [2]36 |
| 5,000 | 31 | 551 | −5.9 | [2]33 | 29 | 562 | 1.1 | [2]79 | 30 | 561 | 0.1 | [2]45 | 28 | 562 | 0.6 | 52 | 29 | 555 | −4.5 | 52 | 31 | 555 | −4.8 | [2]40 | 31 | 561 | 0.7 | [2]32 |
| 6,000 | 31 | 484 | −12.1 | ---- | 28 | 495 | −5.6 | [2]72 | 30 | 494 | −5.6 | [2]35 | 28 | 496 | −5.0 | 48 | 29 | 488 | −11.3 | 46 | 31 | 488 | −12.0 | [2]36 | 31 | 494 | −5.3 | [2]29 |
| 7,000 | 31 | 424 | −18.8 | ---- | 28 | 436 | −11.0 | [2]56 | 30 | 435 | −12.0 | [2]32 | 27 | 436 | −11.4 | 45 | 29 | 428 | −17.9 | 42 | 30 | 428 | −19.2 | [2]30 | 31 | 435 | −11.7 | [2]31 |
| 8,000 | 31 | 370 | −26.0 | ---- | 28 | 382 | −17.1 | [2]45 | 29 | 381 | −19.0 | [2]32 | 27 | 382 | −18.0 | 42 | 29 | 373 | −24.9 | 41 | 28 | 373 | −26.4 | [2]30 | 31 | 381 | −18.5 | [2]28 |
| 9,000 | 31 | 321 | −33.4 | ---- | 27 | 333 | −24.2 | [2]45 | 29 | 331 | −26.3 | [2]32 | 27 | 333 | −25.0 | 42 | 28 | 324 | −31.9 | 40 | 27 | 324 | −33.5 | ---- | 31 | 332 | −26.0 | [2]33 |
| 10,000 | 31 | 278 | −40.4 | ---- | 23 | 290 | −31.6 | ---- | 29 | 288 | −33.8 | ---- | 27 | 290 | −32.3 | 39 | 28 | 281 | −38.5 | 40 | 26 | 281 | −40.1 | ---- | 31 | 288 | −33.7 | ---- |
| 11,000 | 29 | 240 | −45.7 | ---- | 22 | 251 | −39.4 | ---- | 29 | 250 | −41.2 | ---- | 27 | 251 | −40.0 | ---- | 27 | 243 | −44.5 | ---- | 21 | 242 | −46.2 | ---- | 31 | 250 | −41.3 | ---- |
| 12,000 | 29 | 206 | −50.6 | ---- | 22 | 217 | −47.0 | ---- | 28 | 215 | −48.8 | ---- | 27 | 216 | −47.7 | ---- | 27 | 209 | −48.9 | ---- | 18 | 208 | −50.6 | ---- | 30 | 215 | −48.8 | ---- |
| 13,000 | 28 | 177 | −54.4 | ---- | 20 | 186 | −54.7 | ---- | 26 | 184 | −56.4 | ---- | 26 | 186 | −55.1 | ---- | 26 | 179 | −52.8 | ---- | 16 | 177 | −53.4 | ---- | 26 | 184 | −56.4 | ---- |
| 14,000 | 27 | 151 | −57.4 | ---- | 17 | 158 | −61.5 | ---- | 20 | 157 | −63.2 | ---- | 26 | 158 | −61.9 | ---- | 26 | 153 | −56.4 | ---- | 9 | 152 | −54.9 | ---- | 22 | 157 | −63.9 | ---- |
| 15,000 | 24 | 129 | −59.9 | ---- | 17 | 134 | −66.4 | ---- | 16 | 133 | −68.4 | ---- | 26 | 134 | −67.7 | ---- | 24 | 130 | −59.0 | ---- | 7 | 129 | −57.2 | ---- | 19 | 133 | −69.6 | ---- |
| 16,000 | 20 | 110 | −60.7 | ---- | 13 | 114 | −69.8 | ---- | 11 | 113 | −71.0 | ---- | 20 | 114 | −70.5 | ---- | 22 | 111 | −60.6 | ---- | 5 | 111 | −60.3 | ---- | 14 | 112 | −73.8 | ---- |
| 17,000 | 13 | 94 | −60.2 | ---- | 6 | 96 | −70.0 | ---- | ---- | ---- | ---- | ---- | 15 | 96 | −69.6 | ---- | 17 | 95 | −60.0 | ---- | ---- | ---- | ---- | ---- | 11 | 94 | −74.4 | ---- |
| 18,000 | 5 | 79 | −57.8 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 7 | 81 | −68.0 | ---- | 11 | 81 | −57.4 | ---- | ---- | ---- | ---- | ---- | 8 | 79 | −68.8 | ---- |
| 19,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 8 | 69 | −55.2 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |

| Altitude (meters) m. s. l. | Buffalo, N. Y. (221 m.) | | | | Caribou, Maine (191 m.) | | | | Charleston, S. C. (14 m.) | | | | Denver, Colo. (1,616 m.) | | | | Detroit, Mich. (217 m.) | | | | El Paso, Tex (1,193 m.) | | | | Ely, Nev. (1,908) m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Surface | 25 | 987 | 18.7 | [2]84 | 31 | 988 | 13.8 | [2]90 | 30 | 1,013 | 24.0 | 93 | 31 | 839 | 21.9 | [2]56 | 30 | 988 | 19.0 | [2]88 | 31 | 880 | 29.1 | [2]36 | 25 | 810 | 18.6 | 34 |
| 500 | 25 | 956 | 18.6 | [2]73 | 31 | 953 | 15.2 | [2]76 | 30 | 958 | 24.0 | 74 | ---- | ---- | ---- | ---- | 30 | 957 | 21.2 | [2]68 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 1,000 | 25 | 902 | 16.7 | [2]64 | 31 | 898 | 12.7 | [2]75 | 30 | 905 | 21.5 | 67 | ---- | ---- | ---- | ---- | 30 | 903 | 18.1 | [2]61 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 1,500 | 25 | 850 | 13.5 | [2]61 | 31 | 846 | 9.4 | [2]75 | 30 | 854 | 18.5 | 67 | ---- | ---- | ---- | ---- | 30 | 851 | 15.4 | [2]59 | 31 | 850 | 29.2 | [2]34 | ---- | ---- | ---- | ---- |
| 2,000 | 25 | 800 | 10.6 | [2]55 | 31 | 796 | 6.5 | [2]75 | 30 | 805 | 15.6 | 63 | 31 | 803 | 22.1 | [2]48 | 30 | 802 | 12.7 | [2]47 | 31 | 804 | 26.1 | [2]36 | 25 | 802 | 19.9 | 33 |
| 2,500 | 25 | 754 | 8.1 | [2]50 | 31 | 749 | 3.6 | [2]72 | 30 | 759 | 13.2 | 57 | 31 | 757 | 19.0 | [2]46 | 30 | 756 | 10.5 | [2]46 | 31 | 759 | 22.1 | [2]41 | 25 | 756 | 18.9 | 31 |
| 3,000 | 25 | 709 | 5.8 | [2]45 | 31 | 704 | 0.9 | [2]69 | 30 | 715 | 10.5 | 53 | 31 | 714 | 15.3 | [2]49 | 30 | 711 | 8.0 | [2]40 | 31 | 716 | 17.9 | [2]49 | 25 | 713 | 15.0 | 30 |
| 4,000 | 25 | 627 | −1.0 | [2]35 | 30 | 621 | −4.7 | [2]56 | 29 | 633 | 4.6 | 51 | 31 | 634 | 7.8 | [2]59 | 30 | 629 | 2.1 | [2]29 | 31 | 636 | 9.8 | [2]67 | 25 | 632 | 6.7 | 33 |
| 5,000 | 25 | 558 | −4.6 | [2]31 | 29 | 546 | −10.7 | [2]52 | 29 | 560 | −.6 | 48 | 31 | 561 | 0.4 | [2]70 | 30 | 556 | −3.5 | [2]33 | 30 | 564 | 2.3 | [2]69 | 25 | 559 | −1.5 | 38 |
| 6,000 | 25 | 486 | −10.7 | [2]29 | 29 | 479 | −17.1 | [2]50 | 29 | 494 | −6.2 | 42 | 31 | 494 | −6.3 | [2]73 | 30 | 489 | −9.4 | [2]32 | 30 | 497 | −3.8 | [2]53 | 24 | 492 | −8.9 | 45 |
| 7,000 | 25 | 427 | −17.5 | [2]35 | 29 | 418 | −24.5 | [2]48 | 29 | 434 | −12.3 | 37 | 31 | 435 | −12.3 | [2]62 | 30 | 429 | −16.1 | [2]37 | 29 | 438 | −9.4 | [2]34 | 24 | 432 | −15.0 | 44 |
| 8,000 | 25 | 373 | −24.9 | ---- | 29 | 364 | −32.0 | [2]44 | 29 | 380 | −18.8 | 37 | 29 | 380 | −19.0 | [2]56 | 30 | 374 | −23.1 | ---- | 29 | 383 | −15.6 | [2]28 | 21 | 377 | −22.4 | 42 |
| 9,000 | 25 | 324 | −32.7 | ---- | 27 | 314 | −39.3 | ---- | 29 | 331 | −25.6 | 36 | 29 | 332 | −26.1 | ---- | 29 | 326 | −29.7 | ---- | 29 | 335 | −22.7 | ---- | 21 | 328 | −29.7 | 38 |
| 10,000 | 25 | 280 | −39.8 | ---- | 25 | 271 | −45.3 | ---- | 29 | 288 | −32.2 | 35 | 29 | 288 | −33.6 | ---- | 29 | 283 | −37.0 | ---- | 29 | 292 | −30.5 | ---- | 21 | 285 | −37.2 | ---- |
| 11,000 | 25 | 242 | −45.5 | ---- | 25 | 234 | −48.2 | ---- | 27 | 250 | −39.3 | ---- | 29 | 250 | −41.5 | ---- | 29 | 244 | −43.5 | ---- | 29 | 253 | −38.5 | ---- | 21 | 246 | −44.3 | ---- |
| 12,000 | 25 | 208 | −50.0 | ---- | 22 | 201 | −48.7 | ---- | 24 | 216 | −46.4 | ---- | 28 | 215 | −49.2 | ---- | 27 | 210 | −49.7 | ---- | 28 | 219 | −46.6 | ---- | 20 | 211 | −51.3 | ---- |
| 13,000 | 24 | 178 | −53.8 | ---- | 22 | 172 | −50.2 | ---- | 24 | 185 | −53.4 | ---- | 27 | 184 | −56.8 | ---- | 24 | 180 | −55.0 | ---- | 28 | 188 | −54.8 | ---- | 17 | 181 | −57.1 | ---- |
| 14,000 | 22 | 152 | −58.5 | ---- | 22 | 148 | −52.5 | ---- | 21 | 158 | −60.2 | ---- | 24 | 156 | −62.9 | ---- | 23 | 154 | −59.9 | ---- | 27 | 160 | −62.0 | ---- | 16 | 154 | −62.6 | ---- |
| 15,000 | 21 | 129 | −61.2 | ---- | 20 | 126 | −54.0 | ---- | 18 | 134 | −64.9 | ---- | 22 | 133 | −67.3 | ---- | 21 | 131 | −63.2 | ---- | 25 | 136 | −68.2 | ---- | 15 | 131 | −66.4 | ---- |
| 16,000 | 16 | 110 | −62.1 | ---- | 16 | 108 | −55.1 | ---- | 12 | 114 | −67.1 | ---- | 19 | 113 | −70.4 | ---- | 19 | 112 | −64.1 | ---- | 20 | 115 | −72.4 | ---- | 12 | 112 | −67.8 | ---- |
| 17,000 | 9 | 94 | −59.8 | ---- | 10 | 92 | −54.1 | ---- | 11 | 96 | −68.3 | ---- | 13 | 95 | −69.6 | ---- | 15 | 95 | −61.7 | ---- | 15 | 97 | −72.2 | ---- | 8 | 94 | −67.3 | ---- |
| 18,000 | ---- | ---- | ---- | ---- | 5 | 79 | −54.1 | ---- | 8 | 82 | −67.2 | ---- | 6 | 81 | −66.4 | ---- | 7 | 81 | −59.0 | ---- | 9 | 82 | −68.0 | ---- | ---- | ---- | ---- | ---- |
| 19,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 6 | 70 | −65.4 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |

| Altitude (meters) m. s. l. | Glasgow, Mont.[3] (639 m.) | | | | Great Falls, Mont. (1,128 m.) | | | | Huntington, W. Va. (172 m.) | | | | International Falls, Minn. (343 m.) | | | | Joliet, Ill (178 m.) | | | | Lake Charles, La. (5 m.) | | | | Lakehurst, N. J.[1] (39 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Surface | ---- | ---- | ---- | ---- | 31 | 885 | 21.0 | [2]37 | 25 | 995 | 20.5 | [2]88 | 31 | 971 | 17.9 | [2]77 | 31 | 992 | 21.1 | [2]89 | 31 | 1,013 | 25.9 | [2]90 | 30 | 1,008 | 21.5 | [2]76 |
| 500 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 25 | 958 | 22.3 | [2]61 | 31 | 953 | 19.1 | [2]67 | 31 | 956 | 23.2 | [2]67 | 31 | 958 | 25.2 | [2]69 | 30 | 956 | 21.7 | [2]60 |
| 1,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 25 | 904 | 20.1 | [2]60 | 31 | 899 | 16.8 | [2]64 | 31 | 903 | 20.2 | [2]65 | 31 | 905 | 22.6 | [2]60 | 30 | 903 | 18.6 | [2]58 |
| 1,500 | ---- | ---- | ---- | ---- | 31 | 847 | 20.0 | [2]33 | 25 | 853 | 16.7 | [2]63 | 31 | 848 | 14.0 | [2]60 | 31 | 852 | 17.0 | [2]64 | 31 | 854 | 20.0 | [2]52 | 30 | 852 | 15.0 | [2]63 |
| 2,000 | ---- | ---- | ---- | ---- | 31 | 799 | 16.4 | [2]35 | 25 | 804 | 13.9 | [2]57 | 31 | 799 | 11.2 | [2]55 | 31 | 803 | 14.8 | [2]52 | 31 | 806 | 17.6 | [2]45 | 30 | 802 | 11.9 | [2]55 |
| 2,500 | ---- | ---- | ---- | ---- | 31 | 753 | 12.4 | [2]39 | 25 | 757 | 11.2 | [2]42 | 31 | 752 | 8.5 | [2]49 | 31 | 757 | 12.7 | [2]36 | 31 | 760 | 14.9 | [2]42 | 30 | 756 | 9.0 | [2]51 |
| 3,000 | ---- | ---- | ---- | ---- | 31 | 709 | 8.5 | [2]45 | 25 | 713 | 8.5 | [2]33 | 31 | 708 | 6.0 | [2]46 | 31 | 713 | 10.4 | [2]31 | 31 | 716 | 12.2 | [2]39 | 30 | 711 | 6.4 | [2]49 |
| 4,000 | ---- | ---- | ---- | ---- | 31 | 628 | 0.9 | [2]53 | 24 | 631 | 2.9 | [2]33 | 31 | 626 | 0.4 | [2]42 | 31 | 632 | 4.3 | [2]35 | 31 | 635 | 6.7 | [2]39 | 30 | 629 | 1.5 | [2]38 |
| 5,000 | ---- | ---- | ---- | ---- | 31 | 554 | −6.2 | [2]52 | 24 | 557 | −3.1 | [2]35 | 31 | 552 | −6.0 | [2]37 | 30 | 558 | −2.0 | [2]33 | 31 | 562 | 1.3 | [2]34 | 30 | 555 | −3.9 | [2]28 |
| 6,000 | ---- | ---- | ---- | ---- | 31 | 486 | −13.3 | [2]53 | 24 | 491 | −8.7 | [2]33 | 31 | 485 | −12.4 | [2]37 | 30 | 491 | −7.6 | [2]30 | 31 | 495 | −5.0 | [2]32 | 30 | 488 | −10.1 | [2]31 |
| 7,000 | ---- | ---- | ---- | ---- | 31 | 426 | −20.4 | [2]46 | 24 | 431 | −14.8 | ---- | 31 | 425 | −19.4 | [2]35 | 30 | 431 | −14.2 | [2]27 | 30 | 436 | −11.3 | [2]30 | 30 | 428 | −17.0 | ---- |
| 8,000 | ---- | ---- | ---- | ---- | 29 | 371 | −28.1 | ---- | 24 | 377 | −21.6 | ---- | 31 | 371 | −26.6 | [2]37 | 30 | 378 | −21.3 | [2]28 | 30 | 381 | −18.1 | [2]36 | 29 | 374 | −23.8 | ---- |
| 9,000 | ---- | ---- | ---- | ---- | 28 | 322 | −35.8 | ---- | 23 | 328 | −28.4 | ---- | 31 | 322 | −33.9 | ---- | 30 | 328 | −28.9 | ---- | 30 | 333 | −25.6 | [2]37 | 29 | 325 | −30.4 | ---- |
| 10,000 | ---- | ---- | ---- | ---- | 27 | 278 | −42.9 | ---- | 23 | 285 | −36.0 | ---- | 29 | 279 | −40.9 | ---- | 29 | 286 | −36.2 | ---- | 30 | 289 | −33.5 | ---- | 28 | 282 | −38.2 | ---- |
| 11,000 | ---- | ---- | ---- | ---- | 24 | 240 | −48.2 | ---- | 23 | 246 | −43.4 | ---- | 28 | 240 | −46.3 | ---- | 29 | 246 | −42.8 | ---- | 30 | 250 | −41.3 | ---- | 27 | 243 | −45.3 | ---- |
| 12,000 | ---- | ---- | ---- | ---- | 17 | 206 | −51.1 | ---- | 23 | 212 | −50.4 | ---- | 25 | 206 | −50.2 | ---- | 28 | 212 | −49.8 | ---- | 30 | 216 | −49.1 | ---- | 27 | 209 | −51.2 | ---- |
| 13,000 | ---- | ---- | ---- | ---- | 14 | 176 | −53.6 | ---- | 20 | 182 | −57.1 | ---- | 24 | 177 | −53.0 | ---- | 27 | 182 | −56.5 | ---- | 29 | 185 | −56.6 | ---- | 25 | 179 | −56.9 | ---- |
| 14,000 | ---- | ---- | ---- | ---- | 14 | 151 | −55.4 | ---- | 18 | 155 | −63.1 | ---- | 21 | 151 | −55.6 | ---- | 25 | 155 | −61.8 | ---- | 29 | 157 | −63.5 | ---- | 23 | 153 | −60.7 | ---- |
| 15,000 | ---- | ---- | ---- | ---- | 9 | 129 | −57.0 | ---- | 15 | 131 | −67.7 | ---- | 19 | 129 | −57.3 | ---- | 22 | 131 | −65.0 | ---- | 26 | 134 | −68.7 | ---- | 22 | 130 | −64.1 | ---- |
| 16,000 | ---- | ---- | ---- | ---- | 7 | 111 | −58.8 | ---- | 12 | 111 | −69.4 | ---- | 16 | 111 | −57.6 | ---- | 20 | 112 | −67.0 | ---- | 20 | 113 | −72.2 | ---- | 16 | 110 | −65.6 | ---- |
| 17,000 | ---- | ---- | ---- | ---- | 7 | 94 | −59.1 | ---- | 8 | 94 | −66.2 | ---- | 12 | 94 | −56.0 | ---- | 15 | 95 | −65.0 | ---- | 16 | 95 | −72.5 | ---- | 14 | 94 | −64.2 | ---- |
| 18,000 | ---- | ---- | ---- | ---- | 5 | 80 | −57.8 | ---- | 8 | 80 | −63.2 | ---- | 6 | 81 | −54.2 | ---- | 12 | 80 | −61.6 | ---- | 11 | 81 | −70.3 | ---- | 9 | 79 | −61.2 | ---- |
| 19,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 7 | 69 | −66.0 | ---- | ---- | ---- | ---- | ---- |

[1] U. S. Navy. [2] Humidity data obtained by electric hygrometer. [3] Insufficient data.

*Mean free-air barometric pressure in millibars, temperature in degrees centigrade, and relative humidities in percent, obtained by radiosondes during August 1943*—Continued

STATIONS AND ELEVATIONS IN METERS ABOVE SEA LEVEL—Continued

| Altitude (meters) m. s. l. | Mazatlan, Mexico (80 m.) | | | | Medford, Oreg. (409 m.) | | | | Miami, Fla. (4 m.) | | | | Nashville, Tenn. (180 m.) | | | | Norfolk, Va.[1] (4 m.) | | | | Oakland, Calif. (6 m.) | | | | Oklahoma City, Okla. (391 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 29 | 1,002 | 28.4 | 80 | 31 | 967 | 22.7 | 42 | 31 | 1,015 | 25.2 | 88 | 31 | 993 | 26.1 | [2]67 | 23 | 1,014 | 24.8 | [2]80 | 31 | 1,013 | 16.3 | [2]77 | 30 | 966 | 28.8 | [2]47 |
| 500 | 29 | 956 | 25.6 | 81 | 31 | 957 | 22.4 | 43 | 31 | 960 | 24.2 | 85 | 31 | 958 | 26.7 | [2]53 | 23 | 959 | 23.4 | [2]63 | 31 | 956 | 16.1 | [2]64 | 30 | 954 | 29.7 | [2]43 |
| 1,000 | 28 | 904 | 23.3 | 76 | 31 | 903 | 19.2 | 47 | 31 | 906 | 21.3 | 80 | 31 | 905 | 23.6 | [2]57 | 23 | 905 | 21.1 | [2]59 | 31 | 901 | 19.6 | [2]31 | 30 | 903 | 28.3 | [2]42 |
| 1,500 | 28 | 853 | 20.7 | 83 | 31 | 852 | 15.6 | 56 | 31 | 856 | 18.5 | 76 | 31 | 854 | 20.2 | [2]60 | 23 | 854 | 17.9 | [2]59 | 31 | 850 | 18.4 | [2]22 | 30 | 853 | 25.1 | [2]45 |
| 2,000 | 27 | 805 | 18.2 | 78 | 31 | 803 | 11.9 | 63 | 31 | 807 | 15.6 | 72 | 31 | 806 | 17.2 | [2]53 | 23 | 805 | 15.0 | [2]55 | 31 | 802 | 16.0 | [2]18 | 30 | 805 | 21.8 | [2]48 |
| 2,500 | 27 | 759 | 15.7 | 73 | 31 | 756 | 8.8 | 64 | 31 | 760 | 12.8 | 69 | 31 | 760 | 14.7 | [2]49 | 23 | 759 | 12.3 | [2]47 | 31 | 755 | 13.5 | [2]16 | 30 | 760 | 18.6 | [2]47 |
| 3,000 | 27 | 716 | 13.5 | 65 | 31 | 711 | 6.5 | 57 | 31 | 716 | 10.2 | 66 | 31 | 716 | 12.2 | [2]43 | 23 | 715 | 9.6 | [2]45 | 31 | 712 | 10.6 | [2]14 | 30 | 717 | 15.5 | [2]46 |
| 4,000 | 25 | 636 | 7.4 | 71 | 31 | 629 | 0.9 | 46 | 31 | 635 | 4.9 | 64 | 31 | 635 | 6.5 | [2]39 | 23 | 633 | 3.8 | [2]45 | 30 | 630 | 4.7 | [2]13 | 29 | 636 | 9.0 | [2]49 |
| 5,000 | 25 | 562 | 0.8 | 78 | 31 | 555 | −5.0 | 38 | 31 | 562 | −0.5 | 62 | 31 | 562 | 0.4 | [2]39 | 20 | 560 | −1.4 | [2]36 | 30 | 557 | −1.6 | ---- | 29 | 563 | 2.6 | [2]49 |
| 6,000 | 24 | 496 | −5.1 | 76 | 31 | 488 | −11.5 | 33 | 30 | 495 | −6.3 | 58 | 30 | 495 | −4.9 | [2]39 | 18 | 493 | −7.3 | [2]34 | 30 | 490 | −8.6 | ---- | 29 | 497 | −3.2 | [2]39 |
| 7,000 | 24 | 436 | −11.1 | 68 | 31 | 428 | −18.8 | 33 | 28 | 435 | −12.6 | 55 | 30 | 435 | −10.8 | [2]33 | 17 | 433 | −13.6 | [2]32 | 29 | 430 | −15.8 | ---- | 27 | 438 | −8.9 | [2]34 |
| 8,000 | 24 | 382 | −17.6 | 63 | 31 | 373 | −26.4 | 33 | 27 | 380 | −19.2 | 51 | 29 | 382 | −17.1 | [2]28 | ---- | ---- | ---- | ---- | 29 | 376 | −23.1 | ---- | 27 | 383 | −15.5 | ---- |
| 9,000 | 23 | 334 | −24.6 | 59 | 31 | 324 | −34.1 | 29 | 27 | 332 | −26.3 | 50 | 28 | 333 | −24.3 | [2]31 | ---- | ---- | ---- | ---- | 29 | 327 | −30.3 | ---- | 24 | 335 | −22.9 | ---- |
| 10,000 | 21 | 290 | −32.3 | 57 | 31 | 281 | −40.8 | ---- | 25 | 288 | −33.5 | 46 | 27 | 290 | −32.1 | ---- | ---- | ---- | ---- | ---- | 29 | 284 | −37.3 | ---- | 21 | 292 | −30.5 | ---- |
| 11,000 | 21 | 252 | −40.3 | ---- | 30 | 242 | −46.6 | ---- | 25 | 249 | −41.1 | ---- | 26 | 252 | −40.0 | ---- | ---- | ---- | ---- | ---- | 27 | 245 | −44.0 | ---- | 21 | 253 | −38.2 | ---- |
| 12,000 | 20 | 217 | −48.3 | ---- | 28 | 208 | −49.7 | ---- | 25 | 215 | −48.6 | ---- | 25 | 217 | −48.1 | ---- | ---- | ---- | ---- | ---- | 27 | 210 | −50.0 | ---- | 21 | 218 | −45.9 | ---- |
| 13,000 | 17 | 186 | −56.2 | ---- | 27 | 178 | −52.2 | ---- | 23 | 184 | −55.7 | ---- | 25 | 186 | −55.8 | ---- | ---- | ---- | ---- | ---- | 26 | 180 | −55.1 | ---- | 19 | 187 | −53.8 | ---- |
| 14,000 | 17 | 158 | −63.9 | ---- | 25 | 152 | −55.4 | ---- | 22 | 157 | −62.1 | ---- | 24 | 158 | −62.8 | ---- | ---- | ---- | ---- | ---- | 24 | 154 | −59.7 | ---- | 18 | 160 | −61.1 | ---- |
| 15,000 | 17 | 134 | −70.5 | ---- | 23 | 130 | −57.4 | ---- | 20 | 134 | −67.6 | ---- | 23 | 134 | −68.4 | ---- | ---- | ---- | ---- | ---- | 21 | 131 | −62.4 | ---- | 18 | 136 | −67.3 | ---- |
| 16,000 | 13 | 114 | −74.6 | ---- | 20 | 111 | −59.3 | ---- | 15 | 113 | −71.4 | ---- | 19 | 113 | −71.5 | ---- | ---- | ---- | ---- | ---- | 19 | 111 | −64.0 | ---- | 15 | 115 | −72.1 | ---- |
| 17,000 | 6 | 95 | −74.7 | ---- | 16 | 95 | −59.7 | ---- | 6 | 95 | −73.0 | ---- | 13 | 96 | −69.9 | ---- | ---- | ---- | ---- | ---- | 18 | 94 | −64.4 | ---- | 13 | 97 | −74.0 | ---- |
| 18,000 | ---- | ---- | ---- | ---- | 11 | 81 | −59.5 | ---- | ---- | ---- | ---- | ---- | 5 | 81 | −66.4 | ---- | ---- | ---- | ---- | ---- | 17 | 80 | −62.4 | ---- | 6 | 82 | −68.4 | ---- |
| 19,000 | ---- | ---- | ---- | ---- | 8 | 69 | −58.3 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 11 | 68 | −60.5 | ---- | ---- | ---- | ---- | ---- |
| 20,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 7 | 58 | −58.3 | ---- | ---- | ---- | ---- | ---- |

| Altitude (meters) m. s. l. | Omaha, Nebr. (301 m.) | | | | Pensacola, Fla.[1] (24 m.) | | | | Phoenix, Ariz. (339 m.) | | | | Pittsburgh, Pa.[3] (392 m.) | | | | Portland, Maine (20 m.) | | | | St. Louis, Mo. (171 m.) | | | | St. Paul, Minn. (225 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Surface | 31 | 977 | 24.1 | [2]75 | 20 | 1,014 | 27.8 | [2]74 | 31 | 969 | 30.8 | [2]54 | ---- | ---- | ---- | ---- | 31 | 1,010 | 15.8 | 91 | 31 | 993 | 25.7 | [2]73 | 31 | 985 | 21.2 | [2]79 |
| 500 | 31 | 955 | 24.2 | [2]65 | 20 | 961 | 25.3 | [2]71 | 31 | 952 | 32.7 | [2]40 | ---- | ---- | ---- | ---- | 31 | 955 | 17.3 | 68 | 31 | 957 | 25.5 | [2]57 | 31 | 955 | 21.2 | [2]68 |
| 1,000 | 31 | 902 | 23.0 | [2]53 | 20 | 908 | 22.1 | [2]69 | 31 | 901 | 30.0 | [2]38 | ---- | ---- | ---- | ---- | 31 | 900 | 14.8 | 69 | 31 | 904 | 22.8 | [2]56 | 31 | 901 | 18.5 | [2]64 |
| 1,500 | 31 | 852 | 20.9 | [2]49 | 20 | 857 | 19.2 | [2]67 | 31 | 851 | 25.9 | [2]44 | ---- | ---- | ---- | ---- | 31 | 848 | 11.7 | 73 | 31 | 854 | 20.2 | [2]53 | 31 | 850 | 15.8 | [2]60 |
| 2,000 | 31 | 804 | 18.7 | [2]43 | 20 | 808 | 16.2 | [2]66 | 31 | 804 | 21.8 | [2]51 | ---- | ---- | ---- | ---- | 31 | 799 | 8.4 | 73 | 31 | 805 | 17.8 | [2]42 | 31 | 801 | 13.6 | [2]51 |
| 2,500 | 31 | 758 | 15.8 | [2]43 | 20 | 762 | 14.0 | [2]57 | 31 | 758 | 17.9 | [2]57 | ---- | ---- | ---- | ---- | 31 | 752 | 5.7 | 71 | 31 | 759 | 15.1 | [2]42 | 31 | 755 | 11.6 | [2]39 |
| 3,000 | 31 | 714 | 12.4 | [2]43 | 20 | 718 | 11.5 | [2]53 | 31 | 715 | 14.2 | [2]58 | ---- | ---- | ---- | ---- | 31 | 707 | 3.1 | 67 | 31 | 715 | 12.3 | [2]36 | 31 | 710 | 8.9 | [2]38 |
| 4,000 | 31 | 633 | 5.7 | [2]43 | 20 | 636 | 6.2 | [2]44 | 31 | 635 | 7.5 | [2]57 | ---- | ---- | ---- | ---- | 31 | 624 | −1.9 | 58 | 31 | 634 | 6.1 | [2]41 | 31 | 629 | 2.8 | [2]39 |
| 5,000 | 31 | 560 | −1.0 | [2]46 | 20 | 563 | 0.6 | [2]43 | 31 | 562 | 1.0 | [2]55 | ---- | ---- | ---- | ---- | 31 | 550 | −7.8 | 45 | 31 | 561 | 0.3 | [2]43 | 31 | 555 | −3.5 | [2]35 |
| 6,000 | 31 | 493 | −7.1 | [2]33 | 18 | 496 | −5.1 | [2]35 | 30 | 495 | −4.9 | [2]56 | ---- | ---- | ---- | ---- | 30 | 483 | −13.7 | 34 | 31 | 494 | −5.4 | [2]43 | 29 | 488 | −9.7 | [2]37 |
| 7,000 | 31 | 433 | −13.0 | [2]29 | 15 | 436 | −11.8 | [2]36 | 29 | 436 | −10.6 | [2]48 | ---- | ---- | ---- | ---- | 30 | 423 | −20.6 | 33 | 31 | 435 | −11.2 | [2]36 | 29 | 428 | −16.2 | ---- |
| 8,000 | 31 | 379 | −19.5 | [2]30 | 8 | 382 | −18.2 | [2]51 | 29 | 382 | −17.4 | [2]41 | ---- | ---- | ---- | ---- | 27 | 368 | −28.0 | 33 | 31 | 381 | −18.0 | [2]35 | 29 | 374 | −23.0 | ---- |
| 9,000 | 31 | 330 | −26.5 | [2]34 | 8 | 334 | −25.8 | ---- | 29 | 333 | −24.3 | [2]38 | ---- | ---- | ---- | ---- | 26 | 320 | −34.9 | 37 | 30 | 332 | −25.1 | ---- | 29 | 326 | −30.2 | ---- |
| 10,000 | 31 | 288 | −34.0 | ---- | 7 | 290 | −33.2 | ---- | 29 | 290 | −31.8 | ---- | ---- | ---- | ---- | ---- | 25 | 276 | −41.6 | ---- | 30 | 289 | −32.7 | ---- | 28 | 282 | −37.1 | ---- |
| 11,000 | 31 | 249 | −41.5 | ---- | 7 | 251 | −41.5 | ---- | 28 | 252 | −39.5 | ---- | ---- | ---- | ---- | ---- | 22 | 238 | −47.3 | ---- | 30 | 250 | −40.7 | ---- | 26 | 244 | −43.2 | ---- |
| 12,000 | 30 | 214 | −49.0 | ---- | 7 | 216 | −49.5 | ---- | 25 | 217 | −47.3 | ---- | ---- | ---- | ---- | ---- | 20 | 205 | −50.7 | ---- | 30 | 216 | −48.5 | ---- | 22 | 210 | −48.7 | ---- |
| 13,000 | 30 | 183 | −56.3 | ---- | 5 | 185 | −56.8 | ---- | 22 | 186 | −55.2 | ---- | ---- | ---- | ---- | ---- | 17 | 176 | −53.2 | ---- | 30 | 185 | −55.9 | ---- | 21 | 180 | −54.3 | ---- |
| 14,000 | 27 | 156 | −62.2 | ---- | ---- | ---- | ---- | ---- | 20 | 158 | −62.2 | ---- | ---- | ---- | ---- | ---- | 14 | 151 | −55.8 | ---- | 29 | 158 | −62.7 | ---- | 21 | 154 | −59.6 | ---- |
| 15,000 | 25 | 133 | −66.8 | ---- | ---- | ---- | ---- | ---- | 16 | 135 | −67.5 | ---- | ---- | ---- | ---- | ---- | 10 | 129 | −58.6 | ---- | 28 | 134 | −68.0 | ---- | 19 | 131 | −62.7 | ---- |
| 16,000 | 23 | 112 | −68.9 | ---- | ---- | ---- | ---- | ---- | 10 | 114 | −70.5 | ---- | ---- | ---- | ---- | ---- | 10 | 110 | −59.3 | ---- | 26 | 114 | −70.9 | ---- | 18 | 112 | −62.9 | ---- |
| 17,000 | 18 | 95 | −65.9 | ---- | ---- | ---- | ---- | ---- | 7 | 96 | −69.4 | ---- | ---- | ---- | ---- | ---- | 7 | 94 | −59.2 | ---- | 21 | 96 | −69.8 | ---- | 11 | 95 | −60.9 | ---- |
| 18,000 | 17 | 81 | −61.1 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 5 | 80 | −58.0 | ---- | 16 | 81 | −66.4 | ---- | 7 | 80 | −58.6 | ---- |
| 19,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 10 | 69 | −64.9 | ---- | ---- | ---- | ---- | ---- |
| 20,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 6 | 58 | −64.3 | ---- | ---- | ---- | ---- | ---- |

| Altitude (meters) m. s. l. | San Antonio, Tex. (242 m.) | | | | San Diego, Calif.[1] (19 m.) | | | | San Juan, P. R. (15 m.) | | | | Santa Maria, Calif. (73 m.) | | | | Sault Ste. Marie, Mich. (221 m.) | | | | Seattle, Wash.[1] (22 m.) | | | | Spokane, Wash. (598 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Surface | 30 | 984 | 29.5 | [2]59 | 31 | 1,010 | 20.3 | [2]81 | 31 | 1,013 | 26.2 | [2]86 | 31 | 1,005 | 14.2 | [2]87 | 31 | 987 | 14.8 | 90 | 26 | 1,014 | 20.4 | [2]58 | 29 | 943 | 21.9 | [2]37 |
| 500 | 30 | 957 | 28.2 | [2]62 | 31 | 955 | 18.7 | [2]58 | 31 | 960 | 23.2 | [2]85 | 31 | 957 | 16.5 | [2]66 | 31 | 956 | 16.5 | 76 | 26 | 959 | 16.8 | [2]65 | ---- | ---- | ---- | ---- |
| 1,000 | 30 | 904 | 24.9 | [2]68 | 30 | 902 | 21.6 | [2]25 | 31 | 906 | 20.2 | [2]80 | 31 | 902 | 22.0 | [2]15 | 31 | 901 | 14.9 | 69 | 26 | 904 | 13.5 | [2]69 | 29 | 900 | 20.3 | [2]34 |
| 1,500 | 30 | 854 | 22.1 | [2]69 | 30 | 851 | 20.6 | [2]26 | 31 | 856 | 17.4 | [2]74 | 31 | 851 | 20.9 | [2]15 | 31 | 849 | 12.5 | 68 | 26 | 852 | 10.5 | [2]69 | 29 | 849 | 16.2 | [2]38 |
| 2,000 | 30 | 806 | 19.1 | [2]67 | 30 | 803 | 18.6 | [2]32 | 31 | 806 | 15.2 | [2]62 | 31 | 803 | 17.7 | [2]17 | 31 | 800 | 9.6 | 64 | 26 | 802 | 7.8 | [2]66 | 29 | 800 | 12.1 | [2]46 |
| 2,500 | 30 | 760 | 16.6 | [2]58 | 30 | 757 | 15.7 | [2]35 | 31 | 760 | 13.0 | [2]51 | 31 | 757 | 14.7 | [2]15 | 31 | 753 | 7.5 | 55 | 26 | 754 | 5.3 | [2]65 | 29 | 753 | 8.0 | [2]50 |
| 3,000 | 30 | 717 | 14.1 | [2]50 | 30 | 713 | 12.5 | [2]36 | 31 | 716 | 10.4 | [2]45 | 31 | 713 | 12.3 | [2]11 | 31 | 708 | 5.1 | 52 | 26 | 709 | 3.1 | [2]63 | 29 | 708 | 4.9 | [2]46 |
| 4,000 | 30 | 636 | 8.6 | [2]40 | 30 | 633 | 6.1 | [2]33 | 31 | 634 | 4.8 | [2]37 | 31 | 632 | 7.0 | [2]13 | 30 | 626 | −0.2 | 47 | 26 | 626 | −2.0 | [2]57 | 29 | 626 | −1.1 | [2]35 |
| 5,000 | 30 | 563 | 2.7 | [2]36 | 30 | 559 | −0.2 | [2]32 | 30 | 560 | −0.8 | [2]37 | 31 | 559 | 0.4 | [2]19 | 30 | 552 | −6.1 | 43 | 26 | 552 | −8.0 | [2]56 | 29 | 552 | −7.2 | [2]31 |
| 6,000 | 29 | 497 | −3.2 | [2]40 | 30 | 493 | −6.5 | [2]30 | 29 | 494 | −6.4 | [2]26 | 31 | 493 | −6.2 | ---- | 30 | 485 | −12.6 | 39 | 26 | 484 | −14.9 | [2]57 | 29 | 485 | −14.0 | [2]35 |
| 7,000 | 29 | 438 | −9.7 | [2]39 | 30 | 433 | −12.6 | ---- | 29 | 434 | −12.7 | [2]24 | 31 | 433 | −12.9 | ---- | 30 | 424 | −19.9 | 35 | 26 | 424 | −22.1 | [2]59 | 29 | 424 | −21.3 | [2]40 |
| 8,000 | 29 | 383 | −16.6 | [2]38 | 27 | 379 | −19.0 | ---- | 27 | 380 | −19.7 | ---- | 30 | 379 | −20.1 | ---- | 29 | 370 | −26.9 | 36 | 25 | 368 | −20.7 | ---- | 28 | 369 | −29.1 | ---- |
| 9,000 | 29 | 335 | −23.9 | [2]38 | 27 | 331 | −25.8 | ---- | 27 | 331 | −27.1 | ---- | 30 | 330 | −27.7 | ---- | 29 | 321 | −34.0 | 30 | 24 | 320 | −37.5 | ---- | 28 | 319 | −36.7 | ---- |
| 10,000 | 29 | 291 | −31.3 | [2]40 | 27 | 288 | −32.6 | ---- | 27 | 287 | −34.9 | ---- | 30 | 287 | −35.2 | ---- | 28 | 278 | −40.5 | ---- | 23 | 275 | −44.9 | ---- | 27 | 277 | −43.7 | ---- |
| 11,000 | 27 | 253 | −39.0 | ---- | 27 | 249 | −39.5 | ---- | 25 | 249 | −42.5 | ---- | 30 | 248 | −42.0 | ---- | 27 | 240 | −45.7 | ---- | 17 | 237 | −50.1 | ---- | 27 | 238 | −49.0 | ---- |
| 12,000 | 25 | 218 | −46.8 | ---- | 26 | 215 | −46.2 | ---- | 23 | 214 | −50.2 | ---- | 30 | 214 | −48.8 | ---- | 26 | 206 | −49.4 | ---- | 16 | 203 | −52.2 | ---- | 26 | 204 | −50.5 | ---- |
| 13,000 | 22 | 187 | −54.6 | ---- | 25 | 185 | −53.1 | ---- | 22 | 183 | −58.0 | ---- | 29 | 183 | −55.3 | ---- | 25 | 177 | −53.0 | ---- | 15 | 174 | −52.2 | ---- | 26 | 175 | −50.8 | ---- |
| 14,000 | 17 | 160 | −61.7 | ---- | 23 | 158 | −59.2 | ---- | 21 | 156 | −64.5 | ---- | 27 | 156 | −61.1 | ---- | 23 | 151 | −56.1 | ---- | 13 | 149 | −52.8 | ---- | 23 | 150 | −52.7 | ---- |
| 15,000 | 14 | 135 | −67.5 | ---- | 23 | 134 | −64.5 | ---- | 18 | 132 | −70.0 | ---- | 25 | 133 | −65.6 | ---- | 17 | 129 | −57.3 | ---- | 11 | 127 | −54.2 | ---- | 21 | 128 | −54.4 | ---- |
| 16,000 | 13 | 114 | −72.2 | ---- | 18 | 114 | −67.8 | ---- | 16 | 112 | −73.8 | ---- | 20 | 113 | −67.7 | ---- | 12 | 110 | −58.8 | ---- | 9 | 109 | −55.2 | ---- | 19 | 110 | −55.5 | ---- |
| 17,000 | 9 | 97 | −73.4 | ---- | 14 | 97 | −69.6 | ---- | 12 | 94 | −73.3 | ---- | 16 | 96 | −66.2 | ---- | ---- | ---- | ---- | ---- | 6 | 94 | −55.7 | ---- | 15 | 94 | −55.8 | ---- |
| 18,000 | 8 | 82 | −69.2 | ---- | 10 | 82 | −69.1 | ---- | 8 | 79 | −69.6 | ---- | 8 | 81 | −63.6 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 15 | 80 | −54.6 | ---- |
| 19,000 | ---- | ---- | ---- | ---- | 7 | 70 | −67.7 | ---- | 5 | 67 | −67.4 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 9 | 69 | −53.5 | ---- |

[1] U. S. Navy.

[2] Humidity data obtained by electric hygrometer.

*Mean free-air barometric pressure in millibars, temperature in degrees centigrade, and relative humidities in percent, obtained by radiosondes during August 1943*—Continued

STATIONS AND ELEVATIONS IN METERS ABOVE SEA LEVEL—Continued

| Altitude (meters) m. s. l. | Swan Island, West Indies (10 m.) | | | | Tacubaya, Mexico (2,306 m.) | | | | Tampa, Fla.[4] (3 m.) | | | | Tapachula, Mexico (115 m.) | | | | Tatoosh Island, Wash. (31 m.) | | | | Tongue Point, Oreg.[1] (21 m.) | | | | Washington, D. C, (25 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 17 | 1,013 | 26.8 | [2]84 | 30 | 775 | 15.7 | 77 | ---- | ---- | ---- | ---- | 31 | 997 | 24.4 | 90 | 31 | 1,014 | 13.0 | [2]93 | 29 | 1,015 | 17.3 | [2]75 | 31 | 1,011 | 24.7 | [2]69 |
| 500 | 17 | 958 | 23.6 | [2]82 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 31 | 954 | 24.5 | 81 | 31 | 959 | 12.3 | [2]82 | 29 | 960 | 14.2 | [2]75 | 31 | 957 | 23.6 | [2]57 |
| 1,000 | 17 | 905 | 20.4 | [2]76 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 31 | 902 | 21.7 | 82 | 31 | 903 | 11.0 | [2]68 | 29 | 905 | 12.5 | [2]64 | 31 | 904 | 20.5 | [2]57 |
| 1,500 | 17 | 854 | 17.5 | [2]68 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 31 | 851 | 19.2 | 81 | 31 | 851 | 9.1 | [2]57 | 29 | 852 | 10.6 | [2]55 | 31 | 853 | 17.4 | [2]61 |
| 2,000 | 17 | 805 | 15.0 | [2]59 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 31 | 802 | 16.6 | 78 | 31 | 800 | 6.9 | [2]50 | 29 | 802 | 8.7 | [2]44 | 31 | 804 | 14.0 | [2]64 |
| 2,500 | 17 | 758 | 12.7 | [2]50 | 30 | 757 | 14.8 | 78 | ---- | ---- | ---- | ---- | 31 | 757 | 14.0 | 77 | 31 | 753 | 5.0 | [2]46 | 29 | 755 | 6.6 | [2]40 | 31 | 758 | 10.9 | [2]58 |
| 3,000 | 17 | 715 | 10.3 | [2]50 | 30 | 713 | 12.1 | 79 | ---- | ---- | ---- | ---- | 31 | 713 | 11.3 | 78 | 31 | 708 | 2.5 | [2]46 | 29 | 710 | 4.2 | [2]37 | 31 | 714 | 8.5 | [2]46 |
| 4,000 | 16 | 633 | 5.2 | [2]33 | 30 | 632 | 5.5 | 88 | ---- | ---- | ---- | ---- | 30 | 632 | 5.5 | 80 | 31 | 625 | −2.8 | [2]42 | 29 | 627 | −1.4 | [2]35 | 31 | 632 | 3.3 | [2]36 |
| 5,000 | 16 | 560 | 0.0 | [2]26 | 30 | 559 | −0.4 | 94 | ---- | ---- | ---- | ---- | 30 | 559 | −0.2 | 73 | 30 | 550 | −8.9 | [2]38 | 29 | 553 | −8.0 | [2]34 | 31 | 558 | −2.0 | [2]29 |
| 6,000 | 16 | 493 | −6.0 | [2]27 | 29 | 493 | −5.7 | 92 | ---- | ---- | ---- | ---- | 30 | 493 | −5.8 | 68 | 30 | 483 | −15.4 | [2]32 | 28 | 486 | −15.1 | [2]36 | 29 | 491 | −7.9 | [2]30 |
| 7,000 | 16 | 434 | −11.8 | [2]30 | 27 | 434 | −11.2 | 86 | ---- | ---- | ---- | ---- | 30 | 434 | −11.8 | 67 | 30 | 422 | −22.6 | [2]35 | 28 | 425 | −22.4 | [2]42 | 29 | 431 | −13.7 | [2]27 |
| 8,000 | 14 | 379 | −18.1 | [2]34 | 25 | 380 | −17.6 | 79 | ---- | ---- | ---- | ---- | 29 | 379 | −18.3 | 62 | 29 | 367 | −30.6 | [2]43 | 21 | 371 | −29.7 | ---- | 28 | 377 | −21.1 | [2]28 |
| 9,000 | 14 | 331 | −25.0 | [2]32 | 24 | 332 | −24.0 | 75 | ---- | ---- | ---- | ---- | 29 | 331 | −25.2 | 60 | 29 | 318 | −38.4 | ---- | 21 | 321 | −37.6 | ---- | 28 | 328 | −28.0 | ---- |
| 10,000 | 14 | 288 | −32.3 | ---- | 24 | 289 | −31.4 | 69 | ---- | ---- | ---- | ---- | 29 | 288 | −32.7 | 64 | 29 | 275 | −45.8 | ---- | 21 | 278 | −44.5 | ---- | 28 | 286 | −35.1 | ---- |
| 11,000 | 14 | 250 | −39.8 | ---- | 20 | 251 | −38.8 | ---- | ---- | ---- | ---- | ---- | 28 | 249 | −40.5 | ---- | 27 | 236 | −50.9 | ---- | 17 | 240 | −49.4 | ---- | 27 | 247 | −42.1 | ---- |
| 12,000 | 12 | 215 | −47.0 | ---- | 19 | 216 | −46.7 | ---- | ---- | ---- | ---- | ---- | 28 | 215 | −48.9 | ---- | 27 | 202 | −51.9 | ---- | 15 | 206 | −51.8 | ---- | 23 | 212 | −48.7 | ---- |
| 13,000 | 10 | 185 | −54.2 | ---- | 18 | 185 | −54.8 | ---- | ---- | ---- | ---- | ---- | 27 | 184 | −57.1 | ---- | 26 | 173 | −51.4 | ---- | 13 | 176 | −53.7 | ---- | 23 | 182 | −55.4 | ---- |
| 14,000 | 8 | 157 | −61.4 | ---- | 18 | 158 | −62.1 | ---- | ---- | ---- | ---- | ---- | 27 | 157 | −65.2 | ---- | 24 | 148 | −52.2 | ---- | 11 | 151 | −56.0 | ---- | 21 | 155 | −60.7 | ---- |
| 15,000 | 5 | 133 | −67.3 | ---- | 16 | 134 | −68.0 | ---- | ---- | ---- | ---- | ---- | 26 | 133 | −72.9 | ---- | 16 | 127 | −53.9 | ---- | 8 | 129 | −56.2 | ---- | 21 | 132 | −65.1 | ---- |
| 16,000 | 5 | 113 | −72.3 | ---- | 14 | 114 | −72.9 | ---- | ---- | ---- | ---- | ---- | 20 | 112 | −78.7 | ---- | 13 | 109 | −54.1 | ---- | 5 | 111 | −56.3 | ---- | 19 | 112 | −67.5 | ---- |
| 17,000 | ---- | ---- | ---- | ---- | 9 | 96 | −75.9 | ---- | ---- | ---- | ---- | ---- | 15 | 93 | −81.3 | ---- | 7 | 93 | −53.8 | ---- | ---- | ---- | ---- | ---- | 17 | 95 | −66.0 | ---- |
| 18,000 | ---- | ---- | ---- | ---- | 8 | 81 | −77.0 | ---- | ---- | ---- | ---- | ---- | 8 | 78 | −76.6 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 14 | 81 | −63.4 | ---- |
| 19,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 5 | 66 | −71.3 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 6 | 69 | −61.3 | ---- |

*Mean free-air barometric pressure in millibars, temperature in degrees centigrade, and relative humidities in percent, obtained by radiosondes during September 1943*

STATIONS AND ELEVATIONS IN METERS ABOVE SEA LEVEL

| Altitude (meters) m. s. l. | Albany, N. Y. (86 m.) | | | | Albuquerque, N. Mex. (1,620 m.) | | | | Apalachicola, Fla. (5 m.) | | | | Atlanta, Ga. (300 m.) | | | | Bismarck, N. Dak. (505 m.) | | | | Boise, Idaho (368 m.) | | | | Brownsville, Tex. (6 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 30 | 1,010 | 12.3 | [2]86 | 30 | 840 | 21.5 | [2]37 | 30 | 1,016 | 24.6 | [2]81 | 30 | 984 | 20.2 | 68 | 30 | 957 | 12.2 | 65 | 29 | 915 | 19.5 | [2]38 | 30 | 1,012 | 25.5 | [2]87 |
| 500 | 30 | 961 | 13.4 | [2]70 | ---- | ---- | ---- | ---- | 30 | 960 | 22.4 | [2]71 | 30 | 952 | 20.9 | 62 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 30 | 957 | 23.2 | [2]82 |
| 1,000 | 30 | 906 | 10.7 | [2]63 | ---- | ---- | ---- | ---- | 30 | 906 | 19.3 | [2]71 | 30 | 908 | 18.8 | 59 | 30 | 902 | 13.6 | 55 | 29 | 901 | 21.2 | [2]32 | 30 | 904 | 21.6 | [2]73 |
| 1,500 | 30 | 853 | 8.2 | [2]63 | ---- | ---- | ---- | ---- | 30 | 855 | 16.3 | [2]68 | 30 | 857 | 15.9 | 62 | 30 | 850 | 10.8 | 56 | 29 | 851 | 21.0 | [2]25 | 30 | 853 | 18.2 | [2]65 |
| 2,000 | 30 | 802 | 5.9 | [2]56 | 30 | 804 | 20.5 | [2]34 | 30 | 806 | 14.0 | [2]56 | 30 | 807 | 13.1 | 61 | 30 | 800 | 7.6 | 56 | 29 | 802 | 17.2 | [2]27 | 30 | 804 | 15.8 | [2]58 |
| 2,500 | 30 | 755 | 3.7 | [2]47 | 30 | 758 | 17.3 | [2]37 | 30 | 759 | 11.7 | [2]54 | 30 | 761 | 10.6 | 55 | 30 | 752 | 4.8 | 56 | 29 | 756 | 13.2 | [2]30 | 30 | 758 | 13.1 | [2]57 |
| 3,000 | 30 | 709 | 1.3 | [2]44 | 30 | 715 | 13.3 | [2]42 | 30 | 715 | 9.2 | [2]50 | 30 | 716 | 8.2 | 53 | 30 | 708 | 2.0 | 54 | 29 | 712 | 9.4 | [2]30 | 30 | 714 | 10.3 | [2]55 |
| 4,000 | 30 | 626 | −3.8 | [2]40 | 30 | 634 | 5.5 | [2]55 | 30 | 633 | 3.7 | [2]43 | 28 | 634 | 2.9 | 45 | 30 | 624 | −4.2 | 55 | 29 | 630 | 2.4 | [2]29 | 27 | 633 | 5.2 | [2]45 |
| 5,000 | 30 | 551 | −9.7 | [2]35 | 30 | 560 | −2.5 | [2]67 | 30 | 560 | −1.9 | [2]39 | 27 | 560 | −2.3 | 44 | 30 | 549 | −10.3 | 52 | 23 | 556 | −4.6 | [2]27 | 27 | 559 | −0.5 | [2]45 |
| 6,000 | 30 | 483 | −15.9 | [2]29 | 28 | 493 | −9.2 | [2]61 | 30 | 493 | −7.9 | [2]41 | 26 | 493 | −8.6 | 38 | 29 | 482 | −17.3 | 48 | 26 | 489 | −12.0 | [2]33 | 27 | 493 | −6.4 | [2]39 |
| 7,000 | 30 | 422 | −22.5 | [2]33 | 26 | 432 | −15.8 | [2]48 | 30 | 433 | −14.2 | [2]41 | 23 | 432 | −15.4 | 37 | 29 | 421 | −24.1 | 44 | 25 | 428 | −19.5 | [2]31 | 26 | 433 | −12.4 | [2]40 |
| 8,000 | 30 | 368 | −29.8 | ---- | 25 | 378 | −22.8 | ---- | 30 | 379 | −20.9 | [2]43 | 22 | 378 | −22.3 | 39 | 28 | 366 | −31.3 | 39 | 25 | 374 | −27.2 | [2]34 | 24 | 379 | −18.9 | ---- |
| 9,000 | 30 | 318 | −37.3 | ---- | 25 | 328 | −31.0 | ---- | 30 | 329 | −27.9 | [2]46 | 22 | 329 | −29.7 | 40 | 27 | 317 | −38.1 | 34 | 20 | 324 | −35.0 | ---- | 22 | 330 | −26.2 | ---- |
| 10,000 | 29 | 275 | −44.0 | ---- | 25 | 285 | −38.6 | ---- | 30 | 286 | −35.3 | ---- | 20 | 286 | −37.1 | 51 | 26 | 275 | −44.5 | ---- | 18 | 231 | −42.7 | ---- | 22 | 287 | −33.8 | ---- |
| 11,000 | 29 | 237 | −49.1 | ---- | 23 | 246 | −45.7 | ---- | 30 | 247 | −43.2 | ---- | 19 | 246 | −44.7 | ---- | 26 | 236 | −50.0 | ---- | 18 | 211 | −50.2 | ---- | 22 | 249 | −41.9 | ---- |
| 12,000 | 29 | 203 | −53.8 | ---- | 23 | 211 | −51.9 | ---- | 28 | 213 | −50.8 | ---- | 19 | 212 | −51.7 | ---- | 25 | 202 | −53.3 | ---- | 18 | 207 | −56.3 | ---- | 22 | 214 | −50.2 | ---- |
| 13,000 | 29 | 173 | −57.5 | ---- | 22 | 180 | −57.4 | ---- | 27 | 182 | −58.1 | ---- | 18 | 181 | −57.6 | ---- | 23 | 173 | −55.2 | ---- | 17 | 176 | −59.3 | ---- | 21 | 183 | −58.5 | ---- |
| 14,000 | 27 | 148 | −59.3 | ---- | 19 | 154 | −61.7 | ---- | 23 | 155 | −64.7 | ---- | 15 | 155 | −62.5 | ---- | 20 | 148 | −56.0 | ---- | 16 | 150 | −61.0 | ---- | 17 | 156 | −66.9 | ---- |
| 15,000 | 26 | 126 | −60.8 | ---- | 17 | 131 | −61.6 | ---- | 20 | 131 | −69.2 | ---- | 14 | 132 | −66.6 | ---- | 19 | 127 | −56.3 | ---- | 12 | 127 | −62.1 | ---- | 15 | 132 | −73.8 | ---- |
| 16,000 | 21 | 108 | −61.3 | ---- | 15 | 111 | −67.8 | ---- | 13 | 111 | −69.5 | ---- | 10 | 112 | −68.2 | ---- | 12 | 109 | −56.9 | ---- | 10 | 109 | −62.7 | ---- | 11 | 111 | −77.0 | ---- |
| 17,000 | 17 | 92 | −60.8 | ---- | 7 | 94 | −66.4 | ---- | ---- | ---- | ---- | ---- | 6 | 95 | −67.4 | ---- | 7 | 92 | −57.0 | ---- | 9 | 92 | −62.6 | ---- | 7 | 93 | −75.1 | ---- |
| 18,000 | 9 | 78 | −59.3 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 5 | 80 | −65.3 | ---- | ---- | ---- | ---- | ---- | 5 | 78 | −61.1 | ---- | ---- | ---- | ---- | ---- |

| Altitude (meters) m. s. l. | Buffalo, N. Y. (221 m.) | | | | Caribou, Maine (191 m.) | | | | Charleston, S. C. (14 m.) | | | | Denver, Colo. (1661 m.) | | | | Detroit, Mich. (217 m.) | | | | El Paso, Tex. (1193 m.) | | | | Ely, Nev. (1908 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Surface | 30 | 993 | 13.8 | [2]81 | 29 | 997 | 9.4 | [2]87 | 30 | 1,017 | 20.0 | 88 | 30 | 810 | 16.2 | 44 | 30 | 994 | 12.8 | [2]86 | 30 | 882 | 23.3 | 44 | 30 | 811 | 15.9 | 34 |
| 500 | 30 | 961 | 14.5 | [2]67 | 29 | 961 | 11.5 | [2]69 | 30 | 962 | 20.6 | 66 | ---- | ---- | ---- | ---- | 30 | 961 | 15.2 | [2]69 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 1,000 | 30 | 906 | 12.5 | [2]60 | 29 | 905 | 9.5 | [2]59 | 30 | 907 | 17.8 | 66 | ---- | ---- | ---- | ---- | 30 | 906 | 12.4 | [2]63 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 1,500 | 30 | 853 | 9.7 | [2]58 | 29 | 852 | 7.2 | [2]56 | 30 | 856 | 15.0 | 63 | ---- | ---- | ---- | ---- | 30 | 853 | 9.8 | [2]60 | 30 | 852 | 24.1 | [2]37 | ---- | ---- | ---- | ---- |
| 2,000 | 30 | 803 | 6.8 | [2]57 | 29 | 801 | 5.3 | [2]50 | 30 | 806 | 12.6 | 57 | 30 | 803 | 17.7 | 39 | 30 | 803 | 7.4 | [2]54 | 30 | 804 | 21.1 | [2]38 | 30 | 803 | 17.3 | 34 |
| 2,500 | 30 | 755 | 4.3 | [2]48 | 29 | 753 | 3.5 | [2]39 | 30 | 759 | 10.3 | 55 | 30 | 758 | 14.2 | 42 | 30 | 755 | 5.1 | [2]45 | 30 | 758 | 17.3 | [2]41 | 30 | 757 | 16.8 | 33 |
| 3,000 | 30 | 710 | 2.0 | [2]40 | 29 | 708 | 1.4 | [2]37 | 30 | 715 | 8.2 | 50 | 30 | 714 | 10.6 | 46 | 30 | 710 | 2.9 | [2]40 | 30 | 715 | 13.4 | [2]43 | 30 | 714 | 13.1 | 34 |
| 4,000 | 30 | 626 | −3.3 | [2]37 | 27 | 625 | −3.5 | [2]35 | 30 | 633 | 2.9 | 42 | 30 | 632 | 3.1 | 52 | 30 | 627 | −2.5 | [2]39 | 30 | 634 | 5.8 | [2]52 | 30 | 632 | 4.8 | 37 |
| 5,000 | 30 | 551 | −9.0 | [2]31 | 27 | 550 | −9.9 | [2]40 | 29 | 559 | −2.4 | 44 | 30 | 558 | −4.8 | 57 | 29 | 552 | −8.5 | [2]34 | 29 | 560 | −1.4 | [2]49 | 30 | 558 | −3.3 | 40 |
| 6,000 | 30 | 484 | −15.7 | [2]35 | 27 | 482 | −16.5 | [2]39 | 29 | 492 | −8.3 | 42 | 30 | 490 | −12.3 | 55 | 29 | 485 | −14.9 | [2]36 | 28 | 494 | −7.8 | [2]35 | 30 | 491 | −10.7 | 39 |
| 7,000 | 30 | 423 | −22.9 | [2]37 | 27 | 422 | −23.2 | [2]39 | 28 | 432 | −14.9 | 40 | 29 | 430 | −19.5 | 42 | 29 | 424 | −21.7 | [2]35 | 26 | 434 | −13.6 | [2]30 | 30 | 431 | −17.8 | 38 |
| 8,000 | 29 | 368 | −29.8 | ---- | 26 | 367 | −30.2 | [2]44 | 26 | 378 | −22.0 | 40 | 28 | 375 | −26.9 | ---- | 29 | 369 | −29.2 | ---- | 26 | 379 | −20.6 | ---- | 29 | 376 | −25.3 | 37 |
| 9,000 | 29 | 319 | −36.9 | ---- | 24 | 318 | −37.6 | ---- | 26 | 329 | −29.0 | 49 | 27 | 324 | −35.1 | ---- | 28 | 319 | −36.5 | ---- | 25 | 330 | −27.8 | ---- | 28 | 326 | −33.3 | 38 |
| 10,000 | 28 | 276 | −43.5 | ---- | 22 | 275 | −44.2 | ---- | 25 | 286 | −35.9 | ---- | 27 | 281 | −42.9 | ---- | 28 | 276 | −42.9 | ---- | 24 | 287 | −35.2 | ---- | 27 | 283 | −41.0 | ---- |
| 11,000 | 26 | 237 | −48.4 | ---- | 21 | 236 | −50.1 | ---- | 23 | 247 | −43.5 | ---- | 25 | 242 | −50.1 | ---- | 27 | 238 | −48.3 | ---- | 24 | 248 | −42.6 | ---- | 25 | 243 | −48.2 | ---- |
| 12,000 | 24 | 203 | −52.3 | ---- | 18 | 203 | −54.9 | ---- | 23 | 213 | −50.8 | ---- | 25 | 207 | −55.4 | ---- | 23 | 205 | −52.2 | ---- | 24 | 214 | −49.5 | ---- | 22 | 209 | −53.4 | ---- |
| 13,000 | 21 | 175 | −55.1 | ---- | 18 | 173 | −57.0 | ---- | 22 | 182 | −56.9 | ---- | 24 | 176 | −58.4 | ---- | 23 | 175 | −54.7 | ---- | 24 | 183 | −56.2 | ---- | 20 | 179 | −56.9 | ---- |
| 14,000 | 19 | 149 | −57.8 | ---- | 17 | 148 | −58.5 | ---- | 18 | 156 | −61.8 | ---- | 21 | 150 | −61.0 | ---- | 22 | 150 | −57.0 | ---- | 23 | 156 | −62.0 | ---- | 17 | 152 | −59.6 | ---- |
| 15,000 | 14 | 127 | −58.7 | ---- | 16 | 126 | −59.5 | ---- | 16 | 132 | −65.5 | ---- | 19 | 128 | −63.0 | ---- | 21 | 128 | −58.2 | ---- | 21 | 133 | −67.4 | ---- | 12 | 129 | −62.2 | ---- |
| 16,000 | 10 | 108 | −59.1 | ---- | 12 | 108 | −57.9 | ---- | 13 | 112 | −67.5 | ---- | 15 | 109 | −64.2 | ---- | 18 | 109 | −59.0 | ---- | 18 | 112 | −70.0 | ---- | 9 | 110 | −64.1 | ---- |
| 17,000 | 6 | 93 | −61.6 | ---- | 7 | 92 | −57.9 | ---- | 11 | 95 | −68.1 | ---- | 7 | 92 | −63.9 | ---- | 12 | 93 | −58.9 | ---- | 10 | 95 | −70.7 | ---- | 7 | 93 | −65.1 | ---- |
| 18,000 | ---- | ---- | ---- | ---- | 5 | 79 | −59.0 | ---- | 8 | 80 | −65.4 | ---- | ---- | ---- | ---- | ---- | 9 | 79 | −58.9 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |

[1] U. S. Navy. [2] Humidity data obtained by electric hygrometer. [4] Observations temporarily discontinued.

*Mean free-air barometric pressure in millibars, temperature in degrees centigrade, and relative humidities in percent, obtained by radiosondes during September 1943*—Continued

STATIONS AND ELEVATIONS IN METERS ABOVE SEA LEVEL—Continued

| Altitude (meters) m. s. l. | Glasgow, Mont.[4] (639 m.) | | | | Great Falls, Mont. (1,128 m.) | | | | Huntington, W. Va. (172 m.) | | | | International Falls, Minn. (343 m.) | | | | Joliet, Ill. (178 m.) | | | | Lake Charles, La. (5 m.) | | | | Lakehurst, N. J.[1] (39 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | ---- | ---- | ---- | ---- | 30 | 889 | 15.9 | [2] 38 | 30 | 999 | 15.0 | [2] 86 | 30 | 974 | 10.3 | [2] 79 | 30 | 997 | 13.2 | [2] 84 | 30 | 1,016 | 22.2 | [2] 90 | 26 | 1,014 | 16.8 | [2] 82 |
| 500 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 30 | 962 | 18.1 | [2] 60 | 30 | 956 | 11.0 | [2] 71 | 30 | 960 | 15.9 | [2] 62 | 30 | 959 | 21.2 | [2] 77 | 26 | 960 | 17.3 | [2] 67 |
| 1,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 30 | 907 | 15.3 | [2] 56 | 30 | 901 | 8.8 | [2] 67 | 30 | 905 | 12.9 | [2] 57 | 30 | 906 | 19.1 | [2] 66 | 26 | 906 | 15.3 | [2] 65 |
| 1,500 | ---- | ---- | ---- | ---- | 30 | 851 | 15.4 | [2] 34 | 30 | 855 | 11.8 | [2] 50 | 30 | 848 | 5.8 | [2] 71 | 30 | 853 | 10.2 | [2] 56 | 30 | 855 | 17.0 | [2] 38 | 26 | 854 | 12.4 | [2] 58 |
| 2,000 | ---- | ---- | ---- | ---- | 30 | 802 | 11.9 | [2] 37 | 30 | 805 | 8.6 | [2] 57 | 30 | 797 | 3.3 | [2] 63 | 30 | 803 | 7.8 | [2] 52 | 30 | 806 | 14.6 | [2] 53 | 26 | 804 | 9.8 | [2] 57 |
| 2,500 | ---- | ---- | ---- | ---- | 30 | 755 | 8.1 | [2] 42 | 30 | 757 | 5.9 | [2] 58 | 30 | 749 | 1.2 | [2] 53 | 30 | 755 | 5.6 | [2] 45 | 30 | 759 | 12.1 | [2] 47 | 26 | 757 | 7.5 | [2] 49 |
| 3,000 | ---- | ---- | ---- | ---- | 30 | 710 | 4.4 | [2] 46 | 30 | 712 | 3.3 | [2] 52 | 30 | 704 | −1.0 | [2] 48 | 30 | 710 | 3.5 | [2] 42 | 30 | 715 | 9.5 | [2] 41 | 26 | 712 | 5.1 | [2] 47 |
| 4,000 | ---- | ---- | ---- | ---- | 30 | 627 | −2.0 | [2] 39 | 29 | 630 | −1.0 | [2] 49 | 30 | 620 | −6.5 | [2] 44 | 30 | 627 | −2.6 | [2] 43 | 30 | 633 | 3.5 | [2] 46 | 26 | 629 | −0.4 | [2] 42 |
| 5,000 | ---- | ---- | ---- | ---- | 30 | 552 | −8.0 | [2] 37 | 29 | 555 | −6.2 | [2] 45 | 30 | 545 | −12.7 | [2] 45 | 30 | 552 | −8.4 | [2] 38 | 27 | 559 | −2.1 | [2] 36 | 26 | 555 | −6.2 | [2] 40 |
| 6,000 | ---- | ---- | ---- | ---- | 30 | 485 | −14.5 | [2] 35 | 29 | 487 | −12.5 | [2] 41 | 30 | 477 | −19.5 | [2] 48 | 30 | 485 | −15.0 | [2] 38 | 27 | 492 | −8.2 | [2] 34 | 26 | 487 | −12.7 | [2] 37 |
| 7,000 | ---- | ---- | ---- | ---- | 30 | 424 | −21.9 | [2] 36 | 29 | 427 | −19.3 | [2] 35 | 30 | 416 | −26.7 | [2] 48 | 29 | 423 | −22.4 | [2] 40 | 27 | 432 | −14.5 | [2] 41 | 25 | 427 | −19.7 | [2] 40 |
| 8,000 | ---- | ---- | ---- | ---- | 28 | 369 | −29.8 | ---- | 29 | 372 | −26.6 | [2] 36 | 29 | 362 | −33.8 | ---- | 29 | 369 | −29.7 | [2] 45 | 27 | 378 | −21.2 | [2] 43 | 24 | 372 | −27.3 | ---- |
| 9,000 | ---- | ---- | ---- | ---- | 25 | 320 | −37.7 | ---- | 29 | 323 | −34.2 | ---- | 29 | 313 | −41.5 | ---- | 29 | 319 | −36.9 | ---- | 27 | 329 | −28.4 | [2] 44 | 24 | 323 | −34.8 | ---- |
| 10,000 | ---- | ---- | ---- | ---- | 23 | 277 | −45.0 | ---- | 28 | 280 | −41.6 | ---- | 27 | 270 | −47.5 | ---- | 29 | 276 | −43.9 | ---- | 27 | 286 | −35.6 | ---- | 24 | 279 | −41.7 | ---- |
| 11,000 | ---- | ---- | ---- | ---- | 20 | 238 | −51.0 | ---- | 27 | 241 | −48.6 | ---- | 25 | 231 | −51.6 | ---- | 28 | 238 | −50.2 | ---- | 26 | 247 | −43.3 | ---- | 23 | 241 | −48.2 | ---- |
| 12,000 | ---- | ---- | ---- | ---- | 18 | 204 | −55.8 | ---- | 27 | 207 | −54.9 | ---- | 23 | 198 | −53.1 | ---- | 27 | 204 | −53.6 | ---- | 26 | 212 | −51.0 | ---- | 22 | 207 | −54.2 | ---- |
| 13,000 | ---- | ---- | ---- | ---- | 17 | 174 | −58.0 | ---- | 27 | 177 | −59.2 | ---- | 22 | 169 | −53.3 | ---- | 25 | 174 | −56.0 | ---- | 25 | 182 | −58.1 | ---- | 22 | 176 | −58.8 | ---- |
| 14,000 | ---- | ---- | ---- | ---- | 16 | 149 | −59.3 | ---- | 25 | 150 | −61.7 | ---- | 21 | 145 | −53.5 | ---- | 21 | 149 | −58.7 | ---- | 25 | 155 | −64.2 | ---- | 20 | 151 | −62.2 | ---- |
| 15,000 | ---- | ---- | ---- | ---- | 12 | 127 | −60.1 | ---- | 25 | 128 | −63.9 | ---- | 15 | 124 | −54.3 | ---- | 18 | 127 | −60.8 | ---- | 19 | 131 | −68.6 | ---- | 15 | 128 | −63.2 | ---- |
| 16,000 | ---- | ---- | ---- | ---- | 8 | 108 | −60.1 | ---- | 17 | 109 | −64.9 | ---- | 12 | 106 | −54.3 | ---- | 14 | 108 | −61.2 | ---- | 16 | 111 | −71.3 | ---- | 10 | 109 | −63.8 | ---- |
| 17,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 15 | 92 | −63.8 | ---- | ---- | ---- | ---- | ---- | 8 | 93 | −61.0 | ---- | 6 | 94 | −70.2 | ---- | 5 | 95 | −63.0 | ---- |
| 18,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 5 | 78 | −61.4 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |

| Altitude (meters) m. s. l. | Mazatlan, Mexico (80 m.) | | | | Medford, Oreg. (409 m.) | | | | Miami, Fla. (4 m.) | | | | Nashville, Tenn. (180 m.) | | | | Norfolk, Va.[1] (4 m.) | | | | Oakland, Calif. (6 m.) | | | | Oklahoma City, Okla. (391 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Surface | 29 | 1,002 | 27.9 | [2] 81 | 30 | 966 | 24.1 | 38 | 30 | 1,015 | 25.1 | 87 | 27 | 997 | 18.9 | [2] 76 | 27 | 1,109 | 20.7 | [2] 77 | 30 | 1,012 | 17.9 | [2] 75 | 30 | 971 | 21.8 | [2] 61 |
| 500 | 29 | 956 | 25.5 | [2] 79 | 30 | 956 | 24.8 | 38 | 30 | 959 | 23.1 | 87 | 27 | 961 | 19.7 | [2] 57 | 27 | 962 | 18.7 | [2] 65 | 30 | 956 | 19.1 | [2] 55 | 30 | 958 | 22.1 | [2] 58 |
| 1,000 | 29 | 903 | 23.0 | [2] 76 | 30 | 903 | 22.9 | 37 | 30 | 906 | 20.1 | 87 | 27 | 907 | 16.5 | [2] 58 | 27 | 907 | 15.9 | [2] 65 | 30 | 902 | 21.0 | [2] 28 | 30 | 905 | 20.4 | [2] 57 |
| 1,500 | 29 | 853 | 20.5 | [2] 73 | 30 | 852 | 19.4 | 39 | 30 | 855 | 17.2 | 84 | 27 | 855 | 13.7 | [2] 53 | 27 | 855 | 13.5 | [2] 56 | 30 | 851 | 19.9 | [2] 19 | 30 | 855 | 17.7 | [2] 57 |
| 2,000 | 29 | 805 | 17.9 | [2] 73 | 30 | 804 | 16.1 | 41 | 30 | 806 | 14.4 | 79 | 27 | 805 | 11.7 | [2] 46 | 27 | 805 | 11.0 | [2] 49 | 30 | 802 | 17.2 | [2] 13 | 30 | 805 | 15.1 | [2] 56 |
| 2,500 | 29 | 759 | 15.1 | [2] 69 | 30 | 757 | 12.8 | 39 | 30 | 760 | 11.9 | 79 | 27 | 758 | 9.5 | [2] 48 | 27 | 758 | 8.5 | [2] 42 | 29 | 756 | 14.2 | [2] 13 | 30 | 759 | 12.2 | [2] 53 |
| 3,000 | 29 | 715 | 12.4 | [2] 68 | 30 | 714 | 9.7 | 38 | 30 | 716 | 9.4 | 76 | 27 | 714 | 7.1 | [2] 49 | 27 | 714 | 5.8 | [2] 36 | 29 | 713 | 10.9 | [2] 13 | 30 | 715 | 9.4 | [2] 57 |
| 4,000 | 28 | 634 | 6.3 | [2] 70 | 30 | 632 | 2.9 | 39 | 27 | 634 | 4.3 | 67 | 27 | 632 | 2.0 | [2] 43 | 26 | 631 | 0.5 | [2] 37 | 25 | 631 | 3.9 | ---- | 26 | 633 | 3.3 | [2] 52 |
| 5,000 | 26 | 561 | 0.9 | [2] 70 | 30 | 558 | −4.0 | 41 | 27 | 560 | −1.2 | 64 | 27 | 557 | −3.9 | [2] 40 | 25 | 556 | −5.7 | [2] 35 | 24 | 557 | −3.2 | ---- | 26 | 559 | −2.8 | [2] 45 |
| 6,000 | 24 | 495 | −4.3 | [2] 63 | 30 | 490 | −11.4 | 41 | 26 | 494 | −7.0 | 61 | 27 | 490 | −9.9 | [2] 44 | 25 | 489 | −12.3 | [2] 32 | 24 | 490 | −10.5 | ---- | 25 | 492 | −9.7 | [2] 40 |
| 7,000 | 24 | 435 | −10.3 | [2] 59 | 29 | 430 | −18.9 | 41 | 26 | 434 | −13.3 | 59 | 27 | 430 | −16.7 | [2] 41 | 25 | 428 | −18.6 | [2] 35 | 23 | 430 | −18.3 | ---- | 23 | 431 | −16.5 | [2] 33 |
| 8,000 | 24 | 382 | −16.9 | [2] 52 | 29 | 375 | −26.7 | 40 | 26 | 380 | −19.9 | 56 | 26 | 375 | −24.3 | [2] 42 | ---- | ---- | ---- | ---- | 23 | 375 | −26.0 | ---- | 22 | 377 | −24.0 | [2] 32 |
| 9,000 | 24 | 333 | −24.3 | [2] 51 | 28 | 325 | −34.4 | 36 | 25 | 331 | −26.8 | 59 | 26 | 326 | −31.7 | ---- | ---- | ---- | ---- | ---- | 22 | 326 | −33.7 | ---- | 22 | 327 | −31.5 | ---- |
| 10,000 | 24 | 290 | −31.7 | [2] 58 | 28 | 282 | −41.7 | ---- | 25 | 287 | −34.5 | 54 | 25 | 283 | −38.8 | ---- | ---- | ---- | ---- | ---- | 21 | 282 | −41.2 | ---- | 21 | 285 | −38.8 | ---- |
| 11,000 | 24 | 252 | −39.9 | ---- | 28 | 242 | −48.6 | ---- | 24 | 248 | −42.8 | ---- | 25 | 244 | −46.3 | ---- | ---- | ---- | ---- | ---- | 17 | 243 | −48.1 | ---- | 19 | 246 | −46.2 | ---- |
| 12,000 | 24 | 217 | −48.4 | ---- | 27 | 208 | −54.2 | ---- | 22 | 214 | −50.7 | ---- | 24 | 210 | −53.6 | ---- | ---- | ---- | ---- | ---- | 16 | 208 | −53.3 | ---- | 19 | 211 | −52.7 | ---- |
| 13,000 | 24 | 186 | −56.9 | ---- | 26 | 178 | −57.1 | ---- | 21 | 183 | −58.4 | ---- | 22 | 179 | −59.0 | ---- | ---- | ---- | ---- | ---- | 15 | 178 | −56.2 | ---- | 17 | 180 | −57.6 | ---- |
| 14,000 | 23 | 158 | −65.0 | ---- | 25 | 151 | −58.9 | ---- | 20 | 155 | −65.4 | ---- | 21 | 153 | −63.3 | ---- | ---- | ---- | ---- | ---- | 12 | 152 | −59.6 | ---- | 14 | 153 | −61.4 | ---- |
| 15,000 | 21 | 134 | −72.9 | ---- | 22 | 129 | −60.7 | ---- | 18 | 132 | −71.5 | ---- | 18 | 130 | −66.3 | ---- | ---- | ---- | ---- | ---- | 11 | 130 | −63.0 | ---- | 13 | 130 | −64.4 | ---- |
| 16,000 | 19 | 113 | −78.9 | ---- | 18 | 110 | −61.9 | ---- | 14 | 111 | −75.6 | ---- | 15 | 110 | −67.1 | ---- | ---- | ---- | ---- | ---- | 9 | 111 | −65.0 | ---- | 11 | 111 | −66.8 | ---- |
| 17,000 | 14 | 95 | −79.8 | ---- | 14 | 94 | −61.8 | ---- | 11 | 93 | −73.1 | ---- | 9 | 93 | −63.8 | ---- | ---- | ---- | ---- | ---- | 8 | 94 | −64.3 | ---- | 8 | 94 | −65.8 | ---- |
| 18,000 | 8 | 79 | −75.0 | ---- | 9 | 80 | −60.6 | ---- | 5 | 79 | −71.1 | ---- | 5 | 79 | −62.5 | ---- | ---- | ---- | ---- | ---- | 6 | 79 | −62.4 | ---- | 5 | 79 | −62.5 | ---- |
| 19,000 | 5 | 66 | −71.7 | ---- | 5 | 68 | −59.1 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 5 | 68 | −60.1 | ---- | ---- | ---- | ---- | ---- |

| Altitude (meters) m. s. l. | Omaha, Nebr. (301 m.) | | | | Pensacola, Fla.[4] (24 m.) | | | | Phoenix, Ariz. (339 m.) | | | | Pittsburgh, Pa.[4] (392 m.) | | | | Portland, Maine (20 m.) | | | | St. Louis, Mo. (171 m.) | | | | St. Paul, Minn. (225 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Surface | 30 | 983 | 16.0 | [2] 72 | ---- | ---- | ---- | ---- | 30 | 970 | 27.7 | [2] 47 | ---- | ---- | ---- | ---- | 28 | 1017 | 12.0 | 89 | 30 | 998 | 17.4 | [2] 75 | 30 | 991 | 13.4 | [2] 75 |
| 500 | 30 | 961 | 16.5 | [2] 59 | ---- | ---- | ---- | ---- | 30 | 953 | 31.4 | [2] 31 | ---- | ---- | ---- | ---- | 28 | 961 | 13.8 | 75 | 30 | 961 | 17.7 | [2] 59 | 30 | 959 | 13.7 | [2] 60 |
| 1,000 | 30 | 906 | 14.5 | [2] 51 | ---- | ---- | ---- | ---- | 30 | 901 | 30.0 | [2] 26 | ---- | ---- | ---- | ---- | 28 | 905 | 11.4 | 70 | 30 | 906 | 14.9 | [2] 57 | 30 | 904 | 10.7 | [2] 50 |
| 1,500 | 30 | 853 | 11.9 | [2] 47 | ---- | ---- | ---- | ---- | 30 | 851 | 25.8 | [2] 29 | ---- | ---- | ---- | ---- | 28 | 852 | 9.4 | 67 | 30 | 854 | 12.1 | [2] 54 | 30 | 851 | 8.0 | [2] 62 |
| 2,000 | 30 | 803 | 9.1 | [2] 50 | ---- | ---- | ---- | ---- | 30 | 803 | 21.5 | [2] 33 | ---- | ---- | ---- | ---- | 27 | 802 | 7.2 | 68 | 30 | 804 | 9.9 | [2] 46 | 30 | 800 | 5.3 | [2] 55 |
| 2,500 | 30 | 756 | 6.5 | [2] 46 | ---- | ---- | ---- | ---- | 30 | 758 | 16.8 | [2] 37 | ---- | ---- | ---- | ---- | 27 | 754 | 5.0 | 63 | 30 | 757 | 7.5 | [2] 41 | 30 | 752 | 2.6 | [2] 54 |
| 3,000 | 30 | 711 | 4.0 | [2] 41 | ---- | ---- | ---- | ---- | 30 | 715 | 12.5 | [2] 44 | ---- | ---- | ---- | ---- | 27 | 710 | 2.8 | 60 | 30 | 712 | 4.7 | [2] 44 | 30 | 707 | 0.5 | [2] 43 |
| 4,000 | 30 | 628 | −1.4 | [2] 41 | ---- | ---- | ---- | ---- | 30 | 633 | 4.6 | [2] 46 | ---- | ---- | ---- | ---- | 27 | 627 | −2.0 | 54 | 30 | 629 | −0.6 | [2] 43 | 30 | 624 | −5.2 | [2] 42 |
| 5,000 | 30 | 554 | −7.4 | [2] 40 | ---- | ---- | ---- | ---- | 29 | 560 | −2.1 | [2] 42 | ---- | ---- | ---- | ---- | 27 | 552 | −7.7 | 50 | 30 | 555 | −6.1 | [2] 38 | 30 | 548 | −11.2 | [2] 39 |
| 6,000 | 30 | 486 | −14.3 | [2] 43 | ---- | ---- | ---- | ---- | 29 | 493 | −8.7 | [2] 34 | ---- | ---- | ---- | ---- | 25 | 485 | −13.3 | 47 | 30 | 487 | −12.4 | [2] 36 | 30 | 481 | −17.7 | [2] 37 |
| 7,000 | 30 | 425 | −21.1 | [2] 45 | ---- | ---- | ---- | ---- | 28 | 433 | −15.5 | [2] 32 | ---- | ---- | ---- | ---- | 24 | 425 | −20.0 | 43 | 30 | 427 | −19.5 | [2] 35 | 30 | 420 | −24.7 | ---- |
| 8,000 | 30 | 370 | −28.9 | [2] 46 | ---- | ---- | ---- | ---- | 27 | 378 | −23.2 | [2] 36 | ---- | ---- | ---- | ---- | 24 | 370 | −27.2 | 40 | 30 | 372 | −26.8 | ---- | 29 | 365 | −31.9 | ---- |
| 9,000 | 30 | 321 | −36.6 | ---- | ---- | ---- | ---- | ---- | 27 | 328 | −31.0 | ---- | ---- | ---- | ---- | ---- | 24 | 320 | −34.7 | 40 | 28 | 323 | −34.4 | ---- | 29 | 316 | −38.7 | ---- |
| 10,000 | 28 | 278 | −44.1 | ---- | ---- | ---- | ---- | ---- | 26 | 285 | −38.2 | ---- | ---- | ---- | ---- | ---- | 24 | 278 | −41.8 | ---- | 28 | 280 | −42.0 | ---- | 28 | 273 | −45.6 | ---- |
| 11,000 | 28 | 239 | −50.8 | ---- | ---- | ---- | ---- | ---- | 25 | 246 | −44.6 | ---- | ---- | ---- | ---- | ---- | 22 | 239 | −47.8 | ---- | 25 | 241 | −48.4 | ---- | 26 | 234 | −50.7 | ---- |
| 12,000 | 27 | 204 | −55.2 | ---- | ---- | ---- | ---- | ---- | 24 | 211 | −50.6 | ---- | ---- | ---- | ---- | ---- | 19 | 205 | −53.1 | ---- | 20 | 207 | −54.1 | ---- | 23 | 200 | −53.3 | ---- |
| 13,000 | 27 | 174 | −57.0 | ---- | ---- | ---- | ---- | ---- | 23 | 181 | −56.0 | ---- | ---- | ---- | ---- | ---- | 14 | 176 | −56.6 | ---- | 15 | 178 | −57.1 | ---- | 20 | 172 | −55.3 | ---- |
| 14,000 | 27 | 149 | −58.9 | ---- | ---- | ---- | ---- | ---- | 19 | 154 | −61.3 | ---- | ---- | ---- | ---- | ---- | 10 | 151 | −59.9 | ---- | 15 | 152 | −60.8 | ---- | 19 | 146 | −56.3 | ---- |
| 15,000 | 24 | 127 | −60.3 | ---- | ---- | ---- | ---- | ---- | 18 | 132 | −65.4 | ---- | ---- | ---- | ---- | ---- | 10 | 128 | −61.8 | ---- | 14 | 129 | −63.7 | ---- | 15 | 125 | −57.8 | ---- |
| 16,000 | 21 | 108 | −60.8 | ---- | ---- | ---- | ---- | ---- | 16 | 112 | −68.0 | ---- | ---- | ---- | ---- | ---- | 8 | 109 | −60.3 | ---- | 13 | 110 | −64.6 | ---- | 12 | 107 | −58.2 | ---- |
| 17,000 | 14 | 92 | −60.8 | ---- | ---- | ---- | ---- | ---- | 9 | 95 | −68.4 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 10 | 93 | −63.8 | ---- | 8 | 91 | −58.5 | ---- |
| 18,000 | 7 | 79 | −59.2 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 6 | 80 | −62.5 | ---- | 5 | 77 | −58.2 | ---- |

[1] U. S. Navy. [2] Humidity data obtained by electric hygrometer. [4] No data.

*Mean free-air barometric pressure in millibars, temperature in degrees centigrade, and relative humidities in percent, obtained by radiosondes during September 1943*—Continued

STATIONS AND ELEVATIONS IN METERS ABOVE SEA LEVEL—Continued

| Altitude (meters) m. s. l. | San Antonio, Tex. (242 m.) | | | | San Diego, Calif.[1] (19 m.) | | | | San Juan, P. R. (15 m.) | | | | Santa Maria, Calif. (73 m.) | | | | Sault Ste. Marie, Mich. (221 m.) | | | | Seattle, Wash.[1] (22 m.) | | | | Spokane, Wash. (598 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 28 | 987 | 22.7 | [2] 78 | 29 | 1,009 | 19.3 | [2] 83 | 29 | 1,012 | 26.0 | [2] 86 | 30 | 1,005 | 15.3 | [2] 87 | 30 | 991 | 10.1 | 85 | 30 | 1,014 | 19.3 | [2] 59 | 30 | 946 | 17.7 | [2] 42 |
| 500 | 28 | 959 | 21.8 | [2] 69 | 29 | 955 | 20.9 | [2] 45 | 29 | 959 | 23.4 | [2] 85 | 30 | 956 | 18.1 | [2] 64 | 30 | 959 | 10.3 | 79 | 30 | 959 | 17.6 | [2] 54 | ---- | ---- | ---- | ---- |
| 1,000 | 28 | 905 | 19.5 | [2] 66 | 29 | 901 | 22.5 | [2] 30 | 29 | 905 | 20.5 | [2] 81 | 30 | 902 | 22.5 | [2] 22 | 30 | 903 | 8.2 | 76 | 30 | 905 | 16.1 | [2] 50 | 30 | 903 | 19.2 | [2] 31 |
| 1,500 | 28 | 854 | 17.0 | [2] 66 | 29 | 851 | 20.8 | [2] 24 | 29 | 855 | 17.7 | [2] 74 | 30 | 852 | 20.9 | [2] 18 | 30 | 850 | 5.7 | 77 | 30 | 853 | 13.8 | [2] 47 | 30 | 852 | 15.4 | [2] 32 |
| 2,000 | 28 | 805 | 14.6 | [2] 62 | 29 | 802 | 18.0 | [2] 27 | 29 | 805 | 15.1 | [2] 64 | 30 | 803 | 17.9 | [2] 17 | 30 | 799 | 3.6 | 73 | 30 | 803 | 11.1 | [2] 42 | 30 | 802 | 11.6 | [2] 34 |
| 2,500 | 28 | 759 | 12.0 | [2] 52 | 29 | 757 | 14.3 | [2] 29 | 28 | 759 | 12.8 | [2] 57 | 30 | 757 | 14.5 | [2] 18 | 30 | 751 | 1.7 | 62 | 30 | 756 | 8.5 | [2] 38 | 30 | 755 | 8.5 | [2] 37 |
| 3,000 | 28 | 714 | 9.4 | [2] 49 | 29 | 713 | 10.9 | [2] 33 | 27 | 715 | 10.5 | [2] 46 | 30 | 713 | 11.2 | [2] 16 | 30 | 706 | −0.4 | 58 | 30 | 711 | 6.1 | [2] 39 | 30 | 711 | 5.6 | [2] 34 |
| 4,000 | 28 | 633 | 3.6 | [2] 52 | 29 | 632 | 4.2 | [2] 28 | 27 | 634 | 5.5 | [2] 41 | 29 | 632 | 4.9 | [2] 17 | 30 | 622 | −5.8 | 53 | 30 | 629 | −0.3 | [2] 39 | 29 | 628 | 0.3 | [2] 31 |
| 5,000 | 28 | 559 | −2.2 | [2] 50 | 29 | 558 | −2.3 | [2] 38 | 27 | 560 | −0.2 | [2] 39 | 29 | 558 | −2.0 | [2] 16 | 29 | 547 | −11.9 | 48 | 30 | 555 | −6.5 | [2] 44 | 29 | 554 | −6.6 | [2] 29 |
| 6,000 | 28 | 492 | −7.7 | [2] 46 | 28 | 491 | −8.6 | ---- | 27 | 494 | −6.2 | [2] 34 | 29 | 492 | −9.0 | ---- | 29 | 479 | −19.0 | 47 | 30 | 488 | −13.4 | [2] 53 | 29 | 486 | −13.4 | [2] 28 |
| 7,000 | 28 | 432 | −14.1 | [2] 49 | 27 | 431 | −15.8 | ---- | 25 | 434 | −12.6 | [2] 36 | 29 | 431 | −16.6 | ---- | 28 | 418 | −25.0 | 44 | 30 | 426 | −20.7 | [2] 58 | 29 | 426 | −20.6 | ---- |
| 8,000 | 27 | 378 | −20.8 | [2] 48 | 17 | 377 | −23.5 | ---- | 23 | 380 | −19.9 | [2] 40 | 29 | 377 | −24.7 | ---- | 28 | 364 | −32.3 | 40 | 30 | 371 | −28.6 | ---- | 28 | 370 | −28.2 | ---- |
| 9,000 | 26 | 329 | −27.7 | [2] 48 | 17 | 327 | −30.5 | ---- | 23 | 332 | −26.7 | ---- | 28 | 327 | −32.1 | ---- | 26 | 315 | −39.6 | 38 | 30 | 322 | −36.1 | ---- | 27 | 321 | −35.9 | ---- |
| 10,000 | 26 | 286 | −35.1 | [2] 56 | 17 | 284 | −37.5 | ---- | 23 | 288 | −34.4 | ---- | 28 | 284 | −39.1 | ---- | 25 | 272 | −45.4 | ---- | 30 | 279 | −43.9 | ---- | 27 | 278 | −43.7 | ---- |
| 11,000 | 26 | 247 | −42.7 | ---- | 16 | 245 | −43.8 | ---- | 23 | 249 | −41.8 | ---- | 28 | 245 | −46.0 | ---- | 24 | 234 | −50.4 | ---- | 30 | 239 | −51.0 | ---- | 27 | 239 | −50.7 | ---- |
| 12,000 | 26 | 213 | −50.5 | ---- | 16 | 211 | −49.5 | ---- | 21 | 215 | −49.3 | ---- | 28 | 210 | −51.4 | ---- | 23 | 200 | −52.9 | ---- | 29 | 205 | −56.5 | ---- | 27 | 205 | −56.0 | ---- |
| 13,000 | 26 | 182 | −58.1 | ---- | 16 | 181 | −55.1 | ---- | 21 | 184 | −56.8 | ---- | 28 | 180 | −56.3 | ---- | 21 | 172 | −54.2 | ---- | 26 | 175 | −58.9 | ---- | 27 | 175 | −58.5 | ---- |
| 14,000 | 25 | 155 | −65.6 | ---- | 14 | 154 | −60.1 | ---- | 20 | 157 | −63.0 | ---- | 27 | 153 | −60.4 | ---- | 19 | 146 | −55.0 | ---- | 21 | 149 | −59.9 | ---- | 26 | 149 | −58.8 | ---- |
| 15,000 | 24 | 131 | −72.1 | ---- | 14 | 131 | −64.4 | ---- | 19 | 133 | −68.2 | ---- | 25 | 131 | −64.2 | ---- | 14 | 125 | −56.2 | ---- | 19 | 127 | −60.2 | ---- | 22 | 127 | −59.4 | ---- |
| 16,000 | 18 | 110 | −73.6 | ---- | 11 | 112 | −67.6 | ---- | 18 | 113 | −71.6 | ---- | 14 | 111 | 66.1 | ---- | 10 | 107 | −56.3 | ---- | 13 | 109 | −60.6 | ---- | 21 | 109 | −59.5 | ---- |
| 17,000 | 15 | 93 | −71.6 | ---- | 10 | 95 | −69.1 | ---- | 18 | 95 | −71.7 | ---- | 12 | 94 | −66.5 | ---- | 5 | 90 | −54.7 | ---- | 12 | 92 | −60.3 | ---- | 18 | 92 | −58.6 | ---- |
| 18,000 | 9 | 79 | −68.3 | ---- | 5 | 81 | −67.2 | ---- | 14 | 80 | −69.6 | ---- | 9 | 80 | −65.1 | ---- | ---- | ---- | ---- | ---- | 8 | 79 | −60.5 | ---- | 9 | 79 | −58.7 | ---- |
| 19,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 13 | 68 | −67.2 | ---- | 5 | 68 | −62.0 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |

| Altitude (meters) m. s. l. | Swan Island, West Indies (10 m.) | | | | Tacubaya, Mex. (2,306 m.) | | | | Tampa, Fla.[4] (3 m.) | | | | Tapachula, Mex. (115 m.) | | | | Tatoosh Island, Wash (31 m.) | | | | Tongue Point, Oregon[1] (21 m.) | | | | Washington, D. C. (25 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Surface | 27 | 1,012 | 27.1 | [2] 84 | 30 | 774 | 16.2 | 74 | ---- | ---- | ---- | ---- | 30 | 997 | 23.8 | 92 | 30 | 1,013 | 12.6 | [2] 90 | 23 | 1,016 | 17.3 | [2] 72 | 30 | 1,017 | 18.5 | [2] 73 |
| 500 | 27 | 958 | 24.0 | [2] 86 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 30 | 954 | 24.6 | 81 | 30 | 959 | 15.4 | [2] 65 | 23 | 960 | 15.6 | [2] 65 | 30 | 962 | 17.4 | [2] 60 |
| 1,000 | 27 | 904 | 21.4 | [2] 82 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 30 | 901 | 22.2 | 80 | 30 | 904 | 14.7 | [2] 47 | 23 | 906 | 15.4 | [2] 45 | 30 | 907 | 14.5 | [2] 61 |
| 1,500 | 26 | 854 | 18.8 | [2] 79 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 30 | 851 | 19.3 | 79 | 30 | 852 | 12.6 | [2] 41 | 23 | 854 | 14.4 | [2] 35 | 30 | 855 | 11.8 | [2] 58 |
| 2,000 | 26 | 804 | 16.1 | [2] 78 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 30 | 802 | 16.6 | 80 | 30 | 802 | 10.5 | [2] 34 | 23 | 804 | 12.3 | [2] 33 | 30 | 805 | 9.0 | [2] 61 |
| 2,500 | 26 | 759 | 13.3 | [2] 74 | 30 | 756 | 15.1 | 76 | ---- | ---- | ---- | ---- | 30 | 756 | 14.1 | 80 | 30 | 755 | 7.7 | [2] 34 | 23 | 757 | 9.8 | [2] 31 | 30 | 757 | 7.0 | [2] 55 |
| 3,000 | 26 | 715 | 10.6 | [2] 72 | 30 | 713 | 12.2 | 81 | ---- | ---- | ---- | ---- | 30 | 713 | 11.5 | 87 | 30 | 710 | 5.1 | [2] 32 | 23 | 713 | 7.4 | [2] 29 | 30 | 713 | 5.0 | [2] 48 |
| 4,000 | 26 | 634 | 5.1 | [2] 67 | 30 | 632 | 5.9 | 92 | ---- | ---- | ---- | ---- | 29 | 632 | 5.8 | 88 | 30 | 628 | −0.4 | [2] 30 | 23 | 631 | 1.4 | [2] 27 | 30 | 630 | −0.7 | [2] 43 |
| 5,000 | 25 | 560 | −0.4 | [2] 61 | 29 | 559 | 0.2 | 90 | ---- | ---- | ---- | ---- | 27 | 560 | 0.3 | 84 | 30 | 553 | −7.1 | [2] 34 | 22 | 557 | −5.3 | [2] 32 | 30 | 555 | −6.5 | [2] 40 |
| 6,000 | 25 | 494 | −6.1 | [2] 64 | 27 | 493 | −5.3 | 85 | ---- | ---- | ---- | ---- | 25 | 494 | −5.2 | 79 | 30 | 486 | −13.9 | [2] 38 | 22 | 489 | −12.8 | [2] 36 | 30 | 488 | −12.8 | [2] 40 |
| 7,000 | 25 | 435 | −11.9 | [2] 63 | 25 | 434 | −10.6 | 75 | ---- | ---- | ---- | ---- | 25 | 434 | −11.2 | 69 | 29 | 426 | −21.0 | [2] 38 | 22 | 428 | −20.3 | [2] 40 | 30 | 427 | −19.7 | [2] 41 |
| 8,000 | 24 | 380 | −18.6 | [2] 59 | 23 | 380 | −16.8 | 68 | ---- | ---- | ---- | ---- | 24 | 380 | −17.8 | 64 | 27 | 371 | −28.2 | ---- | 13 | 373 | −27.8 | ---- | 30 | 372 | −27.1 | [2] 40 |
| 9,000 | 24 | 332 | −25.6 | [2] 56 | 22 | 332 | −23.6 | 60 | ---- | ---- | ---- | ---- | 24 | 332 | −24.7 | 61 | 26 | 322 | −35.9 | ---- | 13 | 324 | −35.7 | ---- | 30 | 323 | −34.6 | ---- |
| 10,000 | 23 | 288 | −33.3 | ---- | 22 | 289 | −31.0 | 58 | ---- | ---- | ---- | ---- | 24 | 288 | −32.4 | ---- | 22 | 278 | −43.7 | ---- | 10 | 281 | −42.7 | ---- | 29 | 280 | −41.1 | ---- |
| 11,000 | 21 | 250 | −41.4 | ---- | 19 | 251 | −38.6 | 49 | ---- | ---- | ---- | ---- | 23 | 250 | −40.2 | ---- | 21 | 239 | −50.8 | ---- | 9 | 242 | −49.5 | ---- | 27 | 241 | −47.8 | ---- |
| 12,000 | 17 | 215 | −49.2 | ---- | 19 | 216 | −47.2 | ---- | ---- | ---- | ---- | ---- | 22 | 216 | −48.8 | ---- | 21 | 204 | −55.9 | ---- | 8 | 207 | −56.5 | ---- | 24 | 206 | −54.4 | ---- |
| 13,000 | 13 | 184 | −57.5 | ---- | 18 | 185 | −55.4 | ---- | ---- | ---- | ---- | ---- | 22 | 184 | −57.6 | ---- | 20 | 175 | −58.4 | ---- | 7 | 177 | −61.3 | ---- | 23 | 176 | −57.9 | ---- |
| 14,000 | 13 | 157 | −64.6 | ---- | 17 | 158 | −64.0 | ---- | ---- | ---- | ---- | ---- | 22 | 157 | −66.6 | ---- | 18 | 149 | −60.0 | ---- | 7 | 150 | −62.2 | ---- | 19 | 150 | −61.1 | ---- |
| 15,000 | 11 | 133 | −70.3 | ---- | 16 | 134 | −72.5 | ---- | ---- | ---- | ---- | ---- | 19 | 133 | −74.6 | ---- | 13 | 128 | −60.3 | ---- | 5 | 128 | −63.1 | ---- | 18 | 127 | −62.8 | ---- |
| 16,000 | 9 | 112 | −73.5 | ---- | 13 | 112 | −79.2 | ---- | ---- | ---- | ---- | ---- | 16 | 111 | −80.9 | ---- | 11 | 109 | −60.4 | ---- | ---- | ---- | ---- | ---- | 12 | 108 | −63.6 | ---- |
| 17,000 | 6 | 95 | −75.1 | ---- | 8 | 95 | −82.2 | ---- | ---- | ---- | ---- | ---- | 8 | 94 | −82.3 | ---- | 6 | 92 | −59.3 | ---- | ---- | ---- | ---- | ---- | 7 | 92 | −62.1 | ---- |
| 18,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 5 | 78 | −60.3 | ---- |

*Mean free-air barometric pressure in millibars, temperature in degrees centigrade, and relative humidities in percent, obtained by radiosondes during October 1943*

STATIONS AND ELEVATIONS IN METERS ABOVE SEA LEVEL

| Altitude (meters) m. s. l. | Albany, N. Y. (86 m.) | | | | Albuquerque, N. Mex. (1,620 m.) | | | | Apalachicola, Fla. (5 m.) | | | | Atlanta, Ga. (300 m.) | | | | Big Spring, Tex. (774 m.) | | | | Bismarck, N. Dak. (505 m.) | | | | Boise, Idaho (868 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 28 | 1,005 | 8.1 | [2] 82 | 30 | 838 | 14.7 | [2] 35 | 31 | 1,015 | 19.0 | [2] 78 | 30 | 982 | 14.1 | [2] 71 | 21 | 926 | 18.3 | [2] 46 | 31 | 955 | 8.1 | 64 | 31 | 914 | 11.5 | [2] 59 |
| 500 | 28 | 956 | 7.8 | [2] 70 | ---- | ---- | ---- | ---- | 31 | 958 | 18.9 | [2] 53 | 30 | 959 | 16.1 | [2] 60 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 1,000 | 28 | 900 | 5.1 | [2] 70 | ---- | ---- | ---- | ---- | 31 | 904 | 15.8 | [2] 53 | 30 | 904 | 13.5 | [2] 58 | 21 | 901 | 18.1 | [2] 43 | 31 | 900 | 11.1 | 57 | 31 | 901 | 12.8 | [2] 51 |
| 1,500 | 28 | 846 | 2.9 | [2] 69 | ---- | ---- | ---- | ---- | 31 | 852 | 13.2 | [2] 49 | 30 | 852 | 11.0 | [2] 60 | 21 | 851 | 16.6 | [2] 36 | 31 | 847 | 8.9 | 53 | 31 | 848 | 11.9 | [2] 43 |
| 2,000 | 28 | 795 | 1.0 | [2] 65 | 30 | 802 | 14.7 | [2] 30 | 31 | 802 | 10.8 | [2] 46 | 30 | 802 | 8.5 | [2] 56 | 21 | 801 | 13.5 | [2] 35 | 30 | 797 | 6.9 | 48 | 31 | 799 | 8.1 | [2] 48 |
| 2,500 | 28 | 747 | −0.3 | [2] 59 | 30 | 755 | 11.3 | [2] 32 | 31 | 756 | 9.1 | [2] 35 | 30 | 755 | 6.3 | [2] 51 | 21 | 755 | 10.3 | [2] 35 | 30 | 750 | 4.3 | 45 | 31 | 751 | 4.2 | [2] 53 |
| 3,000 | 28 | 702 | −2.4 | [2] 54 | 30 | 711 | 7.2 | [2] 39 | 31 | 711 | 6.7 | [2] 35 | 30 | 710 | 3.8 | [2] 42 | 21 | 711 | 6.7 | [2] 36 | 30 | 704 | 1.5 | 43 | 31 | 706 | 0.4 | [2] 57 |
| 4,000 | 28 | 618 | −6.8 | [2] 44 | 30 | 629 | −1.0 | [2] 50 | 31 | 629 | 1.6 | [2] 25 | 30 | 628 | −1.4 | [2] 32 | 21 | 628 | 0.3 | [2] 34 | 30 | 621 | −4.2 | 40 | 31 | 623 | −6.1 | [2] 59 |
| 5,000 | 27 | 543 | −12.9 | [2] 41 | 30 | 554 | −7.6 | [2] 48 | 31 | 555 | −4.1 | [2] 24 | 30 | 553 | −7.2 | [2] 31 | 19 | 554 | −5.6 | [2] 26 | 28 | 548 | −10.2 | 37 | 30 | 547 | −12.4 | [2] 62 |
| 6,000 | 25 | 476 | −19.7 | [2] 42 | 27 | 486 | −14.2 | [2] 39 | 30 | 488 | −10.6 | ---- | 30 | 485 | −13.8 | [2] 33 | 19 | 487 | −11.8 | ---- | 28 | 480 | −17.3 | 37 | 30 | 479 | −19.2 | [2] 59 |
| 7,000 | 25 | 415 | −27.0 | [2] 44 | 26 | 426 | −20.9 | [2] 31 | 29 | 428 | −17.2 | ---- | 30 | 424 | −21.1 | [2] 32 | 19 | 426 | −19.3 | ---- | 28 | 419 | −24.9 | 36 | 28 | 419 | −26.3 | [2] 57 |
| 8,000 | 25 | 360 | −33.8 | ---- | 24 | 370 | −28.3 | ---- | 28 | 374 | −23.7 | ---- | 26 | 370 | −28.2 | [2] 36 | 19 | 372 | −27.1 | ---- | 28 | 364 | −32.9 | 26 | 26 | 364 | −34.1 | ---- |
| 9,000 | 25 | 311 | −40.4 | ---- | 24 | 321 | −35.4 | ---- | 25 | 326 | −30.5 | ---- | 25 | 321 | −35.1 | [2] 40 | 17 | 323 | −34.5 | ---- | 28 | 315 | −40.6 | ---- | 25 | 315 | −41.5 | ---- |
| 10,000 | 22 | 268 | −46.3 | ---- | 23 | 278 | −42.3 | ---- | 24 | 283 | −37.0 | ---- | 23 | 278 | −41.3 | ---- | 17 | 280 | −41.8 | ---- | 26 | 271 | −47.3 | ---- | 25 | 271 | −47.9 | ---- |
| 11,000 | 22 | 231 | −50.6 | ---- | 21 | 239 | −48.3 | ---- | 24 | 244 | −44.0 | ---- | 21 | 240 | −46.5 | ---- | 16 | 241 | −49.1 | ---- | 22 | 232 | −52.3 | ---- | 25 | 233 | −51.9 | ---- |
| 12,000 | 20 | 198 | −54.4 | ---- | 17 | 205 | −53.7 | ---- | 23 | 210 | −51.3 | ---- | 20 | 206 | −51.7 | ---- | 16 | 206 | −55.6 | ---- | 22 | 198 | −55.4 | ---- | 24 | 199 | −55.2 | ---- |
| 13,000 | 17 | 170 | −57.0 | ---- | 15 | 175 | −58.1 | ---- | 22 | 180 | −58.4 | ---- | 19 | 177 | −56.4 | ---- | 16 | 176 | −61.0 | ---- | 20 | 170 | −56.4 | ---- | 20 | 170 | −56.7 | ---- |
| 14,000 | 14 | 145 | −59.5 | ---- | 14 | 150 | −62.0 | ---- | 21 | 153 | −64.5 | ---- | 18 | 151 | −61.2 | ---- | 12 | 149 | −65.0 | ---- | 19 | 144 | −56.7 | ---- | 20 | 145 | −57.8 | ---- |
| 15,000 | 12 | 124 | −61.4 | ---- | 9 | 128 | −65.7 | ---- | 16 | 129 | −68.8 | ---- | 17 | 128 | −65.3 | ---- | 8 | 126 | −69.8 | ---- | 15 | 124 | −57.8 | ---- | 15 | 123 | −57.8 | ---- |
| 16,000 | 11 | 106 | −61.5 | ---- | 7 | 108 | −67.4 | ---- | 10 | 110 | −72.2 | ---- | 14 | 109 | −67.6 | ---- | 5 | 107 | −70.4 | ---- | 12 | 105 | −60.0 | ---- | 10 | 105 | −57.6 | ---- |
| 17,000 | 7 | 90 | −61.0 | ---- | 6 | 92 | −66.5 | ---- | 5 | 92 | −71.5 | ---- | 9 | 93 | −67.8 | ---- | ---- | ---- | ---- | ---- | 9 | 90 | −59.3 | ---- | ---- | ---- | ---- | ---- |
| 18,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 5 | 79 | −64.2 | ---- | ---- | ---- | ---- | ---- | 5 | 77 | −57.4 | ---- | ---- | ---- | ---- | ---- |

[1] U. S. Navy. [2] Humidity data obtained by electric hygrometer. [4] No data.

*Mean free-air barometric pressure in millibars, temperature in degrees centigrade, and relative humidities in percent, obtained by radiosondes during October 1943*—Continued

STATIONS AND ELEVATIONS IN METERS ABOVE SEA LEVEL—Continued

| Altitude (meters) m. s. l. | Brownsville, Tex. (6 m.) | | | | Buffalo, N. Y. (221 m.) | | | | Caribou, Maine (191 m.) | | | | Charleston, S. C. (14 m.) | | | | Denver, Colo. (1,616 m.) | | | | Detroit, Mich. (217 m.) | | | | El Paso, Tex. (1,193 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 31 | 1,015 | 20.6 | [2]86 | 31 | 990 | 8.0 | [2]81 | 30 | 991 | 5.4 | [2]84 | 31 | 1,014 | 14.4 | 85 | 31 | 838 | 9.3 | [2]43 | 31 | 991 | 7.4 | [2]84 | 31 | 882 | 16.4 | [2]36 |
| 500 | 31 | 958 | 20.3 | [2]68 | 31 | 957 | 7.9 | [2]73 | 30 | 954 | 5.5 | [2]74 | 31 | 958 | 17.0 | 61 | ---- | ---- | ---- | ---- | 31 | 958 | 8.5 | [2]73 | ---- | ---- | ---- | ---- |
| 1,000 | 31 | 905 | 17.8 | [2]54 | 31 | 900 | 5.6 | [2]67 | 30 | 898 | 3.6 | [2]71 | 31 | 904 | 14.7 | 56 | ---- | ---- | ---- | ---- | 31 | 902 | 6.0 | [2]68 | ---- | ---- | ---- | ---- |
| 1,500 | 31 | 854 | 15.5 | [2]44 | 31 | 847 | 3.4 | [2]63 | 30 | 844 | 1.7 | [2]70 | 31 | 851 | 12.0 | 55 | ---- | ---- | ---- | ---- | 31 | 848 | 3.6 | [2]66 | 31 | 852 | 19.3 | [2]32 |
| 2,000 | 31 | 804 | 13.3 | [2]35 | 31 | 796 | 1.6 | [2]64 | 30 | 793 | −0.6 | [2]68 | 31 | 802 | 9.9 | 47 | 31 | 800 | 11.1 | [2]36 | 31 | 797 | 1.9 | [2]52 | 31 | 802 | 15.9 | [2]33 |
| 2,500 | 31 | 758 | 10.5 | [2]37 | 31 | 747 | −0.2 | [2]54 | 30 | 744 | −2.2 | [2]63 | 31 | 755 | 7.8 | 39 | 31 | 753 | 7.7 | [2]38 | 31 | 749 | 0.4 | [2]45 | 31 | 756 | 11.7 | [2]38 |
| 3,000 | 31 | 713 | 7.8 | [2]39 | 31 | 702 | −1.9 | [2]41 | 30 | 699 | −4.2 | [2]58 | 31 | 710 | 5.9 | 33 | 31 | 708 | 3.7 | [2]41 | 31 | 703 | −1.6 | [2]39 | 31 | 712 | 8.0 | [2]40 |
| 4,000 | 31 | 631 | 2.5 | [2]35 | 31 | 618 | −6.8 | [2]35 | 29 | 615 | −8.9 | [2]51 | 29 | 627 | 0.6 | 30 | 31 | 625 | −4.0 | [2]46 | 31 | 620 | −7.1 | [2]41 | 31 | 630 | 1.1 | [2]37 |
| 5,000 | 30 | 557 | −2.4 | [2]28 | 30 | 544 | −12.8 | [2]35 | 28 | 540 | −14.6 | [2]54 | 29 | 553 | −5.5 | 32 | 31 | 550 | −11.2 | [2]47 | 30 | 544 | −13.4 | [2]43 | 29 | 556 | −4.7 | [2]22 |
| 6,000 | 30 | 490 | −8.4 | [2]24 | 29 | 476 | −19.3 | [2]34 | 28 | 472 | −20.9 | [2]52 | 28 | 486 | −11.9 | 31 | 30 | 482 | −18.5 | [2]44 | 30 | 477 | −20.0 | [2]43 | 28 | 489 | −10.9 | [2]21 |
| 7,000 | 30 | 430 | −15.3 | [2]28 | 28 | 416 | −26.2 | [2]35 | 27 | 412 | −28.2 | [2]53 | 27 | 427 | −18.7 | 30 | 30 | 421 | −25.6 | [2]41 | 29 | 416 | −27.5 | [2]48 | 27 | 428 | −17.9 | ---- |
| 8,000 | 30 | 376 | −22.5 | ---- | 28 | 361 | −34.4 | ---- | 24 | 358 | −34.8 | ---- | 26 | 373 | −25.3 | 29 | 30 | 365 | −33.4 | ---- | 27 | 361 | −34.6 | ---- | 24 | 375 | −25.1 | ---- |
| 9,000 | 30 | 327 | −29.5 | ---- | 25 | 313 | −39.5 | ---- | 23 | 309 | −41.7 | ---- | 25 | 324 | −32.1 | 27 | 29 | 315 | −41.1 | ---- | 27 | 312 | −41.7 | ---- | 23 | 325 | −32.5 | ---- |
| 10,000 | 30 | 284 | −36.5 | ---- | 24 | 270 | −46.3 | ---- | 21 | 266 | −46.3 | ---- | 24 | 280 | −38.7 | ---- | 28 | 272 | −47.0 | ---- | 27 | 269 | −47.8 | ---- | 23 | 282 | −40.3 | ---- |
| 11,000 | 30 | 245 | −44.1 | ---- | 19 | 233 | −52.3 | ---- | 17 | 229 | −49.8 | ---- | 24 | 242 | −44.6 | ---- | 26 | 233 | −51.7 | ---- | 25 | 231 | −52.6 | ---- | 23 | 243 | −47.0 | ---- |
| 12,000 | 30 | 211 | −52.0 | ---- | 17 | 199 | −54.8 | ---- | 15 | 196 | −53.4 | ---- | 21 | 208 | −49.9 | ---- | 25 | 200 | −55.7 | ---- | 25 | 198 | −54.8 | ---- | 21 | 209 | −52.5 | ---- |
| 13,000 | 28 | 180 | −59.4 | ---- | 15 | 170 | −56.2 | ---- | 11 | 168 | −55.3 | ---- | 18 | 178 | −55.3 | ---- | 24 | 170 | −58.2 | ---- | 24 | 169 | −56.5 | ---- | 18 | 178 | −57.8 | ---- |
| 14,000 | 22 | 154 | −66.5 | ---- | 14 | 145 | −57.5 | ---- | 6 | 144 | −57.3 | ---- | 17 | 152 | −60.2 | ---- | 16 | 144 | −60.7 | ---- | 23 | 144 | −57.7 | ---- | 18 | 152 | −62.6 | ---- |
| 15,000 | 15 | 130 | −72.3 | ---- | 12 | 123 | −58.2 | ---- | 5 | 123 | −58.2 | ---- | 16 | 130 | −64.5 | ---- | 13 | 123 | −62.1 | ---- | 22 | 123 | −58.3 | ---- | 16 | 130 | −66.8 | ---- |
| 16,000 | 13 | 110 | −76.9 | ---- | 11 | 105 | −58.9 | ---- | ---- | ---- | ---- | ---- | 14 | 110 | −67.9 | ---- | 12 | 105 | −62.7 | ---- | 18 | 105 | −58.4 | ---- | 16 | 110 | −69.3 | ---- |
| 17,000 | ---- | ---- | ---- | ---- | 7 | 89 | −58.9 | ---- | ---- | ---- | ---- | ---- | 10 | 93 | −67.3 | ---- | ---- | ---- | ---- | ---- | 8 | 90 | −57.7 | ---- | 14 | 93 | −69.3 | ---- |
| 18,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 7 | 78 | −65.7 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 10 | 79 | −65.0 | ---- |

| Altitude (meters) m. s. l. | Lakehurst, N. J.[1] (39 m.) | | | | Little Rock, Ark. (79 m.) | | | | Mazatlan, Mexico (80 m.) | | | | Medford, Oreg. (409 m.) | | | | Miami, Fla. (4 m.) | | | | Nashville, Tenn. (180 m.) | | | | Norfolk, Va.[1] (4 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 23 | 1,011 | 10.3 | [2]81 | 22 | 1,006 | 14.5 | [2]69 | 22 | 1,002 | 27.5 | [2]81 | 31 | 967 | 13.2 | 67 | 31 | 1,013 | 22.0 | 88 | 27 | 996 | 12.3 | [2]72 | 28 | 1,015 | 15.4 | [2]74 |
| 500 | 23 | 956 | 10.8 | [2]68 | 22 | 957 | 15.4 | [2]50 | 22 | 956 | 25.3 | [2]66 | 31 | 957 | 13.3 | 66 | 31 | 957 | 20.8 | 86 | 27 | 959 | 14.7 | [2]54 | 28 | 957 | 13.2 | [2]64 |
| 1,000 | 23 | 901 | 8.5 | [2]61 | 22 | 902 | 12.1 | [2]58 | 22 | 903 | 23.1 | [2]49 | 31 | 901 | 11.6 | 65 | 31 | 903 | 17.6 | 86 | 27 | 903 | 11.5 | [2]58 | 28 | 902 | 10.5 | [2]64 |
| 1,500 | 23 | 848 | 6.5 | [2]54 | 22 | 850 | 9.7 | [2]53 | 22 | 852 | 20.6 | [2]40 | 31 | 849 | 8.4 | 66 | 31 | 852 | 15.2 | 77 | 27 | 851 | 8.7 | [2]53 | 28 | 849 | 8.0 | [2]63 |
| 2,000 | 22 | 798 | 4.8 | [2]49 | 22 | 800 | 7.4 | [2]45 | 22 | 804 | 18.1 | [2]35 | 31 | 798 | 5.3 | 66 | 31 | 803 | 13.1 | 70 | 27 | 801 | 6.4 | [2]50 | 28 | 798 | 5.6 | [2]53 |
| 2,500 | 22 | 750 | 3.5 | [2]43 | 21 | 752 | 5.3 | [2]32 | 22 | 758 | 14.8 | [2]37 | 31 | 751 | 2.5 | 63 | 31 | 757 | 11.2 | 62 | 27 | 753 | 4.1 | [2]40 | 28 | 751 | 4.1 | [2]42 |
| 3,000 | 22 | 705 | 1.2 | [2]40 | 21 | 708 | 2.9 | [2]32 | 22 | 714 | 11.1 | [2]44 | 31 | 706 | −0.2 | 60 | 31 | 712 | 9.2 | 52 | 27 | 708 | 2.1 | [2]34 | 28 | 706 | 1.5 | [2]38 |
| 4,000 | 20 | 623 | −4.4 | [2]31 | 21 | 625 | −1.8 | [2]31 | 20 | 633 | 4.4 | [2]42 | 31 | 622 | −6.1 | 57 | 30 | 631 | 4.1 | 45 | 27 | 625 | −3.4 | [2]33 | 28 | 623 | −3.5 | [2]33 |
| 5,000 | 20 | 548 | −10.5 | [2]35 | 20 | 550 | −7.4 | [2]23 | 18 | 559 | −0.7 | ---- | 31 | 547 | −11.9 | 52 | 30 | 557 | −1.3 | 41 | 27 | 550 | −9.4 | [2]32 | 28 | 548 | −9.6 | [2]28 |
| 6,000 | 19 | 480 | −17.4 | ---- | 20 | 483 | −14.4 | [2]24 | 17 | 493 | −6.9 | ---- | 31 | 479 | −18.4 | 50 | 30 | 491 | −7.6 | 42 | 26 | 482 | −16.0 | [2]32 | 28 | 481 | −15.9 | [2]28 |
| 7,000 | 18 | 420 | −24.5 | ---- | 20 | 423 | −21.8 | ---- | 17 | 433 | −13.2 | ---- | 30 | 418 | −26.1 | 49 | 30 | 431 | −13.9 | 37 | 23 | 423 | −22.7 | [2]37 | 28 | 421 | −22.4 | [2]30 |
| 8,000 | 13 | 365 | −33.8 | ---- | 20 | 368 | −28.7 | ---- | 17 | 379 | −19.5 | ---- | 30 | 363 | −33.3 | 46 | 30 | 377 | −20.7 | 36 | 22 | 368 | −30.3 | ---- | ---- | ---- | ---- | ---- |
| 9,000 | 13 | 316 | −41.2 | ---- | 20 | 319 | −36.2 | ---- | 17 | 330 | −26.6 | ---- | 30 | 314 | −40.5 | ---- | 30 | 328 | −27.4 | 36 | 22 | 318 | −37.2 | ---- | ---- | ---- | ---- | ---- |
| 10,000 | 11 | 272 | −47.3 | ---- | 20 | 276 | −43.2 | ---- | 17 | 287 | −34.3 | ---- | 29 | 271 | −46.7 | ---- | 29 | 285 | −34.4 | 32 | 21 | 276 | −43.0 | ---- | ---- | ---- | ---- | ---- |
| 11,000 | 10 | 234 | −52.5 | ---- | 19 | 238 | −48.9 | ---- | 17 | 248 | −42.1 | ---- | 29 | 233 | −51.5 | ---- | 29 | 246 | −42.0 | ---- | 21 | 237 | −48.4 | ---- | ---- | ---- | ---- | ---- |
| 12,000 | 10 | 200 | −55.9 | ---- | 19 | 204 | −54.0 | ---- | 15 | 214 | −50.2 | ---- | 27 | 200 | −53.8 | ---- | 29 | 212 | −49.9 | ---- | 18 | 204 | −52.6 | ---- | ---- | ---- | ---- | ---- |
| 13,000 | 9 | 170 | −59.0 | ---- | 17 | 174 | −58.3 | ---- | 15 | 183 | −58.8 | ---- | 26 | 171 | −55.6 | ---- | 27 | 182 | −58.0 | ---- | 15 | 175 | −56.8 | ---- | ---- | ---- | ---- | ---- |
| 14,000 | 8 | 145 | −61.2 | ---- | 15 | 149 | −62.1 | ---- | 15 | 156 | −67.0 | ---- | 25 | 146 | −57.3 | ---- | 23 | 154 | −65.9 | ---- | 13 | 150 | −60.9 | ---- | ---- | ---- | ---- | ---- |
| 15,000 | 6 | 124 | −62.1 | ---- | 14 | 126 | −65.5 | ---- | 15 | 131 | −74.3 | ---- | 22 | 124 | −58.9 | ---- | 21 | 131 | −72.2 | ---- | 12 | 127 | −64.5 | ---- | ---- | ---- | ---- | ---- |
| 16,000 | ---- | ---- | ---- | ---- | 13 | 107 | −67.8 | ---- | 14 | 110 | −79.3 | ---- | 21 | 106 | −60.3 | ---- | 18 | 110 | −76.0 | ---- | 8 | 108 | −67.4 | ---- | ---- | ---- | ---- | ---- |
| 17,000 | ---- | ---- | ---- | ---- | 13 | 91 | −66.1 | ---- | 11 | 93 | −77.1 | ---- | 10 | 91 | −61.4 | ---- | 13 | 93 | −76.8 | ---- | 5 | 93 | −66.6 | ---- | ---- | ---- | ---- | ---- |
| 18,000 | ---- | ---- | ---- | ---- | 7 | 77 | −64.4 | ---- | 7 | 78 | −70.7 | ---- | 8 | 78 | −61.1 | ---- | 8 | 78 | −72.4 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 19,000 | ---- | ---- | ---- | ---- | 6 | 65 | −61.9 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |

| Altitude (meters) m. s. l. | Ely, Nev. (1908 m.) | | | | Glasgow, Mont. (648 m.) | | | | Great Falls, Mont. (1,128 m.) | | | | Huntington, W. Va. (172 m.) | | | | International Falls, Minn. (343 m.) | | | | Joliet, Ill. (178 m.) | | | | Lake Charles, La. (5 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 30 | 809 | 7.7 | 59 | 16 | 935 | 5.8 | [2]69 | 30 | 885 | 11.0 | [2]47 | 29 | 996 | 9.9 | [2]79 | 31 | 976 | 6.5 | [2]72 | 30 | 996 | 8.2 | [2]82 | 31 | 1,016 | 17.0 | [2]83 |
| 500 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 29 | 958 | 13.1 | [2]59 | 31 | 957 | 8.1 | [2]63 | 30 | 958 | 10.9 | [2]61 | 31 | 959 | 17.6 | [2]58 |
| 1,000 | ---- | ---- | ---- | ---- | 16 | 896 | 7.5 | 54 | ---- | ---- | ---- | ---- | 29 | 903 | 10.4 | [2]60 | 31 | 901 | 5.9 | [2]55 | 30 | 902 | 8.6 | [2]60 | 31 | 905 | 14.4 | [2]54 |
| 1,500 | ---- | ---- | ---- | ---- | 16 | 843 | 5.6 | 47 | 30 | 847 | 11.3 | [2]41 | 29 | 850 | 7.1 | [2]62 | 31 | 848 | 4.8 | [2]52 | 30 | 849 | 6.0 | [2]58 | 31 | 853 | 12.4 | [2]45 |
| 2,000 | 30 | 800 | 8.4 | 57 | 16 | 793 | 3.2 | [2]45 | 30 | 797 | 7.6 | [2]44 | 29 | 799 | 4.5 | [2]57 | 31 | 797 | 3.4 | [2]42 | 29 | 799 | 3.9 | [2]53 | 31 | 803 | 10.5 | [2]35 |
| 2,500 | 30 | 753 | 7.5 | 51 | 16 | 745 | 0.7 | [2]45 | 30 | 750 | 3.6 | [2]50 | 29 | 751 | 1.5 | [2]51 | 31 | 749 | 1.1 | [2]37 | 28 | 751 | 1.8 | [2]48 | 31 | 756 | 8.2 | [2]34 |
| 3,000 | 30 | 708 | 3.6 | 53 | 16 | 700 | −2.2 | [2]58 | 30 | 704 | −0.4 | [2]57 | 29 | 706 | −0.8 | [2]44 | 31 | 704 | −1.3 | [2]35 | 28 | 705 | −0.4 | [2]44 | 31 | 711 | 5.7 | [2]28 |
| 4,000 | 30 | 625 | −2.9 | 53 | 16 | 617 | −8.7 | [2]53 | 30 | 621 | −7.7 | [2]63 | 27 | 622 | −5.6 | [2]35 | 31 | 620 | −6.8 | [2]31 | 27 | 621 | −6.2 | [2]38 | 31 | 629 | 0.1 | [2]34 |
| 5,000 | 30 | 551 | −9.4 | 52 | 15 | 542 | −14.6 | [2]51 | 30 | 545 | −13.8 | [2]60 | 27 | 547 | −11.7 | [2]36 | 31 | 545 | −12.8 | [2]37 | 27 | 546 | −12.0 | [2]40 | 31 | 554 | −5.4 | [2]27 |
| 6,000 | 29 | 483 | −16.6 | 49 | 15 | 474 | −21.3 | [2]57 | 30 | 477 | −20.2 | [2]54 | 27 | 479 | −18.3 | [2]35 | 31 | 477 | −19.5 | [2]41 | 27 | 478 | −18.6 | [2]34 | 30 | 487 | −11.9 | ---- |
| 7,000 | 29 | 422 | −23.4 | 46 | 15 | 412 | −28.3 | [2]55 | 30 | 416 | −27.5 | [2]54 | 27 | 418 | −25.7 | [2]37 | 30 | 417 | −26.5 | [2]37 | 27 | 417 | −26.0 | [2]35 | 30 | 427 | −18.8 | ---- |
| 8,000 | 24 | 368 | −30.4 | 43 | 14 | 358 | −36.0 | [2]57 | 30 | 361 | −35.2 | ---- | 27 | 363 | −32.6 | ---- | 30 | 362 | −34.0 | ---- | 27 | 363 | −33.5 | ---- | 29 | 372 | −26.2 | ---- |
| 9,000 | 23 | 319 | −37.7 | 39 | 14 | 309 | −44.4 | ---- | 30 | 312 | −43.0 | ---- | 27 | 314 | −39.5 | ---- | 28 | 313 | −41.6 | ---- | 27 | 314 | −40.3 | ---- | 28 | 323 | −33.7 | ---- |
| 10,000 | 21 | 276 | −44.6 | ---- | 13 | 264 | −52.0 | ---- | 28 | 269 | −49.5 | ---- | 26 | 271 | −45.6 | ---- | 27 | 270 | −48.6 | ---- | 26 | 271 | −47.2 | ---- | 26 | 280 | −40.0 | ---- |
| 11,000 | 19 | 238 | −49.6 | ---- | 13 | 227 | −55.4 | ---- | 26 | 231 | −53.8 | ---- | 25 | 233 | −49.7 | ---- | 27 | 232 | −53.9 | ---- | 25 | 233 | −51.8 | ---- | 23 | 242 | −46.4 | ---- |
| 12,000 | 17 | 204 | −54.0 | ---- | 13 | 194 | −55.9 | ---- | 22 | 198 | −56.0 | ---- | 25 | 200 | −53.2 | ---- | 26 | 198 | −56.3 | ---- | 24 | 200 | −54.3 | ---- | 25 | 207 | −52.3 | ---- |
| 13,000 | 14 | 173 | −57.7 | ---- | 13 | 166 | −55.5 | ---- | 17 | 169 | −55.8 | ---- | 23 | 171 | −55.9 | ---- | 24 | 169 | −57.4 | ---- | 24 | 171 | −55.7 | ---- | 23 | 177 | −57.8 | ---- |
| 14,000 | 6 | 146 | −59.8 | ---- | 13 | 142 | −55.2 | ---- | 16 | 145 | −56.7 | ---- | 21 | 146 | −59.0 | ---- | 24 | 144 | −58.1 | ---- | 23 | 146 | −57.4 | ---- | 17 | 151 | −62.8 | ---- |
| 15,000 | 5 | 125 | −60.2 | ---- | 11 | 121 | −56.2 | ---- | 14 | 123 | −57.1 | ---- | 18 | 124 | −61.0 | ---- | 20 | 123 | −58.4 | ---- | 17 | 124 | −58.7 | ---- | 15 | 128 | −67.1 | ---- |
| 16,000 | ---- | ---- | ---- | ---- | 7 | 104 | −56.7 | ---- | 13 | 106 | −57.8 | ---- | 17 | 106 | −62.4 | ---- | 15 | 105 | −58.4 | ---- | 11 | 106 | −60.4 | ---- | 10 | 109 | −69.2 | ---- |
| 17,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 6 | 91 | −63.2 | ---- | 6 | 90 | −58.9 | ---- | 6 | 91 | −61.1 | ---- | 5 | 93 | −68.2 | ---- |
| 18,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 5 | 77 | −59.9 | ---- | ---- | ---- | ---- | ---- |

[1] U. S. Navy

[2] Humidity data obtained by electric hygrometer.

*Mean free-air barometric pressure in millibars, temperature in degrees centigrade, and relative humidities in percent, obtained by radiosondes during October 1943*—Continued

STATIONS AND ELEVATIONS IN METERS ABOVE SEA LEVEL—Continued

| Altitude (meters) m. s. l. | Oakland, Calif. (2 m.) | | | | Ogden, Utah (1,355 m.) | | | | Oklahoma City, Okla. (391 m.) | | | | Omaha, Nebr. (301 m.) | | | | Pensacola, Fla.[4] (24 m.) | | | | Phoenix, Ariz. (339 m.) | | | | Pittsburgh, Pa. (392 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 31 | 1,014 | 15.6 | [2]77 | 17 | 861 | 8.6 | [2]60 | 31 | 970 | 14.7 | [2]64 | 31 | 981 | 10.4 | [2]65 | | | | | 28 | 972 | 19.3 | 51 | 22 | 968 | 8.5 | 76 |
| 500 | 31 | 956 | 15.2 | [2]60 | | | | | 31 | 958 | 15.6 | [2]57 | 31 | 959 | 11.8 | [2]51 | | | | | 28 | 955 | 23.7 | 33 | 22 | 955 | 8.4 | 76 |
| 1,000 | 31 | 901 | 13.6 | [2]48 | | | | | 31 | 903 | 14.5 | [2]53 | 31 | 903 | 9.9 | [2]50 | | | | | 28 | 901 | 22.6 | 27 | 22 | 899 | 6.7 | 73 |
| 1,500 | 31 | 849 | 11.4 | [2]40 | 17 | 847 | 9.7 | [2]53 | 31 | 852 | 12.1 | [2]53 | 31 | 850 | 7.3 | [2]49 | | | | | 28 | 851 | 18.6 | 31 | 22 | 846 | 4.4 | 73 |
| 2,000 | 31 | 799 | 9.0 | [2]38 | 17 | 797 | 7.2 | [2]48 | 31 | 801 | 9.7 | [2]42 | 31 | 799 | 5.8 | [2]36 | | | | | 28 | 802 | 14.5 | 34 | 22 | 795 | 2.6 | 68 |
| 2,500 | 31 | 752 | 6.5 | [2]33 | 17 | 749 | 3.0 | [2]55 | 31 | 754 | 7.2 | [2]34 | 31 | 752 | 3.5 | [2]34 | | | | | 28 | 755 | 10.8 | 35 | 22 | 747 | 0.7 | 64 |
| 3,000 | 31 | 707 | 3.4 | [2]30 | 17 | 704 | −1.0 | [2]60 | 31 | 710 | 4.3 | [2]33 | 31 | 707 | 0.9 | [2]31 | | | | | 28 | 711 | 7.5 | 36 | 22 | 702 | −1.1 | 55 |
| 4,000 | 30 | 624 | −3.1 | [2]27 | 17 | 620 | −8.4 | [2]69 | 26 | 627 | −1.6 | [2]28 | 31 | 623 | −4.9 | [2]34 | | | | | 27 | 629 | 0.7 | 34 | 22 | 619 | −6.1 | 50 |
| 5,000 | 29 | 549 | −9.5 | [2]24 | 17 | 544 | −14.9 | [2]58 | 23 | 552 | −8.3 | [2]33 | 31 | 548 | −11.4 | [2]35 | | | | | 27 | 554 | −5.5 | 29 | 22 | 544 | −11.5 | 35 |
| 6,000 | 29 | 482 | −16.4 | | 17 | 476 | −21.4 | [2]52 | 20 | 485 | −15.2 | [2]35 | 30 | 480 | −18.7 | [2]36 | | | | | 27 | 488 | −12.3 | 25 | 22 | 476 | −18.1 | 35 |
| 7,000 | 28 | 421 | −24.3 | | 17 | 415 | −28.3 | | 18 | 424 | −22.2 | [2]36 | 30 | 419 | −26.0 | [2]38 | | | | | 25 | 427 | −19.6 | 23 | 22 | 416 | −25.5 | 37 |
| 8,000 | 27 | 366 | −32.1 | | 17 | 360 | −36.2 | | 17 | 369 | −29.2 | | 30 | 364 | −33.6 | | | | | | 25 | 372 | −27.4 | | 22 | 361 | −32.1 | |
| 9,000 | 26 | 317 | −39.4 | | 17 | 311 | −43.5 | | 17 | 320 | −36.7 | | 30 | 315 | −40.6 | | | | | | 24 | 323 | −35.0 | | 22 | 313 | −38.5 | |
| 10,000 | 25 | 273 | −45.2 | | 16 | 268 | −49.2 | | 16 | 277 | −43.4 | | 30 | 272 | −46.5 | | | | | | 24 | 280 | −42.0 | | 22 | 270 | −44.4 | |
| 11,000 | 19 | 236 | −50.6 | | 15 | 230 | −53.8 | | 14 | 239 | −48.6 | | 29 | 233 | −51.5 | | | | | | 22 | 241 | −48.6 | | 22 | 232 | −48.8 | |
| 12,000 | 15 | 202 | −55.7 | | 12 | 199 | −57.6 | | 14 | 205 | −53.3 | | 28 | 200 | −54.2 | | | | | | 19 | 206 | −54.9 | | 21 | 199 | −52.1 | |
| 13,000 | 13 | 173 | −58.4 | | 12 | 169 | −59.1 | | 14 | 175 | −57.2 | | 25 | 171 | −56.5 | | | | | | 17 | 176 | −58.5 | | 18 | 171 | −55.4 | |
| 14,000 | 9 | 148 | −61.6 | | 10 | 144 | −60.3 | | 12 | 150 | −60.2 | | 21 | 146 | −58.3 | | | | | | 11 | 150 | −61.5 | | 18 | 146 | −57.5 | |
| 15,000 | 7 | 126 | −63.4 | | 7 | 123 | −61.9 | | 11 | 127 | −63.9 | | 17 | 124 | −59.9 | | | | | | 10 | 128 | −63.9 | | 15 | 125 | −60.8 | |
| 16,000 | 5 | 108 | −66.4 | | | | | | 11 | 108 | −65.9 | | 14 | 106 | −60.0 | | | | | | 8 | 109 | −66.1 | | 14 | 107 | −61.0 | |
| 17,000 | 5 | 91 | −65.4 | | | | | | 7 | 91 | −67.3 | | 7 | 91 | −60.4 | | | | | | | | | | 9 | 91 | −60.7 | |

| Altitude (meters) m. s. l. | Portland, Maine (20 m.) | | | | Rapid City, S. Dak. (981 m.) | | | | St. Louis, Mo. (171 m.) | | | | St. Paul, Minn. (225 m.) | | | | San Antonio, Tex. (242 m.) | | | | San Diego, Calif.[1] (19 m.) | | | | San Juan, P. R. (15 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Surface | 31 | 1,012 | 7.6 | 86 | 26 | 901 | 7.6 | [2]55 | 30 | 996 | 13.1 | [2]71 | 31 | 990 | 8.2 | [2]73 | 28 | 989 | 18.4 | [2]72 | 30 | 1,010 | 18.2 | [2]83 | 28 | 1,011 | 25.6 | [2]88 |
| 500 | 31 | 955 | 7.9 | 80 | | | | | 30 | 958 | 13.7 | [2]59 | 31 | 958 | 10.1 | [2]57 | 28 | 960 | 18.6 | [2]58 | 30 | 956 | 17.8 | [2]68 | 28 | 957 | 22.7 | [2]85 |
| 1,000 | 31 | 899 | 5.5 | 77 | 26 | 900 | 7.9 | [2]54 | 30 | 903 | 10.6 | [2]60 | 31 | 902 | 7.5 | [2]57 | 28 | 905 | 15.4 | [2]58 | 30 | 901 | 17.9 | [2]45 | 28 | 904 | 19.8 | [2]80 |
| 1,500 | 31 | 846 | 3.3 | 76 | 26 | 848 | 9.4 | [2]48 | 30 | 850 | 7.3 | [2]64 | 31 | 849 | 5.7 | [2]51 | 28 | 854 | 12.5 | [2]59 | 30 | 850 | 15.7 | [2]35 | 28 | 853 | 17.3 | [2]73 |
| 2,000 | 31 | 794 | 1.4 | 75 | 26 | 797 | 6.4 | [2]49 | 30 | 800 | 5.0 | [2]65 | 31 | 798 | 3.8 | [2]44 | 28 | 803 | 10.4 | [2]44 | 30 | 801 | 13.4 | [2]29 | 28 | 804 | 14.8 | [2]65 |
| 2,500 | 31 | 746 | −0.5 | 70 | 26 | 750 | 3.3 | [2]50 | 30 | 752 | 3.3 | [2]45 | 31 | 750 | 2.0 | [2]35 | 28 | 756 | 8.3 | [2]35 | 30 | 755 | 10.5 | [2]26 | 28 | 758 | 12.5 | [2]54 |
| 3,000 | 30 | 701 | −2.3 | 62 | 26 | 705 | 0.2 | [2]46 | 30 | 707 | 0.9 | [2]40 | 31 | 705 | 0.2 | [2]31 | 28 | 712 | 5.7 | [2]33 | 30 | 710 | 7.2 | [2]28 | 28 | 713 | 10.0 | [2]48 |
| 4,000 | 29 | 618 | −6.6 | 54 | 26 | 621 | −6.5 | [2]46 | 30 | 624 | −4.3 | [2]42 | 30 | 622 | −5.4 | [2]26 | 28 | 629 | −0.3 | [2]33 | 30 | 628 | 1.0 | [2]35 | 27 | 632 | 4.1 | [2]46 |
| 5,000 | 27 | 544 | −12.2 | 53 | 26 | 545 | −12.9 | [2]40 | 30 | 548 | −10.4 | [2]42 | 30 | 547 | −11.5 | [2]26 | 28 | 554 | −5.7 | [2]20 | 30 | 554 | −5.1 | | 27 | 558 | −1.5 | [2]46 |
| 6,000 | 27 | 476 | −18.1 | 49 | 26 | 477 | −19.5 | [2]40 | 30 | 481 | −17.1 | [2]49 | 30 | 479 | −18.6 | [2]32 | 28 | 487 | −12.2 | | 30 | 487 | −12.1 | | 27 | 492 | −7.1 | [2]40 |
| 7,000 | 27 | 416 | −24.7 | 47 | 26 | 416 | −26.5 | [2]43 | 28 | 420 | −24.3 | [2]58 | 30 | 418 | −26.1 | [2]37 | 28 | 427 | −19.3 | | 29 | 427 | −19.2 | | 27 | 432 | −13.1 | [2]34 |
| 8,000 | 25 | 362 | −31.6 | 40 | 26 | 362 | −34.5 | | 28 | 365 | −32.0 | | 28 | 364 | −33.7 | | 28 | 372 | −26.6 | | 12 | 374 | −26.5 | | 24 | 378 | −19.5 | [2]31 |
| 9,000 | 21 | 315 | −37.5 | 40 | 26 | 313 | −42.5 | | 27 | 316 | −39.6 | | 27 | 314 | −41.4 | | 28 | 323 | −33.7 | | 12 | 324 | −34.4 | | 23 | 330 | −27.0 | |
| 10,000 | 19 | 272 | −43.0 | | 25 | 269 | −49.1 | | 27 | 273 | −46.4 | | 26 | 271 | −48.2 | | 28 | 280 | −40.3 | | 12 | 280 | −42.4 | | 23 | 287 | −35.0 | |
| 11,000 | 17 | 234 | −48.6 | | 20 | 231 | −53.6 | | 26 | 235 | −52.0 | | 26 | 232 | −52.9 | | 28 | 241 | −46.5 | | 12 | 241 | −48.7 | | 23 | 247 | −43.1 | |
| 12,000 | 17 | 201 | −52.6 | | 19 | 197 | −55.2 | | 23 | 201 | −55.0 | | 25 | 199 | −55.4 | | 28 | 207 | −52.9 | | 12 | 206 | −54.3 | | 21 | 213 | −51.5 | |
| 13,000 | 14 | 171 | −55.3 | | 15 | 169 | −56.9 | | 22 | 172 | −57.3 | | 24 | 170 | −56.3 | | 27 | 177 | −59.4 | | 10 | 176 | −59.1 | | 19 | 182 | −59.9 | |
| 14,000 | 13 | 146 | −57.0 | | 8 | 146 | −58.8 | | 21 | 146 | −59.5 | | 23 | 145 | −57.5 | | 26 | 150 | −65.4 | | 9 | 151 | −63.0 | | 19 | 154 | −67.7 | |
| 15,000 | 11 | 125 | −59.2 | | 5 | 125 | −61.0 | | 18 | 125 | −61.7 | | 21 | 124 | −58.1 | | 22 | 128 | −69.8 | | 9 | 128 | −66.1 | | 18 | 131 | −73.4 | |
| 16,000 | 9 | 106 | −60.0 | | | | | | 16 | 107 | −62.4 | | 16 | 106 | −58.9 | | 18 | 108 | −71.6 | | 8 | 109 | −68.6 | | 17 | 110 | −76.6 | |
| 17,000 | 6 | 90 | −59.5 | | | | | | 10 | 91 | −62.8 | | 10 | 91 | −59.3 | | 10 | 91 | −70.0 | | | | | | 14 | 93 | −75.3 | |
| 18,000 | | | | | | | | | 5 | 78 | −61.2 | | 6 | 77 | −58.2 | | 7 | 78 | −66.0 | | | | | | 10 | 78 | −71.8 | |
| 19,000 | | | | | | | | | | | | | | | | | 6 | 66 | −63.7 | | | | | | | | | |

| Altitude (meters) m. s. l. | Santa Maria, Calif. (73 m.) | | | | Sault Ste. Marie, Mich. (22 m.) | | | | Seattle, Wash.[1] (22 m.) | | | | Spokane, Wash. (598 m.) | | | | Swan Island, West Indies[1] (10 m.) | | | | Tacubaya, Mexico (2,306 m.) | | | | Tampa,[3] Fla. (3 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Surface | 31 | 1,006 | 13.8 | [2]87 | 31 | 991 | 5.5 | 81 | 24 | 1,010 | 13.9 | [2]75 | 30 | 944 | 10.0 | [2]75 | | | | | 31 | 775 | 14.6 | [2]64 | | | | |
| 500 | 31 | 957 | 16.5 | [2]59 | 31 | 958 | 6.2 | 76 | 24 | 954 | 11.5 | [2]73 | | | | | | | | | | | | | | | | |
| 1,000 | 31 | 902 | 16.7 | [2]39 | 31 | 901 | 4.0 | 72 | 24 | 899 | 8.8 | [2]73 | 30 | 900 | 10.2 | [2]65 | | | | | | | | | | | | |
| 1,500 | 31 | 850 | 14.4 | [2]34 | 31 | 847 | 2.6 | 70 | 24 | 846 | 5.8 | [2]74 | 30 | 847 | 7.4 | [2]66 | | | | | | | | | | | | |
| 2,000 | 31 | 801 | 11.7 | [2]30 | 31 | 796 | 1.4 | 67 | 24 | 795 | 3.1 | [2]72 | 30 | 796 | 4.2 | [2]60 | | | | | | | | | | | | |
| 2,500 | 31 | 754 | 8.7 | [2]33 | 31 | 748 | −0.3 | 63 | 22 | 748 | 0.5 | [2]67 | 30 | 749 | 0.7 | [2]63 | | | | | 31 | 756 | 13.5 | [2]66 | | | | |
| 3,000 | 30 | 709 | 5.6 | [2]34 | 31 | 702 | −2.2 | 59 | 22 | 702 | −2.5 | [2]66 | 29 | 704 | −2.3 | [2]66 | | | | | 31 | 713 | 10.9 | [2]70 | | | | |
| 4,000 | 30 | 627 | 0.0 | [2]28 | 29 | 619 | −7.3 | 50 | 22 | 618 | −8.4 | [2]66 | 28 | 620 | −8.4 | [2]61 | | | | | 31 | 632 | 5.3 | [2]79 | | | | |
| 5,000 | 30 | 553 | −6.2 | [2]24 | 25 | 544 | −12.9 | 46 | 22 | 543 | −15.0 | [2]63 | 28 | 544 | −14.9 | [2]63 | | | | | 31 | 559 | 0.0 | [2]79 | | | | |
| 6,000 | 30 | 486 | −13.1 | [2]23 | 22 | 477 | −19.4 | 43 | 21 | 475 | −21.6 | [2]61 | 28 | 476 | −21.6 | | | | | | 30 | 493 | −4.7 | [2]65 | | | | |
| 7,000 | 30 | 426 | −20.5 | | 18 | 419 | −25.2 | 44 | 21 | 415 | −29.0 | [2]65 | 28 | 415 | −28.8 | | | | | | 30 | 433 | −11.0 | [2]54 | | | | |
| 8,000 | 29 | 371 | −28.2 | | 16 | 364 | −32.3 | 40 | 15 | 362 | −34.9 | | 28 | 359 | −36.1 | | | | | | 30 | 380 | −17.4 | [2]51 | | | | |
| 9,000 | 29 | 321 | −35.7 | | 14 | 316 | −39.8 | | 15 | 313 | −42.4 | | 28 | 310 | −43.0 | | | | | | 30 | 332 | −23.9 | [2]50 | | | | |
| 10,000 | 26 | 279 | −42.6 | | 14 | 272 | −47.0 | | 14 | 268 | −48.9 | | 27 | 267 | −48.7 | | | | | | 29 | 289 | −31.0 | [2]49 | | | | |
| 11,000 | 26 | 240 | −49.2 | | 14 | 234 | −52.8 | | 11 | 232 | −54.3 | | 26 | 230 | −52.8 | | | | | | 28 | 250 | −38.8 | | | | | |
| 12,000 | 21 | 206 | −54.8 | | 13 | 201 | −56.4 | | 11 | 198 | −58.4 | | 25 | 197 | −54.6 | | | | | | 26 | 216 | −46.9 | | | | | |
| 13,000 | 18 | 177 | −58.6 | | 11 | 172 | −58.7 | | 9 | 167 | −59.5 | | 21 | 168 | −54.9 | | | | | | 24 | 185 | −55.3 | | | | | |
| 14,000 | 13 | 151 | −62.3 | | 10 | 146 | −59.4 | | | | | | 17 | 144 | −56.3 | | | | | | 22 | 158 | −63.4 | | | | | |
| 15,000 | 12 | 128 | −65.4 | | 10 | 124 | −60.5 | | | | | | 14 | 123 | −57.3 | | | | | | 20 | 134 | −71.0 | | | | | |
| 16,000 | 10 | 109 | −66.6 | | 9 | 106 | −60.5 | | | | | | 8 | 106 | −58.4 | | | | | | 18 | 113 | −77.2 | | | | | |
| 17,000 | 5 | 94 | −65.9 | | 7 | 91 | −61.0 | | | | | | | | | | | | | | 12 | 95 | −81.0 | | | | | |
| 18,000 | | | | | | | | | | | | | | | | | | | | | 6 | 80 | −79.5 | | | | | |

[1] U. S. Navy. [2] Humidity data obtained by electric hygrometer. [3] Insufficient data. [4] No data.

*Mean free-air barometric pressure in millibars, temperature in degrees centigrade, and relative humidities in percent, obtained by radiosondes during October 1943*—Continued

STATIONS AND ELEVATIONS IN METERS ABOVE SEA LEVEL—Continued

| Altitude (meters) m. s. l. | Tapachula, Mex. (115 m.) | | | | Tatoosh Island, Wash. (31 m.) | | | | Tongue Point, Oreg. [1] (21 m.) | | | | Washington, D. C. (25 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 31 | 997 | 24.1 | [2] 90 | 29 | 1,009 | 11.3 | [2] 86 | 21 | 1,013 | 13.0 | [2] 84 | 31 | 1,013 | 12.6 | [2] 69 |
| 500 | 31 | 954 | 23.7 | [2] 87 | 29 | 954 | 10.1 | [2] 76 | 21 | 957 | 10.3 | [2] 79 | 31 | 957 | 11.1 | [2] 62 |
| 1,000 | 31 | 901 | 21.0 | [2] 86 | 29 | 898 | 7.7 | [2] 66 | 21 | 901 | 8.3 | [2] 71 | 31 | 902 | 8.6 | [2] 64 |
| 1,500 | 31 | 851 | 18.5 | [2] 84 | 29 | 845 | 4.8 | [2] 63 | 21 | 848 | 5.8 | [2] 68 | 31 | 849 | 6.3 | [2] 67 |
| 2,000 | 31 | 802 | 15.9 | [2] 82 | 29 | 794 | 2.1 | [2] 60 | 21 | 797 | 3.1 | [2] 69 | 31 | 798 | 4.3 | [2] 61 |
| 2,500 | 31 | 756 | 13.4 | [2] 78 | 29 | 746 | −0.5 | [2] 53 | 21 | 749 | 0.1 | [2] 65 | 31 | 750 | 2.5 | [2] 61 |
| 3,000 | 31 | 712 | 10.8 | [2] 75 | 28 | 701 | −3.3 | [2] 48 | 21 | 704 | −2.8 | [2] 56 | 31 | 705 | 0.6 | [2] 42 |
| 4,000 | 31 | 632 | 5.4 | [2] 73 | 28 | 617 | −9.4 | [2] 43 | 21 | 620 | −7.9 | [2] 42 | 31 | 622 | −4.8 | [2] 43 |
| 5,000 | 29 | 559 | 0.2 | [2] 67 | 28 | 542 | −15.0 | [2] 45 | 21 | 544 | −13.7 | [2] 43 | 30 | 547 | −10.3 | [2] 40 |
| 6,000 | 28 | 492 | −5.4 | [2] 62 | 28 | 474 | −22.7 | [2] 50 | 21 | 476 | −19.8 | [2] 43 | 30 | 480 | −17.0 | [2] 43 |
| 7,000 | 27 | 433 | −11.3 | [2] 58 | 27 | 412 | −29.7 | [2] 55 | 18 | 416 | −26.5 | [2] 49 | 30 | 419 | −24.0 | [2] 42 |
| 8,000 | 24 | 380 | −18.0 | [2] 53 | 24 | 357 | −36.9 | ---- | 12 | 358 | −35.9 | ---- | 29 | 364 | −31.2 | ---- |
| 9,000 | 24 | 331 | −25.1 | [2] 45 | 24 | 308 | −43.2 | ---- | 12 | 309 | −42.2 | ---- | 29 | 315 | −37.8 | ---- |
| 10,000 | 22 | 288 | −32.9 | ---- | 24 | 265 | −49.1 | ---- | 10 | 268 | −47.6 | ---- | 29 | 272 | −44.0 | ---- |
| 11,000 | 21 | 249 | −41.0 | ---- | 22 | 228 | −52.2 | ---- | 10 | 230 | −51.1 | ---- | 27 | 234 | −49.2 | ---- |
| 12,000 | 18 | 215 | −49.6 | ---- | 21 | 195 | −52.8 | ---- | 7 | 197 | −52.4 | ---- | 20 | 201 | −52.4 | ---- |
| 13,000 | 15 | 184 | −58.9 | ---- | 17 | 167 | −54.3 | ---- | ---- | ---- | ---- | ---- | 14 | 172 | −55.7 | ---- |
| 14,000 | 14 | 156 | −67.9 | ---- | 15 | 143 | −56.3 | ---- | ---- | ---- | ---- | ---- | 11 | 147 | −59.2 | ---- |
| 15,000 | 9 | 132 | −75.8 | ---- | 14 | 122 | −57.1 | ---- | ---- | ---- | ---- | ---- | 10 | 126 | −61.3 | ---- |
| 16,000 | 8 | 111 | −82.1 | ---- | 7 | 104 | −56.9 | ---- | ---- | ---- | ---- | ---- | 7 | 107 | −62.2 | ---- |
| 17,000 | 7 | 93 | −83.3 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 6 | 91 | −62.3 | ---- |

*Mean free-air barometric pressure in millibars, temperature in degrees centigrade, and relative humidities in percent, obtained by airplanes and radiosondes during November 1943*

STATIONS AND ELEVATIONS IN METERS ABOVE SEA LEVEL

| Altitude (meters) m. s. l. | Albany, N. Y. (86 m.) | | | | Albuquerque, N. Mex. (1,620 m.) | | | | Apalachicola, Fla. (5 m.) | | | | Atlanta, Ga. (300 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 29 | 1,008 | 1.4 | [2] 79 | 30 | 842 | 8.0 | [2] 36 | 30 | 1,021 | 13.0 | [2] 72 | 29 | 986 | 8.2 | [2] 65 |
| 500 | 29 | 957 | 1.1 | [2] 70 | ---- | ---- | ---- | ---- | 30 | 963 | 14.9 | [2] 44 | 29 | 963 | 10.5 | [2] 57 |
| 1,000 | 29 | 899 | −1.8 | [2] 74 | ---- | ---- | ---- | ---- | 30 | 908 | 12.0 | [2] 43 | 29 | 967 | 8.8 | [2] 51 |
| 1,500 | 29 | 844 | −3.8 | [2] 72 | ---- | ---- | ---- | ---- | 30 | 855 | 10.5 | [2] 34 | 29 | 854 | 7.1 | [2] 49 |
| 2,000 | 29 | 792 | −5.5 | [2] 65 | 30 | 804 | 8.5 | [2] 33 | 30 | 805 | 8.7 | [2] 26 | 29 | 803 | 5.4 | [2] 42 |
| 2,500 | 29 | 743 | −7.7 | [2] 59 | 30 | 756 | 5.6 | [2] 32 | 30 | 757 | 6.9 | [2] 28 | 29 | 755 | 3.4 | [2] 43 |
| 3,000 | 29 | 697 | −9.6 | [2] 55 | 30 | 711 | 2.5 | [2] 35 | 30 | 712 | 4.1 | [2] 32 | 29 | 710 | 1.1 | [2] 38 |
| 4,000 | 29 | 611 | −14.5 | [2] 46 | 30 | 628 | −4.5 | [2] 41 | 30 | 629 | −1.2 | [2] 33 | 29 | 626 | −4.3 | [2] 35 |
| 5,000 | 28 | 534 | −20.4 | [2] 43 | 30 | 552 | −10.7 | [2] 34 | 29 | 555 | −7.6 | [2] 30 | 28 | 551 | −10.3 | [2] 34 |
| 6,000 | 28 | 466 | −27.0 | [2] 50 | 29 | 484 | −17.7 | [2] 29 | 29 | 487 | −14.3 | [2] 34 | 27 | 483 | −17.1 | [2] 36 |
| 7,000 | 24 | 406 | −32.9 | [2] 56 | 28 | 423 | −24.8 | ---- | 27 | 426 | −21.5 | ---- | 26 | 422 | −24.2 | [2] 35 |
| 8,000 | 21 | 352 | −39.4 | ---- | 27 | 368 | −32.5 | ---- | 26 | 371 | −28.7 | ---- | 26 | 367 | −31.7 | [2] 39 |
| 9,000 | 15 | 305 | −44.3 | ---- | 26 | 318 | −40.2 | ---- | 24 | 322 | −36.2 | ---- | 24 | 317 | −39.5 | ---- |
| 10,000 | 9 | 263 | −49.6 | ---- | 23 | 275 | −47.0 | ---- | 20 | 278 | −43.4 | ---- | 24 | 274 | −47.0 | ---- |
| 11,000 | ---- | ---- | ---- | ---- | 20 | 236 | −52.5 | ---- | 19 | 239 | −49.9 | ---- | 22 | 235 | −52.7 | ---- |
| 12,000 | ---- | ---- | ---- | ---- | 15 | 203 | −57.4 | ---- | 18 | 205 | −55.1 | ---- | 20 | 201 | −56.6 | ---- |
| 13,000 | ---- | ---- | ---- | ---- | 14 | 173 | −59.6 | ---- | 15 | 175 | −59.0 | ---- | 15 | 172 | −59.1 | ---- |
| 14,000 | ---- | ---- | ---- | ---- | 10 | 147 | −62.0 | ---- | 12 | 149 | −62.5 | ---- | 13 | 147 | −61.7 | ---- |
| 15,000 | ---- | ---- | ---- | ---- | 9 | 125 | −64.4 | ---- | 8 | 127 | −65.1 | ---- | 12 | 125 | −64.8 | ---- |
| 16,000 | ---- | ---- | ---- | ---- | 6 | 106 | −65.1 | ---- | 6 | 108 | −67.0 | ---- | 11 | 107 | −65.2 | ---- |
| 17,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |

| Altitude (meters) m. s. l. | Big Spring, Tex. (774 m.) | | | | Bismarck, N. Dak. (505 m.) | | | | Boise, Idaho (868 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 30 | 932 | 10.6 | [2] 53 | 30 | 961 | −1.6 | 87 | 29 | 923 | 3.4 | [2] 77 |
| 500 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 1,000 | 30 | 908 | 12.4 | [2] 49 | 30 | 903 | −1.7 | 81 | 29 | 909 | 5.1 | [2] 67 |
| 1,500 | 30 | 856 | 10.2 | [2] 46 | 30 | 848 | −1.5 | 71 | 29 | 855 | 4.9 | [2] 50 |
| 2,000 | 30 | 805 | 7.6 | [2] 43 | 30 | 796 | −2.5 | 63 | 29 | 803 | 3.5 | [2] 43 |
| 2,500 | 30 | 757 | 5.4 | [2] 39 | 30 | 748 | −4.1 | 58 | 29 | 755 | 1.9 | [2] 39 |
| 3,000 | 30 | 712 | 3.0 | [2] 34 | 30 | 701 | −6.4 | 55 | 29 | 709 | −0.7 | [2] 40 |
| 4,000 | 30 | 628 | −3.4 | [2] 26 | 30 | 616 | −11.5 | 52 | 29 | 625 | −7.0 | [2] 45 |
| 5,000 | 30 | 553 | −10.3 | [2] 29 | 29 | 540 | −17.9 | 51 | 29 | 549 | −13.0 | [2] 46 |
| 6,000 | 29 | 484 | −16.9 | [2] 28 | 29 | 472 | −24.3 | 53 | 28 | 481 | −19.7 | [2] 46 |
| 7,000 | 29 | 423 | −24.2 | [2] 30 | 27 | 411 | −30.9 | 51 | 28 | 420 | −26.8 | [2] 49 |
| 8,000 | 29 | 368 | −31.8 | [2] 36 | 26 | 356 | −38.5 | 54 | 28 | 364 | −34.1 | [2] 52 |
| 9,000 | 24 | 319 | −39.1 | ---- | 26 | 307 | −45.8 | ---- | 23 | 314 | −42.1 | ---- |
| 10,000 | 21 | 276 | −46.1 | ---- | 23 | 264 | −51.8 | ---- | 18 | 272 | −49.2 | ---- |
| 11,000 | 15 | 236 | −52.8 | ---- | 22 | 226 | −55.9 | ---- | 16 | 233 | −55.2 | ---- |
| 12,000 | 13 | 202 | −56.8 | ---- | 22 | 193 | −57.3 | ---- | 11 | 198 | −60.9 | ---- |
| 13,000 | 9 | 173 | −60.7 | ---- | 21 | 165 | −56.8 | ---- | 6 | 167 | −60.2 | ---- |
| 14,000 | 8 | 148 | −63.1 | ---- | 19 | 141 | −56.9 | ---- | ---- | ---- | ---- | ---- |
| 15,000 | 7 | 126 | −65.6 | ---- | 14 | 120 | −57.8 | ---- | ---- | ---- | ---- | ---- |
| 16,000 | 6 | 106 | −67.9 | ---- | 7 | 102 | −58.6 | ---- | ---- | ---- | ---- | ---- |
| 17,000 | 5 | 90 | −66.5 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |

| Altitude (meters) m. s. l. | Brownsville, Tex. (6 m.) | | | | Buffalo, N. Y. (221 m.) | | | | Caribou, Maine (191 m.) | | | | Charleston, S. C. (14 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 30 | 1,020 | 17.1 | [2] 87 | 30 | 992 | 2.3 | [2] 80 | 29 | 993 | −2.2 | [2] 90 | 30 | 1,020 | 8.1 | 87 |
| 500 | 30 | 963 | 16.7 | [2] 72 | 30 | 959 | 1.3 | [2] 77 | 29 | 955 | −2.6 | [2] 85 | 30 | 961 | 12.0 | 59 |
| 1,000 | 30 | 908 | 13.8 | [2] 71 | 30 | 901 | −1.0 | [2] 70 | 29 | 897 | −4.7 | [2] 78 | 30 | 906 | 9.8 | 55 |
| 1,500 | 30 | 856 | 11.1 | [2] 62 | 30 | 846 | −3.7 | [2] 67 | 29 | 841 | −6.5 | [2] 74 | 30 | 853 | 7.8 | 55 |
| 2,000 | 30 | 806 | 8.8 | [2] 53 | 30 | 793 | −6.1 | [2] 69 | 29 | 789 | −8.4 | [2] 71 | 30 | 802 | 6.6 | 50 |
| 2,500 | 30 | 758 | 6.7 | [2] 48 | 30 | 744 | −8.6 | [2] 63 | 29 | 739 | −10.5 | [2] 62 | 30 | 754 | 4.3 | 47 |
| 3,000 | 30 | 714 | 4.5 | [2] 42 | 30 | 697 | −10.7 | [2] 56 | 29 | 693 | −12.3 | [2] 61 | 30 | 709 | 2.2 | 43 |
| 4,000 | 30 | 630 | −0.6 | [2] 32 | 29 | 612 | −14.9 | [2] 52 | 27 | 607 | −16.4 | [2] 52 | 30 | 626 | −3.2 | 37 |
| 5,000 | 30 | 556 | −6.5 | [2] 26 | 29 | 536 | −20.3 | [2] 47 | 26 | 531 | −22.6 | [2] 61 | 29 | 551 | −9.3 | 32 |
| 6,000 | 29 | 488 | −12.6 | [2] 25 | 29 | 468 | −26.7 | [2] 46 | 24 | 463 | −29.0 | [2] 63 | 28 | 484 | −16.0 | 30 |
| 7,000 | 29 | 428 | −19.8 | [2] 28 | 29 | 406 | −33.1 | [2] 45 | 22 | 402 | −35.0 | [2] 63 | 27 | 423 | −22.9 | 30 |
| 8,000 | 29 | 373 | −27.2 | [2] 38 | 28 | 351 | −39.0 | ---- | 20 | 347 | −41.3 | ---- | 25 | 369 | −30.0 | 33 |
| 9,000 | 29 | 324 | −34.5 | ---- | 24 | 302 | −44.7 | ---- | 16 | 300 | −47.2 | ---- | 25 | 320 | −37.5 | 38 |
| 10,000 | 29 | 280 | −41.7 | ---- | 18 | 262 | −49.6 | ---- | 9 | 259 | −49.1 | ---- | 24 | 276 | −44.6 | ---- |
| 11,000 | 28 | 241 | −48.6 | ---- | 11 | 227 | −54.6 | ---- | 6 | 222 | −51.1 | ---- | 24 | 237 | −50.7 | ---- |
| 12,000 | 25 | 207 | −55.2 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 23 | 203 | −54.9 | ---- |
| 13,000 | 25 | 177 | −61.2 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 23 | 173 | −58.7 | ---- |
| 14,000 | 24 | 150 | −66.3 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 23 | 148 | −62.0 | ---- |
| 15,000 | 24 | 127 | −69.8 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 22 | 125 | −64.5 | ---- |
| 16,000 | 21 | 107 | −72.0 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 18 | 107 | −66.3 | ---- |
| 17,000 | 12 | 90 | −72.1 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 16 | 90 | −66.1 | ---- |
| 18,000 | 6 | 77 | −70.7 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 11 | 76 | −67.1 | ---- |

| Altitude (meters) m. s. l. | Denver, Colo. (1,616 m.) | | | | Detroit, Mich. (217 m.) | | | | Dodge City, Kans. (787 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 30 | 842 | 1.4 | [2] 58 | 30 | 993 | 0.9 | [2] 82 | 23 | 930 | 3.4 | [2] 62 |
| 500 | ---- | ---- | ---- | ---- | 30 | 958 | 1.0 | [2] 72 | ---- | ---- | ---- | ---- |
| 1,000 | ---- | ---- | ---- | ---- | 30 | 900 | −1.5 | [2] 70 | 23 | 907 | 8.1 | [2] 47 |
| 1,500 | ---- | ---- | ---- | ---- | 30 | 845 | −3.8 | [2] 65 | 23 | 854 | 8.3 | [2] 41 |
| 2,000 | 30 | 803 | 5.6 | [2] 39 | 30 | 793 | −5.5 | [2] 57 | 23 | 803 | 6.1 | [2] 41 |
| 2,500 | 30 | 754 | 3.0 | [2] 39 | 30 | 744 | −7.1 | [2] 51 | 23 | 755 | 3.5 | [2] 39 |
| 3,000 | 30 | 709 | −0.1 | [2] 41 | 30 | 698 | −9.2 | [2] 52 | 23 | 710 | 1.1 | [2] 35 |
| 4,000 | 30 | 625 | −7.2 | [2] 49 | 30 | 612 | −14.5 | [2] 50 | 23 | 626 | −4.9 | [2] 34 |
| 5,000 | 30 | 549 | −14.1 | [2] 47 | 29 | 536 | −20.3 | [2] 54 | 23 | 550 | −11.9 | [2] 40 |
| 6,000 | 30 | 481 | −20.8 | [2] 42 | 29 | 468 | −26.6 | [2] 48 | 23 | 482 | −18.8 | [2] 39 |
| 7,000 | 30 | 419 | −28.5 | [2] 41 | 29 | 406 | −33.3 | [2] 56 | 23 | 421 | −26.0 | [2] 36 |
| 8,000 | 29 | 363 | −36.7 | ---- | 29 | 351 | −40.3 | ---- | 23 | 365 | −33.8 | [2] 42 |
| 9,000 | 26 | 312 | −44.2 | ---- | 28 | 302 | −46.7 | ---- | 23 | 315 | −41.4 | ---- |
| 10,000 | 26 | 269 | −51.3 | ---- | 25 | 259 | −51.8 | ---- | 22 | 272 | −48.9 | ---- |
| 11,000 | 22 | 230 | −57.1 | ---- | 24 | 222 | −54.8 | ---- | 21 | 233 | −55.4 | ---- |
| 12,000 | 22 | 196 | −60.4 | ---- | 23 | 190 | −55.7 | ---- | 20 | 200 | −59.1 | ---- |
| 13,000 | 16 | 167 | −61.3 | ---- | 22 | 162 | −56.6 | ---- | 19 | 170 | −60.9 | ---- |
| 14,000 | 8 | 142 | −62.8 | ---- | 22 | 138 | −57.3 | ---- | 19 | 144 | −61.9 | ---- |
| 15,000 | ---- | ---- | ---- | ---- | 18 | 118 | −58.1 | ---- | 16 | 123 | −63.5 | ---- |
| 16,000 | ---- | ---- | ---- | ---- | 12 | 100 | −57.6 | ---- | 14 | 105 | −64.8 | ---- |
| 17,000 | ---- | ---- | ---- | ---- | 8 | 87 | −58.1 | ---- | 7 | 90 | −66.8 | ---- |
| 18,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |

[1] U. S. Navy.

[2] Humidity data obtained by electric hygrometer.

***Mean free-air barometric pressure in millibars, temperature in degrees centigrade, and relative humidities in percent, obtained by radiosondes during November 1943*—Continued**

STATIONS AND ELEVATIONS IN METERS ABOVE SEA LEVEL—Continued

| Altitude (meters) m. s. l. | El Paso, Tex. (1,195 m.) | | | | Ely, Nev. (1,908 m.) | | | | Glasgow, Mont. (648 m.) | | | | Great Falls, Mont. (1,128 m.) | | | | Greensboro, N. C. (273 m.) | | | | Huntington, W. Va. (172 m.) | | | | International Falls, Minn. (343 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 30 | 886 | 9.5 | [2]41 | 30 | 813 | 0.3 | 59 | 30 | 944 | 0.4 | [2]77 | 30 | 890 | 5.1 | [2]53 | 16 | 988 | 5.5 | 54 | 29 | 1,001 | 3.0 | [2]80 | 29 | 977 | −3.4 | [2]84 |
| 500 | | | | | | | | | | | | | | | | | 16 | 961 | 8.6 | 39 | 29 | 961 | 5.2 | [2]63 | 29 | 958 | −4.1 | [2]83 |
| 1,000 | | | | | | | | | 30 | 904 | 2.5 | [2]59 | | | | | 16 | 905 | 6.6 | 38 | 29 | 904 | 2.6 | [2]63 | 29 | 899 | −6.2 | [2]78 |
| 1,500 | 30 | 854 | 12.0 | [2]35 | | | | | 30 | 850 | 1.1 | [2]51 | 30 | 851 | 5.6 | [2]43 | 16 | 851 | 4.6 | 38 | 29 | 850 | 0.3 | [2]60 | 29 | 844 | −7.7 | [2]71 |
| 2,000 | 30 | 804 | 9.4 | [2]34 | 30 | 804 | 2.0 | 58 | 30 | 798 | −0.8 | [2]49 | 30 | 800 | 2.5 | [2]45 | 16 | 800 | 2.5 | 43 | 29 | 798 | −1.8 | [2]54 | 29 | 791 | −8.3 | [2]59 |
| 2,500 | 30 | 757 | 6.1 | [2]34 | 30 | 856 | 3.3 | 56 | 30 | 749 | −3.2 | [2]52 | 30 | 751 | −0.8 | [2]49 | 16 | 752 | 0.2 | 42 | 29 | 749 | −3.5 | [2]45 | 29 | 741 | −10.0 | [2]50 |
| 3,000 | 30 | 712 | 3.0 | [2]32 | 30 | 710 | 0.6 | 54 | 30 | 703 | −5.4 | [2]53 | 30 | 706 | −3.3 | [2]50 | 16 | 706 | −2.2 | 39 | 29 | 703 | −5.5 | [2]43 | 29 | 694 | −12.4 | [2]46 |
| 4,000 | 30 | 628 | −2.7 | [2]31 | 30 | 626 | −4.4 | 47 | 30 | 618 | −11.2 | [2]49 | 30 | 621 | −9.4 | [2]57 | 16 | 622 | −7.6 | 24 | 29 | 618 | −10.0 | [2]35 | 29 | 609 | −17.3 | [2]41 |
| 5,000 | 25 | 553 | −9.1 | [2]27 | 30 | 551 | −10.5 | 43 | 29 | 542 | −16.9 | [2]44 | 30 | 545 | −15.6 | [2]57 | 16 | 546 | −12.9 | | 29 | 543 | −15.6 | [2]35 | 29 | 532 | −22.5 | [2]36 |
| 6,000 | 25 | 486 | −16.0 | [2]28 | 30 | 483 | −17.2 | 42 | 27 | 474 | −23.6 | [2]47 | 29 | 476 | −22.6 | [2]58 | 16 | 478 | −19.9 | | 29 | 474 | −22.3 | [2]30 | 27 | 463 | −29.2 | [2]41 |
| 7,000 | 24 | 424 | −23.6 | | 29 | 422 | −24.8 | 39 | 27 | 412 | −31.0 | [2]47 | 29 | 415 | −29.6 | [2]59 | 15 | 416 | −27.4 | | 29 | 413 | −29.0 | [2]37 | 26 | 401 | −35.8 | |
| 8,000 | 22 | 369 | −31.3 | | 28 | 367 | −32.6 | 38 | 26 | 356 | −38.8 | [2]49 | 28 | 360 | −37.1 | | 14 | 362 | −34.9 | | 29 | 358 | −36.2 | | 23 | 346 | −43.4 | |
| 9,000 | 22 | 320 | −38.4 | | 28 | 317 | −40.4 | | 25 | 307 | −46.6 | | 27 | 310 | −44.4 | | 13 | 313 | −42.8 | | 29 | 309 | −43.3 | | 21 | 297 | −49.3 | |
| 10,000 | 18 | 276 | −44.9 | | 27 | 274 | −46.7 | | 25 | 264 | −52.4 | | 23 | 267 | −51.0 | | 13 | 269 | −49.6 | | 28 | 266 | −49.7 | | 20 | 255 | −52.1 | |
| 11,000 | 17 | 238 | −51.4 | | 24 | 235 | −52.6 | | 25 | 226 | −57.1 | | 20 | 230 | −56.9 | | 11 | 231 | −55.9 | | 27 | 228 | −55.6 | | 16 | 219 | −52.5 | |
| 12,000 | 17 | 203 | −56.0 | | 24 | 201 | −56.7 | | 24 | 193 | −58.4 | | 19 | 196 | −60.6 | | 9 | 198 | −59.5 | | 25 | 195 | −57.8 | | 16 | 187 | −53.1 | |
| 13,000 | 16 | 173 | −59.6 | | 23 | 171 | −58.8 | | 22 | 164 | −58.2 | | 18 | 167 | −60.9 | | 9 | 168 | −60.5 | | 25 | 166 | −59.0 | | 14 | 161 | −53.9 | |
| 14,000 | 15 | 148 | −62.2 | | 19 | 146 | −61.2 | | 18 | 140 | −58.2 | | 13 | 142 | −59.8 | | 9 | 143 | −62.1 | | 22 | 142 | −60.6 | | 10 | 137 | −53.8 | |
| 15,000 | 12 | 125 | −65.4 | | 15 | 125 | −63.5 | | 15 | 120 | −59.9 | | 13 | 121 | −59.8 | | 6 | 122 | −64.4 | | 17 | 121 | −61.8 | | 9 | 119 | −54.4 | |
| 16,000 | 11 | 106 | −66.4 | | 10 | 106 | −64.5 | | 10 | 102 | −60.7 | | 9 | 104 | −60.1 | | | | | | 14 | 103 | −61.7 | | | | | |
| 17,000 | 7 | 90 | −67.3 | | 5 | 91 | −65.7 | | | | | | 8 | 88 | −60.1 | | | | | | 9 | 87 | −61.3 | | | | | |

| Altitude (meters) m. s. l. | Joliet, Ill. (178 m.) | | | | Lake Charles, La. (5 m.) | | | | Lakehurst, N. J.[1] (39 m.) | | | | Little Rock, Ark. (79 m.) | | | | Mazatlan, Mexico (80 m.) | | | | Medford, Oreg. (409 m.) | | | | Miami, Fla. (4 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Surface | 28 | 999 | −0.3 | [2]85 | 29 | 1,023 | 11.1 | [2]80 | 26 | 1,014 | 5.0 | [2]71 | 30 | 1,013 | 8.2 | [2]72 | 28 | 1,005 | 24.7 | [2]79 | 30 | 972 | 7.0 | 85 | 30 | 1,018 | 19.7 | 86 |
| 500 | 28 | 960 | +1.5 | [2]71 | 29 | 964 | 12.8 | [2]49 | 26 | 959 | 4.1 | [2]61 | 30 | 963 | 10.2 | [2]49 | 28 | 958 | 23.3 | [2]55 | 30 | 962 | 7.8 | 81 | 30 | 962 | 18.6 | 83 |
| 1,000 | 28 | 902 | −0.3 | [2]64 | 29 | 909 | 10.3 | [2]44 | 26 | 901 | 1.3 | [2]63 | 30 | 907 | 7.4 | [2]49 | 28 | 905 | 20.8 | [2]46 | 30 | 906 | 9.5 | 66 | 30 | 907 | 15.3 | 85 |
| 1,500 | 28 | 847 | −1.4 | [2]52 | 29 | 856 | 8.4 | [2]43 | 26 | 847 | −1.0 | [2]63 | 30 | 854 | 5.9 | [2]42 | 28 | 854 | 17.8 | [2]39 | 30 | 853 | 8.5 | 57 | 30 | 855 | 12.7 | 83 |
| 2,000 | 28 | 795 | −3.0 | [2]46 | 29 | 805 | 6.9 | [2]35 | 25 | 795 | −3.3 | [2]59 | 30 | 802 | 4.4 | [2]37 | 28 | 805 | 15.0 | [2]33 | 30 | 802 | 6.0 | 54 | 30 | 805 | 10.9 | 72 |
| 2,500 | 28 | 746 | −4.7 | [2]39 | 29 | 757 | 4.6 | [2]36 | 25 | 746 | −5.3 | [2]52 | 30 | 754 | 2.7 | [2]32 | 28 | 758 | 11.8 | [2]27 | 30 | 755 | 3.4 | 50 | 30 | 758 | 8.8 | 63 |
| 3,000 | 28 | 700 | −6.4 | [2]38 | 29 | 712 | 2.3 | [2]33 | 25 | 700 | −6.9 | [2]43 | 30 | 709 | 0.2 | [2]34 | 28 | 715 | 8.5 | [2]29 | 30 | 709 | 0.6 | 48 | 30 | 714 | 6.3 | 57 |
| 4,000 | 28 | 615 | −11.4 | [2]45 | 29 | 628 | −3.0 | [2]27 | 25 | 615 | −11.9 | [2]44 | 29 | 625 | −5.9 | [2]36 | 25 | 632 | 2.5 | [2]20 | 30 | 625 | −5.0 | 42 | 30 | 631 | 1.0 | 53 |
| 5,000 | 28 | 540 | −16.8 | [2]45 | 29 | 553 | −9.7 | [2]28 | 24 | 539 | −18.2 | [2]41 | 29 | 549 | −12.0 | [2]29 | 24 | 558 | −3.3 | [2]22 | 29 | 550 | −11.2 | 40 | 30 | 557 | −4.3 | 48 |
| 6,000 | 27 | 472 | −23.7 | [2]49 | 29 | 485 | −16.5 | | 24 | 471 | −24.2 | [2]42 | 29 | 481 | −18.5 | [2]29 | 23 | 491 | −9.3 | [2]28 | 28 | 482 | −18.1 | 42 | 30 | 490 | −10.7 | 44 |
| 7,000 | 26 | 411 | −30.3 | [2]51 | 29 | 424 | −23.6 | | 23 | 410 | −30.5 | | 29 | 420 | −25.8 | [2]36 | 23 | 431 | −16.2 | | 28 | 421 | −25.2 | 42 | 30 | 430 | −17.9 | 41 |
| 8,000 | 26 | 356 | −37.4 | | 29 | 369 | −30.8 | | 23 | 355 | −37.0 | | 29 | 365 | −33.2 | | 23 | 376 | −24.0 | | 26 | 366 | −32.6 | 39 | 30 | 375 | −24.9 | 39 |
| 9,000 | 26 | 307 | −44.8 | | 28 | 319 | −38.4 | | 21 | 307 | −44.2 | | 27 | 316 | −40.7 | | 22 | 327 | −31.9 | | 23 | 317 | −39.7 | 38 | 30 | 326 | −31.8 | 40 |
| 10,000 | 26 | 264 | −51.4 | | 25 | 276 | −45.3 | | 20 | 263 | −50.5 | | 26 | 272 | −48.6 | | 22 | 284 | −39.3 | | 17 | 273 | −46.9 | | 30 | 282 | −38.8 | |
| 11,000 | 26 | 227 | −56.0 | | 17 | 237 | −51.4 | | 19 | 227 | −54.4 | | 25 | 233 | −55.4 | | 22 | 244 | −47.0 | | 14 | 235 | −53.7 | | 26 | 244 | −44.8 | |
| 12,000 | 25 | 194 | −58.0 | | 15 | 203 | −55.9 | | 13 | 192 | −57.7 | | 25 | 199 | −59.1 | | 21 | 210 | −54.5 | | 13 | 201 | −59.5 | | 23 | 210 | −52.2 | |
| 13,000 | 22 | 165 | −58.1 | | 14 | 173 | −59.5 | | 13 | 164 | −58.4 | | 20 | 170 | −60.8 | | 21 | 180 | −60.8 | | 12 | 171 | −60.8 | | 18 | 180 | −59.0 | |
| 14,000 | 17 | 141 | −58.8 | | 12 | 148 | −62.8 | | 10 | 140 | −59.2 | | 18 | 144 | −63.3 | | 20 | 152 | −66.8 | | 11 | 146 | −62.2 | | 16 | 153 | −65.3 | |
| 15,000 | 16 | 120 | −60.0 | | 12 | 125 | −66.0 | | 6 | 120 | −59.9 | | 14 | 123 | −64.6 | | 19 | 129 | −70.9 | | 10 | 124 | −63.1 | | 13 | 130 | −70.1 | |
| 16,000 | 13 | 102 | −60.7 | | 12 | 107 | −67.1 | | | | | | 9 | 105 | −65.6 | | 15 | 109 | −73.3 | | 9 | 105 | −63.9 | | 9 | 110 | −74.3 | |
| 17,000 | 6 | 88 | −60.3 | | 6 | 90 | −66.2 | | | | | | 6 | 89 | −65.8 | | 13 | 92 | −73.5 | | 7 | 89 | −63.4 | | 7 | 92 | −76.0 | |
| 18,000 | | | | | | | | | | | | | | | | | 10 | 77 | −71.4 | | | | | | | | | |
| 19,000 | | | | | | | | | | | | | | | | | 6 | 66 | −69.0 | | | | | | | | | |

| Altitude (meters) m. s. l. | Nashville, Tenn. (180 m.) | | | | Norfolk, Va.[1] (4 m.) | | | | Oakland, Calif. (2 m.) | | | | Ogden, Utah (1,355 m.) | | | | Oklahoma City, Okla. (391 m.) | | | | Omaha, Nebr. (301 m.) | | | | Pensacola, Fla.[4] (24 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Surface | 30 | 1,001 | 6.8 | [2]67 | 26 | 1,020 | 10.5 | [2]74 | 30 | 1,019 | 13.1 | [2]77 | 30 | 870 | 3.4 | [2]72 | 27 | 976 | 8.0 | [2]57 | 30 | 986 | 1.8 | [2]75 | | | | |
| 500 | 30 | 962 | 7.6 | [2]55 | 26 | 960 | 9.8 | [2]60 | 30 | 960 | 13.6 | [2]55 | | | | | 27 | 963 | 9.3 | [2]51 | 30 | 962 | 2.8 | [2]67 | | | | |
| 1,000 | 30 | 906 | 5.2 | [2]54 | 26 | 905 | 7.5 | [2]57 | 30 | 905 | 11.9 | [2]44 | | | | | 27 | 907 | 9.2 | [2]45 | 30 | 904 | 1.6 | [2]55 | | | | |
| 1,500 | 30 | 852 | 3.1 | [2]50 | 26 | 851 | 4.9 | [2]57 | 30 | 852 | 9.7 | [2]39 | 30 | 855 | 5.5 | [2]57 | 27 | 854 | 7.1 | [2]48 | 30 | 850 | 0.8 | [2]46 | | | | |
| 2,000 | 30 | 800 | 1.9 | [2]44 | 26 | 800 | 2.5 | [2]48 | 30 | 802 | 7.6 | [2]34 | 30 | 804 | 4.1 | [2]45 | 27 | 803 | 5.4 | [2]48 | 30 | 798 | −0.3 | [2]39 | | | | |
| 2,500 | 30 | 753 | 0.3 | [2]38 | 26 | 752 | 0.8 | [2]39 | 29 | 754 | 5.0 | [2]33 | 30 | 756 | 1.4 | [2]42 | 26 | 755 | 3.6 | [2]40 | 30 | 749 | −1.9 | [2]37 | | | | |
| 3,000 | 30 | 707 | −1.8 | [2]38 | 26 | 706 | −1.2 | [2]37 | 30 | 709 | 1.9 | [2]34 | 30 | 710 | −1.1 | [2]42 | 26 | 710 | 1.1 | [2]34 | 30 | 704 | −4.0 | [2]40 | | | | |
| 4,000 | 30 | 623 | −6.7 | [2]38 | 26 | 623 | −6.8 | [2]35 | 30 | 626 | −4.0 | [2]33 | 30 | 626 | −7.1 | [2]47 | 25 | 626 | −4.9 | [2]33 | 30 | 619 | −9.5 | [2]39 | | | | |
| 5,000 | 29 | 547 | −13.1 | [2]35 | 25 | 547 | −13.0 | [2]31 | 30 | 550 | −10.5 | [2]33 | 30 | 550 | −13.2 | [2]43 | 24 | 550 | −11.4 | [2]29 | 29 | 543 | −15.7 | [2]36 | | | | |
| 6,000 | 29 | 479 | −19.9 | [2]33 | 25 | 479 | −19.7 | [2]29 | 30 | 482 | −17.3 | [2]37 | 30 | 481 | −19.8 | [2]43 | 23 | 482 | −18.4 | [2]31 | 29 | 475 | −22.6 | [2]39 | | | | |
| 7,000 | 29 | 418 | −27.2 | [2]38 | 24 | 418 | −27.2 | [2]29 | 30 | 422 | −24.2 | [2]42 | 30 | 420 | −27.2 | [2]49 | 23 | 421 | −26.0 | [2]40 | 29 | 413 | −29.9 | [2]40 | | | | |
| 8,000 | 27 | 362 | −34.8 | | | | | | 29 | 366 | −31.3 | [2]29 | 30 | 365 | −34.8 | | 22 | 365 | −34.0 | | 29 | 358 | −37.3 | | | | | |
| 9,000 | 27 | 313 | −41.8 | | | | | | 28 | 317 | −39.0 | | 28 | 315 | −42.7 | | 22 | 315 | −41.3 | | 28 | 309 | −44.4 | | | | | |
| 10,000 | 26 | 270 | −48.8 | | | | | | 28 | 274 | −46.9 | | 28 | 272 | −50.1 | | 21 | 272 | −48.3 | | 27 | 266 | −50.8 | | | | | |
| 11,000 | 25 | 232 | −55.0 | | | | | | 28 | 235 | −53.7 | | 28 | 232 | −56.2 | | 21 | 233 | −54.5 | | 25 | 228 | −56.7 | | | | | |
| 12,000 | 22 | 198 | −58.6 | | | | | | 26 | 201 | −58.7 | | 24 | 198 | −59.3 | | 19 | 200 | −57.1 | | 24 | 195 | −58.2 | | | | | |
| 13,000 | 20 | 169 | −60.0 | | | | | | 23 | 171 | −61.2 | | 21 | 169 | −60.2 | | 19 | 170 | −59.2 | | 20 | 166 | −59.4 | | | | | |
| 14,000 | 18 | 144 | −62.1 | | | | | | 20 | 146 | −64.7 | | 19 | 144 | −61.6 | | 17 | 145 | −60.8 | | 18 | 141 | −60.2 | | | | | |
| 15,000 | 13 | 122 | −63.6 | | | | | | 16 | 124 | −67.2 | | 16 | 122 | −62.9 | | 10 | 123 | −61.8 | | 15 | 121 | −61.0 | | | | | |
| 16,000 | 11 | 104 | −65.7 | | | | | | 12 | 105 | −68.0 | | 10 | 104 | −63.2 | | 6 | 105 | −62.8 | | 9 | 103 | −61.5 | | | | | |
| 17,000 | 5 | 88 | −65.3 | | | | | | 9 | 89 | −67.0 | | | | | | | | | | | | | | | | | |

[1] U. S. Navy. [2] Humidity data obtained by electric hygrometer. [4] No data.

*Mean free-air barometric pressure in millibars, temperature in degrees centigrade, and relative humidities in percent, obtained by radiosondes during November 1943*

STATIONS AND ELEVATIONS IN METERS ABOVE SEA LEVEL—Continued

| Altitude (meters) m. s. l. | Phoenix, Ariz. (339 m.) | | | | Pittsburgh, Pa (392 m.) | | | | Portland, Maine (20 m.) | | | | Rapid City, S. Dak. (981 m.) | | | | St. Louis, Mo. (171 m.) | | | | St. Paul, Minn. (225 m.) | | | | San Antonio, Tex. (242 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 29 | 977 | 12.3 | [2]47 | 30 | 973 | 3.5 | [2]69 | 27 | 1,014 | 1.7 | 84 | 30 | 907 | 0.1 | [2]73 | 30 | 1,001 | 4.6 | [2]69 | 30 | 993 | −1.5 | [2]81 | 27 | 994 | 11.8 | [2]74 |
| 500 | 29 | 959 | 17.8 | [2]29 | 30 | 960 | 3.4 | [2]67 | 27 | 956 | 2.4 | 74 | | | | | 30 | 962 | 5.1 | [2]60 | 30 | 960 | −2.4 | [2]82 | 27 | 964 | 13.5 | [2]56 |
| 1,000 | 29 | 904 | 17.9 | [2]20 | 30 | 903 | 1.2 | [2]65 | 27 | 898 | −0.7 | 73 | 30 | 905 | 0.4 | [2]72 | 30 | 905 | 3.4 | [2]58 | 30 | 901 | −3.9 | [2]72 | 27 | 908 | 10.7 | [2]63 |
| 1,500 | 29 | 853 | 14.2 | [2]23 | 30 | 848 | −1.3 | [2]62 | 27 | 843 | −2.9 | 72 | 30 | 851 | 2.2 | [2]54 | 30 | 850 | 1.9 | [2]47 | 30 | 846 | −4.2 | [2]52 | 27 | 855 | 8.0 | [2]62 |
| 2,000 | 29 | 803 | 10.4 | [2]26 | 30 | 796 | −3.9 | [2]61 | 27 | 791 | −4.6 | 71 | 30 | 800 | 0.2 | [2]50 | 30 | 799 | 0.5 | [2]40 | 30 | 793 | −5.0 | [2]46 | 27 | 805 | 6.0 | [2]47 |
| 2,500 | 29 | 756 | 7.1 | [2]23 | 30 | 747 | −5.6 | [2]51 | 27 | 743 | −6.9 | 68 | 30 | 751 | −2.1 | [2]47 | 30 | 750 | −1.4 | [2]39 | 30 | 744 | −6.3 | [2]46 | 27 | 757 | 4.2 | [2]37 |
| 3,000 | 29 | 711 | 3.9 | [2]22 | 30 | 700 | −7.3 | [2]45 | 27 | 696 | −8.8 | 64 | 30 | 705 | −4.8 | [2]50 | 30 | 704 | −3.4 | [2]38 | 30 | 698 | −8.2 | [2]46 | 27 | 712 | 1.7 | [2]36 |
| 4,000 | 29 | 628 | −1.9 | [2]19 | 30 | 616 | −11.2 | [2]38 | 26 | 611 | −13.9 | 58 | 30 | 620 | −10.6 | [2]53 | 29 | 620 | −8.9 | [2]45 | 28 | 613 | −13.3 | [2]48 | 27 | 628 | −3.8 | [2]32 |
| 5,000 | 29 | 553 | −8.6 | [2]20 | 30 | 540 | −17.0 | [2]44 | 26 | 535 | −19.6 | 55 | 30 | 544 | −16.4 | [2]46 | 28 | 544 | −14.9 | [2]38 | 23 | 537 | −19.5 | [2]53 | 26 | 553 | −9.7 | [2]29 |
| 6,000 | 29 | 485 | −15.1 | [2]24 | 30 | 472 | −23.0 | [2]39 | 26 | 467 | −26.2 | 56 | 30 | 476 | −23.4 | [2]52 | 28 | 476 | −21.6 | | 27 | 468 | −25.8 | [2]49 | 26 | 485 | −16.3 | |
| 7,000 | 29 | 424 | −22.8 | [2]30 | 29 | 411 | −29.5 | [2]37 | 25 | 406 | −32.6 | 54 | 30 | 414 | −30.3 | [2]52 | 28 | 415 | −28.5 | | 27 | 406 | −33.0 | [2]50 | 26 | 424 | −23.8 | |
| 8,000 | 28 | 369 | −30.7 | | 29 | 356 | −36.3 | | 25 | 351 | −39.1 | | 25 | 359 | −37.8 | | 26 | 360 | −36.1 | | 27 | 352 | −40.1 | | 26 | 368 | −31.3 | |
| 9,000 | 28 | 320 | −38.5 | | 28 | 308 | −42.6 | | 19 | 305 | −44.5 | | 21 | 310 | −44.6 | | 24 | 311 | −43.5 | | 27 | 303 | −47.0 | | 26 | 319 | −38.8 | |
| 10,000 | 23 | 276 | −46.0 | | 28 | 265 | −48.6 | | 15 | 263 | −48.8 | | 18 | 266 | −51.6 | | 24 | 268 | −50.6 | | 26 | 260 | −52.3 | | 26 | 275 | −46.3 | |
| 11,000 | 23 | 237 | −52.4 | | 28 | 227 | −53.8 | | 11 | 226 | −51.3 | | 18 | 228 | −57.6 | | 24 | 229 | −56.4 | | 24 | 223 | −55.4 | | 26 | 236 | −53.5 | |
| 12,000 | 22 | 202 | −56.3 | | 28 | 194 | −56.4 | | 8 | 196 | −56.1 | | 17 | 194 | −59.7 | | 22 | 196 | −58.8 | | 22 | 191 | −56.4 | | 25 | 202 | −58.2 | |
| 13,000 | 20 | 173 | −59.3 | | 27 | 166 | −57.5 | | 7 | 168 | −59.3 | | 14 | 165 | −58.5 | | 22 | 167 | −58.9 | | 21 | 163 | −56.6 | | 25 | 172 | −62.0 | |
| 14,000 | 16 | 147 | −62.5 | | 24 | 142 | −58.0 | | 6 | 142 | −59.7 | | 13 | 141 | −59.1 | | 20 | 142 | −60.3 | | 17 | 139 | −57.0 | | 22 | 146 | −65.3 | |
| 15,000 | 13 | 125 | −65.8 | | 16 | 120 | −58.4 | | 5 | 122 | −61.0 | | 8 | 120 | −61.9 | | 16 | 121 | −62.8 | | 6 | 118 | −57.0 | | 21 | 124 | −67.7 | |
| 16,000 | 10 | 106 | −67.5 | | 12 | 103 | −60.0 | | | | | | | | | | 11 | 104 | −63.8 | | | | | | 17 | 105 | −68.9 | |
| 17,000 | | | | | 5 | 89 | −61.9 | | | | | | | | | | 6 | 89 | −65.1 | | | | | | 9 | 90 | −68.3 | |
| 18,000 | | | | | | | | | | | | | | | | | | | | | | | | | 7 | 76 | −65.3 | |

| | San Diego, Calif.[1] (19 m.) | | | | San Juan, P. R. (15 m.) | | | | Santa Maria, Calif. (73 m.) | | | | Sault Ste Marie, Mich. (221 m.) | | | | Seattle, Wash.[1] (22 m.) | | | | Spokane, Wash. (598 m.) | | | | Swan Island, West Indies (10 m.)[4] | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Surface | 28 | 1,014 | 16.5 | [2]74 | 30 | 1,013 | 25.3 | [2]83 | 30 | 1,010 | 12.4 | [2]80 | 29 | 990 | −0.5 | 85 | 25 | 1,018 | 9.4 | [2]82 | 29 | 993 | 2.4 | [2]90 | | | | |
| 500 | 28 | 959 | 17.0 | [2]53 | 30 | 958 | 21.6 | [2]84 | 30 | 960 | 16.5 | [2]48 | 29 | 957 | −1.5 | 84 | 25 | 961 | 9.0 | [2]68 | | | | | | | | |
| 1,000 | 27 | 904 | 15.5 | [2]41 | 29 | 905 | 18.1 | [2]82 | 30 | 996 | 15.2 | [2]38 | 29 | 898 | −4.1 | 83 | 25 | 905 | 8.1 | [2]58 | 29 | 907 | 2.8 | [2]78 | | | | |
| 1,500 | 27 | 853 | 13.1 | [2]40 | 28 | 853 | 15.1 | [2]77 | 30 | 853 | 12.4 | [2]34 | 29 | 843 | −6.4 | 83 | 25 | 852 | 5.9 | [2]56 | 29 | 853 | 2.2 | [2]60 | | | | |
| 2,000 | 27 | 803 | 10.3 | [2]29 | 28 | 804 | 12.7 | [2]67 | 30 | 803 | 9.5 | [2]28 | 29 | 790 | −8.5 | 79 | 24 | 801 | 3.4 | [2]51 | 29 | 801 | 1.1 | [2]48 | | | | |
| 2,500 | 27 | 756 | 7.6 | [2]22 | 28 | 757 | 11.2 | [2]49 | 30 | 756 | 7.1 | [2]27 | 29 | 741 | −10.4 | 74 | 24 | 753 | 0.8 | [2]49 | 29 | 753 | −0.7 | [2]46 | | | | |
| 3,000 | 26 | 711 | 5.2 | [2]24 | 28 | 713 | 8.8 | [2]39 | 30 | 711 | 4.9 | [2]23 | 29 | 694 | −12.7 | 69 | 24 | 707 | −2.2 | [2]49 | 29 | 707 | −3.3 | [2]49 | | | | |
| 4,000 | 25 | 629 | −0.2 | | 28 | 632 | 3.5 | [2]29 | 30 | 629 | −0.6 | [2]22 | 28 | 608 | −17.6 | 64 | 24 | 623 | −7.6 | [2]50 | 28 | 623 | −8.9 | [2]55 | | | | |
| 5,000 | 25 | 554 | −6.9 | | 27 | 558 | −1.9 | [2]19 | 29 | 554 | −6.6 | [2]26 | 27 | 531 | −23.1 | 62 | 23 | 547 | −13.7 | [2]58 | 28 | 546 | −14.7 | [2]55 | | | | |
| 6,000 | 23 | 487 | −13.7 | | 27 | 491 | −8.1 | | 29 | 487 | −13.6 | [2]28 | 26 | 462 | −30.0 | 62 | 20 | 479 | −19.9 | [2]63 | 28 | 478 | −21.1 | [2]48 | | | | |
| 7,000 | 23 | 426 | −21.3 | | 27 | 431 | −15.0 | | 29 | 426 | −20.6 | [2]33 | 24 | 401 | −36.3 | 66 | 19 | 418 | −26.8 | [2]67 | 28 | 416 | −28.2 | [2]49 | | | | |
| 8,000 | 13 | 372 | −28.6 | | 25 | 377 | −22.2 | | 29 | 371 | −28.4 | | 23 | 348 | −42.7 | | 15 | 364 | −34.4 | | 27 | 361 | −35.7 | | | | | |
| 9,000 | 12 | 322 | −36.1 | | 25 | 328 | −29.8 | | 26 | 322 | −36.4 | | 22 | 299 | −48.0 | | 15 | 314 | −42.1 | | 26 | 312 | −43.6 | | | | | |
| 10,000 | 12 | 278 | −43.5 | | 23 | 285 | −37.8 | | 23 | 278 | −44.3 | | 20 | 257 | −51.9 | | 14 | 270 | −50.1 | | 22 | 269 | −51.5 | | | | | |
| 11,000 | 9 | 240 | −50.9 | | 23 | 246 | −46.3 | | 20 | 239 | −51.1 | | 18 | 220 | −52.6 | | 11 | 232 | −58.9 | | 20 | 230 | −56.9 | | | | | |
| 12,000 | 8 | 206 | −55.8 | | 22 | 211 | −54.5 | | 16 | 205 | −56.0 | | 16 | 188 | −53.1 | | 9 | 198 | −64.4 | | 20 | 196 | −60.3 | | | | | |
| 13,000 | 8 | 175 | −59.6 | | 21 | 180 | −62.0 | | 13 | 175 | −59.8 | | 14 | 161 | −54.1 | | 9 | 167 | −64.6 | | 18 | 167 | −60.6 | | | | | |
| 14,000 | 6 | 149 | −64.6 | | 17 | 152 | −68.8 | | 9 | 149 | −63.6 | | 12 | 137 | −55.0 | | 7 | 142 | −64.6 | | 14 | 142 | −59.2 | | | | | |
| 15,000 | | | | | 16 | 129 | −73.9 | | 7 | 126 | −68.0 | | 6 | 118 | −55.6 | | 7 | 120 | −64.5 | | 9 | 121 | −60.2 | | | | | |
| 16,000 | | | | | 15 | 109 | −78.0 | | | | | | | | | | | | | | 6 | 103 | −61.2 | | | | | |
| 17,000 | | | | | 14 | 91 | −77.0 | | | | | | | | | | | | | | | | | | | | | |
| 18,000 | | | | | 7 | 77 | −72.6 | | | | | | | | | | | | | | | | | | | | | |

| | Tacubaya, Mexico (2,306 m.) | | | | Tampa, Fla. (3 m.) | | | | Tapachula, Mexico (115 m.) | | | | Tatoosh Island, Wash. (31 m.) | | | | Tongue Point, Oreg.[1, 3] (21 m.) | | | | Washington, D. C. (25 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Surface | 27 | 776 | 12.1 | [2]64 | 25 | 1,020 | 16.2 | [2]80 | 23 | 998 | 24.0 | [2]88 | 30 | 1,015 | 9.4 | [2]84 | | | | | 30 | 1,017 | 7.1 | [2]66 |
| 500 | | | | | 25 | 963 | 15.4 | [2]64 | 23 | 955 | 23.3 | [2]73 | 30 | 959 | 8.9 | [2]69 | | | | | 30 | 960 | 5.9 | [2]54 |
| 1,000 | | | | | 25 | 908 | 13.5 | [2]60 | 22 | 902 | 21.2 | [2]66 | 30 | 903 | 6.2 | [2]64 | | | | | 30 | 903 | 3.2 | [2]55 |
| 1,500 | | | | | 25 | 855 | 11.0 | [2]55 | 22 | 851 | 18.6 | [2]61 | 30 | 849 | 4.1 | [2]54 | | | | | 30 | 849 | 0.6 | [2]61 |
| 2,000 | | | | | 25 | 805 | 9.1 | [2]40 | 21 | 803 | 16.1 | [2]58 | 30 | 798 | 1.9 | [2]53 | | | | | 30 | 797 | −1.7 | [2]61 |
| 2,500 | 27 | 758 | 11.2 | [2]66 | 25 | 758 | 6.8 | [2]40 | 20 | 757 | 13.2 | [2]58 | 30 | 750 | −0.6 | [2]53 | | | | | 30 | 748 | −3.5 | [2]55 |
| 3,000 | 27 | 714 | 8.5 | [2]71 | 25 | 712 | 4.1 | [2]35 | 20 | 713 | 10.1 | [2]61 | 30 | 704 | −3.0 | [2]52 | | | | | 30 | 703 | −5.0 | [2]45 |
| 4,000 | 26 | 632 | 2.0 | [2]75 | 25 | 630 | −1.0 | [2]31 | 19 | 632 | 4.0 | [2]60 | 30 | 620 | −8.7 | [2]54 | | | | | 29 | 618 | −9.9 | [2]38 |
| 5,000 | 26 | 558 | −3.0 | [2]53 | 25 | 555 | −6.5 | [2]33 | 17 | 558 | −0.7 | [2]44 | 29 | 544 | −15.0 | [2]55 | | | | | 29 | 542 | −15.9 | [2]40 |
| 6,000 | 26 | 491 | −8.7 | [2]41 | 25 | 487 | −13.1 | [2]31 | 17 | 492 | −6.8 | [2]35 | 29 | 476 | −22.0 | [2]57 | | | | | 29 | 474 | −22.6 | [2]39 |
| 7,000 | 25 | 431 | −15.8 | [2]40 | 25 | 427 | −20.5 | [2]38 | 16 | 432 | −13.5 | [2]32 | 29 | 414 | −29.5 | [2]55 | | | | | 29 | 413 | −29.6 | [2]42 |
| 8,000 | 23 | 377 | −22.5 | [2]44 | 25 | 372 | −27.7 | [2]41 | 16 | 378 | −20.4 | | 27 | 359 | −36.4 | | | | | | 29 | 358 | −36.7 | |
| 9,000 | 20 | 327 | −30.0 | [2]42 | 25 | 322 | −34.9 | | 16 | 329 | −28.0 | | 26 | 310 | −43.0 | | | | | | 27 | 309 | −43.5 | |
| 10,000 | 18 | 284 | −37.5 | | 25 | 280 | −41.9 | | 16 | 286 | −36.0 | | 24 | 266 | −49.8 | | | | | | 23 | 268 | −49.9 | |
| 11,000 | 16 | 245 | −45.6 | | 25 | 240 | −48.7 | | 15 | 247 | −44.2 | | 23 | 229 | −56.0 | | | | | | 10 | 233 | −54.8 | |
| 12,000 | 16 | 211 | −53.5 | | 25 | 206 | −55.3 | | 15 | 213 | −52.6 | | 19 | 195 | −58.6 | | | | | | | | | |
| 13,000 | 16 | 180 | −61.2 | | 22 | 176 | −61.1 | | 14 | 182 | −60.7 | | 17 | 166 | −57.7 | | | | | | | | | |
| 14,000 | 11 | 153 | −67.9 | | 21 | 149 | −65.9 | | 14 | 154 | −67.3 | | 14 | 142 | −58.9 | | | | | | | | | |
| 15,000 | 10 | 129 | −73.3 | | 19 | 126 | −69.1 | | 12 | 130 | −73.1 | | 10 | 121 | −60.2 | | | | | | | | | |
| 16,000 | 10 | 108 | −77.0 | | 19 | 107 | −71.2 | | 11 | 109 | −78.5 | | 6 | 104 | −60.6 | | | | | | | | | |
| 17,000 | 8 | 92 | −78.5 | | 14 | 91 | −71.1 | | 8 | 92 | −79.4 | | | | | | | | | | | | | |
| 18,000 | | | | | 10 | 76 | −68.3 | | 6 | 77 | −75.3 | | | | | | | | | | | | | |

[1] U. S. Navy. [2] Humidity data obtained by electric hygrometer [3] Insufficient data. [4] No data.

*Mean free-air barometric pressure in millibars, temperature in degrees centigrade, and relative humidities in percent, obtained by airplanes and by radiosondes during December 1943*—Continued

STATIONS AND ELEVATIONS IN METERS ABOVE SEA LEVEL—Continued

| Altitude (meters) m. s. l. | Albany, N. Y. (86 m.) | | | | Albuquerque, N. Mex. (1,620 m.) | | | | Apalachicola, Fla. (5 m.) | | | | Atlanta, Ga. (300 m.) | | | | Big Spring, Tex. (774 m.) | | | | Bismarck, N. Dak. (505 m.) | | | | Boise, Idaho (868 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 31 | 1,007 | −5.6 | [2] 78 | 28 | 841 | 0.7 | [2] 70 | 30 | 1,021 | 11.5 | [2] 83 | 31 | 986 | 5.4 | [2] 76 | 31 | 932 | 4.5 | [2] 76 | 29 | 958 | −5.8 | 82 | 30 | 922 | −0.7 | [2] 86 |
| 500 | 31 | 955 | −5.8 | [2] 70 | ---- | ---- | ---- | ---- | 30 | 963 | 11.6 | [2] 63 | 31 | 962 | 6.2 | [2] 74 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 1,000 | 31 | 896 | −8.0 | [2] 70 | ---- | ---- | ---- | ---- | 30 | 907 | 11.4 | [2] 47 | 31 | 906 | 5.8 | [2] 67 | 31 | 906 | 6.1 | [2] 64 | 29 | 900 | −3.2 | 76 | 30 | 908 | 0.7 | [2] 75 |
| 1,500 | 31 | 840 | −9.2 | [2] 65 | ---- | ---- | ---- | ---- | 30 | 854 | 10.3 | [2] 42 | 31 | 852 | 6.0 | [2] 53 | 31 | 853 | 6.0 | [2] 57 | 29 | 844 | −3.8 | 71 | 30 | 853 | 0.6 | [2] 60 |
| 2,000 | 31 | 787 | −10.2 | [2] 59 | 28 | 802 | 0.6 | [2] 65 | 30 | 804 | 9.2 | [2] 37 | 31 | 801 | 4.9 | [2] 48 | 31 | 802 | 5.4 | [2] 46 | 28 | 792 | −5.4 | 68 | 30 | 801 | −1.1 | [2] 56 |
| 2,500 | 31 | 737 | −11.9 | [2] 55 | 28 | 753 | −0.7 | [2] 58 | 30 | 757 | 7.2 | [2] 34 | 31 | 754 | 3.4 | [2] 43 | 31 | 754 | 3.9 | [2] 37 | 28 | 744 | −7.1 | 63 | 30 | 752 | −3.2 | [2] 54 |
| 3,000 | 31 | 691 | −12.8 | [2] 48 | 28 | 707 | −2.9 | [2] 56 | 30 | 712 | 4.9 | [2] 32 | 31 | 708 | 1.3 | [2] 43 | 31 | 709 | 1.7 | [2] 33 | 28 | 698 | −8.7 | 60 | 30 | 706 | −4.8 | [2] 53 |
| 4,000 | 31 | 605 | −17.4 | [2] 38 | 28 | 623 | −7.9 | [2] 41 | 30 | 629 | −0.4 | [2] 32 | 30 | 625 | −3.6 | [2] 39 | 31 | 625 | −4.0 | [2] 29 | 28 | 612 | −13.6 | 56 | 29 | 621 | −10.0 | [2] 44 |
| 5,000 | 31 | 529 | −22.7 | [2] 41 | 27 | 547 | −13.9 | [2] 39 | 29 | 554 | −6.7 | [2] 27 | 30 | 550 | −9.6 | [2] 38 | 31 | 550 | −10.3 | [2] 29 | 27 | 536 | −18.9 | 52 | 27 | 545 | −16.2 | [2] 46 |
| 6,000 | 31 | 461 | −28.8 | [2] 42 | 26 | 479 | −20.3 | [2] 41 | 28 | 487 | −13.0 | [2] 34 | 29 | 482 | −16.0 | [2] 36 | 31 | 482 | −16.8 | [2] 28 | 26 | 468 | −25.8 | 50 | 27 | 476 | −23.0 | [2] 48 |
| 7,000 | 31 | 400 | −35.0 | [2] 48 | 26 | 418 | −27.3 | ---- | 28 | 426 | −19.8 | [2] 41 | 29 | 422 | −23.1 | [2] 37 | 30 | 422 | −23.7 | [2] 39 | 24 | 407 | −32.9 | 49 | 25 | 415 | −29.7 | [2] 52 |
| 8,000 | 28 | 346 | −40.5 | ---- | 25 | 362 | −34.2 | ---- | 28 | 372 | −27.1 | [2] 43 | 29 | 367 | −30.3 | [2] 39 | 28 | 367 | −30.3 | [2] 41 | 22 | 352 | −40.2 | ---- | 20 | 362 | −35.3 | ---- |
| 9,000 | 26 | 297 | −46.2 | ---- | 22 | 313 | −40.7 | ---- | 26 | 323 | −34.3 | ---- | 28 | 318 | −37.3 | ---- | 21 | 319 | −36.6 | ---- | 17 | 303 | −46.7 | ---- | 13 | 315 | −40.9 | ---- |
| 10,000 | 21 | 254 | −50.6 | ---- | 19 | 271 | −47.2 | ---- | 21 | 280 | −41.6 | ---- | 28 | 275 | −44.2 | ---- | 11 | 278 | −42.4 | ---- | 10 | 258 | −51.1 | ---- | 6 | 272 | −46.9 | ---- |
| 11,000 | 15 | 219 | −52.5 | ---- | 11 | 232 | −51.3 | ---- | 16 | 241 | −49.0 | ---- | 28 | 236 | −50.4 | ---- | ---- | ---- | ---- | ---- | 6 | 222 | −52.6 | ---- | ---- | ---- | ---- | ---- |
| 12,000 | 7 | 188 | −54.5 | ---- | 10 | 199 | −55.4 | ---- | 15 | 206 | −55.4 | ---- | 24 | 202 | −55.8 | ---- | ---- | ---- | ---- | ---- | 6 | 190 | −54.8 | ---- | ---- | ---- | ---- | ---- |
| 13,000 | ---- | ---- | ---- | ---- | 5 | 170 | −57.5 | ---- | 12 | 176 | −60.1 | ---- | 19 | 173 | −60.7 | ---- | ---- | ---- | ---- | ---- | 5 | 162 | −56.6 | ---- | ---- | ---- | ---- | ---- |
| 14,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 8 | 150 | −63.7 | ---- | 9 | 148 | −62.2 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 15,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 6 | 129 | −68.8 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |

| Altitude (meters) m. s. l. | Brownsville, Tex. (6 m.) | | | | Buffalo, N. Y. (221 m.) | | | | Caribou, Maine (191 m.) | | | | Charleston, S. C. (14 m.) | | | | Denver, Colo. (1,616 m.) | | | | Detroit, Mich. (217 m.) | | | | Dodge City, Kans. (787 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 30 | 1,019 | 14.8 | [2] 92 | 31 | 991 | −3.3 | [2] 72 | 29 | 987 | −12.9 | [2] 90 | 31 | 1,020 | 7.3 | 82 | 31 | 839 | −1.8 | [2] 68 | 30 | 993 | −4.5 | [2] 77 | 31 | 929 | −2.9 | [2] 77 |
| 500 | 30 | 962 | 14.6 | [2] 81 | 31 | 956 | −4.6 | [2] 73 | 29 | 948 | −12.9 | [2] 90 | 31 | 961 | 8.8 | 69 | ---- | ---- | ---- | ---- | 30 | 958 | −5.0 | [2] 74 | ---- | ---- | ---- | ---- |
| 1,000 | 30 | 907 | 12.9 | [2] 76 | 31 | 897 | −7.4 | [2] 73 | 29 | 889 | −13.5 | [2] 88 | 31 | 905 | 7.8 | 64 | ---- | ---- | ---- | ---- | 30 | 899 | −6.0 | [2] 65 | 31 | 905 | 0.9 | [2] 58 |
| 1,500 | 30 | 854 | 11.8 | [2] 68 | 31 | 841 | −8.7 | [2] 65 | 29 | 832 | −13.8 | [2] 79 | 31 | 852 | 6.6 | 58 | ---- | ---- | ---- | ---- | 30 | 843 | −6.7 | [2] 47 | 31 | 851 | 2.2 | [2] 45 |
| 2,000 | 30 | 805 | 11.0 | [2] 55 | 31 | 788 | −9.8 | [2] 55 | 29 | 779 | −14.4 | [2] 65 | 31 | 801 | 5.5 | 51 | 31 | 800 | 0.3 | [2] 48 | 30 | 790 | −8.0 | [2] 40 | 31 | 799 | 1.0 | [2] 46 |
| 2,500 | 30 | 758 | 9.4 | [2] 44 | 31 | 739 | −11.5 | [2] 47 | 29 | 729 | −16.1 | [2] 56 | 31 | 753 | 3.9 | 47 | 31 | 751 | −2.0 | [2] 44 | 30 | 741 | −9.3 | [2] 34 | 31 | 751 | −0.2 | [2] 40 |
| 3,000 | 30 | 713 | 6.9 | [2] 42 | 31 | 692 | −13.1 | [2] 44 | 29 | 682 | −18.7 | [2] 58 | 31 | 708 | 1.6 | 45 | 31 | 705 | −4.6 | [2] 45 | 30 | 694 | −11.3 | [2] 35 | 31 | 705 | −2.3 | [2] 37 |
| 4,000 | 30 | 631 | 1.5 | [2] 39 | 31 | 606 | −17.5 | [2] 45 | 29 | 596 | −23.9 | [2] 59 | 27 | 625 | −3.3 | 38 | 31 | 620 | −10.5 | [2] 49 | 29 | 608 | −15.7 | [2] 43 | 31 | 621 | −7.7 | [2] 32 |
| 5,000 | 27 | 557 | −4.8 | [2] 42 | 31 | 530 | −22.6 | [2] 46 | 28 | 519 | −29.5 | [2] 58 | 26 | 550 | −8.9 | 35 | 31 | 544 | −16.9 | [2] 47 | 28 | 533 | −21.0 | [2] 43 | 31 | 545 | −13.5 | [2] 32 |
| 6,000 | 27 | 490 | −11.2 | [2] 40 | 29 | 462 | −28.4 | [2] 43 | 27 | 450 | −35.5 | [2] 61 | 26 | 483 | −15.7 | 33 | 31 | 476 | −23.6 | [2] 46 | 28 | 465 | −27.6 | [2] 45 | 31 | 477 | −20.0 | [2] 35 |
| 7,000 | 26 | 429 | −18.2 | [2] 45 | 24 | 402 | −33.6 | ---- | 25 | 390 | −41.3 | ---- | 26 | 422 | −22.3 | 32 | 28 | 414 | −30.3 | [2] 45 | 27 | 404 | −33.4 | ---- | 30 | 416 | −27.2 | [2] 37 |
| 8,000 | 26 | 375 | −25.4 | [2] 45 | 18 | 348 | −40.0 | ---- | 21 | 336 | −46.6 | ---- | 26 | 368 | −29.5 | 33 | 22 | 358 | −38.0 | ---- | 23 | 350 | −39.7 | ---- | 30 | 361 | −34.4 | [2] 41 |
| 9,000 | 26 | 325 | −32.8 | ---- | 10 | 303 | −44.0 | ---- | 21 | 289 | −49.0 | ---- | 24 | 319 | −36.0 | 42 | 17 | 310 | −44.6 | ---- | 14 | 303 | −46.7 | ---- | 30 | 312 | −41.8 | ---- |
| 10,000 | 24 | 282 | −40.6 | ---- | 8 | 261 | −49.6 | ---- | 17 | 247 | −50.7 | ---- | 20 | 276 | −42.5 | ---- | 13 | 266 | −50.9 | ---- | 10 | 260 | −50.7 | ---- | 30 | 269 | −48.1 | ---- |
| 11,000 | 23 | 243 | −49.1 | ---- | ---- | ---- | ---- | ---- | 11 | 212 | −50.0 | ---- | 17 | 238 | −48.5 | ---- | 9 | 230 | −53.4 | ---- | 5 | 224 | −56.3 | ---- | 29 | 231 | −52.9 | ---- |
| 12,000 | 11 | 210 | −56.2 | ---- | ---- | ---- | ---- | ---- | 9 | 181 | −49.7 | ---- | 14 | 204 | −54.4 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 28 | 197 | −56.2 | ---- |
| 13,000 | 9 | 178 | −63.2 | ---- | ---- | ---- | ---- | ---- | 7 | 155 | −49.5 | ---- | 13 | 174 | −59.5 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 28 | 168 | −58.2 | ---- |
| 14,000 | 8 | 152 | −68.7 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 10 | 148 | −65.0 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 20 | 144 | −60.9 | ---- |
| 15,000 | 8 | 128 | −70.1 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 8 | 126 | −68.3 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 15 | 122 | −63.1 | ---- |
| 16,000 | 6 | 109 | −72.1 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 6 | 106 | −69.2 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 7 | 104 | −64.0 | ---- |
| 17,000 | 6 | 92 | −74.0 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |

| Altitude (meters) m. s. l. | El Paso, Tex. (1193 m.) | | | | Ely, Nev. (1908 m.) | | | | Glasgow, Mont. (648 m.) | | | | Great Falls, Mont. (1128 m.) | | | | Greensboro, N. C. (273 m.) | | | | Hatteras, N. C. (3 m.) | | | | Huntington, W. Va. (172 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 31 | 885 | 5.3 | [2] 68 | 31 | 810 | −4.3 | 78 | 31 | 942 | −4.6 | [2] 74 | 30 | 888 | 0.5 | [2] 54 | 31 | 988 | 2.9 | [2] 72 | 28 | 1,020 | 7.0 | [2] 83 | 28 | 1,001 | 0.3 | [2] 82 |
| 500 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 31 | 961 | 4.5 | [2] 62 | 28 | 961 | 7.3 | [2] 54 | 28 | 961 | 0.6 | [2] 74 |
| 1,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 31 | 901 | −1.3 | [2] 56 | ---- | ---- | ---- | ---- | 31 | 904 | 3.2 | [2] 55 | 28 | 904 | 5.5 | [2] 51 | 28 | 903 | −1.4 | [2] 74 |
| 1,500 | 31 | 853 | 6.5 | [2] 53 | ---- | ---- | ---- | ---- | 31 | 847 | −2.0 | [2] 46 | 30 | 848 | 1.4 | [2] 44 | 31 | 850 | 1.5 | [2] 47 | 28 | 851 | 3.7 | [2] 44 | 28 | 848 | −2.2 | [2] 66 |
| 2,000 | 31 | 802 | 4.9 | [2] 52 | 31 | 801 | −2.8 | 76 | 31 | 794 | −3.5 | [2] 47 | 30 | 797 | −1.0 | [2] 43 | 31 | 798 | 0.6 | [2] 41 | 28 | 799 | 2.3 | [2] 39 | 28 | 796 | −2.6 | [2] 52 |
| 2,500 | 31 | 754 | 3.4 | [2] 45 | 31 | 752 | −2.6 | 71 | 31 | 746 | −5.6 | [2] 48 | 30 | 748 | −3.4 | [2] 42 | 31 | 750 | −0.7 | [2] 33 | 28 | 751 | 0.3 | [2] 40 | 28 | 747 | −3.7 | [2] 48 |
| 3,000 | 31 | 709 | 0.9 | [2] 37 | 31 | 706 | −5.0 | 70 | 31 | 699 | −8.0 | [2] 49 | 30 | 702 | −5.8 | [2] 40 | 31 | 704 | −2.1 | [2] 32 | 28 | 706 | −1.3 | [2] 40 | 28 | 701 | −5.2 | [2] 44 |
| 4,000 | 31 | 625 | −4.9 | [2] 35 | 31 | 621 | −10.0 | 67 | 31 | 614 | −13.6 | [2] 47 | 29 | 617 | −11.0 | [2] 42 | 31 | 620 | −6.8 | [2] 32 | 28 | 622 | −5.7 | [2] 34 | 28 | 616 | −10.2 | [2] 32 |
| 5,000 | 31 | 550 | −10.9 | [2] 29 | 31 | 545 | −16.3 | 62 | 31 | 538 | −19.5 | [2] 45 | 29 | 541 | −18.4 | [2] 49 | 30 | 545 | −12.9 | [2] 34 | 28 | 547 | −11.5 | [2] 35 | 27 | 541 | −15.6 | [2] 36 |
| 6,000 | 30 | 482 | −17.3 | [2] 34 | 31 | 476 | −22.8 | 58 | 30 | 469 | −26.4 | [2] 43 | 28 | 472 | −25.3 | [2] 46 | 30 | 478 | −19.4 | [2] 40 | 27 | 479 | −18.3 | [2] 37 | 26 | 472 | −21.9 | [2] 39 |
| 7,000 | 29 | 421 | −23.8 | [2] 37 | 31 | 415 | −29.7 | 55 | 30 | 407 | −33.6 | [2] 48 | 25 | 411 | −31.3 | ---- | 30 | 416 | −26.2 | ---- | 27 | 418 | −24.8 | [2] 38 | 26 | 412 | −28.5 | [2] 44 |
| 8,000 | 27 | 367 | −30.7 | ---- | 31 | 359 | −37.0 | 49 | 28 | 352 | −40.6 | [2] 47 | 21 | 356 | −38.5 | ---- | 29 | 362 | −32.8 | ---- | 27 | 363 | −32.0 | ---- | 24 | 358 | −34.9 | ---- |
| 9,000 | 24 | 318 | −37.3 | ---- | 29 | 310 | −43.9 | ---- | 24 | 304 | −47.2 | ---- | 15 | 308 | −45.2 | ---- | 29 | 313 | −39.7 | ---- | 26 | 314 | −39.1 | ---- | 20 | 310 | −41.0 | ---- |
| 10,000 | 13 | 274 | −44.6 | ---- | 28 | 267 | −49.0 | ---- | 20 | 261 | −53.1 | ---- | ---- | ---- | ---- | ---- | 29 | 270 | −40.4 | ---- | 25 | 271 | −45.8 | ---- | 15 | 270 | −46.7 | ---- |
| 11,000 | 6 | 235 | −49.1 | ---- | 28 | 229 | −52.3 | ---- | 14 | 222 | −55.9 | ---- | ---- | ---- | ---- | ---- | 29 | 232 | −51.7 | ---- | 25 | 233 | −51.1 | ---- | 10 | 232 | −52.8 | ---- |
| 12,000 | 6 | 201 | −54.0 | ---- | 25 | 196 | −54.8 | ---- | 12 | 190 | −58.3 | ---- | ---- | ---- | ---- | ---- | 28 | 199 | −56.8 | ---- | 24 | 200 | −56.3 | ---- | 6 | 197 | −57.6 | ---- |
| 13,000 | 6 | 172 | −57.9 | ---- | 22 | 168 | −56.5 | ---- | 9 | 162 | −55.7 | ---- | ---- | ---- | ---- | ---- | 28 | 169 | −60.4 | ---- | 23 | 171 | −61.1 | ---- | ---- | ---- | ---- | ---- |
| 14,000 | 6 | 146 | −61.8 | ---- | 18 | 144 | −59.3 | ---- | 8 | 138 | −58.6 | ---- | ---- | ---- | ---- | ---- | 19 | 144 | −62.6 | ---- | 23 | 145 | −63.7 | ---- | ---- | ---- | ---- | ---- |
| 15,000 | ---- | ---- | ---- | ---- | 16 | 123 | −61.1 | ---- | 6 | 117 | −58.9 | ---- | ---- | ---- | ---- | ---- | 15 | 123 | −64.3 | ---- | 22 | 123 | −65.5 | ---- | ---- | ---- | ---- | ---- |
| 16,000 | ---- | ---- | ---- | ---- | 11 | 105 | −63.0 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 9 | 104 | −66.5 | ---- | 17 | 104 | −67.7 | ---- | ---- | ---- | ---- | ---- |
| 17,000 | ---- | ---- | ---- | ---- | 6 | 89 | −64.4 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 13 | 89 | −68.0 | ---- | ---- | ---- | ---- | ---- |
| 18,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 5 | 75 | −67.2 | ---- | ---- | ---- | ---- | ---- |

[2] Humidity data obtained by electric hygrometer.

***Mean free-air barometric pressure in millibars, temperature in degrees centigrade, and relative humidities in percent, obtained by radiosondes during the year 1943***

STATIONS AND ELEVATIONS IN METERS ABOVE SEA LEVEL—Continued

| Altitude (meters) m. s. l. | International Falls, Minn. (343 m.) | | | | Joliet, Ill. (178 m.) | | | | Lake Charles, La. (5 m.) | | | | Lakehurst, N. J.[1] (39 m.) | | | | Little Rock, Ark. (79 m.) | | | | Louisville, Ky. (166 m.) | | | | Mazatlan, Mexico (80 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 31 | 974 | −10.6 | [2] 82 | 31 | 1,000 | −4.3 | [2] 77 | 31 | 1,022 | 10.1 | [2] 87 | 29 | 1,014 | −0.9 | [2] 64 | 31 | 1,013 | 4.4 | [2] 77 | 29 | 1,003 | 0.6 | [2] 78 | 23 | 1,006 | 22.3 | [2] 83 |
| 500 | 31 | 955 | −10.1 | [2] 80 | 31 | 960 | −3.5 | [2] 73 | 31 | 962 | 10.2 | [2] 71 | 29 | 956 | −1.0 | [2] 58 | 31 | 963 | 4.0 | [2] 65 | 29 | 962 | −0.1 | [2] 63 | 23 | 959 | 21.5 | [2] 54 |
| 1,000 | 31 | 895 | −9.7 | [2] 69 | 31 | 901 | −4.5 | [2] 62 | 31 | 907 | 10.2 | [2] 58 | 29 | 898 | −3.1 | [2] 56 | 31 | 905 | 4.2 | [2] 57 | 29 | 903 | −1.5 | [2] 59 | 23 | 905 | 19.3 | [2] 45 |
| 1,500 | 31 | 839 | −9.4 | [2] 59 | 31 | 846 | −4.8 | [2] 51 | 31 | 854 | 9.0 | [2] 57 | 29 | 843 | −4.3 | [2] 53 | 31 | 852 | 4.4 | [2] 50 | 29 | 849 | −1.6 | [2] 53 | 23 | 854 | 16.6 | [2] 47 |
| 2,000 | 31 | 786 | −10.7 | [2] 54 | 31 | 793 | −5.4 | [2] 41 | 31 | 803 | 8.1 | [2] 47 | 29 | 791 | −5.3 | [2] 51 | 31 | 800 | 3.4 | [2] 49 | 29 | 797 | −1.9 | [2] 48 | 23 | 805 | 13.5 | [2] 47 |
| 2,500 | 31 | 736 | −12.8 | [2] 56 | 31 | 744 | −6.6 | [2] 40 | 31 | 756 | 6.1 | [2] 43 | 29 | 742 | −6.9 | [2] 47 | 31 | 752 | 1.7 | [2] 42 | 29 | 748 | −2.9 | [2] 40 | 22 | 758 | 10.5 | [2] 48 |
| 3,000 | 31 | 690 | −15.0 | [2] 55 | 31 | 697 | −6.1 | [2] 40 | 31 | 711 | 3.9 | [2] 41 | 29 | 696 | −8.5 | [2] 42 | 30 | 707 | 0.0 | [2] 35 | 29 | 702 | −4.6 | [2] 36 | 22 | 714 | 7.8 | [2] 45 |
| 4,000 | 31 | 603 | −20.3 | [2] 57 | 30 | 612 | −13.1 | [2] 36 | 31 | 628 | −1.6 | [2] 38 | 27 | 612 | −13.0 | [2] 36 | 30 | 623 | −4.8 | [2] 35 | 29 | 618 | −8.8 | [2] 32 | 21 | 632 | 1.9 | [2] 42 |
| 5,000 | 31 | 526 | −26.2 | [2] 53 | 30 | 536 | −18.7 | [2] 36 | 29 | 553 | −7.9 | [2] 34 | 27 | 535 | −19.2 | [2] 43 | 30 | 548 | −11.0 | [2] 31 | 29 | 543 | −14.7 | [2] 37 | 20 | 558 | −3.9 | [2] 46 |
| 6,000 | 30 | 458 | −32.2 | ---- | 30 | 469 | −24.8 | [2] 38 | 29 | 486 | −14.5 | [2] 36 | 26 | 468 | −25.5 | [2] 48 | 30 | 481 | −17.5 | [2] 33 | 29 | 475 | −21.3 | [2] 42 | 19 | 491 | −10.3 | ---- |
| 7,000 | 29 | 397 | −38.5 | ---- | 30 | 407 | −31.7 | ---- | 27 | 424 | −21.6 | [2] 42 | 23 | 406 | −31.6 | [2] 44 | 30 | 420 | −24.7 | [2] 38 | 29 | 414 | −28.2 | [2] 44 | 19 | 430 | −17.3 | ---- |
| 8,000 | 26 | 343 | −44.4 | ---- | 28 | 353 | −39.0 | ---- | 26 | 370 | −28.6 | [2] 51 | 22 | 351 | −38.8 | ---- | 28 | 365 | −31.8 | [2] 39 | 28 | 358 | −35.4 | ---- | 18 | 376 | −24.2 | ---- |
| 9,000 | 17 | 296 | −48.3 | ---- | 21 | 308 | −44.0 | ---- | 26 | 320 | −35.8 | ---- | 20 | 304 | −45.3 | ---- | 28 | 316 | −39.0 | ---- | 19 | 312 | −40.9 | ---- | 18 | 327 | −31.8 | ---- |
| 10,000 | 12 | 253 | −51.4 | ---- | 11 | 266 | −49.1 | ---- | 24 | 278 | −43.1 | ---- | 18 | 261 | −52.1 | ---- | 27 | 273 | −45.9 | ---- | 13 | 270 | −46.7 | ---- | 17 | 284 | −39.8 | ---- |
| 11,000 | 5 | 218 | −50.9 | ---- | 7 | 228 | −55.6 | ---- | 19 | 239 | −50.1 | ---- | 15 | 223 | −54.8 | ---- | 26 | 234 | −52.2 | ---- | 8 | 234 | −51.9 | ---- | 16 | 244 | −47.3 | ---- |
| 12,000 | ---- | ---- | ---- | ---- | 6 | 196 | −58.4 | ---- | 9 | 205 | −55.8 | ---- | 10 | 192 | −57.3 | ---- | 23 | 201 | −57.4 | ---- | 8 | 200 | −56.8 | ---- | 16 | 209 | −54.7 | ---- |
| 13,000 | ---- | ---- | ---- | ---- | 5 | 167 | −60.1 | ---- | ---- | ---- | ---- | ---- | 7 | 164 | −60.0 | ---- | 22 | 171 | −61.2 | ---- | 8 | 171 | −61.4 | ---- | 16 | 179 | −61.1 | ---- |
| 14,000 | ---- | ---- | ---- | ---- | 5 | 142 | −60.5 | ---- | ---- | ---- | ---- | ---- | 7 | 140 | −62.0 | ---- | 20 | 146 | −63.4 | ---- | 7 | 145 | −63.6 | ---- | 15 | 152 | −65.3 | ---- |
| 15,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 17 | 124 | −64.0 | ---- | 6 | 123 | −64.4 | ---- | 13 | 129 | −68.6 | ---- |
| 16,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 14 | 105 | −66.0 | ---- | 6 | 104 | −64.6 | ---- | 9 | 109 | −71.3 | ---- |
| 17,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 7 | 92 | −71.4 | ---- |

| Altitude (meters) m. s. l. | Medford, Oreg. (409 m.) | | | | Miami, Fla. (4 m.) | | | | Nashville, Tenn. (180 m.) | | | | Norfolk, Va.[1] (4 m.) | | | | Oakland, Calif. (2 m.) | | | | Ogden, Utah (1,355 m.) | | | | Oklahoma City, Okla. (391 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Surface | 31 | 973 | 4.1 | 82 | 31 | 1,020 | 16.8 | 89 | 31 | 1,001 | 3.1 | [2] 77 | 30 | 1,020 | 5.3 | [2] 72 | 31 | 1,018 | 10.6 | [2] 72 | 31 | 868 | −1.1 | [2] 80 | 26 | 975 | 1.9 | [2] 79 |
| 500 | 31 | 963 | 4.5 | 81 | 31 | 963 | 17.2 | 80 | 31 | 962 | 2.8 | [2] 69 | 30 | 960 | 4.8 | [2] 55 | 31 | 959 | 10.0 | [2] 56 | ---- | ---- | ---- | ---- | 26 | 962 | 2.9 | [2] 69 |
| 1,000 | 31 | 905 | 5.0 | 71 | 31 | 908 | 14.2 | 80 | 31 | 905 | 1.4 | [2] 65 | 30 | 903 | 2.8 | [2] 52 | 31 | 903 | 7.8 | [2] 53 | ---- | ---- | ---- | ---- | 26 | 905 | 4.2 | [2] 51 |
| 1,500 | 31 | 852 | 3.8 | 64 | 31 | 856 | 12.1 | 71 | 31 | 851 | 1.5 | [2] 54 | 30 | 849 | 1.7 | [2] 46 | 31 | 850 | 5.1 | [2] 46 | 31 | 854 | 0.2 | [2] 73 | 26 | 851 | 4.6 | [2] 47 |
| 2,000 | 31 | 800 | 1.7 | 60 | 31 | 806 | 10.8 | 60 | 31 | 799 | 0.9 | [2] 46 | 30 | 797 | 0.1 | [2] 46 | 31 | 799 | 3.1 | [2] 42 | 31 | 801 | −0.8 | [2] 62 | 26 | 800 | 3.8 | [2] 42 |
| 2,500 | 31 | 752 | 0.0 | 54 | 31 | 759 | 9.4 | 49 | 31 | 751 | −0.4 | [2] 44 | 30 | 749 | −1.2 | [2] 46 | 31 | 750 | 0.3 | [2] 42 | 31 | 752 | −3.2 | [2] 61 | 24 | 752 | 2.4 | [2] 37 |
| 3,000 | 31 | 706 | −2.2 | 50 | 31 | 714 | 7.5 | 37 | 31 | 705 | −1.7 | [2] 37 | 29 | 703 | −3.2 | [2] 43 | 31 | 705 | −2.7 | [2] 41 | 31 | 706 | −5.4 | [2] 56 | 24 | 707 | −0.2 | [2] 35 |
| 4,000 | 30 | 622 | −8.0 | 45 | 31 | 632 | 2.6 | 34 | 30 | 621 | −6.3 | [2] 35 | 29 | 619 | −8.3 | [2] 36 | 31 | 621 | −8.4 | [2] 44 | 31 | 621 | −10.8 | [2] 48 | 22 | 624 | −4.5 | [2] 30 |
| 5,000 | 30 | 546 | −14.2 | 48 | 30 | 558 | −2.9 | 30 | 29 | 546 | −12.2 | [2] 37 | 29 | 544 | −14.5 | [2] 42 | 31 | 545 | −14.8 | [2] 49 | 31 | 544 | −17.1 | [2] 46 | 21 | 549 | −11.0 | [2] 30 |
| 6,000 | 29 | 478 | −20.8 | 47 | 30 | 491 | −9.2 | 29 | 28 | 478 | −18.6 | [2] 38 | 28 | 476 | −20.8 | [2] 46 | 31 | 476 | −21.4 | [2] 45 | 31 | 476 | −24.1 | [2] 52 | 21 | 481 | −17.9 | [2] 27 |
| 7,000 | 28 | 417 | −27.5 | 46 | 29 | 431 | −16.4 | 30 | 28 | 417 | −25.6 | [2] 40 | 27 | 415 | −27.9 | [2] 49 | 30 | 416 | −28.4 | [2] 48 | 31 | 414 | −31.2 | [2] 53 | 19 | 420 | −25.1 | [2] 32 |
| 8,000 | 26 | 362 | −35.0 | 54 | 29 | 376 | −23.7 | 29 | 27 | 363 | −33.0 | ---- | ---- | ---- | ---- | ---- | 30 | 360 | −35.8 | ---- | 30 | 358 | −38.1 | ---- | 19 | 364 | −32.4 | ---- |
| 9,000 | 24 | 312 | −43.2 | ---- | 28 | 327 | −31.1 | 28 | 25 | 314 | −39.9 | ---- | ---- | ---- | ---- | ---- | 30 | 312 | −42.4 | ---- | 30 | 309 | −44.8 | ---- | 16 | 316 | −39.2 | ---- |
| 10,000 | 23 | 269 | −50.6 | ---- | 26 | 284 | −38.5 | ---- | 24 | 271 | −47.2 | ---- | ---- | ---- | ---- | ---- | 29 | 268 | −48.2 | ---- | 30 | 266 | −50.2 | ---- | 12 | 272 | −45.3 | ---- |
| 11,000 | 22 | 231 | −55.6 | ---- | 26 | 244 | −45.8 | ---- | 15 | 233 | −53.0 | ---- | ---- | ---- | ---- | ---- | 25 | 231 | −51.5 | ---- | 28 | 228 | −53.4 | ---- | 7 | 233 | −51.3 | ---- |
| 12,000 | 20 | 197 | −56.9 | ---- | 25 | 210 | −52.9 | ---- | 12 | 199 | −57.2 | ---- | ---- | ---- | ---- | ---- | 22 | 198 | −54.6 | ---- | 24 | 195 | −55.8 | ---- | ---- | ---- | ---- | ---- |
| 13,000 | 15 | 168 | −56.8 | ---- | 24 | 180 | −59.8 | ---- | 12 | 170 | −61.2 | ---- | ---- | ---- | ---- | ---- | 18 | 169 | −56.7 | ---- | 20 | 166 | −57.3 | ---- | ---- | ---- | ---- | ---- |
| 14,000 | 8 | 145 | −59.0 | ---- | 21 | 153 | −65.1 | ---- | 12 | 145 | −64.5 | ---- | ---- | ---- | ---- | ---- | 18 | 144 | −60.1 | ---- | 14 | 141 | −58.3 | ---- | ---- | ---- | ---- | ---- |
| 15,000 | ---- | ---- | ---- | ---- | 15 | 129 | −68.4 | ---- | 11 | 123 | −66.2 | ---- | ---- | ---- | ---- | ---- | 16 | 123 | −63.4 | ---- | 10 | 120 | −59.7 | ---- | ---- | ---- | ---- | ---- |
| 16,000 | ---- | ---- | ---- | ---- | 12 | 109 | −71.5 | ---- | 7 | 105 | −68.3 | ---- | ---- | ---- | ---- | ---- | 12 | 105 | −65.0 | ---- | 7 | 102 | −60.0 | ---- | ---- | ---- | ---- | ---- |
| 17,000 | ---- | ---- | ---- | ---- | 9 | 92 | −75.1 | ---- | 6 | 88 | −68.5 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 18,000 | ---- | ---- | ---- | ---- | 6 | 78 | −77.1 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |

| Altitude (meters) m. s. l. | Omaha, Nebr. (301 m.) | | | | Pensacola, Fla.[4] (24 m.) | | | | Phoenix, Ariz. (339 m.) | | | | Pittsburgh, Pa. (392 m.) | | | | Portland, Maine (20 m.) | | | | Rapid City, S. Dak. (981 m.) | | | | St. Louis Mo. (171 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Surface | 30 | 986 | −3.0 | [2] 70 | ---- | ---- | ---- | ---- | 30 | 977 | 10.0 | [2] 72 | 31 | 972 | −1.6 | [2] 69 | 28 | 1,013 | −6.9 | 77 | 31 | 905 | −3.5 | [2] 67 | 31 | 1,003 | −1.3 | [2] 76 |
| 500 | 30 | 962 | −2.5 | [2] 66 | ---- | ---- | ---- | ---- | 30 | 959 | 13.5 | [2] 50 | 31 | 959 | −1.9 | [2] 67 | 28 | 953 | −5.2 | 75 | ---- | ---- | ---- | ---- | 31 | 962 | −1.5 | [2] 68 |
| 1,000 | 30 | 903 | −2.3 | [2] 51 | ---- | ---- | ---- | ---- | 30 | 904 | 11.2 | [2] 44 | 31 | 901 | −3.9 | [2] 64 | 28 | 894 | −6.8 | 72 | 31 | 903 | −3.0 | [2] 65 | 31 | 904 | −1.8 | [2] 59 |
| 1,500 | 30 | 848 | −1.9 | [2] 44 | ---- | ---- | ---- | ---- | 30 | 851 | 7.7 | [2] 47 | 31 | 845 | −5.4 | [2] 63 | 28 | 838 | −8.4 | 70 | 31 | 849 | −0.5 | [2] 45 | 31 | 849 | −1.5 | [2] 48 |
| 2,000 | 30 | 796 | −2.8 | [2] 43 | ---- | ---- | ---- | ---- | 30 | 800 | 4.3 | [2] 49 | 31 | 793 | −6.3 | [2] 52 | 28 | 785 | −10.0 | 69 | 31 | 797 | −2.7 | [2] 44 | 31 | 797 | −1.8 | [2] 42 |
| 2,500 | 30 | 747 | −4.3 | [2] 42 | ---- | ---- | ---- | ---- | 30 | 752 | 1.1 | [2] 44 | 31 | 744 | −7.3 | [2] 45 | 28 | 736 | −12.2 | 66 | 31 | 748 | −4.9 | [2] 42 | 30 | 748 | −3.3 | [2] 36 |
| 3,000 | 30 | 701 | −6.4 | [2] 40 | ---- | ---- | ---- | ---- | 30 | 707 | −1.9 | [2] 41 | 31 | 697 | −9.1 | [2] 41 | 28 | 689 | −14.0 | 60 | 31 | 702 | −6.7 | [2] 40 | 30 | 702 | −4.7 | [2] 35 |
| 4,000 | 30 | 616 | −10.9 | [2] 42 | ---- | ---- | ---- | ---- | 30 | 622 | −7.6 | [2] 29 | 30 | 612 | −13.3 | [2] 40 | 28 | 603 | −19.1 | 56 | 31 | 617 | −12.1 | [2] 41 | 26 | 618 | −9.2 | [2] 33 |
| 5,000 | 30 | 540 | −16.8 | [2] 44 | ---- | ---- | ---- | ---- | 29 | 546 | −13.7 | [2] 32 | 30 | 537 | −18.7 | [2] 35 | 28 | 527 | −24.4 | 52 | 31 | 540 | −18.2 | [2] 39 | 26 | 542 | −15.1 | [2] 25 |
| 6,000 | 30 | 472 | −23.5 | [2] 37 | ---- | ---- | ---- | ---- | 29 | 478 | −20.5 | [2] 35 | 30 | 468 | −24.5 | [2] 37 | 27 | 459 | −30.6 | 49 | 30 | 472 | −25.2 | [2] 45 | 25 | 474 | −22.2 | ---- |
| 7,000 | 30 | 411 | −30.5 | [2] 43 | ---- | ---- | ---- | ---- | 29 | 417 | −27.5 | [2] 34 | 30 | 407 | −30.6 | [2] 37 | 21 | 399 | −35.6 | 44 | 29 | 410 | −32.1 | [2] 47 | 25 | 413 | −29.5 | ---- |
| 8,000 | 27 | 356 | −37.5 | ---- | ---- | ---- | ---- | ---- | 28 | 362 | −34.1 | ---- | 30 | 353 | −37.0 | ---- | 18 | 347 | −40.9 | ---- | 26 | 355 | −39.4 | ---- | 22 | 359 | −36.0 | ---- |
| 9,000 | 20 | 309 | −42.9 | ---- | ---- | ---- | ---- | ---- | 28 | 313 | −40.6 | ---- | 27 | 305 | −42.9 | ---- | 13 | 300 | −46.3 | ---- | 22 | 305 | −45.9 | ---- | 16 | 310 | −42.9 | ---- |
| 10,000 | 9 | 268 | −48.6 | ---- | ---- | ---- | ---- | ---- | 28 | 270 | −46.7 | ---- | 25 | 263 | −48.3 | ---- | 5 | 258 | −51.8 | ---- | 19 | 261 | −53.2 | ---- | 11 | 269 | −49.0 | ---- |
| 11,000 | 7 | 230 | −53.8 | ---- | ---- | ---- | ---- | ---- | 27 | 232 | −51.4 | ---- | 17 | 225 | −52.8 | ---- | ---- | ---- | ---- | ---- | 17 | 224 | −55.9 | ---- | 8 | 231 | −54.6 | ---- |
| 12,000 | 7 | 196 | −56.2 | ---- | ---- | ---- | ---- | ---- | 27 | 199 | −54.9 | ---- | 16 | 193 | −55.3 | ---- | ---- | ---- | ---- | ---- | 14 | 192 | −56.5 | ---- | 7 | 198 | −59.5 | ---- |
| 13,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 27 | 170 | −57.3 | ---- | 16 | 165 | −57.0 | ---- | ---- | ---- | ---- | ---- | 7 | 165 | −56.4 | ---- | 5 | 169 | −61.7 | ---- |
| 14,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 24 | 145 | −60.0 | ---- | 12 | 142 | −60.2 | ---- | ---- | ---- | ---- | ---- | 5 | 141 | −56.9 | ---- | ---- | ---- | ---- | ---- |
| 15,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 20 | 124 | −62.8 | ---- | 9 | 121 | −61.3 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 16,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 14 | 106 | −65.1 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 17,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 7 | 90 | −67.3 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |

[1] U. S. Navy. [2] Humidity data obtained by electric hygrometer. [4] No data.

*Mean free-air barometric pressure in millibars, temperature in degrees centigrade, and relative humidities in percent, obtained by radiosondes during the year 1943*—Continued

STATIONS AND ELEVATIONS IN METERS ABOVE SEA LEVEL—Continued

| Altitude (meters) m. s. l. | St. Paul, Minn. (225 m.) | | | | San Antonio, Tex. (242 m.) | | | | San Diego, Calif.[1] (19 m.) | | | | San Juan, P. R. (15 m.) | | | | Santa Maria, Calif. (73 m.) | | | | Sault Ste Marie, Mich. (221 m.) | | | | Seattle, Wash.[1] (22 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 31 | 992 | −5.1 | [2] 73 | 31 | 993 | 9.8 | [2] 80 | 28 | 1,015 | 14.2 | [2] 78 | 29 | 1,014 | 24.5 | [2] 81 | 31 | 1,009 | 11.2 | [2] 78 | 29 | 988 | −7.8 | 82 | 21 | 1,020 | 5.0 | [2] 83 |
| 500 | 31 | 958 | −5.4 | [2] 68 | 31 | 963 | 10.4 | [2] 74 | 28 | 959 | 12.3 | [2] 66 | 29 | 960 | 21.0 | [2] 81 | 31 | 959 | 11.8 | [2] 60 | 29 | 954 | −8.4 | 83 | 21 | 962 | 4.7 | [2] 69 |
| 1,000 | 31 | 899 | −5.8 | [2] 56 | 31 | 907 | 8.8 | [2] 72 | 28 | 903 | 9.6 | [2] 62 | 29 | 906 | 17.6 | [2] 81 | 31 | 903 | 9.3 | [2] 49 | 29 | 894 | −10.7 | 85 | 21 | 905 | 3.8 | [2] 60 |
| 1,500 | 31 | 843 | −6.3 | [2] 45 | 31 | 854 | 9.1 | [2] 61 | 27 | 850 | 6.7 | [2] 61 | 29 | 854 | 14.5 | [2] 78 | 31 | 850 | 6.8 | [2] 46 | 29 | 838 | −11.6 | 78 | 21 | 851 | 2.2 | [2] 56 |
| 2,000 | 31 | 791 | −7.7 | [2] 39 | 31 | 804 | 7.8 | [2] 55 | 27 | 800 | 3.5 | [2] 50 | 29 | 805 | 11.6 | [2] 67 | 31 | 800 | 4.5 | [2] 41 | 29 | 784 | −12.9 | 75 | 21 | 800 | 0.4 | [2] 55 |
| 2,500 | 31 | 741 | −9.2 | [2] 36 | 31 | 756 | 6.4 | [2] 43 | 27 | 751 | 1.2 | [2] 41 | 28 | 758 | 10.3 | [2] 52 | 31 | 752 | 2.2 | [2] 40 | 29 | 734 | −14.5 | 76 | 21 | 751 | −1.6 | [2] 50 |
| 3,000 | 31 | 695 | −11.2 | [2] 33 | 31 | 711 | 4.2 | [2] 39 | 27 | 706 | −1.4 | [2] 40 | 28 | 714 | 8.3 | [2] 35 | 31 | 706 | −0.4 | [2] 39 | 29 | 687 | −16.4 | 70 | 21 | 705 | −4.6 | [2] 52 |
| 4,000 | 30 | 609 | −16.1 | [2] 32 | 29 | 628 | −1.5 | [2] 39 | 26 | 622 | −6.7 | [2] 38 | 27 | 632 | 3.6 | [2] 24 | 31 | 623 | −6.8 | [2] 39 | 29 | 601 | −21.1 | 67 | 19 | 620 | −10.6 | [2] 61 |
| 5,000 | 30 | 533 | −22.2 | [2] 44 | 29 | 554 | −7.3 | [2] 32 | 24 | 547 | −13.1 | [2] 39 | 22 | 558 | −2.4 | [2] 21 | 31 | 547 | −13.1 | [2] 39 | 28 | 524 | −26.7 | 63 | 18 | 543 | −17.1 | [2] 68 |
| 6,000 | 30 | 464 | −28.7 | [2] 41 | 29 | 486 | −13.9 | [2] 31 | 21 | 479 | −19.7 | ---- | 22 | 492 | −7.9 | ---- | 29 | 479 | −20.4 | [2] 46 | 24 | 456 | −32.3 | 63 | 16 | 475 | −23.4 | [2] 67 |
| 7,000 | 29 | 403 | −35.6 | ---- | 29 | 426 | −20.6 | ---- | 20 | 418 | −25.9 | ---- | 21 | 432 | −14.7 | ---- | 28 | 417 | −27.7 | [2] 49 | 22 | 396 | −37.4 | 60 | 16 | 413 | −30.4 | [2] 64 |
| 8,000 | 24 | 350 | −41.0 | ---- | 29 | 371 | −27.3 | ---- | 5 | 362 | −32.6 | ---- | 21 | 377 | −22.0 | ---- | 28 | 362 | −34.9 | ---- | 17 | 343 | −43.2 | ---- | 9 | 358 | −39.0 | ---- |
| 9,000 | 22 | 302 | −47.4 | ---- | 28 | 322 | −34.5 | ---- | 5 | 313 | −39.8 | ---- | 20 | 328 | −29.7 | ---- | 27 | 314 | −39.6 | ---- | 10 | 299 | −49.1 | ---- | 8 | 307 | −47.9 | ---- |
| 10,000 | 10 | 261 | −51.4 | ---- | 24 | 278 | −41.9 | ---- | 5 | 270 | −46.2 | ---- | 19 | 285 | −37.3 | ---- | 25 | 271 | −45.4 | ---- | 6 | 256 | −54.0 | ---- | 5 | 264 | −54.6 | ---- |
| 11,000 | ---- | ---- | ---- | ---- | 15 | 240 | −48.4 | ---- | ---- | ---- | ---- | ---- | 17 | 246 | −44.7 | ---- | 21 | 234 | −50.7 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 12,000 | ---- | ---- | ---- | ---- | 9 | 207 | −56.1 | ---- | ---- | ---- | ---- | ---- | 17 | 211 | −52.2 | ---- | 15 | 200 | −55.6 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 13,000 | ---- | ---- | ---- | ---- | 7 | 175 | −62.5 | ---- | ---- | ---- | ---- | ---- | 15 | 180 | −58.8 | ---- | 9 | 172 | −61.1 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 14,000 | ---- | ---- | ---- | ---- | 7 | 149 | −65.0 | ---- | ---- | ---- | ---- | ---- | 15 | 153 | −65.4 | ---- | 5 | 148 | −64.5 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 15,000 | ---- | ---- | ---- | ---- | 6 | 126 | −67.5 | ---- | ---- | ---- | ---- | ---- | 13 | 130 | −70.4 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 16,000 | ---- | ---- | ---- | ---- | 6 | 107 | −68.7 | ---- | ---- | ---- | ---- | ---- | 12 | 110 | −74.7 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 17,000 | ---- | ---- | ---- | ---- | 5 | 91 | −70.3 | ---- | ---- | ---- | ---- | ---- | 12 | 93 | −78.0 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 18,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 7 | 78 | −77.1 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |

| | Spokane, Wash. (598 m.) | | | | Swan Island, West Indies (10 m.) | | | | Tacubaya, Mexico (2,306 m.) | | | | Tampa, Fla. (3 m.) | | | | Tapachula, Mexico (115 m.) | | | | Tatoosh Island, Wash. (31 m.) | | | | Tongue Point, Oreg.[3] (21 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Surface | 30 | 952 | −1.7 | [2] 91 | 15 | 1,016 | 24.2 | [2] 78 | 29 | 775 | 13.0 | [2] 57 | 23 | 1,020 | 16.1 | [2] 88 | 19 | 1,000 | 23.6 | [2] 85 | 31 | 1,016 | 7.5 | [2] 19 | ---- | ---- | ---- | ---- |
| 500 | ---- | ---- | ---- | ---- | 15 | 960 | 20.8 | [2] 80 | ---- | ---- | ---- | ---- | 23 | 963 | 16.6 | [2] 72 | 19 | 957 | 22.6 | [2] 75 | 31 | 960 | 6.7 | [2] 64 | ---- | ---- | ---- | ---- |
| 1,000 | 30 | 906 | −1.5 | [2] 85 | 15 | 906 | 17.1 | [2] 79 | ---- | ---- | ---- | ---- | 23 | 908 | 14.1 | [2] 72 | 19 | 904 | 20.1 | [2] 67 | 31 | 903 | 4.5 | [2] 58 | ---- | ---- | ---- | ---- |
| 1,500 | 30 | 851 | −1.4 | [2] 65 | 15 | 854 | 13.9 | [2] 72 | ---- | ---- | ---- | ---- | 23 | 856 | 12.6 | [2] 52 | 19 | 853 | 17.3 | [2] 68 | 31 | 849 | 2.6 | [2] 54 | ---- | ---- | ---- | ---- |
| 2,000 | 30 | 798 | −2.5 | [2] 52 | 15 | 805 | 11.9 | [2] 60 | ---- | ---- | ---- | ---- | 23 | 806 | 11.0 | [2] 44 | 18 | 804 | 15.0 | [2] 63 | 31 | 798 | 0.6 | [2] 48 | ---- | ---- | ---- | ---- |
| 2,500 | 30 | 750 | −3.7 | [2] 50 | 15 | 758 | 9.9 | [2] 51 | 29 | 757 | 12.8 | [2] 54 | 23 | 759 | 9.7 | [2] 35 | 18 | 757 | 12.5 | [2] 53 | 31 | 750 | −1.7 | [2] 47 | ---- | ---- | ---- | ---- |
| 3,000 | 30 | 704 | −5.7 | [2] 45 | 15 | 714 | 8.0 | [2] 41 | 29 | 714 | 10.3 | [2] 54 | 23 | 714 | 7.5 | [2] 33 | 18 | 713 | 9.1 | [2] 50 | 31 | 704 | −4.2 | [2] 47 | ---- | ---- | ---- | ---- |
| 4,000 | 30 | 618 | −11.5 | [2] 45 | 14 | 632 | 4.4 | [2] 35 | 29 | 632 | 3.3 | [2] 62 | 23 | 632 | 1.8 | [2] 33 | 14 | 632 | 5.2 | [2] 25 | 29 | 620 | −9.5 | [2] 47 | ---- | ---- | ---- | ---- |
| 5,000 | 30 | 542 | −18.5 | [2] 46 | 14 | 558 | −1.3 | [2] 32 | 29 | 558 | −2.7 | [2] 39 | 23 | 557 | −4.1 | [2] 28 | 13 | 559 | 0.6 | [2] 17 | 29 | 544 | −16.0 | [2] 46 | ---- | ---- | ---- | ---- |
| 6,000 | 30 | 473 | −24.3 | [2] 43 | 13 | 492 | −6.8 | ---- | 29 | 491 | −8.4 | [2] 26 | 23 | 490 | −11.0 | [2] 32 | 13 | 493 | −5.7 | ---- | 28 | 475 | −22.8 | [2] 49 | ---- | ---- | ---- | ---- |
| 7,000 | 30 | 412 | −31.1 | [2] 47 | 13 | 432 | −13.6 | ---- | 29 | 431 | −15.1 | [2] 30 | 22 | 430 | −17.5 | [2] 34 | 12 | 433 | −12.8 | ---- | 28 | 414 | −29.4 | [2] 50 | ---- | ---- | ---- | ---- |
| 8,000 | 30 | 356 | −38.3 | ---- | 13 | 378 | −20.4 | ---- | 26 | 377 | −22.3 | ---- | 22 | 375 | −25.2 | [2] 42 | 11 | 379 | −21.0 | ---- | 28 | 359 | −36.7 | ---- | ---- | ---- | ---- | ---- |
| 9,000 | 26 | 308 | −45.0 | ---- | 13 | 329 | −27.7 | ---- | 25 | 328 | −29.9 | ---- | 22 | 326 | −32.6 | ---- | 11 | 330 | −29.0 | ---- | 26 | 310 | −44.7 | ---- | ---- | ---- | ---- | ---- |
| 10,000 | 17 | 265 | −51.1 | ---- | 11 | 286 | −34.8 | ---- | 24 | 285 | −37.8 | ---- | 22 | 282 | −40.4 | ---- | 11 | 286 | −37.6 | ---- | 25 | 266 | −52.1 | ---- | ---- | ---- | ---- | ---- |
| 11,000 | 9 | 228 | −56.3 | ---- | 10 | 248 | −42.6 | ---- | 24 | 245 | −46.2 | ---- | 22 | 243 | −48.5 | ---- | 10 | 247 | −46.3 | ---- | 20 | 228 | −55.4 | ---- | ---- | ---- | ---- | ---- |
| 12,000 | ---- | ---- | ---- | ---- | 9 | 214 | −48.6 | ---- | 20 | 211 | −54.3 | ---- | 22 | 208 | −56.1 | ---- | 9 | 212 | −53.3 | ---- | 15 | 195 | −55.7 | ---- | ---- | ---- | ---- | ---- |
| 13,000 | ---- | ---- | ---- | ---- | 6 | 183 | −56.0 | ---- | 19 | 180 | −62.0 | ---- | 22 | 177 | −62.4 | ---- | 9 | 182 | −60.6 | ---- | 10 | 167 | −54.3 | ---- | ---- | ---- | ---- | ---- |
| 14,000 | ---- | ---- | ---- | ---- | 5 | 155 | −63.8 | ---- | 16 | 152 | −67.6 | ---- | 21 | 151 | −67.0 | ---- | 8 | 154 | −68.0 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 15,000 | ---- | ---- | ---- | ---- | 5 | 131 | −69.2 | ---- | 13 | 129 | −71.6 | ---- | 17 | 128 | −68.8 | ---- | 8 | 130 | −74.9 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 16,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 8 | 109 | −75.2 | ---- | 16 | 108 | −71.5 | ---- | 5 | 110 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 17,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 7 | 92 | −76.9 | ---- | 11 | 92 | −74.0 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 18,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 8 | 78 | −74.0 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |

| | Washington, D. C. (25 m.) | | | | | Washington, D. C. (25 m.) | | | | | Washington, D. C. (25 m.) | | | | | Washington, D. C. (25 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Surface | 31 | 1,018 | 1.7 | [2] 59 | 2,500 | 31 | 745 | −5.1 | [2] 52 | 7,000 | 31 | 410 | −29.8 | [2] 48 | 12,000 | 13 | 194 | −54.8 | ---- |
| 500 | 31 | 959 | 1.0 | [2] 52 | 3,000 | 31 | 699 | −6.4 | [2] 43 | 8,000 | 30 | 356 | −36.6 | ---- | 13,000 | 12 | 165 | −57.5 | ---- |
| 1,000 | 31 | 901 | −1.2 | [2] 55 | 4,000 | 31 | 615 | −10.7 | [2] 41 | 9,000 | 30 | 307 | −43.3 | ---- | 14,000 | 9 | 139 | −59.7 | ---- |
| 1,500 | 31 | 846 | −3.1 | [2] 59 | 5,000 | 31 | 539 | −16.8 | [2] 45 | 10,000 | 26 | 264 | −49.3 | ---- | 15,000 | 5 | 118 | −59.8 | ---- |
| 2,000 | 31 | 794 | −4.1 | [2] 56 | 6,000 | 31 | 472 | −23.2 | [2] 45 | 11,000 | 19 | 227 | −53.0 | ---- | | | | | |

[1] U. S. Navy.

[2] Humidity data obtained by electric hygrometer.

[3] Insufficient data.

# LATE REPORTS

*Mean free-air barometric pressure in millibars, temperature in degrees centigrade, and relative humidities in percent, obtained by radiosondes during 1942* [5]

STATIONS AND ELEVATIONS IN METERS ABOVE SEA LEVEL—Continued

| Altitude (meters) m. s. l. | May 1942 Tongue Point, Oreg. (21 m.) | | | | June 1942 Tongue Point, Oreg. (21 m.) | | | | July 1942 Tongue Point, Oreg. (21 m.) | | | | August 1942 Tongue Point, Oreg. (21 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity. |
| Surface | 26 | 1,014 | 12.0 | 79 | 16 | 1,017 | 15.5 | 76 | 26 | 1,015 | 17.4 | 83 | 23 | 1,014 | 16.4 | 84 |
| 500 | 26 | 957 | 8.9 | 78 | 16 | 959 | 13.2 | 72 | 26 | 960 | 15.2 | 82 | 23 | 958 | 15.2 | 84 |
| 1,000 | 26 | 901 | 5.8 | 76 | 16 | 905 | 10.8 | 66 | 26 | 905 | 14.2 | 72 | 23 | 904 | 15.5 | 64 |
| 1,500 | 26 | 847 | 3.2 | 74 | 16 | 853 | 8.9 | 61 | 26 | 853 | 12.5 | 62 | 23 | 852 | 14.5 | 52 |
| 2,000 | 26 | 796 | 0.4 | 69 | 16 | 802 | 6.4 | 53 | 26 | 803 | 10.5 | 54 | 23 | 802 | 12.3 | 42 |
| 2,500 | 26 | 748 | −2.7 | 64 | 16 | 754 | 3.5 | 46 | 26 | 756 | 8.2 | 47 | 23 | 756 | 10.1 | 34 |
| 3,000 | 26 | 702 | −5.5 | 65 | 16 | 709 | 0.6 | 42 | 26 | 711 | 5.4 | 40 | 23 | 711 | 7.5 | 33 |
| 4,000 | 26 | 617 | −11.3 | 65 | 16 | 625 | −5.3 | 42 | 26 | 629 | −0.5 | 34 | 22 | 629 | 1.8 | 30 |
| 5,000 | 25 | 541 | −17.8 | 66 | 16 | 550 | −11.5 | 42 | 26 | 554 | −7.1 | 31 | 22 | 555 | −5.3 | 36 |
| 6,000 | 24 | 472 | −24.9 | 66 | 15 | 482 | −18.1 | 45 | 26 | 486 | −14.2 | 37 | 22 | 488 | −12.2 | 38 |
| 7,000 | 24 | 411 | −32.1 | 69 | 14 | 421 | −25.4 | 47 | 26 | 426 | −21.2 | 35 | 20 | 428 | −19.6 | 39 |
| 8,000 | 22 | 355 | −38.7 | 70 | 13 | 366 | −32.5 | | 12 | 371 | −28.9 | | 16 | 373 | −26.8 | |
| 9,000 | 22 | 307 | −44.8 | | 13 | 317 | −39.4 | | 11 | 321 | −36.5 | | 16 | 324 | −34.1 | |
| 10,000 | 21 | 264 | −50.5 | | 11 | 274 | −45.7 | | 10 | 278 | −43.3 | | 15 | 280 | −40.6 | |
| 11,000 | 18 | 227 | −54.0 | | 9 | 235 | −50.6 | | 7 | 239 | −49.2 | | 14 | 241 | −47.1 | |
| 12,000 | 18 | 194 | −54.4 | | 9 | 202 | −54.2 | | | | | | 14 | 207 | −51.8 | |
| 13,000 | 15 | 165 | −55.2 | | 9 | 172 | −56.4 | | | | | | 10 | 178 | −54.0 | |
| 14,000 | 13 | 141 | −55.7 | | 8 | 147 | −55.5 | | | | | | 8 | 152 | −56.0 | |
| 15,000 | 11 | 121 | −56.2 | | 6 | 126 | −54.8 | | | | | | | | | |
| 16,000 | 10 | 103 | −56.6 | | | | | | | | | | | | | |
| 17,000 | 6 | 89 | −56.8 | | | | | | | | | | | | | |

*Mean free-air barometric pressure in millibars, temperature in degrees centigrade, and relative humidities in percent, obtained by radiosondes during the year 1942*

STATIONS AND ELEVATIONS IN METERS ABOVE SEA LEVEL

| Altitude (meters) m. s. l. | Albuquerque, N. Mex. (1,620 m.) | | | | Atlanta, Ga. (300 m.) | | | | Bismarck, N. Dak. (505 m.) | | | | Boise, Idaho (868 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 362 | 837 | 14.0 | 38 | 365 | 983 | 14.3 | 76 | 361 | 955 | 5.1 | 77 | 363 | 916 | 10.1 | 61 |
| 500 | | | | | 365 | 961 | 15.4 | 68 | | | | | | | | |
| 1,000 | | | | | 365 | 906 | 13.4 | 66 | 361 | 899 | 5.6 | 71 | 363 | 901 | 11.6 | 57 |
| 1,500 | | | | | 365 | 853 | 11.1 | 64 | 361 | 846 | 3.8 | 70 | 363 | 849 | 9.9 | 53 |
| 2,000 | 362 | 800 | 13.4 | 38 | 364 | 803 | 8.8 | 61 | 360 | 794 | 1.6 | 67 | 363 | 799 | 6.9 | 53 |
| 2,500 | 362 | 754 | 10.0 | 38 | 364 | 756 | 6.5 | 56 | 359 | 746 | −1.0 | 64 | 363 | 751 | 3.5 | 53 |
| 3,000 | 362 | 709 | 6.4 | 39 | 364 | 711 | 3.9 | 53 | 359 | 701 | −3.7 | 61 | 363 | 706 | 0.2 | 54 |
| 4,000 | 362 | 627 | −0.9 | 42 | 361 | 628 | −1.4 | 48 | 356 | 617 | −9.6 | 57 | 360 | 622 | −6.4 | 54 |
| 5,000 | 359 | 552 | −7.9 | 45 | 353 | 554 | −7.4 | 45 | 349 | 541 | −16.1 | 54 | 357 | 547 | −13.0 | 53 |
| 6,000 | 355 | 485 | −14.6 | 44 | 349 | 486 | −13.8 | 42 | 341 | 473 | −22.8 | 52 | 352 | 479 | −19.8 | 51 |
| 7,000 | 349 | 424 | −21.4 | 43 | 346 | 425 | −20.4 | 40 | 337 | 412 | −30.0 | 50 | 350 | 418 | −26.9 | 50 |
| 8,000 | 347 | 370 | −28.6 | 41 | 339 | 371 | −27.6 | 39 | 328 | 357 | −37.2 | | 340 | 363 | −34.1 | 48 |
| 9,000 | 336 | 321 | −35.7 | | 334 | 322 | −34.8 | 38 | 317 | 308 | −44.0 | | 332 | 314 | −41.3 | |
| 10,000 | 330 | 277 | −42.7 | | 325 | 279 | −41.9 | | 307 | 265 | −49.7 | | 320 | 270 | −47.6 | |
| 11,000 | 310 | 239 | −49.1 | | 320 | 240 | −48.4 | | 293 | 227 | −53.4 | | 304 | 232 | −52.7 | |
| 12,000 | 298 | 205 | −53.7 | | 310 | 206 | −54.0 | | 269 | 194 | −55.2 | | 289 | 198 | −55.4 | |
| 13,000 | 284 | 175 | −57.2 | | 301 | 176 | −58.2 | | 255 | 166 | −55.5 | | 263 | 170 | −56.2 | |
| 14,000 | 269 | 149 | −60.4 | | 283 | 150 | −61.5 | | 232 | 142 | −55.8 | | 244 | 145 | −56.8 | |
| 15,000 | 252 | 127 | −63.2 | | 265 | 127 | −64.2 | | 183 | 120 | −56.5 | | 227 | 123 | −57.9 | |
| 16,000 | 225 | 108 | −65.5 | | 240 | 108 | −66.0 | | | | | | 201 | 105 | −58.9 | |
| 17,000 | 201 | 91 | −65.9 | | 195 | 92 | −66.4 | | | | | | 170 | 90 | −59.2 | |
| 18,000 | 160 | 77 | −65.0 | | | | | | | | | | | | | |

| Altitude (meters) m. s. l. | Brownsville, Tex. (6 m.) | | | | Buffalo, N. Y. (221 m.) | | | | Charleston, S. C. (14 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 361 | 1,014 | 21.0 | 86 | 361 | 990 | 7.6 | 80 | 361 | 1,016 | 16.0 | 87 |
| 500 | 361 | 958 | 19.7 | 80 | 361 | 957 | 7.7 | 75 | 361 | 960 | 16.6 | 70 |
| 1,000 | 361 | 904 | 17.8 | 68 | 361 | 900 | 5.4 | 74 | 361 | 905 | 14.0 | 67 |
| 1,500 | 361 | 853 | 16.0 | 60 | 361 | 847 | 3.0 | 74 | 360 | 853 | 11.4 | 64 |
| 2,000 | 361 | 804 | 14.0 | 54 | 361 | 796 | 1.0 | 70 | 360 | 803 | 9.0 | 61 |
| 2,500 | 361 | 757 | 11.6 | 49 | 361 | 747 | −1.2 | 66 | 360 | 756 | 6.8 | 55 |
| 3,000 | 361 | 713 | 9.1 | 46 | 361 | 702 | −3.5 | 63 | 360 | 711 | 4.4 | 52 |
| 4,000 | 360 | 631 | 3.2 | 43 | 356 | 618 | −8.5 | 58 | 354 | 628 | −1.0 | 48 |
| 5,000 | 355 | 558 | −2.9 | 41 | 352 | 542 | −14.3 | 54 | 346 | 554 | −7.1 | 45 |
| 6,000 | 351 | 491 | −9.4 | 40 | 346 | 475 | −20.6 | 51 | 336 | 486 | −13.3 | 43 |
| 7,000 | 344 | 431 | −16.1 | 39 | 334 | 414 | −27.4 | 49 | 324 | 426 | −20.1 | 41 |
| 8,000 | 337 | 376 | −23.0 | 38 | 329 | 359 | −34.2 | | 309 | 371 | −27.1 | 40 |
| 9,000 | 328 | 327 | −30.1 | 37 | 314 | 311 | −40.6 | | 297 | 322 | −34.3 | |
| 10,000 | 325 | 284 | −37.5 | | 296 | 268 | −46.4 | | 291 | 279 | −41.6 | |
| 11,000 | 321 | 245 | −45.0 | | 279 | 230 | −50.9 | | 280 | 240 | −48.3 | |
| 12,000 | 307 | 211 | −52.1 | | 253 | 197 | −54.3 | | 265 | 206 | −54.0 | |
| 13,000 | 299 | 180 | −58.4 | | 237 | 168 | −56.1 | | 252 | 176 | −58.3 | |
| 14,000 | 289 | 153 | −64.2 | | 220 | 143 | −57.4 | | 233 | 150 | −61.8 | |
| 15,000 | 278 | 130 | −69.4 | | 195 | 122 | −58.4 | | 208 | 127 | −64.9 | |
| 16,000 | 255 | 110 | −73.4 | | 164 | 104 | −59.9 | | 185 | 108 | −66.8 | |
| 17,000 | 215 | 92 | −75.5 | | | | | | | | | |
| 18,000 | 188 | 78 | −74.8 | | | | | | | | | |

| Altitude (meters) m. s. l. | Denver, Colo. (1,616 m.) | | | | Detroit, Mich. (217 m.) | | | | El Paso, Tex. (1,193 m.) | | | | Ely, Nev. (1,908 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 365 | 837 | 7.6 | 63 | 362 | 991 | 7.2 | 84 | 364 | 881 | 17.2 | 41 | 361 | 809 | 6.5 | 53 |
| 500 | | | | | 362 | 956 | 7.9 | 76 | | | | | | | | |
| 1,000 | | | | | 362 | 900 | 5.9 | 72 | | | | | | | | |
| 1,500 | | | | | 360 | 846 | 3.9 | 69 | 364 | 850 | 17.9 | 38 | | | | |
| 2,000 | 365 | 799 | 8.9 | 57 | 360 | 795 | 1.8 | 64 | 364 | 801 | 14.8 | 37 | 361 | 799 | 7.9 | 52 |
| 2,500 | 365 | 752 | 6.2 | 55 | 360 | 747 | −0.4 | 60 | 364 | 755 | 11.2 | 39 | 361 | 753 | 6.7 | 48 |
| 3,000 | 365 | 707 | 2.8 | 54 | 359 | 702 | −2.8 | 57 | 364 | 711 | 7.6 | 40 | 361 | 708 | 3.1 | 48 |
| 4,000 | 365 | 624 | −4.2 | 56 | 356 | 618 | −8.1 | 51 | 364 | 629 | 0.8 | 42 | 360 | 625 | −4.0 | 48 |
| 5,000 | 365 | 549 | −11.2 | 57 | 352 | 542 | −14.1 | 49 | 363 | 554 | −6.2 | 43 | 358 | 550 | −10.9 | 48 |
| 6,000 | 361 | 481 | −18.2 | 56 | 345 | 475 | −20.4 | 47 | 358 | 487 | −12.8 | 42 | 350 | 482 | −18.0 | 47 |
| 7,000 | 350 | 420 | −25.3 | 53 | 338 | 414 | −27.1 | 45 | 350 | 427 | −19.6 | 40 | 343 | 421 | −25.2 | 46 |
| 8,000 | 346 | 365 | −32.7 | 49 | 325 | 359 | −34.0 | | 344 | 372 | −26.6 | 38 | 335 | 366 | −32.4 | 45 |
| 9,000 | 336 | 316 | −40.0 | | 320 | 311 | −40.7 | | 338 | 323 | −33.9 | 37 | 326 | 316 | −39.8 | |
| 10,000 | 328 | 272 | −46.6 | | 309 | 268 | −46.7 | | 333 | 280 | −41.1 | | 320 | 273 | −46.5 | |
| 11,000 | 321 | 234 | −52.2 | | 298 | 230 | −51.6 | | 329 | 241 | −48.1 | | 310 | 234 | −52.1 | |
| 12,000 | 316 | 200 | −55.8 | | 277 | 197 | −54.8 | | 321 | 206 | −54.0 | | 294 | 201 | −55.4 | |
| 13,000 | 300 | 171 | −57.6 | | 260 | 168 | −56.6 | | 314 | 176 | −58.2 | | 279 | 171 | −57.4 | |
| 14,000 | 278 | 145 | −59.3 | | 234 | 144 | −57.8 | | 305 | 150 | −61.9 | | 260 | 146 | −58.9 | |
| 15,000 | 253 | 124 | −61.0 | | 208 | 122 | −59.1 | | 290 | 128 | −65.3 | | 242 | 124 | −60.5 | |
| 16,000 | 231 | 105 | −62.5 | | 162 | 104 | −60.1 | | 263 | 108 | −68.1 | | 220 | 106 | −61.9 | |
| 17,000 | 198 | 90 | −63.1 | | | | | | 219 | 91 | −68.8 | | 172 | 90 | −62.0 | |
| 18,000 | 136 | 76 | −62.1 | | | | | | 150 | 77 | −68.4 | | | | | |

| Altitude (meters) m. s. l. | Great Falls, Mont. (1,128 m.) | | | | Huntington, W. Va. (172 m.) | | | | Joliet, Ill. (178 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 360 | 886 | 7.1 | 60 | 361 | 997 | 10.8 | 83 | 356 | 995 | 8.0 | 84 |
| 500 | | | | | 361 | 958 | 11.7 | 74 | 356 | 957 | 8.8 | 78 |
| 1,000 | | | | | 361 | 903 | 9.3 | 71 | 356 | 901 | 6.8 | 75 |
| 1,500 | 360 | 847 | 6.9 | 58 | 361 | 850 | 6.6 | 72 | 355 | 847 | 4.9 | 72 |
| 2,000 | 360 | 796 | 3.9 | 57 | 361 | 799 | 4.2 | 69 | 353 | 796 | 2.9 | 69 |
| 2,500 | 360 | 748 | 0.5 | 58 | 361 | 751 | 1.9 | 65 | 351 | 749 | 0.8 | 65 |
| 3,000 | 360 | 703 | −2.9 | 60 | 361 | 706 | −0.5 | 62 | 351 | 703 | −1.7 | 62 |
| 4,000 | 358 | 619 | −9.4 | 61 | 358 | 622 | −5.6 | 56 | 344 | 620 | −7.2 | 58 |
| 5,000 | 350 | 543 | −16.0 | 60 | 353 | 547 | −11.2 | 52 | 342 | 544 | −13.2 | 56 |
| 6,000 | 345 | 475 | −22.9 | 58 | 348 | 480 | −17.5 | 48 | 336 | 477 | −19.6 | 54 |
| 7,000 | 340 | 413 | −30.1 | 56 | 345 | 419 | −24.2 | 46 | 331 | 416 | −26.5 | 53 |
| 8,000 | 334 | 358 | −37.2 | | 341 | 364 | −31.2 | | 323 | 361 | −33.4 | |
| 9,000 | 333 | 309 | −44.0 | | 337 | 316 | −38.3 | | 317 | 312 | −40.2 | |
| 10,000 | 327 | 266 | −50.0 | | 329 | 272 | −44.8 | | 311 | 270 | −46.3 | |
| 11,000 | 326 | 228 | −54.1 | | 324 | 234 | −50.5 | | 303 | 232 | −51.1 | |
| 12,000 | 320 | 195 | −55.7 | | 309 | 201 | −55.0 | | 296 | 198 | −54.4 | |
| 13,000 | 306 | 167 | −55.6 | | 288 | 171 | −58.2 | | 287 | 169 | −56.4 | |
| 14,000 | 293 | 142 | −55.5 | | 261 | 146 | −60.5 | | 272 | 144 | −58.0 | |
| 15,000 | 274 | 122 | −56.2 | | 237 | 124 | −62.5 | | 250 | 123 | −59.5 | |
| 16,000 | 246 | 104 | −57.0 | | 196 | 106 | −64.0 | | 215 | 105 | −60.7 | |
| 17,000 | 197 | 89 | −57.4 | | | | | | 174 | 89 | −61.2 | |
| 18,000 | | | | | | | | | | | | |

[5] No data available for September, October, and November 1942.

*Mean free-air barometric pressure in millibars, temperatures in degrees centigrade, and relative humidities in percent, obtained by radiosondes during the year 1942*—Continued

STATIONS AND ELEVATIONS IN METERS ABOVE SEA LEVEL

| | Lake Charles, La. (5 m.) | | | | Lakehurst, N. J.[1] (39 m.) | | | | Medford, Oreg. (409 m.) | | | | Miami, Fla. (4 m.) | | | | Nashville, Tenn. (180 m.) | | | | Norfolk, Va.[1] (4 m.) | | | | Oakland, Calif. (6 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Surface | 359 | 1,016 | 17.8 | 88 | 328 | 1,012 | 10.1 | 75 | 364 | 968 | 13.6 | 63 | 363 | 1,017 | 21.2 | 85 | 356 | 996 | 14.0 | 74 | 302 | 1,018 | 14.2 | 77 | 364 | 1,016 | 13.5 | 78 |
| 500 | 359 | 959 | 17.5 | 73 | 328 | 958 | 10.0 | 61 | 364 | 957 | 13.7 | 61 | 363 | 961 | 20.6 | 80 | 356 | 959 | 14.2 | 68 | 302 | 960 | 13.5 | 66 | 364 | 958 | 13.2 | 69 |
| 1,000 | 359 | 905 | 15.5 | 67 | 328 | 902 | 7.8 | 58 | 364 | 902 | 11.7 | 60 | 363 | 906 | 17.6 | 77 | 356 | 904 | 11.8 | 66 | 302 | 905 | 11.2 | 63 | 364 | 902 | 13.3 | 55 |
| 1,500 | 358 | 853 | 13.6 | 59 | 328 | 849 | 5.6 | 58 | 362 | 849 | 8.6 | 62 | 363 | 855 | 15.1 | 72 | 355 | 851 | 9.4 | 66 | 302 | 852 | 8.8 | 61 | 364 | 850 | 11.7 | 48 |
| 2,000 | 356 | 803 | 11.5 | 54 | 328 | 798 | 3.6 | 55 | 361 | 799 | 5.3 | 66 | 363 | 806 | 12.9 | 63 | 355 | 801 | 7.2 | 64 | 300 | 802 | 6.6 | 59 | 363 | 800 | 9.3 | 43 |
| 2,500 | 356 | 757 | 9.3 | 49 | 328 | 750 | 1.4 | 53 | 361 | 751 | 2.5 | 64 | 363 | 759 | 10.6 | 56 | 355 | 754 | 4.8 | 60 | 299 | 754 | 4.1 | 55 | 363 | 753 | 6.7 | 39 |
| 3,000 | 356 | 712 | 6.8 | 46 | 328 | 705 | −1.0 | 51 | 361 | 706 | −0.2 | 59 | 363 | 715 | 8.1 | 52 | 354 | 709 | 2.3 | 56 | 299 | 709 | 1.7 | 52 | 363 | 709 | 3.8 | 38 |
| 4,000 | 353 | 630 | 1.3 | 43 | 326 | 621 | −6.2 | 47 | 351 | 622 | −5.9 | 51 | 360 | 633 | 2.8 | 46 | 346 | 626 | −2.8 | 52 | 290 | 625 | −3.9 | 48 | 362 | 626 | −2.0 | 36 |
| 5,000 | 350 | 556 | −4.8 | 41 | 324 | 546 | −12.0 | 46 | 347 | 547 | −12.0 | 48 | 356 | 558 | −3.0 | 44 | 334 | 551 | −8.6 | 48 | 269 | 550 | −10.0 | 43 | 358 | 551 | −8.4 | 35 |
| 6,000 | 349 | 489 | −11.4 | 40 | 317 | 478 | −18.2 | 46 | 340 | 479 | −18.8 | 46 | 345 | 492 | −9.0 | 40 | 326 | 484 | −14.8 | 45 | | | | | 355 | 484 | −15.2 | 34 |
| 7,000 | 345 | 428 | −18.2 | 38 | 312 | 418 | −24.8 | 44 | 336 | 418 | −26.0 | 45 | 338 | 432 | −15.6 | 38 | 320 | 423 | −21.6 | 43 | | | | | 348 | 423 | −22.5 | 34 |
| 8,000 | 342 | 374 | −25.2 | 38 | 304 | 363 | −31.7 | | 330 | 363 | −33.5 | 44 | 329 | 377 | −22.5 | 37 | 312 | 368 | −28.7 | 42 | | | | | 341 | 368 | −30.0 | 34 |
| 9,000 | 339 | 325 | −32.5 | 37 | 300 | 314 | −38.5 | | 329 | 314 | −40.6 | | 322 | 328 | −29.5 | 36 | 305 | 319 | −35.6 | | | | | | 333 | 319 | −37.5 | 33 |
| 10,000 | 336 | 281 | −39.8 | | 291 | 272 | −44.9 | | 326 | 271 | −47.3 | | 317 | 285 | −36.9 | | 292 | 276 | −42.5 | | | | | | 318 | 276 | −44.9 | |
| 11,000 | 324 | 242 | −46.9 | | 283 | 234 | −50.4 | | 321 | 233 | −52.8 | | 300 | 246 | −44.2 | | 278 | 238 | −48.8 | | | | | | 307 | 237 | −51.2 | |
| 12,000 | 310 | 208 | −53.4 | | 268 | 200 | −54.4 | | 315 | 199 | −56.0 | | 279 | 211 | −51.1 | | 265 | 204 | −54.0 | | | | | | 293 | 203 | −55.8 | |
| 13,000 | 299 | 178 | −58.9 | | 255 | 171 | −57.4 | | 304 | 170 | −56.9 | | 264 | 181 | −57.5 | | 257 | 174 | −57.7 | | | | | | 276 | 173 | −58.3 | |
| 14,000 | 279 | 151 | −63.2 | | 232 | 146 | −59.3 | | 295 | 145 | −57.6 | | 253 | 154 | −63.0 | | 245 | 148 | −60.7 | | | | | | 263 | 147 | −59.5 | |
| 15,000 | 257 | 128 | −67.1 | | 197 | 125 | −60.3 | | 280 | 124 | −58.8 | | 238 | 131 | −67.4 | | 231 | 126 | −63.0 | | | | | | 247 | 125 | −61.2 | |
| 16,000 | 229 | 109 | −70.0 | | 157 | 107 | −61.4 | | 247 | 105 | −59.8 | | 218 | 111 | −70.2 | | 213 | 108 | −65.3 | | | | | | 223 | 107 | −62.6 | |
| 17,000 | 204 | 92 | −71.2 | | 98 | 91 | −61.7 | | 214 | 90 | −60.2 | | 184 | 93 | −71.7 | | 187 | 91 | −65.8 | | | | | | 199 | 90 | −63.0 | |
| 18,000 | 149 | 78 | −70.4 | | | | | | 164 | 77 | −59.6 | | | | | | | | | | | | | | 147 | 77 | −62.5 | |

| | Oklahoma City, Okla. (391 m.) | | | | Omaha, Nebr. (301 m.) | | | | Pensacola, Fla.[1] (24 m.) | | | | Phoenix, Ariz. (339 m.) | | | | Portland, Maine (20 m.) | | | | St. Louis, Mo. (171 m.) | | | | St. Paul, Minn. (225 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Surface | 358 | 970 | 13.8 | 74 | 361 | 980 | 9.6 | 77 | 242 | 1,016 | 18.9 | 76 | 363 | 972 | 19.9 | 45 | 362 | 1,012 | 5.2 | 82 | 365 | 996 | 12.1 | 75 | 361 | 988 | 7.1 | 77 |
| 500 | 358 | 958 | 14.7 | 71 | 361 | 957 | 10.3 | 70 | 242 | 960 | 17.0 | 62 | 363 | 954 | 23.8 | 36 | 362 | 955 | 6.3 | 71 | 365 | 958 | 12.2 | 68 | 361 | 956 | 6.8 | 74 |
| 1,000 | 358 | 902 | 13.6 | 65 | 361 | 901 | 9.0 | 66 | 242 | 906 | 14.8 | 54 | 363 | 901 | 21.5 | 32 | 362 | 898 | 4.2 | 70 | 365 | 902 | 10.0 | 67 | 361 | 900 | 4.9 | 72 |
| 1,500 | 358 | 850 | 11.6 | 62 | 361 | 848 | 7.3 | 63 | 241 | 854 | 12.6 | 49 | 363 | 850 | 17.9 | 32 | 362 | 845 | 2.0 | 71 | 365 | 850 | 7.8 | 66 | 361 | 846 | 3.0 | 70 |
| 2,000 | 358 | 801 | 9.6 | 58 | 361 | 798 | 5.2 | 59 | 240 | 804 | 10.5 | 42 | 363 | 801 | 14.0 | 33 | 362 | 794 | 0.0 | 68 | 365 | 799 | 5.9 | 61 | 361 | 795 | 1.1 | 66 |
| 2,500 | 358 | 754 | 7.2 | 54 | 359 | 750 | 2.8 | 55 | 239 | 757 | 7.9 | 40 | 362 | 754 | 10.3 | 35 | 362 | 745 | −2.1 | 63 | 365 | 752 | 3.5 | 58 | 361 | 747 | −0.9 | 62 |
| 3,000 | 358 | 709 | 4.4 | 50 | 359 | 705 | 0.1 | 53 | 237 | 712 | 5.4 | 38 | 361 | 710 | 6.8 | 36 | 361 | 700 | −4.5 | 61 | 365 | 706 | 1.0 | 55 | 361 | 701 | −3.4 | 60 |
| 4,000 | 352 | 626 | −1.6 | 47 | 358 | 622 | −5.7 | 50 | 223 | 629 | −0.3 | 37 | 358 | 628 | 0.4 | 36 | 351 | 616 | −9.6 | 56 | 361 | 623 | −4.4 | 52 | 357 | 617 | −8.9 | 55 |
| 5,000 | 342 | 552 | −7.8 | 44 | 354 | 546 | −12.0 | 48 | 208 | 555 | −6.5 | 39 | 355 | 554 | −6.1 | 36 | 335 | 540 | −15.5 | 52 | 352 | 548 | −10.4 | 49 | 352 | 542 | −15.1 | 53 |
| 6,000 | 339 | 484 | −14.5 | 41 | 345 | 479 | −18.8 | 45 | 190 | 487 | −12.8 | 40 | 350 | 486 | −12.9 | 36 | 326 | 472 | −22.0 | 49 | 348 | 481 | −16.9 | 47 | 346 | 474 | −21.7 | 51 |
| 7,000 | 329 | 424 | −21.4 | 40 | 344 | 418 | −25.8 | 44 | 176 | 427 | −19.4 | 41 | 344 | 426 | −20.0 | 34 | 315 | 411 | −28.6 | 46 | 348 | 420 | −23.8 | 45 | 337 | 413 | −28.6 | 49 |
| 8,000 | 329 | 369 | −28.7 | 39 | 340 | 363 | −33.0 | | 123 | 373 | −26.3 | | 339 | 372 | −27.3 | 33 | 303 | 357 | −35.3 | | 343 | 365 | −30.8 | | 331 | 358 | −35.8 | |
| 9,000 | 321 | 320 | −36.0 | | 338 | 314 | −40.0 | | 113 | 324 | −33.4 | | 338 | 322 | −34.7 | 33 | 282 | 308 | −41.5 | | 340 | 316 | −37.8 | | 318 | 309 | −42.5 | |
| 10,000 | 318 | 277 | −43.0 | | 336 | 271 | −46.2 | | | | | | 334 | 279 | −41.9 | | 262 | 266 | −47.0 | | 337 | 273 | −44.4 | | 305 | 266 | −47.9 | |
| 11,000 | 307 | 238 | −49.5 | | 332 | 233 | −51.1 | | | | | | 326 | 240 | −48.5 | | 236 | 228 | −51.4 | | 335 | 235 | −50.3 | | 290 | 229 | −51.8 | |
| 12,000 | 295 | 204 | −54.6 | | 326 | 199 | −54.4 | | | | | | 321 | 206 | −53.9 | | 208 | 195 | −54.3 | | 326 | 202 | −54.4 | | 267 | 196 | −54.1 | |
| 13,000 | 278 | 174 | −58.1 | | 318 | 170 | −56.4 | | | | | | 314 | 176 | −57.7 | | 177 | 167 | −55.2 | | 308 | 172 | −57.0 | | 244 | 167 | −55.4 | |
| 14,000 | 257 | 148 | −60.7 | | 302 | 145 | −57.7 | | | | | | 308 | 150 | −60.7 | | 137 | 142 | −56.1 | | 284 | 147 | −59.0 | | 210 | 143 | −56.2 | |
| 15,000 | 246 | 126 | −63.4 | | 278 | 124 | −59.1 | | | | | | 295 | 128 | −63.8 | | | | | | 268 | 125 | −60.7 | | 174 | 122 | −57.4 | |
| 16,000 | 222 | 107 | −65.4 | | 243 | 106 | −60.1 | | | | | | 278 | 110 | −66.0 | | | | | | 248 | 106 | −62.0 | | 144 | 105 | −58.1 | |
| 17,000 | | | | | 186 | 90 | −60.4 | | | | | | 241 | 93 | −66.8 | | | | | | 200 | 91 | −62.9 | | | | | |
| 18,000 | | | | | | | | | | | | | 203 | 79 | −66.1 | | | | | | | | | | | | | |
| 19,000 | | | | | | | | | | | | | 122 | 67 | −64.2 | | | | | | | | | | | | | |

| | San Antonio, Tex. (242 m.) | | | | San Diego, Calif.[1] (19 m.) | | | | San Juan, P. R. (15 m.) | | | | Sault Ste. Marie, Mich. (221 m.) | | | | Seattle, Wash.[1] (22 m.) | | | | Spokane, Wash. (598 m.) | | | | Washington, D. C. (25 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Surface | 358 | 992 | 18.6 | 74 | 348 | 1,012 | 15.8 | 80 | 355 | 1,013 | 25.0 | 85 | 363 | 988 | 3.6 | 84 | 331 | 1,014 | 11.1 | 79 | 363 | 945 | 9.3 | 68 | 358 | 1,014 | 12.7 | 72 |
| 500 | 358 | 959 | 18.6 | 72 | 348 | 956 | 15.2 | 63 | 355 | 959 | 22.5 | 87 | 363 | 955 | 4.1 | 78 | 331 | 958 | 9.5 | 72 | | | | | 358 | 958 | 11.6 | 66 |
| 1,000 | 358 | 905 | 16.6 | 69 | 347 | 902 | 15.5 | 43 | 355 | 906 | 19.4 | 87 | 363 | 898 | 2.7 | 75 | 331 | 902 | 6.8 | 69 | 363 | 900 | 9.2 | 63 | 358 | 903 | 9.2 | 66 |
| 1,500 | 357 | 853 | 14.5 | 67 | 346 | 850 | 14.1 | 33 | 355 | 855 | 16.5 | 84 | 363 | 844 | 0.7 | 73 | 331 | 848 | 4.0 | 67 | 363 | 847 | 6.4 | 61 | 357 | 850 | 6.8 | 68 |
| 2,000 | 357 | 804 | 12.5 | 61 | 345 | 801 | 12.0 | 28 | 355 | 806 | 14.0 | 77 | 363 | 793 | −1.4 | 70 | 331 | 797 | 1.3 | 65 | 363 | 797 | 3.2 | 62 | 357 | 799 | 4.6 | 67 |
| 2,500 | 357 | 757 | 10.4 | 54 | 343 | 754 | 9.3 | 27 | 354 | 759 | 12.1 | 66 | 363 | 744 | −3.6 | 66 | 331 | 749 | −1.6 | 62 | 361 | 749 | −0.1 | 62 | 356 | 751 | 2.4 | 65 |
| 3,000 | 357 | 713 | 7.9 | 48 | 340 | 710 | 6.5 | 26 | 353 | 715 | 9.8 | 57 | 362 | 698 | −6.0 | 63 | 331 | 703 | −4.5 | 59 | 358 | 703 | −3.2 | 63 | 355 | 706 | 0.1 | 60 |
| 4,000 | 354 | 631 | 2.0 | 45 | 335 | 627 | 0.2 | 26 | 348 | 634 | 4.7 | 50 | 353 | 614 | −11.2 | 56 | 330 | 618 | −10.6 | 54 | 356 | 619 | −9.3 | 60 | 348 | 623 | −5.0 | 55 |
| 5,000 | 348 | 557 | −4.1 | 42 | 330 | 552 | −6.5 | 30 | 338 | 560 | −0.8 | 46 | 339 | 538 | −17.1 | 53 | 328 | 542 | −16.8 | 53 | 350 | 543 | −15.7 | 57 | 344 | 548 | −10.6 | 50 |
| 6,000 | 340 | 490 | −10.6 | 40 | 319 | 485 | −13.4 | | 331 | 494 | −6.6 | 43 | 323 | 470 | −23.6 | 51 | 319 | 474 | −23.4 | 56 | 344 | 475 | −22.3 | 54 | 335 | 480 | −16.8 | 48 |
| 7,000 | 330 | 429 | −17.4 | 39 | 313 | 425 | −20.7 | | 325 | 434 | −13.0 | 40 | 302 | 409 | −30.5 | 47 | 313 | 412 | −30.4 | 59 | 337 | 414 | −29.4 | 52 | 319 | 420 | −23.4 | 46 |
| 8,000 | 324 | 375 | −24.5 | 38 | 155 | 370 | −28.4 | | 315 | 380 | −19.9 | 39 | 277 | 355 | −37.3 | | 290 | 357 | −37.5 | | 330 | 358 | −36.4 | 51 | 300 | 365 | −30.4 | 44 |
| 9,000 | 321 | 326 | −31.6 | 37 | 152 | 321 | −35.9 | | 312 | 331 | −27.0 | 39 | 251 | 306 | −43.3 | | 277 | 308 | −44.6 | | 328 | 309 | −43.2 | | 285 | 316 | −37.4 | |
| 10,000 | 314 | 282 | −38.9 | | 135 | 278 | −42.8 | | 307 | 288 | −34.5 | 37 | 228 | 264 | −48.1 | | 250 | 265 | −50.9 | | 320 | 266 | −49.1 | | 266 | 273 | −44.1 | |
| 11,000 | 300 | 244 | −46.0 | | 113 | 239 | −49.0 | | 291 | 249 | −42.0 | | 198 | 227 | −51.0 | | 234 | 227 | −55.3 | | 314 | 229 | −53.3 | | 244 | 235 | −50.0 | |
| 12,000 | 281 | 209 | −52.5 | | | | | | 277 | 214 | −49.5 | | 176 | 194 | −52.7 | | 211 | 194 | −57.4 | | 301 | 196 | −55.1 | | 227 | 201 | −54.7 | |
| 13,000 | 263 | 179 | −57.9 | | | | | | 271 | 184 | −57.0 | | 155 | 166 | −53.5 | | | | | | 292 | 167 | −55.7 | | 212 | 172 | −57.9 | |
| 14,000 | 247 | 152 | −62.4 | | | | | | 259 | 156 | −64.2 | | 128 | 142 | −54.2 | | | | | | 270 | 143 | −55.6 | | 195 | 146 | −60.0 | |
| 15,000 | 228 | 129 | −66.4 | | | | | | 244 | 132 | −70.6 | | 105 | 121 | −55.2 | | | | | | 257 | 122 | −56.3 | | 172 | 124 | −61.5 | |
| 16,000 | 200 | 110 | −69.9 | | | | | | 223 | 112 | −75.3 | | | | | | | | | | 229 | 104 | −56.8 | | 140 | 106 | −62.9 | |
| 17,000 | 184 | 93 | −71.6 | | | | | | 195 | 94 | −77.7 | | | | | | | | | | 190 | 89 | −57.1 | | 109 | 90 | −62.8 | |
| 18,000 | | | | | | | | | 175 | 79 | −76.7 | | | | | | | | | | 126 | 76 | −56.6 | | | | | |
| 19,000 | | | | | | | | | 146 | 66 | −73.9 | | | | | | | | | | | | | | | | | |
| 20,000 | | | | | | | | | 94 | 56 | −68.9 | | | | | | | | | | | | | | | | | |

[1] U. S. Navy.

*Mean free-air barometric pressure in millibars, temperature in degrees centigrade, and relative humidities in percent, obtained by radiosondes during the year 1943*

STATIONS AND ELEVATIONS IN METERS ABOVE SEA LEVEL—Continued

| Altitude (meters) m. s. l. | Albuquerque, N. Mex. (1,620 m.) | | | | Atlanta, Ga. (300 m.) | | | | Apalachicola, Fla. (5 m.) | | | | Bismarck, N. Dak. (505 m.) | | | | Boise, Idaho (868 m.) | | | | Brownsville, Tex. (6 m.) | | | | Buffalo, N. Y. (221 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 357 | 838 | 14.6 | 38 | 360 | 984 | 14.9 | 72 | 364 | 1,018 | 19.1 | 81 | 357 | 956 | 4.3 | 74 | 340 | 916 | 10.8 | 59 | 364 | 1,015 | 21.0 | 86 | 350 | 990 | 6.8 | 79 |
| 500 | ---- | ---- | ---- | ---- | 360 | 961 | 15.9 | 66 | 364 | 961 | 18.5 | 63 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 364 | 959 | 19.6 | 76 | 350 | 957 | 6.8 | 71 |
| 1,000 | ---- | ---- | ---- | ---- | 360 | 906 | 13.9 | 63 | 364 | 907 | 16.1 | 59 | 357 | 900 | 5.5 | 67 | 340 | 902 | 11.8 | 52 | 364 | 905 | 17.9 | 61 | 350 | 900 | 4.6 | 66 |
| 1,500 | ---- | ---- | ---- | ---- | 359 | 854 | 11.7 | 62 | 364 | 855 | 13.7 | 54 | 356 | 846 | 4.1 | 65 | 340 | 850 | 10.5 | 45 | 364 | 854 | 15.9 | 51 | 350 | 846 | 2.1 | 63 |
| 2,000 | 357 | 801 | 14.0 | 35 | 359 | 804 | 9.3 | 60 | 363 | 805 | 11.5 | 48 | 353 | 795 | 2.1 | 62 | 340 | 799 | 7.6 | 46 | 364 | 804 | 13.9 | 44 | 350 | 795 | −0.1 | 61 |
| 2,500 | 357 | 755 | 10.8 | 36 | 359 | 757 | 7.0 | 56 | 363 | 758 | 9.2 | 46 | 353 | 748 | −0.3 | 59 | 340 | 752 | 4.2 | 48 | 364 | 758 | 11.6 | 40 | 350 | 747 | −2.3 | 55 |
| 3,000 | 357 | 711 | 7.2 | 39 | 359 | 712 | 4.5 | 53 | 362 | 714 | 6.7 | 42 | 353 | 702 | −2.9 | 58 | 340 | 707 | 1.0 | 50 | 364 | 714 | 8.8 | 37 | 350 | 701 | −4.4 | 49 |
| 4,000 | 357 | 628 | −0.3 | 47 | 348 | 629 | −0.9 | 47 | 359 | 631 | 1.3 | 39 | 353 | 618 | −8.7 | 55 | 336 | 624 | −5.6 | 49 | 357 | 632 | 3.0 | 35 | 344 | 616 | −9.5 | 45 |
| 5,000 | 355 | 554 | −7.6 | 52 | 339 | 554 | −6.8 | 44 | 355 | 557 | −4.6 | 34 | 343 | 543 | −14.9 | 53 | 330 | 548 | −12.2 | 48 | 351 | 558 | −3.2 | 33 | 339 | 541 | −14.9 | 43 |
| 6,000 | 346 | 486 | −14.4 | 50 | 333 | 487 | −13.2 | 42 | 349 | 490 | −10.8 | ---- | 338 | 475 | −21.7 | 51 | 327 | 480 | −19.1 | 47 | 344 | 491 | −9.6 | 32 | 335 | 474 | −21.2 | ---- |
| 7,000 | 339 | 426 | −21.1 | 45 | 323 | 426 | −20.0 | 41 | 344 | 429 | −17.5 | ---- | 332 | 414 | −28.8 | 47 | 317 | 419 | −26.3 | 46 | 341 | 431 | −16.4 | 34 | 322 | 413 | −27.7 | ---- |
| 8,000 | 332 | 371 | −28.1 | ---- | 313 | 372 | −27.1 | 42 | 338 | 375 | −24.5 | ---- | 325 | 359 | −35.8 | ---- | 303 | 364 | −33.6 | ---- | 336 | 376 | −23.5 | ---- | 306 | 358 | −34.6 | ---- |
| 9,000 | 320 | 322 | −35.4 | ---- | 303 | 323 | −34.4 | ---- | 327 | 326 | −31.9 | ---- | 315 | 310 | −42.6 | ---- | 275 | 315 | −40.7 | ---- | 332 | 327 | −30.9 | ---- | 277 | 310 | −40.6 | ---- |
| 10,000 | 304 | 278 | −42.5 | ---- | 292 | 280 | −41.5 | ---- | 315 | 283 | −39.2 | ---- | 294 | 267 | −48.1 | ---- | 247 | 272 | −47.1 | ---- | 328 | 284 | −38.4 | ---- | 254 | 267 | −46.2 | ---- |
| 11,000 | 276 | 240 | −48.6 | ---- | 277 | 241 | −48.1 | ---- | 304 | 244 | −46.2 | ---- | 277 | 229 | −51.8 | ---- | 217 | 233 | −52.1 | ---- | 321 | 245 | −45.9 | ---- | 220 | 230 | −50.0 | ---- |
| 12,000 | 258 | 206 | −53.7 | ---- | 255 | 207 | −53.6 | ---- | 284 | 209 | −52.4 | ---- | 266 | 196 | −53.8 | ---- | 190 | 200 | −55.2 | ---- | 301 | 210 | −52.8 | ---- | 202 | 198 | −52.0 | ---- |
| 13,000 | 235 | 176 | −57.2 | ---- | 225 | 177 | −57.9 | ---- | 266 | 179 | −57.5 | ---- | 248 | 168 | −54.4 | ---- | 158 | 170 | −56.0 | ---- | 286 | 180 | −59.0 | ---- | 190 | 169 | −53.9 | ---- |
| 14,000 | 207 | 150 | −60.4 | ---- | 199 | 151 | −61.5 | ---- | 228 | 152 | −62.1 | ---- | 220 | 144 | −54.9 | ---- | 116 | 146 | −56.4 | ---- | 264 | 153 | −64.6 | ---- | 174 | 145 | −56.2 | ---- |
| 15,000 | 185 | 128 | −63.4 | ---- | 173 | 128 | −64.7 | ---- | 185 | 130 | −65.9 | ---- | 175 | 123 | −56.6 | ---- | 98 | 124 | −57.9 | ---- | 241 | 130 | −69.2 | ---- | ---- | ---- | ---- | ---- |
| 16,000 | 158 | 109 | −65.2 | ---- | 138 | 109 | −66.6 | ---- | 134 | 110 | −68.1 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 214 | 110 | −72.6 | ---- | ---- | ---- | ---- | ---- |
| 17,000 | 112 | 92 | −65.6 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 145 | 92 | −73.6 | ---- | ---- | ---- | ---- | ---- |

| Altitude (meters) m. s. l. | Caribou, Maine (191 m.) | | | | Charleston, S. C. (14 m.) | | | | Denver, Colo. (1,616 m.) | | | | Detroit, Mich. (217 m.) | | | | El Paso, Tex. (1,195 m.) | | | | Ely, Nev. (1,908 m.) | | | | Great Falls, Mont. (1,128 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 359 | 991 | 1.1 | 84 | 355 | 1,017 | 15.4 | 86 | 365 | 838 | 9.3 | 54 | 362 | 991 | 6.5 | 82 | 365 | 882 | 18.0 | 39 | 350 | 810 | 7.4 | 45 | 360 | 887 | 7.5 | 54 |
| 500 | 359 | 953 | 1.9 | 75 | 355 | 961 | 16.4 | 70 | ---- | ---- | ---- | ---- | 362 | 958 | 7.3 | 70 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 1,000 | 359 | 896 | 0.0 | 72 | 355 | 906 | 14.1 | 64 | ---- | ---- | ---- | ---- | 362 | 901 | 5.2 | 66 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 1,500 | 359 | 841 | −2.0 | 71 | 355 | 854 | 11.7 | 62 | ---- | ---- | ---- | ---- | 362 | 847 | 3.0 | 63 | 365 | 851 | 18.6 | 35 | ---- | ---- | ---- | ---- | 360 | 848 | 7.4 | 50 |
| 2,000 | 359 | 790 | −3.9 | 68 | 355 | 804 | 9.5 | 56 | 365 | 800 | 10.2 | 45 | 362 | 796 | 1.0 | 55 | 365 | 802 | 15.6 | 35 | 350 | 801 | 8.4 | 53 | 359 | 797 | 4.5 | 50 |
| 2,500 | 359 | 741 | −5.9 | 62 | 355 | 756 | 7.1 | 52 | 365 | 753 | 7.2 | 44 | 362 | 748 | −0.9 | 50 | 365 | 756 | 12.2 | 36 | 350 | 754 | 7.6 | 50 | 359 | 749 | 1.4 | 53 |
| 3,000 | 359 | 695 | −8.1 | 60 | 355 | 712 | 4.7 | 49 | 365 | 708 | 3.9 | 46 | 362 | 702 | −3.2 | 48 | 365 | 712 | 8.6 | 38 | 350 | 709 | 4.1 | 49 | 357 | 704 | −2.0 | 56 |
| 4,000 | 348 | 610 | −13.1 | 55 | 344 | 629 | −0.7 | 45 | 364 | 625 | −3.1 | 51 | 360 | 618 | −8.6 | 47 | 365 | 630 | 1.4 | 42 | 348 | 626 | −3.0 | 48 | 356 | 620 | −8.5 | 58 |
| 5,000 | 340 | 535 | −18.9 | 53 | 335 | 554 | −6.5 | 43 | 364 | 551 | −10.4 | 54 | 353 | 542 | −14.4 | 44 | 350 | 556 | −5.7 | 41 | 345 | 551 | −10.0 | 49 | 355 | 544 | −15.0 | 57 |
| 6,000 | 334 | 467 | −25.2 | 51 | 321 | 487 | −12.8 | 41 | 362 | 483 | −17.5 | 53 | 347 | 475 | −20.8 | 44 | 342 | 488 | −12.3 | 37 | 340 | 483 | −17.1 | 48 | 347 | 476 | −21.7 | 56 |
| 7,000 | 323 | 406 | −31.6 | 49 | 315 | 427 | −19.4 | 38 | 355 | 422 | −24.4 | 48 | 342 | 414 | −27.5 | ---- | 329 | 428 | −19.0 | ---- | 333 | 422 | −24.2 | 46 | 340 | 415 | −28.7 | ---- |
| 8,000 | 307 | 352 | −38.0 | ---- | 302 | 372 | −26.4 | 38 | 339 | 366 | −31.9 | ---- | 335 | 359 | −34.3 | ---- | 315 | 373 | −26.0 | ---- | 316 | 367 | −31.6 | 43 | 327 | 360 | −36.2 | ---- |
| 9,000 | 290 | 304 | −43.9 | ---- | 293 | 323 | −33.4 | 38 | 325 | 317 | −39.2 | ---- | 318 | 311 | −40.8 | ---- | 305 | 324 | −33.3 | ---- | 301 | 318 | −39.0 | ---- | 305 | 311 | −43.1 | ---- |
| 10,000 | 266 | 261 | −48.1 | ---- | 277 | 280 | −40.5 | ---- | 305 | 274 | −46.0 | ---- | 302 | 268 | −46.4 | ---- | 284 | 281 | −40.7 | ---- | 290 | 274 | −45.6 | ---- | 272 | 268 | −49.0 | ---- |
| 11,000 | 246 | 225 | −50.8 | ---- | 253 | 242 | −47.1 | ---- | 282 | 235 | −51.6 | ---- | 287 | 231 | −50.9 | ---- | 268 | 242 | −47.5 | ---- | 275 | 236 | −51.1 | ---- | 249 | 230 | −53.6 | ---- |
| 12,000 | 219 | 193 | −52.3 | ---- | 225 | 207 | −52.8 | ---- | 258 | 202 | −55.3 | ---- | 268 | 198 | −53.1 | ---- | 255 | 208 | −53.1 | ---- | 258 | 202 | −55.0 | ---- | 218 | 197 | −55.5 | ---- |
| 13,000 | 205 | 165 | −53.2 | ---- | 193 | 178 | −57.3 | ---- | 240 | 172 | −57.8 | ---- | 251 | 170 | −55.1 | ---- | 236 | 178 | −56.3 | ---- | 252 | 172 | −57.7 | ---- | 193 | 168 | −55.5 | ---- |
| 14,000 | 181 | 142 | −54.7 | ---- | 165 | 152 | −61.7 | ---- | 203 | 147 | −60.2 | ---- | 235 | 145 | −56.5 | ---- | 202 | 151 | −62.1 | ---- | 210 | 147 | −60.0 | ---- | 165 | 144 | −55.8 | ---- |
| 15,000 | 153 | 122 | −55.9 | ---- | 140 | 129 | −65.3 | ---- | 171 | 125 | −62.0 | ---- | 203 | 124 | −58.6 | ---- | 184 | 129 | −65.7 | ---- | 183 | 125 | −61.7 | ---- | 135 | 123 | −56.6 | ---- |
| 16,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 151 | 107 | −63.4 | ---- | 159 | 106 | −59.7 | ---- | 150 | 109 | −68.6 | ---- | 163 | 107 | −63.4 | ---- | 103 | 105 | −57.3 | ---- |
| 17,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 112 | 91 | −64.1 | ---- | ---- | ---- | ---- | ---- |

| Altitude (meters) m. s. l. | Huntington, W. Va. (172 m.) | | | | International Falls, Minn. (343 m.) | | | | Joliet, Ill. (178 m.) | | | | Lake Charles, La. (5 m.) | | | | Lakehurst, N. J.[1] (39 m.) | | | | Medford, Oreg. (409 m.) | | | | Miami, Fla. (4 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 343 | 998 | 10.3 | 82 | 364 | 974 | 2.3 | 77 | 361 | 996 | 7.3 | 83 | 360 | 1,018 | 18.0 | 86 | 327 | 1,012 | 9.9 | 75 | 363 | 969 | 13.6 | 61 | 361 | 1,018 | 21.5 | 85 |
| 500 | 343 | 960 | 11.6 | 68 | 364 | 955 | 2.9 | 72 | 361 | 958 | 8.4 | 69 | 360 | 960 | 17.5 | 67 | 327 | 957 | 9.6 | 62 | 363 | 959 | 13.6 | 60 | 361 | 961 | 20.4 | 83 |
| 1,000 | 343 | 904 | 9.2 | 66 | 364 | 898 | 1.3 | 68 | 361 | 901 | 6.5 | 64 | 360 | 906 | 15.6 | 58 | 327 | 901 | 7.2 | 61 | 363 | 903 | 12.0 | 57 | 361 | 907 | 17.3 | 82 |
| 1,500 | 343 | 851 | 6.6 | 66 | 364 | 844 | −0.5 | 67 | 360 | 848 | 4.6 | 61 | 360 | 854 | 13.7 | 51 | 327 | 848 | 4.8 | 60 | 363 | 851 | 9.0 | 58 | 361 | 856 | 14.7 | 76 |
| 2,000 | 342 | 800 | 4.2 | 61 | 364 | 792 | −2.2 | 62 | 359 | 797 | 2.7 | 55 | 360 | 804 | 11.8 | 44 | 325 | 797 | 2.7 | 57 | 361 | 801 | 5.8 | 60 | 361 | 806 | 12.5 | 67 |
| 2,500 | 342 | 752 | 1.9 | 56 | 364 | 744 | −4.4 | 57 | 357 | 749 | 0.6 | 50 | 360 | 757 | 9.3 | 41 | 325 | 749 | 0.5 | 53 | 361 | 753 | 3.1 | 59 | 361 | 759 | 10.3 | 60 |
| 3,000 | 341 | 707 | −0.4 | 51 | 364 | 698 | −6.8 | 55 | 356 | 704 | −1.6 | 48 | 360 | 713 | 6.8 | 37 | 325 | 704 | −1.8 | 50 | 360 | 708 | 0.5 | 56 | 361 | 715 | 7.8 | 55 |
| 4,000 | 336 | 623 | −5.4 | 46 | 362 | 613 | −12.3 | 51 | 352 | 620 | −7.2 | 48 | 360 | 631 | 1.1 | 36 | 320 | 620 | −6.9 | 45 | 359 | 624 | −5.3 | 50 | 353 | 633 | 2.6 | 50 |
| 5,000 | 332 | 548 | −11.2 | 44 | 358 | 537 | −18.2 | 48 | 348 | 545 | −13.0 | 47 | 352 | 556 | −5.1 | 33 | 318 | 545 | −12.7 | 44 | 354 | 549 | −11.7 | 47 | 347 | 559 | −3.1 | 46 |
| 6,000 | 331 | 480 | −17.4 | 42 | 353 | 469 | −24.8 | 46 | 342 | 477 | −19.4 | 45 | 350 | 489 | −11.6 | ---- | 315 | 477 | −19.0 | ---- | 347 | 481 | −18.3 | 45 | 341 | 492 | −9.3 | 44 |
| 7,000 | 328 | 419 | −24.0 | 43 | 346 | 408 | −31.5 | ---- | 336 | 416 | −26.2 | 46 | 345 | 429 | −18.4 | ---- | 308 | 417 | −25.6 | ---- | 340 | 420 | −25.3 | 44 | 335 | 431 | −16.1 | 42 |
| 8,000 | 325 | 365 | −30.8 | ---- | 335 | 353 | −38.2 | ---- | 325 | 362 | −33.2 | ---- | 340 | 374 | −25.5 | ---- | 291 | 362 | −32.4 | ---- | 332 | 365 | −32.7 | 43 | 328 | 377 | −23.1 | 41 |
| 9,000 | 316 | 316 | −37.7 | ---- | 310 | 305 | −44.1 | ---- | 310 | 313 | −39.9 | ---- | 333 | 325 | −33.0 | ---- | 283 | 313 | −39.2 | ---- | 319 | 315 | −40.1 | ---- | 321 | 328 | −30.2 | 40 |
| 10,000 | 305 | 273 | −44.4 | ---- | 294 | 262 | −48.7 | ---- | 284 | 270 | −45.7 | ---- | 317 | 281 | −40.2 | ---- | 269 | 271 | −45.5 | ---- | 304 | 272 | −46.8 | ---- | 309 | 284 | −37.4 | ---- |
| 11,000 | 291 | 235 | −50.3 | ---- | 270 | 225 | −51.2 | ---- | 269 | 232 | −50.9 | ---- | 292 | 243 | −47.1 | ---- | 253 | 233 | −50.8 | ---- | 295 | 234 | −52.2 | ---- | 296 | 245 | −44.6 | ---- |
| 12,000 | 278 | 201 | −54.8 | ---- | 248 | 194 | −52.5 | ---- | 249 | 199 | −54.1 | ---- | 272 | 208 | −53.3 | ---- | 230 | 199 | −54.4 | ---- | 280 | 200 | −55.1 | ---- | 280 | 211 | −51.5 | ---- |
| 13,000 | 254 | 172 | −57.7 | ---- | 218 | 166 | −53.1 | ---- | 228 | 171 | −56.4 | ---- | 252 | 178 | −58.3 | ---- | 208 | 171 | −57.3 | ---- | 260 | 171 | −55.9 | ---- | 254 | 181 | −58.0 | ---- |
| 14,000 | 234 | 147 | −60.2 | ---- | 195 | 142 | −53.9 | ---- | 193 | 146 | −58.6 | ---- | 232 | 152 | −62.8 | ---- | 181 | 146 | −59.7 | ---- | 236 | 146 | −57.5 | ---- | 230 | 154 | −63.7 | ---- |
| 15,000 | 197 | 125 | −62.4 | ---- | 136 | 122 | −54.9 | ---- | 157 | 125 | −60.4 | ---- | 204 | 129 | −66.6 | ---- | 145 | 125 | −60.9 | ---- | 211 | 125 | −58.7 | ---- | 195 | 130 | −68.2 | ---- |
| 16,000 | 162 | 106 | −63.8 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 166 | 109 | −69.3 | ---- | ---- | ---- | ---- | ---- | 176 | 107 | −59.9 | ---- | 157 | 110 | −71.8 | ---- |
| 17,000 | 114 | 91 | −63.8 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 99 | 93 | −70.2 | ---- | ---- | ---- | ---- | ---- | 125 | 91 | −60.2 | ---- | 104 | 93 | −73.7 | ---- |
| 18,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 80 | 78 | −59.5 | ---- | ---- | ---- | ---- | ---- |

[1] U. S. Navy.

*Mean free-air barometric pressure in millibars, temperature in degrees centigrade, and relative humidities in percent, obtained by radiosondes during the year 1943*—Continued

STATIONS AND ELEVATIONS IN METERS ABOVE SEA LEVEL—Continued

| Altitude (meters) m. s. l. | Nashville, Tenn. (180 m.) | | | | Norfolk, Va.[1] (4 m.) | | | | Oakland, Calif. (2 m.) | | | | Oklahoma City, Okla. (391 m.) | | | | Omaha, Nebr. (301 m.) | | | | Pensacola, Fla.[2] (24 m.) | | | | Phoenix, Ariz. (339 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity | Number of observations | Pressure | Temperature | Relative humidity |
| Surface | 351 | 997 | 14.0 | 70 | 290 | 1,018 | 14.6 | 75 | 365 | 1,016 | 14.0 | 75 | 353 | 971 | 14.5 | 64 | 345 | 982 | 9.5 | 72 | ---- | ---- | ---- | ---- | 358 | 972 | 20.8 | 45 |
| 500 | 351 | 960 | 14.2 | 60 | 290 | 960 | 13.3 | 63 | 365 | 958 | 13.5 | 61 | 353 | 958 | 15.3 | 59 | 345 | 959 | 9.9 | 63 | ---- | ---- | ---- | ---- | 358 | 955 | 24.0 | 35 |
| 1,000 | 351 | 905 | 11.6 | 60 | 290 | 905 | 11.0 | 60 | 365 | 903 | 13.4 | 44 | 353 | 904 | 14.7 | 52 | 345 | 902 | 8.6 | 56 | ---- | ---- | ---- | ---- | 358 | 901 | 22.0 | 30 |
| 1,500 | 351 | 852 | 9.3 | 57 | 290 | 852 | 8.6 | 58 | 365 | 851 | 11.6 | 37 | 353 | 852 | 13.0 | 51 | 345 | 849 | 7.0 | 51 | ---- | ---- | ---- | ---- | 358 | 851 | 18.1 | 32 |
| 2,000 | 351 | 802 | 7.3 | 52 | 290 | 801 | 6.2 | 53 | 365 | 801 | 9.1 | 34 | 353 | 802 | 10.9 | 47 | 345 | 799 | 5.2 | 48 | ---- | ---- | ---- | ---- | 358 | 802 | 14.1 | 35 |
| 2,500 | 351 | 754 | 5.1 | 48 | 290 | 754 | 4.0 | 48 | 364 | 753 | 6.5 | 31 | 349 | 754 | 8.4 | 43 | 345 | 751 | 3.0 | 44 | ---- | ---- | ---- | ---- | 358 | 755 | 10.4 | 36 |
| 3,000 | 351 | 709 | 2.8 | 48 | 288 | 709 | 1.4 | 44 | 363 | 708 | 3.6 | 30 | 348 | 711 | 5.7 | 41 | 345 | 706 | 0.5 | 44 | ---- | ---- | ---- | ---- | 358 | 711 | 6.8 | 38 |
| 4,000 | 346 | 626 | −2.7 | 41 | 286 | 625 | −4.1 | 40 | 354 | 626 | −2.7 | 30 | 335 | 628 | −0.4 | 39 | 344 | 622 | −5.3 | 44 | ---- | ---- | ---- | ---- | 355 | 629 | 0.1 | 37 |
| 5,000 | 341 | 551 | −8.7 | 39 | 279 | 550 | −10.1 | 39 | 350 | 551 | −9.2 | 34 | 325 | 553 | −6.9 | 38 | 342 | 548 | −11.5 | 43 | ---- | ---- | ---- | ---- | 347 | 554 | −6.4 | 37 |
| 6,000 | 332 | 484 | −15.0 | ---- | 268 | 482 | −16.5 | ---- | 350 | 483 | −16.2 | ---- | 317 | 486 | −13.6 | 36 | 341 | 480 | −18.1 | 41 | ---- | ---- | ---- | ---- | 343 | 487 | −13.2 | 35 |
| 7,000 | 328 | 423 | −21.8 | ---- | 253 | 422 | −22.9 | ---- | 342 | 422 | −23.5 | ---- | 308 | 426 | −20.5 | 36 | 337 | 419 | −25.0 | ---- | ---- | ---- | ---- | ---- | 334 | 426 | −20.2 | 34 |
| 8,000 | 319 | 368 | −29.0 | ---- | ---- | ---- | ---- | ---- | 340 | 367 | −30.9 | ---- | 294 | 371 | −27.8 | ---- | 334 | 364 | −32.2 | ---- | ---- | ---- | ---- | ---- | 327 | 372 | −27.5 | ---- |
| 9,000 | 306 | 319 | −36.0 | ---- | ---- | ---- | ---- | ---- | 328 | 318 | −38.2 | ---- | 278 | 322 | −35.1 | ---- | 325 | 315 | −39.1 | ---- | ---- | ---- | ---- | ---- | 323 | 322 | −34.8 | ---- |
| 10,000 | 289 | 276 | −43.0 | ---- | ---- | ---- | ---- | ---- | 316 | 275 | −45.0 | ---- | 258 | 279 | −42.0 | ---- | 309 | 272 | −45.3 | ---- | ---- | ---- | ---- | ---- | 313 | 279 | −41.9 | ---- |
| 11,000 | 265 | 238 | −49.3 | ---- | ---- | ---- | ---- | ---- | 288 | 236 | −50.9 | ---- | 228 | 240 | −48.7 | ---- | 300 | 234 | −50.6 | ---- | ---- | ---- | ---- | ---- | 305 | 240 | −48.3 | ---- |
| 12,000 | 244 | 204 | −54.4 | ---- | ---- | ---- | ---- | ---- | 267 | 202 | −55.1 | ---- | ---- | ---- | ---- | ---- | 293 | 201 | −54.2 | ---- | ---- | ---- | ---- | ---- | 292 | 206 | −53.6 | ---- |
| 13,000 | 223 | 175 | −58.2 | ---- | ---- | ---- | ---- | ---- | 234 | 173 | −57.0 | ---- | ---- | ---- | ---- | ---- | 268 | 172 | −56.3 | ---- | ---- | ---- | ---- | ---- | 275 | 176 | −57.4 | ---- |
| 14,000 | 200 | 149 | −61.3 | ---- | ---- | ---- | ---- | ---- | 213 | 148 | −59.3 | ---- | ---- | ---- | ---- | ---- | 242 | 147 | −58.3 | ---- | ---- | ---- | ---- | ---- | 242 | 150 | −60.6 | ---- |
| 15,000 | 173 | 127 | −64.8 | ---- | ---- | ---- | ---- | ---- | 184 | 126 | −61.5 | ---- | ---- | ---- | ---- | ---- | 209 | 125 | −60.2 | ---- | ---- | ---- | ---- | ---- | 220 | 128 | −63.6 | ---- |
| 16,000 | 143 | 108 | −66.8 | ---- | ---- | ---- | ---- | ---- | 150 | 107 | −63.1 | ---- | ---- | ---- | ---- | ---- | 183 | 107 | −61.3 | ---- | ---- | ---- | ---- | ---- | 186 | 109 | −65.8 | ---- |
| 17,000 | 98 | 92 | −66.2 | ---- | ---- | ---- | ---- | ---- | 108 | 92 | −62.8 | ---- | ---- | ---- | ---- | ---- | 127 | 91 | −61.2 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |

| Altitude (meters) m. s. l. | Portland, Maine (20 m.) | | | | St. Louis, Mo. (171 m.) | | | | St. Paul, Minn. (225 m.) | | | | San Antonio, Tex. (242 m.) | | | | San Diego, Calif.[1] (19 m.) | | | | San Juan, P. R. (15 m.) | | | | Sault St. Marie, Mich. (221 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Surface | 354 | 1,013 | 4.7 | 79 | 364 | 998 | 11.9 | 71 | 363 | 989 | 6.0 | 88 | 354 | 989 | 18.7 | 70 | 354 | 1,012 | 16.7 | 83 | 357 | 1,014 | 24.7 | 84 | 352 | 989 | 2.4 | 89 |
| 500 | 354 | 955 | 5.8 | 70 | 364 | 959 | 11.8 | 61 | 363 | 957 | 6.0 | 67 | 354 | 958 | 18.7 | 65 | 354 | 957 | 15.6 | 61 | 357 | 960 | 21.6 | 84 | 352 | 956 | 3.0 | 80 |
| 1,000 | 354 | 898 | 3.5 | 68 | 364 | 903 | 9.7 | 60 | 363 | 900 | 4.3 | 64 | 354 | 906 | 16.5 | 63 | 352 | 902 | 15.5 | 42 | 355 | 906 | 18.5 | 81 | 352 | 898 | 1.3 | 76 |
| 1,500 | 354 | 845 | 1.4 | 68 | 364 | 850 | 7.7 | 55 | 362 | 846 | 2.6 | 60 | 354 | 854 | 14.6 | 58 | 351 | 850 | 13.8 | 35 | 354 | 855 | 15.6 | 75 | 352 | 844 | −0.8 | 74 |
| 2,000 | 353 | 793 | −0.8 | 67 | 364 | 800 | 5.7 | 51 | 362 | 795 | 0.7 | 54 | 354 | 804 | 12.5 | 59 | 351 | 801 | 11.5 | 32 | 354 | 805 | 13.2 | 65 | 352 | 792 | −2.8 | 71 |
| 2,500 | 353 | 745 | −3.0 | 64 | 363 | 752 | 3.6 | 47 | 362 | 747 | −1.4 | 50 | 354 | 758 | 10.3 | 41 | 351 | 754 | 8.7 | 29 | 352 | 759 | 11.1 | 53 | 352 | 744 | −4.8 | 67 |
| 3,000 | 351 | 699 | −5.2 | 61 | 363 | 707 | 1.3 | 45 | 361 | 701 | −3.8 | 47 | 354 | 713 | 7.7 | 39 | 350 | 709 | 5.7 | 29 | 348 | 715 | 8.9 | 43 | 352 | 698 | −7.0 | 64 |
| 4,000 | 340 | 615 | −10.3 | 56 | 355 | 624 | −4.2 | 44 | 354 | 617 | −9.3 | 45 | 354 | 631 | 1.8 | 36 | 347 | 627 | −0.5 | 30 | 338 | 633 | 3.8 | 36 | 344 | 613 | −12.1 | 60 |
| 5,000 | 329 | 540 | −16.1 | 53 | 352 | 549 | −10.2 | 43 | 349 | 542 | −15.3 | 45 | 352 | 557 | −4.4 | 35 | 345 | 553 | −7.0 | ---- | 319 | 559 | −1.8 | 33 | 329 | 537 | −17.8 | 56 |
| 6,000 | 318 | 472 | −22.3 | 50 | 347 | 481 | −16.7 | ---- | 345 | 474 | −21.7 | ---- | 349 | 490 | −10.9 | ---- | 338 | 485 | −13.7 | ---- | 312 | 492 | −7.7 | 32 | 310 | 469 | −24.2 | 54 |
| 7,000 | 308 | 411 | −28.7 | 48 | 343 | 421 | −23.5 | ---- | 338 | 412 | −28.8 | ---- | 346 | 429 | −17.6 | ---- | 335 | 425 | −20.8 | ---- | 304 | 432 | −14.3 | 32 | 297 | 409 | −30.7 | 51 |
| 8,000 | 291 | 357 | −35.2 | ---- | 334 | 366 | −30.6 | ---- | 325 | 358 | −35.6 | ---- | 332 | 375 | −24.8 | ---- | 188 | 371 | −28.0 | ---- | 286 | 379 | −21.1 | ---- | 283 | 354 | −37.3 | ---- |
| 9,000 | 270 | 309 | −41.3 | ---- | 316 | 317 | −37.8 | ---- | 314 | 310 | −42.1 | ---- | 322 | 325 | −32.2 | ---- | 186 | 321 | −35.3 | ---- | 274 | 329 | −28.5 | ---- | 264 | 306 | −43.3 | ---- |
| 10,000 | 247 | 266 | −46.7 | ---- | 309 | 274 | −44.6 | ---- | 290 | 267 | −47.6 | ---- | 307 | 282 | −39.5 | ---- | 182 | 278 | −42.5 | ---- | 264 | 286 | −36.1 | ---- | 250 | 264 | −48.2 | ---- |
| 11,000 | 218 | 230 | −50.8 | ---- | 292 | 236 | −50.5 | ---- | 268 | 230 | −50.9 | ---- | 288 | 243 | −46.7 | ---- | 164 | 240 | −48.7 | ---- | 249 | 247 | −43.6 | ---- | 227 | 227 | −50.9 | ---- |
| 12,000 | 197 | 197 | −53.4 | ---- | 276 | 202 | −54.6 | ---- | 239 | 197 | −53.0 | ---- | 272 | 209 | −53.1 | ---- | 158 | 206 | −54.0 | ---- | 229 | 213 | −51.2 | ---- | 211 | 195 | −52.4 | ---- |
| 13,000 | 164 | 169 | −54.9 | ---- | 260 | 173 | −57.3 | ---- | 220 | 168 | −54.3 | ---- | 257 | 178 | −58.5 | ---- | 148 | 176 | −57.8 | ---- | 219 | 182 | −58.5 | ---- | 189 | 167 | −53.5 | ---- |
| 14,000 | 137 | 144 | −56.8 | ---- | 233 | 148 | −59.7 | ---- | 195 | 144 | −55.8 | ---- | 228 | 152 | −63.0 | ---- | ---- | ---- | ---- | ---- | 199 | 155 | −64.8 | ---- | 168 | 143 | −54.7 | ---- |
| 15,000 | 110 | 124 | −58.9 | ---- | 210 | 126 | −62.3 | ---- | 163 | 123 | −57.1 | ---- | 196 | 129 | −67.1 | ---- | ---- | ---- | ---- | ---- | 182 | 131 | −69.9 | ---- | ---- | ---- | ---- | ---- |
| 16,000 | ---- | ---- | ---- | ---- | 176 | 107 | −63.8 | ---- | ---- | ---- | ---- | ---- | 154 | 110 | −69.5 | ---- | ---- | ---- | ---- | ---- | 171 | 111 | −73.7 | ---- | ---- | ---- | ---- | ---- |
| 17,000 | ---- | ---- | ---- | ---- | 120 | 92 | −64.2 | ---- | ---- | ---- | ---- | ---- | 112 | 93 | −69.9 | ---- | ---- | ---- | ---- | ---- | 151 | 93 | −74.8 | ---- | ---- | ---- | ---- | ---- |
| 18,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 102 | 79 | −73.4 | ---- | ---- | ---- | ---- | ---- |

| Altitude (meters) m. s. l. | Seattle, Wash.[1] (22 m.) | | | | Spokane, Wash. (598 m.) | | | | Swan Island, West Indies[2] (10 m.) | | | | Tongue Point, Oreg.[2] (21 m.) | | | | Washington, D. C. (25 m.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Surface | 316 | 1,016 | 12.3 | 70 | 358 | 947 | 9.0 | 67 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 361 | 1,015 | 12.7 | 68 |
| 500 | 316 | 959 | 10.3 | 64 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 361 | 959 | 11.6 | 59 |
| 1,000 | 316 | 903 | 7.8 | 63 | 358 | 902 | 8.4 | 59 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 361 | 903 | 9.1 | 60 |
| 1,500 | 316 | 850 | 5.1 | 63 | 358 | 849 | 6.0 | 56 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 361 | 850 | 6.5 | 62 |
| 2,000 | 313 | 799 | 2.3 | 62 | 358 | 798 | 3.1 | 55 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 361 | 799 | 4.2 | 61 |
| 2,500 | 310 | 751 | −0.5 | 59 | 357 | 750 | 0.1 | 55 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 361 | 752 | 2.2 | 54 |
| 3,000 | 308 | 705 | −3.4 | 57 | 352 | 704 | −2.9 | 54 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 361 | 706 | 0.1 | 46 |
| 4,000 | 305 | 620 | −9.2 | 58 | 347 | 620 | −8.9 | 49 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 359 | 623 | −5.3 | 42 |
| 5,000 | 299 | 544 | −15.5 | 60 | 346 | 544 | −15.1 | 48 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 356 | 548 | −11.1 | 41 |
| 6,000 | 292 | 476 | −22.2 | ---- | 341 | 476 | −21.8 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 352 | 480 | −17.4 | ---- |
| 7,000 | 282 | 415 | −29.1 | ---- | 330 | 415 | −28.9 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 350 | 419 | −24.0 | ---- |
| 8,000 | 248 | 360 | −36.4 | ---- | 324 | 359 | −36.2 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 340 | 365 | −30.9 | ---- |
| 9,000 | 242 | 310 | −43.5 | ---- | 313 | 310 | −43.2 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 330 | 316 | −37.6 | ---- |
| 10,000 | 226 | 267 | −49.7 | ---- | 289 | 267 | −49.2 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 310 | 273 | −44.2 | ---- |
| 11,000 | 187 | 230 | −53.4 | ---- | 264 | 230 | −53.6 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 271 | 235 | −49.9 | ---- |
| 12,000 | 169 | 197 | −55.5 | ---- | 240 | 197 | −54.6 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 229 | 202 | −53.7 | ---- |
| 13,000 | 145 | 168 | −56.1 | ---- | 224 | 168 | −54.5 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 212 | 173 | −56.7 | ---- |
| 14,000 | 106 | 143 | −56.2 | ---- | 193 | 144 | −55.0 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 187 | 147 | −59.4 | ---- |
| 15,000 | ---- | ---- | ---- | ---- | 160 | 123 | −56.1 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 160 | 125 | −61.2 | ---- |
| 16,000 | ---- | ---- | ---- | ---- | 128 | 105 | −57.0 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |

[1] U. S. Navy.

[2] Insufficient data.

NOTE.—All data are based on observations for 12 months, except at Pensacola, for 1942, for which only 11 months were available, insufficient observations having been taken during September.

At some stations, higher levels were missing during 1 or 2 months. They were not published for any level where observations were missing for more than 1 month in the same season, or more than 2 months during the year.