# METEOROLOGICAL AND CLIMATOLOGICAL DATA FOR MAY 1949

## AEROLOGICAL OBSERVATIONS

[For description of change in Table 1 and charts, see REVIEW, January 1946, p. 6]

TABLE 1.—*Mean dynamic height (geopotential) in units of 0.98 dynamic meters, temperature in degrees centigrade, and relative humidity in percent, for standard pressures, as obtained by radiosondes during May 1949*

STATIONS AND MEAN SURFACE PRESSURES

| Standard pressure surface (mb.) | Albany, N. Y. (1,005.5 mb.) | | | | Albuquerque, N. Mex. (835.0 mb.) | | | | Atlanta, Ga. (982.6 mb.) | | | | Big Spring, Tex. (924.3 mb.) | | | | Bismarck, N. Dak. (952.8 mb.) | | | | Boise, Idaho (911.7 mb.) | | | | Brownsville, Tex. (1,011.6 mb.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Dynamic height | Temperature | Relative humidity | Number of observations | Dynamic height | Temperature | Relative humidity | Number of observations | Dynamic height | Temperature | Relative humidity | Number of observations | Dynamic height | Temperature | Relative humidity | Number of observations | Dynamic height | Temperature | Relative humidity | Number of observations | Dynamic height | Temperature | Relative humidity | Number of observations | Dynamic height | Temperature | Relative humidity |
| Surface | 31 | 86 | 13.5 | 75 | 31 | 1,620 | 19.3 | 31 | 31 | 300 | 20.3 | 71 | 31 | 774 | 20.6 | 63 | 31 | 505 | 148 | 61 | 31 | 868 | 18.7 | 45 | 31 | 6 | 25.7 | 85 |
| 1,000 | 31 | 132 | (*) | ---- | 31 | 34 | (*) | ---- | 31 | 147 | (*) | ---- | 31 | 80 | (*) | ---- | 31 | 90 | (*) | ---- | 31 | 64 | (*) | ---- | 31 | 108 | 25.0 | 84 |
| 950 | 31 | 569 | 13.3 | 57 | 31 | 494 | (*) | ---- | 31 | 595 | 21.1 | 58 | 31 | 535 | (*) | ---- | 31 | 531 | (*) | ---- | 31 | 517 | (*) | ---- | 31 | 559 | 22.0 | 81 |
| 900 | 31 | 1,020 | 10.8 | 60 | 31 | 973 | (*) | ---- | 31 | 1,058 | 18.2 | 59 | 31 | 1,006 | 22.6 | 58 | 31 | 986 | 13.4 | 52 | 31 | 979 | 18.7 | 41 | 31 | 1,028 | 20.9 | 65 |
| 850 | 31 | 1,494 | 7.5 | 63 | 31 | 1,467 | (*) | ---- | 31 | 1,545 | 14.4 | 63 | 31 | 1,502 | 20.0 | 54 | 31 | 1,465 | 10.1 | 56 | 31 | 1,466 | 15.3 | 40 | 31 | 1,521 | 18.6 | 58 |
| 800 | 31 | 1,990 | 4.1 | 64 | 31 | 1,987 | 17.7 | 28 | 31 | 2,054 | 10.6 | 65 | 31 | 2,022 | 16.6 | 49 | 31 | 1,967 | 7.2 | 60 | 31 | 1,976 | 11.2 | 44 | 31 | 2,040 | 16.5 | 45 |
| 750 | 31 | 2,516 | 1.4 | 54 | 31 | 2,537 | 13.4 | 30 | 31 | 2,594 | 7.1 | 58 | 30 | 2,573 | 12.6 | 50 | 31 | 2,502 | 4.3 | 59 | 31 | 2,514 | 6.7 | 48 | 31 | 2,592 | 14.0 | 35 |
| 700 | 31 | 3,065 | −1.3 | 50 | 31 | 3,109 | 8.3 | 35 | 31 | 3,153 | 3.7 | 54 | 30 | 3,143 | 8.6 | 43 | 31 | 3,054 | 1.0 | 57 | 31 | 3,072 | 2.3 | 52 | 31 | 3,165 | 10.4 | 34 |
| 650 | 31 | 3,656 | −4.6 | 47 | 31 | 3,717 | 3.0 | 41 | 31 | 3,754 | .4 | 45 | 30 | 3,756 | 4.1 | 43 | 31 | 3,651 | −2.7 | 53 | 31 | 3,669 | 2.3 | 53 | 30 | 3,779 | 5.9 | 38 |
| 600 | 31 | 4,278 | −8.1 | 44 | 31 | 4,357 | −2.6 | 48 | 31 | 4,389 | −3.2 | 38 | 30 | 4,398 | −.7 | 43 | 31 | 4,276 | −6.6 | 48 | 31 | 4,296 | −7.0 | 53 | 30 | 4,427 | −1.2 | 42 |
| 550 | 30 | 4,954 | −12.3 | 38 | 31 | 5,041 | −8.3 | 52 | 29 | 5,069 | −7.4 | 35 | 30 | 5,084 | −5.9 | 40 | 31 | 4,955 | −11.4 | 49 | 31 | 4,971 | −11.6 | 52 | 30 | 5,118 | −3.7 | 38 |
| 500 | 29 | 5,673 | −17.0 | 38 | 31 | 5,772 | −13.9 | 51 | 28 | 5,805 | −12.2 | ---- | 30 | 5,826 | −11.1 | 34 | 31 | 5,674 | −16.4 | 47 | 31 | 5,693 | −16.8 | 49 | 30 | 5,866 | −9.0 | 38 |
| 450 | 28 | 6,459 | −22.6 | ---- | 31 | 6,569 | −19.5 | 42 | 28 | 6,608 | −17.8 | ---- | 30 | 6,633 | −16.8 | ---- | 31 | 6,464 | −22.0 | ---- | 31 | 6,481 | −22.4 | ---- | 30 | 6,681 | −14.7 | 38 |
| 400 | 28 | 7,306 | −28.6 | ---- | 31 | 7,429 | −25.7 | ---- | 28 | 7,473 | −24.2 | ---- | 30 | 7,503 | −23.1 | ---- | 31 | 7,313 | −28.5 | ---- | 31 | 7,329 | −28.8 | ---- | 30 | 7,556 | −21.0 | ---- |
| 350 | 28 | 8,247 | −36.0 | ---- | 31 | 8,382 | −33.2 | ---- | 28 | 8,432 | −31.7 | ---- | 30 | 8,467 | −30.3 | ---- | 31 | 8,255 | −36.0 | ---- | 31 | 8,270 | −36.2 | ---- | 30 | 8,529 | −28.1 | ---- |
| 300 | 28 | 9,299 | −44.2 | ---- | 31 | 9,447 | −41.0 | ---- | 28 | 9,502 | −40.2 | ---- | 30 | 9,544 | −38.6 | ---- | 30 | 9,305 | −44.4 | ---- | 31 | 9,320 | −44.7 | ---- | 30 | 9,617 | −36.0 | ---- |
| 250 | 26 | 10,499 | −51.6 | ---- | 30 | 10,665 | −49.4 | ---- | 27 | 10,725 | −49.7 | ---- | 29 | 10,768 | −47.8 | ---- | 29 | 10,500 | −53.0 | ---- | 30 | 10,515 | −54.1 | ---- | 29 | 10,861 | −44.8 | ---- |
| 200 | 23 | 11,940 | −57.7 | ---- | 30 | 12,099 | −57.2 | ---- | 27 | 12,151 | −59.5 | ---- | 29 | 12,210 | −57.0 | ---- | 23 | 11,914 | −59.3 | ---- | 28 | 11,921 | −59.3 | ---- | 27 | 12,320 | −55.2 | ---- |
| 175 | 20 | 12,757 | −58.8 | ---- | 26 | 12,938 | −58.5 | ---- | 26 | 12,982 | −62.8 | ---- | 28 | 13,050 | −60.2 | ---- | 17 | 12,759 | −56.9 | ---- | 26 | 12,752 | −57.6 | ---- | 27 | 13,162 | −60.4 | ---- |
| 150 | 18 | 13,726 | −58.8 | ---- | 18 | 13,906 | −58.2 | ---- | 22 | 13,938 | −62.7 | ---- | 27 | 14,009 | −61.7 | ---- | 16 | 13,736 | −55.6 | ---- | 22 | 13,734 | −55.9 | ---- | 25 | 14,112 | −64.4 | ---- |
| 125 | 14 | 14,860 | −57.0 | ---- | 16 | 15,055 | −60.5 | ---- | 15 | 15,051 | −63.4 | ---- | 21 | 15,142 | −63.3 | ---- | 12 | 14,890 | −55.9 | ---- | 17 | 14,877 | −56.2 | ---- | 19 | 15,237 | −67.3 | ---- |
| 100 | 8 | 16,294 | −60.0 | ---- | 6 | 16,439 | −63.5 | ---- | 10 | 16,414 | −65.7 | ---- | 10 | 16,490 | −65.7 | ---- | 8 | 16,272 | −55.7 | ---- | 9 | 16,271 | −58.5 | ---- | 13 | 16,575 | −72.1 | ---- |
| 80 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 5 | 17,751 | −66.9 | ---- | 6 | 17,829 | −66.4 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 8 | 17,874 | −72.7 | ---- |

| Standard pressure surface (mb.) | Buffalo, N. Y. (989.9 mb.) | | | | Camaguey, Cuba [1] (---- mb.) | | | | Caribou, Maine (991.7 mb.) | | | | Charleston, S. C. (1,015.3 mb.) | | | | Ciudad Victoria, Mex. (971.3 mb.) | | | | Columbia, Mo. (986.1 mb.) | | | | Dodge City, Kans. (922.4 mb.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Surface | 31 | 221 | 12.8 | 67 | ---- | ---- | ---- | ---- | 31 | 191 | 8.3 | 73 | 31 | 13 | 18.9 | 90 | 29 | 335 | 29.1 | 60 | 31 | 239 | 18.7 | 73 | 31 | 792 | 16.6 | 80 |
| 1,000 | 31 | 134 | (*) | ---- | ---- | ---- | ---- | ---- | 31 | 122 | (*) | ---- | 31 | 144 | 20.5 | 84 | 29 | 75 | (*) | ---- | 31 | 118 | (*) | ---- | 31 | 94 | (*) | ---- |
| 950 | 31 | 572 | 13.9 | 55 | ---- | ---- | ---- | ---- | 31 | 553 | 9.0 | 60 | 31 | 580 | 19.6 | 68 | 29 | 533 | 27.2 | 60 | 31 | 566 | 19.1 | 63 | 31 | 541 | (*) | ---- |
| 900 | 31 | 1,021 | 11.2 | 56 | ---- | ---- | ---- | ---- | 31 | 993 | 6.0 | 62 | 31 | 1,052 | 16.5 | 67 | 29 | 1,008 | 23.2 | 64 | 31 | 1,023 | 16.1 | 64 | 31 | 1,002 | 17.7 | 69 |
| 850 | 31 | 1,496 | 7.8 | 58 | ---- | ---- | ---- | ---- | 31 | 1,459 | 3.2 | 63 | 31 | 1,537 | 13.4 | 64 | 29 | 1,505 | 19.4 | 71 | 31 | 1,507 | 13.2 | 65 | 31 | 1,490 | 15.5 | 61 |
| 800 | 31 | 1,993 | 4.3 | 62 | ---- | ---- | ---- | ---- | 31 | 1,948 | −.1 | 62 | 31 | 2,044 | 10.3 | 58 | 29 | 2,025 | 15.9 | 73 | 31 | 2,015 | 10.1 | 60 | 31 | 2,002 | 13.1 | 54 |
| 750 | 31 | 2,519 | 1.2 | 59 | ---- | ---- | ---- | ---- | 31 | 2,470 | −2.5 | 61 | 31 | 2,582 | 7.2 | 53 | 29 | 2,575 | 13.3 | 58 | 31 | 2,557 | 6.8 | 56 | 31 | 2,544 | 9.5 | 52 |
| 700 | 31 | 3,068 | −1.7 | 54 | ---- | ---- | ---- | ---- | 31 | 3,008 | −5.0 | 59 | 31 | 3,144 | 3.9 | 50 | 29 | 3,150 | 10.2 | 46 | 31 | 3,112 | 3.3 | 53 | 31 | 3,111 | 5.7 | 50 |
| 650 | 31 | 3,660 | −4.7 | 47 | ---- | ---- | ---- | ---- | 31 | 3,593 | −7.9 | 54 | 30 | 3,744 | .2 | 50 | 29 | 3,764 | 6.2 | 45 | 31 | 3,712 | −.3 | 49 | 31 | 3,714 | 1.4 | 47 |
| 600 | 31 | 4,281 | −8.1 | 43 | ---- | ---- | ---- | ---- | 31 | 4,206 | −11.1 | 49 | 30 | 4,380 | −3.7 | 46 | 29 | 4,413 | 1.8 | 46 | 31 | 4,346 | −4.3 | 44 | 31 | 4,352 | −3.0 | 46 |
| 550 | 30 | 4,955 | −12.3 | 38 | ---- | ---- | ---- | ---- | 31 | 4,873 | −15.2 | 46 | 29 | 5,067 | −7.7 | 43 | 28 | 5,110 | −3.4 | 48 | 31 | 5,026 | −8.8 | 42 | 30 | 5,032 | −7.9 | 41 |
| 500 | 30 | 5,675 | −17.0 | 35 | ---- | ---- | ---- | ---- | 31 | 5,583 | −19.8 | 44 | 29 | 5,802 | −12.4 | 40 | 27 | 5,856 | −8.6 | 48 | 31 | 5,757 | −13.8 | 40 | 30 | 5,767 | −13.2 | 36 |
| 450 | 30 | 6,462 | −22.6 | ---- | ---- | ---- | ---- | ---- | 31 | 6,363 | −25.0 | ---- | 29 | 6,603 | −18.0 | 39 | 27 | 6,679 | −13.4 | 39 | 31 | 6,555 | −19.4 | 37 | 30 | 6,565 | −18.7 | 33 |
| 400 | 27 | 7,307 | −28.8 | ---- | ---- | ---- | ---- | ---- | 31 | 7,203 | −31.1 | ---- | 29 | 7,469 | −24.3 | 40 | 27 | 7,554 | −19.6 | 38 | 30 | 7,411 | −25.8 | ---- | 30 | 7,429 | −25.2 | ---- |
| 350 | 26 | 8,247 | −36.0 | ---- | ---- | ---- | ---- | ---- | 31 | 8,136 | −38.1 | ---- | 29 | 8,428 | −31.7 | 39 | 27 | 8,531 | −26.6 | ---- | 30 | 8,363 | −33.2 | ---- | 30 | 8,383 | −32.6 | ---- |
| 300 | 24 | 9,312 | −43.9 | ---- | ---- | ---- | ---- | ---- | 31 | 9,181 | −45.3 | ---- | 28 | 9,499 | −39.9 | ---- | 27 | 9,626 | −34.9 | ---- | 30 | 9,427 | −41.6 | ---- | 30 | 9,452 | −40.5 | ---- |
| 250 | 23 | 10,520 | −52.1 | ---- | ---- | ---- | ---- | ---- | 29 | 10,388 | −52.2 | ---- | 28 | 10,719 | −49.2 | ---- | 26 | 10,875 | −44.8 | ---- | 30 | 10,639 | −50.6 | ---- | 30 | 10,668 | −50.0 | ---- |
| 200 | 15 | 11,970 | −59.0 | ---- | ---- | ---- | ---- | ---- | 17 | 11,798 | −55.1 | ---- | 25 | 12,159 | −59.0 | ---- | 25 | 12,333 | −56.5 | ---- | 26 | 12,060 | −59.0 | ---- | 29 | 12,101 | −58.9 | ---- |
| 175 | 11 | 12,848 | −62.2 | ---- | ---- | ---- | ---- | ---- | 16 | 12,651 | −54.8 | ---- | 22 | 12,990 | −62.0 | ---- | 23 | 13,169 | −62.0 | ---- | 23 | 12,902 | −61.2 | ---- | 28 | 12,927 | −60.5 | ---- |
| 150 | 7 | 13,817 | −63.7 | ---- | ---- | ---- | ---- | ---- | 11 | 13,620 | −52.8 | ---- | 15 | 13,937 | −61.5 | ---- | 18 | 14,124 | −67.2 | ---- | 13 | 13,877 | −61.2 | ---- | 27 | 13,891 | −59.4 | ---- |
| 125 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 10 | 15,068 | −62.2 | ---- | 12 | 15,215 | −70.9 | ---- | 9 | 15,018 | −61.7 | ---- | 23 | 15,028 | −60.2 | ---- |
| 100 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 5 | 16,508 | −74.8 | ---- | 7 | 16,391 | −63.9 | ---- | 20 | 16,413 | −62.4 | ---- |
| 80 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 14 | 17,793 | −64.0 | ---- |

| Standard pressure surface (mb.) | El Paso, Tex. (878.1 mb.) | | | | Ely, Nev. (806.6 mb.) | | | | Glasgow, Mont. (936.2 mb.) | | | | Grand Junction, Colo. (850.0 mb.) | | | | Great Falls, Mont. (885.0 mb.) | | | | Greensboro, N. C. (985.8 mb.) | | | | Hatteras, N. C. (1,017.3 mb.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Surface | 31 | 1,195 | 24.5 | 23 | 31 | 1,908 | 11.5 | 59 | 31 | 648 | 16.7 | 42 | 31 | 1,474 | 16.3 | 43 | 31 | 1,128 | 14.8 | 46 | 31 | 273 | 16.9 | 86 | 31 | 3 | 18.9 | 85 |
| 1,000 | 31 | 37 | (*) | ---- | 31 | 69 | (*) | ---- | 31 | 78 | (*) | ---- | 31 | 62 | (*) | ---- | 31 | 77 | (*) | ---- | 31 | 149 | (*) | ---- | 31 | 151 | 18.9 | 85 |
| 950 | 31 | 506 | (*) | ---- | 31 | 518 | (*) | ---- | 31 | 525 | (*) | ---- | 31 | 516 | (*) | ---- | 31 | 526 | (*) | ---- | 31 | 591 | 18.5 | 63 | 31 | 595 | 17.0 | 69 |
| 900 | 31 | 988 | (*) | ---- | 31 | 983 | (*) | ---- | 31 | 983 | 16.1 | 39 | 31 | 985 | (*) | ---- | 31 | 993 | (*) | ---- | 31 | 1,053 | 15.9 | 64 | 31 | 1,051 | 14.8 | 65 |
| 850 | 31 | 1,479 | 23.6 | 24 | 31 | 1,465 | (*) | ---- | 31 | 1,465 | 12.1 | 43 | 31 | 1,473 | (*) | ---- | 31 | 1,468 | 13.2 | 43 | 31 | 1,536 | 12.7 | 66 | 31 | 1,532 | 12.0 | 63 |
| 800 | 31 | 2,004 | 19.3 | 26 | 31 | 1,977 | 12.2 | 51 | 31 | 1,969 | 8.2 | 48 | 31 | 1,989 | 14.6 | 40 | 31 | 1,974 | 9.2 | 47 | 31 | 2,043 | 9.1 | 68 | 31 | 2,038 | 9.1 | 60 |
| 750 | 31 | 2,557 | 14.5 | 28 | 31 | 2,517 | 8.5 | 47 | 31 | 2,498 | 4.3 | 53 | 31 | 2,531 | 10.1 | 45 | 31 | 2,510 | 4.9 | 53 | 31 | 2,579 | 5.5 | 66 | 31 | 2,575 | 6.1 | 53 |
| 700 | 31 | 3,130 | 9.4 | 31 | 31 | 3,081 | 4.1 | 50 | 31 | 3,056 | .6 | 55 | 31 | 3,099 | 5.4 | 51 | 31 | 3,064 | .7 | 57 | 31 | 3,136 | 2.1 | 59 | 31 | 3,132 | 2.9 | 45 |
| 650 | 31 | 3,741 | 4.3 | 34 | 31 | 3,680 | −.9 | 54 | 31 | 3,648 | −3.6 | 54 | 31 | 3,702 | .4 | 58 | 30 | 3,658 | −3.7 | 59 | 30 | 3,734 | −1.1 | 50 | 31 | 3,727 | −.8 | 41 |
| 600 | 31 | 4,384 | −.8 | 36 | 31 | 4,312 | −5.9 | 59 | 31 | 4,274 | −7.8 | 52 | 31 | 4,336 | −4.7 | 62 | 30 | 4,284 | −7.9 | 56 | 29 | 4,365 | −4.6 | 42 | 31 | 4,362 | −4.7 | 38 |
| 550 | 31 | 5,073 | −6.0 | 35 | 31 | 4,986 | −11.1 | 60 | 31 | 4,947 | −12.4 | 51 | 31 | 5,016 | −9.8 | 62 | 30 | 4,958 | −12.2 | 51 | 29 | 5,043 | −8.7 | 38 | 29 | 5,044 | −8.8 | 33 |
| 500 | 31 | 5,811 | −11.6 | 31 | 31 | 5,712 | −16.3 | 52 | 31 | 5,667 | −17.3 | 44 | 31 | 5,744 | −14.8 | 52 | 30 | 5,677 | −17.3 | 45 | 29 | 5,777 | −13.2 | 35 | 29 | 5,777 | −13.7 | 32 |
| 450 | 31 | 6,618 | −17.0 | ---- | 31 | 6,503 | −22.1 | ---- | 31 | 6,452 | −23.0 | ---- | 30 | 6,539 | −20.5 | ---- | 30 | 6,463 | −23.2 | ---- | 29 | 6,576 | −18.7 | 31 | 28 | 6,571 | −19.3 | ---- |
| 400 | 31 | 7,484 | −23.7 | ---- | 31 | 7,351 | −28.5 | ---- | 31 | 7,300 | −29.4 | ---- | 30 | 7,395 | −27.0 | ---- | 30 | 7,308 | −29.9 | ---- | 29 | 7,439 | −25.3 | ---- | 28 | 7,435 | −25.8 | ---- |
| 350 | 31 | 8,444 | −31.5 | ---- | 30 | 8,288 | −36.3 | ---- | 31 | 8,238 | −36.9 | ---- | 30 | 8,342 | −34.5 | ---- | 30 | 8,244 | −37.3 | ---- | 28 | 8,390 | −32.6 | ---- | 28 | 8,387 | −33.0 | ---- |
| 300 | 30 | 9,517 | −39.8 | ---- | 30 | 9,338 | −44.7 | ---- | 31 | 9,285 | −45.4 | ---- | 29 | 9,395 | −43.1 | ---- | 29 | 9,292 | −45.6 | ---- | 28 | 9,457 | −40.7 | ---- | 27 | 9,451 | −40.9 | ---- |
| 250 | 28 | 10,745 | −49.0 | ---- | 30 | 10,535 | −52.7 | ---- | 29 | 10,477 | −54.7 | ---- | 25 | 10,617 | −51.3 | ---- | 28 | 10,481 | −54.7 | ---- | 26 | 10,682 | −50.0 | ---- | 27 | 10,665 | −50.1 | ---- |
| 200 | 24 | 12,191 | −57.2 | ---- | 25 | 11,950 | −55.9 | ---- | 29 | 11,882 | −60.3 | ---- | 23 | 12,048 | −57.8 | ---- | 26 | 11,883 | −59.7 | ---- | 20 | 12,124 | −59.1 | ---- | 26 | 12,088 | −58.3 | ---- |
| 175 | 24 | 13,028 | −60.2 | ---- | 23 | 12,802 | −56.8 | ---- | 26 | 12,711 | −58.0 | ---- | 17 | 12,901 | −59.0 | ---- | 24 | 12,709 | −57.9 | ---- | 18 | 12,963 | −61.2 | ---- | 26 | 12,923 | −60.3 | ---- |
| 150 | 21 | 13,989 | −61.2 | ---- | 23 | 13,777 | −56.8 | ---- | 23 | 13,676 | −56.1 | ---- | 10 | 13,867 | −57.6 | ---- | 19 | 13,690 | −55.9 | ---- | 11 | 13,920 | −60.2 | ---- | 26 | 13,884 | −59.8 | ---- |
| 125 | 16 | 15,115 | −63.3 | ---- | 17 | 14,925 | −57.9 | ---- | 15 | 14,842 | −56.1 | ---- | 5 | 15,015 | −57.6 | ---- | 19 | 14,847 | −56.8 | ---- | ---- | ---- | ---- | ---- | 23 | 15,017 | −60.9 | ---- |
| 100 | 13 | 16,471 | −67.2 | ---- | 15 | 16,327 | −60.4 | ---- | 7 | 16,256 | −57.8 | ---- | ---- | ---- | ---- | ---- | 15 | 16,263 | −57.3 | ---- | ---- | ---- | ---- | ---- | 16 | 16,397 | −63.0 | ---- |
| 80 | 7 | 17,802 | −67.6 | ---- | 9 | 17,713 | −61.2 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 14 | 17,674 | −58.4 | ---- | ---- | ---- | ---- | ---- | 9 | 17,772 | −63.1 | ---- |
| 60 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 10 | 19,485 | −58.1 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 50 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 5 | 20,626 | −57.5 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |

**See footnotes at end of table.**

TABLE 1.—*Mean dynamic height (geopotential) in units of 0.98 dynamic meters, temperature in degrees centigrade, and relative humidity in percent, for standard pressures, as obtained by radiosondes during May 1949*—Continued

| Standard pressure surface (mb.) | Havana, Cuba [1] (---- mb.) | | | | Honolulu, T. H. (1,016.0 mb.) | | | | International Falls, Minn. (971.0 mb.) | | | | Joliet, Ill. (994.5 mb.) | | | | Lake Charles, La. (1,014.3 mb.) | | | | Lander, Wyo. (827.5 mb.) | | | | Las Vegas, Nev. (932.8 mb.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Dynamic height | Temperature | Relative humidity | Number of observations | Dynamic height | Temperature | Relative humidity | Number of observations | Dynamic height | Temperature | Relative humidity | Number of observations | Dynamic height | Temperature | Relative humidity | Number of observations | Dynamic height | Temperature | Relative humidity | Number of observations | Dynamic height | Temperature | Relative humidity | Number of observations | Dynamic height | Temperature | Relative humidity |
| Surface | ---- | ---- | ---- | ---- | 31 | 3 | 25.8 | 61 | 31 | 360 | 10.3 | 68 | 31 | 178 | 14.1 | 70 | 31 | 5 | 23.1 | 84 | 31 | 1,696 | 12.0 | 59 | 31 | 660 | 23.3 | 26 |
| 1,000 | ---- | ---- | ---- | ---- | 31 | 142 | 23.5 | 63 | 31 | 111 | (*) | ---- | 31 | 130 | (*) | ---- | 31 | 129 | 23.6 | 78 | 31 | 72 | (*) | ---- | 31 | 45 | (*) | ---- |
| 950 | ---- | ---- | ---- | ---- | 31 | 592 | 19.7 | 71 | 31 | 545 | 11.9 | 59 | 31 | 571 | 16.0 | 55 | 31 | 578 | 21.0 | 75 | 31 | 522 | (*) | ---- | 31 | 501 | (*) | ---- |
| 900 | ---- | ---- | ---- | ---- | 31 | 1,052 | 16.4 | 77 | 31 | 993 | 9.2 | 59 | 31 | 1,023 | 13.3 | 58 | 31 | 1,044 | 18.4 | 67 | 31 | 985 | (*) | ---- | 31 | 972 | 22.6 | 26 |
| 850 | ---- | ---- | ---- | ---- | 31 | 1,537 | 13.6 | 75 | 31 | 1,464 | 6.2 | 63 | 31 | 1,502 | 10.1 | 60 | 31 | 1,532 | 15.9 | 53 | 31 | 1,468 | (*) | ---- | 31 | 1,465 | 18.3 | 28 |
| 800 | ---- | ---- | ---- | ---- | 31 | 2,047 | 12.9 | 50 | 31 | 1,959 | 3.8 | 59 | 31 | 2,004 | 7.3 | 57 | 31 | 2,045 | 13.6 | 42 | 31 | 1,979 | 11.9 | 52 | 31 | 1,979 | 13.7 | 32 |
| 750 | ---- | ---- | ---- | ---- | 31 | 2,591 | 10.7 | 36 | 31 | 2,485 | 1.3 | 56 | 31 | 2,540 | 4.7 | 50 | 31 | 2,593 | 11.0 | 34 | 31 | 2,518 | 8.0 | 52 | 31 | 2,520 | 8.8 | 37 |
| 700 | ---- | ---- | ---- | ---- | 31 | 3,161 | 8.3 | 29 | 31 | 3,033 | −1.8 | 51 | 31 | 3,092 | 1.5 | 45 | 31 | 3,159 | 7.6 | 30 | 31 | 3,081 | 3.8 | 54 | 31 | 3,083 | 3.8 | 42 |
| 650 | ---- | ---- | ---- | ---- | 31 | 3,768 | 4.9 | 30 | 31 | 3,626 | −5.3 | 53 | 31 | 3,690 | −2.2 | 43 | 31 | 3,767 | 3.4 | 33 | 31 | 3,679 | −1.0 | 59 | 31 | 3,679 | −1.2 | 42 |
| 600 | ---- | ---- | ---- | ---- | 31 | 4,417 | .7 | 33 | 31 | 4,243 | −8.8 | 50 | 31 | 4,317 | −6.2 | 42 | 31 | 4,408 | −1.3 | 32 | 31 | 4,312 | −5.8 | 60 | 31 | 4,313 | −5.9 | 37 |
| 550 | ---- | ---- | ---- | ---- | 31 | 5,108 | −3.6 | 34 | 30 | 4,919 | −13.0 | 46 | 31 | 4,995 | −10.6 | 39 | 31 | 5,096 | −5.9 | 30 | 31 | 4,989 | −10.7 | 59 | 31 | 4,989 | −10.4 | 34 |
| 500 | ---- | ---- | ---- | ---- | 31 | 5,856 | −8.6 | 29 | 30 | 5,635 | −17.7 | 43 | 31 | 5,719 | −15.2 | 39 | 29 | 5,837 | −11.1 | ---- | 31 | 5,713 | −15.8 | 53 | 31 | 5,715 | −15.8 | 33 |
| 450 | ---- | ---- | ---- | ---- | 31 | 6,672 | −14.0 | 30 | 30 | 6,420 | −23.4 | ---- | 31 | 6,512 | −20.9 | ---- | 29 | 6,646 | −16.6 | ---- | 31 | 6,506 | −21.5 | ---- | 31 | 6,504 | −21.8 | ---- |
| 400 | ---- | ---- | ---- | ---- | 31 | 7,550 | −20.1 | ---- | 30 | 7,266 | −29.7 | ---- | 31 | 7,366 | −27.3 | ---- | 28 | 7,517 | −23.1 | ---- | 31 | 7,355 | −28.1 | ---- | 31 | 7,356 | −28.5 | ---- |
| 350 | ---- | ---- | ---- | ---- | 31 | 8,525 | −27.7 | ---- | 29 | 8,202 | −37.1 | ---- | 29 | 8,313 | −34.8 | ---- | 28 | 8,475 | −30.9 | ---- | 31 | 8,297 | −36.0 | ---- | 31 | 8,299 | −35.6 | ---- |
| 300 | ---- | ---- | ---- | ---- | 31 | 9,614 | −36.1 | ---- | 26 | 9,243 | −45.4 | ---- | 29 | 9,370 | −43.2 | ---- | 28 | 9,549 | −39.4 | ---- | 31 | 9,348 | −44.9 | ---- | 31 | 9,355 | −42.8 | ---- |
| 250 | ---- | ---- | ---- | ---- | 31 | 10,854 | −45.8 | ---- | 24 | 10,434 | −53.6 | ---- | 29 | 10,573 | −52.0 | ---- | 28 | 10,770 | −49.3 | ---- | 30 | 10,544 | −54.2 | ---- | 31 | 10,562 | −50.5 | ---- |
| 200 | ---- | ---- | ---- | ---- | 30 | 12,307 | −56.7 | ---- | 21 | 11,850 | −57.7 | ---- | 27 | 12,000 | −58.6 | ---- | 28 | 12,198 | −59.0 | ---- | 26 | 11,954 | −59.7 | ---- | 30 | 11,992 | −56.5 | ---- |
| 175 | ---- | ---- | ---- | ---- | 30 | 13,143 | −62.0 | ---- | 18 | 12,681 | −58.2 | ---- | 22 | 12,863 | −60.7 | ---- | 28 | 13,028 | −62.6 | ---- | 22 | 12,796 | −58.6 | ---- | 30 | 12,835 | −57.9 | ---- |
| 150 | ---- | ---- | ---- | ---- | 30 | 14,085 | −66.0 | ---- | 11 | 13,638 | −54.7 | ---- | 20 | 13,825 | −60.3 | ---- | 27 | 13,970 | −64.1 | ---- | 16 | 13,772 | −57.2 | ---- | 27 | 13,808 | −57.5 | ---- |
| 125 | ---- | ---- | ---- | ---- | 30 | 15,184 | −68.4 | ---- | 5 | 14,797 | −54.5 | ---- | 17 | 14,958 | −60.0 | ---- | 24 | 15,082 | −66.8 | ---- | 10 | 14,932 | −57.8 | ---- | 25 | 14,955 | −60.1 | ---- |
| 100 | ---- | ---- | ---- | ---- | 27 | 16,513 | −69.6 | ---- | ---- | ---- | ---- | ---- | 14 | 16,354 | −61.3 | ---- | 22 | 16,416 | −69.7 | ---- | 7 | 16,338 | −58.1 | ---- | 22 | 16,344 | −61.5 | ---- |
| 80 | ---- | ---- | ---- | ---- | 24 | 17,850 | −67.7 | ---- | ---- | ---- | ---- | ---- | 11 | 17,720 | −61.3 | ---- | 18 | 17,745 | −69.6 | ---- | ---- | ---- | ---- | ---- | 16 | 17,726 | −62.5 | ---- |
| 60 | ---- | ---- | ---- | ---- | 17 | 19,595 | −63.9 | ---- | ---- | ---- | ---- | ---- | 6 | 19,514 | −60.2 | ---- | 9 | 19,462 | −64.5 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 50 | ---- | ---- | ---- | ---- | 13 | 20,713 | −59.4 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 5 | 20,570 | −61.3 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 40 | ---- | ---- | ---- | ---- | 10 | 22,132 | −54.2 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |

| Standard pressure surface (mb.) | Little Rock, Ark. (1,005.6 mb.) | | | | Mazatlan, Mex. (1,008.2 mb.) | | | | Medford, Oreg. (967.2 mb.) | | | | Merida, Mex. (1,010.0 mb.) | | | | Miami, Fla. (1,016.1 mb.) | | | | Nantucket, Mass. (1,015.6 mb.) | | | | Nashville, Tenn. (995.4mb.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Surface | 31 | 79 | 21.3 | 76 | 31 | 14 | 25.1 | 74 | 31 | 401 | 17.5 | 55 | 31 | 27 | 27.7 | 67 | 31 | 4 | 24.4 | 75 | 31 | 14 | 9.9 | 92 | 31 | 177 | 19.6 | 76 |
| 1,000 | 31 | 127 | 22.1 | 70 | 31 | 86 | 24.4 | 74 | 31 | 114 | (*) | ---- | 31 | 115 | 27.0 | 67 | 31 | 144 | 24.1 | 74 | 31 | 143 | 12.0 | 81 | 31 | 137 | (*) | ---- |
| 950 | 31 | 575 | 21.1 | 64 | 31 | 544 | 34.6 | 33 | 31 | 554 | 17.1 | 51 | 31 | 570 | 24.9 | 61 | 31 | 593 | 21.3 | 72 | 31 | 575 | 12.8 | 64 | 31 | 583 | 19.8 | 56 |
| 900 | 31 | 1,040 | 18.0 | 65 | 31 | 1,010 | 24.3 | 25 | 31 | 1,013 | 13.9 | 52 | 31 | 1,041 | 21.7 | 64 | 31 | 1,059 | 18.6 | 63 | 31 | 1,027 | 10.8 | 61 | 31 | 1,045 | 16.7 | 58 |
| 850 | 31 | 1,527 | 14.8 | 63 | 31 | 1,507 | 21.6 | 27 | 31 | 1,492 | 10.1 | 57 | 31 | 1,535 | 18.2 | 67 | 31 | 1,547 | 15.4 | 63 | 31 | 1,502 | 8.2 | 58 | 31 | 1,529 | 13.4 | 59 |
| 800 | 31 | 2,038 | 11.6 | 58 | 31 | 2,029 | 18.5 | 24 | 31 | 1,992 | 6.3 | 60 | 31 | 2,052 | 14.7 | 70 | 31 | 2,059 | 12.2 | 61 | 31 | 2,000 | 5.7 | 54 | 31 | 2,036 | 10.0 | 59 |
| 750 | 31 | 2,581 | 9.1 | 48 | 31 | 2,589 | 15.1 | 22 | 31 | 2,522 | 2.6 | 59 | 31 | 2,599 | 11.2 | 64 | 31 | 2,599 | 9.1 | 53 | 31 | 2,528 | 2.9 | 52 | 31 | 2,573 | 6.5 | 59 |
| 700 | 31 | 3,144 | 5.6 | 44 | 31 | 3,159 | 11.3 | 23 | 31 | 3,073 | −.6 | 56 | 31 | 3,169 | 8.2 | 52 | 31 | 3,166 | 6.0 | 46 | 31 | 3,081 | .0 | 49 | 31 | 3,132 | 3.1 | 53 |
| 650 | 31 | 3,748 | 1.8 | 41 | 31 | 3,780 | 7.0 | ---- | 31 | 3,665 | −4.1 | 53 | 31 | 3,782 | 4.8 | 45 | 31 | 3,769 | 2.5 | 40 | 31 | 3,674 | −3.4 | 43 | 31 | 3,733 | .0 | 39 |
| 600 | 31 | 4,387 | −2.4 | 38 | 31 | 4,424 | 2.3 | ---- | 31 | 4,288 | −8.1 | 47 | 30 | 4,425 | 1.5 | 33 | 31 | 4,412 | −1.0 | 32 | 31 | 4,298 | −7.1 | 44 | 31 | 4,366 | −3.9 | 33 |
| 550 | 31 | 5,069 | −7.1 | 35 | 31 | 5,125 | −2.7 | ---- | 31 | 4,959 | −12.5 | 45 | 30 | 5,121 | −2.5 | ---- | 31 | 5,101 | −5.1 | 31 | 31 | 4,971 | −11.4 | 42 | 30 | 5,048 | −8.2 | 30 |
| 500 | 31 | 5,808 | −12.1 | 32 | 31 | 5,871 | −8.1 | ---- | 31 | 5,680 | −17.1 | 42 | 30 | 5,871 | −7.0 | ---- | 31 | 5,843 | −9.6 | 32 | 30 | 5,692 | −16.3 | 41 | 29 | 5,785 | −13.1 | 32 |
| 450 | 30 | 6,609 | −18.0 | ---- | 30 | 6,692 | −13.7 | ---- | 31 | 6,464 | −22.9 | ---- | 30 | 6,689 | −12.3 | ---- | 31 | 6,657 | −15.2 | 31 | 30 | 6,483 | −22.0 | ---- | 29 | 6,583 | −18.7 | ---- |
| 400 | 30 | 4,474 | −24.4 | ---- | 30 | 7,567 | −20.2 | ---- | 31 | 7,313 | −29.5 | ---- | 30 | 7,574 | −19.1 | ---- | 31 | 7,529 | −21.5 | ---- | 30 | 7,333 | −28.3 | ---- | 29 | 7,447 | −24.9 | ---- |
| 350 | 30 | 8,432 | −31.9 | ---- | 28 | 8,546 | −27.2 | ---- | 31 | 8,252 | −36.6 | ---- | 29 | 8,553 | −26.6 | ---- | 30 | 8,498 | −28.9 | ---- | 28 | 8,267 | −35.4 | ---- | 29 | 8,404 | −32.2 | ---- |
| 300 | 30 | 9,503 | −40.1 | ---- | 28 | 9,638 | −35.2 | ---- | 30 | 9,299 | −44.9 | ---- | 29 | 9,648 | −34.7 | ---- | 29 | 9,581 | −37.6 | ---- | 28 | 9,321 | −43.3 | ---- | 28 | 9,462 | −40.4 | ---- |
| 250 | 28 | 10,724 | −49.0 | ---- | 28 | 10,883 | −44.6 | ---- | 30 | 10,493 | −53.4 | ---- | 29 | 10,894 | −44.6 | ---- | 29 | 10,813 | −47.1 | ---- | 23 | 10,550 | −50.9 | ---- | 28 | 10,686 | −50.0 | ---- |
| 200 | 28 | 12,157 | −58.2 | ---- | 28 | 12,339 | −55.9 | ---- | 29 | 11,914 | −57.7 | ---- | 28 | 12,348 | −55.9 | ---- | 28 | 12,254 | −57.2 | ---- | 16 | 11,994 | −58.5 | ---- | 28 | 12,112 | −59.2 | ---- |
| 175 | 26 | 12,983 | −61.0 | ---- | 27 | 13,176 | −61.3 | ---- | 29 | 12,756 | −57.3 | ---- | 28 | 13,185 | −62.0 | ---- | 27 | 13,093 | −61.1 | ---- | 14 | 12,825 | −60.2 | ---- | 27 | 12,945 | −61.7 | ---- |
| 150 | 23 | 13,936 | −61.0 | ---- | 27 | 14,121 | −66.1 | ---- | 27 | 13,731 | −56.0 | ---- | 28 | 14,125 | −67.3 | ---- | 26 | 14,046 | −63.5 | ---- | 12 | 13,763 | −60.2 | ---- | 24 | 13,900 | −61.1 | ---- |
| 125 | 17 | 15,061 | −61.4 | ---- | 23 | 15,215 | −68.8 | ---- | 23 | 14,881 | −55.9 | ---- | 25 | 15,209 | −71.6 | ---- | 21 | 15,163 | −66.7 | ---- | 6 | 14,877 | −57.9 | ---- | 18 | 15,044 | −61.4 | ---- |
| 100 | 10 | 16,435 | −63.8 | ---- | 18 | 16,530 | −73.0 | ---- | 18 | 16,291 | −56.7 | ---- | 9 | 16,526 | −74.9 | ---- | 18 | 16,505 | −70.1 | ---- | ---- | ---- | ---- | ---- | 13 | 16,418 | −63.5 | ---- |
| 80 | 5 | 17,842 | −66.4 | ---- | 14 | 17,815 | −75.6 | ---- | 11 | 17,717 | −57.7 | ---- | ---- | ---- | ---- | ---- | 5 | 17,864 | 74.1 | ---- | ---- | ---- | ---- | ---- | 8 | 17,778 | −63.8 | ---- |
| 60 | ---- | ---- | ---- | ---- | 9 | 19,520 | −68.9 | ---- | 5 | 19,551 | −57.6 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |

| Standard pressure surface (mb.) | New Orleans, La. (1,015.8 mb.) | | | | North Platte, Nebr. (915.1 mb.) | | | | Oakland, Calif. (1,014.5 mb.) | | | | Oklahoma City, Okla. (967.4 mb.) | | | | Omaha, Nebr. (977.3 mb.) | | | | Phoenix, Ariz. (969.0 mb.) | | | | Pittsburgh, Pa. (972.0 mb.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Surface | 31 | 2 | 22.8 | 81 | 31 | 849 | 15.1 | 77 | 31 | 6 | 14.3 | 73 | 21 | 391 | 20.5 | 77 | 31 | 308 | 19.1 | 69 | 31 | 339 | 26.2 | 22 | 31 | 382 | 15.7 | 65 |
| 1,000 | 31 | 139 | 23.6 | 75 | 31 | 86 | (*) | ---- | 31 | 128 | 13.3 | 74 | 31 | 102 | (*) | ---- | 31 | 109 | (*) | ---- | 31 | 58 | (*) | ---- | 31 | 139 | (*) | ---- |
| 950 | 31 | 593 | 21.5 | 63 | 31 | 530 | (*) | ---- | 31 | 563 | 11.9 | 72 | 31 | 551 | 21.4 | 69 | 31 | 551 | 17.5 | 65 | 31 | 514 | 27.6 | 19 | 31 | 583 | 15.9 | 58 |
| 900 | 31 | 1,054 | 18.5 | 61 | 31 | 990 | 16.0 | 70 | 31 | 1,011 | 12.4 | 55 | 31 | 1,016 | 18.6 | 68 | 31 | 1,010 | 14.3 | 70 | 31 | 988 | 23.8 | 22 | 31 | 1,035 | 13.3 | 56 |
| 850 | 31 | 1,542 | 15.5 | 57 | 31 | 1,475 | 13.5 | 64 | 31 | 1,489 | 10.7 | 48 | 31 | 1,504 | 15.4 | 67 | 31 | 1,492 | 12.0 | 69 | 31 | 1,482 | 19.4 | 25 | 31 | 1,513 | 9.7 | 60 |
| 800 | 31 | 2,054 | 13.0 | 46 | 31 | 1,983 | 10.6 | 61 | 31 | 1,992 | 8.2 | 43 | 31 | 2,016 | 12.8 | 58 | 31 | 1,998 | 9.5 | 64 | 31 | 1,998 | 14.8 | 29 | 31 | 2,013 | 6.4 | 60 |
| 750 | 31 | 2,601 | 10.4 | 36 | 31 | 2,522 | 7.5 | 60 | 31 | 2,527 | 5.0 | 45 | 31 | 2,562 | 9.6 | 55 | 31 | 2,535 | 6.1 | 62 | 31 | 2,546 | 10.0 | 33 | 31 | 2,546 | 3.3 | 55 |
| 700 | 31 | 3,166 | 7.2 | 34 | 31 | 3,082 | 3.7 | 57 | 31 | 3,082 | 1.5 | 44 | 31 | 3,125 | 6.0 | 50 | 31 | 3,092 | 2.3 | 60 | 31 | 3,106 | 5.4 | 33 | 31 | 3,100 | .3 | 51 |
| 650 | 31 | 3,772 | 3.2 | 33 | 31 | 3,680 | −.4 | 55 | 30 | 3,681 | −2.2 | 41 | 31 | 3,730 | 2.0 | 47 | 31 | 3,689 | −1.5 | 54 | 31 | 3,710 | .9 | 29 | 31 | 3,693 | −3.0 | 48 |
| 600 | 30 | 4,415 | −1.2 | 33 | 31 | 4,315 | −5.0 | 53 | 30 | 4,307 | −6.4 | 39 | 31 | 4,368 | −2.6 | 46 | 31 | 4,320 | −6.0 | 50 | 31 | 4,343 | −3.5 | 26 | 31 | 4,318 | −6.6 | 44 |
| 550 | 30 | 5,104 | −5.7 | 32 | 31 | 4,993 | −9.9 | 52 | 30 | 4,985 | −10.7 | 34 | 30 | 5,054 | −7.1 | 44 | 31 | 4,998 | −10.4 | 46 | 31 | 5,024 | −8.4 | 26 | 31 | 4,994 | −11.0 | 38 |
| 500 | 30 | 5,844 | −10.7 | ---- | 31 | 5,721 | −14.8 | 44 | 29 | 5,710 | −15.8 | 35 | 30 | 5,790 | −12.3 | 40 | 31 | 5,724 | −15.0 | 43 | 31 | 5,754 | −13.7 | 26 | 31 | 5,718 | −15.5 | 32 |
| 450 | 30 | 6,657 | −16.3 | ---- | 31 | 6,515 | −20.5 | ---- | 29 | 6,499 | −21.5 | ---- | 30 | 6,597 | −17.9 | 34 | 31 | 6,519 | −20.6 | ---- | 31 | 6,552 | −19.6 | ---- | 30 | 6,514 | −21.0 | ---- |
| 400 | 30 | 7,522 | −22.7 | ---- | 31 | 7,370 | −27.2 | ---- | 29 | 7,353 | −28.2 | ---- | 30 | 7,459 | −24.4 | ---- | 31 | 7,374 | −27.0 | ---- | 31 | 7,411 | −26.5 | ---- | 29 | 7,373 | −26.8 | ---- |
| 350 | 29 | 8,486 | −30.2 | ---- | 31 | 8,317 | −34.7 | ---- | 29 | 8,296 | −35.3 | ---- | 29 | 8,414 | −31.5 | ---- | 31 | 8,322 | −34.3 | ---- | 31 | 8,361 | −33.6 | ---- | 29 | 8,322 | −34.1 | ---- |
| 300 | 28 | 9,566 | −38.7 | ---- | 31 | 9,374 | −43.0 | ---- | 29 | 9,352 | −43.0 | ---- | 29 | 9,489 | −39.8 | ---- | 31 | 9,382 | −42.8 | ---- | 31 | 9,423 | −41.7 | ---- | 29 | 9,382 | −42.3 | ---- |
| 250 | 28 | 10,791 | −48.5 | ---- | 31 | 10,576 | −52.7 | ---- | 29 | 10,558 | −51.1 | ---- | 28 | 10,706 | −49.6 | ---- | 31 | 10,585 | −52.3 | ---- | 31 | 10,634 | −50.4 | ---- | 26 | 10,603 | −50.8 | ---- |
| 200 | 22 | 12,236 | −58.0 | ---- | 29 | 11,993 | −60.8 | ---- | 29 | 11,983 | −58.3 | ---- | 26 | 12,128 | −59.6 | ---- | 30 | 12,001 | −59.7 | ---- | 31 | 12,065 | −56.9 | ---- | 24 | 12,043 | −59.2 | ---- |
| 175 | 20 | 13,078 | −60.9 | ---- | 29 | 12,823 | −60.2 | ---- | 29 | 12,821 | −58.6 | ---- | 20 | 12,979 | −61.1 | ---- | 28 | 12,834 | −61.0 | ---- | 31 | 12,907 | −58.4 | ---- | 22 | 12,892 | −62.1 | ---- |
| 150 | 16 | 14,023 | −63.3 | ---- | 23 | 13,791 | −59.4 | ---- | 29 | 13,791 | −58.0 | ---- | 14 | 13,932 | −62.3 | ---- | 25 | 13,797 | −59.7 | ---- | 29 | 13,874 | −59.3 | ---- | 18 | 13,863 | −60.9 | ---- |
| 125 | 12 | 15,144 | −65.0 | ---- | 16 | 14,950 | −60.2 | ---- | 28 | 14,936 | −58.6 | ---- | 7 | 15,076 | −62.2 | ---- | 18 | 14,933 | −59.5 | ---- | 28 | 15,003 | −61.3 | ---- | 15 | 14,997 | −60.6 | ---- |
| 100 | 6 | 16,522 | −70.2 | ---- | 13 | 16,345 | −62.4 | ---- | 25 | 16,336 | −59.3 | ---- | ---- | ---- | ---- | ---- | 10 | 16,316 | −61.0 | ---- | 25 | 16,383 | −64.1 | ---- | 8 | 16,396 | −61.8 | ---- |
| 80 | ---- | ---- | ---- | ---- | 5 | 17,730 | −63.1 | ---- | 19 | 17,729 | −60.1 | ---- | ---- | ---- | ---- | ---- | 5 | 17,711 | −61.2 | ---- | 15 | 17,742 | −65.9 | ---- | ---- | ---- | ---- | ---- |
| 60 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 12 | 19,530 | −60.1 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 7 | 19,478 | −62.3 | ---- | ---- | ---- | ---- | ---- |
| 50 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 5 | 20,651 | −58.2 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |

See footnotes at end of table.

TABLE 1.—*Mean dynamic height (geopotential) in units of 0.98 dynamic meters, temperature in degrees centigrade, and relative humidity in percent, for standard pressures, as obtained by radiosondes during May 1949*—Continued

| Standard pressure surface (mb.) | Portland, Maine (1,013.3 mb.) | | | | Rapid City, S. Dak. (900.7 mb.) | | | | St. Cloud, Minn. (975.5 mb.) | | | | San Antonio, Tex. (984.9 mb.) | | | | San Juan, P. R. (1,014.5 mb.) | | | | Santa Maria, Calif. (1,005.9 mb.) | | | | Sault Ste. Marie, Mich. (989.2 mb.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of observations | Dynamic height | Temperature | Relative humidity | Number of observations | Dynamic height | Temperature | Relative humidity | Number of observations | Dynamic height | Temperature | Relative humidity | Number of observations | Dynamic height | Temperature | Relative humidity | Number of observations | Dynamic height | Temperature | Relative humidity | Number of observations | Dynamic height | Temperature | Relative humidity | Number of observations | Dynamic height | Temperature | Relative humidity |
| Surface | 31 | 20 | 9.9 | 88 | 31 | 980 | 13.1 | 70 | 31 | 317 | 14.5 | 66 | 31 | 240 | 24.0 | 76 | 31 | 15 | 25.2 | 82 | 31 | 71 | 13.5 | 79 | 31 | 221 | 7.8 | 77 |
| 1,000 | 31 | 131 | 11.6 | 76 | 31 | 85 | (*) | ---- | 31 | 105 | (*) | ---- | 31 | 107 | (*) | ---- | 31 | 141 | 24.6 | 79 | 31 | 121 | 13.1 | 78 | 31 | 129 | (*) | ---- |
| 950 | 31 | 564 | 11.6 | 61 | 31 | 529 | (*) | ---- | 31 | 546 | 15.3 | 55 | 31 | 558 | 22.7 | 74 | 31 | 591 | 21.5 | 81 | 31 | 557 | 13.3 | 69 | 31 | 559 | 9.9 | 62 |
| 900 | 31 | 1,011 | 9.3 | 60 | 31 | 987 | (*) | ---- | 31 | 997 | 12.4 | 58 | 31 | 1,026 | 19.8 | 75 | 31 | 1,058 | 18.6 | 80 | 31 | 1,008 | 13.5 | 56 | 31 | 1,005 | 8.3 | 59 |
| 850 | 31 | 1,483 | 6.3 | 61 | 31 | 1,470 | 13.8 | 55 | 31 | 1,475 | 9.3 | 62 | 31 | 1,518 | 17.5 | 70 | 31 | 1,548 | 15.9 | 75 | 31 | 1,488 | 11.6 | 48 | 31 | 1,474 | 5.4 | 58 |
| 800 | 31 | 1,978 | 3.5 | 62 | 31 | 1,978 | 10.2 | 57 | 31 | 1,975 | 6.7 | 59 | 31 | 2,034 | 15.1 | 59 | 31 | 2,061 | 13.3 | 65 | 31 | 1,992 | 9.1 | 45 | 31 | 1,976 | 2.5 | 57 |
| 750 | 31 | 2,506 | .6 | 56 | 31 | 2,517 | 6.4 | 60 | 31 | 2,505 | 3.9 | 58 | 31 | 2,584 | 13.1 | 41 | 31 | 2,607 | 11.0 | 58 | 31 | 2,529 | 6.3 | 36 | 31 | 2,492 | -.1 | 51 |
| 700 | 31 | 3,050 | -2.3 | 53 | 31 | 3,075 | 2.9 | 57 | 31 | 3,061 | .5 | 56 | 31 | 3,157 | 9.8 | 35 | 31 | 3,177 | 8.6 | 46 | 31 | 3,086 | 3.2 | 38 | 31 | 3,036 | -3.1 | 50 |
| 650 | 28 | 3,642 | -5.5 | 41 | 31 | 3,675 | -1.2 | 58 | 31 | 3,655 | -3.0 | 54 | 31 | 3,767 | 5.5 | 34 | 31 | 3,789 | 5.6 | 37 | 31 | 3,683 | -.3 | 36 | 31 | 3,625 | -6.5 | 46 |
| 600 | 28 | 4,260 | -9.2 | 43 | 31 | 4,304 | -5.6 | 56 | 30 | 4,282 | -6.6 | 49 | 29 | 4,417 | .6 | 33 | 31 | 4,437 | 1.8 | 37 | 31 | 4,318 | -4.3 | 34 | 30 | 4,241 | -10.1 | 45 |
| 550 | 28 | 4,933 | -13.4 | 40 | 30 | 4,988 | -10.3 | 52 | 30 | 4,957 | -11.1 | 46 | 28 | 5,106 | -4.4 | 30 | 31 | 5,135 | -2.4 | 33 | 31 | 4,996 | -8.9 | 31 | 31 | 4,910 | -14.3 | 43 |
| 500 | 28 | 5,647 | -18.1 | 35 | 30 | 5,712 | -15.1 | 46 | 30 | 5,682 | -15.8 | 41 | 28 | 5,854 | -9.9 | 33 | 31 | 5,884 | -7.2 | 31 | 31 | 5,729 | -14.0 | 30 | 31 | 5,623 | -18.9 | 45 |
| 450 | 27 | 6,427 | -23.8 | ---- | 30 | 6,505 | -21.0 | ---- | 30 | 6,471 | -21.4 | ---- | 28 | 6,661 | -15.7 | ---- | 31 | 6,704 | -12.7 | 33 | 31 | 6,525 | -19.9 | ---- | 31 | 6,408 | -24.4 | ---- |
| 400 | 27 | 7,268 | -30.3 | ---- | 30 | 7,359 | -27.5 | ---- | 30 | 7,326 | -27.8 | ---- | 28 | 7,537 | -22.4 | ---- | 31 | 7,586 | -18.9 | 36 | 31 | 7,382 | -26.7 | ---- | 31 | 7,281 | -30.5 | ---- |
| 350 | 26 | 8,205 | -37.3 | ---- | 29 | 8,311 | -35.3 | ---- | 30 | 8,271 | -35.2 | ---- | 27 | 8,503 | -29.6 | ---- | 29 | 8,568 | -26.1 | ---- | 31 | 8,331 | -33.9 | ---- | 30 | 8,182 | -37.5 | ---- |
| 300 | 26 | 9,260 | -45.3 | ---- | 29 | 9,368 | -44.0 | ---- | 30 | 9,326 | -43.4 | ---- | 25 | 9,584 | -37.8 | ---- | 29 | 9,664 | -34.3 | ---- | 31 | 9,393 | -41.9 | ---- | 29 | 9,228 | -45.3 | ---- |
| 250 | 26 | 10,454 | -53.2 | ---- | 28 | 10,566 | -53.0 | ---- | 30 | 10,528 | -52.2 | ---- | 25 | 10,815 | -47.0 | ---- | 29 | 10,914 | -44.3 | ---- | 31 | 10,605 | -50.7 | ---- | 22 | 10,463 | -51.7 | ---- |
| 200 | 22 | 11,881 | -59.5 | ---- | 26 | 11,988 | -58.9 | ---- | 30 | 11,948 | -58.7 | ---- | 24 | 12,265 | -56.5 | ---- | 28 | 12,369 | -56.1 | ---- | 30 | 12,028 | -57.8 | ---- | 16 | 11,924 | -58.6 | ---- |
| 175 | 16 | 12,716 | -60.9 | ---- | 25 | 12,826 | -58.8 | ---- | 28 | 12,771 | -58.8 | ---- | 22 | 13,103 | -60.3 | ---- | 26 | 13,206 | -62.4 | ---- | 30 | 12,868 | -58.2 | ---- | 10 | 12,759 | -59.6 | ---- |
| 150 | 12 | 13,672 | -59.9 | ---- | 21 | 13,799 | -57.4 | ---- | 25 | 13,752 | -57.6 | ---- | 20 | 14,064 | -62.3 | ---- | 25 | 14,145 | -68.7 | ---- | 30 | 13,838 | -58.3 | ---- | ---- | ------ | ------ | ---- |
| 125 | 8 | 14,784 | -58.2 | ---- | 16 | 14,953 | -57.2 | ---- | 19 | 14,895 | -57.0 | ---- | 14 | 15,197 | -65.2 | ---- | 23 | 15,224 | -73.5 | ---- | 29 | 14,980 | -59.9 | ---- | ---- | ------ | ------ | ---- |
| 100 | ---- | ------ | ------ | ---- | 8 | 16,352 | -57.4 | ---- | 11 | 16,318 | -57.8 | ---- | 5 | 16,562 | -68.3 | ---- | 20 | 16,523 | -76.1 | ---- | 27 | 16,372 | -62.3 | ---- | ---- | ------ | ------ | ---- |
| 80 | ---- | ------ | ------ | ---- | ---- | ------ | ------ | ---- | ---- | ------ | ------ | ---- | ---- | ------ | ------ | ---- | 12 | 17,810 | -75.6 | ---- | 19 | 17,739 | -62.2 | ---- | ---- | ------ | ------ | ---- |
| 60 | ---- | ------ | ------ | ---- | ---- | ------ | ------ | ---- | ---- | ------ | ------ | ---- | ---- | ------ | ------ | ---- | ---- | ------ | ------ | ---- | 9 | 19,510 | -61.7 | ---- | ---- | ------ | ------ | ---- |

| Standard pressure | Spokane, Wash. (928.8 mb.) | | | | Swan Island, W. I.[1] (---- mb.) | | | | Tacubaya, Mex. (773.7 mb.) | | | | Tampa, Fla. (1,016.2 mb.) | | | | Tatoosh Island, Wash. (1,012.3 mb.) | | | | Toledo, Ohio (993.1 mb.) | | | | Washington, D. C. (1,014.5 mb.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Surface | 31 | 721 | 17.5 | 45 | ---- | ---- | ------ | ---- | 30 | 2,306 | 18.4 | 51 | 31 | 9 | 23.5 | 73 | 31 | 31 | 10.7 | 84 | 31 | 191 | 14.4 | 75 | 31 | 25 | 17.4 | 74 |
| 1,000 | 31 | 83 | (*) | ---- | ---- | ---- | ------ | ---- | 30 | 36 | (*) | ---- | 31 | 149 | 23.2 | 70 | 31 | 133 | 10.6 | 79 | 31 | 131 | (*) | ---- | 31 | 148 | 17.3 | 70 |
| 950 | 31 | 528 | (*) | ---- | ---- | ---- | ------ | ---- | 30 | 505 | (*) | ---- | 31 | 599 | 20.9 | 63 | 31 | 566 | 10.8 | 62 | 31 | 570 | 14.9 | 58 | 31 | 587 | 15.7 | 66 |
| 900 | 31 | 989 | 16.6 | 40 | ---- | ---- | ------ | ---- | 30 | 986 | (*) | ---- | 31 | 1,062 | 18.0 | 62 | 31 | 1,010 | 9.3 | 56 | 31 | 1,023 | 12.3 | 59 | 31 | 1,043 | 13.2 | 65 |
| 850 | 31 | 1,472 | 12.5 | 43 | ---- | ---- | ------ | ---- | 30 | 1,486 | (*) | ---- | 31 | 1,549 | 14.6 | 61 | 31 | 1,481 | 6.5 | 54 | 31 | 1,500 | 9.4 | 59 | 31 | 1,522 | 10.3 | 65 |
| 800 | 31 | 1,977 | 8.0 | 50 | ---- | ---- | ------ | ---- | 30 | 2,018 | (*) | ---- | 31 | 2,059 | 11.2 | 59 | 31 | 1,976 | 3.5 | 52 | 31 | 2,000 | 6.2 | 61 | 31 | 2,024 | 7.1 | 64 |
| 750 | 31 | 2,509 | 3.8 | 53 | ---- | ---- | ------ | ---- | 30 | 2,575 | 16.7 | 49 | 31 | 2,598 | 8.2 | 46 | 31 | 2,504 | .5 | 51 | 31 | 2,534 | 3.2 | 56 | 31 | 2,558 | 3.8 | 66 |
| 700 | 31 | 3,062 | -.2 | 55 | ---- | ---- | ------ | ---- | 30 | 3,155 | 12.3 | 53 | 31 | 3,161 | 4.8 | 36 | 31 | 3,047 | -2.6 | 48 | 31 | 3,084 | .3 | 51 | 31 | 3,110 | .8 | 58 |
| 650 | 31 | 3,655 | -4.1 | 50 | ---- | ---- | ------ | ---- | 30 | 3,778 | 7.4 | 59 | 31 | 3,764 | 1.3 | 32 | 31 | 3,637 | -6.2 | 44 | 31 | 3,683 | -3.1 | 48 | 31 | 3,707 | -2.8 | 53 |
| 600 | 31 | 4,278 | -8.3 | 48 | ---- | ---- | ------ | ---- | 29 | 4,427 | 2.5 | 66 | 31 | 4,402 | -2.3 | ---- | 31 | 4,253 | -10.1 | 43 | 31 | 4,304 | -6.8 | 45 | 31 | 4,332 | -6.3 | 50 |
| 550 | 31 | 4,949 | -12.5 | 46 | ---- | ---- | ------ | ---- | 29 | 5,128 | -2.5 | 68 | 31 | 5,089 | -6.4 | ---- | 31 | 4,921 | -14.3 | 41 | 31 | 4,983 | -11.1 | 38 | 31 | 5,009 | -10.5 | 45 |
| 500 | 31 | 5,669 | -17.5 | 46 | ---- | ---- | ------ | ---- | 29 | 5,876 | -7.5 | 64 | 31 | 5,826 | -11.2 | ---- | 31 | 5,636 | -19.1 | 41 | 31 | 5,703 | -16.0 | 32 | 31 | 5,735 | -15.1 | 42 |
| 450 | 31 | 6,453 | -23.6 | ---- | ---- | ---- | ------ | ---- | 29 | 6,704 | -12.0 | 52 | 30 | 6,630 | -16.7 | ---- | 31 | 6,417 | -24.5 | ---- | 31 | 6,496 | -21.7 | ---- | 31 | 6,530 | -20.6 | ---- |
| 400 | 31 | 7,298 | -30.4 | ---- | ---- | ---- | ------ | ---- | 28 | 7,583 | -18.0 | 43 | 30 | 7,499 | -23.1 | ---- | 31 | 7,259 | -30.6 | ---- | 31 | 7,345 | -28.1 | ---- | 31 | 7,384 | -26.9 | ---- |
| 350 | 30 | 8,229 | -37.8 | ---- | ---- | ---- | ------ | ---- | 27 | 8,565 | -25.6 | ---- | 30 | 8,462 | -30.6 | ---- | 31 | 8,194 | -37.5 | ---- | 30 | 8,287 | -35.6 | ---- | 30 | 8,330 | -34.2 | ---- |
| 300 | 30 | 9,272 | -46.0 | ---- | ---- | ---- | ------ | ---- | 24 | 9,664 | -33.8 | ---- | 30 | 9,538 | -38.9 | ---- | 31 | 9,240 | -45.2 | ---- | 30 | 9,341 | -43.9 | ---- | 30 | 9,390 | -42.5 | ---- |
| 250 | 28 | 10,473 | -54.1 | ---- | ---- | ---- | ------ | ---- | 22 | 10,920 | -43.5 | ---- | 28 | 10,762 | -48.7 | ---- | 31 | 10,435 | -52.8 | ---- | 30 | 10,541 | -52.3 | ---- | 30 | 10,597 | -50.8 | ---- |
| 200 | 25 | 11,881 | -58.6 | ---- | ---- | ---- | ------ | ---- | 21 | 12,383 | -55.3 | ---- | 28 | 12,196 | -58.2 | ---- | 31 | 11,857 | -56.6 | ---- | 26 | 11,957 | -58.9 | ---- | 30 | 12,022 | -58.6 | ---- |
| 175 | 20 | 12,714 | -56.2 | ---- | ---- | ---- | ------ | ---- | 19 | 13,227 | -61.5 | ---- | 27 | 13,030 | -61.5 | ---- | 30 | 12,705 | -55.4 | ---- | 24 | 12,785 | -60.1 | ---- | 29 | 12,855 | -60.2 | ---- |
| 150 | 12 | 13,703 | -55.8 | ---- | ---- | ---- | ------ | ---- | 18 | 14,165 | -67.2 | ---- | 27 | 13,981 | -63.1 | ---- | 27 | 13,687 | -53.7 | ---- | 22 | 13,748 | -59.9 | ---- | 26 | 13,807 | -59.6 | ---- |
| 125 | 9 | 14,859 | -55.1 | ---- | ---- | ---- | ------ | ---- | 15 | 15,259 | -71.4 | ---- | 25 | 15,091 | -65.7 | ---- | 27 | 14,856 | -54.3 | ---- | 15 | 14,912 | -60.9 | ---- | 23 | 14,955 | -60.1 | ---- |
| 100 | 6 | 16,296 | -56.6 | ---- | ---- | ---- | ------ | ---- | 9 | 16,571 | -75.2 | ---- | 17 | 16,444 | -69.2 | ---- | 26 | 16,283 | -54.5 | ---- | 11 | 16,309 | -61.9 | ---- | 21 | 16,342 | -60.8 | ---- |
| 80 | ---- | ------ | ------ | ---- | ---- | ---- | ------ | ---- | 5 | 17,821 | -78.2 | ---- | 14 | 17,779 | -69.6 | ---- | 21 | 17,708 | -54.9 | ---- | 5 | 17,691 | -61.2 | ---- | 13 | 17,721 | -61.2 | ---- |
| 60 | ---- | ------ | ------ | ---- | ---- | ---- | ------ | ---- | ---- | ------ | ------ | ---- | ---- | ------ | ------ | ---- | 14 | 19,562 | -54.4 | ---- | ---- | ------ | ------ | ---- | 6 | 19,497 | -59.1 | ---- |
| 50 | ---- | ------ | ------ | ---- | ---- | ---- | ------ | ---- | ---- | ------ | ------ | ---- | ---- | ------ | ------ | ---- | 10 | 20,743 | -53.7 | ---- | ---- | ------ | ------ | ---- | ---- | ------ | ------ | ---- |

1 Data not yet received.

(*) Temperature and relative humidity data for this level are not available or are available only for certain days. See note entitled "Change in Summarization of Radio sonde Data," p. 6, in the January 1946 issue of the MONTHLY WEATHER REVIEW.

Note.—All observations scheduled between 0300 and 0500, G. C. T. except at Ciudad Victoria, Mazatlan and Merida, where they are taken near 0200, G. C. T. "Number of observations" refers to those of dynamic height only. (In a few cases temperature or humidity data may be missing for one or more standard pressure surfaces of some observations.) Relative humidity data are not published for standard pressure surfaces having a corresponding mean temperature below −20° C. Relative humidity data beginning with October 1, 1948, were computed and expressed in these tables on the basis of the vapor pressure over water. Upper air values of relative humidity at levels with temperatures less than 0° C. have formerly been computed and expressed on the basis of the vapor pressure over ice. All relative humidity observations are obtained by electric hygrometer and have been adjusted to compensate for the values occurring below the operating range of the humidity element. For explanation of the adjustment see article entitled "Curve Method for Obtaining Monthly Means of Relative Humidity," p. 241, MONTHLY WEATHER REVIEW, December 1944.

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