## HUMIDITY AND VAPOR PRESSURE AT TAMPA, FLA.[1]

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The following table gives the bi-hourly averages of relative humidity, temperature, vapor pressure, and vapor pressure ratios (to mean of 7 a. m. and 7 p. m.), for each month at Tampa, Fla., for the period August, 1915, to December, 1918. It is thought that this table is valuable as an addition to data published in MONTHLY WEATHER REVIEW, SUPPLEMENT 6, 1918. It gives the only data for a southern station. The remarkable feature is the occurrence of the minimum vapor pressure in the middle of the day (except January and December).

TABLE 1.—*The mean bi-hourly (ninetieth meridian time) relative humidity, air temperature (°F.) vapor pressure (inches), and "vapor pressure ratio" at Tampa, Fla., for the period August, 1915, to December, 1918, inclusive.*

| | A. M. | | | | | | P. M. | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2 | 4 | 6 | 8 | 10 | *Noon.* | 2 | 4 | 6 | 8 | 10 | *Mid't.* |
| **January:** | | | | | | | | | | | | |
| Relative humidity | 86 | 87 | 87 | 82 | 68 | 59 | 56 | 60 | 71 | 77 | 81 | 84 |
| Vapor pressure | .420 | .412 | .408 | .434 | .430 | .419 | .418 | .426 | .444 | .445 | .421 | .435 |
| Temperature | 57 | 56 | 56 | 58 | 64 | 68 | 70 | 68 | 64 | 62 | 60 | 58 |
| Vapor pressure ratio | .981 | .963 | .953 | 1.014 | 1.005 | .979 | .977 | .995 | 1.037 | 1.040 | .984 | 1.016 |
| **February:** | | | | | | | | | | | | |
| Relative humidity | 81 | 81 | 82 | 75 | 60 | 51 | 47 | 51 | 64 | 73 | 77 | 80 |
| Vapor pressure | .409 | .398 | .396 | .415 | .405 | .388 | .374 | .386 | .415 | .426 | .425 | .419 |
| Temperature | 58 | 56 | 56 | 60 | 65 | 69 | 71 | 69 | 65 | 62 | 60 | 59 |
| Vapor pressure ratio | .998 | .971 | .966 | 1.012 | .988 | .946 | .912 | .941 | 1.012 | 1.039 | 1.037 | 1.022 |
| **March:** | | | | | | | | | | | | |
| Relative humidity | 79 | 80 | 80 | 69 | 53 | 46 | 44 | 49 | 60 | 70 | 75 | 77 |
| Vapor pressure | .430 | .424 | .418 | .439 | .398 | .378 | .376 | .388 | .418 | .445 | .450 | .430 |
| Temperature | 60 | 59 | 58 | 64 | 69 | 72 | 73 | 72 | 67 | 64 | 63 | 61 |
| Vapor pressure ratio | 1.031 | 1.026 | 1.002 | 1.053 | .955 | .906 | .902 | .930 | 1.002 | 1.062 | 1.079 | 1.031 |
| **April:** | | | | | | | | | | | | |
| Relative humidity | 81 | 83 | 83 | 67 | 52 | 46 | 44 | 49 | 59 | 70 | 75 | 78 |
| Vapor pressure | .482 | .480 | .492 | .498 | .453 | .430 | .424 | .443 | .473 | .498 | .504 | .500 |
| Temperature | 63 | 62 | 63 | 70 | 74 | 77 | 79 | 77 | 72 | 69 | 67 | 65 |
| Vapor pressure ratio | .980 | .976 | 1.000 | 1.012 | .921 | .874 | .862 | .900 | .961 | 1.012 | 1.024 | 1.016 |
| **May:** | | | | | | | | | | | | |
| Relative humidity | 84 | 86 | 86 | 68 | 54 | 48 | 48 | 52 | 60 | 70 | 76 | 81 |
| Vapor pressure | .637 | .625 | .650 | .632 | .573 | .547 | .548 | .564 | .589 | .618 | .630 | .638 |
| Temperature | 70 | 69 | 71 | 76 | 81 | 83 | 84 | 82 | 79 | 75 | 73 | 72 |
| Vapor pressure ratio | 1.016 | .997 | 1.037 | 1.008 | .913 | .872 | .874 | .900 | .936 | .985 | 1.005 | 1.018 |
| **June:** | | | | | | | | | | | | |
| Relative humidity | 84 | 86 | 85 | 70 | 57 | 53 | 52 | 58 | 66 | 75 | 79 | 82 |
| Vapor pressure | .724 | .730 | .756 | .723 | .694 | .653 | .626 | .671 | .707 | .732 | .738 | .732 |
| Temperature | 75 | 74 | 76 | 81 | 84 | 86 | 86 | 85 | 82 | 79 | 77 | 76 |
| Vapor pressure ratio | .995 | .989 | 1.038 | .993 | .953 | .897 | .860 | .922 | .971 | 1.005 | 1.014 | 1.005 |
| **July:** | | | | | | | | | | | | |
| Relative humidity | 87 | 88 | 86 | 71 | 61 | 56 | 57 | 62 | 70 | 78 | 82 | 85 |
| Vapor pressure | .780 | .772 | .808 | .786 | .728 | .697 | .723 | .730 | .759 | .780 | .795 | .792 |
| Temperature | 76 | 76 | 77 | 82 | 85 | 87 | 86 | 85 | 82 | 80 | 78 | 77 |
| Vapor pressure ratio | .998 | .987 | 1.033 | 1.005 | .930 | .897 | .924 | .934 | .971 | .998 | 1.017 | 1.013 |
| **August:** | | | | | | | | | | | | |
| Relative humidity | 88 | 89 | 88 | 73 | 61 | 56 | 57 | 64 | 73 | 80 | 84 | 86 |
| Vapor pressure | .782 | .773 | .807 | .803 | .753 | .723 | .717 | .741 | .764 | .787 | .799 | .792 |
| Temperature | 76 | 75 | 77 | 82 | 86 | 88 | 88 | 85 | 81 | 79 | 78 | 76 |
| Vapor pressure ratio | .987 | .976 | 1.019 | 1.014 | .951 | .913 | .903 | .935 | .965 | .994 | 1.009 | 1.000 |
| **September:** | | | | | | | | | | | | |
| Relative humidity | 88 | 89 | 89 | 77 | 63 | 56 | 56 | 61 | 71 | 79 | 83 | 86 |
| Vapor pressure | .730 | .720 | .733 | .762 | .705 | .674 | .674 | .679 | .712 | .727 | .730 | .736 |
| Temperature | 74 | 73 | 74 | 79 | 83 | 85 | 86 | 84 | 80 | 77 | 76 | 75 |
| Vapor pressure ratio | .993 | .978 | .997 | 1.037 | .959 | .914 | .914 | .924 | .969 | .989 | .993 | 1.001 |
| ***October:*** | | | | | | | | | | | | |
| Relative humidity | 82 | 87 | 88 | 76 | 62 | 56 | 55 | 59 | 71 | 78 | 83 | 84 |
| Vapor pressure | .632 | .624 | .628 | .656 | .626 | .603 | .591 | .599 | .637 | .649 | .650 | .635 |
| Temperature | 69 | 69 | 69 | 74 | 79 | 81 | 82 | 80 | 76 | 73 | 72 | 70 |
| Vapor pressure ratio | .978 | .964 | .972 | 1.014 | .971 | .935 | .917 | .929 | .972 | 1.003 | 1.005 | .985 |
| **November:** | | | | | | | | | | | | |
| Relative humidity | 80 | 82 | 82 | 70 | 57 | 49 | 48 | 52 | 64 | 72 | 76 | 80 |
| Vapor pressure | .444 | .435 | .430 | .446 | .435 | .418 | .411 | .430 | .461 | .476 | .476 | .475 |
| Temperature | 61 | 60 | 59 | 64 | 70 | 74 | 74 | 72 | 68 | 65 | 63 | 62 |
| Vapor pressure ratio | .993 | .973 | .962 | .998 | .973 | .913 | .919 | .962 | 1.031 | 1.065 | 1.065 | 1.062 |
| **December:** | | | | | | | | | | | | |
| Relative humidity | 83 | 84 | 86 | 79 | 67 | 58 | 55 | 59 | 69 | 75 | 79 | 82 |
| Vapor pressure | .38$_8$ | .381 | .374 | .390 | .400 | .399 | .392 | .399 | .404 | .413 | .415 | .393 |
| Temperature | 5$_5$ | 54 | 54 | 57 | 63 | 67 | 68 | 66 | 62 | 60 | 58 | 56 |
| Vapor pressure ratio | .98$_5$ | .967 | .949 | .989 | 1.016 | 1.010 | .995 | 1.010 | 1.025 | 1.053 | 1.016 | .997 |

[1] The table was submitted as Table 4 in the author's contribution, "Diurnal variations in humidity," published in the Monthly Weather Review, July 1919. 47: 466-468; but it was unfortunately omitted.—ED.