

Comparative readings between the gage on the custom-house and the roof of the Prudential Building were begun on May 1, 1899, and continued until the end of the year. The catch of the gage on the Prudential Building seems to be about 21 per cent larger than that of the gage on the custom-house. The monthly amounts in the two locations, viz., customhouse, A, and Prudential Building, B, are as follows: May, A, 1.21 inches; B, 1.44 inches. June, A, 1.46 inches; B, 1.56 inches. July, A, 4.68 inches; B, 6.42 inches. August, A, 2.14 inches; B, 3.11 inches. September, A, 2.21 inches; B, 2.27 inches. October, A, 3.19 inches; B, 3.71 inches. November, A, 2.36 inches; B, 2.65 inches. December, A, 3.71 inches; B, 4.15 inches.

The record of precipitation at the Atlanta station from May 1, 1891, to the date of removal to the Prudential Building is probably deficient by amounts varying from 15 to 20 per cent of the recorded catch, or 25 per cent of the true rainfall.

MEXICAN CLIMATOLOGICAL DATA.

Through the kind cooperation of Señor Manuel E. Pastrana, Director of the Central Meteorologico-Magnetic Observatory, the monthly summaries of Mexican data are now communicated in manuscript, in advance of their publication in the Boletin Mensual. An abstract, translated into English measures, is here given, in continuation of the similar tables published in the MONTHLY WEATHER REVIEW since 1896. The barometric means have not been reduced to standard gravity, but this correction will be given at some future date when the pressures are published on our Chart IV.

Mexican data for November, 1899.

| Stations. | Altitude. | Mean barometer. | Temperature. | | | Relative humidity. | Precipitation. | Prevailing direction. | |
|---------------------------------|-----------|-----------------|--------------|------|-------|--------------------|----------------|-----------------------|--------|
| | | | Max. | Min. | Mean. | | | Wind. | Cloud. |
| Colima | ..... | ..... | 90.9 | 59.5 | 76.6 | ..... | ..... | ..... | ..... |
| Culliacán Rosales (E. d. S.) | 112 | 29.78 | 86.6 | 54.5 | 75.7 | 51 | 0.07 | w. | s. |
| Leon (Guanajuato) | 5,934 | 29.95 | 75.9 | 34.3 | 58.6 | 56 | 0.14 | dnw. | sw. |
| Merida | 50 | 29.93 | 85.4 | 57.9 | 75.7 | 73 | 0.29 | ne. | e. |
| Mexico (Obs. Cent.) | 7,472 | 28.04 | 72.5 | 39.6 | 57.0 | 61 | 0.48 | nw. | ne. |
| Morelia (Seminario) | 6,401 | 28.95 | 76.1 | 41.7 | 59.2 | 69 | 0.04 | wsu. | w. |
| Saltillo (Col. S. Juan) | 5,399 | 24.78 | 75.2 | 37.2 | 54.5 | 67 | 0.62 | s. | sw. |
| San Isidro (Hac. de Guanajuato) | ..... | ..... | 68.0 | 51.8 | ..... | ..... | 0.25 | ..... | ..... |
| Silao | 6,063 | 24.27 | 72.9 | 42.3 | 61.3 | 56 | 0.35 | wsu. | sw. |
| Zapotlan (Seminario) | 5,078 | 25.09 | 80.8 | 42.4 | 63.3 | 61 | ..... | T. | se. |

Mexican data for December, 1899.

| Stations. | Altitude. | Mean barometer. | Temperature. | | | Relative humidity. | Precipitation. | Prevailing direction. | |
|---------------------------------|-----------|-----------------|--------------|------|-------|--------------------|----------------|-----------------------|--------|
| | | | Max. | Min. | Mean. | | | Wind. | Cloud. |
| Culliacán Rosales (E. d. S.) | 112 | 29.78 | 87.4 | 53.2 | 70.0 | 61 | 4.43 | w. | ..... |
| Durango (Seminario) | 6,243 | 24.06 | 78.8 | 26.6 | 54.3 | 49 | 0.64 | sw. | w. |
| Leon (Guanajuato) | 5,934 | 24.32 | 75.9 | 32.5 | 56.1 | 50 | 0.04 | ese. | sw. |
| Mexico (Obs. Cent.) | 7,472 | 23.08 | 71.1 | 35.6 | 54.7 | 51 | ..... | nw. | ne. |
| Morelia (Seminario) | 6,401 | 23.98 | 75.6 | 39.9 | 57.7 | 61 | ..... | ene. | sw. |
| Puebla (Col. Cat.) | 7,112 | 23.39 | 73.9 | 34.7 | 57.9 | 73 | ..... | ene. | sw. |
| Saltillo (Col. S. Juan) | 5,399 | 24.80 | 70.3 | 39.3 | 49.8 | 66 | 1.03 | s. | sw. |
| San Isidro (Hac. de Guanajuato) | ..... | ..... | 68.0 | 54.5 | ..... | ..... | ..... | ..... | ..... |
| Silao | 6,063 | 24.30 | 72.3 | 41.9 | 56.3 | 52 | ..... | T. | wsu. |
| Zapotlan | 5,078 | 25.11 | 79.5 | 42.3 | 61.3 | 57 | 0.18 | se. | w. |

DATE OF COLD FRIDAY.

By ALFRED J. HENRY, Chief of Division.

A correspondent writing from Columbus, Ohio, asks us to fix the date of Cold Friday. Our correspondent remarks that his grandfather was buried on that day in Jefferson County, Ohio, about the year 1806. We infer, therefore, that the term Cold Friday must refer to a day of extreme cold that was felt in Ohio, at least, and over we know not how much

greater extent of territory. Meteorological observations were not made west of the Alleghenies in 1806, or for a number of years thereafter. On the eastern fringe of the United States there was no remarkably cold weather in 1806, but there was a cold spell in 1807, and another of greater severity in 1809. In looking over the available lists of dates of great cold we find a reference to Cold Friday in a report of the weather previous to 1830, compiled by the late Major W. H. Gardner, of Mobile, Ala. Major Gardner states that February 7, 1807, was known for many years as Cold Friday by reason of the low temperature reached that day. The location of the great cold is given as the Middle States.

Further information respecting the intensity of the cold experienced and its geographical distribution will be gladly received.

OBSERVATIONS AT HONOLULU.

Through the kind cooperation of Mr. Curtis J. Lyons, Meteorologist to the Government Survey, the monthly report of meteorological conditions at Honolulu is now made partly in accordance with the new form, No. 1040, and the arrangement of the columns, therefore, differs from those previously published.

Meteorological observations at Honolulu, December, 1899.

The station is at 21° 18' N., 157° 50' W.
 Pressure is corrected for temperature and reduced to sea level, and the gravity correction, -0.06, has been applied.
 The average direction and force of the wind and the average cloudiness for the whole day are given unless they have varied more than usual, in which case the extremes are given. The scale of wind force is 0 to 12, or Beaufort scale. Two directions of wind, or values of wind force or amounts of cloudiness, connected by a dash, indicate change from one to the other.
 The rainfall for twenty-four hours has always been measured at 10:29 p. m., not 1 p. m., Greenwich time, on the respective dates.
 The rain gage, 8 inches in diameter, is 1 foot above ground. Thermometer, 9 feet above ground. Ground is 43 feet, and the barometer 50 feet above sea level.

| Date. | Pressure at sea level. | | Temperature. | | During twenty-four hours preceding 1 p. m., Greenwich time, or 2:29 a. m., Honolulu time. | | | | | | Total rainfall at 9 a. m., local time. | | | |
|------------|------------------------|-----------|--------------|----------|---|----------|------------|--------------------|-----------------------|--------|--|----------------------|----------|-------|
| | Dry bulb. | Wet bulb. | Temperature. | | Maximum. | Minimum. | Dew-point. | Relative humidity. | Wind. | | | Sea-level pressures. | | |
| | | | Maximum. | Minimum. | | | | | Prevailing direction. | Force. | | Maximum. | Minimum. | |
| 1 | 29.94 | 68 | 68 | 62.5 | 80 | 66 | 64.0 | 73 | ne. | 3 | 3 | 30.03 | 29.92 | 0.00 |
| 2 | 29.93 | 68 | 61 | 63.3 | 81 | 63 | 63.3 | 76 | sw-n. | 1-0 | 2 | 30.01 | 29.98 | 0.00 |
| 3 | 29.96 | 62 | 60.5 | 60.5 | 79 | 61 | 62.0 | 78 | sw-n. | 1-0 | 2 | 30.06 | 29.94 | 0.00 |
| 4 | 29.97 | 72 | 64.5 | 64.5 | 80 | 61 | 61.7 | 73 | nne. | 1-0 | 1-0 | 30.01 | 29.92 | 0.00 |
| 5 | 30.03 | 68 | 66.5 | 66.5 | 81 | 67 | 61.0 | 66 | ne-sw. | 2-0 | 5 | 30.06 | 29.93 | 0.01 |
| 6 | 30.06 | 73 | 63 | 63 | 78 | 65 | 63.0 | 74 | ne. | 0-1 | 3-3 | 30.08 | 29.99 | 0.00 |
| 7 | 30.06 | 72 | 65 | 78 | 78 | 67 | 59.0 | 57 | ne. | 3 | 3 | 30.10 | 29.99 | 0.00 |
| 8 | 29.98 | 66 | 62 | 62 | 79 | 71 | 62.7 | 67 | ne. | 3 | 5 | 30.09 | 29.96 | 0.00 |
| 9 | 29.95 | 65 | 61.5 | 61.5 | 81 | 65 | 62.7 | 69 | se-w. | 2 | 3 | 30.05 | 29.94 | 0.00 |
| 10 | 29.97 | 67 | 63.5 | 63.5 | 80 | 64 | 61.5 | 70 | s. | 1-0 | 4 | 29.99 | 29.95 | 0.00 |
| 11 | 29.90 | 68 | 66.5 | 66.5 | 78 | 66 | 66.0 | 81 | w-s. | 1-0 | 6-10 | 29.94 | 29.85 | 0.02 |
| 12 | 29.91 | 72 | 68 | 68 | 78 | 68 | 66.3 | 79 | nne. | 0-3 | 6-3 | 29.97 | 29.87 | 0.01 |
| 13 | 29.98 | 70 | 67.5 | 67.5 | 80 | 71 | 64.7 | 74 | nne. | 2-0 | 2 | 29.98 | 29.87 | 0.01 |
| 14 | 29.92 | 69 | 65 | 65 | 81 | 67 | 65.5 | 75 | sw. | 2-0 | 1-10 | 29.91 | 29.82 | 0.00 |
| 15 | 29.82 | 65 | 63 | 63 | 83 | 68 | 64.3 | 76 | sw-n. | 2-0 | 1 | 29.88 | 29.79 | 0.00 |
| 16 | 29.86 | 72 | 69 | 69 | 82 | 64 | 64.7 | 78 | se-sw. | 1 | 2 | 29.92 | 29.84 | 0.02 |
| 17 | 29.90 | 63 | 62 | 62 | 81 | 67 | 68.6 | 81 | s-w. | 1 | 6 | 29.93 | 29.85 | 0.12 |
| 18 | 29.91 | 62 | 61 | 79 | 82 | 63 | 63.7 | 80 | w. | 1-0 | 2-0 | 29.94 | 29.85 | 0.00 |
| 19 | 29.95 | 62 | 61 | 79 | 81 | 62 | 60.7 | 74 | sw. | 1 | 1 | 29.88 | 29.87 | 0.00 |
| 20 | 29.93 | 69 | 65 | 88 | 61 | 63.5 | 77 | 77 | se. | 1 | 4 | 30.04 | 29.94 | 0.01 |
| 21 | 29.96 | 64 | 62 | 80 | 67 | 64.5 | 75 | 75 | se. | 1 | 4 | 30.04 | 29.94 | 0.00 |
| 22 | 29.99 | 68 | 62 | 81 | 63 | 62.5 | 74 | 74 | sw-w. | 1-0 | 0-2 | 30.04 | 29.96 | 0.00 |
| 23 | 30.03 | 69 | 64.5 | 62 | 62 | 63 | 61.7 | 66 | ne. | 1 | 1 | 30.08 | 29.97 | 0.00 |
| 24 | 29.99 | 78 | 66 | 80 | 65 | 60.3 | 63 | 63 | nne. | 2-2 | 1-3 | 30.08 | 29.96 | 0.01 |
| 25 | 29.93 | 70 | 64 | 79 | 72 | 62.3 | 65 | 65 | ne-se. | 3-5 | 3 | 30.04 | 29.83 | 0.00 |
| 26 | 29.81 | 70 | 65 | 79 | 67 | 62.0 | 68 | 68 | ne-se-n. | 2-0 | 10-10 | 29.94 | 29.79 | 0.01 |
| 27 | 29.80 | 63 | 61.5 | 78 | 65 | 62.5 | 76 | 76 | nw-se. | 1-0 | 2-10 | 29.84 | 29.74 | 0.00 |
| 28 | 29.81 | 72 | 65.5 | 81 | 62 | 61.5 | 70 | 70 | se. | 2 | 1-9 | 29.86 | 29.74 | 0.00 |
| 29 | 29.74 | 70 | 69 | 78 | 70 | 64.5 | 73 | 73 | se. | 2 | 10-9 | 29.86 | 29.73 | 0.10 |
| 30 | 29.75 | 69 | 68 | 79 | 69 | 69.7 | 97 | 97 | s-sw. | 2 | 10 | 29.80 | 29.73 | 1.44 |
| 31 | 29.79 | 65 | 61 | 78 | 68 | 68.7 | 85 | 85 | nw-sw. | 2-0 | 10-4 | 29.84 | 29.73 | 0.00 |
| Sums. | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 1.75 |
| Means. | 29.918 | 67.7 | 64.1 | 70.8 | 65.9 | 63.5 | 73.6 | ..... | 1.3 | 4.0 | 29.979 | 29.873 | ..... | ..... |
| Departure. | -.037 | ..... | ..... | ..... | ..... | ..... | +1.0 | -0.3 | ..... | 0.0 | ..... | ..... | ..... | -2.91 |

Mean temperature for December, 1899 (6+2+9)+3=72.°; normal is 71.5°. Mean pressure for December (9+3)+2 is 29.925; normal is 29.963.
 * This pressure is as recorded at 1 p. m., Greenwich time. † These temperatures are observed at 6 a. m., local, or 7:29 p. m., Greenwich time. ‡ These values are the means of (6+9+2+9)+4. § Beaufort scale.