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HISTORICAL CLIMATOLOGY SERIES 2-3

Inventory of Sources of Long Term Climatic Data in Microfilm and Publication Form

National Climatic Center



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NATIONAL OCEANIC AND
ATMOSPHERIC ADMINISTRATION

/ ENVIRONMENTAL DATA AND
INFORMATION SERVICE

/ NATIONAL CLIMATIC CENTER
ASHEVILLE, N.C.

HISTORICAL CLIMATOLOGY SERIES

1. LONG RECORD OF WEATHER OBSERVATIONS:

- 1-1 A Long Record of Weather Observations at Cooperstown, New York, 1854-1977 (July 1978).
- 1-2 Ninety-One Years of Weather Records at Yellowstone National Park, Wyoming, 1887-1977 (March 1979).
- 1-3 A Long Record of Weather Observations in Southeastern Iowa, 1839-1979 (July 1980).

2. HISTORICAL INDEX:

- 2-1 Index of Historical Surface Weather Records, New York (August 1978).
- 2-2 A History of Sunshine Data in the United States, 1891-1980 (July 1981).
- 2-3 Inventory of Sources of Long Term Climatic Data in Microfilm and Publication Form (July 1982).

3. ATLASES:

- 3-1 Atlas of Mean Winter Temperature Departures From the Long-Term Mean Over the Contiguous United States, 1895-1979 (April 1980).

4. AREALLY-WEIGHTED DATA:

- 4-1 State, Regional, and National Monthly and Annual Temperature Weighted by Area, January 1931-December 1980 (Revised September 1981).
- 4-2 State, Regional, and National Monthly and Annual Total Precipitation Weighted by Area, January 1931-December 1980 (Revised September 1981).

5. POPULATION-WEIGHTED DATA:

- 5-1 State, Regional, and National Monthly and Seasonal Heating Degree Days Weighted by Population, July 1931-June 1981 (Revised September 1981).
- 5-2 State, Regional, and National Monthly and Seasonal Cooling Degree Days Weighted by Population, January 1931-December 1980 (Revised September 1981).

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Climatic Data in Microfilm
and Publication Form**

Henry F. Diaz

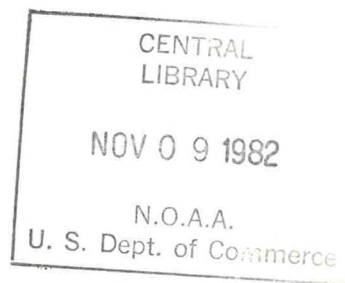
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Michael G. Burgin

National Climatic Center

Asheville, North Carolina

July 1982



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PREFACE

This publication is a by-product of a project entitled "Climate of the Northern Hemisphere, 1851-1900, Compared to Contemporary Climate," funded by the U.S. Department of Energy.

An initial task in carrying out this project was to identify all available non-digital sources of long-term climatic data located at the National Climatic Center (NCC) and at other major repositories, such as the Atmospheric Sciences Library of NOAA and the Meteorological Library of the British Meteorological Office at Bracknell, United Kingdom. This information comprises the contents of this inventory.

A relatively large number of data sources was found. Because of the differing nature of our sources, it was decided to divide the report into four parts: one dealing with source materials found at the NCC reference library; a second dealing with sources found at the NCC foreign data library; a third dealing mostly with data summaries for the U.S. stations on microform; and, a fourth dealing with sources identified by the Climatic Research Unit of the School of Environmental Sciences, University of East Anglia and by R. S. Bradley at the University of Massachusetts.

Each entry in Parts I-III contains the following information: (1) major geographical area covered; (2) the name of the publication; (3) the date the publication was published; (4) the source(s) of the data; and, (5) a brief description of the contents of the publication. In addition, foreign data library publications are preceded by a "GL Number," which is an internal NCC locator code.

These inventories are designed to serve as a guide to users interested in locating and obtaining 19th Century climatic data.

Part I

National Climatic Center

NCC Reference Library

Area: U.S.

Name: Climatology of the United States

Date: 1906

Sources: Military post observations made by the Medical Department of the Army (1820-1890), those made by cooperating observers of the Smithsonian Institution (1849-1874), the Signal Service, and the Weather Bureau (1870 to date).

Contents: Monthly and annual mean maximum and mean minimum temperatures for selected stations. Also monthly and annual mean relative humidity for selected stations. Period covered (1870-1903). Period of deficient rainfall at Washington, D.C. (1871-1903).

Area: U.S.

Name: Signal Service, Professional Papers 2, 7, 12, and 14

Date: October 1881

Sources: Not given.

Contents: Isothermal lines of the U.S. (1871-1880), the character of 600 tornadoes, the temperature of the atmosphere and earth's surface, including solar radiation intensity at the top of the atmosphere, the conditions determining temperature, actinometry and variations of temperature and rainfall on a yearly, monthly, and annual basis as compared to crop production. Also included is information about wind, ocean currents, meteorological researches, cyclones, tornadoes, and waterspouts.

Area: U.S.

Name: Tables of Daily Precipitation at Special River and Rainfall Stations of the United States Weather Bureau, 1893-1894-1895

Date: 1900

Source: The River and Flood Service of the Weather Bureau.

Contents: Simply lists precipitation totals by station for 1893-1895 (daily and monthly totals) for approximately 150 stations in the U.S. There are no stations listed after the letter "P". Seems to be incomplete, with no other volume except this one.

Area: U.S.

Name: Climatological Data* (1890's to present)

Date: Published monthly starting in the late 1800's.

Sources: Original data from participating stations in each state.

Contents: This publication presents basic climatological data in its monthly and annual issues. It is published for each state or combination of states. The series was first published by the Weather Bureau in the late 1890's as the Climate and Crop Service of the Weather Bureau. Beginning in July, 1909, and continuing through December, 1913, the monthly data were included as part of the Monthly Weather Review, but were presented on a drainage district basis. Beginning with January, 1914, Climatological Data has been published monthly and annually.

*See Climate and Crop Service of the Weather Bureau.

Area: U.S.

Name: Local Climatological Data*

Date: Published monthly 1897 to present.

Sources: Original data from participating stations in each state (approximately 300 stations).

Contents: This publication presents basic climatological data for each station by state. Beginning issues were first published in 1897 as the Monthly Meteorological Summary. In 1948, the name was changed to the Monthly Climatological Summary; and in 1952, to its present title. The earlier issues varied greatly in format and content from station to station and from time to time. They ranged from a postcard size single table issue to a seven-page issue containing numerous tables of current and comparative data.

*See Monthly Meteorological Summary.

Area: U.S.

Name: Monthly Weather Review

Date: Monthly since 1873.

Sources: Participating weather observing stations.

Contents: Contains pressure, temperature, precipitation, wind, cloudiness, etc., data by month. Most of the tabulated data are contained in the earlier volumes. The earliest issues are only a narrative of the weather, no tables.

Area: U.S.

Name: Army Meteorological Register, 1822-1825, 1826-1830, 1831-1842, 1843, 1855; Total Volumes - 4

Date: Various dates

Sources: Original observations made at military forts of the U.S. Army.

Contents: This publication contains the following, by year and month: places of observations, mean temperature, average mean temperature, highest and lowest temperature, prevailing wind direction and number of days with one particular wind direction, type of weather (fair, cloudy, rain, snow), annual rainfall by station, latitude, longitude, and year.

Area: U.S.

Name: Weather Bureau Bulletin (1-44)

Date: Since 1892

Source: Weather Bureau

Contents: Contains various topics on meteorology, some bulletins have tables for temperature and precipitation by month. Only a scattering of useful data in the form of monthly tables.

Area: U.S.

Name: Tri-Daily Meteorological Records

Date: 1878

Sources: U.S. Signal Service

Contents: Contains station names, barometer readings, thermometer readings, wind direction and velocity, clouds upper and lower, precipitation, and state of the weather.

Area: U.S.

Name: U.S. Department of Agriculture, Report No. 64, Field Operations of the Division of Soils (1899)

Date: February 1, 1900

Sources: Field Operations of the Division of Soils by Milton Whitney with accompanying papers by Thomas H. Means, Clarence W. Dorsey, Frank D. Gardner, Frank K. Cameron, and Lyman J. Briggs.

Contents: Monthly and annual precipitation, Salt Lake City, Utah, from 1874-1899. Mean monthly and mean annual temperature, Salt Lake City, Utah, from 1874-1899. Monthly and annual wind movement in miles at Salt Lake City, Utah, from 1874-1899. Pages 83-85.

Area: U.S.

Name: Climatic Summary of the United States*

Date: Through 1960's

Source: Weather Bureau

Contents: Temperature, precipitation, relative humidity, sunshine, means and extremes, etc., by month/year and station. Very long period of record - back to early 1800's, depending on station. Good source of monthly data.

*See Bulletin "W"

Area: U.S.

Name: Climatology of the United States (by station)
(example: Climatic Guide for Baltimore, Maryland)

Date: 1950's and 1960's

Source: Weather Bureau

Contents: Temperature and precipitation, wind, visibility, pressure, etc., by month/year and station. Usually a very long period of record for each station.

Area: U.S.

Name: Daily Bulletin of Weather Reports, 1871-1874 (20 volumes)

Date: 1875

Source: Signal Service, U.S. Army, Washington, D.C.

Contents: Meteorological records by month, day, year, and time. Contains pressure, temperature, relative humidity, wind direction and velocity, cloud data, rainfall in the past eight hours, and the state of weather.

Area: U.S.

Name: Bulletin "W"
Summaries of Climatological Data by Section, Volumes I, II, and III

Date: 1930's

Sources: U.S. Department of Agriculture, Weather Bureau

Contents: Contains precipitation, temperature, wind, frost, etc., for selected stations by month/year. Mid- to late 1800's through about 1930's (depending on the station). Some go back to 1820's-1830's.

Area: U.S.

Name: Bulletin "S"
Report on the Temperatures and Vapor Tensions of the United States, 1873-1905

Date: Not given

Sources: U.S. Department of Agriculture, Weather Bureau

Contents: Temperature and vapor pressure by month/year/station, many U.S. stations; 1873-1905 with means and departures.

Area: U.S.

Name: Bulletin "D"
Rainfall of the United States With Annual, Seasonal, and Other Charts

Date: 1897

Source: Weather Bureau

Contents: Contains some tables on rainfall, but very little on rainfall by month/year/station.

Area: U.S. (California)

Name: Bulletin "L"
Climatology of California

Date: 1903

Sources: U.S. Department of Agriculture, Weather Bureau

Contents: Contains tables on precipitation, snowfall, frost, fog, thunderstorms, etc., by month/year/station.*

*Data are from mid-1800's through 1900.

Area: U.S. (Indiana)

Name: Indiana Weather Service Monthly Report, August 1884 - December 1886

Date: 1884-1886

Sources: Volunteer Observers

Contents: Observers' names and station names; maximum, minimum, mean temperature and temperature sums; mean and total rainfall; dates of thunderstorms; and, appropriate remarks.

Area: U.S. (Iowa)

Name: Iowa Weather Report for 1886 by Month

Date: January 1887

Sources: Iowa State Weather Service

Contents: Barometric pressure in inches, temperature, mean wind direction, sky condition, and occurrences of unusual natural phenomena.

Area: U.S. (Massachusetts)

Name: Blue Hill Meteorological Observations 1892, Massachusetts, U.S.A.,
Volume XL, Part III

Date: November 18, 1893

Sources: Annuals of the Astronomical Observatory of Harvard College

Contents: The publication includes atmospheric pressure in inches; air temperature in Fahrenheit; vapor pressure in inches; relative humidity; cloudiness on a 0-10 scale, measured three times a day; wind direction, and velocity in miles per hour.

Area: U.S. (Massachusetts)

Name: Annals of the Astronomical Observatory of Harvard College, Volume 86, Part 2, Volume 87, Part 2; Observations and Investigations Made at Blue Hill Meteorological Observatory, Volume LXXIII, Part I-III (Massachusetts, U.S.A.)

Date: 1914, 1915, 1916

Source: Blue Hill Observatory records

Contents: Contains the total number of hours of wind by direction (1909-1910). Contains monthly temperatures in Fahrenheit for each month including mean maximum and date, mean minimum and date, mean range; unmelted snowfall in inches and in centimeters.

Area: U.S. (Massachusetts)

Name: Annals of the Astronomical Observatory of Harvard College, Volume 83, Part 1-5, Observations and Investigations

Date: August 1917-1921

Source: Blue Hill Observatory records

Contents: Contains air temperature in degrees Kelvin by monthly mean, and precipitation by month over a period of a year. This same information is also provided by atmospheric pressure, wind direction, bright sunshine. Rainfall by year and month with totals. Also included are seasonal snowfall data.

Area: U.S. (Nebraska)

Name: Climate of Nebraska Particularly in Reference to the Temperature and Rainfall

Date: 1890

Sources: U.S. Signal Service

Contents: Percentage of days with precipitation by station, month, and length of record. Average monthly precipitation; average cloudiness; mean temperatures by station, year, month, and annual. Rainfall in inches; snowing the greatest, least, and average values for each month and for the year.

Area: U.S. (New England)

Name: New England Meteorological Society, 1889

Date: 1889

Sources: Data from local observers.

Contents: Summaries of observations for 1889 including station name and number, monthly temperature and departure from mean, monthly precipitation and departure from mean, number of rainy days per month, monthly mean pressure, maximum and minimum pressure, relative humidity, and maximum and minimum wind velocity.

Area: U.S. (New York)

Name: Annual Report of the Director of the Meteorological Observatory, Central Park, New York (1871)

Date: 1871-1878

Source: Meteorological Observatory, Central Park, New York.

Contents: Contains monthly mean, maximum, minimum barometric pressure and range; monthly mean, maximum, minimum temperature and range; wind velocity and direction; and, precipitation.

Area: U.S. (Oregon)

Name: Oregon Weather Reports, 1891-92, 1893-94, 1894-96; 3 Volumes

Date: 1891, 1893, 1895

Sources: U.S. Signal Service and U.S. Weather Bureau

Contents: Contains temperature; barometric pressure; precipitation including rain, melted snow, and hail; and, wind. Also contains miscellaneous data about frosts, thunder, hail, and halos.

Area: U.S. (Oregon)

Name: Second-Fourth Biennial Report of the Oregon Weather Bureau (1893 and 1885); two volumes

Date: 1893

Sources: U.S. Department of Agriculture, Weather Bureau, Central Office, Portland, Oregon.

Contents: Contains maximum, minimum, and mean temperature by city and state; annual precipitation and greatest precipitation in a 24-hour period (Portland); mean relative humidity, measured monthly and yearly; and, the annual number of cloudless, partly cloudy, and cloudy days.

Area: U.S. (Ohio)

Name: A Climatological History of Ohio

Date: 1924

Sources: William Henry Alexander

Contents: Annual and monthly mean, maximum, and minimum temperature, pressure, wind, weather, thunderstorms, snowfall, etc.

Area: U.S. (Pennsylvania)

Name: Magnetic and Meteorological Observations, Girard College,
Philadelphia (1840-1845), Volumes I-II

Date: 1847

Sources: Daily or continuous records

Contents: Daily meteorological observations including barometer reading,
wind direction and velocity, rain in inches, sky cover, cloud types, and
conditions.

Area: U.S. (Washington, D.C., and surrounding area)

Name: The Climatic Handbook for Washington, D.C., Weather Bureau Technical
Paper No. 8

Date: 1949

Sources: U.S. Department of Commerce, Weather Bureau - compiled by the
Division of Climatological and Hydrologic Services.

Contents: Contains temperature, precipitation, degree days, pressure,
etc., for Washington, D.C., and vicinity, by month/year. (Also some
worldwide data.) Seems to be quite thorough in displaying the data tables;
may be a helpful publication for stations in the area of D.C.*

*1870's through about 1945 (depending on the station).

Area: U.S. (Wyoming, Yellowstone Park)

Name: Ninety-One Years of Weather Records at Yellowstone National Park,
Wyoming, 1887-1977

Date: 1979

Sources: Climatic Summary of the U.S., Climatography of the U.S. No. 86,
No. 20, Climatological Data, and others.

Contents: Temperature, precipitation, snowfall, etc., by month/year,
1887-1977.

Area: North America

Name: C. A. Schott (1876) Tables, Distribution, and Variations of the Atmospheric Temperature in the U.S. and Some Adjacent Parts of America

Date: 1876

Sources: Smithsonian system of observations and collection in general. The Army Meteorological Registers, American Almanac, Agriculture Report, Regent Report, etc.

Contents: Contains station, latitude, longitude, and elevation; observer's name and observation hours; monthly, seasonal, and annual mean temperature; isothermal charts; reference charts.

Area: North and South America

Name: C. A. Schott (1881) Consolidated Tables of the Aqueous Precipitation in the U.S. and Other Countries of North and South America

Date: 1881

Sources: Smithsonian contributions, the Army Meteorological Register, American Almanac, Agriculture Report, Regent Report, etc.

Contents: Contains mean precipitation in rain and melted snow by month/season/year for state stations.

Area: Central America

Name: Central American Rainfall

Date: March 1895

Sources: Various collections, mainly the Meteorologische Zeitschrift.

Contents: Contains annual, seasonal, and monthly rainfall rates; maximum rainfall in a 24-hour period; and, monthly mean rainfall of 1889-1891.

Area: Bahama Islands

Name: Climate of the Bahama Islands

Date: 1905

Sources: Not given

Contents: Contains mean relative humidity by month, average cloudiness by month, rainfall average by month, daily wind movement, prevailing wind direction, means and extremes of temperature at Nassau by month, climate as a whole, temperature, extremes of temperature at Cat Cays comparative temperature data.

Area: The World

Name: International Bulletin

Date: 1875-1887

Sources: Cooperating worldwide weather stations

Contents: Contains daily observations for worldwide stations, by country (including the U.S.) for pressure, wind direction and velocity, cloud amount, and rainfall. In 1881, the publication's name changed to "Monthly Summary and Review of International Meteorological Observations." The content is basically the same as the "International Bulletin."

Area: The World

Name: World Weather Records

Date: 1927-1980

Sources: Worldwide observing stations

Contents: Contains temperature, precipitation, and pressure for numerous stations worldwide. Lists means by month/year. Noted many stations as far back as the 1840's and 1850's, some before 1800.

Part II

National Climatic Center

Foreign Data Library

GL #: (100)
Area: World
Name: Air Temperature for the World
Date: 1975
Source: Japan Met. Agency
Contents: (1768-1972) Tables.

GL #: 2(100X)
Area: World
Name: Worldwide Extreme of Temperature, Precipitation, and Pressure
Date: 1968
Source: U.S. Department of Commerce
Contents: Text and tables on precipitation, temperature, and pressure (1881-1967).

GL #: (100)
Area: World
Name: Precipitation for the World
Date: 1975
Source: Japan Met. Agency
Contents: (1740-1972) Tables. Publication contains monthly total, normals, frequency distribution for precipitation.

GL #: (100X)

Area: World

Name: Meteorologische Abhandlungen (Meteorological Proceedings)

Date: 1975

Source: Frein Universitat

Contents: Text, tables, graphs, and maps (1873-1960).

GL #: (261/264)

Area: North/South Atlantic

Name: Surface Water Temperature and Salinity, Atlantic Coast, North and South America

Date: 1973

Source: Department of Commerce

Contents: Contains tables, maps, and graphs on surface temperature.

GL #: (265X)

Area: Western Pacific

Name: Rainfall and Its Variability

Date: 1950

Source: New Zealand Met. Service

Contents: (1896-1949) Tables and charts which detail rainfall and its variability over Central and Southwestern Pacific. Includes 34 island stations in Southwestern Pacific, maps 10°N-30°S, 150°E-150°W.

GL #: (265-13X)

Area: South Pacific

Name: Monthly Sea Surface Temperature

Date: 1949

Source: Great Britain Met. Office

Contents: (1855-1939) Maps, monthly sea surface temperature of Australian and New Zealand waters. Maps for areas 10°-50°S, 100°-180°E.

GL #: (4/215-17X)

Area: Europe

Name: Meteorologische Abhandlungen

Date: 1967

Source: Germany Met. Institute

Contents: (1761-1964) Text, tables, graphs, and maps. Meteorological measurements related to solar processes. Various types of solar observations.

GL #: (431.5X)

Area: Brandenburg Province (Germany)

Name: Das Klima des Brandenburg (The Climate of Brandenburg)

Date: 1962

Source: East German Meteorological Service

Contents: (1891-1950) Text, tables, and maps.

GL #: (433X)

Area: Bavaria

Name: Duration and Amount of Precipitation at Hohenpeissenberg

Date: 1972

Source: German Weather Service

Contents: (1879-1970) Text, tables.

GL #: (436.2X)

Area: Upper Austria

Name: Witturg und Klima von Linz (Weather and Climate of Linz)

Date: 1959

Source: Austria

Contents: (1796-1956) Text, tables, and maps. Textual description of climate with elements summarized for 1796-1833, 1852-1900, 1901-1956. Month by month data included.

GL #: (437)

Area: Prague, Czechoslovakia

Name: Meteorological Observations (Meteorologicka Pozorovani)

Date: 1976

Source: Hydrometeorologicky Ustav Praha

Contents: (1775-1975) Text, tables, clouds, precipitation, temperature, relative humidity, wind, pressure. Contains daily and monthly means.

GL #: (438X)

Area: Poland

Name: Climatic Atlas of Poland (Atlas Polski "Klimat")

Date: 1954

Source: Poland

Contents: (1826-1953) Text, graphs, and maps.

GL #: (438X)

Area: Poland

Name: Meteorological Conditions for Vegetation in Poland, Year 1949

Date: 1951

Source: Poland Met. Institute

Contents: Tables and charts containing mean monthly air temperature (1881-1930, March-October only).

GL #: (438X)

Area: Poland

Name: Reports of Hydrological and Meteorological Service

Date: 1965

Source: Poland Met. Service

Contents: (1826-1964) Text, tables, graphs, and maps.

GL #: (453.33X)

Area: Trieste

Name: Climatic Normals of Trieste, Volume I (Valori Normal Del Clima Di Trieste)

Date: 1970

Source: Trieste Exp. Institute

Contents: Text, tables (1869-1960).

GL #: (469X)

Area: Portugal

Name: Clima de Coimbra (Climate of Coimbra)

Date: 1954

Source: University of Coimbra

Contents: (1866-1953) Annual values of the principal elements and their variations.

GL #: (47/57X)

Area: U.S.S.R.

Name: Anticyclones in the U.S.S.R.

Date: 1962

Source: U.S. Weather Bureau

Contents: (1898-1954) Text, tables, and maps.

GL #: (473X)

Area: Central Russia

Name: Synoptic Climatology of the Moscow Basin

Date: 1956

Source: U.S. Army Air Force

Contents: (1878-1951) Text, tables, graphs, maps, and charts.

GL #: (480/4-17X)

Area: Northern Europe

Name: Temperature Variations

Date: 1944

Source: Finland

Contents: (1831-1940) Text, tables, graphs, maps, and charts.

GL #: (481X)

Area: Norway

Name: Secular Variation of Climate (Air Pressure and Wind)
(Sakulare Schwankungen Des Klimas Von Norwegen (Luft-Druck und
Wend))

Date: 1943

Source: Norway

Contents: (1860-1938) Text, tables, and graphs.

GL #: (485X)

Area: Sweden

Name: Temperature and Precipitation Records Since the 1850s

Date: 1969

Source: Sweden Met. Institute

Contents: (1856-1968) Text, tables, graphs, and maps.

GL #: (485X)

Area: Sweden

Name: Characteristics of Temperature and Precipitation

Date: 1969

Source: Sweden Met. Institute

Contents: Temperature and precipitation data (1756-1968). Text, tables,
graphs, and maps.

GL #: (493X)

Area: Belgium

Name: Cartes Pluviometrique (Precipitation Charts)

Date: 1979

Source: Met Institute

Contents: (1833-1975) Texts, charts, monthly and annual precipitation normals.

GL #: (493.2)

Area: Uccle, Belgium

Name: La Pression Atmospherique (Atmospheric Pressure)

Date: 1979

Source: Meteorological Institute

Contents: Text, tables (1833-1977), tables of monthly pressure for Uccle.

GL #: (494X)

Area: Switzerland

Name: Sonnenscheindauer (Hours of Sunshine)

Date: 1962

Source: Meteorologischen Zentralanstalt

Contents: (1886-1960) Varies; tables (see Summary Index Card for content).

GL #: (510X)

Area: China

Name: Climatological Data - Precipitation

Date: 1943

Source: National Research Institute of Meteorology

Contents: Tables, Chinese/English titles, 190 pages (1873-1940).

GL #: (52/519X)

Area: Japan

Name: Climate of Japan

Date: 1939

Source: McCune, Shannon

Contents: Manuscript made up of two items - Climate of Japan and Handbook for Daily Use. Station list for 43 stations in Japan, Korea, Manchuria; text, tables (1883-1937).

GL #: (520X)

Area: Japan

Name: Climatic Tables of Tokyo

Date: 1951

Source: Japan Central Meteorological Observatory

Contents: (1876-1948) Tables, English translations.

GL #: (546.1X)

Area: India

Name: A Study of Fifty Years of Rainfall at Srinagar and Jamma
(1893-1950)

Date: 1954

Source: India Meteorological Department

Contents: Fifty years of rainfall for Srinagar and Jamma. Text and tables.

GL #: (55X)

Area: Iran

Name: A Statistical Analysis of the Annual, Monthly, and Daily
Precipitation of Tehran

Date: 1969

Source: Iran Meteorological Department

Contents: Annual, monthly, and daily precipitation, with charts, texts,
and tables.

GL #: (57)

Area: Asiatic U.S.S.R.

Name: The Perpetually Frozen Subsoil of Siberia

Date: 1928

Source: University of Minnesota

Contents: (1844-1919) Text, tables, maps. See pub. 60-2-1. Describes in
detail the upper and lower limits of the partially frozen layer - its
thickness and temperature. This publication gave a table showing the depth
of snow cover upon the temperature of the underlying soil at Bomnak,
Siberia.

GL #: (6X)

Area: Africa

Name: The Climate of Africa

Date: 1968

Source: G. Drometeorologiches koe Izdatel'stov

Contents: 1879-1961 (Varies); Part 1, "Air Temperature, Precipitation."
Text, graphs, tables - statistical treatment of climatic elements.

GL #: (61/54X)

Area: Algeria, Tunisia, India

Name: Analisi di alcune Curve di livelli medi Marini

Date: 1951

Source: Mosetti, F., and G. d'Henry

Contents: (1870-1940) Analysis of some curves of average sea levels; 10-year mean for six stations.

GL #: (64X)

Area: Azores, N.W. Africa, Madeira, Canary Islands

Name: Weather Summary, N.W. Africa, H.O. Pub. No. 260

Date: 1943

Source: U.S. Weather Bureau

Contents: Text, tables, graphs, and maps (1879-1941).

GL #: (668.1X)

Area: North Africa

Name: Les Quintiles

Date: Not given

Source: Togo Met. Service

Contents: Monthly precipitation observations over the period 1889-1959, tables in French.

GL #: (7/72X)

Area: North America

Name: Handbuch der Klimatologie. Band II, Teil J. (The Climate of North America)

Date: 1936

Sources: Germany. Gebruder Borntraeger, Ward, Robert deC., Brooks, C.F., Conner, A.J.

Contents: Period varies from 1780-1930. Berlin 1936. Text, tables, graphs, and maps.

GL #: (71)

Area: Canada

Name: Monthly Record Meteorological Observations

Date: 1981

Source: Atmospheric Environment Service

Contents: (1883-1892) (1906-81) Text, tables, and maps. Monthly Record Meteorological Observations in Canada (prior to 1916 the title was Monthly Weather Review). Contains daily pressure temperature (maximum and minimum); relative humidity, wind direction and speed; sky cover, precipitation. Also contains monthly totals mean and extremes of the above elements plus pressure, cloud amounts, visibility, and winds.

GL #: (71/798/988X)

Area: Canada, Alaska

Name: Minimum Temperature of Canada (including Alaska), Pub. No. 23

Date: 1946

Source: Theaman, J. R.

Contents: 33 pages, maps, text, tables, includes Greenland (general period 1895-1945).

GL #: (711-717)

Area: Canada

Name: Daily Climatological Data

Date: 1971

Source: Atmospheric Environment Service

Contents: Individual publications for 15 stations filed by geographical location. (1840-1970) (Period of record varies) Text, tables, elements - precipitation, snow, temperature. Contains daily maximum, minimum, mean temperature; rainfall, snowfall, total precipitation. Mean and extremes - monthly, annual, 10 years, and entire period of record.

GL #: (712.3X-717X)

Area: Canada

Name: Daily Data Summaries

Date: 1971

Source: Atmospheric Environment Service

Contents: Individual publications for 10 stations filed by geographical location. (1840-1970) (Period of record varies by station) Tables.

GL #: (712X)

Area: Canada

Name: Climatic Trends on the Canadian Prairies

Date: 1966

Source: D.O.T. Met. Branch, Climatology Division (Canada)

Contents: (1874-1965) Text, tables, graphs.

GL #: (712.3)

Area: Alberta, Saskatchewan and Manitoba

Name: The Temperature and Precipitation of Alberta, Saskatchewan and Manitoba

Date: 1920

Source: Met. Service

Contents: Text and tables. Elements are precipitation and temperature.

GL #: (713X)

Area: Canada

Name: A Century of Weather Observation at Beatrice, Ontario

Date: 1976

Source: Atmospheric Environment Service

Contents: Observations at Beatrice, Ontario (1876-1975). Text, tables, and graphs.

GL #: (713)

Area: Ontario

Name: Cloud Observations

Date: 1920

Source: Canadian Met. Service

Contents: (1896-1897) Tables, graphs, and maps.

GL #: (722)

Area: Mexico - Lower California

Name: Climatological Data for Baja, California

Date: 1964

Source: University of Arizona

Contents: (1894-1962) Text, tables. Elements - precipitation and temperature. Contains monthly and annual total precipitation and average temperature with mean for entire period of record.

GL #: (725X)

Area: Mexico

Name: Meteorological Summary of 16 Years

Date: Not given

Source: Mexico Central Met. Observatory

Contents: (1877-1890) Annual values and monthly values summarized over the period.

GL #: (728X)

Area: Central America

Name: Central America Rainfall

Date: 1895

Sources: Harrington, M.W., Philosophical Society of Washington, Bulletin Volume XIII, pages 1-56

Contents: Text, tables, station list, with some history of the observations. Unsummarized data annual (1848-1894) for Central American cities.

GL #: (728.2)

Area: British Honduras

Name: Selected Daily Rainfall Data

Date: Not given

Source: Great Britain Overseas Develop. Admin.

Contents: (1895-1970) Tables, element - precipitation. Period of record varies by station. Also contains monthly totals.

GL #: (728.7-52X)

Area: Panama Canal

Name: The Climatology and Hydrology of the Panama Canal, 112 pages

Date: October 1915

Source: Wilson, F.D.

Contents: Text, tables, graphs, photographs, some data for Panama Republic (1879-1914).

GL #: (729/261-4/263.5X)

Area: North Atlantic (Southwest)

Name: Weather Summary West Indies (H.O. Pub. No. 530)

Date: 1947

Source: U.S. Weather Bureau

Contents: Text, tables, graphs, wind roses (1780-1947).

GL #: (729.1)

Area: Cuba

Name: Cuban Meteorological Review

Date: October 1956

Source: Asociacion Cubana Aficionados Meteorologia

Contents: (1800-1956) Text and tables. Contains articles on cyclone disturbances and hurricane "Hilda" of 1955. See publication 87-2-11. Describes the intensity of the cyclone, the time it hit, and the total number of cyclones per month.

GL #: (729.2)

Area: Jamaica

Name: Jamaica Rainfall

Date: 1954

Source: British Caribbean Met. Service

Contents: (1870-1884) (1921-1943) (Supplement 1870-1939) Annual. Contains monthly and annual rainfall with some summarized data for various periods.

GL #: (729.2X)

Area: Jamaica

Name: The Rainfall of Jamaica

Date: 1963

Source: Jamaica Scientific Research Council

Contents: Rainfall data including text, map, etc.

GL #: (729.2X)

Area: Jamaica

Name: The Meteorology of Jamaica

Date: 1904

Source: Jamaica Met. Service

Contents: Tables, text (1870-1903).

GL #: (729.2X)

Area: Jamaica

Name: Rainfall of Jamaica

Date: 1923

Source: Jamaica Met. Service

Contents: Text and tables on rainfall (1870-1919), some unsummarized.

GL #: (729.2)

Area: Jamaica

Name: Meteorological Results of Barometer Pressure, Temperature, Etc.

Date: 1923

Source: Jamaica Weather Service

Contents: Text, tables, cloud, precipitation, temperature, dew point, percent of relative humidity, wind, pressure (1881-1922). Contains monthly and annual means and extremes with 15- and 33-year summaries.

GL #: (729.2)

Area: Jamaica

Name: Tables of Rainfall Records for Kingston

Date: 1932

Source: British Caribbean Met. Service

Contents: Text, tables (1870-1929); precipitation, monthly and annual total rainfall with 10-year means, and the total number of rain days by month and year.

GL #: (729.6)

Area: Bahamas

Name: Past Records of Bahama Rainfall

Date: 1971

Source: Meteorological Office

Contents: Text and tables (1852-1970). Element - precipitation. Contains monthly and annual rainfall by station (period of record varies).

GL #: (729.6X)

Area: Bahama Islands

Name: Climate of the Bahama Islands

Date: 1905

Source: Fassig, O.L., Ph.D. The Geographical Society of Baltimore

Contents: Periods vary from 1852-1903, 1905. Text, tables.

GL #: (729.9X)

Area: Bermuda

Name: Pressure at Mean Sea Level at Bermuda

Date: 1958

Source: Bermuda Meteorological Office

Contents: (1836-1953) Text and tables.

GL #: (729.9X)

Area: Bermuda

Name: Bermuda Temperature, Meteorological Station No. 4

Date: 1948

Source: Mackey, W.A., Meteorological Office, Bermuda

Contents: Text, tables, graphs (1891-1947).

GL #: (729.5/729.71X)

Area: Puerto Rico and U.S. Virgin Islands

Name: Climate of Puerto Rico and U.S. Virgin Islands

Date: 1970

Source: U.S. Department of Commerce

Contents: (1893-1960) Varies; text, tables, and maps.

GL #: (729.71X)

Area: Puerto Rico and Virgin Islands

Name: Scientific Survey of Puerto Rico and the Virgin Islands, Volume XIX - Part 1

Date: 1942

Source: Stone, Robert G. The New York Academy of Sciences

Contents: Period varies from 1838-1938. Text, tables, graphs, and cross sections.

GL #: (81X)

Area: Brazil

Name: Boletim de Normas (Bulletin of Normals)

Date: 1922

Source: Brazil Directoria de Meteorologia

Contents: 66 pages; tables, Rio de Janeiro and other stations; general period 1882-1920; Portuguese.

GL #: (81X)

Area: Brazil

Name: Normas Climatologicas (Climatological Normals)

Date: 1942

Source: Servico de Meteorologia, Brazil

Contents: 167 pages; tables, 1890-1938, Portuguese.

GL #: (81X)

Area: Brazil

Name: Normals Variabilidale Relativa das Precipitacoes Mensais
(Normal and Relative Variability of Monthly Precipitation)

Date: 1956

Sources: Amaral, E., and da Mota, F.S.; Boletim Tecnico do Instituto
Agronomico do Sul, No. 13, Rio Grande do Sul, 1956, 12 pages.

Contents: Precipitation normal and relative variability monthly; 12 pages,
10 figures, graphs, tables, general 1893-1951, formulae, 19 references;
Portuguese.

GL #: (866X)

Area: Ecuador

Name: La Cantidad de Lluvia en la Ciudad de Quito en los Ultimos Sesenta
Anos (The Fall of Rain in Quito in the Last 60 Years)

Date: 1950

Source: Ecuador Servicio Meteorologico

Contents: (1891-1950) Text, tables, graphs; Spanish.

GL #: (87X)

Area: Venezuela

Name: Observaciones Puviometricas Practicadas en Cincuenta Estaciones
entra 1891 y 1933 (Rainfall Observations Practiced at Fifty Stations
Between 1891-1933)

Date: 1936

Source: Pittier, H.; Contribution to the Study of "Venezuela Climate,"
No. 2, Caracas, 1936.

Contents: 25 pages; text, tables; Spanish.

GL #: (899X)

Area: Uruguay

Name: Revista Meteorologia Supplement #3. Las Lluvias en el Uruguay
(The Rains of Uruguay)

Date: 1963

Source: Uruguay Direccion General De Meteorologia

Contents: Precipitation, general period 1883-1962.

GL #: (91X)

Area: East Indies

Name: Wind and Weather, Current, Tides, and Tidal Streams in the East
Indian Archipelago

Date: 1896

Source: U.S. Navy

Contents: Text, tables, roses, maps.

GL #: (922X)

Area: Java

Name: The Climate of Madura

Date: 1968

Sources: Java, University of Indonesia

Contents: Data for 1879-1941 thesis by Wihatmo Djakarta, 1968. Text,
tables.

GL #: (922X)

Area: Netherland Indies

Name: Rainfall in the Netherland Indies, Volume II

Date: 1925

Sources: Netherland Indies. Koninklijk er Meteorologisch Observatorium te Batavia.

Contents: Maps of the mean yearly and monthly rainfall on Fava and Madoera, with a map showing the position of the rainfall stations (1879-1922).

GL #: (922X)

Area: Java

Name: On the Rainfall in Java

Date: 1908

Source: Java Royal Magnetical and Meteorological Observatory

Contents: (1879-1905) Rainfall in Java; text, tables, graphs, and maps.

GL #: (922X)

Area: Netherland Indies

Name: Rainfall in the Netherland Indies (2715 Stations), 1879-1922,
Pub. #14

Date: 1925

Source: Koninklijk en Meteorologisch Observatorium te Batavia

Contents: Rainfall in the Netherland Indies (1879-1922); tables, Cutch.

GL #: (931X)

Area: New Zealand

Name: Summaries of Climatological Observations to 1970

Date: 1973

Source: New Zealand Met. Service

Contents: (1853-1970) Text and tables.

GL #: (931X)

Area: New Zealand

Name: Dry Years in New Zealand

Date: 1931

Source: New Zealand Met. Service

Contents: (1864-1930) Text, maps.

GL #: (931X)

Area: New Zealand

Name: Mean Temperatures in New Zealand

Date: 1931

Source: New Zealand Met. Service

Contents: Mean temperature (1860-1930); tables, text, graphs, and maps.

GL #: (931X)

Area: New Zealand

Name: Climatic Notes: New Zealand Districts

Date: 1937

Source: New Zealand Met. Service

Contents: (1864-1935) Note No. 17; text, tables, and maps.

GL #: (931X)

Area: New Zealand

Name: Rainfall Percentiles

Date: 1973

Source: New Zealand Met. Service

Contents: (1864-1969) Tables, tables of percentiles, means, standard deviations and extremes of monthly seasonal and annual rainfall.

GL #: (931X)

Area: New Zealand

Name: Average Annual Rainfall in New Zealand

Date: 1930

Source: Department of Scientific and Ind. Research

Contents: New Zealand average annual rainfall (1891-1925); text, maps, etc.

GL #: (931-13X)

Area: New Zealand

Name: The Climate and Weather of the Otago Region, New Zealand

Date: 1968

Source: New Zealand Met. Service

Contents: (1890-1964) Text, tables, maps, graphs, and roses.

GL #: (931-13X)

Area: New Zealand

Name: The Climate of Molesworth

Date: 1969

Source: New Zealand Met. Service

Contents: Miscellaneous publication, No. 13; text, tables, graphs, and maps. Period of record varies (1866-1968).

GL #: (931-17X)

Area: New Zealand

Name: Climate and Climatic Resources of the Waikato Coromandel King
County Region

Date: 1974

Source: New Zealand Met. Service

Contents: (1889-1970) Text, tables, charts, graphs, and maps.

GL #: (94)

Area: Australia

Name: Monthly and Yearly Rainfall

Date: Not given

Sources: Australia, M.I.S.S.

Contents: Tables for Melbourne, Cooktown, Cairns, Townsville, Rockhampton, Thursday Island, Hobart, Launceston, Sydney, New Castle, Port Kemba (1840-1977).

GL #: (98X)

Area: Russian

Name: Climatological Book of Reference on the Foreign Arctic, Volume 177

Date: 1941

Source: Chief Administrator of the Northern Sea Route

Contents: Monthly unsummarized data, pages 30-74, 1873-1937; temperature and precipitation, text, maps, tables; Russian; 83 pages.

Part III

National Climatic Center

Microfilm Holdings

Following is a list of stations for which the Climatological Record Books, journals, and diaries have been copied to microfilm. The following information is given: (1) station name; (2) period of record; and, (3) the microfilm reel number as identification. A total of 298 stations have climatological records on microfilm. For the Climatological Record Books, a monthly summary of all the weather elements recorded during the time of operation was entered into these books. A copy of a page from the New York station is shown on page 53. Naturally, the very early diaries and journals were in no particular format. A copy of a page from one of the early journals is shown on page 55.

New York, N. Y.

CLIMATOLOGICAL RECORD.

PRECIPITATION (INCHES AND HUNDREDTHS) AND DEPARTURE FROM NORMAL.

YEAR.	JANUARY.	FEBRUARY.	MARCH.	APRIL.	MAY.	JUNE.	JULY.	AUGUST.	SEPTEMBER.	OCTOBER.	NOVEMBER.	DECEMBER.	ANNUAL.
	Total Precip.	Total Precip.	Total Precip.	Total Precip.	Total Precip.	Total Precip.	Total Precip.	Total Precip.	Total Precip.	Total Precip.	Total Precip.	Total Precip.	Total Precip.
1871	1.15-2.64-3.86+1.00	4.90+1.10	3.41+1.11	4.44+1.30	2.60-8.4	5.48+9.0	2.13-1.44	7.07-3.26	4.33+8.0	1.24-2.21	4.80+4.17		
1872	2.40-1.39	4.45-2.29	3.93-1.17	2.49-1.81	2.44-7.4	2.94-3.2	9.45+4.91	6.13+1.60	3.44-1.5	5.04+1.60	2.50-9.1	4.578+1.15	
1873	5.05+1.26	1.73-2.01	1.92-2.18	3.05-2.5	4.08+9.0	1.29-1.97	4.15-3.9	7.66+3.13	2.51-1.08	2.47-1.74	4.01+4.57	2.06-1.39	3.98-4.15
1874	4.82+1.03	2.41-1.33	1.88-2.22	2.02+3.72	2.16-1.02	2.87-3.9	3.22-1.32	2.53-2.00	7.21+3.62	1.82-1.89	2.21-1.33	1.69-1.76	3.84-4.79
1875	2.87-9.4	3.73-5.1	4.25+1.5	3.21-1.09	1.47-1.71	1.66-1.60	5.23+6.9	10.42+5.89	2.51-1.08	2.13-1.08	4.43+9.9	2.78-1.67	4.579+1.52
1876	1.21-1.53	5.39+1.65	2.90+3.80	3.79+4.49	3.94+7.0	2.87-3.9	5.72+1.18	2.97-1.52	5.24+1.65	1.68-2.03	4.40+9.0	2.29-1.12	4.744+2.77
1877	3.55-3.4	1.67-2.04	6.65+2.53	5.18-1.2	0.73-2.45	3.31+1.08	3.86-1.45	2.54-1.99	1.33-2.02	7.69+3.98	5.48+2.04	0.95-2.50	4.034-3.69
1878	4.53+7.4	3.40-3.0	4.02-1.01	1.93-1.37	3.73+5.0	2.91-3.5	5.26+7.2	7.30+2.77	3.20-3.9	1.71-2.00	3.74+3.0	4.93+1.49	4.666+2.03
1879	3.05-1.4	2.74-1.05	2.74-2.06	4.06+7.6	2.73-9.5	3.42+1.6	3.39-1.15	5.17+6.4	1.45-2.14	0.58-3.13	2.22-4.22	5.86+2.41	3.824-8.42
1880	2.19-1.6	2.11-1.6	4.61+5.2	3.18-1.2	0.82-2.32	1.69-1.57	6.67+2.33	4.40-1.3	2.26-1.33	2.81-9.0	2.40-1.04	4.15+7.0	3.734-7.29
1881	5.41+1.6	5.16+1.3	6.78+2.68	1.00-2.28	2.33-1.85	6.23+2.07	1.31-3.33	1.56-2.97	1.38-2.21	2.10-1.61	2.87-5.7	4.37+9.2	4.040-4.23
1882	1.15+2.23	4.31+1.62	2.92-1.73	2.15-1.15	4.21+1.03	2.82-4.4	2.75-1.79	1.63-2.90	4.57+1.03	1.69-2.02	1.80-1.64	2.22-1.23	4.661+1.98
1883	3.22-5.1	4.58-8.4	1.63-2.47	3.72+1.52	3.03-1.5	4.00+7.4	3.37-1.17	2.29-3.24	3.57-1.02	4.27+5.2	1.65-1.79	3.40-1.05	3.153-5.10
1884	6.04-2.23	5.09+1.35	4.43+1.33	2.66-1.64	4.35+1.17	4.16+9.0	1.44+1.60	8.56+4.03	0.15-3.44	3.63-1.08	3.44+1.00	6.66+3.21	5.534+10.71
1885	3.50-2.9	6.09-2.35	1.19-2.91	2.44-1.6	2.32-9.0	1.86-1.40	3.04-1.50	7.70+3.17	0.72-2.87	5.62+1.91	5.05+1.61	2.69-7.0	4.212-2.51
1886	5.02+1.23	5.00+2.16	3.54-1.52	4.95+1.65	6.53+2.35	3.01-2.5	2.57-1.97	1.18-3.35	1.79-1.80	3.90+1.8	4.61+1.17	3.73+2.5	4.673+2.10
1887	4.19+1.4	5.26+1.52	3.51-5.9	3.67+1.37	0.99-2.19	7.70+4.04	6.75+2.21	3.65-1.87	2.30-1.29	2.36-1.35	2.04-1.42	4.20+7.8	4.663+2.00
1888	5.14+1.35	4.03+2.9	5.64+1.51	3.57+2.27	4.87+1.69	1.68-1.58	1.27-3.27	6.55+1.82	7.40+3.81	4.14+7.3	4.81-1.27	4.05+6.0	5.295+8.32
1889	5.33+1.59	3.07-1.67	4.09-1.01	5.90+2.60	3.25+1.07	2.38-1.81	9.63+5.09	3.39-1.14	7.43+3.84	2.53-1.18	9.82-4.33	1.81-1.64	5.61+1.05
1890	2.95-1.84	3.81+1.2	6.67+2.57	2.58-1.7	3.11-1.07	4.19+9.3	3.96-1.58	4.06-1.47	8.21+4.62	6.46+2.75	0.82-2.62	5.43-1.08	5.92+7.67
1891	7.85	7.59	8.195	6.806	6.998	6.813	4.131	6.458	7.74	5.819	7.57	6.28	9.830
1892	3.89+1.0	3.76+1.02	4.10+1.00	3.40+1.10	3.05-1.13	3.41+1.15	4.57+1.03	4.75+2.22	3.94+2.5	3.46-2.5	3.76+3.8	2.33-1.10	4.548+1.81

REMARKS:

a page from an early journal

[illegible]

CLIMATOLOGICAL RECORD BOOKS

<u>Station Name</u>	<u>Period of Record</u>	<u>Microfilm Reel No.</u>
<u>Alabama</u>		
Birmingham	Jul. 1882-Dec. 1970	CL-002,CL-288
Mobile	Jan. 1871-Dec. 1970	CL-003,CL-288
Montgomery	Jan. 1872-Dec. 1970	CL-004,CL-288
<u>Alaska</u>		
Angoon	1881-1950	AA-454
Anuik	1882-1891	AA-454
Atka	1881-1949	AA-454
Barrow	1881-1950	AA-454
Circle	1897-1945	AA-455
Coal Harbor	1889-1911	AA-455
Eagle	1882-1947	AA-455
Gamble	1894-1950	AA-456
Holy Cross	1893-1940	AA-456
Juneau	1881-1950	AA-456
Kenai	1870-1950	AA-456
Kodiak	1869-1950	AA-456
Kolmakof	1882-1886	AA-456
Kotzebue	1897-1950	AA-456
Metlaktla	1892-1894	AA-457
Mission	1883-1886	AA-457
Morzouia	1881-1883	AA-457
Nulato	1894-1944	AA-457
Orca	1899-1908	AA-457
Point Hope	1896-1950	AA-457
Pyramid Harbor	1881-1908	AA-457
Saint Michael	1874-1933	AA-458
Saint Paul	1870-1950	AA-458
Sitka	1867-1950	AA-458
Skagway	1898-1950	AA-458
Teller	1896-1950	AA-458
Ugashik	1883-1885	AA-458
Unga	1893-1922	AA-458
Wrangell	1868-1950	AA-458
<u>Arizona</u>		
Flagstaff	1888-1970	CL-005,CL-290
Phoenix	Aug. 1895-Dec. 1970	CL-006,CL-290
Yuma	Jan. 1876-Dec. 1970	CL-008,CL-290
<u>Arkansas</u>		
Fort Smith	Jun. 1882-Dec. 1970	CL-010,CL-291
Little Rock	Jul. 1879-Dec. 1970	CL-011,CL-291

<u>Station Name</u>	<u>Period of Record</u>	<u>Microfilm Reel No.</u>
<u>California</u>		
Eureka	1887-1970	CL-013, CL-292
Fresno	Aug. 1887-Dec. 1970	CL-014, CL-292
Independence	Jan. 1895-Dec. 1924	CL-015
Los Angeles	Jul. 1877-Dec. 1970	CL-016, CL-292
Mount Tamalpias	Sep. 1898-Apr. 1921	CL-018
Red Bluff	1877-1970	CL-021, CL-293
Redding	Jan. 1875-Aug. 1944	CL-022
Sacramento	Jul. 1877-Dec. 1970	CL-023, CL-293
San Diego	Jan. 1872-Dec. 1970	CL-024, CL-293
San Francisco	Feb. 1871-Dec. 1970	CL-025, CL-293
San Jose	1874-1930	CL-026
San Louis Obispo	Aug. 1894-Dec. 1927	CL-027
<u>Colorado</u>		
Denver	Jan. 1871-Dec. 1970	CL-030, CL-294
Grand Junction	Jan. 1892-Dec. 1970	CL-032, CL-294
Pueblo	Jul. 1888-1950	CL-033
<u>Connecticut</u>		
New Haven	1873-1950	CL-035
<u>District of Columbia</u>		
Washington	1870-1959	CL-259, CL-344
<u>Florida</u>		
Jacksonville	1871-1970	CL-037, CL-297
Jupiter	1888-1911	CL-038
Miami	1878-1970	CL-040, CL-297
Pensacola	Oct. 1879-Dec. 1970	CL-041, CL-298
Tampa	Apr. 1890-Dec. 1970	CL-043, CL-298
<u>Georgia</u>		
Atlanta	Oct. 1878-Dec. 1970	CL-044, CL-299
Augusta	Nov. 1870-Dec. 1970	CL-046, CL-299
Savannah	Dec. 1870-Dec. 1970	CL-048, CL-299
Macon	Apr. 1899-Dec. 1970	CL-047, CL-299
Thomasville	1878-1949	CL-049
<u>Hawaii</u>		
Honolulu	1877-Dec. 1970	CL-274, CL-300
<u>Idaho</u>		
Boise	1864-1970	CL-050, CL-301
Lewiston	1878-1970	CL-051, CL-301
Pocatello	Jul. 1899-Dec. 1970	CL-052, CL-301

<u>Station Name</u>	<u>Period of Record</u>	<u>Microfilm Reel No.</u>
<u>Illinois</u>		
Cairo	1871-1970	CL-054,CL-302
Chicago	Nov. 1870-Dec. 1970	CL-054,CL-302
Peoria	1886-1970	CL-057,CL-302
Springfield	1879-1970	CL-058,CL-302
<u>Indiana</u>		
Evansville	1897-1970	CL-054,CL-303
Indianapolis	1871-1970	CL-062,CL-303
<u>Iowa</u>		
Burlington	Jul. 1897-Dec. 1964	CL-065,CL-304
Charles City	1881-1904	CL-066
Davenport	May 1871-1950	CL-067
Des Moines	Aug. 1878-Dec. 1970	CL-068,CL-304
Dubuque	Jul. 1873-Dec. 1970	CL-069,CL-304
Keokuk	Jul. 1871-1946	CL-071
Sioux City	Jul. 1889-Dec. 1970	CL-071,CL-304
<u>Kansas</u>		
Concordia	May 1885-Dec. 1970	CL-072,CL-305
Dodge City	1874-1970	CL-073,CL-305
Goodland	Jun. 1887-Dec. 1970	CL-074,CL-305
Wichita	1887-1930	CL-077,CL-305
<u>Kentucky</u>		
Lexington	1872-1970	CL-079,CL-306
Louisville	1871-1950	CL-080,CL-306
<u>Louisiana</u>		
Shreveport	1871-1970	CL-307,CL-083
<u>Maine</u>		
Eastport	1873-1950	CL-085
Portland	1871-1970	CL-086,CL-308
<u>Maryland</u>		
Baltimore	1871-1970	CL-087,CL-309
<u>Massachusetts</u>		
Boston	1871-1970	CL-088,CL-310
Nantucket	Oct. 1886-1969	CL-089
<u>Michigan</u>		
Alpena	1872-1970	CL-090,CL-311
Detroit	1871-1970	CL-091,CL-311
Escanaba	1871-1950	CL-092
Grand Haven	1871-1930	CL-093
Marquette	1871-1970	CL-098,CL-311

<u>Station Name</u>	<u>Period of Record</u>	<u>Microfilm Reel No.</u>
<u>Michigan (Continued)</u>		
Port Huron	1874-1930	CL-099
Sault St. Marie	1888-1970	CL-101,CL-311
<u>Minnesota</u>		
Duluth	1871-1970	CL-102,CL-313,CL-312
Minneapolis	1890-1970	CL-103,CL-104,CL-312
Rochester	1891-1970	CL-104,CL-312
St. Paul	1871-1950	CL-106
<u>Mississippi</u>		
Jackson	1896-1970	CL-107,CL-314
Meridian	1889-1970	CL-108,CL-314
Vicksburg	1871-1965	CL-109,CL-314
<u>Missouri</u>		
Columbia	1889-1970	CL-110,CL-315
Hannibal	1892-1930	CL-111
Kansas City	1889-1970	CL-112,CL-315
Springfield	1887-1970	CL-116,CL-315
<u>Montana</u>		
Great Falls	1892-1970	CL-118,CL-316
Havre	1880-1950	CL-119,CL-316
Helena	1880-1970	CL-120,CL-316
Kalispell	1889-1970	CL-121,CL-316
Miles City	1891-1970	CL-122,CL-316
Missoula	1891-1970	CL-123,CL-316
<u>Nebraska</u>		
Grand Island	1890-1970	CL-124,CL-317
Lincoln	1886-1970	CL-125,CL-317
North Platte	1874-1970	CL-127,CL-317
Omaha	1872-1970	CL-128,CL-317
Scotts Bluff	1891-1970	CL-130,CL-317
Valentine	1889-1970	CL-131,CL-317
<u>Nevada</u>		
Carson City	1887-1905	CL-132
Elko	1888-1970	CL-132A,CL-133,CL-318
Winnemucca	1877-1970	CL-137,CL-318
<u>New Jersey</u>		
Atlantic City	1874-1970	CL-139,CL-320
Trenton	1865-1970	CL-143,CL-320
<u>New Mexico</u>		
Albuquerque	1891-1970	CL-144,CL-321
Roswell	1893-1970	CL-146,CL-321
Santa Fe	1871-1946	CL-147

<u>Station Name</u>	<u>Period of Record</u>	<u>Microfilm Reel No.</u>
<u>New York</u>		
Albany	1874-1970	CL-148,CL-150,CL-322
Binghamton	1896-1970	CL-150,CL-322
Buffalo	1871-1970	CL-151,CL-322
Canton	1899-1950	CL-152
Ithaca	1895-1952	CL-153
New York	1871-1970	CL-154,CL-322
Oswego	1871-1970	CL-155,CL-322
Rochester	1871-1970	CL-156,CL-322
<u>North Carolina</u>		
Charlotte	1873-1970	CL-159,CL-323
Hatteras	1874-1970	CL-161,CL-323
Raleigh	1887-1970	CL-162,CL-324
Wilmington	1871-1970	CL-163,CL-324
<u>North Dakota</u>		
Bismarck	1874-1970	CL-164,CL-325
Fargo	1881-1970	CL-167,CL-325
Williston	1879-1970	CL-168,CL-325
<u>Ohio</u>		
Akron	1887-1970	CL-169,CL-326
Cincinnati	1871-1970	CL-170,CL-326
Cleveland	1871-1970	CL-171,CL-326
Columbus	1883-1970	CL-326
Sandusky	1877-1950	CL-174
Toledo	1871-1970	CL-175,CL-326
<u>Oregon</u>		
Baker	1889-1950	CL-181
Portland	1871-1970	CL-184,CL-328
Rosenburg	1877-1970	CL-185,CL-328
<u>Puerto Rico</u>		
San Juan	1898-1950	CL-275
<u>Pennsylvania</u>		
Erie	1873-1970	CL-187,CL-329
Harrisburg	1889-1970	CL-188,CL-329
Philadelphia	1871-1970	CL-189,CL-329
Pittsburgh	1871-1970	CL-191,CL-191A,CL-329
Reading	1892-1950	CL-193,CL-193
<u>Rhode Island</u>		
Block Island	1880-1970	CL-195,CL-331

<u>South Carolina</u>		
Charleston	1871-1970	CL-197, CL-332
Columbia	1887-1970	CL-198, CL-332
<u>South Dakota</u>		
Huron	1881-1970	CL-201, CL-333
Pierre	1891-1933	CL-202
Rapid City	1888-1930	CL-203
Yankton	1873-1933	CL-205
<u>Tennessee</u>		
Chattanooga	1879-1970	CL-206, CL-334
Knoxville	1871-1970	CL-207, CL-334
Memphis	1871-1970	CL-208, CL-334
Nashville	1871-1970	CL-209, CL-334
<u>Texas</u>		
Abilene	1885-1970	CL-210, CL-335
Amarillo	1892-1970	CL-211, CL-335
Austin	1897-1970	CL-212, CL-335
Brownsville	1878-1970	CL-213, CL-213A, CL-335
Corpus Christi	1887-1970	CL-214, CL-335
El Paso	1878-1970	CL-217
Fort Worth	1898-1970	CL-218, CL-219, CL-335
Galveston	1871-1970	CL-220, CL-335
Houston	1867-1970	CL-222, CL-336, CL-335
Laredo	1849-1930	CL-223
Palestine	1881-1953	CL-224
San Antonio	1885-1970	CL-227, CL-336
<u>Vermont</u>		
Burlington	1887-1943	CL-234
Northfield	1887-1943	CL-235
<u>Virginia</u>		
Cape Henry	1871-1970	CL-236, CL-339
Norfolk	1871-1970	CL-237, CL-339
Richmond	1871-1970	CL-238, CL-339
Wythville	1878-1941	CL-239
<u>Washington</u>		
North Head	1883-1952	CL-240
Seattle	1880-1970	CL-242, CL-340
Spokane	1880-1950	CL-243, CL-340
Tacoma	1897-1950	CL-244
Tatoosh	1883-1950	CL-245
Walla Walla	1885-1970	CL-246, CL-340
<u>West Virginia</u>		
Elkins	1899-1970	CL-247, CL-341
Parkersburg	1888-1970	CL-248, CL-341

<u>Station Name</u>	<u>Period of Record</u>	<u>Microfilm Reel No.</u>
<u>Wisconsin</u>		
Green Bay	1886-1970	CL-249, CL-342
La Crosse	1872-1970	CL-250, CL-342
Madison	1869-1970	CL-251, CL-342
Milwaukee	1870-1970	CL-252
<u>Wyoming</u>		
Cheyenne	1871-1970	CL-255, CL-343
Lander	1891-1970	CL-256, CL-343
Yellowstone	1887-1941	CL-258

JOURNALS AND DIARIES

<u>Station Name</u>	<u>Period of Record</u>	<u>Microfilm Reel No.</u>
<u>Arkansas</u>		
Grand County	1875-1960	1
<u>Connecticut</u>		
Suffield	1835-1836	2
Suffield (near)	1835-1836	2
<u>Illinois</u>		
Burlington	1863-1870	31
Peoria	1855-1905	17
Urbana	1888-1960	1-2
Urbana	1873-1876	31
<u>Iowa</u>		
Franklin County	1868-1869	3
Mechanicsburg	1850-1851	3
Muscatine	1855-1863	3
<u>Maryland</u>		
Baltimore	1909-1918	4
<u>Massachusetts</u>		
Milton Milton?	1884-1932	1-19
Swansea	1840-1840	30
<u>Michigan</u>		
Detroit	1878-1914	5
<u>Mississippi</u>		
Aberdeen & Egypt	1881-1886	6
Brownsville	1841-1859	6
Edwards	1853-1856	6
<u>Missouri</u>		
Hannibal	1859-	7
<u>Nebraska</u>		
Buffalo	1873-1876	26
<u>New Jersey</u>		
Medford	1842-1845	8
<u>New York</u>		
Deansville & Waterville	1858-1859	9
Ingleside	1856-1860	27
Syracuse	1853-1855	9

<u>Station Name</u>	<u>Period of Record</u>	<u>Microfilm Reel No.</u>
<u>North Carolina</u>		
Monroe	1842, 1849, 1851	10
Union County	1800-1802	29
<u>Ohio</u>		
Cincinnati	1834-1846	19
Cincinnati Enquirer	1854-1854	20, 21
<u>Pennsylvania</u>		
Birdsboro	1862-1867	0011
Brownsville Lock	1873-1885	0015
Cassandra	1894-1965	0020
Confluence	1873-1906	0029
Derry	1896-1965	0036
Driftwood	1895-1950	0039
Dubois	1890-1965	0040
Easton	1893-1956	0042
Edinboro	1893-1962	0043
Freeport	1873-1889	0051
Gettysburg	1889-1965	0054
Greensboro	1888-1965	0058
Greenville	1894-1965	0060
Hollidaysburg	1894-1950	0066
Huntingdon	1891-1965	0068, 0069
Indiana	1896-1965	0070, 0071
Irwin	1896-1958	0071, 0072
Jim Thorpe	1896-1959	0072, 0073
Johnstown	1885-1950	0074
Kane	1894-1965	0076
Karthaus	1895-1965	0076
Keating Summit	1895-1957	0076
Lancaster	1894-1965	0079, 0080
Lawrenceville	1896-1965	0081
Lebanon	1894-1965	0082, 0083
Leroy	1893-1965	0083, 0084
Lockhaven	1894-1965	0086, 0087
Meadville	1894-1965	0093
New Castle	1890-1965	0103, 0104
New Geneva	1873-1888	0104
Oil City	1873-1905	0107
Parker Landing	1885-1965	0109
Pennsylvania	1839-1848	0023
Philadelphia Cent. Ave.	1894-1916	0111
Philadelphia	1790-1846	0028
Philadelphia Shawmont	1896-1957	0114
Phoenixville	1895-1965	0115
Quake Town	1893-1965	0122, 0123
Reading	1894-1965	0123, 0124
Renovo	1895-1965	0125, 0124

<u>Station Name</u>	<u>Period of Record</u>	<u>Microfilm Reel No.</u>
<u>Pennsylvania</u> (Continued)		
Ridgeway	1892-1950	0126,0127
Scranton	1895-1965	0130
Selinsgrove	1894-1957	0130,0131
Sinamamahoning	1895-1963	0133
Somerset	1894-1958	0134
Spruce Creek	1895-1953	0136
State College	1893-1965	0137
Towanda	1894-1965	0142
Union	1894-1965	0145
Warren River St.	1885-1965	0148
Washington	1865-1904	0018
Wellsboro	1893-Dec. 1965	0150
West Chester	1896-1965	0151
Wilkes Barre	1894-1965	0154
Williamsport	1895-1965	0156-0157
York	1894-1965	0157
<u>Tennessee</u>		
Greenville	1896-	24
<u>Vermont</u>		
Burlington	1871-1906	12-14
Mount Killington	1889-1891	14
<u>Virginia</u>		
Alexandria	1826-1833	22
<u>Wisconsin</u>		
Roxburg & Sauk City	1847-1851	15
<u>Wyoming</u>		
Parkman	1900-1902	16

PART IV

Climatic Research Unit

University of East Anglia

Norwich, England

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