

Carnegie Institution of Washington
Department of Terrestrial Magnetism

Legacy Atmospheric-Electricity/Meteorological Data

1916-1956



compiled by Shaun J. Hardy

August 2005

Apia Observatory, Samoa

lat. 13°48' S

long. 171°46' W

Monthly abstracts of observations – Land Station:

1922-1941 Box 1990-207

Monthly abstracts of observations – Lagoon Station (“Reef House”):

1923-1933 Box 1990-208

Potential gradient cahiers – Land Station:

1922-1941 Box 1990-222

Potential gradient cahiers – Lagoon Station (“Reef House”):

1923-1933 Box 1990-222

Potential gradient traces – Land Station:

Aug. 1922-Aug. 1924 Box 1990-208

1924-1927 Box 2004-4

1928-1930 Box 2004-19

1931-1935 Box 2004-20

1935-1940 Box 2004-21

1940-1942 Box 1990-208

Potential gradient traces – Lagoon Station (“Reef House”):

Sept. 1923-Apr. 1924 Box 1990-208

1924-1927 Box 2004-4

1928-1930 Box 2004-19

1931-1933 Box 2004-20

Huancayo Magnetic Observatory, Peru

lat. 12°03' S

long. 75°20' W

Anemograms:

| | |
|---------------------|--------------|
| Oct. 1924-Dec. 1932 | Box 1990-152 |
| Jan. 1933-Dec. 1940 | Box 1990-153 |
| Jan. 1941-June 1947 | Box 1990-154 |

Barograms:

| | |
|---------------------|--------------|
| Jan. 1931-Dec. 1947 | Box 1990-228 |
|---------------------|--------------|

Conductivity cahiers:

| | |
|---------------------|-------------|
| Nov. 1923-Dec. 1929 | Box 1990-67 |
| Jan. 1930-Dec. 1946 | Box 1990-68 |

Conductivity tabulated hourly values:

| | |
|-----------|-------------|
| 1923-1947 | Box 2004-11 |
|-----------|-------------|

Conductivity traces:

| | |
|---------------------|-------------|
| Nov. 1923-Dec. 1926 | Box 1990-69 |
| Jan. 1927-Dec. 1932 | Box 1990-70 |
| Jan. 1933-Dec. 1938 | Box 1990-71 |
| Jan. 1939-Dec. 1944 | Box 1990-72 |
| Jan. 1945-Dec. 1946 | Box 1990-75 |

Dust count observations:

| | |
|-----------|--------------|
| 1932-1945 | Box 1990-228 |
|-----------|--------------|

Meteorological cahiers:

| | |
|---------------------|--------------|
| 1926-1927 | Box 1990-228 |
| Jan. 1931-June 1947 | Box 1990-228 |

Meteorological tabulated hourly values

(barometric pressure, sunshine, wind direction and velocity):

| | |
|-----------|-------------|
| 1924-1947 | Box 2004-12 |
|-----------|-------------|

Miscellaneous notebooks:

| | |
|--------------------------------------|-------------|
| “Meteorological Summary 1924-1934” | Box 2004-12 |
| “Cond. Temp. Coefficients 1923-1930” | Box 2004-10 |

Potential gradient cahiers:

| | |
|---------------------|-------------|
| Jan. 1924-Dec. 1936 | Box 1990-61 |
| Jan. 1937-Dec. 1946 | Box 1990-63 |

Potential gradient tabulated hourly values:
1924-1946 Box 2004-10

Potential gradient traces:

Feb. 1924-Apr. 1927 Box 1990-63
Apr. 1927-Dec. 1933 Box 1990-64
Jan. 1934-Dec. 1938 Box 1990-65
Jan. 1939-Dec. 1944 Box 1990-66
Jan. 1945-Dec. 1946 Box 1990-67

Sunshine records:

Nov. 1923-Dec. 1932 Box 1990-204
Jan. 1933-Dec. 1941 Box 1990-205
Jan. 1942-July 1946 Box 1990-206
Aug. 1946-June 1947 Box 1990-229

Thermograms:

June 1936-July 1942 Box 1990-228
July 1947-Jan. 1956 Box 1990-228

Tucson Magnetic Observatory, Arizona

lat. 32°15' N

long. 110°51' W

*Atmospheric electricity hourly values*¹:

Dec. 1952-Dec. 1953 Box 1990-322

Jan. 1954-Aug. 1955 Box 2004-44

Conductivity cahiers:

Sept. 1929-Dec. 1952 Box 2004-5

Conductivity tabulated hourly values:

1929-1946 Box 2004-8

1947-1952 Box 2004-9

*Conductivity traces*²:

Oct. 1929-Dec. 1934 Box 1990-159

Jan. 1935-Dec. 1940 Box 1990-160

Jan. 1941-Dec. 1946 Box 1990-161

Jan. 1947-Sept. 1952 Box 1990-162

Apr. 1952-Aug. 1953 Box 1990-147

Sept. 1953-Dec. 1954 Box 1990-148

Jan. 1955-May 1956 Box 1990-149

June 1956-Aug. 1956 Box 2004-6

*Meteorological cahiers*³:

Nov. 1929-Dec. 1951 Box 2004-5

Miscellaneous notebooks:

“Tucson A-E Analysis” Box 2004-9

Potential gradient cahiers:

Sept. 1929-Dec. 1952 Box 2004-5

Potential gradient tabulated hourly values:

1929-1952 Box 2004-8

Potential gradient traces:

Sept. 1929-Dec. 1934 Box 1990-155

Jan. 1935-Dec. 1940 Box 1990-156

Jan. 1941-Dec. 1946 Box 1990-157

Jan. 1947-Sept. 1952 Box 1990-158

Apr. 1952-Aug. 1953 Box 1990-147

Sept. 1953-Dec. 1954 Box 1990-148

Jan. 1955-May 1956 Box 1990-149

Jun. 1956-Aug. 1956 Box 2004-6

Thermograms and hygrograms^{2, 4}:

| | |
|----------------------|--------------|
| Jan. 1930-Dec. 1939 | Box 2004-6 |
| Jul. 1940-Mar. 1952 | Box 2004-45 |
| Apr. 1952-Aug. 1953 | Box 1990-147 |
| Sept. 1953-Dec. 1954 | Box 1990-148 |
| Jan. 1955-May 1956 | Box 1990-149 |

Tucson Airport (U.S. Weather Bureau)

lat. 32°07' N
long. 110°55' W

Hourly surface weather observations^{1, 4}:

| | |
|----------------------|--------------|
| Jan. 1930-Dec. 1939 | Box 2004-6 |
| Sept. 1941-Dec. 1945 | Box 2004-46 |
| Jan. 1946-Dec. 1948 | Box 2004-47 |
| Jan. 1949-Dec. 1951 | Box 2004-3 |
| Jan. 1952-Dec. 1953 | Box 1990-322 |
| Jan. 1954-Aug. 1955 | Box 2004-44 |
| July 1956-Aug. 1956 | Box 2004-44 |

Washington Atmospheric-Electricity Observatory (“Deck Observatory”)
Department of Terrestrial Magnetism, Washington, DC

lat. 38°57' N
long. 77°04' W

*Atmospheric-electricity cahiers*⁵:

July 1917-Sept. 1932 Box 1990-246

Conductivity tabulated hourly values:

1919-1930 Box 2004-14

Conductivity traces:

Dec. 1916-Dec. 1919 Box 1990-235

Jan. 1920-Dec. 1924 Box 1990-236

Jan. 1925-Dec. 1928 Box 1990-237

Jan. 1929-Jan. 1933 Box 1990-238

Ionization observations (cahiers):

June 1933-Feb. 1940 Box 2005-15

Jan. 1944-Oct. 1945 Box 2005-15

Ionization traces:

Jan. 1933-Dec. 1937 Box 1990-244

Jan. 1938-Dec. 1940 Box 1990-245

Jan. 1944-Dec. 1944 Box 1990-245

Jan. 1945-Mar. 1946 Box 1990-247

Large ion observations (cahiers):

Jan. 1932-Sept. 1940 Box 2005-15

Jan. 1944-Jan. 1945 Box 2005-15

*Large ion traces*⁶:

Mar. 1932-Dec. 1935 Box 1990-247

Jan. 1936-Dec. 1941 Box 1990-248

1944 scattered Box 1990-248

Meteorological cahiers (including thermograms and hygograms):

Jan. 1922-Sept. 1932 Box 1990-239

Miscellaneous notebooks:

“Washington A-E Analysis” Box 2004-14

+ 2 notebooks on observations
made during 1915-1917 Box 1990-246

Potential gradient tabulated hourly values:
1917-1930 Box 2004-14

Potential gradient traces:

| | |
|----------------------|--------------|
| Dec. 1916-Dec. 1920 | Box 1990-232 |
| Jan. 1921-Dec. 1922 | Box 1990-233 |
| Jan. 1923-Dec. 1924 | Box 1990-239 |
| Jan. 1925-Dec. 1926 | Box 1990-233 |
| Jan. 1927-Dec. 1930 | Box 1990-234 |
| Jan. 1931-Sept. 1931 | Box 1990-239 |
| Oct. 1931-Feb. 1933 | Box 1990-235 |

Small & intermediate ion observations (cahiers):

| | |
|----------------------|-------------|
| Mar. 1931-Sept. 1940 | Box 2005-15 |
| Jan. 1944-Jan. 1945 | Box 2005-15 |

Small & intermediate ion traces:

| | |
|---------------------|--------------|
| Jan. 1932-Dec. 1933 | Box 1990-248 |
| Jan. 1934-Dec. 1939 | Box 2005-14 |
| Jan. 1940-Dec. 1941 | Box 2005-15 |
| Jan. 1944-Mar. 1946 | Box 2005-15 |

Thermograms and hygrograms⁷:

| | |
|--------------------|--------------|
| Mar. 1932-May 1941 | Box 1990-239 |
| 1944 scattered | Box 1990-239 |

Watheroo Magnetic Observatory, Western Australia

lat. 30°19' S

long. 115°52' E

Anemograms:

| | |
|---------------------|--------------|
| Jan. 1925-Dec. 1931 | Box 1990-163 |
| Jan. 1932-Dec. 1938 | Box 1990-165 |
| Jan. 1939-Dec. 1945 | Box 1990-166 |
| Jan. 1946-June 1947 | Box 1990-167 |

Barograms:

| | |
|---------------------|-------------|
| Jan. 1931-Dec. 1944 | Box 2004-48 |
| Jan. 1945-June 1947 | Box 2004-49 |

Conductivity cahiers:

| | |
|----------------------|-------------|
| Sept. 1922-Dec. 1931 | Box 1990-79 |
| Jan. 1932-Dec. 1946 | Box 1990-80 |

Conductivity tabulated hourly values:

| | |
|-----------|-------------|
| 1922-1947 | Box 2004-11 |
|-----------|-------------|

Conductivity traces:

| | |
|----------------------|-------------|
| Sept. 1922-Dec. 1924 | Box 1990-81 |
| Jan. 1925-Dec. 1927 | Box 1990-82 |
| Jan. 1928-Dec. 1932 | Box 1990-83 |
| Jan. 1933-Dec. 1937 | Box 1990-84 |
| Jan. 1938-Dec. 1942 | Box 1990-85 |
| Jan. 1943-Dec. 1946 | Box 1990-86 |

Dust count observations:

| | |
|-----------|-------------|
| 1924-1940 | Box 1990-48 |
|-----------|-------------|

Hygrograms:

| | |
|---------------------|-------------|
| Jan. 1931-Dec. 1944 | Box 2004-48 |
|---------------------|-------------|

Meteorological cahiers:

| | |
|----------------------|--------------|
| Sept. 1917-Dec. 1934 | Box 1990-225 |
| Jan. 1935-June 1947 | Box 1990-226 |

Meteorological tabulated hourly values

(barometric pressure, sunshine, wind direction, wind speed):

| | |
|-----------|-------------|
| 1922-1947 | Box 2004-13 |
|-----------|-------------|

Miscellaneous notebooks:

| | |
|-----------------------------------|-------------|
| “PG Reduction Factors, 1924-1932” | Box 2004-10 |
|-----------------------------------|-------------|

“Watheroo AE Analysis, 1924-1934” Box 2004-10
“Meteorological Summary 1924-1934” Box 2004-13
+ four studies of effects of
meteorological elements on AE elements Box 2004-14

Pluviometer records:

July 1932-Dec. 1945 Box 2004-7

Potential gradient cahiers:

Sept. 1922-Dec. 1934 Box 1990-73

Jan. 1935-Feb. 1947 Box 1990-74

Potential gradient tabulated hourly values:

1924-1946 Box 2004-10

Potential gradient traces:

Jan. 1924-Dec. 1927 Box 1990-74

Aug. 1927-Dec. 1930 Box 1990-75

Jan. 1931-Dec. 1935 Box 1990-76

Jan. 1936-Dec. 1940 Box 1990-77

Jan. 1941-Dec. 1945 Box 1990-78

Jan. 1946-Feb. 1947 Box 1990-81

Sunshine records:

Sept. 1922-Dec. 1930 Box 1990-167

Jan. 1931-Dec. 1939 Box 1990-229

Jan. 1940-June 1946 Box 1990-206

July 1946-June 1947 Box 1990-229

Thermograms:

Oct. 1922-Dec. 1932 Box 2004-48

Jan. 1933-June 1947 Box 2004-49

Notes

“traces” = continuous recordings of data, usually on photographic paper

“cahiers” = logs of observations and instrument operation; sometimes labelled
“observations” or “records and data”

¹ Tucson atmospheric-electricity hourly values for 1952-1955 are filed in envelopes with surface weather observations from Tucson Airport.

² Tucson data for 1952-1956 are grouped together in boxes by month: conductivity and potential gradient traces; summary cahiers; thermograms; hygograms; weather data (“meteorological cahiers”).

³ Tucson meteorological cahiers after 1951 are filed in boxes by month with conductivity and potential gradient traces.

⁴ Tucson Magnetic Observatory thermograms and hygograms for 1930-1939 are filed in green envelopes together with surface weather observations; potential gradient and conductivity data are filed elsewhere, contrary to list typed on each envelope.

⁵ Washington cahiers include thermograms for 1917-1921.

⁶ Large ion traces for 1939-1941 are incomplete.

⁷ Washington thermograms and hygograms for 1922-1932 are included in meteorological cahiers.

References on DTM atmospheric-electricity research

- Fleming, J. A., Cooperation with other observatories: Apia Observatory, Western Samoa, *Carnegie Institution of Washington Year Book 30*, 312-314, 1931.
- Johnston, H. F., and G. R. Wait, Atmospheric-electric survey in the vicinity of Washington, D.C., *Terrestrial Magnetism and Atmospheric Electricity 36*, 33-40, 1931.
- Mauchly, S. J., The atmospheric-electric instrumental equipment for the observatories of the Department of Terrestrial Magnetism, *Carnegie Institution of Washington Year Book 21*, 302-305, 1923.
- Mauchly, S. J., The results of potential-gradient registrations at Washington, District of Columbia, for the years 1917 to 1922, *Carnegie Institution of Washington Year Book 22*, 265, 1924.
- Thomson, A., Preliminary report on the atmospheric potential-gradient recorded at the Apia Observatory, Western Samoa, May 1922 to April 1924, *Terrestrial Magnetism and Atmospheric Electricity 29*, 97-100, 1924.
- Torreson, O. W., and G. R. Wait, *Atmospheric-Electric Results from Huancayo Observatory, Peru, 1924-1934*, Carnegie Institution of Washington Publication 175, vol. 19, Washington, D.C., 1948. 547 pp. [originally published only in microfilm; subsequently digitized]
- Wait, G. R., *Atmospheric-Electric Results at Tucson Magnetic Observatory, 1931-1934*, Carnegie Institution of Washington Publication 175, vol. 18, Washington, D.C., 1948. 169 pp. [originally published only in microfilm; subsequently digitized]
- Wait, G. R., and O. W. Torreson, *Atmospheric-Electric Results from Watheroo Observatory, Western Australia, 1924-1934*, Carnegie Institution of Washington Publication 175, vol. 17, Washington, D.C., 1948. 569 pp. [originally published only in microfilm; subsequently digitized]

AE/Meteorological Data - Box List

| | |
|-------------------|--|
| Box Number | 1990-61 |
| Contents | Huancayo potential gradient cahiers, 1924-1936 (Records and data arranged in monthly groups, as follows: time record; daily record of operation; electrometer calibration; standardization observations; meteorological record; daily weather notes) |
| Box Number | 1990-63 |
| Contents | Huancayo potential gradient cahiers, 1937-1946 (Records and data arranged in monthly groups, as follows: time record; daily record of operation; electrometer calibration; standardization observations; meteorological record; daily weather notes) Huancayo potential gradient traces, 1924-1927 Huancayo ionization chamber traces, May-Aug. 1948; large, intermediate and small ion traces, May-Aug. 1948 Huancayo special potential gradient observations at high altitudes, May-July 1927 |
| Box Number | 1990-64 |
| Contents | Huancayo potential gradient traces, 1927-1933 |
| Box Number | 1990-65 |
| Contents | Huancayo potential gradient traces, 1934-1938 |
| Box Number | 1990-66 |
| Contents | Huancayo potential gradient traces, 1939-1944 |
| Box Number | 1990-67 |
| Contents | Huancayo potential gradient traces, 1945-1946 Huancayo conductivity cahiers, 1923-1929 (Records and data arranged in monthly groups as follows: time record; daily journal/record of operation; scale value determinations; electrometer calibrations; weather notes; meteorological record) |
| Box Number | 1990-68 |
| Contents | Huancayo conductivity cahiers, 1930-1946 (Records and data arranged in monthly groups as follows: time record; daily journal/record of operation; scale value determinations; electrometer calibrations; weather notes; meteorological record) |

| | |
|--------------------------|--|
| <i>Box Number</i> | 1990-69 |
| <i>Contents</i> | Huancayo conductivity traces, 1923-1926 |
| <i>Box Number</i> | 1990-70 |
| <i>Contents</i> | Huancayo conductivity traces, 1927-1932 |
| <i>Box Number</i> | 1990-71 |
| <i>Contents</i> | Huancayo conductivity traces, 1933-1938 |
| <i>Box Number</i> | 1990-72 |
| <i>Contents</i> | Huancayo conductivity traces, 1939-1944 |
| <i>Box Number</i> | 1990-73 |
| <i>Contents</i> | Watheroo potential gradient cahiers, 1922-1934 (Records and data arranged in monthly groups as follows: time record; daily record of operation; calibration data; hourly scalings and reductions; meteorological record; daily weather notes) |
| <i>Box Number</i> | 1990-74 |
| <i>Contents</i> | Watheroo potential gradient traces, 1924-1927 Watheroo potential gradient cahiers, 1935-1947 (Records and data arranged in monthly groups as follows: time record; daily record of operation; calibration data; hourly scalings and reductions; meteorological record; daily weather notes) |
| <i>Box Number</i> | 1990-75 |
| <i>Contents</i> | Huancayo conductivity traces, 1945-1946 Watheroo potential gradient traces, 1927-1930 |
| <i>Box Number</i> | 1990-76 |
| <i>Contents</i> | Watheroo potential gradient traces, 1931-1935 Watheroo Field Station traces, 1930-1932 |
| <i>Box Number</i> | 1990-77 |
| <i>Contents</i> | Watheroo potential gradient traces, 1936-1940 |
| <i>Box Number</i> | 1990-78 |
| <i>Contents</i> | Watheroo potential gradient traces, 1941-1945 |

| | |
|--------------------------|--|
| <i>Box Number</i> | 1990-79 |
| <i>Contents</i> | Watheroo conductivity cahiers, 1922-1931 (Records and data arranged in monthly groups as follows: daily journal; tabulation operating potentials; positive scale-value determinations; negative scale-value determinations; time data; electrometer calibrations; meteorological record; conversion tables) |
| <i>Box Number</i> | 1990-80 |
| <i>Contents</i> | Watheroo conductivity cahiers, 1932-1946 (Records and data arranged in monthly groups as follows: daily journal; tabulation operating potentials; positive scale-value determinations; negative scale-value determinations; time data; electrometer calibrations; meteorological record; conversion tables) |
| <i>Box Number</i> | 1990-81 |
| <i>Contents</i> | Watheroo conductivity traces, 1922-1924 Watheroo potential gradient traces, 1946-1947 |
| <i>Box Number</i> | 1990-82 |
| <i>Contents</i> | Watheroo conductivity traces, 1925-1927 |
| <i>Box Number</i> | 1990-83 |
| <i>Contents</i> | Watheroo conductivity traces, 1928-1932 |
| <i>Box Number</i> | 1990-84 |
| <i>Contents</i> | Watheroo conductivity traces, 1933-1937 |
| <i>Box Number</i> | 1990-85 |
| <i>Contents</i> | Watheroo conductivity traces, 1938-1942 |
| <i>Box Number</i> | 1990-86 |
| <i>Contents</i> | Watheroo conductivity traces, 1943-1946 |
| <i>Box Number</i> | 1990-147 |
| <i>Contents</i> | Tucson conductivity traces, potential gradient traces, hygograms, thermograms, and summary cahiers, 1952-1953 |
| <i>Box Number</i> | 1990-148 |
| <i>Contents</i> | Tucson conductivity traces, potential gradient traces, hygograms, thermograms, and summary cahiers, 1953-1954 |

| | |
|--------------------------|---|
| <i>Box Number</i> | 1990-149 |
| <i>Contents</i> | Tucson conductivity traces, potential gradient traces, hygograms, thermograms, and summary cahiers, 1955-1956 |
| <i>Box Number</i> | 1990-152 |
| <i>Contents</i> | Huancayo anemograms, 1924-1932 |
| <i>Box Number</i> | 1990-153 |
| <i>Contents</i> | Huancayo anemograms, 1933-1940 |
| <i>Box Number</i> | 1990-154 |
| <i>Contents</i> | Huancayo anemograms, 1941-1947 |
| <i>Box Number</i> | 1990-155 |
| <i>Contents</i> | Tucson potential gradient traces, 1929-1934 |
| <i>Box Number</i> | 1990-156 |
| <i>Contents</i> | Tucson potential gradient traces, 1935-1940 |
| <i>Box Number</i> | 1990-157 |
| <i>Contents</i> | Tucson potential gradient traces, 1941-1946 |
| <i>Box Number</i> | 1990-158 |
| <i>Contents</i> | Tucson potential gradient traces, 1947-1952 |
| <i>Box Number</i> | 1990-159 |
| <i>Contents</i> | Tucson conductivity traces, 1929-1934 |
| <i>Box Number</i> | 1990-160 |
| <i>Contents</i> | Tucson conductivity traces, 1935-1940 |
| <i>Box Number</i> | 1990-161 |
| <i>Contents</i> | Tucson conductivity traces, 1941-1946 |
| <i>Box Number</i> | 1990-162 |
| <i>Contents</i> | Tucson conductivity traces, 1947-1952 |

| | |
|--------------------------|---|
| <i>Box Number</i> | 1990-163 |
| <i>Contents</i> | Watheroo anemograms, 1925-1931 |
| <i>Box Number</i> | 1990-165 |
| <i>Contents</i> | Watheroo anemograms, 1932-1938 |
| <i>Box Number</i> | 1990-166 |
| <i>Contents</i> | Watheroo anemograms, 1939-1945 |
| <i>Box Number</i> | 1990-167 |
| <i>Contents</i> | Watheroo anemograms, 1946-1947 Watheroo sunshine records, 1922-1930 |
| <i>Box Number</i> | 1990-204 |
| <i>Contents</i> | Huancayo sunshine records, 1923-1932 |
| <i>Box Number</i> | 1990-205 |
| <i>Contents</i> | Huancayo sunshine records, 1933-1941 |
| <i>Box Number</i> | 1990-206 |
| <i>Contents</i> | Huancayo sunshine records, 1942-1946 Watheroo sunshine records, 1940-1946 |
| <i>Box Number</i> | 1990-207 |
| <i>Contents</i> | Apia potential gradient monthly abstracts of observations: Land Station, 1922-1941 |
| <i>Box Number</i> | 1990-208 |
| <i>Contents</i> | Apia potential gradient monthly abstracts of observations: Lagoon Station, 1923-1933 Apia potential gradient traces, Land Station, 1922-1924 Apia potential gradient traces, Lagoon Station (Reef House), 1923-1924 Apia potential gradient traces, Land Station, 1940-1942 |
| <i>Box Number</i> | 1990-222 |
| <i>Contents</i> | Apia potential gradient cahiers, Land Station, 1922-1941 Apia potential gradient cahiers, Lagoon Station, 1923-1933 (Records and data arranged in monthly groups as follows: Abstract of potential gradient data; meteorological record; electrometer calibration-data; reduction-factor observations; seismological bulletin) |

| | |
|--------------------------|--|
| <i>Box Number</i> | 1990-225 |
| <i>Contents</i> | Watheroo meteorological cahiers, 1917-1934 (Records and data arranged in monthly groups as follows: meteorological records; thermograms; hygograms; barograms; seismological data from Perth and Sydney) |
| <i>Box Number</i> | 1990-226 |
| <i>Contents</i> | Watheroo meteorological cahiers 1935-1947 (Records and data arranged in monthly groups as follows: daily meteorological observations; meteorological record; screen instrument corrections; A-E Building instrument corrections; daily weather notes) |
| <i>Box Number</i> | 1990-228 |
| <i>Contents</i> | Huancayo meteorological cahiers, 1926-1927, 1931-1947 (Records and data arranged in monthly groups as follows: daily meteorological observations; meteorological record; screen instrument corrections; A-E Building instrument corrections; daily weather notes) Huancayo dust count observations, 1932-1945 Huancayo thermograms 1936-1942, 1947-1956 Huancayo barograms, 1931-1947 |
| <i>Box Number</i> | 1990-229 |
| <i>Contents</i> | Watheroo sunshine records, 1931-1939, 1946-1947 Huancayo sunshine records, 1946-1947 |
| <i>Box Number</i> | 1990-232 |
| <i>Contents</i> | Washington "Deck Observatory" potential gradient traces, 1916-1920 |
| <i>Box Number</i> | 1990-233 |
| <i>Contents</i> | Washington "Deck Observatory" potential gradient traces, 1921-1922, 1925-1926 |
| <i>Box Number</i> | 1990-234 |
| <i>Contents</i> | Washington "Deck Observatory" potential gradient traces, 1927-1930 |
| <i>Box Number</i> | 1990-235 |
| <i>Contents</i> | Washington "Deck Observatory" potential gradient traces, 1931-1933 Washington "Deck Observatory" conductivity traces, 1916-1919 |

| | |
|--------------------------|--|
| <i>Box Number</i> | 1990-236 |
| <i>Contents</i> | Washington "Deck Observatory" conductivity traces, 1920-1924 |
| <i>Box Number</i> | 1990-237 |
| <i>Contents</i> | Washington "Deck Observatory" conductivity traces, 1925-1928 |
| <i>Box Number</i> | 1990-238 |
| <i>Contents</i> | Washington "Deck Observatory" conductivity traces, 1929-1933 |
| <i>Box Number</i> | 1990-239 |
| <i>Contents</i> | Washington "Deck Observatory" potential gradient traces, 1923-1924, 1931 Washington meteorological cahiers (incl. thermograms and hygograms), 1922-1932 Washington thermograms & hygograms, 1932-1941, 1944 |
| <i>Box Number</i> | 1990-244 |
| <i>Contents</i> | Washington "Deck Observatory" ionization traces, 1933-1937 |
| <i>Box Number</i> | 1990-245 |
| <i>Contents</i> | Washington "Deck Observatory" ionization traces, 1938-1940, 1944 |
| <i>Box Number</i> | 1990-246 |
| <i>Contents</i> | Washington "Deck Observatory" atmospheric-electricity observations (cahiers), 1917-1932 "Journal and notes for a-e observations ... December 1916 to July 1917" "Notebook regarding calibrations and data ... by S. J. Mauchly, 1915-1917" |
| <i>Box Number</i> | 1990-247 |
| <i>Contents</i> | Washington "Deck Observatory" ionization traces, 1945-1946 |
| <i>Box Number</i> | 1990-248 |
| <i>Contents</i> | Washington "Deck Observatory" large ion traces, 1936-1941, 1944 Washington "Deck Observatory" small ion traces, 1932-1933 |

| | |
|--------------------------|---|
| <i>Box Number</i> | 1990-322 |
| <i>Contents</i> | Tucson Airport hourly surface weather observations, 1952-1953; together in monthly envelopes with Tucson Magnetic Observatory hourly atmospheric-electricity values, 1952-1953 |
| <i>Box Number</i> | 2004-3 |
| <i>Contents</i> | Tucson Airport hourly surface weather observations, 1949-1951 |
| <i>Box Number</i> | 2004-4 |
| <i>Contents</i> | Apia potential gradient traces, Land Station, 1924-1927 Apia potential gradient traces, Lagoon Station (Reef House), 1924-1927 |
| <i>Box Number</i> | 2004-5 |
| <i>Contents</i> | Tucson air conductivity cahiers, 1929-1952 Tucson potential gradient cahiers, 1929-1952 Tucson meteorological cahiers, 1929-1951 |
| <i>Box Number</i> | 2004-6 |
| <i>Contents</i> | Tucson thermograms and hygrograms, 1930-1939 Tucson Airport surface weather observations, 1930-1939 [Potential-gradient and conductivity data not in envelopes, contrary to list typed on each. Those data are filed separately.] |
| <i>Box Number</i> | 2004-7 |
| <i>Contents</i> | Watheroo pluviometer records, 1932-1945 |
| <i>Box Number</i> | 2004-8 |
| <i>Contents</i> | Tucson potential gradient, tabulated hourly values, 1929-1952 Tucson conductivity, tabulated hourly values, 1929-1946 |
| <i>Box Number</i> | 2004-9 |
| <i>Contents</i> | Tucson conductivity, tabulated hourly values, 1947-1952 Computation book (green binder): "Tucson A-E Analysis" |

Box Number 2004-10
Contents Huancayo potential gradient, tabulated hourly values, 1924-1946
Watheroo potential gradient, tabulated hourly values, 1924-1946
Computation notebooks (green binders): "Watheroo AE Analysis 1924-1934", "Watheroo PG Reductions Factors 1924-1932", "Huancayo Cond. Temp. Coefficients 1923-1930"

Box Number 2004-11
Contents Watheroo conductivity, tabulated hourly values, 1922-1947
Huancayo conductivity, tabulated hourly values, 1923-1947

Box Number 2004-12
Contents Huancayo meteorological, tabulated hourly values (barometric pressure, sunshine, wind direction, wind velocity), 1924-1947

Box Number 2004-13
Contents Watheroo meteorological, tabulated hourly values (barometric pressure, sunshine, wind direction, wind velocity), 1922-1947

Box Number 2004-14
Contents Washington "Deck Observatory" potential gradient, tabulated hourly values, 1917-1930
Washington "Deck Observatory" conductivity, tabulated hourly values, 1919-1930
Computation notebooks (green binders):
"Washington AE Analysis", "Watheroo Effect of Wind on D-V of A-E Elements", "Watheroo Effect of Wind and Smoke on A-E Elements", "Watheroo Studies of Smoke Effects", "Watheroo Effect of Meteorological Elements on A-E Elements"

Box Number 2004-19
Contents Apia potential gradient traces, Land Station, 1928-1930
Apia potential gradient traces, Lagoon Station (Reef House), 1928-1930

Box Number 2004-20
Contents Apia potential gradient traces, Land Station, 1931-1935
Apia potential gradient traces, Lagoon Station (Reef House), 1931-1933

| | |
|--------------------------|--|
| <i>Box Number</i> | 2004-21 |
| <i>Contents</i> | Apia potential gradient traces, Land Station, 1935-1940 |
| <i>Box Number</i> | 2004-44 |
| <i>Contents</i> | Tucson Airport hourly surface weather observations, 1954-1956; together in monthly envelopes with Tucson Magnetic Observatory hourly atmospheric-electricity values, 1954-1955 |
| <i>Box Number</i> | 2004-45 |
| <i>Contents</i> | Tucson thermograms and hygrograms, 1940-1952 |
| <i>Box Number</i> | 2004-46 |
| <i>Contents</i> | Tucson Airport hourly surface weather observations, 1941-1945 |
| <i>Box Number</i> | 2004-47 |
| <i>Contents</i> | Tucson Airport hourly surface weather observations, 1946-1948 |
| <i>Box Number</i> | 2004-48 |
| <i>Contents</i> | Watheroo barograms, 1931-1944 Watheroo thermograms, 1922-1932 Watheroo hygrograms, 1931-1944 Watheroo dust count observations, 1924-1940 |
| <i>Box Number</i> | 2004-49 |
| <i>Contents</i> | Watheroo thermograms, 1933-1947 Watheroo barograms, 1945-1947 |
| <i>Box Number</i> | 2005-14 |
| <i>Contents</i> | Washington "Deck Observatory" small & intermediate ion traces, 1934-1939 |

Box Number
Contents

2005-15

Washington "Deck Observatory" small & intermediate ion traces, 1940-1941, 1944-1946

Washington large ion observations (cahiers), 1932-1940

Washington small & intermediate ion and nuclei observations (cahiers), 1931-1940

Washington large & small ion observations (cahiers), 1944-1945

Washington ionization observations (cahiers), 1933-1940, 1944-1945

Notebook "Large Ion Counter" (1931)