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GRAPHIC PRESENTATION OF QUARTERLY ^{90}Sr FALLOUT DATA
1954-1982

By
Richard J. Larsen

January 1984

Environmental Measurements Laboratory
U. S. Department of Energy
New York, New York

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ABSTRACT

This report graphically presents all of the precipitation and ^{90}Sr deposition data for all stations operated as part of the Environmental Measurements Laboratory's (EML) global fallout program since the initiation of the program in 1954.

INTRODUCTION

The global fallout program is designed to assess the geographical distribution patterns of ^{90}Sr fallout and to inventory the amount of ^{90}Sr fallout from atmospheric tests as a function of time.

The fallout samples are collected at each site by exposing to the environment either a steep-walled (stainless steel or plastic) pot or a funnel that drains through a column containing Dowex-50 ion exchange resin. It has been reported by Volchok (1968) that the ion exchange columns have seldom received optimum treatment in the field, and consequently most of the data from samples of these collectors are systematically low. Annual interpretive reports summarizing the data in this report have been presented in EML publications (Hardy, 1977; Larsen, 1983).

RESULTS

Quarterly ^{90}Sr deposition and precipitation data are graphically displayed in Figures 1 to 179. Table 1 lists the sites for which the data are plotted in the figures. Site order is arranged by latitude starting with Thule, Greenland located at N $76^{\circ}35'$ and ending with the Chilean Antarctic station located at S $62^{\circ}56'$.

Each figure consists of three separate graphs labelled A, B and C. Graph A is a linear graph of deposition versus time. The units of deposition are in mCi/km^2 . The scale on the ordinate is fixed between 0.0 and 10.0 mCi/km^2 . The space between minor tic marks on the abscissa represents 1 year. Accented horizontal lines represent quarterly composite data that are

obtained by summing a complete set of monthly fallout data while non-accented horizontal lines represent quarterly composite data which have been extrapolated from a limited monthly data set.

Graph B is a semi-logarithmic graph of deposition versus time. The scale on the ordinate is fixed between 0.1 and 10.0 mCi/km². All other graph attributes are identical to those of graph A.

Graph C is a linear graph of precipitation versus time. The units of precipitation are cm. The scale on the ordinate varies and will be dependent upon the range of the data. The abscissa is identical to that in graphs A and B.

Gaps in any of these graphs reflects periods of missing data.

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Figure 1. Site: GREENLAND, THULE

Latitude: N 76 35 Longitude: W 68 38
 Altitude: 290 M Collector: Column

Figure 2. Site: ALASKA, BARROW

Latitude: N 71 16 Longitude: W 156 50
 Altitude: 4 M Collector: Column

Figure 3. Site: ALASKA, FAIRBANKS

Latitude: N 64 49 Longitude: W 147 52
 Altitude: 143 M Collector: Column

Figure 4. Site: ALASKA, NOME

Latitude: N 64 30 Longitude: W 165 30
 Altitude: 7 M Collector: Column

Figure 5. Site: ICELAND, KEFLAVIK

Latitude: N 63 58 Longitude: W 22 36
 Altitude: 56 M Collector: Column

Figure 6. Site: ALASKA, ANCHORAGE

Latitude: N 61 10 Longitude: W 149 59
 Altitude: 27 M Collector: Column

Figure 7. Site: NORWAY, OSLO

Latitude: N 59 56 Longitude: E 10 45
 Altitude: 12 M Collector: Column

Figure 8. Site: ALASKA, JUNEAU

Latitude: N 58 22 Longitude: W 134 35
 Altitude: 5 M Collector: Column

Figure 9. Site: SCOTLAND, PRESTWICK

Latitude: N 55 30 Longitude: W 4 37
 Altitude: 9 M Collector: Column

Figure 10. Site: ALASKA, COLD BAY

Latitude: N 55 12 Longitude: W 162 43
 Altitude: 31 M Collector: Column

Figure 11. Site: CANADA, NEWFOUNDLAND

Latitude: N 53 19 Longitude: W 60 25
 Altitude: 54 M Collector: Column

Figure 12. Site: CANADA, ONTARIO, MOOSONEE

Latitude: N 51 16 Longitude: W 80 89
 Altitude: 10 M Collector: Column

Figure 13. Site: GERMANY, RHEIN MAIN AFB

Latitude: N 50 2 Longitude: E 8 34
 Altitude: 112 M Collector: Column

Figure 14. Site: MINNESOTA, INTL FALLS

Latitude: N 48 34 Longitude: W 93 26
 Altitude: 360 M Collector: Column

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Latitude: N 48 32 Longitude: W 58 34
 Altitude: 26 M Collector: Column

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Latitude: N 48 22 Longitude: W 124 36
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Latitude: N 48 15 Longitude: E 16 22
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Latitude: N 48 10 Longitude: W 103 38
 Altitude: 5 M Collector: Column

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Latitude: N 48 08 Longitude: E 11 35
 Altitude: 1000 M Collector: Column

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Latitude: N 47 35 Longitude: W 122 20
 Altitude: 3 M Collector: Steel Pot

Figure 21. Site: WASHINGTON, SEATTLE

Latitude: N 47 35 Longitude: W 122 20
 Altitude: 3 M Collector: Steel Pot

Figure 22. Site: AUSTRIA, KLAGENFURT

Latitude: N 46 39 Longitude: E 14 20
 Altitude: 448 M Collector: Column

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Latitude: N 46 36 Longitude: W 112 0
 Altitude: 1187 M Collector: Column

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Latitude: N 45 28 Longitude: E 9 12
 Altitude: 122 M Collector: Column

Figure 25. Site: WISCONSIN, GREEN BAY

Latitude: N 44 29 Longitude: W 88 8
 Altitude: 210 M Collector: Column

Figure 26. Site: WISCONSIN, APPLETON

Latitude: N 44 15 Longitude: W 88 25
 Altitude: 229 M Collector: Steel Pot

Figure 27. Site: ITALY, FLORENCE

Latitude: N 43 47 Longitude: E 11 15
 Altitude: 50 M Collector: Column

Figure 28. Site: SOUTH DAKOTA, VERMILLION

Latitude: N 42 47 Longitude: W 96 56
 Altitude: 372 M Collector: Steel Pot

Figure 29. Site: OREGON, MEDFORD

Latitude: N 42 22 Longitude: W 122 52
 Altitude: 400 M Collector: Column

Figure 30. Site: ILLINOIS, ARGONNE

Latitude: N 41 42 Longitude: W 87 59
 Altitude: 228 M Collector: Plastic Bucket
 Steel Pot to 1976

Figure 31. Site: MASSACHUSETTS, WOODS HOLE

Latitude: N 41 33 Longitude: W 74 40
 Altitude: 11 M Collector: Plastic Bucket

Figure 32. Site: NEW JERSEY, WESTWOOD

Latitude: N 41 0 Longitude: W. 74 2
 Altitude: 38 M Collector: Steel Pot

Figure 33. Site: NEW JERSEY, WESTWOOD

Latitude: N 41 0 Longitude: W 74 2
 Altitude: 38 M Collector: Column

Figure 34. Site: OHIO, WOOSTER

Latitude: N 40 47 Longitude: W 81 50
 Altitude: 367 M Collector: Steel Pot

Figure 35. Site: UTAH, SALT LAKE CITY

Latitude: N 40 46 Longitude: W 110 49
 Altitude: 1516 M Collector: Steel Pot

Figure 36. Site: JAPAN, MISAWA

Latitude: N 40 42 Longitude: E 141 22
 Altitude: 36 M Collector: Column

Figure 37. Site: NEW JERSEY, CHESTER

Latitude: N 40 40 Longitude: W 74 40
 Altitude: 268 M Collector: Plastic Bucket

Figure 38. Site: NEW YORK, NEW YORK

Latitude: N 40 40
Altitude: 17 M

Longitude: W 73 50
Collector: Plastic Bucket
Steel Pot to 1976

Figure 39. Site: PENNSYLVANIA, PITTSBURGH

Latitude: N 40 26 Longitude: W 80 0
 Altitude: 227 M Collector: Steel Pot

Figure 40. Site: PENNSYLVANIA, PITTSBURGH

Latitude: N 40 26 Longitude: W 80 0
 Altitude: 227 M Collector: Column

Figure 41. Site: COLORADO, DENVER

Latitude: N 39 46 Longitude: W 104 53
 Altitude: 1611 M Collector: Column

Figure 42. Site: MARYLAND, SILVER HILL

Latitude: N 39 00 Longitude: W 77 01
 Altitude: 0 M Collector: Column

Figure 43. Site: VIRGINIA, STERLING

Latitude: N 38 59 Longitude: W 77 28
 Altitude: 82 M Collector: Column

Figure 44. Site: MISSOURI, COLUMBIA

Latitude: N 38 58 Longitude: W 92 20
 Altitude: 237 M Collector: Column

Figure 45. Site: PORTUGAL, SACAEM

Latitude: N 38 47 Longitude: W 9 06
 Altitude: 50 M Collector: Steel Pot

Figure 46. Site: AZORES, LAJES FIELD

Latitude: N 38 44 Longitude: W 27 4
 Altitude: 112 M Collector: Column

Figure 47. Site: KENTUCKY, LOUISVILLE

Latitude: N 38 13 Longitude: W 85 48
 Altitude: 137 M Collector: Steel Pot

Figure 48. Site: KENTUCKY, LOUISVILLE

Latitude: N 38 13 Longitude: W 85 48
 Altitude: 137 M Collector: Column

Figure 49. Site: CALIFORNIA, RICHMOND

Latitude: N 37 56 Longitude: W 122 20
 Altitude: 20 M Collector: Steel Pot

Figure 50. Site: CALIFORNIA, RICHMOND

Latitude: N 37 56 Longitude: W 122 20
 Altitude: 20 M Collector: Column

Figure 51. Site: CALIFORNIA, SAN FRANCISCO

Latitude: N 37 37 Longitude: W 122 23
 Altitude: 30 M Collector: Column

Figure 52. Site: REP. OF KOREA, SEOUL

Latitude: N 37 30 Longitude: E 127 00
 Altitude: 0 M Collector: Column

Figure .53. Site: CALIFORNIA, PALO ALTO

Latitude: N 37 30 Longitude: W 122 15
 Altitude: 6 M Collector: Column

Figure 54. Site: CALIFORNIA, PALO ALTO

Latitude: N 37 30 Longitude: W 122 15
 Altitude: 6 M Collector: Steel Pot

Figure 55. Site: SYRIA, KAMISHLY

Latitude: N 37. 3 Longitude: E 41 13
 Altitude: 452 M Collector: Column

Figure 56. Site: OKLAHOMA, TULSA

Latitude: N 36 7 Longitude: W 95 58
 Altitude: 245 M Collector: Steel Pot

Figure 57. Site: IRAN, TEHRAN

Latitude: N 35 44 Longitude: E 51 23
 Altitude: 1362 M Collector: Steel Pot

Figure 58. Site: JAPAN, TACHIKAWA

Latitude: N 35 42 Longitude: E 139 24
 Altitude: 98 M Collector: Column

Figure 59. Site: OKLAHOMA, MIDWEST CITY

Latitude: N 35 25 Longitude: W 97 30
 Altitude: 364 M Collector: Steel Pot

Figure 60. Site: TENNESSEE, CHATTANOOGA

Latitude: N 35 3 Longitude: W 85 20
 Altitude: 206 M Collector: Steel Pot

Figure 61. Site: REP. OF KOREA, MOKPO

Latitude: N 34 50 Longitude: E 126 25
 Altitude: 0 M Collector: Column

Figure 62. Site: JAPAN, HIROSHIMA

Latitude: N 34 23 Longitude: E 132 27
 Altitude: 23 M Collector: Steel Pot

Figure 63. Site: CALIFORNIA, W LOS ANGELES

Latitude: N 34 4 Longitude: W 118 27
 Altitude: 125 M Collector: Steel Pot

Figure 64. Site: MOROCCO, RABAT

Latitude: N 34 2 Longitude: W 6 51
 Altitude: 0 M Collector: Column

Figure 65. Site: SOUTH CAROLINA, COLUMBIA

Latitude: N 33 57 Longitude: W 81 7
 Altitude: 66 M Collector: Column

Figure 66. Site: LEBANON, BEIRUT

Latitude: N 33 54 Longitude: E 35 28
 Altitude: 38 M Collector: Column

Figure 67. Site: PAKISTAN, RAWALPINDI

Latitude: N 33 40 Longitude: E 73 8
 Altitude: 0 M Collector: Column

Figure 68. Site: ALABAMA, BIRMINGHAM

Latitude: N 33 30 Longitude: W 86 55
 Altitude: 183 M Collector: Steel Pot

Figure 69. Site: SYRIA, DAMASCUS

Latitude: N 33 29 Longitude: E 36 14
 Altitude: 734 M Collector: Column

Figure 70. Site: LIBYA, WHEELUS AB

Latitude: N 32 54 Longitude: E 13 17
 Altitude: 14 M Collector: Column

Figure .71. Site: MOROCCO, SIDI SLI AFB

Latitude: N 32 51 Longitude: W 8 32
 Altitude: 0 M Collector: Column

Figure 72. Site: TEXAS, DALLAS

Latitude: N 32 51 Longitude: W 96 51
 Altitude: 160 M Collector: Column

Figure 73. Site: LIBYA, CYRENE

Latitude: N 32 49 Longitude: E 21 51
 Altitude: 621 M Collector: Column

Figure 74. Site: JAPAN, NAGASAKI

Latitude: N 32 45
Altitude: 61 M

Longitude: E 129 52
Collector: Steel Pot

Figure 75. Site: BERMUDA, KINDLEY AFB

Latitude: N 32 22 Longitude: W 64 31
 Altitude: 8 M Collector: Column

Figure 76. Site: TEXAS, EL PASO

Latitude: N 31 48 Longitude: W 106 24
 Altitude: 1204 M Collector: Column

Figure 77. Site: PAKISTAN, LAHORE

Latitude: N 31 39 Longitude: E 74 22
 Altitude: 214 M Collector: Column

Figure 78. Site: UAR, ALEXANDRIA

Latitude: N 31 13 Longitude: E 29 55
 Altitude: 8 M Collector: Column

Figure 79. Site: UAR, CAIRO (INSHAS)

Latitude: N 30 23 Longitude: E 31 23
 Altitude: 0 M Collector: Column

Figure 80. Site: LOUISIANA, NEW ORLEANS

Latitude: N 30 0 Longitude: W 90 3
 Altitude: 1 M Collector: Column

Figure 81. Site: TEXAS, HOUSTON

Latitude: N 29 45 Longitude: W 95 25
 Altitude: 12 M Collector: Column

Figure 82. Site: TEXAS, HOUSTON

Latitude: N 29 45 Longitude: W 95 25
 Altitude: 12 M Collector: Steel Pot

Figure 83. Site: TEXAS, HOUSTON

Latitude: N 29 45 Longitude: W 95 25
 Altitude: 12 M Collector: Column

Figure 84. Site: CHICHI JIMA

Latitude: N 27 Longitude: E 143
 Altitude: 0 M Collector: Column

Figure 85. Site: SAUDI ARABIA, DHAHRAN

Latitude: N 26 18 Longitude: E 50 5
 Altitude: 0 M Collector: Column

Figure 86. Site: FLORIDA, MIAMI

Latitude: N 25 49 Longitude: W 80 17
 Altitude: 4 M Collector: Column

Figure 87. Site: FLORIDA, CORAL GABLES

Latitude: N 25 44 Longitude: W 80 17
 Altitude: 3 M Collector: Steel Pot

Figure 88. Site: BAHAMAS, BIMINI

Latitude: N 25 40 Longitude: W 79 15
 Altitude: 0 M Collector: Column

Figure 89. Site: TAIWAN, TAIPEI

Latitude: N 25 5 Longitude: E 121 32
 Altitude: 0 M Collector: Steel Pot

Figure 90. Site: PAKISTAN, KARACHI

Latitude: N 24 51 Longitude: E 67 2
 Altitude: 15 M Collector: Column

Figure 91. Site: IWO JIMA

Latitude: N 24 47
Altitude: 113 M

Longitude: E 141 19
Collector: Column

Figure 92. Site: TAIWAN, TAINAN

Latitude: N 23 1 Longitude: E 120 14
 Altitude: 0 M Collector: Steel Pot

Figure 93. Site: TAIWAN, TAITUNG

Latitude: N 22 45 Longitude: E 121 10
 Altitude: 0 M Collector: Steel Pot

Figure 94. Site: HONG KONG

Latitude: N 22 18
Altitude: 8 M

Longitude: E 114 12
Collector: Column

Figure 95. Site: HAWAII, LIHUE

Latitude: N 21 59 Longitude: W 159 21
 Altitude: 35 M Collector: Column

Figure 96. Site: HAWAII, HONOLULU

Latitude: N 21 19 Longitude: W 157 50
 Altitude: 24 M Collector: Steel Pot

Figure 97. Site: HAWAII, HILO

Latitude: N 19 43 Longitude: W 155 4
 Altitude: 11 M Collector: Column

Figure 98. Site: HAWAII, MAUNA LOA

Latitude: N 19 32 Longitude: W 155 35
 Altitude: 3401 M Collector: Plastic Bucket
 Column to 1976

Figure .99. Site: MEXICO, MEXICO CITY

Latitude: N 19 26 Longitude: W 99 3
 Altitude: 2239 M Collector: Column

Figure 100. Site: WAKE ISLAND

Latitude: N 19 17 Longitude: E 166 39
 Altitude: 3 M Collector: Column

Figure 101. Site: PUERTO RICO, SAN JUAN

Latitude: N 18 26 Longitude: W 66 0
 Altitude: 10 M Collector: Column

Figure 102. Site: JOHNSTON ISLAND

Latitude: N 16 45 Longitude: W 169 32
 Altitude: 0 M Collector: Column

Figure 103. Site: PHILIPPINE I., CLARK AB

Latitude: N 15 11 Longitude: E 120 33
 Altitude: 10 M Collector: Column

Figure 104. Site: PHILIPPINE I., QUEZON CITY

Latitude: N 14 40
Altitude: 70 M

Longitude: E 121 5
Collector: Column

Figure 105. Site: THAILAND, BANGKOK

Latitude: N 13 44 Longitude: E 100 30
 Altitude: 23 M Collector: Steel Pot

Figure 106. Site: THAILAND, BANGKOK

Latitude: N 13 44 Longitude: E 100 30
 Altitude: 23 M Collector: Column

Figure 107. Site: GUAM, ANDERSON AFB

Latitude: N 13 35 Longitude: E 144 55
 Altitude: 185 M Collector: Column

Figure 108. Site: ENIWETOK ATOLL

Latitude: N 11 21 Longitude: E 162 21
 Altitude: 4 M Collector: Column

Figure 109. Site: VENEZUELA, CARACAS SITE 1

Latitude: N 10 24 Longitude: W 66 59
 Altitude: 1751 M Collector: Column

Figure 110. Site: PHILIPPINE I., CEBU CITY

Latitude: N 10 20 Longitude: E 123 54
 Altitude: 34 M Collector: Column

Figure 111. Site: VENEZUELA, CARACAS SITE 2

Latitude: N 10 3 Longitude: W 66 48
 Altitude: 926 M Collector: Column

Figure 112. Site: COSTA RICA, TURRIALBA

Latitude: N 9 53 Longitude: W 83 39
 Altitude: 606 M Collector: Column

Figure 1.13. Site: YAP ISLAND

Latitude: N 9 31 Longitude: E 138 8
 Altitude: 18 M Collector: Column

Figure 114. Site: ETHIOPIA, ADDIS ABABA

Latitude: N 9 3 Longitude: E 38 42
 Altitude: 3004 M Collector: Column

Figure 1-15. Site: PANAMA CANAL ZONE

Latitude: N 8 55 Longitude: W 79 36
 Altitude: 10 M Collector: Column

Figure 116. Site: TRUK ISLAND

Latitude: N 7 28 Longitude: E 151 51
 Altitude: 2 M Collector: Column

Figure 117. Site: KOROR ISLAND

Latitude: N 7 21 Longitude: E 134 31
 Altitude: 31 M Collector: Column

Figure 118. Site: MAJURO ISLAND

Latitude: N 7 5 Longitude: E 171 23
 Altitude: 3 M Collector: Column

Figure 119. Site: PONAPE ISLAND

Latitude: N 6 58 Longitude: E 158 13
 Altitude: 38 M Collector: Column

Figure 120. Site: CEYLON, COLOMBO

Latitude: N 6 55 Longitude: E 79 52
 Altitude: 15 M Collector: Column

Figure 1.21. Site: NIGERIA, LAGOS

Latitude: N 6 26 Longitude: E 3 24
 Altitude: 1 M Collector: Column

Figure 1.23. Site: COLOMBIA, BOGOTA

Latitude: N 4 38 Longitude: W 74 5
 Altitude: 2632 M Collector: Steel Pot

Figure 124. Site: REP. OF ZAIRE, BUNIA

Latitude: N 1 32 Longitude: E 30 13
 Altitude: 1225 M Collector: Column

Figure 125. Site: REPUBLIC OF SINGAPORE

Latitude: N 1 20

Longitude: E 103 50

Altitude: 8 M

Collector: Column

Figure 126. Site: ECUADOR, QUITO

Latitude: S 0 14 Longitude: W 78 30
 Altitude: 2837 M Collector: Column

Figure 127. Site: KENYA, KIKUYU

Latitude: S 1 13 Longitude: E 36 38
 Altitude: 2074 M Collector: Steel Pot

Figure 128. Site: KENYA, NAIROBI

Latitude: S 1 17 Longitude: E 36 49
 Altitude: 1663 M Collector: Column

Figure 129. Site: BRAZIL, BELEM

Latitude: S 1 27 Longitude: W 48 29
 Altitude: 8 M Collector: Column

Figure 130. Site: ECUADOR, GUAYAQUIL

Latitude: S 2 10 Longitude: W 79 52
 Altitude: 7 M Collector: Column

Figure 131. Site: CANTON ISLAND

Latitude: S 2 46 Longitude: W 171 43
 Altitude: 2 M Collector: Column

Figure 132. Site: BRAZIL, MANAUS

Latitude: S 3 2 Longitude: W 60 1
 Altitude: 29 M Collector: Steel Pot

Figure 133. Site: CONGO REP.KINSHASA SITE 1

Latitude: S 4 18 Longitude: E 15 18
 Altitude: 319 M Collector: Column

Figure 134. Site: KINSHASA, REP. OF ZAIRE

Latitude: S 4 20 Longitude: E 15 18
 Altitude: 225 M Collector: Column

Figure 135. Site: REP. OF ZAIRE, KINSHASA

Latitude: S 4 20 Longitude: E 15 18
 Altitude: 305 M Collector: Column

Figure 136. Site: BRAZIL, RECIFE

Latitude: S 8 2 Longitude: W 34 58
 Altitude: 3 M Collector: Column

Figure 137. Site: REP. OF BURMA, KHAMMOU.

Latitude: S 17 36 Longitude: E 97 12
 Altitude: 1275 M Collection: 1951-1985

Figure 138. Site: PERU, LIMA

Latitude: S 12 1 Longitude: W 77 7
 Altitude: 30 M Collector: Column

Figure 139. Site: PERU, LIMA

Latitude: S 12 6 Longitude: W 77 3
 Altitude: 153 M Collector: Column

Figure 140. Site: AUSTRALIA, DARWIN

Latitude: S 12 28 Longitude: E 130 51
 Altitude: 30 M Collector: Column

Figure 141. Site: AMERICAN SAMOA, PAGO PAGO

Latitude: S 14 16 Longitude: W 170 43
 Altitude: 0 M Collector: Plastic Bucket
 Column to 1976

Figure 142. Site: BRAZIL, BRASLIA

Latitude: S 15 52 Longitude: W 47 56
 Altitude: 1052 M Collector: Steel Pot

Figure 1.43. Site: BOLIVIA, CHACALTAYA

Latitude: S 16.21 Longitude: W 68 8
 Altitude: 5222 M Collector: Column

Figure 144. Site: BOLIVIA, LA PAZ (CITY)

Latitude: S 16 30 Longitude: W 68 7
 Altitude: 3508 M Collector: Column

Figure 145. Site: BOLIVIA, LA PAZ (DYEJUY0)

Latitude: S 16 32 Longitude: W 68 +
 Altitude: 3421 M Collector: Colman

Figure 146. Site: RHODESIA, SALISBURY

Latitude: S 17 48 Longitude: E 31 3
 Altitude: 1495 M Collector: Steel Pot

Figure 147. Site: FIJI ISLANDS, SUVA

Latitude: S 18 9 Longitude: E 178 25
 Altitude: 11 M Collector: Column

Figure 148. Site: AUSTRALIA, TOWNSVILLE

Latitude: S 19 18 Longitude: E 146 48
 Altitude: 4 M Collector: Column

Figure 149. Site: BRAZIL, TRINDADE ISLAND

Latitude: S 20 31 Longitude: W 29 20
 Altitude: 92 M Collector: Column

Figure 150. Site: BRAZIL, NOVA FRIBURGO

Latitude: S 22 17 Longitude: W 42 32
 Altitude: 854 M Collector: Steel Pot

Figure 151. Site: BRAZIL, RIO DE JANEIRO

Latitude: S 22 54 Longitude: W 43 13
 Altitude: 9 M Collector: Steel Pot
 Column to 1976

Figure 152. Site: BRAZIL, ITAICI SAO PAULO

Latitude: S 23 6 Longitude: W 47 11
 Altitude: 668 M Collector: Steel Pot

Figure 153. Site: BRAZIL, S. JOSE DOS CAMPOS

Latitude: S 23 14

Longitude: W 45 51

Altitude: 643 M

Collector: Steel Pot

Figure 154. Site: CHILE, ANTOFAGASTA

Latitude: S 23 37 Longitude: W 70 16
 Altitude: 35 M Collector: Column

Figure 155. Site: REP. S. AFRICA, PRETORIA

Latitude: S 25 45 Longitude: E 28 14
 Altitude: 1369 M Collector: Steel Pot

Figure 156. Site: ARGENTINA, FORMOSA

Latitude: S 26 11 Longitude: W 58 10
 Altitude: 58 M Collector: Column

Figure 157. Site: CHILE, EASTER ISLAND

Latitude: S 27 10 Longitude: W 109 26
 Altitude: 41 M Collector: Column

Figure 158. Site: AUSTRALIA, BRISBANE

Latitude: S 27 28 Longitude: E 153 2
 Altitude: 42 M Collector: Column

Figure 159. Site: BRAZIL, SAO LEOPOLDO

Latitude: S 29 45 Longitude: W 51 11
 Altitude: 35 M Collector: Steel Pot

Figure 160. Site: REP. OF S. AFRICA, DURBAN

Latitude: S 29 52 Longitude: E 30 59
 Altitude: 156 M Collector: Steel Pot

Figure 161. Site: AUSTRALIA, PERTH

Latitude: S 31 57 Longitude: E 115 51
 Altitude: 64 M Collector: Column

Figure 162. Site: CHILE, PORTILLO

Latitude: S 32 25 Longitude: W 70 08
 Altitude: 2850 M Collector: Column

Figure 163. Site: CHILE, CRISTO REDENTOR

Latitude: S 32 50 Longitude: W 70 07
 Altitude: 3830 M Collector: Column

Figure 164. Site: CHILE, SANTIAGO

Latitude: S 33 27 Longitude: W 70 42
 Altitude: 520 M Collector: Column

Figure 165. Site: CHILE, SANTIAGO

Latitude: S 33 29 Longitude: W 70 40
 Altitude: 522 M Collector: Steel Pot

Figure 166. Site: CHILE, ISLA ROB. CRUSOE

Latitude: S 33 37 Longitude: W 78 52
 Altitude: 6 M Collector: Column

Figure 167. Site: AUSTRALIA, SYDNEY

Latitude: S 33 52 Longitude: E 151 12
 Altitude: 42 M Collector: Column

Figure 168. Site: ARGENTINA, BUENOS AIRES

Latitude: S 34 37 Longitude: W 58 26
 Altitude: 20 M Collector: Column

Figure 169. Site: AUSTRALIA, ADELAIDE

Latitude: S 34 56 Longitude: E 138 35
 Altitude: 43 M Collector: Column

Figure 170. Site: ARGENTINA, MALARGUE

Latitude: S 35 29 Longitude: W 69 35
 Altitude: 1441 M Collector: Column

Figure 171. Site: CHILE, LINARES

Latitude: S 35 51 Longitude: W 71 36
 Altitude: 157 M Collector: Column

Figure 172. Site: CHILE, CONCEPCION

Latitude: S 36 50 Longitude: W 73 02
 Altitude: 10 M Collector: Column

Figure 173. Site: AUSTRALIA, MELBOURNE

Latitude: S 37 49 Longitude: E 144 58
 Altitude: 47 M Collector: Column

Figure 174. Site: CHILE, TEMUCO

Latitude: S 38 46 Longitude: W 72 35
 Altitude: 113 M Collector: Column

Figure 175. Site: NEW ZEALAND, WELLINGTON

Latitude: S 41 17 Longitude: E 174 46
 Altitude: 34 M Collector: Column

Figure 176. Site: CHILE, PUERTO MONTT

Latitude: S 41 26 Longitude: W 73 07
 Altitude: 110 M Collector: Column

Figure 177. Site: AUSTRALIA, HOBART

Latitude: S 42 53 Longitude: E 147 20
 Altitude: 54 M Collector: Column

Figure 178. Site: CHILE, PUNTA ARENAS

Latitude: S 53 00 Longitude: W 70 50
 Altitude: 74 M Collector: Column

Figure 179. Site: CHILE, ANTARCTICA, ISLA DEC

Latitude: S 62 56 Longitude: W 60 36
 Altitude: 16 M Collector: Column

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