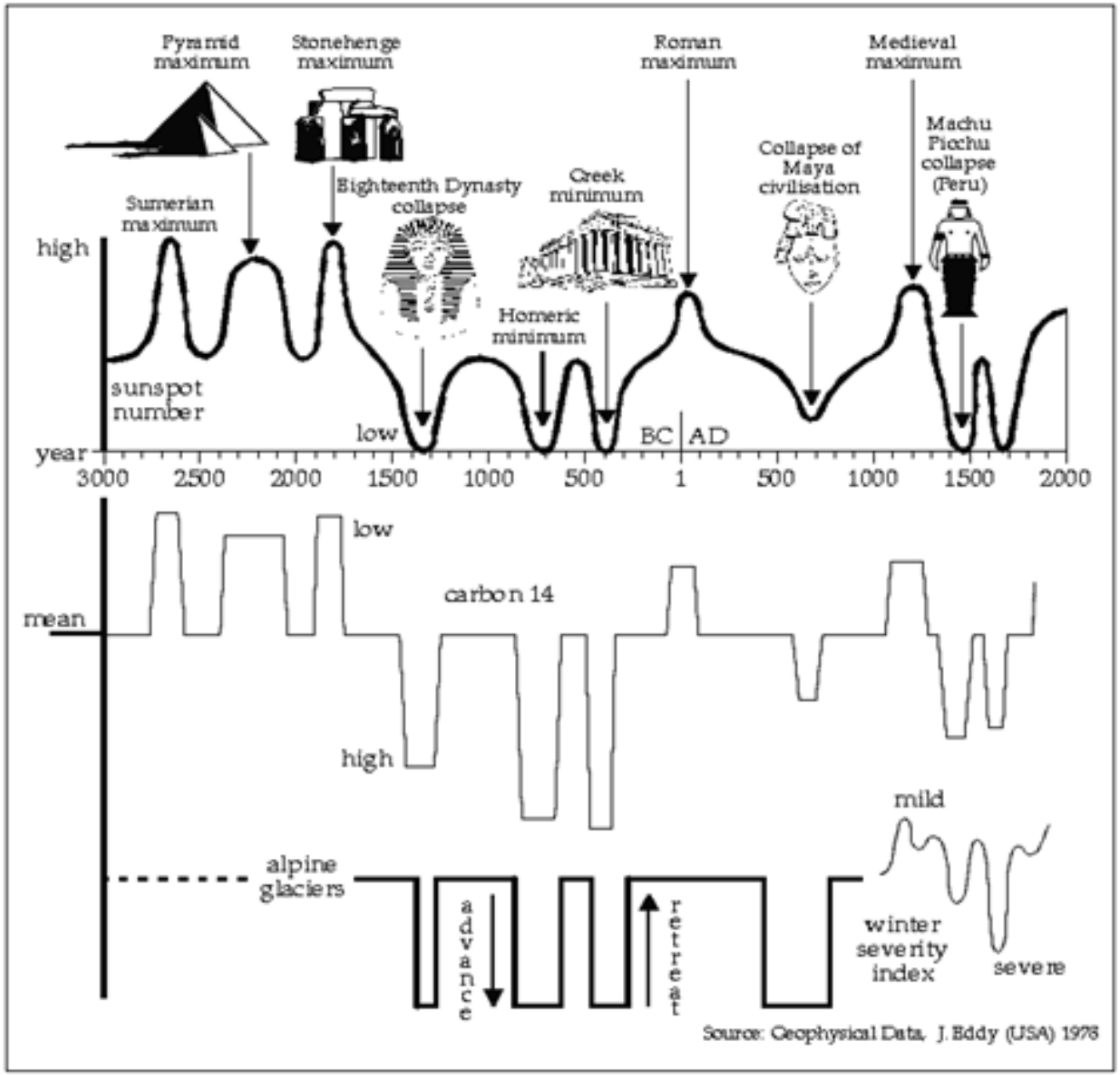
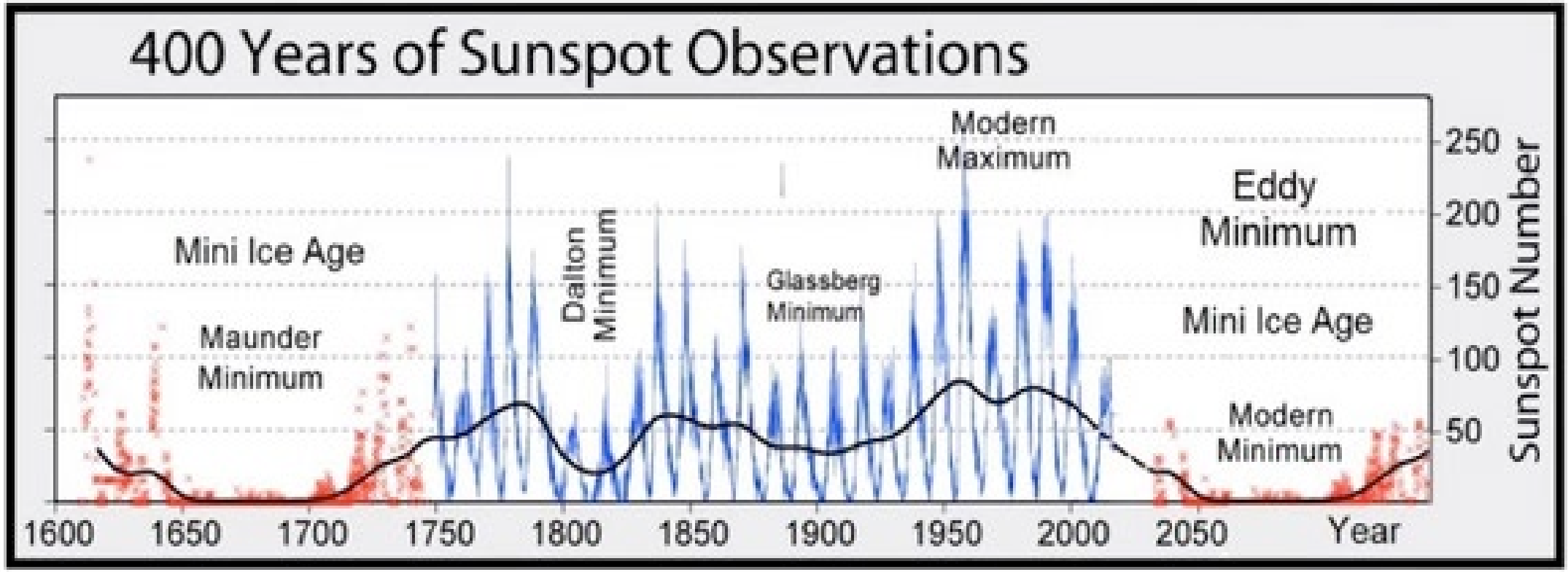
Sunspots and the rise and fall of Civilisations




400 Years of Sunspot Observations
Mini Ice Age
Maunder Minimum
Dalton Minimum
Glassberg Minimum
Modern Maximum
Eddy Minimum
Mini Ice Age
Modern Minimum
250
200
150
100
50
Sunspot Number
1600
1650
1700
1750
1800
1850
1900
1950
2000
2050
Year

1871-1873 av 710mm Average of first 23 years 641.5mm and the high average indicates that there are additional factors to solar activity causing rainfall decline.

1875-1884 av 627mm

1885-1894 av 635.5mm (missing years of 1890&91 taken from Mercury Office Sale record)

1895-1904 av 594mm

Low solar activity- Glassberg Solar Minimum

1905-1914 av 590mm

Average of the two decades 592mm

1915-1924 av 603mm

1925-1934 av 636mm

1935-1944 av 573mm

East Sale-

1945-1954 av 703mm

Peak of the Modern Solar Maximum 703mm average for the decade

1955-1964 av 613mm

1965-1974 av 619mm

1975-1984 av 570mm

1985-1994 av 637mm

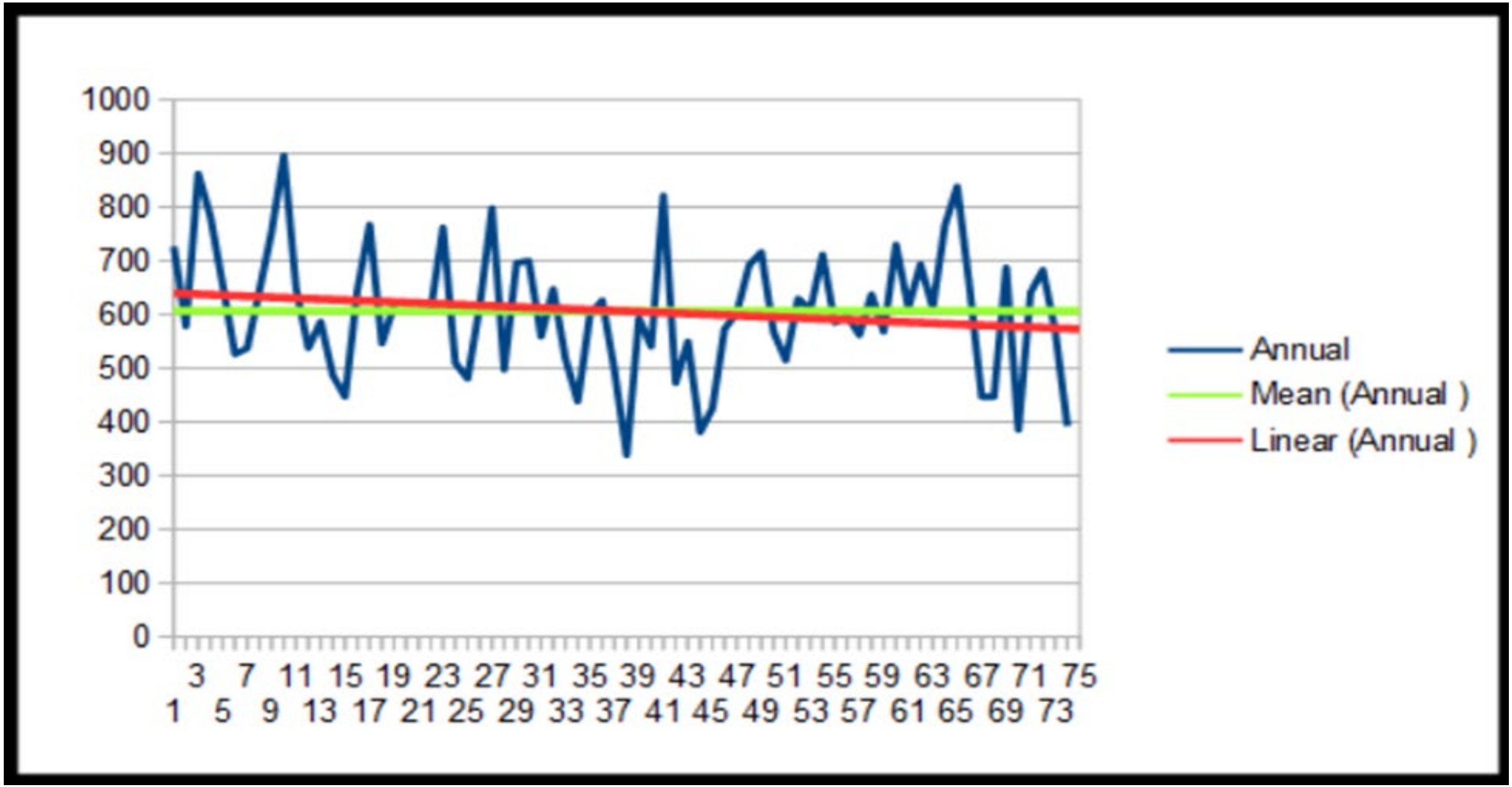
1995-2004 av 526mm

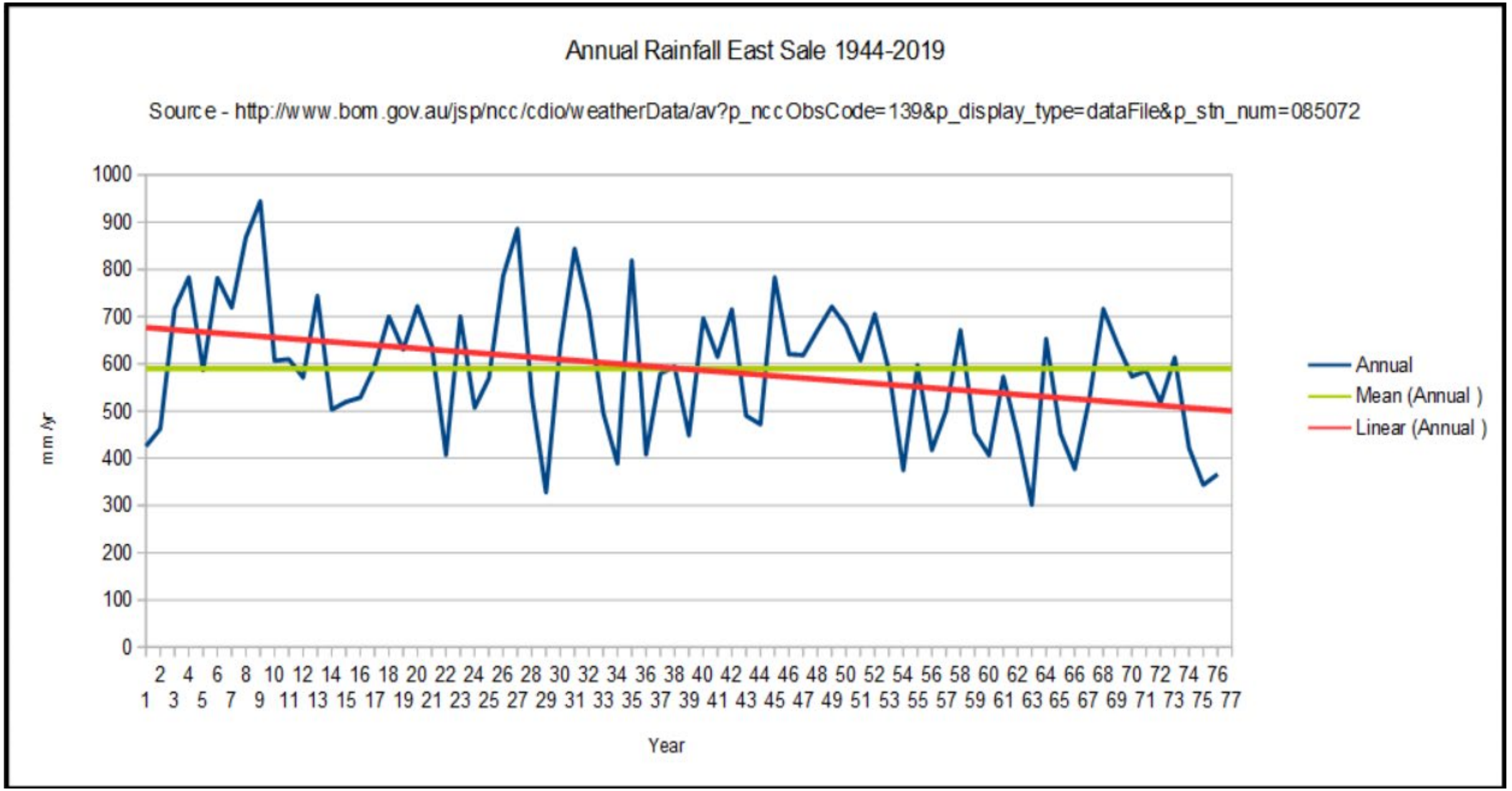
Start of the Eddy Solar minimum

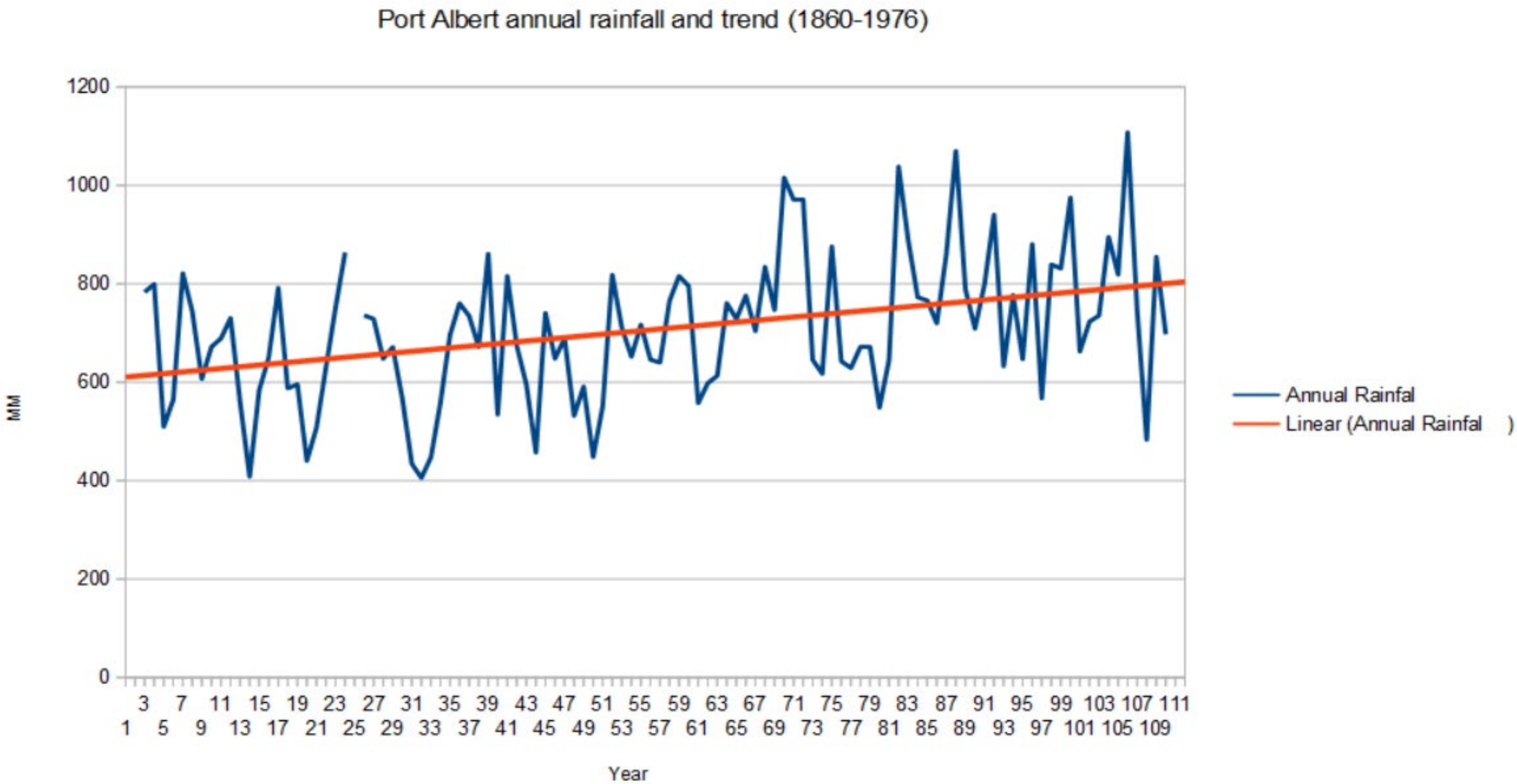
2005-2014 av 527mm

Average of the last 26 years- 515 mm

2015-2020 av 475mm


1000
900
800
700
600
500
400
300
200
100
0
1 3 5 7 9 11 13 15 17 19 21 23 25 27 29 31 33 35 37 39 41 43 45 47 49 51 53 55 57 59 61 63 65 67 69 71 73 75
Annual
Mean (Annual)
Linear (Annual)


Annual Rainfall East Sale 1944-2019
Source - http://www.bom.gov.au/jsp/ncc/cdio/weatherData/av?p_nccObsCode=139&p_display_type=dataFile&p_stn_num=085072
mm /yr
1000
900
800
700
600
500
400
300
200
100
0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77
Year
Annual
Mean (Annual)
Linear (Annual)


Port Albert annual rainfall and trend (1860-1976)
1200
1000
800
600
400
200
0
MM
1 3 5 7 9 11 13 15 17 19 21 23 25 27 29 31 33 35 37 39 41 43 45 47 49 51 53 55 57 59 61 63 65 67 69 71 73 75 77 79 81 83 85 87 89 91 93 95 97 99 101 103 105 107 109 111
Year
Annual Rainfal
Linear (Annual Rainfal)

J. Woolstencroft, Photo, Noojee. Timber at Mt. Horsfall, over 300 ft. high.