[] Dendrochronology Program Library Run RS\_C Program COF 14:54 Mon 20 Apr 2020 Page 1

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[] P R O G R A M C O F E C H A Version 6.06P 31158

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QUALITY CONTROL AND DATING CHECK OF TREE-RING MEASUREMENTS COF12K.for

Title of run: Red Spruce, Lead Mountain, ME (KT Smith)

File of DATED series: RS\_C.rrw

CONTENTS:

Part 1: Title page, options selected, summary, absent rings by series

Part 2: Histogram of time spans

Part 3: Master series with sample depth and absent rings by year

Part 4: Bar plot of Master Dating Series

Part 5: Correlation by segment of each series with Master

Part 6: Potential problems: low correlation, divergent year-to-year changes, absent rings, outliers

Part 7: Descriptive statistics

RUN CONTROL OPTIONS SELECTED VALUE

1 Cubic smoothing spline 50% wavelength cutoff for filtering

32 years

2 Segments examined are 50 years lagged successively by 25 years

3 Autoregressive model applied A Residuals are used in master dating series and testing

4 Series not transformed to logarithms N

5 CORRELATION is Pearson (parametric, quantitative)

Critical correlation, 99% confidence level 0.3281

6 Master dating series saved N

7 Ring measurements listed N

8 Parts printed 1234567

9 Absent rings are omitted from master series and segment correlations (Y)

Time span of Master dating series is 1832 to 1993 162 years

Continuous time span is 1832 to 1993 162 years

Portion with two or more series is 1845 to 1993 149 years

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*C\* Number of dated series 63 \*C\*

\*O\* Master series 1832 1993 162 yrs \*O\*

\*F\* Total rings in all series 5100 \*F\*

\*E\* Total dated rings checked 5087 \*E\*

\*C\* Series intercorrelation 0.643 \*C\*

\*H\* Average mean sensitivity 0.239 \*H\*

\*A\* Segments, possible problems 1 \*A\*

\*\*\* Mean length of series 80.0 \*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

ABSENT RINGS listed by SERIES: (See Master Dating Series for absent rings listed by year)

C1112 2 absent rings: 1918 1919

C1111 6 absent rings: 1917 1918 1919 1920 1921 1922

8 absent rings 0.157%

PART 2: TIME PLOT OF TREE-RING SERIES: Red Spruce, Lead Mountain, ME (KT Smith) 14:54 Mon 20 Apr 2020 Page 2

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1050 1100 1150 1200 1250 1300 1350 1400 1450 1500 1550 1600 1650 1700 1750 1800 1850 1900 1950 2000 2050 Ident Seq Time-span Yrs

: : : : : : : : : : : : : : : : : : : : : -------- --- ---- ---- ----

. . . . . . . . . . . . . . . . . . <===>. . C181 1 1954 1991 38

. . . . . . . . . . . . . . . . . . <====>. . C132 2 1942 1991 50

. . . . . . . . . . . . . . . . . . .<==>. . C192 3 1962 1991 30

. . . . . . . . . . . . . . . . . . <====>. . C131 4 1942 1991 50

. . . . . . . . . . . . . . . . . .<=======>. . C161 5 1912 1991 80

. . . . . . . . . . . . . . . . . .<=======>. . C111 6 1911 1991 81

. . . . . . . . . . . . . . . . . <========>. . C112 7 1904 1991 88

. . . . . . . . . . . . . . . . . .<=======>. . C1102 8 1911 1991 81

. . . . . . . . . . . . . . . . . .<=======>. . C1101 9 1912 1991 80

. . . . . . . . . . . . . . . . . <=========>. . C1121 10 1892 1991 100

. . . . . . . . . . . . . . . . . <==========>. . C172 11 1880 1991 112

. . . . . . . . . . . . . . . . . .<=======>. . C152 12 1911 1991 81

. . . . . . . . . . . . . . . . .<============>. . C1122 13 1868 1991 124

. . . . . . . . . . . . . . . . <===============>. . C1112 14 1832 1991 160

. . . . . . . . . . . . . . . . . <========>. . C142 15 1907 1991 85

. . . . . . . . . . . . . . . . . <===========>. . C121 16 1873 1991 119

. . . . . . . . . . . . . . . . <==============>. . C1111 17 1845 1991 147

. . . . . . . . . . . . . . . . .<============>. . C122 18 1865 1991 127

. . . . . . . . . . . . . . . . . <===========>. . C171 19 1876 1991 116

. . . . . . . . . . . . . . . . . <=========>. . C162 20 1896 1991 96

. . . . . . . . . . . . . . . . . <=========>. . C151 21 1890 1991 102

. . . . . . . . . . . . . . . . . . <======>. . C261 22 1921 1992 72

. . . . . . . . . . . . . . . . . . <=====>. . C251 23 1934 1992 59

. . . . . . . . . . . . . . . . . <=========>. . C242 24 1897 1992 96

. . . . . . . . . . . . . . . . . . <====>. . C232 25 1946 1992 47

. . . . . . . . . . . . . . . . . . <=====>. . C262 26 1939 1992 54

. . . . . . . . . . . . . . . . . . <======>. . C271 27 1928 1992 65

. . . . . . . . . . . . . . . . . <========>. . C231 28 1901 1992 92

. . . . . . . . . . . . . . . . . . <====>. . C212 29 1948 1992 45

. . . . . . . . . . . . . . . . . . <=====>. . C211 30 1934 1992 59

. . . . . . . . . . . . . . . . . . <=====>. . C252 31 1933 1992 60

. . . . . . . . . . . . . . . . . .<=======>. . C272 32 1914 1992 79

. . . . . . . . . . . . . . . . . <========>. . C241 33 1902 1992 91

. . . . . . . . . . . . . . . . . . <=====>. . C282 34 1930 1992 63

. . . . . . . . . . . . . . . . . . <======>. . C392 35 1920 1992 73

. . . . . . . . . . . . . . . . . <========>. . C382 36 1903 1992 90

. . . . . . . . . . . . . . . . . .<=======>. . C372 37 1911 1992 82

. . . . . . . . . . . . . . . . . <=========>. . C362 38 1897 1992 96

. . . . . . . . . . . . . . . . . <=========>. . C371 39 1891 1992 102

. . . . . . . . . . . . . . . . . <========>. . C352 40 1900 1992 93

. . . . . . . . . . . . . . . . . . <=====>. . C361 41 1932 1992 61

. . . . . . . . . . . . . . . . . <========>. . C332 42 1907 1992 86

. . . . . . . . . . . . . . . . . . <===>. . C312 43 1951 1992 42

. . . . . . . . . . . . . . . . . .<=======>. . C322 44 1911 1992 82

. . . . . . . . . . . . . . . . . .<=======>. . C341 45 1913 1992 80

. . . . . . . . . . . . . . . . . <========>. . C321 46 1905 1992 88

. . . . . . . . . . . . . . . . . . <=====>. . C311 47 1931 1992 62

. . . . . . . . . . . . . . . . . . <====>. . C391 48 1948 1992 45

. . . . . . . . . . . . . . . . . .<=======>. . C451 49 1915 1993 79

. . . . . . . . . . . . . . . . . . <======>. . C492 50 1920 1993 74

: : : : : : : : : : : : : : : : : : : : :

1050 1100 1150 1200 1250 1300 1350 1400 1450 1500 1550 1600 1650 1700 1750 1800 1850 1900 1950 2000 2050

PART 2: TIME PLOT OF TREE-RING SERIES: Red Spruce, Lead Mountain, ME (KT Smith) 14:54 Mon 20 Apr 2020 Page 3

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1050 1100 1150 1200 1250 1300 1350 1400 1450 1500 1550 1600 1650 1700 1750 1800 1850 1900 1950 2000 2050 Ident Seq Time-span Yrs

: : : : : : : : : : : : : : : : : : : : : -------- --- ---- ---- ----

. . . . . . . . . . . . . . . . . . <=====>. . C472 51 1930 1993 64

. . . . . . . . . . . . . . . . . . <=====>. . C482 52 1930 1993 64

. . . . . . . . . . . . . . . . . . <=====>. . C481 53 1935 1993 59

. . . . . . . . . . . . . . . . . <========>. . C452 54 1909 1993 85

. . . . . . . . . . . . . . . . . .<=======>. . C462 55 1910 1993 84

. . . . . . . . . . . . . . . . . <==========>. . C422 56 1883 1993 111

. . . . . . . . . . . . . . . . . <==========>. . C421 57 1881 1993 113

. . . . . . . . . . . . . . . . . <========>. . C442 58 1906 1993 88

. . . . . . . . . . . . . . . . . <========>. . C441 59 1907 1993 87

. . . . . . . . . . . . . . . . . . <===>. . C412 60 1950 1993 44

. . . . . . . . . . . . . . . . . . <=====>. . C411 61 1939 1993 55

. . . . . . . . . . . . . . . . . <========>. . C432 62 1909 1993 85

. . . . . . . . . . . . . . . . . <=========>. . C431 63 1897 1993 97

: : : : : : : : : : : : : : : : : : : : :

1050 1100 1150 1200 1250 1300 1350 1400 1450 1500 1550 1600 1650 1700 1750 1800 1850 1900 1950 2000 2050

PART 3: Master Dating Series: Red Spruce, Lead Mountain, ME (KT Smith) 14:54 Mon 20 Apr 2020 Page 4

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Year Value No Ab Year Value No Ab Year Value No Ab Year Value No Ab Year Value No Ab Year Value No Ab

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1850 -0.020 2 1900 -0.917 17 1950 0.662 60

1851 1.675 2 1901 -0.600 18 1951 0.528 61

1852 -0.258 2 1902 -0.454 19 1952 -0.795 61

1853 -1.235 2 1903 0.805 20 1953 1.372 61

1854 -1.911 2 1904 -0.074 21 1954 0.766 62

1855 -1.066 2 1905 0.592 22 1955 0.753 62

1856 -1.880 2 1906 -0.501 23 1956 -0.078 62

1857 -1.510 2 1907 0.295 26 1957 0.961 62

1858 -1.445 2 1908 -0.529 26 1958 0.980 62

1859 -0.284 2 1909 -0.051 28 1959 0.008 62

1860 0.660 2 1910 1.295 29 1960 0.964 62

1861 3.835 2 1911 0.104 34 1961 0.725 62

1862 -0.582 2 1912 1.583 36 1962 -0.946 63

1863 0.892 2 1913 2.821 37 1963 0.815 63

1864 0.223 2 1914 -0.603 38 1964 0.123 63

1865 0.995 3 1915 0.116 39 1965 -0.809 63

1866 0.370 3 1916 0.227 39 1966 -0.373 63

1867 1.121 3 1917 -1.057 39 1 1967 -1.581 63

1868 -0.296 4 1918 -0.975 39 2 1968 -0.477 63

1869 0.387 4 1919 -1.195 39 2 1969 0.572 63

1870 0.744 4 1920 -0.914 41 1 1970 0.070 63

1871 0.437 4 1921 -0.538 42 1 1971 0.685 63

1872 -0.998 4 1922 -0.809 42 1 1972 0.024 63

1873 -0.281 5 1923 -0.915 42 1973 -1.570 63

1874 1.238 5 1924 0.028 42 1974 -0.922 63

1875 0.434 5 1925 0.785 42 1975 -0.972 63

1876 -0.729 6 1926 -0.417 42 1976 -1.008 63

1877 0.227 6 1927 1.141 42 1977 -0.369 63

1878 -0.552 6 1928 1.060 43 1978 0.553 63

1879 -0.635 6 1929 -0.039 43 1979 -0.372 63

1880 0.107 7 1930 1.473 46 1980 0.634 63

1881 -0.244 8 1931 0.961 47 1981 -0.811 63

1832 1.115 1 1882 -0.952 8 1932 1.149 48 1982 0.986 63

1833 1.388 1 1883 -1.595 9 1933 2.391 49 1983 -0.075 63

1834 0.558 1 1884 -1.430 9 1934 0.143 51 1984 -0.774 63

1835 -1.198 1 1885 -1.747 9 1935 -0.272 52 1985 1.043 63

1836 -0.957 1 1886 0.407 9 1936 -0.102 52 1986 0.397 63

1837 -1.908 1 1887 -0.144 9 1937 -0.423 52 1987 1.267 63

1838 -2.740 1 1888 0.251 9 1938 -0.043 52 1988 0.254 63

1839 -0.408 1 1889 1.870 9 1939 -0.371 54 1989 -1.052 63

1840 0.899 1 1890 0.700 10 1940 -0.960 54 1990 0.292 63

1841 1.051 1 1891 0.432 11 1941 -1.020 54 1991 0.130 63

1842 2.133 1 1892 0.399 12 1942 -1.405 56 1992 0.367 42

1843 -0.355 1 1893 -1.221 12 1943 -1.677 56 1993 -0.003 15

1844 -0.040 1 1894 0.620 12 1944 -1.527 56

1845 1.331 2 1895 -1.408 12 1945 -0.642 56

1846 1.629 2 1896 0.853 13 1946 -0.476 57

1847 -0.732 2 1897 0.318 16 1947 0.160 57

1848 0.419 2 1898 0.887 16 1948 -0.729 59

1849 0.741 2 1899 -0.808 16 1949 0.382 59

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PART 4: Master Bar Plot: Red Spruce, Lead Mountain, ME (KT Smith) 14:54 Mon 20 Apr 2020 Page 5

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Year Rel value Year Rel value Year Rel value Year Rel value Year Rel value Year Rel value Year Rel value Year Rel value

1850-----@ 1900-d 1950--------C

1851----------G 1901---b 1951-------B

1852----a 1902---b 1952--c

1853-e 1903--------C 1953----------E

1854h 1904-----@ 1954--------C

1855-d 1905-------B 1955--------C

1856h 1906---b 1956-----@

1857f 1907------A 1957---------D

1858f 1908---b 1958---------D

1859----a 1909-----@ 1959-----@

1860--------C 1910---------E 1960---------D

1861----------O 1911-----@ 1961--------C

1862---b 1912----------F 1962-d

1863--------D 1913----------K 1963--------C

1864------A 1914---b 1964-----@

1865---------D 1915-----@ 1965--c

1866-------A 1916------A 1966----a

1867---------D 1917-d 1967f

1868----a 1918-d 1968---b

1869-------B 1919-e 1969-------B

1870--------C 1920--d 1970-----@

1871-------B 1921---b 1971--------C

1872-d 1922--c 1972-----@

1873----a 1923-d 1973f

1874---------E 1924-----@ 1974-d

1875-------B 1925--------C 1975-d

1876--c 1926---b 1976-d

1877------A 1927---------E 1977----a

1878---b 1928---------D 1978-------B

1879---c 1929-----@ 1979----a

1880-----@ 1930----------F 1980--------C

1881----a 1931---------D 1981--c

1832---------D 1882-d 1932---------E 1982---------D

1833----------F 1883f 1933----------J 1983-----@

1834-------B 1884f 1934------A 1984--c

1835-e 1885g 1935----a 1985---------D

1836-d 1886-------B 1936-----@ 1986-------B

1837h 1887----a 1937---b 1987---------E

1838k 1888------A 1938-----@ 1988------A

1839---b 1889----------G 1939----a 1989-d

1840---------D 1890--------C 1940-d 1990------A

1841---------D 1891-------B 1941-d 1991-----A

1842----------I 1892-------B 1942f 1992-------A

1843----a 1893-e 1943g 1993-----@

1844-----@ 1894--------B 1944f

1845---------E 1895f 1945---c

1846----------G 1896--------C 1946---b

1847--c 1897------A 1947------A

1848-------B 1898--------D 1948--c

1849--------C 1899--c 1949-------B

PART 5: CORRELATION OF SERIES BY SEGMENTS: Red Spruce, Lead Mountain, ME (KT Sm 14:54 Mon 20 Apr 2020 Page 5

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Correlations of 50-year dated segments, lagged 25 years

Flags: A = correlation under 0.3281 but highest as dated; B = correlation higher at other than dated position

Seq Series Time\_span 1825 1850 1875 1900 1925 1950

1874 1899 1924 1949 1974 1999

--- -------- --------- ---- ---- ---- ---- ---- ---- ---- ---- ---- ---- ---- ---- ---- ---- ---- ---- ---- ---- ---- ----

1 C181 1954 1991 .62

2 C132 1942 1991 .72

3 C192 1962 1991 .56

4 C131 1942 1991 .64

5 C161 1912 1991 .52 .55 .63

6 C111 1911 1991 .62 .65 .63

7 C112 1904 1991 .64 .76 .65

8 C1102 1911 1991 .59 .55 .53

9 C1101 1912 1991 .57 .75 .57

10 C1121 1892 1991 .71 .70 .69 .63

11 C172 1880 1991 .83 .84 .74 .53

12 C152 1911 1991 .74 .69 .59

13 C1122 1868 1991 .62 .61 .72 .71 .73

14 C1112 1832 1991 .80 .75 .62 .50 .50 .60

15 C142 1907 1991 .63 .66 .71

16 C121 1873 1991 .60 .58 .76 .72 .73

17 C1111 1845 1991 .69 .60 .54 .68 .59 .61

18 C122 1865 1991 .54 .70 .75 .72 .63

19 C171 1876 1991 .80 .85 .69 .69

20 C162 1896 1991 .62 .71 .77 .72

21 C151 1890 1991 .76 .80 .76 .63

22 C261 1921 1992 .73 .74 .65

23 C251 1934 1992 .66 .65

24 C242 1897 1992 .84 .83 .72 .70

25 C232 1946 1992 .57

26 C262 1939 1992 .75 .76

27 C271 1928 1992 .74 .67

28 C231 1901 1992 .44B .61 .54

29 C212 1948 1992 .50

30 C211 1934 1992 .55 .64

31 C252 1933 1992 .60 .56

32 C272 1914 1992 .66 .70 .64

33 C241 1902 1992 .59 .72 .80

34 C282 1930 1992 .68 .67

35 C392 1920 1992 .62 .62 .62

36 C382 1903 1992 .72 .69 .69

37 C372 1911 1992 .75 .76 .66

38 C362 1897 1992 .72 .71 .80 .68

39 C371 1891 1992 .72 .75 .69 .56

40 C352 1900 1992 .69 .65 .52

41 C361 1932 1992 .75 .64

42 C332 1907 1992 .59 .60 .67

43 C312 1951 1992 .69

44 C322 1911 1992 .77 .70 .65

45 C341 1913 1992 .66 .66 .71

46 C321 1905 1992 .76 .71 .57

47 C311 1931 1992 .69 .67

48 C391 1948 1992 .62

49 C451 1915 1993 .42 .50 .52

50 C492 1920 1993 .48 .51 .40

51 C472 1930 1993 .66 .61

52 C482 1930 1993 .54 .56

53 C481 1935 1993 .46 .47

54 C452 1909 1993 .57 .53 .59

55 C462 1910 1993 .58 .49 .45

56 C422 1883 1993 .71 .76 .68 .60

57 C421 1881 1993 .62 .64 .55 .46

58 C442 1906 1993 .84 .75 .60

59 C441 1907 1993 .74 .74 .57

60 C412 1950 1993 .57

61 C411 1939 1993 .54 .54

62 C432 1909 1993 .87 .79 .68

63 C431 1897 1993 .89 .88 .76 .67

Av segment correlation 0.74 0.62 0.70 0.68 0.66 0.62

PART 6: POTENTIAL PROBLEMS: Red Spruce, Lead Mountain, ME (KT Smith) 14:54 Mon 20 Apr 2020 Page 6

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For each series with potential problems the following diagnostics may appear:

[A] Correlations with master dating series of flagged 50-year segments of series filtered with 32-year spline,

at every point from ten years earlier (-10) to ten years later (+10) than dated

[B] Effect of those data values which most lower or raise correlation with master series

Symbol following year indicates value in series is greater (>) or lesser (<) than master series value

[C] Year-to-year changes very different from the mean change in other series

[D] Absent rings (zero values)

[E] Values which are statistical outliers from mean for the year

====================================================================================================================================

C181 1954 to 1991 38 years Series 1

[B] Entire series, effect on correlation ( 0.625) is:

Lower 1987<-0.035 1990<-0.033 1959>-0.027 1958<-0.022 1964<-0.020 1970>-0.017 Higher 1985 0.035 1982 0.031

====================================================================================================================================

C132 1942 to 1991 50 years Series 2

[B] Entire series, effect on correlation ( 0.716) is:

Lower 1982<-0.035 1971<-0.017 1970>-0.016 1956>-0.014 1945>-0.012 1964>-0.010 Higher 1953 0.024 1967 0.016

====================================================================================================================================

C192 1962 to 1991 30 years Series 3

[B] Entire series, effect on correlation ( 0.558) is:

Lower 1981>-0.052 1971<-0.036 1962>-0.031 1964<-0.026 1970>-0.025 1988<-0.025 Higher 1973 0.070 1963 0.027

====================================================================================================================================

C131 1942 to 1991 50 years Series 4

[B] Entire series, effect on correlation ( 0.645) is:

Lower 1954<-0.027 1955<-0.024 1944>-0.016 1959>-0.015 1982<-0.015 1964>-0.013 Higher 1973 0.033 1987 0.018

[E] Outliers 1 3.0 SD above or -4.5 SD below mean for year

1978 +4.0 SD

====================================================================================================================================

C161 1912 to 1991 80 years Series 5

[B] Entire series, effect on correlation ( 0.578) is:

Lower 1974>-0.030 1930<-0.028 1913<-0.024 1991>-0.016 1958<-0.012 1980<-0.009 Higher 1912 0.019 1962 0.017

[E] Outliers 1 3.0 SD above or -4.5 SD below mean for year

1974 +3.7 SD

====================================================================================================================================

C111 1911 to 1991 81 years Series 6

[B] Entire series, effect on correlation ( 0.643) is:

Lower 1948>-0.023 1922>-0.015 1924<-0.014 1959>-0.012 1972>-0.011 1962>-0.010 Higher 1973 0.017 1953 0.016

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C112 1904 to 1991 88 years Series 7

[B] Entire series, effect on correlation ( 0.622) is:

Lower 1974>-0.025 1989>-0.023 1980<-0.019 1905<-0.017 1911>-0.016 1904>-0.012 Higher 1973 0.022 1967 0.014

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C1102 1911 to 1991 81 years Series 8

[B] Entire series, effect on correlation ( 0.570) is:

Lower 1947<-0.033 1933<-0.032 1984>-0.015 1964>-0.014 1983>-0.013 1963<-0.011 Higher 1967 0.020 1912 0.019

[E] Outliers 1 3.0 SD above or -4.5 SD below mean for year

1925 +3.2 SD

====================================================================================================================================

C1101 1912 to 1991 80 years Series 9

[B] Entire series, effect on correlation ( 0.537) is:

Lower 1917>-0.050 1984>-0.039 1912<-0.031 1976>-0.029 1982<-0.015 1916>-0.010 Higher 1953 0.028 1973 0.018

[E] Outliers 3 3.0 SD above or -4.5 SD below mean for year

1917 +4.9 SD; 1976 +3.6 SD; 1984 +3.1 SD

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C1121 1892 to 1991 100 years Series 10

[B] Entire series, effect on correlation ( 0.672) is:

Lower 1920>-0.027 1905<-0.019 1971<-0.013 1952>-0.011 1986>-0.010 1933<-0.010 Higher 1912 0.013 1913 0.013

[E] Outliers 1 3.0 SD above or -4.5 SD below mean for year

1920 +3.1 SD

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C172 1880 to 1991 112 years Series 11

[B] Entire series, effect on correlation ( 0.729) is:

Lower 1988>-0.017 1983>-0.016 1948>-0.014 1985<-0.013 1881>-0.010 1958<-0.008 Higher 1913 0.021 1889 0.011

[E] Outliers 1 3.0 SD above or -4.5 SD below mean for year

1983 +3.0 SD

====================================================================================================================================

C152 1911 to 1991 81 years Series 12

[B] Entire series, effect on correlation ( 0.672) is:

Lower 1978<-0.028 1962>-0.016 1960<-0.015 1990<-0.012 1979>-0.011 1935<-0.010 Higher 1933 0.021 1953 0.020

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C1122 1868 to 1991 124 years Series 13

[B] Entire series, effect on correlation ( 0.678) is:

Lower 1886<-0.019 1882>-0.013 1889<-0.013 1979>-0.012 1933<-0.011 1877<-0.010 Higher 1913 0.010 1967 0.008

[E] Outliers 2 3.0 SD above or -4.5 SD below mean for year

1905 +3.4 SD; 1979 +3.1 SD

====================================================================================================================================

C1112 1832 to 1991 160 years Series 14

[\*] Early part of series cannot be checked from 1832 to 1844 -- not matched by another series

[B] Entire series, effect on correlation ( 0.668) is:

Lower 1976>-0.016 1896<-0.015 1900>-0.008 1866>-0.007 1945<-0.007 1897>-0.007 Higher 1861 0.030 1862 0.014

[D] 2 Absent rings: Year Master N series Absent

1918 -0.975 39 2

1919 -1.195 39 2

[E] Outliers 1 3.0 SD above or -4.5 SD below mean for year

1976 +3.4 SD

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C142 1907 to 1991 85 years Series 15

[B] Entire series, effect on correlation ( 0.662) is:

Lower 1918>-0.026 1935>-0.019 1978<-0.017 1923>-0.014 1925<-0.014 1927<-0.013 Higher 1913 0.028 1973 0.017

[E] Outliers 1 3.0 SD above or -4.5 SD below mean for year

1924 +3.2 SD

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C121 1873 to 1991 119 years Series 16

[B] Entire series, effect on correlation ( 0.666) is:

Lower 1898>-0.020 1877<-0.017 1896<-0.014 1928<-0.011 1985<-0.010 1956>-0.010 Higher 1913 0.021 1933 0.018

[E] Outliers 2 3.0 SD above or -4.5 SD below mean for year

1898 +3.7 SD; 1899 +3.0 SD

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C1111 1845 to 1991 147 years Series 17

[B] Entire series, effect on correlation ( 0.636) is:

Lower 1896<-0.040 1874<-0.013 1973>-0.011 1878>-0.011 1972<-0.008 1988>-0.006 Higher 1861 0.026 1913 0.014

[D] 6 Absent rings: Year Master N series Absent

1917 -1.057 39 1

1918 -0.975 39 2

1919 -1.195 39 2

1920 -0.914 41 1

1921 -0.538 42 1

1922 -0.809 42 1

====================================================================================================================================

C122 1865 to 1991 127 years Series 18

[B] Entire series, effect on correlation ( 0.618) is:

Lower 1866<-0.023 1872>-0.019 1871>-0.016 1865<-0.012 1956>-0.010 1885>-0.007 Higher 1933 0.018 1973 0.012

[E] Outliers 2 3.0 SD above or -4.5 SD below mean for year

1872 +3.2 SD; 1912 +3.5 SD

====================================================================================================================================

C171 1876 to 1991 116 years Series 19

[B] Entire series, effect on correlation ( 0.761) is:

Lower 1899>-0.018 1964>-0.010 1970<-0.009 1915<-0.008 1879>-0.007 1972>-0.007 Higher 1913 0.017 1889 0.010

====================================================================================================================================

C162 1896 to 1991 96 years Series 20

[B] Entire series, effect on correlation ( 0.658) is:

Lower 1896<-0.033 1975>-0.027 1898<-0.019 1923>-0.013 1931<-0.012 1974>-0.011 Higher 1973 0.015 1967 0.013

[E] Outliers 2 3.0 SD above or -4.5 SD below mean for year

1975 +3.8 SD; 1978 +3.3 SD

====================================================================================================================================

C151 1890 to 1991 102 years Series 21

[B] Entire series, effect on correlation ( 0.697) is:

Lower 1898<-0.022 1981>-0.016 1978<-0.014 1972>-0.014 1980<-0.012 1897>-0.010 Higher 1933 0.017 1912 0.012

[E] Outliers 1 3.0 SD above or -4.5 SD below mean for year

1897 +3.3 SD

====================================================================================================================================

C261 1921 to 1992 72 years Series 22

[B] Entire series, effect on correlation ( 0.644) is:

Lower 1990<-0.029 1992>-0.016 1979>-0.014 1986<-0.012 1973>-0.011 1991>-0.011 Higher 1982 0.012 1953 0.012

====================================================================================================================================

C251 1934 to 1992 59 years Series 23

[B] Entire series, effect on correlation ( 0.588) is:

Lower 1934>-0.062 1988>-0.039 1992<-0.018 1971<-0.018 1969<-0.014 1985<-0.012 Higher 1953 0.041 1962 0.020

====================================================================================================================================

C242 1897 to 1992 96 years Series 24

[B] Entire series, effect on correlation ( 0.773) is:

Lower 1963<-0.021 1953<-0.012 1979>-0.011 1909>-0.010 1958>-0.008 1897>-0.005 Higher 1913 0.013 1973 0.011

====================================================================================================================================

C232 1946 to 1992 47 years Series 25

[B] Entire series, effect on correlation ( 0.566) is:

Lower 1980<-0.035 1992<-0.032 1953<-0.022 1976>-0.020 1975>-0.020 1964>-0.016 Higher 1973 0.053 1963 0.025

====================================================================================================================================

C262 1939 to 1992 54 years Series 26

[B] Entire series, effect on correlation ( 0.745) is:

Lower 1939>-0.025 1987<-0.018 1992>-0.014 1962>-0.013 1977<-0.011 1959>-0.010 Higher 1973 0.020 1985 0.017

====================================================================================================================================

C271 1928 to 1992 65 years Series 27

[B] Entire series, effect on correlation ( 0.683) is:

Lower 1992>-0.029 1978<-0.020 1958<-0.013 1990<-0.013 1977<-0.012 1957<-0.011 Higher 1953 0.027 1989 0.014

[E] Outliers 1 3.0 SD above or -4.5 SD below mean for year

1992 +3.1 SD

====================================================================================================================================

C231 1901 to 1992 92 years Series 28

[A] Segment High -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5 +6 +7 +8 +9 +10

--------- ---- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---

1901 1950 3 -.37 -.14 -.07 -.29 -.01 -.20 .03 .02 .02 .07 .44| .20 .09 .52\*-.09 .07 .35 -.10 .11 -.08 -.11

[B] Entire series, effect on correlation ( 0.468) is:

Lower 1913<-0.041 1933<-0.029 1902>-0.017 1991>-0.011 1962>-0.011 1989>-0.011 Higher 1985 0.020 1973 0.020

1901 to 1950 segment:

Lower 1913<-0.075 1933<-0.053 1902>-0.035 1906>-0.010 1932<-0.008 1912<-0.008 Higher 1910 0.038 1927 0.027

[E] Outliers 1 3.0 SD above or -4.5 SD below mean for year

1907 +3.2 SD

====================================================================================================================================

C212 1948 to 1992 45 years Series 29

[B] Entire series, effect on correlation ( 0.495) is:

Lower 1953<-0.068 1973>-0.036 1949<-0.034 1952>-0.014 1978<-0.010 1967>-0.008 Higher 1987 0.032 1981 0.028

====================================================================================================================================

C211 1934 to 1992 59 years Series 30

[B] Entire series, effect on correlation ( 0.568) is:

Lower 1934>-0.077 1978<-0.027 1981>-0.021 1949<-0.015 1985<-0.013 1992>-0.012 Higher 1987 0.018 1963 0.016

[E] Outliers 1 3.0 SD above or -4.5 SD below mean for year

1934 +3.3 SD

====================================================================================================================================

C252 1933 to 1992 60 years Series 31

[B] Entire series, effect on correlation ( 0.609) is:

Lower 1992<-0.045 1982<-0.023 1960<-0.022 1969<-0.022 1977>-0.021 1963<-0.015 Higher 1933 0.044 1989 0.020

====================================================================================================================================

C272 1914 to 1992 79 years Series 32

[B] Entire series, effect on correlation ( 0.634) is:

Lower 1915>-0.017 1975>-0.012 1980<-0.010 1991<-0.009 1914>-0.009 1952>-0.008 Higher 1927 0.016 1962 0.014

[E] Outliers 1 3.0 SD above or -4.5 SD below mean for year

1916 +3.6 SD

====================================================================================================================================

C241 1902 to 1992 91 years Series 33

[B] Entire series, effect on correlation ( 0.684) is:

Lower 1933<-0.024 1911>-0.022 1912<-0.020 1902<-0.016 1971<-0.012 1930<-0.007 Higher 1953 0.017 1973 0.011

[E] Outliers 1 3.0 SD above or -4.5 SD below mean for year

1911 +3.1 SD

====================================================================================================================================

C282 1930 to 1992 63 years Series 34

[B] Entire series, effect on correlation ( 0.664) is:

Lower 1984>-0.038 1933<-0.028 1982<-0.021 1951<-0.016 1959>-0.014 1954<-0.012 Higher 1930 0.020 1985 0.018

====================================================================================================================================

C392 1920 to 1992 73 years Series 35

[B] Entire series, effect on correlation ( 0.639) is:

Lower 1939>-0.016 1963<-0.014 1947<-0.013 1956>-0.011 1990<-0.011 1961<-0.010 Higher 1933 0.029 1953 0.022

====================================================================================================================================

C382 1903 to 1992 90 years Series 36

[B] Entire series, effect on correlation ( 0.706) is:

Lower 1920>-0.023 1925<-0.016 1958<-0.015 1981>-0.015 1955<-0.012 1963<-0.011 Higher 1913 0.029 1914 0.016

====================================================================================================================================

C372 1911 to 1992 82 years Series 37

[B] Entire series, effect on correlation ( 0.728) is:

Lower 1957<-0.021 1983>-0.014 1955>-0.014 1965>-0.010 1924<-0.010 1958<-0.010 Higher 1953 0.016 1914 0.011

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C362 1897 to 1992 96 years Series 38

[B] Entire series, effect on correlation ( 0.709) is:

Lower 1944>-0.014 1985<-0.012 1987<-0.012 1909<-0.011 1902<-0.010 1981>-0.008 Higher 1933 0.020 1914 0.013

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C371 1891 to 1992 102 years Series 39

[B] Entire series, effect on correlation ( 0.656) is:

Lower 1901>-0.033 1965>-0.021 1963<-0.020 1982<-0.013 1957<-0.012 1903<-0.010 Higher 1913 0.033 1973 0.014

[E] Outliers 1 3.0 SD above or -4.5 SD below mean for year

1901 +4.1 SD

====================================================================================================================================

C352 1900 to 1992 93 years Series 40

[B] Entire series, effect on correlation ( 0.623) is:

Lower 1902>-0.024 1959>-0.014 1992<-0.012 1947<-0.011 1982<-0.010 1981>-0.009 Higher 1913 0.039 1914 0.022

[E] Outliers 1 3.0 SD above or -4.5 SD below mean for year

1902 +3.7 SD

====================================================================================================================================

C361 1932 to 1992 61 years Series 41

[B] Entire series, effect on correlation ( 0.650) is:

Lower 1989>-0.040 1934>-0.019 1991<-0.019 1983>-0.017 1988>-0.012 1961>-0.011 Higher 1953 0.037 1933 0.019

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C332 1907 to 1992 86 years Series 42

[B] Entire series, effect on correlation ( 0.627) is:

Lower 1923>-0.018 1950<-0.018 1988>-0.015 1927<-0.014 1959>-0.014 1942>-0.012 Higher 1933 0.020 1953 0.018

[E] Outliers 1 3.0 SD above or -4.5 SD below mean for year

1988 +3.2 SD

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C312 1951 to 1992 42 years Series 43

[B] Entire series, effect on correlation ( 0.686) is:

Lower 1984>-0.039 1973>-0.033 1978<-0.029 1977<-0.019 1990<-0.016 1980<-0.015 Higher 1967 0.032 1985 0.025

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C322 1911 to 1992 82 years Series 44

[B] Entire series, effect on correlation ( 0.729) is:

Lower 1941>-0.017 1957<-0.014 1944>-0.014 1965>-0.012 1956<-0.009 1991<-0.008 Higher 1933 0.021 1913 0.016

====================================================================================================================================

C341 1913 to 1992 80 years Series 45

[B] Entire series, effect on correlation ( 0.674) is:

Lower 1990<-0.029 1933<-0.022 1989>-0.020 1950<-0.017 1937>-0.017 1914>-0.011 Higher 1913 0.032 1967 0.013

====================================================================================================================================

C321 1905 to 1992 88 years Series 46

[B] Entire series, effect on correlation ( 0.650) is:

Lower 1989>-0.021 1985<-0.020 1927<-0.018 1987<-0.018 1925<-0.010 1941>-0.010 Higher 1913 0.027 1933 0.024

[E] Outliers 1 3.0 SD above or -4.5 SD below mean for year

1990 +3.4 SD

====================================================================================================================================

C311 1931 to 1992 62 years Series 47

[B] Entire series, effect on correlation ( 0.705) is:

Lower 1953<-0.021 1973>-0.020 1950<-0.014 1970<-0.013 1978<-0.012 1971<-0.012 Higher 1933 0.020 1963 0.012

[E] Outliers 1 3.0 SD above or -4.5 SD below mean for year

1982 +4.4 SD

====================================================================================================================================

C391 1948 to 1992 45 years Series 48

[B] Entire series, effect on correlation ( 0.616) is:

Lower 1965>-0.043 1977>-0.038 1949<-0.035 1961<-0.026 1956>-0.020 1976>-0.018 Higher 1973 0.041 1967 0.033

[E] Outliers 1 3.0 SD above or -4.5 SD below mean for year

1977 +4.1 SD

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C451 1915 to 1993 79 years Series 49

[B] Entire series, effect on correlation ( 0.469) is:

Lower 1943>-0.031 1932<-0.015 1958<-0.013 1931<-0.013 1945>-0.012 1927<-0.012 Higher 1933 0.059 1973 0.040

[E] Outliers 5 3.0 SD above or -4.5 SD below mean for year

1915 +3.0 SD; 1943 +3.3 SD; 1945 +3.9 SD; 1946 +3.8 SD; 1968 +3.8 SD

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C492 1920 to 1993 74 years Series 50

[B] Entire series, effect on correlation ( 0.459) is:

Lower 1980<-0.025 1954<-0.023 1950<-0.022 1975>-0.018 1926>-0.014 1959>-0.014 Higher 1930 0.024 1952 0.016

[E] Outliers 2 3.0 SD above or -4.5 SD below mean for year

1969 +3.1 SD; 1990 +3.4 SD

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C472 1930 to 1993 64 years Series 51

[B] Entire series, effect on correlation ( 0.631) is:

Lower 1963<-0.031 1992>-0.023 1986<-0.019 1972>-0.015 1959>-0.013 1949<-0.012 Higher 1973 0.030 1953 0.026

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C482 1930 to 1993 64 years Series 52

[B] Entire series, effect on correlation ( 0.553) is:

Lower 1930<-0.047 1978<-0.023 1953<-0.019 1944>-0.013 1992<-0.011 1991<-0.010 Higher 1933 0.029 1982 0.024

[E] Outliers 2 3.0 SD above or -4.5 SD below mean for year

1982 +3.7 SD; 1990 +3.1 SD

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C481 1935 to 1993 59 years Series 53

[B] Entire series, effect on correlation ( 0.463) is:

Lower 1981>-0.065 1976>-0.030 1935>-0.027 1952>-0.019 1987<-0.015 1953<-0.012 Higher 1973 0.029 1962 0.028

[E] Outliers 3 3.0 SD above or -4.5 SD below mean for year

1936 +3.5 SD; 1976 +3.2 SD; 1981 +3.7 SD

====================================================================================================================================

C452 1909 to 1993 85 years Series 54

[B] Entire series, effect on correlation ( 0.575) is:

Lower 1913<-0.023 1928<-0.022 1945>-0.022 1960<-0.020 1931<-0.015 1932<-0.012 Higher 1933 0.035 1914 0.018

[E] Outliers 1 3.0 SD above or -4.5 SD below mean for year

1945 +4.6 SD

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C462 1910 to 1993 84 years Series 55

[B] Entire series, effect on correlation ( 0.504) is:

Lower 1912<-0.046 1970>-0.026 1967>-0.023 1985<-0.013 1980<-0.012 1950<-0.011 Higher 1913 0.058 1973 0.020

[E] Outliers 1 3.0 SD above or -4.5 SD below mean for year

1990 +3.7 SD

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C422 1883 to 1993 111 years Series 56

[B] Entire series, effect on correlation ( 0.680) is:

Lower 1896>-0.030 1990<-0.012 1957<-0.010 1958<-0.010 1949<-0.009 1905<-0.007 Higher 1913 0.027 1914 0.014

[E] Outliers 1 3.0 SD above or -4.5 SD below mean for year

1896 +5.5 SD

====================================================================================================================================

C421 1881 to 1993 113 years Series 57

[B] Entire series, effect on correlation ( 0.571) is:

Lower 1981>-0.023 1924>-0.018 1985<-0.017 1952>-0.015 1957<-0.015 1898<-0.011 Higher 1913 0.030 1889 0.013

[E] Outliers 3 3.0 SD above or -4.5 SD below mean for year

1903 +3.8 SD; 1924 +4.0 SD; 1981 +3.0 SD

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C442 1906 to 1993 88 years Series 58

[B] Entire series, effect on correlation ( 0.715) is:

Lower 1977>-0.018 1969<-0.016 1989>-0.015 1963<-0.015 1991<-0.012 1993<-0.008 Higher 1933 0.017 1914 0.016

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C441 1907 to 1993 87 years Series 59

[B] Entire series, effect on correlation ( 0.665) is:

Lower 1993<-0.022 1930<-0.022 1978<-0.019 1917>-0.016 1983>-0.014 1981>-0.014 Higher 1933 0.024 1914 0.020

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C412 1950 to 1993 44 years Series 60

[B] Entire series, effect on correlation ( 0.567) is:

Lower 1960<-0.036 1973>-0.025 1955<-0.024 1991>-0.012 1992<-0.011 1951<-0.011 Higher 1981 0.028 1962 0.027

[E] Outliers 1 3.0 SD above or -4.5 SD below mean for year

1971 +3.9 SD

====================================================================================================================================

C411 1939 to 1993 55 years Series 61

[B] Entire series, effect on correlation ( 0.487) is:

Lower 1981>-0.047 1992<-0.043 1940>-0.035 1939>-0.017 1985<-0.017 1970>-0.012 Higher 1987 0.030 1962 0.027

[E] Outliers 2 3.0 SD above or -4.5 SD below mean for year

1940 +3.6 SD; 1970 +3.0 SD

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C432 1909 to 1993 85 years Series 62

[B] Entire series, effect on correlation ( 0.778) is:

Lower 1986>-0.011 1991<-0.010 1981>-0.009 1932<-0.009 1971<-0.009 1990<-0.009 Higher 1913 0.015 1933 0.014

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C431 1897 to 1993 97 years Series 63

[B] Entire series, effect on correlation ( 0.787) is:

Lower 1905>-0.014 1960<-0.013 1988<-0.010 1958>-0.009 1961<-0.008 1969<-0.008 Higher 1913 0.017 1933 0.012

[E] Outliers 2 3.0 SD above or -4.5 SD below mean for year

1905 +3.2 SD; 1958 +3.1 SD

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PART 7: DESCRIPTIVE STATISTICS: Red Spruce, Lead Mountain, ME (KT Smith) 14:54 Mon 20 Apr 2020 Page 7

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Corr //-------- Unfiltered --------\\ //---- Filtered -----\\

No. No. No. with Mean Max Std Auto Mean Max Std Auto AR

Seq Series Interval Years Segmt Flags Master msmt msmt dev corr sens value dev corr ()

--- -------- --------- ----- ----- ----- ------ ----- ----- ----- ----- ----- ----- ----- ----- --

1 C181 1954 1991 38 1 0 0.625 2.90 5.75 1.445 0.904 0.199 0.43 0.223 -0.028 1

2 C132 1942 1991 50 1 0 0.716 2.30 3.83 0.799 0.768 0.198 0.36 0.200 -0.004 1

3 C192 1962 1991 30 1 0 0.558 2.64 4.04 0.680 0.798 0.119 0.25 0.150 0.054 1

4 C131 1942 1991 50 1 0 0.645 2.69 5.00 0.856 0.706 0.190 0.56 0.209 0.000 2

5 C161 1912 1991 80 3 0 0.578 2.26 5.72 1.557 0.902 0.245 0.85 0.386 -0.013 1

6 C111 1911 1991 81 3 0 0.643 1.81 4.87 1.302 0.904 0.232 0.49 0.280 0.055 1

7 C112 1904 1991 88 3 0 0.622 1.53 5.12 1.147 0.904 0.232 0.64 0.317 -0.006 1

8 C1102 1911 1991 81 3 0 0.570 1.32 4.27 1.035 0.898 0.263 0.95 0.339 0.016 4

9 C1101 1912 1991 80 3 0 0.537 1.67 5.55 1.191 0.889 0.228 0.87 0.325 -0.006 1

10 C1121 1892 1991 100 4 0 0.672 1.84 7.77 1.728 0.951 0.222 0.98 0.358 0.008 2

11 C172 1880 1991 112 4 0 0.729 0.99 3.27 0.693 0.912 0.225 1.03 0.355 -0.004 2

12 C152 1911 1991 81 3 0 0.672 1.45 4.01 0.968 0.904 0.237 0.78 0.317 0.035 1

13 C1122 1868 1991 124 5 0 0.678 1.46 5.60 1.378 0.953 0.194 0.65 0.259 -0.037 1

14 C1112 1832 1991 160 6 0 0.668 0.99 3.98 0.792 0.925 0.240 1.27 0.376 -0.038 1

15 C142 1907 1991 85 3 0 0.662 1.48 4.59 1.343 0.953 0.250 0.71 0.301 -0.042 1

16 C121 1873 1991 119 5 0 0.666 1.17 4.91 1.148 0.918 0.260 1.36 0.410 0.010 1

17 C1111 1845 1991 147 6 0 0.636 0.86 2.89 0.676 0.883 0.274 1.36 0.474 -0.005 2

18 C122 1865 1991 127 5 0 0.618 1.41 6.13 1.449 0.943 0.264 1.78 0.469 0.008 2

19 C171 1876 1991 116 4 0 0.761 1.16 3.51 0.830 0.910 0.249 1.07 0.376 -0.006 2

20 C162 1896 1991 96 4 0 0.658 1.59 5.22 1.366 0.943 0.228 1.10 0.346 -0.064 1

21 C151 1890 1991 102 4 0 0.697 1.43 4.18 1.155 0.954 0.218 0.85 0.336 -0.018 1

22 C261 1921 1992 72 3 0 0.644 1.92 5.03 1.271 0.935 0.174 0.48 0.210 0.006 1

23 C251 1934 1992 59 2 0 0.588 1.86 5.61 1.414 0.938 0.172 0.68 0.276 -0.117 1

24 C242 1897 1992 96 4 0 0.773 1.88 7.14 1.801 0.958 0.275 0.88 0.362 -0.021 1

25 C232 1946 1992 47 1 0 0.566 3.12 4.60 0.626 0.585 0.142 0.35 0.165 0.013 1

26 C262 1939 1992 54 2 0 0.745 2.67 6.46 1.572 0.939 0.195 0.44 0.221 -0.031 1

27 C271 1928 1992 65 2 0 0.683 2.23 5.86 1.347 0.905 0.193 0.78 0.296 0.031 1

28 C231 1901 1992 92 3 1 0.468 1.14 3.52 0.913 0.925 0.219 0.73 0.317 -0.051 1

29 C212 1948 1992 45 1 0 0.495 2.63 4.29 0.848 0.669 0.211 0.64 0.254 -0.014 1

30 C211 1934 1992 59 2 0 0.568 1.67 4.33 1.137 0.823 0.245 0.76 0.332 0.015 1

31 C252 1933 1992 60 2 0 0.609 2.37 5.19 1.333 0.916 0.184 0.96 0.393 -0.066 1

32 C272 1914 1992 79 3 0 0.634 2.45 7.47 2.017 0.950 0.193 0.69 0.298 -0.074 1

33 C241 1902 1992 91 3 0 0.684 1.52 4.66 1.240 0.940 0.234 0.86 0.353 -0.065 1

34 C282 1930 1992 63 2 0 0.664 2.05 5.66 1.534 0.899 0.270 1.05 0.492 0.012 1

35 C392 1920 1992 73 3 0 0.639 1.54 4.02 0.873 0.836 0.250 0.81 0.327 -0.031 1

36 C382 1903 1992 90 3 0 0.706 1.67 6.53 1.339 0.919 0.211 0.83 0.284 0.004 1

37 C372 1911 1992 82 3 0 0.728 1.45 4.94 0.924 0.775 0.258 0.79 0.330 -0.018 1

38 C362 1897 1992 96 4 0 0.709 2.05 5.48 1.590 0.944 0.217 0.78 0.267 -0.021 1

39 C371 1891 1992 102 4 0 0.656 1.34 5.07 1.134 0.877 0.296 1.32 0.380 -0.011 2

40 C352 1900 1992 93 3 0 0.623 1.94 6.71 1.769 0.951 0.269 1.29 0.403 0.023 1

41 C361 1932 1992 61 2 0 0.650 2.10 5.10 1.327 0.929 0.158 1.18 0.378 0.057 3

42 C332 1907 1992 86 3 0 0.627 1.42 5.21 1.334 0.930 0.266 0.91 0.377 -0.068 1

43 C312 1951 1992 42 1 0 0.686 2.34 4.02 0.889 0.740 0.208 0.47 0.240 -0.051 1

44 C322 1911 1992 82 3 0 0.729 1.40 4.66 0.982 0.859 0.280 1.20 0.392 -0.008 2

45 C341 1913 1992 80 3 0 0.674 1.54 5.63 1.380 0.946 0.244 0.81 0.320 0.001 2

46 C321 1905 1992 88 3 0 0.650 1.88 5.06 1.332 0.898 0.263 0.85 0.338 -0.008 1

47 C311 1931 1992 62 2 0 0.705 2.11 4.08 0.996 0.831 0.211 1.27 0.344 -0.020 1

48 C391 1948 1992 45 1 0 0.616 2.85 5.11 1.107 0.751 0.246 0.64 0.300 0.003 2

PART 7: DESCRIPTIVE STATISTICS: Red Spruce, Lead Mountain, ME (KT Smith) 14:54 Mon 20 Apr 2020 Page 8

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Corr //-------- Unfiltered --------\\ //---- Filtered -----\\

No. No. No. with Mean Max Std Auto Mean Max Std Auto AR

Seq Series Interval Years Segmt Flags Master msmt msmt dev corr sens value dev corr ()

--- -------- --------- ----- ----- ----- ------ ----- ----- ----- ----- ----- ----- ----- ----- --

49 C451 1915 1993 79 3 0 0.469 1.85 4.62 1.295 0.878 0.261 1.68 0.499 -0.022 1

50 C492 1920 1993 74 3 0 0.459 1.97 5.33 1.505 0.910 0.304 1.19 0.420 -0.021 1

51 C472 1930 1993 64 2 0 0.631 1.35 3.78 0.951 0.947 0.195 1.28 0.343 -0.083 1

52 C482 1930 1993 64 2 0 0.553 2.06 3.90 0.740 0.841 0.156 0.71 0.229 -0.025 1

53 C481 1935 1993 59 2 0 0.463 2.63 5.07 1.063 0.743 0.222 0.57 0.299 0.064 1

54 C452 1909 1993 85 3 0 0.575 1.80 4.62 1.254 0.927 0.221 0.90 0.273 0.011 1

55 C462 1910 1993 84 3 0 0.504 1.48 5.96 1.486 0.926 0.280 1.20 0.361 -0.011 4

56 C422 1883 1993 111 4 0 0.680 1.35 4.43 1.035 0.856 0.307 2.30 0.501 0.033 1

57 C421 1881 1993 113 4 0 0.571 1.33 4.35 1.157 0.877 0.317 1.45 0.439 0.021 1

58 C442 1906 1993 88 3 0 0.715 1.87 5.03 1.244 0.863 0.267 0.83 0.391 -0.003 1

59 C441 1907 1993 87 3 0 0.665 1.54 3.70 0.856 0.864 0.242 1.33 0.355 0.013 1

60 C412 1950 1993 44 1 0 0.567 2.82 5.46 0.884 0.708 0.181 0.61 0.219 0.009 1

61 C411 1939 1993 55 2 0 0.487 1.90 4.16 0.883 0.813 0.233 0.69 0.321 0.065 1

62 C432 1909 1993 85 3 0 0.778 1.15 3.35 0.769 0.854 0.264 0.97 0.378 -0.021 2

63 C431 1897 1993 97 4 0 0.787 1.68 6.20 1.179 0.802 0.293 1.22 0.480 -0.042 1

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Total or mean: 5100 182 1 0.643 1.69 7.77 1.180 0.889 0.239 2.30 0.348 -0.011

- = [ COFECHA RS\_C COF ] = -