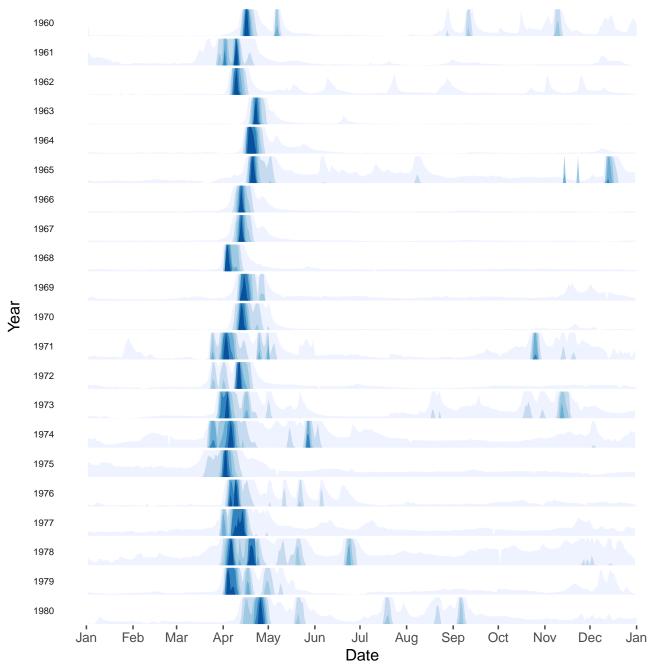
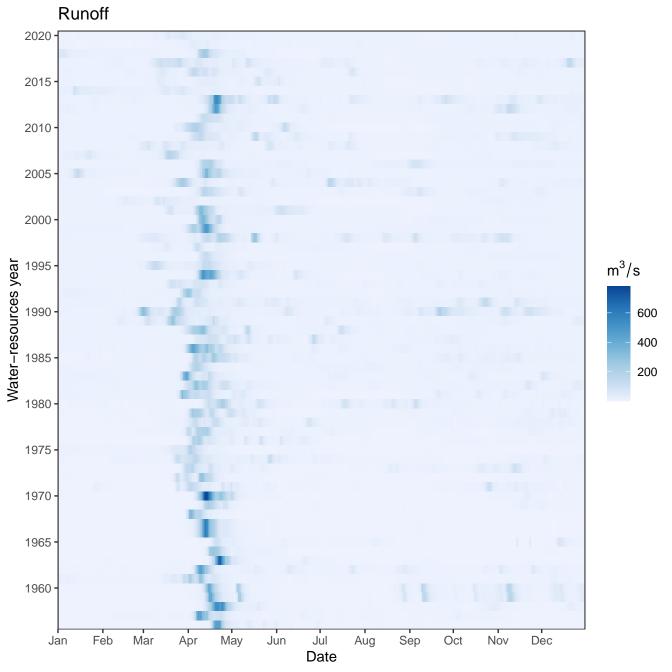
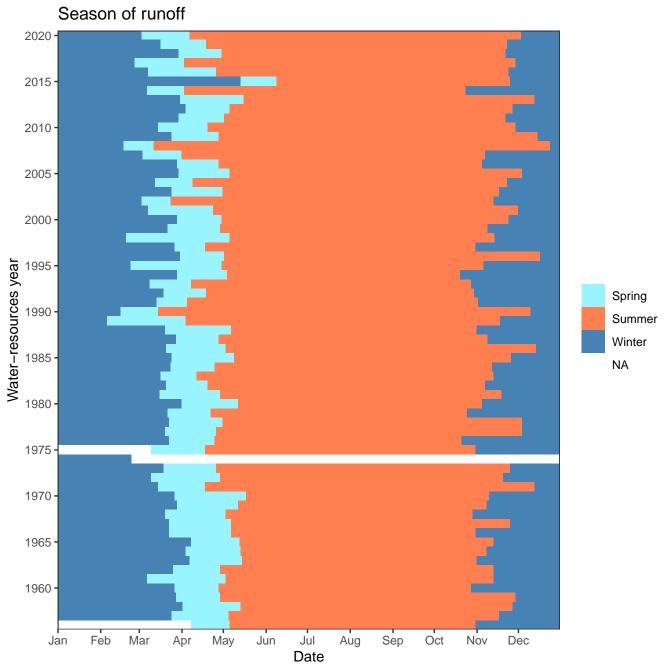
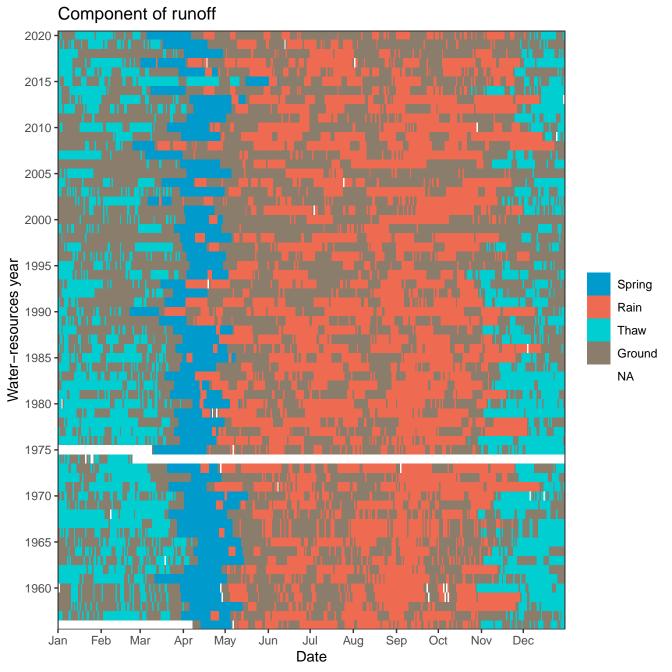
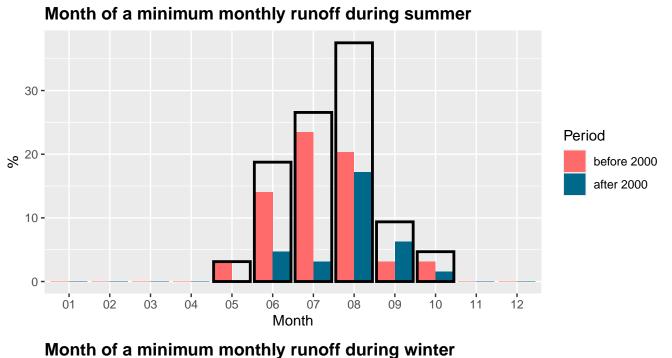
Autocorrelation function (ACF) 1.00 -5 0.75 -0.65 **B** 0.50 -0.25 -0.00 -10 0 20 30 Days

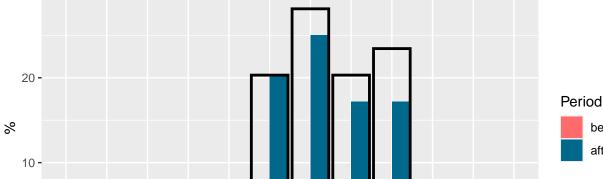








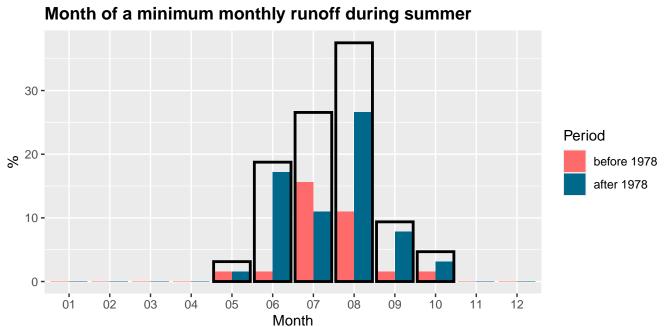




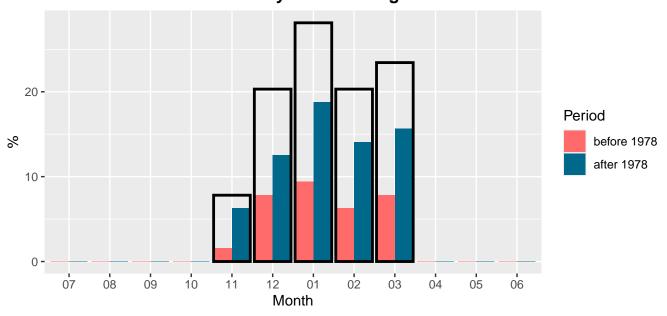
Month

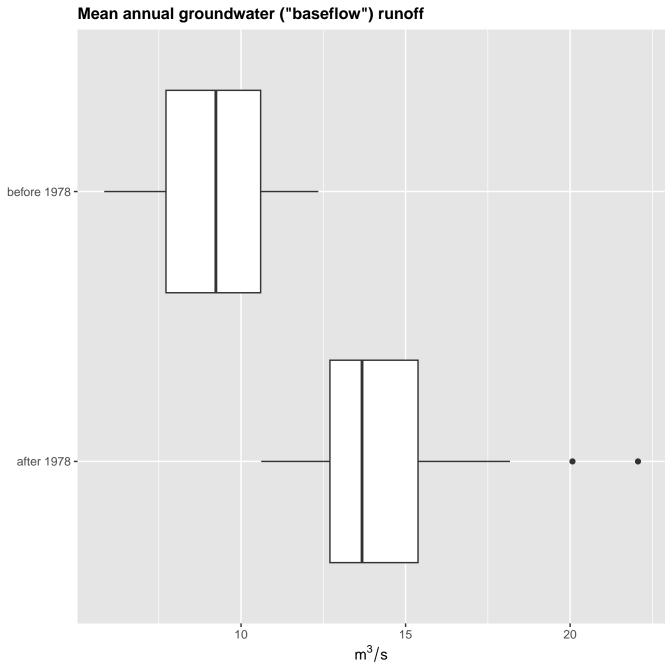
0 -

before 1965 after 1965



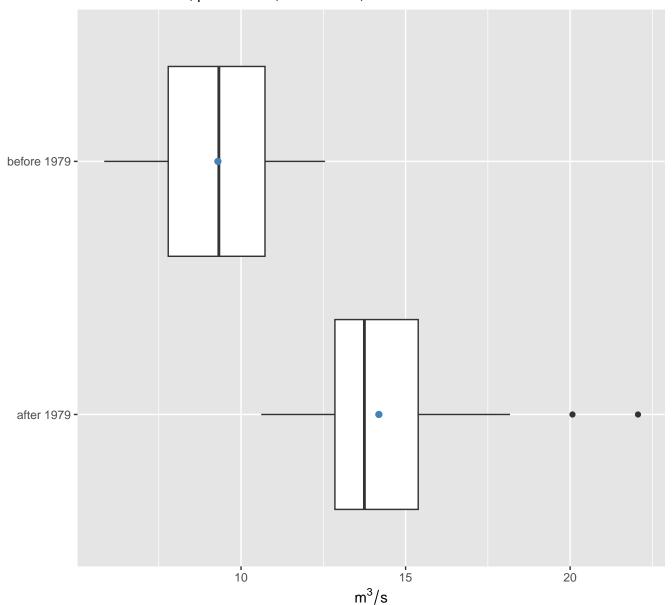






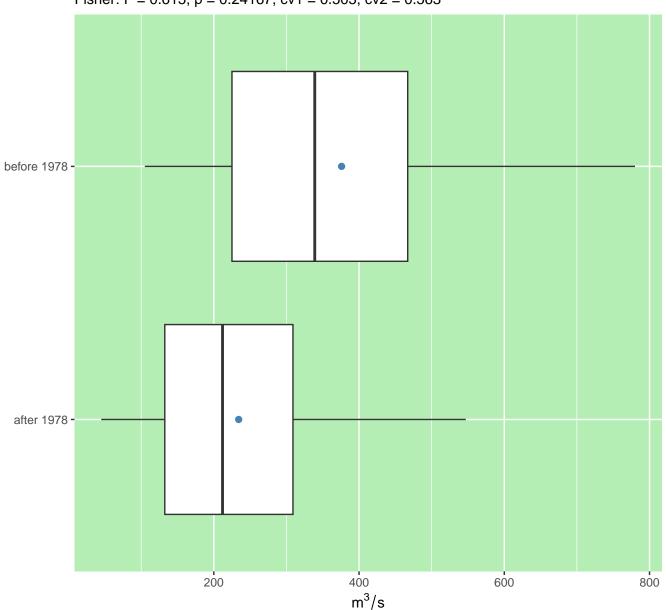
Mean annual groundwater ("baseflow") runoff

Student: t = -8.804, p = 0, m1 = 9.297, m2 = 14.189Fisher: F = 0.576, p = 0.17604, cv1 = 0.203, cv2 = 0.175



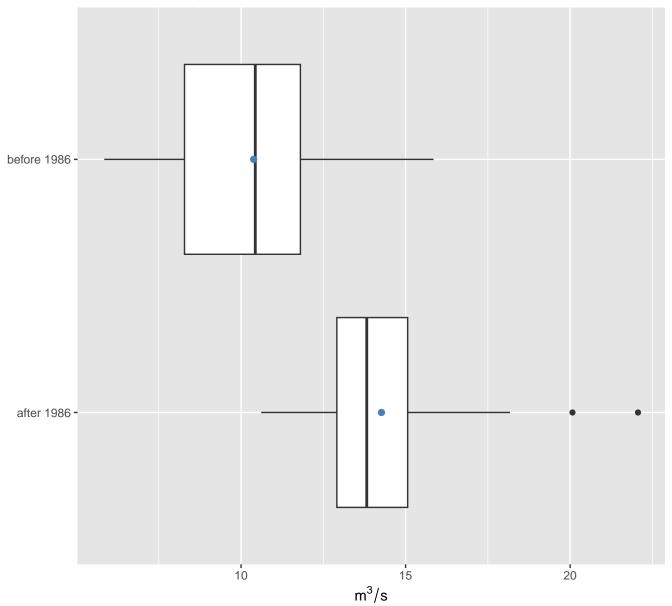
Maximum spring flood runoff

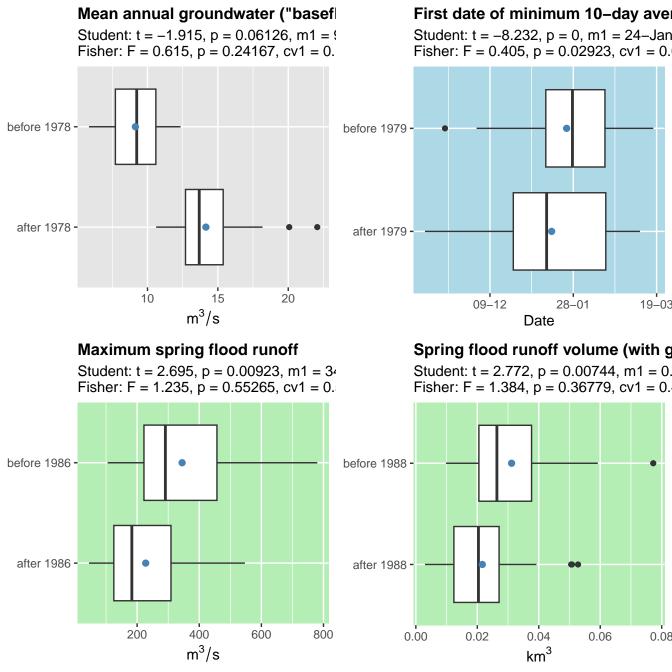
Student: t = -1.915, p = 0.06126, m1 = 375.952, m2 = 234.267 Fisher: F = 0.615, p = 0.24167, cv1 = 0.505, cv2 = 0.563

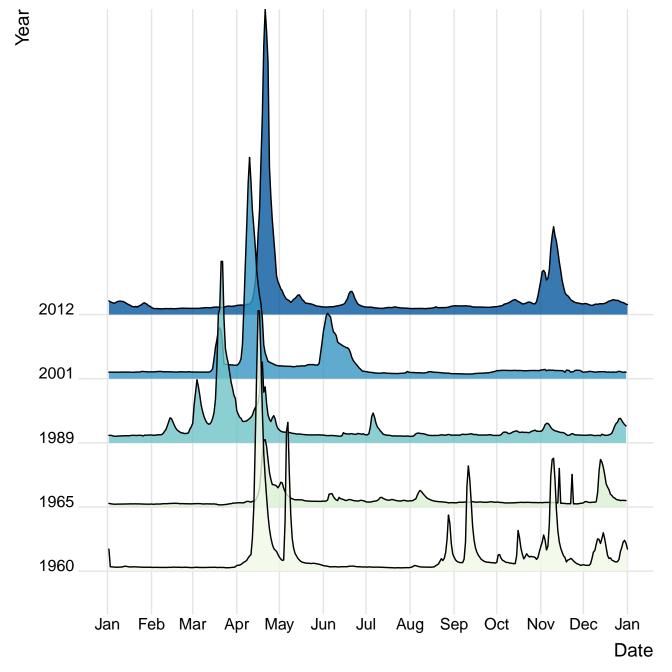


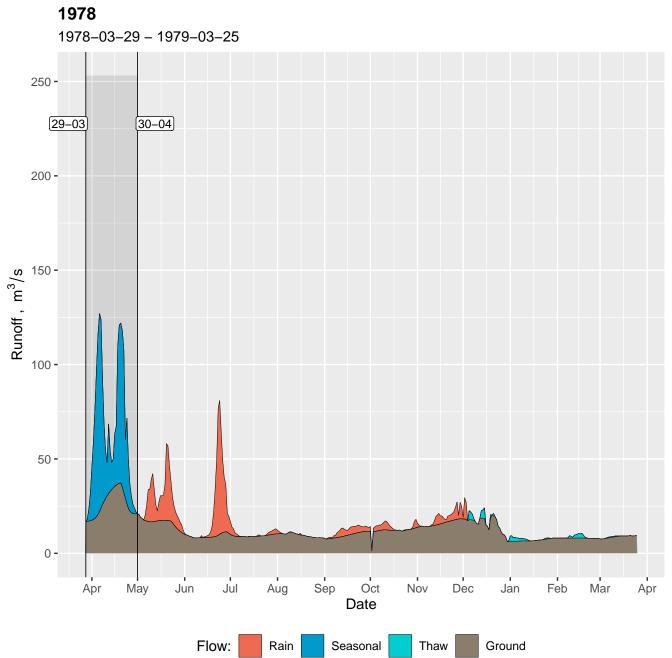
Mean annual groundwater ("baseflow") runoff

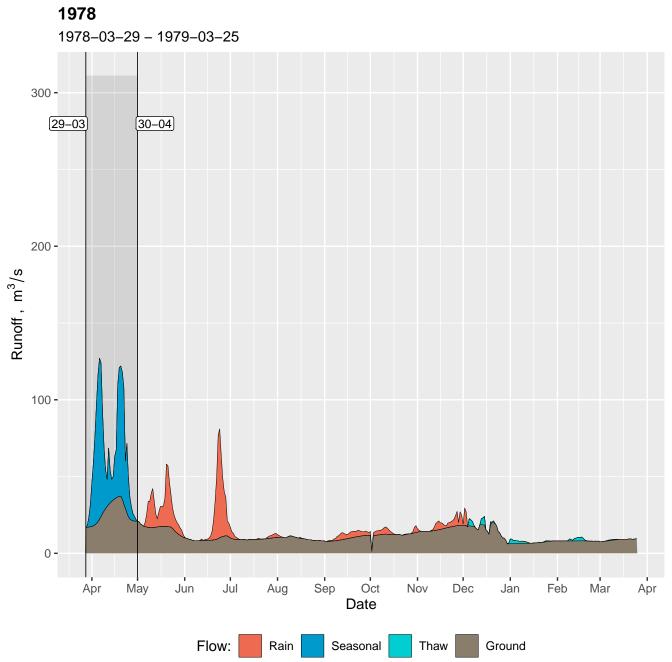
Student: t = 2.695, p = 0.00923, m1 = 10.383, m2 = 14.267 Fisher: F = 1.235, p = 0.55265, cv1 = 0.259, cv2 = 0.183

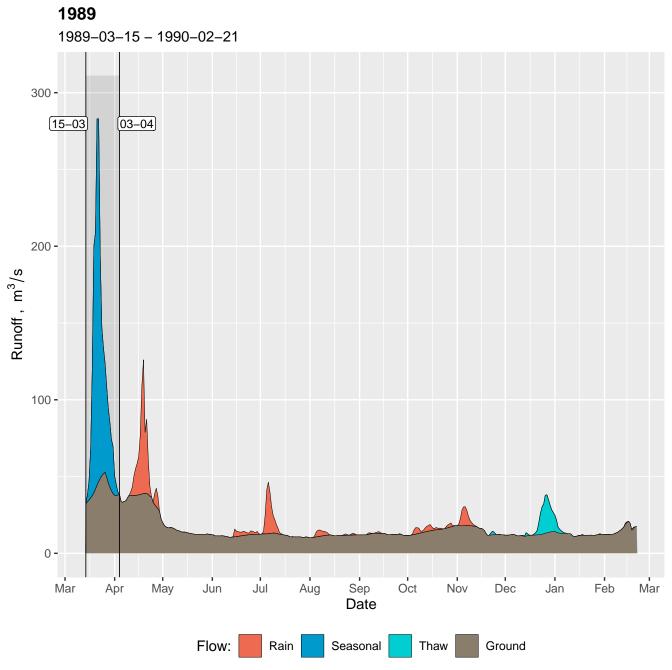


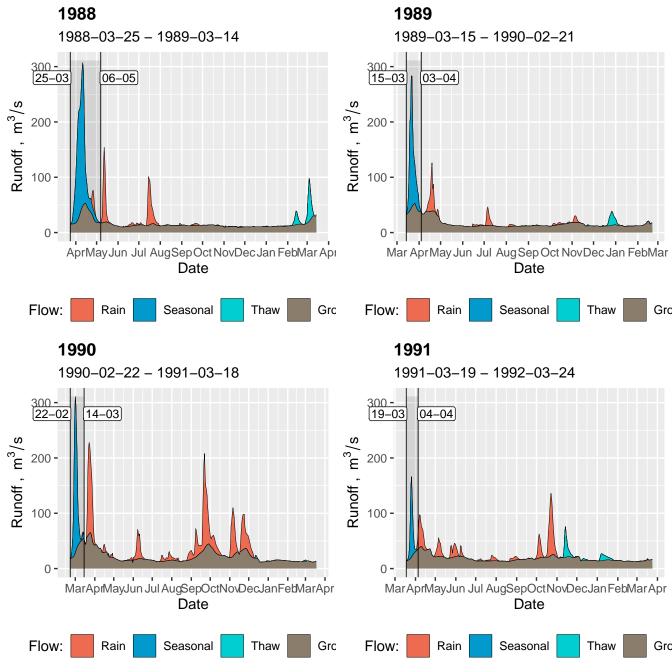












1991 1991-03-19 - 1992-03-24 19–03 04-04 **-** 20 200 -**-** 10 Temperature, °C Runoff, m³/s 100 -**-** –10 - –20 0 -Apr Mar May Jul Oct Dec Mar Aug Sep Feb Nov Jun Jan Apr Date

Seasonal

Ground

Thaw

Flow:

1991 1991-03-19 - 1992-03-24 **-** 50 19–03 04-04 **-** 40 200 -Cum. precipitation, mm (5 days) $\rm Runoff\,,\ m^3/s$ 100 -- 10 0 -Apr Oct Mar May Jul Feb Jun Sep Dec Nov Jan Aug Mar Apr Date

Seasonal

Ground

Thaw

Flow:

1991 1991-03-19 - 1992-03-24 19-03 04-04 **-** 60 200 -Cum. precipitation, mm (10 days) Runoff, m³/s 100 -0 -Apr Mar Jul Oct Feb May Jun Sep Dec Nov Jan Aug Mar Apr Date

Seasonal

Ground

Thaw

Flow:

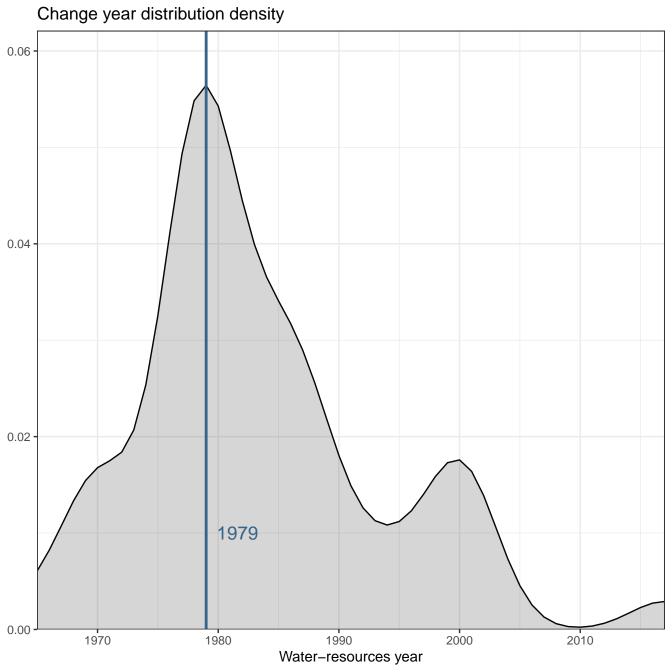
1991 1991-03-19 - 1992-03-24 **-** 50 19-03 04-04 **-** 40 200 **-**Cum. precipitation, mm (5 days) Runoff, m^3/s 100 -**-** 10 0 -Apr Mar May Jul Feb Sep Oct Dec Jan Jun Aug Nov Mar Apr Date

Seasonal

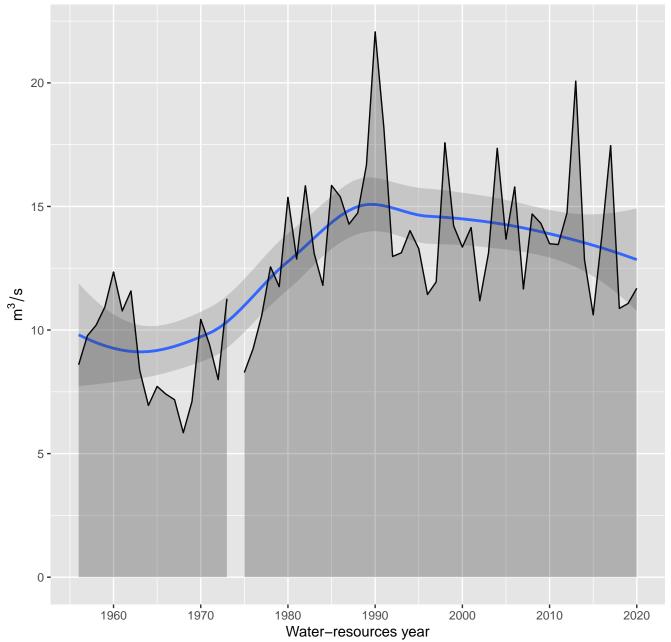
Ground

Thaw

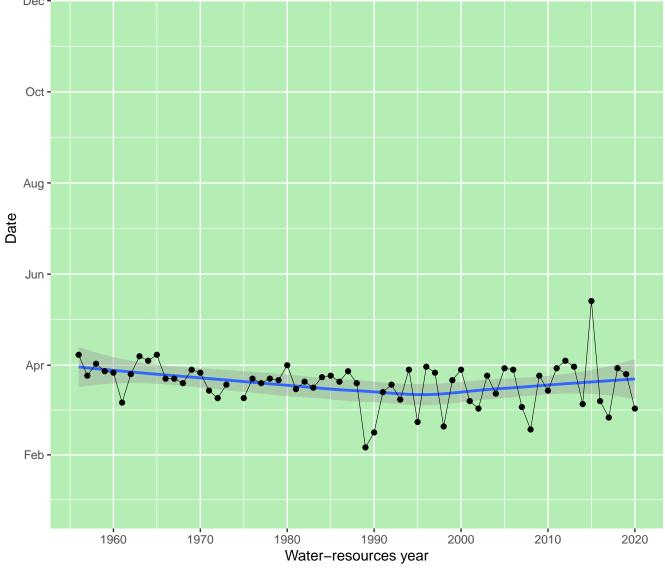
Flow:



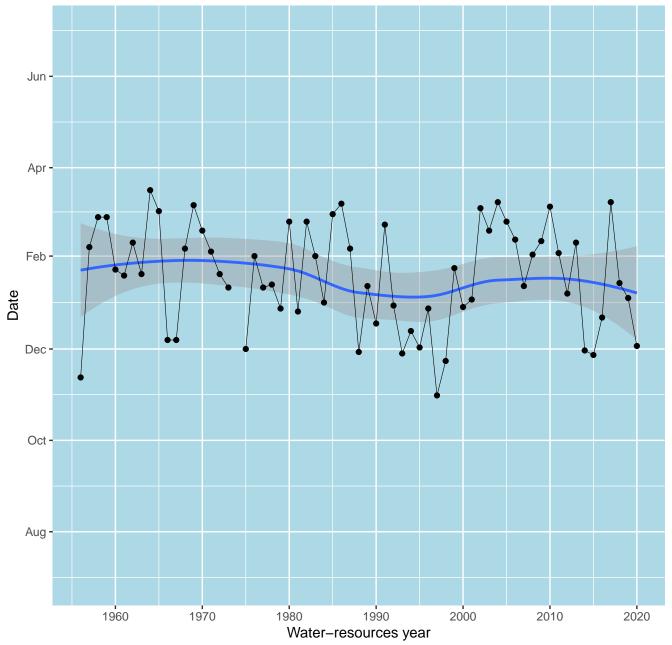
Mean annual groundwater ("baseflow") runoff



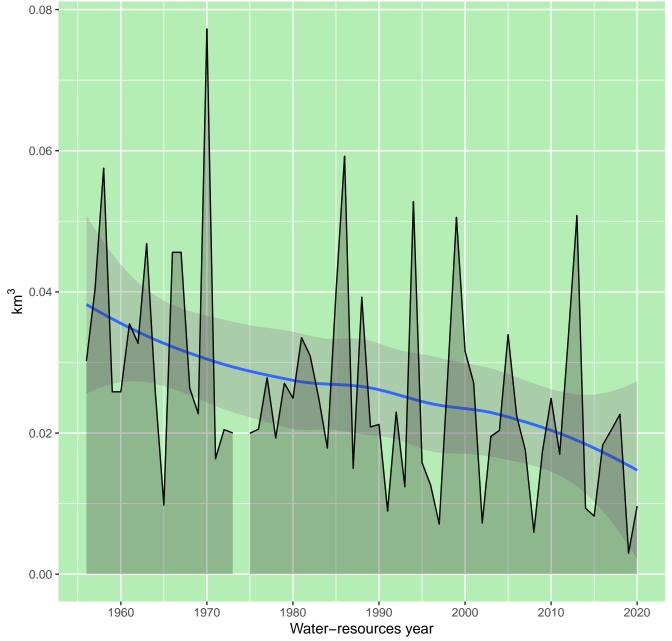
First date of a spring flood Dec-Oct -Aug -Jun -

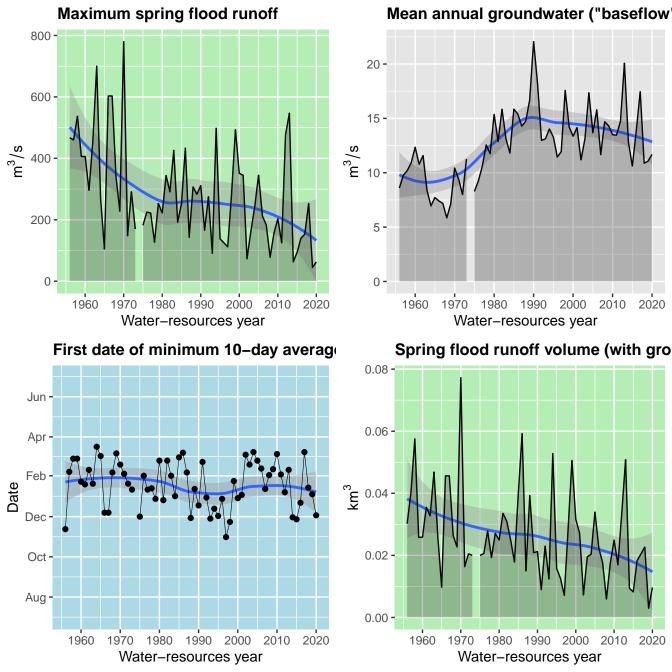


First date of minimum 10-day averaged winter runoff

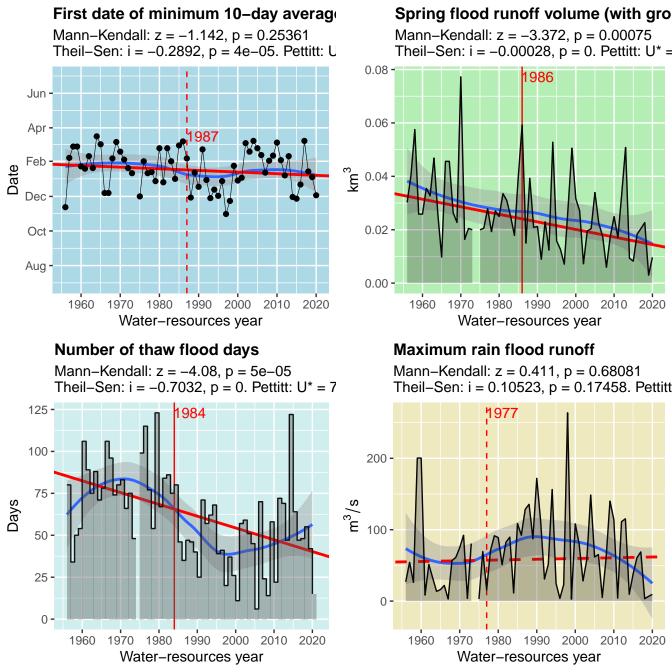


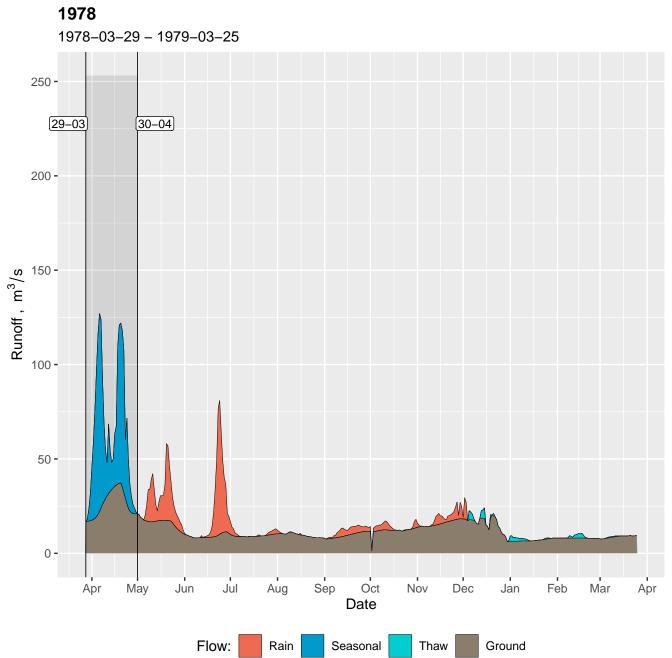
Spring flood runoff volume (with groundwater and rain)





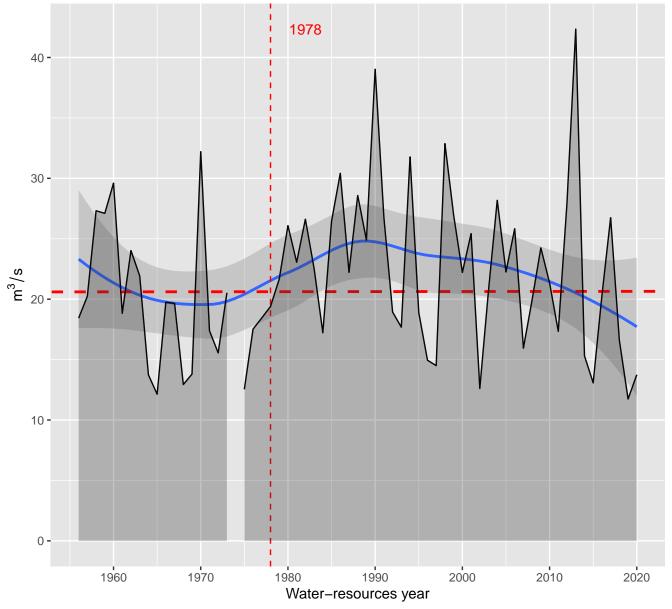
Maximum spring flood runoff Mean annual groundwater ("baseflow Mann-Kendall: z = -3.946, p = 8e-05Mann-Kendall: z = 4.374, p = 1e-05Theil-Sen: i = -4, p = 0. Pettitt: $U^* = 481$, p Theil-Sen: i = 0.08852, p = 0. Pettitt: $U^* = 80$ 800 -1979 20 -600 15 s/_EM 400 200 5 -0 -1980 1990 2010 1960 1970 1990 2000 2010 2020 1970 2000 1980 Water-resources year Water-resources year First date of minimum 10-day average Spring flood runoff volume (with gro Mann-Kendall: z = -1.142, p = 0.25361Mann-Kendall: z = -3.372, p = 0.00075Theil-Sen: i = -0.2892, p = 4e-05. Pettitt: U Theil-Sen: i = -0.00028, p = 0. Pettitt: U* = 0.08 -1986 Jun 0.06 -Apr 987 9.04 ع Dec 0.02 -Oct -Aug · 0.00 -1960 1990 2000 2010 1960 1970 1980 1990 2000 2010 1970 1980 Water-resources year Water-resources year





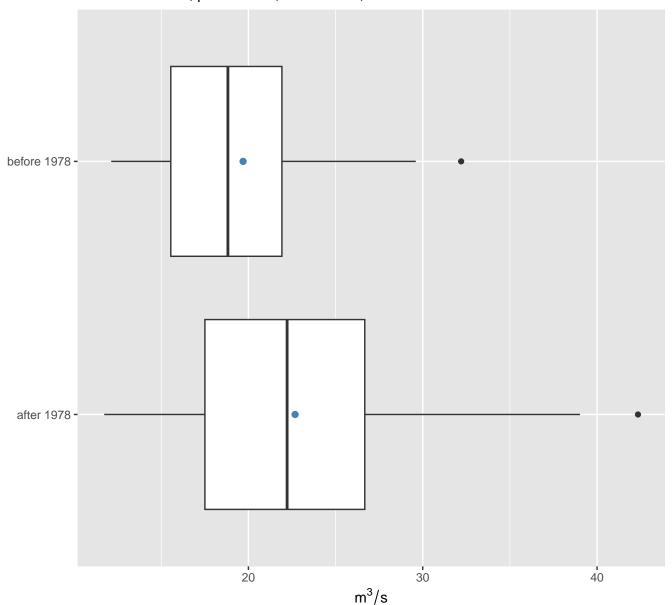
Mean annual runoff

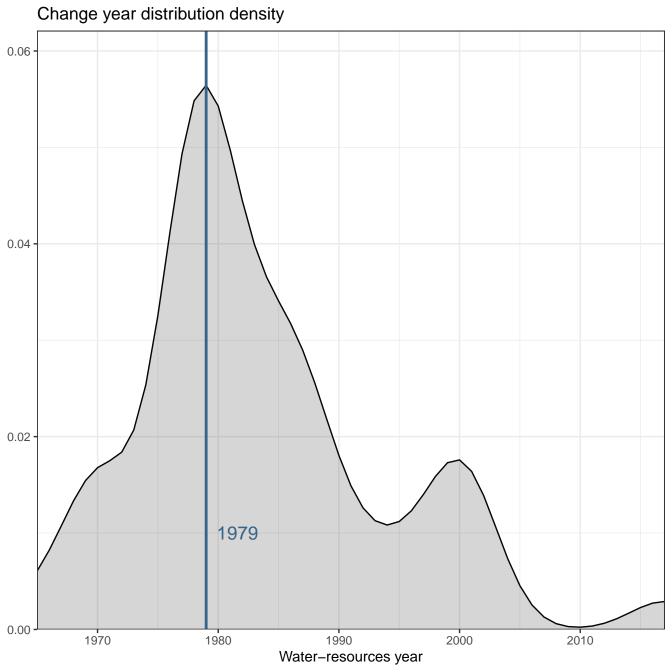
Mann–Kendall: $z=0.017,\,p=0.98613$ Theil–Sen: $i=0.00067,\,p=0.71399.$ Pettitt: $U^*=252,\,p=0.47808$

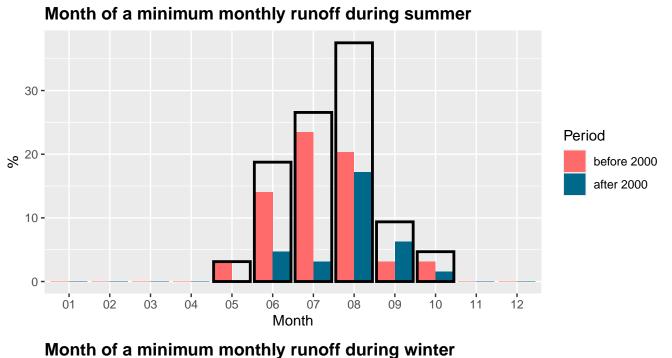


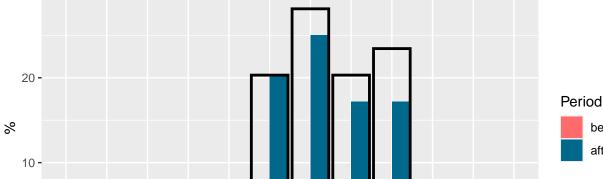
Mean annual runoff

Student: t = -1.915, p = 0.06126, m1 = 19.696, m2 = 22.679 Fisher: F = 0.615, p = 0.24175, cv1 = 0.289, cv2 = 0.297









Month

0 -

before 1965 after 1965

