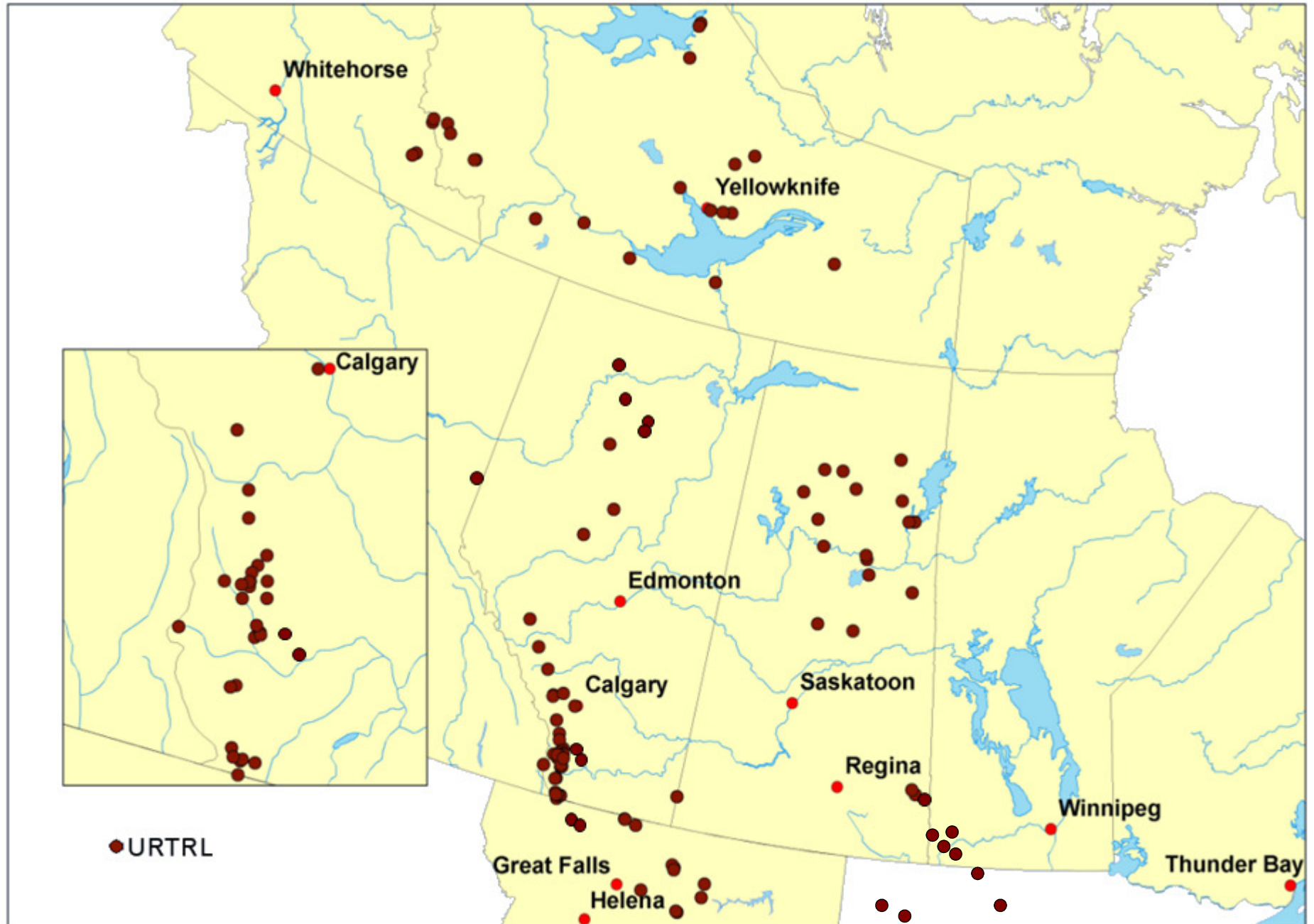
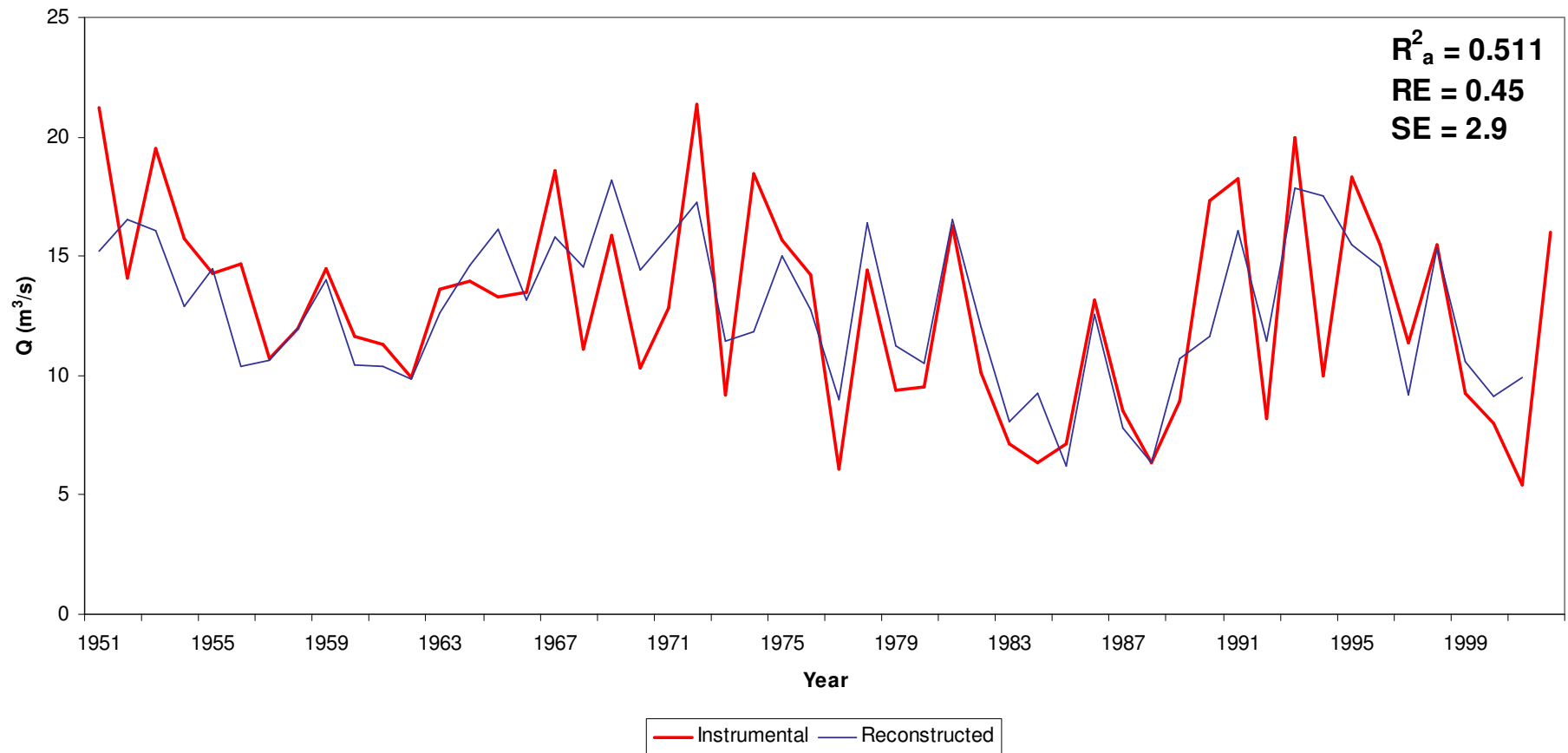
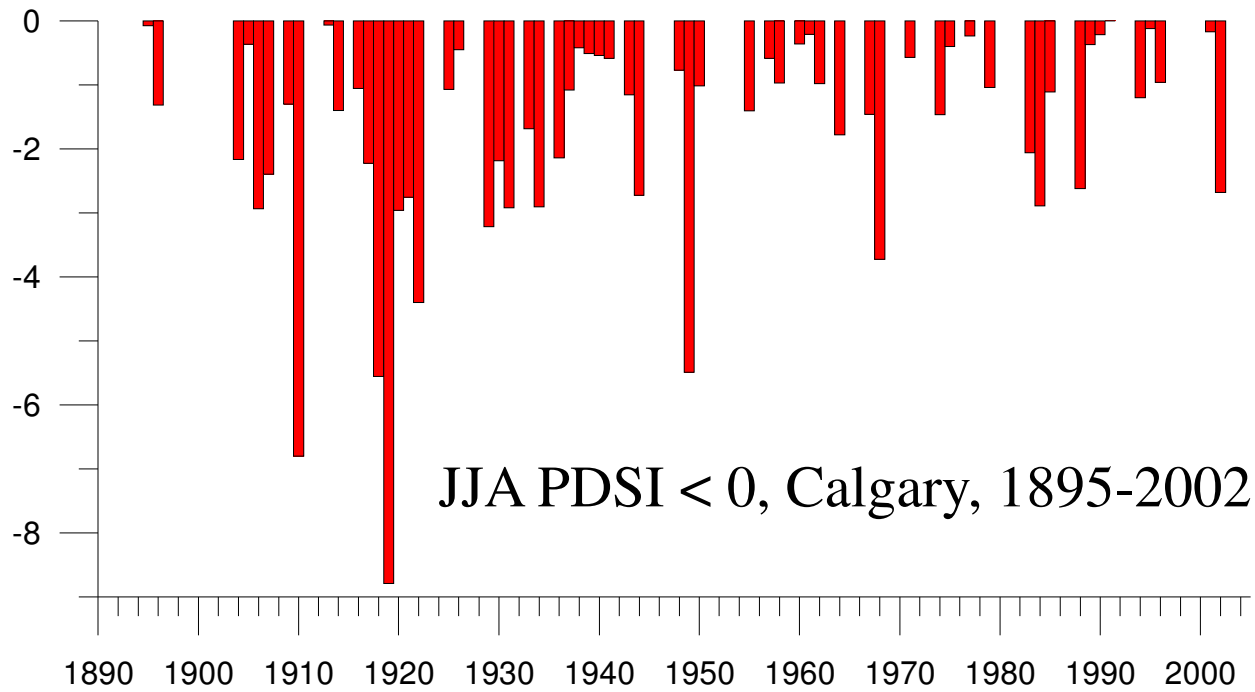


Tree-Ring Sampling Sites

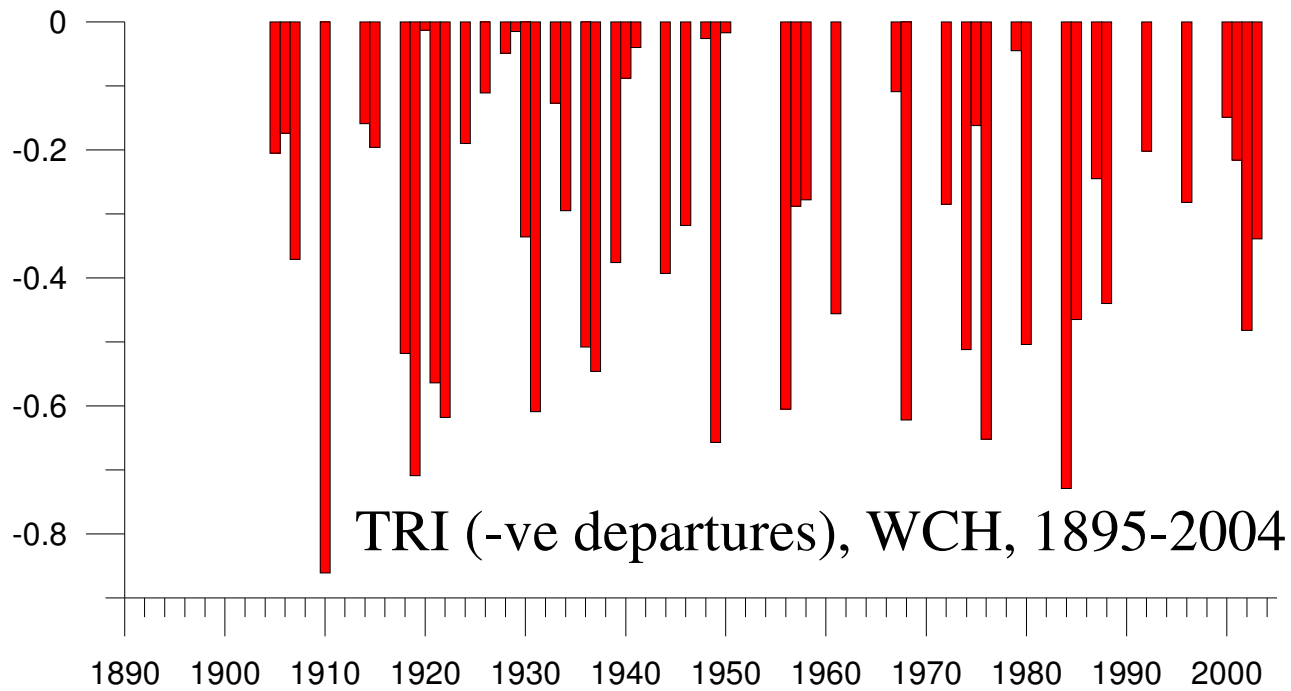


Oldman River at Waldron's Corner, calibration period (1951-2004)



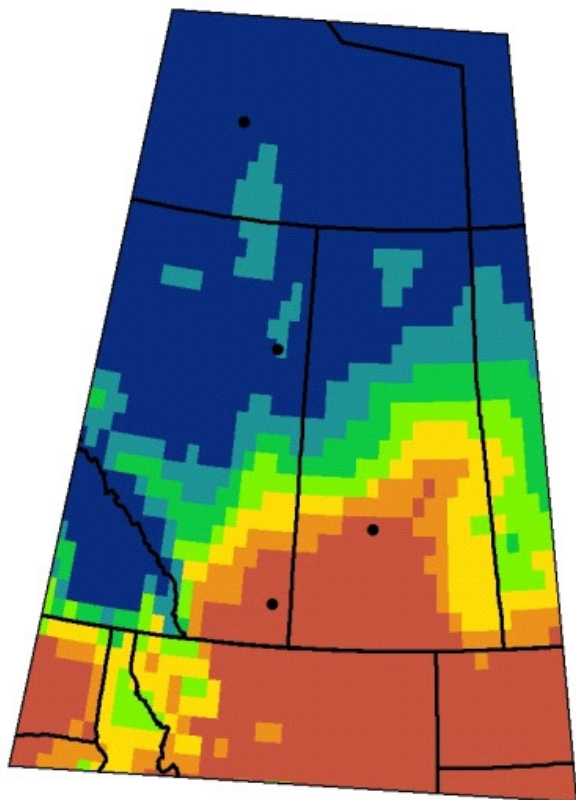


$r = 0.628$

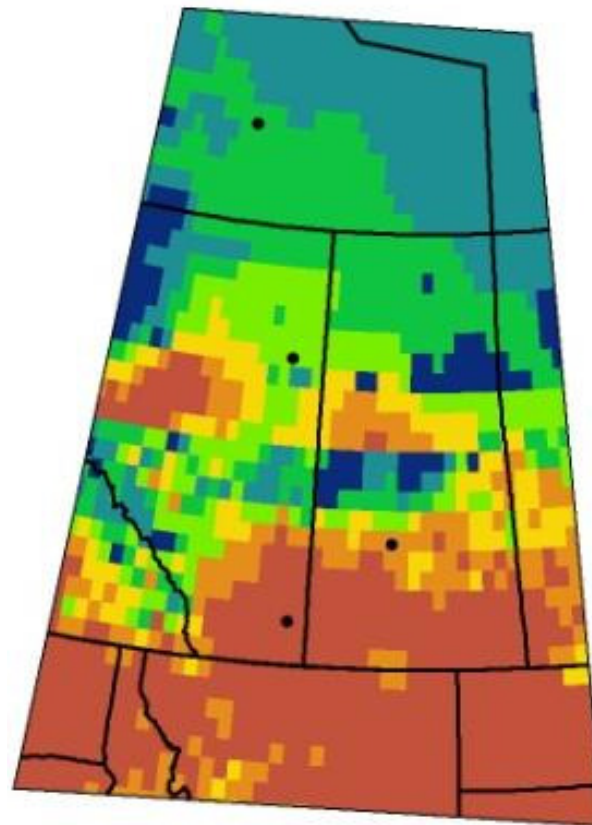


May-July CMI

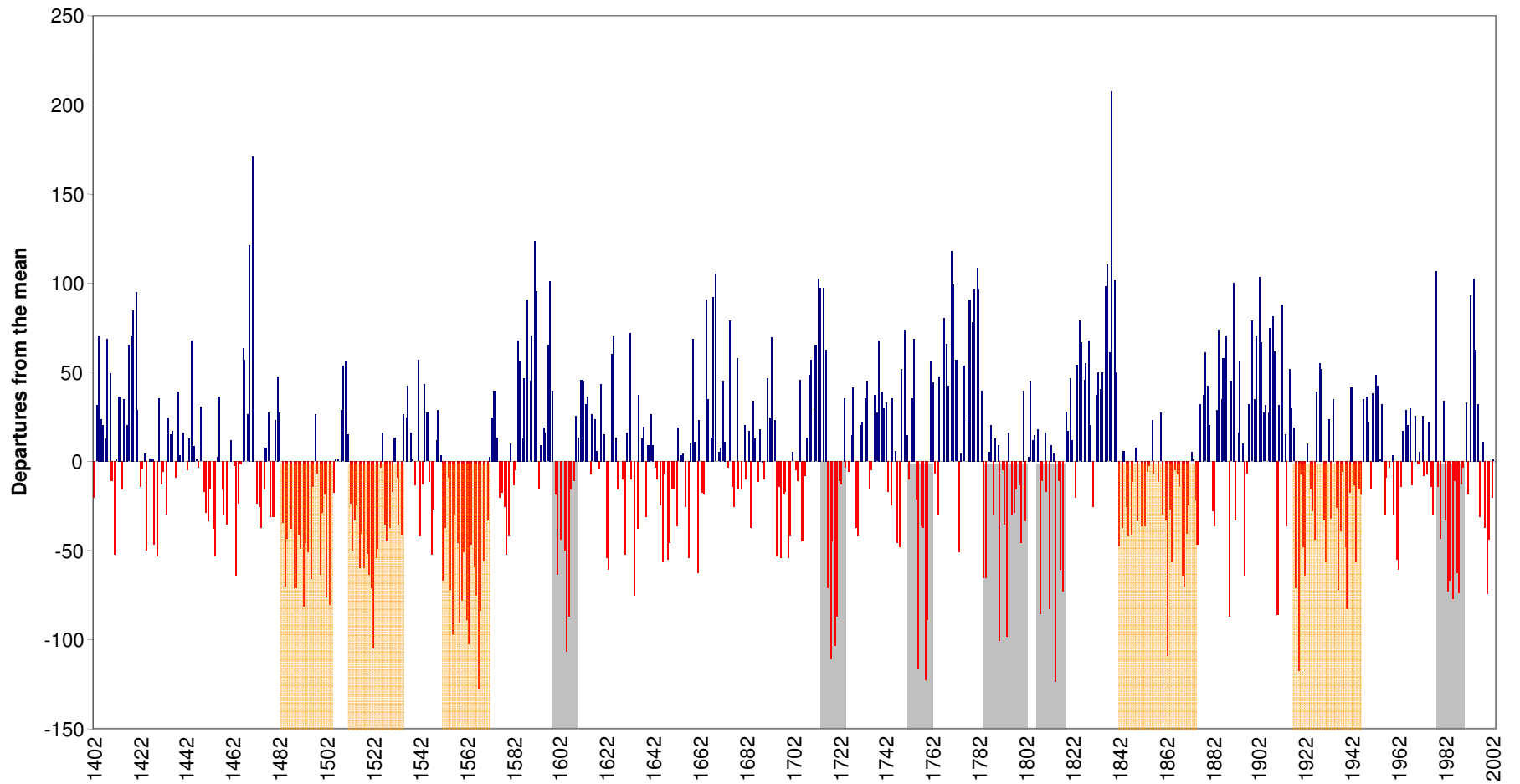
1988



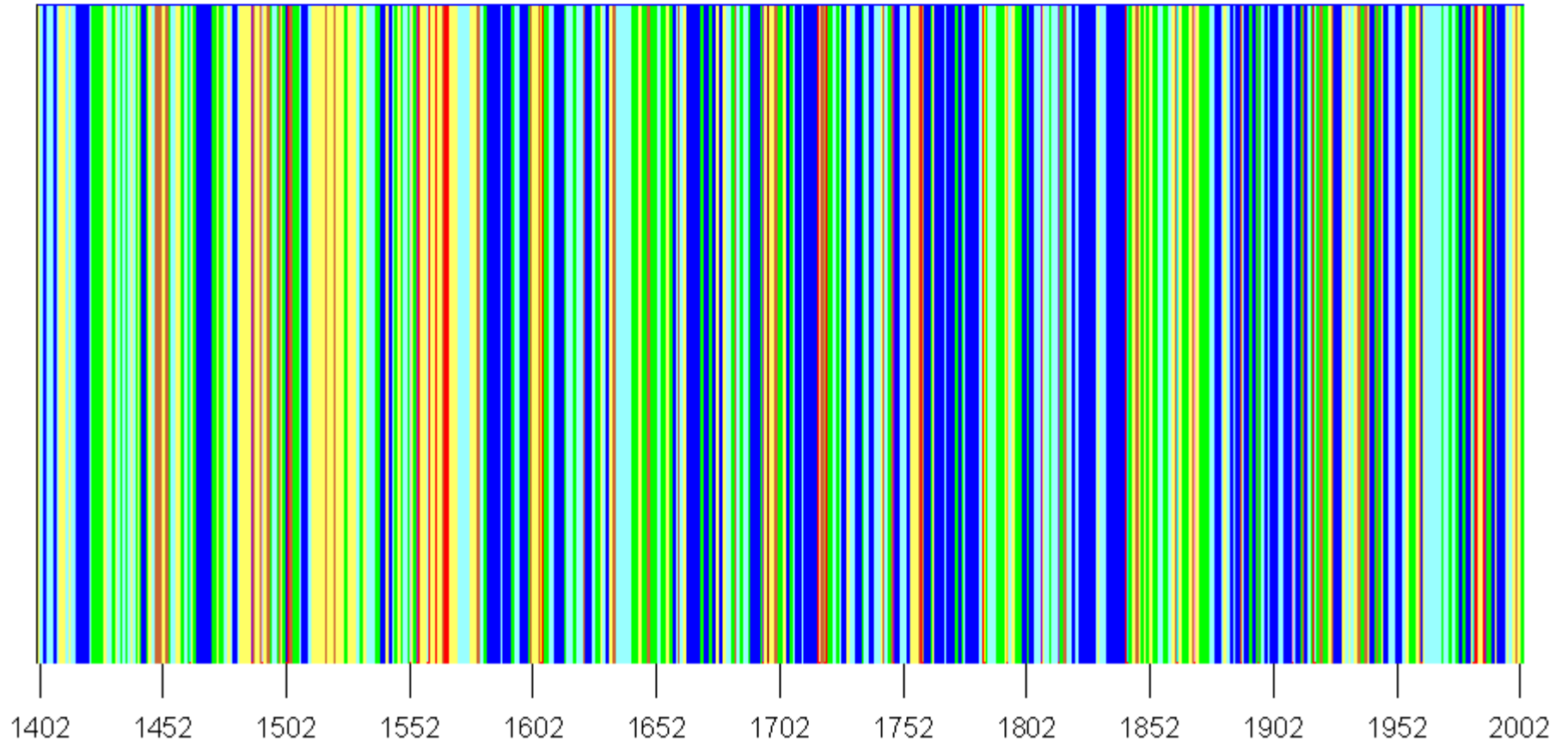
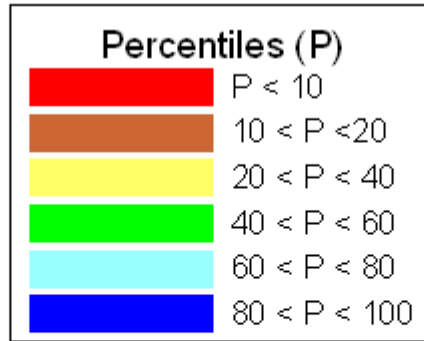
1720



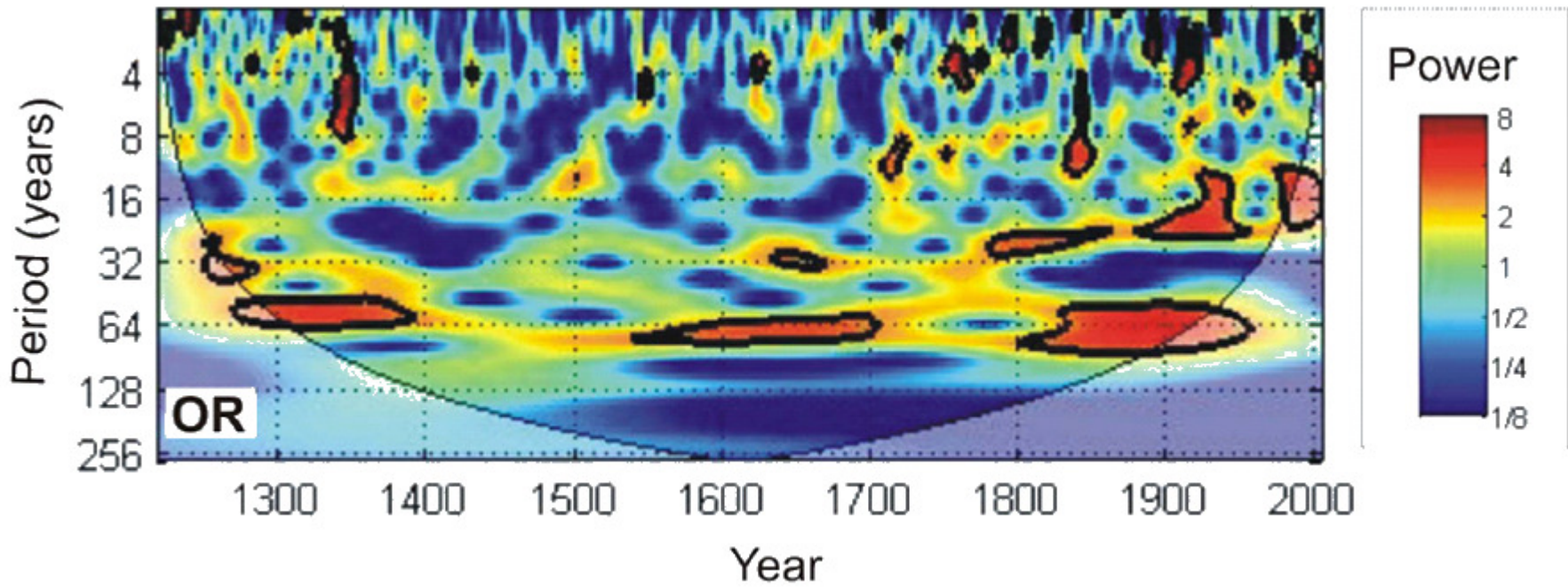
South Saskatchewan River at Medicine Hat, 1402-2004



South Saskatchewan River at Medicine Hat, 1402-2004



Cycles in the tree rings



Seasonal precipitation, ENSO and tree growth response

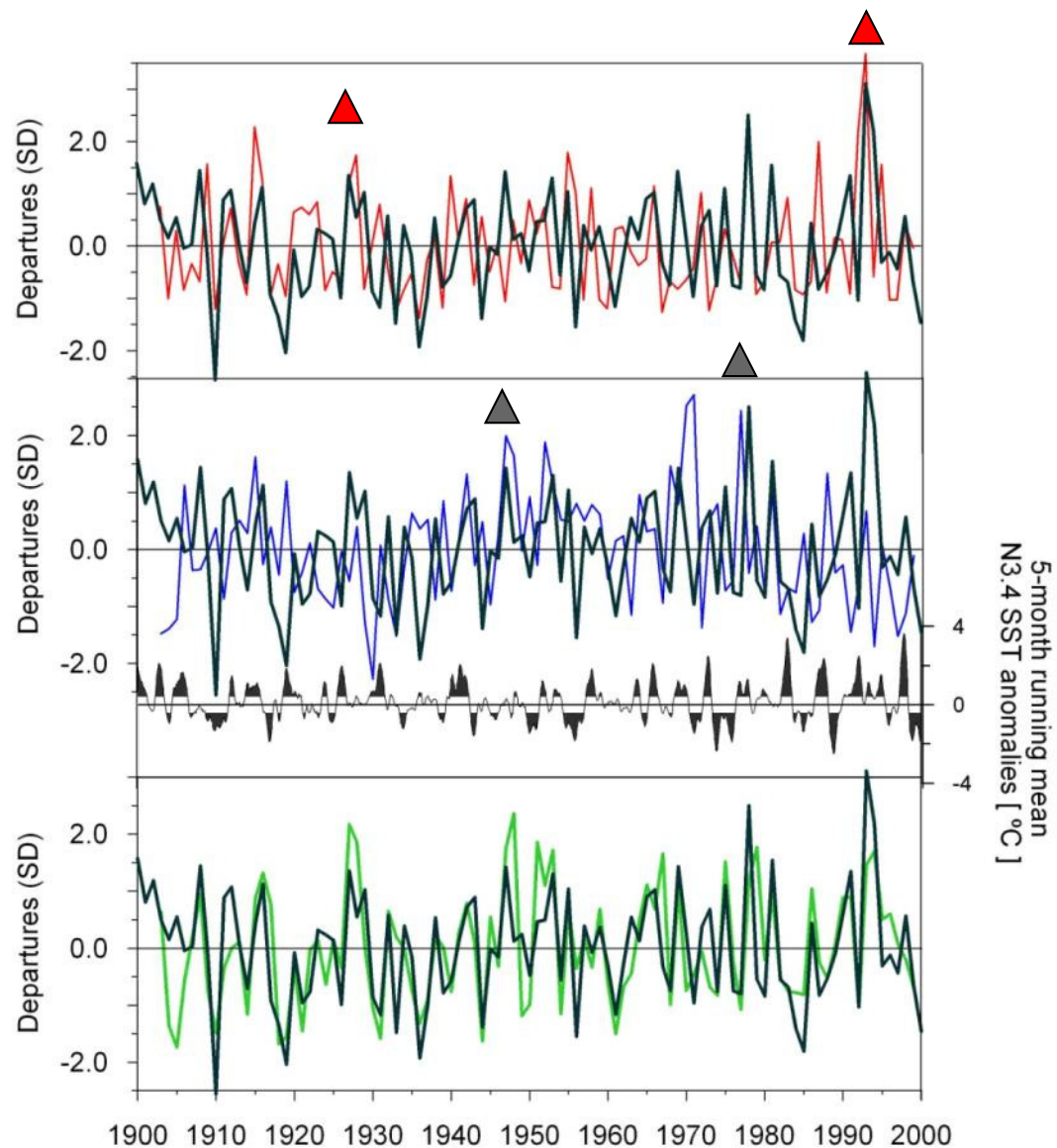
El Niño → winter (-); summer (+)
La Niña → winter (+); summer (-)

▲
Response to summer

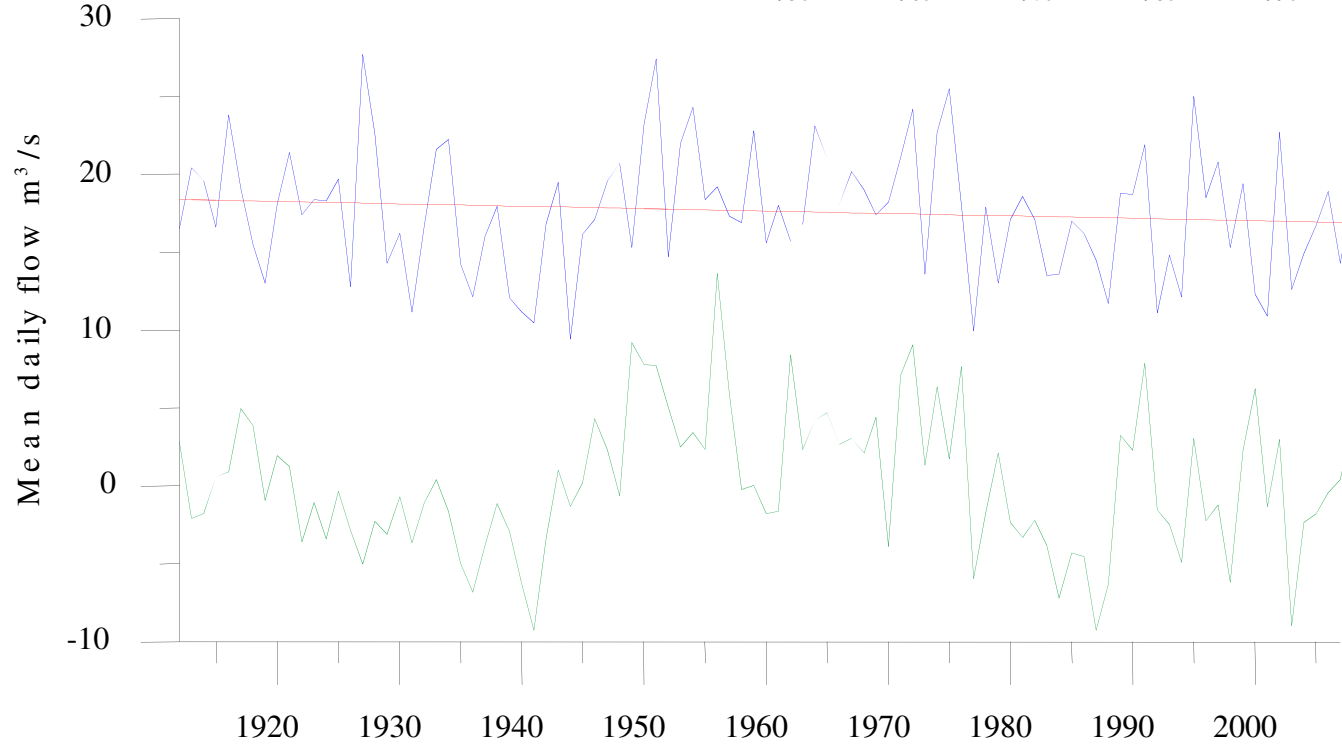
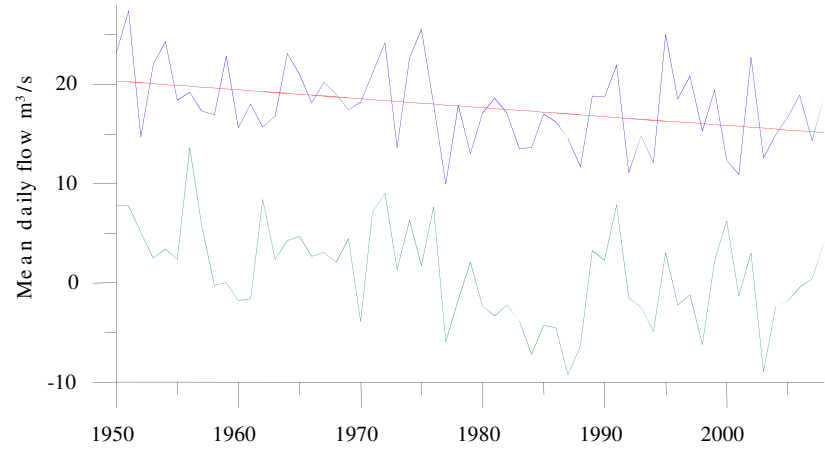
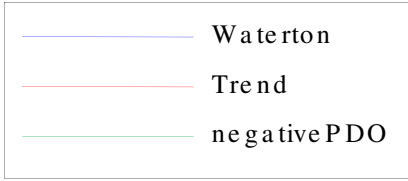
▲
Response to winter



$$r = .67$$



Waterton River at Waterton, AB



St Jacques
Sauchyn, and
Yang, In press

PDO, SOI Projections - GFDL 2.1 A1B

