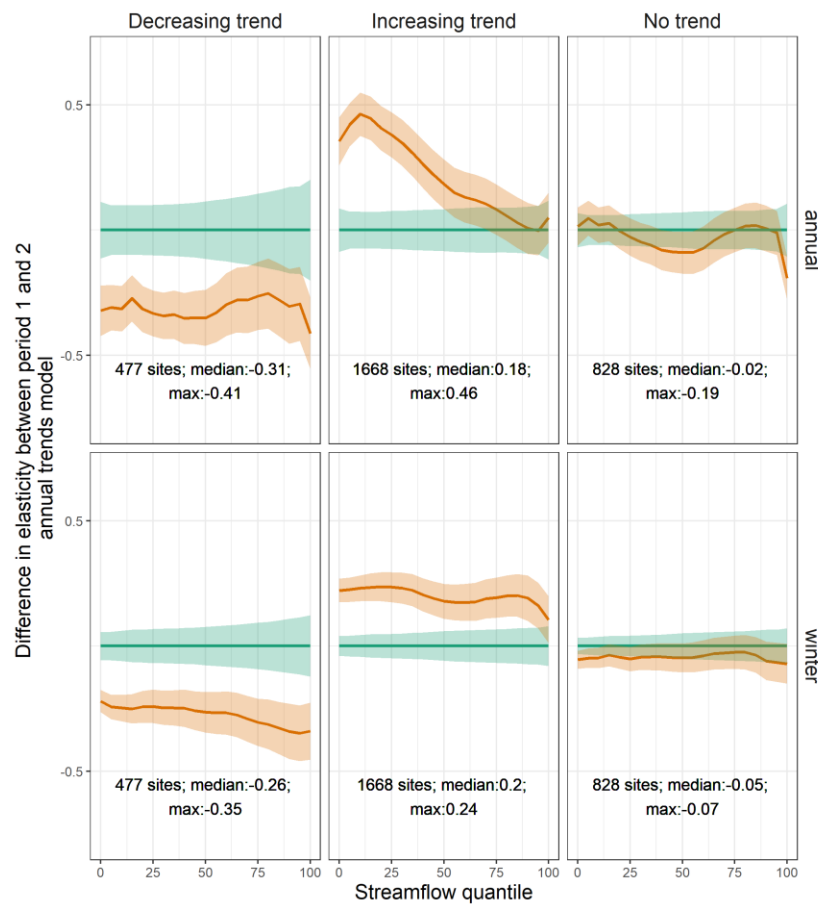


My Third Dphil paper addresses a fundamental assumption which is often made in the hydrologic literature: Elasticity does not change in time (Zhang et al., 2023). This paper is still in the process of being written! But here are some preliminary results:



This figure shows clear, statistically significant average change in  $\epsilon_{c,P}$  (elasticity curve) associated with significant trends (positive and negative) in precipitation between baseline period (1980-2000) and secondary period (2000-2020). We attribute these changes to shifts in the available water storage within a catchment due to prolonged wetting or drying. This also shows an absence of statistically significant change in  $\epsilon_{c,P}$  on average when precipitation has no significant trend, demonstrating the consistency of the result.