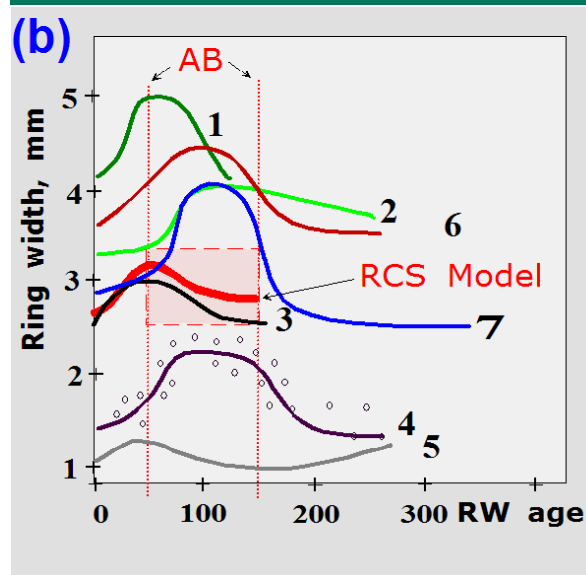


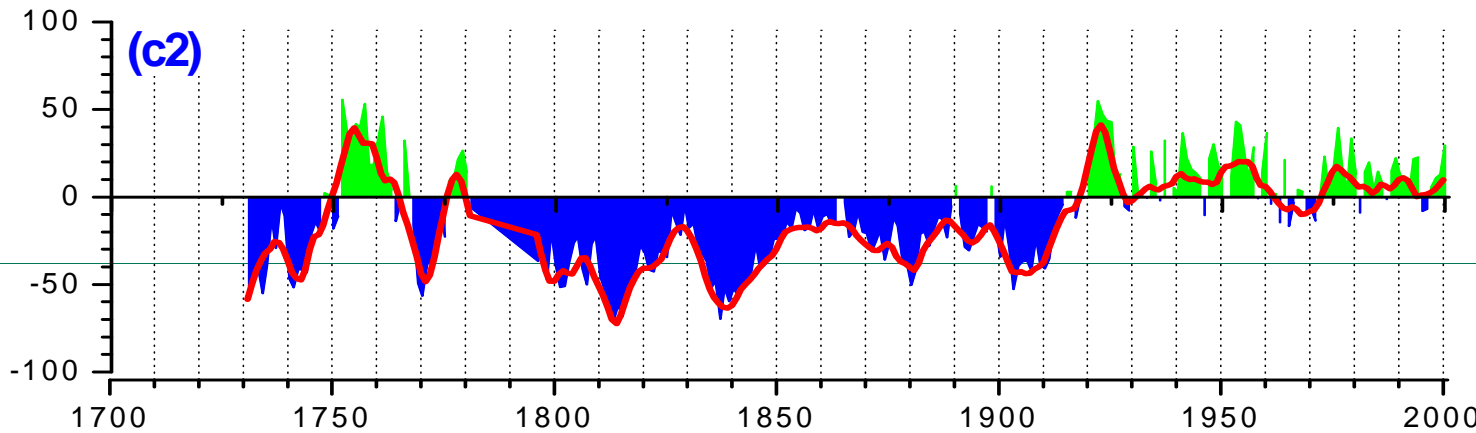
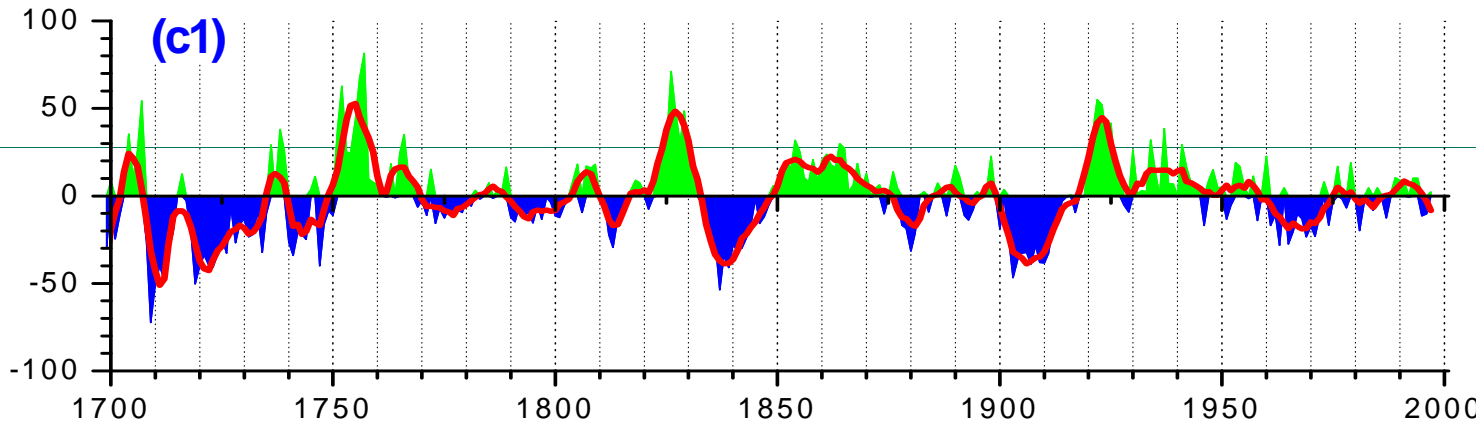
- **Age Banding**
- **RCS-method**

We use three main approaches in our growth trend studies: Single Tree Standardization (STS), Regional Curve Standardization (RCS) and Age Banding (AB).

The traditional STS modelling (a) is as good as the basic model producing the average ring width curve. This method exposes growth trends that are less than half of tree age (a rule of thumb).



The RCS method (b) is used for exposing longer trends. The basic curve is defined as an average ring width-age curve for the whole available regional data. The method is very data sensitive. There are some tricks that can improve the accuracy of a RCS model. One of them is controlling tree-ring age by setting age ranges (b). This method that can also be used alone, is called Age Banding (AB). Applying a combination of the RCS and the AB methods, and trying with different age windows makes it possible to test the stability of growth trends.



The STS and RCS methods may give dramatically different results in case longer trends exist. As an example, The STS (c1) and RCS (c2) graphs illustrate different sides of climatic variation during the last 300 years in Northern Finland.