Questions dendroclimatologists always ask:

1. Was the material cross-dated, and if so, how?
2. What quality control procedures were used to check the dating and the measurements?
3. What steps were taken to maximize the climate signal of interest by the selection of the site, individual trees and variable(s) to be measured?
4. How well replicated is the chronology, and, in particular, when was the first year in which an acceptable level of replication was reached, and the last for which it was retained?
5. How did persistence in the tree-ring time series compare with that in the climate variable of interest, and how was this dealt with?
6. How were age and size trend, and the effects of other non-climatic influences, removed? What effect might this have on the spectral accuracy of any reconstruction?
7. What were the lengths (in years) of the samples making up the site chronology, and how might this affect the chronology's ability to reflect climate variations on longer time-scales (e.g. century scale)?
8. Are the patterns of tree-ring variability correlated (in various frequency bands) between a number of sites in the region, or are they unique to an individual site and hence probably the product of very local conditions rather than climate?
9. How was the climate signal in the site chronologies and network identified and how strong is it?
10. What methods were used to check the reliability at different times in the past of the transfer function used to derive climate from tree rings? Have the relationships between tree-ring growth and climate changed?

Hughes, M. K. (2002). Dendrochronology in climatology – the state of the art. *Dendrochronologia*, *20*(1), 95–116. doi: https://doi.org/10.1078/1125-7865-00011