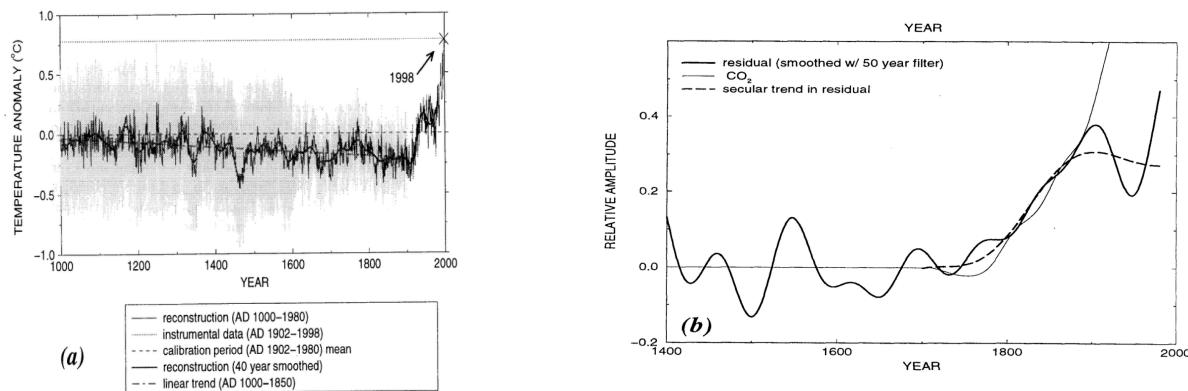


# Michael Mann

Scientists wanted to interpret how the temperatures in the northern hemisphere changed over the last millennium, though reliable measurements of temperature existed solely for the last 150 years. This made it difficult to know whether or not the recent rise in temperature was unusual or was a part of the natural variability of temperature. To resolve this the researchers needed a way to reconstruct the older temperature using natural elements such as tree rings or corals. These records, though useful, varied in location and quality, so combining them into a single curve was a daunting challenge. The main problem was, as can be seen from the given information, creating a formula to merge all this data into a long term and consistent reconstruction. Thus, Mann et al. addressed this by creating the first large-scale multi-proxy reconstruction. The research team collected data from records such as tree rings, ice cores and coral data along with modern tools for temperature measurement. These datasets cumulatively provided long term evidence of past temperature variations across the Northern Hemisphere. The combined set revealed the rise in the 1900's was unique in terms of both speed and magnitude in comparison to the rest of the millenia. The insight from here was that the temperature rise was not a result of natural processes, but instead was abnormal and rapid.



## **Data are plural, what does that mean?**

Data are plural means that the conclusions individuals come to from data shall be made using multiple measurements not from a single measurement.