

Dating and Processing of Archaeological Wood Samples for Dendroclimatology in Mongolia

Application is herein made to the Climate Center for funds to initiate studies of archaeological wood material in Mongolia. Obtaining and analysis of this material would add greatly to the dendroclimatological resource base as well as establishing dates for significant historical structures. Most of the wood used by humans was harvested from lower forest border sites near dwellings, towns and cities. It is these same lower forest border regions in Mongolia where the trees are usually stressed by lack of moisture. Therefore, fortuitously, the wood cut for use is from the same moisture stress environment where we can obtain the best precipitation or drought signal for paleoclimatology. Our collections from living trees at the lower forest border have reached the limit of longevity, about 350 years old. Longer records from historical wood will improve our reconstructions and analyses, including spectral analyses where longer records provide better testing of data and results.