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| **Conclusion**  **The data collected shows a small amount of age difference between the samples. Although one sample went through a special cleaning process it did not appear overly different, indicating the cleaning process was probably very thorough. Calibrated age is estimated by taking into consideration the fact that the ratio of 14C in the atmosphere has fluctuated during different time periods. Although there is always a constant ratio of 14C to 13C one needs to determine how the amount of 14C has changed. The standard way of doing this is found by looking at tree rings. There are trees such as Bristlecone pines that have existed for several thousands of years. The tree rings are able to show how the climate has fluctuated over the years. A tree ring can either be tested for 14C or growth can be analyzed to find the changing weather patterns. Using these standard calibration methods one can adjust dating to a more accurate estimation. The paleographic ages are the time periods in which the artifacts supposedly originated.**  **In determining a difference between the samples, I looked at how much of a result difference there is. In sample 1 the calibrated dates show it is slightly younger that sample 2. Sample 1 is estimated to have originated in 45 BC to AD 120. This is a younger date in comparison to sample 2 which is 93 BC - AD 80. Seeing as sample 1 was the sample that required the extra cleaning due to modern contamination of Perspex glue ( which is said to make a sample appear younger ) it is possible that there might have been some residual contamination. The cleaning that was done probably made rather a lot of difference. Without the cleaning that was done Sample 1 would have appeared much younger that it did, giving false results. I can therefore conclude, with the information I was able to collect, that the pretreatment of samples is somewhat necessary in coming up with a more accurate date. Even thought the difference may be minimal the big picture is that accuracy is always a goal that one strives to meet.**  **I admit that I did find a few hiccups with this project, the main one being that no Laboratory actually did a control where no pretreatment was used. But I was able to work through this slightly. I learned that pretreatments are more of a standard practice and are necessary to promote accuracy. The difference they make is hard to tell as there is no control done. But evidence would suggest that they do make some bit of difference. In answering my original question I would say that if there were a control test available I think it would show a great difference of results.**    [[Home](http://docs.google.com/home.html)][[Introduction](http://docs.google.com/introduction.html)][[Hypothesis](http://docs.google.com/hypothesis.html)][[Procedure](http://docs.google.com/procedure.html)][[Data](http://docs.google.com/data.html)][[Conclusions](http://docs.google.com/conclusions.html)][[Bilio/Links](http://docs.google.com/biblio.html)]  [[2001 Projects](http://docs.google.com/index.html)][[2000 Projects](http://docs.google.com/AP2000/index.html)][[1999 Projects](http://docs.google.com/AP99/index.html)][[1998 Projects](http://docs.google.com/AP98/index.html)] |