**Final Assignment**

**(only Part I of the final assignment for the course is related to paleolimate)**

**Part I: Climate change and its influence on human history**

Over the past 10 years or so, a whole series of studies have been published that document significant climate change in many areas of the Northern Hemisphere ca. 4000-4200 ybp. Each of the articles on the list below is fascinating, and I couldn’t decide which one to assign! So, you can choose any one of them. I’ve posted them all on Blackboard.

You must do the following:

* choose one of the papers. I recommend downloading them all and reading the abstract and introduction of each in order to decide which one you want to focus on. Be sure to look up any words that you don’t know.
* make a bulleted list of the specific *kinds* of geologic evidence that the authors discuss in the article and how each kind of evidence helped them to establish aspects of climate change. Be specific! Just writing, for example, “the sedimentary record, because it reflected the environment” is inadequate. What, *specifically*, did the authors look at in the sedimentary record, and why was it a useful piece of information about past climate? After you write your list, add a statement about what struck you.
* write a short summary of the conclusions that the authors drew about climate change and its influence on humans; be specific about timing. Make a statement about what struck you.
* write a short statement that correlates the events discussed in the article with those happening in Egypt at the same time. Be specific about events and dates, and evaluate whether what happened in the area covered by the article is similar to or different from events over the same period of time in Egypt. Make a statement about what strikes you.

Extra credit for Part I: do the same thing for a second article.

Cullen, H.M., deMenocal, P.B., Hemming, S., Hemming, G., Brown, F.H., Guilderson, T., and Sirocko, F., 2000, Climate change and the collapse of the Akkadian empire: evidence from the deep sea: Geology, v. 28, no. 4, p. 379-382.

Booth, Robert K., Jackson, Stephen T., Forman, Steven L., Kutzbach, John E., Bettis, E.A., Kreig, Joseph, and Wright, David K., 2005, A severe centennial-scale drought in mid-continental North America 4200 years ago and apparent global linkages: The Holocene, v. 15, p. 321-328.

Staubwasser, M., Sirocko, F., Grootes, P.M., Segl, M., 2003, Climate change at the 4.2 Ka BP termination of the Indus Valley civilization and Holocene south Asian monsoon variability: Geophysical Research Letterts, v. 30, no. 8, p.7-1 to 7-4.

An, Chengbang, Feng, Zhaodong, and Tang, Lingyu, 2004, Environmental change and cultural response between 8000 and 4000 cal. yr. BP in the western Loess Plateau, northwest China: Journal of Quaternary Science, v. 19, p. 529-535.

Wenxiang, Wu and Tungsheng, Liu, 2004, Possible role of the “Holocene Event 3” on the collapse of Neolithic cultures around the Central Plain of China: Quaternary International, v. 117, p. 153-166.

An, Cheng-Bang, Tang, Lingyu, Barton, Loukas, Chen, Fa-Hu, 2005, Climate change and cultural response around 4000 cal yr B.P. in the western part of Chinese Loess Plateau: Quaternary Research, v.63, p. 347-352.