## Climate Change in the late Roman Empire

## 1. Intellectual Agenda

Objective: produce a joint "white paper" offering a summary of present ideas on climate conditions and change under the late Roman Empire (ca. 200 to 750 AD).

*Means:* detailed interdisciplinary discussion and analysis of whatever data each of us can bring to bear that illuminates climate change in the area of the late Roman empire, ca. 200 to 750.

I will prepare and circulate in advance a brief summary of the conventional wisdom today about climate conditions from northwest Europe to the Levant in this period. Some or all of that conventional wisdom may be wrong, but it will be a good starting point. A few background readings will follow. If you have suggestions for valuable background readings, by yourselves or by others, do not hesitate to convey them to me.

If time permits, I may be able to circulate a draft database of climate events reported in the written sources of the late Roman empire in this period. It will have several hundred data points, of which perhaps one hundred will be of maximum value. In any case, it will be ready for us to use at DO.

## Guiding principles:

Our time together will be short and precious. We should not read papers to each other, but precirculate materials and points for discussion so that we can do some advance preparation to facilitate discussion of each other's work. I would like to invite each of us at the outset to present in some 10 minutes the most important datasets for what you have to say about the question of climate conditions in this period.

This will be a very diverse group of scientists, historians and archaeologists. We must strive therefore for clarity and be willing to explain things that may be basic in our own fields, and try to imagine the data and perspectives of our collaborators. We will be working in quite extraordinary material circumstances in Harvard University's lovely gardens and estate in Washington, D.C. in full spring bloom. This should allow us to concentrate and make rapid progress toward our goal.

Goal: produce for publication a white paper, which will summarize what is known and what is not known today, and what can be known tomorrow, about climate conditions in the main regions of the Roman empire in its late phase, and what can be ascertained today or discovered tomorrow about the impact of climate change on human society and society's responses. For historians and archaeologists this promises new data to add to the growing wealth of information on the environmental matrix, the changing ecological conditions of the Roman empire and its responses. For climate scientists it offers the

opportunity to verify that the postulated mechanisms thought to be documented by proxy indicators actually functioned and had the anticipated impact; it offers a kind of superproxy evidence, eye-witness testimony on particular climate conditions in the distant human past.

We should be alert to regional and hemispheric or global trends on the millennial, century, decadal, or finer chronological scales. High resolution proxy data will be at an obvious premium.

By Saturday afternoon, we should have a rough draft of a white paper, which one of us will present to the broader Washington public Saturday evening. The workshop participants will be available to take questions from the audience.

## 2. Tentative timetable

Friday PM 4/24/09

In camera workshop meeting: 2:00-5:30 PM

Drinks with Byzantine fellows of Dumbarton Oaks: 5:30-6:30 PM

Private working dinner for workshop participants at local restaurant – 6:45 PM

Saturday AM 4/25/09

Workshop 9:30-12:30. With a limited number of "onlookers", primarily Byz. fellows and a few invited guests.

Lunch 12:30-2:00 (with time to walk in the gardens)

2:00-4:30 – resumption of workshop

5:00 PM – presentation of results to larger audience

6:00 or 6:30 – reception

7:00 or 7:30 – dinner for speakers, fellows, a few Byz. staff members and invited guests