**Geography 507: Seminar 5**

**Sea level during past warm periods- from the Pliocene to the Eemian**

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This week’s seminar speaker was Maureen Raymo who is part of the Lamont-Doherty Earth Observatory at Columbia University. Her talk focused on research looking at past climates, especially those that were high in carbon dioxide to understand what might occur given current trends in rising carbon dioxide. If my understanding was correct the climate was warmer during the Eemian period which was around 125,000 years ago. Also, during the Pliocene (which I believe occurred around 5.3 million and 2.6 million years ago) there was a higher concentration of atmospheric CO2 and the climate was warmer. During this period the sea levels were also higher which might help us better understand how current climate trends could affect sea levels in the near future.

Another aspect of her research involved working to understand how stable the Antarctic ice sheet was in the past. This also has important applications for the future. She utilized a range of methods including being heavily involved in field work. One of the methods I was interested in was the extrapolation of these past complex systems to our current environment. I believe they utilized a number of computer models and I would be interested in exploring how future models may be more accurate given the changes in computational power and availability to powerful tools such as those offered by Open AI, AWS and Google.