

Beringia land extent included the green area during the ice age.

Sophie's Planet #1: Preface and Chapter 1

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Thanks to the Coronavirus, five trips are canceled. Now I can really finish *Sophie's Planet*, which is a story of how I learned the scientific method and of the implications that science has for policies needed to assure a bright future for young people and nature.

I will send out draft chapters for fact checking. If you are locked away, need something to read, let me know if you find any flaws. <u>Here</u> is the Preface plus Chapter 1.

I opened a Twitter account @DrJamesEHansen, (<u>https://twitter.com/drjamesehansen</u>), but will minimize interactions until the book is finished.

The Coronavirus and human-caused climate change are both characterized by a delayed response which makes the problem and its solution more difficult. With the virus the delay time is of order weeks; with climate change the delay is of order generations. In both cases, by the time the effects become obvious, there is a much larger response "in the pipeline."

With the virus the lags for an individual are between infection, appearance of symptoms, and ultimate response, which can potentially include death. The lag for spread of the virus is a bit longer, but it is still measured in weeks. With climate change the lags are between emissions, appearance of warming, and ultimate effects such as large sea level rise and species extinctions, which can potentially lead to social disorder and a more desolate world.

We are in a race to find remedies in both cases, but the near-term focus on the virus provides a moment to assess the actions needed for climate. It is a solvable problem. It is inappropriate to pile stress on young people, by implying that it is too late for realistic actions to be effective.

It is also wrong science. The climate problem is solvable with actions that make sense for other reasons, and the solution will yield a planet less susceptible to pandemics.