

# Powers of 10 - History of the Climate

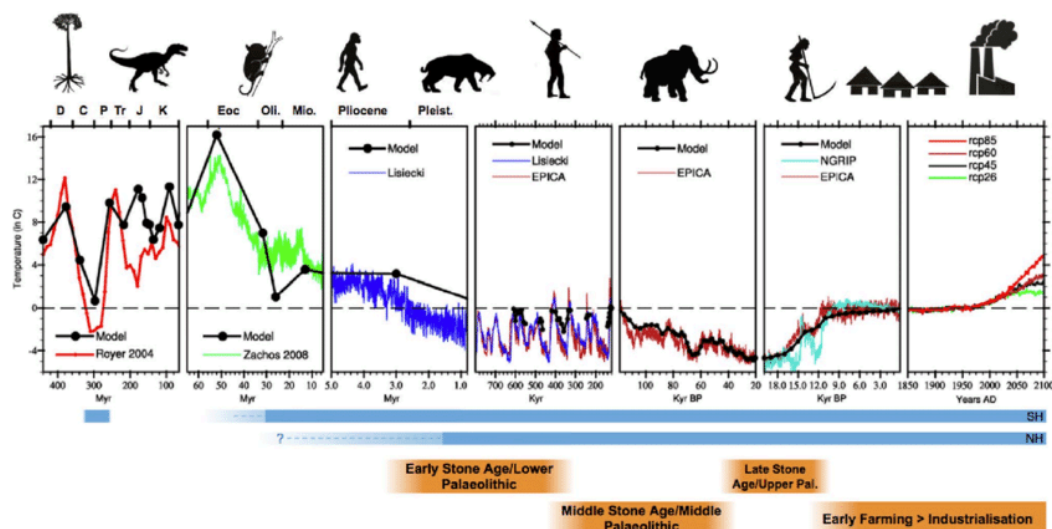
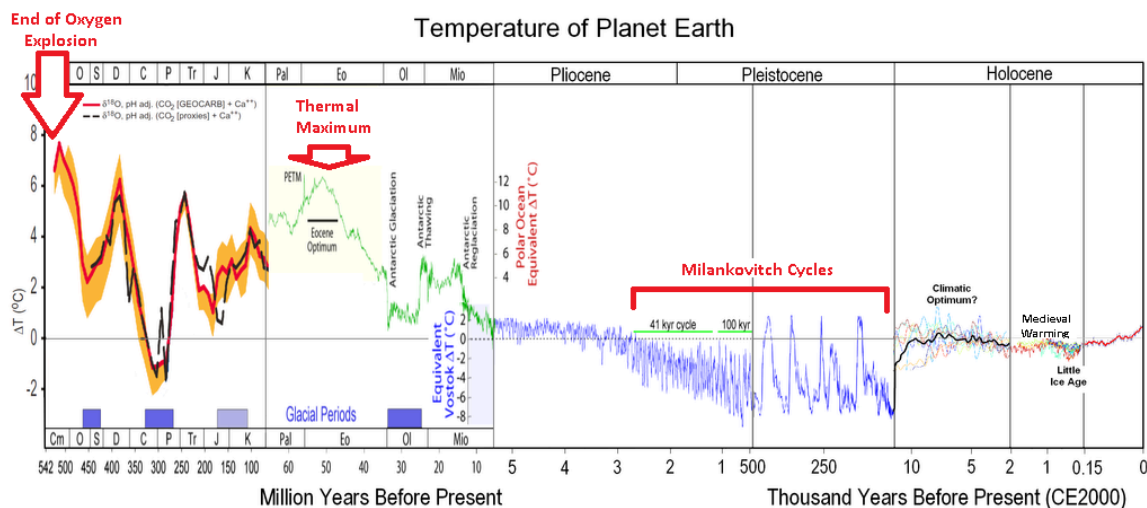
## Principle Sources and Resources for this Study

**Climate Powers of Ten History of Climate from FIU 2023**

## Others of Interest

In our early studies of the Big Picture, graphics like these two helped to put things into perspective. In particular, you might look back at:

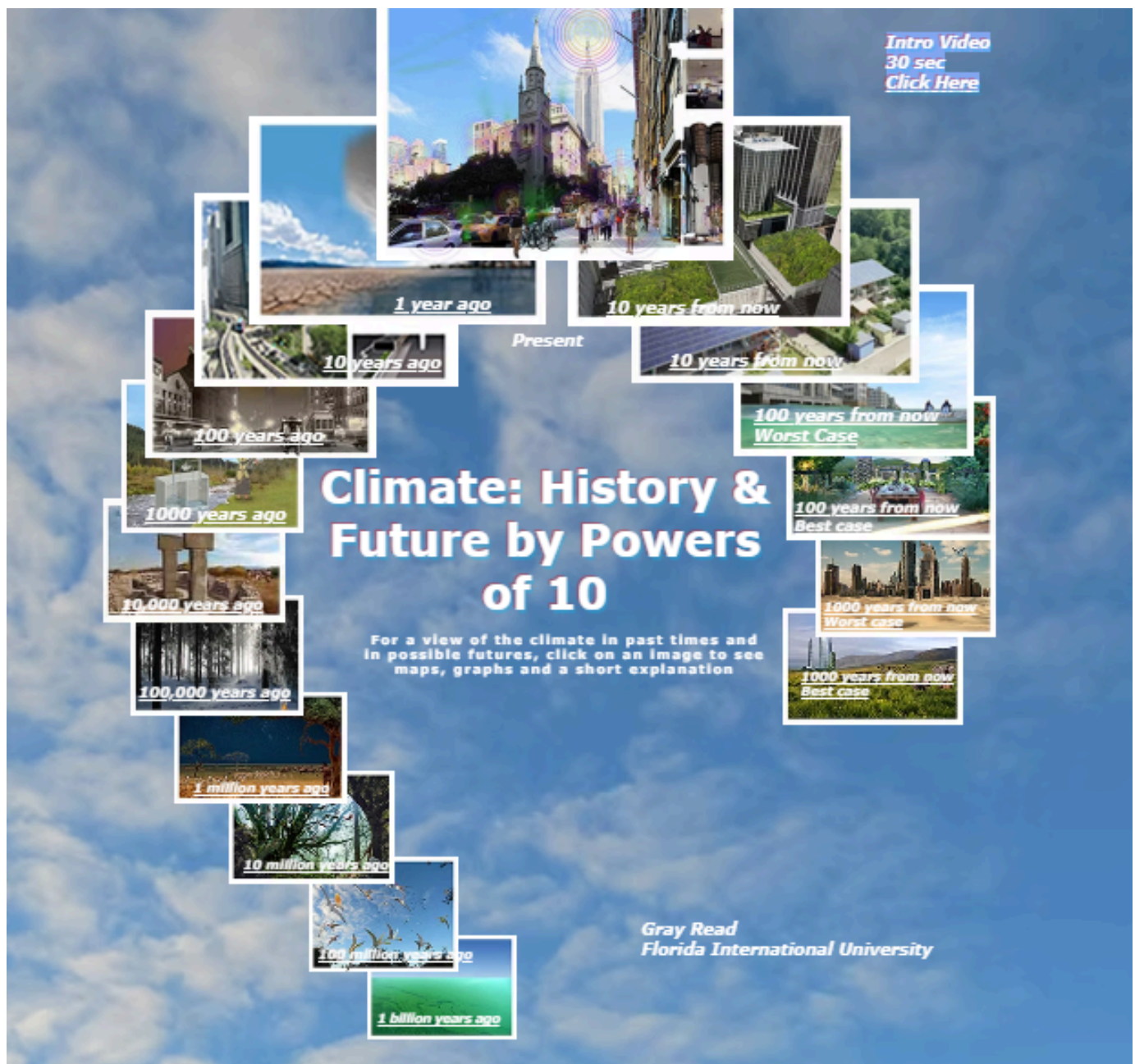
- ≡ CSSG-2.2 Paleo Part 1 - the last 800,000 years
- ≡ CSSG-2.3 Paleo Part 2 - the first 4.6 Billion years less 50 million years
- ≡ CSSG-2.4 Paleo Part 3 - the latest 50 million years - the Big Cooldown



## Another way to get the Big Picture

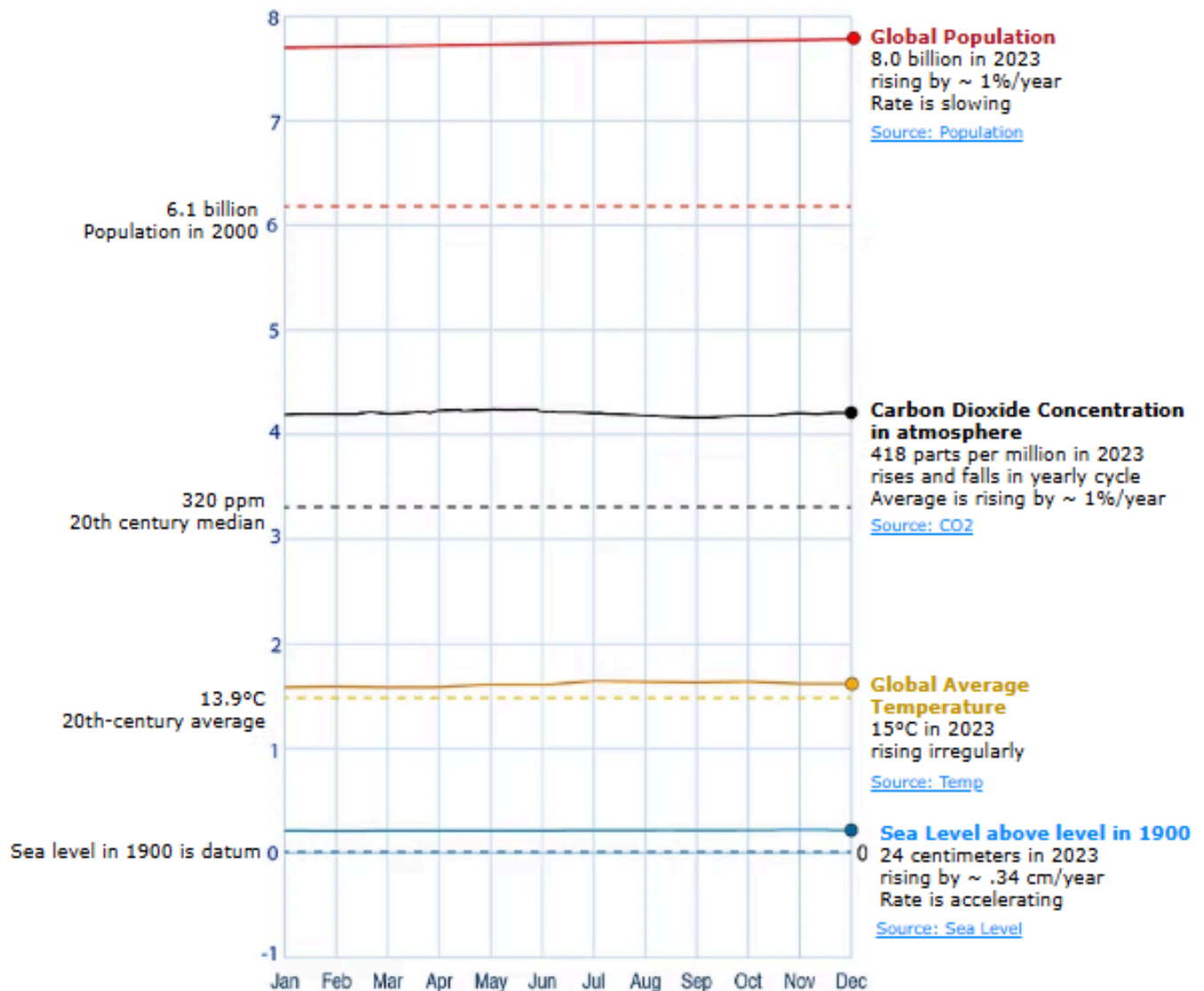
Florida International University published in 2023 a neat “Powers of Ten” presentation of the Climate History. It ranges from 1 Billion Years ago to Last Year and to 1000 years into the future. I’ll show only the time graphs, but this is a great resource! Much more is to be found in the Reference:

**Climate “Powers of Ten History of Climate from FIU 2023”**



*1 year ago*

*Measures over one year compared with recent benchmarks*

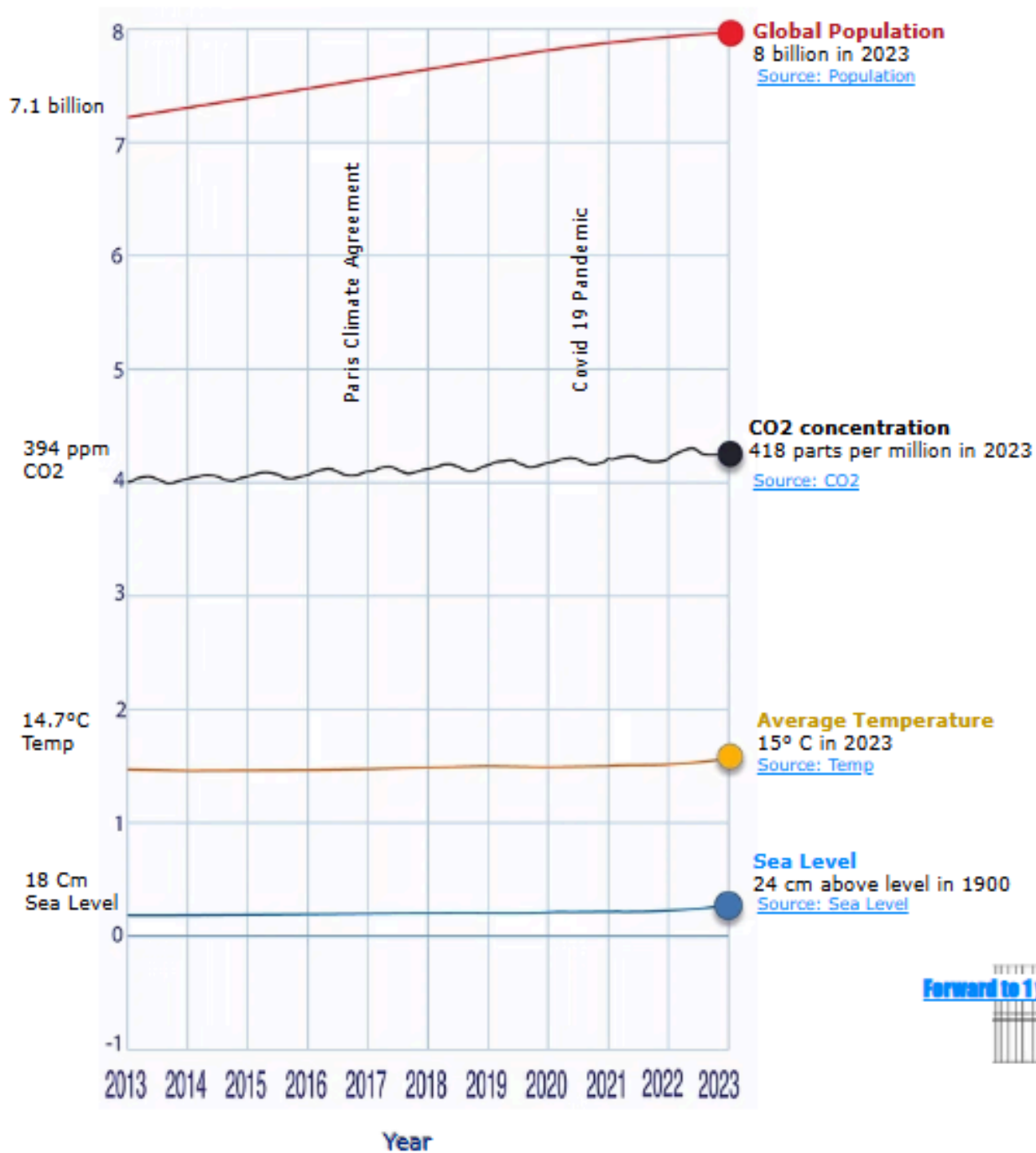


[Back to 10 years ago](#)



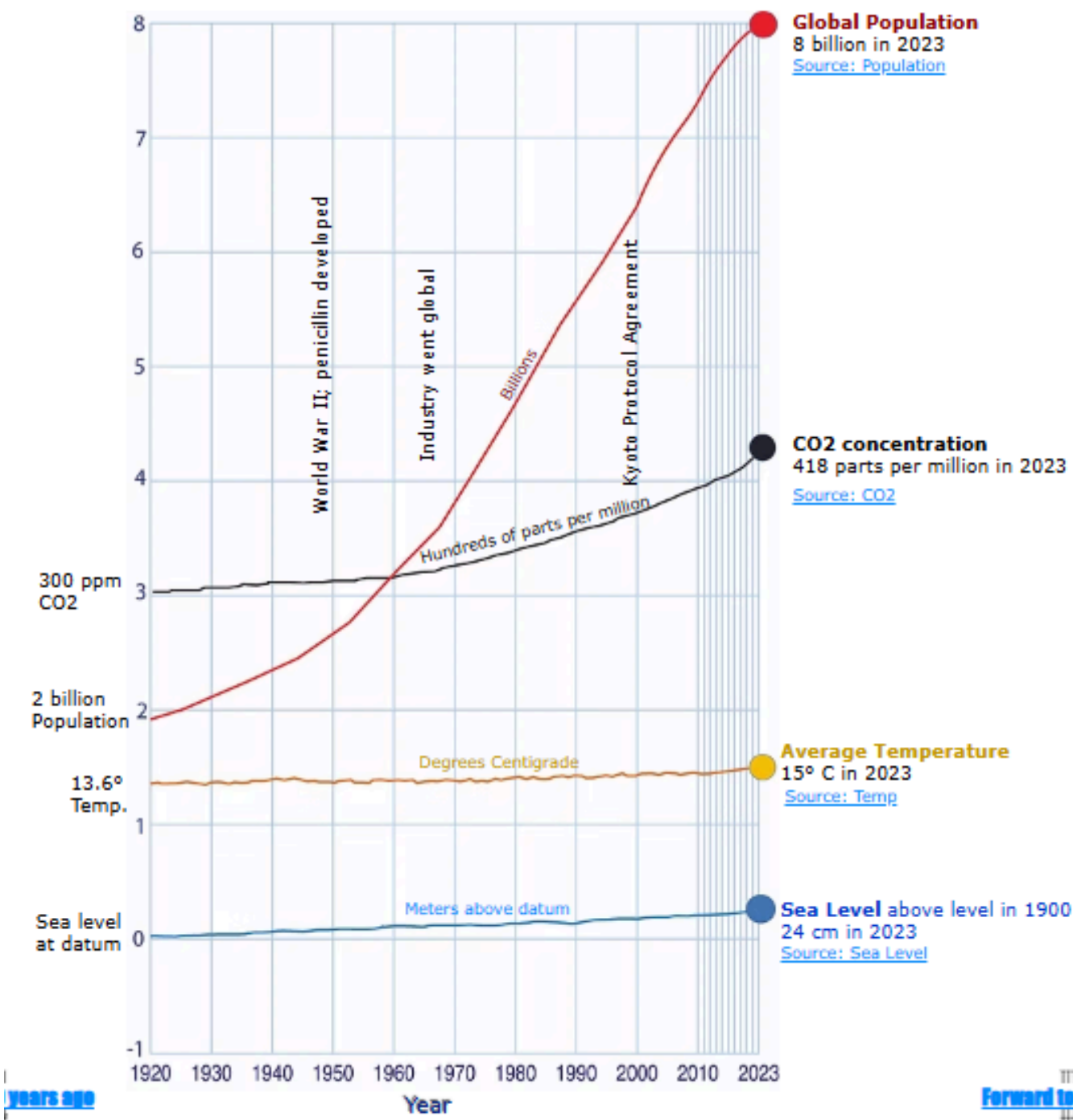
[Forward to present](#)



*10 years ago**Measures*

100 years ago

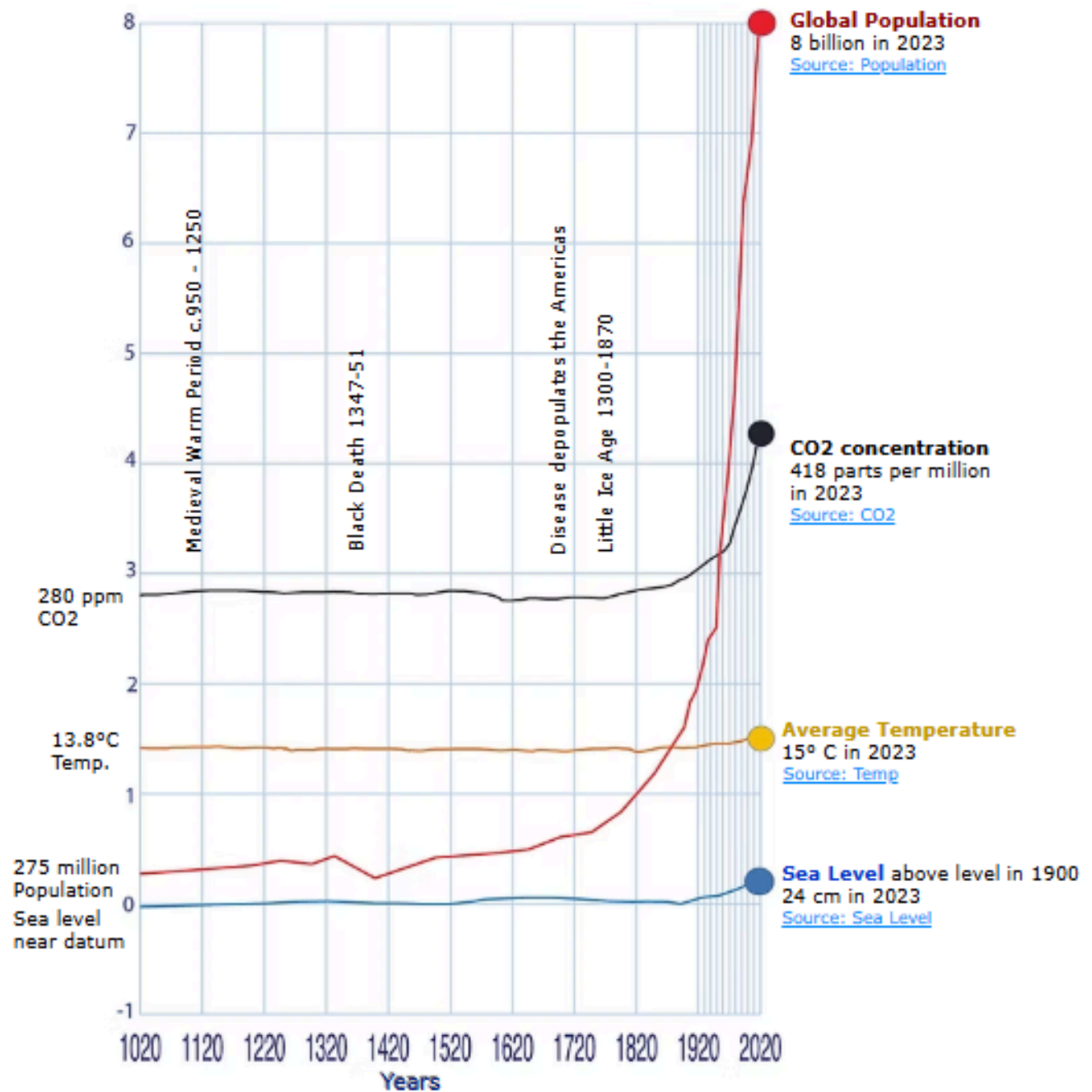
### Measures





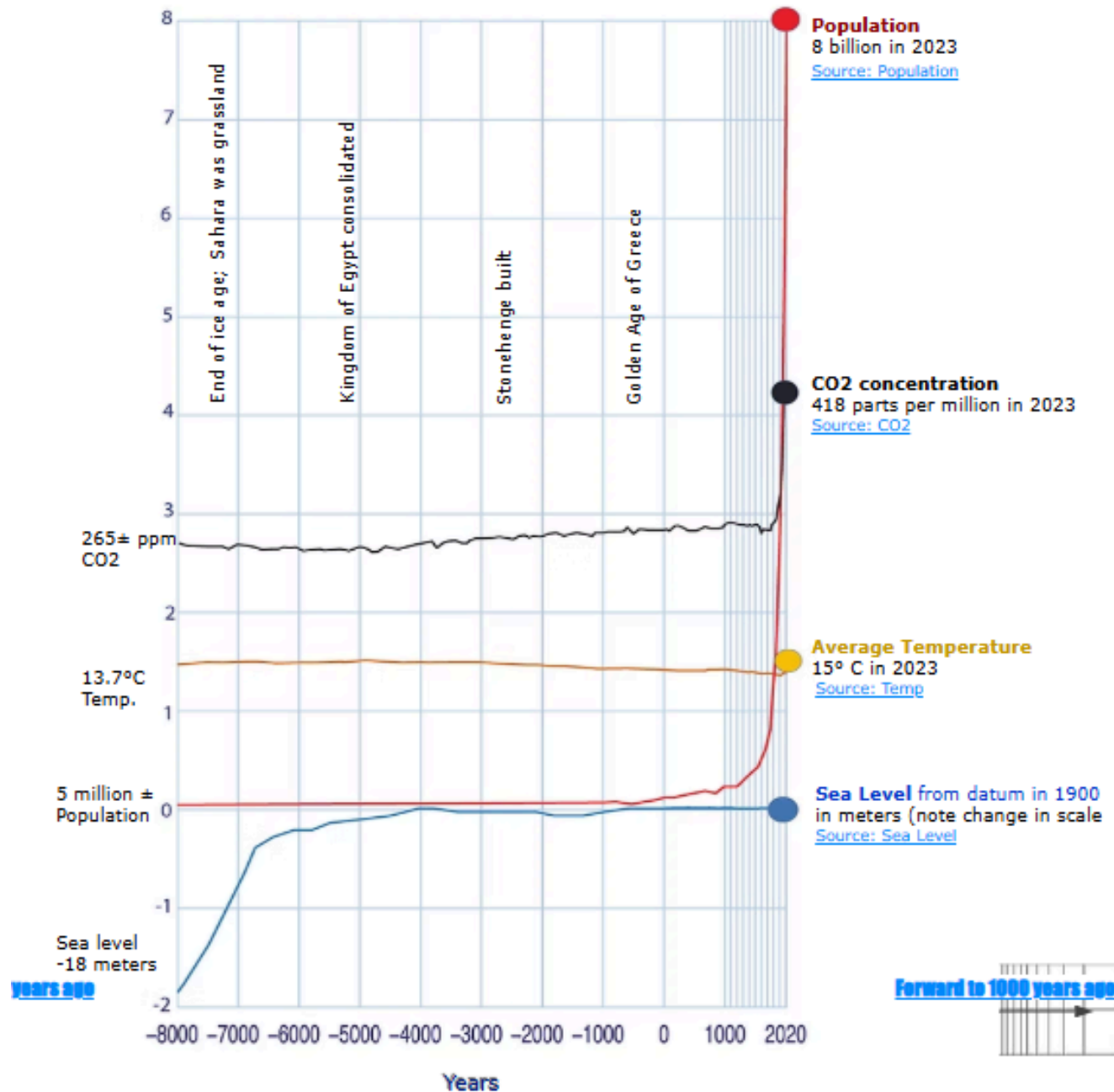
1000 years ago

### Measures

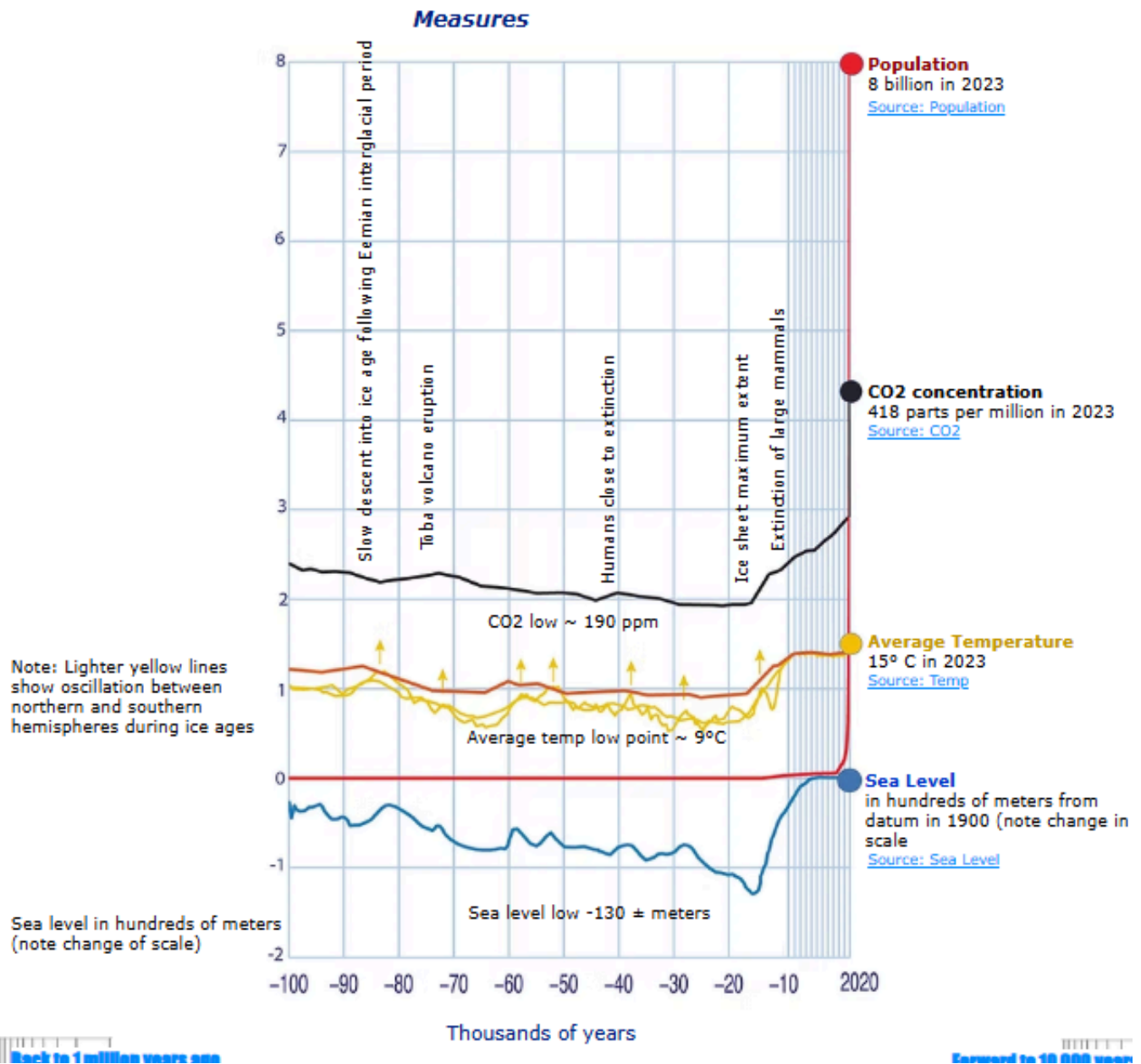


10,000 years ago

Measures

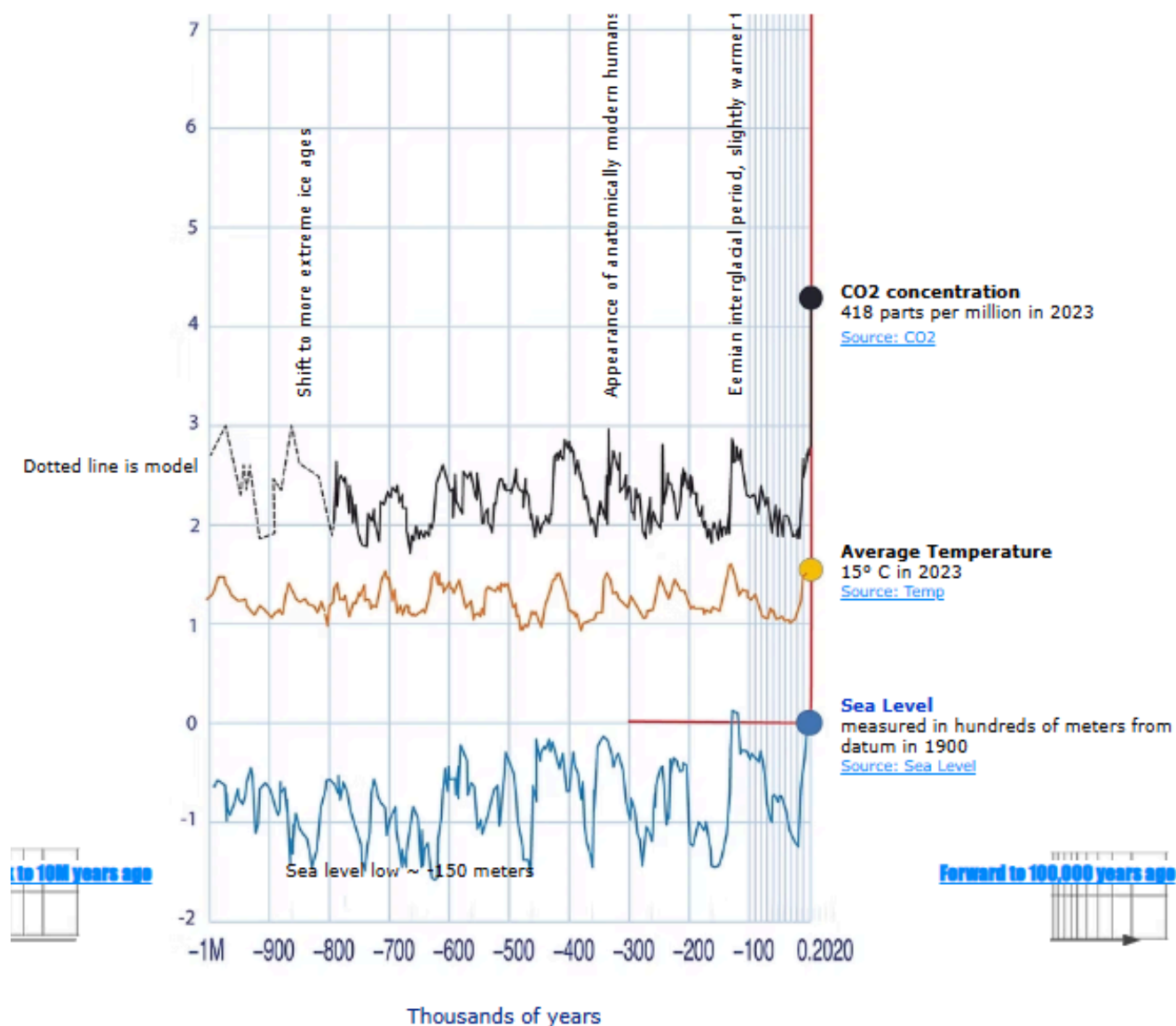


100,000 years ago

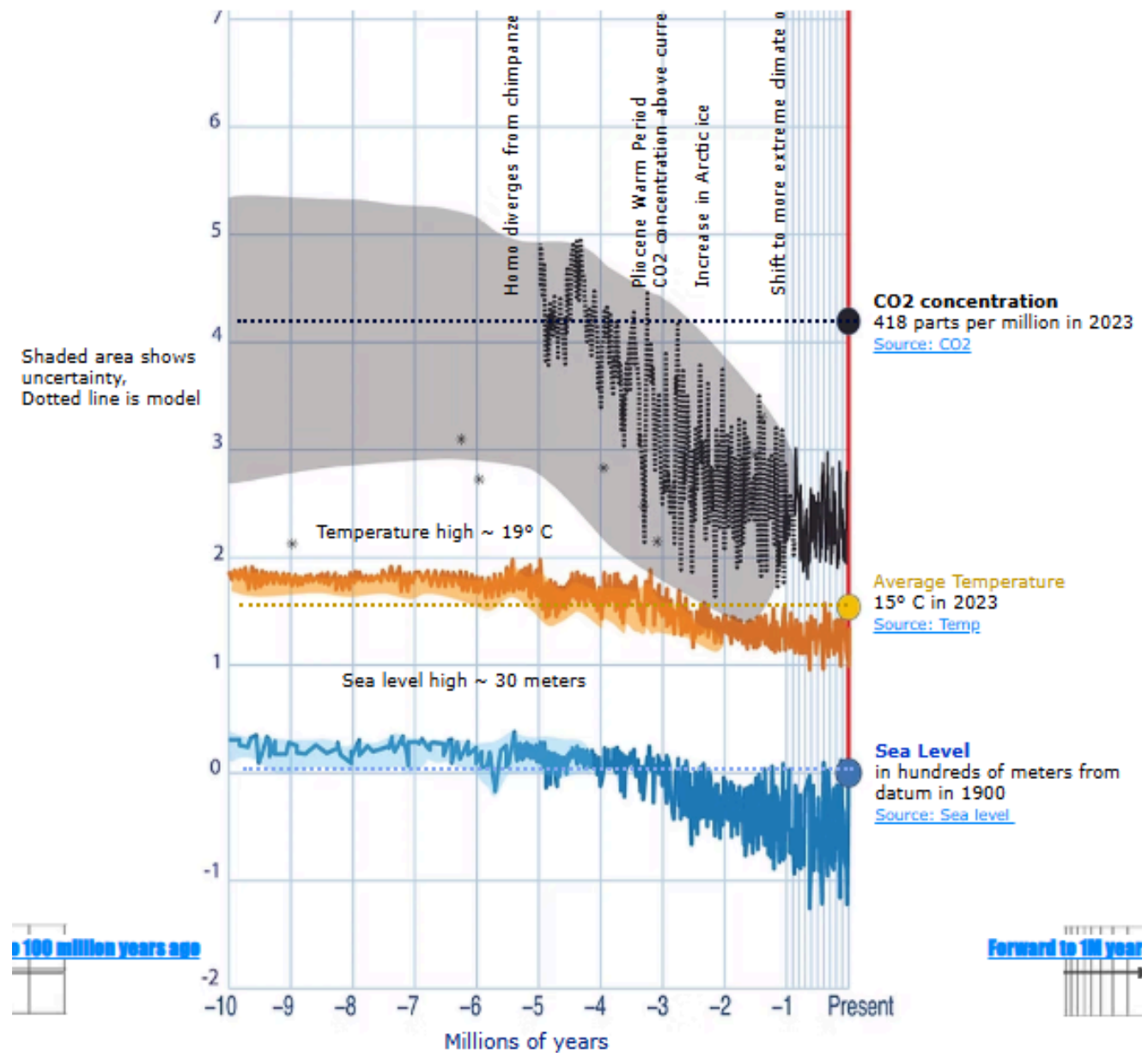




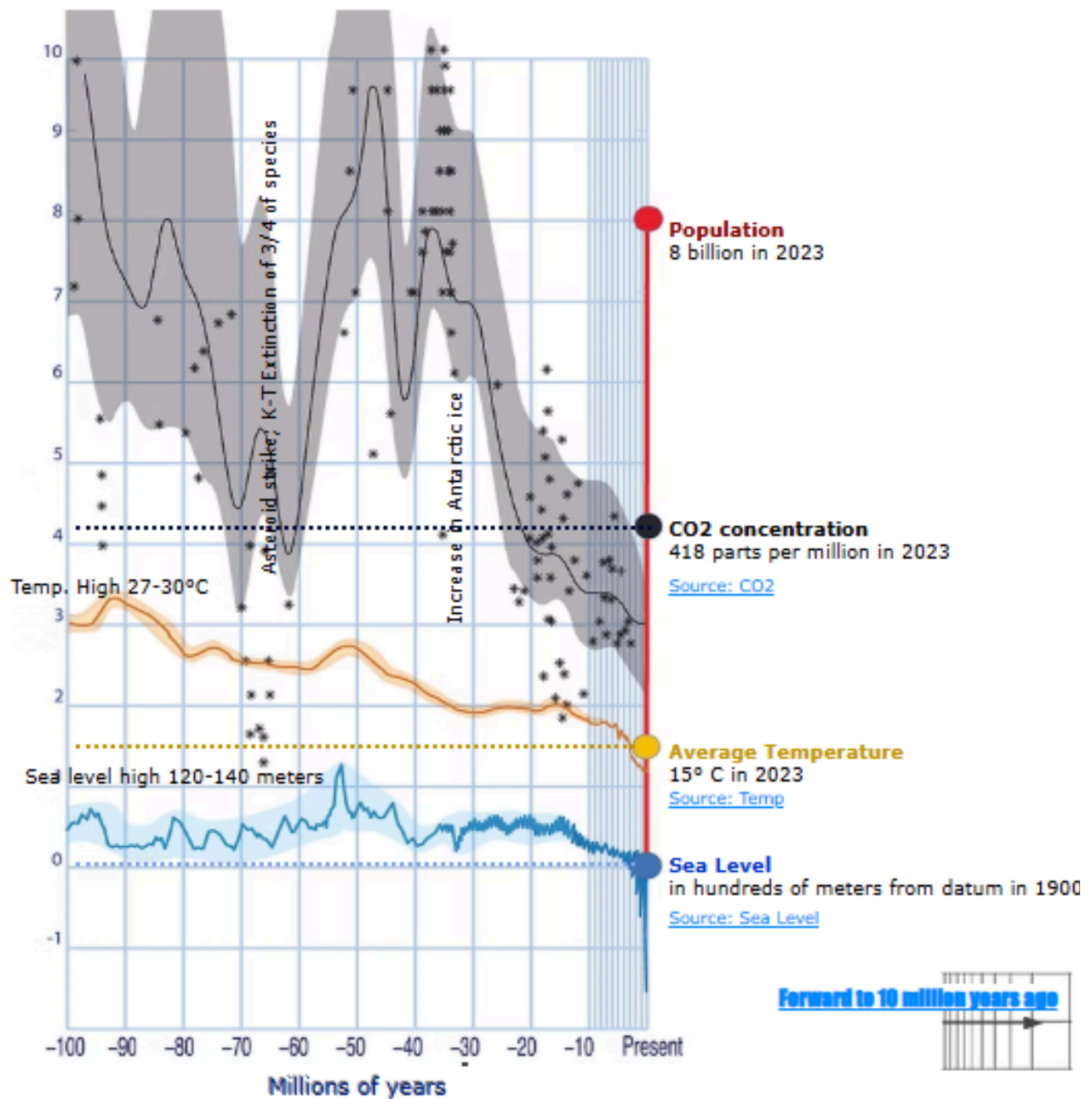
1 Million years ago



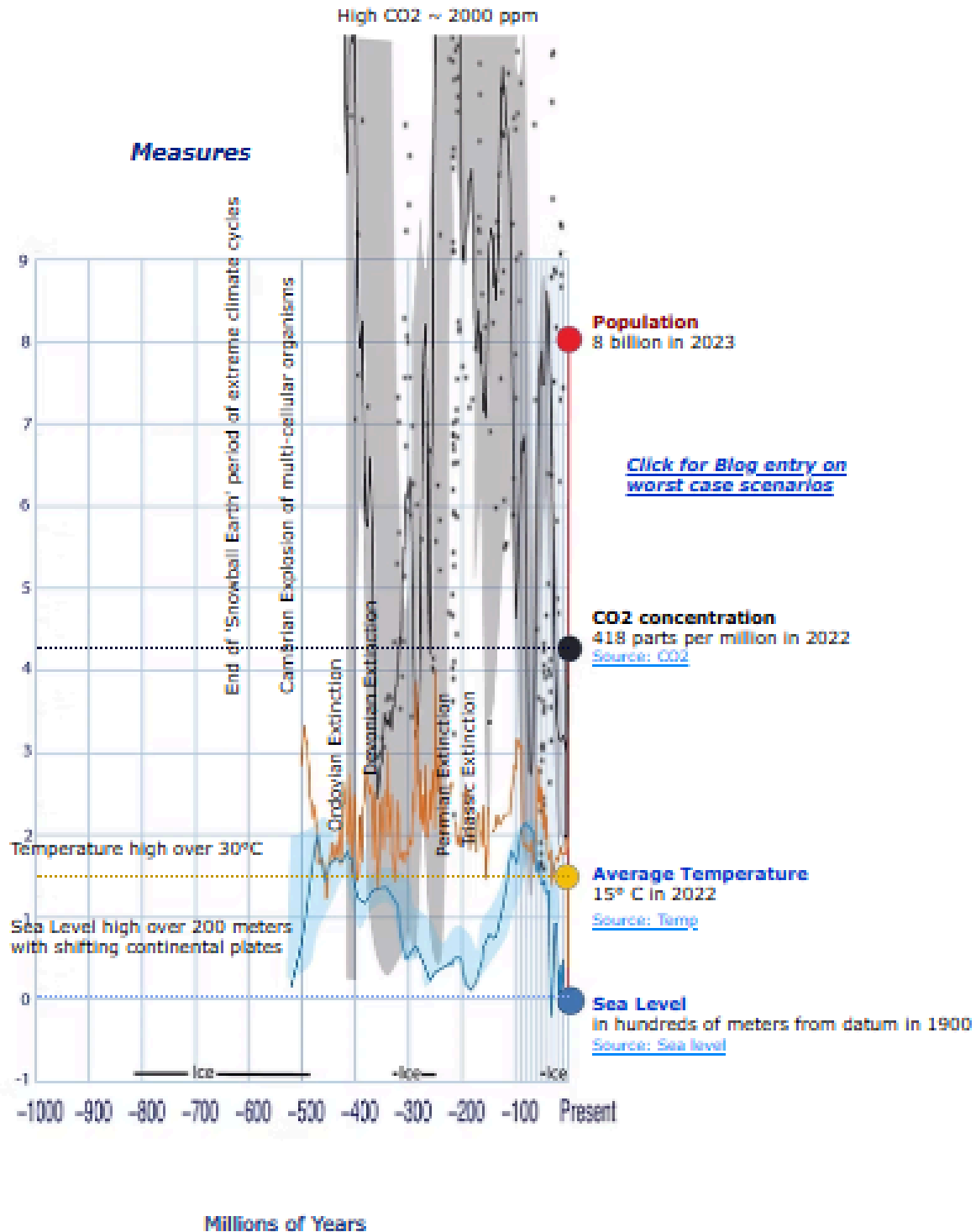
10 Million years ago



100 Million years ago



1 Billion years ago



# ***PUNCHLINES***

- When you look at just the last 1 or even 10 years, change is not so evident.
- Over the last 100 years , change is mind-boggling.
- Over 10,000 and 100,000 and 1,000,000 years, the big stories are temperature and sea level change.
- We're now at the highest temperature in 120,000 years, and the highest CO<sub>2</sub> level in 3 million years.