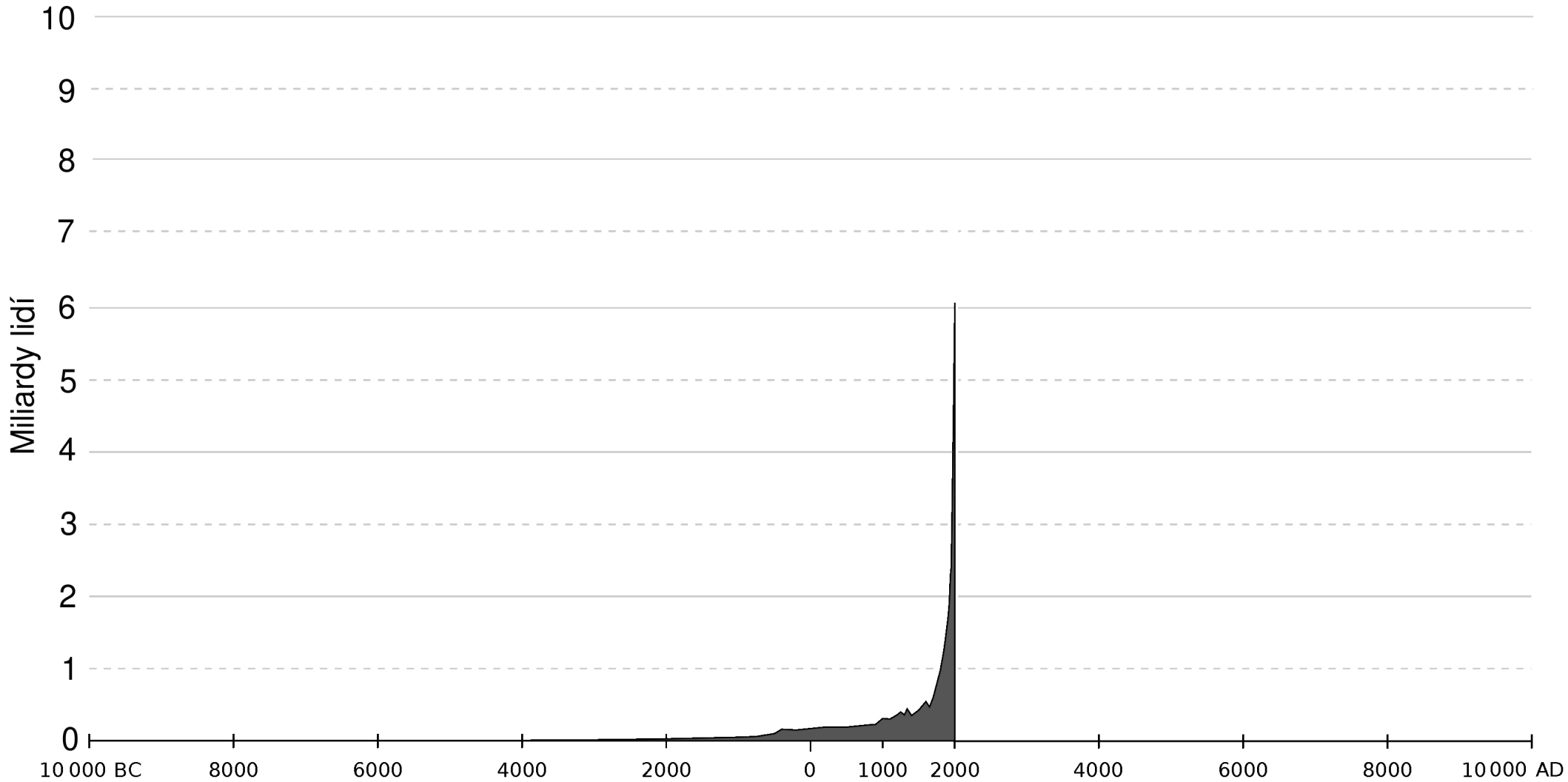
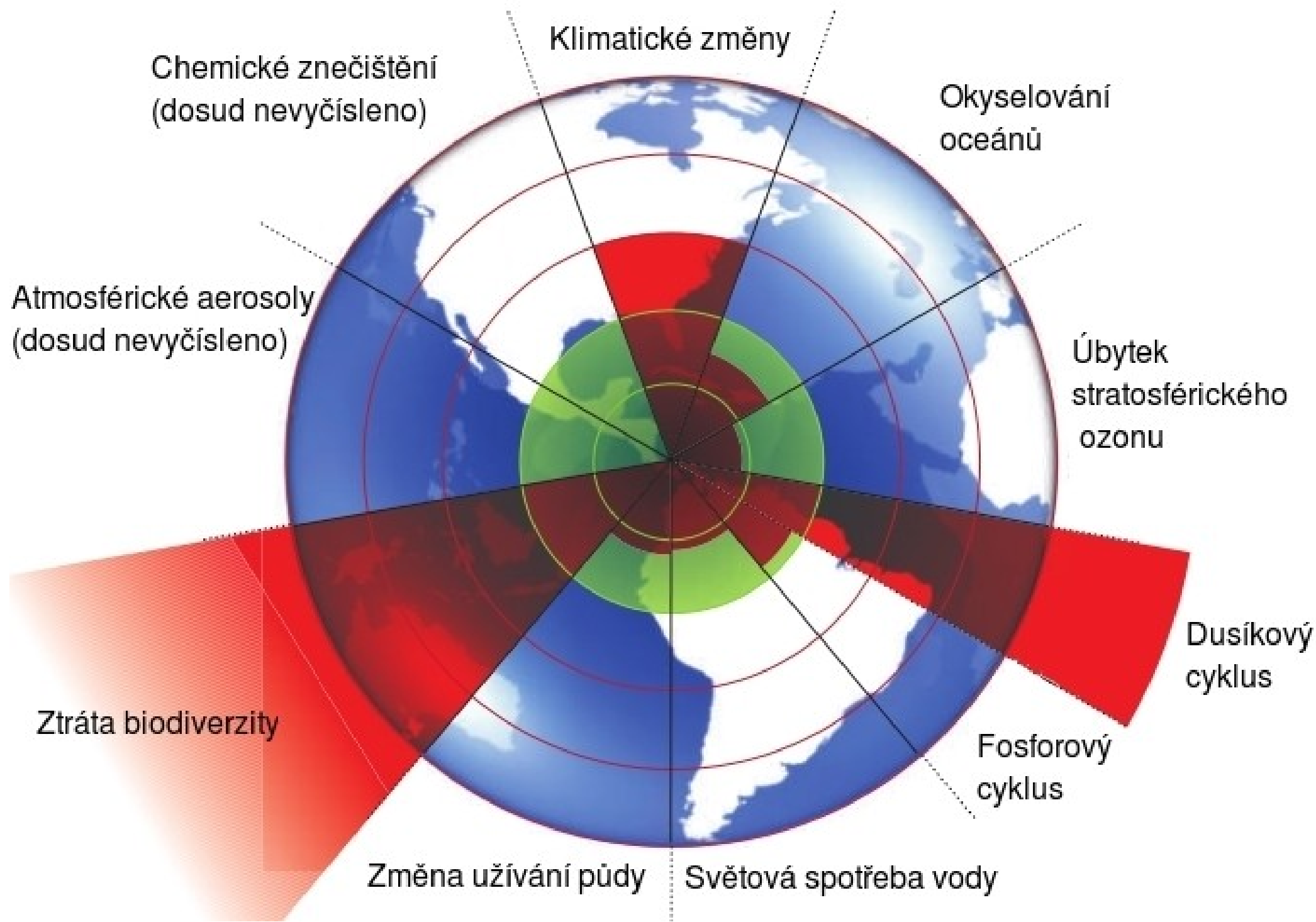
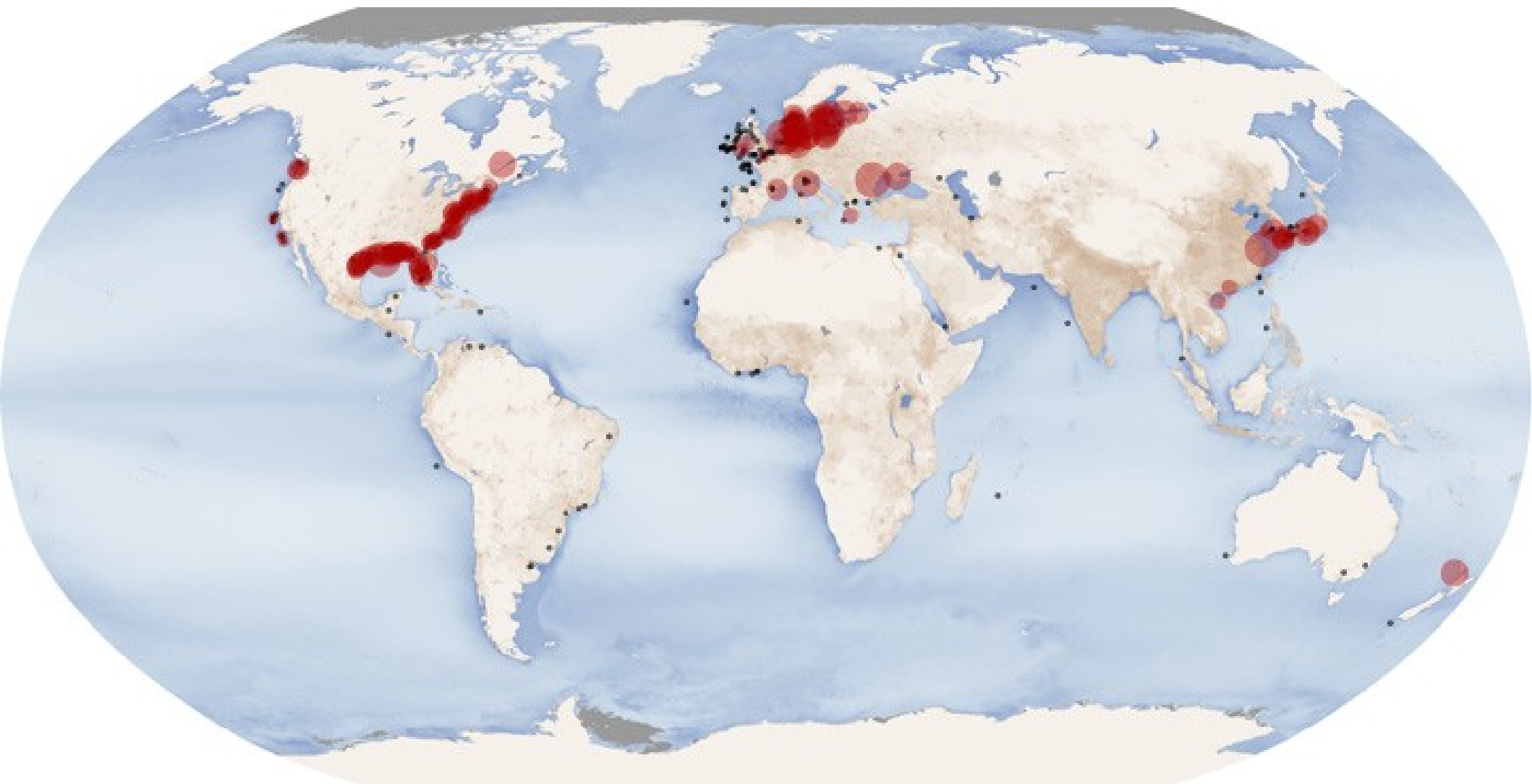


Světová populace (horizont 20 000 let)







Particulate Organic Carbon (mg/m³)



Population Density (persons/km²)



Dead Zone Size (km²)



<http://earthobservatory.nasa.gov/IOTD/view.php?id=44677>

Okyselování oceánů

Pohlčováním CO_2 ve vodě vzniká kyselina uhličitá H_2CO_3 .

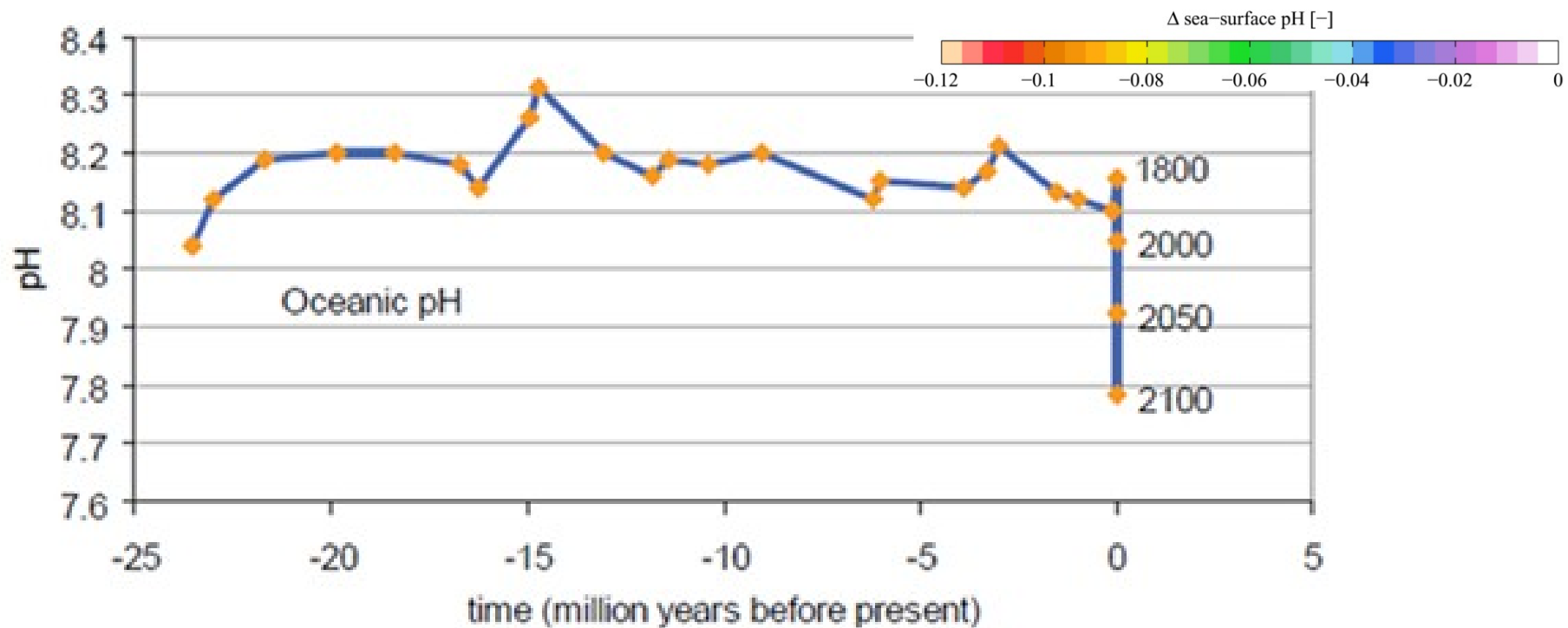
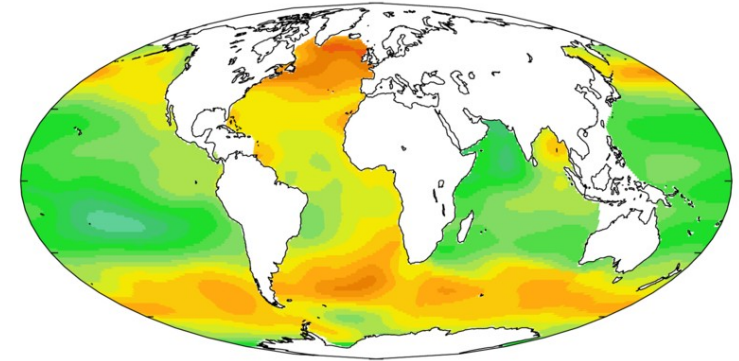
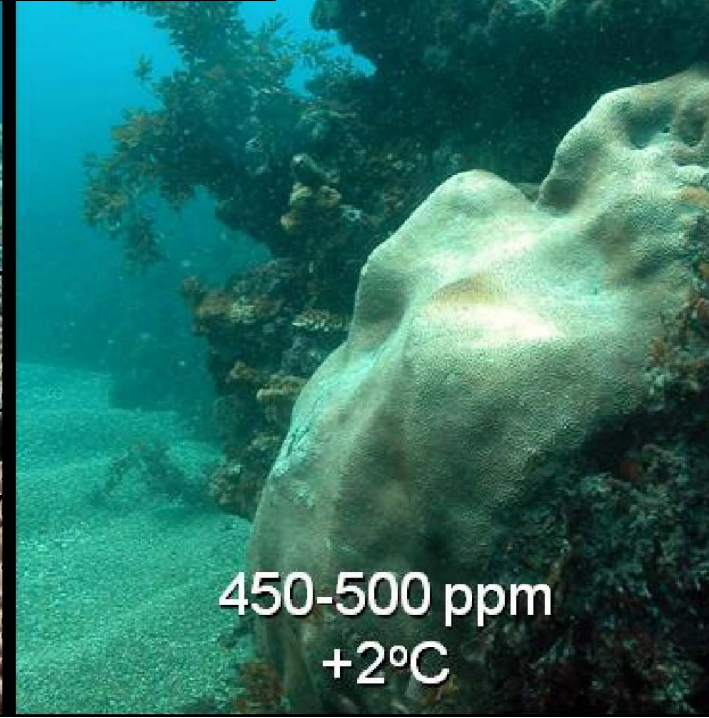
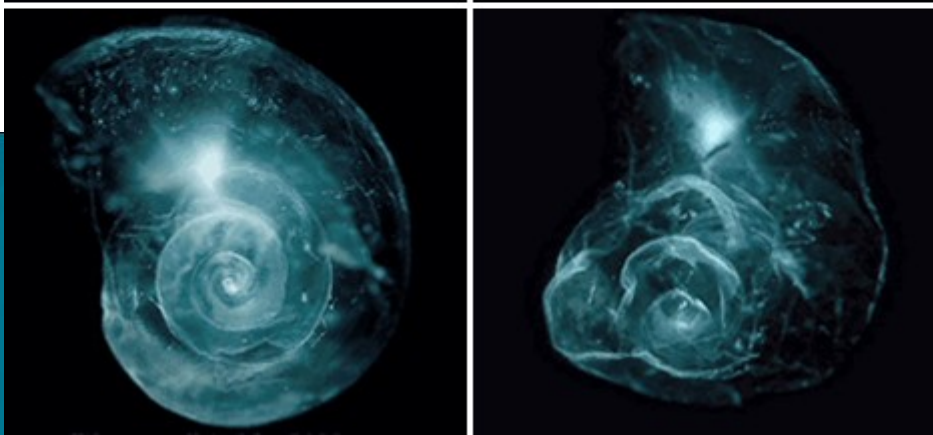
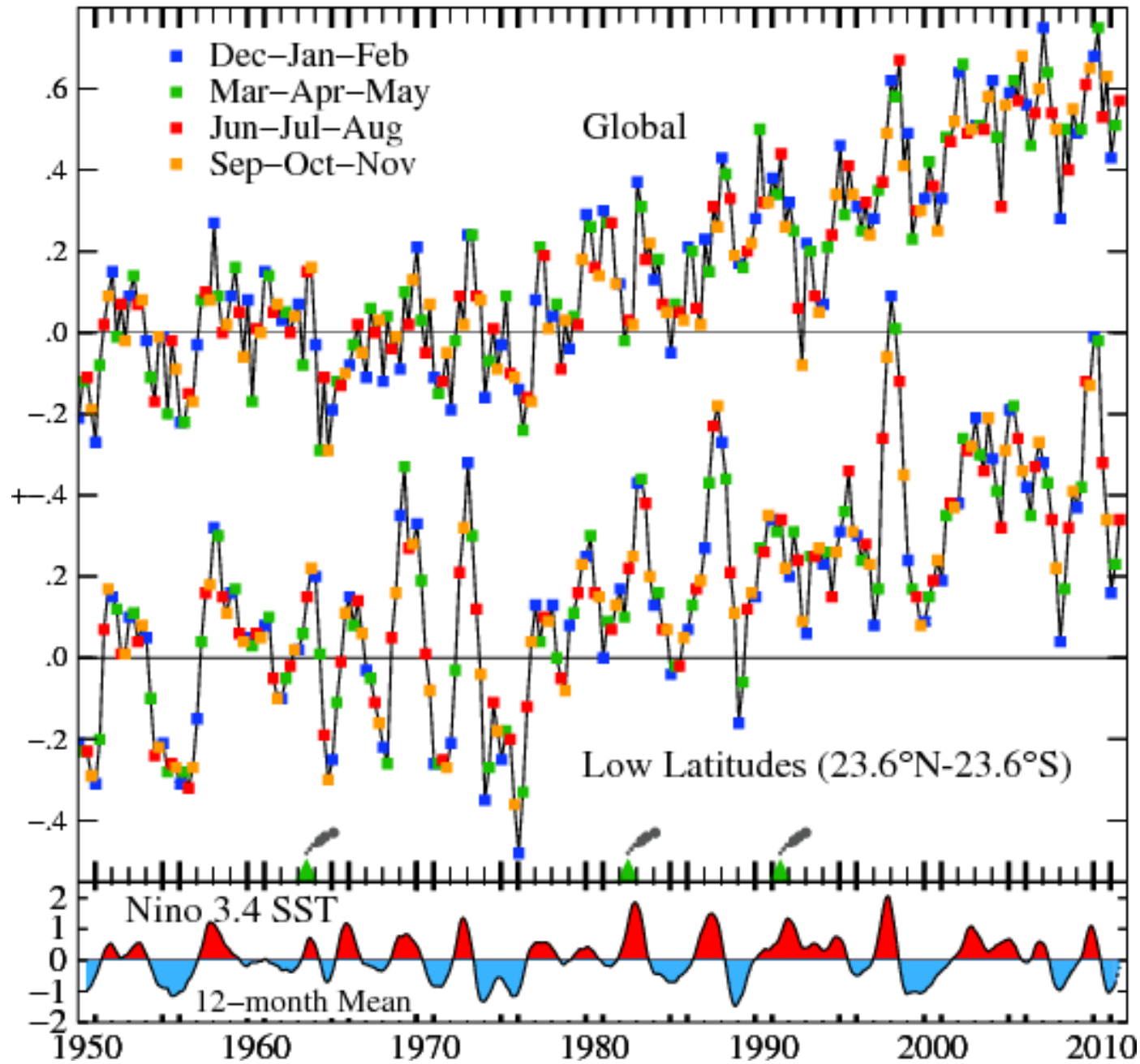


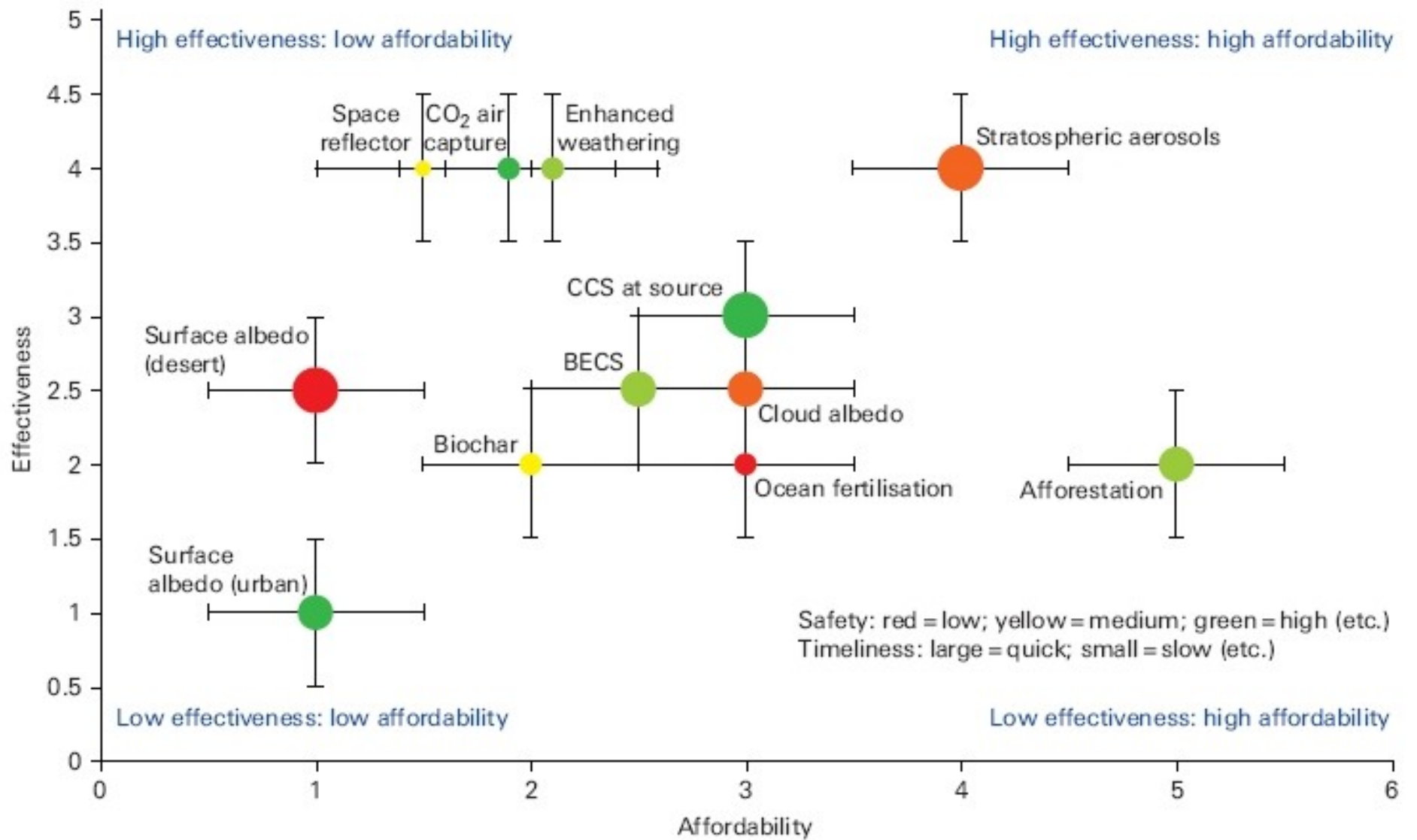
Figure 1. Past and contemporary variability of marine pH. Future predictions are model derived values based on IPCC mean scenarios (from Turley *et al*, 2006. Cambridge University Press, 8, 65-70).



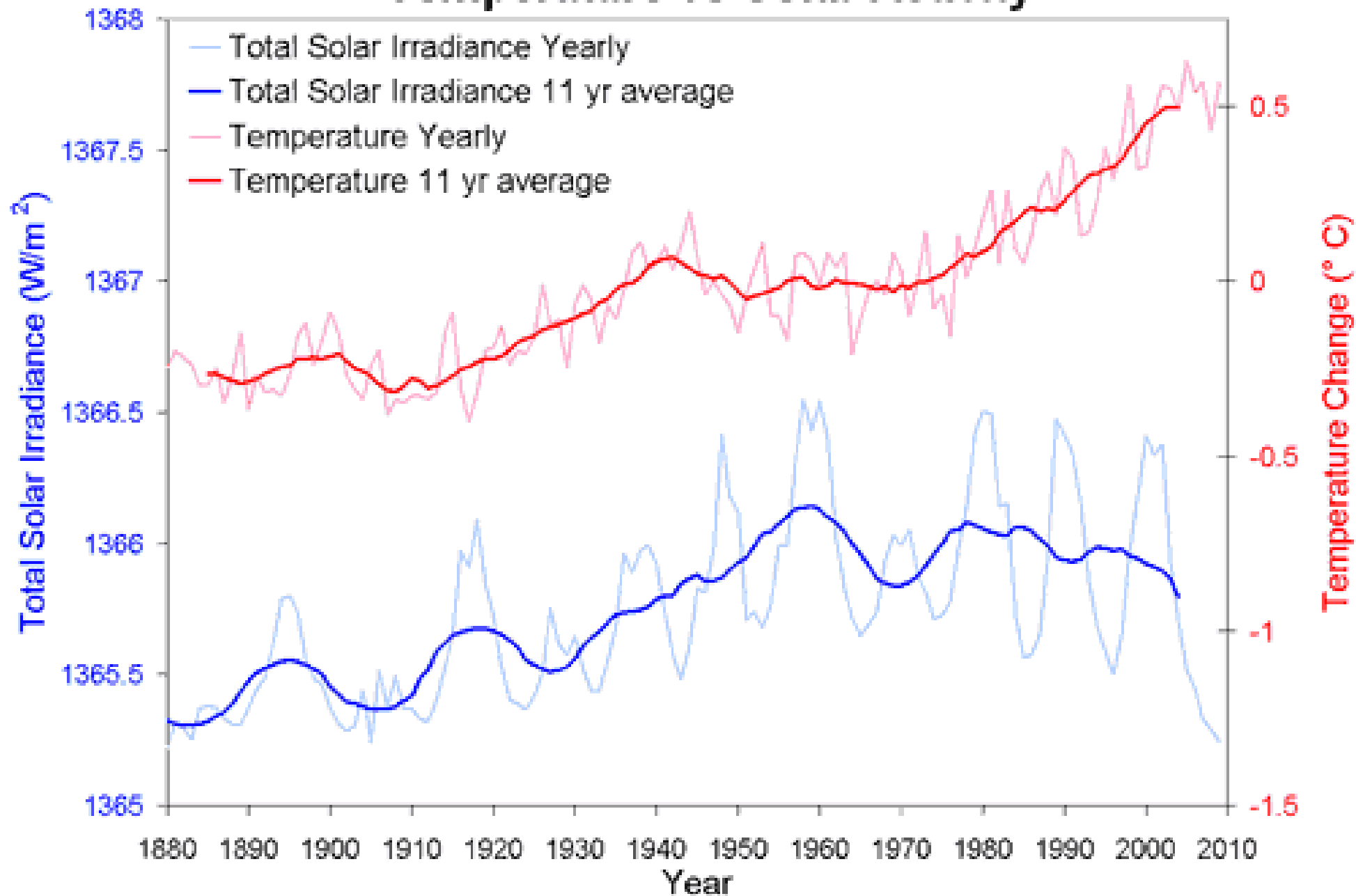
Změny globální teploty

Temperature Anomaly (°C): Seasonal Resolution



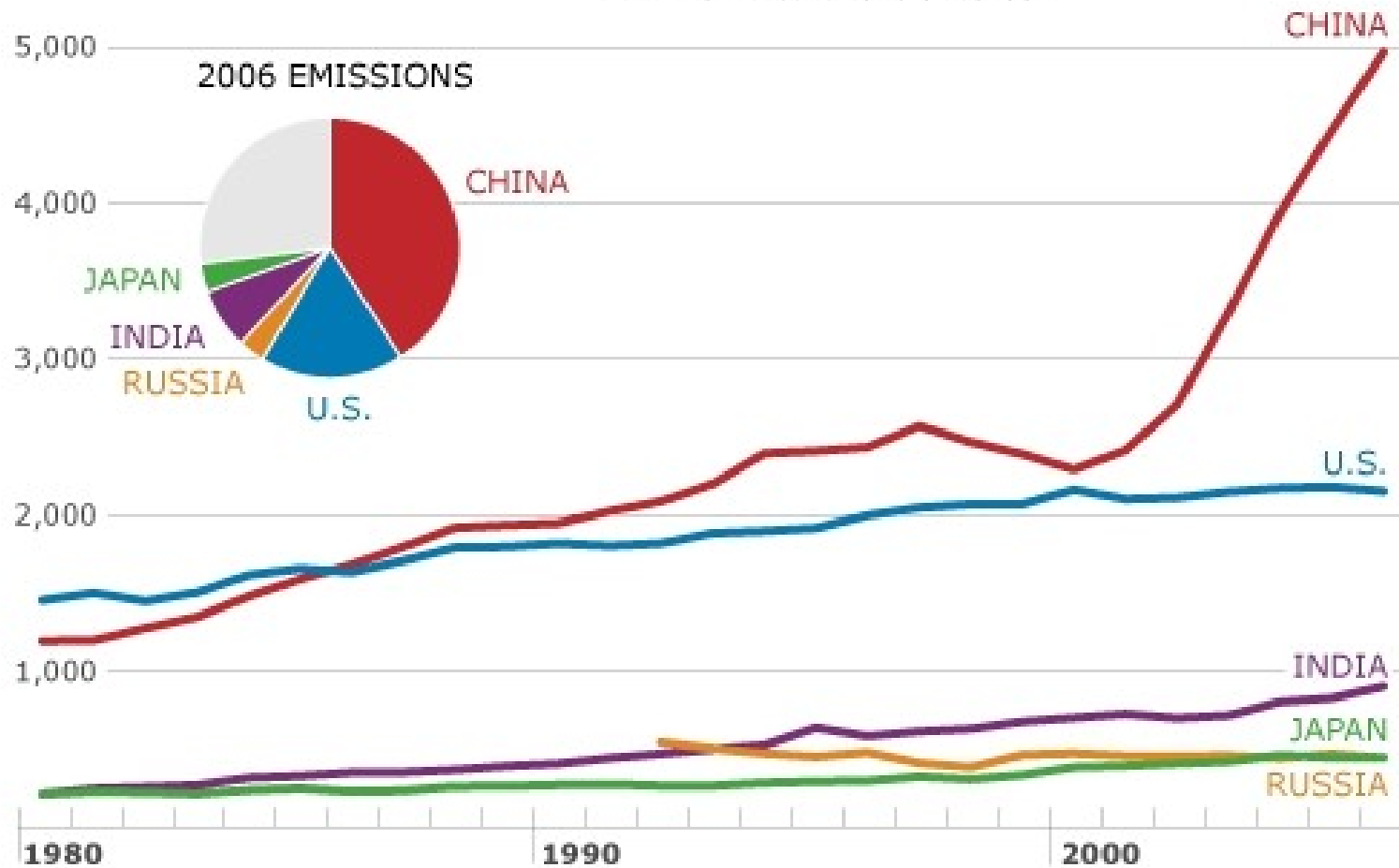


Temperature vs Solar Activity



OVERALL OIL GAS COAL

CO2 EMISSIONS FROM COAL In million metric tons of carbon

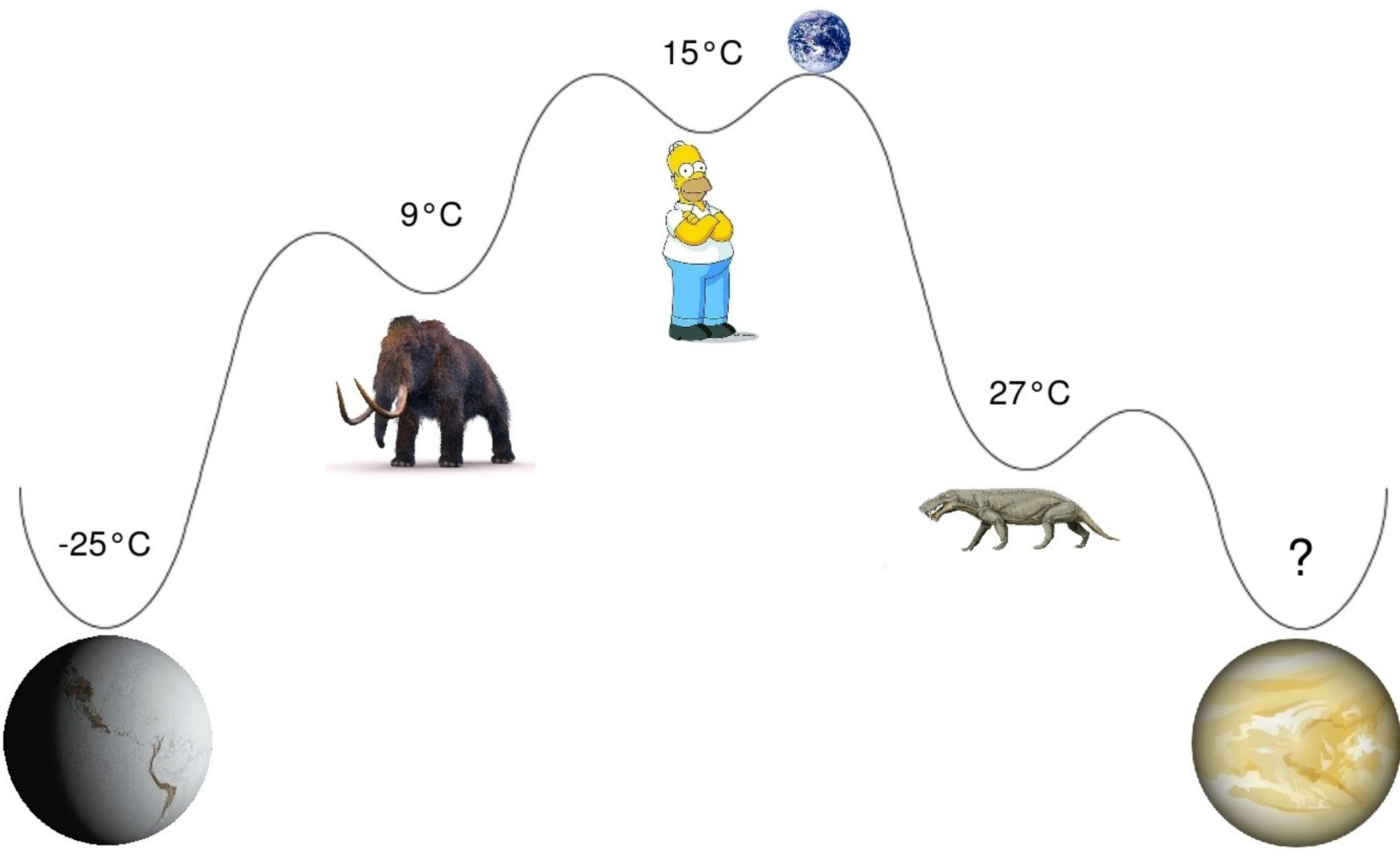


SOURCE: Energy Information Administration



ROLL OVER THE ARROW TO SEE ORIGINAL DATA BEFORE MNN TRANSLATION.

<http://www.mnn.com/earth-matters/translating-uncle-sam/stories/eia-which-countries-produce-the-most-co2>



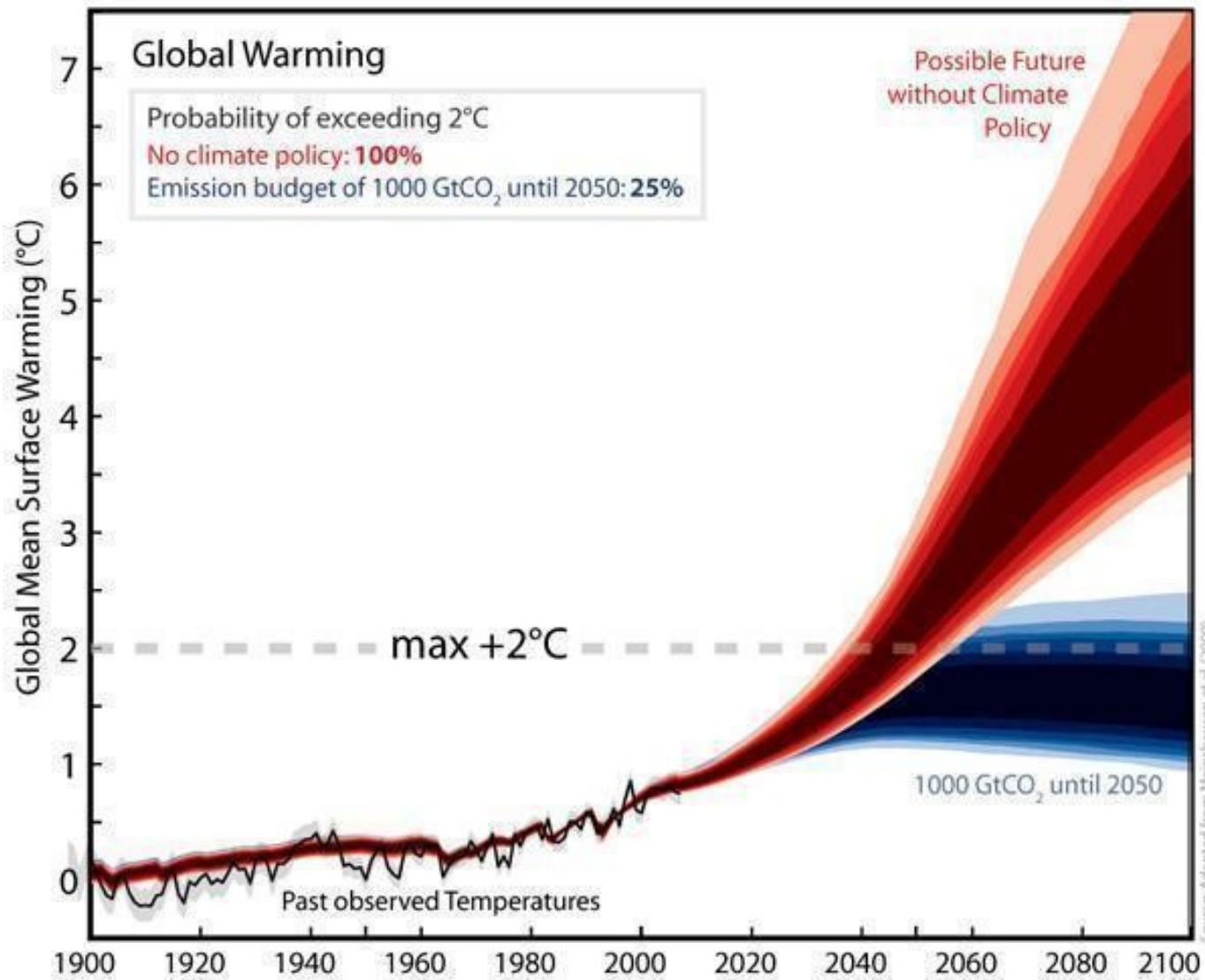
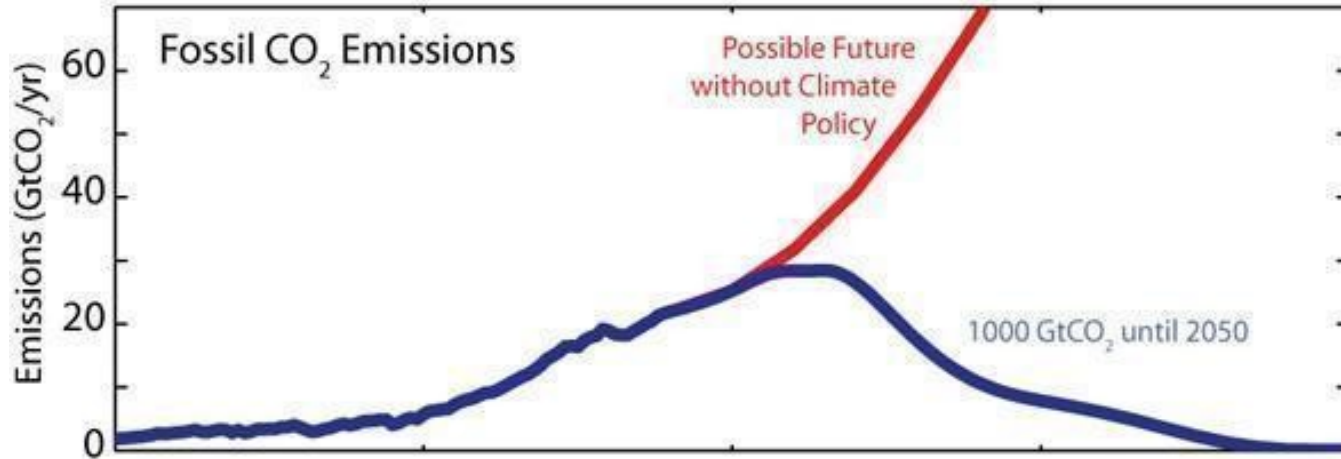
-25°C

9°C

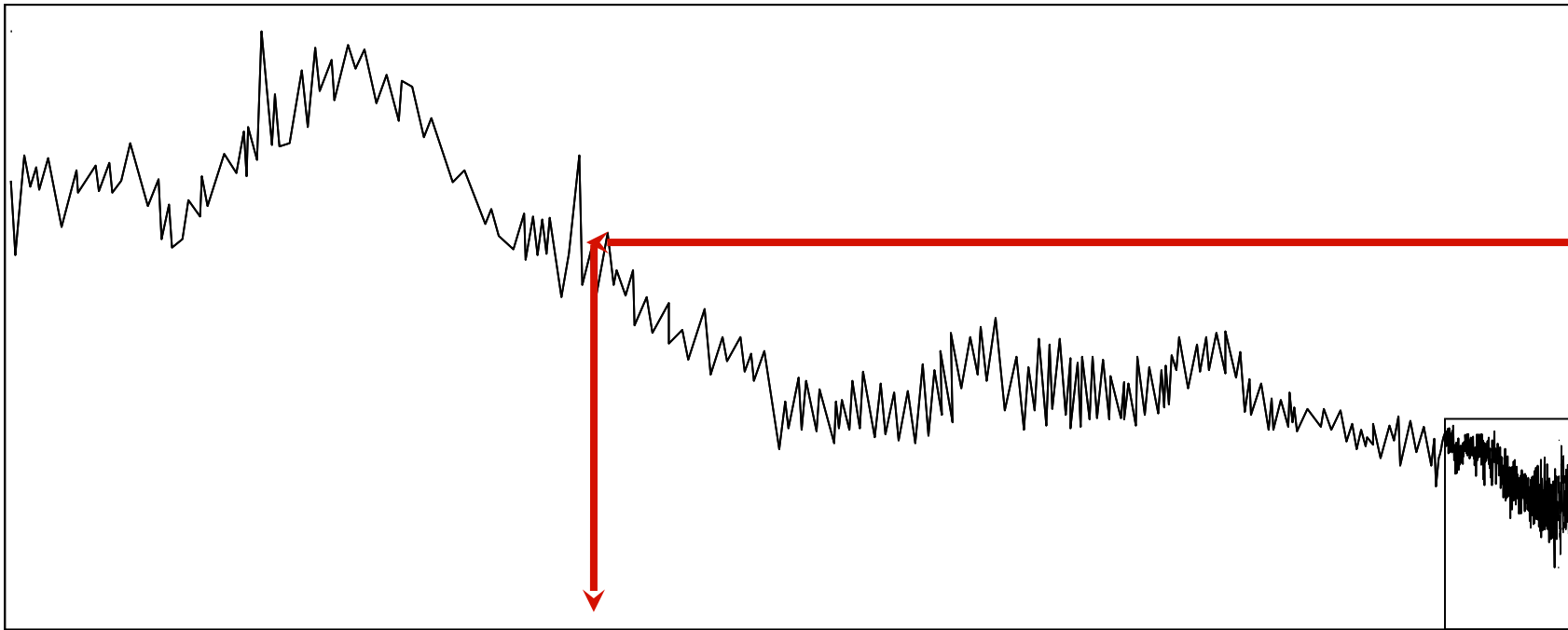
15°C

27°C

?



Oteplení o 6 °C



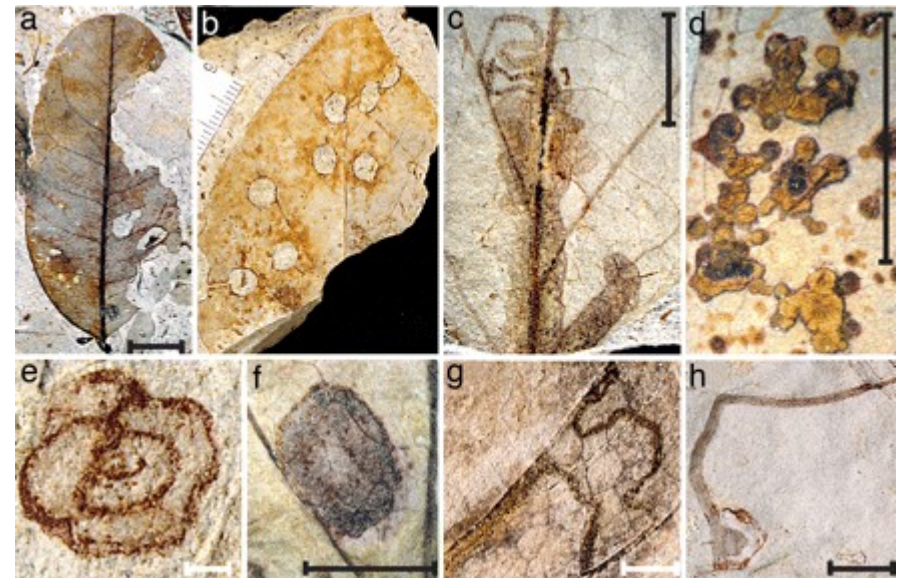
40 mil. let

PETM Paleocén-Eocén Termální Maximum

Před 55 miliony let

Rychlý přísun uhlíku do atmosféry
(pravděpodobně z hydrátů metanu)

Rychlé oteplení, změny v ekosystému, invaze hmyzu

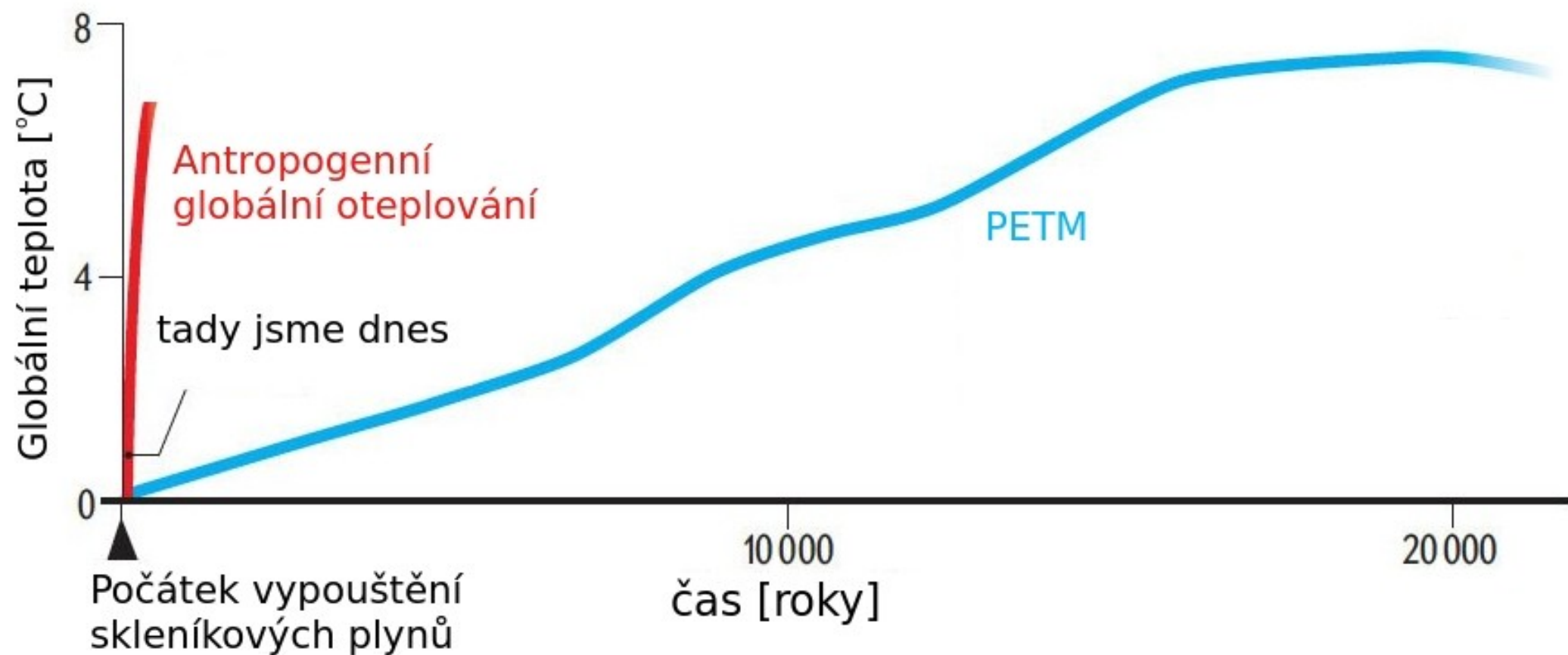


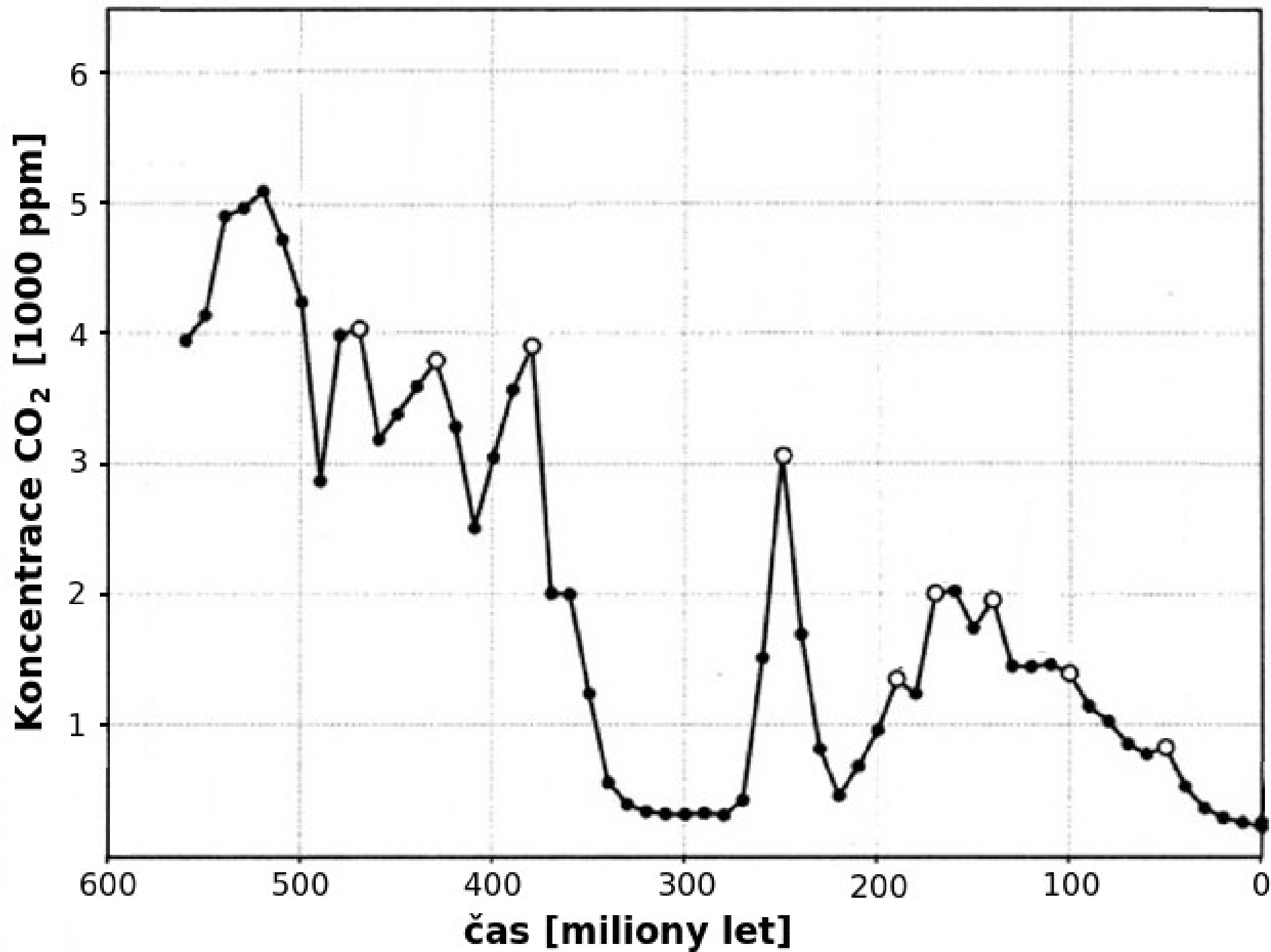
<http://www.pnas.org/content/105/6/1960.full>

|
<http://ngm.nationalgeographic.com/2011/1/2/better-weather/black-photosynth>

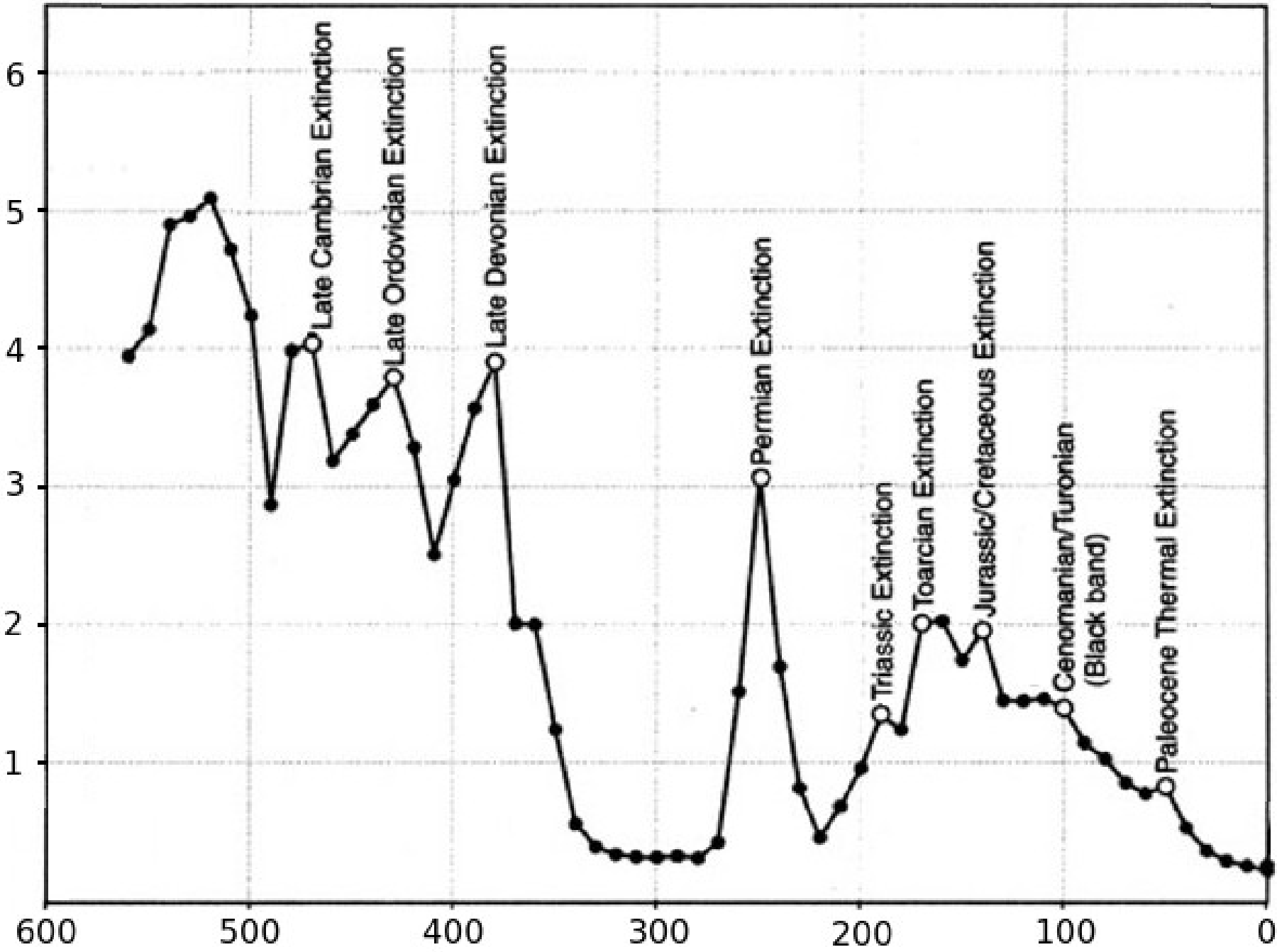
Rychlost oteplování PETM a dnes

Globální teplota v současnosti roste mnohem rychleji než během PETM





Koncentrace CO₂ [1000 ppm]



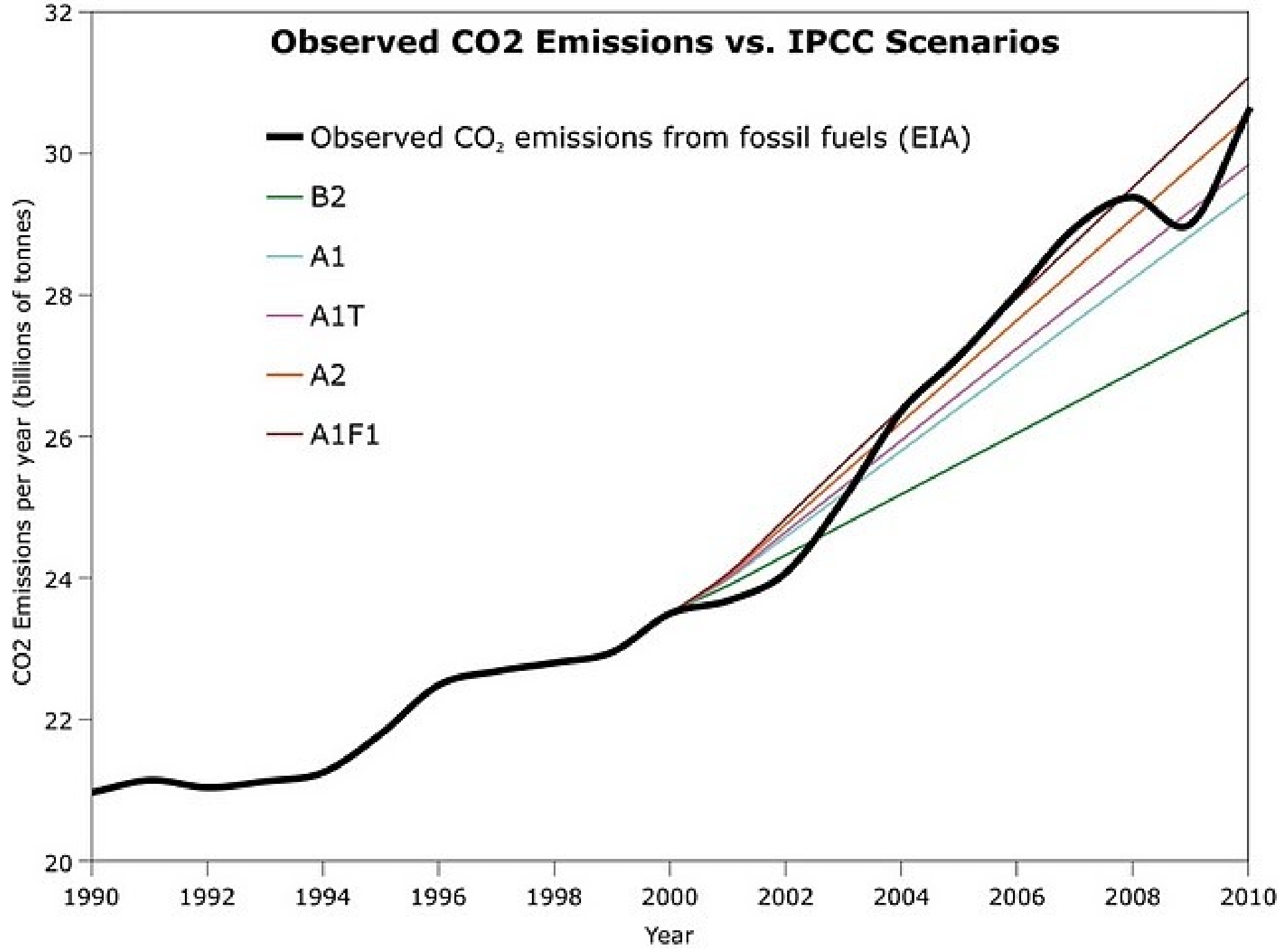
čas [miliony let]

Cíl pro CO₂:
< 350 ppm

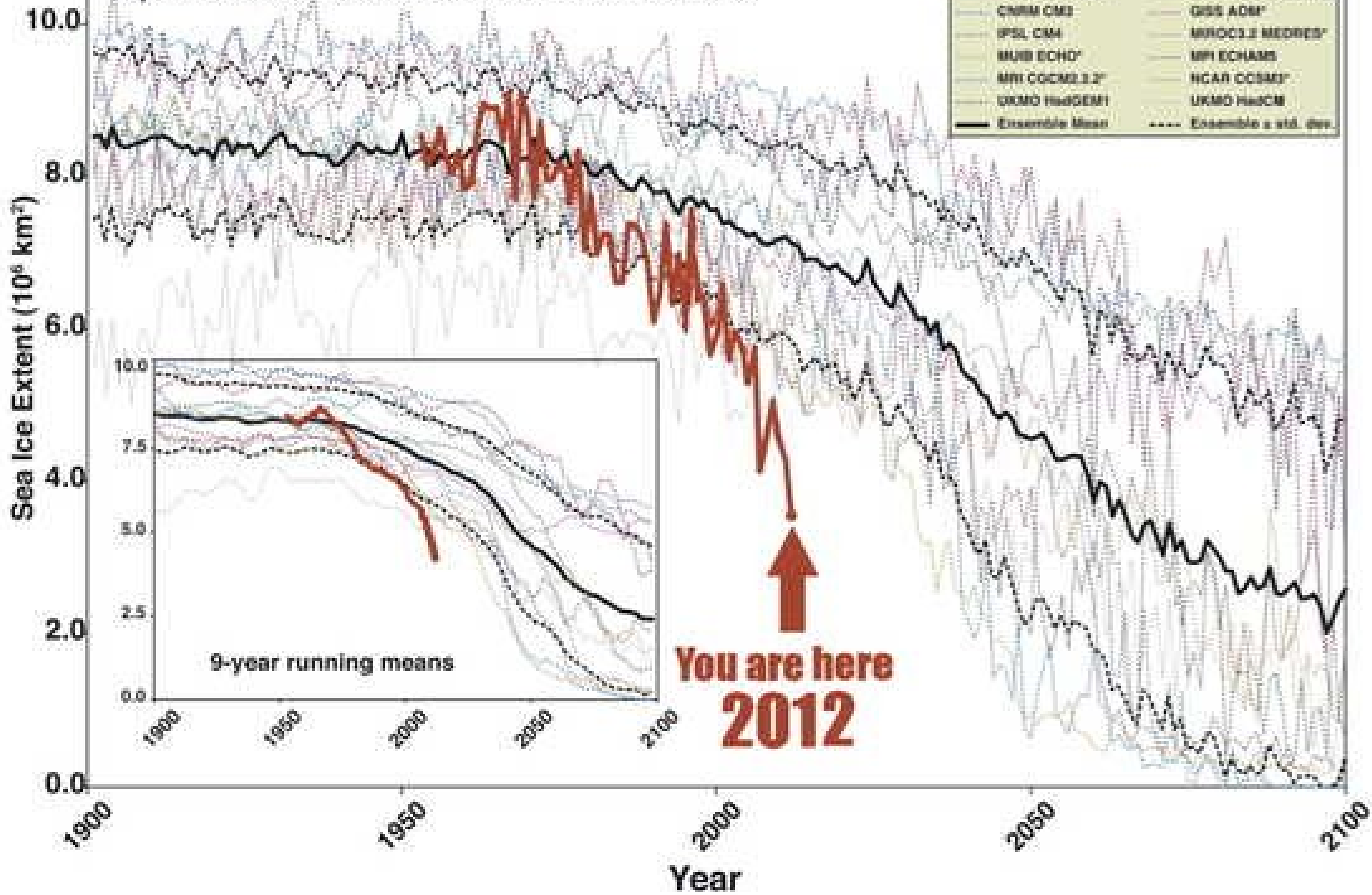
Pro záchranu světa, planety,
na níž se vyvinula civilizace.

Technicky splnitelný, ale základní
podmínkou je přestat spalovat uhlí.

Observed CO₂ Emissions vs. IPCC Scenarios

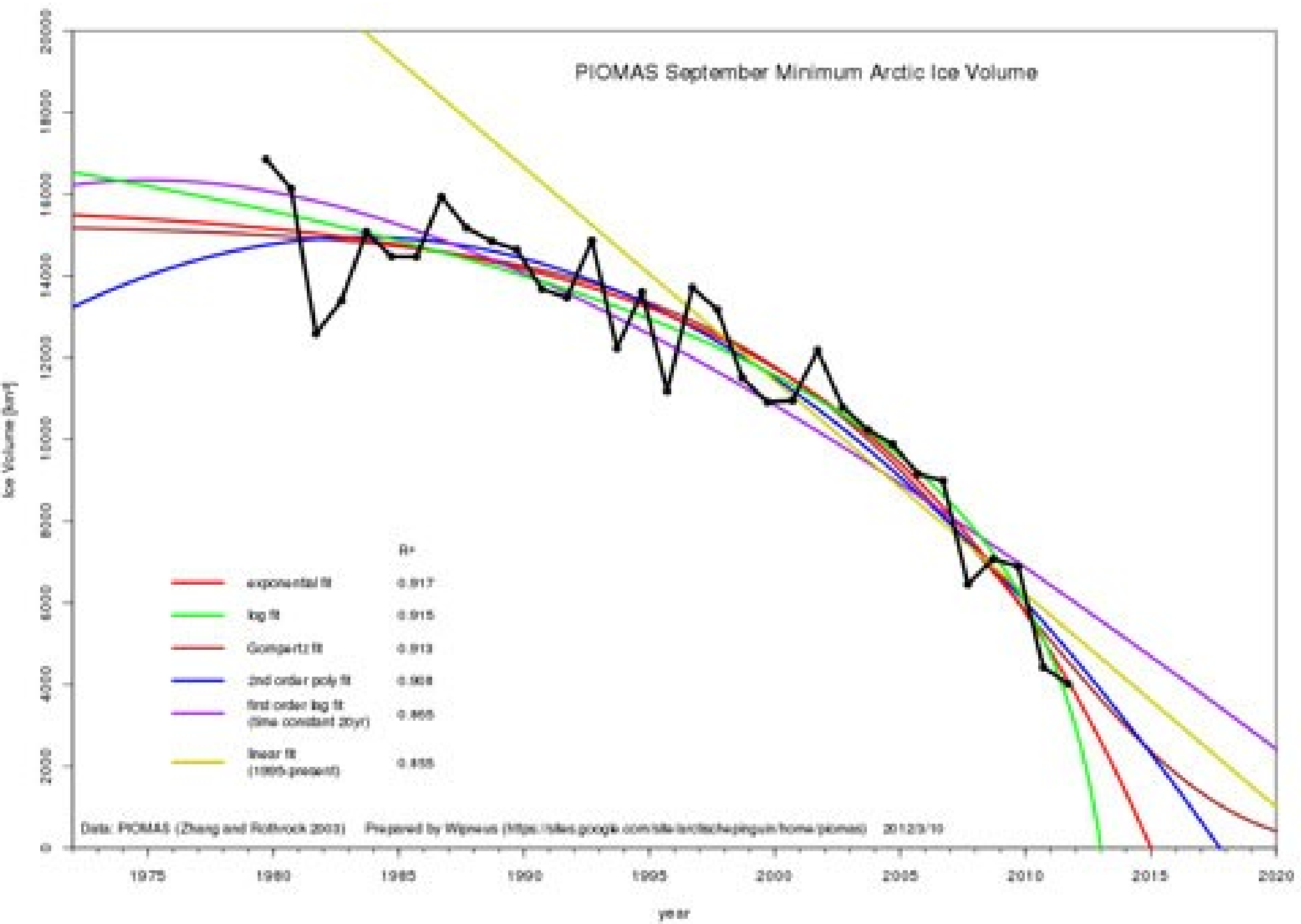


Arctic September Sea Ice Extent: Observations and Model Runs





PIOMAS September Minimum Arctic Ice Volume



Stabilizace klimatu

