

O klimi i klimatskim promjenama

Sara Ivasić

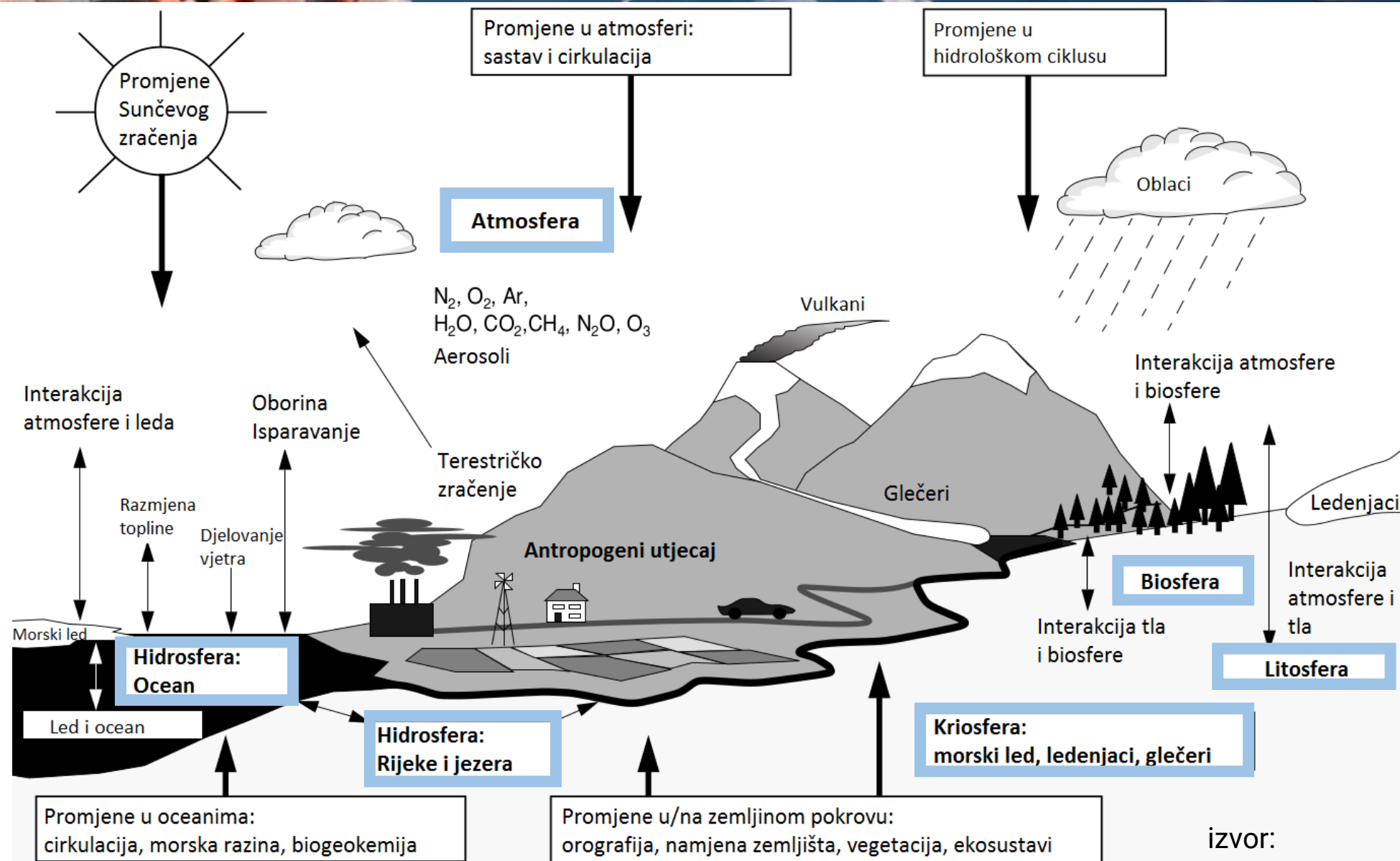
sara.ivasic@gfz.hr

Geofizički odsjek Prirodoslovno-matematičkog fakulteta

Sveučilište u Zagrebu

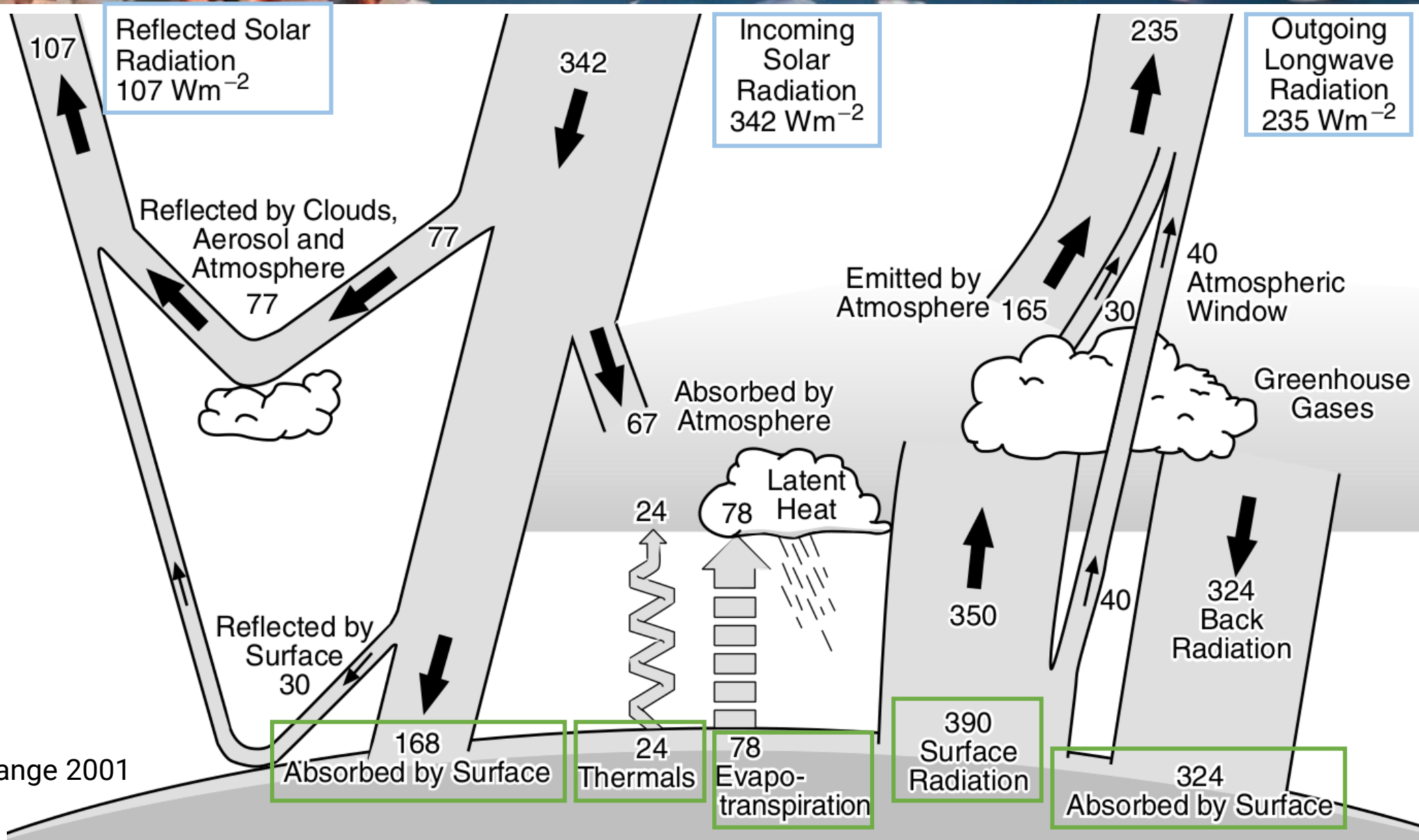


Klimatski sustav



izvor:
IPCC, TAR Climate Change 2001

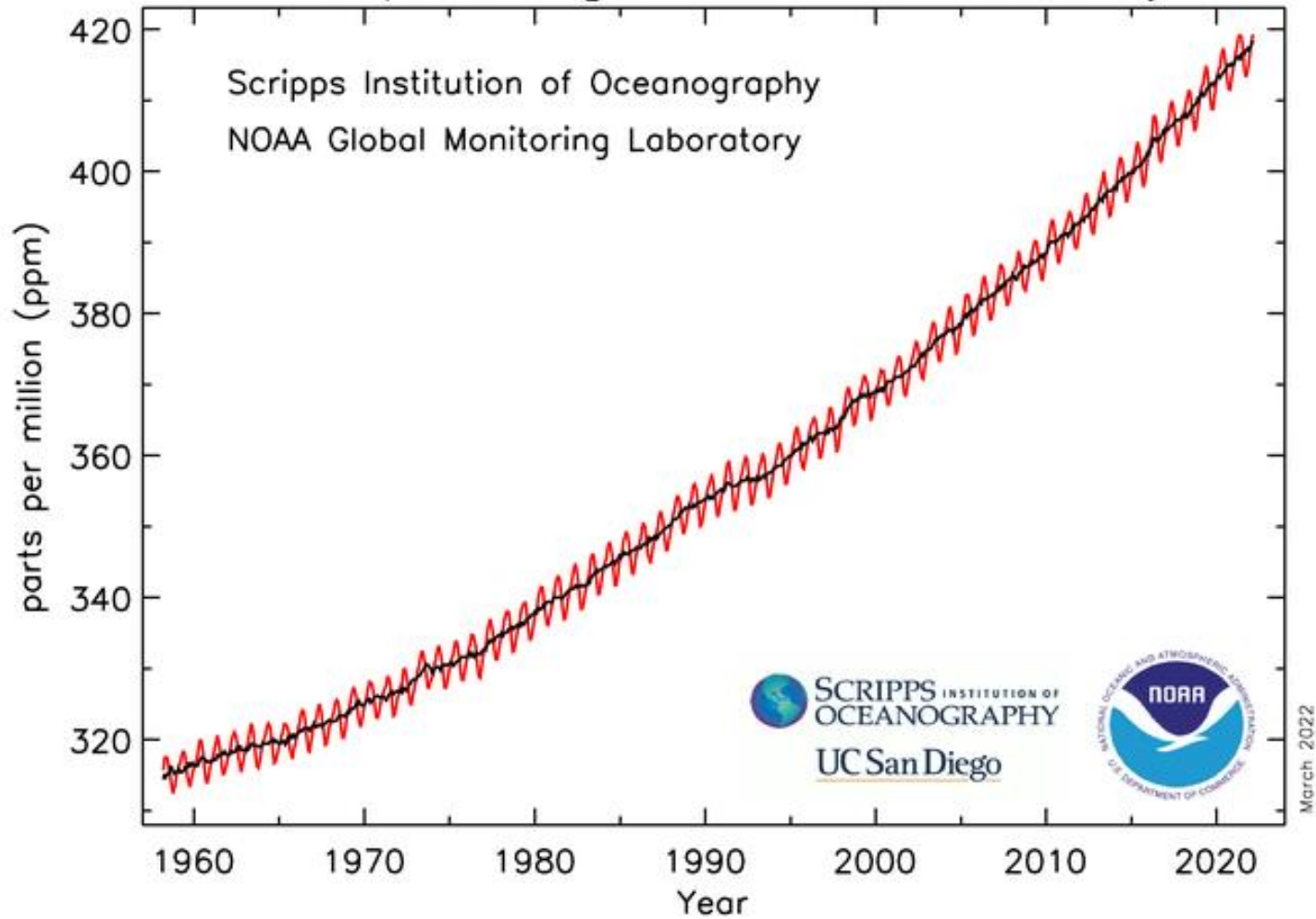
Bilanca zračenja



izvor:
IPCC, TAR
Climate Change 2001

Koncentracije stakleničkih plinova

Atmospheric CO₂ at Mauna Loa Observatory

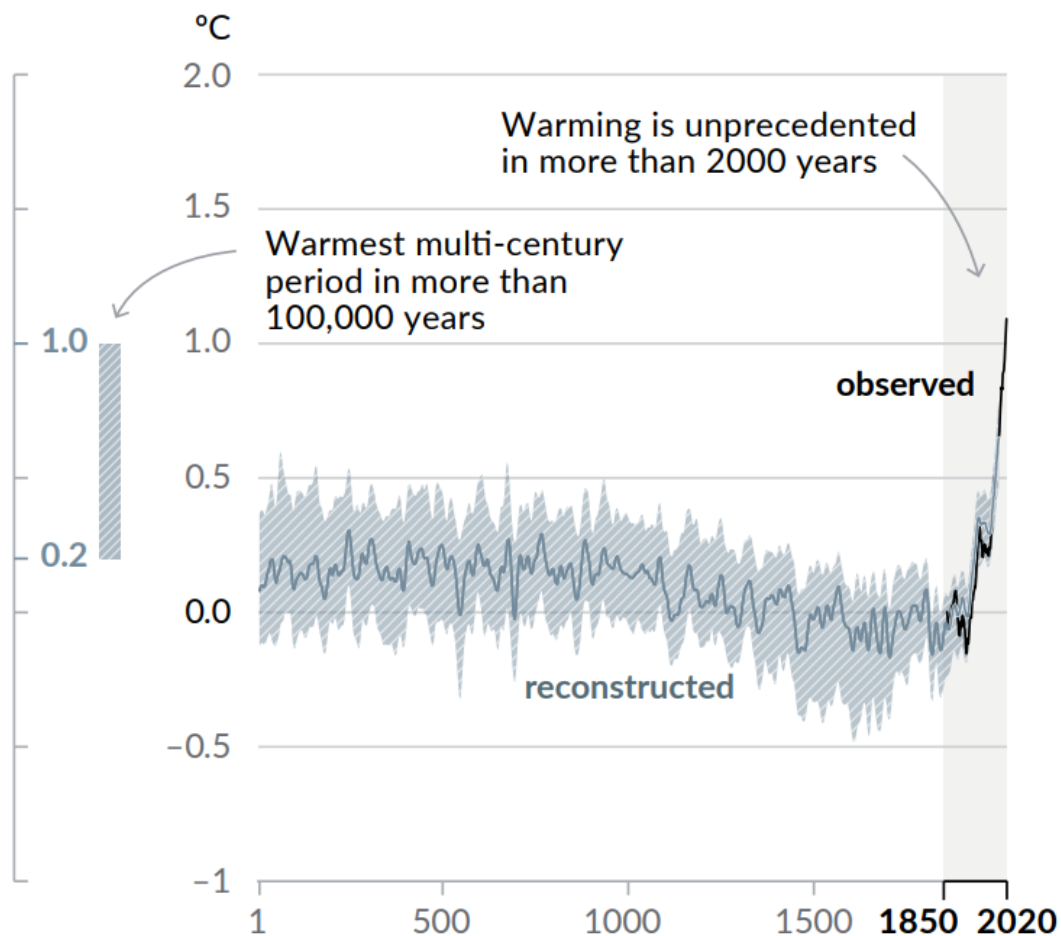


izvor:
(lijevo) NOAA; (desno) Wikipedia

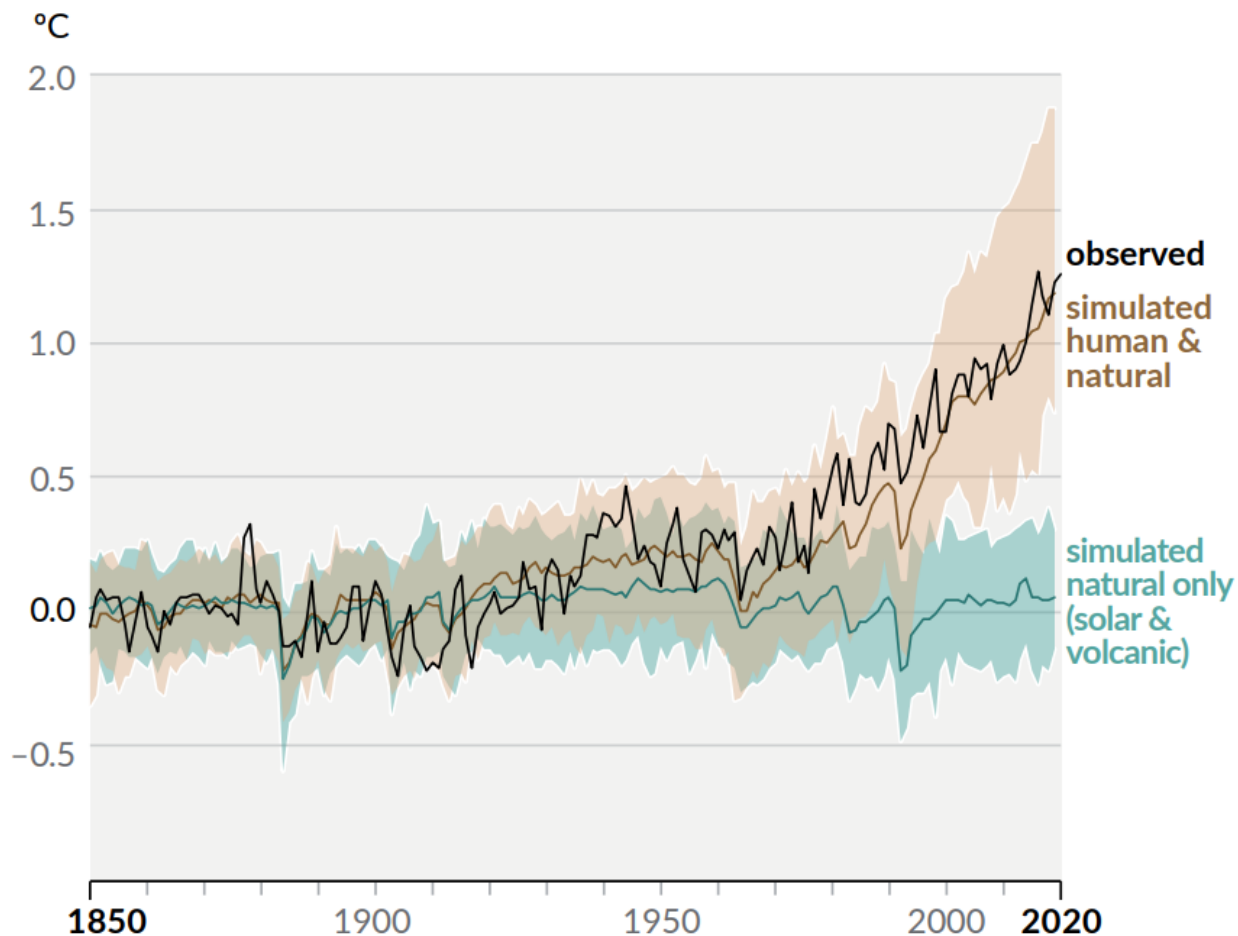
Prirodni vs. antropogeni utjecaj

Promjene u globalnoj površinskoj temperaturinu odnosu na razdoblje 1850.-1900.

(a) Change in global surface temperature (decadal average) as **reconstructed** (1–2000) and **observed** (1850–2020)



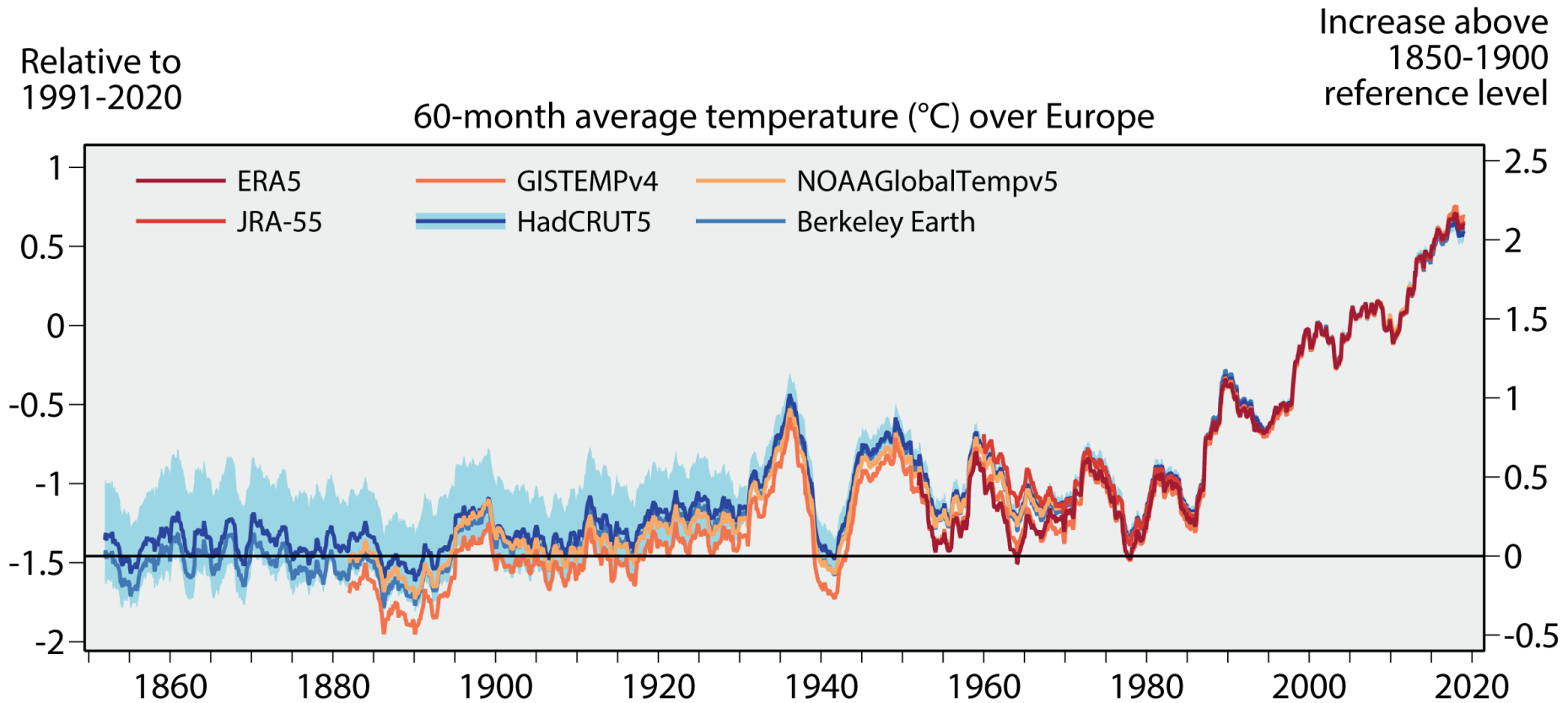
(b) Change in global surface temperature (annual average) as **observed** and simulated using **human & natural** and **only natural** factors (both 1850–2020)



izvor:

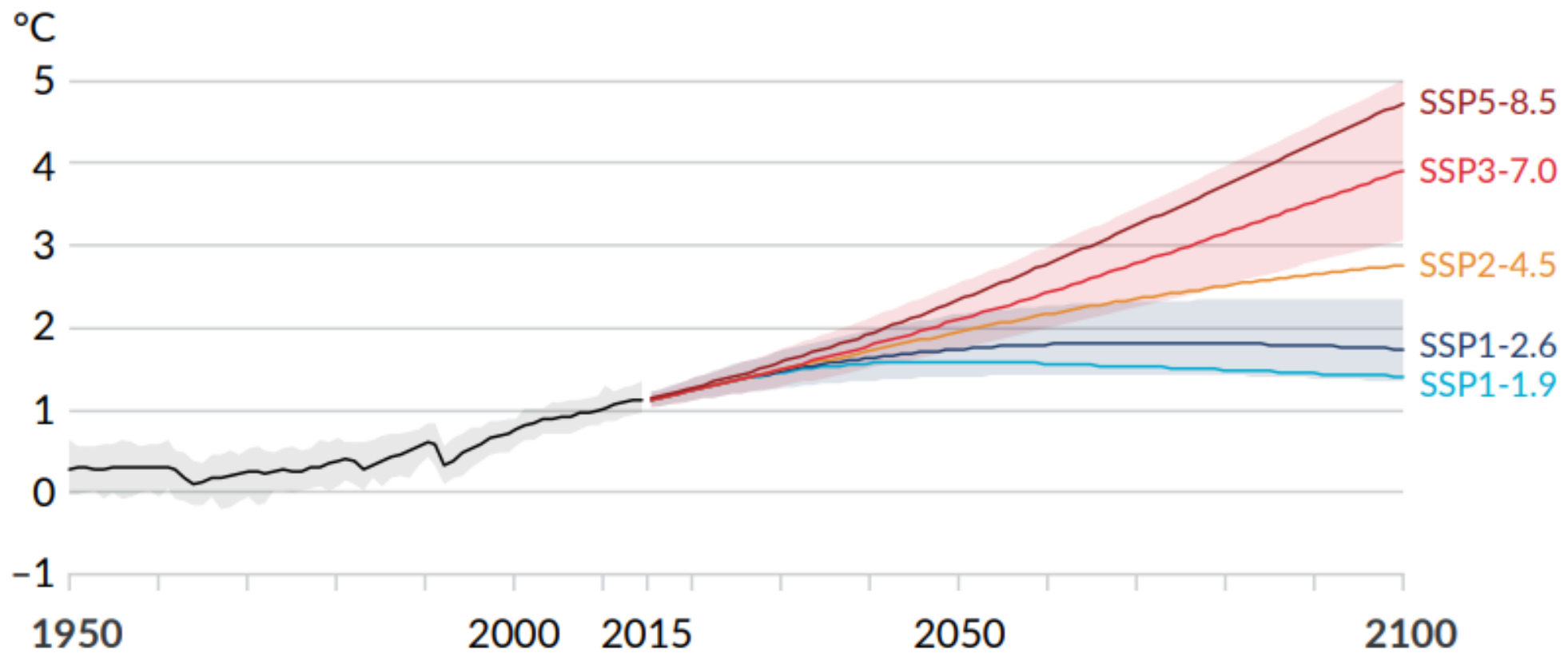
IPCC, 2021: Summary for Policymakers. In: Climate Change 2021: The Physical Science Basis.

Prosječna temperatura - Europa



Klimatski scenariji

(a) Global surface temperature change relative to 1850–1900

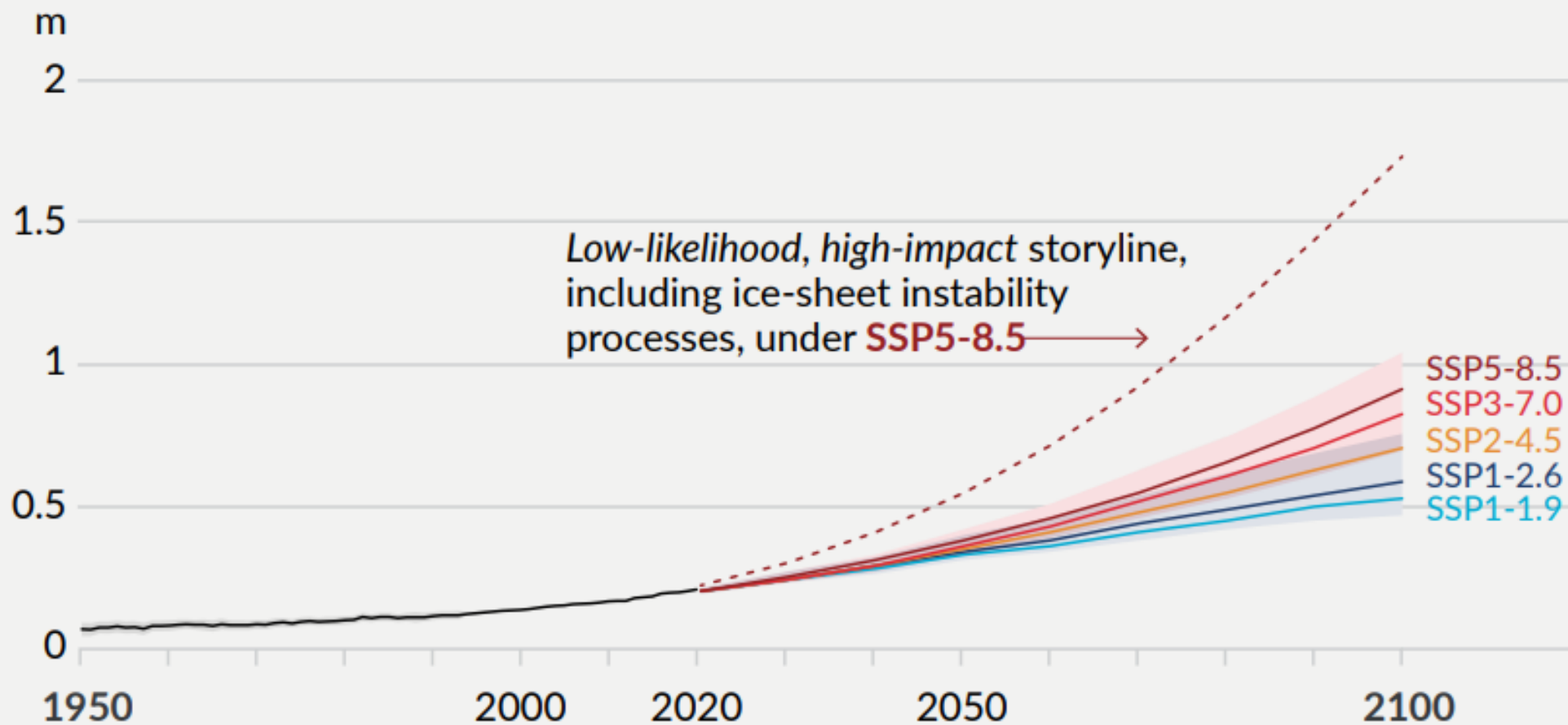


izvor:

IPCC, 2021: Summary for Policymakers. In: Climate Change 2021: The Physical Science Basis.

Klimatski scenariji

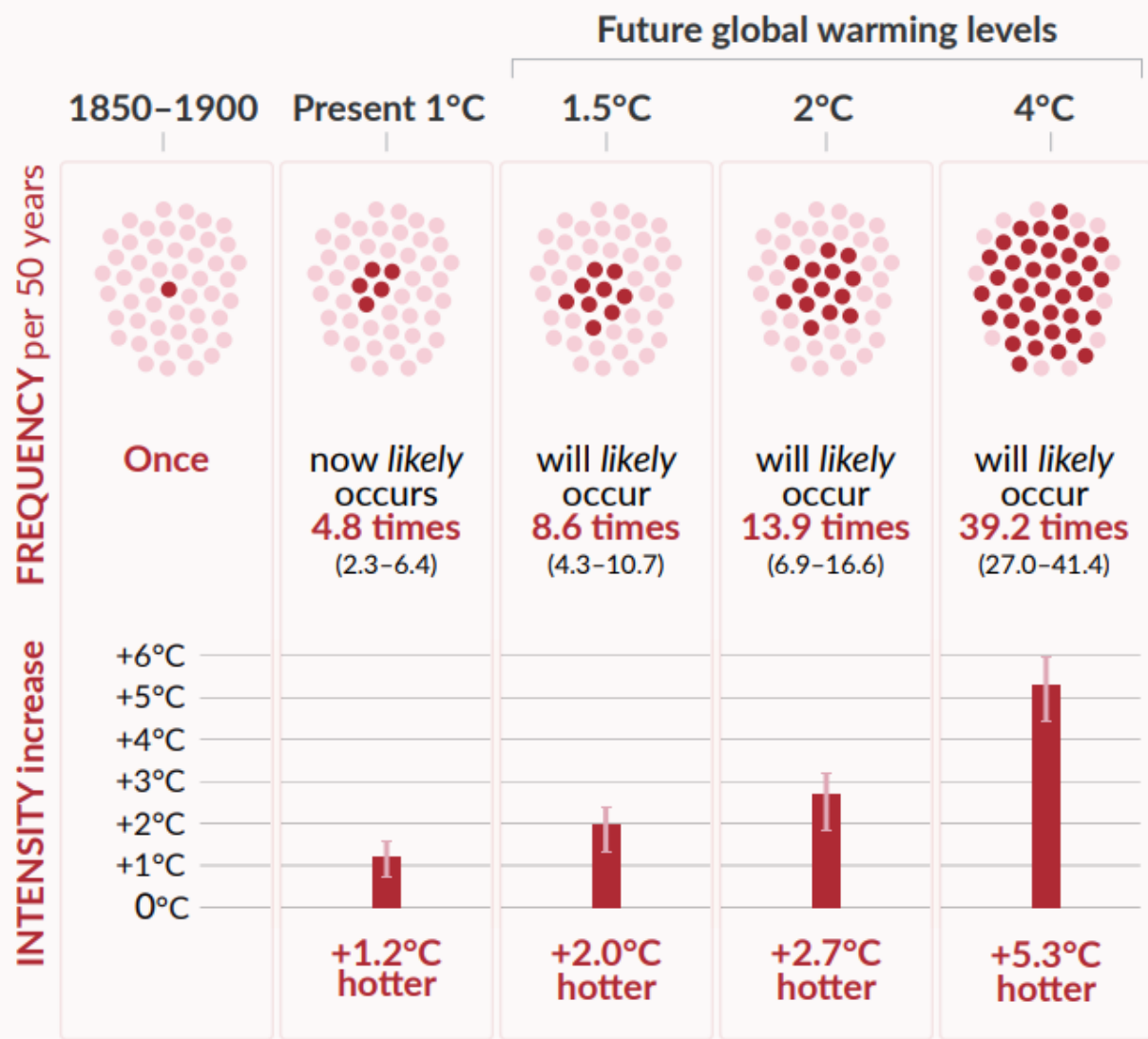
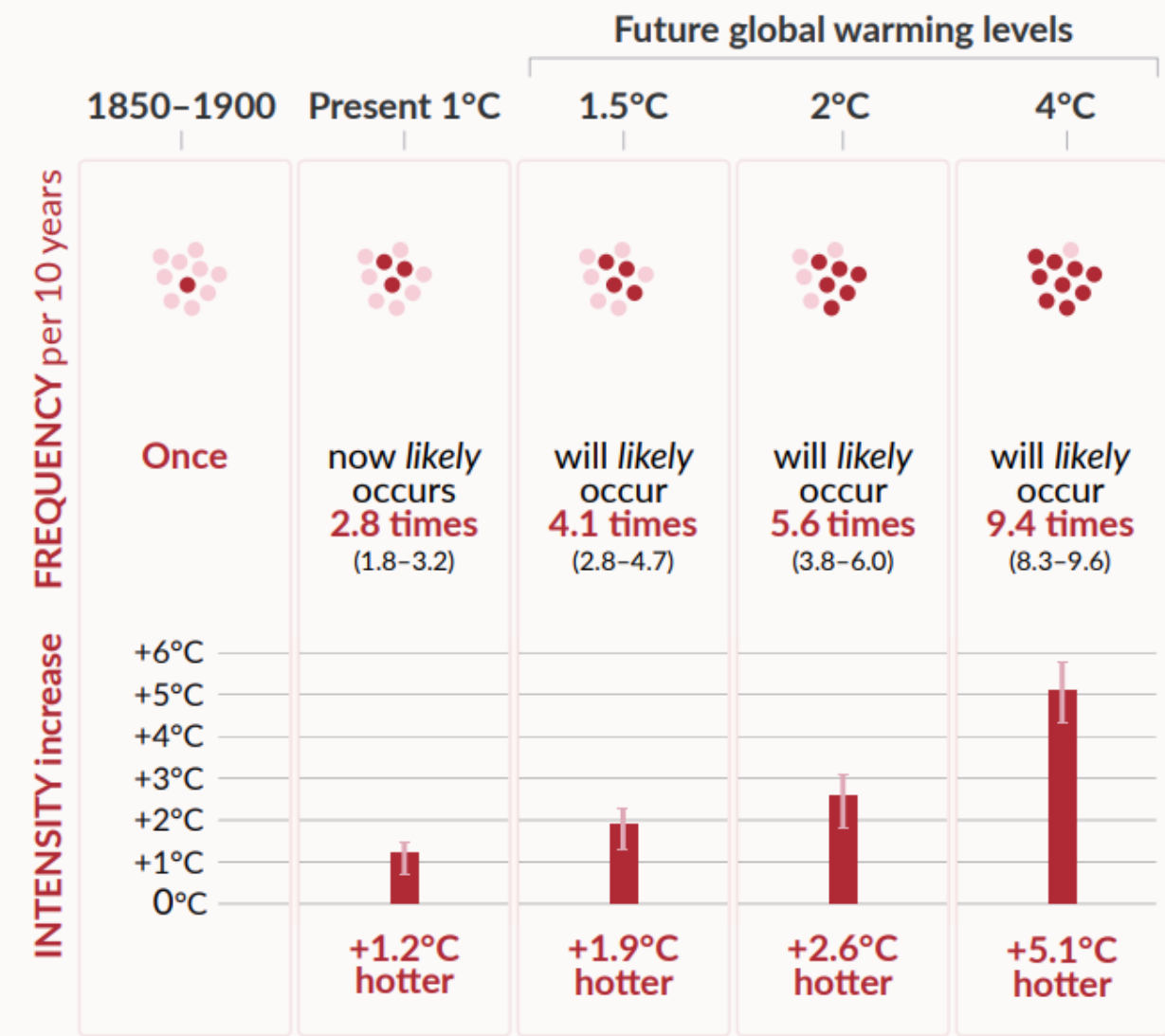
(d) Global mean sea level change relative to 1900



izvor:

IPCC, 2021: Summary for Policymakers. In: Climate Change 2021: The Physical Science Basis.

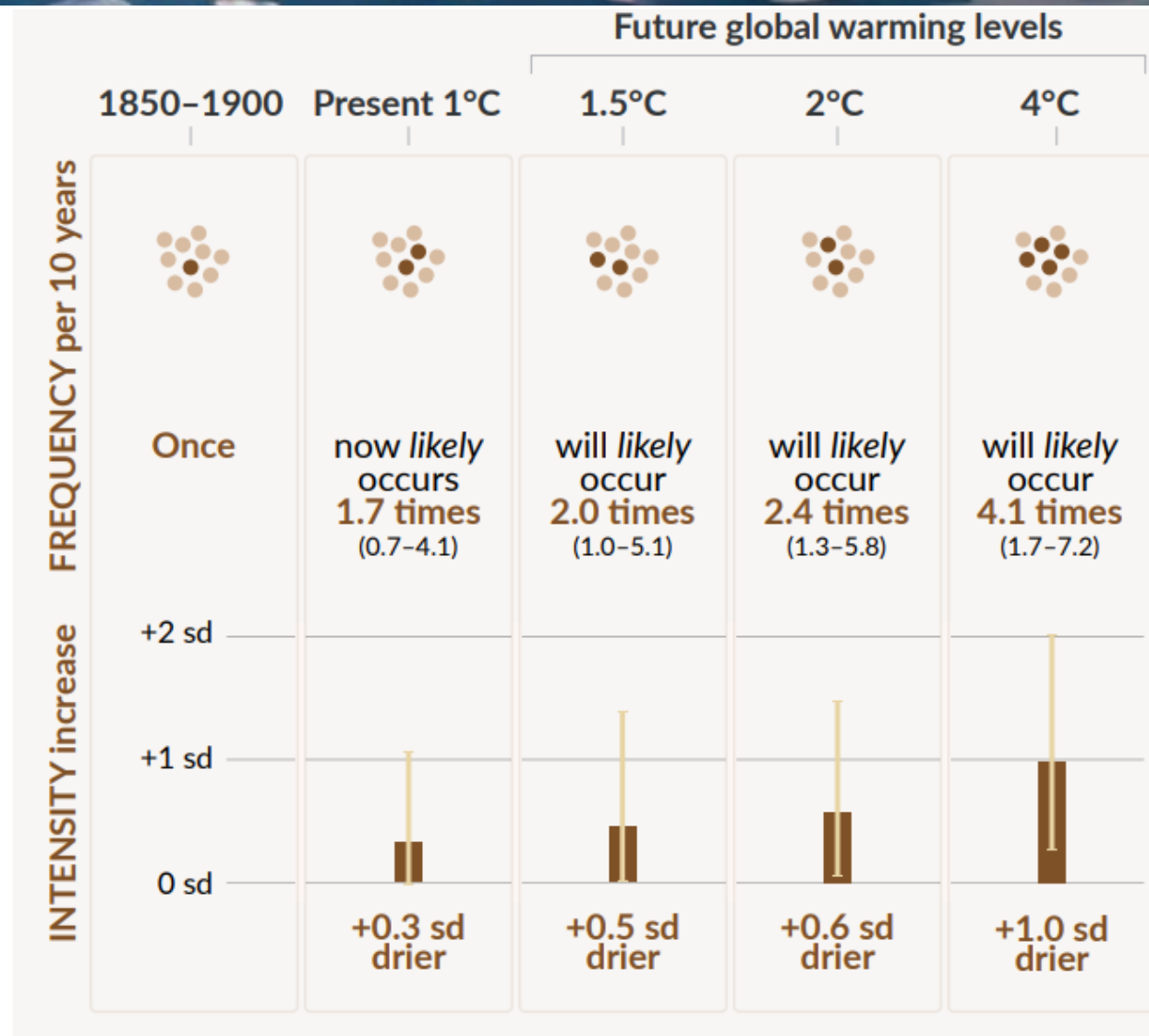
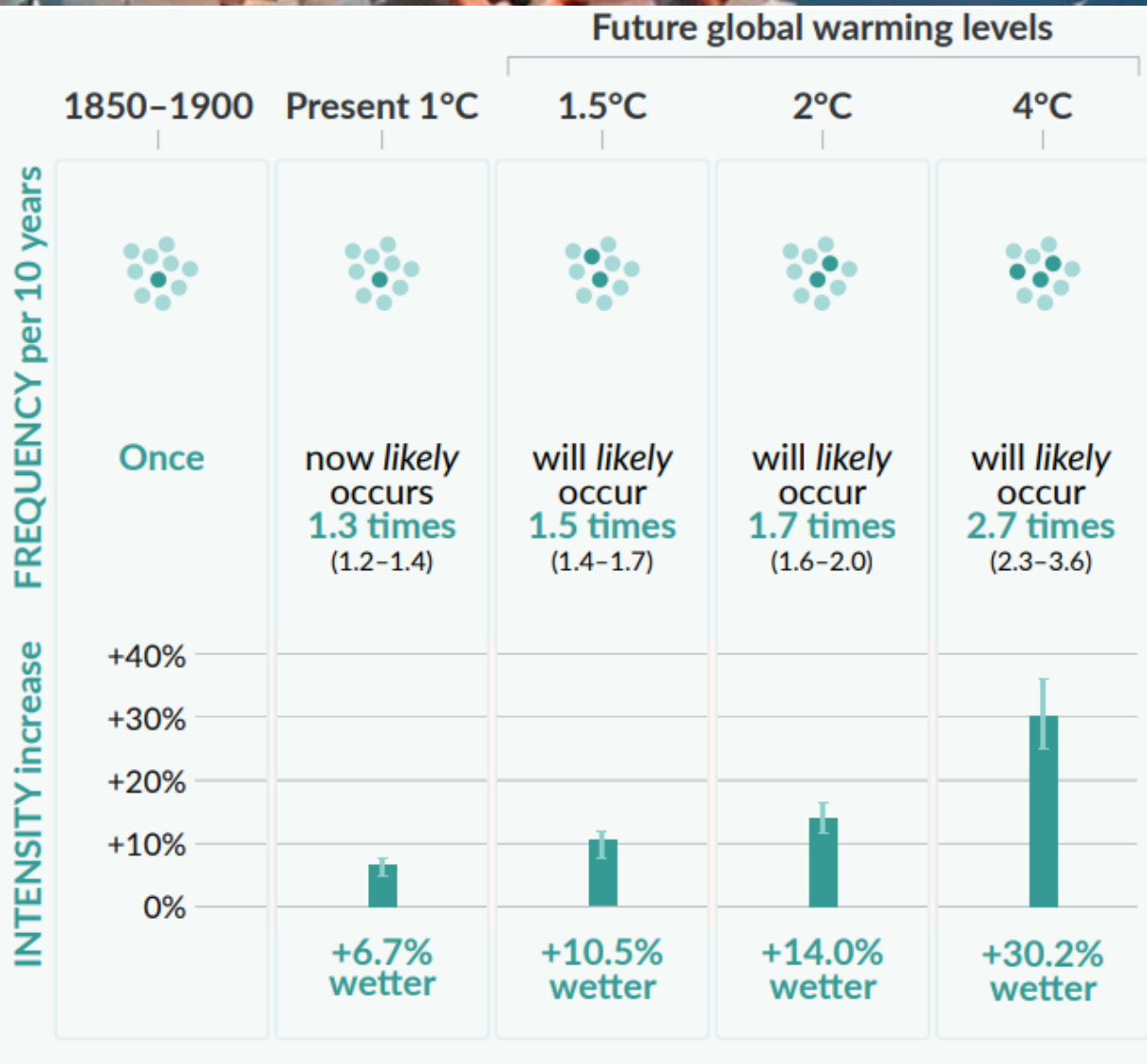
Kopneni temperaturni ekstremi



izvor:

IPCC, 2021: Summary for Policymakers. In: Climate Change 2021: The Physical Science Basis.

Obilna oborina nad kopnenim područjima i sušni uvjeti



izvor:

IPCC, 2021: Summary for Policymakers. In: Climate Change 2021: The Physical Science Basis.

Zaključci

- veća koncentracija stakleničkih plinova → porast temperature
- s porastom temperature raste i morska razina
- u toplijoj klimi meteorološki ekstremi su češći i njihov je intenzitet jači