

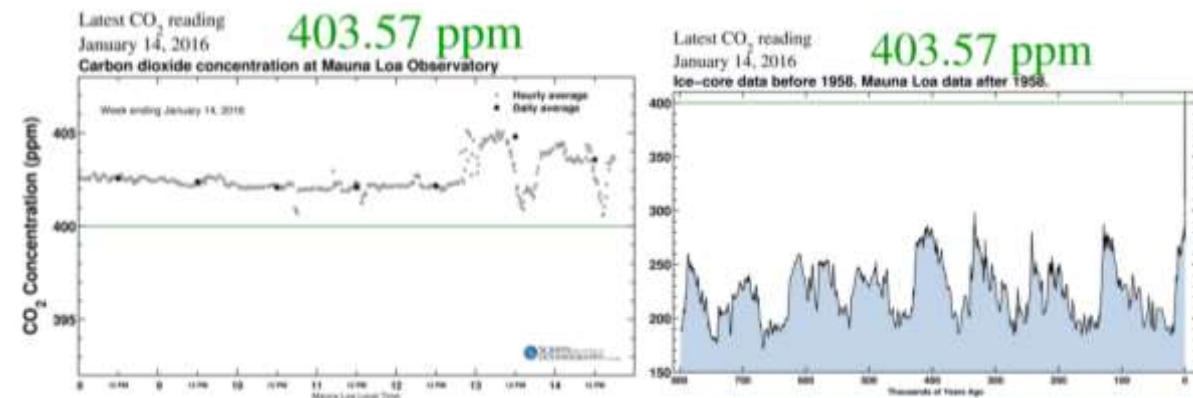
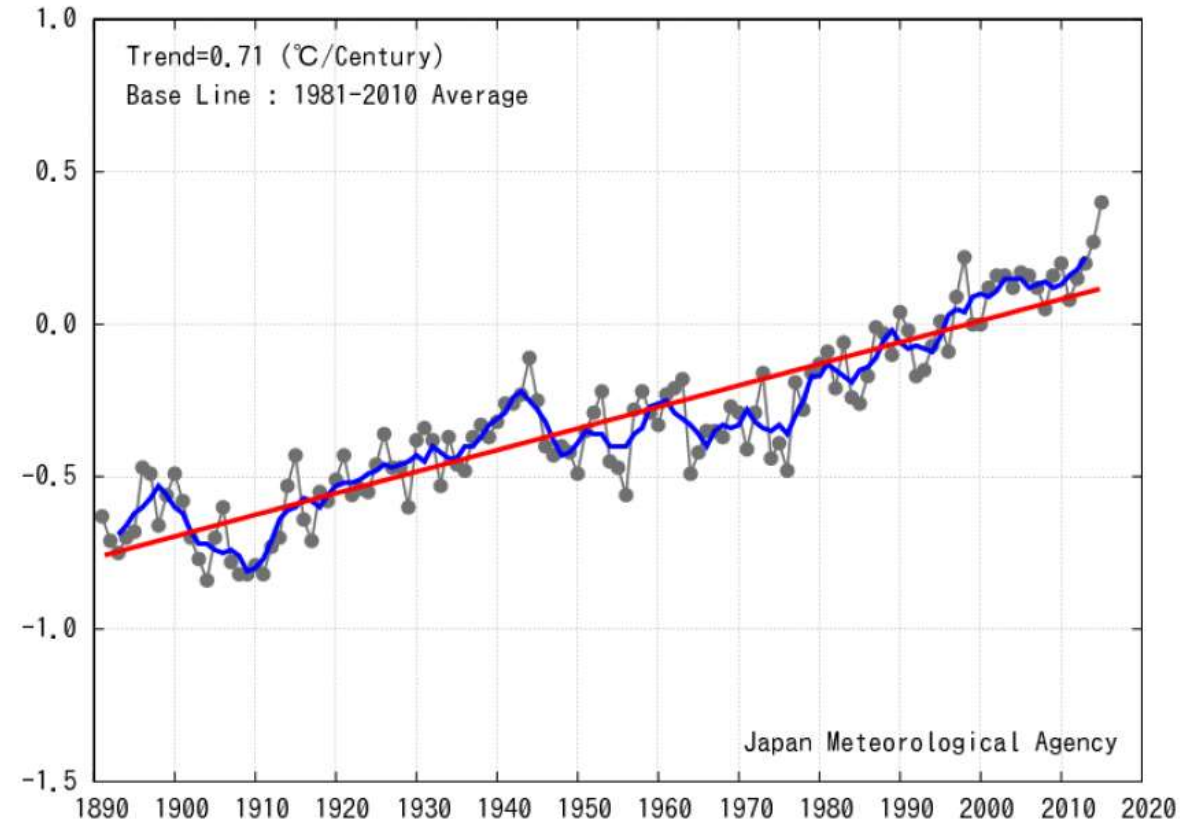
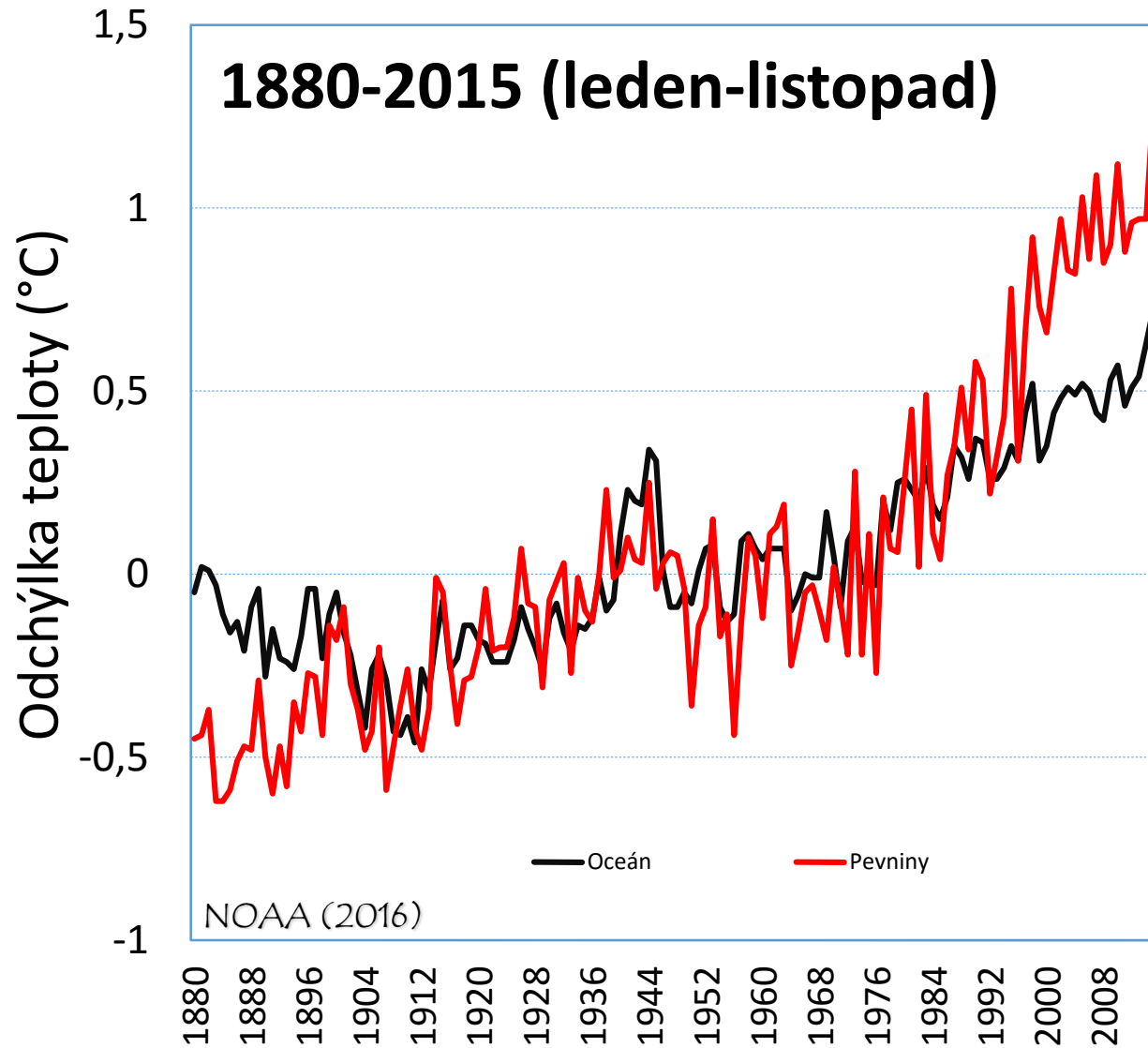
Extrémní počasí, změna klimatu a potravinová bezpečnost

Alexander Ač

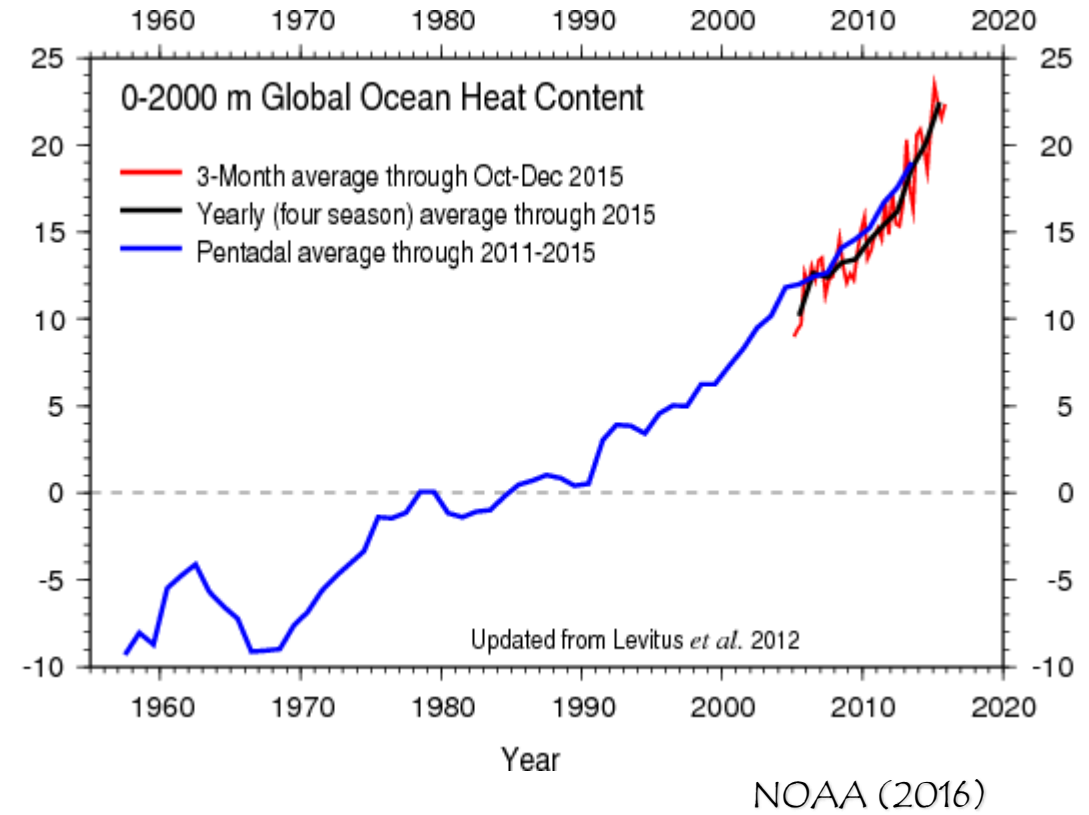
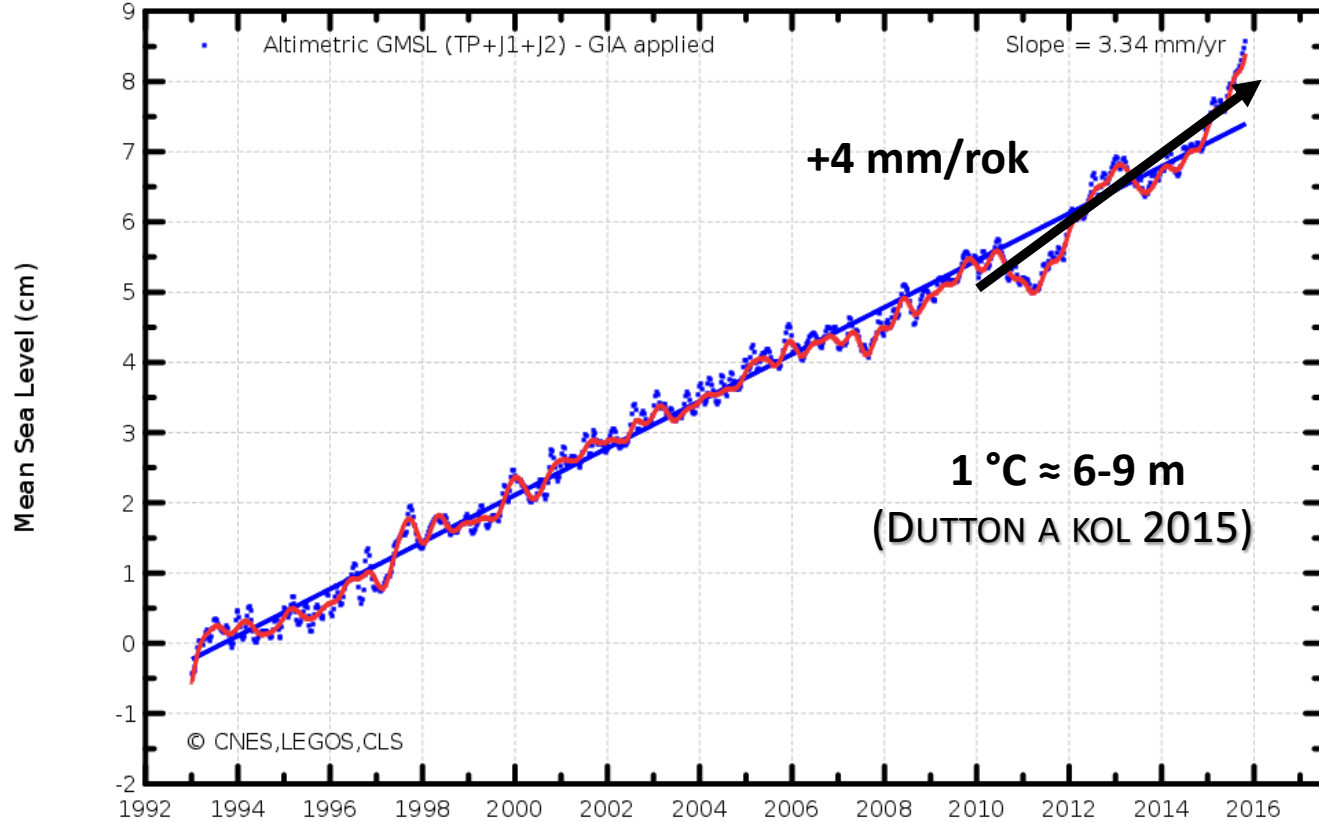
Ústav výzkumu globální změny, AV ČR

Indikátory „globální změny“

Annual Global Average Temperature



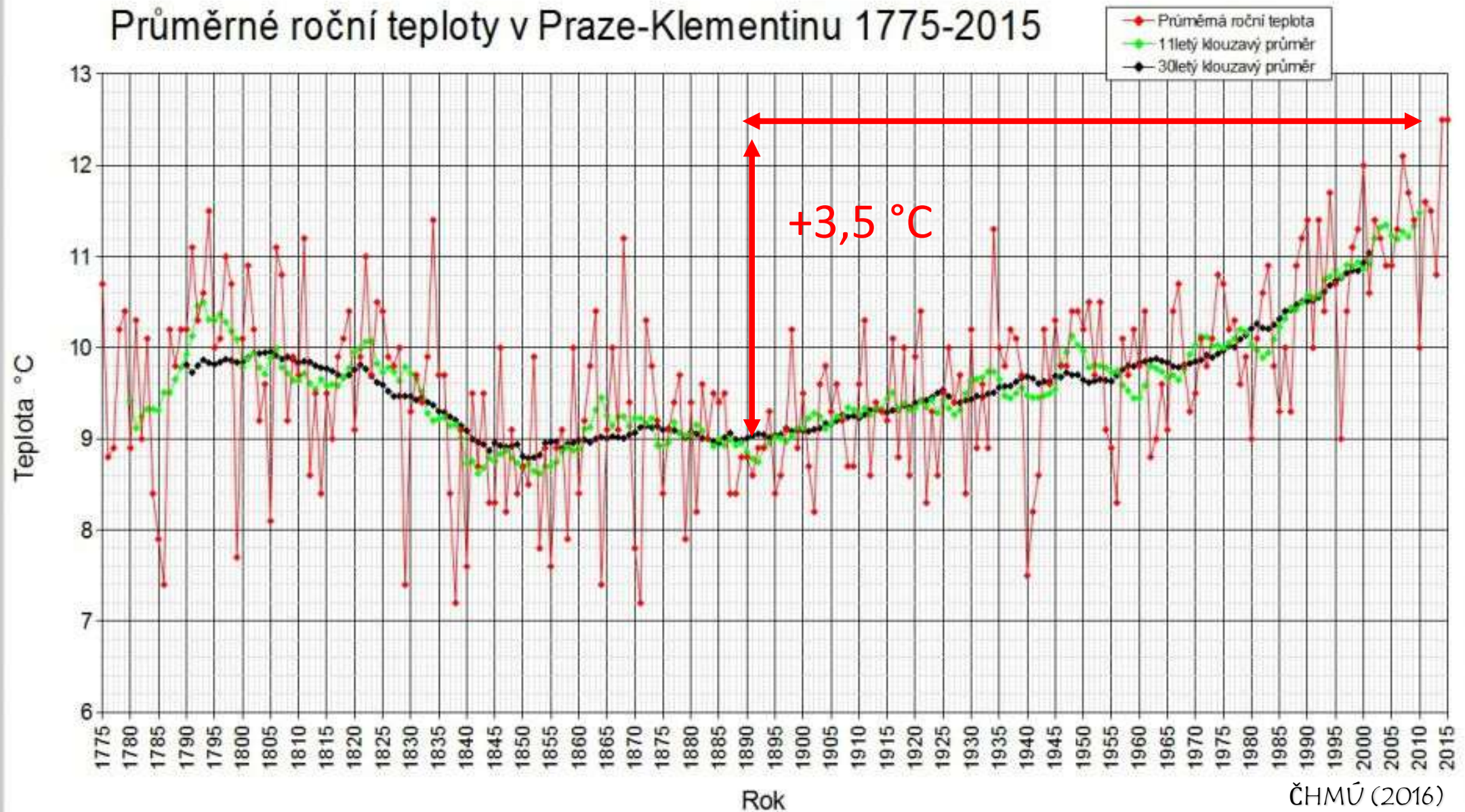
Indikátory „globální změny“



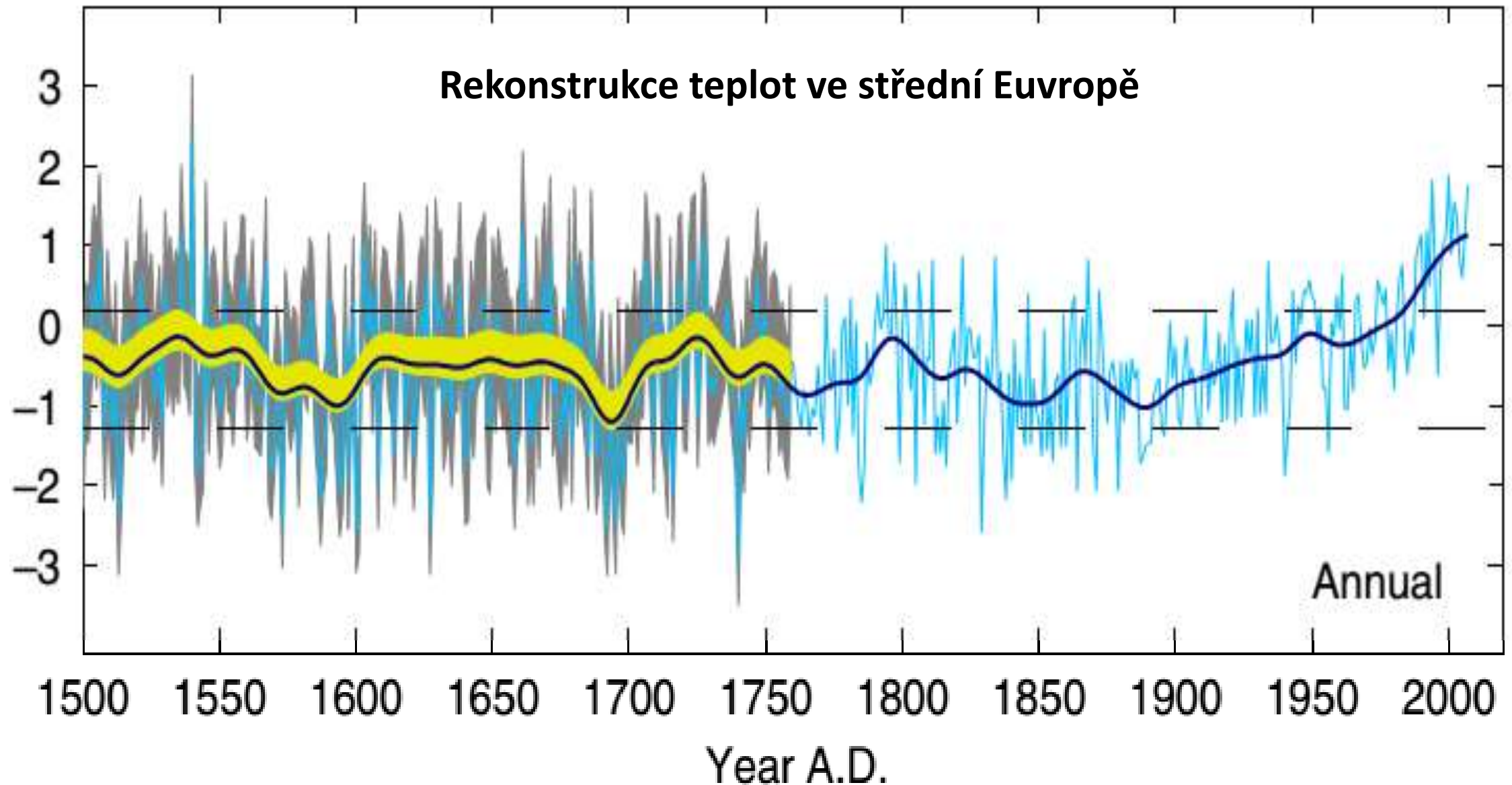
+97 % energie jde do oceánů

Rok 2015 rekordně teplý

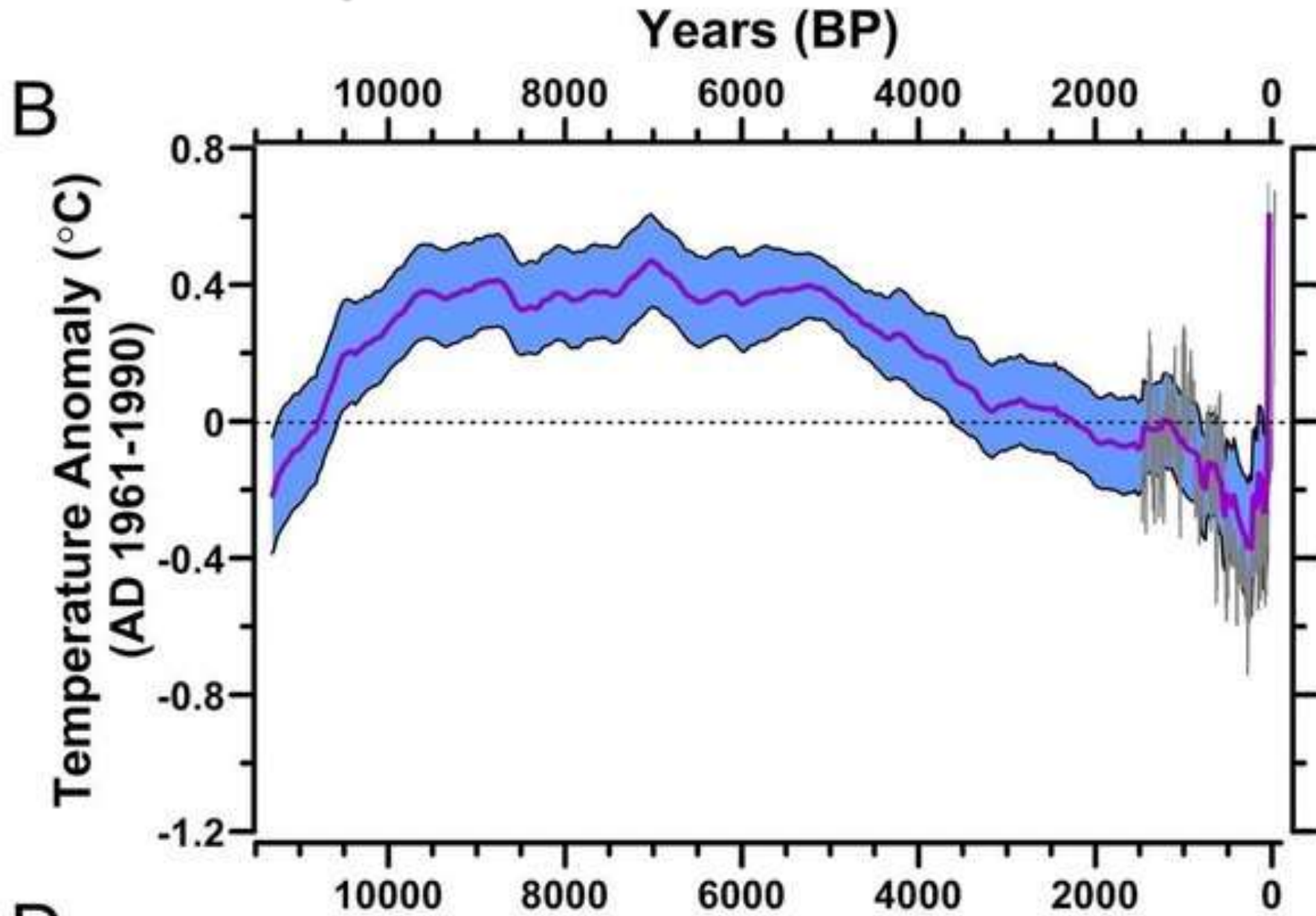
Průměrné roční teploty v Praze-Klementinu 1775-2015



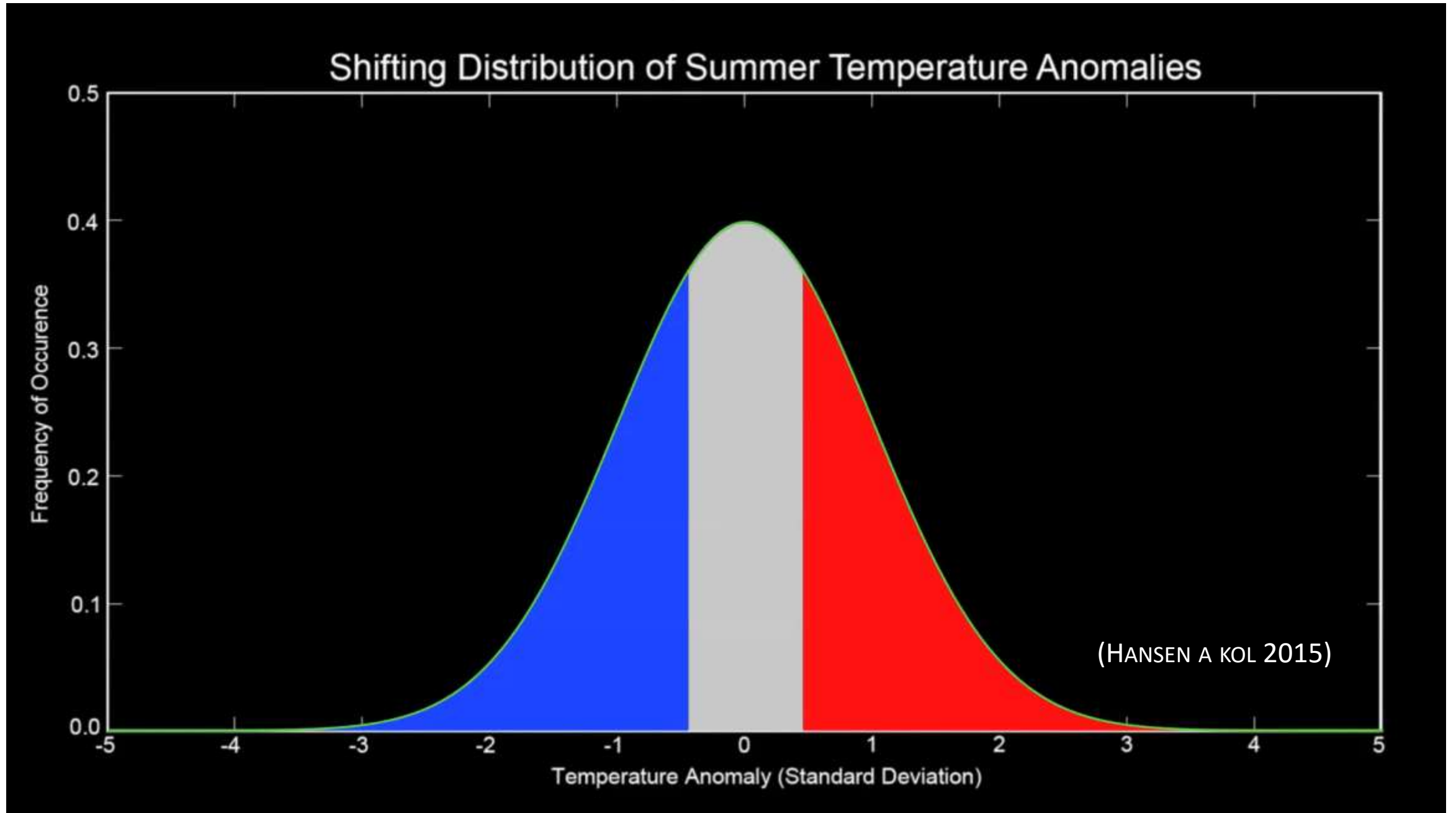
...nejteplejší za nejméně 500 let



...nejteplejší za nejméně...?



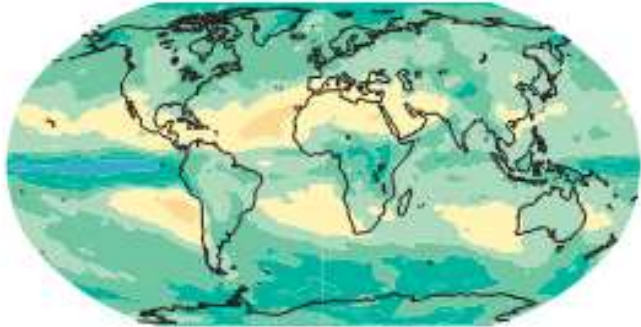
Změna klimatu mění pravděpodobnost extrémů



Změna klimatu zvyšuje pravděpodobnost extrémů

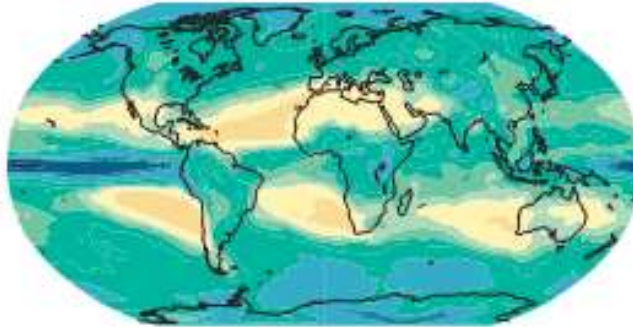
a Heavy precipitation

PR at present-day warming



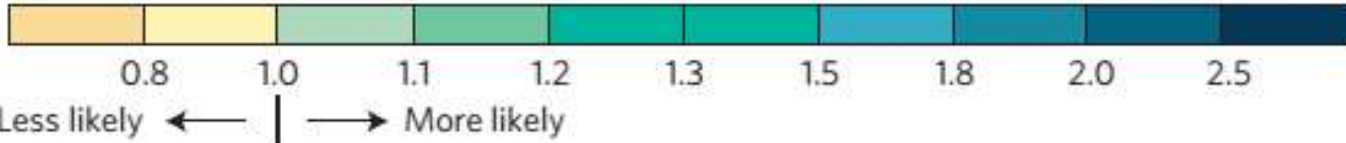
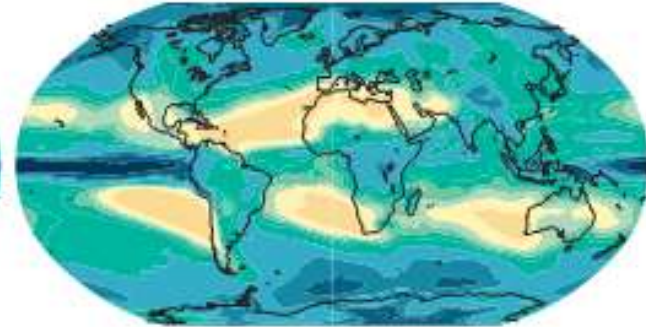
b

PR at 2 °C warming



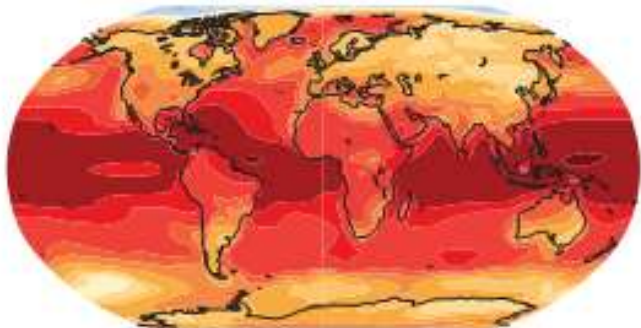
c

PR at 3 °C warming



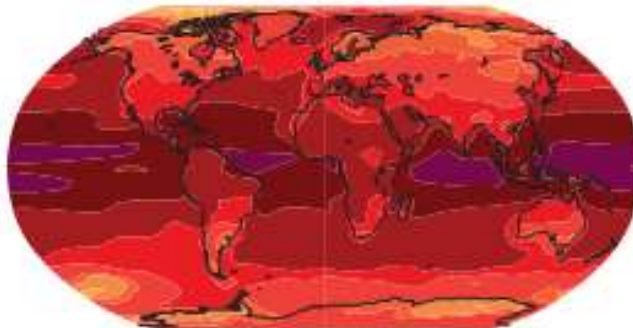
d Hot extremes

PR at present-day warming



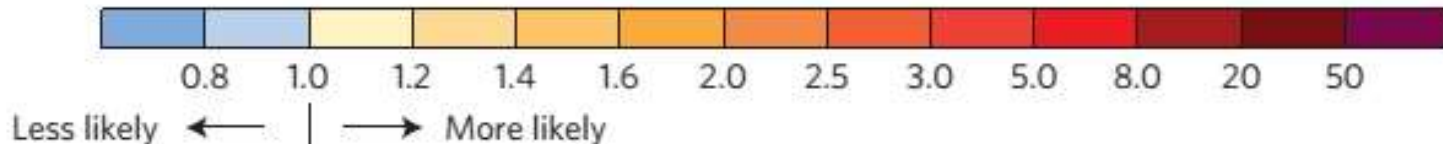
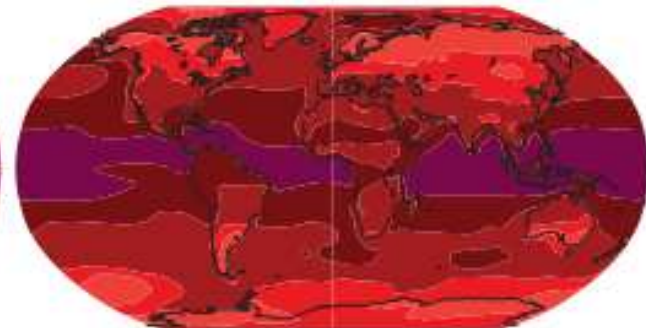
e

PR at 2 °C warming

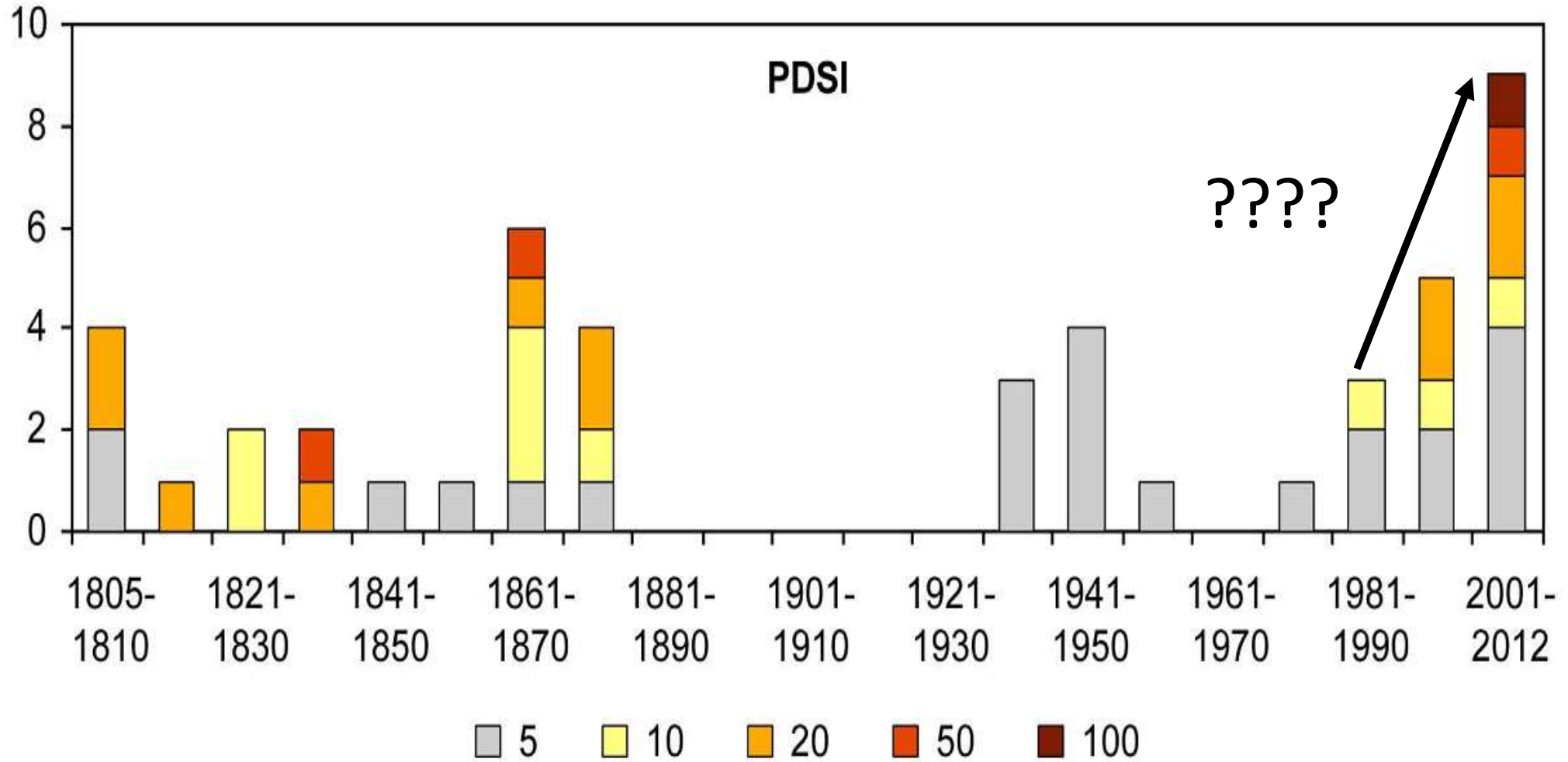


f

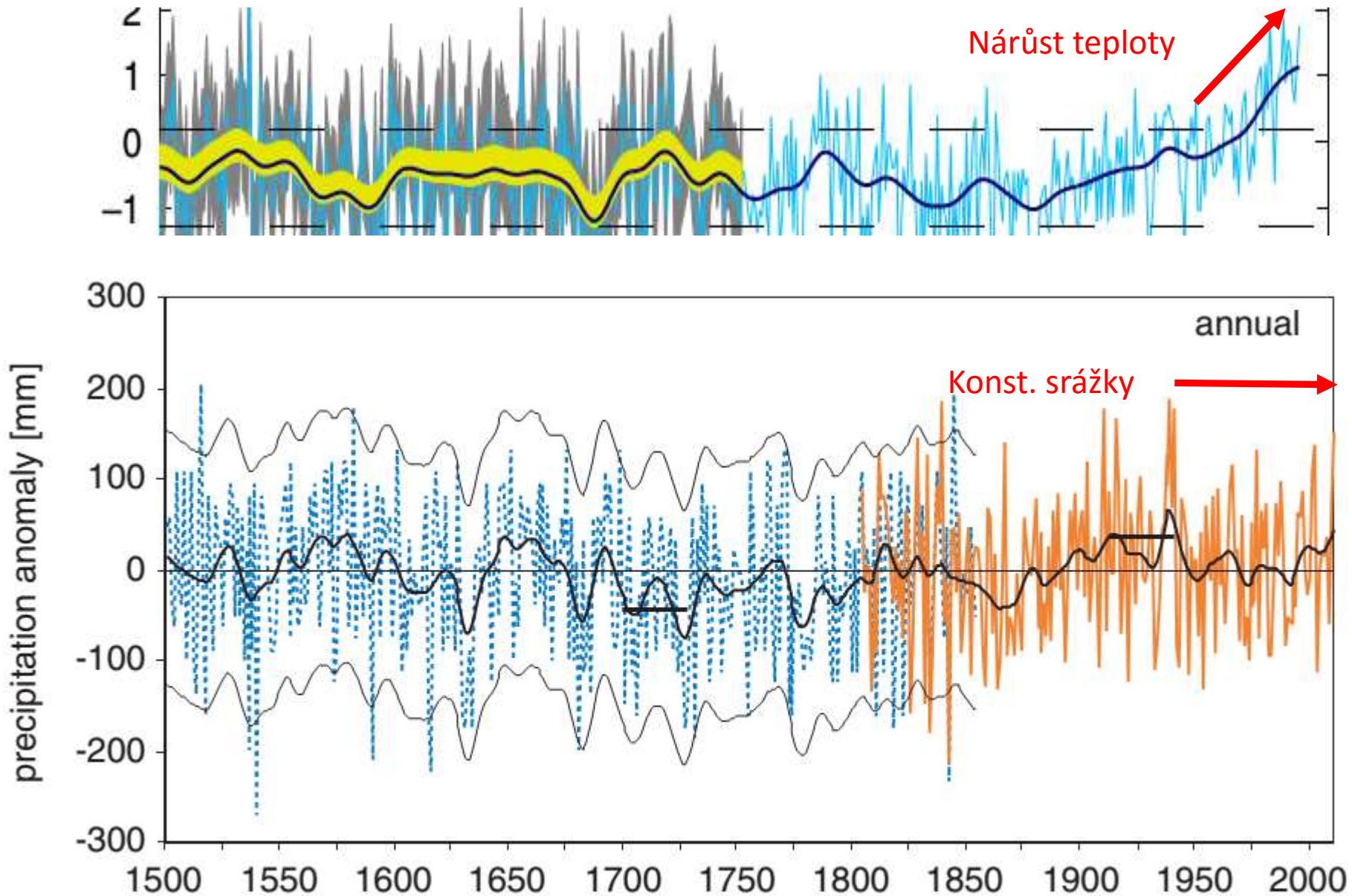
PR at 3 °C warming



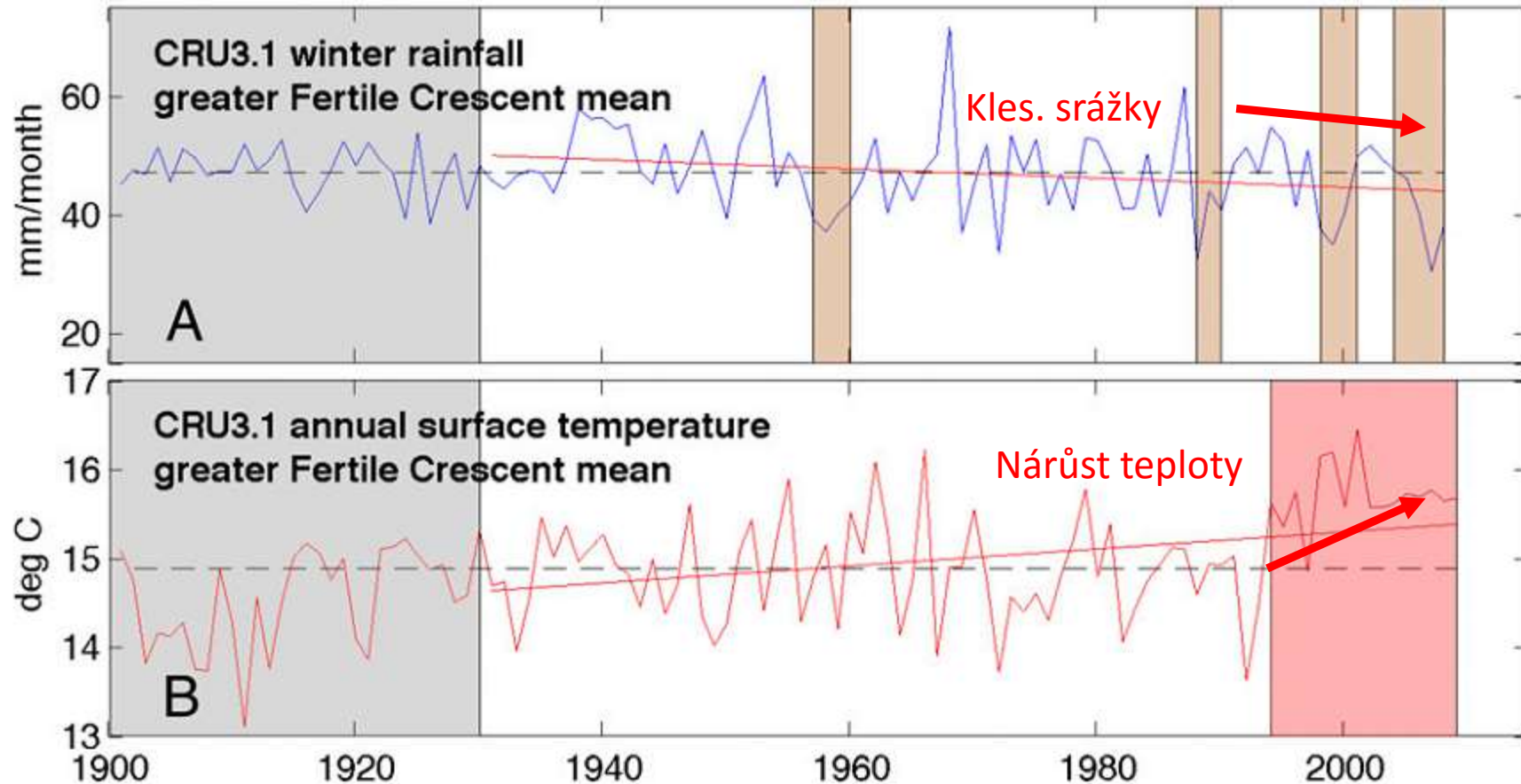
Příčina rostoucího sucha v ČR



Příčina rostoucího sucha v ČR



...situace v jiných krajinách



Syrie...

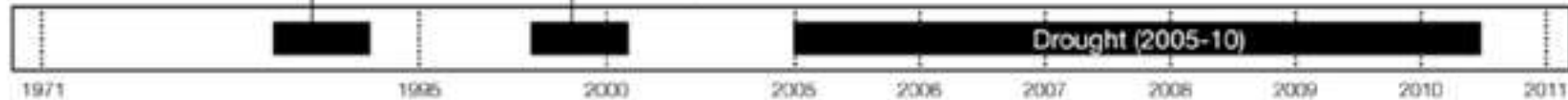
Timeline of Events

Prior to the 2011 Uprising

1970s-1990s

Agricultural policies promote production of staple crops, leading to increase in number of groundwater wells and use of inefficient and outdated irrigation methods

Drought (1988-1993) Drought (1998-2000)



12 March, 1971
Hafez al-Assad becomes president of Syria

Syria achieves self-sufficiency in wheat production

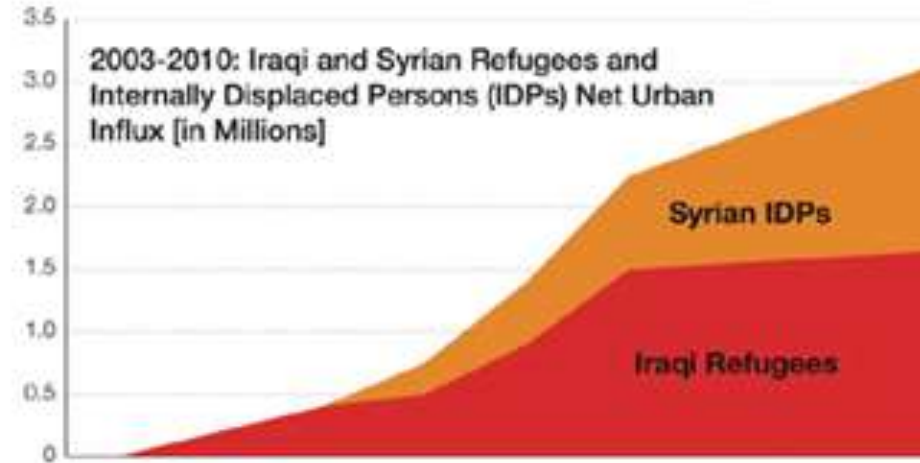
Drying of the Khabur River in NE Syria

Since 2005
Apartment prices in Damascus have more than doubled

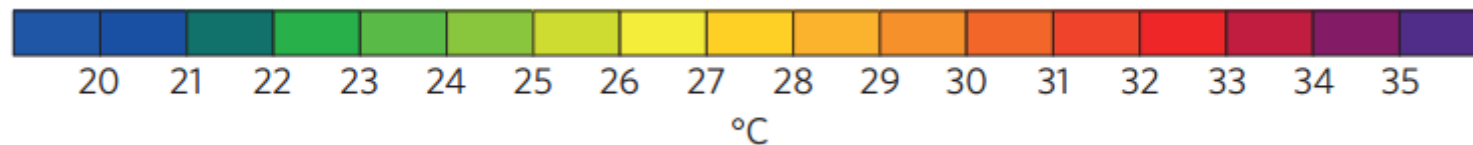
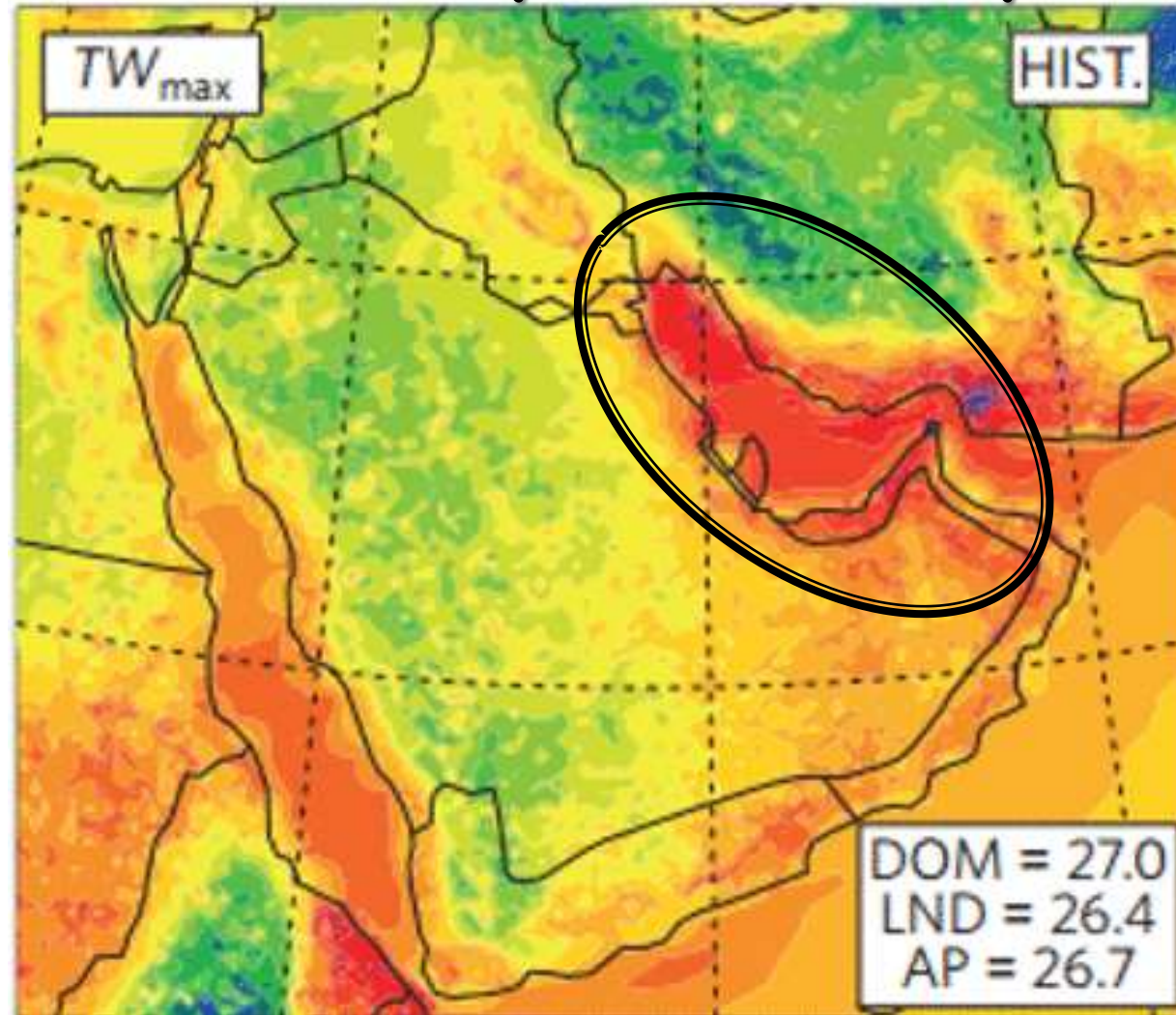
Winter 2007-08:
Driest in observed record

Since 2007
Wheat, rice, and feed prices have doubled

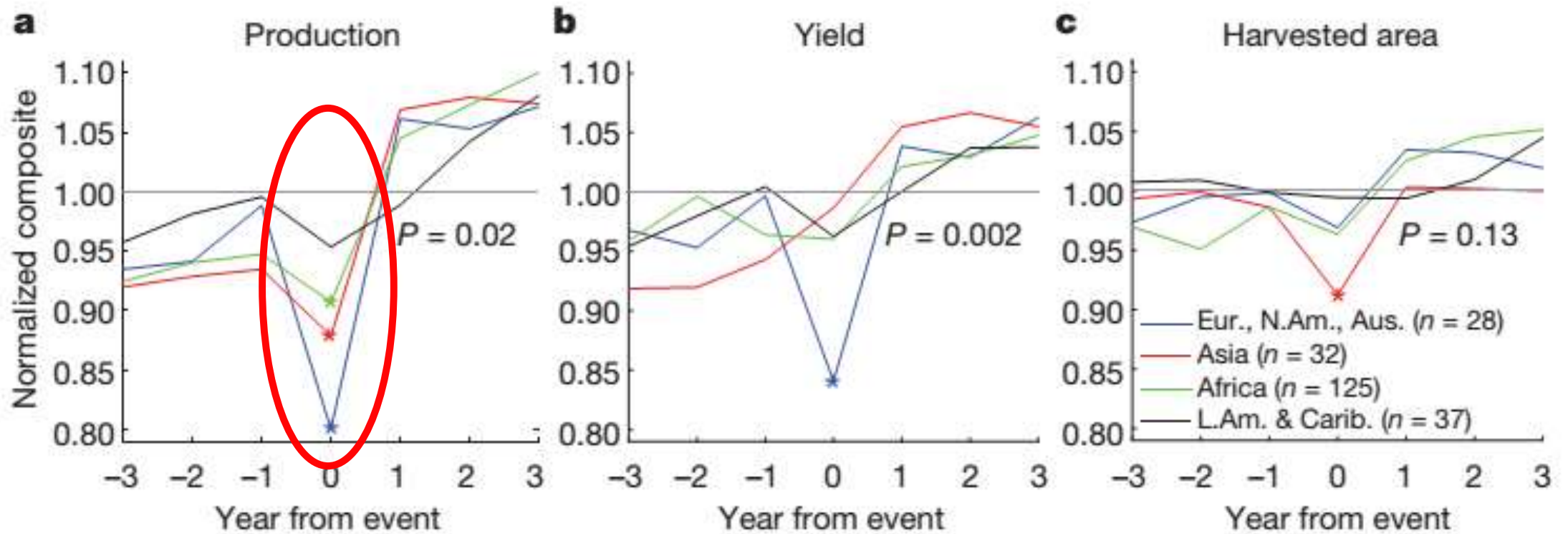
March 2011
Uprising in Syria



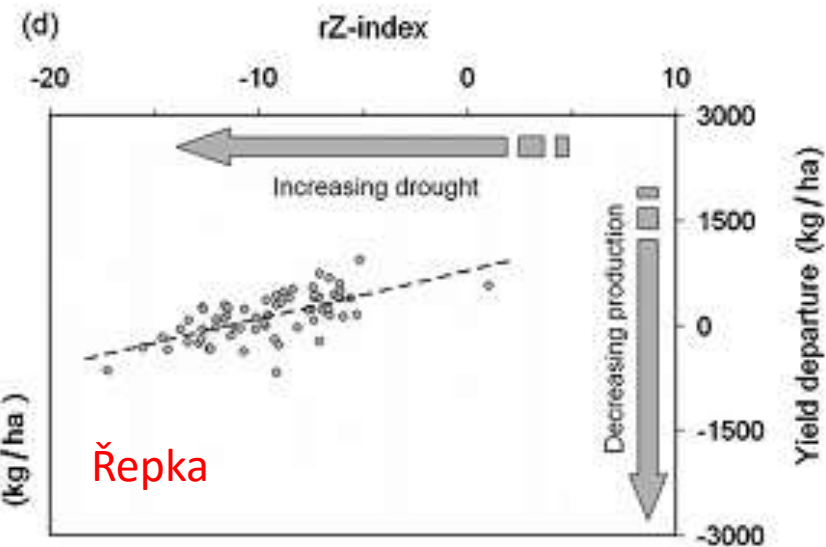
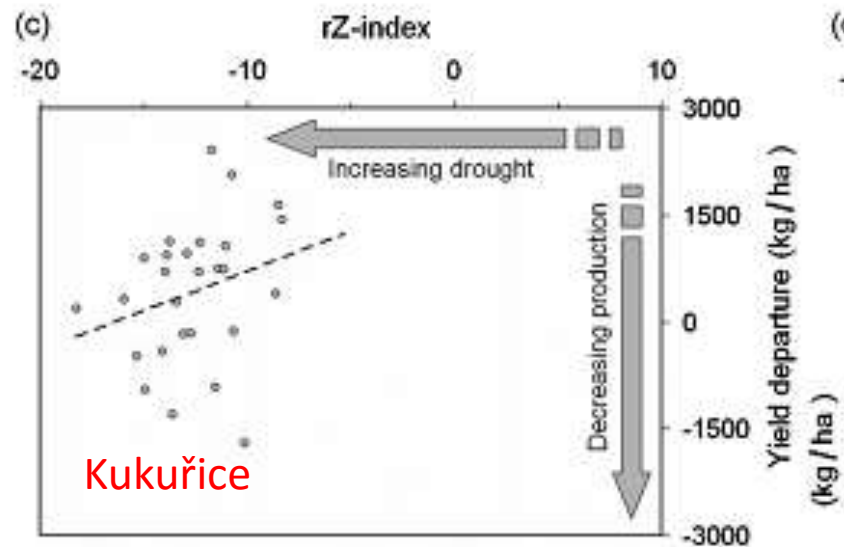
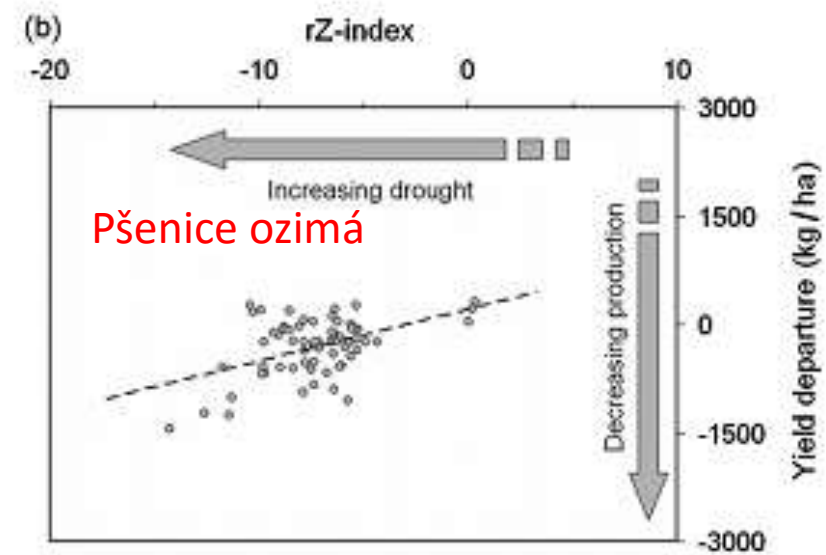
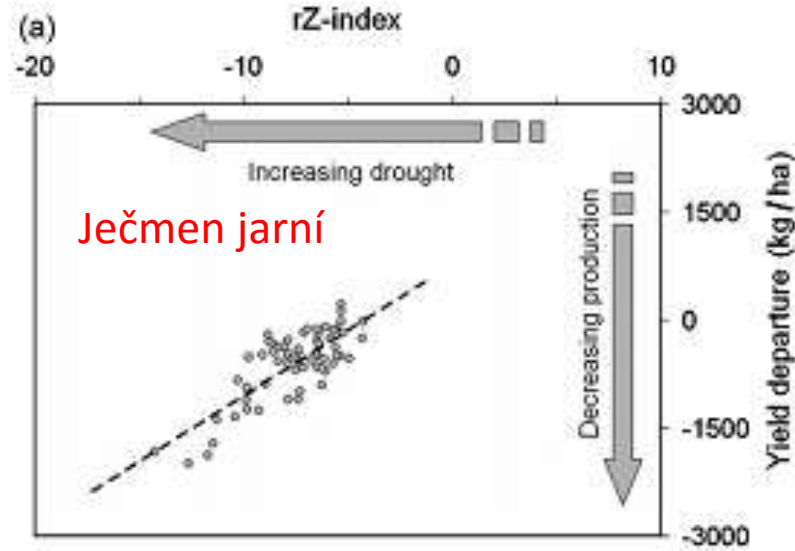
Prekročni schopnosti adaptace lidi



Významné důsledky sucha na úrodu

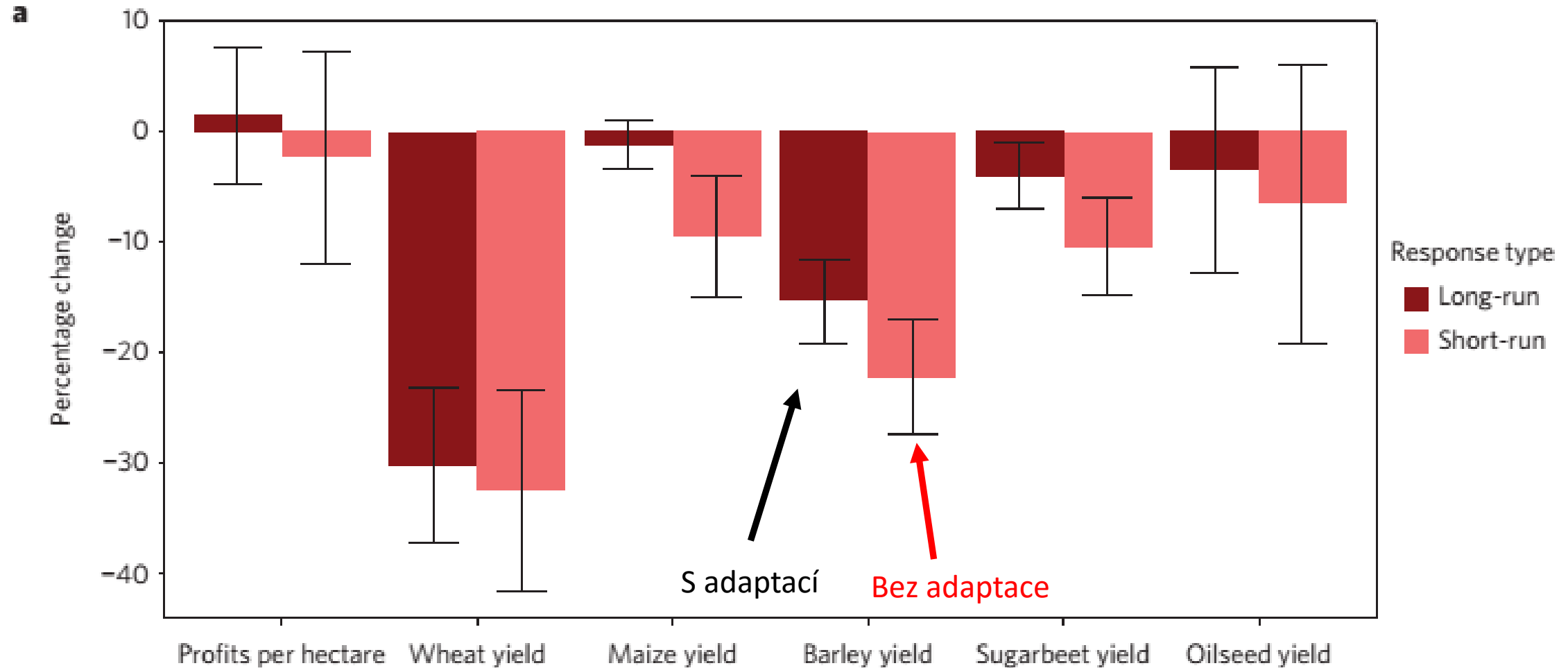


I pro Českou Republiku

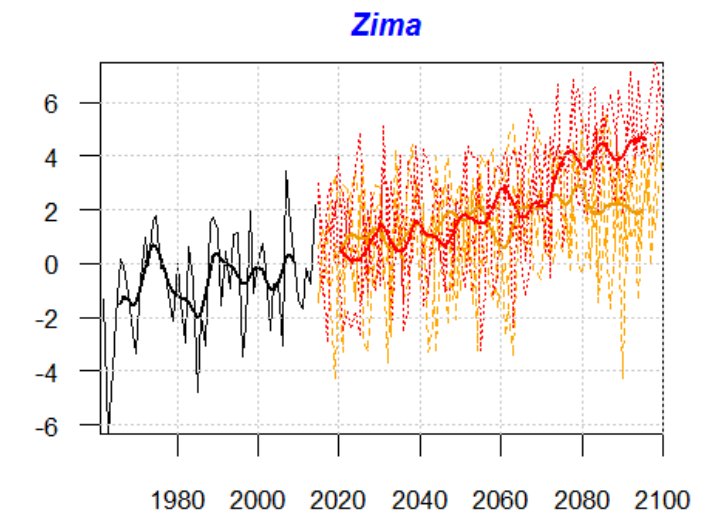
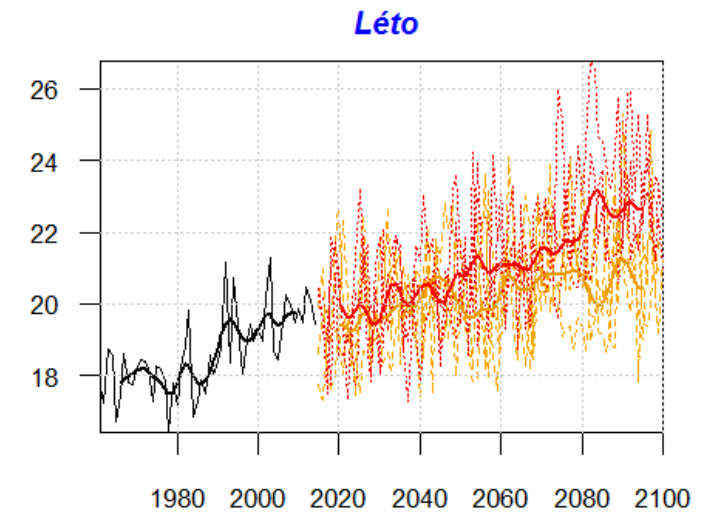
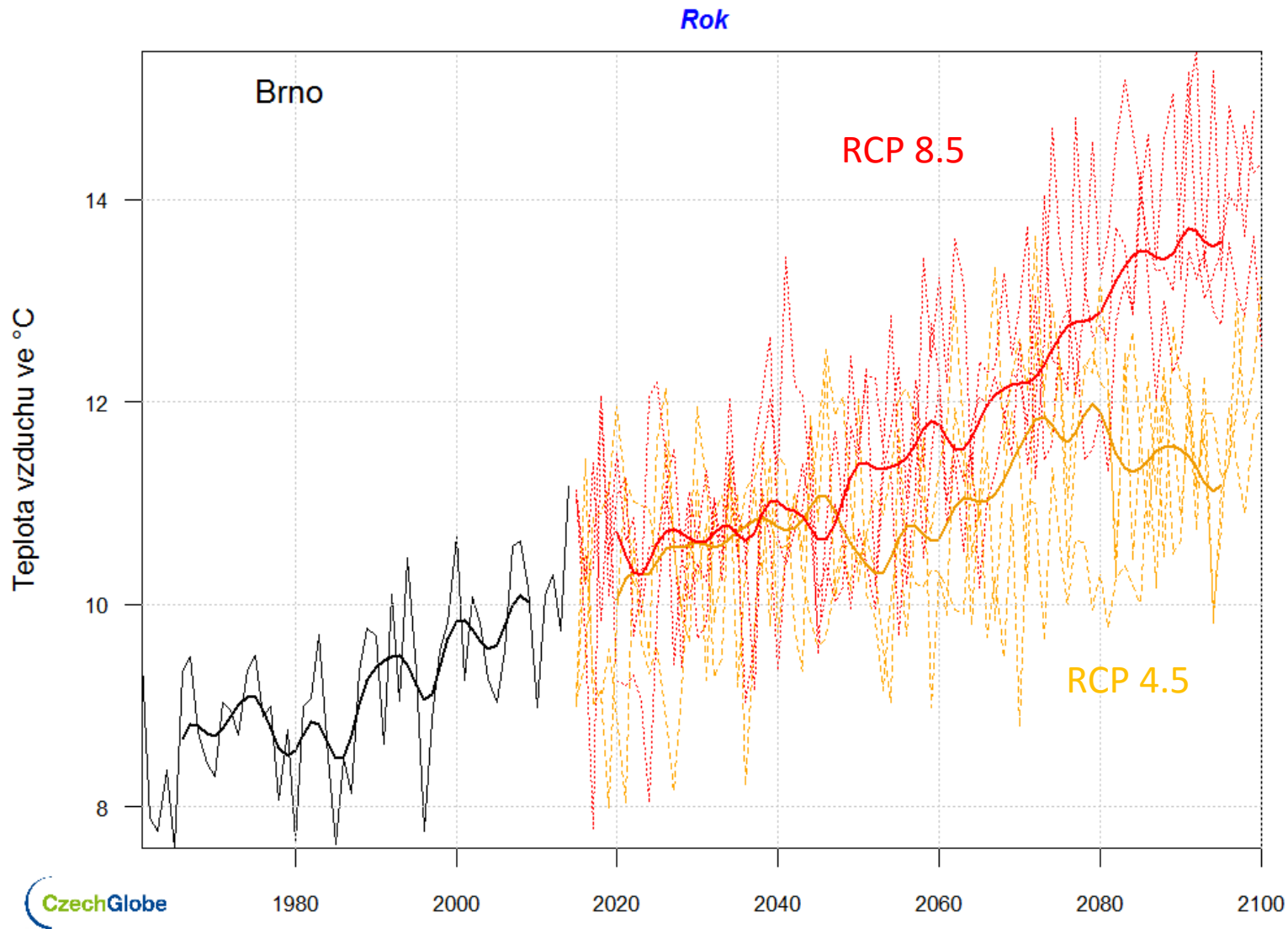


Limity adaptace na změnu klimatu

2030-2050



Adaptace na změnu klimatu v ČR

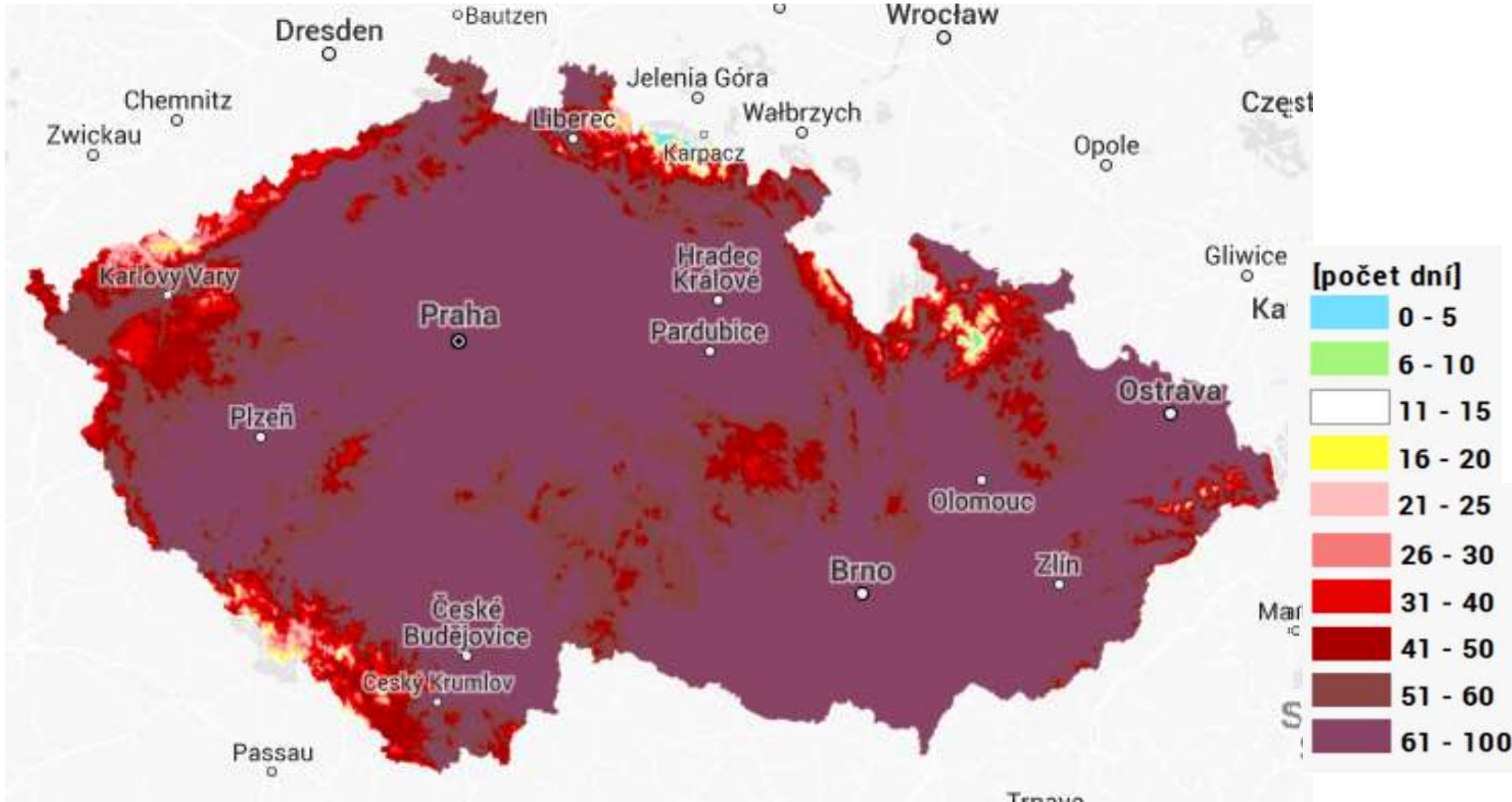


Počet tropických dní v ČR

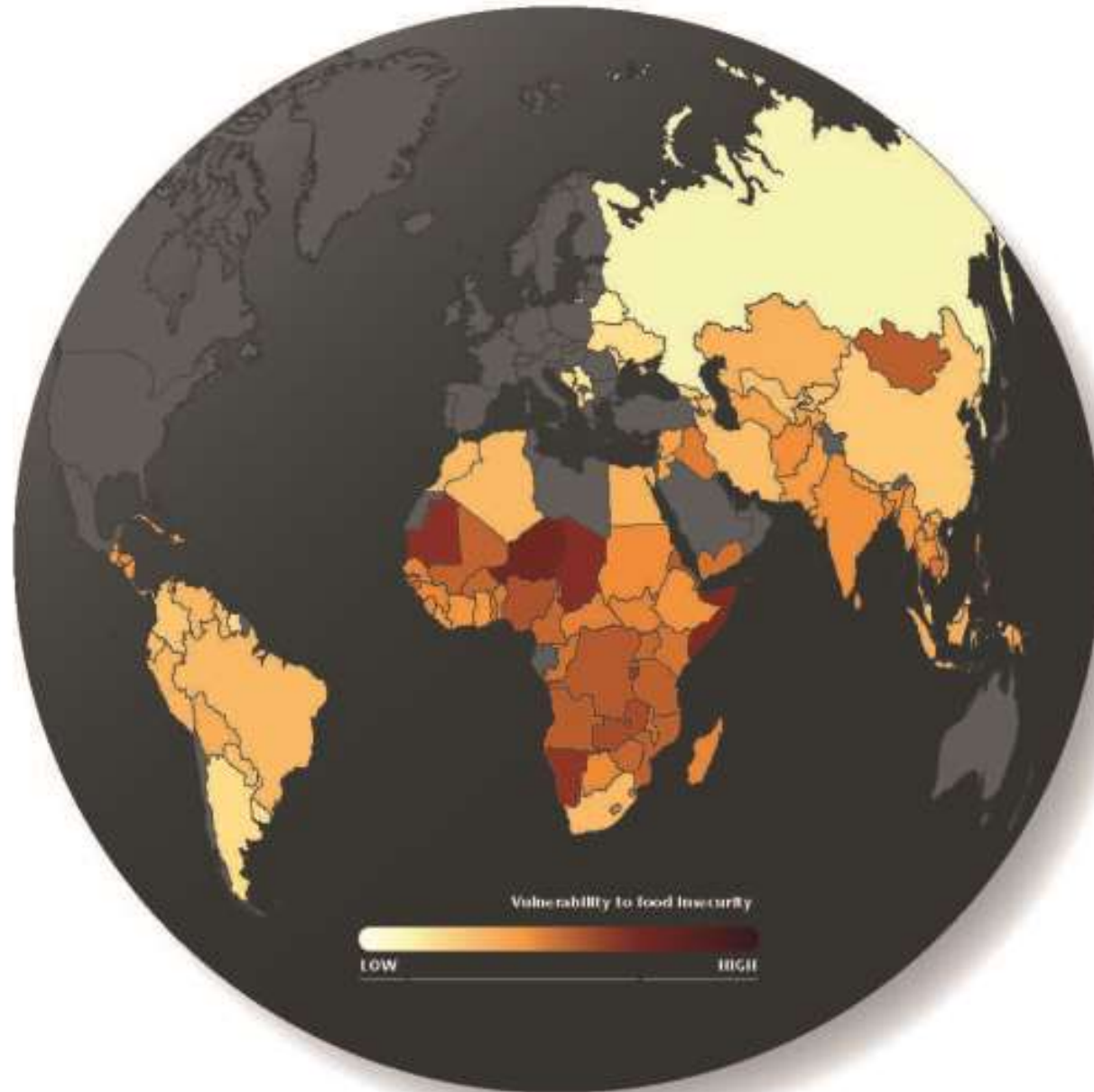
DNES

2090 –
nízký
emisní
scénář

2090 –
vysoký
emisní
scénář



Nevyhnutná je adaptace i mitigace



(MET OFFICE HADLEY CENTRE 2015)

Děkuji za
pozornost