



Klima jadranske regije u njenom globalnom kontekstu

*Climate of the Adriatic region in its global context
(CARE)*

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Međuvladin odbor za klimatske promjene – Prva radna grupa (Intergovernmental Panel on Climate Change, IPCC – Working Group I)



1990.



1995.



2001.

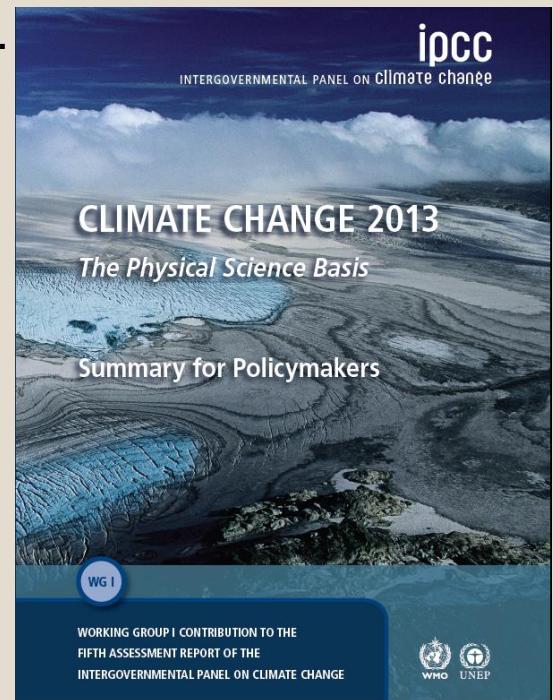


Nobelova nagrada (2007.)



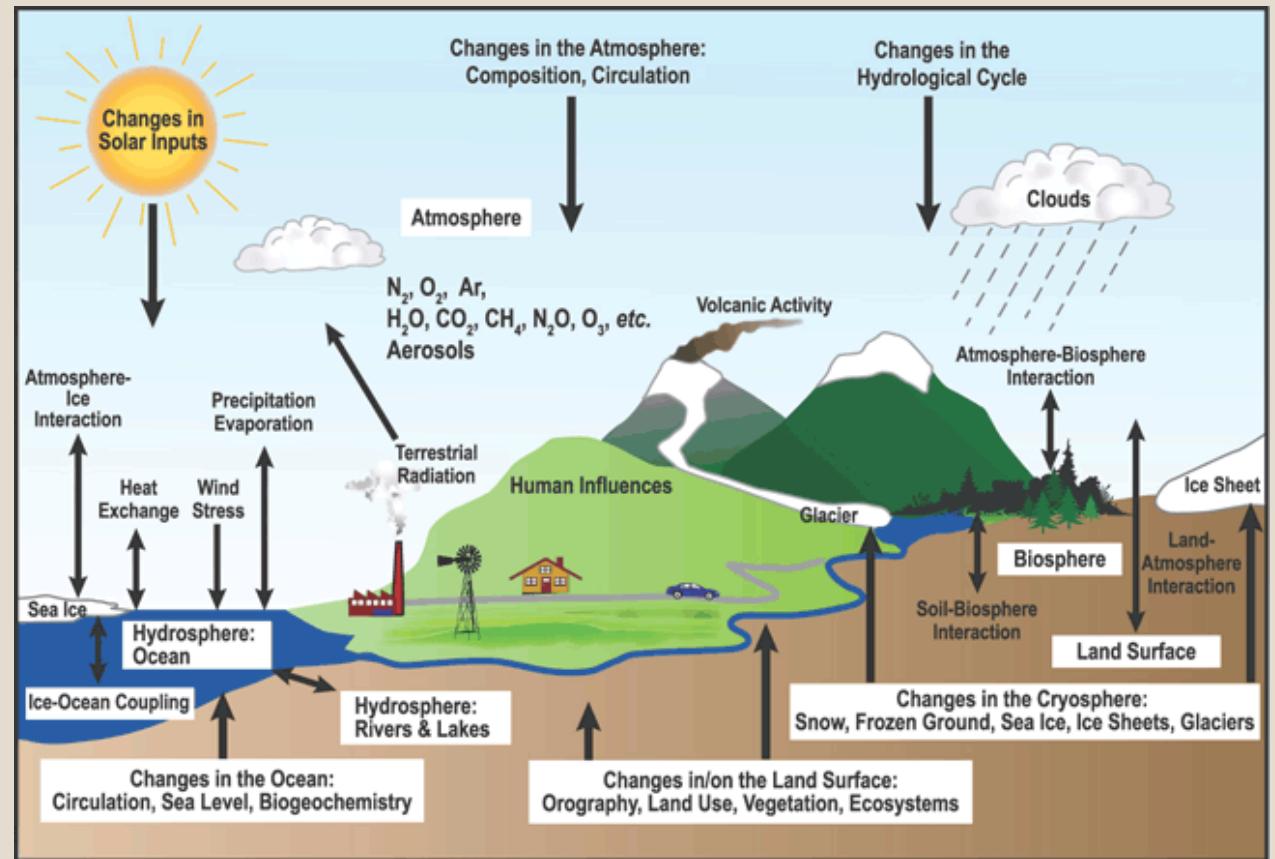
2007.

2013.



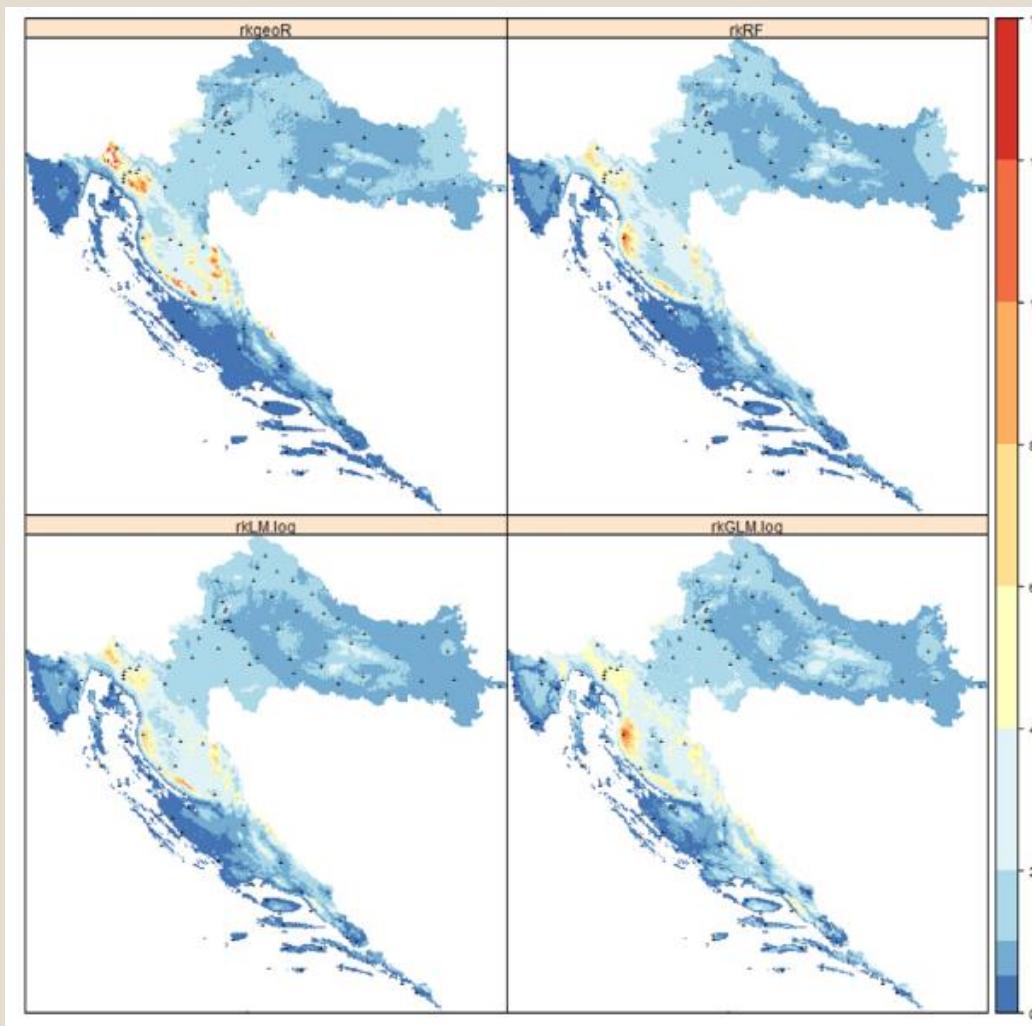
- 1535 stranica
- 9200 publikacija
- 259 vodećih autora
- 600 ostalih autora
- 1089 recenzentata
- 39 država
- 54677 komentara

Klimatski sustav



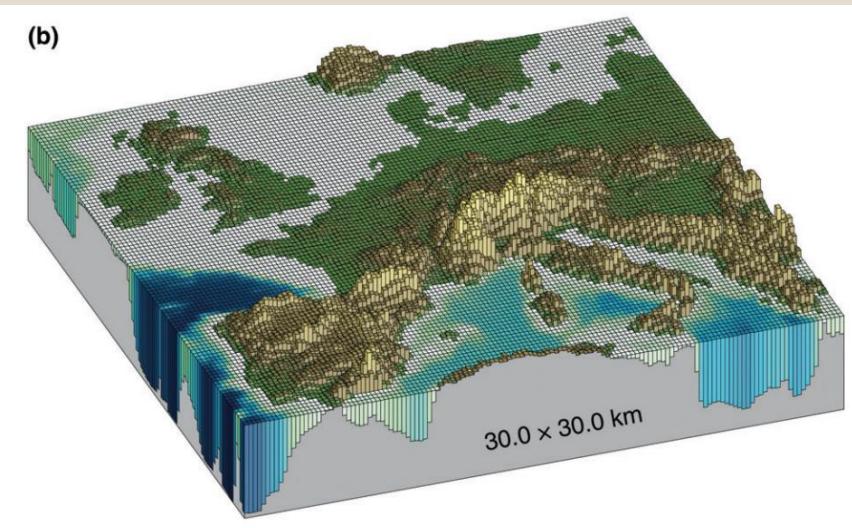
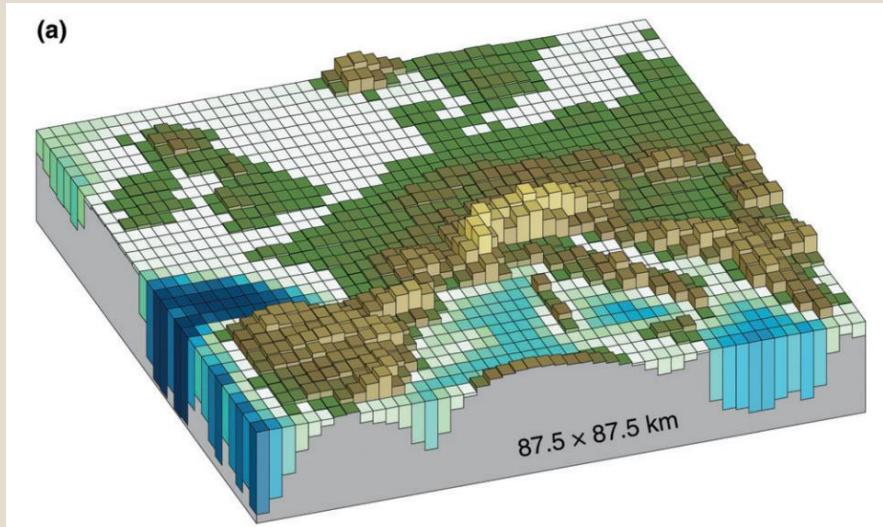
- Atmosfera
- Oceani i mora
- Rijeke i jezera
- Podzemne vode
- Kopno
- Kriosfera
- Biosfera

Opterećenje snijegom (kN/m^{**2}) uz 50-godišnji povratni period



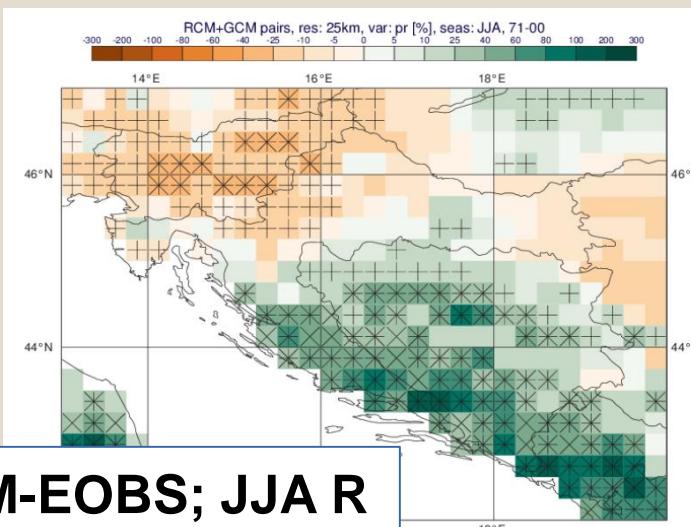
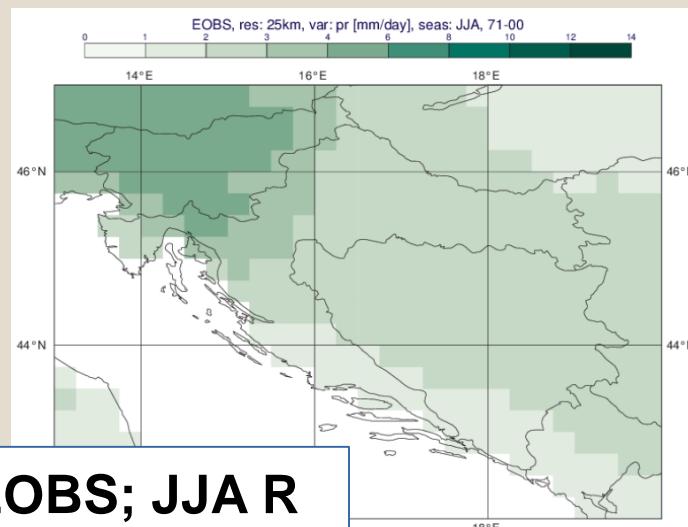
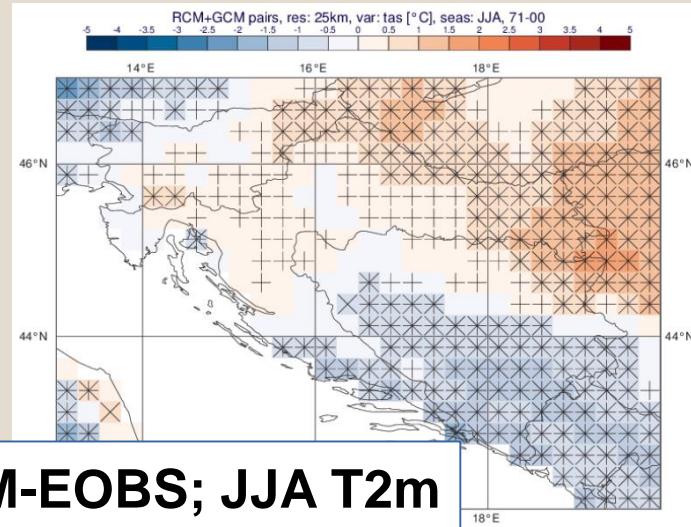
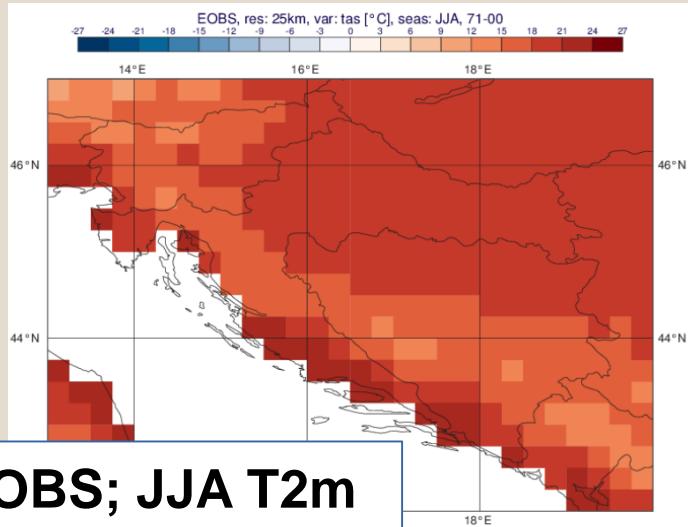
M. Perčec Tadić, K. Zaninović, R. Sokol Jurković (2015)
Spatial Statistics, 14, 53–69.

Numeričko modeliranje uz različite prostorne rezolucije

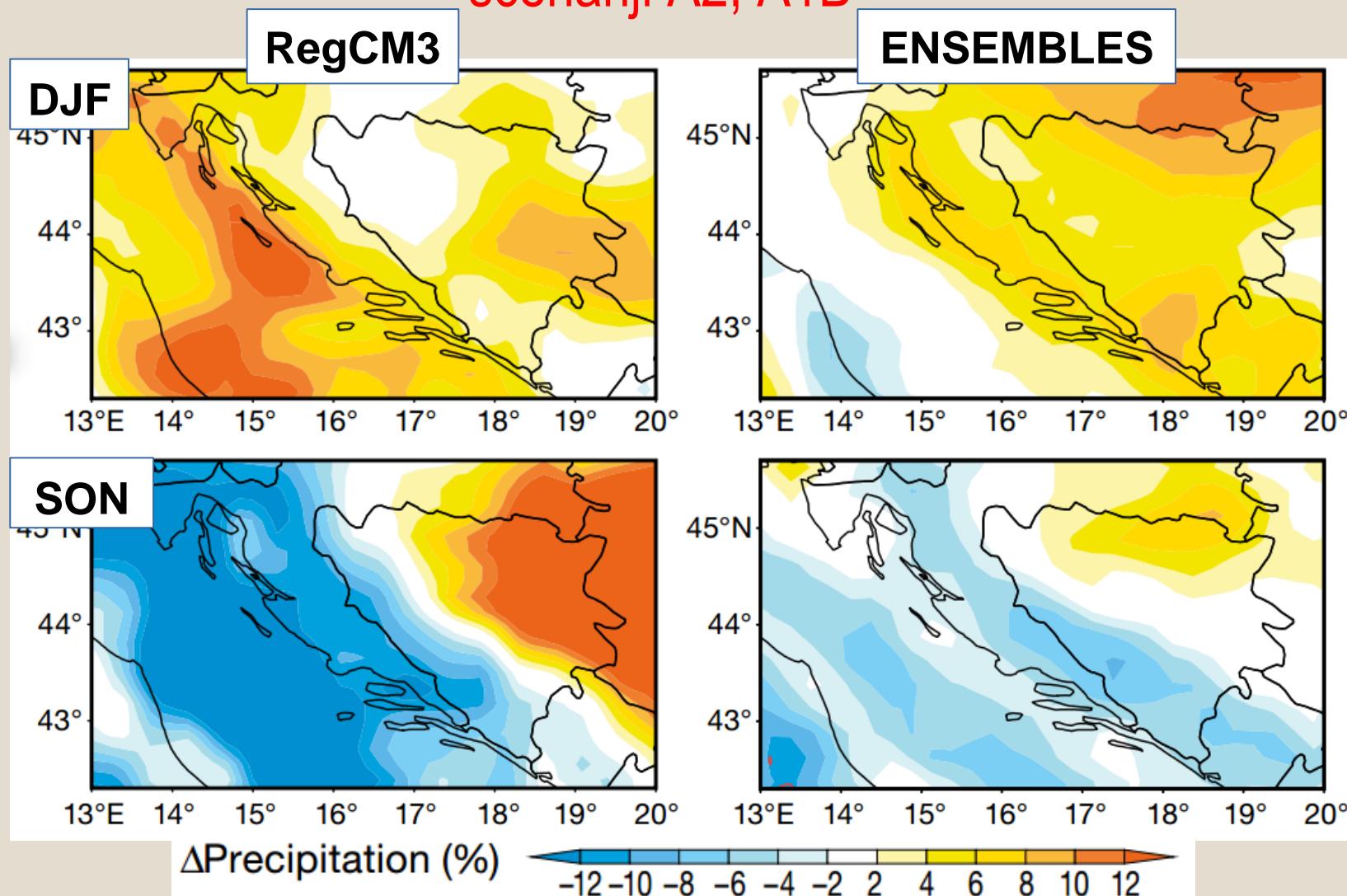


M. Rummukainen (2016)

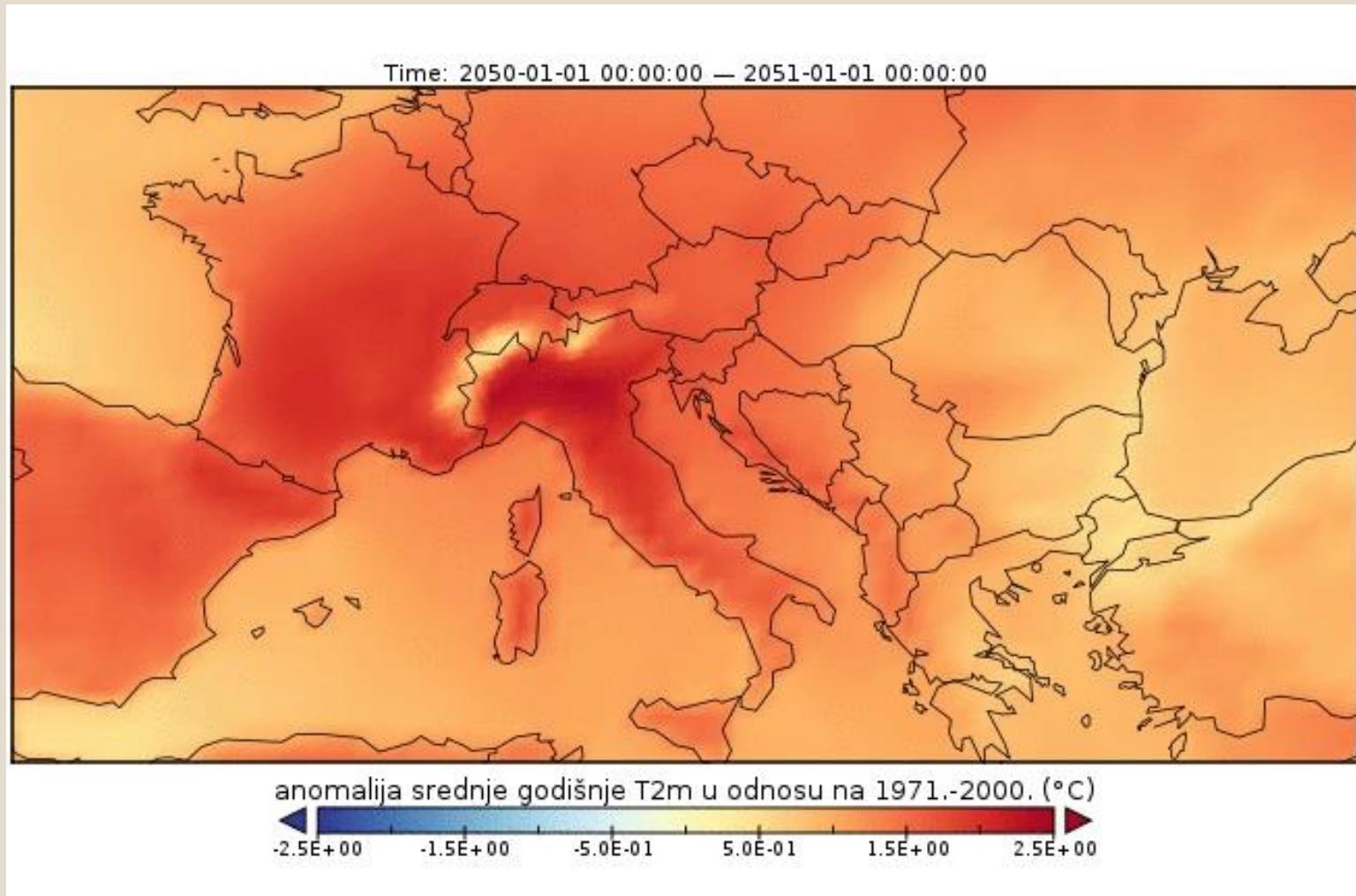
Usporedba opažanja i rezultata modeliranja (1971.–2000.)



Projekcije količine oborine (1961/1990.–2011/2040.), scenariji A2, A1B

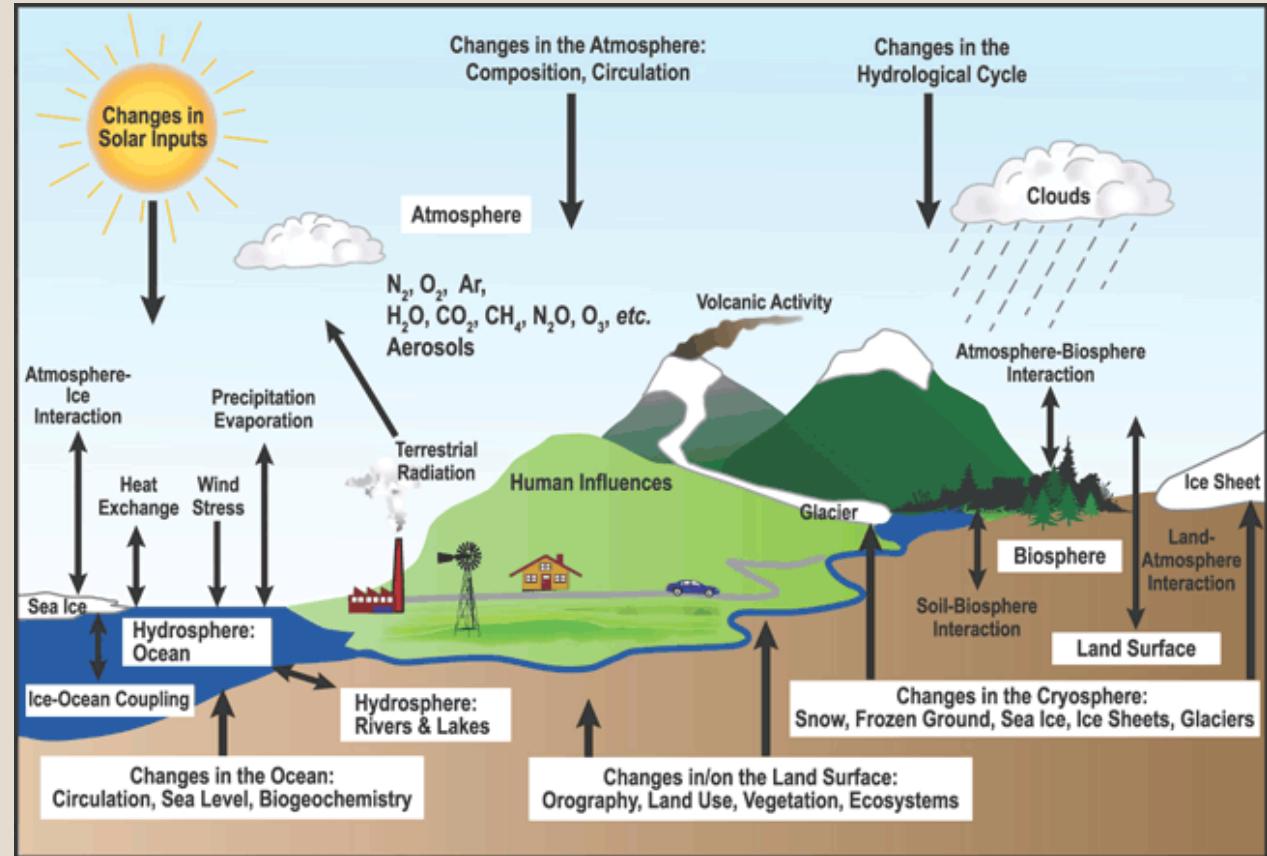


Simulacije temperature za razdoblje od 1970. do 2050.



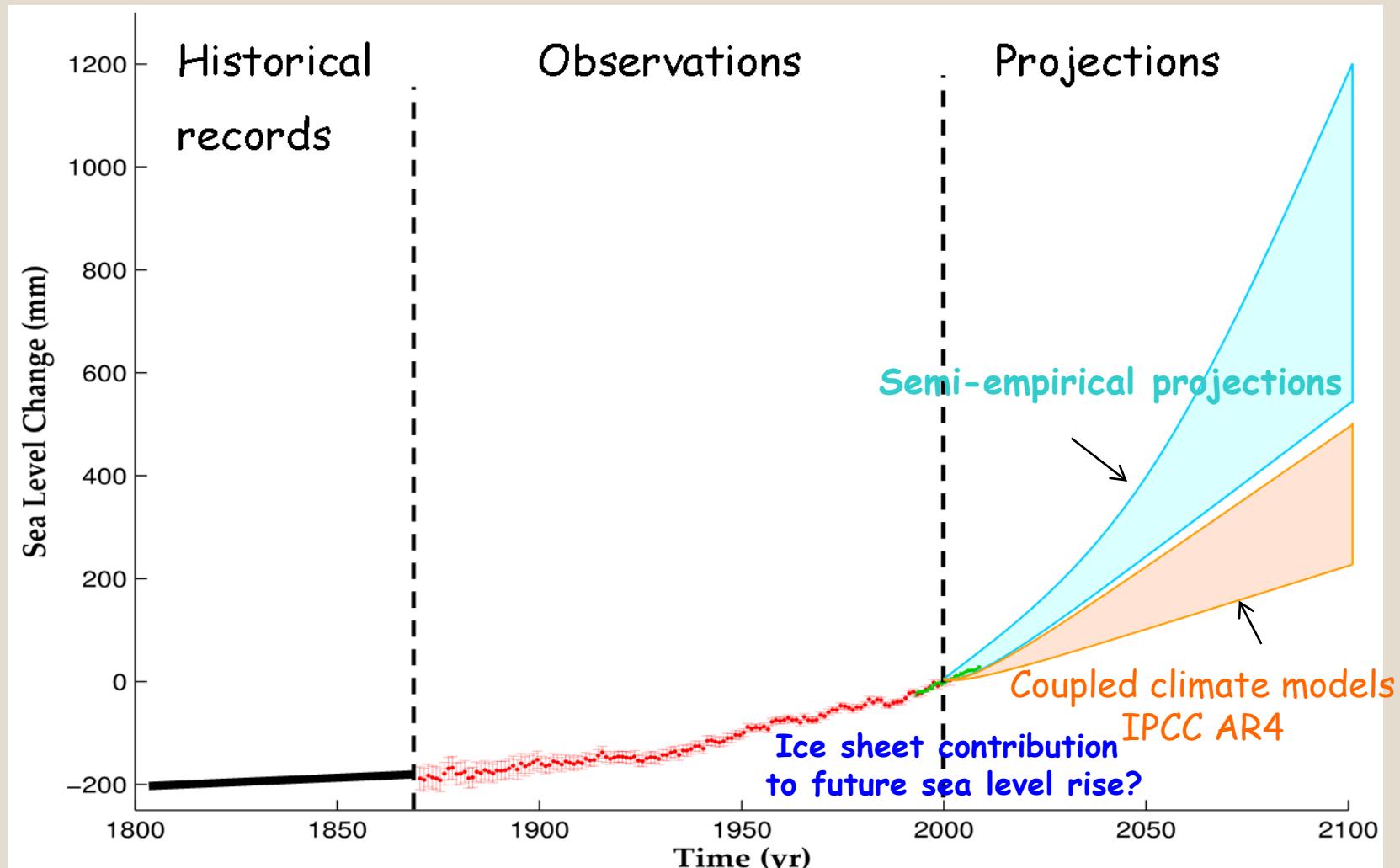
RCM RegCM4 (12.5 km) + CMIP5 GCM EC-Earth
1970.–2005.: izmjerene koncentracije stakleničkih plinova
2006.–2050.: IPCC scenarij RCP4.5

Klimatski sustav

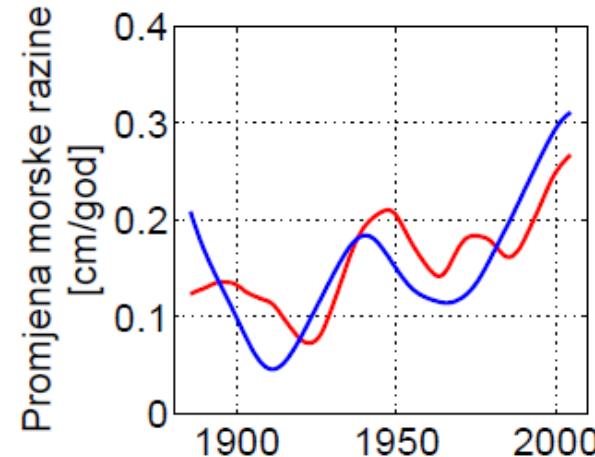
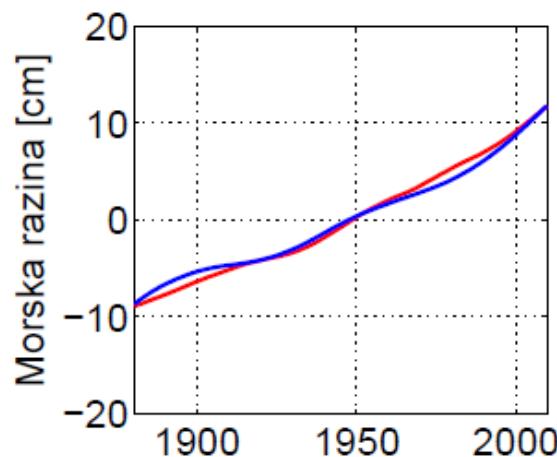
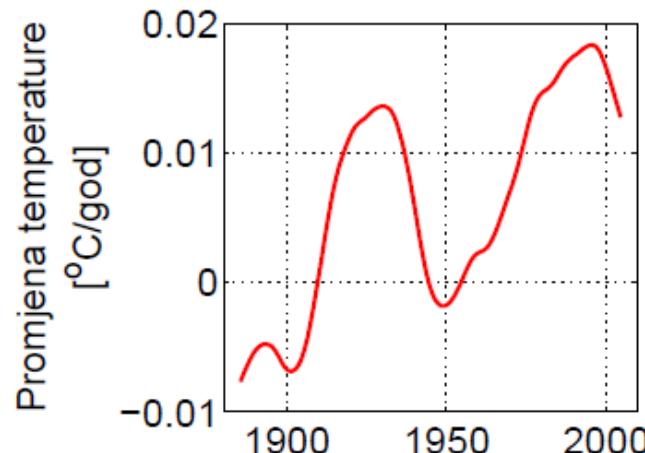
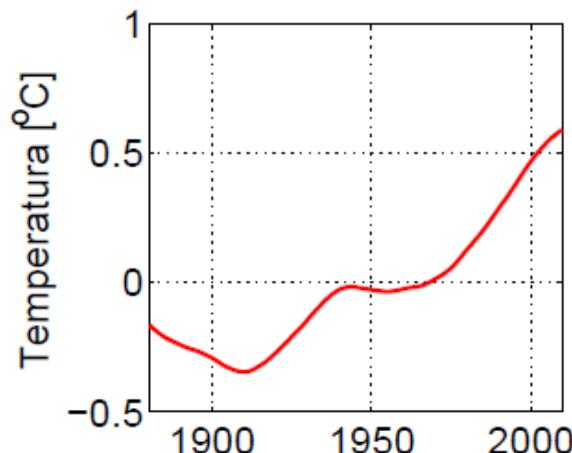


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Analize i projekcije globalne morske razine

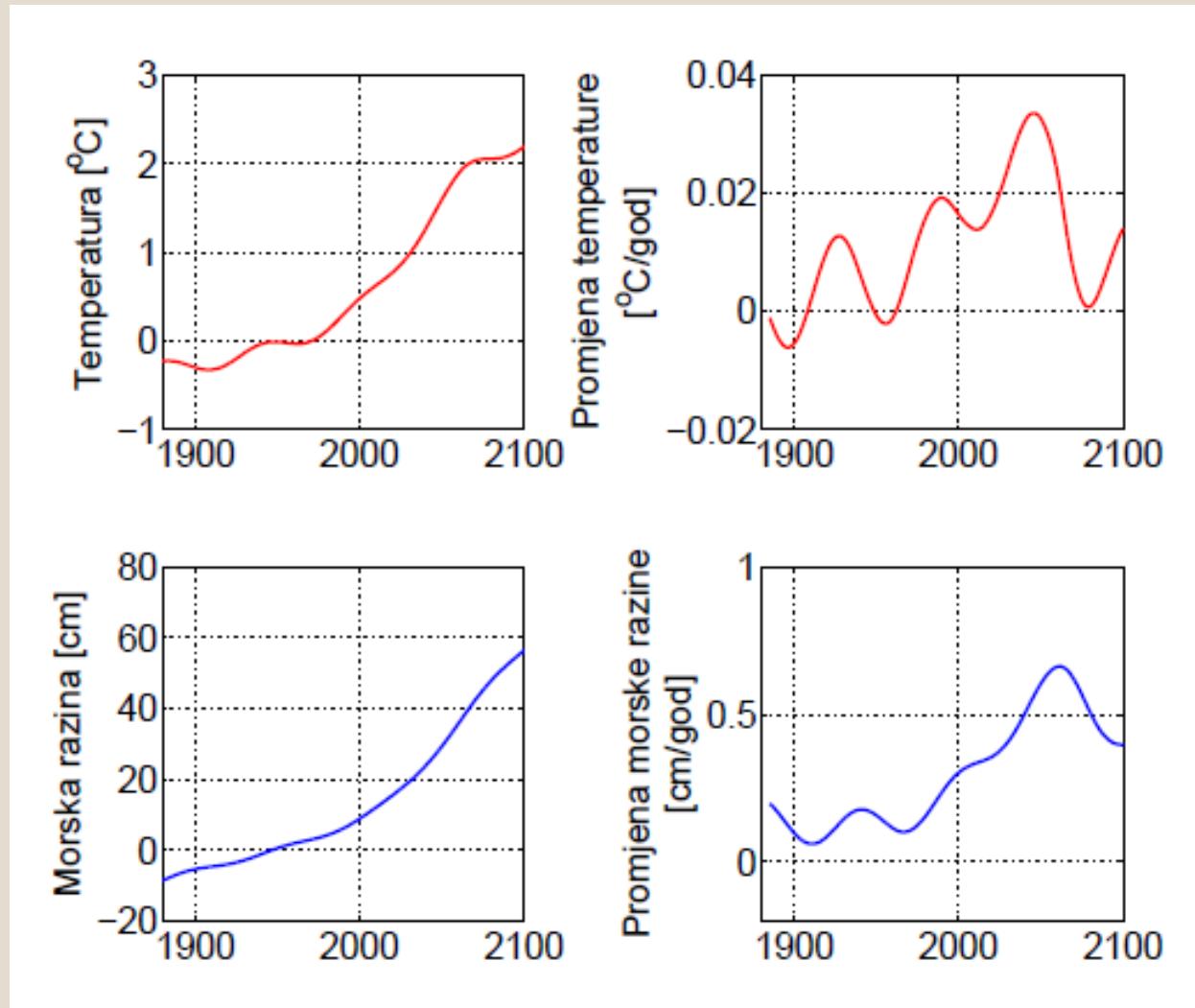


Povezanost globalne morske razine s globalnom temperaturom



$$I \frac{d\eta}{dt} + E\eta = \tau$$

Projekcije uz scenarij RCP4.5



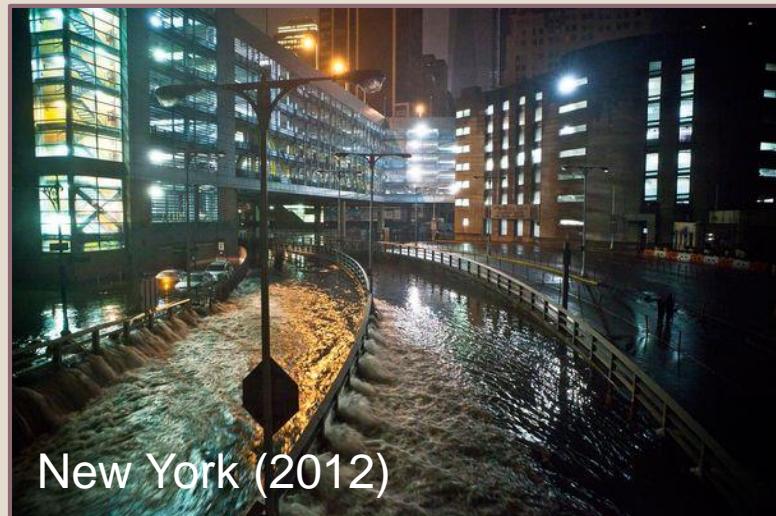
Neki nedavni slučajevi poplavljanja obalnog područja



Hamburg (2007)



Venecija (2008)

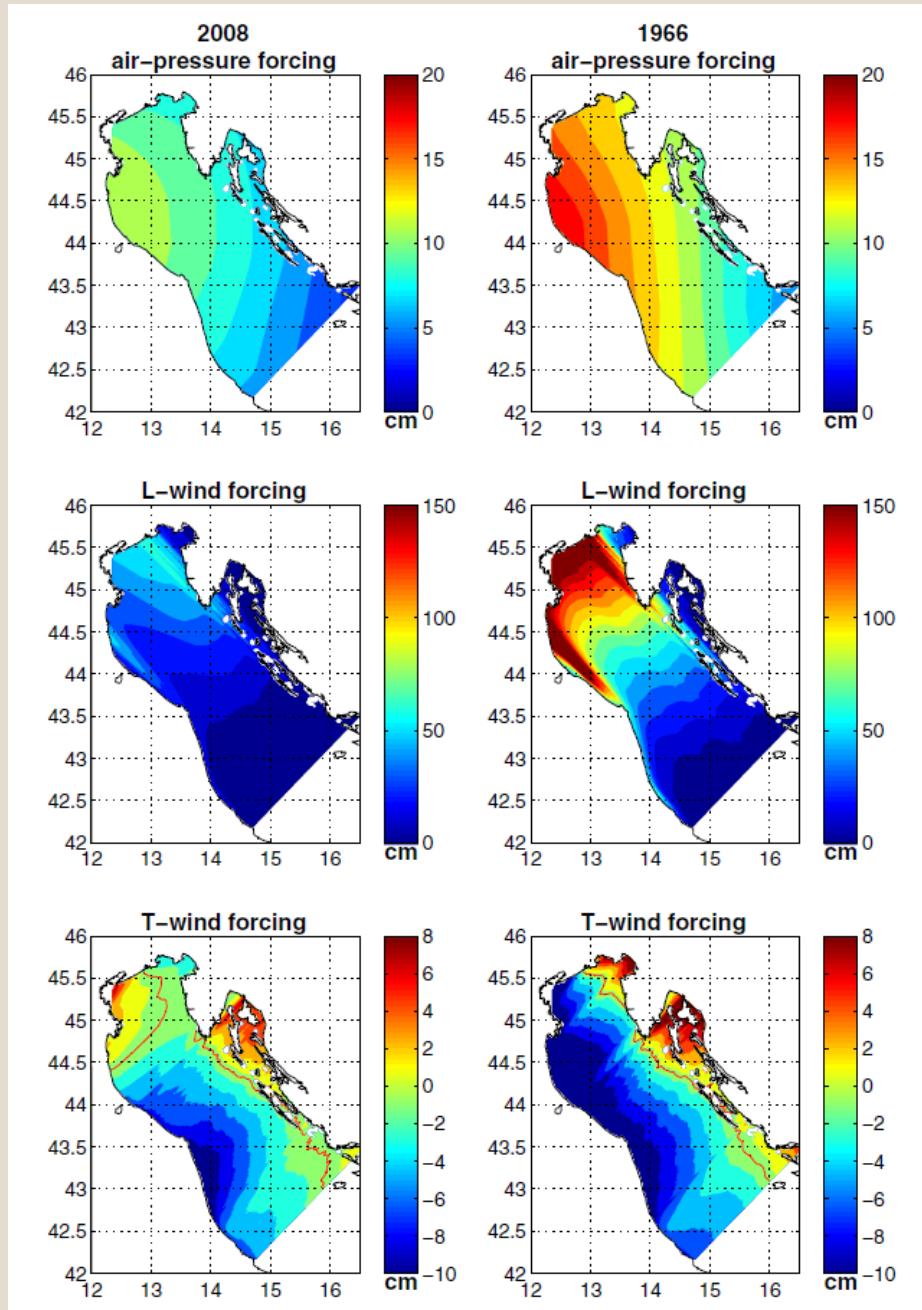


New York (2012)



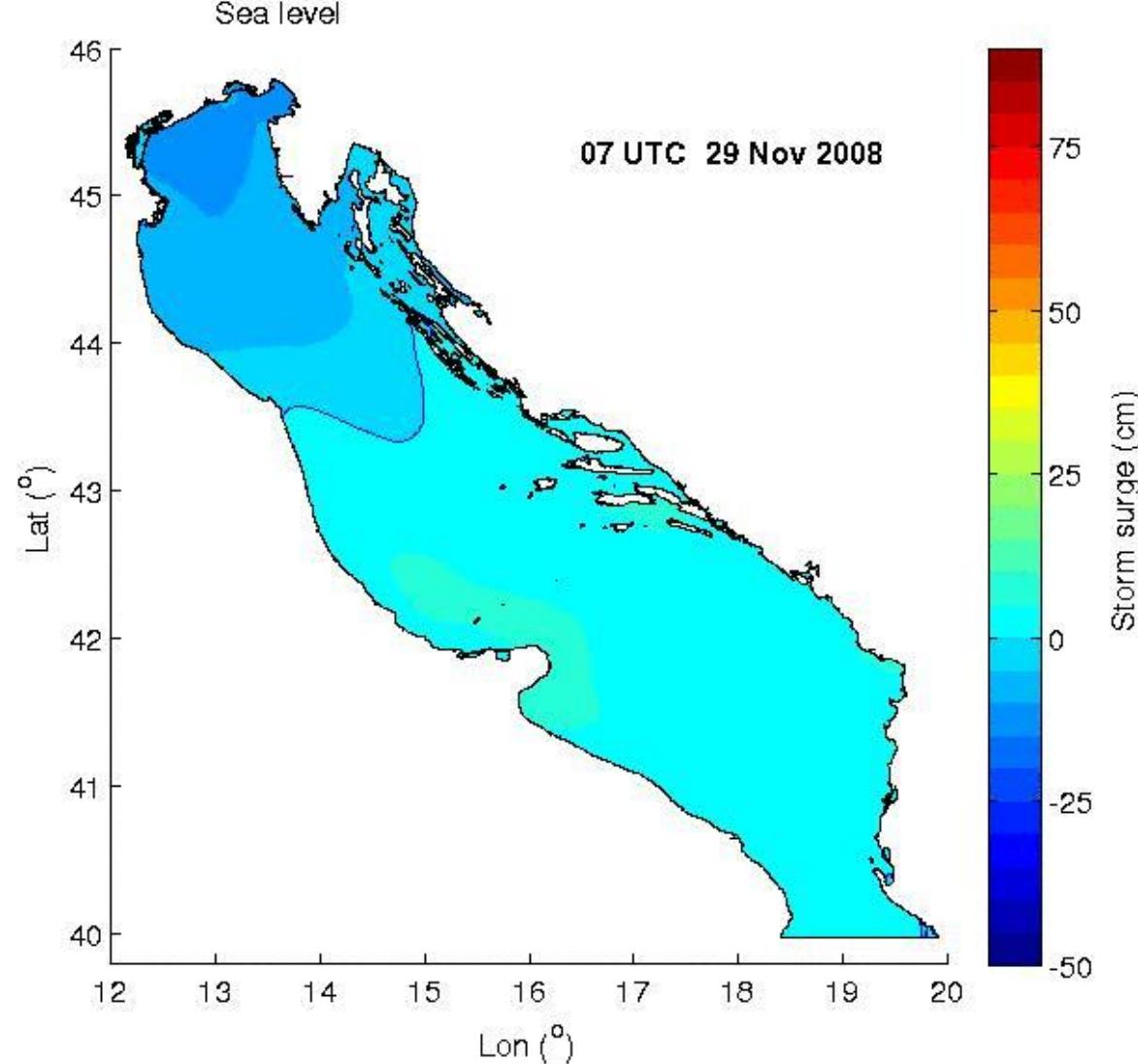
Rijeka (2012)

Utjecaj tlaka zraka i vjetra na visinu morske razine



I. Međugorac, M. Pasarić, M. Orlić (2015)
Ocean Dynamics, 65, 817–830.

Simulacija poplave od 1. prosinca 2008.





Suradnici na projektu CARE



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