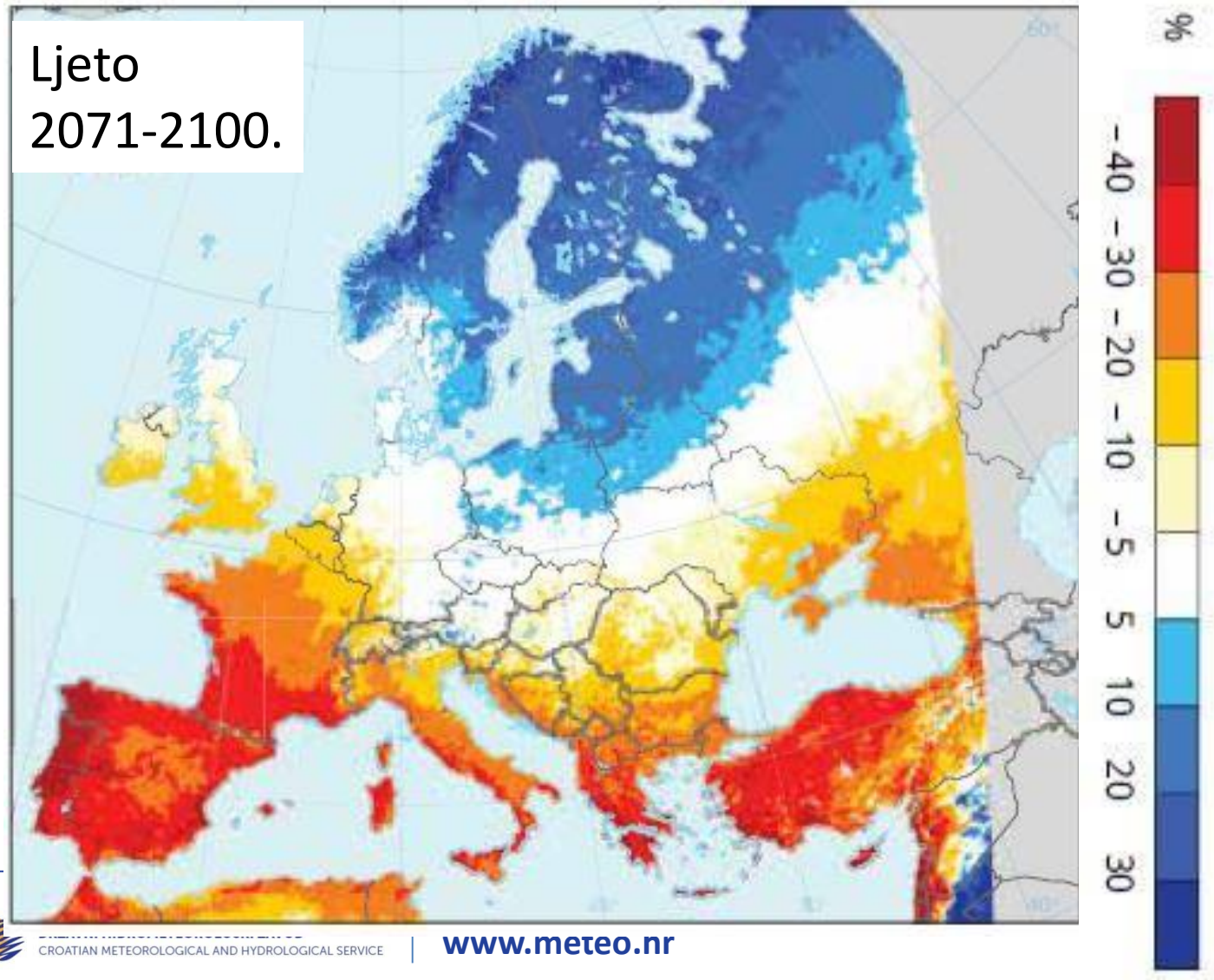
Kako vremenski ekstremi utječu na poljoprivredu i požare?

dr. sc. Višnja Vučetić

vucetic@cirus.dhz.hr

Koprivnica, 22. travnja 2021.

Procjena količine oborine u budućnosti



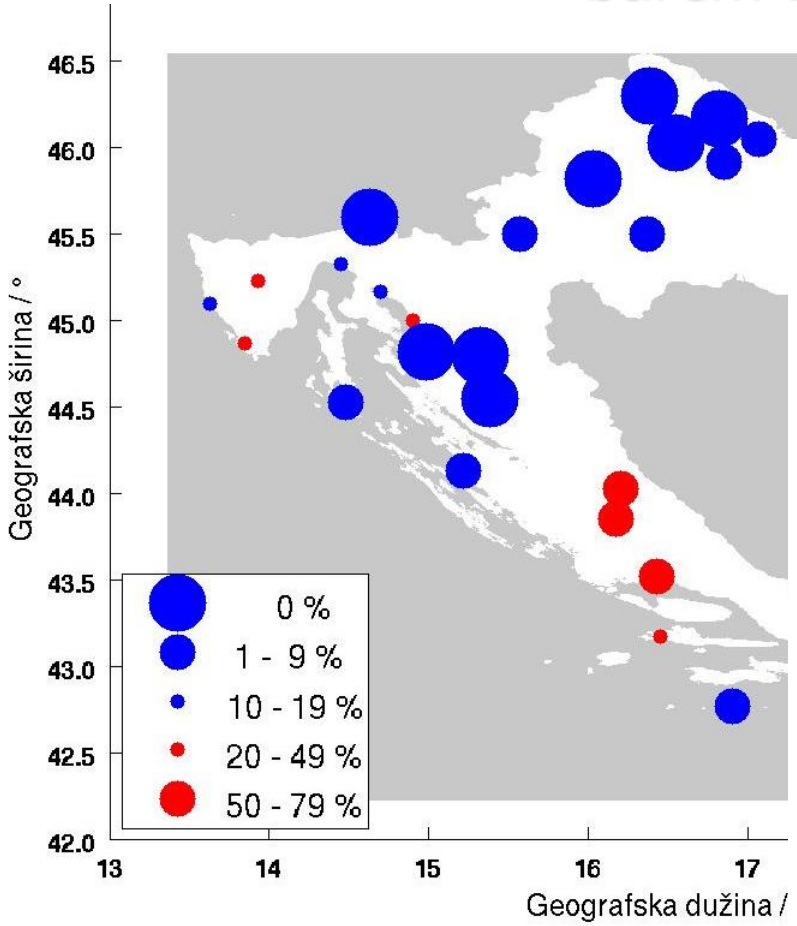
Prosjek:
1971-2000.

Izvor:
EEA, 2017.

Toplinski stres

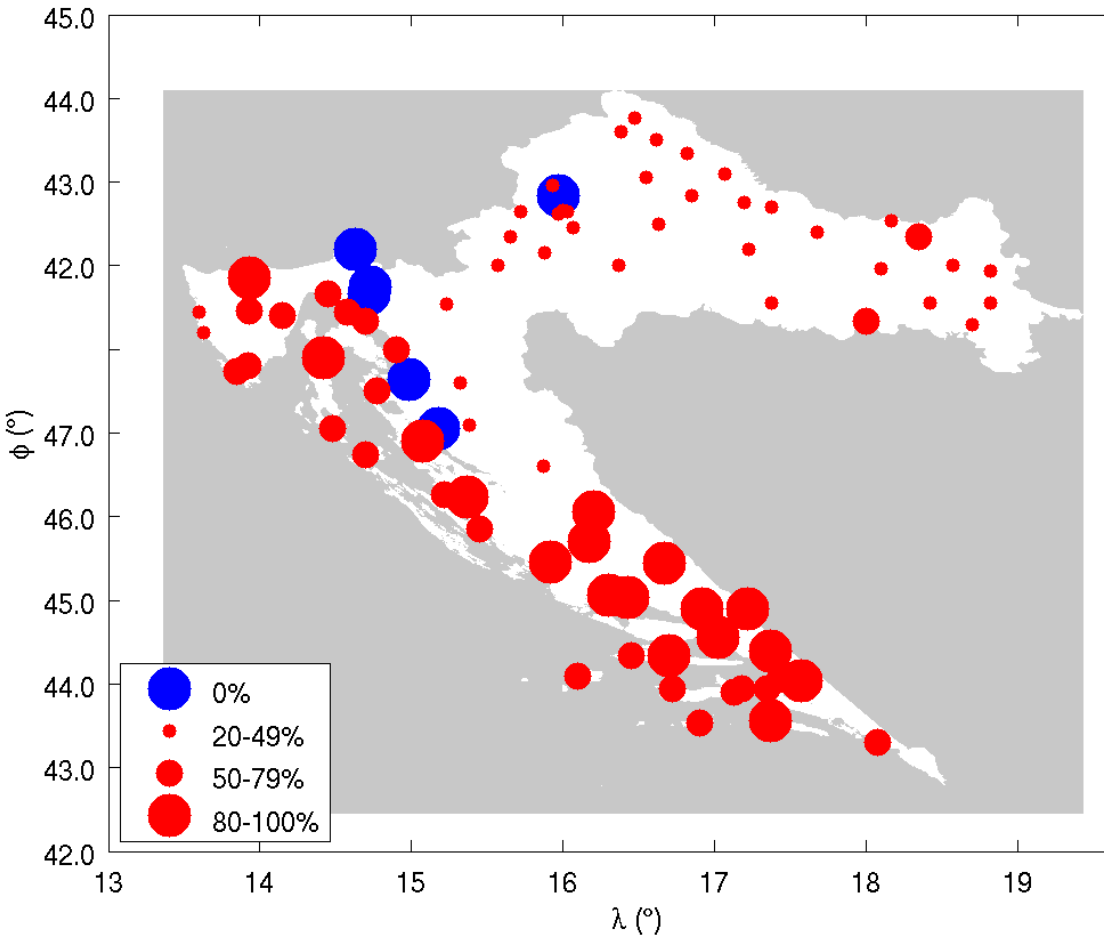
1961-1990.

barem 10 uzastopnih dana s $T_{maks} \geq 30$ °C



Vučetić, 2017

1987-2016.



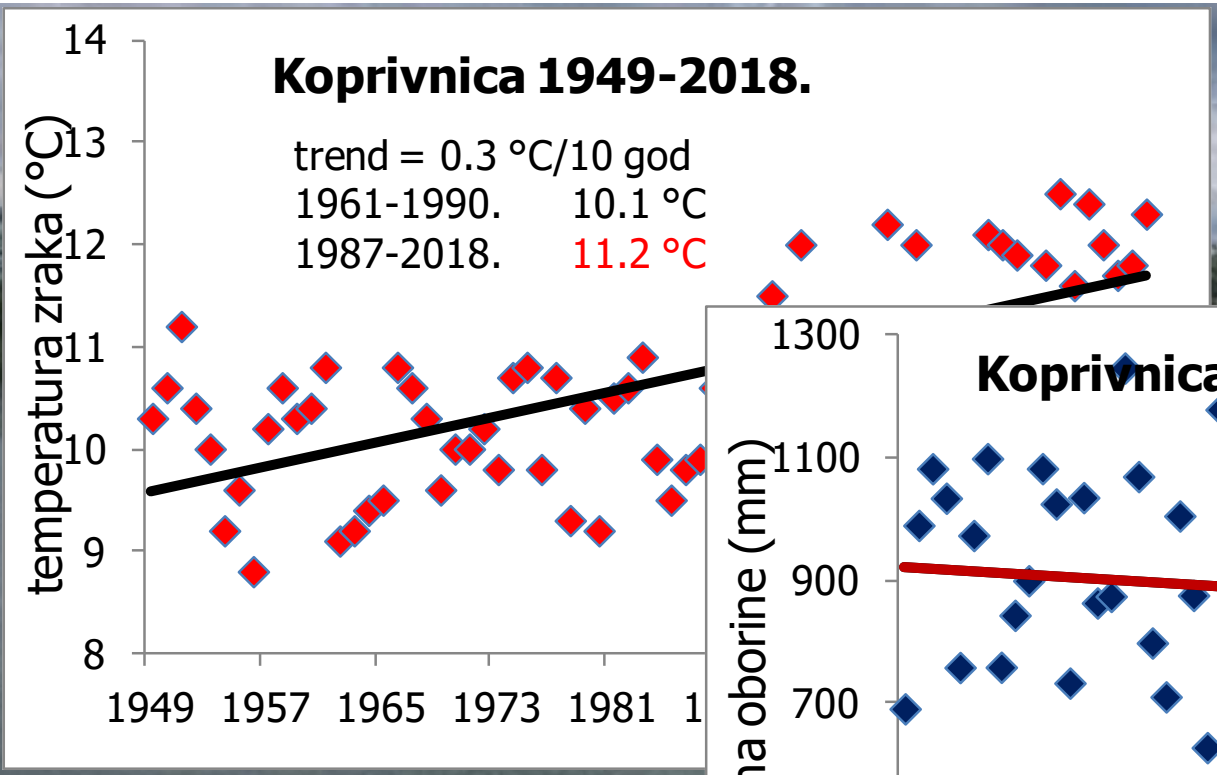
Koprivnica 1949-2018.

Srednja temperatura	10.6 °C	
Maksimalna temperatura	39.1 °C	24.8.2012.
Minimalna temperatura	-26.1 °C	16.2.1956.
Srednja količina oborine	874.5 mm	
Maksimalna količina oborine		
Maksimalna visina snijega		

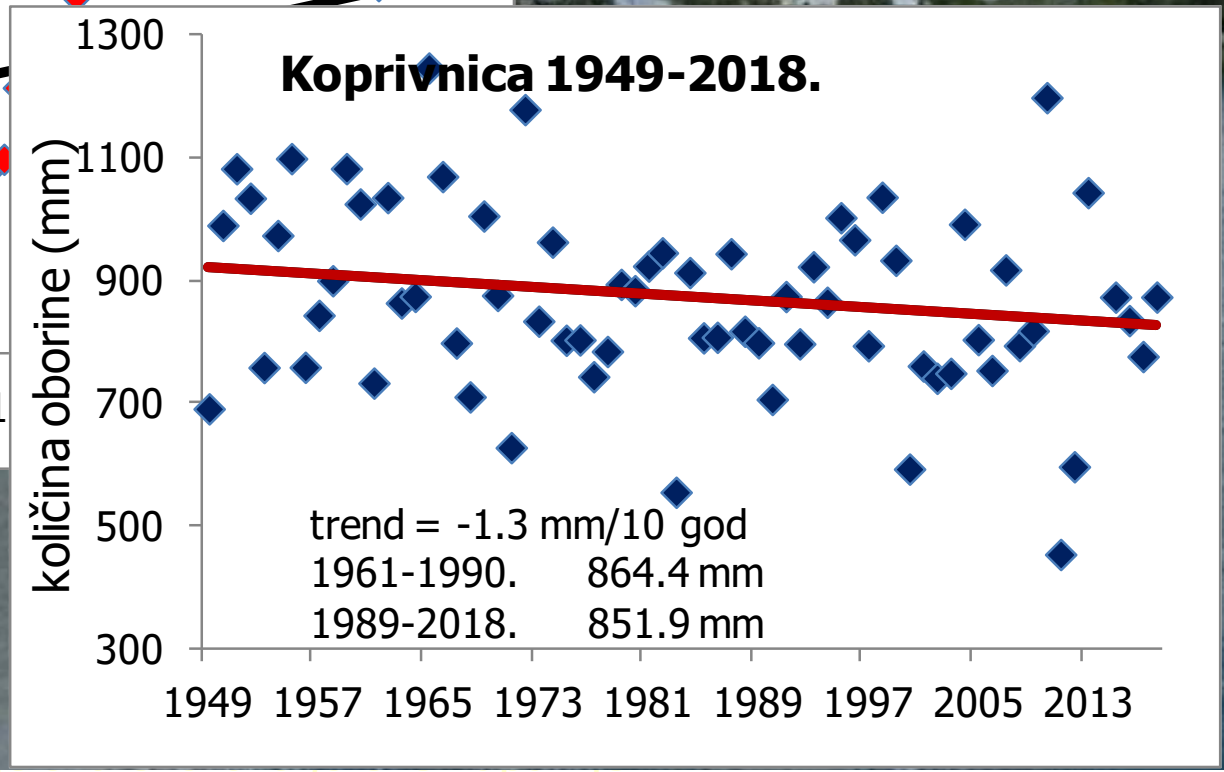
Ledeni dani	t_{min} < -10 °C	8 dana
Hladni dani	t_{min} < 0 °C	82 dana
Topli dani	t_{maks} >25 °C	80 dana
Vrući dani	t_{maks} >30 °C	21 dana
Tople noći	t_{min} > 20 °C	2 dana
Vedri dani	N < 2/10	53 dana
Oblačni dani	N > 8/10	116 dana
Dani s maglom		54 dana
Dani s mrazom		51 dana
Dani s grmljavinom		44 dana
Dani s tučom		2 dan



Trend srednje godišnje temperature i količine oborine

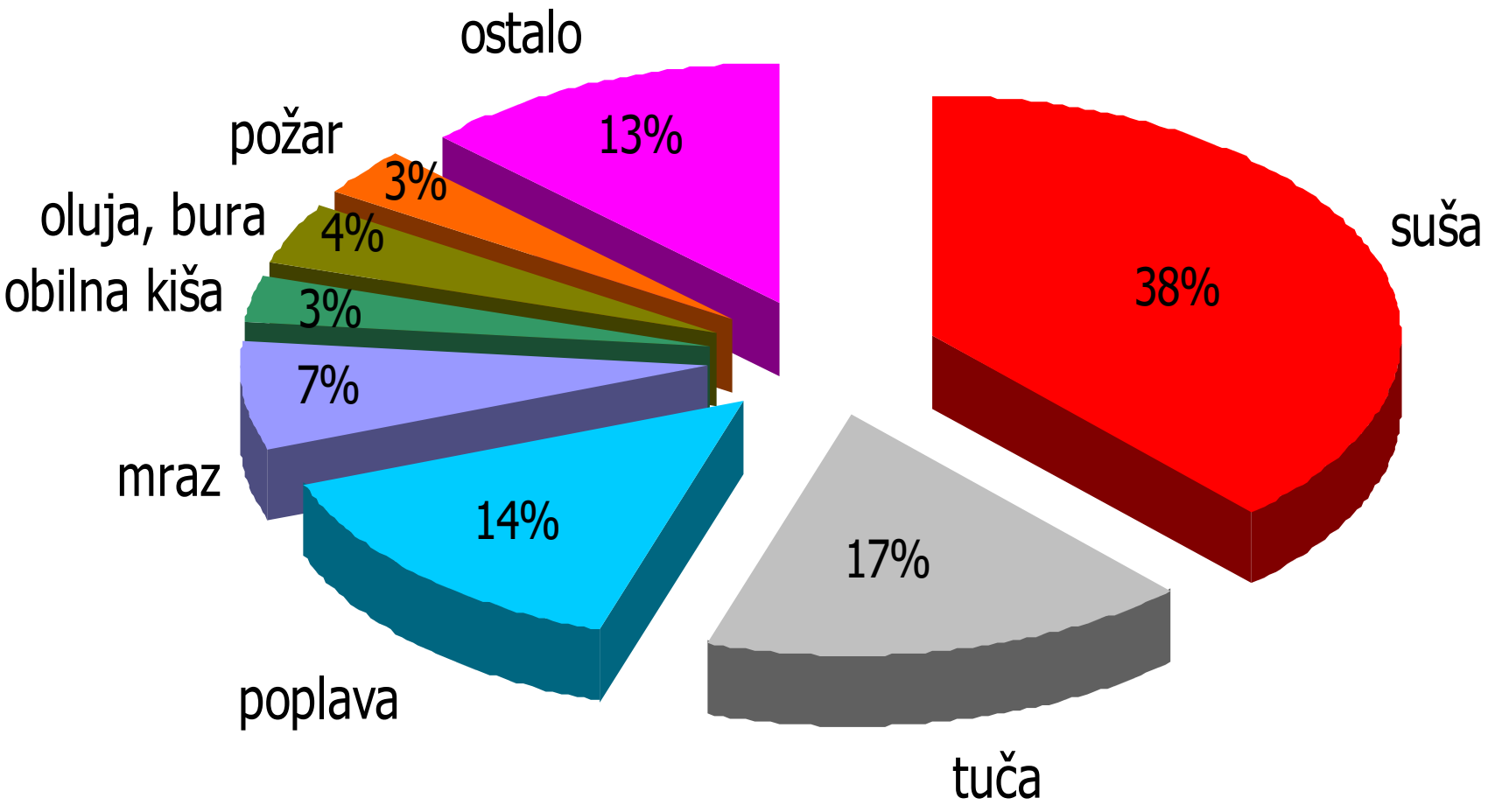






Jezero Šoderica
Foto: Davor Puklavec

Gospodarske štete



Mraz i štete od hladnoće

7-9. travnja 2021.

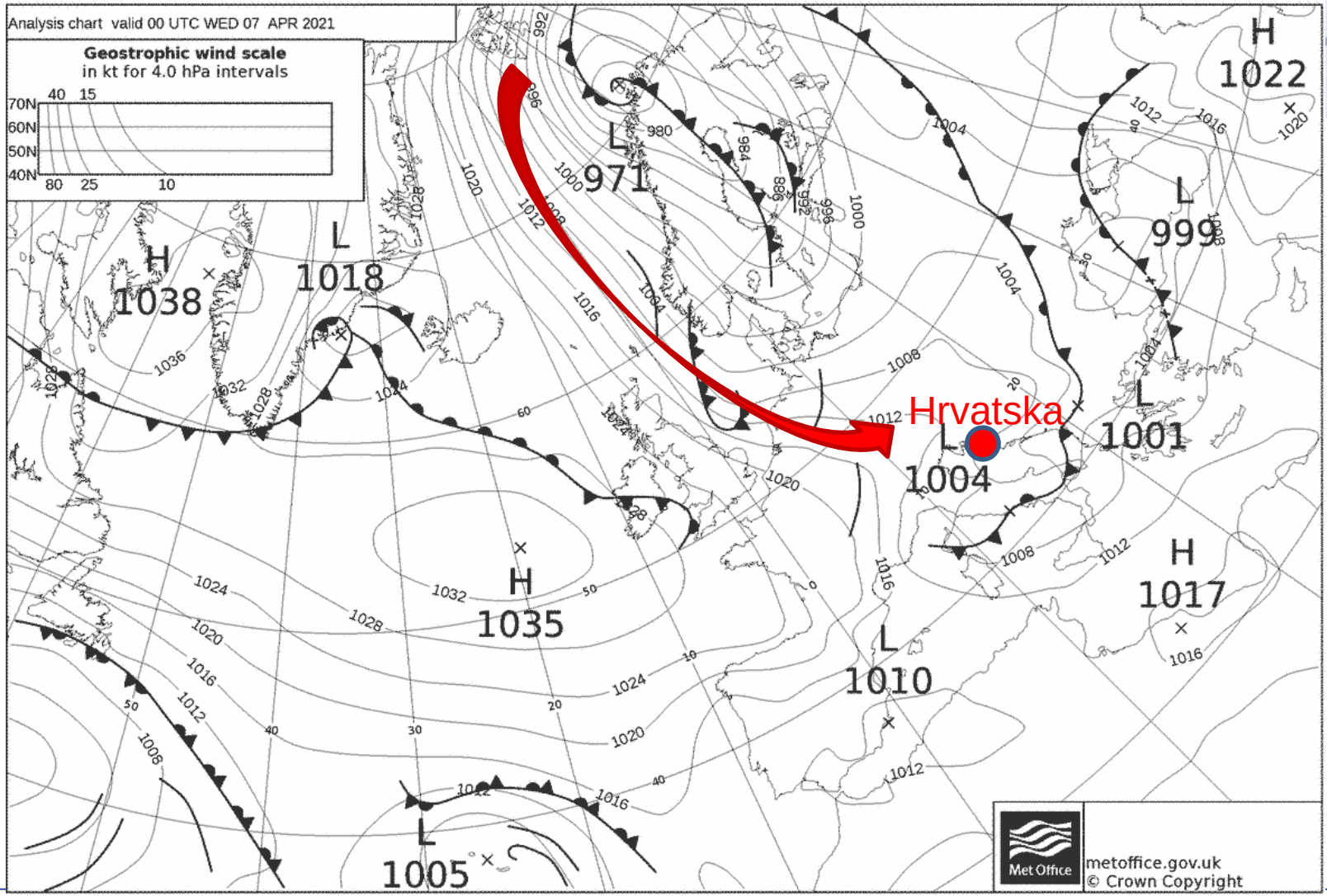


Foto: Nacional O.G.H.



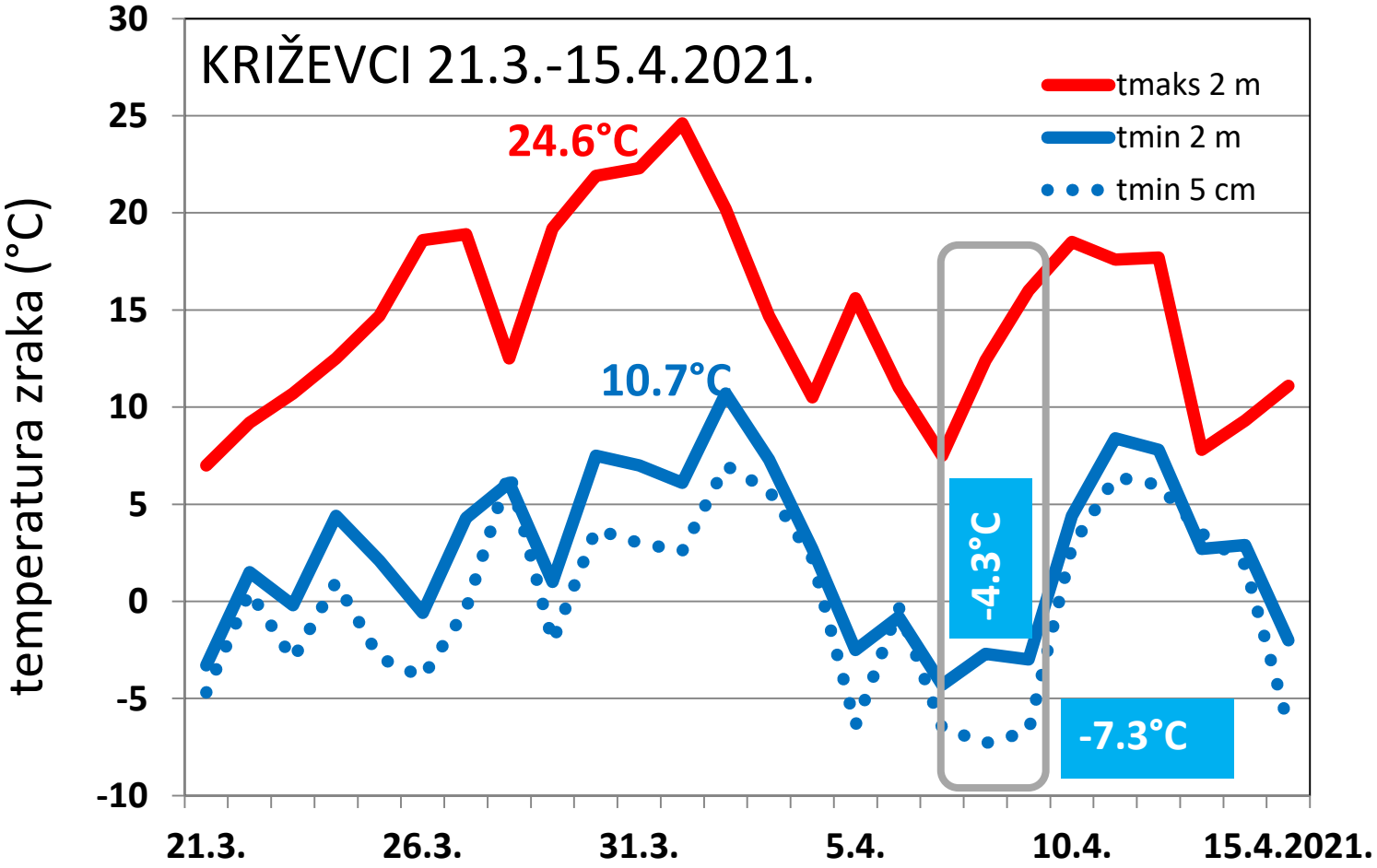
Foto: Ivana Čavlina Tomašević

Sinoptička karta 7. travnja 2021.



Temperatura zraka

21.3.-15.4.2021.

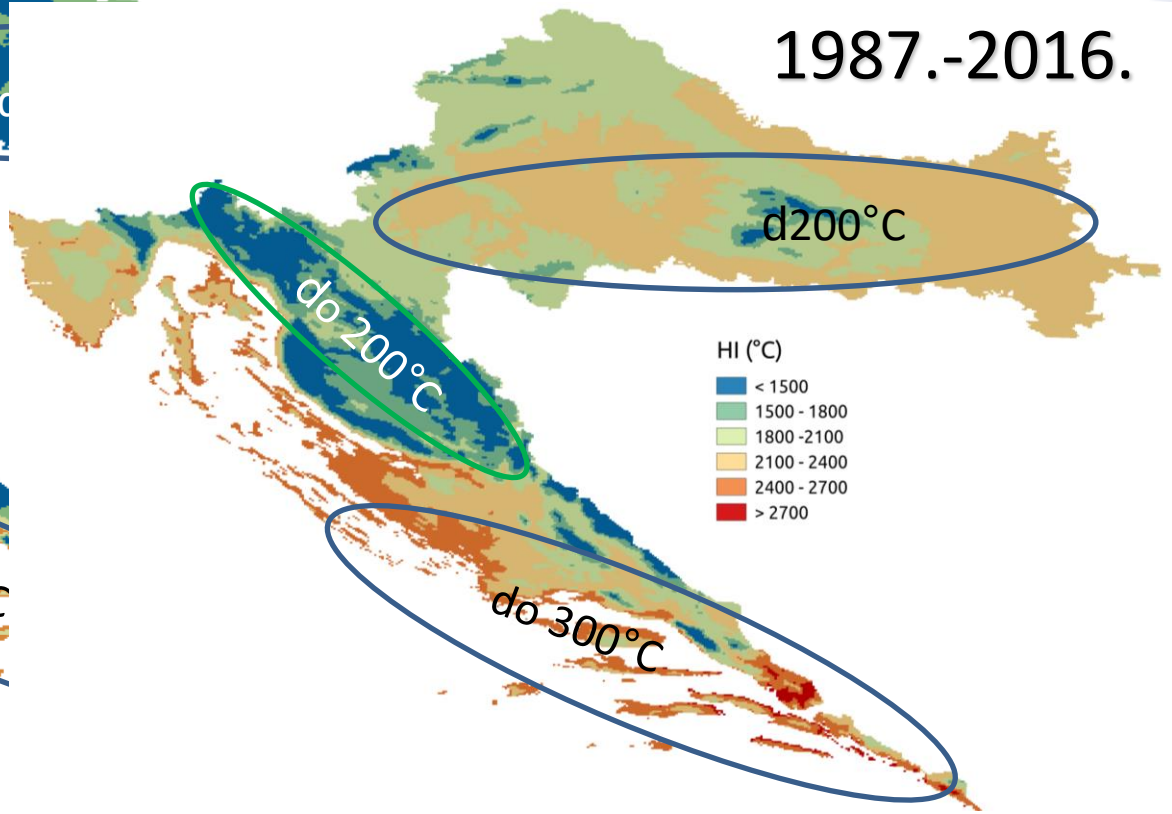


Temperaturne sume za vinovu lozu

1961-1990.

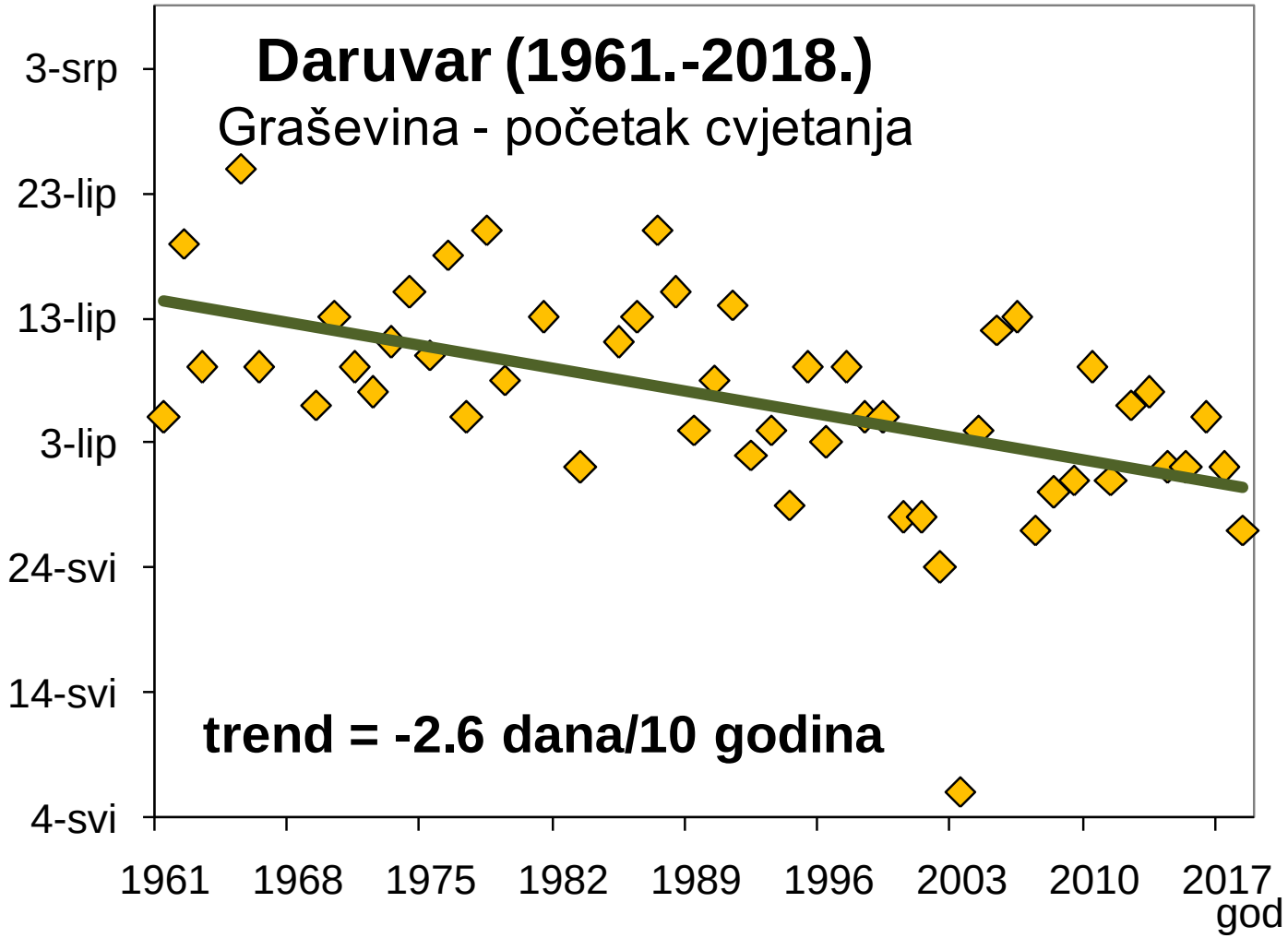


1987.-2016.



projekt VITCLIC (2017-2019)

Fenološka istraživanja

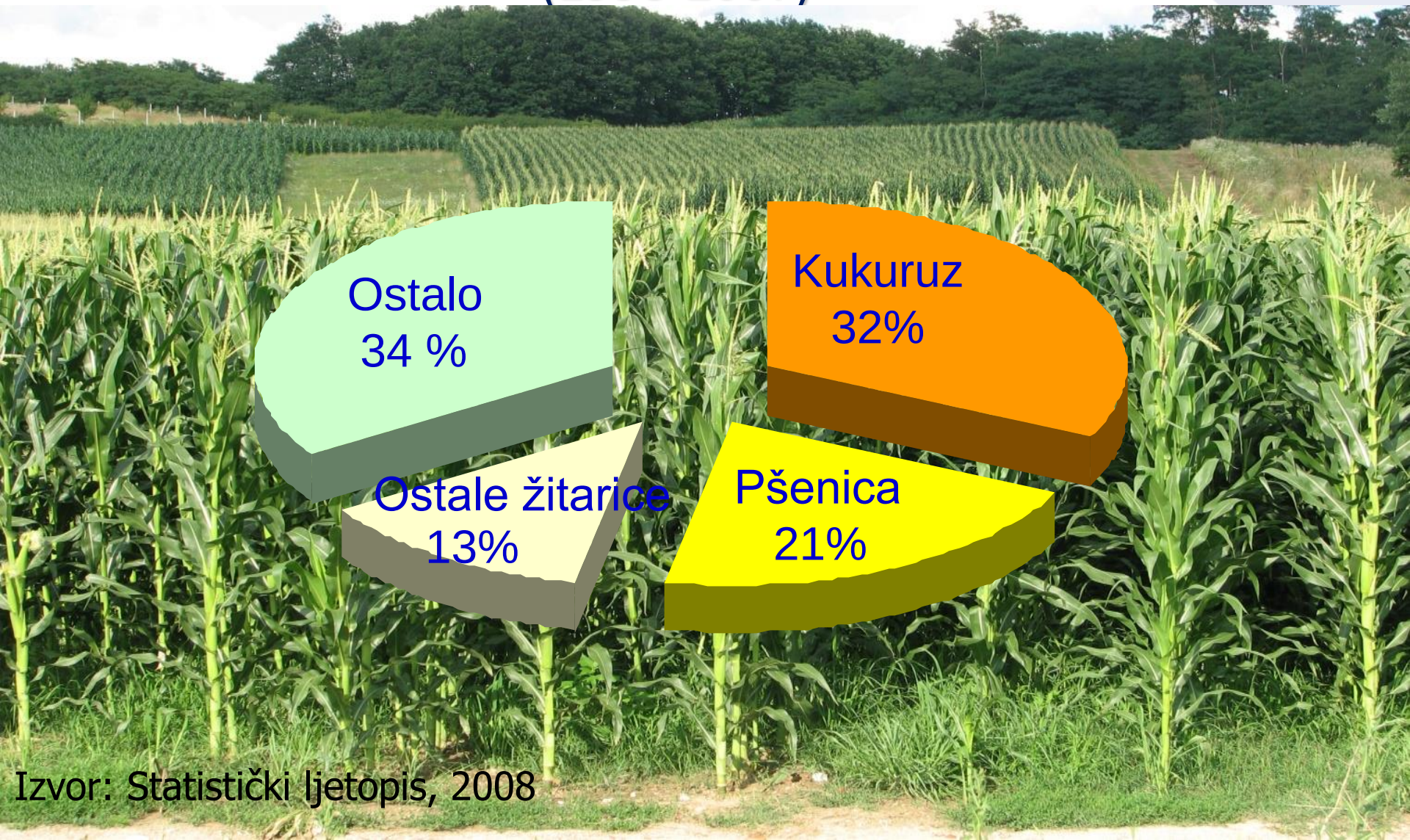


Fenološka istraživanja



Sorta vinove loze	Postaja	Trajanje dozrijevanja (dani)			
		1961-1990	1971-2000	1981-2010	1987-2016
Graševina	Daruvar	35	30	22	17
Plavac mali	Hvar	38	36	27	20

Poljoprivredne površine u Hrvatskoj
(1998-2007)



Izvor: Statistički ljetopis, 2008

Agrometeorološko modeliranje za kukuruz

✓Za procjenu prinosa usjeva i bolje razumijevanje uzročno-posljedične veze tlo–biljka–atmosfera primjenjuju se agrometeorološki modeli.

Gospodarski gubitak

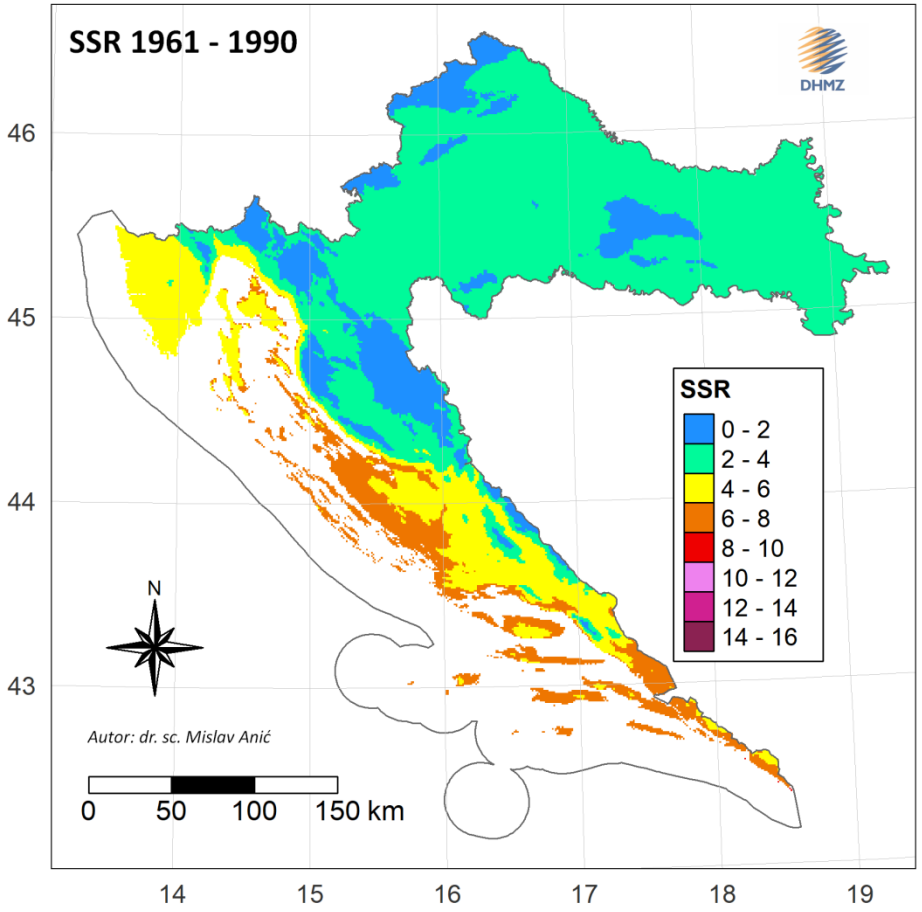
55 mil. USD

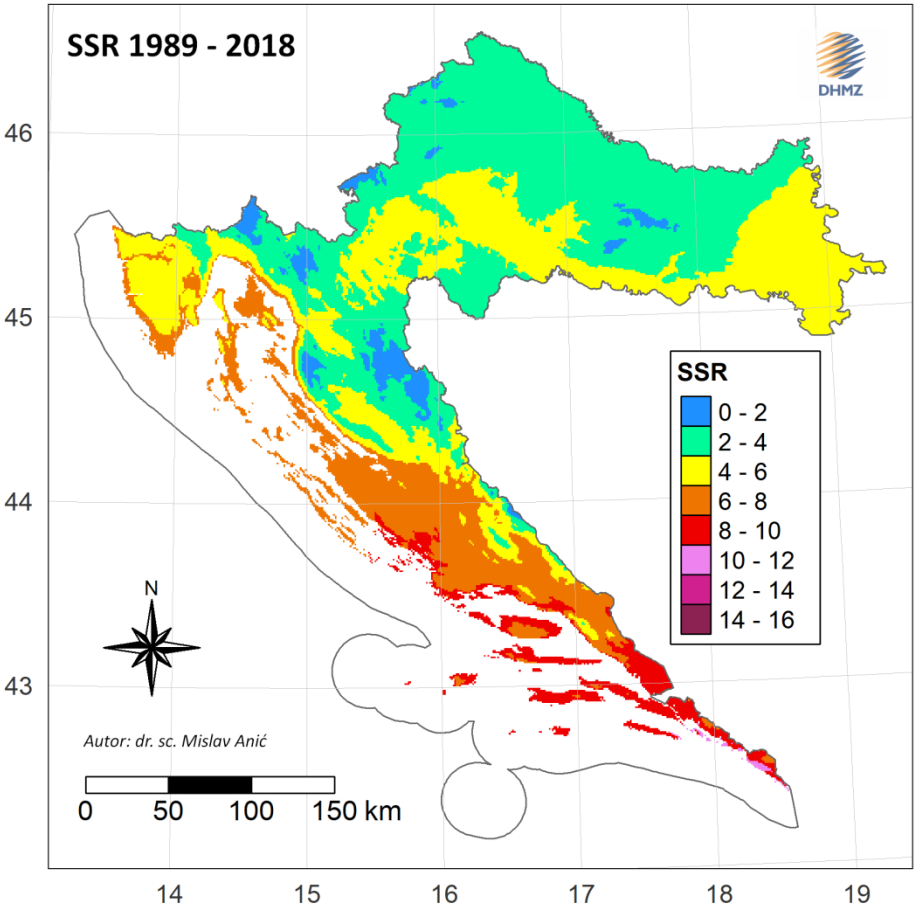
do kraja 21. stoljeća

Vučetić, 2011

Sezonska žestina

Potencijalna opasnost od požara raslinja





Anić, 2019

Sezonska žestina

Potencijalna opasnost od požara raslinja



Strahinjščica, 22-27. ožujka 2012.

Krapina, 22-26.3.2012. u 14 h

Datum	t_{zraka} (°C)	$t_{tlo2\ cm}$ (°C)	prosjek $t_{tlo2\ cm}$ (°C)	RV (%)	v (m/s)	FWI	Opasnost
22.3.2012.	20.0	22.8	12.9	35	2	14.2	mala
23.3.2012.	22.6	23.1.	13.6.	28	2	17.8	umjerena
24.3.2012.	22.3	23.9	14.0	32	2	18.5	umjerena
25.3.2012.	20.3	22.8.	14.6.	39	2	17.9	umjerena
26.3.2012.	17.9	22.2.	14.1	27	4	31.5	velika

Kuraži i Vučetić, 2017

Posljedice šumskih požara



Trstenik, 11. listopad 2015.

HVALA NA POZORNOSTI

