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Seasonal forecast and an outlook for Winter 2015/16 in Hungary



SEECOF-13 Consensus

Outlook for Summer 2015

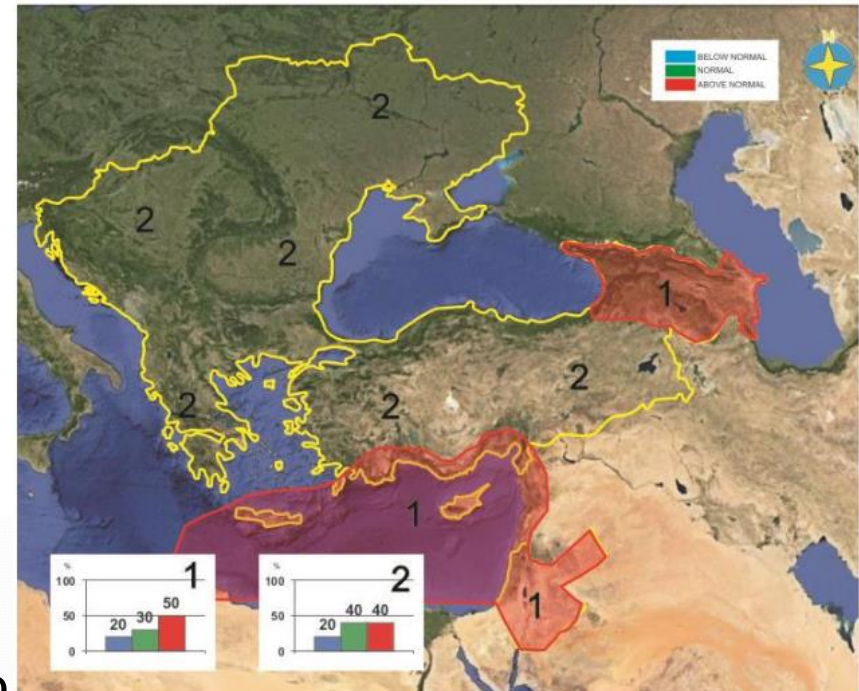
High probability of El Nino conditions

Good consistency of SST anomaly patterns among models

Positive SST anomaly for the Mediterranean Sea, but low predictability because of the absence of signs of tropical influence manifested as teleconnection patterns

Hungary

- medium to high probability for exceeding average summer season temperature (20-40-40)





SEECOF-13 Consensus

Outlook for Summer 2015

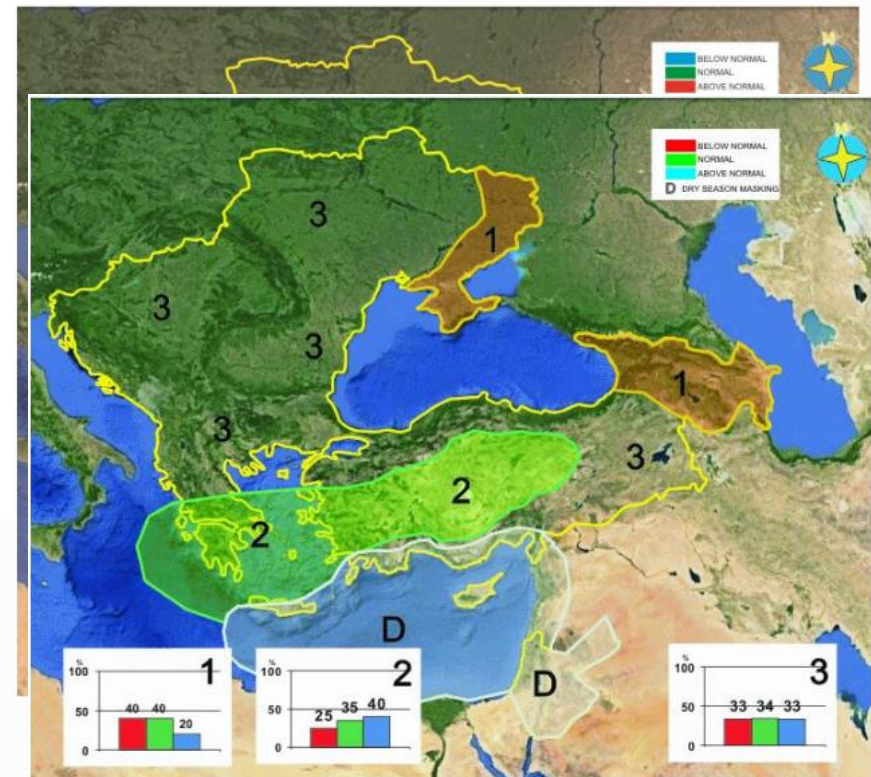
High probability of El Nino conditions

Good consistency of SST anomaly patterns among models

No clear scenario for the SEECOF region, mostly equal probabilities

Hungary

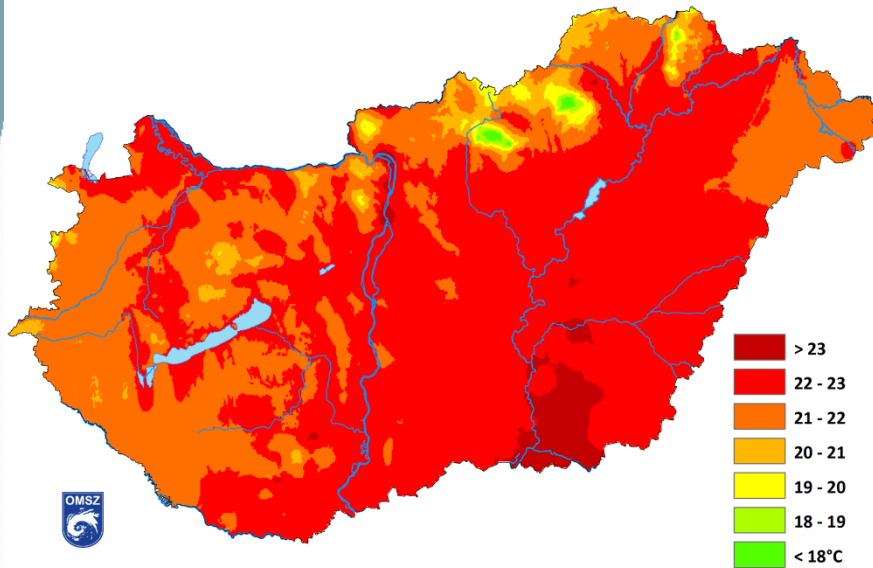
- no preference (33-33-33)





Summer 2015 in Hungary

The 4th hottest Summer since 1901 (+1.88°C)

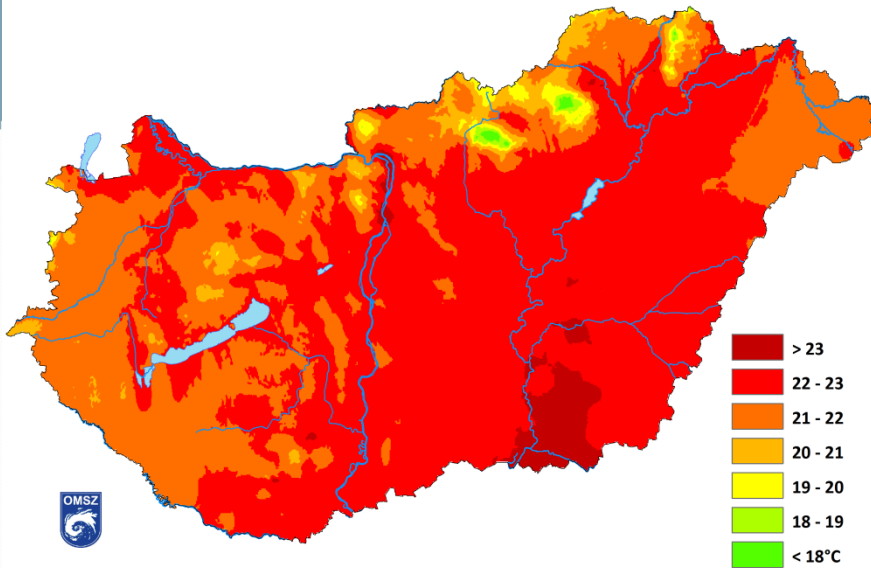


Summer mean temperature
• 21 – 23 °C



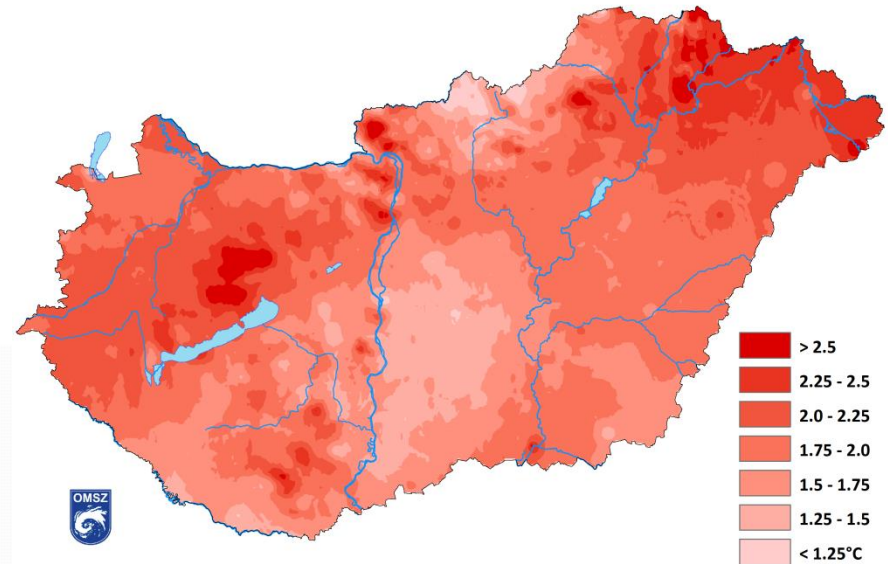
Summer 2015 in Hungary

The 4th hottest Summer since 1901 (+1.88°C)



Summer mean temperature
• 21 – 23 °C

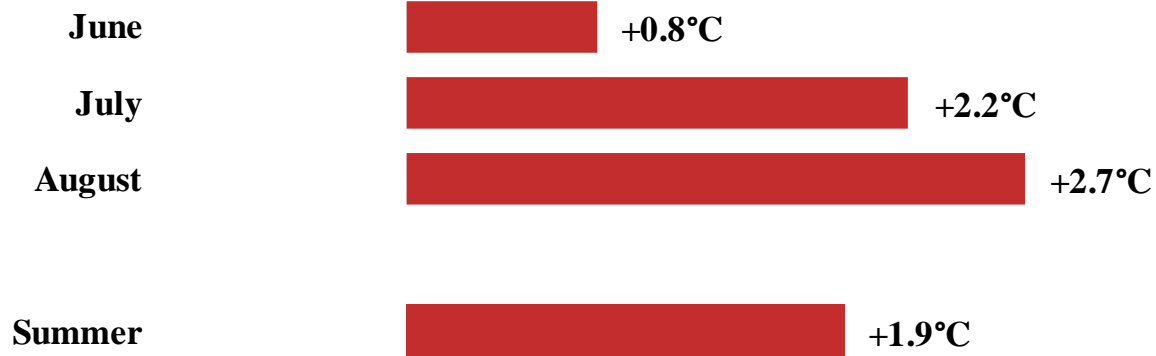
Summer temperature anomaly
• +1 - +2.5°C





Summer 2015 in Hungary

The 4th hottest Summer since 1901 (+1.88°C)



All summer months above average

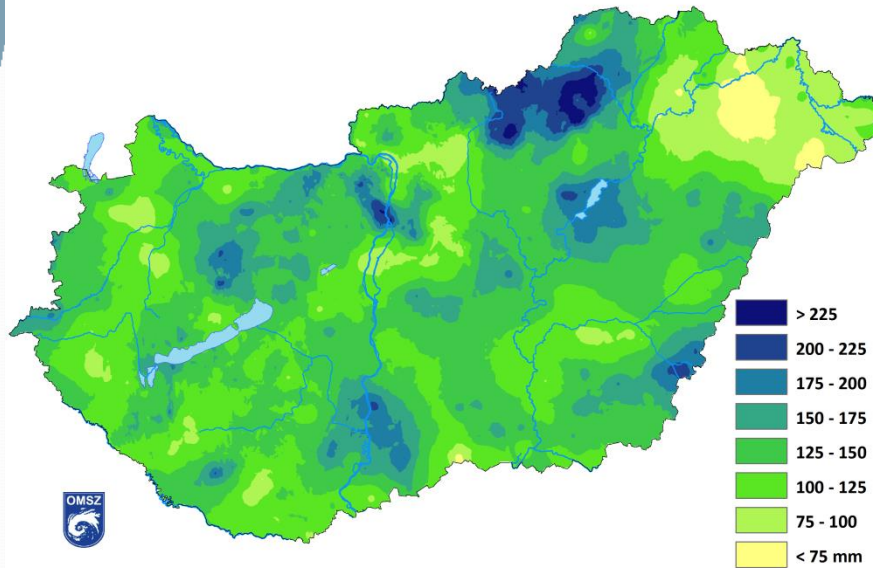
- June: 25th
- July: 2nd
- August: 3rd

- Summer: 4th hottest since 1901



Summer 2015 in Hungary

Very erratic precipitation pattern



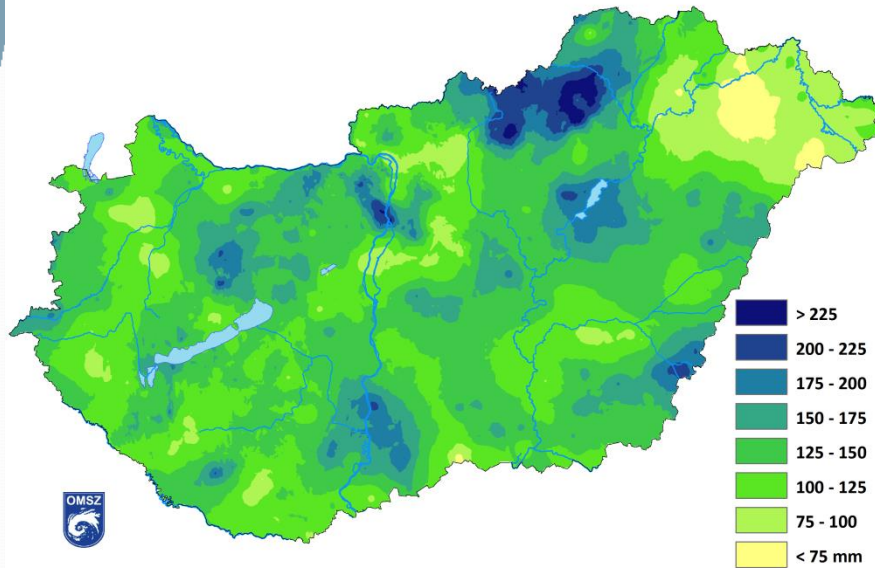
Summer precipitation

- 70 – 200 mm
- great differences in both time and space
- dry June, frequent downpours in July and August



Summer 2015 in Hungary

Very erratic precipitation pattern

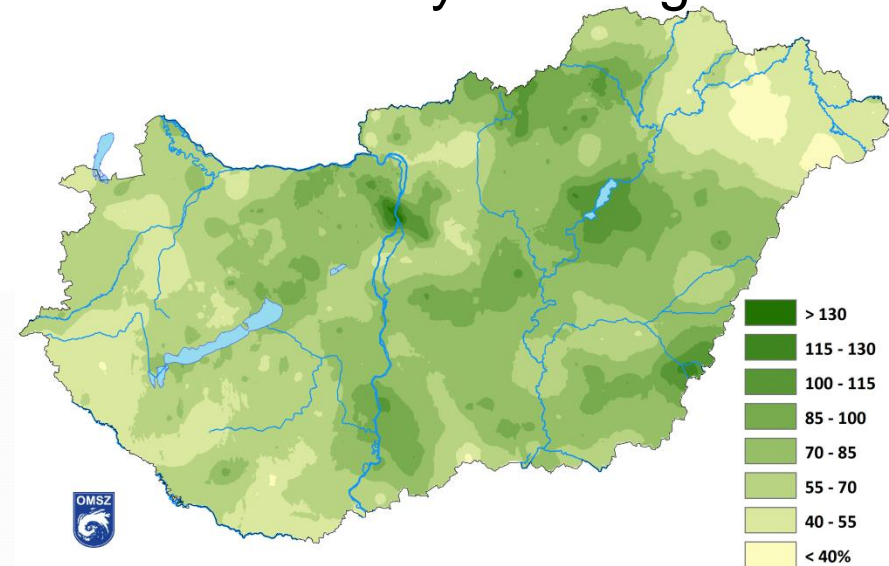


Summer precipitation

- 70 – 200 mm
- great differences in both time and space
- dry June, frequent downpours in July and August

Summer precipitation anomaly

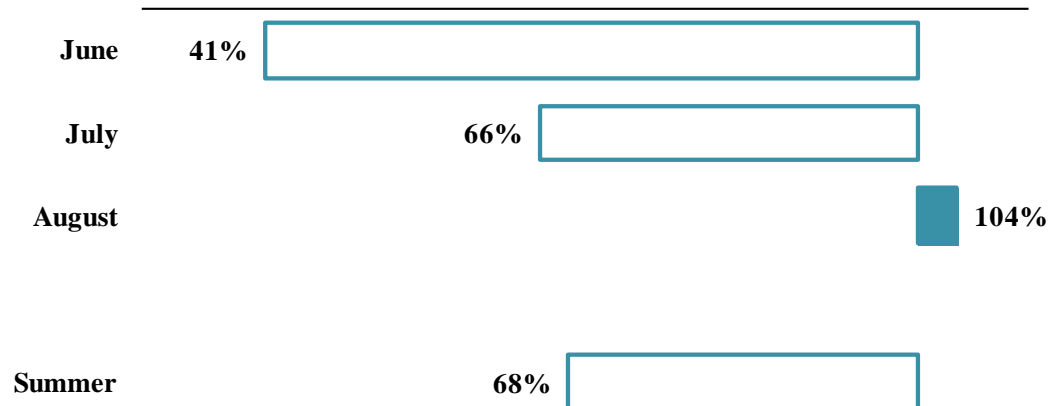
- 40 – 120%





Summer 2015 in Hungary

Very erratic precipitation pattern



- 6th driest June since 1901
- excessive rainfalls in July and August, repeating downpours (August 17 Budapest: 115.4 mm)



Seasonal forecast

Applying ECMWF System 4 long range forecast

Producing forecasts as country averages in every month for

- mean temperature (6 regions in addition)
- max. temperature
- min. temperature
- precipitation amount (6 regions in addition)

in 5-day periods for the following 3 months.

Plus an outlook for the 4-6 months as well

- only mean temp. and precip. country averages

Using calibrated grid data for Hungary



Monthly forecast

December 2015: warmer, slightly wetter

December 2015

Area	Mean temperature			Precipitation amount		
	mean climat	forecast		mean climat	forecast	
		from	to		from	to
Hungary	0.6	0.8	3.7	44	30	65
Budapest area	0.9	1.2	3.9	42	30	65
Northern mountains	-0.5	-0.1	2.8	33	20	60
Northern Great Plain	0.0	0.3	3.2	37	25	60
Southern Great Plain	0.8	0.9	3.7	45	35	65
Southern Transdanubia	1.0	1.1	4.1	52	40	70
Northern Transdanubia	0.7	0.9	3.8	42	35	65



Monthly forecast

January 2016: warmer, drier

January 2016

Area	Mean temperature			Precipitation amount		
	mean climat	forecast		mean climat	forecast	
		from	to		from	to
Hungary	-0.8	-1.2	2.4	32	15	45
Budapest area	-0.6	-0.8	2.8	33	15	45
Northern mountains	-2.0	-2.2	1.4	25	5	40
Northern Great Plain	-1.6	-1.9	1.7	27	10	45
Southern Great Plain	-0.8	-1.3	2.2	29	10	45
Southern Transdanubia	-0.4	-0.9	2.8	35	20	50
Northern Transdanubia	-0.8	-1.1	2.5	32	15	45



Monthly forecast

February 2016: warmer, slightly drier

February 2016

Area	Mean temperature			Precipitation amount		
	mean climat	forecast		mean climat	forecast	
		from	to		from	to
Hungary	1.1	0.6	3.6	29	15	45
Budapest area	1.4	1.0	3.8	27	15	45
Northern mountains	0.3	0.0	3.1	24	15	45
Northern Great Plain	0.6	0.2	3.3	26	15	45
Southern Great Plain	1.1	0.7	3.7	28	15	45
Southern Transdanubia	1.3	0.9	3.7	33	20	50
Northern Transdanubia	1.1	0.6	3.4	29	15	45



Forecast for Winter

Winter 2015/2016: warmer, about average prec.

Winter 2015/2016 outlook for Hungary

	Mean temperature			Precipitation amount		
	climat	from	to	climat	from	to
December	0.6	0.8	3.7	44	30	65
January	-0.8	-1.2	2.4	32	15	45
February	1.1	0.6	3.6	29	15	45



Thank you for your attention!

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