The Republika Srpska/
Bosnia and Herzegovina

RHMS
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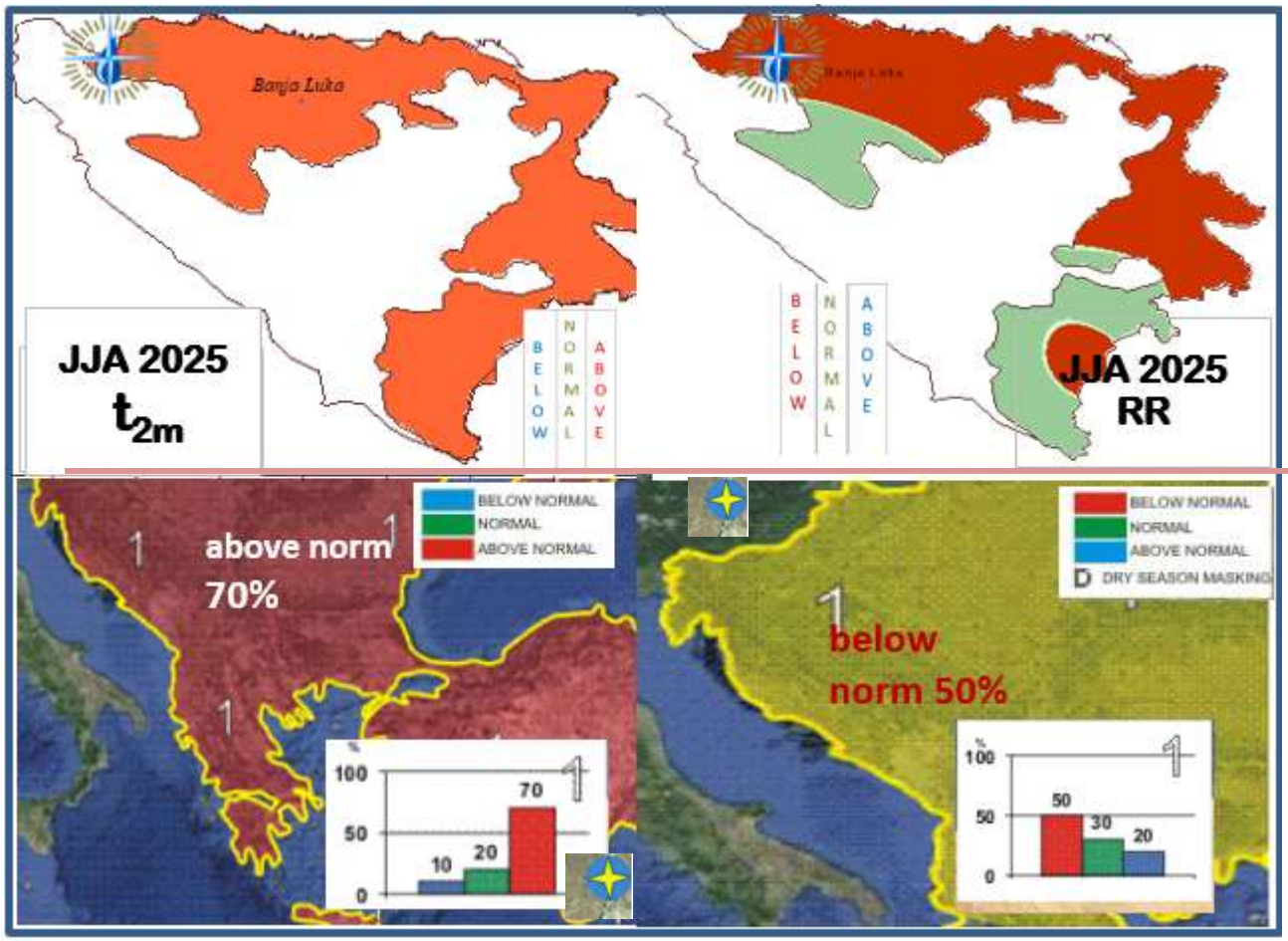
Verification of the the JJA 2025 SEECOF-33 outlook over

The Republika Srpska, Bosnia and Herzegovina

1. SEECOF-33 Consensus Statement of the Climate Outlook for summer 2025.

Temperature and Precipitation

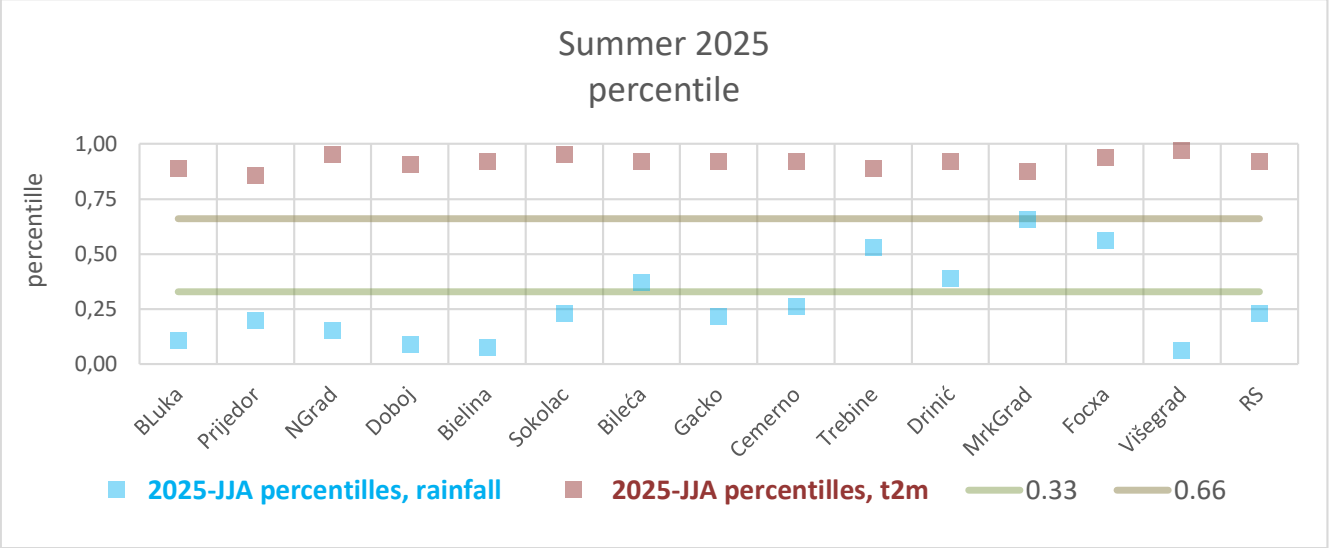
Based on tercile ranks and climate classification ratings, SEECOF-33 outlook thermal conditions over the Republika Srpska (RS) for summer2025 had been described as ***warmer than normal (the portion 1, down left).*** *According to observed values, this climatological prognosys was excellent over entire Republic of Srpska.*



Temp (left) and PRC tot (right) for Summer 2025 outlook (below) and observed values (above)

Precipitation forecast was expected ***below normal*** *(the portion 1, down right) weather pattern. Observations across the territory shows below normal weather pattern over the RS area (25P). The*

precipitation outlook also was correct, giving highest chances for below and near normal conditions.



June 2025 was extremely sunny&warm and extremely dry in Republic of Srpska and Bosnia and Herzegovina

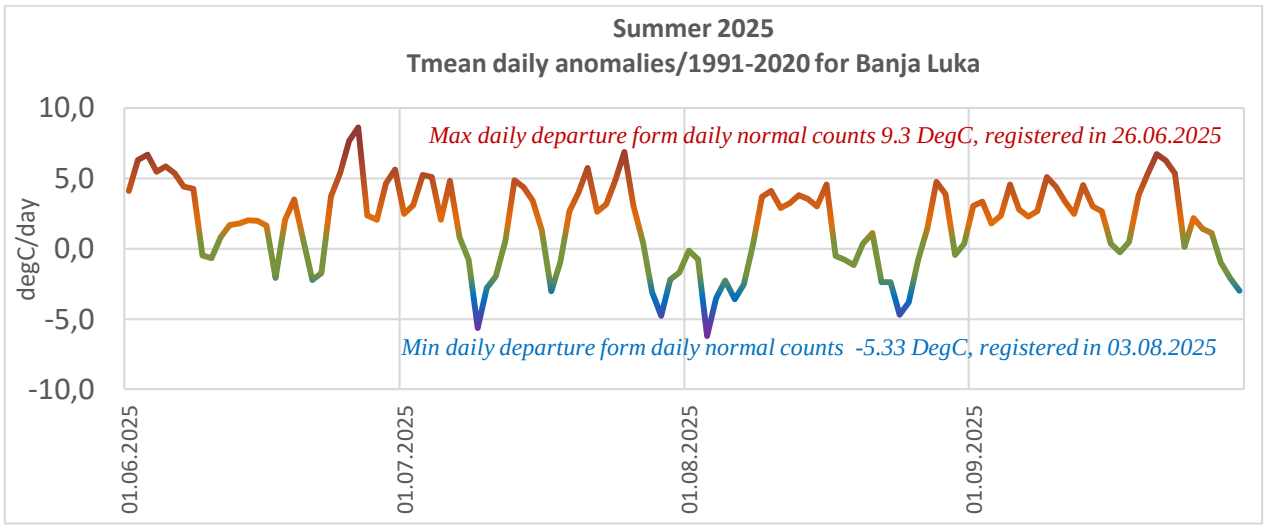
- *Record-breaking solar radiation since the beginning of measurements in 1889*
- *June 2025, with 7mm amount of rainfall, is the <u>absolute minimum</u> since 1950 years; the average deficit for the territory of Srpska was* ***-90.8%.***
- *second warmest June (after 2022yr)*
- *according to satellite based data, regional weather pattern accros the Region was similar:*

JJA-2025 in South-Eastern Europe Region's encountered <u>Radiative Peak</u>

• Analysis of the 2025 Summer season

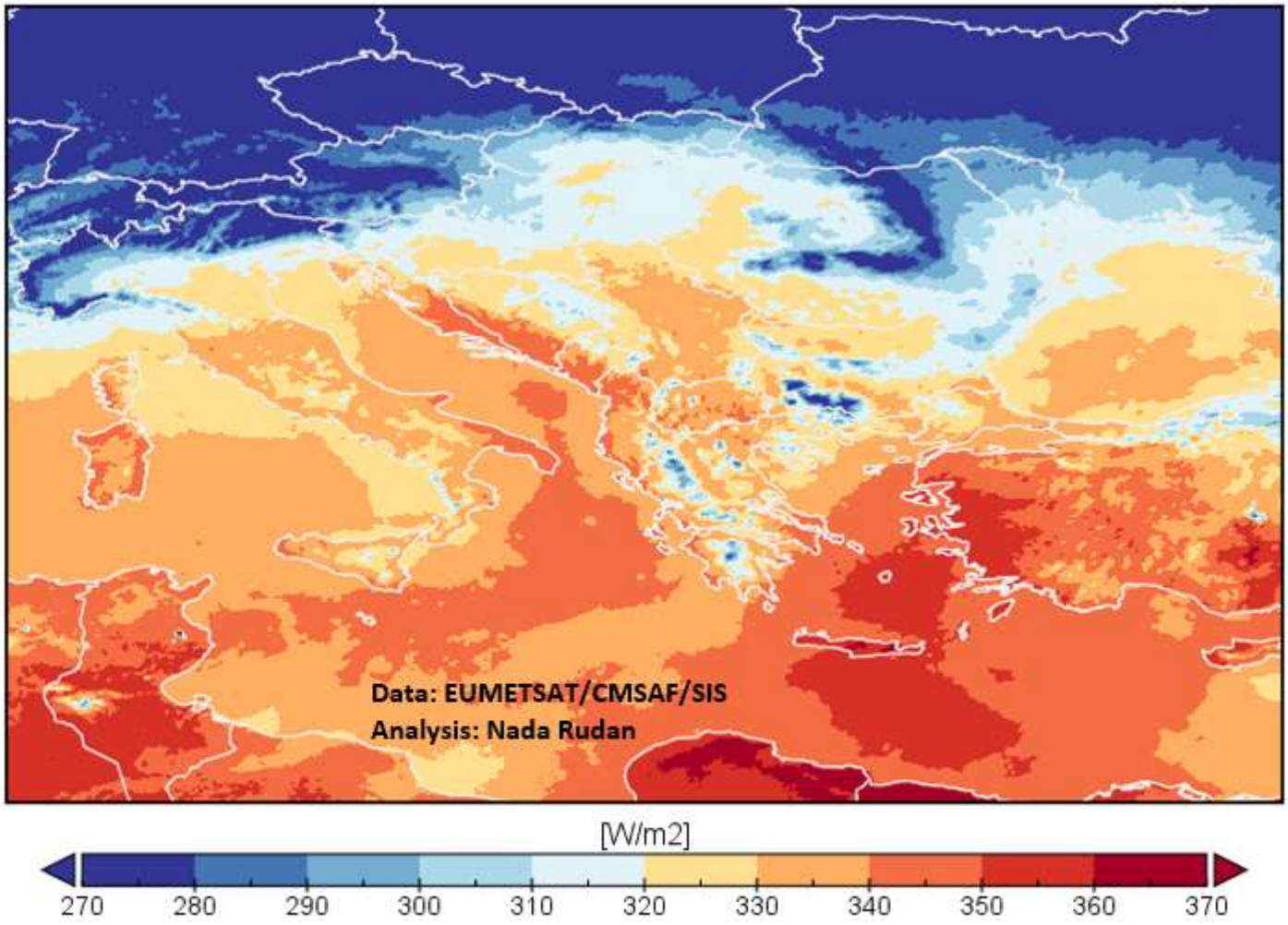
- <u>Thermal&solar conditions</u>

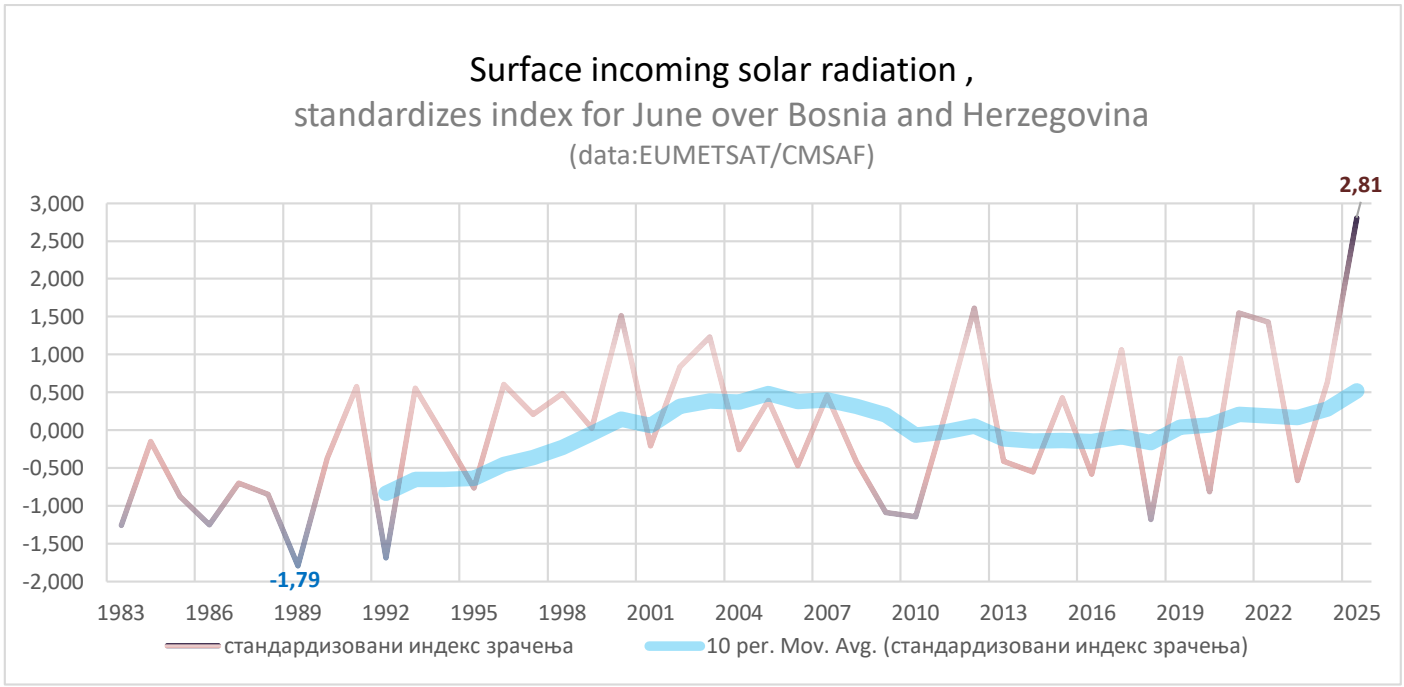
A more comprehensive statistical overview of thermal occasions is presented in the following tables and graphs.



сунчево краткоталасно зрачење у јуну

Surface Downwelling Shortwave Radiation for Jun





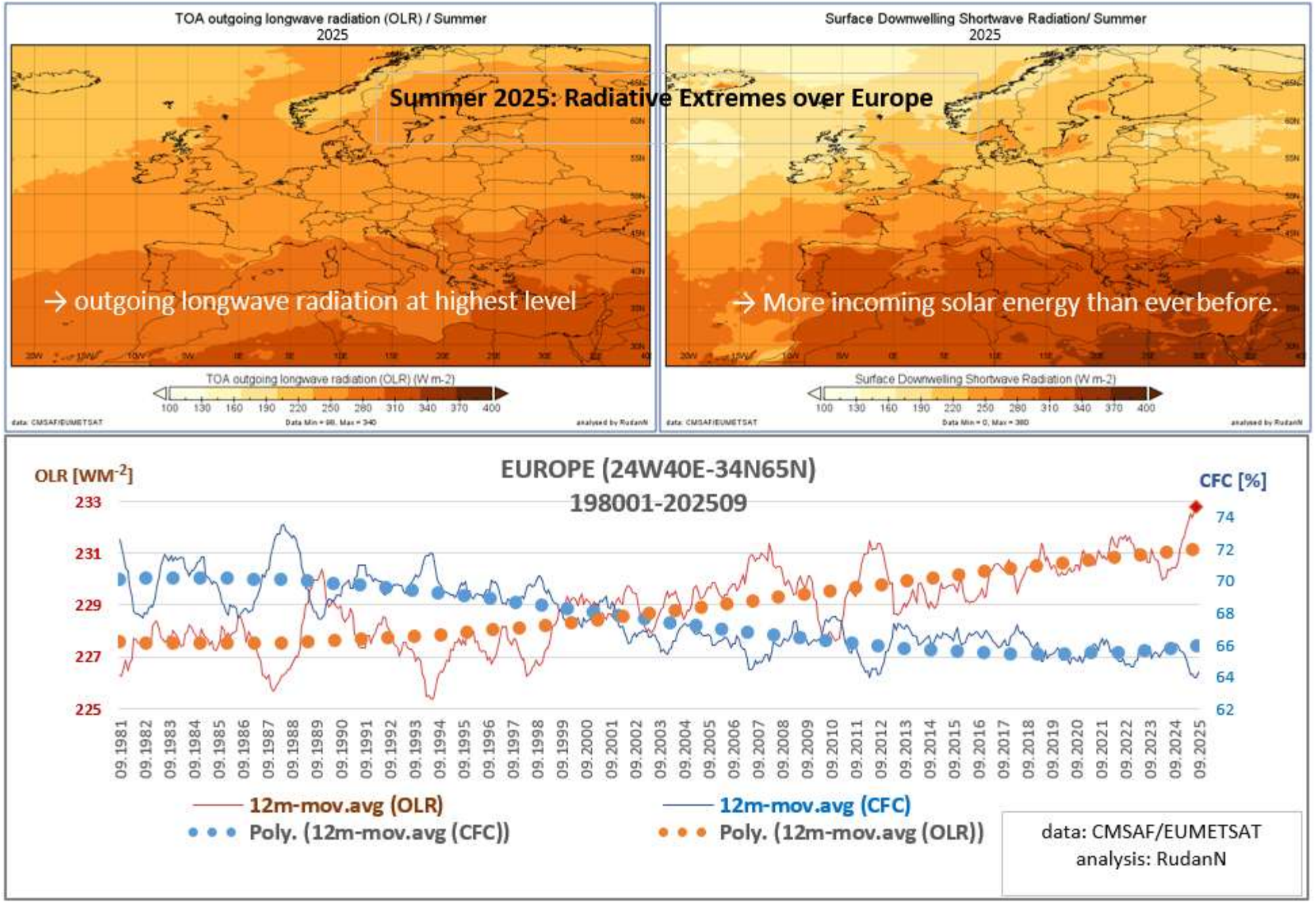
Mean temp - statistics for the JJA-2025 with reference to 1981-2010 for the RS stations(°C)

Station	JJA 1981-2010	STD	index	PercRank 2025	JJA 2025	lower tercille	upper tercille	median	tercille category
Бања Лука Bana Luka	21.0	1.05	2.35	**0.99**	**23.5**	20.6	21.5	20.8	above
Приједор Priedor	21.2	1.08	1.61	**0.95**	**22.9**	20.6	21.8	21.1	above
Нови Град NoviGrad	20.2	1.13	2.25	**0.99**	**22.7**	19.6	20.5	20.1	above
Добој Doboy	20.5	1.00	2.55	**0.99**	**23.1**	20.0	21.0	20.4	above
Бијељина Bijeljina	21.3	1.19	2.10	**0.98**	**23.8**	20.8	21.8	21.2	above
Соколац Sokolac	16.3	1.02	2.19	**0.99**	**18.5**	15.8	16.9	16.3	above
Билећа Bileca	18.4	7.31	0.73	**0.77**	**23.8**	20.6	21.5	21.0	above
Гацко Gacko	17.3	0.90	2.82	**1.00**	**19.8**	16.8	17.8	17.3	above
Чемерно Cxemerno	14.8	0.92	2.54	**0.99**	**17.2**	14.4	15.2	14.9	above
Требиње Trebine	23.3	1.13	1.79	**0.96**	**25.3**	22.8	23.5	23.0	above
Дринић Drinic	17.1	1.12	1.48	**0.93**	**18.8**	16.8	17.4	17.2	above
Фоча Focxa	19.4	1.00	1.71	**0.96**	**21.1**	19.1	19.9	19.4	above
МркГрад MrkonicG	18.2	1.07	1.74	**0.96**	**20.1**	17.6	18.7	18.2	above

Incoming solar radiation and sunshine duration was record breaking, but due to extremely high level of outgoing longwave radiation, summer 2025 was 10th warmest.

Tmean JJA anomaly (mean positive and negative)

1991- 2020	1981-2010	1950-2020
3.4	3.6	3.7
-2.2	-1.9	-1.9


TOA outgoing longwave radiation (OLR) / Summer 2025
Surface Downwelling Shortwave Radiation/ Summer 2025
Summer 2025: Radiative Extremes over Europe
→ outgoing longwave radiation at highest level
→ More incoming solar energy than ever before.
TOA outgoing longwave radiation (OLR) (W m-2)
Surface Downwelling Shortwave Radiation (W m-2)
100 130 160 190 220 250 280 310 340 370 400
data: CMSAF/EUMETSAT
analysed by RudanN
EUROPE (24W40E-34N65N)
198001-202509
OLR [WM-2]
CFC [%]
233
231
229
227
225
74
72
70
68
66
64
62
09.1981 09.1982 09.1983 09.1984 09.1985 09.1986 09.1987 09.1988 09.1989 09.1990 09.1991 09.1992 09.1993 09.1994 09.1995 09.1996 09.1997 09.1998 09.1999 09.2000 09.2001 09.2002 09.2003 09.2004 09.2005 09.2006 09.2007 09.2008 09.2009 09.2010 09.2011 09.2012 09.2013 09.2014 09.2015 09.2016 09.2017 09.2018 09.2019 09.2020 09.2021 09.2022 09.2023 09.2024 09.2025
12m-mov.avg (OLR)
Poly. (12m-mov.avg (CFC))
12m-mov.avg (CFC)
Poly. (12m-mov.avg (OLR))
data: CMSAF/EUMETSAT
analysis: RudanN

- ***Rainfall***

JJA-2025 precipitation statistics over the RS (ref 1981-2010)

Station	*JJA 1981 - 2010*	*STD*	*z (SPI)*	*NORMSDIST (z) (percentile)*	*PercRank 2025*	*JJA 2025 (mm)*	*% JJA2025*	*suf/def %*	*33,33*	*66,67*	*50,00*	*tercile anom.categ*
Бања Лука *Bana Luka*	276	81	-1.63	**0.05**	0.11	**143**	52	-48.2	235	313	273	***below***
Приједор *Priedor*	243	76	-0.69	**0.24**	0.20	**190**	78	-22	198	271	219	***below***
Нови Град *NoviGrad*	247	71	-1.03	**0.15**	0.16	**173**	70	-30	216	279	246	***below***
Добој *Doboy*	284	104	-1.34	**0.09**	0.09	**146**	51	-49	218	321	272	***below***
Бијељина *Bijeljina*	243	78	-1.80	**0.04**	0.08	**103**	42	-58	216	278	255	***below***
Соколац *Sokolac*	238	64	-0.86	**0.19**	0.23	**183**	77	-23	207	259	239	***below***
Билећа *Bileca*	179	71	-0.19	**0.43**	0.38	**166**	93	-7	144	196	175	***normal***
Гацко *Gacko*	200	84	-0.69	**0.25**	0.22	**142**	71	-29	158	226	198	***below***
Чемерно *Cxemerno*	224	98	-0.41	**0.34**	0.27	**184**	82	-18	186	254	203	***below***
Требиње *Trebine*	179	97	0.26	**0.60**	0.53	**204**	114	14	133	229	161	***normal***
Дринић *Drinic*	272	87	-0.34	**0.37**	0.39	**242**	89	-11	243	309	251	***normal***
Фоча *Focxa*	215	81	0.01	**0.50**	0.56	**216**	100	0	175	225	204	***normal***
МркГрад *MrkonicG*	264	102	0.34	**0.63**	0.66	**299**	113	13	227	291	265	***normal***

Hottest and driest years in summer: 1950 (93mm), 1946 (99mm), 1933…;in the distant past: 1894, 1895, 1905 (at the end of 19th century sunshine duration over the Balkans >90P). Each severe to extreme drought over here was connected with the similar anticyclonal weather pattren (very sunny to extremely sunny-warm to extremely warm) which has the return period of about 60-70yrs.

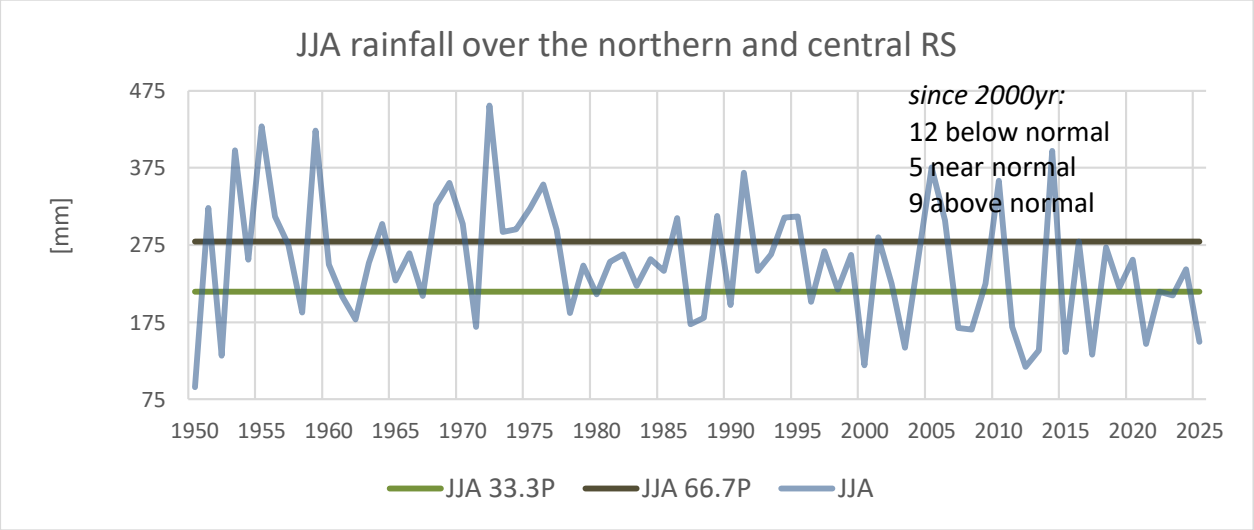
precipitation statistics for Bijeljina, Sokolac, Terbinje and Banja Luka (ref 1981-2010) in particular summer months and JJA-2025: severe drought over the nothern places

Бијељина Bijeljina					
month	Rainfall height 2025 (mm)	Normal 1981-2010	Trend %	SPI	Percentile
June	**0**	95	-100.0	-1.99	0.02
July	**52**	63	-16.9	-0.47	0.32
August	**51**	56	-9.0	-0.33	0.37
JJA	**103**	255	-59.5	-1.80	0.04

Соколац Sokolac					
month	Rainfall height 2025 (mm)	Normal 1981-2010	Trend %	SPI	Percentile
June	**31**	84	-63.6	-1.59	0.06
July	**57**	76	-24.7	-0.50	0.31
August	**95**	61	54.9	0.62	0.73
JJA	**183**	239	-23.5	-0.86	0.19

Требиње Trebinje					
month	Rainfall height 2025 (mm)	Normal 1981-2010	Trend %	SPI	Percentile
June	**7**	59	-88.1	-1.32	0.09
July	**24**	30	-18	-0.41	0.34
August	**173**	52	233	1.66	0.95
JJA	**204**	161	27.2	0.26	0.60

Бањалука Banja Luka					
month	Rainfall height 2025 (mm)	Normal 1981-2010	Trend %	SPI	Percentile
June	**7**	108	-93.8	-2.12	0.02
July	**79**	78	0.3	-0.12	0.45
August	**58**	67	-13.3	-0.41	0.34
JJA	**143**	273	-47.7	-1.63	0.05



2. High impact events:

Wild fires ocurred at the Southern area (Eastern Herzegovina) during very hot and dry periods.

3.Verification of the climate outlook for the 2025 summer

Country	**Seasonal temperature (JJA)**		**Seasonal precipitation (JJA)**	
	Observed	SEECOF *climate outlook*	Observed	SEECOF *climate outlook*
The Republika Srpska, Bosnia and Herzegovina	***Above normal***	***Above normal***	***Below over the most places (normal in southern)***	***Below to normal***

Assesment:

The outlook was correct for both climate outlook, temperature and precipitation.