Thirty-sixth Session of the
SOUTH EAST EUROPEAN CLIMATE OUTLOOK FORUM

SEECOF-36 ONLINE MEETING

ANALYSIS AND VERIFICATION OF THE SEECOF-35 CLIMATE OUTLOOK FOR THE 2026 SUMMER FOR SOUTH-EAST EUROPE

CLIMATE OUTLOOK FOR 2026 SUMMER SEASON FOR THE SEE REGION

As stated in the SEECOF-35 Consensus Statement on the Seasonal Climate Outlook for the 2026 Summer Season over South-East Europe (SEE) document:
http://www.seevccc.rs/SEECOF/SEECOF-35/STEP-3/Consensus%20Statement%20SEECOF-35%20-final.pdf

Forecast through June - August 2026 indicated positive ENSO (strong El Nino) and Indian Ocean Dipole conditions as well as Western Tropical Indian (WTI) positive phase. Neutral NAO was expected. Above-normal summer blocking and below-normal Atlantic low were favored trough Summer 2026.

The analysis indicates a strong El Nino phase and a positive EA pattern during June–August 2026, alongside a positive phase of the Western Tropical Indian Ocean (WTI). NAO was in neutral to negative phase.

ni4	ni34	ni3	ni12	wti	iod	NAO
0.88	1.12	1.41	2.08	0.08	-0.32	0.41
0.92	1.61	1.95	2.86	0.25	-0.19	-0.28
0.95	2.16	2.62	3.49	0.47	0.12	-2.58

Summer temperature was likely to be above-normal in the entire SEECOF region, with the probability up to 60% in the zone 2 and up to 50% in zone 1 (Figure 1). Uncertainties in regional predictions are higher for precipitation than for temperature. Equal probability for summer precipitation was expected in most parts of the SEECOF region (Zone 2 in Figure 2), while below-normal conditions were expected in part of the western and central Balkans, Pannonian Plain, Carpathians, western Ukraine, Moldova (Zone 1 in Figure 2). It is noteworthy that certain parts of the region, particularly mountainous areas, could be observe near- or above-normal summer precipitation totals due to the episodes of enhanced convection accompanied by heavy precipitation.

It was noted that seasonal averages cannot provide details about short spells of weather during the season. It is possible that even in an average season spells of severe summer weather (for example: summer storms, very warm episodes, very dry spells) could occur and lead to significant local socio-economic impacts.

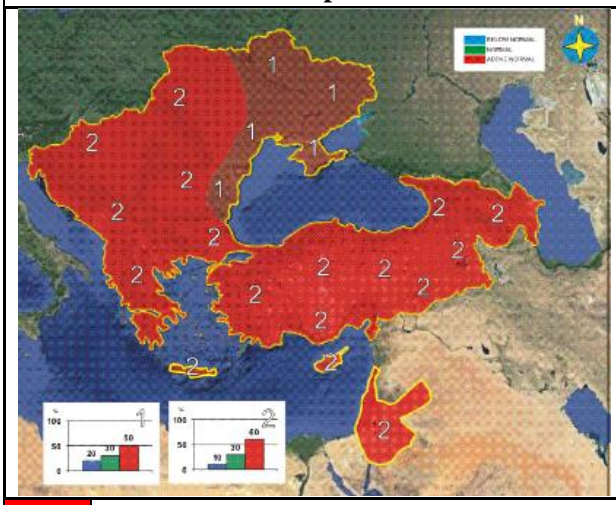
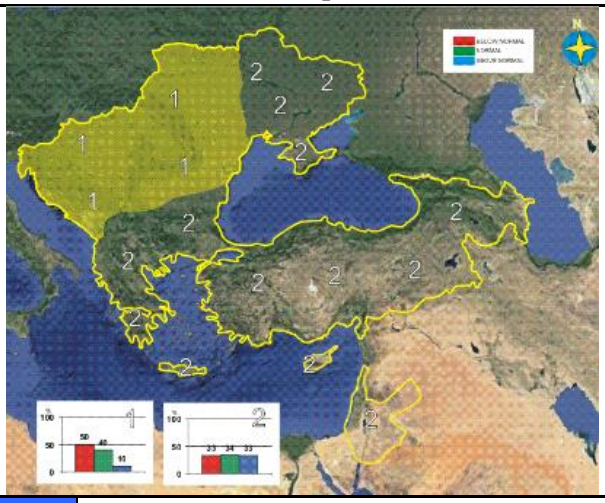
2026 Summer Temperature Outlook		2026 Summer Precipitation Outlook	
			
	Above Normal		Above Normal
	Normal		Normal
	Below Normal		Below Normal

Figure 1. Graphical presentation of the Climate Outlook for the 2026 Summer Season for the SEE Region

ANALYSIS OF THE SUMMER 2026 FOR THE SEE REGION

Analyses of the winter season temperature and precipitation anomalies are based on:

- Operational products of the RCC Node-CM (Regional Climate Centre on Climate Monitoring) provides maps for the World Meteorological Organization (WMO) Region VI (Europe and Middle East), http://rcccm.dwd.de/DWD-RCCCM/EN/products/europe/europe_node.html
- Climate monitoring products of the South East European Virtual Climate Change Center – SEEVCCC (Member of the WMO RA VI RCC Node-CM), http://www.seevccc.rs/imgsrc/clim_mon/202608/
- National climate monitoring reports of the following SEECOF-36 participating countries (**reports received to date**): Croatia, Federation of Bosnia and Herzegovina / Bosnia and Herzegovina, Georgia, Republic of Moldova, Republic of North Macedonia, Serbia and Slovenia are available on: http://www.seevccc.rs/SEECOF/SEECOF-36/STEP%201/

Summer 2026 seasonal mean temperature was in a range from around 15 ºC in the mountainous areas of northeastern Turkey, Armenia, Georgia, in Carpathian region and western Ukraine, to over 30 ºC in southeastern Turkey and most of Middle East. In most of the low-lying regions it was between 20 ºC and 25 ºC, except in Azerbaijan, northern Serbia, southern Turkey, Cyprus and the southern Balkans where it was upper than 25 ºC (Figures 2 and 3, left panel). Most of the SEECOF region observed above-normal summer temperatures (Figures 4 and 5, left panel). Temperature anomalies reached up to +3 ºC above normal, relative to the 1991-2020 base period, in the western and southwestern Balkans as well as western Romania. Below-normal summer temperatures were measured in Georgia and eastern Ukraine, with anomaly up to -1 ºC.

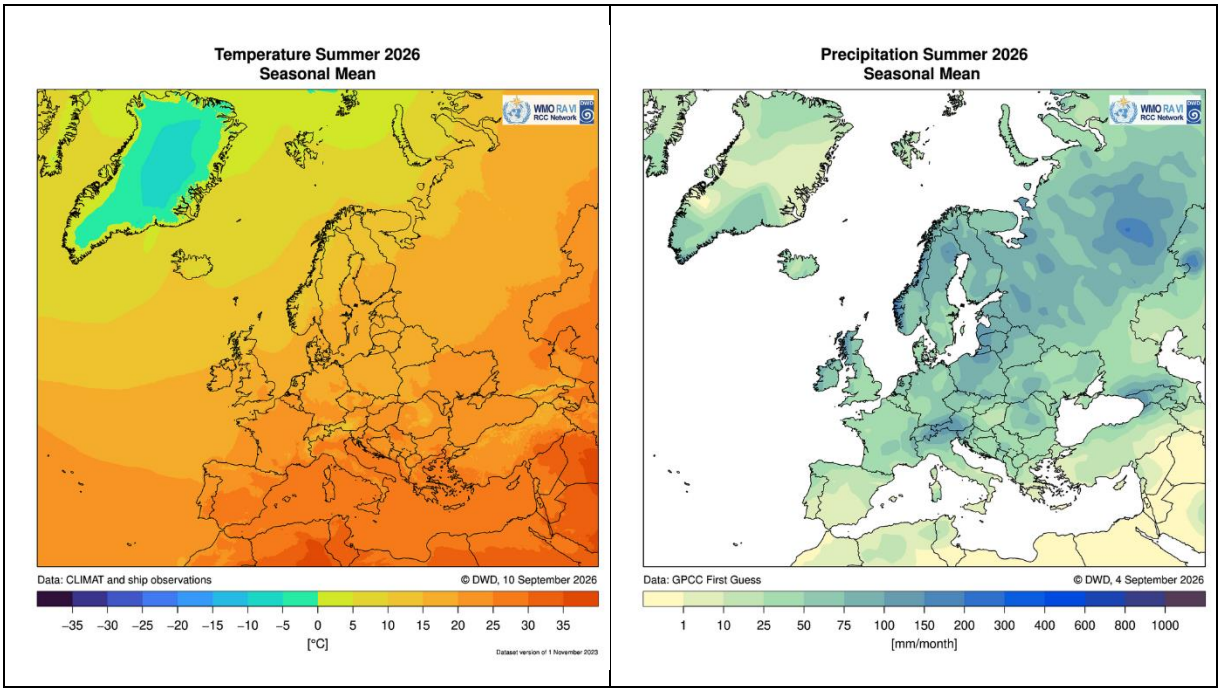


Figure 2. Summer season 2026, Europe – observed temperatures (left panel) and observed precipitation in mm per month (right panel). Source:
https://www.dwd.de/EN/ourservices/rcccm/int/rcccm_month_ttt.html?nn=796932 (left panel)
https://www.dwd.de/EN/ourservices/rcccm/int/rcccm_month_rrr.html?nn=796932 (right panel)

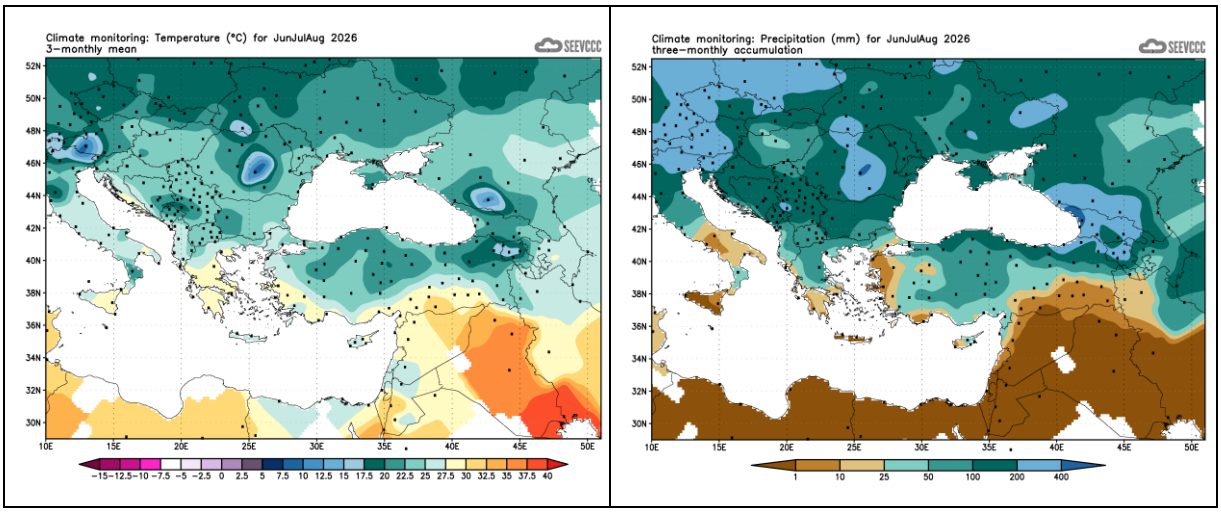


Figure 3. Summer season 2026, SEECOF region – observed temperature (left panel) and observed precipitation (right panel). Source:
http://www.seevccc.rs/imgsrc/clim_mon/202608/temp_av3m.gif (left panel)
http://www.seevccc.rs/imgsrc/clim_mon/202608/prec_tot3m.gif (right panel)

Seasonal precipitation totals (Figures 2 and 3, right panel) were between 200 mm and 400 mm in parts of central, southern and northern Romania, western Serbia, Georgia, northern Armenia, northeastern Turkey and parts of western, northern and eastern Ukraine, in a range from 100 mm up to 200 mm was in the western, northern and eastern Balkans, most of Romania, Moldova, most of Ukraine, northern Turkey, central Armenia and western and eastern Azerbaijan. In rest of the SEECOF region, precipitation totals were below 100 mm, with even below 10 mm in Middle East, western Cyprus, southern and westernTurkey, and southern part of Greece. It was drier than normal in most of the SEECOF region, with less than 80% of the long-term average. Normal conditions were in eastern and southwestern Ukraine, Georgia, most of Turkey, part of central and southern Romania and eastern Azerbaijan, while above normal precipitation sums were in Cyprus, most of the Middle East, part of southern Turkey, Armenia and western Azerbaijan (Figures 4 and 5, right panel).

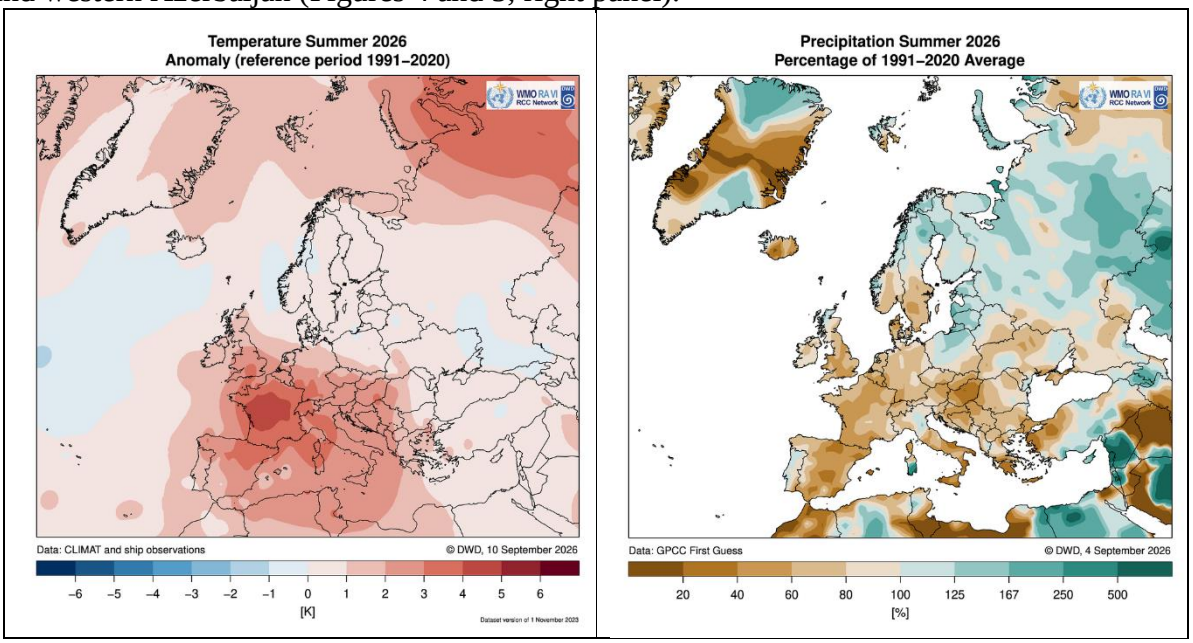


Figure 4. Summer season 2026, Europe – observed temperature anomalies (left panel) and observed precipitation anomalies in percent of 1991-2020 normal (right panel). Source:
https://www.dwd.de/EN/ourservices/rcccm/int/rcccm_month_ttt.html?nn=796932 (left panel)
https://www.dwd.de/EN/ourservices/rcccm/int/rcccm_month_rrr.html?nn=796932 (right panel)

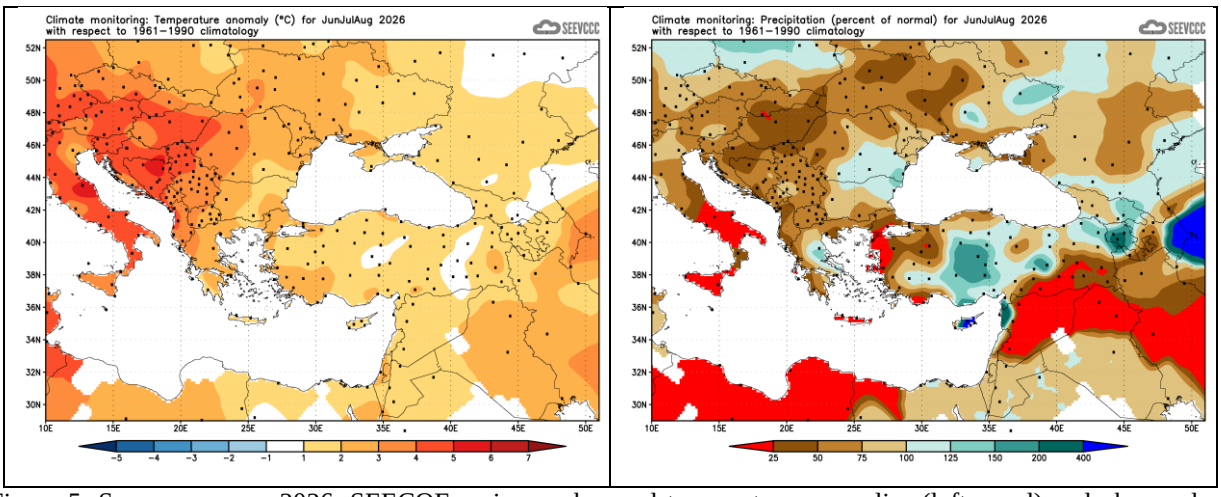


Figure 5. Summer season 2026, SEECOF region – observed temperature anomalies (left panel) and observed precipitation anomalies in percent of 1961-1990 normal (right panel). Source:
http://www.seevccc.rs/imgsrc/clim_mon/202608/temp_an3m.gif (left panel)
http://www.seevccc.rs/imgsrc/clim_mon/202608/prec_pn3m.gif (right panel)

VERIFICATION OF CLIMATE OUTLOOK FOR THE 2026 SUMMER

Summer 2026 temperature was in the above normal category in the entire SEECOF region. Consequently, the outlook was correct for most of the SEECOF region.

SEECOF-35 Climate outlook for summer precipitation was correct for most of the region with below normal precipitation sums. On the other hand, the outlook did not anticipate above-normal summer precipitation totals in Cyprus and South Caucasus as well as below-normal precipitation sums in southern Greece and western Turkey.

APPENDIX A: **Analysis and verification of the SEECOF-35 climate outlook for the 2026 summer season:**
Verification summary based on the national reports and contributions of the participants of STEP-1 of the SEECOF-36 meeting

Country	Seasonal temperature (JJA)		Seasonal precipitation (JJA)		High Impact Events
	Observed	SEECOF-35 climate outlook for temperature	Observed	SEECOF-35 climate outlook for precipitation	
Croatia ref. (1991-2020)	**Above normal**	**Above normal** **(**10,30,60**)**	**Normal and below normal** (below normal in most of Croatia)	**Below normal** in continental part and Istria (50,40,10) **Normal** in the rest of Croatia (33,34,33)	• In **all three months** heat waves were observed – four during the summer (a prolonged heatwave, in late July and the first half of August). • In **all three months** convective related severe weather phenomena (thunderstorms, hail, heavy rains, flash floods, waterspouts) were observed mostly all over Croatia. • In **June**, (June 3 and 14) exceptionally large hail completely destroyed the harvest. In certain areas of northern Croatia, the damage to vineyards and crops (corn, potatoes, and cereals nearing harvest) was total (ranging between 30% and 100%). In eastern Croatia (June 11), there was damage to structures due to gale-force winds. • In **July** - In the northern Adriatic and the northern regions of Croatia, large hail (with a diameter greater than 5 cm) completely destroyed crops of eggplant, zucchini, watermelon, and sweet corn. On July 18, in eastern Croatia, in very short time (10 minutes), a storm accompanied by hail damaged the roofs of 15 family homes. The occurrence of meteotsunamis in Dalmatia and the Kvarner region (July 15, 20 and 21) caused mooring lines to snap and numerous small boats, sailboats, and speedboats to run aground. • **August** – There were severe thunderstorms in August, but

					fewer than in June and July. Prolonged drought - Drying up of waterways: Due to historically low water levels (the Drava in Osijek reached a record low of -194 cm in August), large sandbars completely blocked the navigable channel, preventing vessels from entering Osijek. Due to high temperatures and prolonged drought, there was a high risk of forest fires. On the night of August 13–14, a fire broke out in Lokva Rogoznica, in central Dalmatia, which spread rapidly due to a strong bora (NE) wind. It engulfed an area 23 kilometers long, burning approximately one thousand hectares of pine forest, grass, and low-growing vegetation. Forty people sustained injuries, six people lost their lives, and the fire caused material damage amounting to several million.
Federation of Bosnia and Herzegovina (Bosnia and Herzegovina) ref. (1991-2020)	**Above normal** in almost entire Bosnia and Herzegovina	**Above normal (1**0, 30, 60)	**Below normal**	**Below normal** (50, 40, 10)	• All three months were warmer than average. • August was the warmest—not only of this summer, but the warmest month since official records began. • Never before has any month recorded such high average monthly temperatures. In the south of Bosnia and Herzegovina, the number of days in August with a maximum temperature of 40°C or higher exceeded 10. • Precipitation levels were normal in June, but below average in July and, especially, in August.
Georgia ref. (1991-2020)	**Below and near normal**	**Above normal (1**0, 30, 60)	**The entire of west Georgia was near the norm and the east part of country it was above the norm**	**No predictive signal** (33, 34, 33)	• No high impact events

Republic of Moldova ref. (1991-2020)	**Above normal**	**Above normal**	**Near and below normal**	**Below normal** (50, 40, 10)	• On some days during the season, isolated instances of extreme weather in the form of torrential rain were reported across the country: **On 6 June**: – at the Cornești weather station, 52 mm of rainfall was recorded over a period of 9 hours; – at the Strășeni agrometeorological station, 74 mm of rainfall was recorded over a 12-hour period; – at the Telenești agrometeorological station, 69 mm of rainfall was recorded over a 12-hour period; – at the Nisporeni agrometeorological station, 62 mm of rainfall was recorded over a 12-hour period. • **On 12 June**: – at the Bravicea meteorological station, 62 mm of rainfall was recorded over a 9-hour period; – at the Telenești agrometeorological station, 85 mm of rainfall was recorded over a 10-hour period; – at the Trinca hydrological station (Edineț district), 60 mm of rainfall was recorded over a 12- hour period; – at the Brînzeni hydrological station (Edineț district), 57 mm of rainfall was recorded over a 12- hour period. • **On 2 July**: – at the Giurgiulești hydrological station (Cahul district), 62 mm of rainfall was recorded over a 3- hour period. • **On 4 July**: – on 4 July, at the Comrat weather station, 48 mm of rainfall fell within one hour, and 54 mm within two hours; – at the Basarabeasca agrometeorological station, 55 mm of rainfall fell within one hour. • **On 19 July**: – at the Leova weather station, 35 mm of rainfall fell within one hour; – at the Cantemir automatic weather station, 62 mm of rainfall fell within three hours.

					Heavy rain, accompanied in some places by hail, has caused significant damage to key sectors of the national economy and to agricultural land.
Republic of North Macedonia ref. (1981-2010)	**Above normal**	**Above-normal** (10, 30, 60)	**Very dry to normal**	**No predictive signal** (33, 34, 33)	• A lot of spatially isolated events with stormy weather, intensive precipitation, thunderstorms, and heavy winds but the extremes are not exceeded
Serbia ref. (1991-2020)	**Above normal**	**Above-normal** (10, 30, 60)	**Below normal** (in most of the country)	**No predictive signal** (33, 34, 33)	• The 3rd hottest and the 10th driest summer for Serbia since 1951 • The hottest August and the 5th hottest June • New all-time maximum air temperature measured on June 30 in Palić (40.8 °C) and in Kikinda (40.9 °C) • Record-breaking number of tropical nights at Zlatibor • Record high minimum air temperature for Smederevska Palanka • The 3rd driest summer for Kikinda and Banatski Karlovac • Record-breaking number of summer insolation hours • Exceeded minimum number of thunder days for Palic, Sombor and Kikinda
Slovenia ref. (1991-2020)	**Above normal**	**Above-normal** (10, 30, 60)	**Below-normal** except in parts of western, northern and north- eastern Slovenia where normal (second tercile)	**Below normal** (50, 40, 10)	• **12 June–20 August 2026: Drought/Dry spell** Severe and prolonged rainfall deficits affected the whole of Slovenia, particularly the southern and north-eastern regions, where many areas received only one-third to one-quarter of their normal summer rainfall totals (approximately 50–80 mm instead of 200–300 mm). Combined with repeated periods of extreme heat, these conditions led to severe to extreme agricultural drought across most of the country. The impacts included substantial crop yield

					losses, drinking water shortages in some municipalities, and exceptionally low river flows accompanied by unusually high water temperatures. The 2026 agricultural drought was among the most severe recorded in Slovenia in recent decades and was also exceptional at the regional scale. • **10 June 2026: Thunderstorms/Squall lines** A supercell that evolved into a multicell thunderstorm developed over western Slovenia and crossed the northern half of the country during the evening of 10 June. In and around Komenda, a powerful downburst produced wind gusts well in excess of 100 km/h, accompanied by wind-driven, medium-sized hail. The winds caused extensive damage to buildings in several villages, while the hail severely damaged agricultural crops, particularly vegetables, maize, and potatoes. Even greater agricultural losses occurred in the Drava-Ptuj Plain, where the affected area was considerably larger. This was one of the most severe thunderstorm events in Slovenia in recent years. The total damage caused by the thunderstorms between 9 and 11 June 11 was estimated at 46 million EUR, the majority of which was attributable to damage to buildings. • **27 July–17 August 2026: Heat wave** An exceptionally intense and prolonged heatwave affected Slovenia, breaking records across multiple categories. Several stations recorded their highest temperatures on record, including Koper, where the temperature reached 40.1 °C. On 2 August, Vedrijan in the Goriška Brda region recorded a minimum temperature of 28.7 °C over a 24-hour period, setting

					a new national record for the highest minimum air temperature ever observed in Slovenia. The heatwave brought a record number of days with maximum temperatures exceeding 35 °C, reaching 9–10 days in some lowland areas. Tropical nights were widespread across much of Slovenia and were recorded even at elevations of around 1,500 m above sea level. The event was driven by a persistent high-pressure ridge and was further intensified by severe drought conditions affecting Slovenia and many other parts of Europe. According to the national heatwave definition, the event lasted up to 20–21 consecutive days in some locations and around 10 days at most meteorological stations. The shorter duration at some sites was due to slightly cooler conditions after 7 August, when temperatures temporarily fell below the heatwave threshold. The combined effects of extreme heat and severe agricultural drought caused extensive crop damage. Forests in many areas turned partially brown unusually early in the season, reflecting widespread heat- and drought-induced stress. River and lake temperatures also reached exceptionally high levels, adversely affecting aquatic ecosystems and fisheries.