HELLENIC NATIONAL METEOROLOGICAL SERVICE
ΕΘΝΙΚΗ ΜΕΤΕΩΡΟΛΟΓΙΚΗ ΥΠΗΡΕΣΙΑ

National Climate Bulletin and Verification of the SEECOF-34 Winter 2025/2026 forecast

DIVISION of CLIMATOLOGY – APPLICATIONS

HELLENIC NATIONAL METEOROLOGICAL SERVICE

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Part A

1. Temperature

1.1. Analysis of the 2025/26 winter air temperatures anomalies for Greece

Winter 2025/26 was warmer than normal (relative to 1991-2020) in the area of Greece (Figure 1). The greatest positive temperature anomalies of about 2.0 το 2.6°C were observed over the northwest parts of the country.

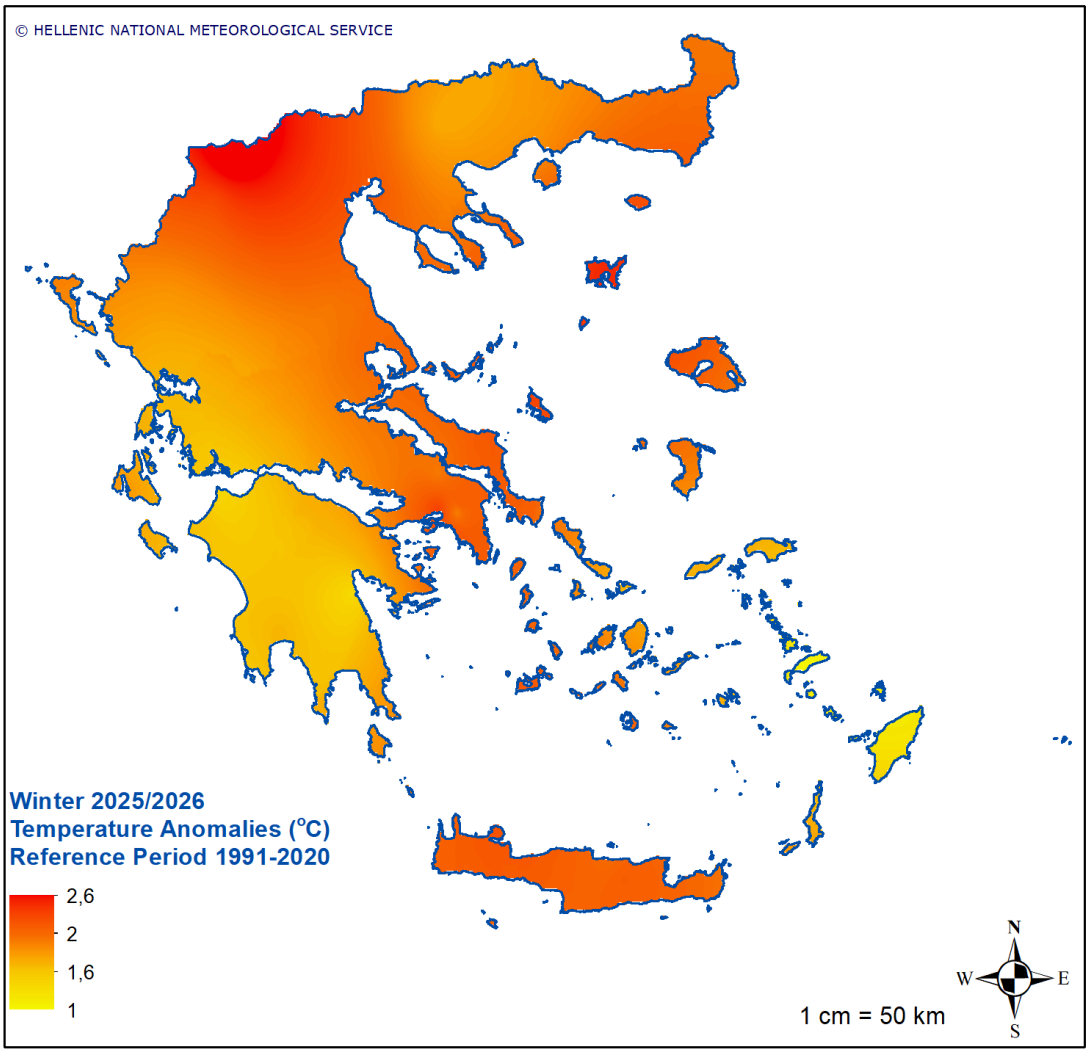

Figure 2. *Mean temperature anomalies (°C) for winter 2025/26 in Greece according to the 1991-2020 climatology.*

In order to quantify the observed seasonal temperatures in terms of cold, warm and normal, we have used the percentile method. The percentiles were calculated for

each station and are based on homogenized data for the period 1960-2022. According to percentile ranks (Figure 2):

- Extremely warm conditions prevailed in 24 stations (56% of stations)
- 17 stations experienced very warm conditions (39% of stations)
- 2 stations experienced warm conditions (5% of stations)

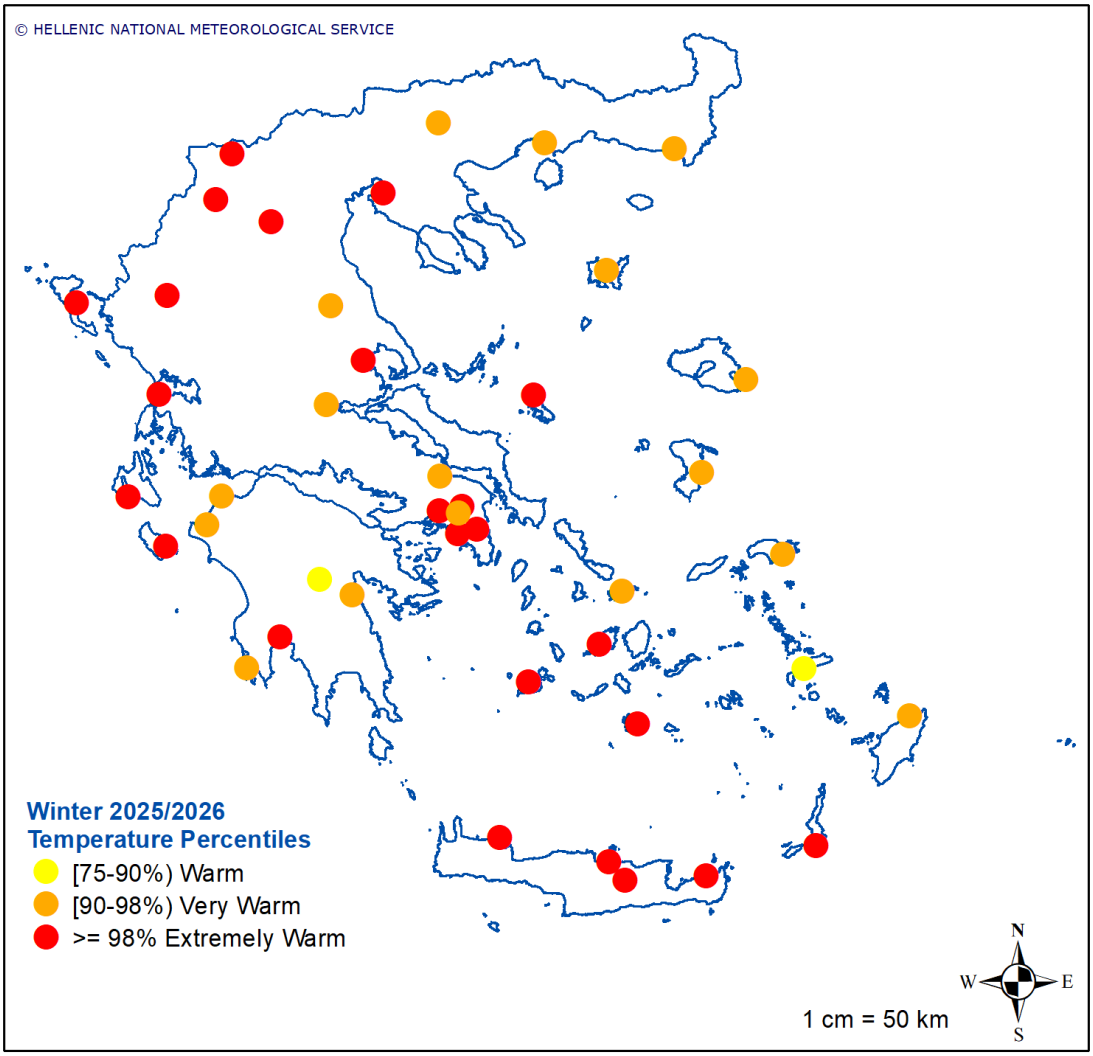

Figure 2. *Mean temperature percentiles for winter 2025/26 (based period 1960-2022).*

1.2. Verification of the SEECOF-34 winter 2025/26 temperature outlook for Greece

The seasonal forecast for winter 2025/26 suggested that the mean temperature would be near normal in the central mainland and above normal in the northern and southern areas with the greatest temperature anomaly (2-3°C) occurring in north Greece (Figure 3). The consensus statement of SEECOF-34 mentioned that in the entire Greek region, winter temperatures were likely to be above-normal, with 50% probability for the north and central Greece (Zone 1 in Figure 4) and 60% for the

south of Greece (Zone 2 in Figure 4). Verifying the seasonal forecast for winter the prediction was successful.

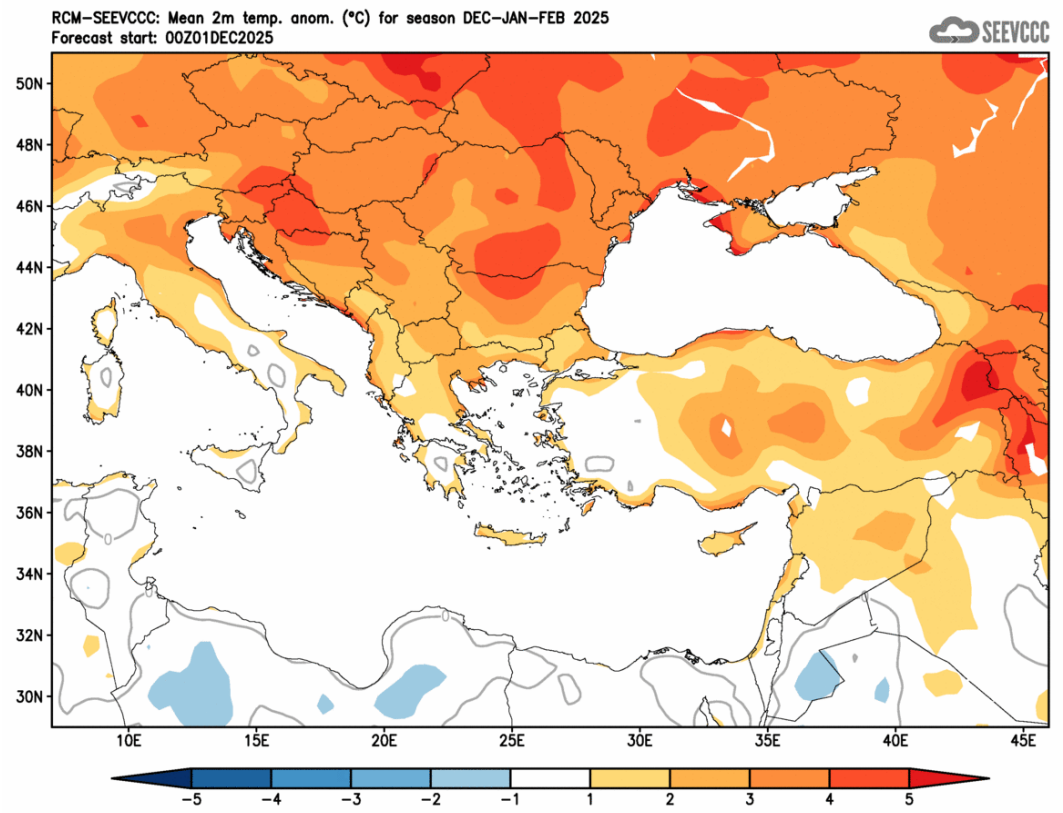

Figure 3. *Mean temperature anomaly for winter 2025/26.*

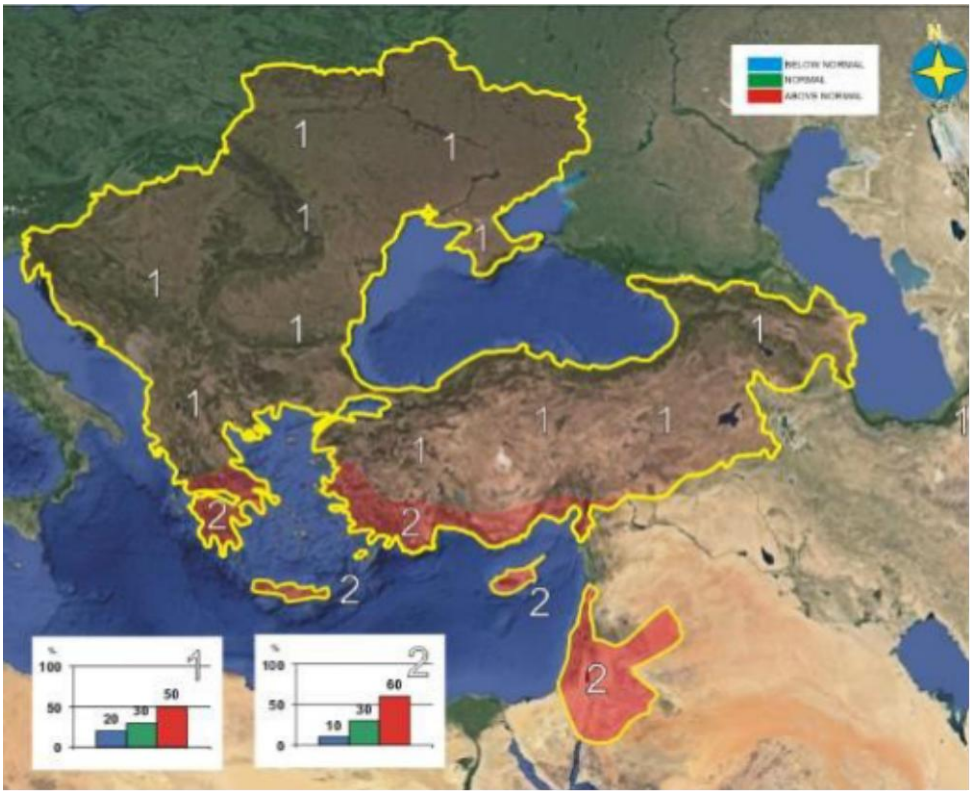

Figure 4. *Graphical presentation of the 2025/26 winter temperature outlook.*

Part B

2. Precipitation

2.1. Analysis of the 2024/25 winter precipitation anomalies in Greece

Winter 2025/26 was wetter than normal over most parts of Greece (Figure 5). Normal conditions prevailed in the central parts and the southeastern island region. On the other hand, the islands of Crete and Cyclades had below-normal winter precipitation totals accounting for 80 % of 1991-2020 normal values.

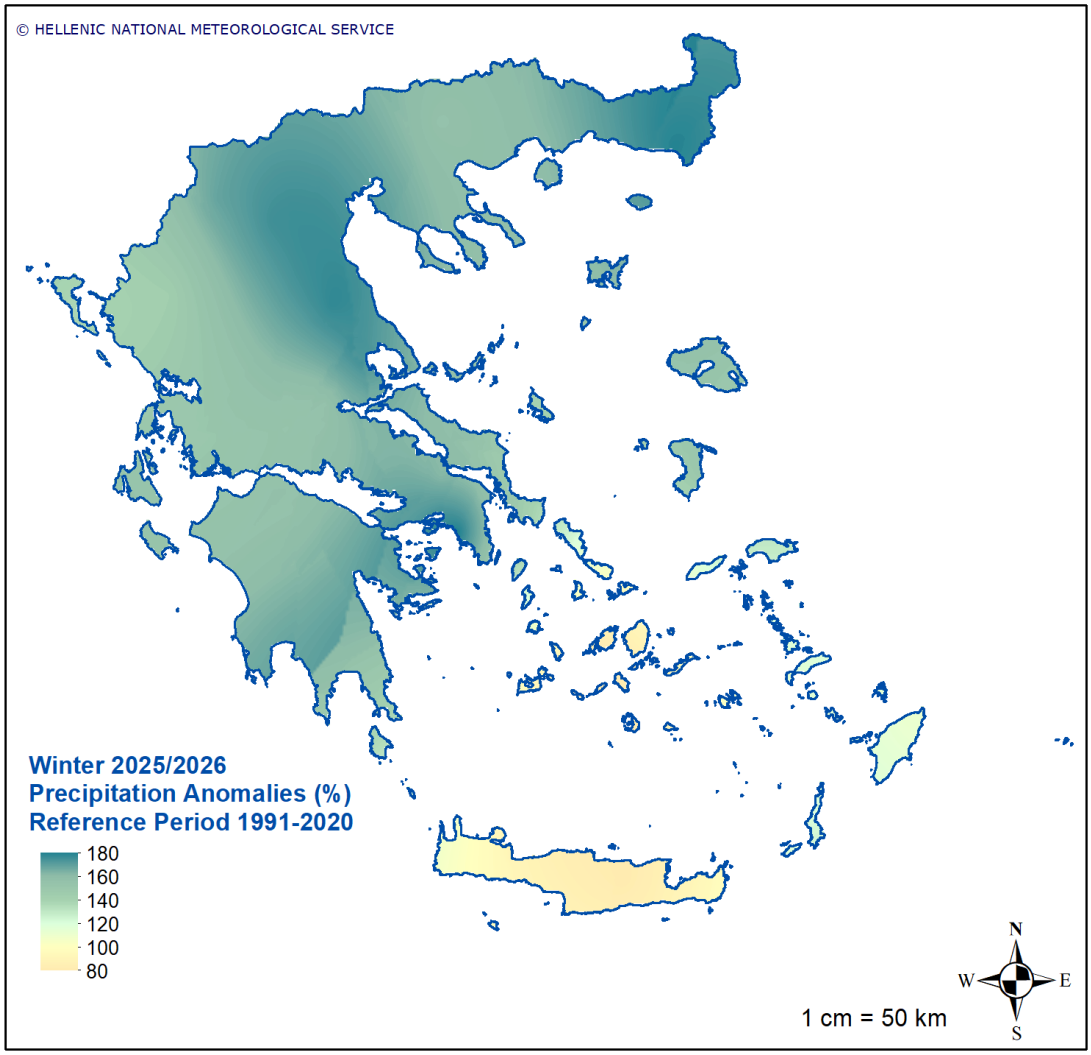

Figure 5. Winter 2025/26 precipitation anomalies (1991-2020) given in percentages.

In order to quantify the observed precipitation height in terms of wet, dry and normal we have used the percentile method. The percentiles were calculated for each station and are based on homogenized precipitation series for the period 1960-2022.

According to precipitation percentile ranks (Figure 6):

- 2 stations experienced wet conditions, 9 stations experienced very wet conditions and 2 stations extremely wet conditions (59% of the examined stations).
- 14 stations experienced normal conditions (36% of the examined stations).
- Dry conditions prevailed in 2 stations (5% of the examined stations).

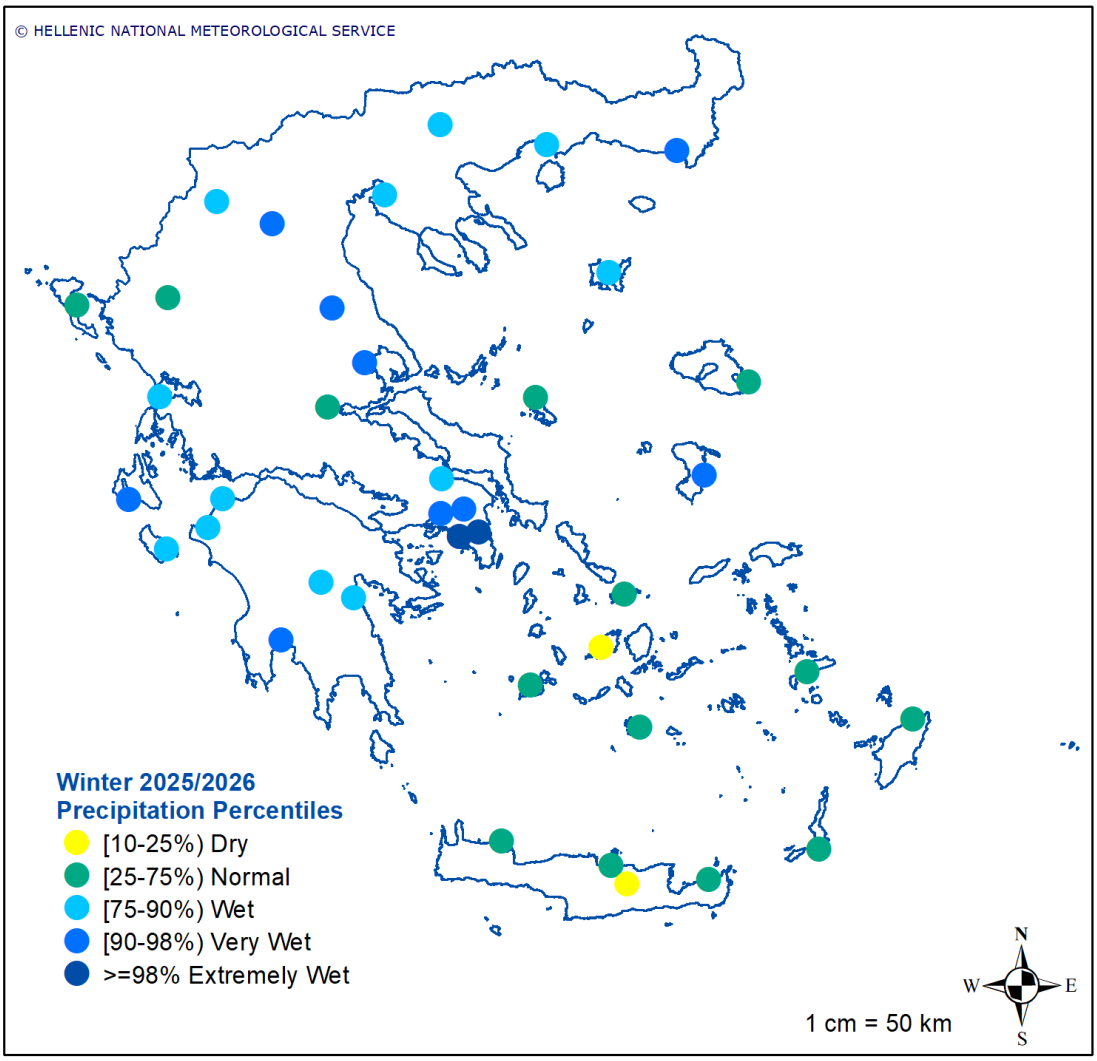

Figure 6. Precipitation percentiles for winter 2025/26 (based period 1960-2022).

2.2. Verification of the SEECOF-34 winter 2025/26 precipitation outlook for Greece

The seasonal forecast for precipitation predicted a dry winter in most of Greece, with areas in west and central mainland most likely to experience severe drought (Figure 7). According to the consensus statement of SEECOF–34, in most of the Greek territory above-normal conditions in terms of winter precipitation sums were expected to prevail (Zone 2 in Figure 8), while in the northern Greece there was an equal probability for winter precipitation (Zone 1 in Figure 8). Verifying the consensus statement for winter, the seasonal forecast was partially successful since wetter than normal conditions prevailed in most parts of the country, while normal

and dry conditions were observed in the central part and the southern – southeastern island region.

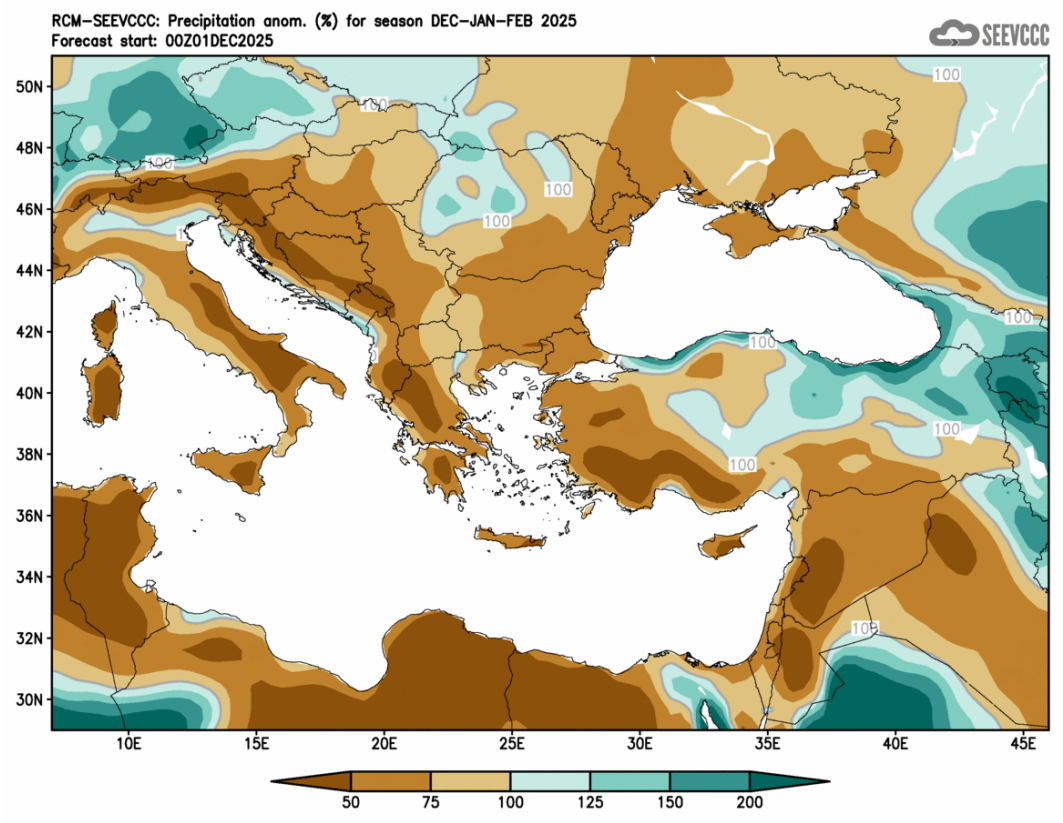

Figure 7. Precipitation anomaly for winter 2025/26.

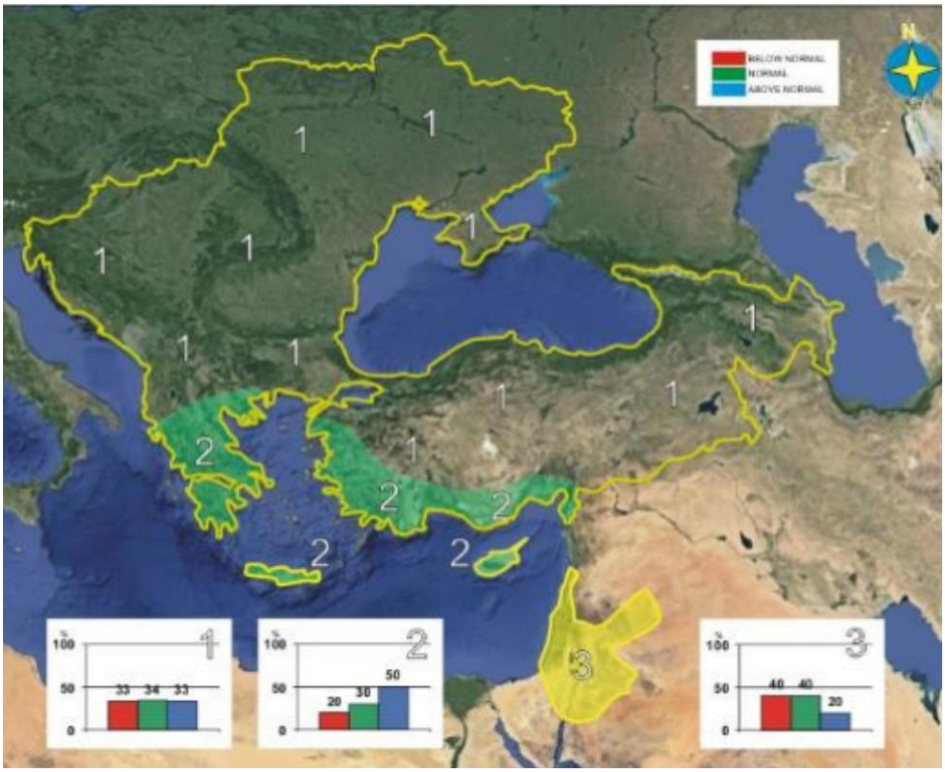

Figure 8. Graphical presentation of the 2025/26 winter precipitation outlook.

Table 1. Seasonal air temperature and precipitation sums - Ranks

Winter 2024/25		Seasonal air temperature (°C)					Seasonal precipitation sums (mm)			
Station	Rank*	33	50	67	Observed value	Rank**	33	50	67	Observed Value
Thessaloniki	2	6.5	7.2	7.7	9,1	11	92.2	124.3	140.7	202.9
Helliniko	1	10.7	11.3	11.6	13.1	1	131.7	157.8	186.1	375.1
Souda	1	11.2	11.6	11.7	13.5	41	296.0	354.2	386.4	318.4
Argostoli	1	11.6	12.0	12.3	13.5	7	328.4	400.6	449.7	606.6

*Rank: period 1960-2022 (warmest season)

**Rank: period 1960-2022 (highest seasonal precipitation)

Table 2. Verification of the SEECOF-32 Climate Outlook in Greece for Winter 2024/25.

Country	Seasonal temperature		Seasonal precipitation		High Impact Events
	Observed	SEECOF-32 climate outlook for temperature	Observed	SEECOF-32 climate outlook for precipitation	
Greece	Above normal for the whole area of the country.	Above normal (zone 1 50%, zone 2 60%)	Wetter than normal conditions prevailed over most of Greece. However normal and dry conditions were observed in the central and southern – southestern island region.	Above-normal conditions in the central and south region (zone 2, 50% above normal, 30% around normal, 20% above normal). Equal probability in the northern Greece (zone 1, 33% above normal, 34% around normal, 33% above normal).	The weather storm **"**Byron**"** that lasted from **December 4 to 9**, **2025**, brought heavy rainfall, strong winds, and caused serious flooding problems. In Greece, on December 4, 2025, authorities issued red code weather alert for many regions, including Attica, Thessaly, Peloponnese, and several Aegean islands. The main characteristics of the storm were heavy rain and thunderstorms, flash floods, winds reaching up to Beaufort scale force 9 in the Aegean Sea disruptions to ferry services and preventive school closures in high-risk areas. From **January 6 to 8, 2026,** a severe weather system hit Greece, leading to intense rain, thunderstorms, strong winds, and floods in many parts of the country. The mainly impacted

					areas were western and northeastern Greece, including the Ionian Islands, Epirus, Western Greece, Eastern Macedonia, and Thrace. The storm was accompanied by hailstorms and powerful southerly winds reaching 8–9 Beaufort in the Aegean Sea. Flooding, transport disruptions, and damage to infrastructure were reported. A strong weather system affected Greece on **January 21**, 2026, bringing heavy rain, thunderstorms, snowfall, and gale-force winds across much of the country. Authorities issued a "Red Code" weather alert for several regions, including Attica, Thessaly, Central Greece, the Peloponnese, and Western Macedonia. The storm caused widespread flooding, especially in Athens and southern suburbs such as Glyfada, where streets turned into rivers and several homes were evacuated (1 casualty). Strong winds in the Aegean Sea reached up to 10 Beaufort, creating major transportation disruptions. During **January 31 and February 1, 2026**, Greece experienced severe weather conditions with intense rainfall, thunderstorms, powerful winds, snowfall, and hail affecting many areas of the country. A "red alert" warning was issued. The storm grew stronger in western Greece and expanded across the nation. The most affected regions included the Peloponnese, Thessaly, Central Greece, Macedonia, Crete, the Ionian Islands, the Cyclades, and Attica.

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