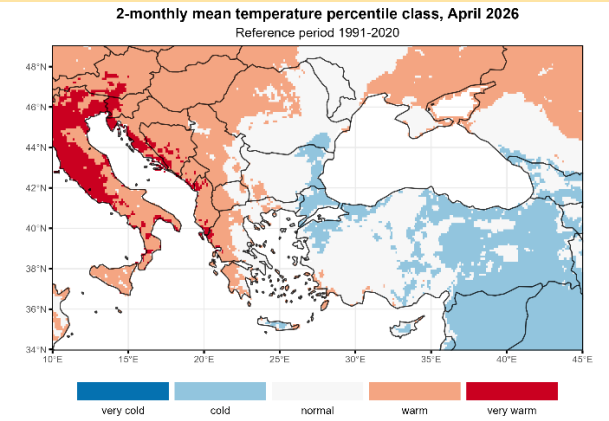
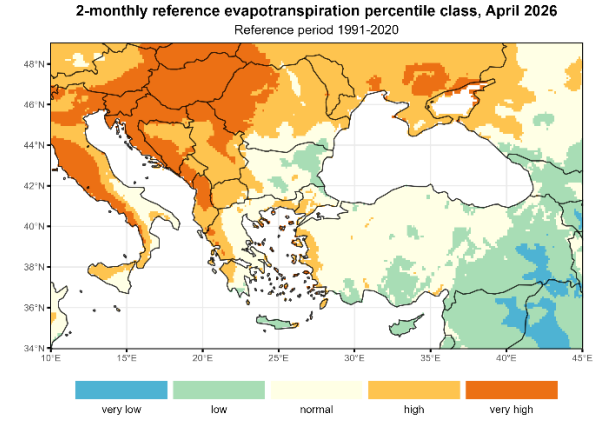
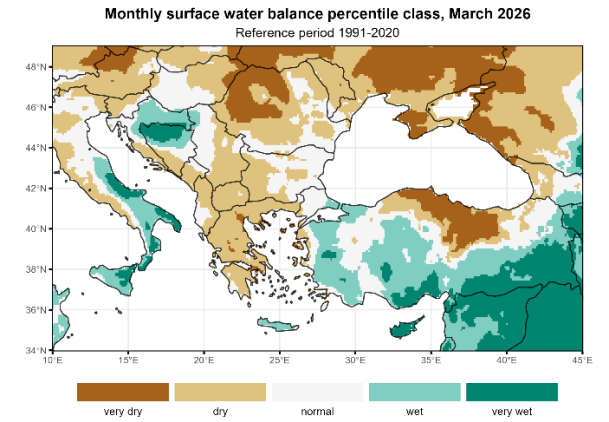
DROUGHT MONITORING BULLETIN

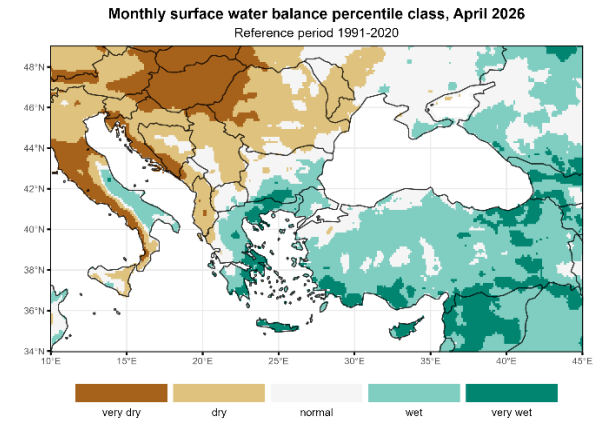
April 2026

HOT SPOT





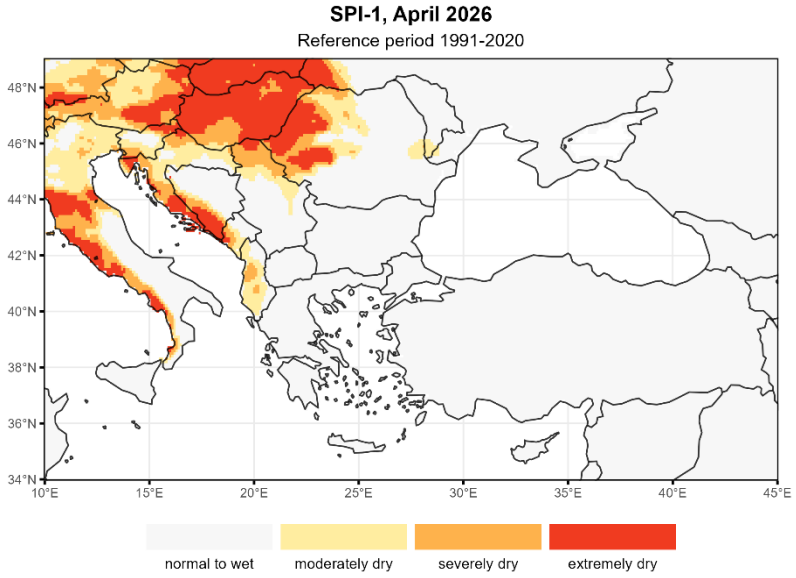


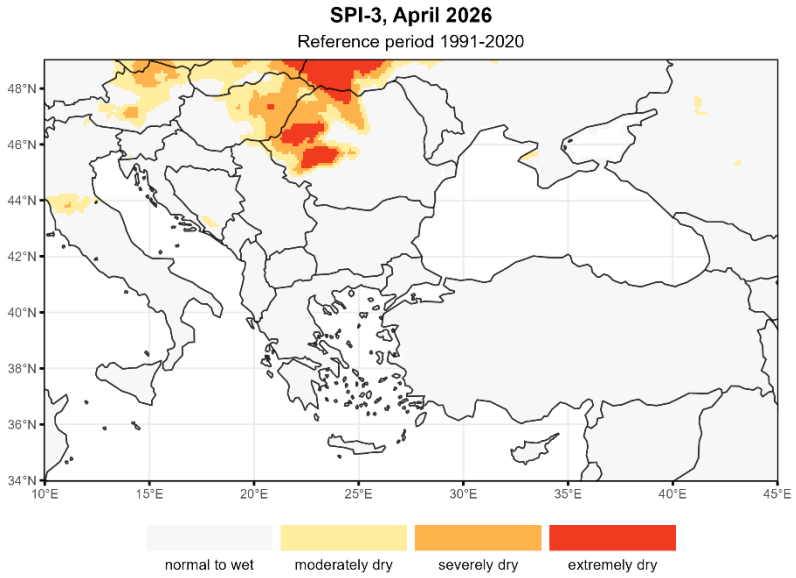


- March brought unusually warm weather to Balkan Peninsula's northern half and its south-west while in April it persisted over the region's entire western belt. First two months of spring were on average up to 2 °C warmer than normal over much of the western half of Balkan Peninsula, locally along the western coastal belt up to 2.5 °C warmer than usual. For Montenegro, Albania and surrounding areas, this was the 6th warmer-than-expected month in a row, since November 2025.
- In March, evaporative demand was extremely high across northern Balkan Peninsula, in April it ranged from severely to extremely high from Slovenia to western Romania, in coastal areas all along the Adriatic Sea and over southeastern Moldova. Across much of the region's northwestern areas up to northern Romania and northern Albania, up to 30 mm more than normal amount of water evaporated potentially, in eastern Hungary up to 45 mm more.
- In March as well as April, areas of unusually warm weather generally corresponded with the areas experiencing rainfall deficit. First two months of spring were drier than usual across most of the Balkan Peninsula, with especially high lack of rain over Hungary, all along the region's western coastal areas and western half of Romania. Each of the two months ended with surface water balance deficit of 30–90 mm, between southern Croatia and northern Albania of up to 150 mm, altogether resulting in 125–200 mm of cumulative deficit this spring so far, locally up to 250 mm.

PRECIPITATION CONDITIONS

Figures below show standardized precipitation index (**SPI**) **for April 2026 at one- and 3-monthly scales**. Unitless SPI values present the deviation of the accumulated precipitations from the long-term mean, suggesting how (in)frequent the occurrence of such value was in the past. SPI values lower than -1 that go as low as -1.5, -2 or below -2 and shall correspond respectively to the occurrence of such precipitation deficit in 9.2 %, 4.4 % or 2.3 % of the time in a long-term series of data, are arbitrary grouped into drought intensity classes labelled as moderate, severe or extreme. Monthly SPI indicates drought conditions that may have impact on vegetation health, while 3-monthly SPI can be indicative also for surface water status.



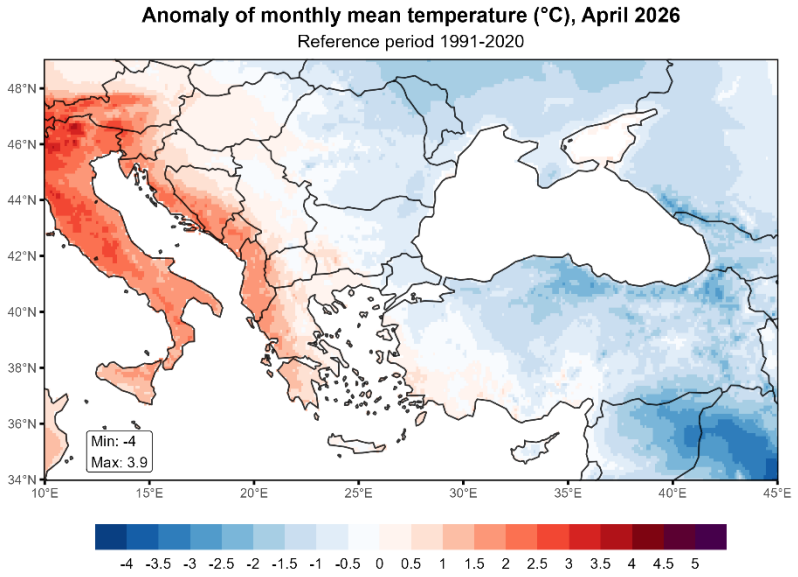


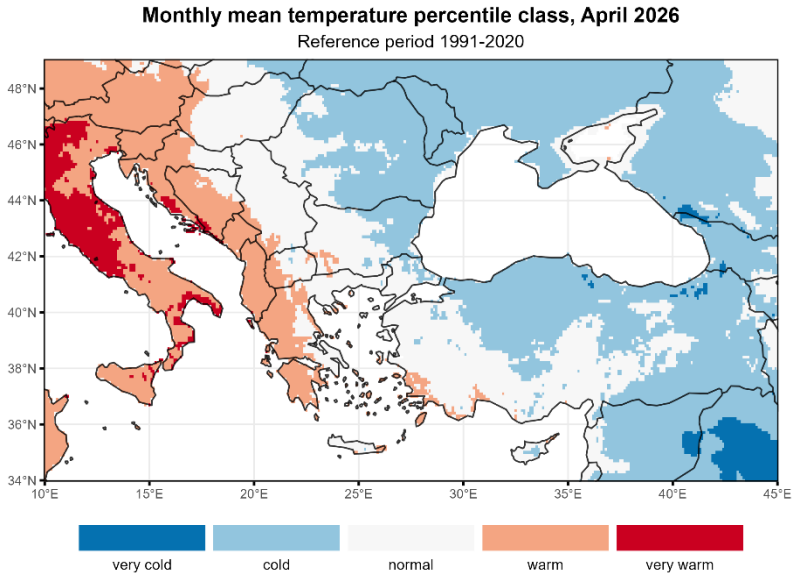
- Precipitation conditions across the region were in April divided in mostly dry to very dry northwestern half and wet to very wet southeastern half, with the split line over western Greece, North Macedonia and coastal Romania.
- Hotspots of major lack of rain were Romania's northwestern quarter, Hungary and the coastal belt all along the Adriatic Sea, which received up to 100 mm lesser amount of rain than normal in April, between southern Croatia and Montenegro up to 150 mm less, classifying April as severely to extremely dry in comparison to the past.
- Meanwhile, it was a wet month across southern Bulgaria, Aegean Greece, over Turkey's south and much of its eastern half. They received mostly up to 125 mm higher than normal amount of rain in April, while far southeastern Turkey recorded up to 200 mm of precipitation surplus this April.

- 3-monthly precipitation overview reveal February as wet to very wet across the entire region, while dry March over much of the Balkan Peninsula and dry April altogether brought up to 75 mm of rainfall deficit to Hungary and coastal Croatia, and between 125 and 200 mm of deficit across southern Adriatic Sea area and northwestern quarter of Romania. In the latter, such high precipitation deficit indicates severely to extremely dry February–April period.

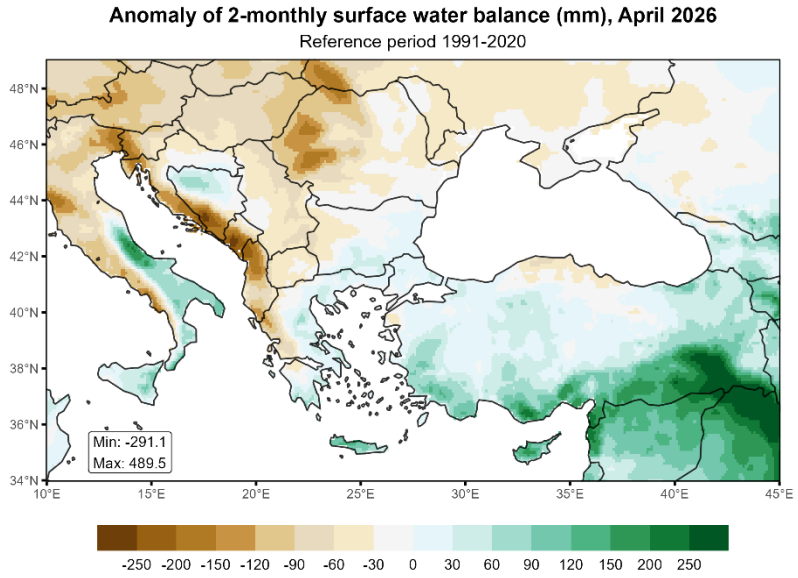
AIR TEMPERATURE AND SURFACE WATER BALANCE

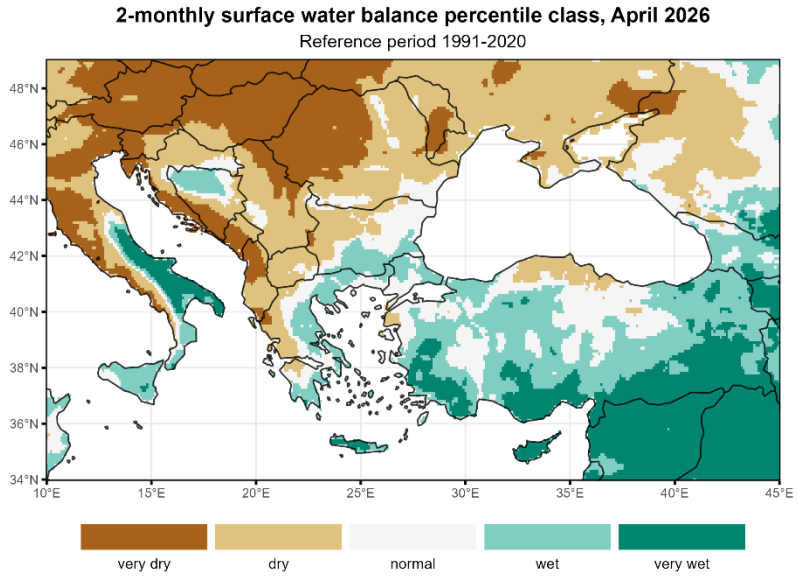
Figures below show anomalies of **monthly mean air temperature and 2-monthly accumulated surface water balance** (precipitation reduced for evapotranspiration) in absolute units and in percentile classes for **April 2026** in comparison to the 1991-2020 reference datasets. A percentile value (class) indicates the position of a score within an ordered dataset, showing the percentage of scores that fall below (within) it. The two extreme percentile classes have a 5-percent range, and each of the middle three classes has a 30-percent range.





- Air temperature conditions were this April also dividing the region in two halves, with the average conditions in between them present in a belt from Hungary to southwestern Turkey.
- Areas in a wide belt all along the region's western coast experienced 1–2 °C warmer than usual weather this April, locally it was on average up to 2.5 °C warmer.
- Same part of the region, along with entire Hungary and far northwestern Romania recorded one of the highest evaporation levels for this time of the year. Locally along the Adriatic Sea and across Hungary up to 30 mm more water evaporated than normally in April, in the latter mostly due to the increased wind effect.
- From warmer than normal western edge of the region, air temperatures gradually declined eastward, with coldest anomalies from the average recorded across northern half of Moldova and northern and eastern Turkey, where April was on average up to 2 °C, locally up to 2.5 °C colder than usual. Much of Romania, eastern half of Bulgaria and central Turkey also recorded considerably colder April in comparison to the past decades, with monthly air temperature generally up to 1.5 °C below the long-term average.





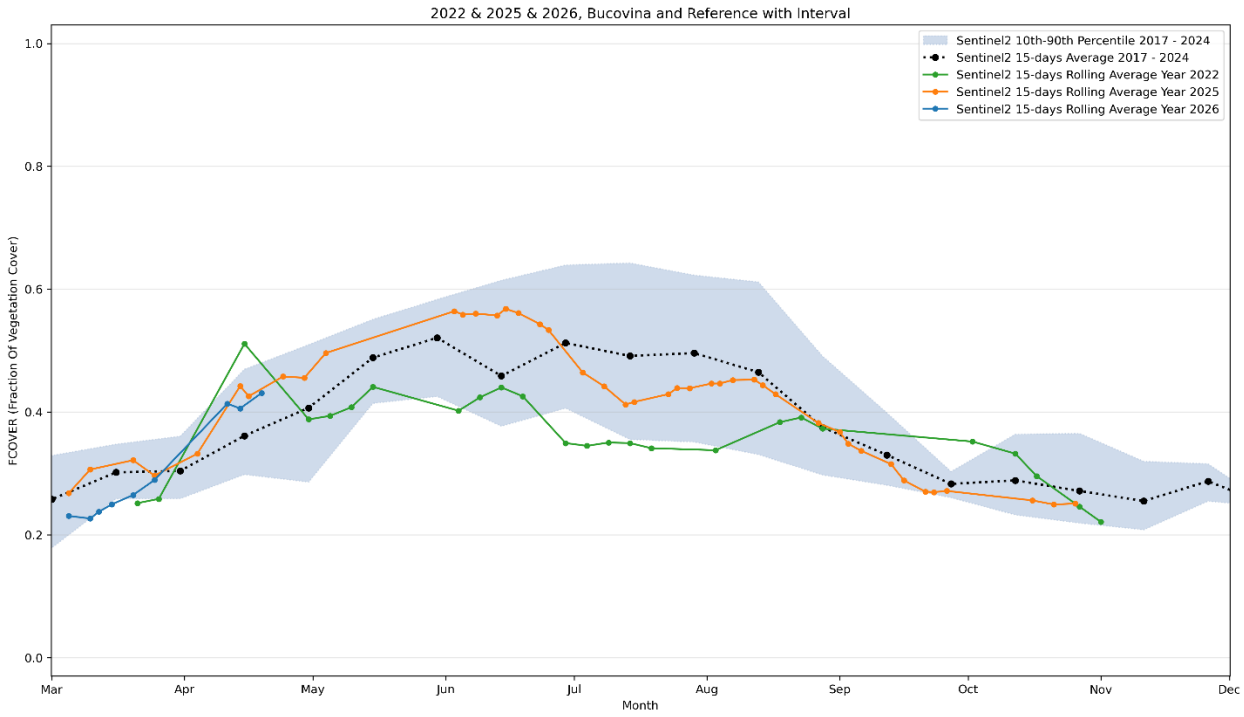
- Over the two-monthly period covering March and April, areas along the region's western coastline, from western Slovenia to southern Albania, and across Romania's northwestern quarter recorded between 150 and 200 mm of surface water balance deficit, locally in Montenegro and southern Bosnia and Herzegovina up to 300 mm, classifying this year's March-April surface water balance as one of the driest in the years 1991-2020. For both parts of the region, the accumulated deficit was obtained in a similar share during dry March as well as dry April.
- In Serbia, continental Croatia and Hungary, accumulated two-monthly deficit of up to 90 mm was obtained during dry April, as March ended with more or less average surface water balance.
- First two months of spring ended with up to 90 mm of surface water balance deficit also across northwestern Greece and northern Turkey, mostly on the account of dry March, as April brought not more than slightly higher than normal surface water balance surplus.
- On the account of drier than normal March and unusually wet April, wider Aegean Greece ended the March-April period with mostly up to 60 mm of surface water balance surplus, while in northern half of Bosnia and Herzegovina the two-monthly surplus of 90 mm comes on the account of distant above-average precipitation levels in March, followed by drier than normal April.
- Southern parts of Turkey recorded well wetter than usual March as well as April, thus accumulating up to 150 mm of surface water balance surplus, local areas in southeastern part of the country accumulated at least 200 mm of surplus, ending up the March-April period with one of the highest surface water balance levels in the last decades.

VEGETATION DEVELOPMENT

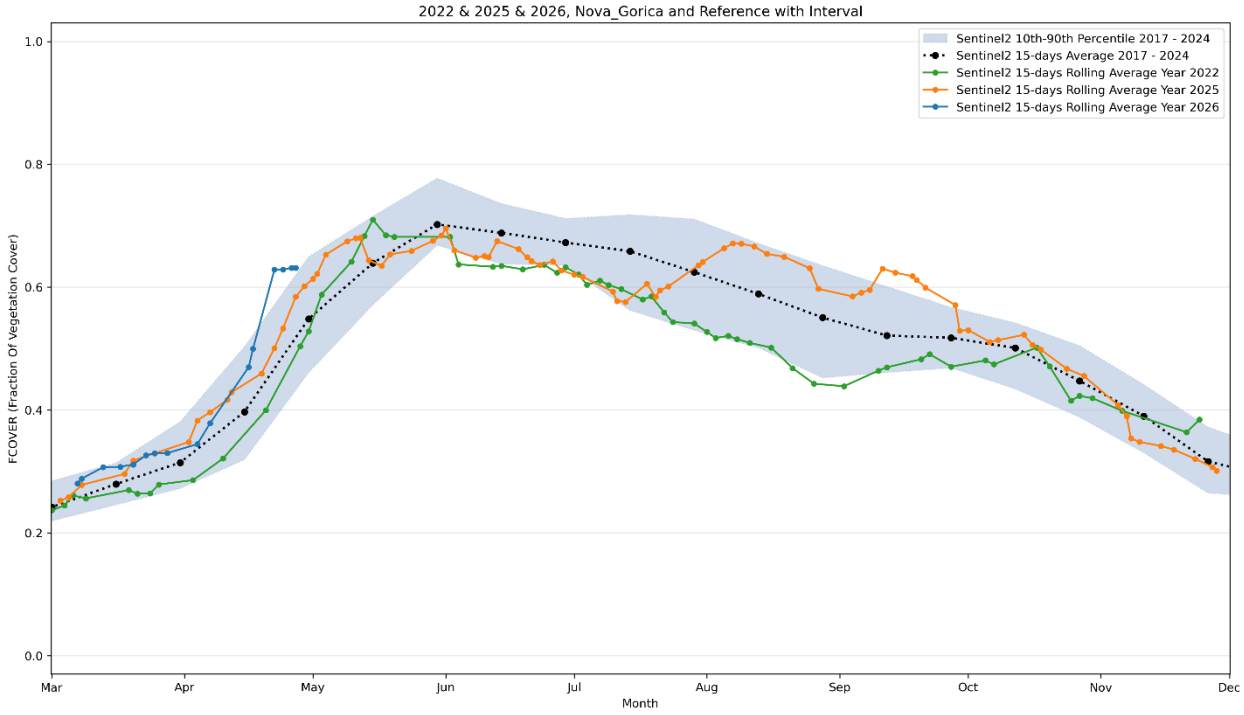
Fraction of green vegetation cover (FCOVER) *is a vegetation index based on remote sensing (satellite) measurements and shows fraction of the total pixel area covered by green vegetation. As such, it has in combination with atmospheric parameters proved useful also for drought monitoring. Values vary according to the vegetation stage and possible damages, including those by extreme weather conditions. In general, they are low at the beginning of the growing season, highest at full seasonal development, then drop with vegetation senescence. Line shape depends on the sort of vegetation at the given location.*

Graphs below show the **fraction of unit area covered with green vegetation** according to FCOVER index, as recorded **on 30 April 2026** at selected locations across southeastern Europe. Current year's values are presented in blue line, alongside the lines for the previous year (orange), year 2022 (green) and the reference background (recent years' average in black, the 10th–90th percentile range in grey) for comparison. Missing values or sharp changes may be linked to prolonged cloudy weather, snow cover, extreme weather events, human intervention or changes to product by the product provider.

ROMANIA



SLOVENIA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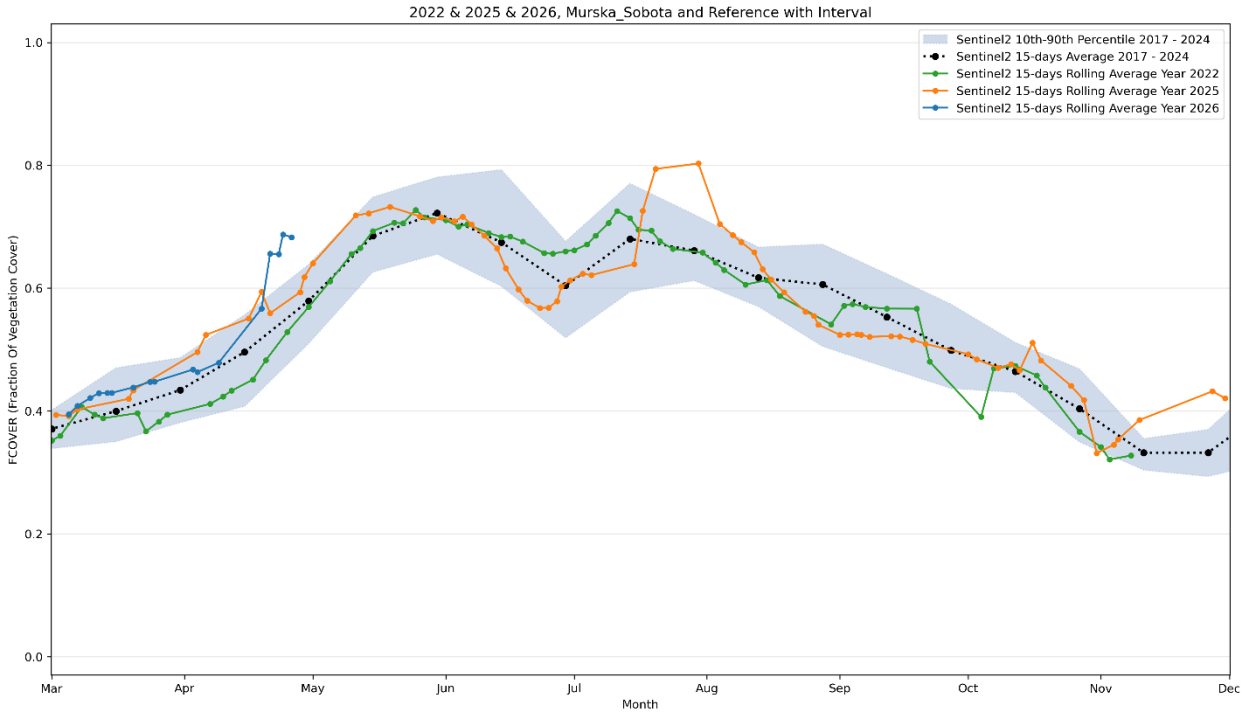
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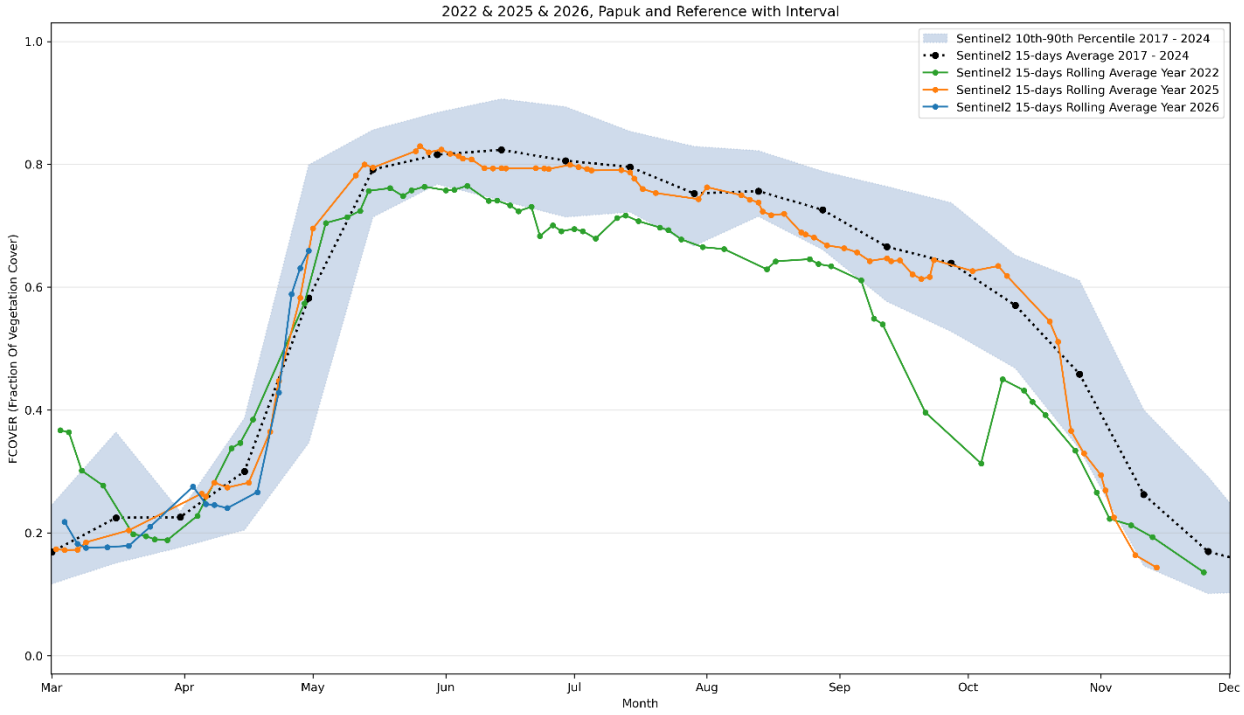
CROATIA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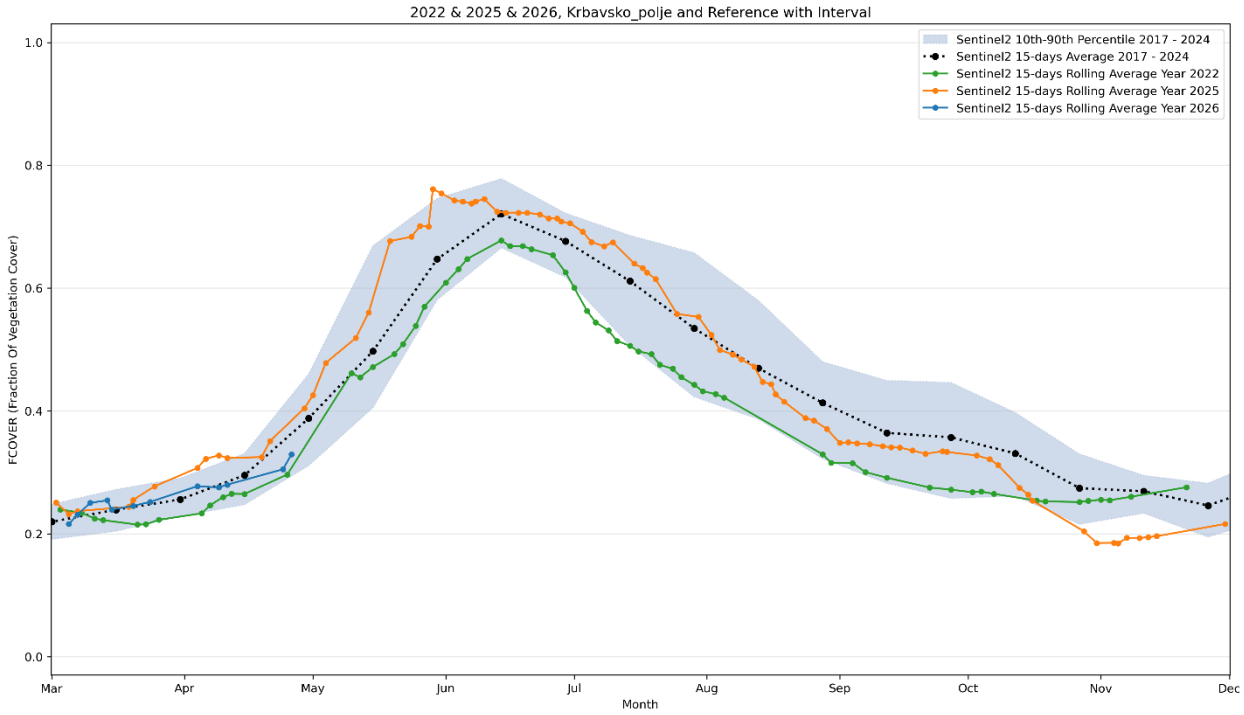
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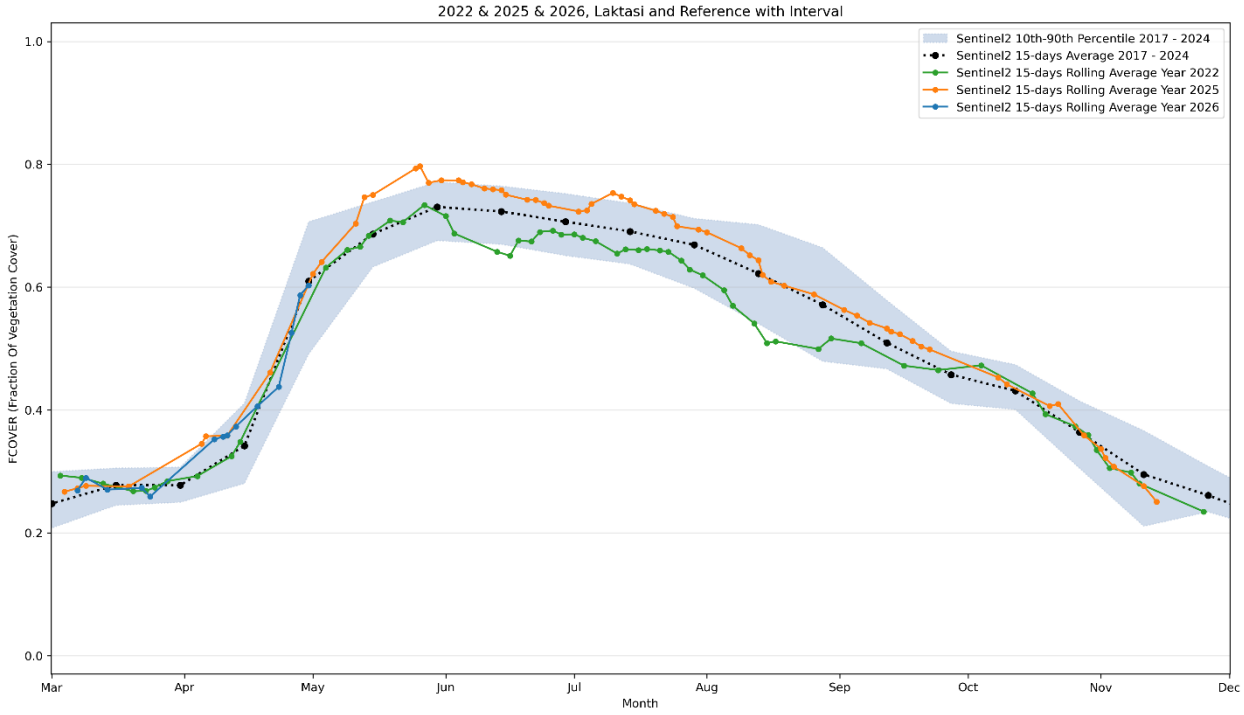
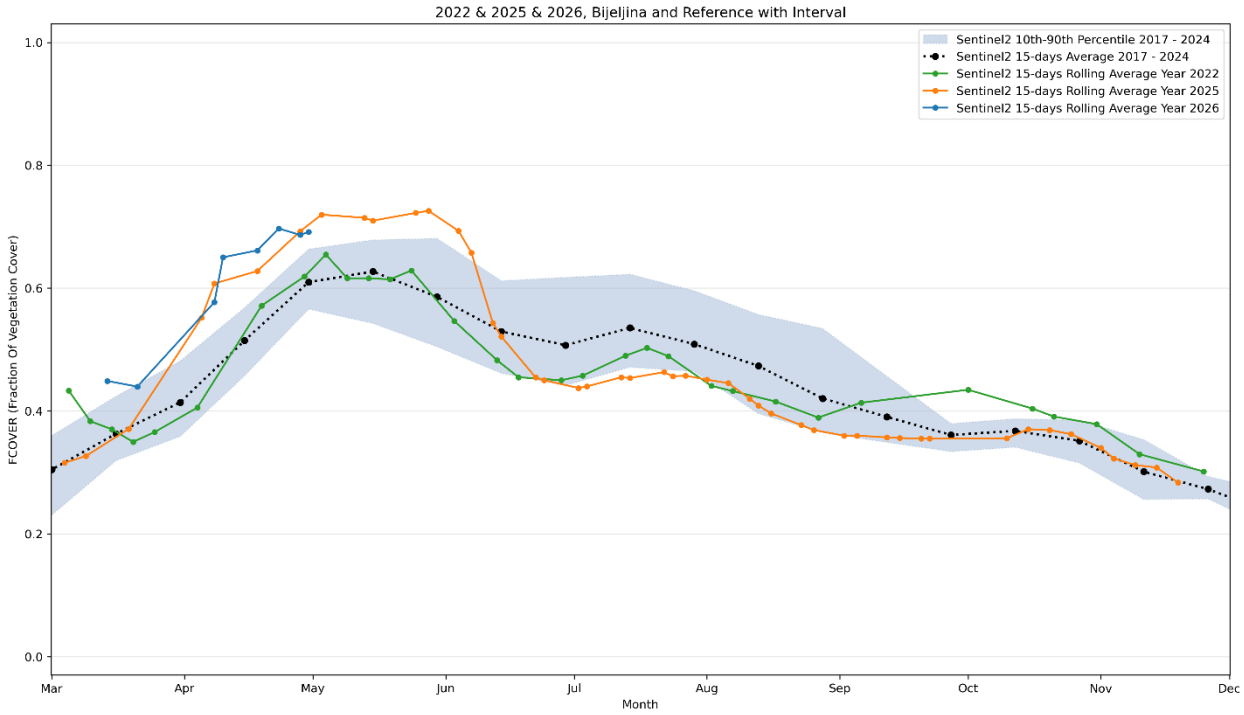
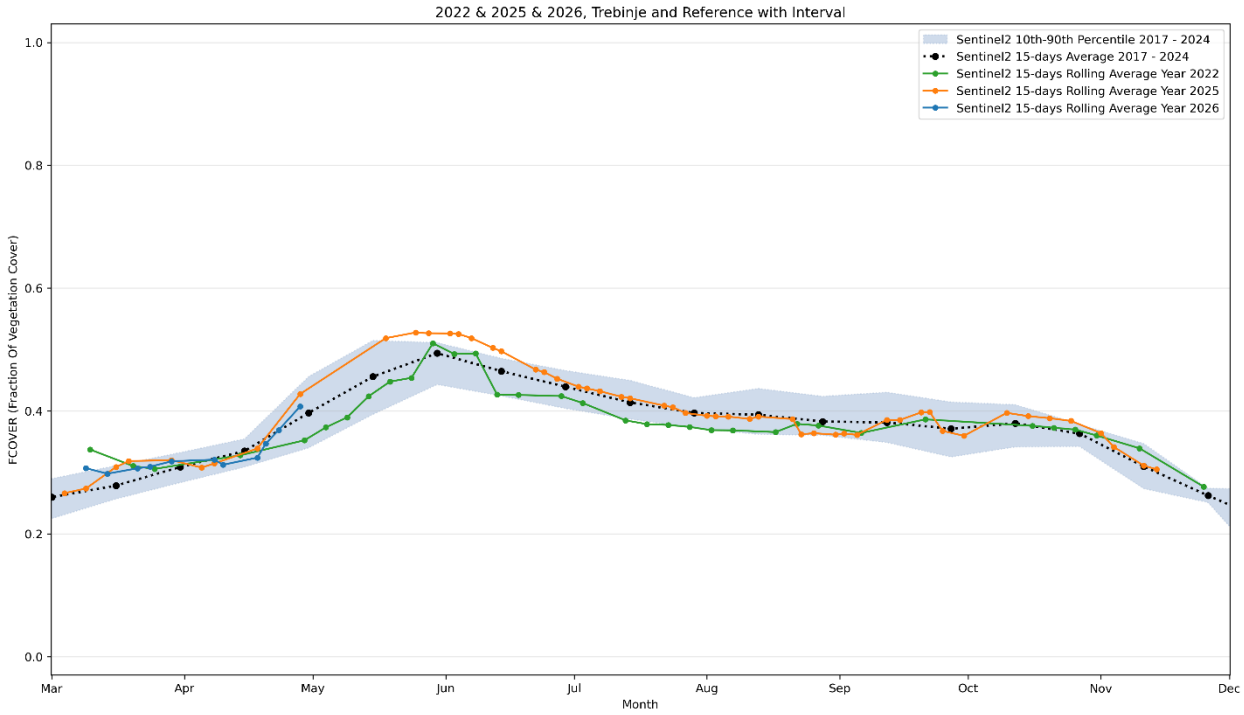
BOSNIA AND HERZEGOVINA (REPUBLIC OF SRPSKA)



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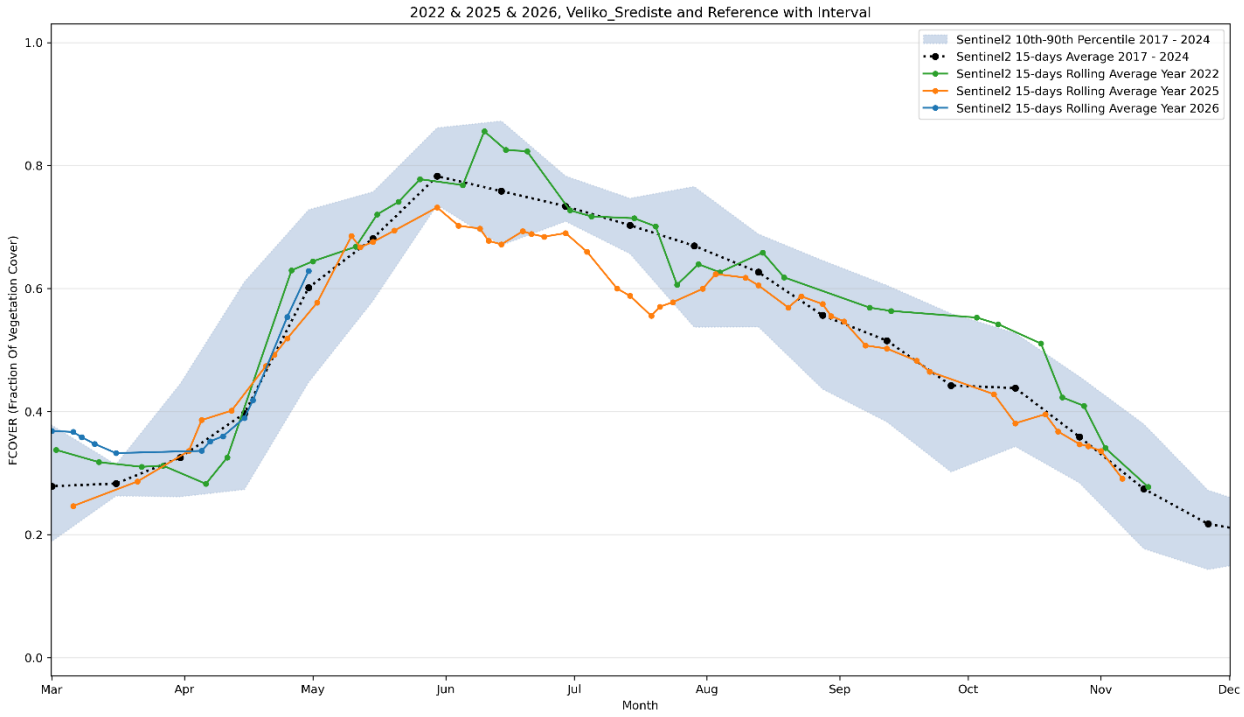
SERBIA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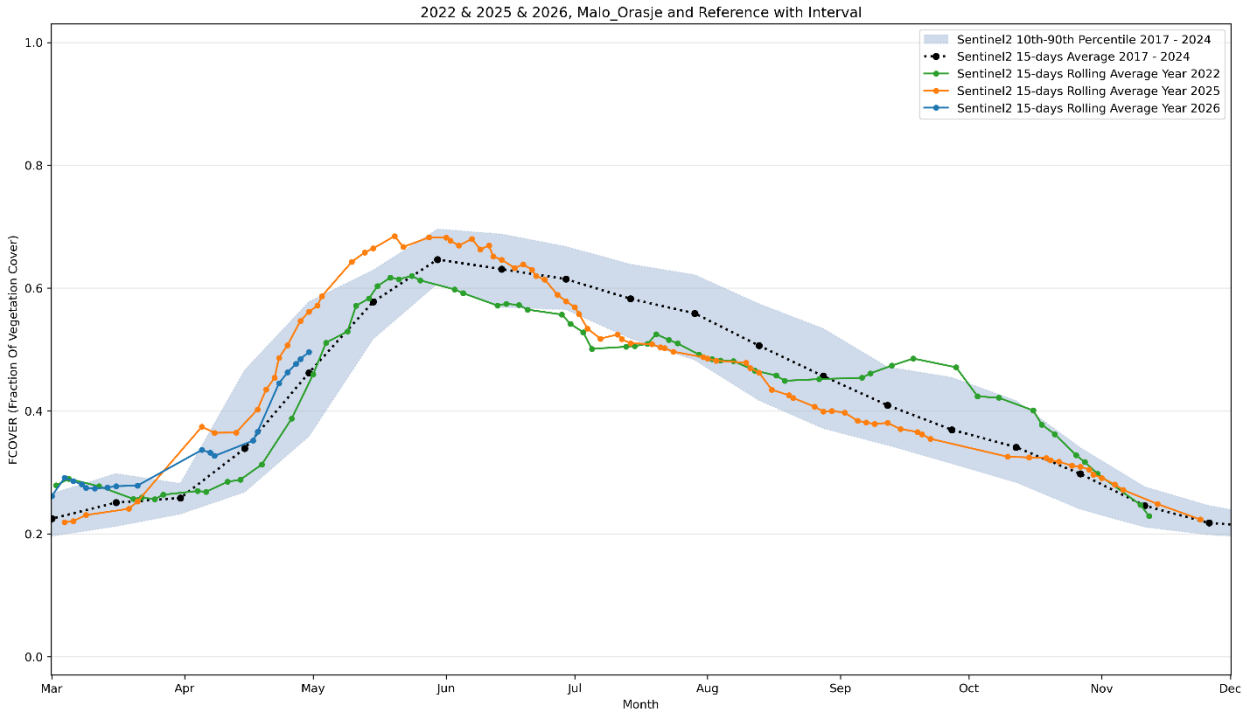
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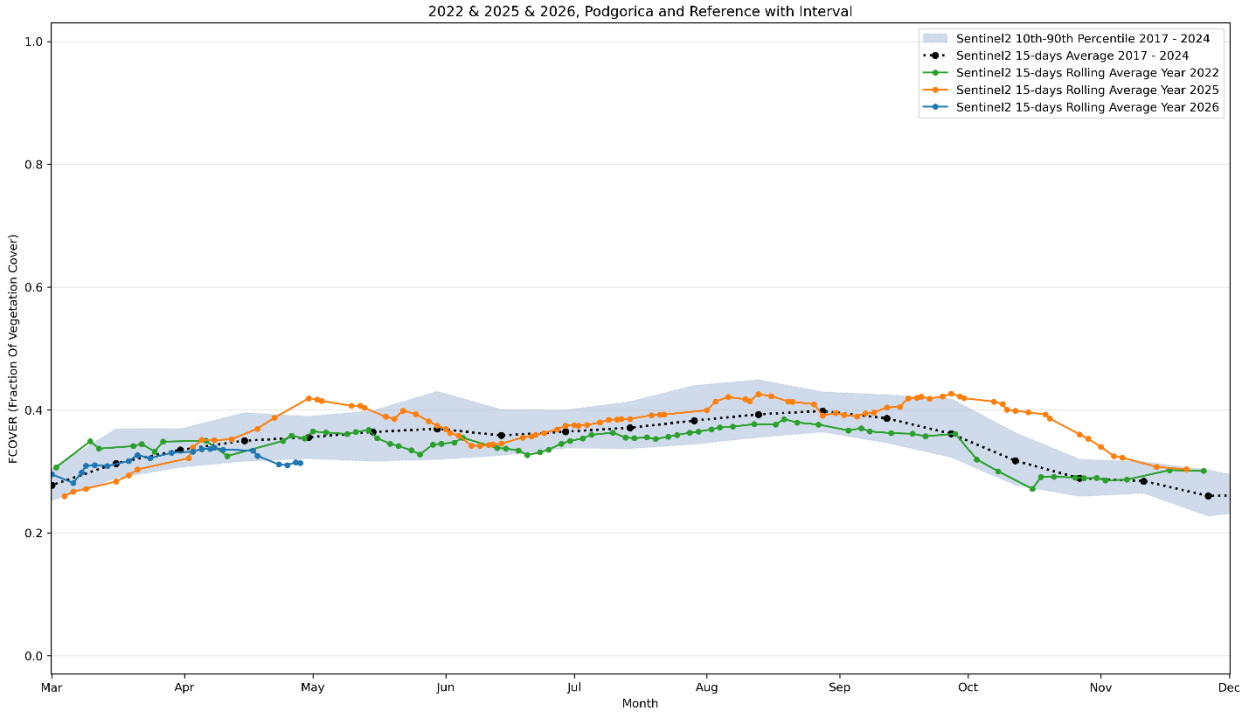
MONTENEGRO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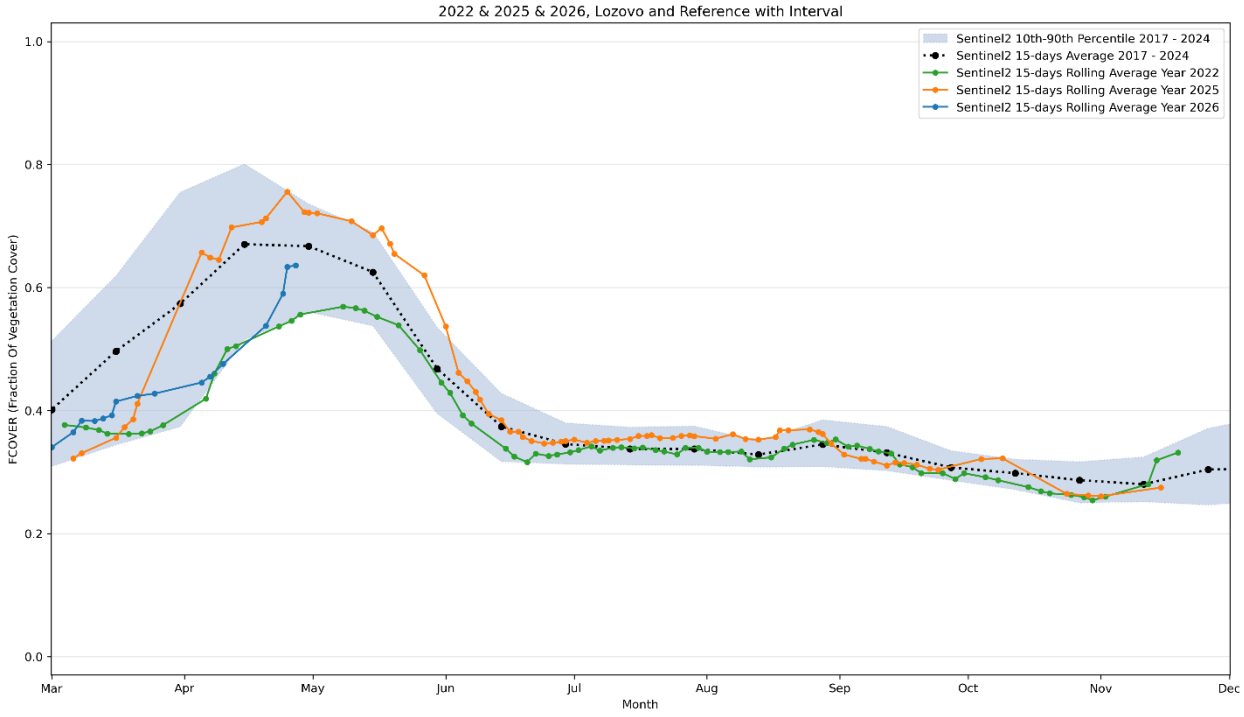
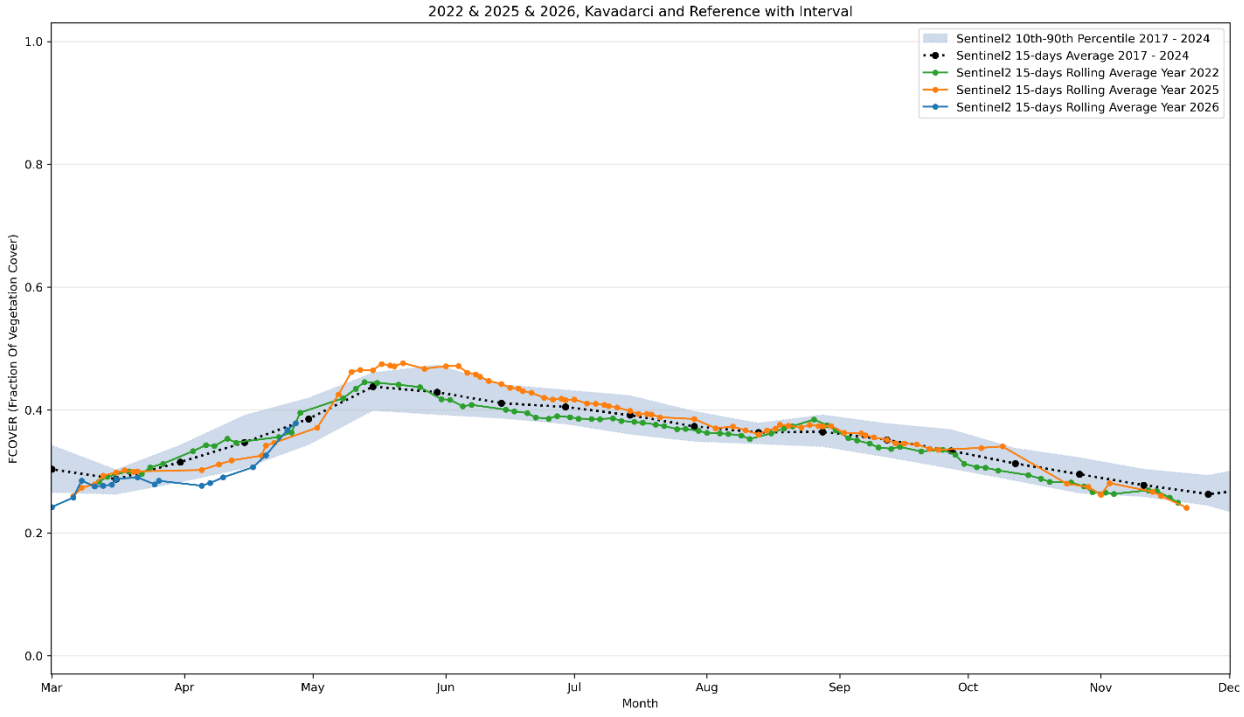
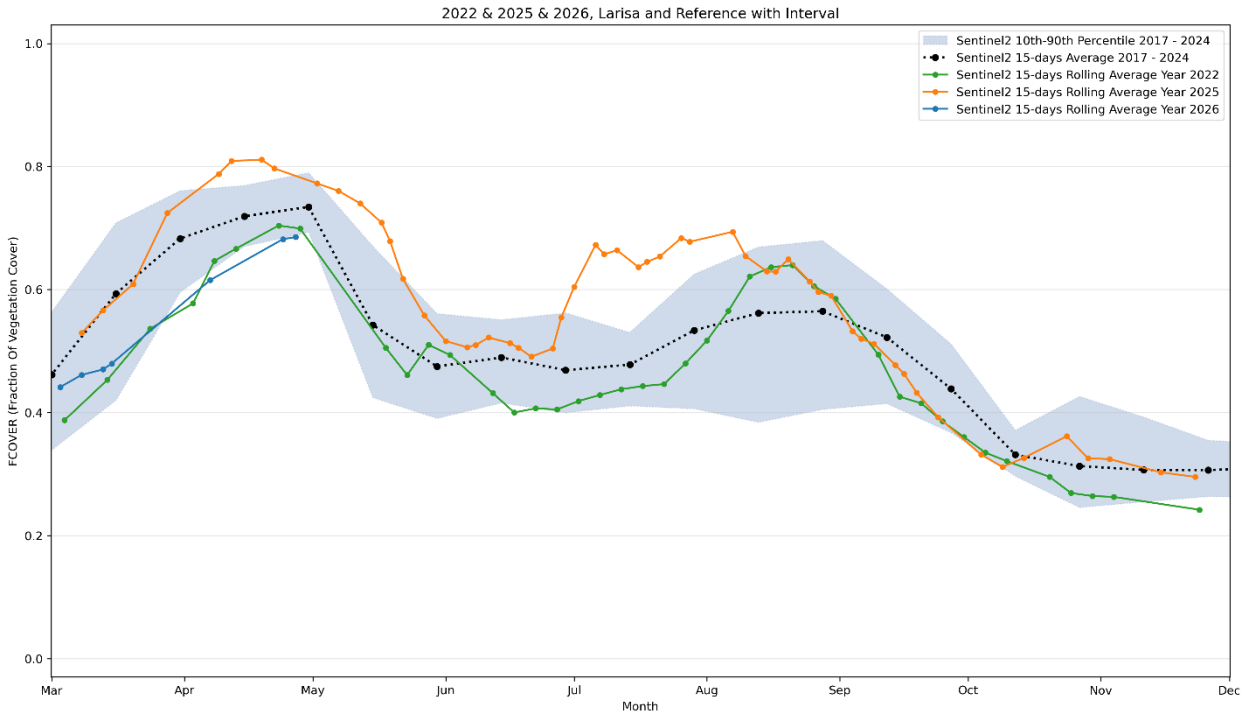




GREECE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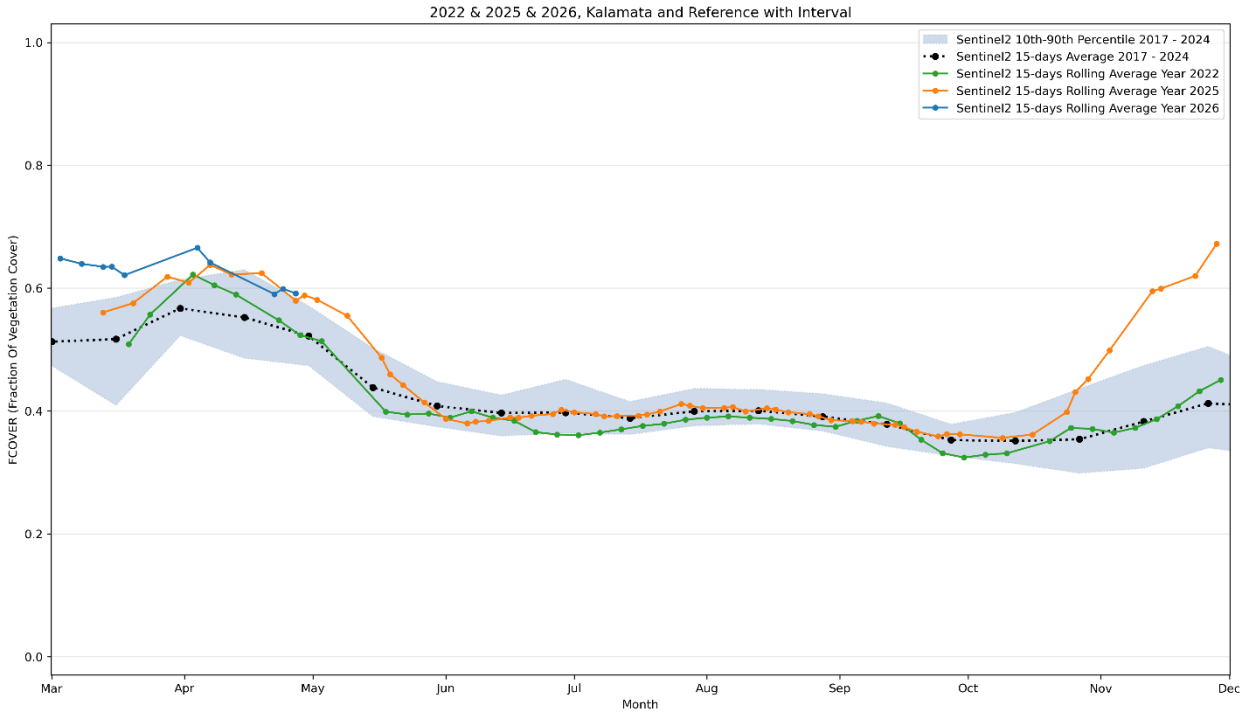
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DROUGHT IMPACT REPORTS

HUNGARY

In Hungary, precipitation shortages were reportedly observed across the lengthier period of the past years, with one year of the last five years' rainfall missing. [1] The nation-wide drought became more severe and worrying in April due to the persistent lack of rainfall. April typically brings an average of 40 mm of rain to Hungary, yet this year the national average was mere 4 mm, with many places not receiving any rain at all. The soil water shortages were recorded drastic across Hungary, spanning over 90 % of the terrain, most severely in the Great Plain. With the exception of a small area in Vas and Zala Counties, the upper 20 cm layer has completely dried out throughout the country. The moisture deficit was increasing also in the deeper, one-meter-thick soil layer, showing consequences in **cracked and porous soil, dusty surfaces and grasslands drying out earlier**. [2, 3, 4, 5] The seeds of **leguminous plants** could not germinate in dry soil, while drought affecting **autumn sowings** was spreading to an increasingly large area in the country. [6]

Lack of water turned into hydrological drought, showing evidently in **lakes and rivers** across the country. Water level of **Lake Velence** was so low some buoys laid in the sandy ground, and some stretches of the shore dried up as water receded 15–20 m offshore. Two lakes that supply the reservoir, **the Patka and the Zamolyi**, also dried up. Also reported as dried up was Lake Kakasszeki in Bekes County, southeastern Hungary. [1, 3] The water level of Hungary's most significant rivers, **Tisza and Danube**, was in April extremely low. In late April, the Danube River in Budapest recorded less than 90 cm of water level, revealing the Inseg Rock that surfaces only at extremely low water levels and was historically only typical in dry, "famine" periods. [4, 7] In several regions the **groundwater level** is up to half a meter lower than the long-term average. The problem was particularly visible in the Great Plain and the Danube-Tisza region, but a significant part of Transdanubia was also affected. [8]

The Ministry of the Tisza Government responsible for the living environment was asked to compile an immediate short- and medium-term **water action and communication plan** due to the worsening drought situation and the critically low levels of our rivers and groundwater. [9]

SLOVENIA

The above-average warm winter and March accelerated the development of cereals, grasses and other winter crops, but drought in March and April **prevented effective fertilization** - the first enrichment with fertilizers was in many places less effective due to drought and the second one was delayed due to continuous lack of rain - and inhibited the growth and development of crops. The consequences showed clearly in greater soil compaction and consequently less developed roots and sparser winter crops. Due to the dried-out topsoil, **winter crops, vegetables and grasslands** have already been affected in some places. Some agricultural crops such as **hops, fruit trees** and vegetables were already being irrigated to maintain soil moisture. [1, 2, 3] In addition to field crop growers, livestock farmers who rely on high-quality **forage** from the first harvest were also concerned. [4]

Cerknica Fishing Association reported that the intermittent lake Cerknica's swallow-hole Vodonos dried up in late April, which is unusual for spring, as thus **fish rescue** was necessary. Unfortunately, there were no young pike, which was a bit worrying. [5, 6]

CROATIA

In April, dry conditions prevailed throughout the entire country. The lowest amount of precipitation was recorded at the Split station with 6.1 mm, which is 9.8 % of the total average April precipitation (1991-2020).

The highest precipitation, still only 86.6% of the total average amount, was recorded in Ploce (76.8 mm) [1]. Air temperature in mountainous Croatia as well as in Istria and Dalmatia, were significantly above the long-term average. Such temperature conditions intensified drought stress. The SPEI index also indicates that conditions ranged from moderately to extremely dry, particularly according to the SPEI1 and SPEI2 indices. [2] Sowing was generally carried out within the optimal time frame [3]; however, dry soil conditions slowed the initial growth and **development of crops** [4]. In crops such as maize, uneven emergence was observed, which is also an indicator of insufficient soil moisture. Such conditions may later complicate weed and plant disease control measures [5].

GREECE

Despite recent rainfall that boosted water reserves, the water shortage in several regions of Greece remains acute. This has prompted the Minister of Environment and Energy to declare a **state of emergency** on the islands of Symi [1], Astypalaia and Patmos [2] through a series of ministerial decisions. Crete is also facing **severe water scarcity**, despite rainfall in March. Following a meeting chaired by the Prime Minister and attended by local government representatives, it was decided to adopt a unified **strategy for water management projects**. The goal is to shift from piecemeal solutions to a coherent plan tailored to the island's actual needs, with a particular emphasis on supporting the primary sector [3].

Methodology

DMCSEE Drought monitoring bulletin is prepared using climatological reanalysis, remote-sensing data and online media reports. Calculations of meteorological variables and indices (air temperature, precipitation, evapotranspiration, surface water balance, SPI, SPEI, EDDI) are based on the European Centre for Medium-Range Weather Forecasts (ECMWF) ERA5-Land monthly averaged data (https://cds.climate.copernicus.eu/datasets/reanalysis-era5-land-monthly-means?tab=overview), using 1991-2020 as a reference period. The remote-sensing product Fraction of vegetation cover (FCOVER) is based on the Copernicus Sentinel-2 data (https://custom-scripts.sentinel-hub.com/custom-scripts/sentinel-2/fcover/) and presented for the confirmed locations, using the available years from 2017 to the last full calendar year (currently up to and including 2025) as a reference period. Information on drought impacts is obtained from freely available online reports of national authorities and media newspapers.