

## **Wildfires in the European Union**

# Situation in the 2023 wildfire season up to August 30th, 2023









#### Outline

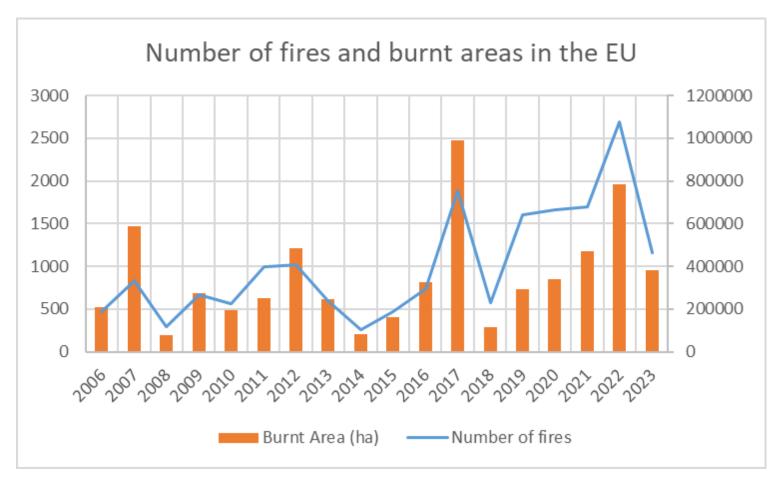
- 1. General trends of burnt areas and number of fires
- 2. Trends of fires by fire size
- 3. Contribution of fires of different sizes to the total burnt area
- 4. Wildfires larger than 100 ha mapped in EFFIS in 2023 current situation in the EU
- 5. Trends of number of fires, burnt areas and fire danger in northern, central and southern EU
- 6. Wildfire emissions
- 7. Area burnt in Natura 2000 sites
- 8. Economic losses by wildfires
- 9. Fire danger and climate change
- 10. Summary







## General trends in the period 2006-2023









#### General trends in the period 2006-2022



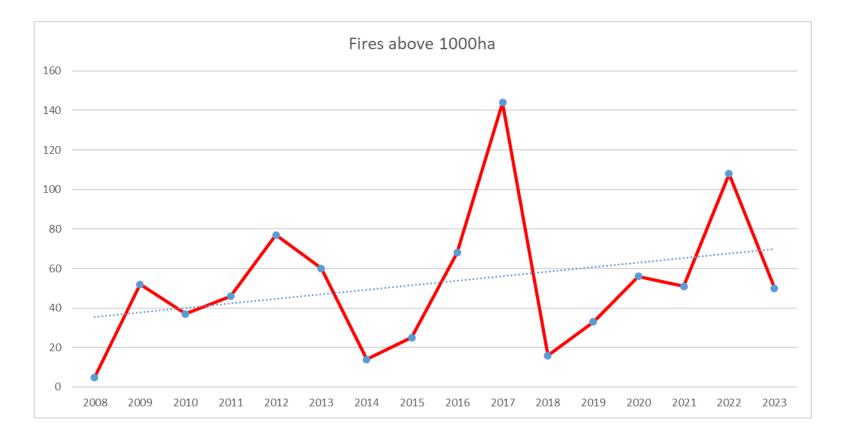
Source: Joint Research Center (JRC) / European Forest Fire Information System (EFFIS)







#### General trends in the period 2006-2023



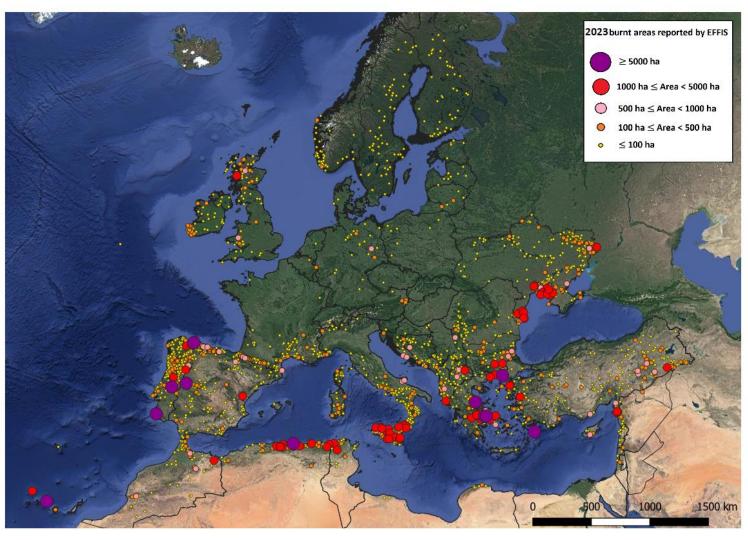
Source: Joint Research Center (JRC) / European Forest Fire Information System (EFFIS)







### Burnt areas mapped by EFFIS in 2023



Source: Joint Research Center (JRC) / European Forest Fire Information System (EFFIS)

European Parliament, AGRI Committee, 31.08.2023







## Largest wildfires in the EU in 2023

Year	Burnt Area	Country
2023	83152	Greece
2023	18626	Greece
2023	11923	Spain
2023	11662	Greece
2023	10843	Spain
2023	9722	Spain
2023	8634	Greece
2023	8145	Portugal
2023	6679	Portugal









## Largest wildfires in the EU since 2000

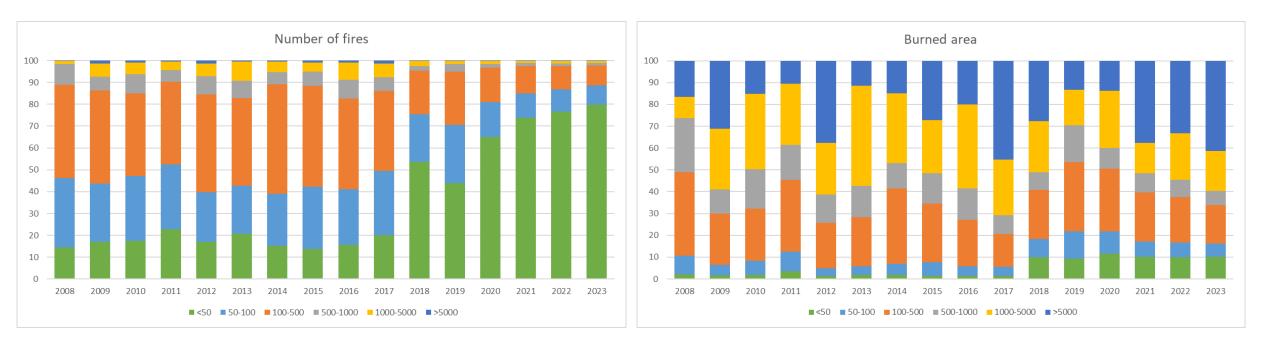
Year	Burnt Area	Country	Region	Province
2023	82000	Greece	Eastern Macedonia, Thrace	Evros
2017	67521	Portugal	Centro (PT)	Viseu Dão Lafões
2017	64321	Portugal	Centro (PT)	Região de Coimbra
2003	59156	Portugal	Centro (PT)	Beira Baixa
2003	53568	Portugal	Centro (PT)	Médio Tejo
2003	52233	Portugal	Algarve	Algarve
2021	51881	Greece	Central Greece	Εύβοια
2007	45809	Greece	Western Greece	Ηλεία







## Wildfire by size in the period 2006-2023



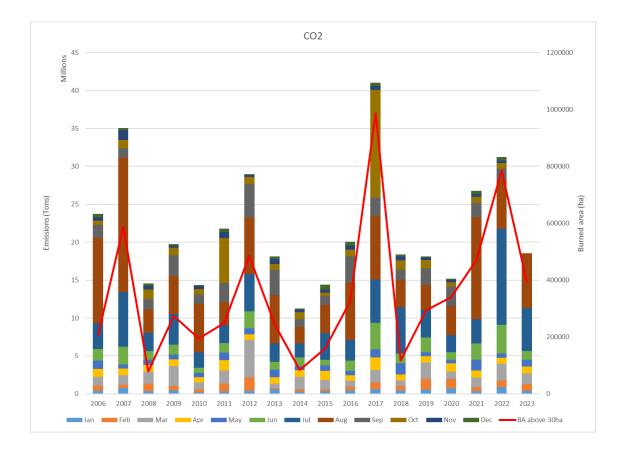
Source: Joint Research Center (JRC) / European Forest Fire Information System (EFFIS)

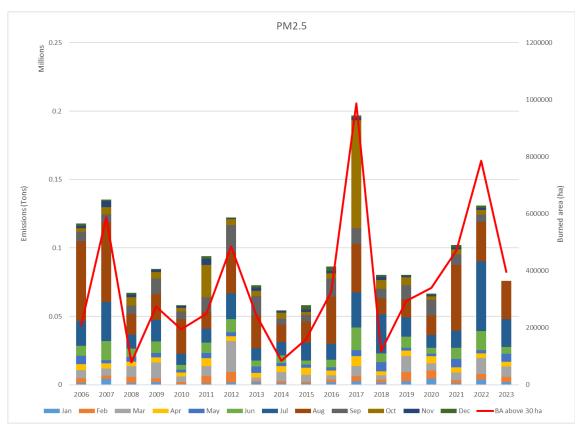






#### Emissions from forest fires in the period 2006-2023





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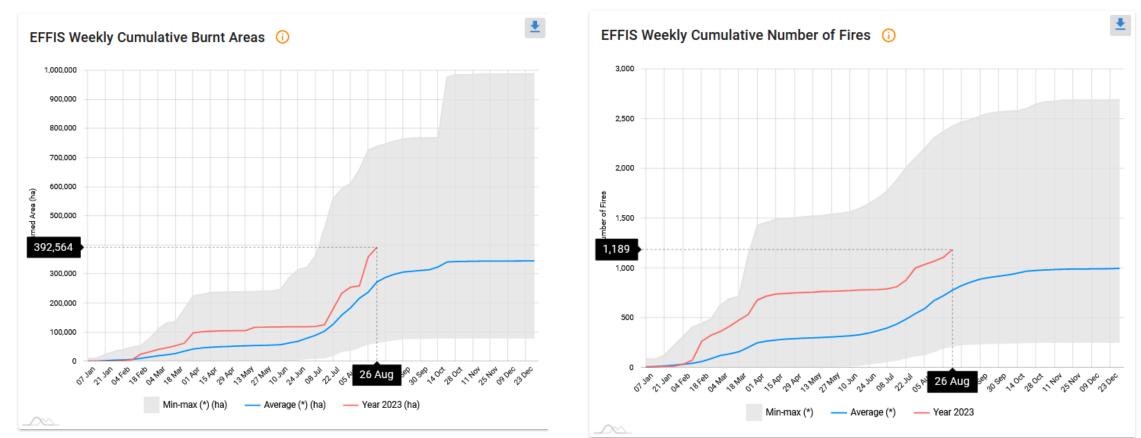
Source: Joint Research Center (JRC) / European Forest Fire Information System (EFFIS) Based on data from GFAS/CAMS European Parliament, AGRI Committee, 31.08.2023



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#### Number of fires and burnt areas in 2023



425,737 ha burnt by fires of all sizes until August 31st, 2023

https://effis.jrc.ec.europa.eu/apps/effis.statistics/seasonaltrend

Source: Joint Research Center (JRC) / European Forest Fire Information System (EFFIS)

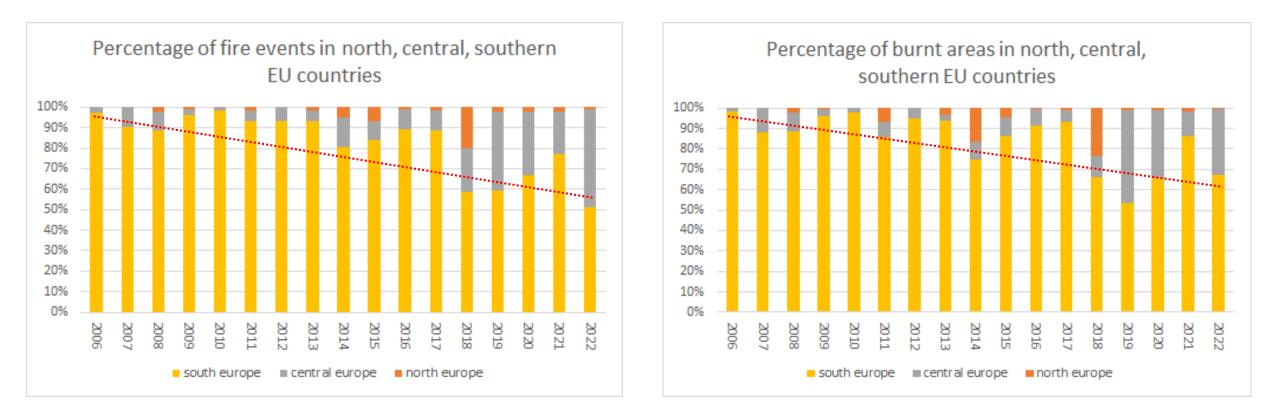
European Parliament, AGRI Committee, 31.08.2023







Number of fires and burnt areas in northern, central and southern EU 2006-2022



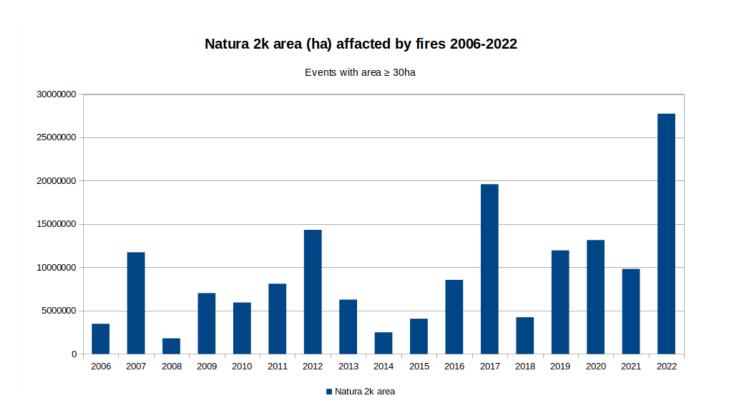
Source: Joint Research Center (JRC) / European Forest Fire Information System (EFFIS)







Natura 2000 damages from forest fires in the period 2006-2022



#### 118,084 ha burnt in Natura2000 areas 2023, which is about 27% of the total burnt area this year

Source: Joint Research Center (JRC) / European Forest Fire Information System (EFFIS)

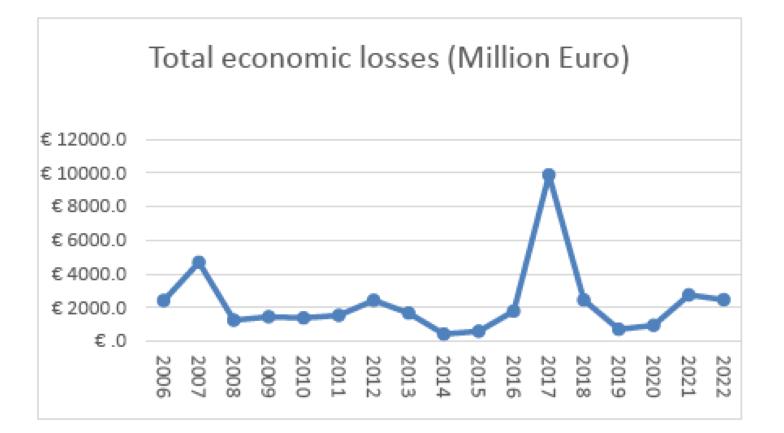
European Parliament, AGRI Committee, 31.08.2023







#### Economic losses from wildfires in the period 2006-2022

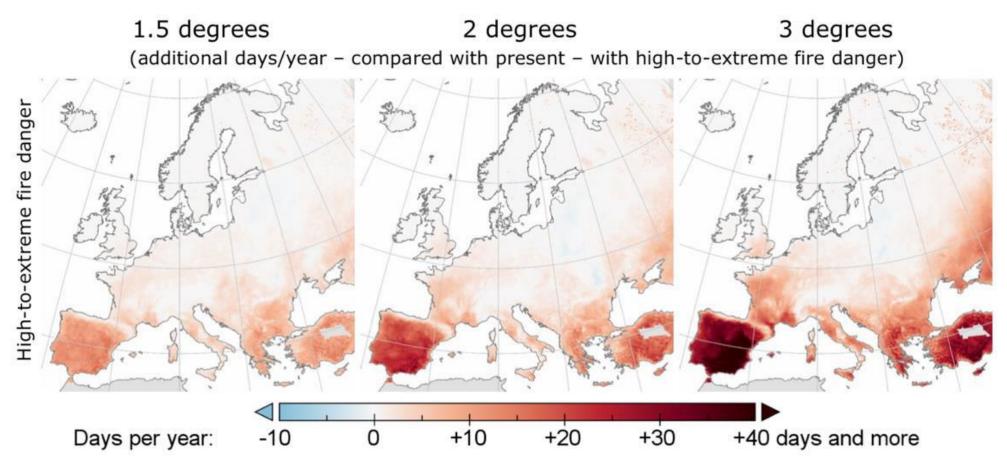








Fire Danger and Climate Change



Peseta IV report - Costa, H., de Rigo, D., Libertà, G., Houston Durrant, T., San-Miguel-Ayanz, J., *European wildfire danger and vulnerability in a changing climate: towards integrating risk dimensions,* EUR 30116 EN, Publications Office of the European Union, Luxembourg, 2020, ISBN: 978-92-76-16898-0, doi:10.2760/46951, JRC119980

Source: Joint Research Center (JRC) / European Forest Fire Information System (EFFIS)

European Parliament, AGRI Committee, 31.08.2023







- Since 2006, there is a general increasing trend in the number of fires and burnt areas in the EU, with recent critical years such as 2017, 2021 and 2022.
- 2023 saw the largest fire episode in the EU, since 2000, with critical fires in several Mediterranean countries
- In the last years, the number of wildfires and burnt areas in central and northern Europe has increased. The amount of burnt areas has increased in countries not commonly affected by wildfires in the past.
- The length of the fire season has increased beyond the traditional months of July, August and September, with many wildfires and critical events outside that period.
- The level of wildfire emissions, which is highly correlated with that of burnt areas, became noticeable in critical years like those mentioned above.
- Over 118,084 ha have burnt in 2023 (close to 27% of the burnt area) is within Natura 2000 protected areas.
- The economic losses due to wildfires in 2022 are above 2.5 billion Euro, every year.
- Future climatic projections indicate higher fire danger levels in Europe; higher fire danger values will likely lead to more intense fires and larger burnt areas.









# Additional information at:

https://effis.jrc.ec.europa.eu

https://gwis.jrc.ec.europa.eu

## jrc-effis@ec.europa.eu

Source: Joint Research Center (JRC) / European Forest Fire Information System (EFFIS)



