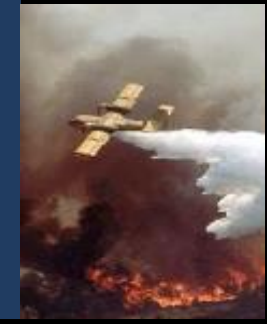




Awareness Events and Workshops of the IHU's Civil
and Emergency Planning Dept. entitled «*Global
Catastrophic Risks* »
Conference Building "Evagoras Pallikaridis", Main Room,
Serres Campus of IHU



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“Megafires... the ‘New Normal’ of Wildfires Risk Globally”

Pierantonios Papazoglou

EUC Res. Assoc. Civil Protection & Safety of Responders

CERIDES Research & Strategy Manager



European
University Cyprus

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UNESCO Chair in
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<https://www.gettyimages.com/detail/news-photo/rural-fire-service-firefighters-conduct-property-protection-news-photo/1198632675> January 2020



<https://www.rfs.nsw.gov.au/>

Australia... 2019–2020:

- ❖ **17 million hectares burned**
- ❖ **Over 3,000 homes destroyed and 3 billion animals affected (www.ifaw.org)**
- ❖ **Extreme Heat and Drought conditions enhanced by Climate Crisis**



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Credit: San Francisco Chronicle/Hearst
Newspapers



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Credit: SOPA Images

<https://www.gettyimages.com/detail/news-photo/cal-fire-helicopter-makes-water-drop-on-the-airport-fire-news-photo/2170616447> September 2024

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Credit: David McNew

<https://www.gettyimages.com/detail/news-photo/cal-fire-firefighters-cut-a-fire-line-in-uncontrolled-fire-news-photo/2194806929> January 2025



California... 2024–2025:

<https://www.fire.ca.gov>

❖ **2024: (extreme) Wet Conditions created dense vegetation, which became... fuel. (extremely) Hot June made conditions dire and extremely dangerous...**

❖ **2025 LA January-Fires: Over 180,000 evacuated, 10+ deaths, thousands of homes lost...**



Own Photos taken on-the-field: Soufli – Evros, Greece, September 2023, ΛΕΦΕΔ Operation

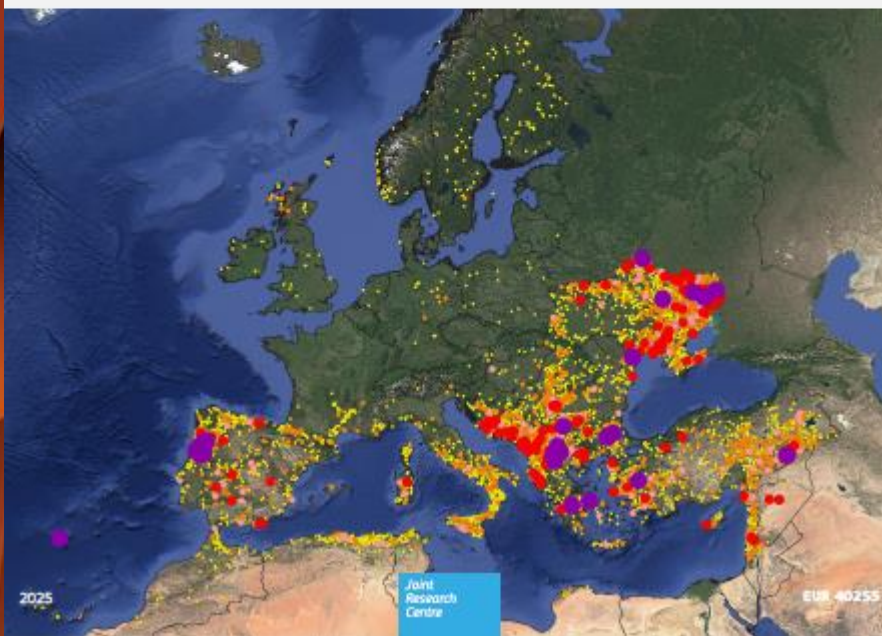


Greece - Evros... Aug.-Sept. 2023:

- ❖ Prior unexpectedly wet season resulted in overgrown vegetation
- ❖ Extreme Heat and hyper-dryness abruptly kicked-in, creating high flammability of fuel (vegetation)...
- ❖ >20 fatalities & $\approx 96,600$ ha for ≈ 3 weeks
- ❖ Largest Wildfire ever recorded in EU...



Advance report on Forest Fires in Europe, Middle East and North Africa 2024



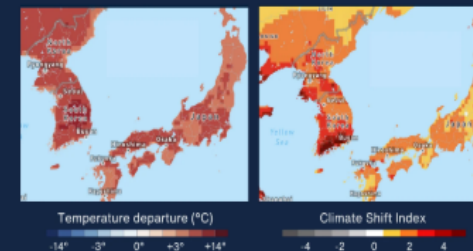
CLIMATE CENTRAL

Climate Shift Index Alert • March 25, 2025

Wildfires across Japan and South Korea fueled by climate change

CLIMATE CHANGE FINGERPRINT ON WARMTH

Average high temperature over March 21-26, 2025



How unusual is the forecasted heat?

- During the wildfires, temperatures in **South Korea** climbed **4.5°C to 10°C** (8.1°F to 18°F) above the 1991-2020 average, while **western Japan** exceeded the average by as much as **7°C to 8.5°C** (12.6°F to 15.3°F). Human-caused climate change strongly influenced these temperatures.
- The peak of this unusual warmth is expected to continue on Wednesday, March 26th, with high temperatures forecast to exceed **22°C to 25°C** (72°F to 77°F) in affected **regions of South Korea and Japan**.

<https://www.climatecentral.org/climate-shift-index-alert/japan-march-2025>

Climate Crisis is... *normalizing* Megafires as the dynamics of Wildfires are exacerbated by...:



<https://op.europa.eu/en/publication-detail/-/publication/2ca29c9c-09f4-11f0-b1a3-01aa75ed71a1/language-en>



<https://www.gettyimages.com/detail/news-photo/wildfire-burns-in-a-forest-near-the-village-of-sikorrachi-news-photo/1619658555> Aug.2023

- ❖ **Extreme Weather** / ‘wicked’ Precipitation patterns creates vegetation overgrowth in some areas and drought in others
- ❖ Reduced moisture → drier soil & vegetation → **increased ignition-potential** and then also ‘**transmission velocity**’
- ❖ **Extreme & Weird weather conditions** facilitate wildfires’ ‘*microclimate*’ anyway created (wind, super-dryness, etc)
- ❖ **Uncanny wind events... Lightning storms...** just add to the extremes exacerbating the already high-risk situations...
- ❖ **Globally: continuously unprecedented & record-breaking Fire-behavior in numbers, frequency, scale, intensity** (adding also to other causes such as human negligence and arsons)

Cannot just keep throwing resources at the Wildfires... What we CAN do globally...:



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- ❖ **Adapt or... Perish! Focus on Prevention-&Preparedness!**
- ❖ Raise Public Awareness and Promote Communities-Engagement in Prevention & Preparedness (but also Recovery) Programmes
- ❖ Implement Integrated (Fire-&Water-&AgroForest) Landscape Management to enhance Resilience
- ❖ Invest in and Develop relevant R&I to achieve science-informed policy-making/ decision-taking, and ensure modern Tech-&Tools: Risks & Vulnerabilities Assessment Maps, Early Warning Systems, Surveillance & Monitoring (e.g. Copernicus), Emergency tele-Communications, First-Responder Capabilities-enhancing Tech and PPE-of-the-future
- ❖ Foster Global / International Inter-Agency Interoperability



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Thank you !
Ευχαριστώ!
תודה !
Grazie!
Merci!
شكر
Gracias !
Danke schön !
謝謝 !

Pierantonios Papazoglou

CERIDES Research & Strategy Manager

Res. Assoc. Civil Protection & Safety of Responders

EURAXESS, IAEM, CSTC, Cy-HRDA Voc.Trainer, former EARMA P&RC

Former NCP & PCM for MSCA, Environment & Climate, Space, EURAXESS

p.papazoglou@research.euc.ac.cy



LinkedIN: <https://www.linkedin.com/in/pierantoniospapazoglou/>

Facebook: <https://www.facebook.com/pierantonios.papazoglou/>

ORCID: <https://orcid.org/0000-0002-2785-8360>

