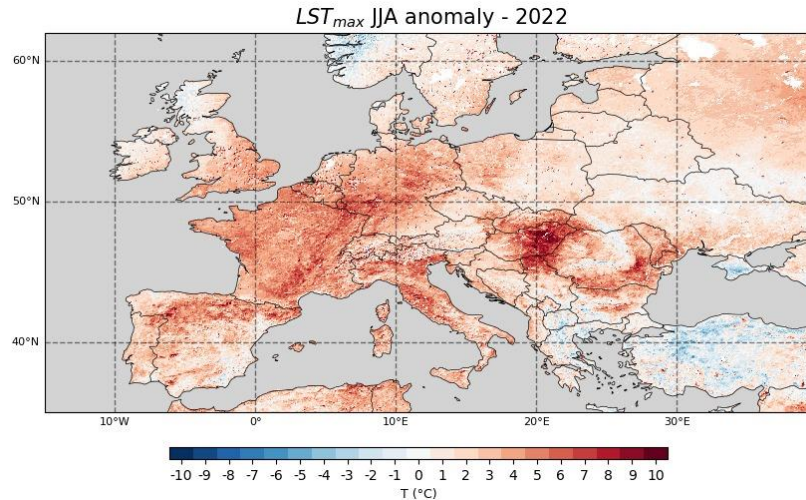


Event Week on Heatwaves and Droughts

29 May to 1 June 2023 - ONLINE



EUMETrain will promote the Event Week on Heatwaves and Droughts, from 29th May to 1st June 2023. We have an exciting program with multidisciplinary speakers which will cover different aspects of heatwaves and droughts, mainly focusing on satellite observations that can be used to study their impacts and causes.

Heatwaves are becoming increasingly more frequent and more intense, with Europe being one of the areas where these increases are more significant. Changes in atmospheric patterns due to climate change and complex interactions between the land surface and the atmosphere, which are now better understood thanks to better models, but also better observations. Satellite climate data records are now reaching sufficient maturity and length to provide robust information on decadal changes in many variables involved in heatwaves and droughts, such as Land Surface Temperature, Soil Moisture and different vegetation indexes. Satellite information may also be used to study associated processes such as marine heatwaves, interactions with the carbon cycle, air pollution or enhanced impact on cities and human health.

Covered Topics

- Theoretical aspects
- Data services (GEE, EUMETSAT, Copernicus)
- Land Surface and impacts on vegetation
- Marine heatwaves
- Hydrological aspects (soil moisture, precipitation, river discharge)
- Urban heat islands
- Impacts on the Carbon cycle

Program

	Monday, 29 May	Tuesday, 30 May	Wednesday, 31 May	Thursday, 1 June
Morning 07h30 UTC - 09h00 UTC		Temperature Extremes Isabel Trigo - <i>How is LSA SAF helping in monitoring of HW & D</i> João Martins - <i>Land Surface Temperature and HW monitoring</i> Hayley Evers-King - <i>Marine Heatwaves - how can SST anomalies influence HW over land?</i>	Impact on Human activities Panagiotis Sismanidis - <i>Urban Heat Islands and Human Health Impacts</i> Anke Duguay-Tetzlaff - <i>Climatological Drought Monitoring in Switzerland Using EUMETSAT SAF Satellite Data</i>	Impacts on Carbon Cycle Ana Bastos - <i>Theoretical aspects</i> Tiago Silva - <i>Practical Applications</i>
Afternoon 12h00 UTC - 13h30 UTC	Introduction João Martins – <i>Intro</i> Ryan Teuling - <i>Drivers of droughts and heatwave intensification mechanisms</i> Sofia Ermida - <i>Google Earth Engine - a powerful tool to study heatwaves & droughts</i>	Hydrological Extremes David Fairbairn - <i>Soil moisture and drought monitoring</i> Luca Brocca - <i>on the combined use of multiple satellite-derived variable (precip, evap, soil moisture, and snow) for monitoring drought and water resources</i>	Vegetation responses to HW & D Beatriz Martinez - <i>LSA SAF Vegetation products</i> Célia Gouveia - <i>Impacts of extremes on vegetation dynamics and crops</i> Bostjan Muri - <i>case studies using LSA SAF data</i>	Air Quality Rita Durão - <i>Impacts on air quality</i> EUMETSAT Climate Services Christine Traeger-Chatterjee - <i>EUMETSAT climate services</i> Final Discussion and Wrap-up

Speakers

Ana Bastos – Max Planck Institute for Biogeochemistry
 Anke Duguay-Tetzlaff – MeteoSwiss / CM-SAF
 Bostjan Muri – Slovenian Environment Agency (ARSO)
 Beatriz Martinez - University of Valencia
 Célia Gouveia – IPMA
 Christine Traeger Chatterjee - EUMETSAT
 David Fairbairn - ECMWF
 Hayley Evers-King – EUMETSAT
 Isabel Trigo – IPMA / LSA SAF
 João Paulo Martins – IPMA / LSA SAF
 Lucca Broca – Italian National Research Council / Research Institute for Geo-Hydrological Protection / H SAF
 Panagiotis Sismanidis - National Observatory of Athens / Ruhr University Bochum
 Rita Durão - IPMA
 Ryan Teuling – Wageningen University
 Sofia Ermida – IPMA / LSA SAF
 Tiago Silva – IPMA / Instituto Dom Luiz