Event Week on Tropical Meteorology

20 – 22 October 2026 - Online

From 20 to 22 October 2026, EUMeTrain is organising an online Event Week exploring tropical meteorology. Through presentations, forecasters and experts will share their experience of observing and forecasting phenomena such as monsoons, tropical cyclones, El Niño, convection, dust storms and more.

The programme is primarily intended for European operational forecasters who may encounter tropical meteorological situations in their daily work, but it is also open to everyone interested in tropical weather.

The objective of the event is to provide participants with a deeper understanding of tropical weather phenomena and their impacts on populations, infrastructure and socio-economic activities.

Access the registration form using the link or QR code:
https://forms.gle/PiULsiGtcFQqLhPq7

Read the timetable and the abstracts below.

For more details about EUMeTrain,
visit www.eumetrain.org.

	Tuesday, 20 October	Wednesday, 21 October	Thursday, 22 October
Morning 08:00 UTC - 08:30 UTC	**Forecasting a heavy rainfall case in Jakarta** Nanda Alfuadi, BMKG	**Application of NWC SAF convection (RDT and CI) products in the tropics** Moisselin Jean-Marc, Claudon Michaël, Météo-France	**Impact of Storm Ingrid on the Coastal and Marine Environment of Morocco** Sofia Chahbi, Maroc Météo
Morning 08:30 UTC - 09:00 UTC	**From Observations and Coupled NWP to Impacts: Advancing Tropical Weather and Monsoon Forecasts over the Indian Subcontinent** Abhishek Lodh, NCMRWF	**Wildfires in Southern Africa: From Weather Conditions to Satellite Detection and Impacts** Matshidiso Mogale, SAWS	**Contribution of OSI SAF data to the marine tropical meteorology** Gwenaël Le Bras (Météo-France | OSI SAF), Ad Stoffelen (KNMI | OSI SAF)
Afternoon 13:00 UTC - 13:30 UTC	**Convection in the Tropics: Seasonal Patterns, Hazards and Impacts, and Operational Forecasting and Nowcasting** Mirriam Mwende Musyoka, University of Nairobi	**Storms and storm monitoring over tropics (vs mid-latitudes)** Ivan Smiljanić, EUMETSAT	**Hurricane Ian: A Case for Impact-Based, Probabilistic Decision Support Services for Emergency Management and Public Safety** Brian LaMarre, Inspire Weather
Afternoon 13:30 UTC - 14:00 UTC	**Tropical Convection over Morocco: Forecasting and Monitoring** Soukaina Boughanem, Maroc Météo	**Dust storms: Impacts, forecasting, and monitoring** Hama Hamidou, ASECNA/EAMAC	**Monitoring El Niño and its impacts on weather and climate using satellite tools** José Manuel Gálvez, CIRA/CSU

Tuesday, 20th October

8 UTC

Nanda Alfuadi, BMKG

Forecasting a heavy rainfall case in Jakarta

The presentation will examine the performance of four numerical weather prediction models (WRF assimilation, WRF non-assimilation, IFS, and GFS) during a heavy rainfall case in Jakarta, the capital city of Indonesia. Specifically, the discussion will focus on how effectively these models were able to capture the high-impact weather signal starting three days prior to the event.

8:30 UTC

Abhishek Lodh, NCMRWF

From Observations and Coupled NWP to Impacts: Advancing Tropical Weather and Monsoon Forecasts over the Indian Subcontinent

Accurate representation of initial conditions in NWP is critical for improving the prediction of high-impact tropical weather and monsoon systems over the Indian subcontinent. Operational developments at NCMRWF, including the assimilation of satellite-derived ASCAT soil moisture and INSAT-3D land surface temperature observations, demonstrate improved prediction of monsoon depressions, tropical cyclones, precipitation, and extreme temperatures, with enhanced forecast skill and extended predictive capability. These advances in land–atmosphere initialization strengthen operational early-warning information for weather-sensitive sectors and support better anticipation of impacts on communities, agriculture, infrastructure, and critical services.

13:00 UTC

Mirriam Mwende Musyoka, University of Nairobi

Convection in the Tropics: Seasonal Patterns, Hazards and Impacts, and Operational Forecasting and Nowcasting

Deep, moist convection is the principal producer of high-impact weather in the tropics and remains one of the most demanding forecast problems in operational forecasting in the tropics. This presentation will review three interlinked themes. First, the typical seasonal patterns of tropical convention i.e. the Zonal and meridional migration of the Intertropical Convergence Zone and the resulting monsoonal and bimodal rainfall regimes of equatorial regions, the afternoon-to-evening convective maximum, Land-sea breeze interactions which enhance mesoscale convective systems over lakes, coastal regions and areas adjacent to water bodies, and the modulation of convective activity by intraseasonal variability such as the Madden–Julian Oscillation. Seasonal tropical cyclone activity in the Indian ocean basin will also be placed within the same framework.

Secondly, we will examine the major hazards from these convective developments and their impacts. Heavy rainfall and flash flooding, lightning, hail, damaging downdraughts and gust fronts, and visibility-reducing phenomena affect local populations through loss of life, displacement, damage to infrastructure and agriculture, and disruption of surface transport. For aviation, the same systems generate convective turbulence, icing, hail damage, low-level wind shear and microbursts on approach and departure, lightning risk to ground operations, and en-route deviations that translate into holding, diversions and added operating cost.

Third, the presentation will review the forecasting and nowcasting methods used operationally: Satellite imagery and satellite products for identifying convective initiation, growth and overshooting tops, lightning detection, rapidly developing convective systems and derived products, together with storm-cell tracking and extrapolation nowcasts; high-resolution convection-permitting numerical weather prediction, ensemble guidance and post-processing; and observational monitoring from surface networks. The presentation will conclude by discussing how these tools are integrated into early warning services for high impact weather scenarios.

13:30 UTC

Soukaina Boughanem, Maroc Météo

Tropical Convection over Morocco: Forecasting and Monitoring

The presentation will focus on tropical convection over Morocco, with emphasis on its forecasting and monitoring, in relation to the northward extension of the ITCZ. I will briefly discuss the main atmospheric features and the use of numerical models, satellite, radar and observations for operational monitoring.

Wednesday, 21st October

8:00 UTC

Moisselin Jean-Marc, Claudon Michaël, Météo-France

Application of NWC SAF convection (RDT and CI) products in the tropics

The RDT-CW (Rapidly Developing Thunderstorm - Convection Warning) product and the CI (Convective initiation) product are developed by Météo-France in the framework of the EUMETSAT NWC SAF. Using mainly geostationary satellite data, they provide information on pixels/clouds related to convective initiation or significant convective systems. In the presentation, the application of RDT/CI in the tropics is discussed in terms of performance (use of MTG-LI for tuning and validation purposes), product representation (CI object mode), and assessment of thunderstorm severity (new detection of cloud-top features in the RDT).

8:30 UTC

Matshidiso Mogale, SAWS

Wildfires in Southern Africa: From Weather Conditions to Satellite Detection and Impacts

This presentation will explore wildfire risk across Southern Africa, with a focus on the Western and Eastern Cape of South Africa, highlighting the seasonal and meteorological conditions that favour wildfire development and spread. It will demonstrate how satellite products can be used for wildfire detection and monitoring, while highlighting the impacts of wildfires on communities, infrastructure and the environment.

13:00 UTC

Ivan Smiljanic, EUMETSAT

Storms and storm monitoring over the tropics (vs mid-latitudes)

Deep moist convection exhibits distinct characteristics across the tropics and mid-latitudes, reflecting differences in thermodynamic environments, vertical wind shear, and the mechanisms governing storm organisation. This talk will compare the genesis, organisation, and dynamics of tropical and mid-latitude convective storms, and discuss how these differences influence their monitoring and observation from space-based platforms.

13:30 UTC

Hama Hamidou, ASECNA/EAMAC

Dust storms: Impacts, forecasting, and monitoring

Dust storms are one of the major high-impact weather phenomena that affect tropical arid and semi-arid areas, with important socio-economic impacts. Even though dust storms are generated in these regions, they can affect areas far beyond their source regions, depending on the weather systems present. In this presentation, we will highlight the socio-economic impacts of dust storms and present the conceptual models for dust forecasting as well as the methods used for its monitoring.

Thursday, 22nd October

8:00 UTC

Sofia Chabhi, Maroc Météo

Impact of Storm Ingrid on the Coastal and Marine Environment of Morocco

This presentation examines the passage of Storm Ingrid (22- 24 January 2026) and its severe impacts along the Moroccan coastline using satellite observations and remote sensing data. We will analyze the key oceanographic and meteorological features of the storm, highlighting how satellite imagery aids in monitoring extreme events and improving coastal vigilance.

8:30 UTC

Le Bras Gwenael, (Météo France/OSI SAF) **& Ad Stoffelen,** (KNMI/OSI SAF)

Contribution of OSI SAF data to the marine tropical meteorology

EUMETSAT OSI SAF provides near-real-time retrieval of key parameters for marine meteorology in the tropical areas and around the globe. We will here present our Sea Surface Temperature and Ocean Wind retrieval catalogue, illustrated with particular meteorological phenomena.

13:00 UTC

Brian LaMarre, Inspire Weather

Hurricane Ian: A Case for Impact-Based, Probabilistic Decision Support Services for Emergency Management and Public Safety

Hurricane Ian made landfall as an intense Category 4 hurricane on September 28, 2022, on the southwest coast of Florida in the United States, claiming 156 lives in the U.S., including 66 direct fatalities in Florida. Drowning in storm surge waters was the primary cause of death. This presentation will highlight how the National Weather Service worked proactively to prepare the public through engagement with core partners in media and emergency management before, during and after the storm. Public perception, based on lived experiences from past storms impacting the region, was a factor in the overall response. Additionally, there was a lack of understanding of how small changes in track can result in significant differences in impact based on the angle of approach of a hurricane moving toward Florida's north-south oriented coastline.

13:30 UTC

José Manuel Gálvez, CIRA/CSU

Monitoring El Niño and its impacts on weather and climate using satellite tools

The session aims to build an understanding of how El Niño modifies weather and climate in tropical regions and beyond, with a focus on satellite-based and numerical weather prediction tools. We will cover the basic concepts and definitions of El Niño, its typical impacts, monitoring and classification, and applications of satellite observations for monitoring its evolution and impacts. We will also examine the expected impacts of the current El Niño event, which has already exceeded the intensity of previous events observed since 1950.