



Our ref.: 08607/2025/SI/ETR/CRS-3525

4 July 2025

Annex: 1 (available in English only)

Subject: Online Workshop on Using Global Tools for Flood and Drought Predictions

Dear Sir/Madam,

I have the pleasure to inform you that the Regional Training Centre (RTC) in Israel, in cooperation with Israel's Agency for International Development Cooperation (MASHAV), will hold an introductory online workshop on Using Global Tools for Flood and Drought Predictions from 8 to 11 December 2025.

The workshop is aimed at forecasters, climatologists, hydrologists, and researchers from National Meteorological and Hydrological Services (NMHSs) in developing countries. The objectives of the workshop are to explore the global tools for flood and drought forecasting and to familiarize participants with essential tools and techniques that are available from free sources, for floods and drought analysis and prediction.

The topics of this workshop are based on the competency requirements for the provision of climate services as provided in the [Compendium of WMO Competency Frameworks](#) (WMO-No. 1209).

The workshop will be conducted online, in English and detailed workshop information, including the requirements and the application procedures are given in the [annex](#).

Interested candidates are requested to complete the [online registration form](#) for the workshop not later than **26 September 2025**.

Yours faithfully,

Prof. Celeste Saulo  
Secretary-General

To: Permanent Representatives of Members with WMO

cc: Hydrological Advisers

**ONLINE WORKSHOP ON**  
**USING GLOBAL TOOLS FOR FLOOD AND DROUGHT PREDICTIONS**  
**8–11 December 2025**

Ref.: 08607/2025-1.4 SI

## **1. Introduction**

In line with the WMO *Early Warnings for All initiative*, floods and drought remain among the most challenging hazards to forecast, particularly flash floods. Flash floods account for approximately 85% of all flood events and have the highest mortality rate of any flood type. They occur suddenly, with less than six hours between the triggering event and the onset of flooding, making real-time forecasting (nowcasting) critical. These floods are typically short in duration but extremely intense, often featuring a high peak discharge. Their destructive force is immense, capable of altering river courses, burying structures in mud, and sweeping away everything in their path.

Drought is one of the most devastating natural hazards worldwide, with far-reaching impacts on agriculture, water resources, ecosystems, economies, and human health. It has caused billions of dollars in economic losses and triggered severe indirect consequences, including malnutrition, disease outbreaks, and population displacement.

Floods and drought are complex hydrometeorological events that are difficult to predict. Effectively preparing for them requires expertise in both hydrology and meteorology, along with a deep understanding of local conditions.

This short workshop aims to provide participants with both theoretical knowledge and practical tools to predict floods and drought, issue early warnings, and enhance collaboration among forecasters, and other emergency response personnel. The workshop is a joint initiative of the Israeli Meteorological Service (IMS) and Israel's Agency for International Development Cooperation (MASHAV), with contributions from WMO, the European Commission's Joint Research Centre (JRC) and the European Centre for Medium-Range Weather Forecasts (ECMWF). It is designed for postgraduate-level meteorologists or hydrologists working in National Meteorological and Hydrological Services (NMHSs) in developing countries.

## **2. Workshop objectives**

An introduction to key global tools and techniques for forecasting floods and drought, with an emphasis on developing practical proficiency in their application.

## **3. Workshop outcomes**

- Participants will gain practical knowledge of online free tools for floods and drought forecasts
- Participants will understand the limitations and challenges faced by NMHSs in providing flood and drought forecasts
- Participants will understand the impact of climate change on floods and drought frequency of occurrence and severity
- Armed with knowledge about flood and drought forecasting tools and their limitations, participants will make informed decisions related to issuing early warnings for all

#### **4. Course format**

Synchronous lectures and practical exercises.

#### **5. Participation cost**

The workshop is free of charge.

#### **6. Training staff**

The workshop will be conducted by senior staff from IMS, WMO, JRC and ECMWF, who will share their knowledge and experience.

#### **7. Audience**

The workshop is aimed at forecasters, climatologists, hydrologists, and researchers from NMHSs in developing countries.

#### **8. Language**

The workshop will be held in English. A working knowledge of English is mandatory. All candidates will be interviewed online before the course.

#### **9. Student assessment**

- A minimum of 90% attendance is required
- The participants should have all technical accessories for a complete and active participation throughout the course
- The students will have mandatory and non-mandatory assignments
- A final project will be conducted

#### **10. Registration**

Interested candidates are requested to complete the [online application form](#) not later than **26 September 2025**.

#### **11. For further information**

Please contact [mleviyo@ims.gov.il](mailto:mleviyo@ims.gov.il) from RTC in Israel.

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