



WMO OMM

World Meteorological Organization
Organisation météorologique mondiale
Organización Meteorológica Mundial
Всемирная метеорологическая организация
المنظمة العالمية للأرصاد الجوية
世界气象组织

Secrétariat

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Наш исх.: 20272/2020/S/ACS/EUMETSAT/WMO/FAO-Training 5 ноября 2020 г.

Приложения: 2 (только на английском языке)

Вопрос: Участие двух экспертов в виртуальных учебных курсах ВМО/ФАО/ЕВМЕТСАТ по использованию спутниковой продукции для мониторинга засухи и применений в сельскохозяйственной метеорологии (23 ноября — 11 декабря 2020 г.)

Предлагаемые меры: Уведомить Секретариат ВМО о назначении экспертов не позднее **13 ноября 2020 г.**

Уважаемый господин/Уважаемая госпожа!

За последние несколько лет ЕВМЕТСАТ и Всемирная метеорологическая организация (ВМО) организовали несколько успешных учебных курсов по использованию спутниковых данных и продукции для сельскохозяйственной метеорологии. ВМО поддерживает усилия по мониторингу засухи и борьбе с ней в координации с организациями системы Организации Объединенных Наций, другими международными организациями и национальными метеорологическими и гидрометеорологическими службами (НМГС) в целях содействия развитию метеорологического и климатического обслуживания сельского хозяйства и производства продовольствия. На основе этих усилий, а также с целью дальнейшего продвижения практики мониторинга засухи и улучшения сельскохозяйственной метеорологической продукции и обслуживания для стран Юго-Восточной Европы и Кавказа, мы планируем провести с 23 ноября по 11 декабря 2020 г. виртуальный региональный учебный курс ЕВМЕТСАТ/ВМО/ФАО по спутниковой продукции по этим темам.

Этот курс будет организован совместно ВМО, Продовольственной и сельскохозяйственной организацией Объединенных Наций (ФАО) и ЕВМЕТСАТ в сотрудничестве с Объединенным научно-исследовательским центром ЕС (ОНЦ), Португальским институтом моря и атмосферы (ИПМА), Венским техническим университетом (Т.У. Вiena) и Центром по борьбе с засухой для Юго-Восточной Европы (ЦБЗЮВЕ). Курс будет проводиться практически метеорологической службой Румынии (Метео Романия). Данный курс предназначен для повышения квалификации специалистов в области сельскохозяйственной метеорологии из НМГС и министерств сельского хозяйства в области мониторинга засухи, оценки состояния растительности и сельскохозяйственных культур, а также других необходимых навыков, необходимых для улучшения предоставления сельскохозяйственного обслуживания. Курс также будет включать в себя потенциальные усовершенствования бюллетеней по засухе и сельскохозяйственной метеорологии каждой страны.

Курс будет проводиться на английском языке и будет предложен участникам из Азербайджана, Албании, Армении, Беларуси, Болгарии, Боснии-Герцеговины, Венгрии, Греции, Грузии, Молдовы, Северной Македонии, Румынии, Сербии, Словении, Турции, Украины, Хорватии и Черногории. Участники будут заниматься в рабочее время по несколько часов в день с 23 ноября по 11 декабря 2020 г. В течение этих трех недель также будут проводиться оффлайн-сессии, посвященные консультационным документам

Постоянным представителям Членов при ВМО (ограниченное распространение)

и письменному обмену с преподавателями, а также онлайн-сессии с одновременным виртуальным присутствием всех участников. Для получения более подробной информации к настоящему документу прилагается описание проекта ([приложение I](#)).

Прошу Вас рассмотреть возможность назначения двух экспертов из вашей Службы для участия в этом виртуальном учебном курсе, имея в виду необходимые уровни по агрометеорологии и владению английским языком.

В административных целях я была бы признательна, если бы Вы любезно уведомили Секретариат ВМО (контактное лицо: г-н Хосе Камачо, электронная почта: jcamacho@wmo.int) как можно скорее, но не позднее **13 ноября 2020 г.**, о ваших кандидатурах путем возврата прилагаемой формы выдвижения ([приложение II](#)), заполненной на каждого кандидата. Пожалуйста, обратите внимание, что отобранные участники будут записаны на виртуальный курс и им будет предоставлена непосредственная дополнительная информация, включая программу курса и другие административные данные.

Благодарю Вас за неизменную поддержку деятельности ВМО.

С уважением,



д-р Елена Манаенкова
за Генерального секретаря



Project Description

WMO/FAO/EUMETSAT Virtual Training Course on the Use of Satellite Products on Drought Monitoring and Applications in Agrometeorology

(23 November–11 December 2020)

1. Concept

Climate variability influences all sectors of countries' economies, especially agriculture, with crop production being one of the most vulnerable sub-sectors. Crop productivity fluctuates from year to year, being influenced by weather and climate variability, and especially by extreme events such as drought.

Drought is a major natural hazard that is manifested through significant deficits in soil moisture and precipitation, with effects on potential and real evapotranspiration. Plants, trees, and grass cover for livestock evolve according to the distribution of rains and solar heating modulated by the season but also by inter annual climate variations.

Satellite data and products play a key role in the development of agrometeorological information and the provision of effective services for drought monitoring, food security and enhanced food production. Mid latitude regions can benefit from rainfall estimations, vegetation development and seasonal evolution, soil moisture monitoring, and changes in solar radiation due to cloudiness, among other satellite products from geostationary and low earth orbit satellites.

2. Partnership

WMO, FAO and EUMETSAT are joining efforts to assist countries to develop capacity to apply satellite products for drought monitoring and other applications. These partners further welcome the support of the National Meteorological Administration of Romania (Meteo-Romania), and other organizations contributing with trainers, including the EU-Joint Research Centre (JRC), the Drought Management Centre for South Eastern Europe (DMCSEE), Instituto Português do Mar e Atmosfera and the Technical University of Wien. These organizations will organize a virtual training course on the use of satellite products for drought monitoring and agrometeorological applications in seven daily remote sessions between 23 November and 11 December 2020, coordinated from Bucharest, Romania.

WMO

The World Meteorological Organization (WMO) is the United Nations system's authoritative voice on the state and behaviour of the Earth's atmosphere, its interaction with the oceans, the climate it produces and the resulting distribution of water resources. Established in 1950, WMO became the specialized agency of the United Nations in 1951 for meteorology (weather and climate), operational hydrology and related geophysical sciences. WMO has 193 Member States and Territories. Since its establishment, WMO has played a unique and powerful role in contributing to the safety and welfare of humanity. It has fostered collaboration between the National Meteorological and Hydrological Services of its Members and furthered the application of meteorology in many areas.

EUMETSAT

Created in 1986, EUMETSAT is the European Organization for the Exploitation of Meteorological Satellites. Its primary objective is to establish, maintain and exploit European systems of operational meteorological satellites. EUMETSAT is responsible for the launch and operation of the satellites and for delivering satellite data to end-users as well as contributing to the operational monitoring of climate and the detection of global climate changes.

FAO

The Food and Agriculture Organization of the United Nations, with headquarters in Rome, Italy, is present in over 130 countries. To meet the demands posed by major global trends in agricultural development and challenges faced by member nations, FAO has identified several key priorities: help eliminate hunger and malnutrition; make agriculture, forestry and fisheries more productive and sustainable; reduce rural poverty; enable inclusive and efficient agricultural and food systems; and increase the resilience of livelihoods to threats and crises.

Meteo Romania

National Meteorological Administration Romania is the national authority in the meteorological field in Romania, with a continuous service since 1884. Romania is a founding member of the International Meteorological Organization and, starting in 1947, became a member of the Convention establishing the World Meteorological Organization. Romania has a vast experience in extreme events monitoring and control at national level, with a history of 120 years of observations, forecasts and case studies performed by the National Meteorological Administration. The NMA experts are actively involved in prevention and mitigation of all the natural risks affecting the environment and agriculture, as well as disseminating specialized forecasts and advisories to decision-making factors and other end-users (farmer, citizens).

3. Main objectives

The goal of this activity is enhanced provision of accessible weather and climate information for the benefit of food producers and agriculture managers in Central and Eastern Europe, with further support from WMO, FAO and DMCSEE ongoing projects. The training is focused on capacity development for National Meteorological Services and Ministries of Agriculture to improve data and product quality and service delivery in drought monitoring and management in a wide range of agricultural sectors. That information must be coupled with other tools such as seasonal forecasts, crop models and geographical information systems.

The virtual training will be supported by the WMO Moodle Platform, where contents, tests and supporting documents will be found. The course will be structured around six modules: EUMETSAT data and products, Land-SAF, FAO crop models and products, EU-JRC products and tools, Hydrology-SAF (H-SAF), and operational products for drought monitoring and agro-meteorological applications in Central-Eastern Europe.

4. Specific objectives

- Expanded use of Land-SAF and Hydrology-SAF products and other related products among European agrometeorologists and water managers to enhance the benefits derived and to collect and exchange experience from that use;
- Development of capacity in the NMHSs and Ministries of Agriculture in Central and Eastern Europe in the areas of vegetation status monitoring, soil moisture, rainfall estimations, forest fire risk estimations, radiative balance and land use;
- Institutional cooperation reinforcement between EUMETSAT, WMO, FAO and the National Institutions of the region in terms of satellite product utilization and reception station optimization for drought management and agriculture production;

- Development of cooperation between the DMCSEE and other WMO and FAO partners at the Region;
- Increased understanding of regional gaps, needs and priorities for future cooperation between relevant institutions and partners;
- Increased capacity within the agriculture sector to adapt to climate change through enhanced drought resilience using recent climate tools and data sets.

5. Target stakeholders

- Participants from NMHSs with drought monitoring and agricultural meteorological responsibilities, identified by WMO (2 per country);
- Participants from Ministries of Agriculture identified by FAO (2 per country);
- Participating countries: Albania, Armenia, Azerbaijan, Belarus, Bosnia-Herzegovina, Bulgaria, Croatia, Georgia, Greece, Hungary, Moldova, Montenegro, North Macedonia, Romania, Serbia, Slovenia, Turkey and Ukraine.

6. Expected results

- Wider use and application of satellite products for vegetation indexes monitoring, soil moisture evaluation, forest fire risk indexes, radiative balance and rainfall estimation;
- Central-Eastern Europe Agrometeorological monitoring products and tools are provided by the National Meteorological Services and national institutions in the region;
- Identification of areas with high vulnerability to climate variability and changes in soil water availability, drought and water scarcity, to inform rainwater conservation for crops cultivated in the Central-Eastern Europe;
- Comprehension/understanding of the current status of drought warning systems and how the drought risk assessment and the impact in real time is evaluated by National Meteorological Services.

7. Contacts

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VIRTUAL TRAINING COURSE ON THE USE OF SATELLITE PRODUCTS ON DROUGHT MONITORING AND APPLICATIONS IN AGRO METEOROLOGY

23 November-11 December 2020

NOMINATION FORM FOR PARTICIPANT

Please return the Nomination forms to WMO by email to jcamacho@wmo.int
NOT LATER THAN 13 November 2020 with an up-to-date curriculum vitae.

Ref.: 21573/2020-1.0 GS

1. **Country:** _____
2. **Title** (Mr / Mrs / Ms): _____
3. **LAST NAME (FAMILY NAME)** (in block letters): _____
4. **First name (Given Name):** _____
5. **Service / Institute / Organization:** _____
6. **Professional address:** _____
 City: _____ Zip Code: _____
7. **Telephone:** _____ **Fax:** _____
8. **Date of birth:** _____
9. **Nationality:** _____
10. **Academic qualification:** _____
11. **Current professional responsibilities:**
 Meteorology/Climatology ☐ Hydrology ☐ Agriculture ☐
 Other (describe): _____

12. **Please check your available Internet and computer resources:**
 Internet connection sufficient enough to
 support 2 to 3 hours of non-stop sessions: ☐ YES ☐ NO
 Computer with standard graphics display performance: ☐ YES ☐ NO

13. **English** Language skill: ☐ Excellent ☐ Good ☐ Fair

14. **IMPORTANT: Login Details** (all applicants are requested to **create an account*** in the **etrp.wmo.int**, the Moodle Platform of the Education and Training Programme of WMO, where the virtual course will be conducted; and provide below the username and the email address associated to the account.

Please contact the course organizers at **tra@wmo.int** if you have difficulties).

*Username: _____

*Email: (associated with the WMO Moodle Platform account): _____

NOTE: The selected participants will be enrolled in the virtual course and contacted directly.

15. The candidate is expected to have experience (or has had training) on at least two of indicated criteria:

- | | | | | |
|--|-----|--------------------------|----|--------------------------|
| • Use of remote sensing derived vegetation indexes | Yes | ☐ | No | ☐ |
| • Use of satellite products on forecasting or nowcasting | Yes | ☐ | No | ☐ |
| • Crop data analysis, crop models and crop statistics | Yes | ☐ | No | ☐ |
| • Drought monitoring indexes | Yes | ☐ | No | ☐ |
| • Climate Risk Management | Yes | ☐ | No | ☐ |
| • Drought impact assessment | Yes | ☐ | No | ☐ |
| • Participation at Agrometeorological Bulletin elaboration | Yes | ☐ | No | ☐ |
| • Other relevant experience: | | | | |

Signature of the candidate: _____ Date: _____

Signature of the Permanent Representative with Office Seal:

Date: -----