

Learning and teaching about seasonal climate forecasts: a Mediterranean educational experience toward operational climate services

Vieri Tarchiani (1), Massimiliano Pasqui (1), Patrick Parrish (2), Elena Rapisardi (1), Edmondo Di Giuseppe (1), and Marina Baldi (1)

(1) IBIMET-CNR, Florence, Italy (v.tarchiani@ibimet.cnr.it), (2) Training Activities Division, DRA/ETR Department, WMO, Switzerland

During the World Climate Conference-3, Capacity Development has been acknowledged as a transversal component underpinning all the other Pillars of the Global Framework for Climate Services. Within the WMO Education and Training Programme, Regional Training Centers (RTC) play a major role in supporting member countries developing operational Climate Services.

Mediterranean climate presents a large spatio-temporal variability: synoptic to mesoscale spatial variability, and inter-seasonal and multi-decadal to centennial time variability. Seasonal to interannual hydro-climatic predictions provide an opportunity for developing a proactive approach towards water management. All these characteristics raise the demand of climate services for the application of seasonal forecasting in the Mediterranean region for a wide spectrum of sectors.

The RTC in Italy, in agreement with WMO and member countries of Region I and VI has identified since 2014 seasonal forecasts as a strategic subject of capacity building for the Mediterranean Region.

This paper presents the training approach as the evolution, from classroom lessons to a blend of practical and theoretical classroom and distance learning.

Particular attention has been payed to apply case-by-case participatory approaches involving different stakeholders and beneficiaries: trainees, institutional contacts within National HydroMeteorological Services, Regional Climate Outlook Forums, such a MedCOF, PRESANORD and SEECOF, Regional Associations and WMO with its different Programmes. The last course, in 2016, adopted a blended solution: a short classroom course with workshops, seminars and practical sessions (50-50 ratio) coupled with an online course, mostly or fully asynchronous.

This evolution of training solutions as well the rising satisfaction of trainees' expectations encouraged WMO and the RTC to widen the spectrum of beneficiaries and to make the course available for other regions and RTCs as a distance learning course package. The Course package is being developed adapting tools and materials of the previous courses to a digital learning environment. Commented slide presentations, videos, interactive content, documents/eBooks, and webinar will be used to create an engaging learning experience and reach the learning objectives.

In order to meet heterogeneous needs of the learners, each course unit will clearly illustrate the prerequisites proposing external resources to fill knowledge gaps. This approach will allow learners to create a personalized learning path taking into account different levels and needs. Moreover, the course package also provides essential guidelines to facilitate the course adoption by different institutions and instructors that will have the possibility to modify and integrate contents to fulfill their regional or institutional education standards.