World Meteorological Organization
Organisation météorologique mondiale

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Weather • Climate • Water
Temps • Climat • Eau

Nuestra ref.: ETR/CRS-615 GINEBRA, 9 de junio de 2015

Anexos: 2 (disponibles en inglés solamente)

Asunto: Curso internacional de formación sobre "Predicciones estacionales y gestión del agua en la cuenca del Mediterráneo: enfoques integrados", Instituto de Biometeorología del Consejo Nacional de Investigación, Florencia (Italia), 5 a 9 de octubre de 2015 (aprendizaje a distancia) y 19 a 23 de octubre de 2015 (aprendizaje en el aula)

Finalidad: Para información y para que se adopten las medidas pertinentes

Estimado señor/Estimada señora:

Tengo el placer de informarle de que el Centro Regional de Formación de Italia celebrará un curso internacional de formación sobre "Predicciones estacionales y gestión del agua en la cuenca del Mediterráneo: enfoques integrados" en las instalaciones del Instituto de Biometeorología del Consejo Nacional de Investigación (CNR-IBIMET), en Florencia, del 5 al 9 de octubre de 2015 (aprendizaje a distancia) y del 19 al 23 de octubre de 2015 (aprendizaje en el aula).

El curso está destinado a técnicos de los servicios agrometeorológicos, climatólogos, agrometeorólogos e investigadores en materia de agricultura y clima, los cuales podrán establecer una visión y un lenguaje comunes en ese entorno propicio.

El curso, de una semana de duración, tiene por objeto crear capacidad para aplicar las predicciones climáticas estacionales a la gestión del agua y de los cultivos, especialmente en el contexto de los sistemas mediterráneos de producción agrícola. Se proporciona información detallada sobre el curso, que se impartirá en inglés, en el anexo I, donde se incluyen, en particular, los criterios de participación y el procedimiento de inscripción.

Los candidatos interesados deberán rellenar el formulario de inscripción que figura en el anexo II y enviarlo directamente al CNR-IBIMET (v.tarchiani@ibimet.cnr.it) a más tardar el 10 de julio de 2015

Le saluda atentamente.

(E. Manaenkova)
por el Secretario General

A los Representantes Permanentes (o Directores de los Servicios Meteorológicos o Hidrometeorológicos) de los Miembros de la OMM (PR-6851)

copias: Asesores hidrológicos de los Representantes Permanentes

W O R L D M E T E O R O L O G I C A L O R G A N I Z A T I O N
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ETR/CRS-615, ANNEX I

COURSE INFORMATION FORM

WMO - CNR-IBIMET

Seasonal forecasts and water management in the Mediterranean Basin: integrated approaches

5-9 October 2015 (Distance Learning)

19-23 October 2015 (Classroom Learning)
Area di Ricerca CNR
via Madonna del Piano, 10- 50019 - Sesto Fiorentino (Florence) - ITALY

Course Description

The purpose of this week-long course is to build capacities for the application of climate seasonal forecasts for water management in the Mediterranean countries.
Climatic variability and related risks are affecting water availability for multipurpose uses, while the water demand is dramatically rising. Agriculture is just one of the many sectors demanding an improvement in water management, being in competition with other economic activities where water uses ensure greater economic value such as energy, tourism, industry.
Since the late 90's seasonal forecasts experienced a growing role, despite the large uncertainties still present. Recent advances in seasonal to interannual hydro-climatic predictions provide an opportunity for developing a proactive approach towards water management. Precipitation and temperature anomalies knowledge, available a few months early, could be useful for technical services and organizations on managing water resources.
At the same time, methods and scientific results are still underexploited and not easily accessible and comprehensible for potential users.
According with the Global Framework for Climate Services, the course addresses the need to develop mechanisms for delivery of climate services for water managers and users and for enabling risk mitigation strategies at various levels and identifying research and transfer demand by end-users. This training course will contribute to the strengthening of existing regional networks for the application of seasonal forecast (MedCOF, PRESANORD, SEECOF).

Expected Learning Outcomes

Through the course, participants will acquire theoretical and practical knowledge on current approaches to use, create and apply seasonal forecast products in the Mediterranean Region, with particular emphasis on:

- General aspects of seasonal forecasts related to the production and use of seasonal forecasts;
- Fundamentals of seasonal forecasts with emphasis on sources of predictability and the diagnosis of the requirements for water management applications of seasonal forecasts;
- Operational application of seasonal forecasts to water management in different sectors.

Target Audience

The course is addressed to hydrometeorological services technicians, climatologists, agrometeorologists and hydrologists and climate researchers, by creating an environment where climate, hydrology and agriculture actors could share a common view and develop a common language. Target countries are all the countries of the Mediterranean Basin.

Course Content

The 2015 course will be organized in three modules:

1. General aspects of seasonal forecasts: this module aims to ensure that all the participants have the same basic knowledge and comprehension of seasonal forecasts. This module will last 1 week and will be realized online through the Moodle distance learning platform from 5-9 October. General aspects covered by this module will be:
- Data analysis and manipulation with open source R tool;
- IRI/LDEO Climate data Library Tutorial;
- Introduction to available multi-model database of seasonal forecasts (WMO-LRF.MME, NMME, EUROSIP);
- Global modeling for seasonal forecasting;
- Sources and mechanisms of long-term predictability;
- Downscaling of seasonal forecasts;
- Statistical seasonal forecasts.

2. Fundamentals of seasonal forecasts: This module will last 2 days of classroom front learning in Florence from 19 to 20 of October.
This module will address the following aspects:
- Summarizing the distance learning module;
- Sources of long-term predictability in the Mediterranean;
- Seasonal forecasts as operational climate services for drought and water management;
- Diagnosis of the requirements for water management applications of seasonal forecasts;
- Practical training sessions.

3. Operational application of seasonal forecasts for water management: this module will address practical needs and solutions for applying seasonal forecast to water management. This module will last 3 days of front classroom learning in Florence from 21 to 23 October. Aspects covered by this module will be:
- Users' requirements for seasonal forecast application in water management;
- Applications of seasonal forecasts on water management for agriculture;
- Applications of seasonal forecasts for water and drought management ad river basin level;
- Practical training sessions.

Course Format

1 week of distance learning through the Moodle platform (5 to 9 October)
1 week of front learning (19 to 23 October) in Florence (Italy), lectures, group discussions, case studies, practical training sessions.

Evaluation

Training evaluation will be performed at two levels: reaction and learning using e-evaluation tools. At the first level participants' and trainers' thoughts and feelings about the learning experience are assessed in order to evaluate the training team and organization.
At the second level, increase in participants' knowledge, skills, and associated behaviours are assessed in order to evaluate the training outcomes and the efficiency of the learning approach. Single interviews with trainers and trainees will be also collected for documenting the training activities.

Instructors' institution, tentative names and topic

IBIMET-CNR (Italy), Massimiliano Pasqui, Numerical modeling and downscaling techniques
IBIMET-CNR (Italy), Ramona Magno, applications of SF for drought management
IBIMET-CNR (Italy), Maurizio Bacci, applications of SF on agriculture
WMO, Long-range forecasts at WMO
UK-METOFFICE (UK), Carlo Buontempo, Climate Services overview in the European Context
CMCC (Italy), Silvio Gualdi, Global modeling for seasonal forecasting
IC3 (Cataluña), Paco Doblas-Reyes, Seasonal Climate prediction for improvement of Climate Services
AEMET, Ernesto Rodriquez Camino, Users' requirements for SF application in water management
NRC (Italy), Pier Paolo Roggero, Climate information for water management
Arpa Emilia Romagna (Italy), Valentina Pavan, Applications of SF for water management for agriculture
Florence University (Italy), Roberto Ferrise, Applications of SF on water management for agriculture
Florence University (Italy), Fabio Castelli, Hydraulic Engineering, Application of hydrological SF for water and drought management at river basin level
Ibn Khaldoun University (Algeria), Lazreg Benaichata, Application of SF for decision-making in Water Management

Language

English

Participant Qualifications for Admission

- Education Level: to be specialized in meteorology, climatology, hydrology, agricultural sciences, or water management;
- Position/Task: from National Hydrometeorological Services, National Agricultural Services, or Research Institutions from Mediterranean Countries;
- Experience: At least 3 years of relevant working experiences;
- Language: To be proficient in English.

Application and Selection Process

Candidates are requested to submit the Application Form to IBIMET-CNR. Applications will be evaluated in collaboration with WMO and the course partners. Admission Notices will be issued to the accepted participants by e-mail by IBIMET-CNR. With the Admission Notices, the participants are requested to go through all the necessary formalities, including visa application if required, for entering in Italy.

Admitted participants are requested to prepare a report/presentation on their (or their service's) experience on the themes of the course for the purpose of exchanges.

Costs

Tuition is free for all the accepted participants that receive the endorsed Admission Notices by IBIMET-CNR.

IBIMET-CNR will provide support for booking accommodation in Florence and will provide local transportation.

Deadline for Application

10 July 2015

ETR/CRS-615, ANNEX II

NOMINATION FORM

International Training Course
Seasonal forecasts for agriculture in the Mediterranean

Florence, Italy

5-9 October 2015 (Distance Learning)
19-23 October 2015 (Classroom Learning)

Section A: Personal Details

1. Country : _____
2. Title : Mr/Ms/Miss/Dr/Prof/ : _____
3. First Name (Given) : _____
4. Family Name (surname) : _____
5. E-mail : _____
6. Telephone No. : _____
7. Fax No. : _____
8. Official Address : _____

_____

_____

9. Date of Birth : _____
10. Nationality : _____
11. Gender ☐ Female ☐ Male
12. Passport Number : _____
13. Do you need an entry visa for Italy? ☐ No ☐ Yes

Section B: Qualification

14. Qualification (Certificates, diplomas, degrees, etc.):

_____

_____

_____

_____

_____

_____

_____

15. Please indicate your English language skills:

	Excellent	Good	Fair	Poor	Nil
Speaking					
Reading					
Writing					

16. What other WMO courses have you attended in the last 5 years?

_____

_____

_____

_____

Section C: Work Experience

17. Present work: ☐ National Meteorological and/or Hydrological Service (NMHS)
☐ WMO Regional Training Center (RTC)
☐ Other National Technical Service:_____
☐ University/Research Institution:_____
☐ Other (Please specify): _____

18. What is your job title? : _____

19. How long have you been in this position? : _____

20. Your qualification: ☐ Meteorologist
☐ Agronomist
☐ Other (Please specify)
_____

21. Do you have experience on?

- Climate analysis/modelling
  ☐ YES ☐ NO
- Production of Seasonal forecasts
- ☐ YES ☐ NO
- Use of Seasonal forecasts
- ☐ YES ☐ NO
- Sensitivity of crops to climate variability and extremes
- ☐ YES ☐ NO

Section D: Rationale for Applying

22. How are you involved in Climate/Meteorological applications for agriculture in your position?

_____

_____

23. Why do you want to attend this course? Be specific about how it will help you in your work.

_____

_____

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_____

_____

24. Statement by candidate on how she/he anticipates using the knowledge and skills from this course in the work after the course:

_____

_____

_____

_____

_____

_____

Section E: Travel and local costs and Insurance

25. How your travel and local costs will be covered?

☐ Your Administration:_____
☐ WMO
☐ Other:_____

26. Insurance

I fully understand that the course organizer does not take any responsibility for risks such as loss of life, accidents, illness, loss of property etc.

Personal statement

I hereby declare that the information given above is true, correct and complete. I shall bear the responsibility for the above information. I pledge to observe all the Italian laws and will respect the local customs and follow the seminar regulations during my stay in Italy for the training seminar.

Place: _____ Date: _____

Signature of the Candidate: _____

Endorsement of the Nominator

1. Name of Organization _____

_____

2. Name and Signature of the Permanent Representative with WMO:

   Name _____

   Signature _____

3. Official Seal _____

4. Date _____

To be completed and returned as soon as possible by e-mail to IBIMET-CNT **not later than 10 July 2015** to:

Vieri Tarchiani
E-Mail: v.tarchiani@ibimet.cnr.it

Include a short CV (last 5 years) with the present form

Contact:
Vieri Tarchiani
IBIMET-CNR
Via G.Caproni 8 – 50145
Florence, ITALY
Tel. +390553033711
E-Mail: v.tarchiani@ibimet.cnr.it