



World Meteorological Organization  
Organisation météorologique mondiale

Secrétariat

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Weather • Climate • Water  
Temps • Climat • Eau

Our ref.: ETR/CRS-1013

GENEVA, 18 July 2013

Annexes: 2

Subject: International Training Course on Producing High Resolution Climate Information:  
Scientific Basis and Application, Seoul, Republic of Korea, 13–24 October 2013

Action required: For information and appropriate action, as necessary

Dear Sir/Madam,

I have pleasure to inform you that the Korea Meteorological Administration (KMA) will host an International Training Course on Producing High Resolution Climate Information: Scientific Basis and Application, at the KMA headquarters in Seoul, Republic of Korea, 13–24 October 2013. This course is part of the KMA's contribution to the GFCS implementation. Ten participants from National Meteorological and Hydrological Services (NMHSs) of WMO Regional Association I (Africa) and Regional Association II (Asia) will be selected for the course.

The course aims at enhancing human capabilities for climate prediction by providing training on downscaling technology for NMHSs, in particular, of the developing countries and Least Developed Countries (LDCs). The course is designed for researchers and working-level personnel working at institutions related to short- and long-range forecasting. It will include lectures and case studies on downscaling methods and application measures fitting for developing countries; long-range climate prediction with downscaling and data handling; site-visits; and action learning for action planning for participating Members.

For detailed information, please find attached the Course Information and the Application Form.

The nominated candidates are requested to complete the attached Application Form, which should be endorsed by the Permanent Representative of their respective countries, and returned **directly to the KMA, Seoul, Republic of Korea** at the address provided on the Application Form **not later than 20 August 2013**.

Yours faithfully,

(E. Manaenkova)  
for the Secretary-General

To: Permanent Representatives of Members of Regional Association I (AFR-773)  
Permanent Representatives of Members of Regional Association II (ASE-627)

cc: Hydrological Advisers to Permanent Representatives

# WORLD METEOROLOGICAL ORGANIZATION

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ETR/CRS-1013, ANNEX I

## INTERNATIONAL TRAINING COURSE ON PRODUCING HIGH RESOLUTION CLIMATE INFORMATION: SCIENTIFIC BASIS AND APPLICATION

13-24 October 2013

Korea Meteorological Administration  
Republic of Korea

### COURSE INFORMATION

#### Date and Venue

The training course will be held on 13-24 October 2013 at the Korea Meteorological Administration (KMA) headquarters located in Seoul, Republic of Korea (website: <http://web.kma.go.kr/eng/index.jsp>).

#### Number of Participants

Ten participants from NMHSs of WMO RAs I (Africa) and II (Asia).

#### Language

The course will be conducted in English.

#### Purpose and Objectives

The purpose of the course is to enhance human capabilities for climate prediction in developing countries with nurturing professional human resources in downscaling fields.

Through the course, participants will acquire knowledge about: (1) downscaling and application for seasonal forecast and climate change; (2) statistical downscaling application for seasonal forecast and climate change; and (3) dynamical downscaling using GRIMs, R and NCS.

#### Contents

The course is designed for researchers and working-level personnel from institutions relating to short- and long-range forecasts, consisting of the following five modules:

##### *Module I: Dynamical Downscaling*

- Introduction of Dynamical Downscaling
- Application of Dynamical Downscaling to Seasonal Prediction, Climate Change

##### *Module II: Statistical Downscaling*

- Introduction of Statistical Downscaling
- Application of Statistical Downscaling to Seasonal Prediction, Climate Change

##### *Module III: Dynamical Downscaling using GRIMs (Global/Regional Integrated Model System)*

- Introduction, Configuration, System framework
- Download
- Physical options
- Setting (Domain, Resolution, etc.)
- Run

#### *Module IV: Statistical Downscaling using R*

- Introduction
- Regression using least squares

#### *Module V: NCL (NCAR Command Language)*

- Introduction
- File I/O
- NCL Graphic
- Script (examples)
- Plot of GRIMs results

### **Qualification of Participants**

The following criteria should be considered in selecting candidate(s):

- *Education Level:*  
Researchers and working-level personnel from institute (WMO classification of personnel)
- *Position/Task:*  
Responsible for short- and long-range forecasts
- *Experience:*  
At least 2 years of relevant working experiences
- *Language:*  
To be proficient in English (If English is not the mother tongue, certificate of proficiency in English is requested).

The following criteria should be requirements in selecting candidate(s)(All conditions needed):

- *Those who can use Linux, programming language (C++, fortran, etc.), graphic tools (GrADS, NCL, etc.), and an experienced RCM practioner*

### **Deadline for Nominations**

The completed nomination form with the signature of the PR of the relevant WMO Member should be returned to the KMA with a copy for the WMO Secretariat **no later than 20 August 2013**.

### **Country Report**

Final participants should submit their country report on general and climate services of their NMHSs in MS PowerPoint or Word to [pubjhh@korea.kr](mailto:pubjhh@korea.kr) by 17 September 2013.

### **Financial Support**

It is requested that governments consider contributing to the expenses related to the participation of their respective nominees, in particular the cost of air tickets. However, if this is not possible, requests for financial assistance can be indicated on the participants nomination form, and these will be considered within the limited funds available for the course.

### **Insurance**

Participants will be provided with travel insurance for the period of their stay in the Republic of Korea with a minimal range of coverage, and accept limited responsibility for the event that the insurance covers.

## Entry Requirements

Foreigners wishing to enter the Republic of Korea should hold valid passports. Most visitors with confirmed round-trip tickets may stay for 15 days without a visa, although this does not apply to certain nationalities. Any visitors from countries with no diplomatic relations or no special visa exemption arrangements with the Republic of Korea should obtain an entry visa before entering the country. *When uncertain as to entry visa requirements for the Republic of Korea, please contact your local Embassy or Consulate as soon as possible.* For more information, please visit the website of the Ministry of Foreign Affairs and Trade of the Republic of Korea at <http://www.mofat.go.kr/english/visa/apply/index.jsp>.

## Local Climate

Climate data for the ten days of October in Korea are listed below:

Mean precipitation	43.7mm
Mean temperature	14.8°C
Mean min. temperature	9.6°C
Mean max. temperature	21.2°C

## Contact

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International Cooperation Division  
Korea Meteorological Administration  
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**WORLD METEOROLOGICAL ORGANIZATION**  
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ETR/CRS-1013, ANNEX II

**INTERNATIONAL TRAINING COURSE ON PRODUCING HIGH RESOLUTION CLIMATE  
INFORMATION: SCIENTIFIC BASIS AND APPLICATION**

**13-24 October 2013**

**Korea Meteorological Administration  
Republic of Korea**

**PARTICIPANT NOMINATION FORM**

The Government of \_\_\_\_\_ nominates the following candidate as a participant in the above mentioned training course:

1. Family Name: .....
2. First Name: .....
3. Middle Name: .....
4. Gender:    ☐ Male    ☐ Female
5. Date of Birth: .....
6. Nationality: .....
7. Passport Number and Place and Date of Issue:  
.....
8. Passport Expiry Date: .....
9. Organization: .....  
.....
10. Address of Organization: .....  
.....  
Tel.: ..... Fax: .....  
E-mail: .....
11. Education and Profession: .....  
.....
12. Present Position and Brief Description of Duties: .....  
.....  
.....
13. Native Language\*: .....

*\* In case English is not the nominee's mother tongue, please attach certificate of proficiency in English, such as TOEIC and TOEFL (recommendation).*

14. The nominee has capacity on:
- Linux ☐ YES (how many times: ....) ☐ NO
  - Programming languages ☐ YES (how many years: ....) ☐ NO
  - Graphic tools ☐ YES (how many years: ....) ☐ NO
  - RCM ☐ YES (how many times: ....) ☐ NO
15. What do you wish to achieve by having your candidate participate in this course?  
.....  
.....  
.....
16. We request financial assistance: ☐ YES ☐ NO
- Air Ticket: ☐ YES ☐ NO
  - Daily Subsistence Allowance: ☐ YES ☐ NO
17. Name, address and phone number of a person to be notified in case of emergency: .....  
.....  
.....
18. Name and Signature of Permanent Representative:  
.....
19. Date: .....

**Please complete and return this form no later than 20 August 2013 to:**

Ms. JUNG Hye-hoon  
Deputy Director  
International Cooperation Division  
Korea Meteorological Administration  
Tel.: +82 2 2181 0375  
Fax: +82 2 836 2386  
E-mail: [pubjhh@kma.go.kr](mailto:pubjhh@kma.go.kr)

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