

# WMO OMM

WEATHER CLIMATE WATER  
TEMPS CLIMAT EAU



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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Ref.: 3227/2017-10 LCP

Notre réf.: 31256/2017/ETR/CRS/1617

30 août 2017

Annexes: 2 (disponibles en anglais seulement)

Objet: Cours international de formation sur les systèmes d'observation en altitude (Istanbul, Turquie, 16-20 octobre 2017)

Suite à donner: Renvoyer les formulaires d'inscription des candidats au cours susmentionné d'ici au **20 septembre 2017**

Madame, Monsieur,

J'ai le plaisir de vous informer que la République turque accueillera le cours cité en objet dans les locaux du Centre régional de formation professionnelle (CRFP) d'Istanbul, du 16 au 20 octobre 2017.

Il s'agira de donner aux participants un aperçu général des principes fondamentaux des observations en altitude et permettra aux représentants des services météorologiques de différents pays d'échanger des informations et de confronter leurs expériences. Il a été prévu d'organiser ce cours dans le cadre des activités du rapporteur pour le matériel didactique et les activités de formation qui a été nommé par le Groupe de gestion de la Commission des instruments et des méthodes d'observation (CIMO).

Ce cours, qui se déroulera en anglais, s'adresse aux techniciens en météorologie, aux observateurs météorologiques et aux météorologues qui travaillent dans le domaine de l'observation en altitude. Les participants seront exonérés des droits d'inscription, et le Service météorologique national turc prendra à sa charge l'hébergement en pension complète – hôtel, petit déjeuner, déjeuner et dîner – et les transferts entre l'aéroport et l'hôtel pour seulement un participant de chaque pays admis au cours. Les frais de voyage internationaux, dont les billets aller-retour et les frais de transit, sont à la charge des participants eux-mêmes ou de leurs gouvernements respectifs. Vous trouverez ci-joint des informations sur le cours, ainsi que le formulaire d'inscription.

Les personnes intéressées sont priées de remplir le formulaire d'inscription ci-joint, qui doit être approuvé par le représentant permanent de leurs pays respectifs, et de l'envoyer directement au CRFP en Turquie (Mme Afife Hande Türkyilmaz, [ahurkyilmaz@mgm.gov.tr](mailto:ahurkyilmaz@mgm.gov.tr)) d'ici au **20 septembre 2017**.

Veuillez agréer, Madame, Monsieur, l'expression de ma considération distinguée.

(W. Zhang)  
pour le Secrétaire général

Aux: Représentants permanents (ou directeurs des Services météorologiques ou hydrométéorologiques) des Membres de l'OMM

cc: Conseillers en hydrologie auprès des représentants permanents



## **INTERNATIONAL TRAINING COURSE ON**

### **“Upper Air Observing Systems”**

**16-20 October 2017, Istanbul, TURKEY**

## **GENERAL INFORMATION**

### **Objectives of the Training Course**

The aim of the course is to give a general view and information to the trainees about the basic features of upper air observation and exchange the experiences and information between the meteorological services of different countries.

To watch the atmosphere and the weather phenomena occurred is getting more and more important for the developing world. To be able to meet the meteorological requirements of the developing world, it is very obvious that there is a necessity for the provision of accurate and timely weather observations which will be the essential input of weather forecasts and numerical weather prediction models, research studies on climate and climate change, sustainable development, environment protection, renewable energy sources, etc. All outputs and products of any system are input dependent. So, accuracy, reliability and efficiency of the products of any meteorological study will depend on its input: Observation.

Radiosondes have been used for observing the upper air. A radiosonde is a balloon-borne instrument used to simultaneously measure and transmit meteorological data while ascending through the atmosphere. The instrument consists of sensors for the measurement of temperature, and relative humidity. The sensors' information is transmitted in a predetermined sequence to the ground receiving station where that information is processed at some fixed time interval. When wind information is processed by tracking the balloon's movement the instrument package is termed a rawinsonde. Pressure is calculated according to altitude data by means of the GPS' altitude data.

This course has been planned to be organized within the scope of the tasks of Rapporteur on Training Materials and Training Activities (R-TA&TM) established by CIMO Management Group.

Upon completion of the course;

Trainees will be able to;

- a) understand why we need more reliable, more accurate and continuous meteorological data and how these requirements can be met,
- b) learn basic principles and approach of upper air observation and its instruments,
- c) take benefits of experiences from users of an upper air observation,
- d) get the view how to maintain an upper air observation network.
- e) get knowledge about different types of radiosondes,
- f) get knowledge about different types of getting ozone data.

Trainers will be also able to;

- a) understand weak and strong parts of their knowledge and teaching method,
- b) learn how they can transfer their knowledge to the trainees,
- c) take the opportunity to check their system's features once more under questions of the trainees,
- d) get comments, experiences and recommendations of the representatives of the other countries.

## **Content**

The main topics of the course are listed below:

- Introduction and overview of Upper Air Observing System
- The Parameters measured in Upper Air Observations
- Rawinsonde Calculations
- Rawinsonde Observations
- Quality Control of Rawinsonde Data
- Rawinsonde Reporting Codes
- General Information of Ozone
- Experiences of TSMS on Operations of Rawinsonde Observations

## **Course Format**

The course will consist of theoretical and practical parts.

## **Internet Facilities**

Internet will be available. The password will be provided to the participants during the training.

### **Working Languages of the Course**

The Training Course will be conducted in English and all documentation will be in English. No translation/interpretation services will be provided.

### **Eligibility and Application**

This training course is open to all participants from each country and aimed at the meteorological technicians, observers, and meteorologists who are involved in upper air observation, and have good level of English. The candidates will make an application via e-mail to the contact person.

### **Required Documents for Application**

- 1- **Photocopy of passport:** to be submitted with the application form, if you possess your passport which you will carry when entering Turkey for this training. If not, you are requested to submit its photocopy as soon as you obtain it. \*Passport photocopy should include the followings: Name, Date of Birth, Nationality, Sex, Passport number and Expire date.
- 2- **Nomination letter:** A letter signed by the Permanent Representative from your institution nominating you for the training course.

### **Training Course- Related Information**

The course will be conducted at RTC Facility of TSMS in Istanbul between 15 and 20 October 2017. The participants will be informed about the address of the facility in due time. PCs would be available for the participants in the facility.

### **Travel Arrangements**

As the host of the training, TSMS will arrange local transportation from the airport to the Facility and transportation for the excursion.

The international travel expenses between Turkey and the home town of the participants will have to be borne by the recipient members or by other means. Please note that there will be no international travel support by TSMS. The nearest international airport to Istanbul RTC Facility is Sabiha Gökçen International Airport. The alternative international airport is Atatürk International Airport.

Please be informed that **no per diem** and **travel costs** will be paid. It is expected from participants to cover all of their domestic expenses in their own country (including their domestic travel expenses in their own countries, visa fees, etc.).

### **Accommodation and Meal**

TSMS will provide full board accommodation and meal including breakfast, lunch, dinner and coffee breaks for one participant from each country.

### **Insurance**

Participants are fully responsible for any expenses in the event of death, illness or injury attributable to the attendance at course and for arranging such life, health and the other form of insurance as they consider appropriate. The participants are highly recommended to make a travel insurance which covers their travel and visit period. TSMS accepts no responsibility for compensation in such events.

### **Deadline for application:**

Nomination forms should be sent to the course coordinator before **20 September 2017**.

### **Contact details of Course Coordinator**

For any information regarding training and related issues, participants should contact with **Ms. Afife Hande Türkyılmaz** whose contact information is given below:

Ms. Afife Hande Türkyılmaz

External Relations Division

Translator and Interpreter

**Tel** : 0090 312 203 29 26

**Fax** : 0090 312 203 28 80

**E-mail** : ahturkyilmaz@mgm.gov.tr



## PARTICIPANT NOMINATION FORM

Ref.: 31256/2017-13 DRA/ETR

1. **FIRST NAME:** \_\_\_\_\_
2. **FAMILY (LAST) NAME:** \_\_\_\_\_
3. **TITLE :** Mr ( ) Ms ( ) Dr ( )
4. **DATE OF BIRTH:** \_\_\_\_\_
5. **COUNTRY:** \_\_\_\_\_
6. **PASSPORT NUMBER:** \_\_\_\_\_
7. **PASSPORT DATE OF ISSUE AND EXPIRY DATE:** \_\_\_\_\_
8. **SERVICE/ORGANIZATION:** \_\_\_\_\_
9. **OFFICIAL MAILING ADDRESS:** \_\_\_\_\_

**City:** \_\_\_\_\_ **Telephone:** \_\_\_\_\_ **Mobile:** \_\_\_\_\_

**Fax:** \_\_\_\_\_ **E-mail:** \_\_\_\_\_

9. **ARRIVAL DATE**

**Date:** \_\_\_\_\_ **Flight number:** \_\_\_\_\_ **Time of arrival:** \_\_\_\_\_

10. **DEPARTURE DATE**

**Date:** \_\_\_\_\_ **Flight number:** \_\_\_\_\_ **Time of departure:** \_\_\_\_\_

11. **FOOD PREFERENCE:** \_\_\_\_\_  
(Such as Vegetarian etc.)

**Name and Signature of the Permanent Representative**

\_\_\_\_\_

**Date:** \_\_\_\_\_