



## WMO OMM

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

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Nuestra ref.: 31256/2017/ETR/CRS/1617

30 de agosto de 2017

Anexos: 2 (disponibles en inglés solamente)

Asunto: Curso internacional de formación sobre los "Sistemas de observación en altitud" (Estambul, Turquía, 16 a 20 de octubre de 2017)

Finalidad: Designación de candidatos para el Curso mencionado a más tardar el **20 de septiembre de 2017**

Estimado señor/Estimada señora:

Me complace informarle de que la República de Turquía acogerá un curso internacional de formación sobre los "Sistemas de observación en altitud", del 16 al 20 de octubre de 2017, en las instalaciones del Centro Regional de Formación (CRF) de la Organización Meteorológica Mundial (OMM) en Estambul (Turquía).

La finalidad del curso es que los participantes puedan contar con una visión general e información sobre las características básicas de la observación en altitud y los representantes de los Servicios Meteorológicos de diferentes países puedan intercambiar experiencias e información entre sí. Se ha previsto organizar este Curso en el marco de las atribuciones del Ponente sobre las actividades de formación y el material didáctico designado por el Grupo de gestión de la Comisión de Instrumentos y Métodos de Observación (CIMO).

El curso está diseñado para observadores y técnicos en meteorología, así como para meteorólogos que se dedican a la observación en altitud; y se impartirá en inglés. El Servicio Meteorológico Estatal de Turquía eximirá a un solo participante por cada país del pago de la matrícula y le proporcionará alojamiento en régimen de pensión completa (que incluye alojamiento, desayuno, almuerzo y cena) y los traslados locales. Los gastos del viaje internacional, entre ellos los billetes de ida y vuelta y los gastos de tránsito, correrán por cuenta del participante o de su gobierno. Se adjuntan información sobre el Curso y el formulario de designación.

Se ruega a los candidatos designados que cumplimenten el formulario de inscripción adjunto, que deberá contar con el visto bueno del Representante Permanente de su país ante la OMM, y que lo envíen directamente al Centro Regional de Formación de Turquía (a la señora Afife Hande Türkyılmaz, ahturkyilmaz@mgm.gov.tr) a más tardar el **20 de septiembre de 2017**.

Le saluda atentamente.

(W. Zhang)

por el Secretario General

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

copias: Asesores hidrológicos de los Representantes Permanentes



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