WORLD METEOROLOGICAL ORGANIZATION

WMO Regional Training Centres (RTCs) Short-term Course Offerings for the year 2019, and possibly beyond

RTC/Component: Tehran-Islamic Republic of Iran Meteorological Organization (IRIMO)

Course Title	Target Audience	Location (City/Country)	Subject (1)	Teaching Language	Start date	Duration (2)
Aeronautical Meteorological Observation (AMO Course)	Observer	Tehran/Iran	Aeronautical Met.; Observations	English	27 Apr. 2019	3 Working Days
Parallel Programming (Advanced)	IT Personnel	Tehran/Iran	Information Technology	English	15 Jun. 2019	5 Working Days
Applied Agro-meteorology	Observer- Meteorological researcher	Tehran/Iran	Agricultural Met;	English	29 Jun. 2019	5 Working Days
Advanced Numerical Ocean Modelling	Forecaster- Meteorological researcher	Tehran/Iran	Marine Met; Oceanography	English	13 July 2019	5 Working Days
An Introduction to Monitoring and Air Pollution Prediction	Forecaster- Meteorological researcher	Tehran/Iran	Urban Met; Air Pollution	English	3 Aug. 2019	5 Working Days
Monitoring and Now-casting of Severe Convection	Forecaster	Tehran/Iran	Radar Met; Satellite Met.	English	24 Aug. 2019	5 Working Days
Familiarity with the WRF Model	Forecaster- Meteorological researcher	Tehran/Iran	Forecasting; Meteorology	English	21 Sep. 2019	5 Working Days
Introduction to the Principles of Data Assimilation	Forecaster- Meteorological researcher	Tehran/Iran	Forecasting; Meteorology	English	5 Oct. 2019	10 Working Days
Basics of Operational Marine Meteorology Forecasting	Forecaster- Meteorological researcher	Tehran/Iran	Forecasting; Marine Met.; Oceanography	English	9 Nov. 2019	5 Working Days
Extraction of Remote Sensing Data for Meteorological and Hydrological Studies	Forecaster- Meteorological researcher	Tehran/Iran	Climate; Hydrology; Radar Met; Satellite Met.; Meteorology	English	16 Nov. 2019	5 Working Days
Identify the Atmospheric Fronts using Satellite Images	Forecaster- Meteorological researcher	Tehran/Iran	Forecasting; Satellite Met.; Meteorology	English	14 Dec. 2019	3 Working Days

(2) Number of days or weeks

⁽¹⁾ For example: Aeronautical Met; Agricultural Met.; Climate; Forecasting; Hydrology; Instruments; Meteorology; Marine Met. and Oceanography; Observations; Radar Met.; Satellite Met.; Tropical Met.; Urban Met. and Air Pollution. If none of these fit, please enter another subject.

Aeronautical Meteorological Observation (AMO Course)

International Training Course on **Aeronautical Meteorological Observation** (**AMO Course**) will be held in Tehran <u>from 27 to 29 Apr. 2019</u> by the WMO Regional Training Canter in Tehran (RTC-Tehran), sponsored by the Islamic Republic of Iran Meteorological Organization (IRIMO).

A. Objectives

After passing the course, besides getting familiar with the preliminary methods in numerical ocean modelling, the participant is able to model the simple cases.

B. Date and Venue

27 to 29 Apr. 2019, WMO Regional Training Centre in Tehran, Iran.

C. Course Contents

- Introducing the Metar and Speci and local Metar and Speci code
- Definition of aeronautical meteorology reports
- A complete description of the coding groups for the Metar, Speci and Local Metar & Speci
- Conditions for issuing special reports (Speci and local Speci)

D. Training Format

• Lecture, group discussion, practical sessions, class task, etc.

E. Instructors

Mr. Izadfar & Mr. Jafari

F. Language of Instruction

• The course will be only conducted in English.

G. Targeted Trainees

Airport Station Observers.

H. Participants' Qualifications for Admission

- 1) Airport station observers with a minimum of 3 years' experience in the airport stations.
- 2) Proficient in English.

I. Application and Admission

- 1) The applicants must be meteorologists who are working in the field of Meteorology and other related fields from Meteorological and Hydrological Services. The nominated candidates are requested to submit the Application Forms (annex I) to IRIMO Legal and International Affairs Department for examination and endorsement (affairs.intl@gmail.com)
- 2) Admission Notices will be issued to the accepted participants by e-mail by the IRIMO Legal and International Affairs Department.

3) Only accepted applicants that receive the Admission Notices endorsed by RTC-Tehran can participate in the training course.

J. Training Expenses

- 1) Tuition is free for all the accepted participants that receive the endorsed Admission Notices by IRIMO;
- 2) RTC-Tehran will provide local support to the accepted participants, including accommodation, meals, and local transportation.
- 3) The international travel costs including return air tickets and transit fares during the travel are to be covered by the participants;
- 4) The expenses of visa, medical care, insurances and daily subsistence allowance for the participants should be borne by the participants.
- 5) It should be taken into account when booking the flight tickets that the course will take place exclusively **27 to 29 Apr. 2019** Any liability or expense out of this term shall be entirely at the expense of the participants.

K. Insurance

The Organizer of the Training Course on **Aeronautical Meteorological Observation** (**AMO Course**) does not hold any responsibility for such risks as loss of life, accidents, illness, and loss of property incurred during the whole period of participation in the training course.

• Please be informed that it is <u>not</u> possible to use visa cart in Iran. You can purchase only by cash

L. Deadline for application

• Application shall be submitted and reach RTC-Tehran no later than 15 Mar. 2019.

M. Liaison Information

1) Attn: M. Sc. Mohammad Jafari, WMO Regional Training Centre in Tehran, Islamic Republic of Iran Meteorological Organization, P. O. Box: 13185-461, Tehran, Iran.

Tel/Fax: +98-21-44787190 Email:mjafaria@gmail.com

2) Ms. Mina Jabbari, IRIMO Director of International Affairs Department, P. O. Box: 13185-461, Tehran, Iran

Tel/Fax: +98-21-66070038

I.	Personal Data		
1.	Surname		
	Given Name		
2.	Gender		
3.	Date of Birth	Photo	
4.	Place of Birth		
5.	Passport Number		
	Nationality		
	Marital Status		
8	Health Condition		
	History of infectious disease: ☐ No ☐ Yes		
	(Please specify if yes)		
10.	Address:		
	Mobile phone:		
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	E-mail Address:@		
11.	Permanent Address:		
	Contact person in case of emergency		
	Name:		
	Address:		
	Mobile phone:		
	Telephone Fax		
	E-mail Address:@		
13.	Statement of present work		
	Name of institution		
	Present Position or Occupation		
	Brief description of duties		
14.	Previous employment history		
	Date Institution Position and Duties		
15.	Educational and/or professional qualification		
	Date Major and University Degree/Diploma		
16	Language Proficiency		
10.	Mother Tongue		
	English Proficiency (Please tick):		
	Reading: a excellent b good c fair d poor		
	Listening: a. excellent b. good c. fair d. poor		
	Speaking: a. excellent b. good c. fair d. poor		
	Writing: a. excellent b. good c. fair d. poor		
17.	State why you wish to attend the course and indicate the practic	cal use of the course t	o your

work in the future.
18. Does your Service have used WMO information System aspects in your responsibility area?
19. Does your Service provide Data services?
II. Financial Support Do you need local support from IRIMO if you are a participant from developing countries? Yes No
III. 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.
IV. 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 Iranian laws and will respect the local customs and follow the course regulations during my stay in Iran for the training course.
Signature of Applicant
Date
V. Endorsement of the Nominator 1. Name of Organization
2. Name and Signature of the Permanent Representative of WMO in your country: Name Signature Official Seal Date Date
VI. Contact Details Contact Persons: M. Sc. Mohammad Jafari, WMO Regional Training Centres – Tehran mjafaria@gmail.com Ms. Mina Jabbari, IRIMO Legal and International Affairs Department affairs.intl@gmail.com, mina747@gmail.com
Address: Islamic Republic of Iran Meteorological Organization, Meraj Ave., Mehrabad Airport, P. O. Box: 13185-461 Tehran, Iran Tel: +98-21-66070038

Parallel Programming (Advanced)

International Training Course on **Parallel Programming** (**Advanced**) will be held in Tehran from <u>15 to 19 Jun. 2019</u> by the WMO Regional Training Canter in Tehran (RTC-Tehran), sponsored by the Islamic Republic of Iran Meteorological Organization (IRIMO).

A. Objectives

After passing the course, the participant is expected to get familiar with the parallel programming and its application in running meteorological models.

B. Date and Venue

15 to 19 Jun. 2019, WMO Regional Training Centre in Tehran, Iran.

C. Course Contents

- Introduction to High Performance Computing (HPC)
- Floating Point Arithmetic
- Parallel Computing

D. Training Format

• Lecture, group discussion, practical sessions, class task, etc.

E. Instructors

Dr. E. Nedaei Oskouei

F. Language of Instruction

• The course will be only conducted in English.

G. Targeted Trainees

• IT Personnel

H. Participants' Qualifications for Admission

- 1) Information Technology men/women with a minimum of 3 years' experience in IT centres of National Hydrological and Meteorological Services
- 2) Proficient in English.

I. Application and Admission

- 1) The applicants must be meteorologists who are working in the field of Meteorology and other related fields from Meteorological and Hydrological Services. The nominated candidates are requested to submit the Application Forms (annex I) to IRIMO Legal and International Affairs Department for examination and endorsement (affairs.intl@gmail.com)
- 2) Admission Notices will be issued to the accepted participants by e-mail by the IRIMO Legal and International Affairs Department.

3) Only accepted applicants that receive the Admission Notices endorsed by RTC-Tehran can participate in the training course.

J. Training Expenses

- 4) Tuition is free for all the accepted participants that receive the endorsed Admission Notices by IRIMO;
- 5) RTC-Tehran will provide local support to the accepted participants, including accommodation, meals, and local transportation.
- 6) The international travel costs including return air tickets and transit fares during the travel are to be covered by the participants;
- 7) The expenses of visa, medical care, insurances and daily subsistence allowance for the participants should be borne by the participants.
- 8) It should be taken into account when booking the flight tickets that the course will take place exclusively from <u>15 to 19 Jun. 2019</u> Any liability or expense out of this term shall be entirely at the expense of the participants.

K. Insurance

The Organizer of the Training Course on **Parallel Programming (Advanced)** does not hold any responsibility for such risks as loss of life, accidents, illness, and loss of property incurred during the whole period of participation in the training course.

• Please be informed that it is <u>not</u> possible to use visa cart in Iran. You can purchase only by cash.

L. Deadline for application

• Application shall be submitted and reach RTC-Tehran no later than 15 Apr. 2019.

M. Liaison Information

1) Attn: M. Sc. Mohammad Jafari, WMO Regional Training Centre in Tehran, Islamic Republic of Iran Meteorological Organization, P. O. Box: 13185-461, Tehran, Iran.

Tel/Fax: +98-21-44787190 Email:mjafaria@gmail.com

2) Ms. Mina Jabbari, IRIMO Director of International Affairs Department, P. O.

Box: 13185-461, Tehran, Iran

Tel/Fax: +98-21-66070038

[.	Personal Data		
1.	Surname		
2.	Given Name		
3.	Gender		
4.	Date of Birth	Photo	
4.	Place of Birth		
5.	Passport Number		
6.	Nationality		
7.	Marital Status		
8.	Health Condition		
9.	History of infectious disease: ☐ No ☐ Yes		
	(Please specify if yes)		
10.	Address:		
	Mobile phone:		
	Telephone Fax		
	E-mail Address:		
11.	Permanent Address:		
12.	Contact person in case of emergency		
	Name:		
	Address:		
	Mobile phone:		
	TelephoneFax		
	E-mail Address:@_		
13.	Statement of present work		
	Name of institution		
	Present Position or Occupation		
	Brief description of duties		
14.	Previous employment history Date Institution Position and Duties		
15.	Educational and/or professional qualification		
	Date Major and University Degree/Diploma		
16.	Language Proficiency		
	Mother Tongue		
	English Proficiency (Please tick):		
	Reading: a. excellent b. good c. fair d. poor		
	Listening: a. excellent b. good c. fair d. poor		
	Speaking: a. excellent b. good c. fair d. poor		
	Writing: a. excellent b. good c. fair d. poor		

	why you wish to attend the course and indicate the practical use of the course to your in the future.
18. Does	your Service have used WMO information System aspects in your responsibility area?
19. Does	your Service provide Data services?
	ncial Support ed local support from IRIMO if you are a participant from developing countries? No
•	rance erstand that the course organizer does not take any responsibility for risks such as loss of ents, illness, loss of property etc.
I hereby o	onal Statement leclare that the information given above is true, correct and complete. I shall bear the lity for the above information.
	o observe all the Iranian laws and will respect the local customs and follow the course s during my stay in Iran for the training course.
	Signature of Applicant
	Date
	ersement of the Nominator ame of Organization
I 2	Name and Signature of the Permanent Representative of WMO in your country: Name Signature Official Seal Oate
	Persons: M. Sc. Mohammad Jafari, WMO Regional Training Centres – Tehran mjafaria@gmail.com Ms. Mina Jabbari, IRIMO Legal and International Affairs Department affairs.intl@gmail.com, mina747@gmail.com
Address:	Islamic Republic of Iran Meteorological Organization, Meraj Ave., Mehrabad Airport, P. O. Box: 13185-461 Tehran, Iran
Tel:	+98-21-66070038

Applied Agro-meteorology

International Training Course on **Applied Agro-meteorology** will be held in Tehran <u>from 29 Jun. to 03 Jul. 2019</u> by the WMO Regional Training Canter in Tehran (RTC-Tehran), sponsored by the Islamic Republic of Iran Meteorological Organization (IRIMO).

A. Objectives

After passing the course, the participant will be able to implement the virtual Cluster and to run some forecasting models.

B. Date and Venue

From 29 Jun. to 03 Jul. 2019, WMO Regional Training Centre in Tehran, Iran.

C. Course Contents

- History, laws and regulations, documents, structure and international and national requirements
- Agricultural meteorological services and equipment
- Principles of Agricultural Meteorological Reports
- Agricultural Meteorological Bulletins
- Data Analysis Principles in Agricultural Meteorology
- Agricultural Meteorological indicators and related software
- Phenology and biometrics of crops, gardens, livestock and poultry and fisheries
- Climatological definitions and Agricultural Microclimatology
- Techniques and methods of Agricultural climate classification
- Climate change and its impact on agriculture
- Principles of climate modelling in agriculture
- Types of Agricultural Drought Indicators and its Impact on Agriculture
- Principles of Modelling Growth and Performance
- Principles of pest and disease modelling
- Agrometeorological recommendations

D. Training Format

• Lecture, group discussion, practical sessions, class task, etc.

E. Instructors

Mr. Haghighat and Dr. Oskoie

F. Language of Instruction

• The course will be only conducted in English.

G. Targeted Trainees

• Observer, Meteorological researcher.

H. Participants' Qualifications for Admission

- 1) Meteorologists with a minimum of 3 years' experience in Observing stations or meteorological research institutes.
- 2) Proficient in English.

I. Application and Admission

- 1) The applicants must be meteorologists who are working in the field of Meteorology and other related fields from Meteorological and Hydrological Services. The nominated candidates are requested to submit the Application Forms (annex I) to IRIMO Legal and International Affairs Department for examination and endorsement (affairs.intl@gmail.com)
- 2) Admission Notices will be issued to the accepted participants by e-mail by the IRIMO Legal and International Affairs Department.
- 3) Only accepted applicants that receive the Admission Notices endorsed by RTC-Tehran can participate in the training course.

J. Training Expenses

- 1) Tuition is free for all the accepted participants that receive the endorsed Admission Notices by IRIMO;
- 2) RTC-Tehran will provide local support to the accepted participants, including accommodation, meals, and local transportation.
- 3) The international travel costs including return air tickets and transit fares during the travel are to be covered by the participants;
- 4) The expenses of visa, medical care, insurances and daily subsistence allowance for the participants should be borne by the participants.
- 5) It should be taken into account when booking the flight tickets that the course will take place exclusively **from 29 Jun. to 03 Jul. 2019** Any liability or expense out of this term shall be entirely at the expense of the participants.

K. Insurance

The Organizer of the Training Course on **Applied Agrometeorology** does not hold any responsibility for such risks as loss of life, accidents, illness, and loss of property incurred during the whole period of participation in the training course.

• Please be informed that it is <u>not</u> possible to use visa cart in Iran. You can purchase only by cash

L. Deadline for application

• Application shall be submitted and reach RTC-Tehran no later than **29 Apr. 2019**.

M. Liaison Information

1) Attn: M. Sc. Mohammad Jafari, WMO Regional Training Centre in Tehran, Islamic Republic of Iran Meteorological Organization, P. O. Box: 13185-461, Tehran, Iran.

Tel/Fax: +98-21-44787190 Email:mjafaria@gmail.com

2) Ms. Mina Jabbari, IRIMO Director of International Affairs Department, P. O. Box: 13185-461, Tehran, Iran

Tel/Fax: +98-21-66070038

Tel/Fax: +98-21-000/0038

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Writing: a. excellent b. good c. fair d. poor				

17. State why you wish to attend the course and indicate the practical use of the course to your work in the future.
18. Does your Service have used WMO information System aspects in your responsibility area?
19. Does your Service provide Data services?
II. Financial Support Do you need local support from IRIMO if you are a participant from developing countries? Yes No
III. 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.
IV. 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 Iranian laws and will respect the local customs and follow the course regulations during my stay in Iran for the training course.
Signature of Applicant
Date
V. Endorsement of the Nominator 1. Name of Organization
2. Name and Signature of the Permanent Representative of WMO in your country: Name Signature Official Seal Date
VI. Contact Details Contact Persons: M. Sc. Mohammad Jafari, WMO Regional Training Centres – Tehranmjafaria@gmail.com Ms. Mina Jabbari, IRIMO Legal and International Affairs Department affairs.intl@gmail.com, mina747@gmail.com
Address: Islamic Republic of Iran Meteorological Organization, Meraj Ave., Mehrabad Airport, P. O. Box: 13185-461 Tehran, Iran
Tel: +98-21-66070038

Advanced Numerical Ocean Modelling

International Training Course on **Advanced Numerical Ocean Modelling** will be held in Tehran <u>from 13 to 17 Jul. 2019</u> by the WMO Regional Training Canter in Tehran (RTC-Tehran), sponsored by the Islamic Republic of Iran Meteorological Organization (IRIMO).

A. Objectives

After passing the course, the participant will be able to implement the virtual Cluster and to run some forecasting models.

B. Date and Venue

From 13 to 17 Jul. 2019, WMO Regional Training Centre in Tehran, Iran.

C. Course Contents

- Solving simple equations by numerical method
- Introducing an oceanic numerical model
- Preparing model input
- Set the model for a simple test sample
- Analysing model output
- Work on more realistic oceanic samples

D. Training Format

• Lecture, group discussion, practical sessions, class task, etc.

E. Instructors

To be recommended by WMO

F. Language of Instruction

• The course will be only conducted in English.

G. Targeted Trainees

• Forecaster, Meteorological researcher.

H. Participants' Qualifications for Admission

- 1) Meteorologists with a minimum of 3 years' experience in Forecasting centres or meteorological research institutes.
- 2) Proficient in English.

I. Application and Admission

1) The applicants must be meteorologists who are working in the field of Meteorology and other related fields from Meteorological and Hydrological Services. The nominated candidates are requested to submit the Application Forms (annex I) to IRIMO Legal and International Affairs Department for examination and endorsement (affairs.intl@gmail.com)

- 2) Admission Notices will be issued to the accepted participants by e-mail by the IRIMO Legal and International Affairs Department.
- 3) Only accepted applicants that receive the Admission Notices endorsed by RTC-Tehran can participate in the training course.

J. Training Expenses

- 1) Tuition is free for all the accepted participants that receive the endorsed Admission Notices by IRIMO;
- 2) RTC-Tehran will provide local support to the accepted participants, including accommodation, meals, and local transportation.
- 3) The international travel costs including return air tickets and transit fares during the travel are to be covered by the participants;
- 4) The expenses of visa, medical care, insurances and daily subsistence allowance for the participants should be borne by the participants.
- 5) It should be taken into account when booking the flight tickets that the course will take place exclusively **from 13 to 17 Jul. 2019** Any liability or expense out of this term shall be entirely at the expense of the participants.

K. Insurance

The Organizer of the Training Course on **Advanced Numerical Ocean Modelling** does not hold any responsibility for such risks as loss of life, accidents, illness, and loss of property incurred during the whole period of participation in the training course.

• Please be informed that it is <u>not</u> possible to use visa cart in Iran. You can purchase only by cash

L. Deadline for application

• Application shall be submitted and reach RTC-Tehran no later than 13 May. 2019.

M. Liaison Information

1) Attn: M. Sc. Mohammad Jafari, WMO Regional Training Centre in Tehran, Islamic Republic of Iran Meteorological Organization, P. O. Box: 13185-461, Tehran, Iran.

Tel/Fax: +98-21-44787190 Email:mjafaria@gmail.com

2) Ms. Mina Jabbari, IRIMO Director of International Affairs Department, P. O.

Box: 13185-461, Tehran, Iran

Tel/Fax: +98-21-66070038

I.	Personal Data		
1.	Surname		
	Given Name		
2.	Gender		
3.	Date of Birth	Photo	
4.	Place of Birth		
5.	Passport Number		
6.	Nationality		
7.	Marital Status		
8.	Health Condition		
9.	History of infectious disease: \square No \square Yes		
	(Please specify if yes)		
10.	Address:		
	Mobile phone:		
	Telephone Fax		
	E-mail Address:@		
11.	Permanent Address:		
12.	Contact person in case of emergency		
	Name:		
	Address:		
	Mobile phone:		
	Telephone Fax		
	E-mail Address: @		
13.	Statement of present work		
	Name of institution		
	Present Position or Occupation		
	Brief description of duties		
14.	Previous employment history		
	Date Institution Position and Duties		
15.	Educational and/or professional qualification		
	Date Major and University Degree/Diploma		
		 	
1.0	I D C		
10.	Language Proficiency Mathem Tongue		
	Mother Tongue		
	English Proficiency (Please tick):		
	Reading: a excellent b good c fair d poor		
	Listening: a excellent b good c fair d poor		
	Speaking: a excellent b good c fair d poor		
	Writing: a. excellent b. good c. fair d. poor		

17. State why you wish to attend the course and indicate the practical use of the course to your work in the future.
18. Does your Service have used WMO information System aspects in your responsibility area?
19. Does your Service provide Data services?
II. Financial Support Do you need local support from IRIMO if you are a participant from developing countries? Yes No
III. 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.
IV. 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 Iranian laws and will respect the local customs and follow the course regulations during my stay in Iran for the training course.
Signature of Applicant
Date
V. Endorsement of the Nominator 1. Name of Organization
2. Name and Signature of the Permanent Representative of WMO in your country: Name Signature Official Seal Date Date
VI. Contact Details Contact Persons: M. Sc. Mohammad Jafari, WMO Regional Training Centres – Tehranmjafaria@gmail.com Ms. Mina Jabbari, IRIMO Legal and International Affairs Department affairs.intl@gmail.com, mina747@gmail.com
Address: Islamic Republic of Iran Meteorological Organization, Meraj Ave., Mehrabad Airport, P. O. Box: 13185-461 Tehran, Iran
Tel: +98-21-66070038

An Introduction to Monitoring and Air Pollution Prediction

International Training Course on an Introduction to Monitoring and Air Pollution Prediction will be held in Tehran <u>from 03 to 07 Aug. 2019</u> by the WMO Regional Training Canter in Tehran (RTC-Tehran), sponsored by the Islamic Republic of Iran Meteorological Organization (IRIMO).

A. Objectives

After passing the course, the participant will be able to implement the virtual Cluster and to run some forecasting models.

B. Date and Venue

from 03 to 07 Aug. 2019, WMO Regional Training Centre in Tehran, Iran.

C. Course Contents

- Atmospheric pollutants and their seasonal variation
- the air pollution sources
- air quality indices
- the synoptic influencing patterns on pollutants concentration increase
- the role of atmospheric variables (air temperature and inversion, wind, humidity, precipitation, cloudiness) on pollutants concentration and emission
- the role of boundary layer on atmospheric pollutants concentration
- The application of SKEW-T diagram in air pollution forecasting
- The application of remote sensing in pollutants concentration monitoring

D. Training Format

• Lecture, group discussion, practical sessions, class task, etc.

E. Instructors

Dr. A. A. Bidokhti and Dr. Saviz Sehat Kashani and Dr. O. Alizadeh

F. Language of Instruction

• The course will be only conducted in English.

G. Targeted Trainees

• Forecaster, Meteorological researcher.

H. Participants' Qualifications for Admission

- 1) Meteorologists with a minimum of 3 years' experience in Forecasting centres or meteorological research institutes.
- 2) Proficient in English.

I. Application and Admission

1) The applicants must be meteorologists who are working in the field of Meteorology and other related fields from Meteorological and Hydrological

Services. The nominated candidates are requested to submit the Application Forms (annex I) to IRIMO Legal and International Affairs Department for examination and endorsement (affairs.intl@gmail.com)

- 2) Admission Notices will be issued to the accepted participants by e-mail by the IRIMO Legal and International Affairs Department.
- 3) Only accepted applicants that receive the Admission Notices endorsed by RTC-Tehran can participate in the training course.

J. Training Expenses

- 1) Tuition is free for all the accepted participants that receive the endorsed Admission Notices by IRIMO;
- 2) RTC-Tehran will provide local support to the accepted participants, including accommodation, meals, and local transportation.
- 3) The international travel costs including return air tickets and transit fares during the travel are to be covered by the participants;
- 4) The expenses of visa, medical care, insurances and daily subsistence allowance for the participants should be borne by the participants.
- 5) It should be taken into account when booking the flight tickets that the course will take place exclusively **from 03 to 07 Aug. 2019** Any liability or expense out of this term shall be entirely at the expense of the participants.

K. Insurance

The Organizer of the Training Course on **An Introduction to Monitoring and Air Pollution Prediction** does not hold any responsibility for such risks as loss of life, accidents, illness, and loss of property incurred during the whole period of participation in the training course.

• Please be informed that it is <u>not</u> possible to use visa cart in Iran. You can purchase only by cash

L. Deadline for application

• Application shall be submitted and reach RTC-Tehran no later than **03 Jun. 2019.**

M. Liaison Information

1) Attn: M. Sc. Mohammad Jafari, WMO Regional Training Centre in Tehran, Islamic Republic of Iran Meteorological Organization, P. O. Box: 13185-461, Tehran, Iran.

Tel/Fax: +98-21-44787190 Email:mjafaria@gmail.com

2) Ms. Mina Jabbari, IRIMO Director of International Affairs Department, P. O.

Box: 13185-461, Tehran, Iran

Tel/Fax: +98-21-66070038

I.	Personal Data	
1.	Surname	
	Given Name	
2.	Gender	
3.	Date of Birth	Photo
4	Place of Birth	Thoto
5	Passport Number	
6	Nationality	
7	Marital Status	
8.	Marital Status Health Condition	
9.	History of infectious disease: \square No \square Yes	
	(Please specify if yes)	
10.	Address:	
	Mobile phone:	
	Telephone Fax	
	E-mail Address:	
11.	Permanent Address:	
12.	Contact person in case of emergency	
	Name:	
	Address:	
	Mobile phone:	
	TelephoneFax	
	E-mail Address:@_	
13.	Statement of present work	
	Name of institution	
	Present Position or Occupation	
	Brief description of duties	
	1	
14	Previous employment history	
17.	Date Institution Position and Duties	
	Date institution I osition and Duties	
15.	Educational and/or professional qualification	
	Date Major and University Degree/Diploma	
16	Language Proficiency	
10.	Mother Tongue	
	English Proficiency (Please tick):	
	Reading: a. excellent b. good c. fair d. poor	
	Listening: a excellent b good c fair d poor	
	Speaking: a excellent b good c fair d poor	
1.7	Writing: a. excellent b. good c. fair d. poor	-16 41
1/.	State why you wish to attend the course and indicate the practic	at use of the course to your

work in the future.
18. Does your Service have used WMO information System aspects in your responsibility area?
19. Does your Service provide Data services?
II. Financial Support Do you need local support from IRIMO if you are a participant from developing countries? Yes No
III. 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.
IV. 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 Iranian laws and will respect the local customs and follow the course regulations during my stay in Iran for the training course.
Signature of Applicant
Date
V. Endorsement of the Nominator 1. Name of Organization
2. Name and Signature of the Permanent Representative of WMO in your country: Name Signature Official Seal Date Date
VI. Contact Details Contact Persons: M. Sc. Mohammad Jafari, WMO Regional Training Centres – Tehran mjafaria@gmail.com Ms. Mina Jabbari, IRIMO Legal and International Affairs Department affairs.intl@gmail.com, mina747@gmail.com
Address: Islamic Republic of Iran Meteorological Organization, Meraj Ave., Mehrabad Airport, P. O. Box: 13185-461 Tehran, Iran Tel: +98-21-66070038

Monitoring and Now-casting of Severe Convection

International Training Course on **Monitoring and Now-casting of Severe Convection** will be held in Tehran <u>from 24 to 28 Aug. 2019</u> by the WMO Regional Training Canter in Tehran (RTC-Tehran), sponsored by the Islamic Republic of Iran Meteorological Organization (IRIMO).

A. Objectives

After passing the course, the participant will be able to implement the virtual Cluster and to run some forecasting models.

B. Date and Venue

From 24 to 28 Aug. 2019, WMO Regional Training Centre in Tehran, Iran.

C. Course Contents

- Conceptual models: single cell, Multi cell, super cell, dry downburst, wet downburst
- Use of weather maps: Numerical weather prediction models output and real time maps
- Use of observations: weather radar, satellite, profilers, surface observation network and other innovative technologies

D. Training Format

• Lecture, group discussion, practical sessions, class task, etc.

E. Instructors

To be recommended by WMO

F. Language of Instruction

• The course will be only conducted in English.

G. Targeted Trainees

Forecaster.

H. Participants' Qualifications for Admission

- 1) Meteorologists with a minimum of 3 years' experience in Forecasting centres.
- 2) proficient in English.

I. Application and Admission

- 1) The applicants must be meteorologists who are working in the field of Meteorology and other related fields from Meteorological and Hydrological Services. The nominated candidates are requested to submit the Application Forms (annex I) to IRIMO Legal and International Affairs Department for examination and endorsement (affairs.intl@gmail.com)
- 2) Admission Notices will be issued to the accepted participants by e-mail by the IRIMO Legal and International Affairs Department.

3) Only accepted applicants that receive the Admission Notices endorsed by RTC-Tehran can participate in the training course.

J. Training Expenses

- 1) Tuition is free for all the accepted participants that receive the endorsed Admission Notices by IRIMO;
- 2) RTC-Tehran will provide local support to the accepted participants, including accommodation, meals, and local transportation.
- 3) The international travel costs including return air tickets and transit fares during the travel are to be covered by the participants;
- 4) The expenses of visa, medical care, insurances and daily subsistence allowance for the participants should be borne by the participants.
- 5) It should be taken into account when booking the flight tickets that the course will take place exclusively **from 24 to 28 Aug. 2019** Any liability or expense out of this term shall be entirely at the expense of the participants.

K. Insurance

The Organizer of the Training Course on **Monitoring and Now-casting of Severe Convection** does not hold any responsibility for such risks as loss of life, accidents, illness, and loss of property incurred during the whole period of participation in the training course.

• Please be informed that it is <u>not</u> possible to use visa cart in Iran. You can purchase only by cash

L. Deadline for application

• Application shall be submitted and reach RTC-Tehran no later than **24 Jun. 2019.**

M. Liaison Information

1) Attn: M. Sc. Mohammad Jafari, WMO Regional Training Centre in Tehran, Islamic Republic of Iran Meteorological Organization, P. O. Box: 13185-461, Tehran, Iran.

Tel/Fax: +98-21-44787190 Email:mjafaria@gmail.com

2) Ms. Mina Jabbari, IRIMO Director of International Affairs Department, P. O. Pow 12185 461 Tehran Iran

Box: 13185-461, Tehran, Iran

Tel/Fax: +98-21-66070038

I.	Personal Data		
1.	Surname		
	Given Name		
2.	Gender		
3.	Date of Birth	Photo	
4.	Place of Birth		
5.	Passport Number		
6.	Nationality		
7.	Marital Status		
8.	Health Condition		
9.	History of infectious disease: \square No \square Yes		
	(Please specify if yes)		
10.	Address:		
	Mobile phone:		
	Telephone Fax		
	E-mail Address:@		
11.	Permanent Address:		
12.	Contact person in case of emergency		
	Name:		
	Address:		
	Mobile phone:		
	Telephone Fax		
	E-mail Address: @		
13.	Statement of present work		
	Name of institution		
	Present Position or Occupation		
	Brief description of duties		
14.	Previous employment history		
	Date Institution Position and Duties		
15.	Educational and/or professional qualification		
	Date Major and University Degree/Diploma		
		 	
1.0	I D C		
10.	Language Proficiency Mathem Tongue		
	Mother Tongue		
	English Proficiency (Please tick):		
	Reading: a excellent b good c fair d poor		
	Listening: a excellent b good c fair d poor		
	Speaking: a excellent b good c fair d poor		
	Writing: a. excellent b. good c. fair d. poor		

17. State why you wish to attend the course and indicate the practical use of the course to your work in the future.
18. Does your Service have used WMO information System aspects in your responsibility area?
19. Does your Service provide Data services?
II. Financial Support Do you need local support from IRIMO if you are a participant from developing countries? Yes No
III. 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.
IV. 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 Iranian laws and will respect the local customs and follow the course regulations during my stay in Iran for the training course.
Signature of Applicant
Date
V. Endorsement of the Nominator 1. Name of Organization
2. Name and Signature of the Permanent Representative of WMO in your country: Name Signature Official Seal Date
VI. Contact Details Contact Persons: M. Sc. Mohammad Jafari, WMO Regional Training Centres – Tehranmjafaria@gmail.com Ms. Mina Jabbari, IRIMO Legal and International Affairs Department affairs.intl@gmail.com, mina747@gmail.com
Address: Islamic Republic of Iran Meteorological Organization, Meraj Ave., Mehrabad Airport, P. O. Box: 13185-461 Tehran, Iran
Tel: +98-21-66070038

Familiarity with the WRF Model

International Training Course on **Familiarity with the WRF Model** will be held in Tehran <u>from 21 to 25 Sep. 2019</u> by the WMO Regional Training Canter in Tehran (RTC-Tehran), sponsored by the Islamic Republic of Iran Meteorological Organization (IRIMO).

A. Objectives

After passing the course, the participant will be able to implement the virtual Cluster and to run some forecasting models.

B. Date and Venue

from 21 to 25 Sep. 2019, WMO Regional Training Centre in Tehran, Iran.

C. Course Contents

- Familiarity with the dynamical structure of the model (governing equations)
- Familiarity with the numerical solution methods of the model
- Introducing the physical structure of the model and some of its schemas, such as radiation, convection, precipitation process and boundary layer
- Installation, implementation and display of model outcomes
- Simulation with topographic changes
- Simulation by changing atmospheric variables

D. Training Format

• Lecture, group discussion, practical sessions, class task, etc.

E. Instructors

Dr. M. Azadi and Dr. S. Ghader

F. Language of Instruction

• The course will be only conducted in English.

G. Targeted Trainees

• Forecaster, Meteorological researcher.

H. Participants' Qualifications for Admission

- 1) Meteorologists with a minimum of 3 years' experience in Forecasting centres or meteorological research institutes.
- 2) Proficient in English.

I. Application and Admission

1) The applicants must be meteorologists who are working in the field of Meteorology and other related fields from Meteorological and Hydrological Services. The nominated candidates are requested to submit the Application

Forms (annex I) to IRIMO Legal and International Affairs Department for examination and endorsement (affairs.intl@gmail.com)

- 2) Admission Notices will be issued to the accepted participants by e-mail by the IRIMO Legal and International Affairs Department.
- 3) Only accepted applicants that receive the Admission Notices endorsed by RTC-Tehran can participate in the training course.

J. Training Expenses

- 1) Tuition is free for all the accepted participants that receive the endorsed Admission Notices by IRIMO;
- 2) RTC-Tehran will provide local support to the accepted participants, including accommodation, meals, and local transportation.
- 3) The international travel costs including return air tickets and transit fares during the travel are to be covered by the participants;
- 4) The expenses of visa, medical care, insurances and daily subsistence allowance for the participants should be borne by the participants.
- 5) It should be taken into account when booking the flight tickets that the course will take place exclusively <u>from 21 to 25 Sep. 2019</u> Any liability or expense out of this term shall be entirely at the expense of the participants.

K. Insurance

The Organizer of the Training Course on **Familiarity with the WRF Model** does not hold any responsibility for such risks as loss of life, accidents, illness, and loss of property incurred during the whole period of participation in the training course.

• Please be informed that it is <u>not</u> possible to use visa cart in Iran. You can purchase only by cash

L. Deadline for application

• Application shall be submitted and reach RTC-Tehran no later than 21 Jul. 2019.

M. Liaison Information

1) Attn: M. Sc. Mohammad Jafari, WMO Regional Training Centre in Tehran, Islamic Republic of Iran Meteorological Organization, P. O. Box: 13185-461, Tehran, Iran.

Tel/Fax: +98-21-44787190 Email: mjafaria@gmail.com

2) Ms. Mina Jabbari, IRIMO Director of International Affairs Department, P. O.

Box: 13185-461, Tehran, Iran

Tel/Fax: +98-21-66070038

I.	Personal Data		
1.	Surname		
	Given Name		
2.	Gender		
3.	Date of Birth	Photo	
4.	Place of Birth		
5.	Passport Number		
	Nationality		
7.	Marital Status		
8.	Health Condition		
	History of infectious disease: ☐ No ☐ Yes		
	(Please specify if yes)		
10.	Address:		
	Mobile phone:		
	Telephone Fax		
	E-mail Address: @		
11.	Permanent Address:		
	Contact person in case of emergency		
	Name:		
	Address:		
	Mobile phone:		
	Telephone Fax		
	E-mail Address:@		
13.	Statement of present work		
	Name of institution		
	Present Position or Occupation		
	Brief description of duties		
14.	Previous employment history		
	Date Institution Position and Duties		
15.	Educational and/or professional qualification		
	Date Major and University Degree/Diploma		
16.	Language Proficiency		
	Mother Tongue		
	English Proficiency (Please tick):		
	Reading: a. excellent b. good c. fair d. poor		
	Listening: a. excellent b. good c. fair d. poor		
	Speaking: a. excellent b. good c. fair d. poor		
	Writing: a. excellent b. good c. fair d. poor	1 0.1	
17.	State why you wish to attend the course and indicate the practic	cal use of the course	to your

work in the future.
18. Does your Service have used WMO information System aspects in your responsibility area?
19. Does your Service provide Data services?
II. Financial Support Do you need local support from IRIMO if you are a participant from developing countries? Yes No
III. 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.
IV. 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 Iranian laws and will respect the local customs and follow the course regulations during my stay in Iran for the training course.
Signature of Applicant
Date
V. Endorsement of the Nominator 1. Name of Organization
2. Name and Signature of the Permanent Representative of WMO in your country: Name Signature Official Seal Date Date
VI. Contact Details Contact Persons: M. Sc. Mohammad Jafari, WMO Regional Training Centres – Tehran mjafaria@gmail.com Ms. Mina Jabbari, IRIMO Legal and International Affairs Department affairs.intl@gmail.com, mina747@gmail.com
Address: Islamic Republic of Iran Meteorological Organization, Meraj Ave., Mehrabad Airport, P. O. Box: 13185-461 Tehran, Iran Tel: +98-21-66070038

Introduction to the Principles of Data Assimilation

International Training Course on Introduction to the Principles of Data Assimilation will be held in Tehran <u>from 05 to 16 Oct. 2019</u> by the WMO Regional Training Canter in Tehran (RTC-Tehran), sponsored by the Islamic Republic of Iran Meteorological Organization (IRIMO).

A. Objectives

After passing the course, the participant will be able to implement the virtual Cluster and to run some forecasting models.

B. Date and Venue

from 05 to 16 Oct. 2019, WMO Regional Training Centre in Tehran, Iran.

C. Course Contents

- Introduction Atmosphere/ocean dynamics and data assimilation
- Introduction Statistical estimation, Bayesian statistics
- Statistical interpolation (OI)
- Hands on exercise, statistical interpolation
- Observing systems for numerical weather prediction
- Kalman filtering, Ensemble Kalman Filters (EnKF)
- Hands on exercise, EnKF with a simple Lorenz model
- Introduction to variational data assimilation, 3D-Var
- Background error statistics for variational methods
- 4D-Var, tangent-linear and adjoint models
- Hands on exercise, 4D-Var with a simple Lorenz model
- Why ensembles?
- Hybrid variational ensemble methods (LETKF included)
- Initialization
- AROME data assimilation for convective scale NWP
- Impact of observations, observability
- WRF variational data assimilation
- Hands on exercise on WRF data assimilation (or any other full scale model and data assimilation)

D. Training Format

• Lecture, group discussion, practical sessions, class task, etc.

E. Instructors

F. To be recommended by WMO

G. Language of Instruction

• The course will be only conducted in English.

H. Targeted Trainees

• Forecaster, Meteorological researcher.

I. Participants' Qualifications for Admission

- 1) Meteorologists with a minimum of 3 years' experience in Forecasting centres or meteorological research institutes.
- 2) Proficient in English.

J. Application and Admission

- 1) The applicants must be meteorologists who are working in the field of Meteorology and other related fields from Meteorological and Hydrological Services. The nominated candidates are requested to submit the Application Forms (annex I) to IRIMO Legal and International Affairs Department for examination and endorsement (affairs.intl@gmail.com)
- 2) Admission Notices will be issued to the accepted participants by e-mail by the IRIMO Legal and International Affairs Department.
- 3) Only accepted applicants that receive the Admission Notices endorsed by RTC-Tehran can participate in the training course.

K. Training Expenses

- 1) Tuition is free for all the accepted participants that receive the endorsed Admission Notices by IRIMO;
- 2) RTC-Tehran will provide local support to the accepted participants, including accommodation, meals, and local transportation.
- 3) The international travel costs including return air tickets and transit fares during the travel are to be covered by the participants;
- 4) The expenses of visa, medical care, insurances and daily subsistence allowance for the participants should be borne by the participants.
- 5) It should be taken into account when booking the flight tickets that the course will take place exclusively **from 05 to 16 Oct. 2019** Any liability or expense out of this term shall be entirely at the expense of the participants.

L. Insurance

The Organizer of the Training Course on **Introduction to the Principles of Data Assimilation** does not hold any responsibility for such risks as loss of life, accidents, illness, and loss of property incurred during the whole period of participation in the training course.

• Please be informed that it is <u>not</u> possible to use visa cart in Iran. You can purchase only by cash

M. Deadline for application

• Application shall be submitted and reach RTC-Tehran no later than **05** Aug. **2019**.

N. Liaison Information

1) Attn: M. Sc. Mohammad Jafari, WMO Regional Training Centre in Tehran, Islamic Republic of Iran Meteorological Organization, P. O. Box: 13185-461, Tehran, Iran.

Tel/Fax: +98-21-44787190 Email:mjafaria@gmail.com

2) Ms. Mina Jabbari, IRIMO Director of International Affairs Department, P. O.

Box: 13185-461, Tehran, Iran

Tel/Fax: +98-21-66070038

I.	Personal Data		
1.	Surname		
	Given Name		
2.	Gender		
3.	Date of Birth	Photo	
4.	Place of Birth		
5.	Passport Number		
	Nationality		
7.	Marital Status		
8	Health Condition		
	History of infectious disease: ☐ No ☐ Yes		
	(Please specify if yes)		
10.	Address:		
	Mobile phone:	·	
	TelephoneFax		
	E-mail Address: @		
11.	Permanent Address:		
	Contact person in case of emergency		
	Name:		
	Address:		
	Mobile phone:		
	Telephone Fax		
	E-mail Address:@		
13.	Statement of present work		
	Name of institution		
	Present Position or Occupation		
	Brief description of duties		
14.	Previous employment history		
	Date Institution Position and Duties		
	<u></u>		
15.	Educational and/or professional qualification		
	Date Major and University Degree/Diploma		
16.	Language Proficiency		
10.	Mother Tongue		
	English Proficiency (Please tick):		
	Reading: a. excellent b. good c. fair d. poor		
	Listening: a excellent b good c fair d poor		
	Speaking: a excellent b good c fair d poor		
1	Writing: a. excellent b. good c. fair d. poor	1 0.1	
1/.	State why you wish to attend the course and indicate the practic	cal use of the course to	your

work in the future.
18. Does your Service have used WMO information System aspects in your responsibility area?
19. Does your Service provide Data services?
II. Financial Support Do you need local support from IRIMO if you are a participant from developing countries? Yes No
III. 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.
IV. 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 Iranian laws and will respect the local customs and follow the course regulations during my stay in Iran for the training course.
Signature of Applicant
Date
V. Endorsement of the Nominator 1. Name of Organization
2. Name and Signature of the Permanent Representative of WMO in your country: Name Signature Official Seal Date Date
VI. Contact Details Contact Persons: M. Sc. Mohammad Jafari, WMO Regional Training Centres – Tehran mjafaria@gmail.com Ms. Mina Jabbari, IRIMO Legal and International Affairs Department affairs.intl@gmail.com, mina747@gmail.com
Address: Islamic Republic of Iran Meteorological Organization, Meraj Ave., Mehrabad Airport, P. O. Box: 13185-461 Tehran, Iran Tel: +98-21-66070038

Basics of Operational Marine Meteorology Forecasting

International Training Course on **Basics of Operational Marine Meteorology Forecasting** will be held in Tehran <u>from 09 to 13 Nov. 2019</u> by the WMO Regional Training Canter in Tehran (RTC-Tehran), sponsored by the Islamic Republic of Iran Meteorological Organization (IRIMO).

A. Objectives

After passing the course, the participant will be able to implement the virtual Cluster and to run some forecasting models.

B. Date and Venue

from 09 to 13 Nov. 2019, WMO Regional Training Centre in Tehran, Iran.

C. Course Contents

- Basic Marine Weather
- Measuring wind field from Space-Scatter meters
- Measuring wind and wave from space- Altimeters
- Fog in marine environment
- Ocean wave models
- Ship routing
- Medium Range Forecasting of tropical cyclones
- Frontal structures and severe winds in extra-tropical cyclones
- Rapid Cyclogenesis

D. Training Format

• Lecture, group discussion, practical sessions, class task, etc.

E. Instructors

Dr. M. Mohapatra

F. Language of Instruction

• The course will be only conducted in English.

G. Targeted Trainees

• Forecaster, Meteorological researcher.

H. Participants' Qualifications for Admission

- 1) Meteorologists with a minimum of 3 years' experience in Forecasting centres or meteorological research institutes.
- 2) Proficient in English.

I. Application and Admission

1) The applicants must be meteorologists who are working in the field of Meteorology and other related fields from Meteorological and Hydrological

Services. The nominated candidates are requested to submit the Application Forms (annex I) to IRIMO Legal and International Affairs Department for examination and endorsement (affairs.intl@gmail.com)

- 2) Admission Notices will be issued to the accepted participants by e-mail by the IRIMO Legal and International Affairs Department.
- 3) Only accepted applicants that receive the Admission Notices endorsed by RTC-Tehran can participate in the training course.

J. Training Expenses

- 1) Tuition is free for all the accepted participants that receive the endorsed Admission Notices by IRIMO;
- 2) RTC-Tehran will provide local support to the accepted participants, including accommodation, meals, and local transportation.
- 3) The international travel costs including return air tickets and transit fares during the travel are to be covered by the participants;
- 4) The expenses of visa, medical care, insurances and daily subsistence allowance for the participants should be borne by the participants.
- 5) It should be taken into account when booking the flight tickets that the course will take place exclusively <u>from 09 to 13 Nov. 2019</u> Any liability or expense out of this term shall be entirely at the expense of the participants.

K. Insurance

The Organizer of the Training Course on **Basics of Operational Marine Meteorology Forecasting** does not hold any responsibility for such risks as loss of life, accidents, illness, and loss of property incurred during the whole period of participation in the training course.

• Please be informed that it is <u>not</u> possible to use visa cart in Iran. You can purchase only by cash

L. Deadline for application

• Application shall be submitted and reach RTC-Tehran no later than **09 Sep. 2019.**

M. Liaison Information

1) Attn: M. Sc. Mohammad Jafari, WMO Regional Training Centre in Tehran, Islamic Republic of Iran Meteorological Organization, P. O. Box: 13185-461, Tehran, Iran.

Tel/Fax: +98-21-44787190 Email: mjafaria@gmail.com

2) Ms. Mina Jabbari, IRIMO Director of International Affairs Department, P. O.

Box: 13185-461, Tehran, Iran

Tel/Fax: +98-21-66070038

I.	Personal Data	
1.	Surname	
	Given Name	
2.	Gender	
3.	Date of Birth	Photo
4.	Place of Birth	
5.	Passport Number	
6.	Nationality	
7.	Marital Status	
8.	Health Condition	
	History of infectious disease: ☐ No ☐ Yes	
	(Please specify if yes)	
10.	Address:	
	Mobile phone:	
	Telephone Fax	
	E-mail Address:@	
11.	Permanent Address:	
12.	Contact person in case of emergency Name:	
	Address:	
	Mobile phone:	
	Telephone Fax	
	E-mail Address:@	
13.	Statement of present work	
	Name of institution	
	Present Position or Occupation	
	Brief description of duties	
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14.	Previous employment history	
14.	Date Institution Position and Duties	
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15.	Educational and/or professional qualification Date Major and University Degree/Diploma Language Proficiency	
15.	Educational and/or professional qualification Date Major and University Degree/Diploma Language Proficiency Mother Tongue	
15.	Educational and/or professional qualification Date Major and University Degree/Diploma Language Proficiency Mother Tongue English Proficiency (Please tick):	
15.	Educational and/or professional qualification Date Major and University Degree/Diploma Language Proficiency Mother Tongue English Proficiency (Please tick): Reading: a. excellent b. good c. fair d. poor	
15.	Educational and/or professional qualification Date Major and University Degree/Diploma Language Proficiency Mother Tongue English Proficiency (Please tick): Reading: a. excellent b. good c. fair d. poor Listening: a. excellent b. good c. fair d. poor	
15.	Educational and/or professional qualification Date Major and University Degree/Diploma Language Proficiency Mother Tongue English Proficiency (Please tick): Reading: a. excellent b. good c. fair d. poor	

work in the future.
18. Does your Service have used WMO information System aspects in your responsibility area?
19. Does your Service provide Data services?
II. Financial Support Do you need local support from IRIMO if you are a participant from developing countries? Yes No
III. 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.
IV. 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 Iranian laws and will respect the local customs and follow the course regulations during my stay in Iran for the training course.
Signature of Applicant
Date
V. Endorsement of the Nominator 1. Name of Organization
2. Name and Signature of the Permanent Representative of WMO in your country: Name Signature Official Seal Date Date
VI. Contact Details Contact Persons: M. Sc. Mohammad Jafari, WMO Regional Training Centres – Tehran mjafaria@gmail.com Ms. Mina Jabbari, IRIMO Legal and International Affairs Department affairs.intl@gmail.com, mina747@gmail.com
Address: Islamic Republic of Iran Meteorological Organization, Meraj Ave., Mehrabad Airport, P. O. Box: 13185-461 Tehran, Iran Tel: +98-21-66070038

Extraction of Remote Sensing Data for Meteorological and Hydrological Studies

International Training Course on Extraction of Remote Sensing Data for Meteorological and Hydrological Studies will be held in Tehran from 16 to 20 Nov. 2019 by the WMO Regional Training Canter in Tehran (RTC-Tehran), sponsored by the Islamic Republic of Iran Meteorological Organization (IRIMO).

A. Objectives

After passing the course, the participant will be able to implement the virtual Cluster and to run some forecasting models.

B. Date and Venue

from 16 to 20 Nov. 2019, WMO Regional Training Centre in Tehran, Iran.

C. Course Contents

- An overview of the primary basics and concepts of remote sensing and its components
- A review of the technology applications of remote sensing in the meteorological and hydrological studies
- Introducing types of satellite data and applied sensors in meteorological and hydrological studies
- Understanding the most widely used software in the field of remote sensing and how to work with one of them
- Designing and implementing an applied project in line with the expertise of the participants in course

D. Training Format

• Lecture, group discussion, practical sessions, class task, etc.

E. Instructors

Dr. Rahnama

F. Language of Instruction

• The course will be only conducted in English.

G. Targeted Trainees

• Forecaster, Meteorological researcher.

H. Participants' Qualifications for Admission

- 1) Meteorologists with a minimum of 3 years' experience in Forecasting centres or meteorological research institutes.
- 2) Proficient in English.

I. Application and Admission

- 1) The applicants must be meteorologists who are working in the field of Meteorology and other related fields from Meteorological and Hydrological Services. The nominated candidates are requested to submit the Application Forms (annex I) to IRIMO Legal and International Affairs Department for examination and endorsement (affairs.intl@gmail.com)
- 2) Admission Notices will be issued to the accepted participants by e-mail by the IRIMO Legal and International Affairs Department.
- 3) Only accepted applicants that receive the Admission Notices endorsed by RTC-Tehran can participate in the training course.

J. Training Expenses

- 1) Tuition is free for all the accepted participants that receive the endorsed Admission Notices by IRIMO;
- 2) RTC-Tehran will provide local support to the accepted participants, including accommodation, meals, and local transportation.
- 3) The international travel costs including return air tickets and transit fares during the travel are to be covered by the participants;
- 4) The expenses of visa, medical care, insurances and daily subsistence allowance for the participants should be borne by the participants.
- 5) It should be taken into account when booking the flight tickets that the course will take place exclusively **from 16 to 20 Nov. 2019** Any liability or expense out of this term shall be entirely at the expense of the participants.

K. Insurance

The Organizer of the Training Course on Extraction of Remote Sensing Data for Meteorological and Hydrological Studies does not hold any responsibility for such risks as loss of life, accidents, illness, and loss of property incurred during the whole period of participation in the training course.

• Please be informed that it is <u>not</u> possible to use visa cart in Iran. You can purchase only by cash

L. Deadline for application

• Application shall be submitted and reach RTC-Tehran no later than 16 Sep. 2019.

M. Liaison Information

1) Attn: M. Sc. Mohammad Jafari, WMO Regional Training Centre in Tehran, Islamic Republic of Iran Meteorological Organization, P. O. Box: 13185-461, Tehran, Iran.

Tel/Fax: +98-21-44787190 Email:mjafaria@gmail.com

2) Ms. Mina Jabbari, IRIMO Director of International Affairs Department, P. O.

Box: 13185-461, Tehran, Iran

Tel/Fax: +98-21-66070038

I.	Personal Data		
1.	Surname		
	Given Name		
2.	Gender		
3.	Date of Birth	Photo	
4.	Place of Birth		
5.	Passport Number		
	Nationality		
7.	Marital Status		
8.	Health Condition		
	History of infectious disease: ☐ No ☐ Yes		
	(Please specify if yes)		
10.	Address:		
	Mobile phone:		
	Telephone Fax		
	E-mail Address: @		
11.	Permanent Address:		
	Contact person in case of emergency		
	Name:		
	Address:		
	Mobile phone:		
	Telephone Fax		
	E-mail Address:@		
13.	Statement of present work		
	Name of institution		
	Present Position or Occupation		
	Brief description of duties		
14.	Previous employment history		
	Date Institution Position and Duties		
15.	Educational and/or professional qualification		
	Date Major and University Degree/Diploma		
16.	Language Proficiency		
	Mother Tongue		
	English Proficiency (Please tick):		
	Reading: a. excellent b. good c. fair d. poor		
	Listening: a. excellent b. good c. fair d. poor		
	Speaking: a. excellent b. good c. fair d. poor		
	Writing: a. excellent b. good c. fair d. poor	1 0.1	
17.	State why you wish to attend the course and indicate the practic	cal use of the course	to your

work in the future.
18. Does your Service have used WMO information System aspects in your responsibility area?
19. Does your Service provide Data services?
II. Financial Support Do you need local support from IRIMO if you are a participant from developing countries? Yes No
III. 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.
IV. 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 Iranian laws and will respect the local customs and follow the course regulations during my stay in Iran for the training course.
Signature of Applicant
Date
V. Endorsement of the Nominator 1. Name of Organization
2. Name and Signature of the Permanent Representative of WMO in your country: Name Signature Official Seal Date Date
VI. Contact Details Contact Persons: M. Sc. Mohammad Jafari, WMO Regional Training Centres – Tehran mjafaria@gmail.com Ms. Mina Jabbari, IRIMO Legal and International Affairs Department affairs.intl@gmail.com, mina747@gmail.com
Address: Islamic Republic of Iran Meteorological Organization, Meraj Ave., Mehrabad Airport, P. O. Box: 13185-461 Tehran, Iran Tel: +98-21-66070038

Identify the Atmospheric Fronts using Satellite Images

International Training Course on **Identify the Atmospheric Fronts using Satellite Images** will be held in Tehran <u>from 14 to 16 Dec. 2019</u> by the WMO Regional Training Canter in Tehran (RTC-Tehran), sponsored by the Islamic Republic of Iran Meteorological Organization (IRIMO).

A. Objectives

After passing the course, the participant will be able to implement the virtual Cluster and to run some forecasting models.

B. Date and Venue

from 14 to 16 Dec. 2019, WMO Regional Training Centre in Tehran, Iran.

C. Course Contents

• Identify the stages of formation amplification, weakening and also the shape of clouds and conceptual models of cold, hot, mixed, Anna, Kata fronts using satellite imagery

D. Training Format

• Lecture, group discussion, practical sessions, class task, etc.

E. Instructors

F. To be recommended by WMO

G. Language of Instruction

• The course will be only conducted in English.

H. Targeted Trainees

• Forecaster, Meteorological researcher.

I. Participants' Qualifications for Admission

- 1) Meteorologists with a minimum of 3 years' experience in Forecasting centres or meteorological research institutes.
- 2) Proficient in English.

J. Application and Admission

- 1) The applicants must be meteorologists who are working in the field of Meteorology and other related fields from Meteorological and Hydrological Services. The nominated candidates are requested to submit the Application Forms (annex I) to IRIMO Legal and International Affairs Department for examination and endorsement (affairs.intl@gmail.com)
- 2) Admission Notices will be issued to the accepted participants by e-mail by the IRIMO Legal and International Affairs Department.
- 3) Only accepted applicants that receive the Admission Notices endorsed by RTC-Tehran can participate in the training course.

K. Training Expenses

- 1) Tuition is free for all the accepted participants that receive the endorsed Admission Notices by IRIMO;
- 2) RTC-Tehran will provide local support to the accepted participants, including accommodation, meals, and local transportation.
- 3) The international travel costs including return air tickets and transit fares during the travel are to be covered by the participants;
- 4) The expenses of visa, medical care, insurances and daily subsistence allowance for the participants should be borne by the participants.
- 5) It should be taken into account when booking the flight tickets that the course will take place exclusively **from 14 to 16 Dec. 2019** Any liability or expense out of this term shall be entirely at the expense of the participants.

L. Insurance

The Organizer of the Training Course on **Identify the Atmospheric Fronts using Satellite Images** does not hold any responsibility for such risks as loss of life, accidents, illness, and loss of property incurred during the whole period of participation in the training course.

• Please be informed that it is <u>not</u> possible to use visa cart in Iran. You can purchase only by cash

M. Deadline for application

• Application shall be submitted and reach RTC-Tehran no later than 14 Oct. 2019.

N. Liaison Information

1) Attn: M. Sc. Mohammad Jafari, WMO Regional Training Centre in Tehran, Islamic Republic of Iran Meteorological Organization, P. O. Box: 13185-461, Tehran, Iran.

Tel/Fax: +98-21-44787190 Email:miafaria@gmail.com

2) Ms. Mina Jabbari, IRIMO Director of International Affairs Department, P. O.

Box: 13185-461, Tehran, Iran

Tel/Fax: +98-21-66070038

I.	Personal Data	
1.	Surname	
	Given Name	
2.	Gender	
3.	Date of Birth	Photo
4	Place of Birth	1 11010
5	Passport Number	
6	Nationality	
7	Marital Status	
8.	Health Condition	
9.	History of infectious disease: \square No \square Yes	
	(Please specify if yes)	
10.	Address:	
	Mobile phone:	
	TelephoneFax	
	E-mail Address:	
11.	Permanent Address:	
12.	Contact person in case of emergency	
	Name:	
	Address:	
	Mobile phone:	
	TelephoneFax	
	E-mail Address:@	
13	Statement of present work	
15.	Name of institution	
	Present Position or Occupation	
	Brief description of duties	
	Enter description of duties	
1.4	Previous employment history	
14.	Date Institution Position and Duties	
	Date institution I osition and Duties	
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15.	Educational and/or professional qualification	
10.	Date Major and University Degree/Diploma	
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16	Language Proficiency	
10.	Mother Tongue	
	English Proficiency (Please tick):	
	Reading: a. excellent b. good c. fair d. poor	
	Listening: a. excellent b. good c. fair d. poor	
	Speaking: a. excellent b. good c. fair d. poor	
	Writing: a. excellent b. good c. fair d. poor	
17.	State why you wish to attend the course and indicate the practic	al use of the course to your

work in the future.
18. Does your Service have used WMO information System aspects in your responsibility area?
19. Does your Service provide Data services?
II. Financial Support Do you need local support from IRIMO if you are a participant from developing countries? Yes No
III. 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.
IV. 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 Iranian laws and will respect the local customs and follow the course regulations during my stay in Iran for the training course.
Signature of Applicant
Date
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2. Name and Signature of the Permanent Representative of WMO in your country: Name Signature Official Seal Date Date
VI. Contact Details Contact Persons: M. Sc. Mohammad Jafari, WMO Regional Training Centres – Tehran mjafaria@gmail.com Ms. Mina Jabbari, IRIMO Legal and International Affairs Department affairs.intl@gmail.com, mina747@gmail.com
Address: Islamic Republic of Iran Meteorological Organization, Meraj Ave., Mehrabad Airport, P. O. Box: 13185-461 Tehran, Iran Tel: +98-21-66070038