

# BADAN METEOROLOGI KLIMATOLOGI DAN GEOFISIKA

PUSAT PENDIDIKAN DAN PELATIHAN

Jl. Angkasa I No. 2, Kemayoran, Jakarta Pusat 10720 Telp. (021) 6586 7058, Fax. (021) 6586 7058, Website: http://www.bmkg.go.id

Nomor : KP.02.00/064/KDL/V/2022 Jakarta, 25 Mei 2022

Sifat : SEGERA

Lampiran : 6 (enam) berkas

Hal : Tawaran mengikuti Pelatihan Daring Nanjing RTC (CMA-NUIST)

Juni - Oktober 2022

Yth. Bapak/Ibu (Mohon Periksa Lampiran I)

di

**Tempat** 

Berdasarkan informasi melalui email dari *China Meteorological Administration* (CMA) pada 17 Mei 2022, dengan hormat kami sampaikan bahwa CMA bekerjasama dengan *Nanjing University of Information Science and Technology* (NUIST) sebagai Nanjing WMO-RTC menawarkan *International Distance Training Courses of CMA Training Centre* 2022 pada periode Juni - Oktober 2022 secara daring.

Pelatihan ditujukan bagi para prakirawan, analis, peneliti, dosen, widysiswara, teknisi, praktisi dalam bidang Meteorologi, Klimatologi dan Geofisika dengan ketentuan tercantum pada **Lampiran**. Adapun pelatihan yang ditawarkan adalah:

- Online Training Course on Monitoring and Warning of Hydro-Meteorological Disasters, Nanjing, China, 13 - 24 Juni 2022;
- 2. *Online Training Course on Tropical Cyclone Forecast*, Nanjing, China, 27 Juni 8 Juli 2022;
- 3. *Training Course on Artificial Intelligence Technologies in Meteorology*, Nanjing, China 12 23 September 2022;
- 4. Online Training Course on The Application of Radar Data in Nowcasting High Impact Weather, Nanjing, China, 17 28 Oktober 2022

Sehubungan dengan hal tersebut, kami mohon bantuan Bapak/Ibu untuk dapat menginformasikan kesempatan pelatihan ini kepada seluruh pegawai yang berada di unit kerja masing-masing, dengan mempertimbangkan tugas pokok dan fungsinya.

Sebagai informasi, saat ini pendaftaran pelatihan daring CMA dilakukan secara langsung oleh peserta melalui website. CMA tidak lagi menerima permohonan pendaftaran dalam bentuk print-out/ hardcopy.

Untuk mengetahui dengan lebih lengkap terkait pelatihan ini, mohon dapat mencermati ketentuan pada **Lampiran**. Informasi lebih lanjut terkait beasiswa pelatihan ini silahkan menghubungi narahubung (*contact persons*) yang tercantum pada pengumuman pendaftaran masing-masing pelatihan.

Demikian disampaikan. Atas perhatian dan kerjasamanya kami ucapkan terima kasih.

Plh. Kepala Pusat Pendidikan dan Pelatihan,

Achmad Supandi

# Tembusan:

- 1. Kepala BMKG;
- 2. Sestama BMKG;
- 3. Kepala Biro Hukum dan Organisasi.

# Lampiran I Surat

Nomor : KP.02.00/064/KDL/V/2022

Tanggal : 25 Mei 2022

# **DAFTAR TUJUAN SURAT**

- 1. Para Kepala Pusat di lingkungan BMKG
- 2. Ketua STMKG;
- 3. Kepala Balai Besar MKG Wilayah I V;
- 4. Para Kepala UPT Meteorologi, Klimatologi dan Geofisika di seluruh Indonesia.

### Lampiran II Surat

Nomor : KP.02.00/064/KDL/V/2022

Tanggal: 25 Mei 2022

### **KETENTUAN PENDAFTARAN**

- Pelamar mencermati informasi terkait pelatihan dan berkonsultasi untuk mendapat persetujuan dari Kepala UPT/ Kepala BBMKG/ Kepala Pusat/ Ketua STMKG. Pelatihan yang akan diikuti harus sesuai dengan tugas pokok dan fungsi unit kerja dan job desk peserta. Untuk keberhasilan dan manfaat optimal dalam mengikuti pelatihan, diperlukan komitmen peserta untuk mengikuti dengan sungguh-sungguh pelatihan dimaksud;
- 2. Pelamar **membuat akun** dan melakukan **pendaftaran mandiri secara daring** melalui situs *virtual learning* CMA di alamat yang tertera pada pengumuman pelatihan sebelum tenggat pendaftaran dari masing-masing pelatihan. Pelamar yang diterima akan memperoleh surat pemanggilan lengkap dengan informasi tentang *Enrollment Key*.
- 3. Untuk tertib administrasi, setelah melakukan pendaftaran ke CMA, peserta juga mengirimkan *screenshot* bukti pendaftaran kepada Pusdiklat BMKG di alamat apply.rtcbmkg@bmkg.go.id dengan *subject email* [daftar\_nama pelatihan\_nama peserta].
- 4. Setelah dinyatakan lulus dan mendapat sertifikat, peserta agar kembali melaporkan statusnya kepada Pusdiklat BMKG dengan melampirkan sertifikat kelulusan ke alamat apply.rtcbmkg@bmkg.go.id subject email [sertfikat nama pelatihan nama peserta].
- 5. Untuk mengikuti pelatihan ini, tidak dipungut biaya.

#### 6. Penting: Tenggat Waktu proses:

Nama Pelatihan	Tenggat Waktu Pendaftaran (*)
<ol> <li>Online Training Course on Monitoring and Warni of Hydro-Meteorological Disasters, Nanjing, China 13-24 June 2022</li> </ol>	
<ol> <li>Online Training Course on Tropical Cyclone Forecast, Nanjing, China, 27 June – 8 July 2022</li> </ol>	20 June 2022 pukul 24.00 UTC

	Nama Pelatihan	Tenggat Waktu Pendaftaran (*)
3.	Training Course on Artificial Intelligence Technologies in Meteorology, Nanjing, China 12 – 23 September 2022	5 September 2022 pukul 24.00 UTC
4.	Online Training Course on The Application of Radar Data In Nowcasting High Impact Weather, Nanjing, China, 17 – 28 October 2022	10 Oktober 2022 pukul 24.00 UTC

<sup>\*</sup>Berkas tidak akan diproses apabila pendaftaran melewati tenggat waktu

### Lampiran III Surat

Nomor : KP.02.00/064/KDL/V/2022

Tanggal: 25 Mei 2022

# ONLINE TRAINING COURSE ON MONITORING AND WARNING OF HYDRO-METEOROLOGICAL DISASTERS

Nanjing, China, 13-24 June 2022

#### PRELIMINARY COURSE INFORMATION

Online Training Course on Monitoring and Warning of Hydro-meteorological Disasters is sponsored by China Meteorological Administration (CMA), and locally organized by WMO Regional Training Centre (RTC) Nanjing with Nanjing University of Information Science and Technology (NUIST).

# **Course Description**

The training course is designed to offer methodological and technical supports in hydrometeorological monitoring and forecasting for disaster prevention and reduction operations. The course will introduce basics of climate prediction and the connections between aquatic ecosystem and climate change, analyze on land-air interactions and elaborate on simulation of rainfall runoff and land surface modeling from a hydrological perspective. Finally, the course will cover operational topics on the prediction, forecasts, and risk management of major hydrological disasters, such as flood and drought with a view to enhance hydro-meteorological disaster prevention and mitigation competence of represented NMHSs.

# **Expected Learning Outcomes**

Upon completing the course, participants are expected to:

- Gain knowledge on climate prediction, climate change and its relevance with aquatic ecosystem;
- Develop understanding of land-air interactions and water cycle, rainfall runoff process and its simulation;
- Acquire skills of flood and drought prediction, forecast and risk management using modeling and simulation as well as weather radar network.

## **Course Format**

The online course will be delivered live via ZOOM. For participants with difficulty following live sessions due to time-zone differences, recorded sessions are available for viewing on RTC NJ's learning platform. Detailed instructions will be provided later.

**Target Audience** 

Officials, specialists and experts working in relevant fields at National Hydrological and

Meteorological Services (NMHSs) or equivalent institutions.

Instructors

Professors from Nanjing University of Information Science and Technology (NUIST) and senior

experts from China Meteorological Administration and its local meteorological services.

Working language

The course will be conducted remotely in English.

**Application, Attendance and Fees** 

1. Please visit https://www.wjx.top/vj/OB5A2mS.aspx to apply for this online course. Please

note the application may require some document scans, such as your ID photo and your

nomination letter (if applicable). Therefore, we suggest you to get them ready when you fill

the online form out since it doesn't not support "save now and edit later" functions.

2. Accepted applicants will be provided with access information to the online video

conferencing service.

3. Application for the course closes at UTC24:00 on 6 June 2022.

4. We provide electronic Certificates of Achievement to participants who attend at least 60%

of all course lectures/activities and submit a technical report on one or more topics covered

in the course (template to be provided).

5. The distance training course is free of charge to all officially admitted trainees.

**Contact Us** 

WMO Regional Training Centre Nanjing Office, Nanjing University of Information Science &

Technology, Nanjing, Jiangsu Province, 210044, China

Lampiran IV Surat

Nomor : KP.02.00/064/KDL/V/2022

Tanggal: 25 Mei 2022

### ONLINE TRAINING COURSE ON TROPICAL CYCLONE FORECAST

Nanjing, China, 27 June – 8 July 2022

#### **ENROLMENT INFORMATION**

Training Course on Tropical Cyclone Forecast is sponsored by China Meteorological Administration (CMA), and locally organized by WMO Regional Training Centre (RTC) Nanjing with Nanjing University of Information Science and Technology.

# **Course Description**

This course is an event including lectures on Tropical Cyclone Formation, Intensity Change of Tropical Cyclones, Dynamics of Tropical Cyclone Motion, Tropical Cyclone Structure and Rainbands, Application of Radar Data in Early Warning of Tropical Cyclone, Technological Advancements of Forecasting Tropical Cyclone, Application of Satellite Data Monitoring Tropical Cyclone, Climate Change and Tropical Cyclone Activity, Impact of Global Warming on Tropical Cyclones. It is also a good consolidating course for researchers in relevant fields of study.

#### **Expected Learning Outcomes**

Upon completing this course, participants shall have revisited the basic mechanisms of tropical cyclones and will be ready for their applications to tropical cyclone monitoring and forecast.

### **Course Format**

The online course will be delivered live via ZOOM. For participants with difficulty following live sessions due to time-zone differences, recorded sessions are available for viewing on RTC NJ's learning platform. Detailed instructions will be provided later.

#### **Target Audience**

Meteorologists engaged in operational work or research relevant to tropical cyclone and its forecasts from NHMSs of developing countries.

#### Instructors

Professors from Nanjing University of Information Science and Technology (NUIST) and senior experts from China Meteorological Administration and its local meteorological services.

# **Working language**

The course will be conducted remotely in English.

# **Application, Attendance and Fees**

- 1. Please visit https://www.wjx.top/vj/OB5A2mS.aspx to apply for this online course. Please note the application may require some document scans, such as your ID photo and your nomination letter (if applicable). Therefore we suggest you to get them ready when you fill the online form out since it doesn't not support "save now and edit later" functions.
- Accepted applicants will be provided with access information to the online video conferencing service.
- 3. Application for the course closes at UTC24:00 on 20 June 2022.
- 4. We provide electronic Certificates of Achievement to participants who attend at least 60% of all course lectures/activities and submit a technical report on one or more topics covered in the course (template to be provided).
- 5. The distance training course is free of charge.

#### **Contact Us**

WMO Regional Training Centre Nanjing Office, Nanjing University of Information Science & Technology, Nanjing, Jiangsu Province, 210044, China

Lampiran V Surat

Nomor : KP.02.00/064/KDL/V/2022

Tanggal: 25 Mei 2022

# TRAINING COURSE ON ARTIFICIAL INTELLIGENCE TECHNOLOGIES IN METEOROLOGY

Nanjing, China 12 – 23 September 2022

#### **ENROLMENT INFORMATION**

Training Course on Artificial Intelligence Technologies in Meteorology is sponsored by China Meteorological Administration (CMA), and locally organized by WMO Regional Training Centre (RTC) Nanjing with Nanjing University of Information Science and Technology.

# **Course Description**

To deliver more efficient, accurate and reliable meteorological information to social governance, service and disaster management, enhanced quality of meteorological forecasting and climate prediction is essential. This course is developed to introduce the applications of emerging technologies, such as Artificial Intelligence (AI), cloud computing, big data in meteorological observation, forecast and service, as well as and those of IoT technologies in atmospheric science with theoretical explanations and case studies with a view to promote the transformation from conventional physics-based forecasting into theoretical modeling-based and data-driven forecasting.

### **Expected Learning Outcomes**

Upon completing this course, participants will have gained:

- basics of AI-related algorithms featuring machine learning and their applications in atmospheric sciences including automatic observation and imagery recognition, short-range and now- casting and short-term climate prediction, convective weather recognition and early warning, remote sensing (RS) data retrieval and assimilation.
- knowledge of data processing and error correction of NWP products through ensemble forecasting and downscaling treatment, of forecasting precipitation and temperature, and alerting convective weather, and ENSO prediction with the use of related deep-learning algorithms.

- general understanding of the three pillars of Smart Meteorology (namely, IoT platform, big data analysis and Internet plus meteorological service) through acquiring knowledge on scenarios of IoT technologies in meteorology and their future trends.
- Understanding of platforms presenting visualized meteorological information.

#### **Course Format**

The online course will be delivered live via ZOOM. For participants with difficulty following live sessions due to time-zone differences, recorded sessions are available for viewing on RTC NJ's learning platform. Detailed instructions will be provided later.

# **Target Audience**

Meteorologists engaged in operational work or research relevant to tropical cyclone and its forecasts from NHMSs of developing countries.

#### Instructors

Professors from Nanjing University of Information Science and Technology (NUIST) and senior experts from China Meteorological Administration and its local meteorological services.

# Working language

The course will be conducted remotely in English.

# Application, Attendance and Fees

- 1. Please visit https://www.wjx.top/vj/OB5A2mS.aspx to apply for this online course. Please note the application may require some document scans, such as your ID photo and your nomination letter (if applicable). Therefore, we suggest you to get them ready when you fill the online form out since it doesn't not support "save now and edit later" functions.
- 2. Accepted applicants will be provided with access information to the online video conferencing service.
- 3. Application for the course closes at UTC24:00 on 5 September 2022.
- 4. We provide electronic Certificates of Achievement to participants who attend at least 60% of all course lectures/activities and submit a technical report on one or more topics covered in the course (template to be provided).
- 5. The distance training course is free of charge.

# **Contact Us**

WMO Regional Training Centre Nanjing Office, Nanjing University of Information Science & Technology, Nanjing, Jiangsu Province, 210044, China

Lampiran I Surat

Nomor : KP.02.00/064/KDL/V/2022

Tanggal: 25 Mei 2022

# ONLINE TRAINING COURSE ON THE APPLICATION OF RADAR DATA IN NOWCASTING HIGH IMPACT WEATHER

Nanjing, China, 17 – 28 October 2022

#### **ENROLMENT INFORMATION**

Training Course on the Application of Radar Data in Nowcasting High Impact Weather is sponsored by China Meteorological Administration (CMA), and locally organized by WMO Regional Training Centre (RTC) Nanjing with Nanjing University of Information Science and Technology.

# **Course Description**

This course is designed to help participants to master the basic theory and principles of meteorological radar and the dynamic mechanism of high impact weather (HIW). It also aims at improving participants' ability in HIW nowcast using radar data to mitigate the impact of HIW disasters on the socio-economic sustainable development.

# **Expected Learning Outcomes**

Upon completion of this training course, participants will have had a good understanding of knowledge and technologies relevant to radar detection, radar data quality control algorithms, radar data processing and product generations, radar data interpretation and analysis, assimilation of radar data, deep learning-based radar echo extrapolation, application of weather radar in nowcasting and warning of severe weather, internal and external user communication of meteorological information.

#### **Course Format**

The online course will be delivered live via ZOOM. For participants with difficulty following live sessions due to time-zone differences, recorded sessions are available for viewing on RTC NJ's learning platform. Detailed instructions will be provided later.

**Target Audience** 

Officials, meteorologists, and specialists working in relevant fields at National Hydrological and

Meteorological Services (NMHSs) or equivalent institutions.

Instructors

Professors from Nanjing University of Information Science and Technology (NUIST) and senior

experts from China Meteorological Administration and its local meteorological services.

**Working language** 

The course will be conducted remotely in English.

**Application, Attendance and Fees** 

1. Please visit https://www.wjx.top/vj/OB5A2mS.aspx to apply for this online course. Please

note the application may require some document scans, such as your ID photo and your

nomination letter (if applicable). Therefore we suggest you to get them ready when you fill

the online form out since it doesn't not support "save now and edit later" functions.

2. Accepted applicants will be provided with access information to the online video

conferencing service.

3. Application for the course closes at UTC 24:00 on 10 October 2022.

4. We provide electronic Certificates of Achievement to participants who attend at least 60%

of all course lectures/activities and submit a technical report on one or more topics covered

in the course (template to be provided).

5. The distance training course is free of charge to all officially admitted trainees.

Contact Us

WMO Regional Training Centre Nanjing Office, Nanjing University of Information Science &

Technology, Nanjing, Jiangsu Province, 210044, China