





## Nanjing University of Information Science & Technology

#### WMO Training Centre Nanjing China













## About NUIST

- Foundation of Nanjing Institute of Meteorology in 1960
- Renamed Nanjing University of Information Science & Technology (NUIST) in 2004
- Designated in 1978 as one of the key institutions of higher learning and reputed as "a cradle of meteorological personnel" in China
- A2 basic and special laboratories such as Key Laboratory of Meteorological Disasters and Sino-American Remote Sensing Laboratory
- > 24 departments or colleges, 12 scientific research institutions and one international training center
- > 30,000 students and over 1,300 faculty members on the campus
- Education programs for BSc, MSc, and doctoral degrees covering variety of disciplines are offered
- > Etc.







# Establishment of WMO RTC Nanjing China

- > First international training course, 1990
- > Recommendation by RA II (Asia), 1992
- >Approval by WMO Executive Council, 1993
- >Beijing Component, 2002
- > Twentieth anniversary of international training at WMO RTC Nanjing, 2010



## 20th Anniversary of International Training of WMO Regional Training Centre Nanjing, 1990-2010

11 May 2010





## Mission

Education and Training for improved Services for Weather, Climate and Water

WMO EDUCATION AND TRAINING PROGRAMME (ETP)

Assist Members, in particular from developing countries, in obtaining personnel specially educated and trained to Internationally agreed standards



in order to carry out the activities and operations of NMHSs required at the global, regional and national levels

For the effective provision of meteorological and hydrological services in support of sustainable development of Member countries.



### Objectives of WMO RTC Nanjing China



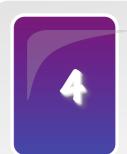
Capacity Building - Education & Training



To offer training courses for both foreign and Chinese meteorologists to upgrade their knowledge and technical skills in their routine operation and research work



To enhance academic exchanges and cooperation between meteorologists from China and other parts of the world



To make contributions to the world meteorological community



### We have had...

81 International training courses
27 Bilateral training courses
More than 2300 Trainees
144 Countries and Regions

Most trainees
become backbone
of NMHSs, a
number of them
are now Directors
of NMHSs



## Topics of Courses

- Application and Interpretation of Numerical Weather Prediction Products
- **♦ Long-term Weather Forecasting**
- ♦ Short-term Climate Prediction
- ♦ Meteorological Disaster Management and Emergency
  Services
- ♦ Radar Meteorology
- **♦** Satellite Meteorology
- Meteorological Instruments



## Topics of Courses

- ♦ Meteorological Management
- ♦ Meteorological Information Service,
- → Agro-meteorology
- ♦ Multi-hazard Early Warning
- ♦ Tropical Cyclone
- ♦ Climate Change and Impact
- **♦ Climate Information Services**
- **Weather Modification**
- **♦Others**



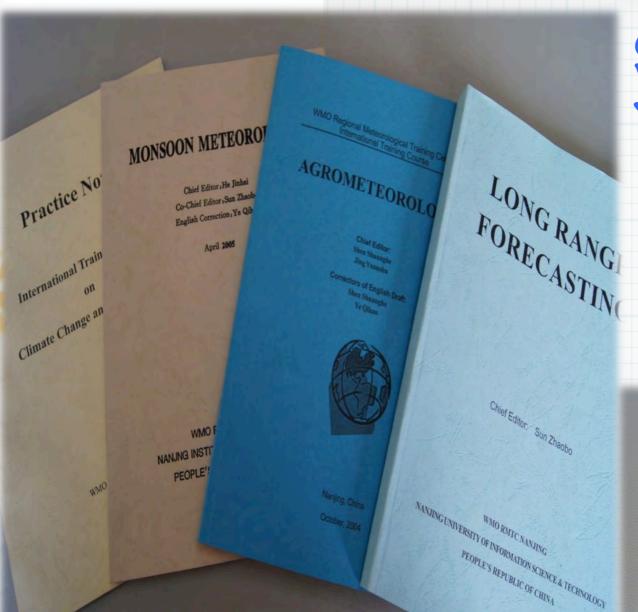






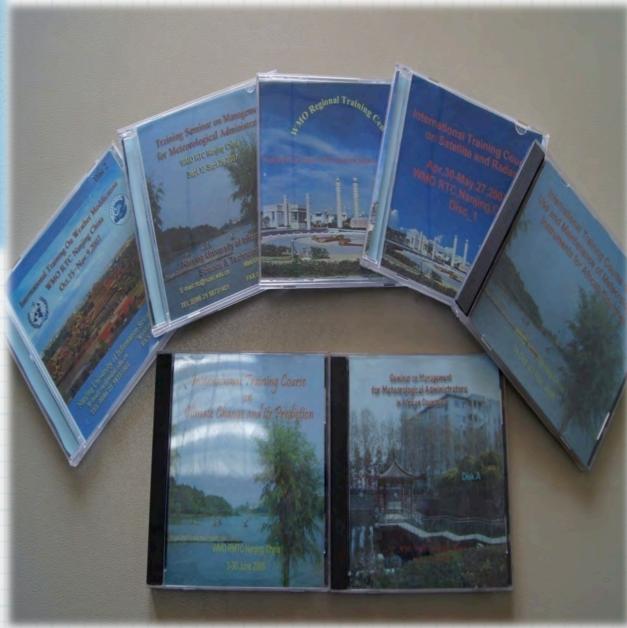
## WMO RTC Nanjing was designated as a Training Centre of UNESCAP/WMO Typhoon Committee





## Samples of Textbooks

Samples of Teaching CD-Rom



# Practice Bases for Training Course

- > Weather Forecasting Practicing Office
- > Atmospheric Observing Base
- > Computer Room
- > Doppler Radar
- > Lighting Protection Laboratory
- > Agro-meteorological Experiment Station
- Meteorological Bureaus of Shanghai, Jiangsu, Anhui
- > Companies and Factories such as Sichuang Electronic Corporation Limited
- > Etc.











**Visiting Lighting Protection Laboratory** 



The radar expert introducing the use of radar



Study tour Shanghai Met. Bureau



Visiting Sichuang Electronic Corporation Ltd

# We appreciate generous funding support from:

- Government of China
- ♦ NUIST
- ♦ WMO
- and Other



## All trainings can't run without hard work from lecturers of:

- ♦ NUIST
- Other Institutions (Universities)
- ♦ WMO
- WMO Members (NMHSs, Universities, Institutions, etc.)



#### **Bilateral Courses**

- 1. Singapore Dec. 2009 July 2010
- 2. Hong Kong, China March June
- 3. Morocco on Weather Modification 30 Mar. 15 April

#### International Courses

- 1. Multi-Hazard Early Warning 10-28 May
- 2. Meteorological Information Services 7 June-4 July
- 3. 7<sup>th</sup> International Seminar on Climate System and Climate Change 19 30 July (Cosponsor)
- 4. Numerical Weather Prediction 13 24 Sept.
- 5. Seminar on Managements for Meteorological Officials 13 Oct. -2 Nov.
- 6. South-South Cooperation on Weather and Climate 8-12 Nov.
- 7. TV Weather Programme (China, USA) Nov.-Dec.



#### International

- 1. Short-term Climate Prediction 28 March-8 April (Nanjing & Beijing)
- 2. Satellite Meteorology 18-29 April
- 3. Meteorological Multi-Hazard Early Warning 11-31 May
- 4. Management for Met. Officials 15 June- 5 July
- 5. Climate System & Climate Change 18-30 July. (Beijing with CMA)
- 6. Climate Change and Climate Inf. Services 30 Aug. -19 Sep.
- 7. Agro-meteorology 17 Oct.- 4 Nov.
- 8. Weather Modification 14-25 Nov.
- 9. Tropical Cyclone 5-16 Dec.
- 10. TC Ensemble Training 14-16 Dec. (with WMO & TC)

#### Bilateral

- 1. Hong Kong, China 21 March --- 17 June
- 2. Indonesia 12 Sept.--1 1 Oct.
- 3. Senegal two weeks Dec.



#### International

- 1. UFRM meeting of Typhoon Committee 13-14 Feb.
- 2. Short-term Climate Prediction 26 March- 7 April (Nanjing & Beijing)
- 3. Agro-meteorology 10-30 May
- 4. Radar Meteorology 11-22 June
- 5. Climate System & Climate Change 2-13 July
- 6. Climate Change and Climate Inf. Services 29 Aug. 18 Sept
- 7. Weather Forecasters 17-26 Sept.
- 8. Meteorological Multi-Hazard Early Warning 12 Oct-1 Nov.
- 9. TC Integrated Workshop 26-30 Nov.
- 10. Meteorological Satellite and its Application on DRR & Environment 2-22 Nov.
- 11. Management of Met. Disasters and Emergency Service of Met. Information 3-23 Dec.

#### Bilateral

Macao, China, Mozambique (Two Courses for Aeronautical met.)



#### International

- 1. International Workshop on Climate Data Requirements and Applications, 4-8 March
- 2. International Seminar on Methods of Short-term Climate Prediction, 1-10 April
- 3. Seminar on Climate Change and Climate Information Service for Developing Countries, 25 April-15 May
- 4. Training Course on Radar Meteorology for Developing Countries, 17 May-6 June
- Seminar on Management for Meteorological Officials from Developing Countries, 11 June
   July 2013
- 6. International Training Course on Use of Meteorological Instruments, 12-25 September
- 7. International Training Course on Tropical Cyclone Forecast, 14-25 October
- 8. WMO Interregional Training Workshop on Verification of Operational Seasonal Forecasts, 28 October-1 November
- 9. International Training Course on Agrometeorology28 October-8 November

#### **Bilateral**

Macao, China, Singapore

#### International

- 1. Seminar on Climate Change and Climate Information Service for African English-Speaking Countries, 16 April-13 May
- 2. International Training Course on Tropical Cyclone Forecast, 16–29 May
- 3. International Training Course on Use of Meteorological Instruments, 5-16 June
- 4. TC Training Workshop on Synergized Standard Operating Procedures for Coastal Multi-Hazard Early Warning System, 9-11 June
- 5. Seminar on Management for Meteorological Officials from African English -Speaking Countries, 13 June -3 July
- 6. Seminar on Meteorological Disaster Management and Weather Information Service for Latin-America, the Caribbean and the South Pacific 10-30 September
- 7. International Training Course on Agrometeorology 19-30 September

#### **Bilateral**

Seminar on Philippines Disaster Mitigation and Relief, 16-29 May

Seminar on Pakistan Meteorological and Earthquake Forecast, Mitigation and Relief, 13 October to 2 November

Macao, China



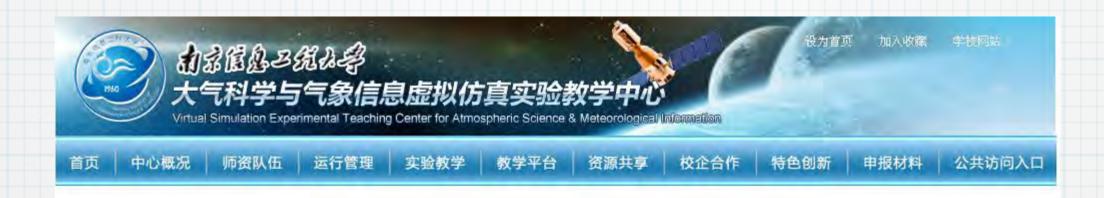
## Challenges Vs. Plans

- Increase the diversity of lecturers and courses;
- Further improve facilities;
- Resource mobilization and share online resources of WMO VLab;
- Develop the blended learning approaches and web-based courseware.



#### NUIST Virtual Simulation Experimental Teaching Center for Atmospheric Science & Meteorological Information

(http://dqxnfz.nuist.edu.cn/openlab/)







中心视频

more

- ·特逊英国雷丁大学气象学系Dr. Nicholas Pappas Klin...
- 。《美国业务资料分析系统GSI基础及应用技能培训》通
- 我校大气科学与环境气象实验教学中心获批成为国家级...
- 我校获批国家级大学生校外实践教育基地
- 。特邀美国夏威夷大学金飞飞教授和韩国首尔大学In-Sik...
- 。我校两门课程入选首批国家级精品资源共享课立项项目...
- 。我校再增一国家"千人计划"专家
- 。全国气象部门第15期地市级预报员轮训培训班(B班)...
- 。全国气象部门第16期新任预报员上岗培训班在我校开班...



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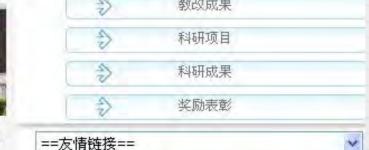




YMO南京区域培训...

气象楼

观测场显示屏



### Future

The WMO RTC Nanjing will continue to train meteorologists and meteorological officials for developing countries under the guidance and support of both WMO and CMA.

To strengthen the academic exchanges and cooperation on training meteorological personnel between RTC Nanjing and other RTCs as well as other WMO Members including Typhoon Committee to make more contributions to the development of meteorological community in the world.





## Thank You!

### WMO

Regional Training Centre Nanjing China

世界气象组织南京区域培训中心

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