

Weather Radar Applications in Nowcasting for Weather Forecasters

DWD, DLR, DHMZ, RNMA, ABoM, EC, ZAMG

Location

Classroom session in DWD Training and Conference Centre (BTZ), Langen, Germany

Application deadline

15 January 2017 (sharp)

Students

Students are divided in into two different levels:

- FULL student (attends BOTH distance and residence phase)
- ONLINE student (attends the distance phase ONLY)

The following rule is observed: a maximum of TWO online students from each applying organization are allowed, under the mandatory condition that at least one full student is accepted from the same organization.

Minimum amount of *full* students required: 12

Maximum amount of *full* students allowed: 20

Priority to participants from Eumetcal member organizations

Dates

Distance phase: 15 March - 17 May 2017 (8 weeks, 11 + 19 hours)

Classroom phase: 29 May - 02 June 2017 (5 days, 36 hours)

Tuition fee

500 EUR - for each *full* student

No fee for required for *online* student

Duration

8 weeks distance, 5 days in person with independents exercises.

Total equivalent about 70 hours of training

Objectives

- Improve the ability of the forecaster to diagnose relevant weather phenomena using weather radar products
- Improve the ability of the forecaster to correctly interpret radar images
- Increase awareness on the potential of modern weather radars in the forecasting process

Target Audience

Forecasters at meteorological and hydrological services

Prerequisites

- Some previous knowledge in operational weather forecasting, especially the use of radar products in forecasting and synoptic meteorology
- Strong motivation for personal development and/or interest in weather radar application
- Good skills in the English language

Language

The course will be given by international teachers in English. No translations will be offered and the participant is expected to be able to follow the teaching in English.

Contents of the Course

1. Diagnosis of weather phenomena in radar products (distance learning phase)
 - 1.1. Use of Doppler radars
 - 1.2. Non-meteorological echoes and other trouble
 - 1.3. Dual polarization radars
 - 1.4. Frontal systems
 - 1.5. Deep convection
 - 1.6. Drizzle and other shallow precipitation events
 - 1.7. Precipitation and orography
2. Case studies, students' presentations, group work and discussion in weather phenomena using radar products (classroom phase)

Teachers

- Wilfried Jacobs, German Meteorological Service, DWD
- Sorin Burcea, Romanian National Meteorological Administration, MeteoRomania
- Martin Hagen, German Aerospace Center, DLR
- Andreas Schaffhauser, Austrian Central Institute for Meteorology and Geodynamics, ZAMG
- Bojan Lipovscak, Hydrometeorological institute of Croatia, DHMZ
- Peter Stapleton, Australian Bureau of Meteorology BoM,
- Paul Joe, Environment Canada, EC

Structure of distance learning phase (online lectures + background material):

1. Introduction to tools and teachers
2. Use of Doppler radars
3. Non-meteorological echoes and other trouble
4. Dual polarization radars
5. Frontal systems
6. Deep convection
7. Drizzle and other shallow precipitation events
8. Precipitation and orography

Classroom structure

- Questions and answers from the distance learning phase
- Tools and techniques for case studies
- Students' presentations and discussion
- Case Studies, group work, presentations and discussion