



Deutscher Wetterdienst  
Wetter und Klima aus einer Hand



Royal Netherlands Meteorological Institute  
Ministry of Infrastructure and Water Management



## Synoptic and Mesoscale System Analyses

DWD, ZAMG, DHMZ, KNMI, Meteo Wing – BAF

### ***Dates:***

Distance phase: 11 January 2021 – 22 February 2021

### ***Duration:***

Seven sessions distributed over six weeks distance with independent exercises (totally 31 hours of training)

### ***Registration deadline:***

30 November 2020

In order to get access to this course you will need a contact person (i.e. your boss) that is aware about your participation.

### ***Target Audience:***

Forecasters at meteorological and hydrological services

### ***Students:***

Minimum amount of students: 12

### ***Tuition fee:***

No fees required

### ***Certificate:***

The course certificate will become available for downloading after successful completion of quizzes and homework.

### ***Objectives:***

- Improve the ability of the forecaster to diagnose relevant weather phenomena using weather satellite products together with other meteorological data sources
- Improve the ability of the forecaster to correctly interpret satellite images
- Increase awareness on the potential of modern satellite products in the forecasting process

***The course content is in accordance to the WMO-requirements “No 1083, BIP-M”***

*This course will focus on improving forecaster skills by using the available satellite data in synoptic and mesoscale analysis. Examples and cases will mainly refer to European and near adjacent Atlantic regions. The participants will learn to use the satellite imagery in combination with other meteorological data sources in order to interpret mid-latitude cyclones, fronts, frontal sub-structures, mesoscale features in cold air, summer convection, orographic features and shallow clouds*

***Language:***

The course will be held in English language. No translations will be available and the participant must be able to follow the course language.

***Prerequisites:***

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

***Your instructors:***

- Jurgen Buelens (Meteo Wing – BAF)
- Rob Groenland (KNMI)
- Vesa Nietosvaara (EUMETSAT)
- Andreas Wirth (ZAMG)
- Peter Schmitt and Wilfried Jacobs (DWD)

***Structure of the course:***

1. Opening
2. Cyclogenesis and fronts
3. Frontal sub-structures
4. Mesoscale features in cold air
5. Summer convection
6. Turbulence (gravity waves, lee waves, Foehn, etc.)
7. Shallow clouds and related weather phenomena

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