

## **Synoptic and Mesoscale Analysis of Satellite Images**

DWD, EUMETSAT, FMI, GeoSphere-Austria, KNMI, METEO WING-BAF

### ***Dates:***

*Distance phase: 23 October – 27 November 2023 (7 sessions, 6 asynchronous parts, 7 + 18 hours)*

*Classroom phase: 04 – 08 December (4.5 days, 40 hours)*

Classroom session at EUMETSAT, Darmstadt, Germany

### ***Duration:***

6 weeks distance 5 days in person with independent exercises.

Total equivalent 65 hours of training.

### ***Application deadline:***

27 August 2023 (sharp)

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

Forecasters at meteorological and hydrological services in Europe

### ***Students:***

Two categories have been defined:

- HYBRID student (attends BOTH distance and classroom phase)
- ONLINE student (attends the distance phase ONLY)

At least 12 hybrid students are necessary for arranging the classroom part.

Priority will be given to participants from Eumetcal member organizations.

Participants are expected to come to the classroom part with the support from their own institute. Travel support may be available for a limited number of participants.

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

No fee

**Objectives:**

- Improve the ability of the forecaster to diagnose relevant weather phenomena using weather satellite products
- 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”***

**Language:**

The course language will be English and translation will not be available. Each participant is expected to follow the teaching in English and to communicate in English.

**Prerequisites:**

- Some previous 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 weather radar application
- Good skills in the English language

**Teachers (planned):**

- Jurgen Buelens (Meteo Wing - BAF)
- Rob Groenland (KNMI)
- Wilfried Jacobs and Christian Herold (DWD)
- Vesa Nietosvaara (EUMETSAT)
- Petteri Pyykkö (FMI)
- Natasa Strelec-Mahovic (EUMETSAT)
- Andreas Wirth (GeoSphere-Austria)

**Structure of online phase (all with a playground session):**

- 1.1. Cyclogenesis and fronts
- 1.2. Frontal sub-structures
- 1.3. Mesoscale features in cold air
- 1.4. Summer convection
- 1.5. Atmospheric wave phenomena
- 1.6. Shallow clouds and related weather phenomena

**Principles of classroom phase:**

- Questions and answers from the distance learning phase
- Tools and techniques for case studies
- Exchange of experiences by students' presentation and discussion
- Case studies, group work, projects, presentations and discussion