



Training activities

User Support and
Climate **Services**
Division (USC)
jose.prieto@eumetsat.int



Training plan (2014-2018)

Priorities

Priority 1 - Member and Cooperating States
... and **WMO RA VI**

Priority 2 - Africa

Priority 3 - Other countries if council approves

Partnerships

Eumetcal, Eumetrain, WMO Virtual Lab

GMES, GEOSS, CEOS, African CoE

COMET, NOAA, INPE-CPTEC (Last course May 2015 in Brazil)

Training activities

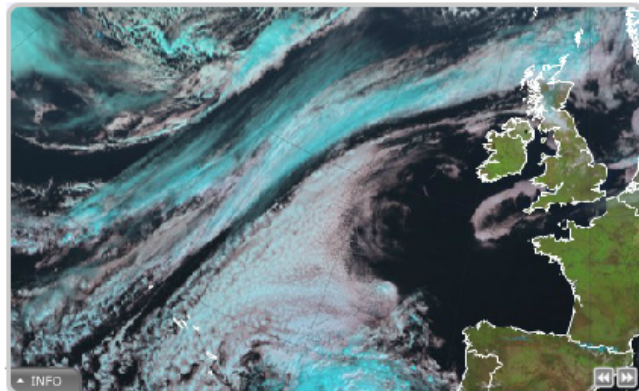


- For operational personnel from weather services
 - For hydrologists, climatologists, agro-meteorologists, trainers
 - Focus on
 - web guides, webcasts
 - interactive modules
 - blended courses
- training.eumetsat.int

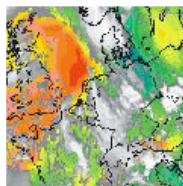


- <http://www.eumetcal.org/>
- EUMETCAL is the EUMETNET training project
- European Virtual Organisation for **Meteorological** Training with focus on courses
- <http://eumetrain.org>
- EUMeTrain is a project, similar to a SAF for training
- EUMeTrain produces training material and delivers training on **satellite meteorology**

Showcase



Recent Publications



Published: 7 April 2015

Product Tutorial on Total Precipitable Water Content Products

This product tutorial introduces the concept of total precipitable water and shows synoptic applications of TWP products.

[More \[+\]](#)

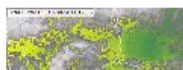


Published: 17 February 2015

Climatology of Snow Cover and Snow Water Equivalent

In this module you will learn how snow cover and snow water equivalent are determined by satellite instruments and how this data can be applied for regional climate studies.

[More \[+\]](#)



Published: 9 February 2015

Tutorial on SEVIRI Physical Retrieval

Upcoming Events!



Upcoming Monthly Weather Briefing

[Register now!](#)

Published: 05 May 2015

Convection Event Week - June 2015



From 8 to 12 June 2015, EUMeTrain organizes an event week on convection. During this week new remote sensing developments in the area of forecasting and/or analysing convective weather situations will be presented. Furthermore actual and/or past convective events will be analysed and discussed. Altogether this event week will give you an interesting insight into the world of convection – from the scientific and application-oriented point of view.

Registration is open!

[Find out more \[+\]](#)

Published: 09 April 2015

Training sessions – well-planned, active and effectively designed

20, 27 April & 7 May 2015 / online

Free and open access will be granted to a series of 45-minute online sessions focusing on planning and delivering training sessions.

> Monday 20 April – 12:00 UTC: Planning training sessions, what information do you need?

(Ivan Smiljanic - EUMeTrain; Maja Kuna - EUMETSAT)

[\(register here\)](#)

> Monday 27 April – 12:00 UTC: How do you make training sessions more active?

(Vesa Nietosvaara-EUMETSAT; Luciane Veeck - VLab)

[\(register here\)](#)

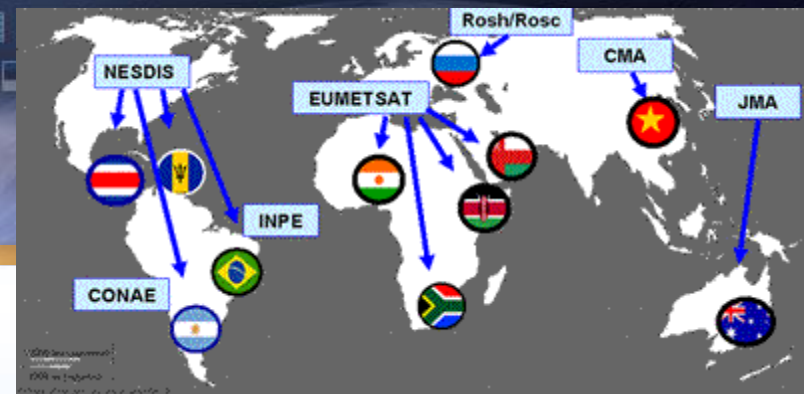
> Thursday 7 May – 9:00 UTC: Creating effective presentations.

Eumetrain.org

- Image+NWP archive
- Synoptic displays
- Event weeks
- Tutorials
- Advice on training

EUMETSAT

WMO Virtual Laboratory



- CGMS recommends satellite meteorology training with this structure
- Centres of Excellence in Niamey, Nairobi, Pretoria, Sao Paulo and Muscat.
- Training events (blended courses) and regional focus group discussions over the internet
- RTC Russia- RSHU and CIMH Barbados are current co-chairs
- **CALENDAR:**

<http://oislab.eumetsat.int/USDTT/webapps/public/listDetailed.jsp>



Virtual laboratory (WMO)



MONITORING WEATHER AND CLIMATE FROM SPACE

REGISTER/SIGN IN

SEARCH

HOME IMAGES ABOUT US SATELLITES DATA NEWS

QUICK LINKS

SIMPLE VIEW DETAILED VIEW LOGIN

VIRTUAL L

EUMETSAT TRAINING CALENDAR

DATA

DATA DELIVERY

PRODUCTS

REGIONAL DATA

GLOBAL DATA S

CLIMATE SERVI

METEOSAT DATA
SERVICES

THIRD PARTY

TRAINING

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RELATED TRAI

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RSS FEED

Training Bulle

EUMETSAT TRAINING EVENTS.

This view allows users to search for past, ongoing and future events, and also shows more information about all these events. The search form allows filtering the events by any field.

FILTER EVENTS

Start: End: Criteria: land Search

25 items found, displaying 21 to 25. [First/Prev] 1, 2, 3 [Next/Last]

| DATE | TITLE | LOCATION | WMO REGION | HOST | INITIATIVE | COE INVOLV. | TYPE | LEVEL | LANG. | ATTENDANCE | CONTACT |
|-------------------------------|--|-----------------------------|---------------------|---|------------------------|----------------|---------------------|----------|---------|---------------|-----------------------|
| 23/03/2015 - 27/03/2015 | Land SAF Satellite Products on Applications in Agro Meteorology | Addis Ababa, Ethiopia | I Africa | National Meteorological Agency of Ethiopia (NMA) | EUMETSAT USC, Other | | Classroom course | Advanced | English | By invitation | Jose Camacho |
| 19/11/2014 | NASA - Applied Remote sensing Training Program (ARSET) - 16:00 UTC | Online | IV North America | GEO | Other | | RFG discussion | Basic | Spanish | Open | Angelica Gutierrez |
| 01/12/2014 - 05/12/2014 | Droughts, Floods and Landslides - Event Week 2014 | Online | | EUMeTrain | EUMeTrain | | Event week | Basic | English | Open | Ivan Smiljanic |

You can find other training resources on the EUMETSAT website or via the Environmental Satellite Resource Center (ESRC), which is a searchable, database-driven web portal.





Cooperation with WMO Agricultural

Yearly courses for **soil** applications and **fire** impact
Niamey (2012), Ghana, Ouagadougou, Addis Ababa (2015),
Pretoria (2016)?

Focus on monitoring tools and techniques, software and work
practices

LSA SAF **support**

Extension to Europe
possibly under
LSA SAF **leadership?**

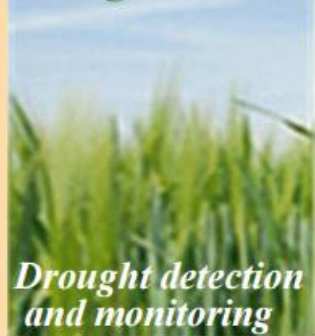




SALGEE: workshops on drought and fires

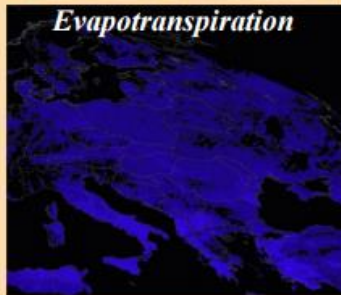
NIMH Applications: Monitoring Vegetation from Space *in combination with ground measurements & meteorological products*

■ Agriculture

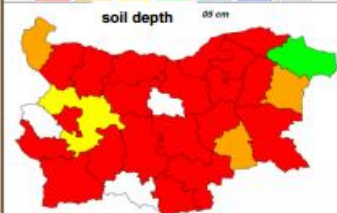


Drought detection and monitoring

Evapotranspiration

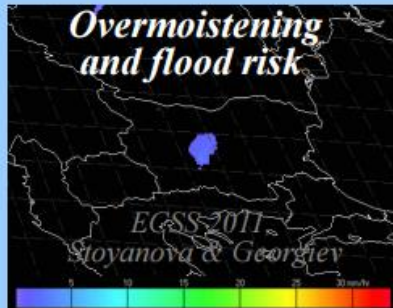


SOIL MOISTENING
wheat field/stubble
Drought SVAT_bg model
Wet



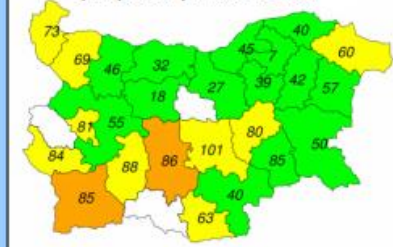
14.7.2011 18UTC

Overmoistening and flood risk



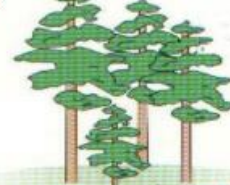
■ Environment

FLOOD RISK AT PRECIPITATION (mm)
wheat field/stubble SVAT_bg model
Drought Wet

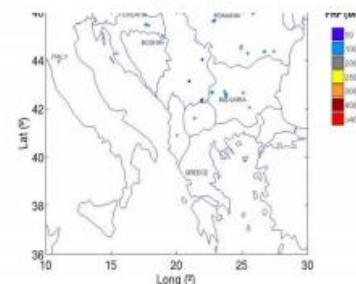


10.6.2011 18UTC

- **Active Fire**
/detection & monitoring/
- **Fire carbon emissions**
*/collaboration with IM Portugal
2011, Stoyanova & Barroso/*



Wildfire, ecosystems, and climate




Next event in Matera (Italy)
1-3 September 2015
IV SALGEE training workshop
(Julia.Stoyanova@meteo.bg)



Vegetation module

- Module on Vegetation monitoring foreseen
- Subject experts needed
- COMET expected to implement, as part of the ASMET series

**ASMET**
A EUMETSAT / COMET PROJECT

**AFRICAN SATELLITE METEOROLOGY
EDUCATION & TRAINING**

Home

ASMET Lessons

About ASMET

Development Process

Other Resources

Contact Us

ASMET Lessons

Recent ASMET lessons are online and on CD. Earlier lessons are available on CD only. To obtain a CD, email ops@eumetsat.int.

ASMET 8: Lessons under development on marine forecasting, forecasting landslides, and using climatology to forecast convection; publication expected summer 2015

ASMET 7 (2013, English and French, online and CD)

Three aviation weather case studies aimed at improving aviation forecasting in Africa. The case studies also support COMET's [Review of Aeronautical Meteorology – Africa](#) online learning curriculum, which provides training that supports the WMO/ICAO competencies for Aeronautical Meteorological Forecasters. The lessons are intended for aviation forecasters, general weather forecasters interested in aviation meteorology, and meteorological forecasting instructors and students.

[Forecasting Fog For Aviation: Kenya Case Study](#) / [Prevision du brouillard pour l'aviation: etude de cas du Kenya](#)

EUMETSAT

SAWS

KMS

EAMAC

METED

COMET

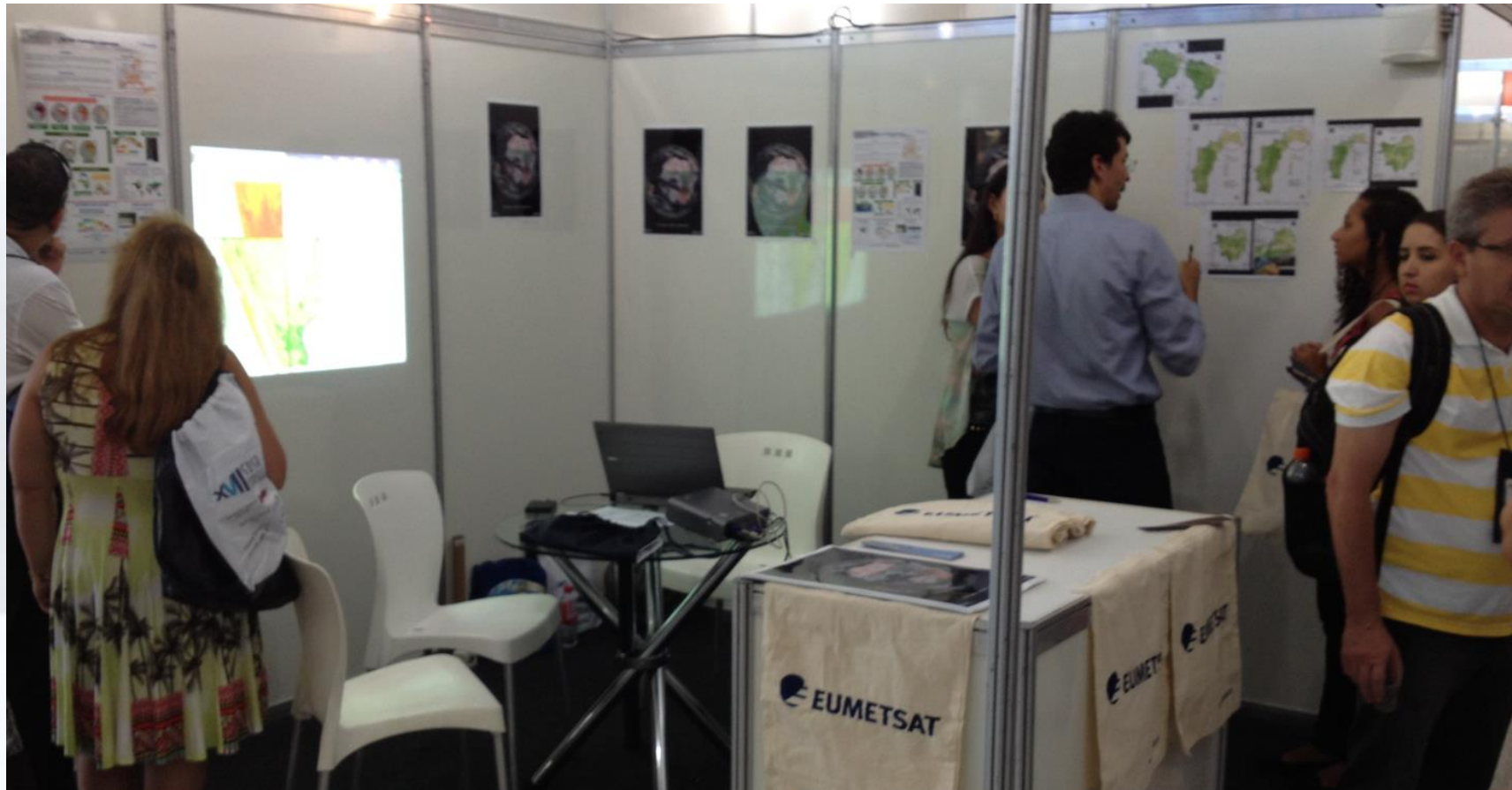


Training module

- Creation of a module
- “Agricultural applications of meteorological satellites”
- LSA SAF contribution required
- COMET in charge of module design and delivery
- Any contribution welcome



Brazilian symposium of remote sensing (SBSR XVII, Joao Pessoa)





EUMETCast Americas

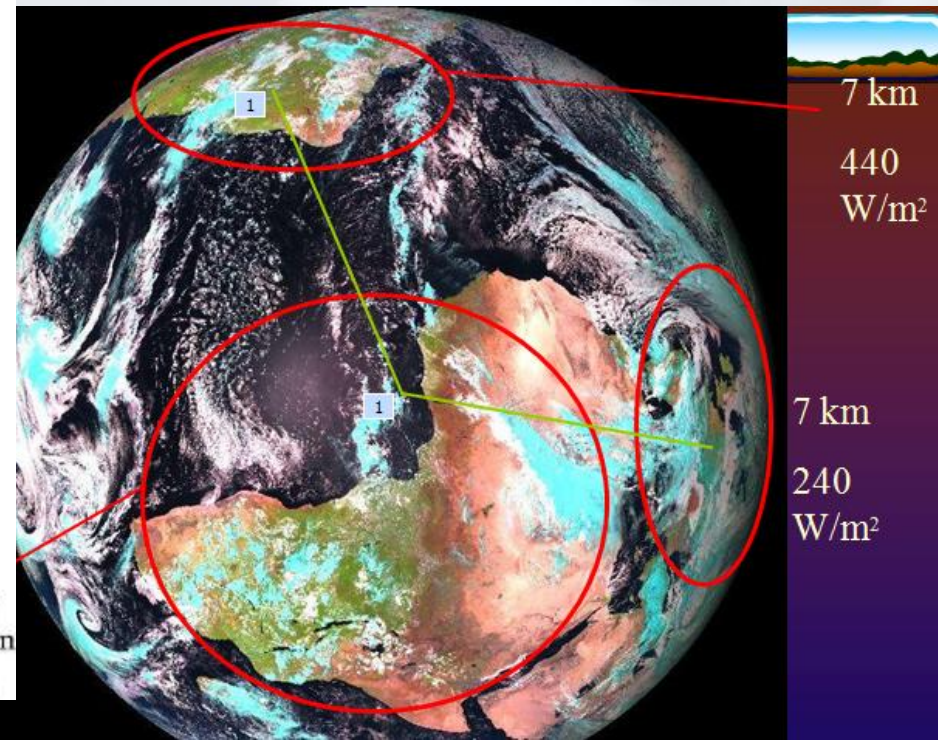


The Basque explorer Juan de la Cosa was employed as pilot and cartographer to Christopher Columbus, and around 1500 drew up the first map of the western hemisphere, in which the outlines of the Caribbean islands were clearly given.

W/m²


5G 1.5 and LSA SAF products
of the LSA SAF data

vice in 2016. What is the



Training and self-training Pages

See the EUMETSAT Web Pages at: [Home](#) → [What We do](#) → [Training](#)



EUMETSAT WHAT WE DO

Monitoring Weather, Climate and the Environment

- WHO WE ARE
- WHAT WE DO
- ACCESS TO DATA
- IMAGE GALLERY
- PUBLICATIONS
- MEDIA




Home > What We Do > Training > Distance Learning

Distance Learning

On this page a number of training sessions in the area of Satellite Meteorology are offered as teletraining sessions. The teletraining sessions utilise the VISITview software (see related links) where a PC with an Internet connection is required. A conference call or Voice over IP (VOIP) is used for the instructor and students to interact. The phone number and/or the VOIP contact details will be provided by email along with signup instructions.

The currently available training sessions are given in the list below. Please, click on the link under "Details" to get a full description of the session and the download instructions. If you want to participate in a training session, please check the **Schedule** for details as regards dates and times. If you prefer self-learning, you can download the training lesson to your local PC and open it in a local mode. More instructions are given in the PDF files under "Details".

Note: it is recommended to use a fast Internet connection for downloading. The files can be very large, typically around 50 MB. Downloading via an analogue modem is not appropriate.

| | |
|---|--|
|  | Title Airmass RGB |
| Author | Jochen Kerkmann |
| Duration | 90 min. Details  PDF, 43 KB |
|  | Title Early Detection of Rapid Cyclogenesis |

WHAT WE DO

- Cooperation
- Satellites
- EUMETCast
- Training**
 - Distance Learning**
 - Schedule
 - Resources
 - Events
 - SAFs
- EUMETSAT Basic Documents
- Data Policy
- Council Resolutions



Blended courses. Example: SAC-French for Africa

Distance and classroom phases

- Covering a period of three months
- Based on communication tools
- Moodle: repository of materials, activities and discussions (forum, chat, quiz, glossary, exercise, documents)
- Centra Saba: on-line presentations



Blended courses

➤ Moodle web page for the 2015 Satellite Meteorology course

➤ Examples in training.eumetsat.int

Course: Principles of Satellite Meteorology for Forecasters - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Links Correo Y

Address http://www.eumetsat.org/courses/course/view.php?id=135&edit=0&sesskey=n78YPZKBCd

Activities

- Assignments
- Chats
- Choices
- Forums
- Glossaries
- Quizzes
- Resources
- Wikis

Search Forums

Go

Advanced search

Administration

- Turn editing on
- Settings
- Assign roles
- Groups
- Backup
- Restore
- Import
- Reset
- Reports
- Questions
- Scales
- Files
- Grades
- Unenrol me from SatMet

My courses

Upcoming Events

- Eumetsat Satellite Meteorology Course
Monday, 20 April (09:00)
» Wednesday, 15 July (16:00)
- Quiz (Quiz closes)
Monday, 27 April (19:35)
Go to calendar...
New Event...

Satellite Meteorology. This course is developed by DWD and EUMETSAT with participation of experts from several institutes.

In this homepage you will find reading to prepare for the lectures, and also quizzes and assignments for your learning. The trainers will be available for the duration of the course to answer your questions through the forum and possibly through chats. You are welcome to participate in the discussions, and even in adding to the resources in this website.

NOTE: Times provided are UTC (universal time)

Here some references for all phases in the course:

- Course forum
- chat for any short discussion

General

- Course Dates and Objectives
- Presentations during the distance phases
- List of students
- Short enquiry
- Location of the BTZ training centre in Langen
- Way to the training location I
- Way to the training location II
- Where we are from
- Group photo

Pre-reading

- Script about former seminar on satellite meteorology in Langen
- Remote sensing book
- wiki

Quiz and glossary

- Quiz
- Glossary

1 Remote-Sensing distance week

21-27 April 2009

Topic: Remote sensing

0a. Online technical tutorial for teachers on Thu 16 April 13 UTC (Vesa Nietosvaara, VS)

0b. Online technical tutorial sessions 17 April 12 UTC/20 April 09 UTC (VS)

1. Online opening on 21 April at 12 UTC: Jose Prieto (JP)

Recording (exe)

27 28 29 30

Global events Course events
Group events User events

Latest News

Add a new topic...

24 Apr, 11:37
Timo Ryyppö
Glossary [more...](#)

26 Feb, 15:48
Wilfried Jacobs
Script about former satellite seminar in Langen uploaded [more...](#)

20 Jan, 11:02
Jose Prieto
teachers progress meeting on 5th Feb [more...](#)

9 Jan, 10:47
Jose Prieto
Welcome to this course! [more...](#)
[Older topics ...](#)

Recent Activity

Activity since Thursday, 23 April 2009, 03:13 PM
[Full report of recent activity...](#)

Course updates:

Updated Resource:
[Introductory reading \(DK\)](#)

New forum posts:

24 Apr, 11:37
Timo Ryyppö
"Glossary"

Random Glossary Entry

Weather
Atmospheric state in a place regarding heat, clouds and rain, humidity, insolation or wind.
[Add your own entry to the Glossary](#)

Blended courses

- Centrameeting screen-shot
- Centra is the online session manager
- Participants click on their home towns

Saba Centra 7 - Satellite course opening lesson (KNQ717572)

File Edit View Actions Tools Help

Pause Hand Yes No Laugh Applaud Step Out Agenda Appshare Survey Web Safari Whiteboard Text Chat Feedback

Audio Controls

Participants

Invite

| Microphone | Hand | Yes | No | Name |
|-----------------|-----------|----------------|--------|-----------------------|
| Microphone icon | Hand icon | Checkmark icon | X icon | Alessandro (Eumetc... |
| Microphone icon | Hand icon | Checkmark icon | X icon | Jochen |
| Microphone icon | Hand icon | Checkmark icon | X icon | Marianne Koenig |
| Microphone icon | Hand icon | Checkmark icon | X icon | prieto |
| Microphone icon | Hand icon | Checkmark icon | X icon | Vesa |
| Microphone icon | Hand icon | Checkmark icon | X icon | Wilfried |
| Microphone icon | Hand icon | Checkmark icon | X icon | zwatz-meise |
| Microphone icon | Hand icon | Checkmark icon | X icon | angela |
| Microphone icon | Hand icon | Checkmark icon | X icon | Bodo |
| Microphone icon | Hand icon | Checkmark icon | X icon | Hajo |
| Microphone icon | Hand icon | Checkmark icon | X icon | ivo |
| Microphone icon | Hand icon | Checkmark icon | X icon | Kostadinka_MK |
| Microphone icon | Hand icon | Checkmark icon | X icon | Kruno |

23

Agenda

Import

- Welcome to the opening meetin...
- Please, mark where you come fr...
- No Slide Title 3
- No Slide Title 4
- Distance phase

Please, mark where you come from. Use the symbol-★



Our training offer

- Subscription of **blended courses**, open to all institutes. The online phase is a filter for the classroom phase
- Participation in topical weeks (fog, mediterranean, convection,..) with **distance** presentations by international experts
- **Eumetrain** subscription: <http://eumetrain.org/> for meteorological briefings
- Invitation to contribute **cases** in your region to the web catalogue of meteorological applications



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Case analysis



IMAGES

REAL-TIME IMAGES

IMAGE LIBRARY

IMAGE GLOSSARY

FILTER BY

Feature

All

Country/Region

All

Satellite

All

Instrument

All

Month

All

Year

All

Product

All

Author

All

Collection

All

▶ APPLY

▶ RESET

EUMETSAT USERS TWITTER

Our image library contains imagery and case studies of weather phenomena and environmental events observed by EUMETSAT's fleet of weather satellites.

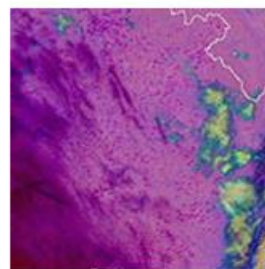
1058 RESULTS



EUROPEAN WEATHER APRIL 2015

30 April 2015

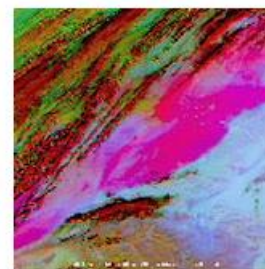
A movie of the weather over Europe during April 2015.



TRADITIONAL BELTANE FIRES SEEN BY METOP

30 April 2015

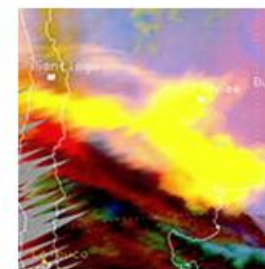
Hotspots from balefires in parts of Europe could be seen on the Metop image from 30 April.



LARGE DUST CLOUD OVER PARTS OF ASIA

27 April 2015

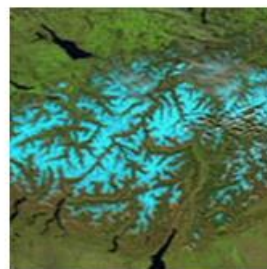
Both EUMETSAT satellites and the Japanese Himawari satellite saw a large dust outbreak over part of Asia at the end of April.



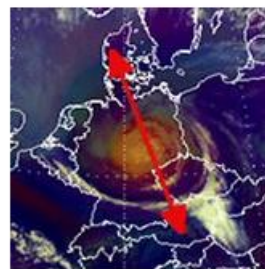
ERUPTION OF CALBUCO VOLCANO, CHILE

22 April 2015

Southern Chile's Calbuco volcano unexpectedly erupted for the first time in more than 40 years on 22 April, and then again early on 23 April.



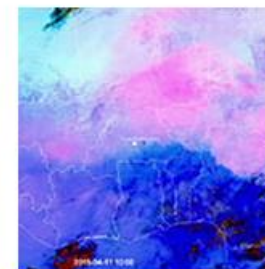
SNOW-COVERED



COLD POOL MOVES



WAVE CLOUDS OVER



LARGE DUST CLOUD

EUMETSAT



Any questions?

Thank you!