



CAPitalization and exploitation of RADar-based infrastructure and decision support system for environmental hazard management NETwork in the Adriatic and Ionian region

# **REPORT**

MyDewetra Training School





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	PROJECT DETAIL	
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### **1 Executive Summary**

The aim of this formation course was to provide training on MyDewetra Portal functions and applications, tailored for the personnel of each institution involved in the CapRadNet project, either partners or associates, and also to other institutions that are not member of CapRadNet but are located in the Adriatic eligible region. The training has been designed for both end users (hydro-meteorological experts, researchers) and ICT experts paying a special attention to support long-term sustainability of the platform.

MyDewetra platform is a real-time integrated system for hydro-meteorological and marine environmental monitoring and forecasting created by CIMA foundation, on behalf of the Italian Civil Protection Department. Since 2012, Dewetra platform is promoted by the Commission of Hydrology of the World Meteorological Organization as a systems for improving flood forecasting and warning.

The MyDewetra training school has been held in Tirana on November 8, 9 and 10 at the Tirana International Hotel. The training has been organized in two separated modules: the first one dedicated to end-users and the second one to ICT experts. Attendees have participated at one module or both modules depending on their interest, experience and skills. The training has encompassed both theoretical and operational/practical sessions on the different functionalities of the platform and the forecasting and observations systems available through MyDewetra.

### 1.1 Module for end users

The part of the course dedicated to end users has taken place on November 8<sup>th</sup> and 9<sup>th</sup> and it has focused on flood risk management, landslide risk management and marine environmental monitoring. The module has presented the newly-released MyDewetra Portal and the observational, forecasts and static data already available on the Dewetra2.0 and Seawetra2.0 applications. The module has been finalized through a "role-playing game" session i.e., a live exercise to learn the real-time operational usage of the Dewetra2.0 functionalities and capabilities, namely:

- real time data, e.g., weather and marine observations, hydrological, meteorological and meteo-marine forecast models, etc.
- 'static' information, e.g. slowly-varying layers such as infrastructures, elements at risk, vegetation cover, etc.
- new features, e.g., Dewetra2.0 User Guide and Seawetra2.0 User Guide

### 1.2 Module for ICT experts

The module dedicated to ICT experts has taken place on November 10<sup>th</sup> and has addressed system design and architecture, web services, the upload of new data to Dewetra2.0 (MyDewetra Metadata Publisher, MyDewetra Data Publisher) and the general maintenance of the system. ICT experts should have experience with Ubuntu, Apache/Tomcat, PostGre and GIS systems.

The courses have been tailored in order to meet specific objectives and needs of the trainees and their level of expertise, on the basis of participants' CVs.

### 1.3 Participants and Monitoring

The end-users course has been attended by 28 persons (day 1) and 22 persons (day 2); 18 trainees participated to the ICT-dedicated part (day 3).

As a result of the experience gained through the years, the feedback of the participants plays a key role in the evaluation of the course: tutors of CIMA Foundation, namely Anduela Kaja, has monitored the participants.

The results of the monitoring is reported in a dedicated paragraph, yet we here anticipate a short summary of the results. On a scale from 1 (very unsatisfied) to 5 (very satisfied):

- 0 evaluations out of the total rated 1 any General Aspect or Training Topic (0%)
- 0 evaluations out of the total rated 2 any General Aspect or Training Topic (0%)
- an average of 6% of the attendance rated 3 any General Aspect or Training Topic
- an average of 29% of the attendance rated 4 any General Aspect or Training Topic
- an average of 65% of the attendance rated 5 any General Aspect or Training Topic

This document contains a description of training activities, with emphasis to the topics addressed during class lectures and training on the job sessions. At the end of the course a pen drive containing all the material shown during the class lectures has been distributed to the trainees.

# 2 Detailed description of the training activity

The training program has covered three days, encompassing both class lectures and training on the job. The lectures have been given in English.

### 2.1 Overview of training programme

As reported in the section dedicated to the program timetable, the class lecture and the training on the job have been carried out during a three-day training program.

The program has covered 7 main topics reported in Table 1, in compliance to what reported in the agenda sent in attachment to the invitation to the training school.

TOPICS
1 – Satellite products
2 – Radar products
3 – Landslide-related products
4 – Marine environment monitoring
5 – Meteorological modelling
6 – Hydrological modelling
7 – MyDewetra2.0 design and architecture

**Table 1:** Description of the topics covered in the frontal lectures.

The program of the class lectures is summarized in Table 2, while the detailed timetable of the program is reported in ANNEX A TIMETABLE OF THE PROGRAMME.

Researchers of the project's beneficiary institutions (CIMA Foundation, CETEMPS, Geologic Survey of Slovenia, Hydro-Meteorological Service of Croatia) have been chosen as lecturers to the course. For the Day 2 of the end users-dedicated course a representative of ARPAL/CFMI-PC (the Ligurian regional hydro-meteorological authority) has been invited in order to share the good practices and procedures of the operational early warning system of the most advanced regional services in Italy. Photographic documentation of the training sessions is reported in ANNEX B PHOTO REPORTING OF THE TRAINING.

Tonio	DAY 1
Topic	Tuesday, 08/11/2016
	Lecturer:
	L. Molini
	(CIMA Foundation – on behalf of Regione Marche
	Civil Protection)
Satellite products	
	Hands-on session
	(MSG products)
	Lecturer:
	S. Barbieri
	(CETEMPS)
	(32.23)
	Lecturer:
	D. Cimini
Radar products	(CNR-IMAA)
	(SMC1777)
	Hands-on session
	(Italian National Radar Network, MICRAdria,
	RAPP)
	,
	Lecturer:
	M. Jemec-Auflic
	(Geologic Survey of Slovenia)
Landslide-related topics	
-	Hands-on session
	(Landslide prediction model for Slovenia)
	Lecturer:
Marine Environment Monitoring	P. Tepsich
	(CIMA Foundation)
	Hands-on session
	(SeaWetra 2.0 live demonstration)
	,
1	

**Table 2** Summary of the timetable of the training for end users (Day1)

<b>-</b> •	DAY 2
Topic	Wednesday, 09/11/2016
	Lecturer:
	S. Gabellani
	(CIMA Foundation)
	Lecturer:
	F. Giannoni
	(ARPAL/CFMI-PC)
Hydrological modelling	
	Lecturer:
	A. Lombardi
	(CETEMPS)
	Hands-on session
	(FloodPROOFs model: implementation on the
	Drini-Buna basin)
	Lecturer:
	K. Horvath
Maka anala ni aslama da liba a	(Hydro-Meteorological Service of Croatia)
Meteorological modelling	Hands-on session
	(COSMO-I7, Aladin, WRF-Adria)
	Hands-on session
	(forecasting and monitoring of a real case
Operational use of Dewetra 2.0	study – Marche, 22/03/2016)

**Table 3** Summary of the timetable of the training for end users (Day2)

Tania	DAY 3	
Торіс	Thursday, 10/11/2016	
Dewetra2.0 design and analysis techniques	Lecturer: P. Campanella (CIMA Foundation)  Hands-on session (Trainers: P. Campanella, A. Libroia, CIMA Foundation)	
Dewetra2.0 data server architecture	Lecturer: P. Campanella (CIMA Foundation)  Hands-on session (Trainers: P. Campanella, A. Libroia, CIMA Foundation)	
Publication of static and dynamic data into  Dewetra 2.0  (MyDewetra Data Manager)	Lecturer:  L. Rossello  (CIMA Foundation)	
MyDewetra2.0 Metadata Manager	Lecturer:  L. Rossello  (CIMA Foundation)	

Table 4 Summary of the timetable of the training for ICT experts (Day3)

# 2.2 End users-dedicated course - Day 1

This section describes the general content of each topic, reports on the daily activity of the training and contents the list of participants for Day 1 of the course.

Day 1 was attended by 28 persons, as summarized in the following table.

Participant	Organization	Country
Raffaele Lidori	CETEMPS	Italy
Stefano Barbieri	CETEMPS	Italy
Nenad Antolovic	University of Dubrovnik	Croatia
Eriona Shabani	Albanian Geological Survey	Albania
Rezarta Avxhi	Albanian Geological Survey	Albania
Donald Deda	Albanian Geological Survey	Albania
Atanas Ugrinski	Hydro-Meteorological Service of Macedonia	Macedonia
Gligor Milevski	Hydro-Meteorological Service of Macedonia	Macedonia
Ermela Kraja	Technical Secretariat of the National Water Council	Albania
Domenico Cimini	CNR-IMAA	Italy
Amparo Samper Hiraldo	IGEWE	Albania
Rovena Meloja	Technical Secretariat of the National Water Council	Albania
Martin Podboj	Geological Survey of Slovenia	Slovenia
Mateja Jemec-Auflic	Geological Survey of Slovenia	Slovenia
Blazenka Matjacic	Hydro-Meteorological Service of Croatia	Croatia
Toni Jurlina	Hydro-Meteorological Service of Croatia	Croatia
Vladimir Malovic	Hydro-Meteorological Service of Croatia	Croatia
Orland Muca	KESH	Albania
Liljana Lata	IGEWE	Albania
Arbesa Kombari	KESH	Albania

Kalin Lovro	Hydro-Meteorological Service of Croatia	Croatia
Olgert Jaupaj	Albanian Geological Survey	Albania
Marsel Veli	Technical Secretariat of the National Water Council	Albania
Miriam Berti	IZSAM	Italy
Massimo Ciampani	IZSAM	Italy

**Table 5** List of the trainees that attended Day 1 of the MyDewetra Training School.

On Day 1 the trainees have been lectured about the Satellite products, the Radar products, the Landslide-related products and the Marine environment monitoring products available through MyDewetra portal. The main topics of each lecture are summarized in the next tables.

Lecture	Satellite products – MSG composites	
Lecturer	Luca Molini	
	- Summary of the MSG composites available in MyDewetra	
	- MSG Dust: applications, area, time, interpretation of colours	
	- MSG Day Natural Colours: applications, coverage, time resolution,	
	interpretation of colours	
	- MSG Airmass: applications, coverage, time resolution,	
Topics	interpretation of colours	
	- MSG Day Solar: applications, coverage, time resolution,	
	interpretation of colours	
	- MSG HRV Convective: applications, coverage, time resolution,	
	interpretation of colours	

Lecture	Radar products - MICRAdria	
Lecturer	Domenico Cimini	
Topics	<ul> <li>MicrAdria: merging satellite and radar observations</li> <li>Observing platforms: raingauge, weather radars, satellites</li> <li>MeteoSat and SEVIRI</li> <li>A Microwave Infrared Combined Rainfall Algorithm (MICRA)</li> <li>MicrAdria approach:         <ul> <li>flowchart</li> <li>timeline</li> <li>statistical integration</li> <li>known limitations</li> </ul> </li> <li>MicrAdria to MyDewetra</li> </ul>	

Lecture	Radar products - RAPP	
Lecturer	Stefano Barbieri	
Topics	<ul> <li>Radar: Principles of operation</li> <li>Hydrometeors classification algorithms: single polarization and dual polarization advantages:</li> <li>The operational radar installations in the CapRadNet Project and their features</li> <li>RAPP processing chain (for single and dual polarization)</li> <li>Dual polarization chain: Quality check (φ<sub>DP</sub> filtering, path attenuation)</li> <li>Bayesian metrics for Hydro Classification (BRAHC)</li> <li>Dual polarization chain: Rain estimation</li> <li>Dual polarization chain: Nowcasting</li> <li>Single polarization chain: Rain estimation</li> <li>Single polarization chain: Rain estimation</li> <li>Single polarization chain: Nowcasting</li> <li>Single polarization chain: Nowcasting</li> </ul>	

Lecture	Landslide-related products – Landslide Prediction Model for Slovenia	
Lecturer	Mateja Jemec-Auflic	
Topics	<ul> <li>Mapping hydrogeological risk due severe weather:         <ul> <li>Elaboration of Landslide susceptibility map for Croatia</li> <li>Landslide prediction system in Slovenia</li> </ul> </li> <li>What are landslides and what cause a landslides?         <ul> <li>Why study them?</li> <li>Occurrences in Slovenia</li> </ul> </li> <li>Prevention         <ul> <li>Hazard mapping</li> <li>Landslide prediction system</li> </ul> </li> <li>Practical Exercises         <ul> <li>Using parameters (rainfall thresholds, rainfall thresholds)</li> <li>Validation</li> </ul> </li> <li>Implementation of the products in MyDewetra</li> </ul>	

Lecture	Marine Environment Monitoring – SeaWetra 2.0
Lecturer	Paola Tepsich
Topics	<ul> <li>Introduction to SeaWetra2.0, an integrated system for Mediterranean Marine Ecosystem Monitoring and Conservation</li> <li>Overview of the CMEMS environmental datasets available in SeaWetra2.0:         <ul> <li>Mediterranean sea physics analysis and forecast</li> <li>Mediterranean sea biogeochemistry analysis and forecast</li> <li>Mediterranean sea L4 gridded maps nrt sla</li> <li>Mediterranean sea surface chlorophyll concentration from satellite observations</li> <li>Mediterranean sea high resolution and ultra high resolution sea surface temperature analysis</li> <li>Global ocean wind L4 nrt 6-hourly observations</li> </ul> </li> </ul>

# 2.3 End users-dedicated course - Day 2

This section describes the general content of each topic, reports on the daily activity of the training and contents the list of participants for Day 2 of the course.

Day 2 was attended by 22 persons, as summarized in the following table.

Participant	Organization	Country
Raffaele Lidori	CETEMPS	Italy
Stefano Barbieri	CETEMPS	Italy
Nenad Antolovic	University of Dubrovnik	Croatia
Ervisjana Tahirllari	Albanian Geological Survey	Albania
Rezarta Avxhi	Albanian Geological Survey	Albania
Donald Deda	Albanian Geological Survey	Albania
Atanas Ugrinski	Hydro-Meteorological Service of Macedonia	Macedonia
Gligor Milevski	Hydro-Meteorological Service of Macedonia	Macedonia
Amparo Samper Hiraldo	IGEWE	Albania
Martin Podboj	Geological Survey of Slovenia	Slovenia
Mateja Jemec-Auflic	Geological Survey of Slovenia	Slovenia
Blazenka Matjacic	Hydro-Meteorological Service of	Croatia
Bidzenka Matjacie	Croatia	Croatia
Vladimir Malovic	Hydro-Meteorological Service of	Croatia
	Croatia	
Orland Muca	KESH	Albania
Liljana Lata	IGEWE	Albania
Arbesa Kombari	KESH	Albania
Orjeta Jaupaj	IGEWE	Albania
Miriam Berti	IZSAM	Italy
Massimo Ciampani	IZSAM	Italy
Danjela Bubanja	Institute of Hydrometeorology	Montenegro
Danjeia Dubanja	and Seismology	Plottellegio
Kristian Horvath	Hydro-Meteorological Service of Croatia	Croatia

Qyrana Blerina	Technical Secretariat of the	Albania
Qyrana bienna	National Water Council	Alballa

**Table 6** List of the trainees that attended Day 2 of the MyDewetra Training School.

On Day 2 the trainees have been lectured about the numerical weather forecast models and the hydrological models available through MyDewetra portal and on the Ligurian Operational flood forecasting chain supporting the Warning system at regional scale. The main topics of each lecture are summarized in the next tables.

Lecture	Numerical Weather Prediction Models – Aladin					
Lecturer	Kristian Horvath					
	- Introduction to the NWP model Aladin: the Aladin consortium					
	- The operational NWP chain at DHMZ					
	- Data assimilation: objective/subjective verification techniques					
	- Dynamics and coupling: effects of the non-hydrostatic formulation					
Topics	- Climate and dynamical downscaling					
	- Post-processing tools and techniques					
	- Current and future outlooks					
	- Coupling Aladin with Ocean Models: wave forecasting in the Adriatic					
	Sea					

Lecture	Hydrological Models - FloodPROOFs						
Lecturer	Simone Gabellani						
Topics	<ul> <li>The FloodPROOFS forecasting chain</li> <li>Scales and Uncertainty: meteorology vs hydrology</li> <li>The probabilistic approach of FloodPROOFs: Control Run, Deterministic Run and Probabilistic Run</li> <li>The initialization of the model through observations (radar and weather stations data)</li> <li>Meteorological inputs and snow modelling through S3M</li> <li>Calibration and validation techniques</li> <li>The operational implementations of FloodPROOFs: Marche and Drini-Buna</li> </ul>						

Lecture	Hydrological Models - CHyM						
Lecturer	Annalina Lombardi (through Skype telcon)						
Topics	<ul> <li>CHyM architectural characteristics: runoff, melting evapotranspiration, interception, infiltration, rainfall, return flow</li> <li>the effects of climate change on hydrological cycle</li> <li>Parametrization of the physical processes contributing to hydrological cycle</li> <li>The application of cellular automata theory to CHyM</li> <li>Flood alert mapping through CHyM</li> <li>Flood alarm indices: BDD and CAI</li> <li>Case Studies and validation</li> <li>CHyM on MyDewetra</li> </ul>						

Lecture	Operational flood forecasting chain supporting the Warning system at regional
Lecture	scale
Lecturer	Francesca Giannoni
Topics	<ul> <li>the National Centri Funzionali Network as a support to Civil Protection at regional scale</li> <li>Regional CF duties in ordinary and extra-ordinary conditions</li> <li>the hydrology of Ligurian basins</li> <li>the operational flood forecasting chain: the deterministic, probabilistic and subjective approaches</li> <li>the operational web-based monitoring tools</li> </ul>

### 2.3.1 Dewetra2.0 exercise

The last part of the end users course was devoted to an hands-on session on Dewetra2.0 with the aim of getting all the stakeholders familiar with the platform.

To this end, participants have been grouped in 5 teams and asked to the access Dewetra2.0 to perform a forecast on a severe event occurred on Central Italy in March 2016.

This exercise, designed to learn the real-time operational usage of the Dewetra 2.0 functionalities and capabilities, specially focused on the latest implementations of the system in terms of real time data, e.g., weather observations, forecast models, 'quasi-static' information, e.g. slowly-varying layers such as infrastructures, elements at risk, river networks among the others.

Each group was asked to set the timerange of the system to March 22<sup>nd</sup> at 07UTC and to analyze the information available at that time. The data retrieved from different sources have been then filled in some tables organized as follows:

- numerical weather prediction models: total precipitation (12 hours accumulation), reference time (from / to), snow accumulation (relevant/not relevant), 10-meter wind (max), other relevant information
- antecedent moisture conditions using SM MOD ASCAT, AMC and Cancelli-Nova
- hydrological forecast using FloodPROOFs

in order to determine an appropriate alert level for the next day for Marche.

In the second part of the exercise, the groups have set the timerange to the next day (March 23<sup>rd</sup>) at 13UTC and performed a forecast verification through:

- rainfall observations (rainfall map, pluviometric thresholds, and radar data)
- the occurrence of lightnings and thunderstorms (SFLOC, Radar SSI, MSG composites)
- hydrometric observations

Finally, the hydrological forecast has been verified by comparing the FloodPROOFs outcomes when initialized with NWP models data and actual raingauge observation.

### 2.4 ICT experts course - Day3

This section describes the general content of each topic, reports on the daily activity of the training and contents the list of participants for Day 3 of the course.

Day 3 was attended by 18 persons, as summarized in the following table.

Participant	Organization	Country
Raffaele Lidori	CETEMPS	Italy
Stefano Barbieri	CETEMPS	Italy
Ervisjana Tahirllari	Albanian Geological Survey	Albania
Rezarta Avxhi	Albanian Geological Survey	Albania
Donald Deda	Albanian Geological Survey	Albania
Atanas Ugrinski	Hydro-Meteorological Service of Macedonia	Macedonia
Gligor Milevski	Hydro-Meteorological Service of Macedonia	Macedonia
Martin Podboj	Geological Survey of Slovenia	Slovenia
Blazenka Matjacic	Hydro-Meteorological Service of Croatia	Croatia
Vladimir Malovic	Hydro-Meteorological Service of Croatia	Croatia
Gentian Shakulli	DPEC	Albania
Miriam Berti	IZSAM	Italy
Massimo Ciampani	IZSAM	Italy
Eriona Shabani	Albanian Geological Survey	Albania
Lovro Kalin	Hydro-Meteorological Service of Croatia	Croatia

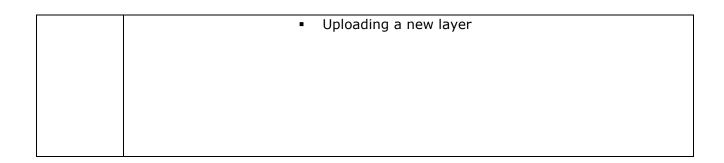
Toni Jurlina	Hydro-Meteorological Service of Croatia	Croatia
Marsel Veli	Technical Secretariat of the National Water Council	Albania
Olgert Jaupaj	Albanian Geological Survey	Albania

**Table 7** List of the trainees that attended Day 3 of the MyDewetra Training School.

On Day 3 the trainees have been lectured about the architecture of the client/server of MyDewetra portal, the transition from Google Web Toolkit (GWT) to Web 2.0 technology (AngualrJS) and the tools for the management of the portal (namely, Data Manager and Metadata Manager). The main topics of each lecture are summarized in the next tables.

Lecture	Dewetra2.0 design and analysis techniques				
Lecturer	Paolo Campanella				
Topics	<ul> <li>From Dewetra to MyDewetra</li> <li>Dewetra Data Server: reading and publishing dynamic data in WxS</li> <li>MyDewetra: a portal for configuration and authentication</li> <li>Dewetra 2.0: a web application for environmental monitoring</li> <li>Use Case Analysis: project's goals and working methods</li> <li>An Use Case Diagram: design, development, test, and mainteinance</li> </ul>				

Lecture	Data Manager and Metadata Manager of MyDewetra
Lecturer	Laura Rossello
Topics	<ul> <li>Collection and ingestion of static spatial data into MyDewetra</li> <li>Spatial Data: OGC Consortium and INSPIRE legislation</li> <li>Handle spatial static data:         <ul> <li>Geonode</li> <li>Geoserver</li> <li>Metadata Manager</li> </ul> </li> <li>Configuration of myDewetra system</li> <li>Tags and folders</li> </ul>



### 2.5 Evaluation of the Training Program

With the aim of evaluating the training program the trainees have been asked to anonymously fill in a questionnaire on the last day of each part of the course. The trainees have to express their level of satisfaction on a scale from 1 (low) to 5 (high). The questionnaire have been organized in two separate sections: the first one was dedicated to rate the general aspects of the courses, the second was to survey about the training of the topics. The results are summarized in the following table and diagram.

On a scale of 1 (low) to 5 (high), please rate the general aspects listed below: 1 2 3 4				5	
Overall satisfaction with the course	0	0	0	23%	77%
Usefulness of the course and matching of objectives with your needs	0	0	19%	35%	46%
Overall satisfaction with the tutorship	0	0	4%	20%	76%
Course methodology (relevance, thoroughness, etc.)	0	0	7%	26%	67%
Course management in terms of administration and technical issues	0	0	4%	33%	63%
Training room	0	0	19%	48%	33%
Accommodation	0	0	4%	17%	79%
Meals	0	0	8%	34%	58%

**Table 8** Evaluation table of the training (general aspects)

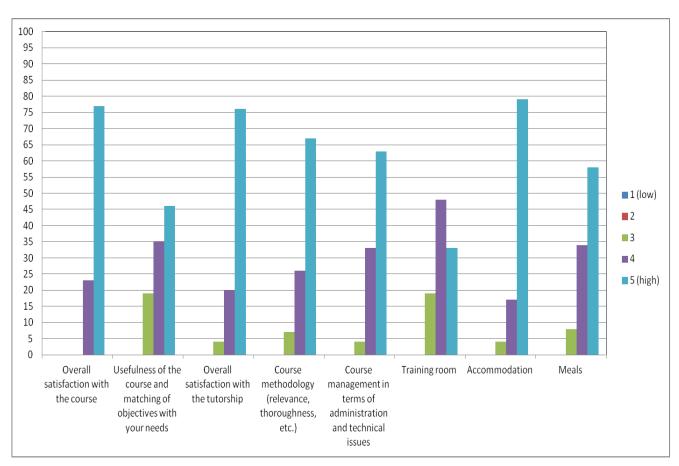


Figure 1. Graphic summary of the evaluation of the training (general aspects)

On a scale of 1 (low) to 5 (high), please rate each of the training course:	e to	pics	covere	ed durii	ng the
<b>3</b> 111 11		1	2	3 4	4 5
The course contents have meet your expectations?	0	0	4%	38%	58%
The duration of the course has been adapted to the topics discussed?	0	0	0	26%	74%
The discussions have had adequate time within the course?	0	0	4%	22%	74%
The time devoted to group work and guided exercises was enough?	0	0	0	27%	73%

Table 9 Evaluation table of the training (topics)

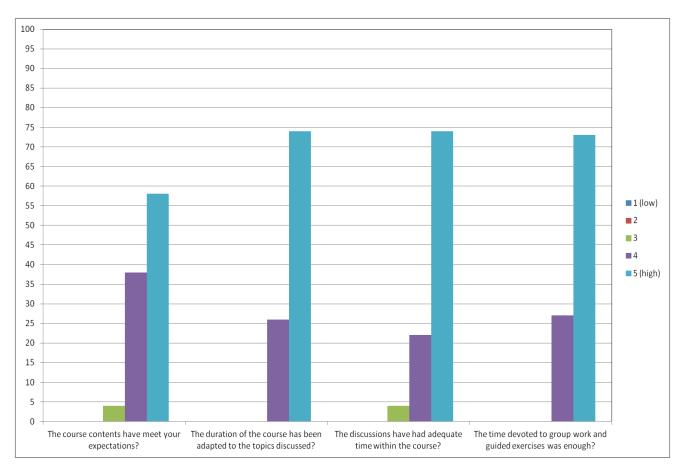


Figure 2. Graphic summary of the evaluation of the training (topics).

The monitoring program has been open for discussion and exchange with the trainees during the whole duration of the Course..

# **ANNEX A TIMETABLE OF THE PROGRAMME**

Day 1 November 8 <sup>th</sup>	Module for End-use	ers
TIME	SUBJECT	FORMAT
9.00 - 9.30	Registration and welcome remarks	
9.30 - 10.00	Presentation of MyDewetra Portal	Presentation CIMA Foundation
10.00 - 10.30	Satellite products – part I: MSG composites	Presentation CIMA Foundation
10:30 - 11.00	Satellite products – part II: MICRAdria	Presentation CETEMPS
11.00 - 11.30	Coffee break	
11.30 - 12.00	Group exercise on satellite products	Hands-on session
12.00 - 12.30	Radar products: Radar Advanced Processing (RAP)	Presentation CETEMPS
12.30 - 13.00	Group exercise on radar products	Hands-on session
13.00 - 14.00	Lunch break	
14.00 - 14.30	Landslides-related products: GZ-S Susceptibility maps	Presentation Geological Survey of Slovenia
14.30 - 15.00	Group exercise on susceptibility maps	Hands-on session
15.00 - 15.30	Land-based observations: the Acronet paradigm	Presentation CIMA Foundation
15.30 - 15.45	Coffee break	
15.45 - 16.00	Marine environment monitoring – part I: CMEMS data	Presentation CIMA Foundation
16.00 - 16.30	Marine environment monitoring part II: SeaWetra	Hands-on session

Day 2 November 9 <sup>th</sup>	Module for End-users	
TIME	SUBJECT	FORMAT
9.00 - 9.45	Hydrological modelling - part I: FloodPROOFs forecasting chain	Presentation CIMA Foundation
9.45 -10.30	Hydrological modelling – part II: Operational flood forecasting supporting the Warning system at regional scale	Presentation ARPAL/CFMI-PC
10.30 - 11.00	Hydrological modelling - part III: CHyM	Presentation CETEMPS
11.00 - 11.30	Coffee Break	
11.30 - 12.00	Group exercise on hydrological modelling	Hands-on session
12.00 - 12.30	Meteorological modelling WRFAdria	Presentation CETEMPS
12.30 - 13.00	Group exercise on meteorological modelling	Hands-on session
13.00 - 14.00	Lunch Break	
14.00 - 15.30	Dewetra2.0 exercise for end-users	Live session CIMA Foundation
15.30 - 15.45	Coffee break	
15.45 - 16.30	Wrap-up, concluding remarks, evaluation and certification of attendance	Round table

Day 3 November 10 <sup>th</sup>	Module for ICT experts	
TIME	SUBJECT	FORMAT
9.00 - 9.30	MyDewetra design and analysis techniques	Presentation CIMA Foundation
9.30 - 10.00	MyDewetra data server architecture	Presentation CIMA Foundation
10.00 - 10.30	Collection and ingestion and of static data into MyDewetra	Presentation CIMA Foundation
10.30 - 11.00	Collection and ingestion and of static data into MyDewetra	Hands-on session
11.00 - 11.30	Coffee break	
11.30 - 12.15	Collection and ingestion and of time-varying data into MyDewetra	Presentation CIMA Foundation
12.15 - 13.00	Collection and ingestion and of time-varying data into MyDewetra	Hands-on session
13.00 - 14.00	Lunch break	
14.00 - 15.30	MyDewetra exercise for technical support	Live session
15.30 - 15.45	Coffee break	
15.45 - 16.30	Wrap-up concluding remarks, evaluation and certification of attendance	Round table

# ANNEX B PHOTO REPORTING OF THE TRAINING











CAPitalization and exploitation of RADar-based infrastructure and decision support system for environmental hazard management NETwork in the Adriatic and Ionian region







# **MYDEWETRA TRAINING SCHOOL**

November 8-10, 2016, Tirana International Hotel, Tirana, Albania

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# MyDEWETRA TRAINING SCHOOL

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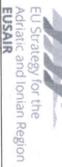
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CAPitalization and exploitation of RADar-based infrastructure and decision support system for environmental hazard management NETwork in the Adriatic and Ionian region Let's grow up together

Adriatic IPA

Cross Border Cooperation 2007-2013





# MyDEWETRA TRAINING SCHOOL

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