

VENICE
7 - 10 June 2016
Palazzo Labia
Campo San Geremia
**CONFERENCE
PROGRAMME**

CITIZEN OBSERVATORIES FOR WATER MANAGEMENT



Citizen Observatories for Water Management

OSSERVATORI DEI CITTADINI PER LA GESTIONE DELLE ACQUE

Autorità
di Bacino
dei Fiumi
Isonzo,
Tagliamento,
Livenza,
Piave,
Brenta-Bacchiglione



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Geometri e Geometri Laureati



in scientific partnership with



The official language of the conference is English,
with simultaneous translation in Italian

www.conwater2016.eu #cowm2016

7 JUNE 2016

9.00 Welcome and greetings

Italian Authorities

Andrea Tilche

Head of Climate Action and Earth Observation Unit, DG Research and Innovation (European Commission)

Mauro Grassi

Manager of the Italian Ministerial Unit on hydrological risk and hydraulic infrastructures

Francesco Baruffi

Technical director of the Alto Adriatico Water Authority

10.00 Overview of the potential application of the Citizen Observatory

The role of Citizen Observatories in Crisis management and disaster resilience

Michele Ferri (Alto Adriatico Water Authority)

Citizen Observatories: From Uncertain Data To Optimal Models of Environment

Dimitri Solomatine (UNESCO-IHE)

10.50 Break

11.10 Overview of the potential application of the Citizen Observatory

Citizen Observatories as support for environmental monitoring and catchment management

Steven Loiselle (Earthwatch Institute / University of Siena)

Social dimensions of citizen observatories

Uta Wehn (UNESCO-IHE)

Understanding outcomes for natural resource policy and management in U.S. citizen observatories

Kris Stepenuck (Citizen Science Association)

Innovation with participation – Citizen Science for society, policy and science

Johannes Vogel (European Citizen Science Association)

13.00 Lunch time

14.00 EXHIBITION ITINERARY

**A new challenge in the water management:
the Citizen Observatory
in the Eastern Alps Hydrographic District**

14.00 INVITATION-ONLY EVENT

**#italiasicura presents: guidelines for the design of interventions mitigating
hydrogeological risk**

With the participation of:

Mauro Grassi and Gian Vito Graziano
The Italian Ministerial Unit on hydrological risk
and hydraulic infrastructures

Massimo Mariani
The Italian Council Engineers - CNI

Maurizio Savoncelli
The Italian Council of Surveyors - CNGeGL

Citizens Observatories and Environmental Monitoring

Chairman: Steven Loiselle (Earthwatch Institute / University of Siena)

15.00 FreshWater Watch: Using Citizen Scientists to Monitor Water Quality

N. Bailey (Earthwatch Institute)

15.20 The Crowd4Sat Project: Augmenting Satellite Observations with Crowdsourcing

S. Mazumdar (Sheffield University)

15.40 CrowdWater: evaluating the value of citizen collected data for hydrological predictions

H.J. van Meerveld (Department of Geography - University of Zurich)

16.00 Developing environmental awareness: a Citizen Observatory model

H.Y. Liu (NILU - Norwegian Institute for Air Research)

16.20 Panel discussion

16.30 Adventure and science: harnessing the skills of outdoorspeople to study global microplastics pollution from source to sea

M. Kautz (Adventurers and Scientists for Conservation)

16.50 Local community river monitoring contributes to improved water quality

M. Letswalo (ImproChem)

17.10 Riu.Net application: citizen science in rivers

I. Verkaik (Freshwater and Ecology Management, Universitat de Barcelona)

17.30 The ACRONET Paradigm, a new Open Hardware solution for environmental monitoring

A. Fedi (ACROTEC Srl)

17.50 Panel discussion

New approaches for data capturing and validation

Chairman: Hendrick Huwald (Ecole Polytechnique Fédérale Lausanne)

15.00 Monitoring and measuring river flows using image analysis: from concept to operational applications

R. Pozzani (TENEVIA)

15.20 Monitoring the Tiber River through an image-based gauge-cam station

S. Grimaldi (Tuscia University)

15.40 Open Hardware Raindrop Arrival Rate Sensor for Citizen Science

E. Veenhoven (Disdrometrics BV, TU Delft)

16.00 Sensing technology for citizen observatories: the WeSenseIt project

H. Huwald (EPFL)

16.20 Panel discussion

16.30 Real-Time Rainfall Detection Employing Microwave Satellite Broadcasting Links Observations

D. Caviglia (DITEN - Genoa University)

16.50 Low-cost sensors for distributed surface-atmosphere heat exchange monitoring – a novel component of citizen observatories

T. Brauchli (EPFL)

17.10 Qualitative and quantitative citizen monitoring on vegetation habitats, based on photogrammetry technique

S. Fabbri (University of Bologna)

17.30 SCENT, Smart Toolbox for Engaging Citizens into a People-Centric Observation Web

A. Tsertou (Institute of Communication and Computer Systems)

17.50 Panel discussion

18.00
Closing time

Communities involvement in Integrated Catchment Management

Chairman: Mariani Massimo - President of the European Council of Civil Engineers

9.00 Citizen hydrology in River Contracts for water management and people engagement at basin scale

A. Balbo (Studio Majone Ingegneri)

9.20 The pioneering Adige river flood risk map (1892): private or public risk transfer?

R. Ranzi (University of Brescia)

9.40 Global system for hydrological monitoring and forecasting in real time at high resolution (GH2MF2)

E. Ortiz (Idrologia e Ambiente Srl)

10.00 MySnowMaps: snow maps display and snow data crowdsourcing

M. Dall'Amico (MobyGIS Srl)

10.20 Panel discussion

10.30 Giving value to popular knowledge for monitoring natural hazards

G. Quinti (CERFE)

10.50 European Projects dealing with Integrated Coastal Zone Management: experiences of the Regional Environmental Protection Agency of Friuli Venezia Giulia (Italy)

I. Scroccaro (ARPA Friuli Venezia Giulia)

11.10 Veneto Region 10 years experience on sedimentation management projects

B. De Fanti (Veneto Region)

11.30 Financial Analysis of the MARSol DEMO Sites

M. Balzarini (SGI Studio Galli Ingegneria)

11.50 Panel discussion

12.00 Exhibition itinerary

Increasing Resilience in the Eastern alps Hydrographic District

Citizen observatories: stakeholder motivations and impacts

Chairman: Uta Wehn (UNESCO-IHE)

9.00 Combining science, learning and environmental observations – Lessons learned from a Finnish science education project

A. Harjanne (Finnish Meteorological Institute)

9.10 Empowerment at all costs? Citizens' Observatory in practice

S. Grossberndt (NILU - Norwegian Institute for Air Research)

9.20 Beyond 'data drones': Citizen scientists' concerns and motivations

W. Ganzevoort (Institute for Science, Innovation and Society - Radboud University)

9.30 Who's in and why? Stakeholder incentives for participatory monitoring in river management

L. Verbrugge (Institute for Science, Innovation and Society - Radboud University)

9.40 Panel discussion

10.05 Interactive session: Identification of viewpoints on citizen science using Qsorts

M.M. Rutten (TU Delft)

10.55 A framework for analyzing the impact of ICT-based citizen science initiatives

M. Gharesifard (UNESCO-IHE)

11.05 Public involvement in knowledge generation: the societal value and potential of citizen science in the Dutch water sector

S. Brouwer (KWR Watercycle Research Institute)

11.15 What you sow is what you reap: a comparison of Citizen Observatories on their implementation and societal results

K. Anema (UNESCO-IHE)

11.25 Panel discussion

12.00 INVITATION-ONLY EVENT
New solutions for territory monitoring
With the participation of:
Luca Finotto
 Technical Manager at CAE S.p.A
Andrea Crestani
 Director ANBI VENETO
 (Italian National Association of Reclamation,
 Irrigation and Land Improvement)

13.00 Lunch time

Methods and Technologies at the service of Citizens: data integration, data assimilation techniques, water modeling

Chairman: L. Alfonso (UNESCO-IHE)

14.00 Information Theory-based Design of Optimal Dynamic Rainfall Networks

L. Alfonso (UNESCO-IHE)

14.20 Operational activity and perspectives in the storm surge disaster preparedness within the North Adriatic coastline, lagoons and river deltas

M. Ferla (ISPRA)

14.40 Comparison between passive and active social sensors of precipitation for flood forecasting

J.C. Chacon-Hurtado (UNESCO-IHE)

15.00 Hydraulic model of the Mestre-Venice combined sewer system

A. Peschiuta (Veritas Spa)

15.20 Assimilation of streamflow observations from an heterogeneous network of distributed sensors in hydrological modeling

M. Mazzoleni (UNESCO-IHE)

15.40 Dat@resQ: an open source software for hydrological applications and the rational management of water resources

S. Garbin (University of Padua, i4 Consulting)

16.00 Panel discussion

Chairman: J.P. Lobo-Ferreira (LNEC)

16.10 Robust flood forecasting by Support Vector Machines and hydrometeorological monitoring networks

G. Fattoruso (ENEA)

16.30 A pervasive data assimilation system for wastewater processing plant protection

S. De Vito (ENEA DTE-FSN-DIN)

16.50 Sharing of technological solutions: key lessons learned from the Portuguese participation in H2020 Piano Project

J.P. Lobo-Ferreira (LNEC)

17.10 Proactive analysis (FMEA) for the quality control of drinking water. A simplification and sharing tool

C. Bonifazzi (Department of Biomedical Sciences - University of Ferrara)

17.30 "Managing crOp water Saving with Enterprise Services – the MOSES Project" - An Example of Technology Integration & Multi Actors Approach

M. G. Scarpino (Serco S.p.A., ESRI Italia)

17.50 Panel discussion

Citizens engagement in Crisis Management

Chairman: Sergio Olivero (SiTI - Security & Safety Department)

14.00 The Water Crime project – Malicious threats against water safety and security

M. Migliorini (SiTI - Security & Safety Department)

14.20 Prevention & Mitigation measures against ground water contamination

R. Sethi (Turin Polytechnic)

14.40 The information, communication and community engagement in case of natural disasters affecting water Crime project

G. Todesco (Scientific Police of Turin)

15.00 From territory's observation to flooding maps

D. Galiazzo (Vicenza Municipality)

15.20 The flooding event of November 2010 in Bacchiglione river (ITALY)

P. Martini (Pro.Gest. Srl)

15.40 Deriving fuzzy flood extents from geo-tagged photographs using Boolean models and smartphone technology

B. Evans (Department of Geography and Earth Sciences, Aberystwyth University)

16.00 Panel discussion

Chairman: Fabio Ciravegna (Shieffield University)

16.10 Participatory early warning and monitoring systems for natural hazards in a Nordic context

P. van der Keur (Geological Survey of Denmark and Greenland)

16.30 Implementation of a Citizen Observatory of Water in the WeSenselt project

C. Bagnasco (Quinary spa)

16.50 Engaging Citizens and Communities for Emergencies

S. Mazumdar (Sheffield University)

17.10 Evaluation of flood emergency protocols using agent based approach

C. Viavattene (Middlesex University)

17.30 Forecasting Acqua Alta in the city of Venice and the use of social media data

M. Zander (Wageningen University)

17.50 Panel discussion

18.00 Closing time

20.00 Social Dinner: Special Night in Venice

9 JUNE 2016

9.00 1966 Flood Observers: 50 years from the flood

Welcome and Greetings at the Special Event

Barbara Degani

Undersecretary of State (Ministry for the Environment and the Protection of the Land and Sea)

9.30 Luigi D'Alpaos - The 1966 flood in the Veneto Region

University of Padua

Roberto Ranzi - Hydrological Aspects of the 4 november 1966 flood in the Adige River: keeping the memory alive.

University of Brescia

10.30 Break

10.50 Round Table: Citizen Observatories for flood management. Learning from the past

Chairman: Giovanni De Luca (RAI Veneto)

Gaia Checcucci

General Director - Department of land and water protection (Ministry of Environment and protection of land and sea)

Gianpaolo Bottacin

Assessor for Civil Protection and Environment (Veneto Region)

Sara Vito

Assessor for Environment and Energy (The Autonomous Region of Friuli Venezia Giulia)

Francesco Vincenzi

President ANBI (The Italian National Association of Reclamation, Irrigation and Land Improvement)

Achille Variati

The Union of Italian Provinces (UPI)

12.20 Exhibition itinerary

Photo exhibition of the 1966 flood

13.00 Lunch time

CQWM
2016

Citizen Observatories for Water Management

Resilience and Territorial Safety

Chairman: Fernando Nardi (University for Foreigners of Perugia)

14.00 Creating Resilient Landscapes to Floods and Droughts in the European Alps via Citizen Science Diagnostics

C. de Jong (LIVE, University of Strasbourg)

14.20 Building community capacities for flood risk mitigation: the CAPFLO project

M. Parés (Institut de Govern i Politiques Públiques - Universitat Autònoma de Barcelona)

14.40 A Web-GIS decision support framework for evaluating first level inspections of hydraulic structures: Key lessons

V. J. Cortes (TU Delft)

15.00 Road hydraulic vulnerability and risk: setting up a standard evaluation procedure

G. Grossi (Brescia University)

15.20 Understanding and communicating weather risk: users perception and landscape observation

E. I. Cristofori (TriM - Turin Polytechnic)

15.40 The use for early warning of models simulating the physical processes resulting in debris flow phenomena occurrence

C. Gregoretti (TESAF UNIPD)

16.00 Panel discussion

16.10 Protection of cultural heritage from hydrogeological risk

C. Cacace (ISCR MiBACT)

16.30 Integrated systems for real time irrigation management and flood forecasting

G. Ravazzani (Milan Polytechnic)

16.50 Flood Risk: Communication and Resilience – The WebGIS READY

S. Manfreda (University of Basilicata)

17.10 Internet of Things integration solutions in water governance, decision making and crisis management

M. Sieprawski (SoftwareMind)

17.30 Perception and management of risk for pedestrians and vehicles in urban flash flooding

F. Castelli (University of Florence)

Public participation mechanisms

Chairman: Kris Stepenuck (Citizen Science Association)

14.00 Stakeholder engagement in cities: findings and opportunities from the OECD report “Water Governance in Cities”

O. Romano (OECD)

14.10 Mountain river basin management plans and river area management plans

N. Marangoni (Civil Protection Agency – Autonomous Province of Bolzano)

14.20 Towards participatory planning for flood risk management in Sicily: the experience of the Simeto Valley River Agreement

A. Cancelliere (University of Catania)

14.30 Panel discussion

14.55 Active public participation in the field of flood risk management in Slovenia – practical cases and experience

L. Stravs (Ministry of the Environment and Spatial Planning of Republic of Slovenia)

15.05 Close and local water monitoring: Citizen Science tools to evaluate and monitor river health to support management processes

M. Graham (GroundTruth)

15.15 The Water Public Policies Observatory: an experience of cogeneration of knowledge for citizen action

V. Cabello (Universidad de Sevilla)

15.25 Co-development of a citizens’ observatory to enhance local citizen decision making: lessons from the WeSenseIt project

S. McCarthy (Middlesex University)

15.35 Panel discussion

16.00 WORKSHOP: How to develop a volunteer water monitoring program

Kris Stepenuck (Citizen Science Association)

17.50

Closing remarks and preview of the technical visit

Chairman:

Francesco Baruffi (Alto Adriatico Water Authority)

18.30

Closing time

8.30

Departure from Venice

10.00

Technical Visit to the control room of the city of Vicence

12.30

Lunch time

13.30

Demonstration of the technologies, techniques and equipment in support of a citizen observatory (City of Vicenza)

16.30

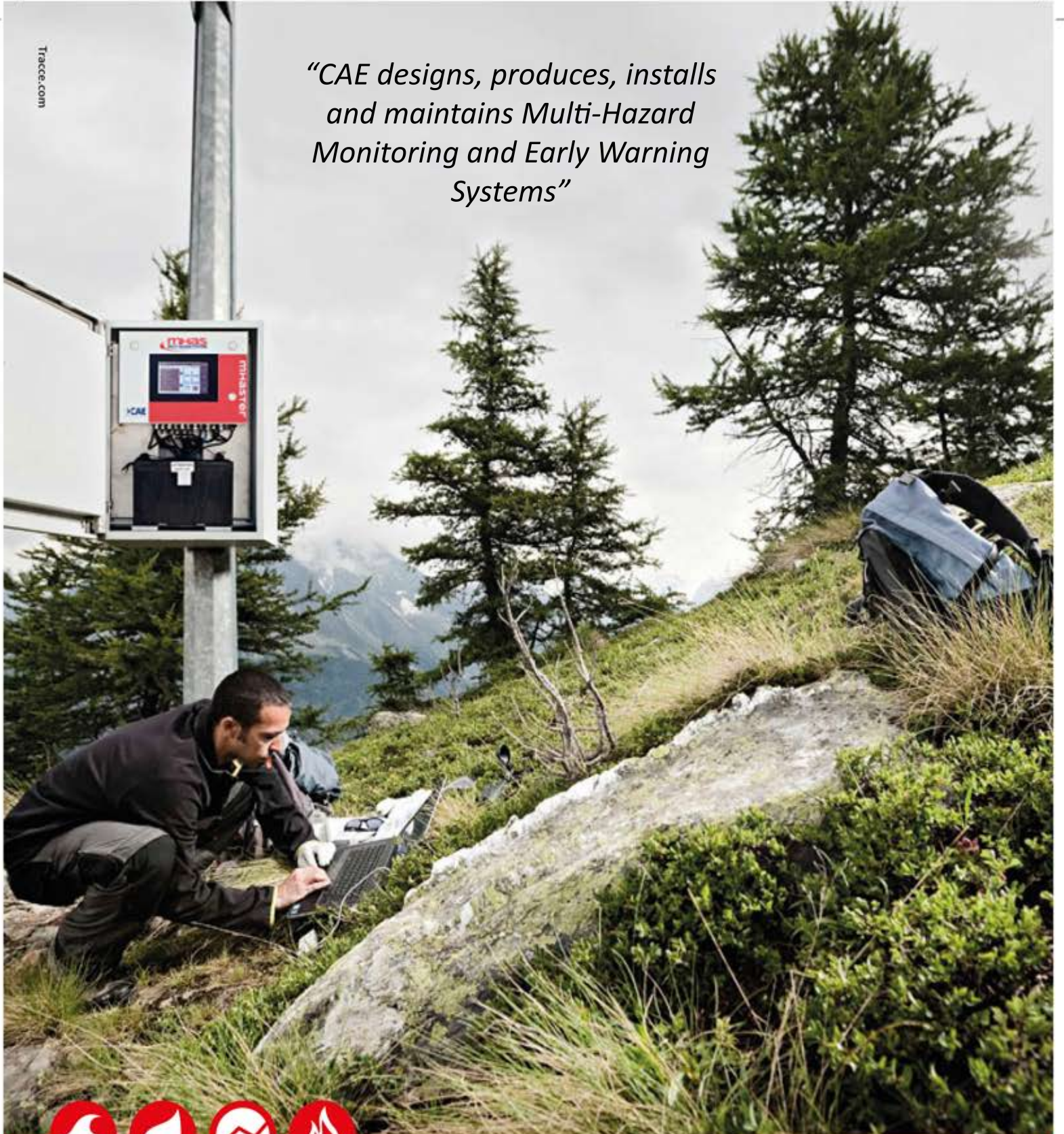
Closing time

17.30

Arrive in Venice

All the logistic is organized by the Secretariat of the event

*“CAE designs, produces, installs
and maintains Multi-Hazard
Monitoring and Early Warning
Systems”*



CAE technology supports competent authorities to prevent natural hazards from becoming devastating disasters, saving human lives and drastically reducing the damage of extreme natural events, which are becoming increasingly frequent and violent due to climate change.

