

REGIONAL IMPACT of CLIMATIC CHANGE in LOMBARDY WATER RESOURCES: MODELLING and APPLICATIONS (RICLIC - WARM)

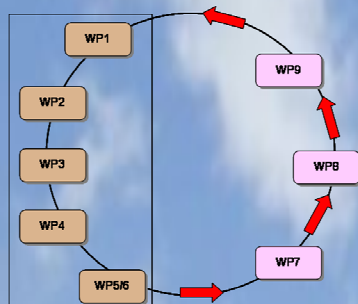
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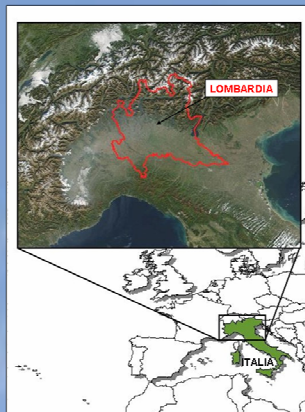
RICLIC

SCIENTIFIC
RESEARCH
UNITS

REGIONAL
PUBLIC
AUTHORITY



STUDY AREA



GOALS

The target of the project is to develop a scientific methodology in order to evaluate climatic impacts on water resources of Lombardia region.

This methodology can be used by public authorities to plan and manage the Lombardia area, one of the most industrialized and populated in Europe.

The methodology uses monitoring, databases, GIS and distributed spatial models in order to achieve scenarios of water resources management.

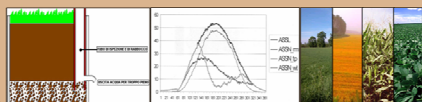
The project involves: public monitoring authorities (ARPA LOMBARDIA), scientific research authorities (UNIMIB, UNIMI, UNIPV) and regional public authorities (REGIONE LOMBARDIA).

WP5/6

Agro-ecosystem scenarios/ Agro-ecosystem models

Prof. Tommaso Maggiore
DIPROVE - University of Milano

Development of dynamic models to simulate water intakes and agriculture production/ Development, calibration and validation of an evapotranspiration model in a urban area.



WP1

Climatic Datasets management

Prof. Valter Maggi
DISAT - University of Milano - Bicocca
Integration of meteo-climatic DataBase (temperature and precipitation) to obtain data for modelling and forecasting in order to value climatic impacts.



WP4

Water quality indicators

Prof. Marco Vighi
DISAT - University of Milano - Bicocca

Historical reconstruction of POP concentrations and measure of actual distribution in aquatic ecosystems, by studying the relationship between deposition trend and climatic change indicators.

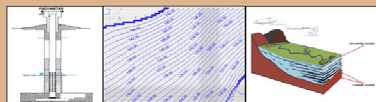


WP3

Groundwater resource balance

Dott.ssa Tullia Bonomi
DISAT - University of Milano - Bicocca

Well DataBase Implementation and 3D idrogeological models applications, to value the consequences on groundwater resource in different potential meteo-climatic scenarios.



WP2

Surface Water management

Prof. Luigi Natale
DIIA - University of Pavia

Models of water resource formation, transport, management and distribution: trustworthy scenarios of future availability.



WP7

Physical Impacts Evaluation

Workpackages Leaders WP1-6

Evaluation of physical impacts caused by climatic changes during the last years: definition of a synoptic description which includes the different environmental components.



WP8

Damages and risk evaluation

Prof. Paolo Giacomelli
DEPAAA - University of Milano

Evaluation of direct and indirect damages caused by natural meteor phenomena: parametrization of socio-economic resources for the risk management.



WP9

END USER

Dr. Enrico Zini
ARPA Lombardia

Use of models which value problems connected with water cycle, caused by potential meteo-climatic scenarios, to support the Decision Makers in planning and management in Lombardy.

