

Rome2015 SCIENCE SYMPOSIUM on CLIMATE *November 19-20*

#ROME2015
#SSCLIMATE



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Welcome Messages

Climate change is one of the greatest challenges to food and agriculture systems. It poses a fundamental threat to global food security, sustainable development and poverty eradication especially for the world's poorest and most vulnerable people. Climate change risks derailing efforts to eradicate extreme poverty and hunger, which the international community has committed to doing by 2030 under the recently adopted Sustainable Development Agenda.

To effectively counter climate change pressures, while at the same time eradicate hunger, we need an unprecedented capacity to work collectively - from local to international levels.

At FAO, we believe that agriculture can – and must – play a central role in our response to climate change. Agriculture holds the key to addressing poverty, hunger and climate change in tandem. The agriculture, forestry and land use sectors account for about 26 percent of global greenhouse gas (GHG) emissions. Meanwhile, almost 75 percent of the world's poor live in rural areas and depend on agriculture for their livelihood and well-being. This means that more productive, inclusive, resilient and low-emissions agricultural development can provide incomes and food security for those who lack them while reducing deforestation and other drivers of climate change.

Achieving this requires context-specific approaches and evidence-based solutions developed through multisectorial expertise and with participation of all stakeholders. The scientific community plays a pivotal role in this dynamic to move rapidly from assessment and planning towards implementation of options and monitoring of outcomes.

And for all these reasons, FAO is pleased to host and be co-sponsor of the Rome 2015 - Science Symposium on Climate aimed at highlighting knowledge, experiences and research across the climate sciences.

Advancing research in management of soil use and conservation, carbon sequestration, water resources, biodiversity, minimizing waste and losses in food systems, greenhouse gas footprint, human nutrition and health, agro-ecology and climate smart agriculture will be vital contributions to addressing a more complex set of objectives, newly-identified knowledge gaps and capacity development needs.

We hope that this fruitful dialogue among scientists, policy makers, service providers, business and the general public will improve knowledge and public awareness on mitigation policies and sustainable growth, deepen the understanding of climate change impacts, the best adaptation strategies and the sharing of scientific results.



Maria Helena Semedo
Deputy Director-General
Coordinator for Natural Resources



Welcome Messages



Dear Convenors,

it is our great pleasure to welcome you to Rome for attending the Rome2015 SCIENCE SYMPOSIUM on CLIMATE in this prestigious venue that is the FAO (Food and Agriculture Organization) headquarter.

The Symposium is an unprecedented event that has been jointly organised by 14 Italian Scientific Societies involved in the study of climate, and it will address the interdisciplinary dimension of climate change to comprehensively address impacts and the socio-economic implications by overcoming the traditional borders between scientific disciplines.

The primary mission of the Symposium is to highlight the most significant results accomplished by the scientific community in the field of climate research and investigate future perspective for the environment and the society.

We all know that climate change is one of the most complex challenges the international community is facing. Addressing climate change is one of the most important objectives that needs to involve the widest possible international cooperation: as highlighted in our statement, **the choices that we make today and in the very near future will affect our society**. On the other hand, strategies to deal with climate change and its negative impacts must be part of a decision-making process involving the scientific community, stakeholders, and policy makers.

Only the cooperation and common work can make the difference in contrasting and reducing climate change impacts.

With this purpose, the second mission of the Symposium is to provide a unique and fruitful platform for dialogue, exchange of ideas and sharing of experiences within the scientific community, the stakeholders, the policy makers, the service providers, as well as the business and general public. Furthermore, the Symposium works toward the COP21 United Nations Climate Change Conference that will be held in Paris in december 2015, aiming to provide scientific knowledge in support of evidence-based adaptation and mitigation strategies and improve the public awareness on climate change impacts and sustainable growth.

The two-day program of the event alternates plenaries and parallel sessions.

Gianluca Galletti (Italian Minister for the Environment Land and Sea) will attend the opening sessions. Keynote lectures will be given in plenary sessions, in order to provide in-depth analyses on specific topics related to climate change sciences and policy. The Symposium has the honor to host Prof. Carlo Carraro (Director of International Center for Climate Governance, Scientific Director of Eni Enrico Mattei Foundation, and Vice Chair of the Intergovernmental Panel on Climate Change Working Group III), Prof. Laurence Tubiana (Special Representative of the French Minister of Foreign Affairs for the 2015 Paris Climate Conference, COP-21, and French Ambassador for Climate Negotiations) and Dr. Martin Frick (Director of Climate, Energy and Tenure Division at FAO). The Director of Environment and Climate Division at IFAD (The International Fund for Agricultural Development, a specialized agency of the United Nations), Dr. Margarita Astralaga, will also contribute to the Symposium to share experiences to be transformed into operations-oriented learning and knowledge.

Parallel sessions will be dedicated to scientific presentations selected and evaluated by the Scientific Committee. The call for papers attracted submissions not only from all over Europe (e.g., Italy, Portugal, Spain, Germany, Greece) but also from India, Iran, Philippines, Bangladesh, Pakistan, Australia and many African Countries. More than 250 presentations and posters are gathered in parallel sessions grouped in six topics: "The physics of climate change; Ocean and climate change on the way to COP21; Water, energy and food nexus in agriculture; Climate change and the future of land system and biodiversity; Climate change response actions; COP21, the INDCs and policies to address climate change."

Putting together Rome2015 SCIENCE SYMPOSIUM on CLIMATE was a team effort. We first thank the authors for their enthusiasm in sharing ideas and results from their scientific work by contributing to the program. We are also grateful to the Scientific Committee and the Organizing Committee who contributed to keep the high scientific level of this Symposium. A work of thanks to the Scientific and Organizing Secretariats here, at the end of a six-months of great effort and care in the preparation of the Symposium, is certainly in order. Their hard work will make, we are sure, these two days here in Rome productive and fulfilling.

The Symposium is supported by the PARIS2015 (COP21/CMP11) United Nations Climate Change Conference and by the Euro-Mediterranean Center on Climate Change. We would like to extend our thanks to the Ministry for the Environment, Land and Sea, the Regions of Sardinia and Latium, and the Italian Association for the United Nations for their advocacy. The Food and Agriculture Organization of the United Nations is greatly acknowledged also for having kindly made their headquarters available. Finally, we would also like to thank our partners Lenovo and Intel, who have generously contributed and collaborated with us to make this event happen.

We hope that you will find the program interesting, inspiring and stimulating, and that the Symposium will provide you with a profitable chance to share and exchange ideas with other researchers, stakeholders, and policy-makers from Institutions around the world.



Donatella Spano
SISC President

About ROME2015 Science Symposium On Climate

Few days before the COP21 in Paris, the Italian Scientific Community organizes an event in Rome aiming at fostering the international scientific debate on climate. The Conference will focus on the multidisciplinary dimension of Climate Sciences in order to address the advances in the scientific knowledge on the climate system, on adaptation and climate impacts, and on mitigation strategies.

Scientific societies, Institutions and Associations dealing with the study of one of the most important issue of our times, its impacts and its socio-economic implications, share their experiences and their expertise with the participation of:

- internationally renowned keynote speakers
- experts gathering in parallel sessions for scientific multidisciplinary in-depth analyses
- decision makers and experienced people whose activities are related to the scientific knowledge on climate

The Symposium aims at:

- Highlighting the most relevant results achieved by the scientific community in the field of international climate research and policy;
- Emphasizing the role and the activity of the scientific community that carries out an interdisciplinary, cutting edge, innovative and international research in the field of climate to support public stakeholders in preparation of long and mid-term adaptation and mitigation strategies;
- Exploring future perspective for the research on climate;

Providing a fruitful opportunity of dialogue, exchange ideas and share experiences among the scientific community and with all the experts interested to know more about the up-to- date scientific knowledge on climate.

About ROME2015 Science Symposium On Climate

ROME 2015-SCIENCE SYMPOSIUM ON CLIMATE is jointly organized by: **SISC** - Società Italiana per le Scienze del Clima, **AGI** - Associazione Geofisica Italiana, **AIAM** - Associazione Italiana di AgroMeteorologia, **AIEAR** - Associazione Italiana degli Economisti dell'Ambiente e delle Risorse naturali, **ATit** - Associazione Teriologica Italiana, **CATAP** - Coordinamento delle Associazioni Tecnico-scientifiche per l'Ambiente ed il Paesaggio, **COI** - Commissione Oceanografica Italiana, **FLA - GII** - Gruppo italiano di Idraulica, **HOS** - Historical Oceanographic Society, **SIDEA** - Società Italiana di Economia Agraria, **SIF** - Società Italiana di Fisica, **SMI** - Società Meteorologica Italiana, **UNASA** - Unione delle Accademie di Agricoltura.

The Symposium is hosted and co-organized by **FAO – Food and Agriculture Organization of the United Nations**. FAO provides its expertise to ensure that the Conference findings – which are sole responsibility of the organizers – are relevant to member countries goals of food security, sustainable natural resources management and rural development.

ROME2015 – SCIENCE SYMPOSIUM ON CLIMATE was granted the label “COP21”, the official label of the UN Climate Change Conference.

COP21 is 21st Session of the Conference of the Parties to the United Nations Framework Convention on Climate Change (COP21/CMP11), otherwise known as “Paris 2015” from November 30th to December 11th. COP21 will be a crucial conference, as it needs to achieve a new international agreement on the climate, applicable to all countries, with the aim of keeping global warming below 2°C.



Scientific Committee

Amedeo ALPI	Università di Pisa
Vincenzo ARTALE	ENEA (co-chair Ocean and climate change on the way to COP21)
Marina BALDI	CNR IBIMET (co-chair Climate change response actions)
Carlo BARBANTE	CNR IDPA, Università Ca' Foscari Venezia
Francesco BOSELLO	Università Statale di Milano, CMCC, FEEM (co-chair COP21, the INDCs and policies to address climate change)
Fabian CAPITANIO	Università di Napoli Federico II
Carlo CARRARO	Università Cà Foscari Venezia, FEEM, CMCC, IPCC WG3 (co-chair COP21, the INDCs and policies to address climate change)
Fabio CASTELLI	Università di Firenze (co-chair Climate change and the future of land system and biodiversity)
Luisa CIFARELLI	Università di Bologna
Silvana DI SABATINO	Università Di Bologna
Marzio GALEOTTI	Università degli Studi di Milano
Gioia GIBELLI	Società Italiana Ecologia del Paesaggio (co-chair Climate change response actions)
Anna LOY	Università del Molise
Giuseppe MANZELLA	ETT srl
Antonio MARCOMINI	Università Ca' Foscari Venezia, CMCC
Adriano MARTINOLI	Università dell'Insubria
Simona MASINA	CMCC
Luca MERCALLI	Società Meteorologica Italiana
Alberto MONTANARI	Università di Bologna
Antonio NAVARRA	CMCC (co-chair The physics of climate change)
Massimo PAOLANTI	Associazione Italiana Pedologi
Antonello PASINI	CNR IIA (co-chair The physics of climate change)
Nadia PINARDI	Università di Bologna, CMCC (co-chair Ocean and climate change on the way to COP21)
Pasquale SCHIANO	CIRA, CMCC (co-chair Climate change and the future of land system and biodiversity)
Federico SPANNA	Associazione Italiana di Agrometeorologia
Donatella SPANO	Università di Sassari – CMCC (chair of the Scientific Committee, co-chair Water, energy and food nexus in agriculture)
Francesco TUBIELLO	FAO
Riccardo VALENTINI	Università della Tuscia, CMCC (co-chair Water, energy and food nexus in agriculture)

Scientific Secretariat

Valentina BACCIU	CMCC
Serena MARRAS	CMCC
Guido RIANNA	CMCC
Monia SANTINI	CMCC
Silvia TORRESAN	CMCC

Logistics & Practical Information

PRESENTATIONS & TIME LIMITS

Presenters should make sure that their presentations can be done in the time allotted (13 min + 2 min. for Q&A). It is important that all sessions end on time. Chairs should not allow the discussion to continue beyond the announced time limit.

WIRELESS INTERNET

Wireless internet connection is available in the Atrium and in the meeting rooms.

Login information

Username: guest_internet // Password: wifi2internet

MEETING BREAKS

Participants are required by FAO security to not leave FAO buildings during the breaks.

Coffee breaks and lunches are NOT arranged by the Organization of the Symposium; within the FAO buildings there are three coffee shops, a cafeteria and a restaurant for coffee breaks and lunch.

These facilities only accept Euro cash. No credit cards are accepted.

- **Polish Bar** (Building A - ground floor). Serves coffee, tea, drinks, cakes and sandwiches all day, cold meals for lunch. Opening hours: 7:30–17:00.
- **Blue Bar** (Building C - 8th floor). They serve snacks and sandwiches all day, with cold meals for lunch. Opening hours 7:30–13:00.
- **Casa Bar** (Building D - ground floor). Salads and light meals, with cold and hot meals for lunch. Opening hours 8:30 – 17:00
- **Cafeteria** (Building B - 8th floor). Self-service restaurant. They serve entrees, pasta, grilled meat or cheese, salads, desserts and drinks. Opening hours 12:00–14:00.
- **Restaurant** (Building C - 8th floor) They offer a complete “menu of the day” or “a la carte” menu. Opening hours 12:00–14:00 Reservation required.

SERVICES AT FAO HEADQUARTERS

Banks: Banca Intesa (ground floor, Building B) and Banca di Sondrio (ground floor, Building D). Opening hours: Monday-Friday, 8:40 to 16:30.

Next to either Bank you will find cash dispensers at your disposal 24 hours. International bank cards accepted

Bookshops and Stands: The ground floor of Building B hosts a newsagent, where Italian and foreign newspapers and magazines can be bought, telephone cards as well as bus/metro tickets.

Lost and found: If you have lost or found something, please contact the Entrance Reception on the ground floor, Building A.

Post Office: Also located on the ground floor of Building B. Opening hours: Monday-Friday, 8:30 to 15:00.

Plenary Sessions

Thursday, November 19, 2015

10:00 PLENARY HALL
Opening Addresses

Donatella SPANO – SISC President

Maria Helena SEMEDO – FAO Deputy Director-General, Coordinator for Natural Resources

Carlo CARRARO – IPCC, Vice-Chair WG3, FEEM, CMCC, Ca' Foscari University Venice

Laurence TUBIANA – Special Representative of the French Minister of Foreign Affairs for the 2015 Paris Climate Conference, COP-21, and French Ambassador for Climate Negotiations

Gianluca GALLETTI – Italian Minister of the Environment, Land and Sea

10:45 PLENARY HALL
Plenary LECTURE

FOOD SECURITY AND CLIMATE CHANGE

Martin FRICK – FAO, Director Director of Climate, Energy and Tenure Division

Friday, November 20, 2015

09:30 RED ROOM
Plenary LECTURE

WATER RESOURCES, AGRICULTURE AND CLIMATE CHANGE

Margarita ASTRALAGA – IFAD, Director Environment and Climate Division

Introduced by **Riccardo VALENTINI** – IPCC AR 5 Coord. Lead Author, Tuscia University

16:15 RED ROOM
17:00 Plenary Session

ITALIAN SCIENTIFIC SOCIETIES: INTEGRATED PERSPECTIVES ON CLIMATE TOWARD COP21

Parallel Sessions

Thursday, November 19, 2015 / h. 11:45 - 13:00

11:45	IRAN ROOM	IRAQ ROOM	PLENARY HALL	Poster Sessions
	COP21, THE INDCs AND POLICIES TO ADDRESS CLIMATE CHANGE COP 21: effectiveness, cost and sustainability dimension CHAIR Carlo CARRARO (IPCC, FEEM, CMCC, Università Ca' Foscari Venezia)	OCEAN AND CLIMATE CHANGE ON THE WAY TO COP21 Ocean Climate Change, ocean modelling and analysis CHAIR Simona MASINA (CMCC)	WATER, ENERGY AND FOOD NEXUS IN AGRICULTURE Water resources in a changing climate CHAIR Donatella SPANO (SISC, CMCC)	
	L. CAMPAGNOLO (FEEM, CMCC) Can Paris deal boost sdgs achievement? An assessment of climate-sustainability co-benefits	S. PIERINI (Università di Napoli Parthenope) Describing and understanding the intrinsic kuroshio extension decadal variability	N. D. GUYENNON (CNR-IRSA) Modelling irrigation practice for long-term groundwater sustainability	
	N. ARNELL (University of Reading) Global-scale impacts avoided by the INDCs	G. SANNINO (ENEA) Variability of the Mediterranean thermohaline circulation IN MED-CORDEX HINDCAST Simulations	H. KANAMARU (FAO) Projection of climate change impacts on hydrological regimes for agriculture adaptation planning	
	C. ORECCHIA (CMCC, FEEM) The cost of climate stabilization in Southeast Asia, a joint assessment with dynamic optimization and CGE models	C. FRATIANNI (INGV) Nextdata sixty years ocean reanalysis for the study of the Mediterranean Climate	V. MARLETTO (Arpa ER) Adapting to climate change: MOSES, a new tool for irrigation water management	
	S. CASERINI (Politecnico di Milano) Decomposition analysis of GHG emissions at four geographic levels	G. COPPINI (CMCC) A new on line service for marine environment and climate change assessment in the Mediterranean Sea	G. STANDARDI (FEEM) Incremental water charging in agriculture. A case study for Regione Emilia Romagna in Italy	
	L. DROUET (CMCC) Uncertainty decomposition of the mitigation costs estimates from the IPCC AR5	P. CASTAGNO (Università di Napoli Parthenope) Long term variability of Antarctic Bottom Water precursors and climate indexes in the Pacific Sector of the Southern Ocean	A. TRABUCCO (CMCC) Multi-purpose functioning of Pedra 'e Othoni reservoir, Sardinia, for energy production, agricultural and urban demand under climate change	
13:00	Lunch			

Parallel Session

Thursday, November 19, 2015 / h. 14:00 - 15:45

14:00	IRAN ROOM	IRAQ ROOM	RED ROOM	Poster Sessions
	<p>CLIMATE CHANGE RESPONSE ACTIONS</p> <p>Knowledge and technology to improve adaptive capacities</p> <p>CHAIR Marina BALDI (CNR IBIMET)</p>	<p>OCEAN AND CLIMATE CHANGE ON THE WAY TO COP21</p> <p>Impact of the Climate Change on the biogeochemical ocean system</p> <p>CHAIR Azadeh RAZAVI ARAB (University of Tehran)</p>	<p>WATER, ENERGY AND FOOD NEXUS IN AGRICULTURE</p> <p>Energy-water nexus: opportunity and choices for agriculture</p> <p>CHAIR Francesco BOSELLO (Università Statale di Milano, CMCC, FEEM)</p>	
	<p>M. GIAMBERINI (CNR)</p> <p>Ecopotential: improving future ecosystem benefits through earth observation</p>	<p>V. PIERMATTEI (University of Tuscia)</p> <p>C-CEMS: an integrated observatory for coastal monitoring</p>	<p>I. PORTOGHESE (CNR – IRSA)</p> <p>Water Energy-Food-Nexus for Mediterranean Countries: an optimization perspective</p>	
	<p>A. FILPA (University of Roma Tre)</p> <p>Climate Vulnerability Map of Rome (CVMR)</p>	<p>D. IUDICONE (Stazione Zoologica Anton Dorn)</p> <p>Environmental forcings on the global ocean biological connectivity</p>	<p>M. BEVIONE (FEEM)</p> <p>Global freshwater demand for electricity generation to 2100 under low carbon scenarios</p>	
	<p>A. FERRUZZA (ISTAT)</p> <p>New challenges for official statistics for the understanding of extreme events and disasters</p>	<p>A. CONVERSI (CNR)</p> <p>Ecological regime shifts: a scientific and socio-economic challenge in an increasingly changing world</p>	<p>F. EBOLI (FEEM, CMCC)</p> <p>Economy-wide assessment of climate change impacts on agriculture: preliminary assessment based upon an ISI-MIP ensemble data</p>	
	<p>M. TIEPOLO (Politecnico Torino)</p> <p>Risk analysis and evaluation to improve climate adaptation planning in Western Niger</p>	<p>M. SCHIAVINA (Politecnico di Milano)</p> <p>Multidecadal North Atlantic Ocean circulation patterns and impacts on European eel larval migration</p>	<p>I. ALLOISIO (FEEM)</p> <p>The Water-Food-Energy Nexus in the Mediterranean Basin</p>	
	<p>B. PIOTTO (ISPRA)</p> <p>An adaptation option to face climate change in urban and peri-urban ecosystems: wildflowers for water saving and biodiversity enhancement</p>	<p>M. SAMMARTINO (CNR – ISAC)</p> <p>Analysis of the spatial and temporal variability of the phytoplankton size classes in the Mediterranean Sea from SEAWIFS data</p>	<p>D. VITO (Politecnico di Milano)</p> <p>Solar Pumping Systems for small-scale agricultural groundwater water supply: a proposal of application in a Indian village</p>	
	<p>D. MARAGNO (University luav of Venice)</p> <p>New technologies and knowledge management for the climate change adaptation</p>	<p>F. MAFFUCCI (Stazione Zoologica Anton Dorn)</p> <p>Thermal constraints on early dispersal may prevent poleward expansion of marine ectotherm with climate warming</p>	<p>G. BEZZI (CIB - Consorzio Italiano Biogas e Gassificazione)</p> <p>Biogas done right in agriculture: implications for water savings and mitigation of emissions of greenhouse gases</p>	
	<p>V. GIANNINI (CMCC)</p> <p>Sharing skills and needs between providers and users of climate information to enable decision making based on science: lessons from the Northern Adriatic case study</p>	<p>A. RAZAVI ARAB (University of Tehran)</p> <p>Climate Change and Feasibility of Developing an Environmentally Sustainable Integrated Multi-Trophic Mariculture System in the Northern Persian Gulf Coastlines</p>	<p>I. GOMEZ (OBSA)</p> <p>Sustainable camelina oil for biojet production without ILUC</p>	
15:45	Coffee Break			

Parallel Sessions

Thursday, November 19, 2015 / h. 16:00 - 17:30

16:15	IRAN ROOM	IRAQ ROOM	RED ROOM	Poster Sessions
	<p>CLIMATE CHANGE RESPONSE ACTIONS</p> <p>Responding to Extreme Weather and Climate Events</p> <p>CHAIR Gioia GIBELLI (Società Italiana Ecologia del Paesaggio)</p>	<p>OCEAN AND CLIMATE CHANGE ON THE WAY TO COP21</p> <p>Monitoring the Ocean Climate Change, integration of observation and modelling</p> <p>CHAIR G. SANNINO (ENEA)</p>	<p>WATER, ENERGY AND FOOD NEXUS IN AGRICULTURE</p> <p>Water resources and basin process</p> <p>CHAIR Fabio CASTELLI (Università di Firenze)</p>	
	<p>T.E. AGBOR DELPHINE (National Institute of Cartography Cameroon)</p> <p>The adverse effects of climate variability and change on the widikum community in Cameroon</p>	<p>F. ANTONIOLI (ENEA - SSPT MET CLIM)</p> <p>Relative sea-level change along the Italian coast and projections for 2100: coastal plain impacts based on high-resolution DTMs and Geodetic data</p>	<p>R. VEZZOLI (CMCC)</p> <p>Climate change impacts on Po River water availability at 2021-2050</p>	
	<p>M.M. MALPEDE (FEEM)</p> <p>The Role of Temperature in Estimating Residential Gas Consumption in the USA and Europe</p>	<p>M. ANZIDEI (INGV)</p> <p>Relative sea level rise in the central Mediterranean from tide gauge data: implications for future projections and flooding scenario for the subsiding island of Lipari</p>	<p>M. PIRAS (Università degli Studi di Cagliari)</p> <p>Climate change effects in a medium-sized Mediterranean Basin</p>	
	<p>F. GARCIA SANCHEZ (University of Cantabria)</p> <p>Climate change adaptation indicators for cities: do not reinvent the wheel</p>	<p>E. NAPOLITANO (ENEA)</p> <p>Operational oceanography at the ENEA Climate Laboratory</p>	<p>D. BOCCHIOLA (Politecnico di Milano)</p> <p>Climate change and the quest for water in the high towers of Asia</p>	
	<p>E. RAMIERI (Thetis)</p> <p>Community-based adaptation measures to climate change in the Lagoon of Carmen-Pajonal-Machona (Tabasco)</p>	<p>S. SIMONCELLI (INGV)</p> <p>MyOcean Mediterranean Sea Reanalysis 1987-2013: focusing on the Algerian basin circulation</p>	<p>F. COMITI (Free University of Bozen-Bolzano)</p> <p>Melting glaciers in mountain basins: measure today's runoff and sediment transport to understand tomorrow's river changes</p>	
	<p>S. CALMANTI (ENEA)</p> <p>A Climate Service prototype for drought early warning in Ethiopia</p>	<p>A. DI SARRA (ENEA)</p> <p>The marine section of the station for climate observations at Lampedusa: an air-sea interaction observatory</p>	<p>G. GROSSI (Università degli Studi di Brescia)</p> <p>The effects of climate change on the sediment yield in mountainous areas</p>	
	<p>C. TRABACCHI (Climate Policy Initiative)</p> <p>Making climate resilience a private sector business. insights from the agricultural sector in Nepal</p>	<p>L. SCARASCIA (CMCC)</p> <p>Factors determining sea level variability and its deviation from the global mean in three marginal seas during 20th Century: Baltic, Adriatic and Black Sea</p>	<p>N. MONTALDO</p> <p>Historical climate change of the Sardinian hydrology: the dramatic runoff decrease in the last three decades</p>	

Parallel Sessions

Friday, November 20, 2015 / h. 10:00 - 11:15

10:00	IRAN ROOM	IRAQ ROOM	RED ROOM	Poster Sessions
	<p>COP21, THE INDCs AND POLICIES TO ADDRESS CLIMATE CHANGE</p> <p>Challenges and opportunities in a post COP 21 world</p> <p>CHAIR Francesco BOSELLO (Università Statale di Milano, CMCC, FEEM)</p>	<p>THE PHYSICS OF CLIMATE CHANGE</p> <p>Climate Variability (I)</p> <p>CHAIR Antonio NAVARRA (CMCC)</p>	<p>CLIMATE CHANGE AND THE FUTURE OF LAND SYSTEM AND BIODIVERSITY</p> <p>Forest Deserts & heat waves</p> <p>CHAIR Pasquale SCHIANO (CIRA, CMCC)</p>	
	<p>F. BOSELLO (Università Statale di Milano, CMCC, FEEM)</p> <p>Building uncertainty into the mitigation adaptation decision: a risk premium approach</p>	<p>A. PASINI (CNR - IIA)</p> <p>Multi-approach investigations for testing the robustness of attribution studies</p>	<p>S. MEREU (Università di Sassari, CMCC)</p> <p>Does a higher functional diversity enhance the dynamic stability of forest ecosystem?</p>	
	<p>M. GRASSO (Università degli Studi di Milano-Bicocca)</p> <p>The political feasibility of large-scale solar radiation management</p>	<p>E. SCOCCIMARRO (CMCC, INGV)</p> <p>The role of high frequency atmosphere-ocean interaction in modulating tropical cyclone activity</p>	<p>D. GARZENA (University of Turin)</p> <p>Evaluation of heat waves over the North Western Italian Alps</p>	
	<p>E. DELPIAZZO (CMCC)</p> <p>Analyzing the coordinated impacts of climate policies for financing adaptation and development actions</p>	<p>D. MELONI (ENEA)</p> <p>Radiative effect of desert dust in the Mediterranean</p>	<p>A. DI FILIPPO (Università degli Studi della Toscana)</p> <p>Tree-ring based regionalization of Climate-Change impact on BEeCH forests at different elevation across the temperate-Mediterranean biomes in Italy</p>	
	<p>S. CODERONI (Università Politecnica delle Marche)</p> <p>The evolution of agricultural GHG emissions in Italy and the role of the cap. A farm-level assessment</p>	<p>G. DALU (CNR - IBIMET)</p> <p>Winds driven by the Sahara and by the West Africa heat low</p>	<p>M. GALVAGNO (Environmental Protection Agency of Aosta Valley)</p> <p>Scorching alps: insights from the 2015 summer heat wave</p>	
	<p>B. MENNE (WHO)</p> <p>Benefits for health of climate action in the WHO European Region</p>	<p>A. DELL'AQUILA (ENEA)</p> <p>Evaluation of simulated decadal variations over the Euro-Mediterranean region from ENSEMBLES to Med-CORDEX</p>	<p>SCIORTINO</p> <p>Climate impact on land degradation and desertification in Italy</p>	
11:15	Coffee Break			

Parallel Sessions

Friday, November 20, 2015 / h. 11:45 – 13:15

11.45	IRAN ROOM	IRAQ ROOM	RED ROOM	Poster Sessions
	WATER, ENERGY AND FOOD NEXUS IN AGRICULTURE Vulnerability and security in future agriculture production CHAIR Astrid AGOSTINI (FAO)	THE PHYSICS OF CLIMATE CHANGE Climate variability (II) CHAIR Antonello PASINI (CNT - IIA)	CLIMATE CHANGE AND THE FUTURE OF LAND SYSTEM AND BIODIVERSITY Geo - Hydrologic Risks CHAIR Pasquale SCHIANO (CIRA, CMCC)	
	A. PONTRANDOLFI (Council for Agricultural Research and Economics) Analysis of exposure and vulnerability of agricultural areas to climatic risk in Italy	V. PAVAN (ARPA ER) The daily gridded climatic data set 1961-2010 for Emilia-Romagna (Italy)	B. BONACCORSO (University of Messina) Detecting changes in annual maxima rainfall series at regional scale	
	E. RIDOLFI (Università degli Studi di Perugia) Enhancing early warning systems with web mobile phone application	M. TEDESCO (Columbia University) The contribution of the Greenland ice sheet to current and future sea level rise: a surface mass balance perspective	S. CAMICI (CNR) Landslide and flood hazard assessment in a climate change environment	
	S. TERSIGNI (ISTAT) A cross-reading of official statistics production to improve the analysis of Climate Change related phenomena	H. KANAMARU (FAO) Downscaling of climate change projections in support of adaptation planning	P. CLAPS (Politecnico di Torino) The effect of global warming on floods in mountain catchments	
	F. ROSSI (CNR) The new urgency for agriculture: to be "climate smart"	M. TANAHARTE (Max Planck Institute for Chemistry) Heat extremes in the Middle East and North Africa (MENA) region in the past and the future	G. RIANNA (CMCC) Potential climate changes in Italy and consequences on land stability	
	O. BALDERAMA (Isabela State University) Aerobic rice technology: strategy of farmers to fight impacts of climate change in Cagayan Valley, Philippines	S. PIERINI (Università di Napoli Parthenope) Exploring basic features of a changing climate: analysis of a low order model's pullback attractors	A. CANCELLIERE (University of Catania) Estimation of landslide-triggering probabilities modification due to climate change	
	M. FUJISAWA (FAO) Nation-wide assessment of climate change impacts on crops in the Philippines and Peru using MOSAICC tool	GIUNTOLI Uncertainties in future water runoff over the United States	F. MATANO (CNR) Trends in frequency of flash floods phenomena over the coastal urbanized areas of Campi Flegrei volcanic district, SW Italy	
13.15	Lunch			

Parallel Sessions

Friday, November 20, 2015 / h. 14:15 - 16:00

14:15	IRAN ROOM	IRAQ ROOM	RED ROOM	Poster Sessions
	CLIMATE CHANGE RESPONSE ACTIONS	THE PHYSICS OF CLIMATE CHANGE	CLIMATE CHANGE AND THE FUTURE OF LAND SYSTEM AND BIODIVERSITY	
	Building Resilience for Adaptation CHAIR Stefano MARIANI	Climate variability (III) CHAIR Stefano PIERINI (Università di Napoli Parthenope)	Biodiversity CHAIR Anna LOY (Università del Molise)	
	S. Di SABATINO (University of Bologna)	R. D'AGOSTINO (University of Salento, CMCC)	S. IMPERIO (Monti Simbruini Regional Park)	
	How to identify critical issues in urban planning through the application of city breathability concepts: a short review	The effect of the global warming on Hadley Circulation trends in ECMWF centennial reanalyses	Climate change effects on the distribution of large mountain herbivores	
	A. FARINA (University of Urbino)	M. RUBINO (Seconda Università di Napoli)	E. RECCHINI (ISTAT)	
	Ecoacoustics, a New Tool to Monitor Climate Change	Terrestrial uptake due to cooling responsible for low atmospheric CO2 during the little ice age	Impacts of climate change on ecosystems and biodiversity and challenges for official statistics	
	R. CERVIGNI (The World Bank)	V. LEMBO (University of Salento)	R. SANDULLI (Università degli Studi di Napoli "Parthenope")	
	Enhancing the climate resilience of africa's infrastructure: the power and water sectors	Evolution of energy budget and Meridional transport in Amip-like experiments during the 20th Century	The red coral populations of the gulfs of Naples and Salerno: global warming and deep mass mortalities	
	F. STEL (Regional Agency for Environmental Protection of FriuliVenezia Giulia)	C. CASSARDO (University of Torino)	A. MOTRONI (Environmental Protection Agency of Sardinia)	
	Why are we not so effective? The non-technical aspects that can undermine our policies	Weather Radar Based Short Term Climatological Analysis Of Severe Storms Over Northwestern Italy	Climate change impacts on biodiversity: a GIS approach for bioclimatic studies and vegetation trends	
	F. POULAIN (FAO)	F. CIOFFI (University of Rome "La Sapienza")	F. BERZAGHI (University of Tuscia)	
	Enhancing Understanding Of The Impacts Of Climate Change, Climate Variability And Extreme Events On Fisheries And Aquaculture	Exploring present and future linkages between Tanzania rainfall and large-scale circulation patterns by Non-Homogenous Hidden Markov model (NHMM)	Indirect link to climate change: long-term effects of Megafauna on tropical forest structure and carbon cycling	
	F. DI TURO (La Sapienza University Of Rome)	L. SANGELANTONI (Università Politecnica delle Marche)	C. CERRATO (CNR)	
	Climate change impacts on cultural heritage materials in sinergies with air pollution: the European risk assessment	From regional to local climate scenario: the effects of a statistical bias correction on different spatial scale climate change signal	Biodiversity monitoring in mountain ecosystems: a multi-taxa approach	
	L. DAMNYAG (Forestry Research Institute of Ghana)	P. FAGGIAN (RSE)	P. MERCOGLIANO (CMCC)	
	Tenure and 'carbon rights' in local redd + project: insights from community-based workshops in ankasa conservation area, Ghana	Climate change and fire risk in Italy	A methodology to assess variation in shallow-landslides hazard induced by climate change	
16:00	Coffee Break			

Poster Session

Special areas will be dedicated to the exhibition of posters to provide a further opportunity to present work and projects on climate related research. Thanks to the poster sessions, authors will have the opportunity to share knowledge and results in a communicative context which encourages an immediate exchange of opinions and ideas among the participants.

Posters presented at ROME2015 – SCIENCE SYMPOSIUM ON CLIMATE are grouped in the following sessions

Thursday, November 19, 2015

	FLAG ROOM	IRAN ROOM MEZZANINE
11.45 13:00	CLIMATE CHANGE AND THE FUTURE OF LAND SYSTEM AND BIODIVERSITY	CLIMATE CHANGE AND THE FUTURE OF LAND SYSTEM AND BIODIVERSITY
		OCEAN AND CLIMATE CHANGE ON THE WAY TO COP21
		COP21, THE INDCs AND POLICIES TO ADDRESS CLIMATE CHANGE
14:00 17:00	THE PHYSICS OF CLIMATE CHANGE	OCEAN AND CLIMATE CHANGE ON THE WAY TO COP21
		COP21, THE INDCs AND POLICIES TO ADDRESS CLIMATE CHANGE

Friday, November 20, 2015

	FLAG ROOM	
10:00 13:15	CLIMATE CHANGE RESPONSE ACTIONS	
14:15 16:00	WATER, ENERGY AND FOOD NEXUS IN AGRICULTURE	

