

23rd SEPTEMBER, 2013

* Only presenting authors are mentioned in the program

8.30-9.00	Registration
9.00-10.00	Welcome Address: A. NAVARRA, SISC President - D. SPANO, co-chair Scientific Committee SISC Annual Conference Plenary Lecture: A. LIBERATORE, European Commission - DG Research and Innovation “Climate Change and Security: the Role of the European Union”

	Parallel sessions ADVANCES IN CLIMATE SCIENCE	Parallel sessions IMPLICATIONS ON ECOSYSTEM SERVICES	Parallel sessions CLIMATE POLICY AND ECONOMIC ASSESSMENT
	Modes of variability in the Pacific Ocean <i>Chair: S. Masina - CMCC</i>	Dynamic landscapes: hazard & risk assessment - I <i>Chair: P. Schiano - CMCC</i>	Economic analysis of climate change impacts: methods and approaches <i>Chair: C. Carraro - Università Ca' Foscari di Venezia / FEEM / CMCC</i>
10.00-10.20	ENSO Formation over the Equatorial Ocean <i>K. Miyakoda - Princeton University N.J.</i>	An European HPC Infrastructure and the Climate Challenges <i>G. Erbacci - CINECA SCAI Department</i>	Probabilistic economic impacts of climate change in an integrated assessment model framework <i>L. Drouet - CMCC / FEEM</i>
10.20-10.40	Intrinsic climate variability paced by external forcing: the Kuroshio Extension bimodality - North Pacific Oscillation case <i>S. Pierini - Università degli Studi di Napoli Parthenope</i>	Exploring synergies for disaster risk reduction in Guatemala: the use of cognitive maps <i>V. Giannini - CMCC</i>	A Ricardian Analysis of the Impact of Climate Change on European Agriculture <i>R. Mendelshon - Yale University</i>
10.40-11.00	Climatic trends of the equatorial undercurrent: A backup mechanism for sustaining the equatorial Pacific production <i>R. Ruggio - Università del Salento</i>	Syndromes of Land Degradation and Implications for Ecosystem Services in Emilia-Romagna, Italy. An Evaluation Framework for the Past and in Face of a Changing Climate <i>T. Ceccarelli - CRA-CMA</i>	Chaos in, chaos out: the effect of deterministic chaos in GCM scenarios on estimates of climate change impacts <i>E. Massetti - CMCC</i>
11.00-11.20	ENSO and Pacific Decadal Oscillation: decadal variability driven by tropical-extratropical interactions <i>R. Farneti - ICTP</i>	Assessing environmental impacts of climate change at the regional scale to provide adaptation services: the Decision support System for Coastal climate change impact assessment (DESYCO) <i>S. Torresan - CMCC-ISC</i>	Discussion
11.20-11.30	Discussion	Discussion	
11.30-12.00	Coffee Break		
	Regional climate modelling and downscaling <i>Chair: A. Pasini - IIA CNR</i>	Dynamic landscapes: hazard & risk assessment - II <i>Chair: A. Marcomini - Università Ca' Foscari di Venezia</i>	Strategies for adaptation and mitigation policies - I <i>Chair: R. Mendelsohn - Yale University</i>
12.00-12.20	A statistical downscaling system for seasonal projections using ensemble neural networks with Bayesian regularization <i>S. Amendola - CMCC</i>	Towards flood risk assessment in a climate change perspective <i>P. Ronco - Università Ca' Foscari di Venezia</i>	Putting climate change adaptation into action: an operational approach to implement the European Guidelines on developing adaptation strategies <i>C. Giupponi - Università Ca' Foscari di Venezia / CMCC</i>
12.20-12.40	Multimodel SuperEnsemble Downscaling of Regional Climate Models in South-Western Alps <i>S. Barbarino- Arpa Piemonte</i>	A risk-based assessment of impacts affecting groundwater resources and related ecosystems in view of climate change <i>S. Torresan - CMCC</i>	The dynamic feedback of climate change impacts and catastrophic risk on mitigation and adaptation investments <i>F. Bosello - FEEM / CMCC / Università Statale di Milano</i>
12.40-13.00	Implementation and validation of a precipitation downscaling chain for regional climate modelling <i>D. D'Onofrio - Università degli Studi di Torino / ISAC-CNR</i>	Climate change scenarios of minimum, maximum temperature and precipitation over Italian areas, period 2021-2050 <i>R. Tomozeiu - ARPA-SIMC Emilia-Romagna</i>	Is Geoengineering a viable Option for Dealing with Climate Change? <i>M. Tavoni - CMCC</i>
13.00-13.20	Performance evaluation of COSMO-CLM over Italy and climate projections for the XXI century <i>E. Bucchignani - CMCC</i>	Preliminary assessment of the effects of climate change on landslide activity of Orvieto clayey slope <i>G. Rianna - CMCC</i>	Insurance and Climate Change Adaptation: Field Experiments in Chilika Lagoon, India <i>A. Sharma - Università di Siena</i>
13.20- 13.30	Discussion	Discussion	Discussion
13.30-14.30	Lunch		

	Variability and uncertainties using CMIP5 models <i>Chair: P. Lionello - Università del Salento / CMCC</i>	Impacts on natural ecosystems - I <i>Chair: J. Von Hardenberg - ISAC-CNR</i>	Strategies for adaptation and mitigation policies - II <i>Chair: M. Tavoni - CMCC</i>
14.30-14.50	A data-driven causality analysis for the attribution of recent global warming <i>A. Pasini - IIA-CNR</i>	Distribution of bioclimate zones and their shifting due to climate change <i>A. Trabucchi - CMCC</i>	Guidelines for the implementation of the Regional Adaptation Strategy in Lombardy (RAS) <i>A. Ballarin Denti - Università Cattolica del Sacro Cuore, Fondazione Lombardia per l'Ambiente</i>
14.50-15.10	Reliability and skill of CMIP5 multi-model decadal hindcasts <i>S. Corti - ISAC-CNR</i>	Influence on population density and climate on the dynamics of the black grouse (<i>Tetrao tetrix</i>) populations in the Piedmont region (Italy) <i>R. Casagrandi / A. Mignatti - Politecnico di Milano</i>	Beyond stationarity in planning renewables: The CLIM-RUN experience for the Euro-Mediterranean region <i>A. Dell'Aquila - ENEA</i>
15.10-15.30	Snow depth in the "Third Pole": how do CMIP5 models represent it? <i>S. Terzago - ISAC-CNR</i>	Response to climate change of alpine glaciers in north-western Italian Alps <i>R. Bonanno - Arpa Piemonte</i>	Eni's approach to mitigation and adaptation <i>R. De Filippo - ENI</i>
15.30-15.50	Heavy precipitation events over the Euro-Mediterranean region in a warmer climate: results from CMIP5 models <i>E. Scoccimarro - INGV / CMCC</i>	Has the ocean contributed to the decline of European eel recruitment? Results of a 40-year simulation experiment <i>R. Casagrandi / M. Schiavina - Politecnico di Milano</i>	Climatic Change Impacts on Energy Sectors over Italian Region <i>P. Faggian - RSE SpA</i>
15.50-16.00	Discussion	Discussion	Discussion
16.00-16.30	Coffee Break		
	Modes of variability in the atmosphere and ocean <i>Chair: S. Corti - ISAC-CNR</i>	Impacts on natural ecosystems - II <i>Chair: R. Casagrandi - Politecnico di Milano</i>	Air quality and climate change mitigation policies <i>Chair: E. Massetti - FEEM / CMCC</i>
16.30-16.50	Effects of the North Atlantic Oscillation on winter precipitation in the Hindu-Kush Karakoram <i>L. Filippi - ISAC-CNR</i>	Climate Change Impacts on Distribution and Composition of the Alpine Natural Pasturelands <i>C. Dibari - Università degli Studi di Firenze</i>	Including air pollutants' emissions in integrated assessment climate change modelling <i>L. Aleluia Reis - CMCC</i>
16.50-17.10	Atmospheric Blocking and Euro-Atlantic Winter Mid-Latitude Climate Variability <i>P. Davini - ISAC-CNR</i>	Larval Connectivity in the Central Pacific Ocean: Lagrangian simulations in the Northern Line Islands <i>R. Casagrandi - Politecnico di Milano</i>	Synergies and trade-offs between climate change mitigation strategies and air quality policies: the case of wood burning in domestic appliances <i>S. Caserini - Politecnico di Milano</i>
17.10-17.30	The temporal variability and associated spectral features of transient-eddy meridional heat transport <i>G. Messori - Imperial College London</i>	The effects of climate change on cuatro cienegas aquatic ecosystem in the desert environment of northern Mexico <i>M. Herrera-Pantoja - Queretaro Water Commission</i>	Ancillary benefits of climate change policy in China: air pollution impacts on household health, adaptation and government-controlled information in Beijing <i>C. Ravetti - CIES</i>
17.30-17.40	The Antarctic Circumpolar Wave scenario described as a combination of interannual signals <i>D. Cerrone - Università di Siena</i>	Discussion	Discussion
17.40-17.50			
17.50-18.00			
18.00-19.30	Media Session		
20.30-23.00	Social dinner		

	Parallel sessions ADVANCES IN CLIMATE SCIENCE	Parallel sessions IMPLICATIONS ON ECOSYSTEM SERVICES	Parallel sessions CLIMATE POLICY AND ECONOMIC ASSESSMENT
	Climate processes in the Mediterranean region - I <i>Chair: V. Artale - ENEA</i>	Impacts on forest and agricultural ecosystems - I <i>Chair: P. Duce - CNR-IBIMET</i>	Climate change and urbanization: implications, feedback and evaluation of strategies <i>Chair: M. Breil - CMCC</i>
9.00-9.20	Future storm surge distribution along the Mediterranean coast <i>P. Lionello - Università del Salento / CMCC</i>	The impact of selective logging on Forest structure, Plant Diversity and above-ground biomass of African tropical forests <i>F. Paparella - Università del Salento</i>	Integrating the human dimension in ecosystem based adaptation to global changes <i>C. Giupponi - Università Ca' Foscari di Venezia</i>
9.20-9.40	Tropical-like cyclones in the Mediterranean sea: from the case study over Salento to a combined satellite-modelling approach <i>M. Miglietta - ISAC-CNR</i>	Assessing the resilience of Mediterranean trees diversity to climate change projections <i>A. Di Paola - CMCC</i>	Vulnerability of Paris metropolitan area to future heat waves <i>A. Lemonsu - CNRM/GAME (Météo-France, CNRS)</i>
9.40-10.00	Sicily monthly high-resolution solar radiation climatologies <i>M. Maugeri - Università Statale di Milano</i>	Projected climate change impacts on staple crops in Nigeria <i>V. Mereu - CMCC</i>	The role of climatic variability on cholera spreading in Bangladesh <i>M. Ciddio - Politecnico di Milano</i>
10.00-10.20	Reconstruction of long time series of monthly temperature values by statistical methods: an application to Europe and the Mediterranean region <i>L. Scarascia - Università del Salento</i>	Evaluation of the potential of genomic tools and plant genes to mitigate the climate change impact and extremes on natural ecosystems and agriculture <i>S. Pavan - Università di Bari</i>	Albedo Modifications as Global Mitigation and Local Adaptation Strategy in European Cities: A Geographically Explicit Investigation <i>T. Susca - Hertie School of Governance</i>
10.20-10.30	Discussion	Discussion	Discussion
10.30-11.00	Coffee Break		
	Climate processes in the Mediterranean region - II <i>Chair: P. Ruti - ENEA</i>	Impacts on forest and agricultural ecosystems - II <i>Chair: D. Spano - UNISS / CMCC</i>	Economic assessment of climate change impacts <i>Chair: S. Caserini - Politecnico di Milano</i>
11.00-11.20	Daily precipitation statistics over the Po Basin: observation and post-processed RCM results <i>M. Turco - CMCC</i>	Local Impact Assessment of Climate Change on Fire Season Length <i>P. Duce - CNR-IBIMET</i>	An indicator-based assessment of vulnerability to climate change in Italian coastal cities <i>M. Breil - CMCC</i>
11.20-11.40	Climatological characterisation of the Ora del Garda wind in the Alps <i>D. Zardi - Università degli studi di Trento</i>	Analyzing changes in wildfire likelihood and intensity in Mediterranean areas: a case study from central Sardinia, Italy <i>M. Salis - UNISS / CMCC</i>	Climate change, smoothing with water stock and impact on the agricultural sector in the Po valley (Italy) <i>M. Bozzola - CIES</i>
11.40-12.00	Continuous measurements of climate altering halogenated gases at the Italian Climate Observatory O. Vittori (ICO-OV) <i>M. Maione - Università Carlo BO Urbino</i>	Skill assessment of the global model EC-Earth in fire danger indices evaluation over the Greater Alpine Region: a comparison with the corresponding ERA-Interim Reanalysis parameters <i>S. Barbarino - ISAC-CNR</i>	The economics of tropical cyclones under climate change: Incorporating the Impact of Global Hurricane Characteristics and Level of Development <i>L. Bakkensen - Yale University</i>
12.00-12.20	The myth of Scylla and Charybdis: a torrent in the Messina Strait <i>G. Sannino - ENEA</i>	Historical Trends and Future Predictions of Fire Emission Estimation in Italy <i>V. Bacciu - CMCC / UNISS</i>	Adaptation strategies at river basin district scale: the Po river basin experience <i>L. Carrera - FEEM / CMCC</i>
12.20-12.30	Discussion	Discussion	Discussion
12.30-13.30	Poster Session		
13.30-14.30	Lunch		
14.30-15.00	Plenary - Best Paper Award		
15.00-16.30	Poster Session		SISC General Assembly

12.30-13.30 /
15.00-16.30

Poster Session

Poster Session ADVANCES IN CLIMATE SCIENCE	Poster Session IMPLICATIONS ON ECOSYSTEM SERVICES	Poster Session CLIMATE POLICY AND ECONOMIC ASSESSMENT
Intrinsic variability of the Antarctic Circumpolar Current: low-frequency fluctuations in the Argentine Basin flow <i>S. Pierini - Università degli Studi di Napoli Parthenope</i>	Assessing environmental impacts of climate change at the regional scale to provide adaptation services: the Decision support System for Coastal climate change impact assessment (DESYCO) <i>S. Torresan - CMCC-ISC</i>	The Cost of Climate Change Inaction in the EU. A CGE Approach <i>R. Pierfederici. Presented by F. Bosello - FEEM / CMCC</i>
GNSS Analysis for Meteorological Applications and Climate Monitoring in the Mediterranean Area <i>B. Pace - E-GEOS S.p.A., ASI / Centro di Geodesia Spaziale</i>	Fluctuation in spatial patterns in semi-arid ecosystems under pressure <i>R. Corrado - Università del Salento</i>	The informative role of farmers' perceptions of change for the development of robust climate change adaptation policies – a case study from Italy <i>L. Bonzanigo. Presented by C. Giupponi - FEEM / CMCC</i>
Study of aerosol - water vapor - clouds interaction at CNR-IMAA Atmospheric Observatory <i>F. Madonna - CNR-IMAA</i>	Application of the 3D-CMCC FEM (Three Dimension Forest Ecosystem Model) on multi-temporal NDVI satellite imagery and future scenarios <i>A. Collalti. Presented by A. Di Paola - CMCC</i>	Evaluation of flood disaster risk in the Polesine sub-region <i>M. Amadio. Presented by L. Carrera - FEEM / CMCC</i>
ACTRIS for coordinated long-term observation of aerosols, cloud-aerosol interactions, and trace gases in Europe <i>G. Pappalardo. Presented by F. Madonna - CNR</i>	Are Cereals in Globally Trouble? <i>E. De Cian. Presented by F. Bosello - FEEM / CMCC</i>	Adaptation strategies at river basin district scale: the Po river basin experience <i>L. Carrera - FEEM / CMCC</i>
Space-borne measurements of carbon dioxide distribution: inverse modelling and data fusion techniques <i>U. Cortesi - IFAC-CNR</i>	Assessing future land suitability of winter wheat crop <i>V. Mereu - UNISS / CMCC</i>	
Time Series Analyses of Climatological Records from a High Altitude Observatory in Southern Italy (Montevergine, AV) <i>G. Budillon - Università degli Studi di Napoli Parthenope</i>	Impact of drought on crop production: the Agricultural Regions from the Po river Basin case study <i>S. Santato. Presented by L. Carrera - FEEM</i>	
Recent trends in daily temperature extremes over the Basilicata Region, Southern Italy (1951 – 2010) <i>A. Pasini - CNR</i>	Water scarcity, climate change, and food security: challenges for the future <i>N. Mancosu. Presented by D. Spano - UNISS / CMCC</i>	
Observed long term trend and low-frequency variability of spring discharge timing in the main Alpine rivers <i>M. Zampieri. Presented by E. Scoccimarro - CMCC</i>	An analysis of the fire danger regime in Italy <i>F. Masala. Presented by C. Sirca - UNISS / CMCC</i>	
Long term atmosphere-surface transfer studies in Salento Peninsula: a database <i>P. Martano - CNR-ISAC</i>	A modelling framework to estimate CO2 fluxes under urban development scenarios <i>S. Marras - UNISS / CMCC</i>	
Statistical modelling of sequences of no rainy days <i>E. Ferrari - Università della Calabria</i>		
Mesoscale biological-physical interactions in the Sardinian Sea <i>S. Bonamano - UNITUS</i>		
Is global warming causing mass mortalities in the Mediterranean Sea upper layer? <i>I. Rivetti - Università del Salento</i>		
High resolution coastal monitoring during the sea breeze event <i>R. Martellucci - UNITUS</i>		
Relationship between sahel rainfall and Mediterranean summer climate <i>R. D'Agostino - Università del Salento / CMCC</i>		
Multivariate analysis for the influence of climate change on maritime structures design <i>G. Salvadori - Università del Salento</i>		