



# CLIVAR 2023

## Towards an integrated view of climate

Madrid, Facultad de Ciencias Físicas - Universidad Complutense de Madrid  
del 24 al 26 de Enero de 2023



BIBLIOTECAS  
PÚBLICAS  
MUNICIPALES

Martes 24	Miércoles 25	Jueves 26
S1: El cambio climático en el periodo pre-instrumental	S3: Variabilidad atmosférica	S5: Proyecciones climáticas
S2: Observación climática y técnicas de reconstrucción instrumental del clima	S4: Variabilidad oceánica	S6: Impactos climáticos

	Martes 24
8:00-9:00	Inscripciones
9:00-9:15	Presentación de apertura I
9:15-9:30	Presentación de apertura II
9:30-9:45	S1: "Holocene temperature reconstruction based on branched glycerol dialkyl glycerol tetraether lipid biomarkers from Laguna de Rio Seco alpine lake, Sierra Nevada (southern Iberia)", Marta Rodrigo Gámiz
9:45-10:00	S1: "Late-Holocene quantitative paleo-humidity reconstructions in the southern Iberian Peninsula from stable isotopes of gypsum hydration water", Fernando Gázquez
10:00-10:15	S1: "Cambios climáticos durante el Holoceno inferidos a partir de subfósiles de cladóceros en la Laguna de Río Seco (Sierra Nevada, España)", Charo López Blanco
10:15-10:30	S1: "Planktic foraminifera calcification variations in the Gulf of Lions and the Menorca basin on seasonal, interannual and pre-industrial time-scales.", Thibault Bejard*
10:30-10:45	S1: "Deglacial Mediterranean-basins link: old carbon-enriched eastern waters and collateral consequences for western aragonite mounds growth", Maria de la Fuente
10:45-11:00	
11:00-11:30	Coffee Break

11:30-11:45	S1: "Los últimos 2000 años del Glaciar de Monte Perdido (Pirineo Central): una mirada a la contaminación atmosférica del pasado, su origen y su variabilidad secular", Jorge Pey Betrán
11:45-12:00	S1: "Reconstructing land temperature variation from Pyrenean caves (NE Spain) over the past 2,500 years", Ana Moreno Caballud
12:00-12:15	S1: "Deep-sea paleoenvironmental reconstruction in the westernmost Mediterranean over the last 40 Kyr: new insights from a multiproxy approach", Santiago Casanova Arenillas*
12:15-12:30	S1: "Clima y fuentes documentales desde Extremadura", José Manuel Vaquero (online)
12:30-12:45	S1: "Iberian margin climate modes: time slices from the late Pliocene to the present", Montserrat Alonso-García
12:45-13:00	S1: "Saharan dust fluxes over N Spain for the last five millennia", Javier Martin Chivelet
13:00-13:15	S2: "CADTEP: una nueva base de datos climática diaria para Catalunya (1950-2021)", Marc Prohom (online)
13:15-13:30	S2: "Near-surface thermal structure in Spain from observational and reanalysis data", Félix García*
13:30-13:45	S2: "Reconstrucción de datos climáticos e hidrológicos a través de la dendrocronología en el sur de Ecuador", Kelly Yohanna Peña Moreno (online)
13:45-14:00	S2: "Validation and Reconstruction of Alpine Meteorological Data Set for Climate Studies", Álvaro González-Cervera*
14:00-15:30	<b>Comida + Sesión Posters: S1 y S2</b>
15:30-16:00	Sesión Posters: S1 y S2
17:00-19:30	<b>Ciencia Ciudadana (Biblioteca Pública Eugenio Trías, Casa de Fieras de El Retiro)</b>

<b>Miércoles 25</b>	
9:00-9:15	S3: "Desarrollo de un modelo empírico para predicción estacional", Esteban Rodríguez
9:15-9:30	Guisado
9:30-9:45	S3: "An assessment of temperature and precipitation over the Sierra de Guadarrama. GuMNet - Guadarrama Monitoring Network.", Cristina Vegas Cañas
10:15-10:30	S3: "Climate Variability, Teleconnections and Climate Change in a Mountainous Region of Central Spain (Sierra de Guadarrama).", Luis Duran
9:45-10:00	S3: "Analysis of trends in the occurrence of records and extremes in daily temperature series", Ana C Cebrián Guajardo
10:00-10:15	S3: "Assessment of the Jenkinson-Collison Weather Type classification in the Mediterranean: suitability of the method and reanalysis uncertainty", Juan Antonio Fernández de la Granja*
10:30-10:45	S3: "Distinguishing ENSO and NAO signatures in the North Atlantic", Javier García-Serrano
10:45-11:00	S3: "ENSO impact on northwest African upwelling", Jorge López Parages
11:00-11:30	<b>Coffee Break</b>
11:30-11:45	S3: "Estacionariedad de la teleconexión entre ENSO y la precipitación europea en verano", Maialen Martija Díez
11:45-12:00	S3: "The Challenge of the Anthropogenic CO2 emissions verification in the coming years", Veronica Martin Gomez
12:00-12:15	S3: "Wind stilling ceased in the Iberian Peninsula since the 2000s", Eduardo Utrabo Carazo*
12:15-12:30	S3: "Data-driven seasonal forecasts of European heat wave propensity", Stefano Materia
12:30-12:45	

<b>12:45-13:00</b>	S4: "Sistemas de observación oceánica del Instituto Español de Oceanografía en el Mediterráneo: Principales cambios de las propiedades físicas.", Manuel Vargas Yáñez
<b>13:00-13:15</b>	S4: "New insights into the Mediterranean Outflow Water export using Neodymium isotopes as a tracer", Leopoldo D. Pena
<b>13:15-13:30</b>	S4: "The impact of small-scale ocean structures on the Mediterranean climate", Camilo Melo
<b>13:30-13:45</b>	S4: "Anatomía de los eventos extremos de nivel del mar en el Mediterráneo Occidental e implicaciones para futuras inundaciones costeras", Jorge Ramos Alcántara*
<b>13:45-14:00</b>	S4: "Coastal sea levels and wind-waves in the Mediterranean Sea since 1950 from a high resolution ocean reanalysis", Tim Toomey*
<b>14:00-15:30</b>	<b>Comida</b>
<b>15:30-15:45</b>	S4: "A 30 years record of meteotsunami events in the eastern Iberian coast.", Joan Villalonga Llauger*
<b>15:45-16:00</b>	S4: "Variabilidad climática y el ecosistema pelágico en la plataforma ibérica atlántica", Manuel Ruiz Villarreal
<b>16:00-16:15</b>	S4: "Recent changes in the North Atlantic Ocean climate observed from SATS", Raquel Somavilla
<b>16:15-16:30</b>	S4: "Tropical Atlantic variability in EC-EARTH: impact of the radiative forcing", Danila Volpi
<b>16:30-16:45</b>	S4: "Interacción entre cuencas oceánicas tropicales y modulaciones", Belen Rodriguez-Fonseca
<b>16:45-17:00</b>	Sesión de pósters online: S3 y S4
<b>17:00-18:00</b>	<b>Coffee Break &amp; Poster: S3 y S4</b>
<b>21:00</b>	<b>Cena (Museo del Traje)</b>

<b>Jueves 26</b>	
<b>9:00-9:15</b>	S5: "Avances en la evaluación del efecto del cambio climático sobre el clima del oleaje a escala global a partir de proyecciones climáticas", Hector Lobeto
<b>9:15-9:30</b>	S5: "Development of a global digital twin for regional and local adaptation to climate change", Francisco Doblaz-Reyes
<b>9:30-9:45</b>	S5: "Evolución de las olas de calor y de frío en la Península Ibérica en el siglo XXI", Alejandro Díaz Poso*
<b>9:45-10:00</b>	S5: "Future conditions of the Iberian Coastal Region: upwelling and freshwater on the shelf", Martinho Marta Almeida
<b>10:00-10:15</b>	S5: "GCM selection for CORDEX next model generation over Europe", Jesús Fernández Fernández
<b>10:15-10:30</b>	S5: "Past and Future role of Atmospheric Rivers in Iberia", Ricardo Trigo
<b>10:30-10:45</b>	S5: "Projections for 2031-60 in the occurrence of heat waves in maximum and minimum temperatures over Spain", Jesús Asín Lafuente
<b>10:45-11:00</b>	S5: "Proyecciones del nivel del mar Mediterráneo para el s.XXI", Elisabet Verger Miralles
<b>11:00-11:30</b>	<b>Coffee Break</b>
<b>11:30-11:45</b>	S5: "Respuesta regional del clima ibérico a diferentes niveles de calentamiento global", Javier Díez Sierra
<b>11:45-12:00</b>	S5: "The MED-CORDEX ensemble future climate projections for the Mediterranean Sea: impacts of the high resolution and ocean-atmosphere coupling", Javier Soto Navarro

<b>12:00-12:15</b>	S5: "WRF-CESM2 high resolution dynamical downscaling of near-surface wind speed projections across the Iberian Peninsula", Miguel Andrés Martín*
<b>12:15-12:30</b>	S5: "¿Cómo evolucionarán los episodios de sequía en la Península ibérica durante el siglo XXI?", M <sup>a</sup> de las Nieves Lorenzo González
<b>12:30-12:45</b>	S6: "Evaluación multi-escala del riesgo de inundación bajo proyecciones climáticas: el caso del río Miño en la ciudad de Ourense", Diego Fernández Nóvoa
<b>12:45-13:00</b>	
<b>13:00-13:15</b>	S6: "Análisis del efecto combinado de inundación costera y erosión debido al cambio climático", Alexandra Toimil Silva
<b>13:15-13:30</b>	S6: "Co-diseño de servicios climáticos basados en predicción estacional en el Mediterráneo", Esteban Rodríguez Guisado
<b>13:30-13:45</b>	S6: "Downscaling of global climate models to assess the regional impact of climate change: the Rías Baixas as a case study", Marisela Des Villanueva
<b>13:45-14:00</b>	S6: "El impacto del cambio climático en los niveles freáticos de los acuíferos costeros y la consiguiente pérdida de calidad del agua subterránea en Mallorca: análisis de la relación con el Dominio Público Marítimo Terrestre", Rebeca Álvarez (online) *
<b>14:00-15:30</b>	<b>Comida</b>
<b>15:30-15:45</b>	S6: "Eventos de intrusión de polvo africano sobre zonas de la cuenca occidental mediterránea: evolución temporal e implicaciones en el cambio climático", Pedro Salvador Martínez
<b>15:45-16:00</b>	S6: "Heat waves in urban environments", Aleks Lacima
<b>16:00-16:15</b>	S6: "Impacto del cambio climático sobre la generación de energía renovable marina en la costa oeste de la Península Ibérica", Xurxo Costoya Noguerol
<b>16:15-16:30</b>	S6: "Modeling of leptospirosis outbreaks considering hydroclimatic variables in Argentina", Leonardo López
<b>16:30-16:45</b>	S6: "Proyecciones de cambio climático de la sequía en la Península Ibérica: Comparación de índices estandarizados en la detección y propagación de la sequía agrícola", Matilde García-Valdecasas Ojeda
<b>16:45-17:00</b>	Sesión de pósters online: S5 y S6
<b>17:00-18:00</b>	<b>Coffee Break &amp; Poster: S5 y S6</b>

## Pósters:

<b>S1: El cambio climático en el periodo pre-instrumental</b>
<ul style="list-style-type: none"> <li>• S1/P01: "Climate variability during Iberian Roman Humid Period recorded by speleothems of El Saliente Cave (SE Spain).", Fernando Gázquez</li> <li>• S1/P02: "Pollen-based quantitative precipitation reconstruction of the last 200,000 years in southern Iberia.", Jon Camuera Bidaurreta</li> <li>• S1/P03: "Temperaturas de verano durante el Holoceno deducidas a partir de un registro de quironómidos de Sierra Nevada, sur de España.", Gonzalo Jiménez Moreno</li> </ul>

- S1/P04: "A dry climate episode during the early-middle Holocene transition revealed by stable isotopes of gypsum from Laguna de Medina playa-lake (Cádiz).", Lucia Martegani\*
- S1/P05: "(No)Todo está sesgado: influencia de los procesos hidrodinámicos en la fidelidad de los registros proxy climáticos: implicaciones, desafíos y oportunidades.", Blanca Ausín
- S1/P06: "Dioles de cadena larga como potenciales paleotermómetros en lagos alpinos del sur Peninsular.", Antonio Garcia-Alix
- S1/P07: "Deglacial and Holocene changes in Mediterranean Thermohaline Circulation: A joint perspective from Eastern and Western basins.", Isabel Cacho Lascorz
- S1/P08: "Tracing Neoglaciation in the northern Iberian Peninsula.", Xabier Pontevedra Pombal
- S1/P09: "Paleoenvironmental and paleoclimate evolution in an alpine peat bog in southern Iberia: a geochemical approach.", Jose Manuel Mesa Fernández
- S1/P10: "Cambios ambientales pasados en el Sur de la Península Ibérica a través del estudio de las variaciones climáticas preservadas en espeleotemas (Cuevas de La Pileta, Trinchera y Nerja).", Francisco José Jiménez Espejo
- S1/P11: "Paleoceanographic variations on the Eastern Bransfield Basin (Antarctic Peninsula) during the Late Holocene.", Cecilia Morales Ocaña\*
- S1/P12: "La última deglaciación en el golfo de Cádiz: Cambios en el agua profunda del Mediterráneo.", Javier Pérez Tarruella\*
- S1/P13: "Proyecto MAGY: Hidrología de Mallorca de los últimos siglos. Validación instrumental del registro de espeleotemas.", Judit Torner
- S1/P14: "Progress towards quantitative temperature reconstructions on land: an example of three speleothem-based paleothermometers in Borneo.", Alvaro Fernandez Bremer
- S1/P15: "Reconstruction of surface ocean dynamics during Termination V (MIS 12-MIS 11) in the Iberian margin (IODP Site U1386).", María González Martín\*
- S1/P16: "Reconstructing climate change impacts on marine productivity in the Mediterranean during the Holocene: new insights from barite production and accumulation rates.", Francisca Martinez Ruiz
- S1/P17: "Present and past sourcing of the terrigenous particles in the western Mediterranean Sea using radiogenic isotopes.", Albert Català
- S1/P18: "Climate impacts of the Common Era on aquatic systems in NW Spain: preliminary results.", Roberto Bao
- S1/P19: "Climate variability in Northern Iberian Peninsula during the last 1500 years: integrating lacustrine and speleothem records.", Mario Morellon Arteles

- S1/P20: "Deoxygenation dynamics in the Mediterranean: new paleo-perspectives from empirical models based on modern anoxic basins.", Ricardo Monedero Contreras\*
- S1/P21: "Tracing the Mediterranean Outflow Water: present and past variability using Nd isotopes.", Sara Campderrós Serra\*
- S1/P22: "Late Holocene climate changes related to the North Atlantic Oscillation (NAO) and the East Atlantic (EA) pattern in the central north Atlantic Ocean. A proxy-based study from Azores archipelago lake sediments.", Mario Benavente\*

## **S2: Observación climática y técnicas de reconstrucción instrumental del clima**

- S2/P01: "Detección y caracterización de ciclones subtropicales en la cuenca noratlántica con ERA5.", Jesús Gutiérrez Fernández
- S2/P02: "Vientos regionales en la Península Ibérica a través del análisis de alta resolución COSMO-REA6.", María Ortega Camacho\*
- S2/P03: "Long-term aerosol optical depth at the Izaña Observatory from 1941-2021.", Omaira Elena García

## **S3: Variabilidad atmosférica**

- S3/P01: "A multiparametric perspective of the North Atlantic eddy-driven jet.", David Barriopedro Cepero
- S3/P02: "Atlantic Multidecadal Variability modulates the climate response to El Niño-Southern Oscillation in Australia.", Paloma Trascasa-Castro\*
- S3/P03: "Changes and variability of sea-breeze occurrence and speeds over the Western Mediterranean basin, 1981-2021.", Shalenys Bedoya-Valestt\*
- S3/P04: "Variability and predictability of chlorophyll in the major upwelling systems of the tropical Atlantic.", Elena Calvo Miguélez (online)
- S3/P05: "Comparison of air quality data between Zaragoza and the UK during the Covid-19 pandemic to predict future atmospheric changes.", Irene Monreal Campos (online)
- S3/P06: "El clima en Sierra Nevada: pasado, presente y futuro.", Matilde García-Valdecasas Ojeda
- S3/P07: "Evolución de la sequía en Galicia entre 1960 y 2020.", Ines Alvarez Fernandez
- S3/P08: "Flujos y caracterización geoquímica del polvo sahariano depositado en Parques Nacionales de alta montaña de la Península Ibérica.", Sonia Castillo Fernández
- S3/P09: "Impact of tropical eastern Pacific warming bias on Caribbean climate projections.", Marta Brotons Blanes (online)

- S3/P10: "Interaction between decadal-to-multidecadal oceanic variability and sudden stratospheric warmings.", Blanca Ayarzagüena Porras
- S3/P11: "On the influence of Tropical Atlantic Variability in the North Atlantic-European winter climate.", Laura Gil Reyes\*
- S3/P12: "Potential SST drivers for Chlorophyll-a variability in the Alboran Sea: A source for seasonal predictability?.", Jorge López Parages
- S3/P13: "Quantification of drought episodes in Bulgaria through multivariate indices: characteristics and associated atmospheric conditions.", Rogert Sorí Gómez (online)
- S3/P14: "Seasonal prediction of the teleconnections between ENSO and Atlantic Eastern Boundary Upwelling Systems.", Teresa Losada Doval
- S3/P15: "Spatio-temporal modeling of the trend in daily maximum temperature quantiles: A case study in Aragón, Spain.", Jorge Castillo-Mateo\*
- S3/P16: "Unraveling the nature of seasonal atmospheric variability over the North Atlantic-European sector.", María Santolaria Otín\*
- S3/P17: "Warming and Climate sensitivity from Long-term Temperature Records at Free Tropospheric Conditions.", Omaira García
- S3/P18: "¿Reproducen las simulaciones históricas CMIP6 la no-estacionariedad de la Oscilación del Atlántico Norte (NAO)?.", Amar Halifa Marin

#### **S4: Variabilidad oceánica**

- S4/P01: "Response of the upper ocean circulation to tropical Atlantic interannual modes.", Marta Martín del Rey
- S4/P02: "Influence of ENSO events on the Atlantic coast of the Iberian Peninsula.", Elsa Mohino
- S4/P03: "SECOSTA: Ciencia ciudadana para el estudio del cambio climático en las regiones costeras.", Alex Herrada
- S4/P04: "Water Mass Analysis of the North Atlantic Iberian margin using Empirical Orthogonal Functions (EOFs) and Optimum Multiparameter (OMP) analysis.", Pau Abelló Simón
- S4/P05: "Wave climate variability in a partially sheltered and upwelling-driven bay (Ria de Vigo).", Nicolás Villaceros Robineau
- S4/P06: "Multi-year Prediction at High-Resolution - Impacts on the predictability of the Pacific variability.", Aude Carreric
- S4/P07: "Aguilhas leakage influence on the Tropical Atlantic Variability Modes.", Teresa Losada Doval

- S4/P08: "Connection between marine ecosystems in the Tropical Atlantic via oceanic wave propagation.", Teresa Losada Doval
- S4/P09: "Thermohaline and volume transport variability in the Gulf of Cadiz.", Ricardo F. Sanchez Leal

#### **S5: Proyecciones climáticas**

- S5/P01: "A proposal towards multiple GCM selection criteria for regional climate change studies on the Iberian Peninsula: Performance, complexity and similarity.", Swen Brands (online)
- S5/P02: "Conclusions from the last report of the climate change and tropical cyclones WWRP working group: Projections on Spanish regions.", Juan Jesús González Alemán
- S5/P04: "Desarrollo de una herramienta web para optimizar la gestión de la economía azul en el litoral mediterráneo español (acuicultura, pesca y turismo): ECOAZUL-MED.", Alba de la Vara
- S5/P05: "Experiencias del proyecto LIKE URBANKLIMA2050: Escenarios de cambio climático para el País Vasco.", Maialen Martija Díez
- S5/P06: "Global land projections of changes in hot, dry and compound hot-dry extremes.", Paolo de Luca
- S5/P07: "Representation of the West African Monsoon in Storm-resolving Earth-system models.", Elsa Mohino
- S5/P08: "Seasonality of coastal upwelling trends in the Mauritania-Senegalese region under climate change scenarios.", Ruben Vazquez Medina
- S5/P09: "Very short-lived halogens amplify recent and future ozone depletion trends in the tropical lower stratosphere.", Julián Villamayor Moreno
- S5/P10: "¿Puede la regionalización estadística basada en Machine Learning competir con los Modelos Climáticos Regionales? Comparativa para temperatura, precipitación, viento, humedad y radiación sobre Europa.", Alfonso Hernanz
- S5/P11: "Dakar Niño variability under global warming investigated by a high-resolution regional coupled model.", Shunya Koseki

#### **S6: Impactos climáticos**

- S6/P01: "A window to the sea: a tool for coastal environmental risk management under the Raia Observatory (NW-IBERIAN PENINSULA).", Paula C. Pardo
- S6/P02: "Análisis de índices de extremos en la Península Ibérica y teleconexiones asociadas.", Belen Rodriguez-Fonseca
- S6/P03: "Análisis espacio-temporal de la relación clima-salud en la población urbana de Guayaquil, Ecuador.", Mariela González Narváez (online)

- S6/P04: "Assessing computational model's performance on the influence of Temperature in new Covid-19 strains.", Leonardo López (online)
- S6/P05: "Heatwaves impact on the Spanish electric system.", Lucía Estefanía Pancorbo\*
- S6/P06: "Impact of Climate Change on solar resource: a review of projections, uncertainties and perspectives.", Claudia Gutiérrez
- S6/P07: "Prediction of arboviral outbreaks in Catalonia under different climate change scenarios.", Leonardo López (online)
- S6/P08: "Quantifying the role of climate and the environment on Lyme disease risk.", Martín Lotto Batista\*
- S6/P09: "Response of cave and lake systems to regional climate change and human activities in Spain: the CALACLIMP project.", Javier Martin Chivelet
- S6/P10: "The effect of ocean-emitted short-lived halogens in the global atmospheric radiative balance.", Alfonso Saiz López
- S6/P11: "Thermal impact of global warming in the underground of karst regions.", David Domínguez Villar
- S6/P12: "Wave climate impact on massive mortality events of wild clam beds in the Ria de Vigo.", Nicolás Villacieros Robineau

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