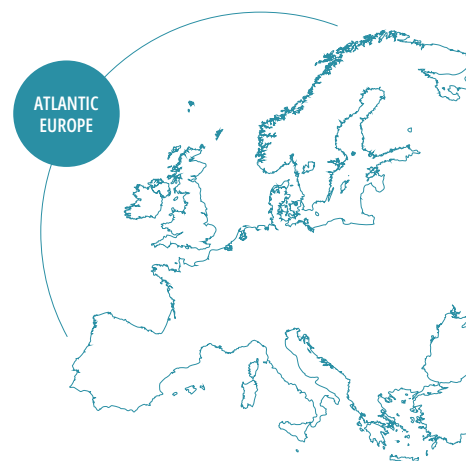




VII International Conference
on Climate and Coastal Change



Thursday, 8th October

8:00 - 9:00 / *Reception and welcome breakfast*

9:00 *Official opening*

9:30 *Opening: Guillem Chust, Head of Global Change in Marine Ecosystems at AZTI*

9:40 *Guest speaker:*

Recent changes in global ocean circulation and in the North Atlantic: have we already passed a tipping point?

Antonio Turiel, Research Scientist, CSIC.

CHALLENGES OF CLIMATE CHANGE

Oral communications

10:25 CLIMATE PROJECTIONS FOR WAVE CONDITIONS IN THE CANTABRIAN SEA: FROM THE GLOBAL TO THE LOCAL SCALE
Adrián Acevedo García, IHCantabria.

10:35 FROM AIR-SEA CO₂ FLUXES TO BLUE CARBON BURIAL: RESOLVING THE COASTAL CARBON BUDGET OF THE CANARY ISLANDS
Aridane G. González, University of Las Palmas de Gran Canaria.

10:45 ANALYZING PH TRENDS ALONG THE BASQUE COAST USING HIGH-FREQUENCY SAMI-PH MEASUREMENTS AND LONG-TERM OBSERVATIONS
Ernesto Villarino, AZTI, BRTA.

10:55 *Panel discussion*

11:05 *Networking coffee - Poster session and visit the exhibition area*

11:45 INCREASING IMPACT OF SAHARAN INTRUSIONS ON AIR QUALITY IN ATLANTIC IBERIA
Asier Ortuzar Andrés, University of the Basque Country (EHU).

11:55 TRACKING HYDROCLIMATIC CHANGE ON THE NORTHERN BASQUE COAST AND ITS IMPLICATIONS FOR MUCILAGE-FAVOURABLE CONDITIONS
Claire Kermorvant, University of Pau and the Adour Region.

12:05 MONITORING HARMFUL ALGAL BLOOMS ON THE FRENCH ATLANTIC COAST: SPECIES SHIFT AND ENVIRONMENTAL DRIVERS OF OSTREOPSIS BLOOMS AT ERROMARDIE BEACH (SAINT-JEAN-DE-LUZ, FRANCE)
Audrey Commault, Rivages Pro Tech SUEZ.

12:15 EFFECTS OF CLIMATE CHANGE BEFORE THE START OF THE FOOD WEB
David González Santana, University of Las Palmas de Gran Canaria (ULPGC), Institute of Oceanography and Global Change (IOCAG).

12:25 *Panel discussion*

12:35 COUPLED ARIES - HYDRODYNAMIC MODELS TO ASSESS FISHERIES DYNAMICS UNDER CLIMATE CHANGE
Pearlin Sam Jinoj, Basque Centre for Climate Change (BC3).

12:45 NAVIGATING FUTURE WATERS: THE RESILIENCE OF THE ATLANTIC BLUEFIN TUNA UNDER CLIMATE CHANGE
Maite Erauskin-Extramiana, AZTI, BRTA.

12:55 THERMAL STRUCTURING OF SEABIRD AND CETACEAN COMMUNITIES IN THE BAY OF BISCAY FROM LONG-TERM ECOSYSTEM-BASED MONITORING
Amaia Astarloa, AZTI, BRTA.

13:05 *Panel discussion*

Simultaneous translation into Spanish, English and French will be provided for all sessions.

COASTAL AND OCEAN CLIMATE CHANGE MITIGATION

Oral communications

13:15 LONG-TERM BLUE CARBON STOCKS IN THE MARSHES OF THE BUTROE ESTUARY, BIZKAIA

Alejandro Cearreta, University of the Basque Country (EHU).

13:25 RESTORATION OF THE BIDASOA ESTUARY FOR BLUE CARBON SEQUESTRATION AND CLIMATE CHANGE ADAPTATION: MONITORING PROGRAM AND NUMERICAL SIMULATIONS

Roland Garnier, AZTI, BRTA.

13:35 ADVANCING THE DECARBONISATION OF FISHING VESSELS

Joseba Castresana, AZTI, BRTA.

13:45 FROM DATA TO DECISIONS: CMP STAGE 2 COASTAL ANALYSIS AND LESSONS FOR ATLANTIC EUROPE

June Gainza, Bluecoast Consulting Engineers.

13:55 *Panel discussion*

14:05 *Networking lunch*

COASTAL RISKS AND EXTREME EVENTS

Oral communications

15:00 DIGITAL MONITORING OF A NATURE-BASED COASTAL DUNE SYSTEM FOR CLIMATE RESILIENCE: THE REGIONS4CLIMATE PROJECT CASE STUDY IN TUSCANY REGION

Lucia Miglietta, RINA Consulting.

15:10 STORMPACT: OPERATIONAL FORECASTING OF WAVE OVERTOPPING ALONG THE FRENCH BASQUE COAST

Erwan Imbertie, SUEZ, Rivages Pro Tech.

15:20 APPLICATION OF VIDEOMETRY TO MONITOR THE IMPACT OF WAVES ON A COASTAL SEA WALL

Camille Lavayssiere, University of Pau and the Adour Region.

15:30 DYNAMIC PROJECTIONS OF FUTURE CHANGES IN EXTREME SEA LEVELS ALONG WESTERN EUROPE AND THEIR DRIVERS

Maialen Irazoqui, Mercator Ocean International.

15:40 REAL-TIME COASTAL FLOOD FORECASTING THROUGH GPU-ACCELERATED BOUSSINESQ MODELLING

Víctor Loras Herrero, University of Pau and the Adour Region.

15:50 *Panel discussion*

16:00 THE INFLUENCE OF AN OFFSHORE SEDIMENT DEPOT TO INFRAGRAVITY WAVE PROPAGATION UPSTREAM THE RIVER ADOUR

Panu Pietikainen, Rivages Pro Tech SUEZ.

16:10 ADVANCED MODELLING OF HS USING DEEP LEARNING IN THE ARRIGUNAGA COASTAL ENVIRONMENT

Manuel Viñes Recasens, UPC & LIM.

16:20 PRELIMINARY IMPACT ASSESSMENT OF REGIONAL CLIMATE ADAPTATION ACTIONS: INSIGHTS FROM FOUR EUROPEAN COASTAL REGIONS

Igone García Pérez, TECNALIA Research & Innovation.

16:30 FUTURE WAVE CONDITIONS ALONG THE NORTH WESTERN MEDITERRANEAN SEA FROM CMIP6 WIND PROJECTIONS: THE IMPACT OF BIAS CORRECTION

Solstice Kraszeski, UPC & LIM.

16:40 INFLUENCE OF SEA-LEVEL VARIATIONS ON STORM WAVES AND COASTAL IMPACTS ALONG EUROPEAN COASTLINES UNDER CLIMATE CHANGE

Alisée Chaigneau, IHCantabria.

16:50 *Panel discussion*

17:00 THE SOCIO-ECONOMIC VALUE OF CLIMATE SERVICES IN THE PACIFIC: A COST-EFFECTIVE INVESTMENT IN THE FACE OF EXTREME EVENTS

Gontzal Ruiz Beneitez, Metroeconomica.

17:10 COASTAL-OFFSHORE THERMAL VARIABILITY THROUGH CONSECUTIVE SUMMER GLIDER DEPLOYMENTS AND MOORING DATA IN THE BAY OF BISCAY

Nadine Steiger, AZTI, BRTA.

17:20 CARBON IMPLICATIONS OF PROTECT, ACCOMMODATE, AND RETREAT ADAPTATION STRATEGIES: A COMPARATIVE ASSESSMENT FOR A LOW-LYING DANISH COAST

Mark Randall, University of Copenhagen.

17:30 COASTAL RISK ASSESSMENT USING STRESS TESTS

Moisés Álvarez-Cuesta, IHCantabria.

17:40 TRANSIENT RIP CURRENTS ON UNIFORM BEACHES: AN EVENT-BASED FRAMEWORK FOR BEACH SAFETY ASSESSMENT

Volker Roeber, University of Pau and the Adour Region.

17:50 *Panel discussion*

18:00 *End of the first day*

Friday, 9th October

8:30 – 9:00 / Reception and welcome coffee

9:00 Guest speaker

Climate Variability in Extreme Sea-Level and Wave Events

Melisa Menéndez, IHCantabria

Round table

9:35 TAKING ACTION ON ADAPTATION: PROJECTS THAT ARE TRANSFORMING THE COASTLINE

MODERATED BY: Malake Muñoz Cachón, Ihobe.

PARTICIPANTS:

Iratxe García de Vicuña, Zarautz Town Council.
Sara Taylor, Welsh Government.
Nicolas Castay, GIP Littoral Nouvelle-Aquitaine.

10:55 Networking coffee - Poster session and visit the exhibition area

COASTAL RISKS AND EXTREME EVENTS

Oral communications

11:25 VALIDATION AND ANALYSIS OF MARITIME AND COASTAL RISK WARNINGS/ALERTS/ALARMS: IMPACT ON THE BASQUE COAST
Santiago Gaztelumendi, Euskalmet.

11:35 A NEW SCENARIO FOR EXTREME EVENTS IN THE CANTABRIAN SEA: IMPLICATIONS FOR SPANISH PORTS OF GENERAL INTEREST
David Lucio, IHCantabria.

11:45 MULTI-TECHNIQUE FACILITIES AS THE KEY IN MODERN GEODESY: THE PASA CASE STUDY
Joaquín Zurutuza, ARANZADI Society of Sciences.

11:55 ANALYSIS OF ABSOLUTE SEA LEVEL TRENDS ALONG THE BASQUE COAST, BASED ON SEA LEVEL AND GNSS OBSERVATIONS AT THE PORTS OF PASAIA AND BILBAO
Aitor Aginaga, ARANZADI Society of Sciences.

12:05 Panel discussion

Round table

12:15 THINKING ABOUT ADAPTATION: STRATEGIES AND GOVERNANCE FOR THE COAST OF THE FUTURE

MODERATED BY: Rafael Sardá, CSIC-ESADE / CEAB.

PARTICIPANTS:

Mikel Gargallo, Basque Government.
Marimar Alonso, Ihobe.
Caroline Sarrade, Communauté d'Agglomération Pays Basque.
Nerea Egia, Gipuzkoa Provincial Council.

GOVERNANCE, MANAGEMENT TOOLS AND COMMUNICATION

Oral communications

13:15 THE ROADS IN COASTAL MANAGEMENT AND PROTECTION PLANS IN A CLIMATE CHANGE SCENARIO: A CASE STUDY IN BISCAY
José María de Ortuzar, Provincial Council of Bizkaia.

13:25 EARLY WARNING SYSTEM FOR COASTAL FLOODING IN AN ENCLOSED BAY: THE CASE OF PASAIA
Irati Epelde, AZTI, BRTA.
Joana Auzokoa, Pasaia Town Hall.

13:35 YES, TO REGIONAL TRANSFORMATIVE ADAPTATION – BUT ONLY WITH TIME AND MONEY
Johannes Klein, Demos Helsinki.
Heidi Tuhkanen, SEI Tallinn.

13:45 50... YEARS OF CHANGE AROUND TXINGUDI
Raúl Castro-Uranga, AZTI, BRTA.

13:55 Panel discussion

14:05 Closure

14:10 End of the conference

POSTERS

EXPLORING CHANGES IN THE DISTRIBUTION OF SEABIRDS AND CETACEANS IN THE BAY OF BISCAY: RELATIONSHIP WITH LOCAL CLIMATE CHANGES AND REGIME SHIFT

Emilie Milon, Biarritz Sea Centre.

ANALYSIS OF THE BACTERIOLOGICAL QUALITY OF THE SAND ON THE BEACHES OF EA AND ISUNTZA (LEKEITIO) IN BIZKAIA

Ivan Garcia Angulo, Basque Government Department of Health.

REGIONS4CLIMATE: FROM ESTUARINE RESTORATION TO CLIMATE RESILIENCE IN THE BASQUE COAST

Roland Garnier, AZTI, BRTA.

EXPLORING THE INFLUENCE OF METEOROLOGICAL FACTORS ON THE RISK OF EUTROPHICATION IN THE ESTUARIES OF THE BASQUE COUNTRY

Marta Revilla, AZTI, BRTA.

THE USE OF SHADE NETS AS A STRATEGY FOR ADAPTING VINEYARDS TO CLIMATE CHANGE IN LA RIOJA

Javier Portu, Institute of Vine and Wine Sciences, (Government of La Rioja, CSIC, UR).

ADAPTING VINEYARDS TO CLIMATE CHANGE THROUGH IRRIGATION STRATEGIES BASED ON THE INTEGRATION OF FIELD DATA AND SATELLITE REMOTE SENSING

Javier Portu, Institute of Vine and Wine Sciences, (Government of La Rioja, CSIC, UR).

PERSISTENT BLOOMS OF THE HARMFUL WARM-WATER DINOFLAGELLATE OSTREOPSIS SP. IN THE SOUTH-EAST BAY OF BISCAY

Yago Laurens-Balparda, University of the Basque Country (EHU).

MODELING PLASTIC TRANSPORT IN COASTAL ENVIRONMENTS USING A COUPLED LAGRANGIAN-EULERIAN FRAMEWORK

Pablo Vallés, I3A, University of Zaragoza.

ENVIRONMENTAL ASSESSMENT OF LOW-TROPHIC AQUACULTURE IN LONGLINE INFRASTRUCTURES USING BIOBASED GEARS

Leire Arantzamendi, AZTI, BRTA.

APPLICATION OF AI-ML TECHNIQUES TO MODELLING THE IMPACT OF MARINE AND COASTAL HAZARDS ON THE BASQUE COAST

Santiago Gaztelumendi, Euskalmet.

IMPLACOST: FROM CLIMATE VULNERABILITY TO THE OPERATIONAL MANAGEMENT OF COASTAL RISK IN THE CANARY ISLANDS IN THE FACE OF EXTREME EVENTS

Asier Borja Furundarena Hernández, Gesplan S.A.

THE IMPACT OF CLIMATE CHANGE ON THE DIRECTION AND MAGNITUDE OF WAVES IN THE SOUTH-EAST OF THE BAY OF BISCAY

Isabel López Úbeda, University of Alicante.

BETWEEN URBAN PRESSURE AND NATURAL RESILIENCE: VULNERABILITY AND EXPOSURE OF THE VALENCIAN COMMUNITY'S COASTLINE

José Ignacio Pagán Conesa, University of Alicante.

REVIEW AND UPDATE OF MAXIMUM SEA LEVELS IN THE ESTUARIES OF THE BASQUE COUNTRY, TAKING INTO ACCOUNT SEA-LEVEL RISE

Pedro Liria, AZTI, BRTA.

COASTAL-FLUVIAL COMPOUND FLOODING MODELLING UNDER THE INFLUENCE OF CLIMATE CHANGE. A CASE STUDY FOR THE CITY OF BAYONNE

Emiel Moerman, Shelf Models.

APPLICATION OF THE XBEACH MODEL AT EUSKALMET FOR OPERATIONAL MONITORING OF STORM SURGES

Antonio Castaño, Euskalmet.

FIELD OBSERVATIONS AND MODELLING OF THE WATERS OF THE SOUTHEASTERN BAY OF BISCAY

Luis Ferrer, AZTI, BRTA.

ASSESSMENT OF THE ECOSYSTEM SERVICES PROVIDED BY DUNE SYSTEMS WITHIN THE NATURA 2000 NETWORK IN BIZKAIA

Lorena Peña López, University of the Basque Country (EHU).

IMPLEMENTATION OF THE SCHISM MODEL AT EUSKALMET AND ITS APPLICATION TO THE STUDY OF TXINGUDI BAY

Antonio Castaño, Euskalmet.

IDAFE: CLIMATE ACTION AND INNOVATION IN THE EDUCATION SYSTEM

Facundo Oyola Hernández, Gesplan S.A.

STRENGTHENING COASTAL RESILIENCE THROUGH SPATIAL PLANNING: INSIGHTS FROM THE GERMAN NORTH SEA COAST

Daniel Schick, University of Stuttgart.

THE LITTORAL OBSERVATORY OF THE EMERALD COAST AND MONT-SAINT-MICHEL BAY : BRIDGING SCIENCE AND POLICY THROUGH INTEGRATED LIDAR, HYDRODYNAMIC MODELING, AND VIRTUAL REALITY VISUALIZATION

Laurine Nogue, Coastal GeoEcology Lab.

THE IGS REFERENCE FRAME TRANSITIONS: IGB14 VS IGS20 AS THE LATEST FRAME

Joaquín Zurutuza, ARANZADI Society of Sciences.

QUADTREE MESH METHOD FOR SHALLOW WATER PROBLEMS ON COASTAL ENVIRONMENT

Umberto Bosi, University of Pau and the Adour Region.

IMPACT OF MARINE HEATWAVES ON SEA SURFACE TEMPERATURE IN THE SOUTHEASTERN BAY OF BISCAY

Nerea Bilbao, AZTI, BRTA.

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