

Sea Level Workshop Final Program
1-3 June, Brest

Organized by LOPS (Ifremer, CNRS, UBO, IRD)
With support from ISblue, LEFE-GMMC, ANR ClimEx

Day 1 - Wednesday 1 June

13:30 - 14:00	<i>Coffee & Registration</i>
14:00 - 14:20	Introduction to the workshop (William Llovel & Lucia Pineau-Guillou)
14:20 - 16:00	SESSION 1: GLOBAL MEAN SEA LEVEL (Chair William Llovel)
14:20 - 14:40	Closing the global mean ocean mass and sea level budgets over 2005-2019 Anne Barnoud, Julia Pfeffer, Anny Cazenave, Michaël Ablain
14:40 - 15:00	ISAS: an optimal interpolation tool for synthesis of global in situ dataset Nicolas Kolodziejczyk, Annaig Prigent, William Llovel
15:00 - 15:20	Using sea level budget reconstructions to estimate the effective climate sensitivity time variations and further constraint the equilibrium climate sensitivity Jonathan Chenal, Benoit Meyssignac, Robin Guillaume-Castel
15:20 - 15:40	Reducing uncertainties of global mean sea level, global ocean heat content and Earth's energy imbalance using CDR water vapour data Anne Barnoud, Bruno Picard, Benoit Meyssignac, Florence Marti, Michaël Ablain, Rémy Roca
15:40 - 16:00	Sea level rise from satellite altimetry data: uncertainty and stability requirements Michaël Ablain, Anne Barnoud, Benoit Meyssignac, Adrien Guérou
16:00 - 16:30	<i>Coffee Break</i>
16:30 - 18:10	SESSION 2: SEA LEVEL DRIVERS (Chair Nicolas Kolodziejczyk)
16:30 - 16:50	Long satellite time series to support climate change investigation Jean-François Piolle, Guillaume Dodet, Nicolas Reul, Emmanuelle Autret
16:50 - 17:10	Dynamical Attribution of North Atlantic Oceanic Heat Content Predictability to Oceanic and Atmospheric Turbulence Florian Sévellec, Stephenson Dafydd
17:10 - 17:30	Full-depth temperature and salinity contribution to regional sea level changes in the North Atlantic subpolar gyre over 2002-2018 based on repeated hydrographic transects Odilon Joël Houndegnonto, William Llovel, Damien Desbruyères
17:30 - 17:50	Imprint of intrinsic ocean variability on decadal trends of regional sea level and ocean heat content using synthetic profiles William Llovel, Nicolas Kolodziejczyk, Thierry Penduff, Sally Close, Jean-Marc Molines, Laurent Terray
17:50 - 18:10	Estimating the atmospherically-driven part of sea-level variability from observations Sally Close, Thierry Penduff, William Llovel, Alice Carret

Day 2 - Thursday 2 June

09:00 - 10:00	SESSION 2: SEA LEVEL DRIVERS (continued) (Chair Anne-Marie Tréguier)
09:00 - 09:20	Uncertainty in observed coastal vertical ground motions matters for local sea-level projections Rémi Thiéblemont, Gonéri Le Cozannet, Jérémy Rohmer, Guy Wöppelmann, Tim Hermans, Aimée Slangen
09:20 - 09:40	Preliminary study on using tide gauge measurements to reduce uncertainty in historical atmospheric reanalysis Paul Platzer, Bertrand Chapron, Pierre Tandeo, Lucia Pineau-Guillou
09:40 - 10:00	Monitoring the Ocean Heat Content and the Earth Energy imbalance from space altimetry and gravimetry missions Michaël Ablain

10:00 - 10:30	<i>Coffee Break</i>
10:30 - 12:50	SESSION 3: REGIONAL & COASTAL SEA LEVEL (Chair Guy Wöppelmann)
10:30 - 10:50	Uncertainties on local sea level trends and accelerations over 1993-2019 from satellite altimetry Pierre Prandi, Benoit Meyssignac, Adrien Guerou
10:50 - 11:10	New network of altimetry-based virtual stations in the world coastal zones Florence Birol, Anny Cazenave, Yvan Gouzenes, Fabien Léger, Marcello Passaro, Francisco Callafat, Andrew Shaw, Fernando Niño, Jean-François Legeais, Julius Oelmann, Jérôme Benveniste
11:10 - 11:30	Impact of Greenland ice melting on sea level trend over 1998-2011 in the Arctic Ocean Soumaïa Tajouri, William Llovel, Florian Sévellec, Thierry Penduff, Jean-Marc Molines, Stéphanie Leroux, Jérémie Mougnot
11:30 - 11:50	Forcing mechanisms of the interannual sea level variability in the midlatitude Southwest Pacific: a focus on the 2015-2020 period Cyril Germaineaud, Denis Volkov, Sophie Cravatte, William Llovel
11:50 - 12:10	Long-term coastal sea level monitoring by GNSS reflectometry in the Bay of Biscay Théo Gravalon, Lucia Seoane, Guillaume Ramillien, Jose Darrozes, Laurent Roblou
12:10 - 12:30	Can we estimate long-term sea level changes from the medimaremetre data? Mikhail Karpytchev, Alain Coulomb, Mathieu Vallée
12:30 - 12:50	Sea level coastal assessment along the maritime silk road Rita Lecci, Antonio Novellino, Salvatore Causio, Marco Alba, Nadia Pinardi, Simona Masina, Andrea Cipollone, Giovanni Coppini
12:50 - 14:00	<i>Lunch</i>
14:00 - 16:00	SESSION 4: EXTREMES & COASTAL FLOODING (Chair Marta Marcos)
14:00 - 14:20	Coastal adaptation to sea-level rise: what is new in the IPCC 6th Assessment report? Gonéri Le Cozannet
14:20 - 14:40	Extreme sea levels and wind-waves in the Mediterranean Sea since 1950 Marta Marcos, Tim Toomey, Angel Amores, Alejandro Orfila
14:40 - 15:00	Changes in extreme sea levels along the North Atlantic coasts from 1846 to 2018 Lucia Pineau-Guillou, Pascal Lazure, Guy Wöppelmann, Jean-Marc Delouis, Bertrand Chapron, Markus Reinert, Jean-Baptiste Rouston
15:00 - 15:20	Reconstruction of the historic sea level observations at Saint-Malo/Saint-Servan (French Brittany coast): changes of extreme coastal water levels since the 19th century Alexa Latapy, Inge van den Beld, Romain Kermaol, Nathalie Giloy, Claire Fraboul, Nicolas Pouvreau, Yasser Hamdi, Antonin Migaud, Lise Bardet
15:20 - 15:40	Shift of the storm surge season in Europe due to climate variability Jean-Baptiste Rouston, Lucia Pineau-Guillou, Bertrand Chapron, Nicolas Raillard, Markus Reinert
15:40 - 16:00	High-resolution projections of extreme sea level changes along the coasts of western Europe Alisée Chaigneau, Angélique Melet, Aurore Voltaire, Stéphane Law-Chune, Guillaume Reffray, Lotfi Aouf
16:00 - 16:30	<i>Coffee Break</i>
16:30 - 18:00	POSTER SESSION
18:00 - 19:00	<i>Cocktail</i>

Day 3 - Friday 3 June

09:00 - 10:00	SESSION 4: EXTREMES & COASTAL FLOODING (continued) (Chair Gonéri Le Cozannet)
09:00 - 09:20	The contribution of wave setup to sea-level variations: from the surf zone to lagoons and estuaries Laura Lavaud, Xavier Bertin, Marc Pezerat, Kevin Martins
09:20 - 09:40	Coastal flooding and mean sea-level rise allowances in atoll island Angel Amores, Marta Marcos, Gonéri Le Cozannet, Jochen Hinkel

09:40 - 10:00	Stochastic-Deterministic Assessment of the current and future storm surge flooding hazard in the Bengal delta Md Jamal Uddin Khan, Kerry Emanuel, Yann Krien, Fabien Durand, Laurent Testut, A.K.M. Saiful Islam, Mélanie Becker
10:00 - 10:30	<i>Coffee Break</i>
10:30 - 12:00	SESSION 4: EXTREMES & COASTAL FLOODING (continued) (Chair Bertrand Chapron)
10:30 - 10:50	European coastal flood awareness system: forecasting extreme coastal water levels at European scale Maialen Irazoqui, Angélique Melet, Clara Armaroli, Paolo Ciavola, Tomas Fernandez Montblanc
10:50 - 11:10	Characterization of storm surge events along the North-East Atlantic coasts, using data mining approaches Jean-Marc Delouis, Lucia Pineau-Guillou, Florent Lyard
11:10 - 11:30	Storm surge reconstruction along the North-East Atlantic coasts Ludovic Harter, Lucia Pineau-Guillou, Bertrand Chapron
11:30 - 12:00	Discussion & Wrap up
12:00 - 14:00	<i>Lunch</i>
14:00	Closing

List of posters

P1	Changing extreme sea levels in the Ganges-Brahmaputra-Meghna delta Alexandre Mussa, Mélanie Becker, Mikhail Karpytchev
P2	Coastal sea level in the Caribbean: dynamic processes and sensitivity to climate change Gabriel Thirion
P3	Drivers of tidal characteristic changes in northwestern France: a statistical analysis Jack Challis, Déborah Idier, Guy Wöppelmann, Gaël André, Raphaël Legouge, Jérémy Rohmer
P4	Optimal seasonal classification of global oceanic stratification and internal tides spatial scales Simon Barbot, Clément Ubelmann, Loren Carrère, Florent Lyard
P5	Recovery of a high-resolution sea level record from 1875 at Saint-Jean-de-Luz (French-Basque coast) Md Jamal Uddin Khan, Inge Van Den Beld, Yann Ferret, Alexa Latapy, Nicolas Pouvreau, Laurent Testut, Guy Wöppelmann
P6	The impact of tidal predictions on historical extreme skew surges Nathalie Giloy, Alexa Latapy, Gaël André, Antonin Migaud, Lise Bardet, Yasser Hamdi, Nicolas Pouvreau
P7	Deep ocean sea level change inferred from sea level budget Pierre Gouvenou, William Llovel, Patrice Bellec
P8	North Atlantic ocean circulation changes due to interannual land freshwater discharge Lucas Dassin, Virginie Thierry, William Llovel
P9	Changes in semidiurnal tide in the North Atlantic Julien Le Meur, Lucia Pineau-Guillou, Pascal Lazure
P10	ILICO – A French research infrastructure for Coastal Ocean and Seashore Observations Lucie Cocquemot, Amandine Thomas, Christophe Delacourt, Jérôme Paillet, Joanne Burden, Guillaume Charria
P11	Trends of sea-level anomalies along the coast of Vietnam over 2002-2018: Spatial deviations between tide gauges and altimetry data Dat Tien Pham, William Llovel, Minh N. Le, Huy Q. Le, Truong M. Nguyen