

CONTRACTOR

“Dunărea de Jos” University from Galați

Program:	IDEI
Project Type:	Exploratory Research Projects
Cod proiect:	PN-III-P4-ID-PCE-2016-0028

PROJECT PLANNING PLAN (2017-2019)**Project Name: Assessment of the Climate Change effects on the WAve conditions in the Black Sea - ACCWA**

- Framework structure -

Year	Stage	Objectives	Activities	Results delivered per stage
2017	Single	E.1 - Validation of simulated results for 'control' period	Act 1.1 - Evaluation of the available RCM wind fields and the schedule of the wave climate simulations will be accomplished, establishing the starting year of each 30-year period. Comparison with reanalysis wind fields (NCEP and/or ECMWF) and with observations; Based on these inter-comparisons, the RCM wind fields for wave climate simulations will be chosen	A database containing information on the wind and wave parameters in the Black Sea basin (high resolution data) for the 'control' period (30 years); A complete database (30 years) with reanalysis data; Dissemination of the results through the project web page.
			Act 1.2 - Performing wave climate simulations for the past period and comparing the main wave parameters with those in other databases. Performing validation tests by comparing with satellite and in-situ measurements at the Black Sea level	
			Act 1.3 - Opening of the project web page, which will be updated throughout the project.	

Year	Stage	Objectives	Activities	Results delivered per stage
2018	Single	E.2 - Perform simulations for 'near future' and 'future' periods corresponding to the two scenarios.	Act 2.1 - Perform simulations with the wave climate system for the periods 'near future' and 'future' (60 years of simulations) for RCP 4.5 scenario.	Achieving a climatological database containing information on the wind and wave parameters in the Black Sea Basin (data with high resolution) covering the 'near future' and 'future' periods; Dissemination of the results.
			Act 2.2 - Perform simulations with the wave climate system for the periods 'near future' and 'future' (60 years of simulations) for RCP8.5 scenario.	

Year	Stage	Objectives	Activities	Results delivered per stage
2019	Single	E.3 - Analyzing the results and estimating the changes in the Black Sea basin for all three periods, considering both scenarios; The assessment of the expected coastal dynamics in the Romanian nearshore area.	Act 3.1 - Statistical evaluation of the long-term trends, analyses of the extreme events and of the expected coastal dynamics.	Estimations of future changes in the average and extreme values of the main wave parameters for the entire Black Sea basin and the Romanian coastal zone, together with the determination of their long-term variability. Projections on possible wind and wave power exploitation in the Romanian coastal zone, based on simulations regarding the wave climate in the future, together with the analysis of the wind fields simulated by RCM. Projections of the possible changes to sea routes in the Black Sea. Evaluate changes of the extreme events in certain key locations. Dissemination of the results.
			Act 3.2 - Final analysis of results, conclusions. Making the final report.	

Project Manager,
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