

SPECIAL SESSION BEACHES IN FETCH-LIMITED ENVIRONMENTS



Call for Abstracts

ICS 2009 - 10th International Coastal Symposium

Lisbon, Portugal

13-18 April 2009

SCOPE AND OBJECTIVES

Sandy beaches resulting exclusively from local wind generated waves can be found in fetch-limited environments, as estuaries and lagoons. Although physical processes in open coastal areas are relatively well described, the knowledge about beach morphodynamics in fetch-limited environments is still scarce. The research interest in this type of environments increased in the last few decades due to the rise of the human pressure, awareness of their ecological value and role as inland natural protection areas. In these systems physical processes concerning wave generation and propagation, as well as the shoreline evolution, are highly influenced by site specific factors as water depth, tide amplitude and currents, wind action, type of sediments and human interferences. Therefore, a complete assessment and development of new methodologies able to describe the physical processes and characterise fetch-limited environments is still missing.

During the last three years the project *BERNA—Beach Evolution in areas of restricted fetch: experimental and numerical analysis*, funded by FCT (POCTI/CTA/45431/2002), contributed to the improvement on the knowledge of the physical processes involved in the beach morphodynamics of two Portuguese coastal environments, with different fetch-restricted conditions: Tagus estuary and Ria Formosa barrier islands. This Special Session of ICS 2009 aims to be an international scientific forum for presenting and discussing the recent research developments on fetch-limited beaches and to compare the achieved information at the BERNA project with the worldwide knowledge.

www.lnec.pt/organization/dha/nec/estudos_id/berna

SPECIAL SESSION TOPICS

- > Hydrodynamics
- > Sediment transport
- > Morphodynamics at different time scales
- > Interactions between physical processes and biota
- > Human impact
- > Protection and rehabilitation

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2008

Please follow the instructions in:

<http://e-geo.fcsh.unl.pt/ICS2009/abstract.html>

All papers accepted, after being peer-reviewed, will be published in a Special Issue of the **Journal of Coastal Research**, one of the leading journals in the field of coastal research.

FOR FURTHER INFORMATION PLEASE VISIT
THE ICS 2009 WEBSITE

<http://e-geo.fcsh.unl.pt/ICS2009/index.html>



THE SPECIAL SESSION ON **BEACHES IN FETCH-LIMITED ENVIRONMENTS** WILL TAKE PLACE IN THE SCOPE OF THE **ICS 2009: 10th INTERNATIONAL COASTAL SYMPOSIUM** ORGANISED BY THE E-GEO – GEOGRAPHY AND REGIONAL PLANNING RESEARCH CENTRE OF THE UNIVERSIDADE NOVA DE LISBOA AND THE COASTAL EDUCATION & RESEARCH FOUNDATION.

HOTEL ALTIS
LISBON, PORTUGAL
FROM 13TH TO 18TH APRIL 2009

SPECIAL SESSION PROGRAM

- PARALLEL TECHNICAL SESSIONS

Abstracts within the Special Session topics are welcome

- 1 ICS 2009 PLENARY SESSION (supported by BERNIA PROJECT)

Physical characteristics, resource values and management considerations for beaches in fetch-limited environments

by

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Karl F. Nordstrom conducts research for 30 years on the dynamic processes affecting the size, shape and location of beaches and dunes in ocean and fetch-restricted environments. These investigations involve assessment of winds, waves and currents and the effect of these processes on sediments, landforms and biota. He formulated models of beach and dune change for both undeveloped and developed coasts. His research has also been directed toward analysis of coastal land use and on strategies applicable at the national, state and municipal levels. These two latter include assessments of the effects of creating or altering dunes and restoring naturally functioning environments in intensively developed municipalities. Karl Nordstrom is the author of several books, 85 articles in refereed journals, 42 chapters in books and has edited symposia volumes, plus other non-refereed publications.

SPECIAL SESSION ORGANISATION

BERNIA PROJECT, pfreire@lnec.pt

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