

Speaker:
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Topics of research:
Coastal morphology, processes, changes and dynamics, sensitivity and risk;
Coastal pollution, water quality and beach litter, Environmental Sensitivity Maps;
Coastal Scenery determination and sensitivity.

Keywords: *Coastal morphology, sandy and rocky coasts, erosion and flooding processes, wave energy, sensibility and vulnerability, management options, coastal scenery, etc.*

Master's Subjects:

- 2373005. Evaluation of natural coastal risks
- 2373101. Management of beaches and tourist areas I
- 2373102. Management of beaches and tourist areas II

I am going to briefly describe content related to coastal morphology, dynamic, sensitivity/vulnerability and risk in the framework of the Master "GIAL".




- 2373005. Evaluation of natural coastal risks

Content 1:

-Characterization of wave energy and extreme conditions. Examples and study cases from Cadiz area.

-Wave currents, sediment transport, erosion and overwash processes, wash-over fun formation.

-Coastal flooding associated with storm events.

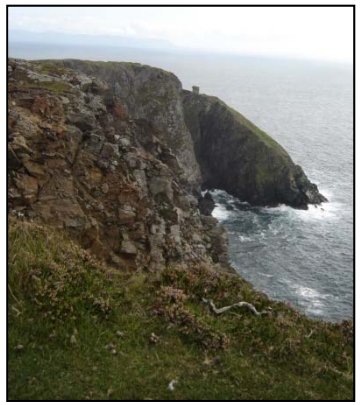
-Coastal erosion at medium and long-term in sandy coasts.

-Methods used to investigate coastal erosion in sandy areas.

-Coastal sedimentation problems.

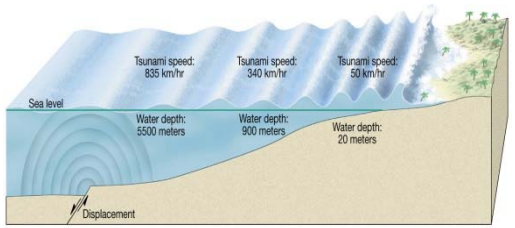
- 2373005. Evaluation of natural coastal risks

Content 2:



-Rocky coasts (cliffs) characterization and evolution.

-Coastal subsidence and Sea Level Rise processes.



-Tsunamis characteristics and impacts.

-Civil Protection organization in Spain.

- 2373101. Management of beaches and tourist areas I

Content:

-Coastal sensitivity and vulnerability: methods and approaches used in different studies. Mitigation Strategies.

-Dunes' characteristics and sensitivity.

-Sensitivity of coastal lagoons and salt marshes.

-Coastal lagoons relevance and impacts of climate change related processes.

- 2373102. Management of beaches and tourist areas II

Content:

-Beach and dune nourishment methods.

-Risk linked to coastal pollution from industrial, domestic and fish-farm activities.

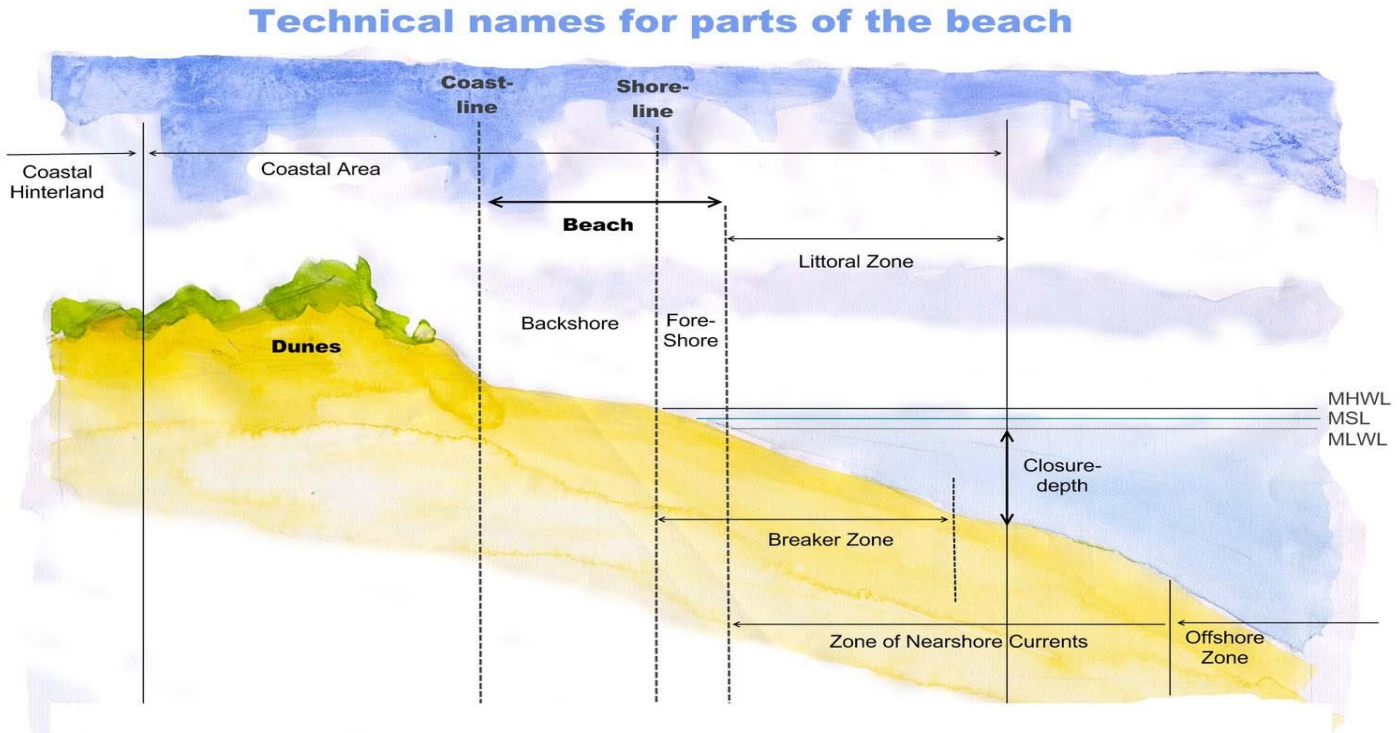
-Beach oiling: models used to predict oil dispersion.

-Beach oiling: Environmental Sensitivity Maps.

-Coastal landscape classification as a tool for proper management and conservation. A view to Climate Change related impacts.

Personal observations/suggestions:

- **Coastal zones are very populated and constitute a relevant part of the marine environment. Their dynamic/characteristics and sensitivity are strictly linked to marine and terrestrial agents;**
- **Is important to consider concepts on coastal environments' characteristics, behaviour and dynamic agents (tide, wind, waves, currents). Coastal evolution, erosion/accretion processes, impacts of coastal structures (ports, breakwaters, etc.), coastal sensitivity/vulnerability and mitigation strategies. Environmental Sensitivity Maps are also relevant for beach oiling prevention/mitigation.**



http://vboping.blogspot.com/2008/11/undertanding-some-names-for-parts-of.html