Course Title: Remote Sensing for Coastal Zone Management

2018 Summer School Program

Date: August 01 to 05, 2018

Target Group: MSc and Above International Students

Pre-requisite/Context/: BSc/MSc in Remote Sensing, Geo-Information and Related Fields

Number of Trainees: 25

Subject Matters / Definition of the problem

This course introduces the theory and techniques of remote sensing for coastal zone management. Coastal areas have significant impacts on societal, economic and ecological development. However, coastal areas are highly vulnerable to waves and tides, which may lead to a huge loss of life, biodiversity and properties. The extents of its impact is highly determined by the way how to manage the coastal areas (World Bank, 1996). Over the past few decades, the development of geospatial technologies like remote sensing has increasingly serving as important tool for coastal change analysis and monitoring (Jiang et.al, 2016). Thus, this course is designed for offering the basic principles, approaches, methodologies and applications of remote sensing for coastal zone management and monitoring strategies.

Learning Objectives

Learning Outcomes

The participants are able to:

- Describe the concept and principles of remote sensing for coastal zone management.
- Familiarize with the various types of coastal management approaches, models and frameworks.
- Apply and use remote sensing technologies for coastal zone change analysis, management and monitoring strategies.

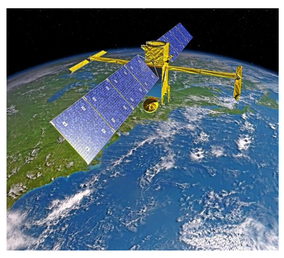
Educational Concern:

The course will have a significant role for empowering the participants in research, teaching , planning and decision making activities related to coastal zone management system.

Learning Environment

- **Teaching-learning activities are:** lecture, group discussion, problem-based learning, Jigsaw method, experiential learning, practical exercises, group work, summary and feedback.
- **Teaching-learning materials are:** books, articles, videos, blogs, laboratory manuals, image analysis software's, data show and web pages.
- It is five days summer school training and it will be delivered using English language.
- **Learning theory** : Constructivism learning theory

Content of the Course

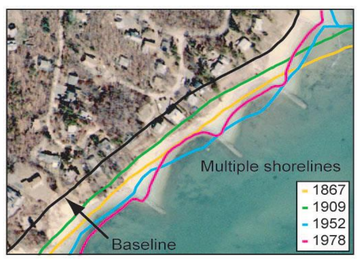


Concept and Principles of Remote Sensing for Coastal Zone Management

Coastal Zone Change Prioritization and Monitoring

Coastal Management Approaches/Models/ and Frameworks

Project Summarization, Presentation and Feedback



Coastal Zone Change Analysis

Designed by :

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References

Jensen, J.R., (2007). Remote Sensing of the Environment: An Earth Resource Perspective.
Panda. B.C. (2005). Remote Sensing: Principles and Applications.
Jiang et.al (2016). Monitoring the Coastal Environmental Using Remote Sensing and GIS Technique
World Bank (1996). Guidelines for Integrated Coastal Zone Management.

For the course description, activities and other information **Follow in the next page "The Road Map"**

With the support from: DAAD

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