COVER PHOTOGRAPH AND FRONT MATTER: PORTION OF THE UPPER FLORIDA KEYS AND DISTAL PENINSULAR FLORIDA SHOWN THROUGH HIGH-RESOLUTION DIGITAL ORTHOIMAGERY AERIALS

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Aims and Scope of the Journal

Journal of Coastal Research, an International Forum for the Littoral Sciences, is dedicated to all aspects of coastal research. These include geology, biology, geomorphology (physical geography), climate, littoral oceanography, hydrography, coastal hydraulics, environmental (resource) management, engineering, and remote sensing. Although each field functions effectively within its own purview, the cross-disciplinary nature of coastal studies requires familiarity with other fields as well. Hence, the scope of topics is necessarily broad in order to address the complexity of coastal biophysical and socio-economic interactions. Because of the wide range of interrelated topics, the journal invites original contributions and manuscripts dealing with theory, methodology, techniques, and field or applied topic studies on interdisciplinary coastal issues.

The journal encourages the dissemination of knowledge and understanding of the coastal zone by promoting cooperation and communication between specialists in different disciplines. Natural scientists, for example, are encouraged to collaborate with professionals in other fields to prepare contributions relating to the coastal zone that foster increased appreciation of coastal environments and processes. By means of this journal, with its scholarly and professional papers, systematic review articles, book and symposia reviews, communications and news, and special topical issues, an international forum for the development of integrated coastal research is provided.

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Coastal aerial imagery allows for a finely detailed visual approach to classifying marine ecosystems remotely. By incorporating both the visible light and infrared wavelength bands, digital orthoimagery is widely used today for the characterization and interpretation of shorelines and nearshore benthic environments. The digital format of the images also allows for a quicker processing turnaround time, as photos can be directly imported into geographic information system (GIS) interfaces to be georeferenced and cataloged. Previous studies, such as Makowski, Finkl, and Vollmer (2016), provided evidence that the use of such aerial photography was effective for the mapping and classification of shallow marine habitats along continental shelves. For example, numerous physiographic realms (e.g., Southeast Distal Florida, Biscayne Bay and Card Sound, Florida Keys, Hawk Channel, Florida Reef Tract, Transitional Tidal Passes) and morphodynamic zones (e.g., Everglades Swampland Systems, Coral Keys, Channel Systems, Backreef, Parabathic Lithic Shelf).

The above imagery contains digital ortho mosaic photographs taken by the United States Department of Agriculture's (USDA) National Agricultural Imagery Program (NAIP). Even though originally taken to monitor the agricultural growing seasons in the continental United States, NAIP offers high-resolution digital aerials of portions along coastal and nearshore environments. This particular orthoimagery set (i.e. ortho_fl086_2010_1) was mainly taken because of the proximity of the Turkey Point Nuclear Generating Station to the coast (shown by the vertical cooling canals towards the left of the imagery above) and provided a rectifying horizontal accuracy that matched within 5 m of ground control points with less than 10% cloud cover. Digital ortho quarter quad tiles of NAIP imagery were downloaded from the USDA Farm Service Agency's (FSA) Aerial Photography Field Office (APFO) (i.e. http://apfo.usda.gov/). Imagery taken 22 November 2010 at a 1 m ground sample distance (GSD), by the United States Department of Agriculture's (USDA) National Agricultural Imagery Program (NAIP).

LITERATURE CITED

The Coastal Education and Research Foundation (CERF) is a nonprofit society dedicated to the advancement of the coastal sciences. The Foundation is devoted to the multi-disciplinary study of the complex problems of the coastal zone. The purpose of CERF is to help translate and interpret coastal issues for the public and to assist the complex problems of the coastal zone. The purpose of CERF is to initiate and foster research and innovation to promote long-term solutions to coastal problems, and to help translate and interpret coastal issues for the public and to assist in the education and use of coastal information to the public and coastal specialists on all aspects of coastal issues in an effort to maintain or improve the quality of shoreline resources.

Because CERF is concerned with broad environmental issues, our efforts concentrate on significant problems such as maintenance of good quality (potable) water with adequate supply, and hazards associated with potential beach erosion, flooding, and susceptibility of developed shorelines to storm surge and wave attack. By focusing on these potential man-made and natural hazards, it is hoped that our research efforts will help others improve the quality of life in diverse coastal areas. CERF thus aims to stimulate awareness of coastal (marine and freshwater shorelines) land and water problems; initiate and foster research and innovation to promote long-term coastal productivity; establish an educational forum for the debate of contentious coastal issues; and develop new principles and approaches for enlightened coastal management, and encourage their adoption and use.
RESEARCH ARTICLES

Geoform and Landform Classification of Continental Shelves using Geospatially Integrated IKONOS Satellite Imagery
.......................................................... Christopher Makowski, Charles W. Finkl, and Heather M. Vollmer 1

Acceleration in European Mean Sea Level? A New Insight Using Improved Tools ........................................ Phil J. Watson 23


The Influence of Sea-Level Rise on Wave-Energy Dissipation and Wave-Driven Currents at Buck Island Reef National Monument .......................................................... Chelsea E. Wegner and Jean T. Ellis 56

Delta Formation in the Nakdong River, Korea, during the Holocene as Inferred from the Diatom Assemblage ........ Ara Cho, Daekyo Cheong, Jin Cheul Kim, Seungwon Shin, Yong-Hee Park, and Kota Katsuki 67

Genetic Description and Remote Sensing Techniques as Management Tools for Zostera noltii Seagrass Populations along the Atlantic Moroccan Coast .................. M. Zarranz Elso, P. Manent, A. Luque, M. Ramdani, and R.R. Robaina 78

Physical Limitation of Phytoplankton Dynamics in Coastal Waters ............................................................................. Lixia Niu, P.H.A.J.M. van Gelder, and J.K. Vrijling 88

Monitoring Tidal Bores using Acoustic Tomography System .......................................................................................... Kiyoshi Kawanisi, Xiao-Hua Zhu, Xiaopeng Fan, and Ioan Nistor 96

Influence of Potential Future Sea-Level Rise on Tides in the China Sea ........................................ Cuiping Kuang, Huidi Liang, Xiaodan Mao, Bryan Karney, Jie Gu, Hongcheng Huang, Wei Chen, and Honglin Song 105

Litterfall Production of Mangroves in Huizache-Caimanero Lagoon System, México ........................................ Francisco Flores-Cárdenas, Miguel Ángel Hurtado-Oliva, Thomas W. Doyle, Mario Nieves-Soto, Sara Díaz-Castro, and Marlenne Manzano-Sarabia 118

Interannual Feature of Summer Upwelling around the Zhoushan Islands in the East China Sea ................................ Qing Xu, Shuangshang Zhang, Yongcun Cheng, and Juncheng Zuo 125

Factors Influencing the Distribution and Characteristics of Surface Sediment in the Bay of Cartagena, Colombia ........ Juan Camilo Restrepo, Jaime Escobar, Luis Otero, Diana Franco, Jorge Pierini, and Iván Correa 135

Predictions for Dynamic Tidal Power and Associated Local Hydrodynamic Impact in the Taiwan Strait, China .................. Peng Dai, Jisheng Zhang, and Jinhai Zheng 149

Measurement and Numerical Study of Vertical Mixing Microstructure in the Bohai Strait ................................................... Zhang Yihui, Liang Shuxiu, and Sun Zhaochen 158

Santos Sea Outfall Wastewater Dispersion Process: Physical Modeling Evaluation ........................................ Paolo Alfredini, Emilia Arasaki, and José Carlos de Melo Bernardino 173

REVIEW ARTICLES


State Changes in Tropical Intertidal Systems: A Palaeo-Ecological Approach .................................................... Jon Knight, Leila Eslami-Andargoli, Pat Dale, and Brian Fry 208

TECHNICAL COMMUNICATIONS

A Dynamic Model for Coastal Mud Flocs with Distributed Fractal Dimension .......... Chunyang Xu and Ping Dong 218

BOOK REVIEWS

Lessons from the Sand by Charles O. Pilkey and Orrin H. Pilkey ............................................................... Charles W. Finkl 226