

Geophysical Prospection in the Oder Mouth Area – Contributions to Archaeological Target Verification

During the 1998 season spent in the Oder mouth area, the National Museums team has completed a lengthy seismic survey of all three channels through which the Oder discharges its waters into the Baltic Sea. The instrumentation used was a combination of high-tech and general acoustic devices which permitted the registration of bottom and sub-bottom anomalies. Few of these targets were inspected by divers afterwards, but the experience gained in this kind of environment enables a better understanding of the application of Chirp-type sub-bottom profiler to underwater archaeological prospection, and in general to the application of seismic prospection to underwater targets. The present knowledge of geophysical prospection in underwater environments is increasing. The focus favours clearly geological applications, while archaeological applications are still in the incipient phase of experimentation. The material presented here tries to increase the understanding and interpretation of bottom and subbottom anomalies in the light of the experience gained in the field.

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Aerial Reconnaissance as an Aid to Reconstruct Coastal Geomorphological Processes

The need to cover large areas of coastal zones for the broader understanding of active geomorphological processes has led to some experiments with aerial photography in the Roskilde fjord. Part of the "Wendish Seafaring" project which deals with the reconstruction of past landscapes in the Oder mouth area, and the experiments carried out over the Roskilde fjord area were directed toward optimization of flying ceiling, selection of film type, photographic technique and camera type, and finding the best flying daylight time. The results were processed in the facilities offered by both institutions in Roskilde and they are presented here in the light gained by the authors during the flights. The results permitted the observation of several new features regarding the geomorphology of the area, and they constituted the basis for a renewed effort in dealing with deltaic formations and morphodynamics in the coastal zone.