

Medieval Portolan Charts, a Geodetic and Historical Mystery

Roel Nicolai (Netherlands)

Key words: Cartography; History; portolan chart; map projection; medieval; geodesy

SUMMARY

The sudden appearance of portolan charts, realistic nautical charts of the Mediterranean and Black Sea, at the end of the thirteenth century is one of the most significant events in the history of cartography. Using geodetic and statistical analysis techniques these charts are shown to be mosaics of partial charts that are considerably more accurate than has been assumed. Their accuracy exceeds medieval mapping capabilities. These regional charts show a remarkably good agreement with the Mercator map projection. It is demonstrated that it is very unlikely that this map projection is an unintentional by-product of the charts' putative medieval construction, as is widely believed. While the physical charts are without doubt medieval, the possibility is eliminated that the charts are original products of a medieval Mediterranean nautical culture, which until now they have been widely believed to be. Their true origin must lie considerably further back in time.

Medieval Portolan Charts, a Geodetic and Historical Mystery (11089)
Roel Nicolai (Netherlands)

FIG e-Working Week 2021
Smart Surveyors for Land and Water Management - Challenges in a New Reality
Virtually in the Netherlands, 21–25 June 2021