Antinoise Plugin for Navimodel

The AntiNoise plugin module for NaviModel Digital Terrain Modeling software is developed in close cooperation with SCALGO, a Danish company founded in 2009 and specialised in software for massive terrain data through utilisation of basic and applied research on algorithms for efficient handling of massive geometric data.

The AntiNoise plugin for NaviModel uses the high-density of modern marine surveying data to clean a point cloud at its intrinsic granularity without use of interpolation. The software automatically computes a "noise score" for each data point, and the user can then easily and interactively clean parts of (or the whole) dataset in NaviModel by selecting a region of the data and remove points with high noise scores.

Intuitively, AntiNoise considers the components (surface patches) that are formed when points within a certain distance of each other are connected. AntiNoise analyses all possible distances and assign a noise score to each point corresponding to the maximal distance for which the point is not part of the largest component (the dominant surface). Apart from the automated scoring of points, AntiNoise also allows for a more careful analysis of the point cloud components at a given user-defined distance. Thus from within Navimodel, AntiNoise can be invoked on a part of (or the whole) dataset and whole components can then be analysed and cleaned.

https://www.hydro-international.com/content/news/antinoise-plugin-for-navimodel