





# **CALHYPSO**

CALHYPSO is a software dedicated to cartographers and hydrographers offering a tool box that revolutionise creation, control and correction of electronic navigational charts (ENC).

## **AUTOMATION FOR SAFETY**

CALHYPSO includes four tools able to automate:

- Safe de-densification of points cloud
- Cartographic generalisation and S-57 ENC production
- Security control of ENC
- Detection of new and unmapped dangers

Highlighting of navigation dangers is a capital issue of marine security. CALHYPSO revolutionise bathymetric data processing with innovative tools able to identify those dangers and to map them in a record time.

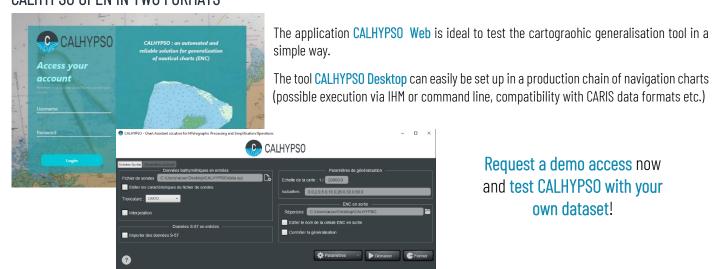


## BOTH SHOM AND GEOMOD EXPERTISE IN A SOLUTION

CALHYPSO is a software closely developed with Shom cartographers and hydrographers. Designed by and for them, it fulfils modern challenges of security and performance taken up by hydrographic agencies.

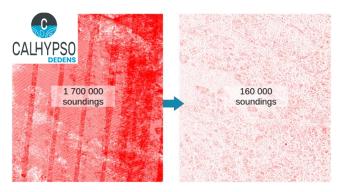


## CALHYPSO OPEN IN TWO FORMATS

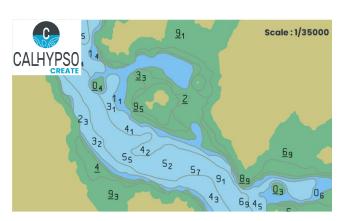


Request a demo access now and test CALHYPSO with your own dataset!

### CALHYPSO IN FOUR TOOLS



CALHYPSO-Dedens extract of high density dataset a safe bathymetric coverage containing all navigation relies on a innovative triangulation dangers. This developed by both Shom and Geomod expertise. The allows acceleration of all bathymetric processing conducted by cartographers and hydrographers.



**CALHYPSO-Create** synthesize automatically and quickly bathymetric in a safe navigation map fulfilling IHO S-57 standards. CALHYPSO-Create process high density dataset, build a sounding triangulation, run depth contours computation and generalisation and launch a sounding selection according to scale. This tool generates the cartography of a one million points dataset in less than 2 minutes.



CALHYPSO-Control generalisation control tool looks for cartographic representation errors in a S-57 ENC. The algorithm alert on anomalies related to security risks and on representation deviations from readibility rules required. To this end, the tool compare a produced ENC with its source survey dataset.



CALHYPSO-Detect dangers detection tool compare a new survey dataset with active ENC maps on this region and highlight unmapped dangers. These detections can be broadcart as notices to mariners. The amount of detections raised during this first analysis can also justify the production on a new map on this region.

CALHYPSO, PortAll, ULHYSSES, PortSide are developed by Geomod, a software company specialized in marine geomatics products in alignment with the IHO standards. Our main clients are NAVAL GROUP, SHOM, IFREMER, GENAVIR, THALES, Harbours (Le Havre, Rouen, Nantes Saint-Nazaire) and Harbours mariners unions (Marseille-Fos, Dunkerque, Sète).





