SARMAP

Search & Rescue Response Planning Software

Version 7.7 Release Notes

Leading with Science®

TETRA TECH

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1 GET IN TOUCH

Please use the following contact information to get in touch with RPS Group | a Tetra Tech Company (TT), regarding any questions concerning SARMAP.

Note: we have updated our email address; mapsupport@rpsgroup.com is now obsolete.

Email: **MapSupport@tetratech.com**

Phone: +1 401 789 6224

Address: 55 Village Square Drive, South Kingstown RI 02879

2 INTRODUCTION

Since 1979, TT has been researching drifting objects, oils, and chemicals at sea. As part of that we developed a search and rescue operational tool called SARMAP and this tool is now used in many countries including Spain, Netherlands, Australia, Korea, New Zealand, Argentina, Brazil, Ireland, Isle of Man, U.S.A and others. SARMAP is a commercial tool and is available as a stand-alone tool.

Version 7.7.0 of SARMAP includes many enhancements and added features to help improve search and rescue response. Enhancements were mainly made in the user interface. This document describes the various new features and bug fixes included in SARMAP v7.7.0.

2.1 Operating System Compatibility

Version 7 (and newer) of the TT MAP Applications, OILMAP, SARMAP, and CHEMMAP, are supported on the following Microsoft Windows platforms: Windows 10 and 11, Windows Server 2016, 2019, 2022 and 2025 as well as cloud computing platforms including Microsoft Azure and Amazon Web Services.

3 SARMAP V7.7.0 USER INTERFACE UPDATES

3.1 General Interface Updates

The following updates and enhancements have been made in the SARMAP v7.7.0 interface:

1. In the table of contents to the left of the map window, the “GIS” tab was renamed to “Layers” for maximum clarity.

Figure 1. TOC labels update.

2. Added Time as optional WMS parameter.
3. Added legend font size selection. Under “File” -> “Display Settings”.

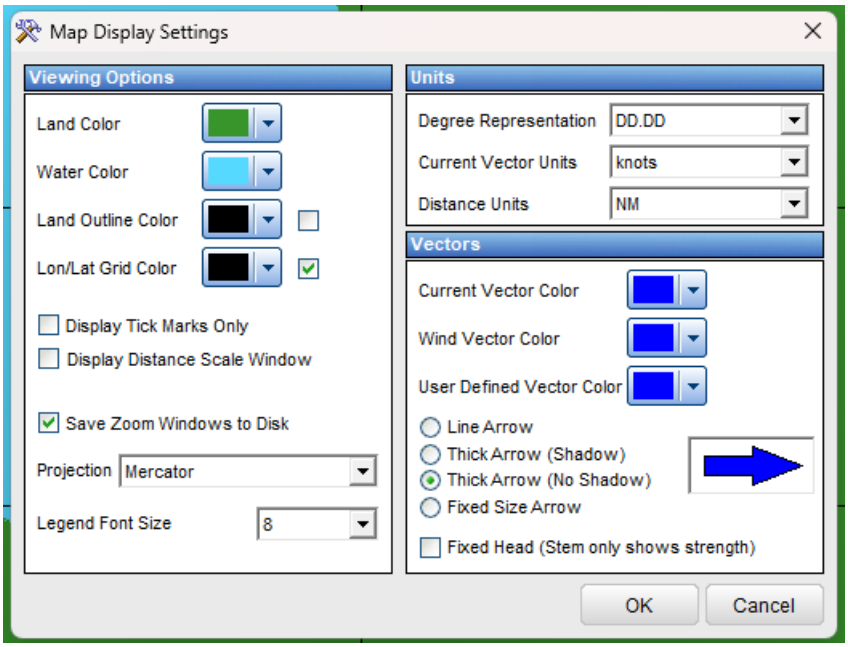

Figure 2. Legend Font Size selection in Map Display Settings.

3.2 Resolved General Interface Bugs

The following bugs have been reported, logged, and **fixed**:

1. Updated to only allow maritime scenario type selection for trackline scenarios.
2. Updated so that, when selecting an aeronautical search object, the other options are disabled to prevent selection of multiple objects.
3. Fixed issue of search object characteristics inputs getting disabled when switching aeronautical search object from airplane to parachute.
4. Fixed issue of model exes not displaying in “About SARMAP” window.
5. Fixed issue of wet/dry (WD) file creation causing SARMAP to crash.
6. Fixed integration of sevenCs into SARMAP. Users with a sevenCs license can now display 7CB files in the interface.

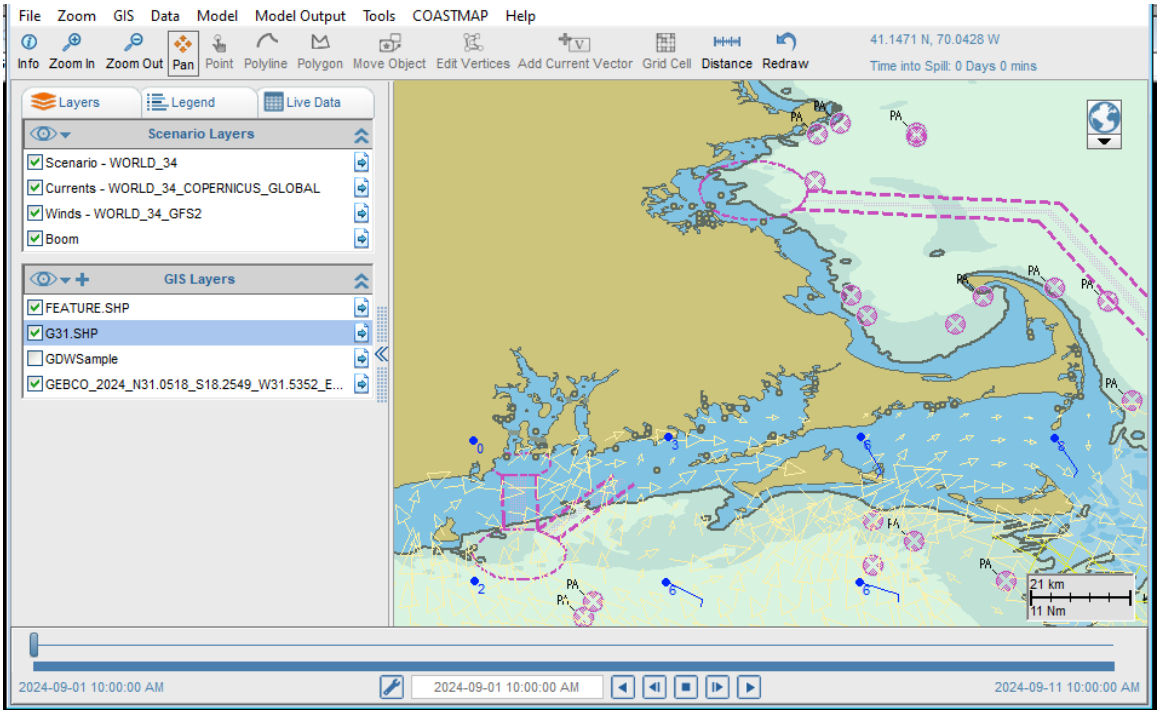

Figure 3. SevenCs files displayed in the interface.

4 SARMAP V7.7.0 NEW FEATURE ADDITIONS

4.1 Open Sea Map

SARMAP users may display the Open Sea Map as their base map in the map window. Users can go to the “GIS” menu to "attach new layer" and then select "map services", then select “Tile Service" and then "Open Sea Map" and click OK. Users then select “Open **Street** Map” from the base map selection in the top right of the map window or the base map of their choice.

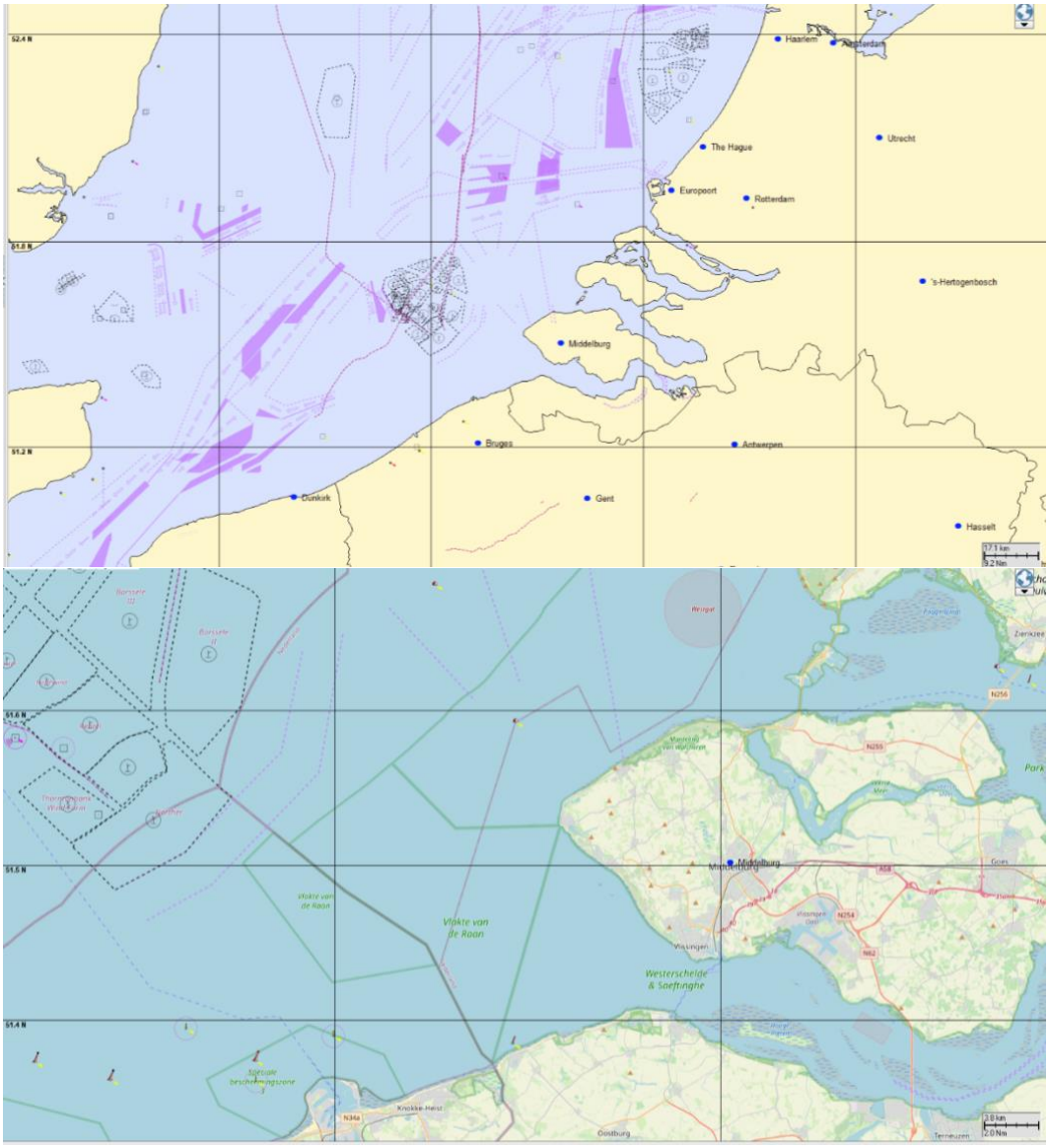

Figure 4. Example Open Sea Map visualization with two base maps: user-set base map (top) and Open Street Map base map (bottom).

4.2 COASTMAP EDS Form Updates

The EDS servers are now labeled as “Primary” and “Secondary”, to clearly indicate which server users should be connecting to.

4.2.1 EDS Metadata Catalog Download Option

The following datasources had a detailed catalogue added:

- GFS
- ECMWF Winds

4.2.2 Full EDS Metadata Catalog

The following datasources contain a detailed catalog:

- AEMET HARMONIE CAN
- AEMET HARMONIE PEN
- ECMWF Open Winds
- GFS
- HFRadar EBRO DELTA
- HFRadar Galicia
- HFRadar Gibraltar
- HFRadar Huelva - Algarve
- HFRadar Ibiza
- NOAA CIOFS
- SAMPA Algeciras
- SAMPA Estrecho de Gibraltar
- SAMPA Gibraltar
- SASEMAR WRF Winds
- WMOP ROMS
- Global HYCOM (NCEP)
- Global HYCOM (Navy) Currents
- Copernicus, GLOBAL
- Bluelink v3
- NAVGEM (Navy)
- NW_ATL
- Copernicus, MED SEA
- ACCESS G3
- CNMI ROMS
- Guam ROMS
- ECMWF Winds
- Copernicus, NW ATL SHELF
- Copernicus, IBI
- Baltic Sea Currents
- Arctic Ocean Currents
- Samoa ROMS
- MOHID Artabro
- MOHID Vigo

5 SARMAP V7.7.0 MODEL UPDATES (1.50.0.0)

5.1 Resolved Model Bugs

1. Fixed initialization error with 2D sigma NC files.
2. Fixed uninitialized variables when wind=fill value.
3. Fixed an edge condition in the i,j index computation from the k-d tree index.

5.2 Model Changes and Improvements

1. Updated average k-d tree computation to avoid losing resolution when computing the average of a large number of cells.
2. Updated to check for NaN before doing floating point comparison.
3. Added a keyname to make the CLST folder location configurable.
4. Updated current library to new 2D lat/lon interpolation routines.
5. Switched runtime libraries to Multithreaded DLL instead of QuickWin.
6. Update to culib to allocate arrays to the heap instead of the stack.