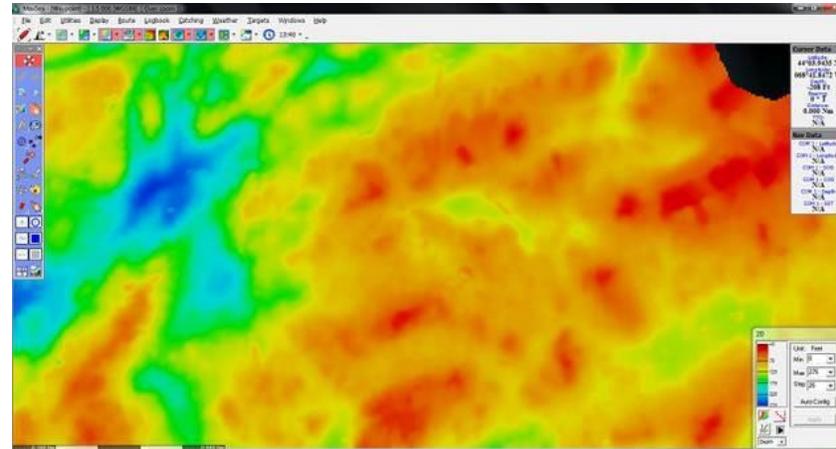


TZ Professional v3

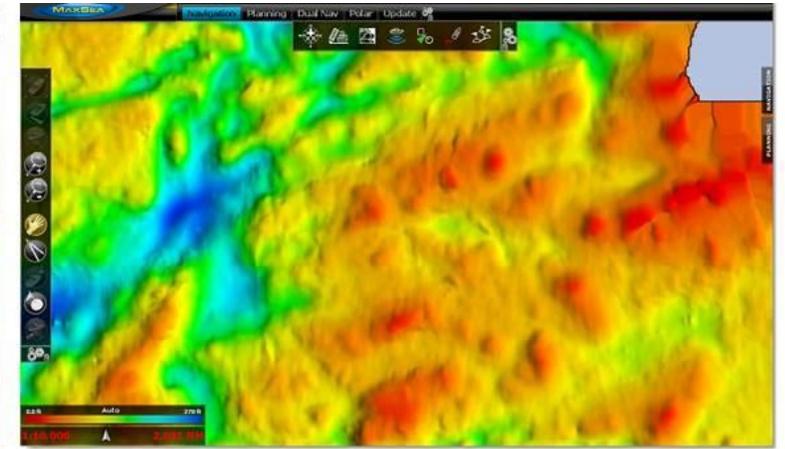
The biggest TIMEZERO release ever!

New PBG Module

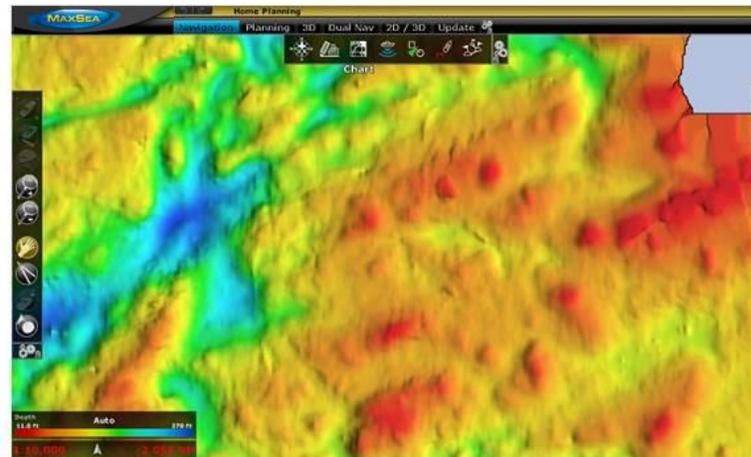
- ✓ Resolution has been doubled (now 1.5m x 1.5m)
- ✓ Automatic and real time extrapolation (no delay when customizing brush size)
- ✓ New “PBG Soundings” allows for PBG data to be displayed using soundings on the chart on all scales
- ✓ New function allowing to detect and remove automatically bad PBG data
- ✓ It is also possible to edit the 3D imported database (not limited anymore to the user data)



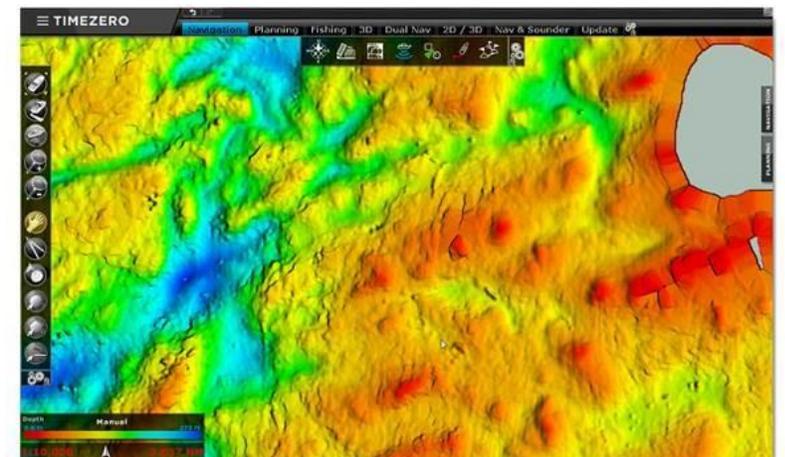
V12



TZ V1 to V2.0.x



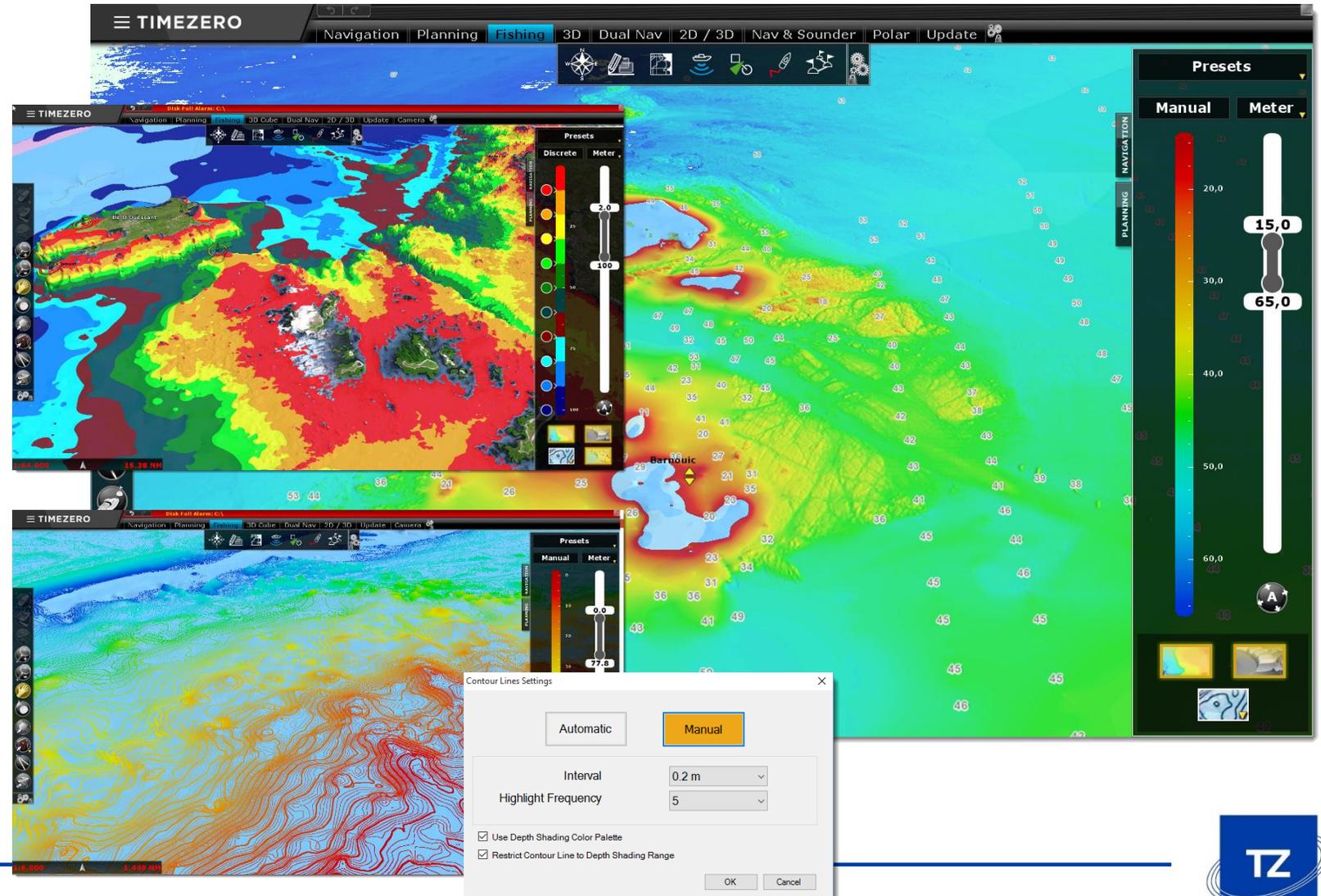
TZ v2.1.x



TZ V3

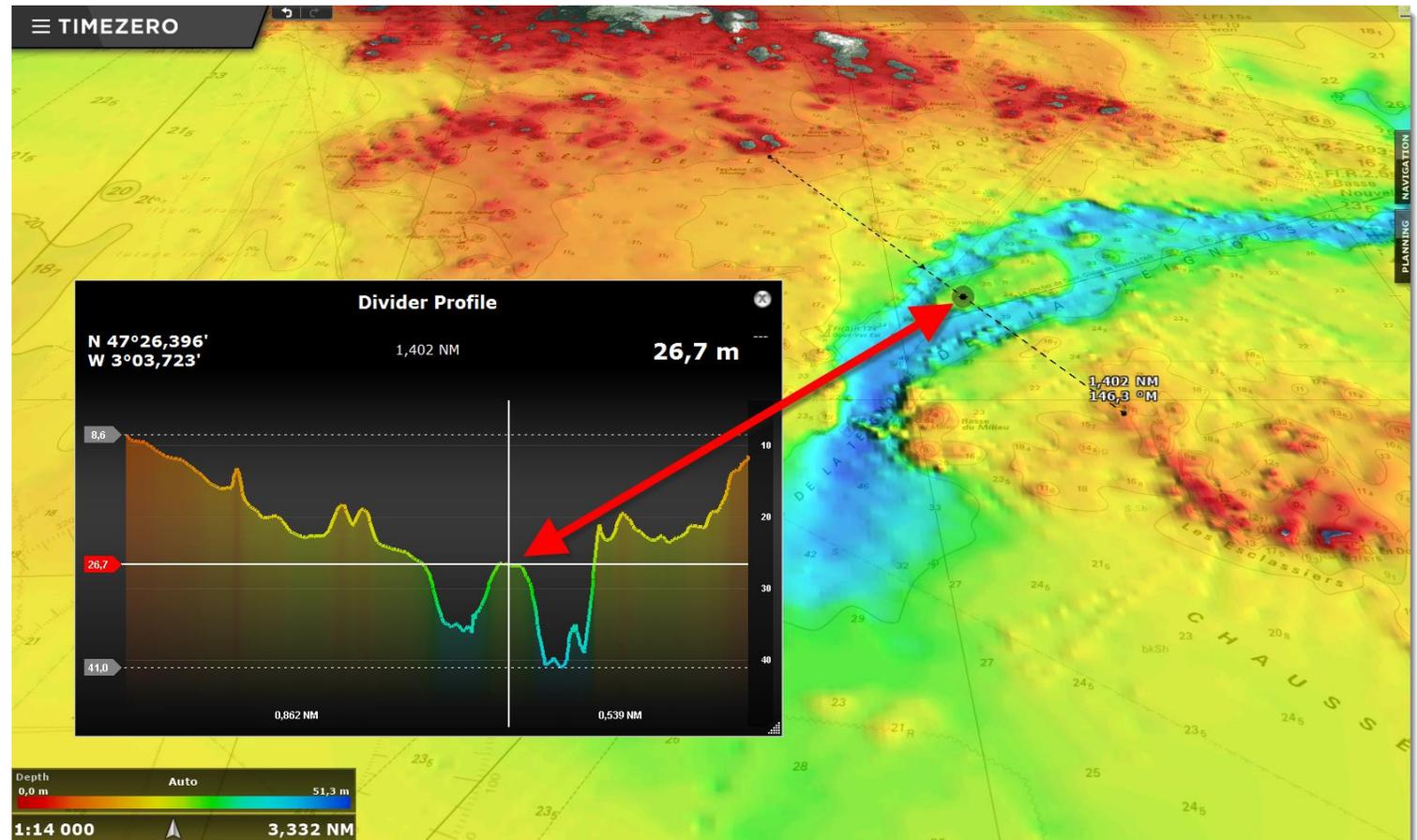
New Fishing Workspace

- ✓ Workspace exclusively dedicated to professional fishermen (PBG module needed)
- ✓ Simplified adjustment of the display settings for bathymetry and depth lines
- ✓ Unlimited colour scale in the « Discrete » range for customizing the seafloor display
- ✓ Limitation of the depth line display to certain depths and possibility to manually set up the interval (minimum of 0.2m) to focus on targeted fishing zones
- ✓ If the Bathymetry is not shown, depth lines are now coloured



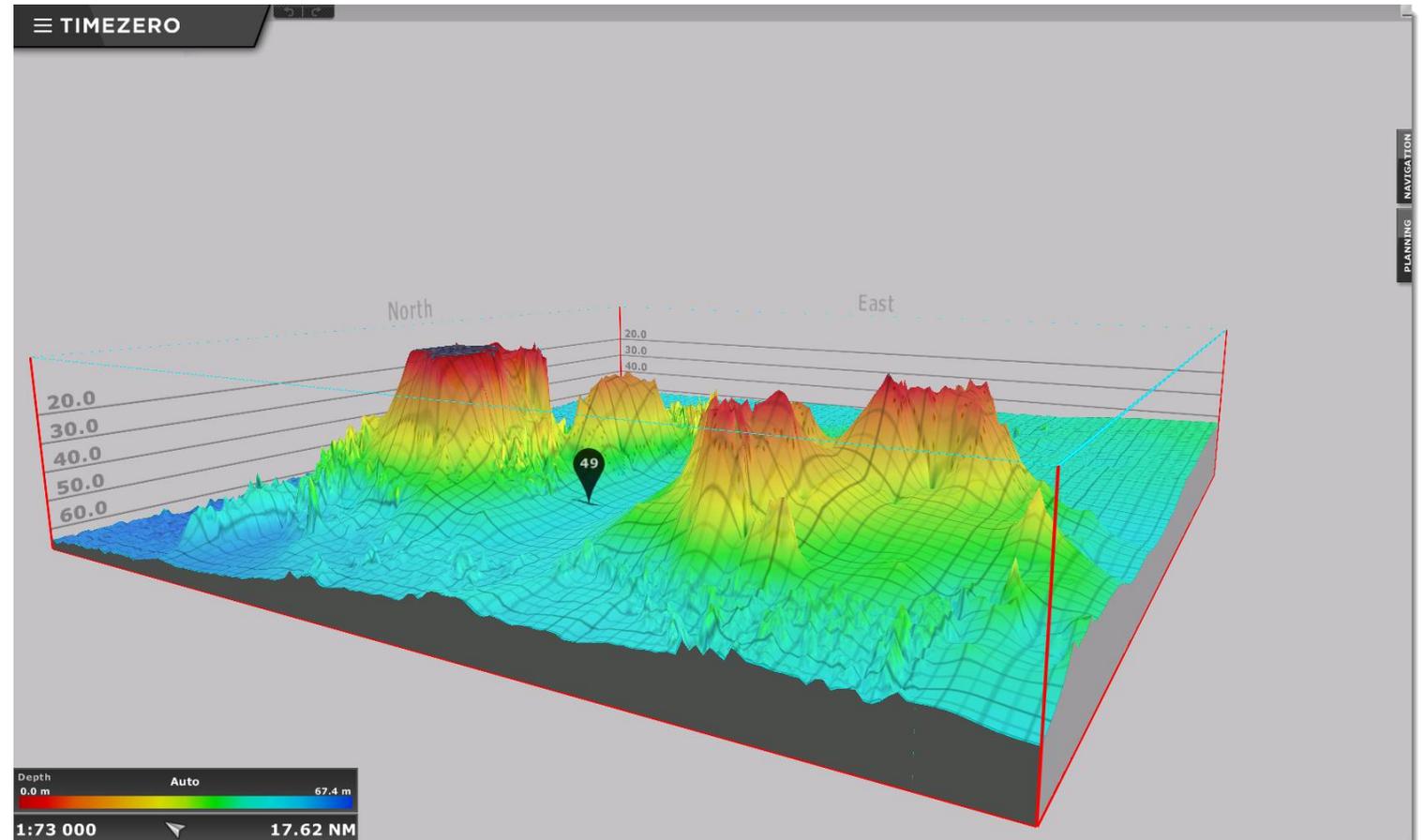
New Profile window on Divider and Tracks

- ✓ This new window allows the depth profile to be displayed in a 2D view. It is available for both tracks and the Divider tool
- ✓ Simultaneous display of the cursor on the chart and in the Profile window
- ✓ Possibility to add a mark on the chart by double-clicking in the Profile window (allowing to quickly spot a specific location)



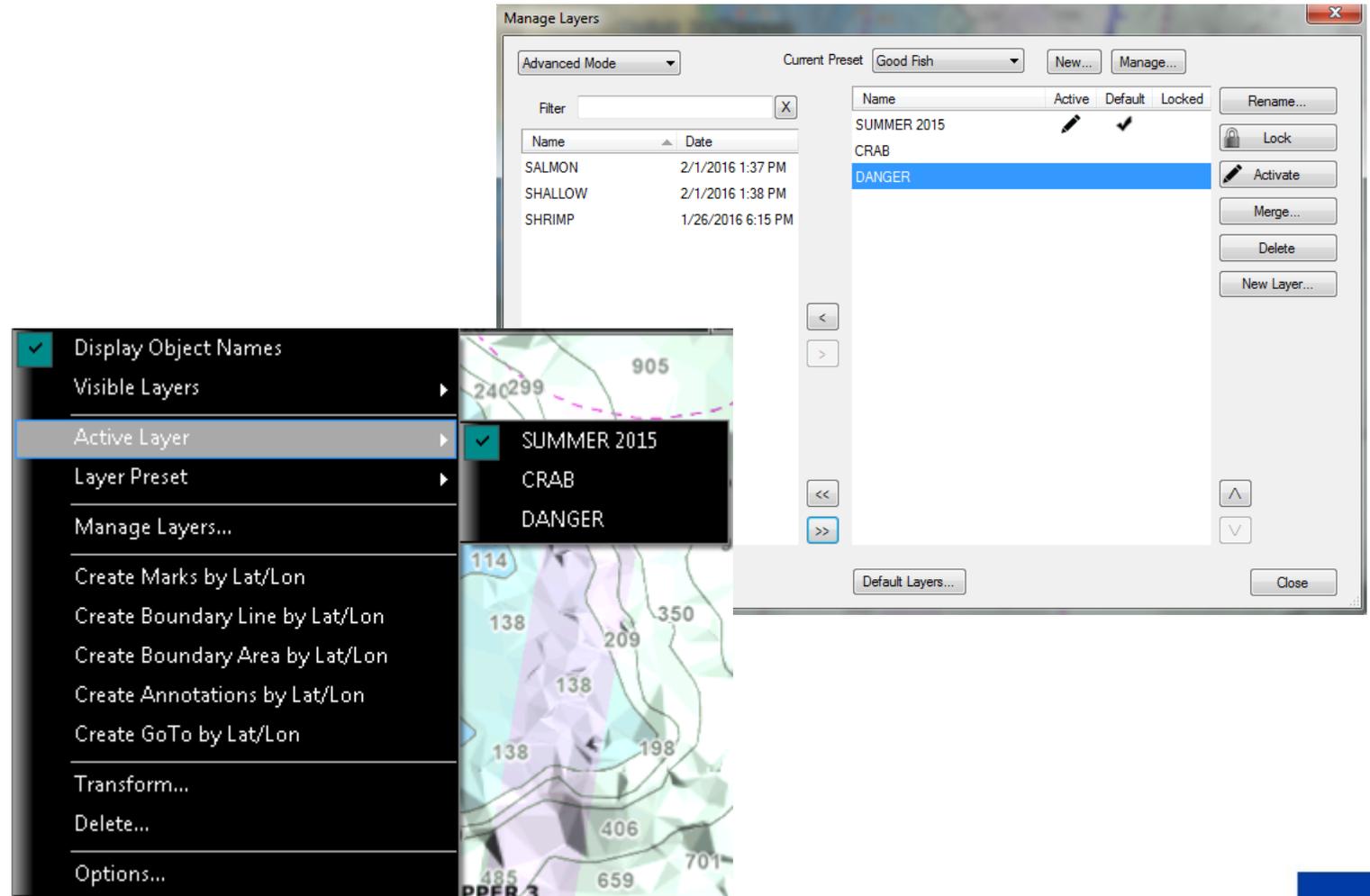
New 3D Cube Workspace

- ✓ By default, centered on the boat with possibility to adjust according to the heading
- ✓ Zoom/Dezoom and moving of the view directly in the 3D Cube Workspace
- ✓ More accurate rotation of the 3D view, for a better seafloor analysis
- ✓ Improvement of the exaggeration factor (Auto and Manual) to adapt the view to all types of under water reliefs



Improvement to layer management

- ✓ Faster sorting and selection of work layers
- ✓ New Advanced mode allowing an easier management which is very useful especially when over 20 layers are opened in TIMEZERO
- ✓ Creation of presets allowing to create groups of layers
- ✓ Access to the presets directly from the ribbon



Alarm zones

- ✓ Set of alarm zones for AIS and ARPA targets
- ✓ Triggers a sound when an AIS or ARPA target enters in the area
- ✓ Lines can be used to set alarms (crossing)

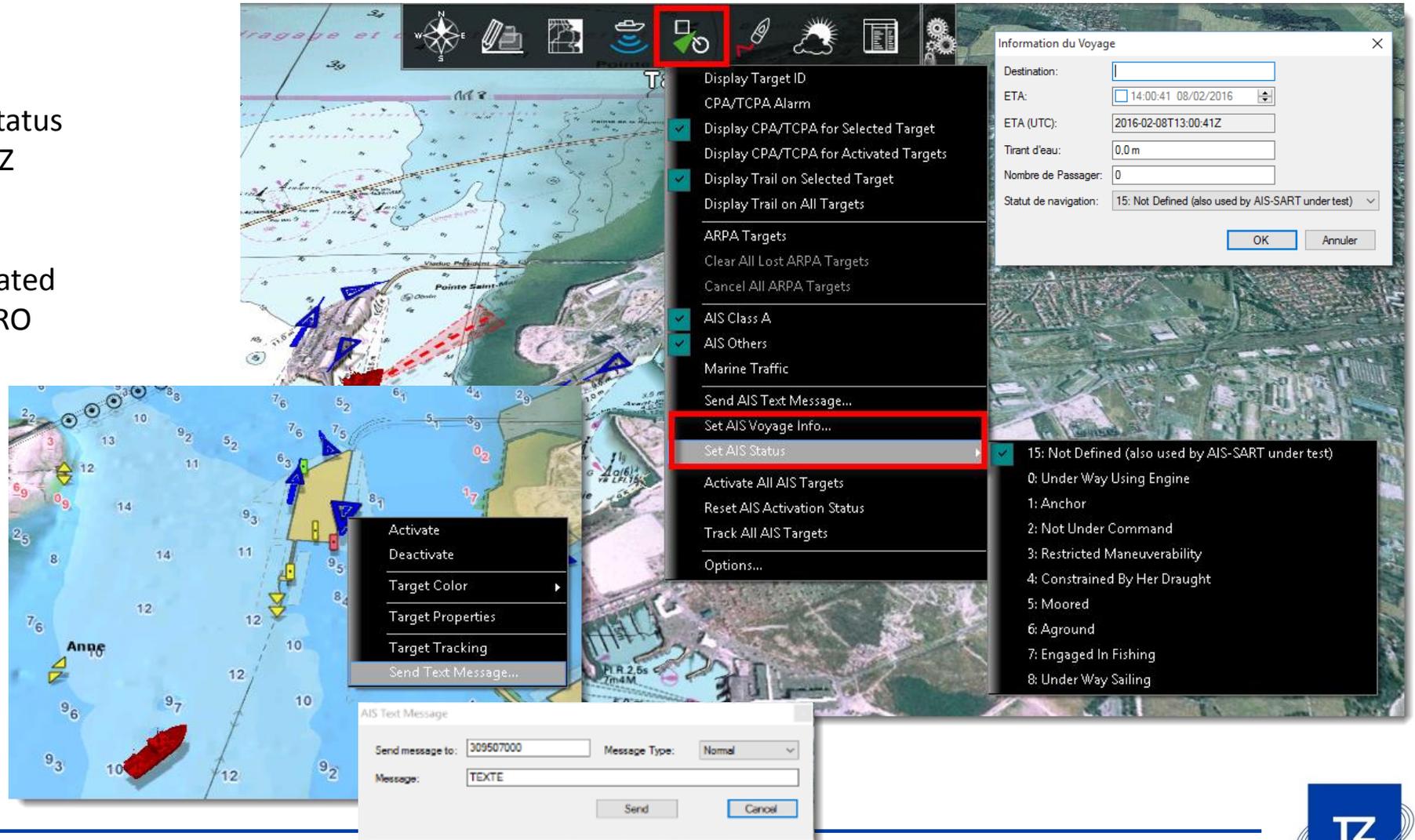
The screenshot shows the TIMEZERO software interface. At the top, a red banner reads "Target in Alarm Zone". The map displays a coastal area with several yellow alarm zones. A context menu is open over one of these zones, listing options: "Insert Boundary Point", "Boundary Properties", "Rename Boundary", "Boundary Color", "Boundary Contour", "Assign Layer", "Delete Boundary", "Alarm" (which is selected with a checkmark), and "Lock Boundary". A red alarm icon is visible on the map. At the bottom, an "Alarms List" table shows the following data:

Category	Date	Title	Acknowledge
User	11:13:00 lundi 12 octobre 2015	Target in Alarm Z...	<input type="checkbox"/>
User	11:11:50 lundi 12 octobre 2015	Target in Alarm Z...	<input checked="" type="checkbox"/>
System	11:11:50 lundi 12 octobre 2015	Radar not detect...	<input checked="" type="checkbox"/>
Hardware	11:11:50 lundi 12 octobre 2015	No Position	<input checked="" type="checkbox"/>

AIS Configuration from TZ Professional

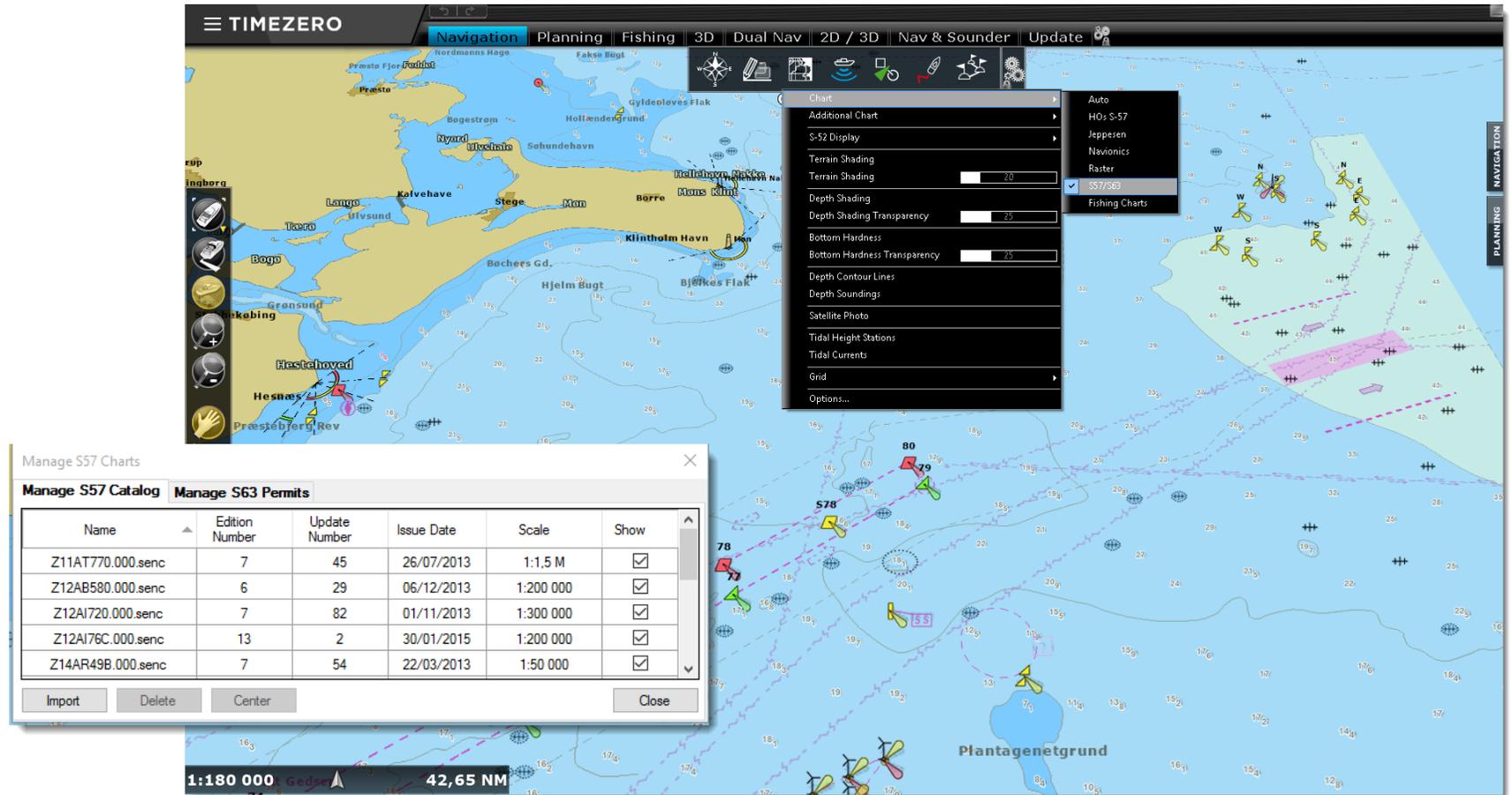
AIS class A configuration

- ✓ AIS MKD: allows to set up the status of an AIS class A directly from TZ Professional
- ✓ Dialog box for entering data related to the voyage AIS from TIMEZERO
- ✓ Modification of the AIS status
- ✓ AIS Text messages can be sent directly from TIMEZERO



ENC S57/S63 Compatibility

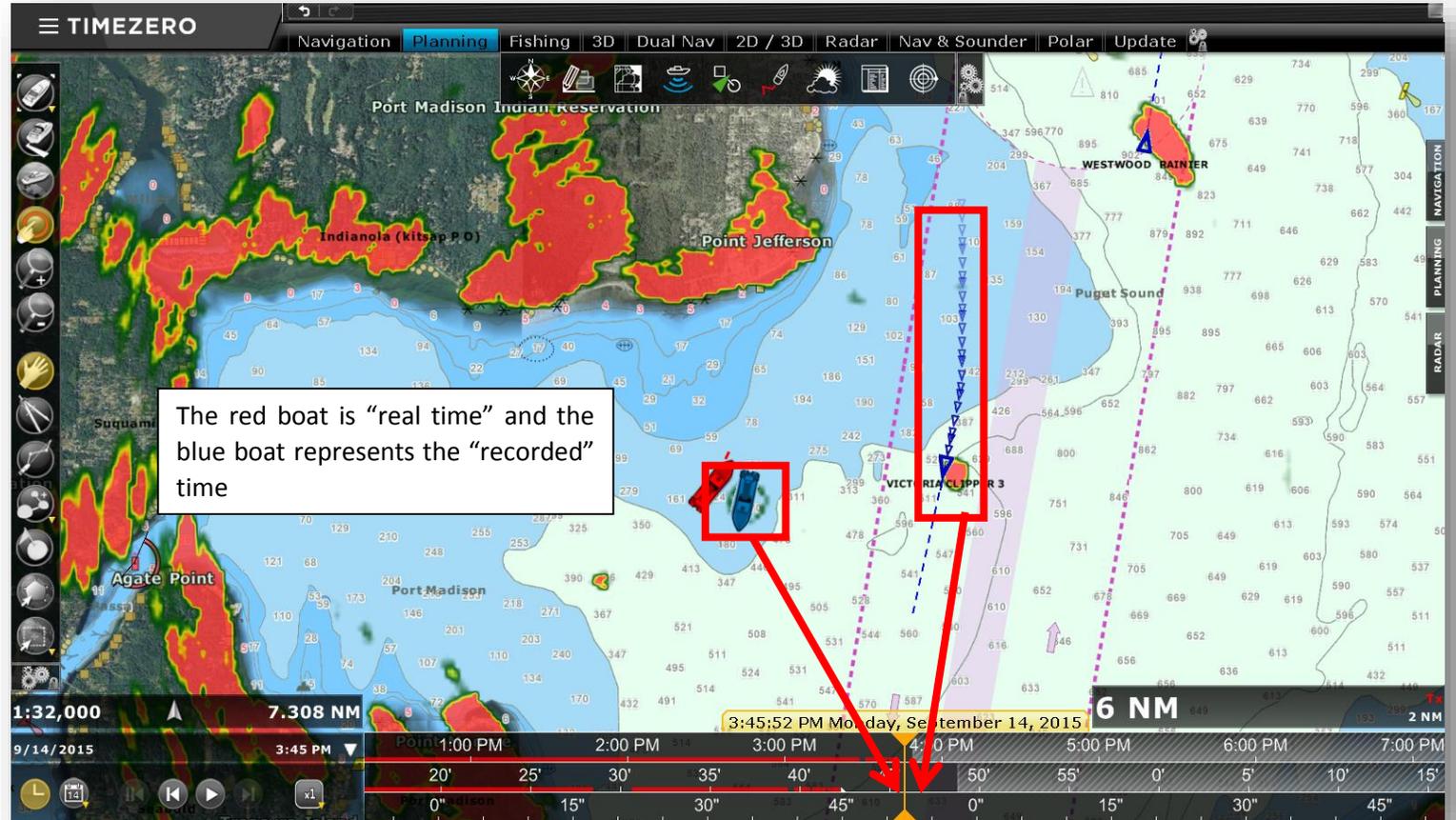
- ✓ Import and display of S57 native charts directly in TZ Professional
- ✓ S63 module is now available to read official ENC charts (from Primar, UKHO or Chartworld, for example)
- ✓ S57/S63 chart catalogue including advanced management of chart display



New VDR Module (Voyage Data Recorder)

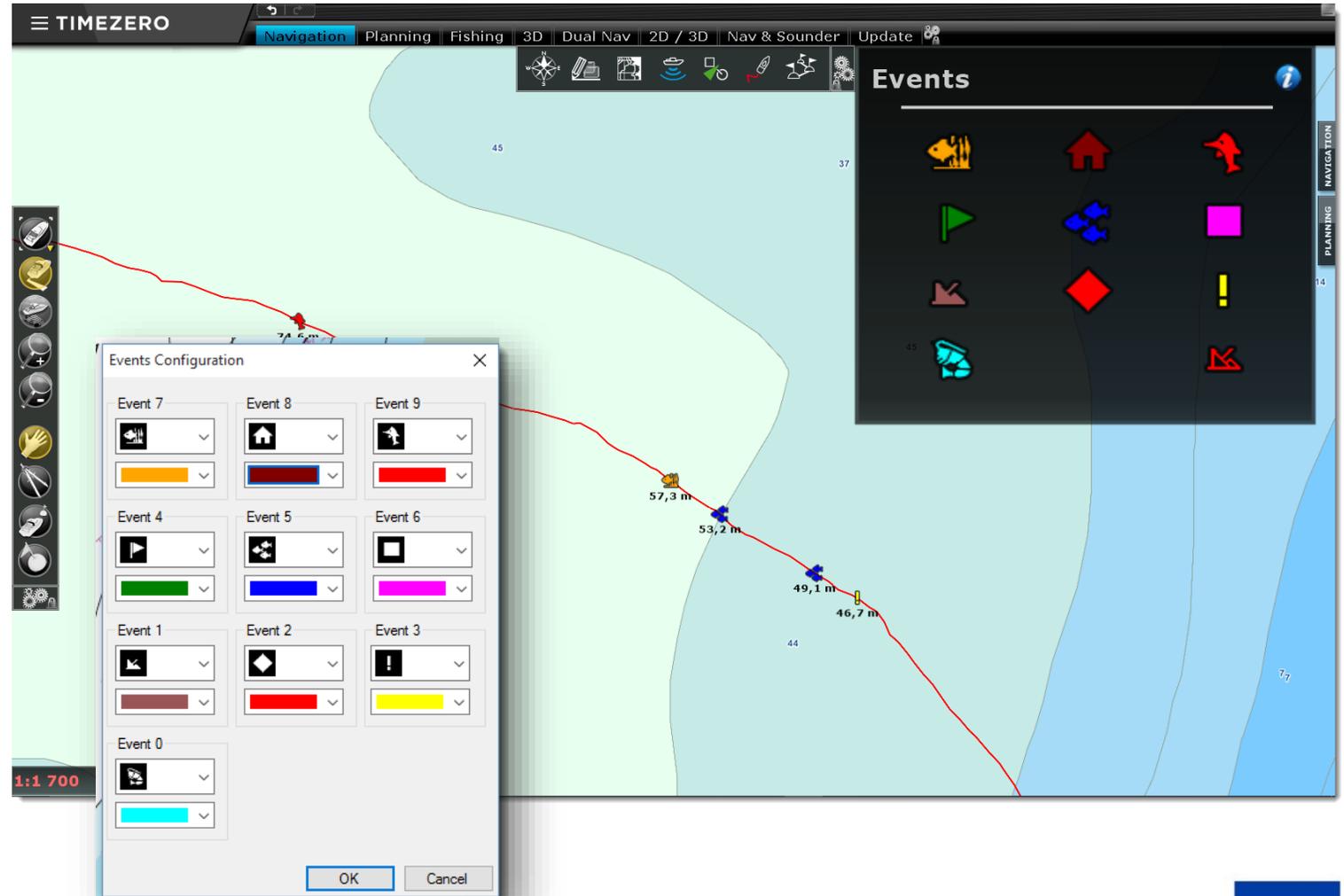
New Optional “Voyage Data Recorder” module

- ✓ Allows to record boat data (position, speed, depth, etc.)
- ✓ Also possible to record data about ARPA/AIS targets as well as the radar image and the alarms
- ✓ Records up to 1 month of data
- ✓ The time bar in the Planning Workspace allows to easily replay this data



New «Events» window in the NavData bar

- ✓ Allows to quickly drop «Events» with the mouse
- ✓ Customization interface for icons and colours associated to the properties of the keypad

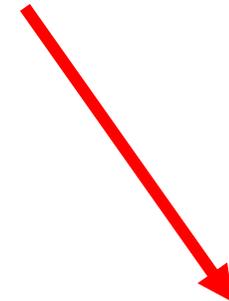


New «Quick Access» function in the NavData bar

- ✓ Allows to customize action buttons

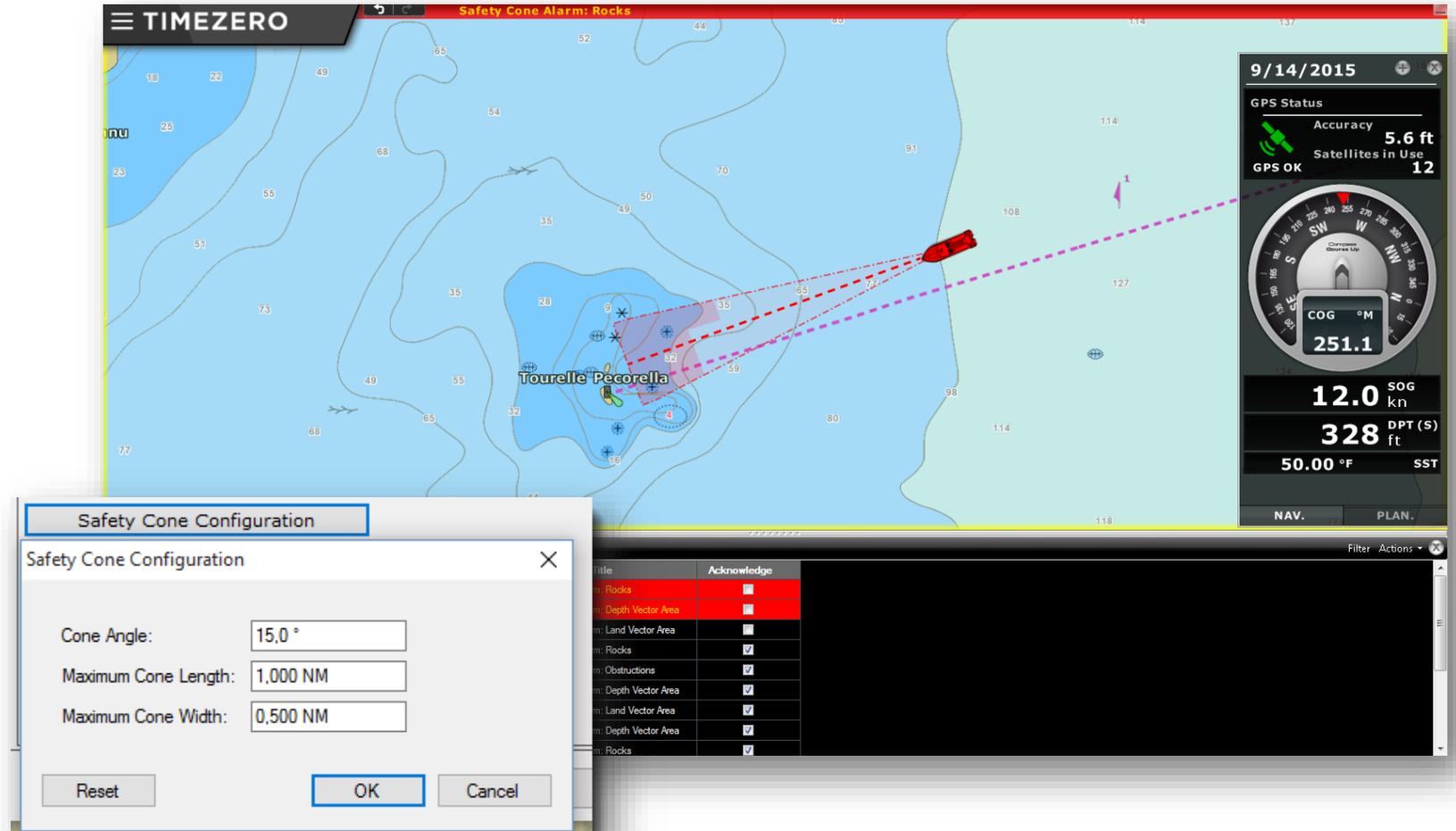


In this example, we have set 3 buttons so we can easily shift from DAYLIGHT mode to DUSK or NIGHT mode



Anti-Grounding Cone

- ✓ Triggers real-time alarms when an obstacle enters in the cone
- ✓ Works with vector chart information (buoys, rocks, etc.)
- ✓ Detection of the height of nearby bridges
- ✓ Detection of insufficient depths based on vector charts or 3D Carto database (configurable)

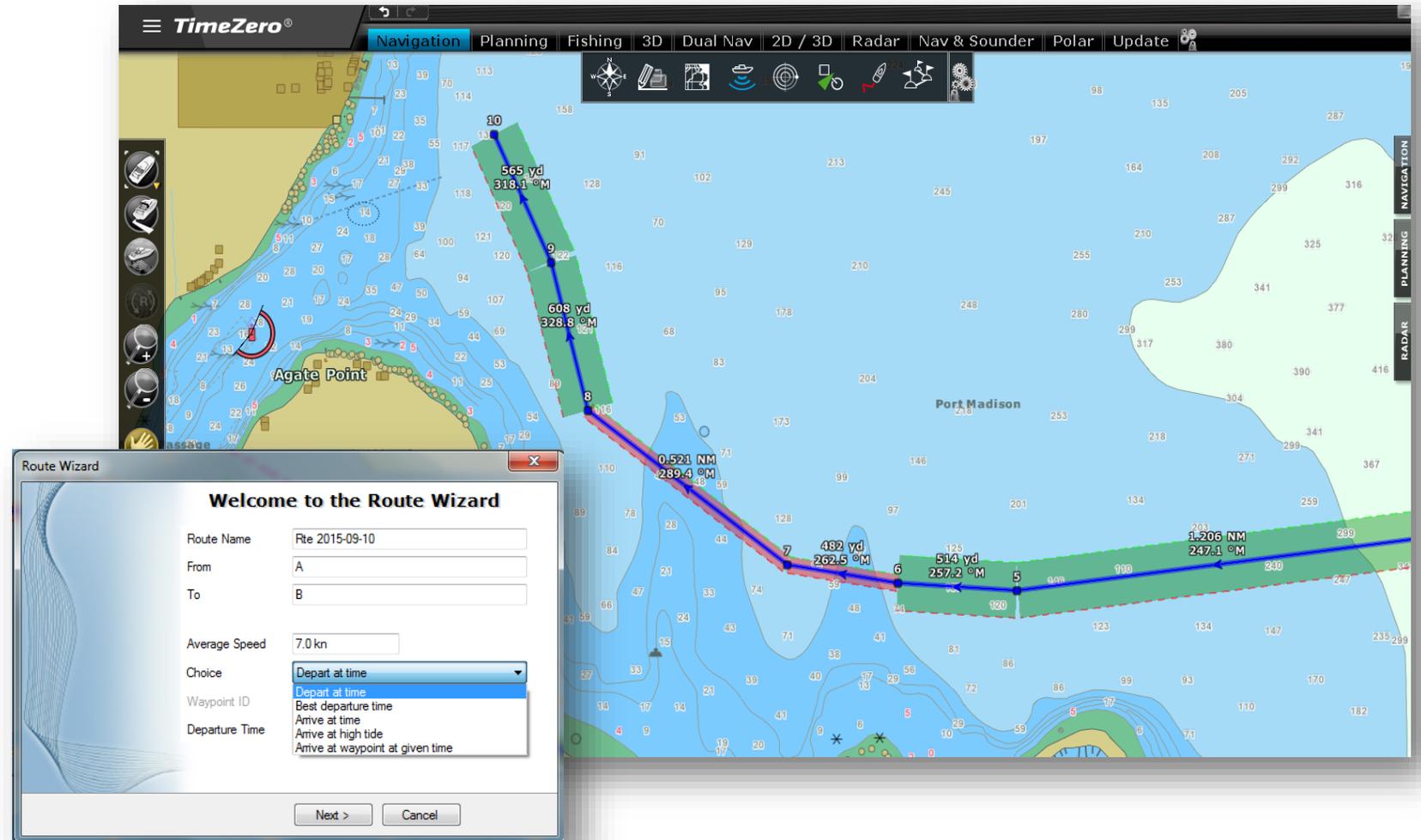


Security control on routes

- ✓ For each Waypoint added, TZ Professional checks the information of the vector chart to know if the depth is sufficient for the safe passing of your boat (GREEN= OK / RED= DANGER)
- ✓ Works with vector chart information (buoys, rocks, etc.) and/or 3D chart database

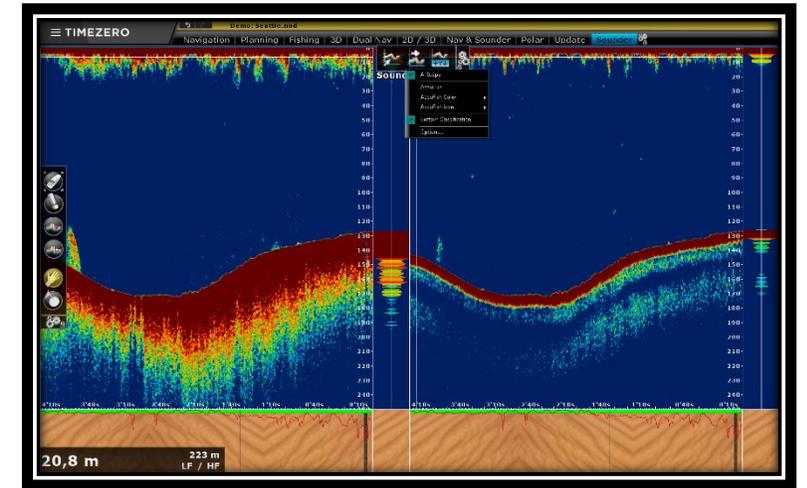
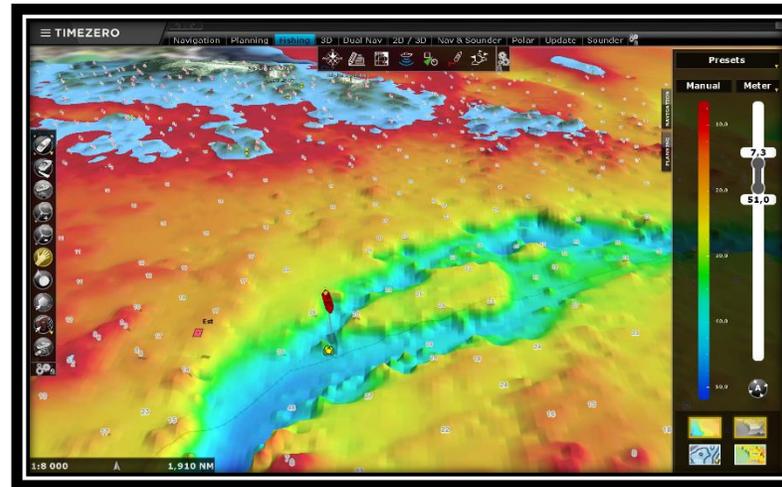
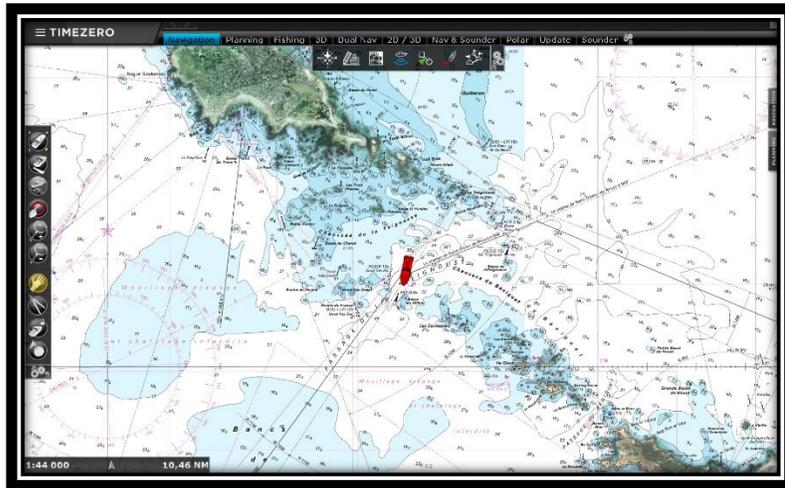
New Route Planning Wizard

- ✓ A route wizard is displayed when a route is created
- ✓ Offers a calculation for the optimal route based upon tides and currents (optimal departure time, arrival at high tide, etc.)



Display on 3 screens

- ✓ Up to 3 monitors can be used simultaneously (powerful graphics card needed)
- ✓ Independent Workspaces



You'll find below the exhaustive list of all the new additional features:

- Radar Preset** save radar settings for specific conditions (bad weather, calm sea, etc.) and recall them
- Camera Preset** save camera position, zoom and recall them
- New Tools available (hidden by default) allowing one to **acquire ARPA targets and control a camera**. Useful with touch screen monitors where right click can be difficult
- New shortcut** enables a mode that allows for **radar adjustment of the Gain/Sea/Rain with the scroll wheel** (similar to NN3D rotary knob)
- New ARPA Algorithm** available in TIMEZERO (choice of Furuno Radar or TIMEZERO ARPA) with Automatic ARPA acquisition (guard zone)
- Compatibility with fishing **Ryokusei** Buoys proprietary NMEA sentence (display the Buoys on screen and right click on them to request a position update)
- Possibility to "lock" TIMEZERO with a password** to protect some settings and preferences (Options, Connection Wizard, Toolbar/Ribbon/NavData configuration)
- Possibility to **enable a "shell"** to prevent the user to access the computer
- Possibility to **record a Workspace configuration** and recall it using a shortcut, using the right click on the workspace title or automatically at startup (using a parameter shortcut)
- Manual and Automatic XTE per leg**
- New UTM Coordinate system** added to the coordinate unit selection
- Ability to select the coordinates unit directly from the Manual Input window** (without having to change the coordinates of the software)
- Lost Sensor Alarm (GPS, compas, sounder, etc.)**
- Print Route Feature** (print the Route Detail List)
- New Shortcut and Tool to save a screenshot**
- Possibility to link two routes** (using right click)
- Customer can either use the real time speed or planned speed in the Active Route calculation (ETA, TTA...)
- New Odometer NavData** (Duration, Distance, Max Speed, Average Speed)
- New Location feature under POI, allowing to save the chart location and recall them from the Ribbon or using a shortcut
- Surface computation** added to the boundary area and boundary circle property window
- Offset and Damping for SST, Wind and Speed
- Sensor Offset & Damping
- Possibility to adjust NMEA2000 Priority using sensor instance numbers
- Coastal Explorer Import compatibility (USA competing software solution)**

Improvements:

- Improved compatibility with AXIS cameras (latest Quad Converter)
- AIS SART Improvements (support for SART Test and new pop-up window asking to center or create a go to an active AIS SART)
- Added Cross Screen Cursor position label to permanently show the cursor position on the map
- Transmit directly from Radar screen (click on “Standby” button in the middle of the screen)
- New ActiveCaptain API
- The chart Range/Scale (lower left of the screen) blinks when over-zooming. Possible to restrict overzoom on vector charts
- Improvement in the route assistant to calculate the speed
- Possible to remove currents from a route leg and disable currents computation on the Active Route
- Alarm List Improvements with the addition of a new column (Category) and option to filter the list
- Undocked NavData improvement that now belongs to a Workspace
- It is possible to right click while pressing the CTRL key down to copy a position in the clipboard (to paste in an email, notepad or in a field in TIMEZERO accepting Lat/Lon)
- GPS NavData Improvements with new “Poor GPS” Alarm
- Shortcut Improvements
- Track Selection Improvements
- Thickness and color setup for Heading Line
- New option allowing to disable the Inertial Scrolling
- New option allowing to disable AccuFish icon displayed on the chart
- Watchdog allowing to restart automatically TIMEZERO in case of a problem
- Automatic Reconnection on TCP lost
- New log mechanism for troubleshooting (log can be sent automatically from Start menu “Send Troubleshooting log”)