ADRENA

to serve your performance...

Catalogue 2010

CD included

www.adrena.fr

About Adrena

This year once again, Adrena has proved to be the reference in the field of navigational and racing performance software. In terms of research and innovation, the company is at the forefront, and is constantly developing its products to provide software that is even more efficient and performs even better.
These programs, which have been developed with the help of the best ocean racers and routers, have already convinced top competitors. Whether for the Transat Jacques Vabre, the Solitaire du Figaro, the Route du Rhum or the Volvo Ocean Race, more and more racing sailors are using them!

The efficient and ever available Adrena team attaches great importance to customer satisfaction, while permanently working towards excellence. This easily accessible team maintains a personal relationship with Adrena's customers.

An overview of what Adrena can offer:

- Adrena, navigation software. The Adrena range consists of 5 modules providing the standard software with even more possibilities.
- Optima performance analysis and speed polar creation program.This can be supplemented by the OptimaPro module, with which additional parameters can be included for calculating polars (such as ballast, position of keel or fins etc.). In addition to this there is the Sailect® reader (Optima) and creator (OptimaPro) function, which concern the range of use of the sails.

New for 2010 !

Adrena wants the expertise acquired from the best in the field and the exceptional performance of its software to be available to all professional and amateur sailors.
The company has therefore brought out **AdrenaFirst**, a pack (software + Cmap cartography) to meet the needs of less experienced customers who are nevertheless still just as demanding when looking for simple and reliable navigational aids.
AdrenaFirst is a "ready to sail" pack, consisting of the basic aspects of Adrena in a simplified, easy to install and use version.

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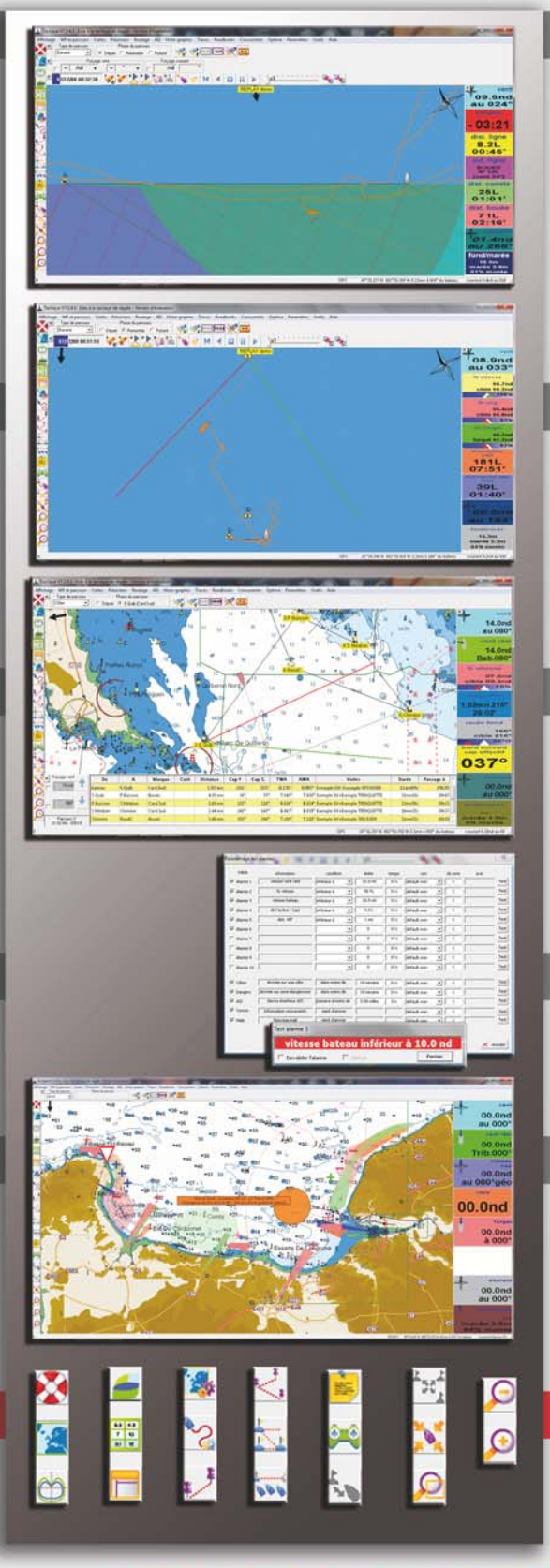
Adrena software

Adrena is high-performance navigation software specially designed for racing.
In addition to classic navigational and cartographic functions, it is an excellent tool for helping with tactical decisions. It calculates more than 100 items of data for the tactician. Each phase of the race is set and the software automatically adapts to the current phase of the race.



Managing the race

During the start phase, once the markers and the stopwatch have been entered, the chart is centred on the line and its laylines and shows the safe starting area. There are specific digital displays: stopwatch, time and distance to the line, line advantage, early/late at the line etc.
During the race, the screen changes automatically and is centred on the buoys if sailing a windward/leeward loop or on the current waypoint in the case of an inshore course. The laylines show the outline and numerical information is displayed: time and distance to the laylines, target speed and performance and also the downwind target angle or the VMG.

Replay, or implacable debriefing

With this function, the race can be replayed to analyse the diffe-rent phases, the options chosen and changes in weather conditions. All the data from the navigational instruments and the GPS are available as well as all the Adrena software calculations.
Replay is a real debriefing tool that permits lessons to be learnt from the race.

Alarms

Adrena can set alarms for more than 100 parameters: heading errors, target speed, depth, wind etc. When they are triggered, they give both a visual and an audible warning.
They are essential for ocean racing and make resting safer for the single-handed sailor or the off-watch skipper. During inshore races, they warn the tactician of events: approaching a layline, a change in wind direction etc.

RoadBook

When preparing the course, the navigator marks and annotates particu-lar areas on the chart - change of tide, effect of the coast, variations in current etc. - constructing a set of parameters to be monitored during the race.

Monitoring competitors

This function monitors competitors and analyses their strategies:
- Automatic reception of positions.
- Complete information on the competitor on putting the mouse over the image (mean speed and heading, name of the boat etc.)
- Replay of competitors' positions
- Competitors' routing.

New for 2010 !

Calculation of IRC and HN compensated time: for the first time, a navigational software program can tell you in real time your position in a race in compensated time!

"There is no doubt that it helps in certain parts of the race: it allows better positioning at the start, more precise sailing, the laylines can be seen etc."
Marc DE SAINT DENIS, IRC Skipper

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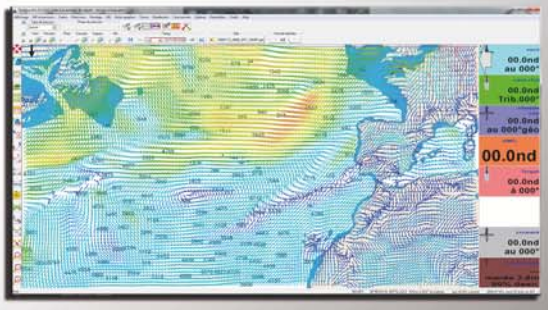
Routing Module

The Routing module calculates the best course for inshore and ocean races.

It provides navigators with a useful racing and course optimisation tool.

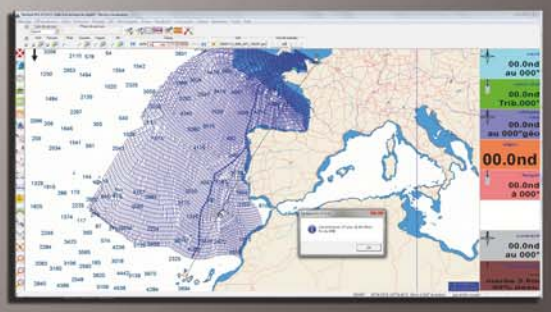


Reading and displaying GRIBs

The Routing module displays the wind, current, pressure and precipitation GRIB on the charts;
GRIBs can be downloaded from most sources of weather data, particularly using the GRIB.US application. The software has a direct interface for this.

Calculating a route plan

The course is calculated from the parameters chosen: start, destination, calculation parameters, polars, wind, current and dangers to avoid.
Several successive course calculations can be obtained by setting certain parameters, then displayed for comparison.
In addition one or more courses can be simulated and the different sections analysed.



The extras in the Routing module

- The calculation algorithm includes the current and makes a correction for the background wind

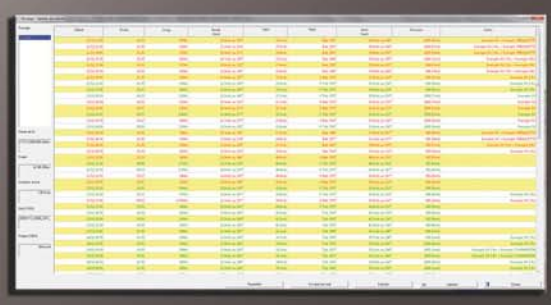
- Adrena route planning calculates the optimum course automatically avoiding the coast.

- It can calculate a route plan from an inshore course: in this case, the program automatically generates the markers to leave or to round and the gates to pass through.

It is best to set the wind force to obtain a route plan calculated on variations in current.

- Adrena provides a customisable table of legs using the predicted sailing conditions and the recommended sail configuration (Sailect® function).

- The courses calculated show the wind conditions encountered throughout of course (post-it and symbols).



New for 2010 !

2 click route planning : One click for the start, one for the finish... Leave Adrena to prepare the route plan !

" We started several route plans and rapidly got a precise idea of the course to follow as it is so effective and easy to use. Adrena was again at the centre of conversation during the 2009 BPE Trophy debriefing in Port-La-Forêt ! "

Thierry CHABAGNY, skipper of Figaro Suzuki Automobiles

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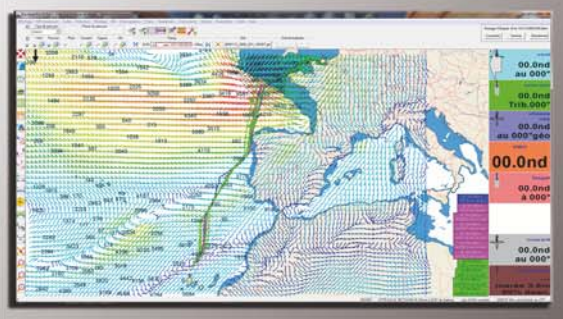
RoutingPro Module

The RoutingPro module has been specially developed for ocean racing.

It has more features than the Routing module and provides the specialist with a complete high performance course study tool.
It is powerful, with exclusive functions, and is unequalled on the market for working on routing strategy.



GRIBs

The RoutingPro module can display more information on the chart such as wave and high altitude wind GRIBs.
Several simultaneous GRIBs can be displayed and used in calculations on a single route plan.

Communication with the shore

This module makes the exchange of information with the team ashore easy :

- It exports to the shore data from the boat's instruments. Thus a router knows exactly what the boat's sailing conditions are and can compare them with the GRIBs to modify the course.

- It can send a route plan to the boat.

The extra points of the RoutingPro module

- Pivots can be placed on the isochrones of a previous route plan to force a passage zone or refine a course.

- The course can be coloured according to previously set criteria: speed, current, waves, wind etc.

New for 2010 !

Adjustment of GRIBs: With this module a GRIB supplied, but not verified, can be adjusted in real time.

Route planning profiles: By scanning different variables such as the wind, current or polar %, several successive route plans appear, so that one can see whether this parameter has much influence on the route plan that was initially chosen. It is particularly useful for deciding on the start time for a record or a cruise.

Reverse isochrones: This feature gives a good visual indication for confirming a choice of tactics as it rapidly shows whether the choice deviates or not from the course, depending on the convergence or divergence of the isochrones. Reverse parallel isochrones indicate that the heading can be changed without influencing the time taken for the course. Given the position of competitors and the reverse isochrone function, you can also see your position relative to the others.

"I was perfectly placed in the route plan given by the software and that is always an advantage."
Gildas MORVAN, skipper of the Figaro Cercle Vert, winner of the 2009 BPE Trophy

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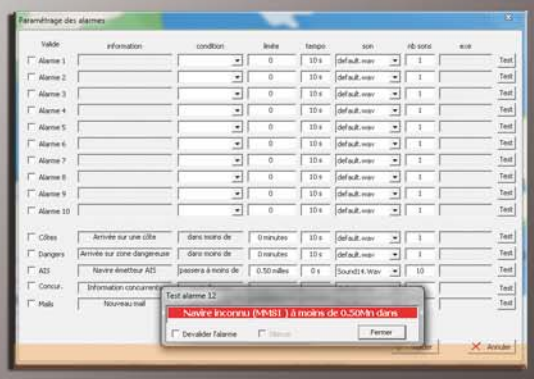
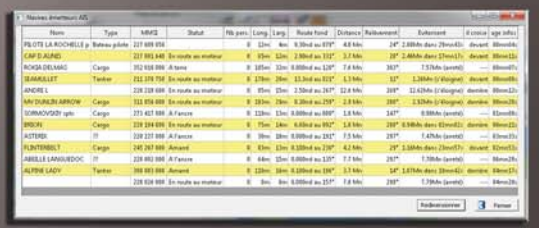
AIS Module

The Adrena AIS module and an AIS receiver connected to the onboard PC guarantee safety when sailing.

The AIS (Automatic Identification System) module continually monitors the various vessels transmitting in the area, which makes sailing safer particularly in dangerous areas or when sailing in fog.





Monitoring AIS vessels

Boats can be monitored by their positions and their courses being displayed on the chart.

The various AIS vessels in the area appear in green as do the tracks of their route and the representation of their course over ground.

Displaying characteristics

By putting the mouse near each of them, you can make their characteristics appear:

- Name
- Type of boat
- MMSI n°
- Status (underway under power, at anchor, in harbour, etc.)
- Course over ground (heading and distance)
- Nearest distance at which they will cross your course.

Alarms

An AIS alarm can be set by putting a cross in the AIS box and specifying a safety distance (the same value as that selected in the AIS settings), the type and the number of sounds which should be produced.

When an AIS alarm is triggered, it generates a message accompanied by an audible warning.

If you have set a safety distance and the crossing distance of an AIS vessel is less than this distance, the vessel in question will flash red, as will concentric rings at the collision zone depending on the options chosen in the settings.

List of vessels

A summary table for each vessel can be displayed showing all its characteristics and whether there is a risk of collision. All this information allows you to see beyond the area displayed on the screen and thus be more aware of a situation which could occur later.

New for 2010 !

Display of the side on which the boat will pass: In addition to the boat's characteristics, which side it will pass is also displayed (i.e. whether it will cross ahead or astern).

"During the last week of the race, when the trade winds were in insistent squalls, I used the various alarms a great deal: for the heading, wind strength and also for merchant vessels using the AIS."
Thierry CHABAGNY, skipper of Figaro Suzuki Automobiles, 2009 BPE Trophy

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TactiquePro Modules
Laser Gun

The TactiquePro module is intended for high level racing and match racing.

It adds to the functions of the Adrena software and has advanced functions for dealing with windward-leeward loops.

In the pre-start phase

The TactiquePro module takes into account the inertial and rotational characteristics of the boat to calculate and display all the hypothetical ways of crossing the line: directly, tacking or gibing, passing by one of the laylines, passing from any point in the starting area to reach the committee boat or the buoy.

The starting area is displayed in real size (line/boat/laylines by steps of a length) and other information is available such as the wind for a neutral line.

Entering course markers initiates new functions such as adjusting buoys one with another and the absolute distance between them.

In the post-start phase and during the race

The TactiquePro module can :

- Provide additional information such as the mean wind (the time period can be customised), the minimum and maximum wind.
- Record and display the laylines as a coloured cone.
- Divide the area of water into squares of a boat length when nearing a marker.
- Automatically zoom on the boat, the competitor and the next marker.
- Manage the leeward gate with a choice at any time of the buoy to pass.
- Differentiate between performance and course polars (time to marker, laylines etc.).
- Modify course polars: by angles and percentage or graphically with the OptimaPro module.
- Manage the number of laps to be made and the number of the current lap.
- Manage the finish line, calculating the best side.

The Laser Gun module is an addition to the TactiquePro module with which markers at the start and during the race can be pinpointed.

It also allows you to pinpoint a competitor's position on the water and to follow his progress relative to your own: up or down wind, difference in lateral position, loss or gain between two plots. His position appears on the chart with a track of his course.

"With TactiquePro, a team can be sure that it has the best view of its position on the course and the appropriate information needed to make the correct decision."

Olivier Douillard, navigator and performance manager onboard K-Challenge, challenger in the last America's Cup.

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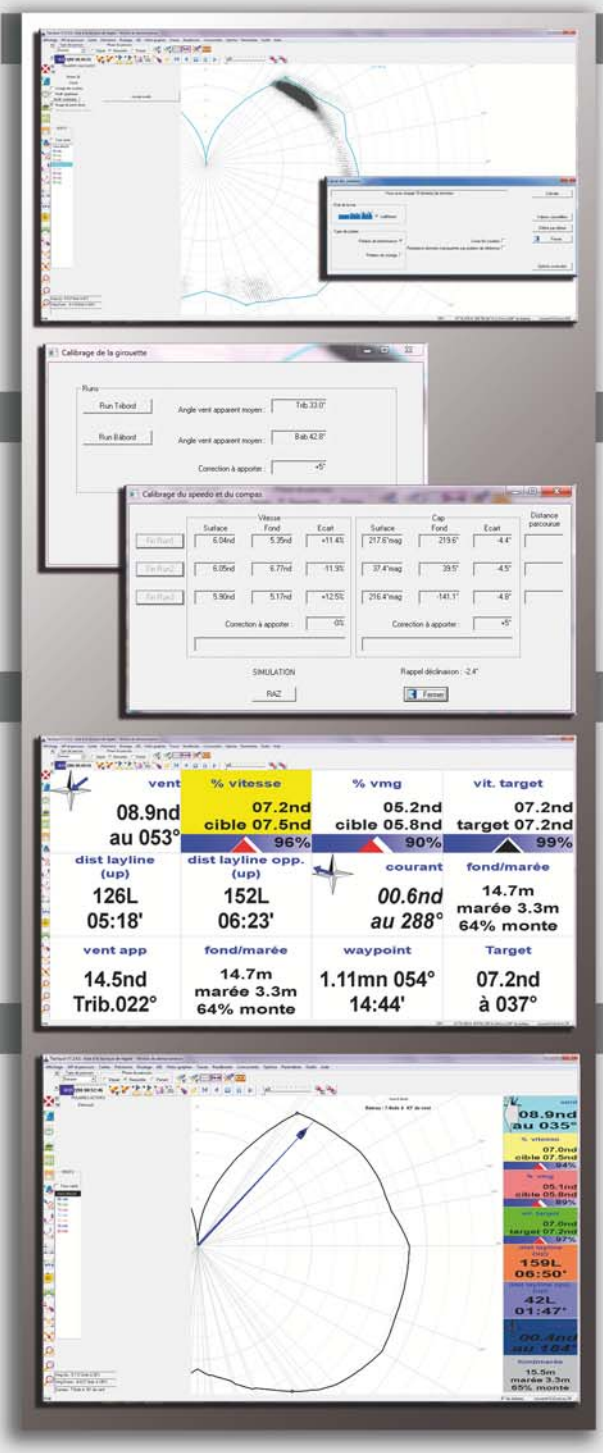
Optima software

Optima is the reference software for creating the real speed polar curves of a sailing vessel.

It is simple to use and available to all, and can produce very accurate performance or routing polars. It is useful both for route planning and racing.



Instrument calibration

First of all, Optima can very simply calibrate the navigational instruments :

- The speedo can be calibrated by making one to three runs of ½ to 1 mile using the engine in the axis of the current.

- The windvane is aligned by making one run beating on starboard tack and another on port tack. The program measures the average pointing angle on each of these tacks, filters them and calculates the difference.

Recording sailing data

During the recording phase Optima collects all the data from the navigational instruments. The program works independently and the more data it acquires the more complete and reliable will be the polars. During recording, it is possible to specify the sea state and to set preferred values.

Calculation of polars

The Optima software loads the recorded data and calculates speed polars excluding unreliable values and filtering all the variations which detract from the quality of the points. It thus creates a real and reliable performance polar curve for the boat.

The ability of the software to provide correct data for route planning or layline calculations stems from this calculation quality.

Use of polars

They can be used for several possible purposes:

- Activation of the polar curve and monitoring the boat's performance by the Optima software.

- Creation of a polar curve file and its use, for example, in a navigation program for route planning.

- Activation of the polar or polars in the Adrena software for pre-start and layline calculations and, of course, for advanced route planning for the race.

"In Roxy we aim for 100% - we have a software program, called Optima, which records the boat's polars. It also displays our actual speed as a percentage compared with the optimal speed of the boat. The objective, obviously, is to be always at 100%! "

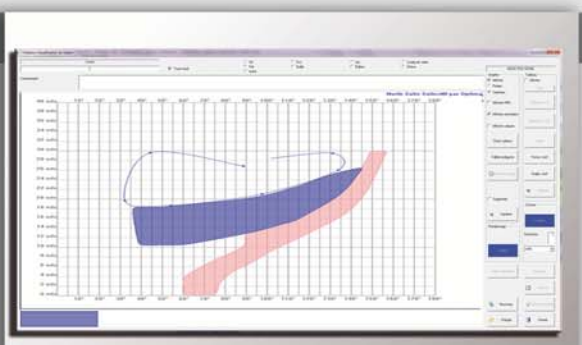
Sam Davies (UK), skipper of ROXY 60', Transat Jacques Vabre 2007

range optima

Zoom on the Sailect® function

Sailect® displays the ranges of use of each sail.

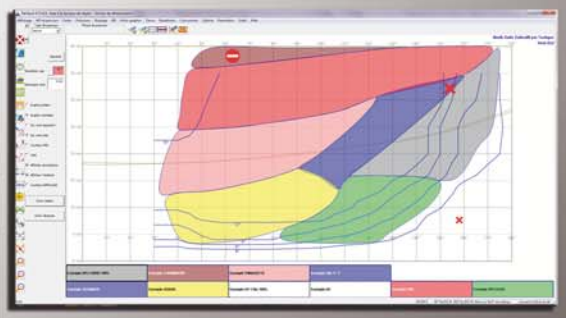
This is an exclusive function, totally integrated into Optima. Developed by Adrena in cooperation with North Sails, the sailmakers, the Sailect® module symbolises the innovative character of Optima software. It is very simple to use, continually telling you whether your sails are suitable for the current wind conditions, and anticipates the best sails to use on the following tacks.
In particular, with Sailect® the boat's sail wardrobe can be optimised during design or when sailing.



Creation of a Sailect® (OptimaPro module)

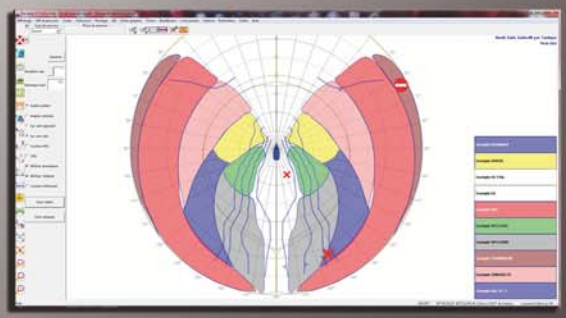
The Sailect® is created either in graphical form on a Cartesian representation, or in a numerical form in a table. In general, the sailmaker provides his customer with the Sailect®, i.e. the graphical representation of the range of use of the boat's sails. This creation phase can also be envisaged during discussion with one's sailmaker when changing the wardrobe.

New variables (keel, ballast, foils, fins) are available with this function which also offers the possibility of creating and reading nomograms.



Displaying the range of use of the sail wardrobe (Optima software)

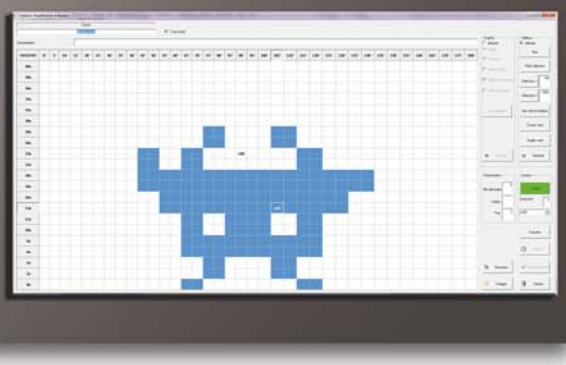
Once the Sailects® have been integrated, the navigator can at any time see the right sail configuration in his program. He can thus be sure that he is carrying the right sails for the current sailing conditions.



Anticipating a future situation (Optima software)

You can also ask the Optima software what will be the appropriate sail for the next tack. To do this, you simply enter the heading of the next tack and a red arrow appears indicating the sail to use.

This function is very useful for inshore races, for example for allowing the crew to prepare the change of sail without rushing.



A relevant discussion with the sailmaker (Optima software)

As the Optima software records all the sailing parameters, it becomes very simple to discuss with the sailmaker.

With this new technology, by studying the Sailect® using the Optima software the sailor is assisted in explaining to the sailmaker what he wants, based on reliable recorded data.

The feeling about a sail's effectiveness or the choice of a new sail can now be based on objective information shared by all those involved.

Using Sailect in Adrena software

In order to anticipate a sail change,

- For inshore races, Sailect appears in the course monitoring toolbar.
- In the route planning module, the sails can be displayed in the Legs table.

"Optima and the Sailect module can be used by any leisure sailor wanting to be sure of the correct range of use for his sails... It provides a sort of simple but essential "identity card" for the sails for anyone who wants his boat to function well ! "
Franck Cammas, skipper of Groupama 3

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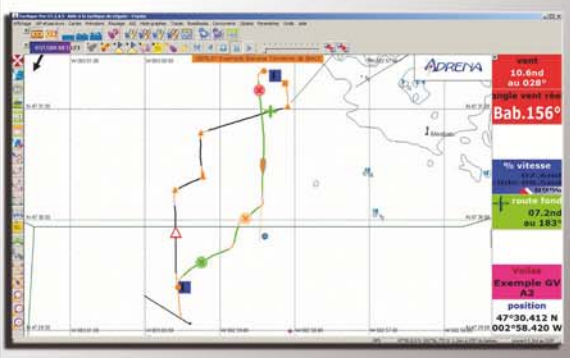
OptimaPro Module

OptimaPro allows additional parameters to be added for calculating polars.
It is added to the Optima software and constructs very refined polars for the most demanding sailors by integrating sail configurations, fins, keel and ballasts.



Selective recording for in-context calculations

With the OptimaPro module, recordings can be made for a given sailing configuration: the sails set, the position of fins and keel, the filling of ballast tanks, the type of crew, of helmsman etc.

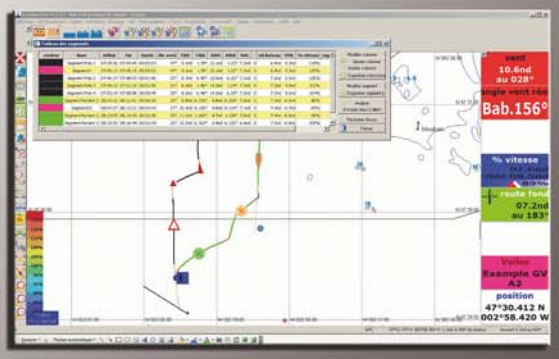
For each sailing context selected, a polar can be calculated subject to a whole battery of parameters. The ultimate aim is to refine performance analysis as much as possible.

Comparing polars

All the polars thus created can be superimposed on each other on graphs and can be compared for an in-depth study of performances. For example, you could compare two sails, the theoretical polar with the calculated polar, or the port with the starboard polar.

Working with polars

The polar conversion tool can modify an existing polar on a graph or in a table by adjusting the values overall for a range of angles and/or wind forces.

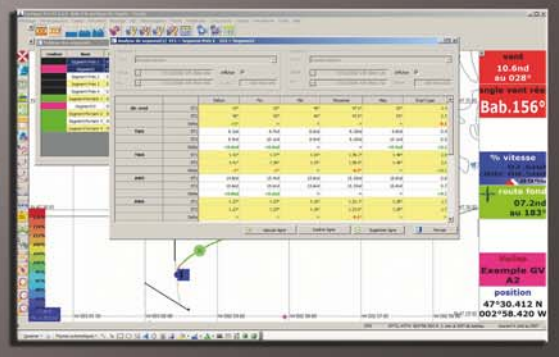


Collection

This is a subsequent study of sorties which allows notes to be added and information collected on segments on the traces, which can also be coloured according to a certain number of criteria (wind, performances, stage of the race etc.) to help with their analysis.

Speed tests and segments

They allow a part of the trace to be analysed in great detail. The speed test function is limited in time but makes it possible to compare 2 parts of the trace rapidly. As far as segments are concerned, you can create as many as you like and put them into a "Collection" for in-depth study.



Trimbook

This is the log of the boat's settings and adjustments. From work done particularly with the "Collections", Sailects® and Optima data, you can produce a complete file of the best tuning and adjustments for your boat: sails, fins and keel, tensions etc.

New for 2010 !

Management of missing sails : For the first time, if a sail is unusable, OptimaPro and its Sailect function will recalculate the polars and readjust your route plan to take this into account!

Statistics concerning the use of sails : With OptimaPro you can know how much each sail in the wardrobe is used: the total time of use per wind force, wind angle etc.

Statistics on the wind conditions : For one race or a season, OptimaPro can tell you the wind conditions encountered and analyse the data so that you can prepare for the future in terms of sails or hull.

"No software producer has ever responded as rapidly as Adrena, which is what I like so much; you can be involved in the development of the products."
Vincent Riou, skipper of PRB

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"OFF" Versions

Data Logger

"Off" versions are complete versions of Adrena and Optima software that cannot be connected to navigational instruments.

Particularly intended for sailmakers, routers ashore, trainers and anyone sailing boats which are not equipped with onboard computers (Mini 6.50s, Olympic boats etc.), these versions can be upgraded at any time to their connectable boat versions.

These non-connectable "off" versions are sold at half the price of the connectable boat versions.

Data Logger is a real "black box" for boats without computers such as the Mini 6.50s or Olympic boats.

This is compatible with all navigational instruments of a boat via an NMEA socket and can record a wide range of navigational data (force and angle of the wind, boat speed, heading etc.) which can be used on return ashore on a PC with Adrena software.

It is sold with an "off" version of our navigation software.

The benefits of Data Logger

The fundamental difference from existing boxes on the market is that our Data Logger is paired with our software. All the data can therefore be used, which was impossible before.

Use of Data Logger

When you return from a sortie, you remove the SD card (2 Gb of memory) from the Data Logger containing all the data and put it into your computer to work on it. Data Logger is sold with one or more Adrena programs. The data recorded in the black box can thus be imported into the computer and worked on.

With Optima, Data Logger users can create and work on their speed polars.

With Adrena, they can take stock of a training day or race, analysing all the phases of the course (start, laylines, trajectories, wind changes etc.).

And also...

When you have independent instruments (GPS, anemometer, log etc.), but no centralised navigational system, they can be connected to the Data Logger with the multiplexer.

The Data Logger is connected to the engine and stops recording as soon as the latter is started up, to avoid "polluting" the data. This is a very useful function for the befuddled !

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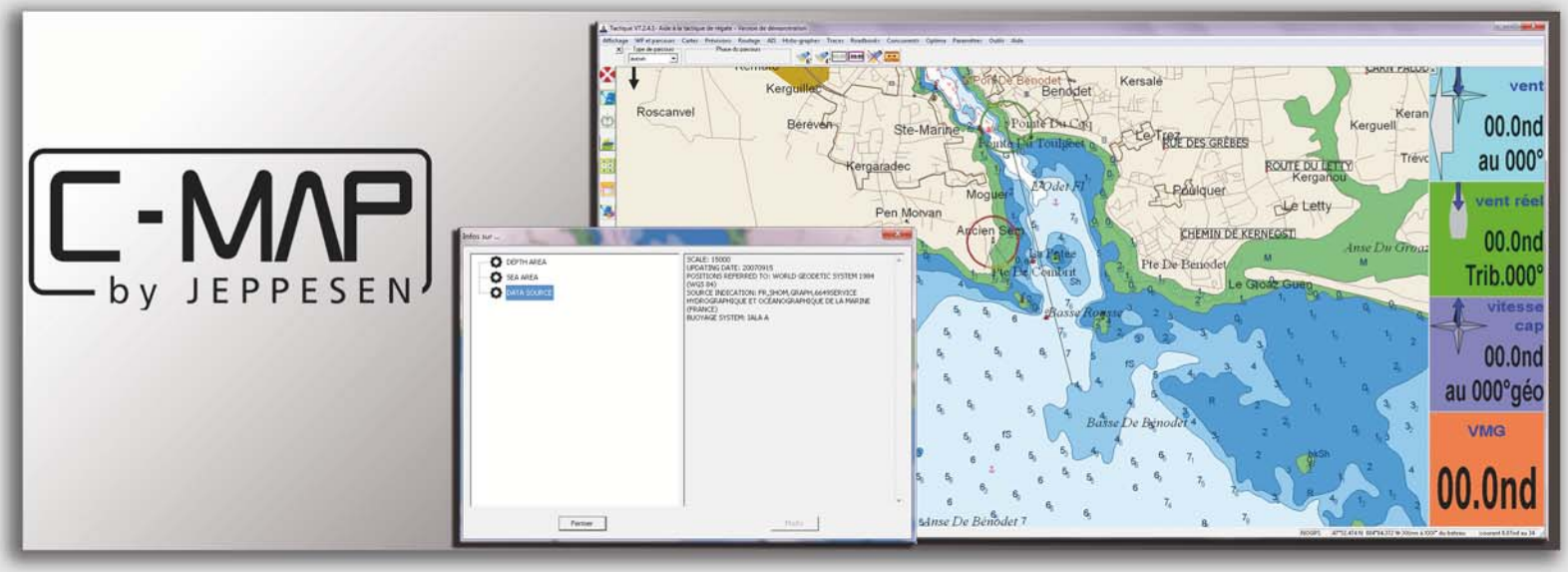
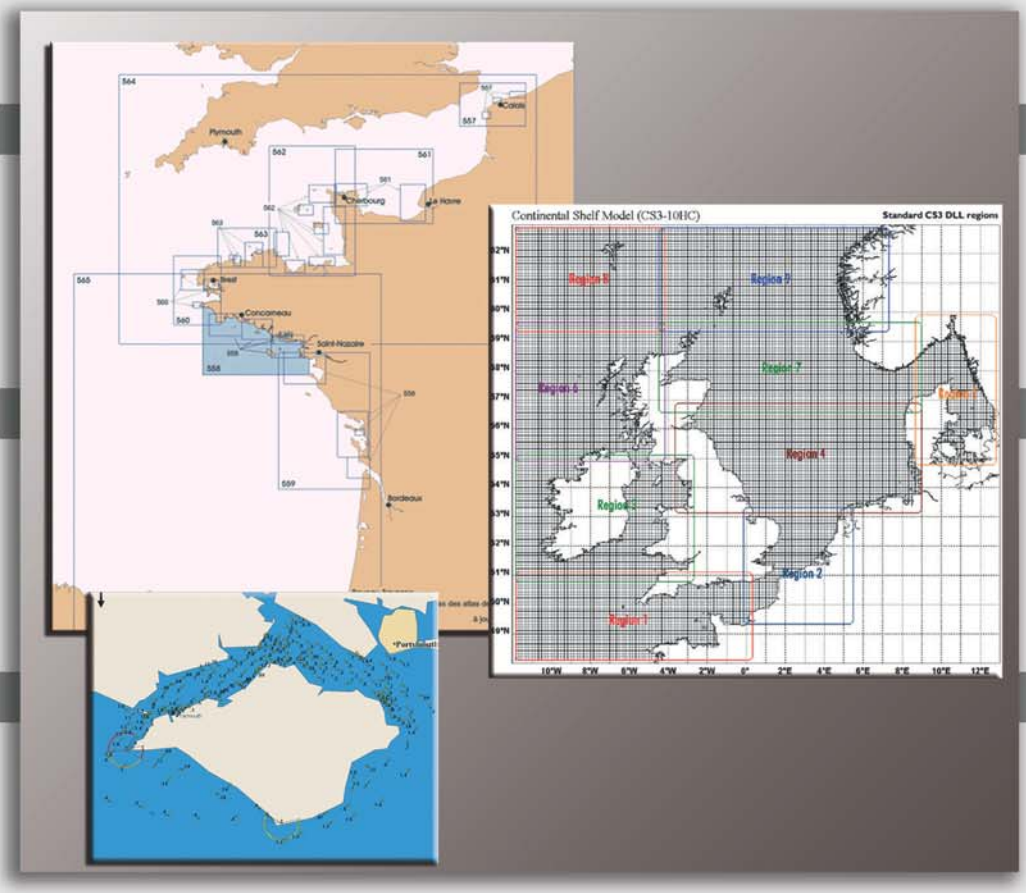
Cartography Currents

C-MAP cartography



Currents



SHOM

PROUDMAN

WINNING TIDES

ADRENA

Technical data

Configuration required

Windows XP, VISTA ou 7

Screen 800X600 minimum

Centralised navigational instruments with NMEA interface.

RS232 series port or USB port with adaptor.

Data Logger :
- 2 NMEA inputs isolated with automatic selection of speed 4800/38400
- 1 event input
- Records on SD card 2Go in text format
- 1 isolated engine tachymeter input
- Supply 10-18V
- Consumption <50mA.

Adrena software :
1 GHz processor recommended.
Memory: 512 Mb recommended.

Route planning module and AIS :
1.5 GHz processor recommended.
Memory: 1 Gb recommended.

TactiquePro module :
1.5 GHz processor recommended.
Memory: 1 Gb recommended.

Optima software :
800 Mhz processor recommended.
Memory: 256 Mb minimum, 512 recommended.

OptimaPro module :
1 GHz processor recommended.
Memory: 1 Gb recommended.

Suppliers

C-MAP by JEPPESEN

GRIB.US

SHOM

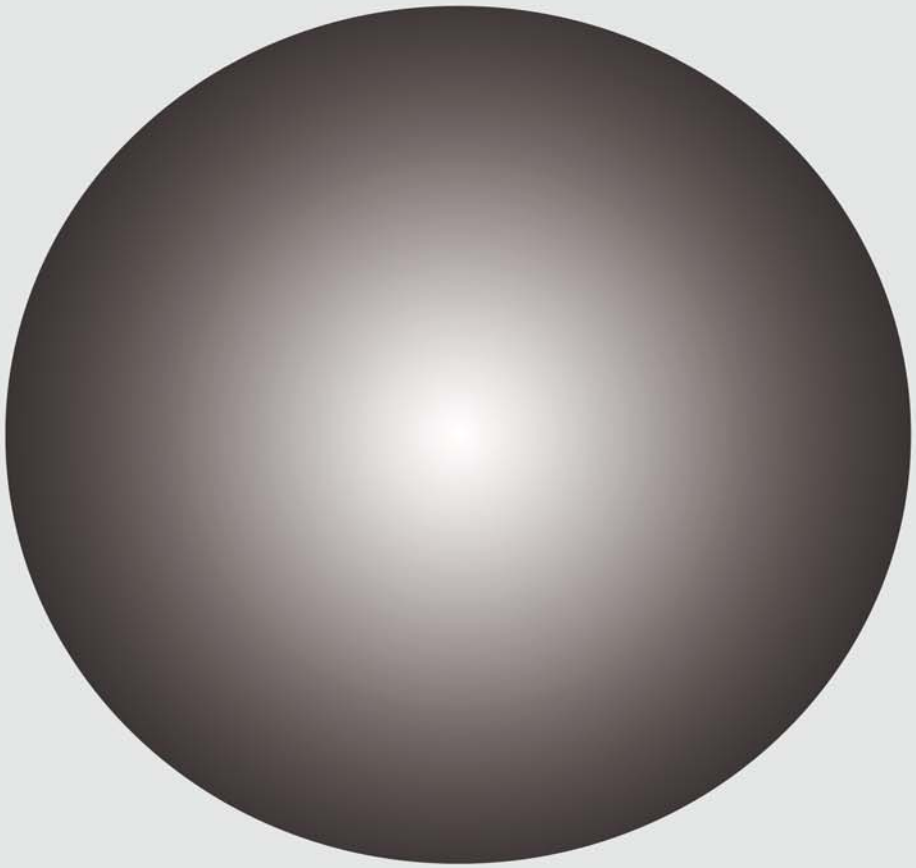
Proudman Oceanographic Laboratory
NATURAL ENVIRONMENT RESEARCH COUNCIL

winning tides

ADRENA

Demo version

The best use it... why not you ?!



Give Adrena a 30 days free try.

Procedure for installing the evaluation version :

1. Insert the CD in the reader
2. Select the language
3. Select the program to install
4. Installation begins

   Recommendation: Accept the default settings
5. At the end of the installation of the Tactique program, you can install the GribUs program
6. To use the demo or loan version, select “Program protection key”
7. Double-click on the Tactique icon created on the desktop

   Demonstration version: The program starts up as a restricted version which cannot be linked to navigational instruments.
8. Select the option "Request keys" to request your activation keys for the loan of a full version of the software for 30 days
9. Enter your contact details, the keys required and send your request by e-mail. You will receive an .erc file to activate the software by return of mail.

www.adrena.fr

YOUR ADRENA RETAILER :

ADRENA
sarl au capital de 40500 euros.
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