



Introducing Debrief-Lite

from the RN's Maritime Warfare Centre

July 2019

Background

The **Debrief** application was created in 1995 at the Royal Navy's Maritime Warfare Centre (MWC).

The application grew over the years to include a range of tactical maritime analysis capabilities, and is now the workhorse that powers many deep analysis tasks.

But, the full version of **Debrief** brings a learning curve, leaving it unsuited to ad-hoc analysis tasking or for use by untrained users.

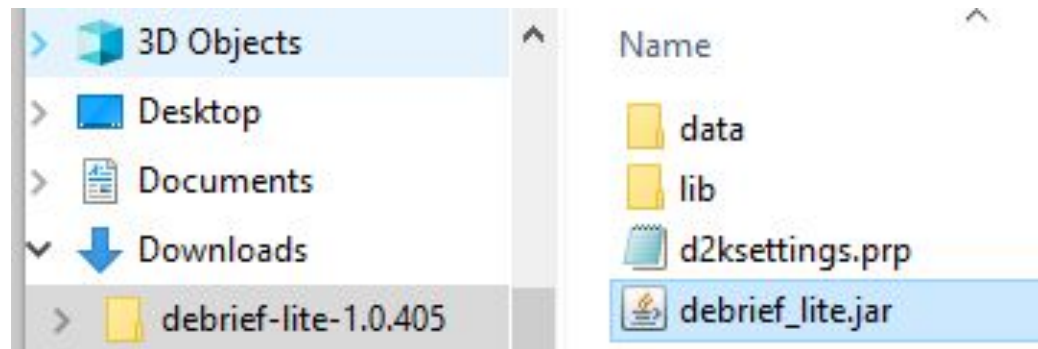
In late 2018 the MWC engaged [DeepBlueC.com](https://www.DeepBlueC.com) to develop **Debrief-Lite**, a slimline application targeted at infrequent analysts, internal and external to the organisation. In 2019 the body of candidate users has grown, both within the RN and internationally.



Installing Debrief-Lite

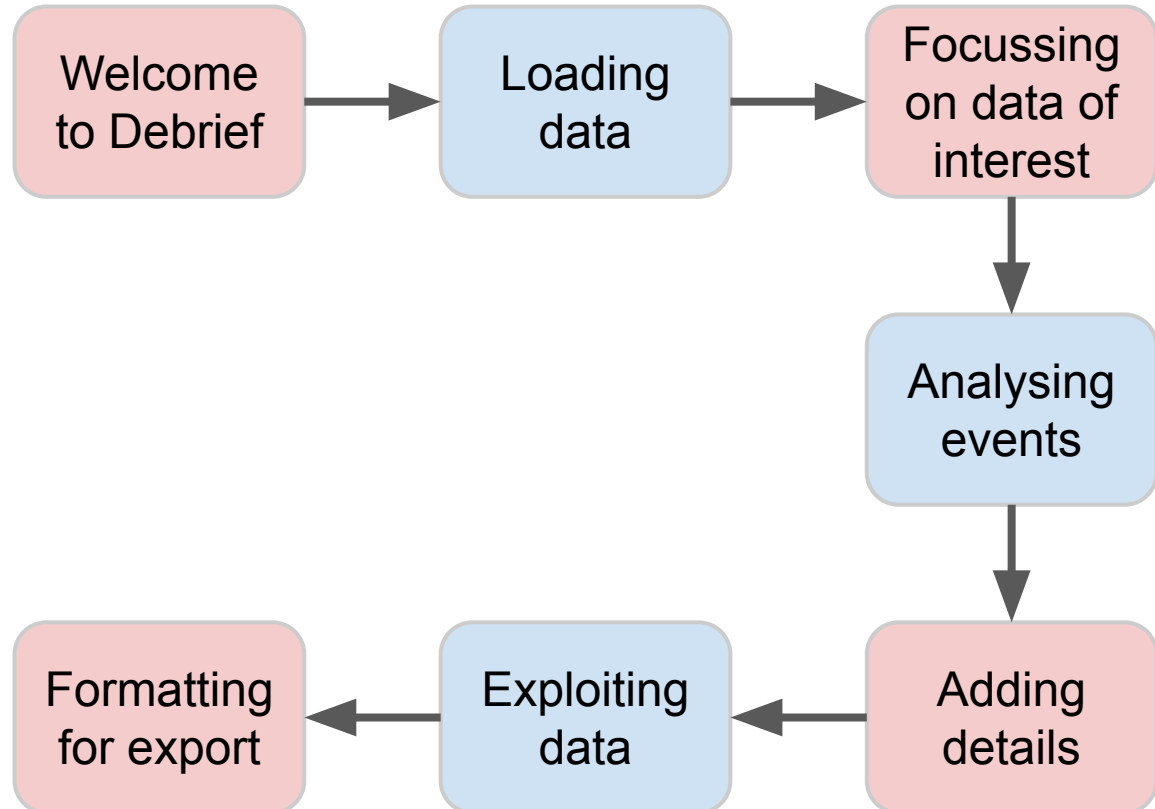
It is most likely that analysts will encounter Debrief-Lite already installed on their PCs/laptops. But, if Debrief-Lite has been obtained independently, the following steps are required:

1. Install Java on the device (64-bit Java Version 8.0 or later is recommended).
Find Java here: <https://adoptopenjdk.net/>
2. Unzip the Debrief-Lite zip file into a suitable location
3. Double-click on **Debrief-Lite.jar**

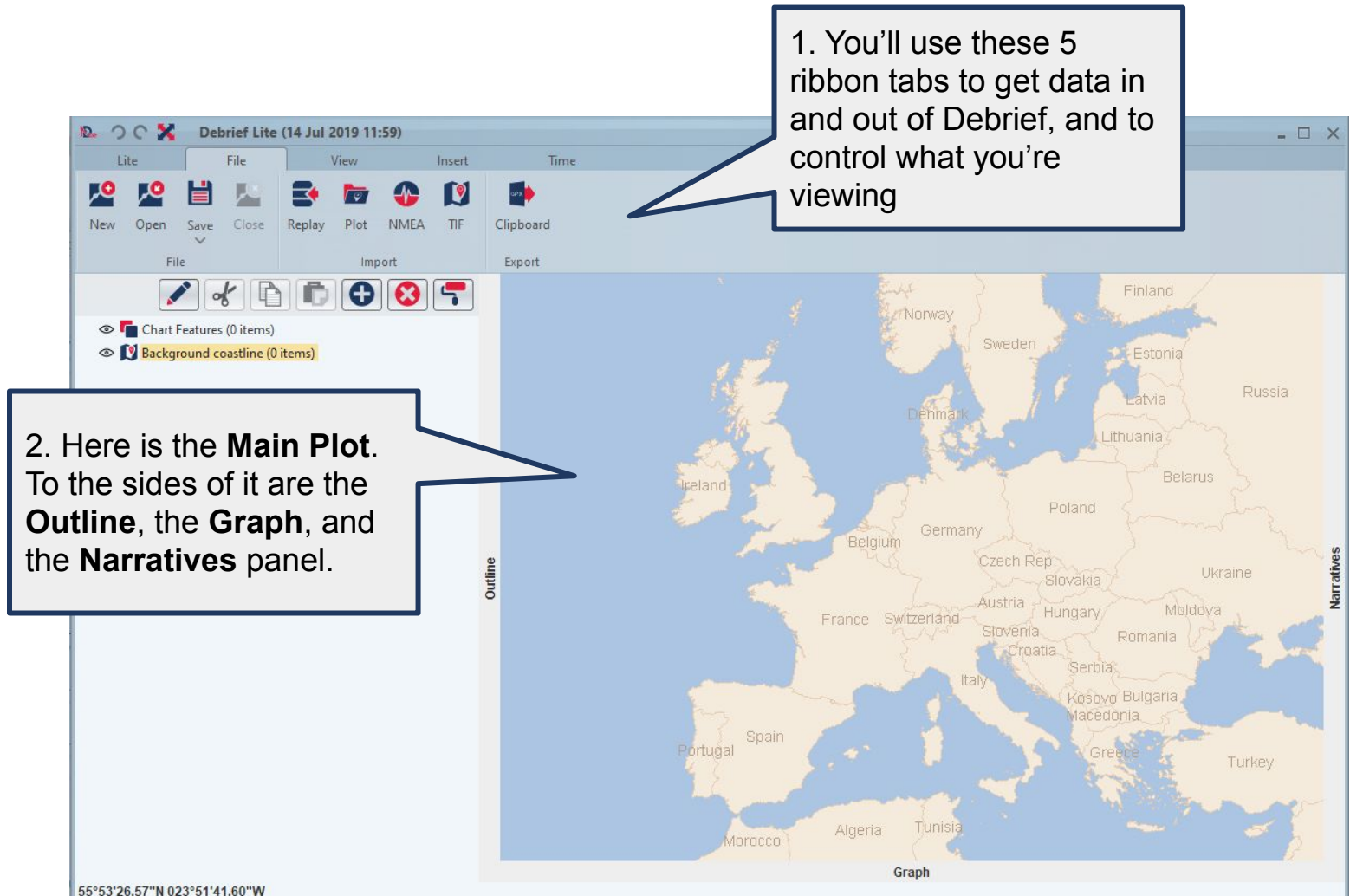


A walk-through Debrief features

*Here's how
we're going to
break down
Debrief-Lite
functionality*



Welcome to Debrief



1. You'll use these 5 ribbon tabs to get data in and out of Debrief, and to control what you're viewing

2. Here is the **Main Plot**. To the sides of it are the **Outline**, the **Graph**, and the **Narratives** panel.

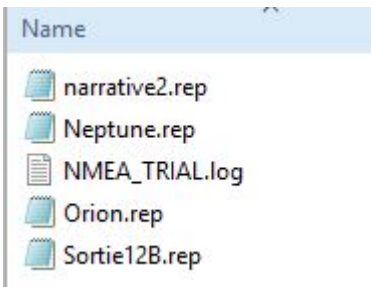
The screenshot shows the Debrief Lite application window titled "Debrief Lite (14 Jul 2019 11:59)". The interface includes a ribbon menu with tabs: Lite, File, View, Insert, and Time. The File tab is active, showing icons for New, Open, Save, Close, Replay, Plot, NMEA, TIF, Clipboard, File, Import, and Export. Below the ribbon, there are icons for editing (pencil, eraser, copy, paste, zoom in, zoom out, reset) and a list of features: "Chart Features (0 items)" and "Background coastline (0 items)". The main plot area displays a map of Europe with country labels. To the left of the map is the "Outline" panel, and to the right is the "Narratives" panel. At the bottom of the map, the text "Graph" is visible. The status bar at the bottom left shows coordinates: "55°53'26.57\"N 023°51'41.60\"W".

Loading data

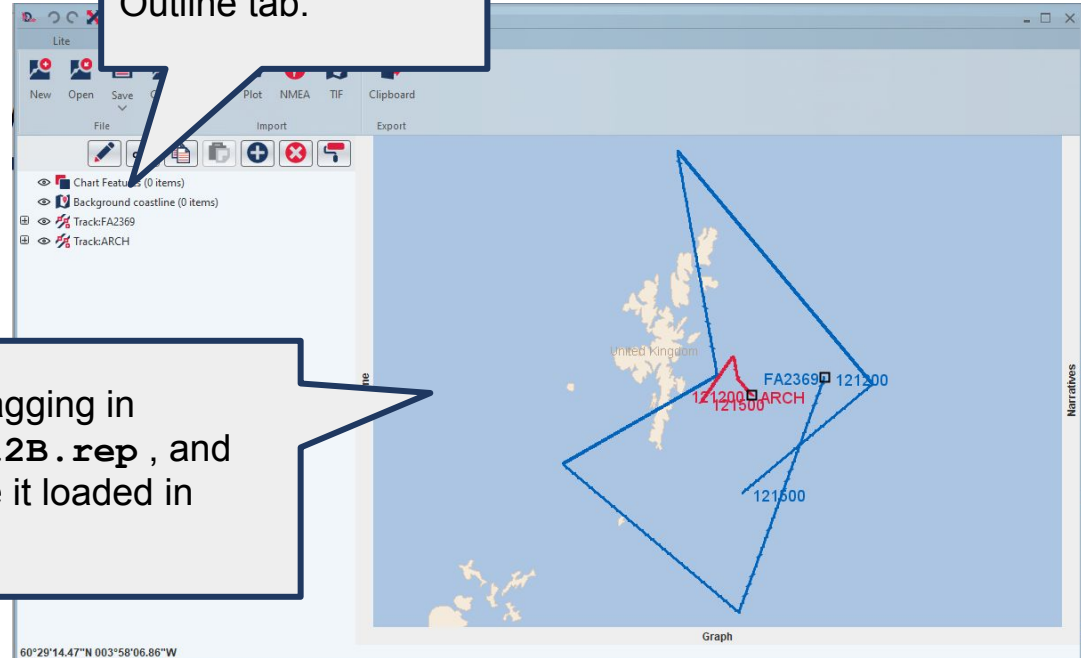
1. Debrief-Lite can load a range of data-types, as shown in the import tab. Click on an icon to open the file dialog, or drag a suitable file into Debrief



2. The app also comes with some sample data, in the sub-folder titled: **data/tracks**



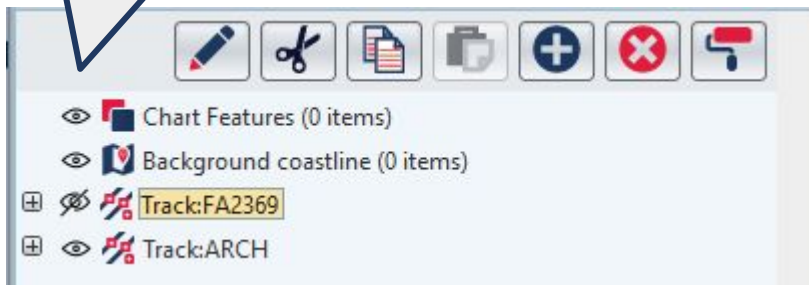
4. Note the two new tracks shown in the Outline tab.



3. Try dragging in **Sortie12B.rep**, and you'll see it loaded in Debrief

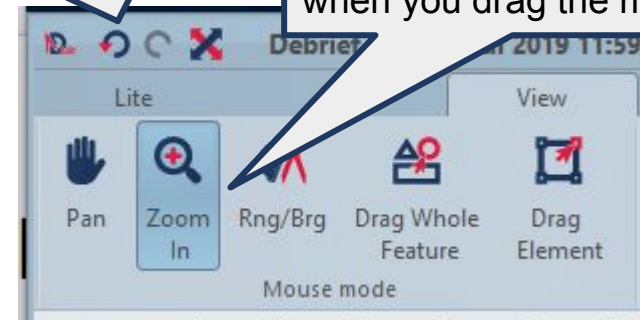
Focussing on data of interest

1. Click on the **eye** icon to switch tracks (or layers) on and off

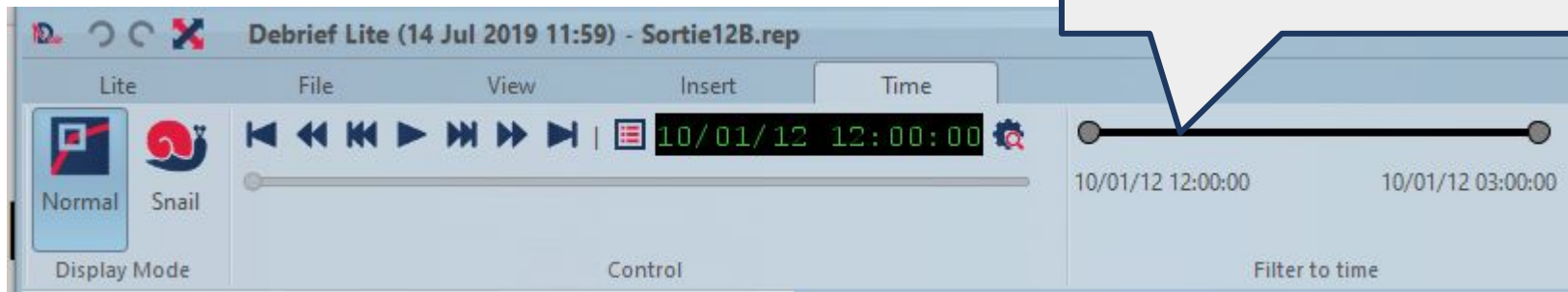


2. After you've edited something (such as changing its visibility) the Undo/Redo buttons become available for use.

3. Toggle between the mouse modes on the **View** menu - they control what happens when you drag the mouse



4. Focus on a smaller period of the sortie by dragging the **Filter to time** controls.



Analysing events - 1

1. To view a graph of the sortie, start by double-clicking on the **Graph** bar.

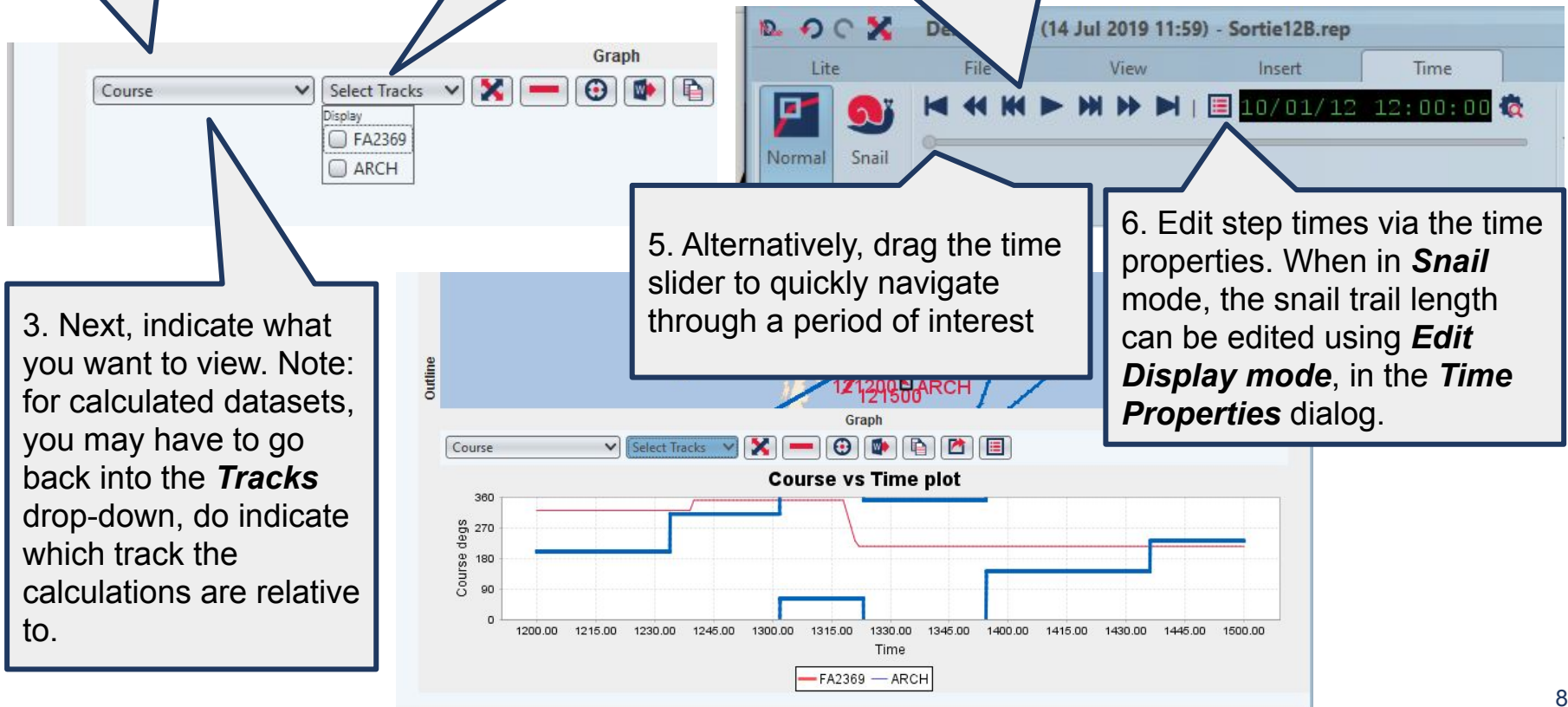
2. Once it's open, indicate which tracks you want to view

4. Use the VCR-style controls on the **Time** tab to move through the sortie - you can also switch between the two **Display Modes** to help focus.

3. Next, indicate what you want to view. Note: for calculated datasets, you may have to go back into the **Tracks** drop-down, do indicate which track the calculations are relative to.

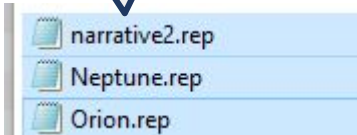
5. Alternatively, drag the time slider to quickly navigate through a period of interest

6. Edit step times via the time properties. When in **Snail** mode, the snail trail length can be edited using **Edit Display mode**, in the **Time Properties** dialog.



Analysing events - 2

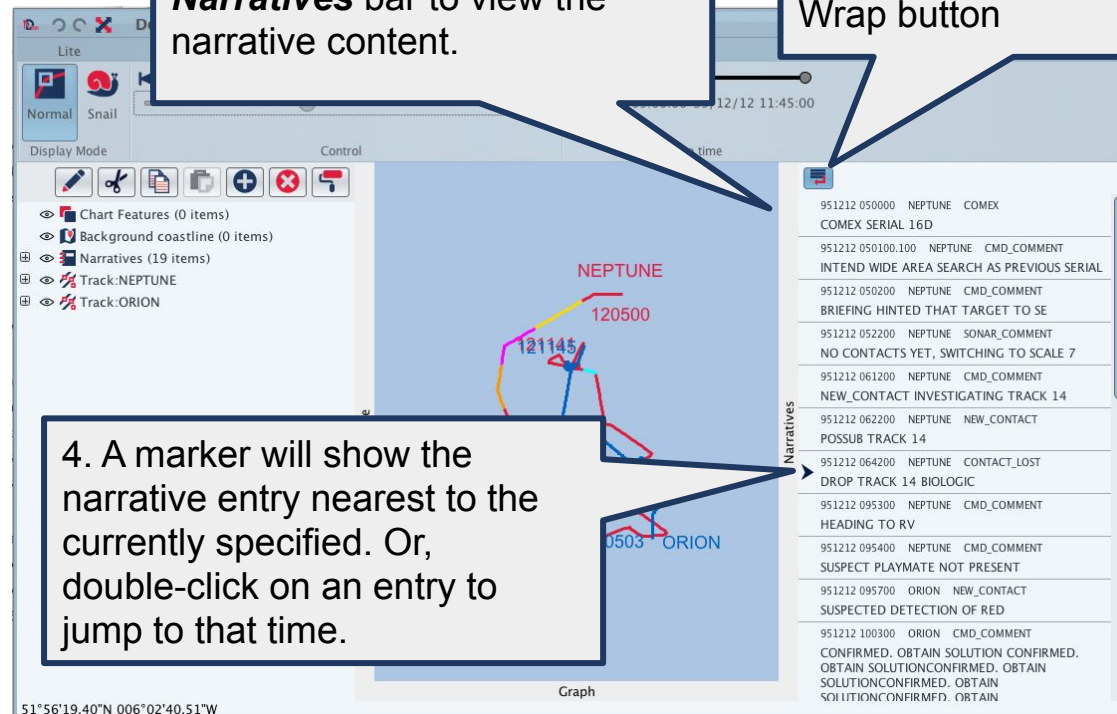
1. In addition to viewing graphs of data, you can also view narrative content. In the sample data folder are two tracks, with supporting narrative.



2. Double-click on the **Narratives** bar to view the narrative content.

3. Control how much data you can see by toggling the Word Wrap button

4. A marker will show the narrative entry nearest to the currently specified. Or, double-click on an entry to jump to that time.



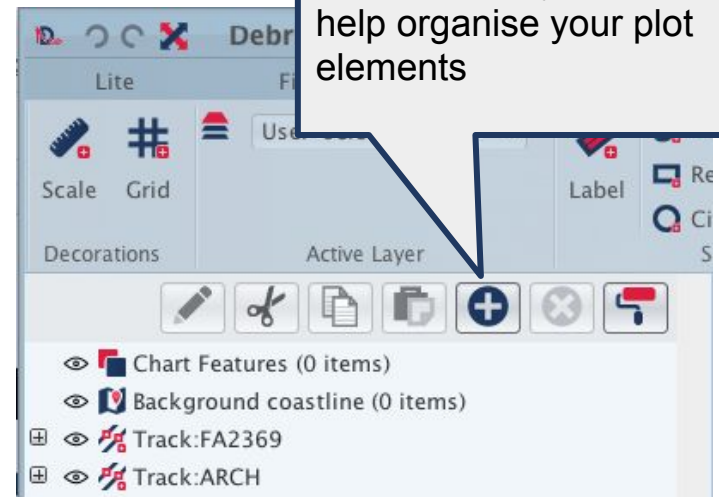
Adding details

1. Adding a **Scale** or **Grid** can help you appreciate distance on the plot

2. Adding **Shapes** can add useful context when you're reporting on a serial

3. Either select the target layer for shapes to be dropped in, or indicate to Debrief-Lite that wish to choose the layer each time

4. Add new layers to help organise your plot elements

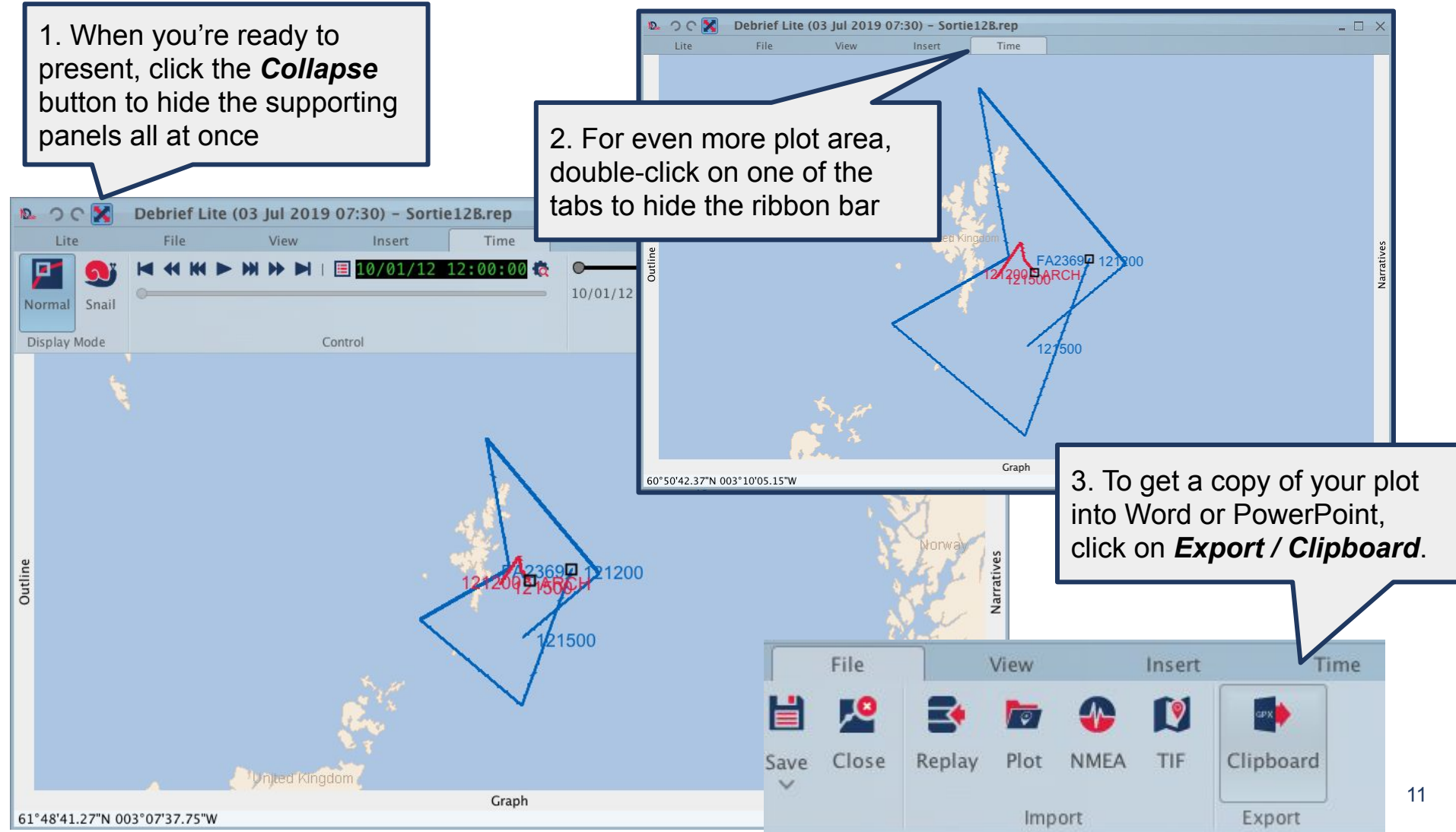


Exploiting data

1. When you're ready to present, click the **Collapse** button to hide the supporting panels all at once

2. For even more plot area, double-click on one of the tabs to hide the ribbon bar

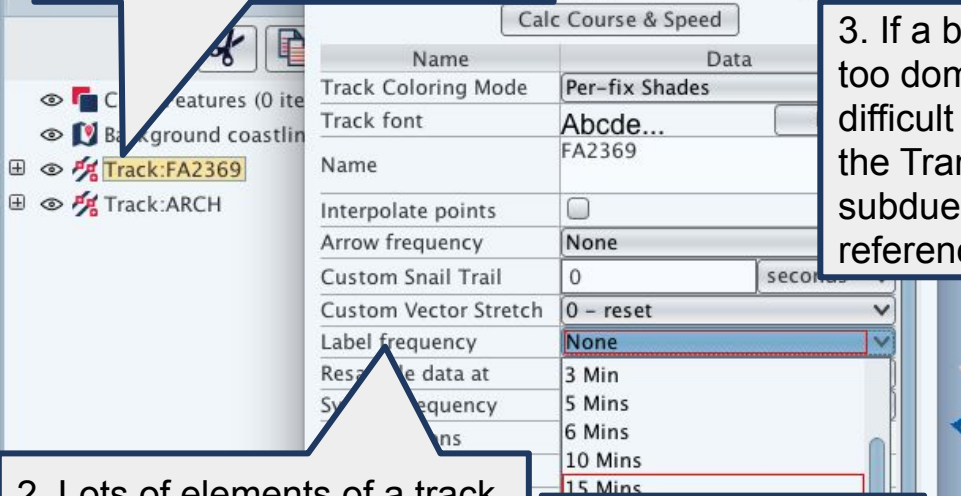
3. To get a copy of your plot into Word or PowerPoint, click on **Export / Clipboard**.



The screenshot shows the Debrief Lite software interface. The main window displays a map of the United Kingdom with flight paths and altitude data. The interface includes a ribbon bar with tabs for Lite, File, View, Insert, and Time. A callout box points to the 'Collapse' button in the ribbon bar. Another callout box points to the 'Time' tab, indicating that double-clicking it will hide the ribbon bar. A third callout box points to the 'Export / Clipboard' button in the 'Time' tab.

Formatting for export

1. To format the appearance of a track, double-click on it from the Outline view, the property editor will open



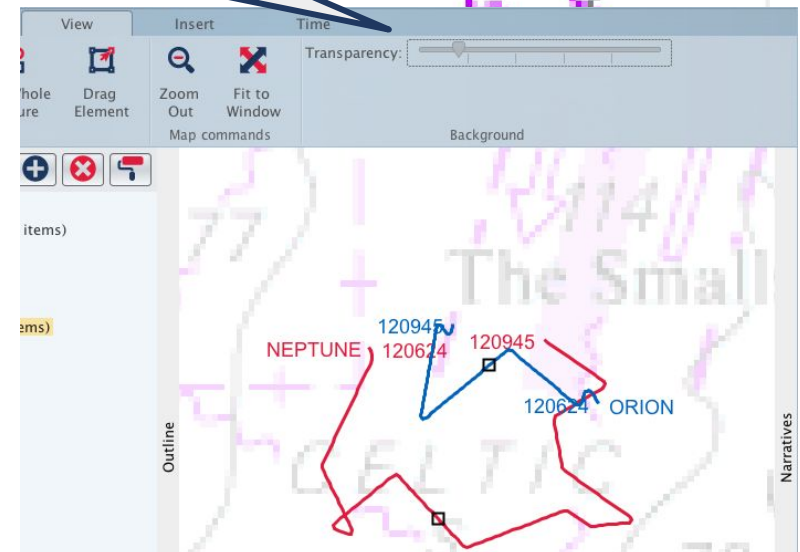
The 'Edit Properties' dialog box is open, showing various settings for the track 'Track:FA2369'. The settings include:

Name	Data
Track Coloring Mode	Per-fix Shades
Track font	Abcde...
Name	FA2369
Interpolate points	<input type="checkbox"/>
Arrow frequency	None
Custom Snail Trail	0
Custom Vector Stretch	0 - reset
Label frequency	None
Resample data at	3 Min
Sync frequency	5 Mins
	6 Mins
	10 Mins
	15 Mins

2. Lots of elements of a track are editable. Here the label frequency can be edited, to give the below result



3. If a background image is too dominant, and make it difficult to see the tracks, use the Transparency slider to subdue the background reference data



The screenshot shows the 'Transparency' slider for the background image. The slider is set to a low value, making the background image less visible. The map shows a track with labels at a frequency of 15 minutes. The track is a blue line with labels at 1300, 1330, 1400, 1430, 12100, 121500, and 1230. The track is labeled 'FA2369' and 'ARCH'.

Tips

Performance

1. High volume tracks (either very frequent or covering a long period) can be slow in Debrief. If you analysis permits, you can resample a track from it's property editor.
2. Alternatively, filter the data to a shorter time period, to keep it manageable.
3. If a large track is making Snail trail performance poor, reduce the snail trail length

Label frequency	None
Resample data at	5 Mins
Symbol frequency	30 Secs
Link positions	1 Min
Name at start	2 Min
Name visible	3 Min
Plot array centre	5 Mins
Positions visible	6 Mins
Start/End time labels	10 Mins
	15 Mins

