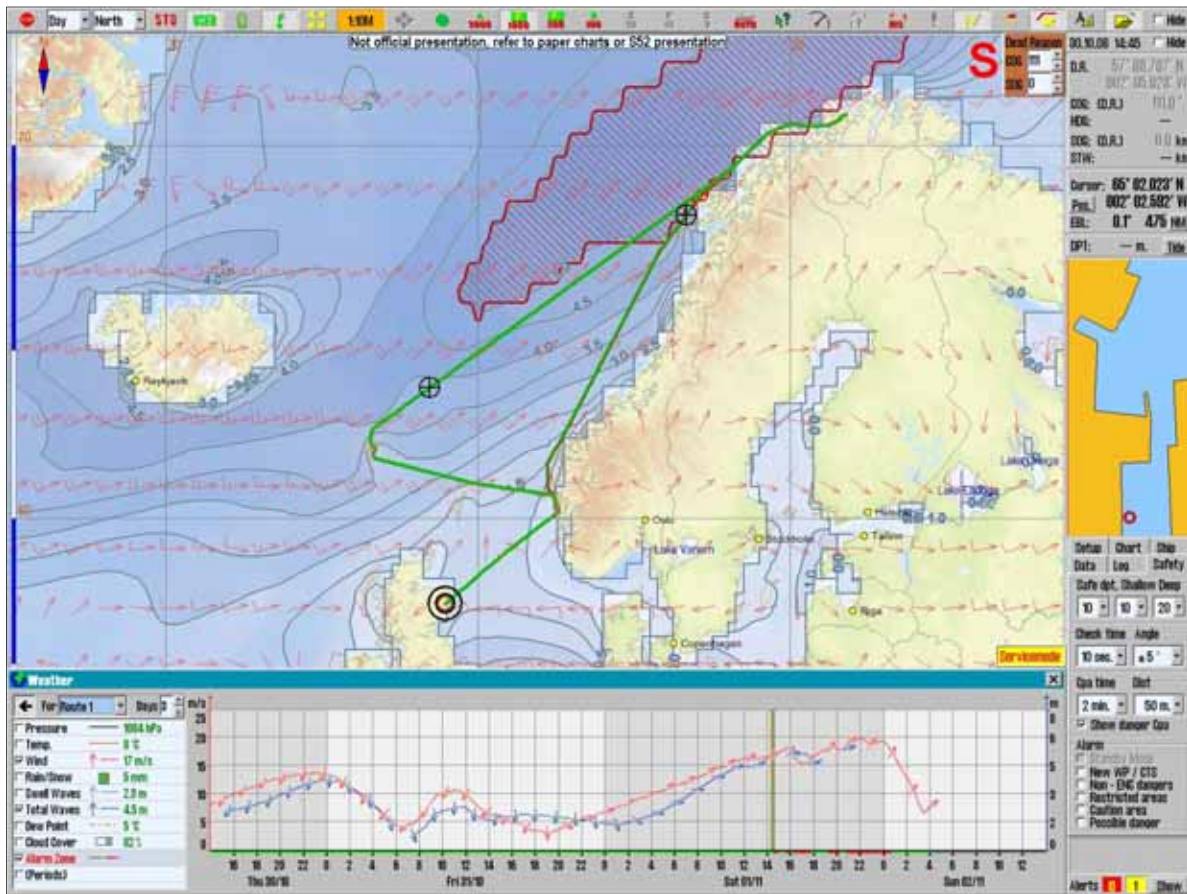




Document Title		Page
TECDIS and TELchart ECS Weather Overlay Guide		1 of 24
Author	Date	Rev
Pål K. Hansen	11. Oct 2009	02



TECDIS and TELchart ECS Weather Overlay Guide

TECDIS and TELchart ECS provides a very advanced weather overlay feature, using top quality commercial maritime weather forecast data available as a subscription service from Jeppesen Marine. The weather overlay is fully customizable and includes both atmospheric and detailed wave data. The overlay includes alarm features allowing intuitive and easy visualization of weather window and dangerous weather conditions. The weather overlay is also integrated with the route system, providing manual weather routing and custom voyage meteorograms.

This guide consists of 3 sections. The first, 'How to use the weather overlay', provides guide for the weather overlay features by going through the setup process and various operations step by step. The second section assists with troubleshooting, and the third section provides supporting procedures needed during weather overlay setup.

1. How to use the weather overlay

This section describes the various sections of the weather overlay in the order they are typically encountered in, providing step by step instructions where needed.



Document Title		Page
TECDIS and TELchart ECS Weather Overlay Guide		2 of 24
Author	Date	Rev
Pål K. Hansen	11. Oct 2009	02

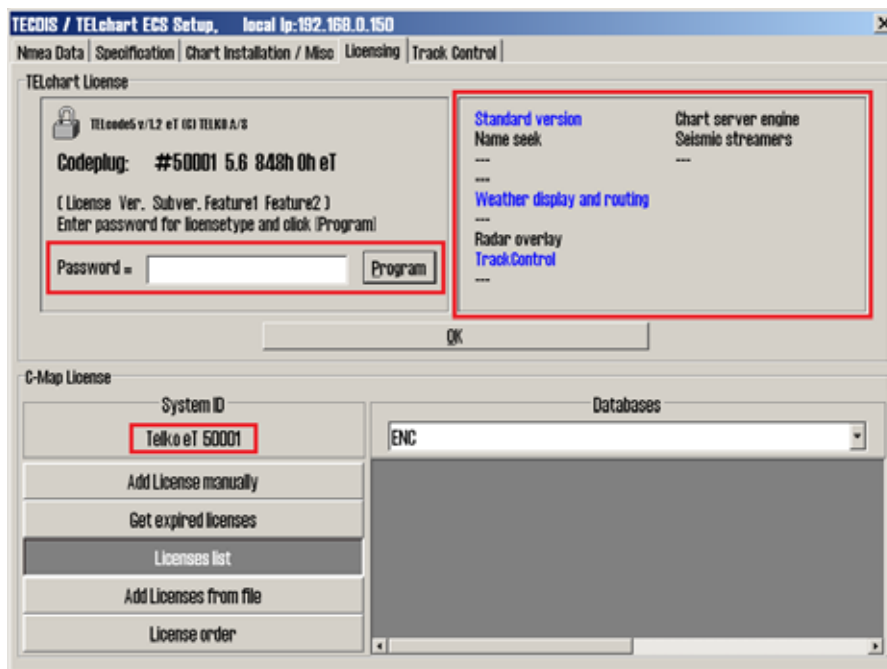
1.1 How to activate Weather Overlay

In order to activate weather overlay, (A) the system software must include weather overlay support, (B) a license code for the feature must be entered and (C) a Weather Service subscription from Jeppesen Marine must be activated. Your TECDIS / TELchart ECS supplier can assist you in all of these steps.

Note that a 3 month trial Weather Service subscription is available free of charge for all new users of the Weather Overlay feature.

WEATHER OVERLAY ACTIVATION PROCEDURE

- (TECDIS Only) Determine whether your software version supports Weather Overlay.
 - Follow the procedure detailed in section 3.1 to determine the software version number.
 - If the version number is lower than 4.7.1.0, the software does not support Weather Overlay. Contact your TECDIS supplier for assistance in upgrading the software.
- (TECDIS Only) Insert the TECDIS Service Key.
- Exit the TECDIS / TELchart ECS software so that the Windows desktop is accessible.
- Start TECDIS / TELchart ECS Setup and select the 'Licensing' folder.
- Locate the *System ID* for the TECDIS / TELchart ECS unit, following the procedure detailed in section 3.2.
- Press the 'Show / edit license' button'. Wait until the TELchart License interface is displayed.



- Make a note of which features are activated (shown with blue text) in the right half of the TELchart License area.



Document Title		Page
TECDIS and TELchart ECS Weather Overlay Guide		3 of 24
Author	Date	Rev
Pål K. Hansen	11. Oct 2009	02

8. Obtain the Weather Overlay license code from your TECDIS / TELchart ECS supplier. Provide the *System ID* located in step 5 and the list of activated software features from step 7 along with your license code request.
9. Arrange with your TECDIS / TELchart ECS supplier for a Weather Service subscription to be activated by Jeppesen Marine.
10. Enter the Weather Overlay license code in the 'Password' field and press the 'Program' button.
11. Verify that 'Weather display and routing' in the right half of the 'TELchart license' area is now activated (shown with blue text).
12. Exit TECDIS / TELchart ECS Setup.
13. (TECDIS Only) Remove the TECDIS Service Key and restart the system. Wait until the chart system is fully up and running.
14. (TELchart ECS Only) Start TELchart ECS again and wait until the chart system is fully up and running.



15. Verify that the weather overlay feature is available by locating the weather overlay toolbar button (shown above) is present.



Document Title		Page
TECDIS and TELchart ECS Weather Overlay Guide		4 of 24
Author	Date	Rev
Pål K. Hansen	11. Oct 2009	02

1.2 How to download the weather service subscription

Weather forecasts can be downloaded either using an internet connection or by email. Before weather forecasts can be downloaded, the subscription details needs to be downloaded. Both of these actions are performed from with the weather overlay interface.

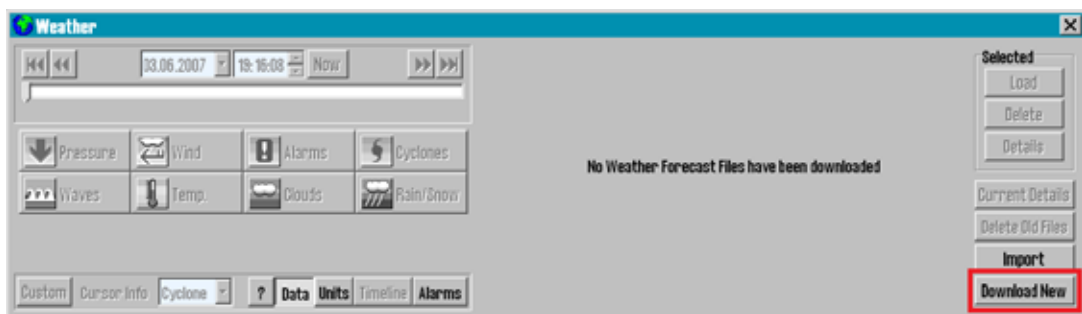
Note that if an internet connection is to be used, the network administrator for the vessel may need to be consulted while performing step 6.

SUBSCRIPTION DOWNLOAD PROCEDURE

1. Display the weather overlay main window by pressing the weather overlay button on the toolbar.
2. A notification that 'No current weather forecasts are available' is shown. Dismiss this message by pressing 'OK'.



3. Press the 'Data' button located in the middle of the bottom of the weather overlay main window. Note that you can close the 'Data' area by pressing the 'Data' button again.



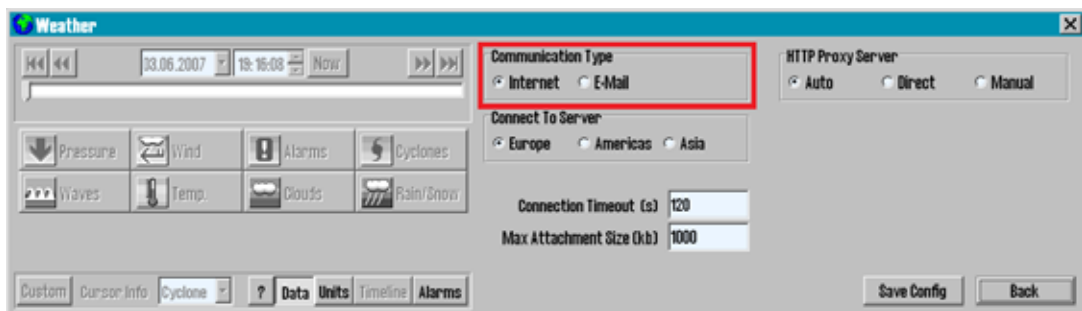
4. Press the 'Download New' button located in the lower right corner of the weather overlay window.



Document Title		Page
TECDIS and TELchart ECS Weather Overlay Guide		5 of 24
Author	Date	Rev
Pål K. Hansen	11. Oct 2009	02



5. Press the 'Configure Connection' button.



6. If an internet connection is to be used, select 'Internet' and make sure that 'Connection Timeout (s)' is set to at least 90 seconds (120 seconds is recommended). For slow connections, an higher value (180 – 240 seconds) is recommended. Set 'HTTP Proxy Server' as required for the internet connection used. Consult your network administrator if these if unsure of these settings.

If weather forecasts are to be downloaded via email on another computer, select 'E-Mail' and set 'Max Attachment Size (kb)' according to the attachment limits for the email service that will be used.

7. Press 'Save Config' to save the configuration and return to the download interface.
8. Make sure 'Subscription' is selected in the 'Model' field.

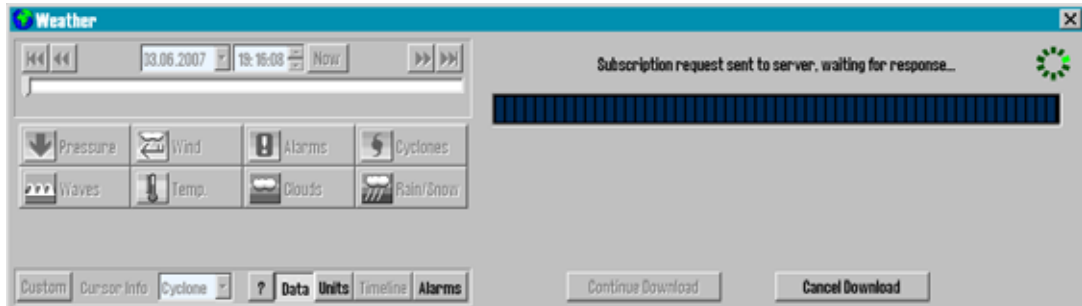
The next steps depend on your chosen connection method.



Document Title		Page
TECDIS and TELchart ECS Weather Overlay Guide		6 of 24
Author	Date	Rev
Pål K. Hansen	11. Oct 2009	02

INTERNET CONNECTION:

9. Press 'Start Download'.



10. Wait while the subscription is downloaded. The current connection status is displayed, and the green indicator in the upper right corner will keep moving as long as the download procedure is active. If this indicator stops moving, you should cancel the download by pressing 'Cancel Download'.

If any error messages are shown, press 'Cancel Download' and dismiss the error message by pressing 'OK'. Refer to section 2 for help with connection problems or other error messages.



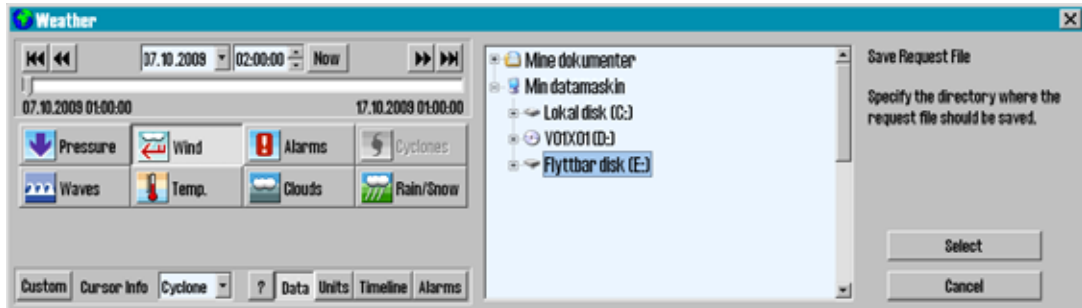
11. Once completed, a report for the download is shown. Later, when downloading weather forecasts, an additional 'Load and Return' button will be available here to show the downloaded forecast immediately. For now, press 'Return' to go back to the 'Data' window.



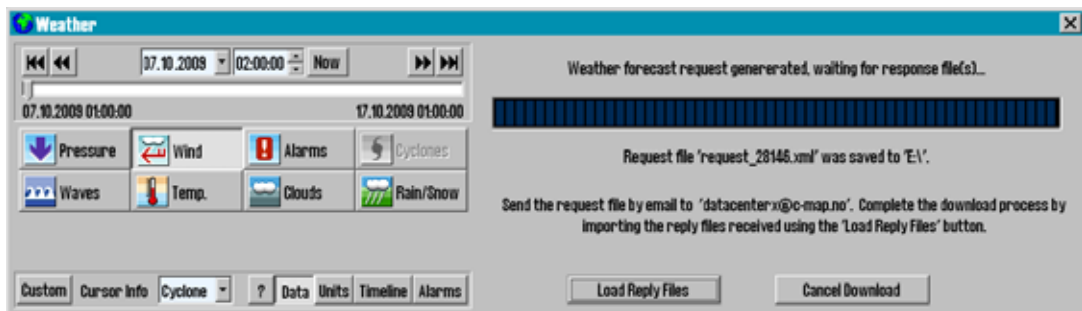
Document Title		Page
TECDIS and TELchart ECS Weather Overlay Guide		7 of 24
Author	Date	Rev
Pål K. Hansen	11. Oct 2009	02

E-MAIL CONNECTION:

9. Insert a USB memory stick that will be used to transport the weather data request and response from Jeppesen Marine.
10. Press 'Save Request File'



11. Select the USB memory stick from the directory display. If it is not present in the list, collapse the 'My Computer' entry by pressing the '-' box next to it and then expand it again in the same manner. The USB memory stick should now be available.
12. Press 'Select'.



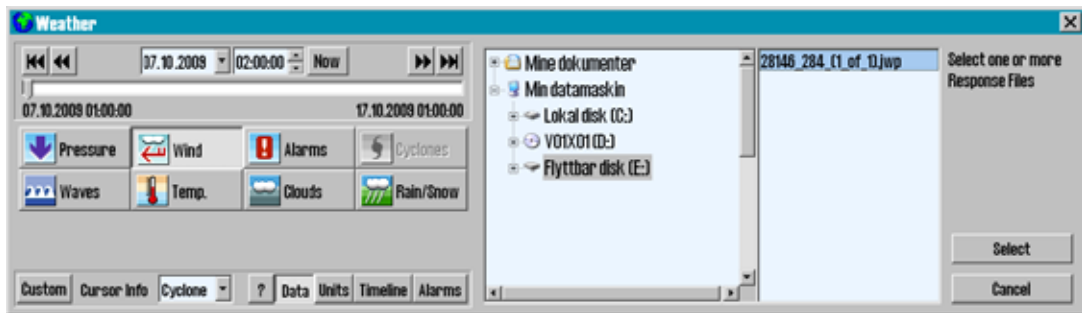
13. The request file has now been saved to the USB memory stick. Email this file to 'datacenterx@c-map.no' and wait until all replies have been received. Note that the subject line of the response from C-Map indicates how many replies there should be in total.

Note that you can safely hide the download interface by pressing the 'Data' button while waiting for the reply files. You can also safely close the weather overlay window, or even restart the system without resulting in problems with the download process. To return to this screen again, reopen the weather overlay and press the 'Data' button.

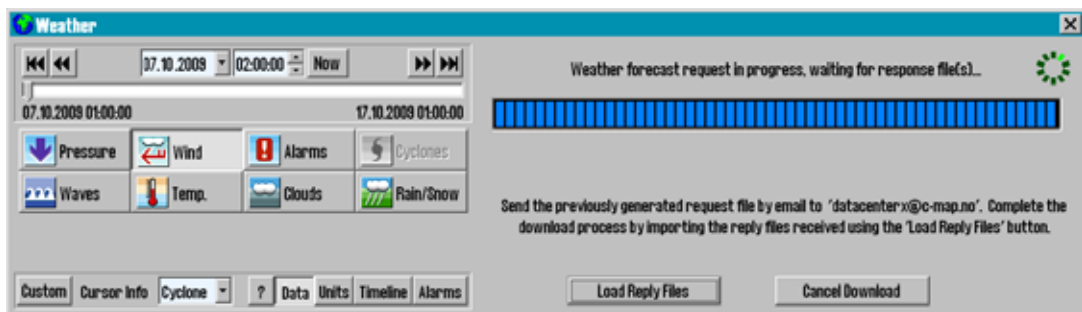
14. Save the attachments from all replies to the USB memory stick. (The request file may now be safely deleted). The attachment files should have the extension **.jwp**.
15. Insert the USB memory stick containing the replies in the TECDIS / TELchart ECS system again.
16. Press 'Load Reply Files'.



Document Title		Page
TECDIS and TELchart ECS Weather Overlay Guide		8 of 24
Author	Date	Rev
Pål K. Hansen	11. Oct 2009	02



17. Locate the USB memory stick in the folder list (again, collapse the 'My Computer' entry and expand it again if the USB memory stick is not visible in the folder list). The reply file(s) are shown in the file list to the right of the folder list.
18. Select one of the reply files and press 'Select'.



19. The download in progress window will be shown again. If all of the reply files were located on the memory stick, this window will only be shown briefly while the reply files are processed. If this window remains visible without any progress, the memory stick did not contain all of the reply files.

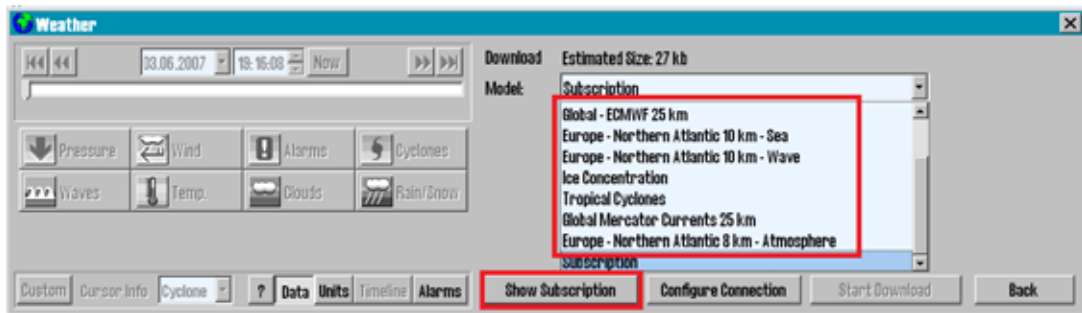


20. Once the reply files have been processed, a report for the download is shown. Later, when downloading weather forecasts, an additional 'Load and Return' button will be available here to show the downloaded forecast immediately. For now, press 'Return' to go back to the 'Data' window.



Document Title TECDIS and TELchart ECS Weather Overlay Guide		Page 9 of 24
Author Pål K. Hansen	Date 11. Oct 2009	Rev 02

SUBSCRIPTION DOWNLOAD VERIFICATION



Once the subscription download has been completed, you can verify that the subscription has been successfully downloaded by pressing 'Download New'. The 'Show Subscription' button should now be selectable. When pressed, this button brings up details regarding the weather forecast models that are available in your subscription. Furthermore, it should now be possible to select several different weather forecast models in the 'Model' field.

Note that if the subscription download fails, your TECDIS / TELchart ECS supplier or Jeppesen Marine should be contacted to verify that the subscription is active and valid before troubleshooting the connection.

1.3 How to download a new weather forecast

Once the subscription has been downloaded, you are ready to download your first weather forecast. Before we get started setting up the first download, a short explanation on weather models is in order.

WEATHER MODELS

Both the 'Model' field in the Download New window and the subscription details now lists a number of weather models. These refer to the various mathematical weather prediction models that are available to you. These models are computed up to several times daily by the organizations providing the data, and when you download a new forecast you select a portion of the data from the most recent update of the model.

Many of the models include a distance in kilometers in the model name. This indicates the distance between each point of data downloaded. Much like zooming in on an image, the weather overlay will compute weather data for every spot between these data points, but as a rule, the lower this kilometer value is, the higher the detail level in the displayed overlay.

The main reason for selecting a model with a higher distance between points is to reduce the download size. While you will not be stopped from downloading data files exceeding 50-100 MB in size, such a large weather forecast file takes a long time to download and may slow down the chart system when in use.



Document Title		Page
TECDIS and TELchart ECS Weather Overlay Guide		10 of 24
Author	Date	Rev
Pål K. Hansen	11. Oct 2009	02

DOWNLOAD WINDOW



Once a weather model is selected, the download window will include a number of new controls:

- **Select Parameters** provides a list of all of the weather variables such as wind, temperature and wave data that the model can provide.
- **Period** allows you to select how many days of the forecast data that should be downloaded.
- **Resolution** indicates the time period between each data point downloaded. Again, the weather overlay will compute values for each point in time between data points, but lower resolution values will result in more detailed forecast data (and larger download size).
- **Include Cyclones** allows you to download cyclone data at the same time you download the weather forecast, eliminating the need for a separate download for cyclone data.
- **Area** controls and shows both the size and placement of the area where weather data will be downloaded. The size in square degrees is shown along with the maximum area allowed by your subscription.

By default, the area displayed in the chart window is used to specify the area to be downloaded. To adjust, simply zoom or pan the chart until the preferred area is shown in the chart window. If your subscription does not allow the entire chart window area to be downloaded, the central part of the chart display is prioritized.

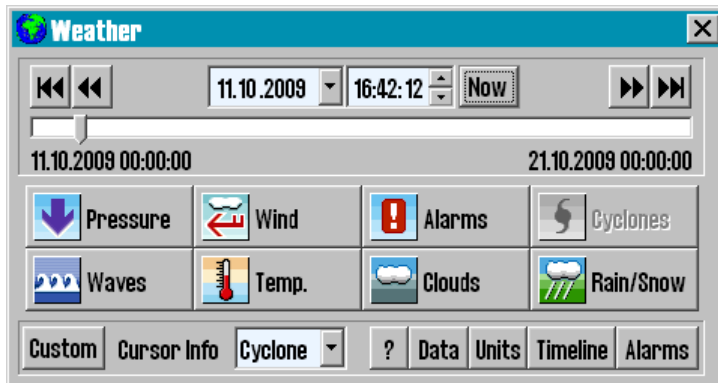
You may override the default screen area selection by pressing 'Select on Map'. Left click on two diagonal corners in the chart display to specify the area. Press 'Select Screen' to return to the default screen area selection.

The estimated download size at the top of the window is at all times updated according to the current selections. Adjust model choice, parameter selection, area, time period and resolution until you reach a good compromise between level of detail and download size.

Typically, a download size of 5-8 MB will provide more than enough detail when you have a broadband connection. **For other connection types, maintain awareness of the costs connected to data downloads in your communication solution.**

Once you are satisfied with your selections, follow the same procedure as when downloading the subscription to perform the download (section 1.2, from step 9 and onwards).

1.4 How to control the chart weather overlay

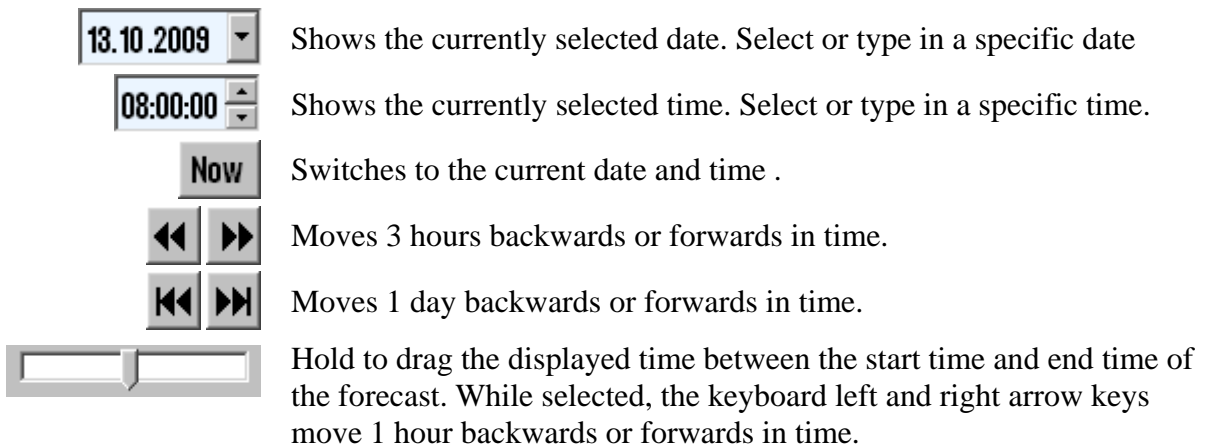


The main window of the weather overlay can be divided into three main areas; the upper area containing the time controls for the chart weather overlay, the middle area where you control which weather parameters that are shown in the overlay, and the bottom area where you access the various sub-screens of the weather overlay window.

Note that the chart weather overlay is only displayed in overview charts. At scale levels more detailed than 1:500 000, the chart weather overlay is hidden, but all other weather features remain available.

TIME CONTROLS

The time control area includes several ways to control the date and time for the weather chart overlay:



The dates and times shown in the lower left and right corners of the time control area are the start and end times for all of the forecast data sets currently loaded. *Note that if you have cyclone data loaded, this data often starts earlier than the forecast data, meaning there will be a section at the start of the time slider where only cyclone data is shown.*

PRESENTATION CONTROLS

The buttons in the middle part of the weather overlay window control the visibility of the various weather parameters in the chart weather overlay. The buttons for the currently visible parameters are shown as pressed down. Pressing the buttons toggles visibility for that parameter. If a button is grey, the current weather data does not contain that parameter.



Document Title		Page
TECDIS and TELchart ECS Weather Overlay Guide		12 of 24
Author	Date	Rev
Pål K. Hansen	11. Oct 2009	02

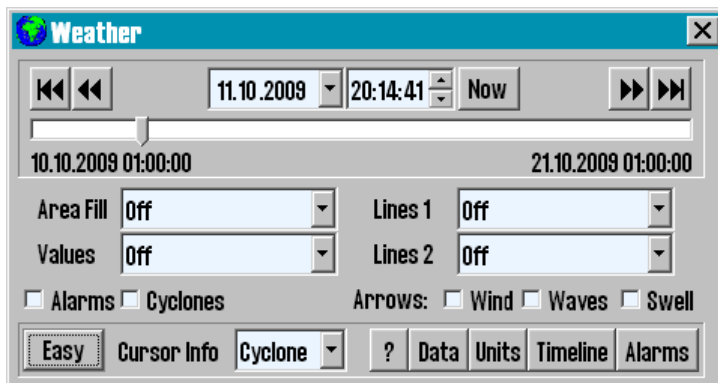


The system optimizes the way the selected parameters are shown, while preventing the overlay from becoming too cluttered. If a single parameter is selected, it is shown in several ways simultaneously. (For example, Waves are shown using both area color, contour and direction arrows.) As more parameters are added, the system divides the presentation forms among the parameters. (For example: When waves, pressure and wind is selected at the same time, waves are shown using area color, wind using arrows and pressure using contours.)

Alarms and cyclones have unique presentation forms and does not influence the display of the other parameters.

There are some combinations of weather parameters that may not be shown simultaneously. Waves, Temperature, Clouds and Rain/Snow are all best shown using area coloring, and only one of these may be shown at one time. *(Note: It is possible to show clouds and Rain/Snow at the same time if NO other parameters are shown. This is a special case.)*

CUSTOM PRESENTATION CONTROLS



If a specific way of viewing the weather data is required and the standard selection mode described above is not sufficient, a custom presentation can be selected by pressing the 'Custom' button in the lower left corner of the window. This will replace the standard presentation controls with the custom presentation controls.

Pressing the same button again (now labeled 'Easy') switches back to the standard controls.

In this mode of presentation control, you have two contour lines, an area fill, and a 'Values' presentation (that simply shows parameter values at each data point) available. For each of these, a parameter can be selected. Alarm, Cyclone and multiple arrow presentations may be selected simultaneously.

CURSOR INFO

The 'Cursor Info' control in the bottom area of the main window controls which information that is displayed in a tooltip next to the cursor as the cursor is moved over the weather overlay.

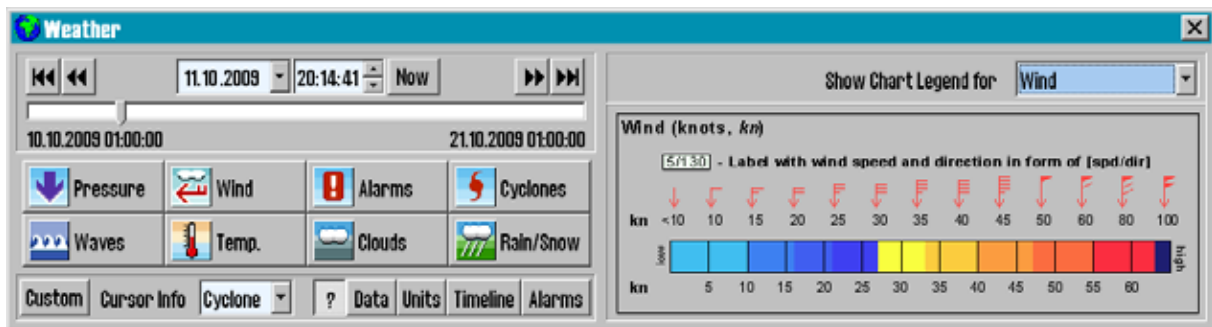


Document Title		Page
TECDIS and TELchart ECS Weather Overlay Guide		13 of 24
Author	Date	Rev
Pål K. Hansen	11. Oct 2009	02

The 'None' setting disable this tooltip. The 'Visible' setting only shows parameters that are shown in the weather chart overlay. The 'All' setting shows all parameters present in the data. The 'Detailed' setting adds direction and period information.

By default, this is set to 'Cyclone', a setting that only show cyclone information. It is recommended that cursor info is left at this setting, as the Timeline feature provides a much more responsive way of looking up values in the chart weather overlay. See section 1.8 for details.

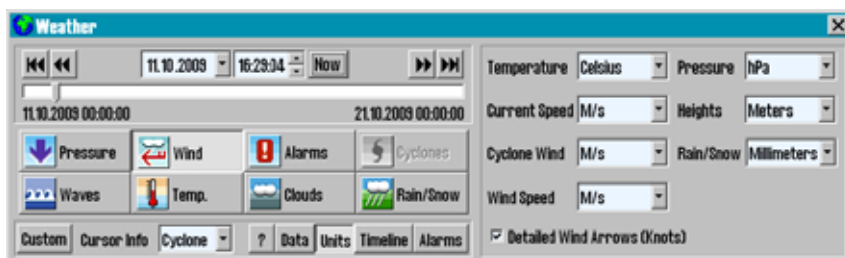
OVERLAY CHART LEGEND



The '?' button at the bottom of the main window opens up a chart legend window that provides explanation for how the various weather parameters are presented graphically. Pressing the button again closes the chart legend window.

1.5 How to specify units for wind speed, temperature, etc.

To specify your preferred units for wind speed, temperature, pressure, etc, press the 'Units' button in the main weather overlay window. Press the 'Units' button again to close the Units window.



Units for all of the displayed weather forecast data throughout the weather overlay module can be specified here.

The 'Detailed Wind Arrows (Knots)' option requires a bit of explanation. When a wind speed unit other than knots is selected, the wind arrows become less descriptive (without indicators of wind strength). Activating this option allows you to view the detailed wind arrows while getting wind speed values in another unit.



Document Title		Page
TECDIS and TELchart ECS Weather Overlay Guide		14 of 24
Author	Date	Rev
Pål K. Hansen	11. Oct 2009	02

1.6 How to manage the downloaded weather forecasts



By pressing the 'Data' button in the main weather overlay window, a list of all downloaded weather data files is shown. The list specifies the forecast model, the start date and the number of forecast days each downloaded file includes. Pressing the 'Data' button again closes the data window.

The weather files may be shown with the following background colors:

- Blue** The currently selected weather file.
- Green** More than half of the forecast period of the weather file is in the future.
- Yellow** Less than half of the forecast period of the weather file is in the future.
- White** All information contained in the weather file is in the past.

The currently selected weather file may be loaded ('Load' button), deleted ('Delete' button), or inspected ('Details' button) using the buttons in the top right corner of the window. The area covered by the selected weather file is also marked in red in the chart window.

In the lower right corner of the window, the following buttons can be found:

- Current Details** Shows detailed information about the currently loaded weather data file.
- Delete Old Files** Deletes all weather files that are more than 14 days old.
- Import** Import a weather file acquired through other means than using the 'Download New' interface. Allows the import of .grb and .xml files.
Note that this feature only supports files as provided by Jeppesen Marine and cannot be used to load weather data from other sources.
- Download New** Opens the weather download interface. See section 1.2 and 1.3 for details.

1.7 How to set up weather alarm conditions

The alarms feature of the weather overlay allows you to specify the exact kind of weather conditions you want to avoid or be alerted to. Once such alarm conditions are specified, clear warnings indicating when and where these conditions will be present are shown in the chart weather overlay, the timeline feature and on routes.



In the chart weather overlay, areas where the alarm conditions are met are shown as a red outline filled with diagonal red lines.

In the weather timeline, alarm conditions can be indicated as a line along the bottom of the graph that is **red** when alarm conditions will be present, **purple** when cyclones are close and **green** otherwise.

Routes are colored using the same scheme when visible while the weather overlay is active.

ABOUT ALARM CONDITIONS

An alarm condition may be based on a single weather parameter (For example, 'Wind Speed above 20 m/s'), or on a combination of parameters (For example, 'Wind Speed above 20 m/s AND Total Waves Height above 6 m'). ***When a single alarm condition includes more than one parameter, it will not be 'triggered' until ALL of the included parameter conditions are met.***

Any number of alarm conditions may be entered, and any number of the entered conditions may be selected at one time. ***When more than one alarm condition is selected, alarm indication will be triggered if ANY of the selected conditions are met.***

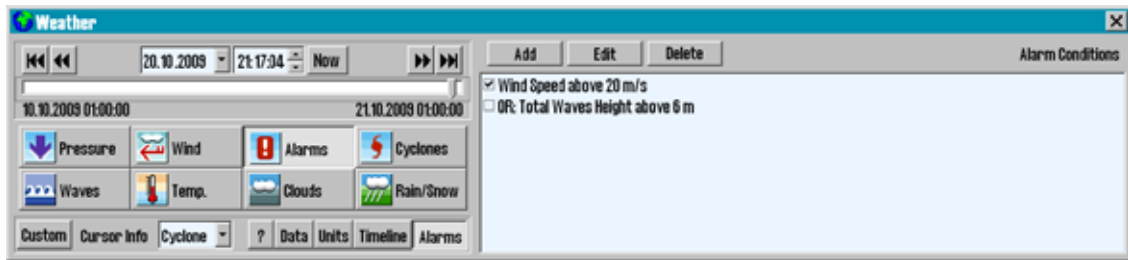
Understanding the distinction between combining parameters into a single alarm condition and selecting separate alarm conditions for each parameter is important. The alarm condition 'Wind Speed above 20 m/s AND Total Waves Height above 6 m' will result in very different alarm results than selecting the separate alarm conditions 'Wind Speed above 20 m/s' and 'Total Waves Height above 6 m'.

The interface assists in making this distinction by marking all other alarm conditions with 'OR:' as soon as an alarm condition is selected.



Document Title		Page
TECDIS and TELchart ECS Weather Overlay Guide		16 of 24
Author	Date	Rev
Pål K. Hansen	11. Oct 2009	02

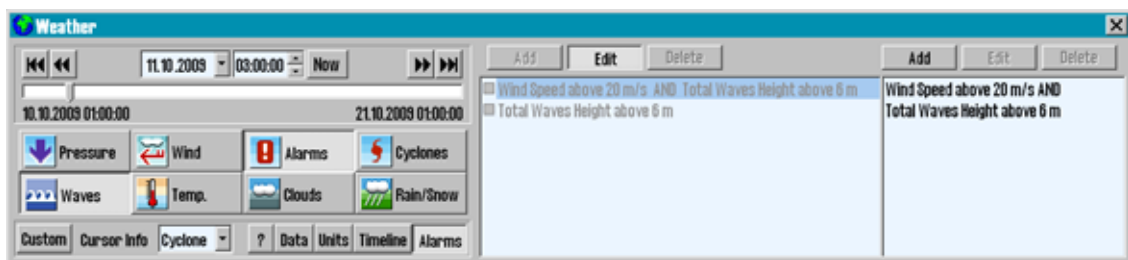
THE ALARM INTERFACE



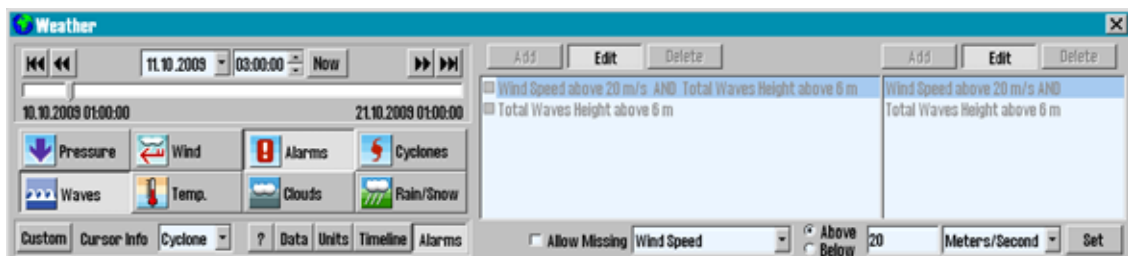
By pressing the 'Alarm' button in the bottom part of the main weather overlay window, the interface for selecting, adding and editing alarm conditions is shown. To hide the alarm interface, press the 'Alarm' button again.

The list of alarm conditions occupies most of this window. Here, all of the entered alarm conditions are listed and may be selected by marking the checkbox to the left of the alarm condition descriptions.

Buttons for adding, editing and deleting alarm conditions are found at the top edge of the window. *Note that all of the 'Add' and 'Edit' buttons in the alarm interface behave in the same manner as the menu buttons at the bottom of the main window; simply press these buttons again to "back out" of the function.*



When 'Add' or 'Edit' is pressed, a new parameter condition list is shown in the right part of the window. This area lists all of the parameter conditions that are a part of the selected alarm condition. (For new alarm conditions, this list will be empty initially.) This list has separate 'Add', 'Edit' and 'Delete' buttons for manipulating the parameter condition list.



When 'Edit' is pressed in the parameter condition list, a new area is shown along the bottom of the window allowing adjustments to the condition. This area includes fields for selecting the weather parameter, specifying the limit value and unit and for selecting whether the condition should trigger for values above or below the limit value. Pressing 'Set' saves any



Document Title		Page
TECDIS and TELchart ECS Weather Overlay Guide		17 of 24
Author	Date	Rev
Pål K. Hansen	11. Oct 2009	02

changes made and returns to the parameter condition list. When pressing ‘Add’ in the main alarm interface, this area is shown directly.

If ‘Allow missing’ is selected, you may select weather parameters that are not present in the currently loaded weather data.

1.8 How to use the weather graph / timeline function



The timeline window provides a graph showing the variation over time for one or more weather parameters (Meteograms). The majority of this window is occupied by the weather graph. The parameter list in the middle part of the window serves the triple purpose of graph parameter selection, graph legend and display of specific values. The controls for manipulating the graph are located above the parameter list. Note that this window can be resized vertically if required.

This graph can be scrolled horizontally by moving the scrollbar at the bottom of the window. The time the weather chart overlay is currently showing is marked by a vertical yellow line. Scales for the graph values are shown dynamically on the right and left edge of the graph as parameters are added and removed. By moving the cursor in the graph area, the forecasted values for the time directly below the cursor are shown to the right of the parameter name and legend.

The cursor can also be moved into the chart display, and the parameter list will display values for the cursor location at the selected point in time. These values are shown in green text to distinguish them from graph values.

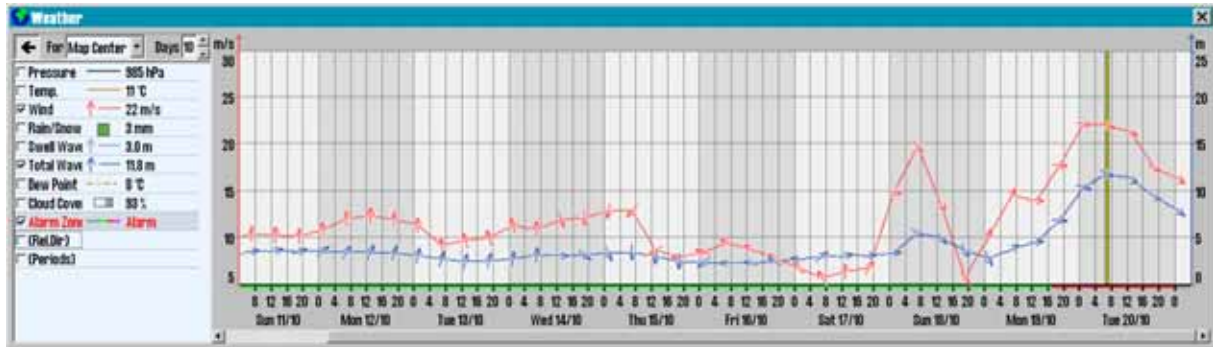
By selection in the ‘For’ field above the parameter list, the graph may be shown for either the ‘Map Center’ (in which case, the location used will be marked with a red cross and a circle), the current vessel position, the cursor position (the graph will update continually as you move the cursor in the chart), or for ‘Route 1’ / ‘Route 2’ (explained in the next section). *Note that when in ‘Cursor Pos’ mode, the graph will “lock” to a location when clicked in the chart.*

By pressing Ctrl+S while the Timeline is shown, an image file of the current graph as currently shown can be saved.



Document Title		Page
TECDIS and TELchart ECS Weather Overlay Guide		18 of 24
Author	Date	Rev
Pål K. Hansen	11. Oct 2009	02

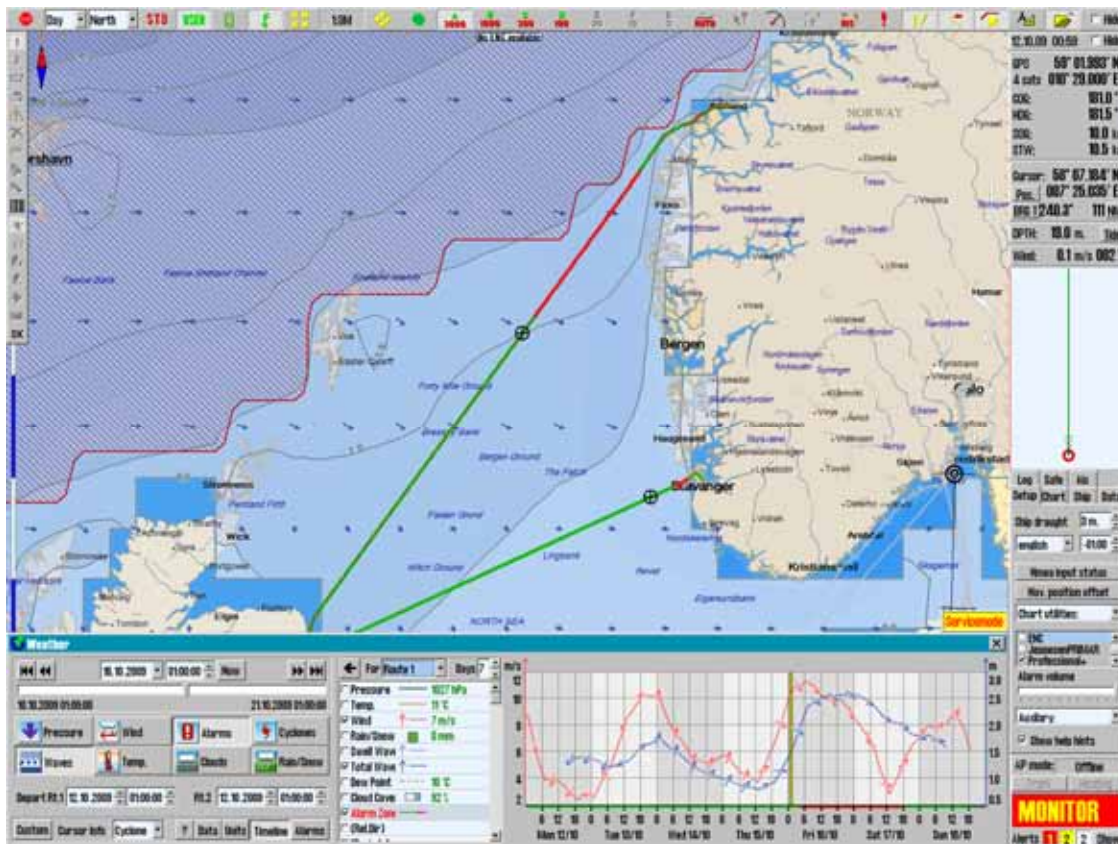
Select parameters by marking the checkbox to the left of the parameter name. If ‘(Periods)’ is selected, the graph will include wave period for any wave graphs shown. If ‘(Rel.Dir)’ is selected and the graph is in “Route” mode, the direction arrows in the graph will change to show the direction relative to the planned vessel heading at that time and the relative directions will be shown along with the values.



By pressing the arrow pointing left in the upper left corner of the graph window, the graph will expand to fill the entire weather window. Press the arrow button again to return.

The number of days shown in the graph at once can be adjusted from 1 day up to 10 days.

1.9 How to do manual weather routing



When one or two routes are selected before activating the weather overlay, several features aiding in weather routing come into play.

First of all, the appearance of the routes in the chart is changed. Waypoint indicators are removed to avoid clutter in overview charts, *and the route is colored according to the alarm conditions the vessel will encounter*. For parts of the planned voyage where weather exceeding the alarm conditions will be encountered, the route is marked with red. If the weather conditions are below alarm condition limits, the route is marked with green.

Furthermore, when the planned position of the vessel for the time shown by the weather chart overlay is shown in the chart as a black cross and circle symbol.

Finally, the Timeline graph can be set to show a graph for either 'Route 1' or 'Route 2' (if present). For each point in this graph, the values shown are for the planned position of the vessel at that time. In other words, the graph is a custom meteogram for the planned voyage.

All of these features assume the vessel starts following the route at the next full hour. Controls to adjust this time for each route are available in the Timeline window.

All adjustments to the route, either by adding / moving / removing waypoints, making changes in the route planner or adjusting the departure time in the timeline window are reflected immediately in all of the route weather integration features described in this section.



Document Title		Page
TECDIS and TELchart ECS Weather Overlay Guide		20 of 24
Author	Date	Rev
Pål K. Hansen	11. Oct 2009	02

2. Troubleshooting

This section provides some guidelines for troubleshooting connection problems, and a list of error messages with explanations.

2.1 Connection problems

For all problems with downloading weather data, regardless of connection type used, your TECDIS / TELchart ECS supplier and/or Jeppesen Marine will be able to provide very useful assistance in tracking down the cause of weather download problems. Logs kept by Jeppesen Marine will show whether your weather download attempts reach the weather data servers and whether the requests are successful. They will also be able to verify that there are no problems with your subscriptions.

In order for Jeppesen Marine or your chart system supplier to help you, they will need your System ID number. See section 3.2 for guidance in locating this number.

Before contacting anyone, at least some of the tests here should be attempted.

GENERAL TESTS

- A. Check your subscription.** Make sure that your subscription has not expired. Expiry information can be seen by opening the weather overlay, pressing 'Data', 'Download New' and then 'Show Subscription'.
- B. Update your subscription.** Jeppesen Marine may make changes to the weather service that are not automatically reflected by in your subscription.
- C. Try another connection method.** If you use an internet connection, try downloading by email. If you use email already, try using another email account/system. If this is successful, you have verified that the problem is with your connection, not your chart system or a problem with the weather service.
- D. Try a smaller download size.** The problem may be connected to downloading large files, especially if the connection is "noisy" and/or error prone.
- E. Try another model.** The problem may be connected to downloading a specific forecast method. If a download of similar size using a different model is successful, the list of potential causes for the problem is significantly reduced.
- F. Try updating the chart software.** Telko AS provides software updates containing both bug fixes and new features free of charges at our website <http://www.telko.no>. Your problem may be due to a bug in the software that we have fixed in an update.



Document Title		Page
TECDIS and TELchart ECS Weather Overlay Guide		21 of 24
Author	Date	Rev
Pål K. Hansen	11. Oct 2009	02

INTERNET CONNECTION

- G. (TECDIS Only) Make sure that the internet connection is not turned off.** In a valid TECDIS installation with a direct internet connection, a switch has been installed so that the internet connection can be turned off when not in use.
- H. Try setting a higher Connection Timeout.** The download attempt may be timing out before the request can be completed. Refer to section 1.2 step 6 for details.
- I. Verify that you can reach the servers.** Exit the chart system (For TECIDS: insert the TECDIS Service Key first), open Internet Explorer and try the following addresses. If the reply does not match what is indicated in this table, you are not reaching the weather service servers.

http://distribution.c-map.no	Should show: Connection OK
http://datacenter.c-map.no	
http://datacenter.jeppesen.com	

- J. If test I failed, see if you can reach the servers using IP addresses.** Continue where you left off in the previous test. Try the following addresses and see if the replies match what is specified in the table.

http://80.239.21.75	Should show: Connection OK
http://80.239.21.103	

If these tests succeed, the problem is with your DNS Settings.
(TECDIS Only: If you have not performed test F, do so now, then run the following file and see if the problem is fixed: C:\Program Files\TECDIS\AddCMapHosts.exe)

- K. If test J failed, have your network administrators check the firewall.** Make sure that the firewall in you internet setup is not blocking your weather data requests.

E-MAIL CONNECTION

- L. Check your spam folder.** Make sure that the replies to your request email from Jeppesen Marine are not being marked as spam.
- M. Try setting a lower Max Attachment Size.** Your email service may be having problems with the weather data attachments. Try lowering the Max Attachment Size value in the Configure Connection window. Refer to section 1.2 step 6 for details.
- N. Make sure you are not using old request / reply files.** Delete all request and reply files from the USB memory stick so that you are sure you are not using the request or reply files from a previous download (or from the other TECDIS).
- O. (TECDIS Only) Update only one TECDIS at a time.** If you send weather requests from both TECDIS systems at the same time, it is very easy to get the reply files mixed up.



Document Title		Page
TECDIS and TELchart ECS Weather Overlay Guide		22 of 24
Author	Date	Rev
Pål K. Hansen	11. Oct 2009	02

2.2 Error messages

The following list shows some of the error messages that may be shown by the weather overlay feature, including explanations.

Error Message	Explanation
Current weather data lacks parameters set in active alarm conditions. Review alarm settings.	This is not an error. It is simply an indication that the currently loaded weather data file does not contain all of the weather parameters you have specified in your selected alarm conditions.
No current weather forecasts are available.	This is not an error. It is simply an indication that you have no current weather data files on the system.
No cyclones in effect at last download.	This is not an error. It is a message to inform you that the Cyclone presentation is not available because there are no cyclones currently.
Communication Error	There was a problem during the weather data download. Refer to section 2.1.
“You must be in show checkbox mode to set this date”	This message is due to a known bug. Perform test F in section 2.1.
ERROR: Weather components are not initialized	There is a problem with the C-Map System Files in your installation. Contact your chart system supplier for assistance.
Weather Data Error: The internal component processing the weather data cannot be created.	
Cyclone Data Error: The internal component processing the weather data cannot be created.	
Weather Data Error: License interface cannot be obtained.	There is a problem with the C-Map System Files in your installation or your license codeplug. Contact your chart system supplier for assistance.
Cyclone Data Error: License interface cannot be obtained.	
Weather Data Error: File is not found.	The weather data file is missing from the system.
Weather Data Error: Corrupted or wrong format file.	The weather data file has become corrupted or is not provided by Jeppesen Marine.



Document Title		Page
TECDIS and TELchart ECS Weather Overlay Guide		23 of 24
Author	Date	Rev
Pål K. Hansen	11. Oct 2009	02

Weather Data Error: The file data cannot be accessed.	The system is unable to access the weather data file.
Weather Data Error: Problems with weather data licensing.	The weather data file does not appear to be licensed to this system.
Cyclone Data Error: File is not found.	The cyclone data file is missing from the system.
Cyclone Data Error: Corrupted or wrong format file.	The cyclone data file has become corrupted or is not provided by Jeppesen Marine.
Cyclone Data Error: Wrong format of cyclones data.	
Cyclone Data Error: Wrong point values in cyclones.	
Cyclone Data Error: The file data cannot be accessed.	The system is unable to access the cyclone data file.
Cyclone Data Error: Problems with weather data licensing.	The cyclone data file does not appear to be licensed to this system.
The specified file did not have a .grb or .xml extension.	The 'Import' feature can only load files with a .grb or .xml file extension. Import of a file with another extension was attempted.



Document Title		Page
TECDIS and TELchart ECS Weather Overlay Guide		24 of 24
Author	Date	Rev
Pål K. Hansen	11. Oct 2009	02

3. Locating licensing and version information

3.1 Determining the TECDIS or TELchart ECS Software version number

The major software version number is displayed in the initial stages of starting the TECDIS or TELchart ECS software. For TECDIS, this will either be '4.6.0' for the previous generation or '4.7.1' for the current generation. For TELchart ECS, this will be '3.7.1'.

The following procedure determines the full TECDIS or TELchart ECS software version number:

1. On the TECDIS or TELchart ECS, check if the menu folders on the right side of the screen are visible.
2. If they are not, press the folder icon at the upper right corner of the screen, labeled 'Tool menu folders'.
3. Select the menu folder labeled 'Chart'.
4. Press the button named '?' to the immediate left of the buttons 'S52' and 'INT1'. A chart legend window will be displayed.
5. Note the TECDIS or TELchart ECS software version number specified in the first entry of the chart legend (TECDIS Software / TELchart ECS Software). The version number is the value of this field up to the # character.

3.2 Determining the TECDIS or TELchart ECS System ID number

The System ID number for each TECDIS or TELchart ECS unit is required when weather overlay is to be activated. This number can be determined in one of three ways:

A. Physical Inspection

1. Inspect the label connected to the USB license dongle attached on the rear side of the TECDIS or TELchart ECS processor. The System ID is noted on this label.

B. Using TECDIS / TELchart ECS Setup

1. (For TECDIS) Insert the TECDIS Service Key in the TECDIS processor.
2. In the TECDIS or TELchart ECS main display, exit the software by pressing the icon in the upper left corner of the display. Press 'YES' to confirm.
3. Start TECDIS / TELchart ECS Setup by clicking the TECDIS Setup or TELchart ECS Setup shortcut on the desktop.
4. Select the 'Licensing' folder.
5. The System ID is displayed in the lower half of the setup window (C-Map License area).

C. Using TECDIS / TELchart ECS

1. Follow the procedure for determining the full TECDIS / TELchart ECS software version number, and note the five digits immediately following the '#' sign in the 'TECDIS Software' or 'TELchart ECS Software' entry in the chart legend. Appending this number to the text 'Telko eT' constitutes the full System ID.