

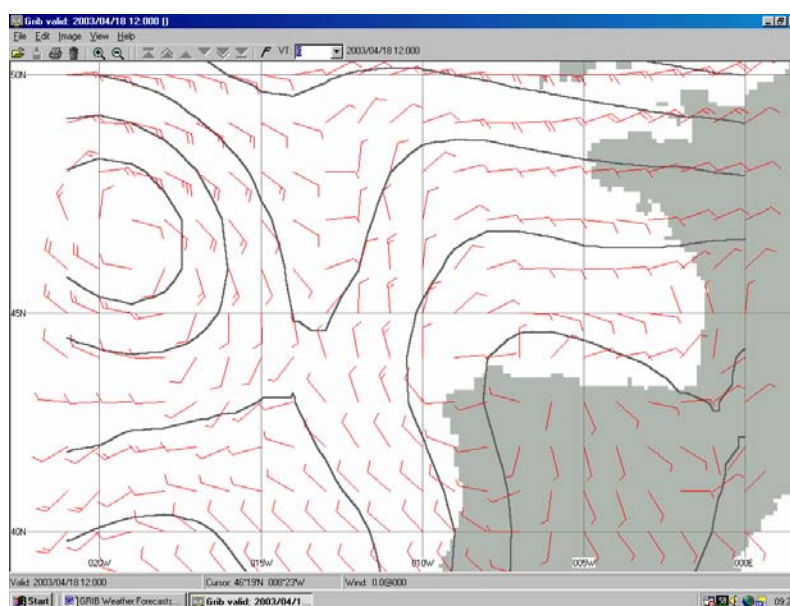
GRIB Weather Forecasts. Saildocs system. Version 30/6/2007

If you want to get into detail then look at Frank Singletons website.

*Since the rest of this article was written a new GRIB service has appeared called **Ugrib** which is well worth a look. Registration is a bit lengthy and you will need some 25Mb of spare space. However, once that is done it is easy and quick with file sizes of typically less than 30kb for 5 days and 3 hrly intervals. This service is direct from NOAA itself. In some cases one does not want to have GRIB files backing up if one has requested that they be sent every day. This service is on demand once one has registered. Go to <http://www.grib.us/> and follow instructions. I have used it all this season and find it much easier to use than saildocs but both have their place.*

This article is split into two sections. The first is to just enable you to look at a forecast on the screen without understanding any of the background and the later section is a deeper discussion to try and explain the alternatives.

By way of introduction this service will enable you to have wind arrow diagrams for your area for 5 days or more at 6 hourly intervals. The data is sent by e-mail and the file is minute eg only typically 1-3 Killobytes which is easily downloaded by GSM phone, Iridium, Satcom C or by SSB Radio. Sounds too good to be true but it is happening. For instance the MaxSea plotting system you may have seen at the boatshow overlays this data directly onto the chart. Although we concentrate on the situation where e-mails can be obtained over the phone, the same service is now available over the SSB radio. The weather information originates from NOAA and a retired UK Met Officer, Frank Singleton, has verified the system.



Typical GRIB plot

SECTION 1 Get a forecast to see the power of the system.

1.1 First you need to download a viewer into your computer so you can look at the data. We are suggesting Viewfax viewer but there are others. Then having done that how to send an email requesting a forecast.

1.2 Download the GRIB viewer from : www.siriuscyber.net/sailmail/index.htm download 'Airmail 3.1 Sailmail client complete install' (about 4.1mb). Note it is best to do a right click on the download instructions and "Save to Target" Make a note of the filename and the folder that it was

stored into. When finished, open that folder and double-click the downloaded file, this will start the Airmail install program. As the instructions proceed you will be asked whether you want an Icon on the desktop and also if you want Airmail installed into the start menu. We suggest you untick both options. The Airmail program will now have been installed probably in C; - Program Files - Airmail. Explore the top folder within this and look for a file called "VIEWFAX.exe". Double click on this and follow the installation instructions. This time accept having an ICON on the desktop. You will now have the all important viewer VIEWFAX installed on your PC.

2. Now you need to send an e-mail to ask for the data. Just for this introduction we choose the area near Crete in the Mediteranean:

a. Send and e-mail to: query@saildocs.com

b. In the subject line type **anything you like**.

c. In the message section type:

send grib:30N,42N,20E,30E|1,1|6,12,24,36,48,60,72,84,96

NB: no gaps after 'grib' Watch commas and spaces carefully. The vertical lines are on your UK keyboard, the key to the right of the shift key!

This is asking for a weather picture for a small area for 12, 24 etc hours ahead. Put in exactly as shown . NB: **30N,42N,20E,30E** is the area we have selected for the forecast. **|1,1|** make the vertical lines by Shift \. The 1,1 selects the grid increment in degrees (2,2 is the default).**6,12,24,36,48,60,72,84,96** are the spacing of the forecasts. The forecast is for wind speeds at 10m height.

d. Shortly afterwards (only a few seconds later) you will get a reply which is an attachment and that is the GRIB file. Save this somewhere such as in My Documents so you can find it later. Make this the file where you will always collect your GRIB data. If you are consistent the viewer will learn and always open that folder which saves lot of time

3. Go to your viewer.

a. On your desktop open VIEWFAX. Then click File Open and find that GRIB file you have just saved in My documents or your chosen folder.

b. The first page of your forecast will appear. Double click at the centre of the area of interest to enlarge and centralise the picture. Click on VT and forward the forecast in time. **You can achieve the same effect by using the up/down arrows on the keyboard.** Zoom in and out as necessary. Click and hold the left mouse to move the map around.

c. On the bottom strip you have the valid date of forecast and the Position (Lat, Long) of the cursor. Wind strength and direction and pressure where the cursor is located (sometimes but not always)

4. You can automatically get a daily forecast from Saildocs for up to 14 continuous days by sending the request '**Sub**' instead of 'send'. This means that you do not have to send an e-mail each time you want a forecast.

5. Troubleshooting:

One member has had trouble with his messages being rejected by saildocs and this was because there was a space in front of the message. No matter what we did we could not correct the problem UNTIL we uninstalled Outlook Express using Control Panel-Add remove programs-add remove windows components and then uninstall outlook express and then reinstall again. That did the trick and it appeared that his e-mail provider had substituted their own version and it had this fault installed. Always use the Microsoft version!! NOTE: it is prudent to backup your addressbook and messages before uninstalling but doing so would not normally cause their loss.

6. We also suggest when you make your first contact with 'saildocs' that you send two more emails:

To: query@saildocs.com

Subject: Anything you like

In the text: Send info

And a second one: Send index

The Index is useful as it gives you some other documents and abbreviations for selected ocean forecasts.

So the bottom line is that here is an amazing system for downloading Wx **but always remember that they are produced without any human interpretation so one should always use in conjunction with a man made forecast such as Navtex so as to check for possible major errors.**

SECTION 2 More Background and as an aid to understanding Frank Singletons website.

Now you have had your appetite wetted:

- a. The US weather from NOAA is available free
- b. NOAA normally work out wind strengths at 20m height and then interpolate to give a 10m height model. The height is that over base level be it sea OR land so over a mountain it gives the weather above that mountain. It is this model which is called a GFS model.
- c. NOAA also provide a model for wave heights called wwave3. It is possible to interpolate a wind model derived from this data BUT it obviously only works over oceans and is not accurate in say the Med or the Baltic where land distorts the answer.
- d. Saildocs is an amateur company which provides GRIB data from the GFS model and you know exactly what you are getting.
- e. Global Marine network (GMN) provides forecasts based on the wwave3 model and it only works over the oceans. It may be better in that case but Frank Singleton has no proof of that. To overcome the fact that the wwave3 forecast does not work in the Med GMN send larger GRIB files covering a whole area such as the Med. Indeed if you were to ask GMN for a GRIB for the Med you would find that in our selected area it gives the same answer. Not surprising as they have then switched to the GFS model! However, if you were to ask them for a restricted size for the same area it will show nothing as their model does not work in the Med.
- f. You can request GRIB files from either Saildocs OR GMN but at this time the recommended supplier is Saildocs as it appears to be compatible with the Viewfax viewer.
- g. At this time there are various other anomalies between viewers and also basic GRIB files but if you stick to the recommendations above then most of these are resolved.
- h. The Windplotter viewer has been improved as at 17/6/2003 and now appears to give similar results to Viewfax. You may find this more user friendly and the charts are

much much more accurate and user friendly. It can be found on www.xaxero.com/windplot.exe. I understand that they now charge for this viewer (1/1/2005) The ideal is to have both viewers as the winfax viewer picture of the land is very coarse and inaccurate (though the lat long for the wind vector is accurate) whereas that from Windplotter is much more accurate. The earlier free version of Windplotter did not have any pressure gradient lines.

- i. **One should remember that these forecasts are produced automatically and one is advised to read them in conjunction with a man produced summary such as Navtex.**

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