



G-Comm GRIB Auto-Responder

Instructions for using the G-Comm GRIB Auto Responder.

Simply send an email to: weather@g-comm.net and enter your grib request in the **SUBJECT** line of your email. Use the following format for the SUBJECT line:

`grib [type_of_grib] [region_of_interest] [times] [grib_fields]`

Where:

- **[type_of_grib]** is the grib type. Choose from:
 - **gfs** - NOAA GFS/AVN Global model covers entire world including overland. Resolution is 1x1 degree every three hours from 0-180 hours.
 - **nww3** - NOAA NWW3 wave model. Prediction is only for open water areas, ie excludes inland waterways such as the Mediterranean and the Black Sea, it is also likely to be "inaccurate" in coastal regions. Resolution is 1x1.5 degrees every three hours from 0-180 hours.
- **[region_of_interest]** is the lat and lon of the area you wish to obtain the grib data. Can be entered in several formats:
 - **30N:40W:2400** - specifies an area which is approximately 2400 miles wide and tall centered on 30N:40W (ie center of the Atlantic). If you omit the radius parameter then 1200 miles is assumed.
 - **10N:60W:50N:20W** - specifies a square boxed area from 10N:60W to 50N:20W. Specify the coordinates of the box of interest from bottom left to top right
 - **named area** - you can simply specify a named area. Area names are intended to be compatible with GMN's area names. Defined areas are (in very rough east to west order): **walaska, centralspacific, centralnpacific, pacific, specific, wpacific, vancouver, centralpacific, chileperu, centralamerica, greatlakes, caribbean, useastcoast, newportbermuda, baffin, argentina, brazil, canada, daimlerchrysler, centralatlantic, atlantic, eastatlantic, capetownrio, southafrica, northeurope, scandinavia, mediterranean, barents, ekergelen, wkergelen, madagascar, kergelen, nindian, indian, indonesiaaustralia, china, saustralia, newzealand, sydneyhobart, njapan, tasmansea**
- **[times]** Comma seperate list of offsets of the desired forecasts in hours. 0 hours is usually from the point the model was run - however, the models take around 3+ hours to run and so the 0 hour data will already be old by the time the data is available.
 - eg **12,24,48,72**
- **[grib_fields]** - grib fields of interest. Available fields vary depending on the model chosen
 - GFS Model:
 - **GRD** - wind speed
 - **PRMSL** - pressure at mean sea level
 - **TMP** - surface temperature
 - **HGT** - 500mb height
 - NWW3 Model:
 - **GRD** - wind speed
 - **WAVE** - significant wave height and direction
 - **WVPER** - significant wave periodicity

Examples

TO: weather@g-comm.net SUBJECT: grib gfs atlantic 12,24,36,48,60,72 GRD,PRMSL	Returns windspeed and pressure GRIB data from the GFS model for a very large region covering the central north Atlantic at 12 hour intervals over the next three days
TO: weather@g-comm.net SUBJECT: grib gfs 5N:70W:35N:10W 12,24,36,48,60,72 GRD,PRMSL	Returns windspeed and pressure GRIB data from the GFS model for the same region and time period as the example above, but the position is specified using the box model (bottom left, top right coords)
TO: weather@g-comm.net SUBJECT: grib nww3 25N:35W:2400 24,48,72 GRD,WAVE	Returns windspeed and wave GRIB data from the NWW3 model for a large region covering the central north Atlantic at 24 hour intervals over the next three days. Position specified using center point and radius of 2400 miles around that point

GRIB File Viewers

The GRIB data is binary computer data and not a picture that you can just open up and view. As such you will need some form of visualisation tool in order to actually use the GRIB data. There are a wide variety of GRIB viewer programs available and they range in price from free to quite expensive. If you are on a budget then we suggest that you try the free viewer "ViewFax", which is part of the Sailmail Airmail software. However, if you have a larger pocket then please do try some of the other very good viewer programs that area available You will find a list of the main GRIB viewer applications on the market and links to download locations from our website at: <http://www.g-comm.net/Support/Weather>

Notes

When using a boxed region of interest you must specify the coordinates of the box from west to east, if you reverse the coordinates then you will get a large area that wraps around the globe and **excludes** the area you were after!

The size of the data file returned is proportional to the amount of data requested. If you are "bandwidth constrained", for example on a satellite phone or SSB, then please start by requesting small areas to assess the size of files returned. Choosing fewer time periods, fewer grib fields or a smaller area will reduce the amount of data returned.

The data is returned as an uncompressed grib file. The entire email will be compressed automatically if you are using our email compression system "**Express Mail**" (and often also by the SSB email services), so there is no benefit in pre-compressing the file

If you are using a cellular or satellite phone and you are NOT using our email compression system then you are spending much more money on calls that you need to! See our website at www.g-comm.net for more information on how to subscribe to our Express Mail email compression service.

If you are still unsure about how to use this service, then for additional help please email: support@g-comm.net

Important note: Grib files are computer-generated forecast files from an NCEP/NOAA computer, which are sent without review, and are offered on an as-is basis. There is no assurance that the data is available, accurate or correct. Tropical systems in particular are not well-modeled. Both the G-Comm Weather Responder and the computer model itself are automated systems, subject to a variety of failures and errors. By using the data, you acknowledge and agree to these limitations.