

QSOmap

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Welcome

Welcome to QSOmap.

For those who like to see where in the world their contacts are located, QSOmap will accept a special ADIF file generated from Logger32 and display the locations of your QSOs onto a Great circle or Millar projection map or produce a file for use with Google Earth. The program can differentiate between "worked", "confirmed" and "heard" stations and it contains a selection of filters to modify the presentations.

The program was written by Charlie Sutton W1MCP.

It should be noted at this early point that QSOmap does NOT operate on the logbook databases themselves. It is necessary to output the detail required for viewing in ADIF format and then import that file to QSOmap.

QSOmap runs under Windows 95/98, Windows 2000, Windows ME, Windows NT and Windows XP (these program names are all the copyright of Microsoft Corporation).

At the present time, QSOmap is free.

Copyright

Software - Copyright © 2008-2009 B. Charles Sutton. All rights reserved.

Help file - Copyright © 2008-2009 Geoff Anderson. All rights reserved

System Requirements

QSOmap has been tested on the following MS Windows operating systems:

- Windows 98/ 98SE

- Windows ME

- Windows 2000

- Windows XP

These systems were primarily Pentium class machines, with the lowest level of hardware having a 166 MHz CPU with 32 Mb of RAM.

The program itself requires approximately 8Mb of Hard disk space. If the help file is included, then the requirement increases to approximately 9Mb.

Installing the Program

General

QSOmap is distributed as a compressed file called QSOmap.zip. QSOmap will run in any directory of your choosing, so just unzip the files into your selected directory. You can select any directory you wish, but in the examples given in this help file, the directory of c:\program files\QSOmap was used.

Logger32 can be set up to shell out to QSOmap and become accessible from the Utilities menu in Logger32. From the Logger32 menus select Tools | Utility menu Setup to produce a window similar to that below:-

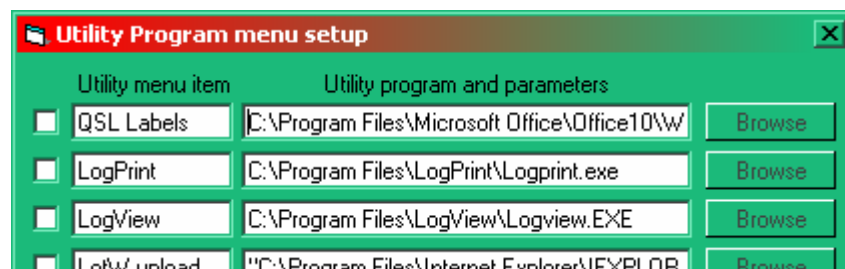


Fig 1

Enter the menu item name and the program path and name (as in menu item 3 above) and then click on "Apply". QSOmap will then become available in the Logger32 Utilities menu.

Basic Setup

On opening QSOmap for the first time an information window is opened giving the opportunity to record callsign and location. Location should be entered in degrees and decimal degrees with West and South as negative values.

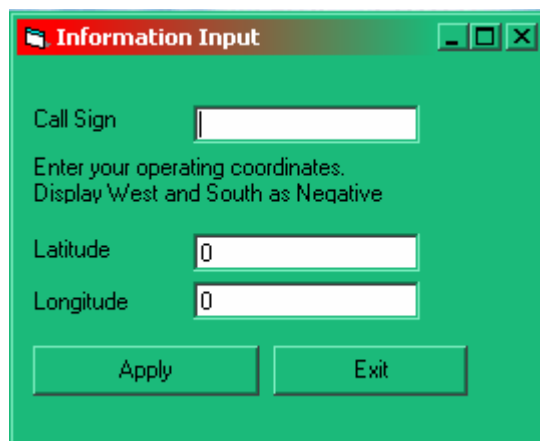


Fig 2

Once the "Apply" button has been pressed QSOmap will calculate a basic Azimuthal Equidistant projection (Great Circle) map with the centre based on the lat/long given – as shown below for the lat/long of 53.0 / -3.0

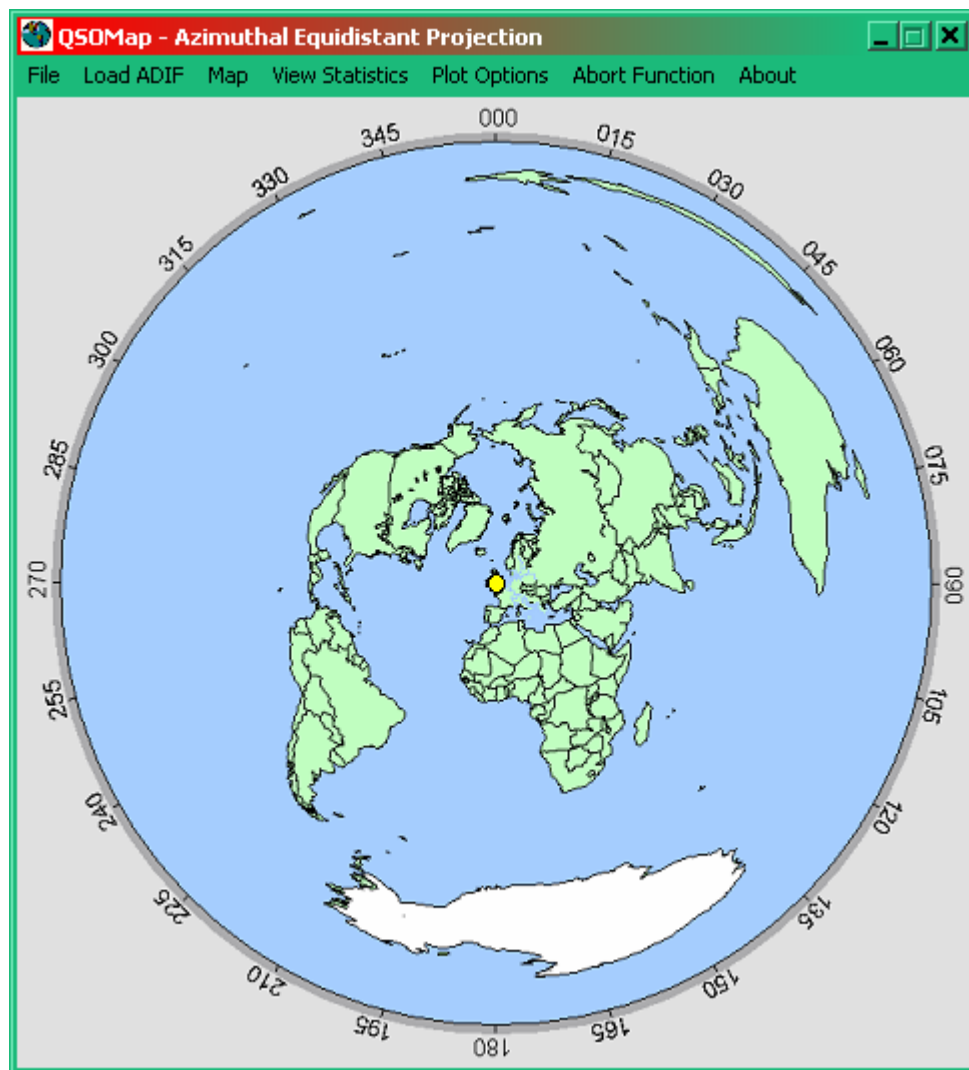


Fig 3

If you move QTH or have entered your details incorrectly, then use the File | Your Information menu option to change the Lat/Long details and then use the procedure as described below under Map | Recreate map.

Using the Program

Menu Options

The options described below are the same or similar for either of the two map projections available

File

Your information

This window allows for the entry of your callsign and Lat/Long position. Location should be entered in degrees and decimal degrees with West and South as negative values.

Open ADIF file

For QSOMap to work correctly you MUST have an ADIF file which contains the Lat/Long for each QSO partner. If a QSO record does not contain Lat/Long fields, it will not plot. [There will be cases where it is simply not possible to determine a sensible Lat/Long from the recorded QSO data]

Versions of Logger32 from 3.5 onward have the ability to output such a file using the ADI fields called App_Logger32_Lat and App_Logger32_Lng. The information is in degrees and decimal degrees with North and West being positive. When generating a file for use from Logger32 use the option File | Export Logs | ADIF and check the options shown below before generating the file.



Fig 4

Both the Export Lat/Long and the full country name are shown checked in the above example. The Lat/Long option is definitely required but the selection of the country name is optional. However please be aware that if you want to display country names on one of the maps produced then you MUST also use this option here.

To ensure your home QTH is shown in the correct position make sure that you have defined your location in QSOMap's Setup menu under "Your information".

Save Map

This option will save a bit map copy of the current map to the default directory. It will also date and time stamp the map. The file name will have the format:-

QSOMapXX_yyyymmdd-hhmmss.bmp

Where XX represents the letters MP or AP (Millar Projection or Azimuthal Projection) and yyyymmdd-hhmmss is the date/time stamp

Load ADIF

This simply triggers QSOMap to plot the QSO data. Note that if any changes are made to the options or display features and the map doesn't refresh of its own accord then you must click on this menu option to redraw the maps with the revised conditions.

Your QSOs can also be plotted onto a local world map. To add your QSO data simply select the menu option "Load ADIF" and the program will use the declared log input file as the data source. A typical plot is shown below.

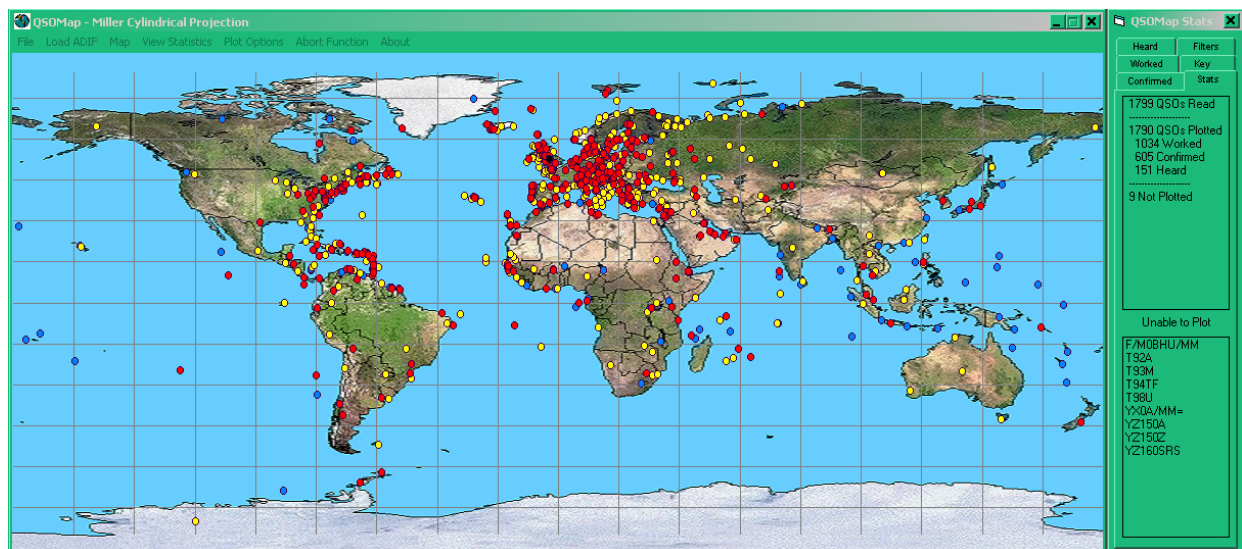


Fig 5

There is an order of preference for the plotting of points on the map with “Heard” being the lowest followed by “Worked” and finally “Confirmed” being the highest. So if you have recorded both a “Heard” and a “Worked” for a particular callsign, then the “Worked” colour will be displayed.

Placing the mouse cursor over any marker will produce a mouseover label

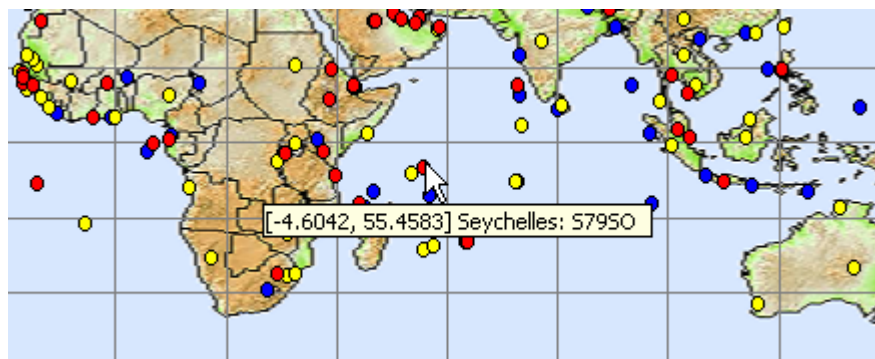


Fig 6

The options to include the Country name, the callsign and the Lat/Long co-ordinates have been selected for the above screenshot. [See “Options” below]

Note - “Heard” or “Informational” QSOs are those marked with the “=” sign following the callsign – See Logger32 help file section under Logbook Informational Entries

Map

Clear Map

This clears the map ready for a new plot.

Hide Plot Line

A plot line can be entered onto the map but simply clicking on any of the callsigns shown in the “Plotted” section of the statistics. This will draw a straight line from the recorded home location to the callsign selected.

The hide plot line option simply deletes the drawn line.

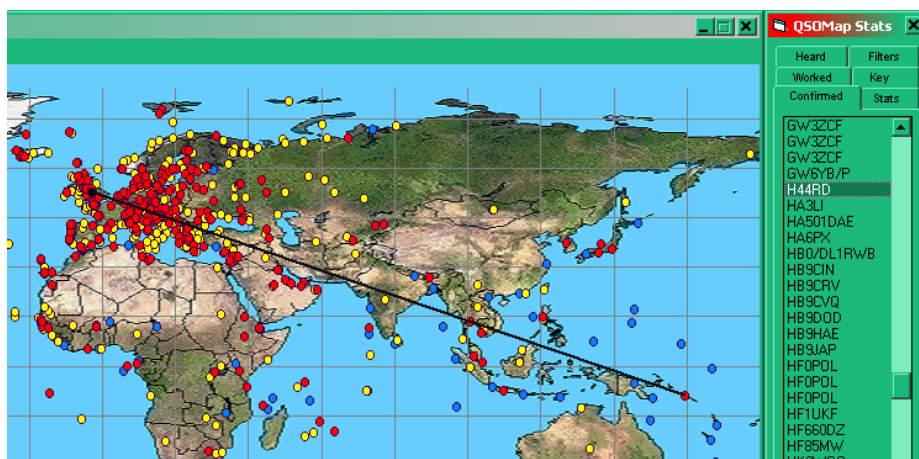


Fig 7

The width of the plot line can be set under the Plot Options menu (described below)

Appearance

Various enhancements to the basic map are available to show the home location, show meridians and to add a coloured topographic overlay. These apply to both the Great Circle and Millar projections. In addition, on the Great Circle map, compass markings may be added.

Change Base Map

Load Custom Map

QSOmap is supplied with a selection of 15 user maps. Examples of the maps provided with the software can be seen in the Appendix section.

QSOmap will accept other base maps in JPG format provided that they are sized to 1800*900. It should be noted however that there may be registration problems with the existing masks.

Change Base Colours

This gives the user the ability to change water and land colours (with a default in case someone really gets it wrong!). Note that the water colour will show on ALL maps and ALL views. The land colour will only show IF the topographic overlay is turned off

Projection

The user has the choice of two world map projections – Great circle (Azimuthal Equidistant Projection) or Millar cylindrical.

Create Google File

If you wish to view your data on Google Earth instead, then create the necessary files by selecting this option. The program will display a progress bar (as below) at the base of the map.

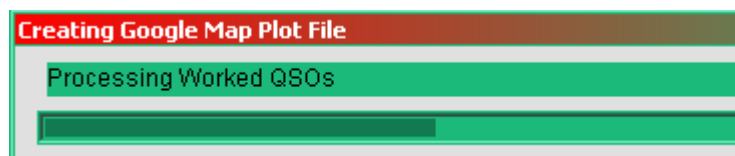


Fig 8

... and then announce the name and path to the .kmz file created giving the user the opportunity to launch Google earth.

This file will have been created from the declared ADIF file.

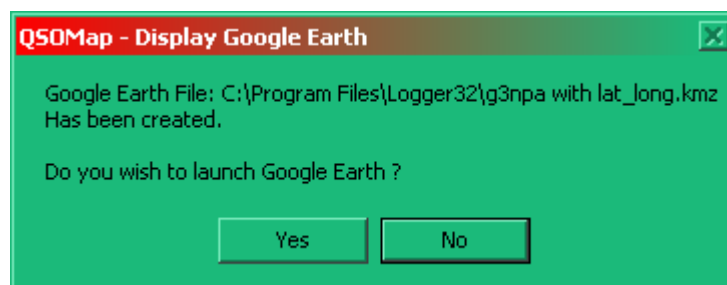


Fig 9

The screenshot below presents a typical example of a Google Earth plot. In this particular case plot options have been used to extract only IOTA contacts.

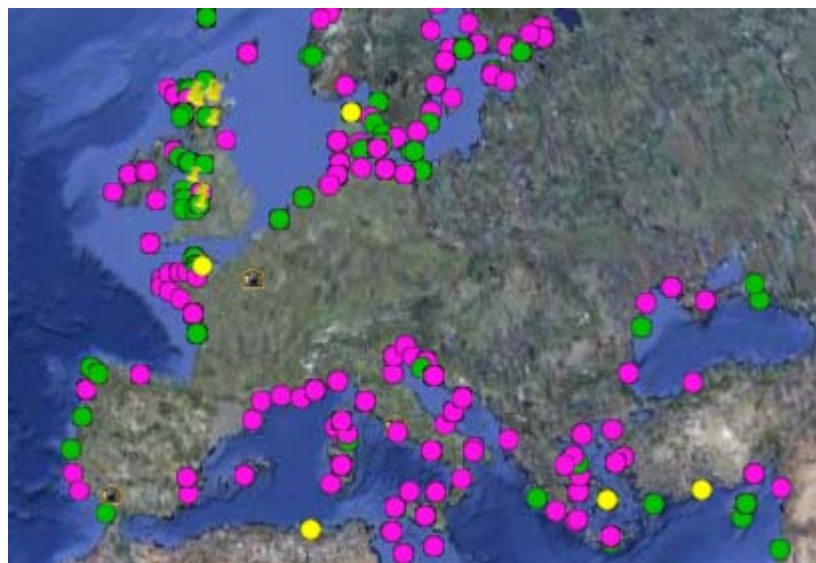


Fig 10

The plot file will actually contain data on “Worked”, “Confirmed” and “Heard” QSO and these can be displayed separately or combined on Google Earth.

The plot can additionally show the callsign

Point and click a plot point on the Google map will bring up additional information –

Note - “Heard” or “Informational” QSOs are those marked with the “=” sign following the callsign – See Logger32 help file section under Logbook Informational Entries.

Google Map Options

The options available here are almost identical to those for the on screen maps. Please refer to "Plot Options" below.

Recreate Map

If you have had reason to change the Lat/Long in the information data, then this option will cause QSOmap to recalculate the base map for the new co-ordinates. Note that this action will have to be performed for both map projections.

View Statistics

Selecting this option will reveal a window containing six tabs which hold information derived from the loaded ADIF file, information about the current filter settings and a panel showing the colour key (and allows one to change these colours as desired).

Stats

This gives the user the overall picture detailing the number of records read, how many were actually plotted and under which category and the number not plotted. A list of those records not plotted is also presented.

Fig 11

Worked/Confirmed/Heard

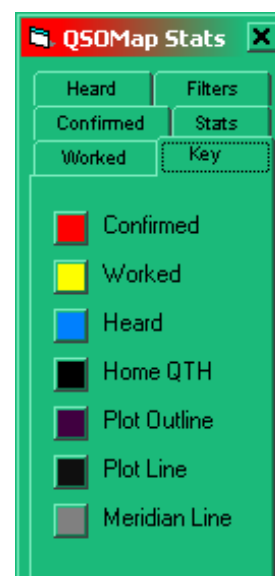
This will produce a full list of those records plotted under the particular category



Key

Initially this panel will show the default colours set within the program. The user can change any of these as desired by simply clicking on the appropriate coloured square in the key list.

Fig 12



Filters

This panel just reflects the filter settings made in the plot options.

The screenshot shows that in this instance a number of band filters along with a mode and a specific IOTA region have been selected.

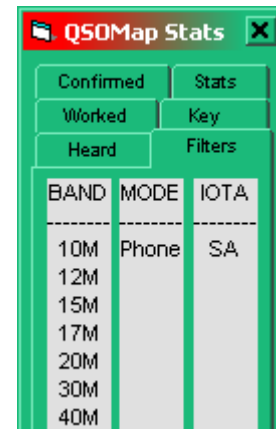


Fig 13

Plot Options

Here the user can select what is actually plotted on the maps together with the colour of the meridian lines and the marker size.

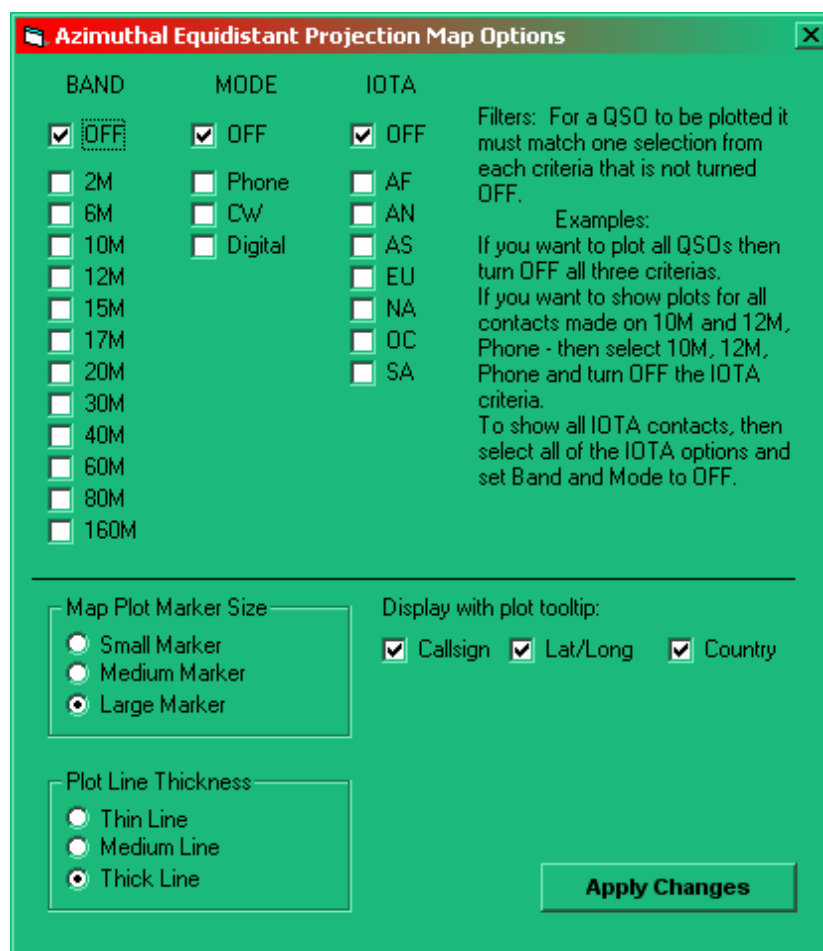


Fig 14

The upper section of the options window is for selecting various filters.

Selecting a band (or combination of bands) will allow ONLY those QSO for those bands to be plotted.

Selecting a Mode or combination of modes will allow only those QSOs using those modes to be plotted.

Selecting one or more IOTA areas will allow only those QSOs recorded with IOTA references meeting the selection to be plotted.

“OFF” in all three cases indicates that the particular selection criteria will not be used.

Examples:-

OFF/OFF/OFF will allow all QSOs to be plotted.

10m/Phone/AF will plot only QSOs to IOTA references in the AF area using Phone on 10m.

In the lower section of the window the user can change the size of the plot markers, the thickness of the plot lines and decide on showing additional tool-tip information.

NOTES

- 1) Country names will be added ONLY if the ADIF file contains the country names.
- 2) There are in fact three of these option windows - one for each of the basic projections and one for Google Earth – each of which can be set-up independently.

Abort Function

This option will abort any calculation going on at the time.

Help

Help

Will give access to this help file

About

Here you will find the basic information about QSOMap.

General points about the map plots

The accuracy of the plots is only as good as the data QSOMap uses. The Lat/Long information used is derived from within Logger32 and output as part of the ADIF data for each QSO record. The additional ADI fields are called APP_LOGGER32_LAT and APP_LOGGER32_LNG

Logger32 uses the following data, in the order given, to determine the positional information

Gridsquare

Secondary Admin subdivision Lat/Long

Primary Admin subdivision Lat/Long

IOTA data

DXCC offset and if all else fails

DXCC Lat/Long

Logger32 will perform the task of adding Lat/Long data to each record it sees (if the option to do so is selected). QSOMap will (with a few exceptions) plot every record it receives. So, if there are records for one particular callsign where one or several of the data fields given above are different, then it follows that the calculated Lat/Long for the same callsign can and

will be different. An example of this might be that at some stage you have been told the gridsquare of a contact but you have only added this to one record out of several with the station in question. The Lat/long calc for this one record will become more accurate than the others and hence at least two (or more) plot positions will be generated.

Uninstalling the Program

All the files used by QSOMap are contained within the selected directory. To remove the program, simply delete all files in the default QSOMap directory.

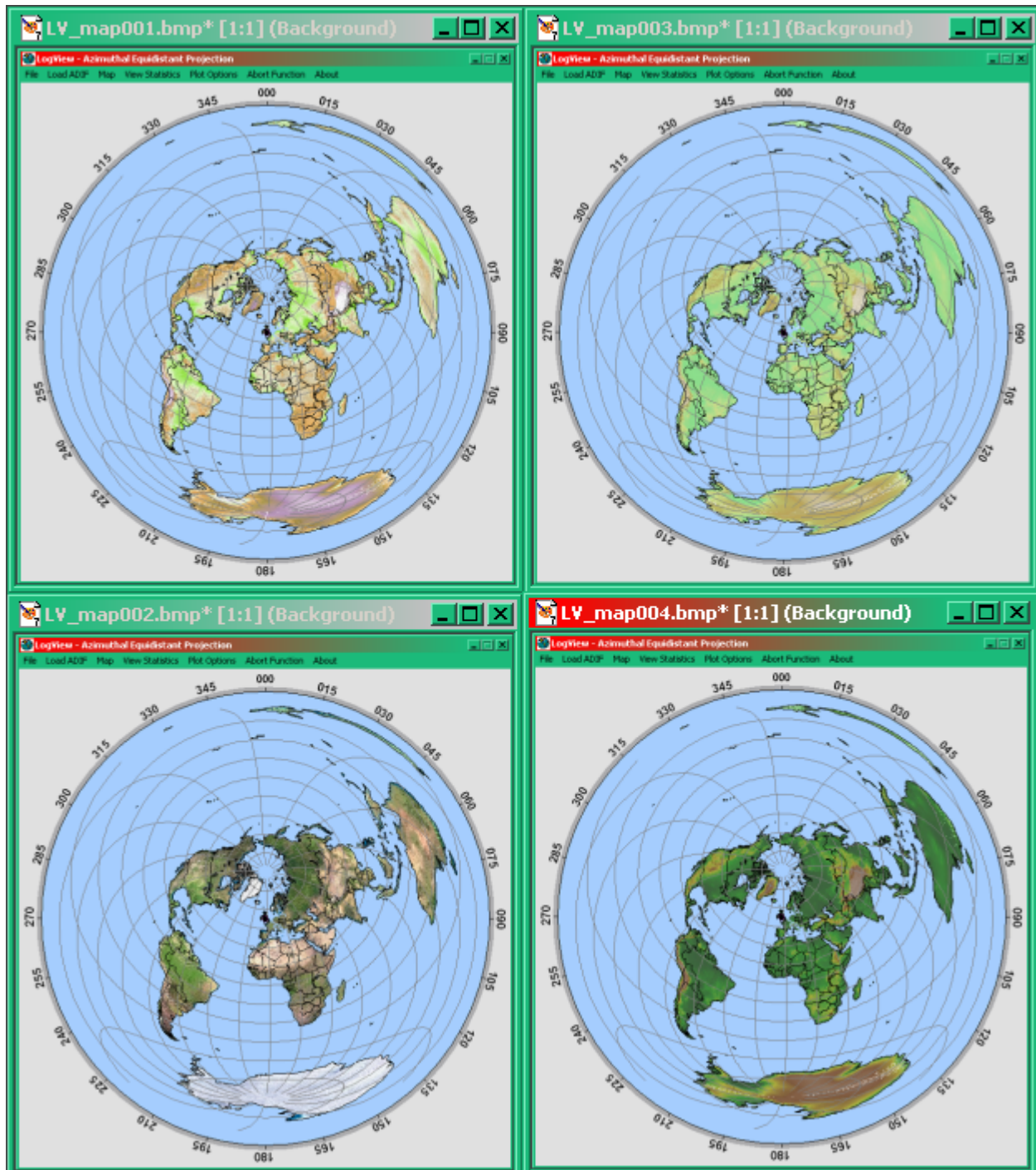
What's New?

Version 1.0

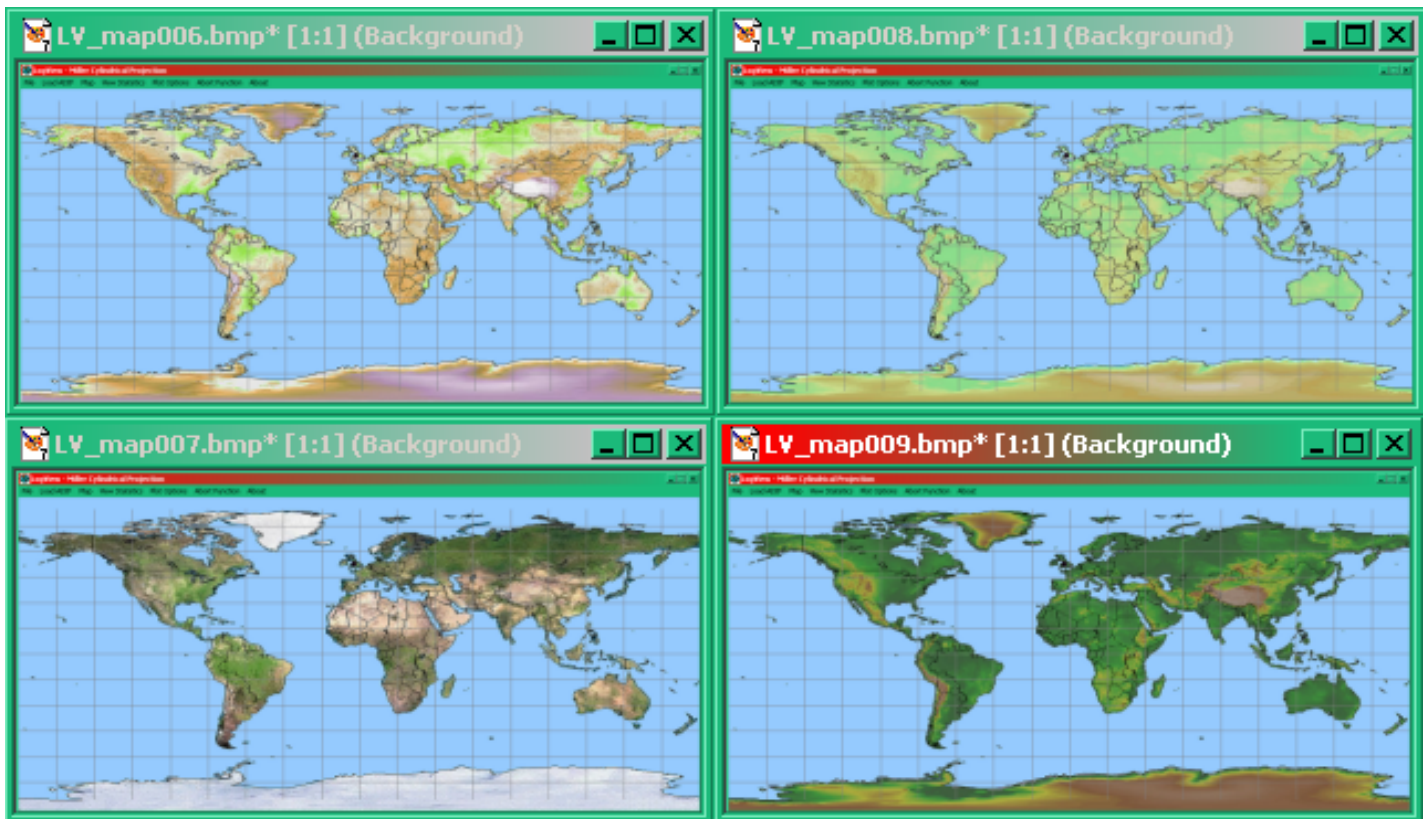
Initial release version.

Appendix

Map examples



A compiled view of all four background maps included with the software
[Great Circle Projection]



A compiled view of all four background maps included with the software
[Millar Cylindrical Projection]