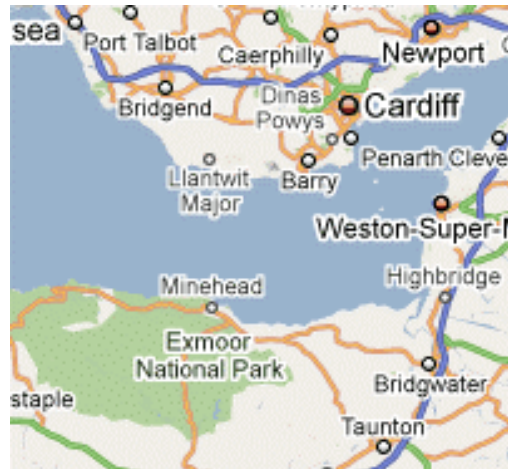
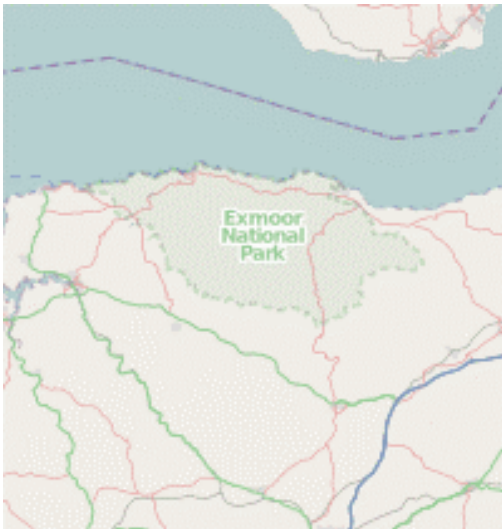


# MERGING MAPS

MAPC2MAPC provides two different ways to merge maps. Use the MAPMERGE menu item to merge two maps if they are both small enough to fit in memory or if you want to overlay detail from one to the other. If you have many maps and the destination is a mobile atlas or JNX file then using Mobile Alas format may be more appropriate – see below.

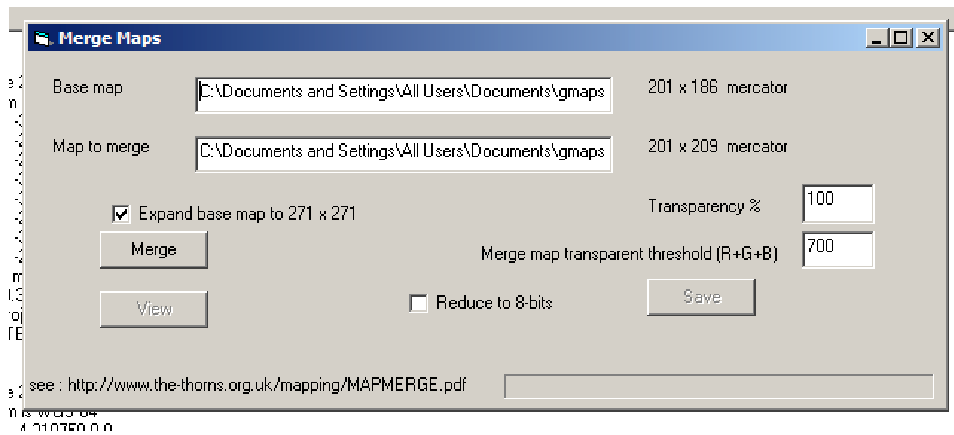
The MAPMERGE function of MAPC2MAPC program joins or merges two maps together. Maps need to be calibrated first and the program opens the calibration file (e.g .map from Ozi Explorer) and finds the map image from that.

The first map loaded is the base map. This determines the scale and orientation of the output.



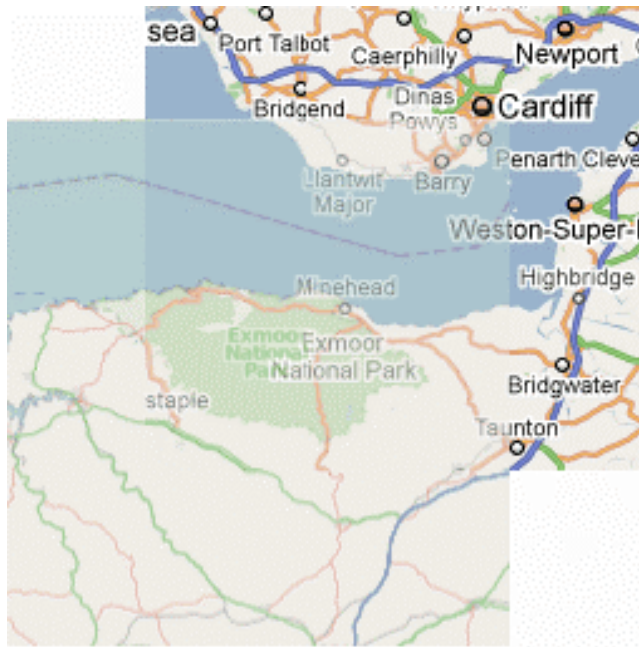
The second map loaded is the merge map.

Before merging, the program offers the option to expand the base map's canvas to encompass the geographic extents of itself and the merge map. You usually need to accept this option.



The merge process operates by looking at every pixel of the base map; determining whether this is geographically within the merge map and, if so, copying the merge map onto that pixel of the base map.

When copying, it is possible to set a transparency level : 100 means the pixel is wholly from the merge map; 50 is half and half; 0 means only pixels of the expanded parts of the base map are altered. This example used a 50 transparency. It is also possible to set a Transparency Threshold for the Merge Map. This sets a level of combined Red, Blue and Green



levels at which the pixel will be ignored. Pure white would be 765(255+255+255) but a scanned map will not achieve that so the default is 700. To remove this feature entirely, set the value to more than 765. When copying, if the latitude and longitude do not point to an exact pixel in the merge map, then a weighted average over the 4 nearest pixels is used. Pixels that are R/G/B 235/253/253 are always treated as transparent.

With this technique, the result is as geographically correct as the original maps are. The maps do not need to be the same scale, orientation or datum. The result is always written with WGS84 datum.

Run time is reasonable : merging a 10821x6377 map with one 7605x6296 takes about 2 minutes on a 2GHz machine. Size is only limited by memory capacity.

# USING MOBILE ATLAS FORMAT

This method works well if the destination of the map is a mobile device and can handle very large areas of mapping.

Create a new folder.

Open each map, crop off any margins that you do not want then Write Mobile Atlas choosing OSMTracker format and checking 'write directly to mobile device' and save the mobile atlas to the folder you have created - using the one folder for each map. Where the originals are adjacent, the map tiles will be merged to make a continuous map.

Then install Mobile Atlas Creator (if you have not got it already) from [mobac.sourceforge.net](http://mobac.sourceforge.net) and define the folder as a local tile store. Then you can use MOBAC to select any area you want from the merged maps and create the map for the mobile device. If you need a single area of map then use the MAP+PNG option of MOBAC. For JNX output use the free command-line program MOBAT2JNX to convert the tile store to JNX.