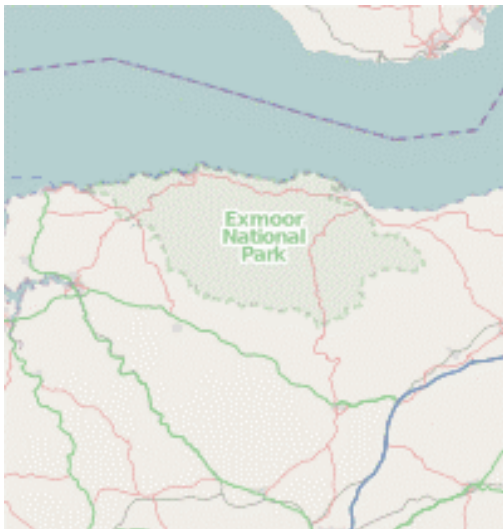


MAPMERGE

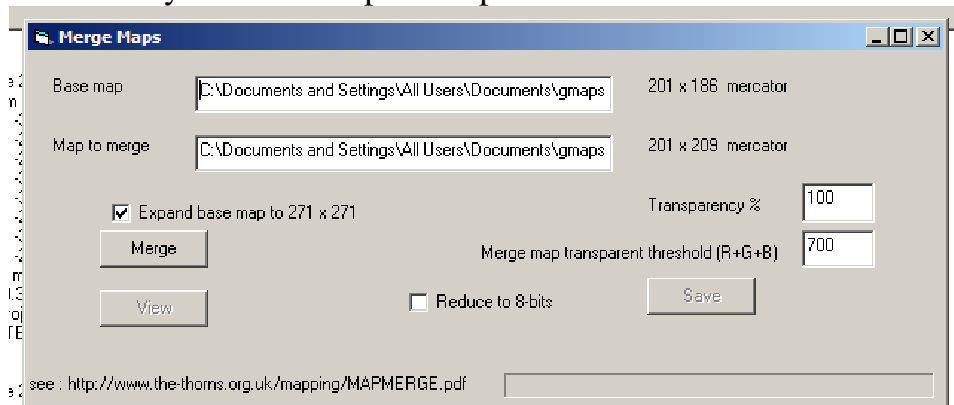
This program joins or merges two maps together. Maps need to be calibrated first and the program opens the calibration file (e.g .map from Ozi Explorer) and finds the map image from that.

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



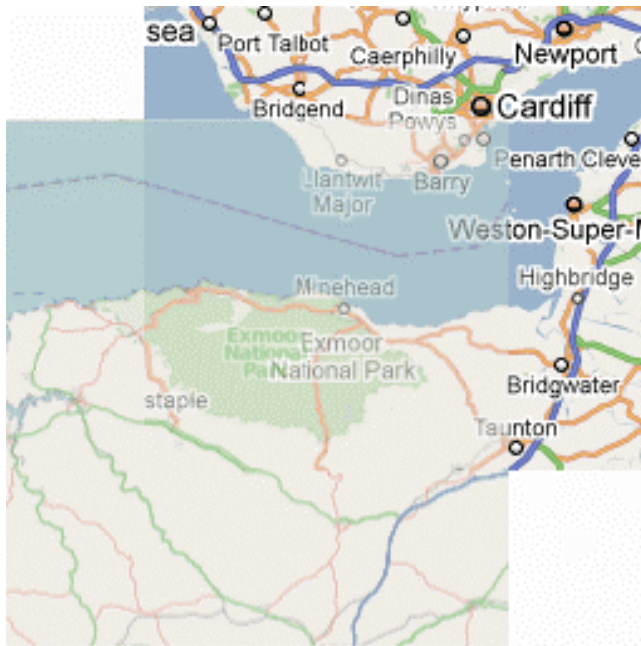
The second map loaded is the merge map.

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.

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.