

# NGR Converter

Version 1.1      16 March 2006

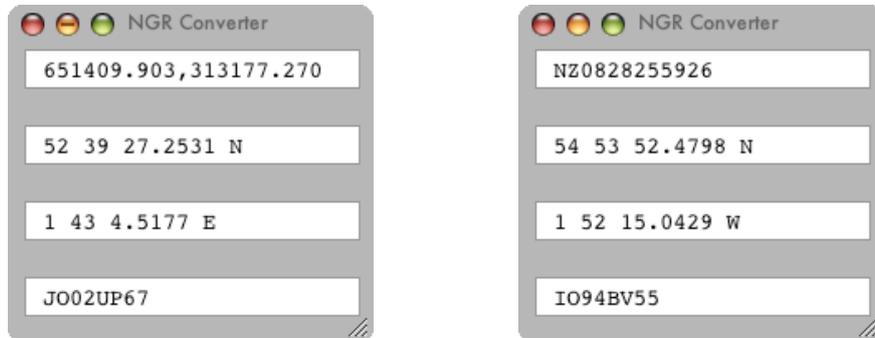
## Summary

**NGR Converter** is a **National Grid Reference** to latitude and longitude converter.

The widget converts between British National Grid References, latitude and longitude, and IARU Locators.

## Description

The widget provides four text boxes.



The uppermost box is used for the entry and display of National Grid References.

The middle two boxes are used for the entry and display of latitudes and longitudes.

The lowest box is for the entry and display of IARU Locators. It is also used for the display of convergences and scales.

National Grid References can be entered in either a numeric or an alphanumeric format.

The numeric format should be a comma-separated pair of **eastings** and **northings** where both are in metres from the (false) origin.

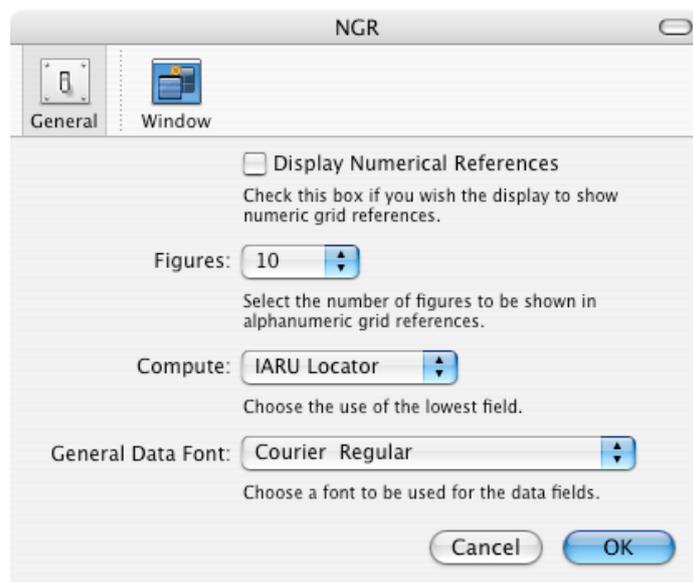
The alphanumeric format can be a 2, 4, 6, 8 or 10 figure National Grid Reference with a two letter prefix.

References can be entered in either format, but there are preferences to specify the format used for display.

There are also preferences to compute convergences and scales.

The *National Grid* coordinate system is based on the Airy 1830 ellipsoid and a Terrestrial Reference Frame (TRF) called OSGB36® (Ordnance Survey Great Britain 1936).

## Preferences



## Credits

The code is based partly on an Ordnance Survey® Information Booklet [1], which is now out of print.

A similar document [2] is currently available on the National GPS Network website <<http://www.gps.gov.uk/>>.

The Ordnance Survey® website is at <<http://www.ordnancesurvey.co.uk/>>.

References:

[1] "Transverse Mercator Projection, Constants, Formulae and Methods", Ordnance Survey® Information Booklet, March 1983.

[2] "A guide to coordinate systems in Great Britain", Ordnance Survey®, May 2002.

**Ordnance Survey** and **OSGB36** are registered trade marks of Ordnance Survey, the national mapping agency of Great Britain.

## Widget Design and Coding

This program and associated documentation are Copyright 1989-2005 Harry Whitfield.

mailto:g6auc@arrl.net

## License

NGR Converter - National Grid Reference to Latitude and Longitude  
Copyright © 2005-2006 Harry Whitfield

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA