

Maps and GPS use around Matienzo from 2014

The permitted area for cave exploration has altered from 2014 requiring new maps. There are a number of consequences. As the latest maps are based on the ETRS89 datum (and not Eur79):

1. All cave entrance coordinates have been altered. (To change old cave entrance coordinates to ones based on the ETRS89 datum, the seven-figure easting should be changed by -102m and the 7-figure northing by -209m.)
Example: Site 1452, Hole in the Road is at 30T 0451722 4797909 (Eur79) and 30T 0451620 4797700 (ETRS89). This position can be checked out using the [Cantabrian government maps](#).
2. New map tiles, orthophotos and shape files have been downloaded from the above map site and have all the entrances and cave lines overlaying the map (and photos, if required). Sections can be printed out in Matienzo as required, as usual. All coordinates will be quoted in ETRS89 terms.
3. GPS units should be altered so that the datum used is ETRS89 (or WGS84, which is only 42cm different). People using Orux maps should download the [updated maps and photos](#), although previous maps and photos (with less coverage) will work with a change of map datum.
4. Any old documents that include a grid reference will be out-of-date. All *FIX lines in all Survex files have been changed to agree with the ETRS89 datum. Changing the magnetic declination lines in all the Survex files (which was recently carried out) to align with the European 79 grid, will not have to be repeated for the new datum as both grids align in almost exactly the same manner over the Matienzo permit area.

Juan Corrin, 9/3/2014, 18/3/2014, 9/6/2014, 18/1/2015