

## Site Coordinates Accuracy

CODE	EXPLANATION	NOTES
<b>P</b>	Coordinates taken from <b>Google Earth</b> or the <b>Cantabrian map</b> site. This is probably the most accurate if the entrance is visible on the photo.	
<b>G</b>	Coordinates taken from a <b>GPS unit</b> . A bracketed number, eg (8m), shows the possible circle of error read from the instrument at the time. If there is no bracketed number then the error was not noted at the time.	Accuracy not only depends on such things as tree cover but also gross errors such as misreading the screen and not allowing the GPS reading to stabilise.
<b>A</b>	A grid reference is taken from a <b>GPS unit</b> or <b>aerial photo</b> and then <b>amended</b> to, fit the map or photo more reasonably, eg put the site on the right side of the road. There may be a number in brackets to give some indication of accuracy.	
<b>M</b>	An entrance or feature that has been placed on the <b>map</b> either in the field or, with some confidence, back in the Office. Many of these will have been given a 6+6 figure grid reference in the past, ie to the nearest 10m, but are now shown with 7+7 figures.	This method of obtaining the coordinates could be more accurate than the data from a poorly used GPS unit.
<b>U</b>	An uncertain grid reference which may have been plotted to 100m in the past. This is now given a precise 7+7 figure position in a large circle of error.	
<b>X</b>	No grid reference given - sometimes, not even an area !	
<b>S</b>	Surveyed out from inside a cave to an entrance. The entrance has not subsequently been GPS'd.	

### NOTES

From March 2014, all cave entrance coordinates and survey points underground are based on the ETRS89 datum. To change old coordinates to ones based on the ETRS89 datum, the seven-figure easting should be changed by -102 and the 7-figure northing by -209.

Example: Site 1452, Hole in the Road is at 30T 0451722 4797909 (Eur79) and 30T 0451620 4797700 (ETRS89).

Entrance altitudes have normally been read off maps. These have all been checked on the new maps, surface surveys taken into account and the altitude altered in the database where necessary.

Part of the documentation presented on each site description page is a grid reference, eg

#### 1452 Hole in the Road

La Secada 30T 451722 4797909 Altitude 235m Length 1742m (including [Cueva Bollón](#) (site 98) Depth 82m

This changed in 2014 to, for example

#### 1452 Hole in the Road

**La Secada** 30T 0451620 4797700 (Datum: ETRS89. Accuracy: **G**) **Altitude** 235m  
**Length** 1742m (including [Cueva Bollón](#) (site 98) **Depth** 82m

If the "Datum: ETRS89" is not shown, the grid reference is likely to be Europe79-based. The Accuracy codes are explained above.

*Juan Corrin, 2014, 2015, December 2024*