Orux Maps

Orux Maps is a possibly free application on an Android smart phone or tablet which allows informed hill walking around Matienzo. The app can browse maps online and, in the Matienzo context, will display offline maps and satellite pictures of the area overlain with all the cave entrances and cave centre lines (on the large scale map). A GPS in the device keeps the users position centered on-screen. The following procedures and app have been tested with various devices. It is assumed that a fairly modern device is used. The detailed map shows entrances, but the database of entrances is also provided to show entrances over the satellite photos.

LOADING SUMMARY is found on the web site. From the opening web page, follow the Publications and Maps / OruxMaps menus

Android smart phone / tablet instructions

1. Download and install the *Orux Maps* app (£2.59 from *Google Play* - it used to be free). (Or install the free .apk from the Orux Maps site, below.)
2. Six folders or files should be installed in the device's OruxMaps folder (*See steps 3 - 5 for details*):
   a. *Matienzo05* and *Matienzo08* are maps and photos which need only be installed once.
   b. 1956-57 aerial photos, *1956-57Aerial* (See note below**)
   c. An up-to-date map, e.g. *MatMap2024e* should replace any older map.
   d. A kmz file, e.g. *entr-2023e.kmz* contains info about the entrances and should replace any old version
   e. A kml file of about 50 marked depressions
3. Connect the smart phone / tablet to a PC with downloaded resources unzipped and available. Ensure that the device is in "USB mode" so that full access to all the folders on the SD card is available, ie the device shows up as a drive on the computer. (Alternatively remove the phone / tablet memory card from the device and transfer files directly through a card reader.)
4. Show the contents of the device's *OruxMaps* folder. Drag the folders, ie *Matienzo05, Matienzo08* (first timer use only), *1956-57Aerial* and *MatMap-2024e* into the *OruxMaps/mapfiles* folder. This may take a couple of minutes.
5. Delete any old versions of the Matienzo maps/photos in the *OruxMaps/mapfiles* folder – they are not required and may confuse the app.
6. The kmz file of sites (entr-2024e) is an **overlay** that shows entrance positions and some information. An info pane will connect to the website description (online) when precisely touched.
   a. Show the contents of the device's *OruxMaps* folder. Drag the entrances kmz file, eg *entr-2024e.kmz* into the *OruxMaps/overlay* folder.
7. The kml file of some depressions (depressions2020) is also an **overlay** that shows the positions of some depressions (mainly around Monte Llusa). Touching an icon brings up an ID code and whether the depression has been explored.
   a. Show the contents of the device's *OruxMaps* folder. Drag the *depressions2020.kmz* file into the *OruxMaps/overlay* folder.
8. Eject the device and start up the *Orux Maps* app.
9. From the *Switch map* icon, with the *OFFLINE* tab selected, select, eg Matienzo08. Zooming into this should show, in turn, the aerial orthophotos then the hires map with cave lines, entrances and permit area. However, it may be necessary, when zooming in from the photo, to manually "Switch map" from the top bar map icon.
10. The visibility of the entrances and depressions layers are controlled through the Map icon / Overlay options / Load *or* Remove KML Overlay. (Removing does not delete the information.)
11. **Crucial settings for Matienzo Caves Project maps:** *(menu items seem not to have a fixed route in different OruxMaps versions. These menu routes are based on v8.1.7 GP)*
    a. Change to UTM values with Global Settings / Units / Coordinates - UTM
    b. Change the datum to ETRS89:Europe (equivalent to WGS 1984) with the top right map icon menu: Map Tweaks/ Map Datum – ETRS89:Europe.
    c. Text size: Global settings / User interface / Tracks / letter size : about 24 seems useable.
12. Touching a site point (from the kmz overlay file) near the centre cursor will bring up some details, eg name, etc, and will load in the full description if the device is connected to the internet.
13. The GPS function will only work if the GPS in the device is enabled ;-)

** Note: Currently, the 1956-57 aerial photo is distorted, despite best efforts to import and calibrate it correctly from QGIS . It can be corrected in a limited local area by using the Map icon / Map tweaks / Map calibrator

Juan Corrin. 2018 – 2023; 21st February 2024

ORUX MAPS
WEBSITE : www.oruxmaps.com/cs/en