MacGPSdmy – a helper program if things go wrong

This program is based on the free MacGPS v0.2. It handles Garmin comms between a Mac and any Garmin handheld (except the 90 I think) and is useful for uploading and downloading waypoints and tracklogs individually. It is useful if for some reason the main VerifyGPS program won't communicate properly with the Garmin (pretty rare). It uses very similar file format to VerifyGPS. The only difference is that waypoints and tracklog are in one file in VerifyGPS and MacGPSdmy creates two files. I have made some slight mods to the original (MacGPS) so that it handles southern hemisphere coordinates and dates are in dmy format. See MacGPSdmy Instructions to run this program or instructions on how to make a data cable.

VerifyGPS. (Previously called GPSTP) – the main verification program

1   Plug GPS cable into modem serial port. (Make sure any modem software is disabled)
2   Create a new folder for the day's task.
3   Copy VerifyGPS to this folder.
4   Create a new task file for this folder.
      Copy an existing task file. (hold down option key while dragging from another folder)
      Double click it to edit it.
      First line tells local time zone and map datum.
      Second line is waypoint of one end of start line (usually start point)
      Third line is waypoint of other end of start line (also usually start point)
      Fourth line is waypoint of one end of goal line (usually goal point)
      Fifth line is waypoint of other end of goal line (also usually goal point)
      Sixth line is waypoint of Start Point
      Next lines are waypoints of Turnpoints(maximum 8 turnpoints)
      Last line is waypoint of Goal Point

      First line looks like this with no tabs and exactly the right number of spaces

```
Format: UTM  UTC Offset:  08.00 hrs  Datum[011]: Australian Geod '66
```

      Waypoints look like

```
W    START8    INTERSECTION    29/12/1998 00:00:00    55    H    0612000
6295300
```

      Waypoint format is

W<tab>NAME<tab>DESCRIPTION<tab>DATE<tab>MAPnn<tab>MAPa<tab>EASTING<tab>NORTHING<cr>

Where

W	specifies waypoint data to follow
NAME	is up to six characters (eg START)
DESCRIPTION	is up to nineteen characters (eg INTERSECTION)
DATE	is in the format dd/mm/yyyy<space>hh:mm:ss (eg 28/10/1998 00:00:00)
MAPnn	is Map Number (eg 56)
MAPa	is Map Letter (eg J)
EASTING	is in metres (eg 0513020 is equivalent to 513.020 from map)
NORTHING	is in metres (eg 7030421 is equivalent to 7030.421 from map)

5   Run VerifyGPS from within the folder. All data files will be saved within the folder.
     After program has just started:-
     File Menu – Open Task File
     File Menu – Preferences to ensure time zone and map datum and coordinate format (UTM)

     Then for each GPS
     File Menu – Verify from GPS

     At any time, flight can be rechecked with
     File Menu – Verify from File

Program notes.

     Program shows red for first ten minutes of track log then black.
     Once an in sector point occurs, line goes green for ten minutes, then black.
     A start gate time is displayed every time the track log goes out of the start gate sector.
     Once a valid first turnpoint point occurs, no more start gate times are calculated.
     The last start point is used to calculate time across start line.
     The first goal point is used to calculate time across finish line.
     To zoom in on a point click on that point.
     To zoom out, click on the window zoom box (small square in big square, upper right hand corner)
     Program won't always show points either side of sector as good even when joining line intersects sector.
     I always use UTM for task file – haven't tested other formats (eg Lat Long)
     Communications Menu in VerifyGPS doesn't work
     If Verify from GPS fails then use
          TimGPSdmy / Communications Menu / Transfer from GPS Receiver / Track Log
     to create a Track Log File and then use
          VerifyGPS / File Menu / Verify from File
     to verify turnpoints and start time.
     Data in datafiles can be examined by double clicking them. This will start the Text Editor BBEdit.

Macintosh Notes

     If program hangs during Verify from GPS
     1.   remove cable
     2.   try to quit program from the File menu
     3.   if that doesn't work try CTRL-ESC to force quit program
     4.   if that doesn't work try CTRL-CMD-POWER to restart computer
     5.   after any force quit of program you may need to restart computer to reset serial port.

     CMD key is the one with the cloverleaf and apple on it.
     Many menu commands have keyboard shortcuts.
     CMD-T Open Task File
     CMD-G Verify from GPS
     CMD-F Verify from file