

1. ExtraactLL.pl

- (a) reads VOR and waypoint databases and produces lat/lon coordinates for each.
- (b) Writes an output file in kml format for use with Google Earth, with labels and also pop-up balloons that contain mag heading, name, etc.
- (c) Also produces a text output file that is read by the next program.
- (d) switches in the program select either VORs or waypoints. There are also restrictions on the area covered which are project dependent.

2. Nearest.pl

- (a) given a lat/lon position, finds the VORs and waypoints closest to that position and prints the VOR/DME-style coordinates

3. ReviseCoordinates.pl

- (a) Designed to read a set of coordinates and produce a comma-separated text file named “NewCoordinates” that contains the nearest two VORs and nearest waypoint, with VOR/DME-style coordinates
- (b) Also produces a kml file suitable for showing the flight plan in Google Earth
- (c) Has options to rotate a subset of the points, translate the entire pattern to a new location, or allow the planned coordinates to drift at a specified rate.

The scripts that produce kml files read “kml.header” and write it at the beginning of the kml files. This contains the format, including symbol type, color, label style, etc. This can be changed to give different symbols and different colors for different uses. These have been edited for individual runs up to now; this could be made more convenient by using different “kml.header” files for different uses. In Google Earth, the label size apparently needs to be at least about 0.7 to be visible, and good symbol sizes are 0.4 for flight-plan points but 1 for other symbols. Choices that work well in G-E are orange for VORs and labels, red (‘ff0000ff’) for waypoints, green (‘ff00ff00’) for track lines, blue (‘ffff0000’) for flight-plan points, and yellow (‘ff00ffff’) for numbering flight-plan points.