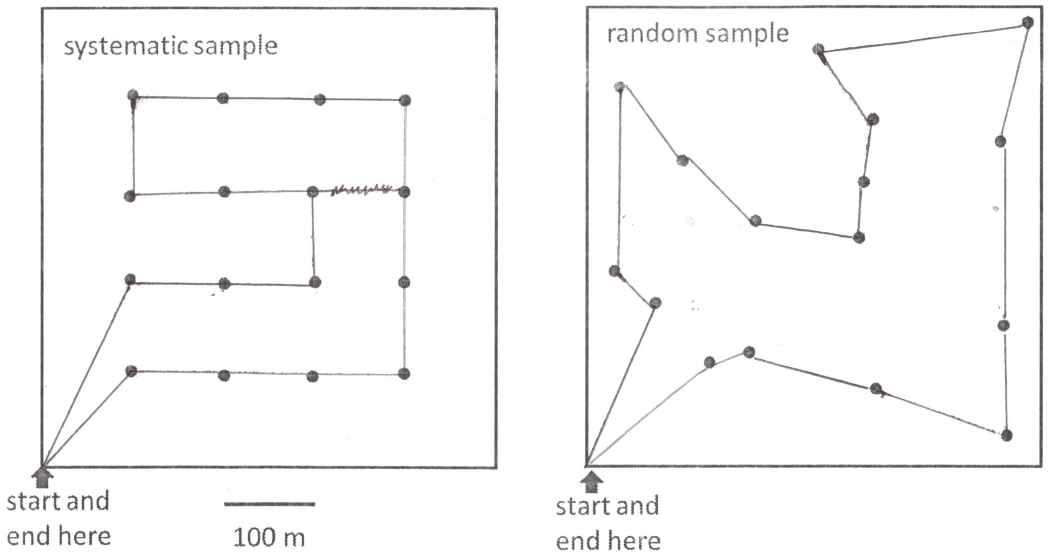

	Systematic sample	Random sample
Shortest path	Approximately 1.8Km	2.03 Km approximately
Time	52 min	121 min

Practical Task 1.4 Landscape analysis using remotely sensed imagery

Sampling efficiency in the field can be greatly improved by pre-locating the samples on a suitable image (using any one of the sample schemes described above), either an aerial photo or more commonly a satellite image.

On the provided section of a satellite image covering the fieldtrip location, perform the following exercises using the GIS software loaded on the workstations (QGIS – this is an open source package which you can download yourself if you wish to complete this prac on your own time)

1. Experiment with assigning different band combinations to different display colours, and adjusting the value ranges. Do different features become more apparent under different combinations?

Which bands are better for soils?	4 and 5
Which are better for vegetation?	6 and 7

2. Can you map distinct vegetation and/or soil classes?

~~Sho~~ Such a mapping would be done by constructing a transect and taking samples along that transect. Relying purely ~~on~~ ~~satel~~ on satelight imagery distinct classes are difficult, ~~if not impossible~~ to distinguish. Some aspects however are striking such as vegetation density or soil cover and are quite visible on satelight imagery.