Watershed identification exercise

Purpose

Many international boundaries follow watersheds for at least part of their course. However, while the concept of a watershed is easily understood, identifying the precise alignment of a watershed is often far from straightforward. This exercise enables you to practise your watershed-identification skills.

The task

The exercise includes four different watershed scenarios. Feel free to tackle any or all of them.

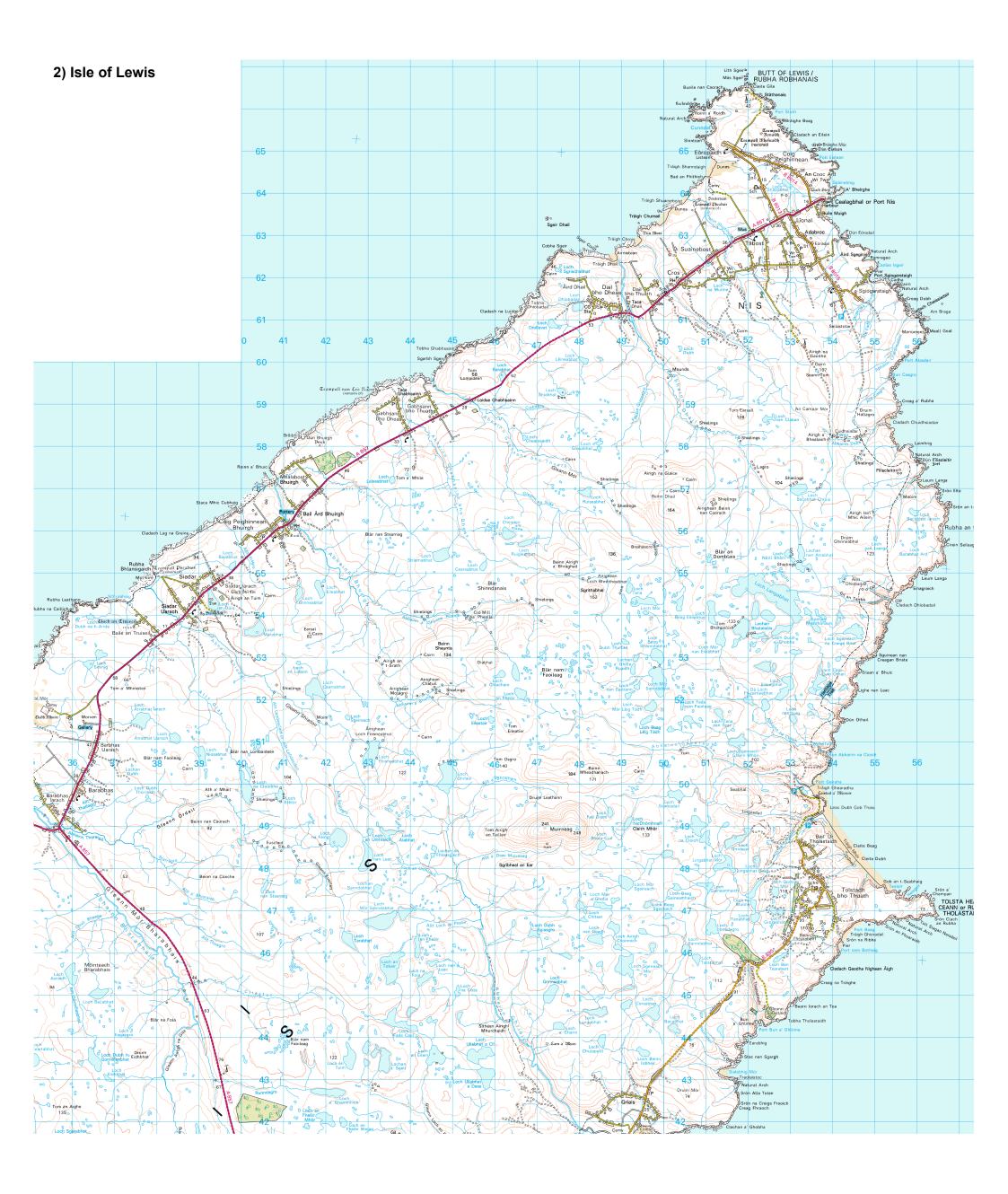
- 1. The tiny Kingdom of Wrath has declared independence and claims the land to the north of the watershed from Rubh an t-Socaich Ghlais (grid reference 238685) to Bealach Coire a' Chuidhe (279650) to the Fort at 352717 (the three points are marked on the map with red diamonds). Can you identify the kingdom's boundary?
- 2. A boundary is required for the northern part of the Isle of Lewis which follows the watershed between watercourses draining to the east and west coasts of the island. Where would this boundary run?
- 3. The boundary between Rannoch and Grampian has long been recognised as following the watershed between the two territories. However, a recently-published map depicting the boundary (marked by a black dot-dash-dot line) contains a number of inaccuracies in the depiction of the line. You have been asked to identify the watershed and correct any errors made by the cartographer.
- 4. Map extract 4 (from the famous 'Annex 1' map which was central to the International Court of Justice's decision to award sovereignty over the Temple of Preah Vihear to Cambodia rather than Thailand) is at a scale of 1:250,000 (1 centimetre = 2.5 kilometres on the ground) with contours at 50 metre intervals. The lowest contour at the foot of the ridge is at 200 metres above sea level.

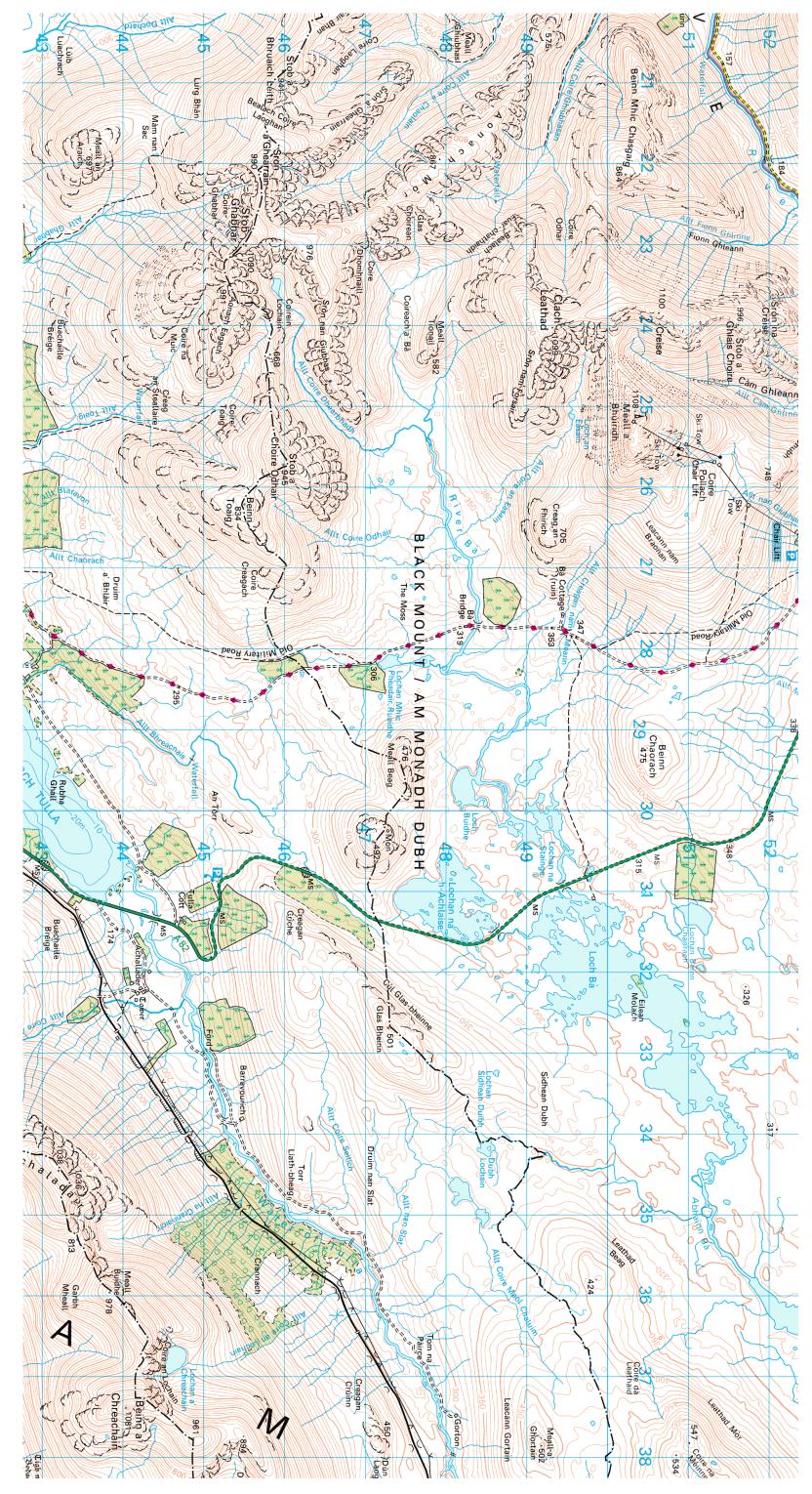
On grid below the map, plot a slope profile along a north-south line 3.75 kilometres to the east of the longitude line marked on the map. What does the profile tell you about the likely location of the watershed?

IBRU: Centre for Borders Research 20-22 September 2022

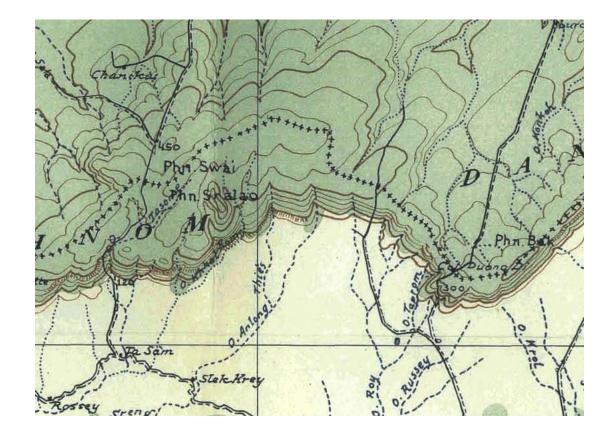
1) Kingdom of Wrath







4) Cambodia-Thailand







Example of a slope profile