

Plate 21 Annotated hard-copy Landsat TM image, used alongside GPS locations to plot the course of an expedition in the Sahel.

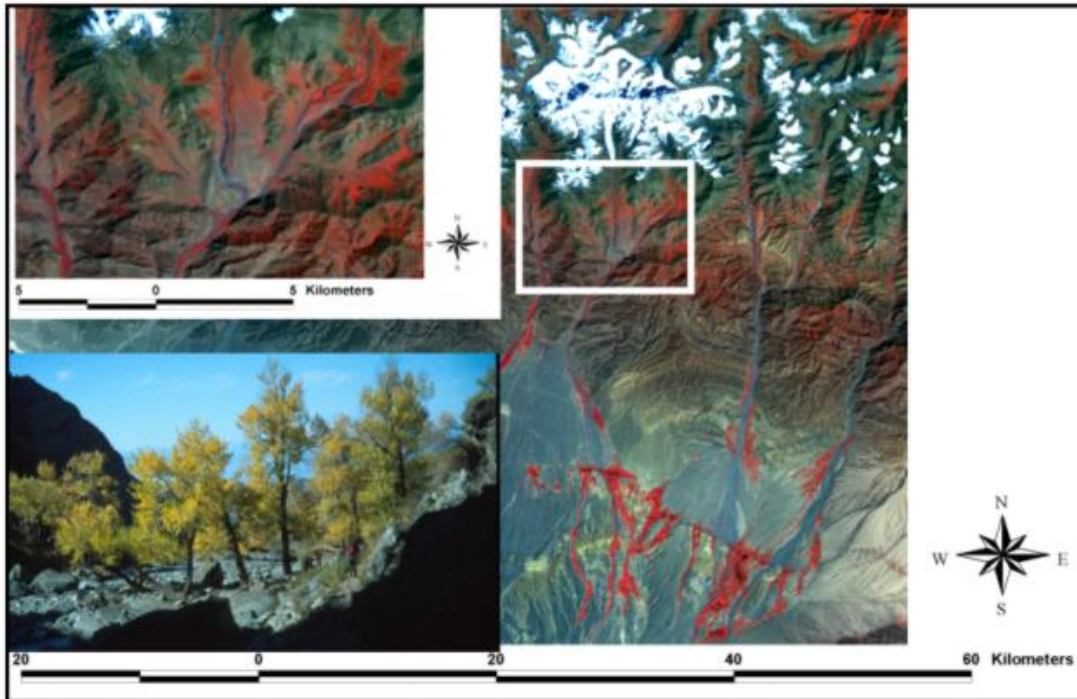


Plate 22 Landsat ETM+ Processed multi-spectral data. Red colours represent vegetation. Bright reds indicate heavy, healthy growth. The subscene (top right) shows the base camp at the stream confluence, indicating vegetation was still present at those altitudes. The photographic inset shows the trees near the basecamp (photograph: Alex Atkinson 2000).

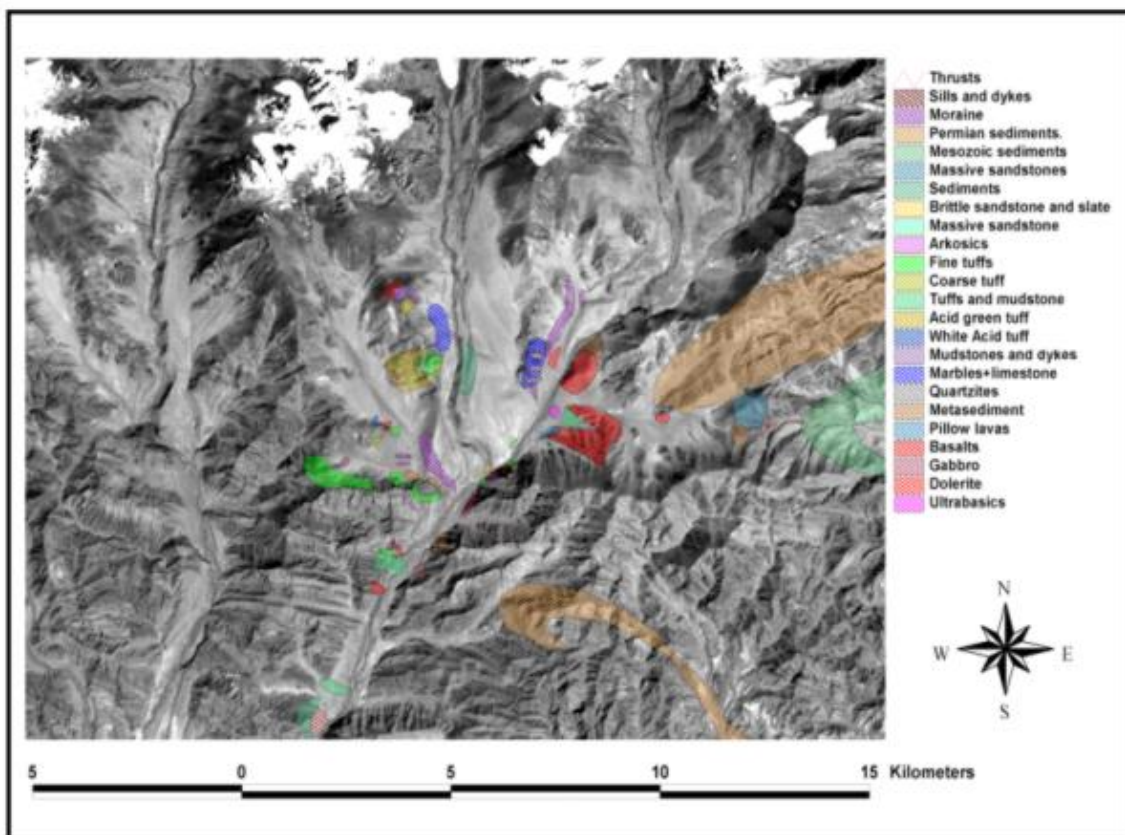
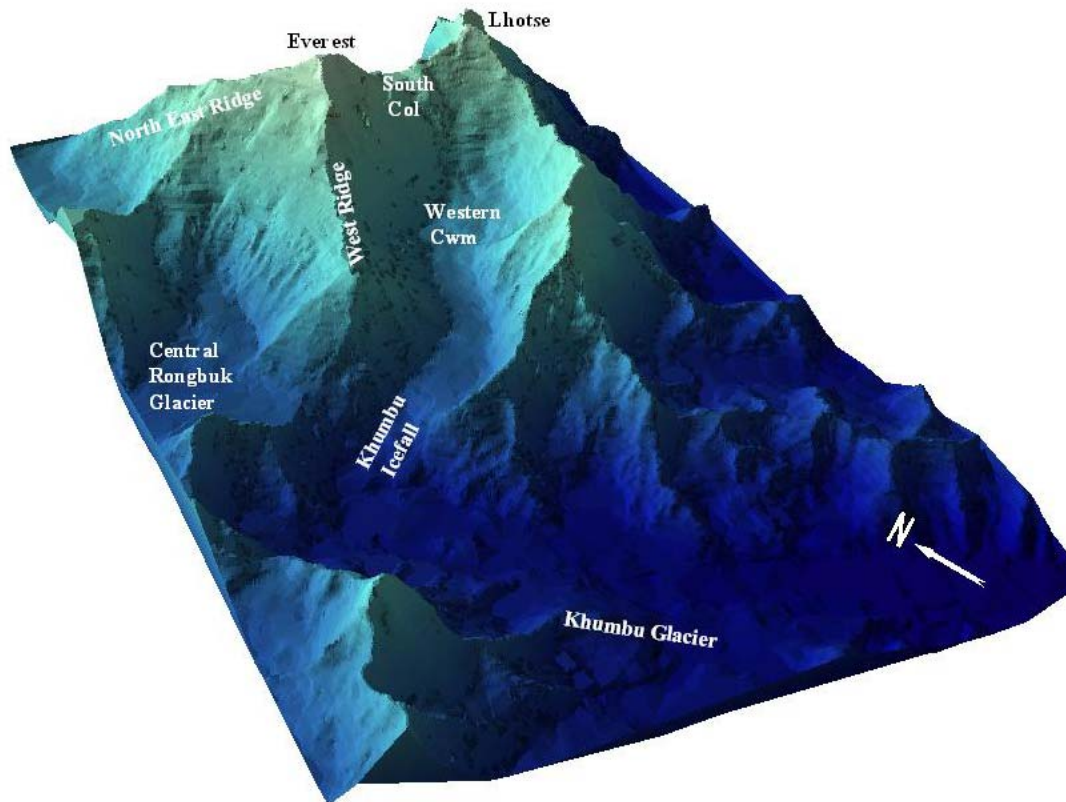
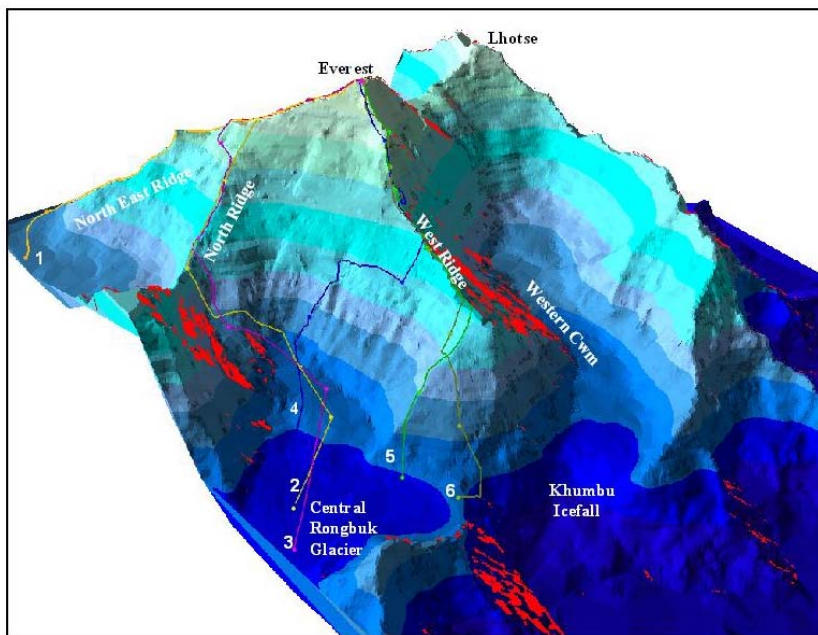


Plate 23 Panchromatic high-resolution data overlaid with geological units mapped in the field using standard GPS receivers.



*Plate 24 The computer model of Mt Everest is the basis of the analysis. The model was generated from the 1988, 1:50,000 National Geographic map of Mt. Everest by students at the Centre of Geographic Studies (COGS), Nova Scotia, Canada. The model is of sufficient detail to locate the first and second steps on the north east ridge.*



*Plate 25 A view of the west ridge with student's routes 1-6 and high risk avalanche zones displayed in red. Despite a lack of climbing experience, many of the student's routes were comparable to those already climbed suggesting that the technique is capable of locating suitable climbing routes.*

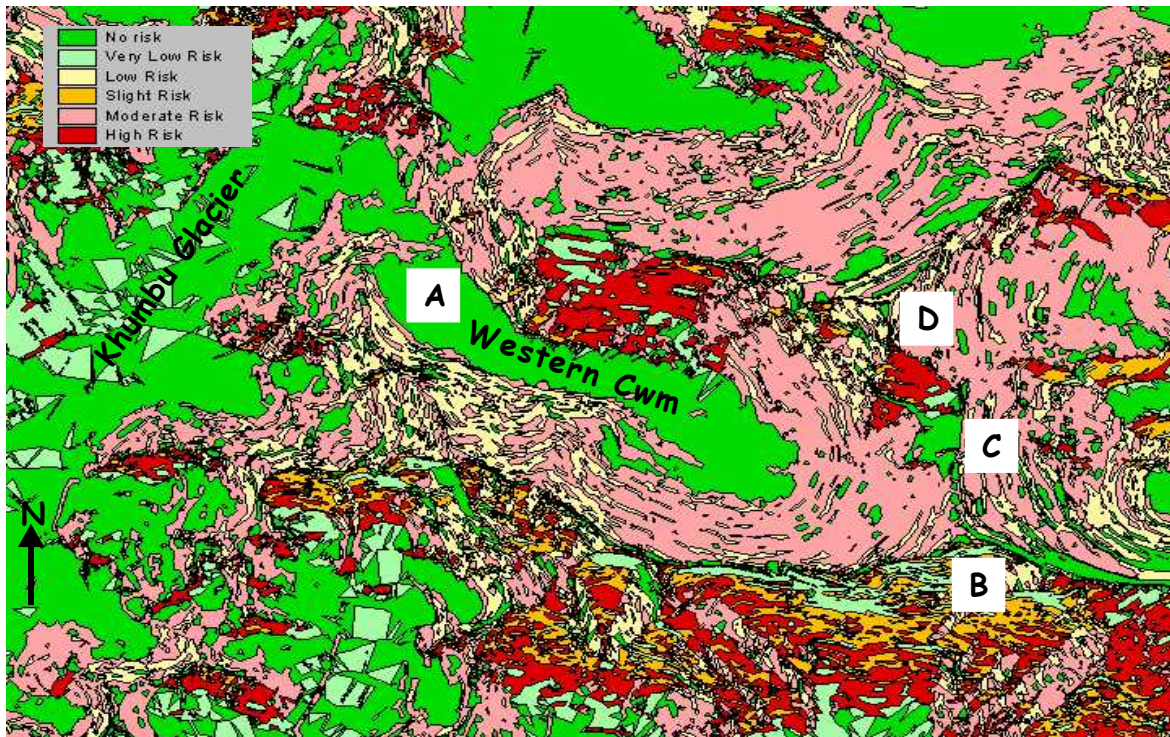


Plate 26 An example of a student's Everest physical hazards risk map showing the Khumbu Icefall (A), Lhotse summit (B), the south col (C) and Everest summit (D). The Khumbu Glacier and Western Cwm are shown relatively safe areas, but the Khumbu Icefall is clearly identified as a moderate risk zone. The final climb to the summit from the south col is identified as being of particularly high risk.

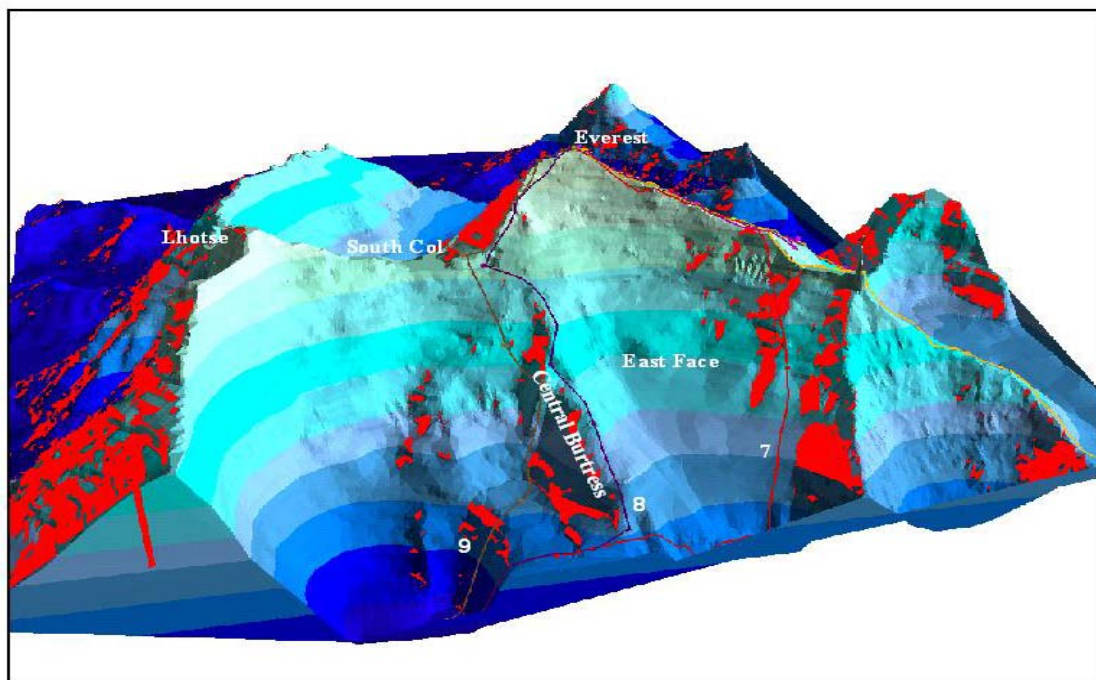
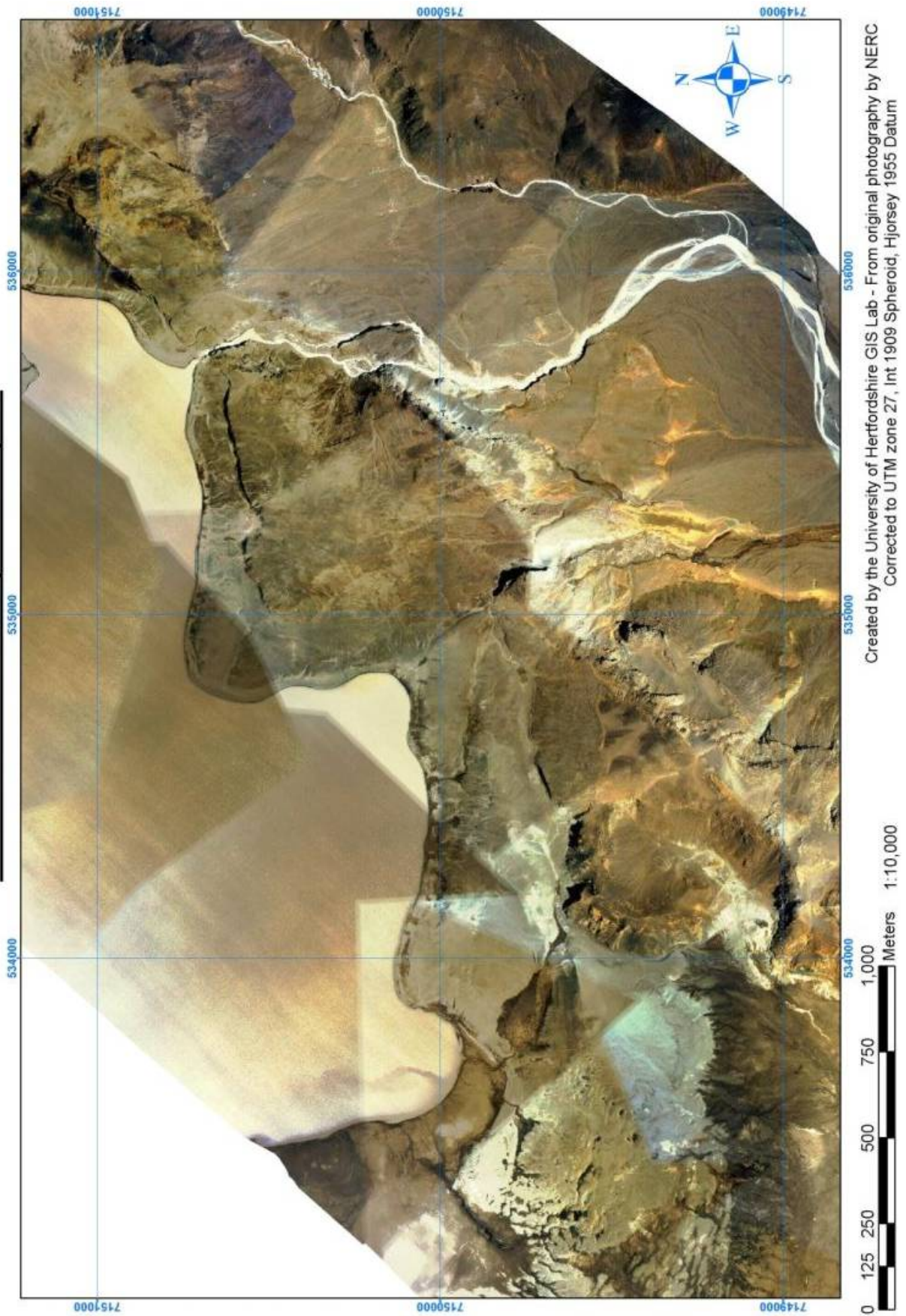


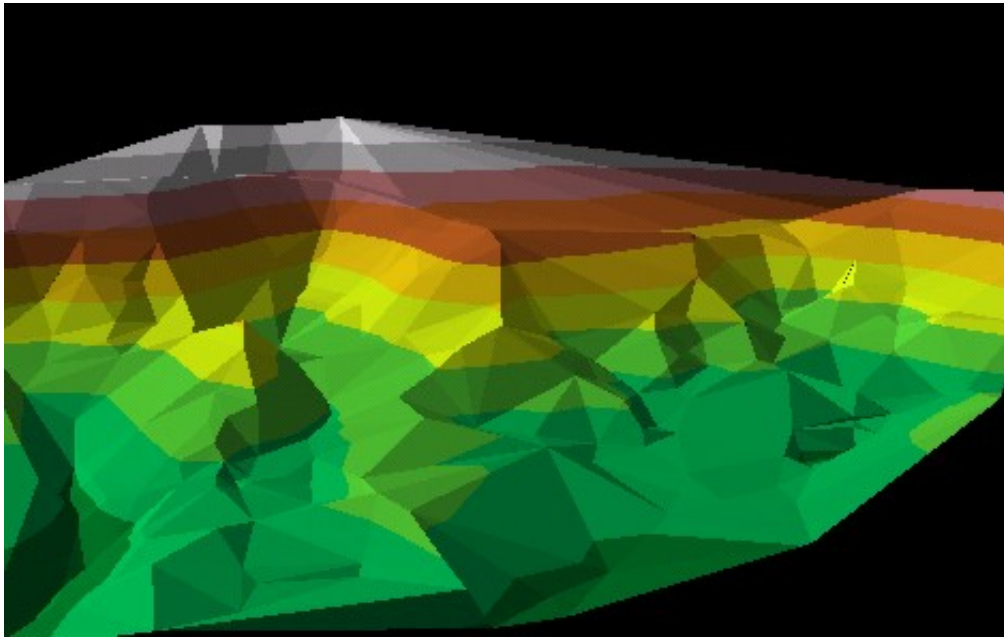
Plate 27 The extremely serious nature of the east face of Everest is clear with an increase in the red high risk zones showing an increase in snow slides and avalanches. Despite the seriousness, routes were attempted, with route 8 approximating the 1983 Central Butress route of Riechardt, Momb and Buhler.

**Iceland 1:10000 Orthophoto Map - 3**

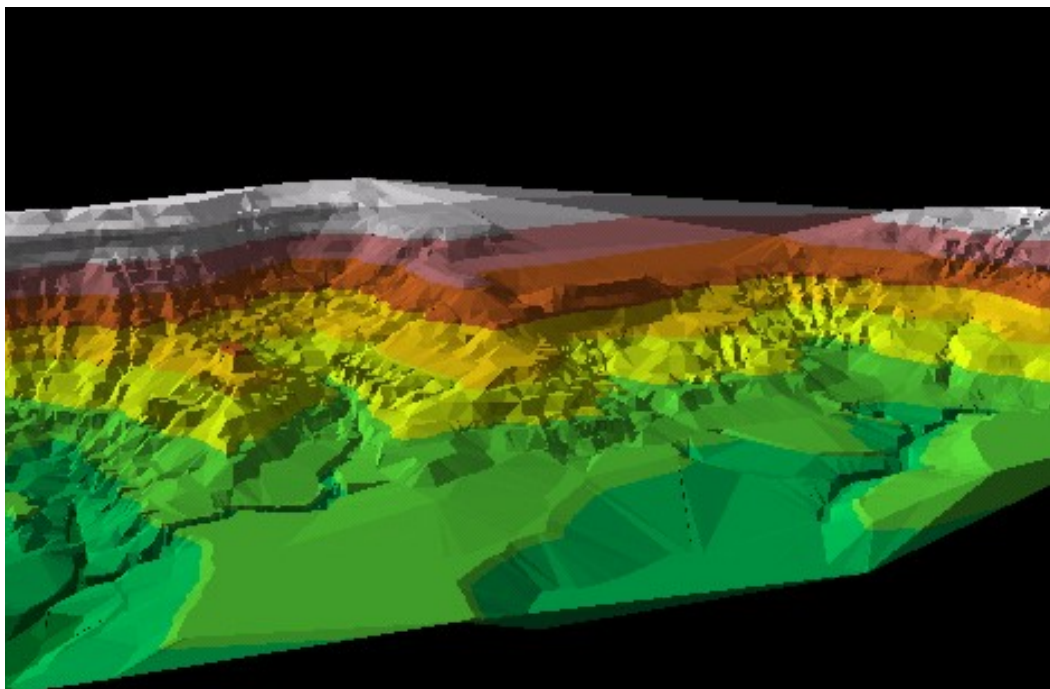


Created by the University of Hertfordshire GIS Lab - From original photography by NERC  
Corrected to UTM zone 27, Int 1909 Spheroid, Hjorsey 1955 Datum

Plate 28 Orthophoto mosaic map of Jarlhettur ridge, central Iceland.



*Plate 29 A Triangulation Irregular Network (TIN) produced from total station points and shaded according to height.*



*Plate 30 The same TIN as above, modified to include field observations of geomorphological features (such as zones of intense gullying and visible soil pipes) occurring between each survey point.*

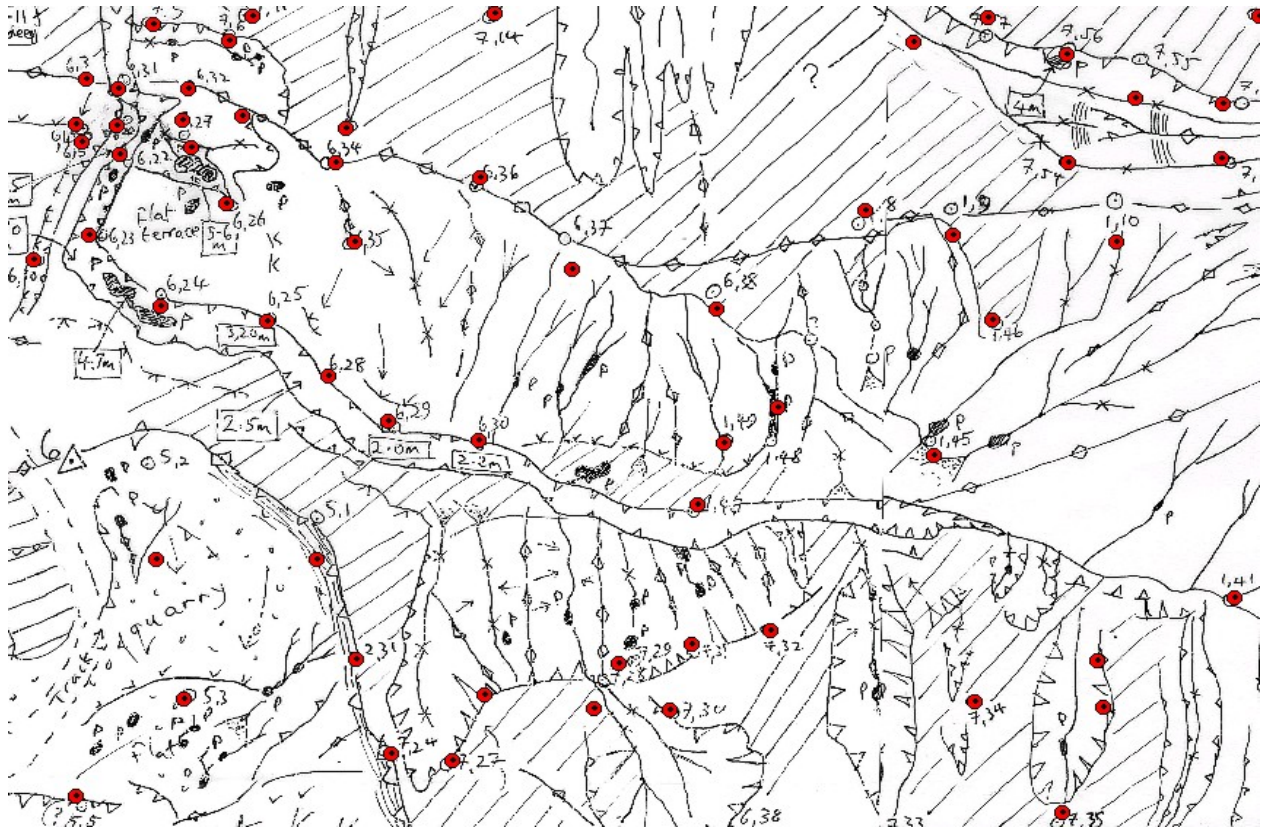


Plate 31 A geomorphological map showing directions of slope and breaks of slope, gullies and soil pipes (red dots). Map courtesy of Dr. Hazel Faulkner.

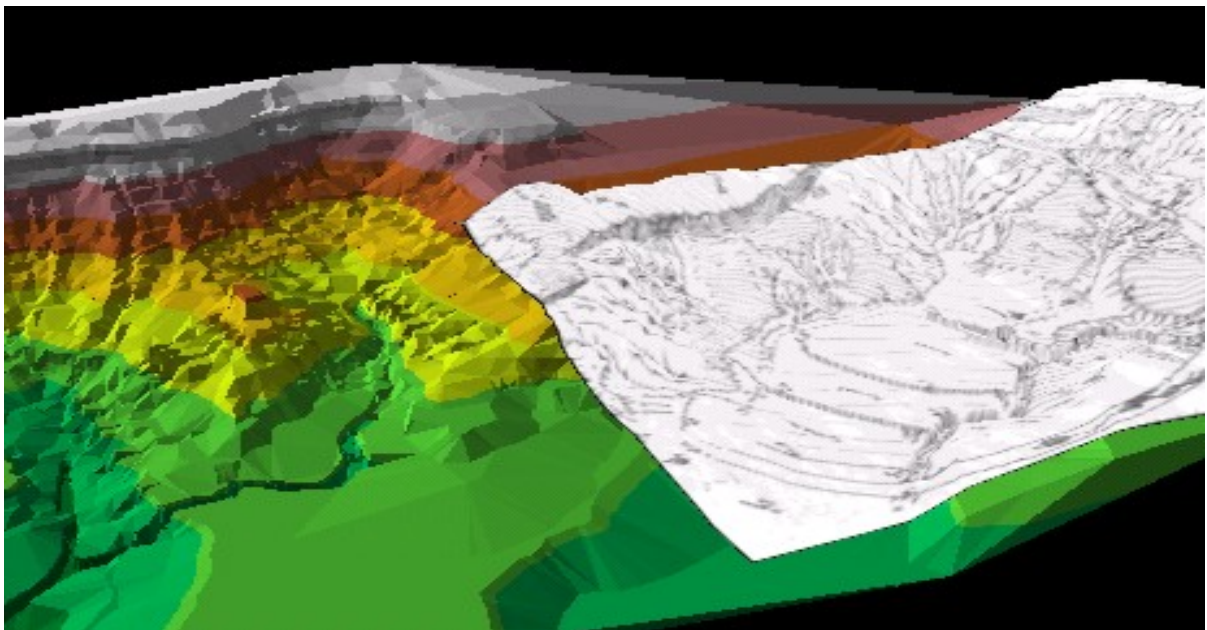


Plate 32 The original TIN, now overlain by the geomorphological sketch-map. The value of a detailed geomorphological map when interpreting landscapes is readily apparent – even if it is only based on the sketching-in of features between survey points.