The innovative use of Google Earth and virtual fieldwork in teaching physical geography

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Fieldwork is often considered one of the most important components of the physical geography curriculum as it can stimulate effective approaches to learning. The opportunity for fieldwork during an undergraduate degree is, however, often limited for practical reasons and so time spent in the field is significantly less than in the classroom. The widespread availability of Google Earth, and the increasing global coverage of high resolution images, means that virtual fieldwork could be embedded within geography curricula as an additional teaching tool. It is important to recognise two caveats to this statement: a) that Google Earth should not be considered as a replacement to field work, and b) that its limitations should be recognised so that appropriate learning activities are devised. The objectives of this talk are: 1) to discuss the potential value of virtual fieldwork for student learning, as a link between the classroom and the field and as an independent learning tool; 2) to illustrate the potential value and limitations of Google Earth that are relevant for class design (e.g. best practice would be to link virtual fieldwork with published journal articles); and 3) to present examples of teaching resources developed for a second year undergraduate Geomorphology course at Royal Holloway. These virtual fieldwork seminars were created to help improve student confidence in quantitative methods, illustrating how innovative use of virtual fieldwork can be used to address specific learning issues.