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## Towards better long-term integration of earth science data from landscape scale to detail studies

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This paper outlines a recording schema for features, events, processes and data identified by decimal latitude-longitude locations. Such geolocation is preferable to using only names or geomorphic features because points, areas and lines can be uniquely identified, represented on a GIS (or Google Earth) and (ideally) searched for in any literature (geomorphic, hydrological, tectonic, ecological etc). It is thus useful for location and integrating 'critical zone' studies and to develop knowledge management systems. Such systems would include geolocated data points in tables, diagrams or as maps. Downslope transects, on hillslopes most notably, can be identified by geolocated points appended to a bearing. This bearing will generally be downslope to provide a pathline that can be associated with data points corresponding to e.g. downhill movement, fluxes, material properties, dated surfaces as well as locations that may correspond to geomorphic features. Transects may link not just surface features or 'processes' but represent a flowline in continuum mechanics. Data points can be referenced according to either/or/both Eulerian and Lagrangian schemes as appropriate. The schema also suggests sharing data and interoperability for measurement methods and data that will be especially useful for modelling purposes.