Identification and interpretation of missing section, Part V: a summary

Missing section is a critical clue in the identification of normal faults, unconformities, and stratigraphic pinchouts. This page looks at the clues to distinguish the three.

A. Missing section that is unique to one borehole (unlike Case B below) and wherein a non-unique part of the section is missing (unlike Case C below) is a good indicator of a normal fault.

B. Missing section that increases from borehole to borehole is a good indicator of an angular unconformity. The most pronounced indicator is loss of considerable section below the unconformity. Lesser but possible section may also be missing above the unconformity because of onlap, in this example from the right.

C. Missing section wherein a distinct stratum is missing, particular a sandstone or a grainy and thus permeable carbonate, is likely to represent a stratigraphic pinch-out. In this case, the bed was never deposited at the locations of boreholes where section is missing, whereas in the two cases above beds were removed. In the example at right, the four logs make interpretation easy, but the distinctive nature of the missing bed would make correct interpretation possible with just the two central logs.

