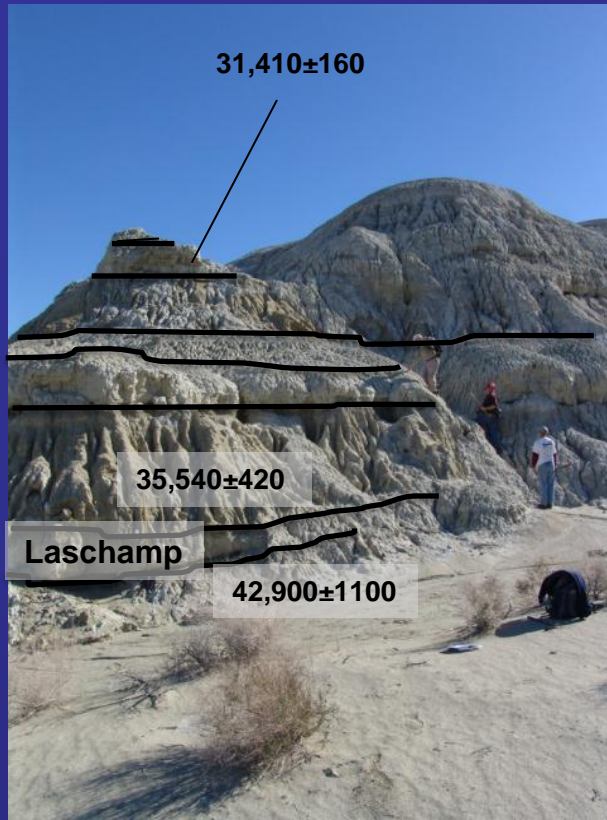


Alluvial Facies Architecture and the Role of Climate and Tectonics in Basin-Fan Systems, Death Valley, CA

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At the type locality of the Searles Lake Formation in Poison Canyon (above), we have identified the Laschamp paleomagnetic excursion bracketed by radiocarbon dates.

In Death Valley, we have identified 18 different tephra layers in the Kit Fox Hills. Here, lacustrine sediments (green) correlate well with known wetter periods in Searles Lake. Similarly, alluvial fan deposits (brown) correlate with relative dry periods in Searles Lake. We interpret these data to show that alluvial fan and lake sequences are climatically driven.

